



| Table of Contents                                             | Page |
|---------------------------------------------------------------|------|
| E1. Conducted Output Power                                    | 2    |
| E2. Peak-To-Average Ratio                                     | 5    |
| E3. Transmitter Radiated Power (EIRP/ERP)                     | 8    |
| E4. Occupied Bandwidth(99% Occupied Bandwidth/26dB Bandwidth) | 10   |
| E5. Frequency Stability                                       | 17   |
| E6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS                   | 18   |
| E7. BAND EDGE                                                 | 24   |
| E8. Field Strength of Spurious Radiation Measurement          | 40   |



**E1. CONDUCTED OUTPUT POWER**

| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 1.4                                    | 1       | 0         | QPSK   | 23.47  | 23.69  | 23.71   |
| 1.4                                    | 1       | 2         |        | 23.24  | 23.42  | 23.47   |
| 1.4                                    | 1       | 5         |        | 23.04  | 23.16  | 23.25   |
| 1.4                                    | 3       | 0         |        | 22.81  | 22.92  | 23.04   |
| 1.4                                    | 3       | 1         |        | 22.57  | 22.71  | 22.83   |
| 1.4                                    | 3       | 2         |        | 22.33  | 22.47  | 22.53   |
| 1.4                                    | 6       | 0         |        | 22.06  | 22.22  | 22.32   |
| 1.4                                    | 1       | 0         | 16-QAM | 23.25  | 23.41  | 23.42   |
| 1.4                                    | 1       | 2         |        | 22.98  | 23.14  | 23.22   |
| 1.4                                    | 1       | 5         |        | 22.69  | 22.86  | 23.01   |
| 1.4                                    | 3       | 0         |        | 22.40  | 22.62  | 22.79   |
| 1.4                                    | 3       | 1         |        | 22.15  | 22.39  | 22.56   |
| 1.4                                    | 3       | 2         |        | 21.87  | 22.10  | 22.29   |
| 1.4                                    | 6       | 0         |        | 21.64  | 21.84  | 22.05   |
| 3                                      | 1       | 0         | QPSK   | 23.62  | 23.75  | 23.89   |
| 3                                      | 1       | 7         |        | 23.36  | 23.46  | 23.62   |
| 3                                      | 1       | 14        |        | 23.07  | 23.23  | 23.32   |
| 3                                      | 8       | 0         |        | 22.83  | 22.99  | 23.06   |
| 3                                      | 8       | 4         |        | 22.56  | 22.74  | 22.84   |
| 3                                      | 8       | 7         |        | 22.36  | 22.54  | 22.55   |
| 3                                      | 15      | 0         |        | 22.11  | 22.28  | 22.31   |
| 3                                      | 1       | 0         | 16-QAM | 23.33  | 23.49  | 23.64   |
| 3                                      | 1       | 7         |        | 23.11  | 23.24  | 23.36   |
| 3                                      | 1       | 14        |        | 22.85  | 23.02  | 23.12   |
| 3                                      | 8       | 0         |        | 22.57  | 22.76  | 22.87   |
| 3                                      | 8       | 4         |        | 22.37  | 22.54  | 22.58   |
| 3                                      | 8       | 7         |        | 22.10  | 22.31  | 22.29   |
| 3                                      | 15      | 0         |        | 21.84  | 22.01  | 22.03   |



| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 5                                      | 1       | 0         | QPSK   | 23.75  | 23.89  | 23.96   |
| 5                                      | 1       | 12        |        | 23.48  | 23.66  | 23.70   |
| 5                                      | 1       | 24        |        | 23.28  | 23.38  | 23.40   |
| 5                                      | 12      | 0         |        | 23.08  | 23.16  | 23.14   |
| 5                                      | 12      | 6         |        | 22.87  | 22.86  | 22.88   |
| 5                                      | 12      | 11        |        | 22.58  | 22.62  | 22.66   |
| 5                                      | 25      | 0         |        | 22.35  | 22.33  | 22.38   |
| 5                                      | 1       | 0         | 16-QAM | 23.49  | 23.61  | 23.73   |
| 5                                      | 1       | 12        |        | 23.27  | 23.33  | 23.47   |
| 5                                      | 1       | 24        |        | 22.98  | 23.09  | 23.19   |
| 5                                      | 12      | 0         |        | 22.74  | 22.84  | 22.90   |
| 5                                      | 12      | 6         |        | 22.47  | 22.59  | 22.64   |
| 5                                      | 12      | 11        |        | 22.27  | 22.39  | 22.40   |
| 5                                      | 25      | 0         |        | 22.03  | 22.10  | 22.12   |
| 10                                     | 1       | 0         | QPSK   | 23.88  | 23.95  | 24.02   |
| 10                                     | 1       | 24        |        | 23.64  | 23.71  | 23.80   |
| 10                                     | 1       | 49        |        | 23.35  | 23.47  | 23.58   |
| 10                                     | 25      | 0         |        | 23.08  | 23.27  | 23.37   |
| 10                                     | 25      | 12        |        | 22.83  | 23.00  | 23.14   |
| 10                                     | 25      | 24        |        | 22.58  | 22.78  | 22.89   |
| 10                                     | 50      | 0         |        | 22.28  | 22.57  | 22.67   |
| 10                                     | 1       | 0         | 16-QAM | 23.65  | 23.67  | 23.75   |
| 10                                     | 1       | 24        |        | 23.40  | 23.45  | 23.48   |
| 10                                     | 1       | 49        |        | 23.14  | 23.20  | 23.25   |
| 10                                     | 25      | 0         |        | 22.93  | 22.99  | 23.04   |
| 10                                     | 25      | 12        |        | 22.72  | 22.73  | 22.82   |
| 10                                     | 25      | 24        |        | 22.52  | 22.44  | 22.57   |
| 10                                     | 50      | 0         |        | 22.31  | 22.15  | 22.34   |



