

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

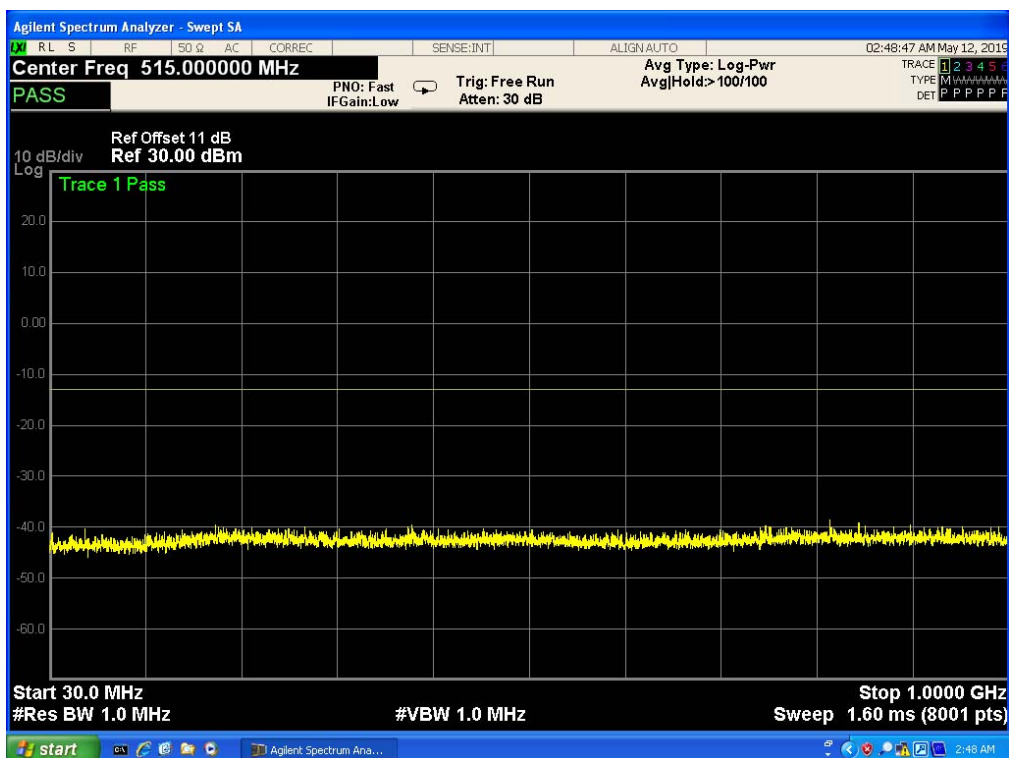
LTE Band 2
LTE Band 4
LTE Band 5
LTE Band 12
LTE Band 17
LTE Band 25

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

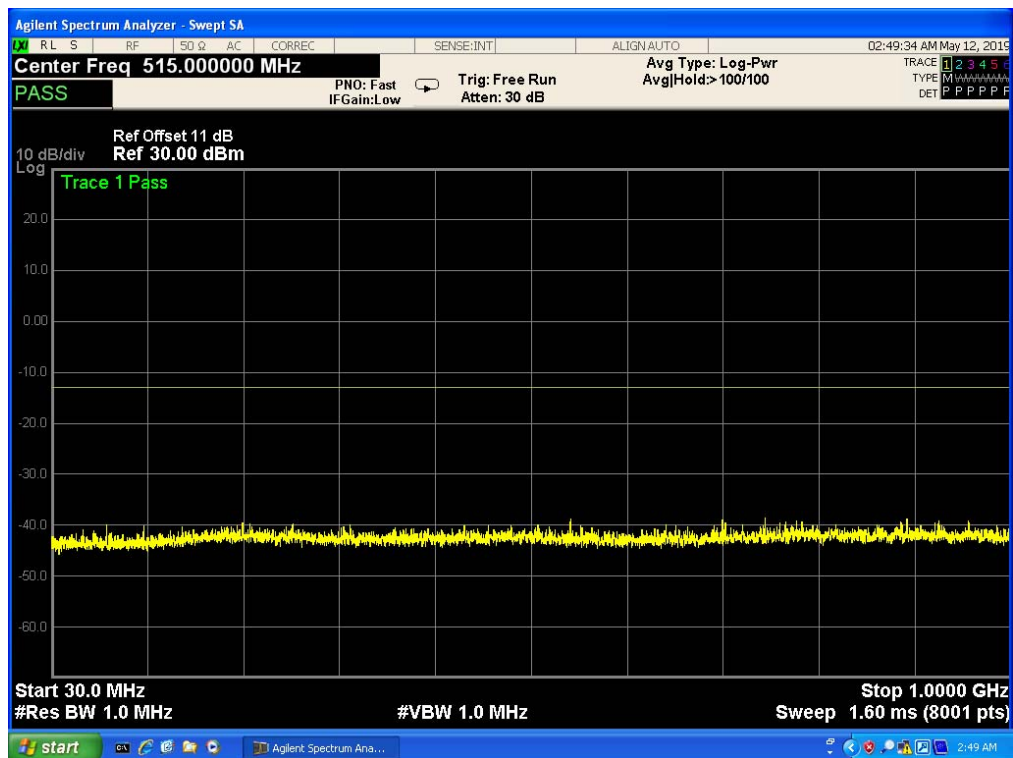
Band 2, UL Channel 18607, UL Frequency 1850.7, BW 1.4, NO. RB 6, RB POS. Low, QPSK



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



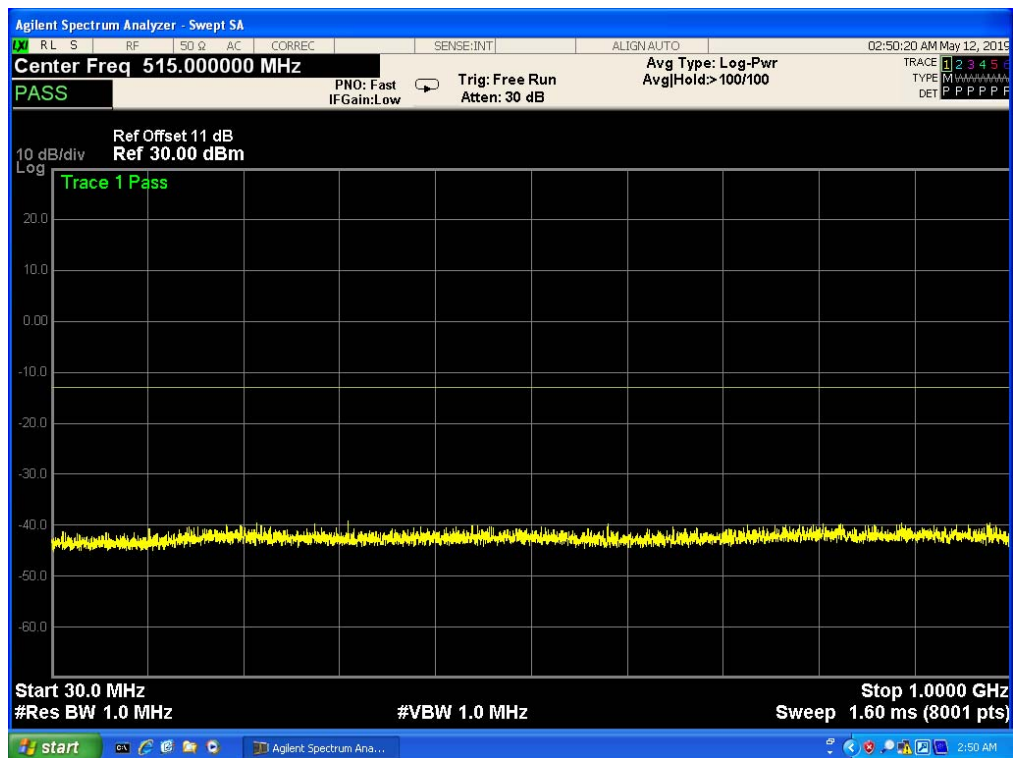
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Band 2, UL Channel 18607, UL Frequency 1850.7, BW 1.4, NO. RB 6, RB POS. Low, 16QAM



