

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

| Test Band: 66 1.4MHz Bandwidth | | | | | | | | | | | | |
|--------------------------------|---------------|--------|-----------------------|-------|-------|--------------|-------|-----------|-------|-------|-------------|---------|
| Modulation | RB Allocation | | Conducted Power (dBm) | | | Antenna gain | | EIRP(dBm) | | | Limit (dBm) | Verdict |
| | Size | Offset | LCH | MCH | HCH | (dBd) | (dBi) | LCH | MCH | HCH | | |
| QPSK | 1 | 0 | 22.59 | 22.78 | 22.51 | / | 2.53 | 25.12 | 25.31 | 25.04 | 30.00 | PASS |
| | | 2 | 22.58 | 22.92 | 22.40 | / | 2.53 | 25.11 | 25.45 | 24.93 | 30.00 | PASS |
| | | 5 | 22.47 | 22.82 | 22.38 | / | 2.53 | 25 | 25.35 | 24.91 | 30.00 | PASS |
| | 3 | 0 | 22.63 | 22.81 | 22.51 | / | 2.53 | 25.16 | 25.34 | 25.04 | 30.00 | PASS |
| | | 2 | 22.72 | 22.84 | 22.55 | / | 2.53 | 25.25 | 25.37 | 25.08 | 30.00 | PASS |
| | | 3 | 22.63 | 22.79 | 22.50 | / | 2.53 | 25.16 | 25.32 | 25.03 | 30.00 | PASS |
| 16QAM | 6 | 0 | 21.67 | 21.85 | 21.51 | / | 2.53 | 24.2 | 24.38 | 24.04 | 30.00 | PASS |
| | | | 22.35 | 21.45 | 21.72 | / | 2.53 | 24.88 | 23.98 | 24.25 | 30.00 | PASS |
| | 1 | 2 | 22.39 | 21.81 | 21.89 | / | 2.53 | 24.92 | 24.34 | 24.42 | 30.00 | PASS |
| | | 5 | 21.76 | 22.25 | 21.74 | / | 2.53 | 24.29 | 24.78 | 24.27 | 30.00 | PASS |
| | | 0 | 21.92 | 22.40 | 21.61 | / | 2.53 | 24.45 | 24.93 | 24.14 | 30.00 | PASS |
| | 3 | 2 | 21.97 | 22.24 | 21.55 | / | 2.53 | 24.5 | 24.77 | 24.08 | 30.00 | PASS |
| 3 | | 21.68 | 22.13 | 21.44 | / | 2.53 | 24.21 | 24.66 | 23.97 | 30.00 | PASS | |
| 6 | | 0 | 20.72 | 20.95 | 20.66 | / | 2.53 | 23.25 | 23.48 | 23.19 | 30.00 | PASS |

Note:
 1) dBd = dBi - 2.15
 2) EIRP = Conducted output power + Antenna gain (dBi)

| Test Band: 66 3MHz Bandwidth | | | | | | | | | | | | |
|------------------------------|---------------|--------|-----------------------|-------|-------|--------------|-------|-----------|-------|-------|-------------|---------|
| Modulation | RB Allocation | | Conducted Power (dBm) | | | Antenna gain | | EIRP(dBm) | | | Limit (dBm) | Verdict |
| | Size | Offset | LCH | MCH | HCH | (dBd) | (dBi) | LCH | MCH | HCH | | |
| QPSK | 1 | 0 | 22.58 | 22.61 | 22.54 | / | 2.53 | 25.11 | 25.14 | 25.07 | 30.00 | PASS |
| | | 7 | 22.68 | 22.84 | 22.49 | / | 2.53 | 25.21 | 25.37 | 25.02 | 30.00 | PASS |
| | | 14 | 22.73 | 22.66 | 22.48 | / | 2.53 | 25.26 | 25.19 | 25.01 | 30.00 | PASS |
| | 8 | 0 | 21.47 | 21.72 | 21.48 | / | 2.53 | 24 | 24.25 | 24.01 | 30.00 | PASS |
| | | 4 | 21.35 | 21.80 | 21.51 | / | 2.53 | 23.88 | 24.33 | 24.04 | 30.00 | PASS |
| | | 7 | 21.35 | 21.74 | 21.57 | / | 2.53 | 23.88 | 24.27 | 24.1 | 30.00 | PASS |
| 16QAM | 15 | 0 | 21.42 | 21.77 | 21.48 | / | 2.53 | 23.95 | 24.3 | 24.01 | 30.00 | PASS |
| | | | 22.07 | 21.74 | 21.66 | / | 2.53 | 24.6 | 24.27 | 24.19 | 30.00 | PASS |
| | 1 | 7 | 22.20 | 21.65 | 21.75 | / | 2.53 | 24.73 | 24.18 | 24.28 | 30.00 | PASS |
| | | 14 | 22.05 | 21.61 | 21.79 | / | 2.53 | 24.58 | 24.14 | 24.32 | 30.00 | PASS |
| | 8 | 0 | 20.81 | 20.84 | 20.44 | / | 2.53 | 23.34 | 23.37 | 22.97 | 30.00 | PASS |
| | | 4 | 20.71 | 20.94 | 20.54 | / | 2.53 | 23.24 | 23.47 | 23.07 | 30.00 | PASS |
| 7 | | 20.70 | 20.87 | 20.50 | / | 2.53 | 23.23 | 23.4 | 23.03 | 30.00 | PASS | |
| 15 | 0 | 20.44 | 20.89 | 20.51 | / | 2.53 | 22.97 | 23.42 | 23.04 | 30.00 | PASS | |

Note:
 1) dBd = dBi - 2.15
 2) EIRP = Conducted output power + Antenna gain (dBi)

| Test Band: 66 5MHz Bandwidth | | | | | | | | | | | | | |
|------------------------------|---------------|--------|-----------------------|-------|-------|--------------|-------|-----------|-------|-------|-------------|---------|------|
| Modulation | RB Allocation | | Conducted Power (dBm) | | | Antenna gain | | EIRP(dBm) | | | Limit (dBm) | Verdict | |
| | Size | Offset | LCH | MCH | HCH | (dBd) | (dBi) | LCH | MCH | HCH | | | |
| QPSK | 1 | 0 | 22.28 | 22.86 | 22.32 | / | 2.53 | 24.81 | 25.39 | 24.85 | 30.00 | PASS | |
| | | 13 | 22.15 | 22.65 | 22.53 | / | 2.53 | 24.68 | 25.18 | 25.06 | 30.00 | PASS | |
| | | 24 | 22.05 | 22.70 | 22.33 | / | 2.53 | 24.58 | 25.23 | 24.86 | 30.00 | PASS | |
| | 12 | 0 | 21.38 | 21.80 | 21.45 | / | 2.53 | 23.91 | 24.33 | 23.98 | 30.00 | PASS | |
| | | 6 | 21.25 | 21.77 | 21.45 | / | 2.53 | 23.78 | 24.3 | 23.98 | 30.00 | PASS | |
| | | 13 | 21.27 | 21.73 | 21.38 | / | 2.53 | 23.8 | 24.26 | 23.91 | 30.00 | PASS | |
| | 25 | 0 | 21.31 | 21.82 | 21.36 | / | 2.53 | 23.84 | 24.35 | 23.89 | 30.00 | PASS | |
| | 16QAM | 1 | 0 | 22.02 | 21.50 | 20.66 | / | 2.53 | 24.55 | 24.03 | 23.19 | 30.00 | PASS |
| | | | 13 | 21.58 | 21.36 | 20.67 | / | 2.53 | 24.11 | 23.89 | 23.2 | 30.00 | PASS |
| 24 | | | 21.46 | 21.42 | 20.77 | / | 2.53 | 23.99 | 23.95 | 23.3 | 30.00 | PASS | |
| 12 | | 0 | 20.28 | 20.62 | 20.39 | / | 2.53 | 22.81 | 23.15 | 22.92 | 30.00 | PASS | |
| | | 6 | 20.00 | 20.61 | 20.62 | / | 2.53 | 22.53 | 23.14 | 23.15 | 30.00 | PASS | |
| | | 13 | 20.02 | 20.65 | 20.66 | / | 2.53 | 22.55 | 23.18 | 23.19 | 30.00 | PASS | |
| 25 | | 0 | 20.36 | 20.79 | 20.59 | / | 2.53 | 22.89 | 23.32 | 23.12 | 30.00 | PASS | |

Note:
 1) dBd = dBi - 2.15
 2) EIRP = Conducted output power + Antenna gain (dBi)

| Test Band: 66 10MHz Bandwidth | | | | | | | | | | | | | |
|-------------------------------|---------------|--------|-----------------------|-------|-------|--------------|-------|-----------|-------|-------|-------------|---------|------|
| Modulation | RB Allocation | | Conducted Power (dBm) | | | Antenna gain | | EIRP(dBm) | | | Limit (dBm) | Verdict | |
| | Size | Offset | LCH | MCH | HCH | (dBd) | (dBi) | LCH | MCH | HCH | | | |
| QPSK | 1 | 0 | 22.55 | 22.75 | 22.52 | / | 2.53 | 25.08 | 25.28 | 25.05 | 30.00 | PASS | |
| | | 25 | 22.20 | 22.91 | 22.57 | / | 2.53 | 24.73 | 25.44 | 25.1 | 30.00 | PASS | |
| | | 49 | 22.38 | 22.67 | 22.39 | / | 2.53 | 24.91 | 25.2 | 24.92 | 30.00 | PASS | |
| | 25 | 0 | 21.37 | 21.75 | 21.47 | / | 2.53 | 23.9 | 24.28 | 24 | 30.00 | PASS | |
| | | 13 | 21.25 | 21.76 | 21.43 | / | 2.53 | 23.78 | 24.29 | 23.96 | 30.00 | PASS | |
| | | 25 | 21.30 | 21.60 | 21.46 | / | 2.53 | 23.83 | 24.13 | 23.99 | 30.00 | PASS | |
| | 50 | 0 | 21.21 | 21.74 | 21.42 | / | 2.53 | 23.74 | 24.27 | 23.95 | 30.00 | PASS | |
| | 16QAM | 1 | 0 | 22.27 | 21.57 | 21.34 | / | 2.53 | 24.8 | 24.1 | 23.87 | 30.00 | PASS |
| | | | 25 | 21.65 | 21.65 | 21.99 | / | 2.53 | 24.18 | 24.18 | 24.52 | 30.00 | PASS |
| 49 | | | 21.74 | 21.20 | 21.78 | / | 2.53 | 24.27 | 23.73 | 24.31 | 30.00 | PASS | |
| 25 | | 0 | 20.43 | 20.68 | 20.27 | / | 2.53 | 22.96 | 23.21 | 22.8 | 30.00 | PASS | |
| | | 13 | 20.18 | 20.70 | 20.62 | / | 2.53 | 22.71 | 23.23 | 23.15 | 30.00 | PASS | |
| | | 25 | 20.42 | 20.51 | 20.69 | / | 2.53 | 22.95 | 23.04 | 23.22 | 30.00 | PASS | |
| 50 | | 0 | 20.25 | 20.70 | 20.43 | / | 2.53 | 22.78 | 23.23 | 22.96 | 30.00 | PASS | |

Note:
 1) dBd = dBi - 2.15
 2) EIRP = Conducted output power + Antenna gain (dBi)

| Test Band: 66 15MHz Bandwidth | | | | | | | | | | | | | |
|-------------------------------|---------------|--------|-----------------------|-------|-------|--------------|-------|-----------|-------|-------|-------------|---------|------|
| Modulation | RB Allocation | | Conducted Power (dBm) | | | Antenna gain | | EIRP(dBm) | | | Limit (dBm) | Verdict | |
| | Size | Offset | LCH | MCH | HCH | (dBd) | (dBi) | LCH | MCH | HCH | | | |
| QPSK | 1 | 0 | 22.28 | 22.48 | 22.33 | / | 2.53 | 24.81 | 25.01 | 24.86 | 30.00 | PASS | |
| | | 38 | 22.26 | 22.67 | 22.44 | / | 2.53 | 24.79 | 25.2 | 24.97 | 30.00 | PASS | |
| | | 74 | 22.55 | 22.54 | 22.46 | / | 2.53 | 25.08 | 25.07 | 24.99 | 30.00 | PASS | |
| | 36 | 0 | 21.23 | 21.76 | 21.38 | / | 2.53 | 23.76 | 24.29 | 23.91 | 30.00 | PASS | |
| | | 18 | 21.25 | 21.75 | 21.55 | / | 2.53 | 23.78 | 24.28 | 24.08 | 30.00 | PASS | |
| | | 39 | 21.33 | 21.57 | 21.47 | / | 2.53 | 23.86 | 24.1 | 24 | 30.00 | PASS | |
| | 75 | 0 | 21.24 | 21.66 | 21.42 | / | 2.53 | 23.77 | 24.19 | 23.95 | 30.00 | PASS | |
| | 16QAM | 1 | 0 | 22.06 | 21.84 | 21.56 | / | 2.53 | 24.59 | 24.37 | 24.09 | 30.00 | PASS |
| | | | 38 | 21.76 | 21.84 | 21.77 | / | 2.53 | 24.29 | 24.37 | 24.3 | 30.00 | PASS |
| 74 | | | 21.97 | 21.09 | 21.77 | / | 2.53 | 24.5 | 23.62 | 24.3 | 30.00 | PASS | |
| 36 | | 0 | 20.19 | 20.69 | 20.38 | / | 2.53 | 22.72 | 23.22 | 22.91 | 30.00 | PASS | |
| | | 18 | 20.27 | 20.69 | 20.45 | / | 2.53 | 22.8 | 23.22 | 22.98 | 30.00 | PASS | |
| | | 39 | 20.47 | 20.59 | 20.54 | / | 2.53 | 23 | 23.12 | 23.07 | 30.00 | PASS | |
| 75 | | 0 | 20.20 | 20.83 | 20.50 | / | 2.53 | 22.73 | 23.36 | 23.03 | 30.00 | PASS | |

Note:
 1) dBd = dBi - 2.15
 2) EIRP = Conducted output power + Antenna gain (dBi)

| Test Band: 66 20MHz Bandwidth | | | | | | | | | | | | | |
|-------------------------------|---------------|--------|-----------------------|-------|-------|--------------|-------|-----------|-------|-------|-------------|---------|------|
| Modulation | RB Allocation | | Conducted Power (dBm) | | | Antenna gain | | EIRP(dBm) | | | Limit (dBm) | Verdict | |
| | Size | Offset | LCH | MCH | HCH | (dBd) | (dBi) | LCH | MCH | HCH | | | |
| QPSK | 1 | 0 | 22.61 | 22.63 | 22.53 | / | 2.53 | 25.14 | 25.16 | 25.06 | 30.00 | PASS | |
| | | 50 | 22.68 | 22.84 | 22.59 | / | 2.53 | 25.21 | 25.37 | 25.12 | 30.00 | PASS | |
| | | 99 | 22.65 | 22.31 | 22.49 | / | 2.53 | 25.18 | 24.84 | 25.02 | 30.00 | PASS | |
| | 50 | 0 | 21.24 | 21.82 | 21.35 | / | 2.53 | 23.77 | 24.35 | 23.88 | 30.00 | PASS | |
| | | 25 | 21.34 | 21.74 | 21.49 | / | 2.53 | 23.87 | 24.27 | 24.02 | 30.00 | PASS | |
| | | 50 | 21.38 | 21.60 | 21.52 | / | 2.53 | 23.91 | 24.13 | 24.05 | 30.00 | PASS | |
| | 100 | 0 | 21.30 | 21.76 | 21.45 | / | 2.53 | 23.83 | 24.29 | 23.98 | 30.00 | PASS | |
| | 16QAM | 1 | 0 | 21.35 | 22.47 | 21.90 | / | 2.53 | 23.88 | 25 | 24.43 | 30.00 | PASS |
| | | | 50 | 21.27 | 23.11 | 22.15 | / | 2.53 | 23.8 | 25.64 | 24.68 | 30.00 | PASS |
| 99 | | | 21.36 | 22.43 | 22.00 | / | 2.53 | 23.89 | 24.96 | 24.53 | 30.00 | PASS | |
| 50 | | 0 | 20.17 | 20.84 | 20.39 | / | 2.53 | 22.7 | 23.37 | 22.92 | 30.00 | PASS | |
| | | 25 | 20.36 | 20.70 | 20.63 | / | 2.53 | 22.89 | 23.23 | 23.16 | 30.00 | PASS | |
| | | 50 | 20.40 | 20.48 | 20.58 | / | 2.53 | 22.93 | 23.01 | 23.11 | 30.00 | PASS | |
| 100 | | 0 | 20.24 | 20.74 | 20.53 | / | 2.53 | 22.77 | 23.27 | 23.06 | 30.00 | PASS | |

Note:
 1) dBd = dBi - 2.15
 2) EIRP = Conducted output power + Antenna gain (dBi)

