



REPORT No.: SZ25060440S01

## Annex E Conducted Power

**Note:**

Conducted power unit: dBm

The target power was recorded in the manufacturer's document.



## Full Power

| GSM850          | Burst Average Power (dBm) |       |       | Tune-up<br>Limit<br>(dBm) | Frame-Average Power (dBm) |       |       | Tune-up<br>Limit<br>(dBm) |
|-----------------|---------------------------|-------|-------|---------------------------|---------------------------|-------|-------|---------------------------|
|                 | 128                       | 189   | 251   |                           | 128                       | 189   | 251   |                           |
| TX Channel      | 824.2                     | 836.4 | 848.8 |                           | 824.2                     | 836.4 | 848.8 |                           |
| Frequency (MHz) | 824.2                     | 836.4 | 848.8 |                           | 824.2                     | 836.4 | 848.8 |                           |
| GSM 1 Tx slot   | 32.91                     | 32.94 | 32.97 | 34.00                     | 23.91                     | 23.94 | 23.97 | 25.00                     |
| GPRS 1 Tx slot  | 32.93                     | 32.95 | 32.92 | 34.00                     | 23.93                     | 23.95 | 23.92 | 25.00                     |
| GPRS 2 Tx slots | 31.96                     | 32.04 | 32.02 | 33.00                     | 25.96                     | 26.04 | 26.02 | 27.00                     |
| GPRS 3 Tx slots | 29.98                     | 30.02 | 29.97 | 31.00                     | 25.72                     | 25.76 | 25.71 | 26.74                     |
| GPRS 4 Tx slots | 28.91                     | 28.94 | 28.92 | 30.00                     | 25.91                     | 25.94 | 25.92 | 27.00                     |
| EDGE 1 Tx slot  | 27.25                     | 27.23 | 27.45 | 28.00                     | 18.25                     | 18.23 | 18.45 | 19.00                     |
| EDGE 2 Tx slots | 25.79                     | 25.65 | 25.63 | 26.50                     | 19.79                     | 19.65 | 19.63 | 20.50                     |
| EDGE 3 Tx slots | 23.37                     | 23.45 | 23.39 | 24.00                     | 19.11                     | 19.19 | 19.13 | 19.74                     |
| EDGE 4 Tx slots | 22.38                     | 22.36 | 22.56 | 23.00                     | 19.38                     | 19.36 | 19.56 | 20.00                     |
| Mode            |                           | Max   | 32.97 |                           |                           | Max   | 26.04 |                           |
| Attenuator      |                           |       |       |                           |                           |       |       |                           |
| Date            |                           |       |       |                           |                           |       |       |                           |

| GSM1900         | Burst Average Power (dBm) |       |        | Tune-up<br>Limit<br>(dBm) | Frame-Average Power (dBm) |       |        | Tune-up<br>Limit<br>(dBm) |
|-----------------|---------------------------|-------|--------|---------------------------|---------------------------|-------|--------|---------------------------|
|                 | 512                       | 661   | 810    |                           | 512                       | 661   | 810    |                           |
| TX Channel      | 1850.2                    | 1880  | 1909.8 |                           | 1850.2                    | 1880  | 1909.8 |                           |
| Frequency (MHz) | 1850.2                    | 1880  | 1909.8 |                           | 1850.2                    | 1880  | 1909.8 |                           |
| GSM 1 Tx slot   | 30.15                     | 29.99 | 30.21  | 31.30                     | 21.15                     | 20.99 | 21.21  | 22.30                     |
| GPRS 1 Tx slot  | 30.14                     | 30.02 | 30.16  | 31.30                     | 21.14                     | 21.02 | 21.16  | 22.30                     |
| GPRS 2 Tx slots | 28.13                     | 28.01 | 28.25  | 29.30                     | 22.13                     | 22.01 | 22.25  | 23.30                     |
| GPRS 3 Tx slots | 26.11                     | 26.01 | 26.25  | 27.30                     | 21.85                     | 21.75 | 21.99  | 23.04                     |
| GPRS 4 Tx slots | 25.16                     | 25.19 | 25.23  | 26.30                     | 22.16                     | 22.19 | 22.23  | 23.30                     |
| EDGE 1 Tx slot  | 26.32                     | 26.38 | 26.46  | 27.30                     | 17.32                     | 17.38 | 17.46  | 18.30                     |
| EDGE 2 Tx slots | 25.61                     | 25.60 | 25.50  | 26.30                     | 19.61                     | 19.60 | 19.50  | 20.30                     |
| EDGE 3 Tx slots | 23.23                     | 23.37 | 23.34  | 24.30                     | 18.97                     | 19.11 | 19.08  | 20.04                     |
| EDGE 4 Tx slots | 22.08                     | 22.16 | 22.19  | 23.30                     | 19.08                     | 19.16 | 19.19  | 20.30                     |
| Mode            |                           |       | 30.21  |                           |                           | Max   | 22.25  |                           |
| Attenuator      |                           |       |        |                           |                           |       |        |                           |
| Date            |                           |       |        |                           |                           |       |        |                           |

| Band            | WCDMA Band II (dBm) |       |            | Tune-up<br>Limit<br>(dBm) | WCDMA Band IV (dBm) |        |            | Tune-up<br>Limit<br>(dBm) | WCDMA Band V (dBm) |       |            | Tune-up<br>Limit<br>(dBm) |
|-----------------|---------------------|-------|------------|---------------------------|---------------------|--------|------------|---------------------------|--------------------|-------|------------|---------------------------|
|                 | 9262                | 9400  | 9538       |                           | 1312                | 1413   | 1513       |                           | 4132               | 4182  | 4233       |                           |
| TX Channel      | 9662                | 9800  | 9938       |                           | 1537                | 1638   | 1738       |                           | 4357               | 4407  | 4458       |                           |
| Rx Channel      | 9662                | 9800  | 9938       |                           | 1537                | 1638   | 1738       |                           | 4357               | 4407  | 4458       |                           |
| Frequency (MHz) | 1852.4              | 1880  | 1907.6     |                           | 1712.4              | 1732.6 | 1752.6     |                           | 826.4              | 836.4 | 846.6      |                           |
| 3GPP Rel 99     | 23.12               | 23.22 | 23.17      | 24.00                     | 23.29               | 23.33  | 23.30      | 24.00                     | 23.27              | 23.37 | 23.31      | 24.00                     |
| 3GPP Rel 5      | 22.26               | 22.30 | 22.32      | 23.00                     | 22.28               | 22.20  | 22.22      | 23.00                     | 22.41              | 22.39 | 22.38      | 23.00                     |
| 3GPP Rel 5      | 22.25               | 22.19 | 22.29      | 23.00                     | 22.27               | 22.15  | 22.17      | 23.00                     | 22.42              | 22.36 | 22.32      | 23.00                     |
| 3GPP Rel 5      | 21.81               | 21.78 | 21.87      | 22.50                     | 21.81               | 21.68  | 21.66      | 22.50                     | 21.88              | 21.90 | 21.92      | 22.50                     |
| 3GPP Rel 5      | 21.74               | 21.69 | 21.78      | 22.50                     | 21.75               | 21.65  | 21.67      | 22.50                     | 21.87              | 21.91 | 21.82      | 22.50                     |
| 3GPP Rel 8      | 22.15               | 22.06 | 22.16      | 23.00                     | 22.13               | 22.02  | 22.07      | 23.00                     | 22.44              | 22.41 | 22.43      | 23.00                     |
| 3GPP Rel 8      | 22.13               | 22.07 | 22.12      | 23.00                     | 22.11               | 22.00  | 22.02      | 23.00                     | 22.47              | 22.43 | 22.44      | 23.00                     |
| 3GPP Rel 8      | 21.58               | 21.57 | 22.16      | 22.50                     | 21.62               | 21.47  | 21.48      | 22.00                     | 21.89              | 21.87 | 21.90      | 22.50                     |
| 3GPP Rel 8      | 21.56               | 21.55 | 21.62      | 22.50                     | 21.66               | 21.52  | 21.49      | 22.00                     | 21.91              | 21.88 | 21.85      | 22.50                     |
| 3GPP Rel 6      | 21.60               | 21.51 | 21.60      | 22.50                     | 21.76               | 21.55  | 21.60      | 22.50                     | 21.67              | 21.68 | 21.64      | 22.50                     |
| 3GPP Rel 6      | 22.15               | 22.12 | 22.15      | 23.00                     | 22.07               | 22.02  | 22.00      | 23.00                     | 22.23              | 22.22 | 22.19      | 23.00                     |
| 3GPP Rel 6      | 21.15               | 21.10 | 21.14      | 22.00                     | 21.21               | 21.02  | 20.99      | 22.00                     | 21.25              | 21.07 | 21.17      | 22.00                     |
| 3GPP Rel 6      | 22.14               | 22.05 | 22.15      | 23.00                     | 22.10               | 22.01  | 22.03      | 23.00                     | 22.22              | 22.22 | 22.21      | 23.00                     |
| 3GPP Rel 6      | 21.12               | 21.07 | 21.11      | 22.00                     | 21.09               | 20.96  | 20.95      | 22.00                     | 21.16              | 21.20 | 21.18      | 22.00                     |
| 3GPP Rel 7      | 21.11               | 21.14 | 21.17      | 22.00                     | 21.03               | 21.06  | 21.04      | 22.00                     | 21.08              | 21.07 | 20.63      | 22.00                     |
| Attenuator      |                     |       | Cable Loss | 0.8                       |                     |        | Cable Loss | 0.8                       |                    |       | Cable Loss | 0.6                       |
| Mode            |                     | Max   | 23.22      |                           |                     | Max    | 23.33      |                           |                    | Max   | 23.37      |                           |
| Date            |                     |       |            |                           |                     |        |            |                           |                    |       |            |                           |

| Band 2 (1900MHz Band) (dBm)<br>Part 24E |            |         |           |             |                |              |                     |  |  |
|-----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW [MHz]                                | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                 |            |         |           | 18700       | 18900          | 19100        |                     |  |  |
| Frequency (MHz)                         |            |         |           | 1860        | 1880           | 1900         |                     |  |  |
| 20                                      | QPSK       | 1       | 0         | 22.92       | 22.96          | 22.89        | 24                  |  |  |
| 20                                      | QPSK       | 1       | 49        | 22.87       | 22.88          | 22.81        |                     |  |  |
| 20                                      | QPSK       | 1       | 99        | 22.82       | 22.78          | 22.73        |                     |  |  |
| 20                                      | QPSK       | 50      | 0         | 21.86       | 21.92          | 21.87        |                     |  |  |
| 20                                      | QPSK       | 50      | 24        | 21.75       | 21.84          | 21.79        | 23                  |  |  |
| 20                                      | QPSK       | 50      | 50        | 21.76       | 21.88          | 21.78        |                     |  |  |
| 20                                      | QPSK       | 100     | 0         | 21.84       | 21.85          | 21.79        |                     |  |  |
| 20                                      | 16QAM      | 1       | 0         | 22.15       | 22.07          | 21.95        |                     |  |  |
| 20                                      | 16QAM      | 1       | 49        | 22.07       | 22.09          | 21.97        | 23                  |  |  |
| 20                                      | 16QAM      | 1       | 99        | 21.94       | 21.94          | 22.02        |                     |  |  |
| 20                                      | 16QAM      | 50      | 0         | 20.90       | 21.01          | 21.05        |                     |  |  |
| 20                                      | 16QAM      | 50      | 24        | 20.91       | 20.87          | 20.84        |                     |  |  |
| 20                                      | 16QAM      | 50      | 50        | 20.73       | 20.78          | 20.93        | 22                  |  |  |
| 20                                      | 16QAM      | 100     | 0         | 20.95       | 20.81          | 20.90        |                     |  |  |
| 20                                      | 64QAM      | 1       | 0         | 21.13       | 21.14          | 21.23        |                     |  |  |
| 20                                      | 64QAM      | 1       | 49        | 21.05       | 21.03          | 21.16        |                     |  |  |
| 20                                      | 64QAM      | 1       | 99        | 21.06       | 21.14          | 20.95        | 22                  |  |  |
| 20                                      | 64QAM      | 50      | 0         | 19.85       | 20.14          | 19.93        |                     |  |  |
| 20                                      | 64QAM      | 50      | 24        | 20.03       | 19.93          | 19.80        |                     |  |  |
| 20                                      | 64QAM      | 50      | 50        | 19.84       | 19.97          | 19.79        |                     |  |  |
| 20                                      | 64QAM      | 100     | 0         | 20.01       | 19.98          | 19.75        | 21                  |  |  |
| Channel                                 |            |         |           | 18675       | 18900          | 19125        |                     |  |  |
| Frequency (MHz)                         |            |         |           | 1857.5      | 1880           | 1902.5       |                     |  |  |
| 15                                      | QPSK       | 1       | 0         | 22.86       | 22.90          | 22.83        | 24                  |  |  |
| 15                                      | QPSK       | 1       | 37        | 22.81       | 22.82          | 22.75        |                     |  |  |
| 15                                      | QPSK       | 1       | 74        | 22.76       | 22.72          | 22.67        |                     |  |  |
| 15                                      | QPSK       | 36      | 0         | 21.80       | 21.96          | 21.81        |                     |  |  |
| 15                                      | QPSK       | 36      | 20        | 21.69       | 21.78          | 21.73        | 23                  |  |  |
| 15                                      | QPSK       | 36      | 39        | 21.70       | 21.82          | 21.72        |                     |  |  |
| 15                                      | QPSK       | 75      | 0         | 21.78       | 21.79          | 21.73        |                     |  |  |
| 15                                      | 16QAM      | 1       | 0         | 22.09       | 22.01          | 21.89        |                     |  |  |
| 15                                      | 16QAM      | 1       | 37        | 22.01       | 22.03          | 21.91        | 23                  |  |  |
| 15                                      | 16QAM      | 1       | 74        | 21.88       | 21.88          | 21.96        |                     |  |  |
| 15                                      | 16QAM      | 36      | 0         | 20.84       | 20.95          | 20.99        |                     |  |  |
| 15                                      | 16QAM      | 36      | 20        | 20.85       | 20.81          | 20.78        |                     |  |  |
| 15                                      | 16QAM      | 36      | 39        | 20.67       | 20.72          | 20.87        | 22                  |  |  |
| 15                                      | 16QAM      | 75      | 0         | 20.89       | 20.75          | 20.84        |                     |  |  |
| 15                                      | 64QAM      | 1       | 0         | 21.07       | 21.08          | 21.17        |                     |  |  |
| 15                                      | 64QAM      | 1       | 37        | 20.99       | 20.97          | 21.10        |                     |  |  |
| 15                                      | 64QAM      | 1       | 74        | 21.00       | 21.08          | 20.89        | 21                  |  |  |
| 15                                      | 64QAM      | 36      | 0         | 19.79       | 20.08          | 19.87        |                     |  |  |
| 15                                      | 64QAM      | 36      | 20        | 19.97       | 19.87          | 19.74        |                     |  |  |
| 15                                      | 64QAM      | 36      | 39        | 19.78       | 19.91          | 19.73        |                     |  |  |
| 15                                      | 64QAM      | 75      | 0         | 19.95       | 19.92          | 19.69        | Tune-up limit (dBm) |  |  |
| Channel                                 |            |         |           | 18650       | 18900          | 19150        |                     |  |  |
| Frequency (MHz)                         |            |         |           | 1855        | 1880           | 1905         |                     |  |  |
| 10                                      | QPSK       | 1       | 0         | 22.80       | 22.84          | 22.77        | 24                  |  |  |
| 10                                      | QPSK       | 1       | 25        | 22.75       | 22.76          | 22.69        |                     |  |  |
| 10                                      | QPSK       | 1       | 49        | 22.70       | 22.66          | 22.61        |                     |  |  |
| 10                                      | QPSK       | 25      | 0         | 21.74       | 21.80          | 21.75        |                     |  |  |
| 10                                      | QPSK       | 25      | 12        | 21.63       | 21.72          | 21.67        | 23                  |  |  |
| 10                                      | QPSK       | 25      | 25        | 21.64       | 21.76          | 21.66        |                     |  |  |
| 10                                      | QPSK       | 50      | 0         | 21.72       | 21.73          | 21.67        |                     |  |  |
| 10                                      | 16QAM      | 1       | 0         | 22.03       | 21.95          | 21.83        |                     |  |  |
| 10                                      | 16QAM      | 1       | 25        | 21.95       | 21.97          | 21.85        | 23                  |  |  |
| 10                                      | 16QAM      | 1       | 49        | 21.82       | 21.82          | 21.90        |                     |  |  |
| 10                                      | 16QAM      | 25      | 0         | 20.78       | 20.89          | 20.93        |                     |  |  |
| 10                                      | 16QAM      | 25      | 12        | 20.79       | 20.75          | 20.72        |                     |  |  |
| 10                                      | 16QAM      | 25      | 25        | 20.61       | 20.68          | 20.81        | 22                  |  |  |
| 10                                      | 16QAM      | 50      | 0         | 20.83       | 20.69          | 20.78        |                     |  |  |
| 10                                      | 64QAM      | 1       | 0         | 21.01       | 21.02          | 21.11        |                     |  |  |
| 10                                      | 64QAM      | 1       | 25        | 20.93       | 20.91          | 21.04        |                     |  |  |
| 10                                      | 64QAM      | 1       | 49        | 20.94       | 21.02          | 20.83        | 22                  |  |  |
| 10                                      | 64QAM      | 25      | 0         | 19.73       | 20.02          | 19.81        |                     |  |  |
| 10                                      | 64QAM      | 25      | 12        | 19.91       | 19.81          | 19.68        |                     |  |  |
| 10                                      | 64QAM      | 25      | 25        | 19.72       | 19.85          | 19.67        |                     |  |  |
| 10                                      | 64QAM      | 50      | 0         | 19.89       | 19.86          | 19.63        | 21                  |  |  |
| Channel                                 |            |         |           | 18625       | 18900          | 19175        |                     |  |  |
| Frequency (MHz)                         |            |         |           | 1852.5      | 1880           | 1907.5       |                     |  |  |
| 5                                       | QPSK       | 1       | 0         | 22.74       | 22.78          | 22.71        | 24                  |  |  |
| 5                                       | QPSK       | 1       | 12        | 22.69       | 22.70          | 22.63        |                     |  |  |
| 5                                       | QPSK       | 1       | 24        | 22.64       | 22.60          | 22.55        |                     |  |  |
| 5                                       | QPSK       | 12      | 0         | 21.68       | 21.74          | 21.69        |                     |  |  |
| 5                                       | QPSK       | 12      | 7         | 21.57       | 21.66          | 21.61        | 23                  |  |  |
| 5                                       | QPSK       | 12      | 13        | 21.58       | 21.70          | 21.60        |                     |  |  |
| 5                                       | QPSK       | 25      | 0         | 21.66       | 21.67          | 21.61        |                     |  |  |
| 5                                       | 16QAM      | 1       | 0         | 21.97       | 21.89          | 21.77        |                     |  |  |
| 5                                       | 16QAM      | 1       | 12        | 21.89       | 21.91          | 21.79        | 23                  |  |  |
| 5                                       | 16QAM      | 1       | 24        | 21.76       | 21.76          | 21.84        |                     |  |  |
| 5                                       | 16QAM      | 12      | 0         | 20.72       | 20.83          | 20.87        |                     |  |  |
| 5                                       | 16QAM      | 12      | 7         | 20.73       | 20.69          | 20.66        |                     |  |  |
| 5                                       | 16QAM      | 12      | 13        | 20.55       | 20.60          | 20.75        | 22                  |  |  |
| 5                                       | 16QAM      | 25      | 0         | 20.77       | 20.63          | 20.72        |                     |  |  |
| 5                                       | 64QAM      | 1       | 0         | 20.95       | 20.96          | 21.05        |                     |  |  |
| 5                                       | 64QAM      | 1       | 12        | 20.87       | 20.85          | 20.98        |                     |  |  |
| 5                                       | 64QAM      | 1       | 24        | 20.88       | 20.96          | 20.77        | 22                  |  |  |
| 5                                       | 64QAM      | 12      | 0         | 19.67       | 19.96          | 19.75        |                     |  |  |
| 5                                       | 64QAM      | 12      | 7         | 19.85       | 19.75          | 19.62        |                     |  |  |
| 5                                       | 64QAM      | 12      | 13        | 19.66       | 19.79          | 19.61        |                     |  |  |
| 5                                       | 64QAM      | 25      | 0         | 19.83       | 19.80          | 19.57        | 21                  |  |  |
| Channel                                 |            |         |           | 18615       | 18900          | 19185        |                     |  |  |
| Frequency (MHz)                         |            |         |           | 1851.5      | 1880           | 1908.5       |                     |  |  |
| 3                                       | QPSK       | 1       | 0         | 22.71       | 22.75          | 22.68        | 24                  |  |  |
| 3                                       | QPSK       | 1       | 8         | 22.66       | 22.67          | 22.60        |                     |  |  |
| 3                                       | QPSK       | 1       | 14        | 22.61       | 22.57          | 22.52        |                     |  |  |
| 3                                       | QPSK       | 8       | 0         | 21.65       | 21.71          | 21.66        |                     |  |  |
| 3                                       | QPSK       | 8       | 4         | 21.54       | 21.63          | 21.58        | 23                  |  |  |
| 3                                       | QPSK       | 8       | 7         | 21.55       | 21.67          | 21.57        |                     |  |  |
| 3                                       | QPSK       | 15      | 0         | 21.63       | 21.64          | 21.58        |                     |  |  |

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required) |            |         |           |             |                |              |                     |                     |
|----------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|---------------------|
| BW [MHz]                                                       | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |                     |
| Channel                                                        |            |         |           | 20050       | 20175          | 20300        |                     |                     |
| Frequency (MHz)                                                |            |         |           | 1720        | 1732.5         | 1745         | 24                  |                     |
| 20                                                             | QPSK       | 1       | 0         | 22.99       | 23.03          | 22.96        |                     |                     |
| 20                                                             | QPSK       | 1       | 49        | 22.94       | 22.95          | 22.88        |                     |                     |
| 20                                                             | QPSK       | 1       | 99        | 22.89       | 22.85          | 22.80        |                     |                     |
| 20                                                             | QPSK       | 50      | 0         | 21.93       | 21.99          | 21.94        | 23                  |                     |
| 20                                                             | QPSK       | 50      | 24        | 21.82       | 21.91          | 21.86        |                     |                     |
| 20                                                             | QPSK       | 50      | 50        | 21.83       | 21.95          | 21.85        |                     |                     |
| 20                                                             | QPSK       | 100     | 0         | 21.91       | 21.92          | 21.86        |                     |                     |
| 20                                                             | 16QAM      | 1       | 0         | 22.22       | 22.14          | 22.02        | 23                  |                     |
| 20                                                             | 16QAM      | 1       | 49        | 22.14       | 22.16          | 22.04        |                     |                     |
| 20                                                             | 16QAM      | 1       | 99        | 22.01       | 22.01          | 22.09        |                     |                     |
| 20                                                             | 16QAM      | 50      | 0         | 20.97       | 21.08          | 21.12        |                     |                     |
| 20                                                             | 16QAM      | 50      | 24        | 20.98       | 20.94          | 20.91        | 22                  |                     |
| 20                                                             | 16QAM      | 50      | 50        | 20.80       | 20.85          | 21.00        |                     |                     |
| 20                                                             | 16QAM      | 100     | 0         | 21.02       | 20.88          | 20.97        |                     |                     |
| 20                                                             | 64QAM      | 1       | 0         | 21.20       | 21.21          | 21.30        |                     |                     |
| 20                                                             | 64QAM      | 1       | 49        | 21.12       | 21.10          | 21.23        | 22                  |                     |
| 20                                                             | 64QAM      | 1       | 99        | 21.13       | 21.21          | 21.02        |                     |                     |
| 20                                                             | 64QAM      | 50      | 0         | 19.92       | 20.21          | 20.00        |                     |                     |
| 20                                                             | 64QAM      | 50      | 24        | 20.10       | 20.00          | 19.87        |                     |                     |
| 20                                                             | 64QAM      | 50      | 50        | 19.91       | 20.04          | 19.86        | 21                  |                     |
| 20                                                             | 64QAM      | 100     | 0         | 20.08       | 20.05          | 19.82        |                     |                     |
| Channel                                                        |            |         |           | 20025       | 20175          | 20325        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1717.5      | 1732.5         | 1747.5       |                     |                     |
| 15                                                             | QPSK       | 1       | 0         | 22.94       | 22.98          | 22.91        | 24                  |                     |
| 15                                                             | QPSK       | 1       | 37        | 22.89       | 22.90          | 22.83        |                     |                     |
| 15                                                             | QPSK       | 1       | 74        | 22.84       | 22.80          | 22.75        |                     |                     |
| 15                                                             | QPSK       | 36      | 0         | 21.88       | 21.94          | 21.89        |                     |                     |
| 15                                                             | QPSK       | 36      | 20        | 21.77       | 21.86          | 21.81        | 23                  |                     |
| 15                                                             | QPSK       | 36      | 39        | 21.78       | 21.90          | 21.80        |                     |                     |
| 15                                                             | QPSK       | 75      | 0         | 21.86       | 21.87          | 21.81        |                     |                     |
| 15                                                             | 16QAM      | 1       | 0         | 22.17       | 22.09          | 21.97        |                     |                     |
| 15                                                             | 16QAM      | 1       | 37        | 22.09       | 22.11          | 21.99        | 23                  |                     |
| 15                                                             | 16QAM      | 1       | 74        | 21.96       | 21.96          | 22.04        |                     |                     |
| 15                                                             | 16QAM      | 36      | 0         | 20.92       | 21.03          | 21.07        |                     |                     |
| 15                                                             | 16QAM      | 36      | 20        | 20.93       | 20.89          | 20.86        |                     |                     |
| 15                                                             | 16QAM      | 36      | 39        | 20.75       | 20.80          | 20.95        | 22                  |                     |
| 15                                                             | 16QAM      | 75      | 0         | 20.97       | 20.83          | 20.92        |                     |                     |
| 15                                                             | 64QAM      | 1       | 0         | 21.15       | 21.16          | 21.25        |                     |                     |
| 15                                                             | 64QAM      | 1       | 37        | 21.07       | 21.05          | 21.18        |                     |                     |
| 15                                                             | 64QAM      | 1       | 74        | 21.08       | 21.16          | 20.97        | 22                  |                     |
| 15                                                             | 64QAM      | 36      | 0         | 19.87       | 20.16          | 19.95        |                     |                     |
| 15                                                             | 64QAM      | 36      | 20        | 20.05       | 19.95          | 19.82        |                     |                     |
| 15                                                             | 64QAM      | 36      | 39        | 19.86       | 19.99          | 19.81        |                     |                     |
| 15                                                             | 64QAM      | 75      | 0         | 20.03       | 20.00          | 19.77        | 21                  |                     |
| Channel                                                        |            |         |           | 20000       | 20175          | 20350        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1715        | 1732.5         | 1750         |                     |                     |
| 10                                                             | QPSK       | 1       | 0         | 22.88       | 22.92          | 22.85        |                     | 24                  |
| 10                                                             | QPSK       | 1       | 25        | 22.83       | 22.84          | 22.77        |                     |                     |
| 10                                                             | QPSK       | 1       | 49        | 22.78       | 22.74          | 22.69        |                     |                     |
| 10                                                             | QPSK       | 25      | 0         | 21.82       | 21.88          | 21.83        |                     |                     |
| 10                                                             | QPSK       | 25      | 12        | 21.71       | 21.80          | 21.75        | 23                  |                     |
| 10                                                             | QPSK       | 25      | 25        | 21.72       | 21.84          | 21.74        |                     |                     |
| 10                                                             | QPSK       | 50      | 0         | 21.80       | 21.81          | 21.75        |                     |                     |
| 10                                                             | 16QAM      | 1       | 0         | 22.11       | 22.03          | 21.91        |                     |                     |
| 10                                                             | 16QAM      | 1       | 25        | 22.03       | 22.05          | 21.93        | 23                  |                     |
| 10                                                             | 16QAM      | 1       | 49        | 21.90       | 21.90          | 21.98        |                     |                     |
| 10                                                             | 16QAM      | 25      | 0         | 20.86       | 20.97          | 21.01        |                     |                     |
| 10                                                             | 16QAM      | 25      | 12        | 20.87       | 20.83          | 20.80        |                     |                     |
| 10                                                             | 16QAM      | 25      | 25        | 20.69       | 20.74          | 20.89        | 22                  |                     |
| 10                                                             | 16QAM      | 50      | 0         | 20.91       | 20.77          | 20.86        |                     |                     |
| 10                                                             | 64QAM      | 1       | 0         | 21.09       | 21.10          | 21.19        |                     |                     |
| 10                                                             | 64QAM      | 1       | 25        | 21.01       | 20.99          | 21.12        |                     |                     |
| 10                                                             | 64QAM      | 1       | 49        | 21.02       | 21.10          | 20.91        | 22                  |                     |
| 10                                                             | 64QAM      | 25      | 0         | 19.81       | 20.10          | 19.89        |                     |                     |
| 10                                                             | 64QAM      | 25      | 12        | 19.99       | 19.89          | 19.76        |                     |                     |
| 10                                                             | 64QAM      | 25      | 25        | 19.80       | 19.93          | 19.75        |                     |                     |
| 10                                                             | 64QAM      | 50      | 0         | 19.97       | 19.94          | 19.71        | 21                  |                     |
| Channel                                                        |            |         |           | 19975       | 20175          | 20375        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1712.5      | 1732.5         | 1752.5       |                     |                     |
| 5                                                              | QPSK       | 1       | 0         | 22.83       | 22.87          | 22.80        |                     | 24                  |
| 5                                                              | QPSK       | 1       | 12        | 22.78       | 22.79          | 22.72        |                     |                     |
| 5                                                              | QPSK       | 1       | 24        | 22.73       | 22.69          | 22.64        |                     |                     |
| 5                                                              | QPSK       | 12      | 0         | 21.77       | 21.83          | 21.78        |                     |                     |
| 5                                                              | QPSK       | 12      | 7         | 21.66       | 21.75          | 21.70        | 23                  |                     |
| 5                                                              | QPSK       | 12      | 13        | 21.67       | 21.79          | 21.69        |                     |                     |
| 5                                                              | QPSK       | 25      | 0         | 21.75       | 21.76          | 21.70        |                     |                     |
| 5                                                              | 16QAM      | 1       | 0         | 22.06       | 21.98          | 21.86        |                     |                     |
| 5                                                              | 16QAM      | 1       | 12        | 21.98       | 22.00          | 21.88        | 23                  |                     |
| 5                                                              | 16QAM      | 1       | 24        | 21.85       | 21.85          | 21.93        |                     |                     |
| 5                                                              | 16QAM      | 12      | 0         | 20.81       | 20.92          | 20.96        |                     |                     |
| 5                                                              | 16QAM      | 12      | 7         | 20.82       | 20.78          | 20.75        |                     |                     |
| 5                                                              | 16QAM      | 12      | 13        | 20.64       | 20.69          | 20.84        | 22                  |                     |
| 5                                                              | 16QAM      | 25      | 0         | 20.86       | 20.72          | 20.81        |                     |                     |
| 5                                                              | 64QAM      | 1       | 0         | 21.04       | 21.05          | 21.14        |                     |                     |
| 5                                                              | 64QAM      | 1       | 12        | 20.96       | 20.94          | 21.07        |                     |                     |
| 5                                                              | 64QAM      | 1       | 24        | 20.97       | 21.05          | 20.86        | 22                  |                     |
| 5                                                              | 64QAM      | 12      | 0         | 19.76       | 20.05          | 19.84        |                     |                     |
| 5                                                              | 64QAM      | 12      | 7         | 19.94       | 19.84          | 19.71        |                     |                     |
| 5                                                              | 64QAM      | 12      | 13        | 19.75       | 19.88          | 19.70        |                     |                     |
| 5                                                              | 64QAM      | 25      | 0         | 19.92       | 19.89          | 19.66        | 21                  |                     |
| Channel                                                        |            |         |           | 19965       | 20175          | 20385        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1711.5      | 1732.5         | 1753.5       |                     |                     |
| 3                                                              | QPSK       | 1       | 0         | 22.78       | 22.82          | 22.75        |                     | 24                  |
| 3                                                              | QPSK       | 1       | 8         | 22.73       | 22.74          | 22.67        |                     |                     |
| 3                                                              | QPSK       | 1       | 14        | 22.68       | 22.64          | 22.59        |                     |                     |
| 3                                                              | QPSK       | 8       | 0         | 21.72       | 21.78          | 21.73        |                     |                     |
| 3                                                              | QPSK       | 8       | 4         | 21.61       | 21.70          | 21.65        | 23                  |                     |
| 3                                                              | QPSK       | 8       | 7         | 21.62       | 21.74          | 21.64        |                     |                     |
| 3                                                              | QPSK       | 15      | 0         | 21.70       | 21.71          | 21.65        |                     |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 16QAM | 1  | 0  | 21.94  | 21.86  | 21.74  | 23                  |
| 3               | 16QAM | 1  | 8  | 21.86  | 21.88  | 21.76  |                     |
| 3               | 16QAM | 1  | 14 | 21.73  | 21.73  | 21.81  |                     |
| 3               | 16QAM | 8  | 0  | 20.69  | 20.80  | 20.84  | 22                  |
| 3               | 16QAM | 8  | 4  | 20.70  | 20.66  | 20.63  |                     |
| 3               | 16QAM | 8  | 7  | 20.52  | 20.57  | 20.72  |                     |
| 3               | 16QAM | 15 | 0  | 20.74  | 20.60  | 20.69  | 22                  |
| 3               | 64QAM | 1  | 0  | 20.92  | 20.93  | 21.02  |                     |
| 3               | 64QAM | 1  | 8  | 20.84  | 20.82  | 20.95  |                     |
| 3               | 64QAM | 1  | 14 | 20.85  | 20.93  | 20.74  | 21                  |
| 3               | 64QAM | 8  | 0  | 19.64  | 19.93  | 19.72  |                     |
| 3               | 64QAM | 8  | 4  | 19.82  | 19.72  | 19.59  |                     |
| 3               | 64QAM | 8  | 7  | 19.63  | 19.76  | 19.58  | 21                  |
| 3               | 64QAM | 15 | 0  | 19.80  | 19.77  | 19.54  |                     |
| Channel         |       |    |    | 1860.7 | 1890.0 | 1919.3 | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1850.7 | 1880   | 1909.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 22.66  | 22.70  | 22.63  |                     |
| 1.4             | QPSK  | 1  | 3  | 22.61  | 22.62  | 22.55  | 24                  |
| 1.4             | QPSK  | 1  | 5  | 22.56  | 22.52  | 22.47  |                     |
| 1.4             | QPSK  | 3  | 0  | 21.60  | 21.66  | 21.61  |                     |
| 1.4             | QPSK  | 3  | 1  | 21.49  | 21.58  | 21.53  | 23                  |
| 1.4             | QPSK  | 3  | 3  | 21.50  | 21.62  | 21.52  |                     |
| 1.4             | QPSK  | 6  | 0  | 21.58  | 21.59  | 21.53  |                     |
| 1.4             | 16QAM | 1  | 0  | 21.89  | 21.81  | 21.69  | 23                  |
| 1.4             | 16QAM | 1  | 3  | 21.81  | 21.83  | 21.71  |                     |
| 1.4             | 16QAM | 1  | 5  | 21.68  | 21.68  | 21.76  |                     |
| 1.4             | 16QAM | 3  | 0  | 20.64  | 20.75  | 20.79  | 22                  |
| 1.4             | 16QAM | 3  | 1  | 20.65  | 20.61  | 20.58  |                     |
| 1.4             | 16QAM | 3  | 3  | 20.47  | 20.52  | 20.67  |                     |
| 1.4             | 16QAM | 6  | 0  | 20.69  | 20.55  | 20.64  | 22                  |
| 1.4             | 64QAM | 1  | 0  | 20.87  | 20.88  | 20.97  |                     |
| 1.4             | 64QAM | 1  | 3  | 20.79  | 20.77  | 20.90  |                     |
| 1.4             | 64QAM | 1  | 5  | 20.80  | 20.88  | 20.69  | 22                  |
| 1.4             | 64QAM | 3  | 0  | 19.59  | 19.88  | 19.67  |                     |
| 1.4             | 64QAM | 3  | 1  | 19.77  | 19.67  | 19.54  |                     |
| 1.4             | 64QAM | 3  | 3  | 19.58  | 19.71  | 19.53  | 21                  |
| 1.4             | 64QAM | 6  | 0  | 19.75  | 19.72  | 19.49  |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 16QAM | 1  | 0  | 22.01  | 21.93  | 21.81  | 23                  |
| 3               | 16QAM | 1  | 8  | 21.93  | 21.95  | 21.83  |                     |
| 3               | 16QAM | 1  | 14 | 21.80  | 21.80  | 21.88  |                     |
| 3               | 16QAM | 8  | 0  | 20.76  | 20.87  | 20.91  | 22                  |
| 3               | 16QAM | 8  | 4  | 20.77  | 20.73  | 20.70  |                     |
| 3               | 16QAM | 8  | 7  | 20.59  | 20.64  | 20.79  |                     |
| 3               | 16QAM | 15 | 0  | 20.81  | 20.67  | 20.76  | 22                  |
| 3               | 64QAM | 1  | 0  | 20.99  | 21.00  | 21.09  |                     |
| 3               | 64QAM | 1  | 8  | 20.91  | 20.89  | 21.02  |                     |
| 3               | 64QAM | 1  | 14 | 20.92  | 21.00  | 20.81  | 21                  |
| 3               | 64QAM | 8  | 0  | 19.71  | 20.00  | 19.79  |                     |
| 3               | 64QAM | 8  | 4  | 19.89  | 19.79  | 19.66  |                     |
| 3               | 64QAM | 8  | 7  | 19.70  | 19.83  | 19.65  | 21                  |
| 3               | 64QAM | 15 | 0  | 19.87  | 19.84  | 19.61  |                     |
| Channel         |       |    |    | 1996.7 | 2017.5 | 2039.3 | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 22.72  | 22.76  | 22.69  |                     |
| 1.4             | QPSK  | 1  | 3  | 22.67  | 22.68  | 22.61  | 24                  |
| 1.4             | QPSK  | 1  | 5  | 22.62  | 22.58  | 22.53  |                     |
| 1.4             | QPSK  | 3  | 0  | 21.66  | 21.72  | 21.67  |                     |
| 1.4             | QPSK  | 3  | 1  | 21.55  | 21.64  | 21.59  | 23                  |
| 1.4             | QPSK  | 3  | 3  | 21.56  | 21.68  | 21.58  |                     |
| 1.4             | QPSK  | 6  | 0  | 21.64  | 21.65  | 21.59  |                     |
| 1.4             | 16QAM | 1  | 0  | 21.95  | 21.87  | 21.75  | 23                  |
| 1.4             | 16QAM | 1  | 3  | 21.87  | 21.89  | 21.77  |                     |
| 1.4             | 16QAM | 1  | 5  | 21.74  | 21.74  | 21.82  |                     |
| 1.4             | 16QAM | 3  | 0  | 20.70  | 20.81  | 20.85  | 22                  |
| 1.4             | 16QAM | 3  | 1  | 20.71  | 20.67  | 20.64  |                     |
| 1.4             | 16QAM | 3  | 3  | 20.53  | 20.58  | 20.73  |                     |
| 1.4             | 16QAM | 6  | 0  | 20.75  | 20.61  | 20.70  | 22                  |
| 1.4             | 64QAM | 1  | 0  | 20.93  | 20.94  | 21.03  |                     |
| 1.4             | 64QAM | 1  | 3  | 20.85  | 20.83  | 20.96  |                     |
| 1.4             | 64QAM | 1  | 5  | 20.86  | 20.94  | 20.75  | 22                  |
| 1.4             | 64QAM | 3  | 0  | 19.65  | 19.94  | 19.73  |                     |
| 1.4             | 64QAM | 3  | 1  | 19.83  | 19.73  | 19.60  |                     |
| 1.4             | 64QAM | 3  | 3  | 19.64  | 19.77  | 19.59  | 21                  |
| 1.4             | 64QAM | 6  | 0  | 19.81  | 19.78  | 19.55  |                     |

| Band 5 (Celluar Band) (dBm)<br>Part 22H(only on channel required) |            |         |           |             |                |              |                     |  |  |
|-------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW [MHz]                                                          | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                                           |            |         |           | 20450       | 20525          | 20600        |                     |  |  |
| Frequency (MHz)                                                   |            |         |           | 829         | 836.5          | 844          |                     |  |  |
| 10                                                                | QPSK       | 1       | 0         | 23.85       | 23.93          | 23.89        | 25                  |  |  |
| 10                                                                | QPSK       | 1       | 25        | 23.82       | 23.88          | 23.81        |                     |  |  |
| 10                                                                | QPSK       | 1       | 49        | 23.70       | 23.81          | 23.77        |                     |  |  |
| 10                                                                | QPSK       | 25      | 0         | 22.81       | 22.89          | 22.88        |                     |  |  |
| 10                                                                | QPSK       | 25      | 12        | 22.68       | 22.82          | 22.74        | 24                  |  |  |
| 10                                                                | QPSK       | 25      | 25        | 22.71       | 22.79          | 22.87        |                     |  |  |
| 10                                                                | QPSK       | 50      | 0         | 22.75       | 22.73          | 22.69        |                     |  |  |
| 10                                                                | 16QAM      | 1       | 0         | 22.81       | 23.13          | 23.03        |                     |  |  |
| 10                                                                | 16QAM      | 1       | 25        | 22.84       | 23.14          | 23.02        | 24                  |  |  |
| 10                                                                | 16QAM      | 1       | 49        | 22.97       | 23.09          | 22.97        |                     |  |  |
| 10                                                                | 16QAM      | 25      | 0         | 21.94       | 22.04          | 21.79        |                     |  |  |
| 10                                                                | 16QAM      | 25      | 12        | 21.68       | 21.73          | 21.68        |                     |  |  |
| 10                                                                | 16QAM      | 25      | 25        | 21.67       | 21.83          | 21.89        | 23                  |  |  |
| 10                                                                | 16QAM      | 50      | 0         | 21.87       | 21.69          | 21.88        |                     |  |  |
| 10                                                                | 64QAM      | 1       | 0         | 21.95       | 22.13          | 21.99        |                     |  |  |
| 10                                                                | 64QAM      | 1       | 25        | 22.09       | 21.87          | 21.82        |                     |  |  |
| 10                                                                | 64QAM      | 1       | 49        | 21.78       | 21.88          | 21.86        | 23                  |  |  |
| 10                                                                | 64QAM      | 25      | 0         | 21.02       | 20.87          | 20.98        |                     |  |  |
| 10                                                                | 64QAM      | 25      | 12        | 20.80       | 20.91          | 20.91        |                     |  |  |
| 10                                                                | 64QAM      | 25      | 25        | 20.70       | 20.82          | 20.70        |                     |  |  |
| 10                                                                | 64QAM      | 50      | 0         | 20.85       | 20.79          | 20.74        | 22                  |  |  |
| Channel                                                           |            |         |           | 20425       | 20525          | 20625        |                     |  |  |
| Frequency (MHz)                                                   |            |         |           | 826.5       | 836.5          | 846.5        |                     |  |  |
| 5                                                                 | QPSK       | 1       | 0         | 23.80       | 23.88          | 23.84        | 25                  |  |  |
| 5                                                                 | QPSK       | 1       | 12        | 23.77       | 23.83          | 23.76        |                     |  |  |
| 5                                                                 | QPSK       | 1       | 24        | 23.65       | 23.76          | 23.72        |                     |  |  |
| 5                                                                 | QPSK       | 12      | 0         | 22.76       | 22.84          | 22.83        |                     |  |  |
| 5                                                                 | QPSK       | 12      | 7         | 22.63       | 22.77          | 22.69        | 24                  |  |  |
| 5                                                                 | QPSK       | 12      | 13        | 22.66       | 22.74          | 22.82        |                     |  |  |
| 5                                                                 | QPSK       | 25      | 0         | 22.70       | 22.68          | 22.64        |                     |  |  |
| 5                                                                 | 16QAM      | 1       | 0         | 22.76       | 23.08          | 22.98        |                     |  |  |
| 5                                                                 | 16QAM      | 1       | 12        | 22.79       | 23.09          | 22.97        | 24                  |  |  |
| 5                                                                 | 16QAM      | 1       | 24        | 22.92       | 23.04          | 22.92        |                     |  |  |
| 5                                                                 | 16QAM      | 12      | 0         | 21.89       | 21.99          | 21.74        |                     |  |  |
| 5                                                                 | 16QAM      | 12      | 7         | 21.63       | 21.68          | 21.63        |                     |  |  |
| 5                                                                 | 16QAM      | 12      | 13        | 21.62       | 21.78          | 21.84        | 23                  |  |  |
| 5                                                                 | 16QAM      | 25      | 0         | 21.82       | 21.64          | 21.83        |                     |  |  |
| 5                                                                 | 64QAM      | 1       | 0         | 21.90       | 22.08          | 21.94        |                     |  |  |
| 5                                                                 | 64QAM      | 1       | 12        | 22.04       | 21.82          | 21.77        |                     |  |  |
| 5                                                                 | 64QAM      | 1       | 24        | 21.73       | 21.83          | 21.81        | 23                  |  |  |
| 5                                                                 | 64QAM      | 12      | 0         | 20.97       | 20.82          | 20.93        |                     |  |  |
| 5                                                                 | 64QAM      | 12      | 7         | 20.75       | 20.86          | 20.86        |                     |  |  |
| 5                                                                 | 64QAM      | 12      | 13        | 20.65       | 20.77          | 20.65        |                     |  |  |
| 5                                                                 | 64QAM      | 25      | 0         | 20.80       | 20.74          | 20.69        | 22                  |  |  |
| Channel                                                           |            |         |           | 20415       | 20525          | 20635        |                     |  |  |
| Frequency (MHz)                                                   |            |         |           | 825.5       | 836.5          | 847.5        |                     |  |  |
| 3                                                                 | QPSK       | 1       | 0         | 23.74       | 23.82          | 23.78        | 25                  |  |  |
| 3                                                                 | QPSK       | 1       | 8         | 23.71       | 23.77          | 23.70        |                     |  |  |
| 3                                                                 | QPSK       | 1       | 14        | 23.59       | 23.70          | 23.66        |                     |  |  |
| 3                                                                 | QPSK       | 8       | 0         | 22.70       | 22.78          | 22.77        |                     |  |  |
| 3                                                                 | QPSK       | 8       | 4         | 22.57       | 22.71          | 22.63        | 24                  |  |  |
| 3                                                                 | QPSK       | 8       | 7         | 22.60       | 22.68          | 22.76        |                     |  |  |
| 3                                                                 | QPSK       | 15      | 0         | 22.64       | 22.62          | 22.58        |                     |  |  |
| 3                                                                 | 16QAM      | 1       | 0         | 22.70       | 23.02          | 22.92        |                     |  |  |
| 3                                                                 | 16QAM      | 1       | 8         | 22.73       | 23.03          | 22.91        | 24                  |  |  |
| 3                                                                 | 16QAM      | 1       | 14        | 22.86       | 22.98          | 22.86        |                     |  |  |
| 3                                                                 | 16QAM      | 8       | 0         | 21.83       | 21.93          | 21.68        |                     |  |  |
| 3                                                                 | 16QAM      | 8       | 4         | 21.57       | 21.62          | 21.57        |                     |  |  |
| 3                                                                 | 16QAM      | 8       | 7         | 21.56       | 21.72          | 21.78        | 23                  |  |  |
| 3                                                                 | 16QAM      | 15      | 0         | 21.76       | 21.58          | 21.77        |                     |  |  |
| 3                                                                 | 64QAM      | 1       | 0         | 21.84       | 22.02          | 21.88        |                     |  |  |
| 3                                                                 | 64QAM      | 1       | 8         | 21.98       | 21.76          | 21.71        |                     |  |  |
| 3                                                                 | 64QAM      | 1       | 14        | 21.67       | 21.77          | 21.75        | 23                  |  |  |
| 3                                                                 | 64QAM      | 8       | 0         | 20.91       | 20.76          | 20.87        |                     |  |  |
| 3                                                                 | 64QAM      | 8       | 4         | 20.69       | 20.80          | 20.80        |                     |  |  |
| 3                                                                 | 64QAM      | 8       | 7         | 20.59       | 20.71          | 20.59        |                     |  |  |
| 3                                                                 | 64QAM      | 15      | 0         | 20.74       | 20.68          | 20.63        | 22                  |  |  |
| Channel                                                           |            |         |           | 20407       | 20525          | 20643        |                     |  |  |
| Frequency (MHz)                                                   |            |         |           | 824.7       | 836.5          | 848.3        |                     |  |  |
| 1.4                                                               | QPSK       | 1       | 0         | 23.68       | 23.76          | 23.72        | 25                  |  |  |
| 1.4                                                               | QPSK       | 1       | 3         | 23.65       | 23.71          | 23.64        |                     |  |  |
| 1.4                                                               | QPSK       | 1       | 5         | 23.53       | 23.64          | 23.60        |                     |  |  |
| 1.4                                                               | QPSK       | 3       | 0         | 22.64       | 22.72          | 22.71        |                     |  |  |
| 1.4                                                               | QPSK       | 3       | 1         | 22.51       | 22.65          | 22.57        | 25                  |  |  |
| 1.4                                                               | QPSK       | 3       | 3         | 22.54       | 22.62          | 22.70        |                     |  |  |
| 1.4                                                               | QPSK       | 6       | 0         | 22.58       | 22.56          | 22.52        |                     |  |  |
| 1.4                                                               | 16QAM      | 1       | 0         | 22.64       | 22.96          | 22.86        |                     |  |  |
| 1.4                                                               | 16QAM      | 1       | 3         | 22.67       | 22.97          | 22.85        | 24                  |  |  |
| 1.4                                                               | 16QAM      | 1       | 5         | 22.80       | 22.92          | 22.80        |                     |  |  |
| 1.4                                                               | 16QAM      | 3       | 0         | 21.77       | 21.87          | 21.62        |                     |  |  |
| 1.4                                                               | 16QAM      | 3       | 1         | 21.51       | 21.56          | 21.51        |                     |  |  |
| 1.4                                                               | 16QAM      | 3       | 3         | 21.50       | 21.66          | 21.72        | 23                  |  |  |
| 1.4                                                               | 16QAM      | 6       | 0         | 21.70       | 21.52          | 21.71        |                     |  |  |
| 1.4                                                               | 64QAM      | 1       | 0         | 21.78       | 21.96          | 21.82        |                     |  |  |
| 1.4                                                               | 64QAM      | 1       | 3         | 21.92       | 21.70          | 21.65        |                     |  |  |
| 1.4                                                               | 64QAM      | 1       | 5         | 21.61       | 21.71          | 21.69        | 23                  |  |  |
| 1.4                                                               | 64QAM      | 3       | 0         | 20.85       | 20.70          | 20.81        |                     |  |  |
| 1.4                                                               | 64QAM      | 3       | 1         | 20.63       | 20.74          | 20.74        |                     |  |  |
| 1.4                                                               | 64QAM      | 3       | 3         | 20.53       | 20.65          | 20.53        |                     |  |  |
| 1.4                                                               | 64QAM      | 6       | 0         | 20.68       | 20.62          | 20.57        | 22                  |  |  |

| Band 7 (2600MHz Band) (dBm)<br>Part 27 |            |         |           |             |                |              |                     |  |  |
|----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW [MHz]                               | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                |            |         |           | 20850       | 21100          | 21350        |                     |  |  |
| Frequency (MHz)                        |            |         |           | 2510        | 2535           | 2560         |                     |  |  |
| 20                                     | QPSK       | 1       | 0         | 22.99       | 23.05          | 23.00        | 24                  |  |  |
| 20                                     | QPSK       | 1       | 49        | 22.88       | 22.96          | 22.84        |                     |  |  |
| 20                                     | QPSK       | 1       | 99        | 22.86       | 22.88          | 22.90        |                     |  |  |
| 20                                     | QPSK       | 50      | 0         | 21.98       | 22.04          | 21.95        |                     |  |  |
| 20                                     | QPSK       | 50      | 24        | 21.95       | 22.00          | 21.83        | 23                  |  |  |
| 20                                     | QPSK       | 50      | 50        | 21.88       | 22.01          | 21.79        |                     |  |  |
| 20                                     | QPSK       | 100     | 0         | 21.93       | 22.01          | 21.84        |                     |  |  |
| 20                                     | 16QAM      | 1       | 0         | 22.12       | 22.09          | 21.97        |                     |  |  |
| 20                                     | 16QAM      | 1       | 49        | 22.01       | 22.00          | 22.14        | 23                  |  |  |
| 20                                     | 16QAM      | 1       | 99        | 22.04       | 21.95          | 22.12        |                     |  |  |
| 20                                     | 16QAM      | 50      | 0         | 21.04       | 20.97          | 21.06        |                     |  |  |
| 20                                     | 16QAM      | 50      | 24        | 20.88       | 20.89          | 20.85        |                     |  |  |
| 20                                     | 16QAM      | 50      | 50        | 20.78       | 20.99          | 20.86        | 22                  |  |  |
| 20                                     | 16QAM      | 100     | 0         | 21.03       | 20.96          | 21.00        |                     |  |  |
| 20                                     | 64QAM      | 1       | 0         | 21.08       | 21.07          | 21.06        |                     |  |  |
| 20                                     | 64QAM      | 1       | 49        | 21.19       | 21.05          | 20.95        |                     |  |  |
| 20                                     | 64QAM      | 1       | 99        | 21.09       | 21.17          | 20.98        | 22                  |  |  |
| 20                                     | 64QAM      | 50      | 0         | 20.10       | 20.20          | 19.94        |                     |  |  |
| 20                                     | 64QAM      | 50      | 24        | 20.01       | 20.11          | 19.85        |                     |  |  |
| 20                                     | 64QAM      | 50      | 50        | 20.00       | 19.91          | 19.99        |                     |  |  |
| 20                                     | 64QAM      | 100     | 0         | 19.96       | 19.98          | 19.89        | 21                  |  |  |
| Channel                                |            |         |           | 20825       | 21100          | 21375        |                     |  |  |
| Frequency (MHz)                        |            |         |           | 2507.5      | 2535           | 2562.5       |                     |  |  |
| 15                                     | QPSK       | 1       | 0         | 22.93       | 22.99          | 22.94        | 24                  |  |  |
| 15                                     | QPSK       | 1       | 37        | 22.82       | 22.90          | 22.78        |                     |  |  |
| 15                                     | QPSK       | 1       | 74        | 22.80       | 22.82          | 22.84        |                     |  |  |
| 15                                     | QPSK       | 36      | 0         | 21.92       | 21.96          | 21.89        |                     |  |  |

| Band 12 (700MHz Low Band) (dBm)<br>Part 27F(only on channel required) |            |         |           |             |                |              |                     |  |  |
|-----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW [MHz]                                                              | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                                               |            |         |           | 23060       | 23095          | 23130        |                     |  |  |
| Frequency (MHz)                                                       |            |         |           | 704         | 707.5          | 711          |                     |  |  |
| 10                                                                    | QPSK       | 1       | 0         | 23.04       | 23.08          | 23.02        | 24                  |  |  |
| 10                                                                    | QPSK       | 1       | 25        | 22.99       | 23.02          | 22.94        |                     |  |  |
| 10                                                                    | QPSK       | 1       | 49        | 22.96       | 23.00          | 22.92        |                     |  |  |
| 10                                                                    | QPSK       | 25      | 0         | 21.87       | 22.03          | 22.12        |                     |  |  |
| 10                                                                    | QPSK       | 25      | 12        | 21.82       | 22.10          | 21.88        | 23                  |  |  |
| 10                                                                    | QPSK       | 25      | 25        | 21.98       | 22.00          | 22.00        |                     |  |  |
| 10                                                                    | QPSK       | 50      | 0         | 21.86       | 22.08          | 21.87        |                     |  |  |
| 10                                                                    | 16QAM      | 1       | 0         | 22.04       | 22.26          | 22.09        |                     |  |  |
| 10                                                                    | 16QAM      | 1       | 25        | 21.95       | 22.16          | 22.12        | 23                  |  |  |
| 10                                                                    | 16QAM      | 1       | 49        | 21.95       | 22.08          | 22.16        |                     |  |  |
| 10                                                                    | 16QAM      | 25      | 0         | 21.02       | 21.24          | 21.17        |                     |  |  |
| 10                                                                    | 16QAM      | 25      | 12        | 20.90       | 21.14          | 21.09        |                     |  |  |
| 10                                                                    | 16QAM      | 25      | 25        | 20.94       | 21.08          | 20.99        | 22                  |  |  |
| 10                                                                    | 16QAM      | 50      | 0         | 20.95       | 20.96          | 20.93        |                     |  |  |
| 10                                                                    | 64QAM      | 1       | 0         | 21.32       | 21.23          | 21.26        |                     |  |  |
| 10                                                                    | 64QAM      | 1       | 25        | 21.11       | 21.19          | 21.24        |                     |  |  |
| 10                                                                    | 64QAM      | 1       | 49        | 21.04       | 20.95          | 21.16        | 22                  |  |  |
| 10                                                                    | 64QAM      | 25      | 0         | 20.02       | 20.05          | 20.16        |                     |  |  |
| 10                                                                    | 64QAM      | 25      | 12        | 19.90       | 20.19          | 20.10        |                     |  |  |
| 10                                                                    | 64QAM      | 25      | 25        | 19.91       | 19.92          | 19.93        |                     |  |  |
| 10                                                                    | 64QAM      | 50      | 0         | 19.93       | 20.10          | 20.09        | 21                  |  |  |
| Channel                                                               |            |         |           | 23035       | 23095          | 23155        |                     |  |  |
| Frequency (MHz)                                                       |            |         |           | 701.5       | 707.5          | 713.5        |                     |  |  |
| 5                                                                     | QPSK       | 1       | 0         | 22.99       | 23.03          | 22.97        | 24                  |  |  |
| 5                                                                     | QPSK       | 1       | 12        | 22.94       | 22.97          | 22.89        |                     |  |  |
| 5                                                                     | QPSK       | 1       | 24        | 22.91       | 22.95          | 22.87        |                     |  |  |
| 5                                                                     | QPSK       | 12      | 0         | 21.82       | 21.98          | 22.07        |                     |  |  |
| 5                                                                     | QPSK       | 12      | 7         | 21.77       | 22.05          | 21.83        | 23                  |  |  |
| 5                                                                     | QPSK       | 12      | 13        | 21.93       | 21.95          | 21.95        |                     |  |  |
| 5                                                                     | QPSK       | 25      | 0         | 21.81       | 22.03          | 21.82        |                     |  |  |
| 5                                                                     | 16QAM      | 1       | 0         | 21.99       | 22.21          | 22.04        |                     |  |  |
| 5                                                                     | 16QAM      | 1       | 12        | 21.90       | 22.11          | 22.07        | 23                  |  |  |
| 5                                                                     | 16QAM      | 1       | 24        | 21.90       | 22.03          | 22.11        |                     |  |  |
| 5                                                                     | 16QAM      | 12      | 0         | 20.97       | 21.19          | 21.12        |                     |  |  |
| 5                                                                     | 16QAM      | 12      | 7         | 20.85       | 21.09          | 21.04        |                     |  |  |
| 5                                                                     | 16QAM      | 12      | 13        | 20.89       | 21.03          | 20.94        | 22                  |  |  |
| 5                                                                     | 16QAM      | 25      | 0         | 20.90       | 20.91          | 20.88        |                     |  |  |
| 5                                                                     | 64QAM      | 1       | 0         | 21.27       | 21.18          | 21.21        |                     |  |  |
| 5                                                                     | 64QAM      | 1       | 12        | 21.06       | 21.14          | 21.19        |                     |  |  |
| 5                                                                     | 64QAM      | 1       | 24        | 20.99       | 20.90          | 21.11        | 22                  |  |  |
| 5                                                                     | 64QAM      | 12      | 0         | 19.97       | 20.00          | 20.11        |                     |  |  |
| 5                                                                     | 64QAM      | 12      | 7         | 19.85       | 20.14          | 20.05        |                     |  |  |
| 5                                                                     | 64QAM      | 12      | 13        | 19.86       | 19.87          | 19.88        |                     |  |  |
| 5                                                                     | 64QAM      | 25      | 0         | 19.88       | 20.05          | 20.04        | 21                  |  |  |
| Channel                                                               |            |         |           | 23025       | 23095          | 23165        |                     |  |  |
| Frequency (MHz)                                                       |            |         |           | 700.5       | 707.5          | 714.5        |                     |  |  |
| 3                                                                     | QPSK       | 1       | 0         | 22.93       | 22.97          | 22.91        | 24                  |  |  |
| 3                                                                     | QPSK       | 1       | 8         | 22.88       | 22.91          | 22.83        |                     |  |  |
| 3                                                                     | QPSK       | 1       | 14        | 22.85       | 22.89          | 22.81        |                     |  |  |
| 3                                                                     | QPSK       | 8       | 0         | 21.76       | 21.92          | 22.01        |                     |  |  |
| 3                                                                     | QPSK       | 8       | 4         | 21.71       | 21.99          | 21.77        | 23                  |  |  |
| 3                                                                     | QPSK       | 8       | 7         | 21.87       | 21.89          | 21.89        |                     |  |  |
| 3                                                                     | QPSK       | 15      | 0         | 21.75       | 21.97          | 21.76        |                     |  |  |
| 3                                                                     | 16QAM      | 1       | 0         | 21.93       | 22.15          | 21.98        |                     |  |  |
| 3                                                                     | 16QAM      | 1       | 8         | 21.84       | 22.05          | 22.01        | 23                  |  |  |
| 3                                                                     | 16QAM      | 1       | 14        | 21.84       | 21.97          | 22.05        |                     |  |  |
| 3                                                                     | 16QAM      | 8       | 0         | 20.91       | 21.13          | 21.06        |                     |  |  |
| 3                                                                     | 16QAM      | 8       | 4         | 20.79       | 21.03          | 20.98        |                     |  |  |
| 3                                                                     | 16QAM      | 8       | 7         | 20.83       | 20.97          | 20.88        | 22                  |  |  |
| 3                                                                     | 16QAM      | 15      | 0         | 20.84       | 20.85          | 20.82        |                     |  |  |
| 3                                                                     | 64QAM      | 1       | 0         | 21.21       | 21.12          | 21.15        |                     |  |  |
| 3                                                                     | 64QAM      | 1       | 8         | 21.00       | 21.08          | 21.13        |                     |  |  |
| 3                                                                     | 64QAM      | 1       | 14        | 20.93       | 20.84          | 21.05        | 22                  |  |  |
| 3                                                                     | 64QAM      | 8       | 0         | 19.91       | 19.94          | 20.05        |                     |  |  |
| 3                                                                     | 64QAM      | 8       | 4         | 19.79       | 20.08          | 19.99        |                     |  |  |
| 3                                                                     | 64QAM      | 8       | 7         | 19.80       | 19.81          | 19.82        |                     |  |  |
| 3                                                                     | 64QAM      | 15      | 0         | 19.82       | 19.99          | 19.98        | 21                  |  |  |
| Channel                                                               |            |         |           | 23017       | 23095          | 23173        |                     |  |  |
| Frequency (MHz)                                                       |            |         |           | 699.7       | 707.5          | 715.3        |                     |  |  |
| 1.4                                                                   | QPSK       | 1       | 0         | 22.88       | 22.92          | 22.86        | 24                  |  |  |
| 1.4                                                                   | QPSK       | 1       | 3         | 22.83       | 22.86          | 22.78        |                     |  |  |
| 1.4                                                                   | QPSK       | 1       | 5         | 22.80       | 22.84          | 22.76        |                     |  |  |
| 1.4                                                                   | QPSK       | 3       | 0         | 21.71       | 21.87          | 21.96        |                     |  |  |
| 1.4                                                                   | QPSK       | 3       | 1         | 21.66       | 21.94          | 21.72        | 23                  |  |  |
| 1.4                                                                   | QPSK       | 3       | 3         | 21.82       | 21.84          | 21.84        |                     |  |  |
| 1.4                                                                   | QPSK       | 6       | 0         | 21.70       | 21.92          | 21.71        |                     |  |  |
| 1.4                                                                   | 16QAM      | 1       | 0         | 21.88       | 22.10          | 21.93        |                     |  |  |
| 1.4                                                                   | 16QAM      | 1       | 3         | 21.79       | 22.00          | 21.96        | 23                  |  |  |
| 1.4                                                                   | 16QAM      | 1       | 5         | 21.79       | 21.92          | 22.00        |                     |  |  |
| 1.4                                                                   | 16QAM      | 3       | 0         | 20.86       | 21.08          | 21.01        |                     |  |  |
| 1.4                                                                   | 16QAM      | 3       | 1         | 20.74       | 20.98          | 20.93        |                     |  |  |
| 1.4                                                                   | 16QAM      | 3       | 3         | 20.78       | 20.92          | 20.83        | 22                  |  |  |
| 1.4                                                                   | 16QAM      | 6       | 0         | 20.79       | 20.80          | 20.77        |                     |  |  |
| 1.4                                                                   | 64QAM      | 1       | 0         | 21.16       | 21.07          | 21.10        |                     |  |  |
| 1.4                                                                   | 64QAM      | 1       | 3         | 20.95       | 21.03          | 21.08        |                     |  |  |
| 1.4                                                                   | 64QAM      | 1       | 5         | 20.88       | 20.79          | 21.00        | 22                  |  |  |
| 1.4                                                                   | 64QAM      | 3       | 0         | 19.86       | 19.89          | 20.00        |                     |  |  |
| 1.4                                                                   | 64QAM      | 3       | 1         | 19.74       | 20.03          | 19.94        |                     |  |  |
| 1.4                                                                   | 64QAM      | 3       | 3         | 19.75       | 19.76          | 19.77        |                     |  |  |

| Band 13(700MHz Band) (dBm)<br>Part 27F |            |         |           |             |                |              |                     |
|----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                               | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                |            |         |           | 23230       |                |              | 24                  |
| Frequency (MHz)                        |            |         |           | 762         |                |              |                     |
| 10                                     | QPSK       | 1       | 0         | 23.13       |                |              |                     |
| 10                                     | QPSK       | 1       | 25        | 23.05       |                |              |                     |
| 10                                     | QPSK       | 1       | 49        | 23.01       |                |              |                     |
| 10                                     | QPSK       | 25      | 0         | 22.10       |                |              |                     |
| 10                                     | QPSK       | 25      | 12        | 22.03       |                |              |                     |
| 10                                     | QPSK       | 25      | 25        | 21.95       |                |              |                     |
| 10                                     | QPSK       | 50      | 0         | 22.02       |                |              |                     |
| 10                                     | 16QAM      | 1       | 0         | 22.21       |                |              |                     |
| 10                                     | 16QAM      | 1       | 25        | 22.16       |                |              |                     |
| 10                                     | 16QAM      | 1       | 49        | 22.09       |                |              |                     |
| 10                                     | 16QAM      | 25      | 0         | 21.09       |                |              |                     |
| 10                                     | 16QAM      | 25      | 12        | 21.04       |                |              |                     |
| 10                                     | 16QAM      | 25      | 25        | 20.97       |                |              |                     |
| 10                                     | 16QAM      | 50      | 0         | 21.01       |                |              |                     |
| 10                                     | 64QAM      | 1       | 0         | 22.22       |                |              |                     |
| 10                                     | 64QAM      | 1       | 25        | 22.15       |                |              |                     |
| 10                                     | 64QAM      | 1       | 49        | 22.08       |                |              |                     |
| 10                                     | 64QAM      | 25      | 0         | 20.12       |                |              |                     |
| 10                                     | 64QAM      | 25      | 12        | 20.07       |                |              |                     |
| 10                                     | 64QAM      | 25      | 25        | 20.00       |                |              |                     |
| 10                                     | 64QAM      | 50      | 0         | 20.04       |                |              |                     |
| Channel                                |            |         |           | 23205       | 23230          | 23255        |                     |
| Frequency (MHz)                        |            |         |           | 779.5       | 782            | 784.5        |                     |
| 5                                      | QPSK       | 1       | 0         | 22.94       | 22.98          | 22.93        |                     |
| 5                                      | QPSK       | 1       | 12        | 22.85       | 22.91          | 22.90        |                     |
| 5                                      | QPSK       | 1       | 24        | 22.82       | 22.86          | 22.79        |                     |
| 5                                      | QPSK       | 12      | 0         | 21.77       | 21.95          | 21.74        |                     |
| 5                                      | QPSK       | 12      | 7         | 21.80       | 21.90          | 21.65        |                     |
| 5                                      | QPSK       | 12      | 13        | 21.73       | 21.70          | 21.87        |                     |
| 5                                      | QPSK       | 25      | 0         | 21.83       | 21.76          | 21.66        |                     |
| 5                                      | 16QAM      | 1       | 0         | 22.04       | 22.06          | 22.00        |                     |
| 5                                      | 16QAM      | 1       | 12        | 21.86       | 22.02          | 21.91        |                     |
| 5                                      | 16QAM      | 1       | 24        | 21.99       | 22.00          | 21.79        |                     |
| 5                                      | 16QAM      | 12      | 0         | 20.72       | 20.87          | 20.82        |                     |
| 5                                      | 16QAM      | 12      | 7         | 20.74       | 20.84          | 20.83        |                     |
| 5                                      | 16QAM      | 12      | 13        | 20.71       | 20.81          | 20.90        |                     |
| 5                                      | 16QAM      | 25      | 0         | 20.73       | 20.91          | 20.71        |                     |
| 5                                      | 64QAM      | 1       | 0         | 21.04       | 21.13          | 21.16        |                     |
| 5                                      | 64QAM      | 1       | 12        | 21.06       | 20.96          | 20.88        |                     |
| 5                                      | 64QAM      | 1       | 24        | 20.85       | 20.96          | 21.01        |                     |
| 5                                      | 64QAM      | 12      | 0         | 19.91       | 19.88          | 19.81        |                     |
| 5                                      | 64QAM      | 12      | 7         | 19.80       | 19.78          | 19.70        |                     |
| 5                                      | 64QAM      | 12      | 13        | 19.80       | 19.84          | 19.68        |                     |
| 5                                      | 64QAM      | 25      | 0         | 19.80       | 19.79          | 19.84        |                     |

| Band 17 (700MHz Band) (dBm)<br>Part 27H(only on channel required) |            |         |           |             |                |              |                     |
|-------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                          | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                           |            |         |           | 23780       | 23790          | 23800        |                     |
| Frequency (MHz)                                                   |            |         |           | 709         | 710            | 711          |                     |
| 10                                                                | QPSK       | 1       | 0         | 22.92       | 23.01          | 22.99        | 24                  |
| 10                                                                | QPSK       | 1       | 25        | 22.90       | 22.92          | 22.86        |                     |
| 10                                                                | QPSK       | 1       | 49        | 22.78       | 22.83          | 22.77        |                     |
| 10                                                                | QPSK       | 25      | 0         | 21.91       | 22.02          | 21.97        | 23                  |
| 10                                                                | QPSK       | 25      | 12        | 21.90       | 21.83          | 21.80        |                     |
| 10                                                                | QPSK       | 25      | 25        | 21.76       | 21.80          | 21.83        |                     |
| 10                                                                | QPSK       | 50      | 0         | 21.79       | 21.97          | 21.83        | 23                  |
| 10                                                                | 16QAM      | 1       | 0         | 22.01       | 22.10          | 21.94        |                     |
| 10                                                                | 16QAM      | 1       | 25        | 22.11       | 22.07          | 22.00        |                     |
| 10                                                                | 16QAM      | 1       | 49        | 21.94       | 22.15          | 22.04        | 22                  |
| 10                                                                | 16QAM      | 25      | 0         | 20.85       | 21.00          | 21.09        |                     |
| 10                                                                | 16QAM      | 25      | 12        | 20.96       | 21.06          | 20.80        |                     |
| 10                                                                | 16QAM      | 25      | 25        | 20.82       | 20.93          | 20.76        | 22                  |
| 10                                                                | 16QAM      | 50      | 0         | 20.87       | 20.99          | 20.74        |                     |
| 10                                                                | 64QAM      | 1       | 0         | 21.06       | 21.20          | 21.25        |                     |
| 10                                                                | 64QAM      | 1       | 25        | 21.11       | 21.14          | 20.93        | 22                  |
| 10                                                                | 64QAM      | 1       | 49        | 20.94       | 21.01          | 20.96        |                     |
| 10                                                                | 64QAM      | 25      | 0         | 20.11       | 20.08          | 20.13        | 21                  |
| 10                                                                | 64QAM      | 25      | 12        | 19.85       | 19.98          | 19.97        |                     |
| 10                                                                | 64QAM      | 25      | 25        | 19.96       | 20.06          | 19.94        |                     |
| 10                                                                | 64QAM      | 50      | 0         | 19.99       | 19.92          | 19.97        |                     |
| Channel                                                           |            |         |           | 23755       | 23790          | 23825        |                     |
| Frequency (MHz)                                                   |            |         |           | 706.5       | 710            | 713.5        | Tune-up limit (dBm) |
| 5                                                                 | QPSK       | 1       | 0         | 22.89       | 22.98          | 22.96        | 24                  |
| 5                                                                 | QPSK       | 1       | 12        | 22.87       | 22.89          | 22.83        |                     |
| 5                                                                 | QPSK       | 1       | 24        | 22.75       | 22.80          | 22.74        |                     |
| 5                                                                 | QPSK       | 12      | 0         | 21.88       | 21.99          | 21.94        | 23                  |
| 5                                                                 | QPSK       | 12      | 7         | 21.87       | 21.80          | 21.77        |                     |
| 5                                                                 | QPSK       | 12      | 13        | 21.73       | 21.77          | 21.80        |                     |
| 5                                                                 | QPSK       | 25      | 0         | 21.76       | 21.94          | 21.80        | 23                  |
| 5                                                                 | 16QAM      | 1       | 0         | 21.98       | 22.07          | 21.91        |                     |
| 5                                                                 | 16QAM      | 1       | 12        | 22.08       | 22.04          | 21.97        |                     |
| 5                                                                 | 16QAM      | 1       | 24        | 21.91       | 22.12          | 22.01        | 22                  |
| 5                                                                 | 16QAM      | 12      | 0         | 20.82       | 20.97          | 21.06        |                     |
| 5                                                                 | 16QAM      | 12      | 7         | 20.93       | 21.03          | 20.77        |                     |
| 5                                                                 | 16QAM      | 12      | 13        | 20.79       | 20.90          | 20.73        | 22                  |
| 5                                                                 | 16QAM      | 25      | 0         | 20.84       | 20.96          | 20.71        |                     |
| 5                                                                 | 64QAM      | 1       | 0         | 21.03       | 21.17          | 21.22        |                     |
| 5                                                                 | 64QAM      | 1       | 12        | 21.08       | 21.11          | 20.90        | 22                  |
| 5                                                                 | 64QAM      | 1       | 24        | 20.91       | 20.98          | 20.93        |                     |
| 5                                                                 | 64QAM      | 12      | 0         | 20.08       | 20.05          | 20.10        | 21                  |
| 5                                                                 | 64QAM      | 12      | 7         | 19.82       | 19.95          | 19.94        |                     |
| 5                                                                 | 64QAM      | 12      | 13        | 19.93       | 20.03          | 19.91        |                     |
| 5                                                                 | 64QAM      | 25      | 0         | 19.96       | 19.89          | 19.94        |                     |

| Band 25 (1900MHz Band) (dBm)<br>Part 24E |            |         |           |             |                |              |                     |  |  |
|------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW [MHz]                                 | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                  |            |         |           | 26140       | 26365          | 26590        |                     |  |  |
| Frequency (MHz)                          |            |         |           | 1860        | 1882.5         | 1905         |                     |  |  |
| 20                                       | QPSK       | 1       | 0         | 23.00       | 23.07          | 23.03        | 24                  |  |  |
| 20                                       | QPSK       | 1       | 49        | 22.91       | 22.96          | 22.92        |                     |  |  |
| 20                                       | QPSK       | 1       | 99        | 22.87       | 22.93          | 22.84        |                     |  |  |
| 20                                       | QPSK       | 50      | 0         | 22.00       | 22.06          | 22.01        |                     |  |  |
| 20                                       | QPSK       | 50      | 24        | 21.91       | 21.99          | 21.92        | 23                  |  |  |
| 20                                       | QPSK       | 50      | 50        | 21.95       | 21.96          | 21.93        |                     |  |  |
| 20                                       | QPSK       | 100     | 0         | 21.93       | 21.98          | 21.90        |                     |  |  |
| 20                                       | 16QAM      | 1       | 0         | 22.10       | 22.19          | 22.14        |                     |  |  |
| 20                                       | 16QAM      | 1       | 49        | 22.04       | 22.16          | 22.09        | 23                  |  |  |
| 20                                       | 16QAM      | 1       | 99        | 21.99       | 22.12          | 22.01        |                     |  |  |
| 20                                       | 16QAM      | 50      | 0         | 21.01       | 21.09          | 21.05        |                     |  |  |
| 20                                       | 16QAM      | 50      | 24        | 20.93       | 21.05          | 20.98        |                     |  |  |
| 20                                       | 16QAM      | 50      | 50        | 20.86       | 20.98          | 20.91        | 22                  |  |  |
| 20                                       | 16QAM      | 100     | 0         | 20.92       | 21.00          | 20.94        |                     |  |  |
| 20                                       | 64QAM      | 1       | 0         | 21.16       | 21.20          | 21.17        |                     |  |  |
| 20                                       | 64QAM      | 1       | 49        | 21.11       | 21.15          | 21.12        |                     |  |  |
| 20                                       | 64QAM      | 1       | 99        | 21.04       | 21.09          | 21.06        | 22                  |  |  |
| 20                                       | 64QAM      | 50      | 0         | 20.04       | 20.13          | 20.08        |                     |  |  |
| 20                                       | 64QAM      | 50      | 24        | 19.97       | 20.05          | 19.99        |                     |  |  |
| 20                                       | 64QAM      | 50      | 50        | 19.93       | 20.02          | 19.95        |                     |  |  |
| 20                                       | 64QAM      | 100     | 0         | 19.96       | 20.01          | 19.96        | 21                  |  |  |
| Channel                                  |            |         |           | 26115       | 26365          | 26615        |                     |  |  |
| Frequency (MHz)                          |            |         |           | 1857.5      | 1882.5         | 1907.5       |                     |  |  |
| 15                                       | QPSK       | 1       | 0         | 22.95       | 23.02          | 22.98        | 24                  |  |  |
| 15                                       | QPSK       | 1       | 37        | 22.86       | 22.91          | 22.87        |                     |  |  |
| 15                                       | QPSK       | 1       | 74        | 22.82       | 22.88          | 22.79        |                     |  |  |
| 15                                       | QPSK       | 36      | 0         | 21.95       | 22.01          | 21.96        |                     |  |  |
| 15                                       | QPSK       | 36      | 20        | 21.86       | 21.94          | 21.87        | 23                  |  |  |
| 15                                       | QPSK       | 36      | 39        | 21.90       | 21.91          | 21.88        |                     |  |  |
| 15                                       | QPSK       | 75      | 0         | 21.88       | 21.93          | 21.85        |                     |  |  |
| 15                                       | 16QAM      | 1       | 0         | 22.05       | 22.14          | 22.09        |                     |  |  |
| 15                                       | 16QAM      | 1       | 37        | 21.99       | 22.11          | 22.04        | 23                  |  |  |
| 15                                       | 16QAM      | 1       | 74        | 21.94       | 22.07          | 21.96        |                     |  |  |
| 15                                       | 16QAM      | 36      | 0         | 20.96       | 21.04          | 21.00        |                     |  |  |
| 15                                       | 16QAM      | 36      | 20        | 20.88       | 21.00          | 20.93        |                     |  |  |
| 15                                       | 16QAM      | 36      | 39        | 20.81       | 20.93          | 20.86        | 22                  |  |  |
| 15                                       | 16QAM      | 75      | 0         | 20.87       | 20.95          | 20.89        |                     |  |  |
| 15                                       | 64QAM      | 1       | 0         | 21.11       | 21.15          | 21.12        |                     |  |  |
| 15                                       | 64QAM      | 1       | 37        | 21.06       | 21.10          | 21.07        |                     |  |  |
| 15                                       | 64QAM      | 1       | 74        | 20.99       | 21.04          | 21.01        | 22                  |  |  |
| 15                                       | 64QAM      | 36      | 0         | 19.99       | 20.08          | 20.03        |                     |  |  |
| 15                                       | 64QAM      | 36      | 20        | 19.92       | 20.00          | 19.94        |                     |  |  |
| 15                                       | 64QAM      | 36      | 39        | 19.88       | 19.97          | 19.90        |                     |  |  |
| 15                                       | 64QAM      | 75      | 0         | 19.91       | 19.96          | 19.91        | 21                  |  |  |
| Channel                                  |            |         |           | 26090       | 26365          | 26640        |                     |  |  |
| Frequency (MHz)                          |            |         |           | 1855        | 1882.5         | 1910         |                     |  |  |
| 10                                       | QPSK       | 1       | 0         | 22.87       | 22.94          | 22.90        | 24                  |  |  |
| 10                                       | QPSK       | 1       | 25        | 22.78       | 22.83          | 22.79        |                     |  |  |
| 10                                       | QPSK       | 1       | 49        | 22.74       | 22.80          | 22.71        |                     |  |  |
| 10                                       | QPSK       | 25      | 0         | 21.87       | 21.93          | 21.88        |                     |  |  |
| 10                                       | QPSK       | 25      | 12        | 21.78       | 21.86          | 21.79        | 23                  |  |  |
| 10                                       | QPSK       | 25      | 25        | 21.82       | 21.83          | 21.80        |                     |  |  |
| 10                                       | QPSK       | 50      | 0         | 21.80       | 21.85          | 21.77        |                     |  |  |
| 10                                       | 16QAM      | 1       | 0         | 21.97       | 22.06          | 22.01        |                     |  |  |
| 10                                       | 16QAM      | 1       | 25        | 21.91       | 22.03          | 21.96        | 23                  |  |  |
| 10                                       | 16QAM      | 1       | 49        | 21.86       | 21.99          | 21.88        |                     |  |  |
| 10                                       | 16QAM      | 25      | 0         | 20.88       | 20.96          | 20.92        |                     |  |  |
| 10                                       | 16QAM      | 25      | 12        | 20.80       | 20.92          | 20.85        |                     |  |  |
| 10                                       | 16QAM      | 25      | 25        | 20.73       | 20.85          | 20.78        | 22                  |  |  |
| 10                                       | 16QAM      | 50      | 0         | 20.79       | 20.87          | 20.81        |                     |  |  |
| 10                                       | 64QAM      | 1       | 0         | 21.03       | 21.07          | 21.04        |                     |  |  |
| 10                                       | 64QAM      | 1       | 25        | 20.98       | 21.02          | 20.99        |                     |  |  |
| 10                                       | 64QAM      | 1       | 49        | 20.91       | 20.96          | 20.93        | 22                  |  |  |
| 10                                       | 64QAM      | 25      | 0         | 19.91       | 20.00          | 19.95        |                     |  |  |
| 10                                       | 64QAM      | 25      | 12        | 19.84       | 19.92          | 19.86        |                     |  |  |
| 10                                       | 64QAM      | 25      | 25        | 19.80       | 19.89          | 19.82        |                     |  |  |
| 10                                       | 64QAM      | 50      | 0         | 19.83       | 19.88          | 19.83        | 21                  |  |  |
| Channel                                  |            |         |           | 26065       | 26365          | 26665        |                     |  |  |
| Frequency (MHz)                          |            |         |           | 1852.5      | 1882.5         | 1912.5       |                     |  |  |
| 5                                        | QPSK       | 1       | 0         | 22.84       | 22.91          | 22.87        | 24                  |  |  |
| 5                                        | QPSK       | 1       | 12        | 22.75       | 22.80          | 22.76        |                     |  |  |
| 5                                        | QPSK       | 1       | 24        | 22.71       | 22.77          | 22.68        |                     |  |  |
| 5                                        | QPSK       | 12      | 0         | 21.84       | 21.90          | 21.85        |                     |  |  |
| 5                                        | QPSK       | 12      | 7         | 21.75       | 21.83          | 21.76        | 23                  |  |  |
| 5                                        | QPSK       | 12      | 13        | 21.79       | 21.80          | 21.77        |                     |  |  |
| 5                                        | QPSK       | 25      | 0         | 21.77       | 21.82          | 21.74        |                     |  |  |
| 5                                        | 16QAM      | 1       | 0         | 21.94       | 22.03          | 21.98        |                     |  |  |
| 5                                        | 16QAM      | 1       | 12        | 21.88       | 22.00          | 21.93        | 23                  |  |  |
| 5                                        | 16QAM      | 1       | 24        | 21.83       | 21.96          | 21.85        |                     |  |  |
| 5                                        | 16QAM      | 12      | 0         | 20.85       | 20.93          | 20.89        |                     |  |  |
| 5                                        | 16QAM      | 12      | 7         | 20.77       | 20.89          | 20.82        |                     |  |  |
| 5                                        | 16QAM      | 12      | 13        | 20.70       | 20.82          | 20.75        | 22                  |  |  |
| 5                                        | 16QAM      | 25      | 0         | 20.76       | 20.84          | 20.78        |                     |  |  |
| 5                                        | 64QAM      | 1       | 0         | 21.00       | 21.04          | 21.01        |                     |  |  |
| 5                                        | 64QAM      | 1       | 12        | 20.95       | 20.99          | 20.96        |                     |  |  |
| 5                                        | 64QAM      | 1       | 24        | 20.88       | 20.93          | 20.90        | 22                  |  |  |
| 5                                        | 64QAM      | 12      | 0         | 19.88       | 19.97          | 19.92        |                     |  |  |
| 5                                        | 64QAM      | 12      | 7         | 19.81       | 19.89          | 19.83        |                     |  |  |
| 5                                        | 64QAM      | 12      | 13        | 19.77       | 19.86          | 19.79        |                     |  |  |
| 5                                        | 64QAM      | 25      | 0         | 19.80       | 19.85          | 19.80        | 21                  |  |  |
| Channel                                  |            |         |           | 26065       | 26365          | 26675        |                     |  |  |
| Frequency (MHz)                          |            |         |           | 1851.5      | 1882.5         | 1913.5       |                     |  |  |
| 3                                        | QPSK       | 1       | 0         | 22.80       | 22.87          | 22.83        | 24                  |  |  |
| 3                                        | QPSK       | 1       | 8         | 22.71       | 22.76          | 22.72        |                     |  |  |
| 3                                        | QPSK       | 1       | 14        | 22.67       | 22.73          | 22.64        |                     |  |  |
| 3                                        | QPSK       | 8       | 0         | 21.80       | 21.86          | 21.81        |                     |  |  |
| 3                                        | QPSK       | 8       | 4         | 21.71       | 21.79          | 21.72        | 23                  |  |  |
| 3                                        | QPSK       | 8       | 7         | 21.75       | 21.76          | 21.73        |                     |  |  |
| 3                                        | QPSK       | 15      | 0         | 21.73       | 21.78          | 21.70        |                     |  |  |