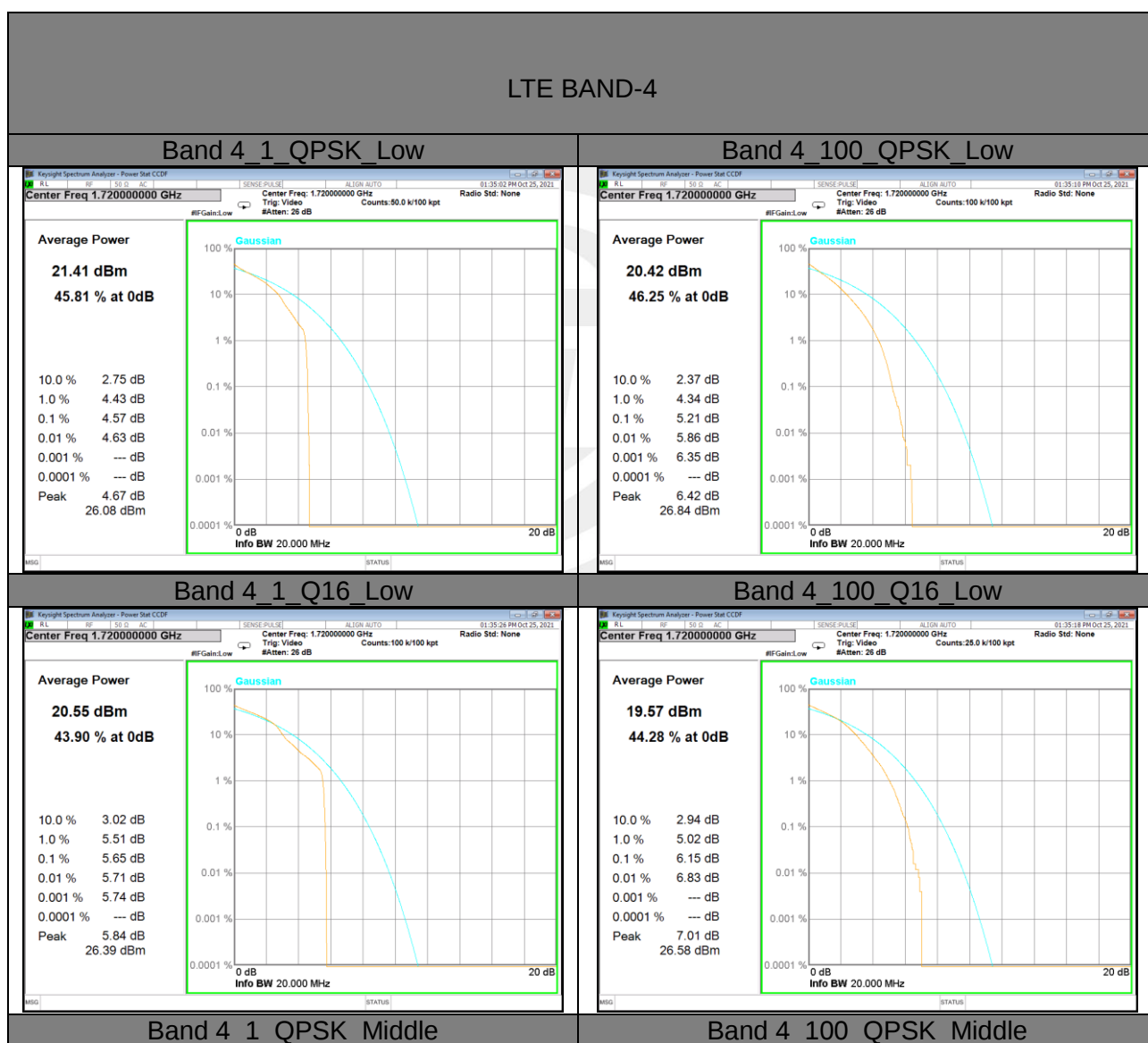
| LTE Band 4 Maximum Average Power [dBm] |         |           |        |        |        |         |
|----------------------------------------|---------|-----------|--------|--------|--------|---------|
| BW [MHz]                               | RB Size | RB Offset | Mod    | Lowest | Middle | Highest |
| 15                                     | 1       | 0         | QPSK   | 24.06  | 24.09  | 23.13   |
| 15                                     | 1       | 37        |        | 23.77  | 23.83  | 22.90   |
| 15                                     | 1       | 74        |        | 23.56  | 23.62  | 22.62   |
| 15                                     | 36      | 0         |        | 23.31  | 23.40  | 22.32   |
| 15                                     | 36      | 18        |        | 23.05  | 23.16  | 22.09   |
| 15                                     | 36      | 39        |        | 22.78  | 22.90  | 21.82   |
| 15                                     | 75      | 0         |        | 22.57  | 22.62  | 21.54   |
| 15                                     | 1       | 0         | 16-QAM | 23.83  | 23.81  | 22.91   |
| 15                                     | 1       | 38        |        | 23.54  | 23.55  | 22.63   |
| 15                                     | 1       | 75        |        | 23.26  | 23.31  | 22.34   |
| 15                                     | 36      | 0         |        | 22.97  | 23.04  | 22.12   |
| 15                                     | 36      | 18        |        | 22.73  | 22.78  | 21.90   |
| 15                                     | 36      | 39        |        | 22.53  | 22.50  | 21.60   |
| 15                                     | 75      | 0         |        | 22.30  | 22.22  | 21.38   |
| 20                                     | 1       | 0         | QPSK   | 24.58  | 24.61  | 24.79   |
| 20                                     | 1       | 49        |        | 24.34  | 24.38  | 24.51   |
| 20                                     | 1       | 99        |        | 24.05  | 24.12  | 24.30   |
| 20                                     | 50      | 0         |        | 23.85  | 23.91  | 24.03   |
| 20                                     | 50      | 24        |        | 23.64  | 23.61  | 23.75   |
| 20                                     | 50      | 49        |        | 23.44  | 23.39  | 23.49   |
| 20                                     | 100     | 0         |        | 23.16  | 23.17  | 23.22   |
| 20                                     | 1       | 0         | 16-QAM | 24.28  | 24.33  | 24.53   |
| 20                                     | 1       | 49        |        | 24.06  | 24.08  | 24.31   |
| 20                                     | 1       | 99        |        | 23.83  | 23.82  | 24.10   |
| 20                                     | 50      | 0         |        | 23.58  | 23.58  | 23.84   |
| 20                                     | 50      | 24        |        | 23.33  | 23.32  | 23.58   |
| 20                                     | 50      | 49        |        | 23.09  | 23.12  | 23.35   |
| 20                                     | 100     | 0         |        | 22.82  | 22.86  | 23.07   |

