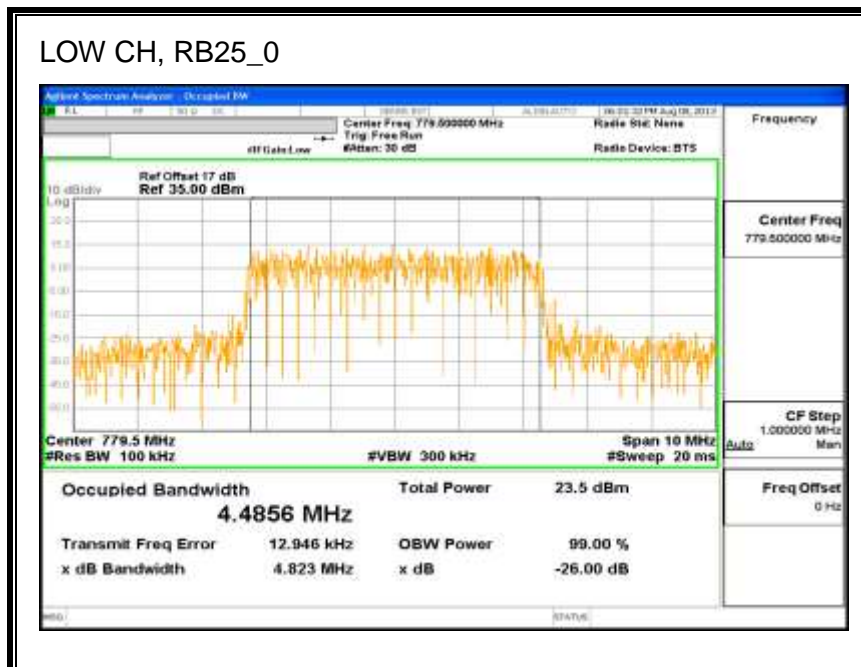
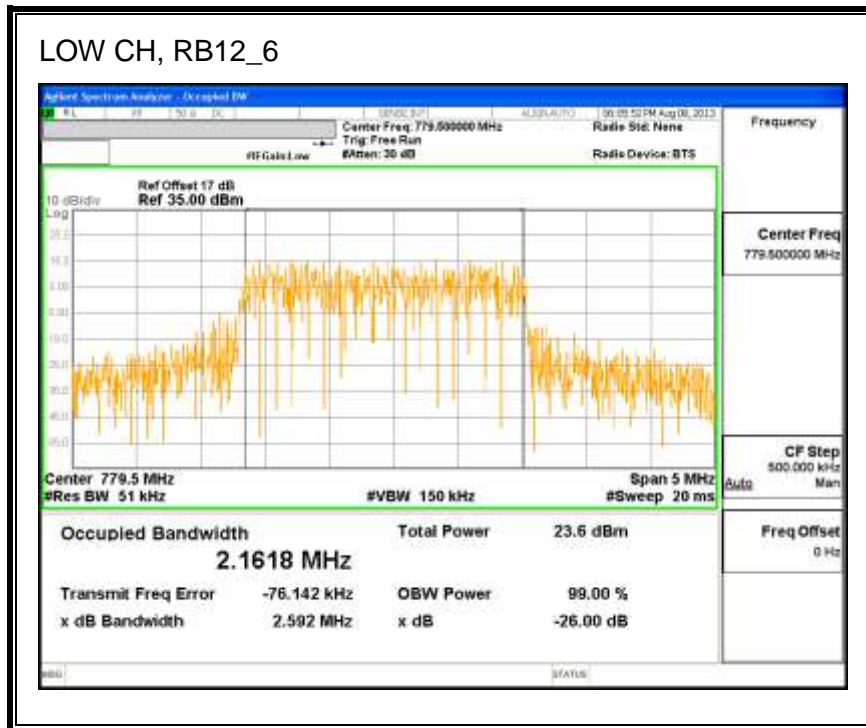
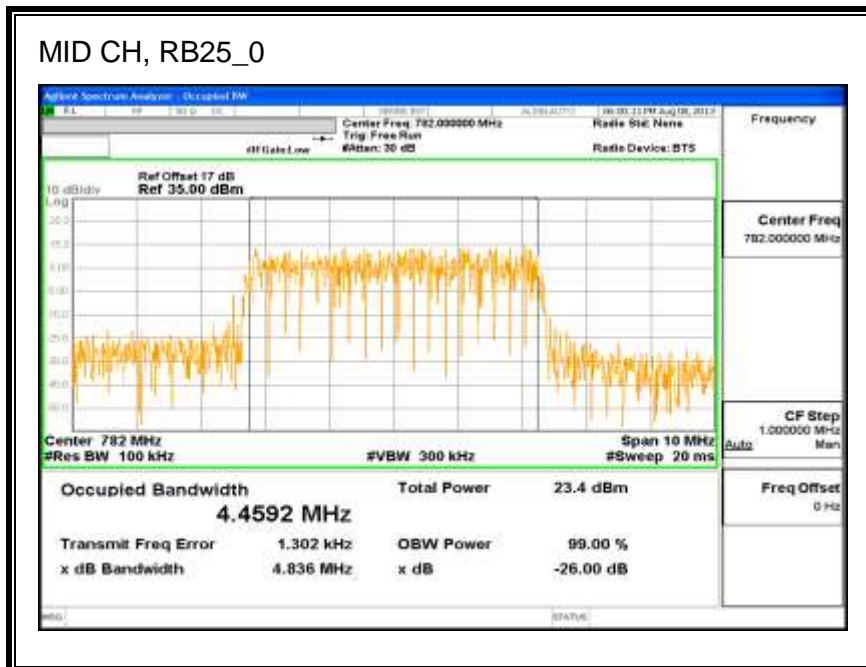
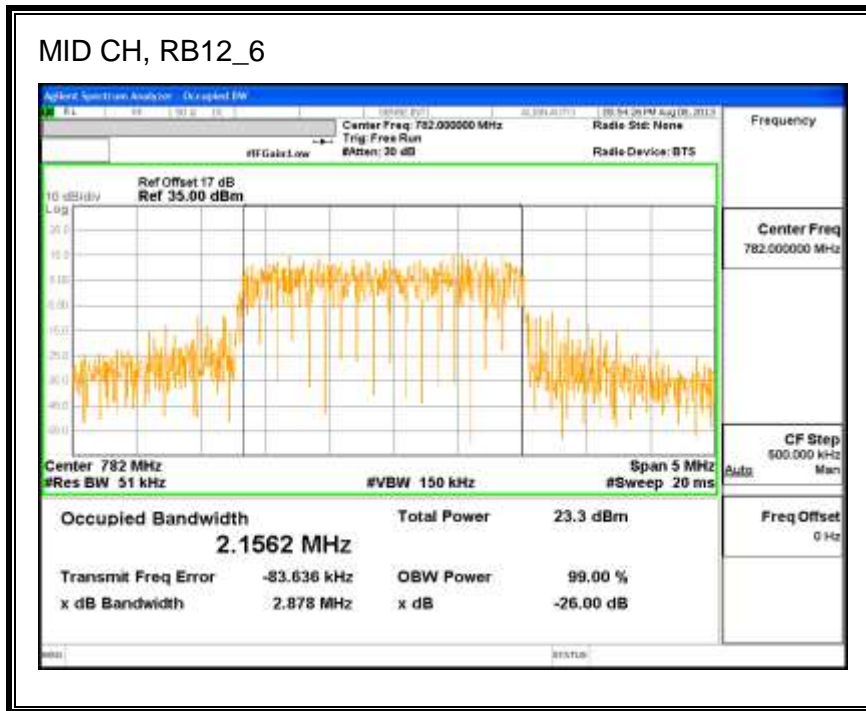
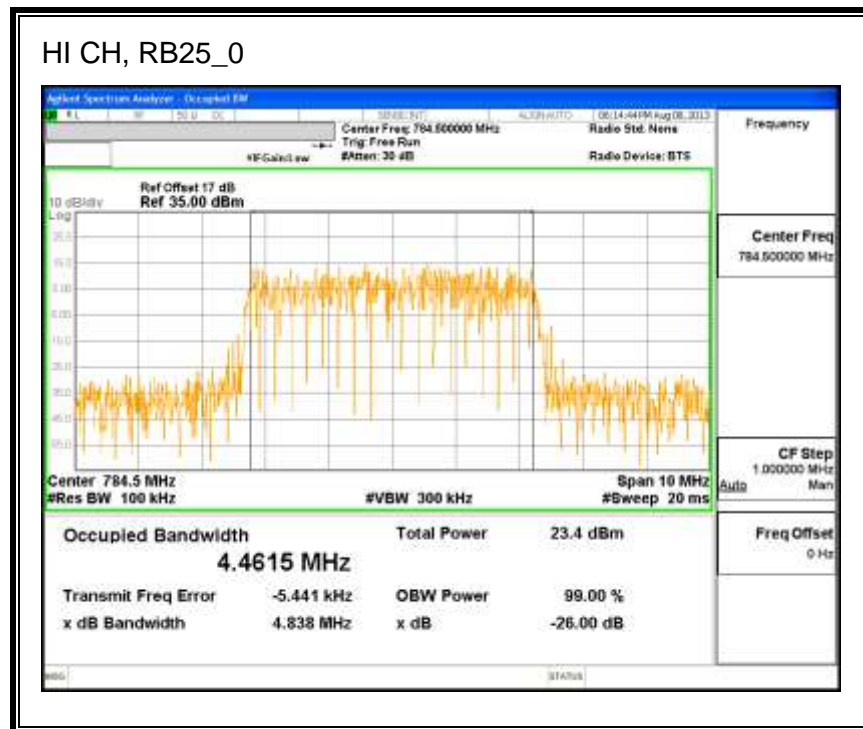
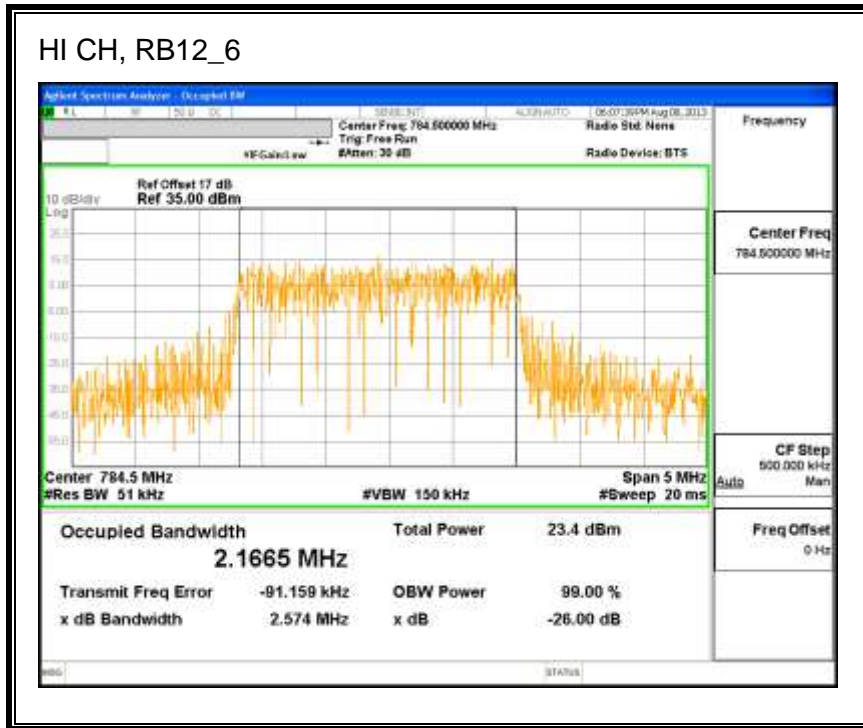


8.1.4. LTE BAND 13

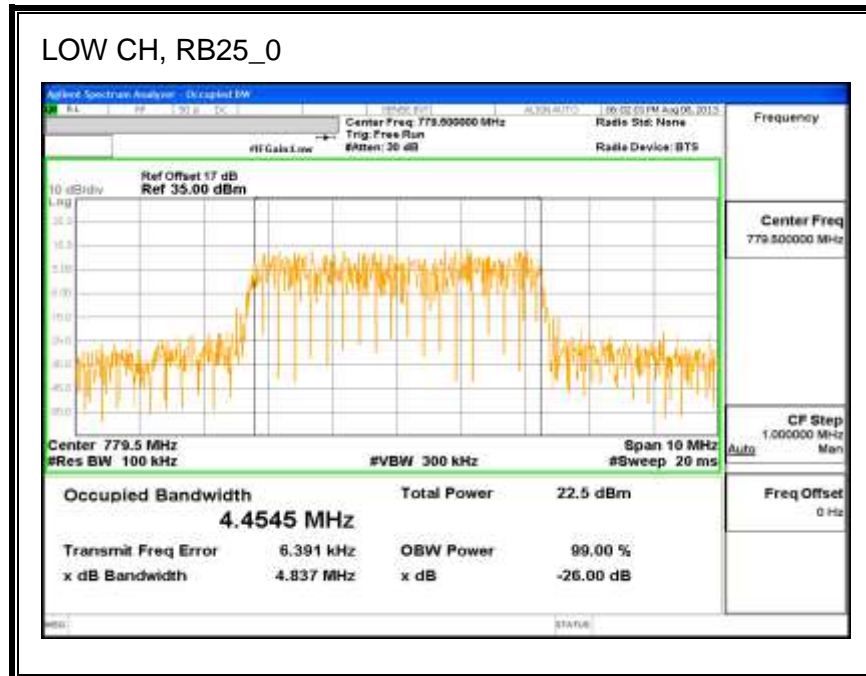
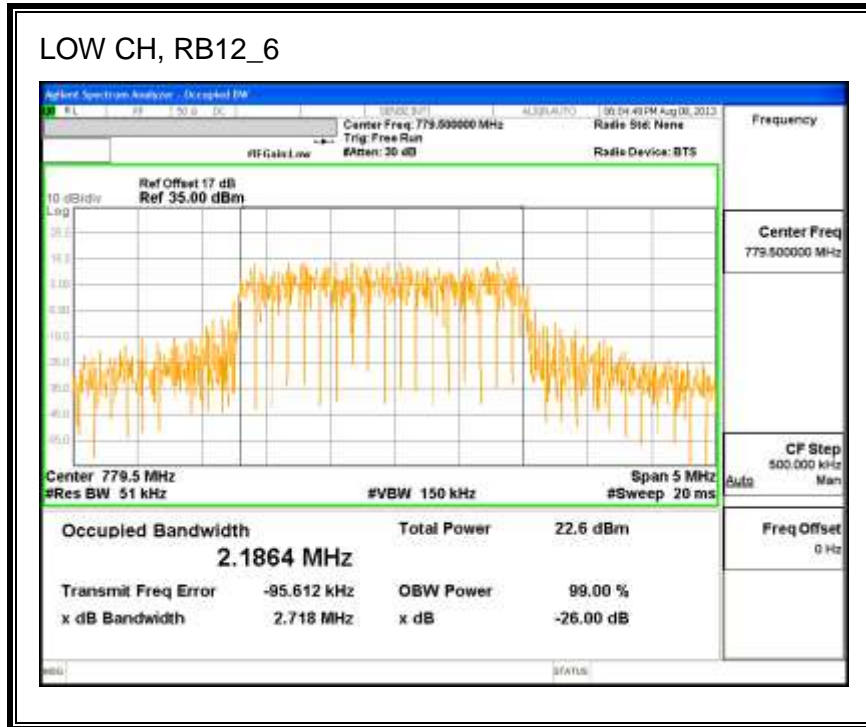
5MHz (QPSK)



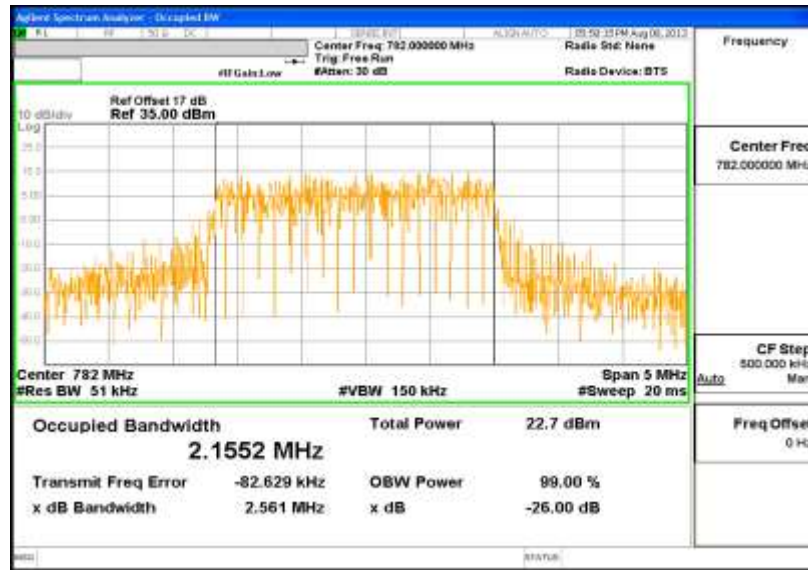




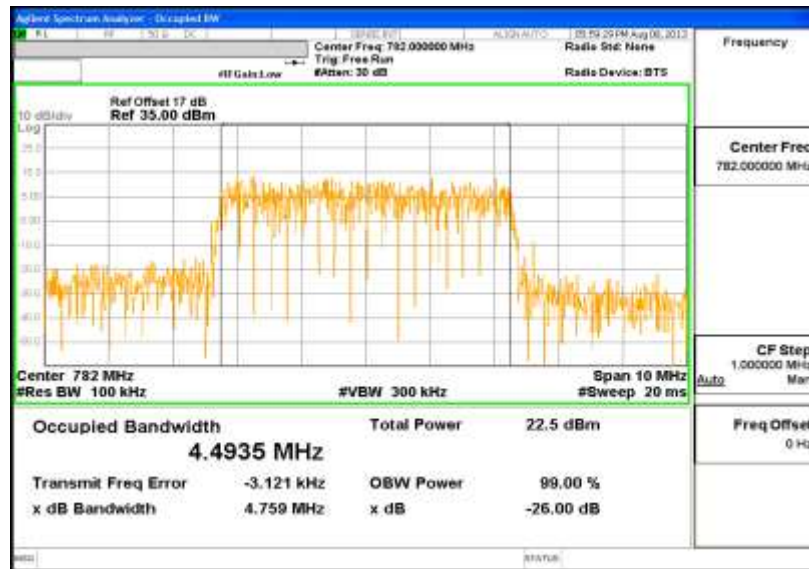
5MHz (16QAM)

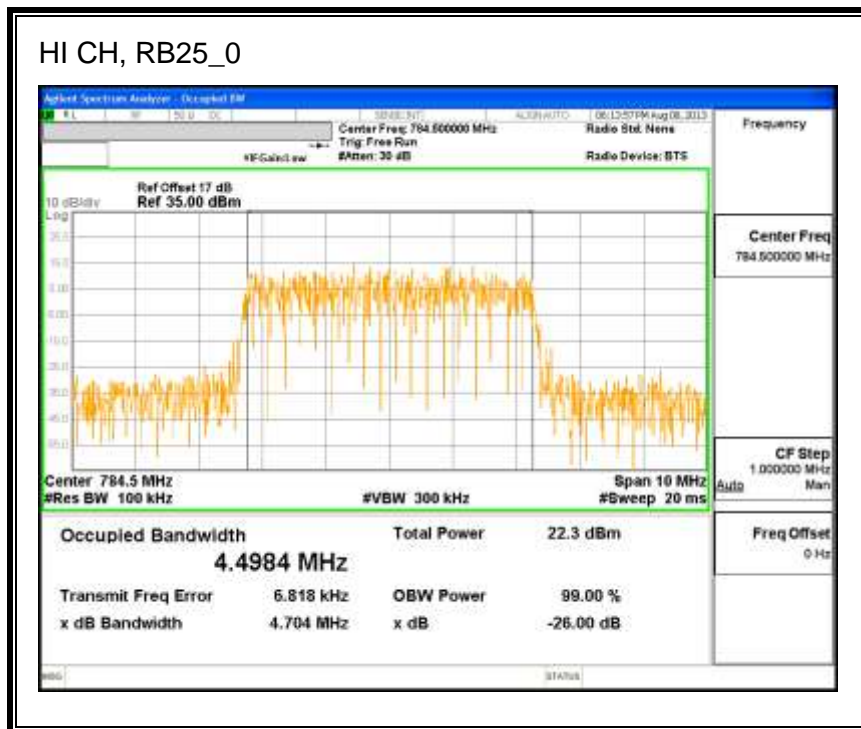
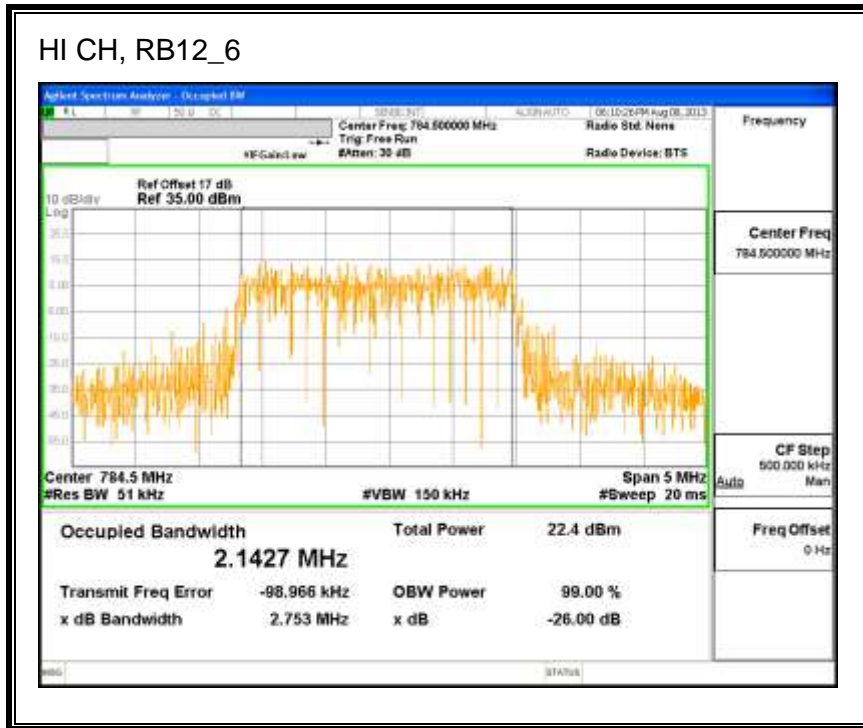


MID CH, RB12_6

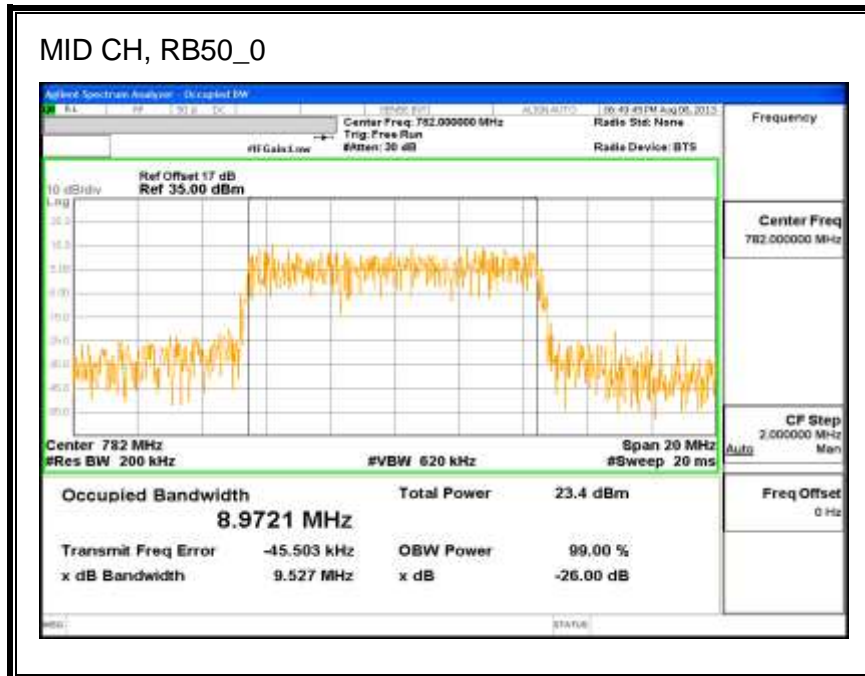
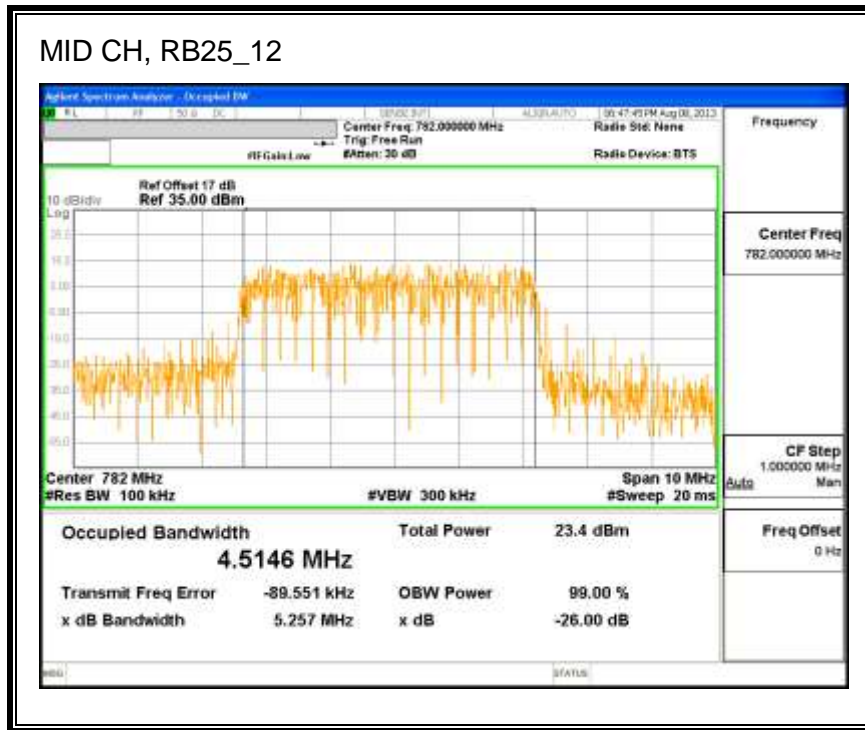


MID CH, RB25_0

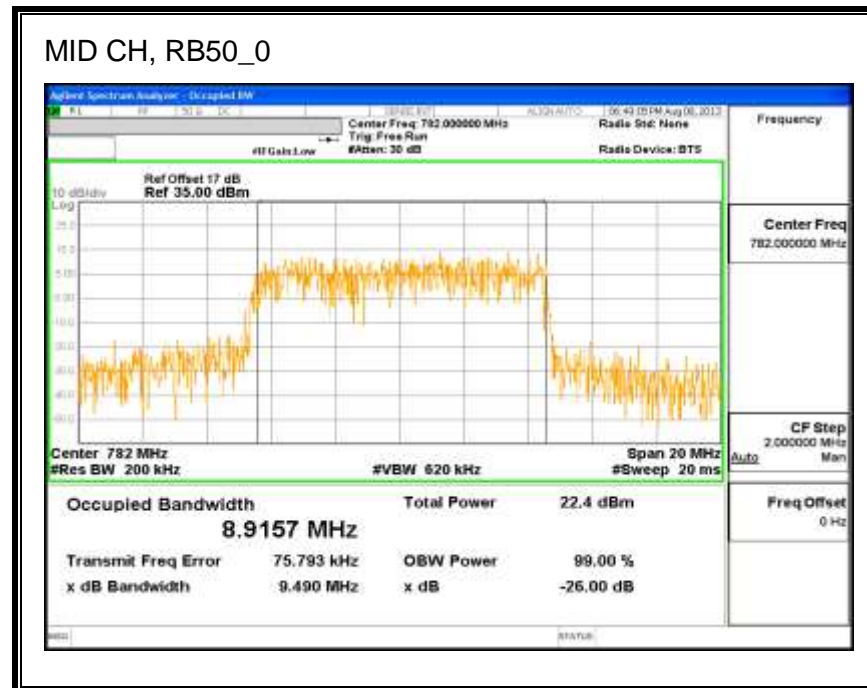
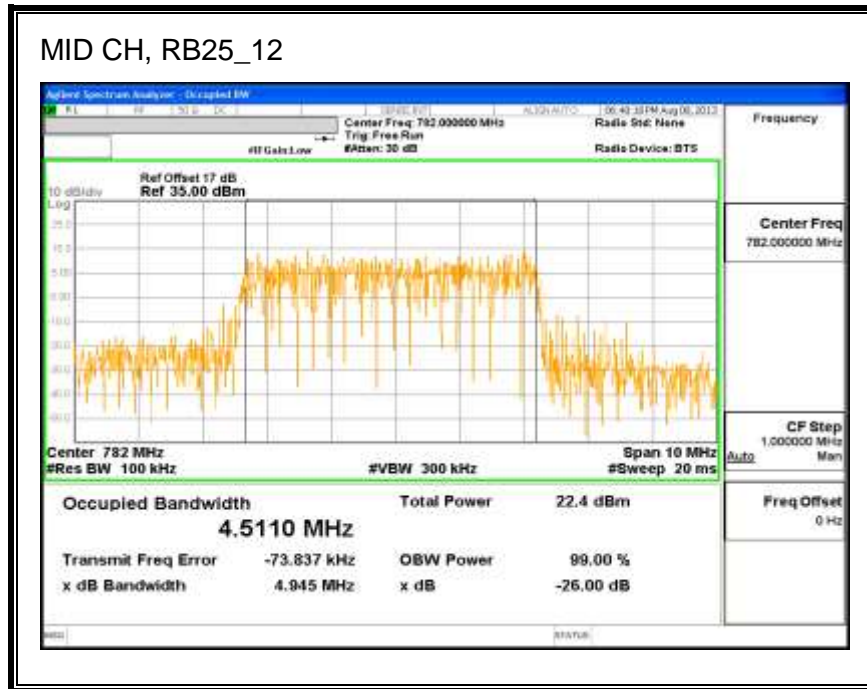




10.0 MHz (QPSK)

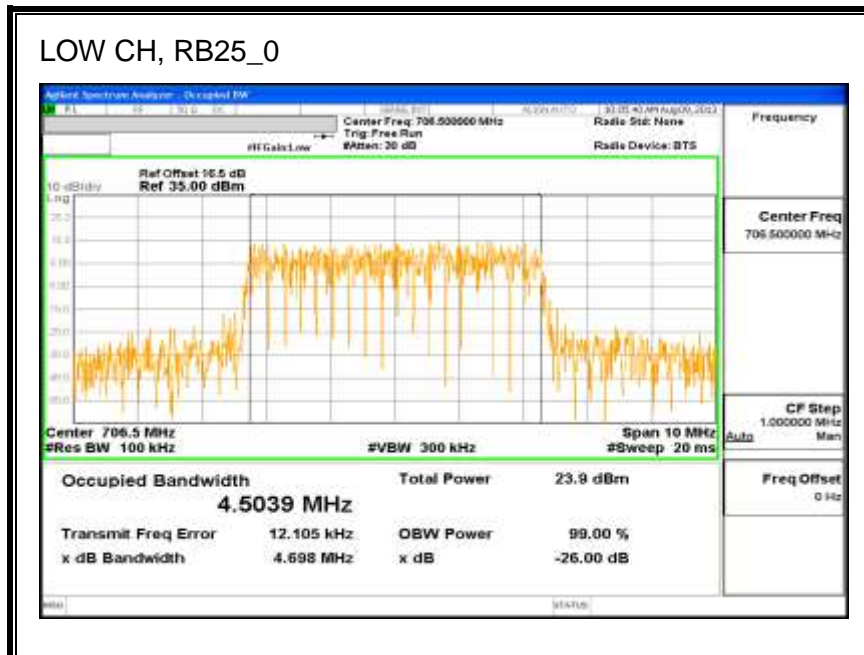
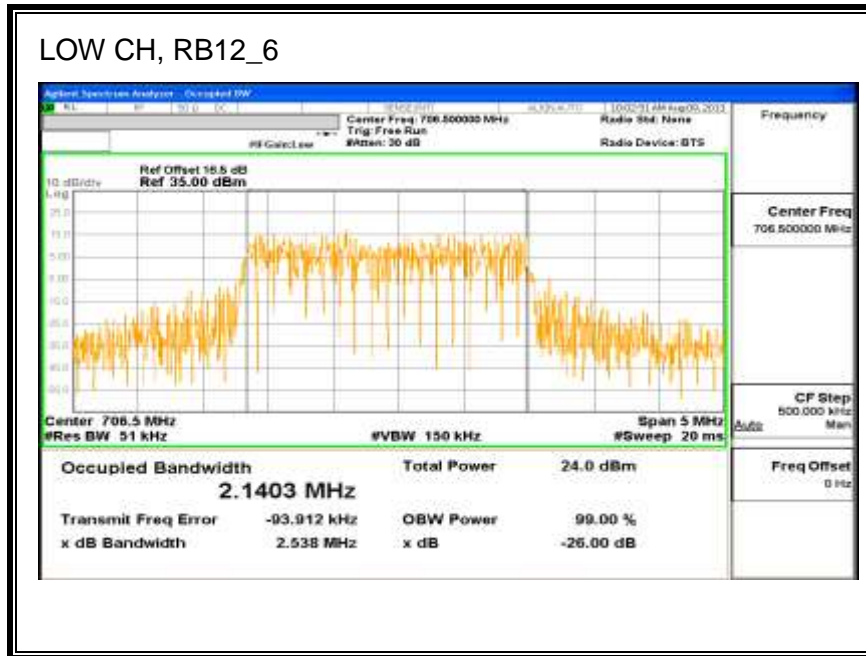


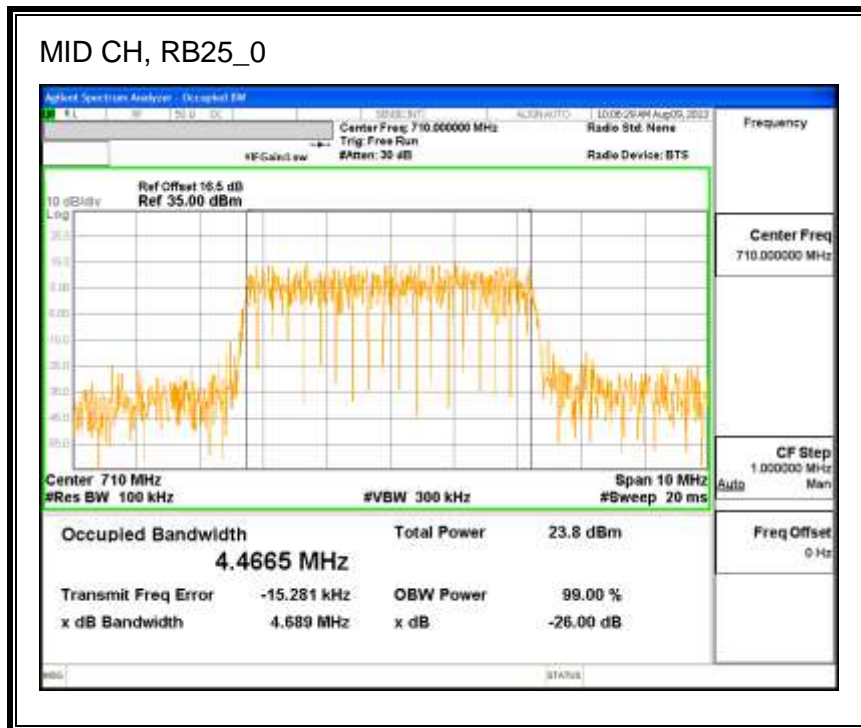
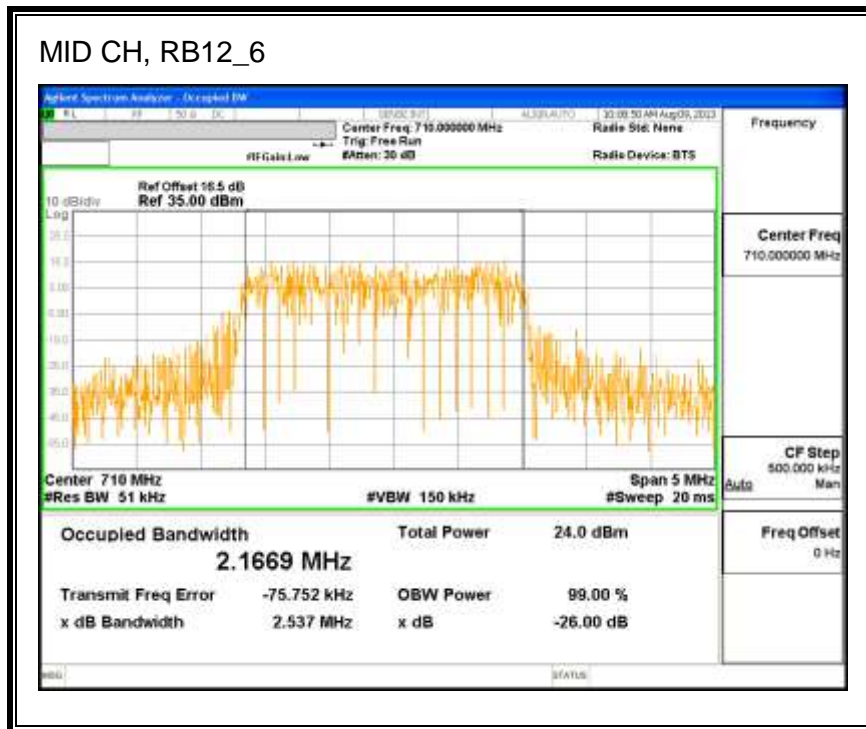
10 MHz (16QAM)

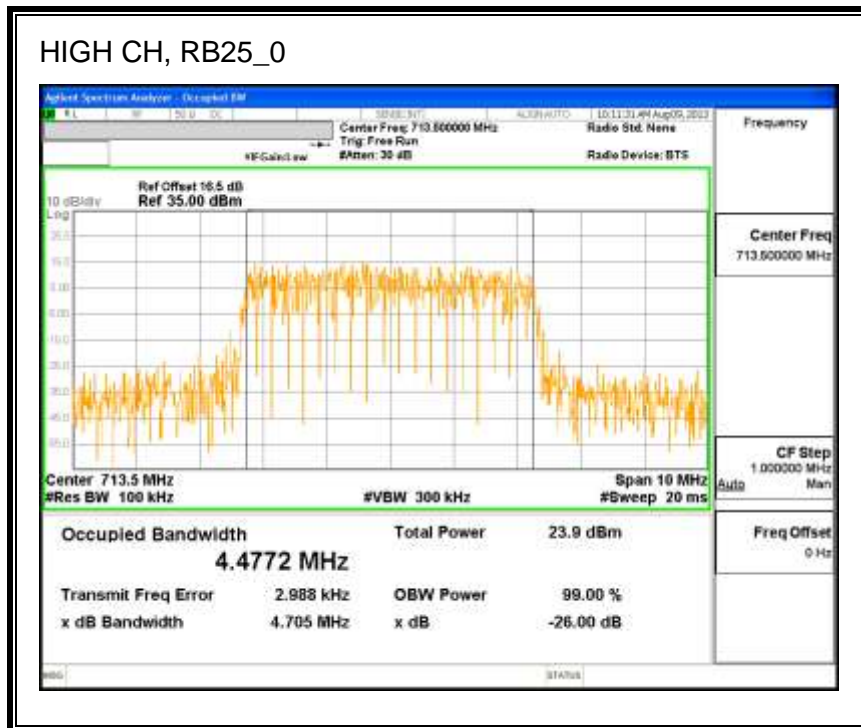
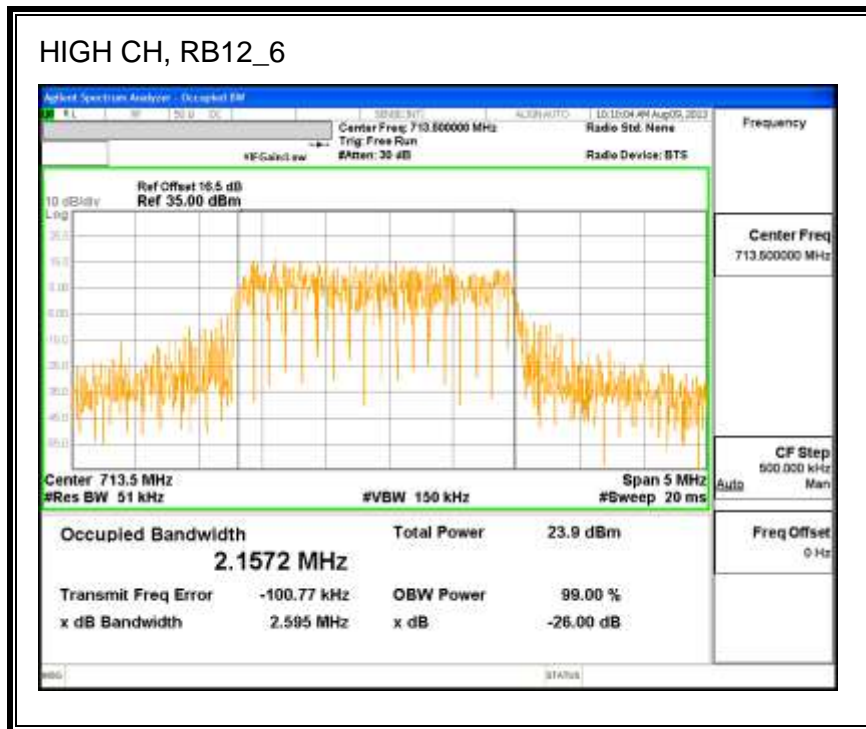


8.1.5. LTE BAND 17

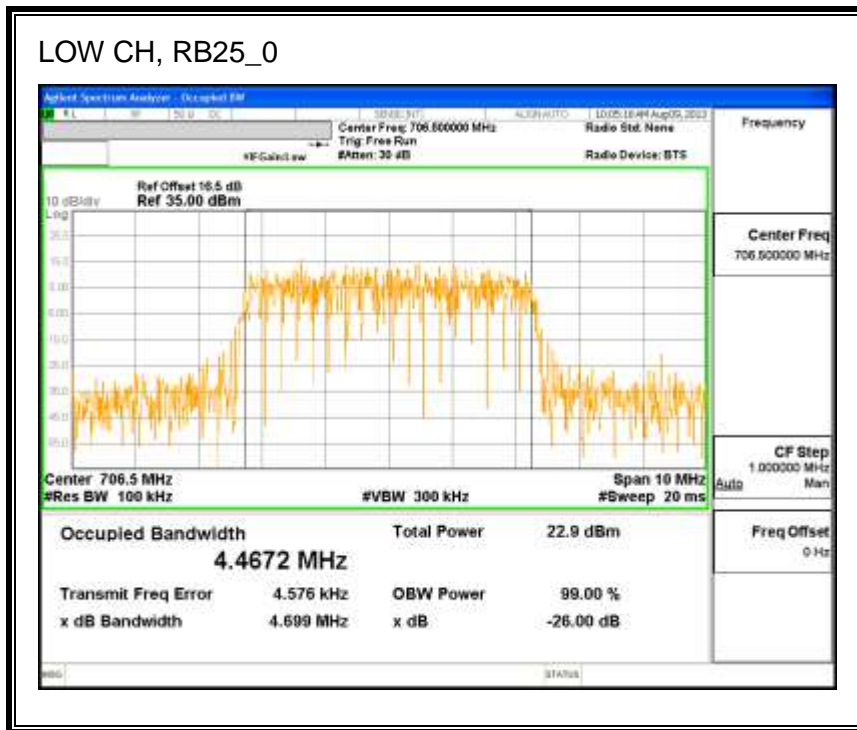
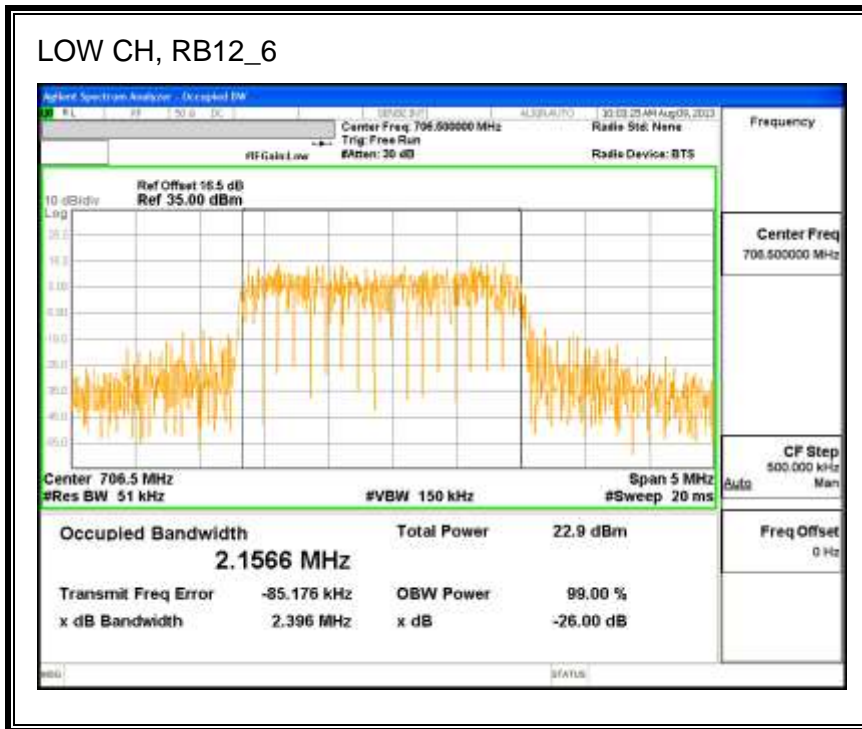
5MHz BW (QPSK)

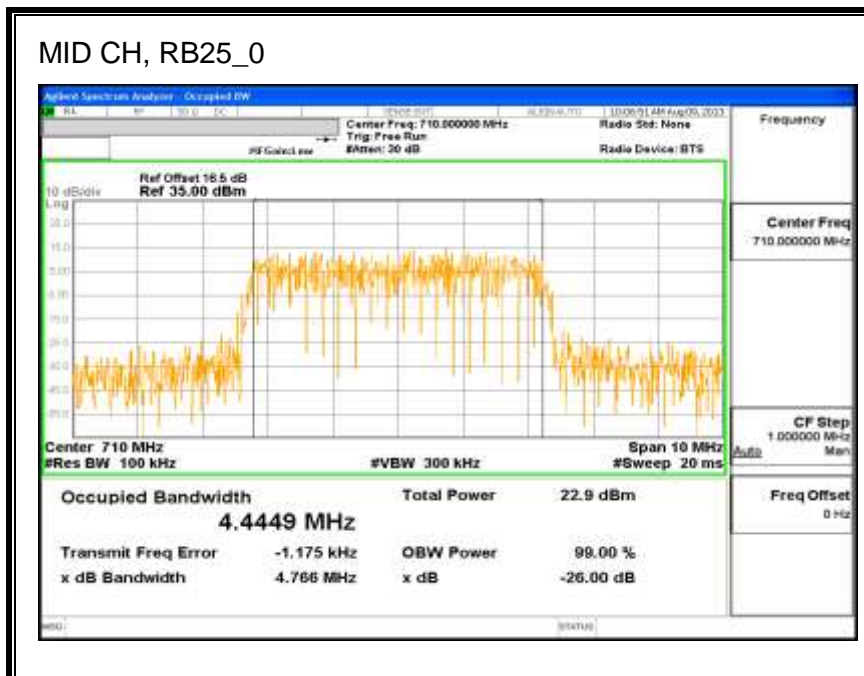
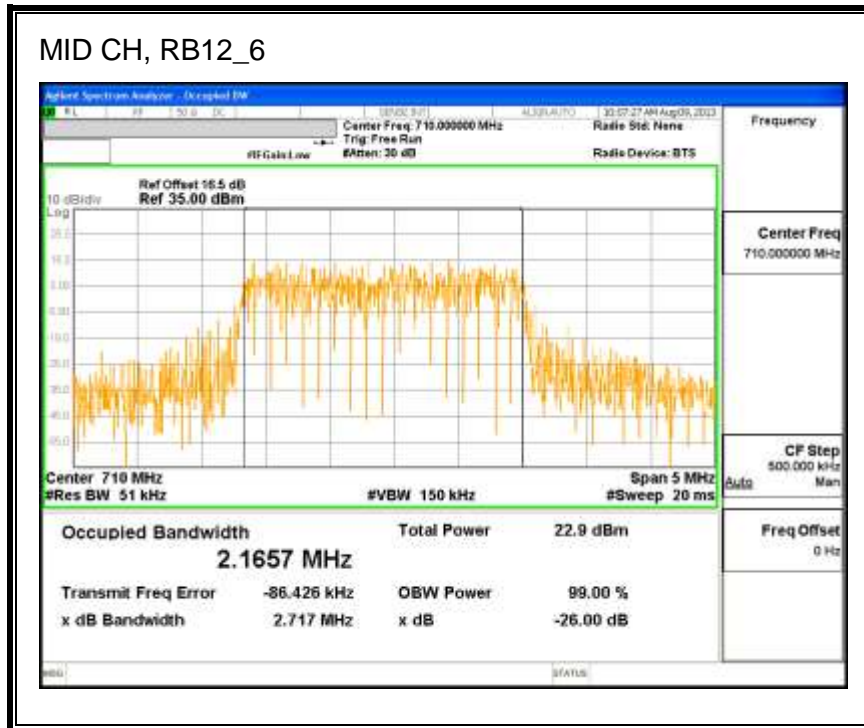