2. Frequency stability

2.1 Test Result

| Test Band: 66 _ 1.4MHz Bandwidth (Frequency Error VS. Voltage) | | | | | | | | | | | | |
|--|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|--------|-------------|---------|
| Test Mode | RB Allocation | | Test Temp. | Test Volt. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 6 | 0 | NT | LV | 2.4319 | -3.2902 | -0.0858 | 0.0014 | -0.0019 | 0.0000 | 2.50 | PASS |
| | | | | NV | 0.8440 | -2.1029 | 0.1860 | 0.0005 | -0.0012 | 0.0001 | 2.50 | PASS |
| | | | | HV | 1.8740 | -2.4891 | 1.2159 | 0.0011 | -0.0014 | 0.0007 | 2.50 | PASS |
| 16QAM | 6 | 0 | NT | LV | 1.8024 | -2.7895 | 0.3576 | 0.0011 | -0.0016 | 0.0002 | 2.50 | PASS |
| | | | | NV | 1.3590 | -2.4033 | 0.3433 | 0.0008 | -0.0014 | 0.0002 | 2.50 | PASS |
| | | | | HV | 1.4591 | -3.3760 | 1.4162 | 0.0009 | -0.0019 | 0.0008 | 2.50 | PASS |

| Test Band: 66 _ 1.4MHz Bandwidth (Frequency Error VS. Temperature) | | | | | | | | | | | | |
|--|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|---------|-------------|---------|
| Test Mode | RB Allocation | | Test Volt. | Test Temp. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 6 | 0 | NV | -30.00 | 1.6451 | -3.3617 | -1.1158 | 0.0010 | -0.0019 | -0.0006 | 2.50 | PASS |
| | | | | -20.00 | 2.1458 | -3.3045 | 0.1431 | 0.0013 | -0.0019 | 0.0001 | 2.50 | PASS |
| | | | | -10.00 | 0.9012 | -1.6451 | 1.0157 | 0.0005 | -0.0009 | 0.0006 | 2.50 | PASS |
| | | | | 0.00 | 2.0599 | -2.2316 | 1.1444 | 0.0012 | -0.0013 | 0.0006 | 2.50 | PASS |
| | | | | 10.00 | 1.2588 | -2.9325 | 0.7153 | 0.0007 | -0.0017 | 0.0004 | 2.50 | PASS |
| | | | | 20.00 | 1.2445 | -3.4618 | -0.2861 | 0.0007 | -0.0020 | -0.0002 | 2.50 | PASS |
| | | | | 30.00 | 1.7023 | -3.5334 | -0.1144 | 0.0010 | -0.0020 | -0.0001 | 2.50 | PASS |
| | | | | 40.00 | 1.6594 | -3.6049 | -0.8726 | 0.0010 | -0.0021 | -0.0005 | 2.50 | PASS |
| | | | | 50.00 | 1.4162 | -3.3474 | 0.3719 | 0.0008 | -0.0019 | 0.0002 | 2.50 | PASS |
| 16QAM | 6 | 0 | NV | -30.00 | 1.6594 | -3.1185 | 0.2289 | 0.0010 | -0.0018 | 0.0001 | 2.50 | PASS |
| | | | | -20.00 | 2.2316 | -2.9325 | -0.1574 | 0.0013 | -0.0017 | -0.0001 | 2.50 | PASS |
| | | | | -10.00 | 0.3147 | -2.9898 | 1.3161 | 0.0002 | -0.0017 | 0.0007 | 2.50 | PASS |
| | | | | 0.00 | 2.1744 | -2.7180 | -1.1587 | 0.0013 | -0.0016 | -0.0007 | 2.50 | PASS |
| | | | | 10.00 | 1.0014 | -1.8311 | 1.0443 | 0.0006 | -0.0010 | 0.0006 | 2.50 | PASS |
| | | | | 20.00 | 1.9741 | -2.4176 | -0.6008 | 0.0012 | -0.0014 | -0.0003 | 2.50 | PASS |
| | | | | 30.00 | 1.2302 | -3.0470 | 0.8440 | 0.0007 | -0.0017 | 0.0005 | 2.50 | PASS |
| | | | | 40.00 | 2.9898 | -2.3603 | -1.2875 | 0.0017 | -0.0014 | -0.0007 | 2.50 | PASS |
| | | | | 50.00 | 0.5007 | -2.3031 | -1.1015 | 0.0003 | -0.0013 | -0.0006 | 2.50 | PASS |

| Test Band: 66 _ 3MHz Bandwidth (Frequency Error VS. Voltage) | | | | | | | | | | | | |
|--|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|--------|-------------|---------|
| Test Mode | RB Allocation | | Test Temp. | Test Volt. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 15 | 0 | NT | LV | -0.7582 | -2.4319 | -0.0572 | -0.0004 | -0.0014 | 0.0000 | 2.50 | PASS |
| | | | | NV | 1.0586 | -3.5906 | 0.4435 | 0.0006 | -0.0021 | 0.0002 | 2.50 | PASS |
| | | | | HV | 0.9441 | -3.3188 | 2.0885 | 0.0006 | -0.0019 | 0.0012 | 2.50 | PASS |
| 16QAM | 15 | 0 | NT | LV | -0.0429 | -3.3331 | 1.4734 | 0.0000 | -0.0019 | 0.0008 | 2.50 | PASS |
| | | | | NV | 0.2718 | -3.0470 | 0.1431 | 0.0002 | -0.0017 | 0.0001 | 2.50 | PASS |
| | | | | HV | 0.8297 | -3.1185 | 2.3746 | 0.0005 | -0.0018 | 0.0013 | 2.50 | PASS |

| Test Band: 66_ 3MHz Bandwidth (Frequency Error VS. Temperature) | | | | | | | | | | | | |
|---|---------------|--------|------------|------------|------------------|---------|--------|-----------------------|---------|--------|-------------|---------|
| Test Mode | RB Allocation | | Test Volt. | Test Temp. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 15 | 0 | NV | -30.00 | 1.6451 | -2.7609 | 3.2759 | 0.0010 | -0.0016 | 0.0018 | 2.50 | PASS |
| | | | | -20.00 | -0.3433 | -2.1458 | 0.5579 | -0.0002 | -0.0012 | 0.0003 | 2.50 | PASS |
| | | | | -10.00 | 0.5293 | -2.3746 | 1.0872 | 0.0003 | -0.0014 | 0.0006 | 2.50 | PASS |
| | | | | 0.00 | 1.2302 | -1.6451 | 0.7296 | 0.0007 | -0.0009 | 0.0004 | 2.50 | PASS |
| | | | | 10.00 | -0.0858 | -1.9884 | 0.0000 | -0.0001 | -0.0011 | 0.0000 | 2.50 | PASS |
| | | | | 20.00 | 0.1431 | -2.5034 | 1.5163 | 0.0001 | -0.0014 | 0.0009 | 2.50 | PASS |
| | | | | 30.00 | -0.4721 | -3.0041 | 1.9598 | -0.0003 | -0.0017 | 0.0011 | 2.50 | PASS |
| | | | | 40.00 | 0.2718 | -2.2316 | 1.5879 | 0.0002 | -0.0013 | 0.0009 | 2.50 | PASS |
| | | | | 50.00 | -0.1001 | -2.3031 | 2.7180 | -0.0001 | -0.0013 | 0.0015 | 2.50 | PASS |
| 16QAM | 15 | 0 | NV | -30.00 | 0.2861 | -4.4489 | 2.0170 | 0.0002 | -0.0025 | 0.0011 | 2.50 | PASS |
| | | | | -20.00 | 0.7010 | -2.5034 | 1.9884 | 0.0004 | -0.0014 | 0.0011 | 2.50 | PASS |
| | | | | -10.00 | 0.2146 | -2.7323 | 0.1144 | 0.0001 | -0.0016 | 0.0001 | 2.50 | PASS |
| | | | | 0.00 | 1.0872 | -3.1328 | 1.5306 | 0.0006 | -0.0018 | 0.0009 | 2.50 | PASS |
| | | | | 10.00 | 0.5579 | -3.5191 | 0.3433 | 0.0003 | -0.0020 | 0.0002 | 2.50 | PASS |
| | | | | 20.00 | 0.4005 | -3.2473 | 1.6451 | 0.0002 | -0.0019 | 0.0009 | 2.50 | PASS |
| | | | | 30.00 | -0.7296 | -2.7895 | 3.0184 | -0.0004 | -0.0016 | 0.0017 | 2.50 | PASS |
| | | | | 40.00 | -0.4435 | -2.8324 | 1.1015 | -0.0003 | -0.0016 | 0.0006 | 2.50 | PASS |
| | | | | 50.00 | 0.0000 | -3.2330 | 0.5007 | 0.0000 | -0.0019 | 0.0003 | 2.50 | PASS |

| Test Band: 66_ 5MHz Bandwidth (Frequency Error VS. Voltage) | | | | | | | | | | | | |
|---|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|---------|-------------|---------|
| Test Mode | RB Allocation | | Test Temp. | Test Volt. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 25 | 0 | NT | LV | 0.6008 | -4.1342 | -0.4578 | 0.0004 | -0.0024 | -0.0003 | 2.50 | PASS |
| | | | | NV | 1.3161 | -2.9325 | -0.4578 | 0.0008 | -0.0017 | -0.0003 | 2.50 | PASS |
| | | | | HV | 1.8024 | -3.1185 | 1.5020 | 0.0011 | -0.0018 | 0.0008 | 2.50 | PASS |
| 16QAM | 25 | 0 | NT | LV | 2.0456 | -4.2772 | 1.5879 | 0.0012 | -0.0025 | 0.0009 | 2.50 | PASS |
| | | | | NV | 2.2030 | -2.6894 | 0.2575 | 0.0013 | -0.0015 | 0.0001 | 2.50 | PASS |
| | | | | HV | -0.3004 | -1.7309 | 0.2146 | -0.0002 | -0.0010 | 0.0001 | 2.50 | PASS |

| Test Band: 66_ 5MHz Bandwidth (Frequency Error VS. Temperature) | | | | | | | | | | | | |
|---|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|---------|-------------|---------|
| Test Mode | RB Allocation | | Test Volt. | Test Temp. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 25 | 0 | NV | -30.00 | 0.6723 | -4.0770 | -1.0872 | 0.0004 | -0.0023 | -0.0006 | 2.50 | PASS |
| | | | | -20.00 | 2.1029 | -4.4060 | -0.9155 | 0.0012 | -0.0025 | -0.0005 | 2.50 | PASS |
| | | | | -10.00 | 1.7452 | -3.6907 | -0.1001 | 0.0010 | -0.0021 | -0.0001 | 2.50 | PASS |
| | | | | 0.00 | 0.8869 | -4.1199 | 0.6294 | 0.0005 | -0.0024 | 0.0004 | 2.50 | PASS |
| | | | | 10.00 | 2.1315 | -3.6192 | 0.1574 | 0.0012 | -0.0021 | 0.0001 | 2.50 | PASS |
| | | | | 20.00 | 1.6165 | -2.8324 | -0.1717 | 0.0009 | -0.0016 | -0.0001 | 2.50 | PASS |
| | | | | 30.00 | 1.2016 | -1.6594 | 0.9441 | 0.0007 | -0.0010 | 0.0005 | 2.50 | PASS |
| | | | | 40.00 | 2.1744 | -1.5879 | 0.3147 | 0.0013 | -0.0009 | 0.0002 | 2.50 | PASS |
| | | | | 50.00 | 0.3862 | -3.1042 | -0.4435 | 0.0002 | -0.0018 | -0.0002 | 2.50 | PASS |
| 16QAM | 25 | 0 | NV | -30.00 | 1.5879 | -1.9741 | -0.1717 | 0.0009 | -0.0011 | -0.0001 | 2.50 | PASS |
| | | | | -20.00 | 1.0443 | -2.6464 | 0.0429 | 0.0006 | -0.0015 | 0.0000 | 2.50 | PASS |
| | | | | -10.00 | 0.8726 | -3.1328 | 0.8297 | 0.0005 | -0.0018 | 0.0005 | 2.50 | PASS |
| | | | | 0.00 | 0.7582 | -2.6178 | 1.0443 | 0.0004 | -0.0015 | 0.0006 | 2.50 | PASS |
| | | | | 10.00 | 1.9026 | -2.3460 | -0.2718 | 0.0011 | -0.0013 | -0.0002 | 2.50 | PASS |
| | | | | 20.00 | 0.1001 | -3.3474 | 1.1873 | 0.0001 | -0.0019 | 0.0007 | 2.50 | PASS |

| | | | | | | | | | | | | |
|--|--|--|--|-------|--------|---------|--------|--------|---------|--------|------|------|
| | | | | 30.00 | 1.6737 | -1.7166 | 0.9441 | 0.0010 | -0.0010 | 0.0005 | 2.50 | PASS |
| | | | | 40.00 | 1.4734 | -3.1042 | 0.1144 | 0.0009 | -0.0018 | 0.0001 | 2.50 | PASS |
| | | | | 50.00 | 0.7296 | -3.5191 | 0.2575 | 0.0004 | -0.0020 | 0.0001 | 2.50 | PASS |

| Test Band: 66 10MHz Bandwidth (Frequency Error VS. Voltage) | | | | | | | | | | | | |
|---|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|---------|-------------|---------|
| Test Mode | RB Allocation | | Test Temp. | Test Volt. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 50 | 0 | NT | LV | -1.5163 | -2.8753 | -2.7037 | -0.0009 | -0.0016 | -0.0015 | 2.50 | PASS |
| | | | | NV | -2.1887 | -2.7323 | -2.3890 | -0.0013 | -0.0016 | -0.0013 | 2.50 | PASS |
| | | | | HV | -2.1887 | -1.6880 | -3.0613 | -0.0013 | -0.0010 | -0.0017 | 2.50 | PASS |
| 16QAM | 50 | 0 | NT | LV | -2.6464 | -2.5749 | -3.2902 | -0.0015 | -0.0015 | -0.0019 | 2.50 | PASS |
| | | | | NV | -3.1614 | -2.5606 | -3.0184 | -0.0018 | -0.0015 | -0.0017 | 2.50 | PASS |
| | | | | HV | -3.0327 | -2.3031 | -2.7180 | -0.0018 | -0.0013 | -0.0015 | 2.50 | PASS |

| Test Band: 66 10MHz Bandwidth (Frequency Error VS. Temperature) | | | | | | | | | | | | |
|---|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|---------|-------------|---------|
| Test Mode | RB Allocation | | Test Volt. | Test Temp. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 50 | 0 | NV | -30.00 | -1.4305 | -1.6880 | -2.9039 | -0.0008 | -0.0010 | -0.0016 | 2.50 | PASS |
| | | | | -20.00 | -2.3031 | -2.7323 | -2.8610 | -0.0013 | -0.0016 | -0.0016 | 2.50 | PASS |
| | | | | -10.00 | -2.0456 | -1.7738 | -3.1471 | -0.0012 | -0.0010 | -0.0018 | 2.50 | PASS |
| | | | | 0.00 | -1.8311 | -1.9312 | -3.8910 | -0.0011 | -0.0011 | -0.0022 | 2.50 | PASS |
| | | | | 10.00 | -2.0885 | -3.5048 | -2.0599 | -0.0012 | -0.0020 | -0.0012 | 2.50 | PASS |
| | | | | 20.00 | -2.0027 | -2.8753 | -3.2187 | -0.0012 | -0.0016 | -0.0018 | 2.50 | PASS |
| | | | | 30.00 | -1.7309 | -3.0613 | -3.0327 | -0.0010 | -0.0018 | -0.0017 | 2.50 | PASS |
| | | | | 40.00 | -2.2745 | -2.7323 | -2.5892 | -0.0013 | -0.0016 | -0.0015 | 2.50 | PASS |
| | | | | 50.00 | -1.2875 | -3.3903 | -1.8597 | -0.0008 | -0.0019 | -0.0010 | 2.50 | PASS |
| 16QAM | 50 | 0 | NV | -30.00 | -2.1601 | -2.8753 | -2.6608 | -0.0013 | -0.0016 | -0.0015 | 2.50 | PASS |
| | | | | -20.00 | -2.3174 | -2.3031 | -3.0470 | -0.0014 | -0.0013 | -0.0017 | 2.50 | PASS |
| | | | | -10.00 | -2.6608 | -1.0586 | -3.6335 | -0.0016 | -0.0006 | -0.0020 | 2.50 | PASS |
| | | | | 0.00 | -2.2602 | -2.4462 | -2.0599 | -0.0013 | -0.0014 | -0.0012 | 2.50 | PASS |
| | | | | 10.00 | -3.2902 | -3.9768 | -1.3876 | -0.0019 | -0.0023 | -0.0008 | 2.50 | PASS |
| | | | | 20.00 | -3.8910 | -4.5490 | -1.8024 | -0.0023 | -0.0026 | -0.0010 | 2.50 | PASS |
| | | | | 30.00 | -2.1029 | -2.7466 | -2.0885 | -0.0012 | -0.0016 | -0.0012 | 2.50 | PASS |
| | | | | 40.00 | -3.4761 | -2.4891 | -1.4591 | -0.0020 | -0.0014 | -0.0008 | 2.50 | PASS |
| | | | | 50.00 | -2.8038 | -3.0327 | -2.5606 | -0.0016 | -0.0017 | -0.0014 | 2.50 | PASS |

| Test Band: 66 15MHz Bandwidth (Frequency Error VS. Voltage) | | | | | | | | | | | | |
|---|---------------|--------|------------|------------|------------------|---------|--------|-----------------------|---------|--------|-------------|---------|
| Test Mode | RB Allocation | | Test Temp. | Test Volt. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 75 | 0 | NT | LV | 0.9012 | -2.5463 | 1.4019 | 0.0005 | -0.0015 | 0.0008 | 2.50 | PASS |
| | | | | NV | 1.1587 | -3.0041 | 1.4877 | 0.0007 | -0.0017 | 0.0008 | 2.50 | PASS |
| | | | | HV | 0.2575 | -2.2888 | 1.0729 | 0.0001 | -0.0013 | 0.0006 | 2.50 | PASS |
| 16QAM | 75 | 0 | NT | LV | 0.6151 | -4.3058 | 1.7023 | 0.0004 | -0.0025 | 0.0010 | 2.50 | PASS |
| | | | | NV | 0.9584 | -3.8481 | 1.5879 | 0.0006 | -0.0022 | 0.0009 | 2.50 | PASS |
| | | | | HV | 0.2003 | -2.6751 | 1.8168 | 0.0001 | -0.0015 | 0.0010 | 2.50 | PASS |