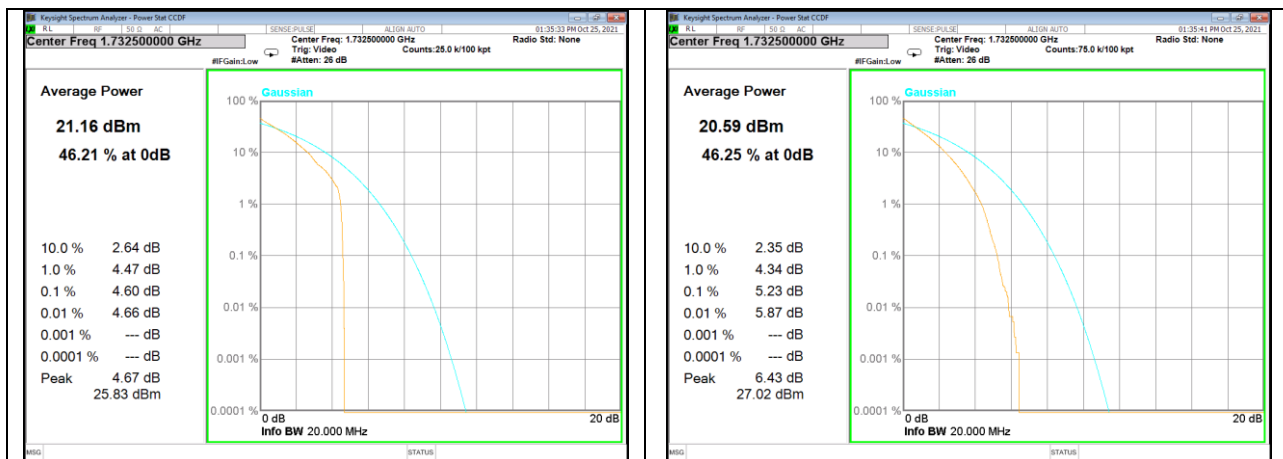


## E2. PEAK-TO-AVERAGE RADIO

| LTE Band 4 PAR [dBm] |         |            |        |        |         |
|----------------------|---------|------------|--------|--------|---------|
| BW [MHz]             | RB Size | Modulation | Lowest | Middle | Highest |
|                      |         |            | P-A    | P-A    | P-A     |
| 20                   | 1       | QPSK       | 4.57   | 4.6    | 4.27    |
| 20                   | 100     |            | 5.21   | 5.23   | 5.24    |
| 20                   | 1       | 16-QAM     | 5.65   | 5.25   | 5.21    |
| 20                   | 100     |            | 6.15   | 6.06   | 6.09    |
| Limit                |         |            | ≤13dB  |        |         |