| Band 26 for FCC (dBm)<br>(only on channel required) |            |         |           |             |                |              |                     |
|-----------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                             |            |         |           | 26765       | 26865          | 26965        |                     |
| Frequency (MHz)                                     |            |         |           | 821.5       | 831.5          | 841.5        | 24                  |
| 15                                                  | QPSK       | 1       | 0         | 23.09       | 23.13          | 23.08        |                     |
| 15                                                  | QPSK       | 1       | 37        | 23.05       | 23.07          | 23.00        |                     |
| 15                                                  | QPSK       | 1       | 74        | 22.89       | 23.08          | 22.92        |                     |
| 15                                                  | QPSK       | 36      | 0         | 22.08       | 22.10          | 22.04        | 23                  |
| 15                                                  | QPSK       | 36      | 20        | 22.00       | 22.07          | 21.92        |                     |
| 15                                                  | QPSK       | 36      | 39        | 22.03       | 21.99          | 22.01        |                     |
| 15                                                  | QPSK       | 75      | 0         | 22.00       | 22.01          | 21.92        |                     |
| 15                                                  | 16QAM      | 1       | 0         | 22.23       | 22.22          | 22.18        | 23                  |
| 15                                                  | 16QAM      | 1       | 37        | 22.03       | 22.18          | 22.09        |                     |
| 15                                                  | 16QAM      | 1       | 74        | 21.99       | 22.16          | 22.06        |                     |
| 15                                                  | 16QAM      | 36      | 0         | 21.18       | 21.11          | 20.95        |                     |
| 15                                                  | 16QAM      | 36      | 20        | 20.91       | 20.94          | 21.07        | 22                  |
| 15                                                  | 16QAM      | 36      | 39        | 20.90       | 21.08          | 20.92        |                     |
| 15                                                  | 16QAM      | 75      | 0         | 21.07       | 21.00          | 20.91        |                     |
| 15                                                  | 64QAM      | 1       | 0         | 21.30       | 21.30          | 21.16        |                     |
| 15                                                  | 64QAM      | 1       | 37        | 20.99       | 21.17          | 21.28        | 22                  |
| 15                                                  | 64QAM      | 1       | 74        | 20.99       | 21.06          | 21.14        |                     |
| 15                                                  | 64QAM      | 36      | 0         | 19.93       | 20.02          | 20.08        |                     |
| 15                                                  | 64QAM      | 36      | 20        | 19.93       | 20.06          | 19.93        |                     |
| 15                                                  | 64QAM      | 36      | 39        | 19.83       | 19.91          | 20.07        | 21                  |
| 15                                                  | 64QAM      | 75      | 0         | 20.09       | 19.98          | 20.00        |                     |
| Channel                                             |            |         |           | 26740       | 26845          | 26990        | Tune-up limit (dBm) |
| Frequency (MHz)                                     |            |         |           | 819         | 831.5          | 844          |                     |
| 10                                                  | QPSK       | 1       | 0         | 23.01       | 23.05          | 23.00        | 24                  |
| 10                                                  | QPSK       | 1       | 25        | 22.97       | 22.99          | 22.92        |                     |
| 10                                                  | QPSK       | 1       | 49        | 22.81       | 23.00          | 22.84        |                     |
| 10                                                  | QPSK       | 25      | 0         | 22.00       | 22.02          | 21.96        |                     |
| 10                                                  | QPSK       | 25      | 12        | 21.92       | 21.99          | 21.84        | 23                  |
| 10                                                  | QPSK       | 25      | 25        | 21.95       | 21.91          | 21.93        |                     |
| 10                                                  | QPSK       | 50      | 0         | 21.92       | 21.93          | 21.84        |                     |
| 10                                                  | 16QAM      | 1       | 0         | 22.15       | 22.14          | 22.10        |                     |
| 10                                                  | 16QAM      | 1       | 25        | 21.95       | 22.10          | 22.01        | 23                  |
| 10                                                  | 16QAM      | 1       | 49        | 21.91       | 22.08          | 21.98        |                     |
| 10                                                  | 16QAM      | 25      | 0         | 21.10       | 21.03          | 20.87        |                     |
| 10                                                  | 16QAM      | 25      | 12        | 20.83       | 20.86          | 20.99        |                     |
| 10                                                  | 16QAM      | 25      | 25        | 20.82       | 21.00          | 20.84        | 22                  |
| 10                                                  | 16QAM      | 50      | 0         | 20.99       | 20.92          | 20.83        |                     |
| 10                                                  | 64QAM      | 1       | 0         | 21.22       | 21.22          | 21.08        |                     |
| 10                                                  | 64QAM      | 1       | 25        | 20.91       | 21.09          | 21.20        |                     |
| 10                                                  | 64QAM      | 1       | 49        | 20.91       | 20.98          | 21.06        | 22                  |
| 10                                                  | 64QAM      | 25      | 0         | 19.85       | 19.94          | 20.00        |                     |
| 10                                                  | 64QAM      | 25      | 12        | 19.85       | 19.98          | 19.85        |                     |
| 10                                                  | 64QAM      | 25      | 25        | 19.75       | 19.83          | 19.99        |                     |
| 10                                                  | 64QAM      | 50      | 0         | 20.01       | 19.90          | 19.92        | 21                  |
| Channel                                             |            |         |           | 26715       | 26865          | 27015        |                     |
| Frequency (MHz)                                     |            |         |           | 816.5       | 831.5          | 846.5        | Tune-up limit (dBm) |
| 5                                                   | QPSK       | 1       | 0         | 22.95       | 22.99          | 22.94        | 24                  |
| 5                                                   | QPSK       | 1       | 12        | 22.91       | 22.93          | 22.86        |                     |
| 5                                                   | QPSK       | 1       | 24        | 22.75       | 22.94          | 22.78        |                     |
| 5                                                   | QPSK       | 12      | 0         | 21.94       | 21.96          | 21.90        |                     |
| 5                                                   | QPSK       | 12      | 7         | 21.86       | 21.93          | 21.78        | 23                  |
| 5                                                   | QPSK       | 12      | 13        | 21.89       | 21.85          | 21.87        |                     |
| 5                                                   | QPSK       | 25      | 0         | 21.86       | 21.87          | 21.78        |                     |
| 5                                                   | 16QAM      | 1       | 0         | 22.09       | 22.08          | 22.04        |                     |
| 5                                                   | 16QAM      | 1       | 12        | 21.89       | 22.04          | 21.95        | 23                  |
| 5                                                   | 16QAM      | 1       | 24        | 21.85       | 22.02          | 21.92        |                     |
| 5                                                   | 16QAM      | 12      | 0         | 21.04       | 20.97          | 20.81        |                     |
| 5                                                   | 16QAM      | 12      | 7         | 20.77       | 20.80          | 20.93        |                     |
| 5                                                   | 16QAM      | 12      | 13        | 20.76       | 20.94          | 20.78        | 22                  |
| 5                                                   | 16QAM      | 25      | 0         | 20.93       | 20.86          | 20.77        |                     |
| 5                                                   | 64QAM      | 1       | 0         | 21.16       | 21.16          | 21.02        |                     |
| 5                                                   | 64QAM      | 1       | 12        | 20.85       | 21.03          | 21.14        |                     |
| 5                                                   | 64QAM      | 1       | 24        | 20.85       | 20.92          | 21.00        | 22                  |
| 5                                                   | 64QAM      | 12      | 0         | 19.79       | 19.88          | 19.94        |                     |
| 5                                                   | 64QAM      | 12      | 7         | 19.79       | 19.92          | 19.79        |                     |
| 5                                                   | 64QAM      | 12      | 13        | 19.69       | 19.77          | 19.93        |                     |
| 5                                                   | 64QAM      | 25      | 0         | 19.95       | 19.84          | 19.86        | 21                  |
| Channel                                             |            |         |           | 26705       | 26865          | 27025        |                     |
| Frequency (MHz)                                     |            |         |           | 815.5       | 831.5          | 847.5        | Tune-up limit (dBm) |
| 3                                                   | QPSK       | 1       | 0         | 22.90       | 22.94          | 22.89        | 24                  |
| 3                                                   | QPSK       | 1       | 8         | 22.86       | 22.88          | 22.81        |                     |
| 3                                                   | QPSK       | 1       | 14        | 22.70       | 22.89          | 22.73        |                     |
| 3                                                   | QPSK       | 8       | 0         | 21.89       | 21.91          | 21.85        |                     |
| 3                                                   | QPSK       | 8       | 4         | 21.81       | 21.88          | 21.73        | 23                  |
| 3                                                   | QPSK       | 8       | 7         | 21.84       | 21.80          | 21.82        |                     |
| 3                                                   | QPSK       | 15      | 0         | 21.81       | 21.82          | 21.73        |                     |
| 3                                                   | 16QAM      | 1       | 0         | 22.04       | 22.03          | 21.99        |                     |
| 3                                                   | 16QAM      | 1       | 8         | 21.84       | 21.99          | 21.90        | 23                  |
| 3                                                   | 16QAM      | 1       | 14        | 21.80       | 21.97          | 21.87        |                     |
| 3                                                   | 16QAM      | 8       | 0         | 20.99       | 20.92          | 20.76        |                     |
| 3                                                   | 16QAM      | 8       | 4         | 20.72       | 20.75          | 20.88        |                     |
| 3                                                   | 16QAM      | 8       | 7         | 20.71       | 20.89          | 20.73        | 22                  |
| 3                                                   | 16QAM      | 15      | 0         | 20.88       | 20.81          | 20.72        |                     |
| 3                                                   | 64QAM      | 1       | 0         | 21.11       | 21.11          | 20.97        |                     |
| 3                                                   | 64QAM      | 1       | 8         | 20.80       | 20.98          | 21.09        |                     |
| 3                                                   | 64QAM      | 1       | 14        | 20.80       | 20.87          | 20.95        | 22                  |
| 3                                                   | 64QAM      | 8       | 0         | 19.74       | 19.83          | 19.89        |                     |
| 3                                                   | 64QAM      | 8       | 4         | 19.74       | 19.87          | 19.74        |                     |
| 3                                                   | 64QAM      | 8       | 7         | 19.64       | 19.72          | 19.88        |                     |
| 3                                                   | 64QAM      | 15      | 0         | 19.90       | 19.79          | 19.81        | 21                  |
| Channel                                             |            |         |           | 26697       | 26865          | 27033        |                     |
| Frequency (MHz)                                     |            |         |           | 814.7       | 831.5          | 848.3        | Tune-up limit (dBm) |
| 1.4                                                 | QPSK       | 1       | 0         | 22.84       | 22.88          | 22.83        | 24                  |
| 1.4                                                 | QPSK       | 1       | 3         | 22.80       | 22.82          | 22.75        |                     |
| 1.4                                                 | QPSK       | 1       | 5         | 22.64       | 22.83          | 22.67        |                     |
| 1.4                                                 | QPSK       | 3       | 0         | 21.83       | 21.85          | 21.79        |                     |
| 1.4                                                 | QPSK       | 3       | 1         | 21.75       | 21.82          | 21.67        | 24                  |
| 1.4                                                 | QPSK       | 3       | 3         | 21.78       | 21.74          | 21.76        |                     |
| 1.4                                                 | QPSK       | 6       | 0         | 21.75       | 21.76          | 21.67        |                     |
| 1.4                                                 | QPSK       | 6       | 0         | 21.75       | 21.76          | 21.67        |                     |



|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 16QAM | 1  | 0  | 21.90  | 21.99  | 21.94  | 23                  |
| 3               | 16QAM | 1  | 8  | 21.84  | 21.96  | 21.89  |                     |
| 3               | 16QAM | 1  | 14 | 21.79  | 21.92  | 21.81  |                     |
| 3               | 16QAM | 8  | 0  | 20.81  | 20.89  | 20.85  | 22                  |
| 3               | 16QAM | 8  | 4  | 20.73  | 20.85  | 20.78  |                     |
| 3               | 16QAM | 8  | 7  | 20.66  | 20.78  | 20.71  |                     |
| 3               | 16QAM | 15 | 0  | 20.72  | 20.80  | 20.74  | 22                  |
| 3               | 64QAM | 1  | 0  | 20.96  | 21.00  | 20.97  |                     |
| 3               | 64QAM | 1  | 8  | 20.91  | 20.95  | 20.92  |                     |
| 3               | 64QAM | 1  | 14 | 20.84  | 20.89  | 20.86  | 21                  |
| 3               | 64QAM | 8  | 0  | 19.84  | 19.93  | 19.88  |                     |
| 3               | 64QAM | 8  | 4  | 19.77  | 19.85  | 19.79  |                     |
| 3               | 64QAM | 8  | 7  | 19.73  | 19.82  | 19.75  | 21                  |
| 3               | 64QAM | 15 | 0  | 19.76  | 19.81  | 19.76  |                     |
| Channel         |       |    |    | 26047  | 26365  | 26683  | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1850.7 | 1892.5 | 1914.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 22.75  | 22.82  | 22.78  | 24                  |
| 1.4             | QPSK  | 1  | 3  | 22.66  | 22.71  | 22.67  |                     |
| 1.4             | QPSK  | 1  | 5  | 22.62  | 22.68  | 22.59  |                     |
| 1.4             | QPSK  | 3  | 0  | 21.75  | 21.81  | 21.76  | 23                  |
| 1.4             | QPSK  | 3  | 1  | 21.66  | 21.74  | 21.67  |                     |
| 1.4             | QPSK  | 3  | 3  | 21.70  | 21.71  | 21.68  |                     |
| 1.4             | QPSK  | 6  | 0  | 21.68  | 21.73  | 21.65  | 22                  |
| 1.4             | 16QAM | 1  | 0  | 21.85  | 21.94  | 21.89  |                     |
| 1.4             | 16QAM | 1  | 3  | 21.79  | 21.91  | 21.84  |                     |
| 1.4             | 16QAM | 1  | 5  | 21.74  | 21.87  | 21.76  | 21                  |
| 1.4             | 16QAM | 3  | 0  | 20.76  | 20.84  | 20.80  |                     |
| 1.4             | 16QAM | 3  | 1  | 20.68  | 20.80  | 20.73  |                     |
| 1.4             | 16QAM | 3  | 3  | 20.61  | 20.73  | 20.66  | 22                  |
| 1.4             | 16QAM | 6  | 0  | 20.67  | 20.75  | 20.69  |                     |
| 1.4             | 64QAM | 1  | 0  | 20.91  | 20.95  | 20.92  |                     |
| 1.4             | 64QAM | 1  | 3  | 20.86  | 20.90  | 20.87  | 21                  |
| 1.4             | 64QAM | 1  | 5  | 20.79  | 20.84  | 20.81  |                     |
| 1.4             | 64QAM | 3  | 0  | 19.79  | 19.88  | 19.83  |                     |
| 1.4             | 64QAM | 3  | 1  | 19.72  | 19.80  | 19.74  | 21                  |
| 1.4             | 64QAM | 3  | 3  | 19.68  | 19.77  | 19.70  |                     |
| 1.4             | 64QAM | 6  | 0  | 19.71  | 19.76  | 19.71  |                     |

|     |       |   |   |       |       |       |    |
|-----|-------|---|---|-------|-------|-------|----|
| 1.4 | 16QAM | 1 | 0 | 21.98 | 21.97 | 21.93 | 23 |
| 1.4 | 16QAM | 1 | 3 | 21.78 | 21.93 | 21.84 |    |
| 1.4 | 16QAM | 1 | 5 | 21.74 | 21.91 | 21.81 |    |
| 1.4 | 16QAM | 3 | 0 | 20.93 | 20.86 | 20.70 | 22 |
| 1.4 | 16QAM | 3 | 1 | 20.66 | 20.69 | 20.82 |    |
| 1.4 | 16QAM | 3 | 3 | 20.65 | 20.83 | 20.67 |    |
| 1.4 | 16QAM | 6 | 0 | 20.82 | 20.75 | 20.66 | 22 |
| 1.4 | 64QAM | 1 | 0 | 21.05 | 21.05 | 20.91 |    |
| 1.4 | 64QAM | 1 | 3 | 20.74 | 20.92 | 21.03 |    |
| 1.4 | 64QAM | 1 | 5 | 20.74 | 20.81 | 20.89 | 22 |
| 1.4 | 64QAM | 3 | 0 | 19.68 | 19.77 | 19.83 |    |
| 1.4 | 64QAM | 3 | 1 | 19.68 | 19.81 | 19.68 |    |
| 1.4 | 64QAM | 3 | 3 | 19.58 | 19.66 | 19.82 | 21 |
| 1.4 | 64QAM | 6 | 0 | 19.84 | 19.73 | 19.75 |    |

| Band 48 (3.5G Band) (dBm) |            |         |           |                       |                    |                    |                     |              |                     |
|---------------------------|------------|---------|-----------|-----------------------|--------------------|--------------------|---------------------|--------------|---------------------|
| BW [MHz]                  | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Middle-Low Channel | Middle-Low Channel | Middle-High Channel | High Channel | Tune-up limit (dBm) |
| Channel                   |            |         |           | 55340                 | 55830              | 55990              | 56150               | 56640        | 24                  |
| Frequency (MHz)           |            |         |           | 3560                  | 3609               | 3625               | 3641                | 3690         |                     |
| 20                        | QPSK       | 1       | 0         | 22.95                 | 23.00              | 23.06              | 23.02               | 23.04        | 24                  |
| 20                        | QPSK       | 1       | 49        | 22.79                 | 22.86              | 22.78              | 22.89               | 22.98        |                     |
| 20                        | QPSK       | 1       | 99        | 22.70                 | 22.75              | 22.84              | 22.80               | 22.81        | 23                  |
| 20                        | QPSK       | 50      | 0         | 21.95                 | 21.92              | 21.97              | 22.03               | 22.07        |                     |
| 20                        | QPSK       | 50      | 24        | 21.91                 | 21.90              | 21.85              | 21.82               | 21.96        | 23                  |
| 20                        | QPSK       | 50      | 50        | 21.93                 | 21.85              | 21.96              | 21.92               | 22.00        |                     |
| 20                        | QPSK       | 100     | 0         | 21.83                 | 21.80              | 21.85              | 21.88               | 21.92        | 23                  |
| 20                        | 16QAM      | 1       | 0         | 22.10                 | 22.02              | 22.06              | 21.94               | 22.14        |                     |
| 20                        | 16QAM      | 1       | 49        | 21.92                 | 21.89              | 22.13              | 21.97               | 22.08        | 22                  |
| 20                        | 16QAM      | 1       | 99        | 21.79                 | 21.92              | 22.12              | 21.87               | 21.97        |                     |
| 20                        | 16QAM      | 50      | 0         | 20.85                 | 20.95              | 20.93              | 20.99               | 21.04        | 22                  |
| 20                        | 16QAM      | 50      | 24        | 20.90                 | 20.84              | 20.84              | 20.96               | 20.99        |                     |
| 20                        | 16QAM      | 50      | 50        | 20.73                 | 20.77              | 20.83              | 20.86               | 20.87        | 22                  |
| 20                        | 16QAM      | 100     | 0         | 20.79                 | 20.87              | 20.92              | 20.81               | 20.88        |                     |
| 20                        | 64QAM      | 1       | 0         | 21.08                 | 20.97              | 21.20              | 20.95               | 21.09        | 22                  |
| 20                        | 64QAM      | 1       | 49        | 21.11                 | 21.06              | 21.06              | 21.03               | 21.01        |                     |
| 20                        | 64QAM      | 1       | 99        | 21.03                 | 20.95              | 20.91              | 20.87               | 20.99        | 21                  |
| 20                        | 64QAM      | 50      | 0         | 19.99                 | 19.94              | 19.98              | 19.99               | 20.12        |                     |
| 20                        | 64QAM      | 50      | 24        | 19.86                 | 19.83              | 19.94              | 19.98               | 19.97        | 21                  |
| 20                        | 64QAM      | 50      | 50        | 19.78                 | 19.77              | 20.04              | 19.87               | 20.08        |                     |
| 20                        | 64QAM      | 100     | 0         | 19.74                 | 19.85              | 19.81              | 19.93               | 19.92        | 21                  |
| Channel                   |            |         |           | 55315                 | 55820              | 55990              | 56160               | 56665        |                     |
| Frequency (MHz)           |            |         |           | 3557.5                | 3608               | 3625               | 3642                | 3692.5       | 24                  |
| 15                        | QPSK       | 1       | 0         | 22.90                 | 22.95              | 23.01              | 22.97               | 22.99        |                     |
| 15                        | QPSK       | 1       | 37        | 22.74                 | 22.81              | 22.73              | 22.84               | 22.93        | 23                  |
| 15                        | QPSK       | 1       | 74        | 22.65                 | 22.70              | 22.79              | 22.75               | 22.76        |                     |
| 15                        | QPSK       | 36      | 0         | 21.90                 | 21.87              | 21.92              | 21.98               | 22.02        | 23                  |
| 15                        | QPSK       | 36      | 20        | 21.86                 | 21.85              | 21.80              | 21.77               | 21.91        |                     |
| 15                        | QPSK       | 36      | 39        | 21.88                 | 21.80              | 21.91              | 21.87               | 21.95        | 23                  |
| 15                        | QPSK       | 75      | 0         | 21.78                 | 21.75              | 21.80              | 21.83               | 21.87        |                     |
| 15                        | 16QAM      | 1       | 0         | 22.05                 | 21.97              | 22.01              | 21.89               | 22.09        | 23                  |
| 15                        | 16QAM      | 1       | 37        | 21.87                 | 21.84              | 22.08              | 21.92               | 22.03        |                     |
| 15                        | 16QAM      | 1       | 74        | 21.74                 | 21.87              | 22.07              | 21.82               | 21.92        | 22                  |
| 15                        | 16QAM      | 36      | 0         | 20.80                 | 20.90              | 20.88              | 20.94               | 20.99        |                     |
| 15                        | 16QAM      | 36      | 20        | 20.85                 | 20.79              | 20.79              | 20.91               | 20.94        | 22                  |
| 15                        | 16QAM      | 36      | 39        | 20.68                 | 20.72              | 20.78              | 20.81               | 20.82        |                     |
| 15                        | 16QAM      | 75      | 0         | 20.74                 | 20.82              | 20.87              | 20.76               | 20.83        | 22                  |
| 15                        | 64QAM      | 1       | 0         | 21.03                 | 20.92              | 21.15              | 20.90               | 21.04        |                     |
| 15                        | 64QAM      | 1       | 37        | 21.06                 | 21.01              | 21.01              | 20.98               | 20.96        | 21                  |
| 15                        | 64QAM      | 1       | 74        | 20.98                 | 20.90              | 20.86              | 20.82               | 20.94        |                     |
| 15                        | 64QAM      | 36      | 0         | 19.94                 | 19.89              | 19.93              | 19.94               | 20.07        | 21                  |
| 15                        | 64QAM      | 36      | 20        | 19.81                 | 19.78              | 19.89              | 19.93               | 19.92        |                     |
| 15                        | 64QAM      | 36      | 39        | 19.73                 | 19.72              | 19.99              | 19.82               | 20.03        | 21                  |
| 15                        | 64QAM      | 75      | 0         | 19.69                 | 19.80              | 19.76              | 19.88               | 19.87        |                     |
| Channel                   |            |         |           | 55290                 | 55815              | 55990              | 56165               | 56690        | 24                  |
| Frequency (MHz)           |            |         |           | 3555                  | 3607.5             | 3625               | 3642.5              | 3695         |                     |
| 10                        | QPSK       | 1       | 0         | 22.86                 | 22.91              | 22.97              | 22.93               | 22.95        | 24                  |
| 10                        | QPSK       | 1       | 25        | 22.70                 | 22.77              | 22.69              | 22.80               | 22.89        |                     |
| 10                        | QPSK       | 1       | 49        | 22.61                 | 22.66              | 22.75              | 22.71               | 22.72        | 23                  |
| 10                        | QPSK       | 25      | 0         | 21.86                 | 21.83              | 21.88              | 21.94               | 21.98        |                     |
| 10                        | QPSK       | 25      | 12        | 21.82                 | 21.81              | 21.76              | 21.73               | 21.87        | 23                  |
| 10                        | QPSK       | 25      | 25        | 21.84                 | 21.76              | 21.87              | 21.83               | 21.91        |                     |
| 10                        | QPSK       | 50      | 0         | 21.74                 | 21.71              | 21.76              | 21.79               | 21.83        | 23                  |
| 10                        | 16QAM      | 1       | 0         | 22.01                 | 21.93              | 21.97              | 21.85               | 22.05        |                     |
| 10                        | 16QAM      | 1       | 25        | 21.83                 | 21.80              | 22.04              | 21.88               | 21.99        | 22                  |
| 10                        | 16QAM      | 1       | 49        | 21.70                 | 21.83              | 22.03              | 21.78               | 21.88        |                     |
| 10                        | 16QAM      | 25      | 0         | 20.76                 | 20.86              | 20.84              | 20.90               | 20.95        | 22                  |
| 10                        | 16QAM      | 25      | 12        | 20.81                 | 20.75              | 20.75              | 20.87               | 20.90        |                     |
| 10                        | 16QAM      | 25      | 25        | 20.64                 | 20.68              | 20.74              | 20.77               | 20.78        | 22                  |
| 10                        | 16QAM      | 50      | 0         | 20.70                 | 20.78              | 20.83              | 20.72               | 20.79        |                     |
| 10                        | 64QAM      | 1       | 0         | 20.99                 | 20.88              | 21.11              | 20.86               | 21.00        | 22                  |
| 10                        | 64QAM      | 1       | 25        | 21.02                 | 20.97              | 20.97              | 20.94               | 20.92        |                     |
| 10                        | 64QAM      | 1       | 49        | 20.94                 | 20.86              | 20.82              | 20.78               | 20.90        | 21                  |
| 10                        | 64QAM      | 25      | 0         | 19.90                 | 19.85              | 19.89              | 19.90               | 20.03        |                     |
| 10                        | 64QAM      | 25      | 12        | 19.77                 | 19.74              | 19.85              | 19.89               | 19.88        | 21                  |
| 10                        | 64QAM      | 25      | 25        | 19.69                 | 19.68              | 19.95              | 19.78               | 19.99        |                     |
| 10                        | 64QAM      | 50      | 0         | 19.65                 | 19.76              | 19.72              | 19.84               | 19.83        | 21                  |
| Channel                   |            |         |           | 55265                 | 55810              | 55990              | 56170               | 56175        |                     |
| Frequency (MHz)           |            |         |           | 3552.5                | 3607               | 3625               | 3643                | 3697.5       | 24                  |
| 5                         | QPSK       | 1       | 0         | 22.81                 | 22.86              | 22.92              | 22.88               | 22.90        |                     |
| 5                         | QPSK       | 1       | 12        | 22.65                 | 22.72              | 22.64              | 22.75               | 22.84        | 23                  |
| 5                         | QPSK       | 1       | 24        | 22.56                 | 22.61              | 22.70              | 22.66               | 22.67        |                     |
| 5                         | QPSK       | 12      | 0         | 21.81                 | 21.78              | 21.83              | 21.89               | 21.93        | 23                  |
| 5                         | QPSK       | 12      | 7         | 21.77                 | 21.76              | 21.71              | 21.68               | 21.82        |                     |
| 5                         | QPSK       | 12      | 13        | 21.79                 | 21.71              | 21.82              | 21.78               | 21.86        | 23                  |
| 5                         | QPSK       | 25      | 0         | 21.69                 | 21.66              | 21.71              | 21.74               | 21.78        |                     |
| 5                         | 16QAM      | 1       | 0         | 21.96                 | 21.88              | 21.92              | 21.80               | 22.00        | 23                  |
| 5                         | 16QAM      | 1       | 12        | 21.78                 | 21.75              | 21.99              | 21.83               | 21.94        |                     |
| 5                         | 16QAM      | 1       | 24        | 21.65                 | 21.78              | 21.98              | 21.73               | 21.83        | 22                  |
| 5                         | 16QAM      | 12      | 0         | 20.71                 | 20.81              | 20.79              | 20.85               | 20.90        |                     |
| 5                         | 16QAM      | 12      | 7         | 20.76                 | 20.70              | 20.70              | 20.82               | 20.85        | 22                  |
| 5                         | 16QAM      | 12      | 13        | 20.59                 | 20.83              | 20.69              | 20.72               | 20.73        |                     |
| 5                         | 16QAM      | 25      | 0         | 20.65                 | 20.73              | 20.78              | 20.67               | 20.74        | 22                  |
| 5                         | 64QAM      | 1       | 0         | 20.94                 | 20.83              | 21.06              | 20.81               | 20.95        |                     |
| 5                         | 64QAM      | 1       | 12        | 20.97                 | 20.92              | 20.92              | 20.89               | 20.87        | 21                  |
| 5                         | 64QAM      | 1       | 24        | 20.89                 | 20.81              | 20.77              | 20.73               | 20.85        |                     |
| 5                         | 64QAM      | 12      | 0         | 19.85                 | 19.80              | 19.84              | 19.85               | 19.98        | 21                  |
| 5                         | 64QAM      | 12      | 7         | 19.72                 | 19.69              | 19.80              | 19.84               | 19.83        |                     |
| 5                         | 64QAM      | 12      | 13        | 19.64                 | 19.63              | 19.90              | 19.73               | 19.94        | 21                  |
| 5                         | 64QAM      | 25      | 0         | 19.60                 | 19.71              | 19.67              | 19.79               | 19.78        |                     |

| Band 66 (dBm)   |            |         |           |             |                |              |                     |                     |  |  |
|-----------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|---------------------|--|--|
| BW [MHz]        | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |                     |  |  |
| Channel         |            |         |           | 132072      | 132322         | 132572       |                     |                     |  |  |
| Frequency (MHz) |            |         |           | 1720        | 1745           | 1770         |                     |                     |  |  |
| 20              | QPSK       | 1       | 0         | 23.08       | 23.12          | 23.05        | 24                  |                     |  |  |
| 20              | QPSK       | 1       | 49        | 23.03       | 23.04          | 22.97        |                     |                     |  |  |
| 20              | QPSK       | 1       | 99        | 22.98       | 22.94          | 22.89        |                     |                     |  |  |
| 20              | QPSK       | 50      | 0         | 22.02       | 22.08          | 22.03        |                     |                     |  |  |
| 20              | QPSK       | 50      | 24        | 21.91       | 22.00          | 21.95        | 23                  |                     |  |  |
| 20              | QPSK       | 50      | 50        | 21.92       | 22.04          | 21.94        |                     |                     |  |  |
| 20              | QPSK       | 100     | 0         | 22.00       | 22.01          | 21.95        |                     |                     |  |  |
| 20              | 16QAM      | 1       | 0         | 22.31       | 22.23          | 22.11        |                     |                     |  |  |
| 20              | 16QAM      | 1       | 49        | 22.23       | 22.25          | 22.13        | 23                  |                     |  |  |
| 20              | 16QAM      | 1       | 99        | 22.10       | 22.10          | 22.18        |                     |                     |  |  |
| 20              | 16QAM      | 50      | 0         | 21.06       | 21.17          | 21.21        |                     |                     |  |  |
| 20              | 16QAM      | 50      | 24        | 21.07       | 21.03          | 21.00        |                     |                     |  |  |
| 20              | 16QAM      | 50      | 50        | 20.89       | 20.94          | 21.09        | 22                  |                     |  |  |
| 20              | 16QAM      | 100     | 0         | 21.11       | 20.97          | 21.06        |                     |                     |  |  |
| 20              | 64QAM      | 1       | 0         | 21.29       | 21.30          | 21.39        |                     |                     |  |  |
| 20              | 64QAM      | 1       | 49        | 21.21       | 21.19          | 21.32        |                     |                     |  |  |
| 20              | 64QAM      | 1       | 99        | 21.22       | 21.30          | 21.11        | 22                  |                     |  |  |
| 20              | 64QAM      | 50      | 0         | 20.01       | 20.30          | 20.09        |                     |                     |  |  |
| 20              | 64QAM      | 50      | 24        | 20.19       | 20.09          | 19.96        |                     |                     |  |  |
| 20              | 64QAM      | 50      | 50        | 20.00       | 20.13          | 19.95        |                     |                     |  |  |
| 20              | 64QAM      | 100     | 0         | 20.17       | 20.14          | 19.91        | 21                  |                     |  |  |
| Channel         |            |         |           | 132047      | 132322         | 132597       |                     | Tune-up limit (dBm) |  |  |
| Frequency (MHz) |            |         |           | 1717.5      | 1745           | 1772.5       |                     |                     |  |  |
| 15              | QPSK       | 1       | 0         | 23.03       | 23.07          | 23.00        |                     | 24                  |  |  |
| 15              | QPSK       | 1       | 37        | 22.98       | 22.99          | 22.92        |                     |                     |  |  |
| 15              | QPSK       | 1       | 74        | 22.93       | 22.89          | 22.84        |                     |                     |  |  |
| 15              | QPSK       | 36      | 0         | 21.97       | 22.03          | 21.98        |                     |                     |  |  |
| 15              | QPSK       | 36      | 20        | 21.86       | 21.95          | 21.90        |                     | 23                  |  |  |
| 15              | QPSK       | 36      | 39        | 21.87       | 21.99          | 21.89        |                     |                     |  |  |
| 15              | QPSK       | 75      | 0         | 21.95       | 21.96          | 21.90        |                     |                     |  |  |
| 15              | 16QAM      | 1       | 0         | 22.26       | 22.18          | 22.06        |                     |                     |  |  |
| 15              | 16QAM      | 1       | 37        | 22.18       | 22.20          | 22.08        | 23                  |                     |  |  |
| 15              | 16QAM      | 1       | 74        | 22.05       | 22.05          | 22.13        |                     |                     |  |  |
| 15              | 16QAM      | 36      | 0         | 21.01       | 21.12          | 21.16        |                     |                     |  |  |
| 15              | 16QAM      | 36      | 20        | 21.02       | 20.98          | 20.95        |                     |                     |  |  |
| 15              | 16QAM      | 36      | 39        | 20.84       | 20.89          | 21.04        | 22                  |                     |  |  |
| 15              | 16QAM      | 75      | 0         | 21.06       | 20.92          | 21.01        |                     |                     |  |  |
| 15              | 64QAM      | 1       | 0         | 21.24       | 21.25          | 21.34        |                     |                     |  |  |
| 15              | 64QAM      | 1       | 37        | 21.16       | 21.14          | 21.27        |                     |                     |  |  |
| 15              | 64QAM      | 1       | 74        | 21.17       | 21.25          | 21.06        | 22                  |                     |  |  |
| 15              | 64QAM      | 36      | 0         | 19.96       | 20.25          | 20.04        |                     |                     |  |  |
| 15              | 64QAM      | 36      | 20        | 20.14       | 20.04          | 19.91        |                     |                     |  |  |
| 15              | 64QAM      | 36      | 39        | 19.95       | 20.08          | 19.90        |                     |                     |  |  |
| 15              | 64QAM      | 75      | 0         | 20.12       | 20.09          | 19.86        | 21                  |                     |  |  |
| Channel         |            |         |           | 132022      | 132322         | 132622       |                     | Tune-up limit (dBm) |  |  |
| Frequency (MHz) |            |         |           | 1715        | 1745           | 1775         |                     |                     |  |  |
| 10              | QPSK       | 1       | 0         | 22.97       | 23.01          | 22.94        |                     | 24                  |  |  |
| 10              | QPSK       | 1       | 25        | 22.92       | 22.93          | 22.86        |                     |                     |  |  |
| 10              | QPSK       | 1       | 49        | 22.87       | 22.83          | 22.78        |                     |                     |  |  |
| 10              | QPSK       | 25      | 0         | 21.91       | 21.97          | 21.92        |                     |                     |  |  |
| 10              | QPSK       | 25      | 12        | 21.80       | 21.89          | 21.84        |                     | 23                  |  |  |
| 10              | QPSK       | 25      | 25        | 21.81       | 21.93          | 21.83        |                     |                     |  |  |
| 10              | QPSK       | 50      | 0         | 21.89       | 21.90          | 21.84        |                     |                     |  |  |
| 10              | 16QAM      | 1       | 0         | 22.20       | 22.12          | 22.00        |                     |                     |  |  |
| 10              | 16QAM      | 1       | 25        | 22.12       | 22.14          | 22.02        | 23                  |                     |  |  |
| 10              | 16QAM      | 1       | 49        | 21.99       | 21.99          | 22.07        |                     |                     |  |  |
| 10              | 16QAM      | 25      | 0         | 20.95       | 21.06          | 21.10        |                     |                     |  |  |
| 10              | 16QAM      | 25      | 12        | 20.96       | 20.92          | 20.89        |                     |                     |  |  |
| 10              | 16QAM      | 25      | 25        | 20.78       | 20.83          | 20.98        | 22                  |                     |  |  |
| 10              | 16QAM      | 50      | 0         | 21.00       | 20.86          | 20.95        |                     |                     |  |  |
| 10              | 64QAM      | 1       | 0         | 21.18       | 21.19          | 21.28        |                     |                     |  |  |
| 10              | 64QAM      | 1       | 25        | 21.10       | 21.08          | 21.21        |                     |                     |  |  |
| 10              | 64QAM      | 1       | 49        | 21.11       | 21.19          | 21.00        | 22                  |                     |  |  |
| 10              | 64QAM      | 25      | 0         | 19.90       | 20.19          | 19.98        |                     |                     |  |  |
| 10              | 64QAM      | 25      | 12        | 20.08       | 19.98          | 19.85        |                     |                     |  |  |
| 10              | 64QAM      | 25      | 25        | 19.89       | 20.02          | 19.84        |                     |                     |  |  |
| 10              | 64QAM      | 50      | 0         | 20.06       | 20.03          | 19.80        | 21                  |                     |  |  |
| Channel         |            |         |           | 131997      | 132322         | 132647       |                     | Tune-up limit (dBm) |  |  |
| Frequency (MHz) |            |         |           | 1712.5      | 1745           | 1777.5       |                     |                     |  |  |
| 5               | QPSK       | 1       | 0         | 22.89       | 22.93          | 22.86        |                     | 24                  |  |  |
| 5               | QPSK       | 1       | 12        | 22.84       | 22.85          | 22.78        |                     |                     |  |  |
| 5               | QPSK       | 1       | 24        | 22.79       | 22.75          | 22.70        |                     |                     |  |  |
| 5               | QPSK       | 12      | 0         | 21.83       | 21.89          | 21.84        |                     |                     |  |  |
| 5               | QPSK       | 12      | 7         | 21.72       | 21.81          | 21.76        |                     | 23                  |  |  |
| 5               | QPSK       | 12      | 13        | 21.73       | 21.85          | 21.75        |                     |                     |  |  |
| 5               | QPSK       | 25      | 0         | 21.81       | 21.82          | 21.76        |                     |                     |  |  |
| 5               | 16QAM      | 1       | 0         | 22.12       | 22.04          | 21.92        |                     |                     |  |  |
| 5               | 16QAM      | 1       | 12        | 22.04       | 22.06          | 21.94        | 23                  |                     |  |  |
| 5               | 16QAM      | 1       | 24        | 21.91       | 21.91          | 21.99        |                     |                     |  |  |
| 5               | 16QAM      | 12      | 0         | 20.87       | 20.98          | 21.02        |                     |                     |  |  |
| 5               | 16QAM      | 12      | 7         | 20.88       | 20.84          | 20.81        |                     |                     |  |  |
| 5               | 16QAM      | 12      | 13        | 20.70       | 20.75          | 20.90        | 22                  |                     |  |  |
| 5               | 16QAM      | 25      | 0         | 20.92       | 20.78          | 20.87        |                     |                     |  |  |
| 5               | 64QAM      | 1       | 0         | 21.10       | 21.11          | 21.20        |                     |                     |  |  |
| 5               | 64QAM      | 1       | 12        | 21.02       | 21.00          | 21.13        |                     |                     |  |  |
| 5               | 64QAM      | 1       | 24        | 21.03       | 21.11          | 20.92        | 22                  |                     |  |  |
| 5               | 64QAM      | 12      | 0         | 19.82       | 20.11          | 19.90        |                     |                     |  |  |
| 5               | 64QAM      | 12      | 7         | 20.00       | 19.90          | 19.77        |                     |                     |  |  |
| 5               | 64QAM      | 12      | 13        | 19.81       | 19.94          | 19.76        |                     |                     |  |  |
| 5               | 64QAM      | 25      | 0         | 19.98       | 19.95          | 19.72        | 21                  |                     |  |  |
| Channel         |            |         |           | 131987      | 132322         | 132657       |                     | Tune-up limit (dBm) |  |  |
| Frequency (MHz) |            |         |           | 1711.5      | 1745           | 1778.5       |                     |                     |  |  |
| 3               | QPSK       | 1       | 0         | 22.82       | 22.86          | 22.79        |                     | 24                  |  |  |
| 3               | QPSK       | 1       | 8         | 22.77       | 22.78          | 22.71        |                     |                     |  |  |
| 3               | QPSK       | 1       | 14        | 22.72       | 22.68          | 22.63        |                     |                     |  |  |
| 3               | QPSK       | 8       | 0         | 21.76       | 21.82          | 21.77        |                     |                     |  |  |
| 3               | QPSK       | 8       | 4         | 21.65       | 21.74          | 21.69        |                     | 23                  |  |  |
| 3               | QPSK       | 8       | 7         | 21.66       | 21.78          | 21.68        |                     |                     |  |  |
| 3               | QPSK       | 15      | 0         | 21.74       | 21.75          | 21.69        |                     |                     |  |  |

| Band 71 (dBm)   |            |         |           |             |                |              |                     |
|-----------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |            |         |           | 133222      | 133322         | 133372       |                     |
| Frequency (MHz) |            |         |           | 673         | 683            | 688          |                     |
| 20              | QPSK       | 1       | 0         | 23.88       | 23.95          | 23.87        | 25                  |
| 20              | QPSK       | 1       | 49        | 23.76       | 23.87          | 23.78        |                     |
| 20              | QPSK       | 1       | 99        | 23.79       | 23.85          | 23.76        |                     |
| 20              | QPSK       | 50      | 0         | 22.85       | 22.94          | 22.89        |                     |
| 20              | QPSK       | 50      | 24        | 22.80       | 22.93          | 22.79        | 24                  |
| 20              | QPSK       | 50      | 50        | 22.81       | 22.82          | 22.83        |                     |
| 20              | QPSK       | 100     | 0         | 22.78       | 22.86          | 22.84        |                     |
| 20              | 16QAM      | 1       | 0         | 22.84       | 23.04          | 22.87        |                     |
| 20              | 16QAM      | 1       | 49        | 22.78       | 23.12          | 22.94        | 24                  |
| 20              | 16QAM      | 1       | 99        | 22.98       | 23.02          | 22.93        |                     |
| 20              | 16QAM      | 50      | 0         | 21.84       | 22.01          | 21.98        |                     |
| 20              | 16QAM      | 50      | 24        | 21.75       | 21.94          | 21.82        |                     |
| 20              | 16QAM      | 50      | 50        | 21.79       | 21.80          | 21.77        | 23                  |
| 20              | 16QAM      | 100     | 0         | 21.84       | 21.84          | 21.69        |                     |
| 20              | 64QAM      | 1       | 0         | 21.88       | 22.10          | 21.98        |                     |
| 20              | 64QAM      | 1       | 49        | 22.05       | 22.06          | 22.14        |                     |
| 20              | 64QAM      | 1       | 99        | 21.89       | 22.06          | 21.94        | 23                  |
| 20              | 64QAM      | 50      | 0         | 21.06       | 21.05          | 20.93        |                     |
| 20              | 64QAM      | 50      | 24        | 20.99       | 20.90          | 20.94        |                     |
| 20              | 64QAM      | 50      | 50        | 20.72       | 20.98          | 20.79        |                     |
| 20              | 64QAM      | 100     | 0         | 20.94       | 20.83          | 20.87        |                     |
| Channel         |            |         |           | 133197      | 133297         | 133397       |                     |
| Frequency (MHz) |            |         |           | 670.5       | 680.5          | 690.5        | Tune-up limit (dBm) |
| 15              | QPSK       | 1       | 0         | 23.83       | 23.90          | 23.82        | 25                  |
| 15              | QPSK       | 1       | 37        | 23.71       | 23.82          | 23.73        |                     |
| 15              | QPSK       | 1       | 74        | 23.74       | 23.80          | 23.71        |                     |
| 15              | QPSK       | 36      | 0         | 22.80       | 22.89          | 22.84        |                     |
| 15              | QPSK       | 36      | 20        | 22.75       | 22.88          | 22.74        | 24                  |
| 15              | QPSK       | 36      | 39        | 22.76       | 22.77          | 22.78        |                     |
| 15              | QPSK       | 75      | 0         | 22.73       | 22.81          | 22.79        |                     |
| 15              | 16QAM      | 1       | 0         | 22.79       | 22.99          | 22.82        |                     |
| 15              | 16QAM      | 1       | 37        | 22.73       | 23.07          | 22.89        | 24                  |
| 15              | 16QAM      | 1       | 74        | 22.93       | 22.97          | 22.88        |                     |
| 15              | 16QAM      | 36      | 0         | 21.79       | 21.96          | 21.93        |                     |
| 15              | 16QAM      | 36      | 20        | 21.70       | 21.89          | 21.77        |                     |
| 15              | 16QAM      | 36      | 39        | 21.74       | 21.75          | 21.72        | 23                  |
| 15              | 16QAM      | 75      | 0         | 21.79       | 21.79          | 21.64        |                     |
| 15              | 64QAM      | 1       | 0         | 21.83       | 22.05          | 21.93        |                     |
| 15              | 64QAM      | 1       | 37        | 22.00       | 22.01          | 22.09        |                     |
| 15              | 64QAM      | 1       | 74        | 21.84       | 22.01          | 21.89        | 23                  |
| 15              | 64QAM      | 36      | 0         | 21.01       | 21.00          | 20.88        |                     |
| 15              | 64QAM      | 36      | 20        | 20.94       | 20.85          | 20.89        |                     |
| 15              | 64QAM      | 36      | 39        | 20.67       | 20.93          | 20.74        |                     |
| 15              | 64QAM      | 75      | 0         | 20.89       | 20.78          | 20.82        | 22                  |
| Channel         |            |         |           | 133172      | 133272         | 133422       |                     |
| Frequency (MHz) |            |         |           | 668         | 678            | 693          | Tune-up limit (dBm) |
| 10              | QPSK       | 1       | 0         | 23.77       | 23.84          | 23.76        | 25                  |
| 10              | QPSK       | 1       | 25        | 23.65       | 23.76          | 23.67        |                     |
| 10              | QPSK       | 1       | 49        | 23.68       | 23.74          | 23.65        |                     |
| 10              | QPSK       | 25      | 0         | 22.74       | 22.83          | 22.78        |                     |
| 10              | QPSK       | 25      | 12        | 22.69       | 22.82          | 22.68        | 24                  |
| 10              | QPSK       | 25      | 25        | 22.70       | 22.71          | 22.72        |                     |
| 10              | QPSK       | 50      | 0         | 22.67       | 22.75          | 22.73        |                     |
| 10              | 16QAM      | 1       | 0         | 22.73       | 22.93          | 22.76        |                     |
| 10              | 16QAM      | 1       | 25        | 22.67       | 23.01          | 22.83        | 24                  |
| 10              | 16QAM      | 1       | 49        | 22.87       | 22.91          | 22.82        |                     |
| 10              | 16QAM      | 25      | 0         | 21.73       | 21.90          | 21.87        |                     |
| 10              | 16QAM      | 25      | 12        | 21.64       | 21.83          | 21.71        |                     |
| 10              | 16QAM      | 25      | 25        | 21.68       | 21.69          | 21.66        | 23                  |
| 10              | 16QAM      | 50      | 0         | 21.73       | 21.73          | 21.58        |                     |
| 10              | 64QAM      | 1       | 0         | 21.77       | 21.99          | 21.87        |                     |
| 10              | 64QAM      | 1       | 25        | 21.94       | 21.95          | 22.03        |                     |
| 10              | 64QAM      | 1       | 49        | 21.78       | 21.95          | 21.83        | 23                  |
| 10              | 64QAM      | 25      | 0         | 20.95       | 20.94          | 20.82        |                     |
| 10              | 64QAM      | 25      | 12        | 20.88       | 20.79          | 20.83        |                     |
| 10              | 64QAM      | 25      | 25        | 20.61       | 20.87          | 20.68        |                     |
| 10              | 64QAM      | 50      | 0         | 20.83       | 20.72          | 20.76        | 22                  |
| Channel         |            |         |           | 133147      | 133247         | 133447       |                     |
| Frequency (MHz) |            |         |           | 665.5       | 675.5          | 695.5        | Tune-up limit (dBm) |
| 5               | QPSK       | 1       | 0         | 23.70       | 23.77          | 23.69        | 25                  |
| 5               | QPSK       | 1       | 12        | 23.58       | 23.69          | 23.60        |                     |
| 5               | QPSK       | 1       | 24        | 23.61       | 23.67          | 23.58        |                     |
| 5               | QPSK       | 12      | 0         | 22.67       | 22.76          | 22.71        |                     |
| 5               | QPSK       | 12      | 7         | 22.62       | 22.75          | 22.61        | 24                  |
| 5               | QPSK       | 12      | 13        | 22.63       | 22.64          | 22.65        |                     |
| 5               | QPSK       | 25      | 0         | 22.60       | 22.68          | 22.66        |                     |
| 5               | 16QAM      | 1       | 0         | 22.66       | 22.86          | 22.69        |                     |
| 5               | 16QAM      | 1       | 12        | 22.60       | 22.94          | 22.76        | 24                  |
| 5               | 16QAM      | 1       | 24        | 22.80       | 22.84          | 22.75        |                     |
| 5               | 16QAM      | 12      | 0         | 21.66       | 21.83          | 21.80        |                     |
| 5               | 16QAM      | 12      | 7         | 21.57       | 21.76          | 21.64        |                     |
| 5               | 16QAM      | 12      | 13        | 21.61       | 21.62          | 21.59        | 23                  |
| 5               | 16QAM      | 25      | 0         | 21.66       | 21.66          | 21.51        |                     |
| 5               | 64QAM      | 1       | 0         | 21.70       | 21.92          | 21.80        |                     |
| 5               | 64QAM      | 1       | 12        | 21.87       | 21.88          | 21.96        |                     |
| 5               | 64QAM      | 1       | 24        | 21.71       | 21.88          | 21.76        | 23                  |
| 5               | 64QAM      | 12      | 0         | 20.88       | 20.87          | 20.75        |                     |
| 5               | 64QAM      | 12      | 7         | 20.81       | 20.72          | 20.76        |                     |
| 5               | 64QAM      | 12      | 13        | 20.54       | 20.80          | 20.61        |                     |
| 5               | 64QAM      | 25      | 0         | 20.76       | 20.65          | 20.69        | 22                  |
| Channel         |            |         |           | 133117      | 133217         | 133417       |                     |
| Frequency (MHz) |            |         |           | 662.5       | 672.5          | 692.5        | Tune-up limit (dBm) |
| 5               | QPSK       | 1       | 0         | 23.63       | 23.70          | 23.62        | 25                  |
| 5               | QPSK       | 1       | 12        | 23.51       | 23.62          | 23.52        |                     |
| 5               | QPSK       | 1       | 24        | 23.54       | 23.60          | 23.45        |                     |
| 5               | QPSK       | 12      | 0         | 22.62       | 22.71          | 22.66        |                     |
| 5               | QPSK       | 12      | 7         | 22.57       | 22.70          | 22.61        | 24                  |
| 5               | QPSK       | 12      | 13        | 22.58       | 22.59          | 22.60        |                     |
| 5               | QPSK       | 25      | 0         | 22.55       | 22.63          | 22.61        |                     |
| 5               | 16QAM      | 1       | 0         | 22.61       | 22.81          | 22.64        |                     |
| 5               | 16QAM      | 1       | 12        | 22.55       | 22.89          | 22.76        | 24                  |
| 5               | 16QAM      | 1       | 24        | 22.75       | 22.79          | 22.74        |                     |
| 5               | 16QAM      | 12      | 0         | 21.71       | 21.88          | 21.80        |                     |
| 5               | 16QAM      | 12      | 7         | 21.62       | 21.76          | 21.64        |                     |
| 5               | 16QAM      | 12      | 13        | 21.66       | 21.67          | 21.65        | 23                  |
| 5               | 64QAM      | 1       | 0         | 21.75       | 21.97          | 21.85        |                     |
| 5               | 64QAM      | 1       | 12        | 21.92       | 21.93          | 21.94        |                     |
| 5               | 64QAM      | 1       | 24        | 21.76       | 21.87          | 21.78        |                     |
| 5               | 64QAM      | 12      | 0         | 20.91       | 20.90          | 20.87        | 23                  |
| 5               | 64QAM      | 12      | 7         | 20.84       | 20.85          | 20.86        |                     |
| 5               | 64QAM      | 12      | 13        | 20.58       | 20.80          | 20.61        |                     |
| 5               | 64QAM      | 25      | 0         | 20.77       | 20.66          | 20.70        |                     |
| 5               | 64QAM      | 25      | 0         | 20.77       | 20.66          | 20.70        | 22                  |
| Channel         |            |         |           | 133097      | 133197         | 133397       |                     |
| Frequency (MHz) |            |         |           | 670.5       | 680.5          | 690.5        | Tune-up limit (dBm) |
| 15              | QPSK       | 1       | 0         | 23.83       | 23.90          | 23.82        | 25                  |
| 15              | QPSK       | 1       | 37        | 23.71       | 23.82          | 23.73        |                     |
| 15              | QPSK       | 1       | 74        | 23.74       | 23.80          | 23.71        |                     |
| 15              | QPSK       | 36      | 0         | 22.80       | 22.89          | 22.84        |                     |
| 15              | QPSK       | 36      | 20        | 22.75       | 22.88          | 22.74        | 24                  |
| 15              | QPSK       | 36      | 39        | 22.76       | 22.77          | 22.78        |                     |
| 15              | QPSK       | 75      | 0         | 22.73       | 22.81          | 22.79        |                     |
| 15              | 16QAM      | 1       | 0         | 22.79       | 22.99          | 22.82        |                     |
| 15              | 16QAM      | 1       | 37        | 22.73       | 23.07          | 22.89        | 24                  |
| 15              | 16QAM      | 1       | 74        | 22.93       | 22.97          | 22.88        |                     |
| 15              | 16QAM      | 36      | 0         | 21.79       | 21.96          | 21.93        |                     |
| 15              | 16QAM      | 36      | 20        | 21.70       | 21.89          | 21.77        |                     |
| 15              | 16QAM      | 36      | 39        | 21.74       | 21.75          | 21.72        | 23                  |
| 15              | 16QAM      | 75      | 0         | 21.79       | 21.79          | 21.64        |                     |
| 15              | 64QAM      | 1       | 0         | 21.83       | 22.05          | 21.93        |                     |
| 15              | 64QAM      | 1       | 37        | 22.00       | 22.01          | 22.09        |                     |
| 15              | 64QAM      | 1       | 74        | 21.84       | 22.01          | 21.89        | 23                  |
| 15              | 64QAM      | 36      | 0         | 21.01       | 21.00          | 20.88        |                     |
| 15              | 64QAM      | 36      | 20        | 20.94       | 20.85          | 20.89        |                     |
| 15              | 64QAM      | 36      | 39        | 20.67       | 20.93          | 20.74        |                     |
| 15              | 64QAM      | 75      | 0         | 20.89       | 20.78          | 20.82        | 22                  |
| Channel         |            |         |           | 133172      | 133272         | 133422       |                     |
| Frequency (MHz) |            |         |           | 668         | 678            | 693          | Tune-up limit (dBm) |
| 10              | QPSK       | 1       | 0         | 23.77       | 23.84          | 23.76        | 25                  |
| 10              | QPSK       | 1       | 25        | 23.65       | 23.76          | 23.67        |                     |
| 10              | QPSK       | 1       | 49        | 23.68       | 23.74          | 23.65        |                     |
| 10              | QPSK       | 25      | 0         | 22.74       | 22.83          | 22.78        |                     |
| 10              | QPSK       | 25      | 12        | 22.69       | 22.82          | 22.68        | 24                  |
| 10              | QPSK       | 25      | 25        | 22.70       | 22.71          | 22.72        |                     |
| 10              | QPSK       | 50      | 0         | 22.67       | 22.75          | 22.73        |                     |
| 10              | 16QAM      | 1       | 0         | 22.73       | 22.93          | 22.76        |                     |
| 10              | 16QAM      | 1       | 25        | 22.67       | 23.01          | 22.83        | 24                  |
| 10              | 16QAM      | 1       | 49        | 22.87       | 22.91          | 22.82        |                     |
| 10              | 16QAM      | 25      | 0         | 21.73       | 21.90          | 21.87        |                     |
| 10              | 16QAM      | 25      | 12        | 21.64       | 21.83          | 21.71        |                     |
| 10              | 16QAM      | 25      | 25        | 21.68       | 21.69          | 21.66        | 23                  |
| 10              | 16QAM      | 50      | 0         | 21.73       | 21.73          | 21.58        |                     |
| 10              | 64QAM      | 1       | 0         | 21.77       | 21.99          | 21.87        |                     |
| 10              | 64QAM      | 1       | 25        | 21.94       | 21.95          | 22.03        |                     |
| 10              | 64QAM      | 1       | 49        | 21.78       | 21.95          | 21.83        | 23                  |
| 10              | 64QAM      | 25      | 0         | 20.95       | 20.94          | 20.82        |                     |
| 10              | 64QAM      | 25      | 12        | 20.88       | 20.79          | 20.83        |                     |
| 10              | 64QAM      | 25      | 25        | 20.61       | 20.87          | 20.68        |                     |
| 10              | 64QAM      | 50      | 0         | 20.83       | 20.72          | 20.76        | 22                  |
| Channel         |            |         |           | 133147      | 133247         | 133447       |                     |
| Frequency (MHz) |            |         |           | 665.5       | 675.5          | 695.5        | Tune-up limit (dBm) |
| 5               | QPSK       | 1       | 0         | 23.70       | 23.77          | 23.69        | 25                  |
| 5               | QPSK       | 1       | 12        | 23.58       | 23.69          | 23.60        |                     |
| 5               | QPSK       | 1       | 24        | 23.61       | 23.67          | 23.58        |                     |
| 5               | QPSK       | 12      | 0         | 22.67       | 22.76          | 22.71        |                     |
| 5               | QPSK       | 12      | 7         | 22.62       | 22.75          | 22.61        | 24                  |
| 5               | QPSK       | 12      | 13        | 22.63       | 22.64          | 22.65        |                     |
| 5               | QPSK       | 25      | 0         | 22.60       | 22.68          | 22.66        |                     |
| 5               | 16QAM      | 1       | 0         | 22.66       | 22.86          | 22.69        |                     |
| 5               | 16QAM      | 1       | 12        | 22.60       | 22.94          | 22.76        | 24                  |
| 5               | 16QAM      | 1       | 24        | 22.80       | 22.84          | 22.75        |                     |
| 5               | 16QAM      | 12      | 0         | 21.66       | 21.83          | 21.80        |                     |
| 5               | 16QAM      | 12      | 7         | 21.57       | 21.76          | 21.64        |                     |
| 5               | 16QAM      | 12      | 13        | 21.61       | 21.62          | 21.59        | 23                  |
| 5               | 16QAM      | 25      | 0         | 21.66       | 21.66          | 21.51        |                     |
| 5               | 64QAM      | 1       | 0         | 21.70       | 21.92          | 21.80        |                     |
| 5               | 64QAM      | 1       | 12        | 21.87       | 21.88          | 21.96        |                     |
| 5               | 64QAM      | 1       | 24        | 21.71       | 21.88          | 21.76        | 23                  |
| 5               | 64QAM      | 12      | 0         | 20.88       | 20.87          | 20.75        |                     |
| 5               | 64QAM      | 12      | 7         | 20.81       | 20.72          | 20.76        |                     |
| 5               | 64QAM      | 12      | 13        | 20.54       | 20.80          | 20.61        |                     |
| 5               | 64QAM      | 25      | 0         | 20.76       | 20.65          | 20.69        | 22                  |
| Channel         |            |         |           | 133117      | 133217         | 133417       |                     |
| Frequency (MHz) |            |         |           | 662.5       | 672.5          | 692.5        | Tune-up limit (dBm) |
| 5               | QPSK       | 1       | 0         | 23.63       | 23.70          | 23.62        | 25                  |
| 5               | QPSK       | 1       | 12        | 23.51       | 23.62          | 23.52        |                     |
| 5               | QPSK       | 1       | 24        | 23.54       | 23.60          | 23.45        |                     |
| 5               | QPSK       | 12      | 0         | 22.62       | 22.71          | 22.66        |                     |
| 5               | QPSK       | 12      | 7         | 22.57       | 22.70          | 22.61        | 24                  |
| 5               | QPSK       | 12      | 13        | 22.58       | 22.59          | 22.60        |                     |
| 5               | QPSK       | 25      | 0         | 22.55       | 22.63          | 22.61        |                     |

|                 |       |    |    |        |        |        |                        |
|-----------------|-------|----|----|--------|--------|--------|------------------------|
| 3               | 16QAM | 1  | 0  | 22.05  | 21.97  | 21.85  | 23                     |
| 3               | 16QAM | 1  | 8  | 21.97  | 21.99  | 21.87  |                        |
| 3               | 16QAM | 1  | 14 | 21.84  | 21.84  | 21.92  |                        |
| 3               | 16QAM | 8  | 0  | 20.80  | 20.91  | 20.95  | 22                     |
| 3               | 16QAM | 8  | 4  | 20.81  | 20.77  | 20.74  |                        |
| 3               | 16QAM | 8  | 7  | 20.63  | 20.68  | 20.83  |                        |
| 3               | 16QAM | 15 | 0  | 20.85  | 20.71  | 20.80  | 22                     |
| 3               | 64QAM | 1  | 0  | 21.03  | 21.04  | 21.13  |                        |
| 3               | 64QAM | 1  | 8  | 20.95  | 20.93  | 21.06  |                        |
| 3               | 64QAM | 1  | 14 | 20.96  | 21.04  | 20.85  | 21                     |
| 3               | 64QAM | 8  | 0  | 19.75  | 20.04  | 19.83  |                        |
| 3               | 64QAM | 8  | 4  | 19.93  | 19.83  | 19.70  |                        |
| 3               | 64QAM | 8  | 7  | 19.74  | 19.87  | 19.69  | 21                     |
| 3               | 64QAM | 15 | 0  | 19.91  | 19.88  | 19.65  |                        |
| Channel         |       |    |    | 131979 | 132322 | 132665 | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 22.76  | 22.80  | 22.73  | 24                     |
| 1.4             | QPSK  | 1  | 3  | 22.71  | 22.72  | 22.65  |                        |
| 1.4             | QPSK  | 1  | 5  | 22.66  | 22.62  | 22.57  |                        |
| 1.4             | QPSK  | 3  | 0  | 21.70  | 21.76  | 21.71  |                        |
| 1.4             | QPSK  | 3  | 1  | 21.59  | 21.68  | 21.63  |                        |
| 1.4             | QPSK  | 3  | 3  | 21.60  | 21.72  | 21.62  |                        |
| 1.4             | QPSK  | 6  | 0  | 21.68  | 21.69  | 21.63  | 23                     |
| 1.4             | 16QAM | 1  | 0  | 21.99  | 21.91  | 21.79  | 23                     |
| 1.4             | 16QAM | 1  | 3  | 21.91  | 21.93  | 21.81  |                        |
| 1.4             | 16QAM | 1  | 5  | 21.78  | 21.78  | 21.86  |                        |
| 1.4             | 16QAM | 3  | 0  | 20.74  | 20.85  | 20.89  |                        |
| 1.4             | 16QAM | 3  | 1  | 20.75  | 20.71  | 20.68  |                        |
| 1.4             | 16QAM | 3  | 3  | 20.57  | 20.62  | 20.77  |                        |
| 1.4             | 16QAM | 6  | 0  | 20.79  | 20.65  | 20.74  | 22                     |
| 1.4             | 64QAM | 1  | 0  | 20.97  | 20.98  | 21.07  | 22                     |
| 1.4             | 64QAM | 1  | 3  | 20.89  | 20.87  | 21.00  |                        |
| 1.4             | 64QAM | 1  | 5  | 20.90  | 20.98  | 20.79  |                        |
| 1.4             | 64QAM | 3  | 0  | 19.69  | 19.98  | 19.77  |                        |
| 1.4             | 64QAM | 3  | 1  | 19.87  | 19.77  | 19.64  |                        |
| 1.4             | 64QAM | 3  | 3  | 19.68  | 19.81  | 19.63  |                        |
| 1.4             | 64QAM | 6  | 0  | 19.85  | 19.82  | 19.59  | 21                     |

| n2 (PC3)        |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.74       | 22.85          | 22.69        | 24.00               |
| 20              |                      | 1      | 53       | 22.66       | 22.63          | 22.58        |                     |
| 20              |                      | 1      | 104      | 22.60       | 22.38          | 22.59        |                     |
| 20              |                      | 50     | 1        | 22.18       | 22.05          | 22.12        | 23.50               |
| 20              |                      | 50     | 25       | 22.68       | 22.60          | 22.59        |                     |
| 20              |                      | 50     | 50       | 22.07       | 22.09          | 22.09        |                     |
| 20              |                      | 100    | 0        | 22.16       | 22.11          | 22.13        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.92       | 22.95          | 22.90        | 24.00               |
| 20              |                      | 1      | 53       | 22.68       | 22.64          | 22.57        |                     |
| 20              |                      | 1      | 104      | 22.62       | 22.42          | 22.60        |                     |
| 20              |                      | 50     | 1        | 21.62       | 21.58          | 21.62        | 23.50               |
| 20              |                      | 50     | 25       | 22.65       | 22.69          | 22.62        |                     |
| 20              |                      | 50     | 50       | 21.50       | 21.64          | 21.58        |                     |
| 20              |                      | 100    | 0        | 21.64       | 21.67          | 21.63        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.68       | 21.58          | 21.36        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.38       | 20.28          | 20.05        | 21.00               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.04       | 17.95          | 17.73        | 18.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.11       | 21.01          | 20.79        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 20.53       | 20.41          | 20.18        | 21.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.43       | 19.33          | 19.18        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 15.85       | 15.81          | 15.58        | 16.50               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.74       | 22.58          | 22.51        | 24.00               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.61       | 22.44          | 22.40        | 24.00               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.81       | 22.69          | 22.78        | 24.00               |

| n5 (PC3)        |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 166800      | 167300         | 167800       | 24.00               |
| Frequency (MHz) |                      |        |          | 834         | 836.5          | 839          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 23.06       | 23.10          | 23.08        | 24.00               |
| 20              |                      | 1      | 53       | 23.19       | 23.16          | 23.13        |                     |
| 20              |                      | 1      | 104      | 22.98       | 22.91          | 22.91        |                     |
| 20              |                      | 50     | 1        | 22.62       | 22.73          | 22.68        | 24.00               |
| 20              |                      | 50     | 25       | 23.29       | 23.24          | 23.35        |                     |
| 20              |                      | 50     | 50       | 22.66       | 22.59          | 20.14        |                     |
| 20              |                      | 100    | 0        | 22.59       | 22.61          | 22.76        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.40       | 23.44          | 23.42        | 24.00               |
| 20              |                      | 1      | 53       | 23.20       | 23.18          | 23.17        |                     |
| 20              |                      | 1      | 104      | 22.99       | 22.98          | 22.95        |                     |
| 20              |                      | 50     | 1        | 22.11       | 22.18          | 22.22        | 24.00               |
| 20              |                      | 50     | 25       | 23.20       | 23.21          | 23.18        |                     |
| 20              |                      | 50     | 50       | 22.09       | 22.06          | 22.13        |                     |
| 20              |                      | 100    | 0        | 22.17       | 22.21          | 22.16        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.99       | 22.14          | 22.11        | 23.00               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.72       | 20.78          | 20.70        | 21.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.90       | 18.52          | 18.78        | 19.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.68       | 21.55          | 21.69        | 22.50               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.22       | 21.32          | 21.44        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.62       | 19.66          | 20.02        | 20.50               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 17.03       | 17.09          | 17.16        | 18.00               |
| Channel         |                      |        |          | 166300      | 167300         | 168300       | 24.00               |
| Frequency (MHz) |                      |        |          | 831.5       | 836.5          | 841.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 23.12       | 23.13          | 23.06        | 24.00               |
| Channel         |                      |        |          | 165800      | 167300         | 168800       | 24.00               |
| Frequency (MHz) |                      |        |          | 829         | 836.5          | 844          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.95       | 23.04          | 22.93        | 24.00               |
| Channel         |                      |        |          | 165300      | 167300         | 169300       | 24.00               |
| Frequency (MHz) |                      |        |          | 826.5       | 836.5          | 846.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 23.13       | 23.16          | 23.14        | 24.00               |

| n25 (PC3)       |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 372000      | 376500         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1882.5         | 1905         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.33       | 22.28          | 22.24        | 23.50               |
| 20              |                      | 1      | 53       | 22.50       | 22.40          | 22.54        |                     |
| 20              |                      | 1      | 104      | 22.30       | 22.17          | 22.43        |                     |
| 20              |                      | 50     | 1        | 21.90       | 21.84          | 22.10        | 23.50               |
| 20              |                      | 50     | 25       | 22.54       | 22.38          | 22.51        |                     |
| 20              |                      | 50     | 50       | 21.91       | 21.81          | 21.98        |                     |
| 20              |                      | 100    | 0        | 21.97       | 21.81          | 22.04        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.40       | 22.31          | 22.27        | 23.50               |
| 20              |                      | 1      | 53       | 22.53       | 22.58          | 22.55        |                     |
| 20              |                      | 1      | 104      | 22.35       | 22.18          | 22.52        |                     |
| 20              |                      | 50     | 1        | 21.42       | 21.34          | 21.50        | 23.50               |
| 20              |                      | 50     | 25       | 22.50       | 22.54          | 22.49        |                     |
| 20              |                      | 50     | 50       | 21.38       | 21.36          | 21.53        |                     |
| 20              |                      | 100    | 0        | 21.48       | 21.32          | 21.57        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.46       | 21.27          | 21.31        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.13       | 20.06          | 20.03        | 21.00               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 17.82       | 17.70          | 17.64        | 18.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 20.89       | 20.76          | 20.67        | 21.50               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 20.27       | 20.23          | 20.14        | 21.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.20       | 19.15          | 19.08        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 15.67       | 15.62          | 15.53        | 16.50               |
| Channel         |                      |        |          | 371500      | 376500         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1882.5         | 1907.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.45       | 22.28          | 22.31        | 23.50               |
| Channel         |                      |        |          | 371000      | 376500         | 382000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1882.5         | 1910         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.30       | 22.17          | 22.26        | 23.50               |
| Channel         |                      |        |          | 370500      | 376500         | 382500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1882.5         | 1912.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.52       | 22.35          | 22.56        | 23.50               |

| n41 (PC2)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 509202      | 513900             | 518598         | 523296              | 528000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2546.01     | 2569.5             | 2592.99        | 2616.48             | 2640         |                     |
| 100             | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 23.50       | 23.46              | 23.47          | 23.56               | 23.80        | 25.50               |
| 100             |                      | 1      | 136      | 24.32       | 24.37              | 24.57          | 24.56               | 24.57        |                     |
| 100             |                      | 1      | 271      | 23.73       | 23.68              | 23.72          | 23.41               | 23.34        |                     |
| 100             |                      | 135    | 1        | 23.81       | 23.70              | 23.74          | 23.86               | 23.91        | 25.50               |
| 100             |                      | 135    | 67       | 24.43       | 24.46              | 24.57          | 24.52               | 24.53        |                     |
| 100             |                      | 135    | 136      | 23.82       | 23.94              | 23.90          | 23.88               | 23.62        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 23.90       | 23.86              | 23.90          | 23.93               | 19.48        | 25.50               |
| 100             |                      | 1      | 1        | 23.51       | 23.50              | 23.50          | 23.57               | 23.76        |                     |
| 100             |                      | 1      | 136      | 24.59       | 24.53              | 24.63          | 24.60               | 24.56        |                     |
| 100             |                      | 1      | 271      | 23.73       | 23.74              | 23.75          | 23.43               | 23.36        | 25.50               |
| 100             |                      | 135    | 1        | 23.34       | 23.22              | 23.27          | 23.36               | 23.43        |                     |
| 100             |                      | 135    | 67       | 24.49       | 24.55              | 24.58          | 24.52               | 24.57        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 23.31       | 23.44              | 23.43          | 23.38               | 23.13        | 25.50               |
| 100             |                      | 270    | 0        | 23.35       | 23.38              | 23.43          | 23.43               | 23.44        |                     |
| 100             |                      | 1      | 1        | 22.62       | 22.55              | 22.55          | 22.63               | 22.86        | 23.50               |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 21.12       | 21.09              | 21.05          | 21.14               | 21.36        | 22.00               |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 19.31       | 19.29              | 19.28          | 19.32               | 19.54        | 20.00               |
| 100             | CP-OFDM QPSK         | 1      | 1        | 22.02       | 22.01              | 21.99          | 22.06               | 22.27        | 23.00               |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 21.50       | 21.51              | 21.48          | 21.51               | 21.72        | 22.50               |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 20.00       | 20.01              | 19.98          | 20.04               | 20.25        | 21.00               |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 17.33       | 17.29              | 17.27          | 17.32               | 17.59        | 18.00               |
| Channel         |                      |        |          | 508200      | 513402             | 518598         | 523800              | 528996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2541        | 2567.01            | 2592.99        | 2619                | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 23.61       | 23.61              | 23.57          | 23.76               | 23.86        | 25.50               |
| Channel         |                      |        |          | 507204      | 512904             | 518598         | 524298              | 529998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2536.02     | 2564.52            | 2592.99        | 2621.49             | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 23.87       | 23.84              | 23.84          | 24.01               | 24.05        | 25.50               |
| Channel         |                      |        |          | 506202      | 512400             | 518598         | 524796              | 531000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2531.01     | 2562               | 2592.99        | 2623.98             | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 23.96       | 23.96              | 23.99          | 24.19               | 24.19        | 25.50               |
| Channel         |                      |        |          | 505200      | 511902             | 518598         | 525798              | 531996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2526        | 2559.51            | 2592.99        | 2626.5              | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 23.99       | 24.00              | 23.98          | 24.09               | 24.12        | 25.50               |
| Channel         |                      |        |          | 504204      | 511404             | 518598         | 525798              | 532998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2521.02     | 2557.02            | 2592.99        | 2626.5              | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 24.08       | 24.03              | 24.16          | 24.27               | 24.24        | 25.50               |
| Channel         |                      |        |          | 503202      | 510900             | 518598         | 526296              | 534000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2516.01     | 2554.5             | 2592.99        | 2631.48             | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 23.88       | 23.81              | 23.94          | 24.05               | 23.88        | 25.50               |
| Channel         |                      |        |          | 502200      | 510402             | 518598         | 526800              | 534996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2511        | 2552.01            | 2592.99        | 2634                | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 24.07       | 23.96              | 24.13          | 24.20               | 23.88        | 25.50               |
| Channel         |                      |        |          | 501204      | 509904             | 518598         | 527298              | 535998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2506.02     | 2549.52            | 2592.99        | 2636.49             | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 24.26       | 24.21              | 24.41          | 24.50               | 24.12        | 25.50               |
| Channel         |                      |        |          | 500700      | 509652             | 518598         | 527550              | 536496       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2503.5      | 2548.26            | 2592.99        | 2637.75             | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 24.35       | 24.32              | 24.53          | 24.60               | 24.19        | 25.50               |
| Channel         |                      |        |          | 500202      | 509400             | 518598         | 527796              | 537000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2501.01     | 2547               | 2592.99        | 2638.98             | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 24.35       | 24.32              | 24.58          | 24.57               | 24.18        | 22.00               |



| n41 (PC3)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 509202      | 513900             | 518598         | 523296              | 528000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2546.01     | 2569.5             | 2592.99        | 2616.48             | 2640         |                     |
| 100             | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 20.48       | 20.46              | 20.44          | 20.50               | 20.71        | 22.5                |
| 100             |                      | 1      | 136      | 21.31       | 21.38              | 21.57          | 21.54               | 21.53        |                     |
| 100             |                      | 1      | 271      | 20.82       | 20.64              | 20.66          | 20.38               | 20.43        |                     |
| 100             |                      | 135    | 1        | 20.78       | 20.63              | 20.65          | 20.77               | 20.85        | 22.5                |
| 100             |                      | 135    | 67       | 21.37       | 21.42              | 21.54          | 21.58               | 21.54        |                     |
| 100             |                      | 135    | 136      | 20.95       | 20.88              | 20.85          | 20.81               | 20.70        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 20.79       | 20.82              | 20.83          | 20.84               | 20.84        | 22.5                |
| 100             |                      | 1      | 1        | 20.47       | 20.46              | 20.44          | 20.49               | 20.70        |                     |
| 100             |                      | 1      | 136      | 21.50       | 21.53              | 21.61          | 21.56               | 21.57        |                     |
| 100             |                      | 1      | 271      | 20.73       | 20.68              | 20.67          | 20.37               | 20.30        | 22.5                |
| 100             |                      | 135    | 1        | 20.56       | 20.41              | 20.44          | 20.53               | 20.61        |                     |
| 100             |                      | 135    | 67       | 21.48       | 21.45              | 21.55          | 21.57               | 21.51        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 20.52       | 20.60              | 20.61          | 20.53               | 20.28        | 22.5                |
| 100             |                      | 270    | 0        | 20.53       | 20.57              | 20.59          | 20.59               | 20.61        |                     |
| 100             |                      | 1      | 1        | 19.97       | 20.00              | 19.95          | 20.02               | 20.25        | 21                  |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 18.46       | 18.43              | 18.40          | 18.46               | 18.67        | 19.5                |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 16.20       | 16.21              | 16.20          | 16.21               | 16.45        | 17                  |
| 100             | CP-OFDM QPSK         | 1      | 1        | 19.35       | 19.38              | 19.35          | 19.40               | 19.62        | 20.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 18.77       | 18.82              | 18.79          | 18.83               | 19.06        | 19.5                |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 17.34       | 17.35              | 17.33          | 17.38               | 17.59        | 18                  |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.13       | 14.17              | 14.15          | 14.16               | 14.37        | 15                  |
| Channel         |                      |        |          | 508200      | 513402             | 518598         | 523800              | 528996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2541        | 2567.01            | 2592.99        | 2619                | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.80       | 20.61              | 20.54          | 20.68               | 20.78        | 22.5                |
| Channel         |                      |        |          | 507204      | 512904             | 518598         | 524298              | 529998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2536.02     | 2564.52            | 2592.99        | 2621.49             | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.80       | 20.78              | 20.77          | 20.91               | 20.97        | 22.5                |
| Channel         |                      |        |          | 506202      | 512400             | 518598         | 524796              | 531000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2531.01     | 2562               | 2592.99        | 2623.98             | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.89       | 20.90              | 20.95          | 21.11               | 21.10        | 22.5                |
| Channel         |                      |        |          | 505200      | 511902             | 518598         | 525798              | 531996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2526        | 2559.51            | 2592.99        | 2626.5              | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.94       | 20.90              | 20.96          | 21.08               | 21.12        | 22.5                |
| Channel         |                      |        |          | 504204      | 511404             | 518598         | 525798              | 532998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2521.02     | 2557.02            | 2592.99        | 2626.5              | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.09       | 21.03              | 21.15          | 21.26               | 21.21        | 22.5                |
| Channel         |                      |        |          | 503202      | 510900             | 518598         | 526296              | 534000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2516.01     | 2554.5             | 2592.99        | 2631.48             | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.94       | 20.81              | 20.95          | 21.04               | 20.87        | 22.5                |
| Channel         |                      |        |          | 502200      | 510402             | 518598         | 526800              | 534996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2511        | 2552.01            | 2592.99        | 2634                | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.08       | 20.98              | 21.13          | 21.21               | 20.90        | 22.5                |
| Channel         |                      |        |          | 501204      | 509904             | 518598         | 527298              | 535998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2506.02     | 2549.52            | 2592.99        | 2636.49             | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.23       | 21.21              | 21.40          | 21.48               | 21.10        | 22.5                |
| Channel         |                      |        |          | 500700      | 509652             | 518598         | 527550              | 536496       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2503.5      | 2548.26            | 2592.99        | 2637.75             | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.28       | 21.25              | 21.49          | 21.50               | 21.11        | 22.5                |
| Channel         |                      |        |          | 500202      | 509400             | 518598         | 527796              | 537000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2501.01     | 2547               | 2592.99        | 2638.98             | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.34       | 21.33              | 21.54          | 21.54               | 21.15        | 19.5                |

| n48 (PC3)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 640000      | 640834             | 641666         | 642500              | 643332       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3600        | 3612.51            | 3624.99        | 3637.5              | 3649.98      |                     |
| 100             | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 20.57       | 20.60              | 20.64          | 20.74               | 20.93        | 23.00               |
| 100             |                      | 1      | 136      | 21.75       | 21.61              | 21.64          | 21.79               | 21.85        |                     |
| 100             |                      | 1      | 271      | 21.07       | 21.06              | 21.13          | 21.19               | 21.26        |                     |
| 100             |                      | 135    | 1        | 20.77       | 20.95              | 21.10          | 20.93               | 20.95        | 23.00               |
| 100             |                      | 135    | 67       | 21.78       | 21.66              | 21.79          | 21.82               | 21.90        |                     |
| 100             |                      | 135    | 136      | 17.81       | 21.12              | 21.21          | 21.22               | 21.29        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 21.09       | 20.97              | 21.26          | 21.15               | 21.21        | 23.00               |
| 100             |                      | 1      | 1        | 20.69       | 20.74              | 20.75          | 20.90               | 21.06        |                     |
| 100             |                      | 1      | 136      | 21.98       | 22.05              | 22.13          | 22.03               | 22.00        |                     |
| 100             |                      | 1      | 271      | 21.22       | 21.21              | 21.30          | 21.36               | 21.40        | 23.00               |
| 100             |                      | 135    | 1        | 20.27       | 20.43              | 20.60          | 20.42               | 20.45        |                     |
| 100             |                      | 135    | 67       | 21.88       | 21.93              | 21.98          | 21.89               | 21.91        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 20.45       | 20.62              | 20.73          | 20.71               | 20.77        | 23.00               |
| 100             |                      | 270    | 0        | 20.61       | 20.47              | 20.46          | 20.68               | 20.71        |                     |
| 100             |                      |        |          |             |                    |                |                     |              |                     |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 19.61       | 19.64              | 19.67          | 19.80               | 19.97        | 21.00               |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 18.08       | 18.10              | 18.16          | 18.32               | 18.46        | 19.50               |
| 100             | CP-OFDM QPSK         | 1      | 1        | 15.81       | 15.87              | 15.93          | 16.06               | 16.23        | 17.00               |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 19.03       | 19.07              | 19.10          | 19.23               | 19.40        | 20.00               |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 18.51       | 18.56              | 18.56          | 18.70               | 18.90        | 19.50               |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 17.00       | 17.03              | 17.08          | 17.22               | 17.38        | 18.00               |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.18       | 14.21              | 14.37          | 14.49               | 14.60        | 15.00               |
| Channel         |                      |        |          | 639668      | 640668             | 641666         | 642666              | 643666       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3595.02     | 3610.02            | 3624.99        | 3639.99             | 3654.99      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 21.66       | 21.74              | 21.75          | 22.00               | 21.94        | 23.00               |
| Channel         |                      |        |          | 639334      | 640500             | 641666         | 642832              | 644000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3590.01     | 3607.5             | 3624.99        | 3642.48             | 3660         |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 21.44       | 21.56              | 21.65          | 21.83               | 21.67        | 23.00               |
| Channel         |                      |        |          | 639000      | 640334             | 641666         | 643000              | 644332       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3585        | 3605.01            | 3624.99        | 3645                | 3664.98      |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 21.04       | 21.05              | 21.30          | 21.24               | 21.43        | 23.00               |
| Channel         |                      |        |          | 638668      | 640168             | 641666         | 643332              | 644666       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3580.02     | 3602.52            | 3624.99        | 3647.49             | 3669.99      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 21.00       | 21.08              | 21.36          | 21.24               | 21.47        | 23.00               |
| Channel         |                      |        |          | 638334      | 640000             | 641666         | 643332              | 645000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3575.01     | 3600               | 3624.99        | 3647.49             | 3675         |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.16       | 21.17              | 21.58          | 21.49               | 21.63        | 23.00               |
| Channel         |                      |        |          | 638000      | 639834             | 641666         | 643500              | 645332       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3570        | 3597.51            | 3624.99        | 3652.5              | 3679.98      |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.90       | 20.98              | 21.25          | 21.30               | 21.40        | 23.00               |
| Channel         |                      |        |          | 637668      | 639668             | 641666         | 643666              | 645666       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3565.02     | 3595.02            | 3624.99        | 3654.99             | 3684.99      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.12       | 21.16              | 21.40          | 21.54               | 21.70        | 23.00               |
| Channel         |                      |        |          | 637334      | 639500             | 641666         | 643832              | 646000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3560.01     | 3592.5             | 3624.99        | 3657.48             | 3690         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.27       | 21.44              | 21.51          | 21.84               | 21.93        | 23.00               |
| Channel         |                      |        |          | 637168      | 639418             | 641666         | 643916              | 646166       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3557.52     | 3591.27            | 3624.99        | 3658.74             | 3692.49      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.30       | 21.50              | 21.57          | 21.88               | 22.04        | 23.00               |
| Channel         |                      |        |          | 637000      | 639334             | 641666         | 644000              | 646332       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3555        | 3590.01            | 3624.99        | 3660                | 3694.98      |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.39       | 21.51              | 21.58          | 21.88               | 22.06        | 19.50               |