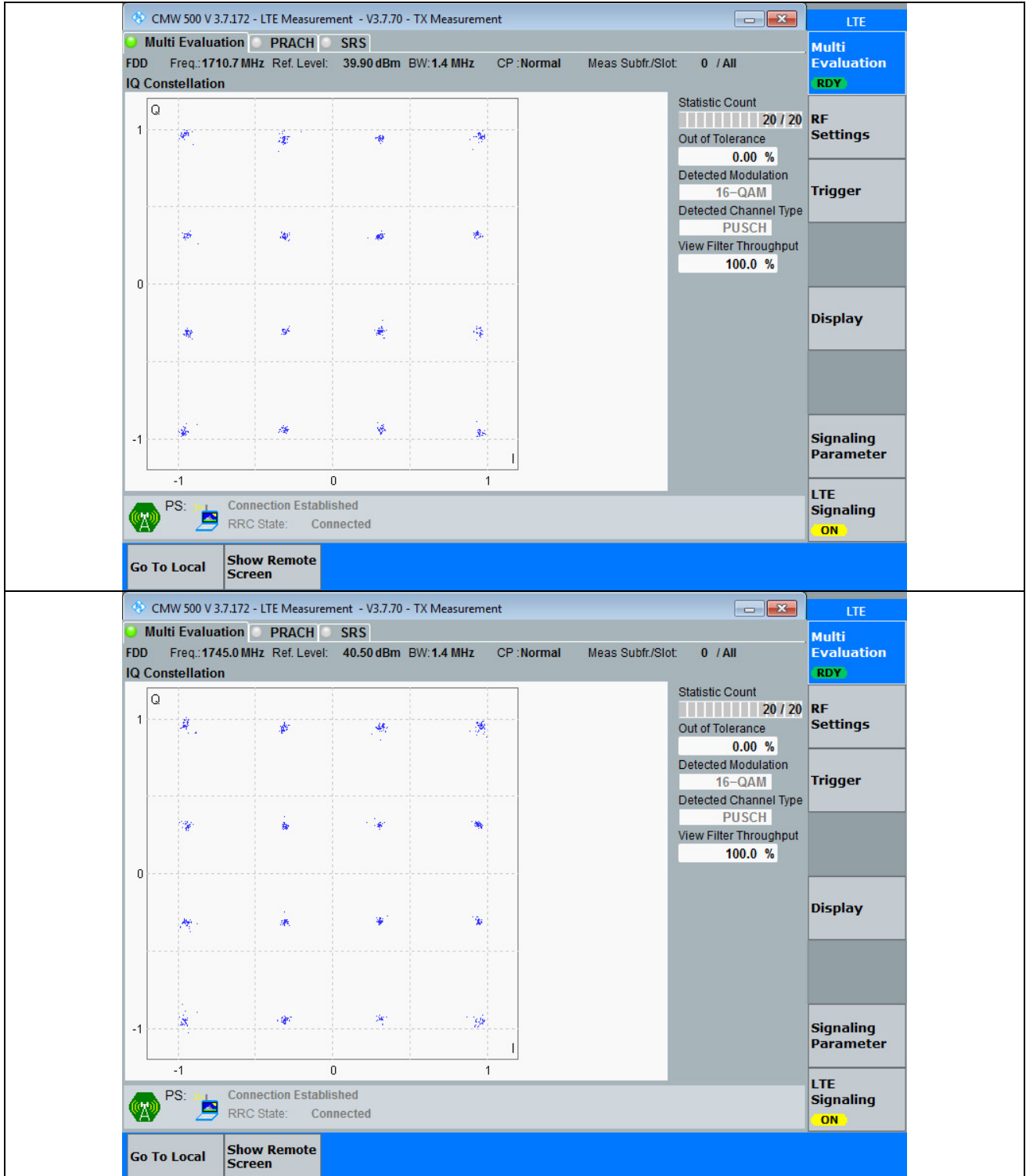
| Test Band: 66_ 15MHz Bandwidth (Frequency Error VS. Temperature) | | | | | | | | | | | | |
|--|---------------|--------|------------|------------|------------------|---------|--------|-----------------------|---------|--------|-------------|---------|
| Test Mode | RB Allocation | | Test Volt. | Test Temp. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 75 | 0 | NV | -30.00 | -0.1144 | -2.4176 | 0.7296 | -0.0001 | -0.0014 | 0.0004 | 2.50 | PASS |
| | | | | -20.00 | -0.8869 | -3.0899 | 1.2016 | -0.0005 | -0.0018 | 0.0007 | 2.50 | PASS |
| | | | | -10.00 | -0.0572 | -3.6764 | 1.2302 | 0.0000 | -0.0021 | 0.0007 | 2.50 | PASS |
| | | | | 0.00 | 0.1144 | -2.9039 | 0.6294 | 0.0001 | -0.0017 | 0.0004 | 2.50 | PASS |
| | | | | 10.00 | 0.8297 | -3.1900 | 1.1587 | 0.0005 | -0.0018 | 0.0007 | 2.50 | PASS |
| | | | | 20.00 | 0.9298 | -3.2759 | 1.5163 | 0.0005 | -0.0019 | 0.0009 | 2.50 | PASS |
| | | | | 30.00 | 0.2861 | -2.8753 | 1.0014 | 0.0002 | -0.0016 | 0.0006 | 2.50 | PASS |
| | | | | 40.00 | -0.2003 | -2.6321 | 1.4877 | -0.0001 | -0.0015 | 0.0008 | 2.50 | PASS |
| | | | | 50.00 | 0.0572 | -3.3903 | 0.9871 | 0.0000 | -0.0019 | 0.0006 | 2.50 | PASS |
| 16QAM | 75 | 0 | NV | -30.00 | 0.4578 | -3.3474 | 0.5722 | 0.0003 | -0.0019 | 0.0003 | 2.50 | PASS |
| | | | | -20.00 | 0.1144 | -2.4748 | 2.6178 | 0.0001 | -0.0014 | 0.0015 | 2.50 | PASS |
| | | | | -10.00 | 0.2575 | -3.8767 | 2.1887 | 0.0001 | -0.0022 | 0.0012 | 2.50 | PASS |
| | | | | 0.00 | -0.1144 | -2.7180 | 1.9741 | -0.0001 | -0.0016 | 0.0011 | 2.50 | PASS |
| | | | | 10.00 | 0.8869 | -2.2459 | 1.6022 | 0.0005 | -0.0013 | 0.0009 | 2.50 | PASS |
| | | | | 20.00 | 0.0286 | -2.1172 | 2.5463 | 0.0000 | -0.0012 | 0.0014 | 2.50 | PASS |
| | | | | 30.00 | -0.0429 | -2.2602 | 2.3317 | 0.0000 | -0.0013 | 0.0013 | 2.50 | PASS |
| | | | | 40.00 | 0.4292 | -3.4761 | 1.4734 | 0.0002 | -0.0020 | 0.0008 | 2.50 | PASS |
| | | | | 50.00 | -0.2146 | -2.9469 | 1.3304 | -0.0001 | -0.0017 | 0.0008 | 2.50 | PASS |

| Test Band: 66_ 20MHz Bandwidth (Frequency Error VS. Voltage) | | | | | | | | | | | | |
|--|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|---------|-------------|---------|
| Test Mode | RB Allocation | | Test Temp. | Test Volt. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 100 | 0 | NT | LV | 2.4462 | -2.5034 | -1.2159 | 0.0014 | -0.0014 | -0.0007 | 2.50 | PASS |
| | | | | NV | 1.6308 | -3.1471 | 0.4435 | 0.0009 | -0.0018 | 0.0003 | 2.50 | PASS |
| | | | | HV | 1.8168 | -2.6035 | 0.4864 | 0.0011 | -0.0015 | 0.0003 | 2.50 | PASS |
| 16QAM | 100 | 0 | NT | LV | 2.2030 | -2.6608 | -0.4292 | 0.0013 | -0.0015 | -0.0002 | 2.50 | PASS |
| | | | | NV | 0.7868 | -2.7609 | 0.1574 | 0.0005 | -0.0016 | 0.0001 | 2.50 | PASS |
| | | | | HV | 1.6165 | -3.1471 | 0.6437 | 0.0009 | -0.0018 | 0.0004 | 2.50 | PASS |

| Test Band: 66_20MHz Bandwidth (Frequency Error VS. Temperature) | | | | | | | | | | | | |
|---|---------------|--------|------------|------------|------------------|---------|---------|-----------------------|---------|---------|-------------|---------|
| Test Mode | RB Allocation | | Test Volt. | Test Temp. | Freq. Error (Hz) | | | Freq. vs. rated (ppm) | | | Limit (ppm) | Verdict |
| | Size | Offset | | | LCH | MCH | HCH | LCH | MCH | HCH | | |
| QPSK | 100 | 0 | NV | -30.00 | 1.7023 | -2.7466 | 0.0572 | 0.0010 | -0.0016 | 0.0000 | 2.50 | PASS |
| | | | | -20.00 | 1.6022 | -2.1315 | 1.1301 | 0.0009 | -0.0012 | 0.0006 | 2.50 | PASS |
| | | | | -10.00 | 1.6594 | -2.6894 | 0.8011 | 0.0010 | -0.0015 | 0.0005 | 2.50 | PASS |
| | | | | 0.00 | 2.0599 | -2.4033 | 1.0872 | 0.0012 | -0.0014 | 0.0006 | 2.50 | PASS |
| | | | | 10.00 | 1.6022 | -3.6335 | 0.9155 | 0.0009 | -0.0021 | 0.0005 | 2.50 | PASS |
| | | | | 20.00 | 1.7595 | -2.7180 | 0.7010 | 0.0010 | -0.0016 | 0.0004 | 2.50 | PASS |
| | | | | 30.00 | 1.1301 | -3.1042 | -0.0572 | 0.0007 | -0.0018 | 0.0000 | 2.50 | PASS |
| | | | | 40.00 | 1.1158 | -2.4748 | -0.4864 | 0.0006 | -0.0014 | -0.0003 | 2.50 | PASS |
| | | | | 50.00 | 1.3018 | -4.0770 | -1.0729 | 0.0008 | -0.0023 | -0.0006 | 2.50 | PASS |
| 16QAM | 100 | 0 | NV | -30.00 | 1.9026 | -2.7180 | 0.1001 | 0.0011 | -0.0016 | 0.0001 | 2.50 | PASS |
| | | | | -20.00 | 1.5593 | -3.1614 | 0.7153 | 0.0009 | -0.0018 | 0.0004 | 2.50 | PASS |
| | | | | -10.00 | 1.5450 | -2.8038 | -0.0858 | 0.0009 | -0.0016 | 0.0000 | 2.50 | PASS |
| | | | | 0.00 | 1.7595 | -3.2902 | 1.0729 | 0.0010 | -0.0019 | 0.0006 | 2.50 | PASS |
| | | | | 10.00 | 2.3890 | -3.2473 | 0.3433 | 0.0014 | -0.0019 | 0.0002 | 2.50 | PASS |
| | | | | 20.00 | 0.8440 | -2.7180 | -0.0858 | 0.0005 | -0.0016 | 0.0000 | 2.50 | PASS |
| | | | | 30.00 | 0.9871 | -3.8910 | 0.1860 | 0.0006 | -0.0022 | 0.0001 | 2.50 | PASS |
| | | | | 40.00 | 1.5306 | -2.5606 | -0.1287 | 0.0009 | -0.0015 | -0.0001 | 2.50 | PASS |
| | | | | 50.00 | 1.2445 | -3.9911 | 1.2445 | 0.0007 | -0.0023 | 0.0007 | 2.50 | PASS |

3. Modulation Characteristics

3.1 Test Graph



| | | |
|---|--|--|
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1779.3 MHz Ref. Level: 39.20 dBm BW: 1.4 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p> <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: 16-QAM Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | | <p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p> |
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1710.7 MHz Ref. Level: 39.60 dBm BW: 1.4 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p> <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | | <p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p> |

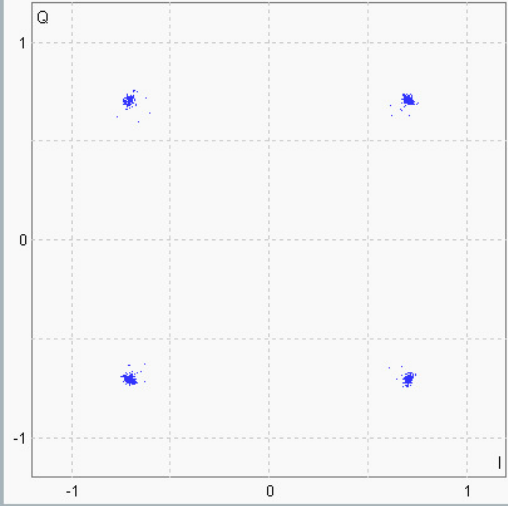
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
LTE

Multi Evaluation
 PRACH
 SRS

Multi Evaluation

FDD Freq.: 1745.0 MHz Ref. Level: 40.50 dBm BW: 1.4 MHz CP: Normal Meas Subfr./Slot: 0 / All
RDY

IQ Constellation



Statistic Count
 / 20

Out of Tolerance
 %

Detected Modulation

Detected Channel Type

View Filter Throughput
 %

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling

PS: Connection Established
 RRC State: Connected

ON

Go To Local
Show Remote Screen

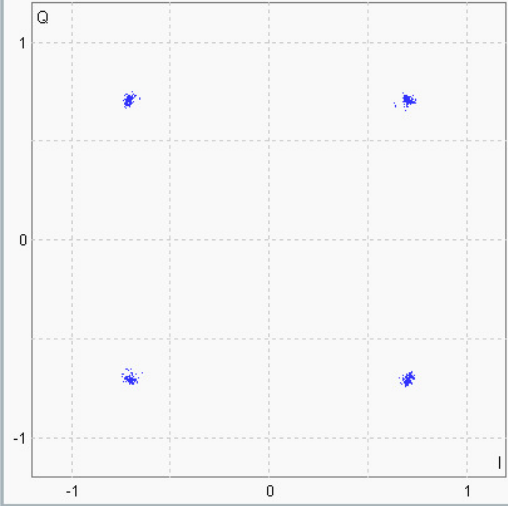
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
LTE

Multi Evaluation
 PRACH
 SRS

Multi Evaluation

FDD Freq.: 1779.3 MHz Ref. Level: 39.90 dBm BW: 1.4 MHz CP: Normal Meas Subfr./Slot: 0 / All
RDY

