

| Band: 12 / Bandwidth: 1.4MHz / NTNV |                                              |               |        |                       |            |           |         |         |         |      |
|-------------------------------------|----------------------------------------------|---------------|--------|-----------------------|------------|-----------|---------|---------|---------|------|
| Modulation                          | Frequency (MHz)                              | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |         |      |
|                                     |                                              | Size          | Offset |                       |            | Result    | Limit   |         |         |      |
| QPSK                                | 699.7                                        | 1             | 0      | 22.36                 | -2.56      | 17.65     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 22.47                 | -2.56      | 17.76     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 5      | 22.34                 | -2.56      | 17.63     | <=34.77 | Pass    |         |      |
|                                     |                                              | 3             | 0      | 22.44                 | -2.56      | 17.73     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 22.53                 | -2.56      | 17.82     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 3      | 22.45                 | -2.56      | 17.74     | <=34.77 | Pass    |         |      |
|                                     |                                              | 6             | 0      | 21.37                 | -2.56      | 16.66     | <=34.77 | Pass    |         |      |
|                                     |                                              | 707.5         | 1      | 0                     | 22.41      | -2.56     | 17.70   | <=34.77 | Pass    |      |
|                                     |                                              |               |        | 2                     | 22.49      | -2.56     | 17.78   | <=34.77 | Pass    |      |
|                                     | 5                                            |               |        | 22.46                 | -2.56      | 17.75     | <=34.77 | Pass    |         |      |
|                                     | 3                                            |               | 0      | 22.51                 | -2.56      | 17.80     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 22.52                 | -2.56      | 17.81     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 3      | 22.54                 | -2.56      | 17.83     | <=34.77 | Pass    |         |      |
|                                     | 6                                            | 0             | 21.48  | -2.56                 | 16.77      | <=34.77   | Pass    |         |         |      |
|                                     | 715.3                                        | 1             | 0      | 22.51                 | -2.56      | 17.80     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 22.65                 | -2.56      | 17.94     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 5      | 22.58                 | -2.56      | 17.87     | <=34.77 | Pass    |         |      |
|                                     |                                              | 3             | 0      | 22.70                 | -2.56      | 17.99     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 22.79                 | -2.56      | 18.08     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 3      | 22.74                 | -2.56      | 18.03     | <=34.77 | Pass    |         |      |
|                                     |                                              | 6             | 0      | 21.69                 | -2.56      | 16.98     | <=34.77 | Pass    |         |      |
|                                     |                                              | 16QAM         | 699.7  | 1                     | 0          | 21.36     | -2.56   | 16.65   | <=34.77 | Pass |
|                                     |                                              |               |        |                       | 2          | 21.45     | -2.56   | 16.74   | <=34.77 | Pass |
|                                     | 5                                            |               |        |                       | 21.42      | -2.56     | 16.71   | <=34.77 | Pass    |      |
| 3                                   | 0                                            |               |        | 21.52                 | -2.56      | 16.81     | <=34.77 | Pass    |         |      |
|                                     | 2                                            |               |        | 21.53                 | -2.56      | 16.82     | <=34.77 | Pass    |         |      |
|                                     | 3                                            |               |        | 21.49                 | -2.56      | 16.78     | <=34.77 | Pass    |         |      |
| 6                                   | 0                                            |               |        | 20.35                 | -2.56      | 15.64     | <=34.77 | Pass    |         |      |
| 707.5                               | 1                                            |               |        | 0                     | 21.58      | -2.56     | 16.87   | <=34.77 | Pass    |      |
|                                     |                                              |               |        | 2                     | 21.72      | -2.56     | 17.01   | <=34.77 | Pass    |      |
|                                     |                                              |               | 5      | 21.59                 | -2.56      | 16.88     | <=34.77 | Pass    |         |      |
|                                     | 3                                            |               | 0      | 21.50                 | -2.56      | 16.79     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 21.52                 | -2.56      | 16.81     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 3      | 21.56                 | -2.56      | 16.85     | <=34.77 | Pass    |         |      |
| 6                                   | 0                                            |               | 20.54  | -2.56                 | 15.83      | <=34.77   | Pass    |         |         |      |
| 715.3                               | 1                                            |               | 0      | 21.54                 | -2.56      | 16.83     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 21.67                 | -2.56      | 16.96     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 5      | 21.66                 | -2.56      | 16.95     | <=34.77 | Pass    |         |      |
|                                     | 3                                            |               | 0      | 21.87                 | -2.56      | 17.16     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 2      | 21.94                 | -2.56      | 17.23     | <=34.77 | Pass    |         |      |
|                                     |                                              |               | 3      | 21.91                 | -2.56      | 17.20     | <=34.77 | Pass    |         |      |
|                                     | 6                                            |               | 0      | 20.67                 | -2.56      | 15.96     | <=34.77 | Pass    |         |      |
|                                     | Note1: ERP=Conducted Power+Antenna Gain-2.15 |               |        |                       |            |           |         |         |         |      |

### 1.1.2 B12\_3MHz\_ERP

| Band: 12 / Bandwidth: 3MHz / NTNV |                                              |               |        |                       |            |           |         |         |         |      |
|-----------------------------------|----------------------------------------------|---------------|--------|-----------------------|------------|-----------|---------|---------|---------|------|
| Modulation                        | Frequency (MHz)                              | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |         |      |
|                                   |                                              | Size          | Offset |                       |            | Result    | Limit   |         |         |      |
| QPSK                              | 700.5                                        | 1             | 0      | 22.37                 | -2.56      | 17.66     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 22.50                 | -2.56      | 17.79     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 14     | 22.30                 | -2.56      | 17.59     | <=34.77 | Pass    |         |      |
|                                   |                                              | 8             | 0      | 21.35                 | -2.56      | 16.64     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 4      | 21.38                 | -2.56      | 16.67     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 21.31                 | -2.56      | 16.60     | <=34.77 | Pass    |         |      |
|                                   |                                              | 15            | 0      | 21.35                 | -2.56      | 16.64     | <=34.77 | Pass    |         |      |
|                                   |                                              | 707.5         | 1      | 0                     | 22.47      | -2.56     | 17.76   | <=34.77 | Pass    |      |
|                                   |                                              |               |        | 7                     | 22.61      | -2.56     | 17.90   | <=34.77 | Pass    |      |
|                                   | 14                                           |               |        | 22.49                 | -2.56      | 17.78     | <=34.77 | Pass    |         |      |
|                                   | 8                                            |               | 0      | 21.45                 | -2.56      | 16.74     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 4      | 21.52                 | -2.56      | 16.81     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 21.48                 | -2.56      | 16.77     | <=34.77 | Pass    |         |      |
|                                   | 15                                           | 0             | 21.47  | -2.56                 | 16.76      | <=34.77   | Pass    |         |         |      |
|                                   | 714.5                                        | 1             | 0      | 22.58                 | -2.56      | 17.87     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 22.69                 | -2.56      | 17.98     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 14     | 22.66                 | -2.56      | 17.95     | <=34.77 | Pass    |         |      |
|                                   |                                              | 8             | 0      | 21.63                 | -2.56      | 16.92     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 4      | 21.68                 | -2.56      | 16.97     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 21.64                 | -2.56      | 16.93     | <=34.77 | Pass    |         |      |
|                                   |                                              | 15            | 0      | 21.61                 | -2.56      | 16.90     | <=34.77 | Pass    |         |      |
|                                   |                                              | 16QAM         | 700.5  | 1                     | 0          | 21.95     | -2.56   | 17.24   | <=34.77 | Pass |
|                                   |                                              |               |        |                       | 7          | 22.07     | -2.56   | 17.36   | <=34.77 | Pass |
|                                   | 14                                           |               |        |                       | 21.87      | -2.56     | 17.16   | <=34.77 | Pass    |      |
| 8                                 | 0                                            |               |        | 20.55                 | -2.56      | 15.84     | <=34.77 | Pass    |         |      |
|                                   | 4                                            |               |        | 20.57                 | -2.56      | 15.86     | <=34.77 | Pass    |         |      |
|                                   | 7                                            |               |        | 20.52                 | -2.56      | 15.81     | <=34.77 | Pass    |         |      |
| 15                                | 0                                            |               |        | 20.43                 | -2.56      | 15.72     | <=34.77 | Pass    |         |      |
| 707.5                             | 1                                            |               |        | 0                     | 21.51      | -2.56     | 16.80   | <=34.77 | Pass    |      |
|                                   |                                              |               |        | 7                     | 21.65      | -2.56     | 16.94   | <=34.77 | Pass    |      |
|                                   |                                              |               | 14     | 21.48                 | -2.56      | 16.77     | <=34.77 | Pass    |         |      |
|                                   | 8                                            |               | 0      | 20.50                 | -2.56      | 15.79     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 4      | 20.59                 | -2.56      | 15.88     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 20.56                 | -2.56      | 15.85     | <=34.77 | Pass    |         |      |
| 15                                | 0                                            |               | 20.55  | -2.56                 | 15.84      | <=34.77   | Pass    |         |         |      |
| 714.5                             | 1                                            |               | 0      | 21.76                 | -2.56      | 17.05     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 21.90                 | -2.56      | 17.19     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 14     | 21.85                 | -2.56      | 17.14     | <=34.77 | Pass    |         |      |
|                                   | 8                                            |               | 0      | 20.63                 | -2.56      | 15.92     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 4      | 20.66                 | -2.56      | 15.95     | <=34.77 | Pass    |         |      |
|                                   |                                              |               | 7      | 20.62                 | -2.56      | 15.91     | <=34.77 | Pass    |         |      |
|                                   | 15                                           |               | 0      | 20.58                 | -2.56      | 15.87     | <=34.77 | Pass    |         |      |
|                                   | Note1: ERP=Conducted Power+Antenna Gain-2.15 |               |        |                       |            |           |         |         |         |      |

### 1.1.3 B12\_5MHz\_ERP

| Band: 12 / Bandwidth: 5MHz / NTVN            |                 |               |        |                       |            |           |         |         |         |      |
|----------------------------------------------|-----------------|---------------|--------|-----------------------|------------|-----------|---------|---------|---------|------|
| Modulation                                   | Frequency (MHz) | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |         |      |
|                                              |                 | Size          | Offset |                       |            | Result    | Limit   |         |         |      |
| QPSK                                         | 701.5           | 1             | 0      | 22.32                 | -2.56      | 17.61     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 13     | 22.40                 | -2.56      | 17.69     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 24     | 22.38                 | -2.56      | 17.67     | <=34.77 | Pass    |         |      |
|                                              |                 | 12            | 0      | 21.43                 | -2.56      | 16.72     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 6      | 21.46                 | -2.56      | 16.75     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 13     | 21.28                 | -2.56      | 16.57     | <=34.77 | Pass    |         |      |
|                                              |                 | 25            | 0      | 21.33                 | -2.56      | 16.62     | <=34.77 | Pass    |         |      |
|                                              |                 | 707.5         | 1      | 0                     | 22.40      | -2.56     | 17.69   | <=34.77 | Pass    |      |
|                                              |                 |               |        | 13                    | 22.48      | -2.56     | 17.77   | <=34.77 | Pass    |      |
|                                              | 24              |               |        | 22.37                 | -2.56      | 17.66     | <=34.77 | Pass    |         |      |
|                                              | 12              |               | 0      | 21.38                 | -2.56      | 16.67     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 6      | 21.53                 | -2.56      | 16.82     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 13     | 21.60                 | -2.56      | 16.89     | <=34.77 | Pass    |         |      |
|                                              | 25              | 0             | 21.50  | -2.56                 | 16.79      | <=34.77   | Pass    |         |         |      |
|                                              | 713.5           | 1             | 0      | 22.45                 | -2.56      | 17.74     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 13     | 22.64                 | -2.56      | 17.93     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 24     | 22.61                 | -2.56      | 17.90     | <=34.77 | Pass    |         |      |
|                                              |                 | 12            | 0      | 21.74                 | -2.56      | 17.03     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 6      | 21.67                 | -2.56      | 16.96     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 13     | 21.58                 | -2.56      | 16.87     | <=34.77 | Pass    |         |      |
|                                              |                 | 25            | 0      | 21.66                 | -2.56      | 16.95     | <=34.77 | Pass    |         |      |
|                                              |                 | 16QAM         | 701.5  | 1                     | 0          | 21.45     | -2.56   | 16.74   | <=34.77 | Pass |
|                                              |                 |               |        |                       | 13         | 21.52     | -2.56   | 16.81   | <=34.77 | Pass |
|                                              | 24              |               |        |                       | 21.50      | -2.56     | 16.79   | <=34.77 | Pass    |      |
|                                              | 12              |               |        | 0                     | 20.40      | -2.56     | 15.69   | <=34.77 | Pass    |      |
|                                              |                 |               |        | 6                     | 20.44      | -2.56     | 15.73   | <=34.77 | Pass    |      |
|                                              |                 |               |        | 13                    | 20.26      | -2.56     | 15.55   | <=34.77 | Pass    |      |
| 25                                           | 0               |               |        | 20.43                 | -2.56      | 15.72     | <=34.77 | Pass    |         |      |
| 707.5                                        | 1               |               | 0      | 21.62                 | -2.56      | 16.91     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 13     | 21.77                 | -2.56      | 17.06     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 24     | 21.70                 | -2.56      | 16.99     | <=34.77 | Pass    |         |      |
|                                              | 12              |               | 0      | 20.44                 | -2.56      | 15.73     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 6      | 20.58                 | -2.56      | 15.87     | <=34.77 | Pass    |         |      |
| 25                                           | 0               |               | 20.64  | -2.56                 | 15.93      | <=34.77   | Pass    |         |         |      |
| 713.5                                        | 1               |               | 0      | 20.51                 | -2.56      | 15.80     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 13     | 21.30                 | -2.56      | 16.59     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 24     | 21.51                 | -2.56      | 16.80     | <=34.77 | Pass    |         |      |
|                                              | 12              |               | 0      | 20.74                 | -2.56      | 16.03     | <=34.77 | Pass    |         |      |
|                                              |                 |               | 6      | 20.65                 | -2.56      | 15.94     | <=34.77 | Pass    |         |      |
|                                              |                 | 13            | 20.55  | -2.56                 | 15.84      | <=34.77   | Pass    |         |         |      |
|                                              | 25              | 0             | 20.71  | -2.56                 | 16.00      | <=34.77   | Pass    |         |         |      |
| Note1: ERP=Conducted Power+Antenna Gain-2.15 |                 |               |        |                       |            |           |         |         |         |      |