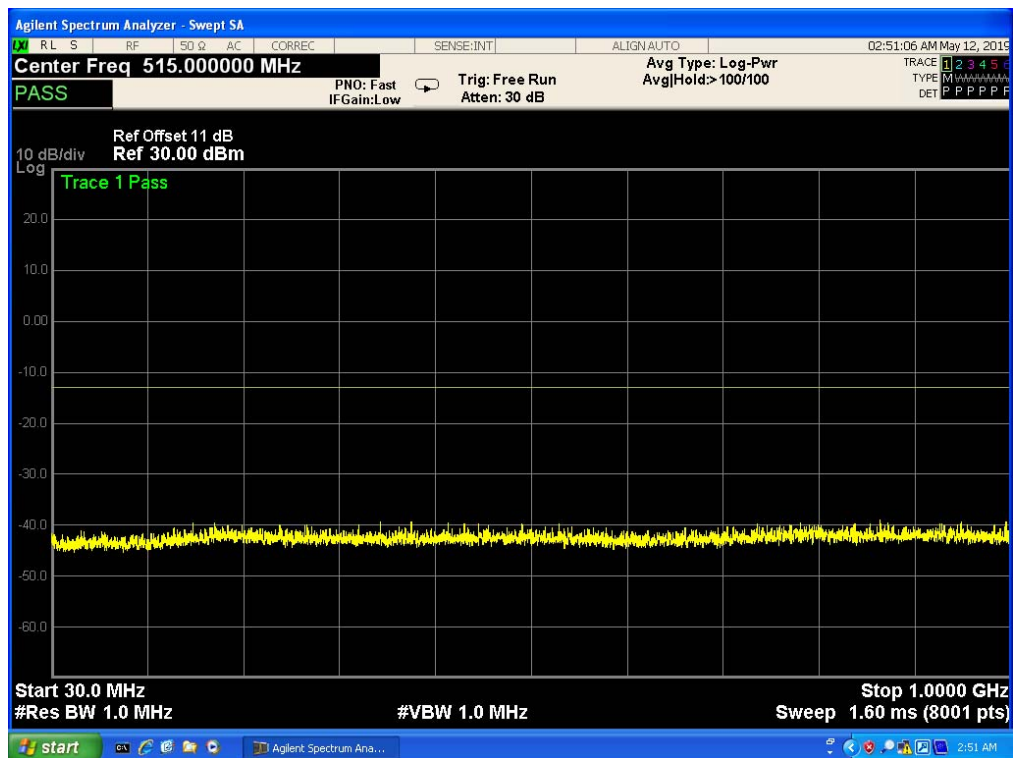
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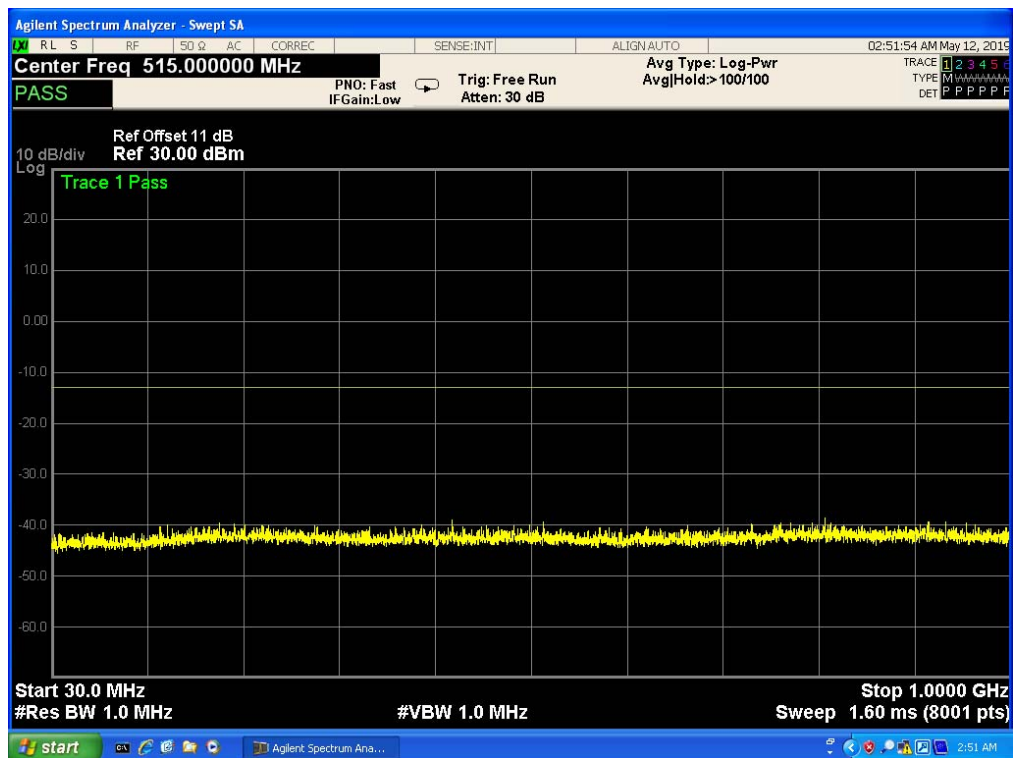
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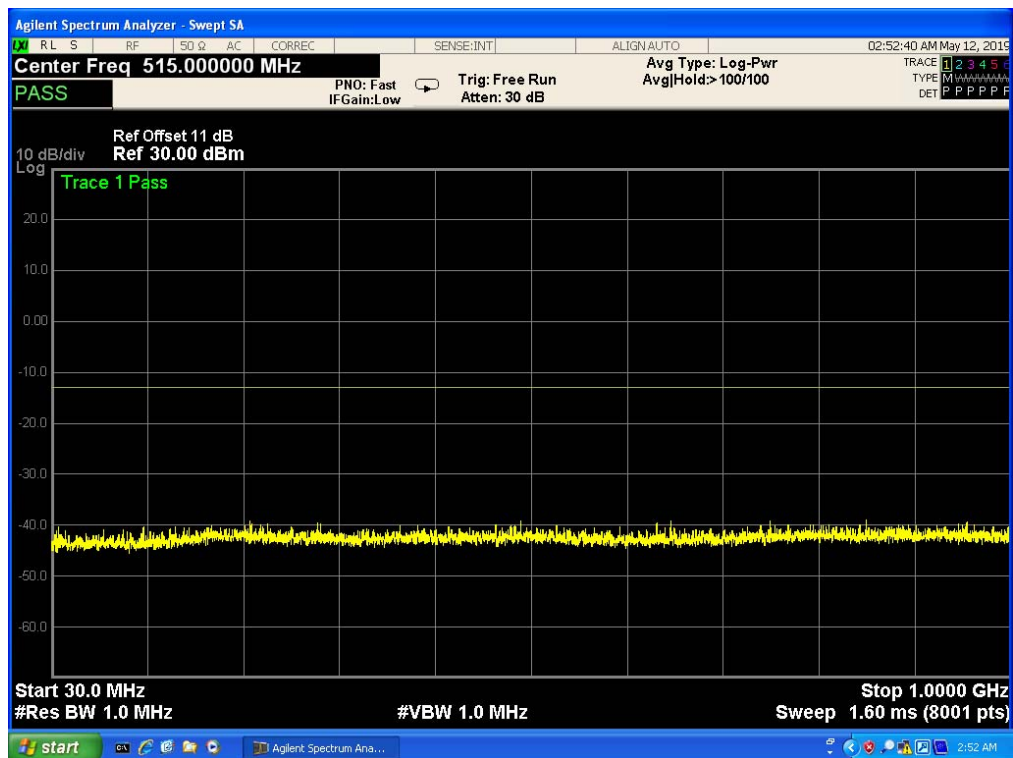
Band 2, UL Channel 18615, UL Frequency 1851.5, BW 3.0, NO. RB 15, RB POS. Low, QPSK



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



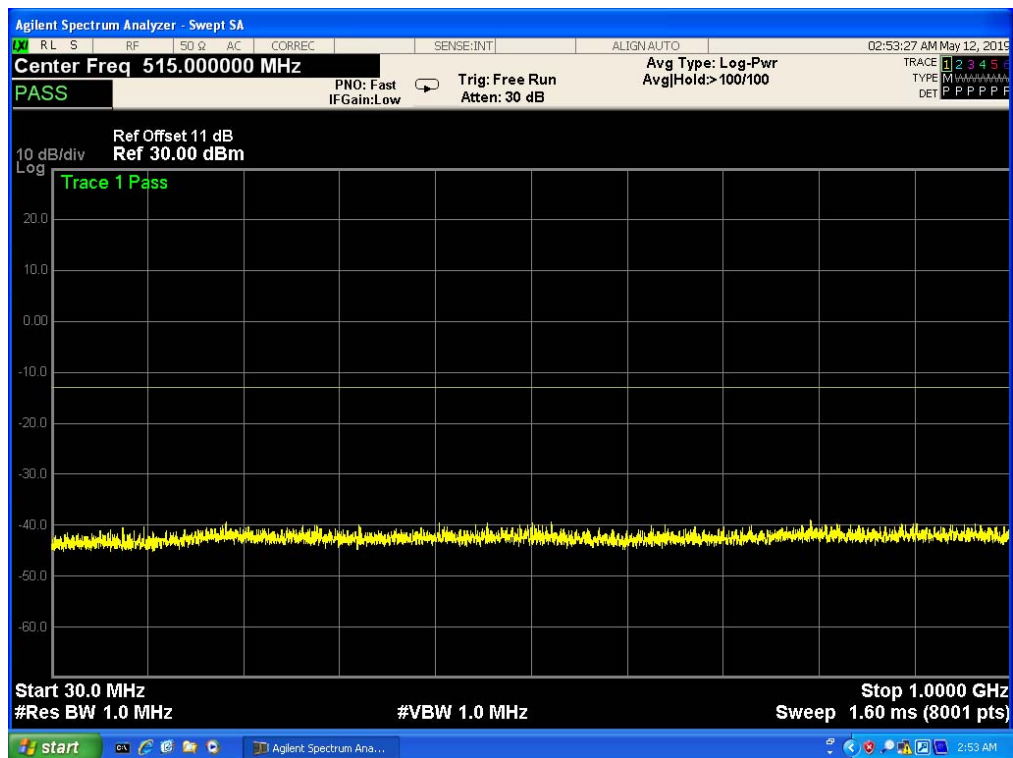
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Band 2, UL Channel 18615, UL Frequency 1851.5, BW 3.0, NO. RB 15, RB POS. Low, 16QAM