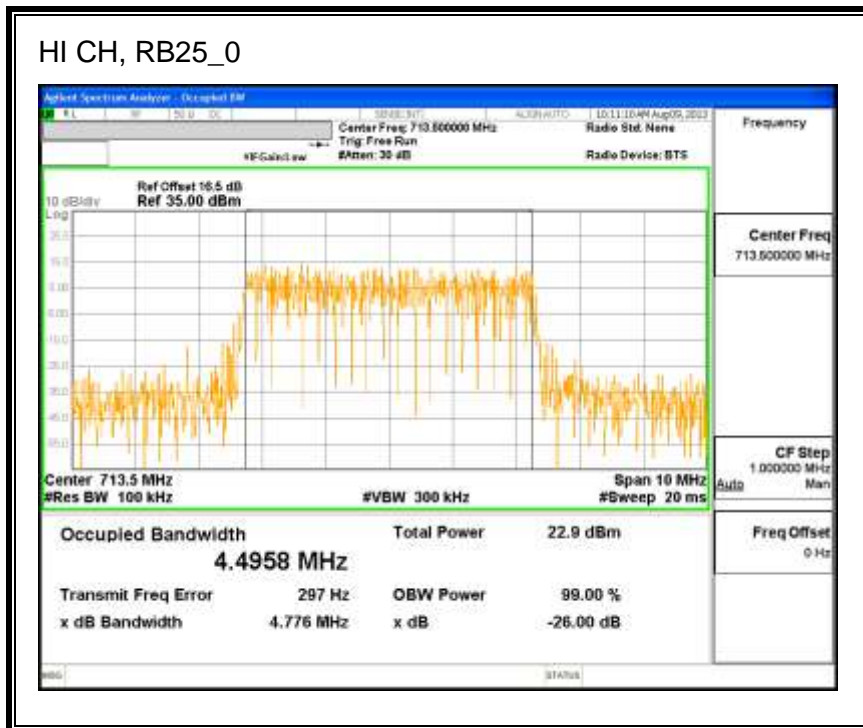
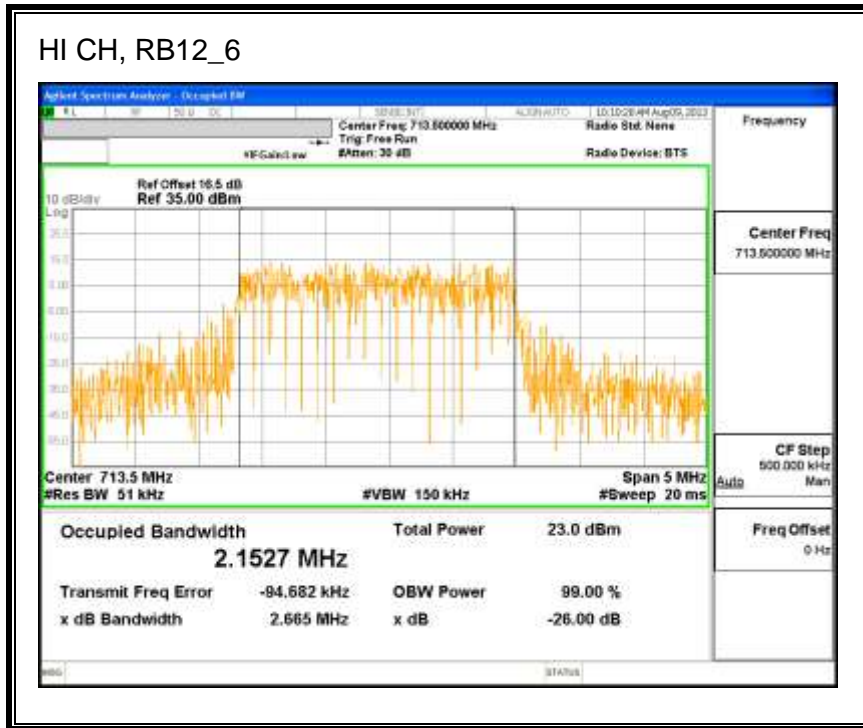




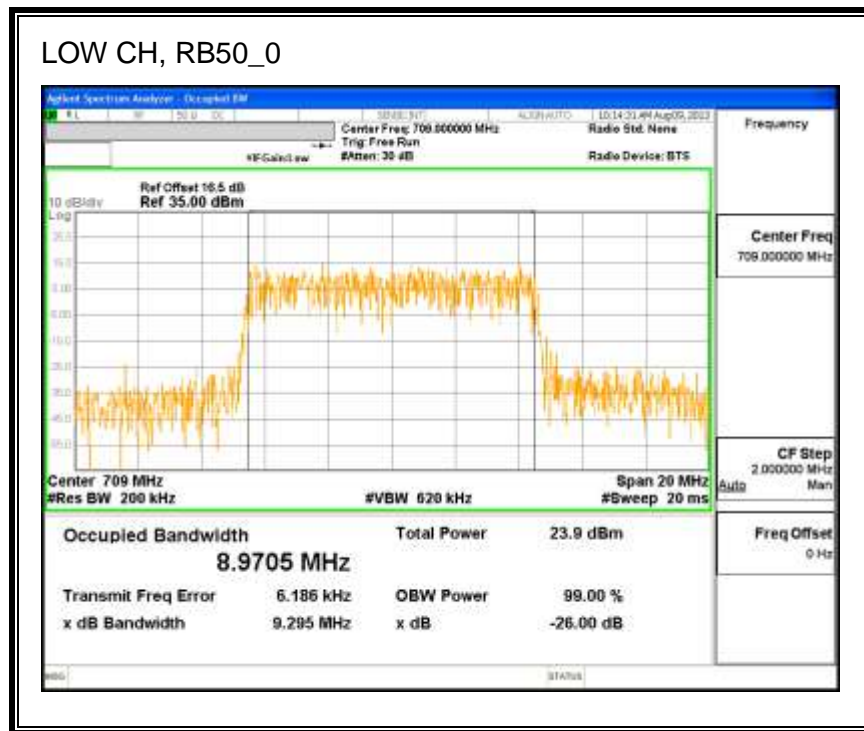
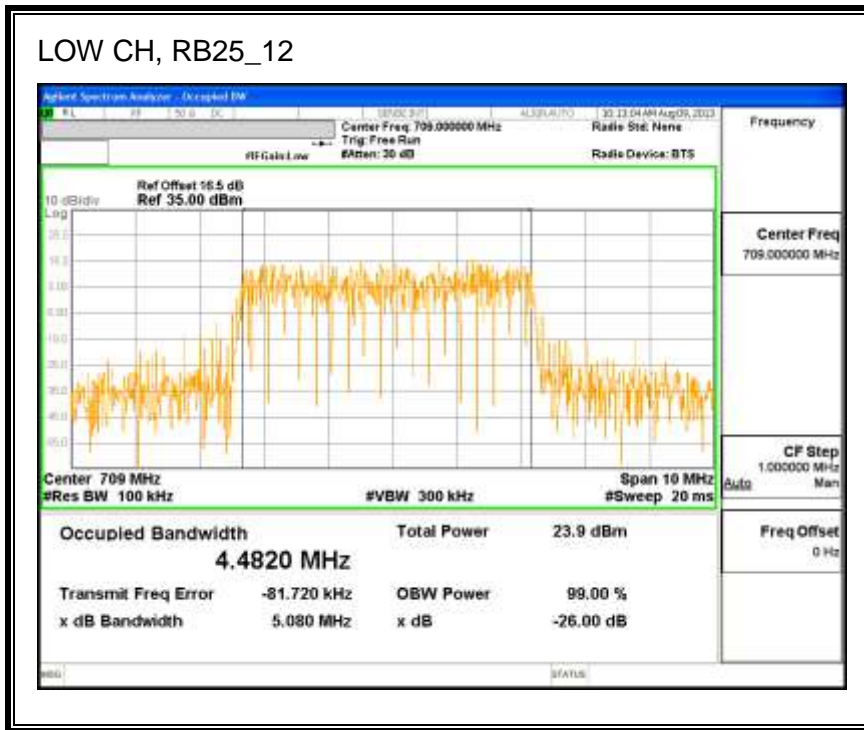
5MHz (16QAM)

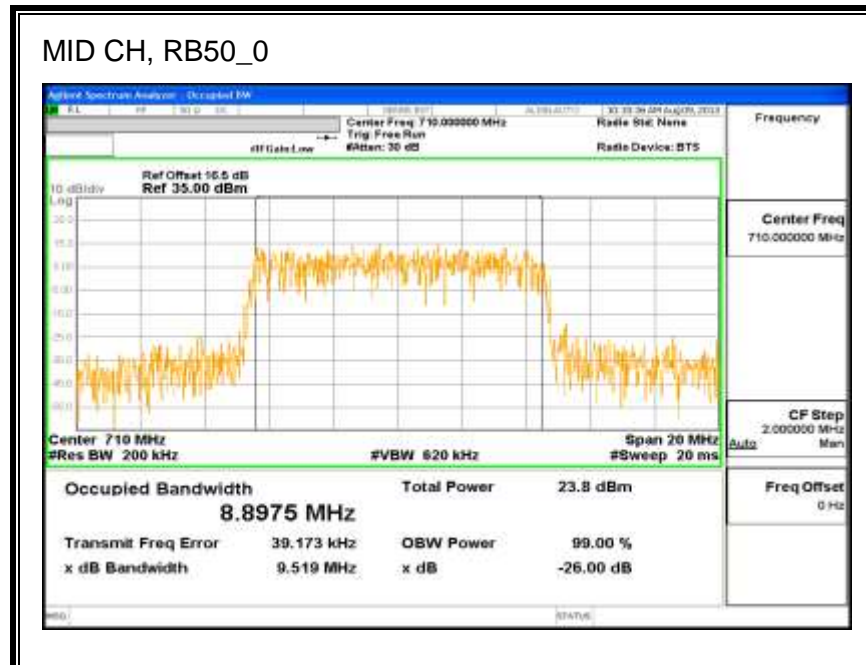
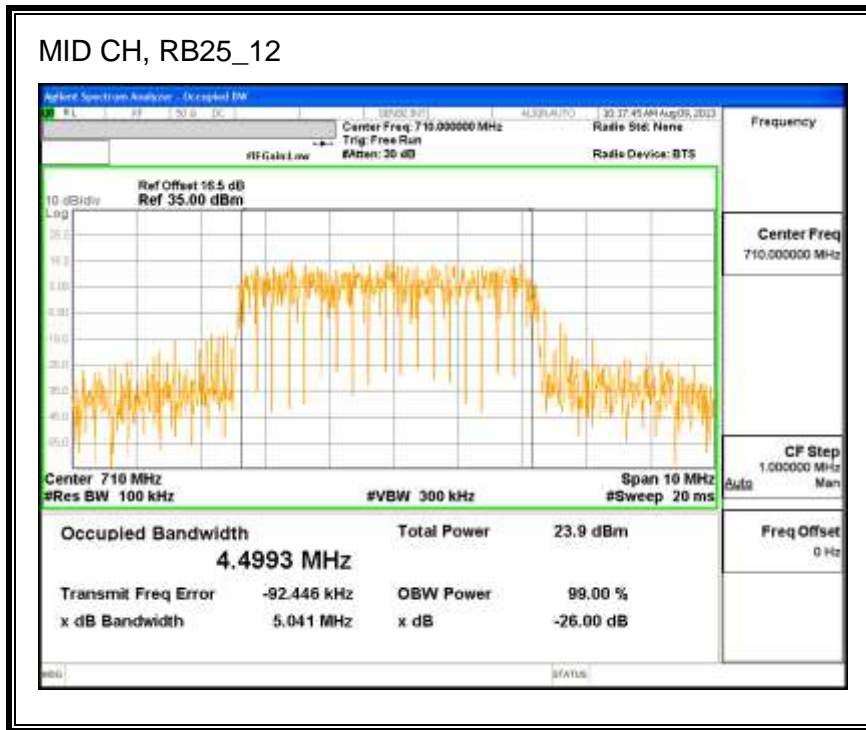


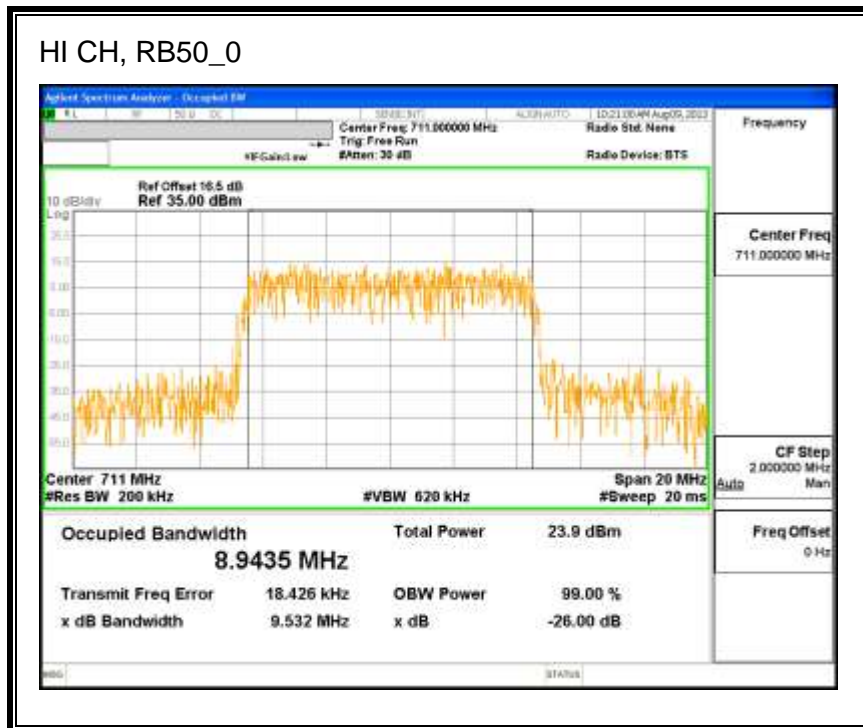
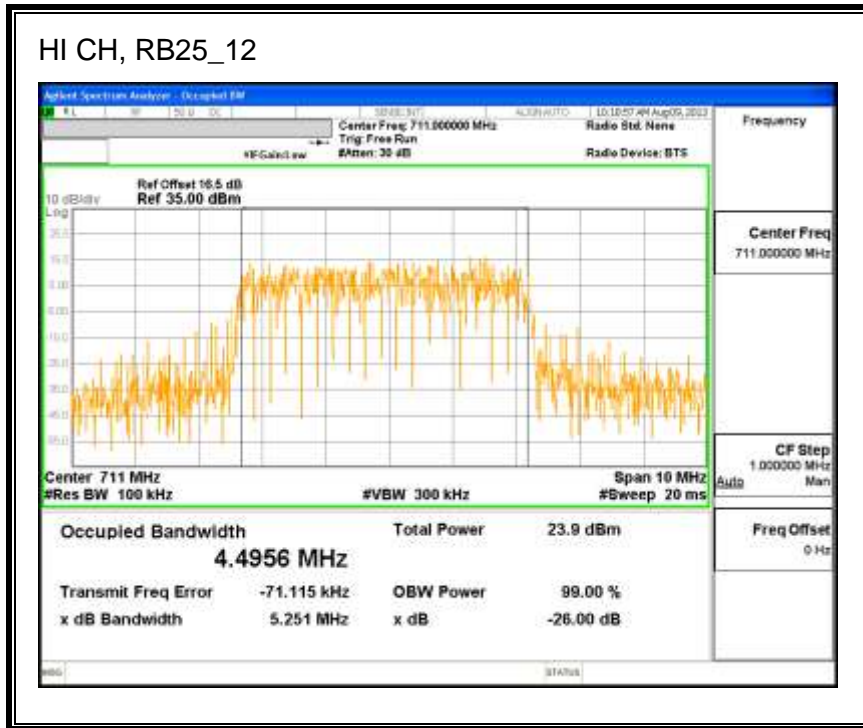




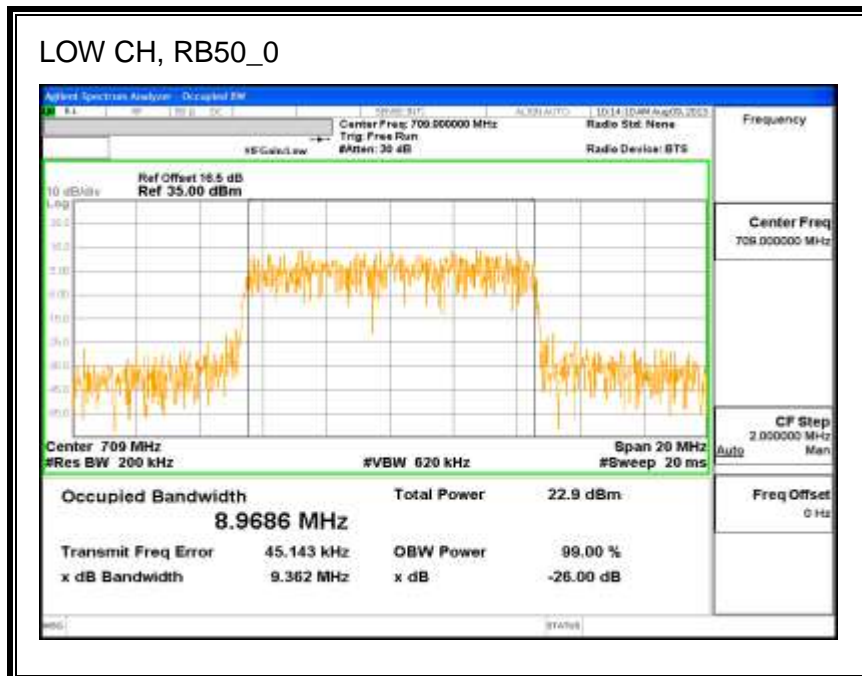
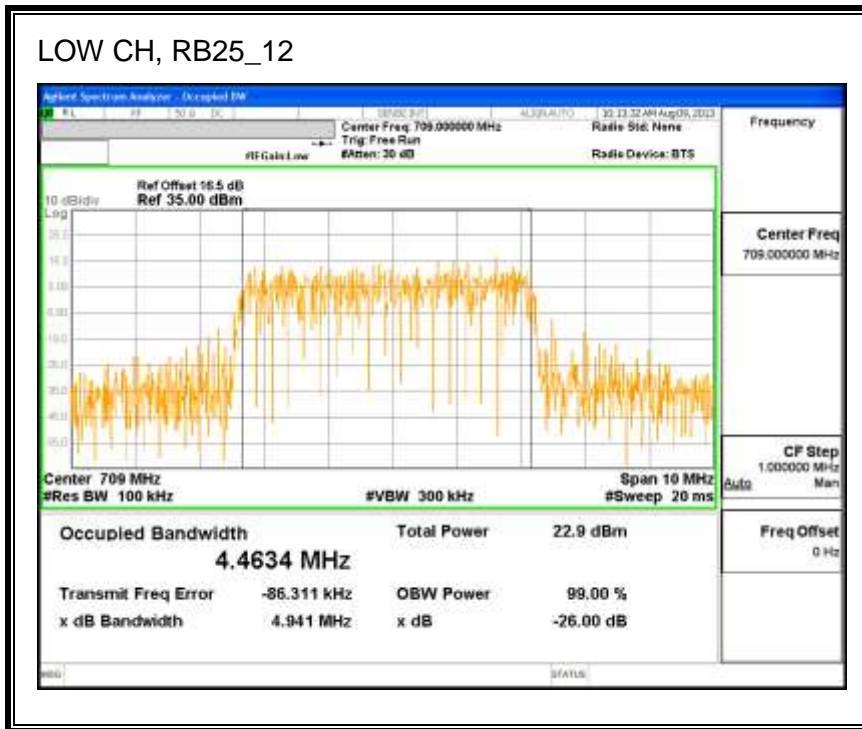
10.0 MHz (QPSK)



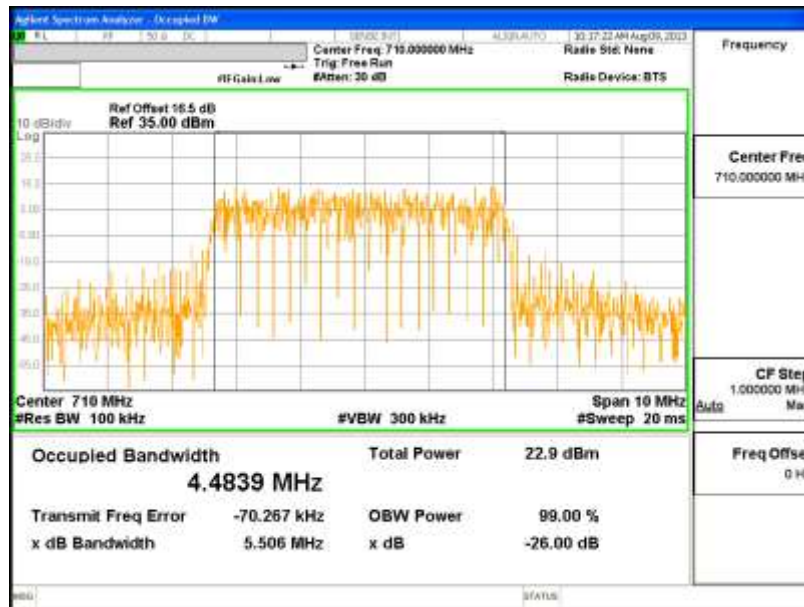




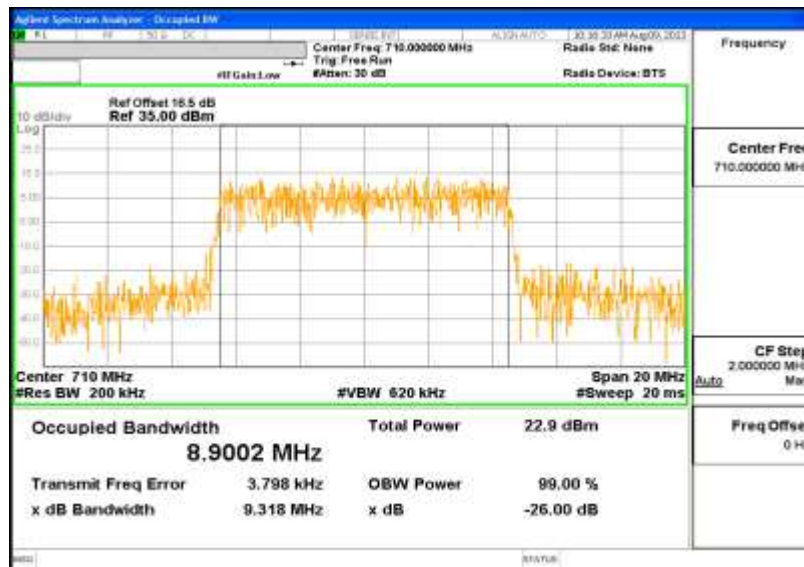
10MHz (16QAM)

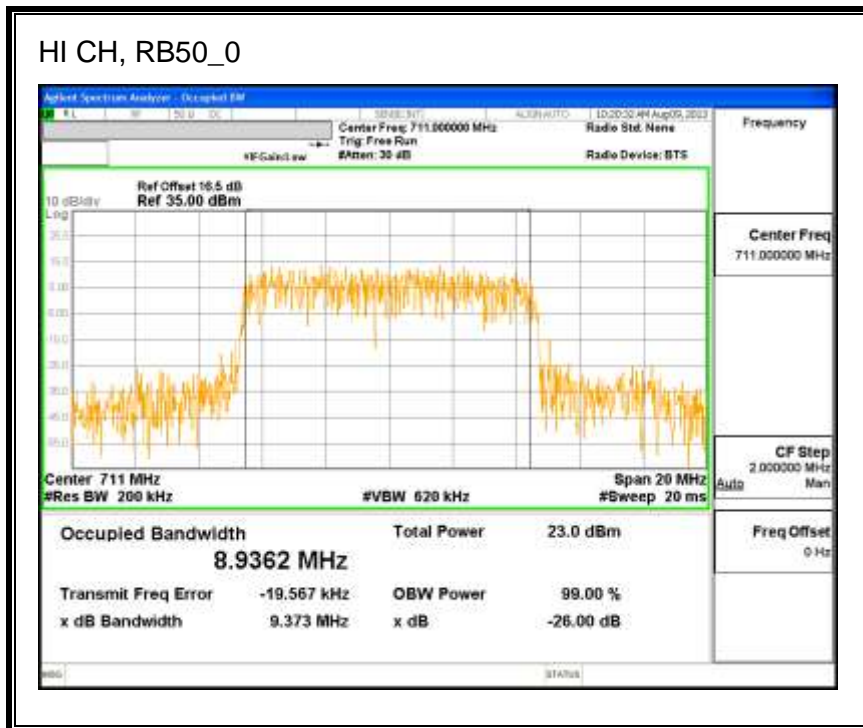
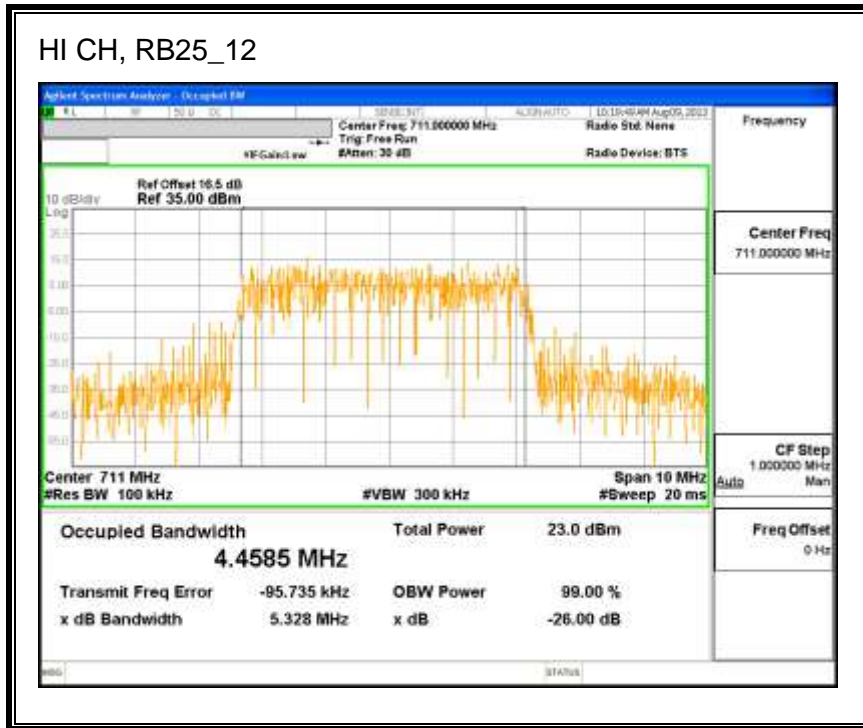


MID CH, RB25_12



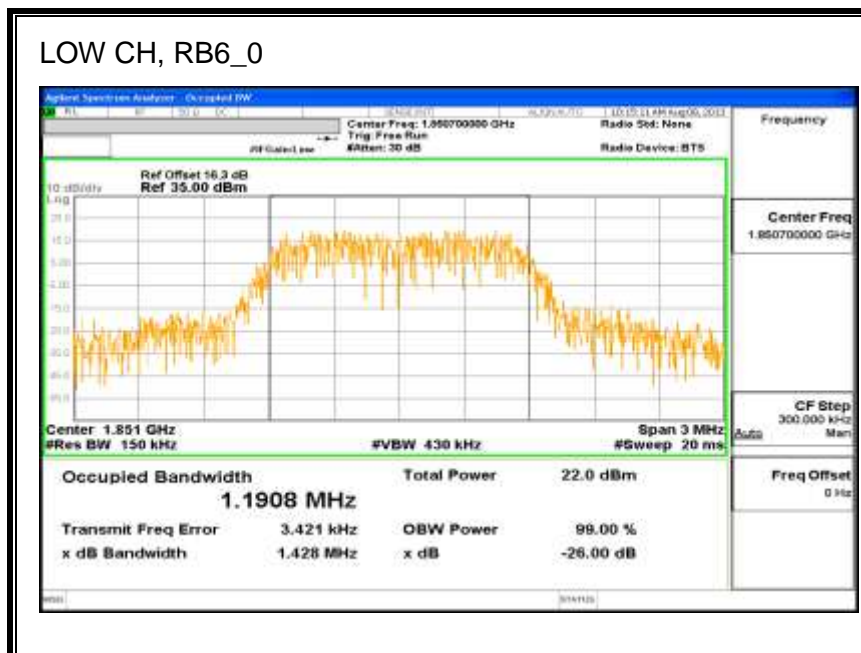
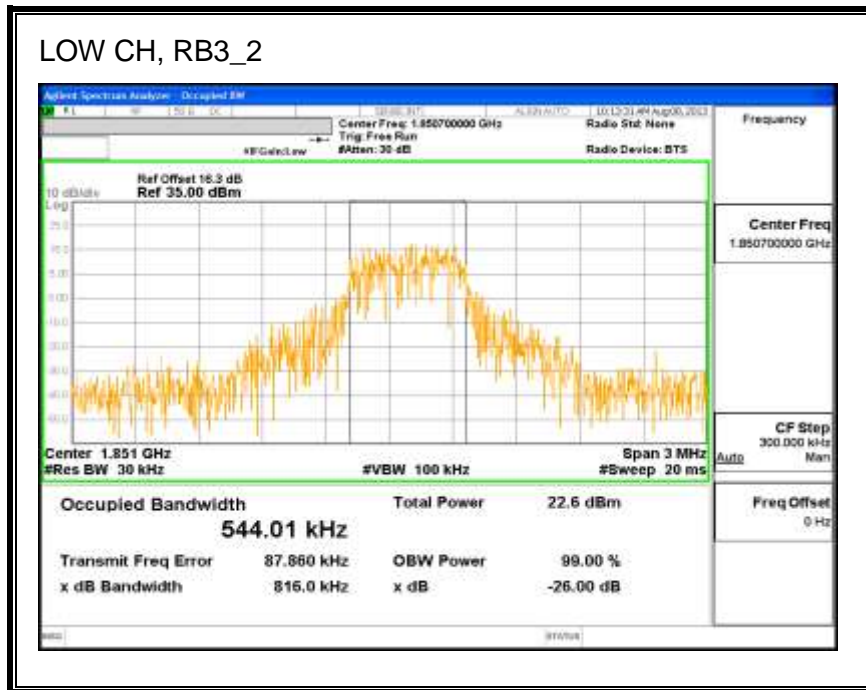
MID CH, RB50_0

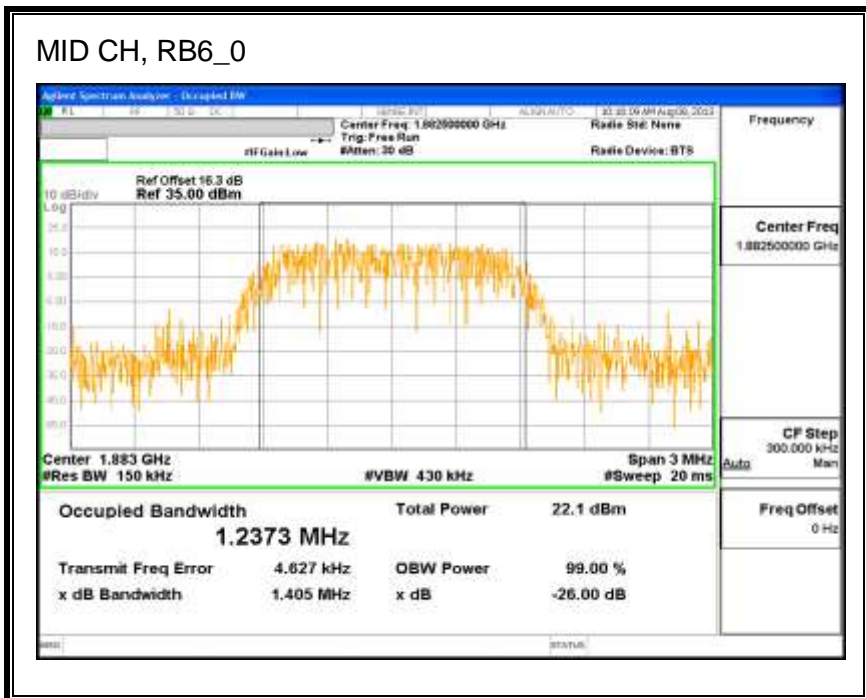
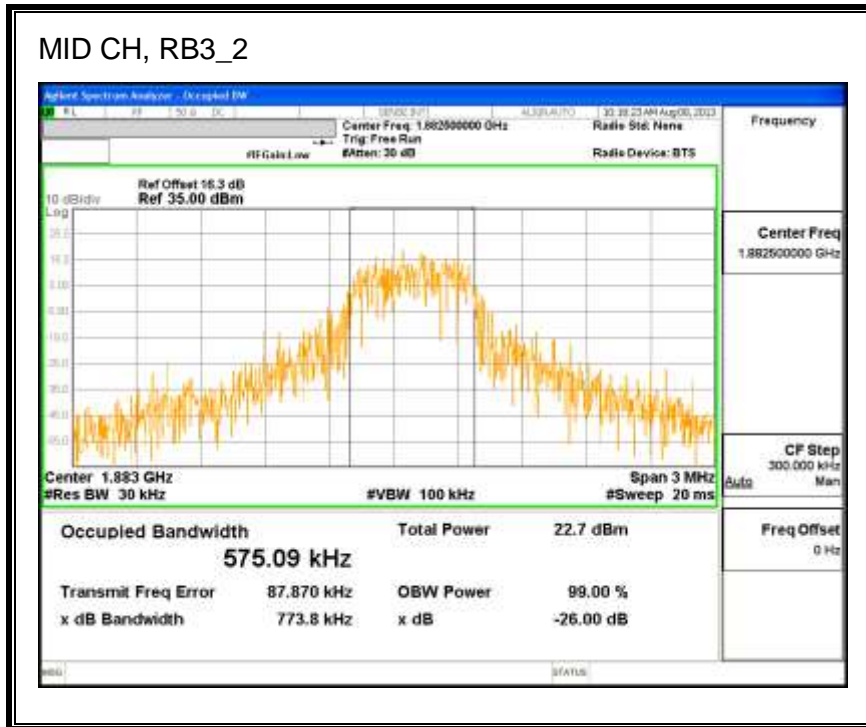


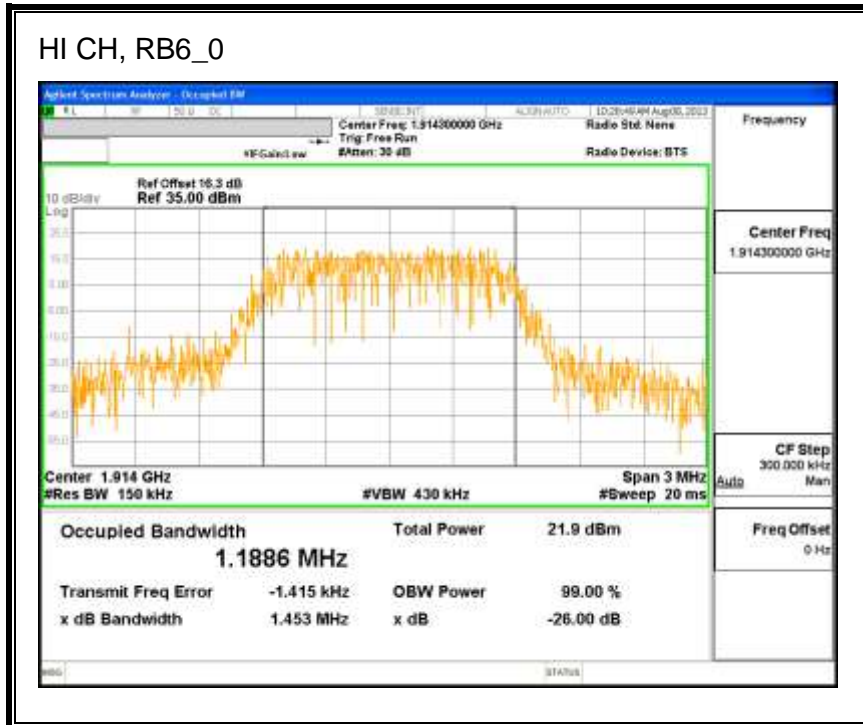
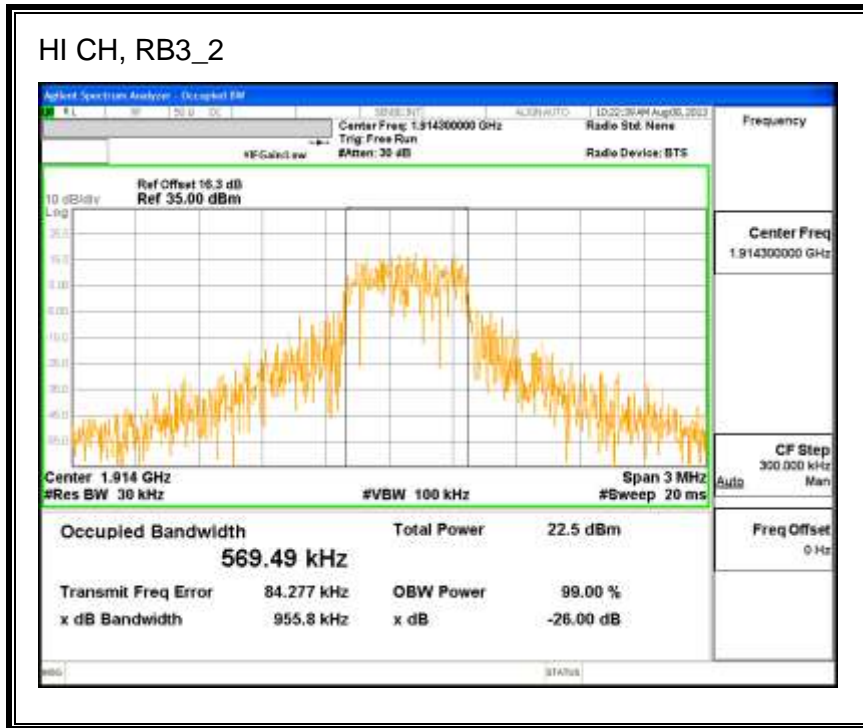


8.1.6. LTE BAND 25

1.4MHz (QPSK)

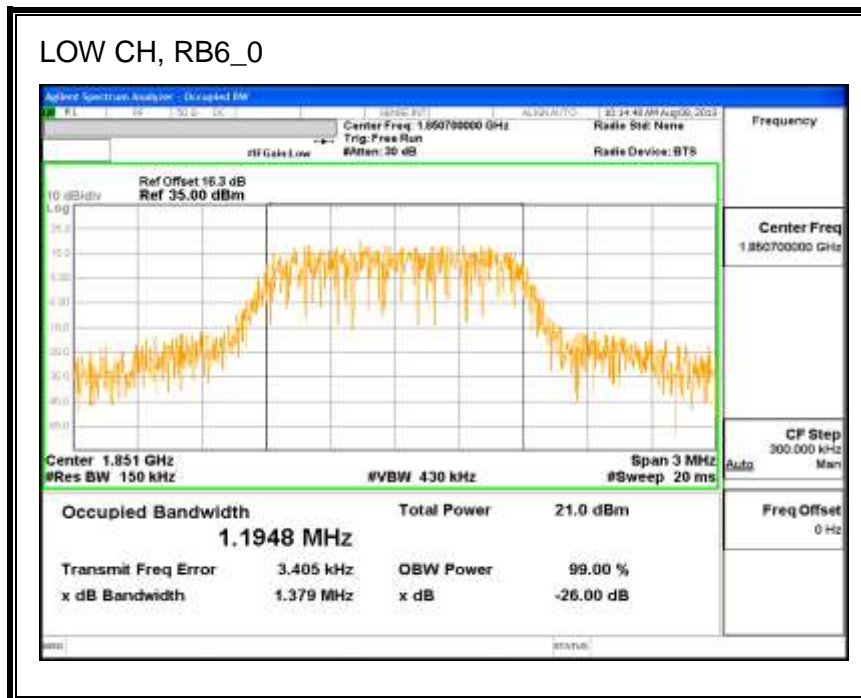
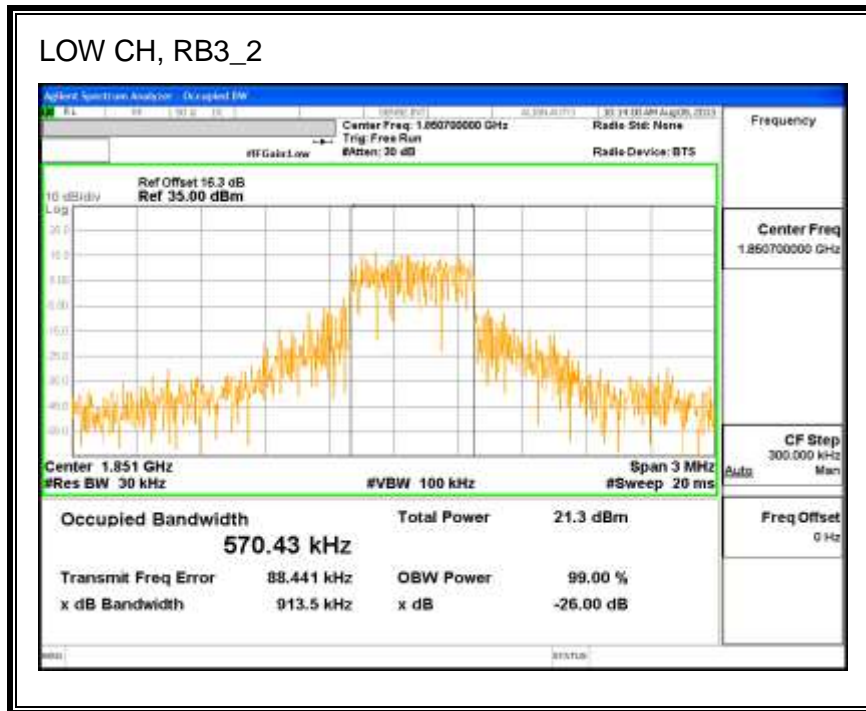


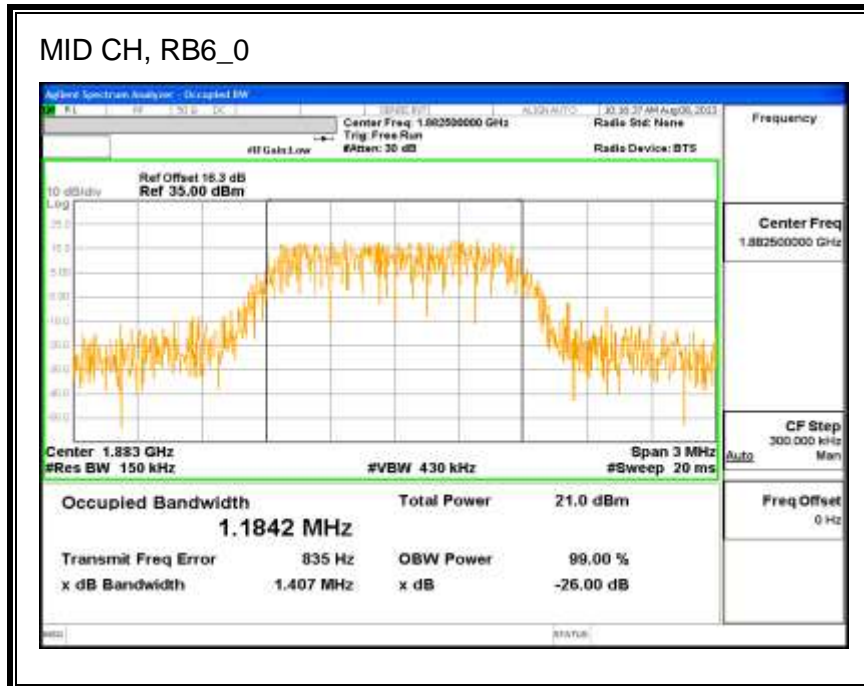
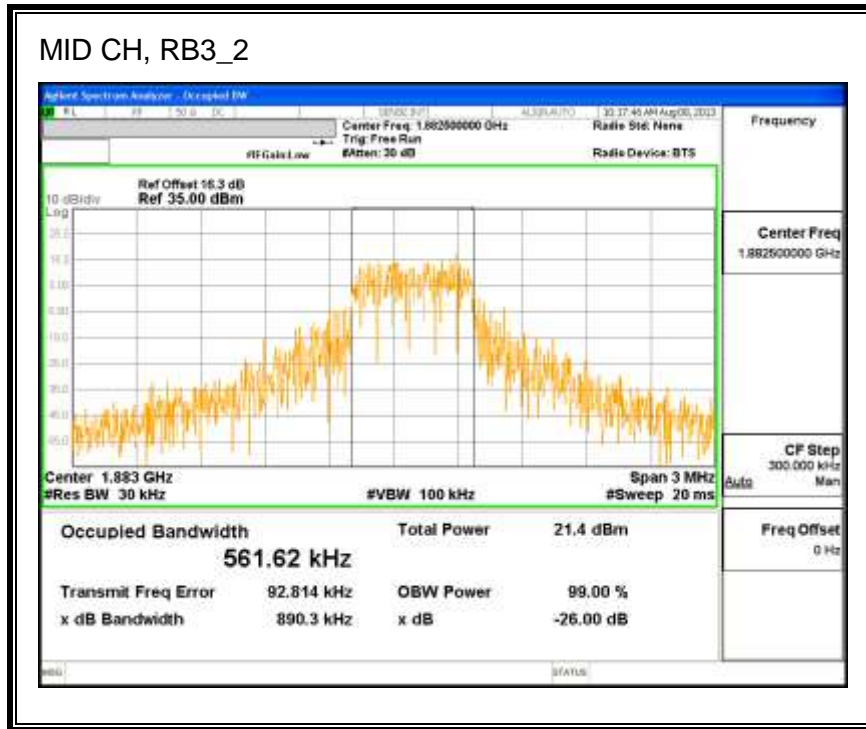


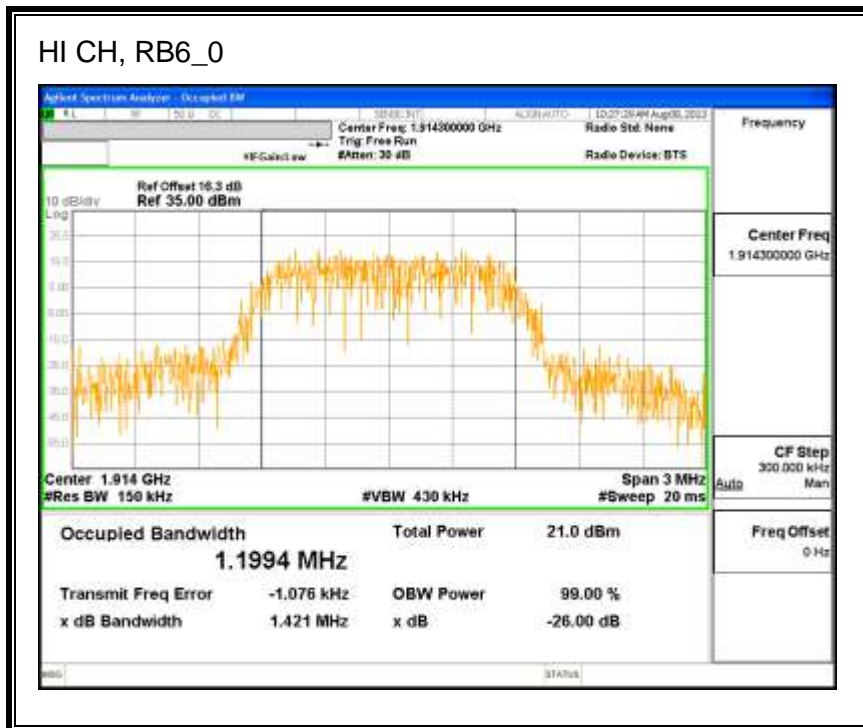
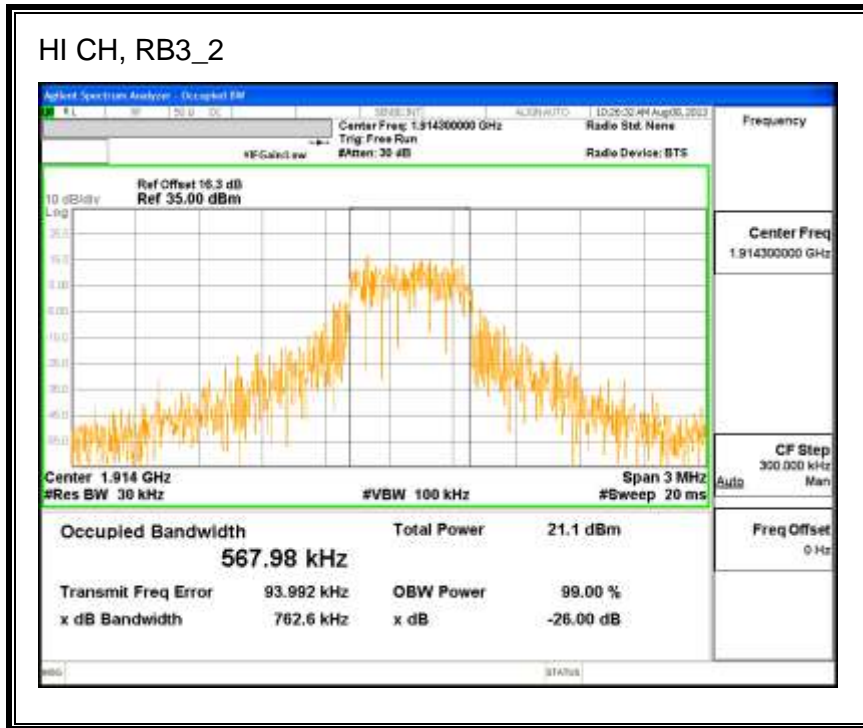


Band 25 (1.4 MHz BAND WIDTH)

