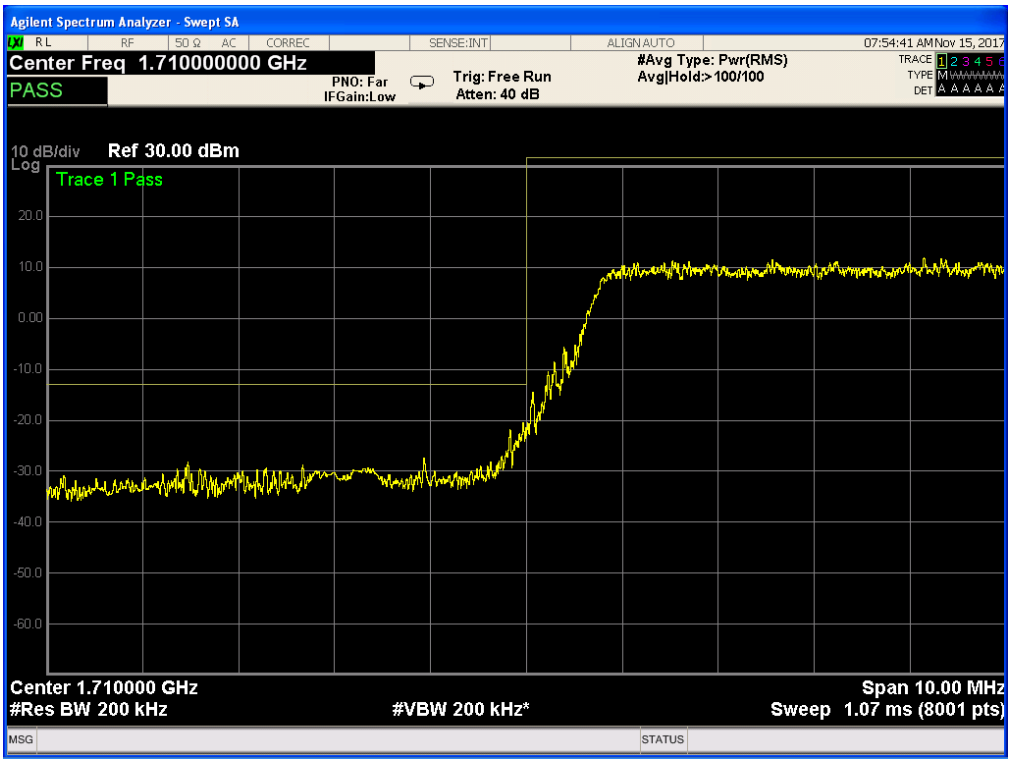
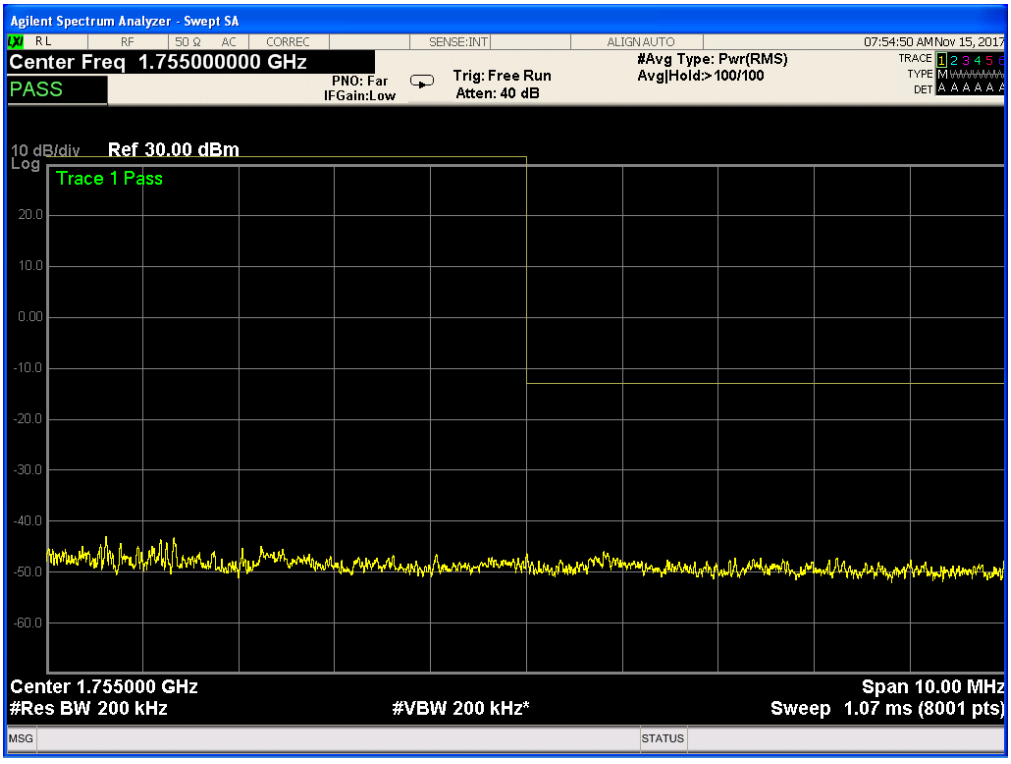
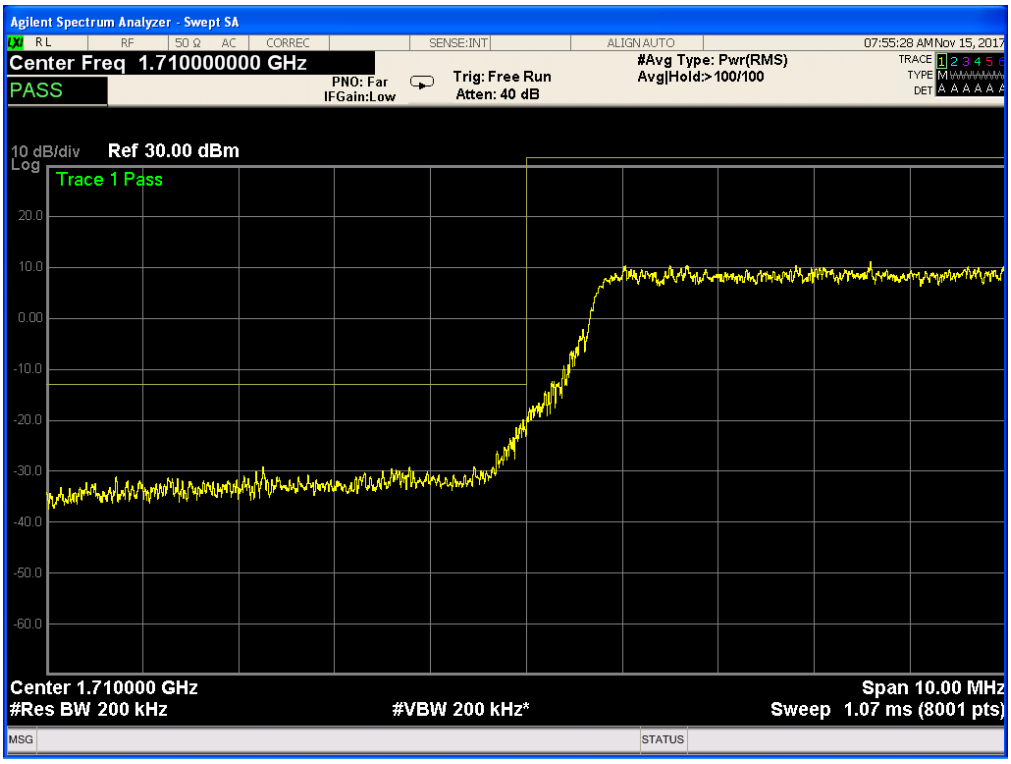
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



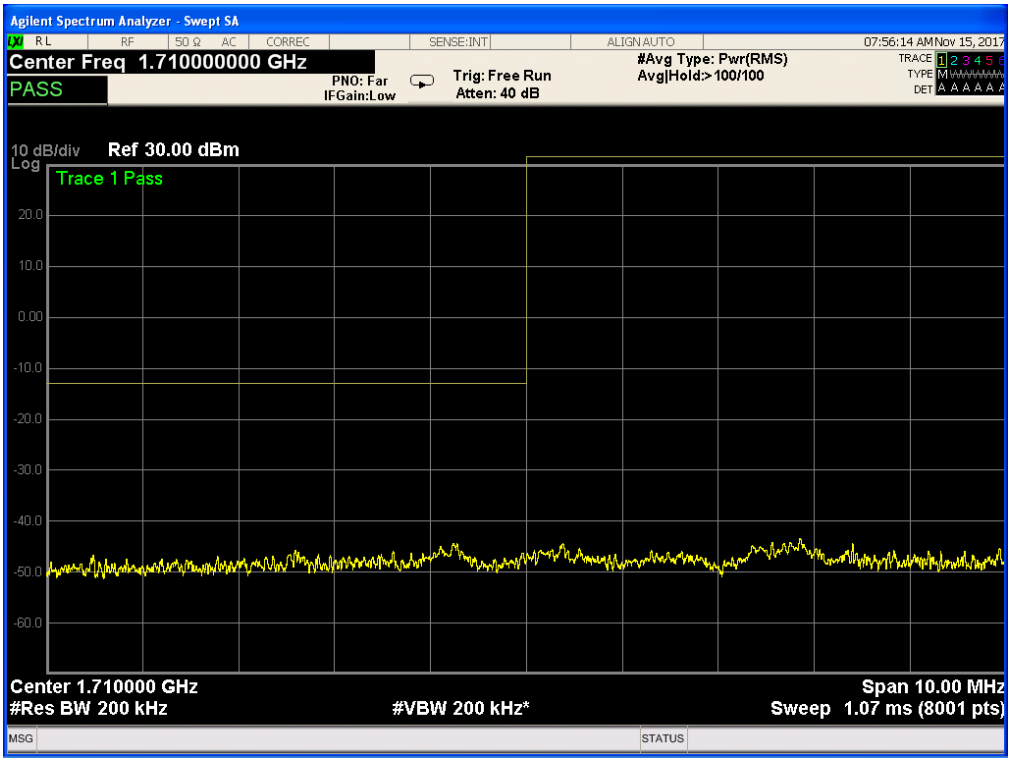
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



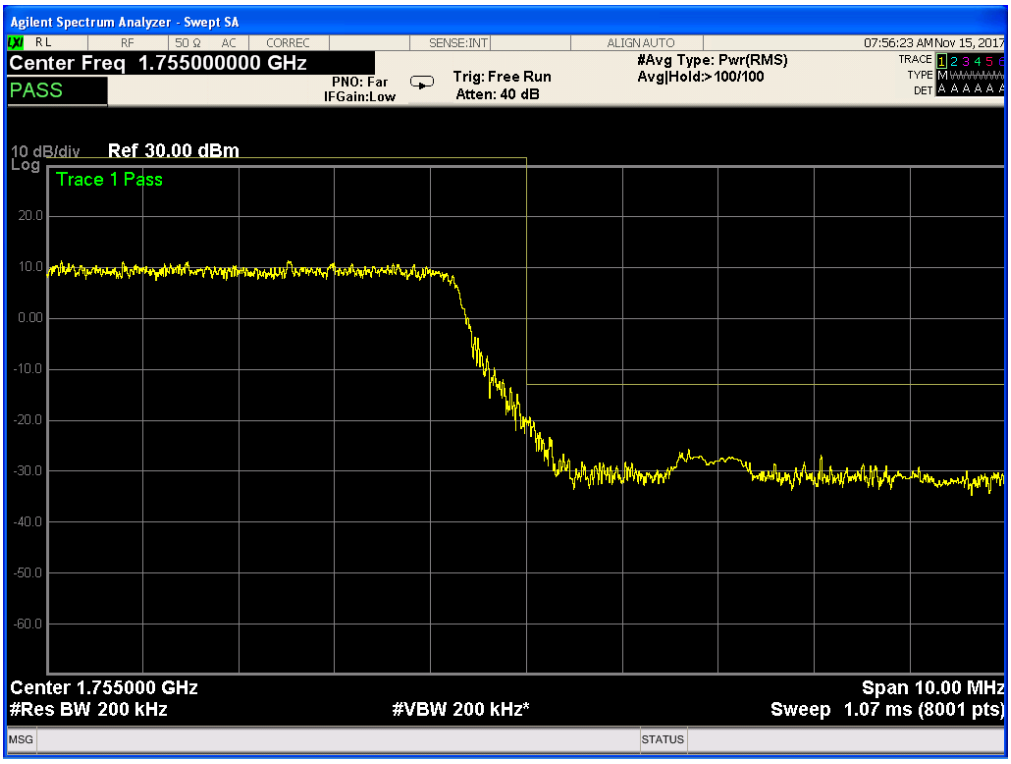
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



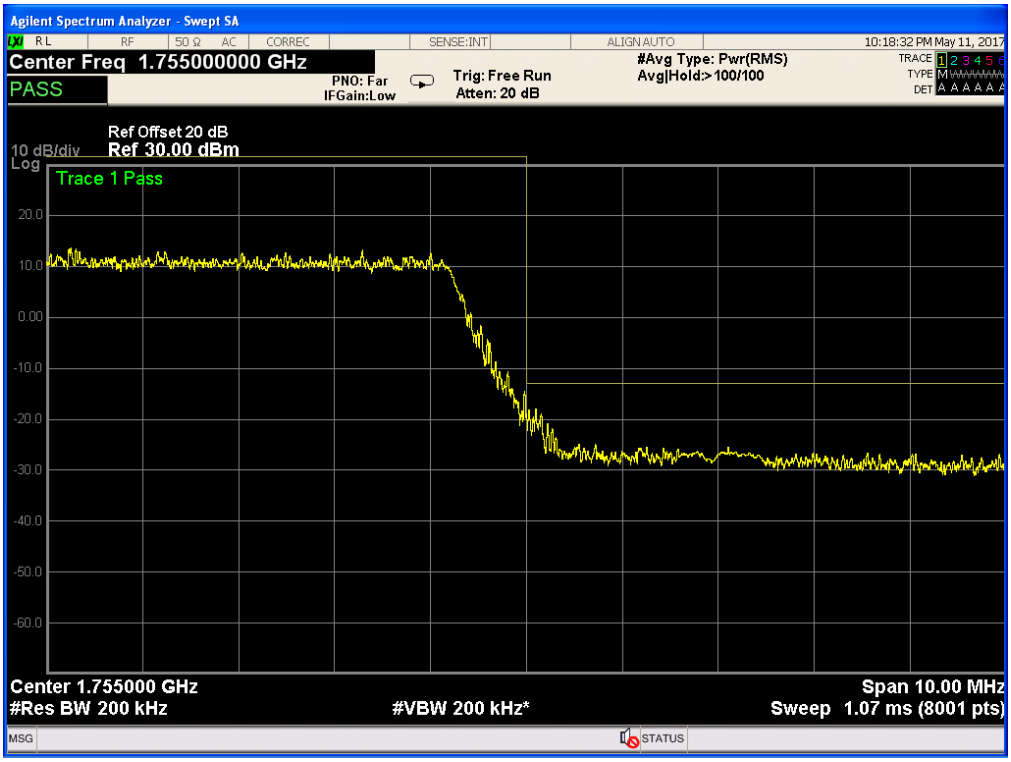
Band 4,UL Channel 20025,UL Frequency 1717.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



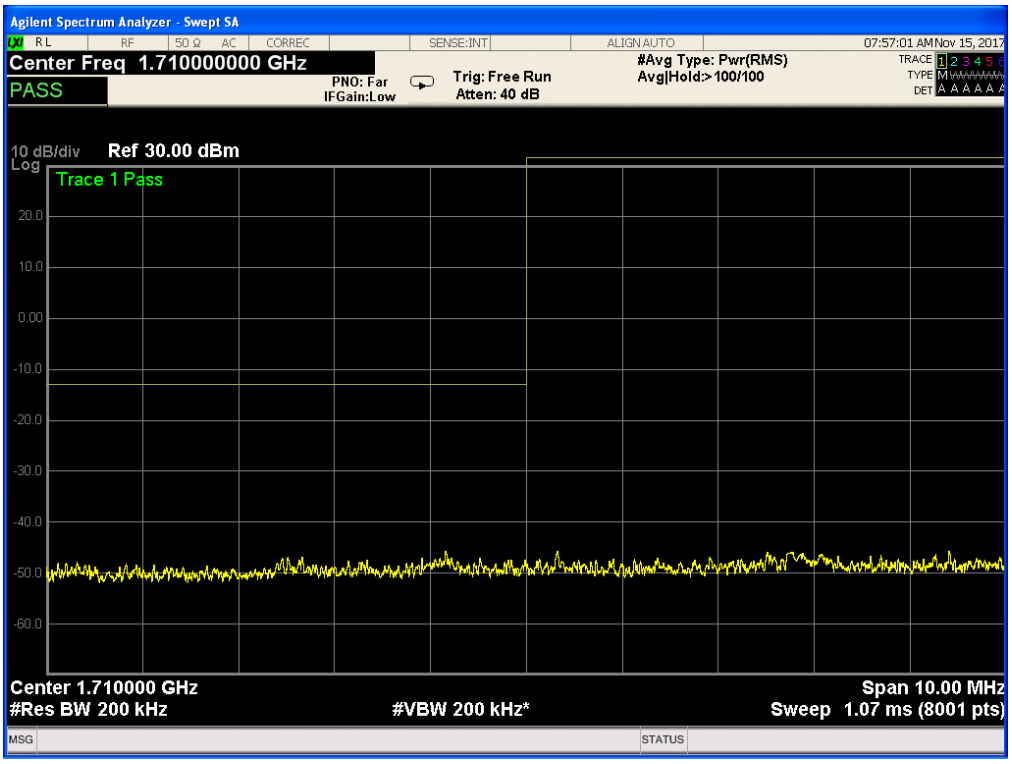
Band 4,UL Channel 20325,UL Frequency 1747.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



Band 4,UL Channel 20325,UL Frequency 1747.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



Band 4,UL Channel 20325,UL Frequency 1747.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



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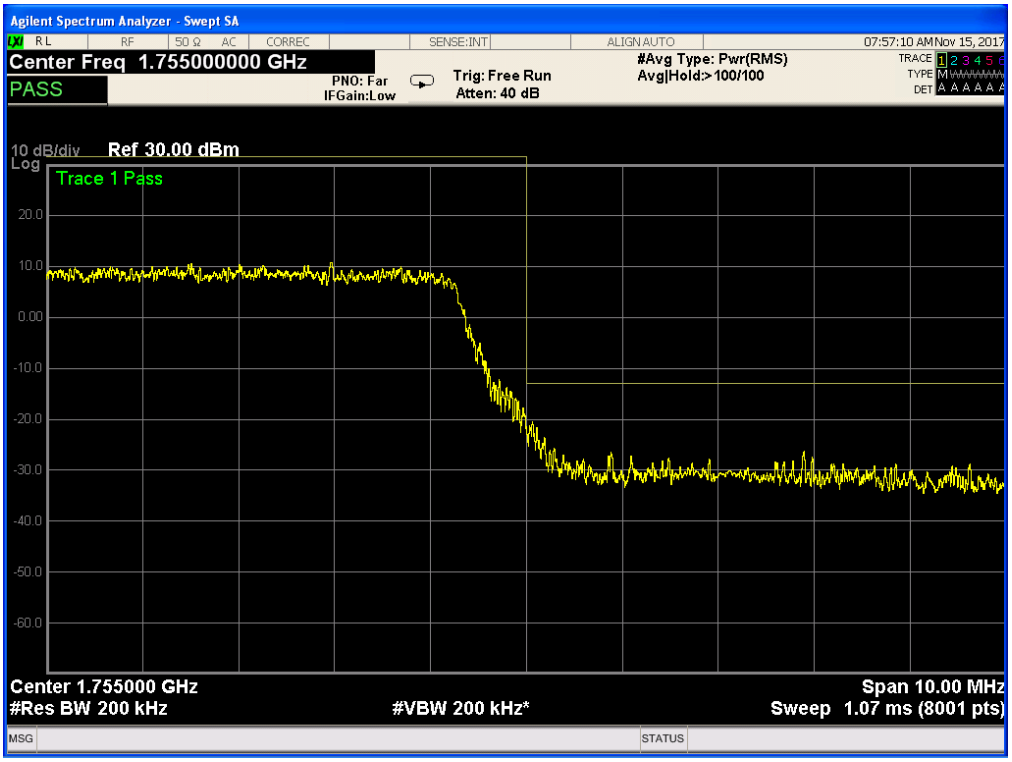
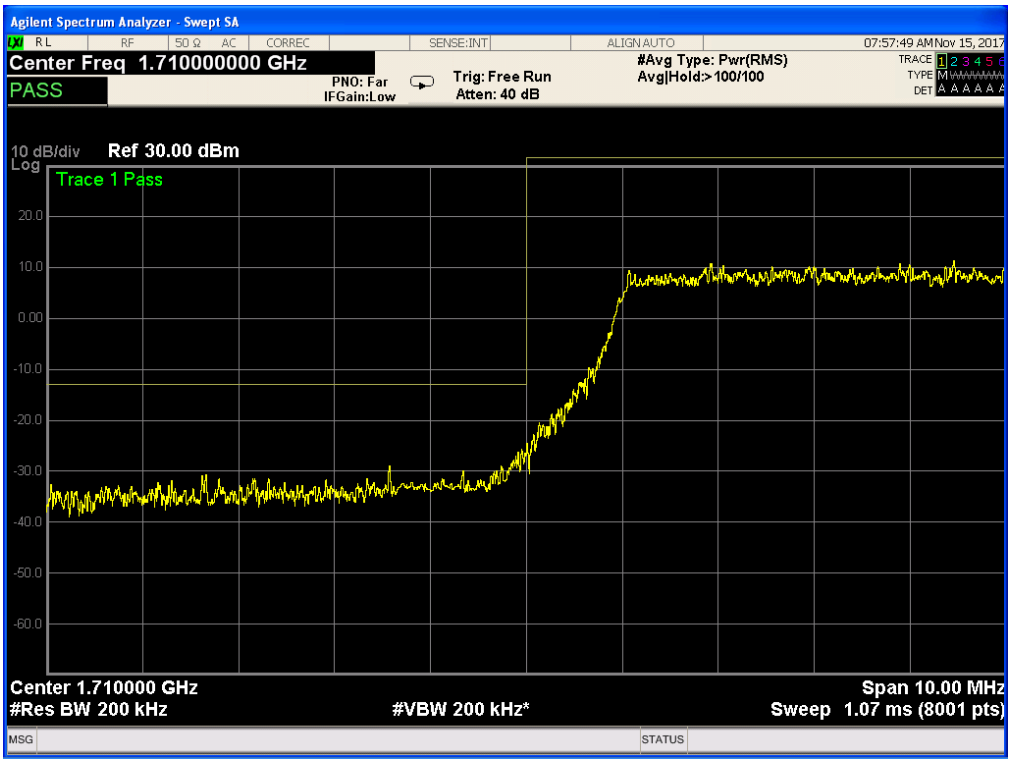
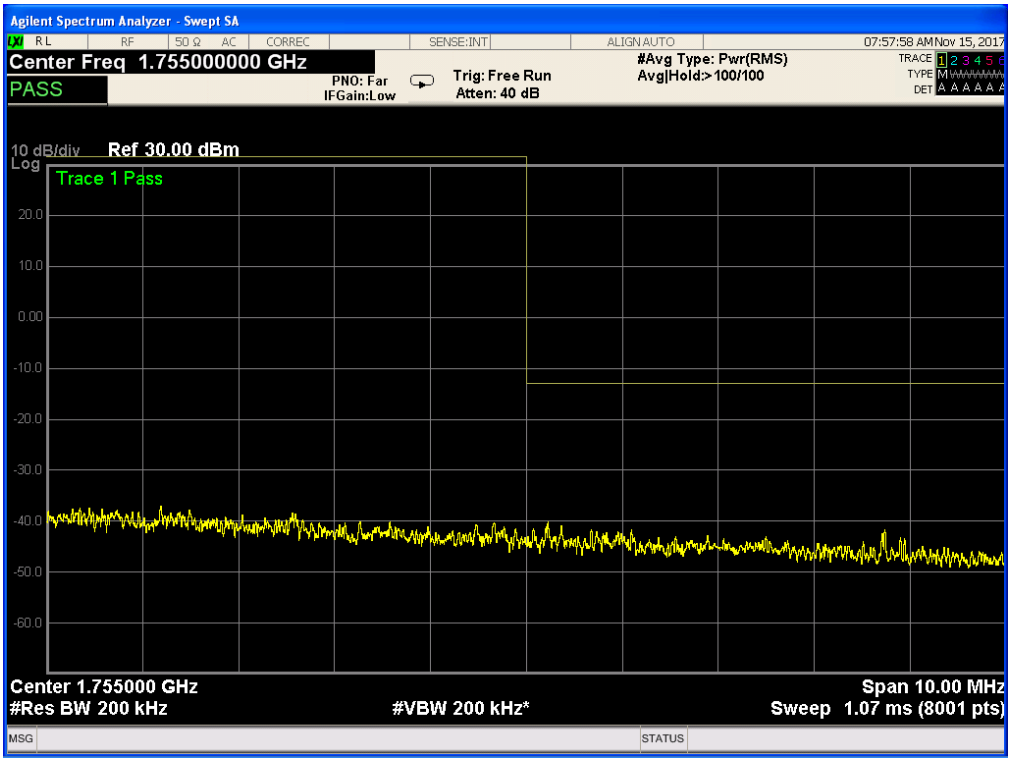


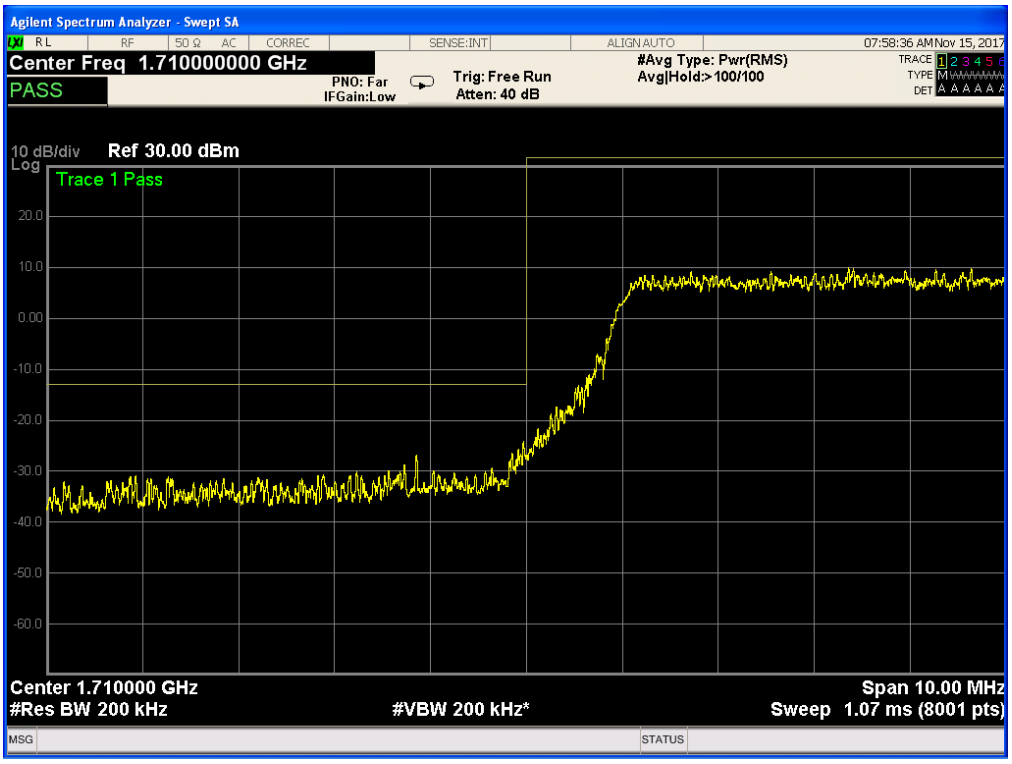
Band 4,UL Channel 20050,UL Frequency 1720.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



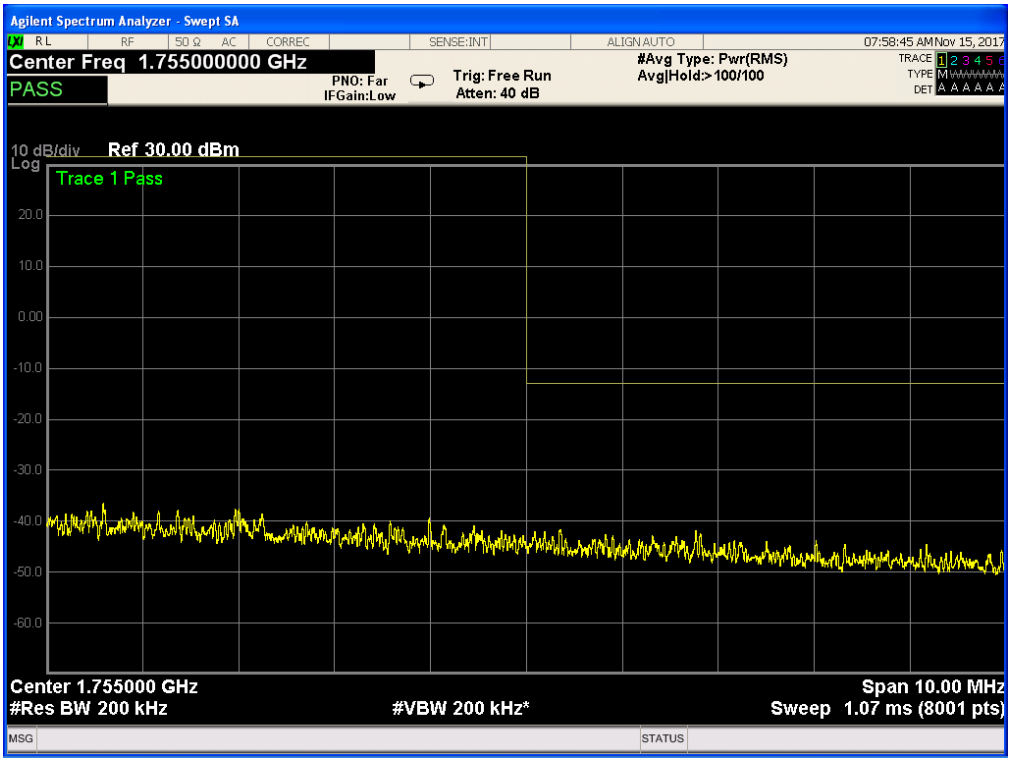
Band 4,UL Channel 20050,UL Frequency 1720.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



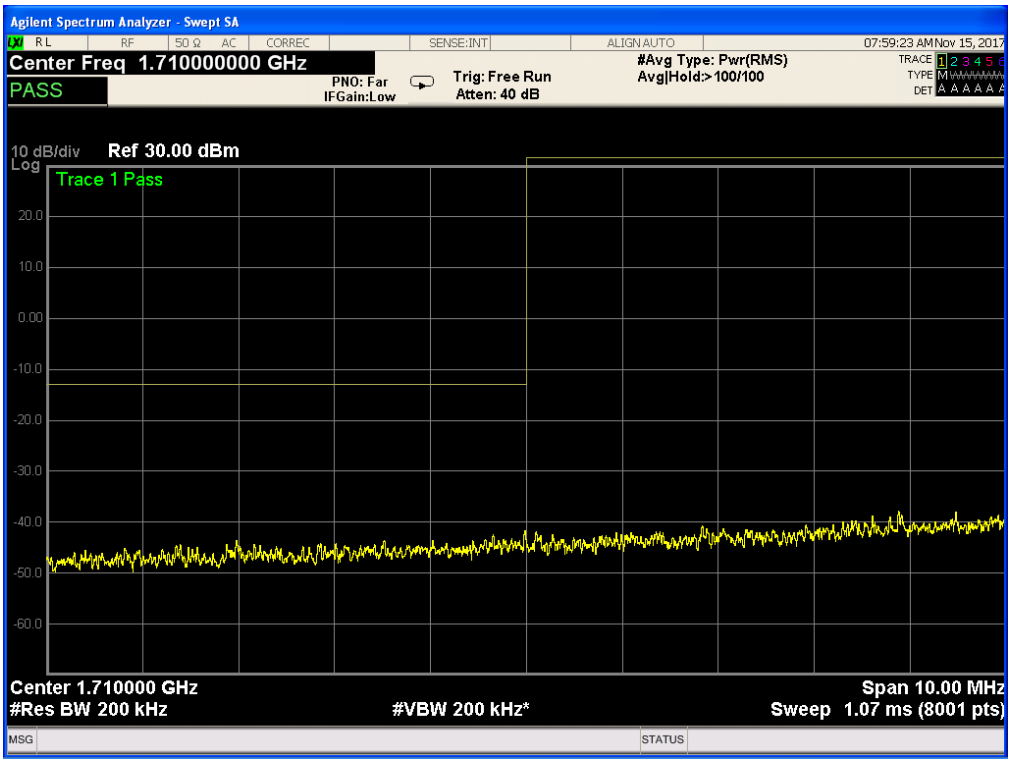
Band 4,UL Channel 20050,UL Frequency 1720.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



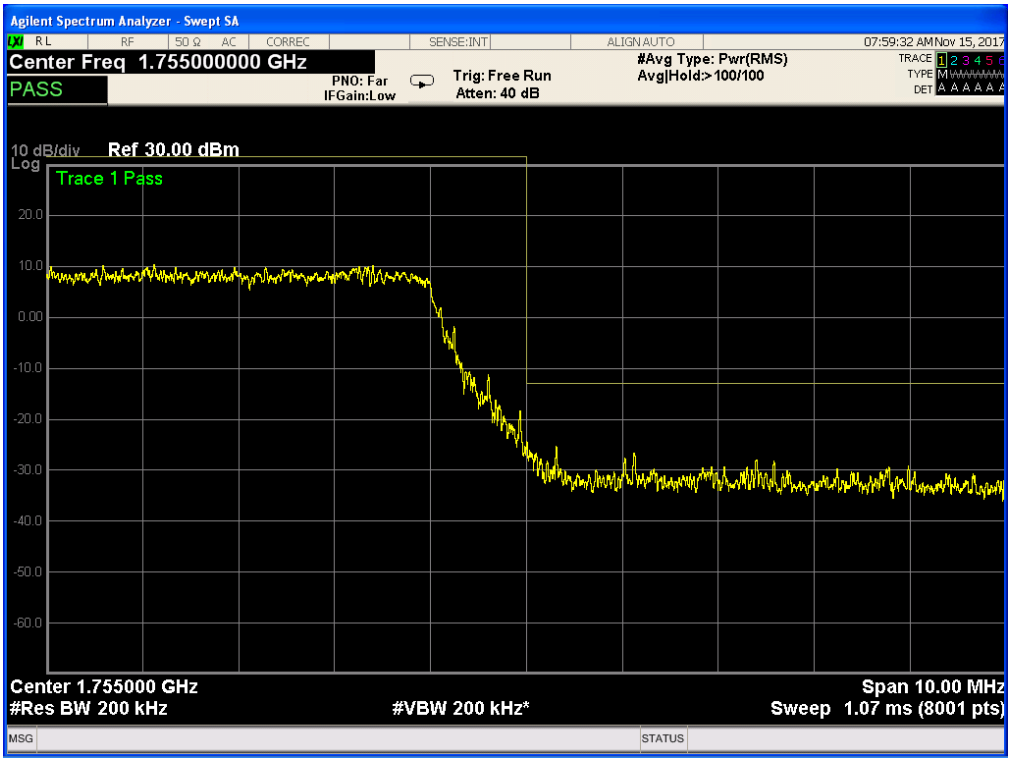
Band 4,UL Channel 20050,UL Frequency 1720.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



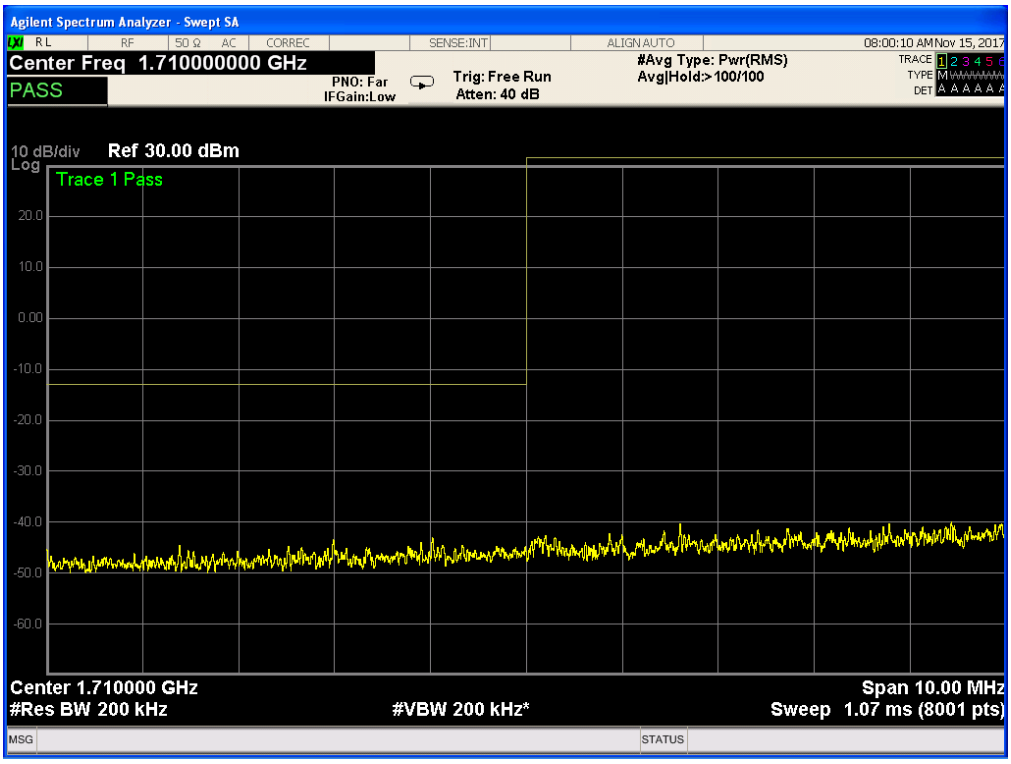
Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



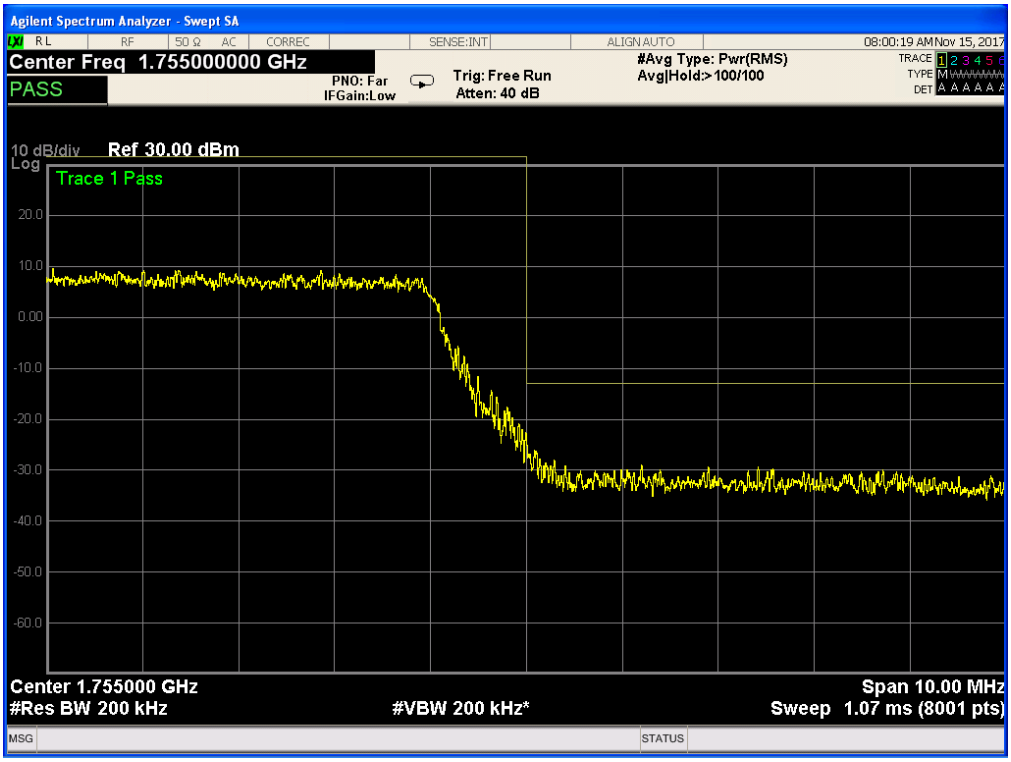
Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM

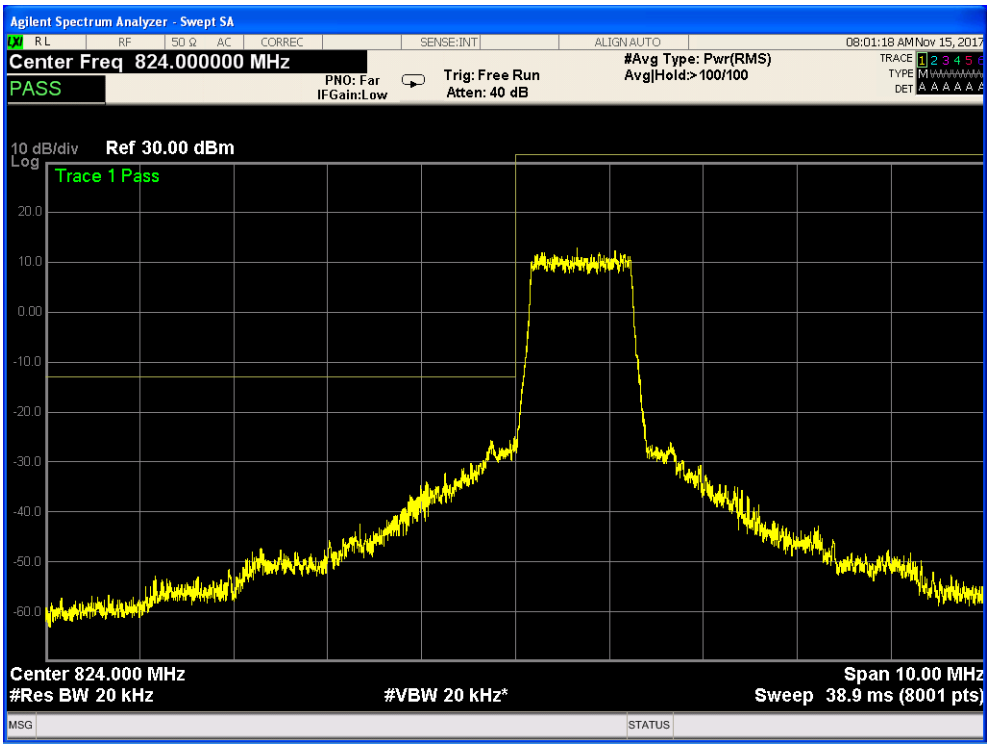


Band 4,UL Channel 20300,UL Frequency 1745.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM

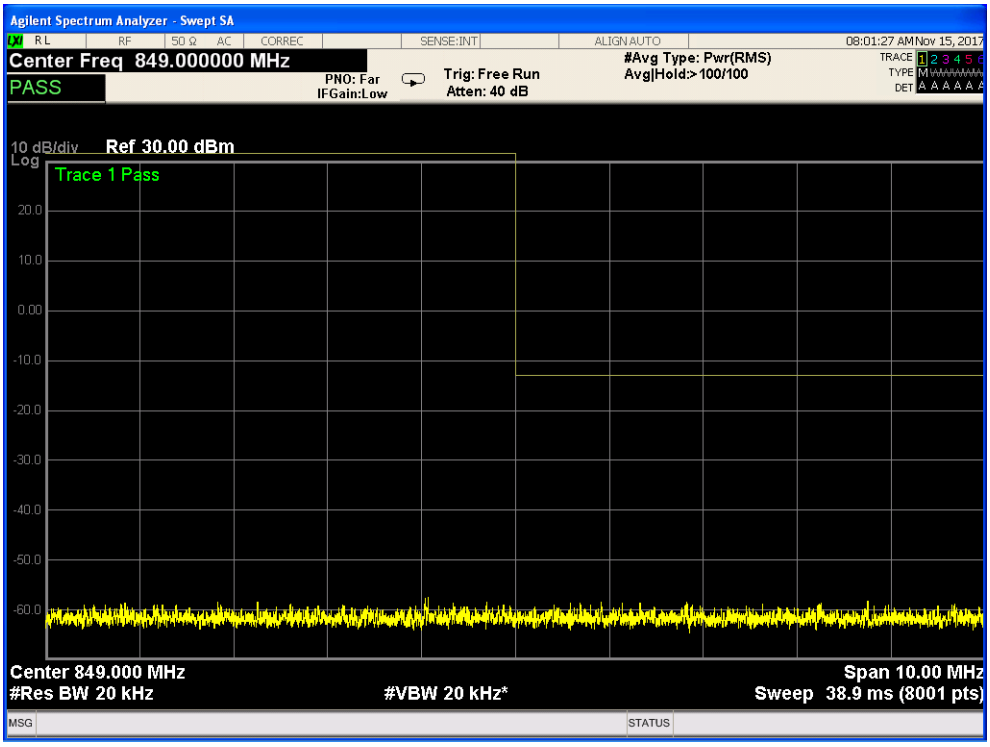


6.3 LTE BAND 5

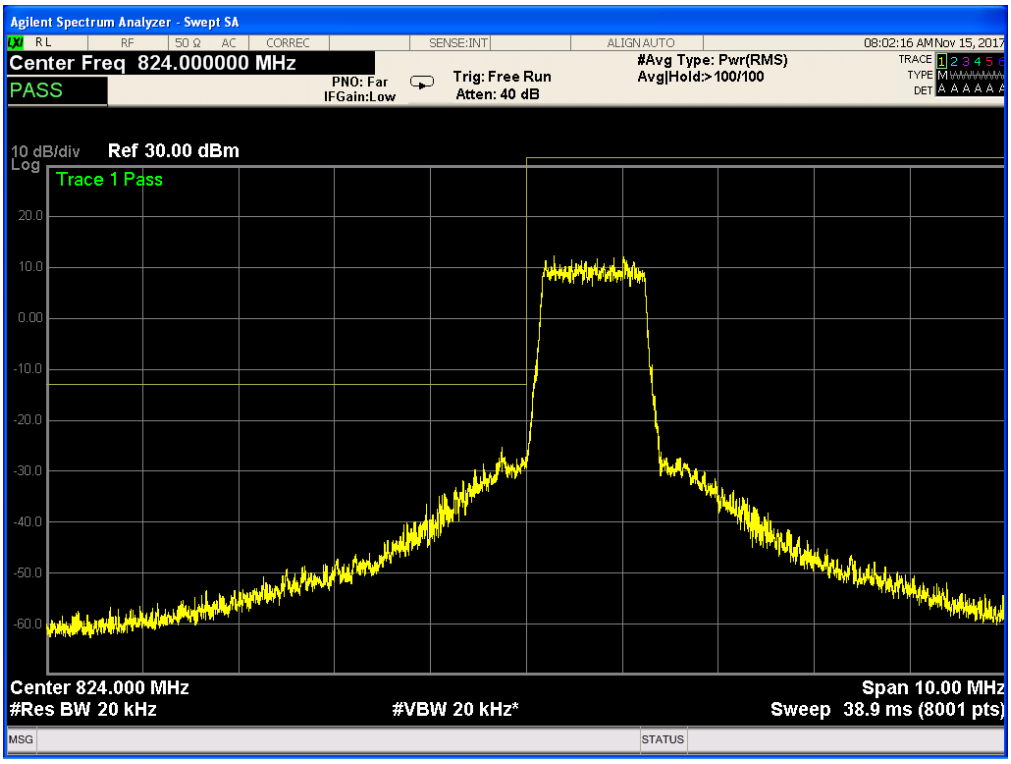
Band 5,UL Channel 20407,UL Frequency 824.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



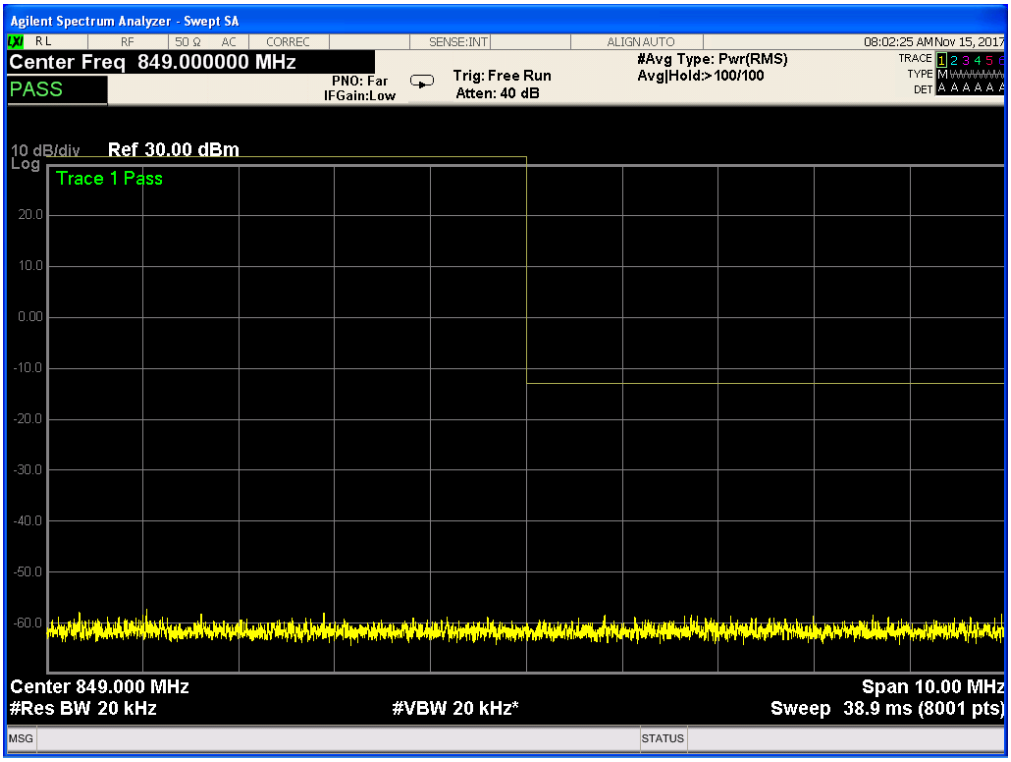
Band 5,UL Channel 20407,UL Frequency 824.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



