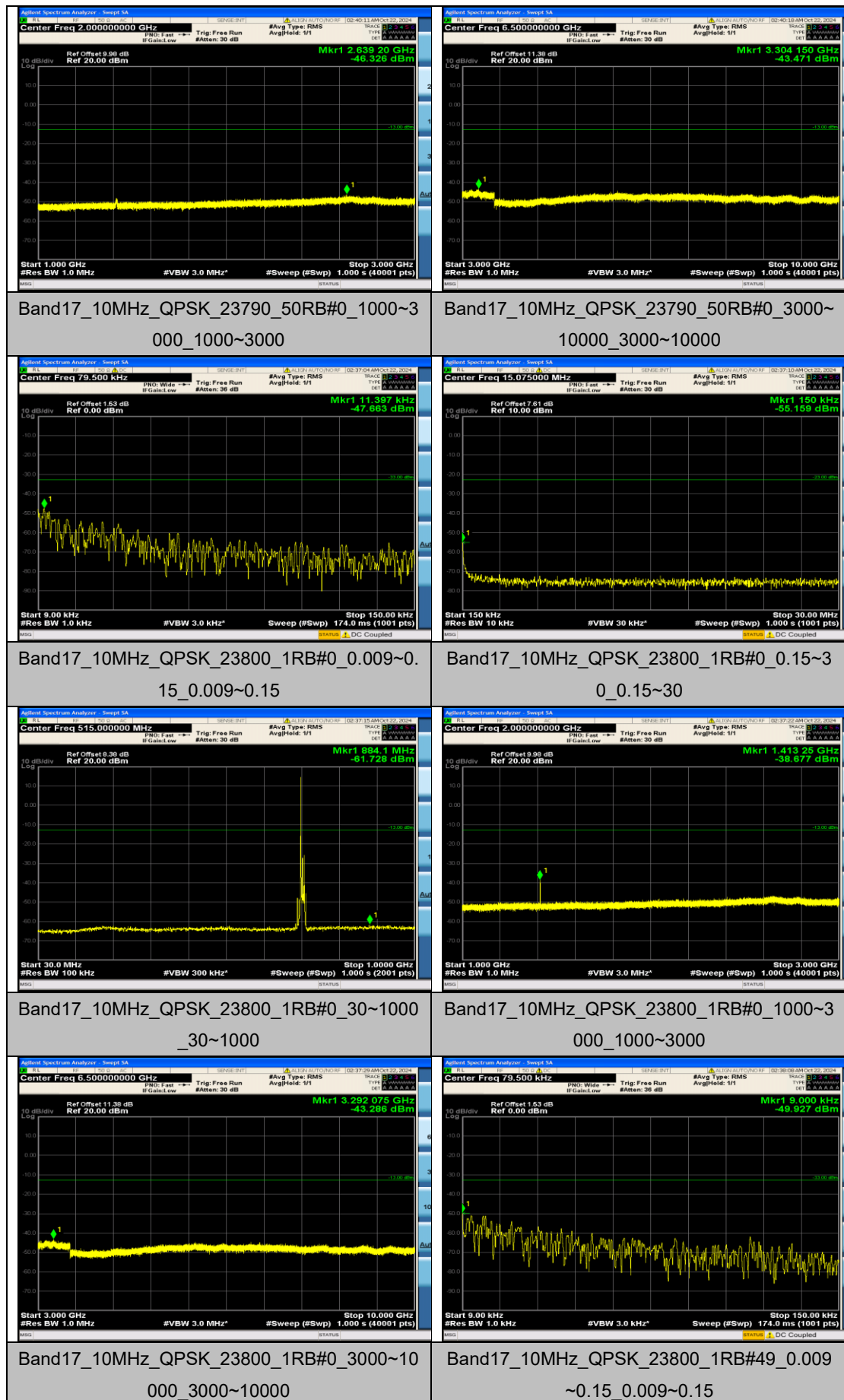
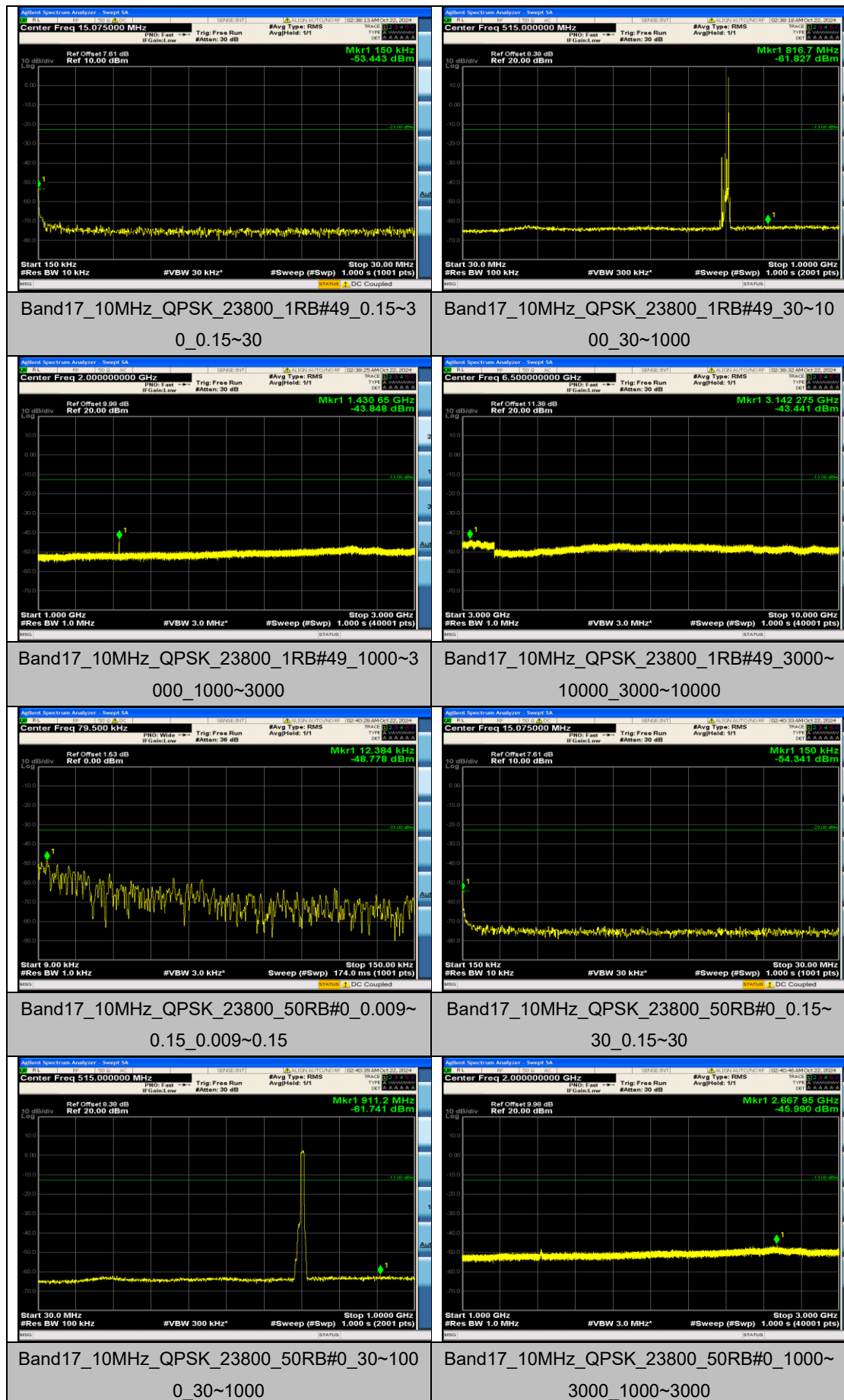
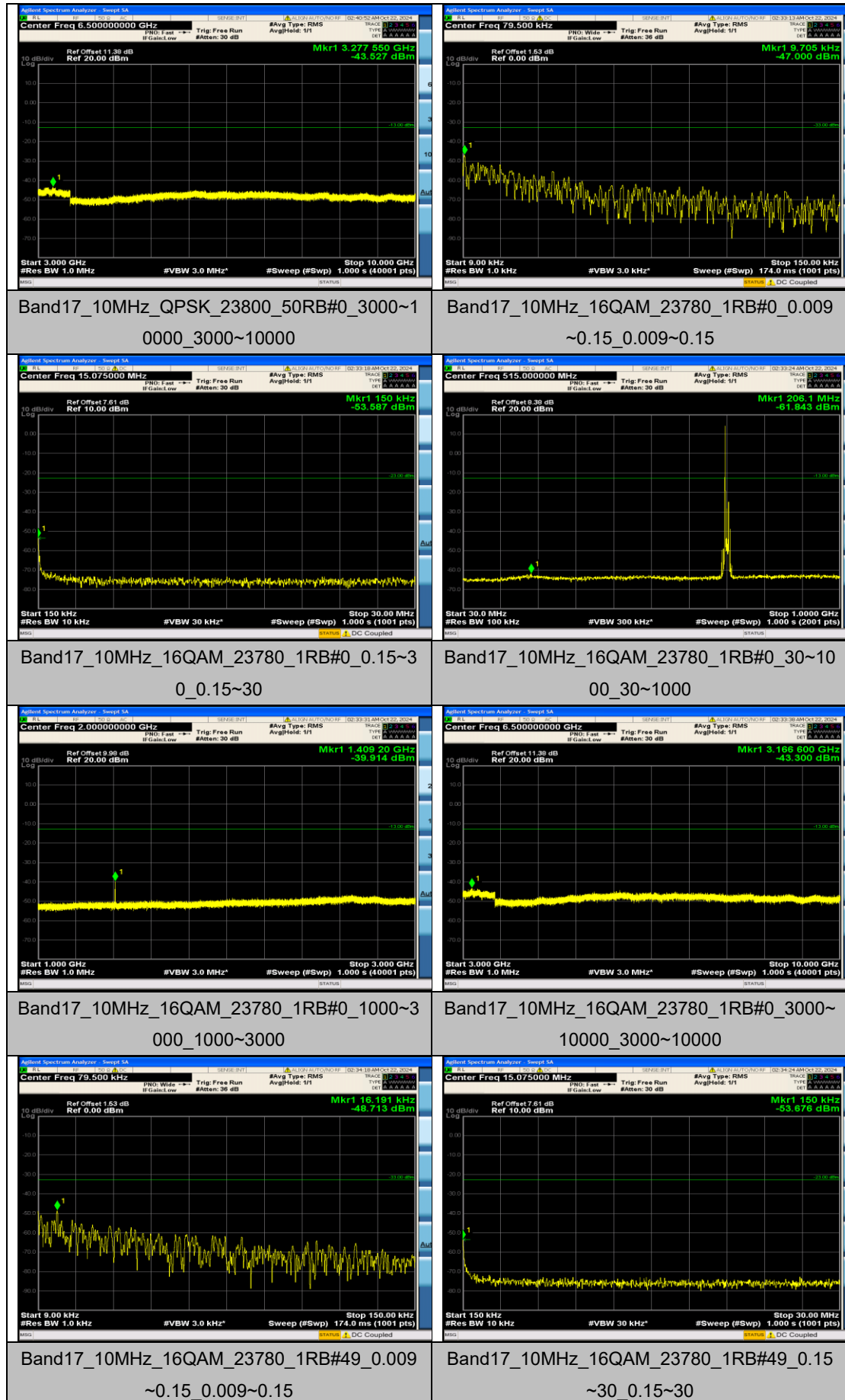
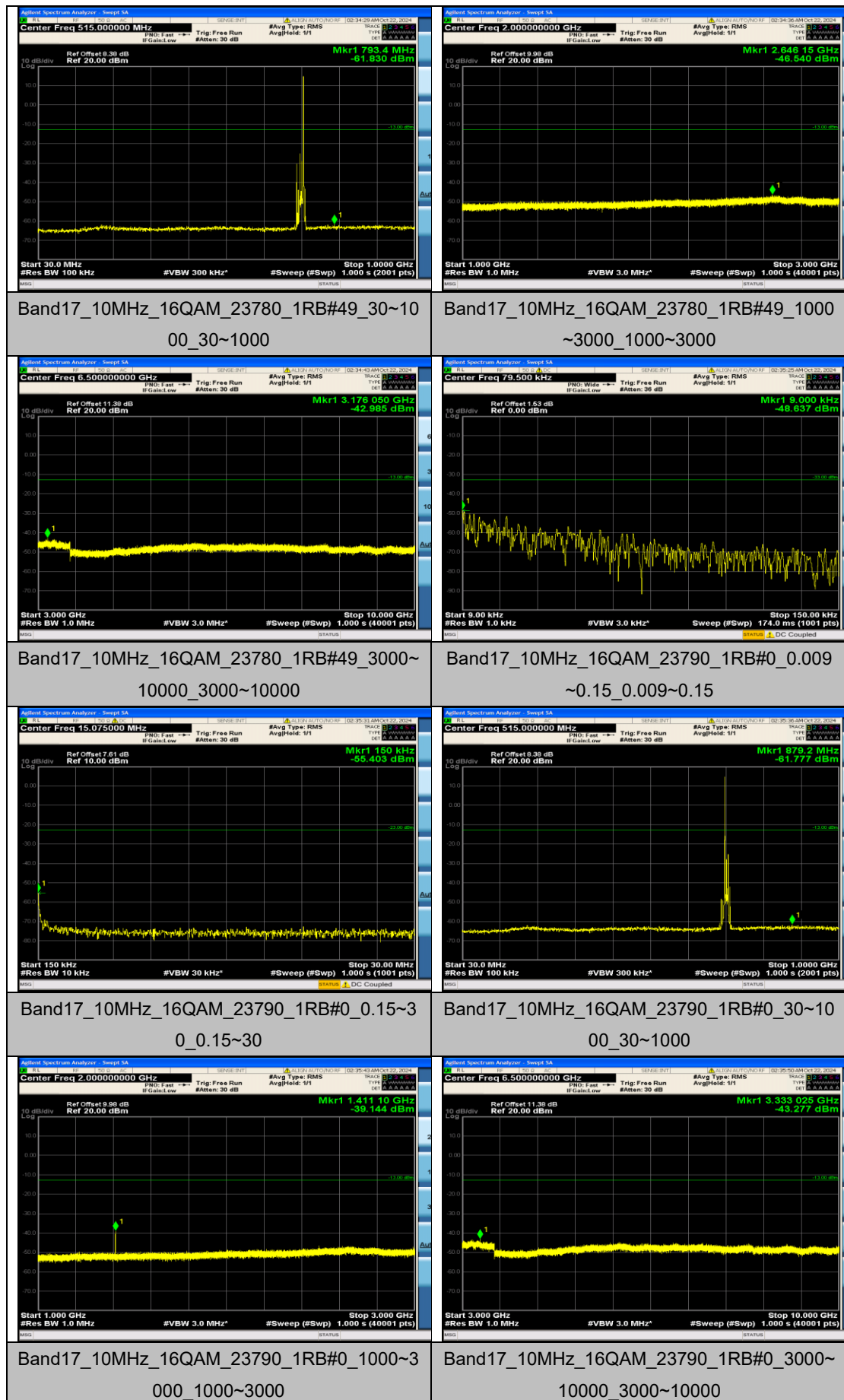
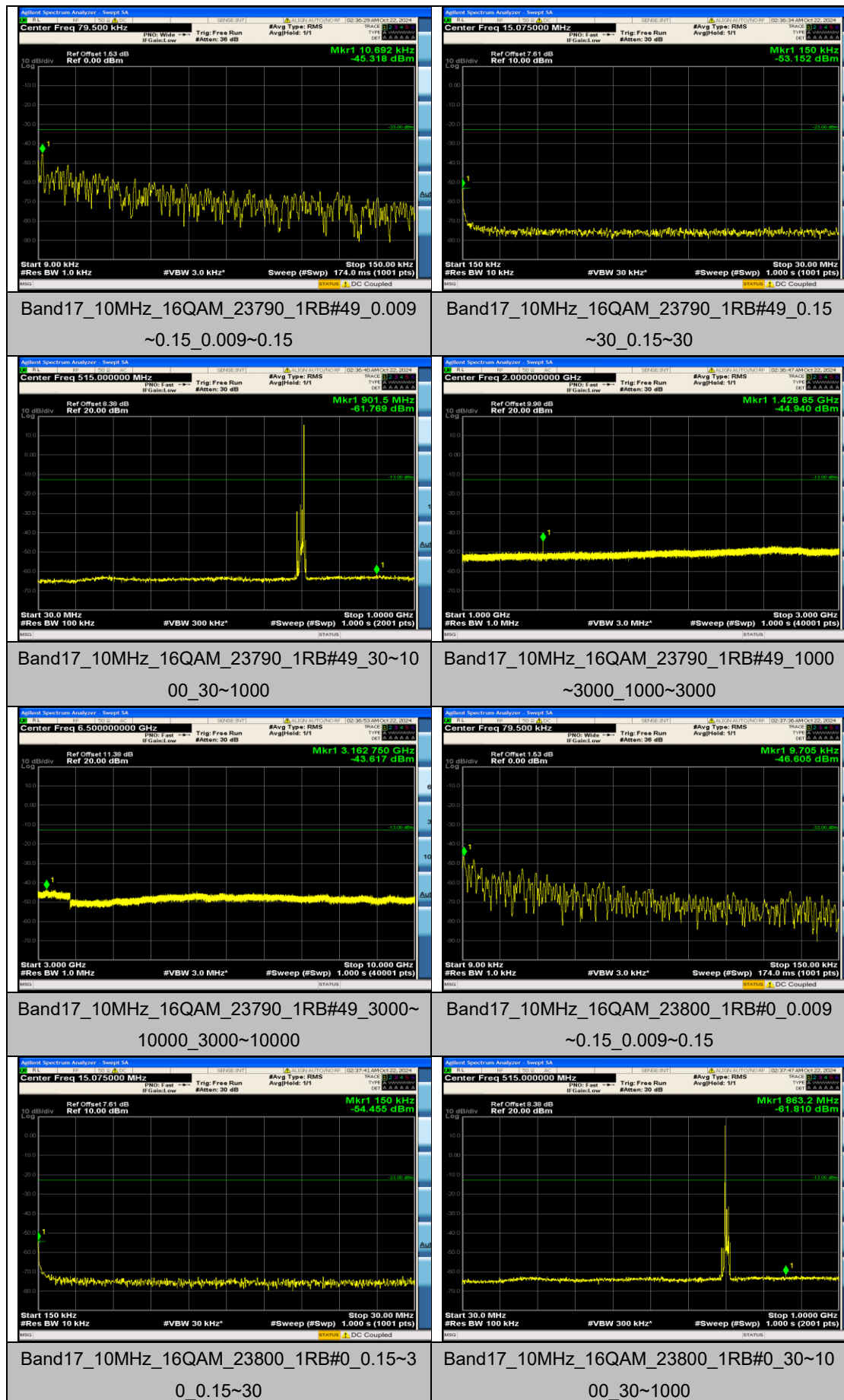


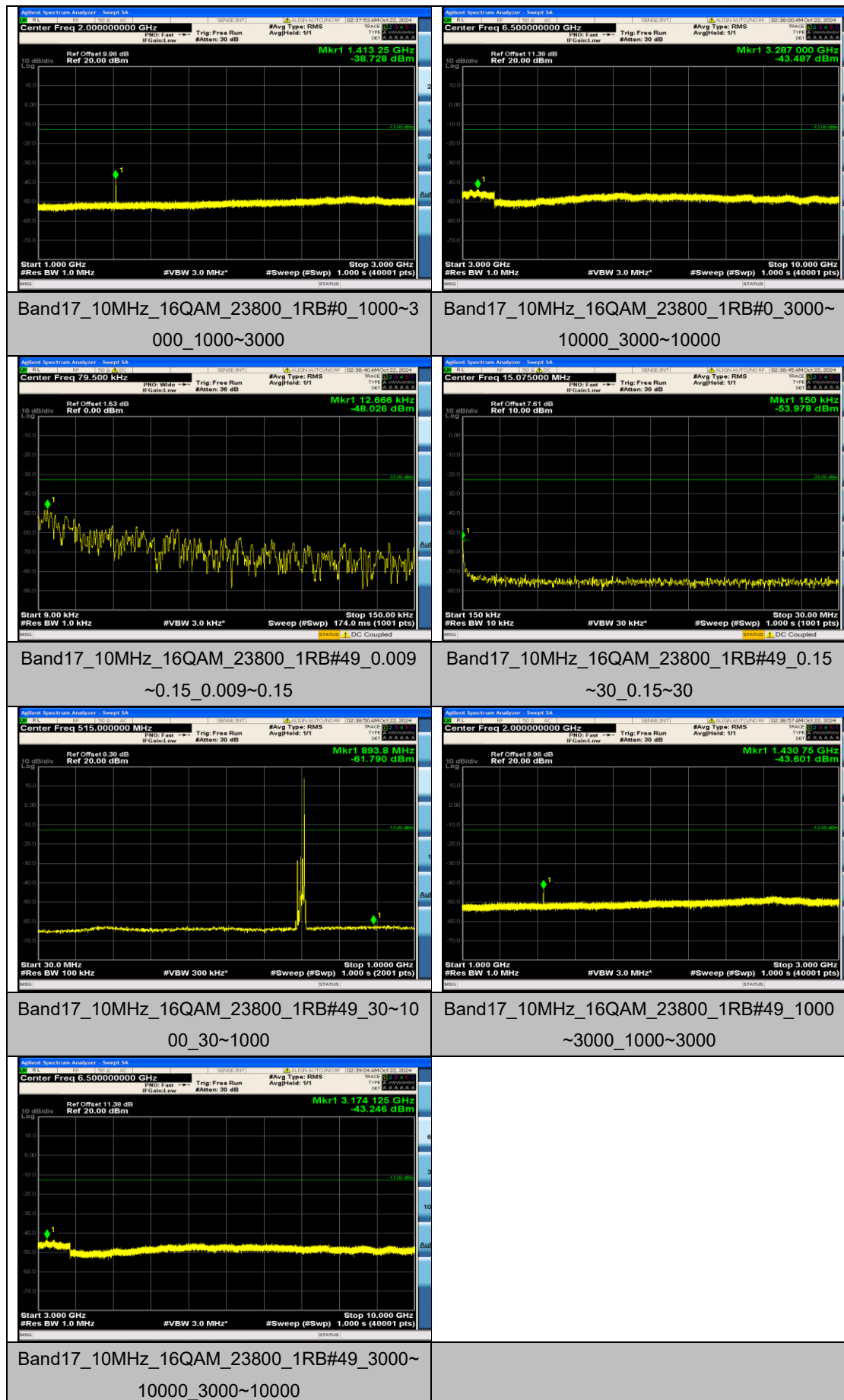












## Appendix F: Frequency Stability

### Test Result

| Voltage  |           |            |         |              |               |                  |                |                 |             |         |
|----------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band     | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| BandName | Bandwidth | Modulation | Channel | RBcfg        | VolValue      | TempValue        | ValueHz        | ValuePpm        | Limit       | Verdict |

| Temperature |           |            |         |              |               |                  |                |                 |             |         |
|-------------|-----------|------------|---------|--------------|---------------|------------------|----------------|-----------------|-------------|---------|
| Band        | Bandwidth | Modulation | Channel | RB Configure | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | -30              | -3170.00       | -4.486907       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | -20              | -1640.00       | -2.321302       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | -10              | -2080.00       | -2.944091       