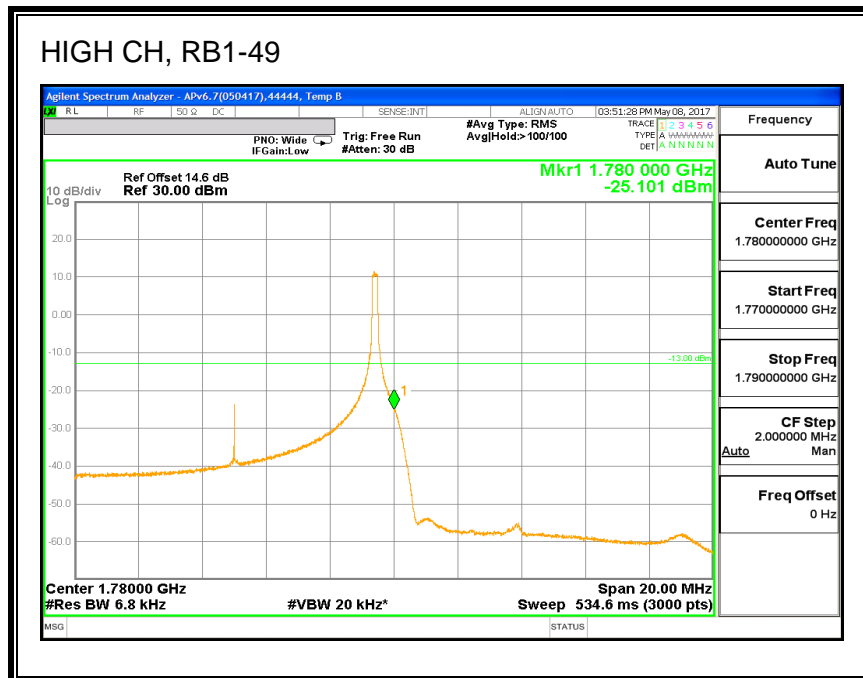
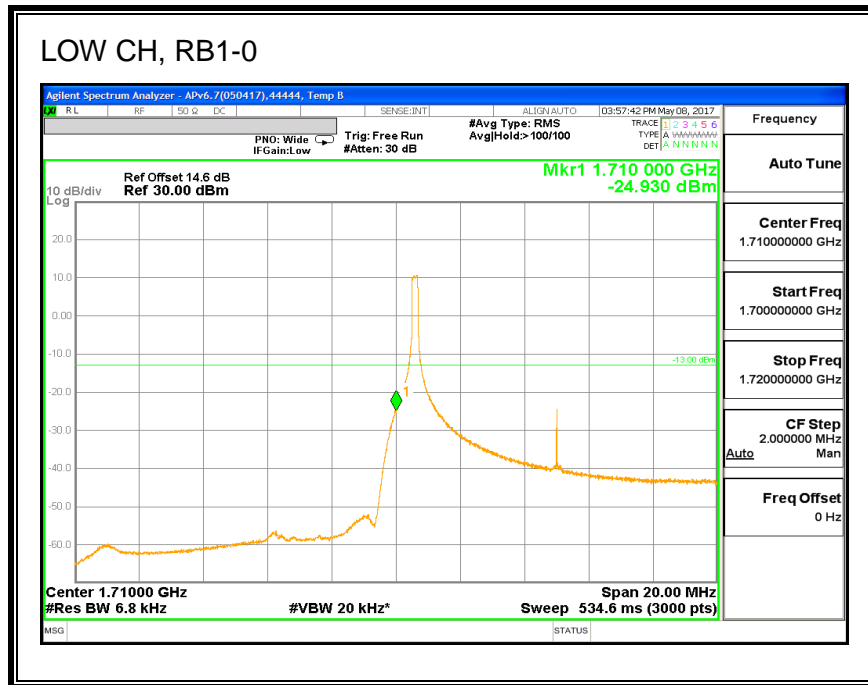
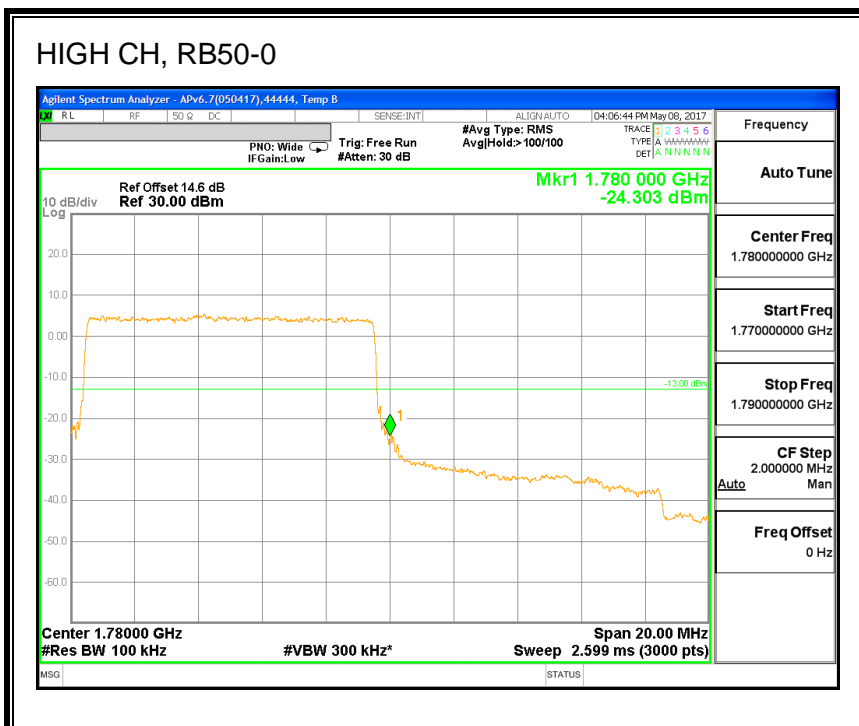
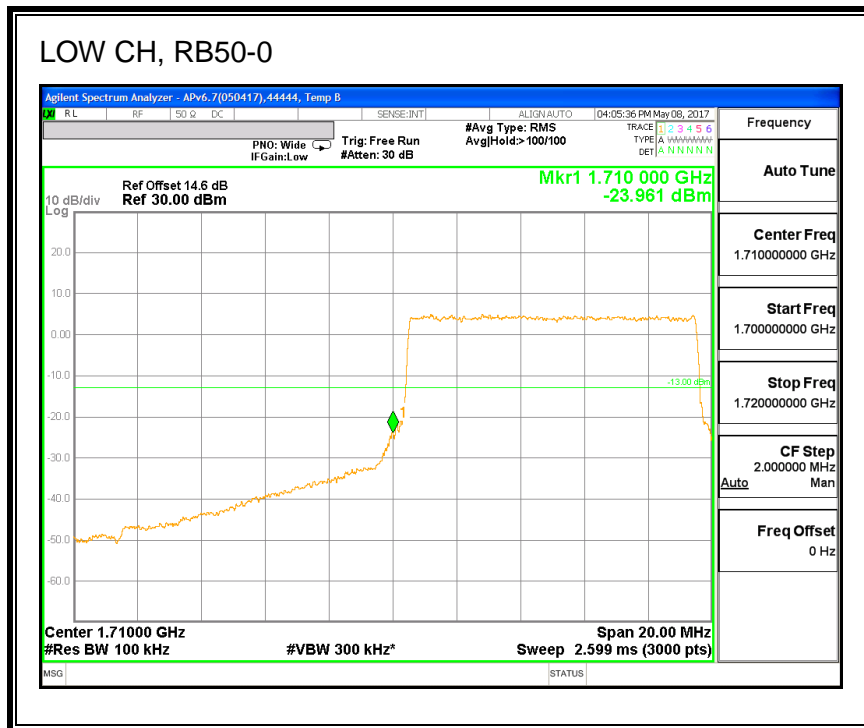
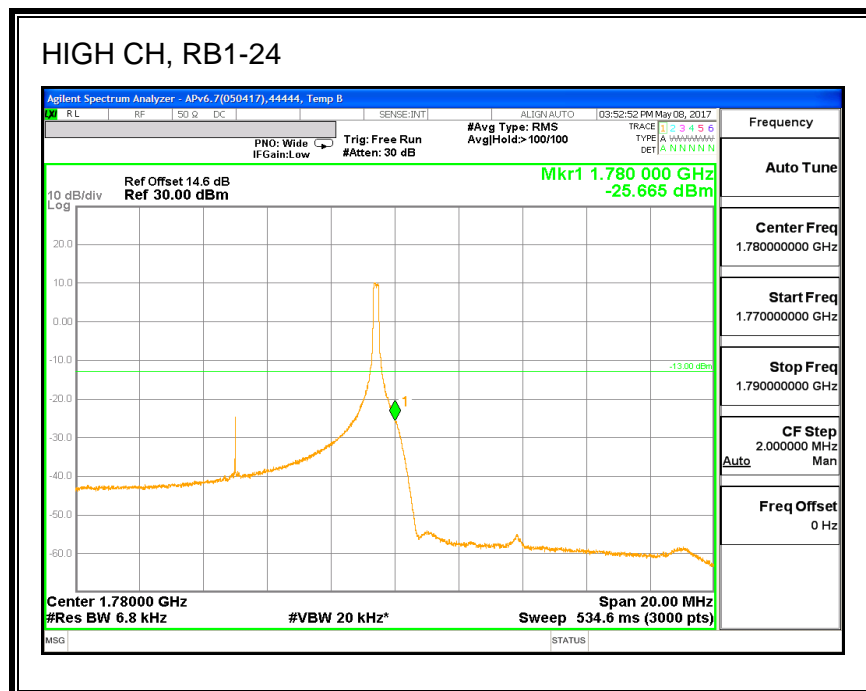
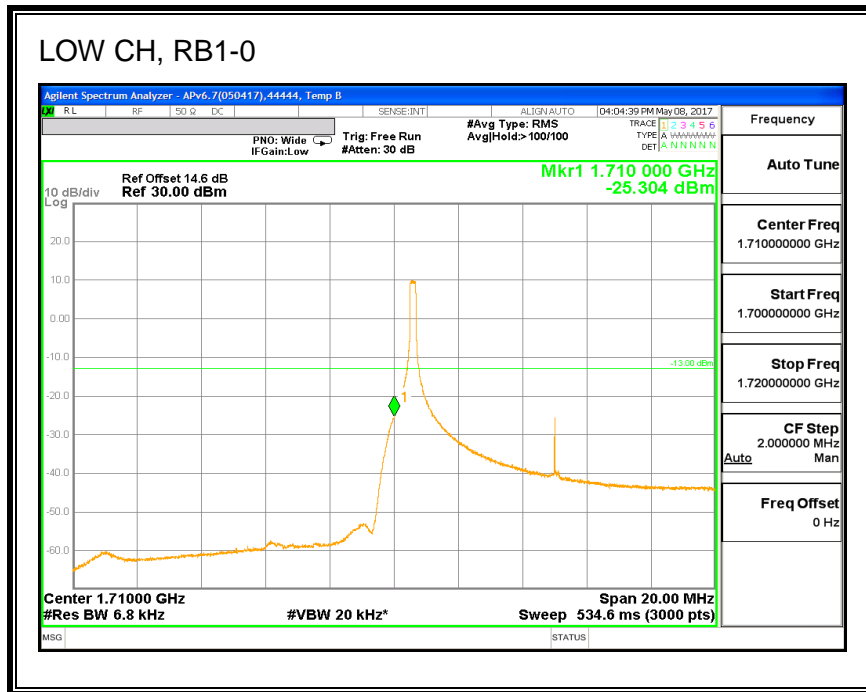


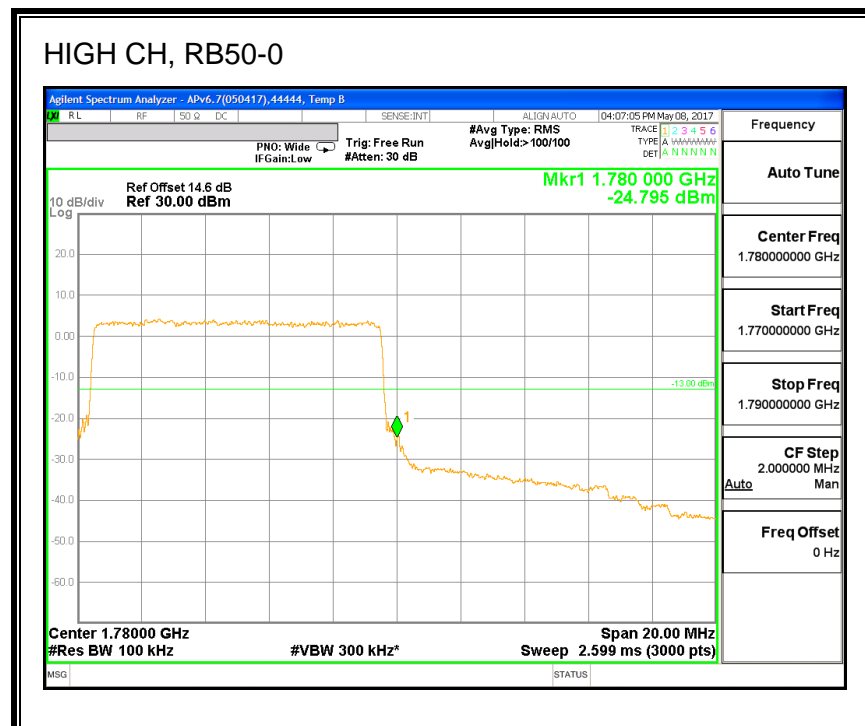
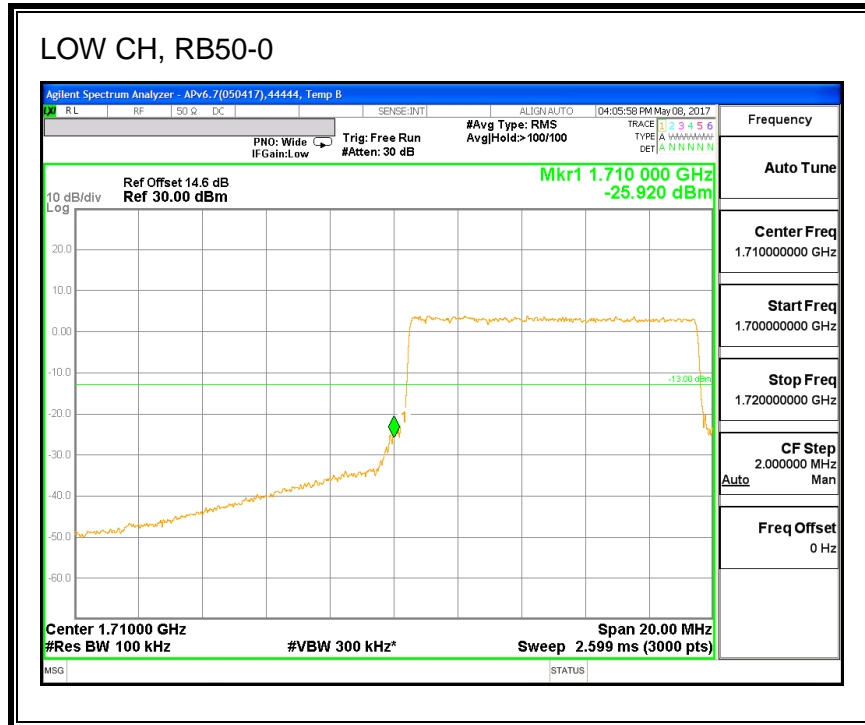
QPSK, (10.0 MHz BAND WIDTH)



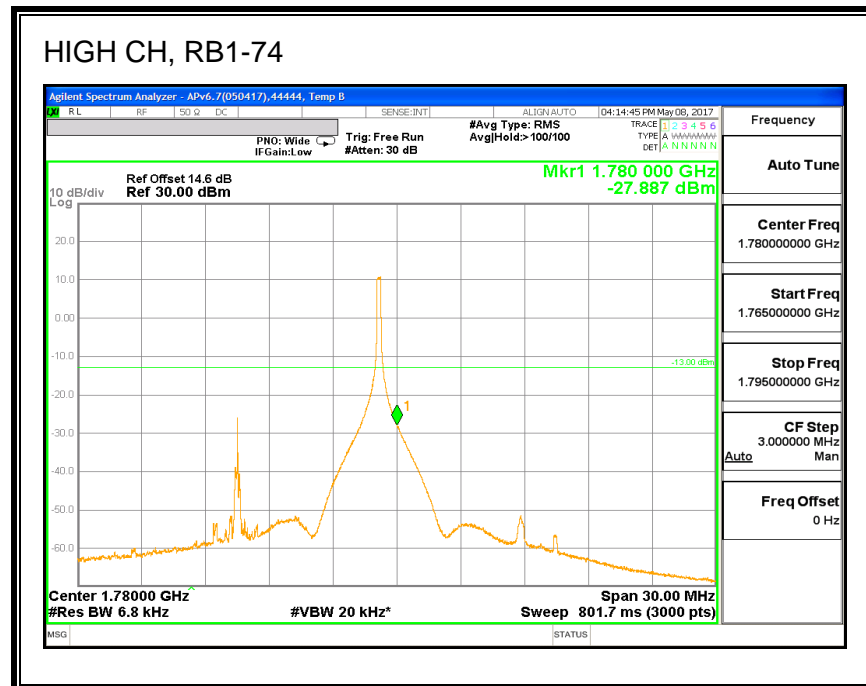
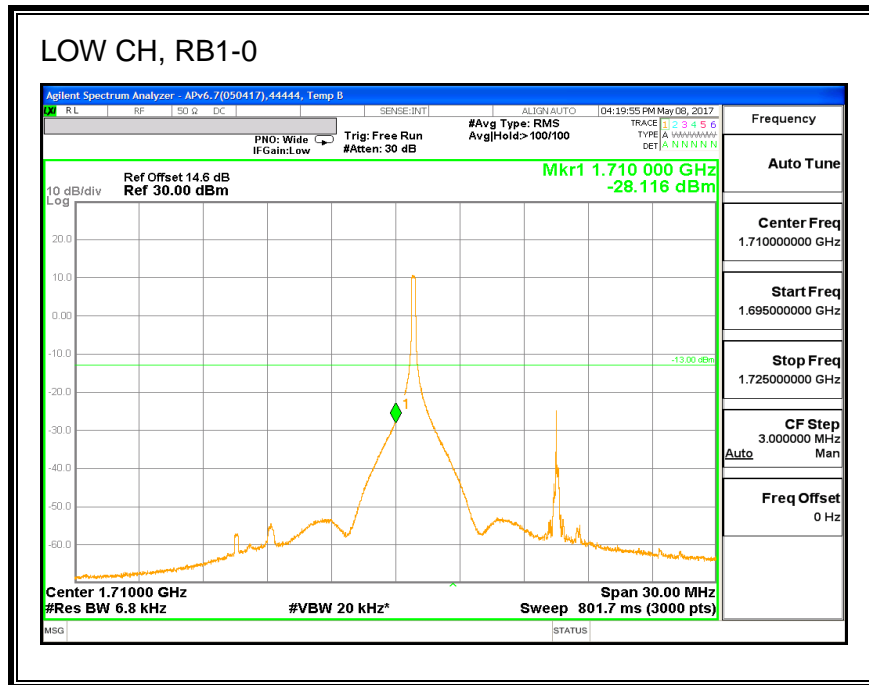


16QAM, (10.0 MHz BAND WIDTH)

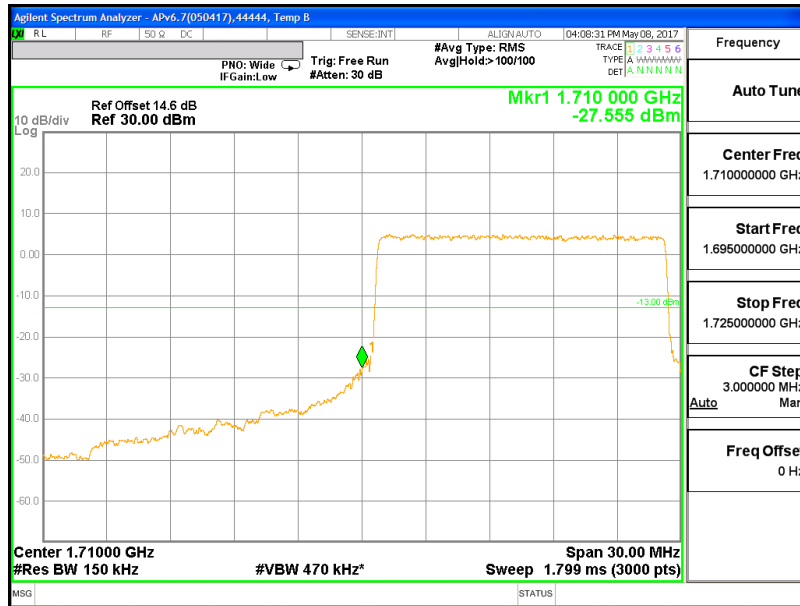




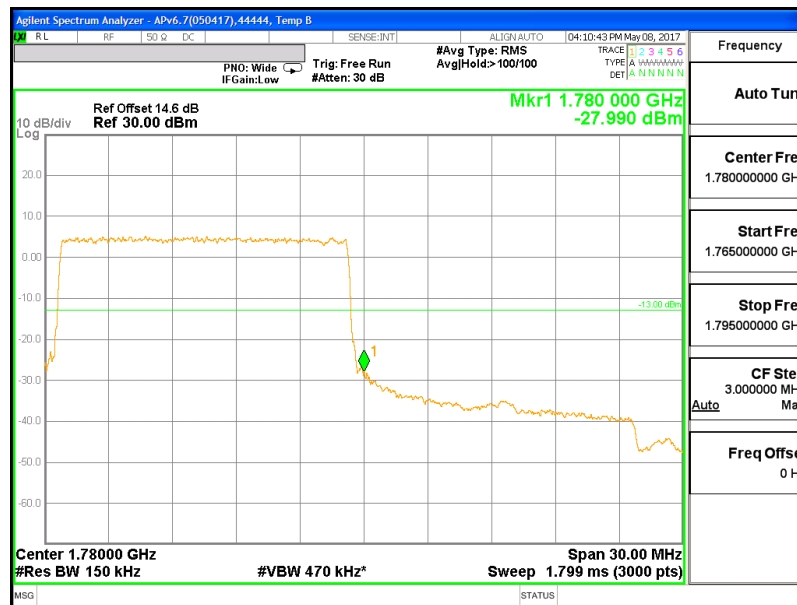
QPSK, (15.0 MHz BAND WIDTH)