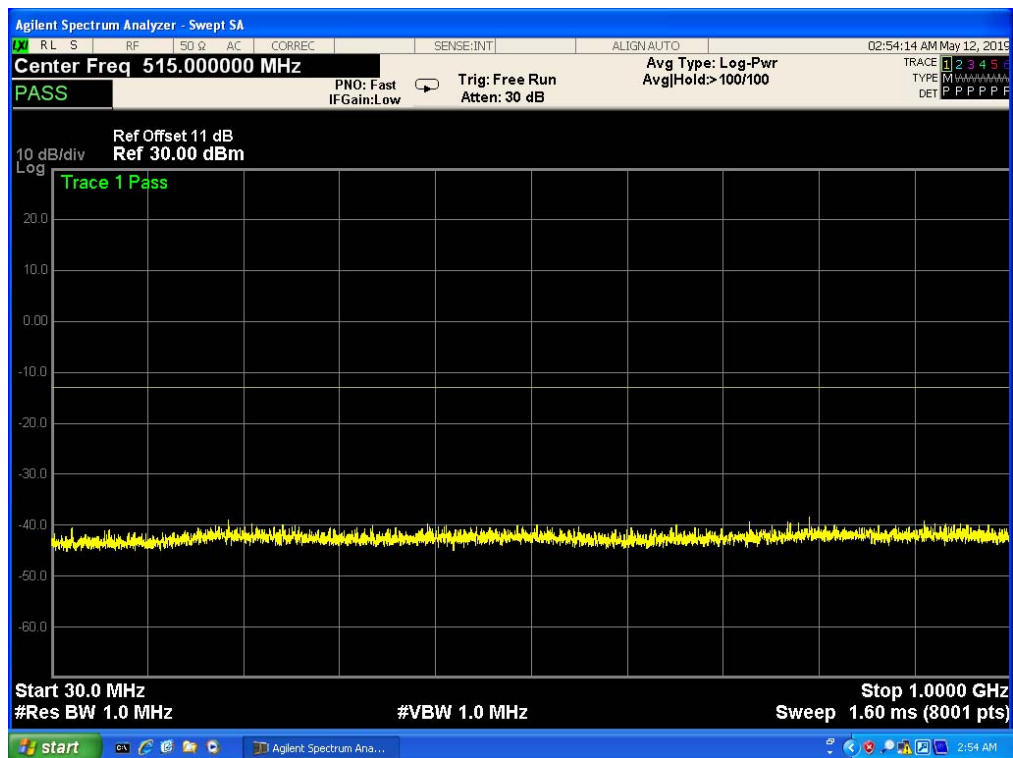
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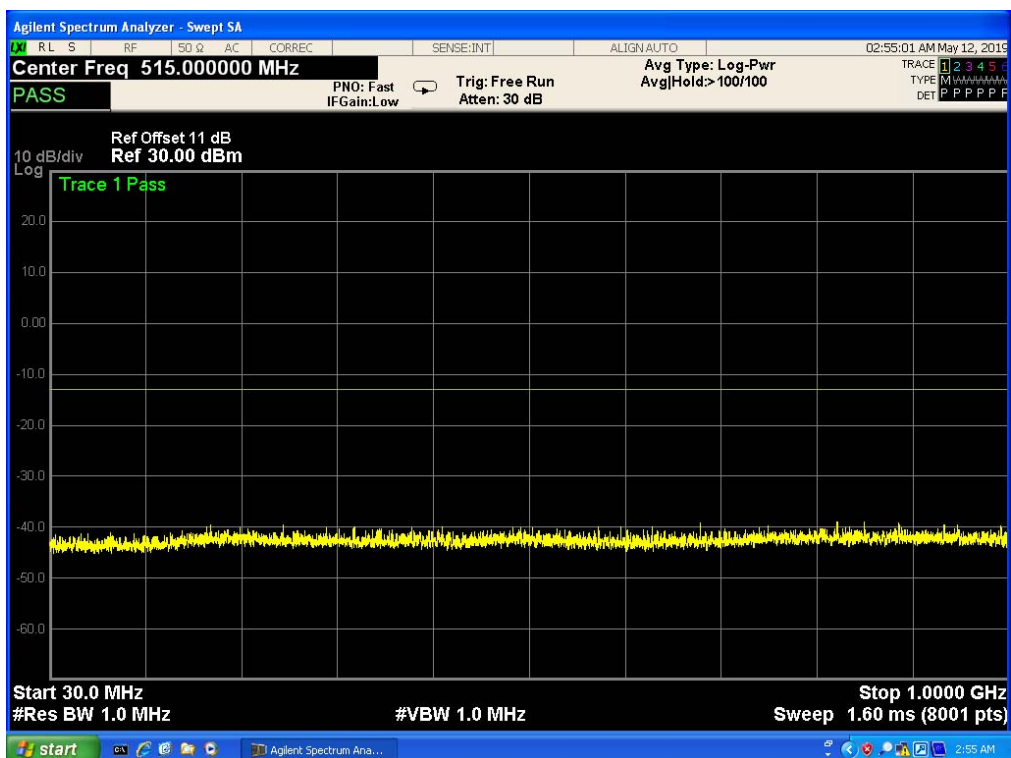
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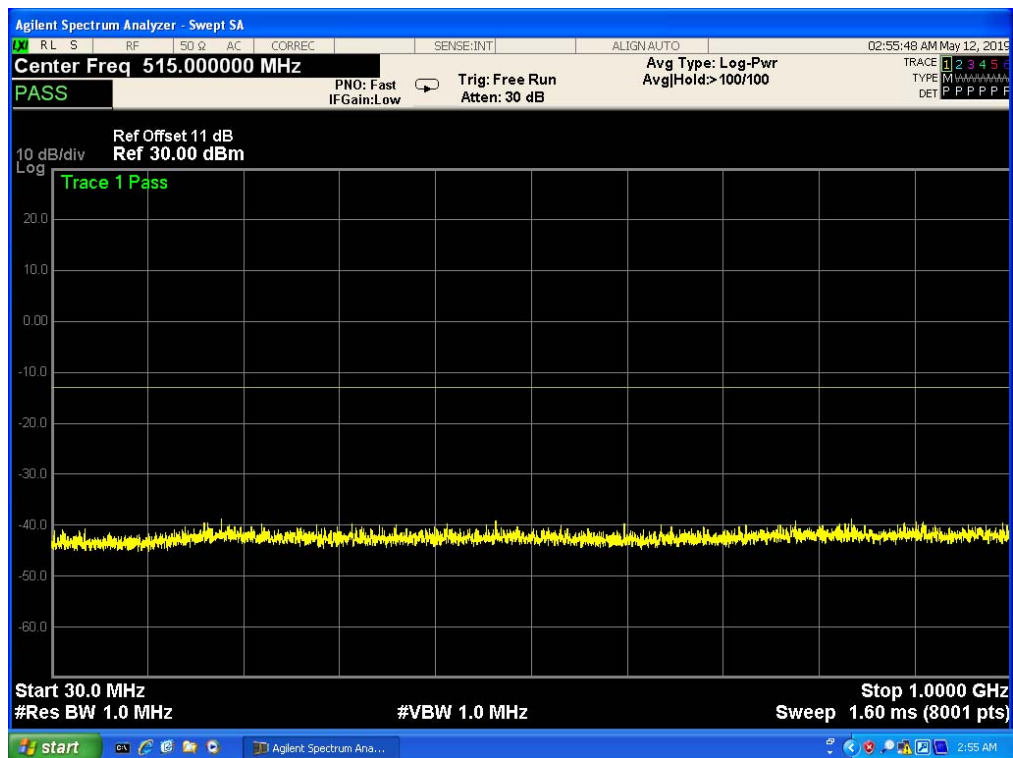
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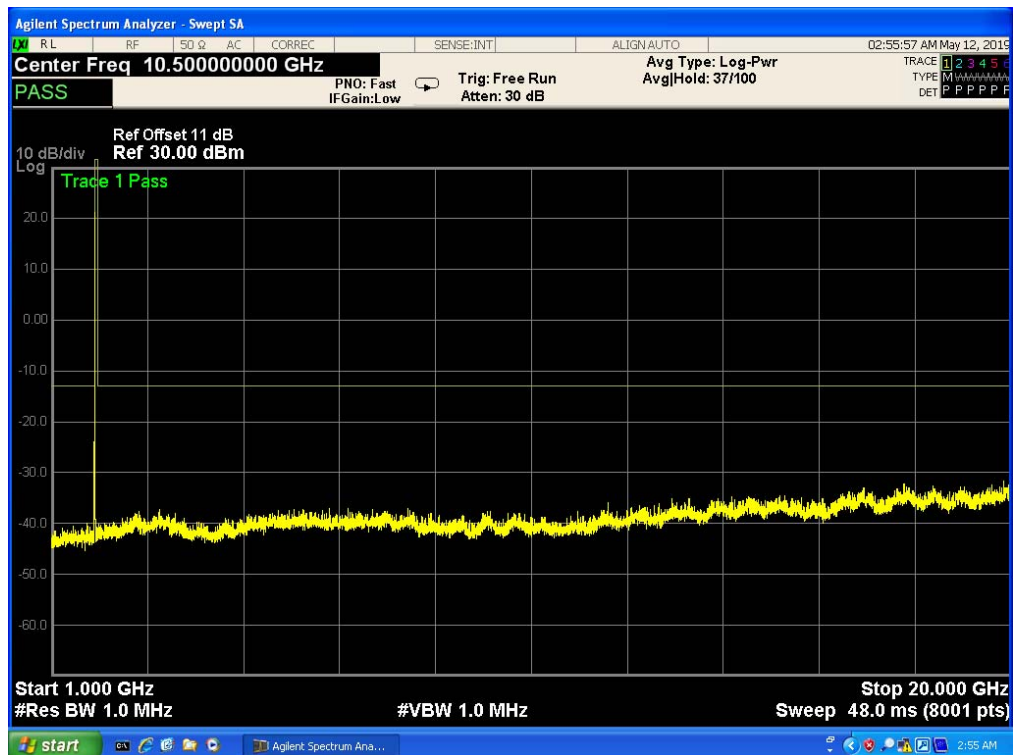
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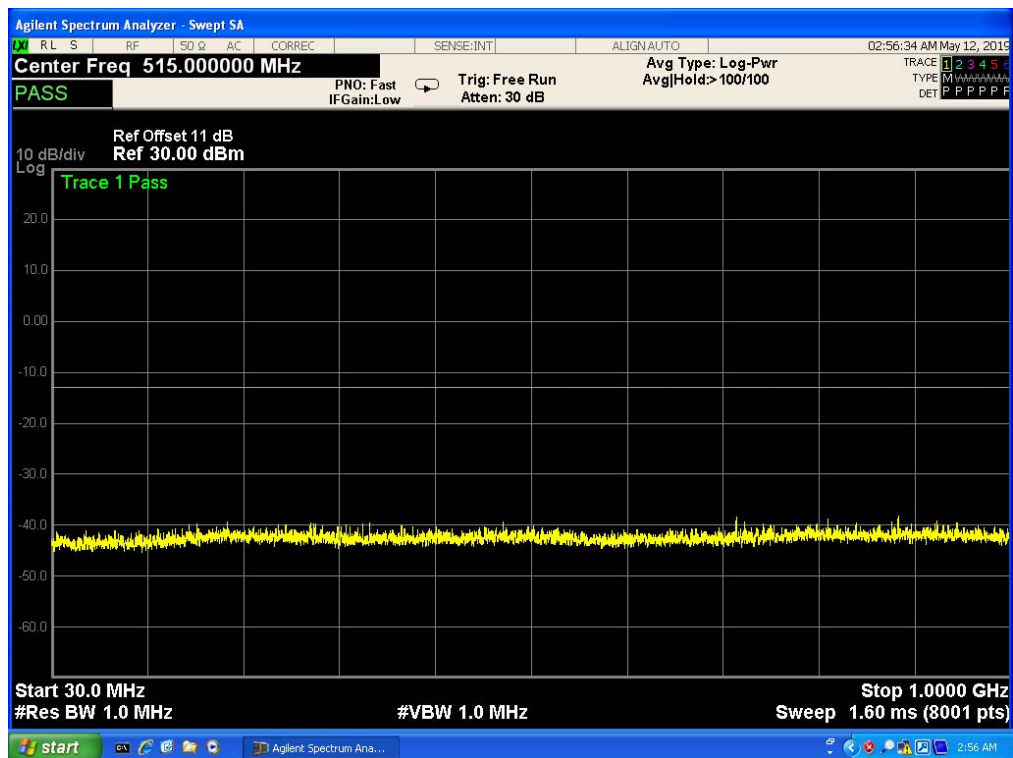
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Band 2, UL Channel 18625, UL Frequency 1852.5, BW 5.0, NO. RB 25, RB POS. Low, 16QAM