#### 1.1.4 B12\_10MHz\_ERP

| Band: 12 / Bandwidth: 10MHz / NTNV |                                              |               |        |                       |            |           |         |         |         |      |
|------------------------------------|----------------------------------------------|---------------|--------|-----------------------|------------|-----------|---------|---------|---------|------|
| Modulation                         | Frequency (MHz)                              | RB Allocation |        | Conducted Power (dBm) | Gain (dBi) | ERP (dBm) |         | Verdict |         |      |
|                                    |                                              | Size          | Offset |                       |            | Result    | Limit   |         |         |      |
| QPSK                               | 704                                          | 1             | 0      | 22.34                 | -2.56      | 17.63     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 22.59                 | -2.56      | 17.88     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 49     | 22.40                 | -2.56      | 17.69     | <=34.77 | Pass    |         |      |
|                                    |                                              | 25            | 0      | 21.71                 | -2.56      | 17.00     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 13     | 21.45                 | -2.56      | 16.74     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 21.63                 | -2.56      | 16.92     | <=34.77 | Pass    |         |      |
|                                    |                                              | 50            | 0      | 21.65                 | -2.56      | 16.94     | <=34.77 | Pass    |         |      |
|                                    |                                              | 707.5         | 1      | 0                     | 22.37      | -2.56     | 17.66   | <=34.77 | Pass    |      |
|                                    |                                              |               |        | 25                    | 22.58      | -2.56     | 17.87   | <=34.77 | Pass    |      |
|                                    | 49                                           |               |        | 22.51                 | -2.56      | 17.80     | <=34.77 | Pass    |         |      |
|                                    | 25                                           |               | 0      | 21.48                 | -2.56      | 16.77     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 13     | 21.55                 | -2.56      | 16.84     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 21.62                 | -2.56      | 16.91     | <=34.77 | Pass    |         |      |
|                                    | 50                                           | 0             | 21.60  | -2.56                 | 16.89      | <=34.77   | Pass    |         |         |      |
|                                    | 711                                          | 1             | 0      | 22.43                 | -2.56      | 17.72     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 22.64                 | -2.56      | 17.93     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 49     | 22.65                 | -2.56      | 17.94     | <=34.77 | Pass    |         |      |
|                                    |                                              | 25            | 0      | 21.34                 | -2.56      | 16.63     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 13     | 21.54                 | -2.56      | 16.83     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 21.33                 | -2.56      | 16.62     | <=34.77 | Pass    |         |      |
|                                    |                                              | 50            | 0      | 21.38                 | -2.56      | 16.67     | <=34.77 | Pass    |         |      |
|                                    |                                              | 16QAM         | 704    | 1                     | 0          | 21.51     | -2.56   | 16.80   | <=34.77 | Pass |
|                                    |                                              |               |        |                       | 25         | 21.76     | -2.56   | 17.05   | <=34.77 | Pass |
|                                    | 49                                           |               |        |                       | 21.62      | -2.56     | 16.91   | <=34.77 | Pass    |      |
| 25                                 | 0                                            |               |        | 20.75                 | -2.56      | 16.04     | <=34.77 | Pass    |         |      |
|                                    | 13                                           |               |        | 20.50                 | -2.56      | 15.79     | <=34.77 | Pass    |         |      |
|                                    | 25                                           |               |        | 20.68                 | -2.56      | 15.97     | <=34.77 | Pass    |         |      |
| 50                                 | 0                                            |               |        | 20.70                 | -2.56      | 15.99     | <=34.77 | Pass    |         |      |
| 707.5                              | 1                                            |               |        | 0                     | 21.97      | -2.56     | 17.26   | <=34.77 | Pass    |      |
|                                    |                                              |               |        | 25                    | 22.24      | -2.56     | 17.53   | <=34.77 | Pass    |      |
|                                    |                                              |               | 49     | 22.13                 | -2.56      | 17.42     | <=34.77 | Pass    |         |      |
|                                    | 25                                           |               | 0      | 20.54                 | -2.56      | 15.83     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 13     | 20.60                 | -2.56      | 15.89     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 20.67                 | -2.56      | 15.96     | <=34.77 | Pass    |         |      |
| 50                                 | 0                                            |               | 20.60  | -2.56                 | 15.89      | <=34.77   | Pass    |         |         |      |
| 711                                | 1                                            |               | 0      | 21.46                 | -2.56      | 16.75     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 21.71                 | -2.56      | 17.00     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 49     | 21.68                 | -2.56      | 16.97     | <=34.77 | Pass    |         |      |
|                                    | 25                                           |               | 0      | 20.48                 | -2.56      | 15.77     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 13     | 20.70                 | -2.56      | 15.99     | <=34.77 | Pass    |         |      |
|                                    |                                              |               | 25     | 20.42                 | -2.56      | 15.71     | <=34.77 | Pass    |         |      |
|                                    | 50                                           |               | 0      | 20.41                 | -2.56      | 15.70     | <=34.77 | Pass    |         |      |
|                                    | Note1: ERP=Conducted Power+Antenna Gain-2.15 |               |        |                       |            |           |         |         |         |      |

## 2. Frequency Stability

### 2.1 Test Result

#### 2.1.1 B12\_10MHz

| Band: 12 / Bandwidth: 10MHz |                 |               |        |            |               |                  |                       |             |         |
|-----------------------------|-----------------|---------------|--------|------------|---------------|------------------|-----------------------|-------------|---------|
| Modulation                  | Frequency (MHz) | RB Allocation |        | Temp. (°C) | Voltage (VDC) | Freq. Error (Hz) | Freq. vs. Rated (ppm) |             | Verdict |
|                             |                 | Size          | Offset |            |               |                  | Result                | Limit       |         |
| QPSK                        | 707.5           | 50            | 0      | 20         | 3.40          | -5.965           | -0.0084               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 3.70          | -5.379           | -0.0076               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        |            | 4.20          | -6.251           | -0.0088               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -30        | 3.70          | -7.396           | -0.0105               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -20        | 3.70          | -5.250           | -0.0074               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | -10        | 3.70          | -7.010           | -0.0099               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 0          | 3.70          | -7.210           | -0.0102               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 10         | 3.70          | -7.110           | -0.0100               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 30         | 3.70          | -8.411           | -0.0119               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 40         | 3.70          | -8.712           | -0.0123               | -2.5 to 2.5 | Pass    |
|                             |                 |               |        | 50         | 3.70          | -8.340           | -0.0118               | -2.5 to 2.5 | Pass    |

### 3. 99% & 26dB Bandwidth

#### 3.1 Test Result

##### 3.1.1 Band12\_OBW

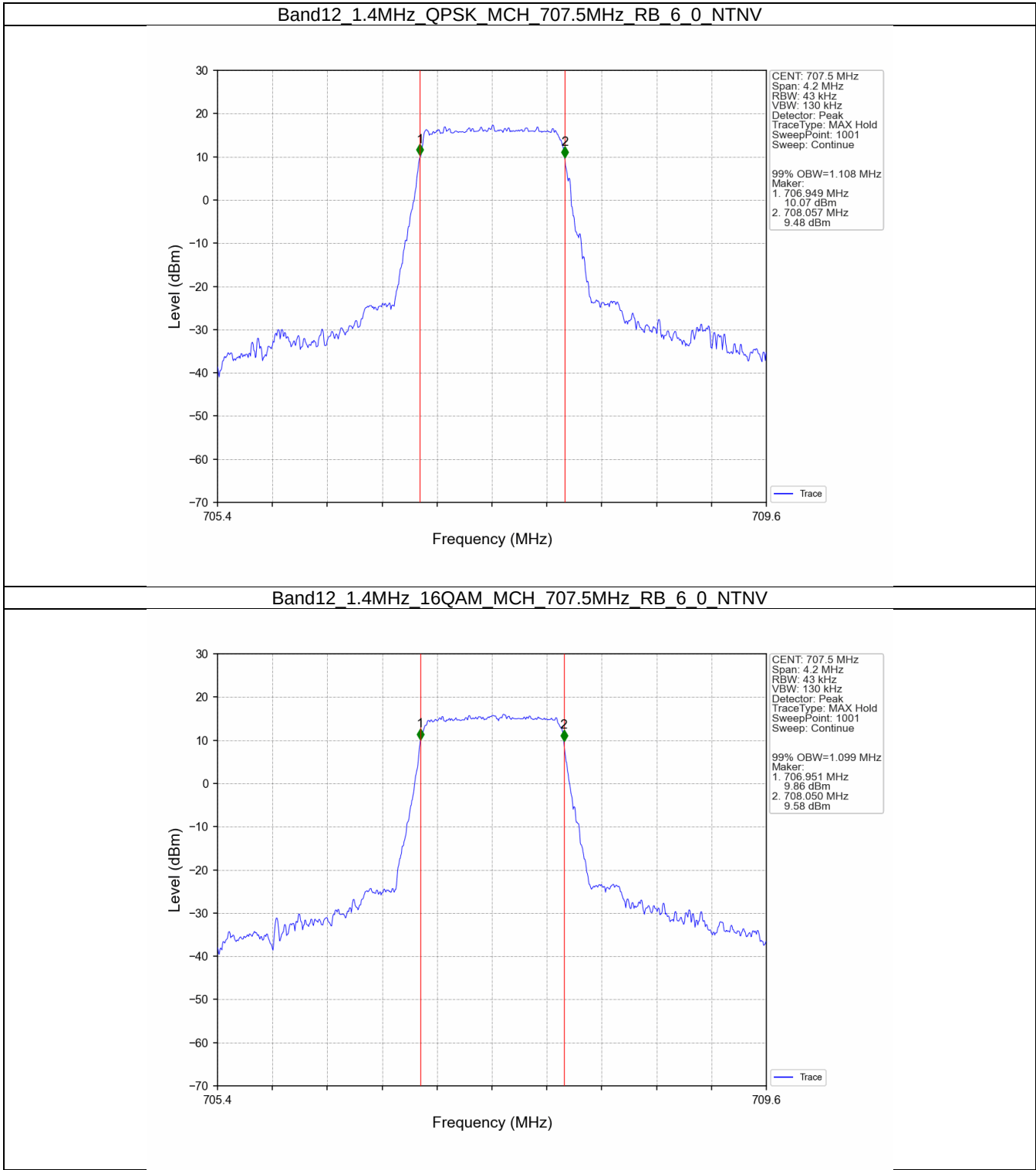
| Band: 12 / NTNV |            |                 |               |        |                              |       |         |
|-----------------|------------|-----------------|---------------|--------|------------------------------|-------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 99% Occupied Bandwidth (MHz) |       | Verdict |
|                 |            |                 | Size          | Offset | Result                       | Limit |         |
| 1.4             | QPSK       | 707.5           | 6             | 0      | 1.108                        | /     | Pass    |
|                 | 16QAM      | 707.5           | 6             | 0      | 1.099                        | /     | Pass    |
| 3               | QPSK       | 707.5           | 15            | 0      | 2.721                        | /     | Pass    |
|                 | 16QAM      | 707.5           | 15            | 0      | 2.712                        | /     | Pass    |
| 5               | QPSK       | 707.5           | 25            | 0      | 4.561                        | /     | Pass    |
|                 | 16QAM      | 707.5           | 25            | 0      | 4.582                        | /     | Pass    |
| 10              | QPSK       | 707.5           | 50            | 0      | 9.114                        | /     | Pass    |
|                 | 16QAM      | 707.5           | 50            | 0      | 9.123                        | /     | Pass    |

##### 3.1.2 Band12\_XDB

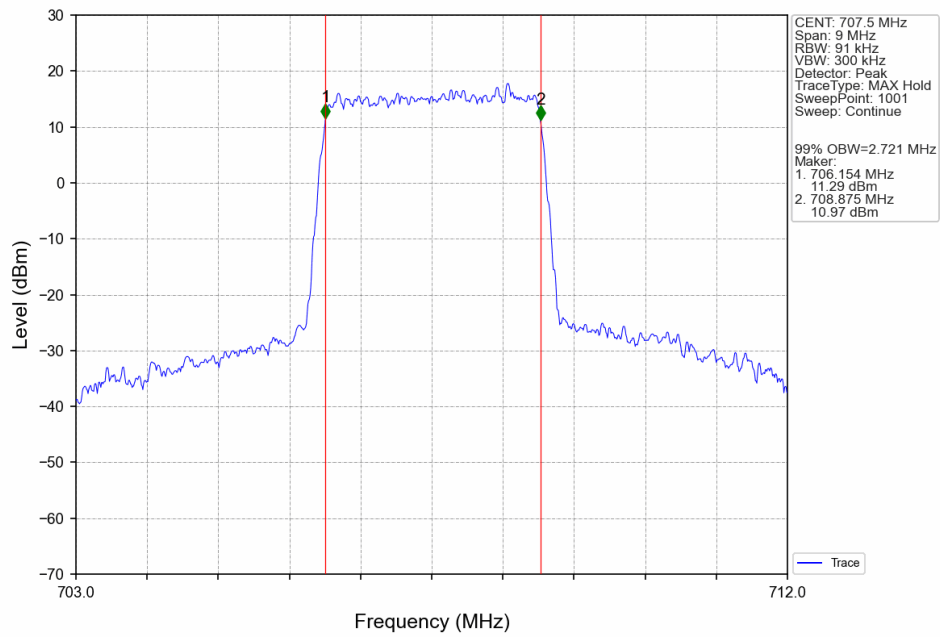
| Band: 12 / NTNV |            |                 |               |        |                      |       |         |
|-----------------|------------|-----------------|---------------|--------|----------------------|-------|---------|
| Bandwidth (MHz) | Modulation | Frequency (MHz) | RB Allocation |        | 26dB Bandwidth (MHz) |       | Verdict |
|                 |            |                 | Size          | Offset | Result               | Limit |         |
| 1.4             | QPSK       | 707.5           | 6             | 0      | 1.329                | /     | Pass    |
|                 | 16QAM      | 707.5           | 6             | 0      | 1.319                | /     | Pass    |
| 3               | QPSK       | 707.5           | 15            | 0      | 2.988                | /     | Pass    |
|                 | 16QAM      | 707.5           | 15            | 0      | 2.988                | /     | Pass    |
| 5               | QPSK       | 707.5           | 25            | 0      | 5.212                | /     | Pass    |
|                 | 16QAM      | 707.5           | 25            | 0      | 5.244                | /     | Pass    |
| 10              | QPSK       | 707.5           | 50            | 0      | 10.226               | /     | Pass    |
|                 | 16QAM      | 707.5           | 50            | 0      | 10.245               | /     | Pass    |