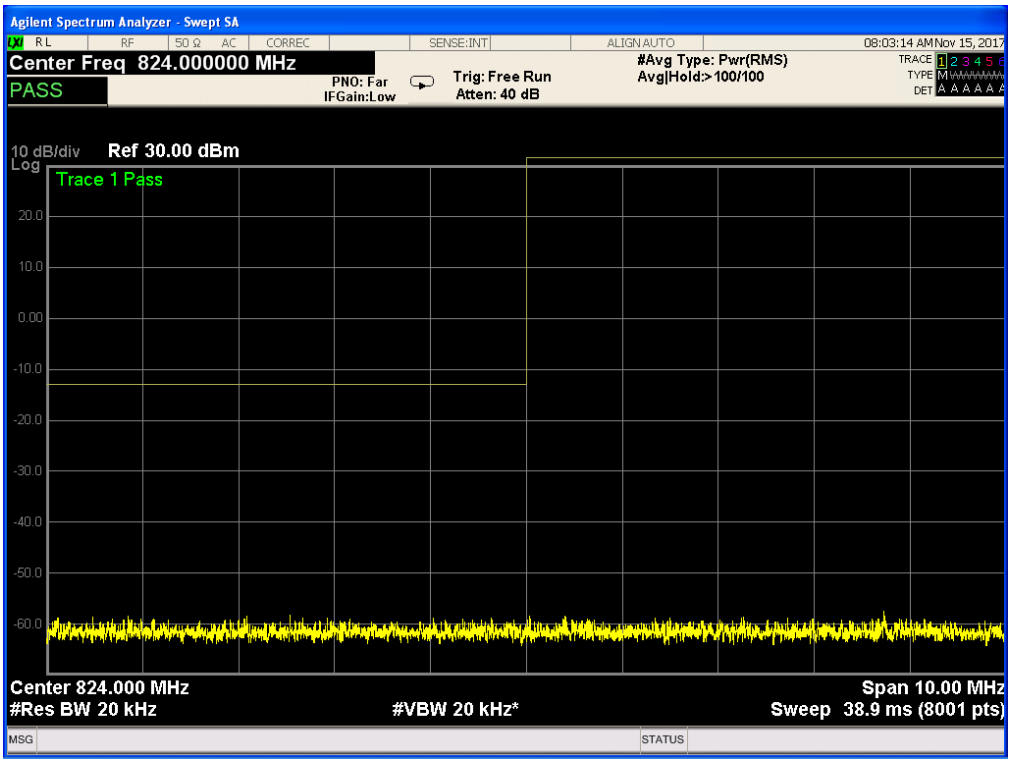
Band 5,UL Channel 20407,UL Frequency 824.7,BW 1.4,NO. RB 6,RB POS. Low,16-QAM



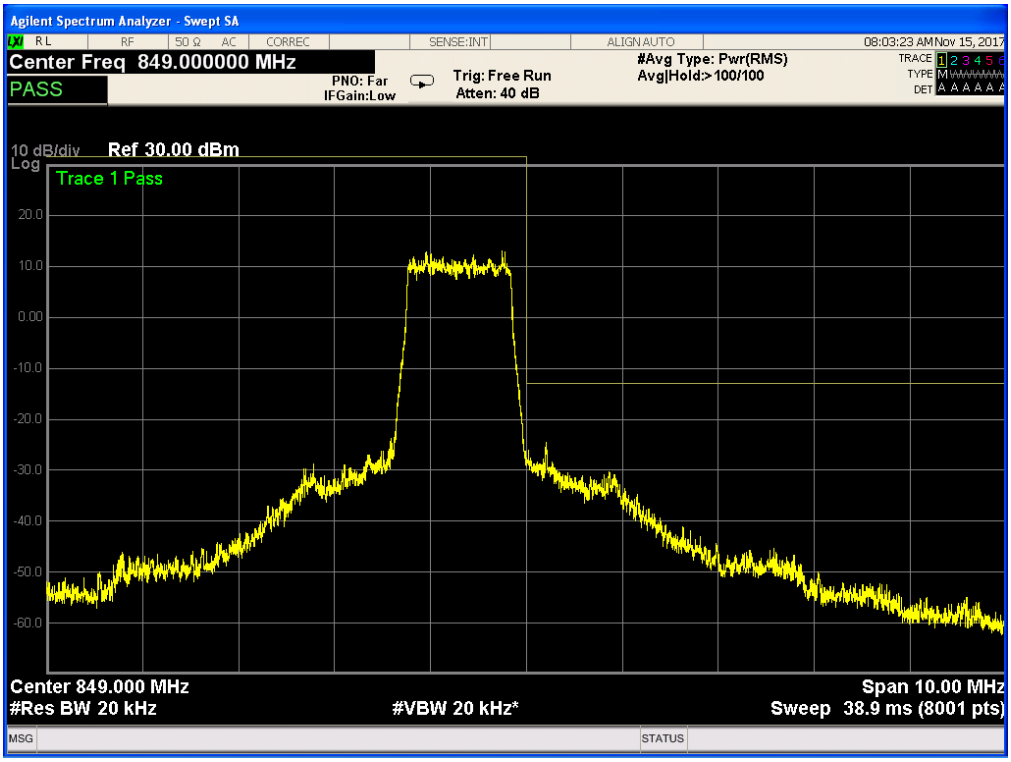
Band 5,UL Channel 20407,UL Frequency 824.7,BW 1.4,NO. RB 6,RB POS. Low,16-QAM



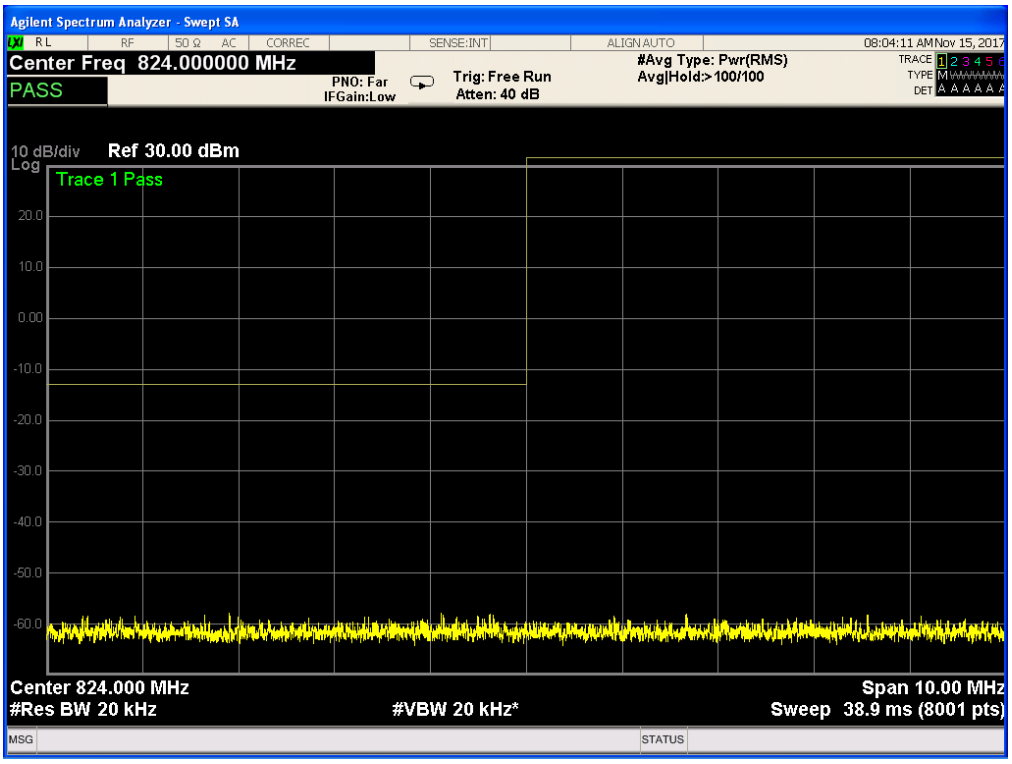
Band 5,UL Channel 20643,UL Frequency 848.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



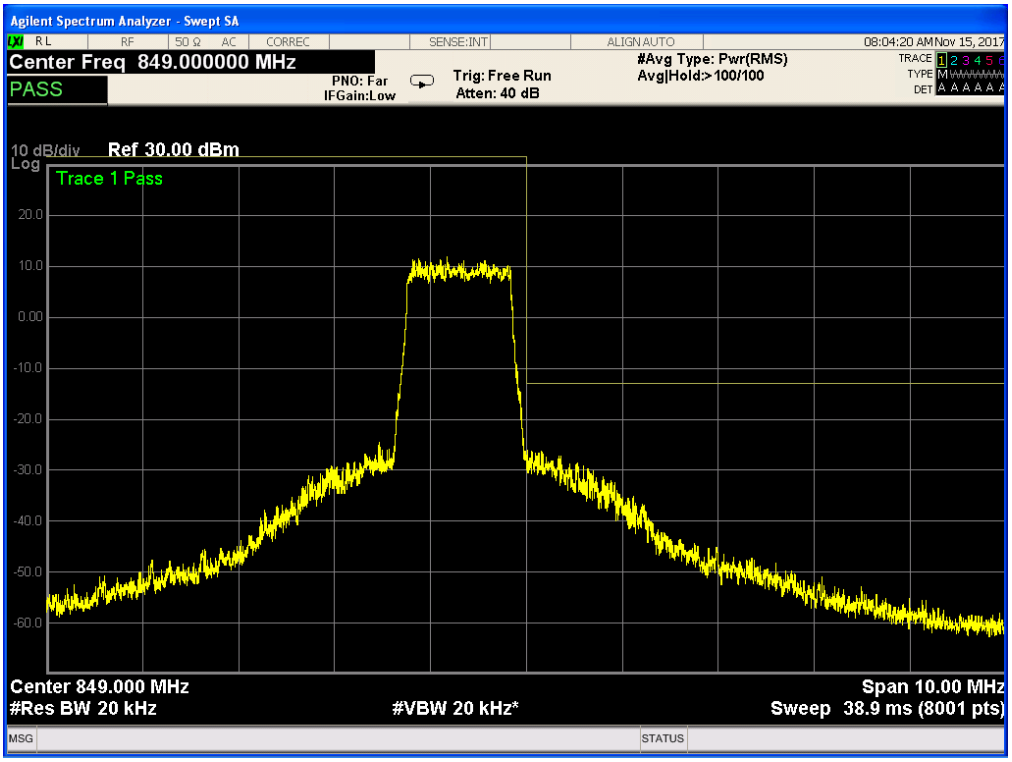
Band 5,UL Channel 20643,UL Frequency 848.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



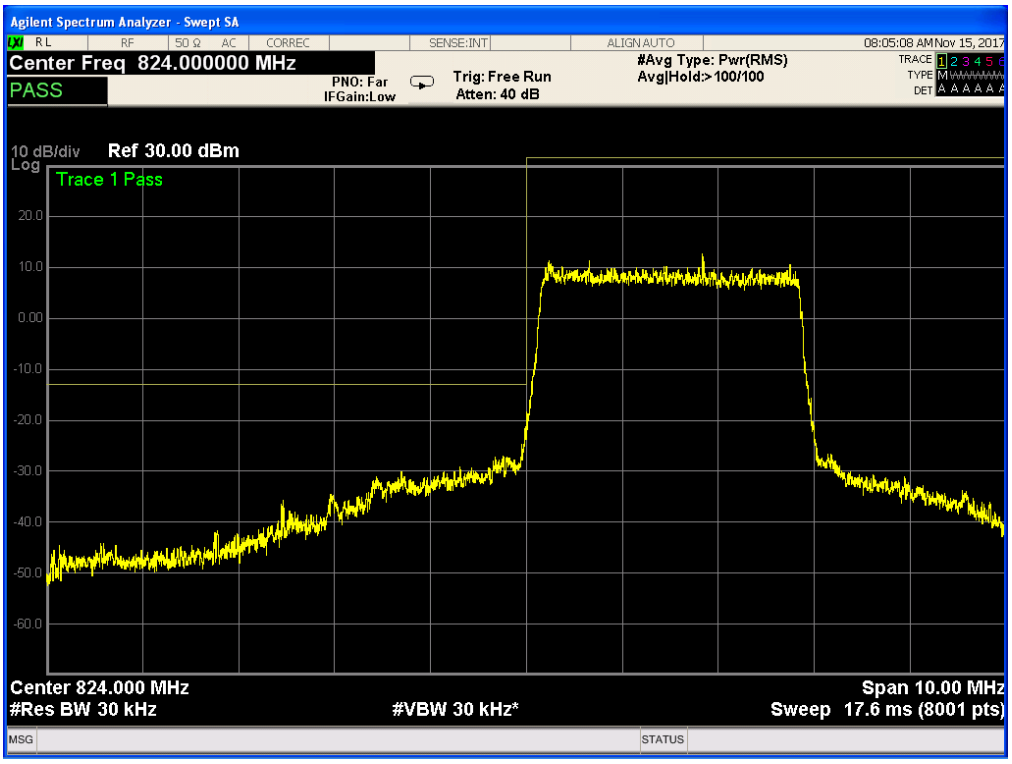
Band 5,UL Channel 20643,UL Frequency 848.3,BW 1.4,NO. RB 6,RB POS. Low,16-QAM



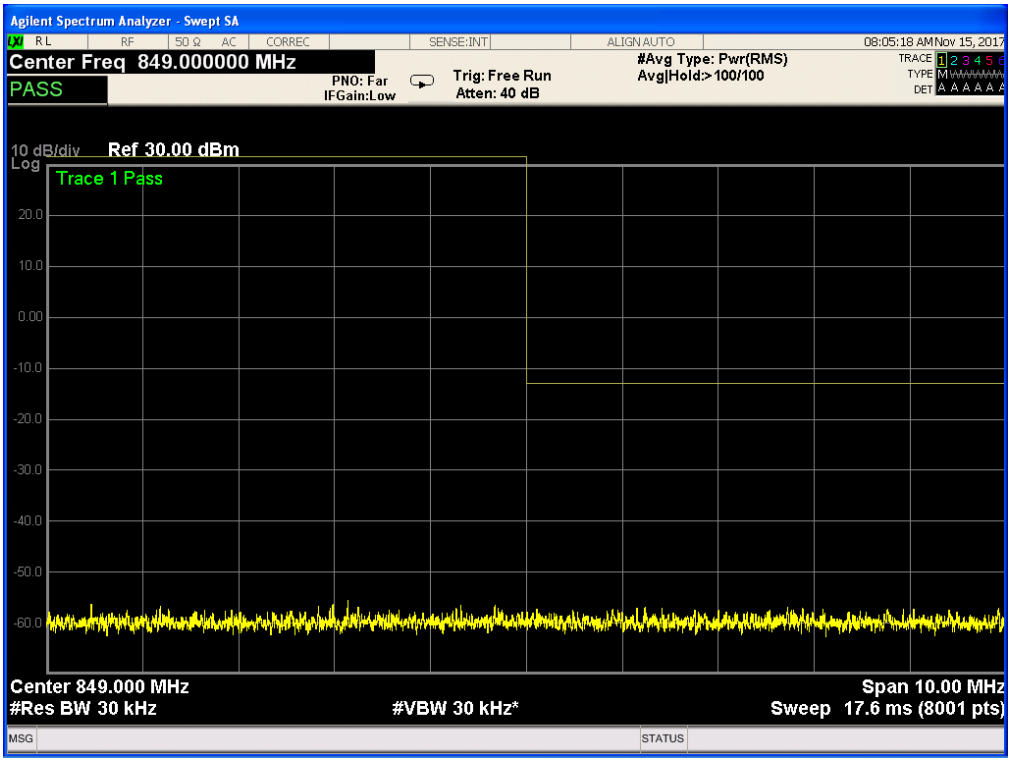
Band 5,UL Channel 20643,UL Frequency 848.3,BW 1.4,NO. RB 6,RB POS. Low,16-QAM



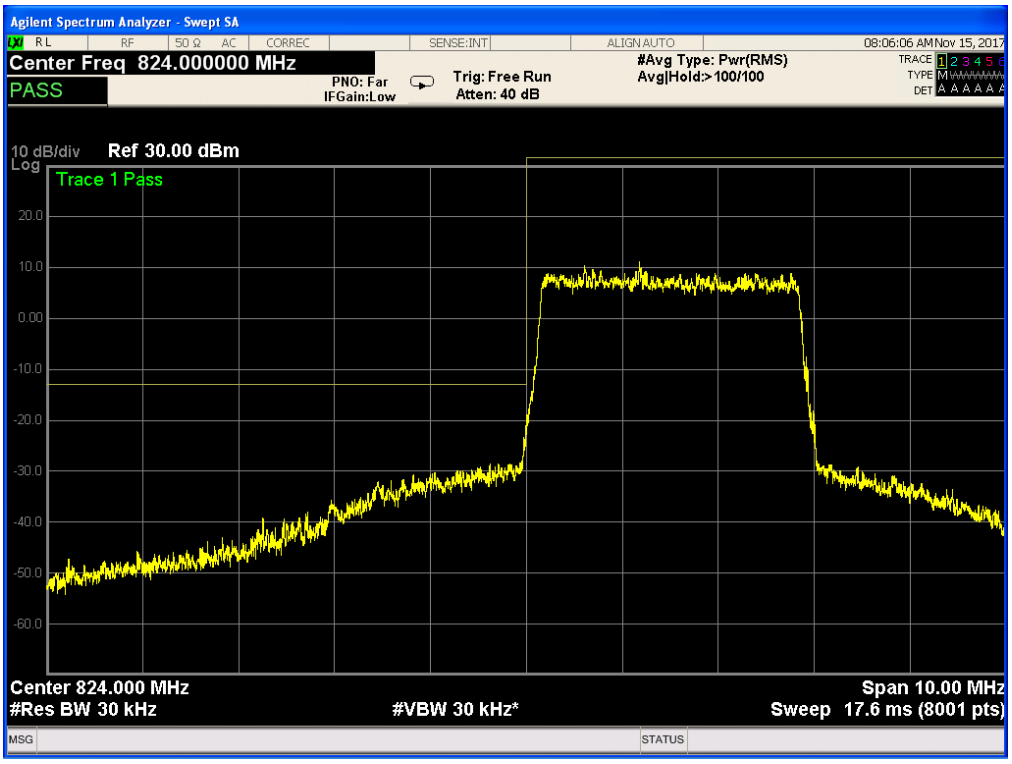
Band 5,UL Channel 20415,UL Frequency 825.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



Band 5,UL Channel 20415,UL Frequency 825.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



Band 5,UL Channel 20415,UL Frequency 825.5,BW 3.0,NO. RB 15,RB POS. Low,16-QAM



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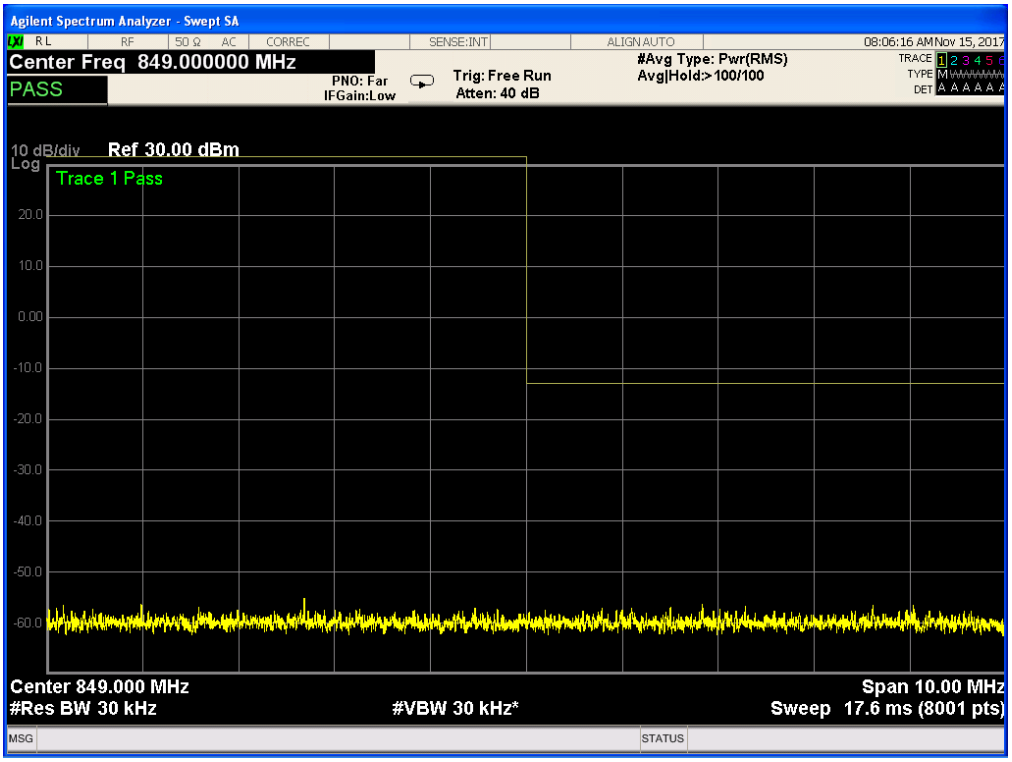
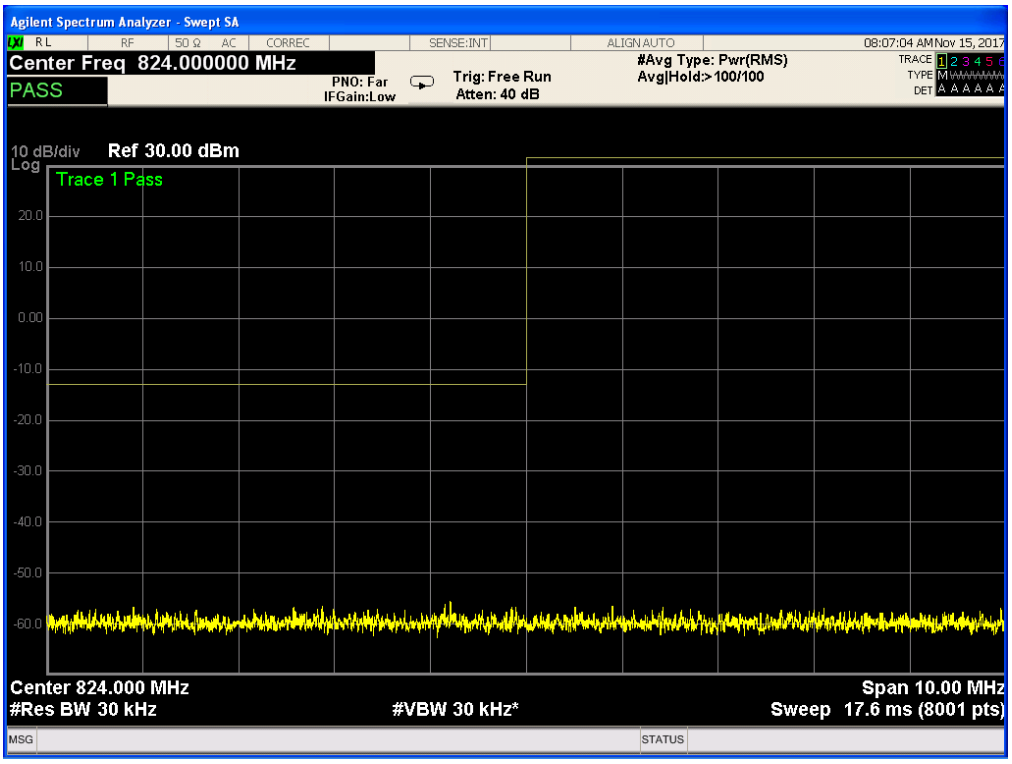
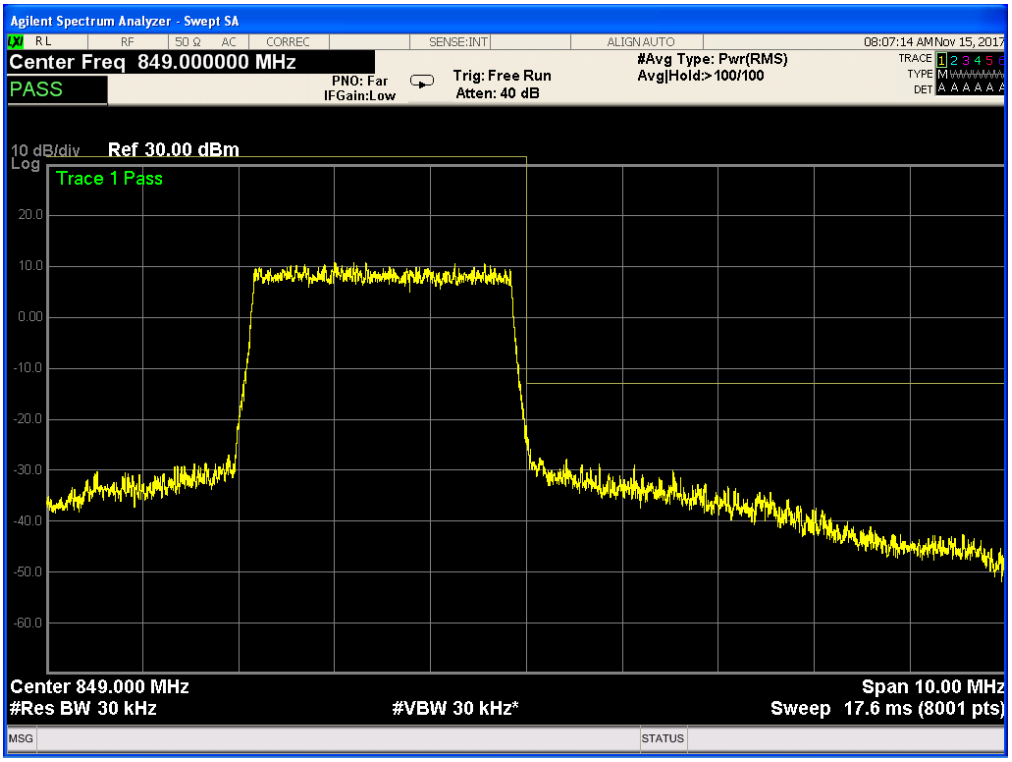


Band 5,UL Channel 20635,UL Frequency 847.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



Band 5,UL Channel 20635,UL Frequency 847.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



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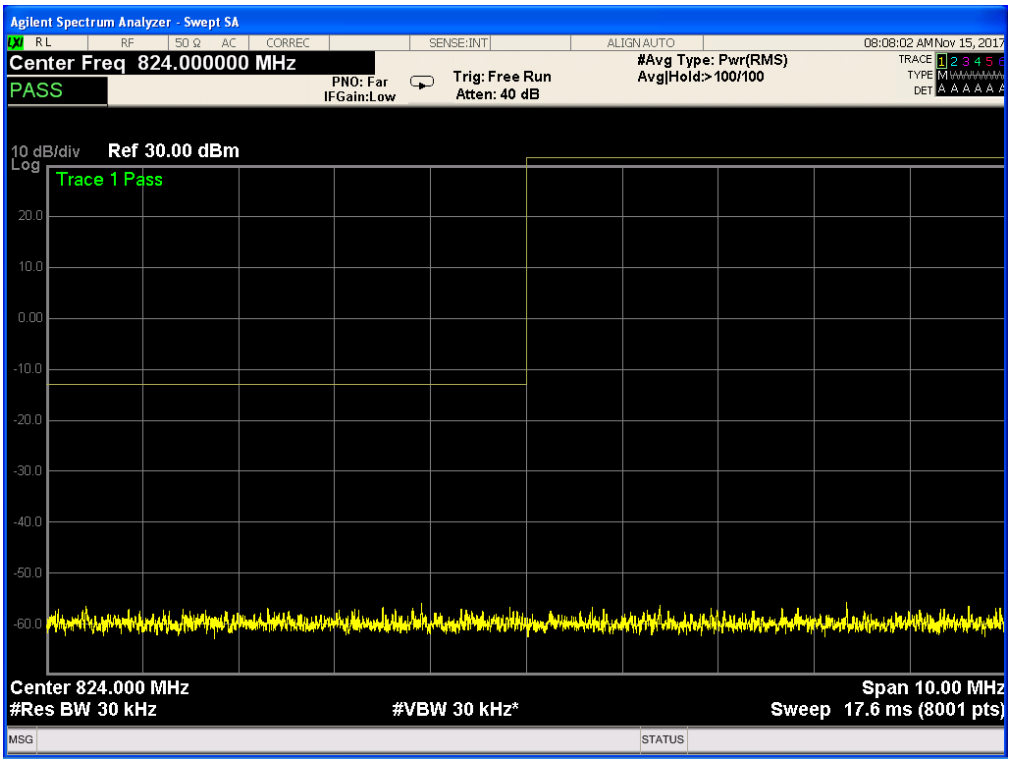

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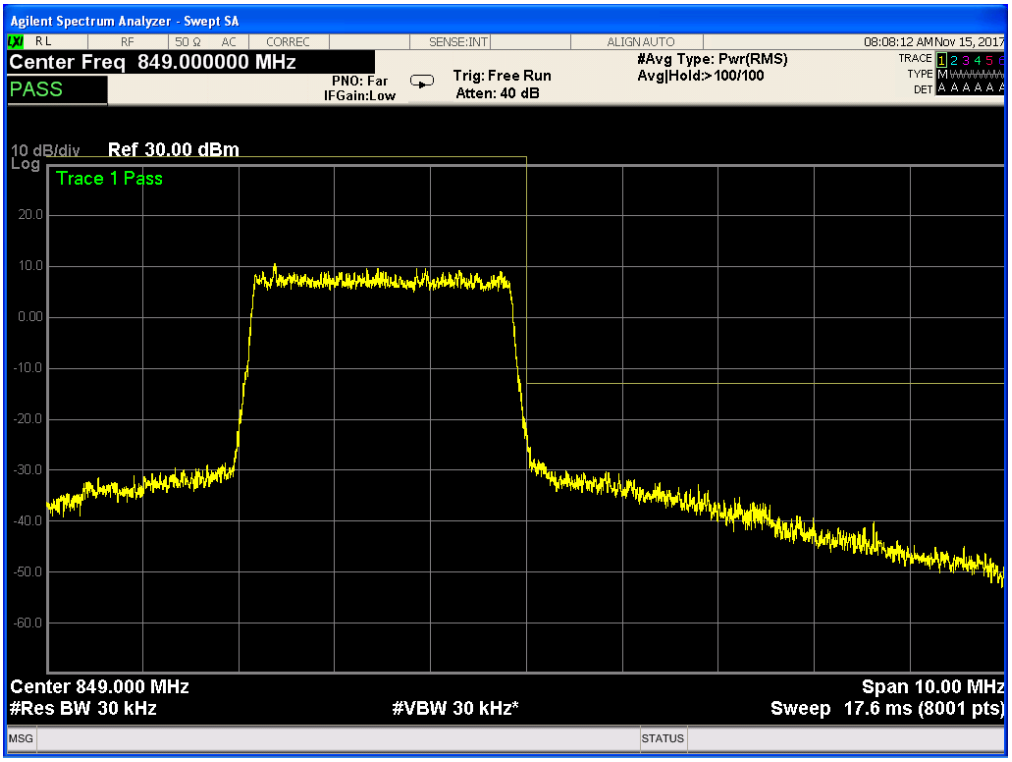
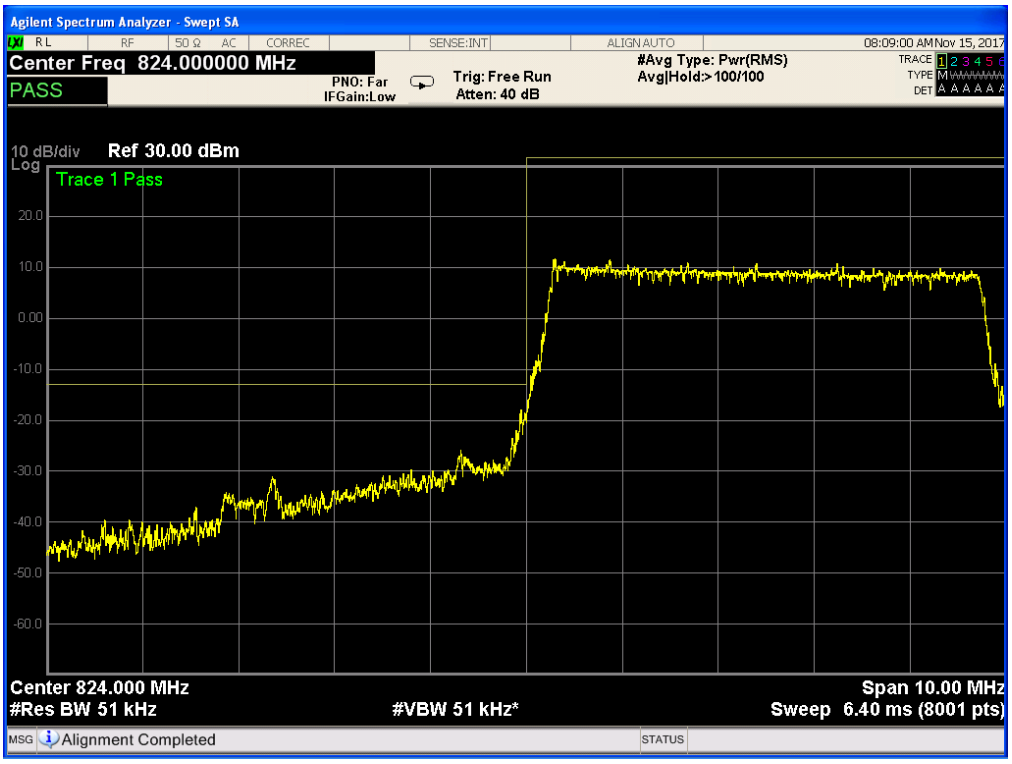
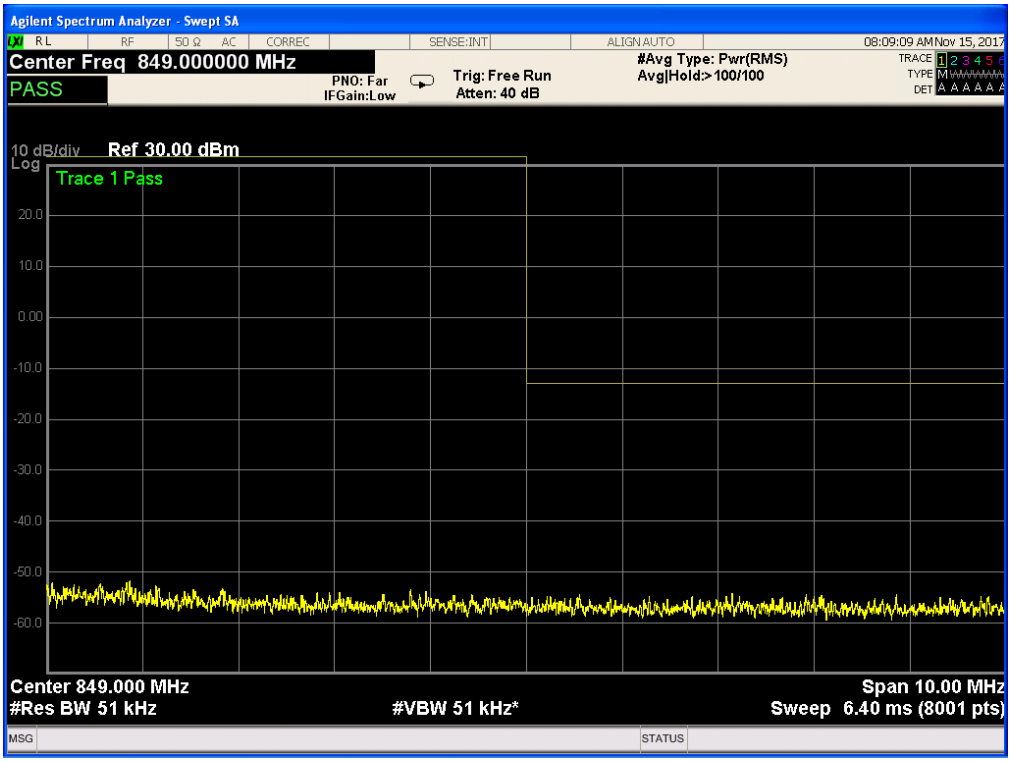


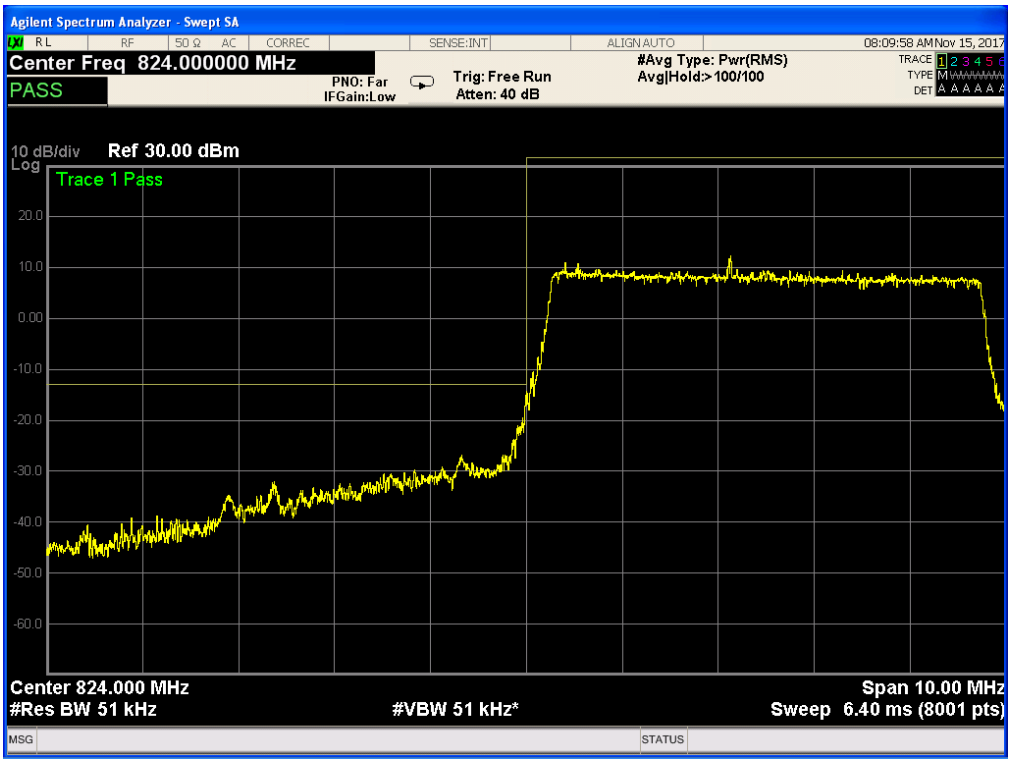
Band 5,UL Channel 20425,UL Frequency 826.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



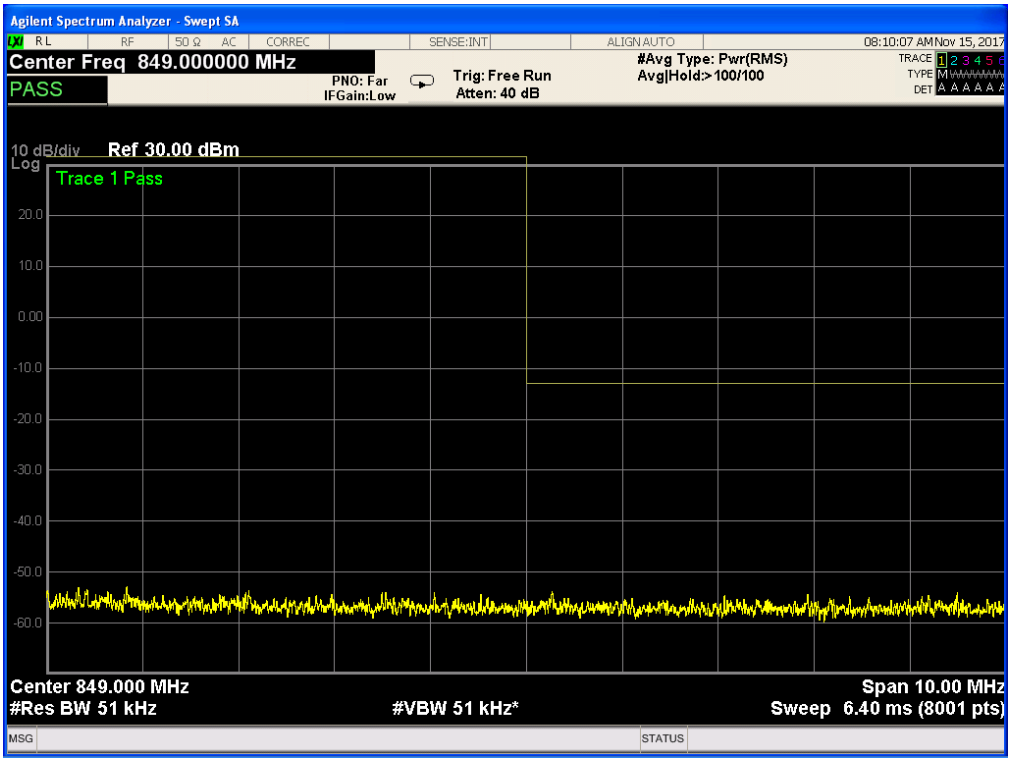
Band 5,UL Channel 20425,UL Frequency 826.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



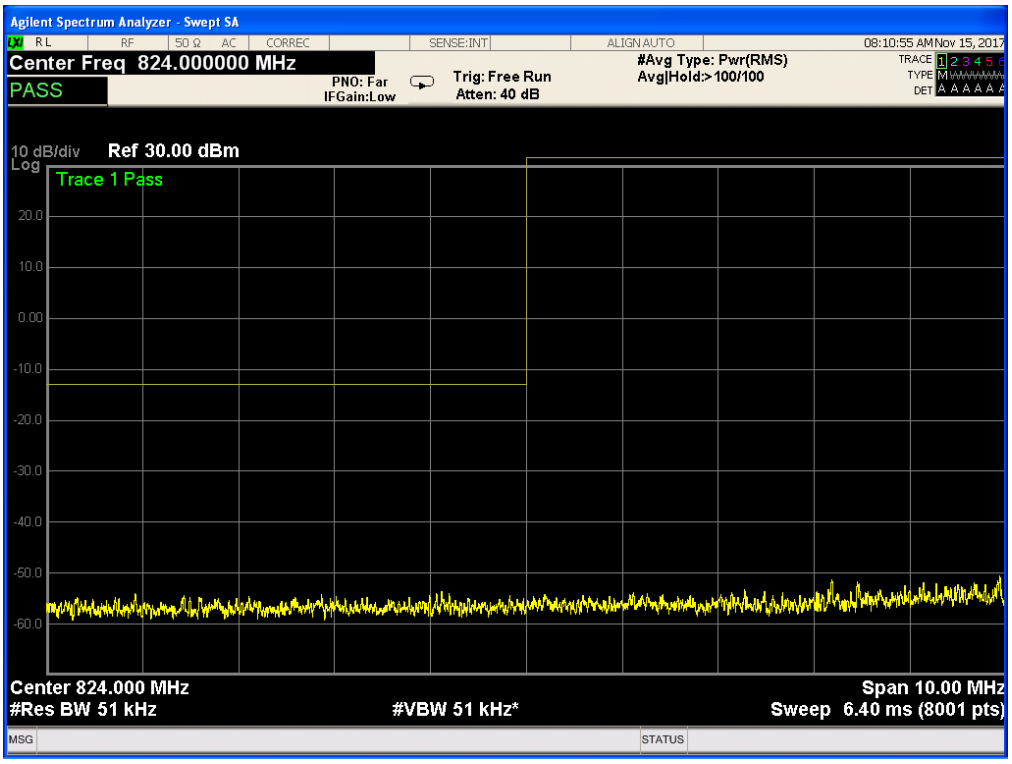
Band 5,UL Channel 20425,UL Frequency 826.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



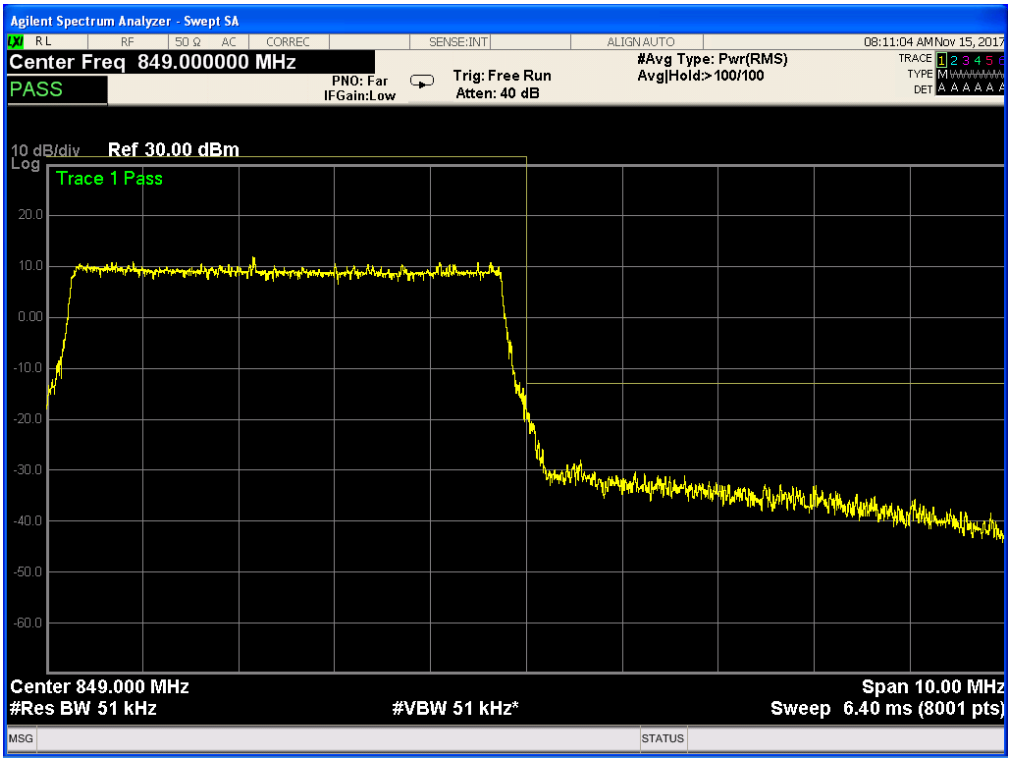
Band 5,UL Channel 20425,UL Frequency 826.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



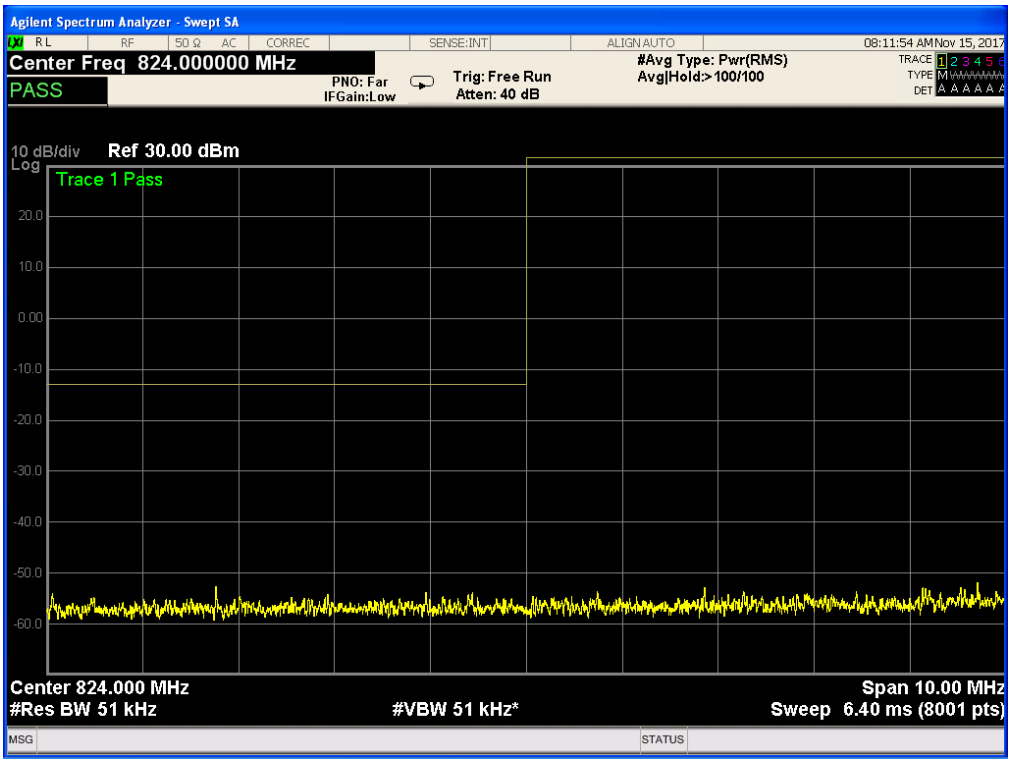
Band 5,UL Channel 20625,UL Frequency 846.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



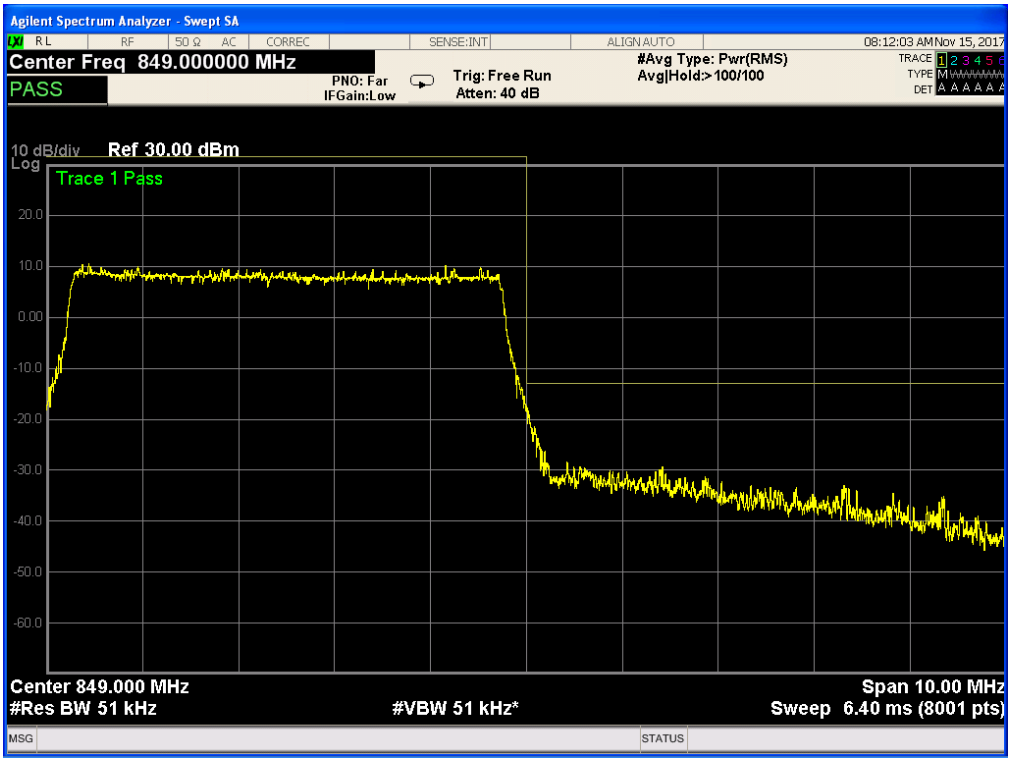
Band 5,UL Channel 20625,UL Frequency 846.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