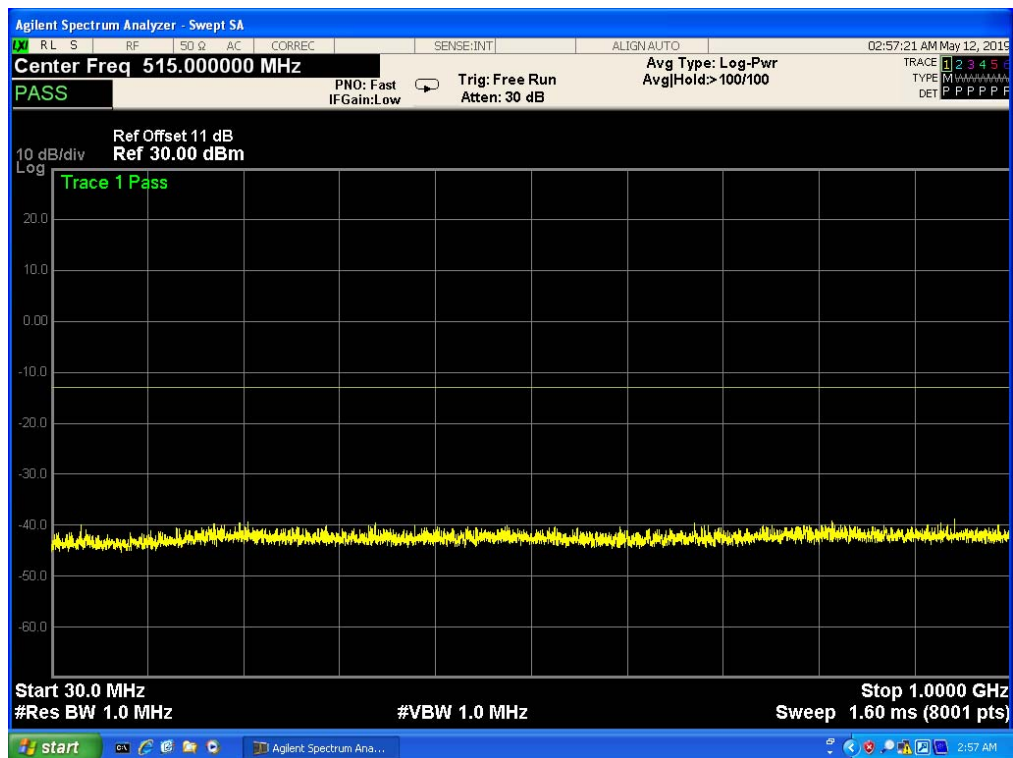
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Band 2, UL Channel 19175, UL Frequency 1907.5, BW 5.0, NO. RB 25, RB POS. Low, QPSK



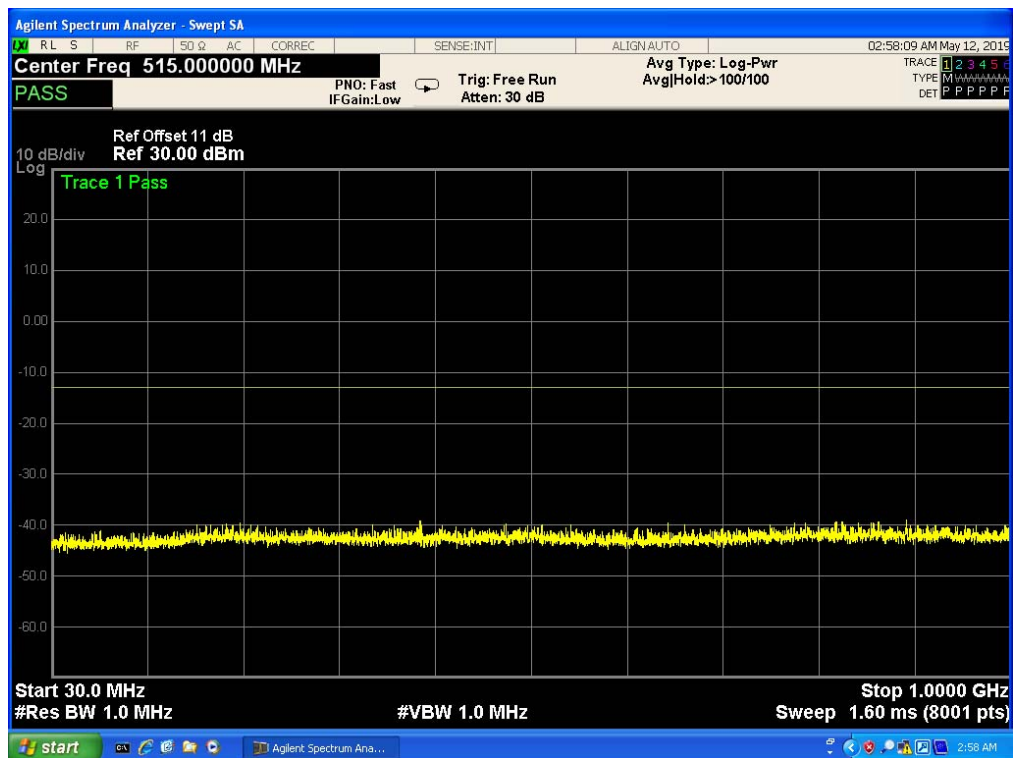
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Band 2, UL Channel 19175, UL Frequency 1907.5, BW 5.0, NO. RB 25, RB POS. Low, 16QAM