LTE 16QAM

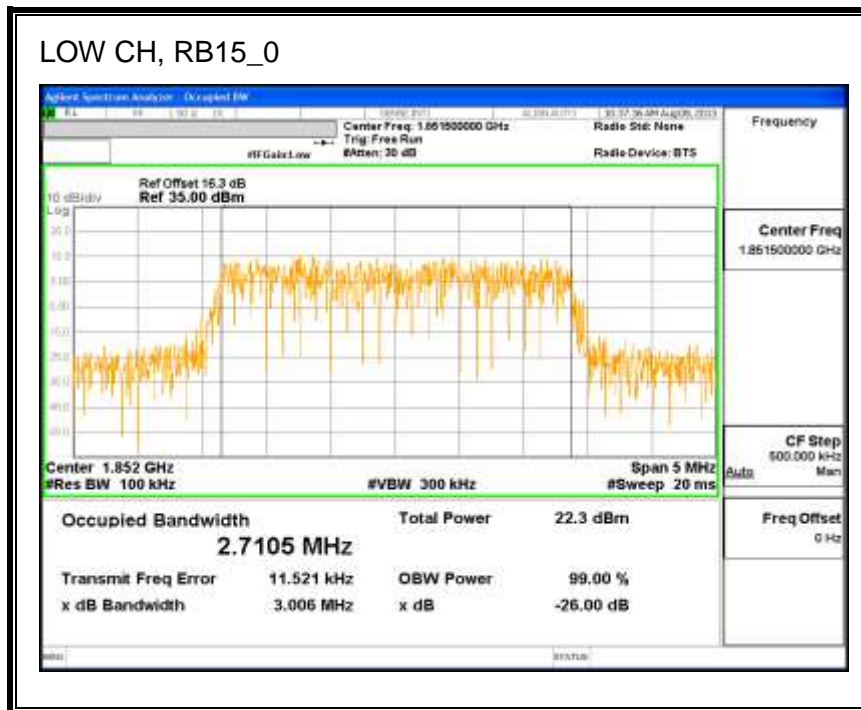
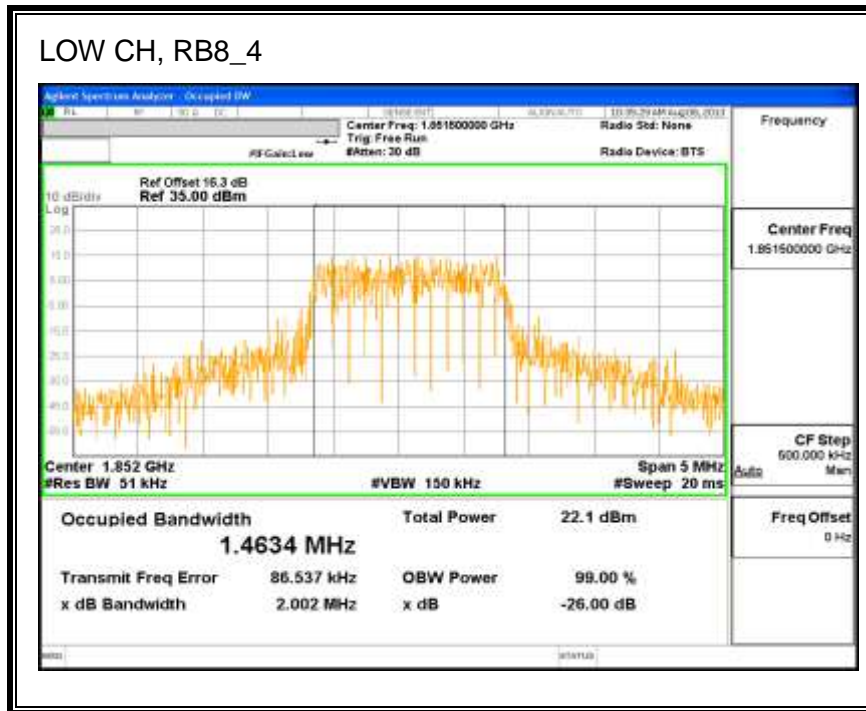




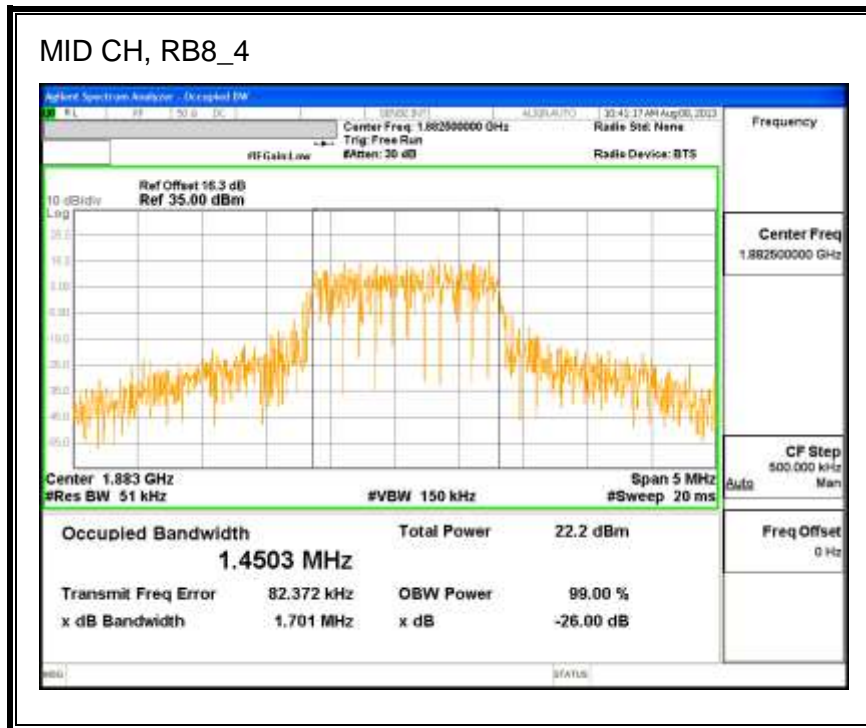


Band 25 (3.0 MHz BAND WIDTH)

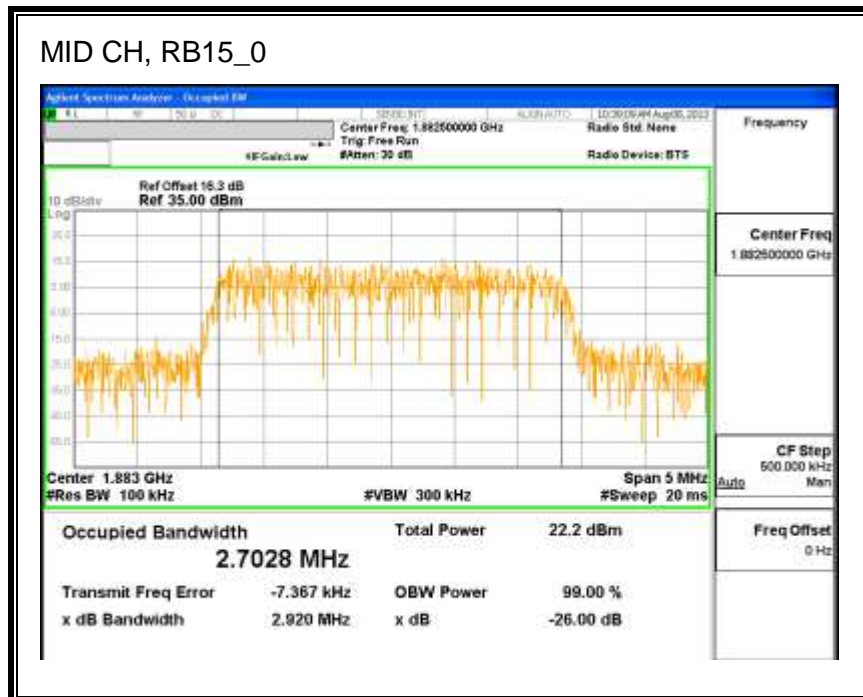
LTE QPSK

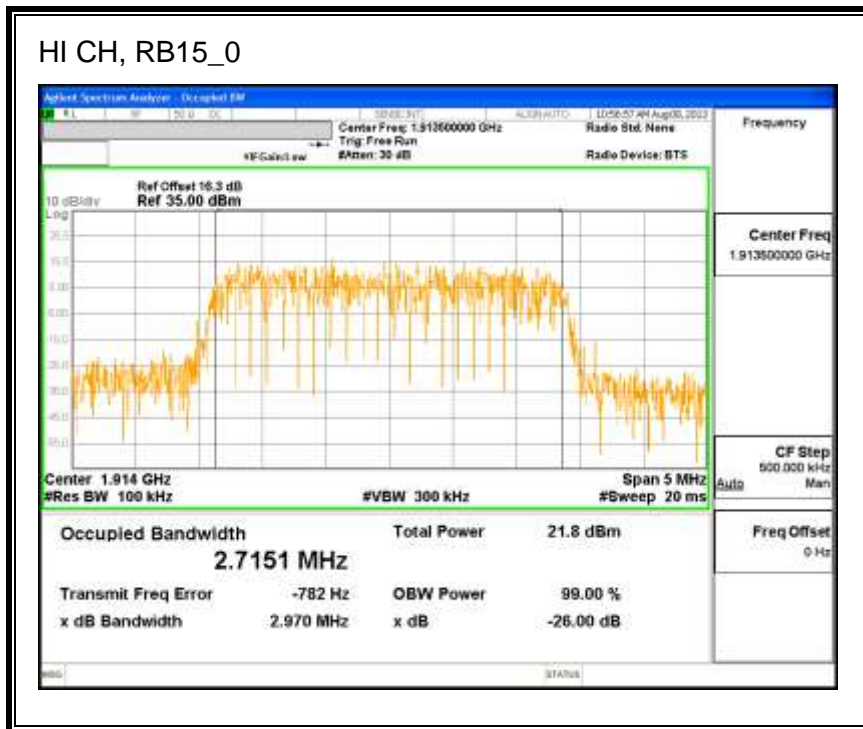
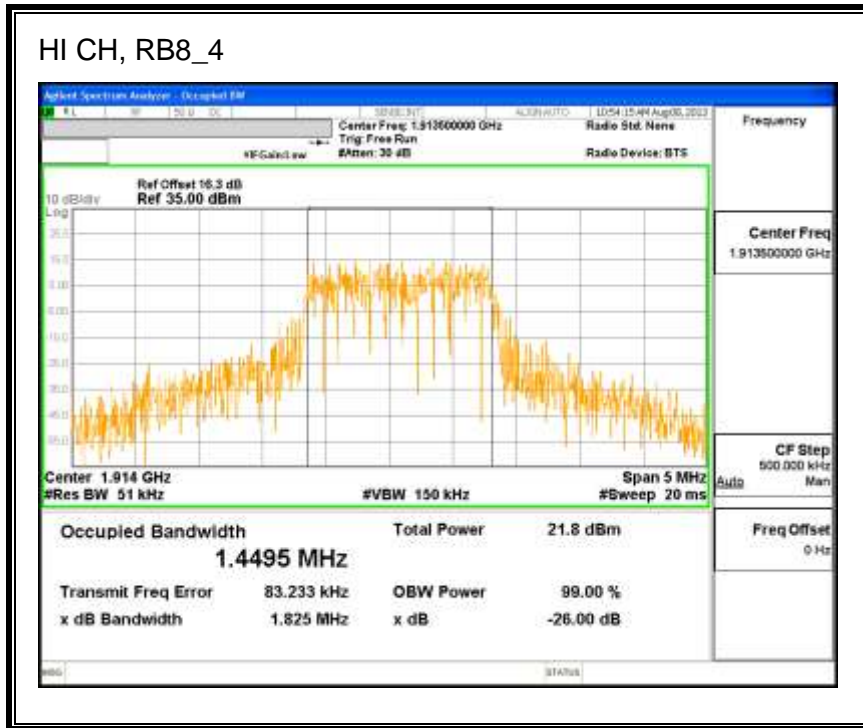


MID CH, RB8_4



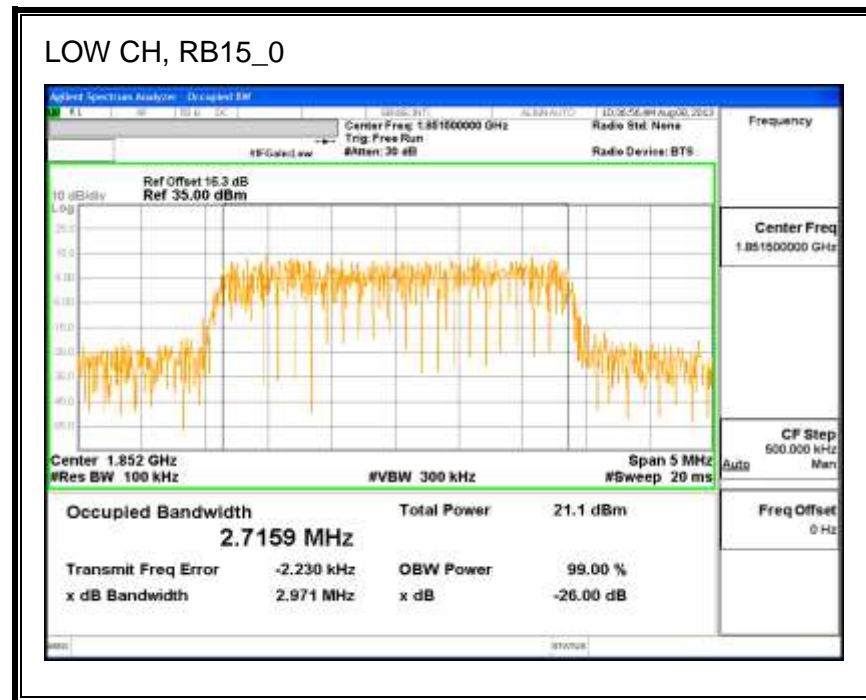
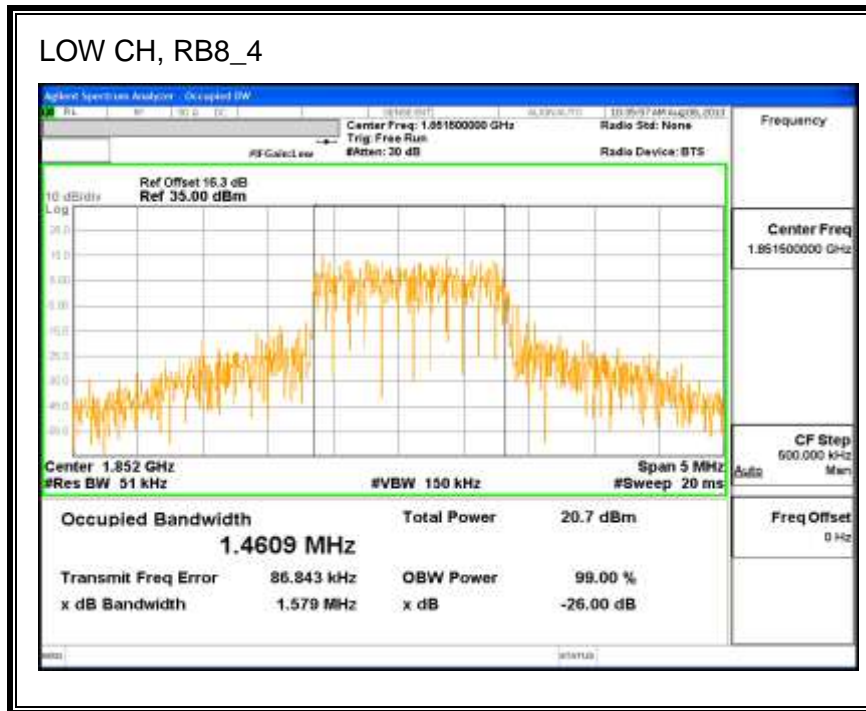
MID CH, RB15_0



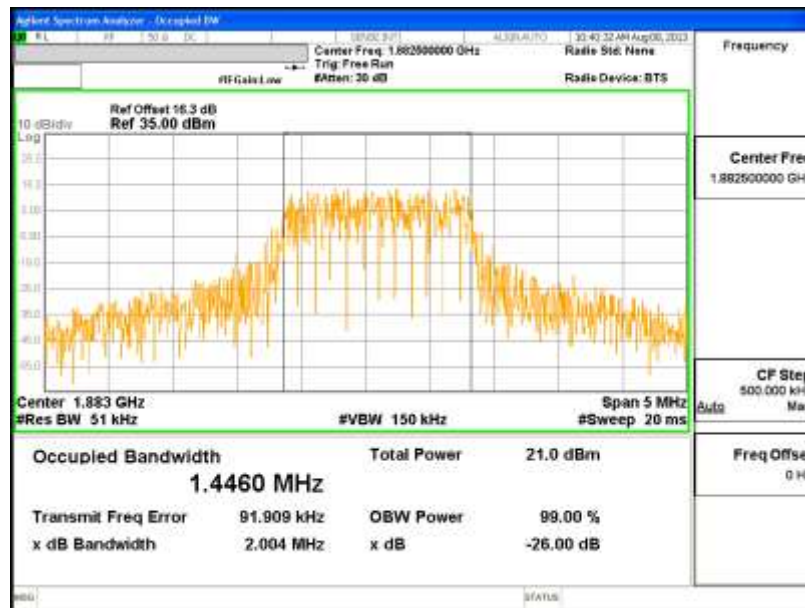


Band 25 (3.0 MHz BAND WIDTH)

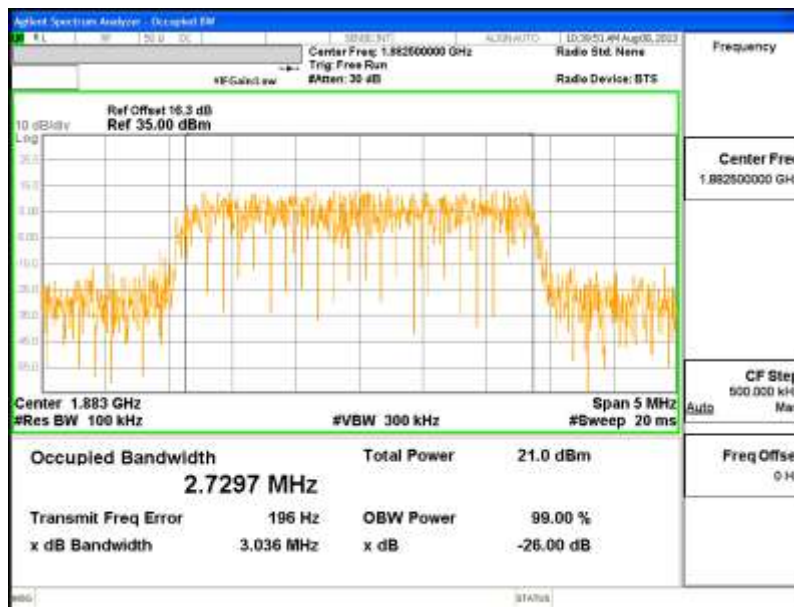
LTE 16QAM

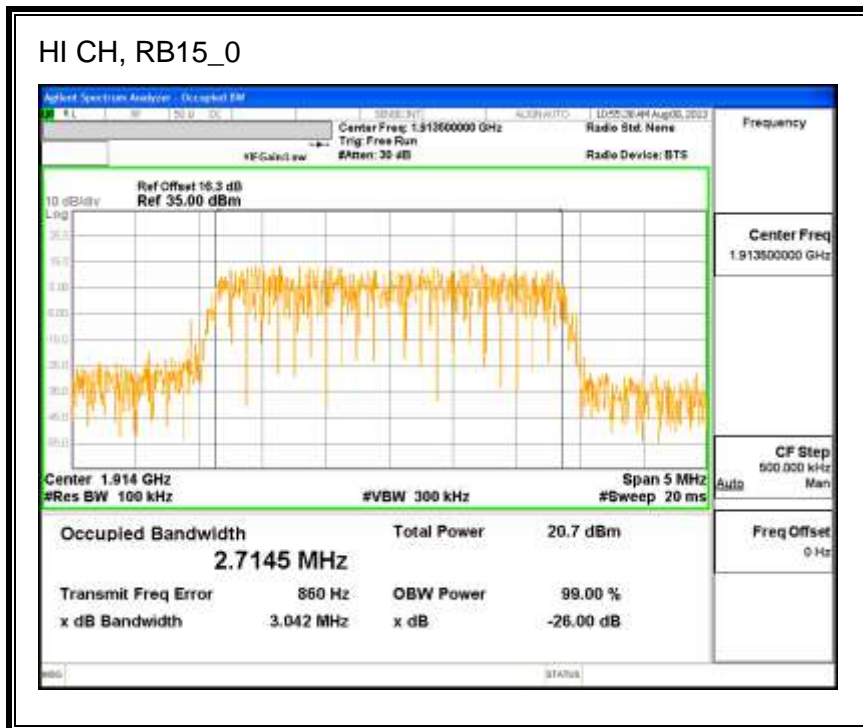
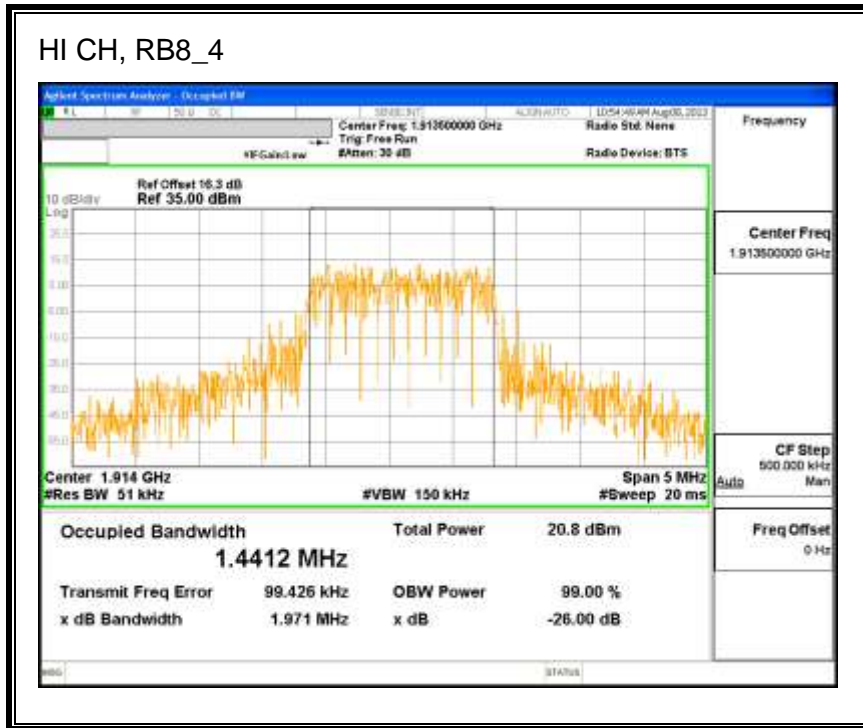


MID CH, RB8_4



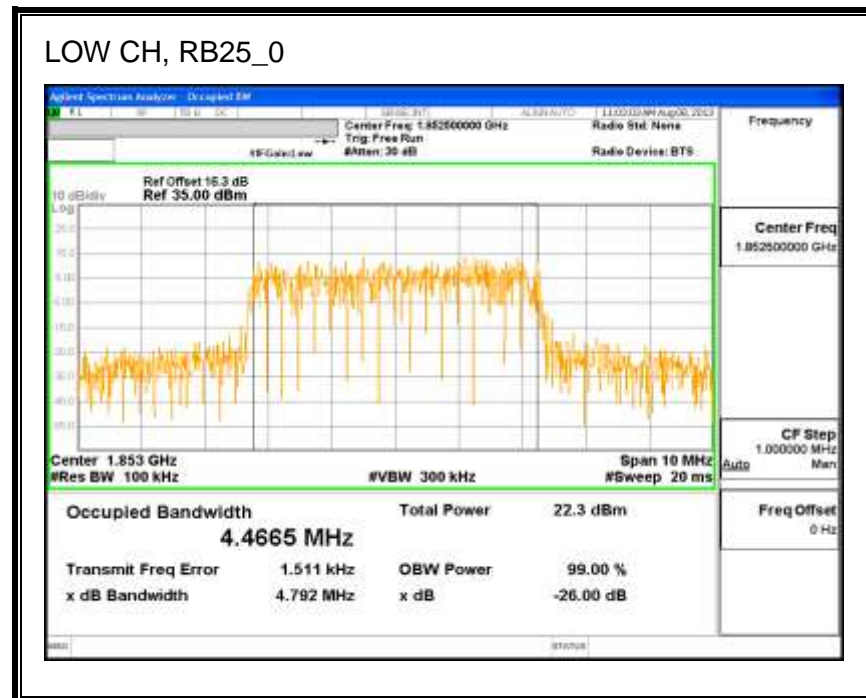
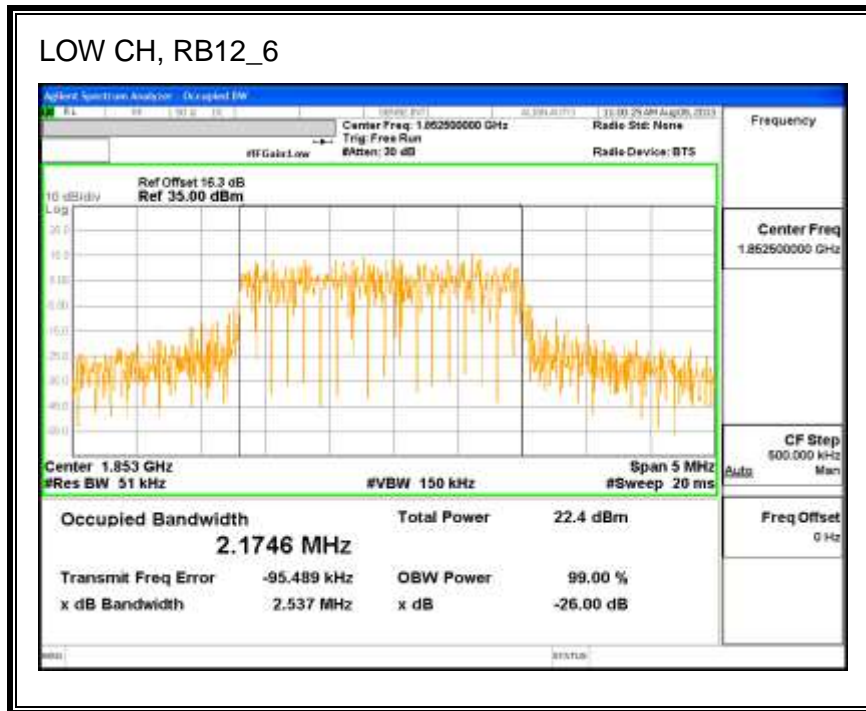
MID CH, RB15_0



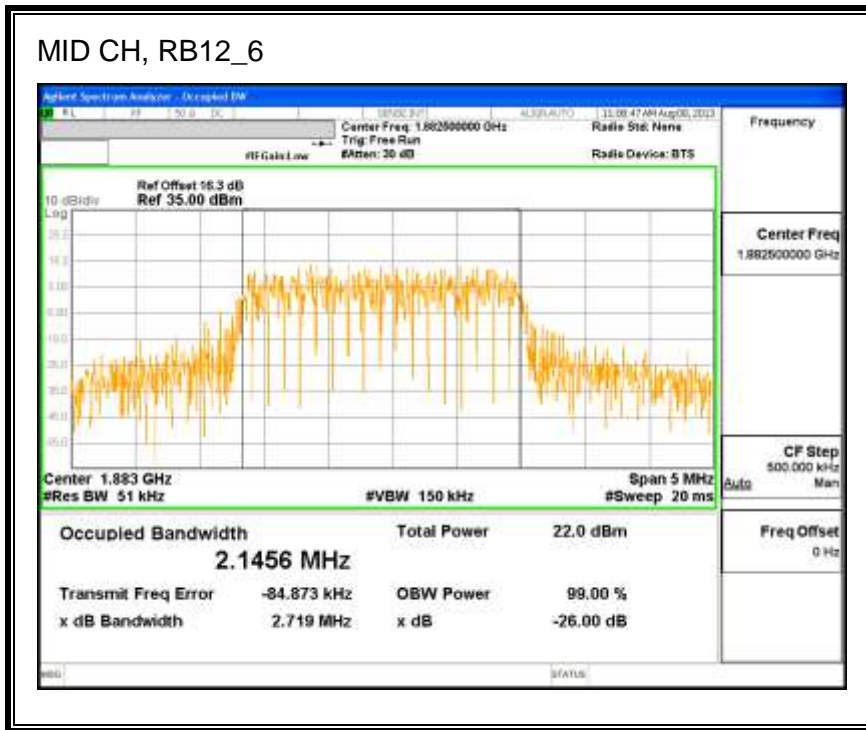


Band 25 (5.0 MHz BAND WIDTH)

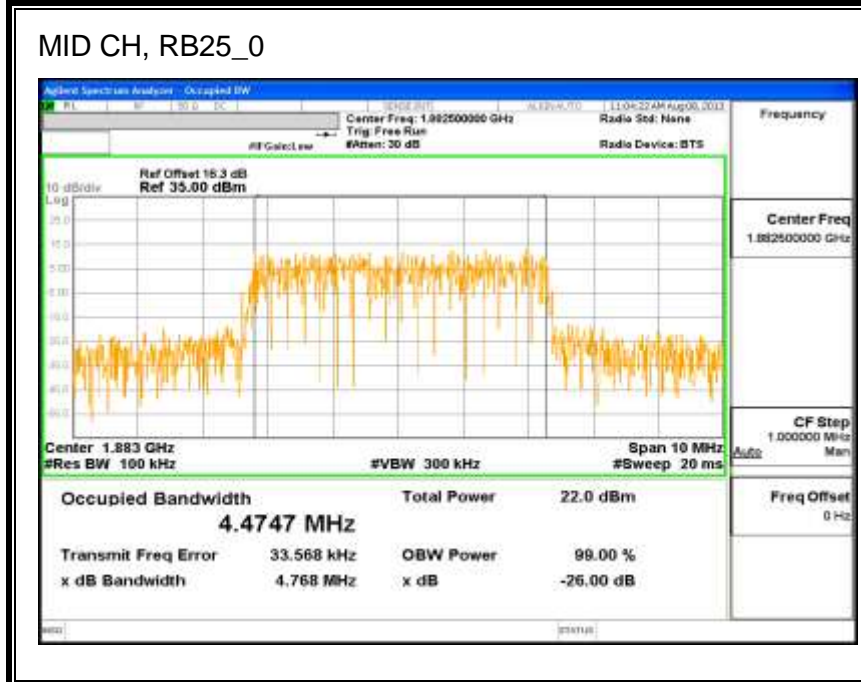
LTE QPSK

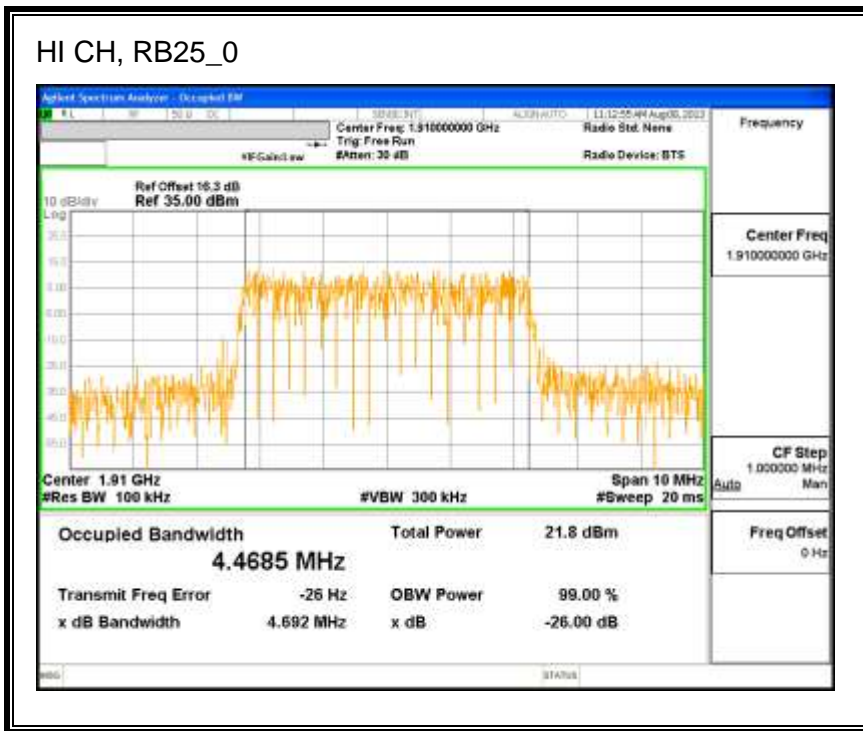
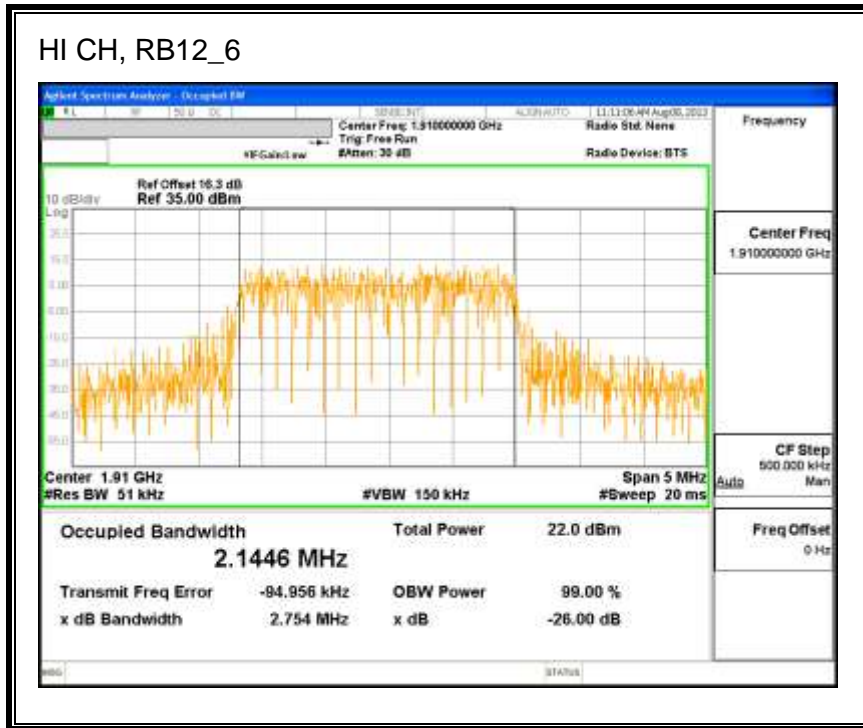


MID CH, RB12_6



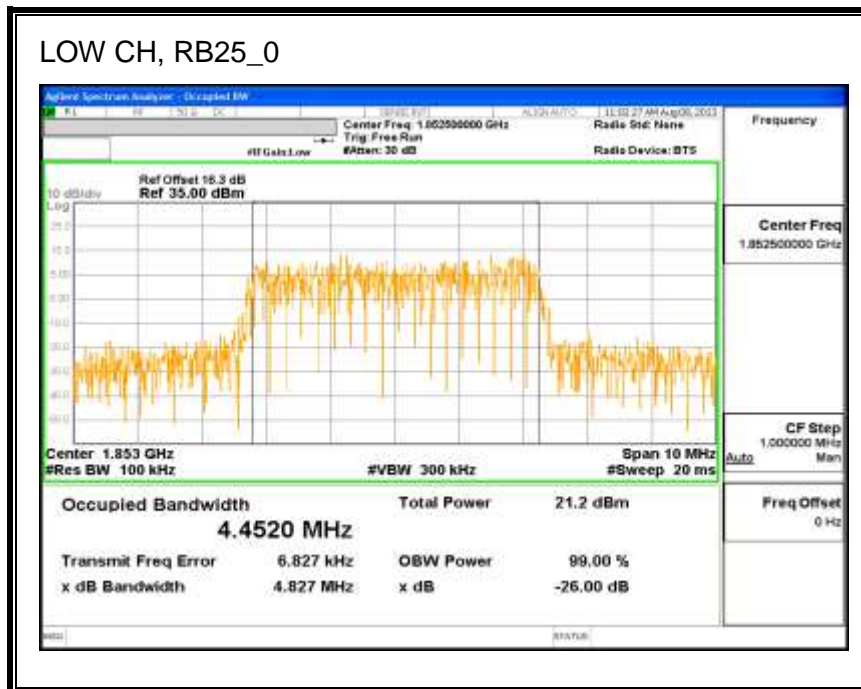
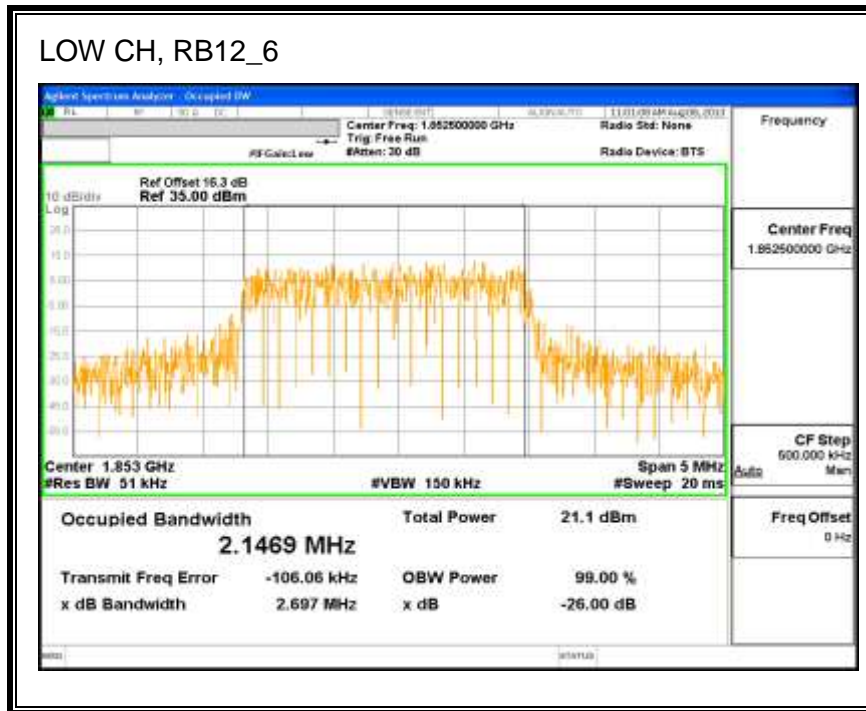
MID CH, RB25_0

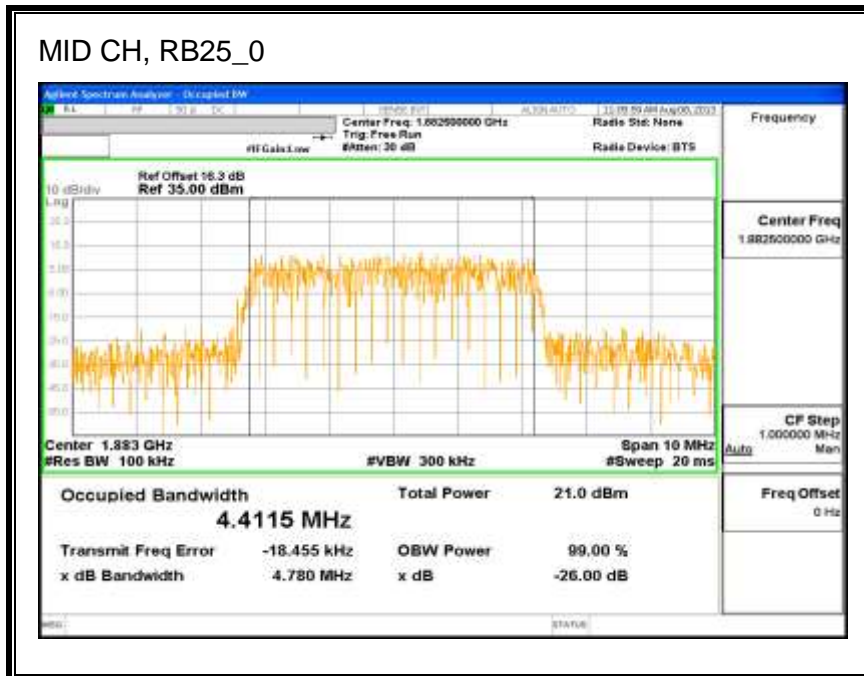
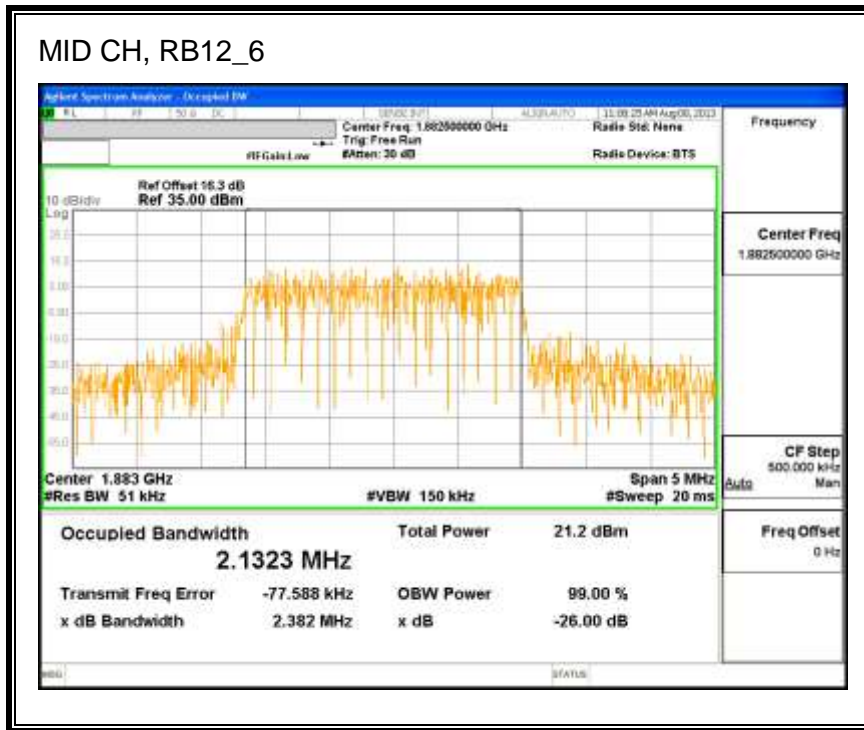


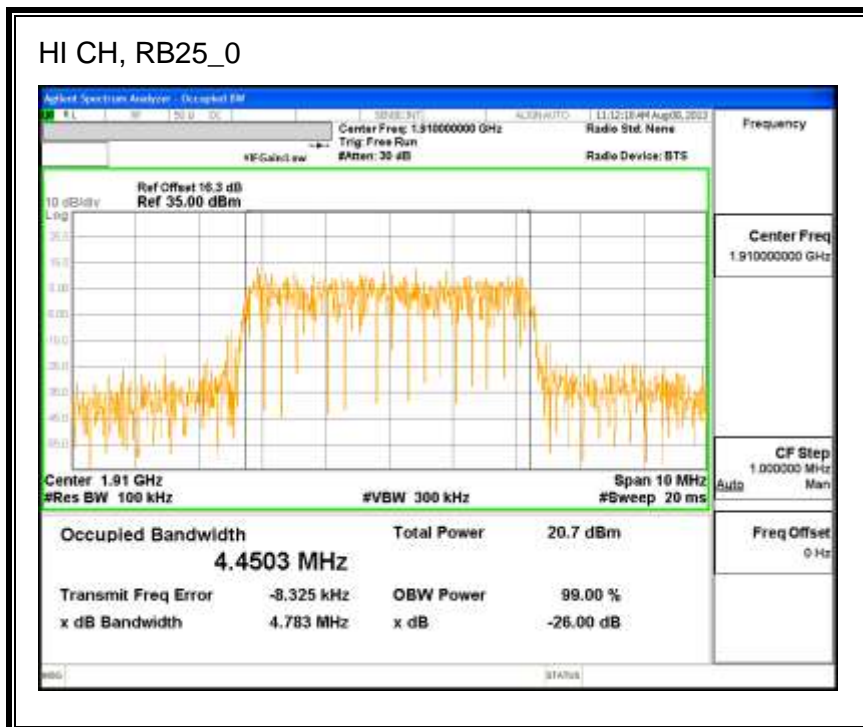
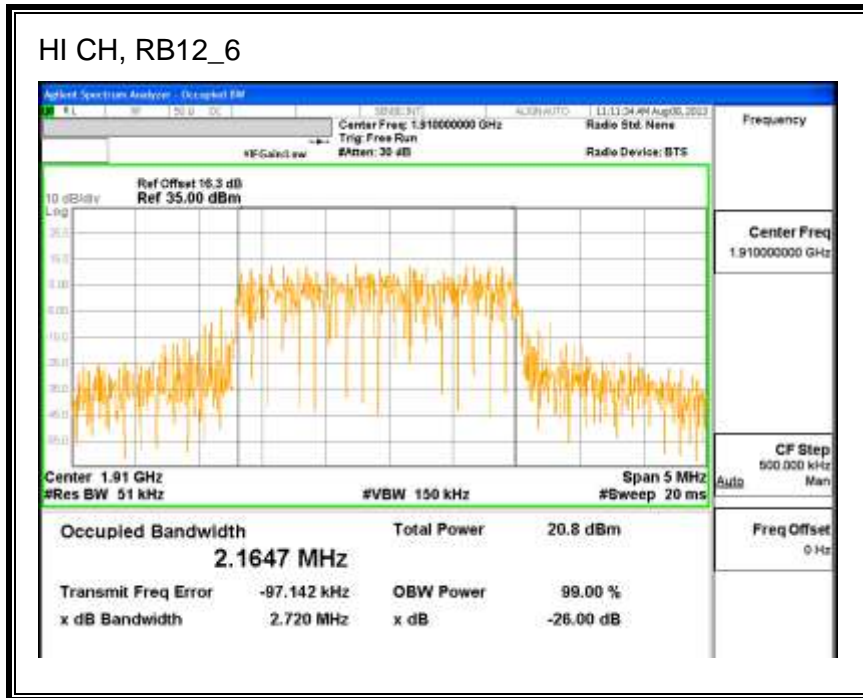


Band 25 (5 MHz BAND WIDTH)

LTE 16QAM

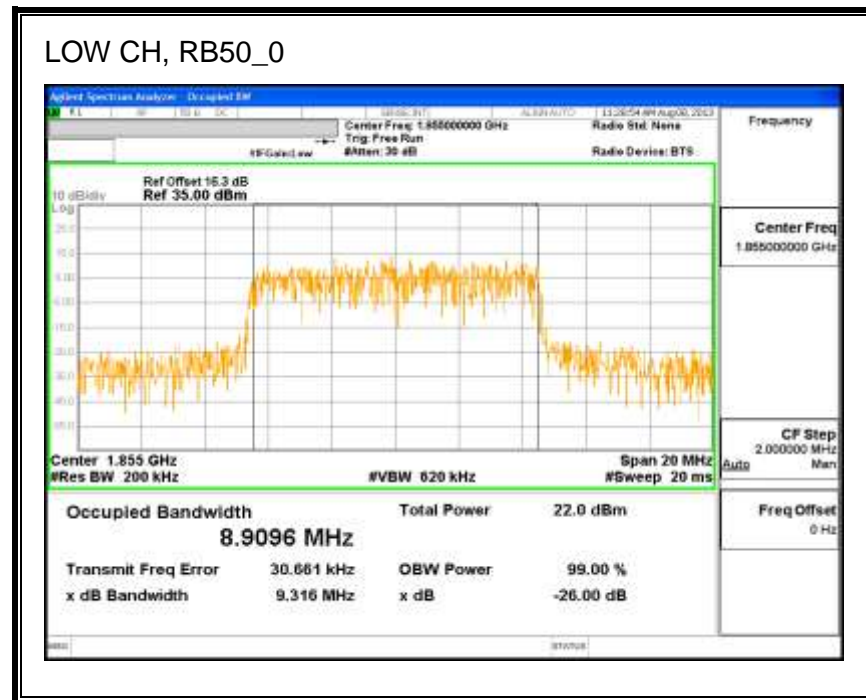
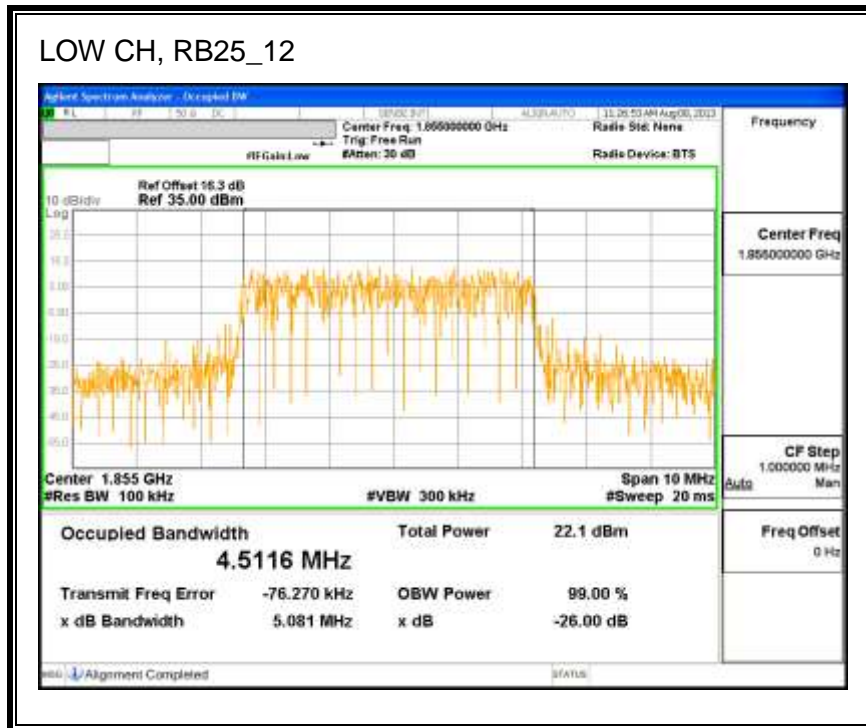