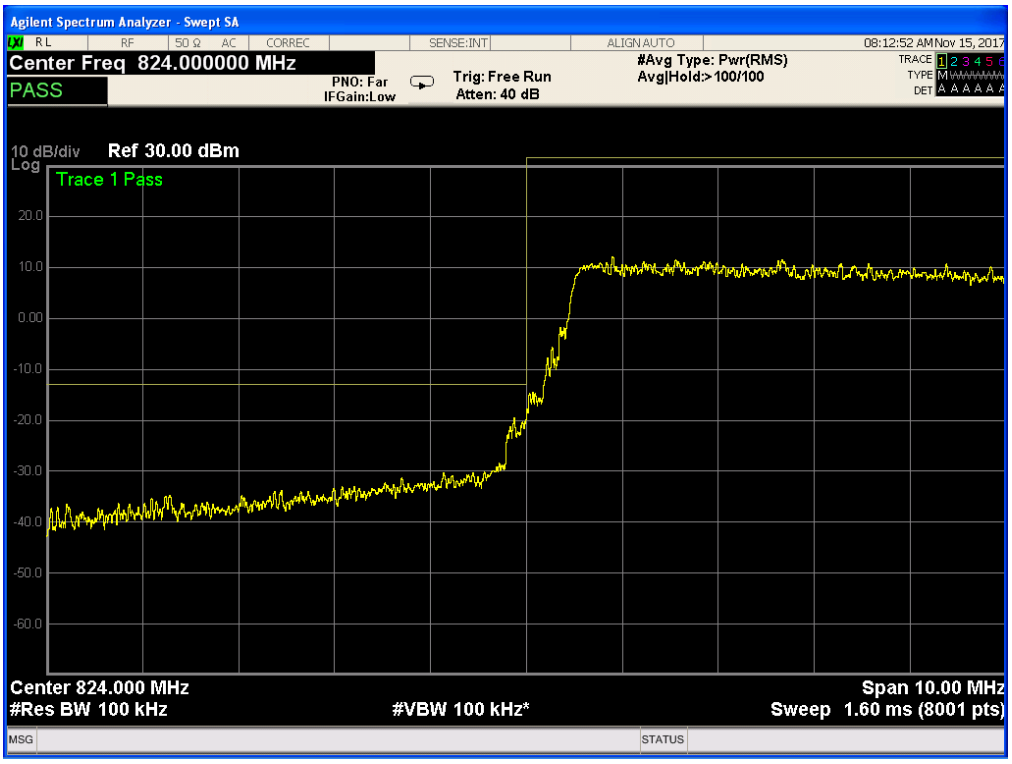
Band 5,UL Channel 20625,UL Frequency 846.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



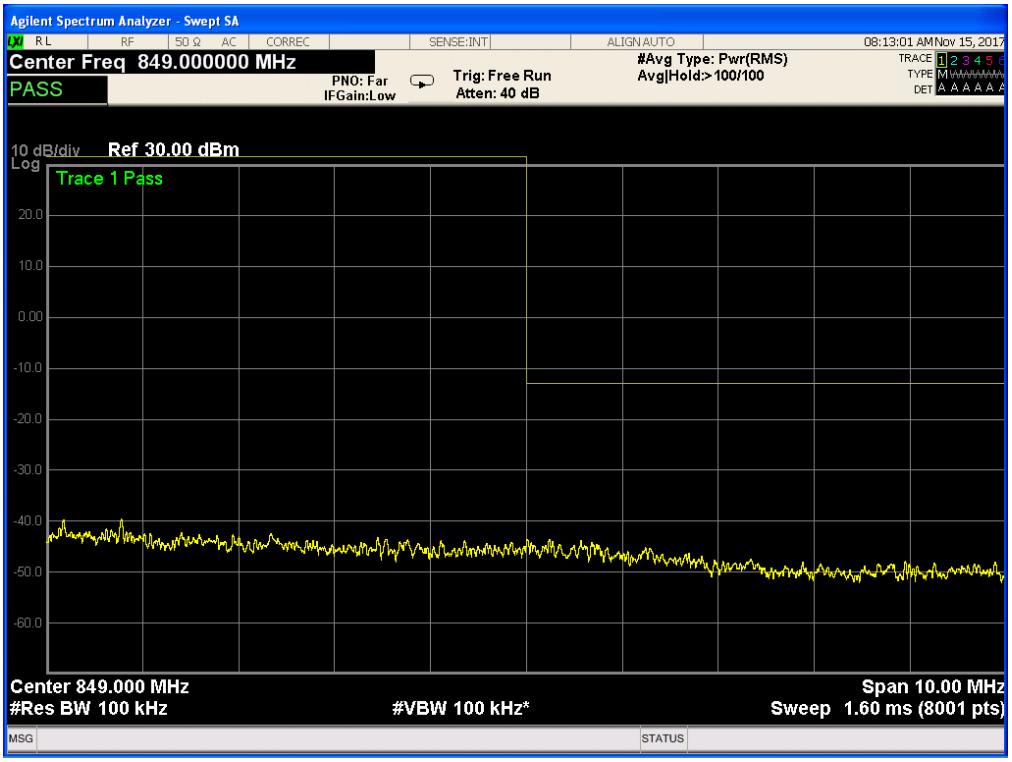
Band 5,UL Channel 20625,UL Frequency 846.5,BW 5.0,NO. RB 25,RB POS. Low,16-QAM



Band 5,UL Channel 20450,UL Frequency 829.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



Band 5,UL Channel 20450,UL Frequency 829.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



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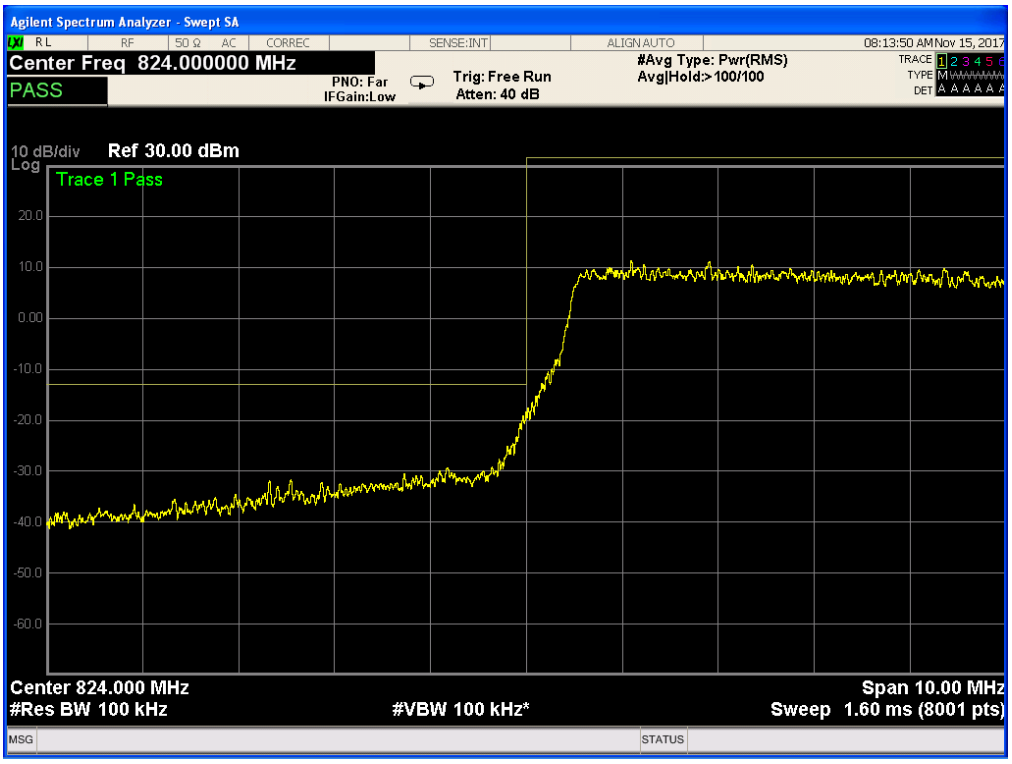
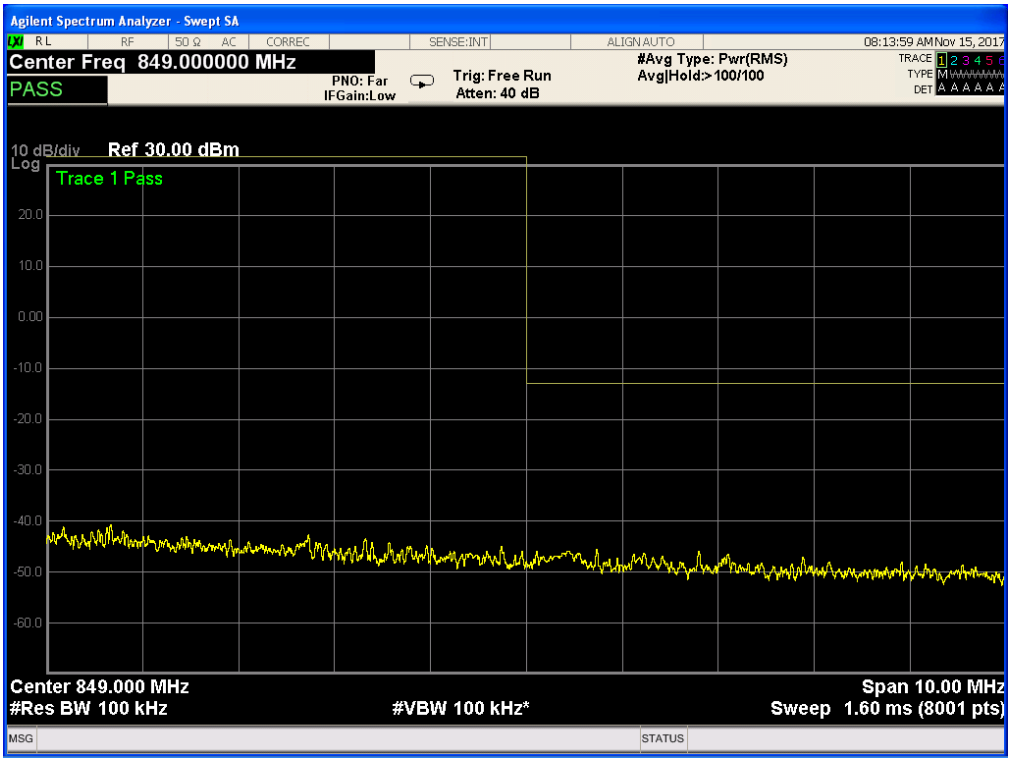
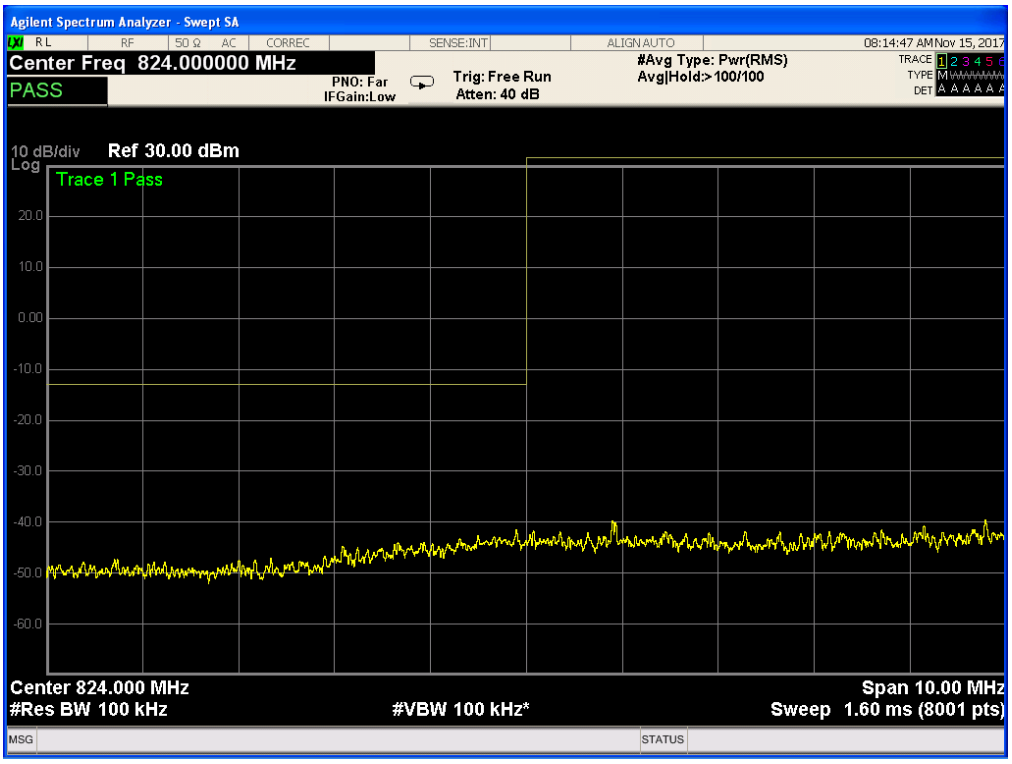


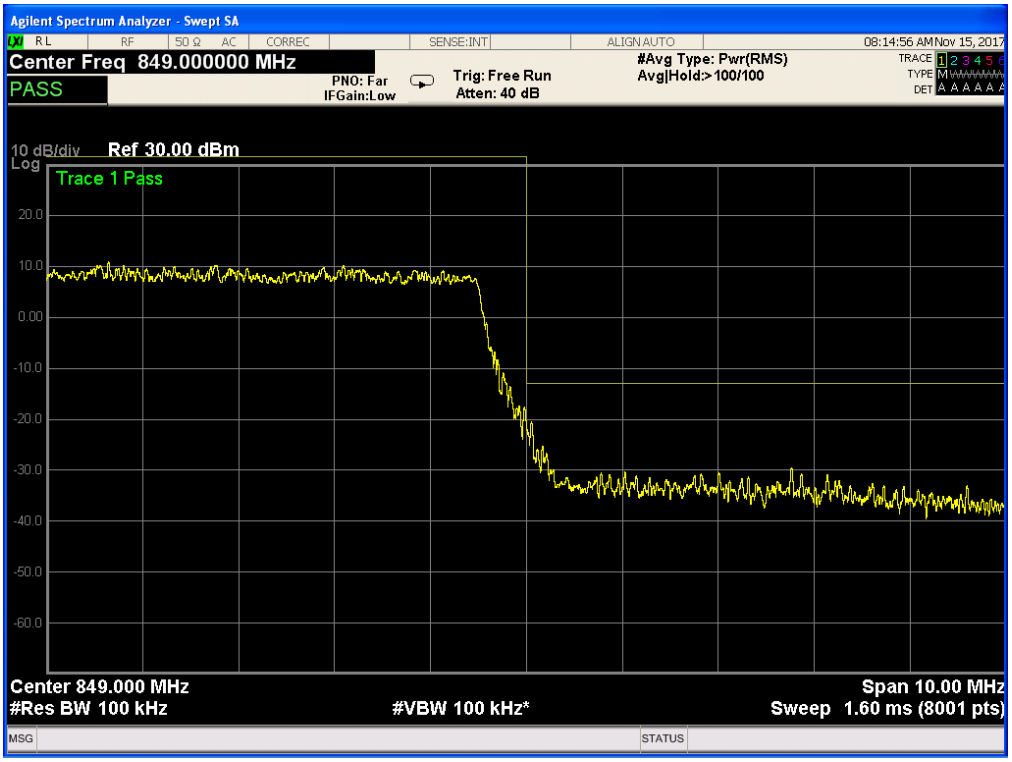
Band 5,UL Channel 20450,UL Frequency 829.0,BW 10.0,NO. RB 50,RB POS. Low,16-QAM



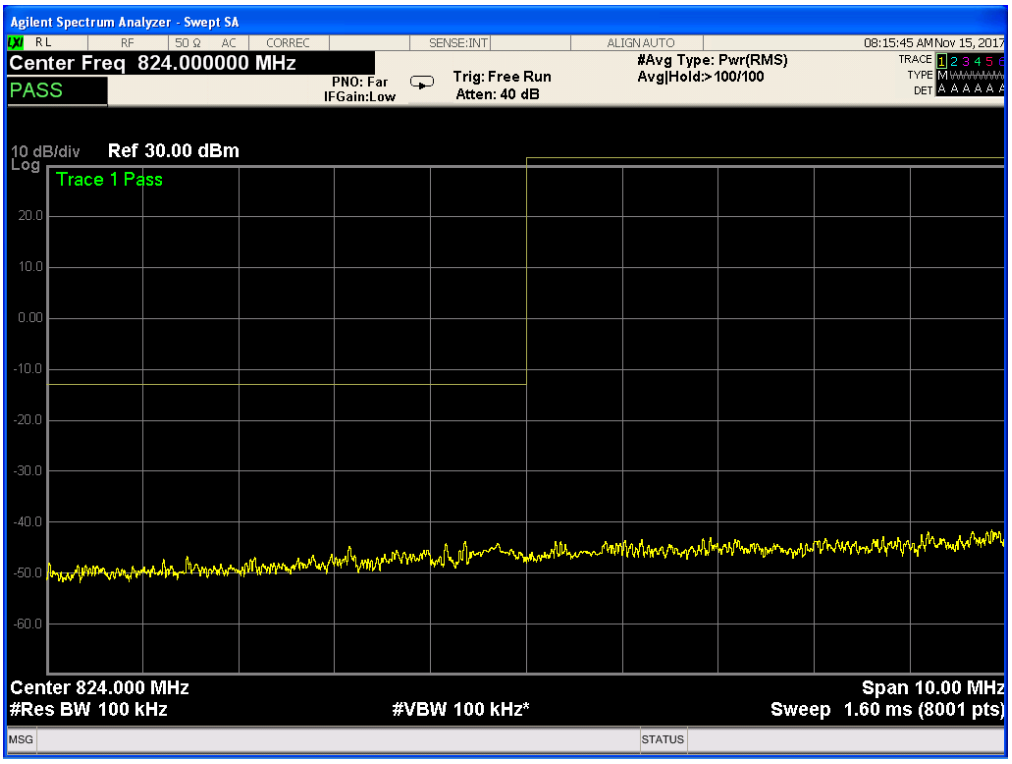
Band 5,UL Channel 20600,UL Frequency 844.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



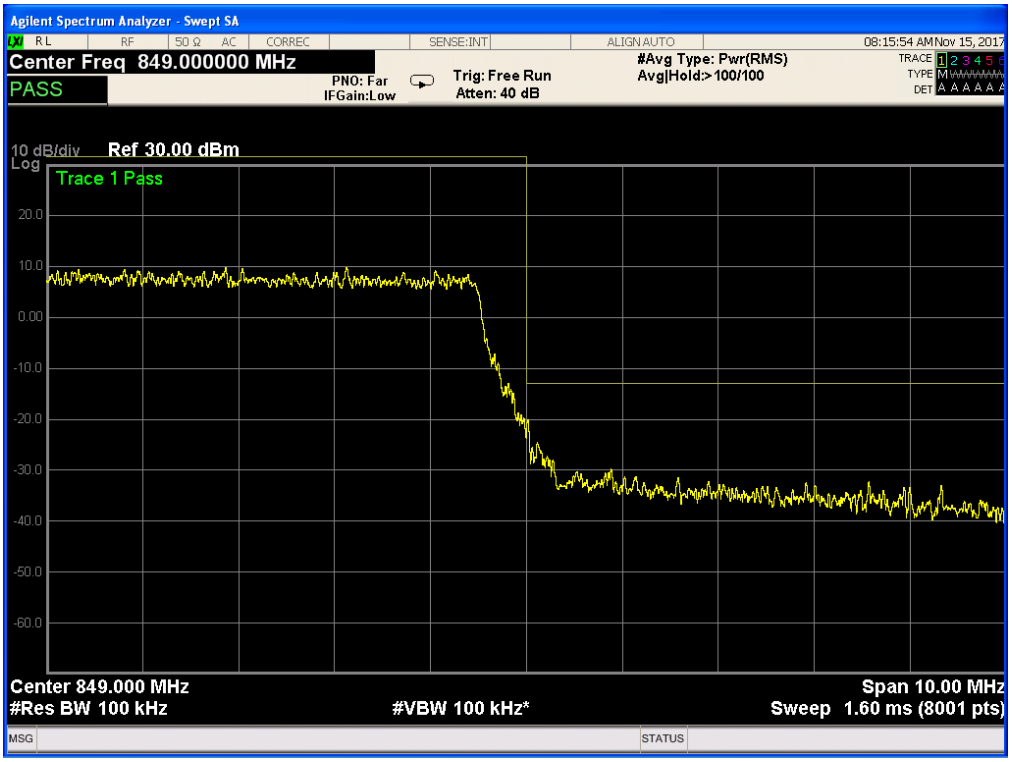
Band 5,UL Channel 20600,UL Frequency 844.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



Band 5,UL Channel 20600,UL Frequency 844.0,BW 10.0,NO. RB 50,RB POS. Low,16-QAM

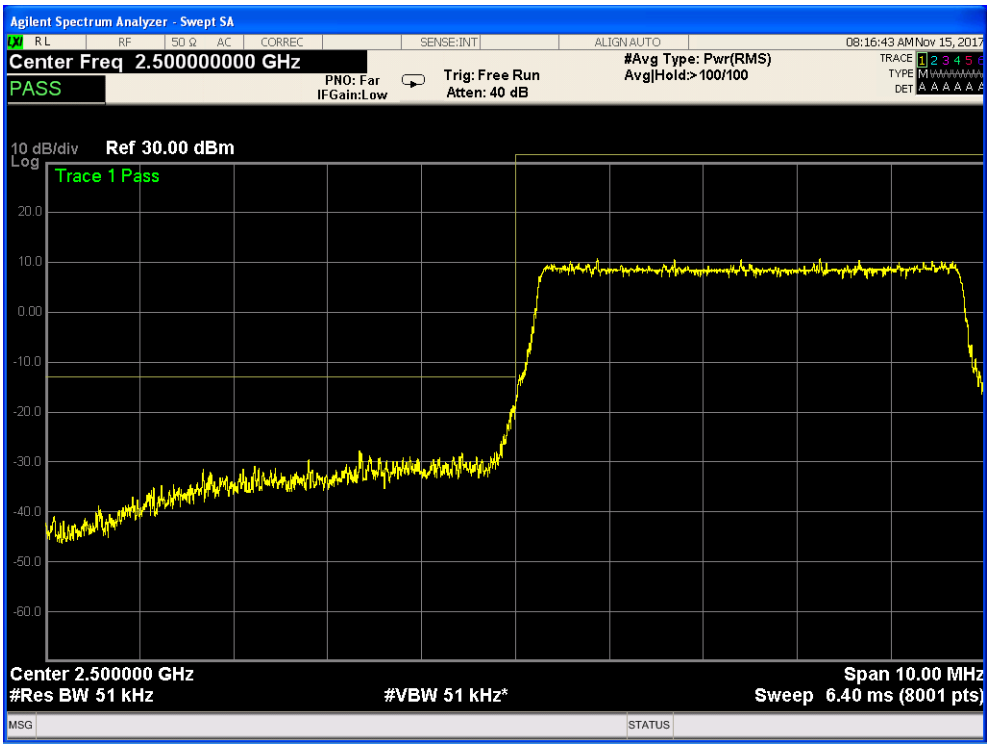


Band 5,UL Channel 20600,UL Frequency 844.0,BW 10.0,NO. RB 50,RB POS. Low,16-QAM

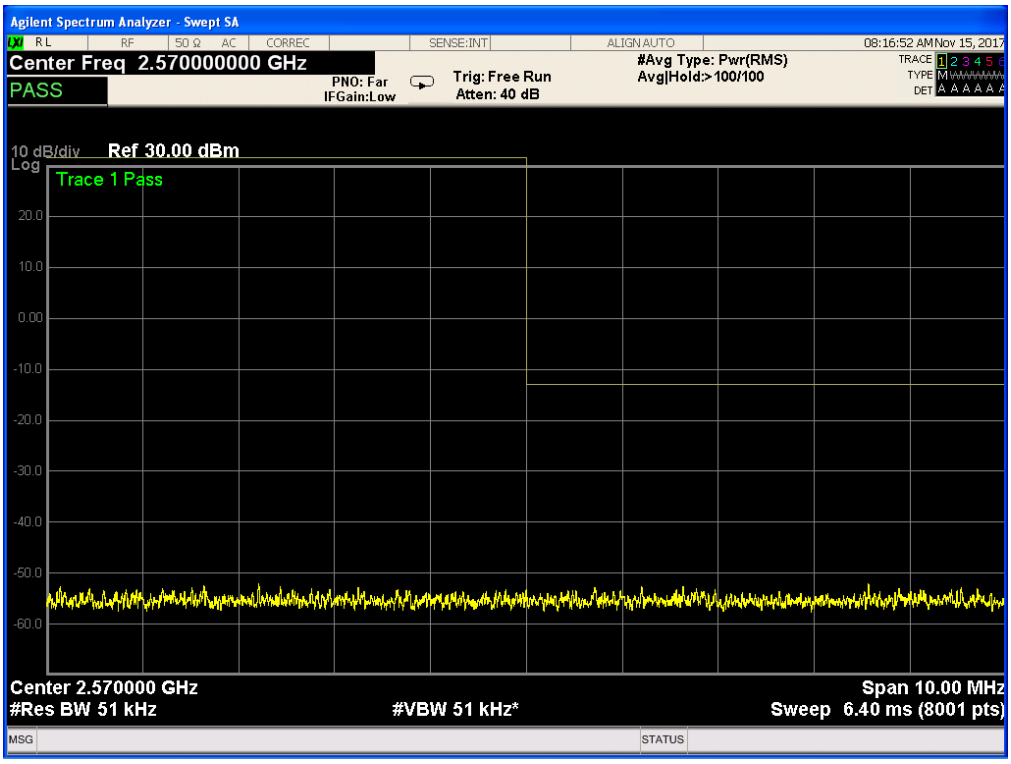


6.4 LTE BAND 7

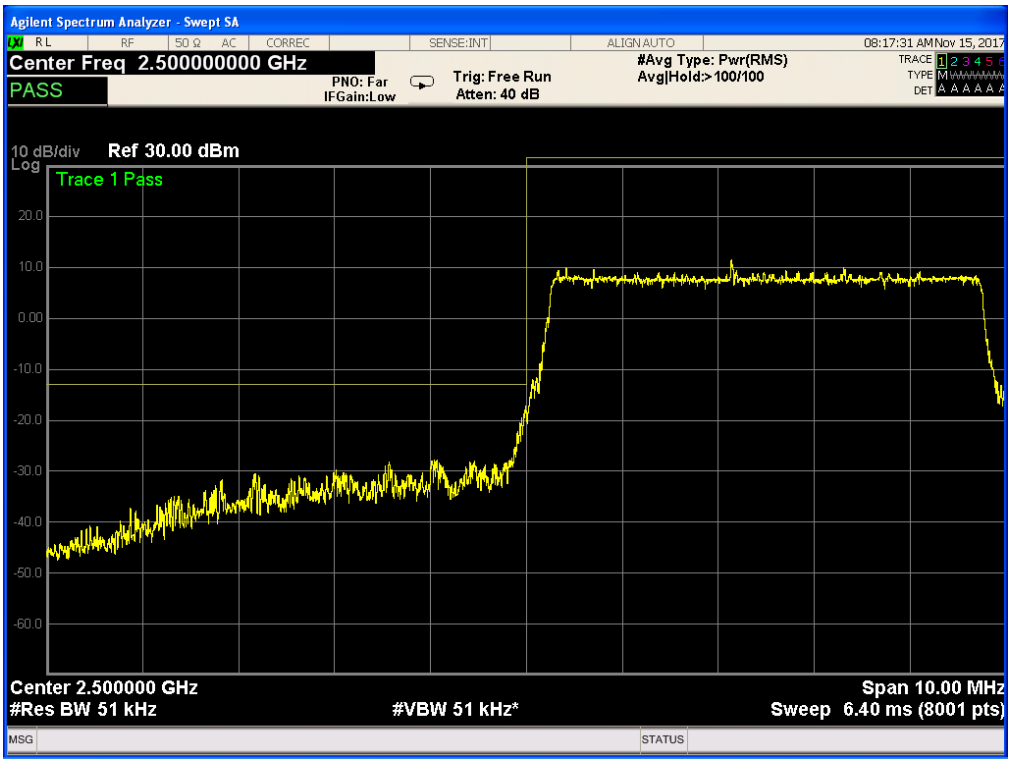
Band 7,UL Channel 20775,UL Frequency 2502.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



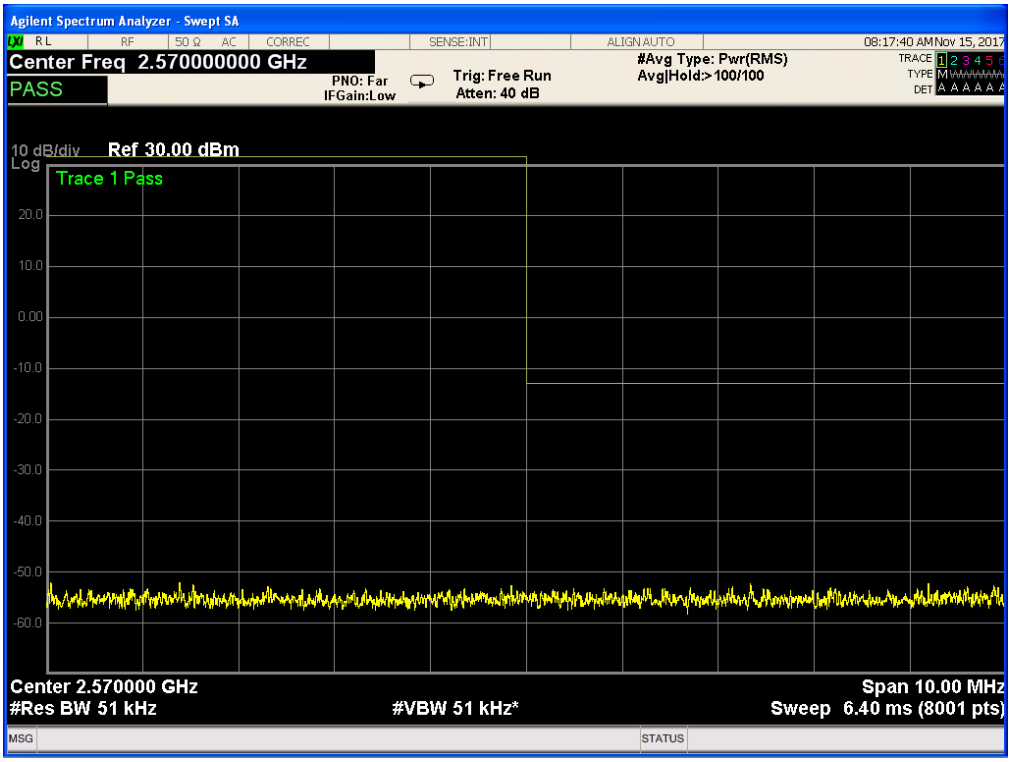
Band 7,UL Channel 20775,UL Frequency 2502.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



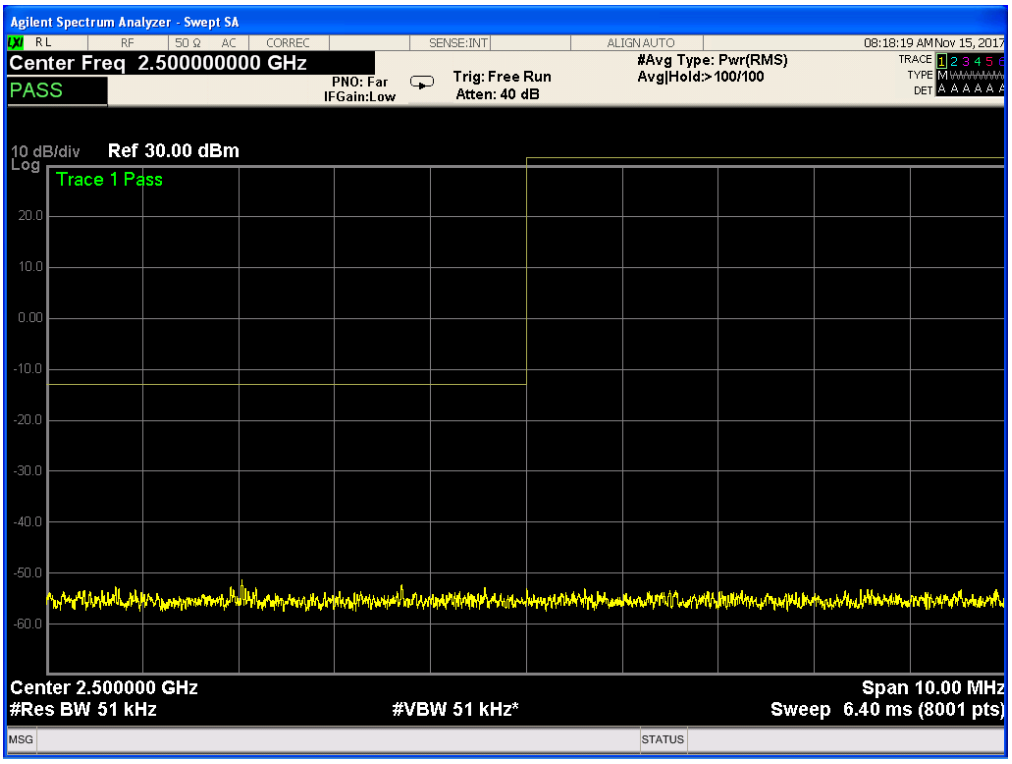
Band 7,UL Channel 20775,UL Frequency 2502.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



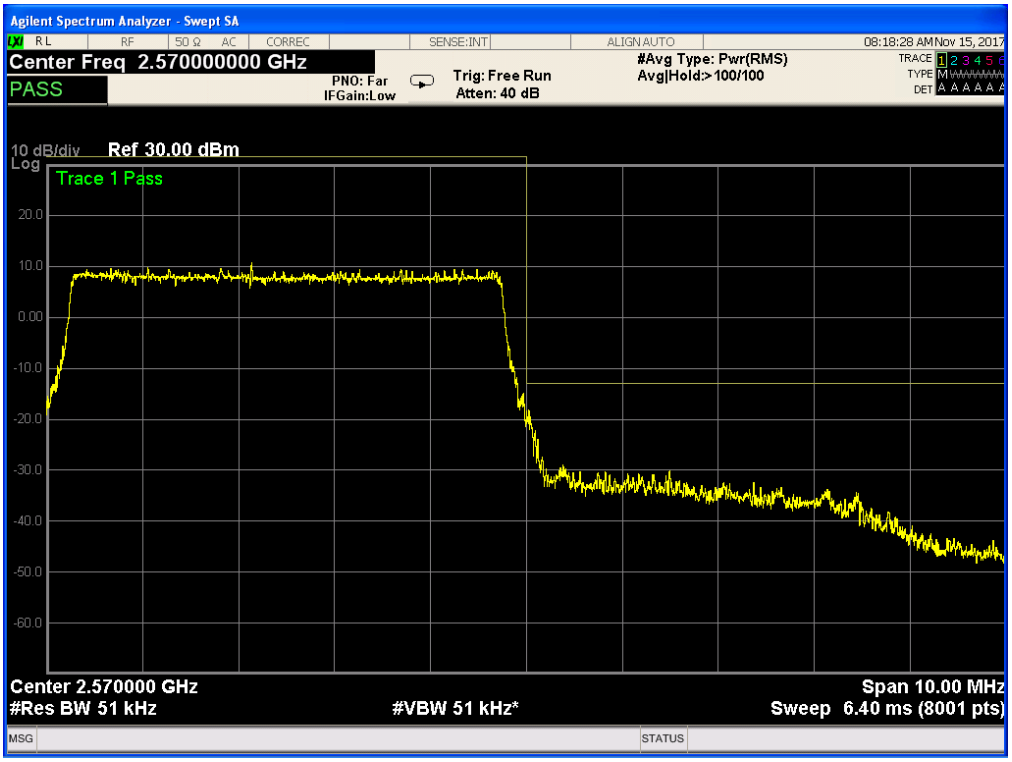
Band 7,UL Channel 20775,UL Frequency 2502.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



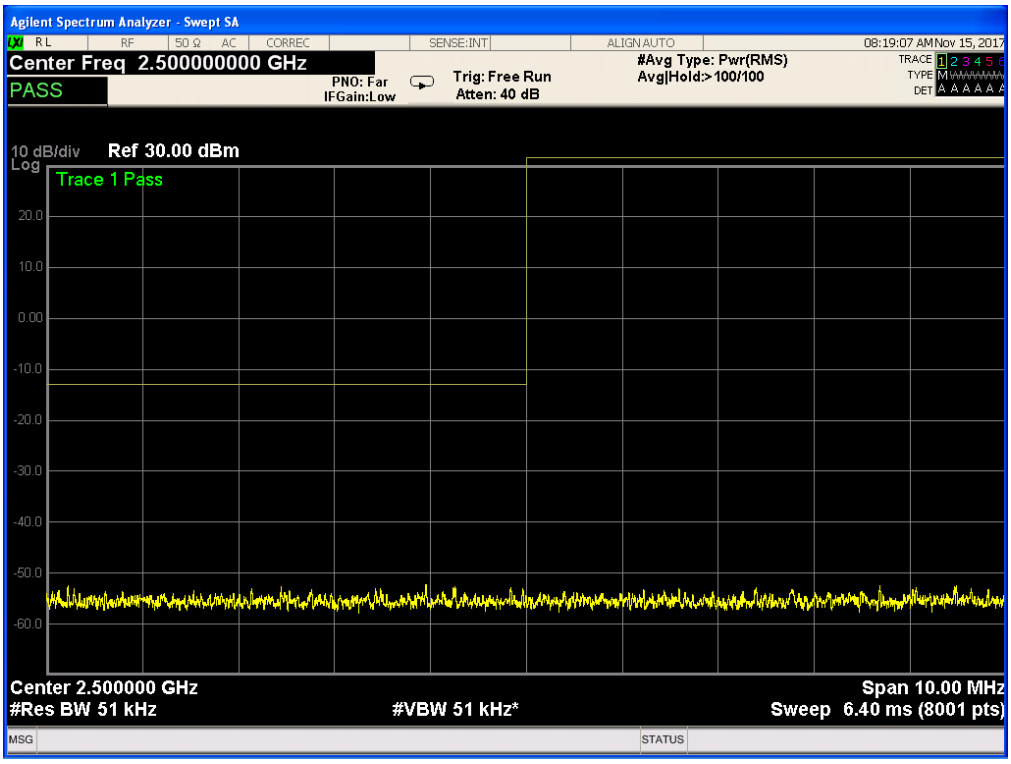
Band 7,UL Channel 21425,UL Frequency 2567.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



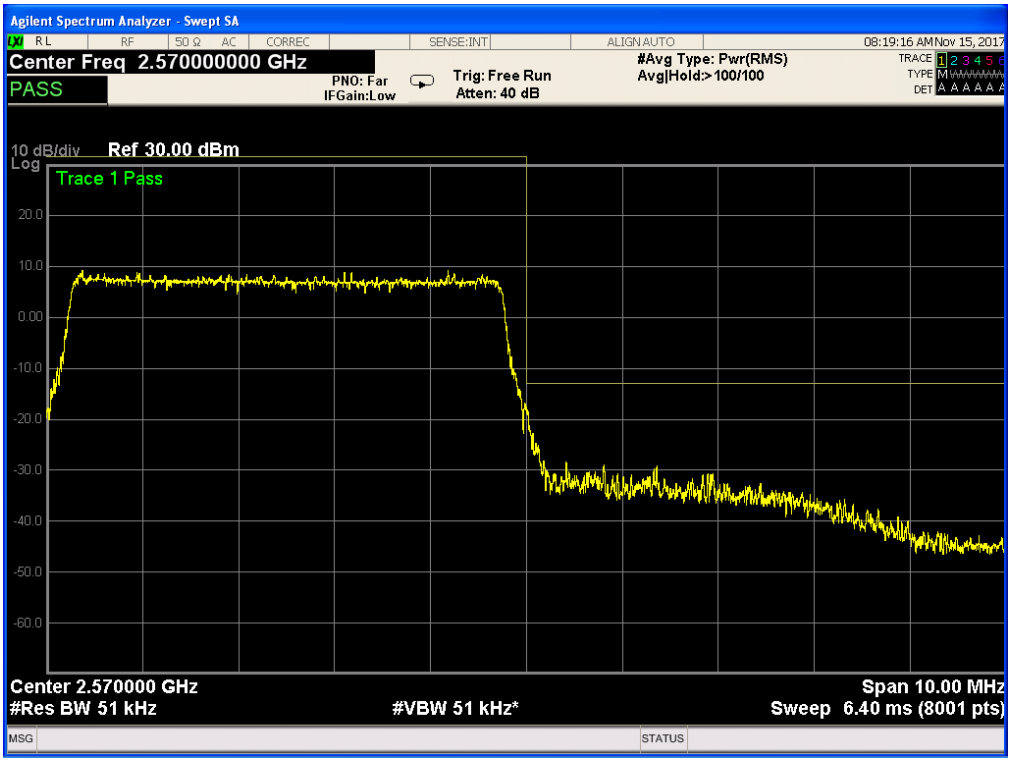
Band 7,UL Channel 21425,UL Frequency 2567.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



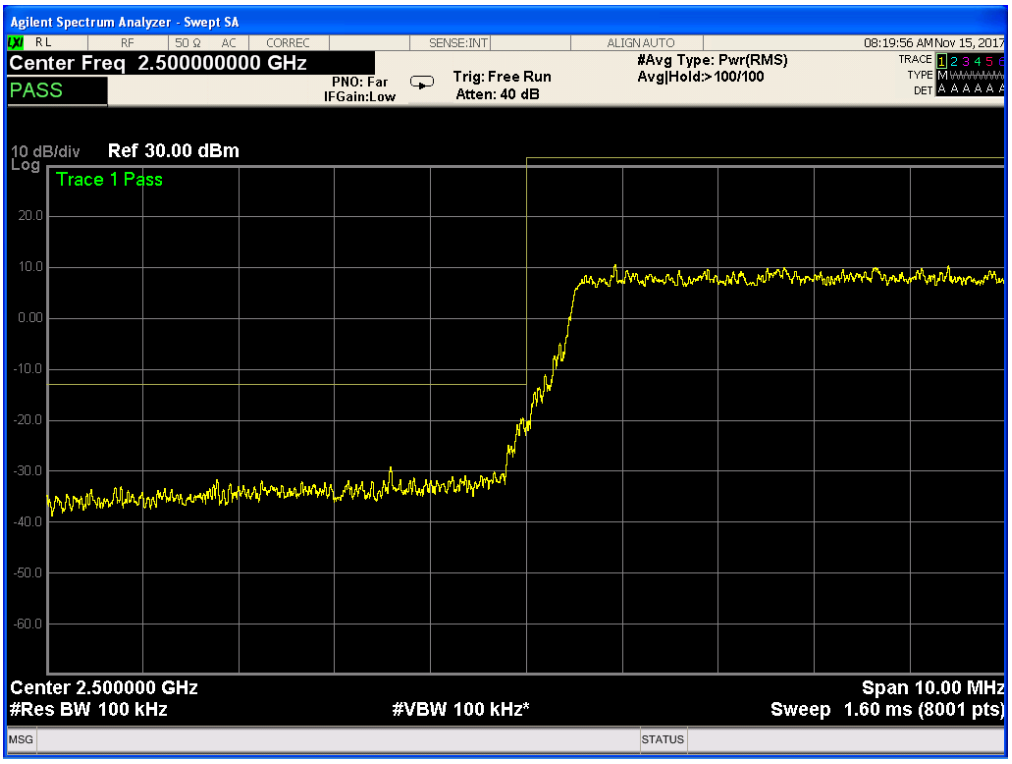
Band 7,UL Channel 21425,UL Frequency 2567.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



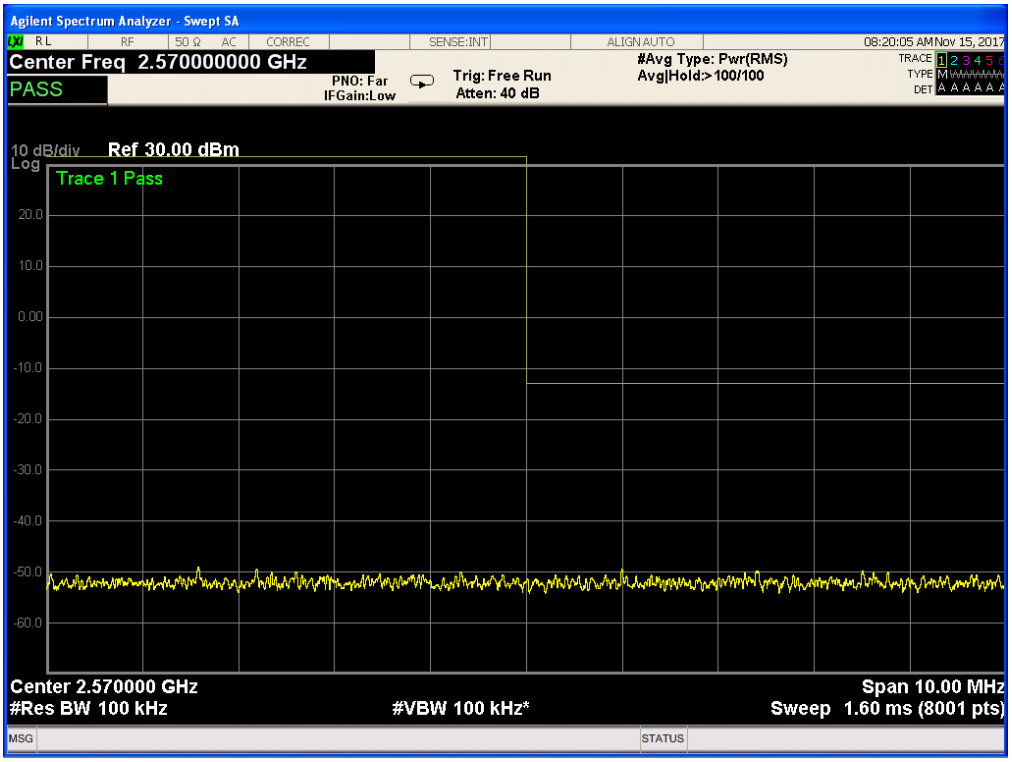
Band 7,UL Channel 21425,UL Frequency 2567.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



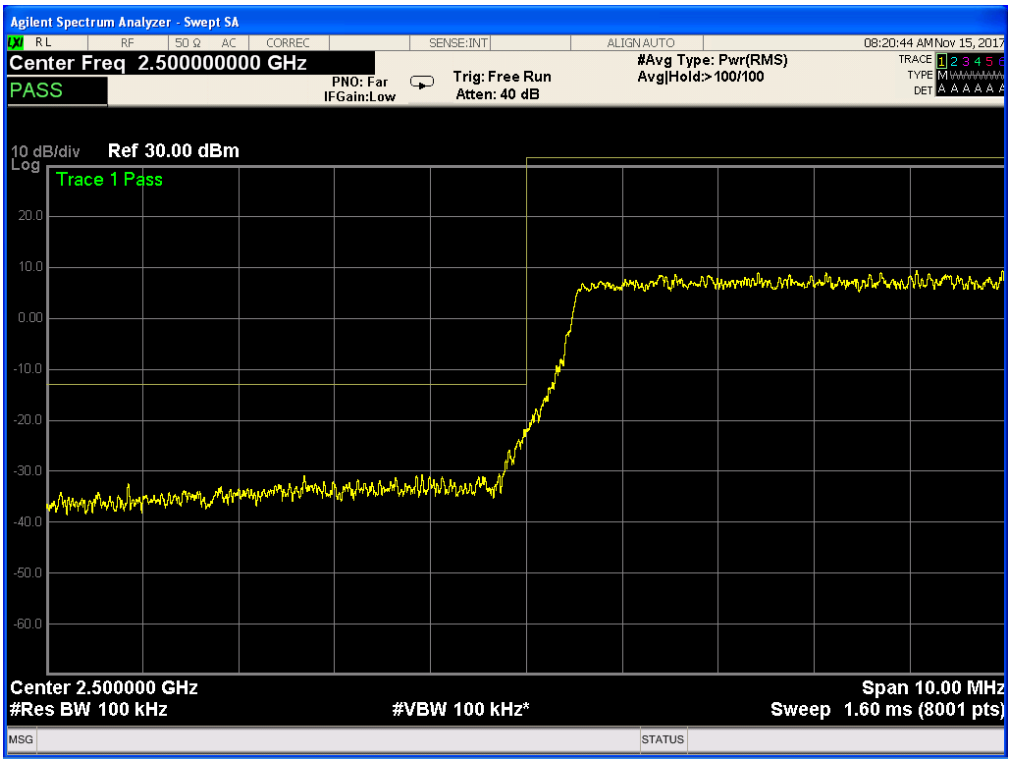
Band 7,UL Channel 20800,UL Frequency 2505.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