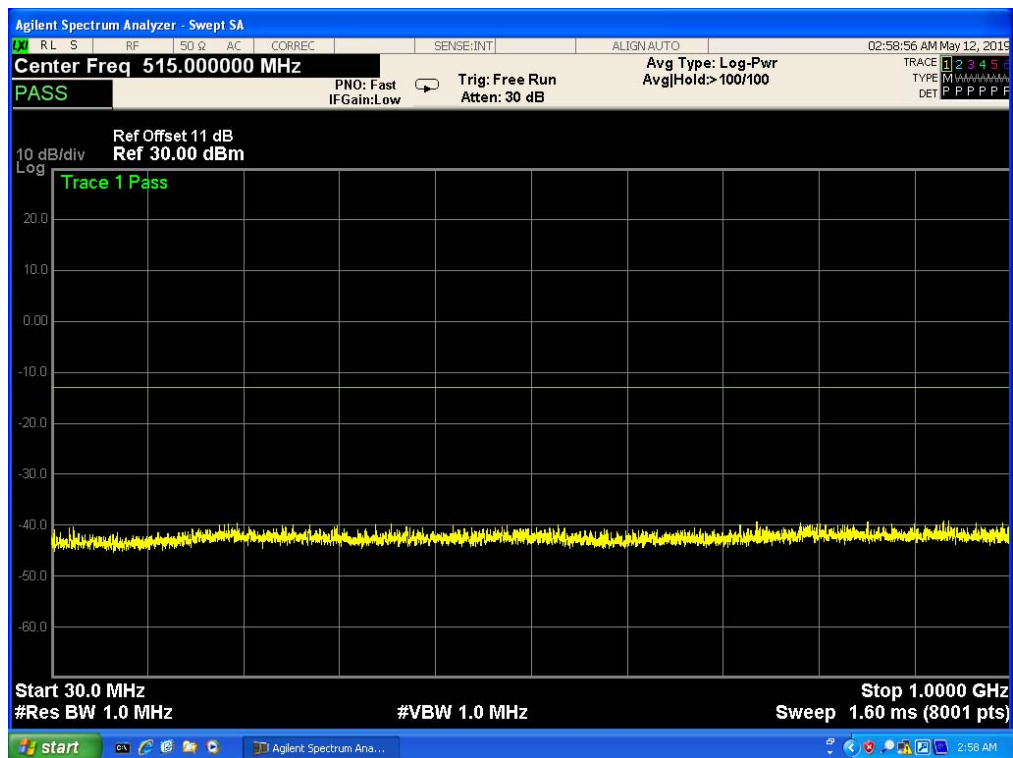
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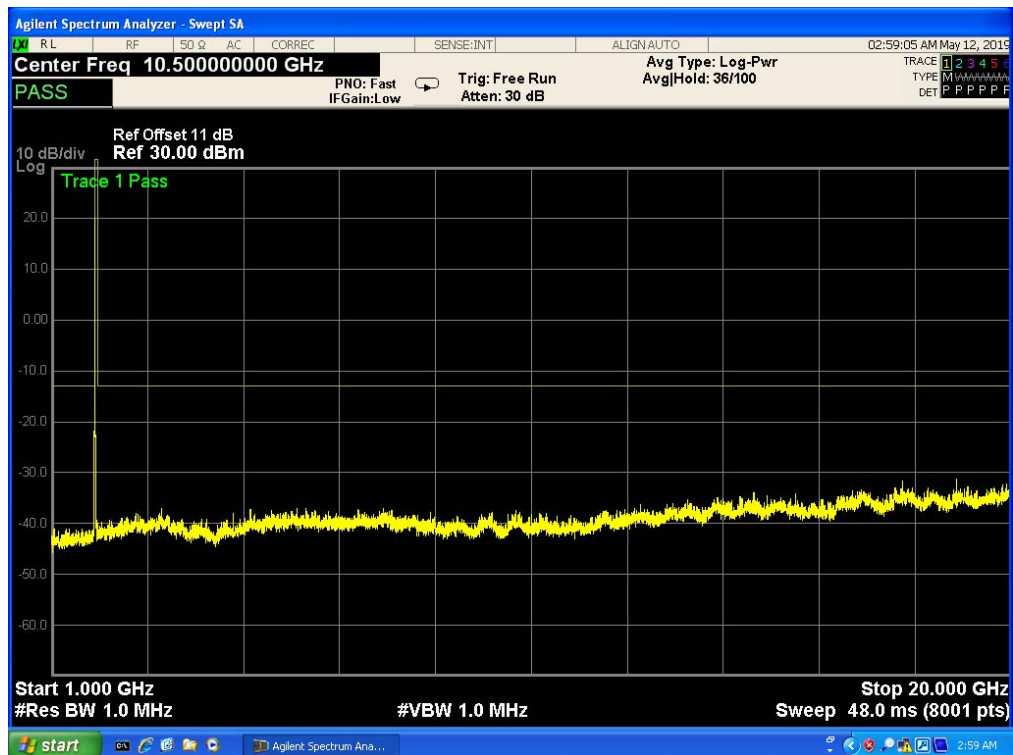
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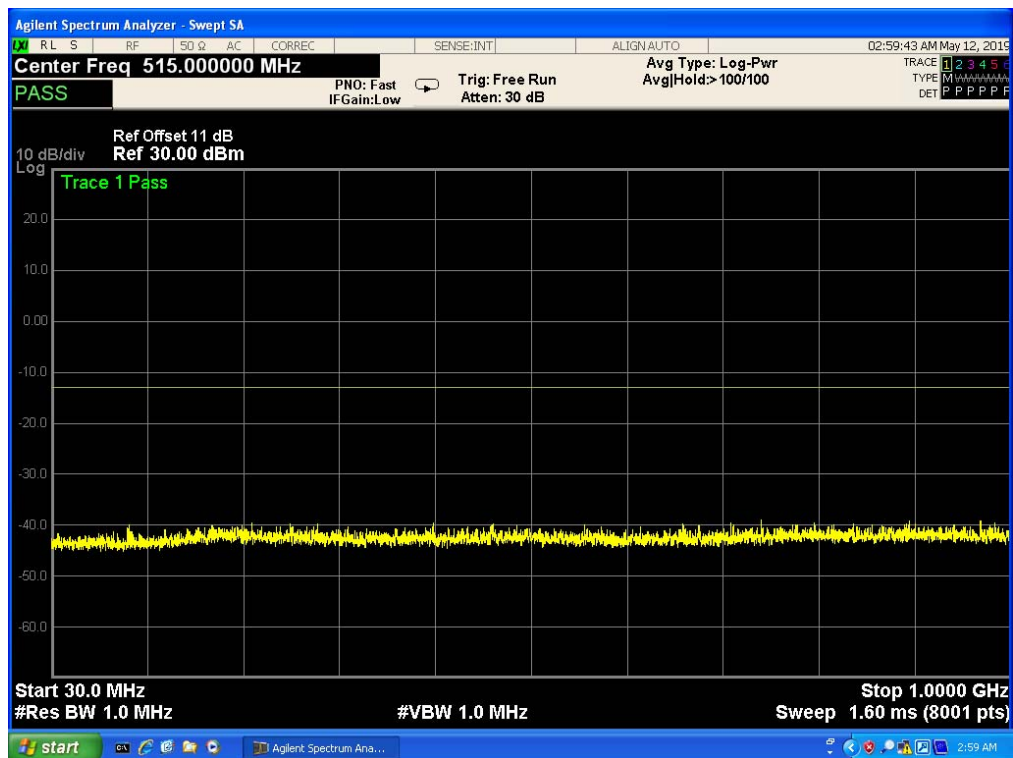
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Band 2, UL Channel1 18650, UL Frequency 1855.0, BW 10.0, NO. RB 50, RB POS. Low, 16QAM