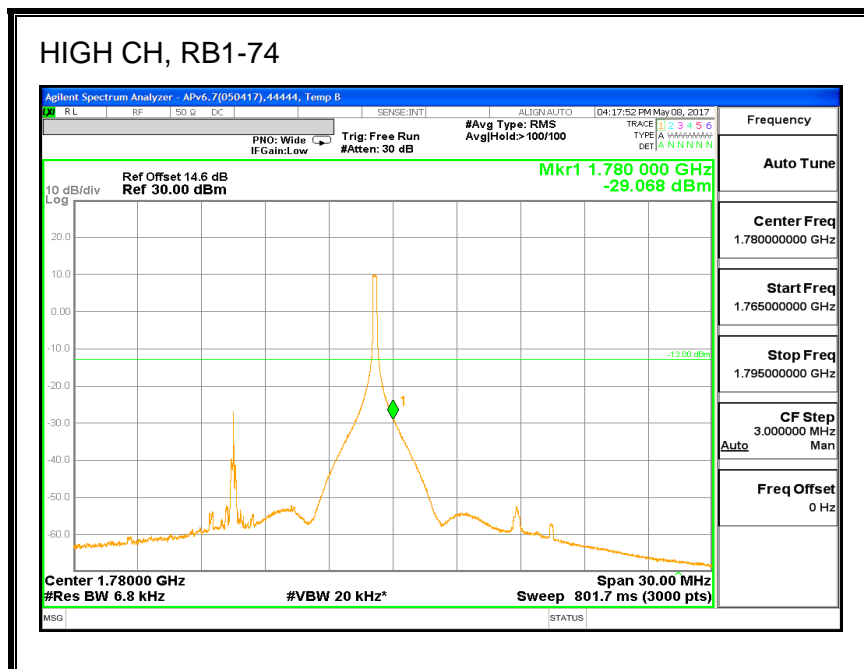
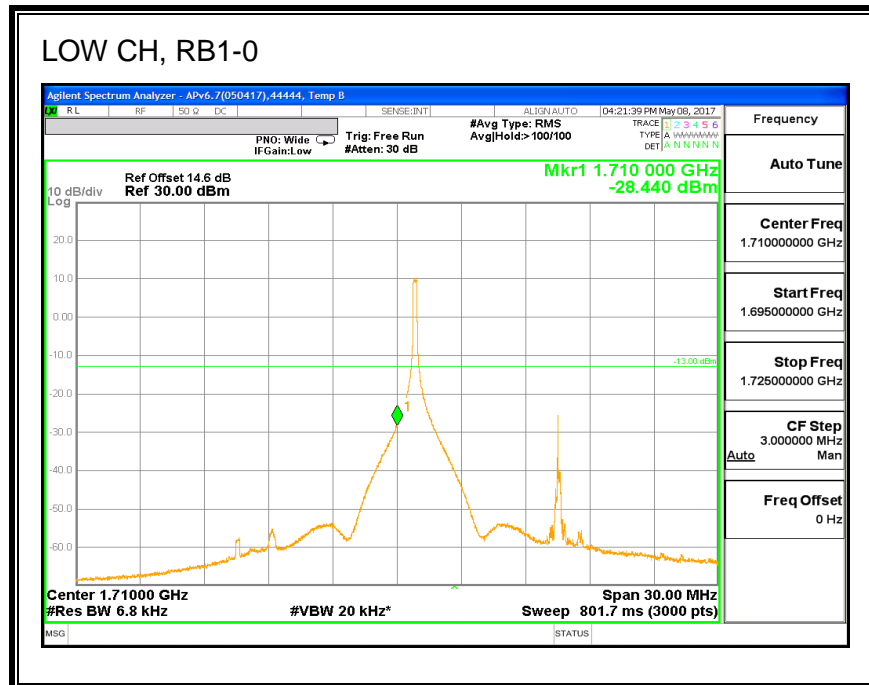
LOW CH, RB75-0



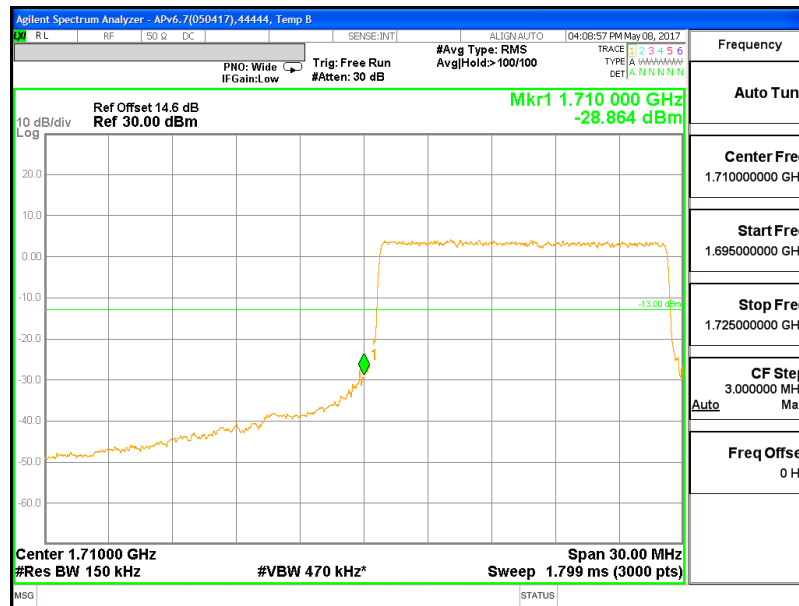
HIGH CH, RB75-0



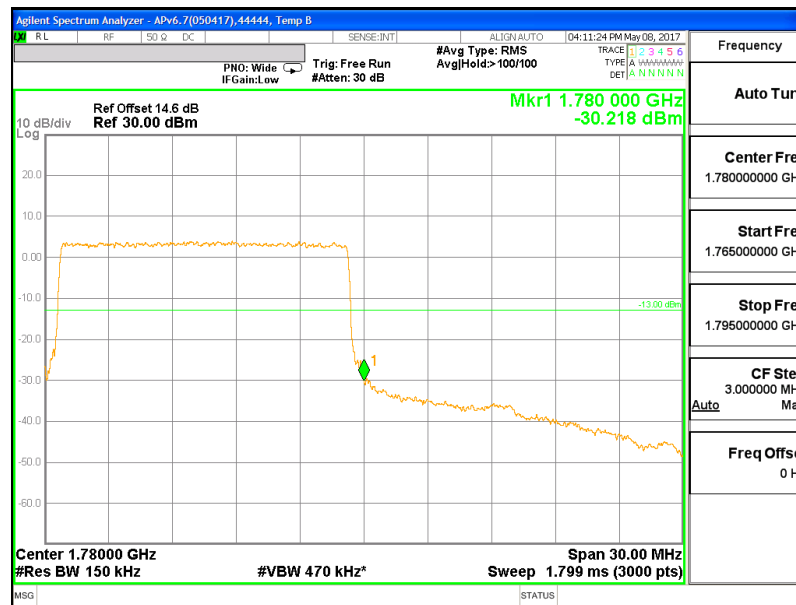
16QAM, (15.0 MHz BAND WIDTH)



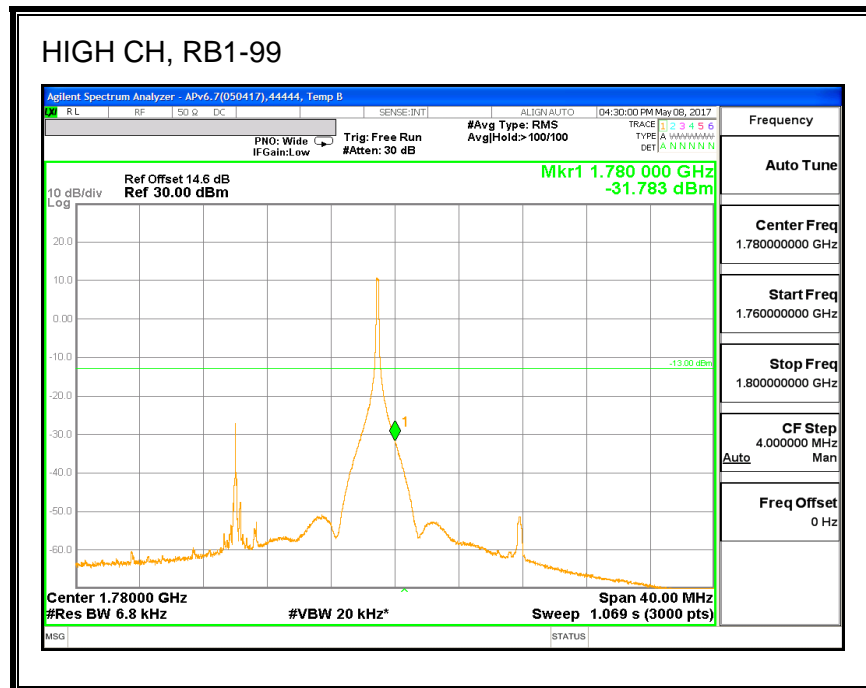
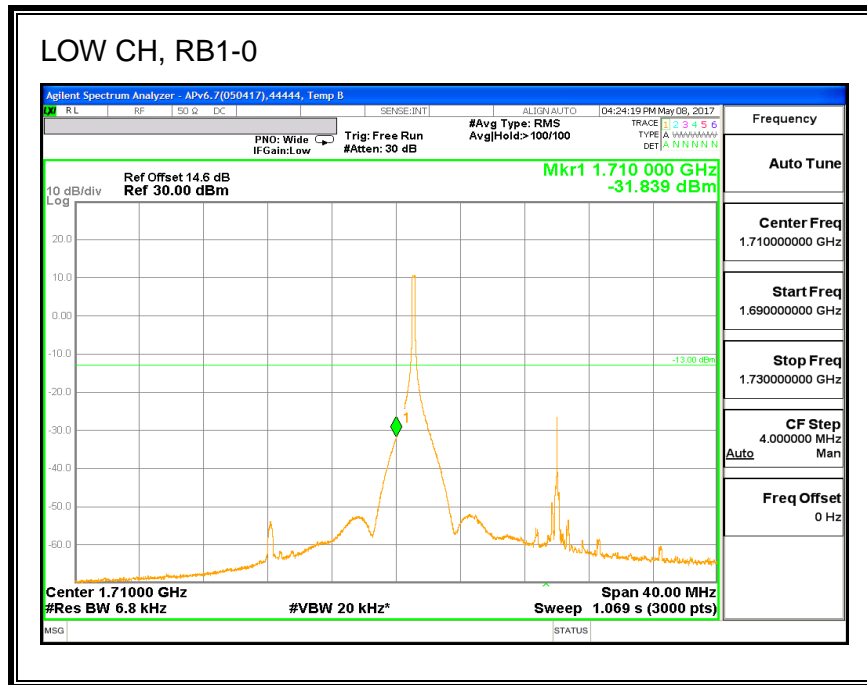
LOW CH, RB75-0



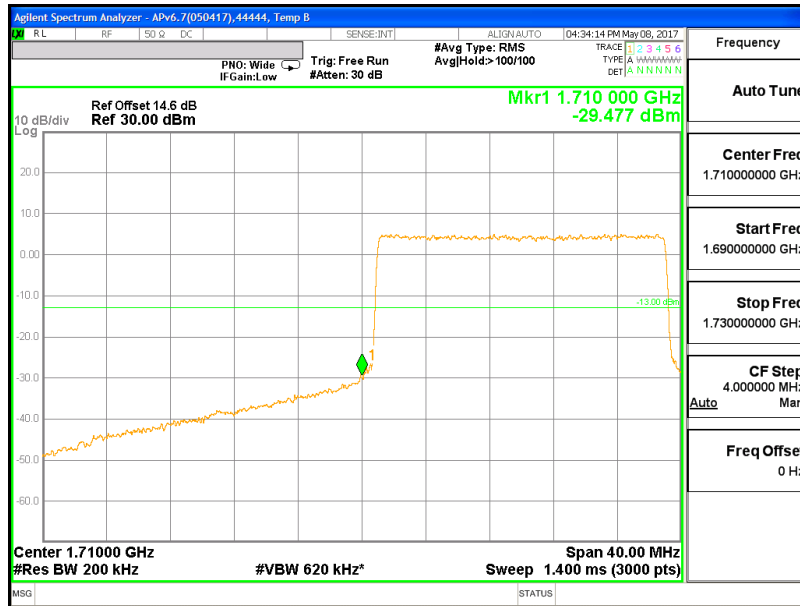
HIGH CH, RB75-0



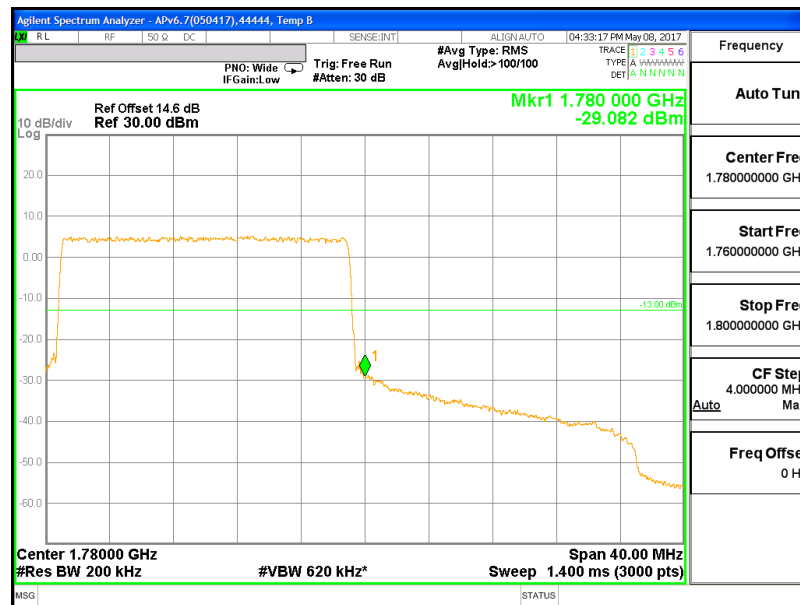
QPSK, (20.0 MHz BAND WIDTH)



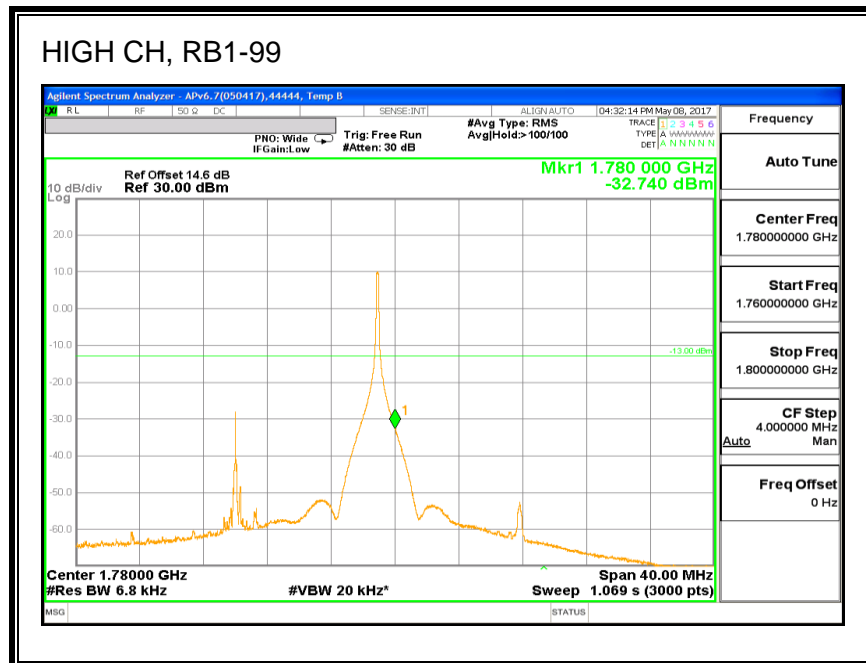
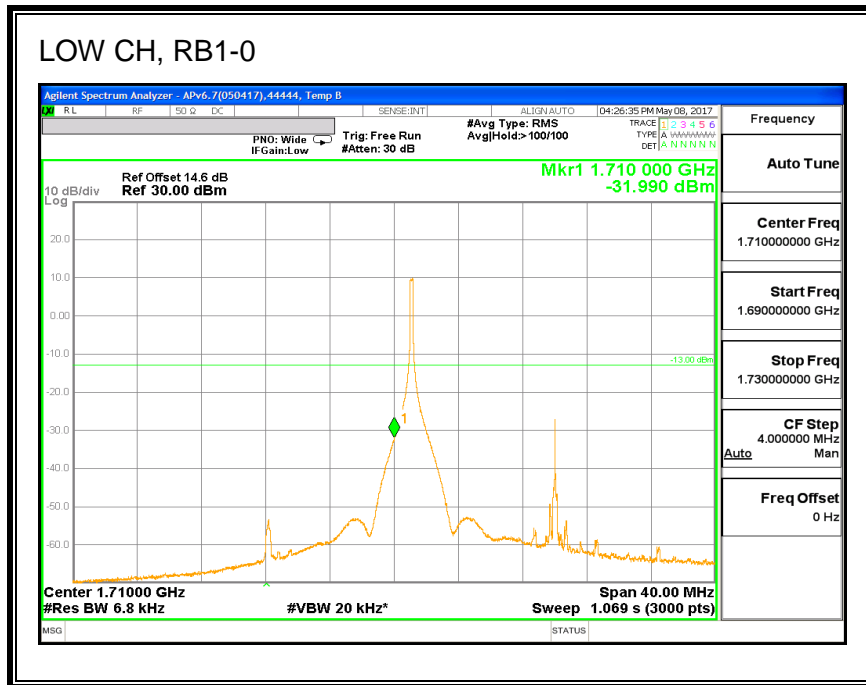
LOW CH, RB100-0

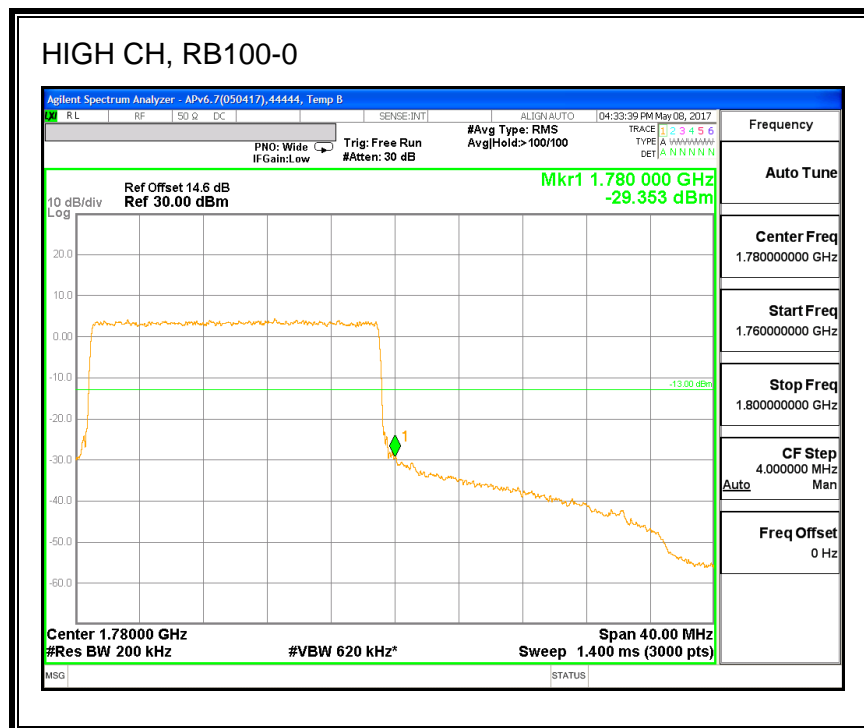
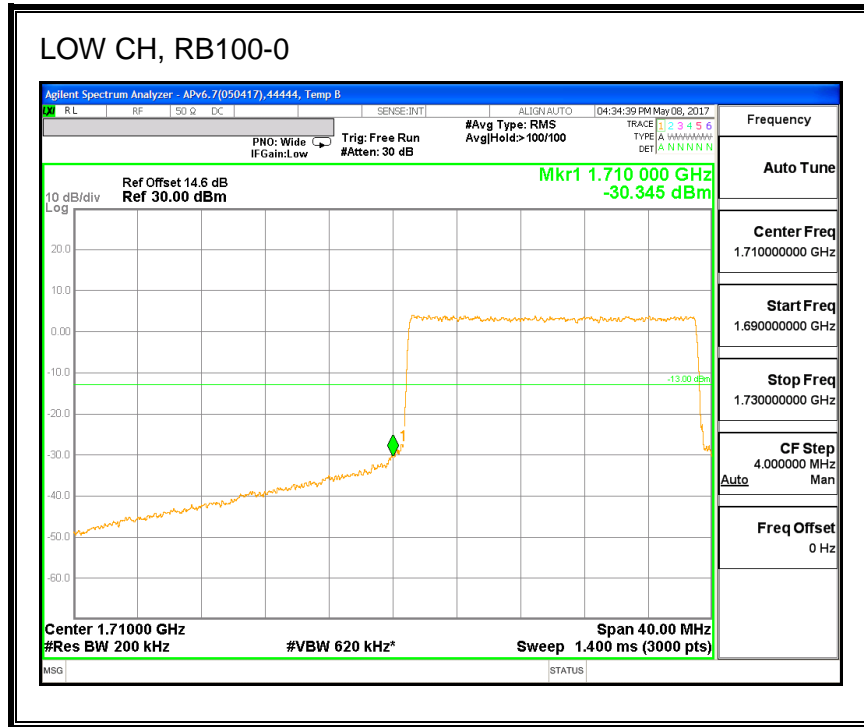


HIGH CH, RB100-0



16QAM, (20.0 MHz BAND WIDTH)





8.3. OUT OF BAND EMISSIONS

RULE PART(S)

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53, §90.691

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.