## LTE BAND-4



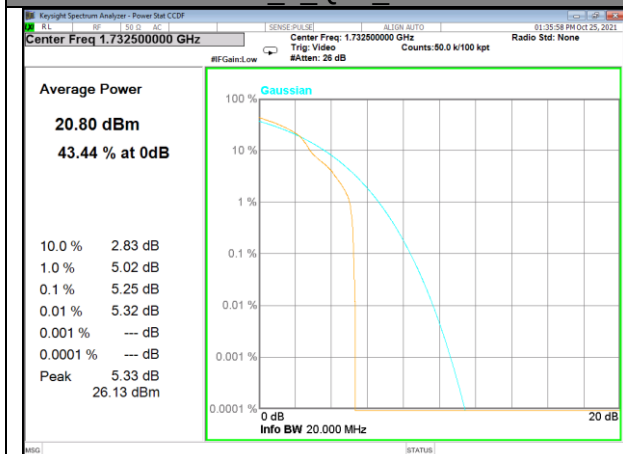




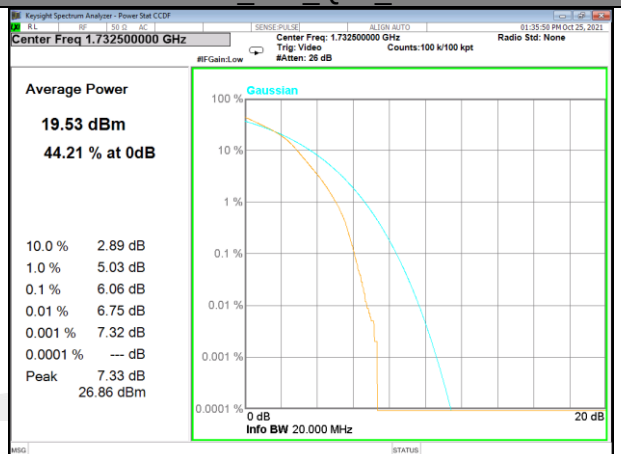
## LTE BAND-4

## LTE BAND-4

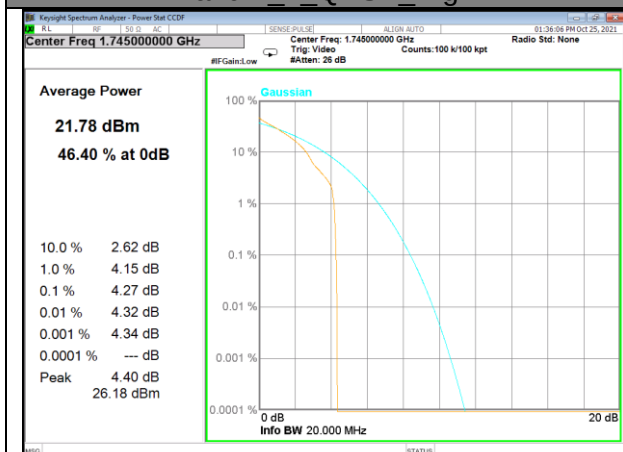
Band 4\_1\_Q16\_Middle



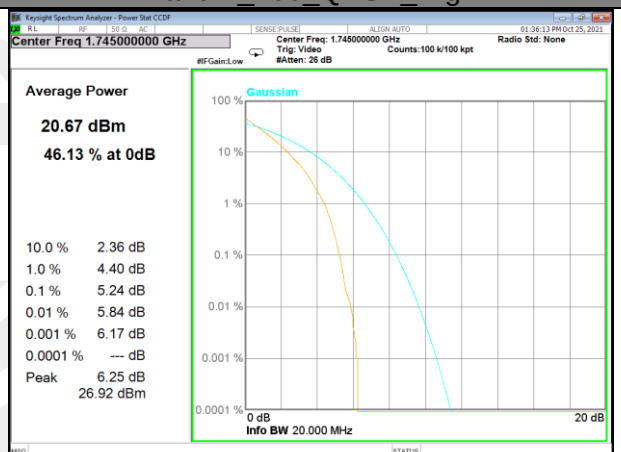
Band 4\_100\_Q16\_Middle



Band 4\_1\_QPSK\_High



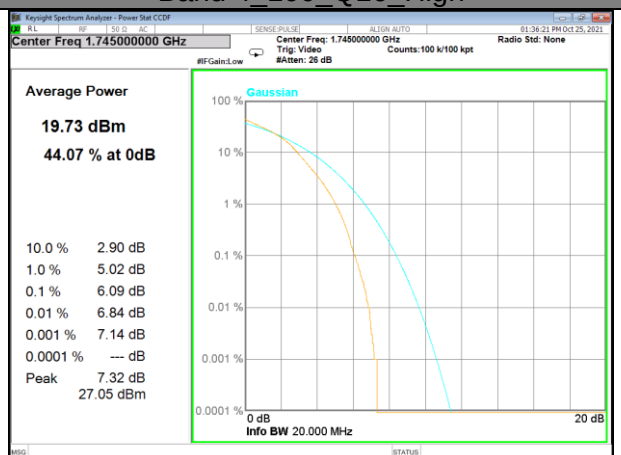
Band 4\_100\_QPSK\_High



Band 4\_1\_Q16\_High



Band 4\_100\_Q16\_High



**E3. TRANSMITTER RADIATED POWER (EIRP/ERP)**

| Radiated Power (EIRP) for LTE Band 4 / 1.4M |               |        |         |                       |               |               |                        |                                 |            |
|---------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                  | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                             | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                        | 1             | 0      | Lowest  | 13.03                 | 2.35          | 10.13         | 20.81                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Middle  | 13.22                 | 2.36          | 10.16         | 21.02                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Highest | 13.08                 | 2.37          | 10.22         | 20.93                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Lowest  | 14.48                 | 2.35          | 10.13         | 22.26                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Middle  | 14.56                 | 2.36          | 10.16         | 22.36                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Highest | 14.5                  | 2.37          | 10.22         | 22.35                  | Vertical                        | Pass       |
| 16QAM                                       | 1             | 0      | Lowest  | 12.74                 | 2.35          | 10.13         | 20.52                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Middle  | 13.02                 | 2.36          | 10.16         | 20.82                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Highest | 13                    | 2.37          | 10.22         | 20.85                  | Horizontal                      | Pass       |
|                                             | 1             | 0      | Lowest  | 14.1                  | 2.35          | 10.13         | 21.88                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Middle  | 14.36                 | 2.36          | 10.16         | 22.16                  | Vertical                        | Pass       |
|                                             | 1             | 0      | Highest | 14.3                  | 2.37          | 10.22         | 22.15                  | Vertical                        | Pass       |
| Limit                                       | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 4 / 3M |               |        |         |                       |               |               |                        |                                 |            |
|-------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                           | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                      | 1             | 0      | Lowest  | 13.1                  | 2.35          | 10.13         | 20.88                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 13.15                 | 2.36          | 10.16         | 20.95                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 13.29                 | 2.37          | 10.22         | 21.14                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.59                 | 2.35          | 10.13         | 22.37                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.61                 | 2.36          | 10.16         | 22.41                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.69                 | 2.37          | 10.22         | 22.54                  | Vertical                        | Pass       |
| 16QAM                                     | 1             | 0      | Lowest  | 12.92                 | 2.35          | 10.13         | 20.70                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 13                    | 2.36          | 10.16         | 20.80                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 13.16                 | 2.37          | 10.22         | 21.01                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.29                 | 2.35          | 10.13         | 22.07                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.41                 | 2.36          | 10.16         | 22.21                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.5                  | 2.37          | 10.22         | 22.35                  | Vertical                        | Pass       |
| Limit                                     | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 4 / 5M |               |        |         |                       |               |               |                        |                                 |            |