IQ Constellation



Statistic Count
 / 20

Out of Tolerance
 %

Detected Modulation

Detected Channel Type

View Filter Throughput
 %

RF Settings

Trigger

Display

Signaling Parameter

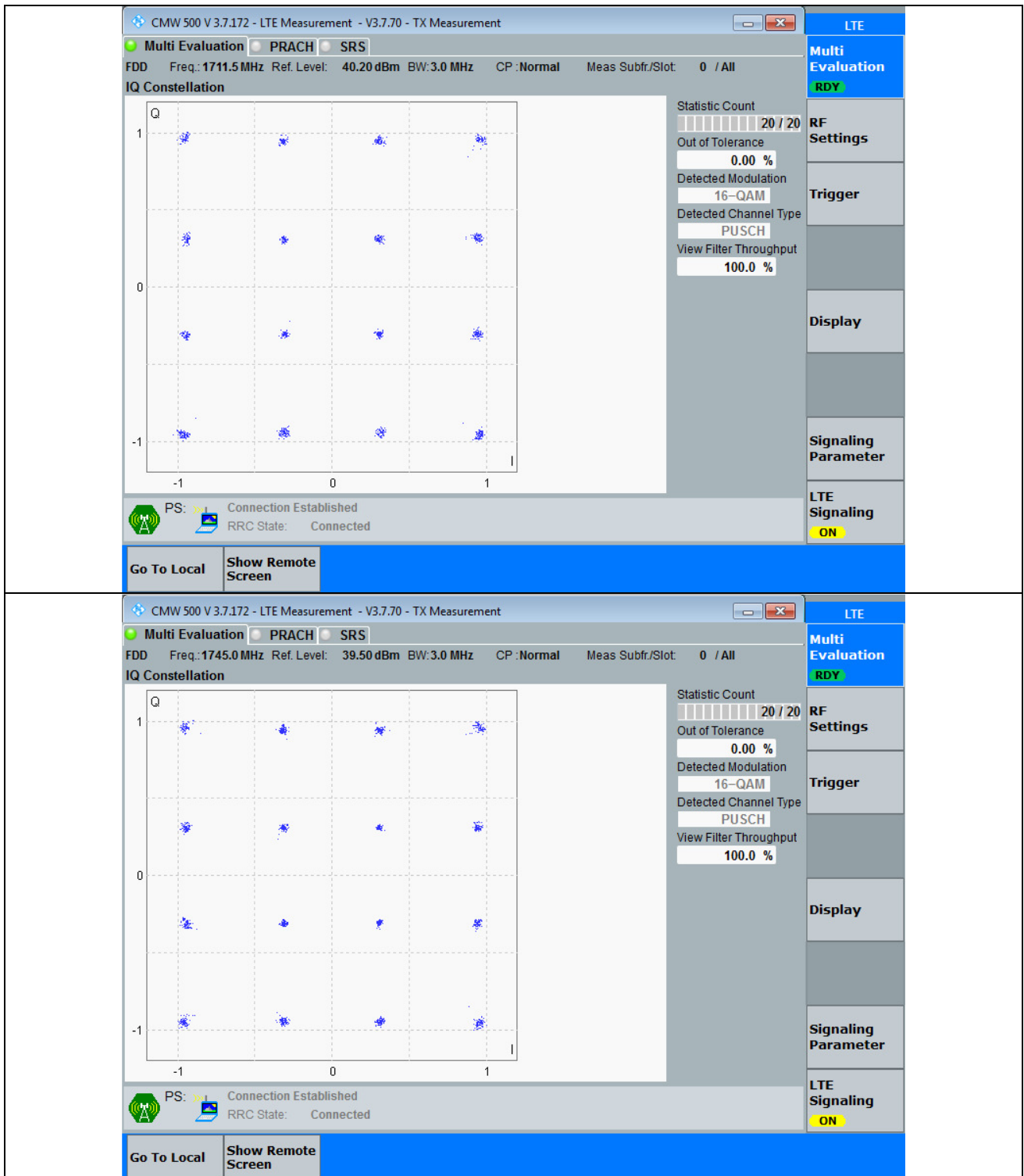
LTE Signaling

PS: Connection Established
 RRC State: Connected

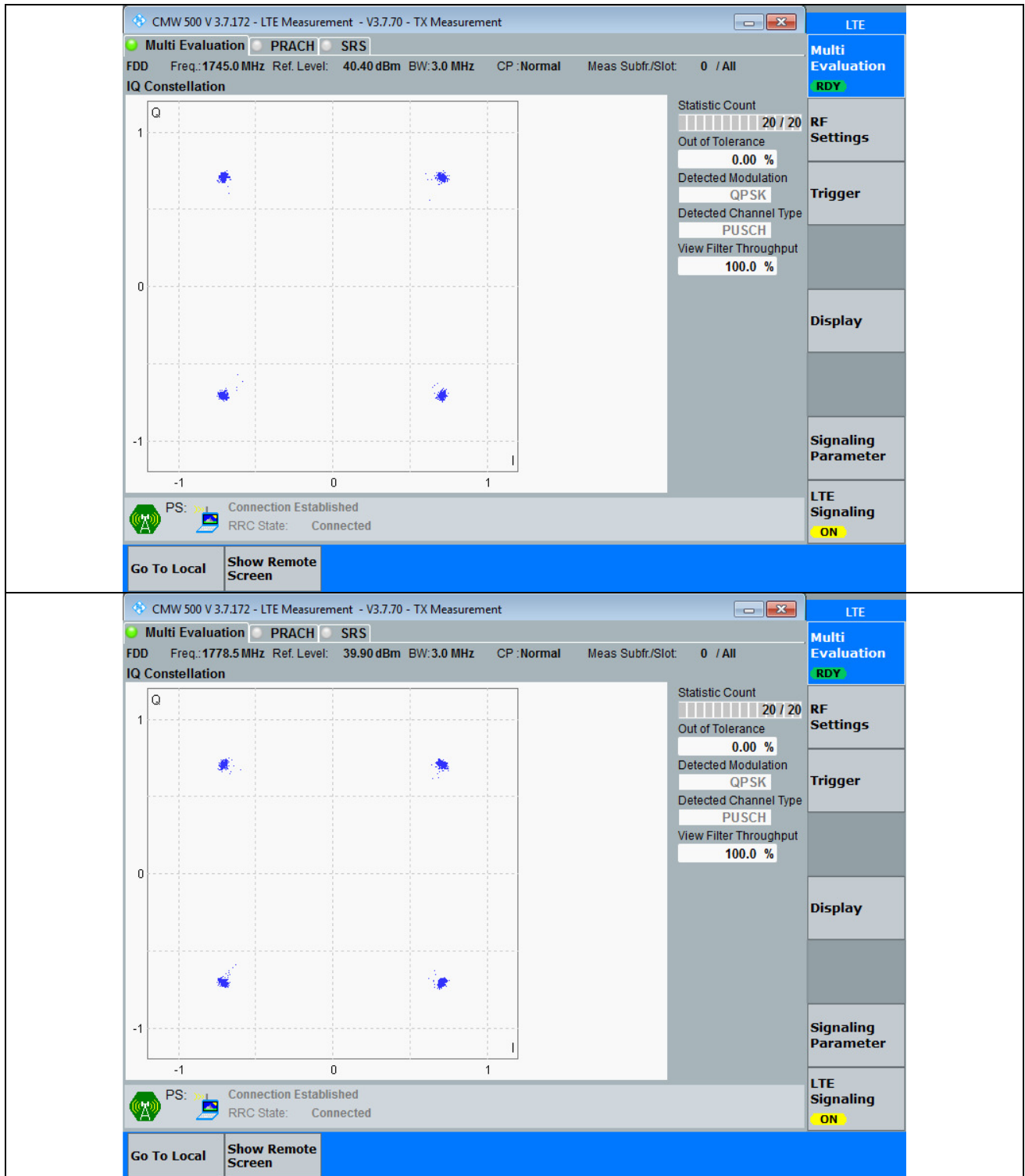
ON

Go To Local
Show Remote Screen

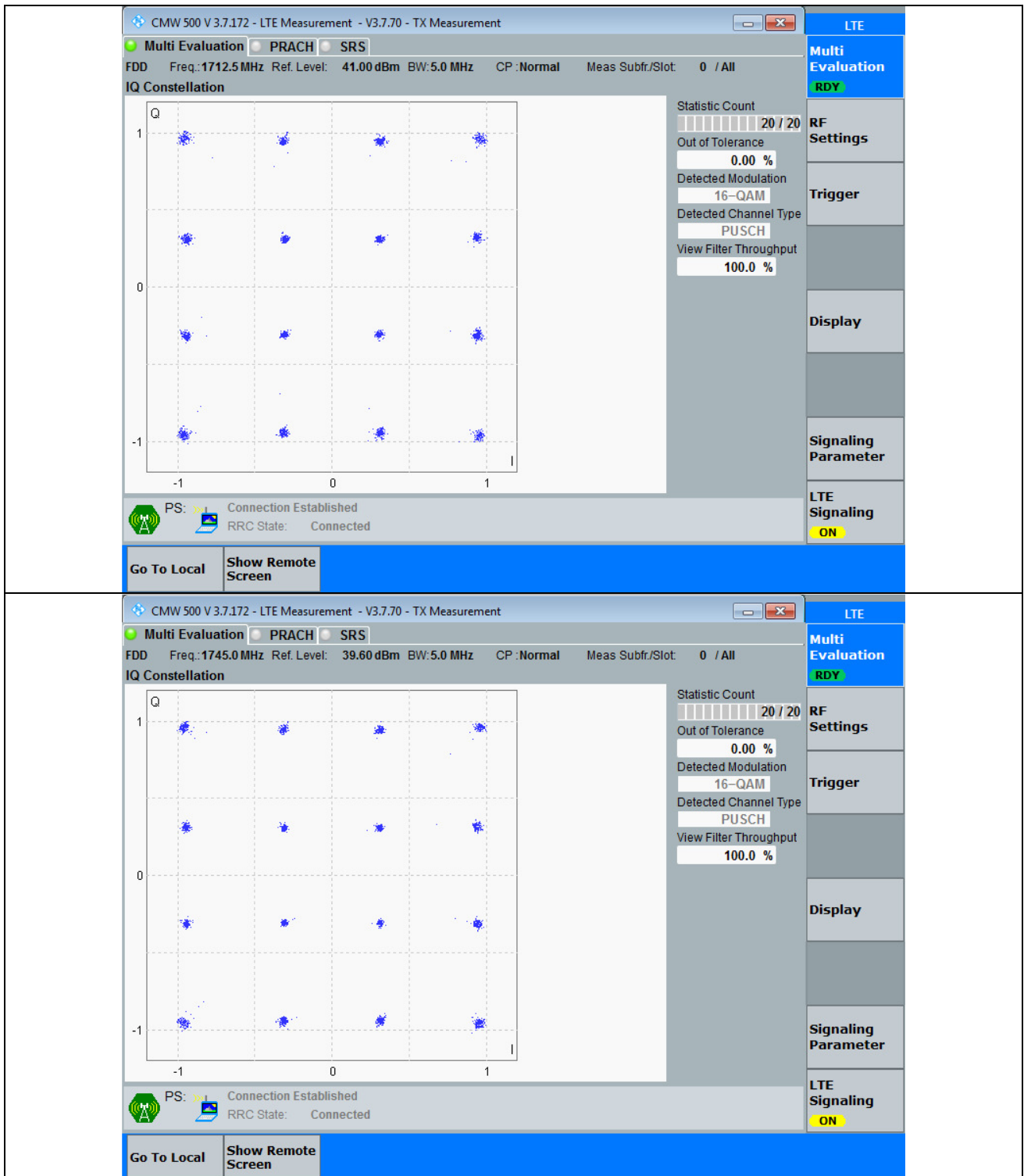
3.1 Test Graph

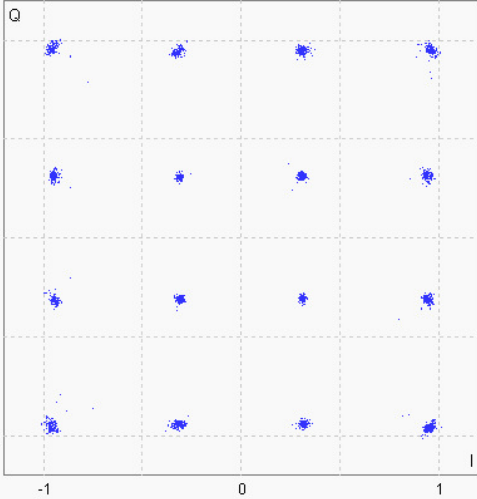
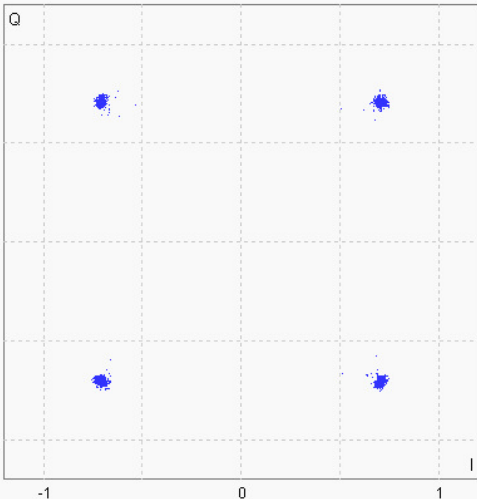


| | | |
|--|--|---|
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1778.5 MHz Ref. Level: 38.90 dBm BW: 3.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p> <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: 16-QAM Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | | LTE Multi Evaluation RDY RF Settings Trigger Display Signaling Parameter LTE Signaling ON |
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1711.5 MHz Ref. Level: 39.30 dBm BW: 3.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p> <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | | LTE Multi Evaluation RDY RF Settings Trigger Display Signaling Parameter LTE Signaling ON |



3.1 Test Graph



| | |
|--|--|
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1777.5 MHz Ref. Level: 38.80 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p>  <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: 16-QAM Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | <p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p> |
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1712.5 MHz Ref. Level: 39.40 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p>  <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | <p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p> |

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1745.0 MHz Ref. Level: 40.50 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation

Statistic Count
20 / 20
 Out of Tolerance
0.00 %
 Detected Modulation
QPSK
 Detected Channel Type
PUSCH
 View Filter Throughput
100.0 %

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling
ON

PS: ● Connection Established
 RRC State: ● Connected

Go To Local Show Remote Screen

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1777.5 MHz Ref. Level: 39.90 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation

Statistic Count
20 / 20
 Out of Tolerance
0.00 %
 Detected Modulation
QPSK
 Detected Channel Type
PUSCH
 View Filter Throughput
100.0 %

RF Settings

Trigger

Display

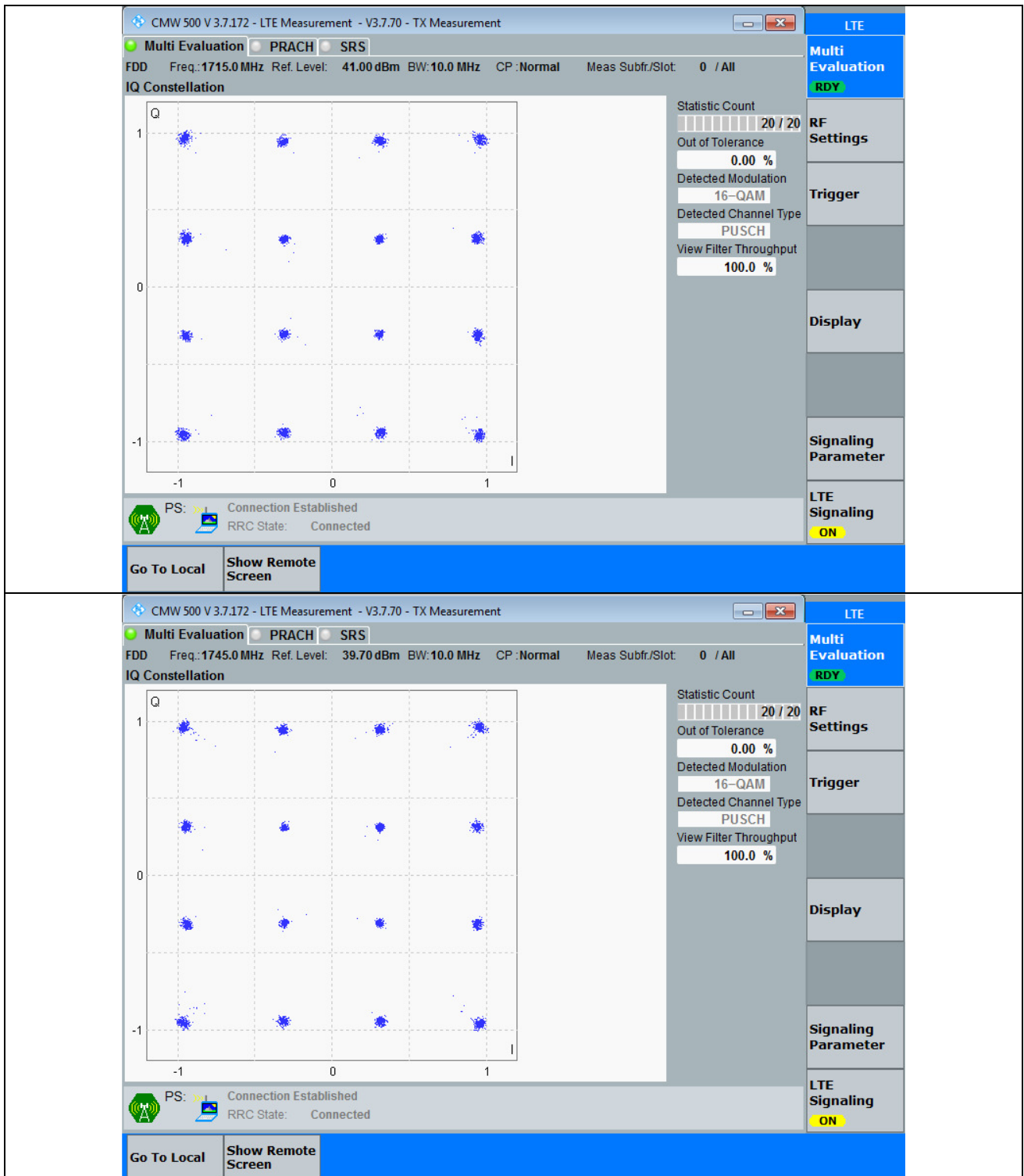
Signaling Parameter

LTE Signaling
ON

PS: ● Connection Established
 RRC State: ● Connected

Go To Local Show Remote Screen

3.1 Test Graph



CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1775.0 MHz Ref. Level: 39.00 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation

Statistic Count
 20 / 20
 Out of Tolerance
 0.00 %
 Detected Modulation
 16-QAM
 Detected Channel Type
 PUSCH
 View Filter Throughput
 100.0 %

PS: ● Connection Established
 RRC State: Connected

RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling
ON

Go To Local Show Remote Screen

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1715.0 MHz Ref. Level: 39.40 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

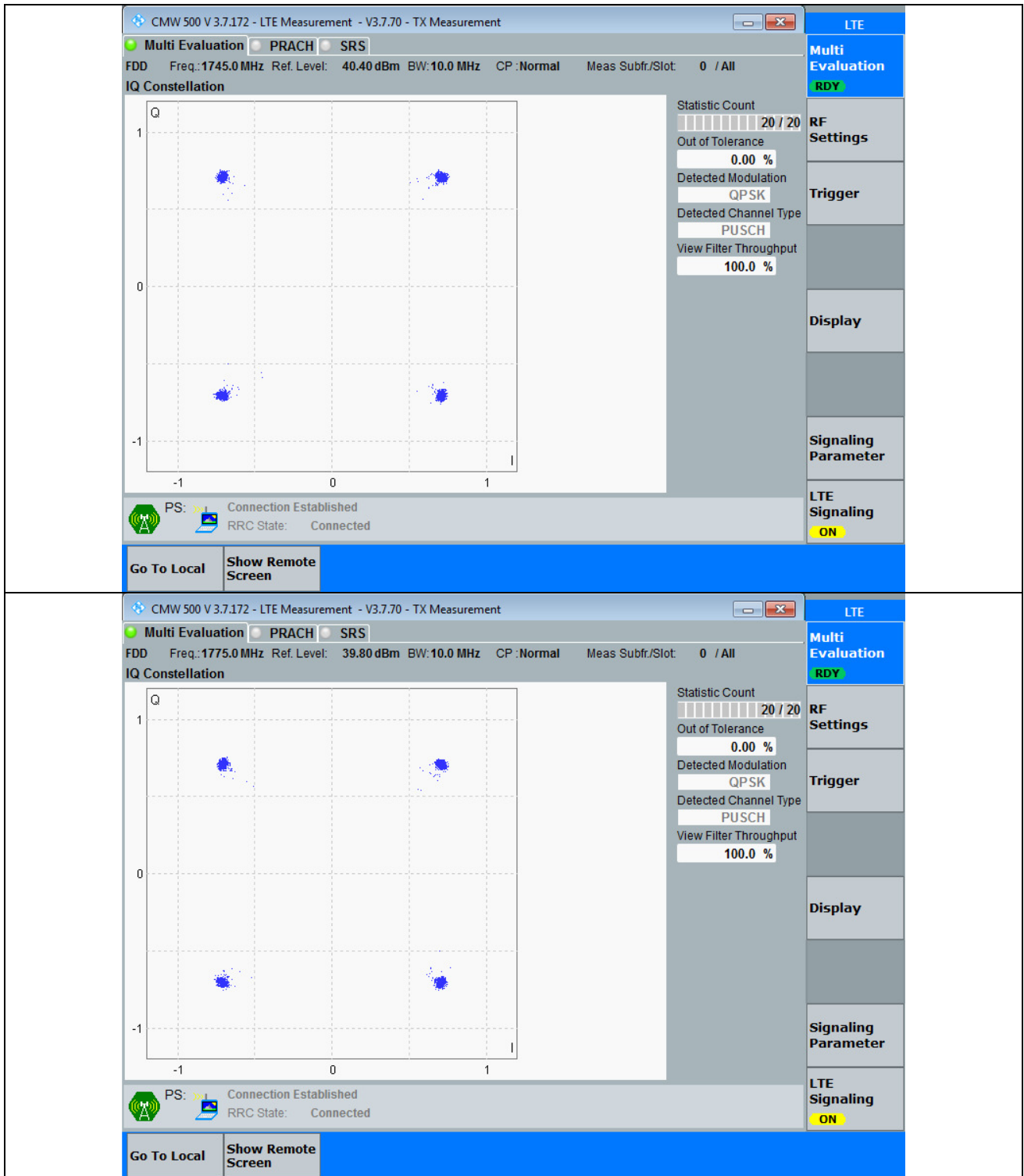
IQ Constellation

Statistic Count
 20 / 20
 Out of Tolerance
 0.00 %
 Detected Modulation
 QPSK
 Detected Channel Type
 PUSCH
 View Filter Throughput
 100.0 %