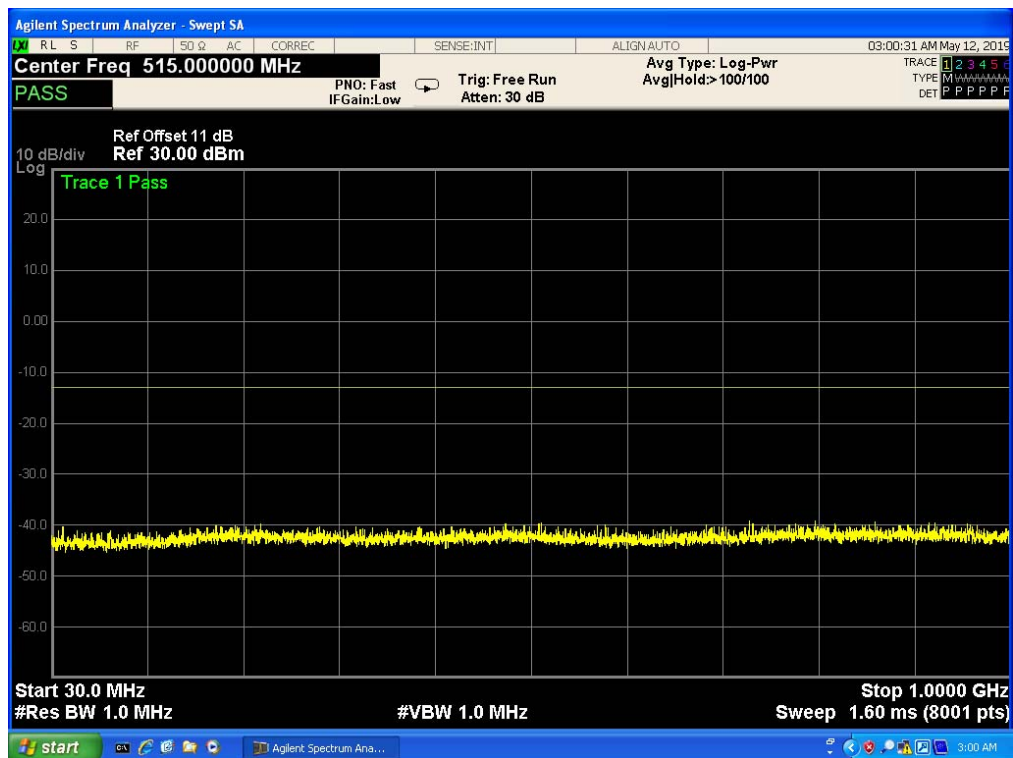
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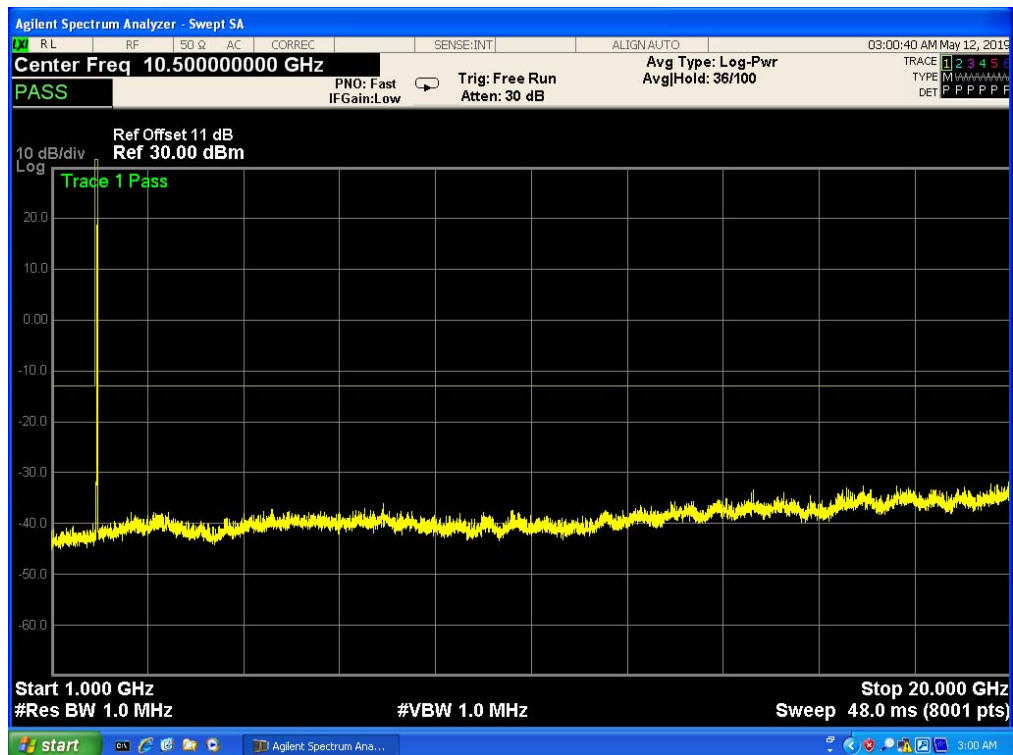
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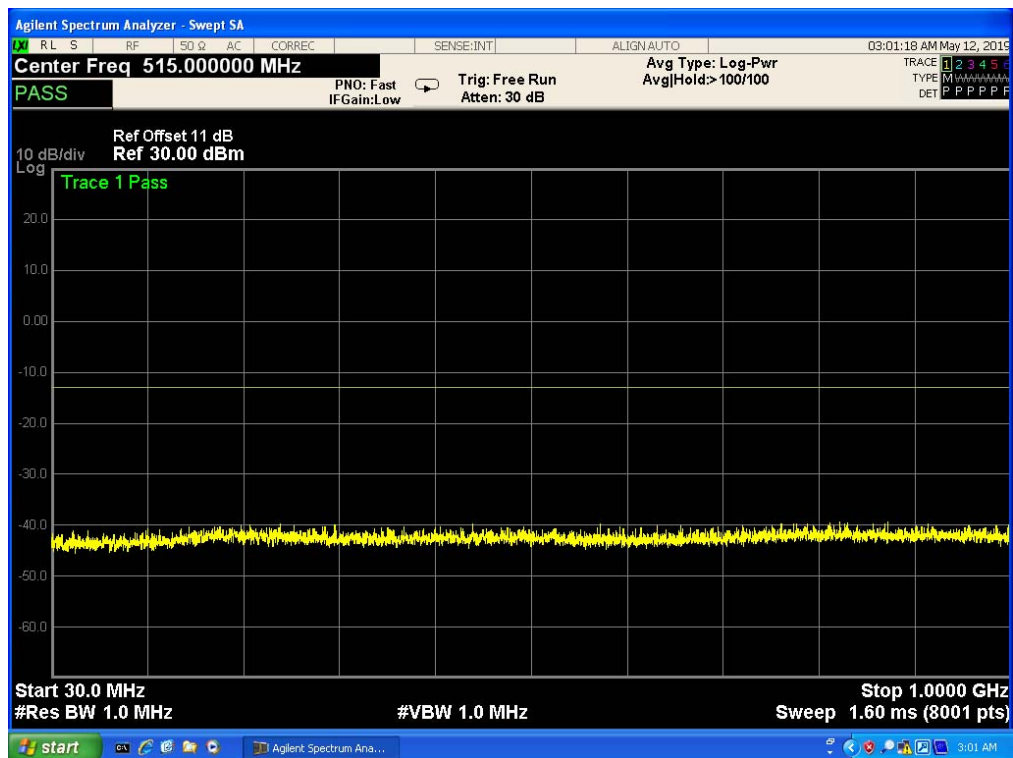
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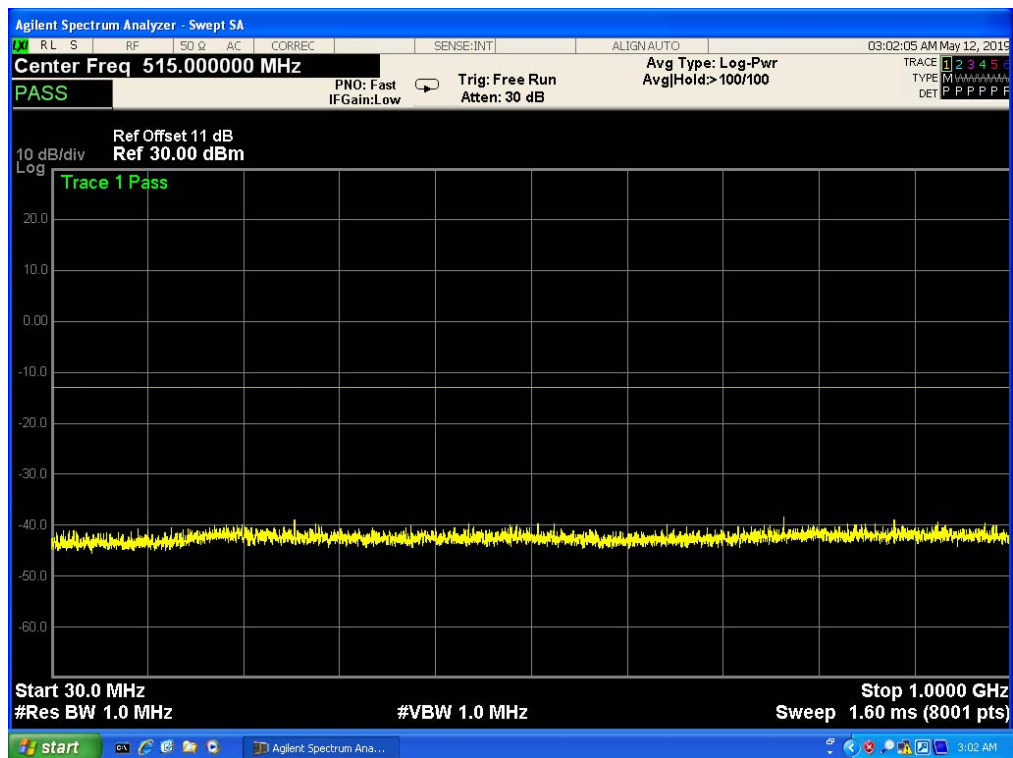
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Band 2, UL Channel 18675, UL Frequency 1857.5, BW 15.0, NO. RB 75, RB POS. Low, QPSK