### 3.2 Test Graph

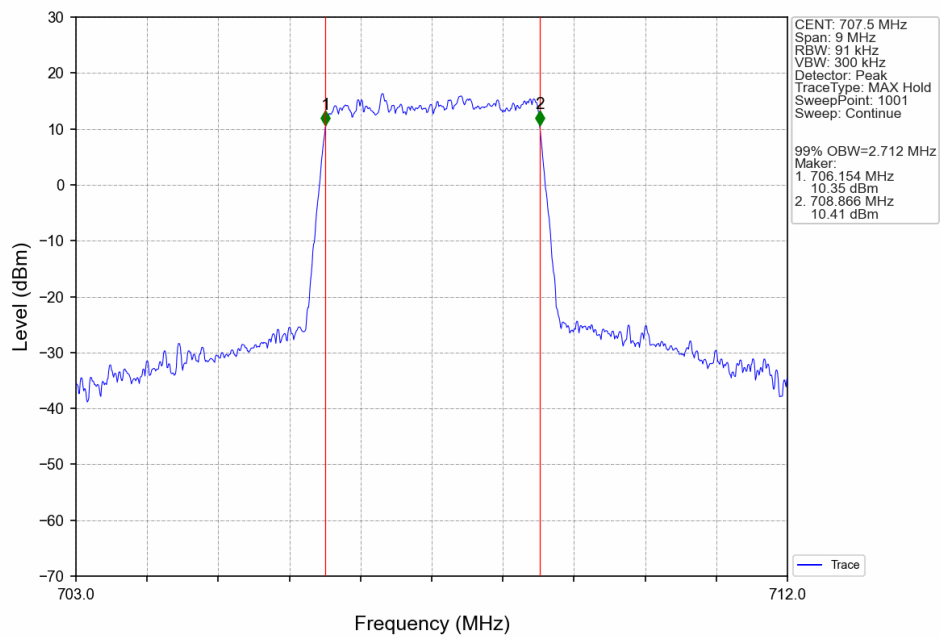
#### 3.2.1 Band12\_OBW



# Band12 3MHz QPSK MCH 707.5MHz RB 15 0 NTNV

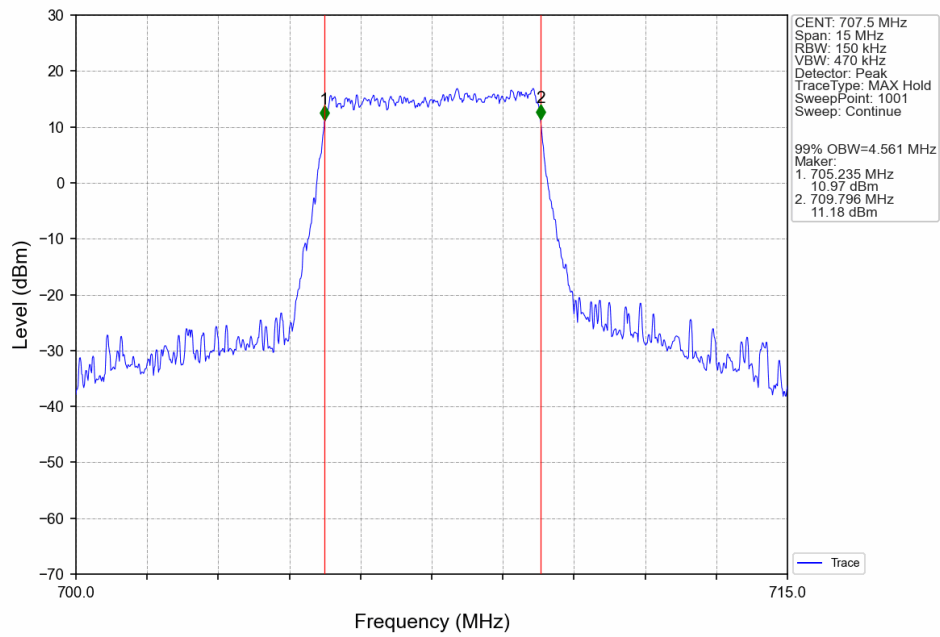


# Band12 3MHz 16QAM MCH 707.5MHz RB 15 0 NTNV

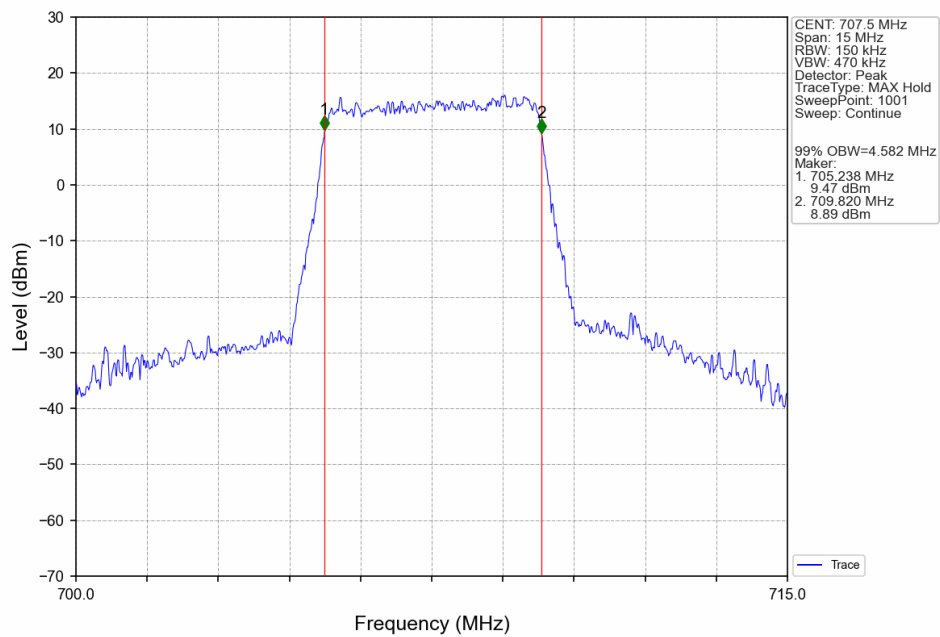




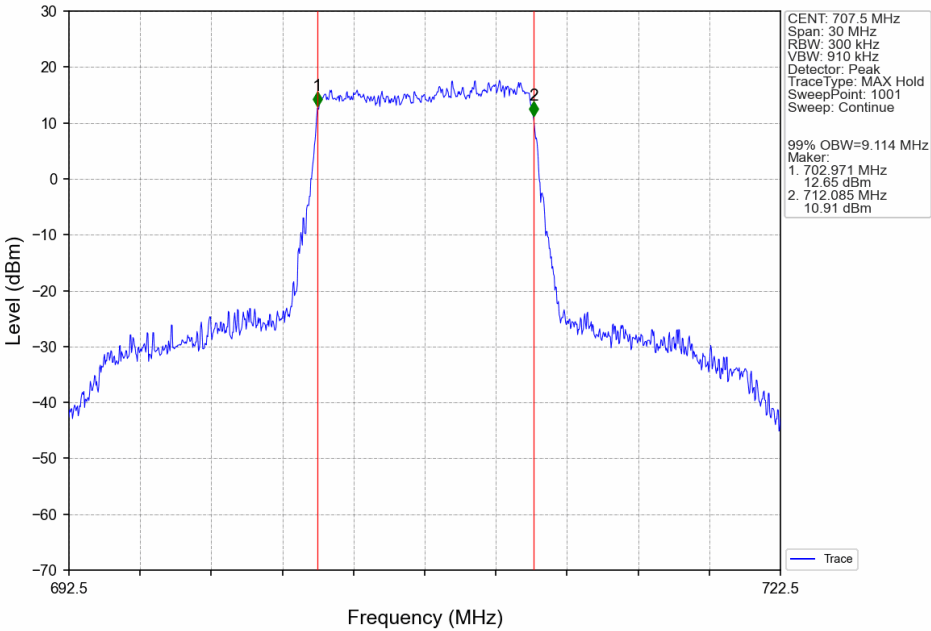
Band12 5MHz QPSK MCH 707.5MHz RB 25 0 NTN



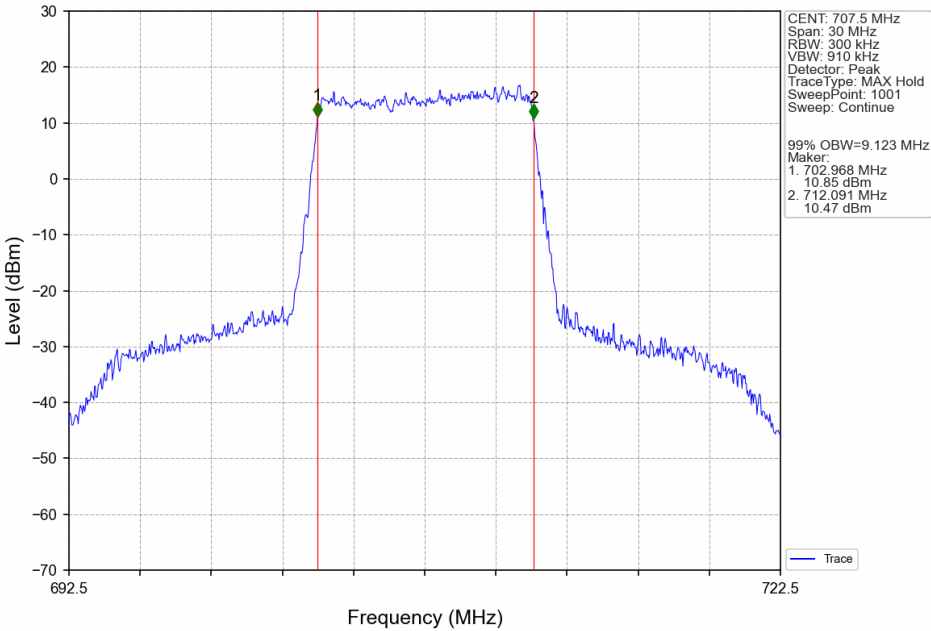
Band12 5MHz 16QAM MCH 707.5MHz RB 25 0 NTN



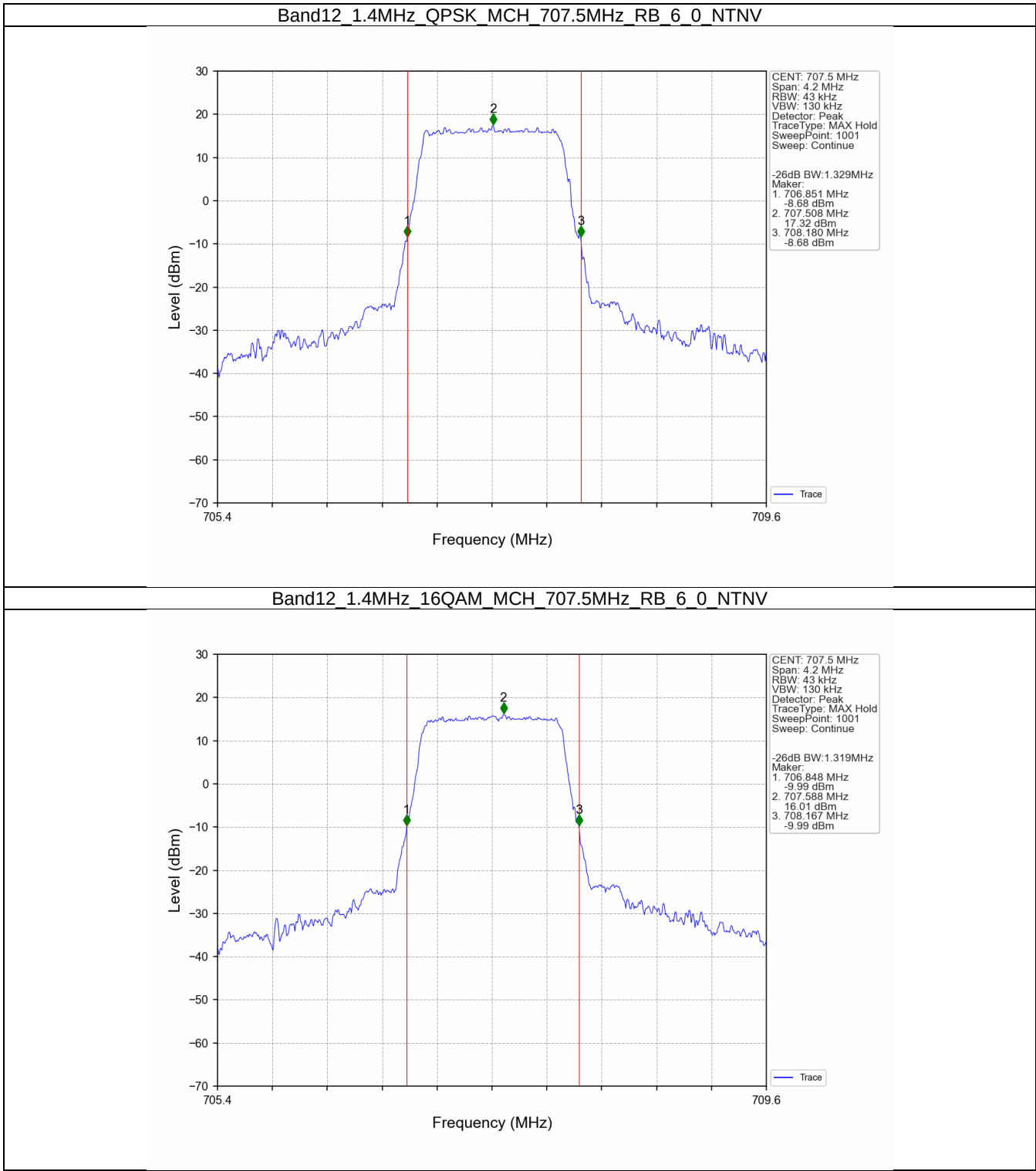
Band12 10MHz QPSK MCH 707.5MHz RB 50 0 NTNV