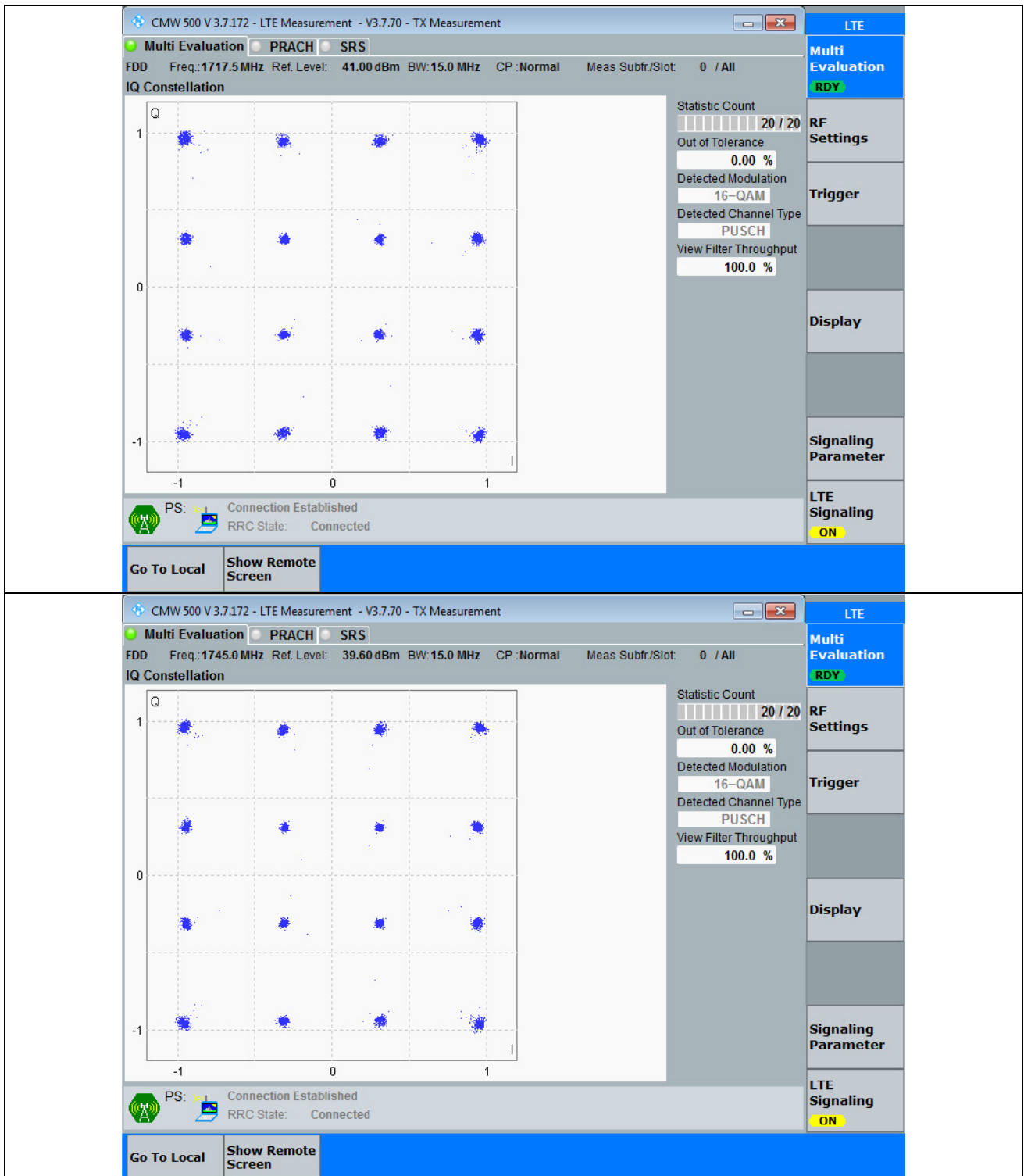
PS: ● Connection Established
 RRC State: Connected

RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling
ON

Go To Local Show Remote Screen



3.1 Test Graph



CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1772.5 MHz Ref. Level: 39.10 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation

Statistic Count
 20 / 20
 Out of Tolerance
 0.00 %
 Detected Modulation
 16-QAM
 Detected Channel Type
 PUSCH
 View Filter Throughput
 100.0 %

PS: ● Connection Established
 RRC State: Connected

RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling
ON

Go To Local Show Remote Screen

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1717.5 MHz Ref. Level: 39.40 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation

Statistic Count
 20 / 20
 Out of Tolerance
 0.00 %
 Detected Modulation
 QPSK
 Detected Channel Type
 PUSCH
 View Filter Throughput
 100.0 %

PS: ● Connection Established
 RRC State: Connected

RF Settings
Trigger
Display
Signaling Parameter
LTE Signaling
ON

Go To Local Show Remote Screen

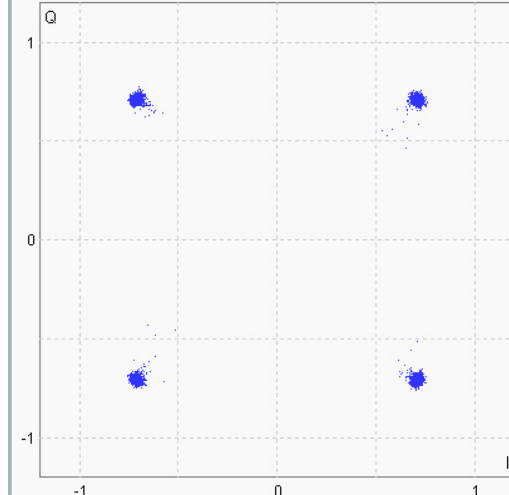
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
LTE

● Multi Evaluation
 PRACH
SRS

FDD Freq.: 1745.0 MHz Ref. Level: 40.40 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

Multi Evaluation
RDY

IQ Constellation



Statistic Count
 20 / 20

Out of Tolerance
 0.00 %

Detected Modulation
 QPSK

Detected Channel Type
 PUSCH

View Filter Throughput
 100.0 %

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling
ON

PS: Connection Established
RRC State: Connected

Go To Local
Show Remote Screen

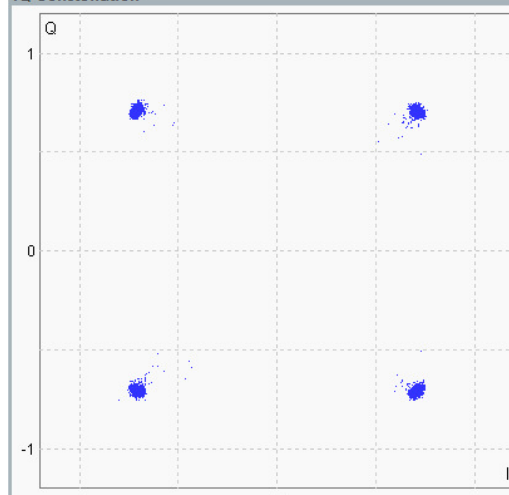
CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
LTE

● Multi Evaluation
 PRACH
SRS

FDD Freq.: 1772.5 MHz Ref. Level: 40.00 dBm BW: 15.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

Multi Evaluation
RDY

IQ Constellation



Statistic Count
 20 / 20

Out of Tolerance
 0.00 %

Detected Modulation
 QPSK

Detected Channel Type
 PUSCH

View Filter Throughput
 100.0 %

RF Settings

Trigger

Display

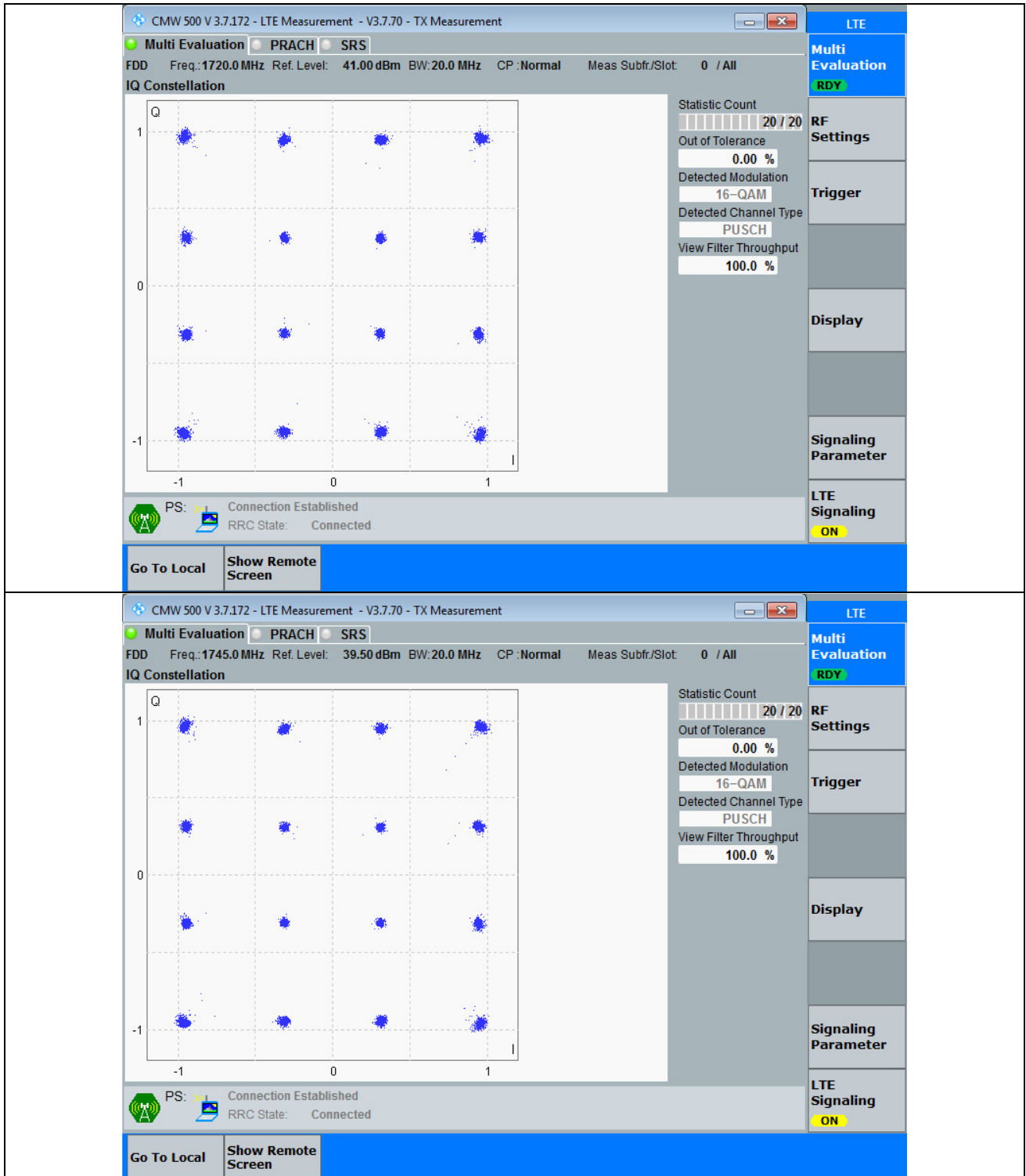
Signaling Parameter

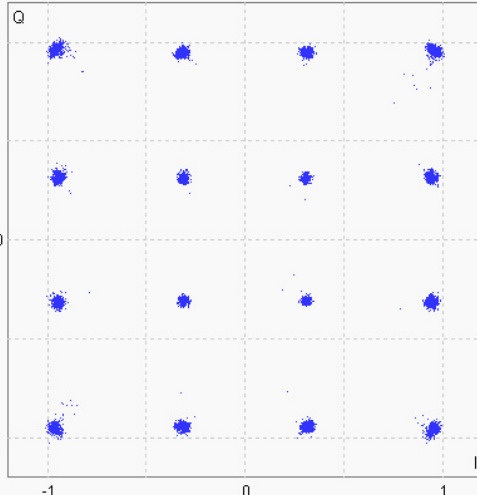
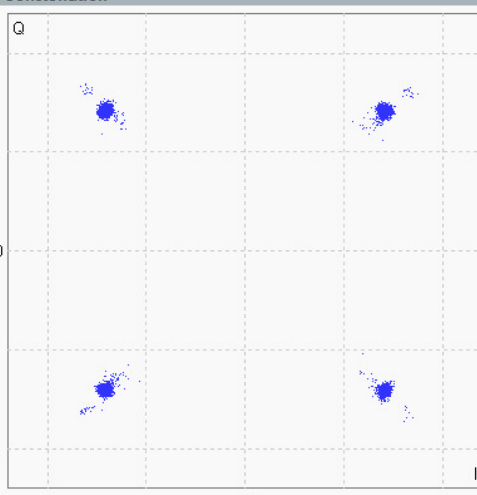
LTE Signaling
ON

PS: Connection Established
RRC State: Connected

Go To Local
Show Remote Screen

3.1 Test Graph



| | |
|---|--|
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1770.0 MHz Ref. Level: 39.10 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p>  <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: 16-QAM Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | <p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p> |
| <p>CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement</p> <p>Multi Evaluation PRACH SRS</p> <p>FDD Freq.: 1720.0 MHz Ref. Level: 39.30 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All</p> <p>IQ Constellation</p>  <p>Statistic Count: 20 / 20 Out of Tolerance: 0.00 % Detected Modulation: QPSK Detected Channel Type: PUSCH View Filter Throughput: 100.0 %</p> <p>PS: Connection Established RRC State: Connected</p> <p>Go To Local Show Remote Screen</p> | <p>LTE</p> <p>Multi Evaluation RDY</p> <p>RF Settings</p> <p>Trigger</p> <p>Display</p> <p>Signaling Parameter</p> <p>LTE Signaling ON</p> |

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1745.0 MHz Ref. Level: 40.60 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation

Statistic Count
20 / 20
 Out of Tolerance
0.00 %
 Detected Modulation
QPSK
 Detected Channel Type
PUSCH
 View Filter Throughput
100.0 %

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling
ON

PS: ● Connection Established
 RRC State: Connected

Go To Local
Show Remote Screen

CMW 500 V 3.7.172 - LTE Measurement - V3.7.70 - TX Measurement
 FDD Freq.: 1770.0 MHz Ref. Level: 40.10 dBm BW: 20.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation PRACH SRS

Multi Evaluation
RDY

IQ Constellation

Statistic Count
20 / 20
 Out of Tolerance
0.00 %
 Detected Modulation
QPSK
 Detected Channel Type
PUSCH
 View Filter Throughput
100.0 %