## n66 (PC3)

| BW [MHz]        | Modulation           | RB num            | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |       |
|-----------------|----------------------|-------------------|----------|-------------|----------------|--------------|---------------------|-------|
| Channel         |                      |                   |          | 346000      | 349000         | 352000       | 24.00               |       |
| Frequency (MHz) |                      |                   |          | 1730        | 1745           | 1760         |                     |       |
| 40              | DFT-s-OFDM PI/2 BPSK | 1                 | 1        | 21.99       | 21.96          | 21.93        | 24.00               |       |
| 40              |                      | 1                 | 108      | 22.50       | 22.53          | 22.47        |                     |       |
| 40              |                      | 1                 | 214      | 21.92       | 21.95          | 21.95        |                     |       |
| 40              |                      | 108               | 1        | 21.93       | 21.99          | 21.94        | 24.00               |       |
| 40              |                      | 108               | 54       | 22.55       | 22.53          | 22.46        |                     |       |
| 40              |                      | 108               | 108      | 21.88       | 21.78          | 21.84        |                     |       |
| 40              | DFT-s-OFDM QPSK      | 216               | 0        | 21.84       | 21.89          | 21.80        | 24.00               |       |
| 40              |                      | 1                 | 1        | 22.06       | 22.00          | 21.98        |                     |       |
| 40              |                      | 1                 | 108      | 22.91       | 22.94          | 22.90        |                     |       |
| 40              |                      | 1                 | 214      | 21.95       | 21.95          | 21.95        | 24.00               |       |
| 40              |                      | 108               | 1        | 21.45       | 21.45          | 21.44        |                     |       |
| 40              |                      | 108               | 54       | 22.88       | 22.90          | 22.85        |                     |       |
| 40              | DFT-s-OFDM 16QAM     | 108               | 108      | 21.36       | 21.29          | 21.33        | 24.00               |       |
| 40              |                      | 216               | 0        | 21.40       | 21.38          | 21.38        |                     |       |
| 40              |                      | 1                 | 1        | 21.09       | 21.03          | 20.97        |                     |       |
| 40              |                      | DFT-s-OFDM 64QAM  | 1        | 1           | 19.81          | 19.77        | 19.70               | 20.50 |
| 40              |                      | DFT-s-OFDM 256QAM | 1        | 1           | 17.46          | 17.37        | 17.38               | 18.00 |
| 40              |                      | CP-OFDM QPSK      | 1        | 1           | 20.53          | 20.51        | 20.40               | 21.50 |
| 40              | CP-OFDM 16QAM        | 1                 | 1        | 19.93       | 19.91          | 19.82        | 20.50               |       |
| 40              | CP-OFDM 64QAM        | 1                 | 1        | 18.74       | 18.31          | 18.79        | 19.50               |       |
| 40              | CP-OFDM 256QAM       | 1                 | 1        | 15.38       | 15.34          | 15.27        | 16.00               |       |
| Channel         |                      |                   |          | 345000      | 349000         | 353000       | 24.00               |       |
| Frequency (MHz) |                      |                   |          | 1725        | 1745           | 1765         |                     |       |
| 30              | DFT-s-OFDM QPSK      | 1                 | 1        | 22.24       | 22.14          | 22.14        | 24.00               |       |
| Channel         |                      |                   |          | 344500      | 349000         | 353500       | 24.00               |       |
| Frequency (MHz) |                      |                   |          | 1722.5      | 1745           | 1767.5       |                     |       |
| 25              | DFT-s-OFDM QPSK      | 1                 | 1        | 22.40       | 22.31          | 22.29        | 24.00               |       |
| Channel         |                      |                   |          | 344000      | 349000         | 354000       | 24.00               |       |
| Frequency (MHz) |                      |                   |          | 1720        | 1745           | 1770         |                     |       |
| 20              | DFT-s-OFDM QPSK      | 1                 | 1        | 22.45       | 22.46          | 22.32        | 24.00               |       |
| Channel         |                      |                   |          | 343500      | 349000         | 354500       | 24.00               |       |
| Frequency (MHz) |                      |                   |          | 1717.5      | 1745           | 1772.5       |                     |       |
| 15              | DFT-s-OFDM QPSK      | 1                 | 1        | 22.51       | 22.46          | 22.43        | 24.00               |       |
| Channel         |                      |                   |          | 343000      | 349000         | 355000       | 24.00               |       |
| Frequency (MHz) |                      |                   |          | 1715        | 1745           | 1775         |                     |       |
| 10              | DFT-s-OFDM QPSK      | 1                 | 1        | 22.39       | 22.34          | 22.30        | 24.00               |       |
| Channel         |                      |                   |          | 342500      | 349000         | 355500       | 24.00               |       |
| Frequency (MHz) |                      |                   |          | 1712.5      | 1745           | 1777.5       |                     |       |
| 5               | DFT-s-OFDM QPSK      | 1                 | 1        | 22.63       | 22.52          | 22.52        | 24.00               |       |

## n71 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 134600      | 136100         | 137600       | 24.00               |
| Frequency (MHz) |                      |        |          | 673         | 680.5          | 688          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.73       | 22.81          | 22.83        | 24.00               |
| 20              |                      | 1      | 53       | 22.96       | 23.01          | 22.99        |                     |
| 20              |                      | 1      | 104      | 22.87       | 22.80          | 22.82        |                     |
| 20              |                      | 50     | 1        | 22.36       | 22.38          | 22.45        | 24.00               |
| 20              |                      | 50     | 25       | 23.11       | 23.07          | 19.55        |                     |
| 20              |                      | 50     | 50       | 22.66       | 22.67          | 22.66        |                     |
| 20              |                      | 100    | 0        | 22.54       | 22.46          | 22.50        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.04       | 23.15          | 23.08        | 24.00               |
| 20              |                      | 1      | 53       | 22.96       | 23.08          | 22.96        |                     |
| 20              |                      | 1      | 104      | 22.86       | 22.88          | 22.81        |                     |
| 20              |                      | 50     | 1        | 21.87       | 21.88          | 21.92        | 24.00               |
| 20              |                      | 50     | 25       | 23.05       | 23.10          | 23.08        |                     |
| 20              |                      | 50     | 50       | 22.09       | 22.10          | 22.00        |                     |
| 20              |                      | 100    | 0        | 22.22       | 21.93          | 21.99        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.74       | 21.79          | 21.88        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.42       | 20.66          | 20.71        | 21.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.37       | 18.80          | 18.84        | 19.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.16       | 21.31          | 21.30        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 20.90       | 21.05          | 21.04        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.50       | 19.93          | 19.99        | 21.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.32       | 16.89          | 17.02        | 18.00               |
| Channel         |                      |        |          | 134100      | 136100         | 138100       | 24.00               |
| Frequency (MHz) |                      |        |          | 670.5       | 680.5          | 690.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.76       | 22.91          | 22.89        | 24.00               |
| Channel         |                      |        |          | 133600      | 136100         | 138600       | 24.00               |
| Frequency (MHz) |                      |        |          | 668         | 680.5          | 693          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.65       | 22.77          | 22.74        | 24.00               |
| Channel         |                      |        |          | 133100      | 136100         | 139100       | 24.00               |
| Frequency (MHz) |                      |        |          | 665.5       | 680.5          | 695.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.84       | 22.98          | 22.99        | 24.00               |

| n77(3450-3550MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        |             |                    | 23.63          |                     |              | 25.00               |
| 100                     |                      | 1      | 136      |             |                    | 24.07          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 22.64          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 23.52          |                     |              | 24.50               |
| 100                     |                      | 135    | 67       |             |                    | 24.05          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 22.90          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        |             |                    | 23.35          |                     |              | 25.50               |
| 100                     |                      | 1      | 1        |             |                    | 23.60          |                     |              |                     |
| 100                     |                      | 1      | 136      |             |                    | 24.46          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 22.66          |                     |              | 25.00               |
| 100                     |                      | 135    | 1        |             |                    | 23.05          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 24.28          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      |             |                    | 22.34          |                     |              | 25.00               |
| 100                     |                      | 270    | 0        |             |                    | 22.87          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 22.70          |                     |              | 23.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 20.94          |                     |              | 22.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 19.05          |                     |              | 20.00               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 22.12          |                     |              | 23.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 21.68          |                     |              | 22.50               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 20.13          |                     |              | 21.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 16.96          |                     |              | 18.00               |
| Channel                 |                      |        |          | 633000      | 633168             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.52            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.78       | 23.75              | 23.74          | 23.72               | 23.74        | 25.00               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.97       | 23.94              | 23.94          | 23.90               | 23.84        | 25.00               |
| Channel                 |                      |        |          | 632334      | 632668             | 633334         | 633666              | 634332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.14       | 24.04              | 24.03          | 23.95               | 23.88        | 25.00               |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.98       | 23.94              | 23.86          | 23.76               | 23.75        | 25.00               |
| Channel                 |                      |        |          | 631668      | 632000             | 633334         | 634166              | 635000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3510                | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.14       | 24.07              | 23.93          | 23.85               | 23.72        | 25.00               |
| Channel                 |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.93       | 23.83              | 23.71          | 23.60               | 23.26        | 25.00               |
| Channel                 |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.13       | 24.00              | 23.87          | 23.63               | 23.18        | 25.00               |
| Channel                 |                      |        |          | 630834      | 632084             | 633334         | 634584              | 635832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3462.51     | 3481.26            | 3500.01        | 3518.76             | 3537.48      |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.21       | 24.10              | 24.00          | 23.67               | 23.24        | 25.00               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.20       | 24.12              | 23.98          | 23.68               | 23.28        | 25.00               |
| Channel                 |                      |        |          | 630500      | 631916             | 633334         | 634750              | 636166       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3457.5      | 3478.74            | 3500.01        | 3521.25             | 3542.49      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.27       | 24.16              | 24.06          | 23.59               | 23.32        | 25.00               |
| Channel                 |                      |        |          | 630334      | 631834             | 633334         | 634834              | 636332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3455.01     | 3477.51            | 3500.01        | 3522.51             | 3544.98      |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.26       | 24.16              | 24.07          | 23.54               | 23.39        | 25.00               |

| n77(3700-3980MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 23.21       | 22.95              | 22.80          | 23.14               | 23.05        | 25.00               |
| 100                     |                      | 1      | 136      | 23.77       | 23.68              | 23.99          | 23.84               | 22.87        |                     |
| 100                     |                      | 1      | 271      | 22.89       | 23.15              | 22.97          | 22.07               | 22.64        |                     |
| 100                     |                      | 135    | 1        | 23.50       | 22.91              | 22.97          | 23.05               | 22.65        | 25.00               |
| 100                     |                      | 135    | 67       | 23.80       | 23.75              | 24.00          | 23.93               | 23.02        |                     |
| 100                     |                      | 135    | 136      | 22.95       | 23.19              | 23.18          | 22.78               | 22.62        |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        | 23.15       | 23.04              | 23.25          | 23.04               | 22.38        | 25.00               |
| 100                     |                      | 1      | 1        | 23.22       | 22.92              | 22.80          | 23.16               | 23.06        |                     |
| 100                     |                      | 1      | 136      | 23.94       | 24.02              | 24.12          | 24.08               | 24.10        |                     |
| 100                     |                      | 1      | 271      | 22.86       | 23.15              | 22.96          | 22.07               | 22.64        | 25.00               |
| 100                     |                      | 135    | 1        | 23.01       | 22.41              | 22.43          | 22.60               | 22.13        |                     |
| 100                     |                      | 135    | 67       | 23.99       | 23.97              | 24.02          | 23.98               | 23.93        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      | 22.42       | 22.59              | 22.66          | 22.28               | 22.11        | 25.00               |
| 100                     |                      | 270    | 0        | 22.72       | 22.50              | 22.81          | 22.61               | 21.96        |                     |
| 100                     |                      | 1      | 1        | 22.20       | 21.96              | 21.75          | 22.14               | 22.08        | 23.00               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 20.48       | 20.24              | 20.20          | 20.44               | 20.36        | 21.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 18.67       | 18.37              | 18.23          | 18.60               | 18.53        | 19.00               |
| 100                     | CP-OFDM QPSK         | 1      | 1        | 21.89       | 21.58              | 21.37          | 21.72               | 21.65        | 22.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 21.23       | 20.96              | 20.79          | 21.15               | 21.05        | 22.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 19.76       | 19.48              | 19.31          | 19.68               | 19.59        | 20.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 16.68       | 16.32              | 16.28          | 16.54               | 16.51        | 17.50               |
| Channel                 |                      |        |          | 649666      | 652834             | 656000         | 659166              | 662332       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3744.99     | 3792.51            | 3840           | 3887.49             | 3934.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.35       | 23.04              | 22.95          | 23.27               | 23.04        | 25.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.58       | 23.23              | 23.17          | 23.38               | 22.99        | 25.00               |
| Channel                 |                      |        |          | 649000      | 652500             | 656000         | 659500              | 663000       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3735        | 3787.5             | 3840           | 3892.5              | 3945         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.71       | 23.33              | 23.30          | 23.48               | 22.88        | 25.00               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.65       | 23.27              | 23.29          | 23.43               | 22.61        | 25.00               |
| Channel                 |                      |        |          | 648334      | 652168             | 656000         | 659832              | 663666       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3782.52            | 3840           | 3894.99             | 3954.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.79       | 23.37              | 23.45          | 23.64               | 22.67        | 25.00               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.53       | 23.13              | 23.19          | 23.37               | 22.41        | 25.00               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.77       | 23.31              | 23.50          | 23.47               | 22.74        | 25.00               |
| Channel                 |                      |        |          | 647500      | 651750             | 656000         | 660250              | 664500       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3712.5      | 3776.25            | 3840           | 3903.75             | 3967.5       |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 23.89       | 23.43              | 23.70          | 23.53               | 22.96        | 25.00               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.00       | 23.52              | 23.75          | 23.56               | 23.11        | 25.00               |
| Channel                 |                      |        |          | 647168      | 651584             | 656000         | 660416              | 664832       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3707.52     | 3773.76            | 3840           | 3906.24             | 3972.48      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.04       | 23.59              | 23.90          | 23.54               | 23.31        | 25.00               |
| Channel                 |                      |        |          | 647000      | 651500             | 656000         | 660500              | 665000       | 25.00               |
| Frequency (MHz)         |                      |        |          | 3705        | 3772.5             | 3840           | 3907.5              | 3975         |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 24.07       | 23.58              | 23.94          | 23.44               | 23.35        | 25.00               |

| n77(3450-3550MHz) (PC3) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        |             |                    | 20.47          |                     |              | 22.00               |
| 100                     |                      | 1      | 136      |             |                    | 20.93          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 20.53          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 20.33          |                     |              | 21.50               |
| 100                     |                      | 135    | 67       |             |                    | 20.90          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 20.27          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        |             |                    | 20.16          |                     |              | 22.00               |
| 100                     |                      | 1      | 1        |             |                    | 20.41          |                     |              |                     |
| 100                     |                      | 1      | 136      |             |                    | 20.98          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 20.52          |                     |              | 22.00               |
| 100                     |                      | 135    | 1        |             |                    | 20.58          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 20.91          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      |             |                    | 20.29          |                     |              | 22.00               |
| 100                     |                      | 270    | 0        |             |                    | 20.57          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 19.48          |                     |              | 20.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 17.95          |                     |              | 19.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 15.70          |                     |              | 16.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 18.91          |                     |              | 20.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 18.38          |                     |              | 19.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 16.87          |                     |              | 17.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 14.10          |                     |              | 15.00               |
| Channel                 |                      |        |          | 633000      | 633168             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.52            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.59       | 20.54              | 20.54          | 20.50               | 20.50        | 22.00               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.79       | 20.73              | 20.74          | 20.69               | 20.63        | 22.00               |
| Channel                 |                      |        |          | 632334      | 632668             | 633334         | 633666              | 634332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.87       | 20.86              | 20.82          | 20.74               | 20.63        | 22.00               |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.88       | 20.83              | 20.70          | 20.62               | 20.61        | 22.00               |
| Channel                 |                      |        |          | 631668      | 632000             | 633334         | 634166              | 635000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3510                | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.02       | 20.92              | 20.81          | 20.74               | 20.63        | 22.00               |
| Channel                 |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.81       | 20.70              | 20.57          | 20.45               | 20.13        | 22.00               |
| Channel                 |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.85       | 20.85              | 20.74          | 20.53               | 20.08        | 22.00               |
| Channel                 |                      |        |          | 630834      | 632084             | 633334         | 634584              | 635832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3462.51     | 3481.26            | 3500.01        | 3518.76             | 3537.48      |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.80       | 20.93              | 20.83          | 20.56               | 20.16        | 22.00               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.79       | 20.88              | 20.95          | 20.58               | 20.19        | 22.00               |
| Channel                 |                      |        |          | 630500      | 631916             | 633334         | 634750              | 636166       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3457.5      | 3478.74            | 3500.01        | 3521.25             | 3542.49      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.85       | 20.88              | 20.94          | 20.57               | 20.26        | 22.00               |
| Channel                 |                      |        |          | 630334      | 631834             | 633334         | 634834              | 636332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3455.01     | 3477.51            | 3500.01        | 3522.51             | 3544.98      |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.92       | 20.86              | 20.79          | 20.50               | 20.35        | 22.00               |

| n77(3700-3980MHz) (PC3) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 20.30       | 20.08              | 19.95          | 20.24               | 20.09        | 22.00               |
| 100                     |                      | 1      | 136      | 20.91       | 20.85              | 21.09          | 20.86               | 19.89        |                     |
| 100                     |                      | 1      | 271      | 20.01       | 20.20              | 19.99          | 20.11               | 20.14        |                     |
| 100                     |                      | 135    | 1        | 20.64       | 20.06              | 20.10          | 20.14               | 20.66        | 22.00               |
| 100                     |                      | 135    | 67       | 20.85       | 20.91              | 20.96          | 20.88               | 20.03        |                     |
| 100                     |                      | 135    | 136      | 20.11       | 19.89              | 20.18          | 20.22               | 20.16        |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        | 20.26       | 20.22              | 20.37          | 20.13               | 19.46        | 22.00               |
| 100                     |                      | 1      | 1        | 20.25       | 20.05              | 19.91          | 20.27               | 20.08        |                     |
| 100                     |                      | 1      | 136      | 21.05       | 21.03              | 21.14          | 20.95               | 21.05        |                     |
| 100                     |                      | 1      | 271      | 19.99       | 20.22              | 19.95          | 19.02               | 19.65        | 22.00               |
| 100                     |                      | 135    | 1        | 20.14       | 19.53              | 19.61          | 19.75               | 19.14        |                     |
| 100                     |                      | 135    | 67       | 20.98       | 20.87              | 21.09          | 20.96               | 21.01        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      | 20.22       | 20.19              | 20.57          | 20.22               | 20.18        | 22.00               |
| 100                     |                      | 270    | 0        | 19.81       | 19.71              | 19.94          | 19.85               | 19.85        |                     |
| 100                     |                      |        |          |             |                    |                |                     |              |                     |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 19.34       | 19.12              | 19.06          | 19.37               | 19.14        | 20.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 17.80       | 17.60              | 17.41          | 17.83               | 17.62        | 18.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        | 15.55       | 15.32              | 15.30          | 15.57               | 15.37        | 16.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 18.77       | 18.56              | 18.37          | 18.76               | 18.56        | 19.50               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 18.20       | 18.05              | 18.07          | 18.22               | 18.03        | 19.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 16.72       | 16.50              | 16.43          | 16.72               | 16.55        | 17.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 13.94       | 13.68              | 13.62          | 13.92               | 13.34        | 14.00               |
| Channel                 |                      |        |          | 649666      | 652834             | 656000         | 659166              | 662332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3744.99     | 3792.51            | 3840           | 3887.49             | 3934.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.44       | 20.15              | 20.11          | 20.36               | 20.03        | 22.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.62       | 20.33              | 20.34          | 20.47               | 19.99        | 22.00               |
| Channel                 |                      |        |          | 649000      | 652500             | 656000         | 659500              | 663000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3735        | 3787.5             | 3840           | 3892.5              | 3945         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.71       | 20.46              | 20.44          | 20.54               | 19.80        | 22.00               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.70       | 20.42              | 20.41          | 20.47               | 19.56        | 22.00               |
| Channel                 |                      |        |          | 648334      | 652168             | 656000         | 659832              | 663666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3782.52            | 3840           | 3894.99             | 3954.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.89       | 20.51              | 20.61          | 20.71               | 19.64        | 22.00               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.63       | 20.29              | 20.33          | 20.40               | 19.38        | 22.00               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.86       | 20.47              | 20.62          | 20.48               | 19.71        | 22.00               |
| Channel                 |                      |        |          | 647500      | 651750             | 656000         | 660250              | 664500       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3712.5      | 3776.25            | 3840           | 3903.75             | 3967.5       |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.99       | 20.60              | 20.81          | 20.53               | 19.92        | 22.00               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.08       | 20.68              | 20.89          | 20.52               | 20.09        | 22.00               |
| Channel                 |                      |        |          | 647168      | 651584             | 656000         | 660416              | 664832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3707.52     | 3773.76            | 3840           | 3906.24             | 3972.48      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.13       | 20.73              | 21.01          | 20.49               | 20.27        | 18.50               |
| Channel                 |                      |        |          | 647000      | 651500             | 656000         | 660500              | 665000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3705        | 3772.5             | 3840           | 3907.5              | 3975         |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.14       | 20.75              | 21.08          | 20.40               | 20.35        | 19.00               |



## B5\_n2 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.62       | 22.55          | 22.37        | 24.00               |
| 20              |                      | 1      | 53       | 22.65       | 22.65          | 22.59        |                     |
| 20              |                      | 1      | 104      | 22.56       | 22.40          | 22.62        |                     |
| 20              |                      | 50     | 1        | 22.22       | 22.16          | 22.18        | 23.50               |
| 20              |                      | 50     | 25       | 22.67       | 22.65          | 22.62        |                     |
| 20              |                      | 50     | 50       | 22.11       | 22.19          | 22.16        |                     |
| 20              |                      | 100    | 0        | 22.16       | 22.16          | 22.22        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.69       | 22.62          | 22.40        | 24.00               |
| 20              |                      | 1      | 53       | 22.96       | 22.91          | 22.86        |                     |
| 20              |                      | 1      | 104      | 22.58       | 22.42          | 22.63        |                     |
| 20              |                      | 50     | 1        | 21.70       | 21.64          | 21.71        | 23.50               |
| 20              |                      | 50     | 25       | 22.77       | 22.67          | 22.65        |                     |
| 20              |                      | 50     | 50       | 21.63       | 21.70          | 21.68        |                     |
| 20              |                      | 100    | 0        | 21.70       | 21.70          | 21.73        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.78       | 21.70          | 21.48        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 19.95       | 19.95          | 19.73        | 20.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.42       | 18.36          | 18.13        | 19.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.12       | 21.07          | 20.84        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.14       | 21.07          | 20.87        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.09       | 19.06          | 18.81        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.33       | 16.27          | 16.03        | 17.00               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.66       | 22.53          | 22.42        | 24.00               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.48       | 22.39          | 22.30        | 24.00               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.66       | 22.50          | 22.59        | 24.00               |

## B7\_n2 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.71       | 22.62          | 22.38        | 23.50               |
| 20              |                      | 1      | 53       | 22.70       | 22.69          | 22.62        |                     |
| 20              |                      | 1      | 104      | 22.64       | 22.45          | 22.63        |                     |
| 20              |                      | 50     | 1        | 22.21       | 22.14          | 22.22        | 23.50               |
| 20              |                      | 50     | 25       | 22.77       | 22.70          | 22.60        |                     |
| 20              |                      | 50     | 50       | 22.15       | 22.22          | 22.18        |                     |
| 20              |                      | 100    | 0        | 22.20       | 22.19          | 22.23        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.73       | 22.66          | 22.41        | 23.50               |
| 20              |                      | 1      | 53       | 22.80       | 22.73          | 22.69        |                     |
| 20              |                      | 1      | 104      | 22.66       | 22.47          | 22.64        |                     |
| 20              |                      | 50     | 1        | 21.74       | 21.69          | 21.73        | 23.50               |
| 20              |                      | 50     | 25       | 22.79       | 22.72          | 22.64        |                     |
| 20              |                      | 50     | 50       | 21.64       | 21.71          | 21.72        |                     |
| 20              |                      | 100    | 0        | 21.75       | 21.69          | 21.75        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.80       | 21.69          | 21.46        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.03       | 20.01          | 19.73        | 20.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.45       | 18.36          | 18.12        | 19.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.18       | 21.09          | 20.86        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.18       | 21.08          | 20.88        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.16       | 19.03          | 18.82        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.38       | 16.27          | 16.04        | 17.00               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.73       | 22.64          | 22.47        | 23.50               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.62       | 22.46          | 22.41        | 23.50               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.85       | 22.71          | 22.75        | 23.50               |

## B12\_n2 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.66       | 22.62          | 22.36        | 24.00               |
| 20              |                      | 1      | 53       | 22.71       | 22.68          | 22.61        |                     |
| 20              |                      | 1      | 104      | 22.62       | 22.43          | 22.61        |                     |
| 20              |                      | 50     | 1        | 22.26       | 22.16          | 22.23        | 23.50               |
| 20              |                      | 50     | 25       | 22.72       | 22.68          | 22.63        |                     |
| 20              |                      | 50     | 50       | 22.12       | 22.22          | 22.16        |                     |
| 20              |                      | 100    | 0        | 22.21       | 22.20          | 22.19        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.65       | 22.61          | 22.38        | 24.00               |
| 20              |                      | 1      | 53       | 22.97       | 22.92          | 22.96        |                     |
| 20              |                      | 1      | 104      | 22.67       | 22.43          | 22.63        |                     |
| 20              |                      | 50     | 1        | 21.73       | 21.64          | 21.71        | 23.50               |
| 20              |                      | 50     | 25       | 22.82       | 22.68          | 22.65        |                     |
| 20              |                      | 50     | 50       | 21.64       | 21.71          | 21.67        |                     |
| 20              |                      | 100    | 0        | 21.77       | 21.69          | 21.73        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.78       | 21.70          | 21.47        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.04       | 19.98          | 19.75        | 20.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.49       | 18.32          | 18.13        | 19.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.16       | 21.08          | 20.84        | 21.50               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.13       | 21.08          | 20.87        | 21.50               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.20       | 19.06          | 18.78        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.36       | 16.27          | 16.03        | 17.00               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.72       | 22.61          | 22.51        | 24.00               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.63       | 22.48          | 22.39        | 24.00               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.83       | 22.71          | 22.75        | 24.00               |

## B13\_n2 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.68       | 22.63          | 22.36        | 23.50               |
| 20              |                      | 1      | 53       | 22.71       | 22.68          | 22.61        |                     |
| 20              |                      | 1      | 104      | 22.62       | 22.41          | 22.63        |                     |
| 20              |                      | 50     | 1        | 22.24       | 22.16          | 22.24        | 23.50               |
| 20              |                      | 50     | 25       | 22.71       | 22.70          | 22.65        |                     |
| 20              |                      | 50     | 50       | 22.15       | 22.23          | 22.18        |                     |
| 20              |                      | 100    | 0        | 22.20       | 22.18          | 22.24        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.73       | 22.62          | 22.41        | 23.50               |
| 20              |                      | 1      | 53       | 22.86       | 22.84          | 22.80        |                     |
| 20              |                      | 1      | 104      | 22.64       | 22.42          | 22.67        |                     |
| 20              |                      | 50     | 1        | 21.72       | 21.64          | 21.76        | 23.50               |
| 20              |                      | 50     | 25       | 22.82       | 22.71          | 22.66        |                     |
| 20              |                      | 50     | 50       | 21.65       | 21.73          | 21.71        |                     |
| 20              |                      | 100    | 0        | 21.74       | 21.72          | 21.75        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.85       | 21.72          | 21.48        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.03       | 20.04          | 19.76        | 21.00               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.47       | 18.36          | 18.15        | 19.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.19       | 21.07          | 20.88        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.15       | 21.09          | 20.82        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.12       | 19.12          | 18.83        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.33       | 16.28          | 16.05        | 17.00               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.73       | 22.61          | 22.50        | 23.50               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.65       | 22.47          | 22.37        | 23.50               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.81       | 22.67          | 22.75        | 23.50               |

## B66\_n2 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.66       | 22.61          | 22.38        | 23.50               |
| 20              |                      | 1      | 53       | 22.71       | 22.68          | 22.62        |                     |
| 20              |                      | 1      | 104      | 22.63       | 22.42          | 22.64        |                     |
| 20              |                      | 50     | 1        | 22.28       | 22.19          | 22.21        | 23.50               |
| 20              |                      | 50     | 25       | 22.76       | 22.68          | 22.60        |                     |
| 20              |                      | 50     | 50       | 22.15       | 22.21          | 22.22        |                     |
| 20              |                      | 100    | 0        | 22.20       | 22.21          | 22.22        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.70       | 22.62          | 22.41        | 23.50               |
| 20              |                      | 1      | 53       | 22.89       | 22.84          | 22.86        |                     |
| 20              |                      | 1      | 104      | 22.65       | 22.43          | 22.64        |                     |
| 20              |                      | 50     | 1        | 21.74       | 21.69          | 21.72        | 23.50               |
| 20              |                      | 50     | 25       | 22.83       | 22.82          | 22.81        |                     |
| 20              |                      | 50     | 50       | 21.68       | 21.72          | 21.70        |                     |
| 20              |                      | 100    | 0        | 21.76       | 21.70          | 21.74        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.79       | 21.70          | 21.45        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.05       | 20.00          | 19.73        | 20.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.42       | 18.38          | 18.12        | 19.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.19       | 21.09          | 20.85        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.19       | 21.05          | 20.86        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.16       | 19.07          | 18.82        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.35       | 16.28          | 16.04        | 17.00               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.74       | 22.62          | 22.51        | 23.50               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.61       | 22.47          | 22.40        | 23.50               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.88       | 22.70          | 22.77        | 23.50               |

## B2\_n5 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 166800      | 167300         | 167800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 834         | 836.5          | 839          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 23.03       | 23.15          | 23.13        | 24                  |
| 20              |                      | 1      | 53       | 23.32       | 23.32          | 23.30        |                     |
| 20              |                      | 1      | 104      | 23.18       | 23.13          | 23.11        |                     |
| 20              |                      | 50     | 1        | 22.73       | 22.83          | 22.87        | 24                  |
| 20              |                      | 50     | 25       | 23.36       | 23.36          | 23.30        |                     |
| 20              |                      | 50     | 50       | 22.79       | 22.80          | 22.77        |                     |
| 20              |                      | 100    | 0        | 22.80       | 22.82          | 22.83        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.06       | 23.13          | 23.13        | 24                  |
| 20              |                      | 1      | 53       | 23.35       | 23.37          | 23.36        |                     |
| 20              |                      | 1      | 104      | 23.18       | 23.13          | 23.16        |                     |
| 20              |                      | 50     | 1        | 22.30       | 22.32          | 22.33        | 24                  |
| 20              |                      | 50     | 25       | 23.33       | 23.35          | 23.22        |                     |
| 20              |                      | 50     | 50       | 22.34       | 22.25          | 22.27        |                     |
| 20              |                      | 100    | 0        | 22.27       | 22.33          | 22.32        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 22.08       | 22.23          | 22.21        | 23                  |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.60       | 20.67          | 20.71        | 21.5                |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.86       | 18.98          | 18.99        | 19.5                |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.52       | 21.61          | 21.62        | 22.5                |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.08       | 21.21          | 21.19        | 22                  |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.68       | 19.80          | 19.79        | 20.5                |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.99       | 17.12          | 17.11        | 18                  |
| Channel         |                      |        |          | 166300      | 167300         | 168300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 831.5       | 836.5          | 841.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 23.11       | 23.26          | 23.29        | 24                  |
| Channel         |                      |        |          | 165800      | 167300         | 168800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 829         | 836.5          | 844          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.95       | 23.14          | 23.13        | 24                  |
| Channel         |                      |        |          | 165300      | 167300         | 169300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 826.5       | 836.5          | 846.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 23.15       | 23.32          | 23.28        | 24                  |

## B66\_n5 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 166800      | 167300         | 167800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 834         | 836.5          | 839          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 23.05       | 23.16          | 23.16        | 24                  |
| 20              |                      | 1      | 53       | 23.30       | 23.30          | 23.34        |                     |
| 20              |                      | 1      | 104      | 23.19       | 23.13          | 23.04        |                     |
| 20              |                      | 50     | 1        | 22.75       | 22.79          | 22.90        | 24                  |
| 20              |                      | 50     | 25       | 23.30       | 23.31          | 23.29        |                     |
| 20              |                      | 50     | 50       | 22.82       | 22.78          | 22.77        |                     |
| 20              |                      | 100    | 0        | 22.78       | 22.81          | 22.81        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.06       | 23.14          | 23.14        | 24                  |
| 20              |                      | 1      | 53       | 23.36       | 23.35          | 23.37        |                     |
| 20              |                      | 1      | 104      | 23.18       | 23.15          | 23.09        |                     |
| 20              |                      | 50     | 1        | 22.23       | 22.34          | 22.33        | 24                  |
| 20              |                      | 50     | 25       | 23.34       | 23.32          | 23.33        |                     |
| 20              |                      | 50     | 50       | 22.29       | 22.34          | 22.34        |                     |
| 20              |                      | 100    | 0        | 22.26       | 22.31          | 22.39        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 22.12       | 22.20          | 22.22        | 23                  |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.63       | 20.74          | 20.73        | 21.5                |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.85       | 18.95          | 18.97        | 19.5                |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.54       | 21.57          | 21.62        | 22.5                |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.08       | 21.21          | 21.14        | 22                  |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.65       | 19.79          | 19.79        | 20.5                |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.98       | 17.12          | 17.12        | 18                  |
| Channel         |                      |        |          | 166300      | 167300         | 168300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 831.5       | 836.5          | 841.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 23.14       | 23.27          | 23.30        | 24                  |
| Channel         |                      |        |          | 165800      | 167300         | 168800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 829         | 836.5          | 844          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.95       | 23.14          | 23.12        | 24                  |
| Channel         |                      |        |          | 165300      | 167300         | 169300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 826.5       | 836.5          | 846.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 23.19       | 23.36          | 23.33        | 24                  |

## B2\_n41 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 509202      | 518598         | 528000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2546.01     | 2592.99        | 2640         |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 20.54       | 20.54          | 20.76        | 22.5                |
| 100             |                      | 1      | 136      | 21.46       | 21.67          | 21.47        |                     |
| 100             |                      | 1      | 271      | 20.77       | 20.61          | 20.24        |                     |
| 100             |                      | 135    | 1        | 20.90       | 20.75          | 20.83        | 22.5                |
| 100             |                      | 135    | 67       | 21.45       | 21.61          | 21.48        |                     |
| 100             |                      | 135    | 136      | 20.83       | 20.85          | 20.43        |                     |
| 100             |                      | 270    | 0        | 20.85       | 20.88          | 20.79        |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        | 20.55       | 20.52          | 20.76        | 22.5                |
| 100             |                      | 1      | 136      | 21.49       | 21.69          | 21.49        |                     |
| 100             |                      | 1      | 271      | 20.99       | 20.58          | 20.22        |                     |
| 100             |                      | 135    | 1        | 20.63       | 20.50          | 20.58        | 22.5                |
| 100             |                      | 135    | 67       | 21.48       | 21.60          | 21.41        |                     |
| 100             |                      | 135    | 136      | 20.86       | 20.61          | 20.15        |                     |
| 100             |                      | 270    | 0        | 20.66       | 20.63          | 20.52        |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        | 19.93       | 19.81          | 20.06        | 20.5                |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 18.47       | 18.44          | 18.68        | 19.5                |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 16.41       | 16.41          | 16.64        | 17.5                |
| 100             | CP-OFDM QPSK         | 1      | 1        | 19.43       | 19.44          | 19.68        | 20.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 18.90       | 19.14          | 19.18        | 20                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 17.81       | 17.69          | 18.01        | 18.5                |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.37       | 14.37          | 14.64        | 15                  |
| Channel         |                      |        |          | 508200      | 518598         | 528996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2541        | 2592.99        | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.65       | 20.64          | 20.82        | 22.5                |
| Channel         |                      |        |          | 507204      | 518598         | 529998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2536.02     | 2592.99        | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.87       | 20.86          | 21.00        | 22.5                |
| Channel         |                      |        |          | 506202      | 518598         | 531000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2531.01     | 2592.99        | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.98       | 21.06          | 21.10        | 22.5                |
| Channel         |                      |        |          | 505200      | 518598         | 531996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2526        | 2592.99        | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.97       | 21.04          | 21.09        | 22.5                |
| Channel         |                      |        |          | 504204      | 518598         | 532998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2521.02     | 2592.99        | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.11       | 21.22          | 21.11        | 22.5                |
| Channel         |                      |        |          | 503202      | 518598         | 534000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2516.01     | 2592.99        | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.93       | 20.97          | 20.71        | 22.5                |
| Channel         |                      |        |          | 502200      | 518598         | 534996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2511        | 2592.99        | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.12       | 21.20          | 20.74        | 22.5                |
| Channel         |                      |        |          | 501204      | 518598         | 535998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2506.02     | 2592.99        | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.26       | 21.43          | 20.96        | 22.5                |
| Channel         |                      |        |          | 500700      | 518598         | 536496       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2503.5      | 2592.99        | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.28       | 21.54          | 20.97        | 22.5                |
| Channel         |                      |        |          | 500202      | 518598         | 537000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2501.01     | 2592.99        | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.33       | 21.60          | 21.01        | 22.5                |



## B4\_n41 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 509202      | 518598         | 528000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2546.01     | 2592.99        | 2640         |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 20.55       | 20.50          | 20.78        | 22.5                |
| 100             |                      | 1      | 136      | 21.47       | 21.66          | 21.47        |                     |
| 100             |                      | 1      | 271      | 20.78       | 20.59          | 20.23        |                     |
| 100             |                      | 135    | 1        | 20.91       | 20.77          | 20.83        | 22.5                |
| 100             |                      | 135    | 67       | 21.47       | 21.60          | 21.44        |                     |
| 100             |                      | 135    | 136      | 20.82       | 20.84          | 20.40        |                     |
| 100             |                      | 270    | 0        | 20.90       | 20.88          | 20.78        |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        | 20.55       | 20.55          | 20.78        | 22.5                |
| 100             |                      | 1      | 136      | 21.51       | 21.67          | 21.49        |                     |
| 100             |                      | 1      | 271      | 20.77       | 20.59          | 20.22        |                     |
| 100             |                      | 135    | 1        | 20.67       | 20.51          | 20.57        | 22.5                |
| 100             |                      | 135    | 67       | 21.46       | 21.58          | 21.44        |                     |
| 100             |                      | 135    | 136      | 20.57       | 20.60          | 20.45        |                     |
| 100             |                      | 270    | 0        | 20.63       | 20.90          | 20.50        |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        | 19.92       | 19.95          | 19.33        | 20.5                |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 18.21       | 18.45          | 18.42        | 19                  |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 16.40       | 16.38          | 16.62        | 17                  |
| 100             | CP-OFDM QPSK         | 1      | 1        | 19.39       | 19.43          | 19.67        | 20.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 19.05       | 19.09          | 19.32        | 20                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 17.30       | 17.28          | 17.51        | 18                  |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.39       | 14.39          | 14.63        | 15                  |
| Channel         |                      |        |          | 508200      | 518598         | 528996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2541        | 2592.99        | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.68       | 20.67          | 20.85        | 22.5                |
| Channel         |                      |        |          | 507204      | 518598         | 529998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2536.02     | 2592.99        | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.92       | 20.93          | 21.03        | 22.5                |
| Channel         |                      |        |          | 506202      | 518598         | 531000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2531.01     | 2592.99        | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.96       | 21.05          | 21.12        | 22.5                |
| Channel         |                      |        |          | 505200      | 518598         | 531996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2526        | 2592.99        | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.99       | 21.03          | 21.08        | 22.5                |
| Channel         |                      |        |          | 504204      | 518598         | 532998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2521.02     | 2592.99        | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.15       | 21.25          | 21.11        | 22.5                |
| Channel         |                      |        |          | 503202      | 518598         | 534000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2516.01     | 2592.99        | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.94       | 21.01          | 20.74        | 22.5                |
| Channel         |                      |        |          | 502200      | 518598         | 534996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2511        | 2592.99        | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.14       | 21.24          | 20.75        | 22.5                |
| Channel         |                      |        |          | 501204      | 518598         | 535998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2506.02     | 2592.99        | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.24       | 21.46          | 20.96        | 22.5                |
| Channel         |                      |        |          | 500700      | 518598         | 536496       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2503.5      | 2592.99        | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.33       | 21.54          | 20.97        | 22.5                |
| Channel         |                      |        |          | 500202      | 518598         | 537000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2501.01     | 2592.99        | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.37       | 21.61          | 21.05        | 22.5                |

## B12\_n41 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 509202      | 518598         | 528000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2546.01     | 2592.99        | 2640         |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 20.53       | 20.52          | 20.77        | 22.5                |
| 100             |                      | 1      | 136      | 21.46       | 21.66          | 21.46        |                     |
| 100             |                      | 1      | 271      | 20.76       | 20.58          | 20.20        |                     |
| 100             |                      | 135    | 1        | 20.91       | 20.77          | 20.85        | 22.5                |
| 100             |                      | 135    | 67       | 21.45       | 21.58          | 21.45        |                     |
| 100             |                      | 135    | 136      | 20.84       | 20.85          | 20.40        |                     |
| 100             |                      | 270    | 0        | 21.14       | 21.02          | 20.78        |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        | 20.53       | 20.52          | 20.75        | 22.5                |
| 100             |                      | 1      | 136      | 21.49       | 21.80          | 21.46        |                     |
| 100             |                      | 1      | 271      | 20.77       | 20.58          | 20.20        |                     |
| 100             |                      | 135    | 1        | 20.92       | 20.81          | 20.56        | 22.5                |
| 100             |                      | 135    | 67       | 21.45       | 21.70          | 21.56        |                     |
| 100             |                      | 135    | 136      | 19.24       | 20.60          | 20.14        |                     |
| 100             |                      | 270    | 0        | 20.83       | 20.91          | 19.35        |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        | 19.88       | 19.86          | 20.07        | 20.5                |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 18.80       | 18.94          | 18.87        | 19.5                |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 16.39       | 16.39          | 16.61        | 17                  |
| 100             | CP-OFDM QPSK         | 1      | 1        | 19.43       | 19.42          | 19.65        | 20.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 19.01       | 18.91          | 19.17        | 20                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 18.14       | 18.26          | 18.38        | 19                  |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.41       | 14.37          | 14.57        | 15                  |
| Channel         |                      |        |          | 508200      | 518598         | 528996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2541        | 2592.99        | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.66       | 20.63          | 20.84        | 22.5                |
| Channel         |                      |        |          | 507204      | 518598         | 529998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2536.02     | 2592.99        | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.89       | 20.89          | 21.00        | 22.5                |
| Channel         |                      |        |          | 506202      | 518598         | 531000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2531.01     | 2592.99        | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.98       | 21.03          | 21.10        | 22.5                |
| Channel         |                      |        |          | 505200      | 518598         | 531996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2526        | 2592.99        | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.97       | 21.05          | 21.07        | 22.5                |
| Channel         |                      |        |          | 504204      | 518598         | 532998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2521.02     | 2592.99        | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.10       | 21.22          | 21.12        | 22.5                |
| Channel         |                      |        |          | 503202      | 518598         | 534000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2516.01     | 2592.99        | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.93       | 20.99          | 20.72        | 22.5                |
| Channel         |                      |        |          | 502200      | 518598         | 534996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2511        | 2592.99        | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.12       | 21.22          | 20.75        | 22.5                |
| Channel         |                      |        |          | 501204      | 518598         | 535998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2506.02     | 2592.99        | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.28       | 21.41          | 20.96        | 22.5                |
| Channel         |                      |        |          | 500700      | 518598         | 536496       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2503.5      | 2592.99        | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.32       | 21.58          | 20.98        | 22.5                |
| Channel         |                      |        |          | 500202      | 518598         | 537000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2501.01     | 2592.99        | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.35       | 21.60          | 21.03        | 22.5                |

## B66\_n41 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 509202      | 518598         | 528000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2546.01     | 2592.99        | 2640         |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 20.54       | 20.51          | 20.76        | 22.5                |
| 100             |                      | 1      | 136      | 21.47       | 21.67          | 21.48        |                     |
| 100             |                      | 1      | 271      | 20.80       | 20.59          | 20.22        |                     |
| 100             |                      | 135    | 1        | 20.91       | 20.76          | 20.84        | 22.5                |
| 100             |                      | 135    | 67       | 21.46       | 21.60          | 21.42        |                     |
| 100             |                      | 135    | 136      | 20.81       | 20.88          | 20.41        |                     |
| 100             |                      | 270    | 0        | 21.14       | 20.86          | 20.78        |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        | 20.55       | 20.54          | 20.75        | 22.5                |
| 100             |                      | 1      | 136      | 21.77       | 21.69          | 21.44        |                     |
| 100             |                      | 1      | 271      | 20.77       | 20.58          | 20.21        |                     |
| 100             |                      | 135    | 1        | 20.80       | 20.50          | 20.57        | 22.5                |
| 100             |                      | 135    | 67       | 21.66       | 21.58          | 21.45        |                     |
| 100             |                      | 135    | 136      | 20.58       | 20.58          | 20.13        |                     |
| 100             |                      | 270    | 0        | 20.86       | 20.66          | 20.51        |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        | 19.87       | 19.82          | 20.08        | 21                  |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 19.05       | 18.92          | 19.18        | 20                  |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 16.42       | 16.38          | 16.50        | 17                  |
| 100             | CP-OFDM QPSK         | 1      | 1        | 19.43       | 19.42          | 19.90        | 20.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 18.93       | 18.92          | 19.15        | 20                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 17.39       | 17.36          | 17.59        | 18                  |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.38       | 14.37          | 14.57        | 15                  |
| Channel         |                      |        |          | 508200      | 518598         | 528996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2541        | 2592.99        | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.67       | 20.63          | 20.85        | 22.5                |
| Channel         |                      |        |          | 507204      | 518598         | 529998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2536.02     | 2592.99        | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.88       | 20.88          | 21.01        | 22.5                |
| Channel         |                      |        |          | 506202      | 518598         | 531000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2531.01     | 2592.99        | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.99       | 21.04          | 21.11        | 22.5                |
| Channel         |                      |        |          | 505200      | 518598         | 531996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2526        | 2592.99        | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.96       | 21.05          | 21.10        | 22.5                |
| Channel         |                      |        |          | 504204      | 518598         | 532998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2521.02     | 2592.99        | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.14       | 21.24          | 21.11        | 22.5                |
| Channel         |                      |        |          | 503202      | 518598         | 534000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2516.01     | 2592.99        | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.93       | 21.01          | 20.73        | 22.5                |
| Channel         |                      |        |          | 502200      | 518598         | 534996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2511        | 2592.99        | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.09       | 21.20          | 20.74        | 22.5                |
| Channel         |                      |        |          | 501204      | 518598         | 535998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2506.02     | 2592.99        | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.25       | 21.45          | 20.98        | 22.5                |
| Channel         |                      |        |          | 500700      | 518598         | 536496       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2503.5      | 2592.99        | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.28       | 21.57          | 20.98        | 22.5                |
| Channel         |                      |        |          | 500202      | 518598         | 537000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2501.01     | 2592.99        | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.34       | 21.60          | 21.02        | 22.5                |

## B2\_n66 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 346000      | 349000         | 352000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.05       | 22.01          | 21.97        | 23.5                |
| 40              |                      | 1      | 108      | 22.56       | 22.58          | 22.53        |                     |
| 40              |                      | 1      | 214      | 22.03       | 22.03          | 21.63        |                     |
| 40              |                      | 108    | 1        | 22.06       | 22.11          | 22.12        | 23.5                |
| 40              |                      | 108    | 54       | 22.71       | 22.67          | 22.54        |                     |
| 40              |                      | 108    | 108      | 21.96       | 21.92          | 21.89        |                     |
| 40              |                      | 216    | 0        | 21.96       | 21.98          | 22.07        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 22.11       | 22.09          | 22.01        | 23.5                |
| 40              |                      | 1      | 108      | 22.85       | 22.71          | 22.73        |                     |
| 40              |                      | 1      | 214      | 22.05       | 22.17          | 22.00        |                     |
| 40              |                      | 108    | 1        | 21.48       | 21.79          | 21.53        | 23.5                |
| 40              |                      | 108    | 54       | 22.64       | 22.55          | 22.54        |                     |
| 40              |                      | 108    | 108      | 21.46       | 21.41          | 21.43        |                     |
| 40              |                      | 216    | 0        | 21.47       | 21.69          | 21.46        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.21       | 21.33          | 21.12        | 22                  |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 19.46       | 19.40          | 19.39        | 20                  |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 17.84       | 17.80          | 17.75        | 18.5                |
| 40              | CP-OFDM QPSK         | 1      | 1        | 20.61       | 20.74          | 20.53        | 21.5                |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 20.54       | 20.52          | 20.45        | 21                  |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 18.58       | 18.52          | 18.43        | 19                  |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 15.80       | 15.73          | 15.68        | 16.5                |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 22.31       | 22.26          | 22.18        | 23.5                |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 22.42       | 22.43          | 22.35        | 23.5                |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.54       | 22.54          | 22.39        | 23.5                |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.59       | 22.60          | 22.52        | 23.5                |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.49       | 22.40          | 22.40        | 23.5                |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.67       | 22.62          | 22.60        | 23.5                |

## B5\_n66 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 346000      | 349000         | 352000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.05       | 21.99          | 21.95        | 23.5                |
| 40              |                      | 1      | 108      | 22.53       | 22.57          | 22.50        |                     |
| 40              |                      | 1      | 214      | 21.98       | 21.99          | 22.00        |                     |
| 40              |                      | 108    | 1        | 22.08       | 22.03          | 21.99        | 23.5                |
| 40              |                      | 108    | 54       | 22.68       | 22.55          | 22.52        |                     |
| 40              |                      | 108    | 108      | 21.91       | 21.85          | 21.93        |                     |
| 40              |                      | 216    | 0        | 21.40       | 21.98          | 21.90        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 22.07       | 22.04          | 21.99        | 23.5                |
| 40              |                      | 1      | 108      | 22.62       | 22.74          | 22.69        |                     |
| 40              |                      | 1      | 214      | 21.99       | 22.11          | 22.13        |                     |
| 40              |                      | 108    | 1        | 21.70       | 21.50          | 21.47        | 23.5                |
| 40              |                      | 108    | 54       | 22.59       | 22.58          | 22.54        |                     |
| 40              |                      | 108    | 108      | 21.45       | 21.54          | 20.94        |                     |
| 40              |                      | 216    | 0        | 21.62       | 21.70          | 21.66        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.34       | 21.13          | 21.08        | 22                  |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 19.36       | 19.36          | 19.31        | 20                  |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 17.85       | 17.74          | 17.75        | 18.5                |
| 40              | CP-OFDM QPSK         | 1      | 1        | 20.58       | 20.23          | 20.52        | 21                  |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 20.49       | 20.66          | 20.44        | 21                  |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 18.53       | 18.45          | 18.89        | 19.5                |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 15.77       | 15.70          | 15.65        | 16.5                |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 22.29       | 22.23          | 22.20        | 23.5                |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 22.41       | 22.42          | 22.35        | 23.5                |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.51       | 22.52          | 22.43        | 23.5                |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.62       | 22.56          | 22.51        | 23.5                |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.47       | 22.40          | 22.42        | 23.5                |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.69       | 22.61          | 22.65        | 23.5                |

## B7\_n66 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 346000      | 349000         | 352000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.04       | 22.01          | 21.95        | 23.5                |
| 40              |                      | 1      | 108      | 22.54       | 22.59          | 22.52        |                     |
| 40              |                      | 1      | 214      | 21.61       | 22.03          | 22.00        |                     |
| 40              |                      | 108    | 1        | 22.05       | 22.06          | 22.11        | 23.5                |
| 40              |                      | 108    | 54       | 22.62       | 22.58          | 22.62        |                     |
| 40              |                      | 108    | 108      | 21.96       | 21.89          | 21.89        |                     |
| 40              |                      | 216    | 0        | 21.37       | 21.96          | 21.94        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 22.09       | 22.04          | 22.00        | 23.5                |
| 40              |                      | 1      | 108      | 22.83       | 22.75          | 22.69        |                     |
| 40              |                      | 1      | 214      | 22.03       | 22.05          | 22.04        |                     |
| 40              |                      | 108    | 1        | 21.75       | 21.59          | 21.50        | 23.5                |
| 40              |                      | 108    | 54       | 22.72       | 22.55          | 22.50        |                     |
| 40              |                      | 108    | 108      | 21.45       | 21.39          | 21.42        |                     |
| 40              |                      | 216    | 0        | 21.44       | 21.69          | 21.43        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.29       | 21.30          | 21.36        | 22                  |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 19.68       | 19.38          | 19.62        | 20.5                |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 17.83       | 17.78          | 17.74        | 18.5                |
| 40              | CP-OFDM QPSK         | 1      | 1        | 20.60       | 20.56          | 20.49        | 21.5                |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 20.73       | 20.45          | 20.48        | 19.5                |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 18.55       | 18.76          | 18.44        | 19.5                |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 15.81       | 15.76          | 15.68        | 16.5                |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 22.30       | 22.21          | 22.19        | 23.5                |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 22.43       | 22.41          | 22.35        | 23.5                |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.51       | 22.51          | 22.44        | 23.5                |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.60       | 22.56          | 22.49        | 23.5                |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.44       | 22.42          | 22.43        | 23.5                |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.72       | 22.61          | 22.62        | 23.5                |

## B12\_n66 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 346000      | 349000         | 352000       | 23.5                |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.05       | 22.03          | 21.99        | 23.5                |
| 40              |                      | 1      | 108      | 22.56       | 22.56          | 22.52        |                     |
| 40              |                      | 1      | 214      | 22.01       | 22.02          | 22.03        |                     |
| 40              |                      | 108    | 1        | 21.99       | 22.05          | 21.98        |                     |
| 40              |                      | 108    | 54       | 22.61       | 22.58          | 22.55        | 23.5                |
| 40              |                      | 108    | 108      | 21.94       | 21.90          | 22.02        |                     |
| 40              |                      | 216    | 0        | 21.96       | 21.97          | 21.94        |                     |
| 40              |                      | 1      | 1        | 22.08       | 22.06          | 22.00        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 108      | 22.73       | 22.64          | 22.69        | 23.5                |
| 40              |                      | 1      | 214      | 22.10       | 22.04          | 22.12        |                     |
| 40              |                      | 108    | 1        | 21.67       | 21.56          | 21.53        |                     |
| 40              |                      | 108    | 54       | 22.61       | 22.61          | 22.54        |                     |
| 40              |                      | 108    | 108      | 21.46       | 21.36          | 21.63        | 23.5                |
| 40              |                      | 216    | 0        | 21.46       | 21.50          | 21.64        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.18       | 21.13          | 21.09        | 22                  |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 19.46       | 19.42          | 19.32        | 20                  |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 17.84       | 17.79          | 17.70        | 18.5                |
| 40              | CP-OFDM QPSK         | 1      | 1        | 20.63       | 20.51          | 20.50        | 21.5                |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 20.55       | 20.48          | 20.64        | 21.5                |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 18.55       | 17.98          | 18.44        | 19                  |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 15.78       | 15.74          | 15.71        | 16.5                |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | 23.5                |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 22.26       | 22.23          | 22.18        | 23.5                |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | 23.5                |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 22.41       | 22.43          | 22.35        | 23.5                |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | 23.5                |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.53       | 22.53          | 22.45        | 23.5                |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | 23.5                |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.57       | 22.59          | 22.50        | 23.5                |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | 23.5                |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.46       | 22.44          | 22.40        | 23.5                |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | 23.5                |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.71       | 22.59          | 22.61        | 23.5                |

## B13\_n66 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 346000      | 349000         | 352000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.08       | 22.02          | 22.00        | 23.5                |
| 40              |                      | 1      | 108      | 22.55       | 22.57          | 22.53        |                     |
| 40              |                      | 1      | 214      | 22.03       | 22.01          | 21.66        |                     |
| 40              |                      | 108    | 1        | 22.00       | 22.06          | 22.08        | 23.5                |
| 40              |                      | 108    | 54       | 22.63       | 22.62          | 22.56        |                     |
| 40              |                      | 108    | 108      | 21.95       | 21.89          | 21.92        |                     |
| 40              |                      | 216    | 0        | 21.95       | 21.93          | 22.01        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 22.08       | 22.05          | 22.01        | 23.5                |
| 40              |                      | 1      | 108      | 22.75       | 22.64          | 22.60        |                     |
| 40              |                      | 1      | 214      | 22.04       | 22.05          | 22.01        |                     |
| 40              |                      | 108    | 1        | 21.50       | 21.55          | 21.69        | 23.5                |
| 40              |                      | 108    | 54       | 22.63       | 22.60          | 22.65        |                     |
| 40              |                      | 108    | 108      | 21.47       | 21.38          | 21.41        |                     |
| 40              |                      | 216    | 0        | 21.63       | 21.49          | 21.45        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.44       | 21.17          | 21.27        | 22                  |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 19.46       | 19.45          | 19.31        | 20                  |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 17.83       | 17.77          | 17.73        | 18.5                |
| 40              | CP-OFDM QPSK         | 1      | 1        | 20.60       | 20.52          | 20.67        | 21.5                |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 20.57       | 20.52          | 20.43        | 21.5                |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 18.53       | 18.50          | 18.46        | 19                  |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 15.79       | 15.75          | 15.69        | 16.5                |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 22.33       | 22.24          | 22.22        | 23.5                |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 22.43       | 22.45          | 22.37        | 23.5                |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.51       | 22.48          | 22.42        | 23.5                |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.59       | 22.62          | 22.55        | 23.5                |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.49       | 22.41          | 22.44        | 23.5                |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.68       | 22.62          | 22.63        | 23.5                |



## B2\_n77(3450-3550MHz) (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          |             | 633334         |              | 22                  |
| Frequency (MHz) |                      |        |          |             | 3500.01        |              |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             | 20.67          |              | 22                  |
| 100             |                      | 1      | 136      |             | 21.17          |              |                     |
| 100             |                      | 1      | 271      |             | 19.71          |              |                     |
| 100             |                      | 135    | 1        |             | 20.60          |              | 22                  |
| 100             |                      | 135    | 67       |             | 21.13          |              |                     |
| 100             |                      | 135    | 136      |             | 19.92          |              |                     |
| 100             |                      | 270    | 0        |             | 20.45          |              |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        |             | 20.73          |              | 22                  |
| 100             |                      | 1      | 136      |             | 21.26          |              |                     |
| 100             |                      | 1      | 271      |             | 19.73          |              |                     |
| 100             |                      | 135    | 1        |             | 20.13          |              | 22                  |
| 100             |                      | 135    | 67       |             | 21.17          |              |                     |
| 100             |                      | 135    | 136      |             | 19.43          |              |                     |
| 100             |                      | 270    | 0        |             | 19.91          |              |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        |             | 19.59          |              | 20.5                |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        |             | 18.21          |              | 19                  |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        |             | 16.13          |              | 17                  |
| 100             | CP-OFDM QPSK         | 1      | 1        |             | 16.78          |              | 17.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        |             | 18.64          |              | 19.5                |
| 100             | CP-OFDM 64QAM        | 1      | 1        |             | 17.11          |              | 18                  |
| 100             | CP-OFDM 256QAM       | 1      | 1        |             | 14.46          |              | 15                  |
| Channel         |                      |        |          | 633000      | 633334         | 633666       | 22                  |
| Frequency (MHz) |                      |        |          | 3495        | 3500.01        | 3504.99      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.83       | 20.80          | 20.80        | 22                  |
| Channel         |                      |        |          | 632668      | 633334         | 634000       | 22                  |
| Frequency (MHz) |                      |        |          | 3490.02     | 3500.01        | 3510         |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 21.07       | 21.04          | 20.93        | 22                  |
| Channel         |                      |        |          | 632334      | 633334         | 634332       | 22                  |
| Frequency (MHz) |                      |        |          | 3485.01     | 3500.01        | 3514.98      |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 21.19       | 21.13          | 20.97        | 22                  |
| Channel         |                      |        |          | 632000      | 633334         | 634666       | 22                  |
| Frequency (MHz) |                      |        |          | 3480        | 3500.01        | 3519.99      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 21.13       | 21.01          | 20.89        | 22                  |
| Channel         |                      |        |          | 631668      | 633334         | 635000       | 22                  |
| Frequency (MHz) |                      |        |          | 3475.02     | 3500.01        | 3525         |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.31       | 21.10          | 20.90        | 22                  |
| Channel         |                      |        |          | 631334      | 633334         | 635332       | 22                  |
| Frequency (MHz) |                      |        |          | 3470.01     | 3500.01        | 3529.98      |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 21.07       | 20.85          | 20.41        | 22                  |
| Channel         |                      |        |          | 631000      | 633334         | 635666       | 22                  |
| Frequency (MHz) |                      |        |          | 3465        | 3500.01        | 3534.99      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.25       | 21.02          | 20.34        | 22                  |
| Channel         |                      |        |          | 630833      | 633334         | 635832       | 22                  |
| Frequency (MHz) |                      |        |          | 3462.49     | 3500.01        | 3537.48      |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 21.36       | 21.11          | 20.40        | 22                  |
| Channel         |                      |        |          | 630668      | 633334         | 636000       | 22                  |
| Frequency (MHz) |                      |        |          | 3460.02     | 3500.01        | 3540         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.39       | 21.19          | 20.39        | 22                  |
| Channel         |                      |        |          | 630500      | 633334         | 636166       | 22                  |
| Frequency (MHz) |                      |        |          | 3457.5      | 3500.01        | 3542.49      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.44       | 21.22          | 20.45        | 22                  |
| Channel         |                      |        |          | 630334      | 633334         | 636332       | 22                  |
| Frequency (MHz) |                      |        |          | 3455.01     | 3500.01        | 3544.98      |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.44       | 21.20          | 20.52        | 22                  |

## B12\_n77(3450-3550MHz) (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          |             | 633334         |              | 22                  |
| Frequency (MHz) |                      |        |          |             | 3500.01        |              |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             | 20.68          |              | 22                  |
| 100             |                      | 1      | 136      |             | 21.16          |              |                     |
| 100             |                      | 1      | 271      |             | 19.68          |              |                     |
| 100             |                      | 135    | 1        |             | 20.58          |              |                     |
| 100             |                      | 135    | 67       |             | 21.13          |              | 22                  |
| 100             |                      | 135    | 136      |             | 19.89          |              |                     |
| 100             |                      | 270    | 0        |             | 20.40          |              |                     |
| 100             |                      | 1      | 1        |             | 20.73          |              |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 136      |             | 21.18          |              | 22                  |
| 100             |                      | 1      | 271      |             | 19.72          |              |                     |
| 100             |                      | 135    | 1        |             | 20.11          |              |                     |
| 100             |                      | 135    | 67       |             | 21.11          |              |                     |
| 100             |                      | 135    | 136      |             | 19.37          |              | 22                  |
| 100             |                      | 270    | 0        |             | 19.91          |              |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        |             | 19.63          |              | 20.5                |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        |             | 18.22          |              | 19                  |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        |             | 16.13          |              | 17                  |
| 100             | CP-OFDM QPSK         | 1      | 1        |             | 19.10          |              | 20                  |
| 100             | CP-OFDM 16QAM        | 1      | 1        |             | 18.63          |              | 19.5                |
| 100             | CP-OFDM 64QAM        | 1      | 1        |             | 17.10          |              | 18                  |
| 100             | CP-OFDM 256QAM       | 1      | 1        |             | 14.52          |              | 15                  |
| Channel         |                      |        |          | 633000      | 633334         | 633666       | 22                  |
| Frequency (MHz) |                      |        |          | 3495        | 3500.01        | 3504.99      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.82       | 20.81          | 20.78        | 22                  |
| Channel         |                      |        |          | 632668      | 633334         | 634000       | 22                  |
| Frequency (MHz) |                      |        |          | 3490.02     | 3500.01        | 3510         |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 21.07       | 21.03          | 20.92        | 22                  |
| Channel         |                      |        |          | 632334      | 633334         | 634332       | 22                  |
| Frequency (MHz) |                      |        |          | 3485.01     | 3500.01        | 3514.98      |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 21.17       | 21.13          | 20.95        | 22                  |
| Channel         |                      |        |          | 632000      | 633334         | 634666       | 22                  |
| Frequency (MHz) |                      |        |          | 3480        | 3500.01        | 3519.99      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 21.13       | 20.99          | 20.87        | 22                  |
| Channel         |                      |        |          | 631668      | 633334         | 635000       | 22                  |
| Frequency (MHz) |                      |        |          | 3475.02     | 3500.01        | 3525         |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.27       | 21.08          | 20.88        | 22                  |
| Channel         |                      |        |          | 631334      | 633334         | 635332       | 22                  |
| Frequency (MHz) |                      |        |          | 3470.01     | 3500.01        | 3529.98      |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 21.07       | 20.84          | 20.38        | 22                  |
| Channel         |                      |        |          | 631000      | 633334         | 635666       | 22                  |
| Frequency (MHz) |                      |        |          | 3465        | 3500.01        | 3534.99      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.26       | 21.01          | 20.31        | 22                  |
| Channel         |                      |        |          | 630833      | 633334         | 635832       | 22                  |
| Frequency (MHz) |                      |        |          | 3462.49     | 3500.01        | 3537.48      |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 21.36       | 21.11          | 20.37        | 22                  |
| Channel         |                      |        |          | 630668      | 633334         | 636000       | 22                  |
| Frequency (MHz) |                      |        |          | 3460.02     | 3500.01        | 3540         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.38       | 21.20          | 20.43        | 22                  |
| Channel         |                      |        |          | 630500      | 633334         | 636166       | 22                  |
| Frequency (MHz) |                      |        |          | 3457.5      | 3500.01        | 3542.49      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.46       | 21.26          | 20.49        | 22                  |
| Channel         |                      |        |          | 630334      | 633334         | 636332       | 22                  |
| Frequency (MHz) |                      |        |          | 3455.01     | 3500.01        | 3544.98      |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.46       | 21.24          | 20.57        | 22                  |

## B13\_n77(3450-3550MHz) (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          |             | 633334         |              | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          |             | 3500.01        |              |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             | 20.69          |              | 22.00               |
| 100             |                      | 1      | 136      |             | 21.17          |              |                     |
| 100             |                      | 1      | 271      |             | 19.74          |              |                     |
| 100             |                      | 135    | 1        |             | 20.61          |              | 22.00               |
| 100             |                      | 135    | 67       |             | 21.14          |              |                     |
| 100             |                      | 135    | 136      |             | 19.91          |              |                     |
| 100             |                      | 270    | 0        |             | 20.44          |              |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        |             | 20.73          |              | 22.00               |
| 100             |                      | 1      | 136      |             | 21.26          |              |                     |
| 100             |                      | 1      | 271      |             | 19.73          |              |                     |
| 100             |                      | 135    | 1        |             | 20.11          |              | 22.00               |
| 100             |                      | 135    | 67       |             | 21.14          |              |                     |
| 100             |                      | 135    | 136      |             | 19.38          |              |                     |
| 100             |                      | 270    | 0        |             | 19.94          |              |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        |             | 19.64          |              | 20.50               |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        |             | 18.19          |              | 19.00               |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        |             | 16.13          |              | 17.00               |
| 100             | CP-OFDM QPSK         | 1      | 1        |             | 16.81          |              | 17.50               |
| 100             | CP-OFDM 16QAM        | 1      | 1        |             | 18.67          |              | 19.50               |
| 100             | CP-OFDM 64QAM        | 1      | 1        |             | 17.08          |              | 18.00               |
| 100             | CP-OFDM 256QAM       | 1      | 1        |             | 14.47          |              | 15.00               |
| Channel         |                      |        |          | 633000      | 633334         | 633666       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3495        | 3500.01        | 3504.99      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.82       | 20.80          | 20.79        | 22.00               |
| Channel         |                      |        |          | 632668      | 633334         | 634000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3490.02     | 3500.01        | 3510         |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 21.06       | 21.03          | 20.93        | 22.00               |
| Channel         |                      |        |          | 632334      | 633334         | 634332       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3485.01     | 3500.01        | 3514.98      |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 21.17       | 21.11          | 20.95        | 22.00               |
| Channel         |                      |        |          | 632000      | 633334         | 634666       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3480        | 3500.01        | 3519.99      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 21.13       | 20.98          | 20.87        | 22.00               |
| Channel         |                      |        |          | 631668      | 633334         | 635000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3475.02     | 3500.01        | 3525         |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 21.26       | 21.08          | 20.88        | 22.00               |
| Channel         |                      |        |          | 631334      | 633334         | 635332       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3470.01     | 3500.01        | 3529.98      |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 21.05       | 20.83          | 20.38        | 22.00               |
| Channel         |                      |        |          | 631000      | 633334         | 635666       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3465        | 3500.01        | 3534.99      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 21.23       | 21.00          | 20.30        | 22.00               |
| Channel         |                      |        |          | 630833      | 633334         | 635832       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3462.49     | 3500.01        | 3537.48      |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 21.34       | 21.11          | 20.37        | 22.00               |
| Channel         |                      |        |          | 630668      | 633334         | 636000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3460.02     | 3500.01        | 3540         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.37       | 21.19          | 20.42        | 22.00               |
| Channel         |                      |        |          | 630500      | 633334         | 636166       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3457.5      | 3500.01        | 3542.49      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.45       | 21.25          | 20.48        | 22.00               |
| Channel         |                      |        |          | 630334      | 633334         | 636332       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3455.01     | 3500.01        | 3544.98      |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.47       | 21.24          | 20.56        | 22.00               |

## B2\_n77(3700-3980MHz) (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 650000      | 656000         | 662000       | 22                  |
| Frequency (MHz) |                      |        |          | 3750        | 3840           | 3930         |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 20.30       | 20.10          | 20.27        | 22                  |
| 100             |                      | 1      | 136      | 20.98       | 21.35          | 20.03        |                     |
| 100             |                      | 1      | 271      | 20.18       | 20.14          | 19.65        |                     |
| 100             |                      | 135    | 1        | 20.64       | 20.23          | 19.82        | 22                  |
| 100             |                      | 135    | 67       | 21.07       | 21.29          | 20.07        |                     |
| 100             |                      | 135    | 136      | 20.19       | 20.36          | 19.58        |                     |
| 100             |                      | 270    | 0        | 20.36       | 20.60          | 19.53        |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        | 20.33       | 20.10          | 20.28        | 22                  |
| 100             |                      | 1      | 136      | 21.33       | 21.43          | 21.36        |                     |
| 100             |                      | 1      | 271      | 20.19       | 20.19          | 20.16        |                     |
| 100             |                      | 135    | 1        | 20.18       | 20.16          | 20.26        | 22                  |
| 100             |                      | 135    | 67       | 21.03       | 21.32          | 21.26        |                     |
| 100             |                      | 135    | 136      | 19.67       | 19.91          | 20.08        |                     |
| 100             |                      | 270    | 0        | 19.89       | 20.03          | 20.13        |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        | 19.20       | 18.96          | 19.19        | 21                  |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 17.82       | 17.57          | 17.77        | 18.5                |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 15.77       | 15.55          | 15.76        | 16.5                |
| 100             | CP-OFDM QPSK         | 1      | 1        | 18.77       | 18.54          | 18.70        | 19.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 18.30       | 18.04          | 18.27        | 19                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 16.74       | 16.49          | 16.68        | 17.5                |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.12       | 13.86          | 13.63        | 14                  |
| Channel         |                      |        |          | 649666      | 656000         | 662332       | 22                  |
| Frequency (MHz) |                      |        |          | 3744.99     | 3840           | 3934.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.47       | 20.26          | 20.27        | 22                  |
| Channel         |                      |        |          | 649334      | 656000         | 662666       | 22                  |
| Frequency (MHz) |                      |        |          | 3740.01     | 3840           | 3939.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.66       | 20.50          | 20.20        | 22                  |
| Channel         |                      |        |          | 649000      | 656000         | 663000       | 22                  |
| Frequency (MHz) |                      |        |          | 3735        | 3840           | 3945         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.80       | 20.62          | 20.02        | 22                  |
| Channel         |                      |        |          | 648668      | 656000         | 663332       | 22                  |
| Frequency (MHz) |                      |        |          | 3730.02     | 3840           | 3949.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.73       | 20.61          | 19.73        | 22                  |
| Channel         |                      |        |          | 648334      | 656000         | 663666       | 22                  |
| Frequency (MHz) |                      |        |          | 3725.01     | 3840           | 3954.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 20.89       | 20.74          | 19.74        | 22                  |
| Channel         |                      |        |          | 648000      | 656000         | 664000       | 22                  |
| Frequency (MHz) |                      |        |          | 3720        | 3840           | 3960         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.65       | 20.52          | 19.50        | 22                  |
| Channel         |                      |        |          | 647668      | 656000         | 664332       | 22                  |
| Frequency (MHz) |                      |        |          | 3715.02     | 3840           | 3964.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 20.88       | 20.81          | 19.75        | 22                  |
| Channel         |                      |        |          | 647500      | 656000         | 664500       | 22                  |
| Frequency (MHz) |                      |        |          | 3712.5      | 3840           | 3967.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 20.99       | 20.99          | 20.01        | 22                  |
| Channel         |                      |        |          | 647334      | 656000         | 664666       | 22                  |
| Frequency (MHz) |                      |        |          | 3710.01     | 3840           | 3969.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.09       | 21.07          | 20.16        | 22                  |
| Channel         |                      |        |          | 647168      | 656000         | 664832       | 22                  |
| Frequency (MHz) |                      |        |          | 3707.52     | 3840           | 3972.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.17       | 21.19          | 20.33        | 22                  |
| Channel         |                      |        |          | 647000      | 656000         | 665000       | 22                  |
| Frequency (MHz) |                      |        |          | 3705        | 3840           | 3975         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.17       | 21.26          | 20.45        | 22                  |