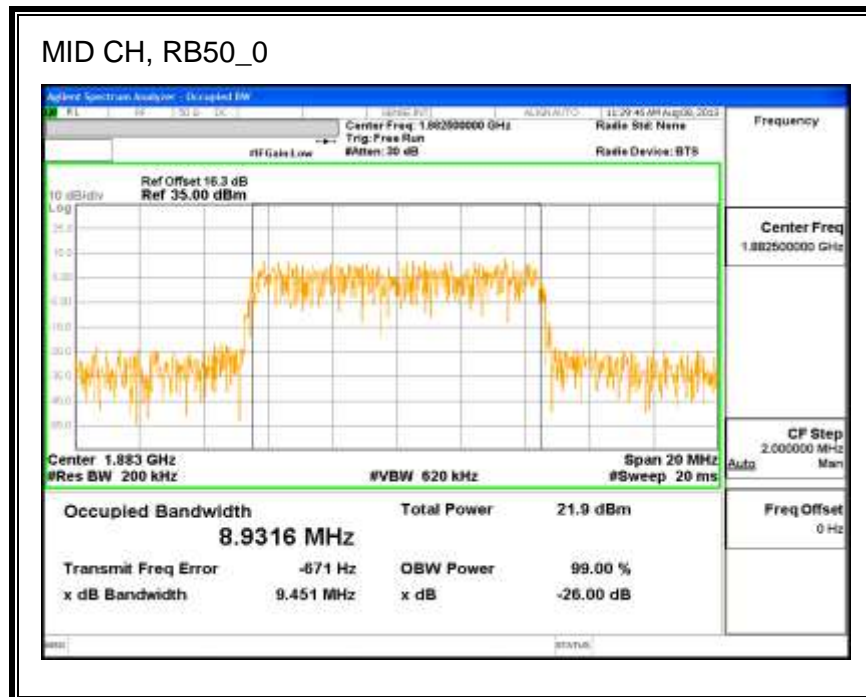
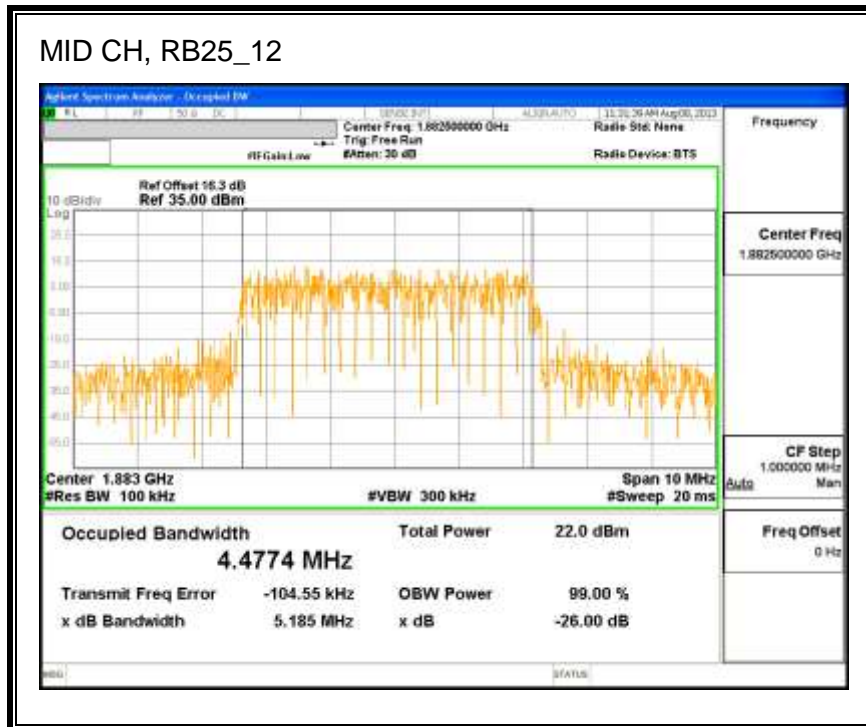


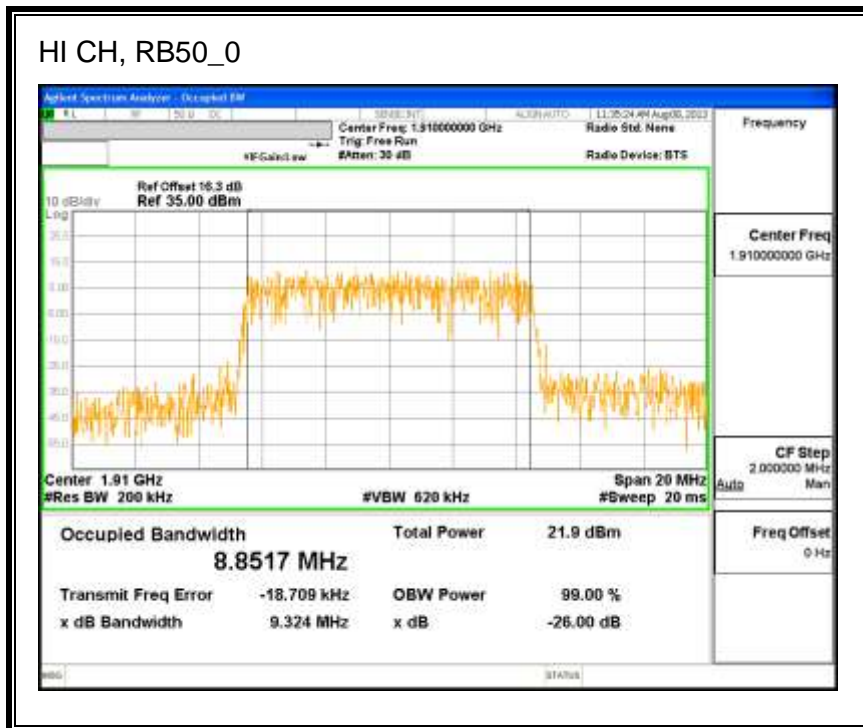
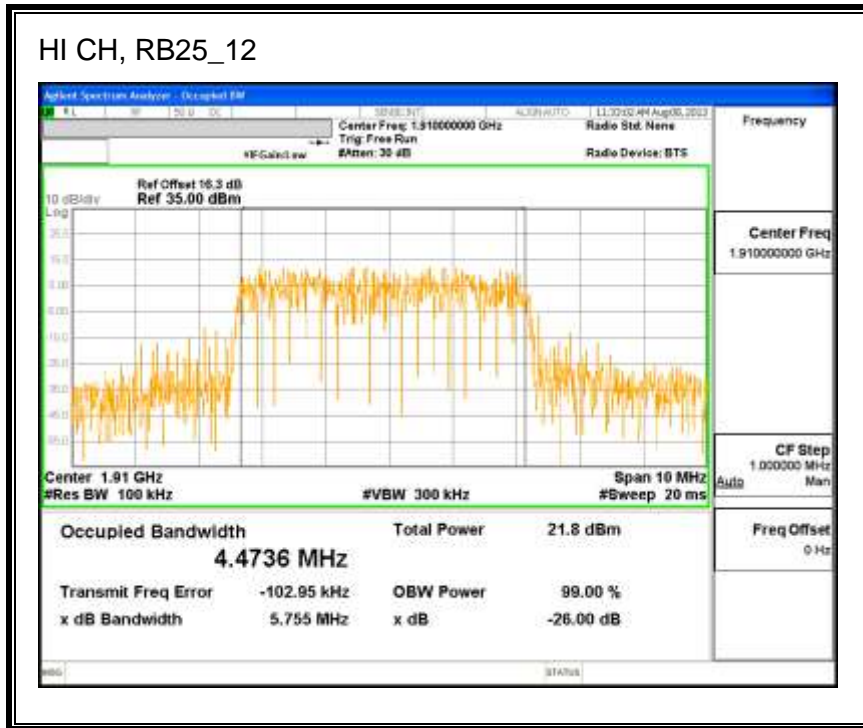


Band 25 (10.0 MHz BAND WIDTH)

LTE QPSK

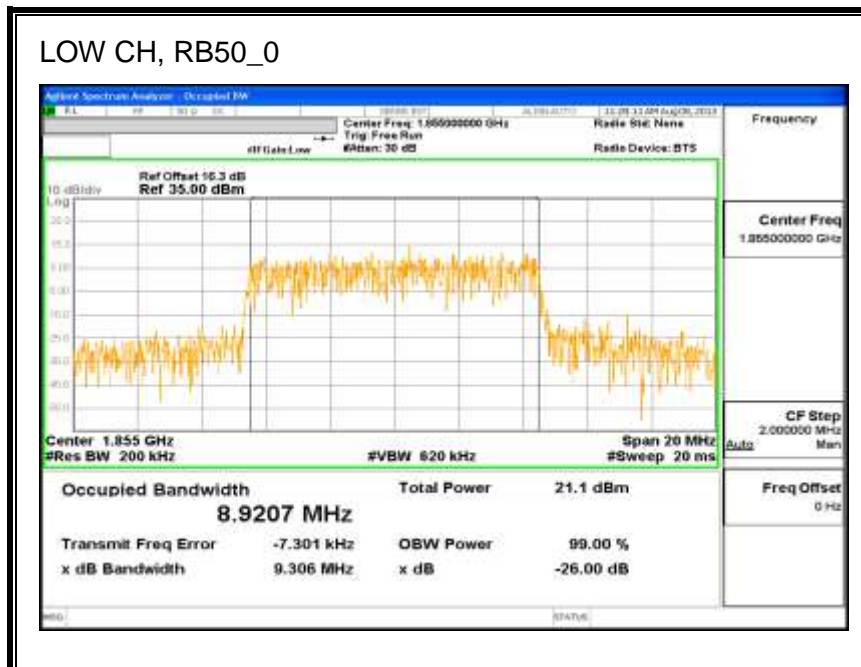
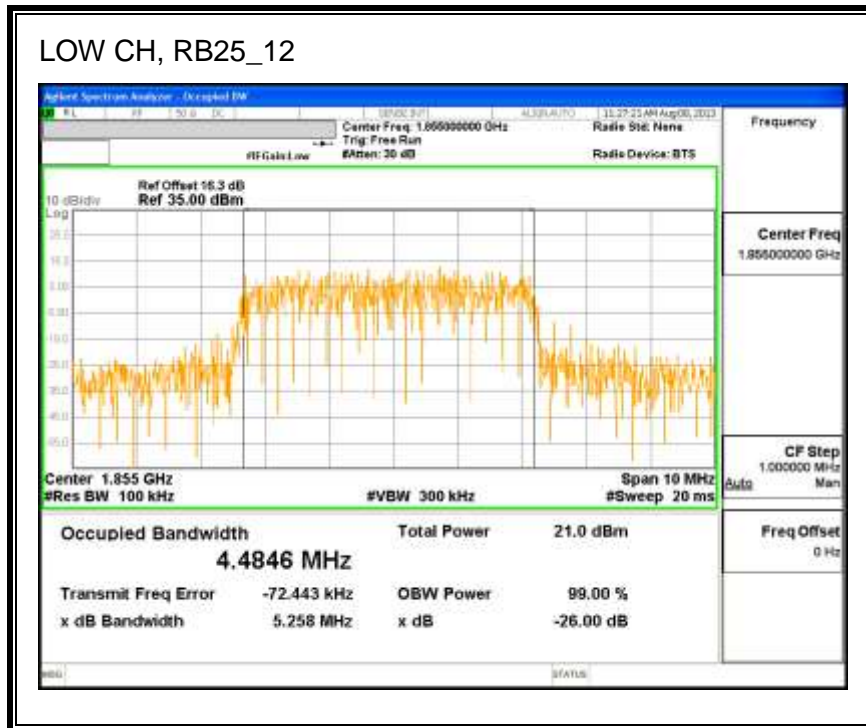


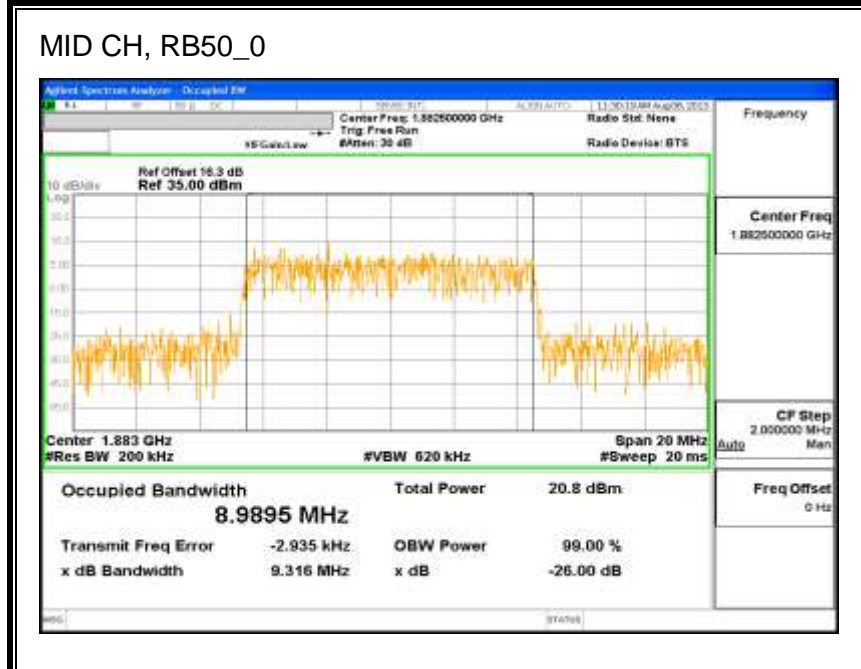
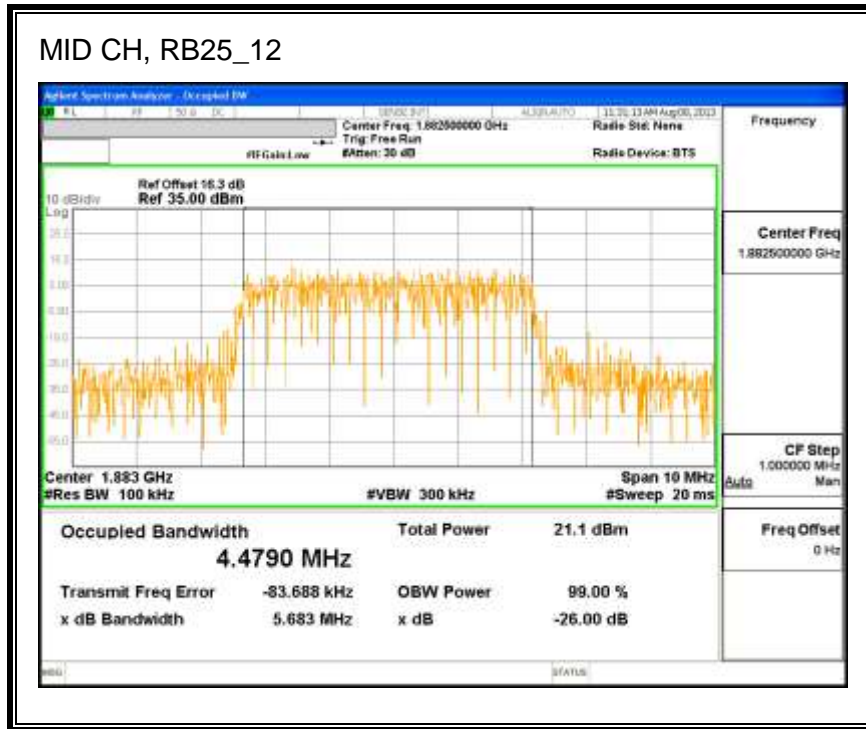


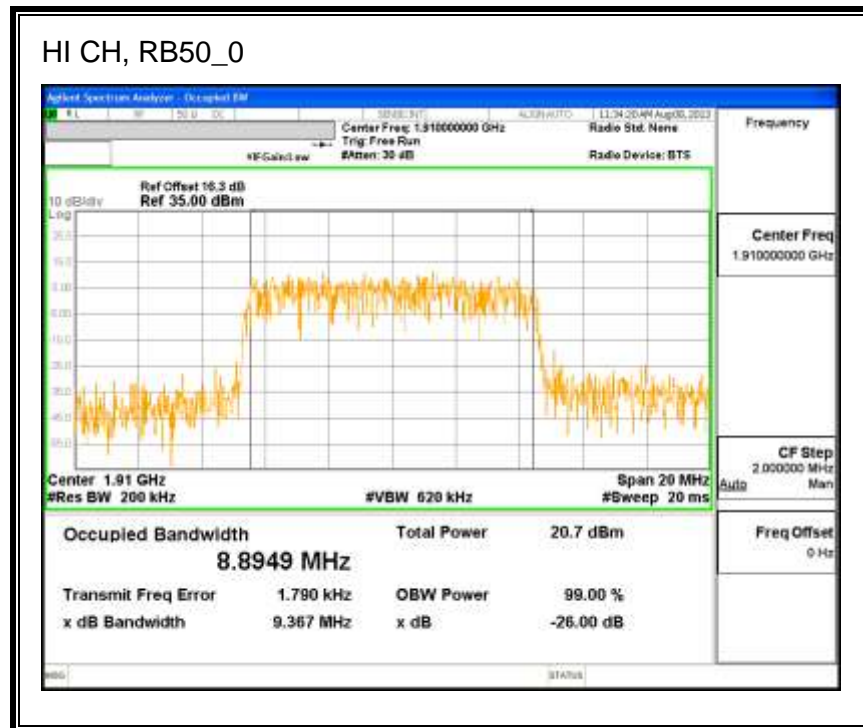
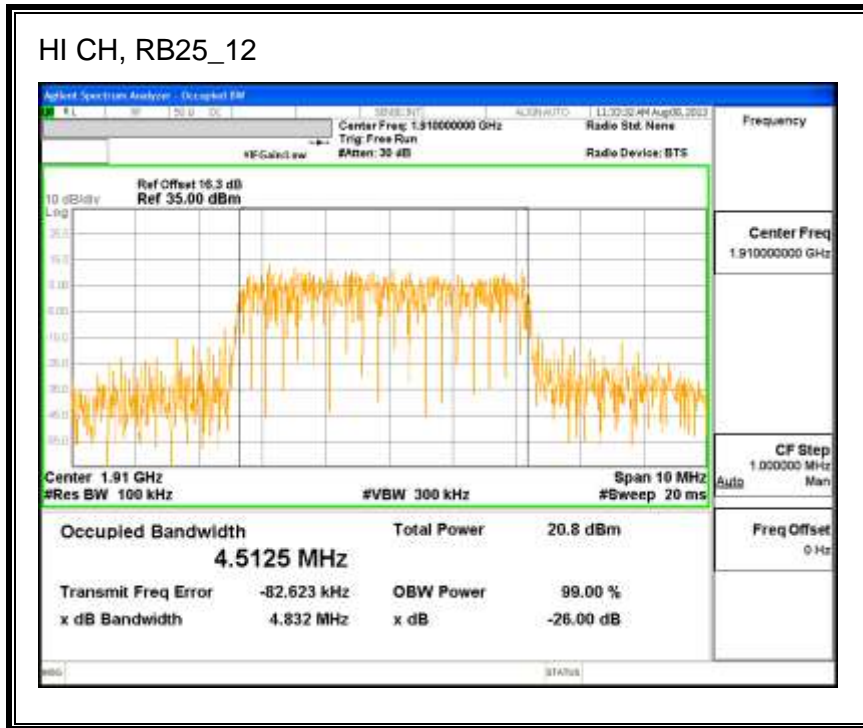


Band 25 (10 MHz BAND WIDTH)

LTE 16QAM

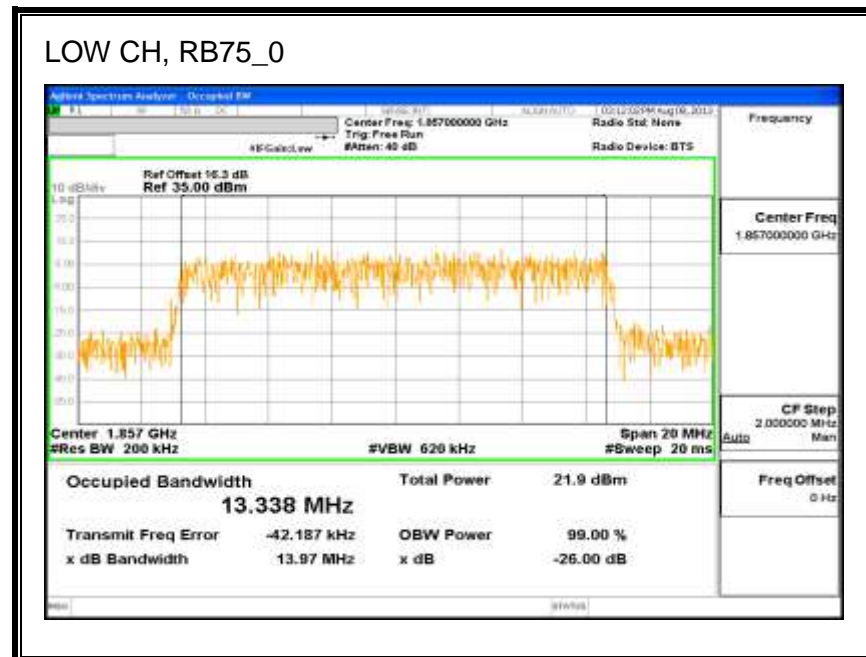
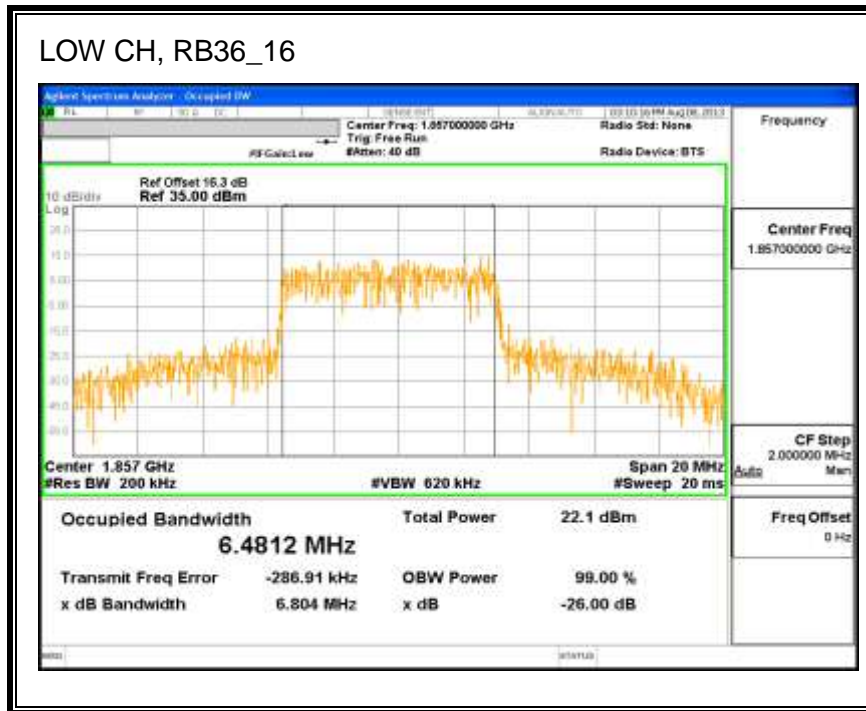


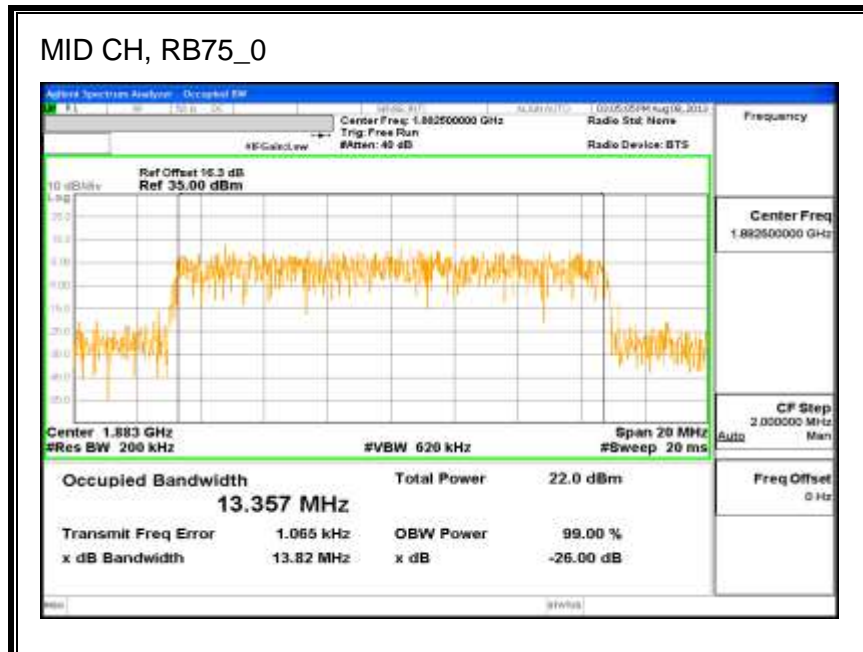
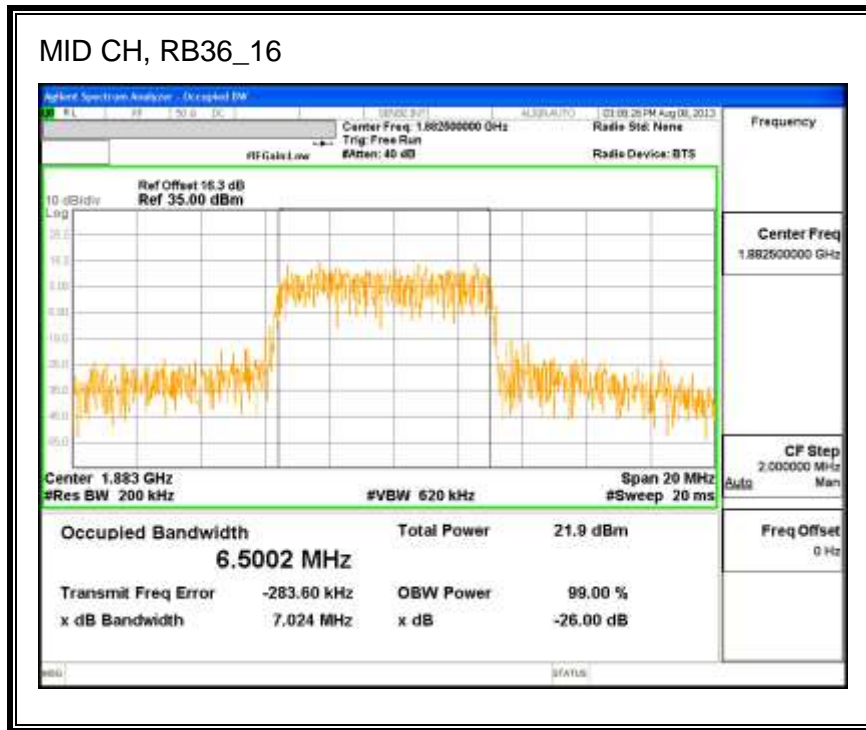


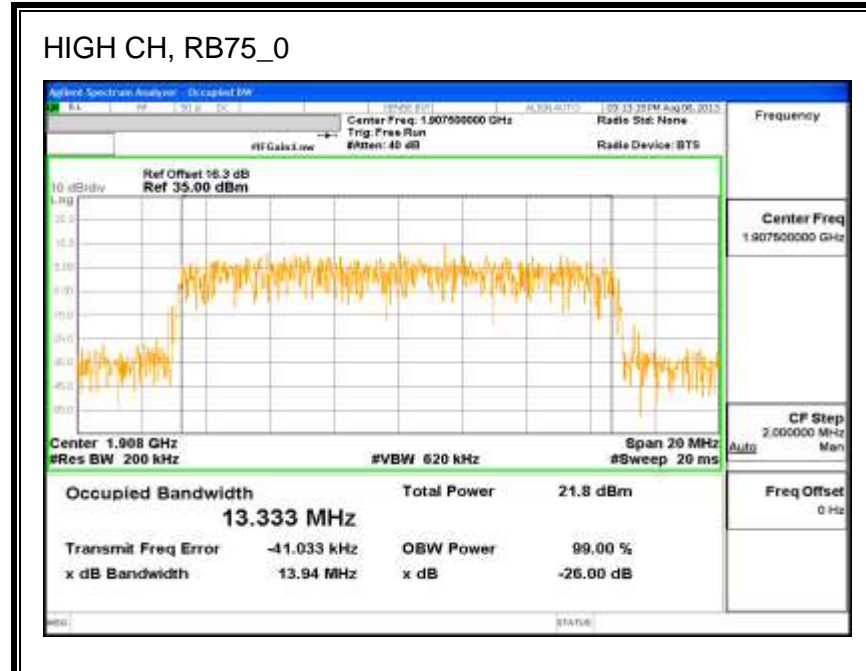
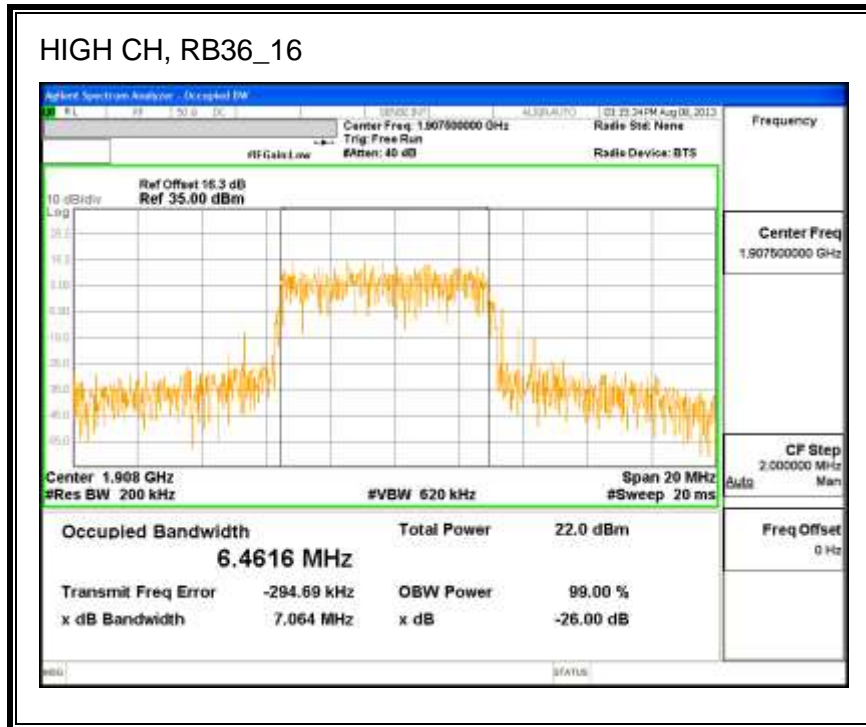


Band 25 (15.0 MHz BAND WIDTH)

LTE QPSK

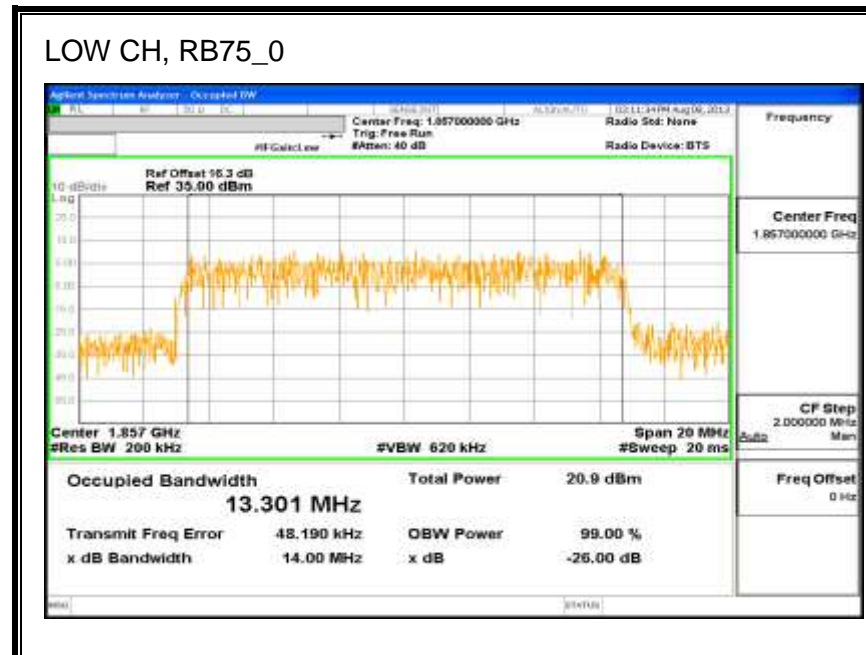
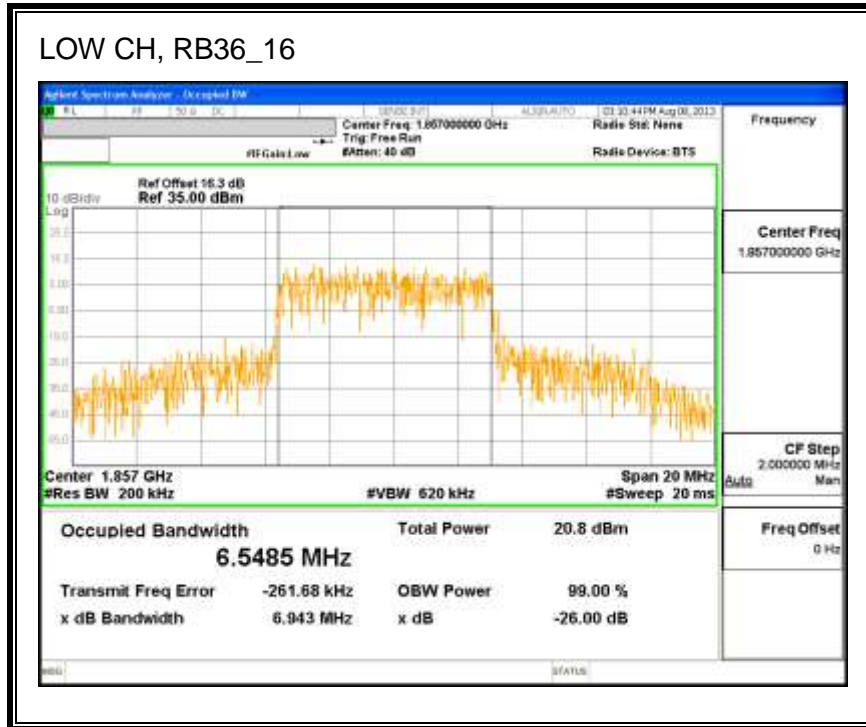


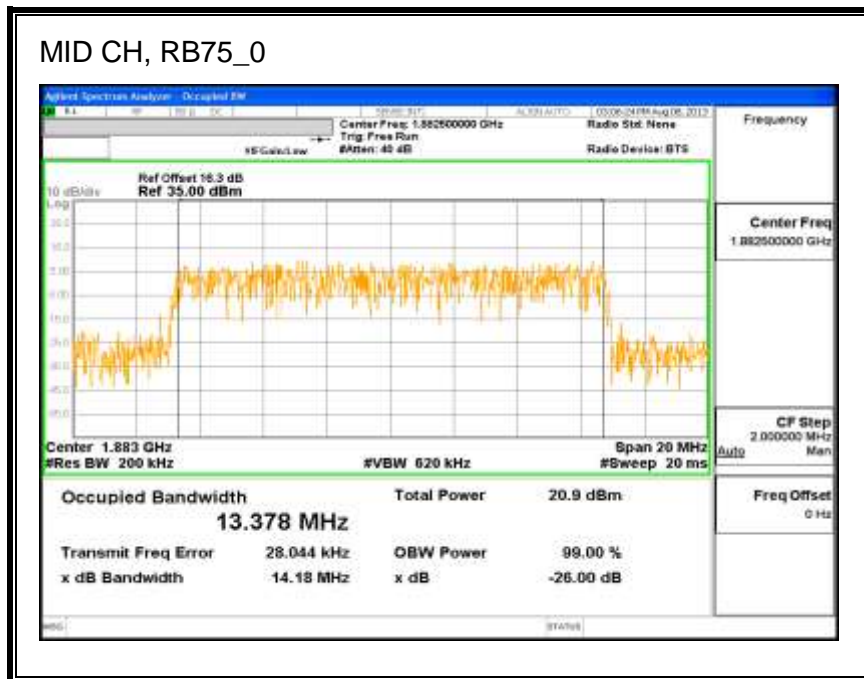
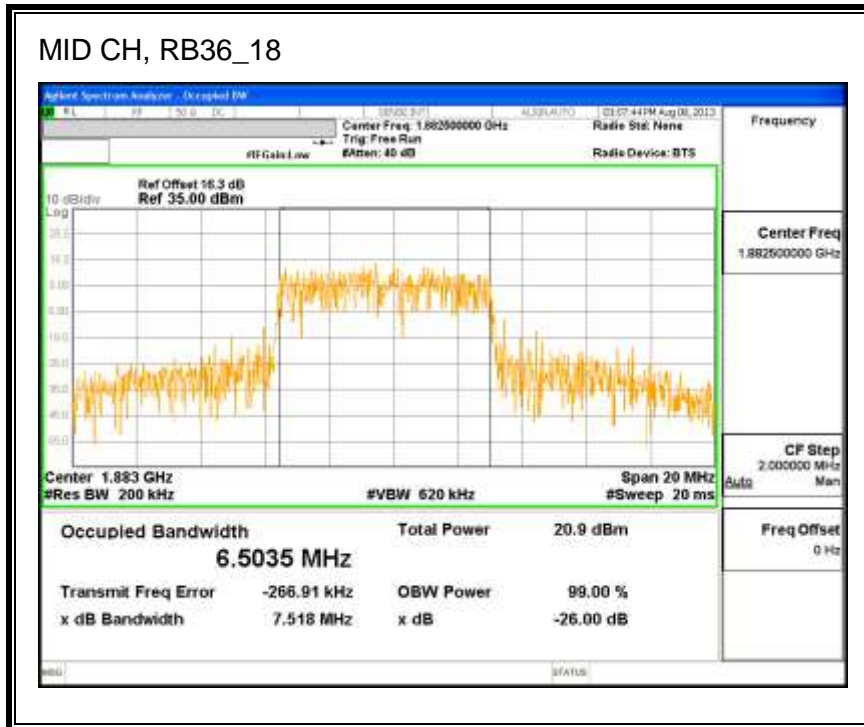


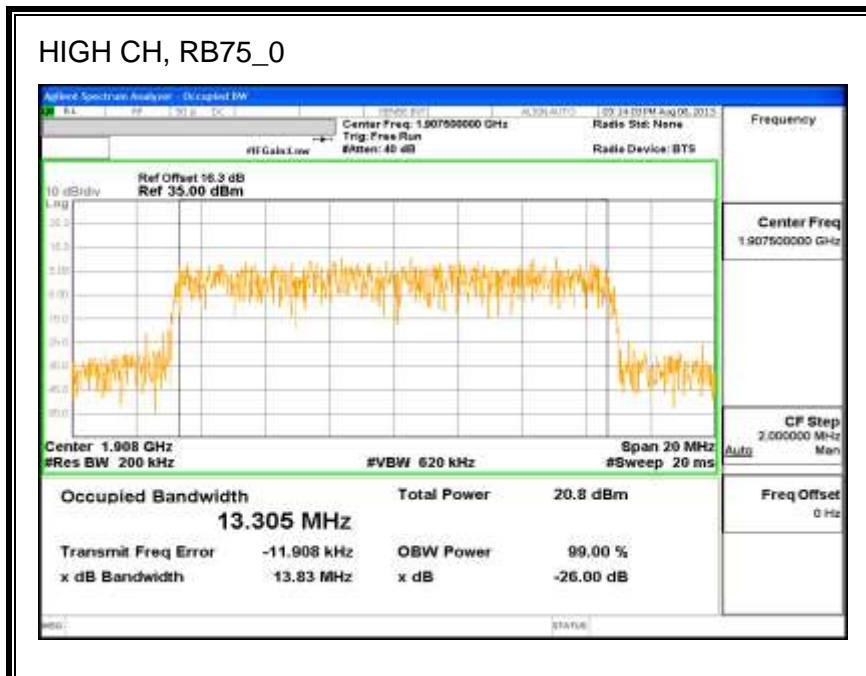
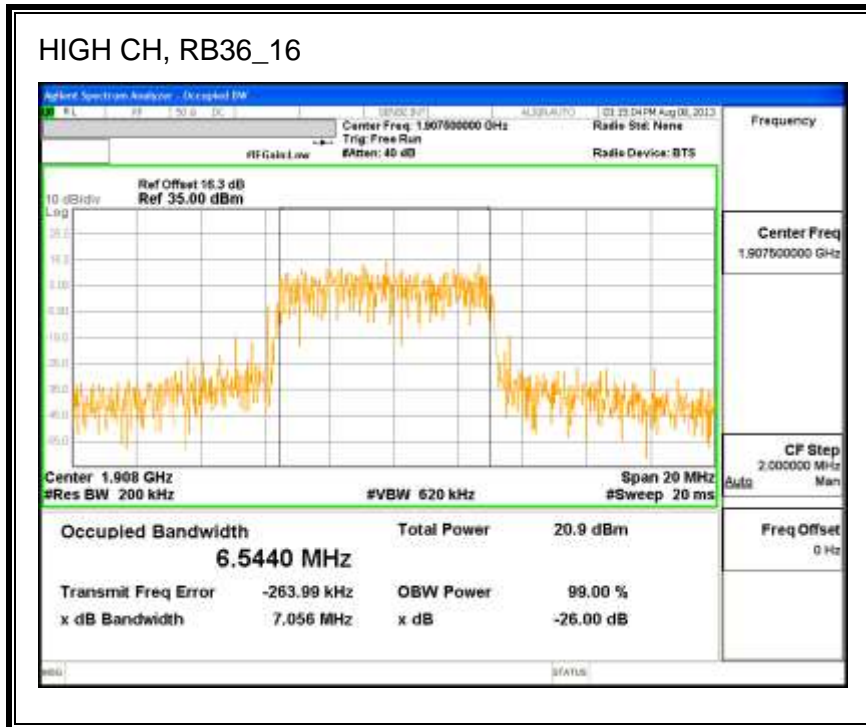


Band 25 (15.0 MHz BAND WIDTH)

LTE 16QAM

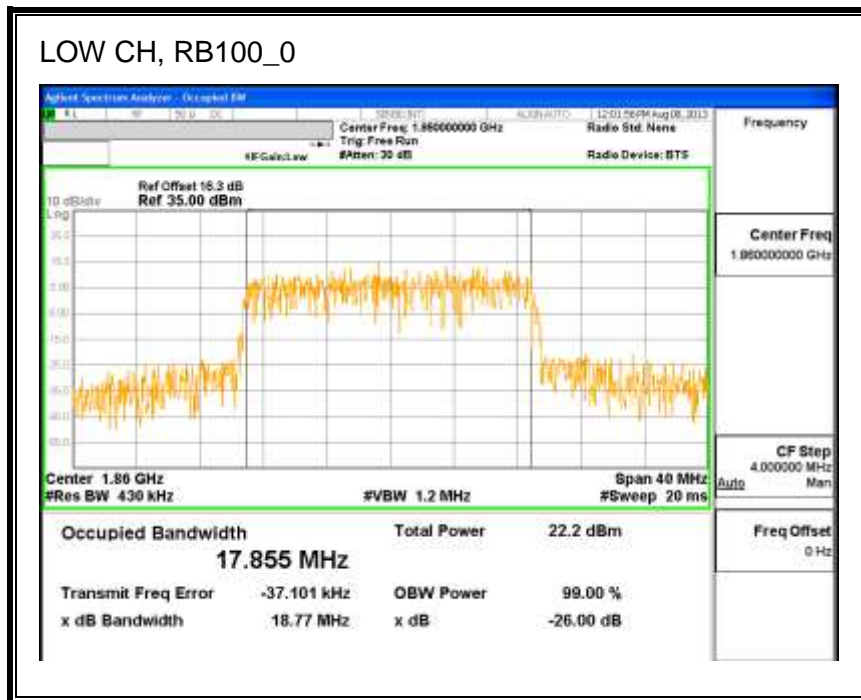
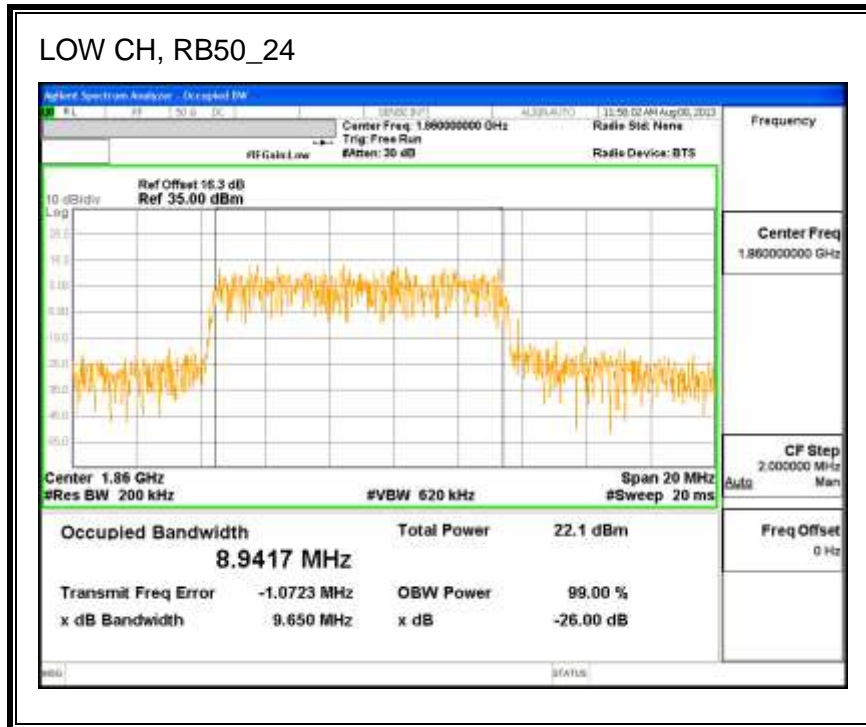


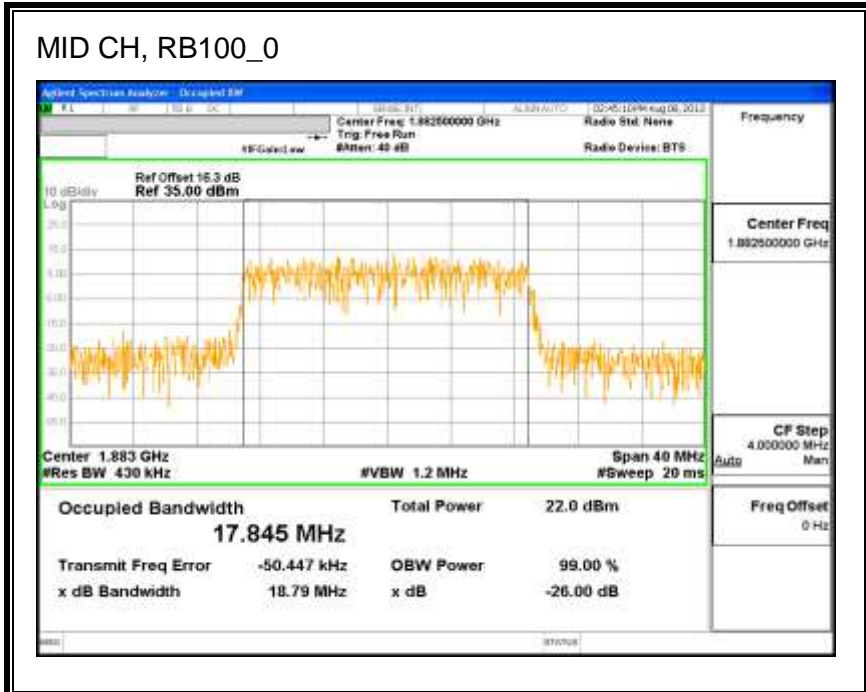
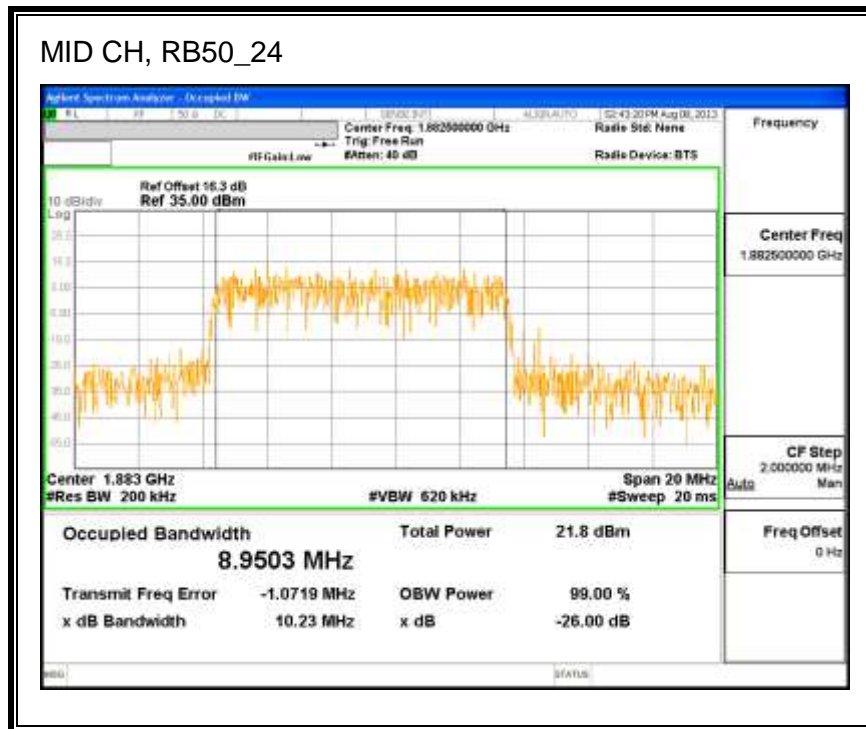