|-------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                           | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                      | 1             | 0      | Lowest  | 13.16                 | 2.35          | 10.13         | 20.94                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 13.44                 | 2.36          | 10.16         | 21.24                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 13.51                 | 2.37          | 10.22         | 21.36                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.58                 | 2.35          | 10.13         | 22.36                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.79                 | 2.36          | 10.16         | 22.59                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.87                 | 2.37          | 10.22         | 22.72                  | Vertical                        | Pass       |
| 16QAM                                     | 1             | 0      | Lowest  | 12.99                 | 2.35          | 10.13         | 20.77                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Middle  | 13.15                 | 2.36          | 10.16         | 20.95                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Highest | 13.23                 | 2.37          | 10.22         | 21.08                  | Horizontal                      | Pass       |
|                                           | 1             | 0      | Lowest  | 14.46                 | 2.35          | 10.13         | 22.24                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Middle  | 14.49                 | 2.36          | 10.16         | 22.29                  | Vertical                        | Pass       |
|                                           | 1             | 0      | Highest | 14.66                 | 2.37          | 10.22         | 22.51                  | Vertical                        | Pass       |
| Limit                                     | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |



| Radiated Power (EIRP) for LTE Band 4 / 10M |               |        |         |                       |               |               |                        |                                 |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                       | 1             | 0      | Lowest  | 13.27                 | 2.35          | 10.13         | 21.05                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 13.36                 | 2.36          | 10.16         | 21.16                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 13.44                 | 2.37          | 10.22         | 21.29                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 14.74                 | 2.35          | 10.13         | 22.52                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 14.83                 | 2.36          | 10.16         | 22.63                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 14.81                 | 2.37          | 10.22         | 22.66                  | Vertical                        | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 13.02                 | 2.35          | 10.13         | 20.80                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 13.14                 | 2.36          | 10.16         | 20.94                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 13.2                  | 2.37          | 10.22         | 21.05                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 14.51                 | 2.35          | 10.13         | 22.29                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 14.48                 | 2.36          | 10.16         | 22.28                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 14.66                 | 2.37          | 10.22         | 22.51                  | Vertical                        | Pass       |
| Limit                                      | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |

| Radiated Power (EIRP) for LTE Band 4 / 15M |               |        |         |                       |               |               |                        |                                 |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                       | 1             | 0      | Lowest  | 13.63                 | 2.35          | 10.13         | 21.41                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 13.63                 | 2.36          | 10.16         | 21.43                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 12.59                 | 2.37          | 10.22         | 20.44                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 15.03                 | 2.35          | 10.13         | 22.81                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 15.03                 | 2.36          | 10.16         | 22.83                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.95                 | 2.37          | 10.22         | 21.80                  | Vertical                        | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 13.25                 | 2.35          | 10.13         | 21.03                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 13.44                 | 2.36          | 10.16         | 21.24                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 12.37                 | 2.37          | 10.22         | 20.22                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 14.69                 | 2.35          | 10.13         | 22.47                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 14.79                 | 2.36          | 10.16         | 22.59                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 13.75                 | 2.37          | 10.22         | 21.60                  | Vertical                        | Pass       |
| Limit                                      | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |