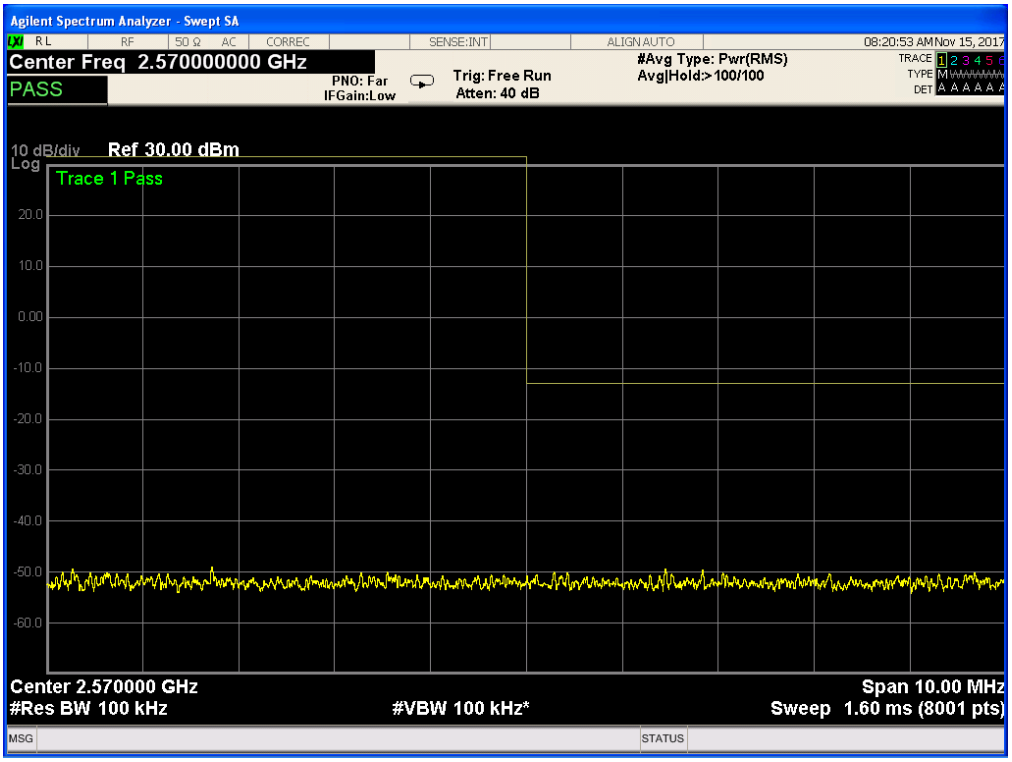
Band 7,UL Channel 20800,UL Frequency 2505.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



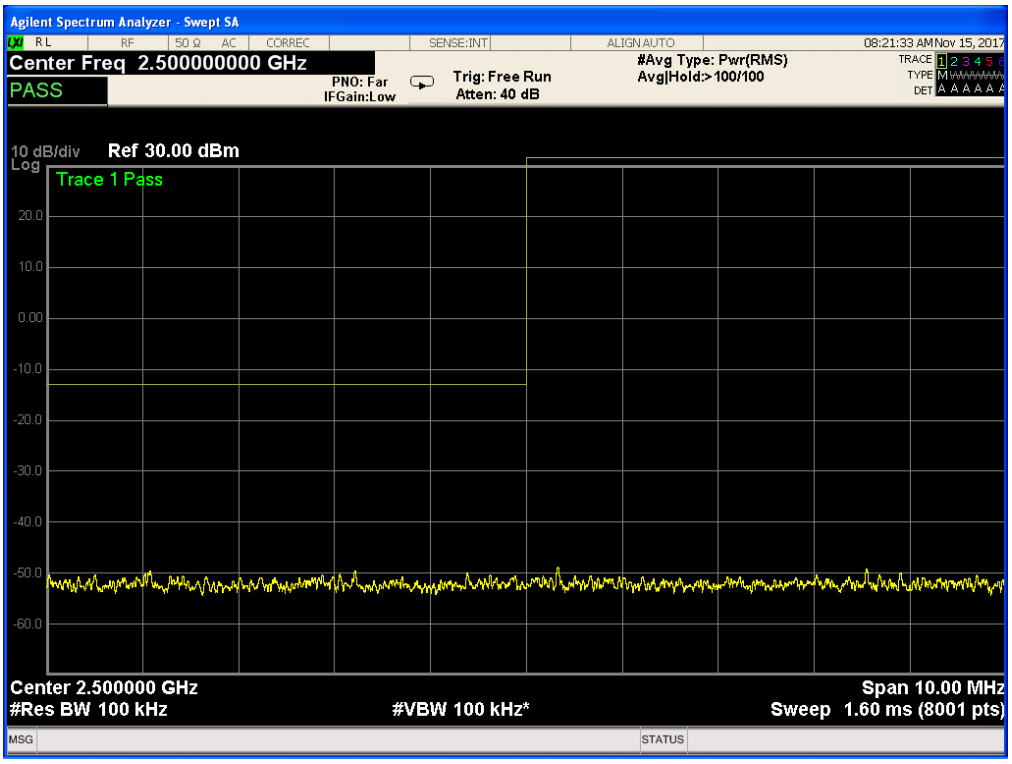
Band 7,UL Channel 20800,UL Frequency 2505.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



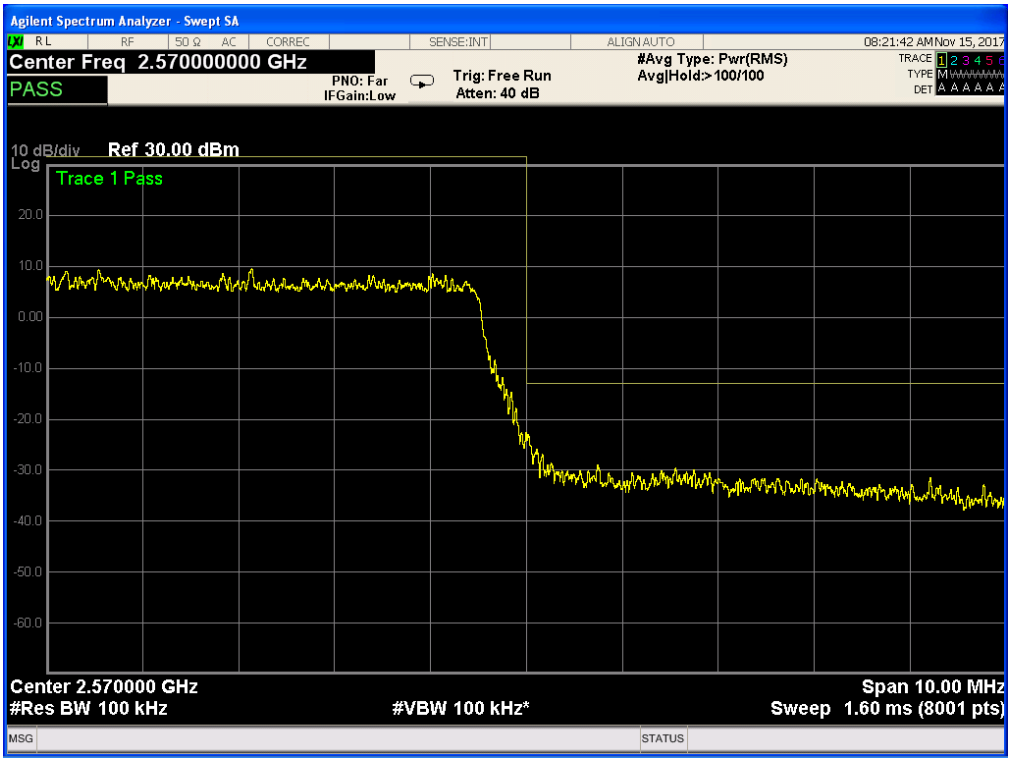
Band 7,UL Channel 20800,UL Frequency 2505.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



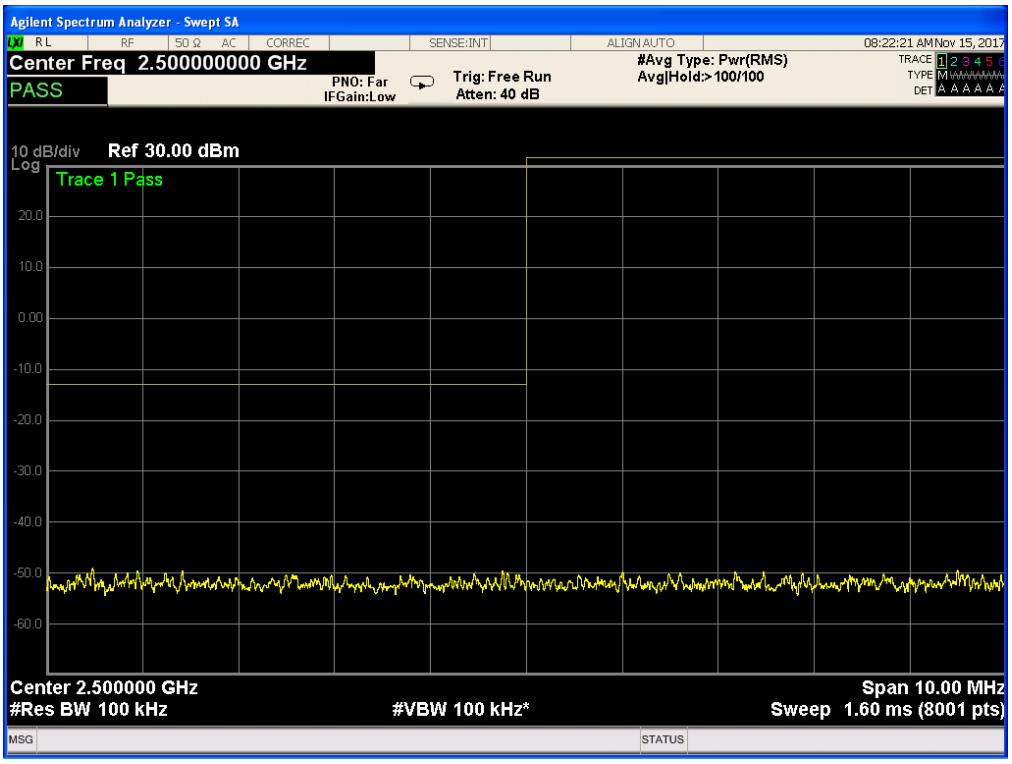
Band 7,UL Channel 21400,UL Frequency 2565.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



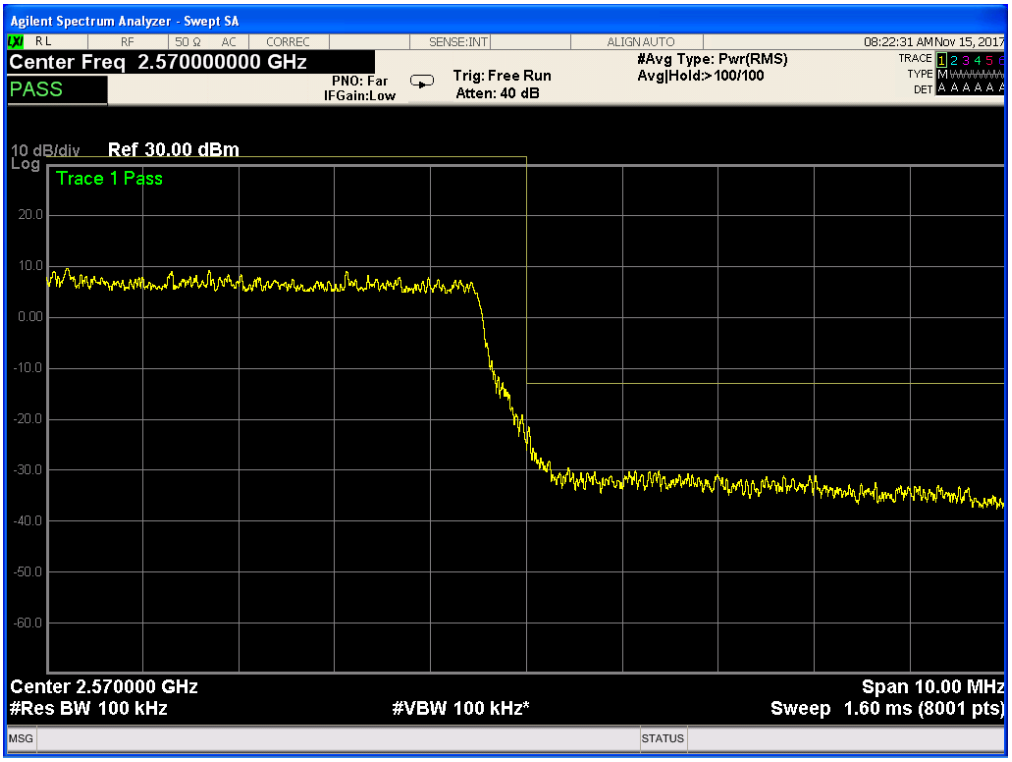
Band 7,UL Channel 21400,UL Frequency 2565.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



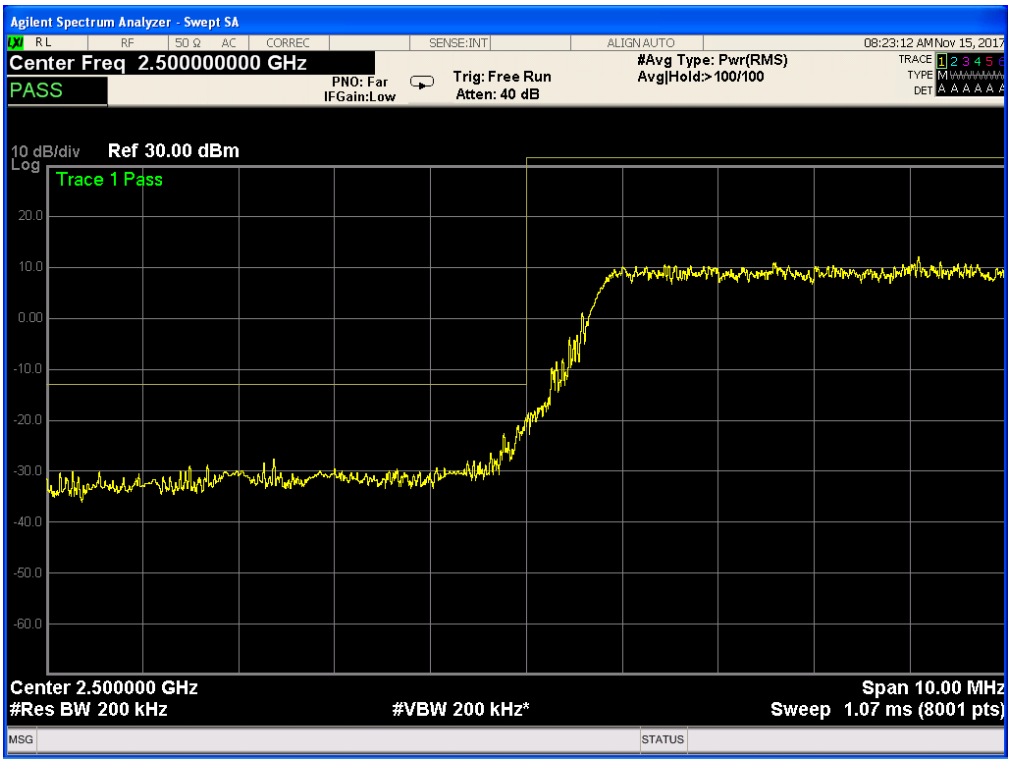
Band 7,UL Channel 21400,UL Frequency 2565.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



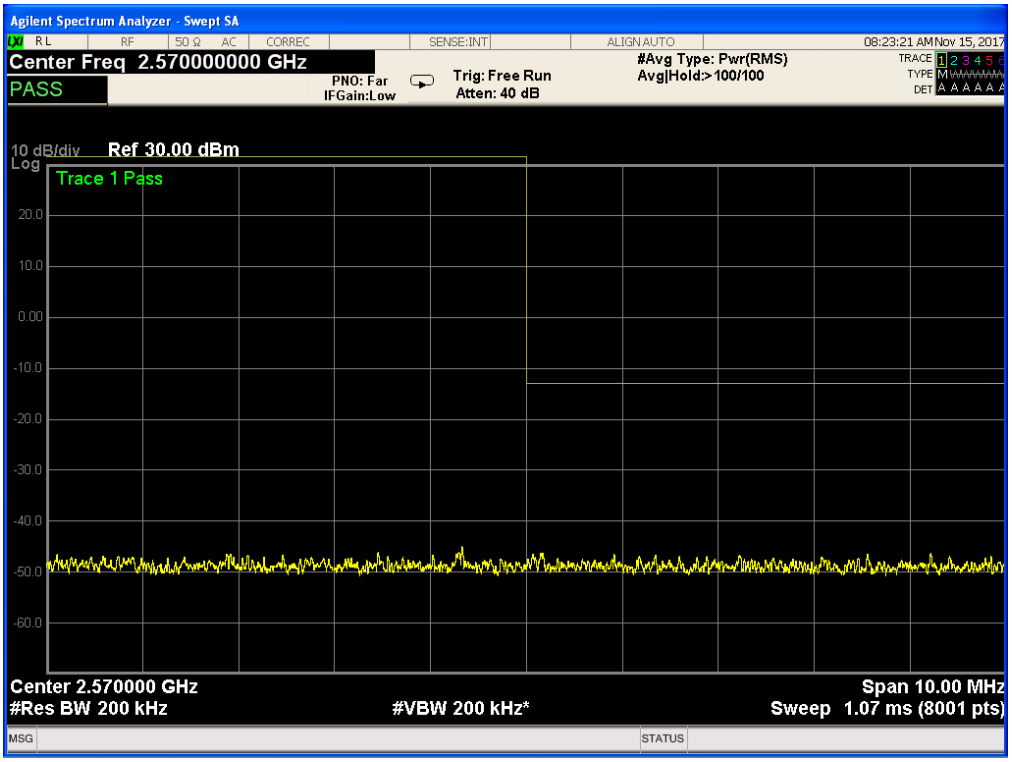
Band 7,UL Channel 21400,UL Frequency 2565.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



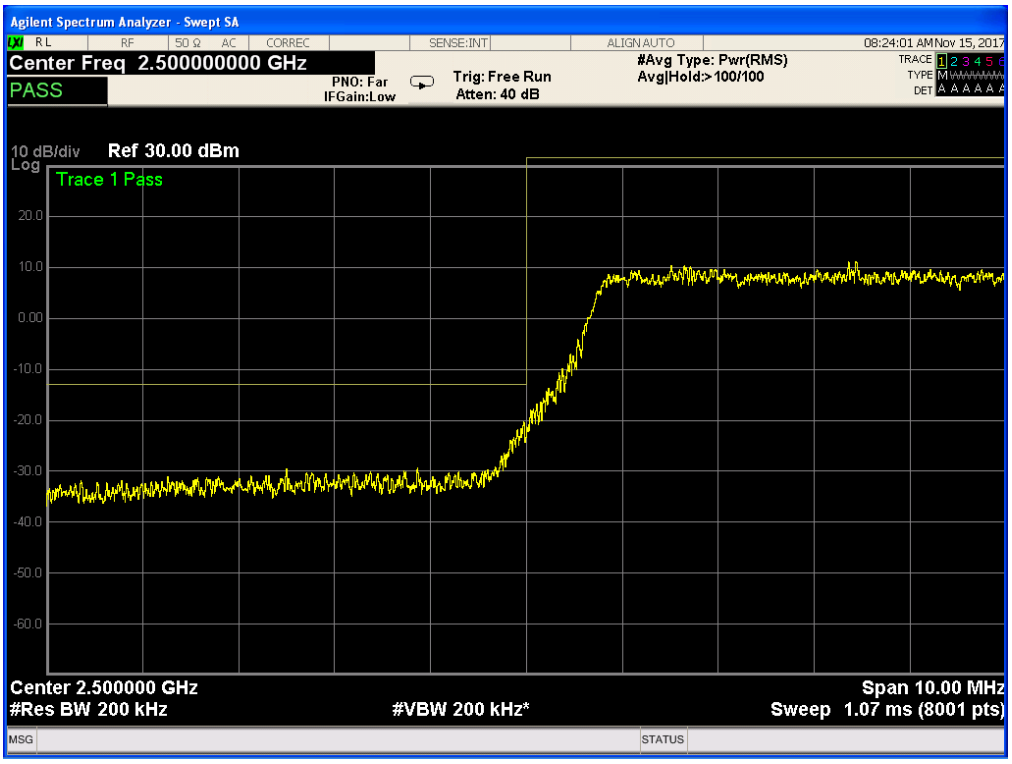
Band 7,UL Channel 20825,UL Frequency 2507.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



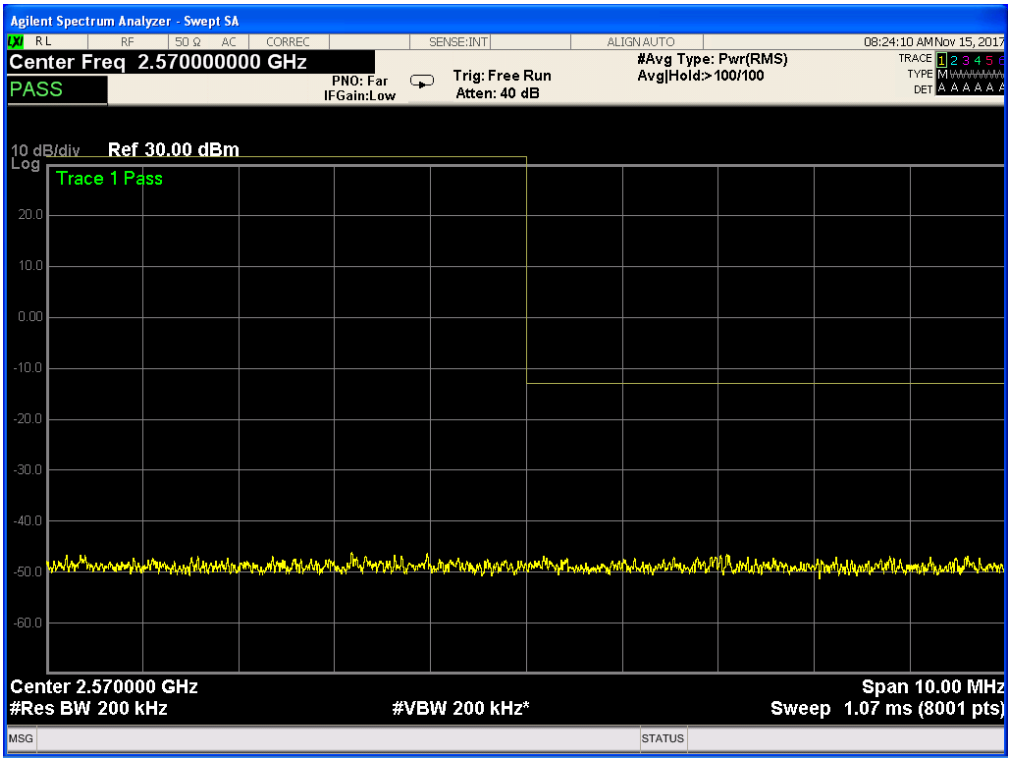
Band 7,UL Channel 20825,UL Frequency 2507.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



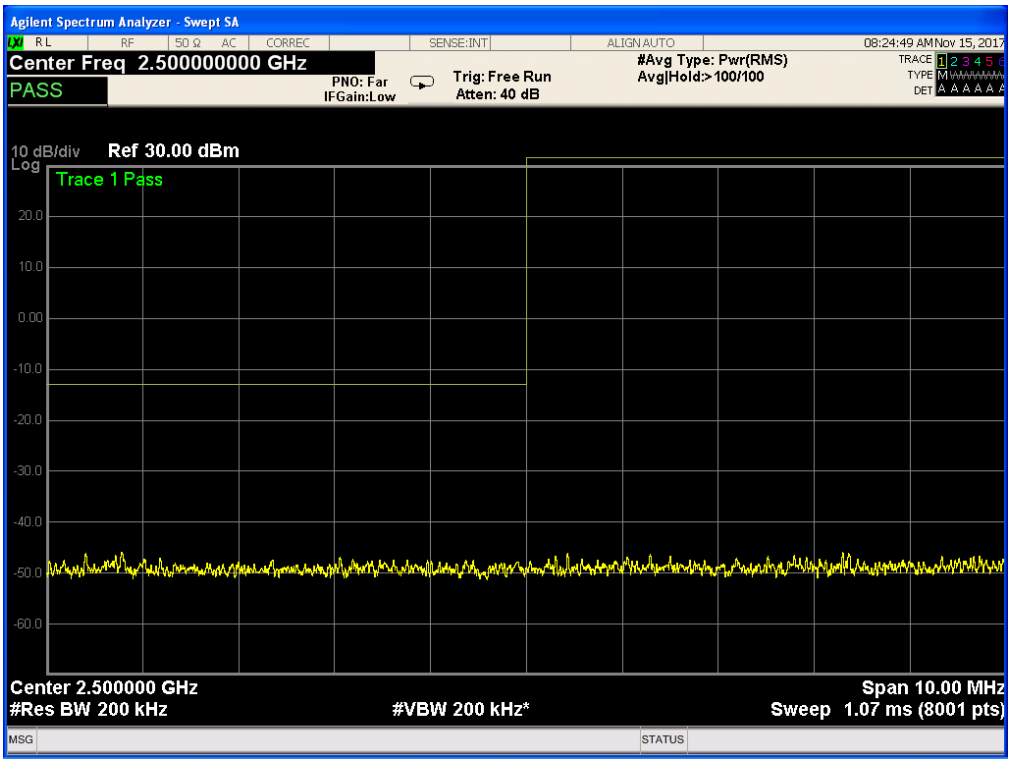
Band 7,UL Channel 20825,UL Frequency 2507.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



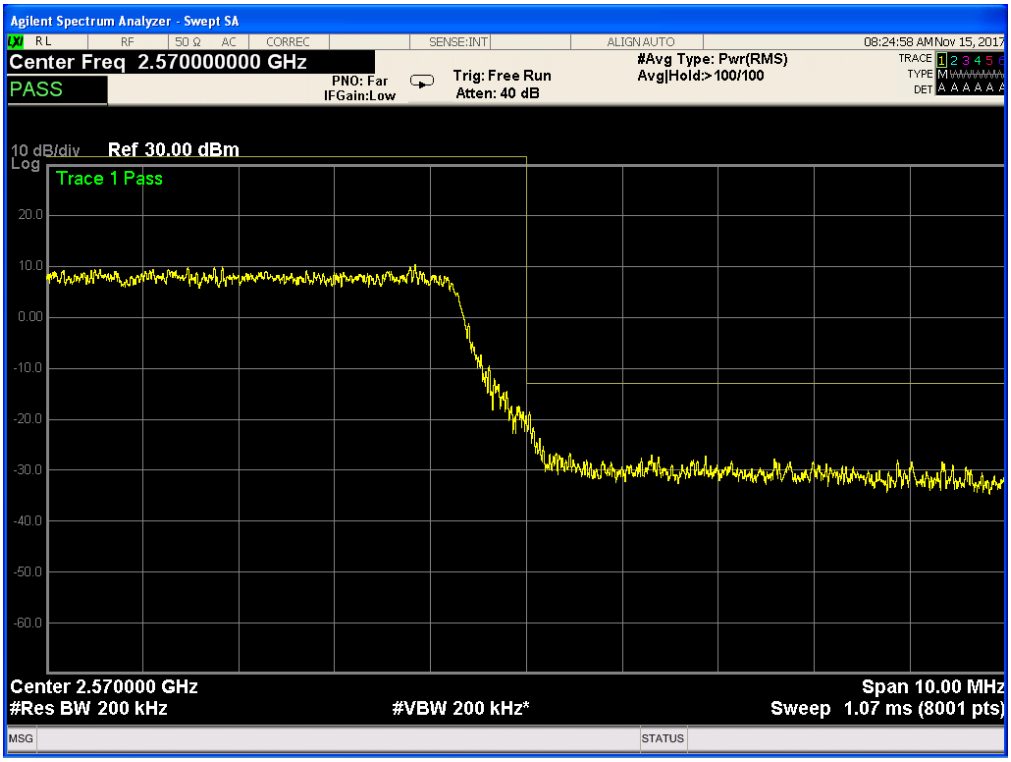
Band 7,UL Channel 20825,UL Frequency 2507.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



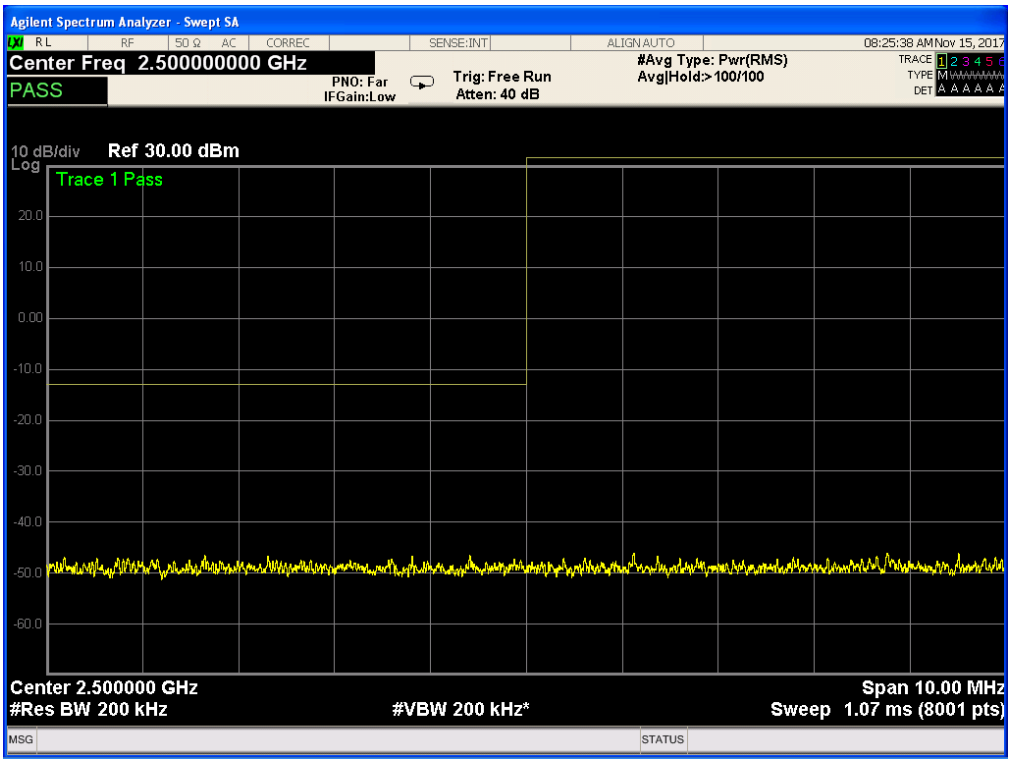
Band 7,UL Channel 21375,UL Frequency 2562.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



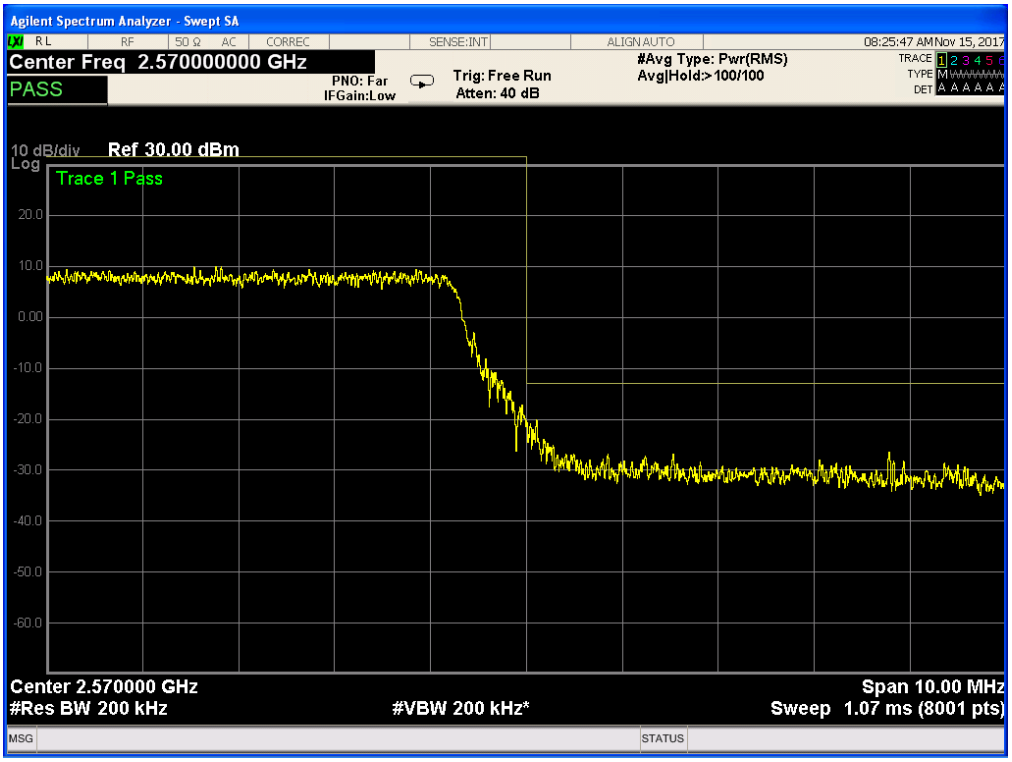
Band 7,UL Channel 21375,UL Frequency 2562.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



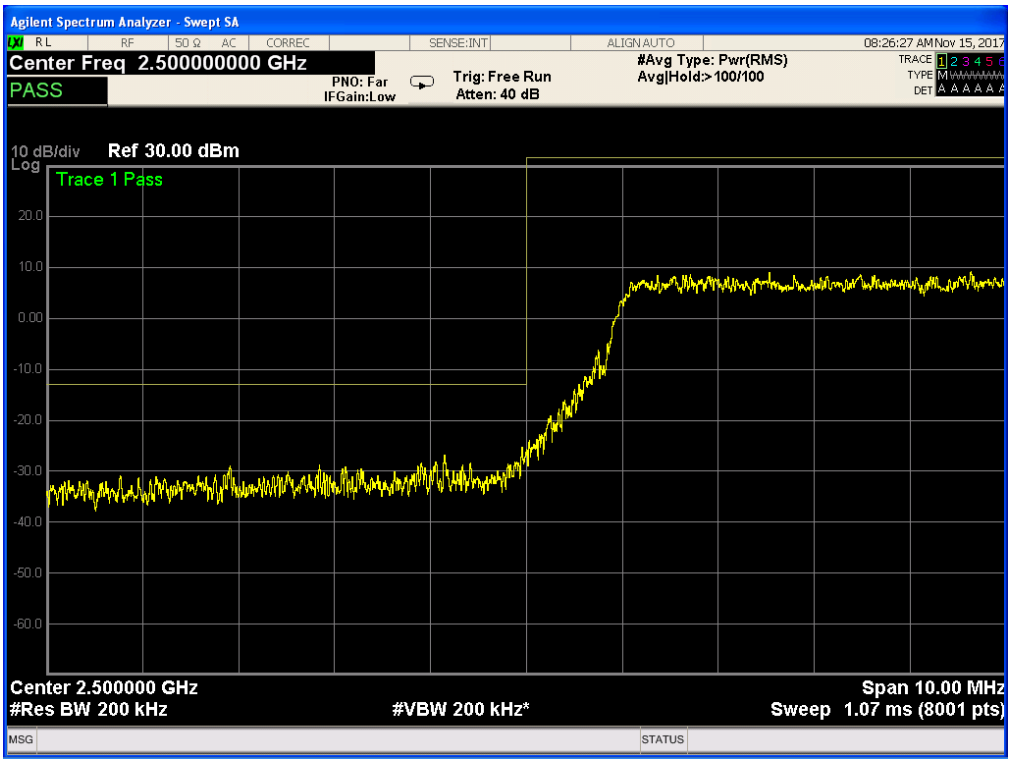
Band 7,UL Channel 21375,UL Frequency 2562.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



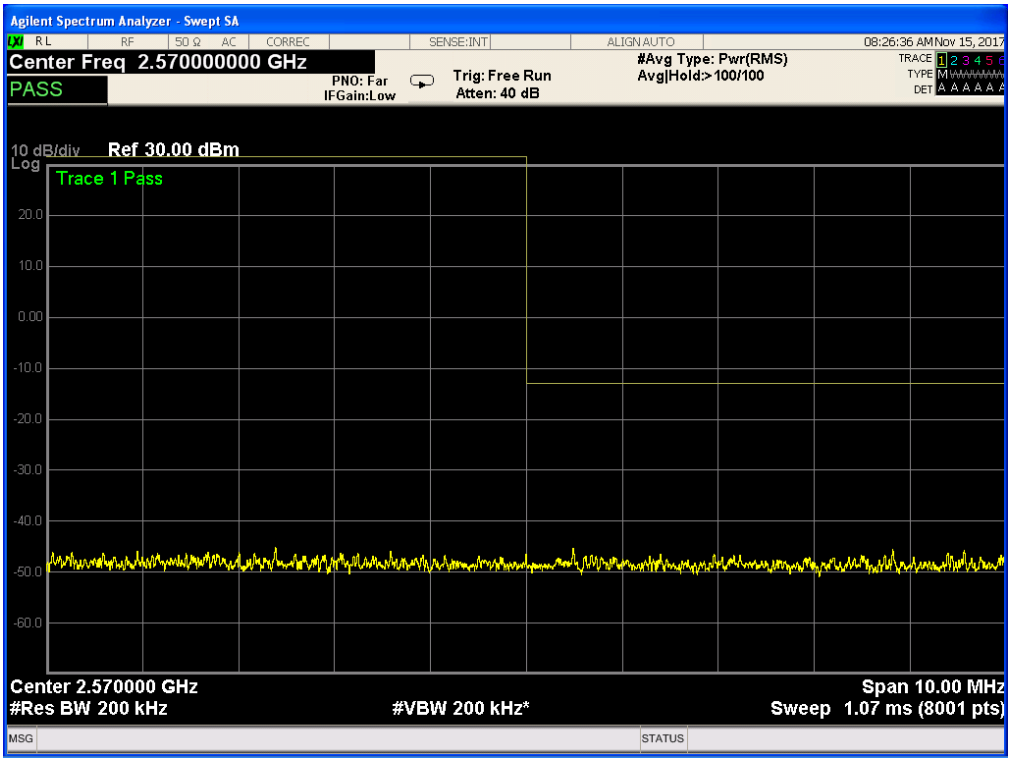
Band 7,UL Channel 21375,UL Frequency 2562.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



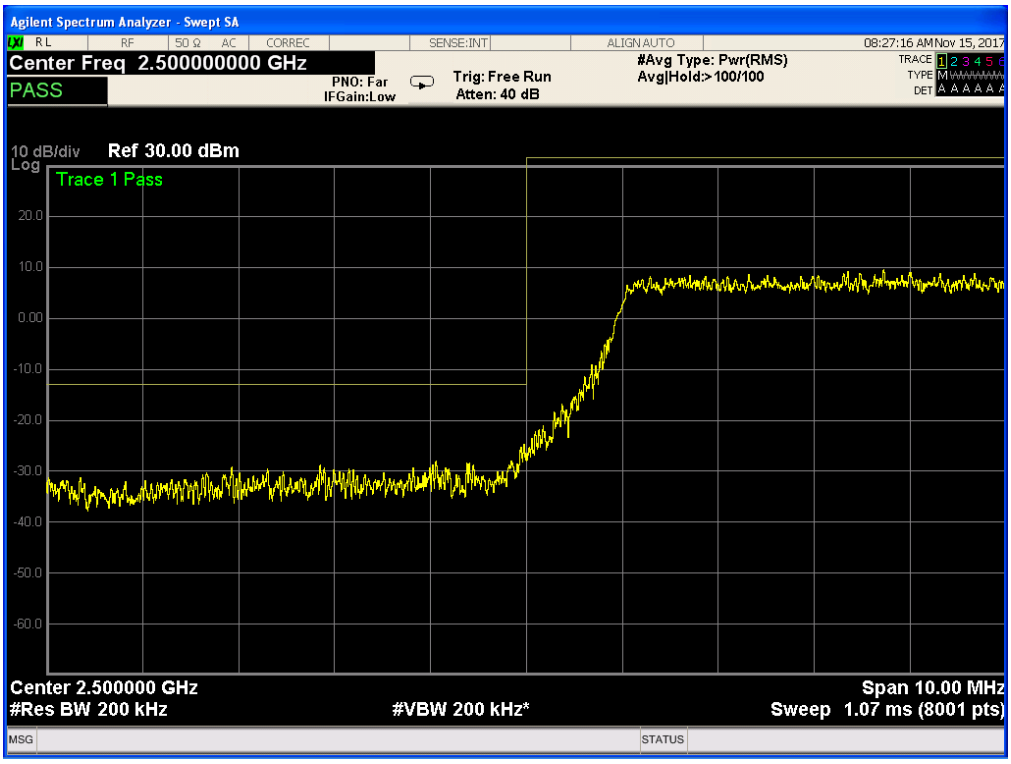
Band 7,UL Channel 20850,UL Frequency 2510.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



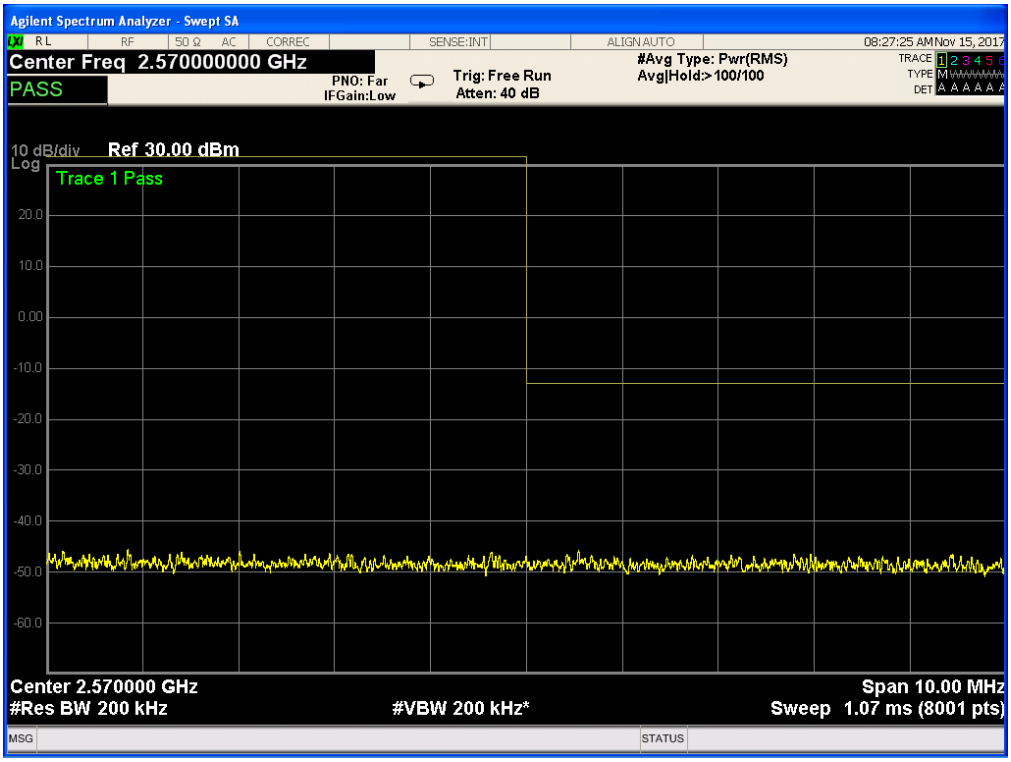
Band 7,UL Channel 20850,UL Frequency 2510.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



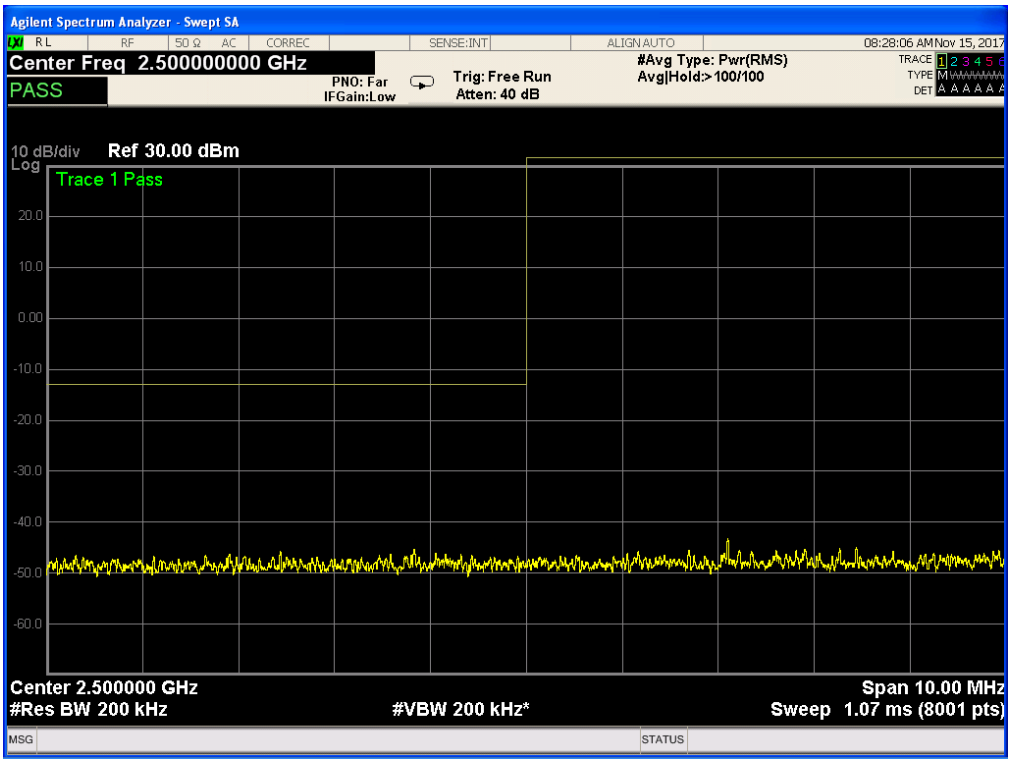
Band 7,UL Channel 20850,UL Frequency 2510.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



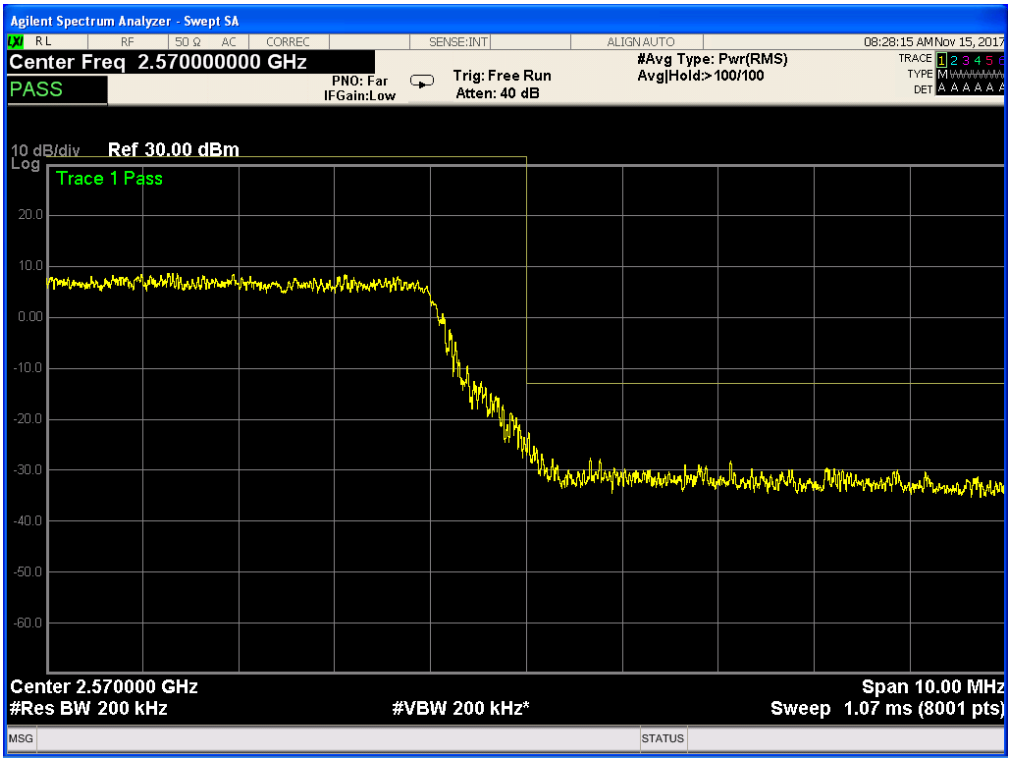
Band 7,UL Channel 20850,UL Frequency 2510.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



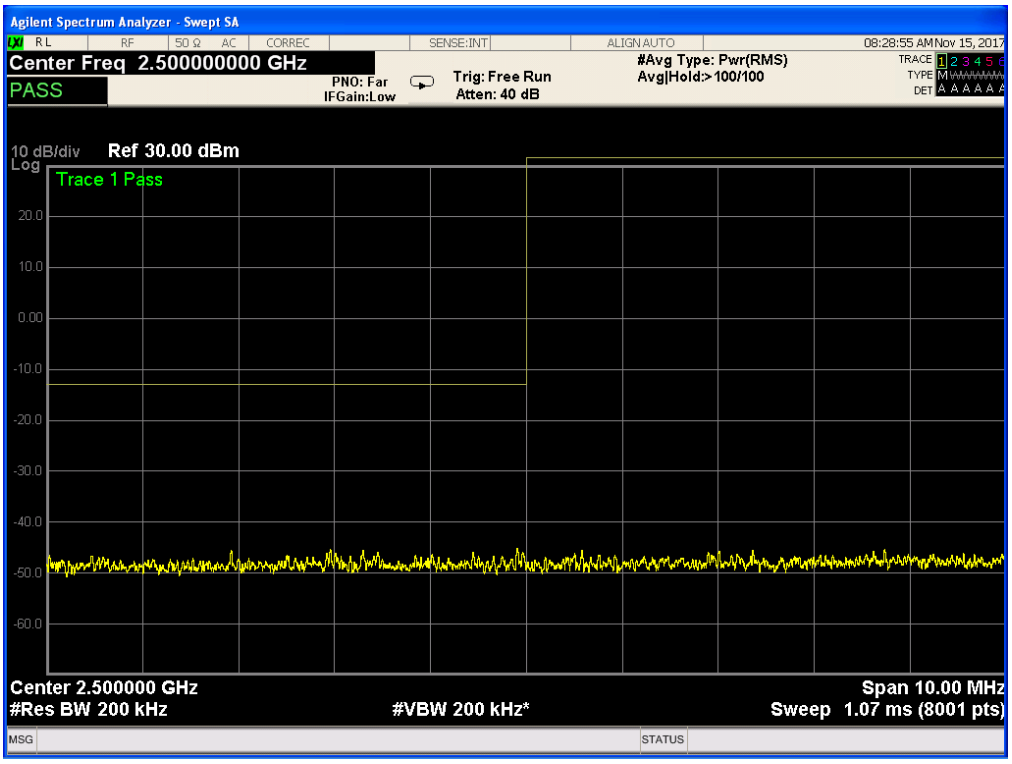
Band 7,UL Channel 21350,UL Frequency 2560.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



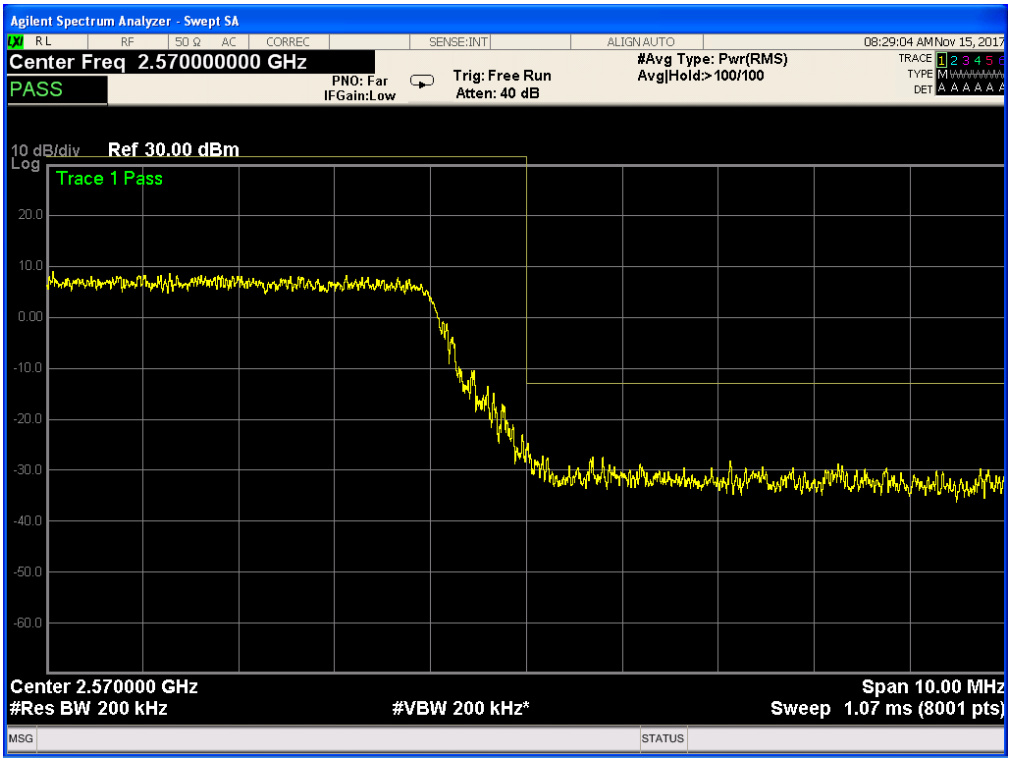
Band 7,UL Channel 21350,UL Frequency 2560.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 7,UL Channel 21350,UL Frequency 2560.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



Band 7,UL Channel 21350,UL Frequency 2560.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



7. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238 and §27.53

LIMITS

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

TEST PROCEDURE

The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

For each out of band emissions measurement:

- Set display line at-13 dBm
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz.