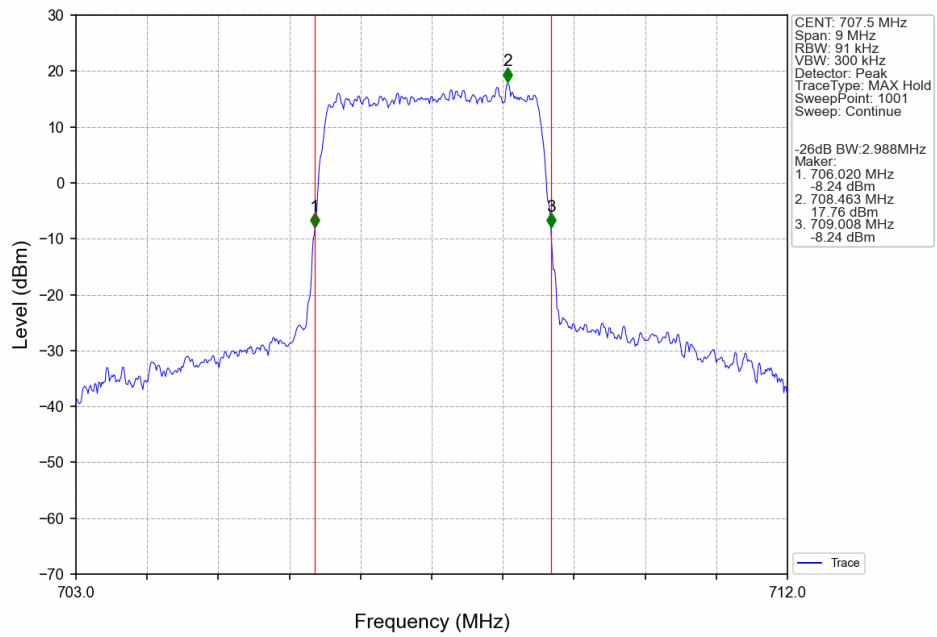
Band12 10MHz 16QAM MCH 707.5MHz RB 50 0 NTNV



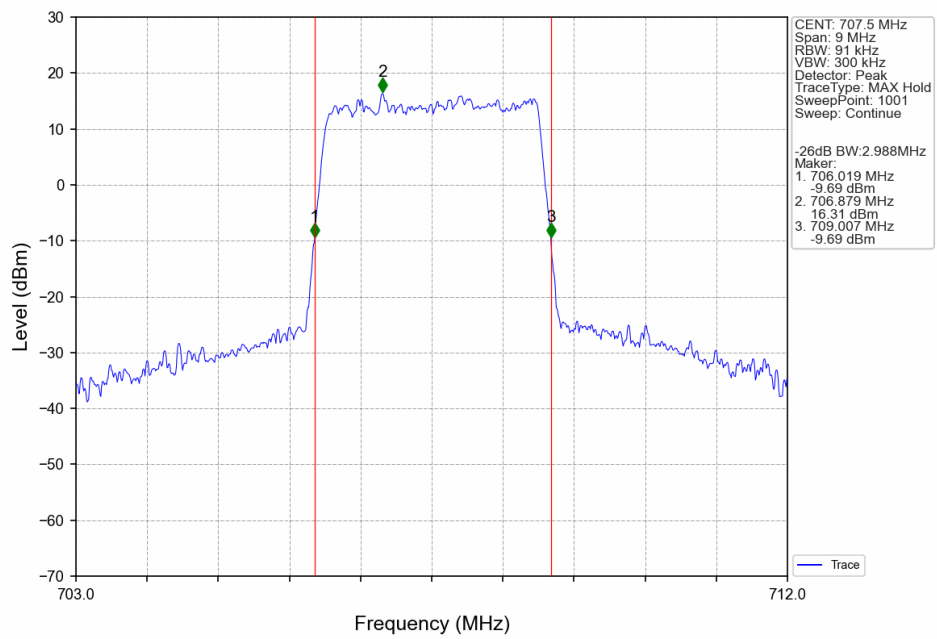
3.2.2 Band12\_XDB



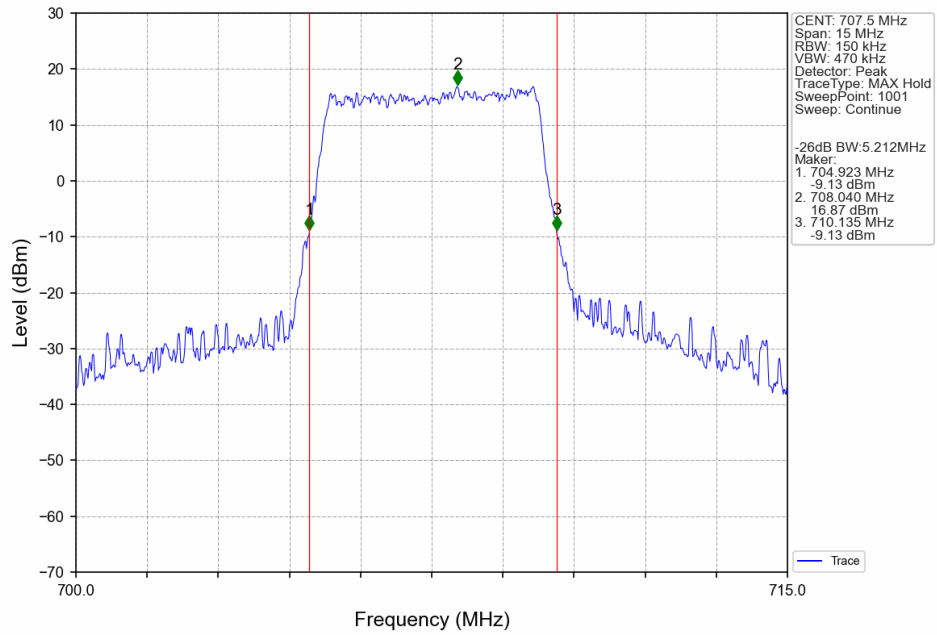
Band12 3MHz QPSK MCH 707.5MHz RB 15 0 NTNV



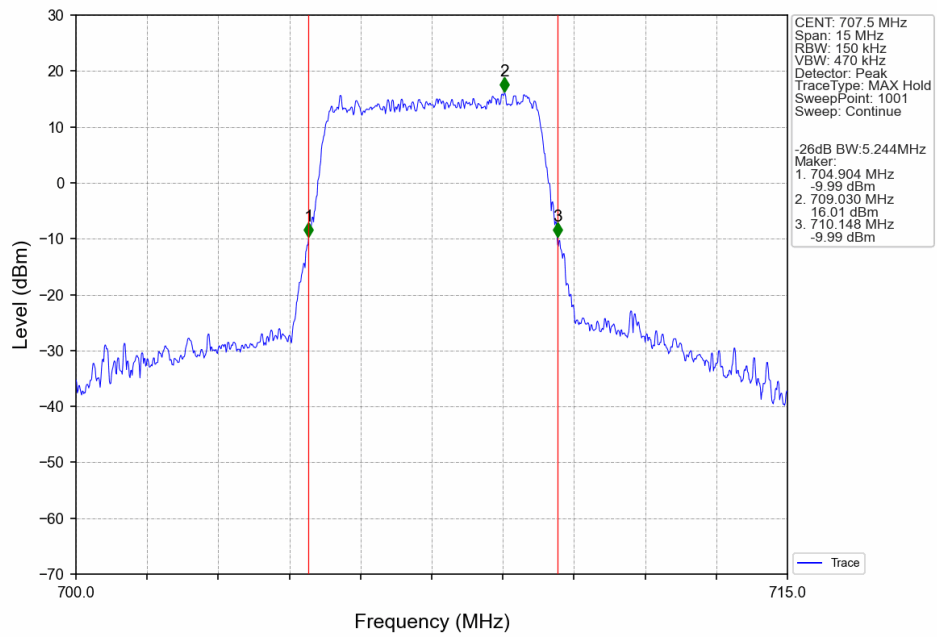
Band12 3MHz 16QAM MCH 707.5MHz RB 15 0 NTNV



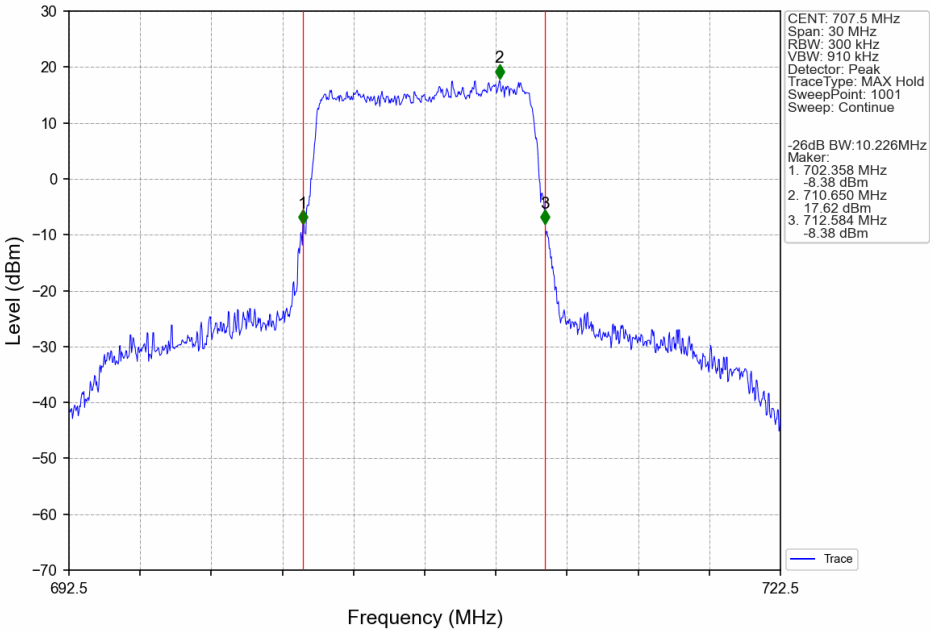
Band12 5MHz QPSK MCH 707.5MHz RB 25 0 NTN



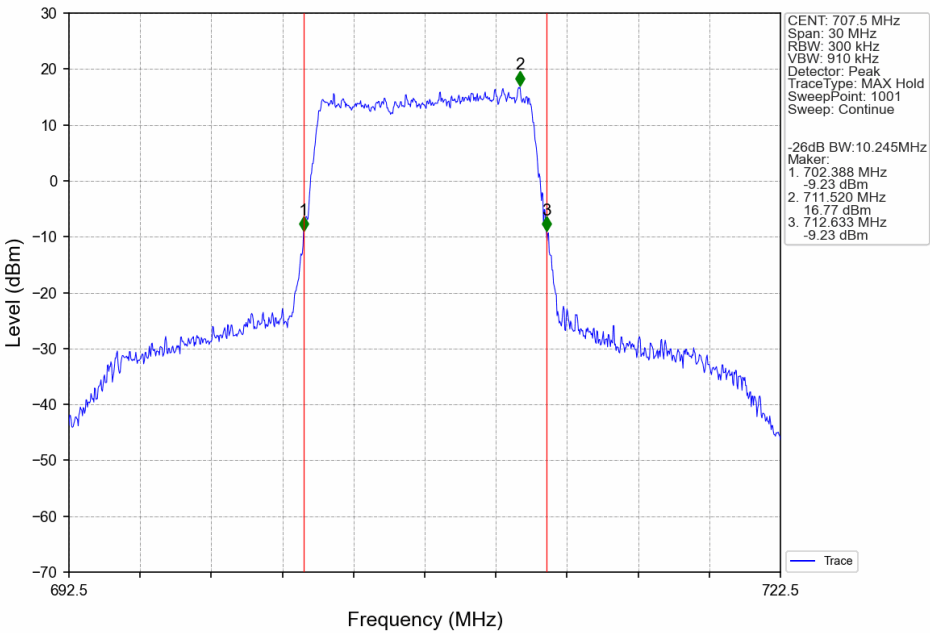
Band12 5MHz 16QAM MCH 707.5MHz RB 25 0 NTN