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | 0                | -1660.00       | -2.349611       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | 10               | -3070.00       | -4.345364       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | 20               | -1990.00       | -2.816702       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | 30               | -2830.00       | -4.005662       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | 40               | -3980.00       | -5.633404       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23755   | 25RB#0       | NV            | 50               | -2090.00       | -2.958245       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | -30              | -1090.00       | -1.535211       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | -20              | -670.00        | -0.943662       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | -10              | -1270.00       | -1.788732       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | 0                | -2400.00       | -3.380282       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | 10               | -260.00        | -0.366197       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | 20               | 1560.00        | 2.197183        | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | 30               | -2070.00       | -2.915493       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | 40               | -1410.00       | -1.985915       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23790   | 25RB#0       | NV            | 50               | -1780.00       | -2.507042       | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | -30              | -8340.00       | -11.688858      | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | -20              | -7600.00       | -10.651717      | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | -10              | -8540.00       | -11.969166      | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | 0                | -7800.00       | -10.932025      | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | 10               | -9450.00       | -13.244569      | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | 20               | -8860.00       | -12.417659      | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | 30               | -9780.00       | -13.707078      | ±NA         | PASS    |
| Band17      | 5MHz      | QPSK       | 23825   | 25RB#0       | NV            | 40               | -7590.00       | -10.637701      | ±NA         | PASS    |

|        |       |       |       |        |    |     |          |            |     |      |
|--------|-------|-------|-------|--------|----|-----|----------|------------|-----|------|
