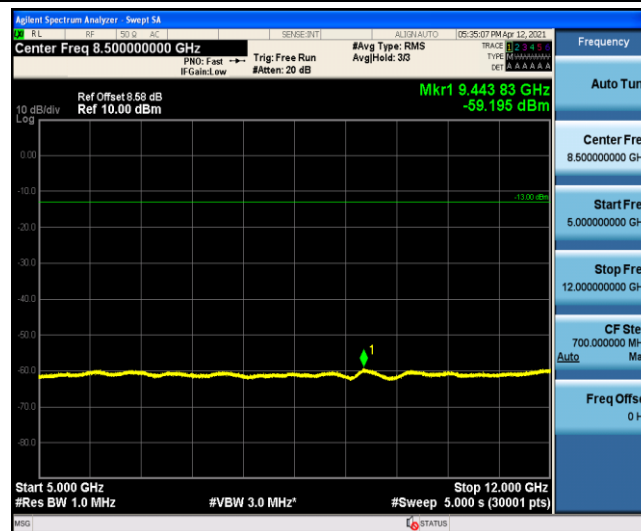
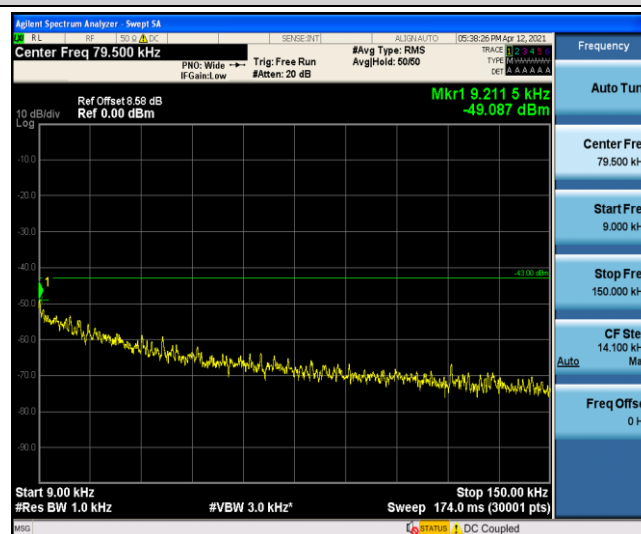




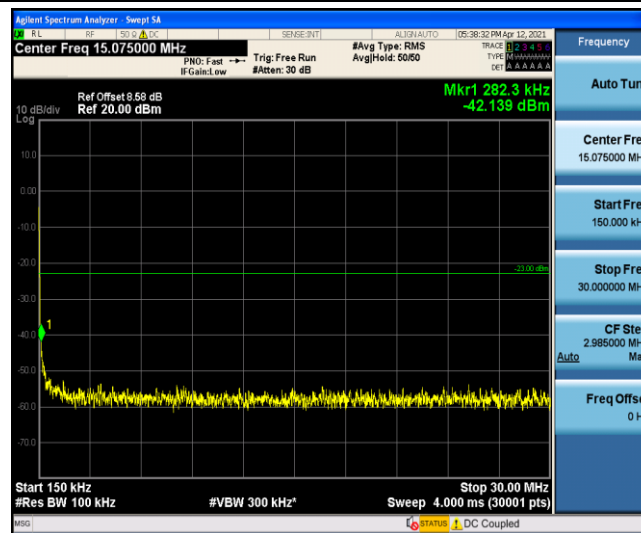
Band5-5MHz-16QAM-20425-1-0-Low-5000-12000--59.2-PASS



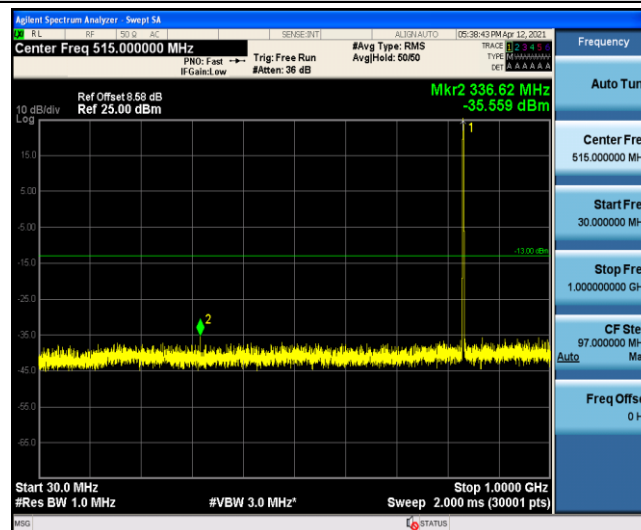
Band5-5MHz-16QAM-20425-1-0-Low-12000-26500--50.84-PASS



Band5-5MHz-16QAM-20525-1-0-Low-0.009-0.15--49.09-PASS



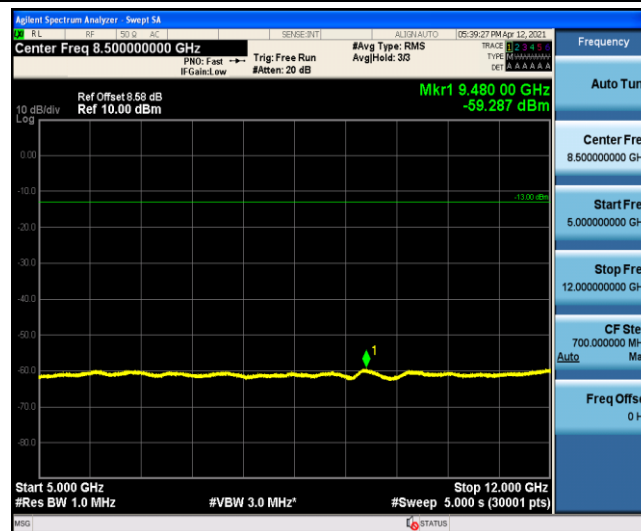
Band5-5MHz-16QAM-20525-1-0-Low-0.15-30--42.14-PASS



Band5-5MHz-16QAM-20525-1-0-Low-30-1000--35.56-PASS



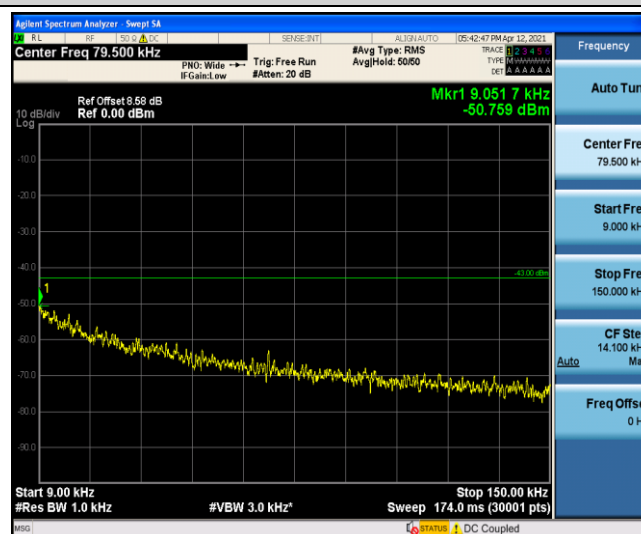
Band5-5MHz-16QAM-20525-1-0-Low-1000-5000--40.52-PASS