For mobile and portable stations operating in the 2305-2315 MHz: by a factor of not less than $43 + 10 \log (P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log (P)$ dB above 2365 MHz

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

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:

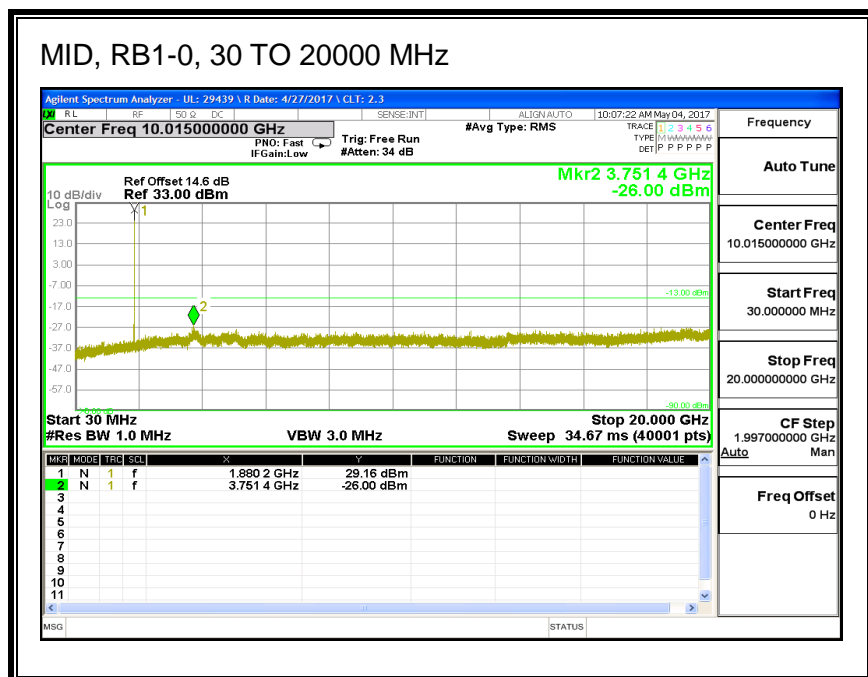
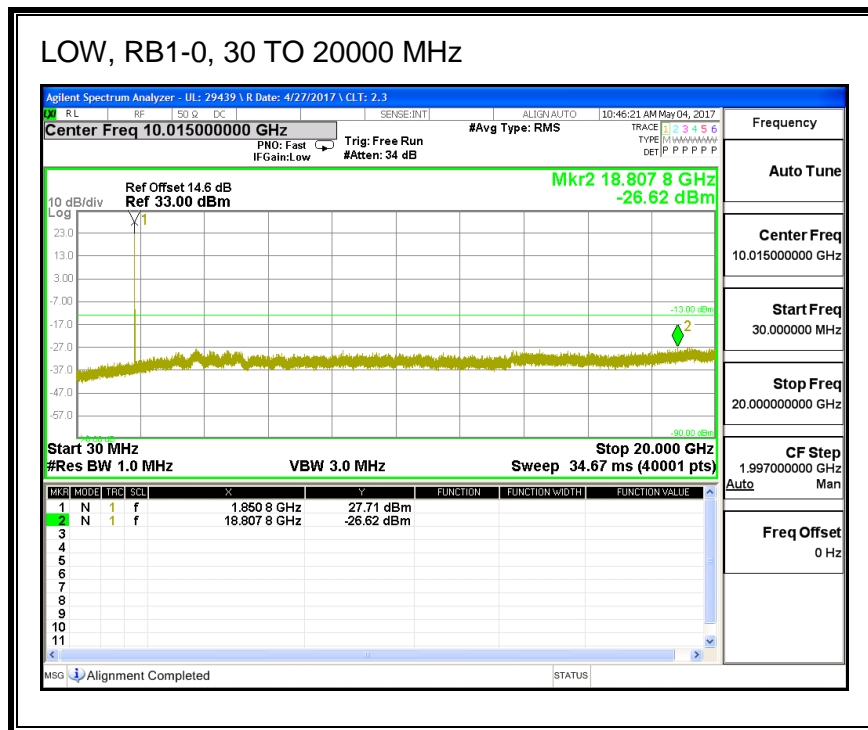
- Set display line at -13 dBm, -25dBm and -40dBm according to the band Limit
- Set RBW & VBW to 100 kHz for the measurement below 1 GHz, and 1 MHz for the measurement above 1 GHz. (NOTE: Worst case set RBW/VBW to 1MHz/3MHz)

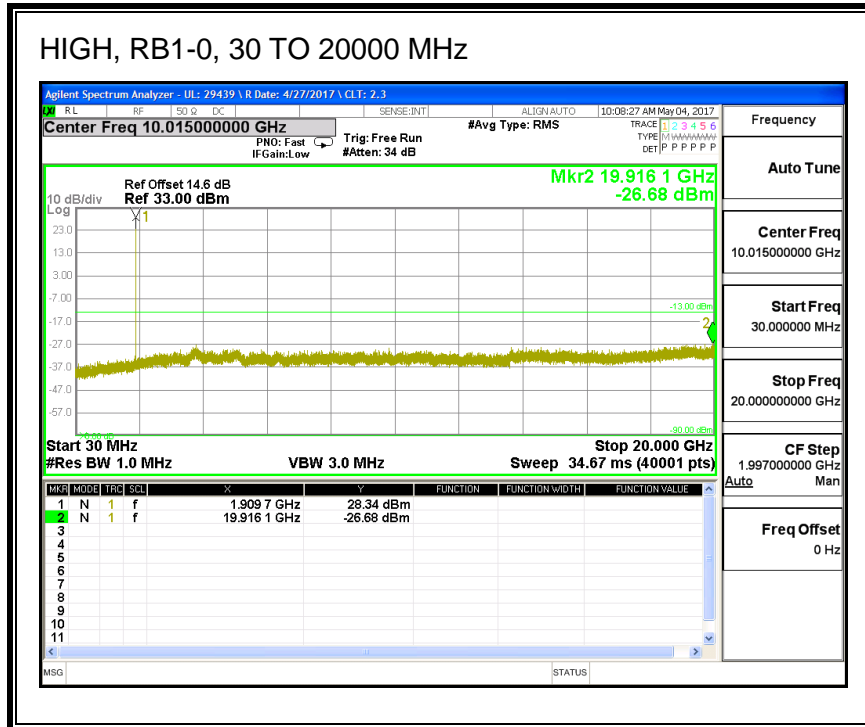
MODES TESTED

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 66

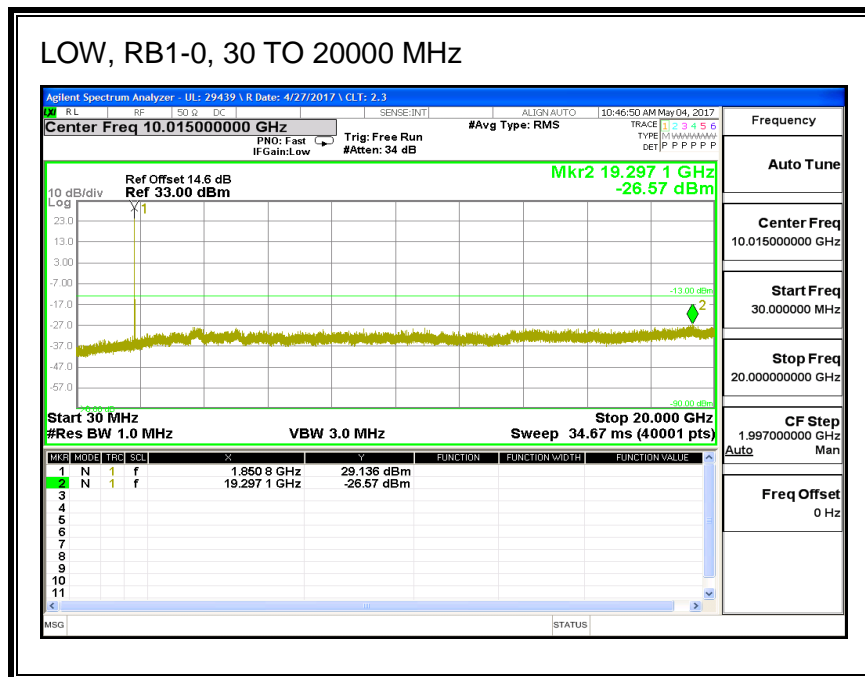
8.3.1. LTE BAND 2

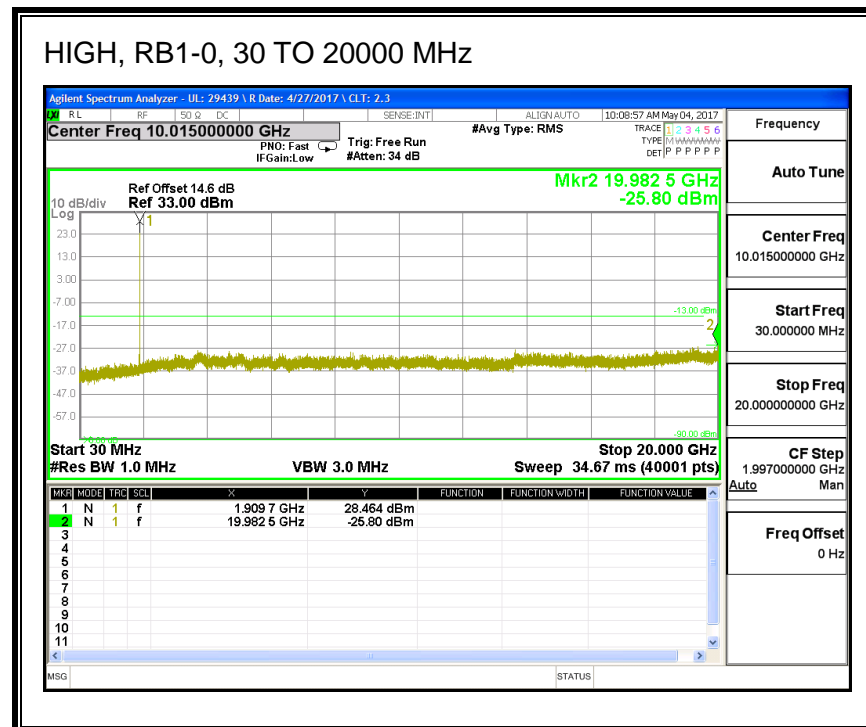
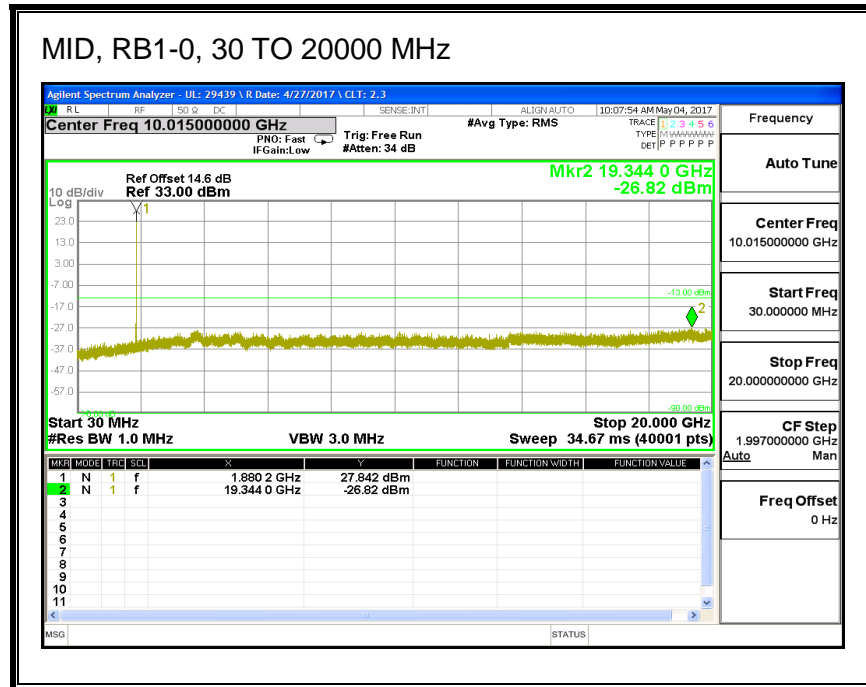
QPSK, (1.4 MHz BAND WIDTH)



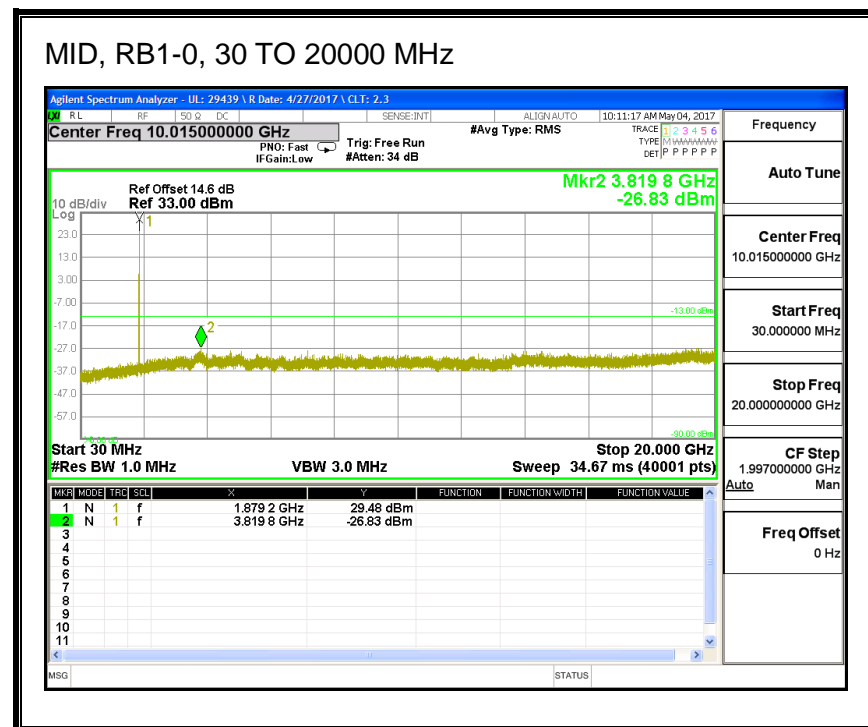
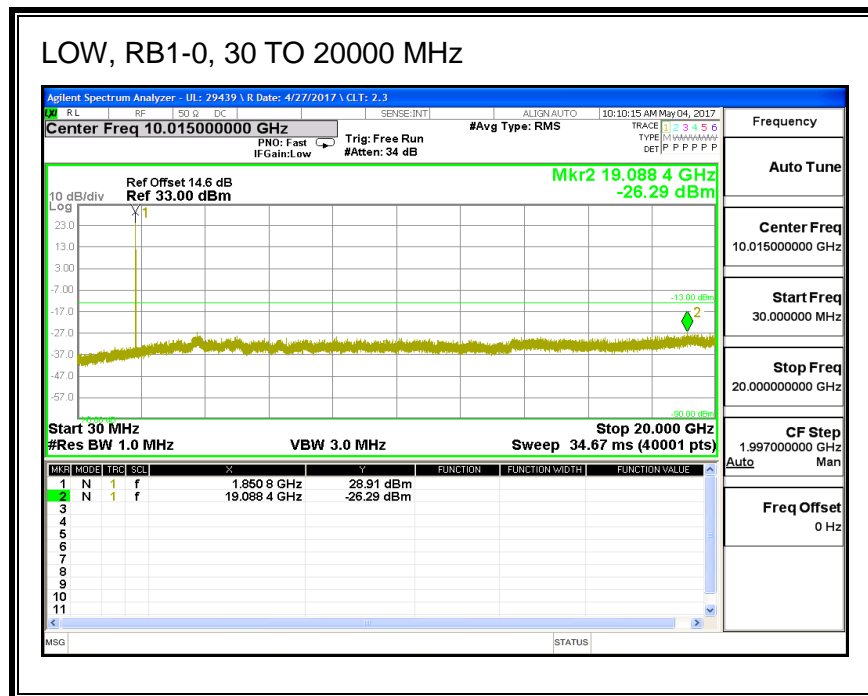


16QAM, (1.4 MHz BAND WIDTH)

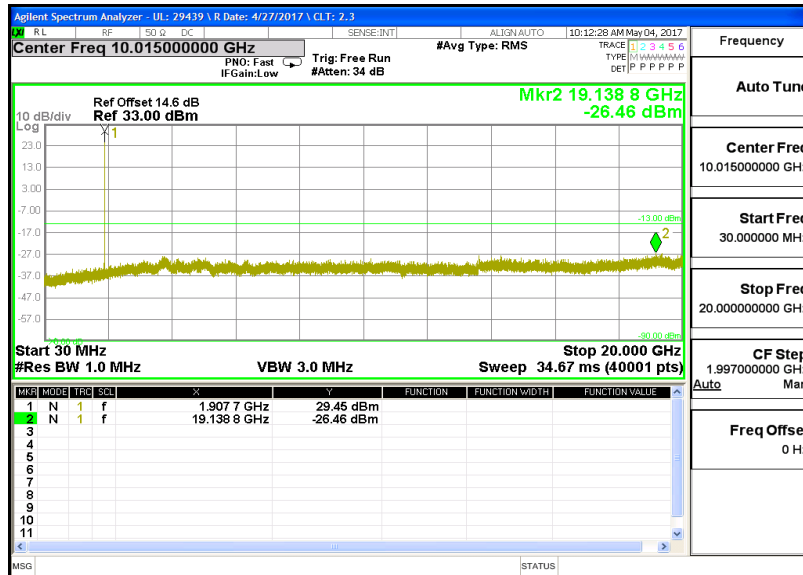




QPSK, (3.0 MHz BAND WIDTH)

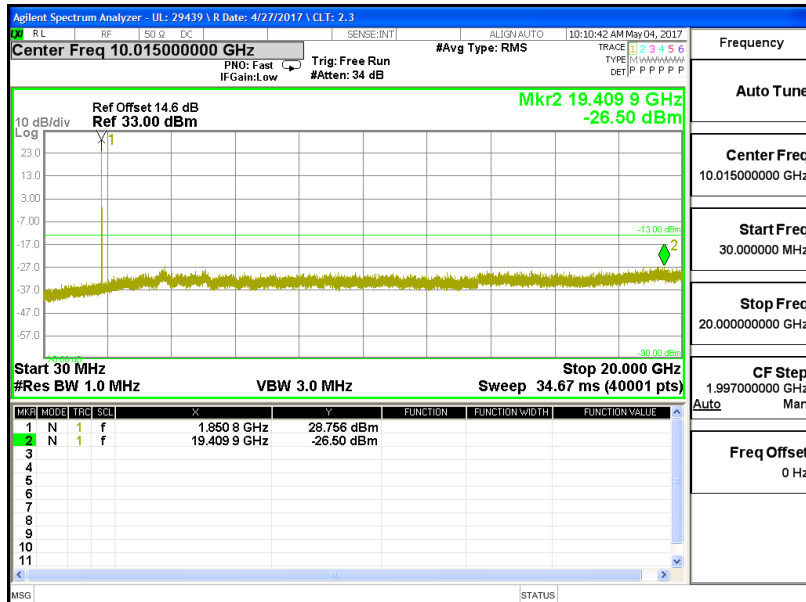


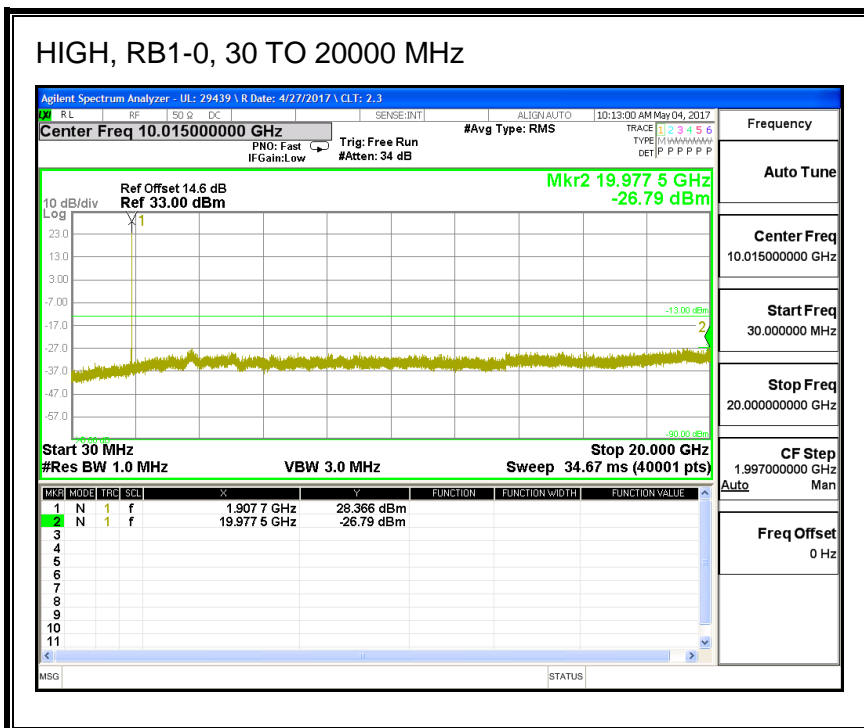
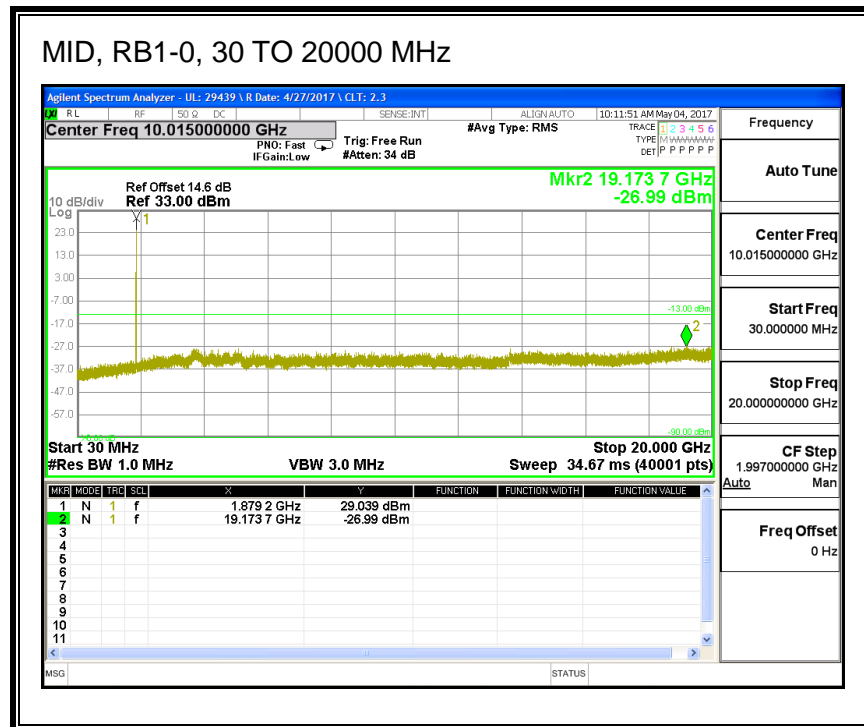
HIGH, RB1-0, 30 TO 20000 MHz