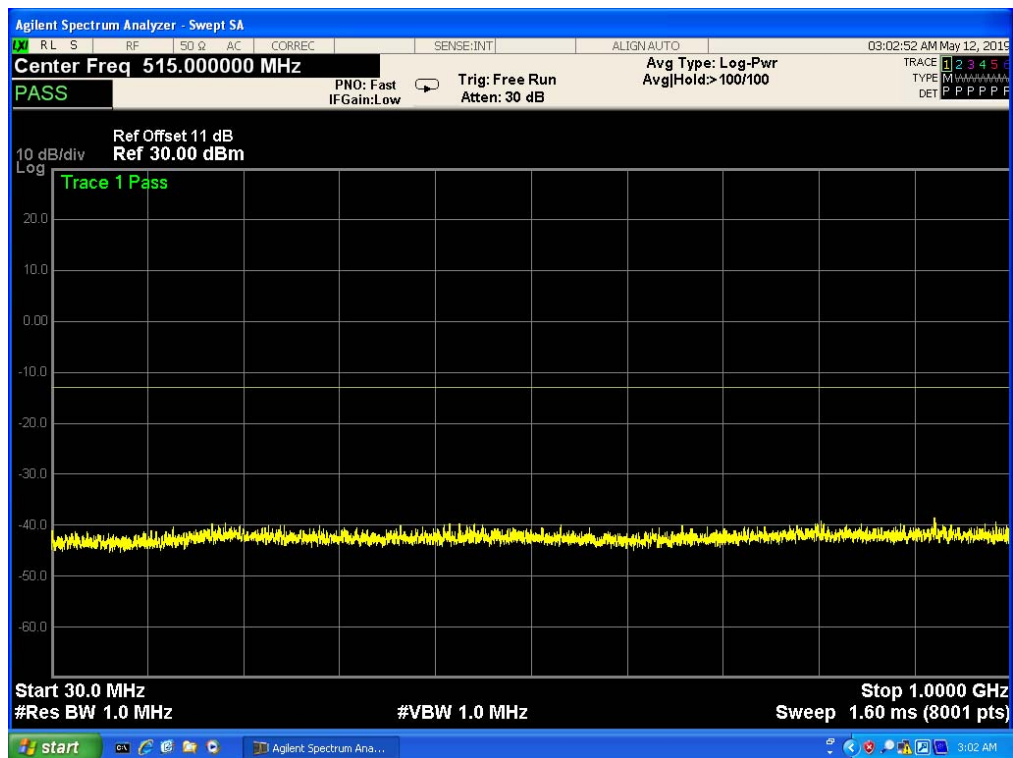
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Band 2, UL Channel1 18675, UL Frequency 1857.5, BW 15.0, NO. RB 75, RB POS. Low, 16QAM



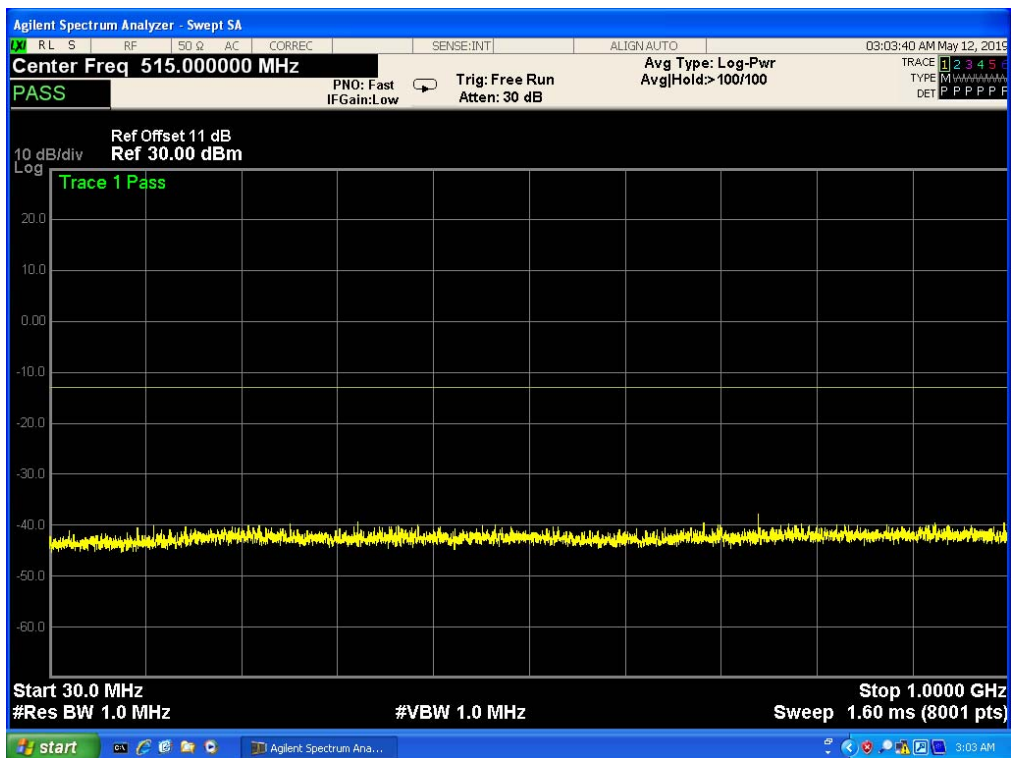
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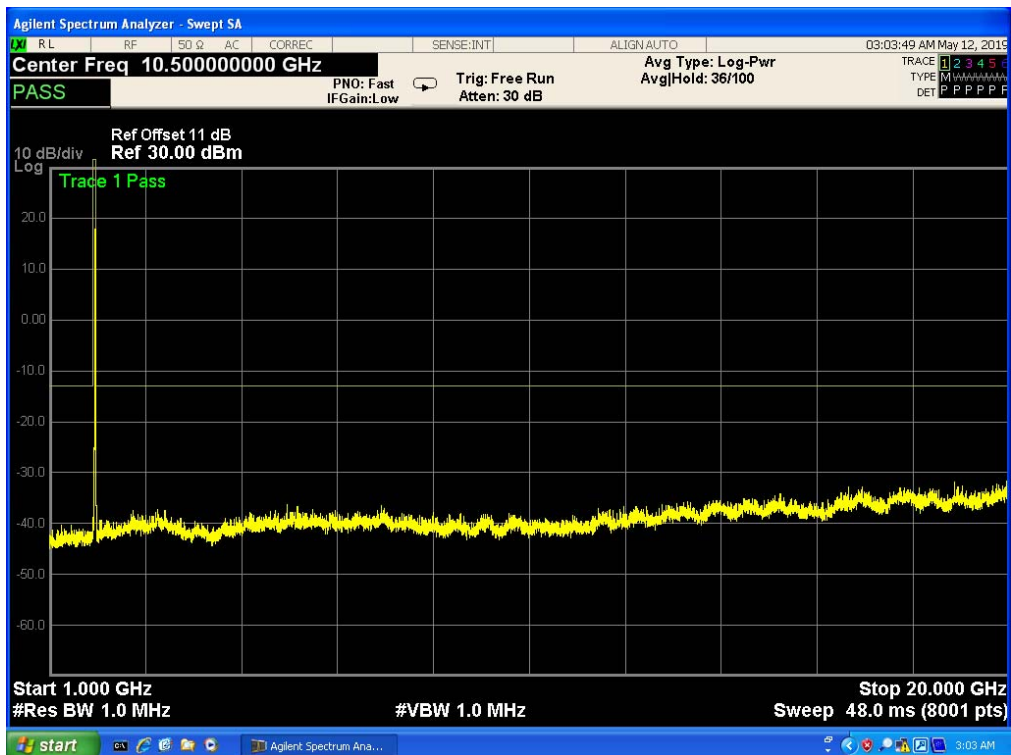
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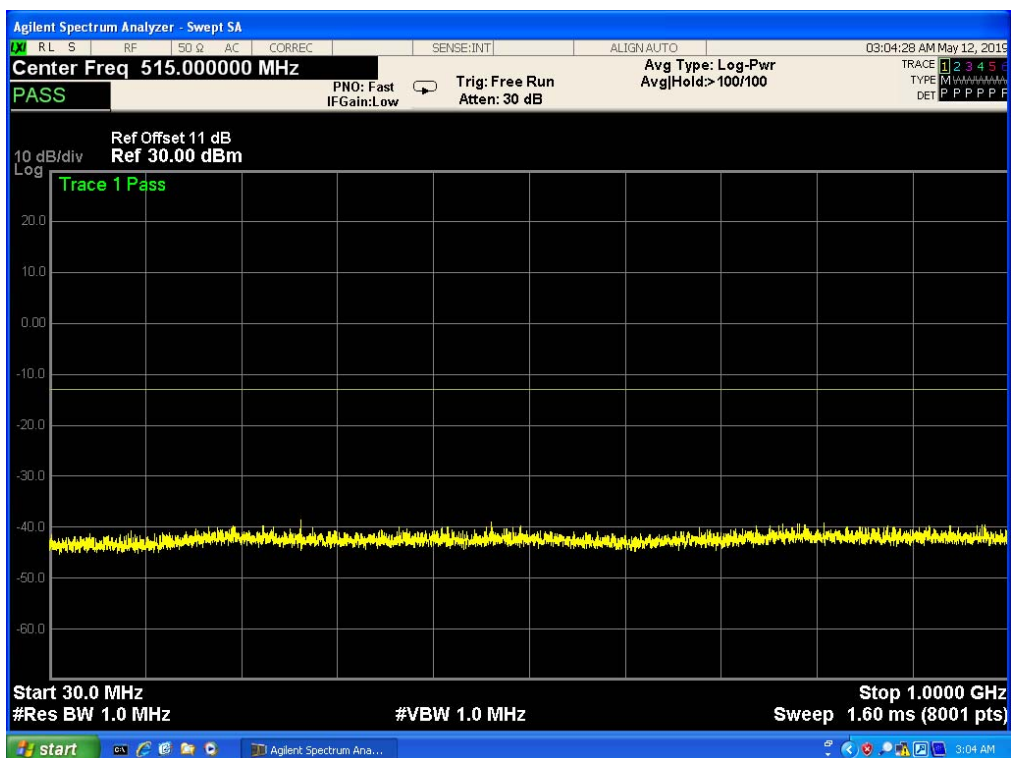
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Band 2, UL Channel1 19125, UL Frequency 1902.5, BW 15.0, NO. RB 75, RB POS. Low, 16QAM