| Band17 | 5MHz  | QPSK  | 23825 | 25RB#0 | NV | 50  | -9190.00 | -12.880168 | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | -30 | 740.00   | 1.047417   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | -20 | -190.00  | -0.268931  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | -10 | -360.00  | -0.509554  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | 0   | 0.00     | 0.000000   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | 10  | -70.00   | -0.099080  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | 20  | 760.00   | 1.075725   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | 30  | 590.00   | 0.835103   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | 40  | 340.00   | 0.481246   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23755 | 25RB#0 | NV | 50  | -870.00  | -1.231423  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | -30 | 4000.00  | 5.633803   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | -20 | 2320.00  | 3.267606   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | -10 | 1340.00  | 1.887324   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | 0   | 2200.00  | 3.098592   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | 10  | 2440.00  | 3.436620   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | 20  | 1890.00  | 2.661972   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | 30  | 2300.00  | 3.239437   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | 40  | 2220.00  | 3.126761   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23790 | 25RB#0 | NV | 50  | 3340.00  | 4.704225   | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | -30 | -5980.00 | -8.381219  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | -20 | -3910.00 | -5.480028  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | -10 | -5700.00 | -7.988788  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | 0   | -4000.00 | -5.606167  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | 10  | -5420.00 | -7.596356  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | 20  | -6640.00 | -9.306237  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | 30  | -5470.00 | -7.666433  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | 40  | -6250.00 | -8.759636  | ±NA | PASS |
| Band17 | 5MHz  | 16QAM | 23825 | 25RB#0 | NV | 50  | -4530.00 | -6.348984  | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | -30 | 960.00   | 1.354020   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | -20 | -760.00  | -1.071932  | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | -10 | 1200.00  | 1.692525   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | 0   | 3370.00  | 4.753173   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | 10  | 2290.00  | 3.229901   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | 20  | 2920.00  | 4.118477   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | 30  | 1660.00  | 2.341326   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | 40  | 220.00   | 0.310296   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23780 | 50RB#0 | NV | 50  | 180.00   | 0.253879   