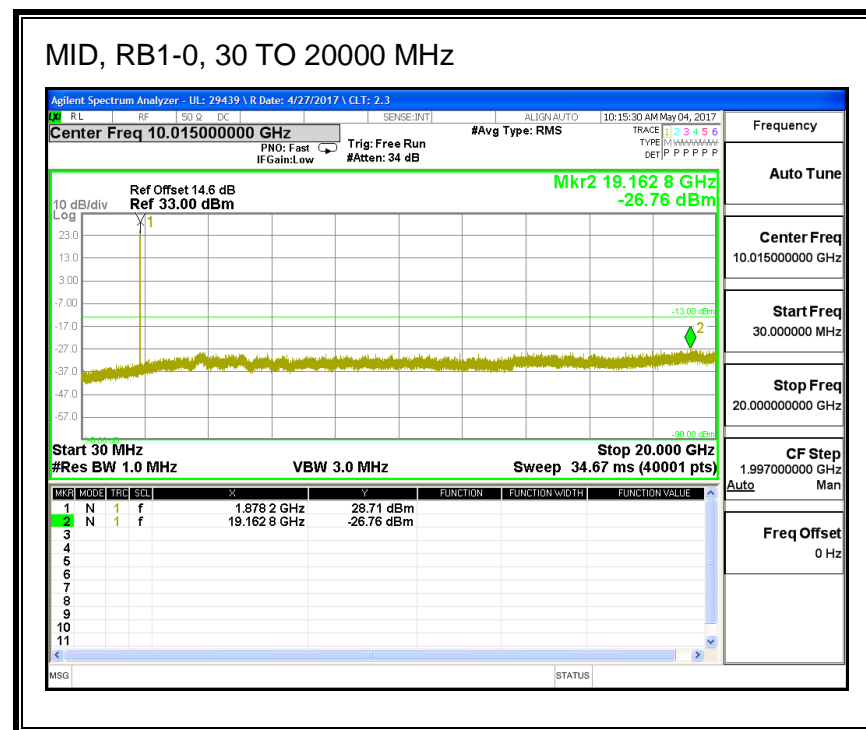
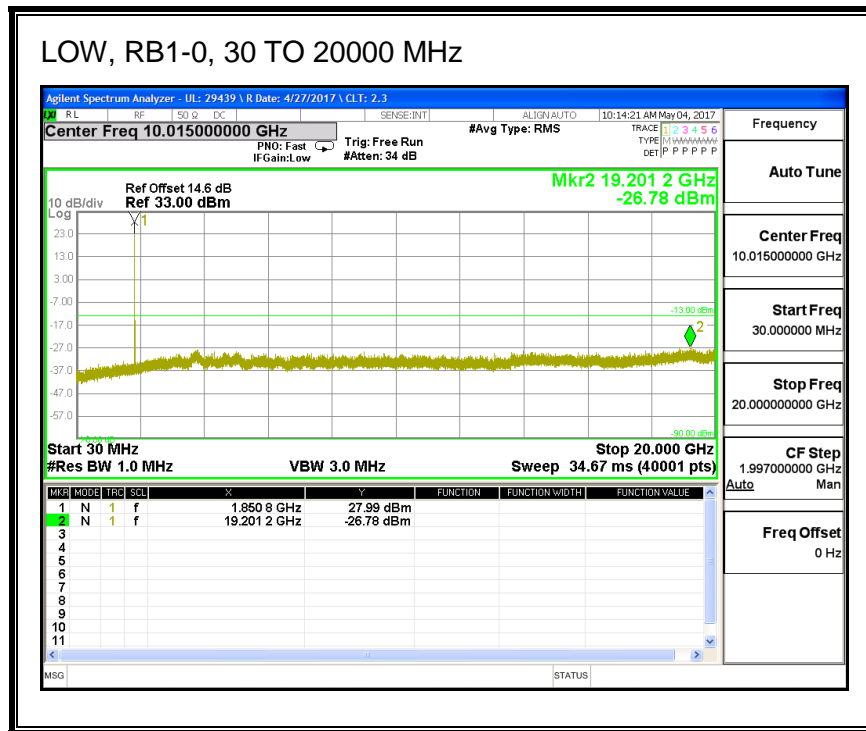
16QAM, (3.0 MHz BAND WIDTH)

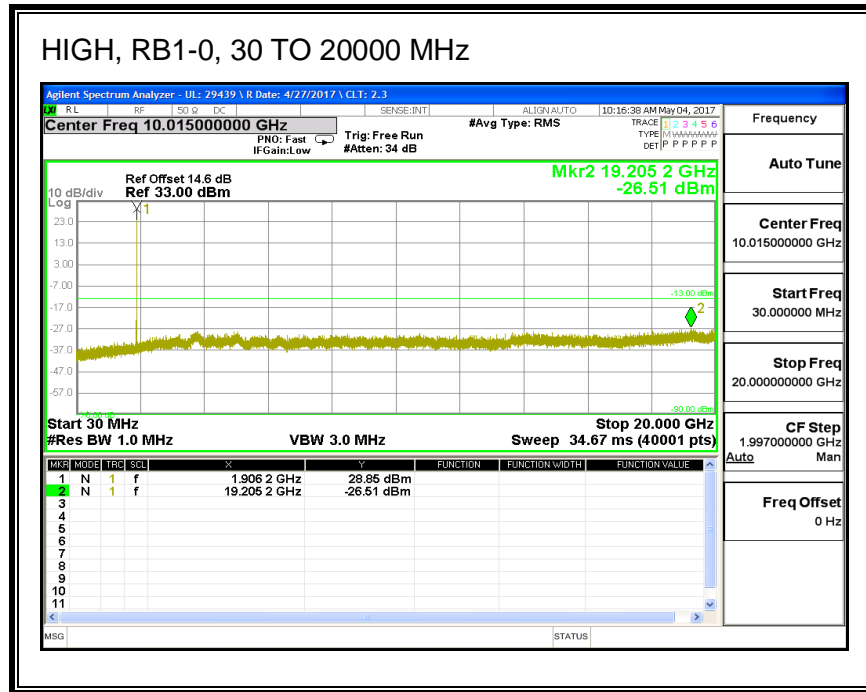
LOW, RB1-0, 30 TO 20000 MHz



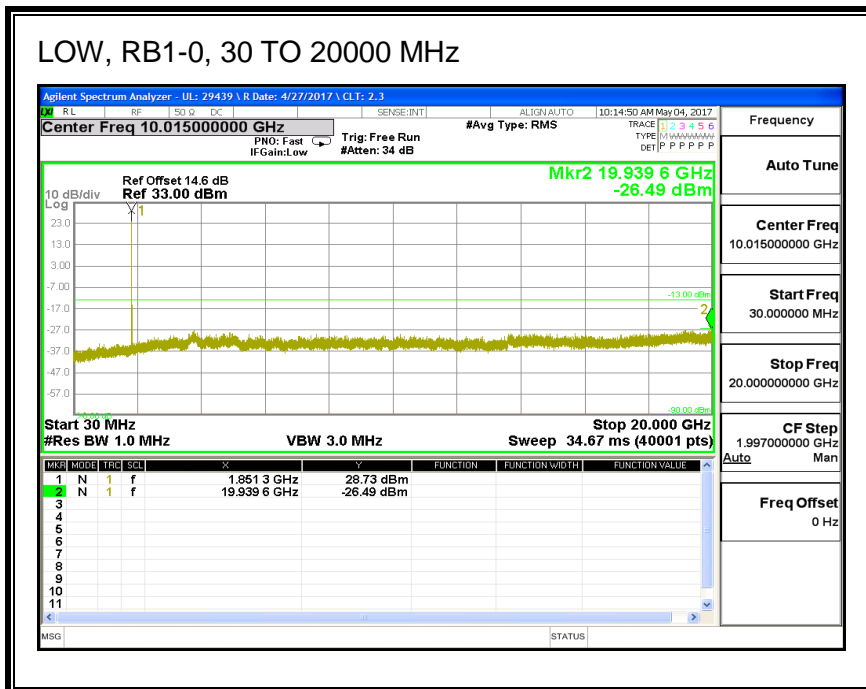


QPSK, (5.0 MHz BAND WIDTH)

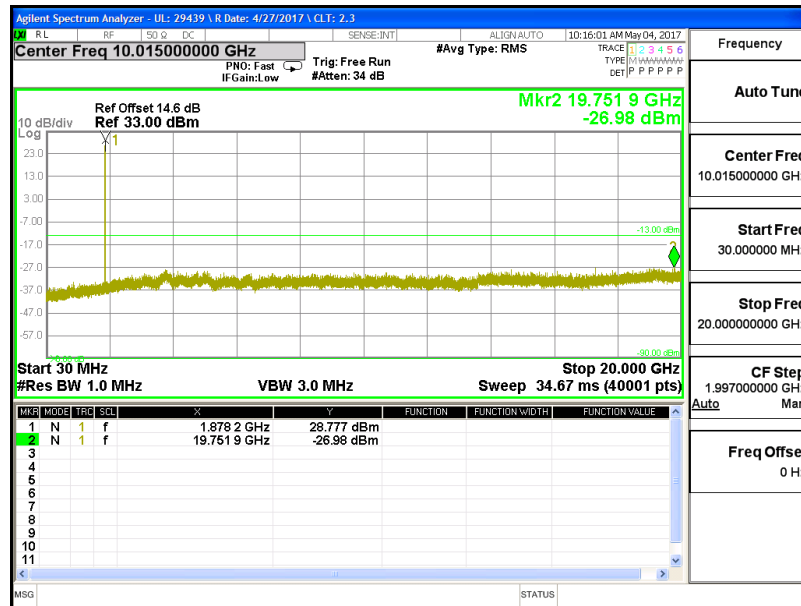




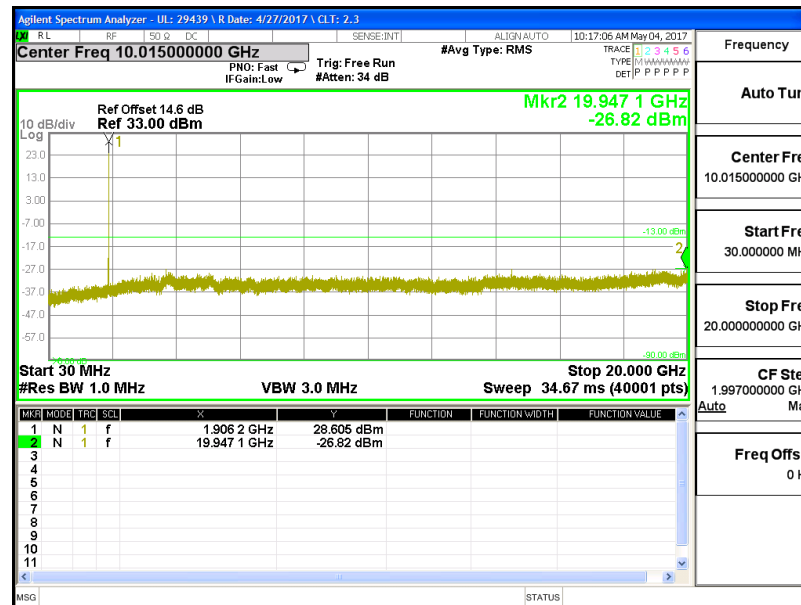
16QAM, (5.0 MHz BAND WIDTH)



MID, RB1-0, 30 TO 20000 MHz

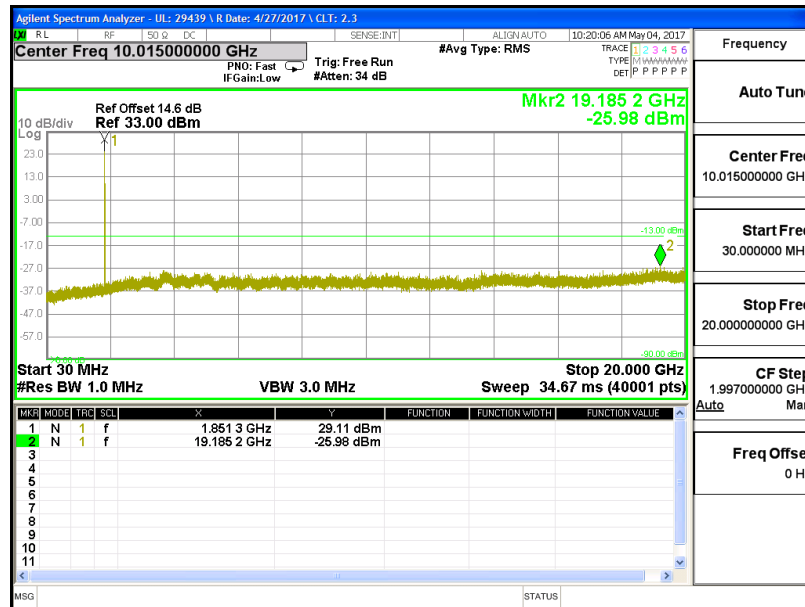


HIGH, RB1-0, 30 TO 20000 MHz

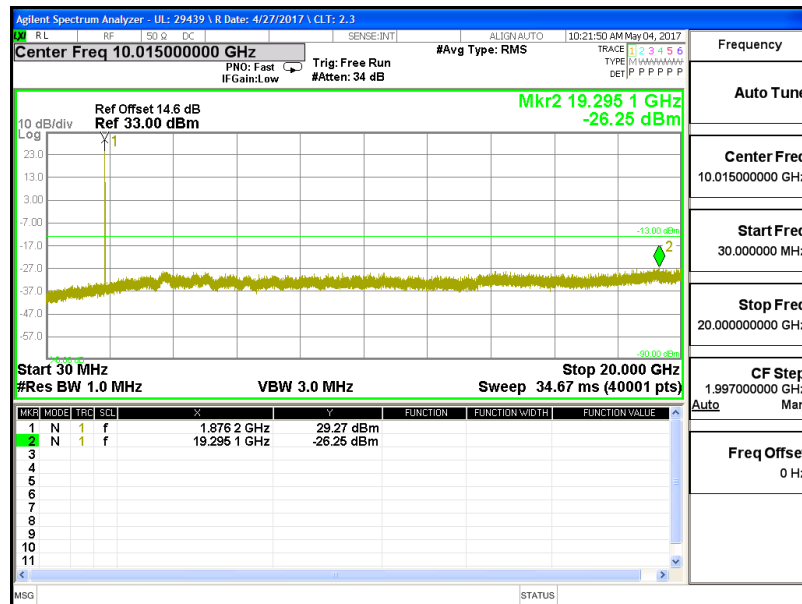


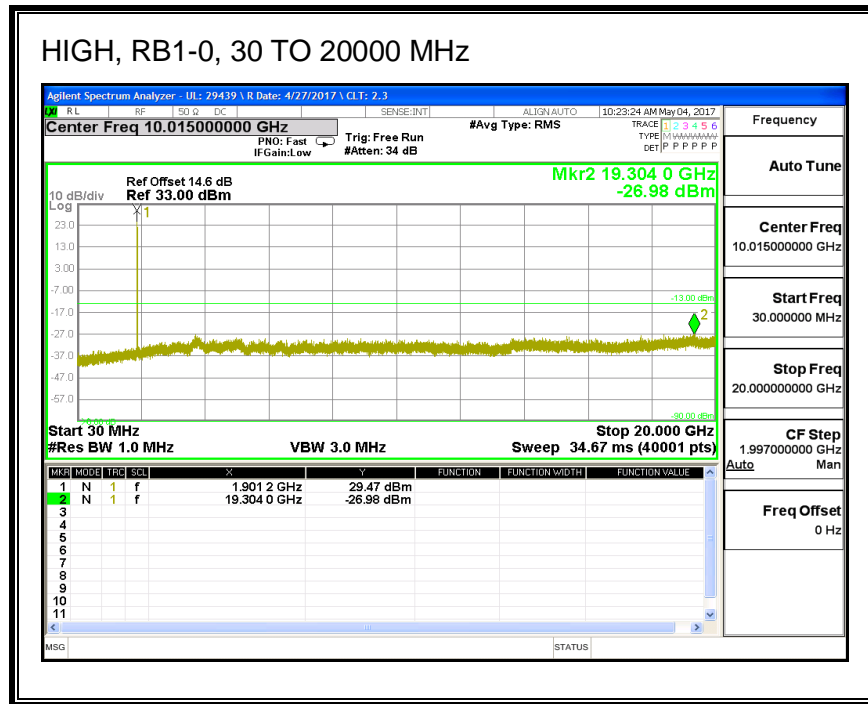
QPSK, (10.0 MHz BAND WIDTH)

LOW, RB1-0, 30 TO 20000 MHz

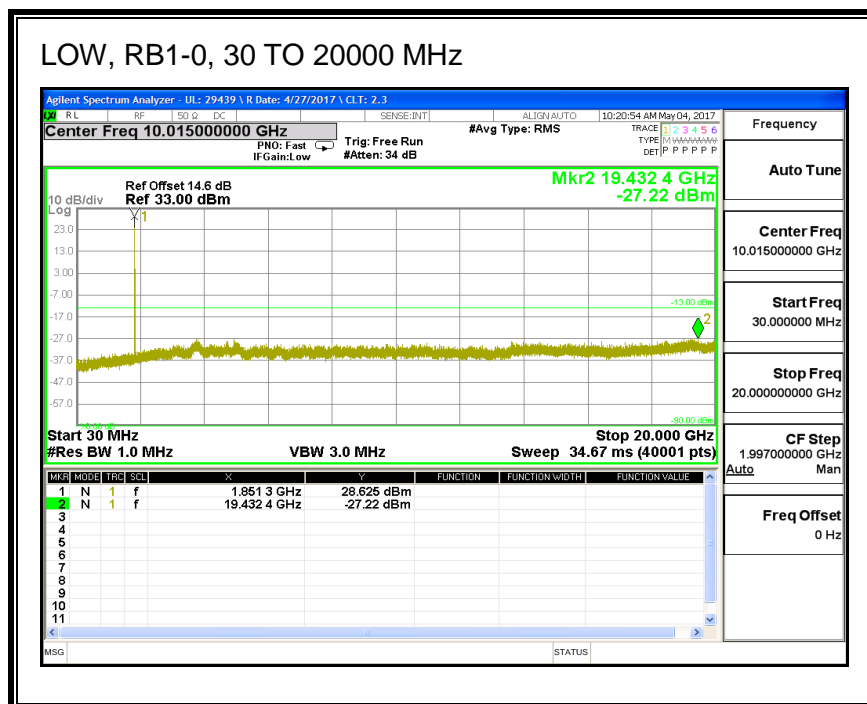


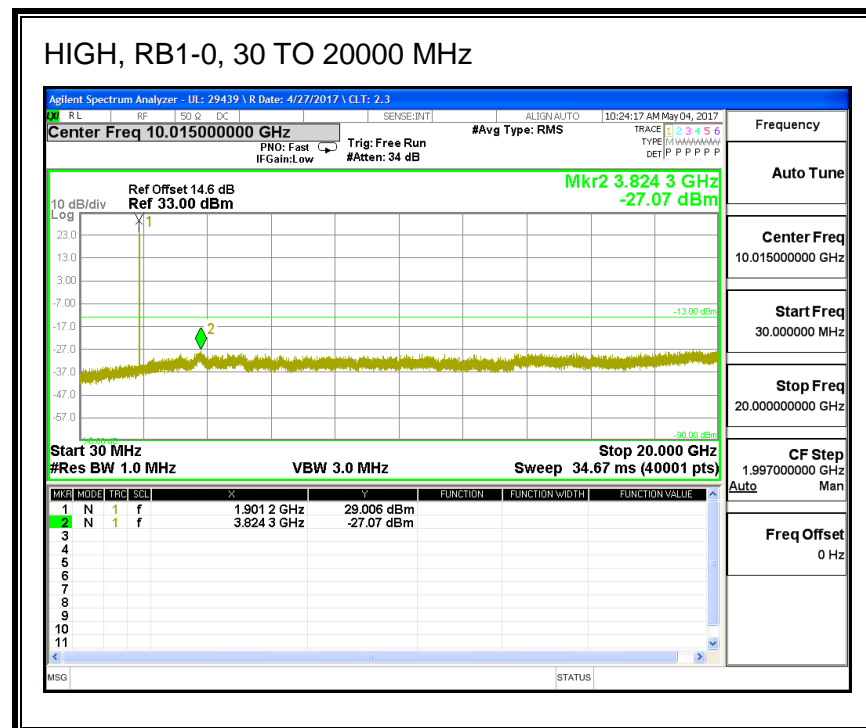
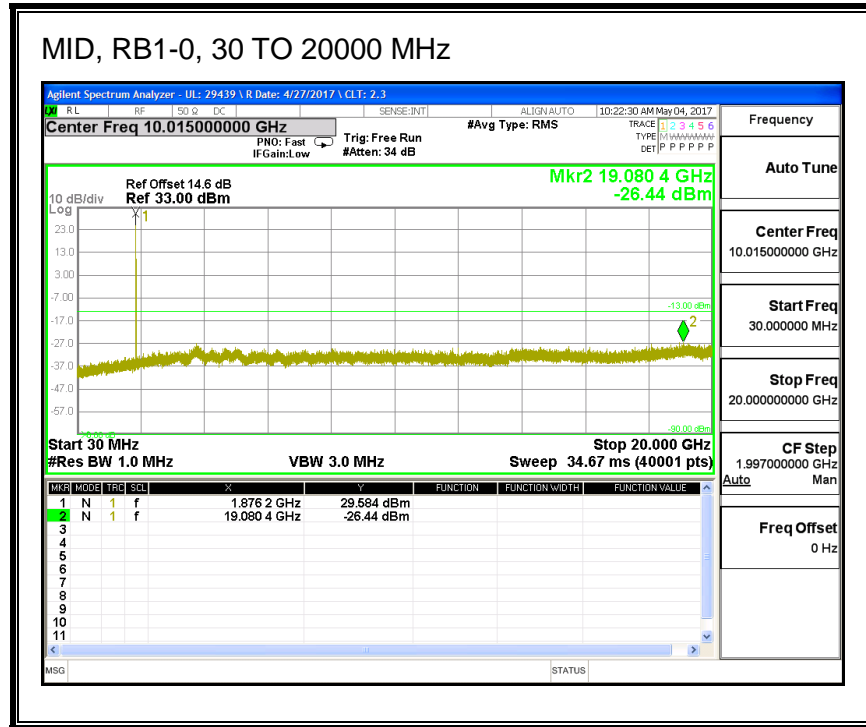
MID, RB1-0, 30 TO 20000 MHz