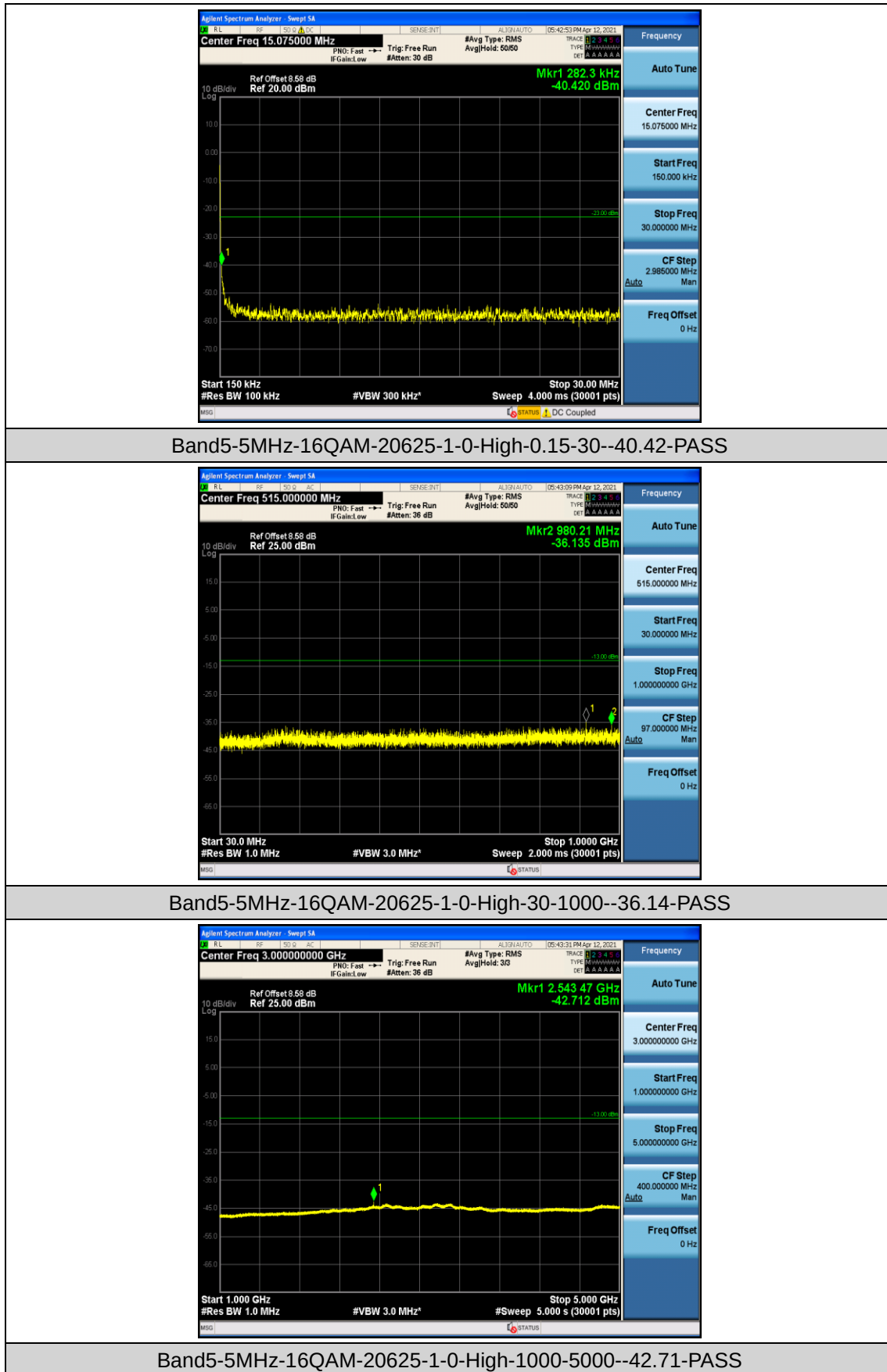
Band5-5MHz-16QAM-20525-1-0-Low-5000-12000--59.29-PASS



Band5-5MHz-16QAM-20525-1-0-Low-12000-26500--50.96-PASS



Band5-5MHz-16QAM-20625-1-0-High-0.009-0.15--50.76-PASS

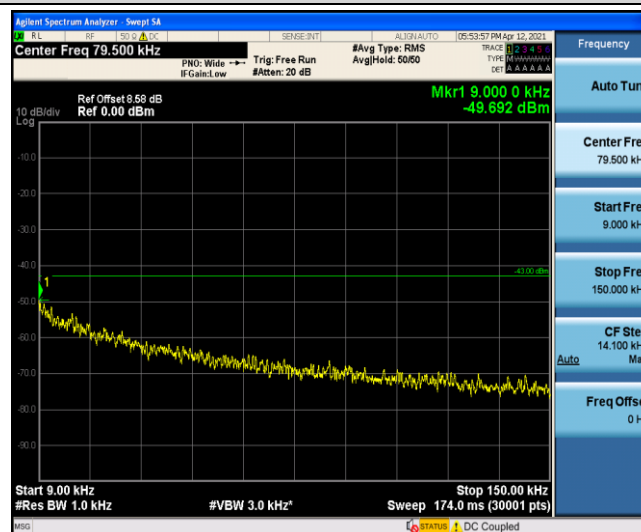




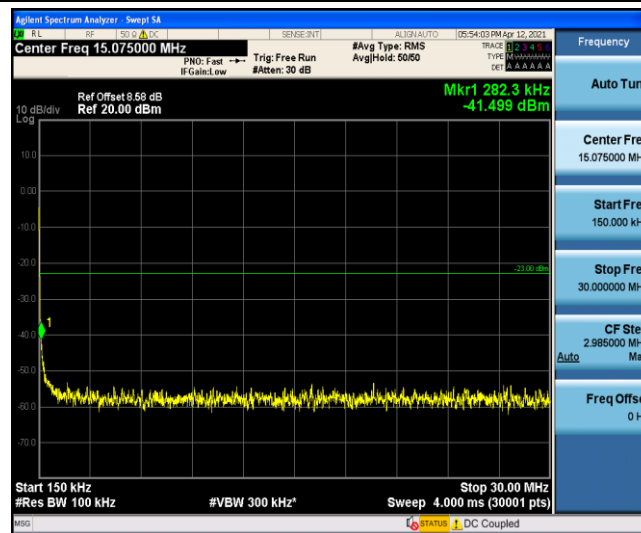
Band5-5MHz-16QAM-20625-1-0-High-5000-12000--59.31-PASS