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 50RB#0 | NV | -30 | 1240.00  | 1.746479   | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 50RB#0 | NV | -20 | -840.00  | -1.183099  | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 50RB#0 | NV | -10 | -1740.00 | -2.450704  | ±NA | PASS |
| Band17 | 10MHz | QPSK  | 23790 | 50RB#0 | NV | 0   | -900.00  | -1.267606  | ±NA | PASS |

|        |       |      |       |        |    |     |          |            |     |      |
|--------|-------|------|-------|--------|----|-----|----------|------------|-----|------|
| Band17 | 10MHz | QPSK | 23790 | 50RB#0 | NV | 10  | -1350.00 | -1.901408  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23790 | 50RB#0 | NV | 20  | -1590.00 | -2.239437  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23790 | 50RB#0 | NV | 30  | -1240.00 | -1.746479  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23790 | 50RB#0 | NV | 40  | -2030.00 | -2.859155  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23790 | 50RB#0 | NV | 50  | -800.00  | -1.126761  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | -30 | -7870.00 | -11.068917 | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | -20 | -8850.00 | -12.447257 | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | -10 | -4850.00 | -6.821378  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | 0   | -6020.00 | -8.466948  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | 10  | -4280.00 | -6.019691  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | 20  | -4510.00 | -6.343179  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | 30  | -5950.00 | -8.368495  | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | 40  | -7340.00 | -10.323488 | ±NA | PASS |
| Band17 | 10MHz | QPSK | 23800 | 50RB#0 | NV | 50  | -1770.00 | -2.489451  | ±NA | PASS |

## Appendix G: Modulation Characteristics

### Test Result

| Band   | Bandwidth | Modulation | Channel | RB Configuration | Verdict |
|--------|-----------|------------|---------|------------------|---------|
| Band17 | 5MHz      | QPSK       | 23755   | 25RB#0           | PASS    |
| Band17 | 5MHz      | QPSK       | 23790   | 25RB#0           | PASS    |
| Band17 | 5MHz      | QPSK       | 23825   | 25RB#0           | PASS    |
| Band17 | 5MHz      | 16QAM      | 23755   | 25RB#0           | PASS    |
| Band17 | 5MHz      | 16QAM      | 23790   | 25RB#0           | PASS    |
| Band17 | 5MHz      | 16QAM      | 23825   | 25RB#0           | PASS    |
| Band17 | 10MHz     | QPSK       | 23780   | 50RB#0           | PASS    |
| Band17 | 10MHz     | QPSK       | 23790   | 50RB#0           | PASS    |
| Band17 | 10MHz     | QPSK       | 23800   | 50RB#0           | PASS    |
| Band17 | 10MHz     | 16QAM      | 23780   | 1RB#0            | PASS    |
| Band17 | 10MHz     | 16QAM      | 23790   | 1RB#0            | PASS    |
| Band17 | 10MHz     | 16QAM      | 23800   | 1RB#0            | PASS    |

### Test Graphs