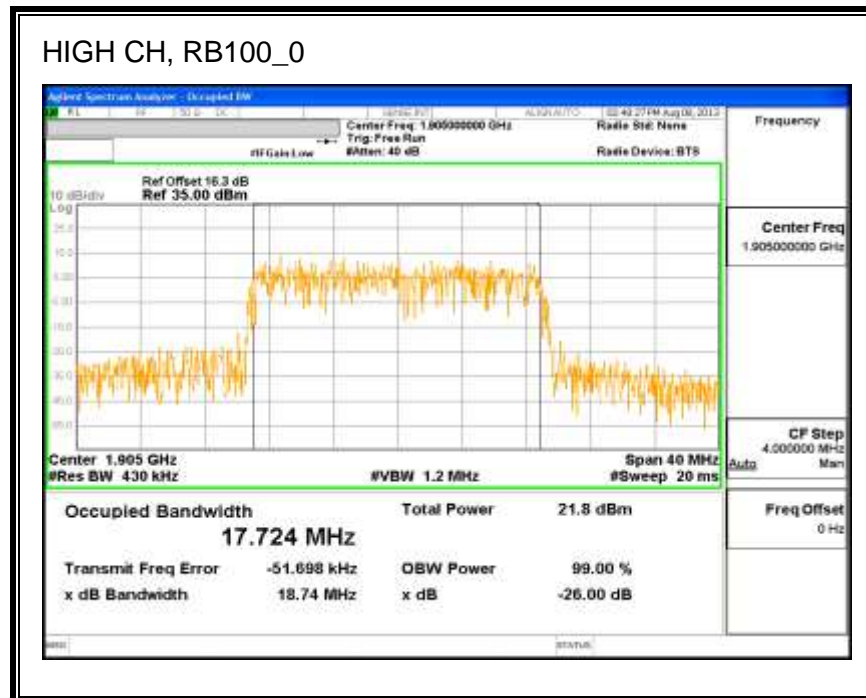
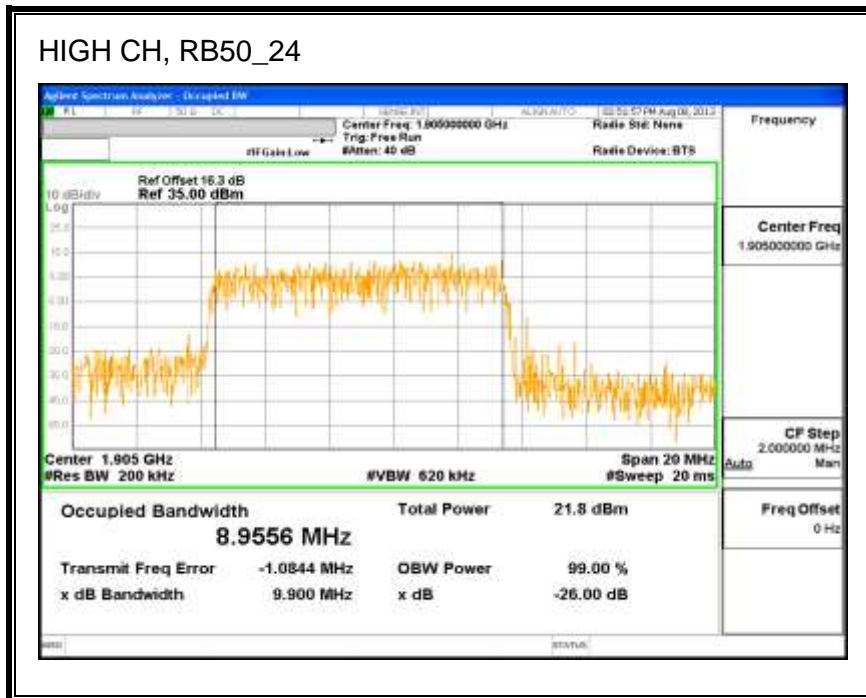


Band 25 (20.0 MHz BAND WIDTH)

LTE QPSK

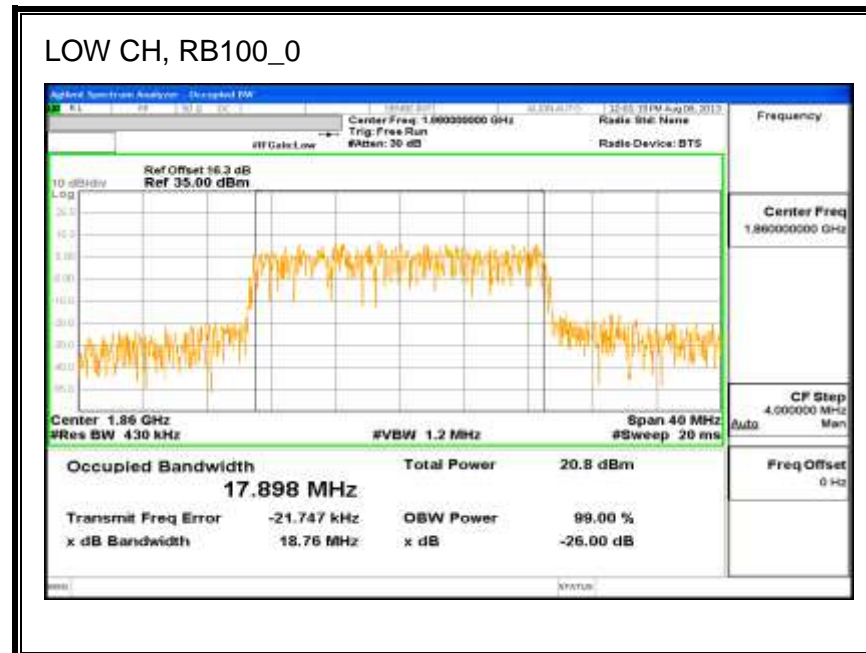
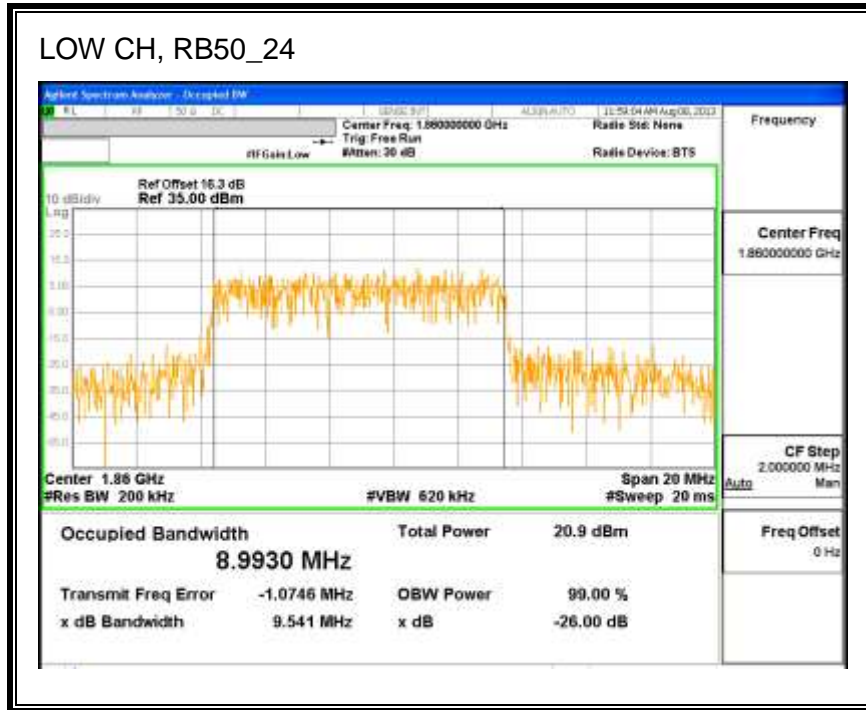


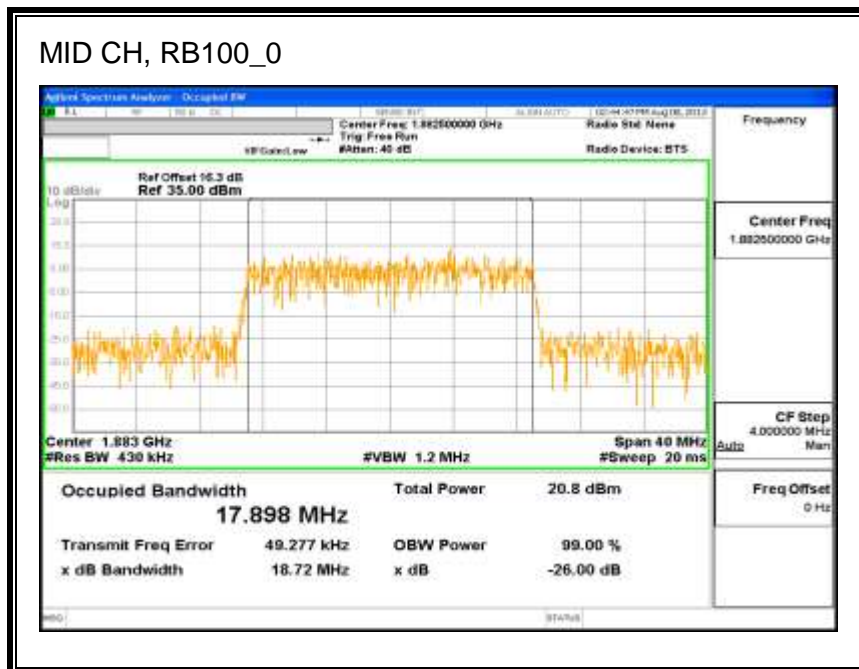
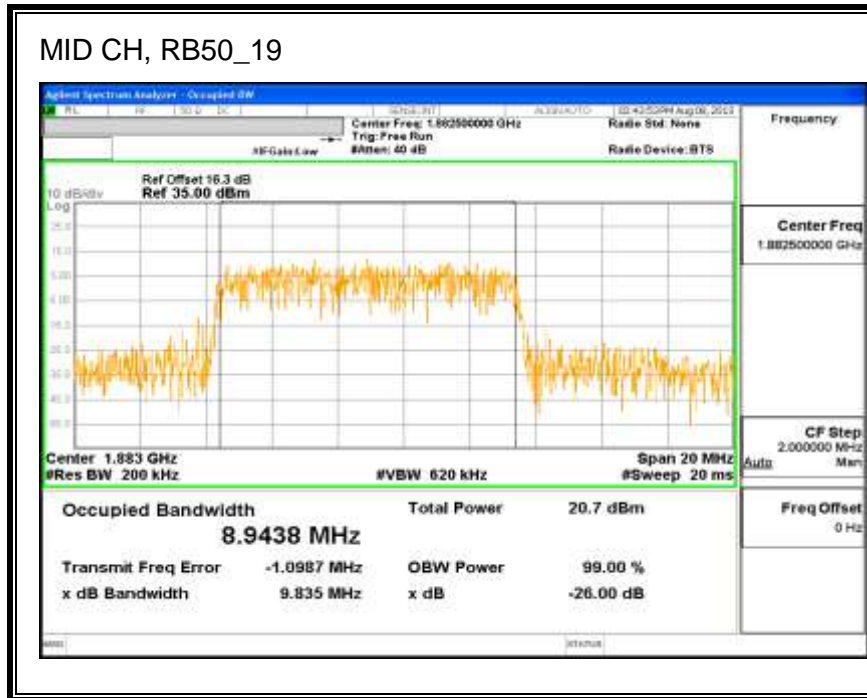


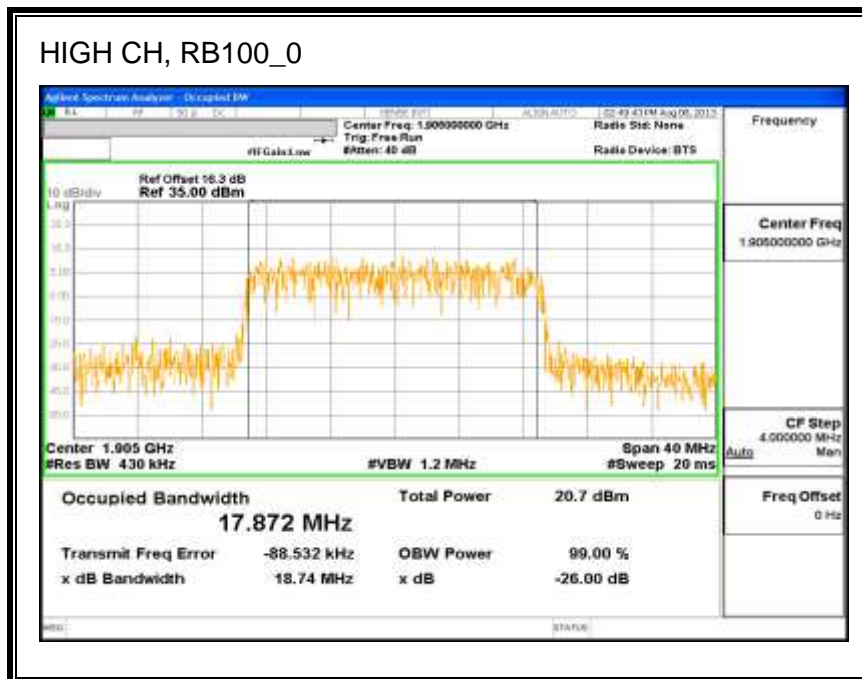
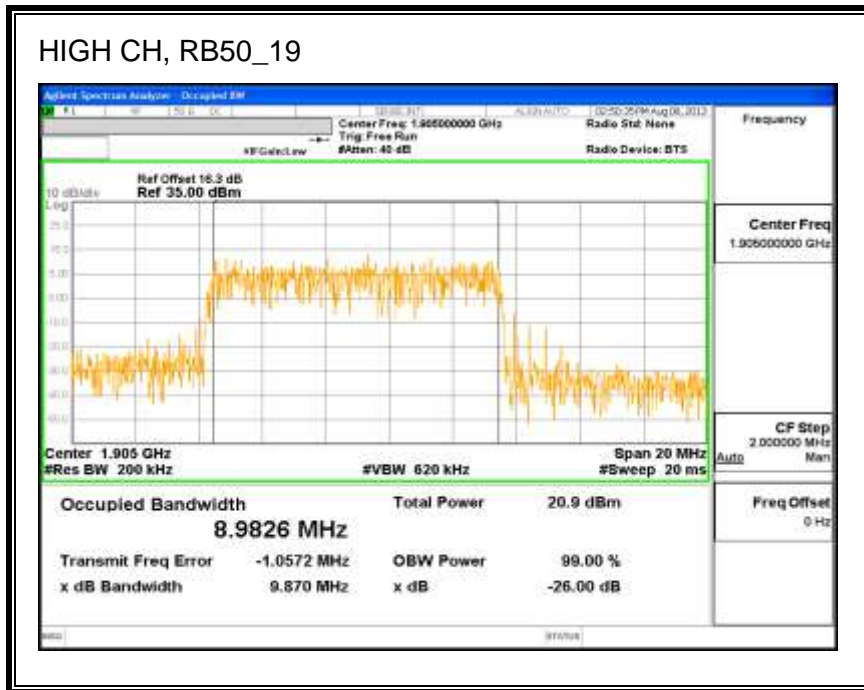


Band 25 (20.0 MHz BAND WIDTH)

LTE 16QAM

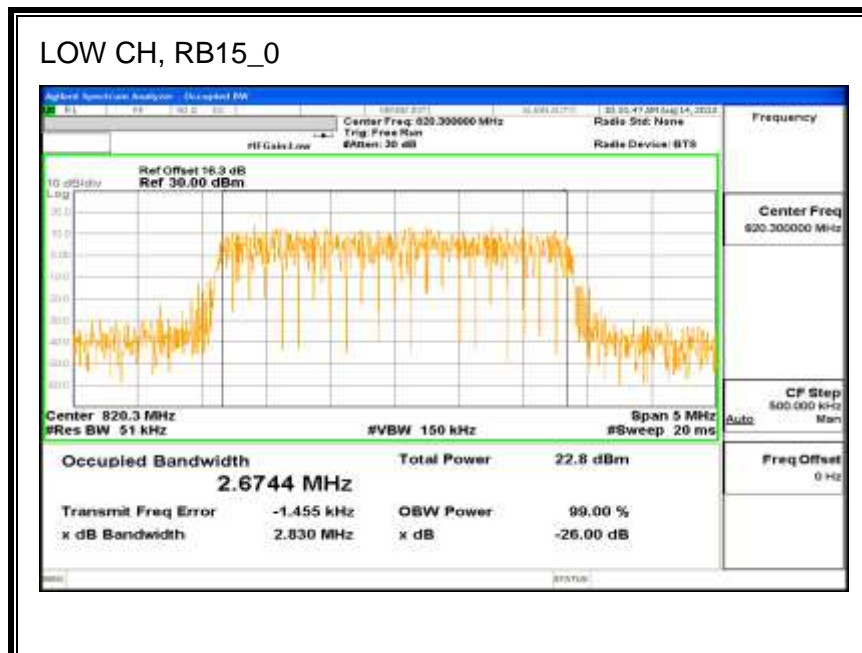
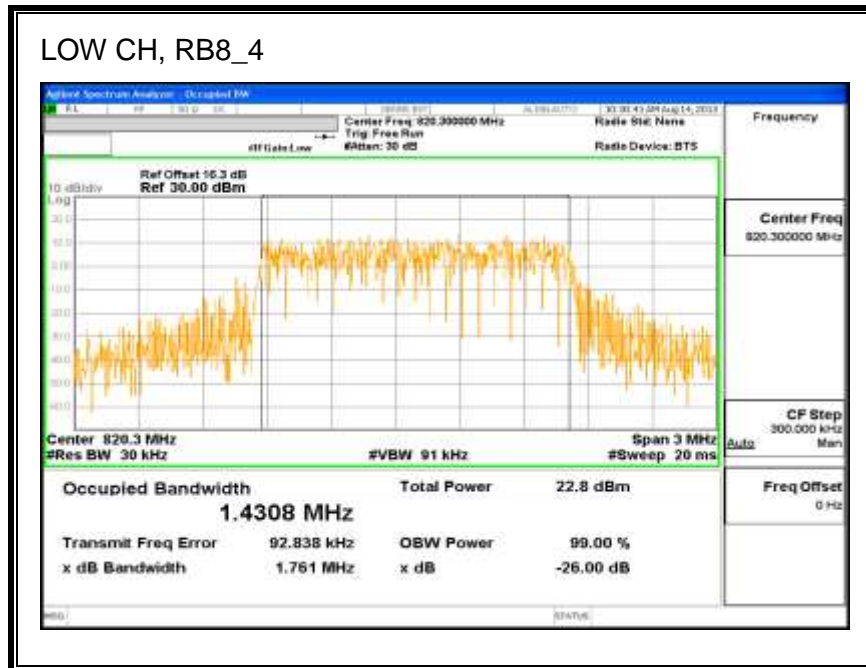


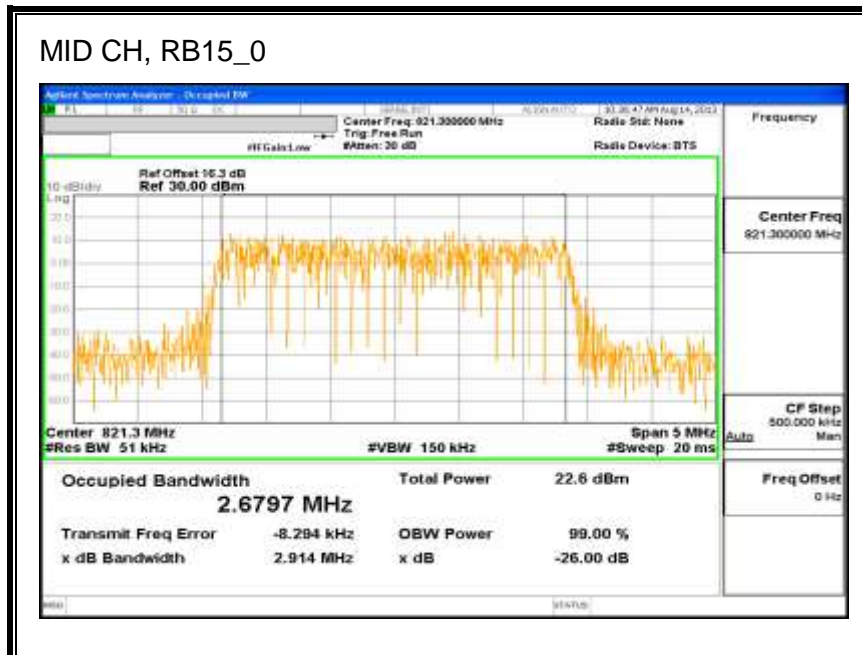
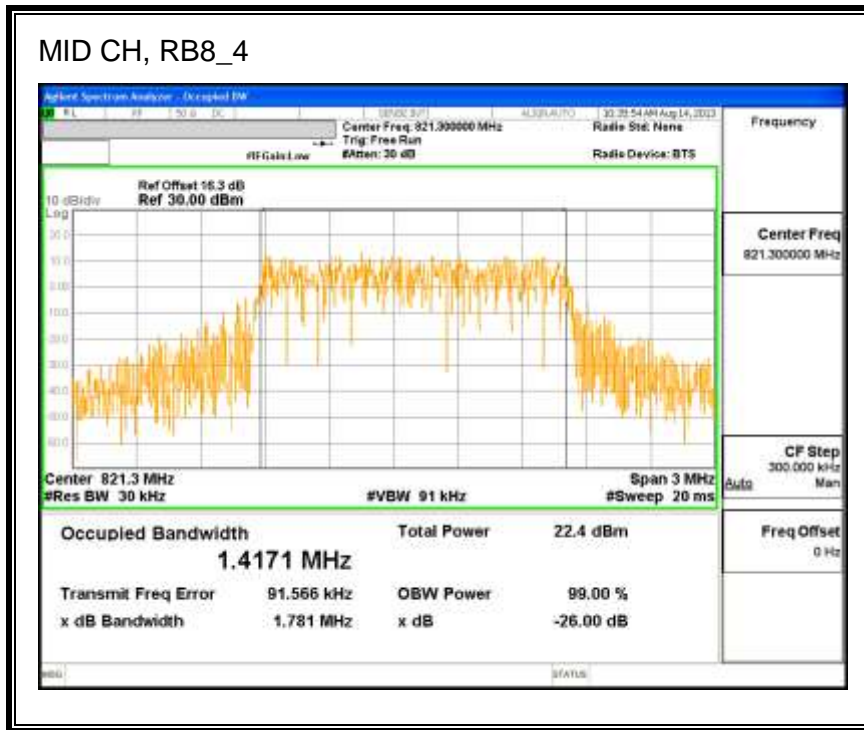


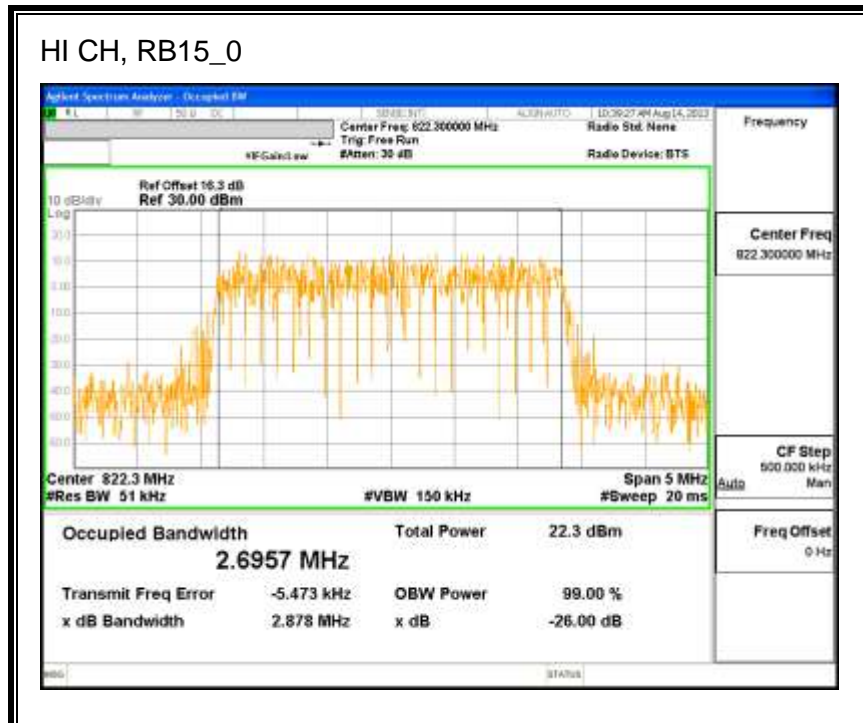
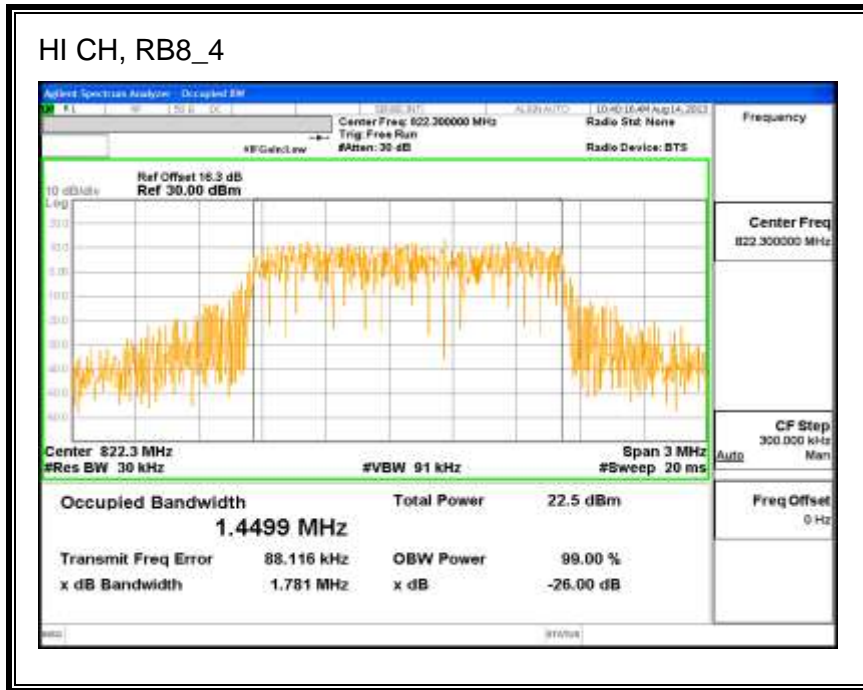


8.1.7. LTE BAND 26

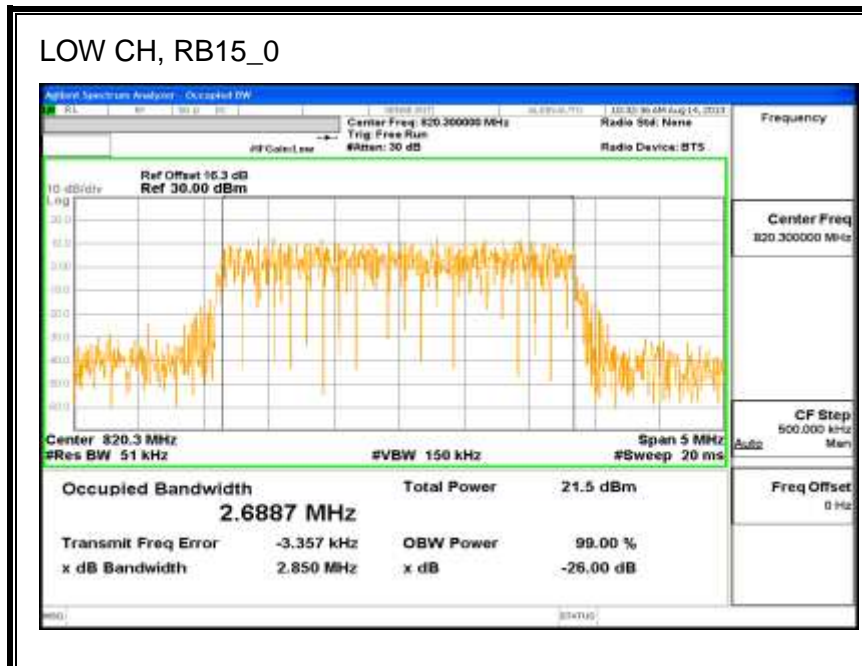
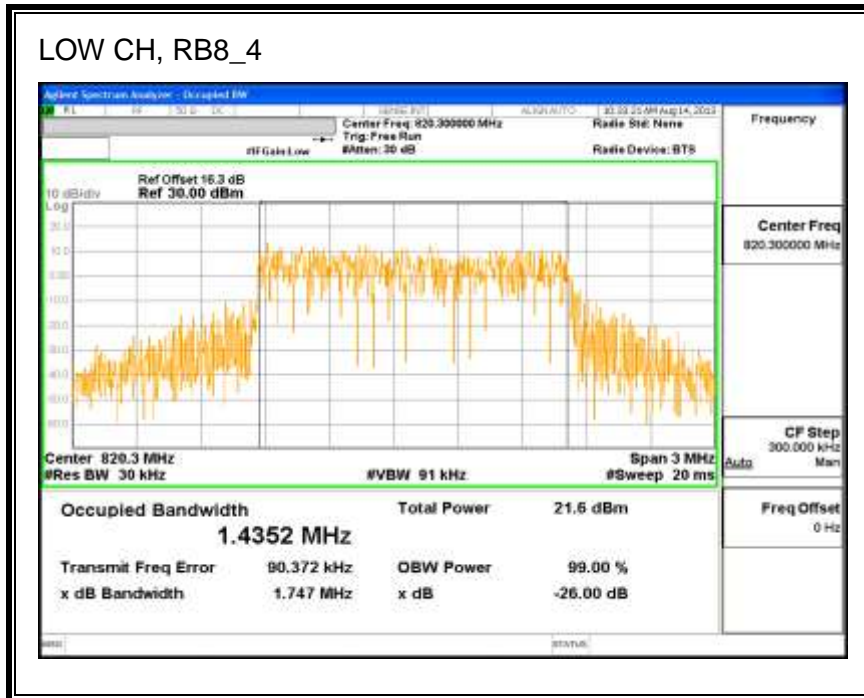
Band 26 QPSK (3.0 MHz BAND WIDTH)

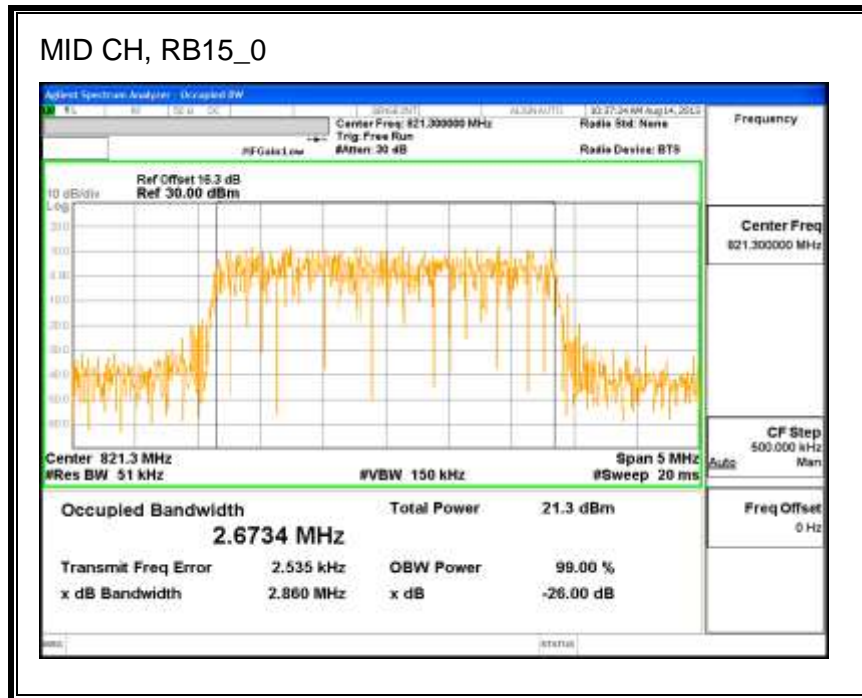
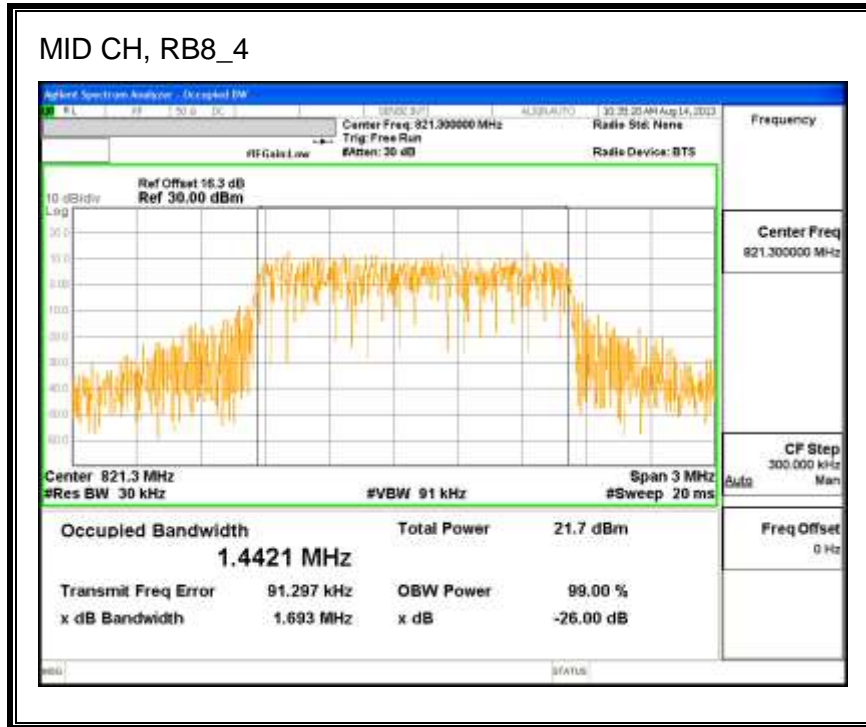


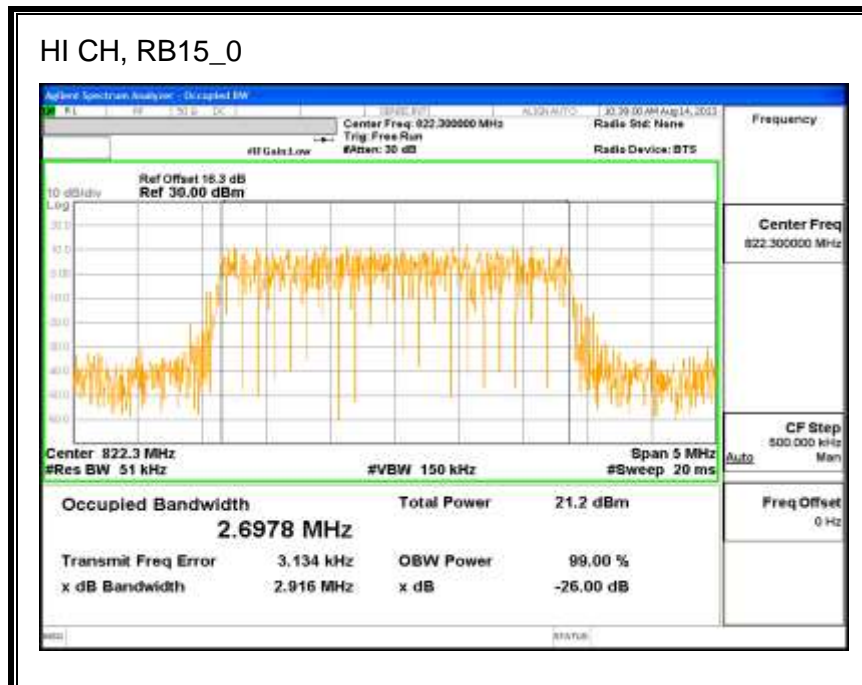
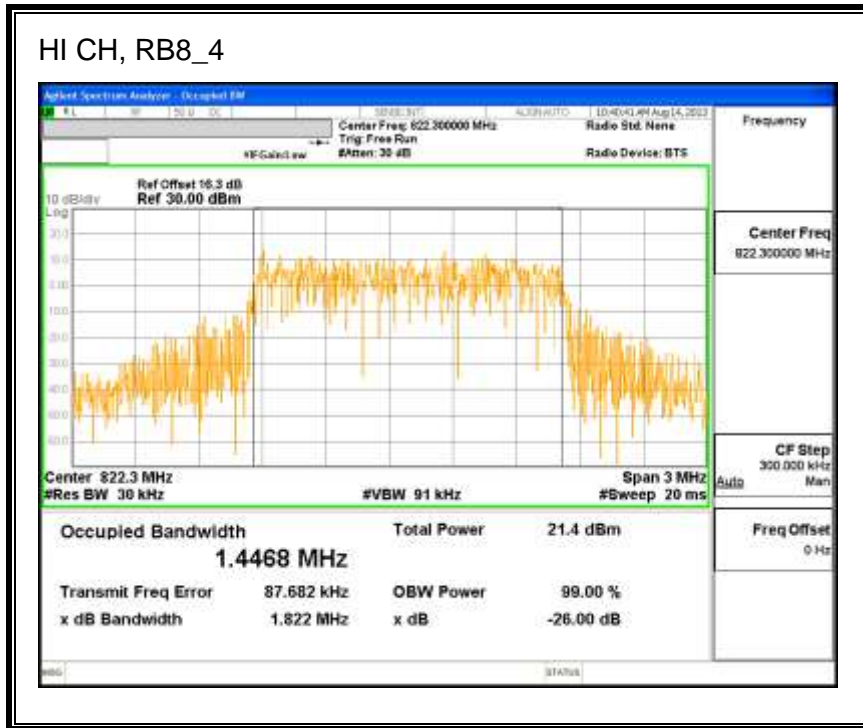




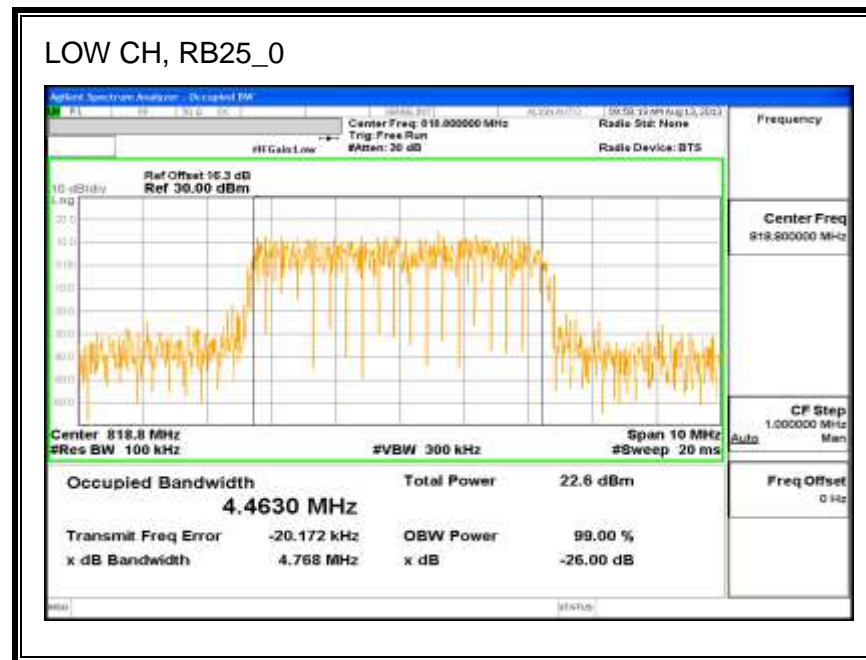
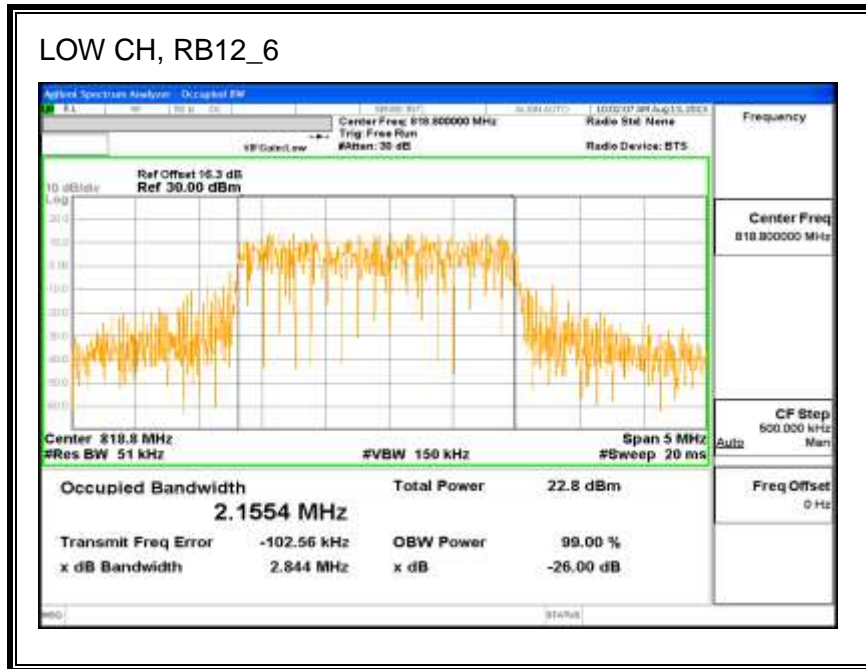
Band 26 16QAM (3.0 MHz BAND WIDTH)

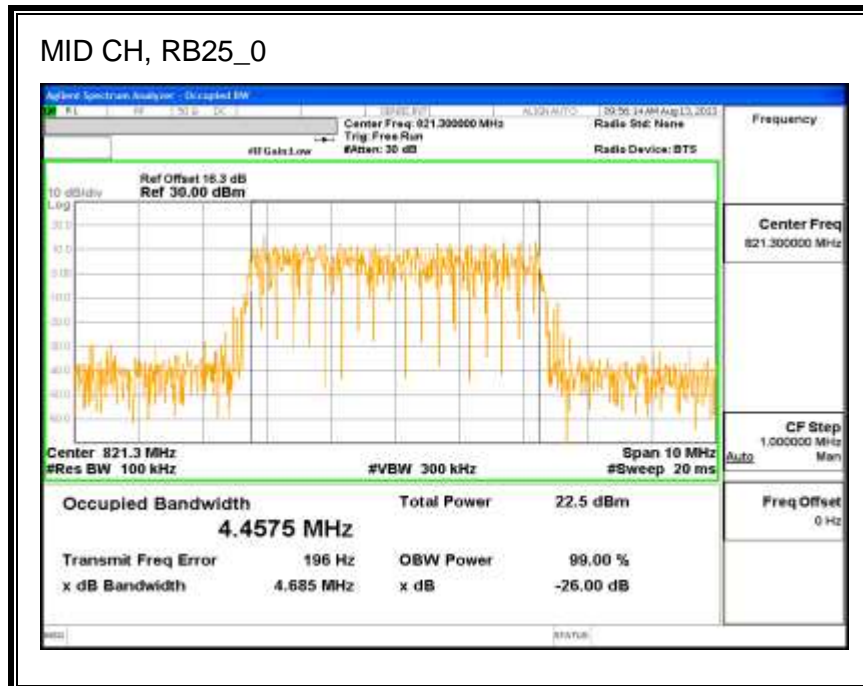
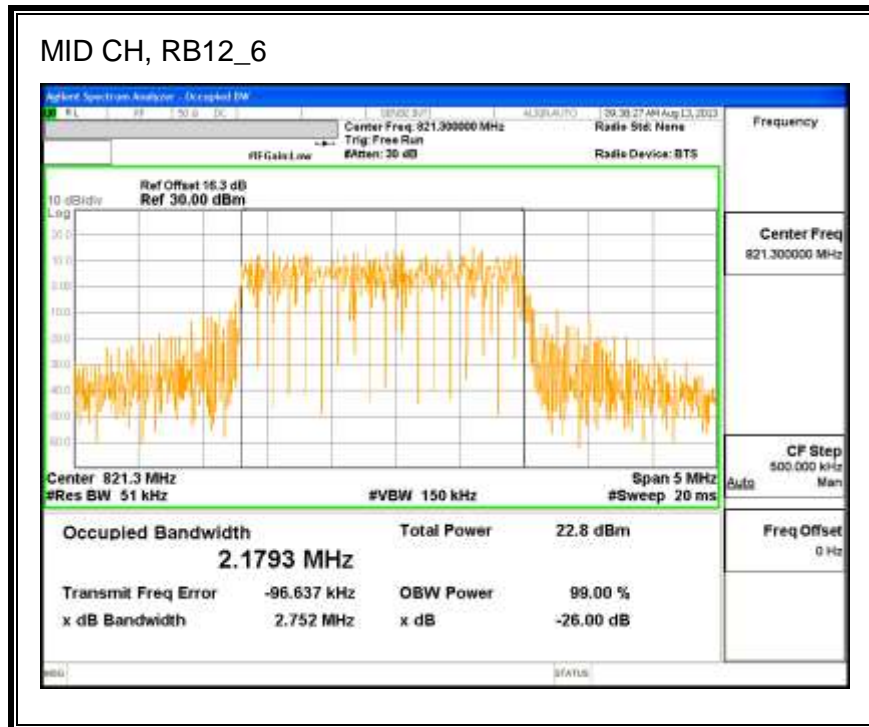


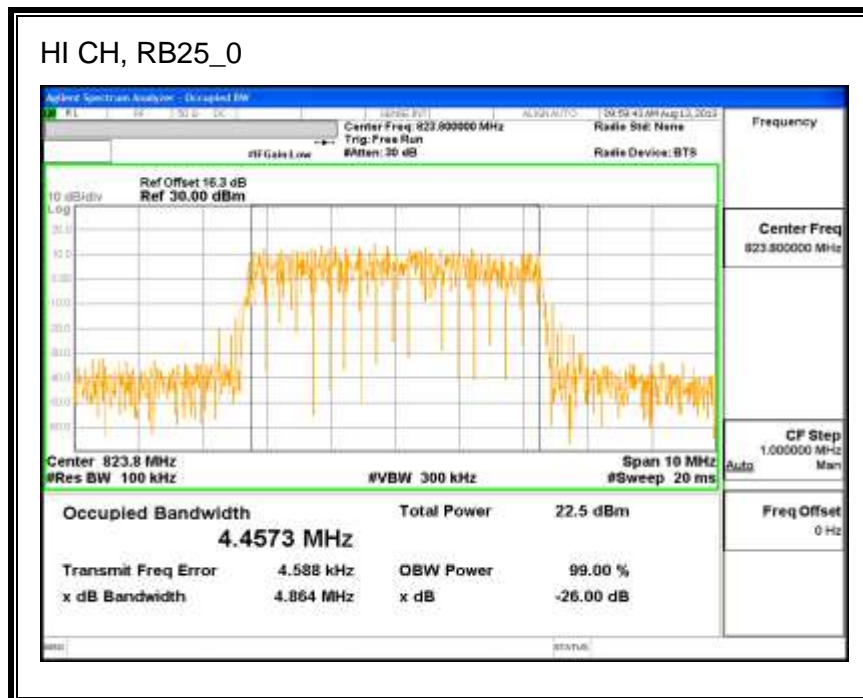
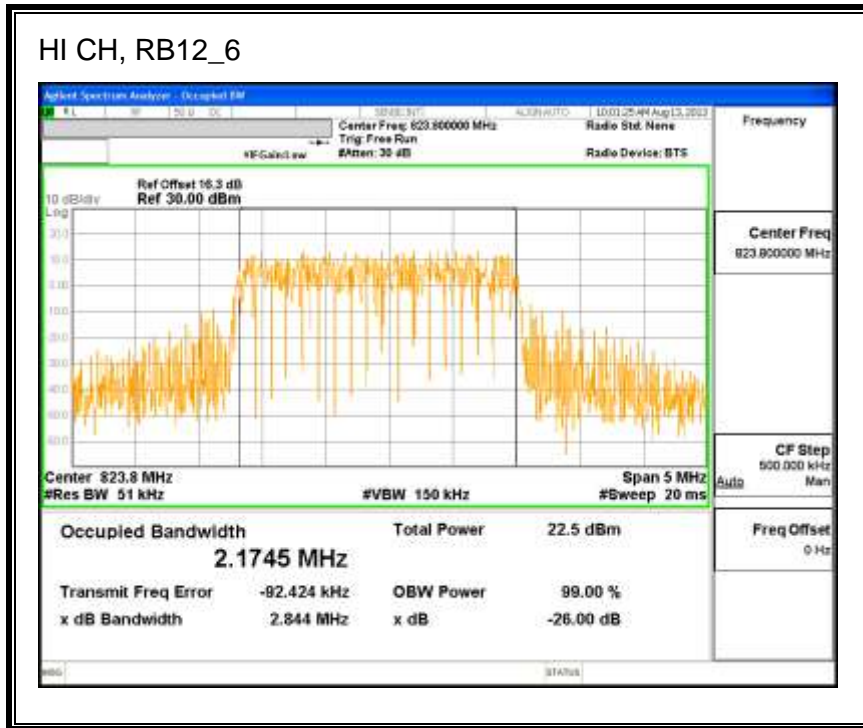