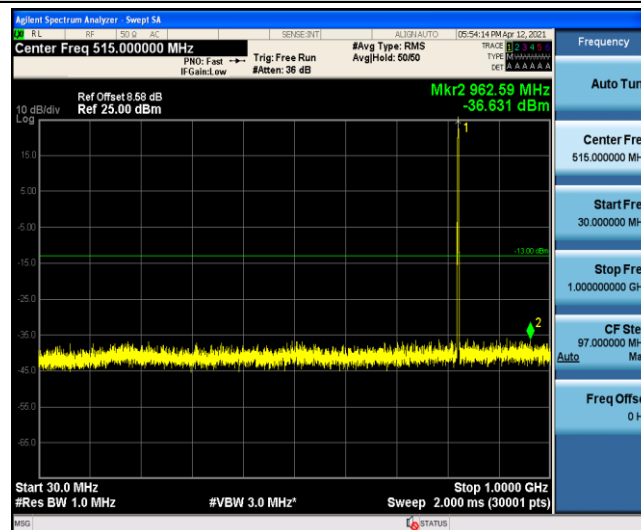
Band5-5MHz-16QAM-20625-1-0-High-12000-26500--50.83-PASS



Band5-10MHz-QPSK-20450-1-0-Low-0.009-0.15--49.69-PASS



Band5-10MHz-QPSK-20450-1-0-Low-0.15-30--41.5-PASS



Band5-10MHz-QPSK-20450-1-0-Low-30-1000--36.63-PASS



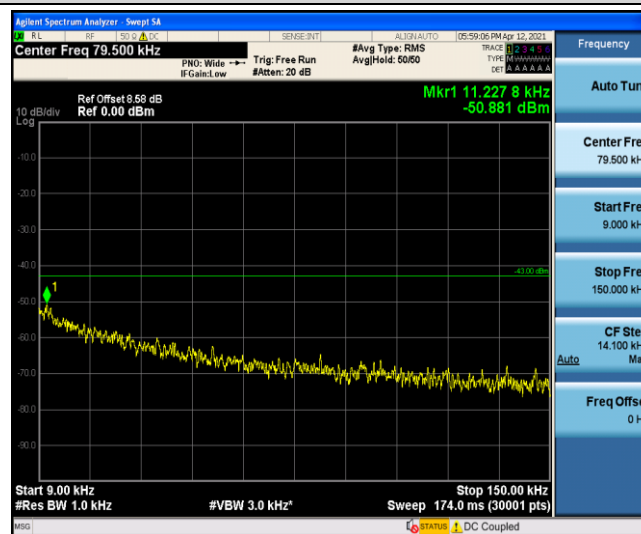
Band5-10MHz-QPSK-20450-1-0-Low-1000-5000--42.34-PASS



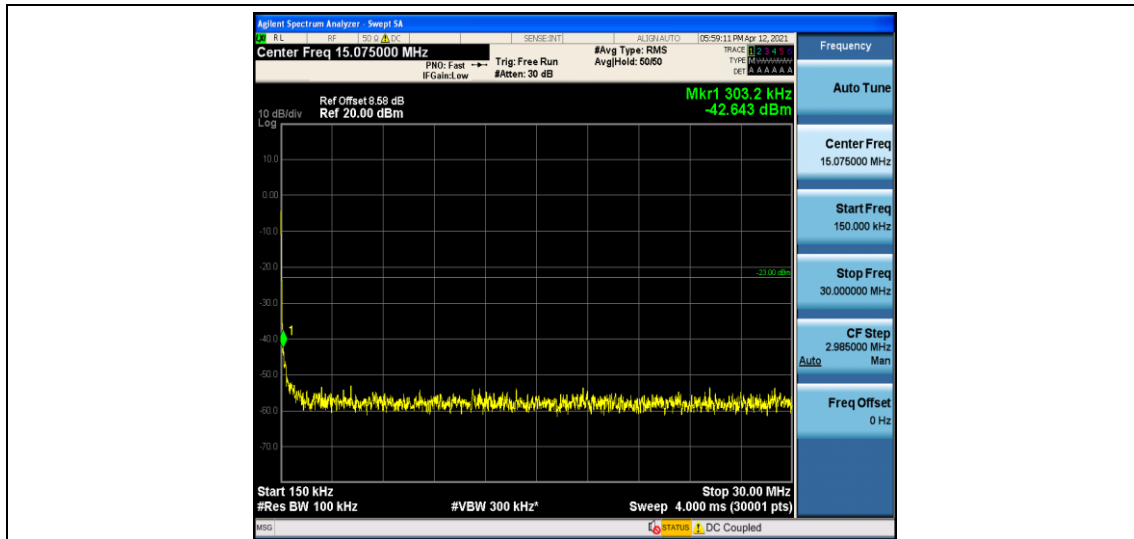
Band5-10MHz-QPSK-20450-1-0-Low-5000-12000--59.21-PASS



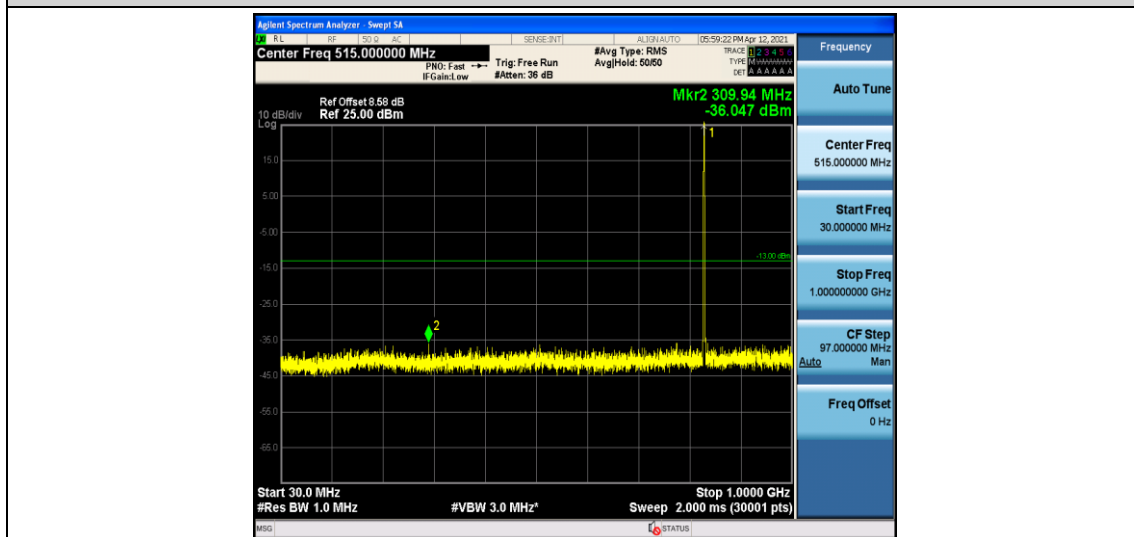
Band5-10MHz-QPSK-20450-1-0-Low-12000-26500--50.78-PASS