MODES TESTED

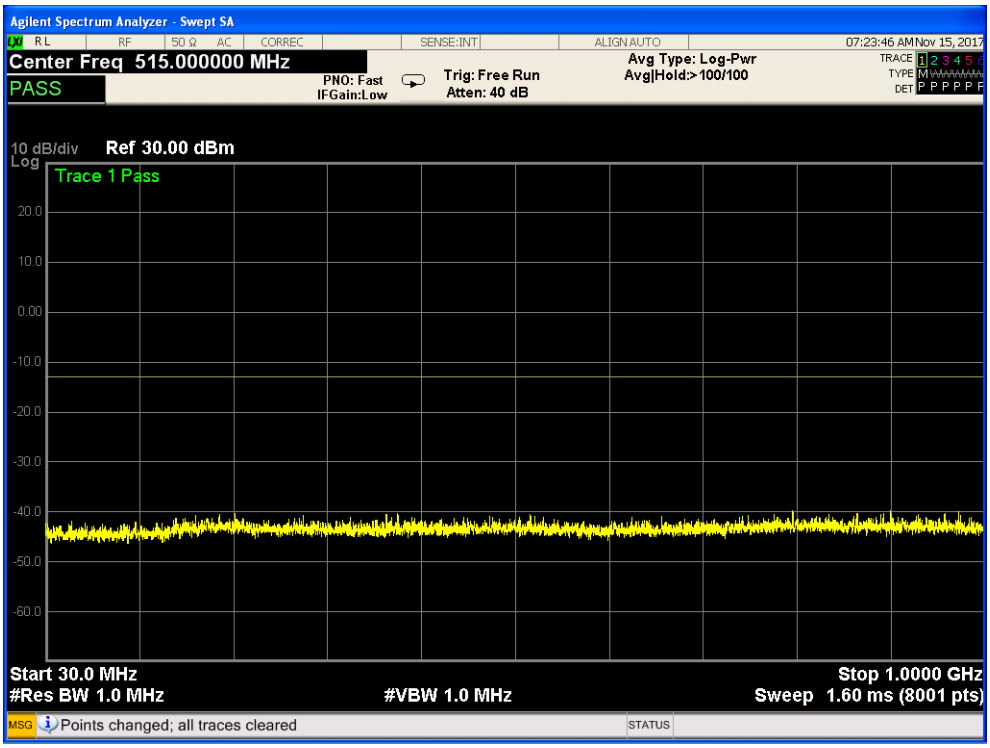
- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7

7.1 MEASUREMENT METHOD

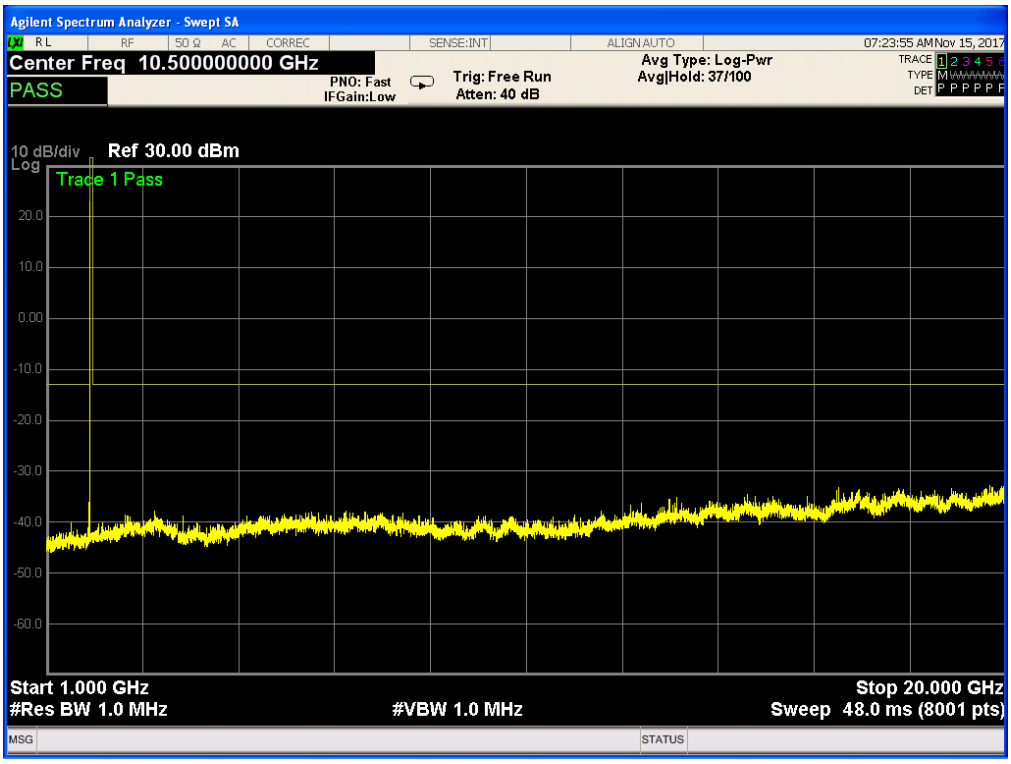
The test set up and general procedure is similar to conducted peak output power test. Only different for setting the measurement configuration of the measuring instrument of Spectrum Analyzer.

7.1 LTE BAND 2

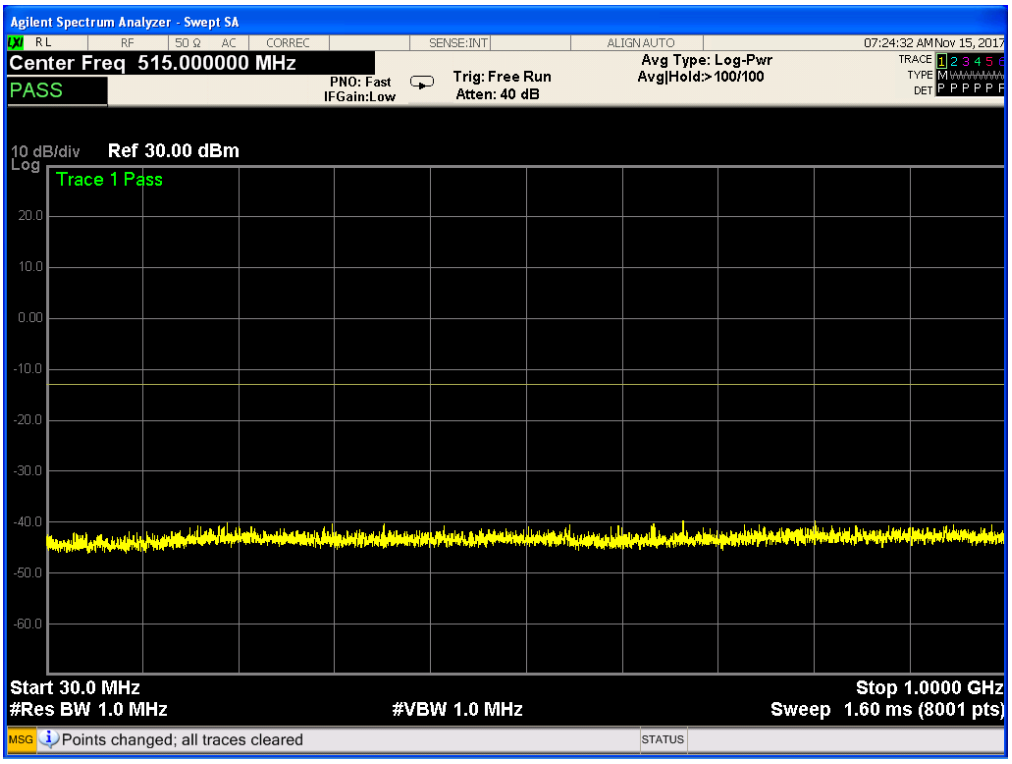
Band 2,UL Channel 18607,UL Frequency 1850.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



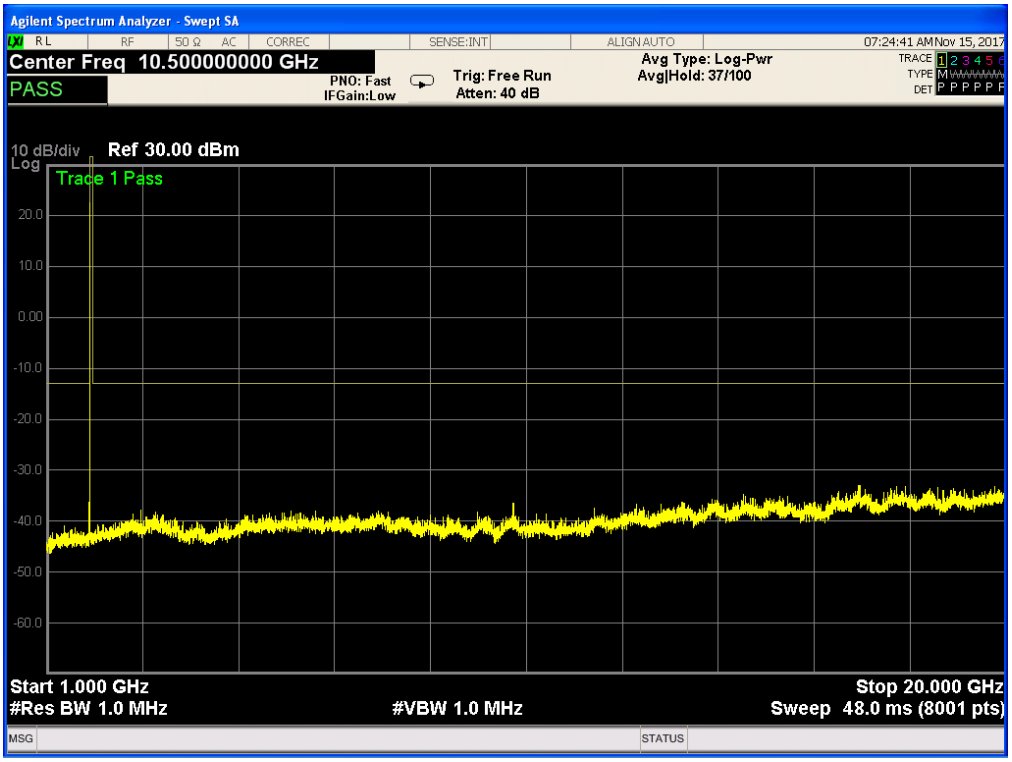
Band 2,UL Channel 18607,UL Frequency 1850.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



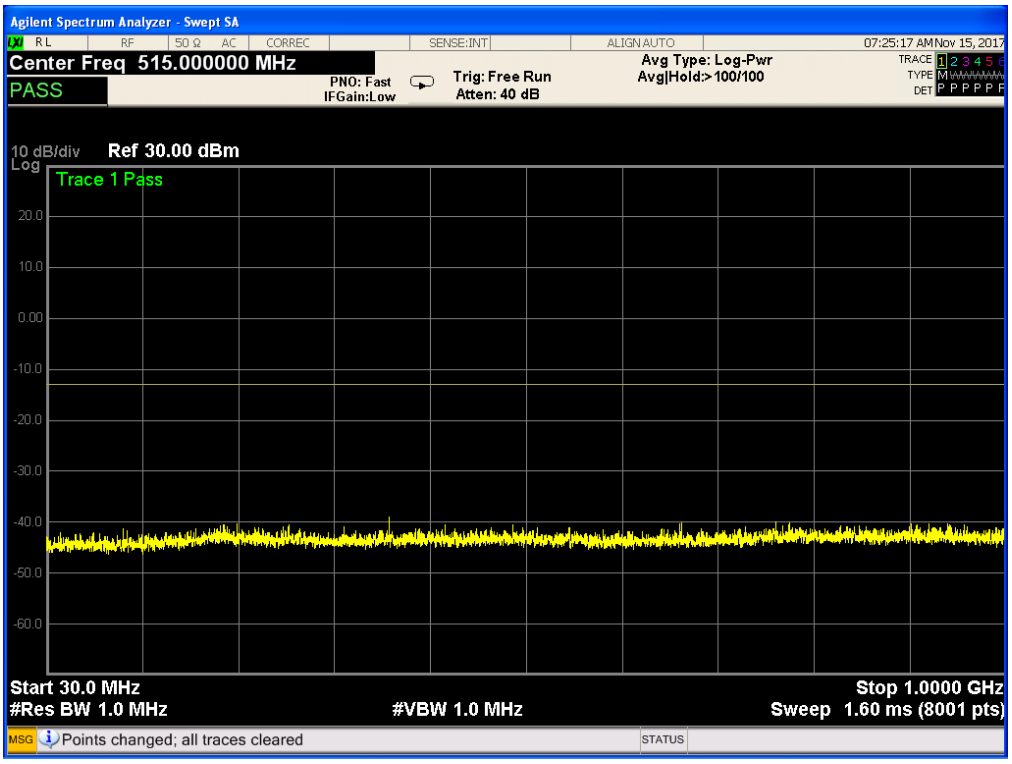
Band 2,UL Channel 18607,UL Frequency 1850.7,BW 1.4,NO. RB 6,RB POS. Low,16QAM



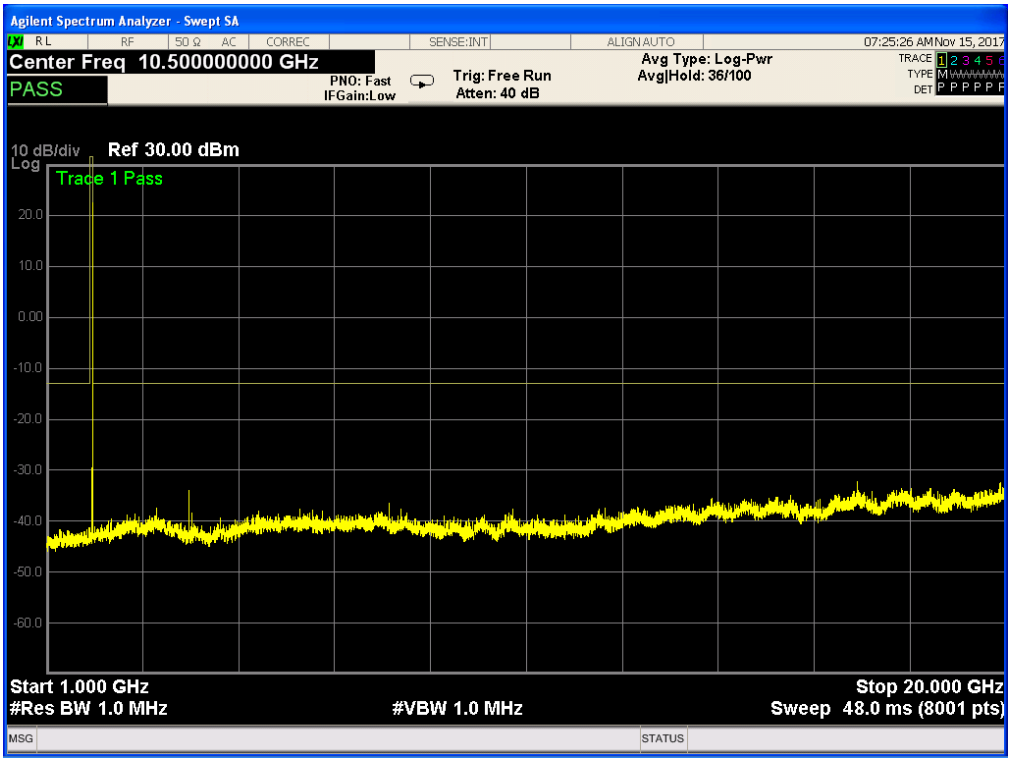
Band 2,UL Channel 18607,UL Frequency 1850.7,BW 1.4,NO. RB 6,RB POS. Low,16QAM



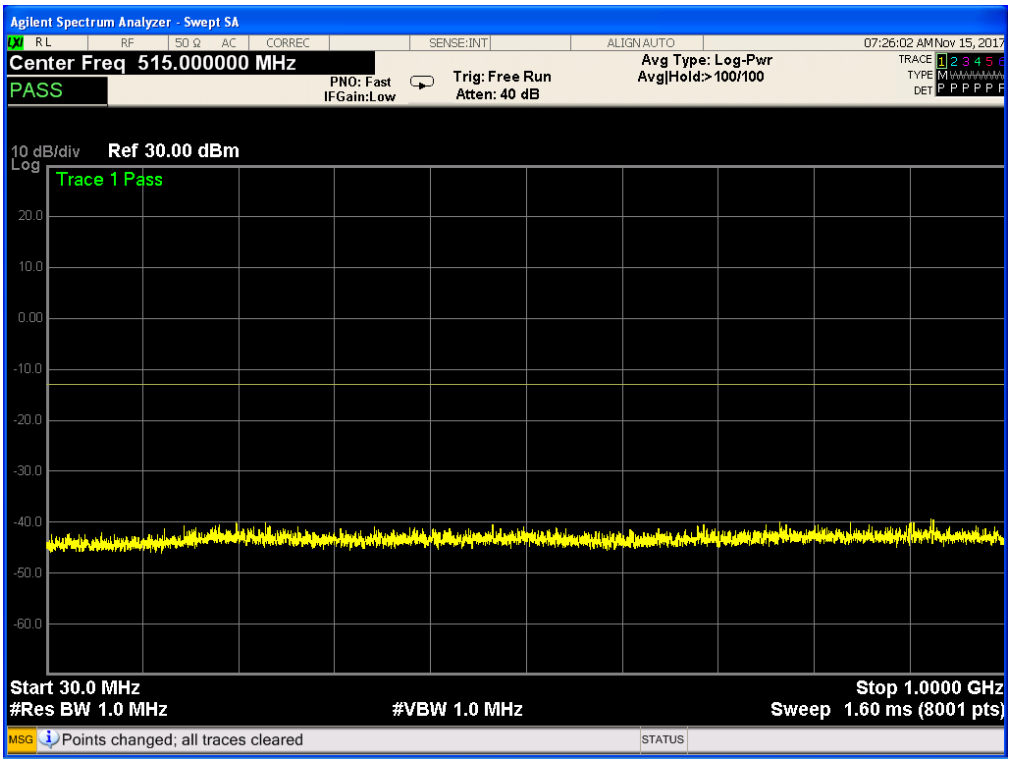
Band 2,UL Channel 19193,UL Frequency 1909.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



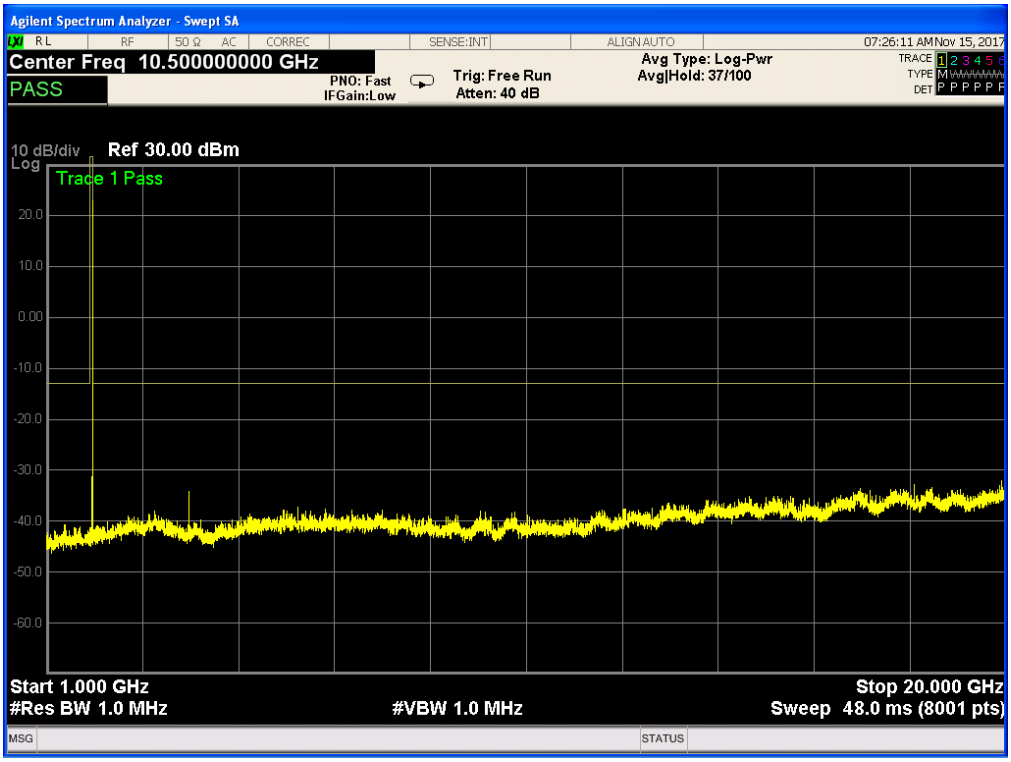
Band 2,UL Channel 19193,UL Frequency 1909.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



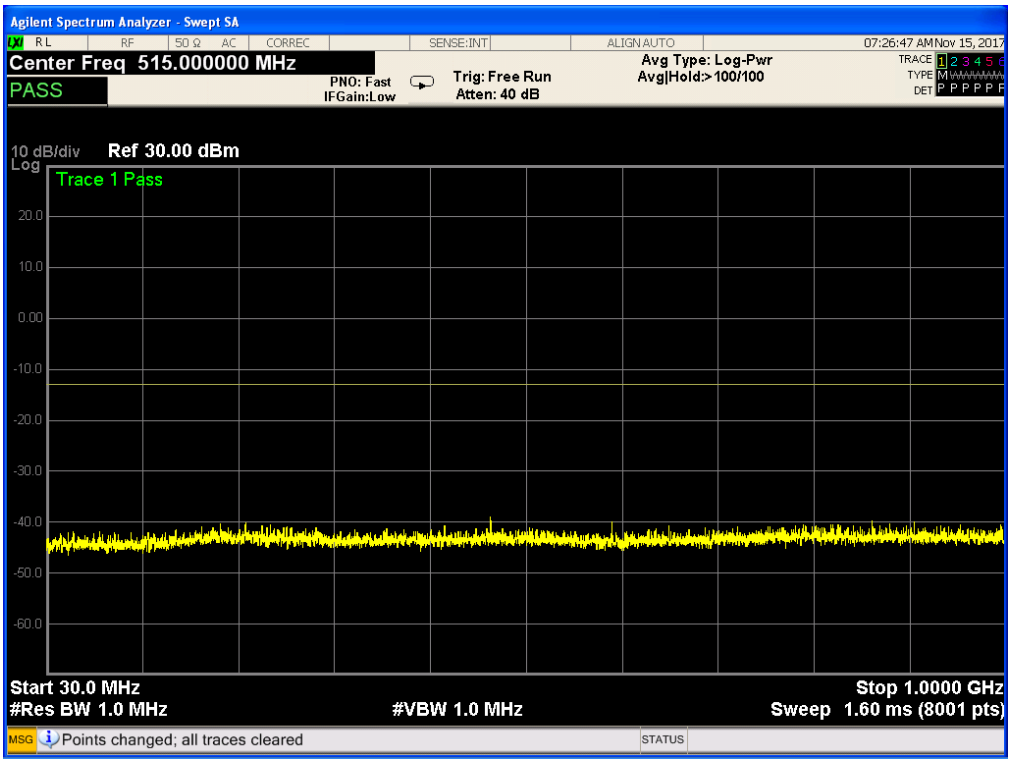
Band 2,UL Channel 19193,UL Frequency 1909.3,BW 1.4,NO. RB 6,RB POS. Low,16QAM



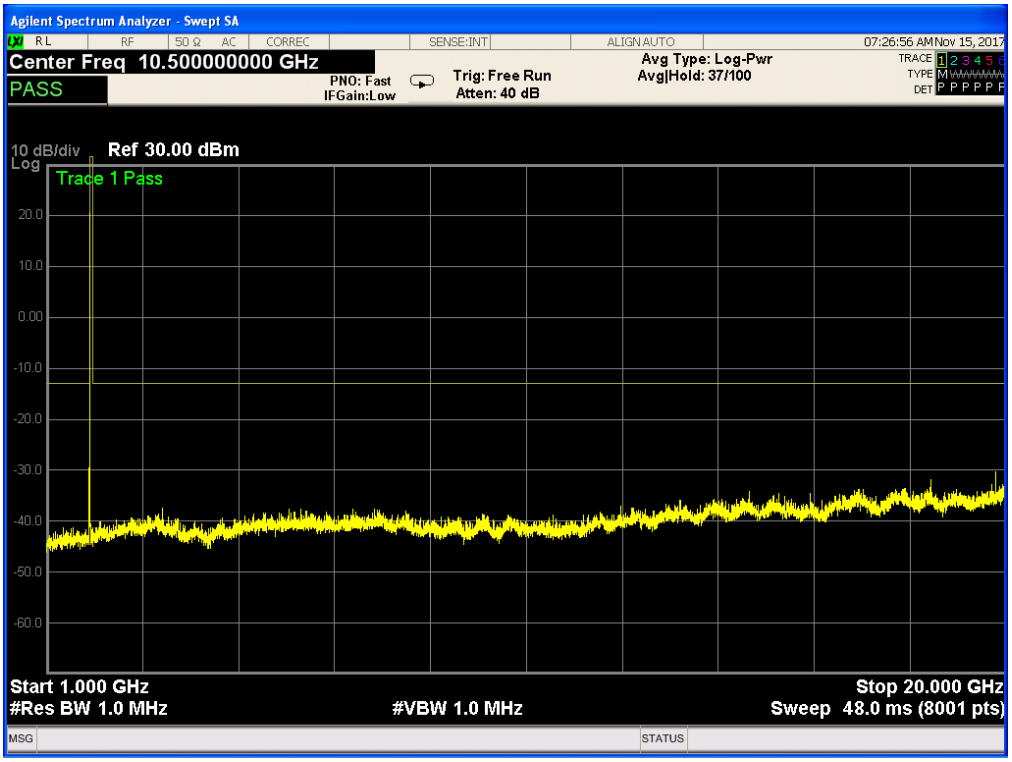
Band 2,UL Channel 19193,UL Frequency 1909.3,BW 1.4,NO. RB 6,RB POS. Low,16QAM



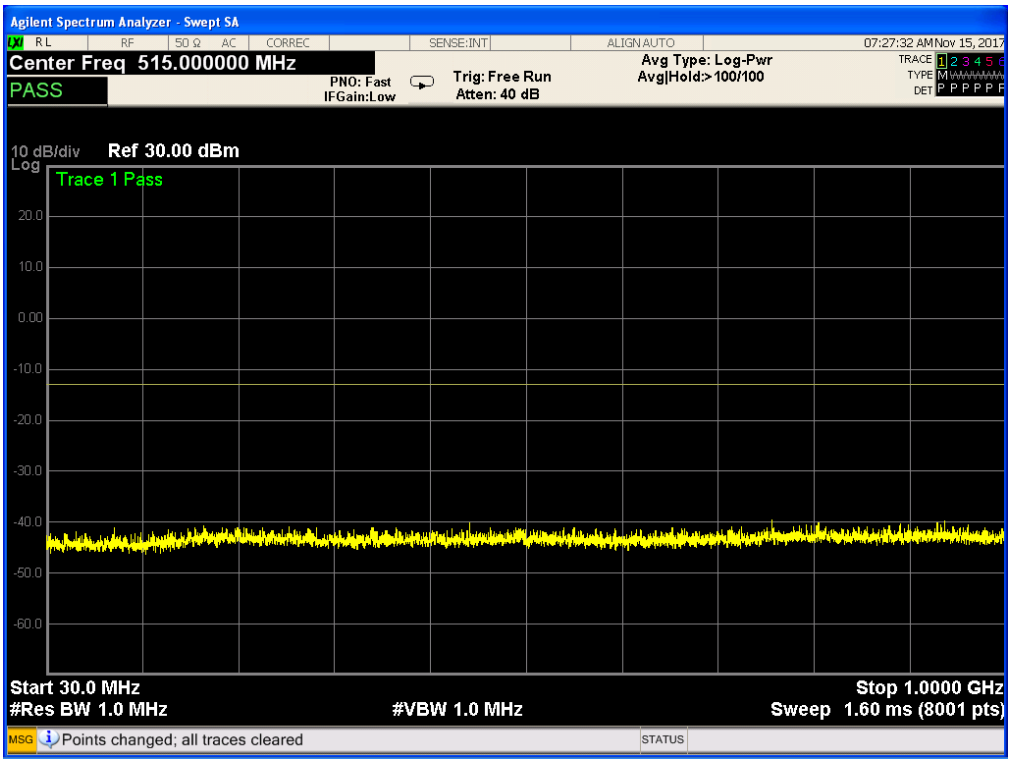
Band 2,UL Channel 18615,UL Frequency 1851.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



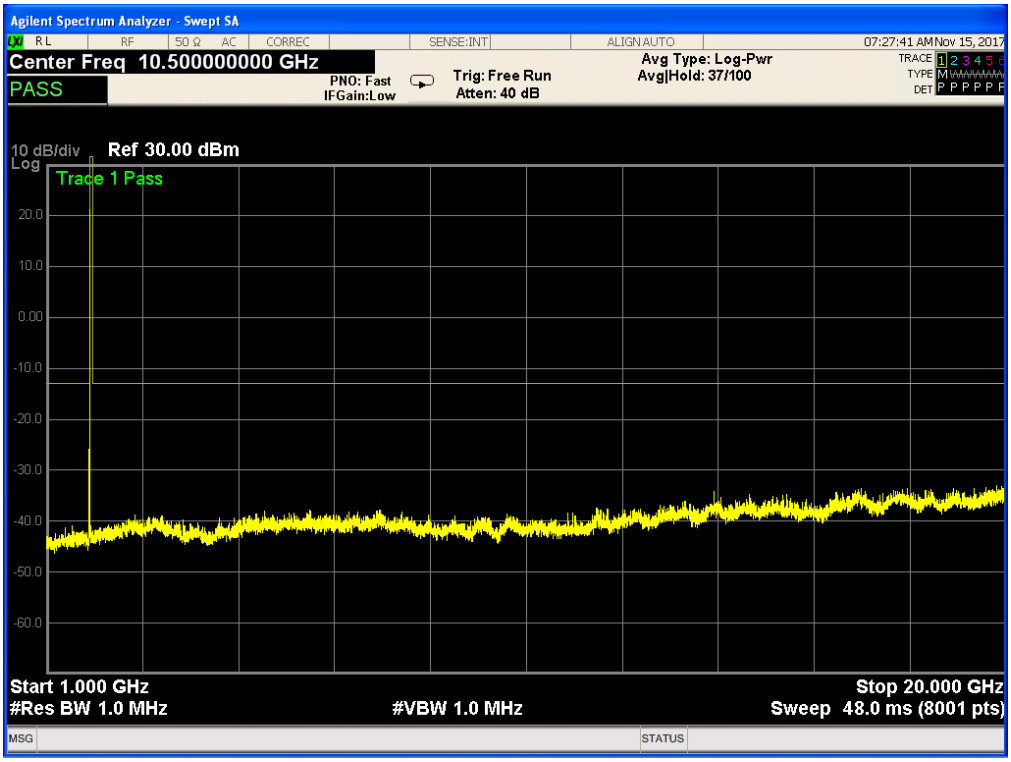
Band 2,UL Channel 18615,UL Frequency 1851.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



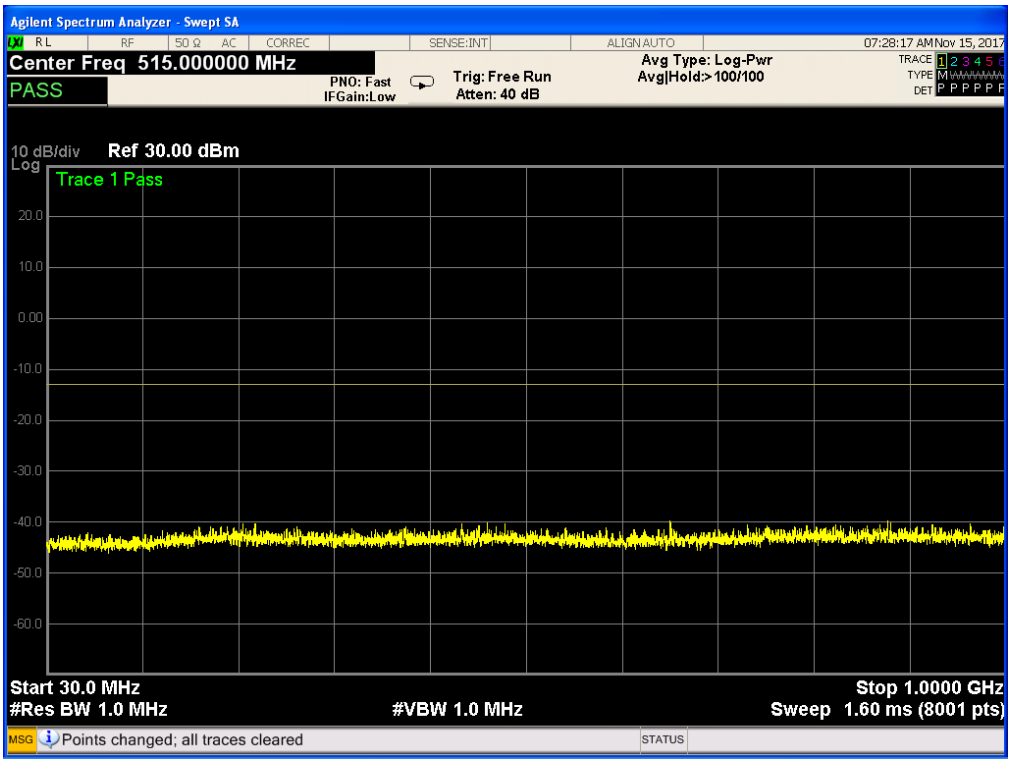
Band 2,UL Channel 18615,UL Frequency 1851.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



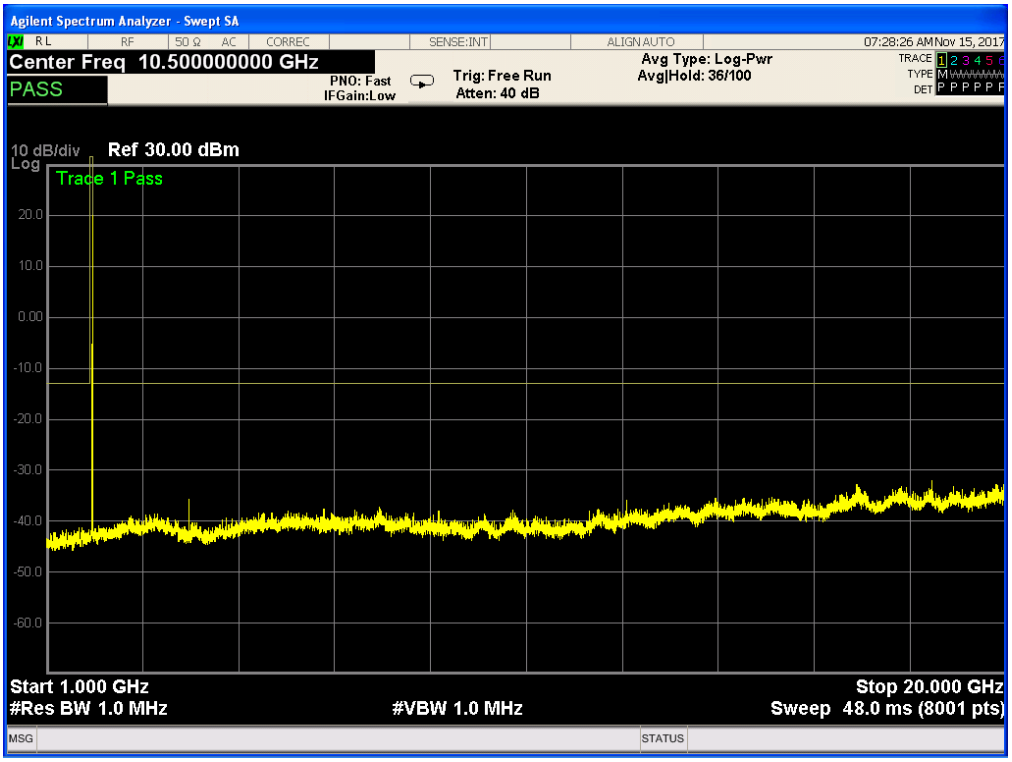
Band 2,UL Channel 18615,UL Frequency 1851.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



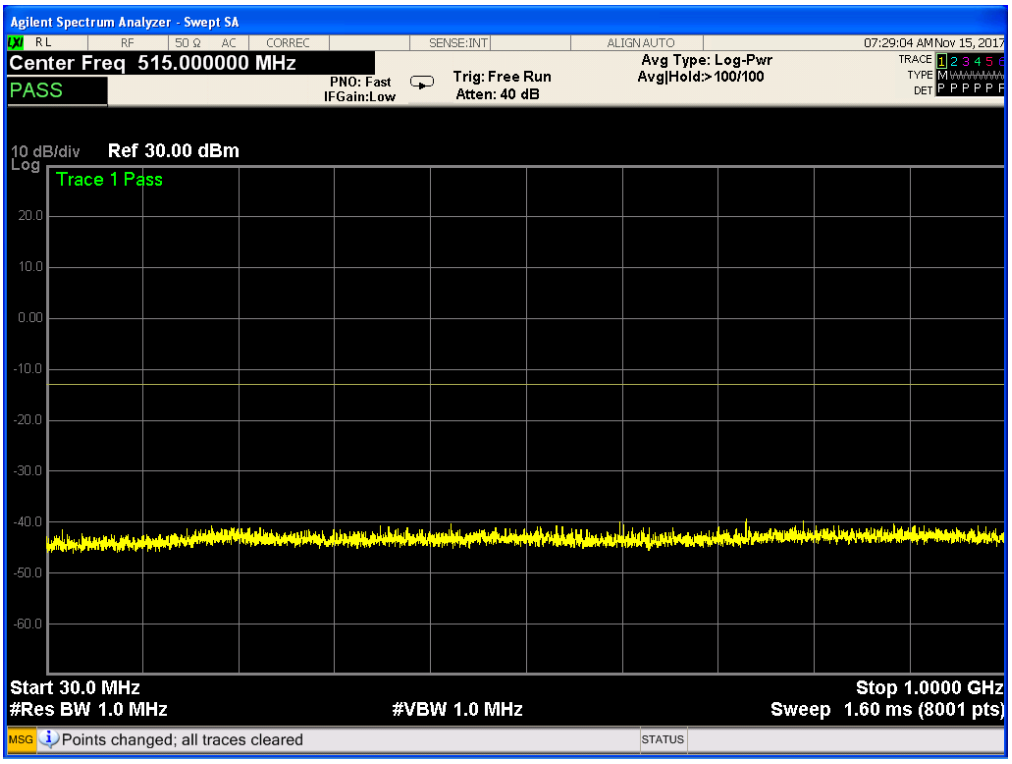
Band 2,UL Channel 19185,UL Frequency 1908.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



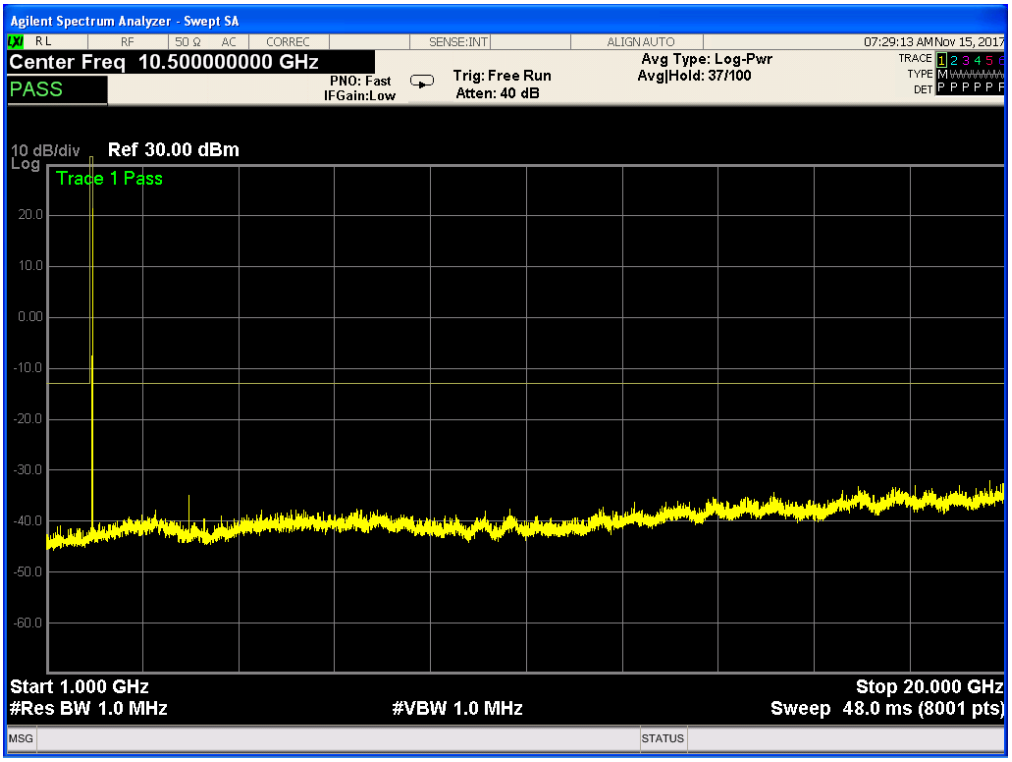
Band 2,UL Channel 19185,UL Frequency 1908.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



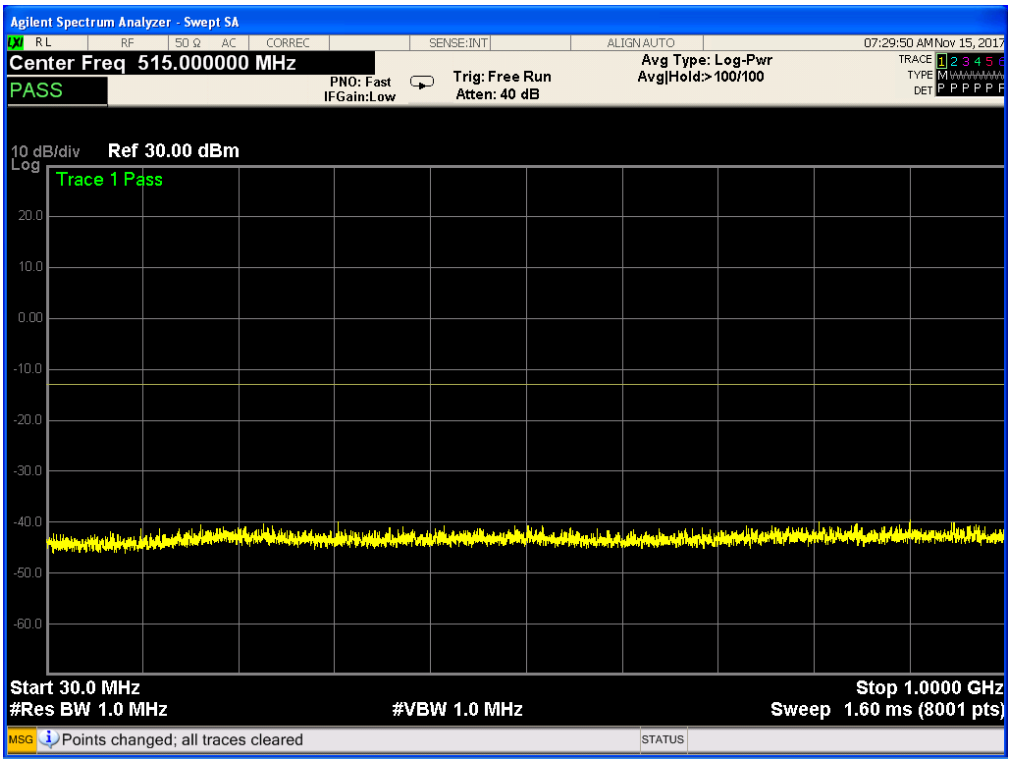
Band 2,UL Channel 19185,UL Frequency 1908.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



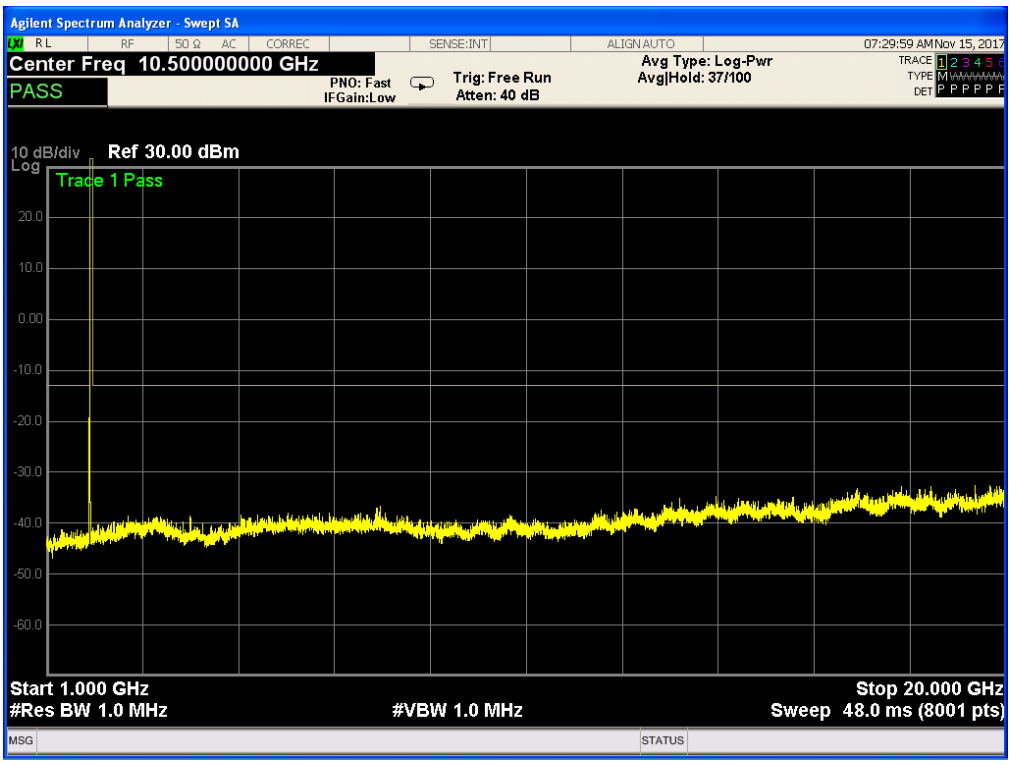
Band 2,UL Channel 19185,UL Frequency 1908.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



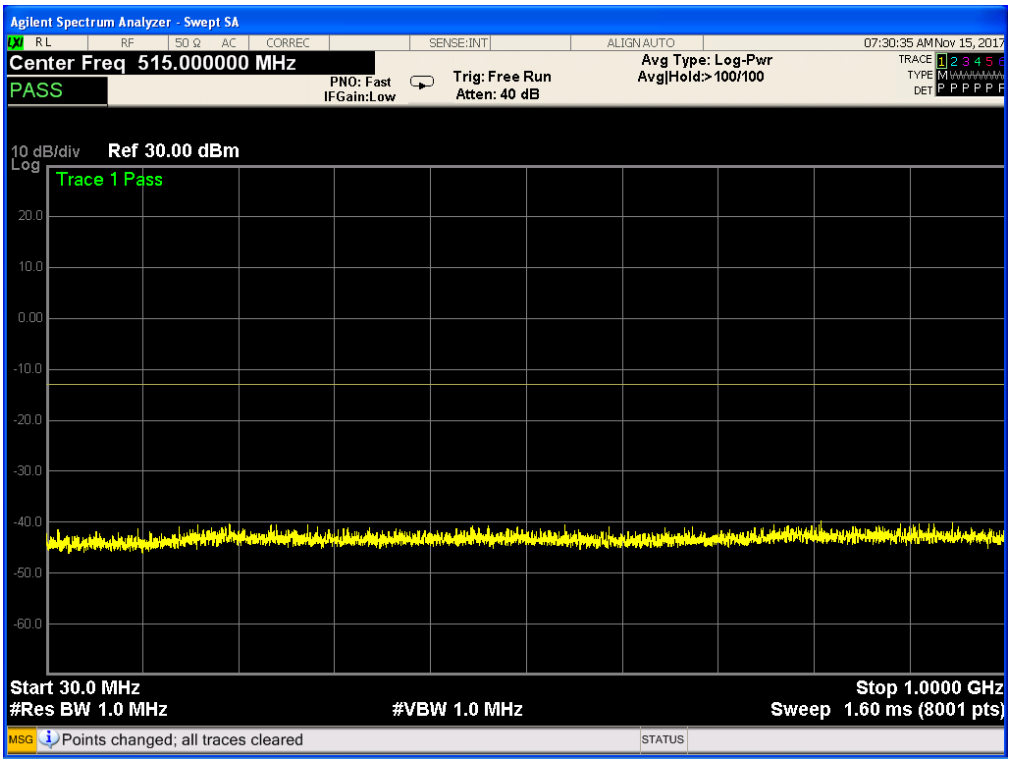
Band 2,UL Channel 18625,UL Frequency 1852.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