Band12 10MHz QPSK MCH 707.5MHz RB 50 0 NTNV



Band12 10MHz 16QAM MCH 707.5MHz RB 50 0 NTNV



4. Peak-Average Ratio

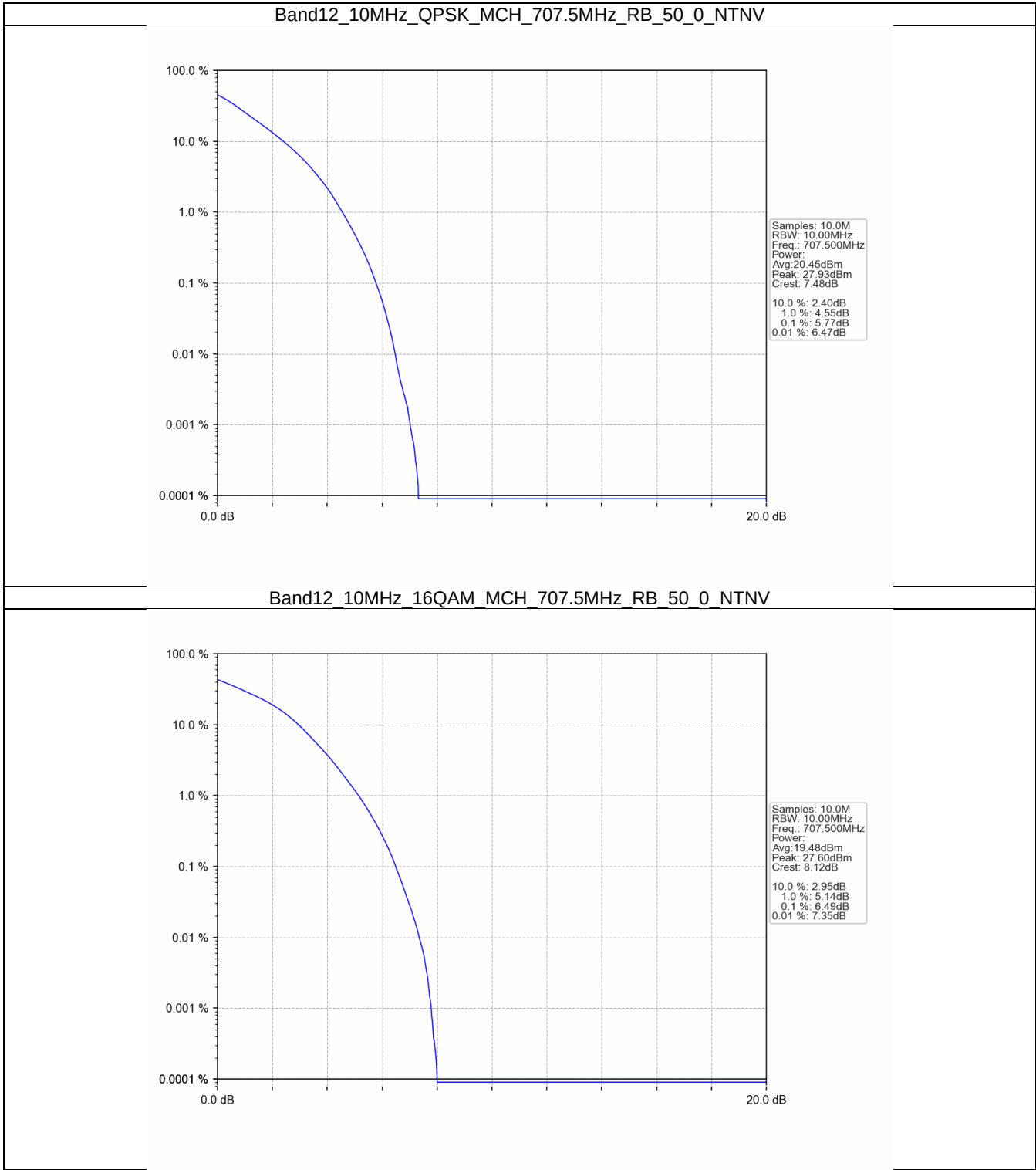
4.1 Test Result

4.1.1 B12\_10MHz

| Band: 12 / Bandwidth: 10MHz / NTNV |                    |               |        |                         |       |         |
|------------------------------------|--------------------|---------------|--------|-------------------------|-------|---------|
| Modulation                         | Frequency<br>(MHz) | RB Allocation |        | Peak-Average Ratio (dB) |       | Verdict |
|                                    |                    | Size          | Offset | Result                  | Limit |         |
| QPSK                               | 707.5              | 50            | 0      | 5.77                    | <=13  | Pass    |
| 16QAM                              | 707.5              | 50            | 0      | 6.49                    | <=13  | Pass    |

# 4.2 Test Graph

## 4.2.1 B12\_10MHz





## 5. Spurious Emission

### 5.1 Test Result

#### 5.1.1 B12\_1.4MHz

| Band: 12 / Bandwidth: 1.4MHz / NTNV |                 |               |        |                     |       |         |
|-------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                          | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                     |                 | Size          | Offset | Result              | Limit |         |
| QPSK                                | 699.7           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     |                 | 6             | 0      | Refer To Test Graph |       | Pass    |
|                                     | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     | 715.3           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                     |                 |               | 5      | Refer To Test Graph |       | Pass    |
|                                     |                 | 6             | 0      | Refer To Test Graph |       | Pass    |

#### 5.1.2 B12\_3MHz

| Band: 12 / Bandwidth: 3MHz / NTNV |                 |               |        |                     |       |         |
|-----------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                   |                 | Size          | Offset | Result              | Limit |         |
| QPSK                              | 700.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                   |                 | 15            | 0      | Refer To Test Graph |       | Pass    |
|                                   | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                   | 714.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                   |                 |               | 14     | Refer To Test Graph |       | Pass    |
|                                   |                 | 15            | 0      | Refer To Test Graph |       | Pass    |

#### 5.1.3 B12\_5MHz

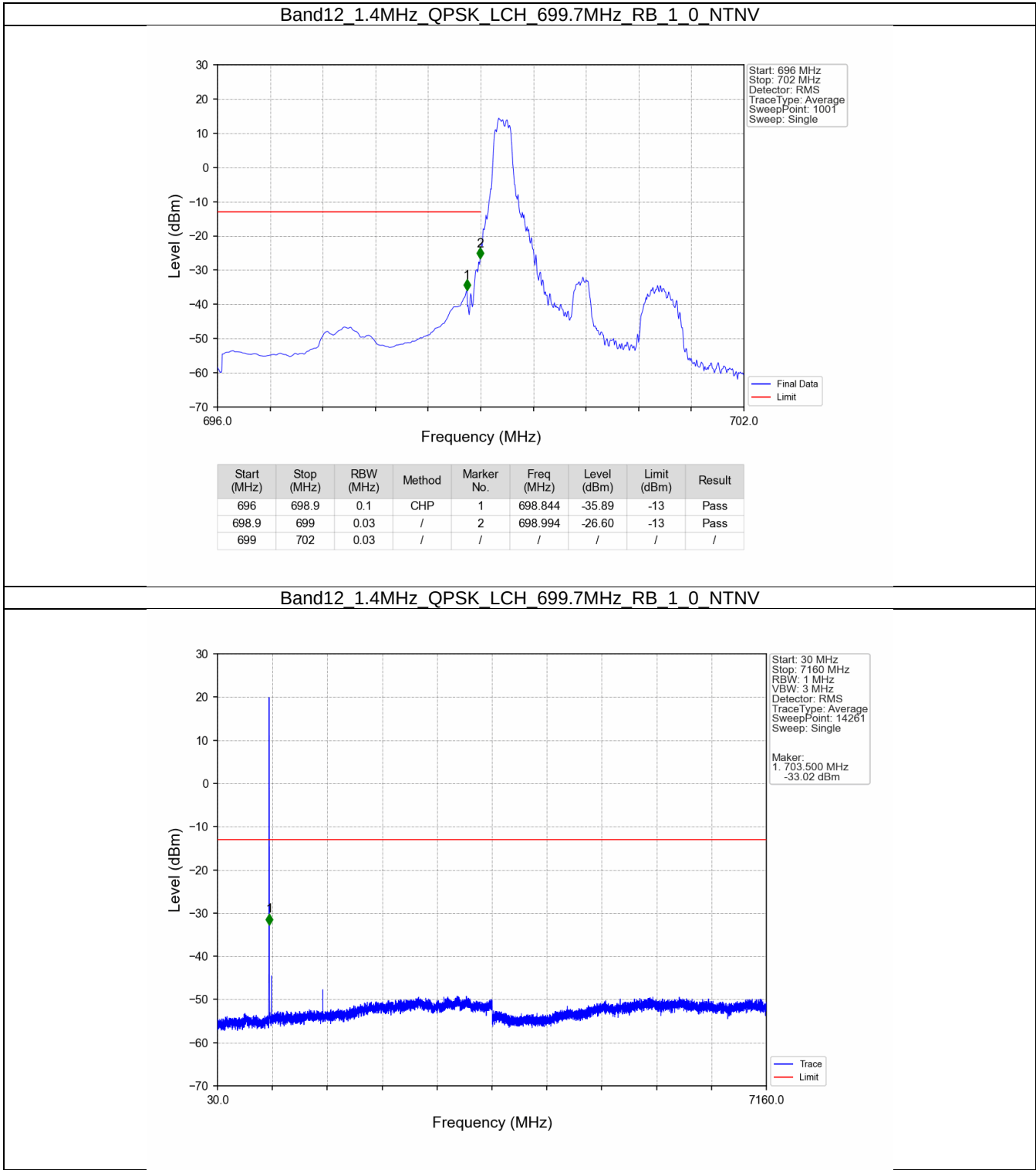
| Band: 12 / Bandwidth: 5MHz / NTNV |                 |               |        |                     |       |         |
|-----------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                        | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                   |                 | Size          | Offset | Result              | Limit |         |
| QPSK                              | 701.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                   |                 | 25            | 0      | Refer To Test Graph |       | Pass    |
|                                   | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                   | 713.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                   |                 |               | 24     | Refer To Test Graph |       | Pass    |
|                                   |                 | 25            | 0      | Refer To Test Graph |       | Pass    |

#### 5.1.4 B12\_10MHz

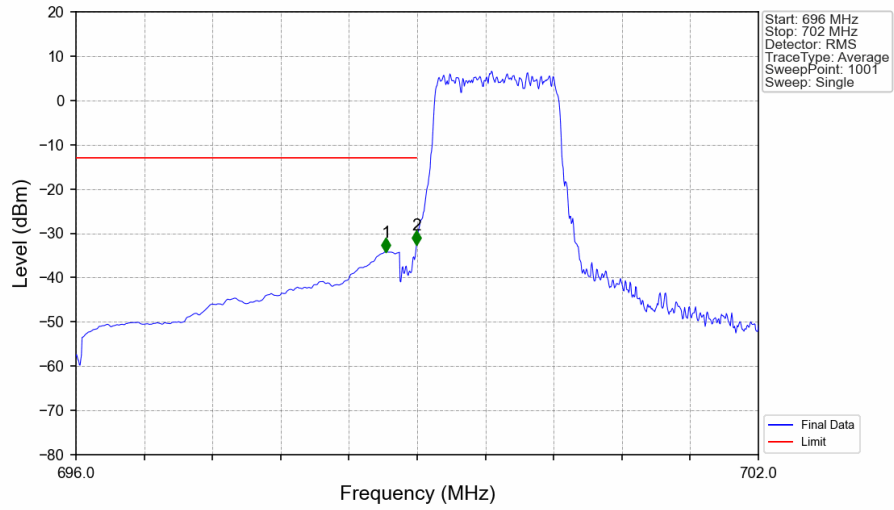
| Band: 12 / Bandwidth: 10MHz / NTNV |                 |               |        |                     |       |         |
|------------------------------------|-----------------|---------------|--------|---------------------|-------|---------|
| Modulation                         | Frequency (MHz) | RB Allocation |        | Spurious Emission   |       | Verdict |
|                                    |                 | Size          | Offset | Result              | Limit |         |
| QPSK                               | 704             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |
|                                    | 707.5           | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    | 711             | 1             | 0      | Refer To Test Graph |       | Pass    |
|                                    |                 |               | 49     | Refer To Test Graph |       | Pass    |
|                                    |                 | 50            | 0      | Refer To Test Graph |       | Pass    |

5.2 Test Graph

5.2.1 B12\_1.4MHz

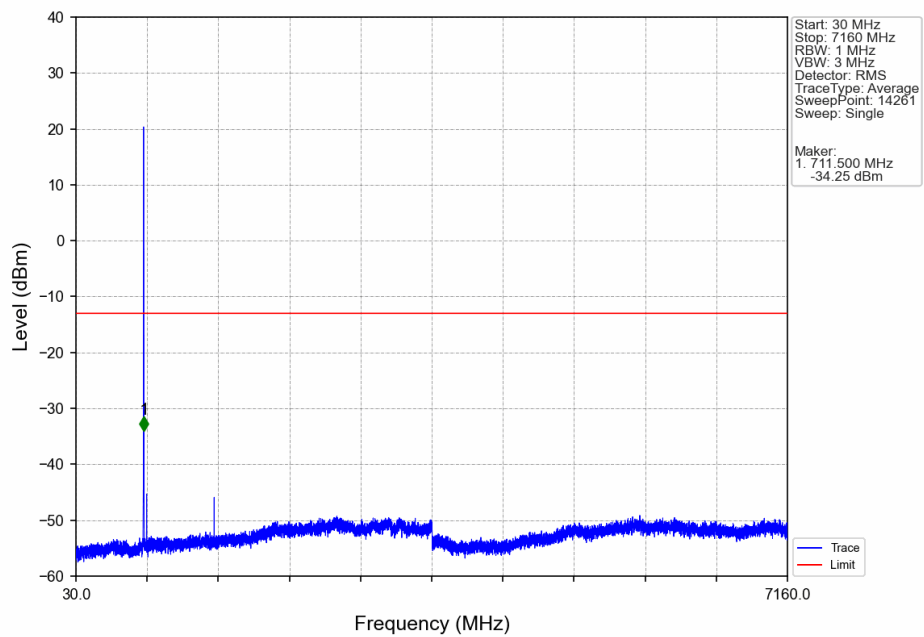


# Band12 1.4MHz QPSK LCH 699.7MHz RB 6 0 NTNV

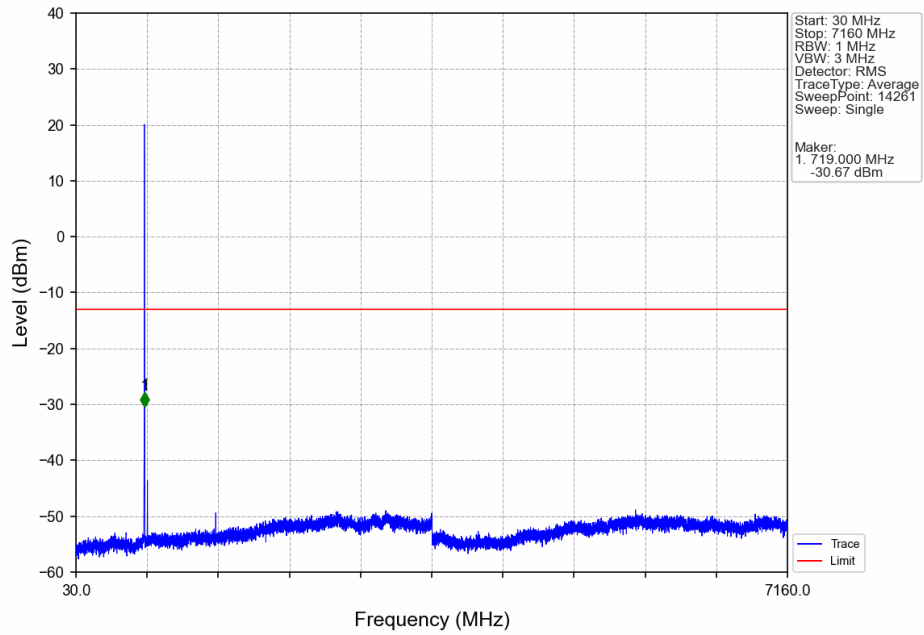


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 696         | 698.9      | 0.1       | CHP    | 1          | 698.724    | -34.15      | -13         | Pass   |
| 698.9       | 699        | 0.03      | /      | 2          | 698.994    | -32.50      | -13         | Pass   |
| 699         | 702        | 0.03      | /      | /          | /          | /           | /           | /      |