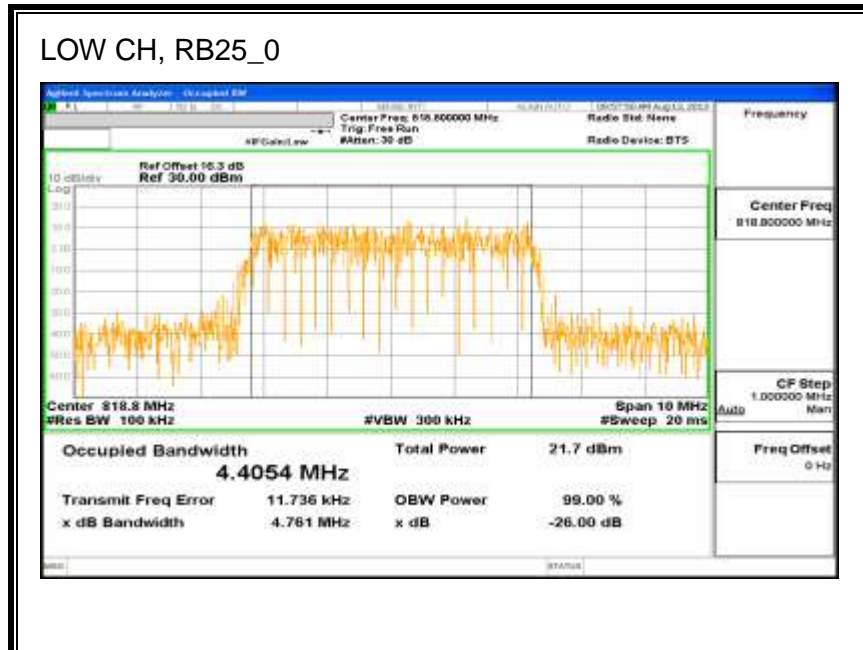
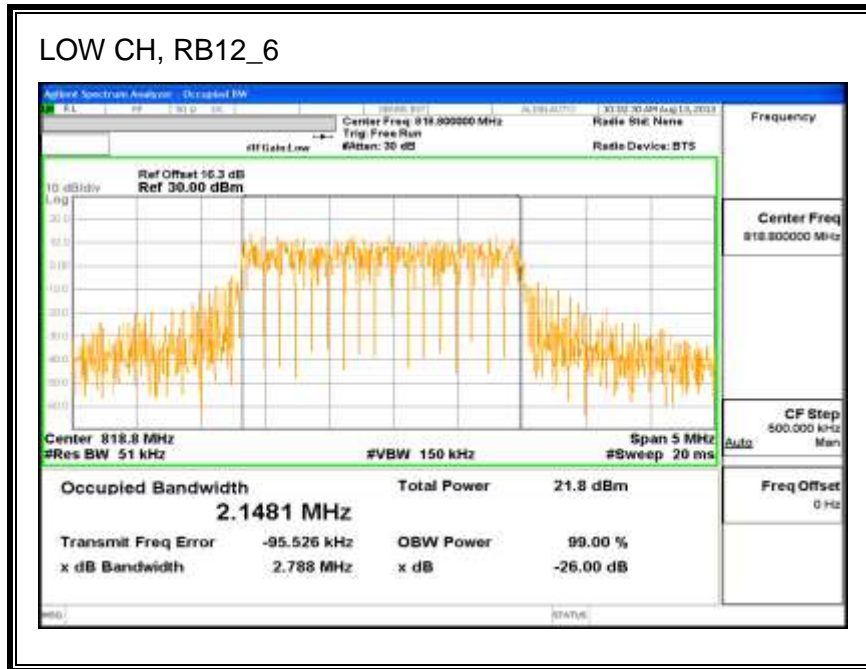
QPSK (5.0 MHz BAND WIDTH)

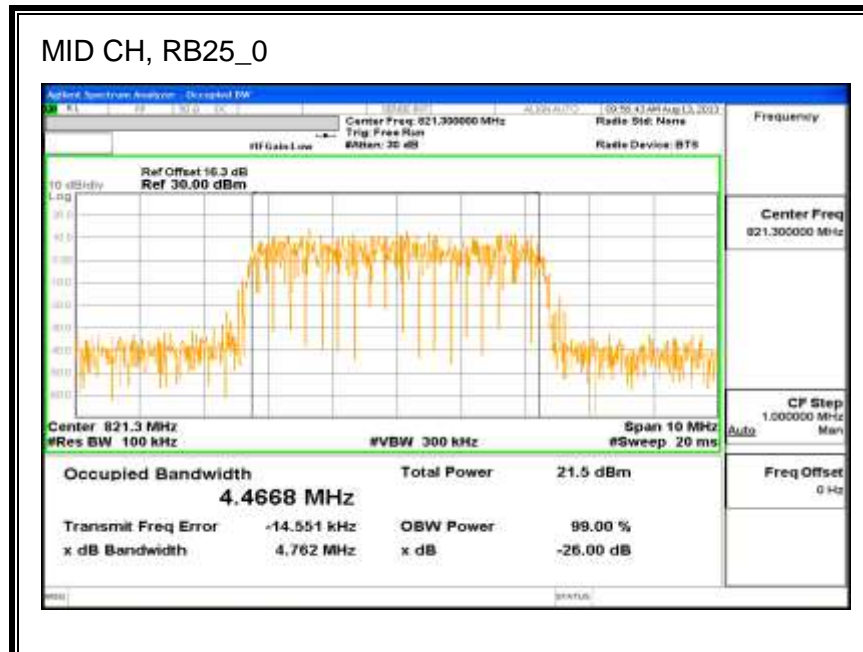
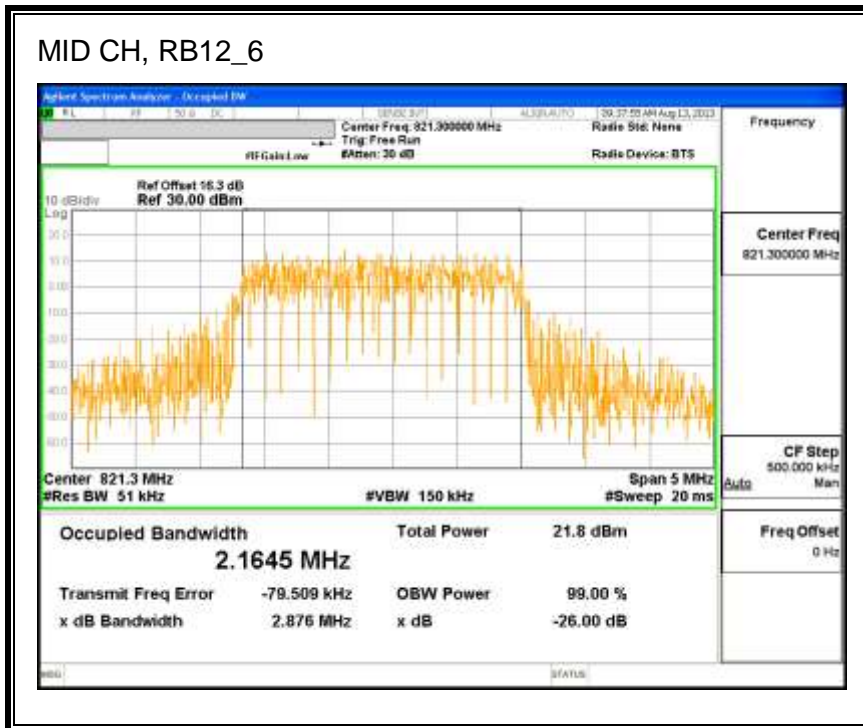


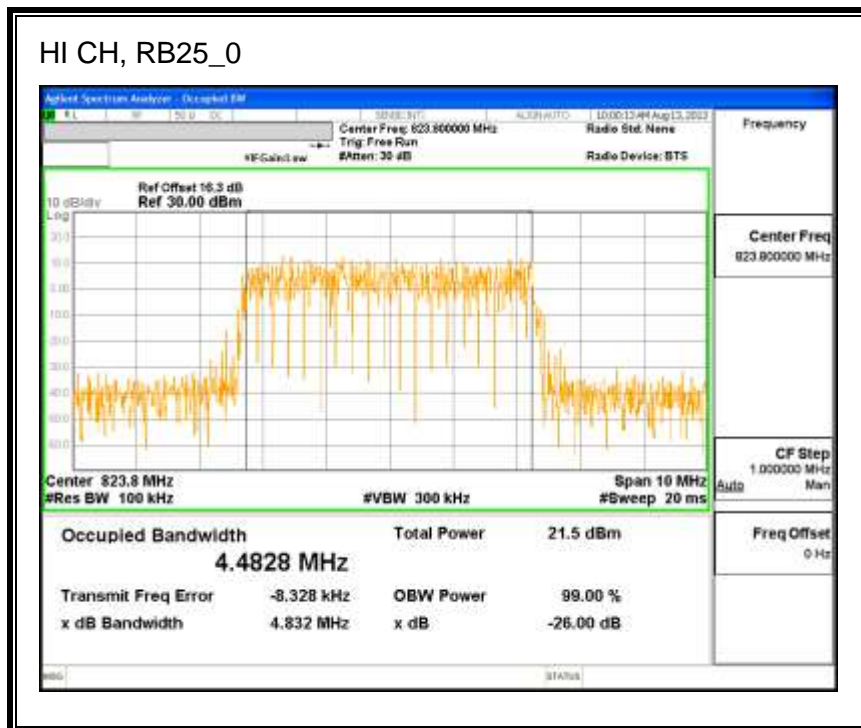
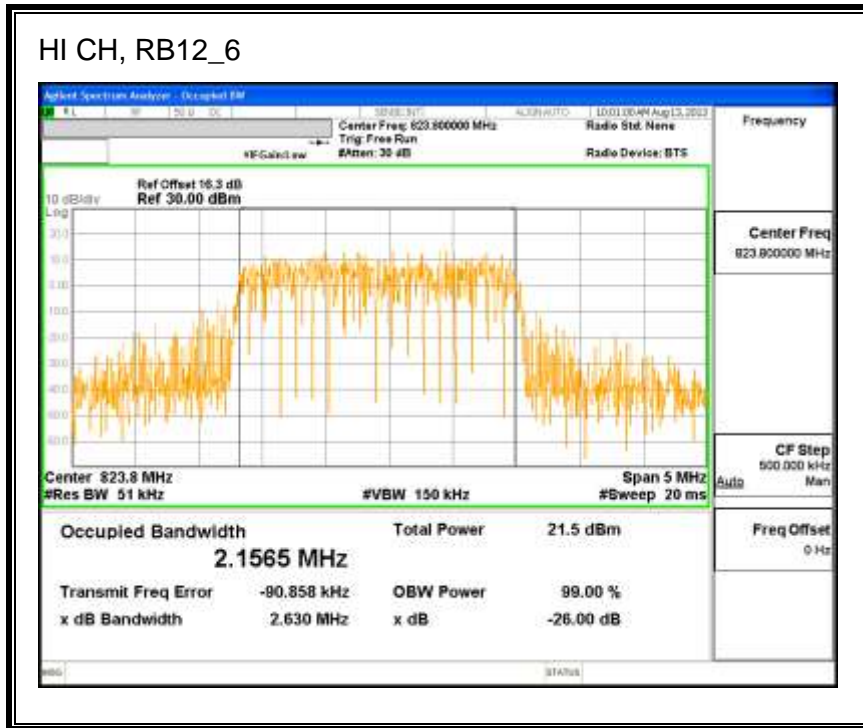




Band 26 16QAM (5.0 MHz BAND WIDTH)







8.2. BAND EDGE and EMISSION MASK

RULE PART(S) for Band Edge

- FCC: §22.359, §24.238, §27.53
- 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 transmitter output was connected to a CMW500 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.
- For each band edge measurement:
- Set the spectrum analyzer span to include the block edge frequency (704, 716, 824, 849, 1710 and 1755, 1850 and 1910 MHz)
- Set a marker to point the corresponding band edge frequency in each test case.
- Set display line at -13 dBm
- Set resolution bandwidth to at least 1% of emission bandwidth.
- (m)(4) For mobile digital stations, the attenuation factor shall be not less than $43 + 10 \log (P)$ dB at the channel edge and $55 + 10 \log (P)$ dB at 5.5 megahertz from the channel edges. (Channel edges are defined under §27.5 (i) Frequency assignment for the BRS/EBS band)
- (m)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

RULE PART(S) for Emission Mask

- FCC: §90.210, and §90.691
- (a)(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10}(f/6.1)$ decibels or $50 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.
- (a)(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz. {NOTE: Use 100 kHz reference bandwidth.}

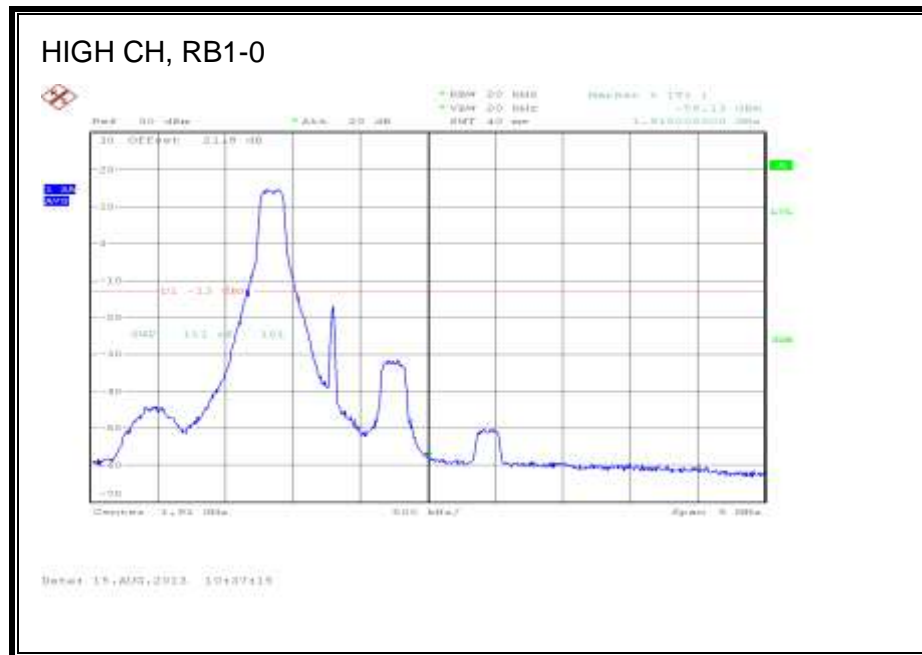
MODES TESTED

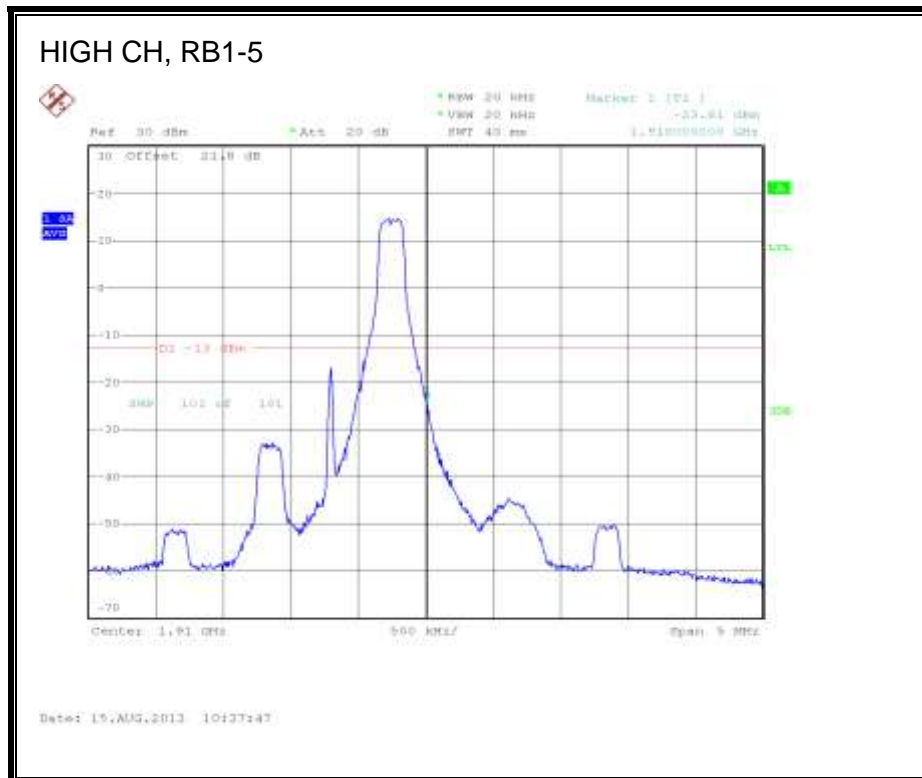
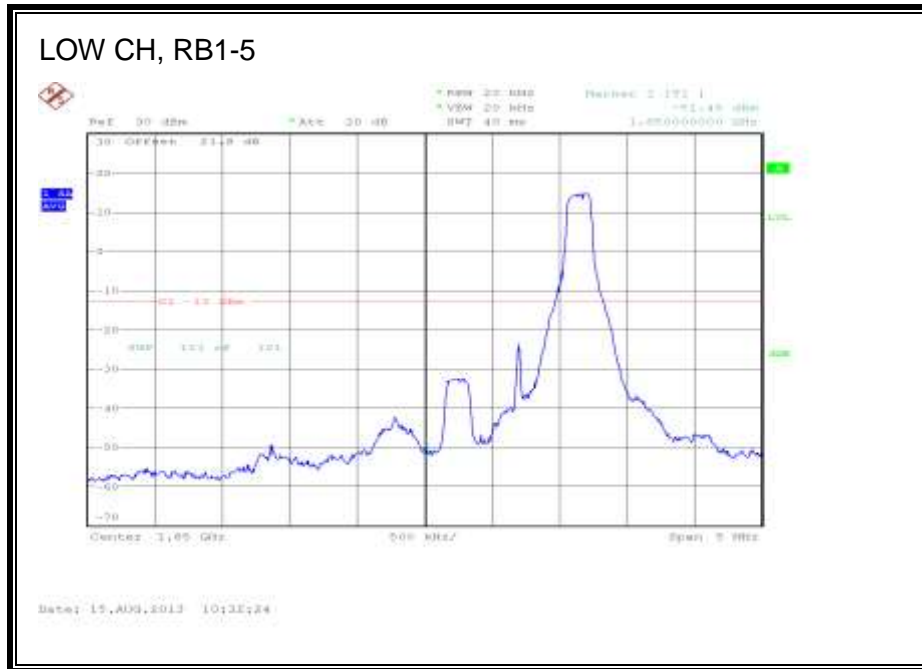
- Band 2
- Band 4
- Band 5
- Band 13
- Band 17
- Band 25
- Band 26

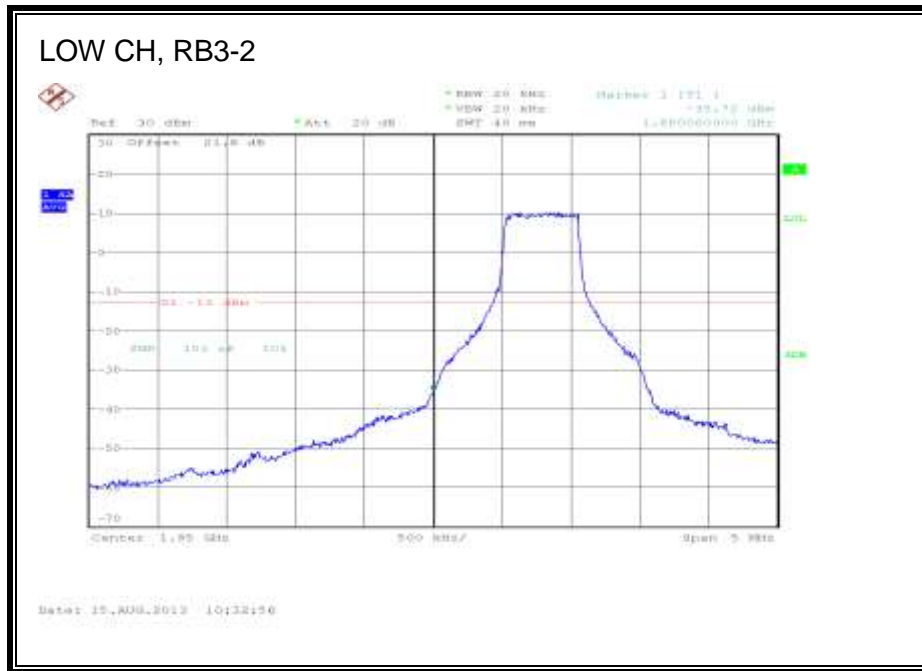
RESULTS

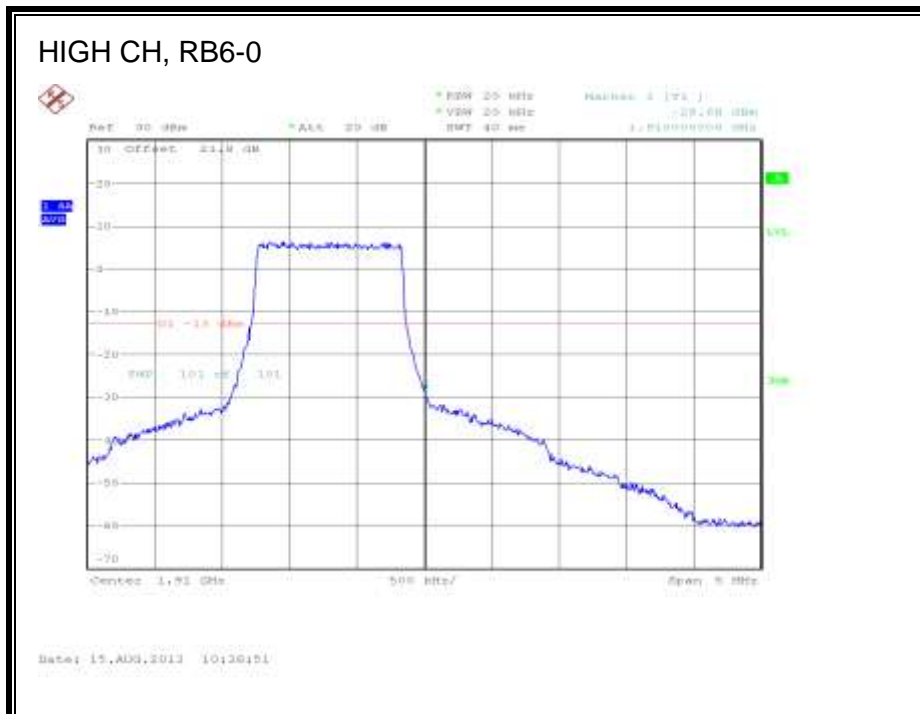
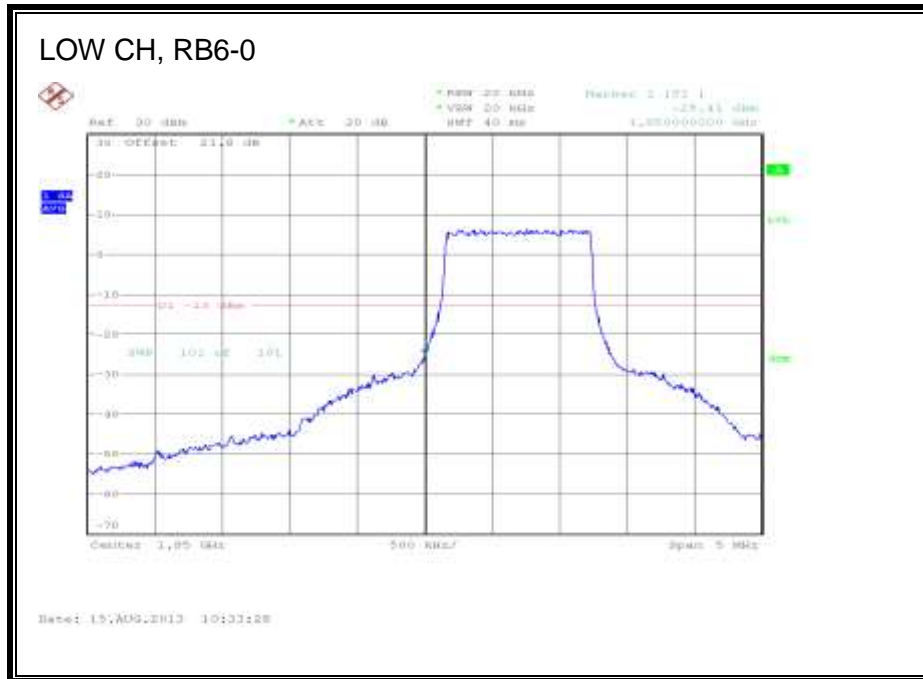
8.2.1. LTE BAND 2

LTE QPSK Band 2 (1.4 MHz BAND WIDTH)

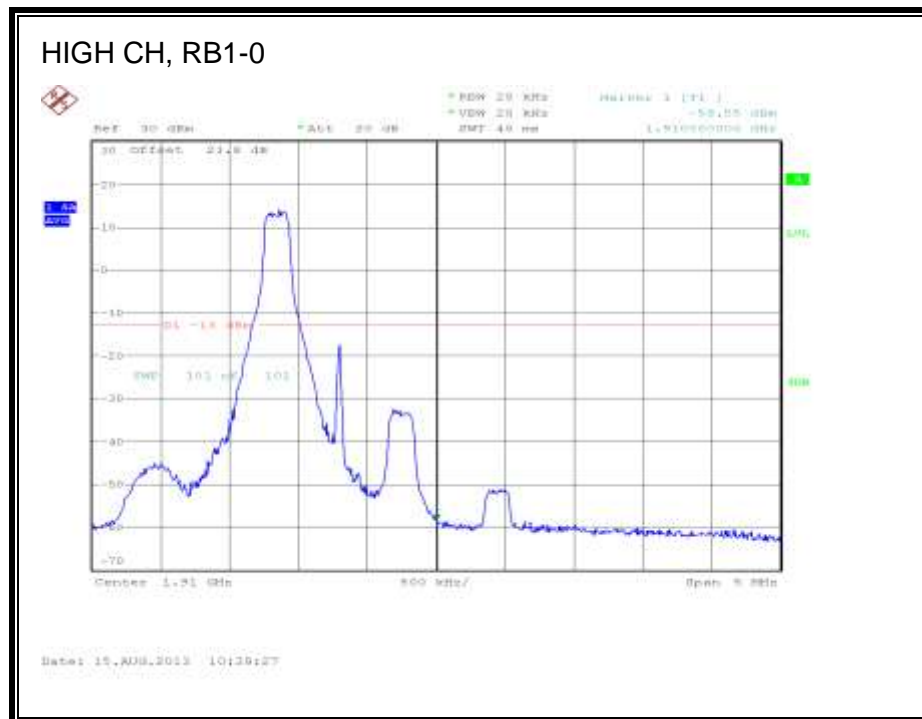
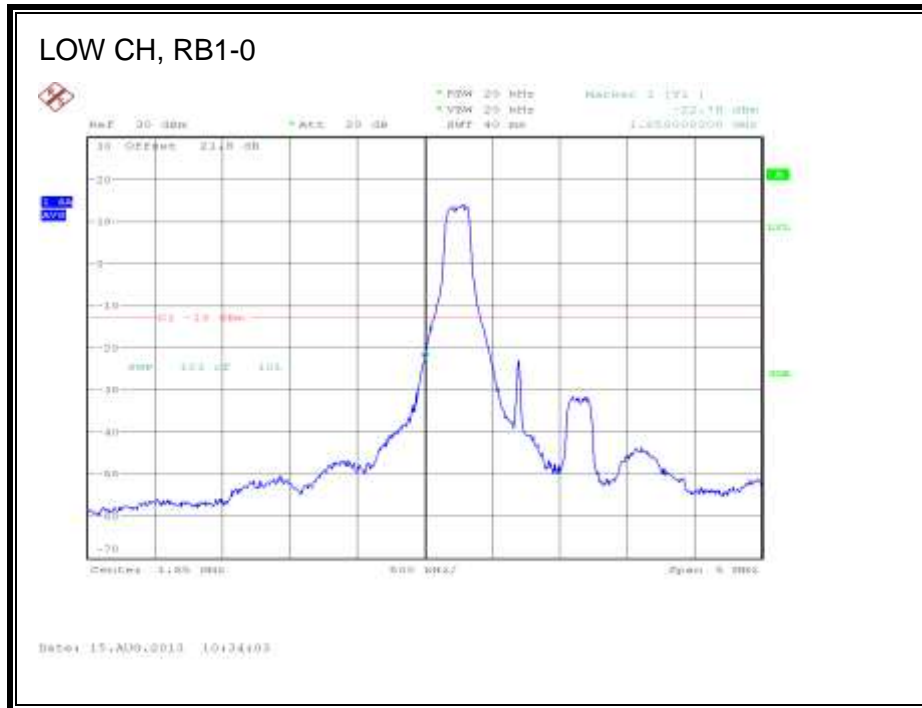


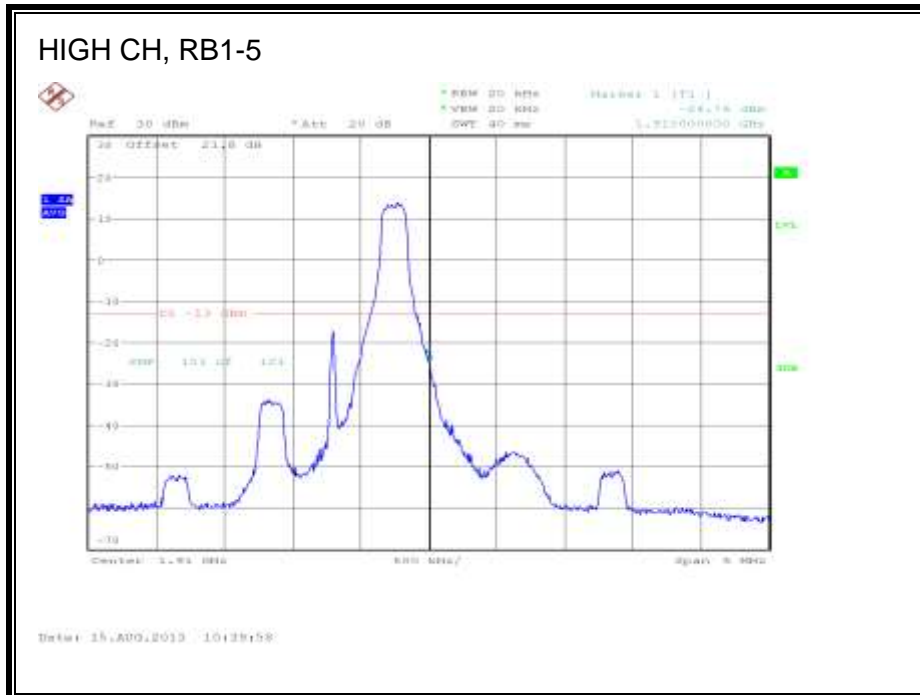
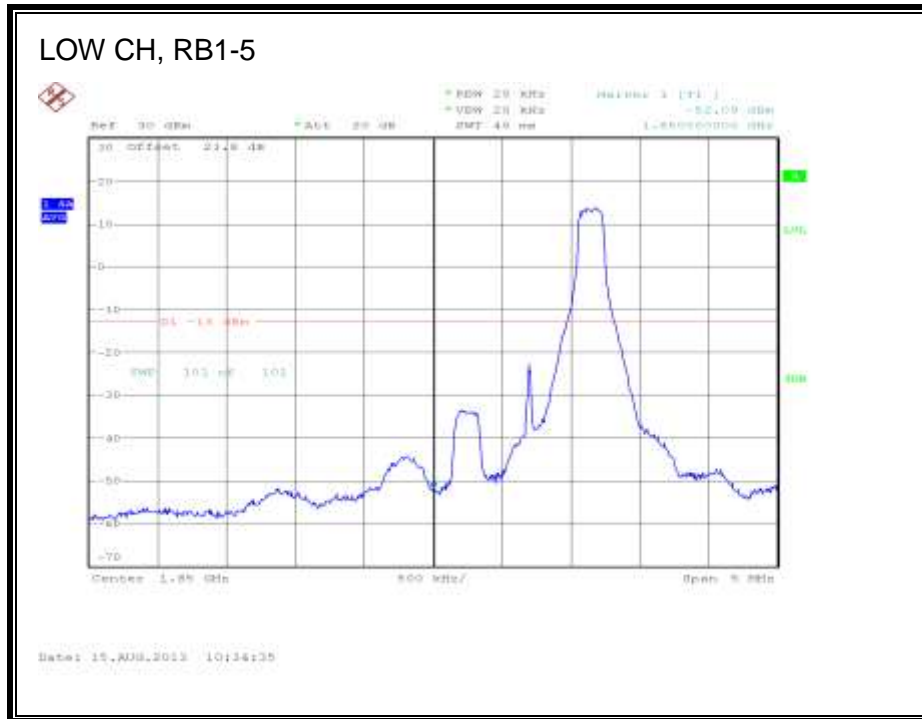


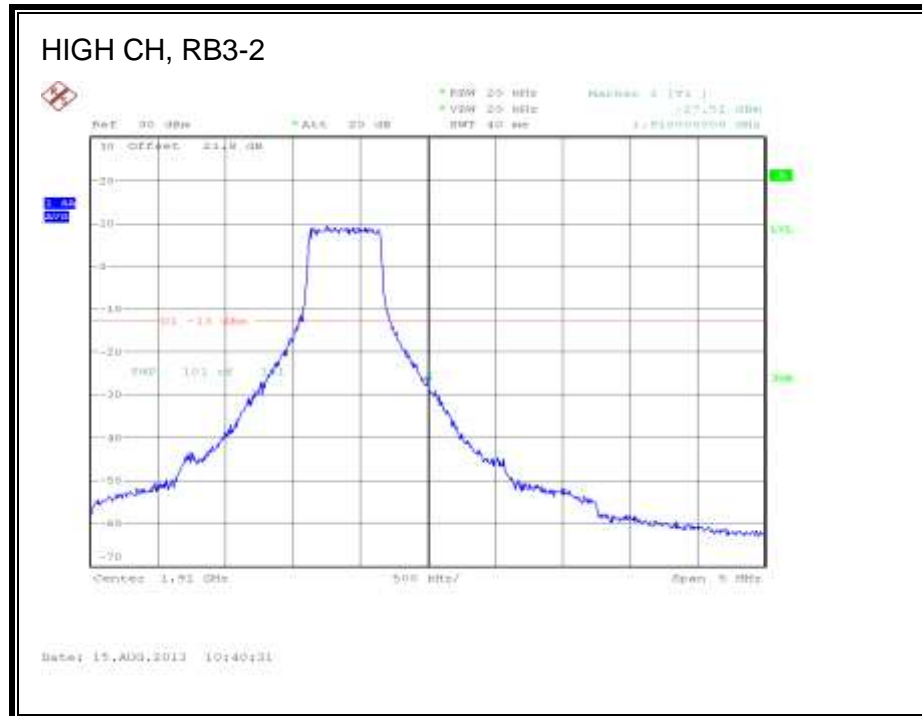
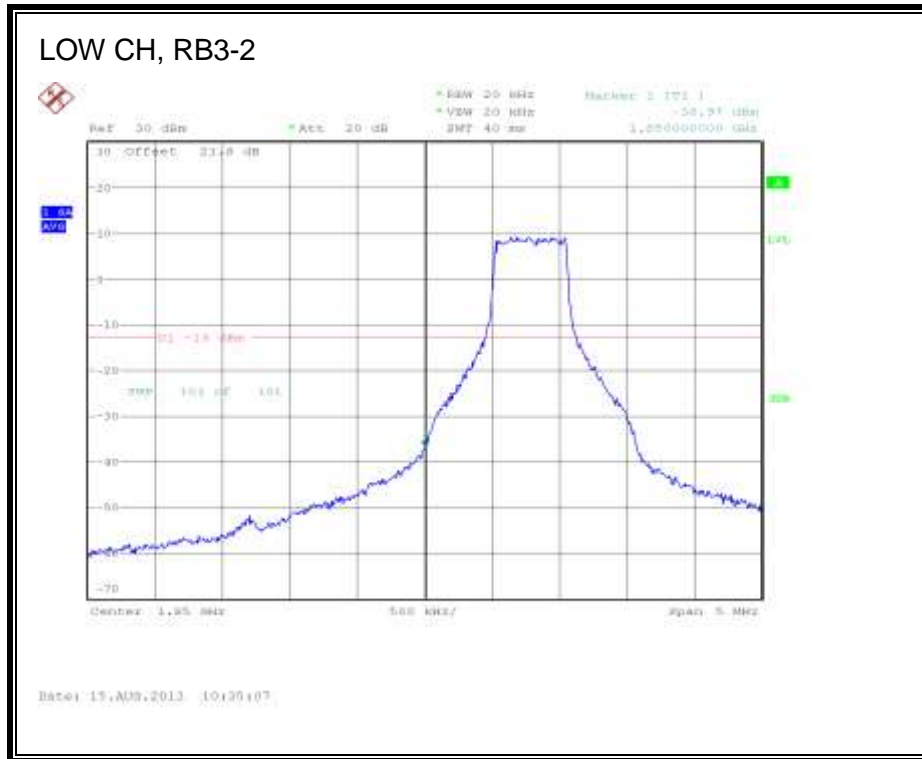


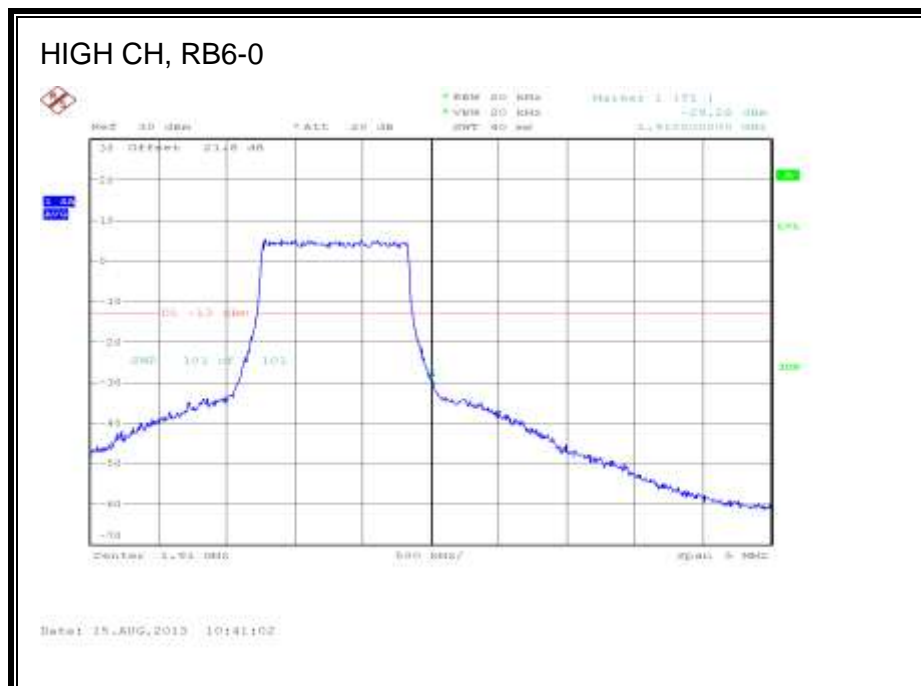


LTE 16QAM Band 2 (1.4 MHz BAND WIDTH)

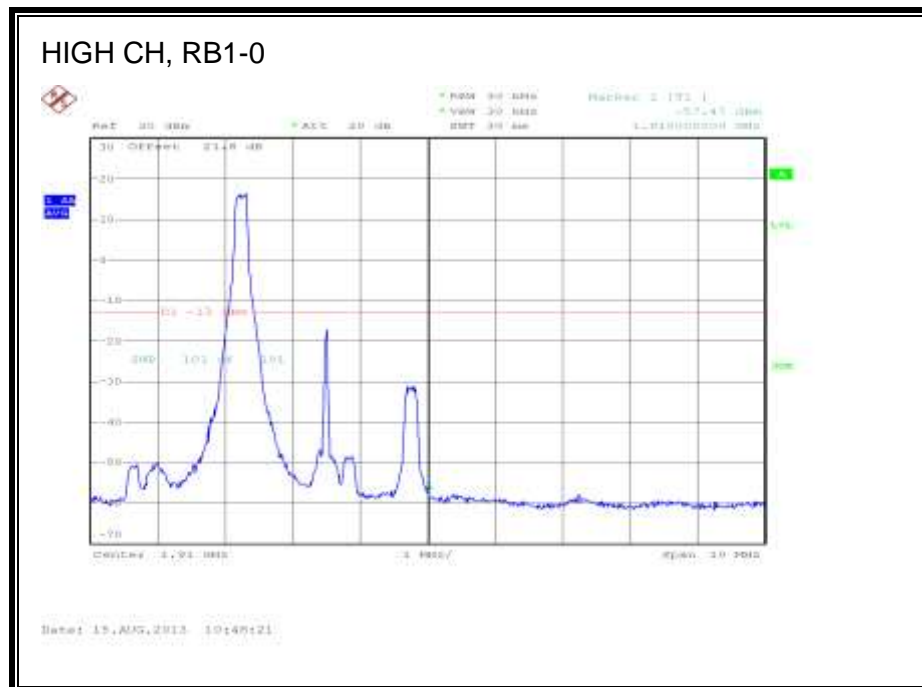
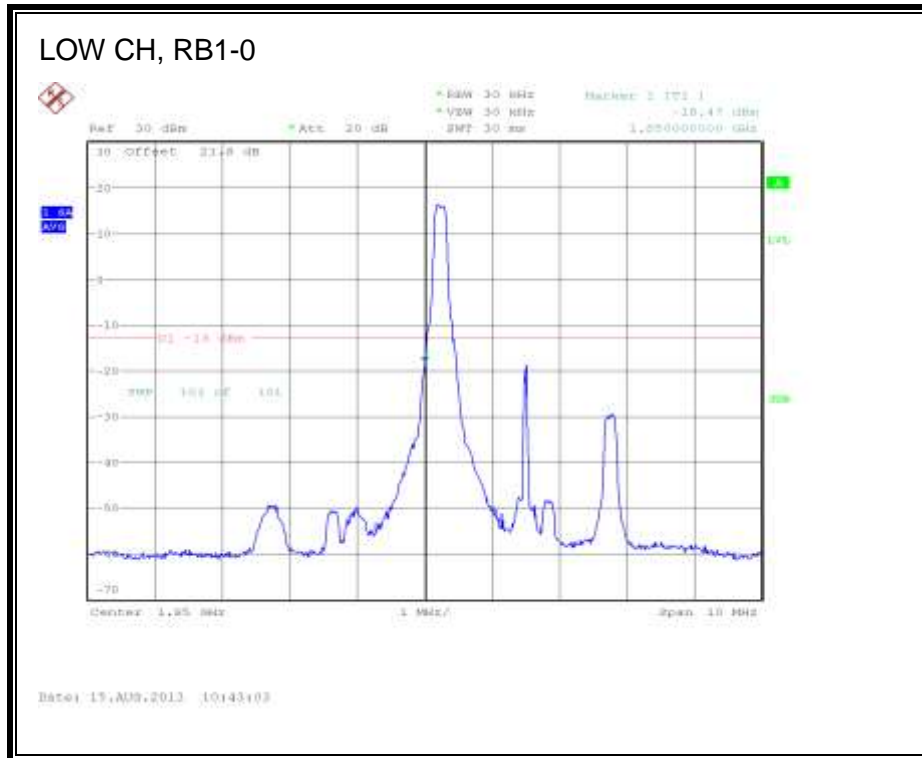


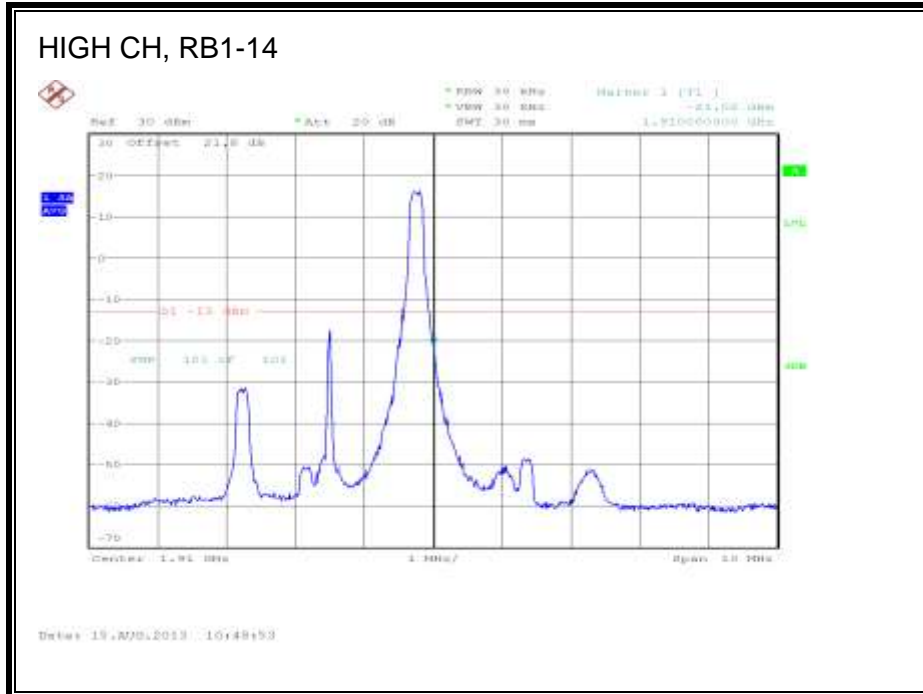
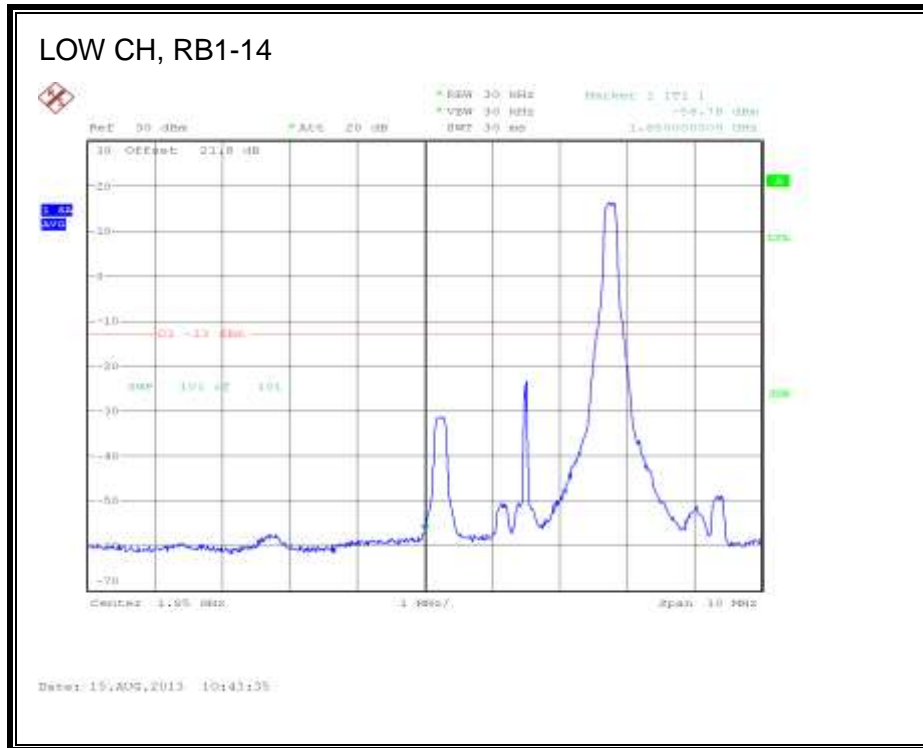


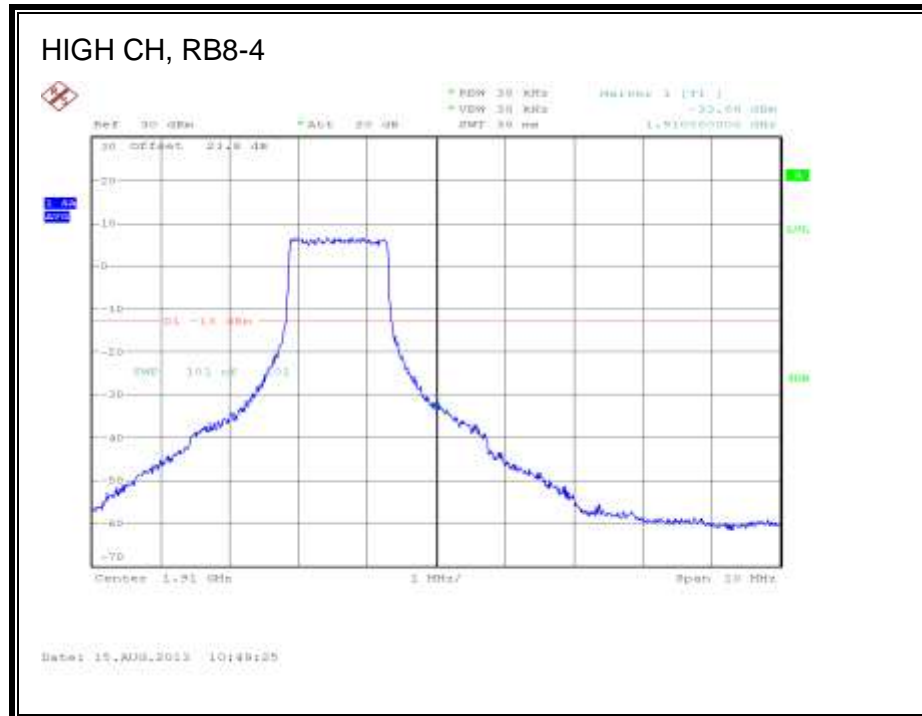


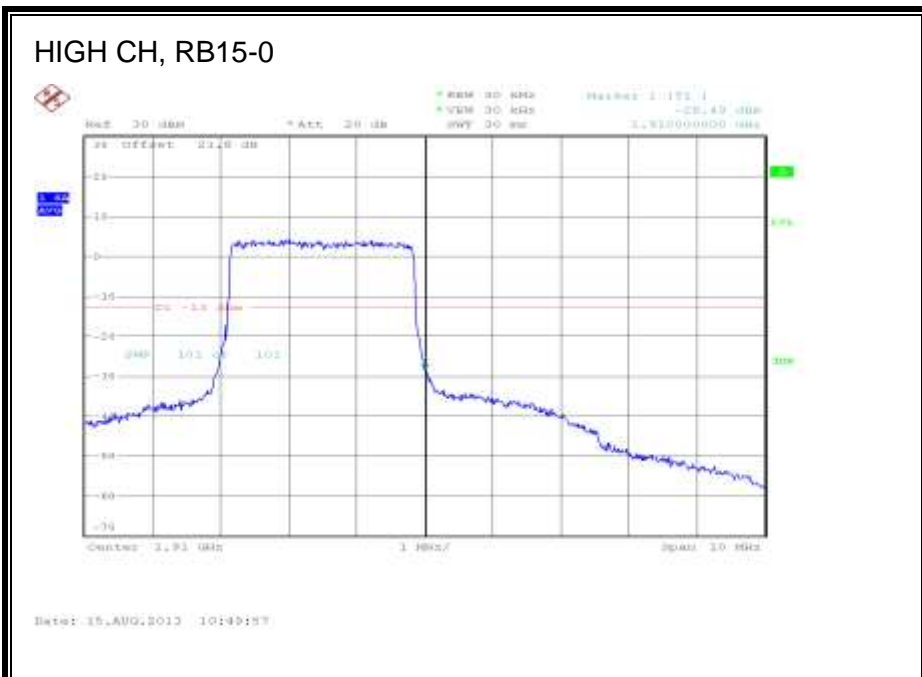


LTE QPSK Band 2 (3.0 MHz BAND WIDTH)