Band5-10MHz-QPSK-20525-1-0-Low-0.009-0.15--50.88-PASS



Band5-10MHz-QPSK-20525-1-0-Low-0.15-30--42.64-PASS

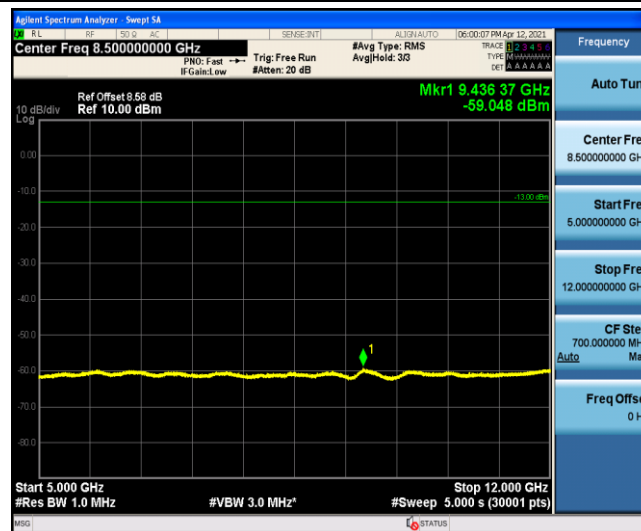


Band5-10MHz-QPSK-20525-1-0-Low-30-1000--36.05-PASS



Band5-10MHz-QPSK-20525-1-0-Low-1000-5000--38.19-PASS

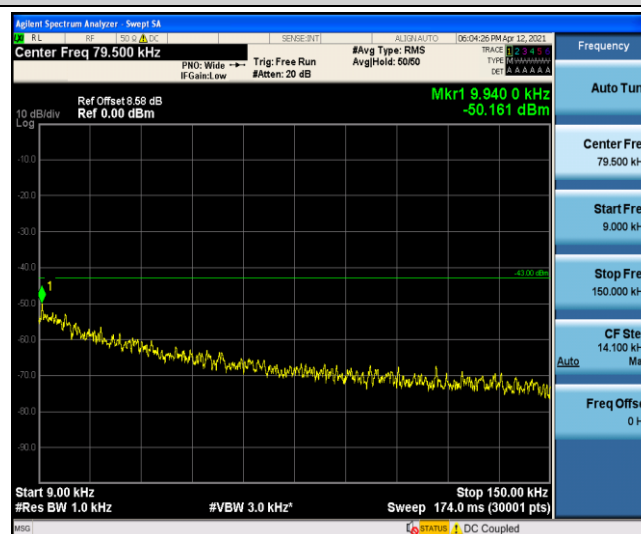




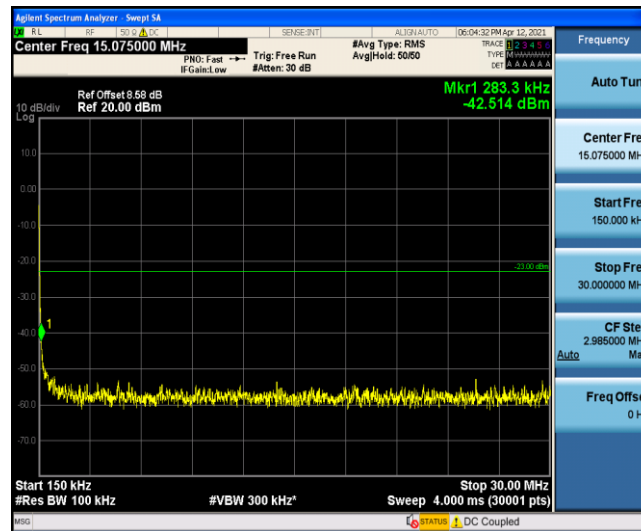
Band5-10MHz-QPSK-20525-1-0-Low-5000-12000--59.05-PASS



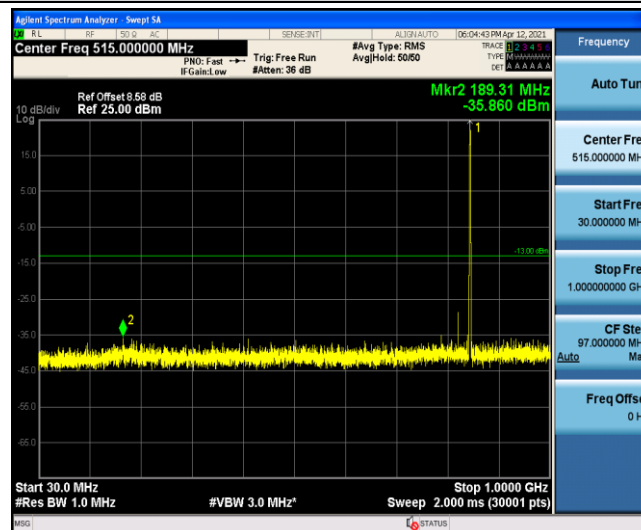
Band5-10MHz-QPSK-20525-1-0-Low-12000-26500--50.78-PASS



Band5-10MHz-QPSK-20600-1-0-High-0.009-0.15--50.16-PASS



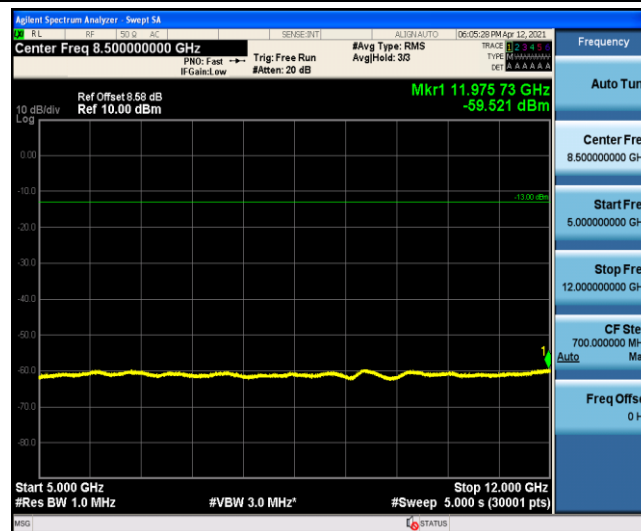
Band5-10MHz-QPSK-20600-1-0-High-0.15-30--42.51-PASS