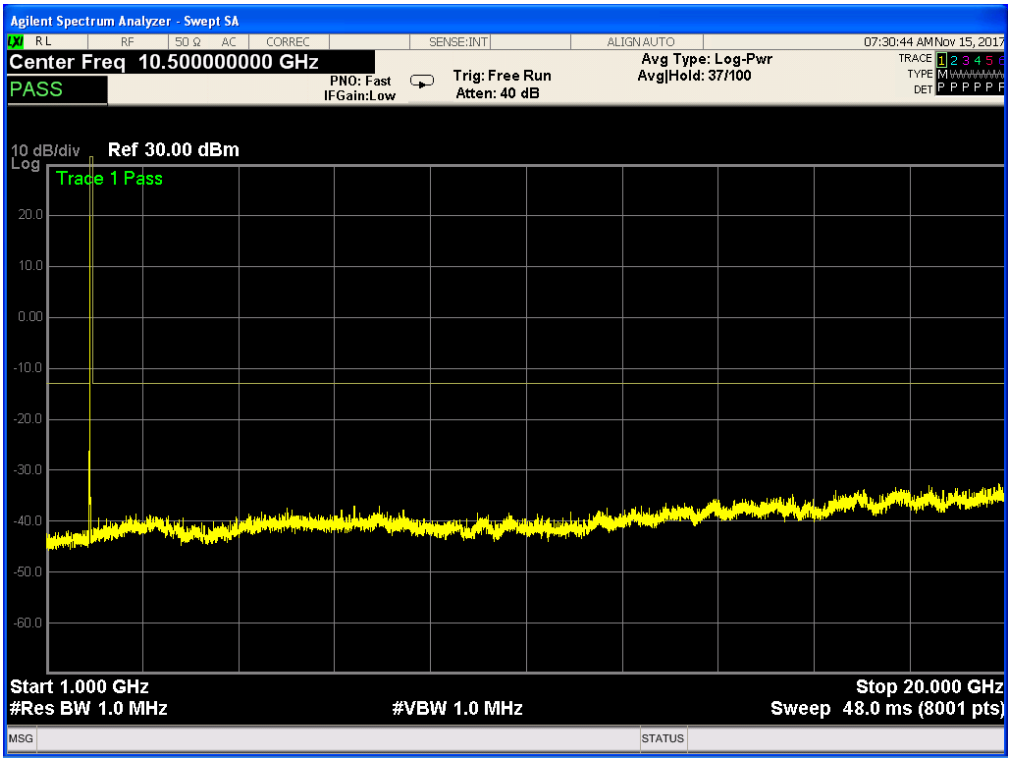
Band 2,UL Channel 18625,UL Frequency 1852.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



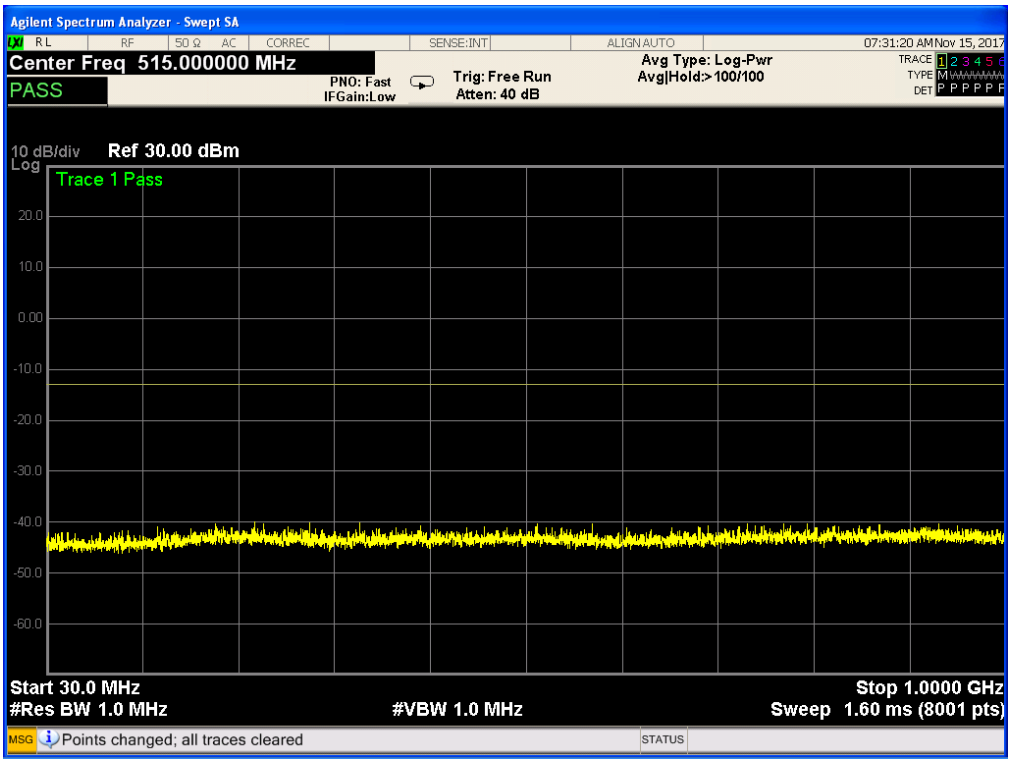
Band 2,UL Channel 18625,UL Frequency 1852.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



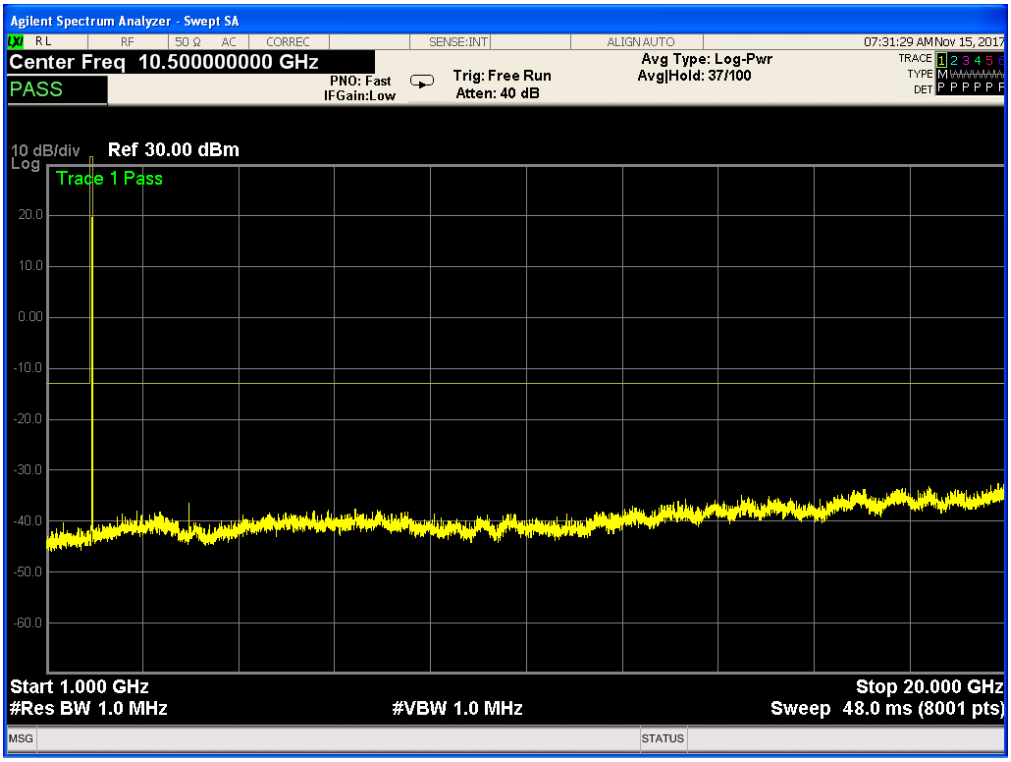
Band 2,UL Channel 18625,UL Frequency 1852.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



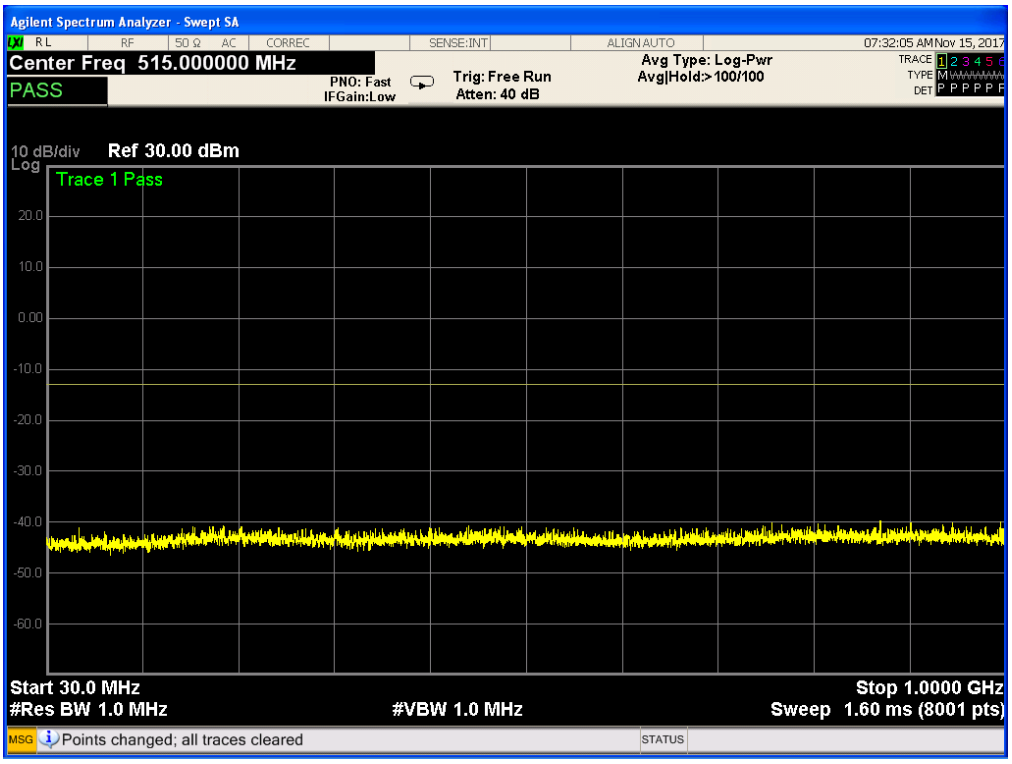
Band 2,UL Channel 19175,UL Frequency 1907.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



Band 2,UL Channel 19175,UL Frequency 1907.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



Band 2,UL Channel 19175,UL Frequency 1907.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



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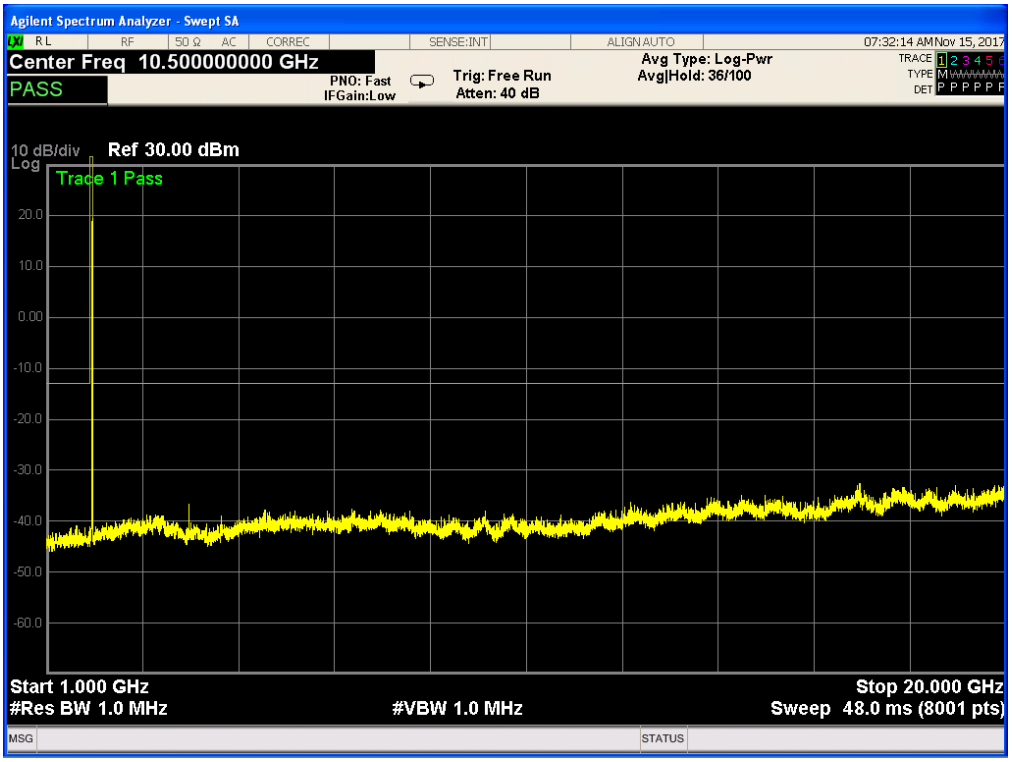
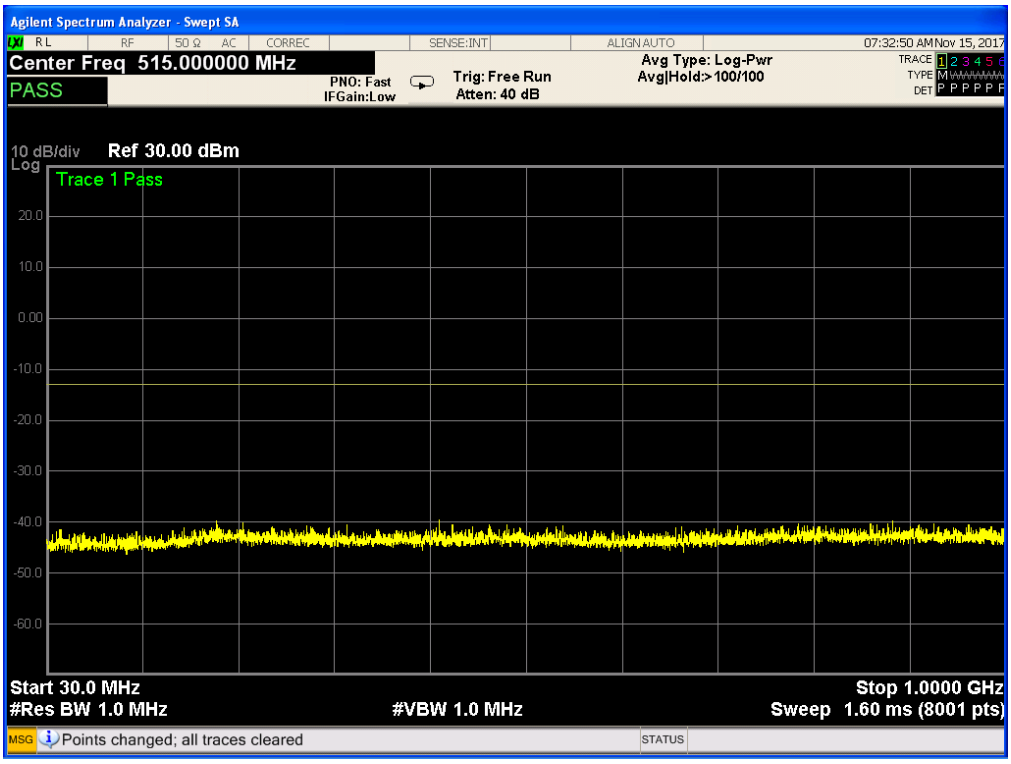
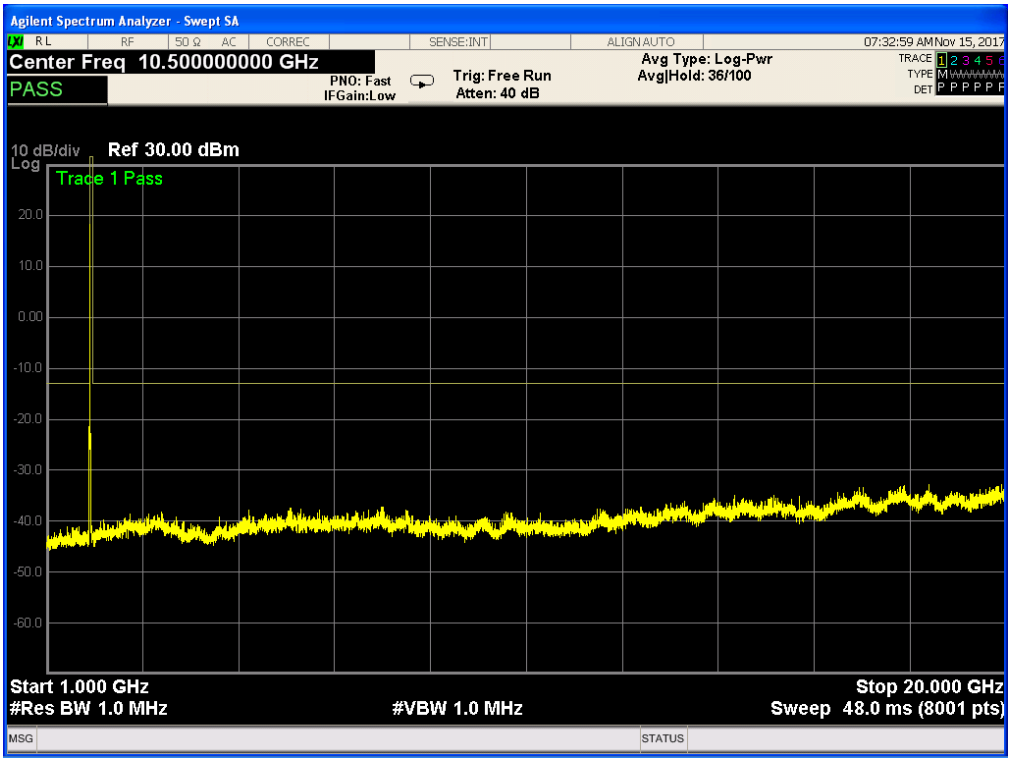


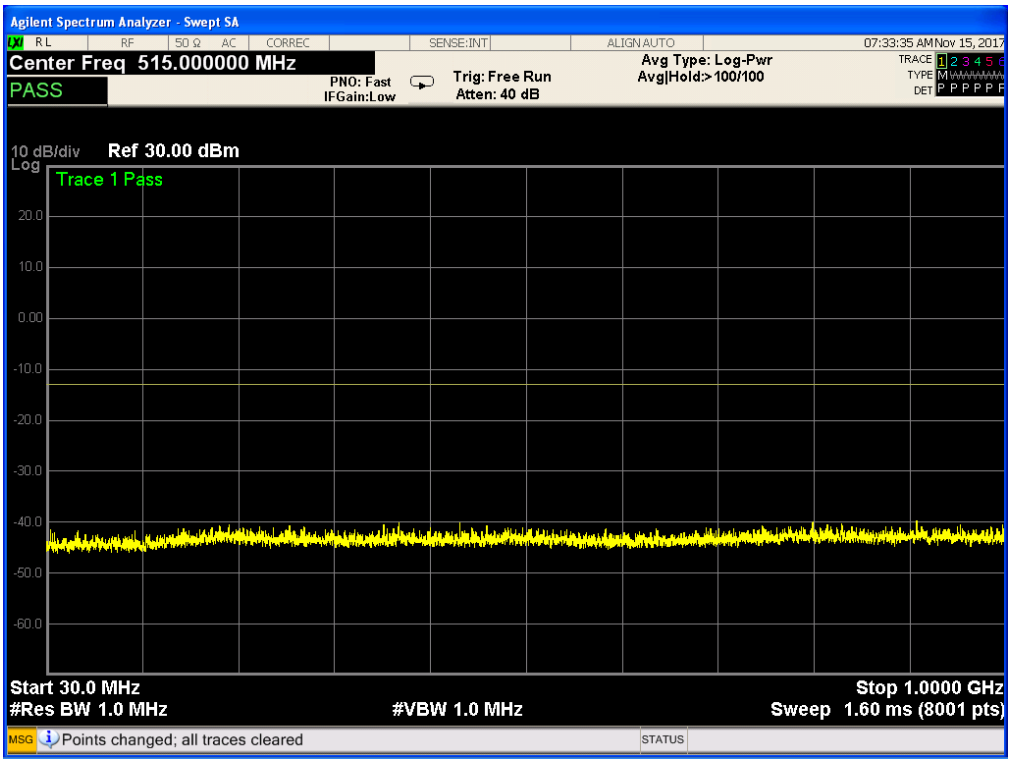
Band 2,UL Channel 18650,UL Frequency 1855.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



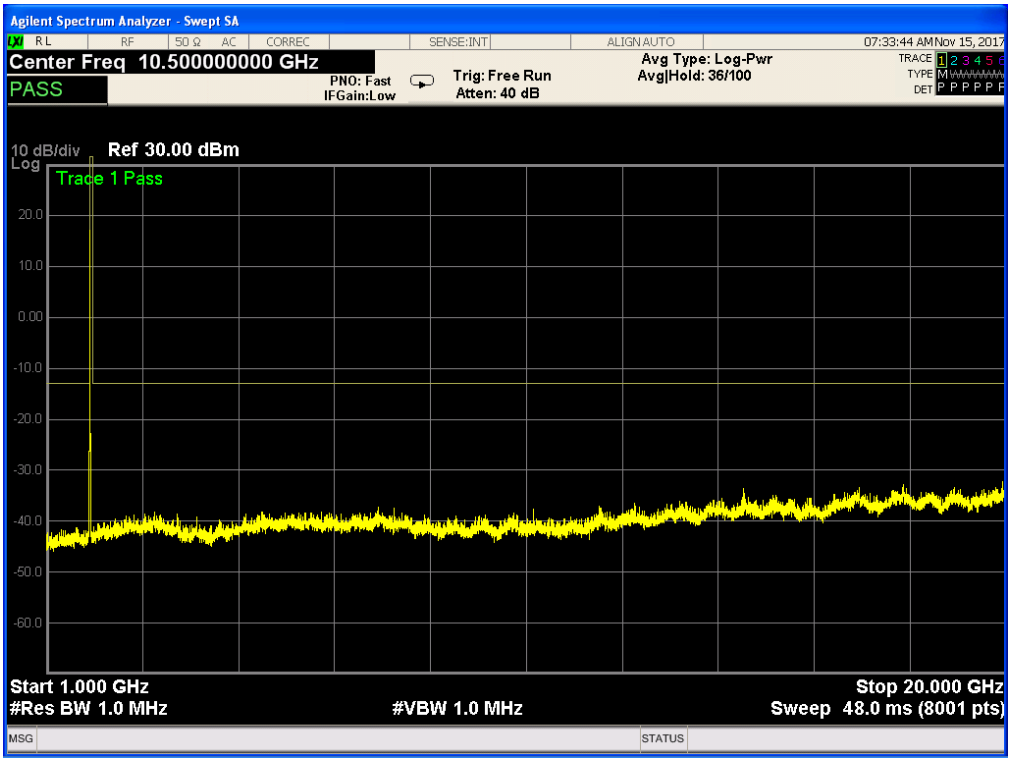
Band 2,UL Channel 18650,UL Frequency 1855.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



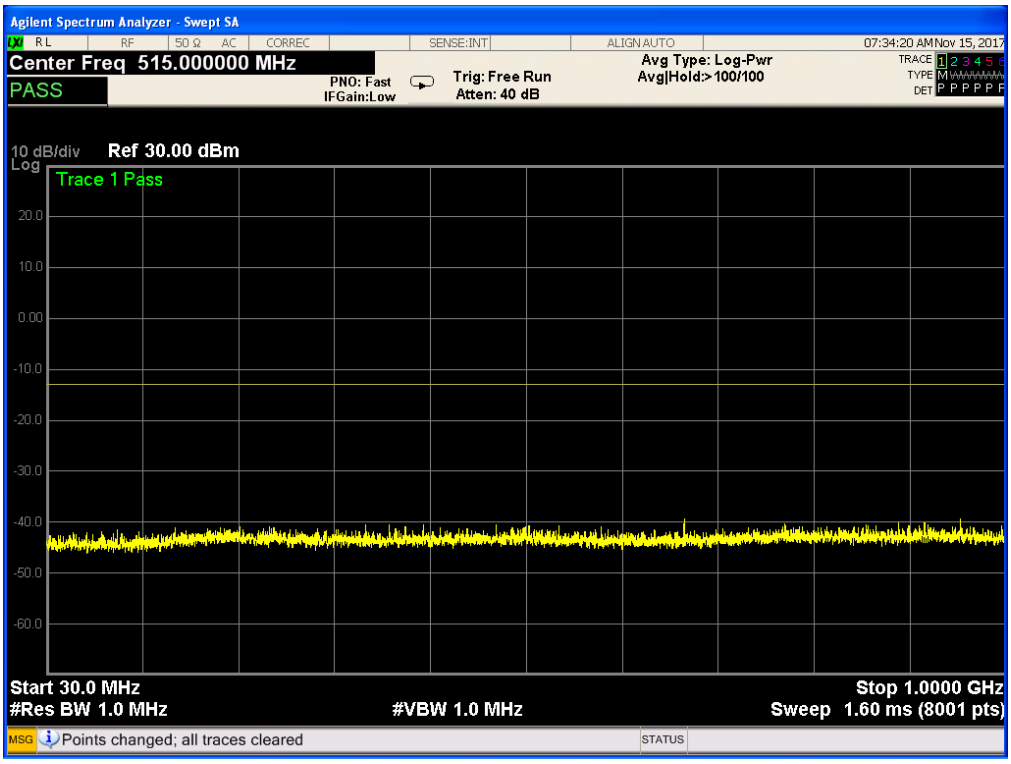
Band 2,UL Channel 18650,UL Frequency 1855.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



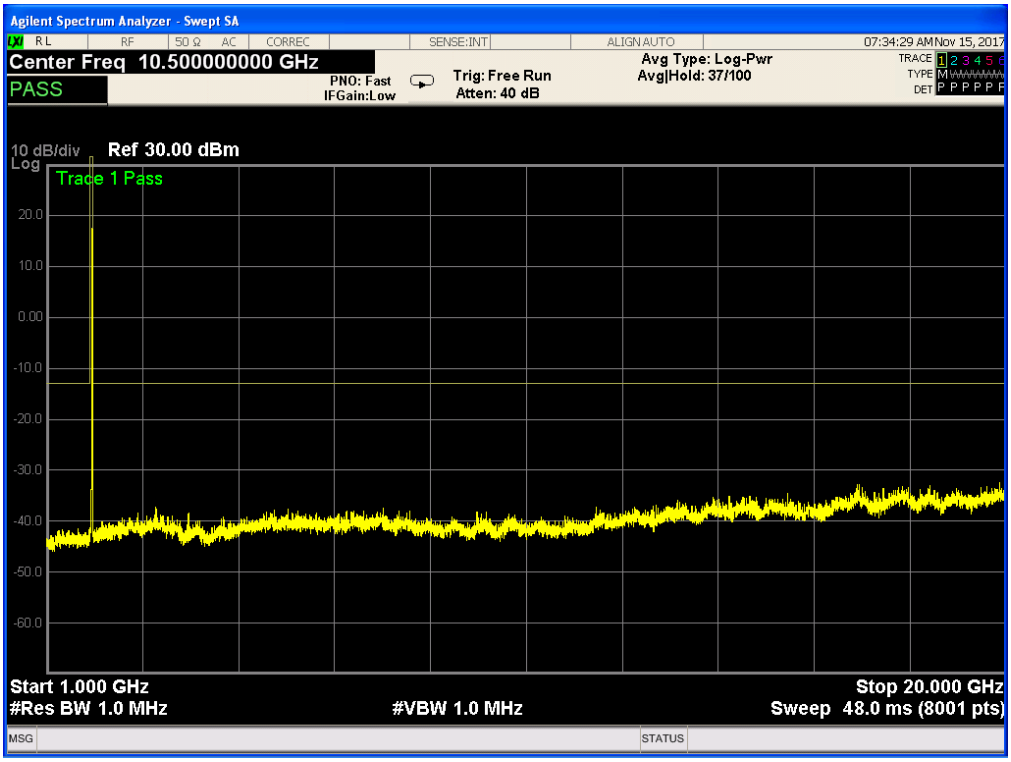
Band 2,UL Channel 18650,UL Frequency 1855.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



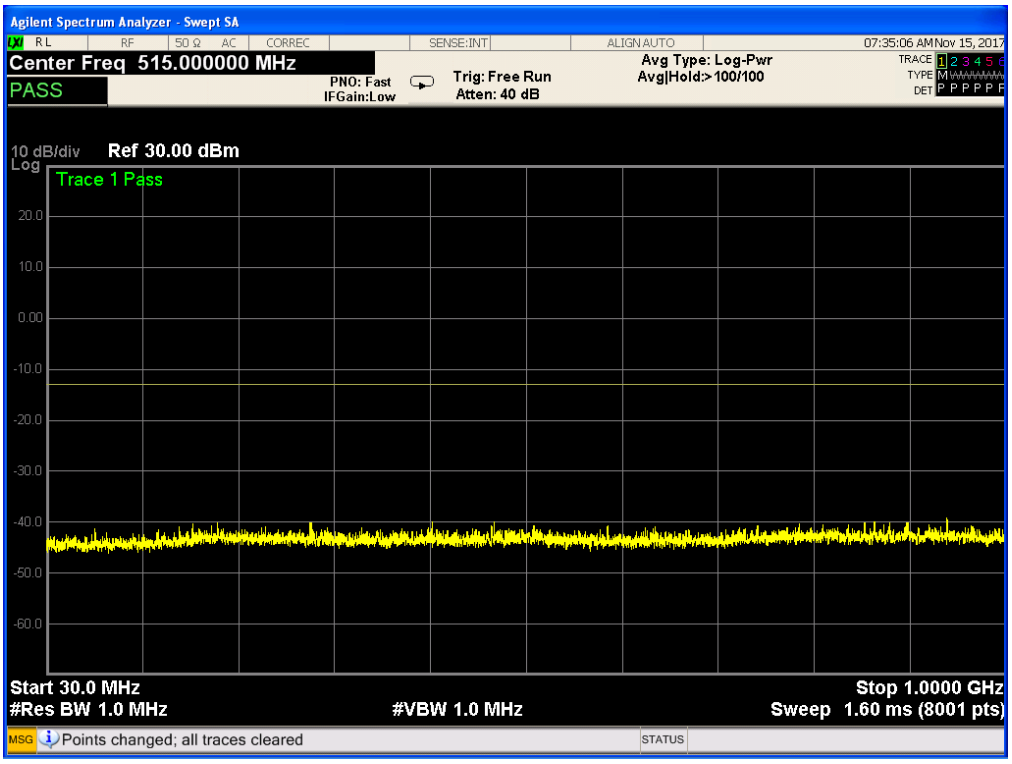
Band 2,UL Channel 19150,UL Frequency 1905.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



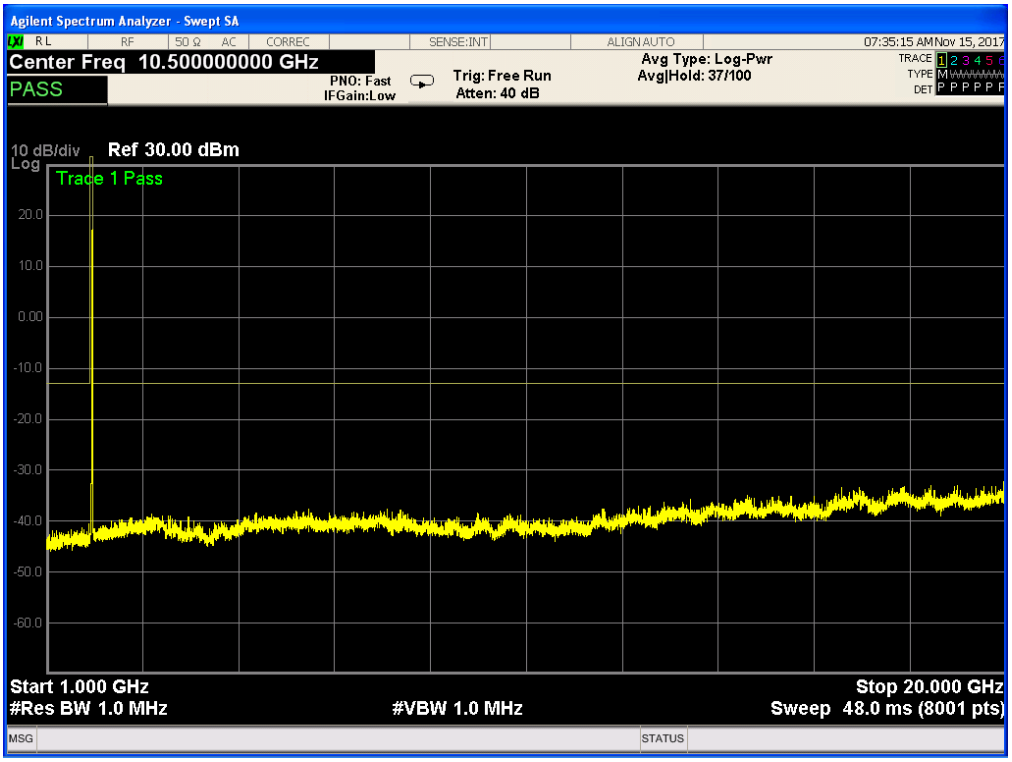
Band 2,UL Channel 19150,UL Frequency 1905.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



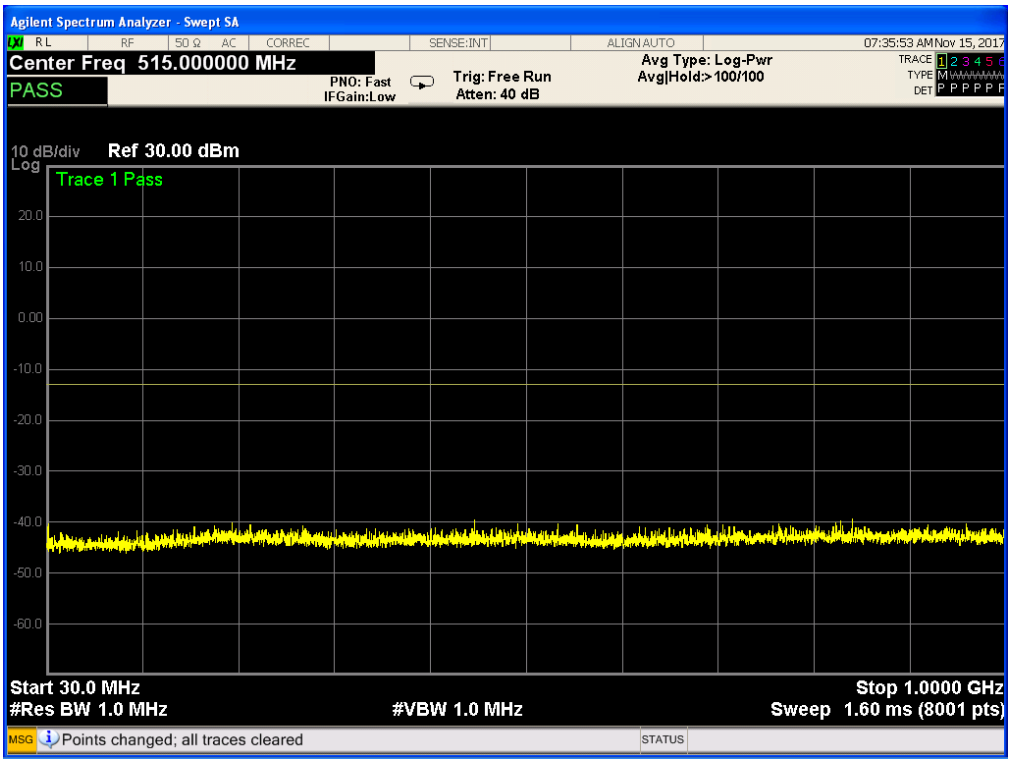
Band 2,UL Channel 19150,UL Frequency 1905.0,BW 10.0,NO. RB 1,RB POS. Low,16QAM



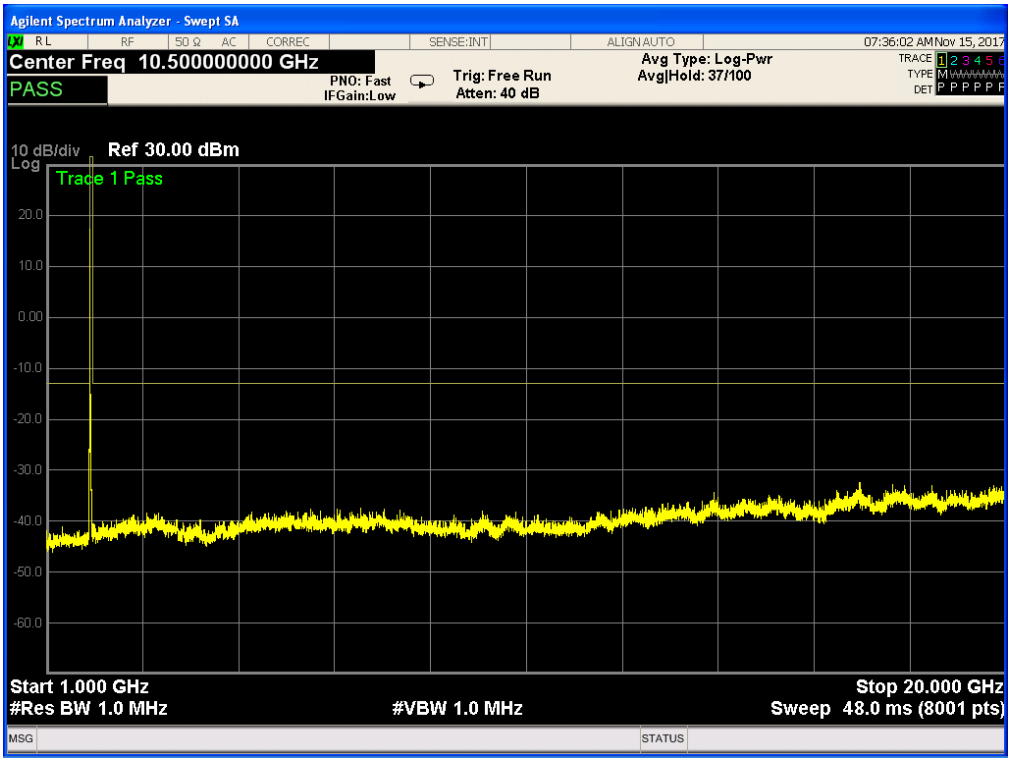
Band 2,UL Channel 19150,UL Frequency 1905.0,BW 10.0,NO. RB 1,RB POS. Low,16QAM



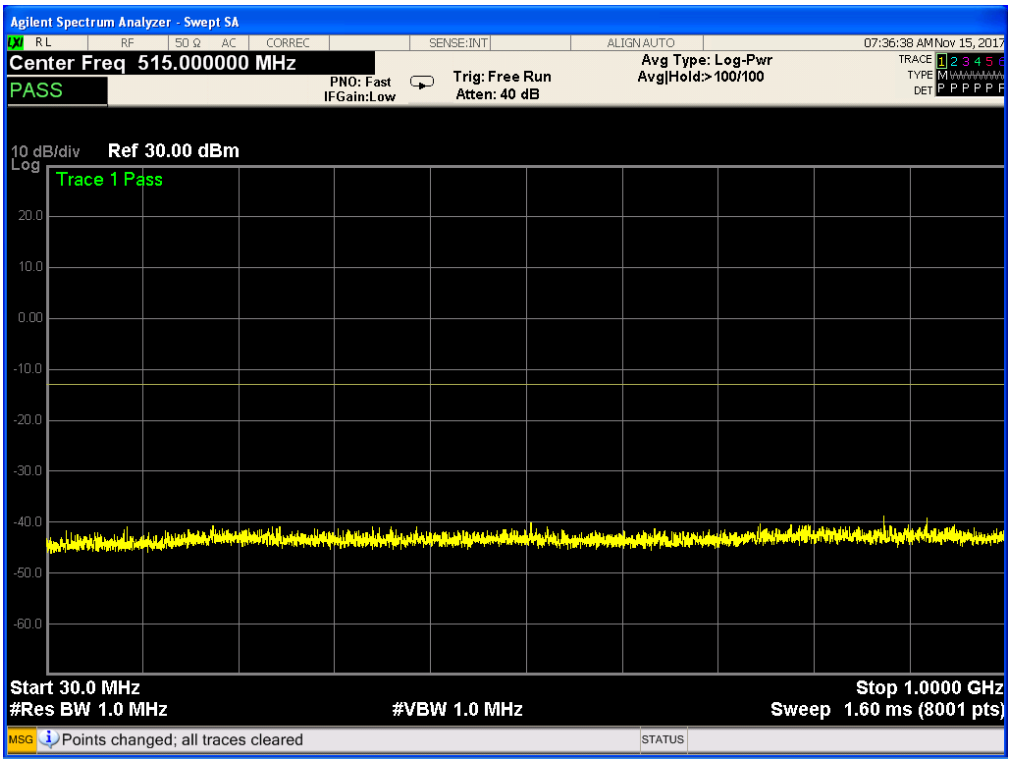
Band 2,UL Channel 18675,UL Frequency 1857.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



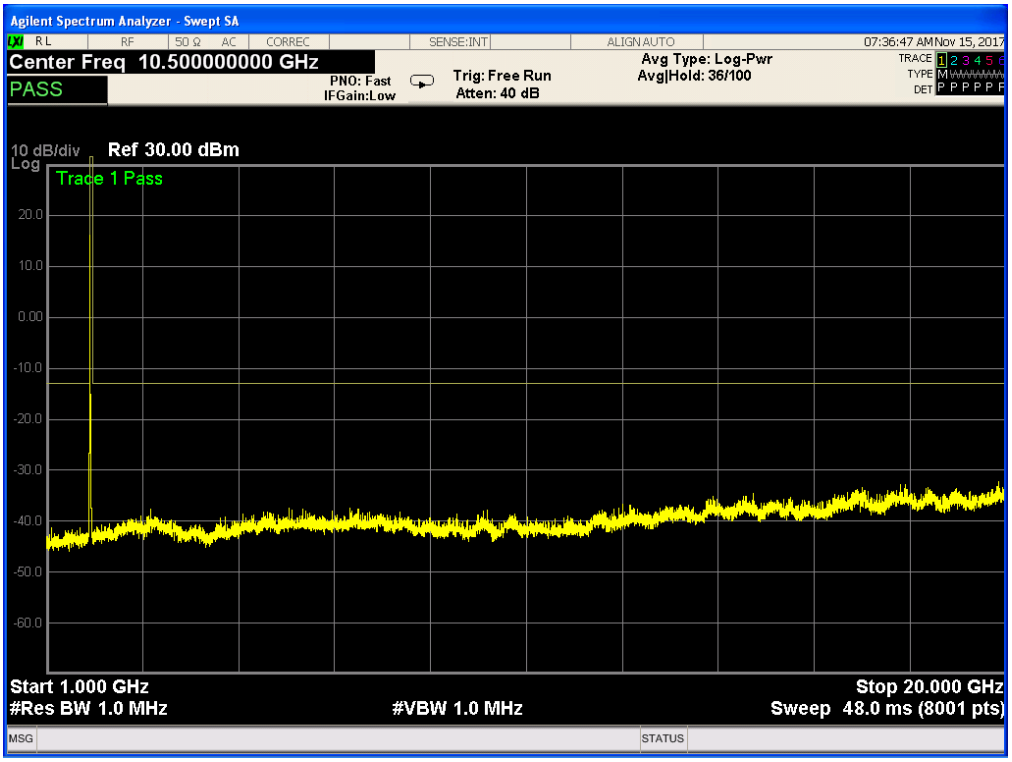
Band 2,UL Channel 18675,UL Frequency 1857.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



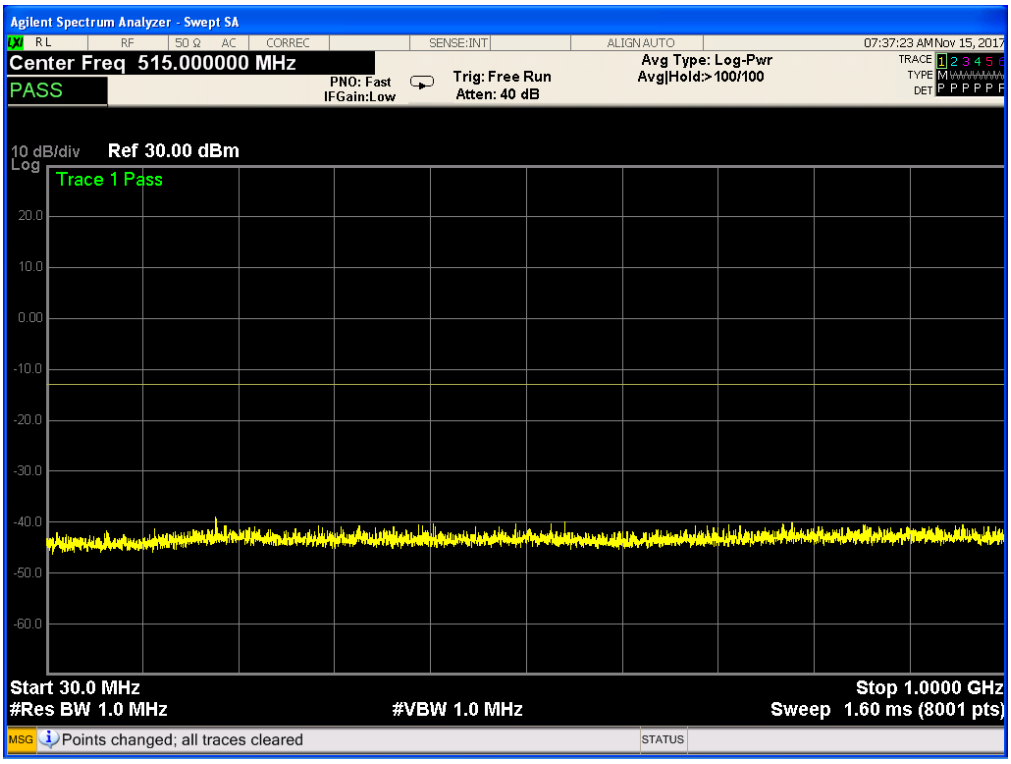
Band 2,UL Channel 18675,UL Frequency 1857.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



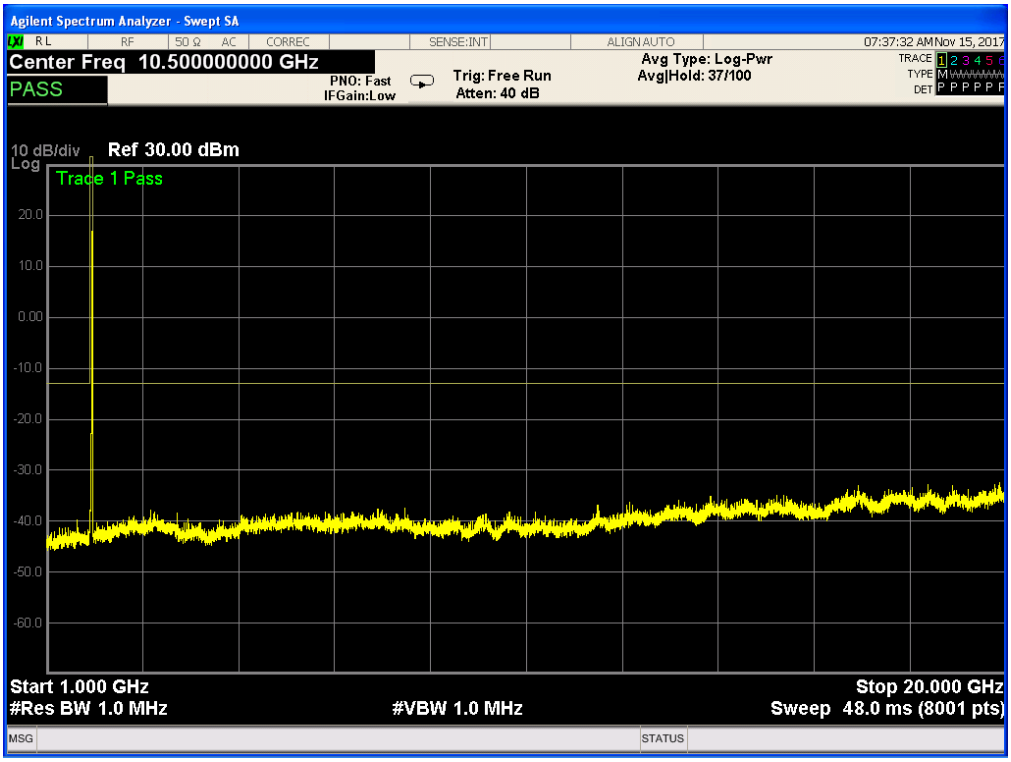
Band 2,UL Channel 18675,UL Frequency 1857.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