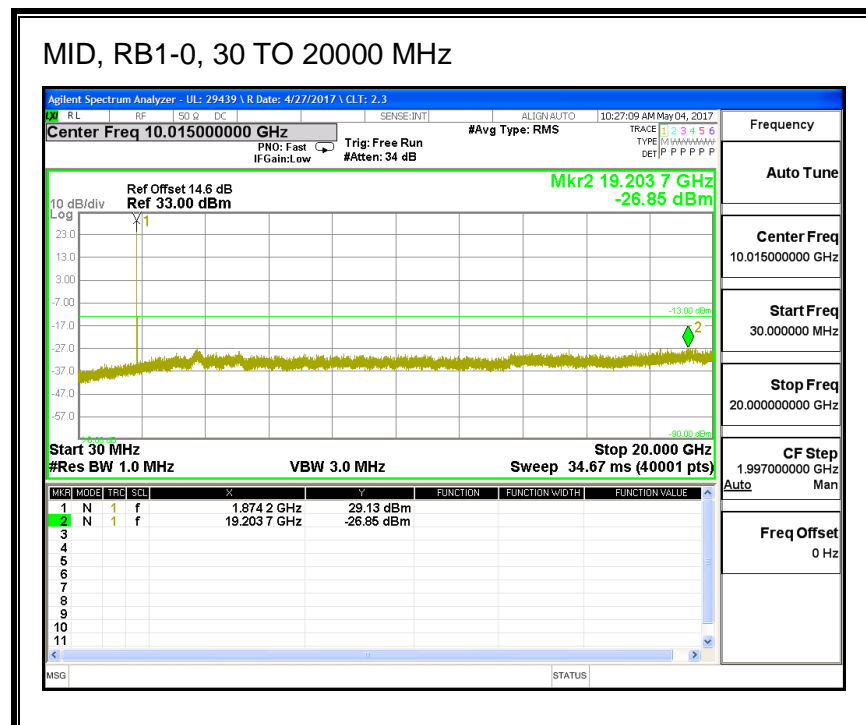
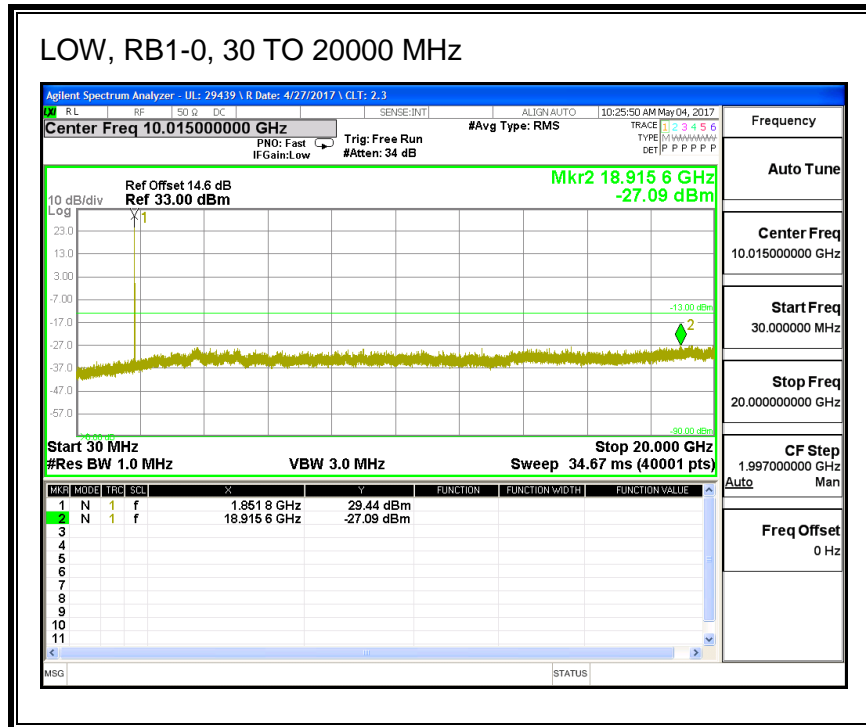


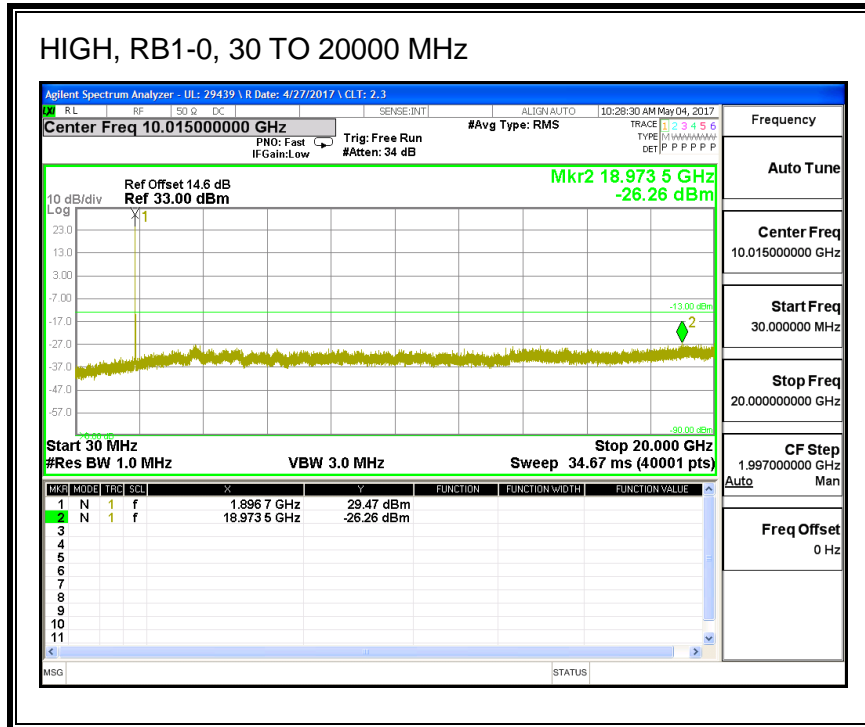
16QAM, (10.0 MHz BAND WIDTH)



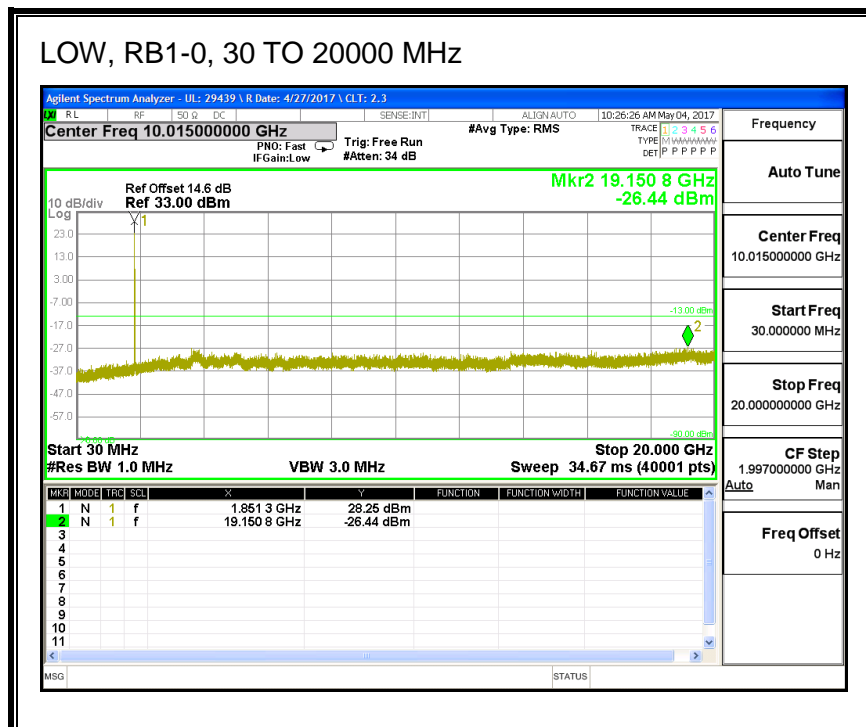


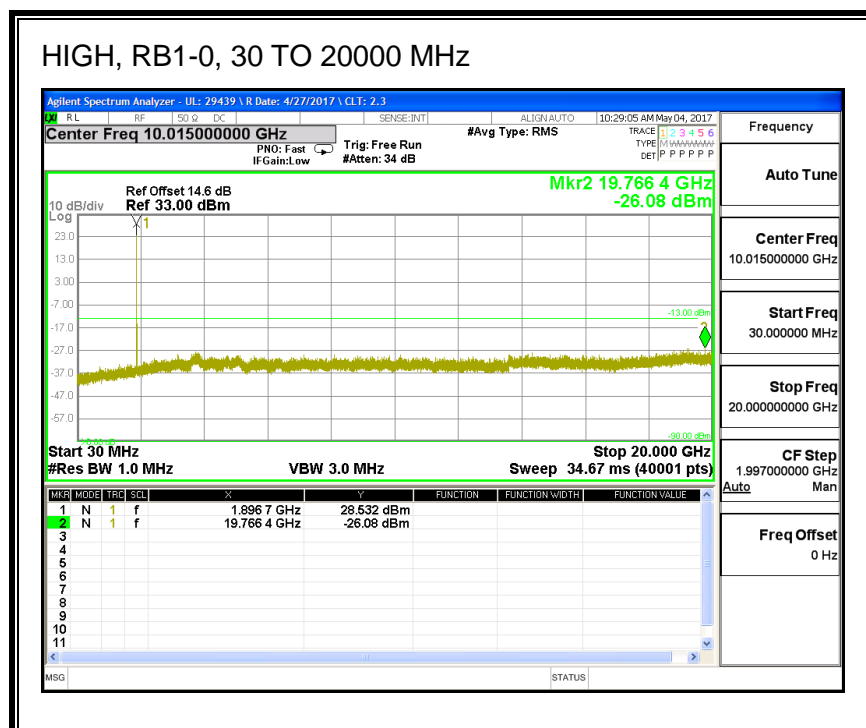
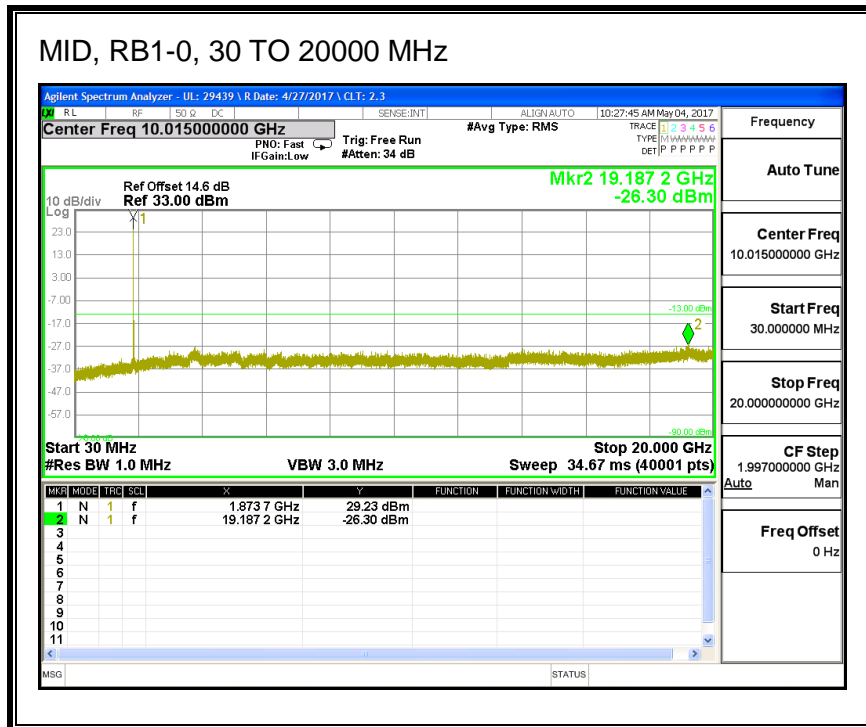
QPSK, (15.0 MHz BAND WIDTH)



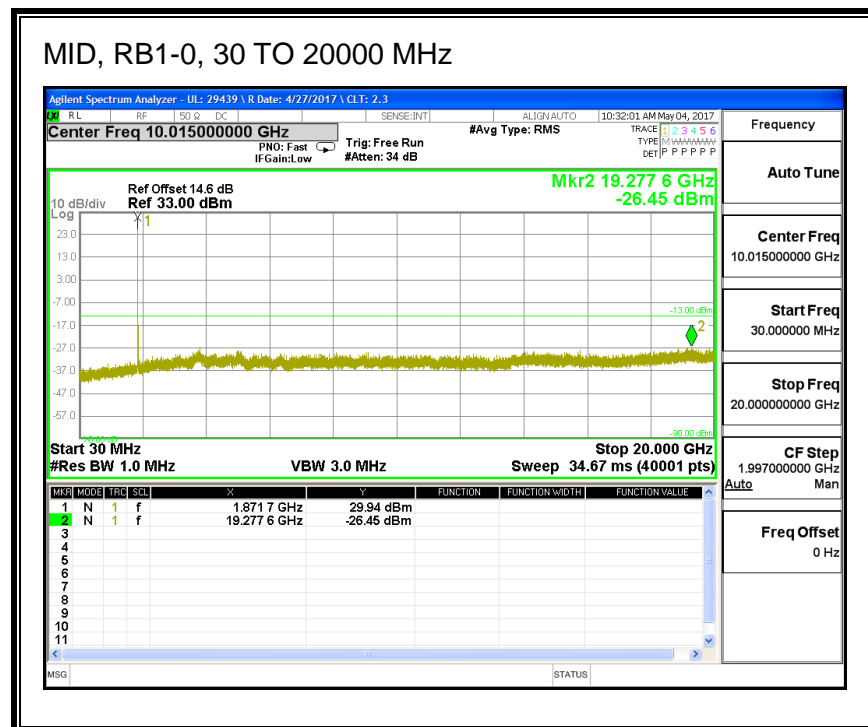
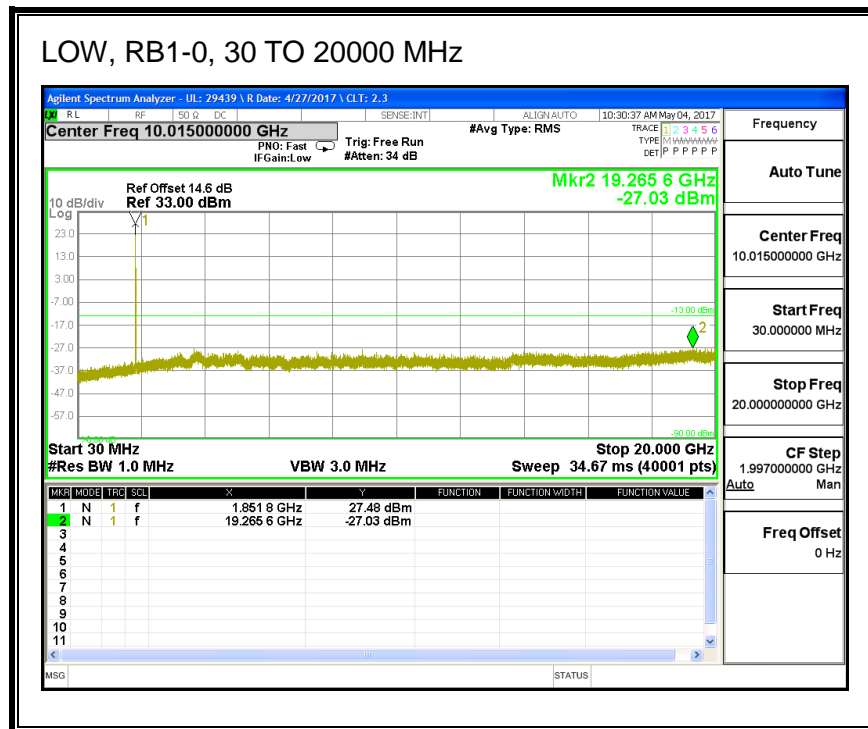


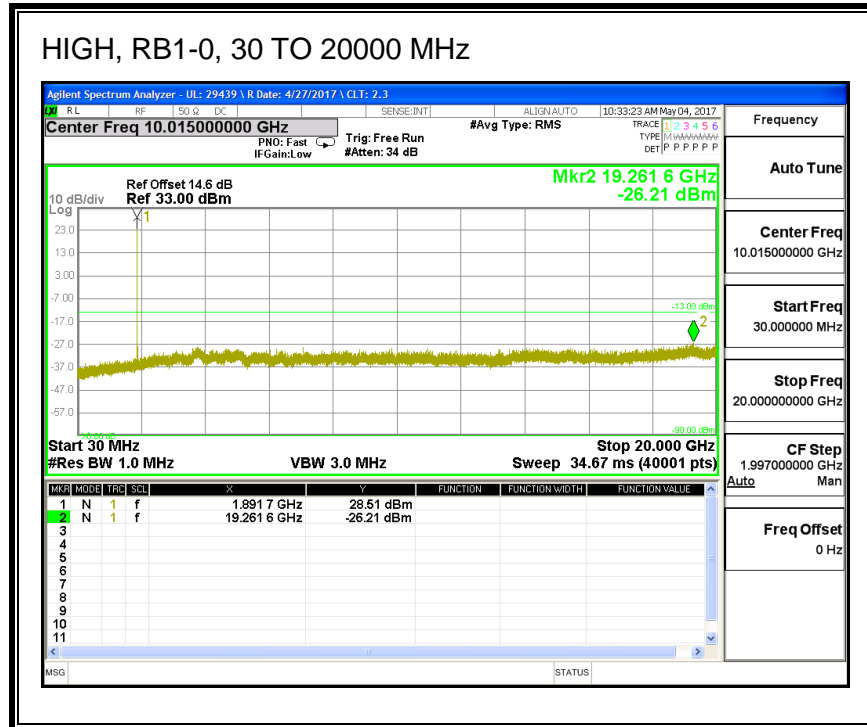
16QAM, (15.0 MHz BAND WIDTH)



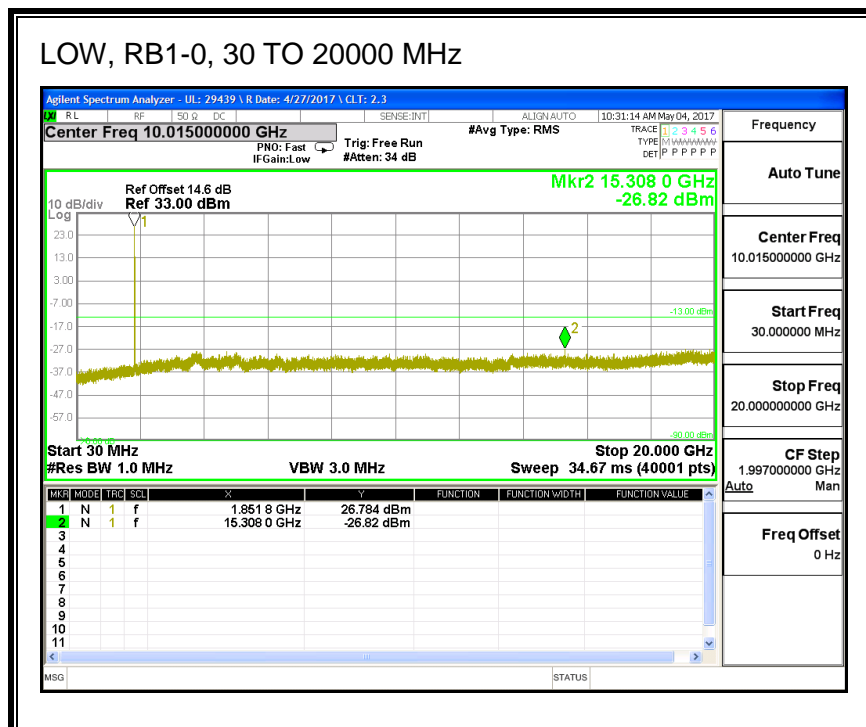


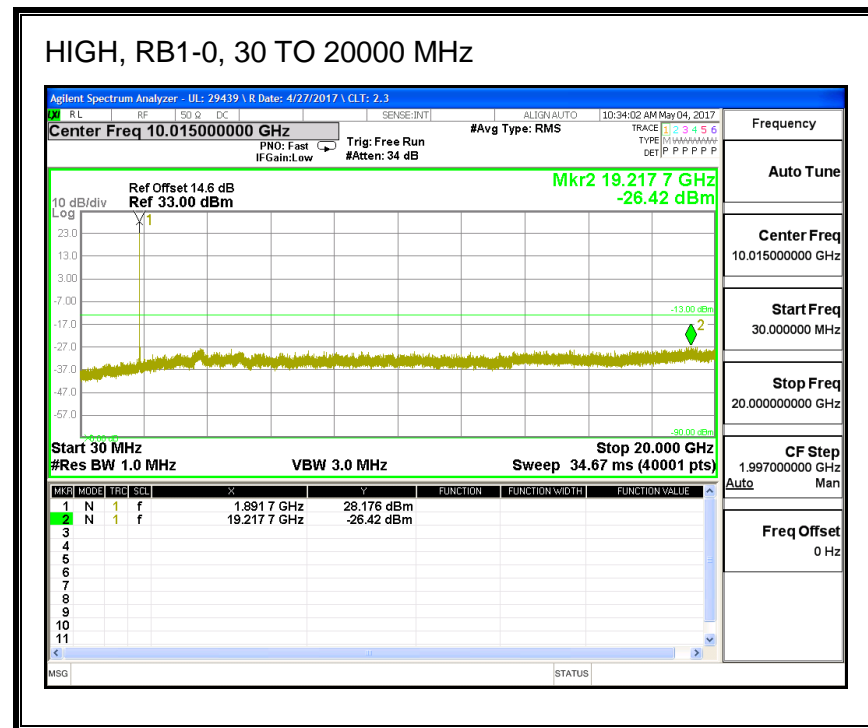
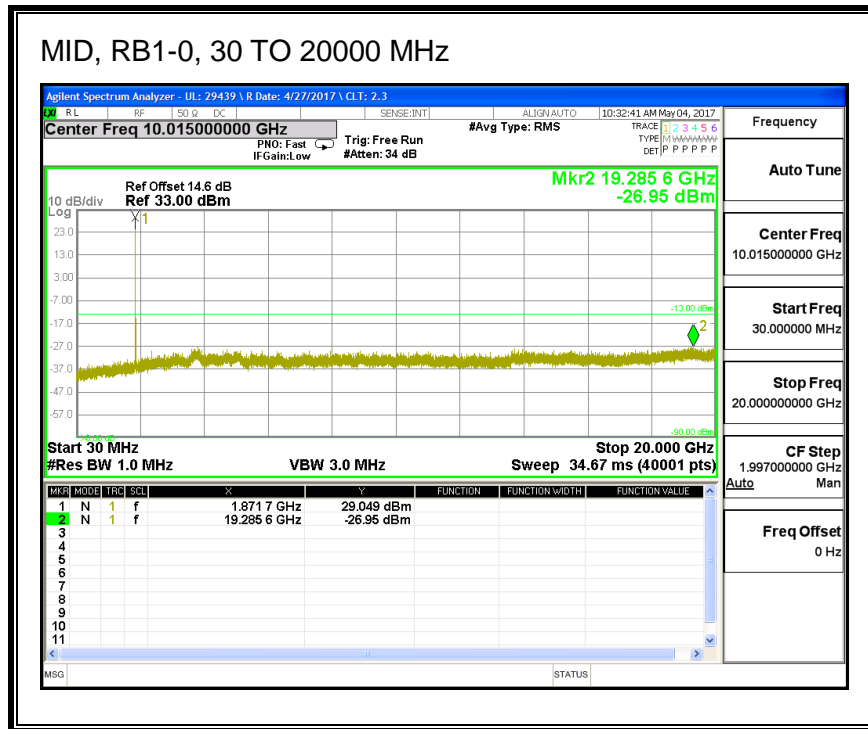
QPSK, (20.0 MHz BAND WIDTH)