Band5-10MHz-QPSK-20600-1-0-High-30-1000--35.86-PASS



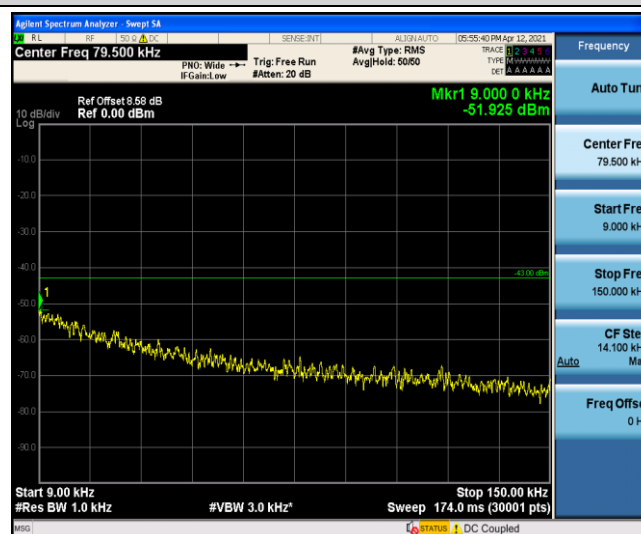
Band5-10MHz-QPSK-20600-1-0-High-1000-5000--42.87-PASS



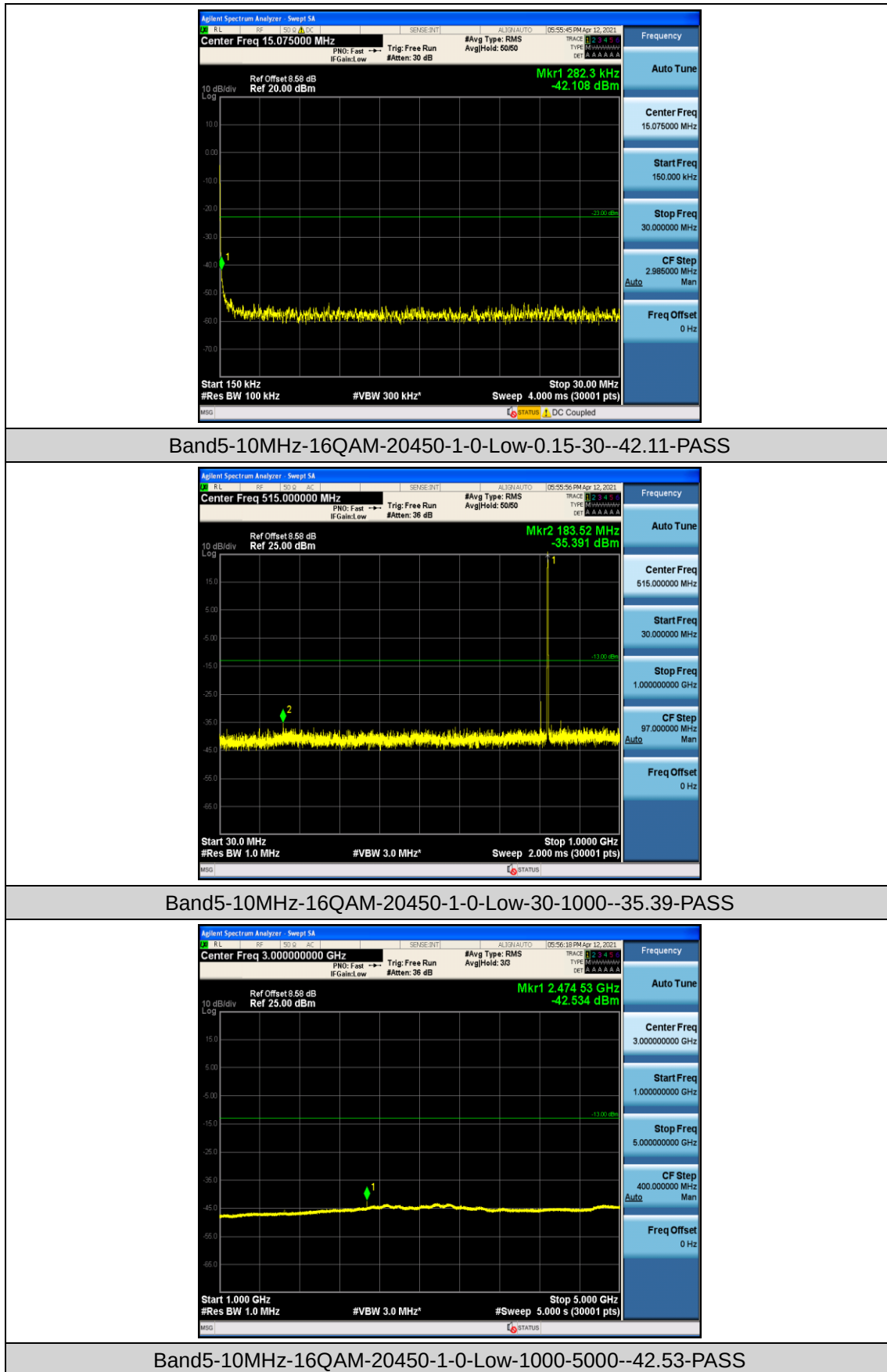
Band5-10MHz-QPSK-20600-1-0-High-5000-12000--59.52-PASS



Band5-10MHz-QPSK-20600-1-0-High-12000-26500--50.72-PASS



Band5-10MHz-16QAM-20450-1-0-Low-0.009-0.15--51.93-PASS



Band5-10MHz-16QAM-20450-1-0-Low-0.15-30--42.11-PASS

Band5-10MHz-16QAM-20450-1-0-Low-30-1000--35.39-PASS

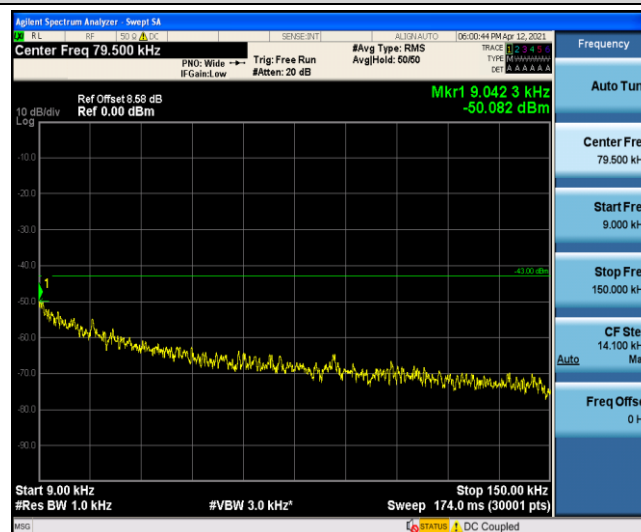
Band5-10MHz-16QAM-20450-1-0-Low-1000-5000--42.53-PASS