## B12\_n77(3700-3980MHz) (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 650000      | 656000         | 662000       | 22                  |
| Frequency (MHz) |                      |        |          | 3750        | 3840           | 3930         |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 20.32       | 20.09          | 20.27        | 22                  |
| 100             |                      | 1      | 136      | 21.00       | 21.37          | 20.03        |                     |
| 100             |                      | 1      | 271      | 20.13       | 20.15          | 19.66        |                     |
| 100             |                      | 135    | 1        | 20.71       | 20.24          | 19.80        | 22                  |
| 100             |                      | 135    | 67       | 21.02       | 21.28          | 20.09        |                     |
| 100             |                      | 135    | 136      | 20.17       | 20.35          | 19.59        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 20.40       | 20.53          | 19.54        | 22                  |
| 100             |                      | 1      | 1        | 20.35       | 20.07          | 20.31        |                     |
| 100             |                      | 1      | 136      | 20.97       | 21.33          | 20.16        |                     |
| 100             |                      | 1      | 271      | 20.17       | 20.21          | 19.69        | 22                  |
| 100             |                      | 135    | 1        | 20.18       | 17.11          | 19.31        |                     |
| 100             |                      | 135    | 67       | 21.05       | 21.27          | 20.12        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 19.72       | 17.08          | 19.11        | 22                  |
| 100             |                      | 270    | 0        | 19.89       | 20.04          | 19.02        |                     |
| 100             |                      | 1      | 1        | 19.32       | 19.08          | 19.24        |                     |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 17.49       | 17.30          | 17.47        | 18                  |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 15.80       | 15.56          | 15.75        | 16.5                |
| 100             | CP-OFDM QPSK         | 1      | 1        | 18.80       | 18.53          | 18.71        | 19.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 18.48       | 18.29          | 18.46        | 19                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 16.64       | 16.41          | 16.59        | 17.5                |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.12       | 13.86          | 13.67        | 14.5                |
| Channel         |                      |        |          | 649666      | 656000         | 662332       | 22                  |
| Frequency (MHz) |                      |        |          | 3744.99     | 3840           | 3934.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.48       | 20.28          | 20.25        | 22                  |
| Channel         |                      |        |          | 649334      | 656000         | 662666       | 22                  |
| Frequency (MHz) |                      |        |          | 3740.01     | 3840           | 3939.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.69       | 20.51          | 20.19        | 22                  |
| Channel         |                      |        |          | 649000      | 656000         | 663000       | 22                  |
| Frequency (MHz) |                      |        |          | 3735        | 3840           | 3945         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.82       | 20.63          | 20.03        | 22                  |
| Channel         |                      |        |          | 648668      | 656000         | 663332       | 22                  |
| Frequency (MHz) |                      |        |          | 3730.02     | 3840           | 3949.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.75       | 20.60          | 19.68        | 22                  |
| Channel         |                      |        |          | 648334      | 656000         | 663666       | 22                  |
| Frequency (MHz) |                      |        |          | 3725.01     | 3840           | 3954.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 20.91       | 20.74          | 19.75        | 22                  |
| Channel         |                      |        |          | 648000      | 656000         | 664000       | 22                  |
| Frequency (MHz) |                      |        |          | 3720        | 3840           | 3960         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.66       | 20.52          | 19.48        | 22                  |
| Channel         |                      |        |          | 647668      | 656000         | 664332       | 22                  |
| Frequency (MHz) |                      |        |          | 3715.02     | 3840           | 3964.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 20.88       | 20.79          | 19.80        | 22                  |
| Channel         |                      |        |          | 647500      | 656000         | 664500       | 22                  |
| Frequency (MHz) |                      |        |          | 3712.5      | 3840           | 3967.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 21.00       | 20.99          | 20.00        | 22                  |
| Channel         |                      |        |          | 647334      | 656000         | 664666       | 22                  |
| Frequency (MHz) |                      |        |          | 3710.01     | 3840           | 3969.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.09       | 21.07          | 20.12        | 22                  |
| Channel         |                      |        |          | 647168      | 656000         | 664832       | 22                  |
| Frequency (MHz) |                      |        |          | 3707.52     | 3840           | 3972.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.16       | 21.18          | 20.31        | 22                  |
| Channel         |                      |        |          | 647000      | 656000         | 665000       | 22                  |
| Frequency (MHz) |                      |        |          | 3705        | 3840           | 3975         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.18       | 21.25          | 20.40        | 22                  |

## B13\_n77(3700-3980MHz) (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 650000      | 656000         | 662000       | 22                  |
| Frequency (MHz) |                      |        |          | 3750        | 3840           | 3930         |                     |
| 100             | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 20.34       | 20.14          | 20.26        | 22                  |
| 100             |                      | 1      | 136      | 21.03       | 21.38          | 20.04        |                     |
| 100             |                      | 1      | 271      | 20.15       | 20.18          | 19.67        |                     |
| 100             |                      | 135    | 1        | 20.73       | 20.25          | 19.85        | 22                  |
| 100             |                      | 135    | 67       | 21.05       | 21.31          | 20.10        |                     |
| 100             |                      | 135    | 136      | 20.21       | 20.37          | 19.62        |                     |
| 100             |                      | 270    | 0        | 20.40       | 20.62          | 19.53        |                     |
| 100             | DFT-s-OFDM QPSK      | 1      | 1        | 20.37       | 20.10          | 20.35        | 22                  |
| 100             |                      | 1      | 136      | 21.29       | 22.48          | 21.36        |                     |
| 100             |                      | 1      | 271      | 20.21       | 20.22          | 19.68        |                     |
| 100             |                      | 135    | 1        | 20.22       | 19.74          | 19.33        | 22                  |
| 100             |                      | 135    | 67       | 21.06       | 21.35          | 20.10        |                     |
| 100             |                      | 135    | 136      | 19.71       | 19.93          | 19.11        |                     |
| 100             |                      | 270    | 0        | 19.90       | 20.07          | 19.04        |                     |
| 100             | DFT-s-OFDM 16QAM     | 1      | 1        | 19.29       | 19.02          | 19.23        | 20                  |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 17.68       | 17.40          | 17.73        | 18.5                |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 15.80       | 15.56          | 15.77        | 16.5                |
| 100             | CP-OFDM QPSK         | 1      | 1        | 16.00       | 18.55          | 18.70        | 19.5                |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 18.43       | 18.23          | 18.30        | 19                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 16.71       | 16.46          | 16.70        | 17.5                |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 14.13       | 13.95          | 13.67        | 15                  |
| Channel         |                      |        |          | 649666      | 656000         | 662332       | 22                  |
| Frequency (MHz) |                      |        |          | 3744.99     | 3840           | 3934.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 20.50       | 20.30          | 20.27        | 22                  |
| Channel         |                      |        |          | 649334      | 656000         | 662666       | 22                  |
| Frequency (MHz) |                      |        |          | 3740.01     | 3840           | 3939.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 20.72       | 20.53          | 20.21        | 22                  |
| Channel         |                      |        |          | 649000      | 656000         | 663000       | 22                  |
| Frequency (MHz) |                      |        |          | 3735        | 3840           | 3945         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 20.85       | 20.66          | 20.05        | 22                  |
| Channel         |                      |        |          | 648668      | 656000         | 663332       | 22                  |
| Frequency (MHz) |                      |        |          | 3730.02     | 3840           | 3949.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 20.78       | 20.61          | 19.76        | 22                  |
| Channel         |                      |        |          | 648334      | 656000         | 663666       | 22                  |
| Frequency (MHz) |                      |        |          | 3725.01     | 3840           | 3954.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 20.94       | 20.77          | 19.81        | 22                  |
| Channel         |                      |        |          | 648000      | 656000         | 664000       | 22                  |
| Frequency (MHz) |                      |        |          | 3720        | 3840           | 3960         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 20.69       | 20.54          | 19.51        | 22                  |
| Channel         |                      |        |          | 647668      | 656000         | 664332       | 22                  |
| Frequency (MHz) |                      |        |          | 3715.02     | 3840           | 3964.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 20.90       | 20.84          | 19.83        | 22                  |
| Channel         |                      |        |          | 647500      | 656000         | 664500       | 22                  |
| Frequency (MHz) |                      |        |          | 3712.5      | 3840           | 3967.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 21.03       | 21.01          | 20.05        | 22                  |
| Channel         |                      |        |          | 647334      | 656000         | 664666       | 22                  |
| Frequency (MHz) |                      |        |          | 3710.01     | 3840           | 3969.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.12       | 21.09          | 20.17        | 22                  |
| Channel         |                      |        |          | 647168      | 656000         | 664832       | 22                  |
| Frequency (MHz) |                      |        |          | 3707.52     | 3840           | 3972.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.19       | 21.21          | 20.32        | 22                  |
| Channel         |                      |        |          | 647000      | 656000         | 665000       | 22                  |
| Frequency (MHz) |                      |        |          | 3705        | 3840           | 3975         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.20       | 21.28          | 20.44        | 22                  |

| CA_48C                               |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 55340                                | 55538       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.34               | 23.00              |
| 55990                                | 56089       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.39               | 23.00              |
| 56640                                | 56640       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.29               | 23.00              |
| 55340                                | 55538       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.29               | 22.00              |
| 55990                                | 56089       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.32               | 22.00              |
| 56640                                | 56640       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.26               | 22.00              |
| 55340                                | 55538       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.26               | 21.00              |
| 55990                                | 56089       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.33               | 21.00              |
| 56640                                | 56640       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.21               | 21.00              |

| CA_66C                               |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 132072                               | 132270      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.26               | 23                 |
| 132322                               | 132521      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.33               | 23                 |
| 132572                               | 132572      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.17               | 23                 |
| 132072                               | 132270      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.65               | 23                 |
| 132322                               | 132521      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.58               | 23                 |
| 132572                               | 132572      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.53               | 23                 |
| 132072                               | 132270      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.65               | 23                 |
| 132322                               | 132521      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.57               | 23                 |
| 132572                               | 132572      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.62               | 23                 |

| 2CC LTE Uplink |                  |       |      |          |            |               |                                |      |       |          |            |               |                     |                    |
|----------------|------------------|-------|------|----------|------------|---------------|--------------------------------|------|-------|----------|------------|---------------|---------------------|--------------------|
| Configure      | CA Configuration | Ant   | PCC  |          |            |               |                                | SCC  |       |          |            |               | Power               |                    |
|                |                  |       | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation/RB/Offset) | Band | Ant   | BW (MHz) | UL Channel | UL Fre. (MHz) | Measured Power(dBm) | Tune-up limit(dBm) |
| Inter-band     | CA_4A-5A         | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 5    | Ant 5 | 10       | 20525      | 836.5         | 21.86               | 22.5               |
|                | CA_4A-7A         | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 7    | Ant 4 | 20       | 20850      | 2510          | 21.92               | 22.5               |
|                | CA_4A-12A        | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 12   | Ant 5 | 10       | 23060      | 704           | 22.05               | 23                 |
|                | CA_5A-7A         | Ant 5 | 5    | 10       | 20525      | 836.5         | QPSK/1#0                       | 7    | Ant 4 | 20       | 20850      | 2510          | 22.22               | 23                 |
|                | CA_5A-66A        | Ant 5 | 5    | 10       | 20525      | 836.5         | QPSK/1#0                       | 66   | Ant 1 | 20       | 132322     | 1745          | 22.15               | 23                 |
|                | CA_7A-66A        | Ant 4 | 7    | 20       | 20850      | 2510          | QPSK/1#0                       | 66   | 20    | 20       | 132322     | 1745          | 22.03               | 23                 |
|                | CA_12A-66A       | Ant 2 | 12   | 10       | 23060      | 704           | QPSK/1#0                       | 66   | 20    | 20       | 132322     | 1745          | 22.06               | 23                 |



| 2CC LTE Downlink for Top Antenna |                  |       |      |          |            |               |                                |      |          |            |               |             |                |
|----------------------------------|------------------|-------|------|----------|------------|---------------|--------------------------------|------|----------|------------|---------------|-------------|----------------|
| Configure                        | CA Configuration | Ant   | PCC  |          |            |               |                                | SCC  |          |            |               | Power       |                |
|                                  |                  |       | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation/RB/Offset) | Band | BW (MHz) | DL Channel | DL Fre. (MHz) | CA TX (dBm) | Rel.8 TX (dBm) |
| Inter-band                       | CA_4A-4A         | Ant 5 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 4    | 5        | 2375       | 2152.5        | 22.01       | 22.5           |
|                                  | CA_4A-5A         | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 5    | 10       | 20600      | 844           | 22.12       | 22.5           |
|                                  | CA_4A-7A         | Ant 5 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 7    | 20       | 21350      | 2560          | 22.17       | 22.5           |
|                                  | CA_4A-12A        | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 12   | 10       | 23130      | 711           | 22.11       | 22.5           |
|                                  | CA_4A-71A        | Ant 5 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 71   | 20       | 133297     | 680.5         | 22.08       | 22.5           |
|                                  | CA_5A-7A         | Ant 5 | 5    | 10       | 20450      | 829           | QPSK/1#0                       | 7    | 20       | 21350      | 2560          | 21.65       | 22.5           |
|                                  | CA_5A-66A        | Ant 5 | 5    | 10       | 20450      | 829           | QPSK/1#0                       | 66   | 20       | 67236      | 2190          | 21.72       | 22.5           |
|                                  | CA_7A-66A        | Ant 4 | 7    | 20       | 20850      | 2510          | QPSK/1#0                       | 66   | 20       | 67236      | 2190          | 21.68       | 22.5           |
|                                  | CA_12A-66A       | Ant 5 | 12   | 10       | 23095      | 707.5         | QPSK/1#0                       | 66   | 20       | 67236      | 2190          | 21.64       | 22.5           |
|                                  | CA_66A-66A       | Ant 5 | 66   | 20       | 132072     | 1720          | QPSK/1#0                       | 66   | 20       | 132572     | 1770          | 22.19       | 23             |
|                                  | CA_66A-71A       | Ant 1 | 66   | 20       | 132422     | 1755          | QPSK/1#0                       | 71   | 10       | 133297     | 680.5         | 22.08       | 22.5           |
|                                  | CA_48C           | Ant 3 | 48   | 20       | 55340      | 3560          | QPSK/1#0                       | 48   | 20       | 56640      | 3690          | 21.82       | 22.5           |
|                                  | CA_66C           | Ant 5 | 66   | 20       | 132622     | 1775          | QPSK/1#0                       | 66   | 10       | 67185      | 2184.9        | 22.15       | 22.5           |

**2.4GHz WLAN ANT 1**

| 2.4GHz WLAN ANT 1 | Mode              | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|-------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11b 1Mbps     | CH 1    | 2412            | 19.52               | 20.00         | 19.50         | 99.67        |
|                   |                   | CH 6    | 2437            | 20.18               | 20.50         | 19.50         |              |
|                   |                   | CH 11   | 2462            | 19.99               | 20.50         | 19.50         |              |
|                   | 802.11g 6Mbps     | CH 1    | 2412            | 22.90               | 23.50         | 17.50         | 97.62        |
|                   |                   | CH 6    | 2437            | 23.06               | 23.50         | 17.50         |              |
|                   |                   | CH 11   | 2462            | 22.74               | 23.00         | 17.50         |              |
|                   | 802.11n-HT20 MCS0 | CH 1    | 2412            | 22.74               | 23.00         | 17.50         | 97.46        |
|                   |                   | CH 6    | 2437            | 22.98               | 23.50         | 17.50         |              |
|                   |                   | CH 11   | 2462            | 22.51               | 23.00         | 17.50         |              |

**5GHz WLAN ANT 1**

| 5.2GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 36   | 5180            | 15.79               | 16.00         | 16.00         | 98.60        |
|                   |                     | CH 44   | 5220            | 15.83               | 16.50         | 16.00         |              |
|                   |                     | CH 48   | 5240            | 15.68               | 16.00         | 16.00         |              |
|                   | 802.11n-HT20 MCS0   | CH 36   | 5180            | 15.95               | 16.50         | 16.00         | 98.50        |
|                   |                     | CH 44   | 5220            | 16.00               | 16.50         | 16.00         |              |
|                   |                     | CH 48   | 5240            | 15.85               | 16.50         | 16.00         |              |
|                   | 802.11n-HT40 MCS0   | CH 36   | 5180            | 15.83               | 16.50         | 16.00         | 97.10        |
|                   |                     | CH 46   | 5230            | 16.27               | 16.50         | 16.00         |              |
|                   |                     | CH 38   | 5180            | 15.95               | 16.50         | 16.00         |              |
|                   | 802.11ac-VHT20 MCS0 | CH 44   | 5220            | 16.06               | 16.50         | 16.00         | 98.52        |
|                   |                     | CH 48   | 5240            | 15.90               | 16.50         | 16.00         |              |
|                   |                     | CH 38   | 5190            | 15.87               | 16.50         | 16.00         | 97.10        |
|                   | 802.11ac-VHT40 MCS0 | CH 46   | 5230            | 16.25               | 16.50         | 16.00         |              |
|                   |                     | CH 42   | 5210            | 15.89               | 16.50         | 16.00         | 88.89        |

**5GHz WLAN ANT 1**

| 5.3GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 52   | 5260            | 15.89               | 16.50         | 16.00         | 98.60        |
|                   |                     | CH 60   | 5300            | 15.68               | 16.50         | 16.00         |              |
|                   |                     | CH 64   | 5320            | 15.48               | 16.00         | 16.00         |              |
|                   | 802.11n-HT20 MCS0   | CH 52   | 5260            | 16.02               | 16.50         | 16.00         | 98.50        |
|                   |                     | CH 60   | 5300            | 15.71               | 16.50         | 16.00         |              |
|                   |                     | CH 64   | 5320            | 15.42               | 16.00         | 16.00         |              |
|                   | 802.11n-HT40 MCS0   | CH 54   | 5270            | 16.21               | 16.50         | 16.00         | 97.10        |
|                   |                     | CH 62   | 5310            | 16.06               | 16.50         | 16.00         |              |
|                   |                     | CH 52   | 5260            | 16.44               | 17.00         | 16.00         | 98.52        |
|                   | 802.11ac-VHT20 MCS0 | CH 60   | 5300            | 16.19               | 16.50         | 16.00         |              |
|                   |                     | CH 64   | 5320            | 15.93               | 16.50         | 16.00         |              |
|                   | 802.11ac-VHT40 MCS0 | CH 54   | 5270            | 16.22               | 16.50         | 16.00         | 97.10        |
|                   |                     | CH 62   | 5310            | 16.09               | 16.50         | 16.00         |              |
|                   |                     | CH 58   | 5290            | 15.66               | 16.00         | 16.00         | 88.89        |

**5GHz WLAN ANT 1**

| 5.5GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 100  | 5500            | 16.29               | 16.50         | 16.00         | 98.60        |
|                   |                     | CH 120  | 5600            | 16.41               | 17.00         | 16.00         |              |
|                   |                     | CH 144  | 5720            | 16.63               | 17.00         | 16.00         |              |
|                   | 802.11n-HT20 MCS0   | CH 100  | 5500            | 16.29               | 16.50         | 16.00         | 98.50        |
|                   |                     | CH 120  | 5600            | 16.41               | 17.00         | 16.00         |              |
|                   |                     | CH 144  | 5720            | 16.57               | 17.00         | 16.00         |              |
|                   | 802.11n-HT40 MCS0   | CH 102  | 5510            | 16.23               | 16.50         | 16.00         | 97.10        |
|                   |                     | CH 126  | 5630            | 16.78               | 17.00         | 16.00         |              |
|                   |                     | CH 142  | 5710            | 16.70               | 17.00         | 16.00         | 98.52        |
|                   | 802.11ac-VHT20 MCS0 | CH 100  | 5500            | 16.75               | 17.00         | 16.00         |              |
|                   |                     | CH 120  | 5600            | 16.46               | 17.00         | 16.00         |              |
|                   |                     | CH 144  | 5720            | 16.45               | 17.00         | 16.00         | 97.10        |
|                   | 802.11ac-VHT40 MCS0 | CH 102  | 5510            | 16.61               | 17.00         | 16.00         |              |
|                   |                     | CH 126  | 5630            | 16.38               | 17.00         | 16.00         |              |
|                   | 802.11ac-VHT80 MCS0 | CH 142  | 5710            | 17.10               | 17.50         | 16.00         | 88.89        |
|                   |                     | CH 106  | 5630            | 16.16               | 16.50         | 16.00         |              |
|                   |                     | CH 122  | 5610            | 16.39               | 17.00         | 16.00         |              |
|                   |                     | CH 138  | 5690            | 16.58               | 17.00         | 16.00         |              |

**5GHz WLAN ANT 1**

| 5.8GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 149  | 5745            | 16.35               | 17.00         | 16.00         | 98.60        |
|                   |                     | CH 157  | 5785            | 16.53               | 17.00         | 16.00         |              |
|                   |                     | CH 165  | 5825            | 16.46               | 17.00         | 16.00         |              |
|                   | 802.11n-HT20 MCS0   | CH 149  | 5745            | 16.28               | 16.50         | 16.00         | 98.50        |
|                   |                     | CH 157  | 5785            | 16.62               | 17.50         | 16.00         |              |
|                   |                     | CH 165  | 5825            | 16.40               | 17.00         | 16.00         |              |
|                   | 802.11n-HT40 MCS0   | CH 151  | 5755            | 16.45               | 17.00         | 16.00         | 97.10        |
|                   |                     | CH 159  | 5795            | 16.48               | 17.00         | 16.00         |              |
|                   |                     | CH 149  | 5745            | 16.25               | 16.50         | 16.00         | 98.52        |
|                   | 802.11ac-VHT20 MCS0 | CH 157  | 5785            | 16.87               | 17.50         | 16.00         |              |
|                   |                     | CH 165  | 5825            | 16.89               | 17.50         | 16.00         |              |
|                   | 802.11ac-VHT40 MCS0 | CH 151  | 5755            | 16.49               | 17.00         | 16.00         | 97.10        |
|                   |                     | CH 159  | 5795            | 16.54               | 17.00         | 16.00         |              |
|                   |                     | CH 155  | 5775            | 16.29               | 16.50         | 16.00         | 88.89        |

| Mode         | Channel | Frequency (MHz) | 1Mbps               |               | 2Mbps               |               | 3Mbps               |               |
|--------------|---------|-----------------|---------------------|---------------|---------------------|---------------|---------------------|---------------|
|              |         |                 | Average power (dBm) | Tune-up Limit | Average power (dBm) | Tune-up Limit | Average power (dBm) | Tune-up Limit |
| BR / EDR     | CH 00   | 2402            | 13.82               | 14.50         | 10.96               | 11.50         | 10.48               | 11.00         |
|              | CH 36   | 2441            | 11.13               | 11.50         | 8.36                | 8.50          | 8.21                | 8.50          |
|              | CH 78   | 2480            | 13.24               | 13.50         | 9.84                | 10.50         | 9.46                | 10.00         |
| Duty Cycle % |         |                 | 76.85               |               | 76.96               |               | 77.01               |               |

| Mode         | Channel | Frequency (MHz) | Average power (dBm) |                 |       |                 |
|--------------|---------|-----------------|---------------------|-----------------|-------|-----------------|
|              |         |                 | 1M                  | Tune-up Limit   | 2M    | Tune-up Limit   |
| LE           | CH 00   | 2402            | 13.31               | 13.50           | 10.48 | 11.00           |
|              | CH 19   | 2440            | 10.79               | 11.00           | 8.06  | 8.50            |
|              | CH 39   | 2480            | 12.28               | 12.50           | 9.17  | 9.50            |
| Duty Cycle % |         |                 | 61.47               | Power Setting 8 | 32.08 | Power Setting 8 |

Reduced Power Level 1

| Band 48 (3.5G Band) (dBm) |            |         |           |                       |                    |                    |                     |              |                     |
|---------------------------|------------|---------|-----------|-----------------------|--------------------|--------------------|---------------------|--------------|---------------------|
| BW (MHz)                  | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Middle-Low Channel | Middle-Low Channel | Middle-High Channel | High Channel | Tune-up limit (dBm) |
| Channel                   |            |         |           | 55340                 | 55830              | 55990              | 56150               | 56640        |                     |
| Frequency (MHz)           |            |         |           | 3560                  | 3609               | 3625               | 3641                | 3690         |                     |
| 20                        | QPSK       | 1       | 0         | 16.95                 | 17.00              | 17.06              | 17.02               | 17.04        | 18                  |
| 20                        | QPSK       | 1       | 49        | 16.79                 | 16.86              | 16.78              | 16.89               | 16.98        |                     |
| 20                        | QPSK       | 1       | 99        | 16.70                 | 16.75              | 16.84              | 16.80               | 16.81        |                     |
| 20                        | QPSK       | 50      | 0         | 15.95                 | 15.92              | 15.97              | 16.03               | 16.07        |                     |
| 20                        | QPSK       | 50      | 24        | 15.91                 | 15.90              | 15.85              | 15.82               | 15.96        | 17                  |
| 20                        | QPSK       | 50      | 50        | 15.93                 | 15.95              | 15.96              | 15.92               | 16.00        |                     |
| 20                        | QPSK       | 100     | 0         | 15.83                 | 15.80              | 15.85              | 15.88               | 15.92        |                     |
| 20                        | 16QAM      | 1       | 0         | 16.10                 | 16.02              | 16.06              | 15.94               | 16.14        |                     |
| 20                        | 16QAM      | 1       | 49        | 15.92                 | 15.89              | 16.13              | 15.97               | 16.08        | 17                  |
| 20                        | 16QAM      | 1       | 99        | 15.79                 | 15.92              | 16.12              | 15.87               | 15.97        |                     |
| 20                        | 16QAM      | 50      | 0         | 14.85                 | 14.95              | 14.93              | 14.99               | 15.04        |                     |
| 20                        | 16QAM      | 50      | 24        | 14.90                 | 14.84              | 14.84              | 14.96               | 14.99        |                     |
| 20                        | 16QAM      | 50      | 50        | 14.73                 | 14.77              | 14.83              | 14.86               | 14.87        | 16                  |
| 20                        | 16QAM      | 100     | 0         | 14.79                 | 14.87              | 14.92              | 14.81               | 14.88        |                     |
| 20                        | 64QAM      | 1       | 0         | 15.08                 | 14.97              | 15.20              | 14.95               | 15.09        |                     |
| 20                        | 64QAM      | 1       | 49        | 15.11                 | 15.06              | 15.06              | 15.03               | 15.01        |                     |
| 20                        | 64QAM      | 1       | 99        | 15.03                 | 14.95              | 14.91              | 14.87               | 14.99        | 15                  |
| 20                        | 64QAM      | 50      | 0         | 13.99                 | 13.94              | 13.98              | 13.99               | 14.12        |                     |
| 20                        | 64QAM      | 50      | 24        | 13.86                 | 13.83              | 13.94              | 13.98               | 13.97        |                     |
| 20                        | 64QAM      | 50      | 50        | 13.78                 | 13.77              | 14.04              | 13.87               | 14.08        |                     |
| 20                        | 64QAM      | 100     | 0         | 13.74                 | 13.85              | 13.81              | 13.93               | 13.92        |                     |
| Channel                   |            |         |           | 55315                 | 55820              | 55990              | 56160               | 56665        |                     |
| Frequency (MHz)           |            |         |           | 3557.5                | 3608               | 3625               | 3642                | 3692.5       |                     |
| 15                        | QPSK       | 1       | 0         | 16.90                 | 16.95              | 17.01              | 16.97               | 16.99        | 18                  |
| 15                        | QPSK       | 1       | 37        | 16.74                 | 16.81              | 16.73              | 16.84               | 16.93        |                     |
| 15                        | QPSK       | 1       | 74        | 16.65                 | 16.70              | 16.79              | 16.75               | 16.76        |                     |
| 15                        | QPSK       | 36      | 0         | 15.90                 | 15.87              | 15.92              | 15.98               | 16.02        |                     |
| 15                        | QPSK       | 36      | 20        | 15.86                 | 15.85              | 15.80              | 15.77               | 15.91        | 17                  |
| 15                        | QPSK       | 36      | 39        | 15.88                 | 15.80              | 15.91              | 15.87               | 15.95        |                     |
| 15                        | QPSK       | 75      | 0         | 15.78                 | 15.75              | 15.80              | 15.83               | 15.87        |                     |
| 15                        | 16QAM      | 1       | 0         | 16.05                 | 15.97              | 16.01              | 15.89               | 16.09        |                     |
| 15                        | 16QAM      | 1       | 37        | 15.87                 | 15.84              | 16.08              | 15.92               | 16.03        | 17                  |
| 15                        | 16QAM      | 1       | 74        | 15.74                 | 15.87              | 16.07              | 15.82               | 15.92        |                     |
| 15                        | 16QAM      | 36      | 0         | 14.80                 | 14.90              | 14.88              | 14.94               | 14.99        |                     |
| 15                        | 16QAM      | 36      | 20        | 14.85                 | 14.79              | 14.79              | 14.91               | 14.94        |                     |
| 15                        | 16QAM      | 36      | 39        | 14.68                 | 14.72              | 14.78              | 14.81               | 14.82        | 16                  |
| 15                        | 16QAM      | 75      | 0         | 14.74                 | 14.82              | 14.87              | 14.76               | 14.83        |                     |
| 15                        | 64QAM      | 1       | 0         | 15.03                 | 14.92              | 15.15              | 14.90               | 15.04        |                     |
| 15                        | 64QAM      | 1       | 37        | 15.06                 | 15.01              | 15.01              | 14.98               | 14.96        |                     |
| 15                        | 64QAM      | 1       | 74        | 14.98                 | 14.90              | 14.86              | 14.82               | 14.94        | 15                  |
| 15                        | 64QAM      | 36      | 0         | 13.94                 | 13.89              | 13.93              | 13.94               | 14.07        |                     |
| 15                        | 64QAM      | 36      | 20        | 13.81                 | 13.78              | 13.89              | 13.93               | 13.92        |                     |
| 15                        | 64QAM      | 36      | 39        | 13.73                 | 13.72              | 13.99              | 13.82               | 14.03        |                     |
| 15                        | 64QAM      | 75      | 0         | 13.69                 | 13.80              | 13.76              | 13.88               | 13.87        |                     |
| Channel                   |            |         |           | 55290                 | 55815              | 55990              | 56165               | 56690        |                     |
| Frequency (MHz)           |            |         |           | 3555                  | 3607.5             | 3625               | 3642.5              | 3695         |                     |
| 10                        | QPSK       | 1       | 0         | 16.86                 | 16.91              | 16.97              | 16.93               | 16.95        | 18                  |
| 10                        | QPSK       | 1       | 25        | 16.70                 | 16.77              | 16.69              | 16.80               | 16.89        |                     |
| 10                        | QPSK       | 1       | 49        | 16.61                 | 16.66              | 16.75              | 16.71               | 16.72        |                     |
| 10                        | QPSK       | 25      | 0         | 15.86                 | 15.83              | 15.88              | 15.94               | 15.96        |                     |
| 10                        | QPSK       | 25      | 12        | 15.82                 | 15.81              | 15.76              | 15.73               | 15.87        | 17                  |
| 10                        | QPSK       | 25      | 25        | 15.84                 | 15.76              | 15.87              | 15.83               | 15.91        |                     |
| 10                        | QPSK       | 50      | 0         | 15.74                 | 15.71              | 15.76              | 15.79               | 15.83        |                     |
| 10                        | 16QAM      | 1       | 0         | 16.01                 | 15.93              | 15.97              | 15.85               | 16.05        |                     |
| 10                        | 16QAM      | 1       | 25        | 15.83                 | 15.80              | 16.04              | 15.88               | 15.99        | 17                  |
| 10                        | 16QAM      | 1       | 49        | 15.70                 | 15.83              | 16.03              | 15.78               | 15.88        |                     |
| 10                        | 16QAM      | 25      | 0         | 14.76                 | 14.86              | 14.84              | 14.90               | 14.95        |                     |
| 10                        | 16QAM      | 25      | 12        | 14.81                 | 14.75              | 14.75              | 14.87               | 14.90        |                     |
| 10                        | 16QAM      | 25      | 25        | 14.64                 | 14.68              | 14.74              | 14.77               | 14.78        | 16                  |
| 10                        | 16QAM      | 50      | 0         | 14.70                 | 14.78              | 14.83              | 14.72               | 14.79        |                     |
| 10                        | 64QAM      | 1       | 0         | 14.99                 | 14.88              | 15.11              | 14.86               | 15.00        |                     |
| 10                        | 64QAM      | 1       | 25        | 15.02                 | 14.97              | 14.97              | 14.94               | 14.92        |                     |
| 10                        | 64QAM      | 1       | 49        | 14.94                 | 14.86              | 14.82              | 14.78               | 14.90        | 15                  |
| 10                        | 64QAM      | 25      | 0         | 13.90                 | 13.85              | 13.89              | 13.90               | 14.03        |                     |
| 10                        | 64QAM      | 25      | 12        | 13.77                 | 13.74              | 13.85              | 13.89               | 13.88        |                     |
| 10                        | 64QAM      | 25      | 25        | 13.69                 | 13.68              | 13.95              | 13.78               | 13.99        |                     |
| 10                        | 64QAM      | 50      | 0         | 13.65                 | 13.76              | 13.72              | 13.84               | 13.83        |                     |
| Channel                   |            |         |           | 55265                 | 55810              | 55990              | 56170               | 56175        |                     |
| Frequency (MHz)           |            |         |           | 3552.5                | 3607               | 3625               | 3643                | 3697.5       |                     |
| 5                         | QPSK       | 1       | 0         | 16.81                 | 16.86              | 16.92              | 16.88               | 16.90        | 18                  |
| 5                         | QPSK       | 1       | 12        | 16.65                 | 16.72              | 16.64              | 16.75               | 16.84        |                     |
| 5                         | QPSK       | 1       | 24        | 16.56                 | 16.61              | 16.70              | 16.66               | 16.67        |                     |
| 5                         | QPSK       | 12      | 0         | 15.81                 | 15.78              | 15.83              | 15.89               | 15.93        |                     |
| 5                         | QPSK       | 12      | 7         | 15.77                 | 15.76              | 15.71              | 15.68               | 15.82        | 17                  |
| 5                         | QPSK       | 12      | 13        | 15.79                 | 15.71              | 15.82              | 15.78               | 15.86        |                     |
| 5                         | QPSK       | 25      | 0         | 15.69                 | 15.66              | 15.71              | 15.74               | 15.78        |                     |
| 5                         | 16QAM      | 1       | 0         | 15.96                 | 15.88              | 15.92              | 15.80               | 16.00        |                     |
| 5                         | 16QAM      | 1       | 12        | 15.78                 | 15.75              | 15.99              | 15.83               | 15.94        | 17                  |
| 5                         | 16QAM      | 1       | 24        | 15.65                 | 15.78              | 15.98              | 15.73               | 15.83        |                     |
| 5                         | 16QAM      | 12      | 0         | 14.71                 | 14.81              | 14.79              | 14.85               | 14.90        |                     |
| 5                         | 16QAM      | 12      | 7         | 14.76                 | 14.70              | 14.70              | 14.82               | 14.85        |                     |
| 5                         | 16QAM      | 12      | 13        | 14.59                 | 14.63              | 14.69              | 14.72               | 14.73        | 16                  |
| 5                         | 16QAM      | 25      | 0         | 14.65                 | 14.73              | 14.78              | 14.67               | 14.74        |                     |
| 5                         | 64QAM      | 1       | 0         | 14.94                 | 14.83              | 15.06              | 14.81               | 14.95        |                     |
| 5                         | 64QAM      | 1       | 12        | 14.97                 | 14.92              | 14.92              | 14.89               | 14.87        |                     |
| 5                         | 64QAM      | 1       | 24        | 14.89                 | 14.81              | 14.77              | 14.73               | 14.85        | 15                  |
| 5                         | 64QAM      | 12      | 0         | 13.85                 | 13.80              | 13.84              | 13.85               | 13.98        |                     |
| 5                         | 64QAM      | 12      | 7         | 13.72                 | 13.69              | 13.80              | 13.84               | 13.83        |                     |
| 5                         | 64QAM      | 12      | 13        | 13.64                 | 13.63              | 13.90              | 13.73               | 13.94        |                     |
| 5                         | 64QAM      | 25      | 0         | 13.60                 | 13.71              | 13.67              | 13.79               | 13.78        |                     |

| n2 (PC3)        |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 15.74       | 15.85          | 15.69        | 17.00               |
| 20              |                      | 1      | 53       | 15.66       | 15.63          | 15.58        |                     |
| 20              |                      | 1      | 104      | 15.60       | 15.38          | 15.59        |                     |
| 20              |                      | 50     | 1        | 15.18       | 15.05          | 15.12        | 16.50               |
| 20              |                      | 50     | 25       | 15.68       | 15.60          | 15.59        |                     |
| 20              |                      | 50     | 50       | 15.07       | 15.09          | 15.09        |                     |
| 20              |                      | 100    | 0        | 15.16       | 15.11          | 15.13        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 15.92       | 15.95          | 15.90        | 17.00               |
| 20              |                      | 1      | 53       | 15.68       | 15.64          | 15.57        |                     |
| 20              |                      | 1      | 104      | 15.62       | 15.42          | 15.60        |                     |
| 20              |                      | 50     | 1        | 14.62       | 14.58          | 14.62        | 16.50               |
| 20              |                      | 50     | 25       | 15.65       | 15.69          | 15.62        |                     |
| 20              |                      | 50     | 50       | 14.50       | 14.64          | 14.58        |                     |
| 20              |                      | 100    | 0        | 14.64       | 14.67          | 14.63        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 14.68       | 14.58          | 14.36        | 15.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 13.38       | 13.28          | 13.05        | 14.00               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 11.04       | 10.95          | 10.73        | 11.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 14.11       | 14.01          | 13.79        | 15.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 13.53       | 13.41          | 13.18        | 14.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 12.43       | 12.33          | 12.18        | 13.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 8.85        | 8.81           | 8.58         | 9.50                |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 15.74       | 15.58          | 15.51        | 17.00               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 15.61       | 15.44          | 15.40        | 17.00               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 15.81       | 15.69          | 15.78        | 17.00               |

| n5 (PC3)        |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 166800      | 167300         | 167800       | 24.00               |
| Frequency (MHz) |                      |        |          | 834         | 836.5          | 839          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 23.06       | 23.10          | 23.08        | 24.00               |
| 20              |                      | 1      | 53       | 23.19       | 23.16          | 23.13        |                     |
| 20              |                      | 1      | 104      | 22.98       | 22.91          | 22.91        |                     |
| 20              |                      | 50     | 1        | 22.62       | 22.73          | 22.68        | 24.00               |
| 20              |                      | 50     | 25       | 23.29       | 23.24          | 23.35        |                     |
| 20              |                      | 50     | 50       | 22.66       | 22.59          | 20.14        |                     |
| 20              |                      | 100    | 0        | 22.59       | 22.61          | 22.76        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.40       | 23.44          | 23.42        | 24.00               |
| 20              |                      | 1      | 53       | 23.20       | 23.18          | 23.17        |                     |
| 20              |                      | 1      | 104      | 22.99       | 22.98          | 22.95        |                     |
| 20              |                      | 50     | 1        | 22.11       | 22.18          | 22.22        | 24.00               |
| 20              |                      | 50     | 25       | 23.20       | 23.21          | 23.18        |                     |
| 20              |                      | 50     | 50       | 22.09       | 22.06          | 22.13        |                     |
| 20              |                      | 100    | 0        | 22.17       | 22.21          | 22.16        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.99       | 22.14          | 22.11        | 23.00               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.72       | 20.78          | 20.70        | 21.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.90       | 18.52          | 18.78        | 19.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.68       | 21.55          | 21.69        | 22.50               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.22       | 21.32          | 21.44        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.62       | 19.66          | 20.02        | 20.50               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 17.03       | 17.09          | 17.16        | 18.00               |
| Channel         |                      |        |          | 166300      | 167300         | 168300       | 24.00               |
| Frequency (MHz) |                      |        |          | 831.5       | 836.5          | 841.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 23.12       | 23.13          | 23.06        | 24.00               |
| Channel         |                      |        |          | 165800      | 167300         | 168800       | 24.00               |
| Frequency (MHz) |                      |        |          | 829         | 836.5          | 844          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.95       | 23.04          | 22.93        | 24.00               |
| Channel         |                      |        |          | 165300      | 167300         | 169300       | 24.00               |
| Frequency (MHz) |                      |        |          | 826.5       | 836.5          | 846.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 23.13       | 23.16          | 23.14        | 24.00               |

## n25 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 372000      | 376500         | 381000       | 17.00               |
| Frequency (MHz) |                      |        |          | 1860        | 1882.5         | 1905         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 15.83       | 15.78          | 15.74        | 17.00               |
| 20              |                      | 1      | 53       | 16.00       | 15.90          | 16.04        |                     |
| 20              |                      | 1      | 104      | 15.80       | 15.67          | 15.93        |                     |
| 20              |                      | 50     | 1        | 15.40       | 15.34          | 15.60        | 17.00               |
| 20              |                      | 50     | 25       | 16.04       | 15.88          | 16.01        |                     |
| 20              |                      | 50     | 50       | 15.41       | 15.31          | 15.48        |                     |
| 20              |                      | 100    | 0        | 15.47       | 15.31          | 15.54        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 15.90       | 15.81          | 15.77        | 17.00               |
| 20              |                      | 1      | 53       | 16.03       | 16.08          | 16.05        |                     |
| 20              |                      | 1      | 104      | 15.85       | 15.68          | 16.02        |                     |
| 20              |                      | 50     | 1        | 14.92       | 14.84          | 15.00        | 17.00               |
| 20              |                      | 50     | 25       | 16.00       | 16.04          | 15.99        |                     |
| 20              |                      | 50     | 50       | 14.88       | 14.86          | 15.03        |                     |
| 20              |                      | 100    | 0        | 14.98       | 14.82          | 15.07        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 14.96       | 14.77          | 14.81        | 16.00               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 13.63       | 13.56          | 13.53        | 14.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 11.32       | 11.20          | 11.14        | 12.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 14.39       | 14.26          | 14.17        | 15.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 13.77       | 13.73          | 13.64        | 14.50               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 12.70       | 12.65          | 12.58        | 13.50               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 9.17        | 9.12           | 9.03         | 10.00               |
| Channel         |                      |        |          | 371500      | 376500         | 381500       | 17.00               |
| Frequency (MHz) |                      |        |          | 1857.5      | 1882.5         | 1907.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 15.95       | 15.78          | 15.81        | 17.00               |
| Channel         |                      |        |          | 371000      | 376500         | 382000       | 17.00               |
| Frequency (MHz) |                      |        |          | 1855        | 1882.5         | 1910         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 15.80       | 15.67          | 15.76        | 17.00               |
| Channel         |                      |        |          | 370500      | 376500         | 382500       | 17.00               |
| Frequency (MHz) |                      |        |          | 1852.5      | 1882.5         | 1912.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 16.02       | 15.85          | 16.06        | 17.00               |

| n48 (PC3)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 640000      | 640834             | 641666         | 642500              | 643332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3600        | 3612.51            | 3624.99        | 3637.5              | 3649.98      |                     |
| 100             | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 15.57       | 15.60              | 15.64          | 15.74               | 15.93        | 18.00               |
| 100             |                      | 1      | 136      | 16.75       | 16.61              | 16.64          | 16.79               | 16.85        |                     |
| 100             |                      | 1      | 271      | 16.07       | 16.06              | 16.13          | 16.19               | 16.26        |                     |
| 100             |                      | 135    | 1        | 15.77       | 15.95              | 16.10          | 15.93               | 15.95        | 18.00               |
| 100             |                      | 135    | 67       | 16.78       | 16.66              | 16.79          | 16.82               | 16.90        |                     |
| 100             |                      | 135    | 136      | 12.81       | 16.12              | 16.21          | 16.22               | 16.29        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 16.09       | 15.97              | 16.26          | 16.15               | 16.21        | 18.00               |
| 100             |                      | 1      | 1        | 15.69       | 15.74              | 15.75          | 15.90               | 16.06        |                     |
| 100             |                      | 1      | 136      | 16.98       | 17.05              | 17.13          | 17.03               | 17.00        |                     |
| 100             |                      | 1      | 271      | 16.22       | 16.21              | 16.30          | 16.36               | 16.40        | 18.00               |
| 100             |                      | 135    | 1        | 15.27       | 15.43              | 15.60          | 15.42               | 15.45        |                     |
| 100             |                      | 135    | 67       | 16.88       | 16.93              | 16.98          | 16.89               | 16.91        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 15.45       | 15.62              | 15.73          | 15.71               | 15.77        | 18.00               |
| 100             |                      | 270    | 0        | 15.61       | 15.47              | 15.46          | 15.68               | 15.71        |                     |
| 100             |                      | 1      | 1        | 14.61       | 14.64              | 14.67          | 14.80               | 14.97        | 16.00               |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 13.08       | 13.10              | 13.16          | 13.32               | 13.46        | 14.50               |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 10.81       | 10.87              | 10.93          | 11.06               | 11.23        | 12.00               |
| 100             | CP-OFDM QPSK         | 1      | 1        | 14.03       | 14.07              | 14.10          | 14.23               | 14.40        | 15.00               |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 13.51       | 13.56              | 13.56          | 13.70               | 13.90        | 14.50               |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 12.00       | 12.03              | 12.08          | 12.22               | 12.38        | 13.00               |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 9.18        | 9.21               | 9.37           | 9.49                | 9.60         | 10.00               |
| Channel         |                      |        |          | 639668      | 640668             | 641666         | 642666              | 643666       | 18.00               |
| Frequency (MHz) |                      |        |          | 3595.02     | 3610.02            | 3624.99        | 3639.99             | 3654.99      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 16.66       | 16.74              | 16.75          | 17.00               | 16.94        | 18.00               |
| Channel         |                      |        |          | 639334      | 640500             | 641666         | 642832              | 644000       | 18.00               |
| Frequency (MHz) |                      |        |          | 3590.01     | 3607.5             | 3624.99        | 3642.48             | 3660         |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 16.44       | 16.56              | 16.65          | 16.83               | 16.67        | 18.00               |
| Channel         |                      |        |          | 639000      | 640334             | 641666         | 643000              | 644332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3585        | 3605.01            | 3624.99        | 3645                | 3664.98      |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 16.04       | 16.05              | 16.30          | 16.24               | 16.43        | 18.00               |
| Channel         |                      |        |          | 638668      | 640168             | 641666         | 643332              | 644666       | 18.00               |
| Frequency (MHz) |                      |        |          | 3580.02     | 3602.52            | 3624.99        | 3647.49             | 3669.99      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 16.00       | 16.08              | 16.36          | 16.24               | 16.47        | 18.00               |
| Channel         |                      |        |          | 638334      | 640000             | 641666         | 643332              | 645000       | 18.00               |
| Frequency (MHz) |                      |        |          | 3575.01     | 3600               | 3624.99        | 3647.49             | 3675         |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 16.16       | 16.17              | 16.58          | 16.49               | 16.63        | 18.00               |
| Channel         |                      |        |          | 638000      | 639834             | 641666         | 643500              | 645332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3570        | 3597.51            | 3624.99        | 3652.5              | 3679.98      |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 15.90       | 15.98              | 16.25          | 16.30               | 16.40        | 18.00               |
| Channel         |                      |        |          | 637668      | 639668             | 641666         | 643666              | 645666       | 18.00               |
| Frequency (MHz) |                      |        |          | 3565.02     | 3595.02            | 3624.99        | 3654.99             | 3684.99      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 16.12       | 16.16              | 16.40          | 16.54               | 16.70        | 18.00               |
| Channel         |                      |        |          | 637334      | 639500             | 641666         | 643832              | 646000       | 18.00               |
| Frequency (MHz) |                      |        |          | 3560.01     | 3592.5             | 3624.99        | 3657.48             | 3690         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 16.27       | 16.44              | 16.51          | 16.84               | 16.93        | 18.00               |
| Channel         |                      |        |          | 637168      | 639418             | 641666         | 643916              | 646166       | 18.00               |
| Frequency (MHz) |                      |        |          | 3557.52     | 3591.27            | 3624.99        | 3658.74             | 3692.49      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 16.30       | 16.50              | 16.57          | 16.88               | 17.04        | 18.00               |
| Channel         |                      |        |          | 637000      | 639334             | 641666         | 644000              | 646332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3555        | 3590.01            | 3624.99        | 3660                | 3694.98      |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 16.39       | 16.51              | 16.58          | 16.88               | 17.06        | 14.50               |

| n66 (PC3)       |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 346000      | 349000         | 352000       |                     |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 14.99       | 14.96          | 14.93        | 17.00               |
| 40              |                      | 1      | 108      | 15.50       | 15.53          | 15.47        |                     |
| 40              |                      | 1      | 214      | 14.92       | 14.95          | 14.95        |                     |
| 40              |                      | 108    | 1        | 14.93       | 14.99          | 14.94        | 17.00               |
| 40              |                      | 108    | 54       | 15.55       | 15.53          | 15.46        |                     |
| 40              |                      | 108    | 108      | 14.88       | 14.78          | 14.84        |                     |
| 40              |                      | 216    | 0        | 14.84       | 14.89          | 14.80        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 15.06       | 15.00          | 14.98        | 17.00               |
| 40              |                      | 1      | 108      | 15.91       | 15.94          | 15.90        |                     |
| 40              |                      | 1      | 214      | 14.95       | 14.95          | 14.95        |                     |
| 40              |                      | 108    | 1        | 14.45       | 14.45          | 14.44        | 17.00               |
| 40              |                      | 108    | 54       | 15.88       | 15.90          | 15.85        |                     |
| 40              |                      | 108    | 108      | 14.36       | 14.29          | 14.33        |                     |
| 40              |                      | 216    | 0        | 14.40       | 14.38          | 14.38        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 14.09       | 14.03          | 13.97        | 15.00               |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 12.81       | 12.77          | 12.70        | 13.50               |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 10.46       | 10.37          | 10.38        | 11.00               |
| 40              | CP-OFDM QPSK         | 1      | 1        | 13.53       | 13.51          | 13.40        | 14.50               |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 12.93       | 12.91          | 12.82        | 13.50               |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 11.74       | 11.31          | 11.79        | 12.50               |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 8.38        | 8.34           | 8.27         | 9.00                |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 15.24       | 15.14          | 15.14        | 17.00               |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 15.40       | 15.31          | 15.29        | 17.00               |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 15.45       | 15.46          | 15.32        | 17.00               |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 15.51       | 15.46          | 15.43        | 17.00               |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 15.39       | 15.34          | 15.30        | 17.00               |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 15.63       | 15.52          | 15.52        | 17.00               |



| n77(3450-3550MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        |             |                    | 19.13          |                     |              | 20.50               |
| 100                     |                      | 1      | 136      |             |                    | 19.57          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 18.14          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 19.02          |                     |              | 20.00               |
| 100                     |                      | 135    | 67       |             |                    | 19.55          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 18.40          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        |             |                    | 18.85          |                     |              | 21.00               |
| 100                     |                      | 1      | 1        |             |                    | 19.10          |                     |              |                     |
| 100                     |                      | 1      | 136      |             |                    | 19.96          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 18.16          |                     |              | 20.50               |
| 100                     |                      | 135    | 1        |             |                    | 18.55          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 19.78          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      |             |                    | 17.84          |                     |              | 20.50               |
| 100                     |                      | 270    | 0        |             |                    | 18.37          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 18.20          |                     |              | 19.00               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 16.44          |                     |              | 17.50               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 14.55          |                     |              | 15.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 17.62          |                     |              | 18.50               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 17.18          |                     |              | 18.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 15.63          |                     |              | 16.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 12.46          |                     |              | 13.50               |
| Channel                 |                      |        |          | 633000      | 633168             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.52            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.28       | 19.25              | 19.24          | 19.22               | 19.24        | 20.50               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.47       | 19.44              | 19.44          | 19.40               | 19.34        | 20.50               |
| Channel                 |                      |        |          | 632334      | 632668             | 633334         | 633832              | 634332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 18.64       | 19.54              | 19.53          | 19.45               | 19.38        | 20.50               |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.48       | 19.44              | 19.36          | 19.26               | 19.25        | 20.50               |
| Channel                 |                      |        |          | 631668      | 632000             | 633334         | 634166              | 635000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3510                | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.64       | 19.57              | 19.43          | 19.35               | 19.22        | 20.50               |
| Channel                 |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.43       | 19.33              | 19.21          | 19.10               | 18.76        | 20.50               |
| Channel                 |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.63       | 19.50              | 19.37          | 19.13               | 18.68        | 20.50               |
| Channel                 |                      |        |          | 630834      | 632084             | 633334         | 634584              | 635832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3462.51     | 3481.26            | 3500.01        | 3518.76             | 3537.48      |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.71       | 19.60              | 19.50          | 19.17               | 18.74        | 20.50               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.70       | 19.62              | 19.48          | 19.18               | 18.78        | 20.50               |
| Channel                 |                      |        |          | 630500      | 631916             | 633334         | 634750              | 636166       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3457.5      | 3478.74            | 3500.01        | 3521.25             | 3542.49      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.77       | 19.66              | 19.56          | 19.09               | 18.82        | 25.00               |
| Channel                 |                      |        |          | 630334      | 631834             | 633334         | 634834              | 636332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3455.01     | 3477.51            | 3500.01        | 3522.51             | 3544.98      |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.76       | 19.66              | 19.57          | 19.04               | 18.89        | 25.00               |

| n77(3700-3980MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 19.21       | 18.95              | 18.80          | 19.14               | 19.05        | 21.00               |
| 100                     |                      | 1      | 136      | 19.77       | 19.68              | 19.99          | 19.84               | 18.87        |                     |
| 100                     |                      | 1      | 271      | 18.89       | 19.15              | 18.97          | 18.07               | 18.64        |                     |
| 100                     |                      | 135    | 1        | 19.50       | 18.91              | 18.97          | 19.05               | 18.65        | 21.00               |
| 100                     |                      | 135    | 67       | 19.80       | 19.75              | 20.00          | 19.93               | 19.02        |                     |
| 100                     |                      | 135    | 136      | 18.95       | 19.19              | 19.18          | 18.78               | 18.62        |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        | 19.15       | 19.04              | 19.25          | 19.04               | 18.38        | 21.00               |
| 100                     |                      | 1      | 1        | 19.22       | 18.92              | 18.80          | 19.16               | 19.06        |                     |
| 100                     |                      | 1      | 136      | 19.94       | 20.02              | 20.12          | 20.08               | 20.10        |                     |
| 100                     |                      | 1      | 271      | 18.86       | 19.15              | 18.96          | 18.07               | 18.64        | 21.00               |
| 100                     |                      | 135    | 1        | 19.01       | 18.41              | 18.43          | 18.60               | 18.13        |                     |
| 100                     |                      | 135    | 67       | 19.99       | 19.97              | 20.02          | 19.98               | 19.93        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      | 18.42       | 18.59              | 18.66          | 18.28               | 18.11        | 21.00               |
| 100                     |                      | 270    | 0        | 18.72       | 18.50              | 18.81          | 18.61               | 17.96        |                     |
| 100                     |                      | 1      | 1        | 18.20       | 17.96              | 17.75          | 18.14               | 18.08        | 19.00               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 16.48       | 16.24              | 16.20          | 16.44               | 16.36        | 17.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 14.67       | 14.37              | 14.23          | 14.60               | 14.53        | 15.00               |
| 100                     | CP-OFDM QPSK         | 1      | 1        | 17.89       | 17.58              | 17.37          | 17.72               | 17.65        | 18.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 17.23       | 16.96              | 16.79          | 17.15               | 17.05        | 18.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 15.76       | 15.48              | 15.31          | 15.68               | 15.59        | 16.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 12.68       | 12.32              | 12.28          | 12.54               | 12.51        | 13.50               |
| Channel                 |                      |        |          | 649666      | 652834             | 656000         | 659166              | 662332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3744.99     | 3792.51            | 3840           | 3887.49             | 3934.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.35       | 19.04              | 18.95          | 19.27               | 19.04        | 21.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.58       | 19.23              | 19.17          | 19.38               | 18.99        | 21.00               |
| Channel                 |                      |        |          | 649000      | 652500             | 656000         | 659500              | 663000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3735        | 3787.5             | 3840           | 3892.5              | 3945         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.71       | 19.33              | 19.30          | 19.48               | 18.88        | 21.00               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.65       | 19.27              | 19.29          | 19.43               | 18.61        | 21.00               |
| Channel                 |                      |        |          | 648334      | 652168             | 656000         | 659832              | 663666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3782.52            | 3840           | 3894.99             | 3954.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.79       | 19.37              | 19.45          | 19.64               | 18.67        | 21.00               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.53       | 19.13              | 19.19          | 19.37               | 18.41        | 21.00               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.77       | 19.31              | 19.50          | 19.47               | 18.74        | 21.00               |
| Channel                 |                      |        |          | 647500      | 651750             | 656000         | 660250              | 664500       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3712.5      | 3776.25            | 3840           | 3903.75             | 3967.5       |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.89       | 19.43              | 19.70          | 19.53               | 18.96        | 21.00               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.00       | 19.52              | 19.75          | 19.56               | 19.11        | 21.00               |
| Channel                 |                      |        |          | 647168      | 651584             | 656000         | 660416              | 664832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3707.52     | 3773.76            | 3840           | 3906.24             | 3972.48      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.04       | 19.59              | 19.90          | 19.54               | 19.31        | 25.00               |
| Channel                 |                      |        |          | 647000      | 651500             | 656000         | 660500              | 665000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3705        | 3772.5             | 3840           | 3907.5              | 3975         |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.07       | 19.58              | 19.94          | 19.44               | 19.35        | 25.00               |

| n77(3450-3550MHz) (PC3) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        |             |                    | 19.47          |                     |              | 21.00               |
| 100                     |                      | 1      | 136      |             |                    | 19.93          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 19.53          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 19.33          |                     |              | 20.50               |
| 100                     |                      | 135    | 67       |             |                    | 19.90          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 19.27          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        |             |                    | 19.16          |                     |              | 21.00               |
| 100                     |                      | 1      | 1        |             |                    | 19.41          |                     |              |                     |
| 100                     |                      | 1      | 136      |             |                    | 19.98          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 19.52          |                     |              | 21.00               |
| 100                     |                      | 135    | 1        |             |                    | 19.58          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 19.91          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      |             |                    | 19.29          |                     |              | 21.00               |
| 100                     |                      | 270    | 0        |             |                    | 19.57          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 18.48          |                     |              | 19.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 16.95          |                     |              | 18.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 14.70          |                     |              | 15.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 17.91          |                     |              | 19.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 17.38          |                     |              | 18.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 15.87          |                     |              | 16.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 13.10          |                     |              | 14.00               |
| Channel                 |                      |        |          | 633000      | 633168             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.52            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.59       | 20.54              | 20.54          | 20.50               | 20.50        | 21.00               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.79       | 20.73              | 20.74          | 20.69               | 20.63        | 21.00               |
| Channel                 |                      |        |          | 632334      | 632668             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.87       | 20.86              | 20.82          | 20.74               | 20.63        | 21.00               |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.88       | 19.83              | 19.70          | 19.62               | 19.61        | 21.00               |
| Channel                 |                      |        |          | 631668      | 632000             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3510                | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.02       | 19.92              | 19.81          | 19.74               | 19.63        | 21.00               |
| Channel                 |                      |        |          | 631334      | 632000             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.81       | 19.70              | 19.57          | 19.45               | 19.13        | 21.00               |
| Channel                 |                      |        |          | 631000      | 632000             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.85       | 19.85              | 19.74          | 19.53               | 19.08        | 21.00               |
| Channel                 |                      |        |          | 630834      | 632000             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3462.51     | 3481.26            | 3500.01        | 3518.76             | 3537.48      |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.80       | 19.93              | 19.83          | 19.56               | 19.16        | 21.00               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.79       | 19.88              | 19.95          | 19.58               | 19.19        | 21.00               |
| Channel                 |                      |        |          | 630500      | 631916             | 633334         | 634750              | 636166       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3457.5      | 3478.74            | 3500.01        | 3521.25             | 3542.49      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.85       | 19.88              | 19.94          | 19.57               | 19.26        | 21.00               |
| Channel                 |                      |        |          | 630334      | 631634             | 633334         | 634834              | 636332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3455.01     | 3477.51            | 3500.01        | 3522.51             | 3544.98      |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.92       | 19.86              | 19.79          | 19.50               | 19.35        | 21.00               |

| n77(3700-3980MHz) (PC3) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 19.30       | 19.08              | 18.95          | 19.24               | 19.09        | 21.00               |
| 100                     |                      | 1      | 136      | 19.91       | 19.85              | 20.09          | 19.86               | 18.89        |                     |
| 100                     |                      | 1      | 271      | 19.01       | 19.20              | 18.99          | 19.11               | 19.14        |                     |
| 100                     |                      | 135    | 1        | 19.64       | 19.06              | 19.10          | 19.14               | 19.66        | 21.00               |
| 100                     |                      | 135    | 67       | 19.85       | 19.91              | 19.96          | 19.88               | 19.03        |                     |
| 100                     |                      | 135    | 136      | 19.11       | 18.89              | 19.18          | 19.22               | 19.16        |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        | 19.26       | 19.22              | 19.37          | 19.13               | 18.46        | 21.00               |
| 100                     |                      | 1      | 1        | 19.25       | 19.05              | 18.91          | 19.27               | 19.08        |                     |
| 100                     |                      | 1      | 136      | 20.05       | 20.03              | 20.14          | 19.95               | 20.05        |                     |
| 100                     |                      | 1      | 271      | 18.99       | 19.22              | 18.95          | 18.02               | 18.65        | 21.00               |
| 100                     |                      | 135    | 1        | 19.14       | 18.53              | 18.61          | 18.75               | 18.14        |                     |
| 100                     |                      | 135    | 67       | 19.98       | 19.87              | 20.09          | 19.96               | 20.01        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      | 19.22       | 19.19              | 19.57          | 19.22               | 19.18        | 21.00               |
| 100                     |                      | 270    | 0        | 18.81       | 18.71              | 18.94          | 18.85               | 18.85        |                     |
| 100                     |                      |        |          |             |                    |                |                     |              |                     |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 18.34       | 18.12              | 18.06          | 18.37               | 18.14        | 19.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 16.80       | 16.60              | 16.41          | 16.83               | 16.62        | 17.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        | 14.55       | 14.32              | 14.30          | 14.57               | 14.37        | 15.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 17.77       | 17.56              | 17.37          | 17.76               | 17.56        | 18.50               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 17.20       | 17.05              | 17.07          | 17.22               | 17.03        | 18.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 15.72       | 15.50              | 15.43          | 15.72               | 15.55        | 16.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 12.94       | 12.68              | 12.62          | 12.92               | 12.34        | 13.00               |
| Channel                 |                      |        |          | 649666      | 652834             | 656000         | 659166              | 662332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3744.99     | 3792.51            | 3840           | 3887.49             | 3934.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.44       | 19.15              | 19.11          | 19.36               | 19.03        | 21.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.62       | 19.33              | 19.34          | 19.47               | 18.99        | 21.00               |
| Channel                 |                      |        |          | 649000      | 652500             | 656000         | 659500              | 663000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3735        | 3787.5             | 3840           | 3892.5              | 3945         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.71       | 19.46              | 19.44          | 19.54               | 18.80        | 21.00               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.70       | 19.42              | 19.41          | 19.47               | 18.56        | 21.00               |
| Channel                 |                      |        |          | 648334      | 652168             | 656000         | 659832              | 663666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3782.52            | 3840           | 3894.99             | 3954.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.89       | 19.51              | 19.61          | 19.71               | 18.64        | 21.00               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.63       | 19.29              | 19.33          | 19.40               | 18.38        | 21.00               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.86       | 19.47              | 19.62          | 19.48               | 18.71        | 21.00               |
| Channel                 |                      |        |          | 647500      | 651750             | 656000         | 660250              | 664500       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3712.5      | 3776.25            | 3840           | 3903.75             | 3967.5       |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.99       | 19.60              | 19.81          | 19.53               | 18.92        | 21.00               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.08       | 19.68              | 19.89          | 19.52               | 19.09        | 21.00               |
| Channel                 |                      |        |          | 647168      | 651584             | 656000         | 660416              | 664832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3707.52     | 3773.76            | 3840           | 3906.24             | 3972.48      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.13       | 19.73              | 20.01          | 19.49               | 19.27        | 17.50               |
| Channel                 |                      |        |          | 647000      | 651500             | 656000         | 660500              | 665000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3705        | 3772.5             | 3840           | 3907.5              | 3975         |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.14       | 19.75              | 20.08          | 19.40               | 19.35        | 18.00               |

| CA_48C                               |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 55340                                | 55538       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 16.34               | 17.00              |
| 55990                                | 56089       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 16.39               | 17.00              |
| 56640                                | 56640       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 16.29               | 17.00              |
| 55340                                | 55538       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 15.29               | 16.00              |
| 55990                                | 56089       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 15.32               | 16.00              |
| 56640                                | 56640       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 15.26               | 16.00              |
| 55340                                | 55538       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 14.26               | 15.00              |
| 55990                                | 56089       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 14.33               | 15.00              |
| 56640                                | 56640       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 14.21               | 15.00              |

| 2CC LTE Uplink |                  |       |      |          |            |               |                                |      |       |          |            |               |                     |                    |
|----------------|------------------|-------|------|----------|------------|---------------|--------------------------------|------|-------|----------|------------|---------------|---------------------|--------------------|
| Configure      | CA Configuration | Ant   | PCC  |          |            |               |                                | SCC  |       |          |            |               | Power               |                    |
|                |                  |       | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation/RB/Offset) | Band | Ant   | BW (MHz) | UL Channel | UL Fre. (MHz) | Measured Power(dBm) | Tune-up limit(dBm) |
| Inter-band     | CA_4A-5A         | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 5    | Ant 5 | 10       | 20525      | 836.5         | 21.86               | 22.5               |
|                | CA_4A-7A         | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 7    | Ant 4 | 20       | 20850      | 2510          | 21.92               | 22.5               |
|                | CA_4A-12A        | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 12   | Ant 5 | 10       | 23060      | 704           | 22.05               | 23                 |
|                | CA_5A-7A         | Ant 5 | 5    | 10       | 20525      | 836.5         | QPSK/1#0                       | 7    | Ant 4 | 20       | 20850      | 2510          | 22.22               | 23                 |
|                | CA_5A-66A        | Ant 5 | 5    | 10       | 20525      | 836.5         | QPSK/1#0                       | 66   | Ant 1 | 20       | 132322     | 1745          | 22.15               | 23                 |
|                | CA_7A-66A        | Ant 4 | 7    | 20       | 20850      | 2510          | QPSK/1#0                       | 66   | 20    | 20       | 132322     | 1745          | 22.03               | 23                 |
|                | CA_12A-66A       | Ant 2 | 12   | 10       | 23060      | 704           | QPSK/1#0                       | 66   | 20    | 20       | 132322     | 1745          | 22.06               | 23                 |

| 2CC LTE Downlink for Top Antenna |                  |       |      |          |            |               |                                |      |          |            |               |             |                |  |
|----------------------------------|------------------|-------|------|----------|------------|---------------|--------------------------------|------|----------|------------|---------------|-------------|----------------|--|
| Configure                        | CA Configuration | Ant   | PCC  |          |            |               |                                | SCC  |          |            |               | Power       |                |  |
|                                  |                  |       | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation/RB/Offset) | Band | BW (MHz) | DL Channel | DL Fre. (MHz) | CA TX (dBm) | Rel.8 TX (dBm) |  |
| Inter-band                       | CA_4A-4A         | Ant 5 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 4    | 5        | 2375       | 2152.5        | 22.01       | 22.5           |  |
|                                  | CA_4A-5A         | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 5    | 10       | 20600      | 844           | 22.12       | 22.5           |  |
|                                  | CA_4A-7A         | Ant 5 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 7    | 20       | 21350      | 2560          | 22.17       | 22.5           |  |
|                                  | CA_4A-12A        | Ant 1 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 12   | 10       | 23130      | 711           | 22.11       | 22.5           |  |
|                                  | CA_4A-71A        | Ant 5 | 4    | 20       | 20175      | 1732.5        | QPSK/1#0                       | 71   | 20       | 133297     | 680.5         | 22.08       | 22.5           |  |
|                                  | CA_5A-7A         | Ant 5 | 5    | 10       | 20450      | 829           | QPSK/1#0                       | 7    | 20       | 21350      | 2560          | 21.65       | 22.5           |  |
|                                  | CA_5A-66A        | Ant 5 | 5    | 10       | 20450      | 829           | QPSK/1#0                       | 66   | 20       | 67236      | 2190          | 21.72       | 22.5           |  |
|                                  | CA_7A-66A        | Ant 4 | 7    | 20       | 20850      | 2510          | QPSK/1#0                       | 66   | 20       | 67236      | 2190          | 21.68       | 22.5           |  |
|                                  | CA_12A-66A       | Ant 5 | 12   | 10       | 23095      | 707.5         | QPSK/1#0                       | 66   | 20       | 67236      | 2190          | 21.64       | 22.5           |  |
|                                  | CA_66A-66A       | Ant 5 | 66   | 20       | 132072     | 1720          | QPSK/1#0                       | 66   | 20       | 132572     | 1770          | 22.19       | 23             |  |
|                                  | CA_66A-71A       | Ant 1 | 66   | 20       | 132422     | 1755          | QPSK/1#0                       | 71   | 10       | 133297     | 680.5         | 22.08       | 22.5           |  |
|                                  | CA_48C           | Ant 3 | 48   | 20       | 55340      | 3560          | QPSK/1#0                       | 48   | 20       | 56640      | 3690          | 21.82       | 22.5           |  |
|                                  | CA_66C           | Ant 5 | 66   | 20       | 132622     | 1775          | QPSK/1#0                       | 66   | 10       | 67185      | 2184.9        | 22.15       | 22.5           |  |

**2.4GHz WLAN ANT 1**

| 2.4GHz WLAN ANT 1 | Mode              | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|-------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11b 1Mbps     | CH 1    | 2412            | 13.52               | 14.00         | 14.00         | 99.67        |
|                   |                   | CH 6    | 2437            | 14.18               | 14.50         | 14.00         |              |
|                   |                   | CH 11   | 2462            | 13.99               | 14.50         | 14.00         |              |
|                   | 802.11g 6Mbps     | CH 1    | 2412            | 16.90               | 17.50         | 11.50         | 97.62        |
|                   |                   | CH 6    | 2437            | 17.08               | 17.50         | 11.50         |              |
|                   |                   | CH 11   | 2462            | 16.74               | 17.00         | 11.50         |              |
|                   | 802.11n-HT20 MCS0 | CH 1    | 2412            | 16.74               | 17.00         | 11.50         | 97.46        |
|                   |                   | CH 6    | 2437            | 16.98               | 17.50         | 11.50         |              |
|                   |                   | CH 11   | 2462            | 16.51               | 17.00         | 11.50         |              |

**5GHz WLAN ANT 1**

| 5.2GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 36   | 5180            | 11.29               | 11.50         | 11.50         | 98.60        |
|                   |                     | CH 44   | 5220            | 11.33               | 12.00         | 11.50         |              |
|                   |                     | CH 48   | 5240            | 11.18               | 11.50         | 11.50         |              |
|                   | 802.11n-HT20 MCS0   | CH 36   | 5180            | 11.45               | 12.00         | 11.50         | 98.50        |
|                   |                     | CH 44   | 5220            | 11.50               | 12.00         | 11.50         |              |
|                   |                     | CH 48   | 5240            | 11.35               | 12.00         | 11.50         |              |
|                   | 802.11n-HT40 MCS0   | CH 38   | 5190            | 11.33               | 12.00         | 12.00         | 97.10        |
|                   |                     | CH 46   | 5230            | 11.77               | 12.00         | 12.00         |              |
|                   | 802.11ac-VHT20 MCS0 | CH 36   | 5180            | 11.45               | 12.00         | 11.50         | 98.52        |
|                   |                     | CH 44   | 5220            | 11.56               | 12.00         | 11.50         |              |
|                   |                     | CH 48   | 5240            | 11.40               | 12.00         | 11.50         |              |
|                   | 802.11ac-VHT40 MCS0 | CH 38   | 5190            | 11.37               | 12.00         | 11.50         | 97.10        |
|                   |                     | CH 46   | 5230            | 11.75               | 12.00         | 11.50         |              |
|                   | 802.11ac-VHT80 MCS0 | CH 42   | 5210            | 11.39               | 12.00         | 11.50         | 88.89        |

**5GHz WLAN ANT 1**

| 5.3GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 52   | 5260            | 11.39               | 12.00         | 11.50         | 98.60        |
|                   |                     | CH 60   | 5300            | 11.18               | 12.00         | 11.50         |              |
|                   |                     | CH 64   | 5320            | 10.98               | 11.50         | 11.50         |              |
|                   | 802.11n-HT20 MCS0   | CH 52   | 5260            | 11.52               | 12.00         | 11.50         | 98.50        |
|                   |                     | CH 60   | 5300            | 11.21               | 12.00         | 11.50         |              |
|                   |                     | CH 64   | 5320            | 10.92               | 11.50         | 11.50         |              |
|                   | 802.11n-HT40 MCS0   | CH 54   | 5270            | 11.71               | 12.00         | 11.50         | 97.10        |
|                   |                     | CH 62   | 5310            | 11.56               | 12.00         | 11.50         |              |
|                   | 802.11ac-VHT20 MCS0 | CH 52   | 5260            | 11.94               | 12.50         | 12.00         | 98.52        |
|                   |                     | CH 60   | 5300            | 11.69               | 12.00         | 12.00         |              |
|                   |                     | CH 64   | 5320            | 11.43               | 12.00         | 12.00         |              |
|                   | 802.11ac-VHT40 MCS0 | CH 54   | 5270            | 11.72               | 12.00         | 11.50         | 97.10        |
|                   |                     | CH 62   | 5310            | 11.59               | 12.00         | 11.50         |              |
|                   | 802.11ac-VHT80 MCS0 | CH 58   | 5290            | 11.16               | 11.50         | 11.50         | 88.89        |

**5GHz WLAN ANT 1**

| 5.5GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 100  | 5500            | 11.29               | 11.50         | 11.00         | 98.60        |
|                   |                     | CH 120  | 5600            | 11.41               | 12.00         | 11.00         |              |
|                   |                     | CH 144  | 5720            | 11.63               | 12.00         | 11.00         |              |
|                   | 802.11n-HT20 MCS0   | CH 100  | 5500            | 11.29               | 11.50         | 11.00         | 98.50        |
|                   |                     | CH 120  | 5600            | 11.41               | 12.00         | 11.00         |              |
|                   |                     | CH 144  | 5720            | 11.57               | 12.00         | 11.00         |              |
|                   | 802.11n-HT40 MCS0   | CH 102  | 5510            | 11.23               | 11.50         | 11.00         | 97.10        |
|                   |                     | CH 126  | 5630            | 11.78               | 12.00         | 11.00         |              |
|                   |                     | CH 142  | 5710            | 11.70               | 12.00         | 11.00         |              |
|                   | 802.11ac-VHT20 MCS0 | CH 100  | 5500            | 11.75               | 12.00         | 11.00         | 98.52        |
|                   |                     | CH 120  | 5600            | 11.46               | 12.00         | 11.00         |              |
|                   |                     | CH 144  | 5720            | 11.45               | 12.00         | 11.00         |              |
|                   | 802.11ac-VHT40 MCS0 | CH 102  | 5510            | 11.61               | 12.00         | 12.00         | 97.10        |
|                   |                     | CH 126  | 5630            | 11.38               | 12.00         | 12.00         |              |
|                   |                     | CH 142  | 5710            | 12.10               | 12.50         | 12.00         |              |
|                   | 802.11ac-VHT80 MCS0 | CH 106  | 5530            | 11.18               | 11.50         | 11.00         | 88.89        |
|                   |                     | CH 122  | 5610            | 11.39               | 12.00         | 11.00         |              |
|                   |                     | CH 138  | 5690            | 11.58               | 12.00         | 11.00         |              |

**5GHz WLAN ANT 1**

| 5.8GHz WLAN ANT 1 | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
|                   | 802.11a 6Mbps       | CH 149  | 5745            | 11.35               | 12.00         | 11.00         | 98.60        |
|                   |                     | CH 157  | 5785            | 11.53               | 12.00         | 11.00         |              |
|                   |                     | CH 165  | 5825            | 11.46               | 12.00         | 11.00         |              |
|                   | 802.11n-HT20 MCS0   | CH 149  | 5745            | 11.28               | 11.50         | 12.00         | 98.50        |
|                   |                     | CH 157  | 5785            | 11.92               | 12.50         | 12.00         |              |
|                   |                     | CH 165  | 5825            | 11.40               | 12.00         | 12.00         |              |
|                   | 802.11n-HT40 MCS0   | CH 151  | 5755            | 11.45               | 12.00         | 11.00         | 97.10        |
|                   |                     | CH 159  | 5795            | 11.48               | 12.00         | 11.00         |              |
|                   |                     | CH 149  | 5745            | 11.25               | 11.50         | 11.00         |              |
|                   | 802.11ac-VHT20 MCS0 | CH 157  | 5785            | 11.87               | 12.50         | 11.00         | 98.52        |
|                   |                     | CH 165  | 5825            | 11.89               | 12.50         | 11.00         |              |
|                   | 802.11ac-VHT40 MCS0 | CH 151  | 5755            | 11.49               | 12.00         | 11.00         | 97.10        |
|                   |                     | CH 159  | 5795            | 11.54               | 12.00         | 11.00         |              |
|                   | 802.11ac-VHT80 MCS0 | CH 155  | 5775            | 11.29               | 11.50         | 11.00         | 88.89        |