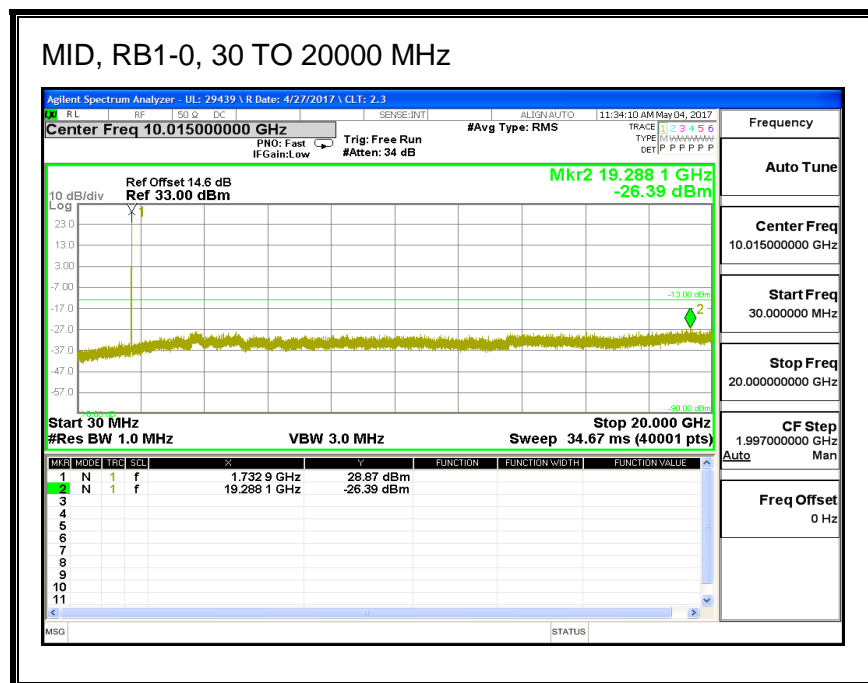
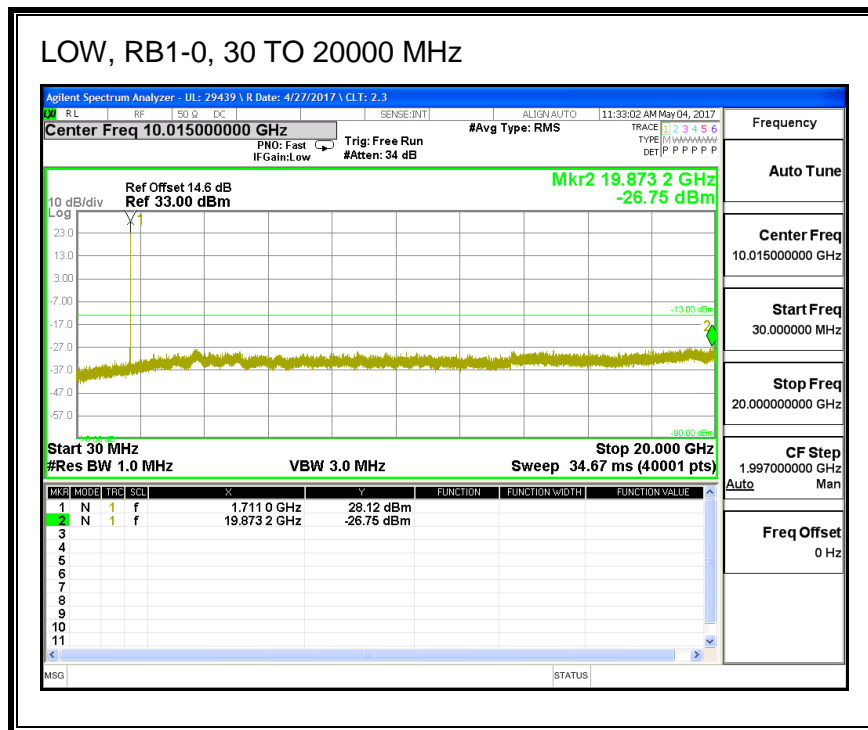
16QAM, (20.0 MHz BAND WIDTH)

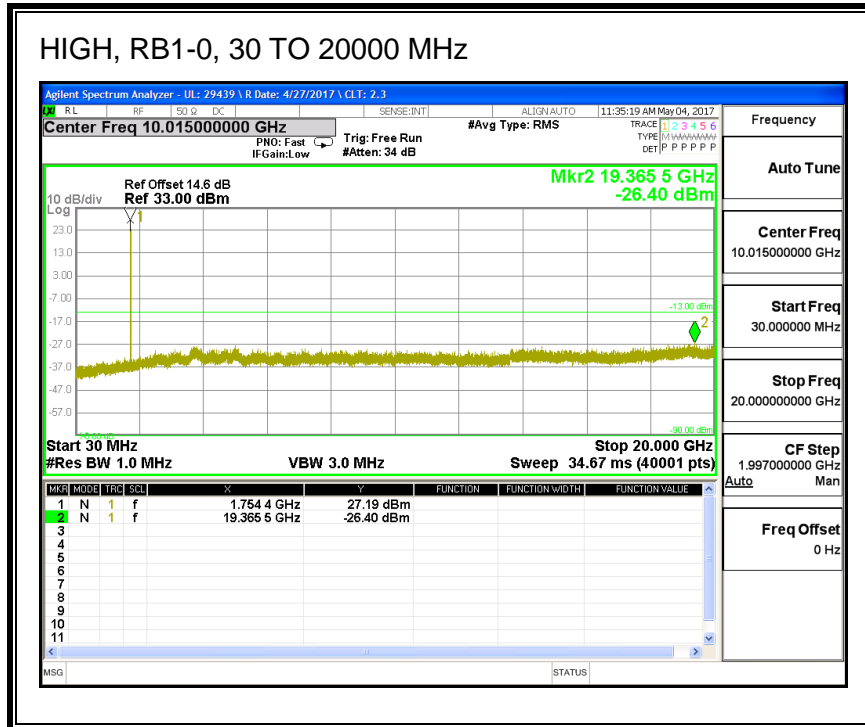




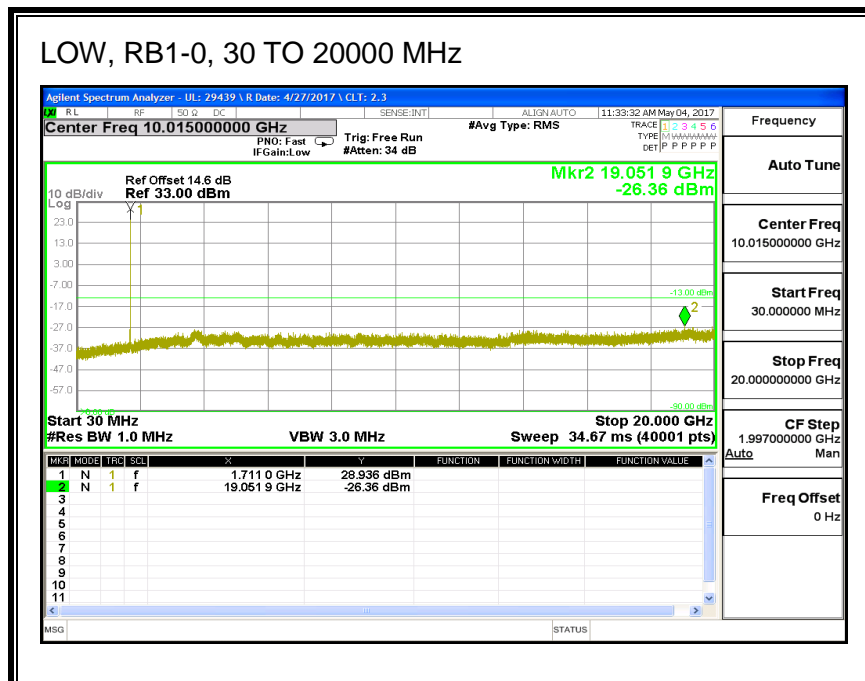
8.3.2. LTE BAND 4

QPSK, (1.4 MHz BAND WIDTH)

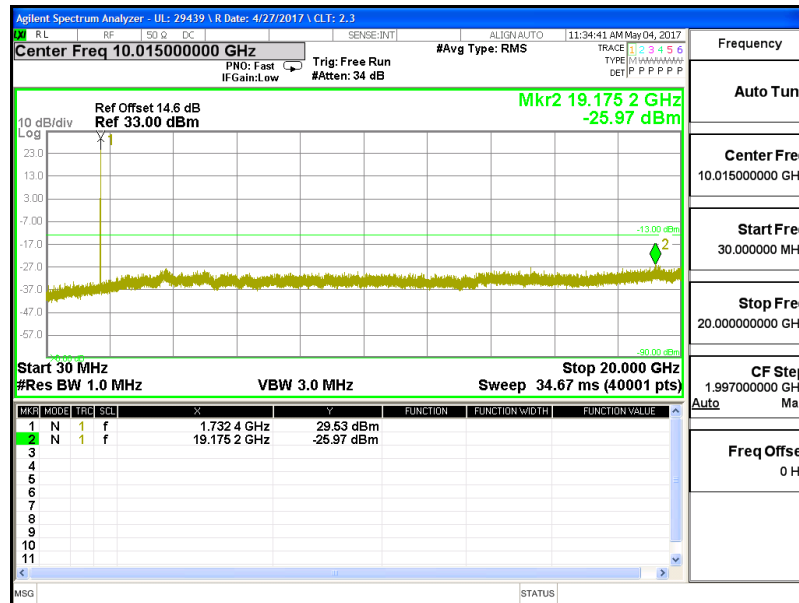




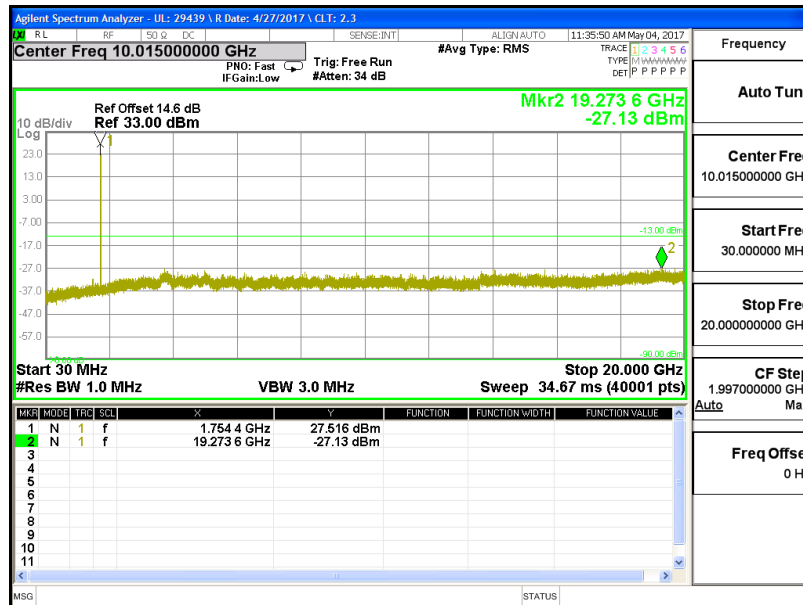
16QAM, (1.4 MHz BAND WIDTH)



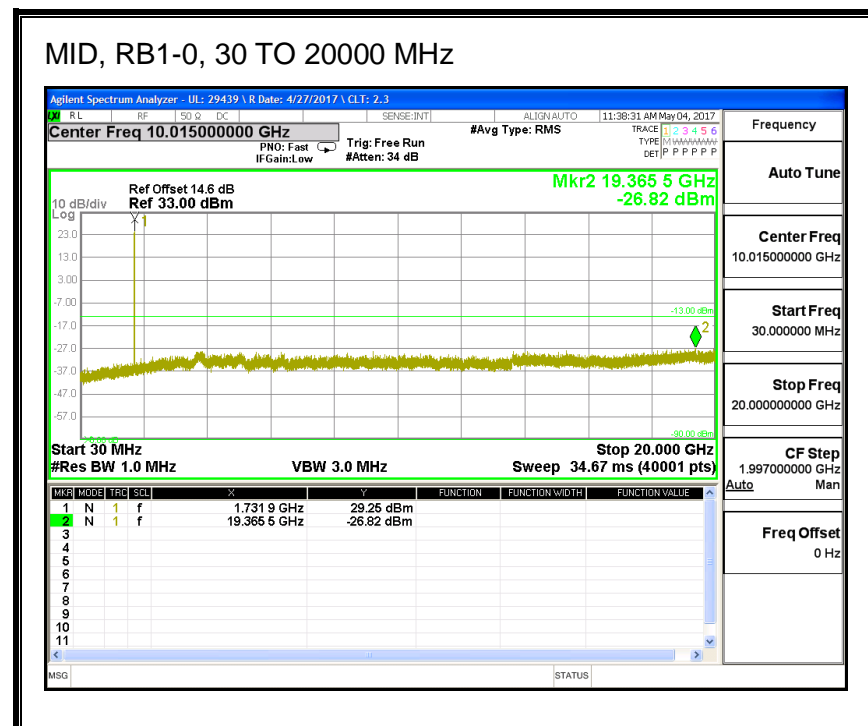
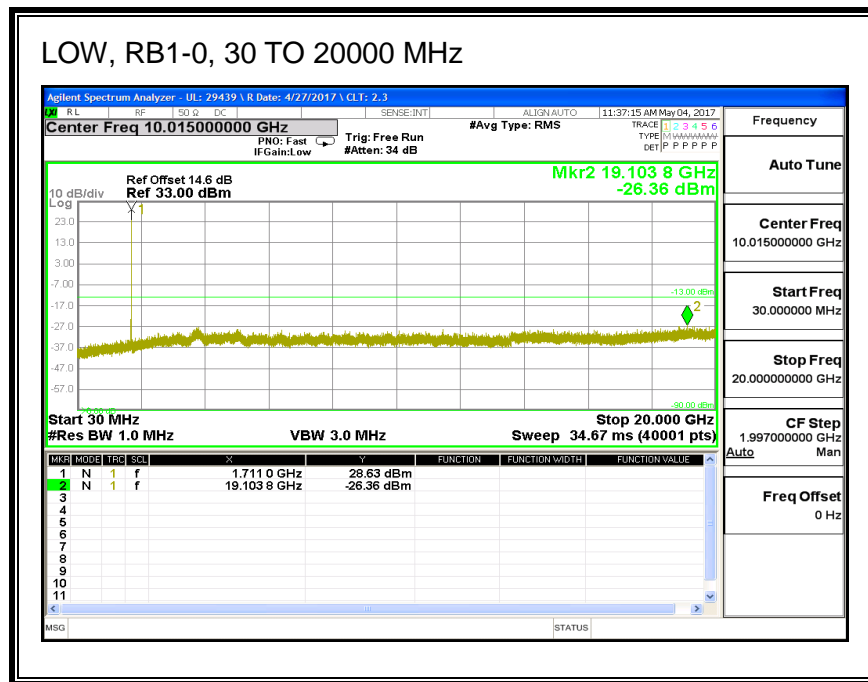
MID, RB1-0, 30 TO 20000 MHz