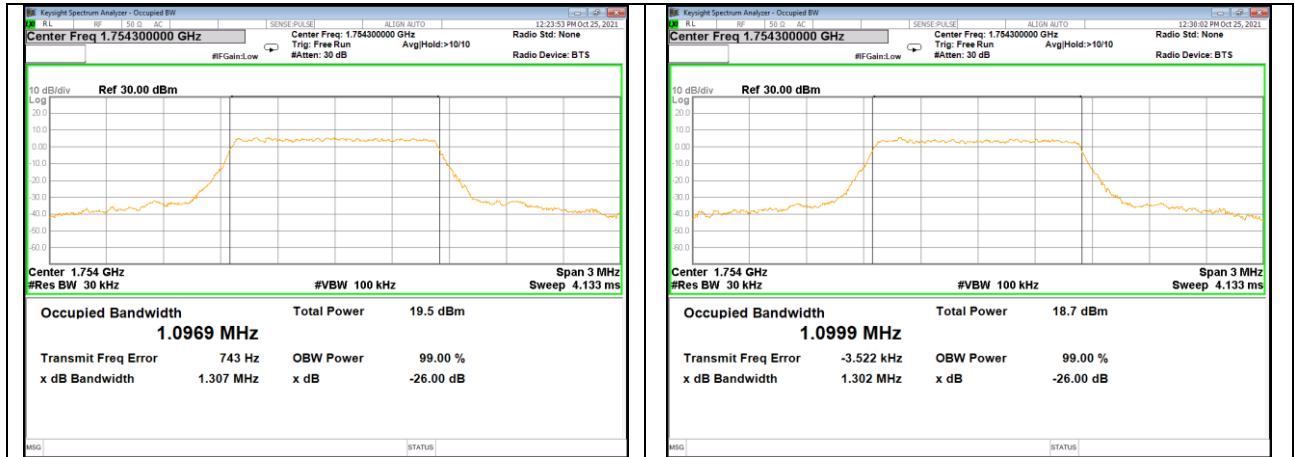
| Radiated Power (EIRP) for LTE Band 4 / 20M |               |        |         |                       |               |               |                        |                                 |            |
|--------------------------------------------|---------------|--------|---------|-----------------------|---------------|---------------|------------------------|---------------------------------|------------|
| Modulation                                 | RB            |        | Channel | Result                |               |               |                        |                                 | Conclusion |
|                                            | Size          | Offset |         | S<br>G.Level<br>(dBm) | Cable<br>loss | Gain<br>(dBi) | PMeas<br>E.I.R.P.(dBm) | Polarization<br>Of Max.<br>EIRP |            |
| QPSK                                       | 1             | 0      | Lowest  | 14.13                 | 2.35          | 10.13         | 21.91                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 14.03                 | 2.36          | 10.16         | 21.83                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 14.13                 | 2.37          | 10.22         | 21.98                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 15.6                  | 2.35          | 10.13         | 23.38                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 15.44                 | 2.36          | 10.16         | 23.24                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 15.59                 | 2.37          | 10.22         | 23.44                  | Vertical                        | Pass       |
| 16QAM                                      | 1             | 0      | Lowest  | 13.87                 | 2.35          | 10.13         | 21.65                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Middle  | 13.8                  | 2.36          | 10.16         | 21.60                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Highest | 13.93                 | 2.37          | 10.22         | 21.78                  | Horizontal                      | Pass       |
|                                            | 1             | 0      | Lowest  | 15.2                  | 2.35          | 10.13         | 22.98                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Middle  | 15.29                 | 2.36          | 10.16         | 23.09                  | Vertical                        | Pass       |
|                                            | 1             | 0      | Highest | 15.43                 | 2.37          | 10.22         | 23.28                  | Vertical                        | Pass       |
| Limit                                      | EIRP<1W=30dBm |        |         |                       |               |               |                        |                                 |            |

**E4. OCCUPIED BANDWIDTH(99% OCCUPIED BANDWIDTH/26DB BANDWIDTH)**

| LTE Band 4 Bandwidth [MHz] |        |        |         |        |         |         |         |
|----------------------------|--------|--------|---------|--------|---------|---------|---------|
| BW [MHz]                   | Mode   | Lowest |         | Middle |         | Highest |         |
|                            |        | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW  | 26dB BW |
| 1.4                        | QPSK   | 1.1045 | 1.281   | 1.096  | 1.293   | 1.0969  | 1.307   |
| 1.4                        | 16-QAM | 1.0927 | 1.281   | 1.0965 | 1.29    | 1.1     | 1.302   |
| 3                          | QPSK   | 2.6877 | 2.917   | 2.684  | 2.928   | 2.683   | 2.91    |
| 3                          | 16-QAM | 2.6795 | 2.937   | 2.681  | 2.935   | 2.68    | 2.927   |
| 5                          | QPSK   | 4.501  | 5.004   | 4.523  | 5.029   | 4.509   | 4.993   |
| 5                          | 16-QAM | 4.525  | 5.031   | 4.5263 | 5.026   | 4.507   | 4.967   |
| 10                         | QPSK   | 8.912  | 9.671   | 8.923  | 9.689   | 8.935   | 9.77    |
| 10                         | 16-QAM | 8.918  | 9.591   | 8.922  | 9.621   | 8.93    | 9.714   |
| 15                         | QPSK   | 13.392 | 14.56   | 13.446 | 14.75   | 13.451  | 14.71   |
| 15                         | 16-QAM | 13.424 | 14.66   | 13.449 | 14.67   | 13.451  | 14.7    |
| 20                         | QPSK   | 17.839 | 19.1    | 17.877 | 19.44   | 17.862  | 19.2    |
| 20                         | 16-QAM | 17.891 | 19.22   | 17.876 | 19.41   | 17.857  | 19.28   |