# Reduced Power Level 2

| GSM1900         |  | Burst Average Power (dBm) |       |        | Tune-up Limit (dBm) | Frame-Average Power (dBm) |       |        | Tune-up Limit (dBm) |
|-----------------|--|---------------------------|-------|--------|---------------------|---------------------------|-------|--------|---------------------|
| TX Channel      |  | 512                       | 661   | 810    |                     | 512                       | 661   | 810    |                     |
| Frequency (MHz) |  | 1850.2                    | 1880  | 1909.8 |                     | 1850.2                    | 1880  | 1909.8 |                     |
| GSM 1 Tx slot   |  | 27.15                     | 26.99 | 27.21  | 28.30               | 18.15                     | 17.99 | 18.21  | 19.30               |
| GPRS 1 Tx slot  |  | 27.14                     | 27.02 | 27.16  | 28.30               | 18.14                     | 18.02 | 18.16  | 19.30               |
| GPRS 2 Tx slots |  | 25.13                     | 25.01 | 25.25  | 26.30               | 19.13                     | 19.01 | 19.25  | 20.30               |
| GPRS 3 Tx slots |  | 23.11                     | 23.01 | 23.25  | 24.30               | 18.85                     | 18.75 | 18.99  | 20.04               |
| GPRS 4 Tx slots |  | 22.16                     | 22.19 | 22.23  | 23.30               | 19.16                     | 19.19 | 19.23  | 20.30               |
| EDGE 1 Tx slot  |  | 23.32                     | 23.38 | 23.46  | 24.30               | 14.32                     | 14.38 | 14.46  | 15.30               |
| EDGE 2 Tx slots |  | 22.61                     | 22.60 | 22.50  | 23.30               | 16.61                     | 16.60 | 16.50  | 17.30               |
| EDGE 3 Tx slots |  | 20.23                     | 20.37 | 20.34  | 21.30               | 15.97                     | 16.11 | 16.08  | 17.04               |
| EDGE 4 Tx slots |  | 19.08                     | 19.16 | 19.19  | 20.30               | 16.08                     | 16.16 | 16.19  | 17.30               |
| Mode            |  |                           |       | 27.21  |                     |                           | Max.  | 19.25  |                     |
| Attenuator      |  | Cable Loss : 0.8          |       |        |                     |                           |       |        |                     |
| Date            |  | 7/17                      |       |        |                     |                           |       |        |                     |

| Band            |                         | WCDMA Band II (dBm) |       |        | Tune-up Limit (dBm) | WCDMA Band IV (dBm) |        |        | Tune-up Limit (dBm) |
|-----------------|-------------------------|---------------------|-------|--------|---------------------|---------------------|--------|--------|---------------------|
| TX Channel      |                         | 9262                | 9400  | 9538   |                     | 1312                | 1413   | 1513   |                     |
| Rx Channel      |                         | 9662                | 9800  | 9938   |                     | 1537                | 1638   | 1738   |                     |
| Frequency (MHz) |                         | 1852.4              | 1880  | 1907.6 |                     | 1712.4              | 1732.6 | 1752.6 |                     |
| 3GPP Rel 99     | RMC 12.2Kbps            | 19.12               | 19.22 | 19.17  | 20.00               | 19.29               | 19.33  | 19.30  | 20.00               |
| 3GPP Rel 5      | HSDPA Subtest-1         | 18.26               | 18.30 | 18.32  | 19.00               | 18.28               | 18.20  | 18.22  | 19.00               |
| 3GPP Rel 5      | HSDPA Subtest-2         | 18.25               | 18.19 | 18.29  | 19.00               | 18.27               | 18.15  | 18.17  | 19.00               |
| 3GPP Rel 5      | HSDPA Subtest-3         | 17.81               | 17.78 | 17.87  | 18.50               | 17.81               | 17.68  | 17.66  | 18.50               |
| 3GPP Rel 5      | HSDPA Subtest-4         | 17.74               | 17.69 | 17.78  | 18.50               | 17.75               | 17.65  | 17.67  | 18.50               |
| 3GPP Rel 8      | DC-HSDPA Subtest-1      | 18.15               | 18.06 | 18.16  | 19.00               | 18.13               | 18.02  | 18.07  | 19.00               |
| 3GPP Rel 8      | DC-HSDPA Subtest-2      | 18.13               | 18.07 | 18.12  | 19.00               | 18.11               | 18.00  | 18.02  | 19.00               |
| 3GPP Rel 8      | DC-HSDPA Subtest-3      | 17.58               | 17.57 | 18.16  | 19.00               | 17.62               | 17.47  | 17.48  | 18.50               |
| 3GPP Rel 8      | DC-HSDPA Subtest-4      | 17.56               | 17.55 | 17.62  | 18.50               | 17.66               | 17.52  | 17.49  | 18.50               |
| 3GPP Rel 6      | HSUPA Subtest-1         | 17.60               | 17.51 | 17.60  | 18.50               | 17.76               | 17.55  | 17.60  | 18.50               |
| 3GPP Rel 6      | HSUPA Subtest-2         | 18.15               | 18.12 | 18.15  | 19.00               | 18.07               | 18.02  | 18.00  | 19.00               |
| 3GPP Rel 6      | HSUPA Subtest-3         | 17.15               | 17.10 | 17.14  | 18.00               | 17.21               | 17.02  | 16.99  | 18.00               |
| 3GPP Rel 6      | HSUPA Subtest-4         | 18.14               | 18.05 | 18.15  | 19.00               | 18.10               | 18.01  | 18.03  | 19.00               |
| 3GPP Rel 6      | HSUPA Subtest-5         | 17.12               | 17.07 | 17.11  | 18.00               | 17.09               | 16.96  | 16.95  | 17.50               |
| 3GPP Rel 7      | HSPA+ (16QAM) Subtest-1 | 17.11               | 17.14 | 17.17  | 18.00               | 17.03               | 17.06  | 17.04  | 17.50               |
| Attenuator      |                         | Cable Loss          |       |        | 0.8                 | Cable Loss          |        |        | 0.8                 |
| Mode            |                         |                     | Max.  | 19.22  |                     |                     | Max.   | 19.33  |                     |
| Date            |                         | 7/17                |       |        |                     |                     |        |        |                     |

| Band 2 (1900MHz Band) (dBm)<br>Part 24E |            |         |           |             |                |              |                     |
|-----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)                                | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                 |            |         |           | 18700       | 18900          | 19100        |                     |
| Frequency (MHz)                         |            |         |           | 1860        | 1880           | 1900         |                     |
| 20                                      | QPSK       | 1       | 0         | 18.92       | 18.96          | 18.89        |                     |
| 20                                      | QPSK       | 1       | 49        | 18.87       | 18.88          | 18.81        | 20                  |
| 20                                      | QPSK       | 1       | 99        | 18.82       | 18.78          | 18.73        |                     |
| 20                                      | QPSK       | 50      | 0         | 17.86       | 17.92          | 17.87        |                     |
| 20                                      | QPSK       | 50      | 24        | 17.75       | 17.84          | 17.79        | 19                  |
| 20                                      | QPSK       | 50      | 50        | 17.76       | 17.88          | 17.78        |                     |
| 20                                      | QPSK       | 100     | 0         | 17.84       | 17.85          | 17.79        |                     |
| 20                                      | 16QAM      | 1       | 0         | 16.15       | 16.07          | 17.95        | 19                  |
| 20                                      | 16QAM      | 1       | 49        | 16.07       | 16.09          | 17.97        |                     |
| 20                                      | 16QAM      | 1       | 99        | 17.94       | 17.94          | 18.02        |                     |
| 20                                      | 16QAM      | 50      | 0         | 16.90       | 17.01          | 17.05        | 18                  |
| 20                                      | 16QAM      | 50      | 24        | 16.91       | 16.87          | 16.84        |                     |
| 20                                      | 16QAM      | 50      | 50        | 16.73       | 16.78          | 16.93        |                     |
| 20                                      | 16QAM      | 100     | 0         | 16.95       | 16.81          | 16.90        | 18                  |
| 20                                      | 64QAM      | 1       | 0         | 17.13       | 17.14          | 17.23        |                     |
| 20                                      | 64QAM      | 1       | 49        | 17.05       | 17.03          | 17.16        |                     |
| 20                                      | 64QAM      | 1       | 99        | 17.06       | 17.14          | 16.95        | 17                  |
| 20                                      | 64QAM      | 50      | 0         | 15.85       | 16.14          | 15.93        |                     |
| 20                                      | 64QAM      | 50      | 24        | 16.03       | 15.93          | 15.80        |                     |
| 20                                      | 64QAM      | 50      | 50        | 15.84       | 15.97          | 15.79        |                     |
| 20                                      | 64QAM      | 100     | 0         | 16.01       | 15.98          | 15.75        |                     |
| Channel                                 |            |         |           | 1867.5      | 18900          | 19125        | Tune-up limit (dBm) |
| Frequency (MHz)                         |            |         |           | 1857.5      | 1880           | 1902.5       | 20                  |
| 15                                      | QPSK       | 1       | 0         | 18.86       | 18.90          | 18.83        |                     |
| 15                                      | QPSK       | 1       | 37        | 18.81       | 18.82          | 18.75        |                     |
| 15                                      | QPSK       | 1       | 74        | 18.76       | 18.72          | 18.67        | 19                  |
| 15                                      | QPSK       | 36      | 0         | 17.80       | 17.86          | 17.81        |                     |
| 15                                      | QPSK       | 36      | 20        | 17.69       | 17.78          | 17.73        |                     |
| 15                                      | QPSK       | 36      | 39        | 17.70       | 17.82          | 17.72        | 19                  |
| 15                                      | QPSK       | 75      | 0         | 17.78       | 17.79          | 17.73        |                     |
| 15                                      | 16QAM      | 1       | 0         | 18.09       | 18.01          | 17.89        |                     |
| 15                                      | 16QAM      | 1       | 37        | 18.01       | 18.03          | 17.91        | 18                  |
| 15                                      | 16QAM      | 1       | 74        | 17.88       | 17.88          | 17.96        |                     |
| 15                                      | 16QAM      | 36      | 0         | 16.84       | 16.95          | 16.99        |                     |
| 15                                      | 16QAM      | 36      | 20        | 16.85       | 16.81          | 16.78        | 18                  |
| 15                                      | 16QAM      | 36      | 39        | 16.67       | 16.72          | 16.87        |                     |
| 15                                      | 16QAM      | 75      | 0         | 16.89       | 16.75          | 16.84        |                     |
| 15                                      | 64QAM      | 1       | 0         | 17.07       | 17.08          | 17.17        | 18                  |
| 15                                      | 64QAM      | 1       | 37        | 16.99       | 16.97          | 17.10        |                     |
| 15                                      | 64QAM      | 1       | 74        | 17.00       | 17.08          | 16.89        |                     |
| 15                                      | 64QAM      | 36      | 0         | 16.79       | 16.08          | 15.87        | 17                  |
| 15                                      | 64QAM      | 36      | 20        | 15.97       | 16.87          | 15.74        |                     |
| 15                                      | 64QAM      | 36      | 39        | 15.78       | 15.91          | 15.73        |                     |
| 15                                      | 64QAM      | 75      | 0         | 16.95       | 16.92          | 16.69        |                     |
| Channel                                 |            |         |           | 18650       | 18900          | 19150        | Tune-up limit (dBm) |
| Frequency (MHz)                         |            |         |           | 1855        | 1880           | 1905         | 20                  |
| 10                                      | QPSK       | 1       | 0         | 18.80       | 18.84          | 18.77        |                     |
| 10                                      | QPSK       | 1       | 25        | 18.75       | 18.76          | 18.69        |                     |
| 10                                      | QPSK       | 1       | 49        | 18.70       | 18.66          | 18.61        | 19                  |
| 10                                      | QPSK       | 25      | 0         | 17.74       | 17.80          | 17.75        |                     |
| 10                                      | QPSK       | 25      | 12        | 17.63       | 17.72          | 17.67        |                     |
| 10                                      | QPSK       | 25      | 25        | 17.64       | 17.76          | 17.66        | 19                  |
| 10                                      | QPSK       | 50      | 0         | 17.72       | 17.73          | 17.67        |                     |
| 10                                      | 16QAM      | 1       | 0         | 18.03       | 17.95          | 17.83        |                     |
| 10                                      | 16QAM      | 1       | 25        | 17.95       | 17.97          | 17.85        | 18                  |
| 10                                      | 16QAM      | 1       | 49        | 17.82       | 17.82          | 17.90        |                     |
| 10                                      | 16QAM      | 25      | 0         | 16.78       | 16.89          | 16.93        |                     |
| 10                                      | 16QAM      | 25      | 12        | 16.79       | 16.75          | 16.72        | 18                  |
| 10                                      | 16QAM      | 25      | 25        | 16.61       | 16.66          | 16.81        |                     |
| 10                                      | 16QAM      | 50      | 0         | 16.83       | 16.69          | 16.78        |                     |
| 10                                      | 64QAM      | 1       | 0         | 17.01       | 17.02          | 17.11        | 18                  |
| 10                                      | 64QAM      | 1       | 25        | 16.93       | 16.91          | 17.04        |                     |
| 10                                      | 64QAM      | 1       | 49        | 16.94       | 17.02          | 16.83        |                     |
| 10                                      | 64QAM      | 25      | 0         | 15.73       | 16.02          | 15.81        | 17                  |
| 10                                      | 64QAM      | 25      | 12        | 15.91       | 15.81          | 15.68        |                     |
| 10                                      | 64QAM      | 25      | 25        | 15.72       | 15.85          | 15.67        |                     |
| 10                                      | 64QAM      | 50      | 0         | 16.89       | 16.86          | 16.63        |                     |
| Channel                                 |            |         |           | 18625       | 18900          | 19175        | Tune-up limit (dBm) |
| Frequency (MHz)                         |            |         |           | 1852.5      | 1880           | 1907.5       | 20                  |
| 5                                       | QPSK       | 1       | 0         | 18.74       | 18.78          | 18.71        |                     |
| 5                                       | QPSK       | 1       | 12        | 18.69       | 18.70          | 18.63        |                     |
| 5                                       | QPSK       | 1       | 24        | 18.64       | 18.60          | 18.55        | 19                  |
| 5                                       | QPSK       | 12      | 0         | 17.68       | 17.74          | 17.69        |                     |
| 5                                       | QPSK       | 12      | 7         | 17.57       | 17.66          | 17.61        |                     |
| 5                                       | QPSK       | 12      | 13        | 17.58       | 17.70          | 17.60        | 19                  |
| 5                                       | QPSK       | 25      | 0         | 17.66       | 17.67          | 17.61        |                     |
| 5                                       | 16QAM      | 1       | 0         | 17.97       | 17.89          | 17.77        |                     |
| 5                                       | 16QAM      | 1       | 12        | 17.89       | 17.91          | 17.79        | 18                  |
| 5                                       | 16QAM      | 1       | 24        | 17.76       | 17.76          | 17.84        |                     |
| 5                                       | 16QAM      | 12      | 0         | 16.72       | 16.83          | 16.97        |                     |
| 5                                       | 16QAM      | 12      | 7         | 16.73       | 16.69          | 16.86        | 18                  |
| 5                                       | 16QAM      | 12      | 13        | 16.55       | 16.60          | 16.75        |                     |
| 5                                       | 16QAM      | 25      | 0         | 16.77       | 16.63          | 16.72        |                     |
| 5                                       | 64QAM      | 1       | 0         | 16.95       | 16.86          | 17.05        | 18                  |
| 5                                       | 64QAM      | 1       | 12        | 16.87       | 16.85          | 16.98        |                     |
| 5                                       | 64QAM      | 1       | 24        | 16.88       | 16.96          | 16.77        |                     |
| 5                                       | 64QAM      | 12      | 0         | 15.67       | 15.96          | 15.75        | 17                  |
| 5                                       | 64QAM      | 12      | 7         | 15.85       | 15.75          | 15.62        |                     |
| 5                                       | 64QAM      | 12      | 13        | 15.66       | 15.79          | 15.61        |                     |
| 5                                       | 64QAM      | 25      | 0         | 15.83       | 15.80          | 15.57        |                     |
| Channel                                 |            |         |           | 18615       | 18900          | 19185        | Tune-up limit (dBm) |
| Frequency (MHz)                         |            |         |           | 1851.5      | 1880           | 1908.5       | 20                  |
| 3                                       | QPSK       | 1       | 0         | 18.71       | 18.75          | 18.68        |                     |
| 3                                       | QPSK       | 1       | 8         | 18.66       | 18.67          | 18.60        |                     |
| 3                                       | QPSK       | 1       | 14        | 18.61       | 18.57          | 18.52        | 19                  |
| 3                                       | QPSK       | 8       | 0         | 17.65       | 17.71          | 17.66        |                     |
| 3                                       | QPSK       | 8       | 4         | 17.54       | 17.63          | 17.58        |                     |
| 3                                       | QPSK       | 8       | 7         | 17.55       | 17.67          | 17.57        | 19                  |
| 3                                       | QPSK       | 15      | 0         | 17.63       | 17.64          | 17.58        |                     |
| 3                                       | 16QAM      | 1       | 0         | 17.94       | 17.86          | 17.74        |                     |
| 3                                       | 16QAM      | 1       | 8         | 17.86       | 17.88          | 17.76        | 18                  |
| 3                                       | 16QAM      | 1       | 14        | 17.73       | 17.73          | 17.81        |                     |
| 3                                       | 16QAM      | 8       | 0         | 16.68       | 16.80          | 16.84        |                     |
| 3                                       | 16QAM      | 8       | 4         | 16.70       | 16.66          | 16.63        | 18                  |
| 3                                       | 16QAM      | 8       | 7         | 16.52       | 16.57          | 16.72        |                     |
| 3                                       | 16QAM      | 15      | 0         | 16.74       | 16.60          | 16.69        |                     |
| 3                                       | 64QAM      | 1       | 0         | 16.92       | 16.93          | 17.02        | 18                  |
| 3                                       | 64QAM      | 1       | 8         | 16.84       | 16.82          | 16.95        |                     |
| 3                                       | 64QAM      | 1       | 14        | 16.85       | 16.93          | 16.74        |                     |
| 3                                       | 64QAM      | 8       | 0         | 15.64       | 15.93          | 15.72        | 17                  |
| 3                                       | 64QAM      | 8       | 4         | 15.82       | 15.72          | 15.59        |                     |
| 3                                       | 64QAM      | 8       | 7         | 15.63       | 15.76          | 15.58        |                     |
| 3                                       | 64QAM      | 15      | 0         | 15.80       | 15.77          | 15.54        |                     |
| Channel                                 |            |         |           | 18607       | 18900          | 19193        | Tune-up limit (dBm) |
| Frequency (MHz)                         |            |         |           | 1850.7      | 1880           | 1909.3       | 20                  |
| 1.4                                     | QPSK       | 1       | 0         | 18.66       | 18.70          | 18.63        |                     |
| 1.4                                     | QPSK       | 1       | 3         | 18.61       | 18.62          | 18.55        |                     |
| 1.4                                     | QPSK       | 1       | 5         | 18.56       | 18.52          | 18.47        | 20                  |
| 1.4                                     | QPSK       | 3       | 0         | 17.60       | 17.66          | 17.61        |                     |
| 1.4                                     | QPSK       | 3       | 1         | 17.49       | 17.58          | 17.53        |                     |

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required) |            |         |           |             |                |              |                     |
|----------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)                                                       | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                        |            |         |           | 20050       | 20175          | 20300        |                     |
| Frequency (MHz)                                                |            |         |           | 1720        | 1732.5         | 1745         |                     |
| 20                                                             | QPSK       | 1       | 0         | 18.99       | 19.03          | 18.96        | 20                  |
| 20                                                             | QPSK       | 1       | 49        | 18.94       | 18.95          | 18.88        |                     |
| 20                                                             | QPSK       | 1       | 99        | 18.89       | 18.85          | 18.80        |                     |
| 20                                                             | QPSK       | 50      | 0         | 17.93       | 17.99          | 17.94        | 19                  |
| 20                                                             | QPSK       | 50      | 24        | 17.82       | 17.91          | 17.86        |                     |
| 20                                                             | QPSK       | 50      | 50        | 17.83       | 17.95          | 17.85        |                     |
| 20                                                             | QPSK       | 100     | 0         | 17.91       | 17.92          | 17.86        | 19                  |
| 20                                                             | 16QAM      | 1       | 0         | 18.22       | 18.14          | 18.02        |                     |
| 20                                                             | 16QAM      | 1       | 49        | 18.14       | 18.16          | 18.04        |                     |
| 20                                                             | 16QAM      | 1       | 99        | 18.01       | 18.01          | 18.09        | 18                  |
| 20                                                             | 16QAM      | 50      | 0         | 16.97       | 17.08          | 17.12        |                     |
| 20                                                             | 16QAM      | 50      | 24        | 16.98       | 16.94          | 16.91        |                     |
| 20                                                             | 16QAM      | 50      | 50        | 16.80       | 16.85          | 17.00        | 18                  |
| 20                                                             | 16QAM      | 100     | 0         | 17.02       | 16.88          | 16.97        |                     |
| 20                                                             | 64QAM      | 1       | 0         | 17.20       | 17.21          | 17.30        |                     |
| 20                                                             | 64QAM      | 1       | 49        | 17.12       | 17.10          | 17.23        | 18                  |
| 20                                                             | 64QAM      | 1       | 99        | 17.13       | 17.21          | 17.02        |                     |
| 20                                                             | 64QAM      | 50      | 0         | 15.92       | 16.21          | 16.00        |                     |
| 20                                                             | 64QAM      | 50      | 24        | 16.10       | 16.00          | 15.87        | 17                  |
| 20                                                             | 64QAM      | 50      | 50        | 15.91       | 16.04          | 15.86        |                     |
| 20                                                             | 64QAM      | 100     | 0         | 16.08       | 16.05          | 15.82        |                     |
| Channel                                                        |            |         |           | 20025       | 20175          | 20325        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1717.5      | 1732.5         | 1747.5       | 20                  |
| 15                                                             | QPSK       | 1       | 0         | 18.94       | 18.98          | 18.91        |                     |
| 15                                                             | QPSK       | 1       | 37        | 18.89       | 18.90          | 18.83        |                     |
| 15                                                             | QPSK       | 1       | 74        | 18.84       | 18.80          | 18.75        | 19                  |
| 15                                                             | QPSK       | 36      | 0         | 17.88       | 17.94          | 17.89        |                     |
| 15                                                             | QPSK       | 36      | 20        | 17.77       | 17.86          | 17.81        |                     |
| 15                                                             | QPSK       | 36      | 39        | 17.78       | 17.90          | 17.80        | 19                  |
| 15                                                             | QPSK       | 75      | 0         | 17.86       | 17.87          | 17.81        |                     |
| 15                                                             | 16QAM      | 1       | 0         | 18.17       | 18.09          | 17.97        |                     |
| 15                                                             | 16QAM      | 1       | 37        | 18.09       | 18.11          | 17.99        | 19                  |
| 15                                                             | 16QAM      | 1       | 74        | 17.96       | 17.96          | 18.04        |                     |
| 15                                                             | 16QAM      | 36      | 0         | 16.92       | 17.03          | 17.07        |                     |
| 15                                                             | 16QAM      | 36      | 20        | 16.93       | 16.89          | 16.86        | 18                  |
| 15                                                             | 16QAM      | 36      | 39        | 16.75       | 16.80          | 16.85        |                     |
| 15                                                             | 16QAM      | 75      | 0         | 16.97       | 16.83          | 16.92        |                     |
| 15                                                             | 64QAM      | 1       | 0         | 17.15       | 17.16          | 17.25        | 18                  |
| 15                                                             | 64QAM      | 1       | 37        | 17.07       | 17.05          | 17.18        |                     |
| 15                                                             | 64QAM      | 1       | 74        | 17.08       | 17.16          | 16.97        |                     |
| 15                                                             | 64QAM      | 36      | 0         | 15.87       | 16.16          | 15.95        | 17                  |
| 15                                                             | 64QAM      | 36      | 20        | 16.05       | 15.95          | 15.82        |                     |
| 15                                                             | 64QAM      | 36      | 39        | 15.86       | 15.99          | 15.81        |                     |
| 15                                                             | 64QAM      | 75      | 0         | 16.03       | 16.00          | 15.77        |                     |
| Channel                                                        |            |         |           | 20000       | 20175          | 20300        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1715        | 1732.5         | 1750         | 20                  |
| 10                                                             | QPSK       | 1       | 0         | 18.88       | 18.92          | 18.85        |                     |
| 10                                                             | QPSK       | 1       | 25        | 18.83       | 18.84          | 18.77        |                     |
| 10                                                             | QPSK       | 1       | 49        | 18.78       | 18.74          | 18.69        | 19                  |
| 10                                                             | QPSK       | 25      | 0         | 17.82       | 17.88          | 17.83        |                     |
| 10                                                             | QPSK       | 25      | 12        | 17.71       | 17.80          | 17.75        |                     |
| 10                                                             | QPSK       | 25      | 25        | 17.72       | 17.84          | 17.74        | 19                  |
| 10                                                             | QPSK       | 50      | 0         | 17.80       | 17.81          | 17.75        |                     |
| 10                                                             | 16QAM      | 1       | 0         | 18.11       | 18.03          | 17.91        |                     |
| 10                                                             | 16QAM      | 1       | 25        | 18.03       | 18.05          | 17.93        | 19                  |
| 10                                                             | 16QAM      | 49      | 0         | 17.90       | 17.90          | 17.98        |                     |
| 10                                                             | 16QAM      | 25      | 0         | 16.86       | 16.97          | 17.01        |                     |
| 10                                                             | 16QAM      | 25      | 12        | 16.87       | 16.83          | 16.80        | 18                  |
| 10                                                             | 16QAM      | 25      | 25        | 16.69       | 16.74          | 16.89        |                     |
| 10                                                             | 16QAM      | 50      | 0         | 16.91       | 16.77          | 16.86        |                     |
| 10                                                             | 64QAM      | 1       | 0         | 17.09       | 17.10          | 17.19        | 18                  |
| 10                                                             | 64QAM      | 1       | 25        | 17.01       | 16.99          | 17.12        |                     |
| 10                                                             | 64QAM      | 1       | 49        | 17.02       | 17.10          | 16.91        |                     |
| 10                                                             | 64QAM      | 25      | 0         | 15.81       | 16.10          | 15.89        | 17                  |
| 10                                                             | 64QAM      | 25      | 12        | 15.99       | 15.89          | 15.76        |                     |
| 10                                                             | 64QAM      | 25      | 25        | 15.80       | 15.93          | 15.75        |                     |
| 10                                                             | 64QAM      | 50      | 0         | 15.97       | 15.94          | 15.71        |                     |
| Channel                                                        |            |         |           | 19975       | 20175          | 20375        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1712.5      | 1732.5         | 1752.5       | 20                  |
| 5                                                              | QPSK       | 1       | 0         | 18.83       | 18.87          | 18.80        |                     |
| 5                                                              | QPSK       | 1       | 12        | 18.78       | 18.79          | 18.72        |                     |
| 5                                                              | QPSK       | 1       | 24        | 18.73       | 18.69          | 18.64        | 19                  |
| 5                                                              | QPSK       | 12      | 0         | 17.77       | 17.83          | 17.78        |                     |
| 5                                                              | QPSK       | 12      | 7         | 17.66       | 17.75          | 17.70        |                     |
| 5                                                              | QPSK       | 12      | 13        | 17.67       | 17.79          | 17.69        | 19                  |
| 5                                                              | QPSK       | 25      | 0         | 17.75       | 17.76          | 17.73        |                     |
| 5                                                              | 16QAM      | 1       | 0         | 18.06       | 17.98          | 17.86        |                     |
| 5                                                              | 16QAM      | 1       | 12        | 17.98       | 18.00          | 17.88        | 19                  |
| 5                                                              | 16QAM      | 1       | 24        | 17.85       | 17.85          | 17.93        |                     |
| 5                                                              | 16QAM      | 12      | 0         | 16.81       | 16.92          | 16.96        |                     |
| 5                                                              | 16QAM      | 12      | 7         | 16.82       | 16.78          | 16.75        | 18                  |
| 5                                                              | 16QAM      | 12      | 13        | 16.84       | 16.69          | 16.84        |                     |
| 5                                                              | 16QAM      | 25      | 0         | 16.86       | 16.72          | 16.81        |                     |
| 5                                                              | 64QAM      | 1       | 0         | 17.04       | 17.05          | 17.14        | 18                  |
| 5                                                              | 64QAM      | 1       | 12        | 16.96       | 16.94          | 17.07        |                     |
| 5                                                              | 64QAM      | 1       | 24        | 16.97       | 17.05          | 16.86        |                     |
| 5                                                              | 64QAM      | 12      | 0         | 15.76       | 16.05          | 15.84        | 17                  |
| 5                                                              | 64QAM      | 12      | 7         | 15.94       | 15.84          | 15.71        |                     |
| 5                                                              | 64QAM      | 12      | 13        | 15.75       | 15.88          | 15.70        |                     |
| 5                                                              | 64QAM      | 25      | 0         | 15.92       | 15.89          | 15.66        |                     |
| Channel                                                        |            |         |           | 19965       | 20175          | 20385        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1711.5      | 1732.5         | 1753.5       | 20                  |
| 3                                                              | QPSK       | 1       | 0         | 18.78       | 18.82          | 18.75        |                     |
| 3                                                              | QPSK       | 1       | 8         | 18.73       | 18.74          | 18.67        |                     |
| 3                                                              | QPSK       | 1       | 14        | 18.68       | 18.64          | 18.69        | 19                  |
| 3                                                              | QPSK       | 8       | 0         | 17.72       | 17.78          | 17.77        |                     |
| 3                                                              | QPSK       | 8       | 7         | 17.61       | 17.70          | 17.65        |                     |
| 3                                                              | QPSK       | 8       | 7         | 17.62       | 17.74          | 17.64        | 19                  |
| 3                                                              | QPSK       | 16      | 0         | 17.70       | 17.71          | 17.65        |                     |
| 3                                                              | 16QAM      | 1       | 0         | 18.01       | 17.93          | 17.81        |                     |
| 3                                                              | 16QAM      | 1       | 8         | 17.93       | 17.95          | 17.83        | 19                  |
| 3                                                              | 16QAM      | 1       | 14        | 17.80       | 17.80          | 17.88        |                     |
| 3                                                              | 16QAM      | 8       | 0         | 16.76       | 16.87          | 16.81        |                     |
| 3                                                              | 16QAM      | 8       | 4         | 16.77       | 16.73          | 16.70        | 18                  |
| 3                                                              | 16QAM      | 8       | 7         | 16.59       | 16.64          | 16.79        |                     |
| 3                                                              | 16QAM      | 15      | 0         | 16.81       | 16.67          | 16.76        |                     |
| 3                                                              | 64QAM      | 1       | 0         | 16.99       | 17.00          | 17.09        | 18                  |
| 3                                                              | 64QAM      | 1       | 8         | 16.91       | 16.89          | 17.02        |                     |
| 3                                                              | 64QAM      | 1       | 14        | 16.92       | 17.00          | 16.81        |                     |
| 3                                                              | 64QAM      | 8       | 0         | 15.71       | 16.00          | 15.79        | 17                  |
| 3                                                              | 64QAM      | 8       | 4         | 15.89       | 15.79          | 15.66        |                     |
| 3                                                              | 64QAM      | 8       | 7         | 15.70       | 15.83          | 15.65        |                     |
| 3                                                              | 64QAM      | 15      | 0         | 15.87       | 15.84          | 15.61        |                     |
| Channel                                                        |            |         |           | 19957       | 20175          | 20393        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1710.7      | 1732.5         | 1754.3       | 20                  |
| 1.4                                                            | QPSK       | 1       | 0         | 18.72       | 18.76          | 18.69        |                     |
| 1.4                                                            | QPSK       | 1       | 3         | 18.67       | 18.68          | 18.61        |                     |
| 1.4                                                            | QPSK       | 1       | 5         | 18.62       | 18.58          | 18.53        | 20                  |
| 1.4                                                            | QPSK       | 3       | 0         | 17.66       | 17.72          | 17.67        |                     |
| 1.4                                                            | QPSK       | 3       | 1         | 17.55       | 17.64          | 17.59        |                     |



|     |       |   |   |       |       |       |    |
|-----|-------|---|---|-------|-------|-------|----|
| 1.4 | QPSK  | 3 | 3 | 17.50 | 17.62 | 17.52 |    |
| 1.4 | QPSK  | 6 | 0 | 17.58 | 17.59 | 17.53 | 19 |
| 1.4 | 16QAM | 1 | 0 | 17.89 | 17.81 | 17.69 |    |
| 1.4 | 16QAM | 1 | 3 | 17.81 | 17.83 | 17.71 |    |
| 1.4 | 16QAM | 1 | 5 | 17.68 | 17.68 | 17.76 | 19 |
| 1.4 | 16QAM | 3 | 0 | 16.64 | 16.75 | 16.79 |    |
| 1.4 | 16QAM | 3 | 1 | 16.65 | 16.61 | 16.58 |    |
| 1.4 | 16QAM | 3 | 3 | 16.47 | 16.52 | 16.67 |    |
| 1.4 | 16QAM | 6 | 0 | 16.69 | 16.55 | 16.64 | 18 |
| 1.4 | 64QAM | 1 | 0 | 16.87 | 16.88 | 16.97 |    |
| 1.4 | 64QAM | 1 | 3 | 16.79 | 16.77 | 16.90 |    |
| 1.4 | 64QAM | 1 | 5 | 16.80 | 16.88 | 16.69 | 18 |
| 1.4 | 64QAM | 3 | 0 | 15.59 | 15.88 | 15.67 |    |
| 1.4 | 64QAM | 3 | 1 | 15.77 | 15.67 | 15.54 |    |
| 1.4 | 64QAM | 3 | 3 | 15.58 | 15.71 | 15.53 |    |
| 1.4 | 64QAM | 6 | 0 | 15.75 | 15.72 | 15.49 | 17 |

|     |       |   |   |       |       |       |    |
|-----|-------|---|---|-------|-------|-------|----|
| 1.4 | QPSK  | 3 | 3 | 17.56 | 17.68 | 17.58 |    |
| 1.4 | QPSK  | 6 | 0 | 17.64 | 17.65 | 17.59 | 19 |
| 1.4 | 16QAM | 1 | 0 | 17.95 | 17.87 | 17.75 |    |
| 1.4 | 16QAM | 1 | 3 | 17.87 | 17.89 | 17.77 |    |
| 1.4 | 16QAM | 1 | 5 | 17.74 | 17.74 | 17.82 | 19 |
| 1.4 | 16QAM | 3 | 0 | 16.70 | 16.81 | 16.85 |    |
| 1.4 | 16QAM | 3 | 1 | 16.71 | 16.67 | 16.64 |    |
| 1.4 | 16QAM | 3 | 3 | 16.53 | 16.58 | 16.73 |    |
| 1.4 | 16QAM | 6 | 0 | 16.75 | 16.61 | 16.70 | 18 |
| 1.4 | 64QAM | 1 | 0 | 16.93 | 16.94 | 17.03 |    |
| 1.4 | 64QAM | 1 | 3 | 16.85 | 16.83 | 16.98 |    |
| 1.4 | 64QAM | 1 | 5 | 16.86 | 16.94 | 16.75 | 18 |
| 1.4 | 64QAM | 3 | 0 | 15.65 | 15.94 | 15.73 |    |
| 1.4 | 64QAM | 3 | 1 | 15.83 | 15.73 | 15.60 |    |
| 1.4 | 64QAM | 3 | 3 | 15.64 | 15.77 | 15.59 |    |
| 1.4 | 64QAM | 6 | 0 | 15.81 | 15.78 | 15.55 | 17 |

| Band 7 (2600MHz Band) (dBm)<br>Part 27 |            |         |           |             |                |              |                     |
|----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                               | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                |            |         |           | 20850       | 21100          | 21350        |                     |
| Frequency (MHz)                        |            |         |           | 2510        | 2535           | 2560         |                     |
| 20                                     | QPSK       | 1       | 0         | 20.99       | 21.05          | 21.00        | 22                  |
| 20                                     | QPSK       | 1       | 49        | 20.88       | 20.96          | 20.84        |                     |
| 20                                     | QPSK       | 1       | 99        | 20.86       | 20.88          | 20.90        |                     |
| 20                                     | QPSK       | 50      | 0         | 19.98       | 20.04          | 19.95        | 21                  |
| 20                                     | QPSK       | 50      | 24        | 19.95       | 20.00          | 19.83        |                     |
| 20                                     | QPSK       | 50      | 50        | 19.88       | 20.01          | 19.79        |                     |
| 20                                     | QPSK       | 100     | 0         | 19.93       | 20.01          | 19.84        | 21                  |
| 20                                     | 16QAM      | 1       | 0         | 20.12       | 20.09          | 19.97        |                     |
| 20                                     | 16QAM      | 1       | 49        | 20.01       | 20.00          | 20.14        |                     |
| 20                                     | 16QAM      | 1       | 99        | 20.04       | 19.95          | 20.12        | 20                  |
| 20                                     | 16QAM      | 50      | 0         | 19.04       | 18.97          | 19.06        |                     |
| 20                                     | 16QAM      | 50      | 24        | 18.88       | 18.89          | 18.85        |                     |
| 20                                     | 16QAM      | 50      | 50        | 18.78       | 18.99          | 18.86        | 20                  |
| 20                                     | 16QAM      | 100     | 0         | 19.03       | 18.96          | 19.00        |                     |
| 20                                     | 64QAM      | 1       | 0         | 19.08       | 19.07          | 19.06        |                     |
| 20                                     | 64QAM      | 1       | 49        | 19.19       | 19.05          | 18.95        | 20                  |
| 20                                     | 64QAM      | 1       | 99        | 19.09       | 19.17          | 18.98        |                     |
| 20                                     | 64QAM      | 50      | 0         | 18.10       | 18.20          | 17.94        |                     |
| 20                                     | 64QAM      | 50      | 24        | 18.01       | 18.11          | 17.85        | 19                  |
| 20                                     | 64QAM      | 50      | 50        | 18.00       | 17.91          | 17.99        |                     |
| 20                                     | 64QAM      | 100     | 0         | 17.96       | 17.98          | 17.89        |                     |
| Channel                                |            |         |           | 23625       | 21100          | 21375        | Tune-up limit (dBm) |
| Frequency (MHz)                        |            |         |           | 2507.5      | 2535           | 2562.5       |                     |
| 15                                     | QPSK       | 1       | 0         | 20.93       | 20.99          | 20.94        | 22                  |
| 15                                     | QPSK       | 1       | 37        | 20.82       | 20.90          | 20.78        |                     |
| 15                                     | QPSK       | 1       | 74        | 20.80       | 20.82          | 20.84        |                     |
| 15                                     | QPSK       | 36      | 0         | 19.92       | 19.98          | 19.89        | 21                  |
| 15                                     | QPSK       | 36      | 20        | 19.89       | 19.94          | 19.77        |                     |
| 15                                     | QPSK       | 36      | 39        | 19.82       | 19.95          | 19.73        |                     |
| 15                                     | QPSK       | 75      | 0         | 19.87       | 19.95          | 19.78        | 21                  |
| 15                                     | 16QAM      | 1       | 0         | 20.06       | 20.03          | 19.91        |                     |
| 15                                     | 16QAM      | 1       | 37        | 19.95       | 19.94          | 20.08        |                     |
| 15                                     | 16QAM      | 1       | 74        | 19.98       | 19.89          | 20.06        | 20                  |
| 15                                     | 16QAM      | 36      | 0         | 18.98       | 18.91          | 19.00        |                     |
| 15                                     | 16QAM      | 36      | 20        | 18.82       | 18.83          | 18.79        |                     |
| 15                                     | 16QAM      | 36      | 39        | 18.72       | 18.93          | 18.80        | 20                  |
| 15                                     | 16QAM      | 75      | 0         | 18.97       | 18.90          | 18.94        |                     |
| 15                                     | 64QAM      | 1       | 0         | 19.02       | 19.01          | 19.00        |                     |
| 15                                     | 64QAM      | 1       | 37        | 19.13       | 18.99          | 18.89        | 20                  |
| 15                                     | 64QAM      | 1       | 74        | 19.03       | 19.11          | 18.92        |                     |
| 15                                     | 64QAM      | 36      | 0         | 18.04       | 18.14          | 17.88        |                     |
| 15                                     | 64QAM      | 36      | 20        | 17.95       | 18.05          | 17.79        | 19                  |
| 15                                     | 64QAM      | 36      | 39        | 17.94       | 17.85          | 17.93        |                     |
| 15                                     | 64QAM      | 75      | 0         | 17.90       | 17.92          | 17.83        |                     |
| Channel                                |            |         |           | 20800       | 21100          | 21400        | Tune-up limit (dBm) |
| Frequency (MHz)                        |            |         |           | 2505        | 2535           | 2565         |                     |
| 10                                     | QPSK       | 1       | 0         | 20.88       | 20.94          | 20.89        | 22                  |
| 10                                     | QPSK       | 1       | 25        | 20.77       | 20.85          | 20.73        |                     |
| 10                                     | QPSK       | 1       | 49        | 20.75       | 20.77          | 20.79        |                     |
| 10                                     | QPSK       | 25      | 0         | 19.87       | 19.93          | 19.84        | 21                  |
| 10                                     | QPSK       | 25      | 12        | 19.84       | 19.89          | 19.72        |                     |
| 10                                     | QPSK       | 25      | 25        | 19.77       | 19.90          | 19.68        |                     |
| 10                                     | QPSK       | 50      | 0         | 19.82       | 19.90          | 19.73        | 21                  |
| 10                                     | 16QAM      | 1       | 0         | 20.01       | 19.98          | 19.86        |                     |
| 10                                     | 16QAM      | 1       | 25        | 19.90       | 19.89          | 20.03        |                     |
| 10                                     | 16QAM      | 1       | 49        | 19.93       | 19.84          | 20.01        | 20                  |
| 10                                     | 16QAM      | 25      | 0         | 18.93       | 18.86          | 18.95        |                     |
| 10                                     | 16QAM      | 25      | 12        | 18.77       | 18.78          | 18.74        |                     |
| 10                                     | 16QAM      | 25      | 25        | 18.67       | 18.88          | 18.75        | 20                  |
| 10                                     | 16QAM      | 50      | 0         | 18.92       | 18.85          | 18.89        |                     |
| 10                                     | 64QAM      | 1       | 0         | 18.97       | 18.96          | 18.95        |                     |
| 10                                     | 64QAM      | 1       | 25        | 19.08       | 18.94          | 18.84        | 20                  |
| 10                                     | 64QAM      | 1       | 49        | 18.98       | 19.06          | 18.87        |                     |
| 10                                     | 64QAM      | 25      | 0         | 17.99       | 18.09          | 17.83        |                     |
| 10                                     | 64QAM      | 25      | 12        | 17.90       | 18.00          | 17.74        | 19                  |
| 10                                     | 64QAM      | 25      | 25        | 17.89       | 17.80          | 17.88        |                     |
| 10                                     | 64QAM      | 50      | 0         | 17.85       | 17.87          | 17.78        |                     |
| Channel                                |            |         |           | 20775       | 21100          | 21425        | Tune-up limit (dBm) |
| Frequency (MHz)                        |            |         |           | 2502.5      | 2535           | 2567.5       |                     |
| 5                                      | QPSK       | 1       | 0         | 20.82       | 20.88          | 20.83        | 22                  |
| 5                                      | QPSK       | 1       | 12        | 20.71       | 20.79          | 20.67        |                     |
| 5                                      | QPSK       | 1       | 24        | 20.69       | 20.71          | 20.73        |                     |
| 5                                      | QPSK       | 12      | 0         | 19.81       | 19.87          | 19.78        | 21                  |
| 5                                      | QPSK       | 12      | 7         | 19.78       | 19.83          | 19.66        |                     |
| 5                                      | QPSK       | 12      | 13        | 19.71       | 19.84          | 19.62        |                     |
| 5                                      | QPSK       | 25      | 0         | 19.76       | 19.84          | 19.67        | 21                  |
| 5                                      | 16QAM      | 1       | 0         | 19.95       | 19.92          | 19.80        |                     |
| 5                                      | 16QAM      | 1       | 12        | 19.84       | 19.83          | 19.97        |                     |
| 5                                      | 16QAM      | 1       | 24        | 19.87       | 19.78          | 19.95        | 20                  |
| 5                                      | 16QAM      | 12      | 0         | 18.87       | 18.80          | 18.89        |                     |
| 5                                      | 16QAM      | 12      | 7         | 18.71       | 18.72          | 18.68        |                     |
| 5                                      | 16QAM      | 12      | 13        | 18.61       | 18.82          | 18.69        | 20                  |
| 5                                      | 16QAM      | 25      | 0         | 18.86       | 18.79          | 18.83        |                     |
| 5                                      | 64QAM      | 1       | 0         | 18.91       | 18.90          | 18.89        |                     |
| 5                                      | 64QAM      | 1       | 12        | 19.02       | 18.88          | 18.78        | 20                  |
| 5                                      | 64QAM      | 1       | 24        | 18.92       | 19.00          | 18.81        |                     |
| 5                                      | 64QAM      | 12      | 0         | 17.93       | 18.03          | 17.77        |                     |
| 5                                      | 64QAM      | 12      | 7         | 17.84       | 17.94          | 17.68        | 19                  |
| 5                                      | 64QAM      | 12      | 13        | 17.83       | 17.74          | 17.82        |                     |
| 5                                      | 64QAM      | 25      | 0         | 17.79       | 17.81          | 17.72        |                     |

| Band 25 (1900MHz Band) (dBm)<br>Part 24E |            |         |           |             |                |              |                     |
|------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                 | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                  |            |         |           | 26140       | 26365          | 26590        |                     |
| Frequency (MHz)                          |            |         |           | 1860        | 1882.5         | 1905         |                     |
| 20                                       | QPSK       | 1       | 0         | 19.00       | 19.07          | 19.03        | 20                  |
| 20                                       | QPSK       | 1       | 49        | 18.91       | 18.96          | 18.92        |                     |
| 20                                       | QPSK       | 1       | 99        | 18.87       | 18.93          | 18.84        |                     |
| 20                                       | QPSK       | 50      | 0         | 18.00       | 18.06          | 18.01        | 19                  |
| 20                                       | QPSK       | 50      | 24        | 17.91       | 17.99          | 17.92        |                     |
| 20                                       | QPSK       | 50      | 50        | 17.95       | 17.96          | 17.93        |                     |
| 20                                       | QPSK       | 100     | 0         | 17.93       | 17.98          | 17.90        | 19                  |
| 20                                       | 16QAM      | 1       | 0         | 18.10       | 18.19          | 18.14        |                     |
| 20                                       | 16QAM      | 1       | 49        | 18.04       | 18.16          | 18.09        |                     |
| 20                                       | 16QAM      | 1       | 99        | 17.99       | 18.12          | 18.01        | 18                  |
| 20                                       | 16QAM      | 50      | 0         | 17.01       | 17.09          | 17.05        |                     |
| 20                                       | 16QAM      | 50      | 24        | 16.93       | 17.05          | 16.98        |                     |
| 20                                       | 16QAM      | 50      | 50        | 16.86       | 16.98          | 16.91        | 18                  |
| 20                                       | 16QAM      | 100     | 0         | 16.92       | 17.00          | 16.94        |                     |
| 20                                       | 64QAM      | 1       | 0         | 17.16       | 17.20          | 17.12        |                     |
| 20                                       | 64QAM      | 1       | 49        | 17.11       | 17.15          | 17.17        | 18                  |
| 20                                       | 64QAM      | 1       | 99        | 17.04       | 17.09          | 17.06        |                     |
| 20                                       | 64QAM      | 50      | 0         | 16.04       | 16.13          | 16.08        |                     |
| 20                                       | 64QAM      | 50      | 24        | 15.97       | 16.05          | 15.99        | 17                  |
| 20                                       | 64QAM      | 50      | 50        | 15.93       | 16.02          | 15.95        |                     |
| 20                                       | 64QAM      | 100     | 0         | 15.96       | 16.01          | 15.96        |                     |
| Channel                                  |            |         |           | 26115       | 26365          | 26615        |                     |
| Frequency (MHz)                          |            |         |           | 1857.5      | 1882.5         | 1907.5       |                     |
| 15                                       | QPSK       | 1       | 0         | 18.95       | 19.02          | 18.98        | 20                  |
| 15                                       | QPSK       | 1       | 37        | 18.86       | 18.91          | 18.87        |                     |
| 15                                       | QPSK       | 1       | 74        | 18.82       | 18.88          | 18.79        |                     |
| 15                                       | QPSK       | 36      | 0         | 17.95       | 18.01          | 17.96        | 19                  |
| 15                                       | QPSK       | 36      | 20        | 17.86       | 17.94          | 17.87        |                     |
| 15                                       | QPSK       | 36      | 39        | 17.90       | 17.91          | 17.88        |                     |
| 15                                       | QPSK       | 75      | 0         | 17.88       | 17.93          | 17.85        | 19                  |
| 15                                       | 16QAM      | 1       | 0         | 18.05       | 18.14          | 18.09        |                     |
| 15                                       | 16QAM      | 1       | 37        | 17.99       | 18.11          | 18.04        |                     |
| 15                                       | 16QAM      | 1       | 74        | 17.94       | 18.07          | 17.96        | 18                  |
| 15                                       | 16QAM      | 36      | 0         | 16.96       | 17.04          | 17.00        |                     |
| 15                                       | 16QAM      | 36      | 20        | 16.88       | 17.00          | 16.93        |                     |
| 15                                       | 16QAM      | 36      | 39        | 16.81       | 16.93          | 16.86        | 18                  |
| 15                                       | 16QAM      | 75      | 0         | 16.87       | 16.95          | 16.89        |                     |
| 15                                       | 64QAM      | 1       | 0         | 17.11       | 17.15          | 17.12        |                     |
| 15                                       | 64QAM      | 1       | 37        | 17.06       | 17.10          | 17.07        | 18                  |
| 15                                       | 64QAM      | 1       | 74        | 16.99       | 17.04          | 17.01        |                     |
| 15                                       | 64QAM      | 36      | 0         | 15.99       | 16.08          | 16.03        | 17                  |
| 15                                       | 64QAM      | 36      | 20        | 15.92       | 16.00          | 15.94        |                     |
| 15                                       | 64QAM      | 36      | 39        | 15.88       | 15.97          | 15.90        |                     |
| 15                                       | 64QAM      | 75      | 0         | 15.91       | 15.96          | 15.91        |                     |
| Channel                                  |            |         |           | 26090       | 26365          | 26640        |                     |
| Frequency (MHz)                          |            |         |           | 1855        | 1882.5         | 1910         |                     |
| 10                                       | QPSK       | 1       | 0         | 18.87       | 18.94          | 18.90        | 20                  |
| 10                                       | QPSK       | 1       | 25        | 18.78       | 18.83          | 18.79        |                     |
| 10                                       | QPSK       | 1       | 49        | 18.74       | 18.80          | 18.71        |                     |
| 10                                       | QPSK       | 25      | 0         | 17.87       | 17.93          | 17.88        | 19                  |
| 10                                       | QPSK       | 25      | 12        | 17.78       | 17.86          | 17.79        |                     |
| 10                                       | QPSK       | 25      | 25        | 17.82       | 17.83          | 17.80        |                     |
| 10                                       | QPSK       | 50      | 0         | 17.80       | 17.85          | 17.77        | 19                  |
| 10                                       | 16QAM      | 1       | 0         | 17.97       | 18.06          | 18.01        |                     |
| 10                                       | 16QAM      | 1       | 25        | 17.91       | 18.03          | 17.96        |                     |
| 10                                       | 16QAM      | 1       | 49        | 17.86       | 17.99          | 17.88        | 18                  |
| 10                                       | 16QAM      | 25      | 0         | 16.88       | 16.96          | 16.92        |                     |
| 10                                       | 16QAM      | 25      | 12        | 16.80       | 16.92          | 16.85        |                     |
| 10                                       | 16QAM      | 25      | 25        | 16.73       | 16.85          | 16.78        | 18                  |
| 10                                       | 16QAM      | 50      | 0         | 16.79       | 16.87          | 16.81        |                     |
| 10                                       | 64QAM      | 1       | 0         | 17.03       | 17.07          | 17.04        |                     |
| 10                                       | 64QAM      | 1       | 25        | 16.98       | 17.02          | 16.99        | 18                  |
| 10                                       | 64QAM      | 1       | 49        | 16.91       | 16.96          | 16.93        |                     |
| 10                                       | 64QAM      | 25      | 0         | 15.91       | 16.00          | 15.95        |                     |
| 10                                       | 64QAM      | 25      | 12        | 15.84       | 15.92          | 15.86        | 17                  |
| 10                                       | 64QAM      | 25      | 25        | 15.80       | 15.89          | 15.82        |                     |
| 10                                       | 64QAM      | 50      | 0         | 15.83       | 15.88          | 15.83        |                     |
| Channel                                  |            |         |           | 26065       | 26365          | 26665        |                     |
| Frequency (MHz)                          |            |         |           | 1852.5      | 1882.5         | 1912.5       |                     |
| 5                                        | QPSK       | 1       | 0         | 18.84       | 18.91          | 18.87        | 20                  |
| 5                                        | QPSK       | 1       | 12        | 18.75       | 18.80          | 18.76        |                     |
| 5                                        | QPSK       | 1       | 24        | 18.71       | 18.77          | 18.68        |                     |
| 5                                        | QPSK       | 12      | 0         | 17.84       | 17.90          | 17.85        | 19                  |
| 5                                        | QPSK       | 12      | 7         | 17.83       | 17.85          | 17.76        |                     |
| 5                                        | QPSK       | 12      | 13        | 17.79       | 17.80          | 17.77        |                     |
| 5                                        | QPSK       | 25      | 0         | 17.77       | 17.82          | 17.74        | 19                  |
| 5                                        | 16QAM      | 1       | 0         | 17.94       | 18.03          | 17.98        |                     |
| 5                                        | 16QAM      | 1       | 12        | 17.88       | 18.00          | 17.93        |                     |
| 5                                        | 16QAM      | 1       | 24        | 17.83       | 17.96          | 17.85        | 18                  |
| 5                                        | 16QAM      | 12      | 0         | 16.85       | 16.93          | 16.89        |                     |
| 5                                        | 16QAM      | 12      | 7         | 16.77       | 16.89          | 16.82        |                     |
| 5                                        | 16QAM      | 12      | 13        | 16.70       | 16.82          | 16.75        | 18                  |
| 5                                        | 16QAM      | 25      | 0         | 16.76       | 16.84          | 16.78        |                     |
| 5                                        | 64QAM      | 1       | 0         | 17.00       | 17.04          | 17.01        |                     |
| 5                                        | 64QAM      | 1       | 12        | 16.95       | 16.99          | 16.96        | 18                  |
| 5                                        | 64QAM      | 1       | 24        | 16.88       | 16.93          | 16.90        |                     |
| 5                                        | 64QAM      | 12      | 0         | 15.88       | 15.97          | 15.92        |                     |
| 5                                        | 64QAM      | 12      | 7         | 15.81       | 15.89          | 15.83        | 17                  |
| 5                                        | 64QAM      | 12      | 13        | 15.77       | 15.86          | 15.79        |                     |
| 5                                        | 64QAM      | 25      | 0         | 15.80       | 15.85          | 15.80        |                     |
| Channel                                  |            |         |           | 26055       | 26365          | 26675        |                     |
| Frequency (MHz)                          |            |         |           | 1851.5      | 1882.5         | 1913.5       |                     |
| 3                                        | QPSK       | 1       | 0         | 18.80       | 18.87          | 18.83        | 20                  |
| 3                                        | QPSK       | 1       | 8         | 18.71       | 18.76          | 18.72        |                     |
| 3                                        | QPSK       | 1       | 14        | 18.67       | 18.73          | 18.64        |                     |
| 3                                        | QPSK       | 8       | 0         | 17.80       | 17.86          | 17.81        | 19                  |
| 3                                        | QPSK       | 8       | 4         | 17.71       | 17.79          | 17.72        |                     |
| 3                                        | QPSK       | 8       | 7         | 17.75       | 17.76          | 17.73        |                     |
| 3                                        | QPSK       | 15      | 0         | 17.73       | 17.78          | 17.70        | 19                  |
| 3                                        | 16QAM      | 1       | 0         | 17.90       | 17.96          | 17.84        |                     |
| 3                                        | 16QAM      | 1       | 8         | 17.84       | 17.96          | 17.89        |                     |
| 3                                        | 16QAM      | 1       | 14        | 17.79       | 17.92          | 17.81        | 18                  |
| 3                                        | 16QAM      | 8       | 0         | 16.81       | 16.89          | 16.85        |                     |
| 3                                        | 16QAM      | 8       | 4         | 16.73       | 16.85          | 16.78        |                     |
| 3                                        | 16QAM      | 8       | 7         | 16.66       | 16.78          | 16.71        | 18                  |
| 3                                        | 16QAM      | 15      | 0         | 16.72       | 16.80          | 16.74        |                     |



|                 |       |    |    |        |        |        |    |
|-----------------|-------|----|----|--------|--------|--------|----|
| 3               | 64QAM | 1  | 0  | 16.96  | 17.00  | 16.97  | 18 |
| 3               | 64QAM | 1  | 8  | 16.91  | 16.95  | 16.92  |    |
| 3               | 64QAM | 1  | 14 | 16.84  | 16.89  | 16.86  |    |
| 3               | 64QAM | 8  | 0  | 15.84  | 15.93  | 15.88  | 17 |
| 3               | 64QAM | 8  | 4  | 15.77  | 15.85  | 15.79  |    |
| 3               | 64QAM | 8  | 7  | 15.73  | 15.82  | 15.75  |    |
| 3               | 64QAM | 15 | 0  | 15.76  | 15.81  | 15.76  | 16 |
| Channel         |       |    |    | 26047  | 26365  | 26683  |    |
| Frequency (MHz) |       |    |    | 1850.7 | 1882.5 | 1914.3 |    |
| 1.4             | QPSK  | 1  | 0  | 18.75  | 18.82  | 18.78  | 20 |
| 1.4             | QPSK  | 1  | 3  | 18.66  | 18.71  | 18.67  |    |
| 1.4             | QPSK  | 1  | 5  | 18.62  | 18.68  | 18.59  |    |
| 1.4             | QPSK  | 3  | 0  | 17.75  | 17.81  | 17.76  |    |
| 1.4             | QPSK  | 3  | 1  | 17.66  | 17.74  | 17.67  |    |
| 1.4             | QPSK  | 3  | 3  | 17.70  | 17.71  | 17.68  |    |
| 1.4             | QPSK  | 6  | 0  | 17.68  | 17.73  | 17.65  | 19 |
| 1.4             | 16QAM | 1  | 0  | 17.85  | 17.84  | 17.89  |    |
| 1.4             | 16QAM | 1  | 3  | 17.79  | 17.91  | 17.84  |    |
| 1.4             | 16QAM | 1  | 5  | 17.74  | 17.87  | 17.76  | 18 |
| 1.4             | 16QAM | 3  | 0  | 16.76  | 16.84  | 16.80  |    |
| 1.4             | 16QAM | 3  | 1  | 16.68  | 16.80  | 16.73  |    |
| 1.4             | 16QAM | 3  | 3  | 16.61  | 16.73  | 16.66  |    |
| 1.4             | 16QAM | 6  | 0  | 16.67  | 16.75  | 16.69  | 17 |
| 1.4             | 64QAM | 1  | 0  | 16.91  | 16.95  | 16.92  |    |
| 1.4             | 64QAM | 1  | 3  | 16.86  | 16.90  | 16.87  |    |
| 1.4             | 64QAM | 1  | 5  | 16.79  | 16.84  | 16.81  | 18 |
| 1.4             | 64QAM | 3  | 0  | 15.79  | 15.88  | 15.83  |    |
| 1.4             | 64QAM | 3  | 1  | 15.72  | 15.80  | 15.74  |    |
| 1.4             | 64QAM | 3  | 3  | 15.68  | 15.77  | 15.70  |    |
| 1.4             | 64QAM | 6  | 0  | 15.71  | 15.76  | 15.71  | 17 |

| Band 48 (3.5G Band) (dBm) |            |         |           |                       |                    |                    |                     |              |                     |
|---------------------------|------------|---------|-----------|-----------------------|--------------------|--------------------|---------------------|--------------|---------------------|
| BW [MHz]                  | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Middle-Low Channel | Middle-Low Channel | Middle-High Channel | High Channel | Tune-up limit (dBm) |
| Channel                   |            |         |           | 55340                 | 55830              | 55990              | 56150               | 56640        | 18                  |
| Frequency (MHz)           |            |         |           | 3560                  | 3609               | 3625               | 3641                | 3690         |                     |
| 20                        | QPSK       | 1       | 0         | 16.95                 | 17.00              | 17.06              | 17.02               | 17.04        | 17                  |
| 20                        | QPSK       | 1       | 49        | 16.79                 | 16.86              | 16.78              | 16.89               | 16.98        |                     |
| 20                        | QPSK       | 1       | 99        | 16.70                 | 16.75              | 16.84              | 16.80               | 16.81        |                     |
| 20                        | QPSK       | 50      | 0         | 15.95                 | 15.92              | 15.97              | 16.03               | 16.07        |                     |
| 20                        | QPSK       | 50      | 24        | 15.91                 | 15.90              | 15.85              | 15.82               | 15.96        |                     |
| 20                        | QPSK       | 50      | 50        | 15.93                 | 15.85              | 15.96              | 15.92               | 16.00        | 17                  |
| 20                        | QPSK       | 100     | 0         | 15.83                 | 15.80              | 15.85              | 15.88               | 15.92        |                     |
| 20                        | 16QAM      | 1       | 0         | 16.10                 | 16.02              | 16.06              | 15.94               | 16.14        |                     |
| 20                        | 16QAM      | 1       | 49        | 15.92                 | 15.89              | 16.13              | 15.97               | 16.08        |                     |
| 20                        | 16QAM      | 1       | 99        | 15.79                 | 15.92              | 16.12              | 15.87               | 15.97        |                     |
| 20                        | 16QAM      | 50      | 0         | 14.85                 | 14.95              | 14.93              | 14.99               | 15.04        | 16                  |
| 20                        | 16QAM      | 50      | 24        | 14.90                 | 14.84              | 14.84              | 14.96               | 14.99        |                     |
| 20                        | 16QAM      | 50      | 50        | 14.73                 | 14.77              | 14.83              | 14.86               | 14.87        |                     |
| 20                        | 16QAM      | 100     | 0         | 14.79                 | 14.87              | 14.92              | 14.81               | 14.88        |                     |
| 20                        | 64QAM      | 1       | 0         | 15.08                 | 14.97              | 15.20              | 14.95               | 15.09        |                     |
| 20                        | 64QAM      | 1       | 49        | 15.11                 | 15.06              | 15.06              | 15.03               | 15.01        | 16                  |
| 20                        | 64QAM      | 1       | 99        | 15.03                 | 14.95              | 14.91              | 14.87               | 14.99        |                     |
| 20                        | 64QAM      | 50      | 0         | 13.98                 | 13.94              | 13.98              | 13.99               | 14.12        |                     |
| 20                        | 64QAM      | 50      | 24        | 13.86                 | 13.83              | 13.94              | 13.98               | 13.97        |                     |
| 20                        | 64QAM      | 50      | 50        | 13.78                 | 13.77              | 14.04              | 13.87               | 14.08        |                     |
| 20                        | 64QAM      | 100     | 0         | 13.74                 | 13.85              | 13.81              | 13.93               | 13.92        | 15                  |
| Channel                   |            |         |           | 55315                 | 55820              | 55990              | 56160               | 56665        |                     |
| Frequency (MHz)           |            |         |           | 3557.5                | 3608               | 3625               | 3642                | 3692.5       | 18                  |
| 15                        | QPSK       | 1       | 0         | 16.90                 | 16.95              | 17.01              | 16.97               | 16.99        |                     |
| 15                        | QPSK       | 1       | 37        | 16.74                 | 16.81              | 16.73              | 16.84               | 16.93        | 17                  |
| 15                        | QPSK       | 1       | 74        | 16.65                 | 16.70              | 16.79              | 16.75               | 16.76        |                     |
| 15                        | QPSK       | 36      | 0         | 15.90                 | 15.87              | 15.92              | 15.98               | 16.02        |                     |
| 15                        | QPSK       | 36      | 20        | 15.86                 | 15.85              | 15.80              | 15.77               | 15.91        |                     |
| 15                        | QPSK       | 36      | 39        | 15.88                 | 15.80              | 15.91              | 15.87               | 15.95        |                     |
| 15                        | QPSK       | 75      | 0         | 15.78                 | 15.75              | 15.80              | 15.83               | 15.87        | 17                  |
| 15                        | 16QAM      | 1       | 0         | 16.05                 | 15.97              | 16.01              | 15.89               | 16.09        |                     |
| 15                        | 16QAM      | 1       | 37        | 15.87                 | 15.84              | 16.08              | 15.92               | 16.03        |                     |
| 15                        | 16QAM      | 1       | 74        | 15.74                 | 15.87              | 16.07              | 15.82               | 15.92        |                     |
| 15                        | 16QAM      | 36      | 0         | 14.80                 | 14.90              | 14.88              | 14.94               | 14.99        |                     |
| 15                        | 16QAM      | 36      | 20        | 14.85                 | 14.79              | 14.79              | 14.91               | 14.94        | 16                  |
| 15                        | 16QAM      | 36      | 39        | 14.68                 | 14.72              | 14.78              | 14.81               | 14.82        |                     |
| 15                        | 16QAM      | 75      | 0         | 14.74                 | 14.82              | 14.87              | 14.76               | 14.83        |                     |
| 15                        | 64QAM      | 1       | 0         | 15.03                 | 14.92              | 15.15              | 14.90               | 15.04        |                     |
| 15                        | 64QAM      | 1       | 37        | 15.06                 | 15.01              | 15.01              | 14.98               | 14.96        |                     |
| 15                        | 64QAM      | 1       | 74        | 14.98                 | 14.90              | 14.86              | 14.82               | 14.94        | 16                  |
| 15                        | 64QAM      | 36      | 0         | 13.94                 | 13.89              | 13.93              | 13.94               | 14.07        |                     |
| 15                        | 64QAM      | 36      | 20        | 13.81                 | 13.78              | 13.89              | 13.93               | 13.92        |                     |
| 15                        | 64QAM      | 36      | 39        | 13.73                 | 13.72              | 13.99              | 13.82               | 14.03        |                     |
| 15                        | 64QAM      | 75      | 0         | 13.69                 | 13.80              | 13.76              | 13.88               | 13.87        |                     |
| Channel                   |            |         |           | 55290                 | 55815              | 55990              | 56165               | 56690        | 18                  |
| Frequency (MHz)           |            |         |           | 3555                  | 3607.5             | 3625               | 3642.5              | 3695         |                     |
| 10                        | QPSK       | 1       | 0         | 16.86                 | 16.91              | 16.97              | 16.93               | 16.95        | 17                  |
| 10                        | QPSK       | 1       | 25        | 16.70                 | 16.77              | 16.69              | 16.80               | 16.89        |                     |
| 10                        | QPSK       | 1       | 49        | 16.61                 | 16.66              | 16.75              | 16.71               | 16.72        |                     |
| 10                        | QPSK       | 25      | 0         | 15.86                 | 15.83              | 15.88              | 15.94               | 15.98        |                     |
| 10                        | QPSK       | 25      | 12        | 15.82                 | 15.81              | 15.76              | 15.73               | 15.87        |                     |
| 10                        | QPSK       | 25      | 25        | 15.84                 | 15.76              | 15.87              | 15.83               | 15.91        | 17                  |
| 10                        | QPSK       | 50      | 0         | 15.74                 | 15.71              | 15.76              | 15.79               | 15.83        |                     |
| 10                        | 16QAM      | 1       | 0         | 16.01                 | 15.93              | 15.97              | 15.85               | 16.05        |                     |
| 10                        | 16QAM      | 1       | 25        | 15.83                 | 15.80              | 16.04              | 15.88               | 15.99        |                     |
| 10                        | 16QAM      | 1       | 49        | 15.70                 | 15.83              | 16.03              | 15.78               | 15.88        |                     |
| 10                        | 16QAM      | 25      | 0         | 14.76                 | 14.86              | 14.84              | 14.90               | 14.95        | 16                  |
| 10                        | 16QAM      | 25      | 12        | 14.81                 | 14.75              | 14.75              | 14.87               | 14.90        |                     |
| 10                        | 16QAM      | 25      | 25        | 14.64                 | 14.68              | 14.74              | 14.77               | 14.78        |                     |
| 10                        | 16QAM      | 50      | 0         | 14.70                 | 14.78              | 14.83              | 14.72               | 14.79        |                     |
| 10                        | 64QAM      | 1       | 0         | 14.99                 | 14.88              | 15.11              | 14.86               | 15.00        |                     |
| 10                        | 64QAM      | 1       | 25        | 15.02                 | 14.97              | 14.97              | 14.94               | 14.92        | 16                  |
| 10                        | 64QAM      | 1       | 49        | 14.94                 | 14.86              | 14.82              | 14.78               | 14.90        |                     |
| 10                        | 64QAM      | 25      | 0         | 13.90                 | 13.85              | 13.89              | 13.90               | 14.03        |                     |
| 10                        | 64QAM      | 25      | 12        | 13.77                 | 13.74              | 13.85              | 13.89               | 13.88        |                     |
| 10                        | 64QAM      | 25      | 25        | 13.69                 | 13.68              | 13.95              | 13.78               | 13.99        |                     |
| 10                        | 64QAM      | 50      | 0         | 13.65                 | 13.76              | 13.72              | 13.84               | 13.83        | 15                  |
| Channel                   |            |         |           | 55265                 | 55810              | 55990              | 56170               | 56175        |                     |
| Frequency (MHz)           |            |         |           | 3552.5                | 3607               | 3625               | 3643                | 3697.5       | 18                  |
| 5                         | QPSK       | 1       | 0         | 16.81                 | 16.86              | 16.92              | 16.88               | 16.90        |                     |
| 5                         | QPSK       | 1       | 12        | 16.65                 | 16.72              | 16.64              | 16.75               | 16.84        | 17                  |
| 5                         | QPSK       | 1       | 24        | 16.56                 | 16.61              | 16.70              | 16.66               | 16.67        |                     |
| 5                         | QPSK       | 12      | 0         | 15.81                 | 15.78              | 15.83              | 15.89               | 15.93        |                     |
| 5                         | QPSK       | 12      | 7         | 15.77                 | 15.76              | 15.71              | 15.68               | 15.82        |                     |
| 5                         | QPSK       | 12      | 13        | 15.79                 | 15.71              | 15.82              | 15.78               | 15.86        |                     |
| 5                         | QPSK       | 25      | 0         | 15.69                 | 15.66              | 15.71              | 15.74               | 15.78        | 17                  |
| 5                         | 16QAM      | 1       | 0         | 15.96                 | 15.88              | 15.92              | 15.80               | 16.00        |                     |
| 5                         | 16QAM      | 1       | 12        | 15.78                 | 15.75              | 15.99              | 15.83               | 15.94        |                     |
| 5                         | 16QAM      | 1       | 24        | 15.65                 | 15.78              | 15.98              | 15.73               | 15.83        |                     |
| 5                         | 16QAM      | 12      | 0         | 14.71                 | 14.81              | 14.79              | 14.85               | 14.90        |                     |
| 5                         | 16QAM      | 12      | 7         | 14.76                 | 14.70              | 14.70              | 14.82               | 14.85        | 16                  |
| 5                         | 16QAM      | 12      | 13        | 14.59                 | 14.63              | 14.69              | 14.72               | 14.73        |                     |
| 5                         | 16QAM      | 25      | 0         | 14.65                 | 14.73              | 14.78              | 14.67               | 14.74        |                     |
| 5                         | 64QAM      | 1       | 0         | 14.94                 | 14.83              | 15.06              | 14.81               | 14.95        |                     |
| 5                         | 64QAM      | 1       | 12        | 14.97                 | 14.92              | 14.92              | 14.89               | 14.87        |                     |
| 5                         | 64QAM      | 1       | 24        | 14.89                 | 14.81              | 14.77              | 14.73               | 14.85        | 16                  |
| 5                         | 64QAM      | 12      | 0         | 13.85                 | 13.80              | 13.84              | 13.85               | 13.98        |                     |
| 5                         | 64QAM      | 12      | 7         | 13.72                 | 13.69              | 13.80              | 13.84               | 13.83        |                     |
| 5                         | 64QAM      | 12      | 13        | 13.64                 | 13.63              | 13.80              | 13.73               | 13.94        |                     |
| 5                         | 64QAM      | 25      | 0         | 13.60                 | 13.71              | 13.67              | 13.79               | 13.78        |                     |

| Band 66 (dBm) Ant 5 |            |         |           |             |                |              |                     |
|---------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel             |            |         |           | 132072      | 132322         | 132572       |                     |
| Frequency (MHz)     |            |         |           | 1720        | 1745           | 1770         |                     |
| 20                  | QPSK       | 1       | 0         | 19.08       | 19.12          | 19.05        | 20                  |
| 20                  | QPSK       | 1       | 49        | 19.03       | 19.04          | 18.97        |                     |
| 20                  | QPSK       | 1       | 99        | 18.98       | 18.94          | 18.89        |                     |
| 20                  | QPSK       | 50      | 0         | 18.02       | 18.08          | 18.03        |                     |
| 20                  | QPSK       | 50      | 24        | 17.91       | 18.00          | 17.95        | 19                  |
| 20                  | QPSK       | 50      | 50        | 17.92       | 18.04          | 17.94        |                     |
| 20                  | QPSK       | 100     | 0         | 18.00       | 18.01          | 17.95        |                     |
| 20                  | 16QAM      | 1       | 0         | 18.31       | 18.23          | 18.11        |                     |
| 20                  | 16QAM      | 1       | 49        | 18.23       | 18.25          | 18.13        | 19                  |
| 20                  | 16QAM      | 1       | 99        | 18.10       | 18.10          | 18.18        |                     |
| 20                  | 16QAM      | 50      | 0         | 17.06       | 17.17          | 17.21        |                     |
| 20                  | 16QAM      | 50      | 24        | 17.07       | 17.03          | 17.00        |                     |
| 20                  | 16QAM      | 50      | 50        | 16.89       | 16.94          | 17.09        | 18                  |
| 20                  | 16QAM      | 100     | 0         | 17.11       | 16.97          | 17.06        |                     |
| 20                  | 64QAM      | 1       | 0         | 17.29       | 17.30          | 17.39        |                     |
| 20                  | 64QAM      | 1       | 49        | 17.21       | 17.19          | 17.32        |                     |
| 20                  | 64QAM      | 1       | 99        | 17.22       | 17.30          | 17.41        | 18                  |
| 20                  | 64QAM      | 50      | 0         | 16.01       | 16.30          | 16.09        |                     |
| 20                  | 64QAM      | 50      | 24        | 16.19       | 16.09          | 15.96        |                     |
| 20                  | 64QAM      | 50      | 50        | 16.00       | 16.13          | 15.95        |                     |
| 20                  | 64QAM      | 100     | 0         | 16.17       | 16.14          | 15.91        |                     |
| Channel             |            |         |           | 132047      | 132322         | 132597       |                     |
| Frequency (MHz)     |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15                  | QPSK       | 1       | 0         | 19.03       | 19.07          | 19.00        | 20                  |
| 15                  | QPSK       | 1       | 37        | 18.98       | 18.99          | 18.92        |                     |
| 15                  | QPSK       | 1       | 74        | 18.93       | 18.89          | 18.84        |                     |
| 15                  | QPSK       | 36      | 0         | 17.97       | 18.03          | 17.98        |                     |
| 15                  | QPSK       | 36      | 20        | 17.86       | 17.95          | 17.90        | 19                  |
| 15                  | QPSK       | 36      | 39        | 17.87       | 17.99          | 17.89        |                     |
| 15                  | QPSK       | 75      | 0         | 17.95       | 17.96          | 17.90        |                     |
| 15                  | 16QAM      | 1       | 0         | 18.26       | 18.18          | 18.06        |                     |
| 15                  | 16QAM      | 1       | 37        | 18.18       | 18.20          | 18.08        | 19                  |
| 15                  | 16QAM      | 1       | 74        | 18.05       | 18.05          | 18.13        |                     |
| 15                  | 16QAM      | 36      | 0         | 17.01       | 17.12          | 17.16        |                     |
| 15                  | 16QAM      | 36      | 20        | 17.02       | 16.98          | 16.95        |                     |
| 15                  | 16QAM      | 36      | 39        | 16.84       | 16.89          | 17.04        | 18                  |
| 15                  | 16QAM      | 75      | 0         | 17.06       | 16.92          | 17.01        |                     |
| 15                  | 64QAM      | 1       | 0         | 17.24       | 17.25          | 17.34        |                     |
| 15                  | 64QAM      | 1       | 37        | 17.16       | 17.14          | 17.27        |                     |
| 15                  | 64QAM      | 1       | 74        | 17.17       | 17.25          | 17.06        | 18                  |
| 15                  | 64QAM      | 36      | 0         | 15.96       | 16.25          | 16.04        |                     |
| 15                  | 64QAM      | 36      | 20        | 16.14       | 16.04          | 15.91        |                     |
| 15                  | 64QAM      | 36      | 39        | 15.95       | 16.08          | 15.90        |                     |
| 15                  | 64QAM      | 75      | 0         | 16.12       | 16.09          | 15.86        |                     |
| Channel             |            |         |           | 132022      | 132322         | 132622       |                     |
| Frequency (MHz)     |            |         |           | 1715        | 1745           | 1775         |                     |
| 10                  | QPSK       | 1       | 0         | 18.97       | 19.01          | 18.94        | 20                  |
| 10                  | QPSK       | 1       | 25        | 18.92       | 18.93          | 18.86        |                     |
| 10                  | QPSK       | 1       | 49        | 18.87       | 18.83          | 18.78        |                     |
| 10                  | QPSK       | 25      | 0         | 17.91       | 17.97          | 17.92        |                     |
| 10                  | QPSK       | 25      | 12        | 17.80       | 17.89          | 17.84        | 19                  |
| 10                  | QPSK       | 25      | 25        | 17.81       | 17.83          | 17.83        |                     |
| 10                  | QPSK       | 50      | 0         | 17.89       | 17.90          | 17.84        |                     |
| 10                  | 16QAM      | 1       | 0         | 18.20       | 18.12          | 18.00        |                     |
| 10                  | 16QAM      | 1       | 25        | 18.12       | 18.14          | 18.02        | 19                  |
| 10                  | 16QAM      | 1       | 49        | 17.99       | 17.99          | 18.07        |                     |
| 10                  | 16QAM      | 25      | 0         | 16.95       | 17.06          | 17.10        |                     |
| 10                  | 16QAM      | 25      | 12        | 16.96       | 16.92          | 16.89        |                     |
| 10                  | 16QAM      | 25      | 25        | 16.78       | 16.83          | 16.98        | 18                  |
| 10                  | 16QAM      | 50      | 0         | 17.00       | 16.86          | 16.95        |                     |
| 10                  | 64QAM      | 1       | 0         | 17.18       | 17.19          | 17.28        |                     |
| 10                  | 64QAM      | 1       | 25        | 17.10       | 17.08          | 17.21        |                     |
| 10                  | 64QAM      | 1       | 49        | 17.11       | 17.19          | 17.00        | 18                  |
| 10                  | 64QAM      | 25      | 0         | 15.90       | 16.19          | 15.98        |                     |
| 10                  | 64QAM      | 25      | 12        | 16.08       | 15.98          | 15.85        |                     |
| 10                  | 64QAM      | 25      | 25        | 15.89       | 16.02          | 15.84        |                     |
| 10                  | 64QAM      | 50      | 0         | 16.06       | 16.03          | 15.80        |                     |
| Channel             |            |         |           | 131997      | 132322         | 132647       |                     |
| Frequency (MHz)     |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5                   | QPSK       | 1       | 0         | 18.89       | 18.93          | 18.86        | 20                  |
| 5                   | QPSK       | 1       | 12        | 18.84       | 18.85          | 18.78        |                     |
| 5                   | QPSK       | 1       | 24        | 18.79       | 18.75          | 18.70        |                     |
| 5                   | QPSK       | 12      | 0         | 17.83       | 17.89          | 17.84        |                     |
| 5                   | QPSK       | 12      | 7         | 17.72       | 17.81          | 17.76        | 19                  |
| 5                   | QPSK       | 12      | 13        | 17.73       | 17.85          | 17.75        |                     |
| 5                   | QPSK       | 25      | 0         | 17.81       | 17.82          | 17.76        |                     |
| 5                   | 16QAM      | 1       | 0         | 18.12       | 18.04          | 17.92        |                     |
| 5                   | 16QAM      | 1       | 12        | 18.04       | 18.06          | 17.94        | 19                  |
| 5                   | 16QAM      | 1       | 24        | 17.91       | 17.91          | 17.99        |                     |
| 5                   | 16QAM      | 12      | 0         | 16.87       | 16.98          | 17.02        |                     |
| 5                   | 16QAM      | 12      | 7         | 16.88       | 16.84          | 16.81        |                     |
| 5                   | 16QAM      | 12      | 13        | 16.70       | 16.75          | 16.90        | 18                  |
| 5                   | 16QAM      | 25      | 0         | 16.92       | 16.78          | 16.87        |                     |
| 5                   | 64QAM      | 1       | 0         | 17.10       | 17.11          | 17.20        |                     |
| 5                   | 64QAM      | 1       | 12        | 17.02       | 17.00          | 17.13        |                     |
| 5                   | 64QAM      | 1       | 24        | 17.03       | 17.11          | 16.92        | 18                  |
| 5                   | 64QAM      | 12      | 0         | 15.82       | 16.11          | 15.90        |                     |
| 5                   | 64QAM      | 12      | 7         | 16.00       | 15.90          | 15.77        |                     |
| 5                   | 64QAM      | 12      | 13        | 15.81       | 15.94          | 15.76        |                     |
| 5                   | 64QAM      | 25      | 0         | 15.98       | 15.95          | 15.72        |                     |
| Channel             |            |         |           | 131967      | 132322         | 132697       |                     |
| Frequency (MHz)     |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3                   | QPSK       | 1       | 0         | 18.82       | 18.86          | 18.79        | 20                  |
| 3                   | QPSK       | 1       | 8         | 18.77       | 18.78          | 18.71        |                     |
| 3                   | QPSK       | 1       | 14        | 18.72       | 18.68          | 18.63        |                     |
| 3                   | QPSK       | 8       | 0         | 17.76       | 17.82          | 17.77        |                     |
| 3                   | QPSK       | 8       | 4         | 17.65       | 17.74          | 17.69        | 19                  |
| 3                   | QPSK       | 8       | 7         | 17.66       | 17.78          | 17.68        |                     |
| 3                   | QPSK       | 15      | 0         | 17.74       | 17.75          | 17.69        |                     |
| 3                   | 16QAM      | 1       | 0         | 18.05       | 17.97          | 17.85        |                     |
| 3                   | 16QAM      | 1       | 8         | 17.97       | 17.99          | 17.87        | 19                  |
| 3                   | 16QAM      | 1       | 14        | 17.84       | 17.84          | 17.92        |                     |
| 3                   | 16QAM      | 8       | 0         | 16.80       | 16.91          | 16.95        |                     |
| 3                   | 16QAM      | 8       | 4         | 16.81       | 16.77          | 16.74        |                     |
| 3                   | 16QAM      | 8       | 7         | 16.63       | 16.68          | 16.83        | 18                  |
| 3                   | 16QAM      | 15      | 0         | 16.85       | 16.71          | 16.80        |                     |



|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 17.03  | 17.04  | 17.13  | 18                  |
| 3               | 64QAM | 1  | 8  | 16.95  | 16.93  | 17.06  |                     |
| 3               | 64QAM | 1  | 14 | 16.96  | 17.04  | 16.85  |                     |
| 3               | 64QAM | 8  | 0  | 15.75  | 16.04  | 15.83  | 17                  |
| 3               | 64QAM | 8  | 4  | 15.93  | 15.83  | 15.70  |                     |
| 3               | 64QAM | 8  | 7  | 15.74  | 15.87  | 15.69  |                     |
| 3               | 64QAM | 15 | 0  | 15.91  | 15.88  | 15.65  | Tune-up limit (dBm) |
| Channel         |       |    |    | 131979 | 132322 | 132665 |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 18.76  | 18.80  | 18.73  | 20                  |
| 1.4             | QPSK  | 1  | 3  | 18.71  | 18.72  | 18.65  |                     |
| 1.4             | QPSK  | 1  | 5  | 18.66  | 18.62  | 18.57  |                     |
| 1.4             | QPSK  | 3  | 0  | 17.70  | 17.76  | 17.71  |                     |
| 1.4             | QPSK  | 3  | 1  | 17.59  | 17.68  | 17.63  |                     |
| 1.4             | QPSK  | 3  | 3  | 17.60  | 17.72  | 17.62  |                     |
| 1.4             | QPSK  | 6  | 0  | 17.68  | 17.69  | 17.63  | 19                  |
| 1.4             | 16QAM | 1  | 0  | 17.99  | 17.91  | 17.79  |                     |
| 1.4             | 16QAM | 1  | 3  | 17.91  | 17.93  | 17.81  | 19                  |
| 1.4             | 16QAM | 1  | 5  | 17.78  | 17.78  | 17.86  |                     |
| 1.4             | 16QAM | 3  | 0  | 16.74  | 16.85  | 16.89  |                     |
| 1.4             | 16QAM | 3  | 1  | 16.75  | 16.71  | 16.68  |                     |
| 1.4             | 16QAM | 3  | 3  | 16.57  | 16.62  | 16.77  | 18                  |
| 1.4             | 16QAM | 6  | 0  | 16.79  | 16.65  | 16.74  |                     |
| 1.4             | 64QAM | 1  | 0  | 16.97  | 16.98  | 17.07  | 18                  |
| 1.4             | 64QAM | 1  | 3  | 16.89  | 16.87  | 17.00  |                     |
| 1.4             | 64QAM | 1  | 5  | 16.90  | 16.98  | 16.79  |                     |
| 1.4             | 64QAM | 3  | 0  | 15.69  | 15.98  | 15.77  |                     |
| 1.4             | 64QAM | 3  | 1  | 15.87  | 15.77  | 15.64  |                     |
| 1.4             | 64QAM | 3  | 3  | 15.68  | 15.81  | 15.63  |                     |
| 1.4             | 64QAM | 6  | 0  | 15.85  | 15.82  | 15.59  | 17                  |



| n2 (PC3)        |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 19.74       | 19.85          | 19.69        | 21.00               |
| 20              |                      | 1      | 53       | 19.66       | 19.63          | 19.58        |                     |
| 20              |                      | 1      | 104      | 19.60       | 19.38          | 19.59        |                     |
| 20              |                      | 50     | 1        | 19.18       | 19.05          | 19.12        | 20.50               |
| 20              |                      | 50     | 25       | 19.68       | 19.60          | 19.59        |                     |
| 20              |                      | 50     | 50       | 19.07       | 19.09          | 19.09        |                     |
| 20              |                      | 100    | 0        | 19.16       | 19.11          | 19.13        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 19.92       | 19.95          | 19.90        | 21.00               |
| 20              |                      | 1      | 53       | 19.68       | 19.64          | 19.57        |                     |
| 20              |                      | 1      | 104      | 19.62       | 19.42          | 19.60        |                     |
| 20              |                      | 50     | 1        | 18.62       | 18.58          | 18.62        | 20.50               |
| 20              |                      | 50     | 25       | 19.65       | 19.69          | 19.62        |                     |
| 20              |                      | 50     | 50       | 18.50       | 18.64          | 18.58        |                     |
| 20              |                      | 100    | 0        | 18.64       | 18.67          | 18.63        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 18.68       | 18.58          | 18.36        | 19.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 17.38       | 17.28          | 17.05        | 18.00               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 15.04       | 14.95          | 14.73        | 15.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 18.11       | 18.01          | 17.79        | 19.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 17.53       | 17.41          | 17.18        | 18.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 16.43       | 16.33          | 16.18        | 17.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 12.85       | 12.81          | 12.58        | 13.50               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 19.74       | 19.58          | 19.51        | 21.00               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 19.61       | 19.44          | 19.40        | 21.00               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 19.81       | 19.69          | 19.78        | 21.00               |