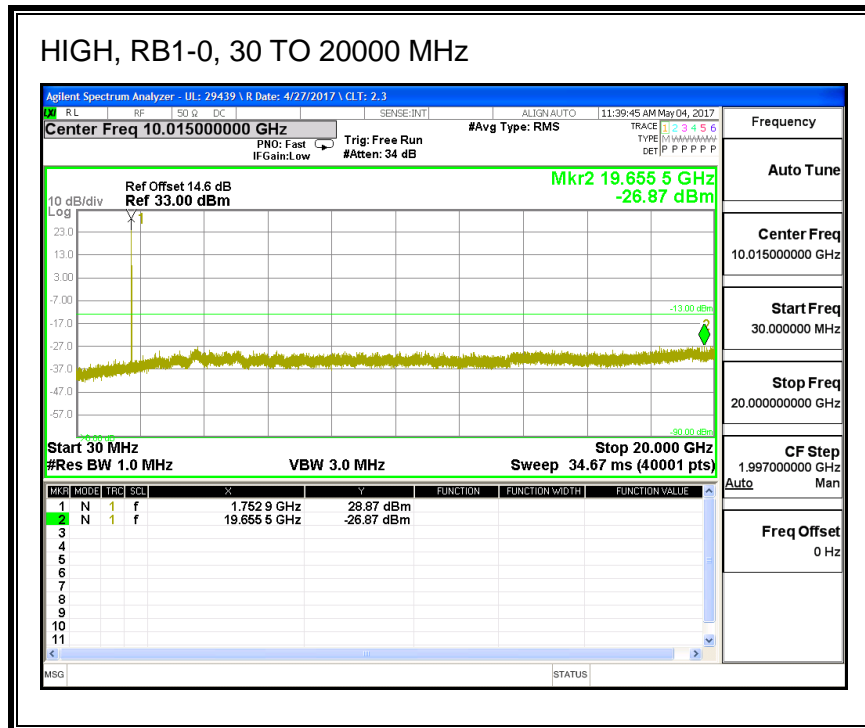


HIGH, RB1-0, 30 TO 20000 MHz

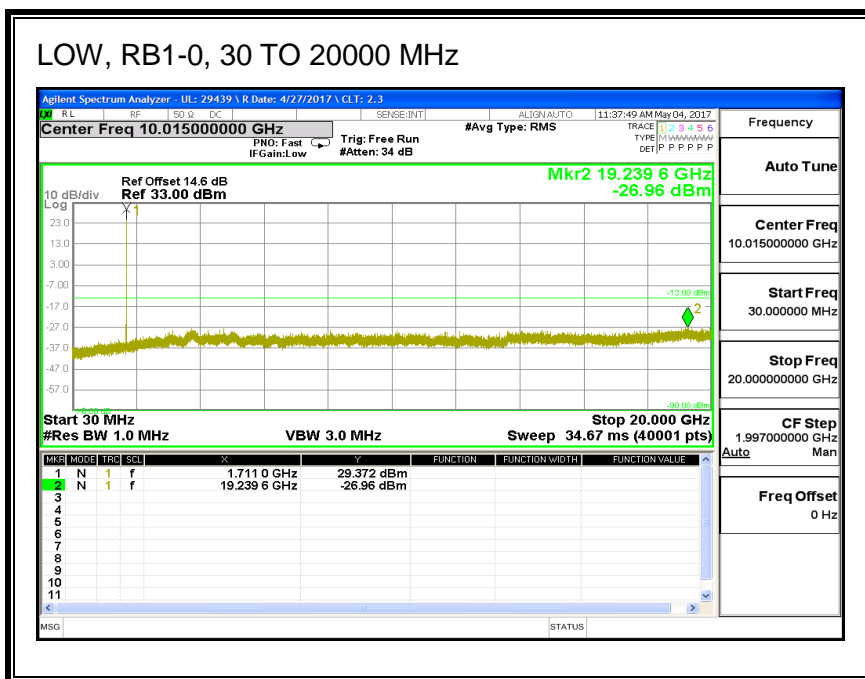


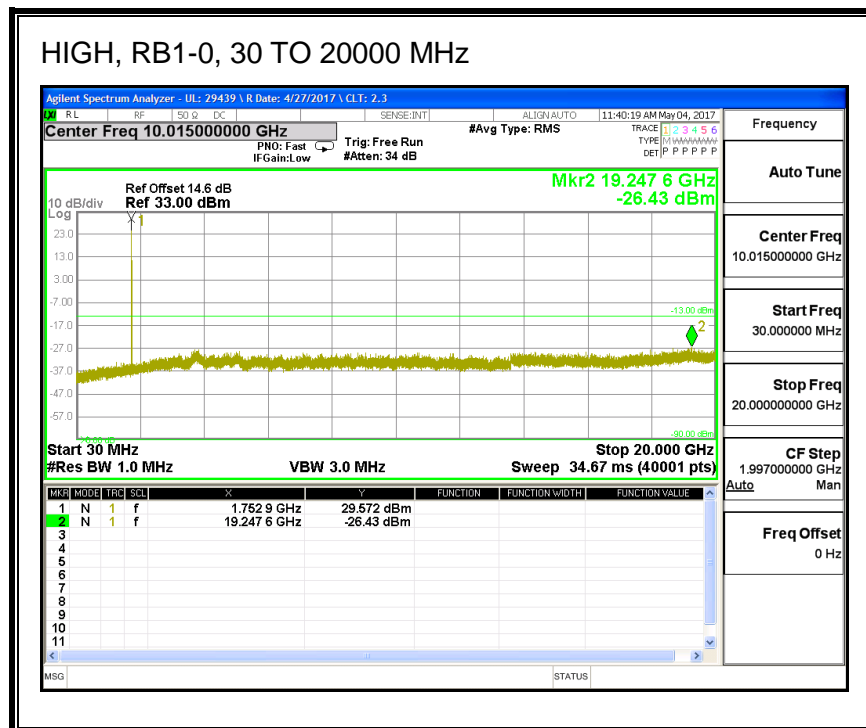
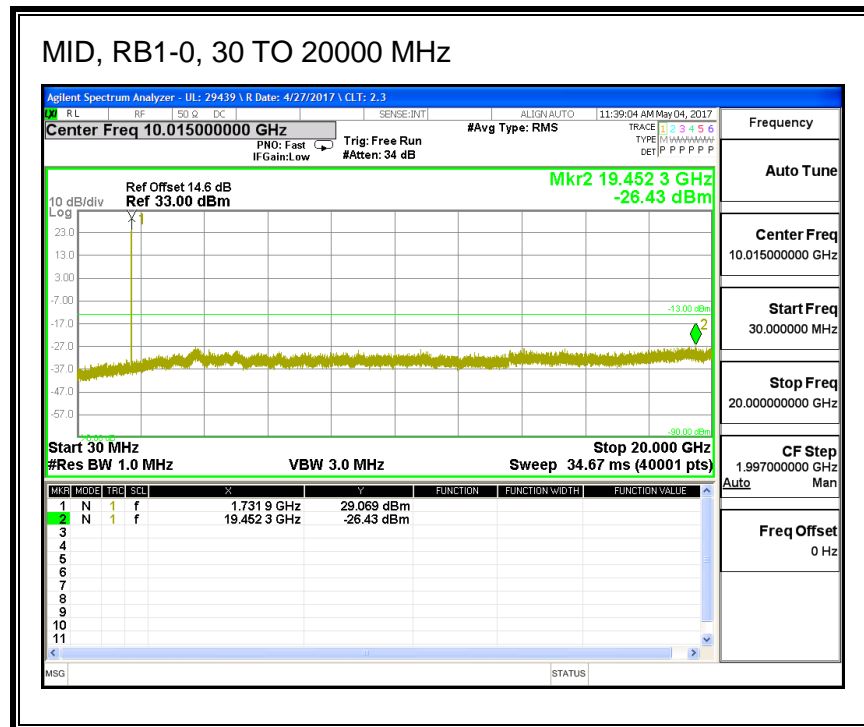
QPSK, (3.0 MHz BAND WIDTH)





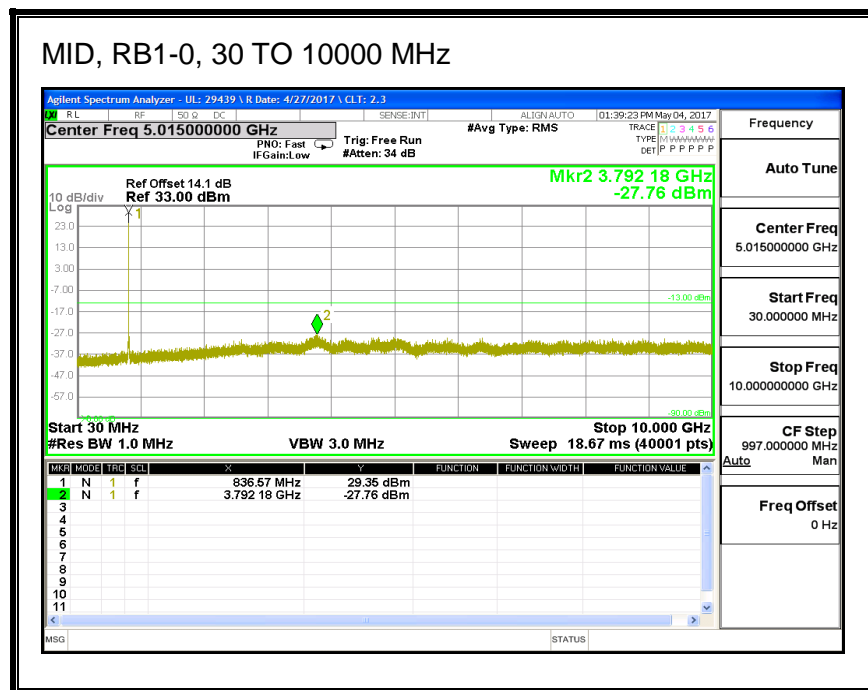
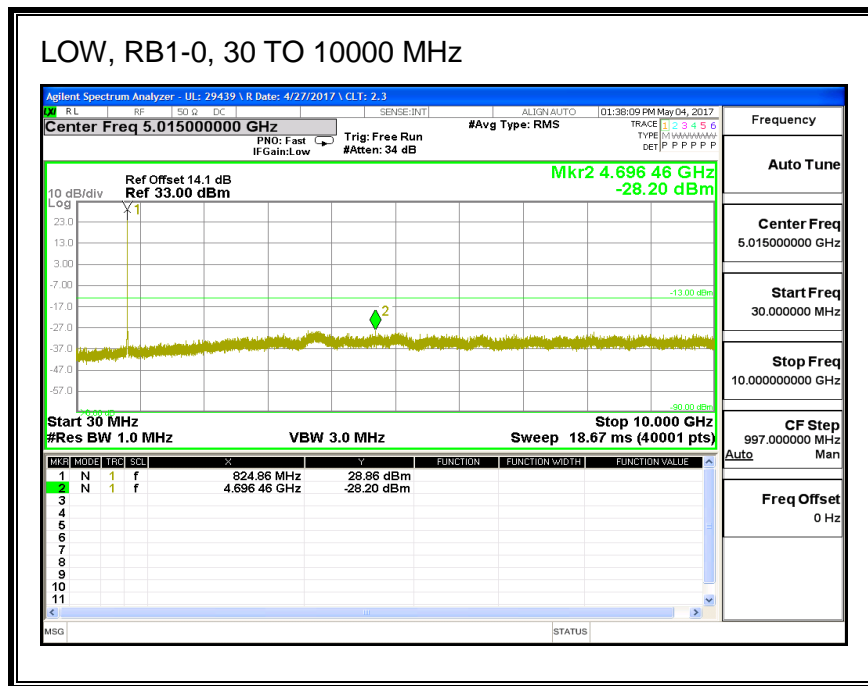
16QAM, (3.0 MHz BAND WIDTH)

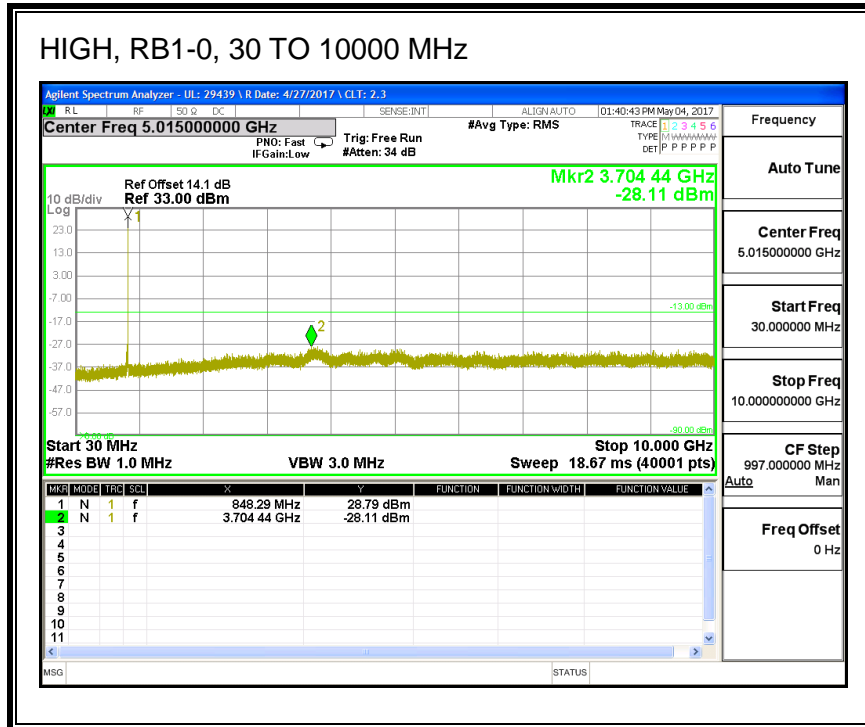




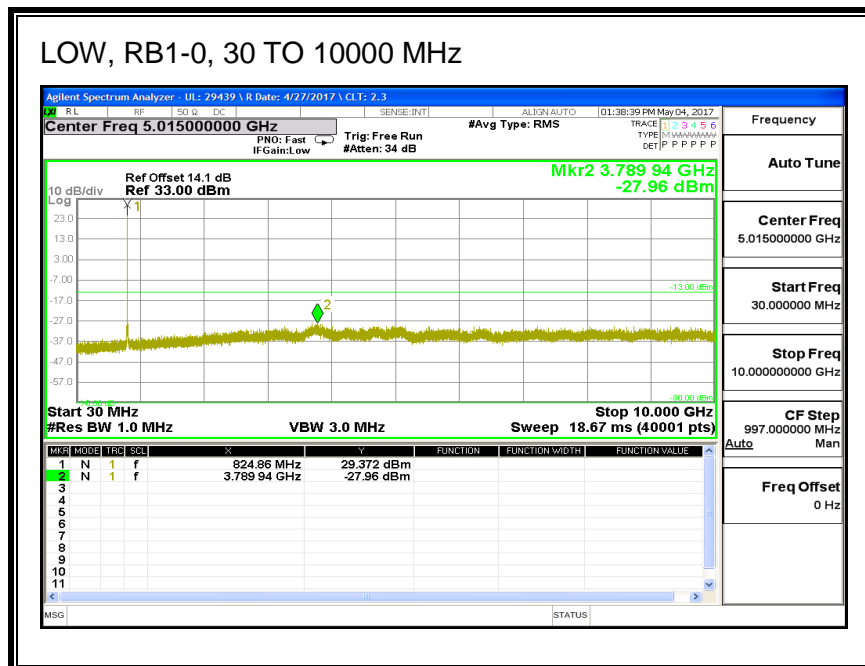
8.3.3. LTE BAND 5

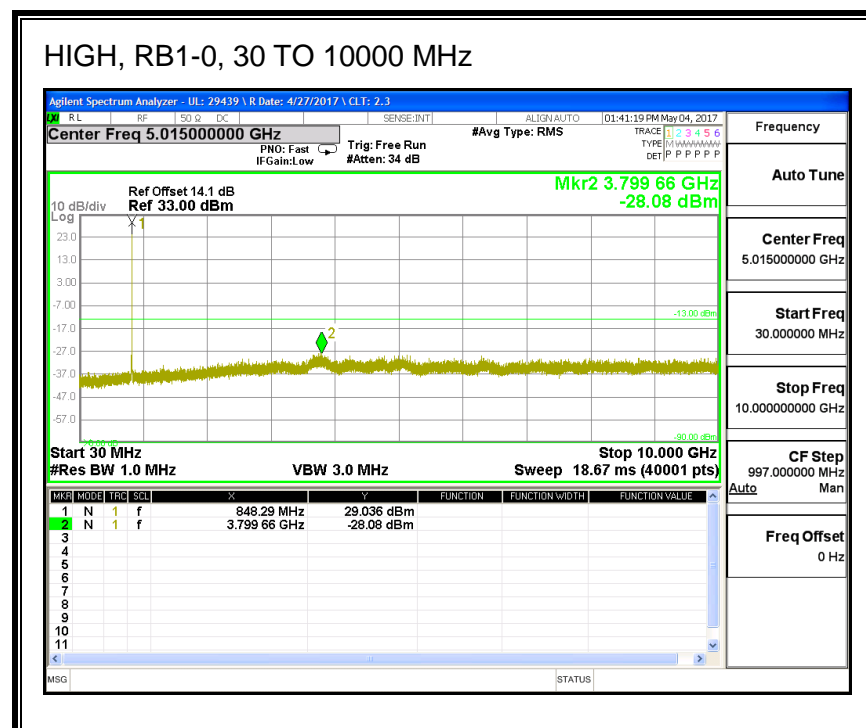
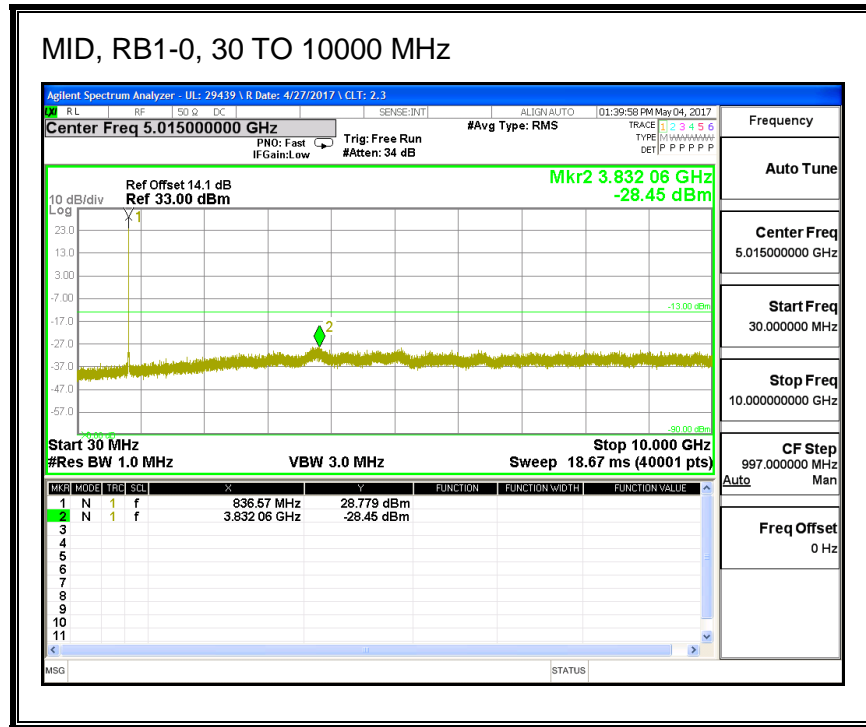
QPSK, (1.4 MHz BAND WIDTH)



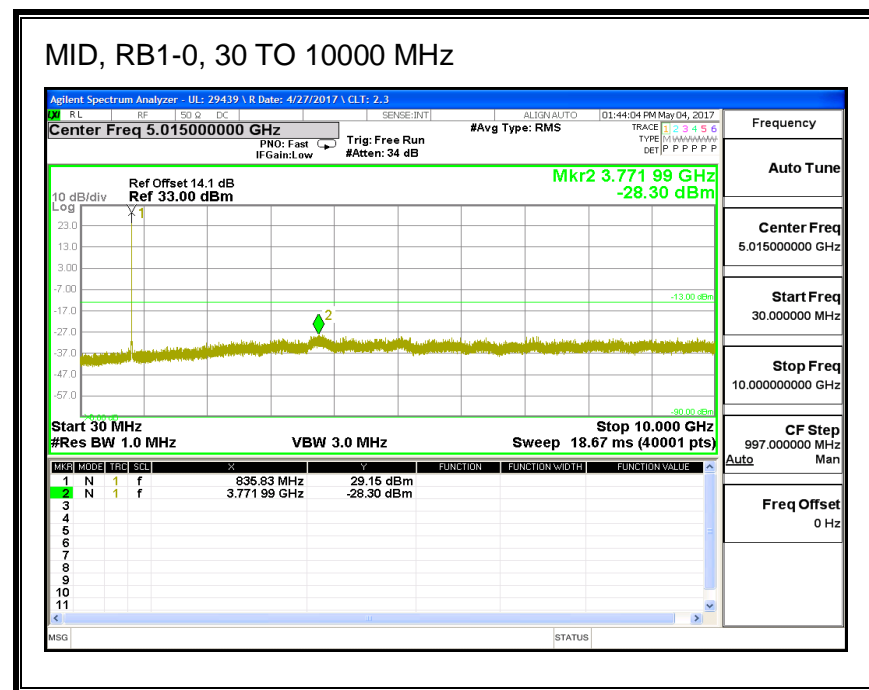
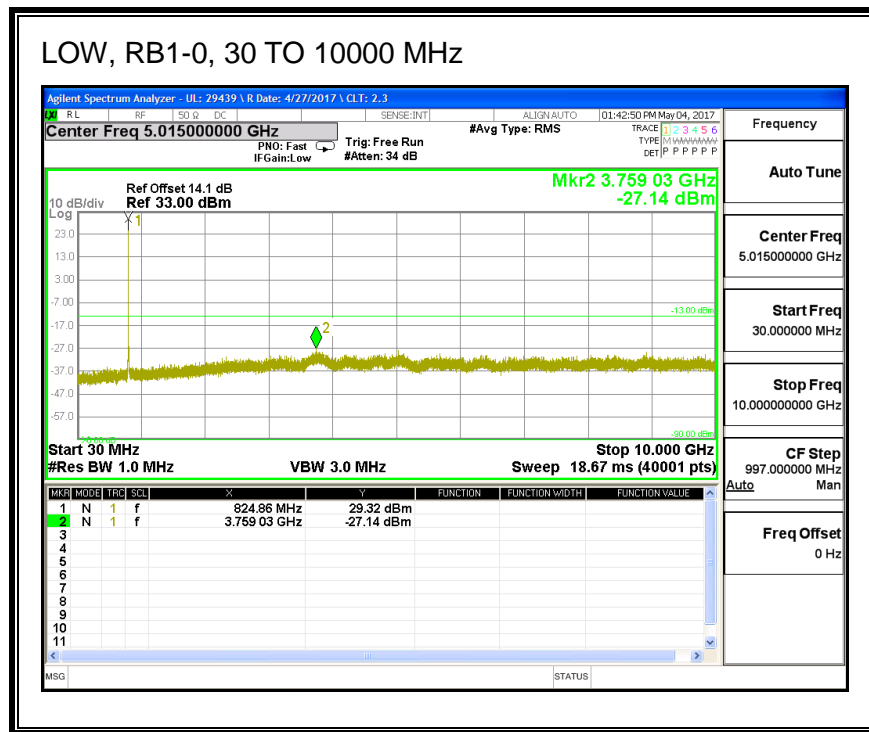


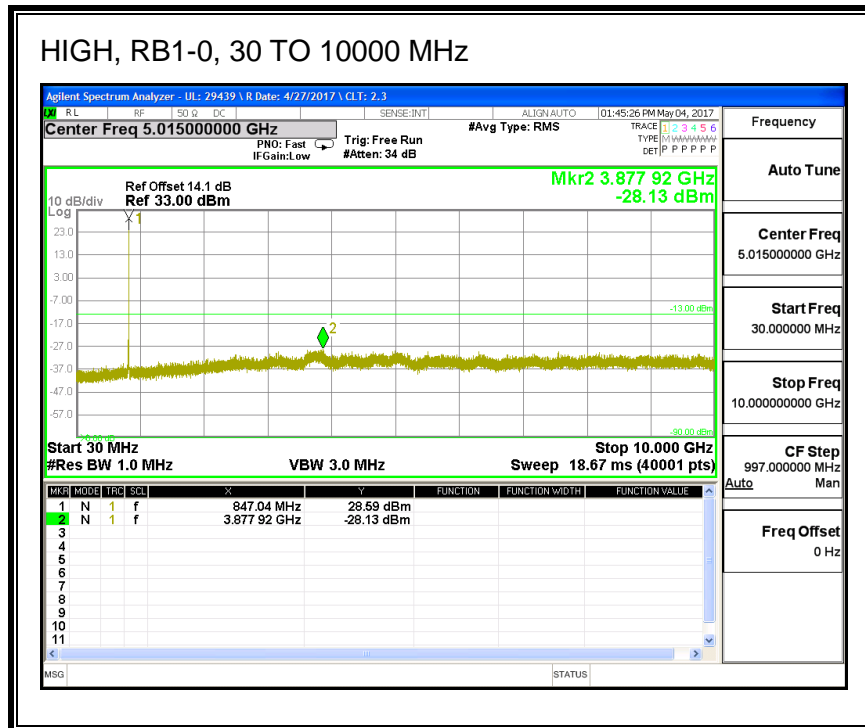
16QAM, (1.4 MHz BAND WIDTH)