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling
ON

PS: ● Connection Established
 RRC State: Connected

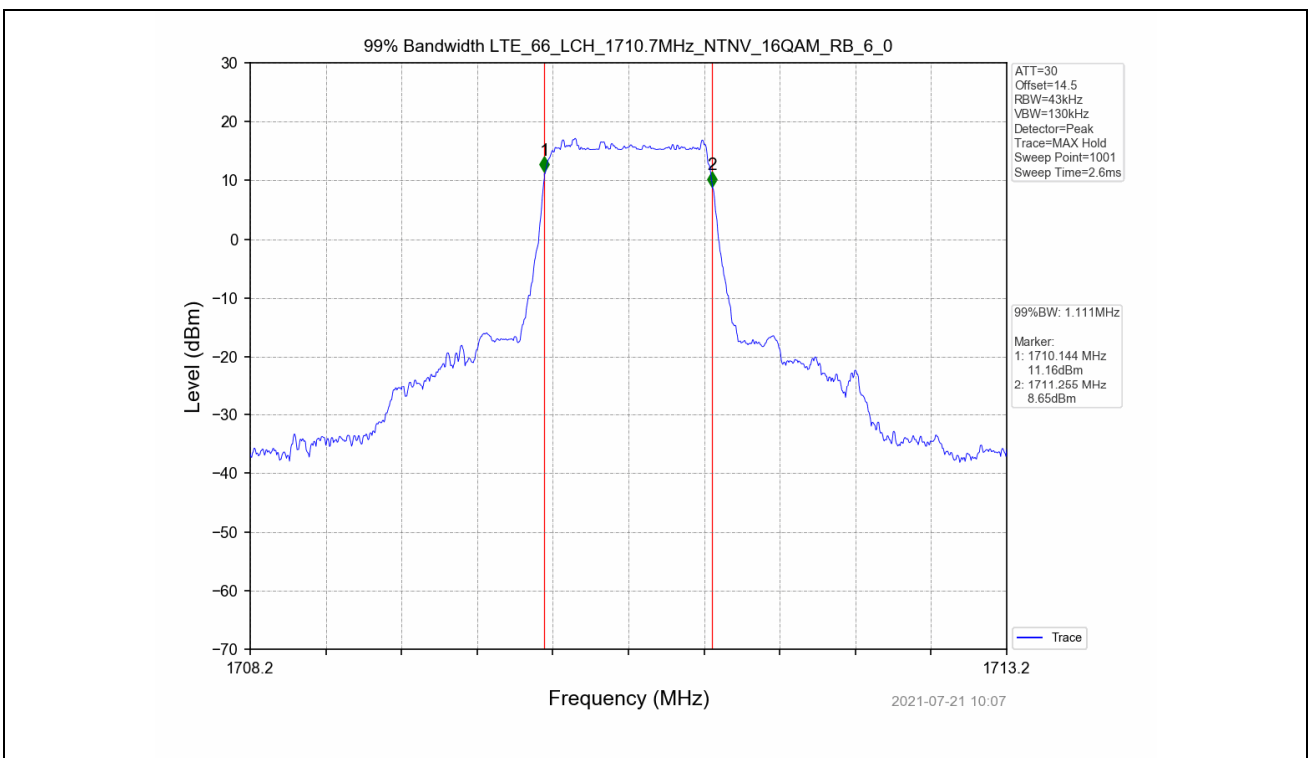
Go To Local
Show Remote Screen

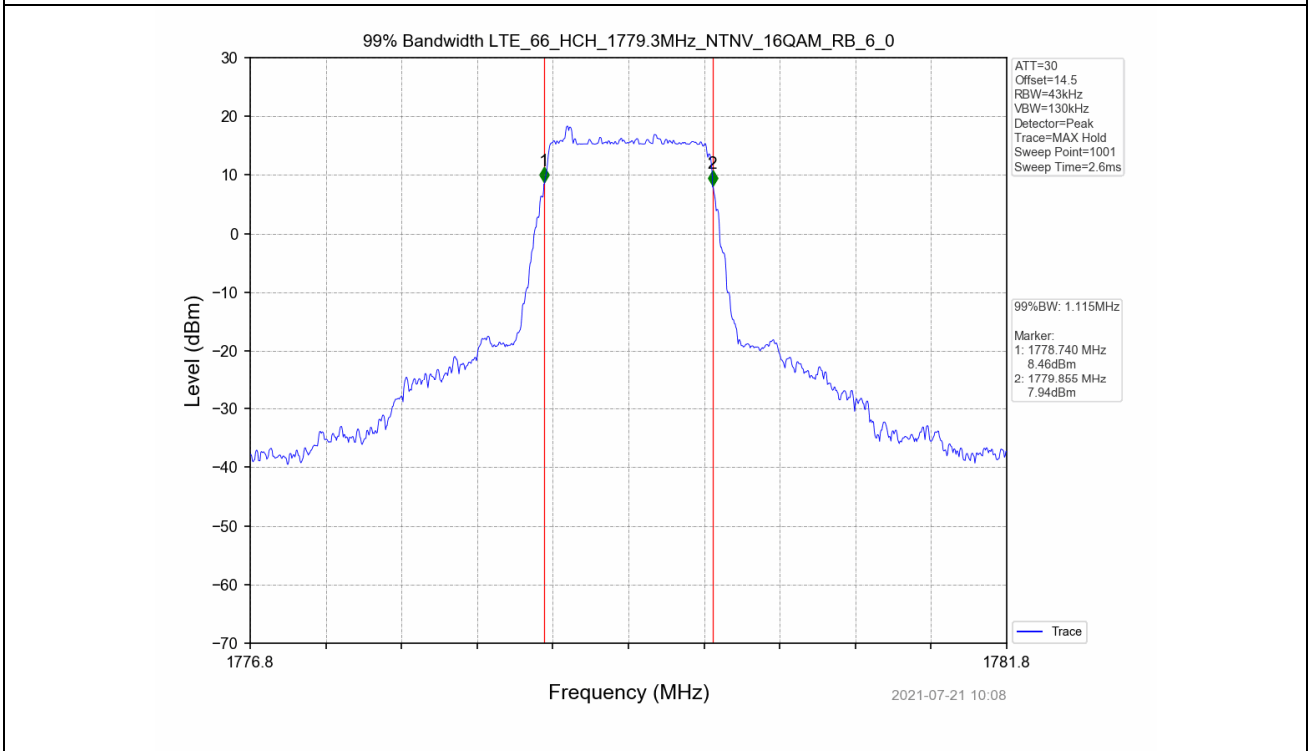
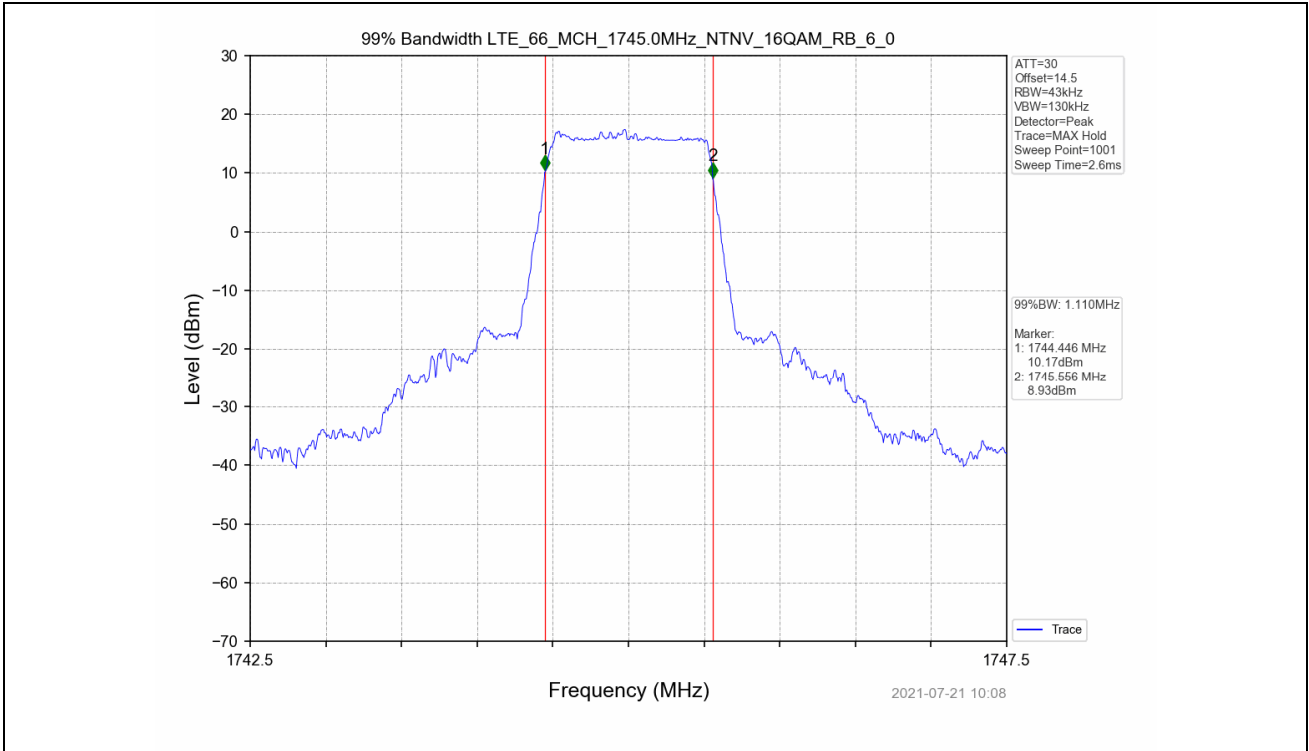
4. 99% & 26dB Bandwidth

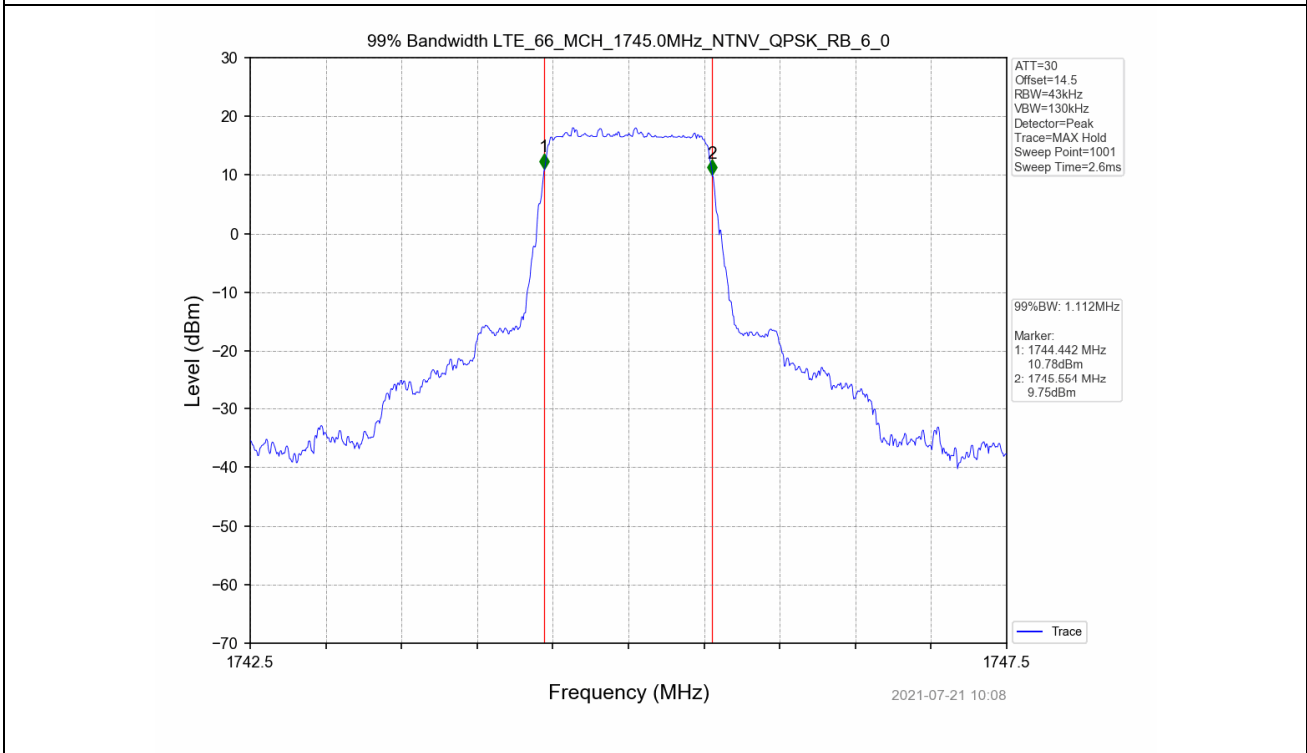
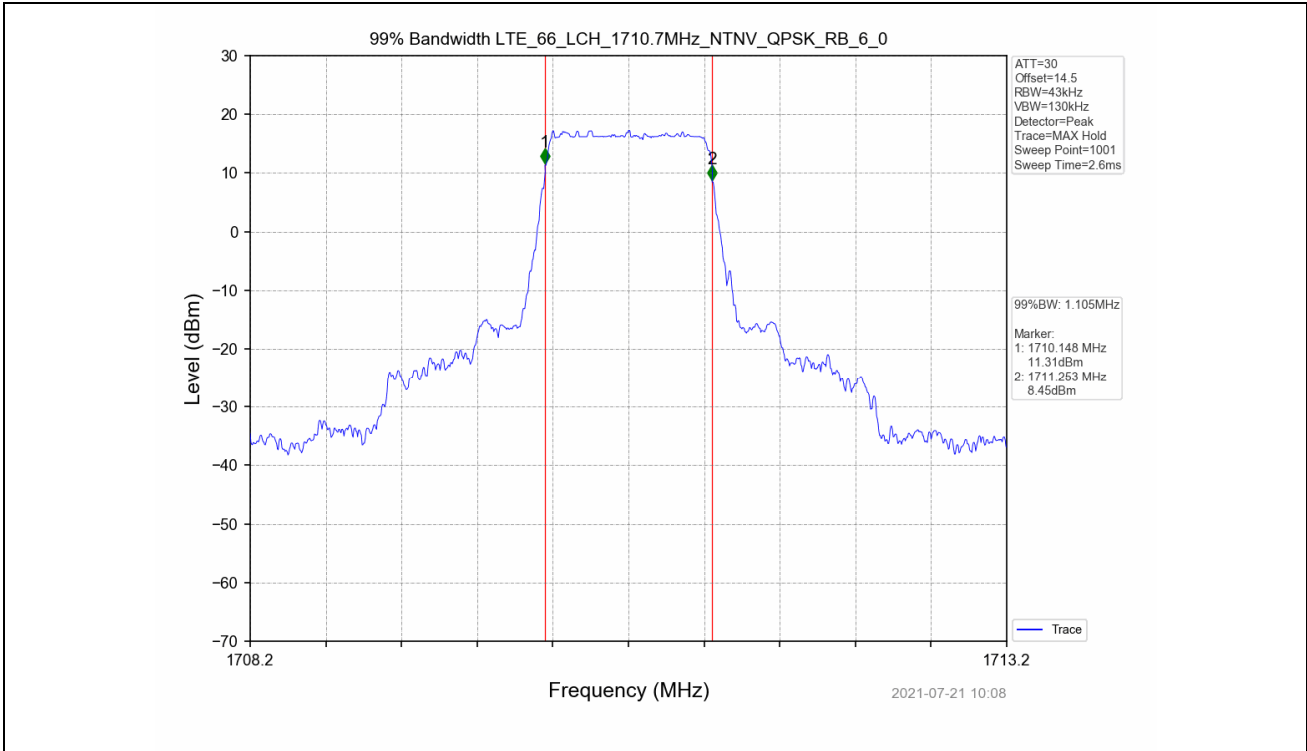
4.1 Test Result

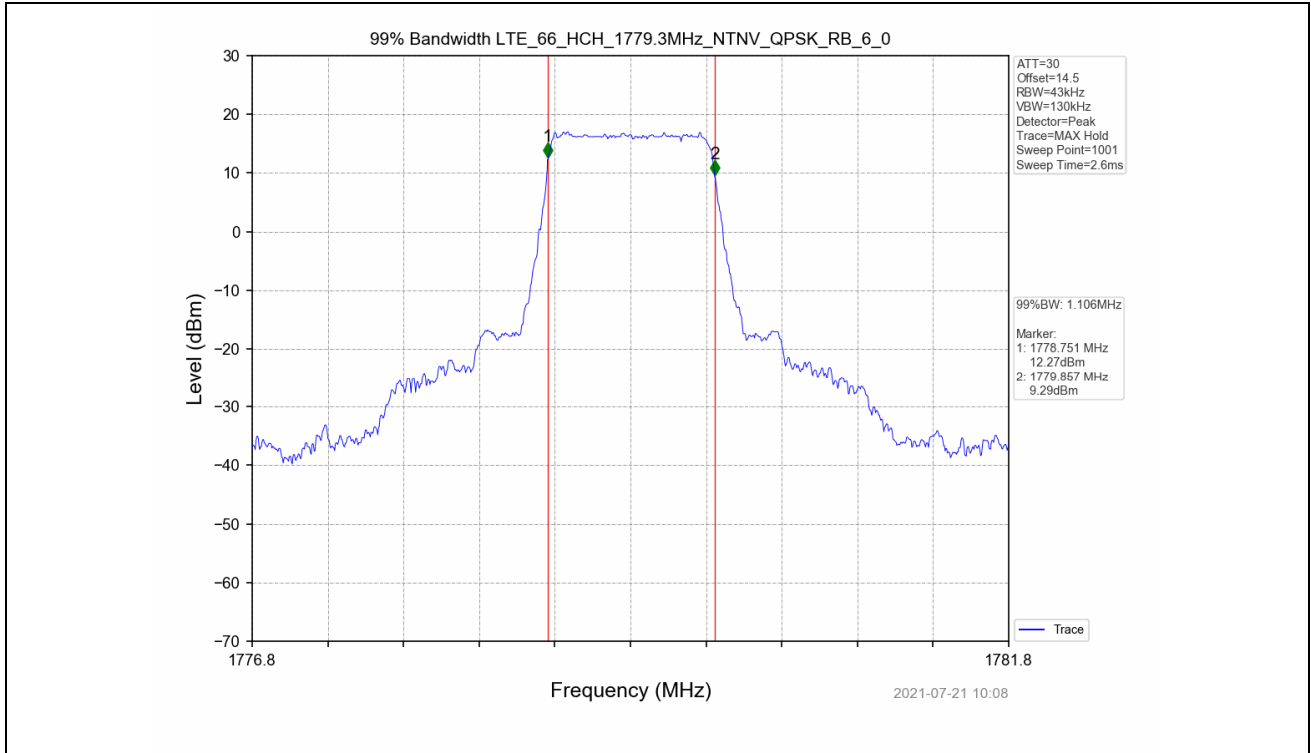
| Test Band: 66 _ 1.4MHz Bandwidth | | | | | | | |
|----------------------------------|---------------|--------|------------------------------|-------|-------|-------|---------|
| Test Mode | RB Allocation | | 99% Occupied Bandwidth (MHz) | | | Limit | Verdict |
| | Size | Offset | LCH | MCH | HCH | | |
| QPSK | 6 | 0 | 1.105 | 1.112 | 1.106 | N/A | PASS |
| 16QAM | 6 | 0 | 1.111 | 1.110 | 1.115 | N/A | PASS |