## n25 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 372000      | 376500         | 381000       | 21.00               |
| Frequency (MHz) |                      |        |          | 1860        | 1882.5         | 1905         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 19.83       | 19.78          | 19.74        | 21.00               |
| 20              |                      | 1      | 53       | 20.00       | 19.90          | 20.04        |                     |
| 20              |                      | 1      | 104      | 19.80       | 19.67          | 19.93        |                     |
| 20              |                      | 50     | 1        | 19.40       | 19.34          | 19.60        | 21.00               |
| 20              |                      | 50     | 25       | 20.04       | 19.88          | 20.01        |                     |
| 20              |                      | 50     | 50       | 19.41       | 19.31          | 19.48        |                     |
| 20              |                      | 100    | 0        | 19.47       | 19.31          | 19.54        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 19.90       | 19.81          | 19.77        | 21.00               |
| 20              |                      | 1      | 53       | 20.03       | 20.08          | 20.05        |                     |
| 20              |                      | 1      | 104      | 19.85       | 19.68          | 20.02        |                     |
| 20              |                      | 50     | 1        | 18.92       | 18.84          | 19.00        | 21.00               |
| 20              |                      | 50     | 25       | 20.00       | 20.04          | 19.99        |                     |
| 20              |                      | 50     | 50       | 18.88       | 18.86          | 19.03        |                     |
| 20              |                      | 100    | 0        | 18.98       | 18.82          | 19.07        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 18.96       | 18.77          | 18.81        | 20.00               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 17.63       | 17.56          | 17.53        | 18.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 15.32       | 15.20          | 15.14        | 16.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 18.39       | 18.26          | 18.17        | 19.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 17.77       | 17.73          | 17.64        | 18.50               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 16.70       | 16.65          | 16.58        | 17.50               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 13.17       | 13.12          | 13.03        | 14.00               |
| Channel         |                      |        |          | 371500      | 376500         | 381500       | 21.00               |
| Frequency (MHz) |                      |        |          | 1857.5      | 1882.5         | 1907.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 19.95       | 19.78          | 19.81        | 21.00               |
| Channel         |                      |        |          | 371000      | 376500         | 382000       | 21.00               |
| Frequency (MHz) |                      |        |          | 1855        | 1882.5         | 1910         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 19.80       | 19.67          | 19.76        | 21.00               |
| Channel         |                      |        |          | 370500      | 376500         | 382500       | 21.00               |
| Frequency (MHz) |                      |        |          | 1852.5      | 1882.5         | 1912.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 20.02       | 19.85          | 20.06        | 21.00               |

| n41 (PC2)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 509202      | 513900             | 518598         | 523296              | 528000       | 21.00               |
| Frequency (MHz) |                      |        |          | 2546.01     | 2569.5             | 2592.99        | 2616.48             | 2640         |                     |
| 100             | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 19.00       | 18.96              | 18.97          | 19.06               | 19.30        | 21.00               |
| 100             |                      | 1      | 136      | 19.82       | 19.87              | 20.07          | 20.06               | 20.07        |                     |
| 100             |                      | 1      | 271      | 19.23       | 19.18              | 19.22          | 18.91               | 18.84        |                     |
| 100             |                      | 135    | 1        | 19.31       | 19.20              | 19.24          | 19.36               | 19.41        | 21.00               |
| 100             |                      | 135    | 67       | 19.93       | 19.96              | 20.07          | 20.02               | 20.03        |                     |
| 100             |                      | 135    | 136      | 19.32       | 19.44              | 19.40          | 19.38               | 19.12        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 19.40       | 19.36              | 19.40          | 19.43               | 14.98        | 21.00               |
| 100             |                      | 1      | 1        | 19.01       | 19.00              | 19.00          | 19.07               | 19.26        |                     |
| 100             |                      | 1      | 136      | 20.09       | 20.03              | 20.13          | 20.10               | 20.06        |                     |
| 100             |                      | 1      | 271      | 19.23       | 19.24              | 19.25          | 18.93               | 18.86        | 21.00               |
| 100             |                      | 135    | 1        | 18.84       | 18.72              | 18.77          | 18.86               | 18.93        |                     |
| 100             |                      | 135    | 67       | 19.99       | 20.05              | 20.08          | 20.02               | 20.07        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 18.81       | 18.94              | 18.93          | 18.88               | 18.63        | 21.00               |
| 100             |                      | 270    | 0        | 18.85       | 18.88              | 18.93          | 18.93               | 18.94        |                     |
| 100             |                      | 1      | 1        | 18.12       | 18.05              | 18.05          | 18.13               | 18.36        | 19.00               |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 16.62       | 16.59              | 16.55          | 16.64               | 16.86        | 17.50               |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 14.81       | 14.79              | 14.78          | 14.82               | 15.04        | 15.50               |
| 100             | CP-OFDM QPSK         | 1      | 1        | 17.52       | 17.51              | 17.49          | 17.56               | 17.77        | 18.50               |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 17.00       | 17.01              | 16.98          | 17.01               | 17.22        | 18.00               |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 15.50       | 15.51              | 15.48          | 15.54               | 15.75        | 16.50               |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 12.83       | 12.79              | 12.77          | 12.82               | 13.09        | 13.50               |
| Channel         |                      |        |          | 508200      | 513402             | 518598         | 523800              | 528996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2541        | 2567.01            | 2592.99        | 2619                | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 19.11       | 19.11              | 19.07          | 19.26               | 19.36        | 21.00               |
| Channel         |                      |        |          | 507204      | 512904             | 518598         | 524298              | 529998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2536.02     | 2564.52            | 2592.99        | 2621.49             | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 19.37       | 19.34              | 19.34          | 19.51               | 19.55        | 21.00               |
| Channel         |                      |        |          | 506202      | 512400             | 518598         | 524796              | 531000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2531.01     | 2562               | 2592.99        | 2623.98             | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 19.46       | 19.46              | 19.49          | 19.69               | 19.69        | 21.00               |
| Channel         |                      |        |          | 505200      | 511902             | 518598         | 525798              | 531996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2526        | 2559.51            | 2592.99        | 2626.5              | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 19.49       | 19.50              | 19.48          | 19.59               | 19.62        | 21.00               |
| Channel         |                      |        |          | 504204      | 511404             | 518598         | 525798              | 532998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2521.02     | 2557.02            | 2592.99        | 2626.5              | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 19.58       | 19.53              | 19.66          | 19.77               | 19.74        | 21.00               |
| Channel         |                      |        |          | 503202      | 510900             | 518598         | 526296              | 534000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2516.01     | 2554.5             | 2592.99        | 2631.48             | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 19.38       | 19.31              | 19.44          | 19.55               | 19.38        | 21.00               |
| Channel         |                      |        |          | 502200      | 510402             | 518598         | 526800              | 534996       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2511        | 2552.01            | 2592.99        | 2634                | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 19.57       | 19.46              | 19.63          | 19.70               | 19.38        | 21.00               |
| Channel         |                      |        |          | 501204      | 509904             | 518598         | 527298              | 535998       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2506.02     | 2549.52            | 2592.99        | 2636.49             | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 19.76       | 19.71              | 19.91          | 20.00               | 19.62        | 21.00               |
| Channel         |                      |        |          | 500700      | 509652             | 518598         | 527550              | 536496       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2503.5      | 2548.26            | 2592.99        | 2637.75             | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 19.85       | 19.82              | 20.03          | 20.10               | 19.69        | 21.00               |
| Channel         |                      |        |          | 500202      | 509400             | 518598         | 527796              | 537000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 2501.01     | 2547               | 2592.99        | 2638.98             | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 19.85       | 19.82              | 20.08          | 20.07               | 19.68        | 17.50               |

| n41 (PC3)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 509202      | 513900             | 518598         | 523296              | 528000       | 21                  |
| Frequency (MHz) |                      |        |          | 2546.01     | 2569.5             | 2592.99        | 2616.48             | 2640         |                     |
| 100             | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 18.98       | 18.96              | 18.94          | 19.00               | 19.21        | 21                  |
| 100             |                      | 1      | 136      | 19.81       | 19.88              | 20.07          | 20.04               | 20.03        |                     |
| 100             |                      | 1      | 271      | 19.32       | 19.14              | 19.16          | 18.88               | 18.93        |                     |
| 100             |                      | 135    | 1        | 19.28       | 19.13              | 19.15          | 19.27               | 19.35        | 21                  |
| 100             |                      | 135    | 67       | 19.87       | 19.92              | 20.04          | 20.08               | 20.04        |                     |
| 100             |                      | 135    | 136      | 19.45       | 19.38              | 19.35          | 19.31               | 19.20        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 19.29       | 19.32              | 19.33          | 19.34               | 19.34        | 21                  |
| 100             |                      | 1      | 1        | 18.97       | 18.96              | 18.94          | 18.99               | 19.20        |                     |
| 100             |                      | 1      | 136      | 20.00       | 20.03              | 20.11          | 20.06               | 20.07        |                     |
| 100             |                      | 1      | 271      | 19.23       | 19.18              | 19.17          | 18.87               | 18.80        | 21                  |
| 100             |                      | 135    | 1        | 19.06       | 18.91              | 18.94          | 19.03               | 19.11        |                     |
| 100             |                      | 135    | 67       | 19.98       | 19.95              | 20.05          | 20.07               | 20.01        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 19.02       | 19.10              | 19.11          | 19.03               | 18.78        | 21                  |
| 100             |                      | 270    | 0        | 19.03       | 19.07              | 19.09          | 19.09               | 19.11        |                     |
| 100             |                      | 1      | 1        | 18.47       | 18.50              | 18.45          | 18.52               | 18.75        | 19.5                |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 16.96       | 16.93              | 16.90          | 16.96               | 17.17        | 18                  |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 14.70       | 14.71              | 14.70          | 14.71               | 14.95        | 15.5                |
| 100             | CP-OFDM QPSK         | 1      | 1        | 17.85       | 17.88              | 17.85          | 17.90               | 18.12        | 19                  |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 17.27       | 17.32              | 17.29          | 17.33               | 17.56        | 18                  |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 15.84       | 15.85              | 15.83          | 15.88               | 16.09        | 16.5                |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 12.63       | 12.67              | 12.65          | 12.66               | 12.87        | 13.5                |
| Channel         |                      |        |          | 508200      | 513402             | 518598         | 523800              | 528996       | 21                  |
| Frequency (MHz) |                      |        |          | 2541        | 2567.01            | 2592.99        | 2619                | 2644.98      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 19.10       | 19.11              | 19.04          | 19.18               | 19.28        | 21                  |
| Channel         |                      |        |          | 507204      | 512904             | 518598         | 524298              | 529998       | 21                  |
| Frequency (MHz) |                      |        |          | 2536.02     | 2564.52            | 2592.99        | 2621.49             | 2649.99      |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 19.30       | 19.28              | 19.27          | 19.41               | 19.47        | 21                  |
| Channel         |                      |        |          | 506202      | 512400             | 518598         | 524796              | 531000       | 21                  |
| Frequency (MHz) |                      |        |          | 2531.01     | 2562               | 2592.99        | 2623.98             | 2655         |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 19.39       | 19.40              | 19.45          | 19.61               | 19.60        | 21                  |
| Channel         |                      |        |          | 505200      | 511902             | 518598         | 525798              | 531996       | 21                  |
| Frequency (MHz) |                      |        |          | 2526        | 2559.51            | 2592.99        | 2626.5              | 2659.98      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 19.44       | 19.40              | 19.46          | 19.58               | 19.62        | 21                  |
| Channel         |                      |        |          | 504204      | 511404             | 518598         | 525798              | 532998       | 21                  |
| Frequency (MHz) |                      |        |          | 2521.02     | 2557.02            | 2592.99        | 2626.5              | 2664.99      |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 19.59       | 19.53              | 19.65          | 19.76               | 19.71        | 21                  |
| Channel         |                      |        |          | 503202      | 510900             | 518598         | 526296              | 534000       | 21                  |
| Frequency (MHz) |                      |        |          | 2516.01     | 2554.5             | 2592.99        | 2631.48             | 2670         |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 19.44       | 19.31              | 19.45          | 19.54               | 19.37        | 21                  |
| Channel         |                      |        |          | 502200      | 510402             | 518598         | 526800              | 534996       | 21                  |
| Frequency (MHz) |                      |        |          | 2511        | 2552.01            | 2592.99        | 2634                | 2674.98      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 19.58       | 19.48              | 19.63          | 19.71               | 19.40        | 21                  |
| Channel         |                      |        |          | 501204      | 509904             | 518598         | 527298              | 535998       | 21                  |
| Frequency (MHz) |                      |        |          | 2506.02     | 2549.52            | 2592.99        | 2636.49             | 2679.99      |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 19.73       | 19.71              | 19.90          | 19.98               | 19.60        | 21                  |
| Channel         |                      |        |          | 500700      | 509652             | 518598         | 527550              | 536496       | 21                  |
| Frequency (MHz) |                      |        |          | 2503.5      | 2548.26            | 2592.99        | 2637.75             | 2682.48      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 19.78       | 19.75              | 19.99          | 20.00               | 19.61        | 21                  |
| Channel         |                      |        |          | 500202      | 509400             | 518598         | 527796              | 537000       | 21                  |
| Frequency (MHz) |                      |        |          | 2501.01     | 2547               | 2592.99        | 2638.98             | 2685         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 19.84       | 19.83              | 20.04          | 20.04               | 19.65        | 18                  |

| n48 (PC3)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 640000      | 640834             | 641666         | 642500              | 643332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3600        | 3612.51            | 3624.99        | 3637.5              | 3649.98      |                     |
| 100             | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 15.57       | 15.60              | 15.64          | 15.74               | 15.93        | 18.00               |
| 100             |                      | 1      | 136      | 16.75       | 16.61              | 16.64          | 16.79               | 16.85        |                     |
| 100             |                      | 1      | 271      | 16.07       | 16.06              | 16.13          | 16.19               | 16.26        |                     |
| 100             |                      | 135    | 1        | 15.77       | 15.95              | 16.10          | 15.93               | 15.95        | 18.00               |
| 100             |                      | 135    | 67       | 16.78       | 16.66              | 16.79          | 16.82               | 16.90        |                     |
| 100             |                      | 135    | 136      | 12.81       | 16.12              | 16.21          | 16.22               | 16.29        |                     |
| 100             | DFT-s-OFDM QPSK      | 270    | 0        | 16.09       | 15.97              | 16.26          | 16.15               | 16.21        | 18.00               |
| 100             |                      | 1      | 1        | 15.69       | 15.74              | 15.75          | 15.90               | 16.06        |                     |
| 100             |                      | 1      | 136      | 16.98       | 17.05              | 17.13          | 17.03               | 17.00        |                     |
| 100             |                      | 1      | 271      | 16.22       | 16.21              | 16.30          | 16.36               | 16.40        | 18.00               |
| 100             |                      | 135    | 1        | 15.27       | 15.43              | 15.60          | 15.42               | 15.45        |                     |
| 100             |                      | 135    | 67       | 16.88       | 16.93              | 16.98          | 16.89               | 16.91        |                     |
| 100             | DFT-s-OFDM 16QAM     | 135    | 136      | 15.45       | 15.62              | 15.73          | 15.71               | 15.77        | 18.00               |
| 100             |                      | 270    | 0        | 15.61       | 15.47              | 15.46          | 15.68               | 15.71        |                     |
| 100             |                      | 1      | 1        | 14.61       | 14.64              | 14.67          | 14.80               | 14.97        | 16.00               |
| 100             | DFT-s-OFDM 64QAM     | 1      | 1        | 13.08       | 13.10              | 13.16          | 13.32               | 13.46        | 14.50               |
| 100             | DFT-s-OFDM 256QAM    | 1      | 1        | 10.81       | 10.87              | 10.93          | 11.06               | 11.23        | 12.00               |
| 100             | CP-OFDM QPSK         | 1      | 1        | 14.03       | 14.07              | 14.10          | 14.23               | 14.40        | 15.00               |
| 100             | CP-OFDM 16QAM        | 1      | 1        | 13.51       | 13.56              | 13.56          | 13.70               | 13.90        | 14.50               |
| 100             | CP-OFDM 64QAM        | 1      | 1        | 12.00       | 12.03              | 12.08          | 12.22               | 12.38        | 13.00               |
| 100             | CP-OFDM 256QAM       | 1      | 1        | 9.18        | 9.21               | 9.37           | 9.49                | 9.60         | 10.00               |
| Channel         |                      |        |          | 639668      | 640668             | 641666         | 642666              | 643666       | 18.00               |
| Frequency (MHz) |                      |        |          | 3595.02     | 3610.02            | 3624.99        | 3639.99             | 3654.99      |                     |
| 90              | DFT-s-OFDM QPSK      | 1      | 1        | 16.66       | 16.74              | 16.75          | 17.00               | 16.94        | 18.00               |
| Channel         |                      |        |          | 639334      | 640500             | 641666         | 642832              | 644000       | 18.00               |
| Frequency (MHz) |                      |        |          | 3590.01     | 3607.5             | 3624.99        | 3642.48             | 3660         |                     |
| 80              | DFT-s-OFDM QPSK      | 1      | 1        | 16.44       | 16.56              | 16.65          | 16.83               | 16.67        | 18.00               |
| Channel         |                      |        |          | 639000      | 640334             | 641666         | 643000              | 644332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3585        | 3605.01            | 3624.99        | 3645                | 3664.98      |                     |
| 70              | DFT-s-OFDM QPSK      | 1      | 1        | 16.04       | 16.05              | 16.30          | 16.24               | 16.43        | 18.00               |
| Channel         |                      |        |          | 638668      | 640168             | 641666         | 643332              | 644666       | 18.00               |
| Frequency (MHz) |                      |        |          | 3580.02     | 3602.52            | 3624.99        | 3647.49             | 3669.99      |                     |
| 60              | DFT-s-OFDM QPSK      | 1      | 1        | 16.00       | 16.08              | 16.36          | 16.24               | 16.47        | 18.00               |
| Channel         |                      |        |          | 638334      | 640000             | 641666         | 643332              | 645000       | 18.00               |
| Frequency (MHz) |                      |        |          | 3575.01     | 3600               | 3624.99        | 3647.49             | 3675         |                     |
| 50              | DFT-s-OFDM QPSK      | 1      | 1        | 16.16       | 16.17              | 16.58          | 16.49               | 16.63        | 18.00               |
| Channel         |                      |        |          | 638000      | 639834             | 641666         | 643500              | 645332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3570        | 3597.51            | 3624.99        | 3652.5              | 3679.98      |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 15.90       | 15.98              | 16.25          | 16.30               | 16.40        | 18.00               |
| Channel         |                      |        |          | 637668      | 639668             | 641666         | 643666              | 645666       | 18.00               |
| Frequency (MHz) |                      |        |          | 3565.02     | 3595.02            | 3624.99        | 3654.99             | 3684.99      |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 16.12       | 16.16              | 16.40          | 16.54               | 16.70        | 18.00               |
| Channel         |                      |        |          | 637334      | 639500             | 641666         | 643832              | 646000       | 18.00               |
| Frequency (MHz) |                      |        |          | 3560.01     | 3592.5             | 3624.99        | 3657.48             | 3690         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 16.27       | 16.44              | 16.51          | 16.84               | 16.93        | 18.00               |
| Channel         |                      |        |          | 637168      | 639418             | 641666         | 643916              | 646166       | 18.00               |
| Frequency (MHz) |                      |        |          | 3557.52     | 3591.27            | 3624.99        | 3658.74             | 3692.49      |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 16.30       | 16.50              | 16.57          | 16.88               | 17.04        | 18.00               |
| Channel         |                      |        |          | 637000      | 639334             | 641666         | 644000              | 646332       | 18.00               |
| Frequency (MHz) |                      |        |          | 3555        | 3590.01            | 3624.99        | 3660                | 3694.98      |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 16.39       | 16.51              | 16.58          | 16.88               | 17.06        | 14.50               |

| n66 (PC3)       |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 346000      | 349000         | 352000       | 21.00               |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 18.99       | 18.96          | 18.93        | 21.00               |
| 40              |                      | 1      | 108      | 19.50       | 19.53          | 19.47        |                     |
| 40              |                      | 1      | 214      | 18.92       | 18.95          | 18.95        |                     |
| 40              |                      | 108    | 1        | 18.93       | 18.99          | 18.94        | 21.00               |
| 40              |                      | 108    | 54       | 19.55       | 19.53          | 19.46        |                     |
| 40              |                      | 108    | 108      | 18.88       | 18.78          | 18.84        |                     |
| 40              | DFT-s-OFDM QPSK      | 216    | 0        | 18.84       | 18.89          | 18.80        | 21.00               |
| 40              |                      | 1      | 1        | 19.06       | 19.00          | 18.98        |                     |
| 40              |                      | 1      | 108      | 19.91       | 19.94          | 19.90        |                     |
| 40              |                      | 1      | 214      | 18.95       | 18.95          | 18.95        | 21.00               |
| 40              |                      | 108    | 1        | 18.45       | 18.45          | 18.44        |                     |
| 40              |                      | 108    | 54       | 19.88       | 19.90          | 19.85        |                     |
| 40              | DFT-s-OFDM 16QAM     | 108    | 108      | 18.36       | 18.29          | 18.33        | 21.00               |
| 40              |                      | 216    | 0        | 18.40       | 18.38          | 18.38        |                     |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 18.09       | 18.03          | 17.97        | 19.00               |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 16.81       | 16.77          | 16.70        | 17.50               |
| 40              | CP-OFDM QPSK         | 1      | 1        | 14.46       | 14.37          | 14.38        | 15.00               |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 17.53       | 17.51          | 17.40        | 18.50               |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 16.93       | 16.91          | 16.82        | 17.50               |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 15.74       | 15.31          | 15.79        | 16.50               |
| 40              |                      | 1      | 1        | 12.38       | 12.34          | 12.27        | 13.00               |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | 21.00               |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 19.24       | 19.14          | 19.14        | 21.00               |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | 21.00               |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 19.40       | 19.31          | 19.29        | 21.00               |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | 21.00               |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 19.45       | 19.46          | 19.32        | 21.00               |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | 21.00               |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 19.51       | 19.46          | 19.43        | 21.00               |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | 21.00               |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 19.39       | 19.34          | 19.30        | 21.00               |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | 21.00               |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 19.63       | 19.52          | 19.52        | 21.00               |

## n71 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 134600      | 136100         | 137600       | 24.00               |
| Frequency (MHz) |                      |        |          | 673         | 680.5          | 688          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.73       | 22.81          | 22.83        | 24.00               |
| 20              |                      | 1      | 53       | 22.96       | 23.01          | 22.99        |                     |
| 20              |                      | 1      | 104      | 22.87       | 22.80          | 22.82        |                     |
| 20              |                      | 50     | 1        | 22.36       | 22.38          | 22.45        | 24.00               |
| 20              |                      | 50     | 25       | 23.11       | 23.07          | 19.55        |                     |
| 20              |                      | 50     | 50       | 22.66       | 22.67          | 22.66        |                     |
| 20              |                      | 100    | 0        | 22.54       | 22.46          | 22.50        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.04       | 23.15          | 23.08        | 24.00               |
| 20              |                      | 1      | 53       | 22.96       | 23.08          | 22.96        |                     |
| 20              |                      | 1      | 104      | 22.86       | 22.88          | 22.81        |                     |
| 20              |                      | 50     | 1        | 21.87       | 21.88          | 21.92        | 24.00               |
| 20              |                      | 50     | 25       | 23.05       | 23.10          | 23.08        |                     |
| 20              |                      | 50     | 50       | 22.09       | 22.10          | 22.00        |                     |
| 20              |                      | 100    | 0        | 22.22       | 21.93          | 21.99        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.74       | 21.79          | 21.88        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.42       | 20.66          | 20.71        | 21.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 18.37       | 18.80          | 18.84        | 19.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.16       | 21.31          | 21.30        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 20.90       | 21.05          | 21.04        | 22.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.50       | 19.93          | 19.99        | 21.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.32       | 16.89          | 17.02        | 18.00               |
| Channel         |                      |        |          | 134100      | 136100         | 138100       | 24.00               |
| Frequency (MHz) |                      |        |          | 670.5       | 680.5          | 690.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.76       | 22.91          | 22.89        | 24.00               |
| Channel         |                      |        |          | 133600      | 136100         | 138600       | 24.00               |
| Frequency (MHz) |                      |        |          | 668         | 680.5          | 693          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.65       | 22.77          | 22.74        | 24.00               |
| Channel         |                      |        |          | 133100      | 136100         | 139100       | 24.00               |
| Frequency (MHz) |                      |        |          | 665.5       | 680.5          | 695.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.84       | 22.98          | 22.99        | 24.00               |

| n77(3450-3550MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        |             |                    | 19.13          |                     |              | 20.50               |
| 100                     |                      | 1      | 136      |             |                    | 19.57          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 18.14          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 19.02          |                     |              | 20.00               |
| 100                     |                      | 135    | 67       |             |                    | 19.55          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 18.40          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        |             |                    | 18.85          |                     |              | 21.00               |
| 100                     |                      | 1      | 1        |             |                    | 19.10          |                     |              |                     |
| 100                     |                      | 1      | 136      |             |                    | 19.96          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 18.16          |                     |              | 20.50               |
| 100                     |                      | 135    | 1        |             |                    | 18.55          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 19.78          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      |             |                    | 17.84          |                     |              | 20.50               |
| 100                     |                      | 270    | 0        |             |                    | 18.37          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 18.20          |                     |              | 19.00               |
| 100                     |                      | 1      | 1        |             |                    | 16.44          |                     |              | 17.50               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 14.55          |                     |              | 15.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 17.62          |                     |              | 18.50               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 17.18          |                     |              | 18.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 15.63          |                     |              | 16.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 12.46          |                     |              | 13.50               |
| Channel                 |                      |        |          | 633000      | 633168             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.52            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.28       | 19.25              | 19.24          | 19.22               | 19.24        | 20.50               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.47       | 19.44              | 19.44          | 19.40               | 19.34        | 20.50               |
| Channel                 |                      |        |          | 632334      | 632668             | 633334         | 633832              | 634332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 18.64       | 19.54              | 19.53          | 19.45               | 19.38        | 20.50               |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.48       | 19.44              | 19.36          | 19.26               | 19.25        | 20.50               |
| Channel                 |                      |        |          | 631668      | 632000             | 633334         | 634166              | 635000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3510                | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.64       | 19.57              | 19.43          | 19.35               | 19.22        | 20.50               |
| Channel                 |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.43       | 19.33              | 19.21          | 19.10               | 18.76        | 20.50               |
| Channel                 |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.63       | 19.50              | 19.37          | 19.13               | 18.68        | 20.50               |
| Channel                 |                      |        |          | 630834      | 632084             | 633334         | 634584              | 635832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3462.51     | 3481.26            | 3500.01        | 3518.76             | 3537.48      |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.71       | 19.60              | 19.50          | 19.17               | 18.74        | 20.50               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.70       | 19.62              | 19.48          | 19.18               | 18.78        | 20.50               |
| Channel                 |                      |        |          | 630500      | 631916             | 633334         | 634750              | 636166       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3457.5      | 3478.74            | 3500.01        | 3521.25             | 3542.49      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.77       | 19.66              | 19.56          | 19.09               | 18.82        | 25.00               |
| Channel                 |                      |        |          | 630334      | 631834             | 633334         | 634834              | 636332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3455.01     | 3477.51            | 3500.01        | 3522.51             | 3544.98      |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.76       | 19.66              | 19.57          | 19.04               | 18.89        | 25.00               |



| n77(3700-3980MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 19.21       | 18.95              | 18.80          | 19.14               | 19.05        | 21.00               |
| 100                     |                      | 1      | 136      | 19.77       | 19.68              | 19.99          | 19.84               | 18.87        |                     |
| 100                     |                      | 1      | 271      | 18.89       | 19.15              | 18.97          | 18.07               | 18.64        |                     |
| 100                     |                      | 135    | 1        | 19.50       | 18.91              | 18.97          | 19.05               | 18.65        | 21.00               |
| 100                     |                      | 135    | 67       | 19.80       | 19.75              | 20.00          | 19.93               | 19.02        |                     |
| 100                     |                      | 135    | 136      | 18.95       | 19.19              | 19.18          | 18.78               | 18.62        |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        | 19.15       | 19.04              | 19.25          | 19.04               | 18.38        | 21.00               |
| 100                     |                      | 1      | 1        | 19.22       | 18.92              | 18.80          | 19.16               | 19.06        |                     |
| 100                     |                      | 1      | 136      | 19.94       | 20.02              | 20.12          | 20.08               | 20.10        |                     |
| 100                     |                      | 1      | 271      | 18.86       | 19.15              | 18.96          | 18.07               | 18.64        | 21.00               |
| 100                     |                      | 135    | 1        | 19.01       | 18.41              | 18.43          | 18.60               | 18.13        |                     |
| 100                     |                      | 135    | 67       | 19.99       | 19.97              | 20.02          | 19.98               | 19.93        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      | 18.42       | 18.59              | 18.66          | 18.28               | 18.11        | 21.00               |
| 100                     |                      | 270    | 0        | 18.72       | 18.50              | 18.81          | 18.61               | 17.96        |                     |
| 100                     |                      | 1      | 1        | 18.20       | 17.96              | 17.75          | 18.14               | 18.08        | 19.00               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 16.48       | 16.24              | 16.20          | 16.44               | 16.36        | 17.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 14.67       | 14.37              | 14.23          | 14.60               | 14.53        | 15.00               |
| 100                     | CP-OFDM QPSK         | 1      | 1        | 17.89       | 17.58              | 17.37          | 17.72               | 17.65        | 18.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 17.23       | 16.96              | 16.79          | 17.15               | 17.05        | 18.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 15.76       | 15.48              | 15.31          | 15.68               | 15.59        | 16.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 12.68       | 12.32              | 12.28          | 12.54               | 12.51        | 13.50               |
| Channel                 |                      |        |          | 649666      | 652834             | 656000         | 659166              | 662332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3744.99     | 3792.51            | 3840           | 3887.49             | 3934.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.35       | 19.04              | 18.95          | 19.27               | 19.04        | 21.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.58       | 19.23              | 19.17          | 19.38               | 18.99        | 21.00               |
| Channel                 |                      |        |          | 649000      | 652500             | 656000         | 659500              | 663000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3735        | 3787.5             | 3840           | 3892.5              | 3945         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.71       | 19.33              | 19.30          | 19.48               | 18.88        | 21.00               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.65       | 19.27              | 19.29          | 19.43               | 18.61        | 21.00               |
| Channel                 |                      |        |          | 648334      | 652168             | 656000         | 659832              | 663666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3782.52            | 3840           | 3894.99             | 3954.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.79       | 19.37              | 19.45          | 19.64               | 18.67        | 21.00               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.53       | 19.13              | 19.19          | 19.37               | 18.41        | 21.00               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.77       | 19.31              | 19.50          | 19.47               | 18.74        | 21.00               |
| Channel                 |                      |        |          | 647500      | 651750             | 656000         | 660250              | 664500       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3712.5      | 3776.25            | 3840           | 3903.75             | 3967.5       |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.89       | 19.43              | 19.70          | 19.53               | 18.96        | 21.00               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.00       | 19.52              | 19.75          | 19.56               | 19.11        | 21.00               |
| Channel                 |                      |        |          | 647168      | 651584             | 656000         | 660416              | 664832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3707.52     | 3773.76            | 3840           | 3906.24             | 3972.48      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.04       | 19.59              | 19.90          | 19.54               | 19.31        | 25.00               |
| Channel                 |                      |        |          | 647000      | 651500             | 656000         | 660500              | 665000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3705        | 3772.5             | 3840           | 3907.5              | 3975         |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.07       | 19.58              | 19.94          | 19.44               | 19.35        | 25.00               |

| n77(3450-3550MHz) (PC3) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        |             |                    | 19.47          |                     |              | 21.00               |
| 100                     |                      | 1      | 136      |             |                    | 19.93          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 19.53          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 19.33          |                     |              | 20.50               |
| 100                     |                      | 135    | 67       |             |                    | 19.90          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 19.27          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        |             |                    | 19.16          |                     |              | 21.00               |
| 100                     |                      | 1      | 1        |             |                    | 19.41          |                     |              |                     |
| 100                     |                      | 1      | 136      |             |                    | 19.98          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 19.52          |                     |              | 21.00               |
| 100                     |                      | 135    | 1        |             |                    | 19.58          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 19.91          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      |             |                    | 19.29          |                     |              | 21.00               |
| 100                     |                      | 270    | 0        |             |                    | 19.57          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 18.48          |                     |              | 19.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 16.95          |                     |              | 18.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 14.70          |                     |              | 15.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 17.91          |                     |              | 19.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 17.38          |                     |              | 18.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 15.87          |                     |              | 16.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 13.10          |                     |              | 14.00               |
| Channel                 |                      |        |          | 633000      | 633168             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.52            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.59       | 19.54              | 19.54          | 19.50               | 19.50        | 21.00               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.79       | 19.73              | 19.74          | 19.69               | 19.63        | 21.00               |
| Channel                 |                      |        |          | 632334      | 632668             | 633334         | 633666              | 634332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.87       | 19.86              | 19.82          | 19.74               | 19.63        | 21.00               |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.88       | 19.83              | 19.70          | 19.62               | 19.61        | 21.00               |
| Channel                 |                      |        |          | 631668      | 632000             | 633334         | 634166              | 635000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3510                | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.02       | 19.92              | 19.81          | 19.74               | 19.63        | 21.00               |
| Channel                 |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.81       | 19.70              | 19.57          | 19.45               | 19.13        | 21.00               |
| Channel                 |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.85       | 19.85              | 19.74          | 19.53               | 19.08        | 21.00               |
| Channel                 |                      |        |          | 630834      | 632084             | 633334         | 634584              | 635832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3462.51     | 3481.26            | 3500.01        | 3518.76             | 3537.48      |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.80       | 19.93              | 19.83          | 19.56               | 19.16        | 21.00               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.79       | 19.88              | 19.95          | 19.58               | 19.19        | 21.00               |
| Channel                 |                      |        |          | 630500      | 631916             | 633334         | 634750              | 636166       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3457.5      | 3478.74            | 3500.01        | 3521.25             | 3542.49      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.85       | 19.88              | 19.94          | 19.57               | 19.26        | 22.00               |
| Channel                 |                      |        |          | 630334      | 631834             | 633334         | 634834              | 636332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3455.01     | 3477.51            | 3500.01        | 3522.51             | 3544.98      |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.92       | 19.86              | 19.79          | 19.50               | 19.35        | 22.00               |

| n77(3700-3980MHz) (PC3) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM Pi/2 BPSK | 1      | 1        | 19.30       | 19.08              | 18.95          | 19.24               | 19.09        | 21.00               |
| 100                     |                      | 1      | 136      | 19.91       | 19.85              | 20.09          | 19.86               | 18.89        |                     |
| 100                     |                      | 1      | 271      | 19.01       | 19.20              | 18.99          | 19.11               | 19.14        |                     |
| 100                     |                      | 135    | 1        | 19.64       | 19.06              | 19.10          | 19.14               | 19.66        | 21.00               |
| 100                     |                      | 135    | 67       | 19.85       | 19.91              | 19.96          | 19.88               | 19.03        |                     |
| 100                     |                      | 135    | 136      | 19.11       | 18.89              | 19.18          | 19.22               | 19.16        |                     |
| 100                     | DFT-s-OFDM QPSK      | 270    | 0        | 19.26       | 19.22              | 19.37          | 19.13               | 18.46        | 21.00               |
| 100                     |                      | 1      | 1        | 19.25       | 19.05              | 18.91          | 19.27               | 19.08        |                     |
| 100                     |                      | 1      | 136      | 20.05       | 20.03              | 20.14          | 19.95               | 20.05        |                     |
| 100                     |                      | 1      | 271      | 18.99       | 19.22              | 18.95          | 18.02               | 18.65        | 21.00               |
| 100                     |                      | 135    | 1        | 19.14       | 18.53              | 18.61          | 18.75               | 18.14        |                     |
| 100                     |                      | 135    | 67       | 19.98       | 19.87              | 20.09          | 19.96               | 20.01        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 135    | 136      | 19.22       | 19.19              | 19.57          | 19.22               | 19.18        | 21.00               |
| 100                     |                      | 270    | 0        | 18.81       | 18.71              | 18.94          | 18.85               | 18.85        |                     |
| 100                     |                      |        |          |             |                    |                |                     |              |                     |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 18.34       | 18.12              | 18.06          | 18.37               | 18.14        | 19.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 16.80       | 16.60              | 16.41          | 16.83               | 16.62        | 17.50               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 14.55       | 14.32              | 14.30          | 14.57               | 14.37        | 15.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 17.77       | 17.56              | 17.37          | 17.76               | 17.56        | 18.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 17.20       | 17.05              | 17.07          | 17.22               | 17.03        | 18.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 15.72       | 15.50              | 15.43          | 15.72               | 15.55        | 16.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 12.94       | 12.68              | 12.62          | 12.92               | 12.34        | 13.00               |
| Channel                 |                      |        |          | 649666      | 652834             | 656000         | 659166              | 662332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3744.99     | 3792.51            | 3840           | 3887.49             | 3934.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.44       | 19.15              | 19.11          | 19.36               | 19.03        | 21.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.62       | 19.33              | 19.34          | 19.47               | 18.99        | 21.00               |
| Channel                 |                      |        |          | 649000      | 652500             | 656000         | 659500              | 663000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3735        | 3787.5             | 3840           | 3892.5              | 3945         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.71       | 19.46              | 19.44          | 19.54               | 18.80        | 21.00               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.70       | 19.42              | 19.41          | 19.47               | 18.56        | 21.00               |
| Channel                 |                      |        |          | 648334      | 652168             | 656000         | 659832              | 663666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3782.52            | 3840           | 3894.99             | 3954.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.89       | 19.51              | 19.61          | 19.71               | 18.64        | 21.00               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.63       | 19.29              | 19.33          | 19.40               | 18.38        | 21.00               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.86       | 19.47              | 19.62          | 19.48               | 18.71        | 21.00               |
| Channel                 |                      |        |          | 647500      | 651750             | 656000         | 660250              | 664500       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3712.5      | 3776.25            | 3840           | 3903.75             | 3967.5       |                     |
| 25                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.99       | 19.60              | 19.81          | 19.53               | 18.92        | 21.00               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.08       | 19.68              | 19.89          | 19.52               | 19.09        | 21.00               |
| Channel                 |                      |        |          | 647168      | 651584             | 656000         | 660416              | 664832       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3707.52     | 3773.76            | 3840           | 3906.24             | 3972.48      |                     |
| 15                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.13       | 19.73              | 20.01          | 19.49               | 19.27        | 17.50               |
| Channel                 |                      |        |          | 647000      | 651500             | 656000         | 660500              | 665000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3705        | 3772.5             | 3840           | 3907.5              | 3975         |                     |
| 10                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.14       | 19.75              | 20.08          | 19.40               | 19.35        | 18.00               |

| CA_48C                               |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 55340                                | 55538       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 16.34               | 17.00              |
| 55990                                | 56089       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 16.39               | 17.00              |
| 56640                                | 56640       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 16.29               | 17.00              |
| 55340                                | 55538       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 15.29               | 16.00              |
| 55990                                | 56089       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 15.32               | 16.00              |
| 56640                                | 56640       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 15.26               | 16.00              |
| 55340                                | 55538       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 14.26               | 15.00              |
| 55990                                | 56089       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 14.33               | 15.00              |
| 56640                                | 56640       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 14.21               | 15.00              |

| CA_66C                               |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 132072                               | 132270      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 18.26               | 19                 |
| 132322                               | 132521      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 18.33               | 19                 |
| 132572                               | 132572      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 18.17               | 19                 |
| 132072                               | 132270      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.65               | 19                 |
| 132322                               | 132521      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.58               | 19                 |
| 132572                               | 132572      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.53               | 19                 |
| 132072                               | 132270      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.65               | 19                 |
| 132322                               | 132521      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.57               | 19                 |

**2.4GHz WLAN ANT 1**

| 2.4GHz WLAN<br>ANT 1 | Mode              | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Power Setting | Duty Cycle % |
|----------------------|-------------------|---------|--------------------|------------------------|------------------|---------------|--------------|
|                      | 802.11b 1Mbps     | CH 1    | 2412               | 17.52                  | 18.00            | 18.00         | 99.67        |
|                      |                   | CH 6    | 2437               | 18.18                  | 18.50            | 18.00         |              |
|                      |                   | CH 11   | 2462               | 17.99                  | 18.50            | 18.00         |              |
|                      | 802.11g 6Mbps     | CH 1    | 2412               | 20.90                  | 21.50            | 15.50         | 97.62        |
|                      |                   | CH 6    | 2437               | 21.08                  | 21.50            | 15.50         |              |
|                      |                   | CH 11   | 2462               | 20.74                  | 21.00            | 15.50         |              |
|                      | 802.11n-HT20 MCS0 | CH 1    | 2412               | 20.74                  | 21.00            | 15.50         | 97.46        |
|                      |                   | CH 6    | 2437               | 20.98                  | 21.50            | 15.50         |              |
|                      |                   | CH 11   | 2462               | 20.51                  | 21.00            | 15.50         |              |

**5GHz WLAN ANT 1**

| 5.2GHz WLAN<br>ANT 1 | Mode                | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Power Setting | Duty Cycle % |
|----------------------|---------------------|---------|--------------------|------------------------|------------------|---------------|--------------|
|                      | 802.11a 6Mbps       | CH 36   | 5180               | 12.79                  | 13.00            | 13.00         | 98.60        |
|                      |                     | CH 44   | 5220               | 12.83                  | 13.50            | 13.00         |              |
|                      |                     | CH 48   | 5240               | 12.68                  | 13.00            | 13.00         |              |
|                      | 802.11n-HT20 MCS0   | CH 36   | 5180               | 12.95                  | 13.50            | 13.00         | 98.50        |
|                      |                     | CH 44   | 5220               | 13.00                  | 13.50            | 13.00         |              |
|                      |                     | CH 48   | 5240               | 12.85                  | 13.50            | 13.00         |              |
|                      | 802.11n-HT40 MCS0   | CH 38   | 5190               | 12.83                  | 13.50            | 13.00         | 97.10        |
|                      |                     | CH 46   | 5230               | 13.27                  | 13.50            | 13.00         |              |
|                      |                     | CH 36   | 5180               | 12.95                  | 13.50            | 13.00         |              |
|                      | 802.11ac-VHT20 MCS0 | CH 44   | 5220               | 13.06                  | 13.50            | 13.00         | 98.52        |
|                      |                     | CH 48   | 5240               | 12.90                  | 13.50            | 13.00         |              |
|                      |                     | CH 38   | 5190               | 12.87                  | 13.50            | 13.00         |              |
|                      | 802.11ac-VHT40 MCS0 | CH 46   | 5230               | 13.25                  | 13.50            | 13.00         | 97.10        |
|                      |                     | CH 42   | 5210               | 12.89                  | 13.50            | 13.00         |              |
|                      |                     | CH 42   | 5210               | 12.89                  | 13.50            | 13.00         | 88.89        |

**5GHz WLAN ANT 1**

| 5.3GHz WLAN<br>ANT 1 | Mode                | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Power Setting | Duty Cycle % |
|----------------------|---------------------|---------|--------------------|------------------------|------------------|---------------|--------------|
|                      | 802.11a 6Mbps       | CH 52   | 5260               | 12.39                  | 13.00            | 12.50         | 98.60        |
|                      |                     | CH 60   | 5300               | 12.18                  | 13.00            | 12.50         |              |
|                      |                     | CH 64   | 5320               | 11.98                  | 12.50            | 12.50         |              |
|                      | 802.11n-HT20 MCS0   | CH 52   | 5260               | 12.52                  | 13.00            | 12.50         | 98.50        |
|                      |                     | CH 60   | 5300               | 12.21                  | 13.00            | 12.50         |              |
|                      |                     | CH 64   | 5320               | 11.92                  | 12.50            | 12.50         |              |
|                      | 802.11n-HT40 MCS0   | CH 54   | 5270               | 12.71                  | 13.00            | 12.50         | 97.10        |
|                      |                     | CH 62   | 5310               | 12.56                  | 13.00            | 12.50         |              |
|                      |                     | CH 52   | 5260               | 12.94                  | 13.50            | 13.00         |              |
|                      | 802.11ac-VHT20 MCS0 | CH 60   | 5300               | 12.69                  | 13.00            | 13.00         | 98.52        |
|                      |                     | CH 64   | 5320               | 12.43                  | 13.00            | 13.00         |              |
|                      |                     | CH 54   | 5270               | 12.72                  | 13.00            | 12.50         |              |
|                      | 802.11ac-VHT40 MCS0 | CH 62   | 5310               | 12.59                  | 13.00            | 12.50         | 97.10        |
|                      |                     | CH 58   | 5290               | 12.16                  | 12.50            | 12.50         |              |
|                      |                     | CH 58   | 5290               | 12.16                  | 12.50            | 12.50         | 88.89        |

**5GHz WLAN ANT 1**

| 5.5GHz WLAN<br>ANT 1 | Mode                | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Power Setting | Duty Cycle % |
|----------------------|---------------------|---------|--------------------|------------------------|------------------|---------------|--------------|
|                      | 802.11a 6Mbps       | CH 100  | 5500               | 12.29                  | 12.50            | 12.00         | 98.60        |
|                      |                     | CH 120  | 5600               | 12.41                  | 13.00            | 12.00         |              |
|                      |                     | CH 144  | 5720               | 12.63                  | 13.00            | 12.00         |              |
|                      | 802.11n-HT20 MCS0   | CH 100  | 5500               | 12.29                  | 12.50            | 12.00         | 98.50        |
|                      |                     | CH 120  | 5600               | 12.41                  | 13.00            | 12.00         |              |
|                      |                     | CH 144  | 5720               | 12.57                  | 13.00            | 12.00         |              |
|                      | 802.11n-HT40 MCS0   | CH 102  | 5510               | 12.23                  | 12.50            | 12.00         | 97.10        |
|                      |                     | CH 126  | 5630               | 12.78                  | 13.00            | 12.00         |              |
|                      |                     | CH 142  | 5710               | 12.70                  | 13.00            | 12.00         |              |
|                      | 802.11ac-VHT20 MCS0 | CH 100  | 5500               | 12.75                  | 13.00            | 12.00         | 98.52        |
|                      |                     | CH 120  | 5600               | 12.46                  | 13.00            | 12.00         |              |
|                      |                     | CH 144  | 5720               | 12.45                  | 13.00            | 12.00         |              |
|                      | 802.11ac-VHT40 MCS0 | CH 102  | 5510               | 12.61                  | 13.00            | 13.00         | 97.10        |
|                      |                     | CH 126  | 5630               | 12.38                  | 13.00            | 13.00         |              |
|                      |                     | CH 142  | 5710               | 13.10                  | 13.50            | 13.00         |              |
|                      | 802.11ac-VHT80 MCS0 | CH 106  | 5530               | 12.18                  | 12.50            | 12.00         | 88.89        |
|                      |                     | CH 122  | 5610               | 12.39                  | 13.00            | 12.00         |              |
|                      |                     | CH 138  | 5690               | 12.58                  | 13.00            | 12.00         |              |

**5GHz WLAN ANT 1**

| 5.8GHz WLAN<br>ANT 1 | Mode                | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Power Setting | Duty Cycle % |
|----------------------|---------------------|---------|--------------------|------------------------|------------------|---------------|--------------|
|                      | 802.11a 6Mbps       | CH 149  | 5745               | 12.35                  | 13.00            | 12.00         | 98.60        |
|                      |                     | CH 157  | 5785               | 12.53                  | 13.00            | 12.00         |              |
|                      |                     | CH 165  | 5825               | 12.46                  | 13.00            | 12.00         |              |
|                      | 802.11n-HT20 MCS0   | CH 149  | 5745               | 12.28                  | 12.50            | 13.00         | 98.50        |
|                      |                     | CH 157  | 5785               | 12.92                  | 13.50            | 13.00         |              |
|                      |                     | CH 165  | 5825               | 12.40                  | 13.00            | 13.00         |              |
|                      | 802.11n-HT40 MCS0   | CH 151  | 5755               | 12.45                  | 13.00            | 12.00         | 97.10        |
|                      |                     | CH 159  | 5795               | 12.48                  | 13.00            | 12.00         |              |
|                      |                     | CH 149  | 5745               | 12.25                  | 12.50            | 12.00         |              |
|                      | 802.11ac-VHT20 MCS0 | CH 157  | 5785               | 12.87                  | 13.50            | 12.00         | 98.52        |
|                      |                     | CH 165  | 5825               | 12.89                  | 13.50            | 12.00         |              |
|                      |                     | CH 151  | 5755               | 12.49                  | 13.00            | 12.00         |              |
|                      | 802.11ac-VHT40 MCS0 | CH 159  | 5795               | 12.54                  | 13.00            | 12.00         | 97.10        |
|                      |                     | CH 155  | 5775               | 12.29                  | 12.50            | 12.00         |              |
|                      |                     | CH 155  | 5775               | 12.29                  | 12.50            | 12.00         | 88.89        |

## Reduced Power Level 3

| Band            |                         | WCDMA Band II (dBm) |            |        | Tune-up<br>Limit<br>(dBm) | WCDMA Band IV (dBm) |            |        | Tune-up<br>Limit<br>(dBm) |
|-----------------|-------------------------|---------------------|------------|--------|---------------------------|---------------------|------------|--------|---------------------------|
| TX Channel      |                         | 9262                | 9400       | 9538   |                           | 1312                | 1413       | 1513   |                           |
| Rx Channel      |                         | 9662                | 9800       | 9938   |                           | 1537                | 1638       | 1738   |                           |
| Frequency (MHz) |                         | 1852.4              | 1880       | 1907.6 |                           | 1712.4              | 1732.6     | 1752.6 |                           |
| 3GPP Rel 99     | RMC 12.2Kbps            | 20.12               | 20.22      | 20.17  | 21.00                     | 20.29               | 20.33      | 20.30  | 21.00                     |
| 3GPP Rel 5      | HSDPA Subtest-1         | 19.26               | 19.30      | 19.32  | 20.00                     | 19.28               | 19.20      | 19.22  | 20.00                     |
| 3GPP Rel 5      | HSDPA Subtest-2         | 19.25               | 19.19      | 19.29  | 20.00                     | 19.27               | 19.15      | 19.17  | 20.00                     |
| 3GPP Rel 5      | HSDPA Subtest-3         | 18.81               | 18.78      | 18.87  | 19.50                     | 18.81               | 18.68      | 18.66  | 19.50                     |
| 3GPP Rel 5      | HSDPA Subtest-4         | 18.74               | 18.69      | 18.78  | 19.50                     | 18.75               | 18.65      | 18.67  | 19.50                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-1      | 19.15               | 19.06      | 19.16  | 20.00                     | 19.13               | 19.02      | 19.07  | 20.00                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-2      | 19.13               | 19.07      | 19.12  | 20.00                     | 19.11               | 19.00      | 19.02  | 20.00                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-3      | 18.58               | 18.57      | 19.16  | 19.50                     | 18.62               | 18.47      | 18.48  | 19.00                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-4      | 18.56               | 18.55      | 18.62  | 19.50                     | 18.66               | 18.52      | 18.49  | 19.00                     |
| 3GPP Rel 6      | HSUPA Subtest-1         | 18.60               | 18.51      | 18.60  | 19.50                     | 18.76               | 18.55      | 18.60  | 19.50                     |
| 3GPP Rel 6      | HSUPA Subtest-2         | 19.15               | 19.12      | 19.15  | 20.00                     | 19.07               | 19.02      | 19.00  | 20.00                     |
| 3GPP Rel 6      | HSUPA Subtest-3         | 18.15               | 18.10      | 18.14  | 19.00                     | 18.21               | 18.02      | 17.99  | 19.00                     |
| 3GPP Rel 6      | HSUPA Subtest-4         | 19.14               | 19.05      | 19.15  | 20.00                     | 19.10               | 19.01      | 19.03  | 20.00                     |
| 3GPP Rel 6      | HSUPA Subtest-5         | 18.12               | 18.07      | 18.11  | 19.00                     | 18.09               | 17.96      | 17.95  | 19.00                     |
| 3GPP Rel 7      | HSPA+ (16QAM) Subtest-1 | 18.11               | 18.14      | 18.17  | 19.00                     | 18.03               | 18.06      | 18.04  | 19.00                     |
| Attenuator      |                         |                     | Cable Loss | 0.8    |                           |                     | Cable Loss | 0.8    |                           |
| Mode            |                         |                     | Max.       | 20.22  |                           |                     | Max.       | 20.33  |                           |
| Date            |                         | 7/17                |            |        |                           |                     |            |        |                           |

| Band 2 (1900MHz Band) (dBm)<br>Part 24E_Ant 1 |            |         |           |             |                |              |                     |  |  |
|-----------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW [MHz]                                      | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                       |            |         |           | 18700       | 18900          | 19100        |                     |  |  |
| Frequency (MHz)                               |            |         |           | 1860        | 1880           | 1900         |                     |  |  |
| 20                                            | QPSK       | 1       | 0         | 18.92       | 18.96          | 18.89        | 20                  |  |  |
| 20                                            | QPSK       | 1       | 49        | 18.87       | 18.88          | 18.81        |                     |  |  |
| 20                                            | QPSK       | 1       | 99        | 18.82       | 18.78          | 18.73        |                     |  |  |
| 20                                            | QPSK       | 50      | 0         | 17.86       | 17.92          | 17.87        | 19                  |  |  |
| 20                                            | QPSK       | 50      | 24        | 17.75       | 17.84          | 17.79        |                     |  |  |
| 20                                            | QPSK       | 50      | 50        | 17.76       | 17.88          | 17.78        |                     |  |  |
| 20                                            | QPSK       | 100     | 0         | 17.84       | 17.85          | 17.79        | 19                  |  |  |
| 20                                            | 16QAM      | 1       | 0         | 18.15       | 18.07          | 17.95        |                     |  |  |
| 20                                            | 16QAM      | 1       | 49        | 18.07       | 18.09          | 17.97        |                     |  |  |
| 20                                            | 16QAM      | 1       | 99        | 17.94       | 17.94          | 18.02        | 18                  |  |  |
| 20                                            | 16QAM      | 50      | 0         | 16.90       | 17.01          | 17.05        |                     |  |  |
| 20                                            | 16QAM      | 50      | 24        | 16.91       | 16.87          | 16.84        |                     |  |  |
| 20                                            | 16QAM      | 50      | 50        | 16.73       | 16.78          | 16.93        | 18                  |  |  |
| 20                                            | 16QAM      | 100     | 0         | 16.95       | 16.81          | 16.90        |                     |  |  |
| 20                                            | 64QAM      | 1       | 0         | 17.13       | 17.14          | 17.23        |                     |  |  |
| 20                                            | 64QAM      | 1       | 49        | 17.05       | 17.03          | 17.16        | 18                  |  |  |
| 20                                            | 64QAM      | 1       | 99        | 17.06       | 17.14          | 16.95        |                     |  |  |
| 20                                            | 64QAM      | 50      | 0         | 15.85       | 16.14          | 15.93        |                     |  |  |
| 20                                            | 64QAM      | 50      | 24        | 16.03       | 15.93          | 15.80        | 17                  |  |  |
| 20                                            | 64QAM      | 50      | 50        | 15.84       | 15.97          | 15.79        |                     |  |  |
| 20                                            | 64QAM      | 100     | 0         | 16.01       | 15.98          | 15.75        |                     |  |  |
| Channel                                       |            |         |           | 18675       | 18900          | 19125        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1857.5      | 1880           | 1902.5       |                     |  |  |
| 15                                            | QPSK       | 1       | 0         | 18.86       | 18.90          | 18.83        | 20                  |  |  |
| 15                                            | QPSK       | 1       | 37        | 18.81       | 18.82          | 18.75        |                     |  |  |
| 15                                            | QPSK       | 1       | 74        | 18.76       | 18.72          | 18.67        |                     |  |  |
| 15                                            | QPSK       | 36      | 0         | 17.80       | 17.86          | 17.81        | 19                  |  |  |
| 15                                            | QPSK       | 36      | 20        | 17.69       | 17.78          | 17.73        |                     |  |  |
| 15                                            | QPSK       | 36      | 39        | 17.70       | 17.82          | 17.72        |                     |  |  |
| 15                                            | QPSK       | 75      | 0         | 17.78       | 17.79          | 17.73        | 19                  |  |  |
| 15                                            | 16QAM      | 1       | 0         | 18.09       | 18.01          | 17.89        |                     |  |  |
| 15                                            | 16QAM      | 1       | 37        | 18.01       | 18.03          | 17.91        |                     |  |  |
| 15                                            | 16QAM      | 1       | 74        | 17.88       | 17.88          | 17.96        | 18                  |  |  |
| 15                                            | 16QAM      | 36      | 0         | 16.84       | 16.95          | 16.99        |                     |  |  |
| 15                                            | 16QAM      | 36      | 20        | 16.85       | 16.81          | 16.78        |                     |  |  |
| 15                                            | 16QAM      | 36      | 39        | 16.67       | 16.72          | 16.87        | 18                  |  |  |
| 15                                            | 16QAM      | 75      | 0         | 16.89       | 16.75          | 16.84        |                     |  |  |
| 15                                            | 64QAM      | 1       | 0         | 17.07       | 17.08          | 17.17        |                     |  |  |
| 15                                            | 64QAM      | 1       | 37        | 16.99       | 16.97          | 17.10        | 18                  |  |  |
| 15                                            | 64QAM      | 1       | 74        | 17.00       | 17.08          | 16.89        |                     |  |  |
| 15                                            | 64QAM      | 36      | 0         | 15.79       | 16.08          | 15.87        |                     |  |  |
| 15                                            | 64QAM      | 36      | 20        | 15.97       | 15.87          | 15.74        | 17                  |  |  |
| 15                                            | 64QAM      | 36      | 39        | 15.78       | 15.91          | 15.73        |                     |  |  |
| 15                                            | 64QAM      | 75      | 0         | 15.95       | 15.92          | 15.69        |                     |  |  |
| Channel                                       |            |         |           | 18650       | 18900          | 19150        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1855        | 1880           | 1905         |                     |  |  |
| 10                                            | QPSK       | 1       | 0         | 18.80       | 18.84          | 18.77        | 20                  |  |  |
| 10                                            | QPSK       | 1       | 25        | 18.75       | 18.76          | 18.69        |                     |  |  |
| 10                                            | QPSK       | 1       | 49        | 18.70       | 18.66          | 18.61        |                     |  |  |
| 10                                            | QPSK       | 25      | 0         | 17.74       | 17.80          | 17.75        | 19                  |  |  |
| 10                                            | QPSK       | 25      | 12        | 17.63       | 17.72          | 17.67        |                     |  |  |
| 10                                            | QPSK       | 25      | 25        | 17.64       | 17.76          | 17.66        |                     |  |  |
| 10                                            | QPSK       | 50      | 0         | 17.72       | 17.73          | 17.67        | 19                  |  |  |
| 10                                            | 16QAM      | 1       | 0         | 18.03       | 17.95          | 17.83        |                     |  |  |
| 10                                            | 16QAM      | 1       | 25        | 17.95       | 17.97          | 17.85        |                     |  |  |
| 10                                            | 16QAM      | 1       | 49        | 17.82       | 17.82          | 17.90        | 18                  |  |  |
| 10                                            | 16QAM      | 25      | 0         | 16.78       | 16.89          | 16.93        |                     |  |  |
| 10                                            | 16QAM      | 25      | 12        | 16.79       | 16.75          | 16.72        |                     |  |  |
| 10                                            | 16QAM      | 25      | 25        | 16.61       | 16.66          | 16.81        | 18                  |  |  |
| 10                                            | 16QAM      | 50      | 0         | 16.83       | 16.69          | 16.78        |                     |  |  |
| 10                                            | 64QAM      | 1       | 0         | 17.01       | 17.02          | 17.11        |                     |  |  |
| 10                                            | 64QAM      | 1       | 25        | 16.93       | 16.91          | 17.04        | 18                  |  |  |
| 10                                            | 64QAM      | 1       | 49        | 16.94       | 17.02          | 16.83        |                     |  |  |
| 10                                            | 64QAM      | 25      | 0         | 15.73       | 16.02          | 15.81        |                     |  |  |
| 10                                            | 64QAM      | 25      | 12        | 15.91       | 15.81          | 15.68        | 17                  |  |  |
| 10                                            | 64QAM      | 25      | 25        | 15.72       | 15.85          | 15.67        |                     |  |  |
| 10                                            | 64QAM      | 50      | 0         | 15.89       | 15.86          | 15.63        |                     |  |  |
| Channel                                       |            |         |           | 18625       | 18900          | 19175        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1852.5      | 1880           | 1907.5       |                     |  |  |
| 5                                             | QPSK       | 1       | 0         | 18.74       | 18.78          | 18.71        | 20                  |  |  |
| 5                                             | QPSK       | 1       | 12        | 18.69       | 18.70          | 18.63        |                     |  |  |
| 5                                             | QPSK       | 1       | 24        | 18.64       | 18.60          | 18.55        |                     |  |  |
| 5                                             | QPSK       | 12      | 0         | 17.68       | 17.74          | 17.69        | 19                  |  |  |
| 5                                             | QPSK       | 12      | 7         | 17.57       | 17.66          | 17.61        |                     |  |  |
| 5                                             | QPSK       | 12      | 13        | 17.58       | 17.70          | 17.60        |                     |  |  |
| 5                                             | QPSK       | 25      | 0         | 17.66       | 17.67          | 17.61        | 19                  |  |  |
| 5                                             | 16QAM      | 1       | 0         | 17.97       | 17.89          | 17.77        |                     |  |  |
| 5                                             | 16QAM      | 1       | 12        | 17.89       | 17.91          | 17.79        |                     |  |  |
| 5                                             | 16QAM      | 1       | 24        | 17.76       | 17.76          | 17.84        | 18                  |  |  |
| 5                                             | 16QAM      | 12      | 0         | 16.72       | 16.83          | 16.87        |                     |  |  |
| 5                                             | 16QAM      | 12      | 7         | 16.73       | 16.69          | 16.66        |                     |  |  |
| 5                                             | 16QAM      | 12      | 13        | 16.55       | 16.60          | 16.75        | 18                  |  |  |
| 5                                             | 16QAM      | 25      | 0         | 16.77       | 16.63          | 16.72        |                     |  |  |
| 5                                             | 64QAM      | 1       | 0         | 16.95       | 16.96          | 17.05        |                     |  |  |
| 5                                             | 64QAM      | 1       | 12        | 16.87       | 16.85          | 16.98        | 18                  |  |  |
| 5                                             | 64QAM      | 1       | 24        | 16.88       | 16.96          | 16.77        |                     |  |  |
| 5                                             | 64QAM      | 12      | 0         | 15.67       | 15.96          | 15.75        |                     |  |  |
| 5                                             | 64QAM      | 12      | 7         | 15.85       | 15.75          | 15.62        | 17                  |  |  |
| 5                                             | 64QAM      | 12      | 13        | 15.66       | 15.79          | 15.61        |                     |  |  |
| 5                                             | 64QAM      | 25      | 0         | 15.83       | 15.80          | 15.57        |                     |  |  |
| Channel                                       |            |         |           | 18615       | 18900          | 19185        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1851.5      | 1880           | 1908.5       |                     |  |  |
| 3                                             | QPSK       | 1       | 0         | 18.71       | 18.75          | 18.68        | 20                  |  |  |
| 3                                             | QPSK       | 1       | 8         | 18.66       | 18.67          | 18.60        |                     |  |  |
| 3                                             | QPSK       | 1       | 14        | 18.61       | 18.57          | 18.52        |                     |  |  |
| 3                                             | QPSK       | 8       | 0         | 17.65       | 17.71          | 17.66        | 19                  |  |  |
| 3                                             | QPSK       | 8       | 4         | 17.54       | 17.63          | 17.58        |                     |  |  |
| 3                                             | QPSK       | 8       | 7         | 17.55       | 17.67          | 17.57        |                     |  |  |
| 3                                             | QPSK       | 15      | 0         | 17.63       | 17.64          | 17.58        | 19                  |  |  |
| 3                                             | 16QAM      | 1       | 0         | 17.94       | 17.86          | 17.74        |                     |  |  |
| 3                                             | 16QAM      | 1       | 8         | 17.86       | 17.88          | 17.76        |                     |  |  |
| 3                                             | 16QAM      | 1       | 14        | 17.73       | 17.73          | 17.81        | 18                  |  |  |
| 3                                             | 16QAM      | 8       | 0         | 16.69       | 16.80          | 16.84        |                     |  |  |
| 3                                             | 16QAM      | 8       | 4         | 16.70       | 16.66          | 16.63        |                     |  |  |
| 3                                             | 16QAM      | 8       | 7         | 16.52       | 16.57          | 16.72        | 18                  |  |  |
| 3                                             | 16QAM      | 15      | 0         | 16.74       | 16.60          | 16.69        |                     |  |  |

| Band 2 (1900MHz Band) (dBm)<br>Part 24E_Ant 5 |            |         |           |             |                |              |                     |  |  |
|-----------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW [MHz]                                      | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                       |            |         |           | 18700       | 18900          | 19100        |                     |  |  |
| Frequency (MHz)                               |            |         |           | 1860        | 1880           | 1900         |                     |  |  |
| 20                                            | QPSK       | 1       | 0         | 19.92       | 19.96          | 19.89        | 21                  |  |  |
| 20                                            | QPSK       | 1       | 49        | 19.87       | 19.88          | 19.81        |                     |  |  |
| 20                                            | QPSK       | 1       | 99        | 19.82       | 19.78          | 19.73        |                     |  |  |
| 20                                            | QPSK       | 50      | 0         | 18.86       | 18.92          | 18.87        | 20                  |  |  |
| 20                                            | QPSK       | 50      | 24        | 18.75       | 18.84          | 18.79        |                     |  |  |
| 20                                            | QPSK       | 50      | 50        | 18.76       | 18.88          | 18.78        |                     |  |  |
| 20                                            | QPSK       | 100     | 0         | 18.84       | 18.85          | 18.79        | 20                  |  |  |
| 20                                            | 16QAM      | 1       | 0         | 19.15       | 19.07          | 18.95        |                     |  |  |
| 20                                            | 16QAM      | 1       | 49        | 19.07       | 19.09          | 18.97        |                     |  |  |
| 20                                            | 16QAM      | 1       | 99        | 18.94       | 18.94          | 19.02        | 19                  |  |  |
| 20                                            | 16QAM      | 50      | 0         | 17.90       | 18.01          | 18.05        |                     |  |  |
| 20                                            | 16QAM      | 50      | 24        | 17.91       | 17.87          | 17.84        |                     |  |  |
| 20                                            | 16QAM      | 50      | 50        | 17.73       | 17.78          | 17.93        | 19                  |  |  |
| 20                                            | 16QAM      | 100     | 0         | 17.95       | 17.81          | 17.90        |                     |  |  |
| 20                                            | 64QAM      | 1       | 0         | 18.13       | 18.14          | 18.23        |                     |  |  |
| 20                                            | 64QAM      | 1       | 49        | 18.05       | 18.03          | 18.16        | 19                  |  |  |
| 20                                            | 64QAM      | 1       | 99        | 18.06       | 18.14          | 17.95        |                     |  |  |
| 20                                            | 64QAM      | 50      | 0         | 18.85       | 17.14          | 16.93        |                     |  |  |
| 20                                            | 64QAM      | 50      | 24        | 17.03       | 16.93          | 16.90        | 18                  |  |  |
| 20                                            | 64QAM      | 50      | 50        | 16.84       | 16.97          | 16.79        |                     |  |  |
| 20                                            | 64QAM      | 100     | 0         | 17.01       | 16.98          | 16.85        |                     |  |  |
| Channel                                       |            |         |           | 18676       | 18900          | 19125        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1857.6      | 1880           | 1902.5       |                     |  |  |
| 15                                            | QPSK       | 1       | 0         | 19.86       | 19.80          | 19.83        | 21                  |  |  |
| 15                                            | QPSK       | 1       | 37        | 19.81       | 19.82          | 19.75        |                     |  |  |
| 15                                            | QPSK       | 1       | 74        | 19.76       | 19.72          | 19.67        |                     |  |  |
| 15                                            | QPSK       | 36      | 0         | 18.80       | 18.86          | 18.81        | 20                  |  |  |
| 15                                            | QPSK       | 36      | 20        | 18.69       | 18.78          | 18.73        |                     |  |  |
| 15                                            | QPSK       | 36      | 39        | 18.70       | 18.82          | 18.72        |                     |  |  |
| 15                                            | QPSK       | 75      | 0         | 18.78       | 18.79          | 18.73        | 20                  |  |  |
| 15                                            | 16QAM      | 1       | 0         | 19.09       | 19.01          | 18.89        |                     |  |  |
| 15                                            | 16QAM      | 1       | 37        | 19.01       | 19.03          | 18.91        |                     |  |  |
| 15                                            | 16QAM      | 1       | 74        | 18.88       | 18.88          | 18.96        | 19                  |  |  |
| 15                                            | 16QAM      | 36      | 0         | 17.84       | 17.95          | 17.99        |                     |  |  |
| 15                                            | 16QAM      | 36      | 20        | 17.85       | 17.81          | 17.78        |                     |  |  |
| 15                                            | 16QAM      | 36      | 39        | 17.67       | 17.72          | 17.87        | 19                  |  |  |
| 15                                            | 16QAM      | 75      | 0         | 17.89       | 17.75          | 17.84        |                     |  |  |
| 15                                            | 64QAM      | 1       | 0         | 18.07       | 18.08          | 18.17        |                     |  |  |
| 15                                            | 64QAM      | 1       | 37        | 17.99       | 17.97          | 18.10        | 19                  |  |  |
| 15                                            | 64QAM      | 1       | 74        | 18.00       | 18.08          | 17.89        |                     |  |  |
| 15                                            | 64QAM      | 36      | 0         | 16.79       | 17.08          | 16.87        |                     |  |  |
| 15                                            | 64QAM      | 36      | 20        | 16.97       | 16.87          | 16.74        | 18                  |  |  |
| 15                                            | 64QAM      | 36      | 39        | 16.78       | 16.91          | 16.73        |                     |  |  |
| 15                                            | 64QAM      | 75      | 0         | 16.95       | 16.92          | 16.69        |                     |  |  |
| Channel                                       |            |         |           | 18650       | 18900          | 19150        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1855        | 1880           | 1905         |                     |  |  |
| 10                                            | QPSK       | 1       | 0         | 19.80       | 19.84          | 19.77        | 21                  |  |  |
| 10                                            | QPSK       | 1       | 25        | 19.75       | 19.76          | 19.69        |                     |  |  |
| 10                                            | QPSK       | 1       | 49        | 19.70       | 19.66          | 19.61        |                     |  |  |
| 10                                            | QPSK       | 25      | 0         | 18.74       | 18.80          | 18.75        | 20                  |  |  |
| 10                                            | QPSK       | 25      | 12        | 18.63       | 18.72          | 18.67        |                     |  |  |
| 10                                            | QPSK       | 25      | 25        | 18.64       | 18.76          | 18.66        |                     |  |  |
| 10                                            | QPSK       | 50      | 0         | 18.72       | 18.73          | 18.67        | 20                  |  |  |
| 10                                            | 16QAM      | 1       | 0         | 19.03       | 18.95          | 18.83        |                     |  |  |
| 10                                            | 16QAM      | 1       | 25        | 18.95       | 18.97          | 18.85        |                     |  |  |
| 10                                            | 16QAM      | 1       | 49        | 18.82       | 18.82          | 18.90        | 19                  |  |  |
| 10                                            | 16QAM      | 25      | 0         | 17.78       | 17.89          | 17.93        |                     |  |  |
| 10                                            | 16QAM      | 25      | 12        | 17.79       | 17.75          | 17.72        |                     |  |  |
| 10                                            | 16QAM      | 25      | 25        | 17.61       | 17.66          | 17.81        | 19                  |  |  |
| 10                                            | 16QAM      | 50      | 0         | 17.83       | 17.69          | 17.78        |                     |  |  |
| 10                                            | 64QAM      | 1       | 0         | 18.01       | 18.02          | 18.11        |                     |  |  |
| 10                                            | 64QAM      | 1       | 25        | 17.93       | 17.91          | 18.04        | 19                  |  |  |
| 10                                            | 64QAM      | 1       | 49        | 17.94       | 18.02          | 17.83        |                     |  |  |
| 10                                            | 64QAM      | 25      | 0         | 16.73       | 17.02          | 16.81        |                     |  |  |
| 10                                            | 64QAM      | 25      | 12        | 16.91       | 16.81          | 16.68        | 18                  |  |  |
| 10                                            | 64QAM      | 25      | 25        | 16.72       | 16.85          | 16.67        |                     |  |  |
| 10                                            | 64QAM      | 50      | 0         | 16.89       | 16.86          | 16.63        |                     |  |  |
| Channel                                       |            |         |           | 18625       | 18900          | 19175        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1852.5      | 1880           | 1907.5       |                     |  |  |
| 5                                             | QPSK       | 1       | 0         | 19.74       | 19.78          | 19.71        | 21                  |  |  |
| 5                                             | QPSK       | 1       | 12        | 19.69       | 19.70          | 19.63        |                     |  |  |
| 5                                             | QPSK       | 1       | 24        | 19.64       | 19.60          | 19.55        |                     |  |  |
| 5                                             | QPSK       | 12      | 0         | 18.68       | 18.74          | 18.69        | 20                  |  |  |
| 5                                             | QPSK       | 12      | 7         | 18.57       | 18.66          | 18.61        |                     |  |  |
| 5                                             | QPSK       | 12      | 13        | 18.58       | 18.70          | 18.60        |                     |  |  |
| 5                                             | QPSK       | 25      | 0         | 18.66       | 18.67          | 18.61        | 20                  |  |  |
| 5                                             | 16QAM      | 1       | 0         | 18.97       | 18.89          | 18.77        |                     |  |  |
| 5                                             | 16QAM      | 1       | 12        | 18.89       | 18.91          | 18.79        |                     |  |  |
| 5                                             | 16QAM      | 1       | 24        | 18.76       | 18.76          | 18.84        | 19                  |  |  |
| 5                                             | 16QAM      | 12      | 0         | 17.72       | 17.83          | 17.87        |                     |  |  |
| 5                                             | 16QAM      | 12      | 7         | 17.73       | 17.69          | 17.66        |                     |  |  |
| 5                                             | 16QAM      | 12      | 13        | 17.55       | 17.60          | 17.75        | 19                  |  |  |
| 5                                             | 16QAM      | 25      | 0         | 17.77       | 17.63          | 17.72        |                     |  |  |
| 5                                             | 64QAM      | 1       | 0         | 17.95       | 17.96          | 18.05        |                     |  |  |
| 5                                             | 64QAM      | 1       | 12        | 17.87       | 17.85          | 17.98        | 19                  |  |  |
| 5                                             | 64QAM      | 1       | 24        | 17.88       | 17.96          | 17.77        |                     |  |  |
| 5                                             | 64QAM      | 12      | 0         | 16.67       | 16.96          | 16.75        |                     |  |  |
| 5                                             | 64QAM      | 12      | 7         | 16.85       | 16.75          | 16.62        | 18                  |  |  |
| 5                                             | 64QAM      | 12      | 13        | 16.66       | 16.79          | 16.61        |                     |  |  |
| 5                                             | 64QAM      | 25      | 0         | 16.83       | 16.80          | 16.57        |                     |  |  |
| Channel                                       |            |         |           | 18615       | 18900          | 19185        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1851.5      | 1880           | 1908.5       |                     |  |  |
| 3                                             | QPSK       | 1       | 0         | 19.71       | 19.75          | 19.68        | 21                  |  |  |
| 3                                             | QPSK       | 1       | 8         | 19.66       | 19.67          | 19.60        |                     |  |  |
| 3                                             | QPSK       | 1       | 14        | 19.61       | 19.57          | 19.52        |                     |  |  |
| 3                                             | QPSK       | 8       | 0         | 18.65       | 18.71          | 18.66        | 20                  |  |  |
| 3                                             | QPSK       | 8       | 4         | 18.54       | 18.63          | 18.58        |                     |  |  |
| 3                                             | QPSK       | 15      | 0         | 18.55       | 18.67          | 18.57        |                     |  |  |
| 3                                             | 16QAM      | 1       | 0         | 18.63       | 18.64          | 18.58        | 20                  |  |  |
| 3                                             | 16QAM      | 1       | 8         | 18.94       | 18.86          | 18.74        |                     |  |  |
| 3                                             | 16QAM      | 1       | 14        | 18.73       | 18.73          | 18.81        |                     |  |  |
| 3                                             | 16QAM      | 8       | 0         | 17.69       | 17.80          | 17.84        | 19                  |  |  |
| 3                                             | 16QAM      | 8       | 4         | 17.70       | 17.66          | 17.83        |                     |  |  |
| 3                                             | 16QAM      | 8       | 7         | 17.52       | 17.57          | 17.72        |                     |  |  |
| 3                                             | 16QAM      | 15      | 0         | 17.34       | 17.50          | 17.69        | 19                  |  |  |



|                 |       |    |    |        |       |        |                     |
|-----------------|-------|----|----|--------|-------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 16.92  | 16.93 | 17.02  | 18                  |
| 3               | 64QAM | 1  | 8  | 16.84  | 16.82 | 16.95  |                     |
| 3               | 64QAM | 1  | 14 | 16.85  | 16.93 | 16.74  |                     |
| 3               | 64QAM | 8  | 0  | 15.64  | 15.93 | 15.72  | 17                  |
| 3               | 64QAM | 8  | 4  | 15.82  | 15.72 | 15.59  |                     |
| 3               | 64QAM | 8  | 7  | 15.63  | 15.76 | 15.58  |                     |
| 3               | 64QAM | 15 | 0  | 15.80  | 15.77 | 15.54  | Tune-up limit (dBm) |
| Channel         |       |    |    | 18607  | 18900 | 19193  |                     |
| Frequency (MHz) |       |    |    | 1850.7 | 1880  | 1909.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 18.66  | 18.70 | 18.63  | 20                  |
| 1.4             | QPSK  | 1  | 3  | 18.61  | 18.62 | 18.55  |                     |
| 1.4             | QPSK  | 1  | 5  | 18.56  | 18.52 | 18.47  |                     |
| 1.4             | QPSK  | 3  | 0  | 17.60  | 17.66 | 17.61  | 19                  |
| 1.4             | QPSK  | 3  | 1  | 17.49  | 17.58 | 17.53  |                     |
| 1.4             | QPSK  | 3  | 3  | 17.50  | 17.62 | 17.52  |                     |
| 1.4             | QPSK  | 6  | 0  | 17.58  | 17.59 | 17.53  | 19                  |
| 1.4             | 16QAM | 1  | 0  | 17.89  | 17.81 | 17.69  |                     |
| 1.4             | 16QAM | 1  | 3  | 17.81  | 17.83 | 17.71  |                     |
| 1.4             | 16QAM | 1  | 5  | 17.68  | 17.68 | 17.76  | 19                  |
| 1.4             | 16QAM | 3  | 0  | 16.64  | 16.75 | 16.79  |                     |
| 1.4             | 16QAM | 3  | 1  | 16.65  | 16.61 | 16.58  |                     |
| 1.4             | 16QAM | 3  | 3  | 16.47  | 16.52 | 16.67  | 18                  |
| 1.4             | 16QAM | 6  | 0  | 16.69  | 16.55 | 16.64  |                     |
| 1.4             | 64QAM | 1  | 0  | 16.87  | 16.88 | 16.97  |                     |
| 1.4             | 64QAM | 1  | 3  | 16.79  | 16.77 | 16.90  | 18                  |
| 1.4             | 64QAM | 1  | 5  | 16.80  | 16.88 | 16.69  |                     |
| 1.4             | 64QAM | 3  | 0  | 15.59  | 15.88 | 15.67  |                     |
| 1.4             | 64QAM | 3  | 1  | 15.77  | 15.67 | 15.54  | 17                  |
| 1.4             | 64QAM | 3  | 3  | 15.58  | 15.71 | 15.53  |                     |
| 1.4             | 64QAM | 6  | 0  | 15.75  | 15.72 | 15.49  |                     |