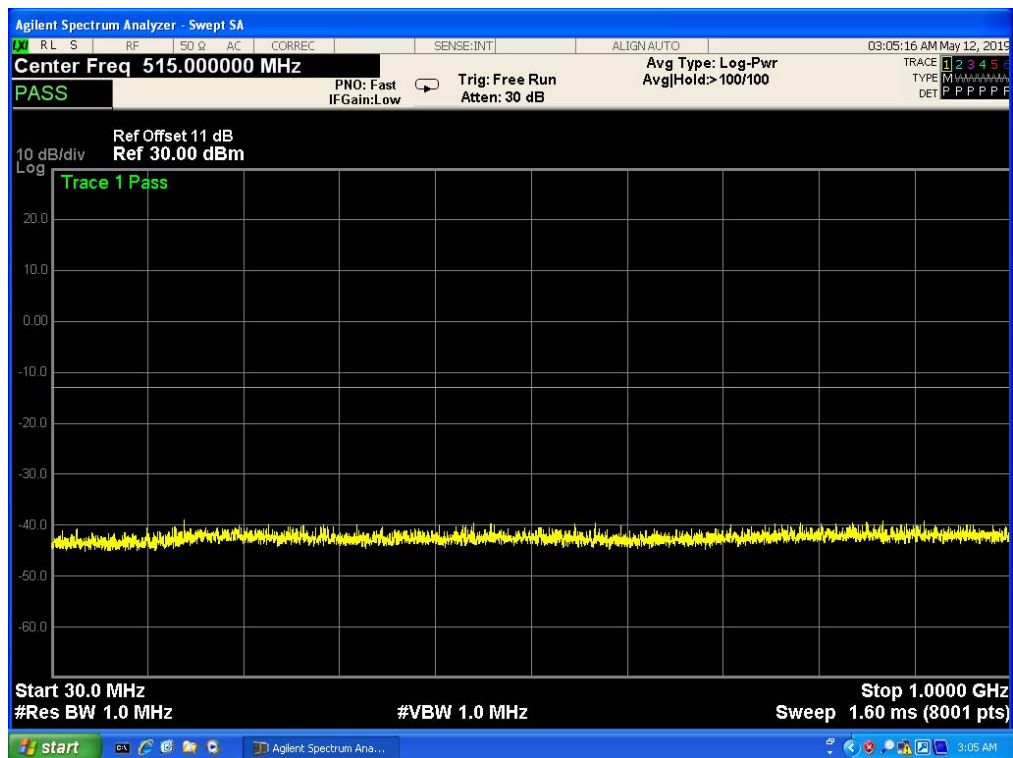
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Band 2,UL Channel 18700,UL Frequency 1860.0,BW 20.0,NO. RB 100,RB POS. Low,QPSK



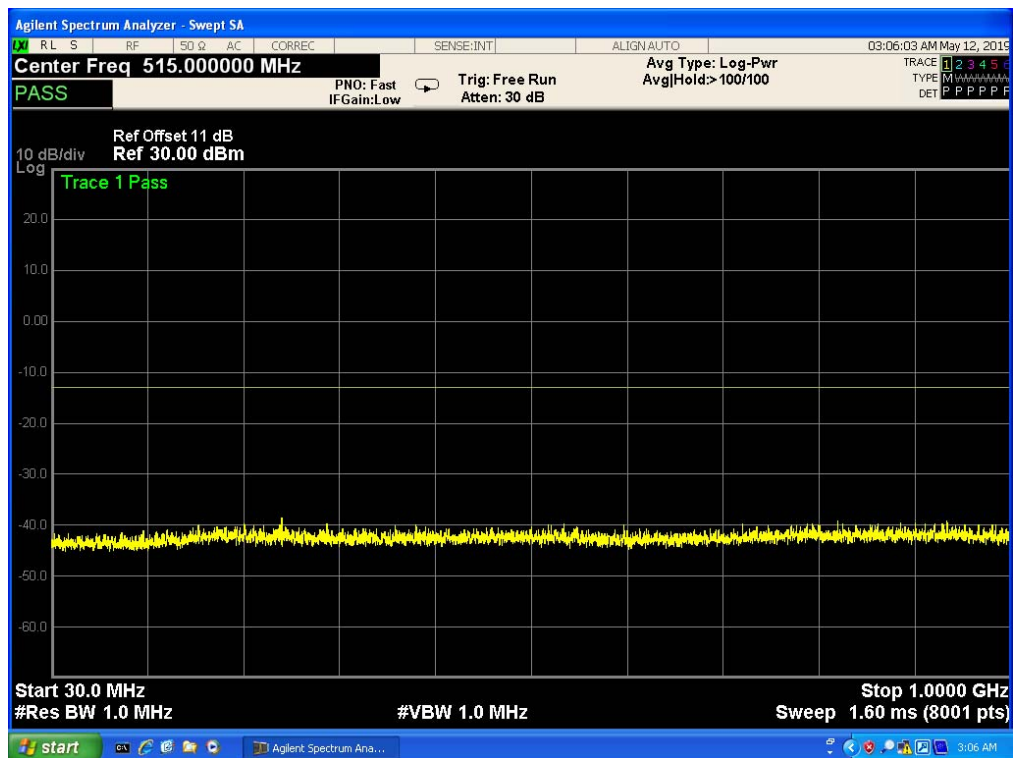
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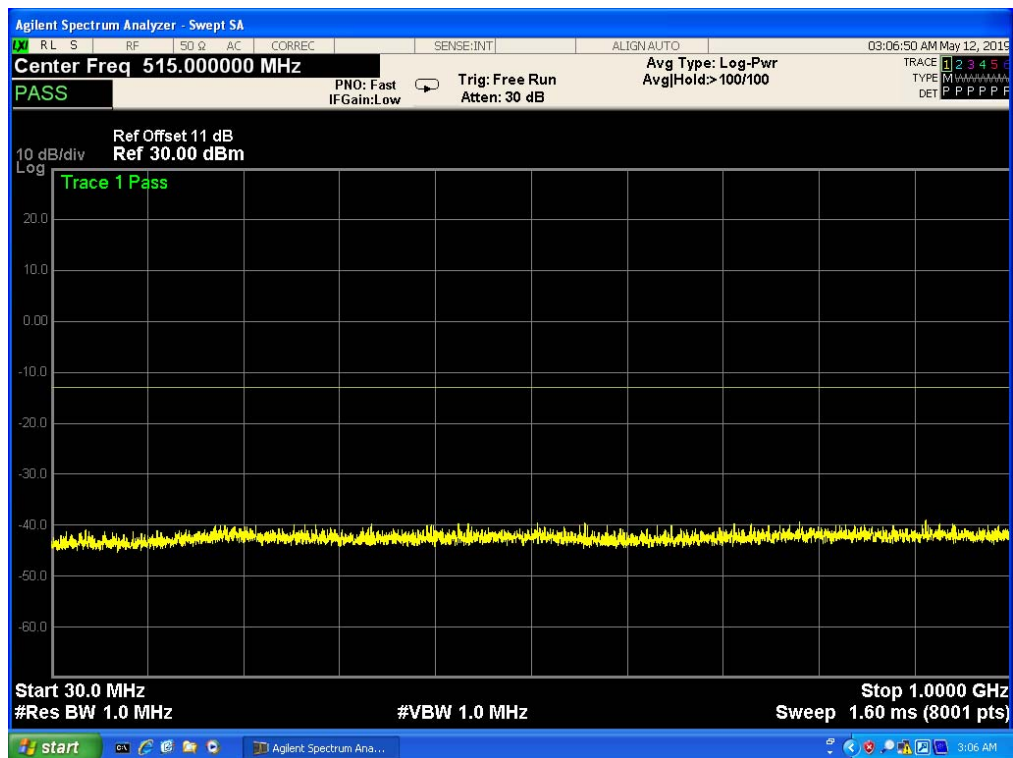
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Band 2, UL Channel1 19100, UL Frequency 1900.0, BW 20.0, NO. RB 100, RB POS. Low, QPSK



Band 2, UL Channel1 19100, UL Frequency 1900.0, BW 20.0, NO. RB 100, RB POS. Low, 16QAM



Band 2, UL Channel1 19100, UL Frequency 1900.0, BW 20.0, NO. RB 100, RB POS. Low, 16QAM