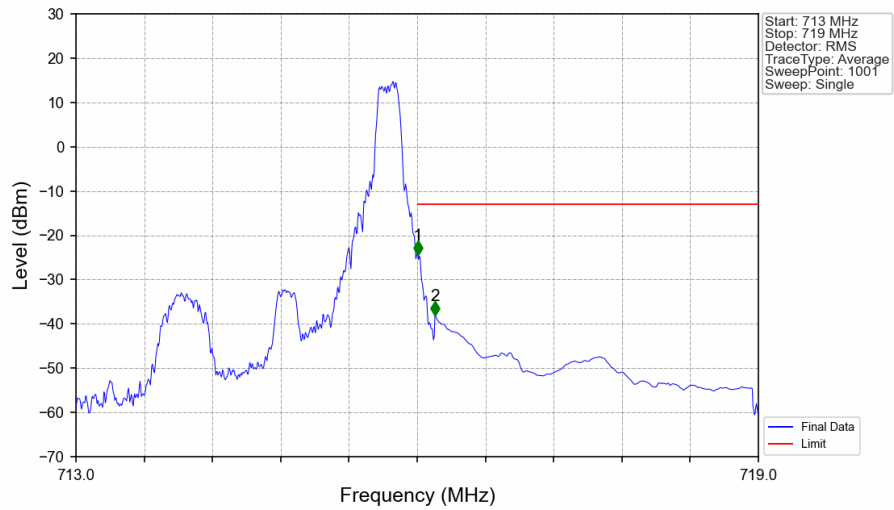
# Band12 1.4MHz QPSK MCH 707.5MHz RB 1 0 NTNV



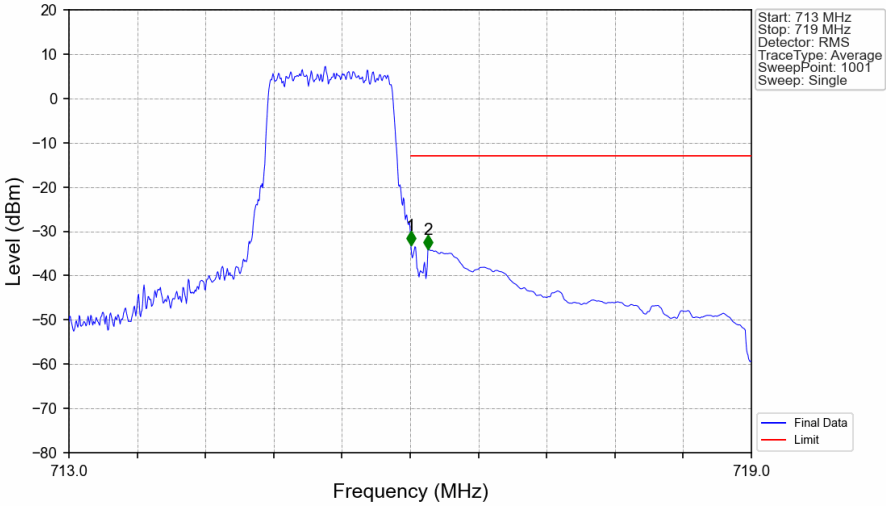
Band12 1.4MHz QPSK HCH 715.3MHz RB 1 0 NTV



Band12 1.4MHz QPSK HCH 715.3MHz RB 1 5 NTV

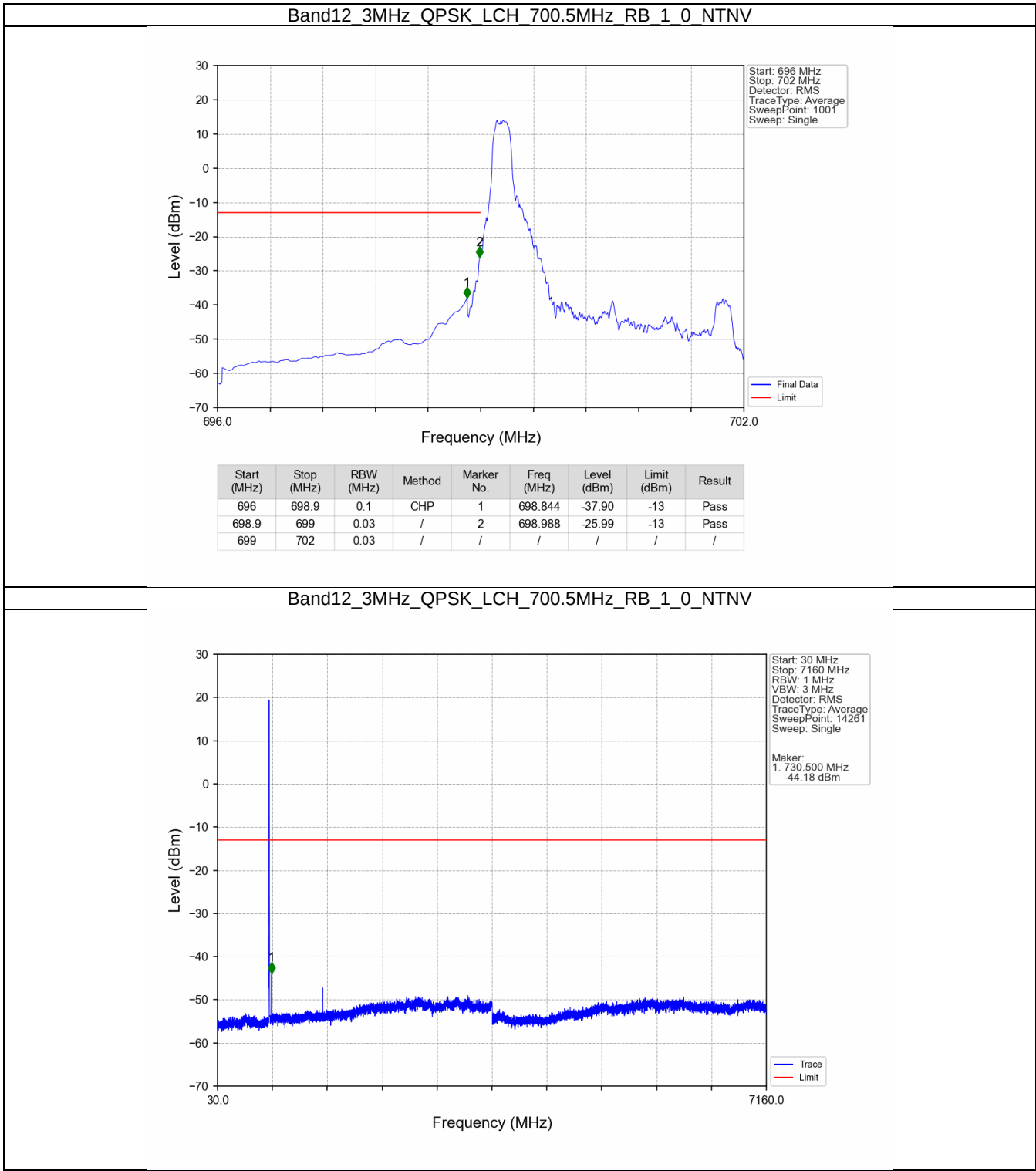


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 713         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.006    | -24.38      | -13         | Pass   |
| 716.1       | 719        | 0.1       | CHP    | 2          | 716.156    | -38.05      | -13         | Pass   |

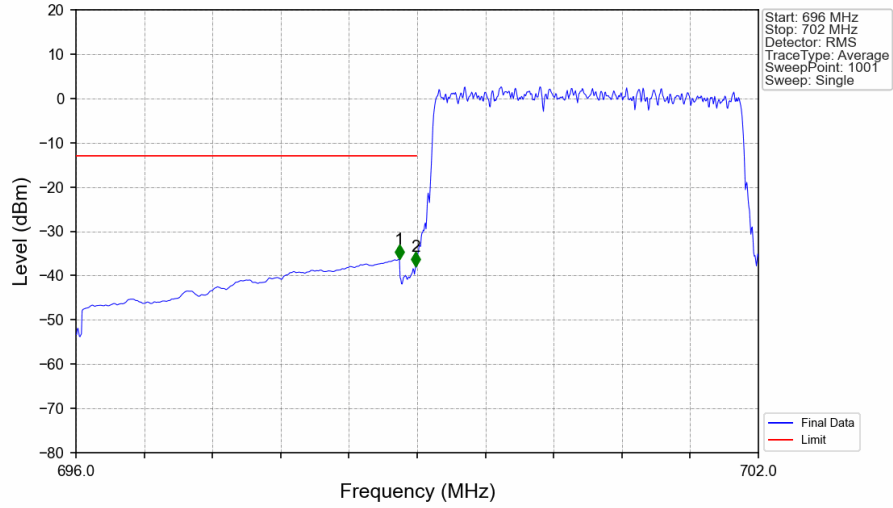


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 713         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.006    | -33.05      | -13         | Pass   |
| 716.1       | 719        | 0.1       | CHP    | 2          | 716.156    | -34.05      | -13         | Pass   |

5.2.2 B12\_3MHz

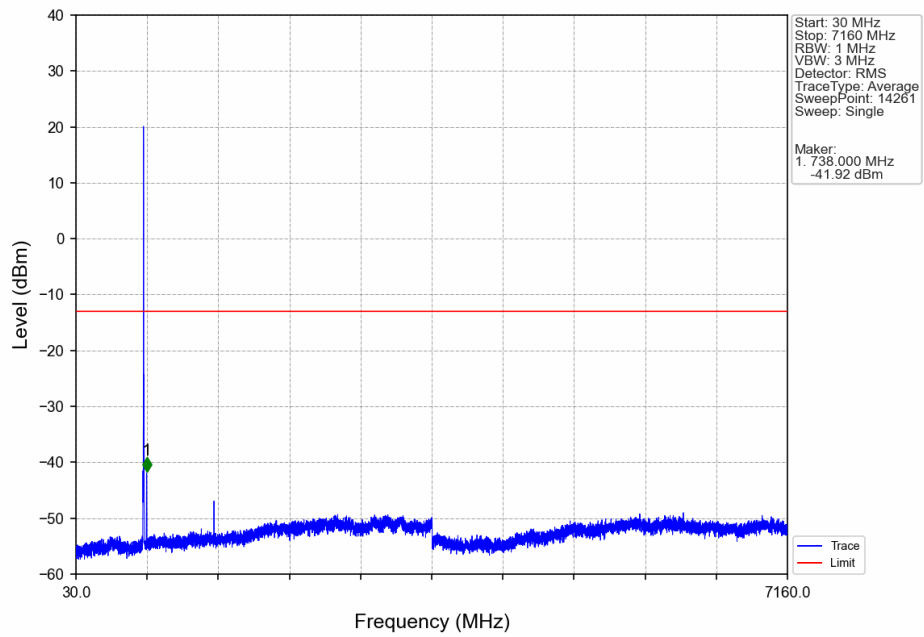


# Band12 3MHz QPSK LCH 700.5MHz RB 15 0 NTNV



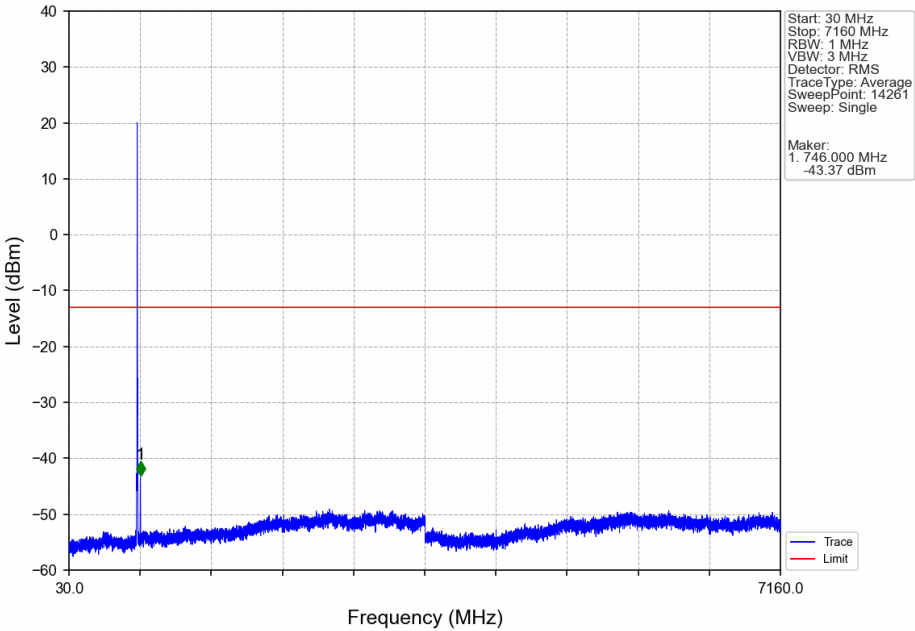
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 696         | 698.9      | 0.1       | CHP    | 1          | 698.844    | -36.27      | -13         | Pass   |
| 698.9       | 699        | 0.03      | /      | 2          | 698.988    | -37.95      | -13         | Pass   |
| 699         | 702        | 0.03      | /      | /          | /          | /           | /           | /      |