|                 |       |    |    |        |       |        |                     |
|-----------------|-------|----|----|--------|-------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 17.92  | 17.93 | 18.02  | 19                  |
| 3               | 64QAM | 1  | 8  | 17.84  | 17.82 | 17.95  |                     |
| 3               | 64QAM | 1  | 14 | 17.85  | 17.93 | 17.74  |                     |
| 3               | 64QAM | 8  | 0  | 16.64  | 16.93 | 16.72  | 18                  |
| 3               | 64QAM | 8  | 4  | 16.82  | 16.72 | 16.59  |                     |
| 3               | 64QAM | 8  | 7  | 16.63  | 16.76 | 16.58  |                     |
| 3               | 64QAM | 15 | 0  | 16.80  | 16.77 | 16.54  | Tune-up limit (dBm) |
| Channel         |       |    |    | 18607  | 18900 | 19193  |                     |
| Frequency (MHz) |       |    |    | 1850.7 | 1880  | 1909.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 19.66  | 19.70 | 19.63  | 21                  |
| 1.4             | QPSK  | 1  | 3  | 19.61  | 19.62 | 19.55  |                     |
| 1.4             | QPSK  | 1  | 5  | 19.56  | 19.52 | 19.47  |                     |
| 1.4             | QPSK  | 3  | 0  | 18.60  | 18.66 | 18.61  | 20                  |
| 1.4             | QPSK  | 3  | 1  | 18.49  | 18.58 | 18.53  |                     |
| 1.4             | QPSK  | 3  | 3  | 18.50  | 18.62 | 18.52  |                     |
| 1.4             | QPSK  | 6  | 0  | 18.58  | 18.59 | 18.53  | 20                  |
| 1.4             | 16QAM | 1  | 0  | 18.89  | 18.81 | 18.69  |                     |
| 1.4             | 16QAM | 1  | 3  | 18.81  | 18.83 | 18.71  |                     |
| 1.4             | 16QAM | 1  | 5  | 18.68  | 18.68 | 18.76  | 19                  |
| 1.4             | 16QAM | 3  | 0  | 17.64  | 17.75 | 17.79  |                     |
| 1.4             | 16QAM | 3  | 1  | 17.65  | 17.61 | 17.58  |                     |
| 1.4             | 16QAM | 3  | 3  | 17.47  | 17.52 | 17.67  | 19                  |
| 1.4             | 16QAM | 6  | 0  | 17.69  | 17.55 | 17.64  |                     |
| 1.4             | 64QAM | 1  | 0  | 17.87  | 17.88 | 17.97  |                     |
| 1.4             | 64QAM | 1  | 3  | 17.79  | 17.77 | 17.90  | 19                  |
| 1.4             | 64QAM | 1  | 5  | 17.80  | 17.88 | 17.69  |                     |
| 1.4             | 64QAM | 3  | 0  | 16.59  | 16.88 | 16.67  |                     |
| 1.4             | 64QAM | 3  | 1  | 16.77  | 16.67 | 16.54  | 18                  |
| 1.4             | 64QAM | 3  | 3  | 16.58  | 16.71 | 16.53  |                     |
| 1.4             | 64QAM | 6  | 0  | 16.75  | 16.72 | 16.49  |                     |



| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required)_Ant 1 |            |         |           |             |                |              |                     |
|----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)                                                             | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                              |            |         |           | 20050       | 20175          | 20300        |                     |
| Frequency (MHz)                                                      |            |         |           | 1720        | 1732.5         | 1745         |                     |
| 20                                                                   | QPSK       | 1       | 0         | 18.99       | 19.03          | 18.96        | 20                  |
| 20                                                                   | QPSK       | 1       | 49        | 18.94       | 18.95          | 18.88        |                     |
| 20                                                                   | QPSK       | 1       | 99        | 18.89       | 18.85          | 18.80        |                     |
| 20                                                                   | QPSK       | 50      | 0         | 17.93       | 17.99          | 17.94        |                     |
| 20                                                                   | QPSK       | 50      | 24        | 17.82       | 17.91          | 17.86        | 19                  |
| 20                                                                   | QPSK       | 50      | 50        | 17.83       | 17.95          | 17.85        |                     |
| 20                                                                   | QPSK       | 100     | 0         | 17.91       | 17.92          | 17.86        |                     |
| 20                                                                   | 16QAM      | 1       | 0         | 18.22       | 18.14          | 18.02        |                     |
| 20                                                                   | 16QAM      | 1       | 49        | 18.14       | 18.16          | 18.04        | 19                  |
| 20                                                                   | 16QAM      | 1       | 99        | 18.01       | 18.01          | 18.09        |                     |
| 20                                                                   | 16QAM      | 50      | 0         | 16.97       | 17.08          | 17.12        |                     |
| 20                                                                   | 16QAM      | 50      | 24        | 16.98       | 16.94          | 16.91        |                     |
| 20                                                                   | 16QAM      | 50      | 50        | 16.80       | 16.85          | 17.00        | 18                  |
| 20                                                                   | 16QAM      | 100     | 0         | 17.02       | 16.88          | 16.97        |                     |
| 20                                                                   | 64QAM      | 1       | 0         | 17.20       | 17.21          | 17.30        |                     |
| 20                                                                   | 64QAM      | 1       | 49        | 17.12       | 17.10          | 17.23        |                     |
| 20                                                                   | 64QAM      | 1       | 99        | 17.13       | 17.21          | 17.02        | 18                  |
| 20                                                                   | 64QAM      | 50      | 0         | 15.92       | 16.21          | 16.00        |                     |
| 20                                                                   | 64QAM      | 50      | 24        | 16.10       | 16.00          | 15.87        |                     |
| 20                                                                   | 64QAM      | 50      | 50        | 15.91       | 16.04          | 15.86        |                     |
| 20                                                                   | 64QAM      | 100     | 0         | 16.08       | 16.05          | 15.82        | 17                  |
| Channel                                                              |            |         |           | 20025       | 20175          | 20325        |                     |
| Frequency (MHz)                                                      |            |         |           | 1717.5      | 1732.5         | 1747.5       | Tune-up limit (dBm) |
| 15                                                                   | QPSK       | 1       | 0         | 18.94       | 18.98          | 18.91        | 20                  |
| 15                                                                   | QPSK       | 1       | 37        | 18.89       | 18.90          | 18.83        |                     |
| 15                                                                   | QPSK       | 1       | 74        | 18.84       | 18.80          | 18.75        |                     |
| 15                                                                   | QPSK       | 36      | 0         | 17.88       | 17.94          | 17.89        |                     |
| 15                                                                   | QPSK       | 36      | 20        | 17.77       | 17.86          | 17.81        | 19                  |
| 15                                                                   | QPSK       | 36      | 39        | 17.78       | 17.90          | 17.80        |                     |
| 15                                                                   | QPSK       | 75      | 0         | 17.86       | 17.87          | 17.81        |                     |
| 15                                                                   | 16QAM      | 1       | 0         | 18.17       | 18.09          | 17.97        |                     |
| 15                                                                   | 16QAM      | 1       | 37        | 18.09       | 18.11          | 17.99        | 19                  |
| 15                                                                   | 16QAM      | 1       | 74        | 17.96       | 17.96          | 18.04        |                     |
| 15                                                                   | 16QAM      | 36      | 0         | 16.92       | 17.03          | 17.07        |                     |
| 15                                                                   | 16QAM      | 36      | 20        | 16.93       | 16.89          | 16.86        |                     |
| 15                                                                   | 16QAM      | 36      | 39        | 16.75       | 16.80          | 16.95        | 18                  |
| 15                                                                   | 16QAM      | 75      | 0         | 16.97       | 16.83          | 16.92        |                     |
| 15                                                                   | 64QAM      | 1       | 0         | 17.15       | 17.16          | 17.25        |                     |
| 15                                                                   | 64QAM      | 1       | 37        | 17.07       | 17.05          | 17.18        |                     |
| 15                                                                   | 64QAM      | 1       | 74        | 17.08       | 17.16          | 16.97        | 18                  |
| 15                                                                   | 64QAM      | 36      | 0         | 15.87       | 16.16          | 15.95        |                     |
| 15                                                                   | 64QAM      | 36      | 20        | 16.05       | 15.95          | 15.82        |                     |
| 15                                                                   | 64QAM      | 36      | 39        | 15.86       | 15.99          | 15.81        |                     |
| 15                                                                   | 64QAM      | 75      | 0         | 16.03       | 16.00          | 15.77        | 17                  |
| Channel                                                              |            |         |           | 20000       | 20175          | 20350        |                     |
| Frequency (MHz)                                                      |            |         |           | 1715        | 1732.5         | 1750         | Tune-up limit (dBm) |
| 10                                                                   | QPSK       | 1       | 0         | 18.88       | 18.92          | 18.85        | 20                  |
| 10                                                                   | QPSK       | 1       | 25        | 18.83       | 18.84          | 18.77        |                     |
| 10                                                                   | QPSK       | 1       | 49        | 18.78       | 18.74          | 18.69        |                     |
| 10                                                                   | QPSK       | 25      | 0         | 17.82       | 17.88          | 17.83        |                     |
| 10                                                                   | QPSK       | 25      | 12        | 17.71       | 17.80          | 17.75        | 19                  |
| 10                                                                   | QPSK       | 25      | 25        | 17.72       | 17.84          | 17.74        |                     |
| 10                                                                   | QPSK       | 50      | 0         | 17.80       | 17.81          | 17.75        |                     |
| 10                                                                   | 16QAM      | 1       | 0         | 18.11       | 18.03          | 17.91        |                     |
| 10                                                                   | 16QAM      | 1       | 25        | 18.03       | 18.05          | 17.93        | 19                  |
| 10                                                                   | 16QAM      | 1       | 49        | 17.90       | 17.90          | 17.98        |                     |
| 10                                                                   | 16QAM      | 25      | 0         | 16.86       | 16.97          | 17.01        |                     |
| 10                                                                   | 16QAM      | 25      | 12        | 16.87       | 16.83          | 16.80        |                     |
| 10                                                                   | 16QAM      | 25      | 25        | 16.69       | 16.74          | 16.89        | 18                  |
| 10                                                                   | 16QAM      | 50      | 0         | 16.91       | 16.77          | 16.86        |                     |
| 10                                                                   | 64QAM      | 1       | 0         | 17.09       | 17.10          | 17.19        |                     |
| 10                                                                   | 64QAM      | 1       | 25        | 17.01       | 16.99          | 17.12        |                     |
| 10                                                                   | 64QAM      | 1       | 49        | 17.02       | 17.10          | 16.91        | 18                  |
| 10                                                                   | 64QAM      | 25      | 0         | 15.81       | 16.10          | 15.89        |                     |
| 10                                                                   | 64QAM      | 25      | 12        | 15.99       | 15.89          | 15.76        |                     |
| 10                                                                   | 64QAM      | 25      | 25        | 15.80       | 15.93          | 15.75        |                     |
| 10                                                                   | 64QAM      | 50      | 0         | 15.97       | 15.94          | 15.71        | 17                  |
| Channel                                                              |            |         |           | 19975       | 20175          | 20375        |                     |
| Frequency (MHz)                                                      |            |         |           | 1712.5      | 1732.5         | 1752.5       | Tune-up limit (dBm) |
| 5                                                                    | QPSK       | 1       | 0         | 18.83       | 18.87          | 18.80        | 20                  |
| 5                                                                    | QPSK       | 1       | 12        | 18.78       | 18.79          | 18.72        |                     |
| 5                                                                    | QPSK       | 1       | 24        | 18.73       | 18.69          | 18.64        |                     |
| 5                                                                    | QPSK       | 12      | 0         | 17.77       | 17.83          | 17.78        |                     |
| 5                                                                    | QPSK       | 12      | 7         | 17.66       | 17.75          | 17.70        | 19                  |
| 5                                                                    | QPSK       | 12      | 13        | 17.67       | 17.79          | 17.69        |                     |
| 5                                                                    | QPSK       | 25      | 0         | 17.75       | 17.76          | 17.70        |                     |
| 5                                                                    | 16QAM      | 1       | 0         | 18.06       | 17.98          | 17.86        |                     |
| 5                                                                    | 16QAM      | 1       | 12        | 17.98       | 18.00          | 17.88        | 19                  |
| 5                                                                    | 16QAM      | 1       | 24        | 17.85       | 17.85          | 17.93        |                     |
| 5                                                                    | 16QAM      | 12      | 0         | 16.81       | 16.92          | 16.96        |                     |
| 5                                                                    | 16QAM      | 12      | 7         | 16.82       | 16.78          | 16.75        |                     |
| 5                                                                    | 16QAM      | 12      | 13        | 16.64       | 16.69          | 16.84        | 18                  |
| 5                                                                    | 16QAM      | 25      | 0         | 16.86       | 16.72          | 16.81        |                     |
| 5                                                                    | 64QAM      | 1       | 0         | 17.04       | 17.05          | 17.14        |                     |
| 5                                                                    | 64QAM      | 1       | 12        | 16.96       | 16.94          | 17.07        |                     |
| 5                                                                    | 64QAM      | 1       | 24        | 16.97       | 17.05          | 16.86        | 18                  |
| 5                                                                    | 64QAM      | 12      | 0         | 15.76       | 16.05          | 15.84        |                     |
| 5                                                                    | 64QAM      | 12      | 7         | 15.94       | 15.84          | 15.71        |                     |
| 5                                                                    | 64QAM      | 12      | 13        | 15.75       | 15.88          | 15.70        |                     |
| 5                                                                    | 64QAM      | 25      | 0         | 15.92       | 15.89          | 15.66        | 17                  |
| Channel                                                              |            |         |           | 19965       | 20175          | 20385        |                     |
| Frequency (MHz)                                                      |            |         |           | 1711.5      | 1732.5         | 1753.5       | Tune-up limit (dBm) |
| 3                                                                    | QPSK       | 1       | 0         | 18.78       | 18.82          | 18.75        | 20                  |
| 3                                                                    | QPSK       | 1       | 8         | 18.73       | 18.74          | 18.67        |                     |
| 3                                                                    | QPSK       | 1       | 14        | 18.68       | 18.64          | 18.59        |                     |
| 3                                                                    | QPSK       | 8       | 0         | 17.72       | 17.78          | 17.73        |                     |
| 3                                                                    | QPSK       | 8       | 4         | 17.61       | 17.70          | 17.65        | 19                  |
| 3                                                                    | QPSK       | 8       | 7         | 17.62       | 17.74          | 17.64        |                     |
| 3                                                                    | QPSK       | 15      | 0         | 17.70       | 17.71          | 17.65        |                     |
| 3                                                                    | 16QAM      | 1       | 0         | 18.01       | 17.93          | 17.81        |                     |
| 3                                                                    | 16QAM      | 1       | 8         | 17.93       | 17.95          | 17.83        | 19                  |
| 3                                                                    | 16QAM      | 1       | 14        | 17.80       | 17.80          | 17.88        |                     |
| 3                                                                    | 16QAM      | 8       | 0         | 16.76       | 16.87          | 16.91        |                     |
| 3                                                                    | 16QAM      | 8       | 4         | 16.77       | 16.73          | 16.70        |                     |
| 3                                                                    | 16QAM      | 8       | 7         | 16.59       | 16.64          | 16.79        | 18                  |
| 3                                                                    | 16QAM      | 15      | 0         | 16.81       | 16.67          | 16.76        |                     |

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required)_Ant 5 |            |         |           |             |                |              |                     |
|----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)                                                             | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                              |            |         |           | 20050       | 20175          | 20300        |                     |
| Frequency (MHz)                                                      |            |         |           | 1720        | 1732.5         | 1745         |                     |
| 20                                                                   | QPSK       | 1       | 0         | 19.99       | 20.03          | 19.96        | 21                  |
| 20                                                                   | QPSK       | 1       | 49        | 19.94       | 19.95          | 19.88        |                     |
| 20                                                                   | QPSK       | 1       | 99        | 19.89       | 19.85          | 19.80        |                     |
| 20                                                                   | QPSK       | 50      | 0         | 18.93       | 18.99          | 18.94        |                     |
| 20                                                                   | QPSK       | 50      | 24        | 18.82       | 18.91          | 18.86        | 20                  |
| 20                                                                   | QPSK       | 50      | 50        | 18.83       | 18.95          | 18.85        |                     |
| 20                                                                   | QPSK       | 100     | 0         | 18.91       | 18.92          | 18.86        |                     |
| 20                                                                   | 16QAM      | 1       | 0         | 19.22       | 19.14          | 19.02        |                     |
| 20                                                                   | 16QAM      | 1       | 49        | 19.14       | 19.16          | 19.04        | 20                  |
| 20                                                                   | 16QAM      | 1       | 99        | 19.01       | 19.01          | 19.09        |                     |
| 20                                                                   | 16QAM      | 50      | 0         | 17.97       | 18.08          | 18.12        |                     |
| 20                                                                   | 16QAM      | 50      | 24        | 17.98       | 17.94          | 17.91        | 19                  |
| 20                                                                   | 16QAM      | 50      | 50        | 17.80       | 17.85          | 18.00        |                     |
| 20                                                                   | 16QAM      | 100     | 0         | 18.02       | 17.88          | 17.97        |                     |
| 20                                                                   | 64QAM      | 1       | 0         | 18.20       | 18.21          | 18.30        |                     |
| 20                                                                   | 64QAM      | 1       | 49        | 18.12       | 18.10          | 18.23        | 19                  |
| 20                                                                   | 64QAM      | 1       | 99        | 18.13       | 18.21          | 18.02        |                     |
| 20                                                                   | 64QAM      | 50      | 0         | 16.92       | 17.21          | 17.00        |                     |
| 20                                                                   | 64QAM      | 50      | 24        | 17.10       | 17.00          | 16.87        |                     |
| 20                                                                   | 64QAM      | 50      | 50        | 16.91       | 17.04          | 16.86        | 18                  |
| 20                                                                   | 64QAM      | 100     | 0         | 17.08       | 17.05          | 16.82        |                     |
| Channel                                                              |            |         |           | 20025       | 20175          | 20325        | Tune-up limit (dBm) |
| Frequency (MHz)                                                      |            |         |           | 1717.5      | 1732.5         | 1747.5       |                     |
| 15                                                                   | QPSK       | 1       | 0         | 19.94       | 19.98          | 19.91        | 21                  |
| 15                                                                   | QPSK       | 1       | 37        | 19.89       | 19.90          | 19.83        |                     |
| 15                                                                   | QPSK       | 1       | 74        | 19.84       | 19.80          | 19.75        |                     |
| 15                                                                   | QPSK       | 36      | 0         | 18.88       | 18.94          | 18.89        |                     |
| 15                                                                   | QPSK       | 36      | 20        | 18.77       | 18.86          | 18.81        | 20                  |
| 15                                                                   | QPSK       | 36      | 39        | 18.78       | 18.90          | 18.80        |                     |
| 15                                                                   | QPSK       | 75      | 0         | 18.86       | 18.87          | 18.81        |                     |
| 15                                                                   | 16QAM      | 1       | 0         | 19.17       | 19.09          | 18.97        |                     |
| 15                                                                   | 16QAM      | 1       | 37        | 19.09       | 19.11          | 18.99        | 20                  |
| 15                                                                   | 16QAM      | 1       | 74        | 18.96       | 18.96          | 19.04        |                     |
| 15                                                                   | 16QAM      | 36      | 0         | 17.92       | 18.03          | 18.07        |                     |
| 15                                                                   | 16QAM      | 36      | 20        | 17.93       | 17.89          | 17.86        |                     |
| 15                                                                   | 16QAM      | 36      | 39        | 17.75       | 17.80          | 17.95        | 19                  |
| 15                                                                   | 16QAM      | 75      | 0         | 17.97       | 17.83          | 17.92        |                     |
| 15                                                                   | 64QAM      | 1       | 0         | 18.15       | 18.16          | 18.25        |                     |
| 15                                                                   | 64QAM      | 1       | 37        | 18.07       | 18.05          | 18.18        |                     |
| 15                                                                   | 64QAM      | 1       | 74        | 18.08       | 18.16          | 17.97        | 19                  |
| 15                                                                   | 64QAM      | 36      | 0         | 16.87       | 17.16          | 16.95        |                     |
| 15                                                                   | 64QAM      | 36      | 20        | 17.05       | 16.95          | 16.82        |                     |
| 15                                                                   | 64QAM      | 36      | 39        | 16.86       | 16.99          | 16.81        |                     |
| 15                                                                   | 64QAM      | 75      | 0         | 17.03       | 17.00          | 16.77        | 18                  |
| Channel                                                              |            |         |           | 20000       | 20175          | 20350        |                     |
| Frequency (MHz)                                                      |            |         |           | 1715        | 1732.5         | 1750         | Tune-up limit (dBm) |
| 10                                                                   | QPSK       | 1       | 0         | 19.88       | 19.92          | 19.85        | 21                  |
| 10                                                                   | QPSK       | 1       | 25        | 19.83       | 19.84          | 19.77        |                     |
| 10                                                                   | QPSK       | 1       | 49        | 19.78       | 19.74          | 19.69        |                     |
| 10                                                                   | QPSK       | 25      | 0         | 18.82       | 18.88          | 18.83        |                     |
| 10                                                                   | QPSK       | 25      | 12        | 18.71       | 18.74          | 18.75        | 20                  |
| 10                                                                   | QPSK       | 25      | 25        | 18.72       | 18.84          | 18.74        |                     |
| 10                                                                   | QPSK       | 50      | 0         | 18.80       | 18.81          | 18.75        |                     |
| 10                                                                   | 16QAM      | 1       | 0         | 19.11       | 19.03          | 18.91        |                     |
| 10                                                                   | 16QAM      | 1       | 25        | 19.03       | 19.05          | 18.93        | 20                  |
| 10                                                                   | 16QAM      | 1       | 49        | 18.90       | 18.90          | 18.98        |                     |
| 10                                                                   | 16QAM      | 25      | 0         | 17.86       | 17.97          | 18.01        |                     |
| 10                                                                   | 16QAM      | 25      | 12        | 17.87       | 17.83          | 17.80        |                     |
| 10                                                                   | 16QAM      | 25      | 25        | 17.69       | 17.74          | 17.89        | 19                  |
| 10                                                                   | 16QAM      | 50      | 0         | 17.91       | 17.77          | 17.86        |                     |
| 10                                                                   | 64QAM      | 1       | 0         | 18.09       | 18.10          | 18.19        |                     |
| 10                                                                   | 64QAM      | 1       | 25        | 18.01       | 17.99          | 18.12        |                     |
| 10                                                                   | 64QAM      | 1       | 49        | 18.02       | 18.10          | 17.91        | 19                  |
| 10                                                                   | 64QAM      | 25      | 0         | 16.81       | 17.10          | 16.89        |                     |
| 10                                                                   | 64QAM      | 25      | 12        | 16.99       | 16.89          | 16.76        |                     |
| 10                                                                   | 64QAM      | 25      | 25        | 16.80       | 16.93          | 16.75        |                     |
| 10                                                                   | 64QAM      | 50      | 0         | 16.97       | 16.94          | 16.71        | 18                  |
| Channel                                                              |            |         |           | 19975       | 20175          | 20375        |                     |
| Frequency (MHz)                                                      |            |         |           | 1712.5      | 1732.5         | 1752.5       | Tune-up limit (dBm) |
| 5                                                                    | QPSK       | 1       | 0         | 19.83       | 19.87          | 19.80        | 21                  |
| 5                                                                    | QPSK       | 1       | 12        | 19.78       | 19.79          | 19.72        |                     |
| 5                                                                    | QPSK       | 1       | 24        | 19.73       | 19.69          | 19.64        |                     |
| 5                                                                    | QPSK       | 12      | 0         | 18.77       | 18.83          | 18.78        |                     |
| 5                                                                    | QPSK       | 12      | 7         | 18.66       | 18.75          | 18.70        | 20                  |
| 5                                                                    | QPSK       | 12      | 13        | 18.67       | 18.79          | 18.69        |                     |
| 5                                                                    | QPSK       | 25      | 0         | 18.75       | 18.76          | 18.78        |                     |
| 5                                                                    | 16QAM      | 1       | 0         | 19.06       | 18.98          | 18.86        |                     |
| 5                                                                    | 16QAM      | 1       | 12        | 18.98       | 19.00          | 18.88        | 20                  |
| 5                                                                    | 16QAM      | 1       | 24        | 18.85       | 18.85          | 18.93        |                     |
| 5                                                                    | 16QAM      | 12      | 0         | 17.81       | 17.92          | 17.96        |                     |
| 5                                                                    | 16QAM      | 12      | 7         | 17.82       | 17.78          | 17.75        |                     |
| 5                                                                    | 16QAM      | 12      | 13        | 17.64       | 17.69          | 17.84        | 19                  |
| 5                                                                    | 16QAM      | 25      | 0         | 17.86       | 17.72          | 17.81        |                     |
| 5                                                                    | 64QAM      | 1       | 0         | 18.04       | 18.05          | 18.14        |                     |
| 5                                                                    | 64QAM      | 1       | 12        | 17.96       | 17.94          | 18.07        |                     |
| 5                                                                    | 64QAM      | 1       | 24        | 17.97       | 18.05          | 17.86        | 19                  |
| 5                                                                    | 64QAM      | 12      | 0         | 16.76       | 17.05          | 16.84        |                     |
| 5                                                                    | 64QAM      | 12      | 7         | 16.94       | 16.84          | 16.71        |                     |
| 5                                                                    | 64QAM      | 12      | 13        | 16.75       | 16.88          | 16.70        |                     |
| 5                                                                    | 64QAM      | 25      | 0         | 16.92       | 16.89          | 16.66        | 18                  |
| Channel                                                              |            |         |           | 19965       | 20175          | 20385        |                     |
| Frequency (MHz)                                                      |            |         |           | 1711.5      | 1732.5         | 1753.5       | Tune-up limit (dBm) |
| 3                                                                    | QPSK       | 1       | 0         | 19.78       | 19.82          | 19.75        | 21                  |
| 3                                                                    | QPSK       | 1       | 8         | 19.73       | 19.74          | 19.67        |                     |
| 3                                                                    | QPSK       | 1       | 14        | 19.68       | 19.64          | 19.59        |                     |
| 3                                                                    | QPSK       | 8       | 0         | 18.72       | 18.78          | 18.73        |                     |
| 3                                                                    | QPSK       | 8       | 4         | 18.61       | 18.70          | 18.65        | 20                  |
| 3                                                                    | QPSK       | 8       | 7         | 18.62       | 18.74          | 18.64        |                     |
| 3                                                                    | QPSK       | 15      | 0         | 18.70       | 18.71          | 18.65        |                     |
| 3                                                                    | 16QAM      | 1       | 0         | 19.01       | 18.93          | 18.81        |                     |
| 3                                                                    | 16QAM      | 1       | 8         | 18.93       | 18.95          | 18.83        | 20                  |
| 3                                                                    | 16QAM      | 1       | 14        | 18.80       | 18.80          | 18.88        |                     |
| 3                                                                    | 16QAM      | 8       | 0         | 17.76       | 17.87          | 17.91        |                     |
| 3                                                                    | 16QAM      | 8       | 4         | 17.77       | 17.73          | 17.70        |                     |
| 3                                                                    | 16QAM      | 8       | 7         | 17.59       | 17.64          | 17.79        | 19                  |
| 3                                                                    | 16QAM      | 15      | 0         | 17.81       | 17.67          | 17.78        |                     |



|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 16.99  | 17.00  | 17.09  | 18                  |
| 3               | 64QAM | 1  | 8  | 16.91  | 16.89  | 17.02  |                     |
| 3               | 64QAM | 1  | 14 | 16.92  | 17.00  | 16.81  |                     |
| 3               | 64QAM | 8  | 0  | 15.71  | 16.00  | 15.79  | 17                  |
| 3               | 64QAM | 8  | 4  | 15.89  | 15.79  | 15.66  |                     |
| 3               | 64QAM | 8  | 7  | 15.70  | 15.83  | 15.65  |                     |
| 3               | 64QAM | 15 | 0  | 15.87  | 15.84  | 15.61  | Tune-up limit (dBm) |
| Channel         |       |    |    | 19957  | 20175  | 20393  |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 18.72  | 18.76  | 18.69  | 20                  |
| 1.4             | QPSK  | 1  | 3  | 18.67  | 18.68  | 18.61  |                     |
| 1.4             | QPSK  | 1  | 5  | 18.62  | 18.58  | 18.53  |                     |
| 1.4             | QPSK  | 3  | 0  | 17.66  | 17.72  | 17.67  | 19                  |
| 1.4             | QPSK  | 3  | 1  | 17.55  | 17.64  | 17.59  |                     |
| 1.4             | QPSK  | 3  | 3  | 17.56  | 17.68  | 17.58  |                     |
| 1.4             | QPSK  | 6  | 0  | 17.64  | 17.65  | 17.59  | 18                  |
| 1.4             | 16QAM | 1  | 0  | 17.95  | 17.87  | 17.75  |                     |
| 1.4             | 16QAM | 1  | 3  | 17.87  | 17.89  | 17.77  |                     |
| 1.4             | 16QAM | 1  | 5  | 17.74  | 17.74  | 17.82  | 19                  |
| 1.4             | 16QAM | 3  | 0  | 16.70  | 16.81  | 16.85  |                     |
| 1.4             | 16QAM | 3  | 1  | 16.71  | 16.67  | 16.64  |                     |
| 1.4             | 16QAM | 3  | 3  | 16.53  | 16.58  | 16.73  | 18                  |
| 1.4             | 16QAM | 6  | 0  | 16.75  | 16.61  | 16.70  |                     |
| 1.4             | 64QAM | 1  | 0  | 16.93  | 16.94  | 17.03  |                     |
| 1.4             | 64QAM | 1  | 3  | 16.85  | 16.83  | 16.96  | 18                  |
| 1.4             | 64QAM | 1  | 5  | 16.86  | 16.94  | 16.75  |                     |
| 1.4             | 64QAM | 3  | 0  | 15.65  | 15.94  | 15.73  |                     |
| 1.4             | 64QAM | 3  | 1  | 15.83  | 15.73  | 15.60  | 17                  |
| 1.4             | 64QAM | 3  | 3  | 15.84  | 15.77  | 15.59  |                     |
| 1.4             | 64QAM | 6  | 0  | 15.81  | 15.78  | 15.55  |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 17.99  | 18.00  | 18.09  | 19                  |
| 3               | 64QAM | 1  | 8  | 17.91  | 17.89  | 18.02  |                     |
| 3               | 64QAM | 1  | 14 | 17.92  | 18.00  | 17.81  |                     |
| 3               | 64QAM | 8  | 0  | 16.71  | 17.00  | 16.79  | 18                  |
| 3               | 64QAM | 8  | 4  | 16.89  | 16.79  | 16.66  |                     |
| 3               | 64QAM | 8  | 7  | 16.70  | 16.83  | 16.65  |                     |
| 3               | 64QAM | 15 | 0  | 16.87  | 16.84  | 16.61  | Tune-up limit (dBm) |
| Channel         |       |    |    | 19957  | 20175  | 20393  |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 19.72  | 19.76  | 19.69  | 21                  |
| 1.4             | QPSK  | 1  | 3  | 19.67  | 19.68  | 19.61  |                     |
| 1.4             | QPSK  | 1  | 5  | 19.62  | 19.58  | 19.53  |                     |
| 1.4             | QPSK  | 3  | 0  | 18.66  | 18.72  | 18.67  | 20                  |
| 1.4             | QPSK  | 3  | 1  | 18.55  | 18.64  | 18.59  |                     |
| 1.4             | QPSK  | 3  | 3  | 18.56  | 18.68  | 18.58  |                     |
| 1.4             | QPSK  | 6  | 0  | 18.64  | 18.65  | 18.59  | 19                  |
| 1.4             | 16QAM | 1  | 0  | 18.95  | 18.87  | 18.75  |                     |
| 1.4             | 16QAM | 1  | 3  | 18.87  | 18.89  | 18.77  |                     |
| 1.4             | 16QAM | 1  | 5  | 18.74  | 18.74  | 18.82  | 20                  |
| 1.4             | 16QAM | 3  | 0  | 17.70  | 17.81  | 17.85  |                     |
| 1.4             | 16QAM | 3  | 1  | 17.71  | 17.67  | 17.64  |                     |
| 1.4             | 16QAM | 3  | 3  | 17.53  | 17.58  | 17.73  | 19                  |
| 1.4             | 16QAM | 6  | 0  | 17.75  | 17.61  | 17.70  |                     |
| 1.4             | 64QAM | 1  | 0  | 17.93  | 17.94  | 18.03  |                     |
| 1.4             | 64QAM | 1  | 3  | 17.85  | 17.83  | 17.96  | 19                  |
| 1.4             | 64QAM | 1  | 5  | 17.86  | 17.94  | 17.75  |                     |
| 1.4             | 64QAM | 3  | 0  | 16.65  | 16.94  | 16.73  |                     |
| 1.4             | 64QAM | 3  | 1  | 16.83  | 16.73  | 16.60  | 18                  |
| 1.4             | 64QAM | 3  | 3  | 16.64  | 16.77  | 16.59  |                     |
| 1.4             | 64QAM | 6  | 0  | 16.81  | 16.78  | 16.55  |                     |

| Band 25 (1900MHz Band) (dBm)<br>Part 24E |            |         |           |             |                |              |                     |
|------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                 | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                  |            |         |           | 26140       | 26365          | 26590        |                     |
| Frequency (MHz)                          |            |         |           | 1860        | 1882.5         | 1905         |                     |
| 20                                       | QPSK       | 1       | 0         | 21.00       | 21.07          | 21.03        | 22                  |
| 20                                       | QPSK       | 1       | 49        | 20.91       | 20.96          | 20.92        |                     |
| 20                                       | QPSK       | 1       | 99        | 20.87       | 20.93          | 20.84        |                     |
| 20                                       | QPSK       | 50      | 0         | 20.00       | 20.06          | 20.01        |                     |
| 20                                       | QPSK       | 50      | 24        | 19.91       | 19.99          | 19.92        | 21                  |
| 20                                       | QPSK       | 50      | 50        | 19.95       | 19.96          | 19.93        |                     |
| 20                                       | QPSK       | 100     | 0         | 19.93       | 19.98          | 19.90        |                     |
| 20                                       | 16QAM      | 1       | 0         | 20.10       | 20.19          | 20.14        |                     |
| 20                                       | 16QAM      | 1       | 49        | 20.04       | 20.16          | 20.09        | 21                  |
| 20                                       | 16QAM      | 1       | 99        | 19.99       | 20.12          | 20.01        |                     |
| 20                                       | 16QAM      | 50      | 0         | 19.01       | 19.09          | 19.05        |                     |
| 20                                       | 16QAM      | 50      | 24        | 18.93       | 19.05          | 18.98        |                     |
| 20                                       | 16QAM      | 50      | 50        | 18.86       | 18.98          | 18.91        | 20                  |
| 20                                       | 16QAM      | 100     | 0         | 18.92       | 19.00          | 18.94        |                     |
| 20                                       | 64QAM      | 1       | 0         | 19.16       | 19.20          | 19.17        |                     |
| 20                                       | 64QAM      | 1       | 49        | 19.11       | 19.15          | 19.12        |                     |
| 20                                       | 64QAM      | 1       | 99        | 19.04       | 19.09          | 19.06        | 20                  |
| 20                                       | 64QAM      | 50      | 0         | 18.04       | 18.13          | 18.08        |                     |
| 20                                       | 64QAM      | 50      | 24        | 17.97       | 18.05          | 17.99        |                     |
| 20                                       | 64QAM      | 50      | 50        | 17.93       | 18.02          | 17.95        |                     |
| 20                                       | 64QAM      | 100     | 0         | 17.96       | 18.01          | 17.96        |                     |
| Channel                                  |            |         |           | 26115       | 26365          | 26615        |                     |
| Frequency (MHz)                          |            |         |           | 1857.5      | 1882.5         | 1907.5       |                     |
| 15                                       | QPSK       | 1       | 0         | 20.95       | 21.02          | 20.98        |                     |
| 15                                       | QPSK       | 1       | 37        | 20.86       | 20.91          | 20.87        | 22                  |
| 15                                       | QPSK       | 1       | 74        | 20.82       | 20.88          | 20.79        |                     |
| 15                                       | QPSK       | 36      | 0         | 19.95       | 20.01          | 19.96        |                     |
| 15                                       | QPSK       | 36      | 20        | 19.86       | 19.94          | 19.87        |                     |
| 15                                       | QPSK       | 36      | 39        | 19.90       | 19.91          | 19.88        | 21                  |
| 15                                       | QPSK       | 75      | 0         | 19.88       | 19.93          | 19.85        |                     |
| 15                                       | 16QAM      | 1       | 0         | 20.05       | 20.14          | 20.09        |                     |
| 15                                       | 16QAM      | 1       | 37        | 19.99       | 20.11          | 20.04        |                     |
| 15                                       | 16QAM      | 1       | 74        | 19.94       | 20.07          | 19.96        | 21                  |
| 15                                       | 16QAM      | 36      | 0         | 18.96       | 19.04          | 19.00        |                     |
| 15                                       | 16QAM      | 36      | 20        | 18.88       | 19.00          | 18.93        |                     |
| 15                                       | 16QAM      | 36      | 39        | 18.81       | 18.93          | 18.86        |                     |
| 15                                       | 16QAM      | 75      | 0         | 18.87       | 18.95          | 18.89        | 20                  |
| 15                                       | 64QAM      | 1       | 0         | 19.11       | 19.15          | 19.12        |                     |
| 15                                       | 64QAM      | 1       | 37        | 19.06       | 19.10          | 19.07        |                     |
| 15                                       | 64QAM      | 1       | 74        | 18.99       | 19.04          | 19.01        |                     |
| 15                                       | 64QAM      | 36      | 0         | 17.99       | 18.08          | 18.03        | 20                  |
| 15                                       | 64QAM      | 36      | 20        | 17.92       | 18.00          | 17.94        |                     |
| 15                                       | 64QAM      | 36      | 39        | 17.88       | 17.97          | 17.90        |                     |
| 15                                       | 64QAM      | 75      | 0         | 17.91       | 17.96          | 17.91        |                     |
| Channel                                  |            |         |           | 26090       | 26365          | 26640        |                     |
| Frequency (MHz)                          |            |         |           | 1855        | 1882.5         | 1910         |                     |
| 10                                       | QPSK       | 1       | 0         | 20.87       | 20.94          | 20.90        | 22                  |
| 10                                       | QPSK       | 1       | 25        | 20.78       | 20.83          | 20.79        |                     |
| 10                                       | QPSK       | 1       | 49        | 20.74       | 20.80          | 20.71        |                     |
| 10                                       | QPSK       | 25      | 0         | 19.87       | 19.93          | 19.88        |                     |
| 10                                       | QPSK       | 25      | 12        | 19.78       | 19.86          | 19.79        | 21                  |
| 10                                       | QPSK       | 25      | 25        | 19.82       | 19.83          | 19.80        |                     |
| 10                                       | QPSK       | 50      | 0         | 19.80       | 19.85          | 19.77        |                     |
| 10                                       | 16QAM      | 1       | 0         | 19.97       | 20.06          | 20.01        |                     |
| 10                                       | 16QAM      | 1       | 25        | 19.91       | 20.03          | 19.96        | 21                  |
| 10                                       | 16QAM      | 1       | 49        | 19.86       | 19.99          | 19.88        |                     |
| 10                                       | 16QAM      | 25      | 0         | 18.88       | 18.96          | 18.92        |                     |
| 10                                       | 16QAM      | 25      | 12        | 18.80       | 18.92          | 18.85        |                     |
| 10                                       | 16QAM      | 25      | 25        | 18.73       | 18.85          | 18.78        | 20                  |
| 10                                       | 16QAM      | 50      | 0         | 18.79       | 18.87          | 18.81        |                     |
| 10                                       | 64QAM      | 1       | 0         | 19.03       | 19.07          | 19.04        |                     |
| 10                                       | 64QAM      | 1       | 25        | 18.98       | 19.02          | 18.99        |                     |
| 10                                       | 64QAM      | 1       | 49        | 18.91       | 18.96          | 18.93        | 20                  |
| 10                                       | 64QAM      | 25      | 0         | 17.91       | 18.00          | 17.95        |                     |
| 10                                       | 64QAM      | 25      | 12        | 17.84       | 17.92          | 17.86        |                     |
| 10                                       | 64QAM      | 25      | 25        | 17.80       | 17.89          | 17.82        |                     |
| 10                                       | 64QAM      | 50      | 0         | 17.83       | 17.88          | 17.83        |                     |
| Channel                                  |            |         |           | 26065       | 26365          | 26665        |                     |
| Frequency (MHz)                          |            |         |           | 1852.5      | 1882.5         | 1912.5       |                     |
| 5                                        | QPSK       | 1       | 0         | 20.84       | 20.91          | 20.87        |                     |
| 5                                        | QPSK       | 1       | 12        | 20.75       | 20.80          | 20.76        | 22                  |
| 5                                        | QPSK       | 1       | 24        | 20.71       | 20.77          | 20.68        |                     |
| 5                                        | QPSK       | 12      | 0         | 19.84       | 19.90          | 19.85        |                     |
| 5                                        | QPSK       | 12      | 7         | 19.75       | 19.83          | 19.76        |                     |
| 5                                        | QPSK       | 12      | 13        | 19.79       | 19.80          | 19.77        | 21                  |
| 5                                        | QPSK       | 25      | 0         | 19.77       | 19.82          | 19.74        |                     |
| 5                                        | 16QAM      | 1       | 0         | 19.94       | 20.03          | 19.98        |                     |
| 5                                        | 16QAM      | 1       | 12        | 19.88       | 20.00          | 19.93        |                     |
| 5                                        | 16QAM      | 1       | 24        | 19.83       | 19.96          | 19.85        | 21                  |
| 5                                        | 16QAM      | 12      | 0         | 18.85       | 18.93          | 18.89        |                     |
| 5                                        | 16QAM      | 12      | 7         | 18.77       | 18.89          | 18.82        |                     |
| 5                                        | 16QAM      | 12      | 13        | 18.70       | 18.82          | 18.75        |                     |
| 5                                        | 16QAM      | 25      | 0         | 18.76       | 18.84          | 18.78        | 20                  |
| 5                                        | 64QAM      | 1       | 0         | 19.00       | 19.04          | 19.01        |                     |
| 5                                        | 64QAM      | 1       | 12        | 18.95       | 18.99          | 18.96        |                     |
| 5                                        | 64QAM      | 1       | 24        | 18.88       | 18.93          | 18.90        |                     |
| 5                                        | 64QAM      | 12      | 0         | 17.88       | 17.97          | 17.92        | 19                  |
| 5                                        | 64QAM      | 12      | 7         | 17.81       | 17.89          | 17.83        |                     |
| 5                                        | 64QAM      | 12      | 13        | 17.77       | 17.86          | 17.79        |                     |
| 5                                        | 64QAM      | 25      | 0         | 17.80       | 17.85          | 17.80        |                     |
| Channel                                  |            |         |           | 26055       | 26365          | 26675        |                     |
| Frequency (MHz)                          |            |         |           | 1851.5      | 1882.5         | 1913.5       |                     |
| 3                                        | QPSK       | 1       | 0         | 20.80       | 20.87          | 20.83        | 22                  |
| 3                                        | QPSK       | 1       | 8         | 20.71       | 20.76          | 20.72        |                     |
| 3                                        | QPSK       | 1       | 14        | 20.67       | 20.73          | 20.64        |                     |
| 3                                        | QPSK       | 8       | 0         | 19.80       | 19.86          | 19.81        |                     |
| 3                                        | QPSK       | 8       | 4         | 19.71       | 19.79          | 19.72        | 21                  |
| 3                                        | QPSK       | 8       | 7         | 19.75       | 19.76          | 19.73        |                     |
| 3                                        | QPSK       | 15      | 0         | 19.73       | 19.78          | 19.70        |                     |
| 3                                        | 16QAM      | 1       | 0         | 19.90       | 19.99          | 19.94        |                     |
| 3                                        | 16QAM      | 1       | 8         | 19.84       | 19.96          | 19.89        | 21                  |
| 3                                        | 16QAM      | 1       | 14        | 19.79       | 19.92          | 19.81        |                     |
| 3                                        | 16QAM      | 8       | 0         | 18.81       | 18.89          | 18.85        |                     |
| 3                                        | 16QAM      | 8       | 4         | 18.73       | 18.85          | 18.78        |                     |
| 3                                        | 16QAM      | 8       | 7         | 18.66       | 18.78          | 18.71        | 20                  |
| 3                                        | 16QAM      | 15      | 0         | 18.72       | 18.80          | 18.74        |                     |



|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 18.96  | 19.00  | 18.97  | 20                  |
| 3               | 64QAM | 1  | 8  | 18.91  | 18.95  | 18.92  |                     |
| 3               | 64QAM | 1  | 14 | 18.84  | 18.89  | 18.86  |                     |
| 3               | 64QAM | 8  | 0  | 17.84  | 17.93  | 17.88  | 19                  |
| 3               | 64QAM | 8  | 4  | 17.77  | 17.85  | 17.79  |                     |
| 3               | 64QAM | 8  | 7  | 17.73  | 17.82  | 17.75  |                     |
| 3               | 64QAM | 15 | 0  | 17.76  | 17.81  | 17.76  | Tune-up limit (dBm) |
| Channel         |       |    |    | 26047  | 26365  | 26683  |                     |
| Frequency (MHz) |       |    |    | 1850.7 | 1882.5 | 1914.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 20.75  | 20.82  | 20.78  | 22                  |
| 1.4             | QPSK  | 1  | 3  | 20.66  | 20.71  | 20.67  |                     |
| 1.4             | QPSK  | 1  | 5  | 20.62  | 20.68  | 20.59  |                     |
| 1.4             | QPSK  | 3  | 0  | 19.75  | 19.81  | 19.76  |                     |
| 1.4             | QPSK  | 3  | 1  | 19.66  | 19.74  | 19.67  |                     |
| 1.4             | QPSK  | 3  | 3  | 19.70  | 19.71  | 19.68  |                     |
| 1.4             | QPSK  | 6  | 0  | 19.68  | 19.73  | 19.65  | 21                  |
| 1.4             | QPSK  | 1  | 0  | 19.85  | 19.94  | 19.89  |                     |
| 1.4             | 16QAM | 1  | 3  | 19.79  | 19.91  | 19.84  | 20                  |
| 1.4             | 16QAM | 1  | 5  | 19.74  | 19.87  | 19.76  |                     |
| 1.4             | 16QAM | 3  | 0  | 18.76  | 18.84  | 18.80  |                     |
| 1.4             | 16QAM | 3  | 1  | 18.68  | 18.80  | 18.73  |                     |
| 1.4             | 16QAM | 3  | 3  | 18.61  | 18.73  | 18.66  |                     |
| 1.4             | 16QAM | 6  | 0  | 18.67  | 18.75  | 18.69  |                     |
| 1.4             | 64QAM | 1  | 0  | 18.91  | 18.95  | 18.92  | 19                  |
| 1.4             | 64QAM | 1  | 3  | 18.86  | 18.90  | 18.87  |                     |
| 1.4             | 64QAM | 1  | 5  | 18.79  | 18.84  | 18.81  |                     |
| 1.4             | 64QAM | 3  | 0  | 17.79  | 17.88  | 17.83  |                     |
| 1.4             | 64QAM | 3  | 1  | 17.72  | 17.80  | 17.74  |                     |
| 1.4             | 64QAM | 3  | 3  | 17.68  | 17.77  | 17.70  |                     |
| 1.4             | 64QAM | 6  | 0  | 17.71  | 17.76  | 17.71  | 19                  |

| Band 66 (dBm)_Ant 1 |            |         |           |             |                |              |                     |
|---------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel             |            |         |           | 132072      | 132322         | 132572       |                     |
| Frequency (MHz)     |            |         |           | 1720        | 1745           | 1770         |                     |
| 20                  | QPSK       | 1       | 0         | 19.08       | 19.12          | 19.05        | 20                  |
| 20                  | QPSK       | 1       | 49        | 19.03       | 19.04          | 18.97        |                     |
| 20                  | QPSK       | 1       | 99        | 18.98       | 18.94          | 18.89        |                     |
| 20                  | QPSK       | 50      | 0         | 18.02       | 18.08          | 18.03        | 19                  |
| 20                  | QPSK       | 50      | 24        | 17.91       | 18.00          | 17.95        |                     |
| 20                  | QPSK       | 50      | 50        | 17.92       | 18.04          | 17.94        |                     |
| 20                  | QPSK       | 100     | 0         | 18.00       | 18.01          | 17.95        | 19                  |
| 20                  | 16QAM      | 1       | 0         | 18.31       | 18.23          | 18.11        |                     |
| 20                  | 16QAM      | 1       | 49        | 18.23       | 18.25          | 18.13        |                     |
| 20                  | 16QAM      | 1       | 99        | 18.10       | 18.10          | 18.18        | 18                  |
| 20                  | 16QAM      | 50      | 0         | 17.06       | 17.17          | 17.21        |                     |
| 20                  | 16QAM      | 50      | 24        | 17.07       | 17.03          | 17.00        |                     |
| 20                  | 16QAM      | 50      | 50        | 16.89       | 16.94          | 17.09        | 18                  |
| 20                  | 16QAM      | 100     | 0         | 17.11       | 16.97          | 17.06        |                     |
| 20                  | 64QAM      | 1       | 0         | 17.29       | 17.30          | 17.39        |                     |
| 20                  | 64QAM      | 1       | 49        | 17.21       | 17.19          | 17.32        | 17                  |
| 20                  | 64QAM      | 1       | 99        | 17.22       | 17.30          | 17.41        |                     |
| 20                  | 64QAM      | 50      | 0         | 16.01       | 16.30          | 16.09        |                     |
| 20                  | 64QAM      | 50      | 24        | 16.19       | 16.09          | 15.96        | 17                  |
| 20                  | 64QAM      | 50      | 50        | 16.00       | 16.13          | 15.95        |                     |
| 20                  | 64QAM      | 100     | 0         | 16.17       | 16.14          | 15.91        |                     |
| Channel             |            |         |           | 132047      | 132322         | 132597       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15                  | QPSK       | 1       | 0         | 19.03       | 19.07          | 19.00        | 20                  |
| 15                  | QPSK       | 1       | 37        | 18.98       | 18.99          | 18.92        |                     |
| 15                  | QPSK       | 1       | 74        | 18.93       | 18.89          | 18.84        |                     |
| 15                  | QPSK       | 36      | 0         | 17.97       | 18.03          | 17.98        | 19                  |
| 15                  | QPSK       | 36      | 20        | 17.86       | 17.95          | 17.90        |                     |
| 15                  | QPSK       | 36      | 39        | 17.87       | 17.99          | 17.89        |                     |
| 15                  | QPSK       | 75      | 0         | 17.95       | 17.96          | 17.90        | 19                  |
| 15                  | 16QAM      | 1       | 0         | 18.26       | 18.18          | 18.06        |                     |
| 15                  | 16QAM      | 1       | 37        | 18.18       | 18.20          | 18.08        |                     |
| 15                  | 16QAM      | 1       | 74        | 18.05       | 18.05          | 18.13        | 18                  |
| 15                  | 16QAM      | 36      | 0         | 17.01       | 17.12          | 17.16        |                     |
| 15                  | 16QAM      | 36      | 20        | 17.02       | 16.98          | 16.95        |                     |
| 15                  | 16QAM      | 36      | 39        | 16.84       | 16.89          | 17.04        | 18                  |
| 15                  | 16QAM      | 75      | 0         | 17.06       | 16.92          | 17.01        |                     |
| 15                  | 64QAM      | 1       | 0         | 17.24       | 17.25          | 17.34        |                     |
| 15                  | 64QAM      | 1       | 37        | 17.16       | 17.14          | 17.27        | 17                  |
| 15                  | 64QAM      | 1       | 74        | 17.17       | 17.25          | 17.06        |                     |
| 15                  | 64QAM      | 36      | 0         | 15.96       | 16.25          | 16.04        |                     |
| 15                  | 64QAM      | 36      | 20        | 16.14       | 16.04          | 15.91        | 17                  |
| 15                  | 64QAM      | 36      | 39        | 15.95       | 16.08          | 15.90        |                     |
| 15                  | 64QAM      | 75      | 0         | 16.12       | 16.09          | 15.86        |                     |
| Channel             |            |         |           | 132022      | 132322         | 132622       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1715        | 1745           | 1775         |                     |
| 10                  | QPSK       | 1       | 0         | 18.97       | 19.01          | 18.94        | 20                  |
| 10                  | QPSK       | 1       | 25        | 18.92       | 18.93          | 18.86        |                     |
| 10                  | QPSK       | 1       | 49        | 18.87       | 18.83          | 18.78        |                     |
| 10                  | QPSK       | 25      | 0         | 17.91       | 17.97          | 17.92        | 19                  |
| 10                  | QPSK       | 25      | 12        | 17.80       | 17.89          | 17.84        |                     |
| 10                  | QPSK       | 25      | 25        | 17.81       | 17.83          | 17.83        |                     |
| 10                  | QPSK       | 50      | 0         | 17.89       | 17.90          | 17.84        | 19                  |
| 10                  | 16QAM      | 1       | 0         | 18.20       | 18.12          | 18.00        |                     |
| 10                  | 16QAM      | 1       | 25        | 18.12       | 18.14          | 18.02        |                     |
| 10                  | 16QAM      | 1       | 49        | 17.99       | 17.99          | 18.07        | 18                  |
| 10                  | 16QAM      | 25      | 0         | 16.95       | 17.06          | 17.10        |                     |
| 10                  | 16QAM      | 25      | 12        | 16.96       | 16.92          | 16.89        |                     |
| 10                  | 16QAM      | 25      | 25        | 16.78       | 16.83          | 16.98        | 18                  |
| 10                  | 16QAM      | 50      | 0         | 17.00       | 16.86          | 16.95        |                     |
| 10                  | 64QAM      | 1       | 0         | 17.18       | 17.19          | 17.28        |                     |
| 10                  | 64QAM      | 1       | 25        | 17.10       | 17.08          | 17.21        | 17                  |
| 10                  | 64QAM      | 1       | 49        | 17.11       | 17.19          | 17.00        |                     |
| 10                  | 64QAM      | 25      | 0         | 15.90       | 16.19          | 15.98        |                     |
| 10                  | 64QAM      | 25      | 12        | 16.08       | 15.98          | 15.85        | 17                  |
| 10                  | 64QAM      | 25      | 25        | 15.89       | 16.02          | 15.84        |                     |
| 10                  | 64QAM      | 50      | 0         | 16.06       | 16.03          | 15.80        |                     |
| Channel             |            |         |           | 131997      | 132322         | 132647       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5                   | QPSK       | 1       | 0         | 18.89       | 18.93          | 18.86        | 20                  |
| 5                   | QPSK       | 1       | 12        | 18.84       | 18.85          | 18.78        |                     |
| 5                   | QPSK       | 1       | 24        | 18.79       | 18.75          | 18.70        |                     |
| 5                   | QPSK       | 12      | 0         | 17.83       | 17.89          | 17.84        | 19                  |
| 5                   | QPSK       | 12      | 7         | 17.72       | 17.81          | 17.76        |                     |
| 5                   | QPSK       | 12      | 13        | 17.73       | 17.85          | 17.75        |                     |
| 5                   | QPSK       | 25      | 0         | 17.81       | 17.82          | 17.76        | 19                  |
| 5                   | 16QAM      | 1       | 0         | 18.12       | 18.04          | 17.92        |                     |
| 5                   | 16QAM      | 1       | 12        | 18.04       | 18.06          | 17.94        |                     |
| 5                   | 16QAM      | 1       | 24        | 17.91       | 17.91          | 17.99        | 18                  |
| 5                   | 16QAM      | 12      | 0         | 16.87       | 16.98          | 17.02        |                     |
| 5                   | 16QAM      | 12      | 7         | 16.88       | 16.84          | 16.81        |                     |
| 5                   | 16QAM      | 12      | 13        | 16.70       | 16.75          | 16.90        | 18                  |
| 5                   | 16QAM      | 25      | 0         | 16.92       | 16.79          | 16.97        |                     |
| 5                   | 64QAM      | 1       | 0         | 17.10       | 17.11          | 17.20        |                     |
| 5                   | 64QAM      | 1       | 12        | 17.02       | 17.00          | 17.13        | 17                  |
| 5                   | 64QAM      | 1       | 24        | 17.03       | 17.11          | 16.92        |                     |
| 5                   | 64QAM      | 12      | 0         | 15.82       | 16.11          | 15.90        |                     |
| 5                   | 64QAM      | 12      | 7         | 16.00       | 15.90          | 15.77        | 17                  |
| 5                   | 64QAM      | 12      | 13        | 15.81       | 15.94          | 15.76        |                     |
| 5                   | 64QAM      | 25      | 0         | 15.98       | 15.95          | 15.72        |                     |
| Channel             |            |         |           | 131967      | 132322         | 132657       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3                   | QPSK       | 1       | 0         | 18.82       | 18.86          | 18.79        | 20                  |
| 3                   | QPSK       | 1       | 8         | 18.77       | 18.78          | 18.71        |                     |
| 3                   | QPSK       | 1       | 14        | 18.72       | 18.68          | 18.63        |                     |
| 3                   | QPSK       | 8       | 0         | 17.76       | 17.82          | 17.77        | 19                  |
| 3                   | QPSK       | 8       | 4         | 17.65       | 17.74          | 17.69        |                     |
| 3                   | QPSK       | 8       | 7         | 17.66       | 17.78          | 17.68        |                     |
| 3                   | QPSK       | 15      | 0         | 17.74       | 17.75          | 17.69        | 19                  |
| 3                   | 16QAM      | 1       | 0         | 18.05       | 17.97          | 17.85        |                     |
| 3                   | 16QAM      | 1       | 8         | 17.97       | 17.99          | 17.87        |                     |
| 3                   | 16QAM      | 1       | 14        | 17.84       | 17.84          | 17.92        | 18                  |
| 3                   | 16QAM      | 8       | 0         | 16.80       | 16.91          | 16.95        |                     |
| 3                   | 16QAM      | 8       | 4         | 16.81       | 16.77          | 16.74        |                     |
| 3                   | 16QAM      | 8       | 7         | 16.63       | 16.68          | 16.83        | 18                  |
| 3                   | 16QAM      | 15      | 0         | 16.85       | 16.71          | 16.80        |                     |

| Band 66 (dBm)_Ant 5 |            |         |           |             |                |              |                     |
|---------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel             |            |         |           | 132072      | 132322         | 132572       |                     |
| Frequency (MHz)     |            |         |           | 1720        | 1745           | 1770         |                     |
| 20                  | QPSK       | 1       | 0         | 20.08       | 20.12          | 20.05        | 21                  |
| 20                  | QPSK       | 1       | 49        | 20.03       | 20.04          | 19.97        |                     |
| 20                  | QPSK       | 1       | 99        | 19.98       | 19.94          | 19.89        |                     |
| 20                  | QPSK       | 50      | 0         | 19.02       | 19.08          | 19.03        | 20                  |
| 20                  | QPSK       | 50      | 24        | 18.91       | 19.00          | 18.95        |                     |
| 20                  | QPSK       | 50      | 50        | 18.92       | 19.04          | 18.94        |                     |
| 20                  | QPSK       | 100     | 0         | 19.00       | 19.01          | 18.95        | 20                  |
| 20                  | 16QAM      | 1       | 0         | 19.31       | 19.23          | 19.11        |                     |
| 20                  | 16QAM      | 1       | 49        | 19.23       | 19.25          | 19.13        |                     |
| 20                  | 16QAM      | 1       | 99        | 19.10       | 19.10          | 19.18        | 19                  |
| 20                  | 16QAM      | 50      | 0         | 18.06       | 18.17          | 18.21        |                     |
| 20                  | 16QAM      | 50      | 24        | 18.07       | 18.03          | 18.00        |                     |
| 20                  | 16QAM      | 50      | 50        | 17.89       | 17.94          | 18.09        | 19                  |
| 20                  | 16QAM      | 100     | 0         | 18.11       | 17.97          | 18.06        |                     |
| 20                  | 64QAM      | 1       | 0         | 18.29       | 18.30          | 18.39        |                     |
| 20                  | 64QAM      | 1       | 49        | 18.21       | 18.19          | 18.32        | 19                  |
| 20                  | 64QAM      | 1       | 99        | 18.22       | 18.30          | 18.11        |                     |
| 20                  | 64QAM      | 50      | 0         | 17.01       | 17.30          | 17.09        | 18                  |
| 20                  | 64QAM      | 50      | 24        | 17.19       | 17.09          | 16.96        |                     |
| 20                  | 64QAM      | 50      | 50        | 17.00       | 17.13          | 16.95        |                     |
| 20                  | 64QAM      | 100     | 0         | 17.17       | 17.14          | 16.91        |                     |
| Channel             |            |         |           | 132047      | 132322         | 132597       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15                  | QPSK       | 1       | 0         | 20.03       | 20.07          | 20.00        | 21                  |
| 15                  | QPSK       | 1       | 37        | 19.98       | 19.99          | 19.92        |                     |
| 15                  | QPSK       | 1       | 74        | 19.93       | 19.89          | 19.84        |                     |
| 15                  | QPSK       | 36      | 0         | 18.97       | 19.03          | 18.98        | 20                  |
| 15                  | QPSK       | 36      | 20        | 18.86       | 18.95          | 18.90        |                     |
| 15                  | QPSK       | 36      | 39        | 18.87       | 18.99          | 18.89        |                     |
| 15                  | QPSK       | 75      | 0         | 18.95       | 18.96          | 18.90        | 20                  |
| 15                  | 16QAM      | 1       | 0         | 19.26       | 19.18          | 19.06        |                     |
| 15                  | 16QAM      | 1       | 37        | 19.18       | 19.20          | 19.08        |                     |
| 15                  | 16QAM      | 1       | 74        | 19.05       | 19.05          | 19.13        | 19                  |
| 15                  | 16QAM      | 36      | 0         | 18.01       | 18.12          | 18.16        |                     |
| 15                  | 16QAM      | 36      | 20        | 18.02       | 17.98          | 17.95        |                     |
| 15                  | 16QAM      | 36      | 39        | 17.84       | 17.89          | 18.04        | 19                  |
| 15                  | 16QAM      | 75      | 0         | 18.06       | 17.92          | 18.01        |                     |
| 15                  | 64QAM      | 1       | 0         | 18.24       | 18.25          | 18.34        |                     |
| 15                  | 64QAM      | 1       | 37        | 18.16       | 18.14          | 18.27        | 19                  |
| 15                  | 64QAM      | 1       | 74        | 18.17       | 18.25          | 18.06        |                     |
| 15                  | 64QAM      | 36      | 0         | 16.96       | 17.25          | 17.04        |                     |
| 15                  | 64QAM      | 36      | 20        | 17.14       | 17.04          | 16.91        | 18                  |
| 15                  | 64QAM      | 36      | 39        | 16.95       | 17.08          | 16.90        |                     |
| 15                  | 64QAM      | 75      | 0         | 17.12       | 17.09          | 16.86        |                     |
| Channel             |            |         |           | 132022      | 132322         | 132622       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1715        | 1745           | 1775         |                     |
| 10                  | QPSK       | 1       | 0         | 19.97       | 20.01          | 19.94        | 21                  |
| 10                  | QPSK       | 1       | 25        | 19.92       | 19.93          | 19.86        |                     |
| 10                  | QPSK       | 1       | 49        | 19.87       | 19.83          | 19.78        |                     |
| 10                  | QPSK       | 25      | 0         | 18.91       | 18.97          | 18.92        | 20                  |
| 10                  | QPSK       | 25      | 12        | 18.80       | 18.89          | 18.84        |                     |
| 10                  | QPSK       | 25      | 25        | 18.81       | 18.93          | 18.83        |                     |
| 10                  | QPSK       | 50      | 0         | 18.89       | 18.90          | 18.84        | 20                  |
| 10                  | 16QAM      | 1       | 0         | 19.20       | 19.12          | 19.00        |                     |
| 10                  | 16QAM      | 1       | 25        | 19.12       | 19.14          | 19.02        |                     |
| 10                  | 16QAM      | 1       | 49        | 18.99       | 18.99          | 19.07        | 19                  |
| 10                  | 16QAM      | 25      | 0         | 17.95       | 18.06          | 18.10        |                     |
| 10                  | 16QAM      | 25      | 12        | 17.96       | 17.92          | 17.89        |                     |
| 10                  | 16QAM      | 25      | 25        | 17.78       | 17.83          | 17.98        | 19                  |
| 10                  | 16QAM      | 50      | 0         | 18.00       | 17.86          | 17.95        |                     |
| 10                  | 64QAM      | 1       | 0         | 18.18       | 18.19          | 18.28        |                     |
| 10                  | 64QAM      | 1       | 25        | 18.10       | 18.08          | 18.21        | 19                  |
| 10                  | 64QAM      | 1       | 49        | 18.11       | 18.19          | 18.00        |                     |
| 10                  | 64QAM      | 25      | 0         | 16.90       | 17.19          | 16.98        |                     |
| 10                  | 64QAM      | 25      | 12        | 17.08       | 16.98          | 16.85        | 18                  |
| 10                  | 64QAM      | 25      | 25        | 16.89       | 17.02          | 16.84        |                     |
| 10                  | 64QAM      | 50      | 0         | 17.06       | 17.03          | 16.80        |                     |
| Channel             |            |         |           | 131997      | 132322         | 132647       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5                   | QPSK       | 1       | 0         | 19.89       | 19.93          | 19.86        | 21                  |
| 5                   | QPSK       | 1       | 12        | 19.84       | 19.85          | 19.78        |                     |
| 5                   | QPSK       | 1       | 24        | 19.79       | 19.75          | 19.70        |                     |
| 5                   | QPSK       | 12      | 0         | 18.83       | 18.89          | 18.84        | 20                  |
| 5                   | QPSK       | 12      | 7         | 18.72       | 18.81          | 18.76        |                     |
| 5                   | QPSK       | 12      | 13        | 18.73       | 18.85          | 18.75        |                     |
| 5                   | QPSK       | 25      | 0         | 18.81       | 18.82          | 18.76        | 20                  |
| 5                   | 16QAM      | 1       | 0         | 19.12       | 19.04          | 18.92        |                     |
| 5                   | 16QAM      | 1       | 12        | 19.04       | 19.06          | 18.94        |                     |
| 5                   | 16QAM      | 1       | 24        | 18.91       | 18.91          | 18.99        | 19                  |
| 5                   | 16QAM      | 12      | 0         | 17.87       | 17.98          | 18.02        |                     |
| 5                   | 16QAM      | 12      | 7         | 17.88       | 17.84          | 17.81        |                     |
| 5                   | 16QAM      | 12      | 13        | 17.70       | 17.75          | 17.90        | 19                  |
| 5                   | 16QAM      | 25      | 0         | 17.92       | 17.78          | 17.87        |                     |
| 5                   | 64QAM      | 1       | 0         | 18.10       | 18.11          | 18.20        |                     |
| 5                   | 64QAM      | 1       | 12        | 18.02       | 18.00          | 18.13        | 19                  |
| 5                   | 64QAM      | 1       | 24        | 18.03       | 18.11          | 17.92        |                     |
| 5                   | 64QAM      | 12      | 0         | 16.82       | 17.11          | 16.90        |                     |
| 5                   | 64QAM      | 12      | 7         | 17.00       | 16.90          | 16.77        | 18                  |
| 5                   | 64QAM      | 12      | 13        | 16.81       | 16.94          | 16.76        |                     |
| 5                   | 64QAM      | 25      | 0         | 16.98       | 16.95          | 16.72        |                     |
| Channel             |            |         |           | 131987      | 132322         | 132657       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3                   | QPSK       | 1       | 0         | 19.82       | 19.86          | 19.79        | 21                  |
| 3                   | QPSK       | 1       | 8         | 19.77       | 19.78          | 19.71        |                     |
| 3                   | QPSK       | 1       | 14        | 19.72       | 19.68          | 19.63        |                     |
| 3                   | QPSK       | 8       | 0         | 18.76       | 18.82          | 18.77        | 20                  |
| 3                   | QPSK       | 8       | 4         | 18.65       | 18.74          | 18.69        |                     |
| 3                   | QPSK       | 15      | 0         | 18.74       | 18.78          | 18.68        |                     |
| 3                   | 16QAM      | 1       | 0         | 19.05       | 18.97          | 18.85        | 20                  |
| 3                   | 16QAM      | 1       | 8         | 18.97       | 18.99          | 18.87        |                     |
| 3                   | 16QAM      | 1       | 14        | 18.84       | 18.84          | 18.92        |                     |
| 3                   | 16QAM      | 8       | 0         | 17.80       | 17.91          | 17.85        | 19                  |
| 3                   | 16QAM      | 8       | 4         | 17.81       | 17.77          | 17.74        |                     |
| 3                   | 16QAM      | 8       | 7         | 17.63       | 17.68          | 17.83        |                     |
| 3                   | 16QAM      | 15      | 0         | 17.85       | 17.73          | 17.80        |                     |



|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 17.03  | 17.04  | 17.13  | 18                  |
| 3               | 64QAM | 1  | 8  | 16.95  | 16.93  | 17.06  |                     |
| 3               | 64QAM | 1  | 14 | 16.96  | 17.04  | 16.85  |                     |
| 3               | 64QAM | 8  | 0  | 15.75  | 16.04  | 15.83  | 17                  |
| 3               | 64QAM | 8  | 4  | 15.93  | 15.83  | 15.70  |                     |
| 3               | 64QAM | 8  | 7  | 15.74  | 15.87  | 15.69  |                     |
| 3               | 64QAM | 15 | 0  | 15.91  | 15.88  | 15.65  | Tune-up limit (dBm) |
| Channel         |       |    |    | 131979 | 132322 | 132665 |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 18.76  | 18.80  | 18.73  | 20                  |
| 1.4             | QPSK  | 1  | 3  | 18.71  | 18.72  | 18.65  |                     |
| 1.4             | QPSK  | 1  | 5  | 18.66  | 18.62  | 18.57  |                     |
| 1.4             | QPSK  | 3  | 0  | 17.70  | 17.76  | 17.71  |                     |
| 1.4             | QPSK  | 3  | 1  | 17.59  | 17.68  | 17.63  |                     |
| 1.4             | QPSK  | 3  | 3  | 17.60  | 17.72  | 17.62  |                     |
| 1.4             | QPSK  | 6  | 0  | 17.68  | 17.69  | 17.63  | 19                  |
| 1.4             | 16QAM | 1  | 0  | 17.99  | 17.91  | 17.79  |                     |
| 1.4             | 16QAM | 1  | 3  | 17.91  | 17.93  | 17.81  |                     |
| 1.4             | 16QAM | 1  | 5  | 17.78  | 17.78  | 17.86  | 19                  |
| 1.4             | 16QAM | 3  | 0  | 16.74  | 16.85  | 16.89  |                     |
| 1.4             | 16QAM | 3  | 1  | 16.75  | 16.71  | 16.68  |                     |
| 1.4             | 16QAM | 3  | 3  | 16.57  | 16.62  | 16.77  | 18                  |
| 1.4             | 16QAM | 6  | 0  | 16.79  | 16.65  | 16.74  |                     |
| 1.4             | 64QAM | 1  | 0  | 16.97  | 16.98  | 17.07  |                     |
| 1.4             | 64QAM | 1  | 3  | 16.89  | 16.87  | 17.00  | 18                  |
| 1.4             | 64QAM | 1  | 5  | 16.90  | 16.98  | 16.79  |                     |
| 1.4             | 64QAM | 3  | 0  | 15.69  | 15.98  | 15.77  |                     |
| 1.4             | 64QAM | 3  | 1  | 15.87  | 15.77  | 15.64  | 17                  |
| 1.4             | 64QAM | 3  | 3  | 15.88  | 15.81  | 15.63  |                     |
| 1.4             | 64QAM | 6  | 0  | 15.85  | 15.82  | 15.59  |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 18.03  | 18.04  | 18.13  | 19                  |
| 3               | 64QAM | 1  | 8  | 17.95  | 17.93  | 18.06  |                     |
| 3               | 64QAM | 1  | 14 | 17.96  | 18.04  | 17.85  |                     |
| 3               | 64QAM | 8  | 0  | 16.75  | 17.04  | 16.83  | 18                  |
| 3               | 64QAM | 8  | 4  | 16.93  | 16.83  | 16.70  |                     |
| 3               | 64QAM | 8  | 7  | 16.74  | 16.87  | 16.69  |                     |
| 3               | 64QAM | 15 | 0  | 16.91  | 16.88  | 16.65  | Tune-up limit (dBm) |
| Channel         |       |    |    | 131979 | 132322 | 132665 |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 19.76  | 19.80  | 19.73  | 21                  |
| 1.4             | QPSK  | 1  | 3  | 19.71  | 19.72  | 19.65  |                     |
| 1.4             | QPSK  | 1  | 5  | 19.66  | 19.62  | 19.57  |                     |
| 1.4             | QPSK  | 3  | 0  | 18.70  | 18.76  | 18.71  |                     |
| 1.4             | QPSK  | 3  | 1  | 18.59  | 18.68  | 18.63  |                     |
| 1.4             | QPSK  | 3  | 3  | 18.60  | 18.72  | 18.62  |                     |
| 1.4             | QPSK  | 6  | 0  | 18.68  | 18.69  | 18.63  | 20                  |
| 1.4             | 16QAM | 1  | 0  | 18.99  | 18.91  | 18.79  |                     |
| 1.4             | 16QAM | 1  | 3  | 18.91  | 18.93  | 18.81  |                     |
| 1.4             | 16QAM | 1  | 5  | 18.78  | 18.78  | 18.86  | 20                  |
| 1.4             | 16QAM | 3  | 0  | 17.74  | 17.85  | 17.89  |                     |
| 1.4             | 16QAM | 3  | 1  | 17.75  | 17.71  | 17.68  |                     |
| 1.4             | 16QAM | 3  | 3  | 17.57  | 17.62  | 17.77  | 19                  |
| 1.4             | 16QAM | 6  | 0  | 17.79  | 17.65  | 17.74  |                     |
| 1.4             | 64QAM | 1  | 0  | 17.97  | 17.98  | 18.07  |                     |
| 1.4             | 64QAM | 1  | 3  | 17.89  | 17.87  | 18.00  | 19                  |
| 1.4             | 64QAM | 1  | 5  | 17.90  | 17.98  | 17.79  |                     |
| 1.4             | 64QAM | 3  | 0  | 16.69  | 16.98  | 16.77  |                     |
| 1.4             | 64QAM | 3  | 1  | 16.87  | 16.77  | 16.64  | 18                  |
| 1.4             | 64QAM | 3  | 3  | 16.68  | 16.81  | 16.63  |                     |
| 1.4             | 64QAM | 6  | 0  | 16.85  | 16.82  | 16.59  |                     |

Reduced Power Level 4 for Head

| Band 2 (1900MHz Band) (dBm) Ant 1<br>Part 24E |            |         |           |             |                |              |                     |  |  |
|-----------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|--|
| BW (MHz)                                      | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |  |
| Channel                                       |            |         |           | 18700       | 18900          | 19100        |                     |  |  |
| Frequency (MHz)                               |            |         |           | 1860        | 1880           | 1900         |                     |  |  |
| 20                                            | QPSK       | 1       | 0         | 15.92       | 15.96          | 15.89        | 17                  |  |  |
| 20                                            | QPSK       | 1       | 49        | 15.87       | 15.88          | 15.81        |                     |  |  |
| 20                                            | QPSK       | 1       | 99        | 15.82       | 15.78          | 15.73        |                     |  |  |
| 20                                            | QPSK       | 50      | 0         | 14.86       | 14.92          | 14.87        | 16                  |  |  |
| 20                                            | QPSK       | 50      | 24        | 14.75       | 14.84          | 14.79        |                     |  |  |
| 20                                            | QPSK       | 50      | 50        | 14.76       | 14.88          | 14.78        |                     |  |  |
| 20                                            | QPSK       | 100     | 0         | 14.84       | 14.85          | 14.79        | 16                  |  |  |
| 20                                            | 16QAM      | 1       | 0         | 15.15       | 15.07          | 14.95        |                     |  |  |
| 20                                            | 16QAM      | 1       | 49        | 15.07       | 15.09          | 14.97        |                     |  |  |
| 20                                            | 16QAM      | 1       | 99        | 14.94       | 14.94          | 15.02        | 15                  |  |  |
| 20                                            | 16QAM      | 50      | 0         | 13.90       | 14.01          | 14.05        |                     |  |  |
| 20                                            | 16QAM      | 50      | 24        | 13.91       | 13.87          | 13.84        |                     |  |  |
| 20                                            | 16QAM      | 50      | 50        | 13.73       | 13.78          | 13.93        | 15                  |  |  |
| 20                                            | 16QAM      | 100     | 0         | 13.95       | 13.81          | 13.90        |                     |  |  |
| 20                                            | 64QAM      | 1       | 0         | 14.13       | 14.14          | 14.23        |                     |  |  |
| 20                                            | 64QAM      | 1       | 49        | 14.05       | 14.03          | 14.16        | 15                  |  |  |
| 20                                            | 64QAM      | 1       | 99        | 14.06       | 14.14          | 13.95        |                     |  |  |
| 20                                            | 64QAM      | 50      | 0         | 12.85       | 13.14          | 12.93        |                     |  |  |
| 20                                            | 64QAM      | 50      | 24        | 13.03       | 12.93          | 12.80        | 14                  |  |  |
| 20                                            | 64QAM      | 50      | 50        | 12.84       | 12.97          | 12.79        |                     |  |  |
| 20                                            | 64QAM      | 100     | 0         | 13.01       | 12.98          | 12.75        |                     |  |  |
| Channel                                       |            |         |           | 18675       | 18900          | 19125        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1857.5      | 1880           | 1902.5       |                     |  |  |
| 15                                            | QPSK       | 1       | 0         | 15.86       | 15.90          | 15.83        | 17                  |  |  |
| 15                                            | QPSK       | 1       | 37        | 15.81       | 15.82          | 15.75        |                     |  |  |
| 15                                            | QPSK       | 1       | 74        | 15.76       | 15.72          | 15.67        |                     |  |  |
| 15                                            | QPSK       | 36      | 0         | 14.80       | 14.86          | 14.81        | 16                  |  |  |
| 15                                            | QPSK       | 36      | 20        | 14.69       | 14.78          | 14.73        |                     |  |  |
| 15                                            | QPSK       | 36      | 39        | 14.70       | 14.82          | 14.72        |                     |  |  |
| 15                                            | QPSK       | 75      | 0         | 14.78       | 14.79          | 14.73        | 16                  |  |  |
| 15                                            | 16QAM      | 1       | 0         | 15.09       | 15.01          | 14.89        |                     |  |  |
| 15                                            | 16QAM      | 1       | 37        | 15.01       | 15.03          | 14.91        |                     |  |  |
| 15                                            | 16QAM      | 1       | 74        | 14.88       | 14.88          | 14.96        | 15                  |  |  |
| 15                                            | 16QAM      | 36      | 0         | 13.84       | 13.95          | 13.99        |                     |  |  |
| 15                                            | 16QAM      | 36      | 20        | 13.85       | 13.81          | 13.78        |                     |  |  |
| 15                                            | 16QAM      | 36      | 39        | 13.67       | 13.72          | 13.87        | 15                  |  |  |
| 15                                            | 16QAM      | 75      | 0         | 13.89       | 13.75          | 13.84        |                     |  |  |
| 15                                            | 64QAM      | 1       | 0         | 14.07       | 14.08          | 14.17        |                     |  |  |
| 15                                            | 64QAM      | 1       | 37        | 13.99       | 13.97          | 14.10        | 15                  |  |  |
| 15                                            | 64QAM      | 1       | 74        | 14.00       | 14.08          | 13.89        |                     |  |  |
| 15                                            | 64QAM      | 36      | 0         | 12.79       | 13.08          | 12.87        |                     |  |  |
| 15                                            | 64QAM      | 36      | 20        | 12.97       | 12.87          | 12.74        | 14                  |  |  |
| 15                                            | 64QAM      | 36      | 39        | 12.78       | 12.91          | 12.73        |                     |  |  |
| 15                                            | 64QAM      | 75      | 0         | 12.95       | 12.92          | 12.69        |                     |  |  |
| Channel                                       |            |         |           | 18650       | 18900          | 19150        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1855        | 1880           | 1905         |                     |  |  |
| 10                                            | QPSK       | 1       | 0         | 15.80       | 15.84          | 15.77        | 17                  |  |  |
| 10                                            | QPSK       | 1       | 25        | 15.75       | 15.76          | 15.69        |                     |  |  |
| 10                                            | QPSK       | 1       | 49        | 15.70       | 15.66          | 15.61        |                     |  |  |
| 10                                            | QPSK       | 25      | 0         | 14.74       | 14.80          | 14.75        | 16                  |  |  |
| 10                                            | QPSK       | 25      | 12        | 14.63       | 14.72          | 14.67        |                     |  |  |
| 10                                            | QPSK       | 25      | 25        | 14.64       | 14.76          | 14.66        |                     |  |  |
| 10                                            | QPSK       | 50      | 0         | 14.72       | 14.73          | 14.67        | 16                  |  |  |
| 10                                            | 16QAM      | 1       | 0         | 15.03       | 14.95          | 14.83        |                     |  |  |
| 10                                            | 16QAM      | 1       | 25        | 14.95       | 14.97          | 14.85        |                     |  |  |
| 10                                            | 16QAM      | 1       | 49        | 14.82       | 14.82          | 14.90        | 15                  |  |  |
| 10                                            | 16QAM      | 25      | 0         | 13.78       | 13.89          | 13.93        |                     |  |  |
| 10                                            | 16QAM      | 25      | 12        | 13.79       | 13.75          | 13.72        |                     |  |  |
| 10                                            | 16QAM      | 25      | 25        | 13.61       | 13.66          | 13.81        | 15                  |  |  |
| 10                                            | 16QAM      | 50      | 0         | 13.83       | 13.69          | 13.78        |                     |  |  |
| 10                                            | 64QAM      | 1       | 0         | 14.01       | 14.02          | 14.11        |                     |  |  |
| 10                                            | 64QAM      | 1       | 25        | 13.93       | 13.91          | 14.04        | 15                  |  |  |
| 10                                            | 64QAM      | 1       | 49        | 13.94       | 14.02          | 13.83        |                     |  |  |
| 10                                            | 64QAM      | 25      | 0         | 12.73       | 13.02          | 12.81        |                     |  |  |
| 10                                            | 64QAM      | 25      | 12        | 12.91       | 12.81          | 12.68        | 14                  |  |  |
| 10                                            | 64QAM      | 25      | 25        | 12.72       | 12.85          | 12.67        |                     |  |  |
| 10                                            | 64QAM      | 50      | 0         | 12.89       | 12.86          | 12.63        |                     |  |  |
| Channel                                       |            |         |           | 18625       | 18900          | 19175        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1852.5      | 1880           | 1907.5       |                     |  |  |
| 5                                             | QPSK       | 1       | 0         | 15.74       | 15.78          | 15.71        | 17                  |  |  |
| 5                                             | QPSK       | 1       | 12        | 15.69       | 15.70          | 15.63        |                     |  |  |
| 5                                             | QPSK       | 1       | 24        | 15.64       | 15.60          | 15.55        |                     |  |  |
| 5                                             | QPSK       | 12      | 0         | 14.68       | 14.74          | 14.69        | 16                  |  |  |
| 5                                             | QPSK       | 12      | 7         | 14.57       | 14.66          | 14.61        |                     |  |  |
| 5                                             | QPSK       | 12      | 13        | 14.58       | 14.70          | 14.60        |                     |  |  |
| 5                                             | QPSK       | 25      | 0         | 14.66       | 14.67          | 14.61        | 16                  |  |  |
| 5                                             | 16QAM      | 1       | 0         | 14.97       | 14.89          | 14.77        |                     |  |  |
| 5                                             | 16QAM      | 1       | 12        | 14.89       | 14.91          | 14.79        |                     |  |  |
| 5                                             | 16QAM      | 1       | 24        | 14.76       | 14.76          | 14.84        | 15                  |  |  |
| 5                                             | 16QAM      | 12      | 0         | 13.72       | 13.83          | 13.87        |                     |  |  |
| 5                                             | 16QAM      | 12      | 7         | 13.73       | 13.69          | 13.66        |                     |  |  |
| 5                                             | 16QAM      | 12      | 13        | 13.55       | 13.60          | 13.75        | 15                  |  |  |
| 5                                             | 16QAM      | 25      | 0         | 13.77       | 13.63          | 13.72        |                     |  |  |
| 5                                             | 64QAM      | 1       | 0         | 13.95       | 13.96          | 14.05        |                     |  |  |
| 5                                             | 64QAM      | 1       | 12        | 13.87       | 13.85          | 13.98        | 15                  |  |  |
| 5                                             | 64QAM      | 1       | 24        | 13.88       | 13.96          | 13.77        |                     |  |  |
| 5                                             | 64QAM      | 12      | 0         | 12.67       | 12.96          | 12.75        |                     |  |  |
| 5                                             | 64QAM      | 12      | 7         | 12.85       | 12.75          | 12.62        | 14                  |  |  |
| 5                                             | 64QAM      | 12      | 13        | 12.66       | 12.79          | 12.61        |                     |  |  |
| 5                                             | 64QAM      | 25      | 0         | 12.83       | 12.80          | 12.57        |                     |  |  |
| Channel                                       |            |         |           | 18615       | 18900          | 19165        | Tune-up limit (dBm) |  |  |
| Frequency (MHz)                               |            |         |           | 1851.5      | 1880           | 1908.5       |                     |  |  |
| 3                                             | QPSK       | 1       | 0         | 15.71       | 15.75          | 15.68        | 17                  |  |  |
| 3                                             | QPSK       | 1       | 8         | 15.66       | 15.67          | 15.60        |                     |  |  |
| 3                                             | QPSK       | 1       | 14        | 15.61       | 15.57          | 15.52        |                     |  |  |
| 3                                             | QPSK       | 8       | 0         | 14.65       | 14.71          | 14.66        | 16                  |  |  |
| 3                                             | QPSK       | 8       | 4         | 14.54       | 14.63          | 14.58        |                     |  |  |
| 3                                             | QPSK       | 8       | 7         | 14.55       | 14.67          | 14.57        |                     |  |  |
| 3                                             | QPSK       | 15      | 0         | 14.63       | 14.64          | 14.58        | 16                  |  |  |
| 3                                             | 16QAM      | 1       | 0         | 14.94       | 14.86          | 14.74        |                     |  |  |
| 3                                             | 16QAM      | 1       | 8         | 14.86       | 14.88          | 14.76        |                     |  |  |
| 3                                             | 16QAM      | 1       | 14        | 14.73       | 14.73          | 14.81        | 15                  |  |  |
| 3                                             | 16QAM      | 8       | 0         | 13.69       | 13.80          | 13.84        |                     |  |  |
| 3                                             | 16QAM      | 8       | 4         | 13.70       | 13.66          | 13.63        |                     |  |  |