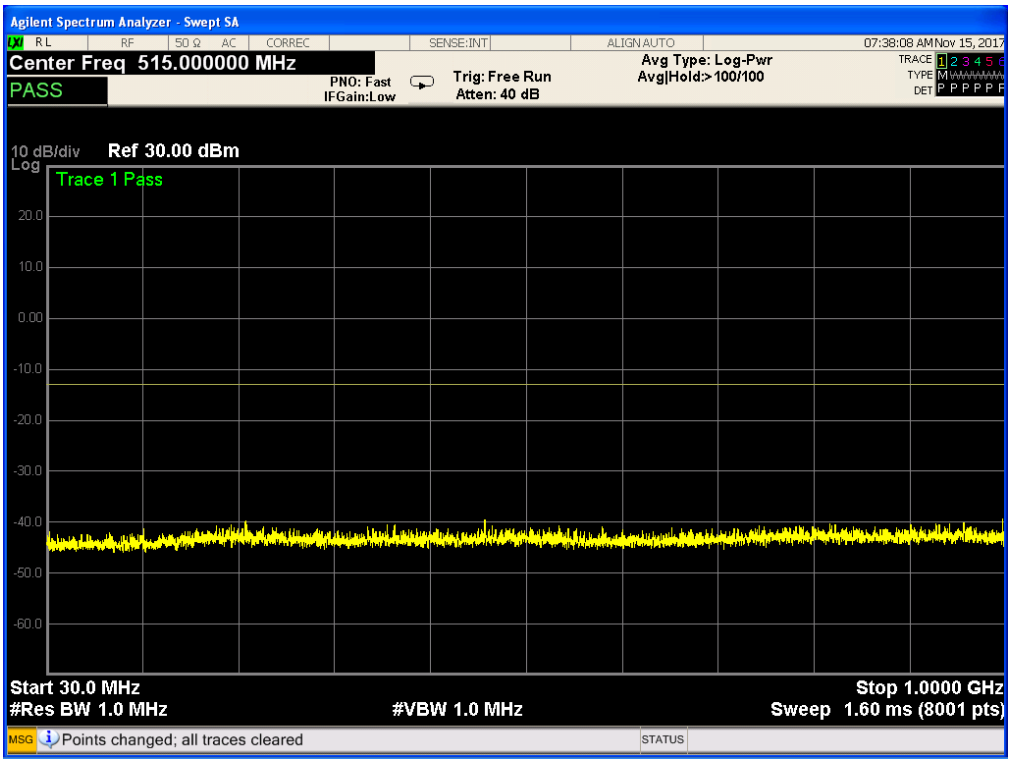
Band 2,UL Channel 19125,UL Frequency 1902.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



Band 2,UL Channel 19125,UL Frequency 1902.5,BW 15.0,NO. RB 75,RB POS. Low,QPSK



Band 2,UL Channel 19125,UL Frequency 1902.5,BW 15.0,NO. RB 75,RB POS. Low,16QAM



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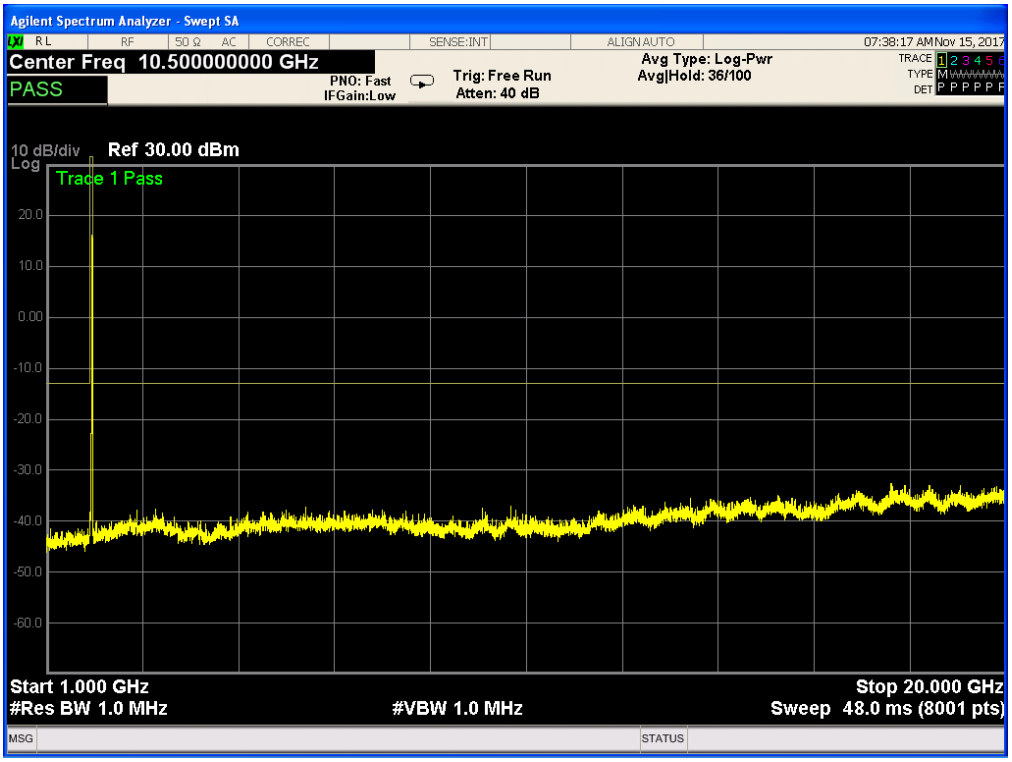
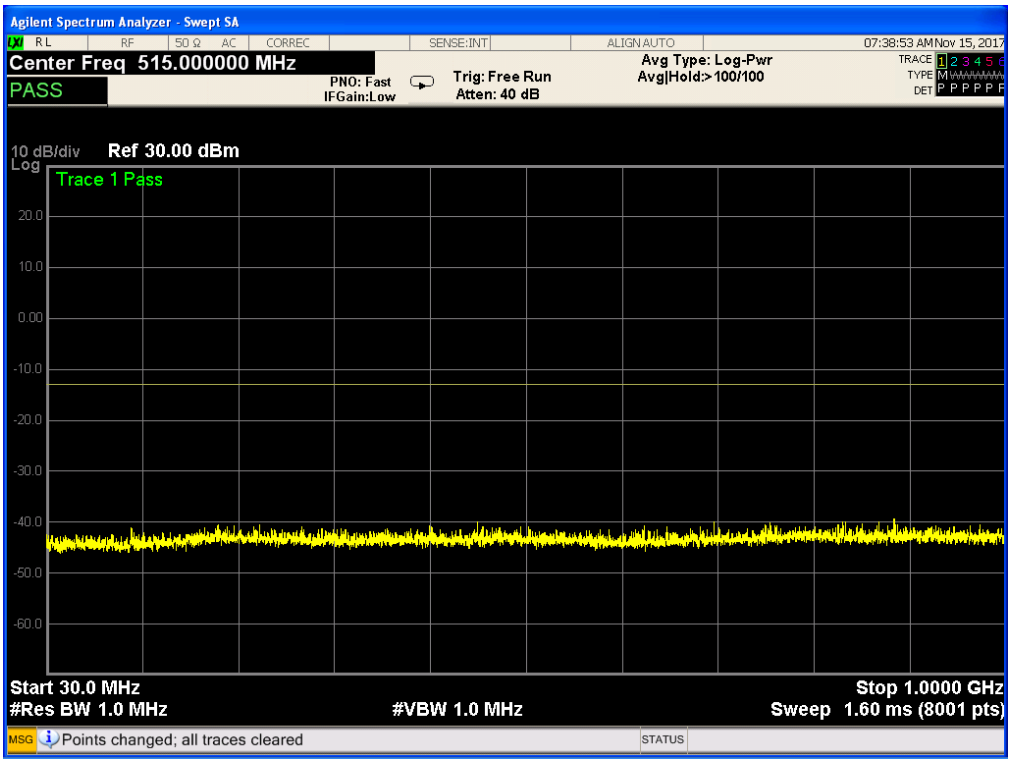
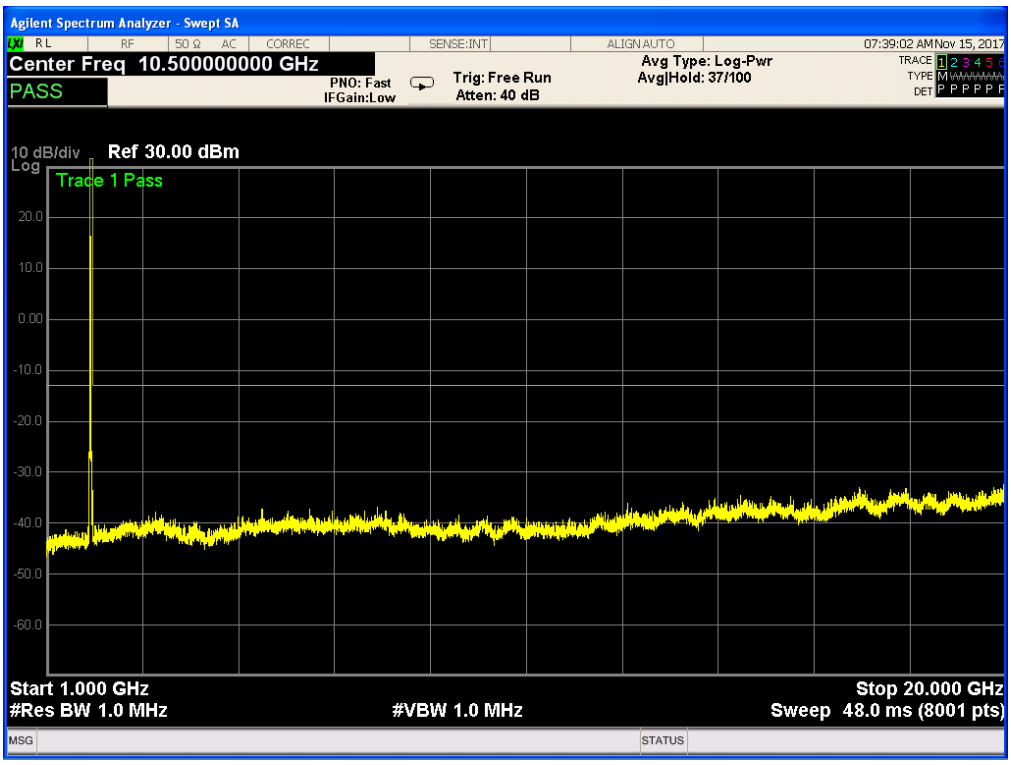


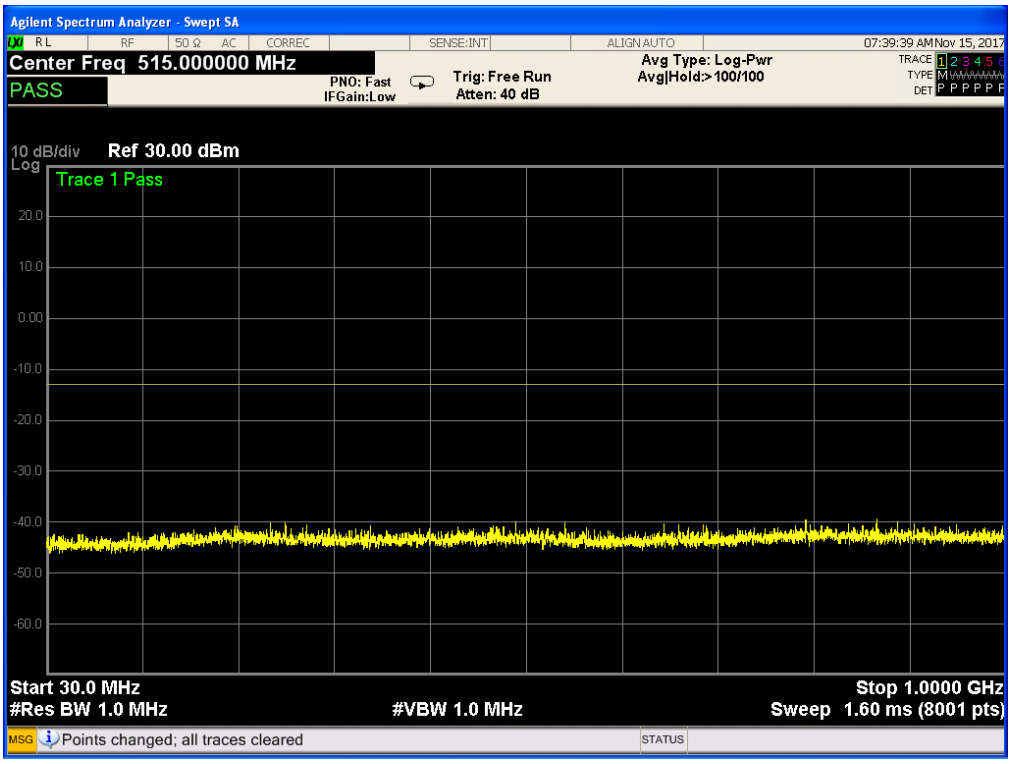
Band 2,UL Channel 18700,UL Frequency 1860.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



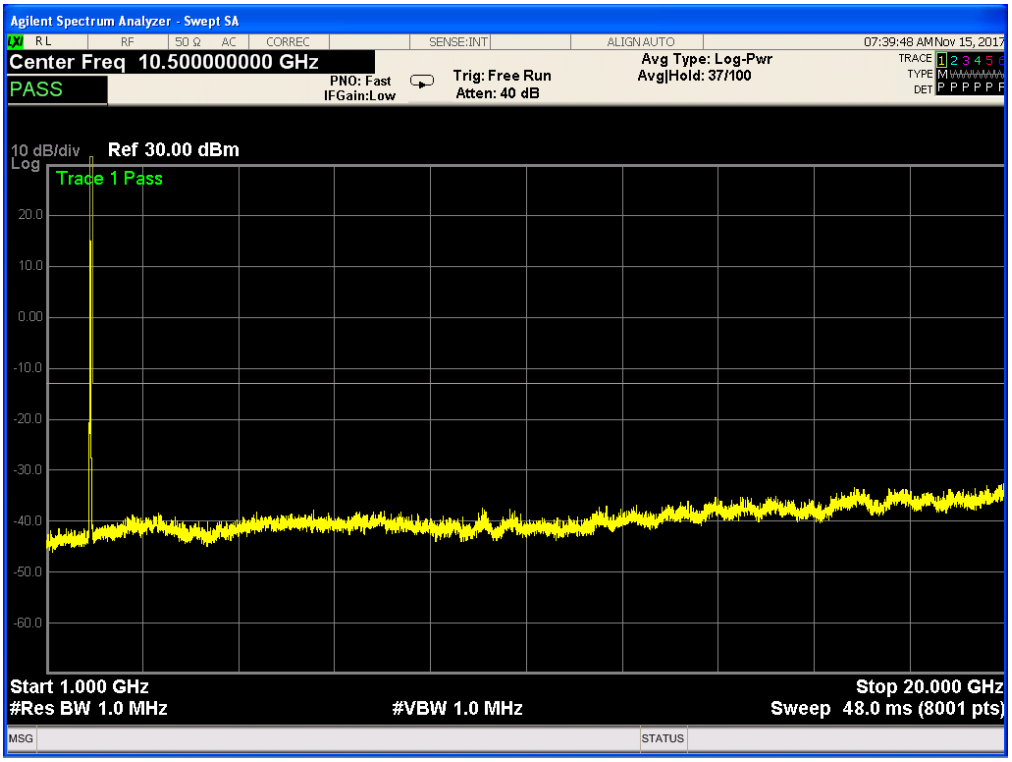
Band 2,UL Channel 18700,UL Frequency 1860.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



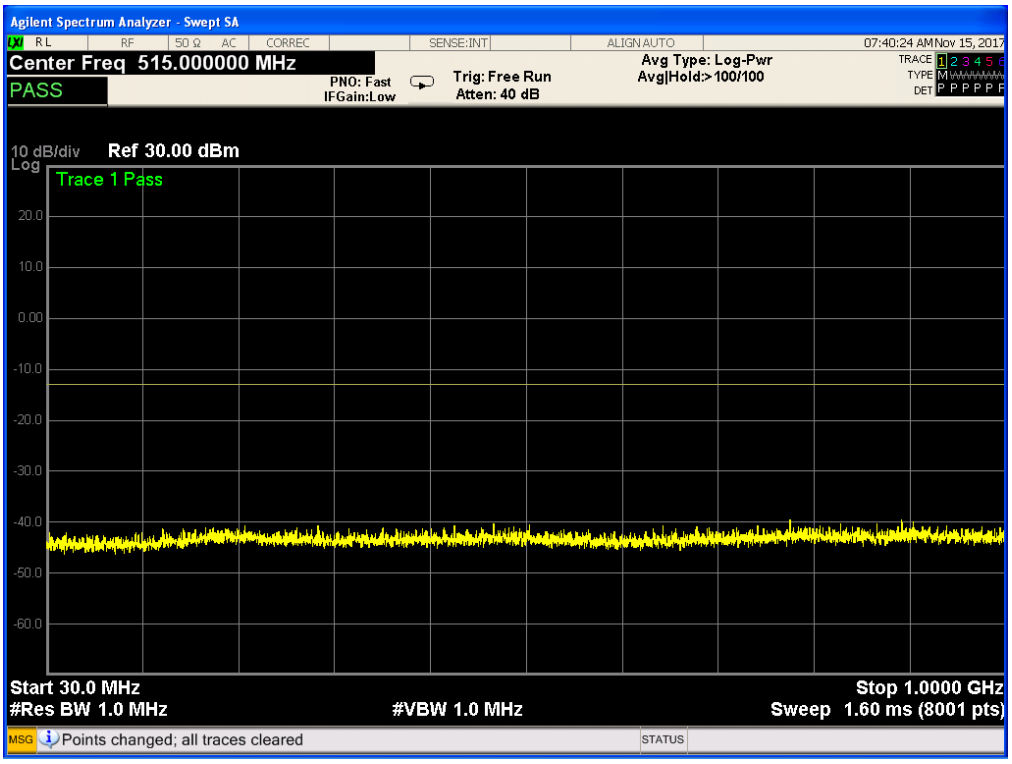
Band 2,UL Channel 18700,UL Frequency 1860.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



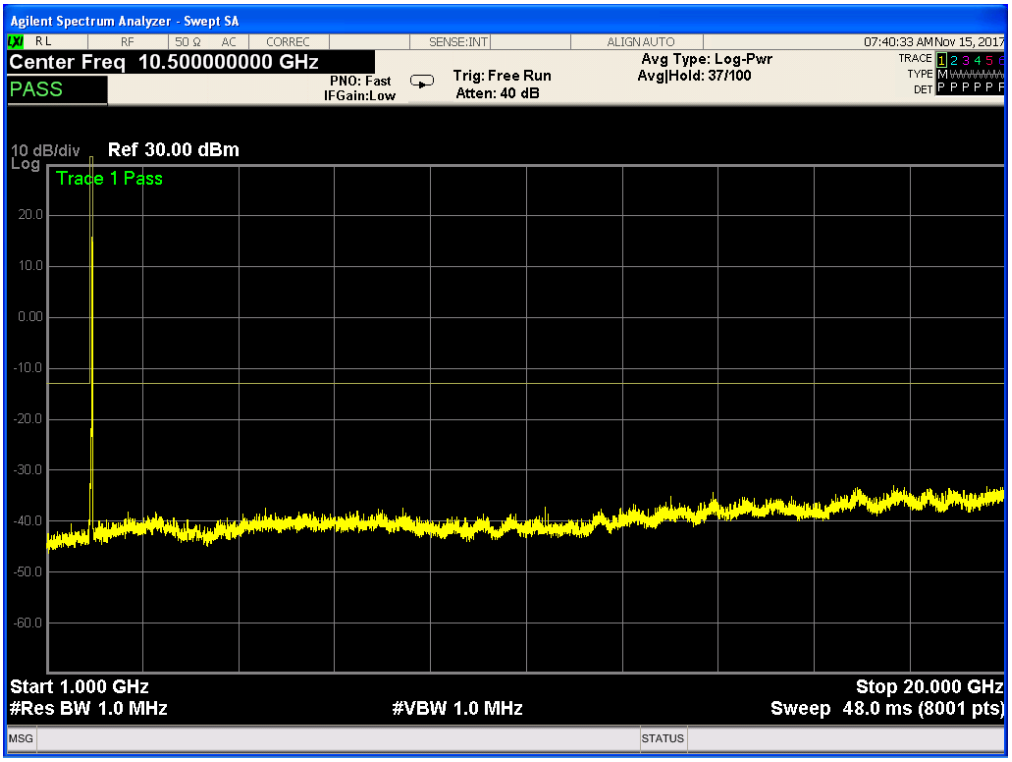
Band 2,UL Channel 18700,UL Frequency 1860.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM



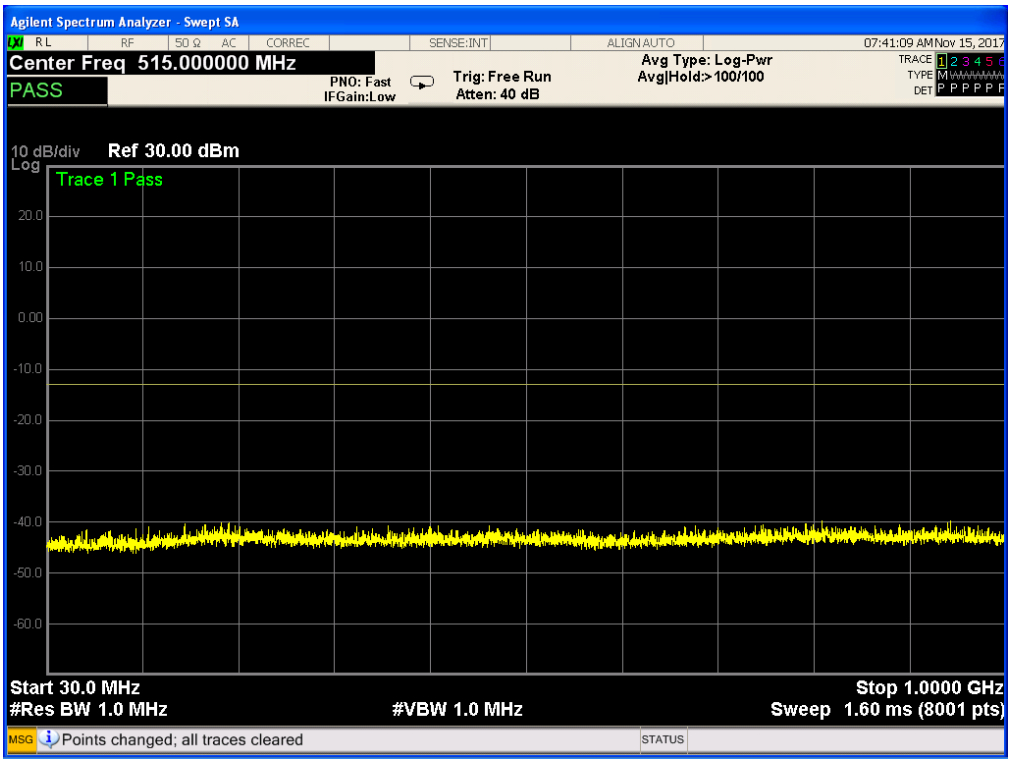
Band 2,UL Channel 19100,UL Frequency 1900.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



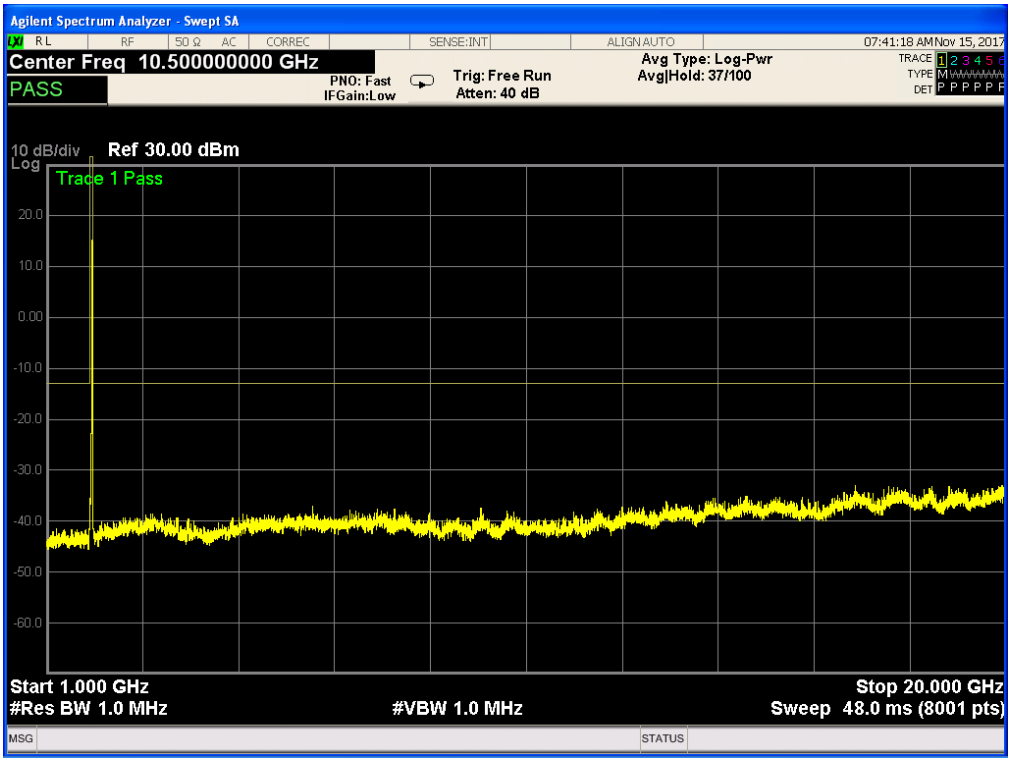
Band 2,UL Channel 19100,UL Frequency 1900.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



Band 2,UL Channel 19100,UL Frequency 1900.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM

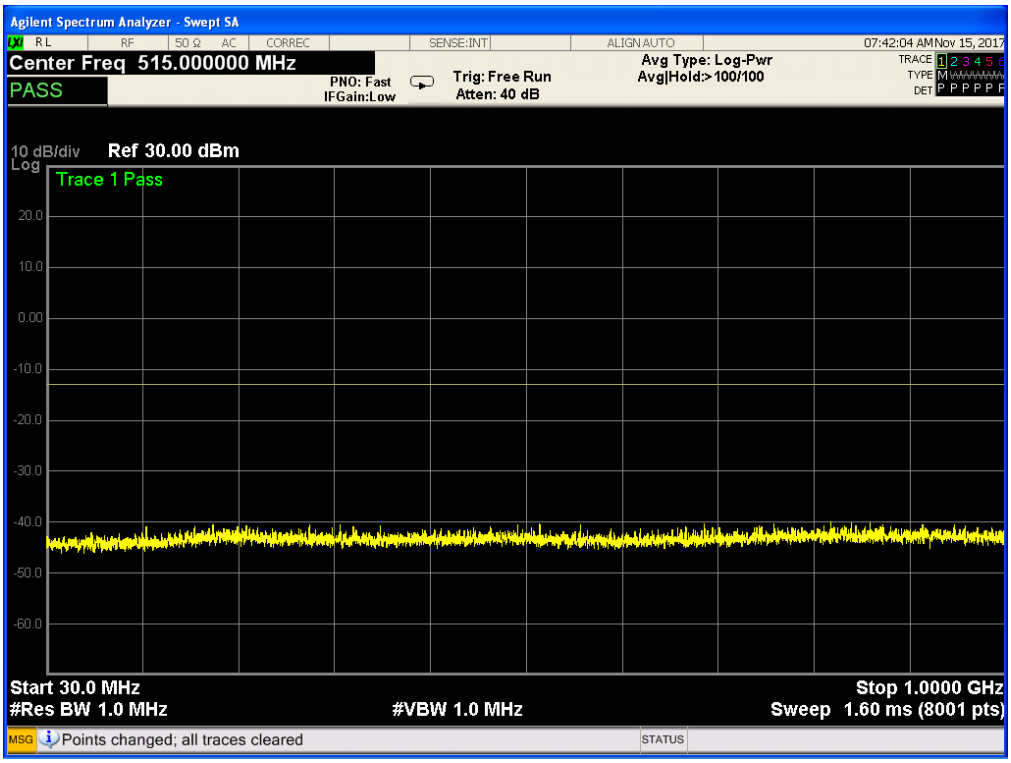


Band 2,UL Channel 19100,UL Frequency 1900.0,BW 20.0,NO. RB 100,RB POS. Low,16QAM

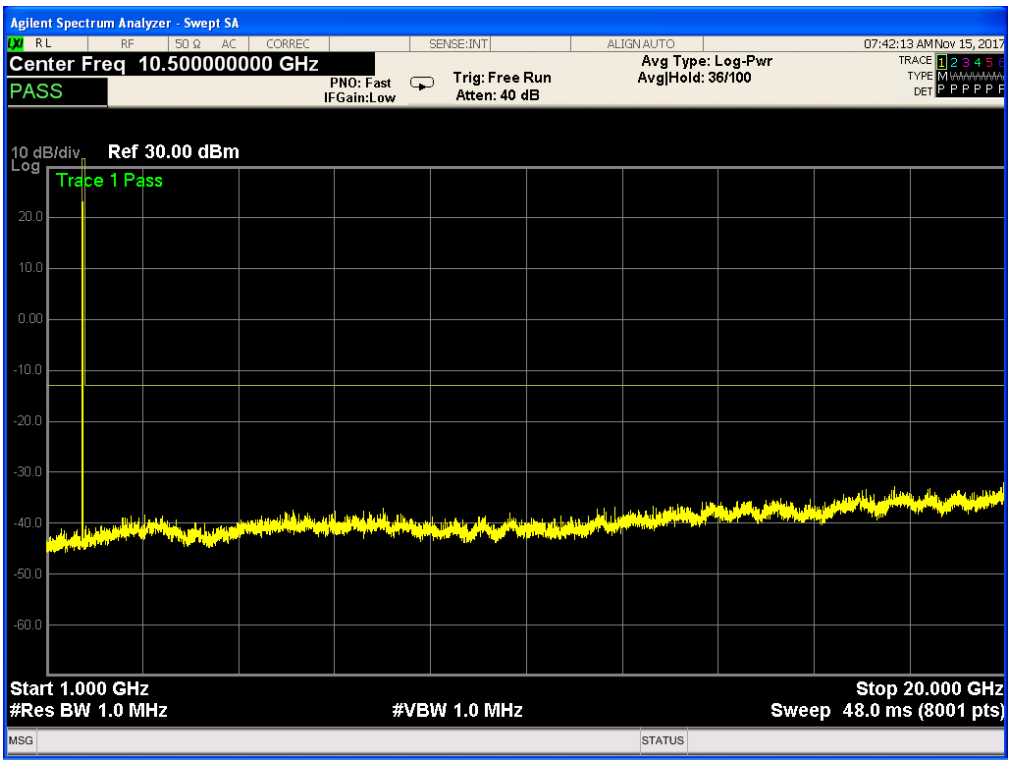


7.2 LTE BAND 4

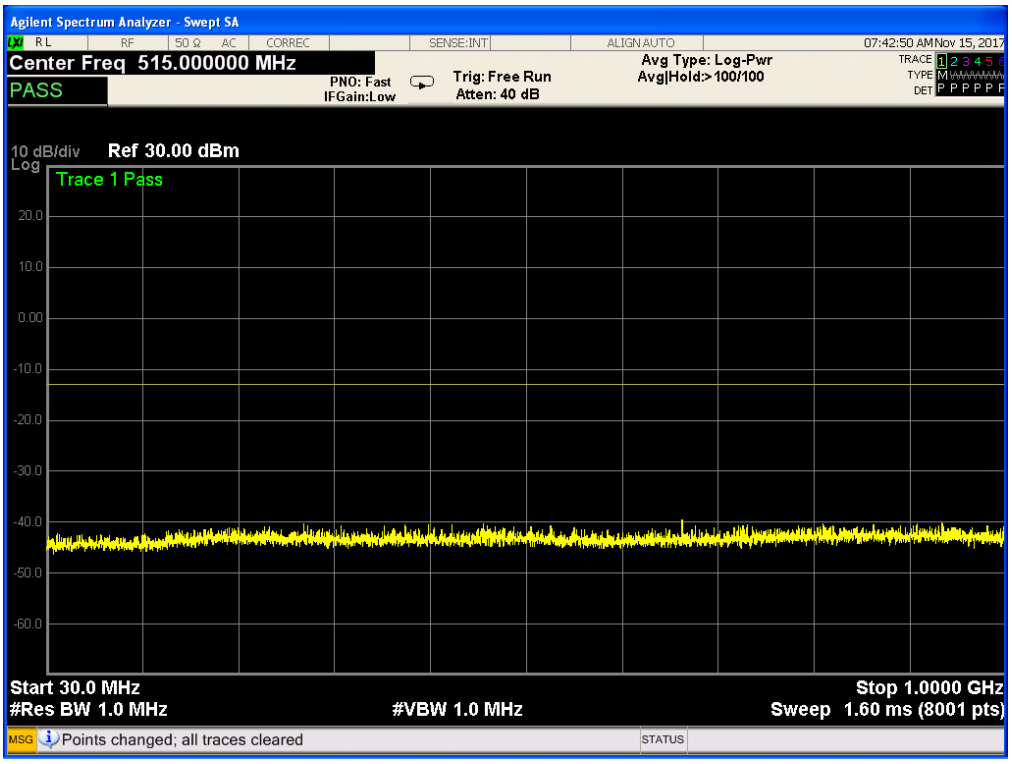
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



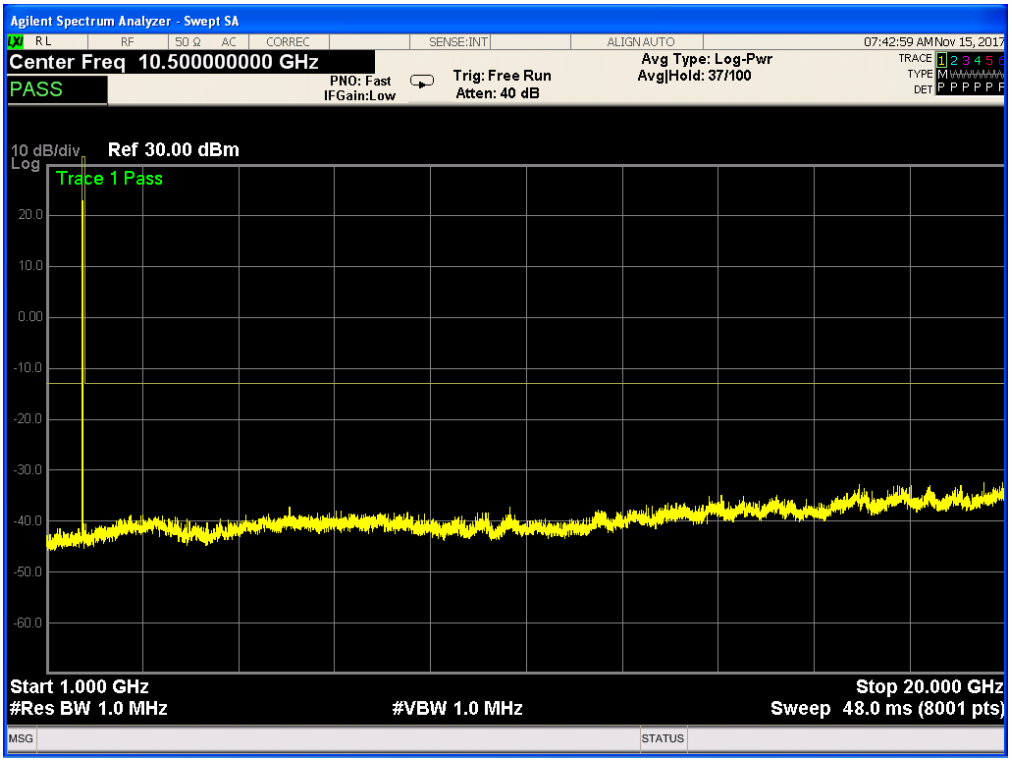
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,QPSK



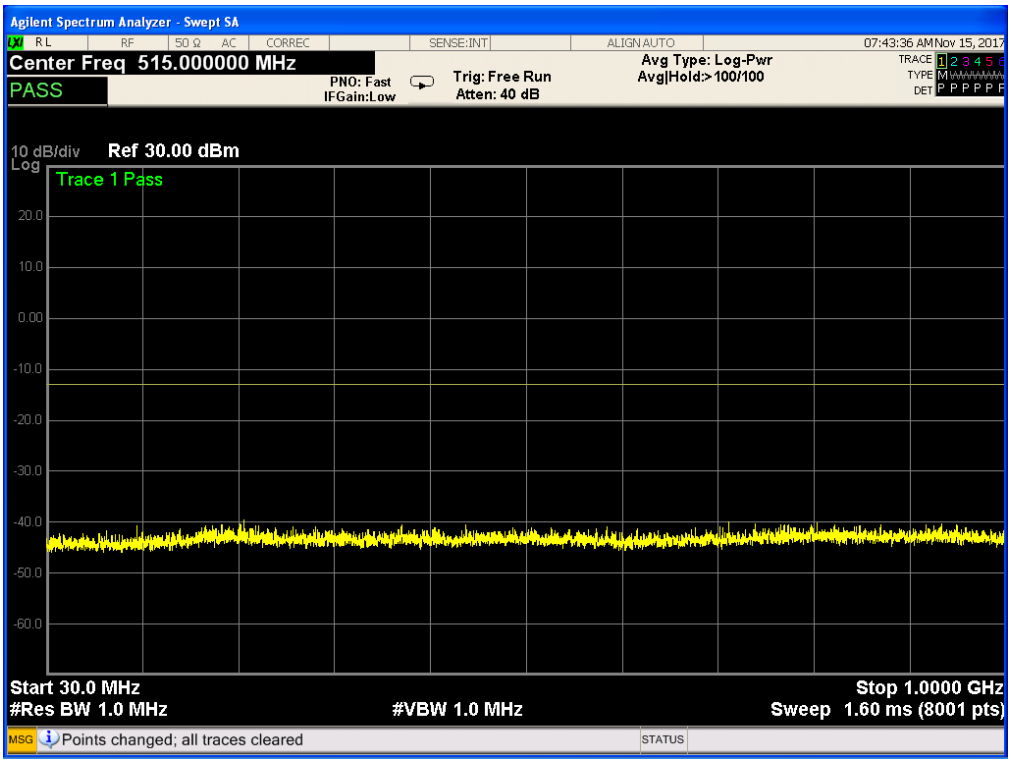
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,16QAM



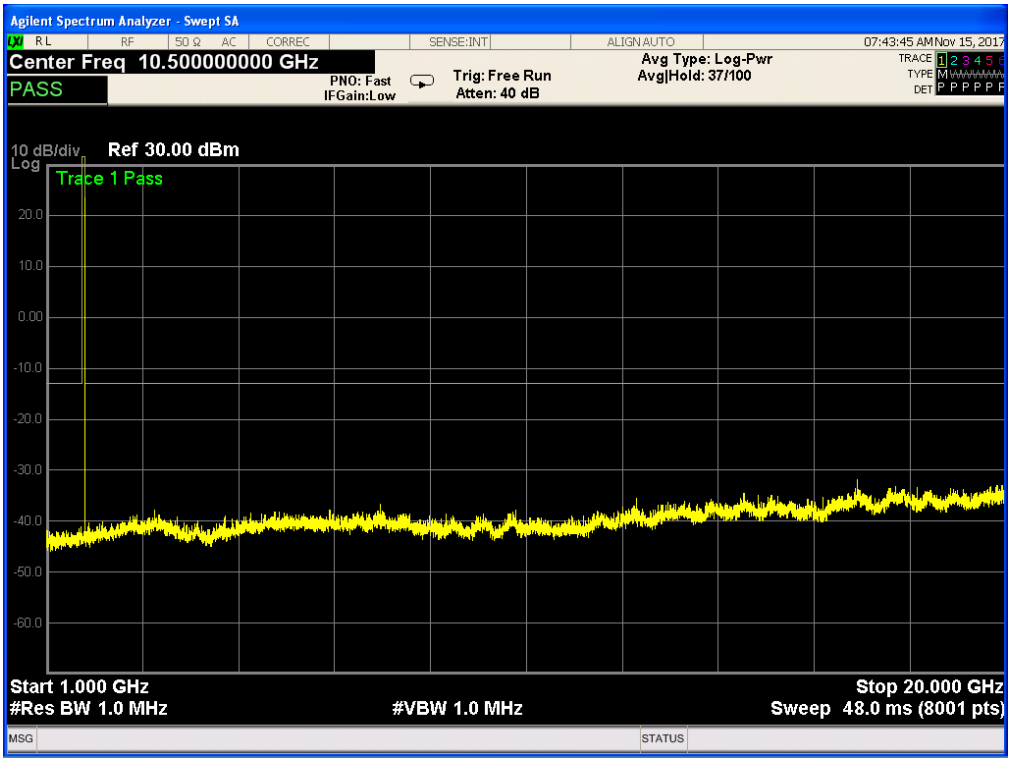
Band 4,UL Channel 19957,UL Frequency 1710.7,BW 1.4,NO. RB 6,RB POS. Low,16QAM



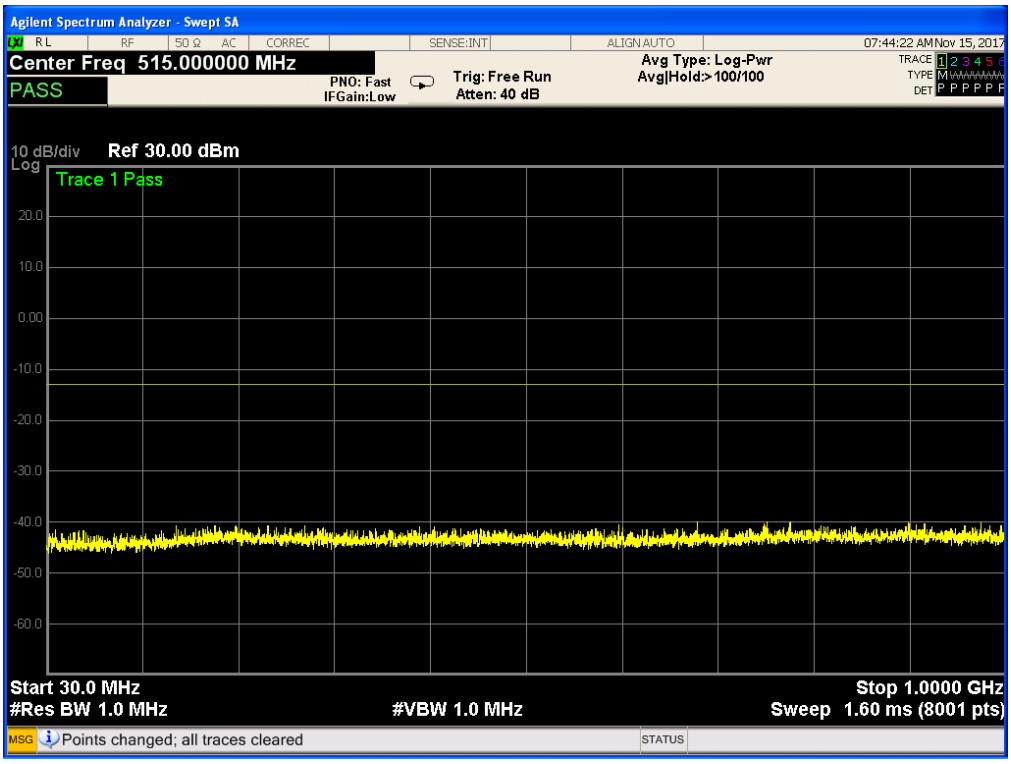
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



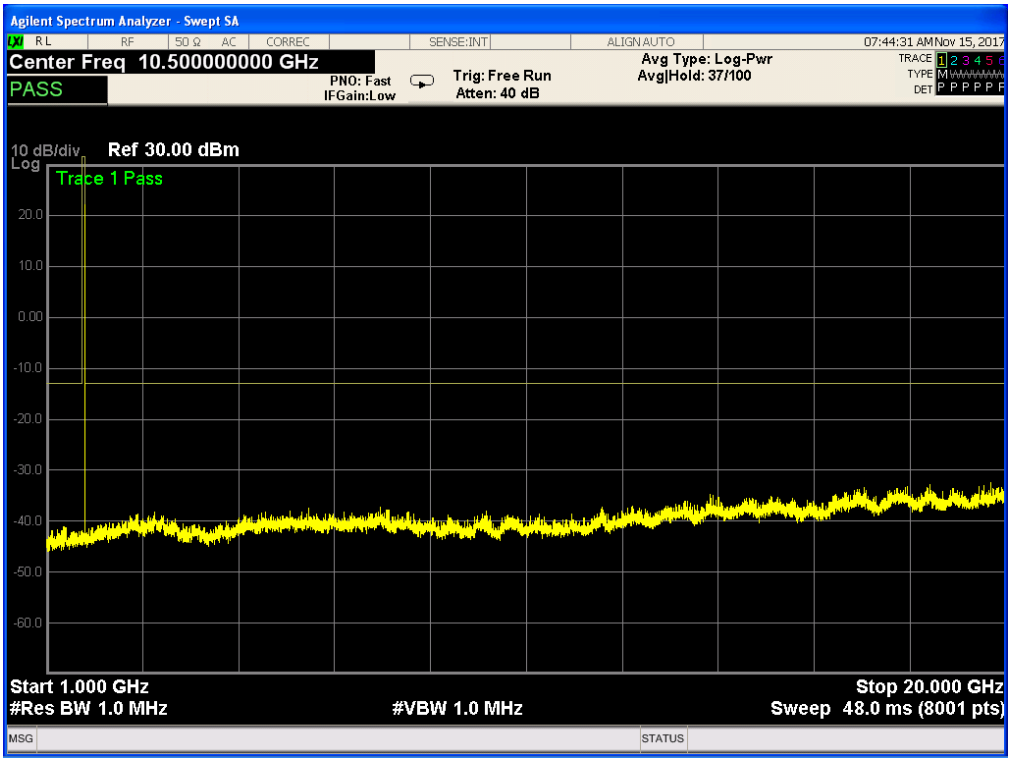
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,QPSK



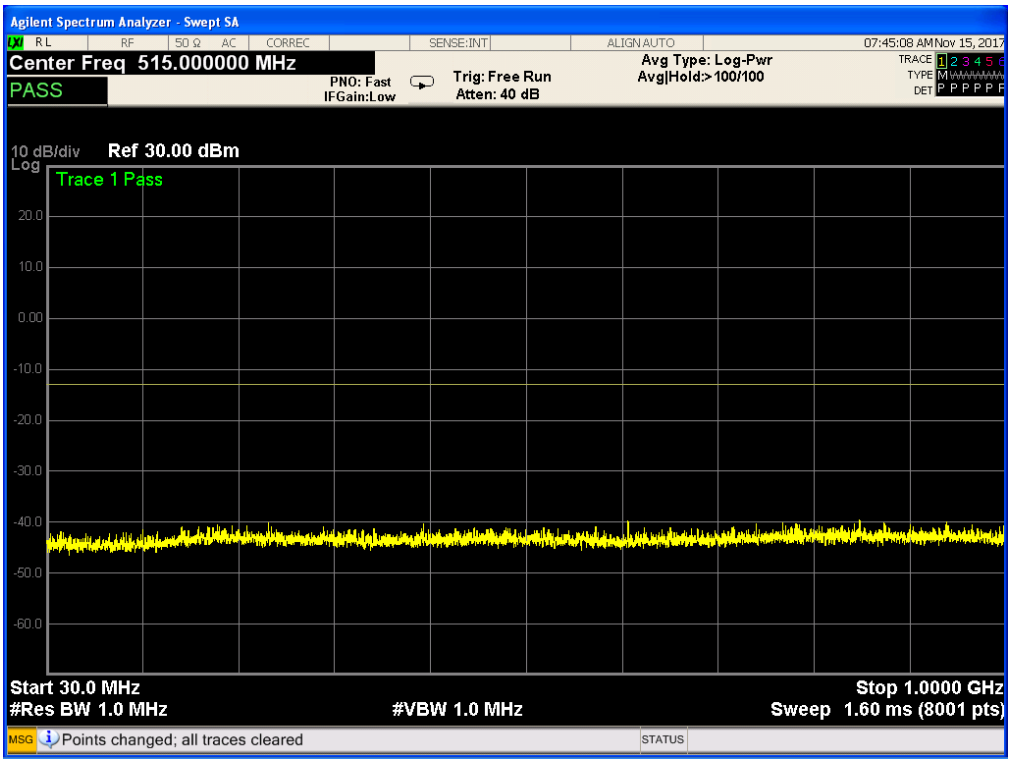
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,16QAM



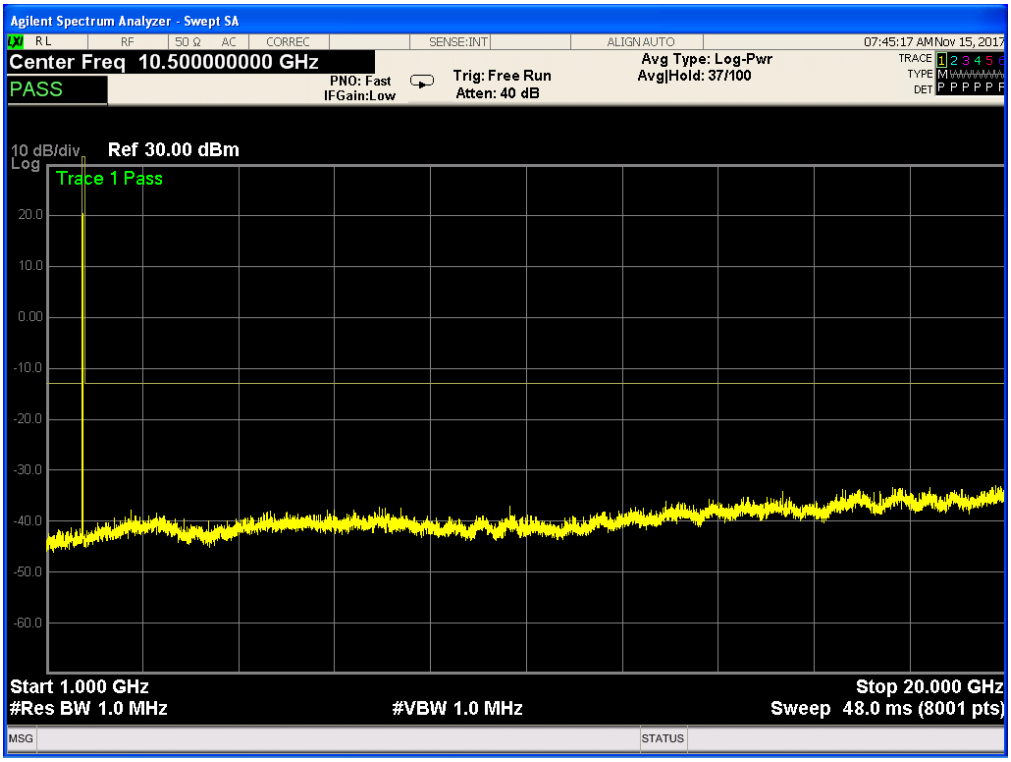
Band 4,UL Channel 20393,UL Frequency 1754.3,BW 1.4,NO. RB 6,RB POS. Low,16QAM