# Band12 3MHz QPSK MCH 707.5MHz RB 1 0 NTNV

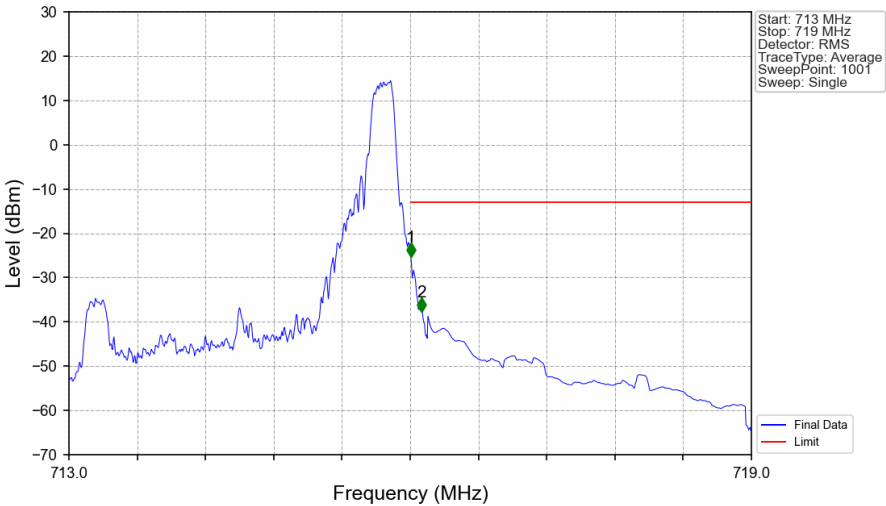




Band12 3MHz QPSK HCH 714.5MHz RB 1 0 NTN

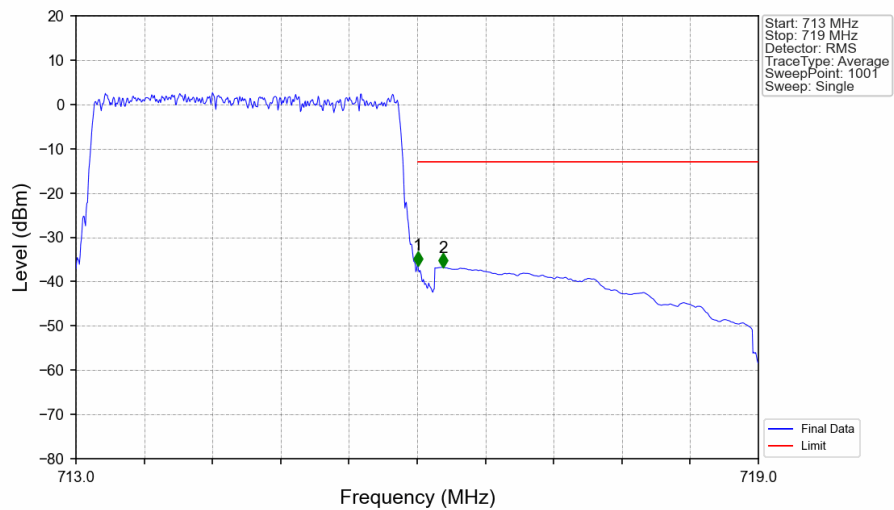


Band12 3MHz QPSK HCH 714.5MHz RB 1 14 NTN



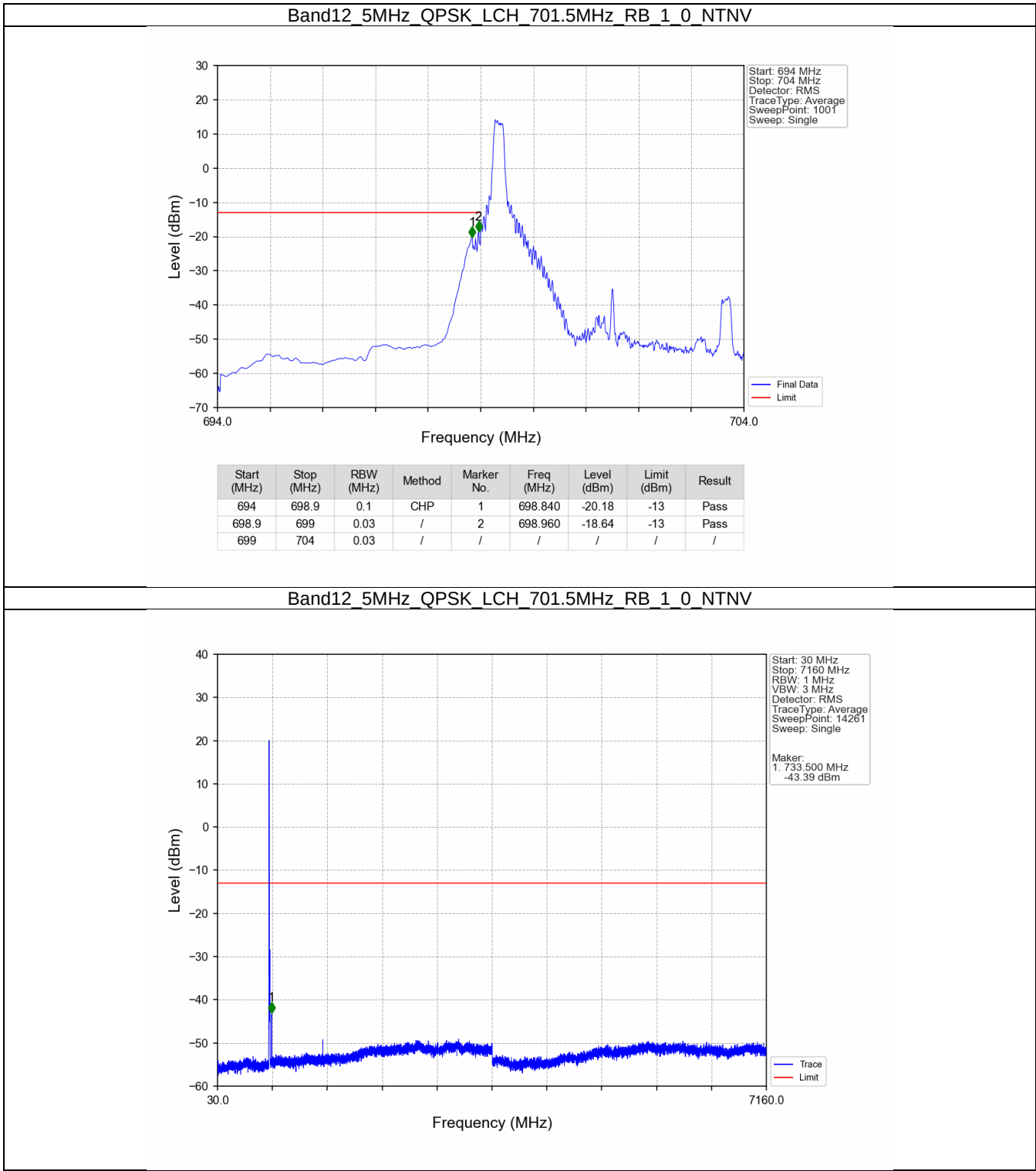
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 713         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.006    | -25.34      | -13         | Pass   |
| 716.1       | 719        | 0.1       | CHP    | 2          | 716.102    | -37.78      | -13         | Pass   |

Band12 3MHz QPSK HCH 714.5MHz RB 15 0 NTV

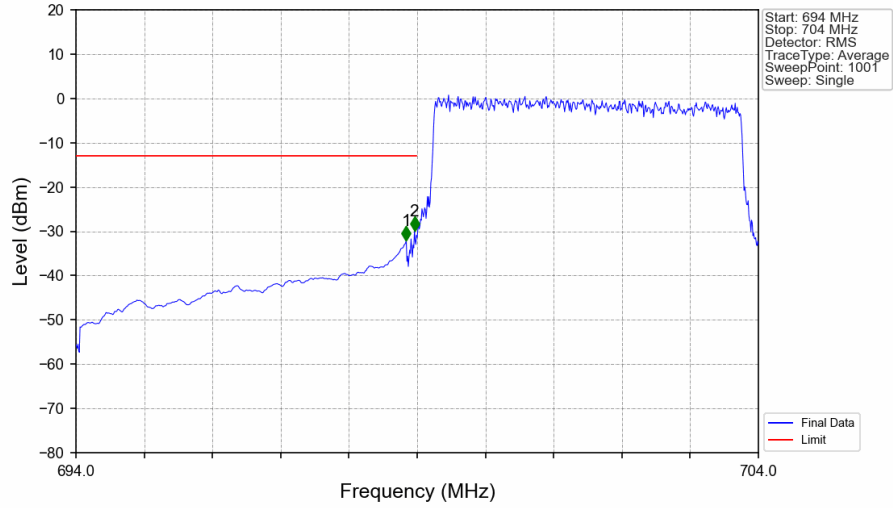


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 713         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.006    | -36.32      | -13         | Pass   |
| 716.1       | 719        | 0.1       | CHP    | 2          | 716.228    | -36.76      | -13         | Pass   |

5.2.3 B12\_5MHz

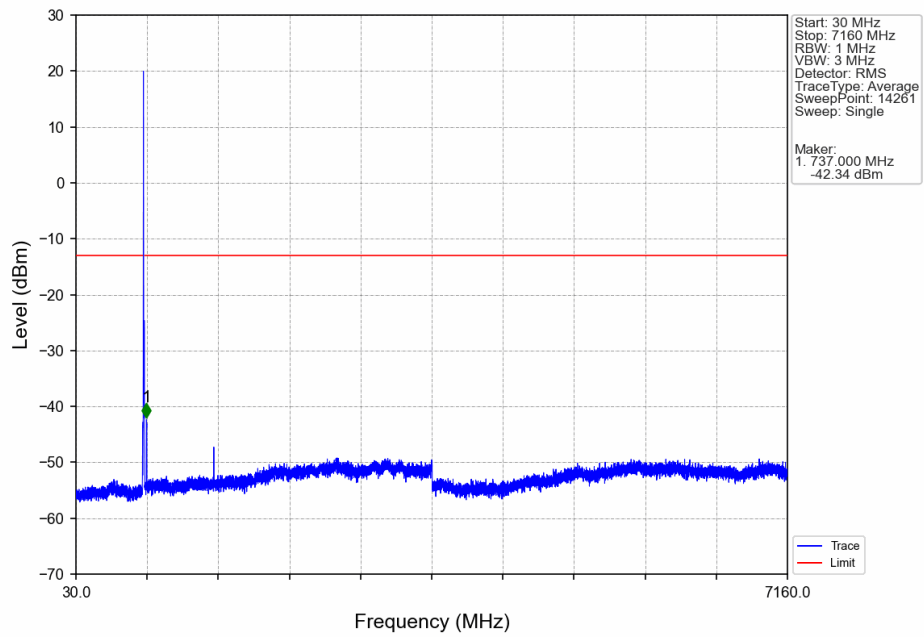


# Band12 5MHz QPSK LCH 701.5MHz RB 25 0 NTNV

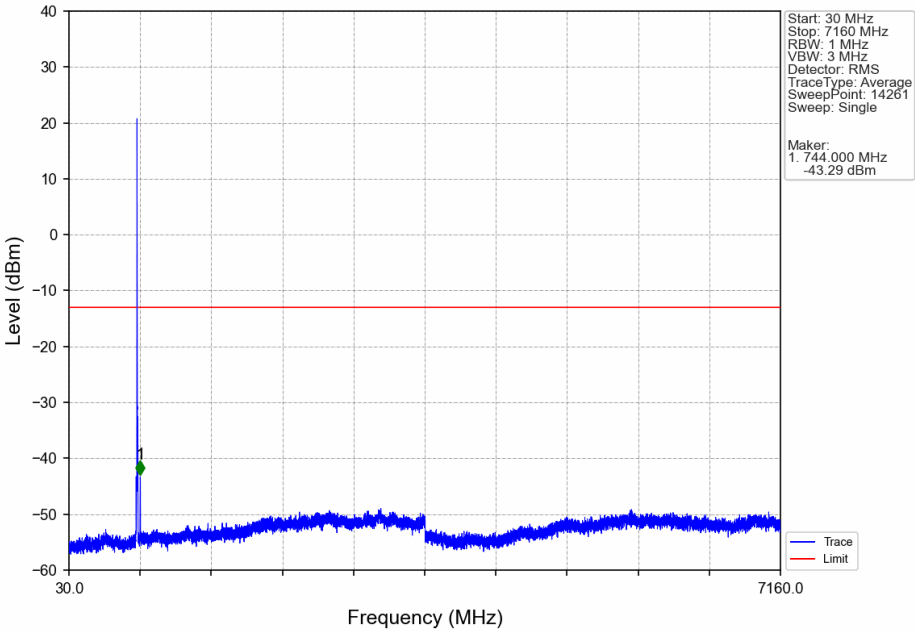


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 694         | 698.9      | 0.1       | CHP    | 1          | 698.840    | -32.11      | -13         | Pass   |
| 698.9       | 699        | 0.03      | /      | 2          | 698.960    | -29.91      | -13         | Pass   |
| 699         | 704        | 0.03      | /      | /          | /          | /           | /           | /      |

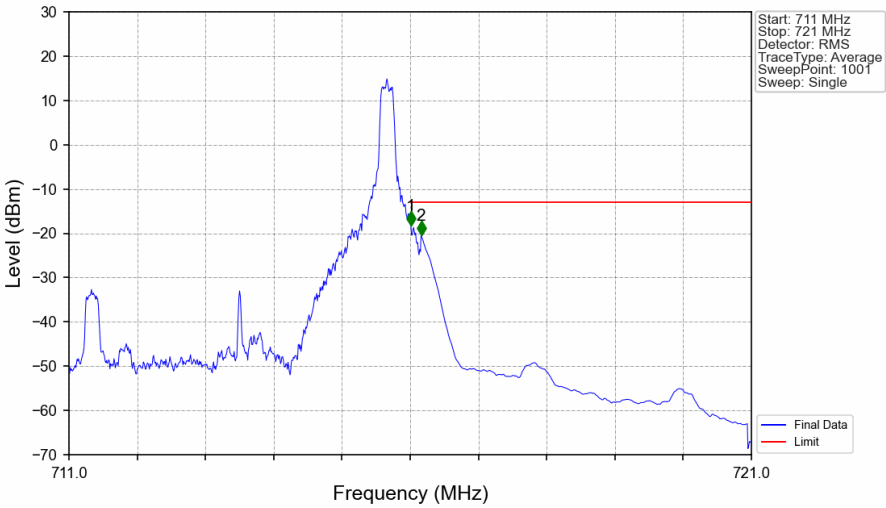
# Band12 5MHz QPSK MCH 707.5MHz RB 1 0 NTNV