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required) |            |         |           |             |                |              |                     |
|----------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)                                                       | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                        |            |         |           | 20050       | 20175          | 20300        |                     |
| Frequency (MHz)                                                |            |         |           | 1720        | 1732.5         | 1745         |                     |
| 20                                                             | QPSK       | 1       | 0         | 15.99       | 16.03          | 15.96        | 17                  |
| 20                                                             | QPSK       | 1       | 49        | 15.94       | 15.95          | 15.88        |                     |
| 20                                                             | QPSK       | 1       | 99        | 15.89       | 15.85          | 15.80        |                     |
| 20                                                             | QPSK       | 50      | 0         | 14.93       | 14.99          | 14.94        | 16                  |
| 20                                                             | QPSK       | 50      | 24        | 14.82       | 14.91          | 14.86        |                     |
| 20                                                             | QPSK       | 50      | 50        | 14.83       | 14.95          | 14.85        |                     |
| 20                                                             | QPSK       | 100     | 0         | 14.91       | 14.92          | 14.86        | 16                  |
| 20                                                             | 16QAM      | 1       | 0         | 15.22       | 15.14          | 15.02        |                     |
| 20                                                             | 16QAM      | 1       | 49        | 15.14       | 15.16          | 15.04        |                     |
| 20                                                             | 16QAM      | 1       | 99        | 15.01       | 15.01          | 15.09        | 15                  |
| 20                                                             | 16QAM      | 50      | 0         | 13.97       | 14.08          | 14.12        |                     |
| 20                                                             | 16QAM      | 50      | 24        | 13.98       | 13.94          | 13.91        | 15                  |
| 20                                                             | 16QAM      | 50      | 50        | 13.80       | 13.85          | 14.00        |                     |
| 20                                                             | 16QAM      | 100     | 0         | 14.02       | 14.21          | 14.30        |                     |
| 20                                                             | 64QAM      | 1       | 49        | 14.12       | 14.10          | 14.23        | 15                  |
| 20                                                             | 64QAM      | 1       | 99        | 14.13       | 14.21          | 14.02        |                     |
| 20                                                             | 64QAM      | 50      | 0         | 12.92       | 13.21          | 13.00        |                     |
| 20                                                             | 64QAM      | 50      | 24        | 13.10       | 13.00          | 12.87        | 14                  |
| 20                                                             | 64QAM      | 50      | 50        | 12.91       | 13.04          | 12.86        |                     |
| 20                                                             | 64QAM      | 100     | 0         | 13.08       | 13.05          | 12.82        |                     |
| Channel                                                        |            |         |           | 20025       | 20175          | 20325        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1717.5      | 1732.5         | 1747.5       |                     |
| 15                                                             | QPSK       | 1       | 0         | 15.94       | 15.98          | 15.91        | 17                  |
| 15                                                             | QPSK       | 1       | 37        | 15.89       | 15.90          | 15.83        |                     |
| 15                                                             | QPSK       | 1       | 74        | 15.84       | 15.80          | 15.75        |                     |
| 15                                                             | QPSK       | 36      | 0         | 14.88       | 14.94          | 14.89        | 16                  |
| 15                                                             | QPSK       | 36      | 20        | 14.77       | 14.86          | 14.81        |                     |
| 15                                                             | QPSK       | 36      | 39        | 14.78       | 14.90          | 14.80        |                     |
| 15                                                             | QPSK       | 75      | 0         | 14.86       | 14.87          | 14.81        | 16                  |
| 15                                                             | 16QAM      | 1       | 0         | 15.17       | 15.09          | 14.97        |                     |
| 15                                                             | 16QAM      | 1       | 37        | 15.09       | 15.11          | 14.99        |                     |
| 15                                                             | 16QAM      | 1       | 74        | 14.96       | 14.96          | 15.04        | 15                  |
| 15                                                             | 16QAM      | 36      | 0         | 13.92       | 14.03          | 14.07        |                     |
| 15                                                             | 16QAM      | 36      | 20        | 13.93       | 13.89          | 13.86        |                     |
| 15                                                             | 16QAM      | 36      | 39        | 13.75       | 13.80          | 13.95        | 14                  |
| 15                                                             | 16QAM      | 75      | 0         | 13.97       | 13.83          | 13.92        |                     |
| 15                                                             | 64QAM      | 1       | 0         | 14.15       | 14.16          | 14.25        |                     |
| 15                                                             | 64QAM      | 1       | 37        | 14.07       | 14.05          | 14.18        | 15                  |
| 15                                                             | 64QAM      | 1       | 74        | 14.08       | 14.16          | 13.97        |                     |
| 15                                                             | 64QAM      | 36      | 0         | 12.87       | 13.16          | 12.98        |                     |
| 15                                                             | 64QAM      | 36      | 20        | 13.05       | 12.95          | 12.82        | 14                  |
| 15                                                             | 64QAM      | 36      | 39        | 12.86       | 12.99          | 12.81        |                     |
| 15                                                             | 64QAM      | 75      | 0         | 13.03       | 13.00          | 12.77        |                     |
| Channel                                                        |            |         |           | 20000       | 20175          | 20350        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1715        | 1732.5         | 1750         |                     |
| 10                                                             | QPSK       | 1       | 0         | 15.88       | 15.92          | 15.85        | 17                  |
| 10                                                             | QPSK       | 1       | 25        | 15.83       | 15.84          | 15.77        |                     |
| 10                                                             | QPSK       | 1       | 49        | 15.78       | 15.74          | 15.69        |                     |
| 10                                                             | QPSK       | 25      | 0         | 14.82       | 14.88          | 14.83        | 16                  |
| 10                                                             | QPSK       | 25      | 12        | 14.71       | 14.80          | 14.75        |                     |
| 10                                                             | QPSK       | 25      | 25        | 14.72       | 14.84          | 14.74        |                     |
| 10                                                             | QPSK       | 50      | 0         | 14.80       | 14.81          | 14.75        | 16                  |
| 10                                                             | 16QAM      | 1       | 0         | 15.11       | 15.03          | 14.91        |                     |
| 10                                                             | 16QAM      | 1       | 25        | 15.03       | 15.05          | 14.93        |                     |
| 10                                                             | 16QAM      | 1       | 49        | 14.90       | 14.90          | 14.98        | 15                  |
| 10                                                             | 16QAM      | 25      | 0         | 13.86       | 13.97          | 14.01        |                     |
| 10                                                             | 16QAM      | 25      | 12        | 13.87       | 13.83          | 13.80        |                     |
| 10                                                             | 16QAM      | 25      | 25        | 13.69       | 13.74          | 13.89        | 15                  |
| 10                                                             | 16QAM      | 50      | 0         | 13.91       | 13.77          | 13.86        |                     |
| 10                                                             | 64QAM      | 1       | 0         | 14.09       | 14.10          | 14.19        |                     |
| 10                                                             | 64QAM      | 1       | 25        | 14.01       | 13.99          | 14.12        | 15                  |
| 10                                                             | 64QAM      | 1       | 49        | 14.02       | 14.10          | 13.91        |                     |
| 10                                                             | 64QAM      | 25      | 0         | 12.81       | 13.10          | 12.89        |                     |
| 10                                                             | 64QAM      | 25      | 12        | 12.99       | 12.89          | 12.76        | 14                  |
| 10                                                             | 64QAM      | 25      | 25        | 12.80       | 12.93          | 12.75        |                     |
| 10                                                             | 64QAM      | 50      | 0         | 12.97       | 12.94          | 12.71        |                     |
| Channel                                                        |            |         |           | 19975       | 20175          | 20375        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1712.5      | 1732.5         | 1752.5       |                     |
| 5                                                              | QPSK       | 1       | 0         | 15.83       | 15.87          | 15.80        | 17                  |
| 5                                                              | QPSK       | 1       | 12        | 15.78       | 15.79          | 15.72        |                     |
| 5                                                              | QPSK       | 1       | 24        | 15.73       | 15.69          | 15.64        |                     |
| 5                                                              | QPSK       | 12      | 0         | 14.67       | 14.73          | 14.78        | 16                  |
| 5                                                              | QPSK       | 12      | 7         | 14.66       | 14.75          | 14.70        |                     |
| 5                                                              | QPSK       | 12      | 13        | 14.67       | 14.79          | 14.69        |                     |
| 5                                                              | QPSK       | 25      | 0         | 14.75       | 14.76          | 14.70        | 16                  |
| 5                                                              | 16QAM      | 1       | 0         | 15.06       | 14.98          | 14.86        |                     |
| 5                                                              | 16QAM      | 1       | 12        | 14.98       | 15.00          | 14.88        |                     |
| 5                                                              | 16QAM      | 1       | 24        | 14.85       | 14.85          | 14.93        | 15                  |
| 5                                                              | 16QAM      | 12      | 0         | 13.81       | 13.92          | 13.96        |                     |
| 5                                                              | 16QAM      | 12      | 7         | 13.82       | 13.78          | 13.75        |                     |
| 5                                                              | 16QAM      | 12      | 13        | 13.64       | 13.69          | 13.84        | 15                  |
| 5                                                              | 16QAM      | 25      | 0         | 13.86       | 13.72          | 13.81        |                     |
| 5                                                              | 64QAM      | 1       | 0         | 14.04       | 14.05          | 14.14        |                     |
| 5                                                              | 64QAM      | 1       | 12        | 13.96       | 13.94          | 14.07        | 15                  |
| 5                                                              | 64QAM      | 1       | 24        | 13.97       | 14.05          | 13.86        |                     |
| 5                                                              | 64QAM      | 12      | 0         | 12.76       | 13.05          | 12.84        |                     |
| 5                                                              | 64QAM      | 12      | 7         | 12.94       | 12.84          | 12.71        | 14                  |
| 5                                                              | 64QAM      | 12      | 13        | 12.75       | 12.88          | 12.70        |                     |
| 5                                                              | 64QAM      | 25      | 0         | 12.92       | 12.89          | 12.66        |                     |
| Channel                                                        |            |         |           | 19965       | 20175          | 20385        | Tune-up limit (dBm) |
| Frequency (MHz)                                                |            |         |           | 1711.5      | 1732.5         | 1753.5       |                     |
| 3                                                              | QPSK       | 1       | 0         | 15.78       | 15.82          | 15.75        | 17                  |
| 3                                                              | QPSK       | 1       | 8         | 15.73       | 15.74          | 15.67        |                     |
| 3                                                              | QPSK       | 1       | 14        | 15.68       | 15.64          | 15.59        |                     |
| 3                                                              | QPSK       | 8       | 4         | 14.72       | 14.78          | 14.65        | 16                  |
| 3                                                              | QPSK       | 8       | 7         | 14.62       | 14.74          | 14.64        |                     |
| 3                                                              | QPSK       | 18      | 0         | 14.70       | 14.71          | 14.65        |                     |
| 3                                                              | 16QAM      | 1       | 0         | 15.01       | 14.93          | 14.81        | 16                  |
| 3                                                              | 16QAM      | 1       | 8         | 14.93       | 14.95          | 14.83        |                     |
| 3                                                              | 16QAM      | 1       | 14        | 14.80       | 14.80          | 14.88        |                     |
| 3                                                              | 16QAM      | 8       | 0         | 13.76       | 13.87          | 13.91        | 16                  |
| 3                                                              | 16QAM      | 8       | 4         | 13.77       | 13.73          | 13.70        |                     |

|                 |       |    |    |        |       |        |                     |
|-----------------|-------|----|----|--------|-------|--------|---------------------|
| 3               | 16QAM | 8  | 7  | 13.52  | 13.57 | 13.72  | 15                  |
| 3               | 16QAM | 15 | 0  | 13.74  | 13.60 | 13.69  |                     |
| 3               | 64QAM | 1  | 0  | 13.92  | 13.93 | 14.02  |                     |
| 3               | 64QAM | 1  | 8  | 13.84  | 13.82 | 13.95  |                     |
| 3               | 64QAM | 1  | 14 | 13.85  | 13.93 | 13.74  |                     |
| 3               | 64QAM | 8  | 0  | 12.64  | 12.93 | 12.72  |                     |
| 3               | 64QAM | 8  | 4  | 12.82  | 12.72 | 12.59  | 14                  |
| 3               | 64QAM | 8  | 7  | 12.63  | 12.76 | 12.58  |                     |
| 3               | 64QAM | 15 | 0  | 12.80  | 12.77 | 12.54  |                     |
| Channel         |       |    |    | 18607  | 18900 | 19193  | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1850.7 | 1880  | 1909.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 15.66  | 15.70 | 15.63  | 17                  |
| 1.4             | QPSK  | 1  | 3  | 15.61  | 15.62 | 15.55  |                     |
| 1.4             | QPSK  | 1  | 5  | 15.56  | 15.52 | 15.47  |                     |
| 1.4             | QPSK  | 3  | 0  | 14.60  | 14.66 | 14.61  |                     |
| 1.4             | QPSK  | 3  | 1  | 14.49  | 14.58 | 14.53  |                     |
| 1.4             | QPSK  | 3  | 3  | 14.50  | 14.62 | 14.52  |                     |
| 1.4             | QPSK  | 6  | 0  | 14.58  | 14.59 | 14.53  | 16                  |
| 1.4             | 16QAM | 1  | 0  | 14.89  | 14.81 | 14.69  |                     |
| 1.4             | 16QAM | 1  | 3  | 14.81  | 14.83 | 14.71  |                     |
| 1.4             | 16QAM | 1  | 5  | 14.68  | 14.68 | 14.76  | 16                  |
| 1.4             | 16QAM | 3  | 0  | 13.64  | 13.75 | 13.79  |                     |
| 1.4             | 16QAM | 3  | 1  | 13.65  | 13.61 | 13.58  |                     |
| 1.4             | 16QAM | 3  | 3  | 13.47  | 13.52 | 13.67  |                     |
| 1.4             | 16QAM | 6  | 0  | 13.69  | 13.55 | 13.64  | 15                  |
| 1.4             | 64QAM | 1  | 0  | 13.67  | 13.88 | 13.97  |                     |
| 1.4             | 64QAM | 1  | 3  | 13.79  | 13.77 | 13.90  | 15                  |
| 1.4             | 64QAM | 1  | 5  | 13.80  | 13.88 | 13.69  |                     |
| 1.4             | 64QAM | 3  | 0  | 12.59  | 12.88 | 12.67  |                     |
| 1.4             | 64QAM | 3  | 1  | 12.77  | 12.67 | 12.54  |                     |
| 1.4             | 64QAM | 3  | 3  | 12.58  | 12.71 | 12.53  |                     |
| 1.4             | 64QAM | 6  | 0  | 12.75  | 12.72 | 12.49  | 14                  |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 16QAM | 8  | 7  | 13.59  | 13.64  | 13.79  | 15                  |
| 3               | 16QAM | 15 | 0  | 13.81  | 13.67  | 13.76  |                     |
| 3               | 64QAM | 1  | 0  | 13.99  | 14.00  | 14.09  |                     |
| 3               | 64QAM | 1  | 8  | 13.91  | 13.89  | 14.02  |                     |
| 3               | 64QAM | 1  | 14 | 13.92  | 14.00  | 13.81  |                     |
| 3               | 64QAM | 8  | 0  | 12.71  | 13.00  | 12.79  | 14                  |
| 3               | 64QAM | 8  | 4  | 12.89  | 12.79  | 12.66  |                     |
| 3               | 64QAM | 8  | 7  | 12.70  | 12.83  | 12.65  |                     |
| 3               | 64QAM | 15 | 0  | 12.87  | 12.84  | 12.61  | Tune-up limit (dBm) |
| Channel         |       |    |    | 19957  | 20175  | 20393  |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 | 17                  |
| 1.4             | QPSK  | 1  | 0  | 15.72  | 15.76  | 15.69  |                     |
| 1.4             | QPSK  | 1  | 3  | 15.67  | 15.68  | 15.61  |                     |
| 1.4             | QPSK  | 1  | 5  | 15.62  | 15.58  | 15.53  |                     |
| 1.4             | QPSK  | 3  | 0  | 14.66  | 14.72  | 14.67  |                     |
| 1.4             | QPSK  | 3  | 1  | 14.55  | 14.64  | 14.59  |                     |
| 1.4             | QPSK  | 3  | 3  | 14.56  | 14.68  | 14.58  | 16                  |
| 1.4             | QPSK  | 6  | 0  | 14.64  | 14.65  | 14.59  |                     |
| 1.4             | 16QAM | 1  | 0  | 14.95  | 14.87  | 14.75  |                     |
| 1.4             | 16QAM | 1  | 3  | 14.87  | 14.89  | 14.77  | 16                  |
| 1.4             | 16QAM | 1  | 5  | 14.74  | 14.74  | 14.82  |                     |
| 1.4             | 16QAM | 3  | 0  | 13.70  | 13.81  | 13.85  |                     |
| 1.4             | 16QAM | 3  | 1  | 13.71  | 13.67  | 13.64  |                     |
| 1.4             | 16QAM | 3  | 3  | 13.53  | 13.58  | 13.73  | 15                  |
| 1.4             | 16QAM | 6  | 0  | 13.75  | 13.61  | 13.70  |                     |
| 1.4             | 64QAM | 1  | 0  | 13.93  | 13.94  | 14.03  | 15                  |
| 1.4             | 64QAM | 1  | 3  | 13.85  | 13.83  | 13.96  |                     |
| 1.4             | 64QAM | 1  | 5  | 13.86  | 13.94  | 13.75  |                     |
| 1.4             | 64QAM | 3  | 0  | 12.65  | 12.94  | 12.73  |                     |
| 1.4             | 64QAM | 3  | 1  | 12.83  | 12.73  | 12.60  |                     |
| 1.4             | 64QAM | 3  | 3  | 12.64  | 12.77  | 12.59  | 14                  |
| 1.4             | 64QAM | 6  | 0  | 12.81  | 12.78  | 12.55  |                     |



| Band 66 (dBm) Ant 1 |            |         |           |             |                |              |                     |
|---------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel             |            |         |           | 132072      | 132322         | 132572       |                     |
| Frequency (MHz)     |            |         |           | 1720        | 1745           | 1770         |                     |
| 20                  | QPSK       | 1       | 0         | 16.08       | 16.12          | 16.05        | 17                  |
| 20                  | QPSK       | 1       | 49        | 16.03       | 16.04          | 15.97        |                     |
| 20                  | QPSK       | 1       | 99        | 15.98       | 15.94          | 15.89        |                     |
| 20                  | QPSK       | 50      | 0         | 15.02       | 15.08          | 15.03        |                     |
| 20                  | QPSK       | 50      | 24        | 14.91       | 15.00          | 14.95        | 16                  |
| 20                  | QPSK       | 50      | 50        | 14.92       | 15.04          | 14.94        |                     |
| 20                  | QPSK       | 100     | 0         | 15.00       | 15.01          | 14.95        |                     |
| 20                  | 16QAM      | 1       | 0         | 15.31       | 15.23          | 15.11        |                     |
| 20                  | 16QAM      | 1       | 49        | 15.23       | 15.25          | 15.13        | 16                  |
| 20                  | 16QAM      | 1       | 99        | 15.10       | 15.10          | 15.16        |                     |
| 20                  | 16QAM      | 50      | 0         | 14.06       | 14.17          | 14.21        |                     |
| 20                  | 16QAM      | 50      | 24        | 14.07       | 14.03          | 14.00        |                     |
| 20                  | 16QAM      | 50      | 50        | 13.89       | 13.94          | 14.09        | 15                  |
| 20                  | 16QAM      | 100     | 0         | 14.11       | 13.97          | 14.06        |                     |
| 20                  | 64QAM      | 1       | 0         | 14.29       | 14.30          | 14.39        |                     |
| 20                  | 64QAM      | 1       | 49        | 14.21       | 14.19          | 14.32        |                     |
| 20                  | 64QAM      | 1       | 99        | 14.22       | 14.30          | 14.11        | 15                  |
| 20                  | 64QAM      | 50      | 0         | 13.01       | 13.30          | 13.09        |                     |
| 20                  | 64QAM      | 50      | 24        | 13.19       | 13.09          | 12.96        |                     |
| 20                  | 64QAM      | 50      | 50        | 13.00       | 13.13          | 12.95        |                     |
| 20                  | 64QAM      | 100     | 0         | 13.17       | 13.14          | 12.91        |                     |
| Channel             |            |         |           | 132047      | 132322         | 132597       |                     |
| Frequency (MHz)     |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15                  | QPSK       | 1       | 0         | 16.03       | 16.07          | 16.00        | 17                  |
| 15                  | QPSK       | 1       | 37        | 15.98       | 15.99          | 15.92        |                     |
| 15                  | QPSK       | 1       | 74        | 15.93       | 15.89          | 15.84        |                     |
| 15                  | QPSK       | 36      | 0         | 14.97       | 15.03          | 14.98        |                     |
| 15                  | QPSK       | 36      | 20        | 14.86       | 14.95          | 14.90        | 16                  |
| 15                  | QPSK       | 36      | 39        | 14.87       | 14.99          | 14.89        |                     |
| 15                  | QPSK       | 75      | 0         | 14.95       | 14.96          | 14.90        |                     |
| 15                  | 16QAM      | 1       | 0         | 15.26       | 15.18          | 15.06        |                     |
| 15                  | 16QAM      | 1       | 37        | 15.18       | 15.20          | 15.08        | 16                  |
| 15                  | 16QAM      | 1       | 74        | 15.05       | 15.05          | 15.13        |                     |
| 15                  | 16QAM      | 36      | 0         | 14.01       | 14.12          | 14.16        |                     |
| 15                  | 16QAM      | 36      | 20        | 14.02       | 13.98          | 13.95        |                     |
| 15                  | 16QAM      | 36      | 39        | 13.84       | 13.89          | 14.04        | 15                  |
| 15                  | 16QAM      | 75      | 0         | 14.06       | 13.92          | 14.01        |                     |
| 15                  | 64QAM      | 1       | 0         | 14.24       | 14.25          | 14.34        |                     |
| 15                  | 64QAM      | 1       | 37        | 14.16       | 14.14          | 14.27        |                     |
| 15                  | 64QAM      | 1       | 74        | 14.17       | 14.25          | 14.06        | 15                  |
| 15                  | 64QAM      | 36      | 0         | 12.96       | 13.25          | 13.04        |                     |
| 15                  | 64QAM      | 36      | 20        | 13.14       | 13.04          | 12.91        |                     |
| 15                  | 64QAM      | 36      | 39        | 12.95       | 13.08          | 12.90        |                     |
| 15                  | 64QAM      | 75      | 0         | 13.12       | 13.09          | 12.86        |                     |
| Channel             |            |         |           | 132022      | 132322         | 132622       |                     |
| Frequency (MHz)     |            |         |           | 1715        | 1745           | 1775         |                     |
| 10                  | QPSK       | 1       | 0         | 15.97       | 16.01          | 15.94        | 17                  |
| 10                  | QPSK       | 1       | 25        | 15.92       | 15.93          | 15.86        |                     |
| 10                  | QPSK       | 1       | 49        | 15.87       | 15.83          | 15.78        |                     |
| 10                  | QPSK       | 25      | 0         | 14.91       | 14.97          | 14.92        |                     |
| 10                  | QPSK       | 25      | 12        | 14.80       | 14.89          | 14.84        | 16                  |
| 10                  | QPSK       | 25      | 25        | 14.81       | 14.93          | 14.83        |                     |
| 10                  | QPSK       | 50      | 0         | 14.89       | 14.90          | 14.84        |                     |
| 10                  | 16QAM      | 1       | 0         | 15.20       | 15.12          | 15.00        |                     |
| 10                  | 16QAM      | 1       | 25        | 15.12       | 15.14          | 15.02        | 16                  |
| 10                  | 16QAM      | 1       | 49        | 14.99       | 14.99          | 15.07        |                     |
| 10                  | 16QAM      | 25      | 0         | 13.95       | 14.06          | 14.10        |                     |
| 10                  | 16QAM      | 25      | 12        | 13.96       | 13.92          | 13.89        |                     |
| 10                  | 16QAM      | 25      | 25        | 13.78       | 13.83          | 13.98        | 15                  |
| 10                  | 16QAM      | 50      | 0         | 14.00       | 13.86          | 13.95        |                     |
| 10                  | 64QAM      | 1       | 0         | 14.18       | 14.19          | 14.28        |                     |
| 10                  | 64QAM      | 1       | 25        | 14.10       | 14.08          | 14.21        |                     |
| 10                  | 64QAM      | 1       | 49        | 14.11       | 14.19          | 14.00        | 15                  |
| 10                  | 64QAM      | 25      | 0         | 12.90       | 13.19          | 12.98        |                     |
| 10                  | 64QAM      | 25      | 12        | 13.08       | 12.98          | 12.85        |                     |
| 10                  | 64QAM      | 25      | 25        | 12.89       | 13.02          | 12.84        |                     |
| 10                  | 64QAM      | 50      | 0         | 13.06       | 13.03          | 12.80        |                     |
| Channel             |            |         |           | 131997      | 132322         | 132647       |                     |
| Frequency (MHz)     |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5                   | QPSK       | 1       | 0         | 15.89       | 15.93          | 15.86        | 17                  |
| 5                   | QPSK       | 1       | 12        | 15.84       | 15.85          | 15.78        |                     |
| 5                   | QPSK       | 1       | 24        | 15.79       | 15.75          | 15.70        |                     |
| 5                   | QPSK       | 12      | 0         | 14.83       | 14.89          | 14.84        |                     |
| 5                   | QPSK       | 12      | 7         | 14.72       | 14.81          | 14.76        | 16                  |
| 5                   | QPSK       | 12      | 13        | 14.73       | 14.85          | 14.75        |                     |
| 5                   | QPSK       | 25      | 0         | 14.81       | 14.82          | 14.76        |                     |
| 5                   | 16QAM      | 1       | 0         | 15.12       | 15.04          | 14.92        |                     |
| 5                   | 16QAM      | 1       | 12        | 15.04       | 15.06          | 14.94        | 16                  |
| 5                   | 16QAM      | 1       | 24        | 14.91       | 14.91          | 14.99        |                     |
| 5                   | 16QAM      | 12      | 0         | 13.87       | 13.98          | 14.02        |                     |
| 5                   | 16QAM      | 12      | 7         | 13.88       | 13.84          | 13.81        |                     |
| 5                   | 16QAM      | 12      | 13        | 13.70       | 13.75          | 13.90        | 15                  |
| 5                   | 16QAM      | 25      | 0         | 13.92       | 13.78          | 13.87        |                     |
| 5                   | 64QAM      | 1       | 0         | 14.10       | 14.11          | 14.20        |                     |
| 5                   | 64QAM      | 1       | 12        | 14.02       | 14.00          | 14.13        |                     |
| 5                   | 64QAM      | 1       | 24        | 14.03       | 14.11          | 13.92        | 15                  |
| 5                   | 64QAM      | 12      | 0         | 12.82       | 13.11          | 12.90        |                     |
| 5                   | 64QAM      | 12      | 7         | 13.00       | 12.90          | 12.77        |                     |
| 5                   | 64QAM      | 12      | 13        | 12.81       | 12.94          | 12.76        |                     |
| 5                   | 64QAM      | 25      | 0         | 12.98       | 12.95          | 12.72        |                     |
| Channel             |            |         |           | 131967      | 132322         | 132697       |                     |
| Frequency (MHz)     |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3                   | QPSK       | 1       | 0         | 15.82       | 15.86          | 15.79        | 17                  |
| 3                   | QPSK       | 1       | 8         | 15.77       | 15.78          | 15.71        |                     |
| 3                   | QPSK       | 1       | 14        | 15.72       | 15.68          | 15.63        |                     |
| 3                   | QPSK       | 8       | 0         | 14.76       | 14.82          | 14.77        |                     |
| 3                   | QPSK       | 8       | 4         | 14.65       | 14.74          | 14.69        | 16                  |
| 3                   | QPSK       | 8       | 7         | 14.66       | 14.78          | 14.68        |                     |
| 3                   | QPSK       | 15      | 0         | 14.74       | 14.75          | 14.69        |                     |
| 3                   | 16QAM      | 1       | 0         | 15.05       | 14.97          | 14.85        |                     |
| 3                   | 16QAM      | 1       | 8         | 14.97       | 14.99          | 14.87        | 16                  |
| 3                   | 16QAM      | 1       | 14        | 14.84       | 14.84          | 14.92        |                     |
| 3                   | 16QAM      | 8       | 0         | 13.80       | 13.91          | 13.95        |                     |
| 3                   | 16QAM      | 8       | 4         | 13.81       | 13.77          | 13.74        |                     |
| 3                   | 16QAM      | 8       | 7         | 13.63       | 13.68          | 13.83        | 15                  |
| 3                   | 16QAM      | 15      | 0         | 13.85       | 13.71          | 13.80        |                     |



|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 64QAM | 1  | 0  | 14.03  | 14.04  | 14.13  | 15                  |
| 3               | 64QAM | 1  | 8  | 13.95  | 13.93  | 14.06  |                     |
| 3               | 64QAM | 1  | 14 | 13.96  | 14.04  | 13.85  |                     |
| 3               | 64QAM | 8  | 0  | 12.75  | 13.04  | 12.83  | 14                  |
| 3               | 64QAM | 8  | 4  | 12.93  | 12.83  | 12.70  |                     |
| 3               | 64QAM | 8  | 7  | 12.74  | 12.87  | 12.69  |                     |
| 3               | 64QAM | 15 | 0  | 12.91  | 12.88  | 12.65  | Tune-up limit (dBm) |
| Channel         |       |    |    | 131979 | 132322 | 132665 |                     |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 15.76  | 15.80  | 15.73  | 17                  |
| 1.4             | QPSK  | 1  | 3  | 15.71  | 15.72  | 15.65  |                     |
| 1.4             | QPSK  | 1  | 5  | 15.66  | 15.62  | 15.57  |                     |
| 1.4             | QPSK  | 3  | 0  | 14.70  | 14.76  | 14.71  | 16                  |
| 1.4             | QPSK  | 3  | 1  | 14.59  | 14.68  | 14.63  |                     |
| 1.4             | QPSK  | 3  | 3  | 14.60  | 14.72  | 14.62  |                     |
| 1.4             | QPSK  | 6  | 0  | 14.68  | 14.69  | 14.63  | 15                  |
| 1.4             | 16QAM | 1  | 0  | 14.99  | 14.91  | 14.79  |                     |
| 1.4             | 16QAM | 1  | 3  | 14.91  | 14.93  | 14.81  |                     |
| 1.4             | 16QAM | 1  | 5  | 14.78  | 14.78  | 14.86  | 14                  |
| 1.4             | 16QAM | 3  | 0  | 13.74  | 13.85  | 13.89  |                     |
| 1.4             | 16QAM | 3  | 1  | 13.75  | 13.71  | 13.68  |                     |
| 1.4             | 16QAM | 3  | 3  | 13.57  | 13.62  | 13.77  | 15                  |
| 1.4             | 16QAM | 6  | 0  | 13.79  | 13.65  | 13.74  |                     |
| 1.4             | 64QAM | 1  | 0  | 13.97  | 13.98  | 14.07  |                     |
| 1.4             | 64QAM | 1  | 3  | 13.89  | 13.87  | 14.00  | 14                  |
| 1.4             | 64QAM | 1  | 5  | 13.90  | 13.98  | 13.79  |                     |
| 1.4             | 64QAM | 3  | 0  | 12.69  | 12.98  | 12.77  |                     |
| 1.4             | 64QAM | 3  | 1  | 12.87  | 12.77  | 12.64  | 15                  |
| 1.4             | 64QAM | 3  | 3  | 12.68  | 12.81  | 12.63  |                     |
| 1.4             | 64QAM | 6  | 0  | 12.85  | 12.82  | 12.59  |                     |

Reduced Power Level 4 for Hotspot

| Band 2 (1900MHz Band) (dBm)<br>Part 24E_Ant 1 |            |         |           |             |                |              |                     |
|-----------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW (MHz)                                      | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                       |            |         |           | 18700       | 18900          | 19100        | 19                  |
| Frequency (MHz)                               |            |         |           | 1860        | 1880           | 1900         |                     |
| 20                                            | QPSK       | 1       | 0         | 17.92       | 17.96          | 17.89        | 18                  |
| 20                                            | QPSK       | 1       | 49        | 17.87       | 17.88          | 17.81        |                     |
| 20                                            | QPSK       | 1       | 99        | 17.82       | 17.78          | 17.73        | 17                  |
| 20                                            | QPSK       | 50      | 0         | 16.86       | 16.92          | 16.87        |                     |
| 20                                            | QPSK       | 50      | 24        | 16.75       | 16.84          | 16.79        | 16                  |
| 20                                            | QPSK       | 50      | 50        | 16.76       | 16.88          | 16.78        |                     |
| 20                                            | QPSK       | 100     | 0         | 16.84       | 16.85          | 16.79        | 15                  |
| 20                                            | 16QAM      | 1       | 0         | 17.15       | 17.07          | 16.95        |                     |
| 20                                            | 16QAM      | 1       | 49        | 17.07       | 17.09          | 16.97        | 14                  |
| 20                                            | 16QAM      | 1       | 99        | 16.94       | 16.94          | 17.02        |                     |
| 20                                            | 16QAM      | 50      | 0         | 15.90       | 16.01          | 16.05        | 13                  |
| 20                                            | 16QAM      | 50      | 24        | 15.91       | 15.87          | 15.84        |                     |
| 20                                            | 16QAM      | 50      | 50        | 15.73       | 15.78          | 15.93        | 12                  |
| 20                                            | 16QAM      | 100     | 0         | 15.95       | 15.81          | 15.90        |                     |
| 20                                            | 64QAM      | 1       | 0         | 16.13       | 16.14          | 16.23        | 11                  |
| 20                                            | 64QAM      | 1       | 49        | 16.05       | 16.03          | 16.16        |                     |
| 20                                            | 64QAM      | 1       | 99        | 16.06       | 16.14          | 15.95        | 10                  |
| 20                                            | 64QAM      | 50      | 0         | 14.85       | 15.14          | 14.93        |                     |
| 20                                            | 64QAM      | 50      | 24        | 15.03       | 14.93          | 14.80        | 9                   |
| 20                                            | 64QAM      | 50      | 50        | 14.84       | 14.97          | 14.79        |                     |
| 20                                            | 64QAM      | 100     | 0         | 15.01       | 14.98          | 14.75        | 8                   |
| Channel                                       |            |         |           | 18675       | 18900          | 19125        |                     |
| Frequency (MHz)                               |            |         |           | 1857.5      | 1880           | 1902.5       | 19                  |
| 15                                            | QPSK       | 1       | 0         | 17.86       | 17.90          | 17.83        |                     |
| 15                                            | QPSK       | 1       | 37        | 17.81       | 17.82          | 17.75        | 18                  |
| 15                                            | QPSK       | 1       | 74        | 17.76       | 17.72          | 17.67        |                     |
| 15                                            | QPSK       | 36      | 0         | 16.80       | 16.86          | 16.81        | 17                  |
| 15                                            | QPSK       | 36      | 20        | 16.69       | 16.76          | 16.73        |                     |
| 15                                            | QPSK       | 36      | 39        | 16.70       | 16.82          | 16.72        | 16                  |
| 15                                            | QPSK       | 75      | 0         | 16.78       | 16.79          | 16.73        |                     |
| 15                                            | 16QAM      | 1       | 0         | 17.09       | 17.01          | 16.89        | 15                  |
| 15                                            | 16QAM      | 1       | 37        | 17.01       | 17.03          | 16.91        |                     |
| 15                                            | 16QAM      | 1       | 74        | 16.88       | 16.88          | 16.96        | 14                  |
| 15                                            | 16QAM      | 36      | 0         | 15.84       | 15.95          | 15.99        |                     |
| 15                                            | 16QAM      | 36      | 20        | 15.85       | 15.81          | 15.78        | 13                  |
| 15                                            | 16QAM      | 36      | 39        | 15.67       | 15.72          | 15.87        |                     |
| 15                                            | 16QAM      | 75      | 0         | 15.89       | 15.75          | 15.84        | 12                  |
| 15                                            | 64QAM      | 1       | 0         | 16.07       | 16.08          | 16.17        |                     |
| 15                                            | 64QAM      | 1       | 37        | 15.99       | 15.97          | 16.10        | 11                  |
| 15                                            | 64QAM      | 1       | 74        | 16.00       | 16.08          | 15.89        |                     |
| 15                                            | 64QAM      | 36      | 0         | 14.79       | 15.08          | 14.87        | 10                  |
| 15                                            | 64QAM      | 36      | 20        | 14.97       | 14.87          | 14.74        |                     |
| 15                                            | 64QAM      | 36      | 39        | 14.78       | 14.91          | 14.73        | 9                   |
| 15                                            | 64QAM      | 75      | 0         | 14.95       | 14.92          | 14.69        |                     |
| Channel                                       |            |         |           | 18650       | 18900          | 19150        | 19                  |
| Frequency (MHz)                               |            |         |           | 1855        | 1880           | 1905         |                     |
| 10                                            | QPSK       | 1       | 0         | 17.80       | 17.84          | 17.77        | 18                  |
| 10                                            | QPSK       | 1       | 25        | 17.76       | 17.76          | 17.69        |                     |
| 10                                            | QPSK       | 1       | 49        | 17.70       | 17.66          | 17.61        | 17                  |
| 10                                            | QPSK       | 25      | 0         | 16.74       | 16.80          | 16.75        |                     |
| 10                                            | QPSK       | 25      | 12        | 16.63       | 16.72          | 16.67        | 16                  |
| 10                                            | QPSK       | 25      | 25        | 16.64       | 16.76          | 16.66        |                     |
| 10                                            | QPSK       | 50      | 0         | 16.72       | 16.73          | 16.67        | 15                  |
| 10                                            | 16QAM      | 1       | 0         | 17.03       | 16.95          | 16.83        |                     |
| 10                                            | 16QAM      | 1       | 25        | 16.95       | 16.97          | 16.85        | 14                  |
| 10                                            | 16QAM      | 1       | 49        | 16.82       | 16.82          | 16.90        |                     |
| 10                                            | 16QAM      | 25      | 0         | 15.78       | 15.89          | 15.93        | 13                  |
| 10                                            | 16QAM      | 25      | 12        | 15.79       | 15.75          | 15.72        |                     |
| 10                                            | 16QAM      | 25      | 25        | 15.61       | 15.66          | 15.81        | 12                  |
| 10                                            | 16QAM      | 50      | 0         | 15.83       | 15.69          | 15.78        |                     |
| 10                                            | 64QAM      | 1       | 0         | 16.01       | 16.02          | 16.11        | 11                  |
| 10                                            | 64QAM      | 1       | 25        | 15.93       | 15.91          | 16.04        |                     |
| 10                                            | 64QAM      | 1       | 49        | 15.94       | 16.02          | 15.83        | 10                  |
| 10                                            | 64QAM      | 25      | 0         | 14.73       | 15.02          | 14.81        |                     |
| 10                                            | 64QAM      | 25      | 12        | 14.91       | 14.81          | 14.68        | 9                   |
| 10                                            | 64QAM      | 25      | 25        | 14.72       | 14.85          | 14.67        |                     |
| 10                                            | 64QAM      | 50      | 0         | 14.89       | 14.86          | 14.63        | 8                   |
| Channel                                       |            |         |           | 18625       | 18900          | 19175        |                     |
| Frequency (MHz)                               |            |         |           | 1852.5      | 1880           | 1907.5       | 19                  |
| 5                                             | QPSK       | 1       | 0         | 17.74       | 17.78          | 17.71        |                     |
| 5                                             | QPSK       | 1       | 12        | 17.69       | 17.70          | 17.63        | 18                  |
| 5                                             | QPSK       | 1       | 24        | 17.64       | 17.60          | 17.55        |                     |
| 5                                             | QPSK       | 12      | 0         | 16.68       | 16.74          | 16.69        | 17                  |
| 5                                             | QPSK       | 12      | 7         | 16.57       | 16.66          | 16.61        |                     |
| 5                                             | QPSK       | 12      | 13        | 16.58       | 16.70          | 16.60        | 16                  |
| 5                                             | QPSK       | 25      | 0         | 16.66       | 16.67          | 16.61        |                     |
| 5                                             | 16QAM      | 1       | 0         | 16.97       | 16.89          | 16.77        | 15                  |
| 5                                             | 16QAM      | 1       | 12        | 16.89       | 16.91          | 16.79        |                     |
| 5                                             | 16QAM      | 1       | 24        | 16.76       | 16.76          | 16.84        | 14                  |
| 5                                             | 16QAM      | 12      | 0         | 15.72       | 15.83          | 15.87        |                     |
| 5                                             | 16QAM      | 12      | 7         | 15.73       | 15.69          | 15.66        | 13                  |
| 5                                             | 16QAM      | 12      | 13        | 15.55       | 15.60          | 15.75        |                     |
| 5                                             | 16QAM      | 25      | 0         | 15.77       | 15.63          | 15.72        | 12                  |
| 5                                             | 64QAM      | 1       | 0         | 15.95       | 15.96          | 16.05        |                     |
| 5                                             | 64QAM      | 1       | 12        | 15.87       | 15.85          | 15.98        | 11                  |
| 5                                             | 64QAM      | 1       | 24        | 15.88       | 15.96          | 15.77        |                     |
| 5                                             | 64QAM      | 12      | 0         | 14.67       | 14.96          | 14.75        | 10                  |
| 5                                             | 64QAM      | 12      | 7         | 14.85       | 14.75          | 14.62        |                     |
| 5                                             | 64QAM      | 12      | 13        | 14.66       | 14.79          | 14.61        | 9                   |
| 5                                             | 64QAM      | 25      | 0         | 14.83       | 14.80          | 14.57        |                     |
| Channel                                       |            |         |           | 18615       | 18900          | 19165        | 19                  |
| Frequency (MHz)                               |            |         |           | 1851.5      | 1880           | 1908.5       |                     |
| 3                                             | QPSK       | 1       | 0         | 17.71       | 17.75          | 17.68        | 18                  |
| 3                                             | QPSK       | 1       | 8         | 17.66       | 17.67          | 17.60        |                     |
| 3                                             | QPSK       | 1       | 14        | 17.61       | 17.57          | 17.52        | 17                  |
| 3                                             | QPSK       | 8       | 0         | 16.65       | 16.71          | 16.66        |                     |
| 3                                             | QPSK       | 8       | 4         | 16.54       | 16.63          | 16.58        | 16                  |
| 3                                             | QPSK       | 8       | 7         | 16.55       | 16.67          | 16.57        |                     |
| 3                                             | QPSK       | 15      | 0         | 16.63       | 16.64          | 16.58        | 15                  |
| 3                                             | 16QAM      | 1       | 0         | 16.94       | 16.86          | 16.74        |                     |
| 3                                             | 16QAM      | 1       | 8         | 16.86       | 16.88          | 16.76        | 14                  |
| 3                                             | 16QAM      | 1       | 14        | 16.73       | 16.73          | 16.81        |                     |
| 3                                             | 16QAM      | 8       | 0         | 15.69       | 15.80          | 15.84        | 13                  |
| 3                                             | 16QAM      | 8       | 4         | 15.70       | 15.66          | 15.63        |                     |

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required)_Ant 1 |            |         |           |             |                |              |                  |
|----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|------------------|
| BW [MHz]                                                             | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up In (dBm) |
| Channel                                                              |            |         |           | 20050       | 20175          | 20300        |                  |
| Frequency (MHz)                                                      |            |         |           | 1720        | 1732.5         | 1745         |                  |
| 20                                                                   | QPSK       | 1       | 0         | 17.99       | 18.03          | 17.96        | 19               |
| 20                                                                   | QPSK       | 1       | 49        | 17.94       | 17.95          | 17.88        |                  |
| 20                                                                   | QPSK       | 1       | 99        | 17.89       | 17.85          | 17.80        |                  |
| 20                                                                   | QPSK       | 50      | 0         | 16.93       | 16.99          | 16.94        | 18               |
| 20                                                                   | QPSK       | 50      | 24        | 16.82       | 16.91          | 16.86        |                  |
| 20                                                                   | QPSK       | 50      | 50        | 16.83       | 16.95          | 16.85        |                  |
| 20                                                                   | QPSK       | 100     | 0         | 16.91       | 16.92          | 16.86        | 18               |
| 20                                                                   | 16QAM      | 1       | 0         | 17.22       | 17.14          | 17.02        |                  |
| 20                                                                   | 16QAM      | 1       | 49        | 17.14       | 17.16          | 17.04        |                  |
| 20                                                                   | 16QAM      | 1       | 99        | 17.01       | 17.01          | 17.09        | 17               |
| 20                                                                   | 16QAM      | 50      | 0         | 15.97       | 16.08          | 16.12        |                  |
| 20                                                                   | 16QAM      | 50      | 24        | 15.98       | 15.94          | 15.91        |                  |
| 20                                                                   | 16QAM      | 50      | 50        | 15.80       | 15.85          | 16.00        | 17               |
| 20                                                                   | 16QAM      | 100     | 0         | 16.02       | 15.88          | 15.97        |                  |
| 20                                                                   | 64QAM      | 1       | 0         | 16.20       | 16.21          | 16.30        |                  |
| 20                                                                   | 64QAM      | 1       | 49        | 16.12       | 16.10          | 16.23        | 17               |
| 20                                                                   | 64QAM      | 1       | 99        | 16.13       | 16.21          | 16.02        |                  |
| 20                                                                   | 64QAM      | 50      | 0         | 14.92       | 15.21          | 15.00        |                  |
| 20                                                                   | 64QAM      | 50      | 24        | 15.10       | 15.00          | 14.87        | 16               |
| 20                                                                   | 64QAM      | 50      | 50        | 14.91       | 15.04          | 14.86        |                  |
| 20                                                                   | 64QAM      | 100     | 0         | 15.08       | 15.05          | 14.82        |                  |
| Channel                                                              |            |         |           | 20025       | 20175          | 20325        |                  |
| Frequency (MHz)                                                      |            |         |           | 1717.5      | 1732.5         | 1747.5       |                  |
| 15                                                                   | QPSK       | 1       | 0         | 17.94       | 17.98          | 17.91        | 19               |
| 15                                                                   | QPSK       | 1       | 37        | 17.89       | 17.90          | 17.83        |                  |
| 15                                                                   | QPSK       | 1       | 74        | 17.84       | 17.80          | 17.75        |                  |
| 15                                                                   | QPSK       | 36      | 0         | 16.88       | 16.94          | 16.89        | 18               |
| 15                                                                   | QPSK       | 36      | 20        | 16.77       | 16.86          | 16.81        |                  |
| 15                                                                   | QPSK       | 36      | 39        | 16.78       | 16.90          | 16.80        |                  |
| 15                                                                   | QPSK       | 75      | 0         | 16.86       | 16.87          | 16.81        | 18               |
| 15                                                                   | 16QAM      | 1       | 0         | 17.17       | 17.09          | 16.97        |                  |
| 15                                                                   | 16QAM      | 1       | 37        | 17.09       | 17.11          | 16.99        |                  |
| 15                                                                   | 16QAM      | 1       | 74        | 16.96       | 16.96          | 17.04        | 17               |
| 15                                                                   | 16QAM      | 36      | 0         | 15.92       | 16.03          | 16.07        |                  |
| 15                                                                   | 16QAM      | 36      | 20        | 15.93       | 15.89          | 15.86        |                  |
| 15                                                                   | 16QAM      | 36      | 39        | 15.75       | 15.80          | 15.95        | 17               |
| 15                                                                   | 16QAM      | 75      | 0         | 15.97       | 15.83          | 15.92        |                  |
| 15                                                                   | 64QAM      | 1       | 0         | 16.15       | 16.16          | 16.25        |                  |
| 15                                                                   | 64QAM      | 1       | 37        | 16.07       | 16.05          | 16.18        | 17               |
| 15                                                                   | 64QAM      | 1       | 74        | 16.08       | 16.16          | 15.97        |                  |
| 15                                                                   | 64QAM      | 36      | 0         | 14.87       | 15.16          | 14.95        |                  |
| 15                                                                   | 64QAM      | 36      | 20        | 15.05       | 14.95          | 14.82        | 16               |
| 15                                                                   | 64QAM      | 36      | 39        | 14.86       | 14.99          | 14.81        |                  |
| 15                                                                   | 64QAM      | 75      | 0         | 15.03       | 15.00          | 14.77        |                  |
| Channel                                                              |            |         |           | 20000       | 20175          | 20350        |                  |
| Frequency (MHz)                                                      |            |         |           | 1715        | 1732.5         | 1750         |                  |
| 10                                                                   | QPSK       | 1       | 0         | 17.88       | 17.92          | 17.85        | 19               |
| 10                                                                   | QPSK       | 1       | 25        | 17.83       | 17.84          | 17.77        |                  |
| 10                                                                   | QPSK       | 1       | 49        | 17.78       | 17.74          | 17.69        |                  |
| 10                                                                   | QPSK       | 25      | 0         | 16.82       | 16.88          | 16.83        | 18               |
| 10                                                                   | QPSK       | 25      | 12        | 16.71       | 16.80          | 16.75        |                  |
| 10                                                                   | QPSK       | 25      | 25        | 16.72       | 16.84          | 16.74        |                  |
| 10                                                                   | QPSK       | 50      | 0         | 16.80       | 16.81          | 16.75        | 18               |
| 10                                                                   | 16QAM      | 1       | 0         | 17.11       | 17.03          | 16.91        |                  |
| 10                                                                   | 16QAM      | 1       | 25        | 17.03       | 17.05          | 16.93        |                  |
| 10                                                                   | 16QAM      | 1       | 49        | 16.90       | 16.90          | 16.98        | 17               |
| 10                                                                   | 16QAM      | 25      | 0         | 15.86       | 15.97          | 16.01        |                  |
| 10                                                                   | 16QAM      | 25      | 12        | 15.87       | 15.83          | 15.80        |                  |
| 10                                                                   | 16QAM      | 25      | 25        | 15.69       | 15.74          | 15.89        | 17               |
| 10                                                                   | 16QAM      | 50      | 0         | 15.91       | 15.77          | 15.86        |                  |
| 10                                                                   | 64QAM      | 1       | 0         | 16.09       | 16.10          | 16.19        |                  |
| 10                                                                   | 64QAM      | 1       | 25        | 16.01       | 15.99          | 16.12        | 17               |
| 10                                                                   | 64QAM      | 1       | 49        | 16.02       | 16.10          | 15.91        |                  |
| 10                                                                   | 64QAM      | 25      | 0         | 14.81       | 15.10          | 14.89        |                  |
| 10                                                                   | 64QAM      | 25      | 12        | 14.99       | 14.89          | 14.76        | 16               |
| 10                                                                   | 64QAM      | 25      | 25        | 14.80       | 14.93          | 14.75        |                  |
| 10                                                                   | 64QAM      | 50      | 0         | 14.97       | 14.94          | 14.91        |                  |
| Channel                                                              |            |         |           | 19975       | 20175          | 20375        |                  |
| Frequency (MHz)                                                      |            |         |           | 1712.5      | 1732.5         | 1752.5       |                  |
| 5                                                                    | QPSK       | 1       | 0         | 17.83       | 17.87          | 17.80        | 19               |
| 5                                                                    | QPSK       | 1       | 12        | 17.78       | 17.79          | 17.72        |                  |
| 5                                                                    | QPSK       | 1       | 24        | 17.73       | 17.69          | 17.64        |                  |
| 5                                                                    | QPSK       | 12      | 0         | 16.77       | 16.83          | 16.77        | 18               |
| 5                                                                    | QPSK       | 12      | 7         | 16.66       | 16.75          | 16.70        |                  |
| 5                                                                    | QPSK       | 12      | 13        | 16.67       | 16.79          | 16.69        |                  |
| 5                                                                    | QPSK       | 25      | 0         | 16.75       | 16.76          | 16.70        | 18               |
| 5                                                                    | 16QAM      | 1       | 0         | 17.06       | 16.98          | 16.86        |                  |
| 5                                                                    | 16QAM      | 1       | 12        | 16.98       | 17.00          | 16.88        |                  |
| 5                                                                    | 16QAM      | 1       | 24        | 16.85       | 16.85          | 16.93        | 17               |
| 5                                                                    | 16QAM      | 12      | 0         | 15.81       | 15.92          | 15.96        |                  |
| 5                                                                    | 16QAM      | 12      | 7         | 15.82       | 15.87          | 15.75        |                  |
| 5                                                                    | 16QAM      | 12      | 13        | 15.64       | 15.69          | 15.84        | 17               |
| 5                                                                    | 16QAM      | 25      | 0         | 15.86       | 15.72          | 15.81        |                  |
| 5                                                                    | 64QAM      | 1       | 0         | 16.04       | 16.05          | 16.14        |                  |
| 5                                                                    | 64QAM      | 1       | 12        | 15.96       | 15.94          | 16.07        | 17               |
| 5                                                                    | 64QAM      | 1       | 24        | 15.97       | 16.05          | 15.86        |                  |
| 5                                                                    | 64QAM      | 12      | 0         | 14.76       | 15.05          | 14.84        |                  |
| 5                                                                    | 64QAM      | 12      | 7         | 14.94       | 14.84          | 14.71        | 16               |
| 5                                                                    | 64QAM      | 12      | 13        | 14.75       | 14.88          | 14.70        |                  |
| 5                                                                    | 64QAM      | 25      | 0         | 14.92       | 14.89          | 14.66        |                  |
| Channel                                                              |            |         |           | 19965       | 20175          | 20385        |                  |
| Frequency (MHz)                                                      |            |         |           | 1711.5      | 1732.5         | 1753.5       |                  |
| 3                                                                    | QPSK       | 1       | 0         | 17.78       | 17.82          | 17.75        | 19               |
| 3                                                                    | QPSK       | 1       | 8         | 17.73       | 17.74          | 17.67        |                  |
| 3                                                                    | QPSK       | 8       | 0         | 16.72       | 16.78          | 16.65        |                  |
| 3                                                                    | QPSK       | 8       | 4         | 16.61       | 16.76          | 16.73        | 18               |
| 3                                                                    | QPSK       | 16      | 0         | 16.62       | 16.74          | 16.64        |                  |
| 3                                                                    | QPSK       | 16      | 0         | 16.70       | 16.71          | 16.65        |                  |
| 3                                                                    | 16QAM      | 1       | 0         | 17.01       | 16.93          | 16.81        | 18               |
| 3                                                                    | 16QAM      | 1       | 8         | 16.93       | 16.95          | 16.83        |                  |
| 3                                                                    | 16QAM      | 1       | 14        | 16.80       | 16.80          | 16.88        |                  |
| 3                                                                    | 16QAM      | 8       | 0         | 15.76       | 15.87          | 15.91        |                  |
| 3                                                                    | 16QAM      | 8       | 4         | 15.77       | 15.73          | 15.70        |                  |

|                 |       |    |    |        |       |        |                     |
|-----------------|-------|----|----|--------|-------|--------|---------------------|
| 3               | 16QAM | 8  | 7  | 15.52  | 15.57 | 15.72  | 17                  |
| 3               | 16QAM | 15 | 0  | 15.74  | 15.60 | 15.69  |                     |
| 3               | 64QAM | 1  | 0  | 15.92  | 15.93 | 16.02  |                     |
| 3               | 64QAM | 1  | 8  | 15.84  | 15.82 | 15.95  | 16                  |
| 3               | 64QAM | 1  | 14 | 15.85  | 15.93 | 15.74  |                     |
| 3               | 64QAM | 8  | 0  | 14.64  | 14.93 | 14.72  |                     |
| 3               | 64QAM | 8  | 4  | 14.82  | 14.72 | 14.59  | 16                  |
| 3               | 64QAM | 8  | 7  | 14.63  | 14.76 | 14.58  |                     |
| 3               | 64QAM | 15 | 0  | 14.80  | 14.77 | 14.54  |                     |
| Channel         |       |    |    | 18607  | 18900 | 19193  | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1850.7 | 1880  | 1909.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 17.66  | 17.70 | 17.83  | 19                  |
| 1.4             | QPSK  | 1  | 3  | 17.61  | 17.62 | 17.55  |                     |
| 1.4             | QPSK  | 1  | 5  | 17.56  | 17.52 | 17.47  |                     |
| 1.4             | QPSK  | 3  | 0  | 16.60  | 16.66 | 16.61  | 18                  |
| 1.4             | QPSK  | 3  | 1  | 16.49  | 16.58 | 16.53  |                     |
| 1.4             | QPSK  | 3  | 3  | 16.50  | 16.62 | 16.52  |                     |
| 1.4             | QPSK  | 6  | 0  | 16.58  | 16.59 | 16.53  | 18                  |
| 1.4             | 16QAM | 1  | 0  | 16.89  | 16.81 | 16.69  |                     |
| 1.4             | 16QAM | 1  | 3  | 16.81  | 16.83 | 16.71  |                     |
| 1.4             | 16QAM | 1  | 5  | 16.68  | 16.68 | 16.76  | 18                  |
| 1.4             | 16QAM | 3  | 0  | 15.64  | 15.75 | 15.79  |                     |
| 1.4             | 16QAM | 3  | 1  | 15.65  | 15.61 | 15.58  |                     |
| 1.4             | 16QAM | 3  | 3  | 15.47  | 15.52 | 15.67  | 17                  |
| 1.4             | 16QAM | 6  | 0  | 15.69  | 15.55 | 15.64  |                     |
| 1.4             | 64QAM | 1  | 0  | 15.87  | 15.88 | 15.97  |                     |
| 1.4             | 64QAM | 1  | 3  | 15.79  | 15.77 | 15.90  | 17                  |
| 1.4             | 64QAM | 1  | 5  | 15.80  | 15.88 | 15.69  |                     |
| 1.4             | 64QAM | 3  | 0  | 14.59  | 14.88 | 14.67  |                     |
| 1.4             | 64QAM | 3  | 1  | 14.77  | 14.67 | 14.54  | 16                  |
| 1.4             | 64QAM | 3  | 3  | 14.58  | 14.71 | 14.53  |                     |
| 1.4             | 64QAM | 6  | 0  | 14.75  | 14.72 | 14.49  |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | 16QAM | 8  | 7  | 15.59  | 15.64  | 15.79  | 17                  |
| 3               | 16QAM | 15 | 0  | 15.81  | 15.67  | 15.76  |                     |
| 3               | 64QAM | 1  | 0  | 15.99  | 16.00  | 16.09  |                     |
| 3               | 64QAM | 1  | 8  | 15.91  | 15.89  | 16.02  | 16                  |
| 3               | 64QAM | 1  | 14 | 15.92  | 16.00  | 15.81  |                     |
| 3               | 64QAM | 8  | 0  | 14.71  | 15.00  | 14.79  |                     |
| 3               | 64QAM | 8  | 4  | 14.89  | 14.79  | 14.66  | 16                  |
| 3               | 64QAM | 8  | 7  | 14.70  | 14.83  | 14.65  |                     |
| 3               | 64QAM | 15 | 0  | 14.87  | 14.84  | 14.61  |                     |
| Channel         |       |    |    | 19957  | 20175  | 20393  | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 17.72  | 17.76  | 17.69  | 19                  |
| 1.4             | QPSK  | 1  | 3  | 17.67  | 17.68  | 17.61  |                     |
| 1.4             | QPSK  | 1  | 5  | 17.62  | 17.58  | 17.53  |                     |
| 1.4             | QPSK  | 3  | 0  | 16.66  | 16.72  | 16.67  | 18                  |
| 1.4             | QPSK  | 3  | 1  | 16.55  | 16.64  | 16.59  |                     |
| 1.4             | QPSK  | 3  | 3  | 16.56  | 16.68  | 16.58  |                     |
| 1.4             | QPSK  | 6  | 0  | 16.64  | 16.65  | 16.59  | 18                  |
| 1.4             | 16QAM | 1  | 0  | 16.95  | 16.87  | 16.75  |                     |
| 1.4             | 16QAM | 1  | 3  | 16.87  | 16.89  | 16.77  |                     |
| 1.4             | 16QAM | 1  | 5  | 16.74  | 16.74  | 16.82  | 18                  |
| 1.4             | 16QAM | 3  | 0  | 15.70  | 15.81  | 15.85  |                     |
| 1.4             | 16QAM | 3  | 1  | 15.71  | 15.67  | 15.64  |                     |
| 1.4             | 16QAM | 3  | 3  | 15.53  | 15.58  | 15.73  | 17                  |
| 1.4             | 16QAM | 6  | 0  | 15.75  | 15.61  | 15.70  |                     |
| 1.4             | 64QAM | 1  | 0  | 15.93  | 15.94  | 16.03  |                     |
| 1.4             | 64QAM | 1  | 3  | 15.85  | 15.83  | 15.96  | 17                  |
| 1.4             | 64QAM | 1  | 5  | 15.86  | 15.94  | 15.75  |                     |
| 1.4             | 64QAM | 3  | 0  | 14.65  | 14.94  | 14.73  |                     |
| 1.4             | 64QAM | 3  | 1  | 14.83  | 14.73  | 14.60  | 16                  |
| 1.4             | 64QAM | 3  | 3  | 14.64  | 14.77  | 14.59  |                     |
| 1.4             | 64QAM | 6  | 0  | 14.81  | 14.78  | 14.55  |                     |

| Band 66 (dBm) Ant 1 |            |         |           |             |                |              |                     |
|---------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel             |            |         |           | 132072      | 132322         | 132572       |                     |
| Frequency (MHz)     |            |         |           | 1720        | 1745           | 1770         |                     |
| 20                  | QPSK       | 1       | 0         | 18.08       | 18.12          | 18.05        | 19                  |
| 20                  | QPSK       | 1       | 49        | 18.03       | 18.04          | 17.97        |                     |
| 20                  | QPSK       | 1       | 99        | 17.98       | 17.94          | 17.89        |                     |
| 20                  | QPSK       | 50      | 0         | 17.02       | 17.08          | 17.03        | 18                  |
| 20                  | QPSK       | 50      | 24        | 16.91       | 17.00          | 16.95        |                     |
| 20                  | QPSK       | 50      | 50        | 16.92       | 17.04          | 16.94        |                     |
| 20                  | QPSK       | 100     | 0         | 17.00       | 17.01          | 16.95        | 18                  |
| 20                  | 16QAM      | 1       | 0         | 17.31       | 17.23          | 17.11        |                     |
| 20                  | 16QAM      | 1       | 49        | 17.23       | 17.25          | 17.13        |                     |
| 20                  | 16QAM      | 1       | 99        | 17.10       | 17.10          | 17.18        | 17                  |
| 20                  | 16QAM      | 50      | 0         | 16.06       | 16.17          | 16.21        |                     |
| 20                  | 16QAM      | 50      | 24        | 16.07       | 16.03          | 16.00        |                     |
| 20                  | 16QAM      | 50      | 50        | 15.89       | 15.94          | 16.09        | 17                  |
| 20                  | 16QAM      | 100     | 0         | 16.11       | 15.97          | 16.06        |                     |
| 20                  | 64QAM      | 1       | 0         | 16.29       | 16.30          | 16.39        |                     |
| 20                  | 64QAM      | 1       | 49        | 16.21       | 16.19          | 16.32        | 17                  |
| 20                  | 64QAM      | 1       | 99        | 16.22       | 16.30          | 16.11        |                     |
| 20                  | 64QAM      | 50      | 0         | 15.01       | 15.30          | 15.09        |                     |
| 20                  | 64QAM      | 50      | 24        | 15.19       | 15.09          | 14.96        | 16                  |
| 20                  | 64QAM      | 50      | 50        | 15.00       | 15.13          | 14.95        |                     |
| 20                  | 64QAM      | 100     | 0         | 15.17       | 15.14          | 14.91        |                     |
| Channel             |            |         |           | 132047      | 132322         | 132597       |                     |
| Frequency (MHz)     |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15                  | QPSK       | 1       | 0         | 18.03       | 18.07          | 18.00        | 19                  |
| 15                  | QPSK       | 1       | 37        | 17.98       | 17.99          | 17.92        |                     |
| 15                  | QPSK       | 1       | 74        | 17.93       | 17.89          | 17.84        |                     |
| 15                  | QPSK       | 36      | 0         | 16.97       | 17.03          | 16.98        | 18                  |
| 15                  | QPSK       | 36      | 20        | 16.86       | 16.95          | 16.90        |                     |
| 15                  | QPSK       | 36      | 39        | 16.87       | 16.99          | 16.89        |                     |
| 15                  | QPSK       | 75      | 0         | 16.95       | 16.96          | 16.90        | 18                  |
| 15                  | 16QAM      | 1       | 0         | 17.26       | 17.18          | 17.06        |                     |
| 15                  | 16QAM      | 1       | 37        | 17.18       | 17.20          | 17.08        |                     |
| 15                  | 16QAM      | 1       | 74        | 17.05       | 17.05          | 17.13        | 17                  |
| 15                  | 16QAM      | 36      | 0         | 16.01       | 16.12          | 16.16        |                     |
| 15                  | 16QAM      | 36      | 20        | 16.02       | 15.98          | 15.95        |                     |
| 15                  | 16QAM      | 36      | 39        | 15.84       | 15.89          | 16.04        | 17                  |
| 15                  | 16QAM      | 75      | 0         | 16.06       | 15.92          | 16.01        |                     |
| 15                  | 64QAM      | 1       | 0         | 16.24       | 16.25          | 16.34        |                     |
| 15                  | 64QAM      | 1       | 37        | 16.16       | 16.14          | 16.27        | 17                  |
| 15                  | 64QAM      | 1       | 74        | 16.17       | 16.25          | 16.06        |                     |
| 15                  | 64QAM      | 36      | 0         | 14.96       | 15.25          | 15.04        |                     |
| 15                  | 64QAM      | 36      | 20        | 15.14       | 15.04          | 14.91        | 16                  |
| 15                  | 64QAM      | 36      | 39        | 14.95       | 15.08          | 14.90        |                     |
| 15                  | 64QAM      | 75      | 0         | 15.12       | 15.09          | 14.86        |                     |
| Channel             |            |         |           | 132022      | 132322         | 132622       |                     |
| Frequency (MHz)     |            |         |           | 1715        | 1745           | 1775         |                     |
| 10                  | QPSK       | 1       | 0         | 17.97       | 18.01          | 17.94        | 19                  |
| 10                  | QPSK       | 1       | 25        | 17.92       | 17.93          | 17.86        |                     |
| 10                  | QPSK       | 1       | 49        | 17.87       | 17.83          | 17.78        |                     |
| 10                  | QPSK       | 25      | 0         | 16.91       | 16.97          | 16.92        | 18                  |
| 10                  | QPSK       | 25      | 12        | 16.80       | 16.89          | 16.84        |                     |
| 10                  | QPSK       | 25      | 25        | 16.81       | 16.93          | 16.83        |                     |
| 10                  | QPSK       | 50      | 0         | 16.89       | 16.90          | 16.84        | 18                  |
| 10                  | 16QAM      | 1       | 0         | 17.20       | 17.12          | 17.00        |                     |
| 10                  | 16QAM      | 1       | 25        | 17.12       | 17.14          | 17.02        |                     |
| 10                  | 16QAM      | 1       | 49        | 16.99       | 16.99          | 17.07        | 17                  |
| 10                  | 16QAM      | 25      | 0         | 15.95       | 16.06          | 16.10        |                     |
| 10                  | 16QAM      | 25      | 12        | 15.96       | 15.92          | 15.89        |                     |
| 10                  | 16QAM      | 25      | 25        | 15.78       | 15.83          | 15.98        | 17                  |
| 10                  | 16QAM      | 50      | 0         | 16.00       | 15.86          | 15.95        |                     |
| 10                  | 64QAM      | 1       | 0         | 16.18       | 16.19          | 16.28        |                     |
| 10                  | 64QAM      | 1       | 25        | 16.10       | 16.08          | 16.21        | 17                  |
| 10                  | 64QAM      | 1       | 49        | 16.11       | 16.19          | 16.00        |                     |
| 10                  | 64QAM      | 25      | 0         | 14.90       | 15.19          | 14.98        |                     |
| 10                  | 64QAM      | 25      | 12        | 15.08       | 14.98          | 14.85        | 16                  |
| 10                  | 64QAM      | 25      | 25        | 14.89       | 15.02          | 14.84        |                     |
| 10                  | 64QAM      | 50      | 0         | 15.06       | 15.03          | 14.80        |                     |
| Channel             |            |         |           | 131997      | 132322         | 132647       |                     |
| Frequency (MHz)     |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5                   | QPSK       | 1       | 0         | 17.89       | 17.93          | 17.86        | 19                  |
| 5                   | QPSK       | 1       | 12        | 17.84       | 17.85          | 17.78        |                     |
| 5                   | QPSK       | 1       | 24        | 17.79       | 17.75          | 17.70        |                     |
| 5                   | QPSK       | 12      | 0         | 16.83       | 16.89          | 16.84        | 18                  |
| 5                   | QPSK       | 12      | 7         | 16.72       | 16.81          | 16.76        |                     |
| 5                   | QPSK       | 12      | 13        | 16.73       | 16.85          | 16.75        |                     |
| 5                   | QPSK       | 25      | 0         | 16.81       | 16.82          | 16.76        | 18                  |
| 5                   | 16QAM      | 1       | 0         | 17.12       | 17.04          | 16.92        |                     |
| 5                   | 16QAM      | 1       | 12        | 17.04       | 17.06          | 16.94        |                     |
| 5                   | 16QAM      | 1       | 24        | 16.91       | 16.91          | 16.99        | 17                  |
| 5                   | 16QAM      | 12      | 0         | 15.87       | 15.98          | 16.02        |                     |
| 5                   | 16QAM      | 12      | 7         | 15.88       | 15.84          | 15.81        |                     |
| 5                   | 16QAM      | 12      | 13        | 15.70       | 15.75          | 15.90        | 17                  |
| 5                   | 16QAM      | 25      | 0         | 15.92       | 15.78          | 15.87        |                     |
| 5                   | 64QAM      | 1       | 0         | 16.10       | 16.11          | 16.20        |                     |
| 5                   | 64QAM      | 1       | 12        | 16.02       | 16.00          | 16.13        | 17                  |
| 5                   | 64QAM      | 1       | 24        | 16.03       | 16.11          | 15.92        |                     |
| 5                   | 64QAM      | 12      | 0         | 14.82       | 15.11          | 14.90        |                     |
| 5                   | 64QAM      | 12      | 7         | 15.00       | 14.90          | 14.77        | 16                  |
| 5                   | 64QAM      | 12      | 13        | 14.81       | 14.94          | 14.76        |                     |
| 5                   | 64QAM      | 25      | 0         | 14.98       | 14.95          | 14.72        |                     |
| Channel             |            |         |           | 131967      | 132322         | 132697       |                     |
| Frequency (MHz)     |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3                   | QPSK       | 1       | 0         | 17.82       | 17.86          | 17.79        | 19                  |
| 3                   | QPSK       | 1       | 8         | 17.77       | 17.78          | 17.71        |                     |
| 3                   | QPSK       | 1       | 14        | 17.72       | 17.68          | 17.63        |                     |
| 3                   | QPSK       | 8       | 0         | 16.76       | 16.82          | 16.77        | 18                  |
| 3                   | QPSK       | 8       | 4         | 16.65       | 16.74          | 16.69        |                     |
| 3                   | QPSK       | 8       | 7         | 16.66       | 16.78          | 16.68        |                     |
| 3                   | QPSK       | 15      | 0         | 16.74       | 16.75          | 16.69        | 18                  |
| 3                   | 16QAM      | 1       | 0         | 17.05       | 16.97          | 16.85        |                     |
| 3                   | 16QAM      | 1       | 8         | 16.97       | 16.99          | 16.87        |                     |
| 3                   | 16QAM      | 1       | 14        | 16.84       | 16.84          | 16.92        | 17                  |
| 3                   | 16QAM      | 8       | 0         | 15.80       | 15.91          | 15.95        |                     |
| 3                   | 16QAM      | 8       | 4         | 15.81       | 15.77          | 15.74        |                     |
| 3                   | 16QAM      | 8       | 7         | 15.63       | 15.68          | 15.83        | 17                  |
| 3                   | 16QAM      | 15      | 0         | 15.85       | 15.71          | 15.80        |                     |



|                 |       |    |    |        |        |        |                        |
|-----------------|-------|----|----|--------|--------|--------|------------------------|
| 3               | 64QAM | 1  | 0  | 16.03  | 16.04  | 16.13  | 17                     |
| 3               | 64QAM | 1  | 8  | 15.95  | 15.93  | 16.06  |                        |
| 3               | 64QAM | 1  | 14 | 15.96  | 16.04  | 15.85  |                        |
| 3               | 64QAM | 8  | 0  | 14.75  | 15.04  | 14.83  | 16                     |
| 3               | 64QAM | 8  | 4  | 14.93  | 14.83  | 14.70  |                        |
| 3               | 64QAM | 8  | 7  | 14.74  | 14.87  | 14.69  |                        |
| 3               | 64QAM | 15 | 0  | 14.91  | 14.88  | 14.65  | Tune-up limit<br>(dBm) |
| Channel         |       |    |    | 131979 | 132322 | 132665 |                        |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 17.76  | 17.80  | 17.73  | 19                     |
| 1.4             | QPSK  | 1  | 3  | 17.71  | 17.72  | 17.65  |                        |
| 1.4             | QPSK  | 1  | 5  | 17.66  | 17.62  | 17.57  |                        |
| 1.4             | QPSK  | 3  | 0  | 16.70  | 16.76  | 16.71  | 18                     |
| 1.4             | QPSK  | 3  | 1  | 16.59  | 16.68  | 16.63  |                        |
| 1.4             | QPSK  | 3  | 3  | 16.60  | 16.72  | 16.62  |                        |
| 1.4             | QPSK  | 6  | 0  | 16.68  | 16.69  | 16.63  | 17                     |
| 1.4             | 16QAM | 1  | 0  | 16.99  | 16.91  | 16.79  |                        |
| 1.4             | 16QAM | 1  | 3  | 16.91  | 16.93  | 16.81  |                        |
| 1.4             | 16QAM | 1  | 5  | 16.78  | 16.78  | 16.86  | 16                     |
| 1.4             | 16QAM | 3  | 0  | 15.74  | 15.85  | 15.89  |                        |
| 1.4             | 16QAM | 3  | 1  | 15.75  | 15.71  | 15.68  |                        |
| 1.4             | 16QAM | 3  | 3  | 15.57  | 15.62  | 15.77  | 17                     |
| 1.4             | 16QAM | 6  | 0  | 15.79  | 15.65  | 15.74  |                        |
| 1.4             | 64QAM | 1  | 0  | 15.97  | 15.98  | 16.07  |                        |
| 1.4             | 64QAM | 1  | 3  | 15.89  | 15.87  | 16.00  | 17                     |
| 1.4             | 64QAM | 1  | 5  | 15.90  | 15.98  | 15.79  |                        |
| 1.4             | 64QAM | 3  | 0  | 14.69  | 14.98  | 14.77  |                        |
| 1.4             | 64QAM | 3  | 1  | 14.87  | 14.77  | 14.64  | 16                     |
| 1.4             | 64QAM | 3  | 3  | 14.68  | 14.81  | 14.63  |                        |
| 1.4             | 64QAM | 6  | 0  | 14.85  | 14.82  | 14.59  |                        |

## n66 (PC3) Ant1

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 346000      | 349000         | 352000       | 20.00               |
| Frequency (MHz) |                      |        |          | 1730        | 1745           | 1760         |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 17.99       | 17.96          | 17.93        | 20.00               |
| 40              |                      | 1      | 108      | 18.50       | 18.53          | 18.47        |                     |
| 40              |                      | 1      | 214      | 17.92       | 17.95          | 17.95        |                     |
| 40              |                      | 108    | 1        | 17.93       | 17.99          | 17.94        | 20.00               |
| 40              |                      | 108    | 54       | 18.55       | 18.53          | 18.46        |                     |
| 40              |                      | 108    | 108      | 17.88       | 17.78          | 17.84        |                     |
| 40              | DFT-s-OFDM QPSK      | 216    | 0        | 17.84       | 17.89          | 17.80        | 20.00               |
| 40              |                      | 1      | 1        | 18.06       | 18.00          | 17.98        |                     |
| 40              |                      | 1      | 108      | 18.91       | 18.94          | 18.90        |                     |
| 40              |                      | 1      | 214      | 17.95       | 17.95          | 17.95        | 20.00               |
| 40              |                      | 108    | 1        | 17.45       | 17.45          | 17.44        |                     |
| 40              |                      | 108    | 54       | 18.88       | 18.90          | 18.85        |                     |
| 40              | DFT-s-OFDM 16QAM     | 108    | 108      | 17.36       | 17.29          | 17.33        | 20.00               |
| 40              |                      | 216    | 0        | 17.40       | 17.38          | 17.38        |                     |
| 40              |                      | 1      | 1        | 17.09       | 17.03          | 16.97        |                     |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 15.81       | 15.77          | 15.70        | 16.50               |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 13.46       | 13.37          | 13.38        | 14.00               |
| 40              | CP-OFDM QPSK         | 1      | 1        | 16.53       | 16.51          | 16.40        | 17.50               |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 15.93       | 15.91          | 15.82        | 16.50               |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 14.74       | 14.31          | 14.79        | 15.50               |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 11.38       | 11.34          | 11.27        | 12.00               |
| Channel         |                      |        |          | 345000      | 349000         | 353000       | 20.00               |
| Frequency (MHz) |                      |        |          | 1725        | 1745           | 1765         |                     |
| 30              | DFT-s-OFDM QPSK      | 1      | 1        | 18.24       | 18.14          | 18.14        | 20.00               |
| Channel         |                      |        |          | 344500      | 349000         | 353500       | 20.00               |
| Frequency (MHz) |                      |        |          | 1722.5      | 1745           | 1767.5       |                     |
| 25              | DFT-s-OFDM QPSK      | 1      | 1        | 18.40       | 18.31          | 18.29        | 20.00               |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | 20.00               |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 18.45       | 18.46          | 18.32        | 20.00               |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | 20.00               |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 18.51       | 18.46          | 18.43        | 20.00               |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | 20.00               |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 18.39       | 18.34          | 18.30        | 20.00               |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | 20.00               |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 18.63       | 18.52          | 18.52        | 20.00               |