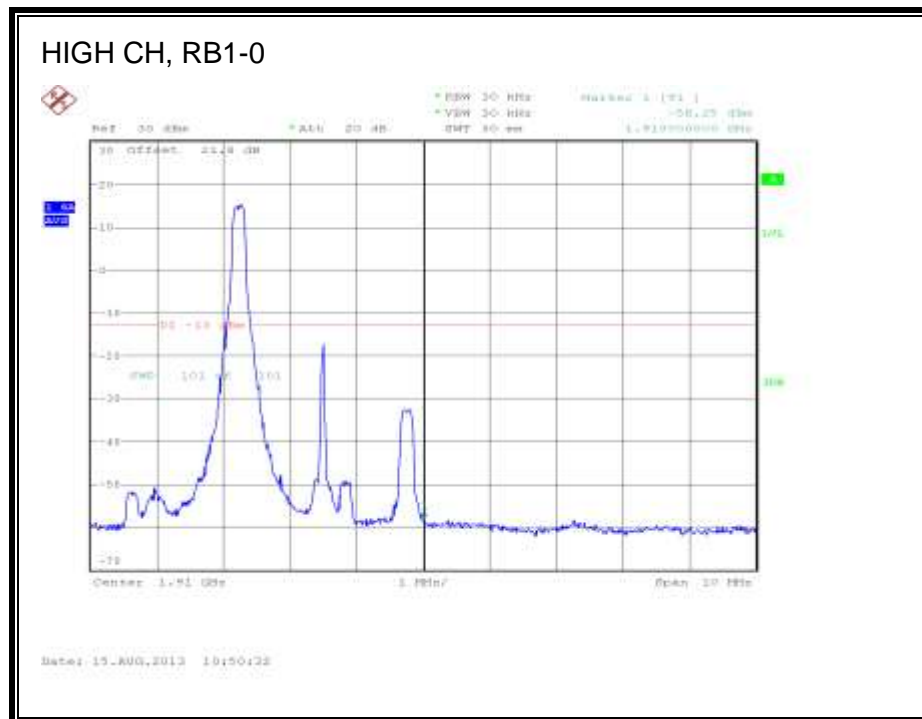
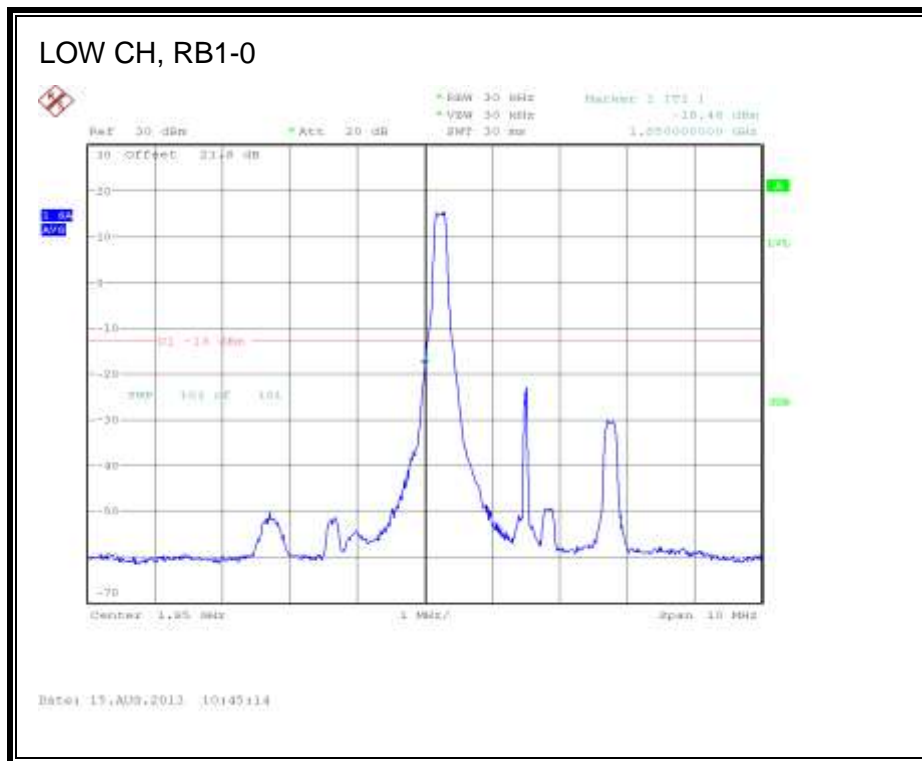


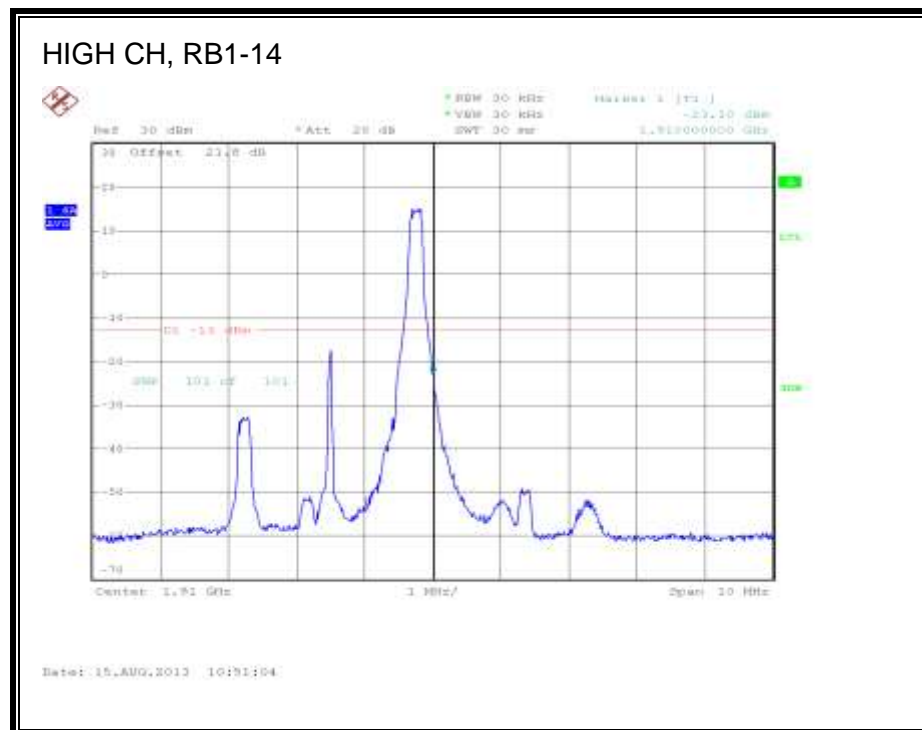


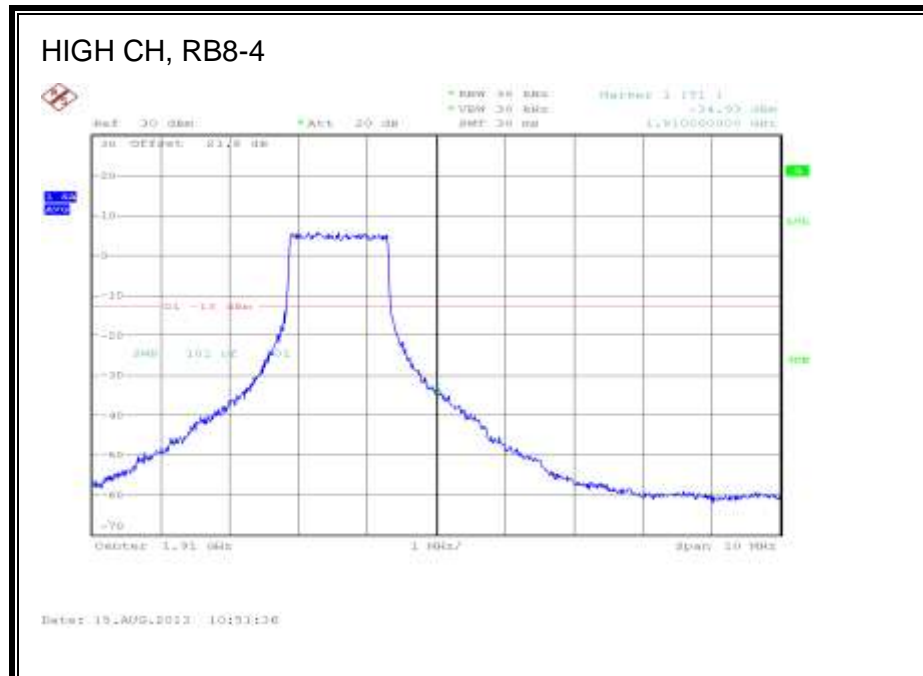


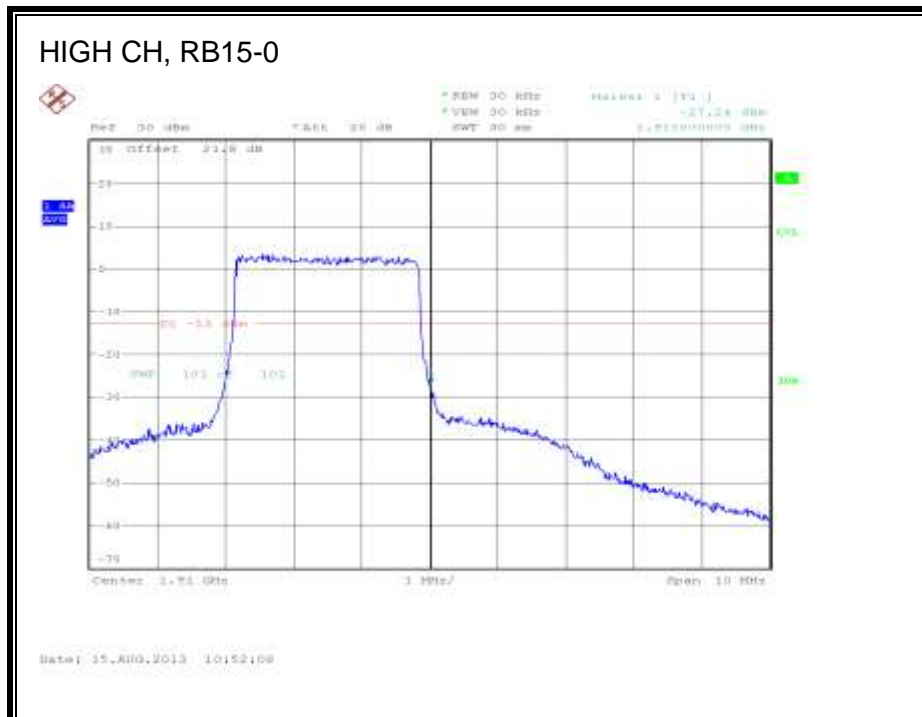


LTE 16QAM Band 2 (3.0 MHz BAND WIDTH)

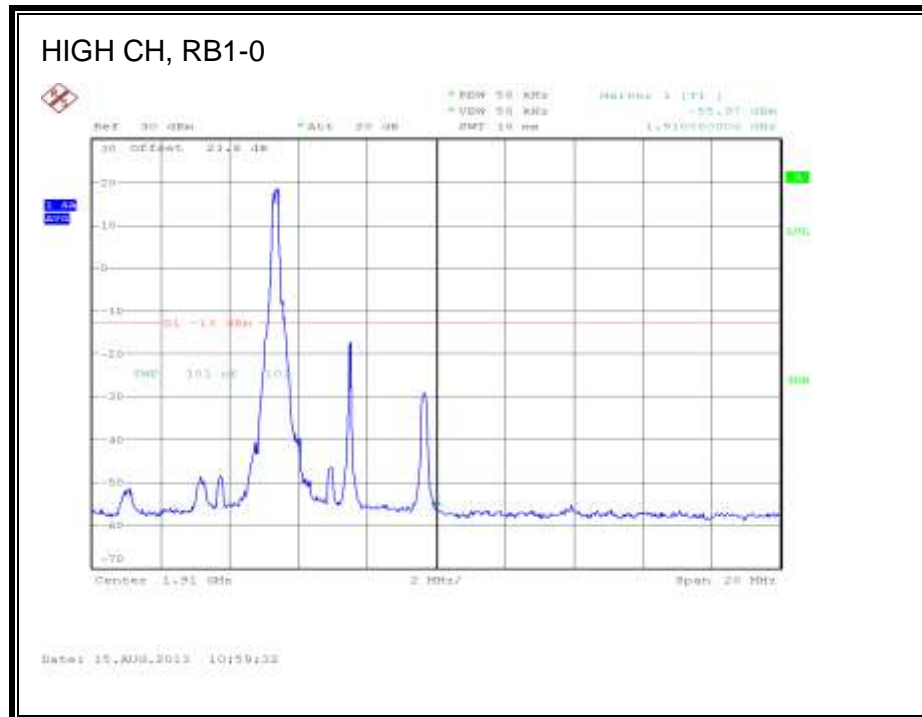
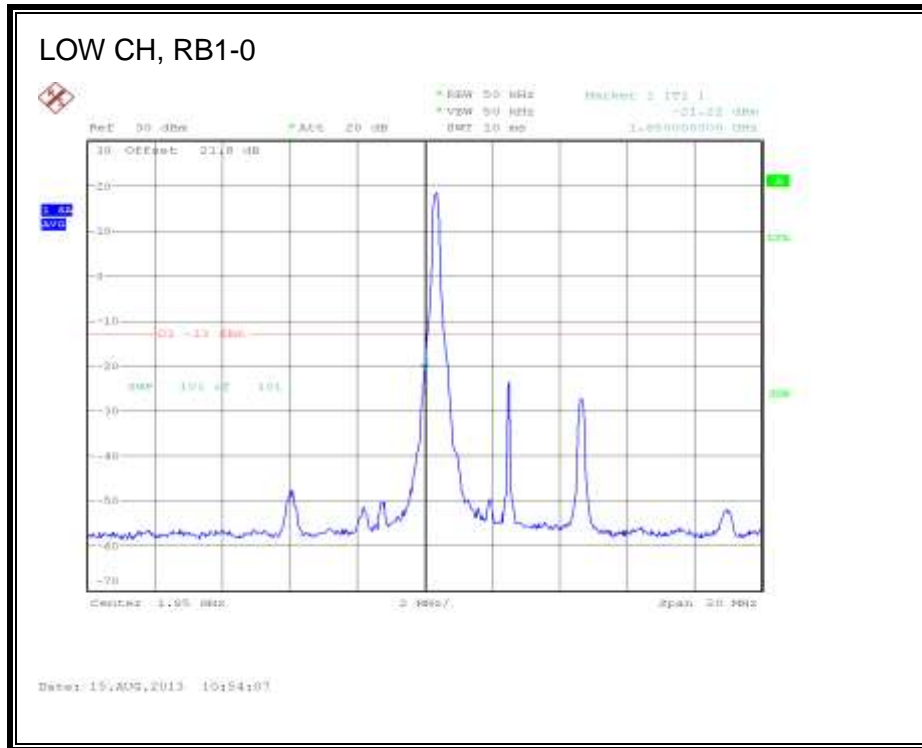


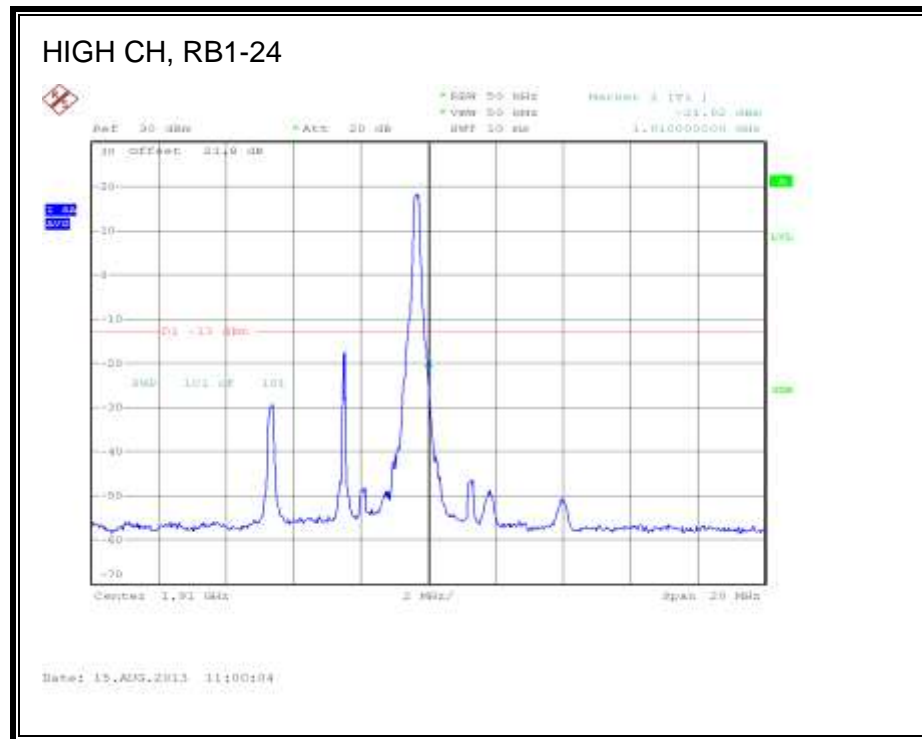
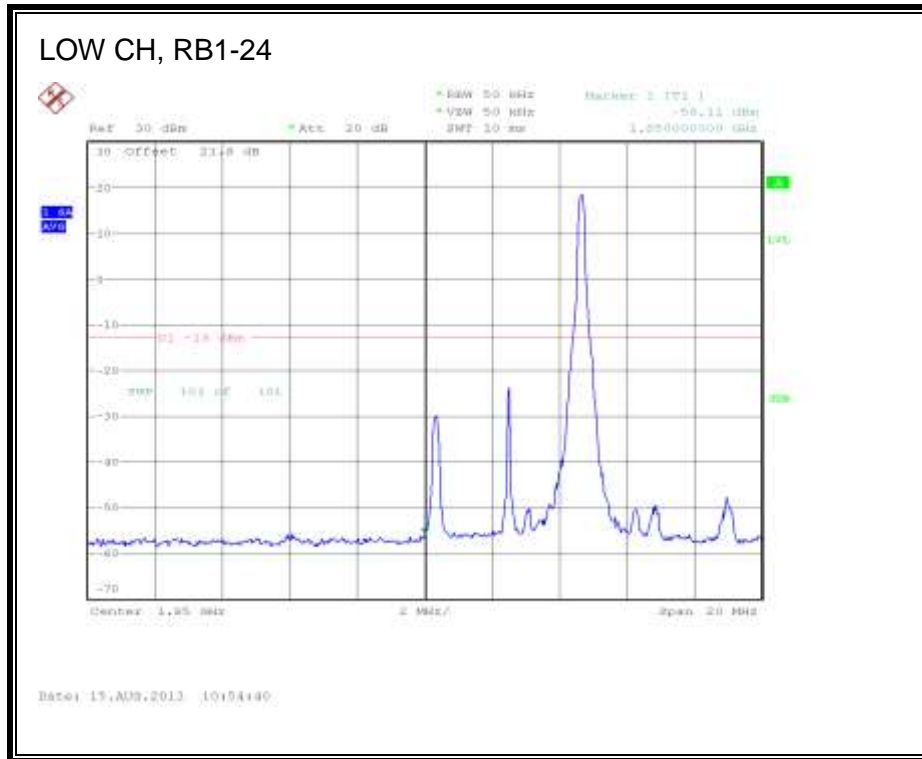


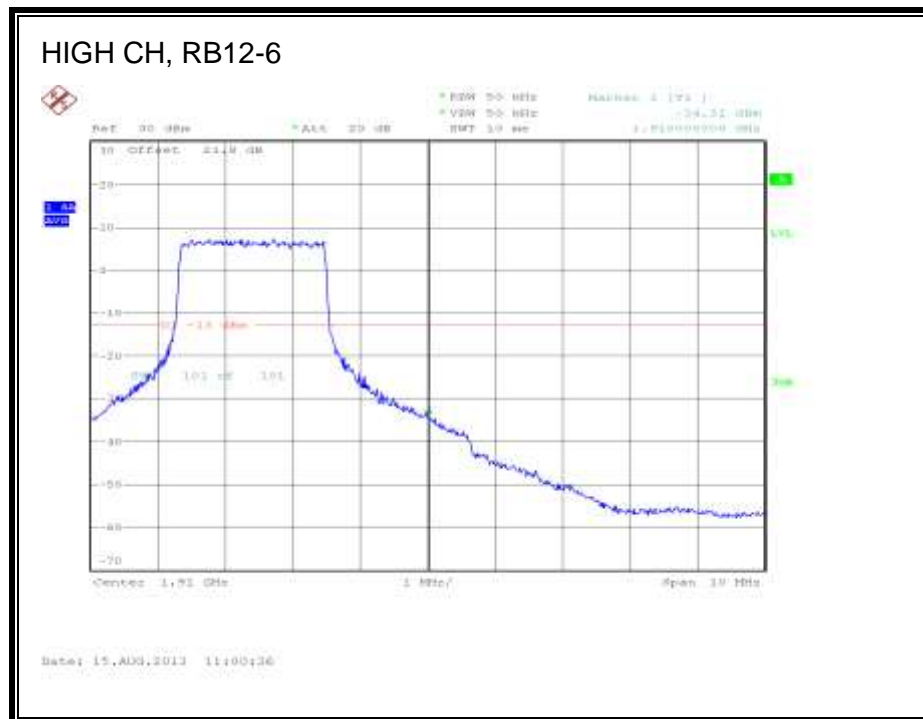
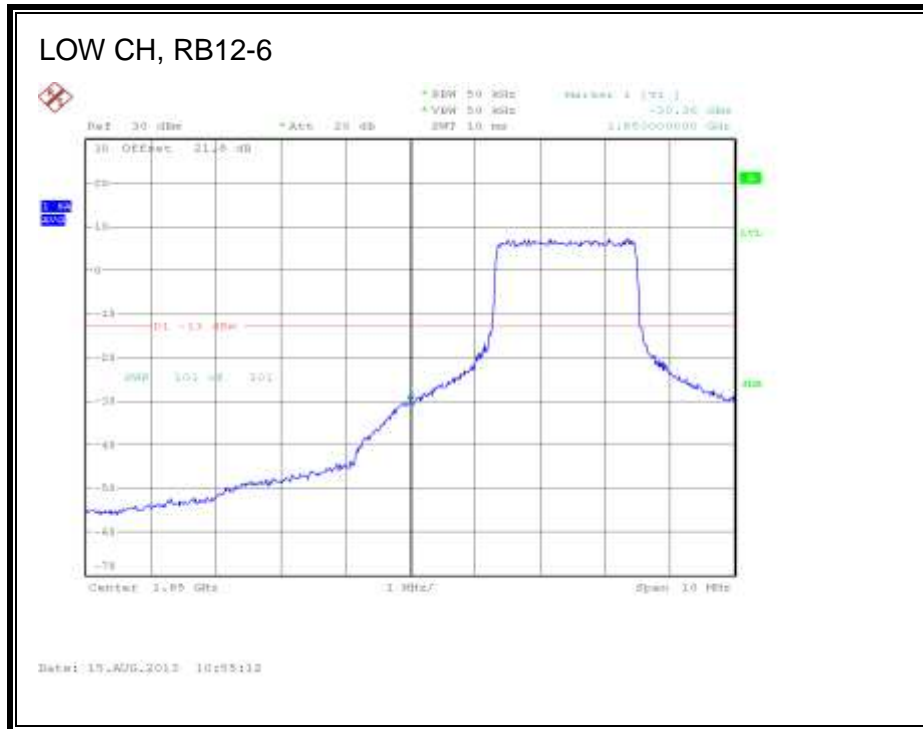


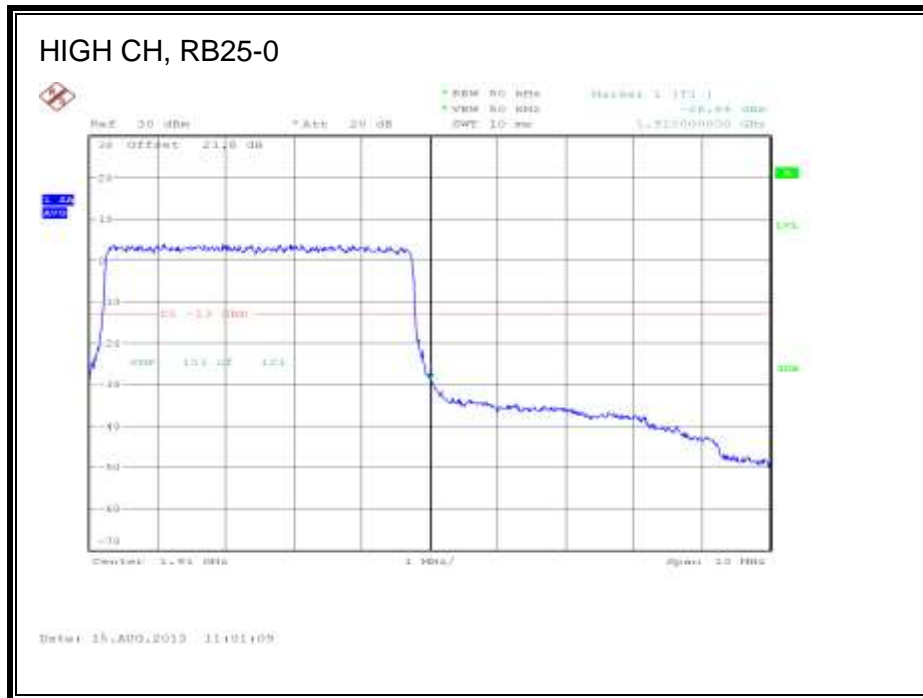
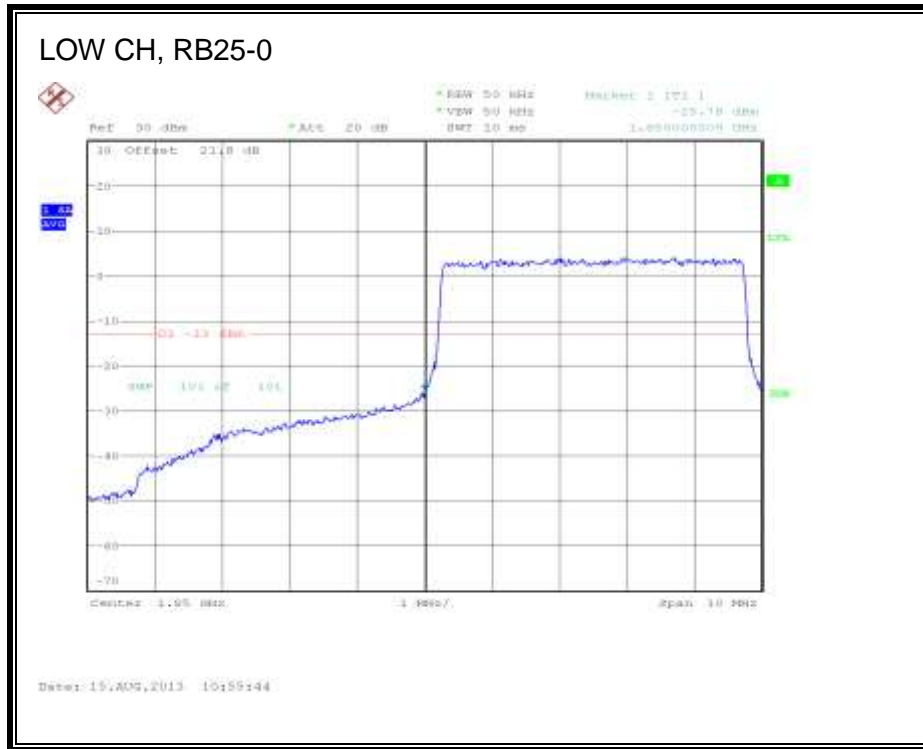


LTE QPSK Band 2 (5.0 MHz BAND WIDTH)

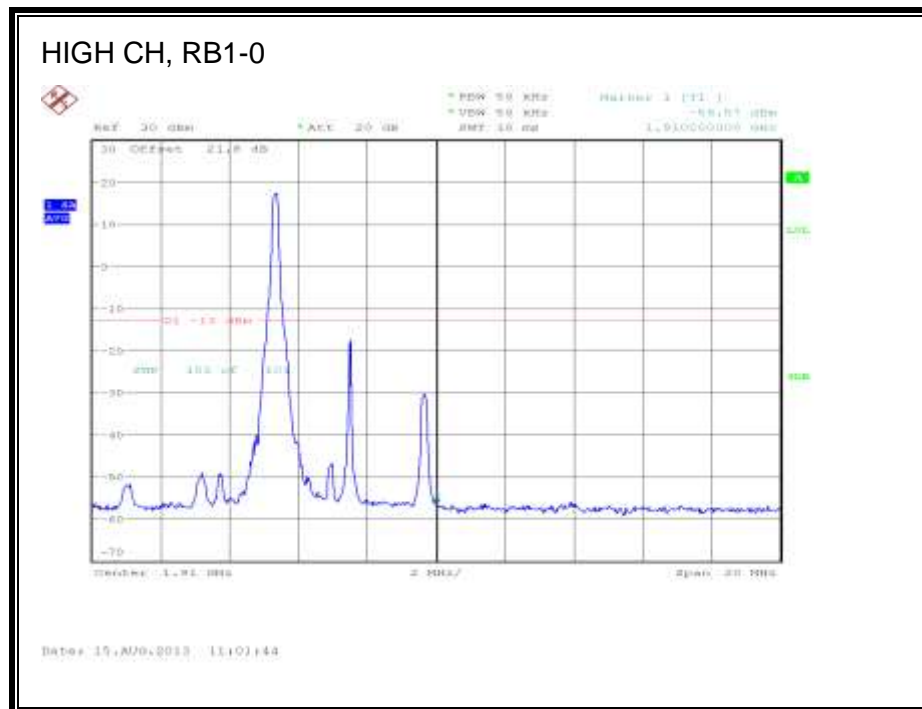
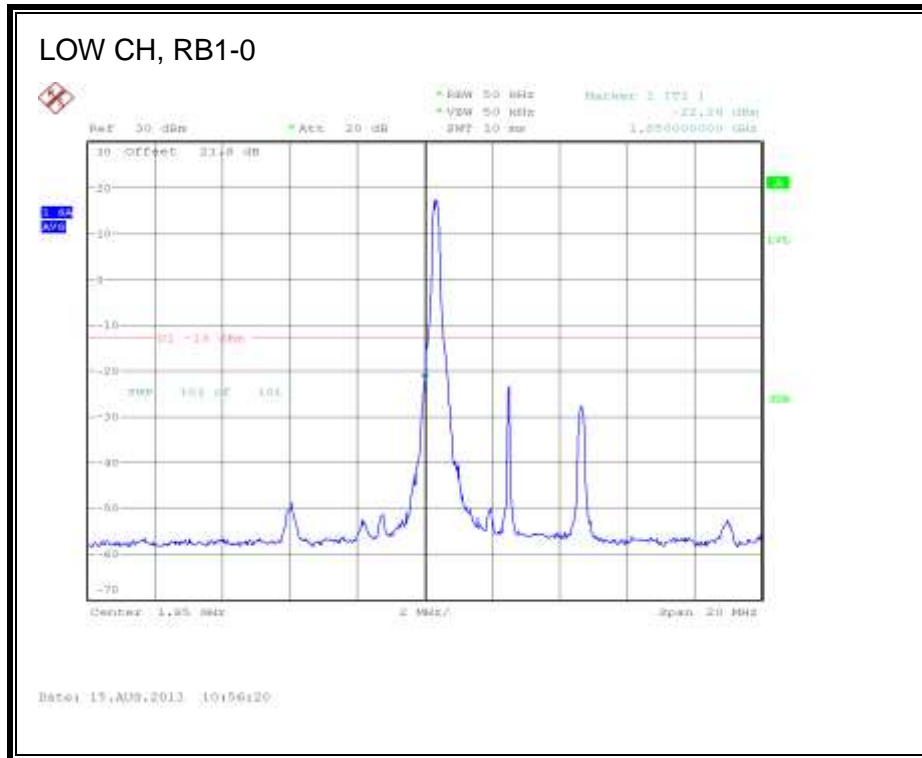


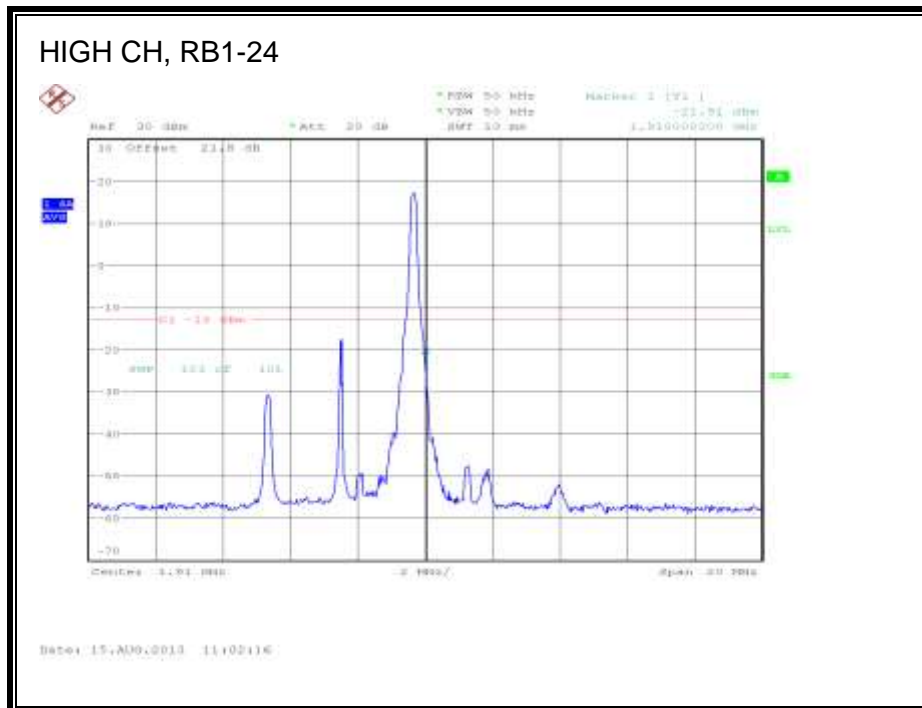
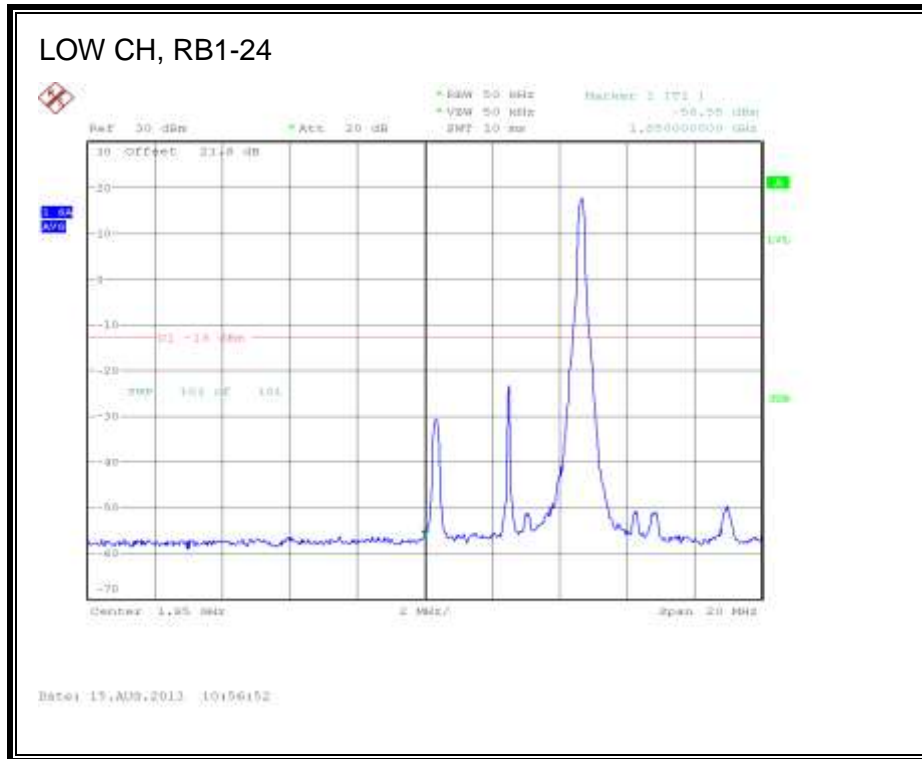




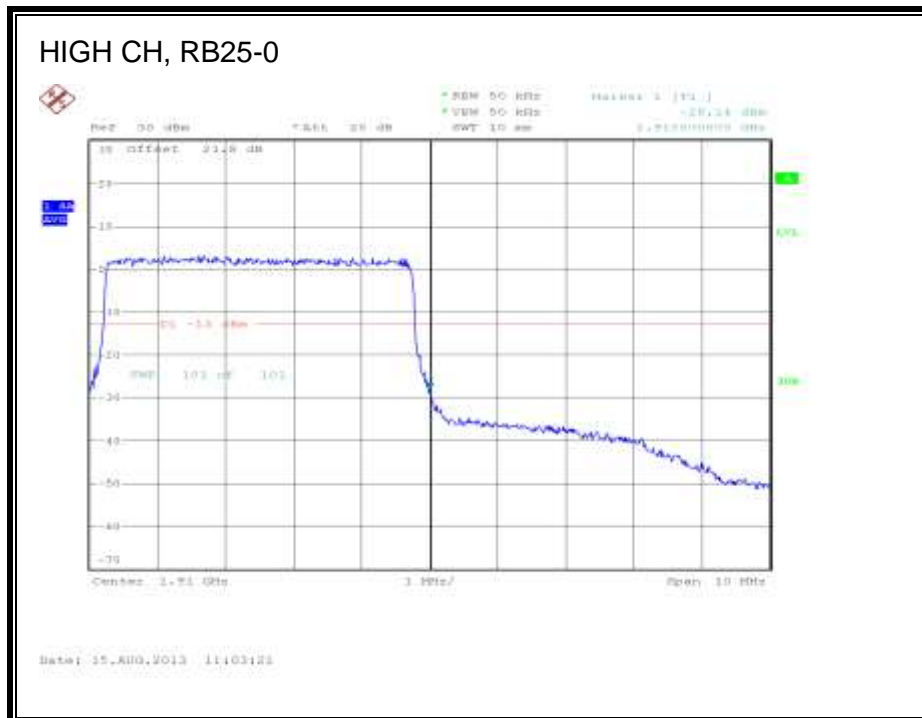


LTE 16QAM Band 2 (5.0 MHz BAND WIDTH)

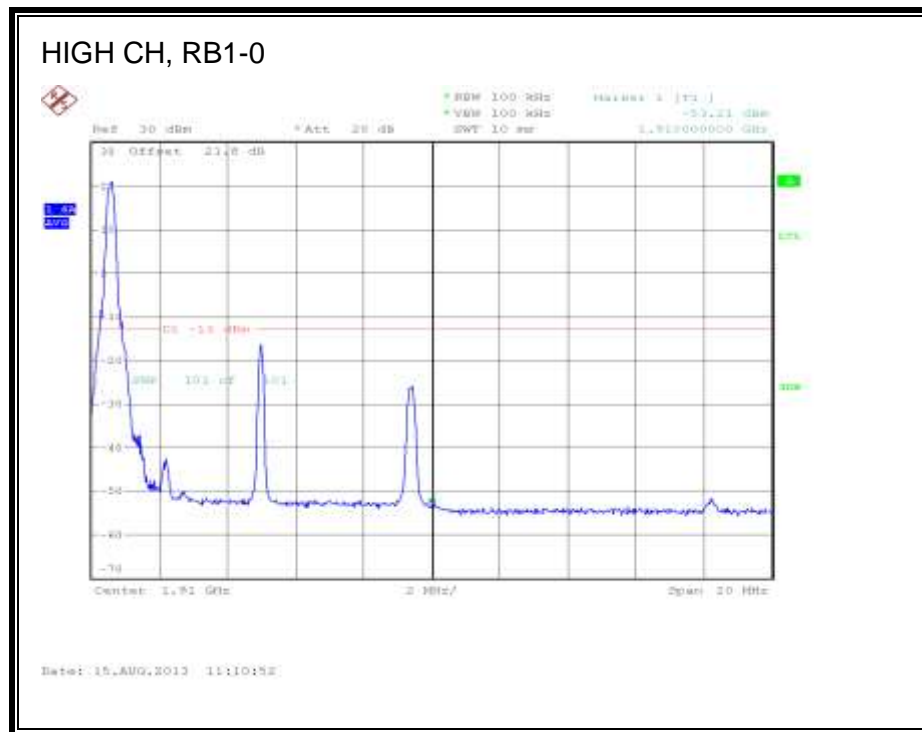
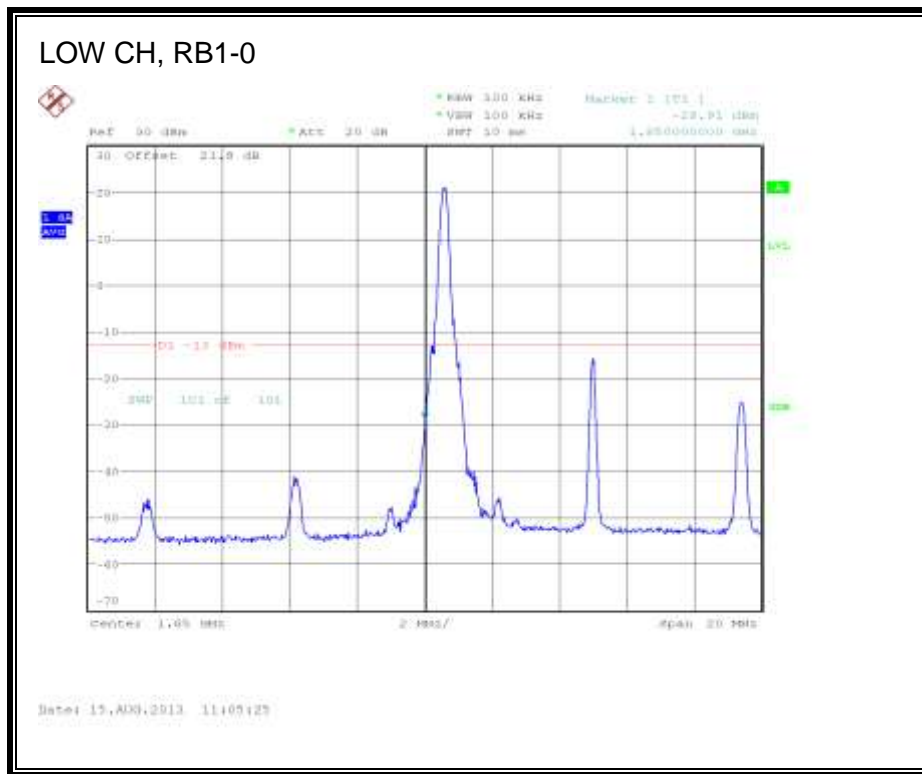


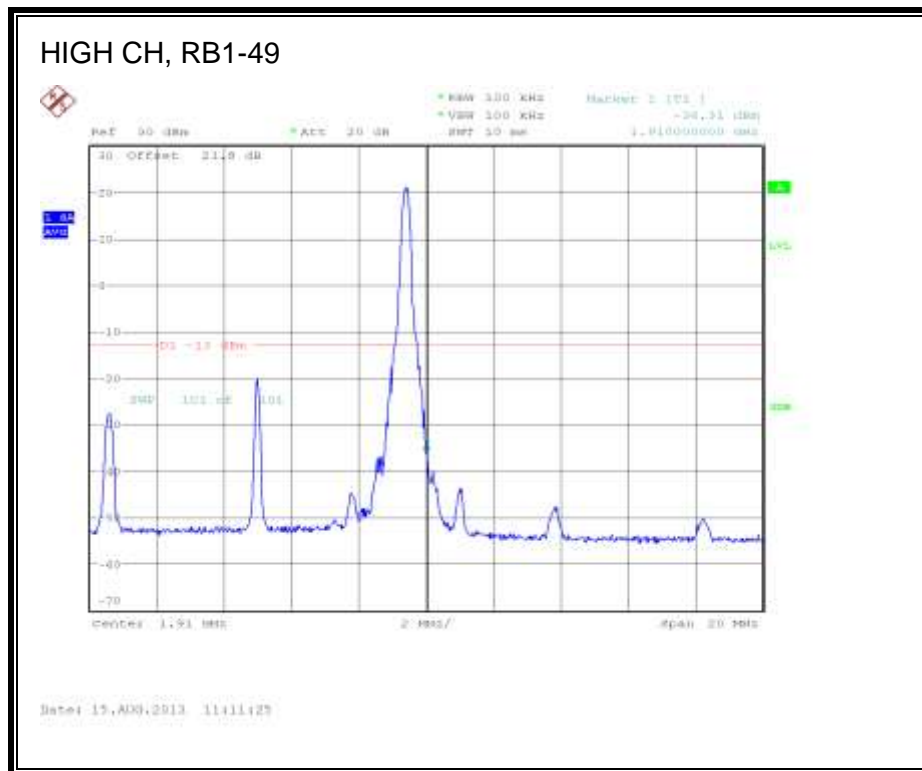
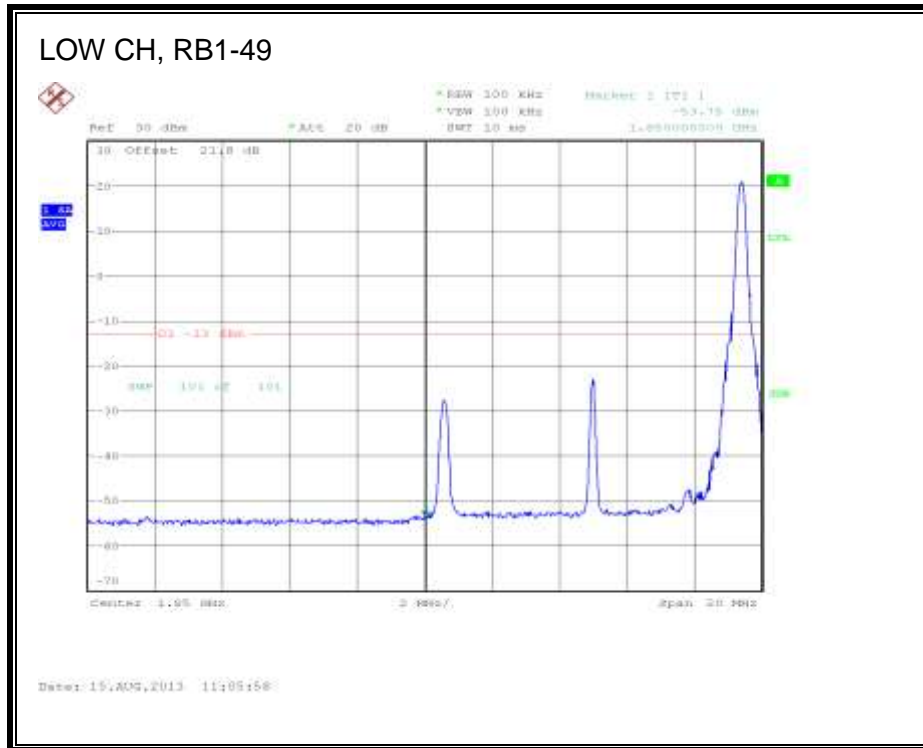