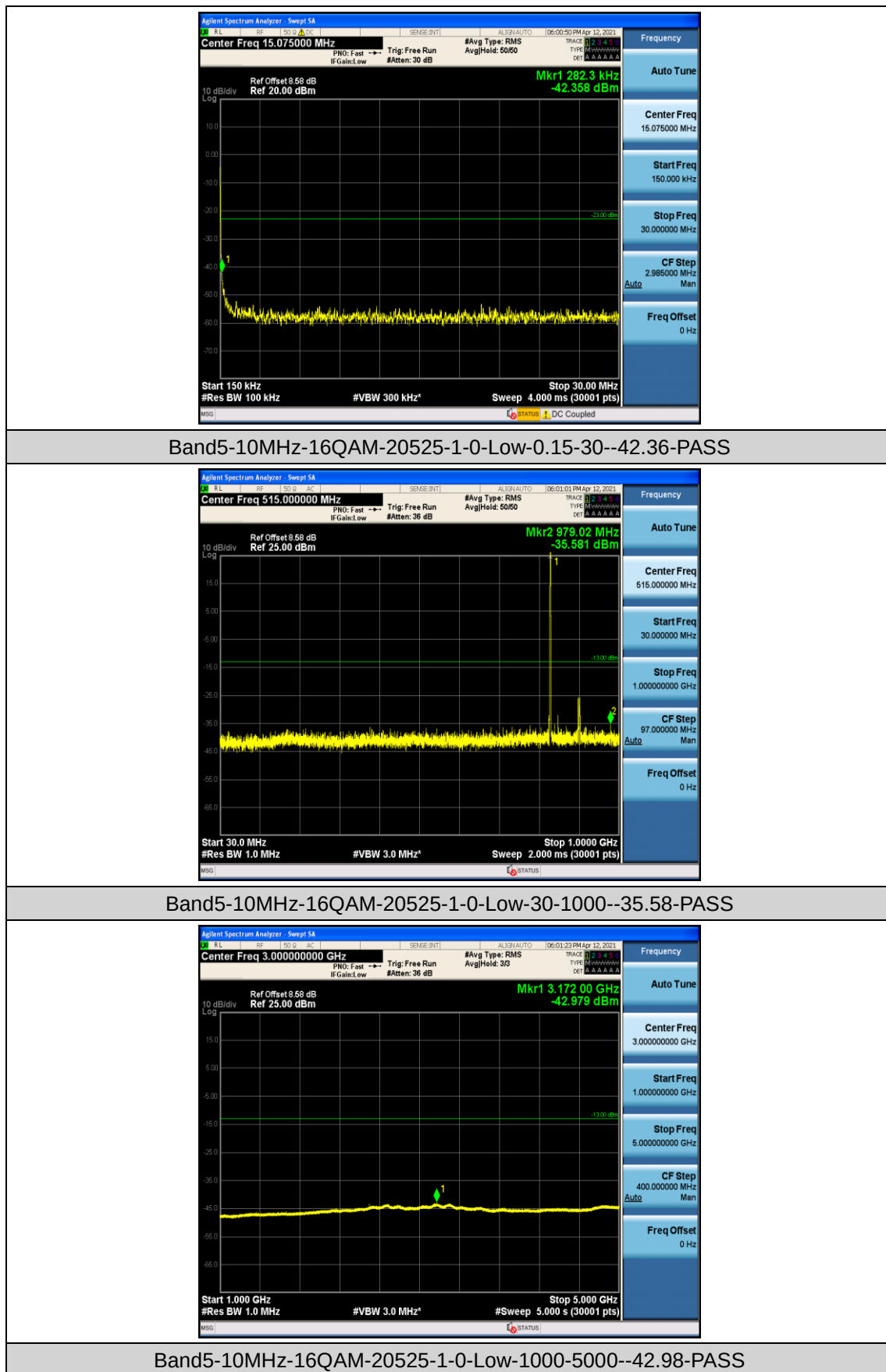
Band5-10MHz-16QAM-20450-1-0-Low-5000-12000--59.44-PASS