4.2 Test Graph



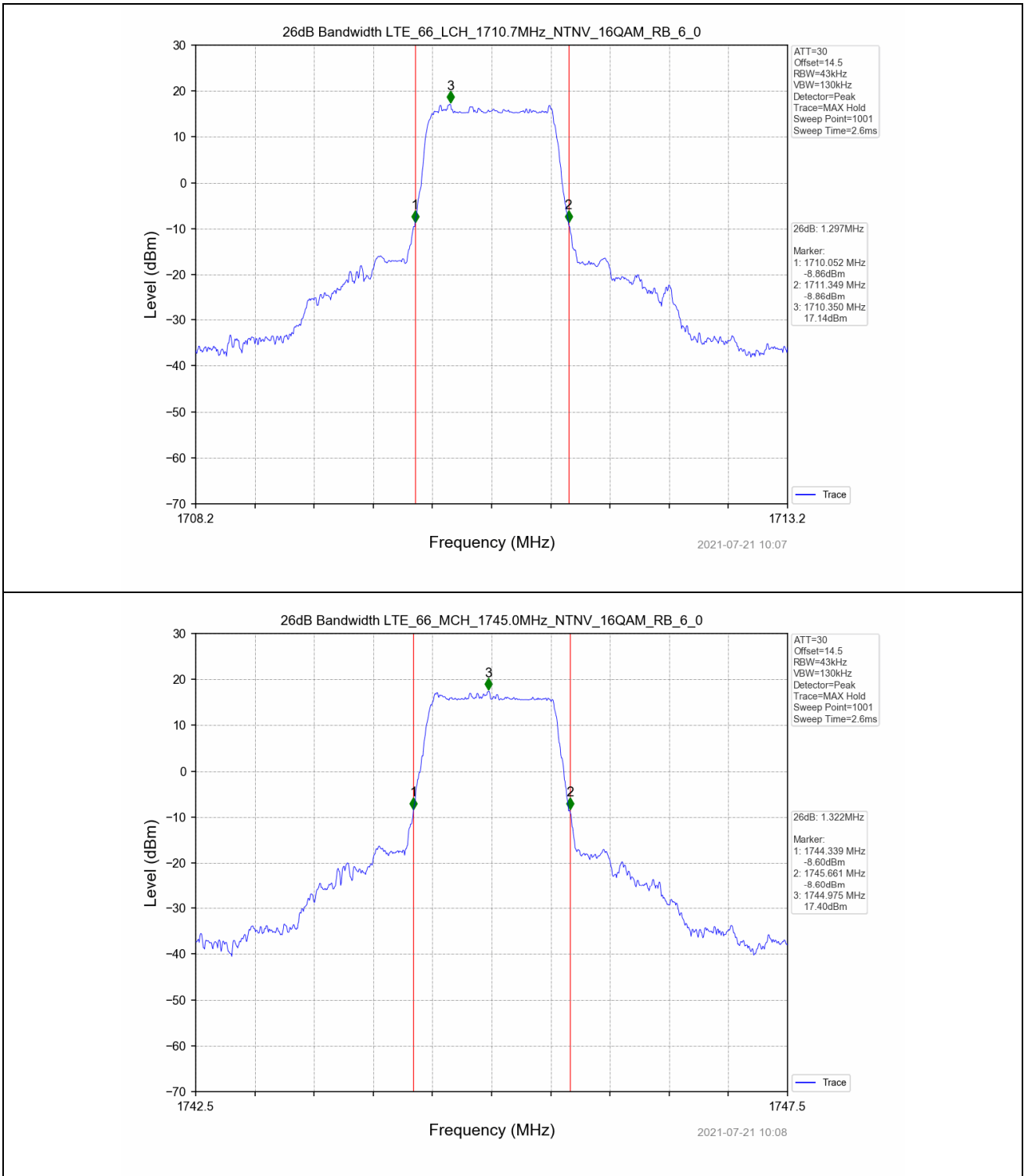


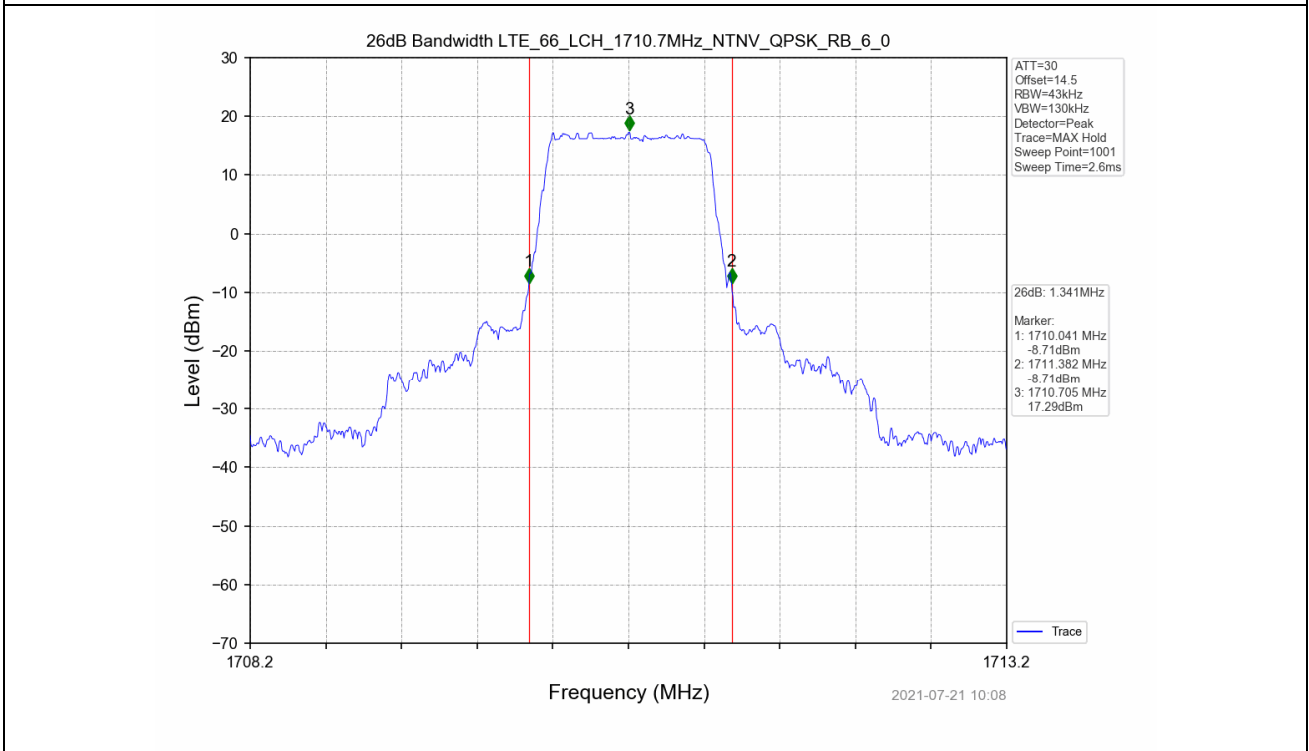
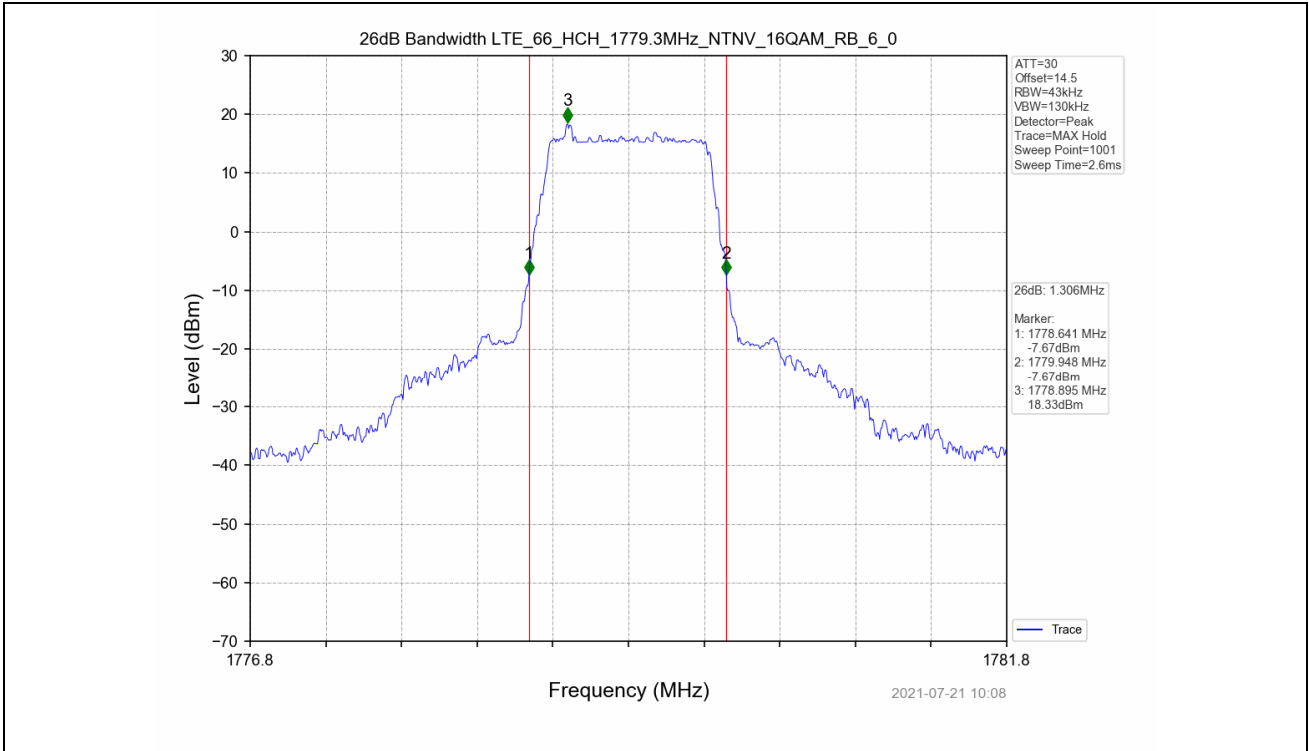


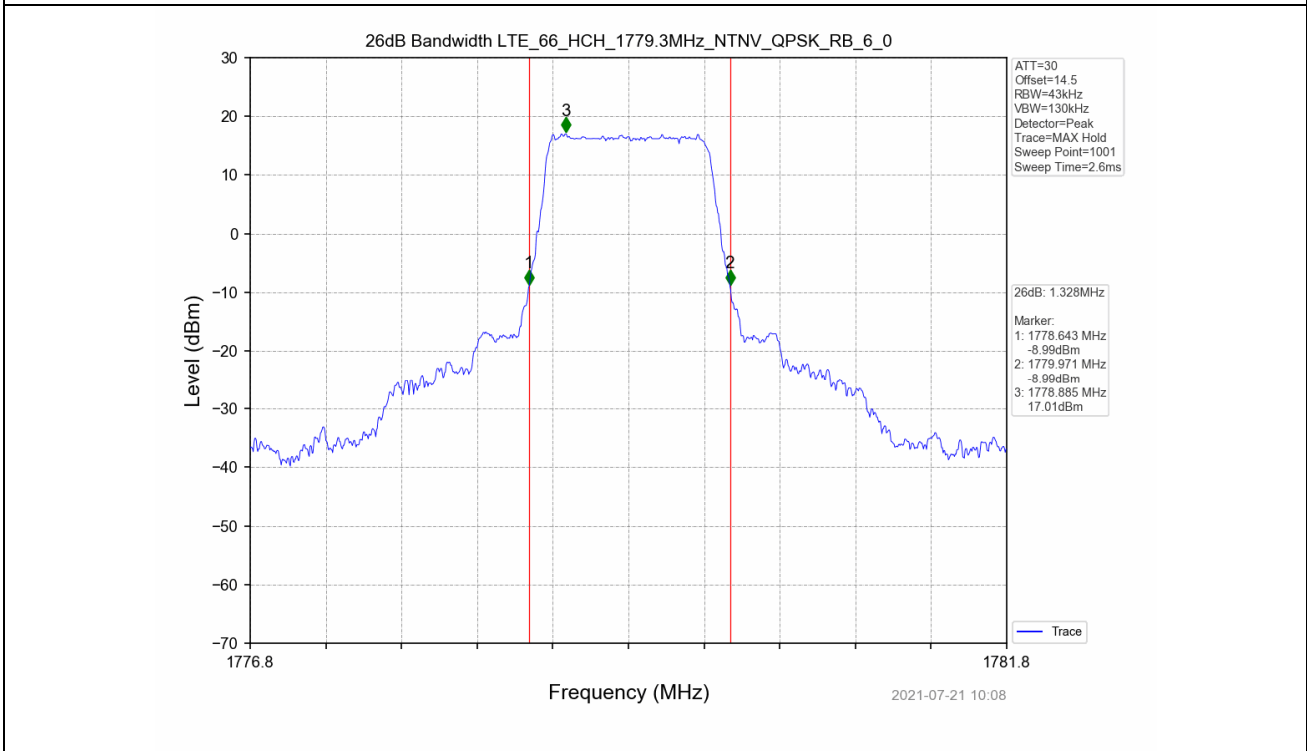
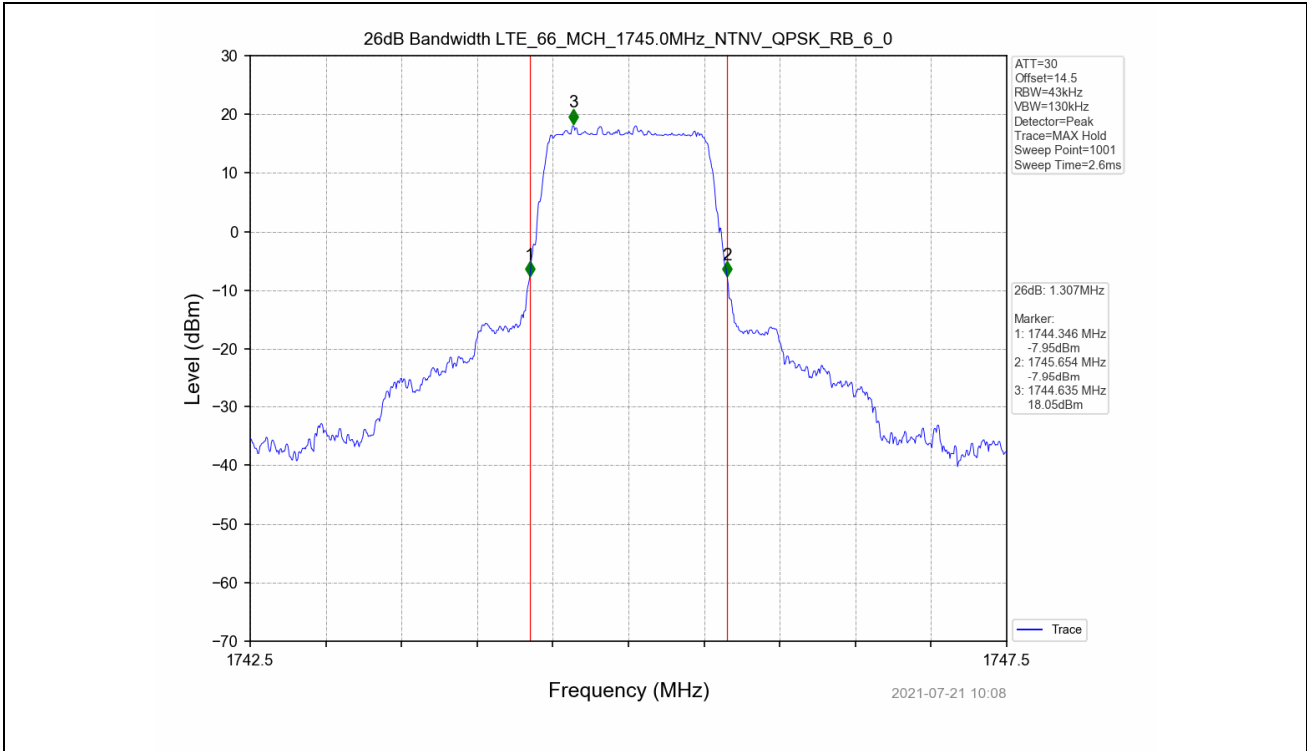


| Test Band: 66 1.4MHz Bandwidth | | | | | | | |
|--------------------------------|---------------|--------|----------------------|-------|-------|-------|---------|
| Test Mode | RB Allocation | | 26dB Bandwidth (MHz) | | | Limit | Verdict |
| | Size | Offset | LCH | MCH | HCH | | |
| QPSK | 6 | 0 | 1.341 | 1.307 | 1.328 | N/A | PASS |
| 16QAM | 6 | 0 | 1.297 | 1.322 | 1.306 | N/A | PASS |