Band12 5MHz QPSK HCH 713.5MHz RB 1 0 NTN

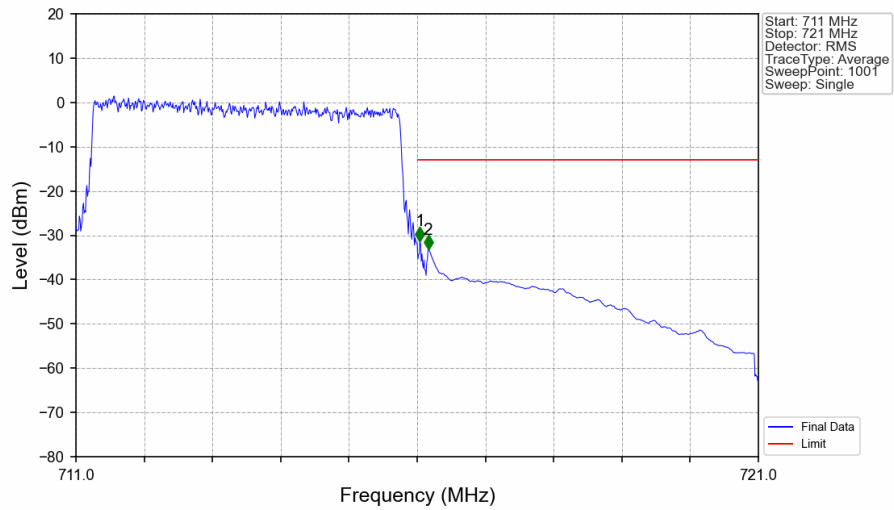


Band12 5MHz QPSK HCH 713.5MHz RB 1 24 NTN



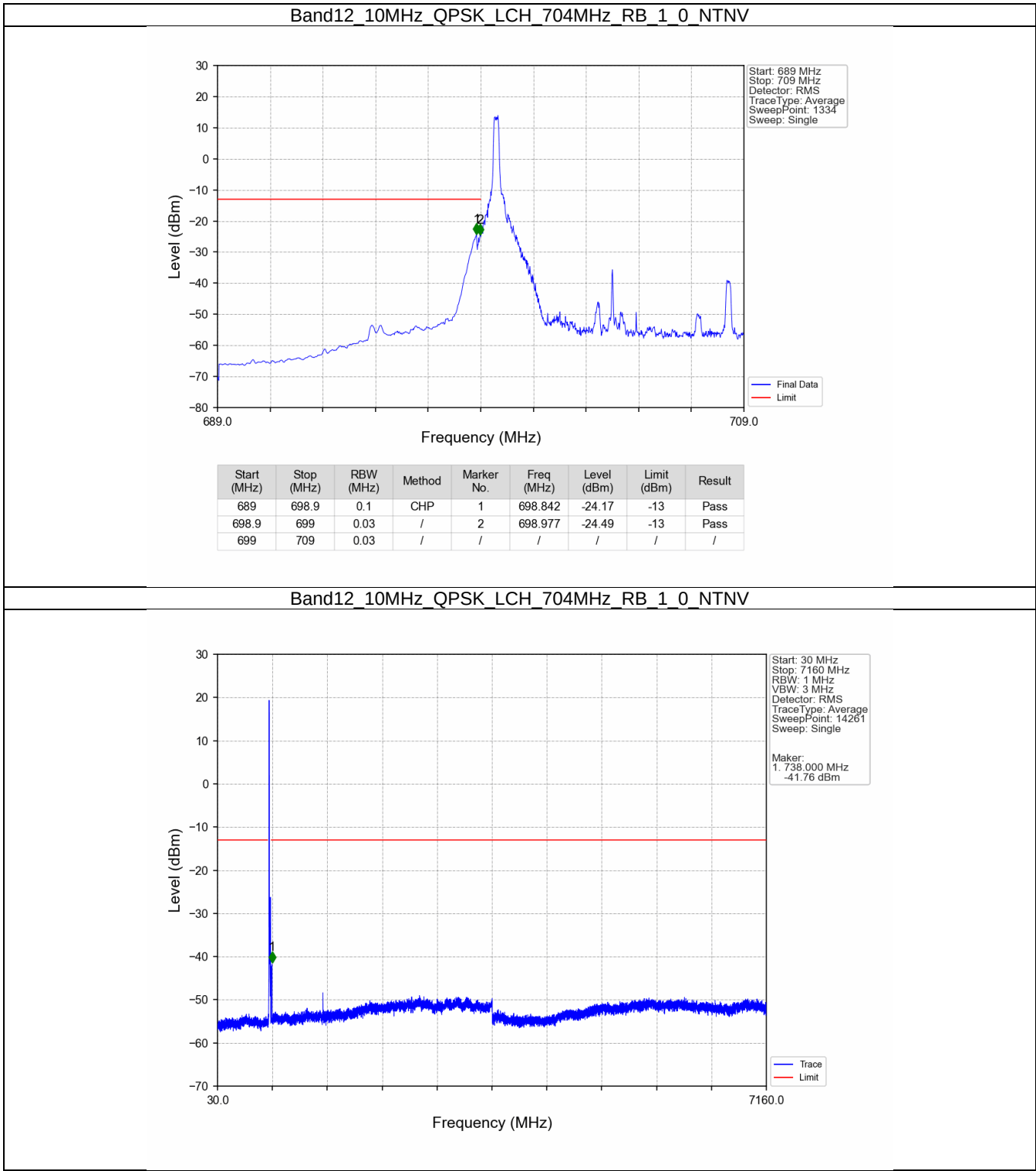
| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 711         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.010    | -18.22      | -13         | Pass   |
| 716.1       | 721        | 0.1       | CHP    | 2          | 716.160    | -20.38      | -13         | Pass   |

Band12 5MHz QPSK HCH 713.5MHz RB 25 0 NTV

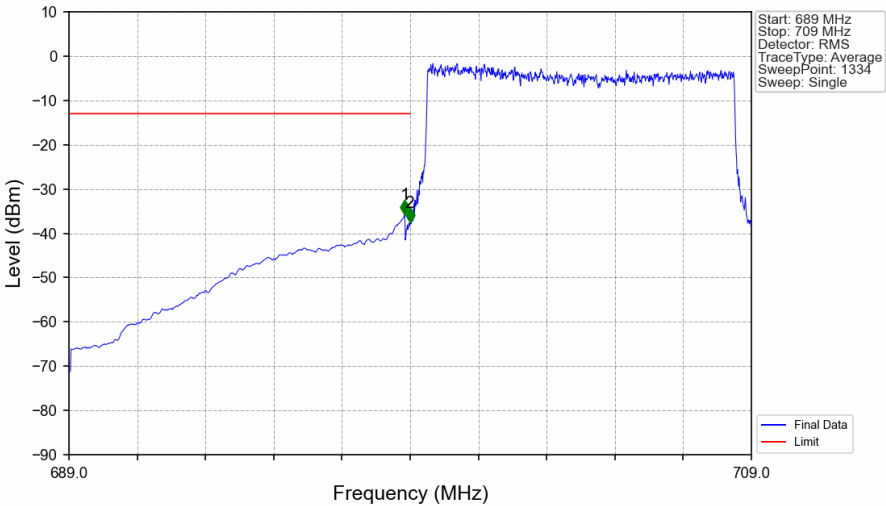


| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 711         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.040    | -31.22      | -13         | Pass   |
| 716.1       | 721        | 0.1       | CHP    | 2          | 716.160    | -33.12      | -13         | Pass   |

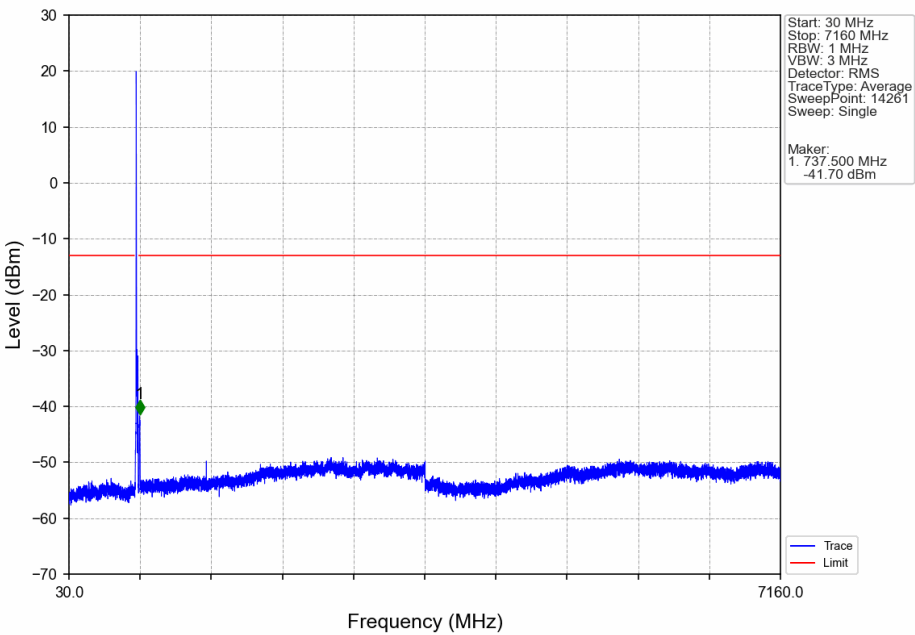
5.2.4 B12\_10MHz



Band12 10MHz QPSK LCH 704MHz RB 50 0 NTNV

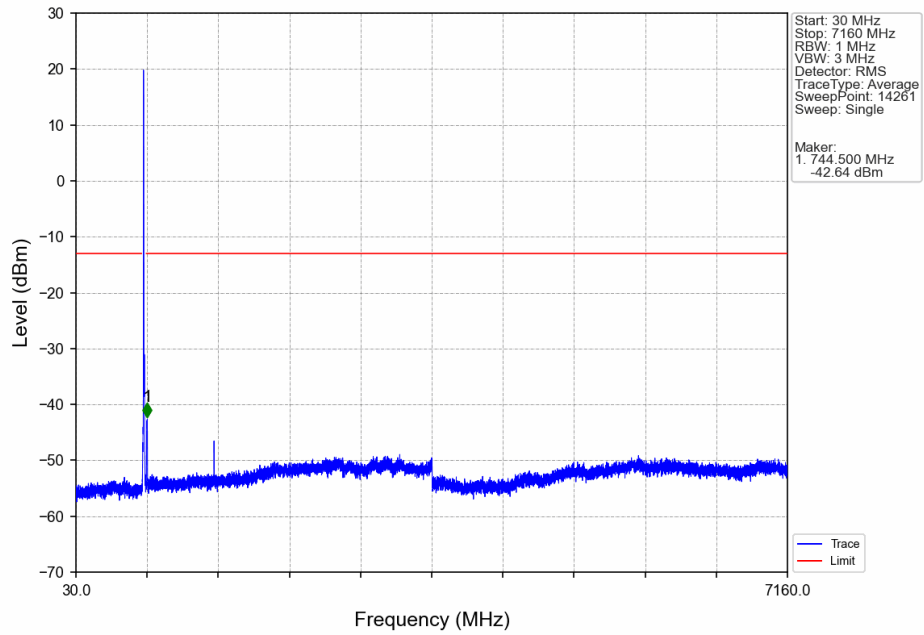


Band12 10MHz QPSK MCH 707.5MHz RB 1 0 NTNV

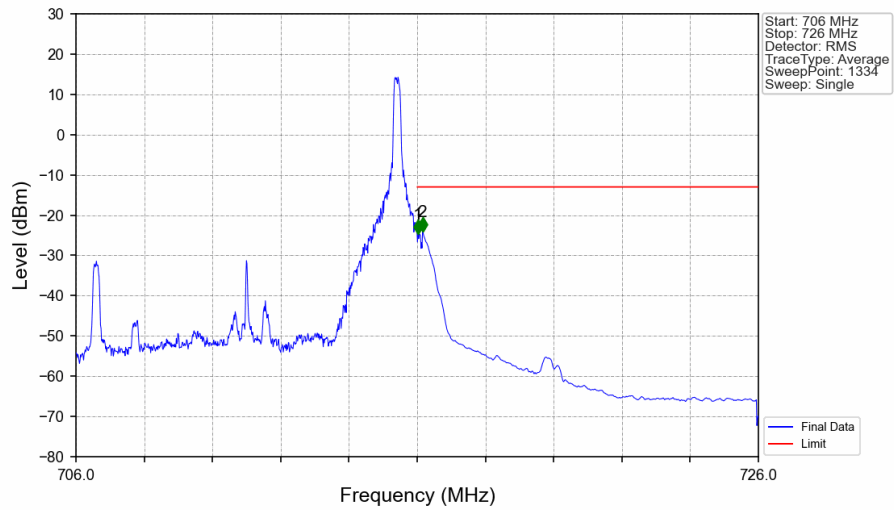




# Band12 10MHz QPSK HCH 711MHz RB 1 0 NTNV

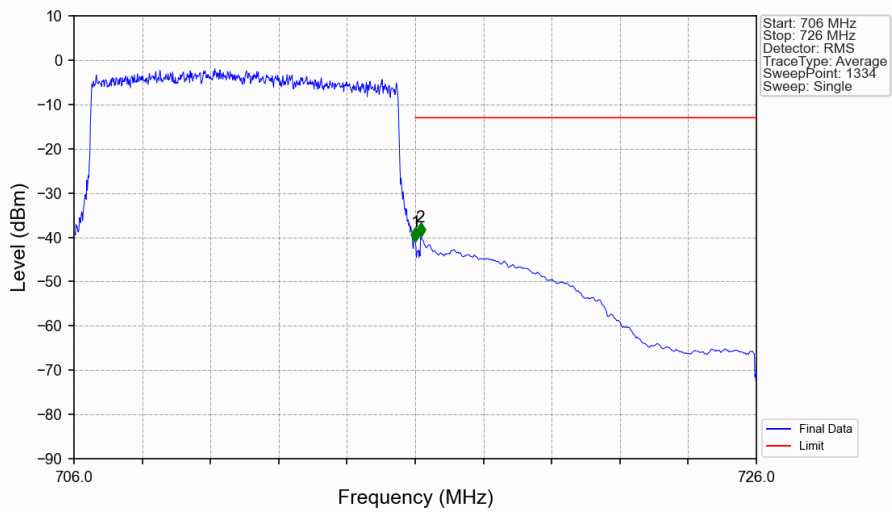


# Band12 10MHz QPSK HCH 711MHz RB 1 49 NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 706         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.023    | -24.57      | -13         | Pass   |
| 716.1       | 726        | 0.1       | CHP    | 2          | 716.158    | -23.98      | -13         | Pass   |

Band12 10MHz QPSK HCH 711MHz RB 50 0 NTNV



| Start (MHz) | Stop (MHz) | RBW (MHz) | Method | Marker No. | Freq (MHz) | Level (dBm) | Limit (dBm) | Result |
|-------------|------------|-----------|--------|------------|------------|-------------|-------------|--------|
| 706         | 716        | 0.03      | /      | /          | /          | /           | /           | /      |
| 716         | 716.1      | 0.03      | /      | 1          | 716.008    | -40.98      | -13         | Pass   |
| 716.1       | 726        | 0.1       | CHP    | 2          | 716.158    | -39.82      | -13         | Pass   |

-The End-