Band5-10MHz-16QAM-20450-1-0-Low-12000-26500--50.72-PASS



Band5-10MHz-16QAM-20525-1-0-Low-0.009-0.15--50.08-PASS

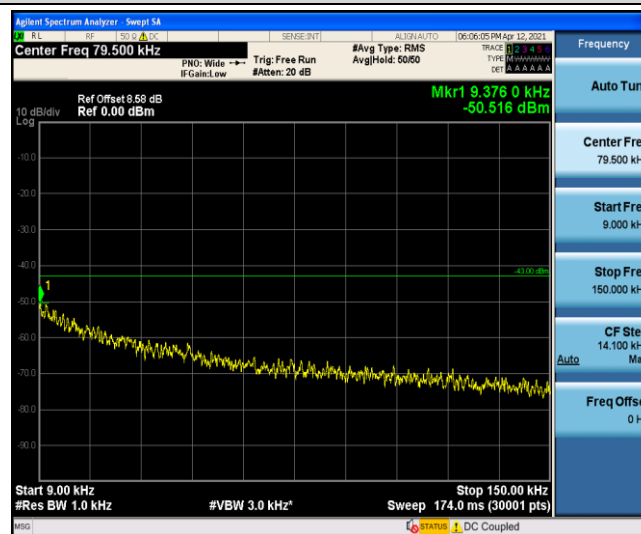




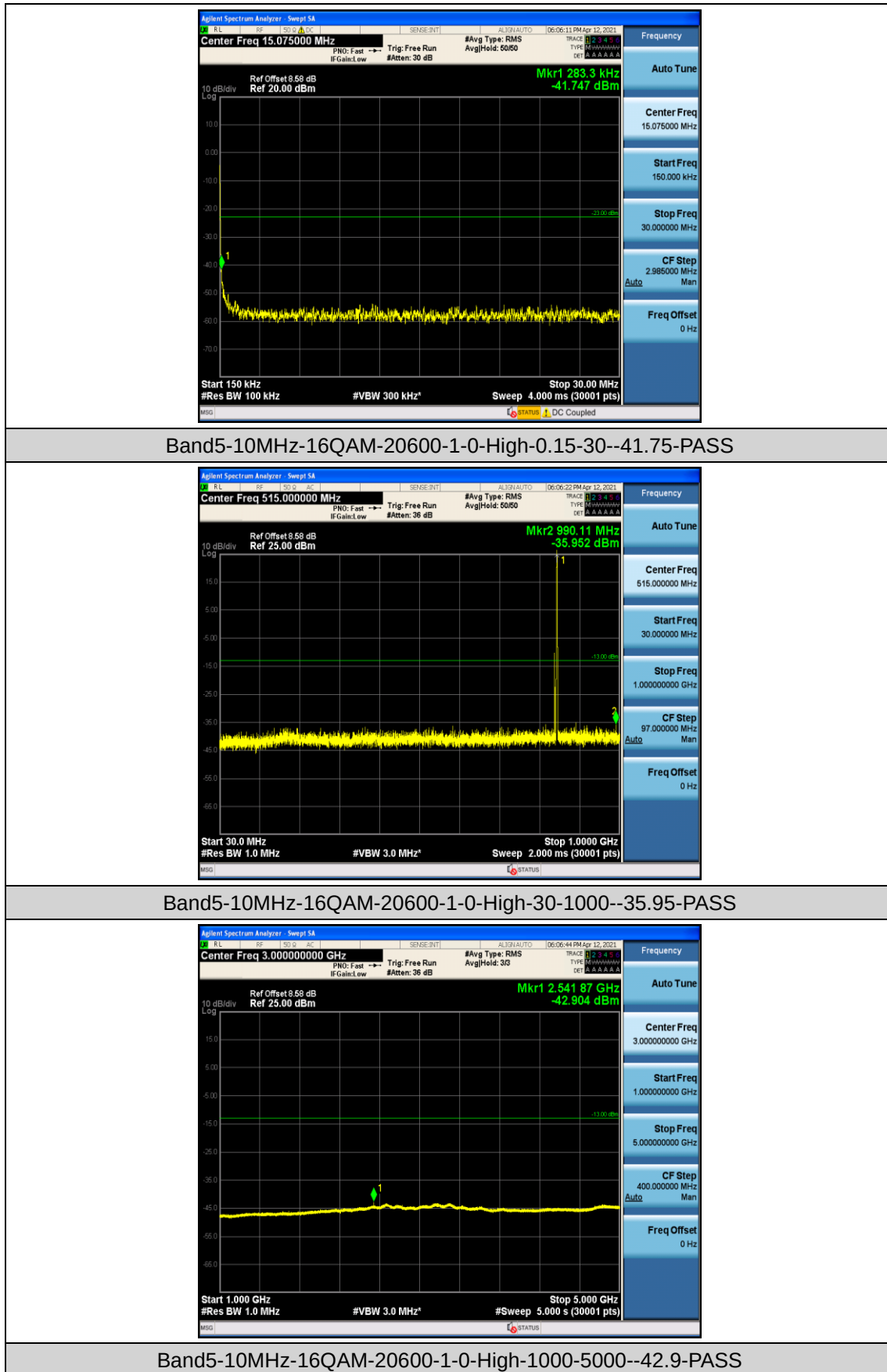
Band5-10MHz-16QAM-20525-1-0-Low-5000-12000--59.32-PASS



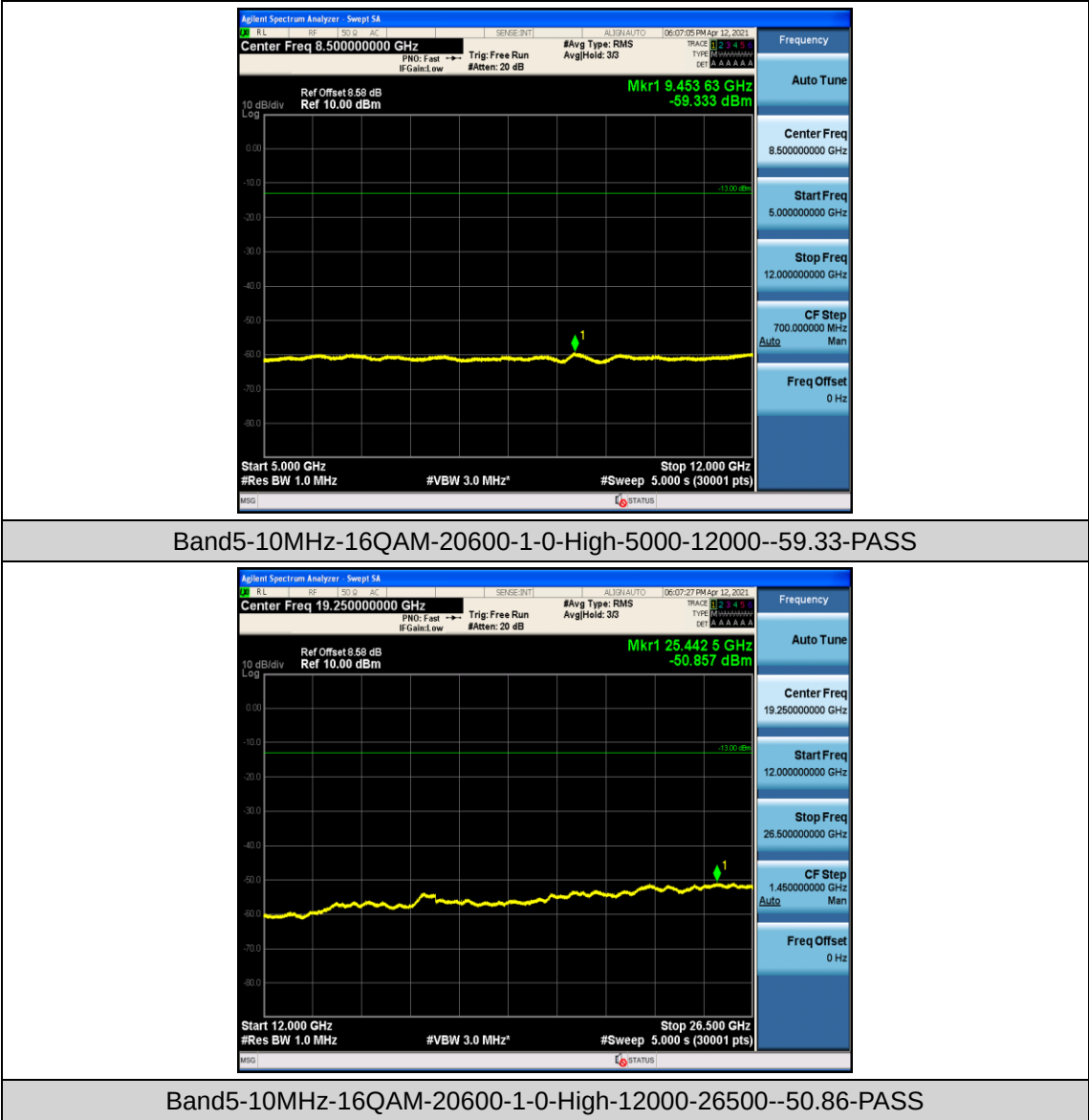
Band5-10MHz-16QAM-20525-1-0-Low-12000-26500--50.84-PASS