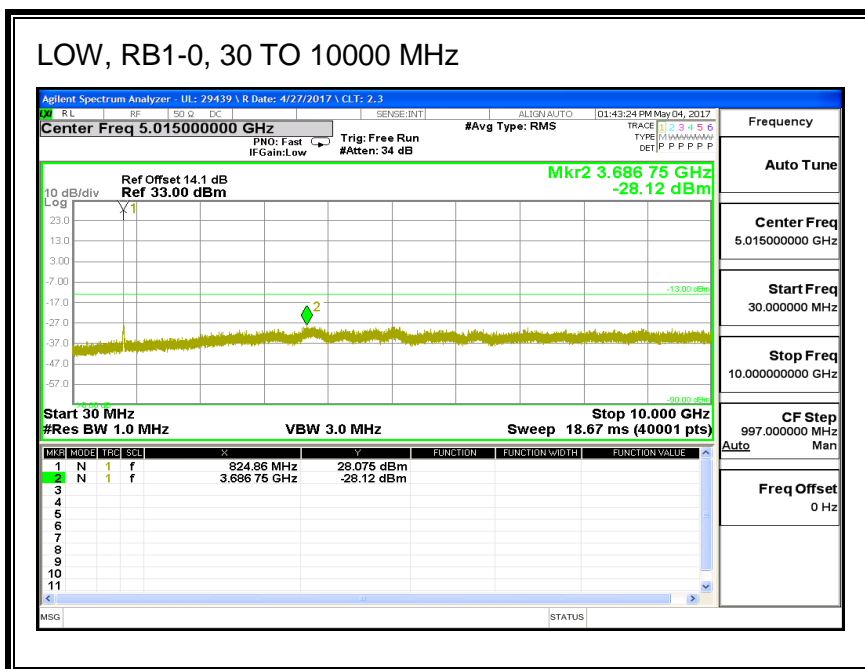


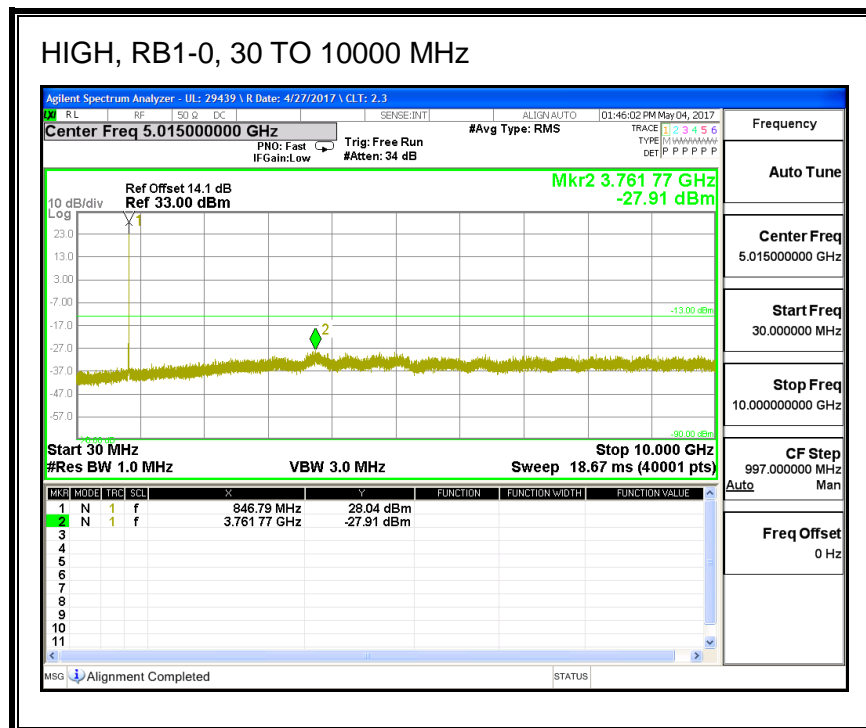
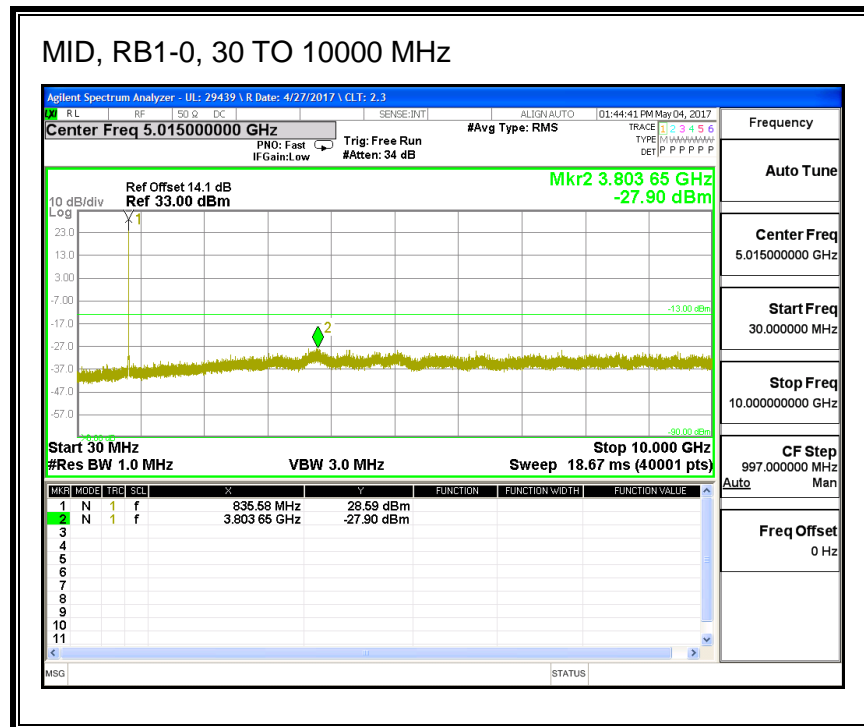
QPSK, (3.0 MHz BAND WIDTH)



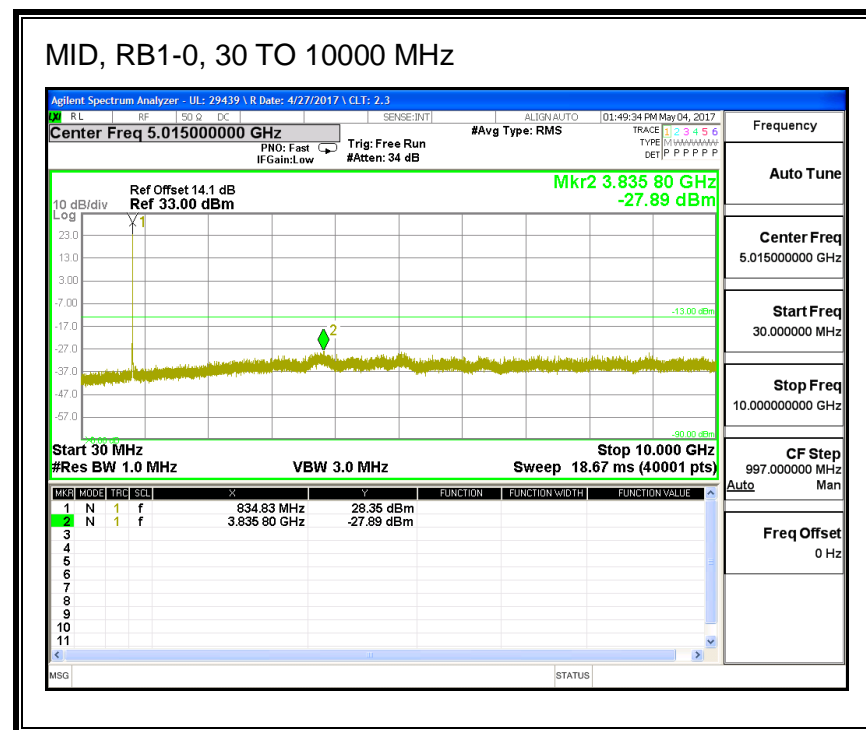
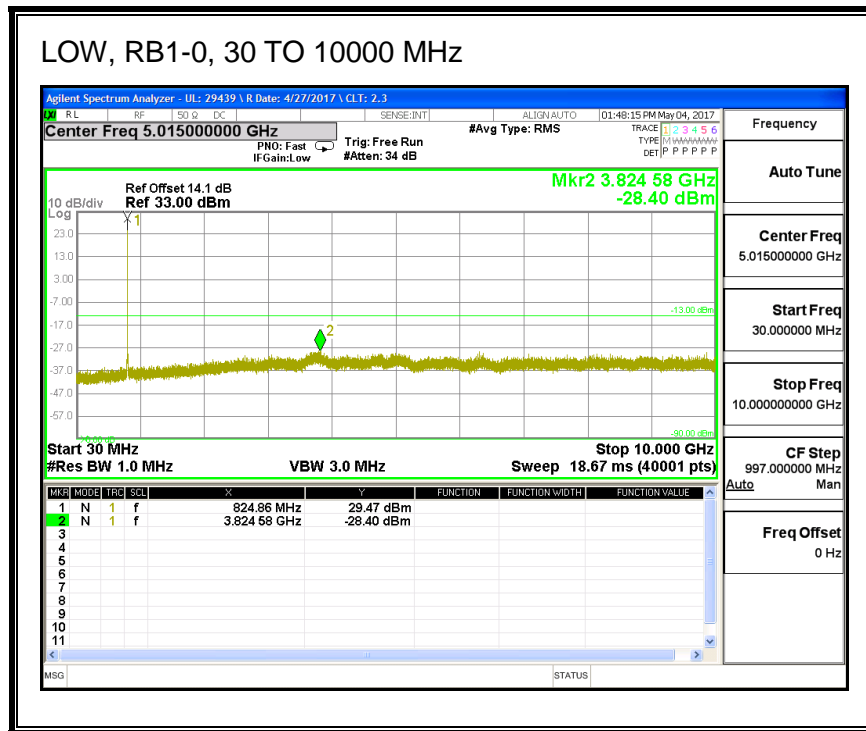


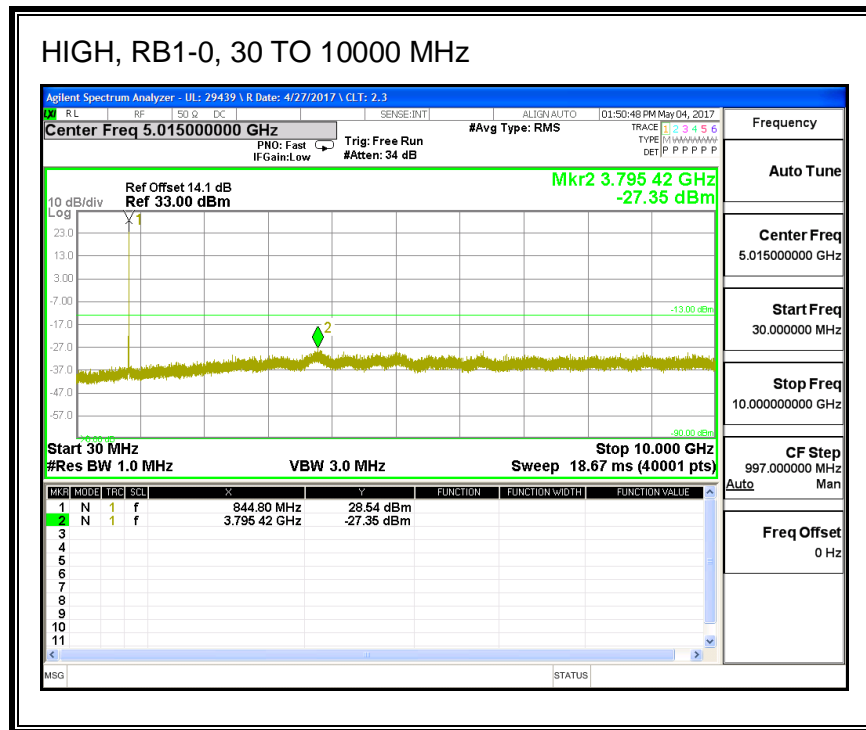
16QAM, (3.0 MHz BAND WIDTH)



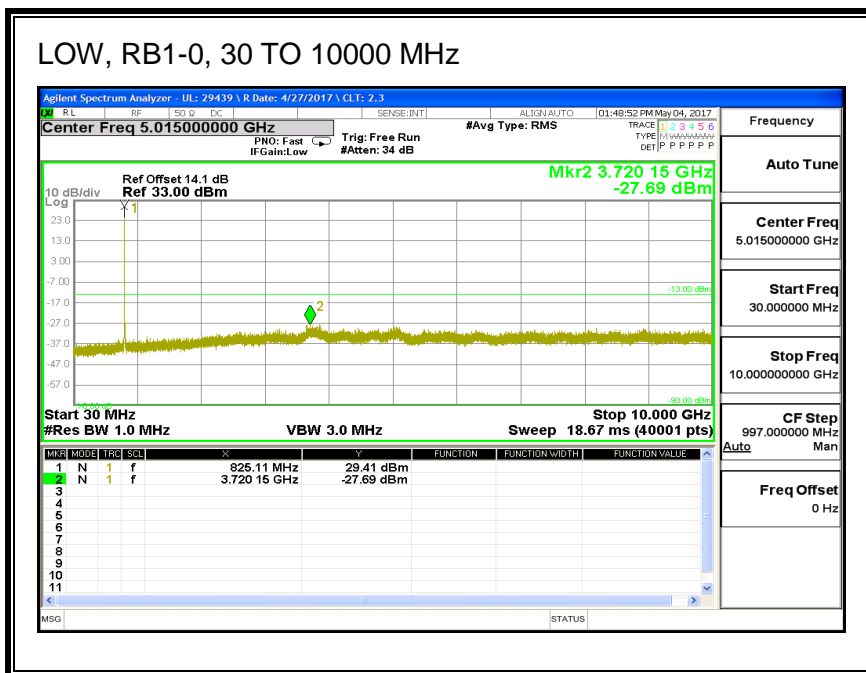


QPSK, (5.0 MHz BAND WIDTH)

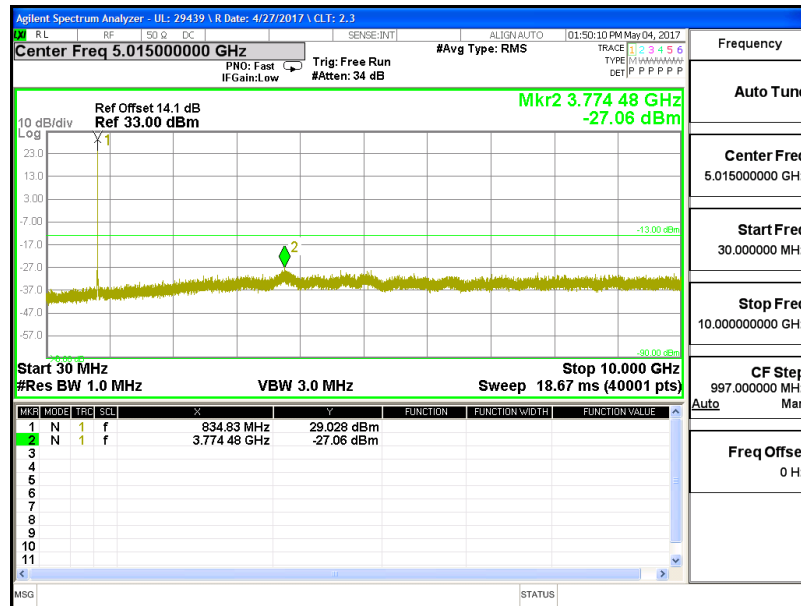




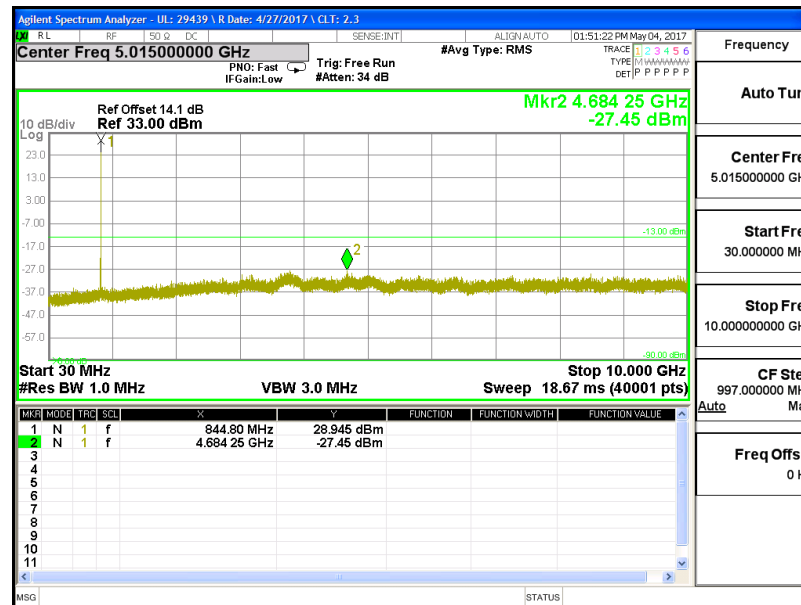
16QAM, (5.0 MHz BAND WIDTH)



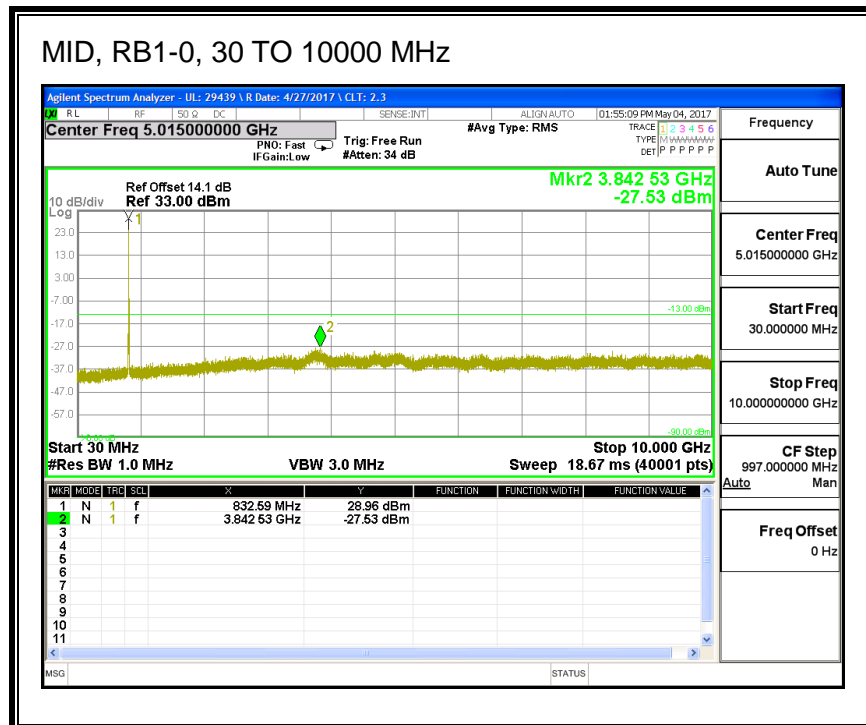
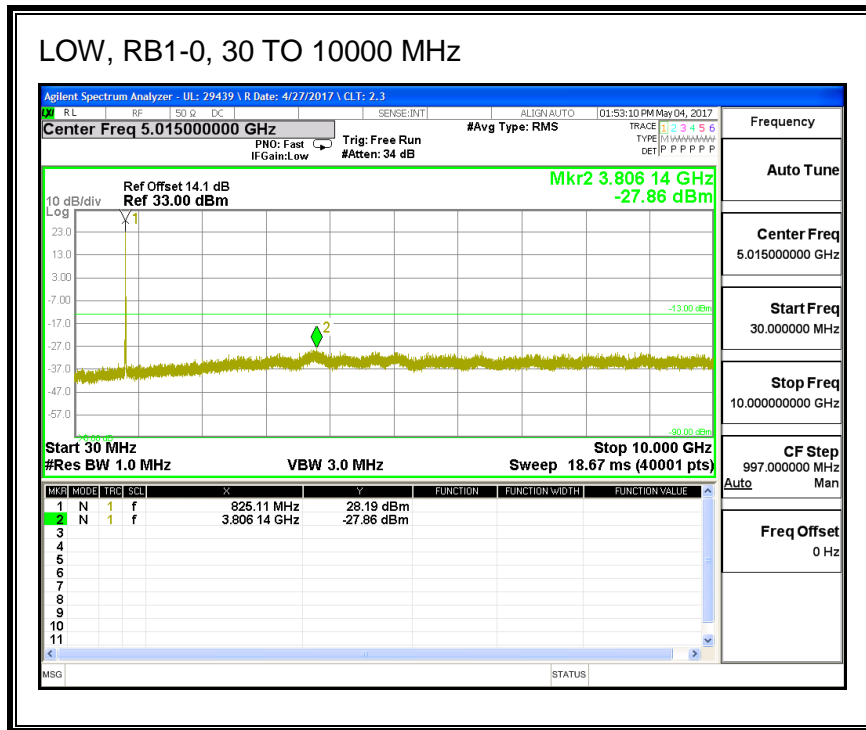
MID, RB1-0, 30 TO 10000 MHz

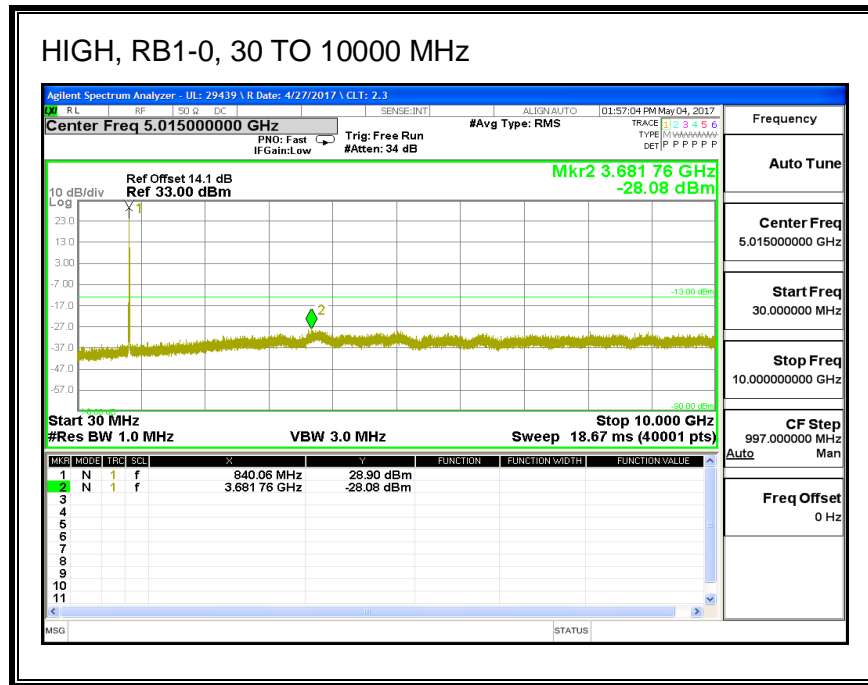


HIGH, RB1-0, 30 TO 10000 MHz



QPSK, (10.0 MHz BAND WIDTH)





16QAM, (10.0 MHz BAND WIDTH)