## LTE BAND-4







## LTE BAND-4

## LTE BAND-4





## LTE BAND-4

## LTE BAND-4





## LTE BAND-4

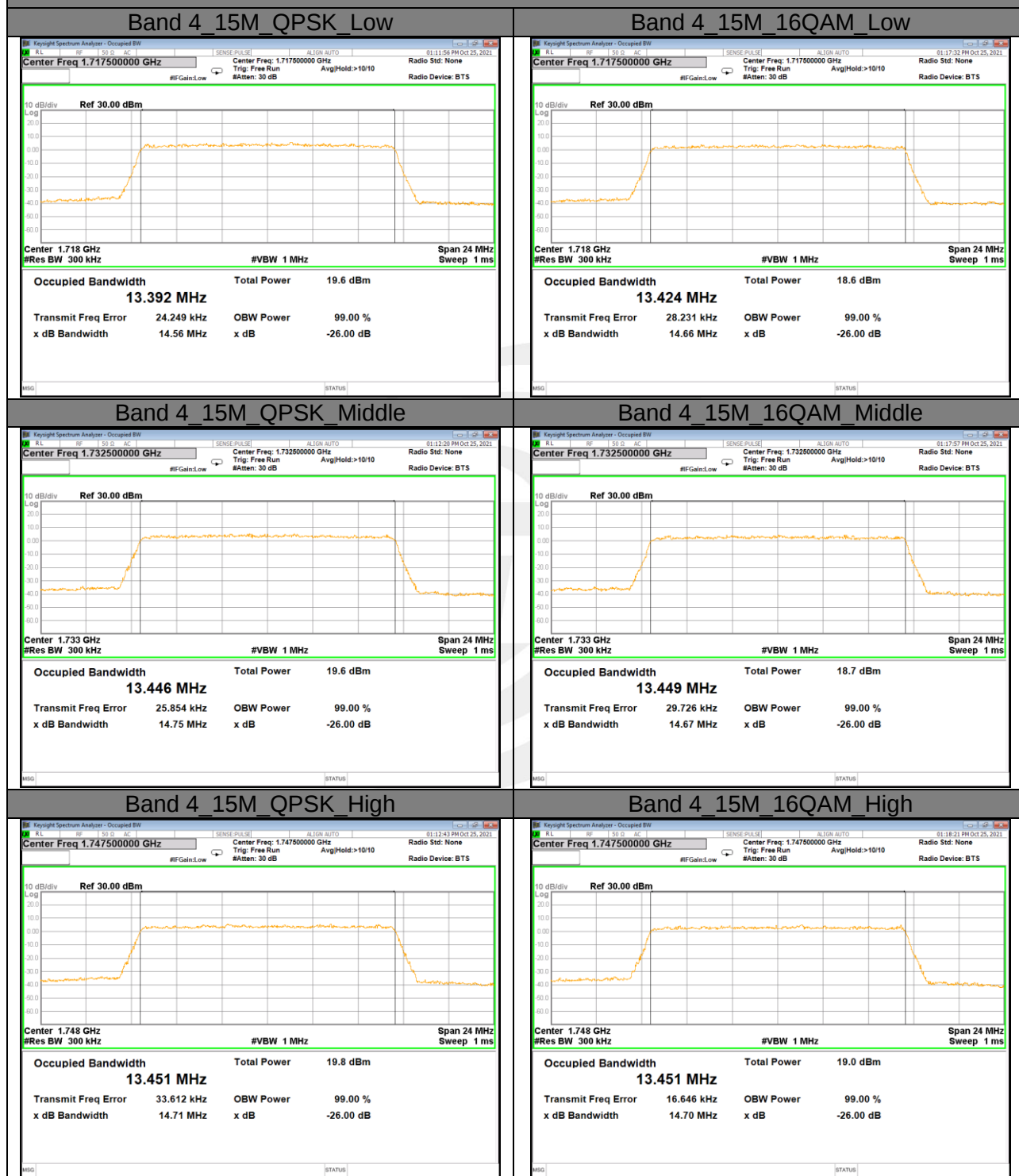
## LTE BAND-4





## LTE BAND-4

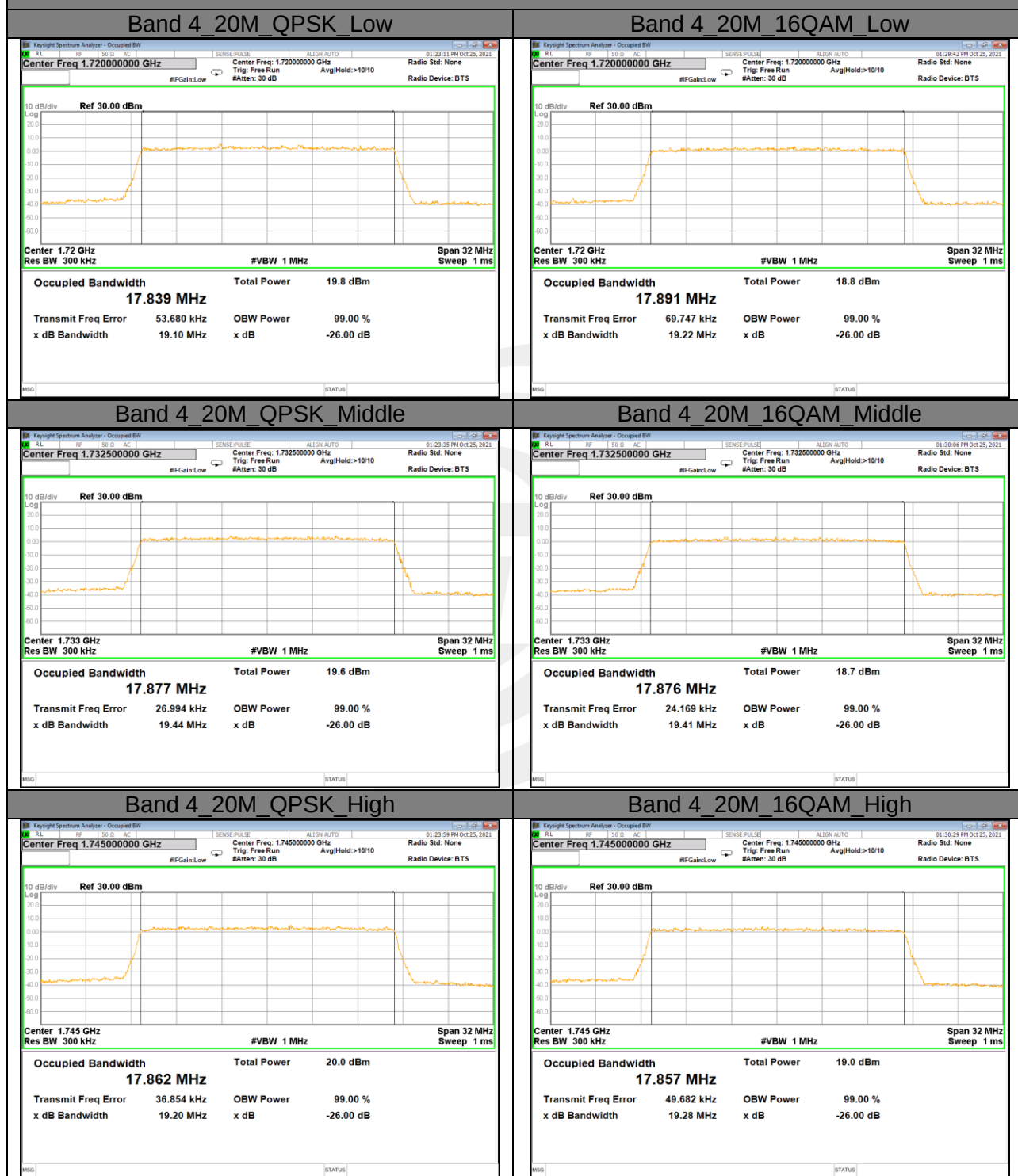
## LTE BAND-4





## LTE BAND-4

## LTE BAND-4



**E5. FREQUENCY STABILITY**

| LTE Band 4 (QPSK) / 1733MHz / BW10M |                 |            |            |        |        |
|-------------------------------------|-----------------|------------|------------|--------|--------|
| Temperature (°C)                    | Voltage         | Freq. Dev. | Freq. Dev. | Limit  | Result |
|                                     | (Volt)          | (Hz)       | (ppm)      |        |        |
| 50                                  | Normal Voltage  | 35.08      | 0.020      | 2.5ppm | PASS   |
| 40                                  |                 | 12.62      | 0.007      |        |        |
| 30                                  |                 | 16.97      | 0.010      |        |        |
| 20                                  |                 | 12.74      | 0.007      |        |        |
| 10                                  |                 | 29.06      | 0.017      |        |        |
| 0                                   |                 | 32.80      | 0.019      |        |        |
| -10                                 |                 | 26.28      | 0.015      |        |        |
| -20                                 |                 | 34.19      | 0.020      |        |        |
| -30                                 |                 | 32.86      | 0.019      |        |        |
| 20                                  | Maximum Voltage | 31.02      | 0.018      |        |        |
| 20                                  | BEP             | 13.36      | 0.008      |        |        |

| LTE Band 4 (QPSK) / 1733MHz / BW20M |                 |            |            |        |        |
|-------------------------------------|-----------------|------------|------------|--------|--------|
| Temperature (°C)                    | Voltage         | Freq. Dev. | Freq. Dev. | Limit  | Result |
|                                     | (Volt)          | (Hz)       | (ppm)      |        |        |
| 50                                  | Normal Voltage  | 29.44      | 0.017      | 2.5ppm | PASS   |
| 40                                  |                 | 28.41      | 0.016      |        |        |
| 30                                  |                 | 32.12      | 0.019      |        |        |
| 20                                  |                 | 36.24      | 0.021      |        |        |
| 10                                  |                 | 12.25      | 0.007      |        |        |
| 0                                   |                 | 36.38      | 0.021      |        |        |
| -10                                 |                 | 24.85      | 0.014      |        |        |
| -20                                 |                 | 15.63      | 0.009      |        |        |
| -30                                 |                 | 32.03      | 0.018      |        |        |
| 20                                  | Maximum Voltage | 13.44      | 0.008      |        |        |
| 20                                  | BEP             | 23.38      | 0.013      |        |        |