Band5-10MHz-16QAM-20600-1-0-High-0.009-0.15--50.52-PASS







## Appendix F: Frequency Stability for M1

### Test Result

**Channel Bandwidth: 1.4 MHz**

| Channel Bandwidth: 1.4 MHz |         |               |                  |                |                 |             |         |
|----------------------------|---------|---------------|------------------|----------------|-----------------|-------------|---------|
| Voltage                    |         |               |                  |                |                 |             |         |
| Modulation                 | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                       | LCH     | VL            | TN               | 2.77           | 0.003359        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -1.56          | -0.001892       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -0.32          | -0.000388       | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | 2.91           | 0.003479        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 2.47           | 0.002953        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -1.36          | -0.001626       | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | 1.31           | 0.001544        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -0.92          | -0.001085       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 2.41           | 0.002841        | ± 2.5       | PASS    |
| 16QAM                      | LCH     | VL            | TN               | -1.51          | -0.001831       | ± 2.5       | PASS    |
|                            |         | VN            | TN               | -1.66          | -0.002013       | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 1.02           | 0.001237        | ± 2.5       | PASS    |
|                            | MCH     | VL            | TN               | 3.44           | 0.004112        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 0.68           | 0.000813        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | 1.61           | 0.001925        | ± 2.5       | PASS    |
|                            | HCH     | VL            | TN               | 2.05           | 0.002417        | ± 2.5       | PASS    |
|                            |         | VN            | TN               | 3.3            | 0.003890        | ± 2.5       | PASS    |
|                            |         | VH            | TN               | -1.12          | -0.001320       | ± 2.5       | PASS    |
| Temperature                |         |               |                  |                |                 |             |         |
| Modulation                 | Channel | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Verdict |
| QPSK                       | LCH     | VN            | -30              | 0.38           | 0.000461        | ± 2.5       | PASS    |
|                            |         | VN            | -20              | 2.16           | 0.002619        | ± 2.5       | PASS    |
|                            |         | VN            | -10              | 0.1            | 0.000121        | ± 2.5       | PASS    |
|                            |         | VN            | 0                | 3.09           | 0.003747        | ± 2.5       | PASS    |
|                            |         | VN            | 10               | 3.07           | 0.003723        | ± 2.5       | PASS    |
|                            |         | VN            | 20               | 0.26           | 0.000315        | ± 2.5       | PASS    |
|                            |         | VN            | 30               | 1.04           | 0.001261        | ± 2.5       | PASS    |
|                            |         | VN            | 40               | 3.24           | 0.003929        | ± 2.5       | PASS    |
|                            |         | VN            | 50               | 4.94           | 0.005990        | ± 2.5       | PASS    |
|                            | MCH     | VN            | -30              | -0.62          | -0.000741       | ± 2.5       | PASS    |

|       |     |    |     |       |           |       |      |
|-------|-----|----|-----|-------|-----------|-------|------|
|       |     | VN | -20 | -1.6  | -0.001913 | ± 2.5 | PASS |
|       |     | VN | -10 | 0.48  | 0.000574  | ± 2.5 | PASS |
|       |     | VN | 0   | 3     | 0.003586  | ± 2.5 | PASS |
|       |     | VN | 10  | -1.23 | -0.001470 | ± 2.5 | PASS |
|       |     | VN | 20  | 2.13  | 0.002546  | ± 2.5 | PASS |
|       |     | VN | 30  | -0.93 | -0.001112 | ± 2.5 | PASS |
|       |     | VN | 40  | 3.52  | 0.004208  | ± 2.5 | PASS |
|       |     | VN | 50  | 2.95  | 0.003527  | ± 2.5 | PASS |
|       | HCH | VN | -30 | -1.79 | -0.002110 | ± 2.5 | PASS |
|       |     | VN | -20 | -0.47 | -0.000554 | ± 2.5 | PASS |
|       |     | VN | -10 | 3.1   | 0.003654  | ± 2.5 | PASS |
|       |     | VN | 0   | 1.12  | 0.001320  | ± 2.5 | PASS |
|       |     | VN | 10  | 4.02  | 0.004739  | ± 2.5 | PASS |
|       |     | VN | 20  | -0.76 | -0.000896 | ± 2.5 | PASS |
|       |     | VN | 30  | 2.51  | 0.002959  | ± 2.5 | PASS |
|       |     | VN | 40  | 0.58  | 0.000684  | ± 2.5 | PASS |
|       |     | VN | 50  | 1.33  | 0.001568  | ± 2.5 | PASS |
| 16QAM | LCH | VN | -30 | 0.5   | 0.000606  | ± 2.5 | PASS |
|       |     | VN | -20 | 2.51  | 0.003044  | ± 2.5 | PASS |
|       |     | VN | -10 | 1.63  | 0.001976  | ± 2.5 | PASS |
|       |     | VN | 0   | 2.26  | 0.002740  | ± 2.5 | PASS |
|       |     | VN | 10  | -0.48 | -0.000582 | ± 2.5 | PASS |
|       |     | VN | 20  | 4.56  | 0.005529  | ± 2.5 | PASS |
|       |     | VN | 30  | 1.72  | 0.002086  | ± 2.5 | PASS |
|       |     | VN | 40  | -1.65 | -0.002001 | ± 2.5 | PASS |
|       |     | VN | 50  | 3.98  | 0.004826  | ± 2.5 | PASS |
|       | MCH | VN | -30 | -1.78 | -0.002098 | ± 2.5 | PASS |
|       |     | VN | -20 | 1.32  | 0.001556  | ± 2.5 | PASS |
|       |     | VN | -10 | -1.95 | -0.002299 | ± 2.5 | PASS |
|       |     | VN | 0   | 2.62  | 0.003089  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.4   | 0.000472  | ± 2.5 | PASS |
|       |     | VN | 20  | 4.44  | 0.005234  | ± 2.5 | PASS |
|       |     | VN | 30  | -1.44 | -0.001698 | ± 2.5 | PASS |
|       |     | VN | 40  | -0.09 | -0.000106 | ± 2.5 | PASS |
|       |     | VN | 50  | 0.53  | 0.000625  | ± 2.5 | PASS |
|       | HCH | VN | -30 | 4.92  | 0.005800  | ± 2.5 | PASS |
|       |     | VN | -20 | 0.07  | 0.000083  | ± 2.5 | PASS |
|       |     | VN | -10 | 0.91  | 0.001073  | ± 2.5 | PASS |
|       |     | VN | 0   | 3.34  | 0.003937  | ± 2.5 | PASS |
|       |     | VN | 10  | 0.21  | 0.000248  | ± 2.5 | PASS |
|       |     | VN | 20  | -1.23 | -0.001450 | ± 2.5 | PASS |