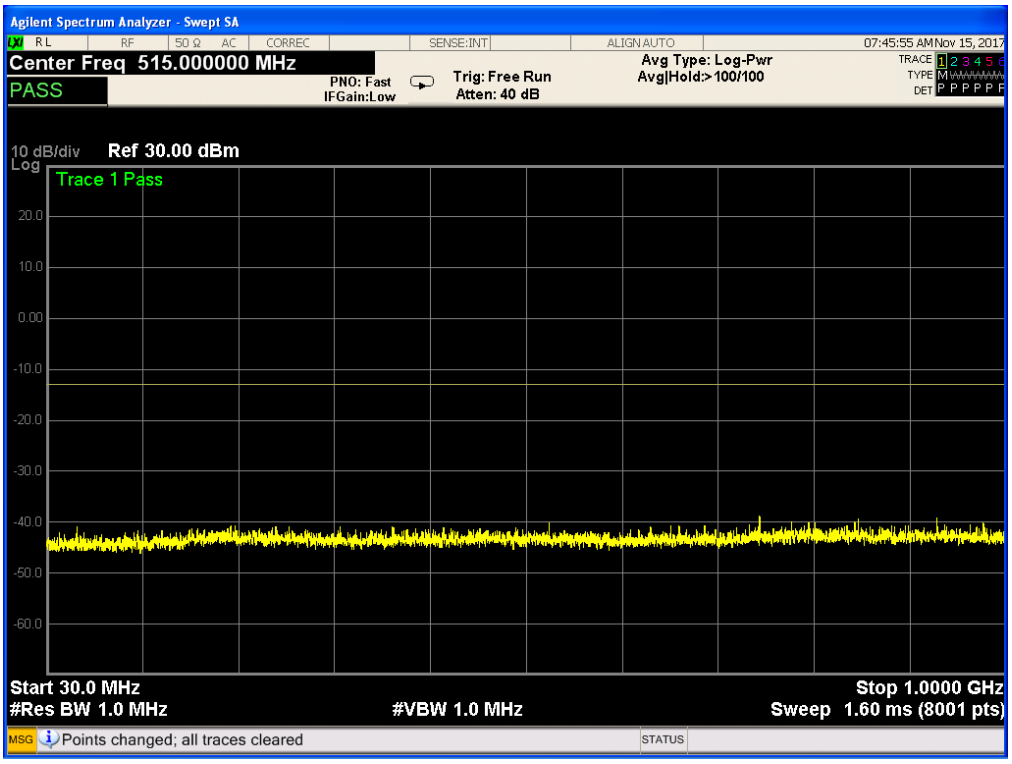
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



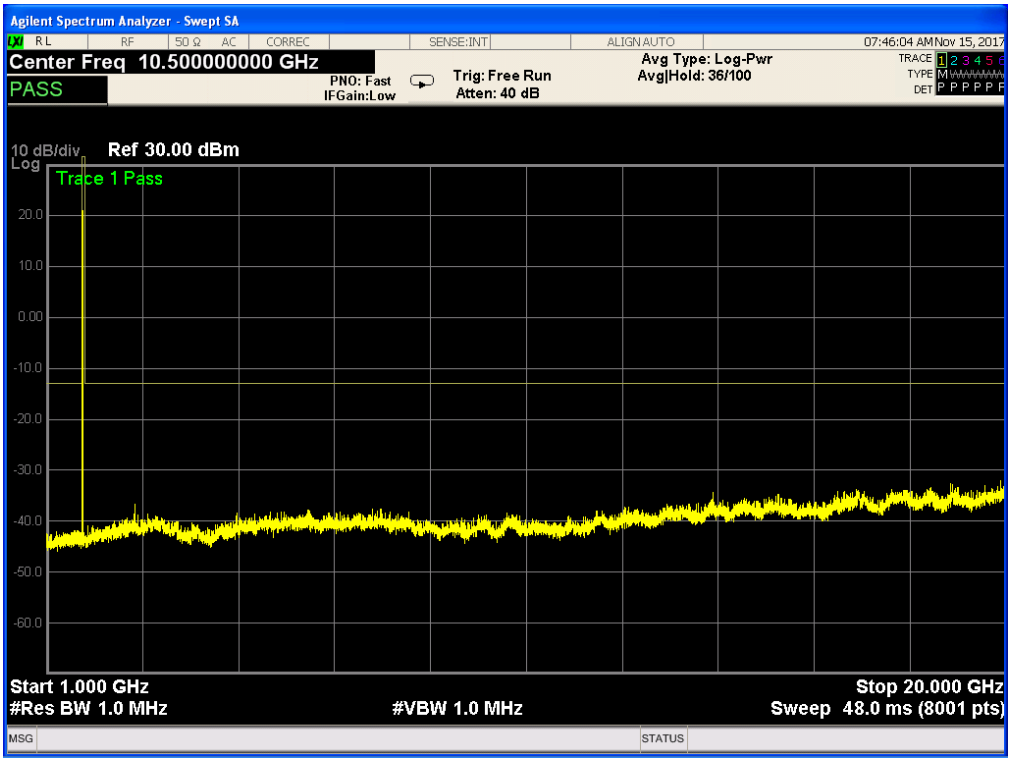
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



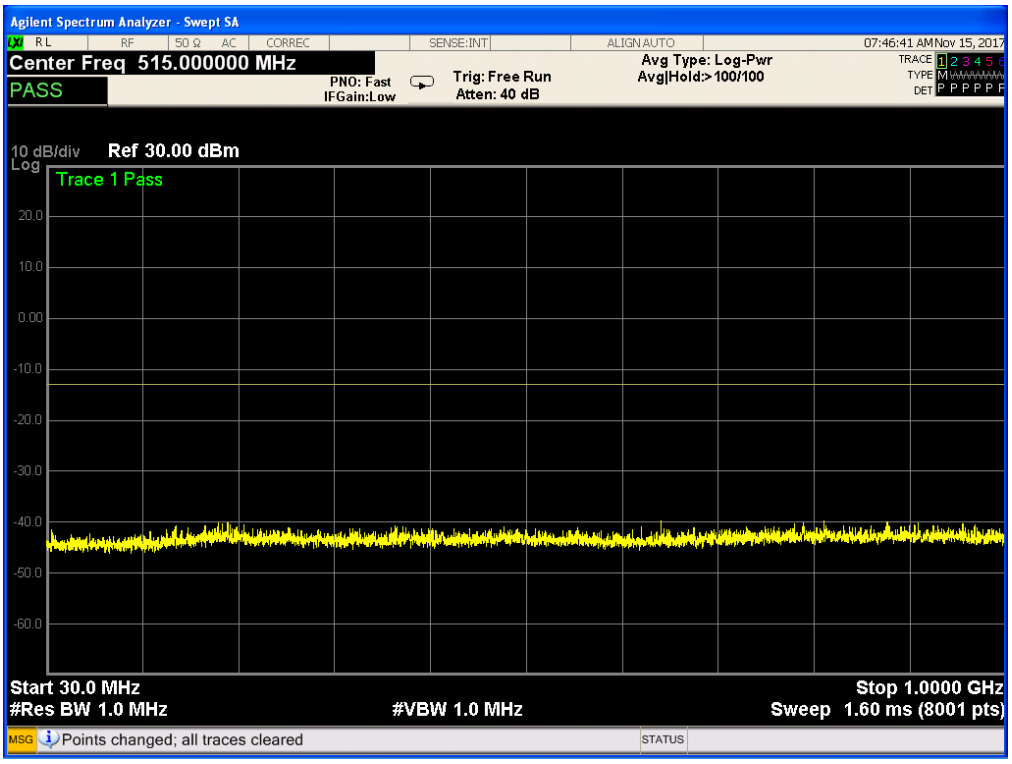
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



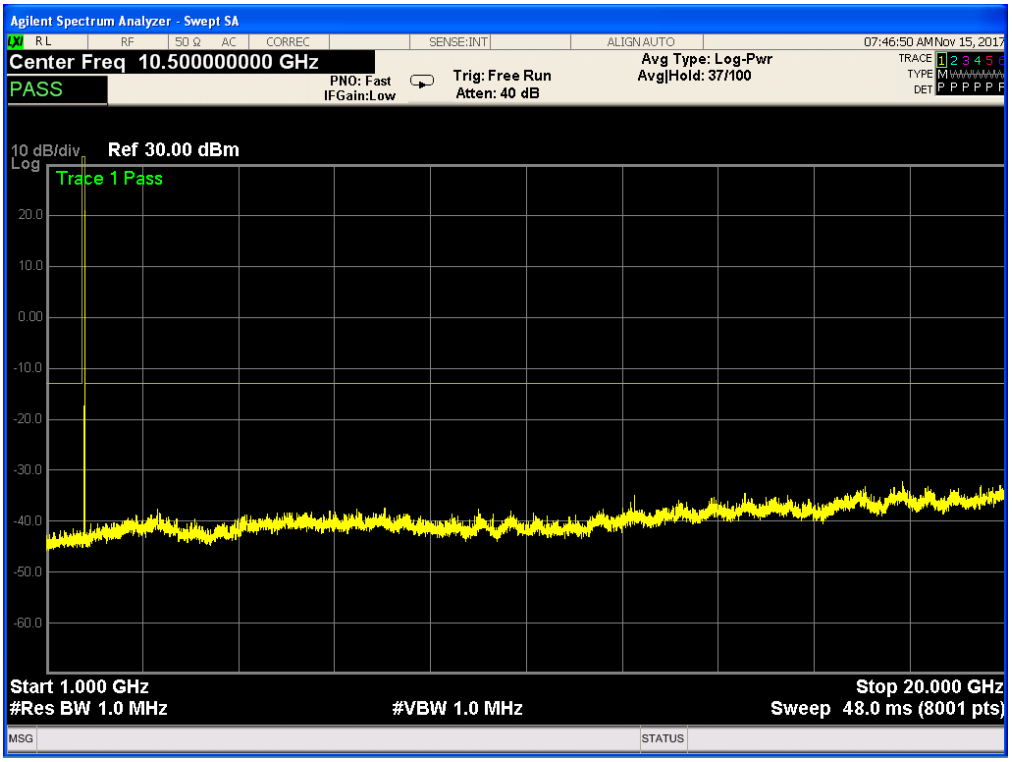
Band 4,UL Channel 19965,UL Frequency 1711.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



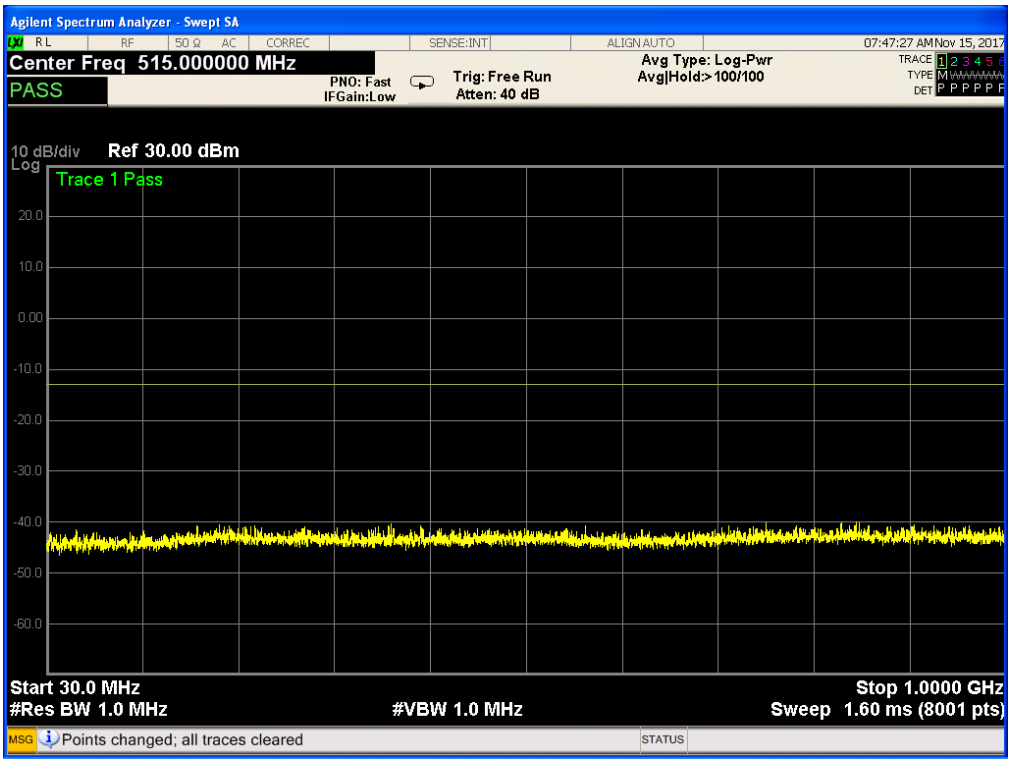
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



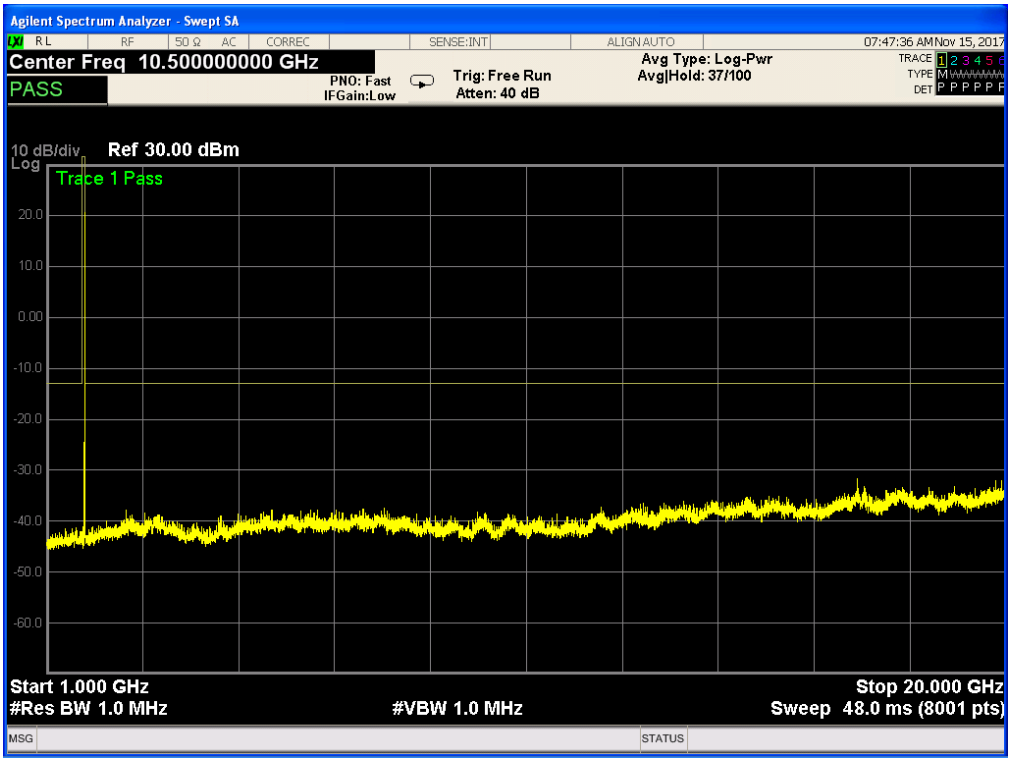
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,QPSK



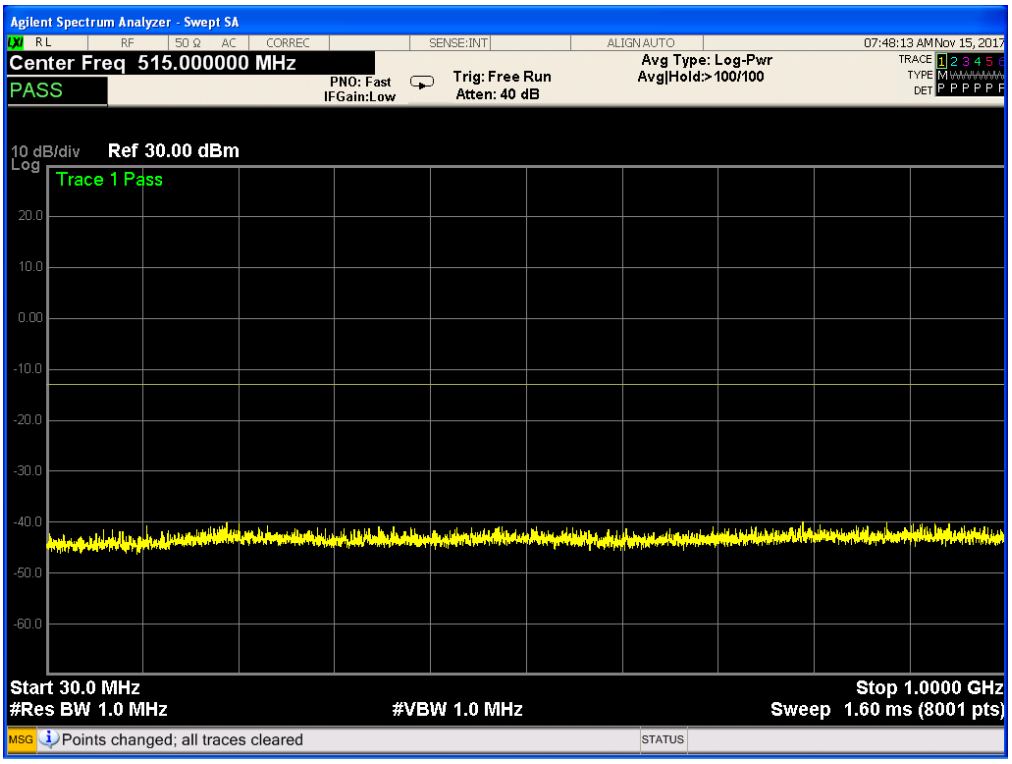
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



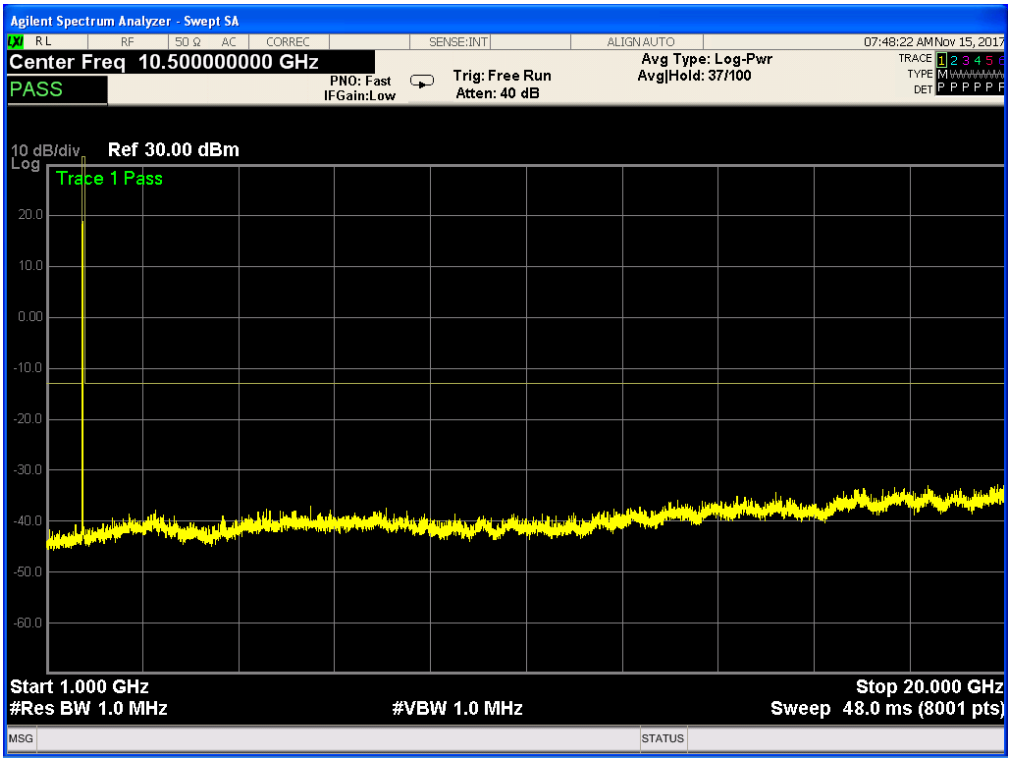
Band 4,UL Channel 20385,UL Frequency 1753.5,BW 3.0,NO. RB 15,RB POS. Low,16QAM



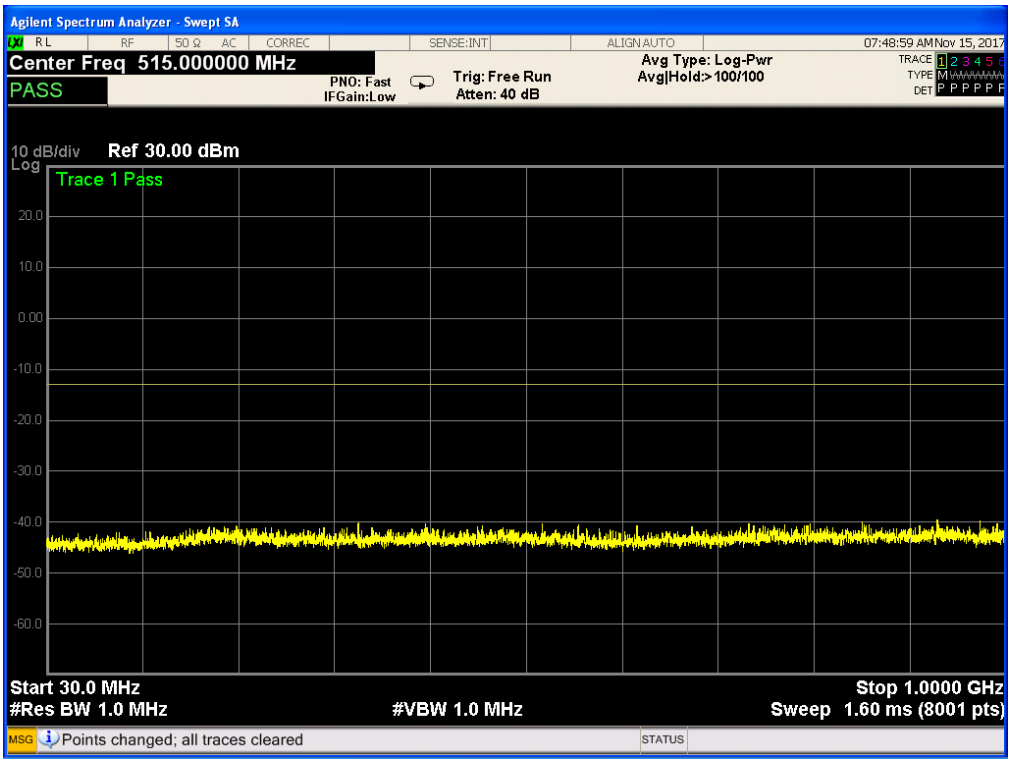
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



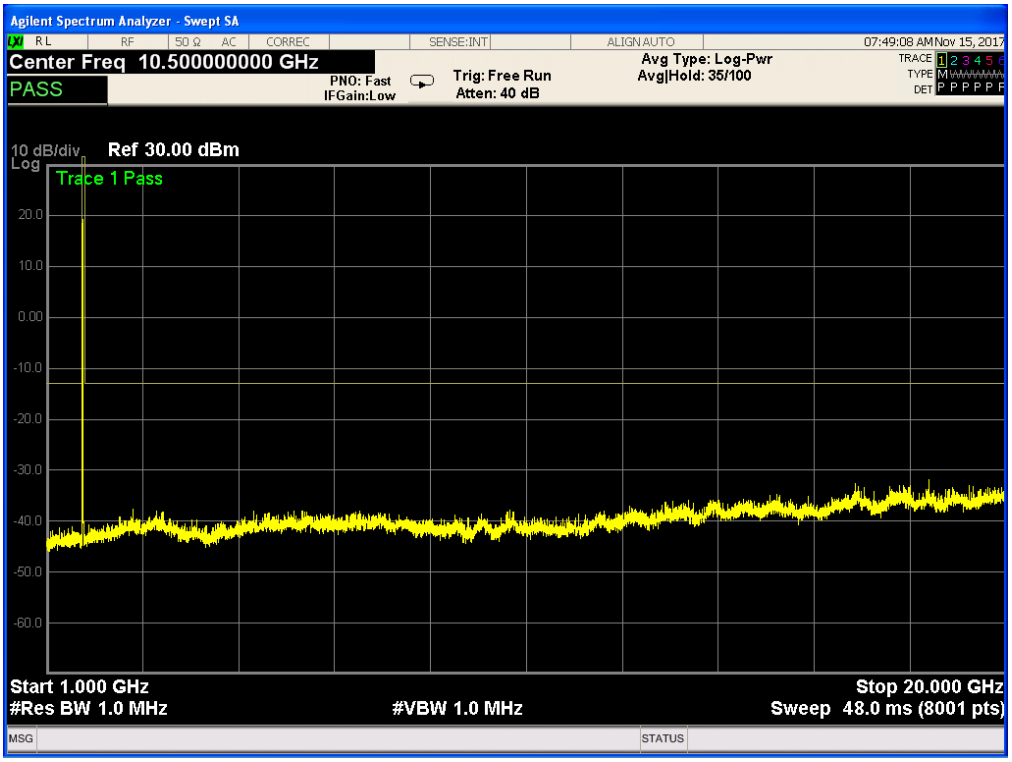
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



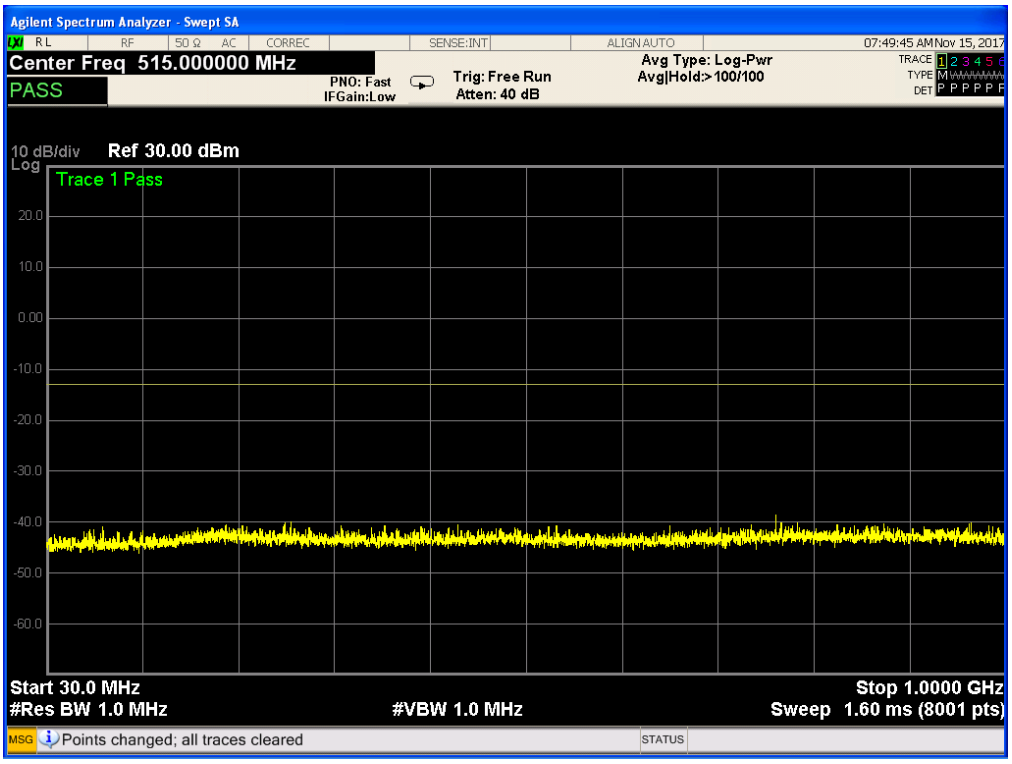
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



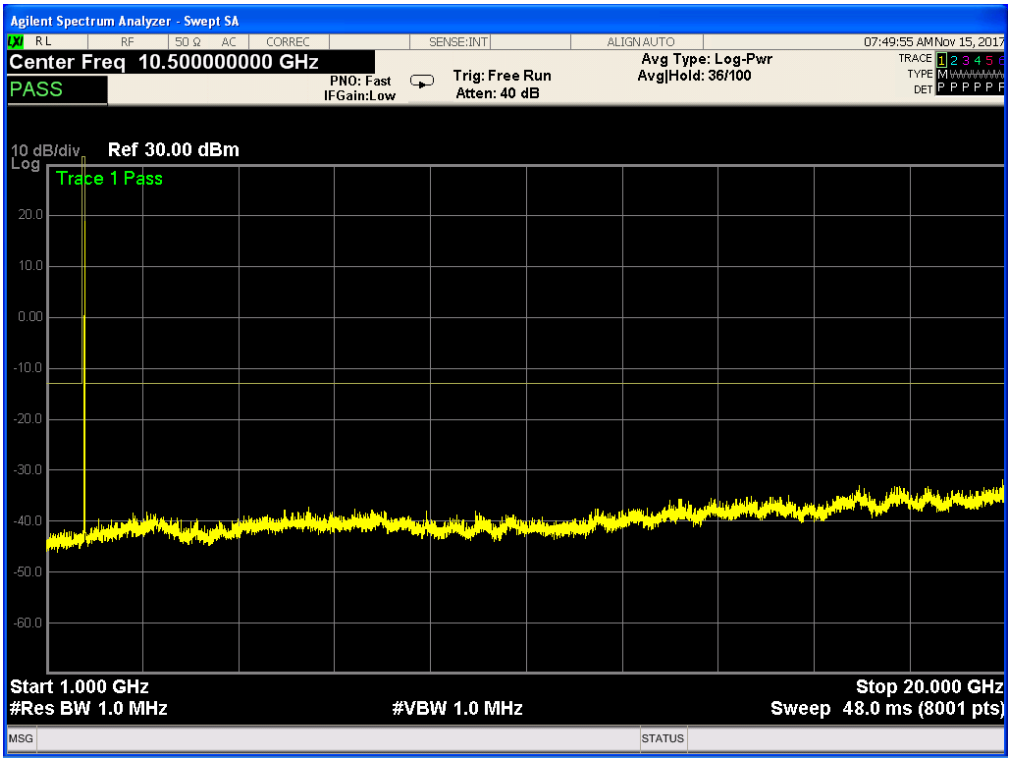
Band 4,UL Channel 19975,UL Frequency 1712.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



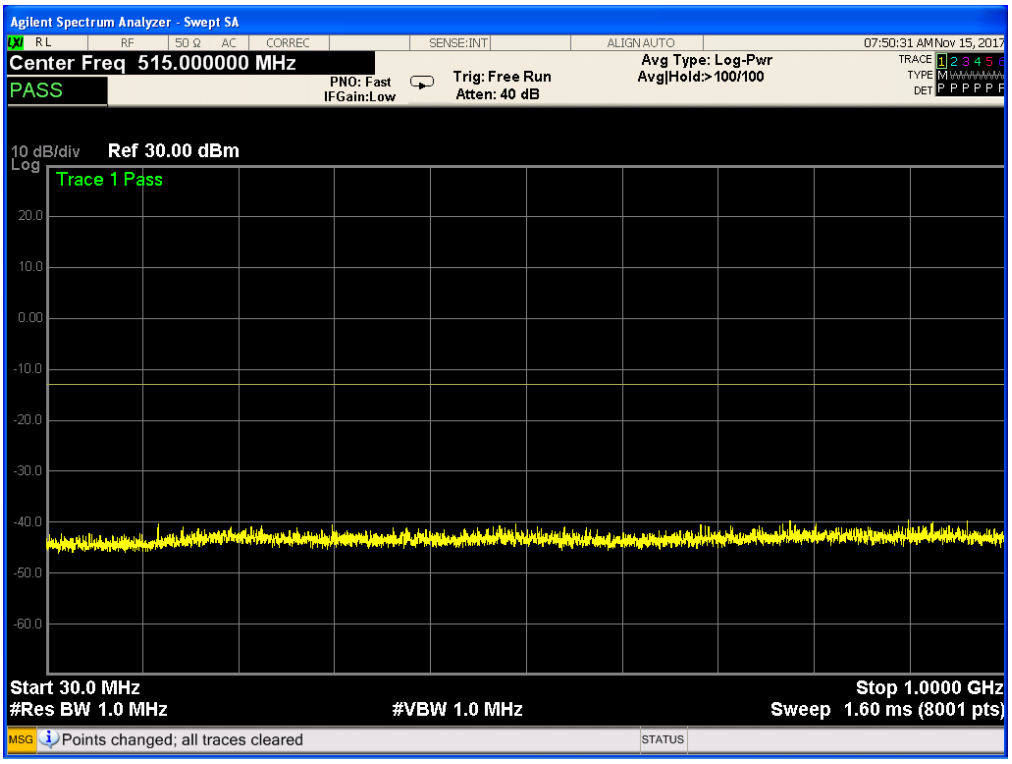
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



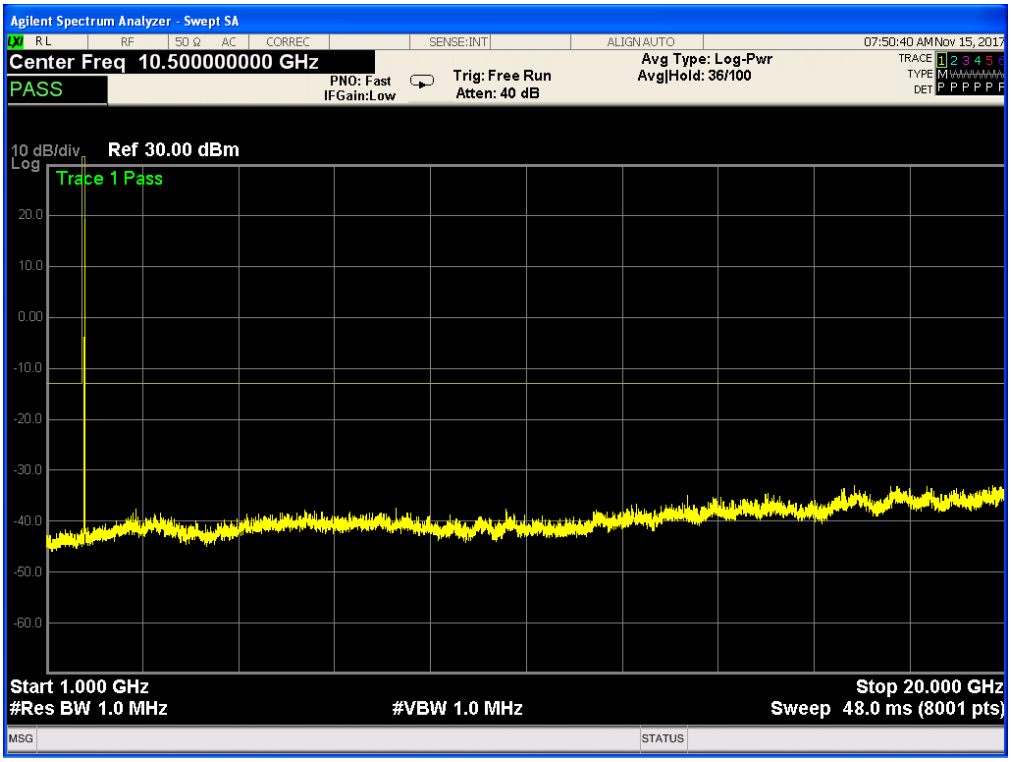
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,QPSK



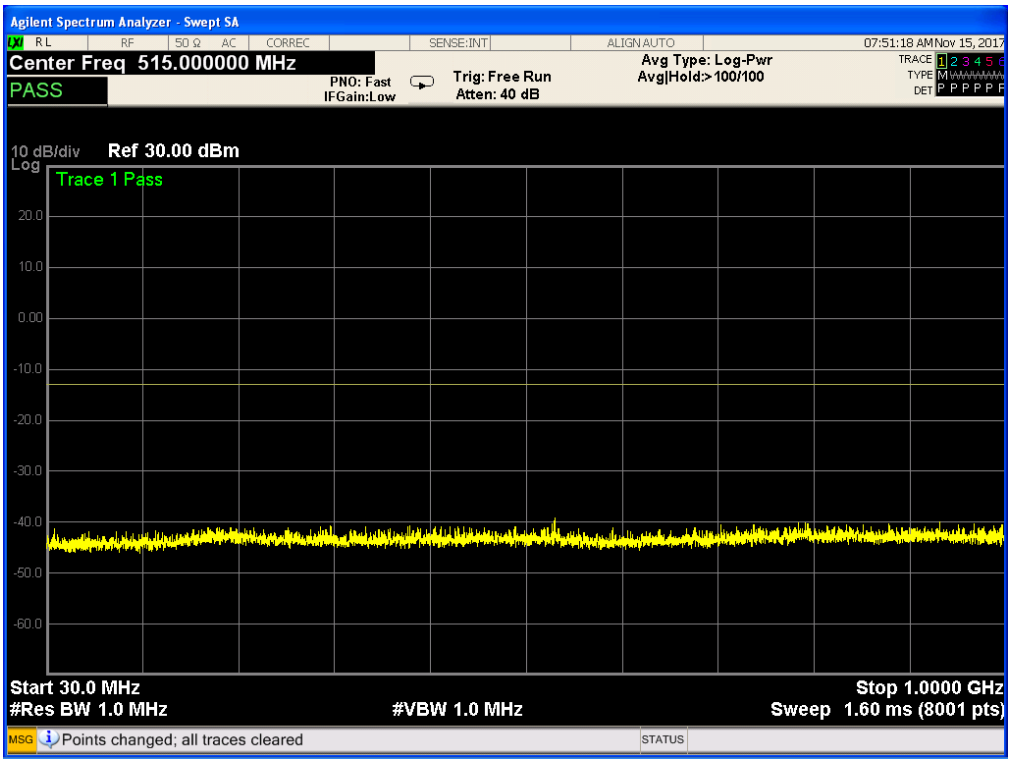
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



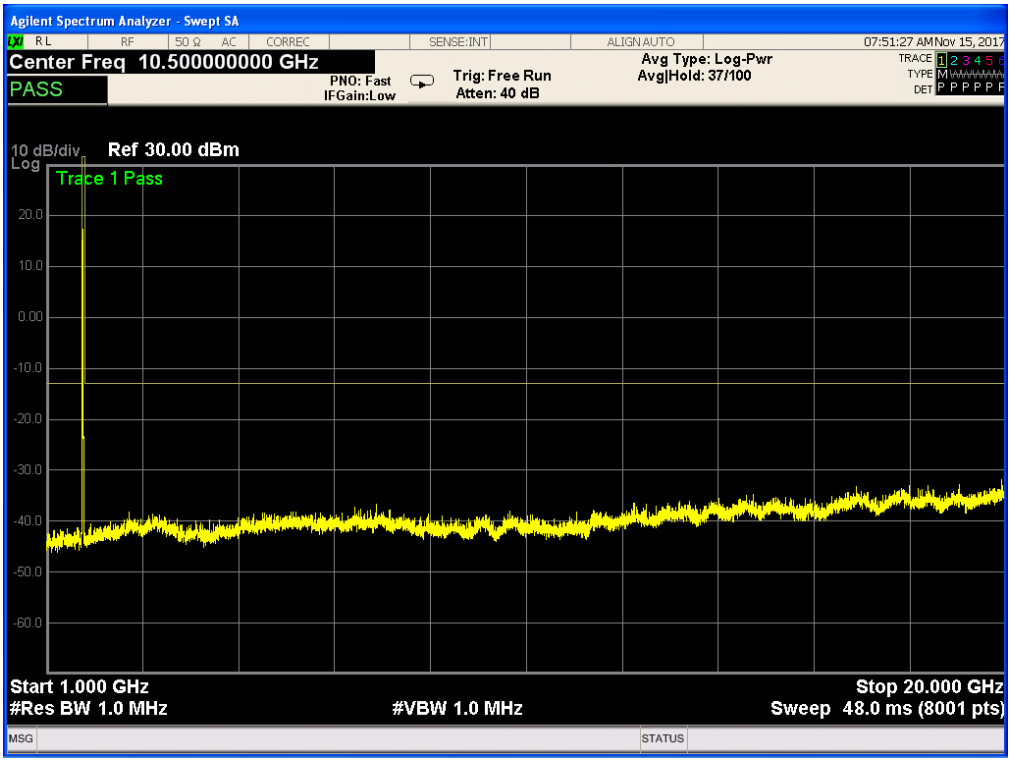
Band 4,UL Channel 20375,UL Frequency 1752.5,BW 5.0,NO. RB 25,RB POS. Low,16QAM



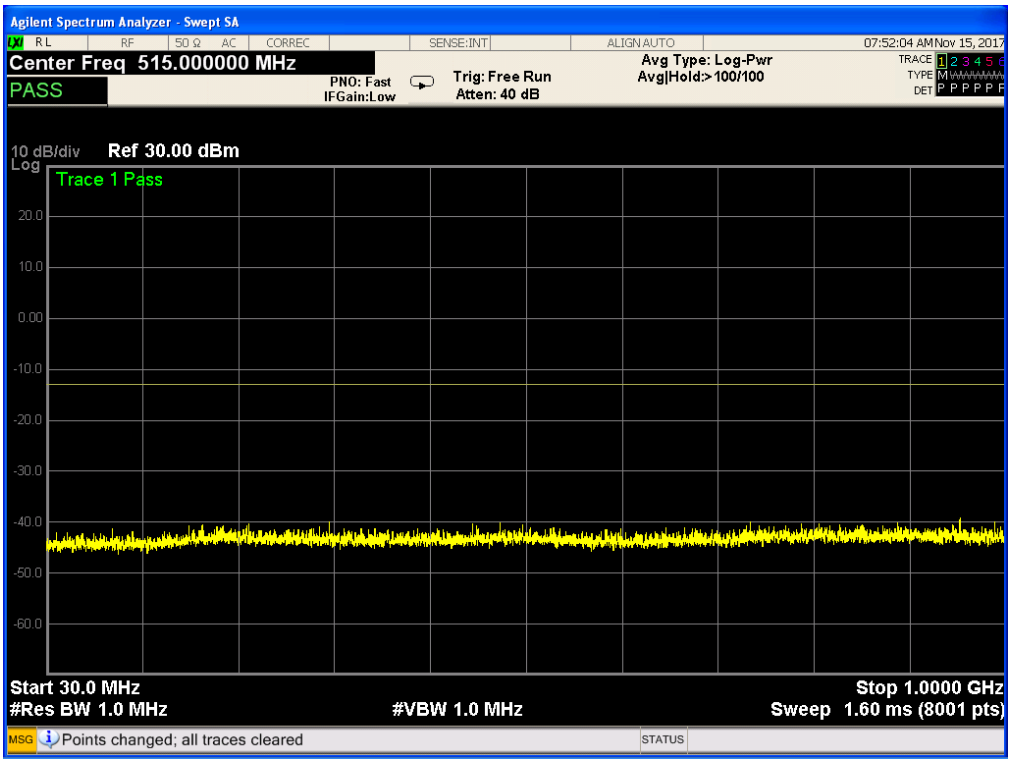
Band 4,UL Channel 20000,UL Frequency 1715.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



Band 4,UL Channel 20000,UL Frequency 1715.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



Band 4,UL Channel 20000,UL Frequency 1715.0,BW 10.0,NO. RB 50,RB POS. Low,16QAM



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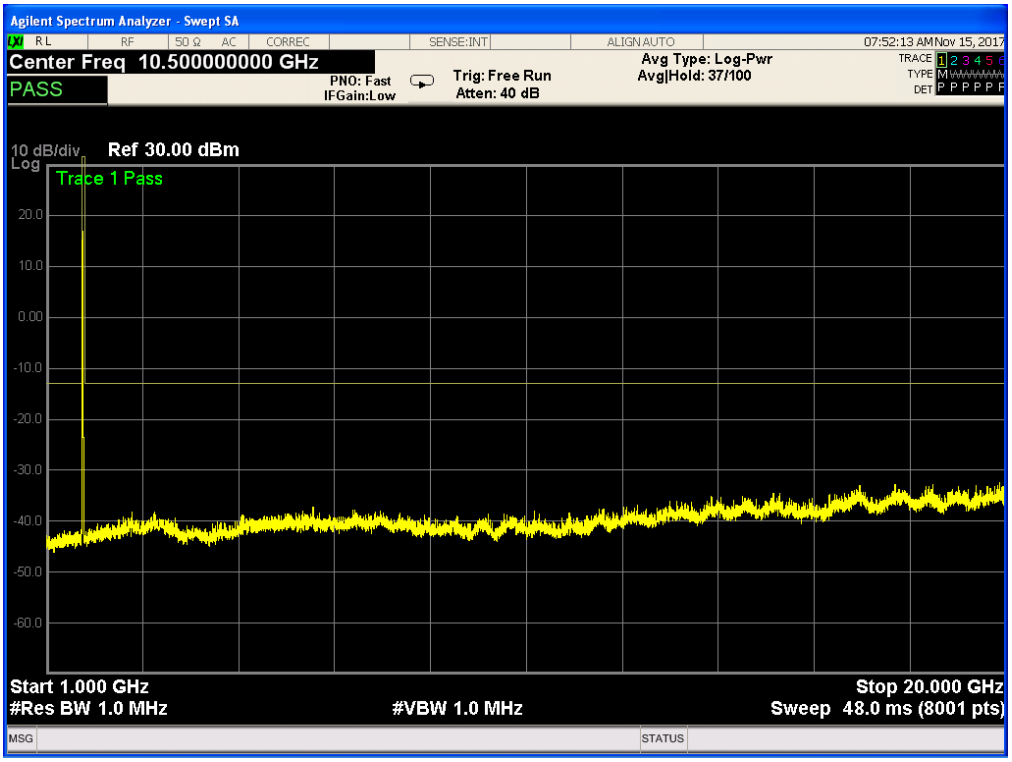
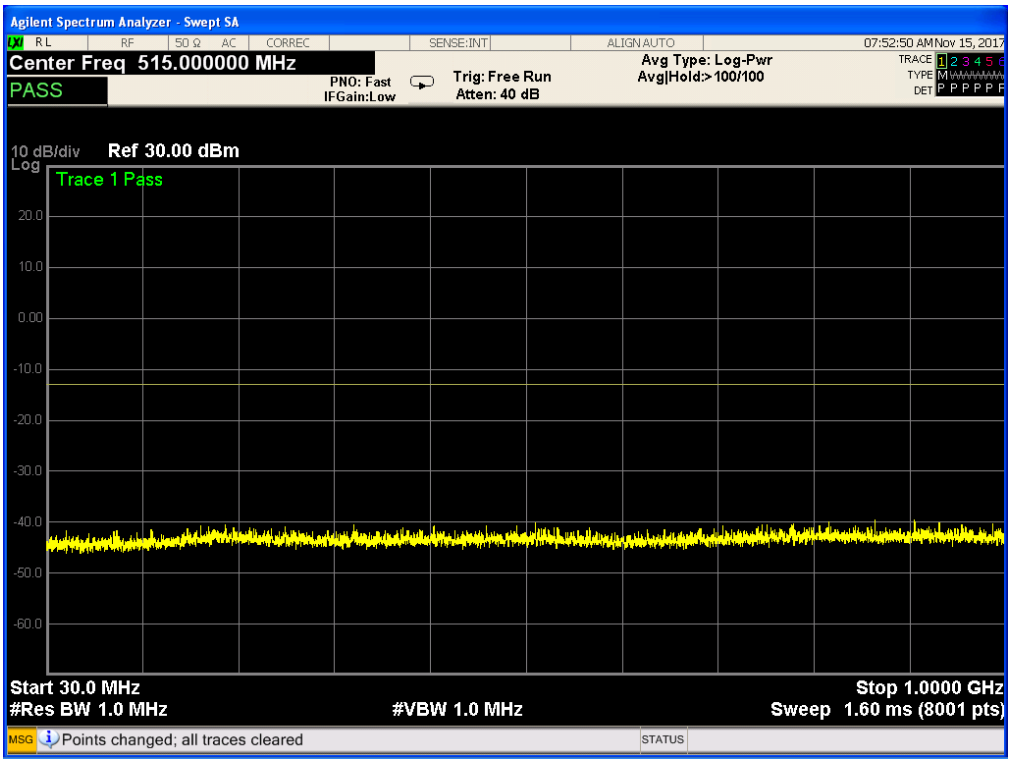
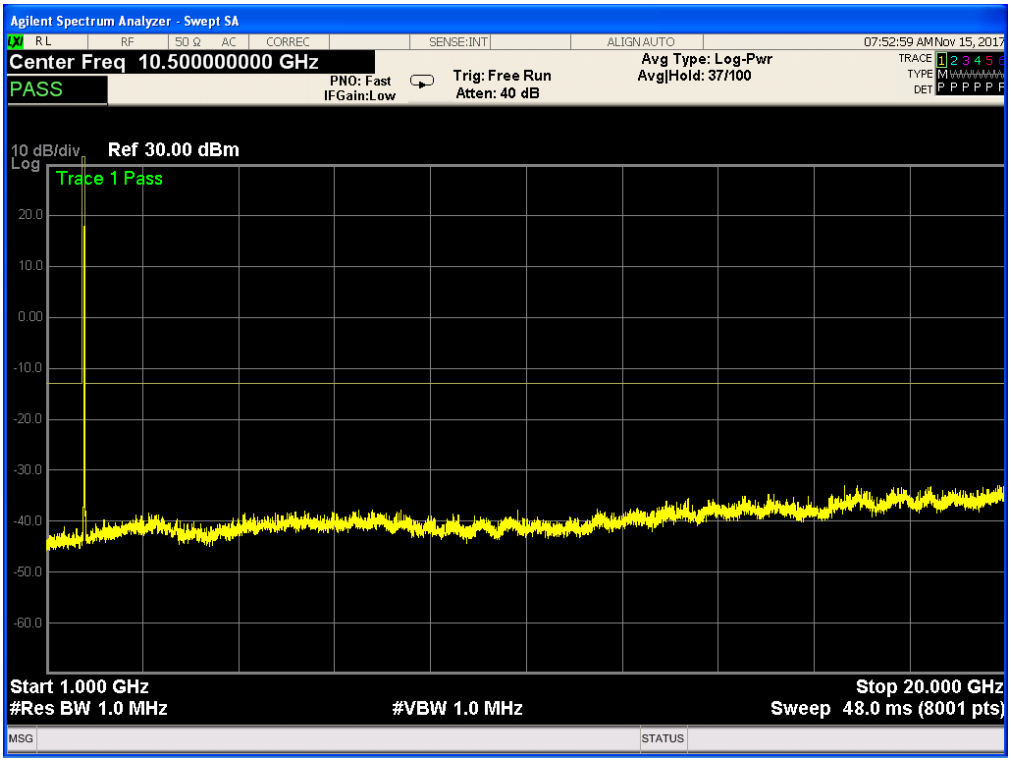


Band 4,UL Channel 20350,UL Frequency 1750.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK



Band 4,UL Channel 20350,UL Frequency 1750.0,BW 10.0,NO. RB 50,RB POS. Low,QPSK