## E6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS

## LTE BAND-4

## LTE BAND-4





## LTE BAND-4

## LTE BAND-4





## LTE BAND-4

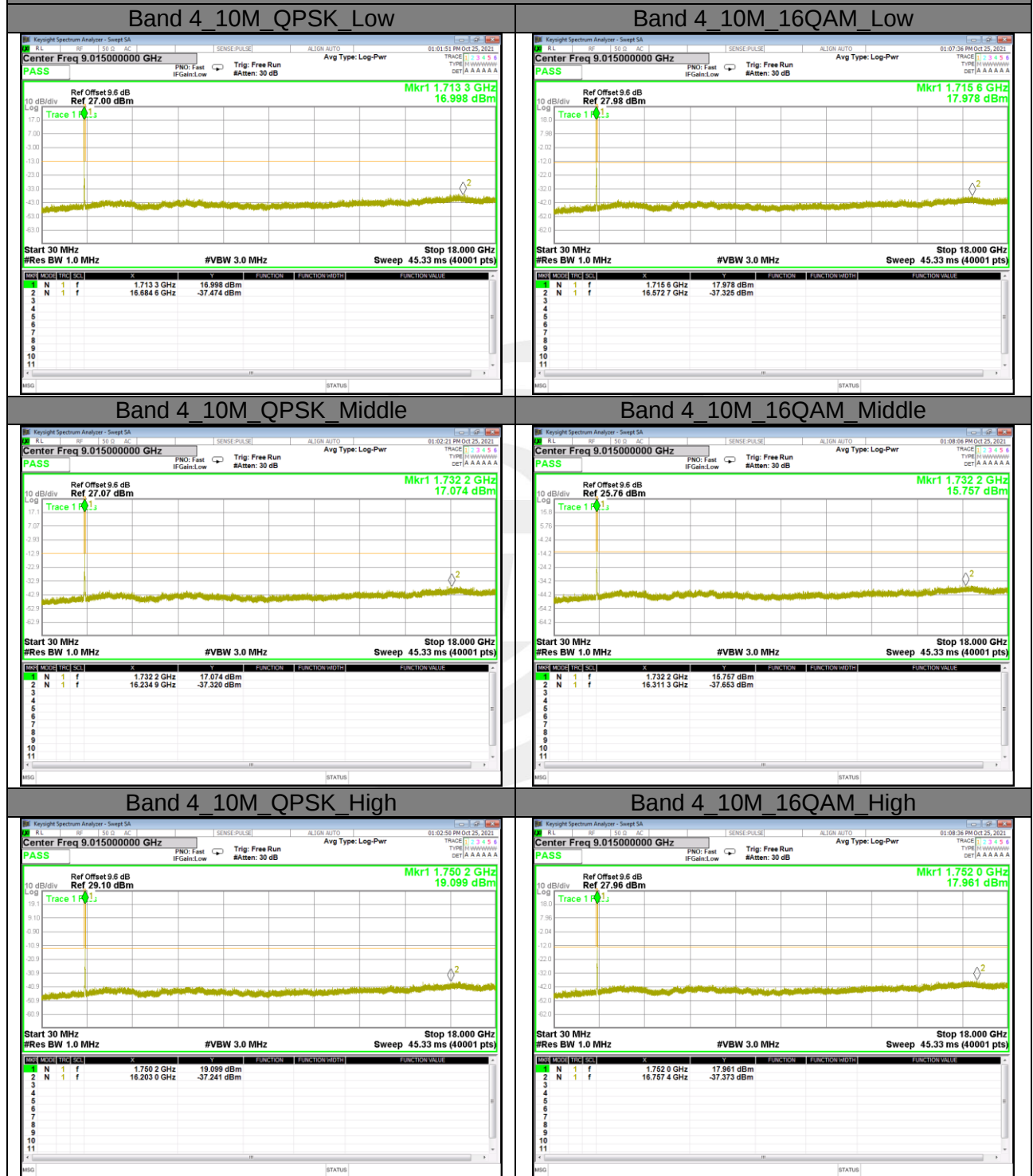
## LTE BAND-4





## LTE BAND-4

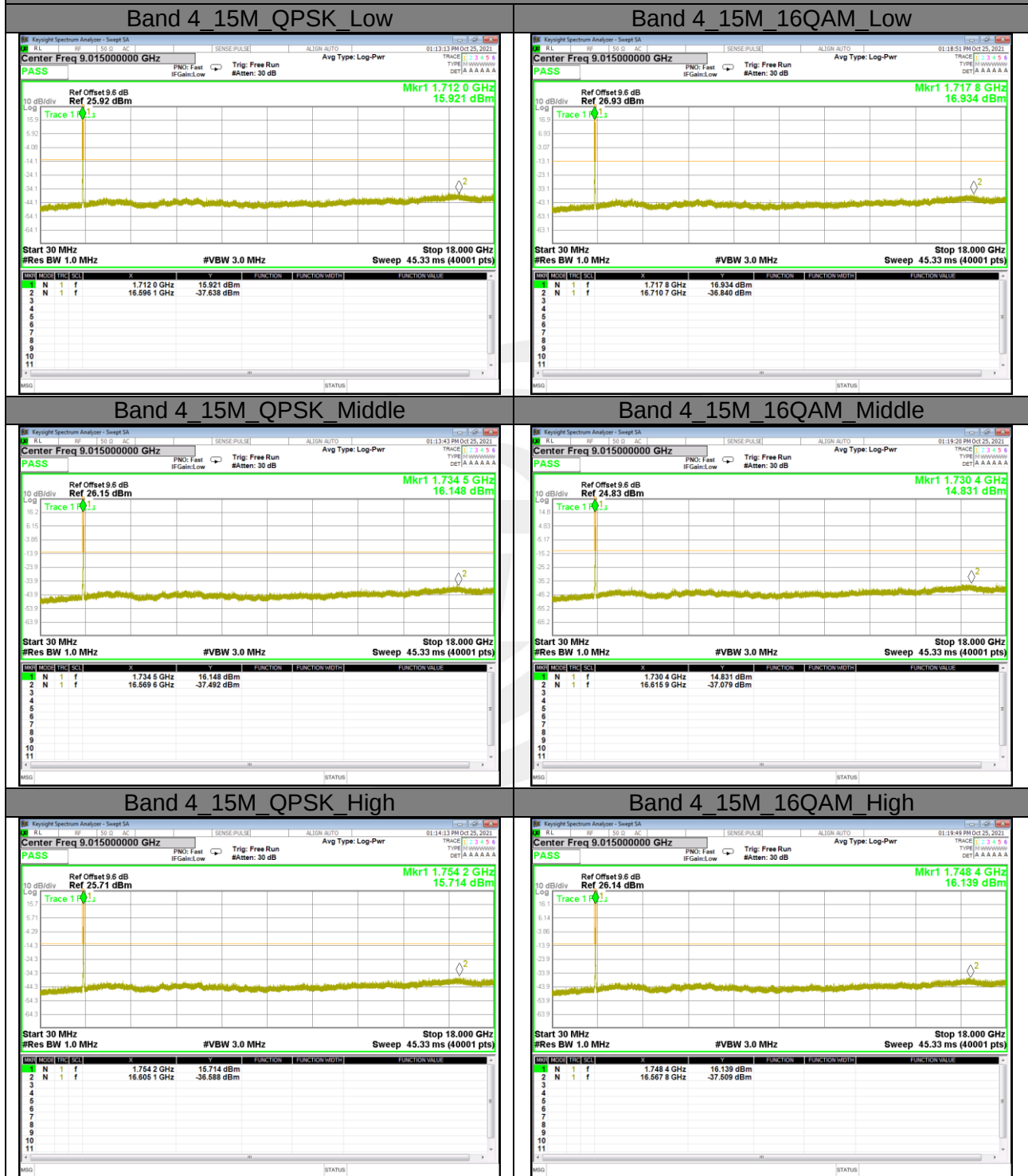
## LTE BAND-4





## LTE BAND-4

## LTE BAND-4





## LTE BAND-4

## LTE BAND-4