4.2 Test Graph

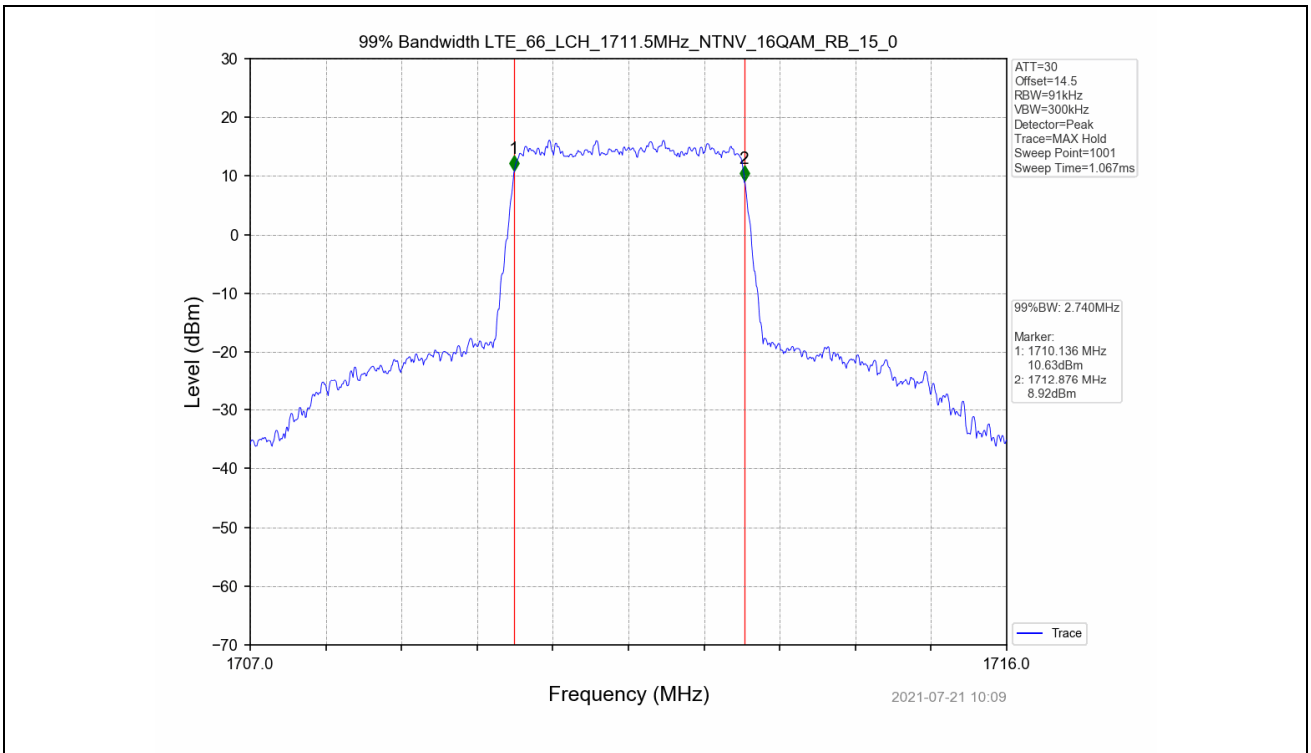


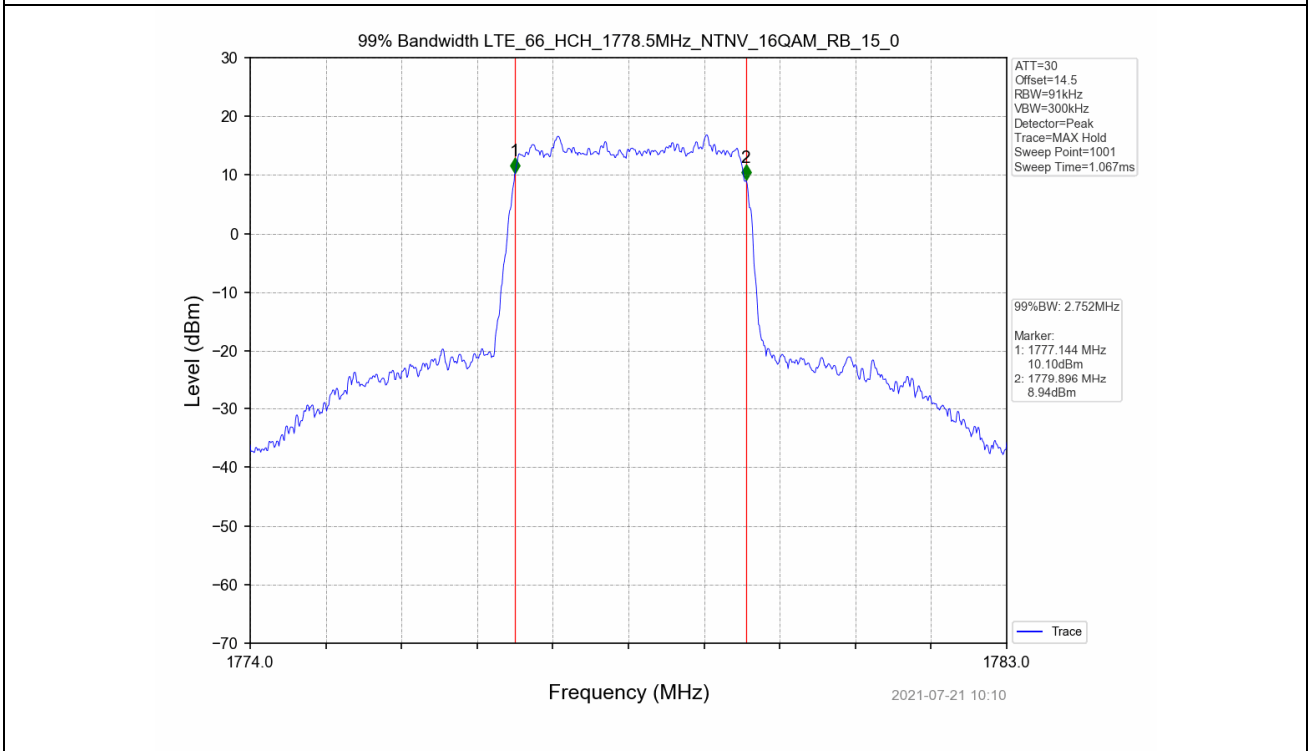
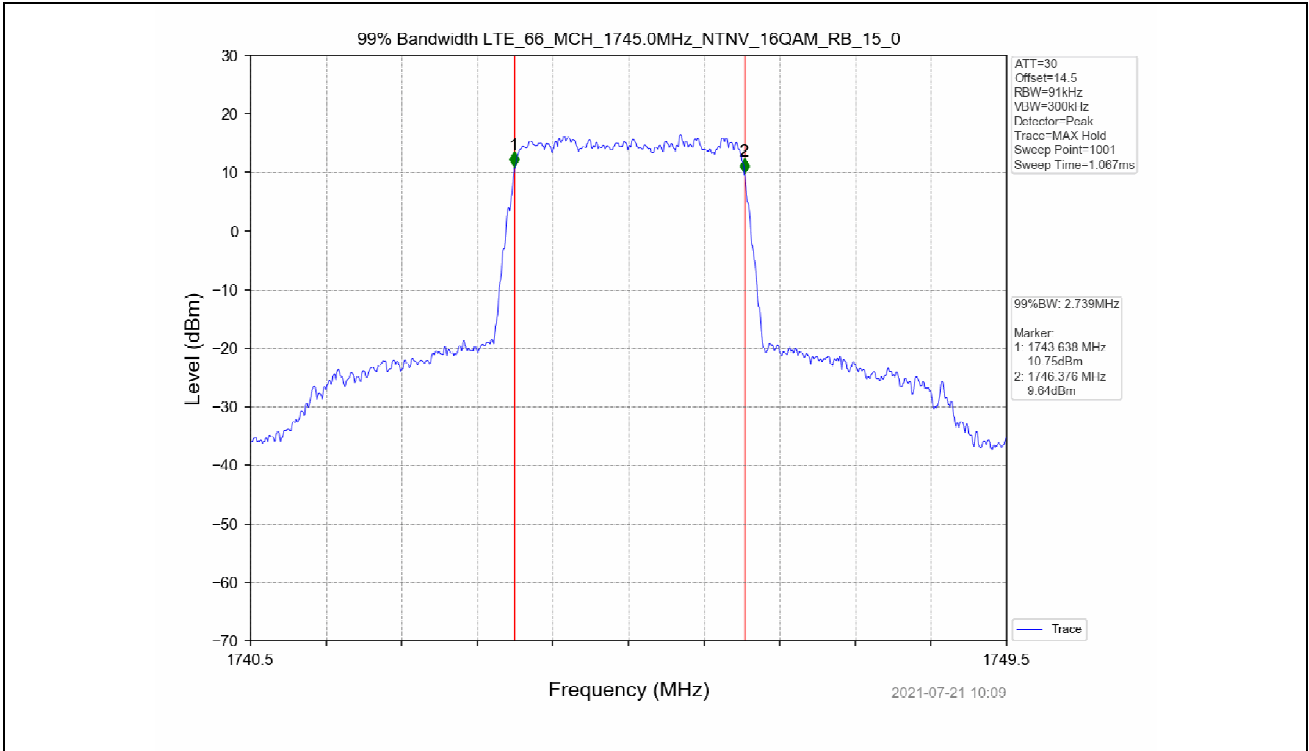


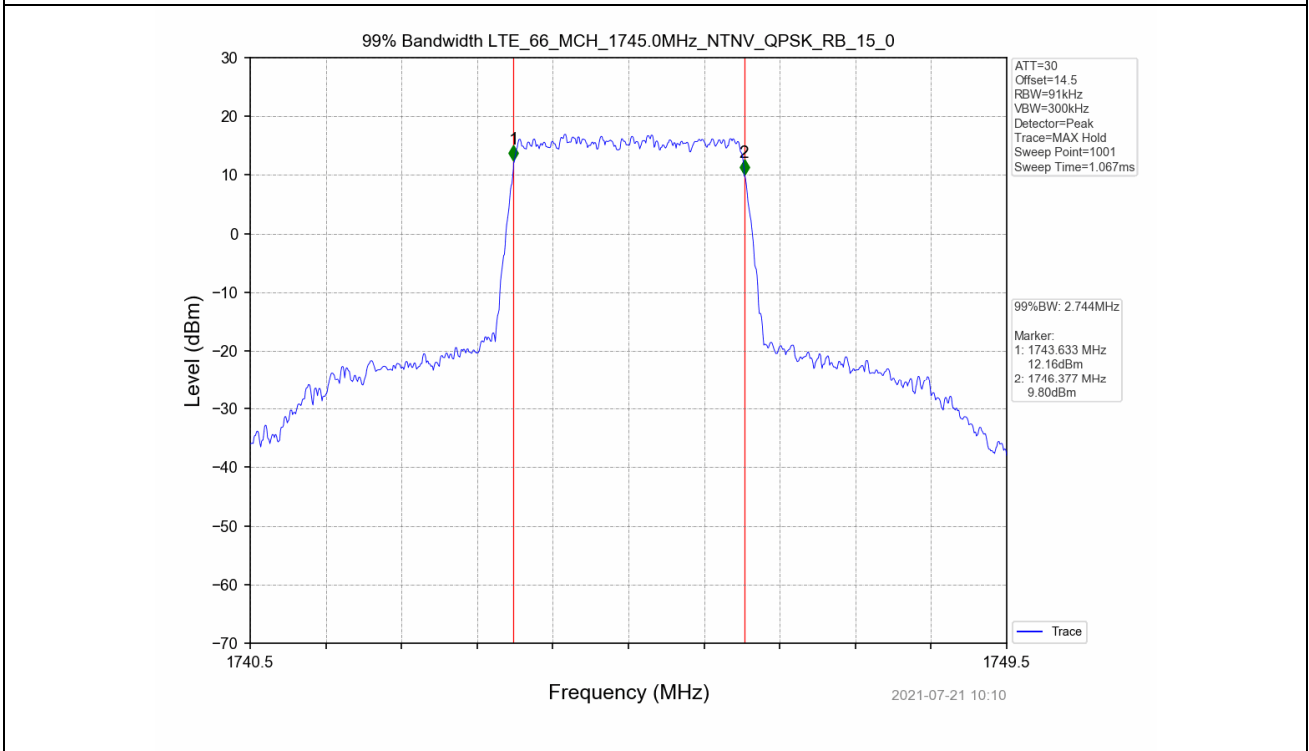
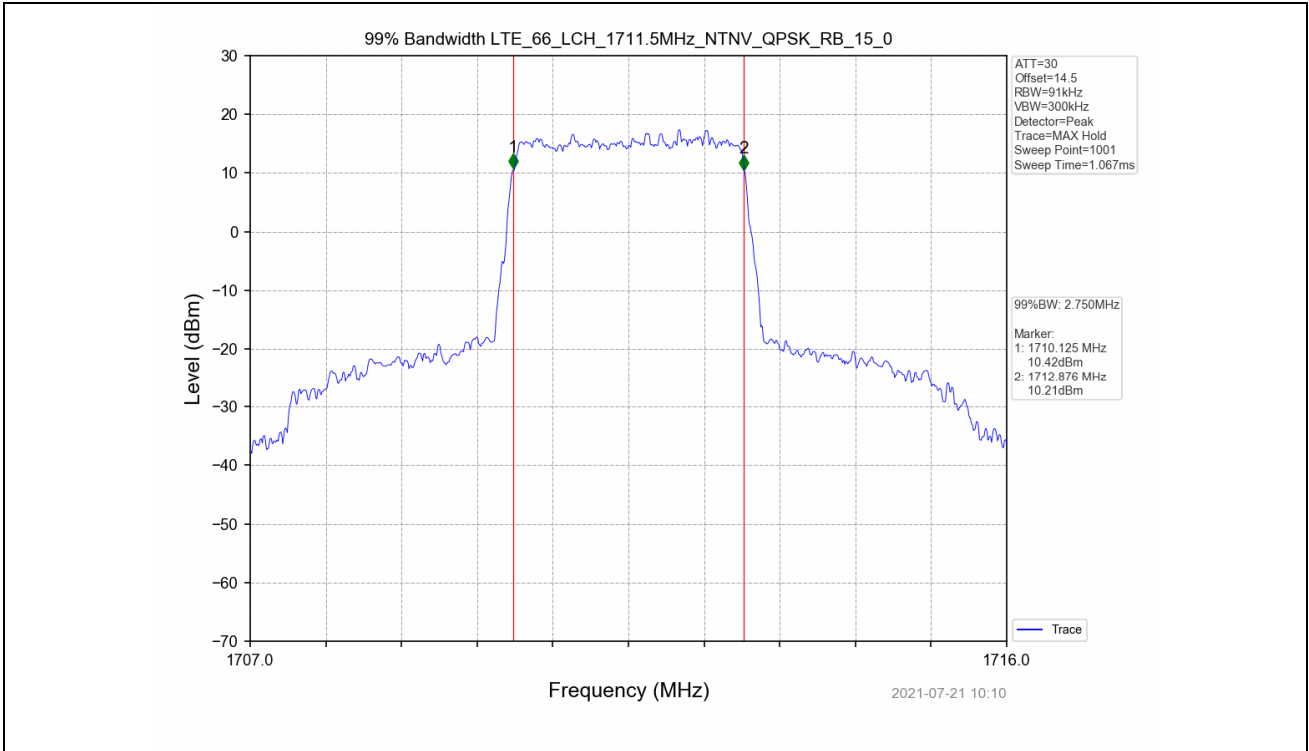


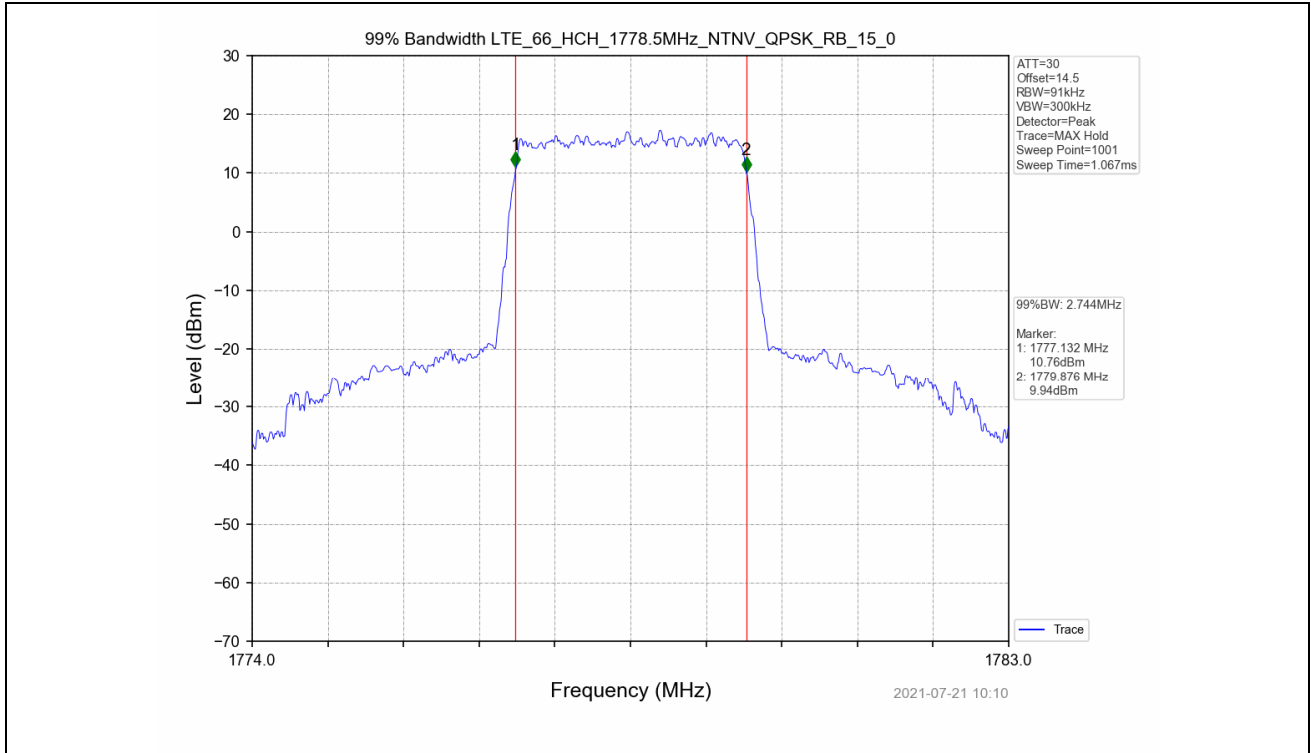
| Test Band: 66_3MHz Bandwidth | | | | | | | |
|------------------------------|---------------|--------|------------------------------|-------|-------|-------|---------|
| Test Mode | RB Allocation | | 99% Occupied Bandwidth (MHz) | | | Limit | Verdict |
| | Size | Offset | LCH | MCH | HCH | | |
| QPSK | 15 | 0 | 2.750 | 2.744 | 2.744 | N/A | PASS |
| 16QAM | 15 | 0 | 2.740 | 2.739 | 2.752 | N/A | PASS |

4.2 Test Graph









| Test Band: 66 3MHz Bandwidth | | | | | | | |
|------------------------------|---------------|--------|----------------------|-------|-------|-------|---------|
| Test Mode | RB Allocation | | 26dB Bandwidth (MHz) | | | Limit | Verdict |
| | Size | Offset | LCH | MCH | HCH | | |
| QPSK | 15 | 0 | 3.065 | 3.065 | 3.061 | N/A | PASS |
| 16QAM | 15 | 0 | 3.066 | 3.067 | 3.035 | N/A | PASS |

4.2 Test Graph