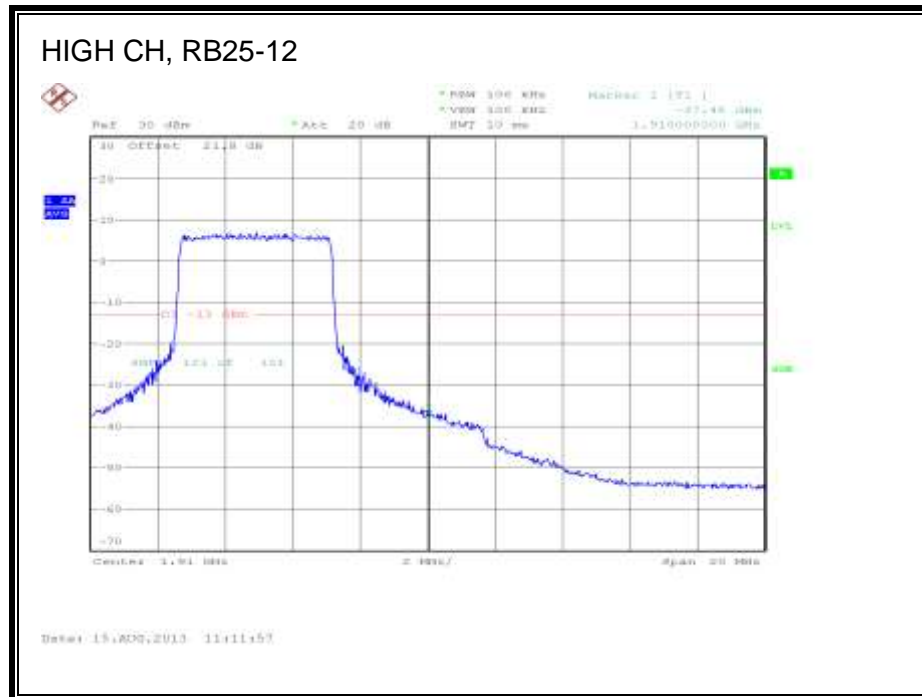
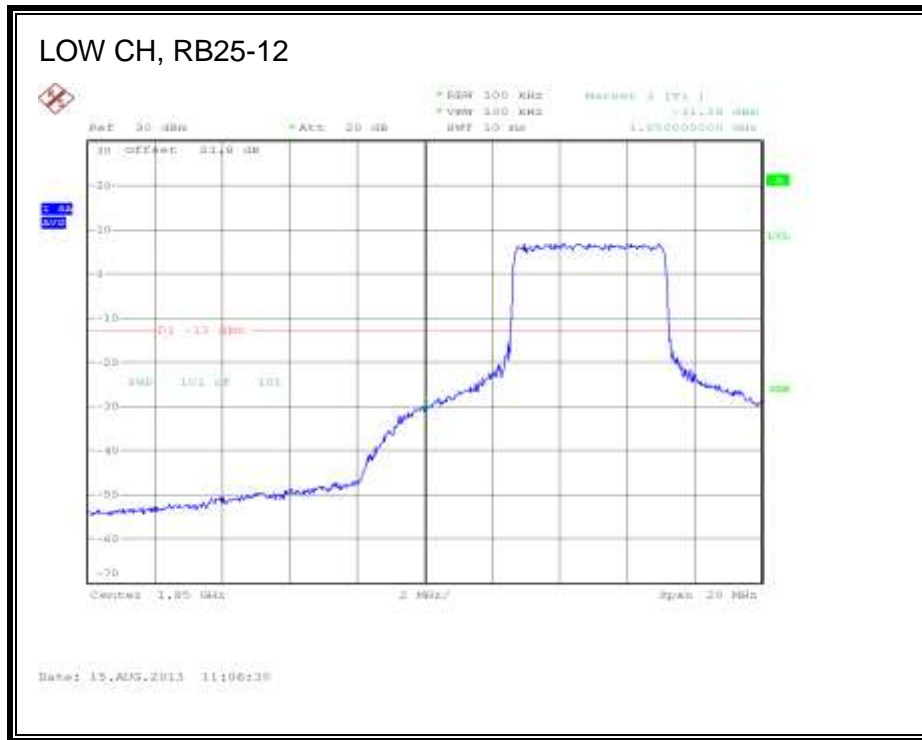




LTE QPSK Band 2 (10.0 MHz BAND WIDTH)

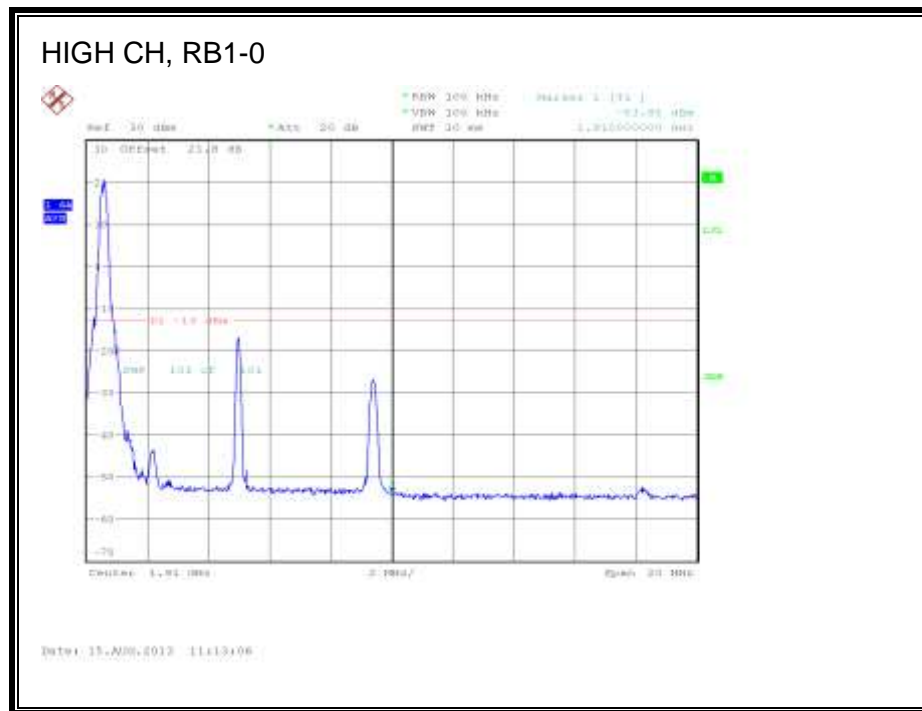
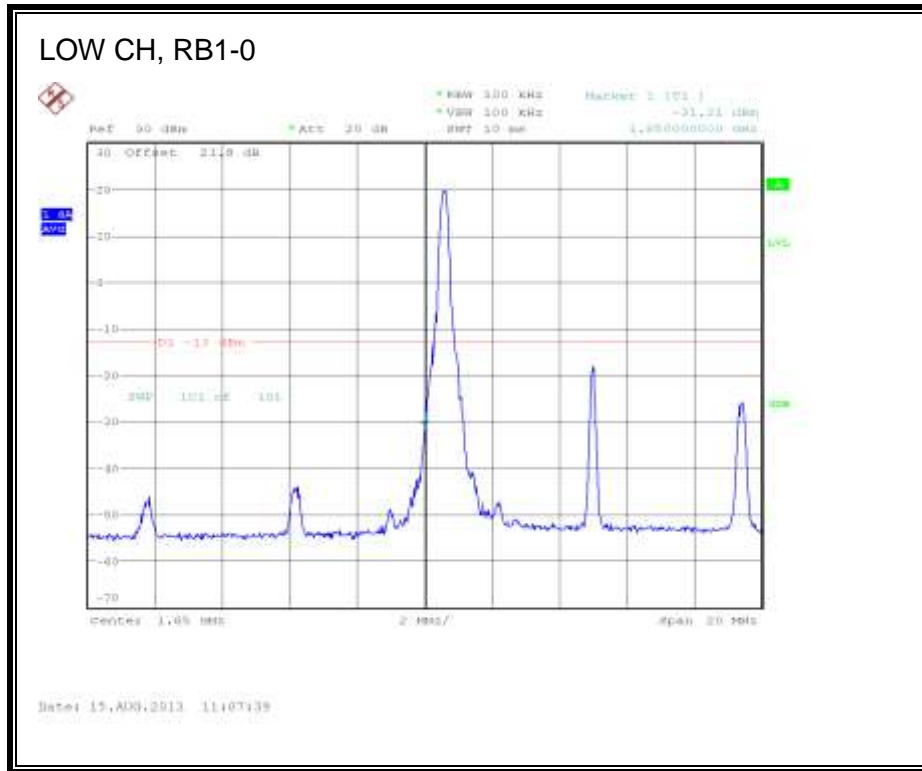


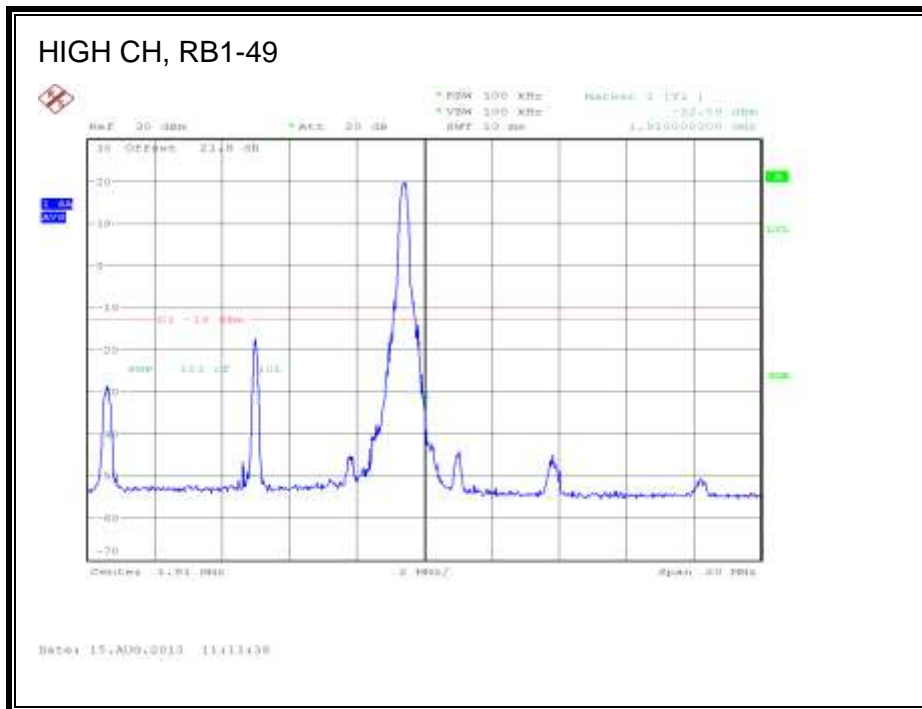
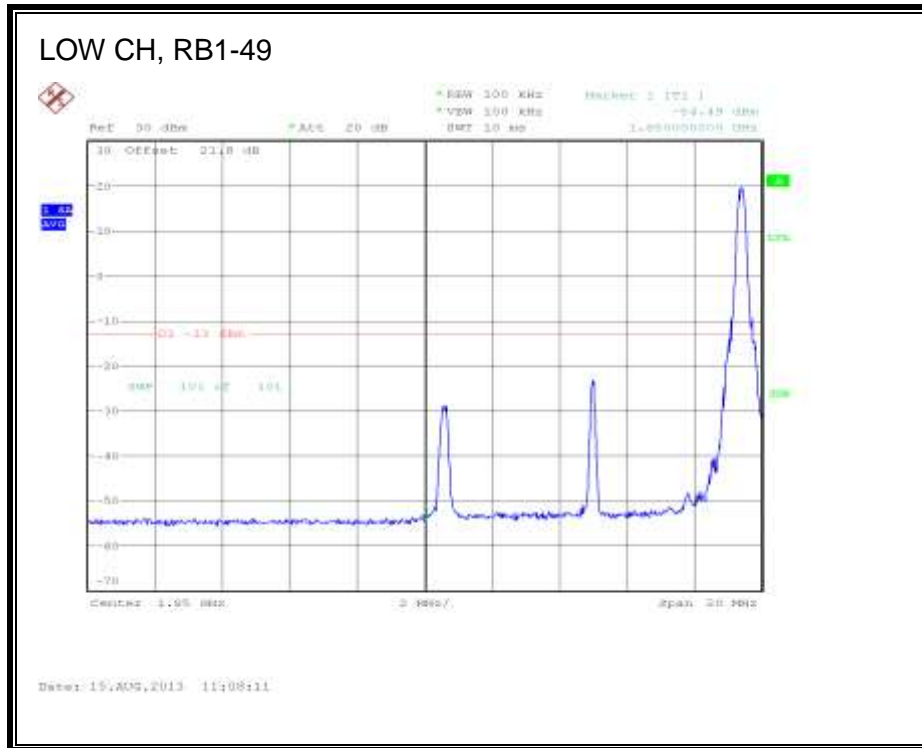


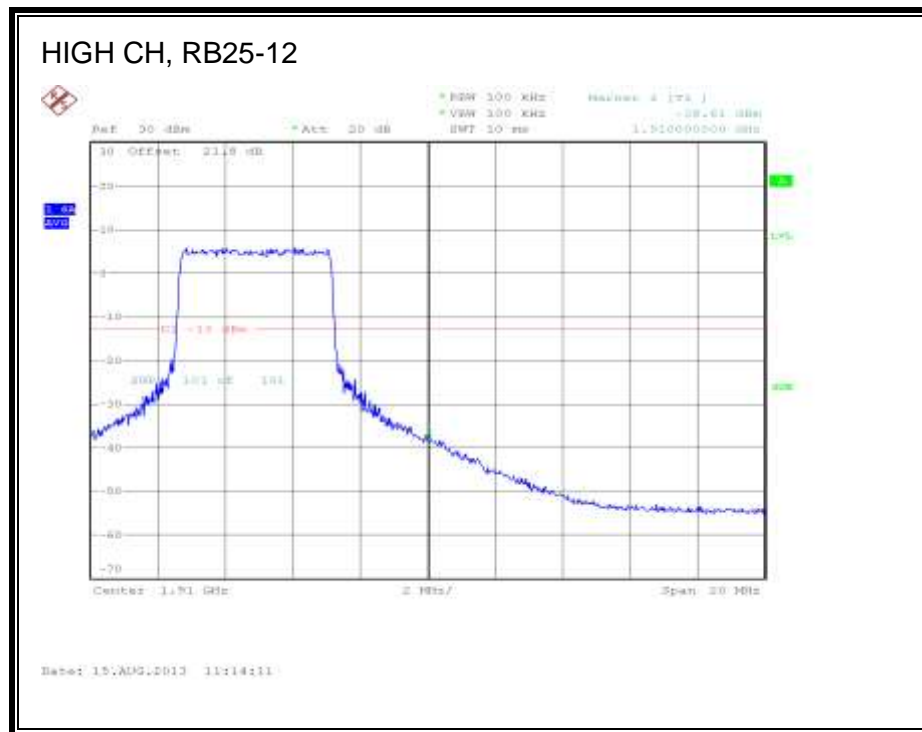




LTE 16QAM Band 2 (10.0 MHz BAND WIDTH)

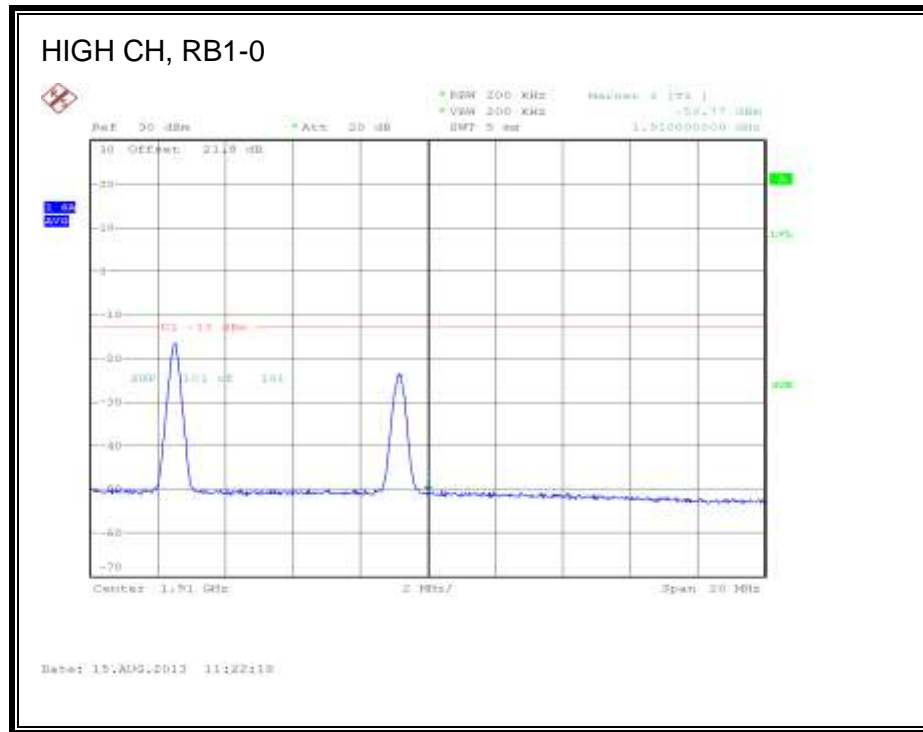
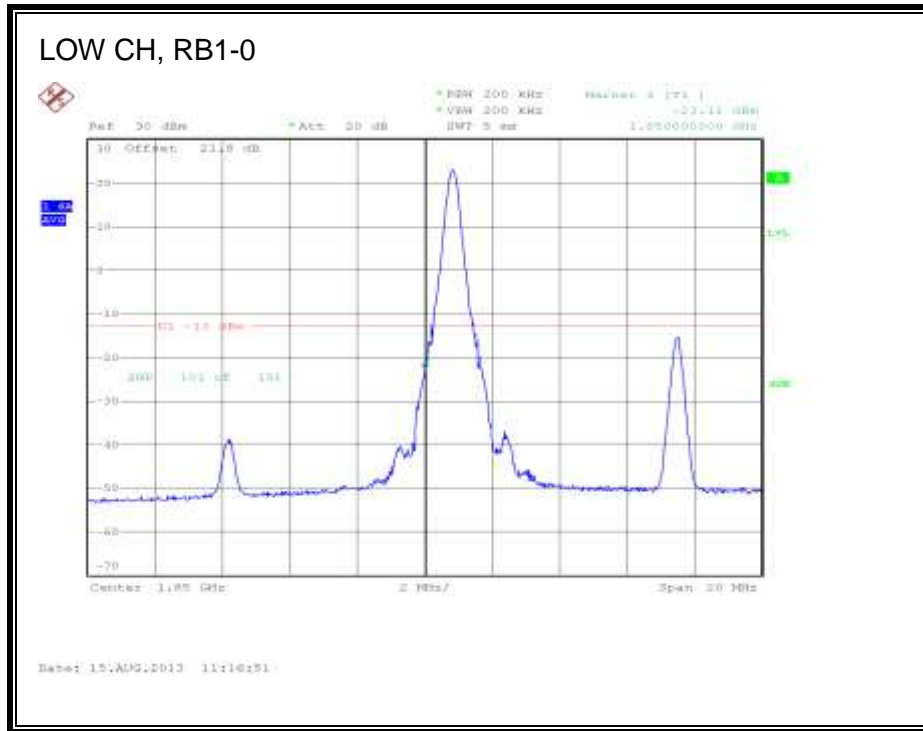


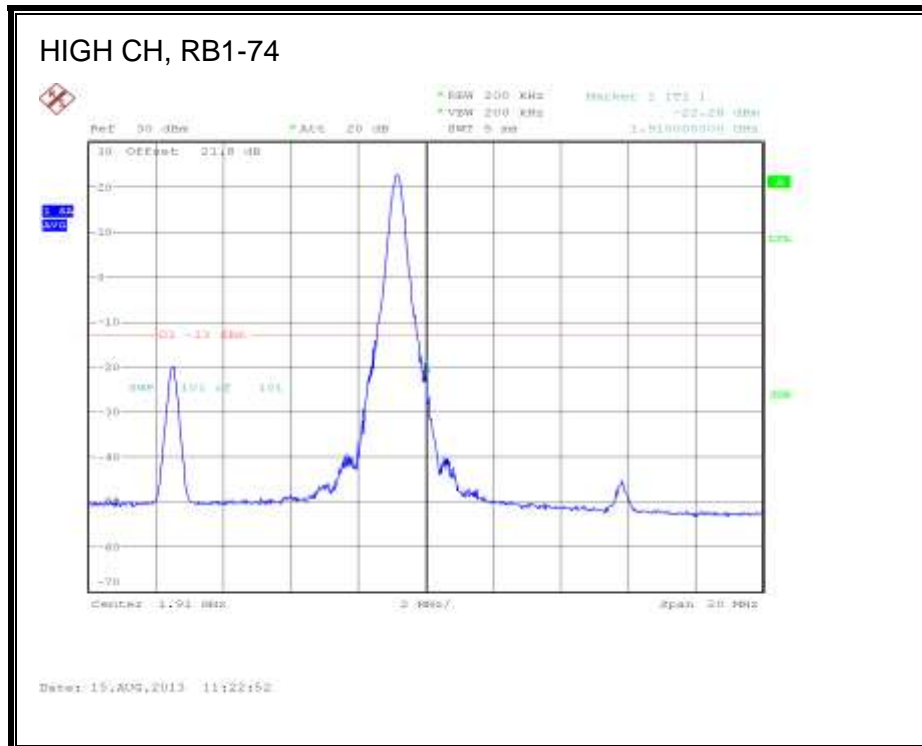
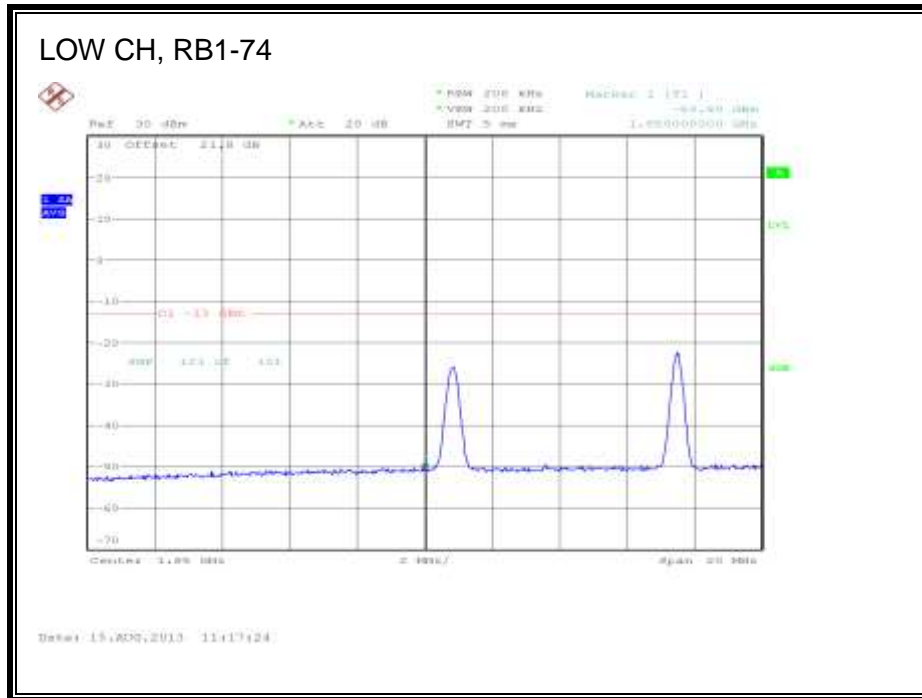


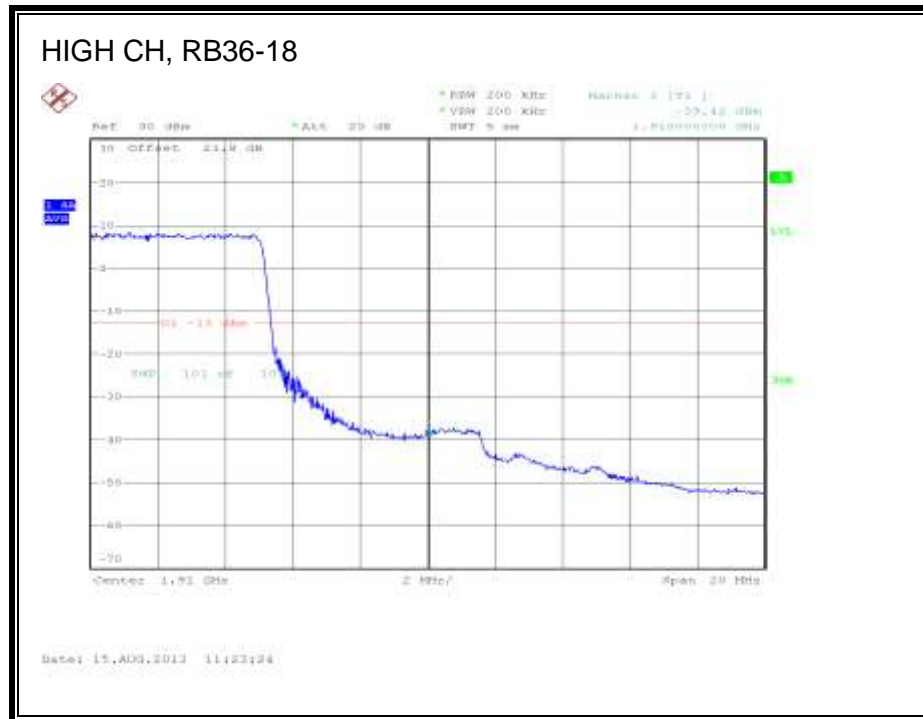


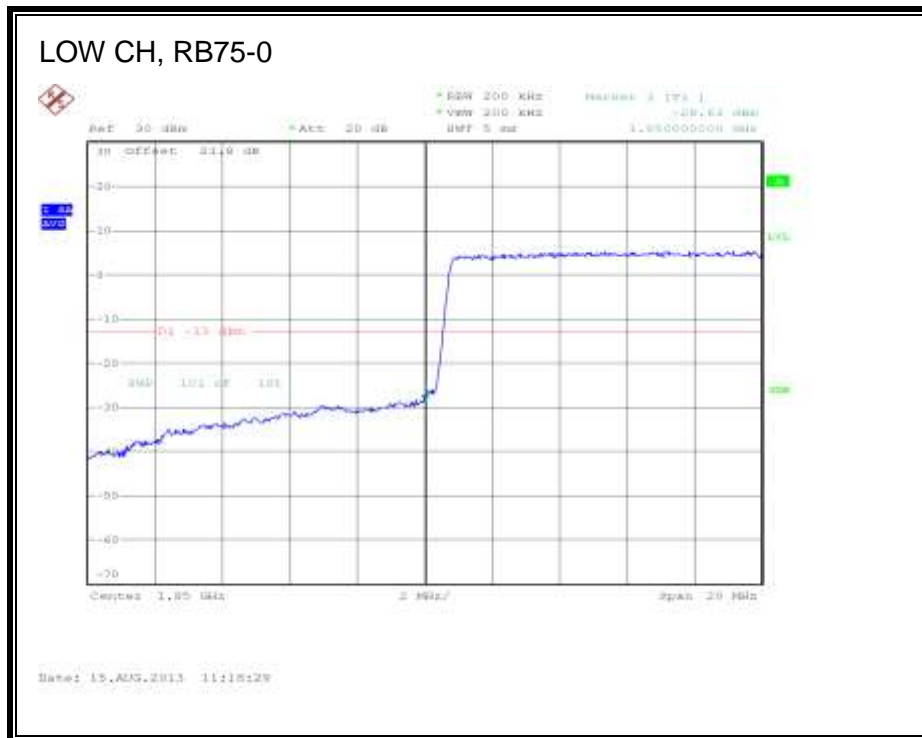


LTE QPSK Band 2 (15.0 MHz BAND WIDTH)

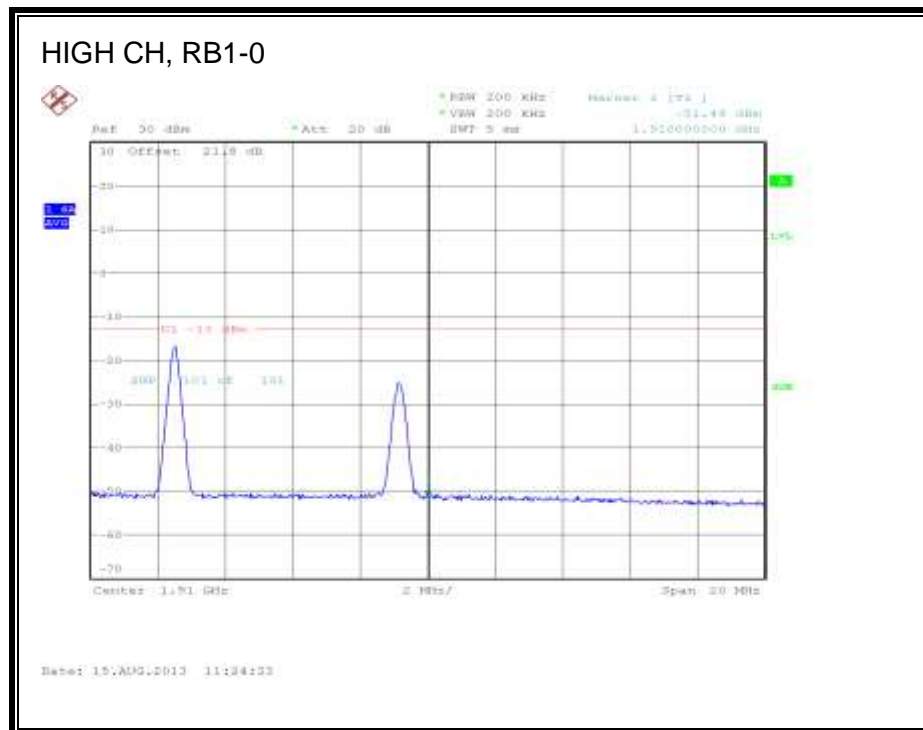
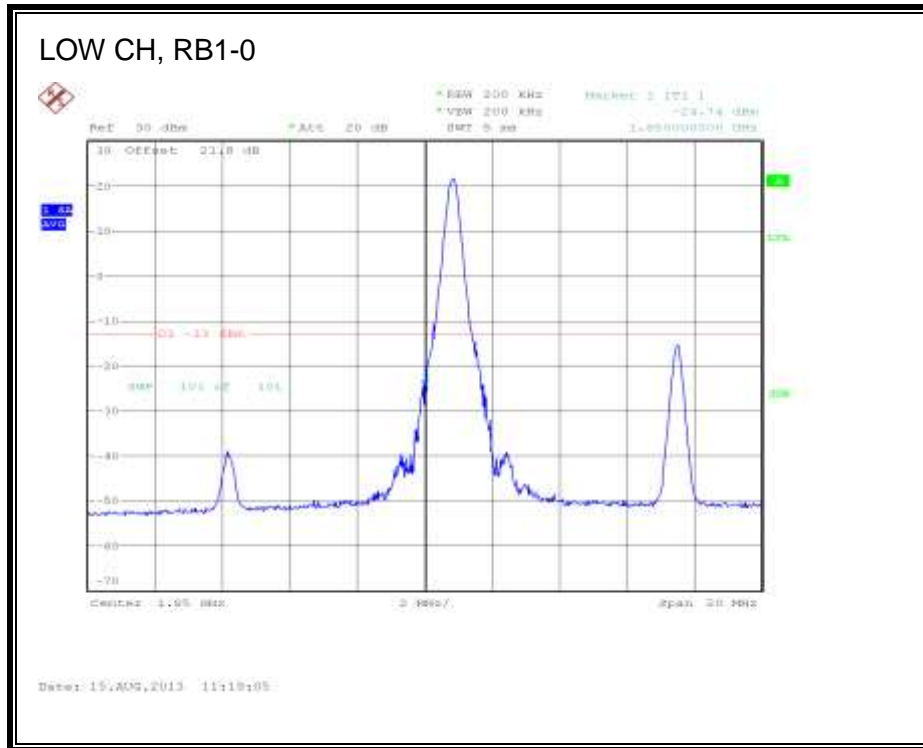


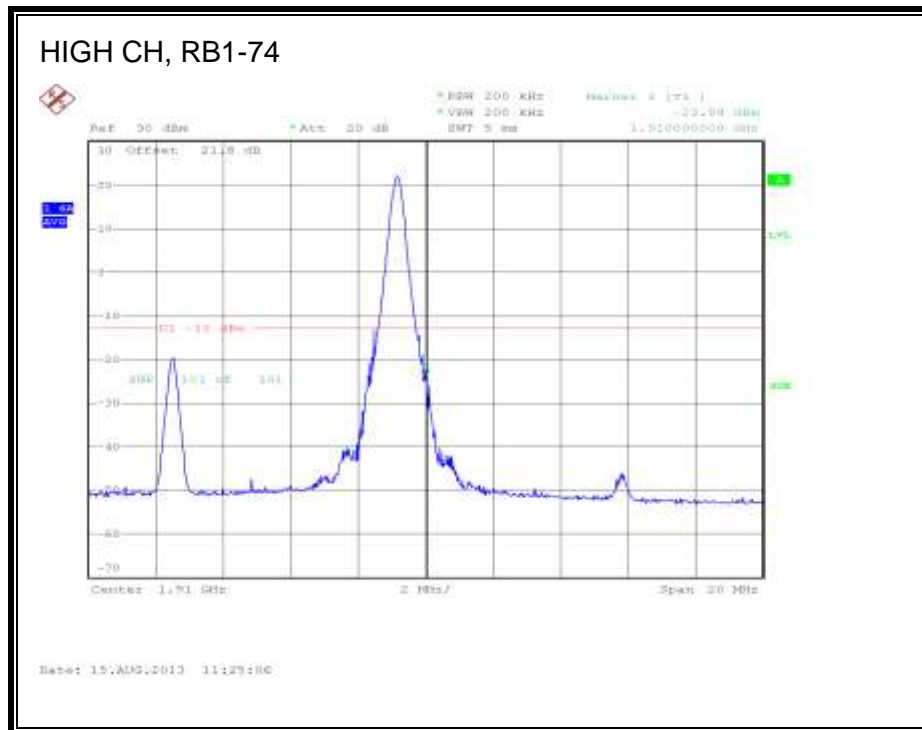
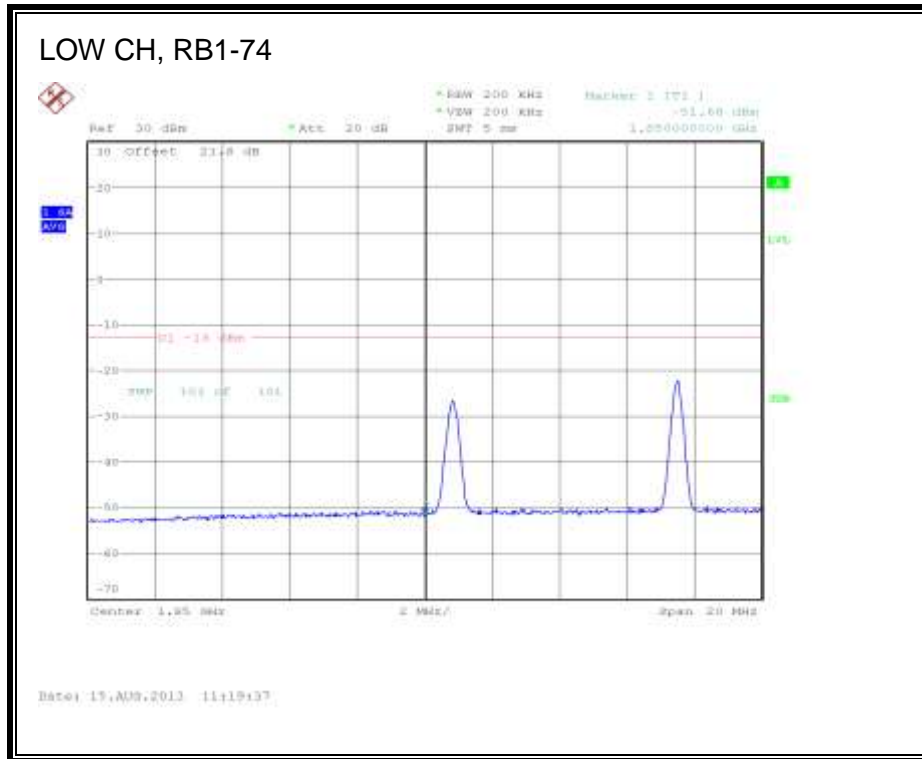


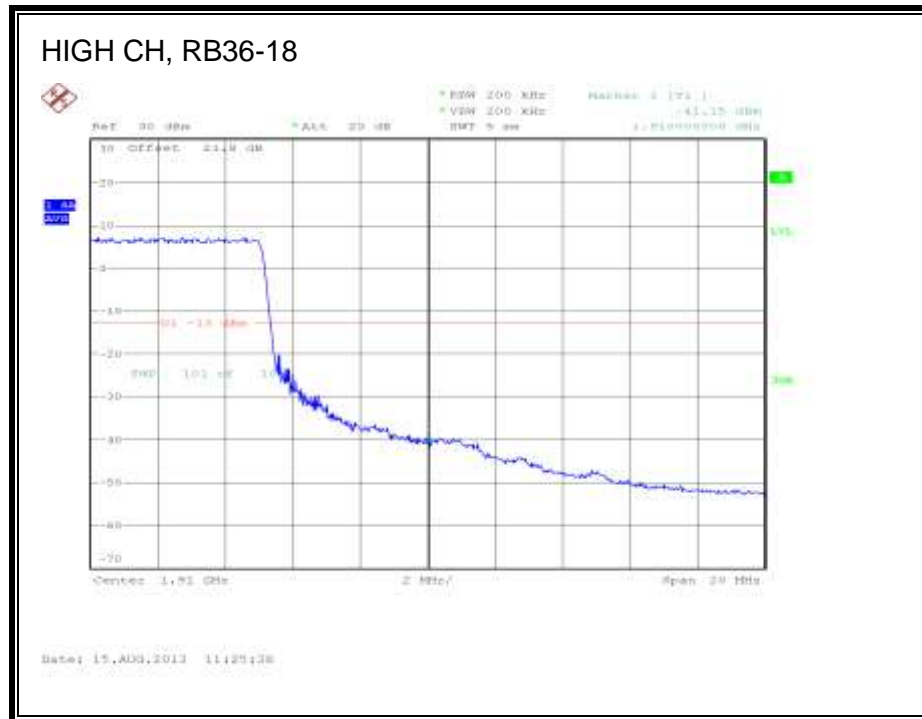


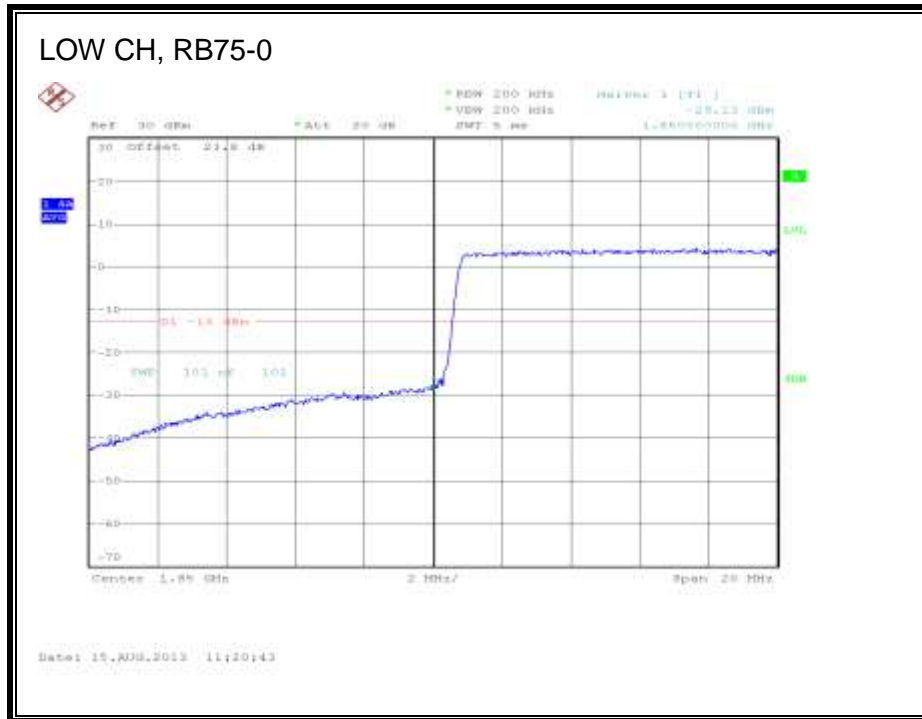


LTE 16QAM Band 2 (15.0 MHz BAND WIDTH)

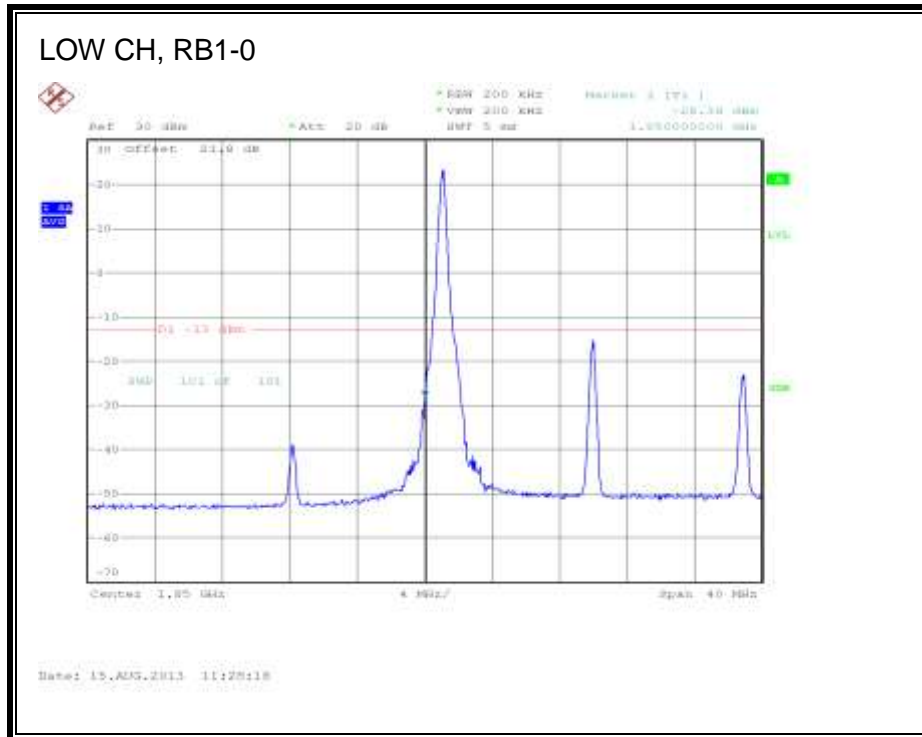


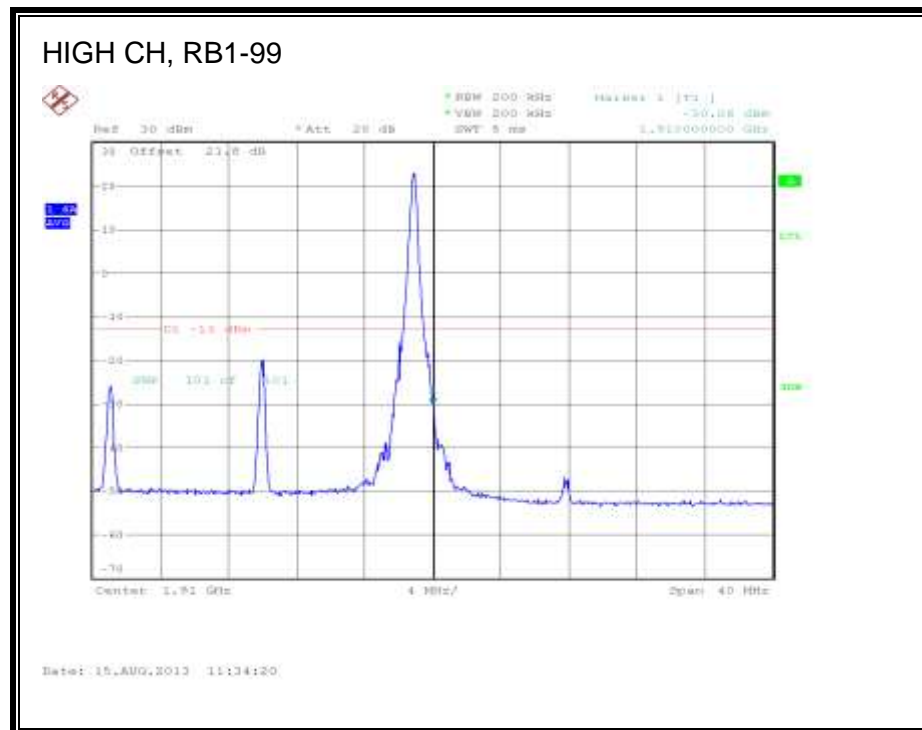
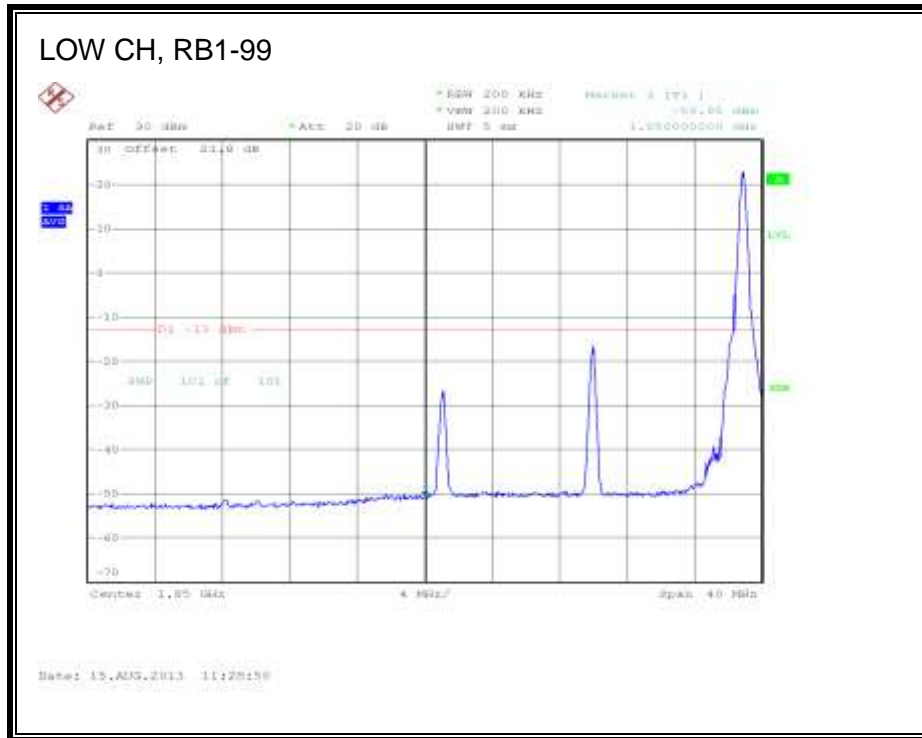


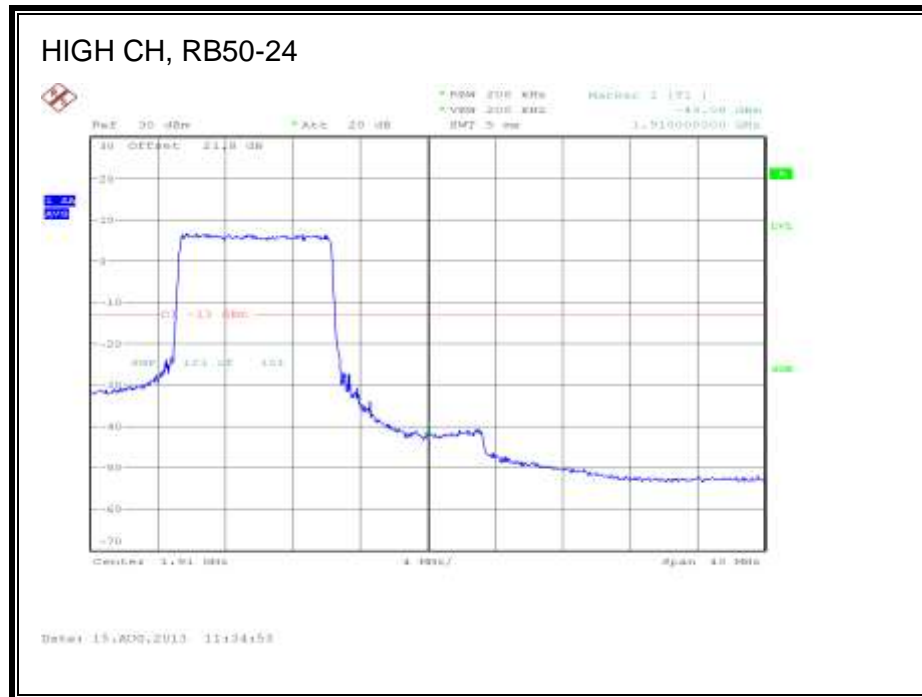




LTE QPSK Band 2 (20.0 MHz BAND WIDTH)

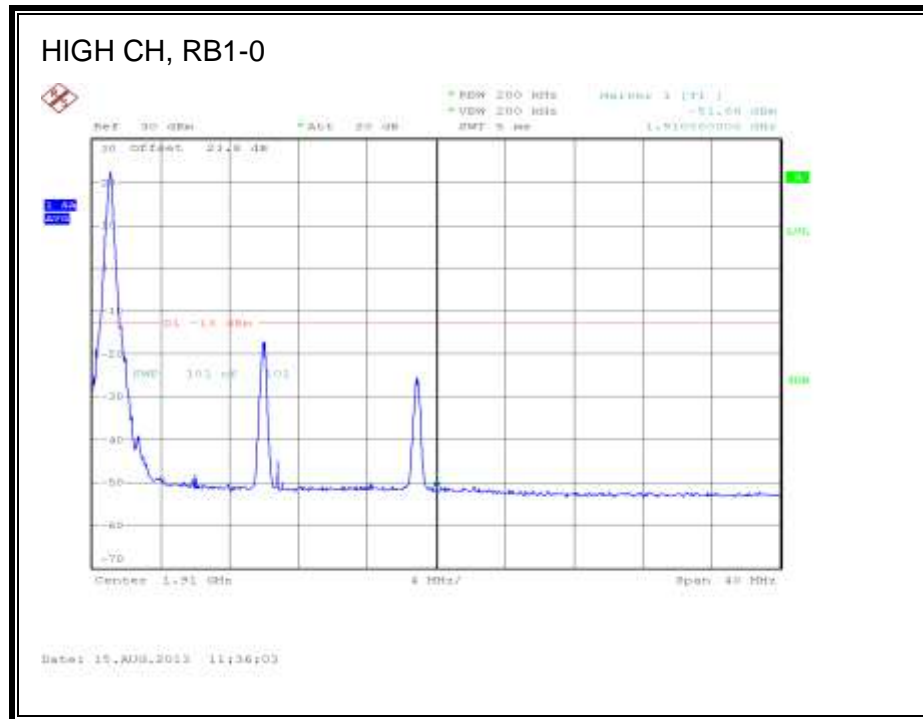
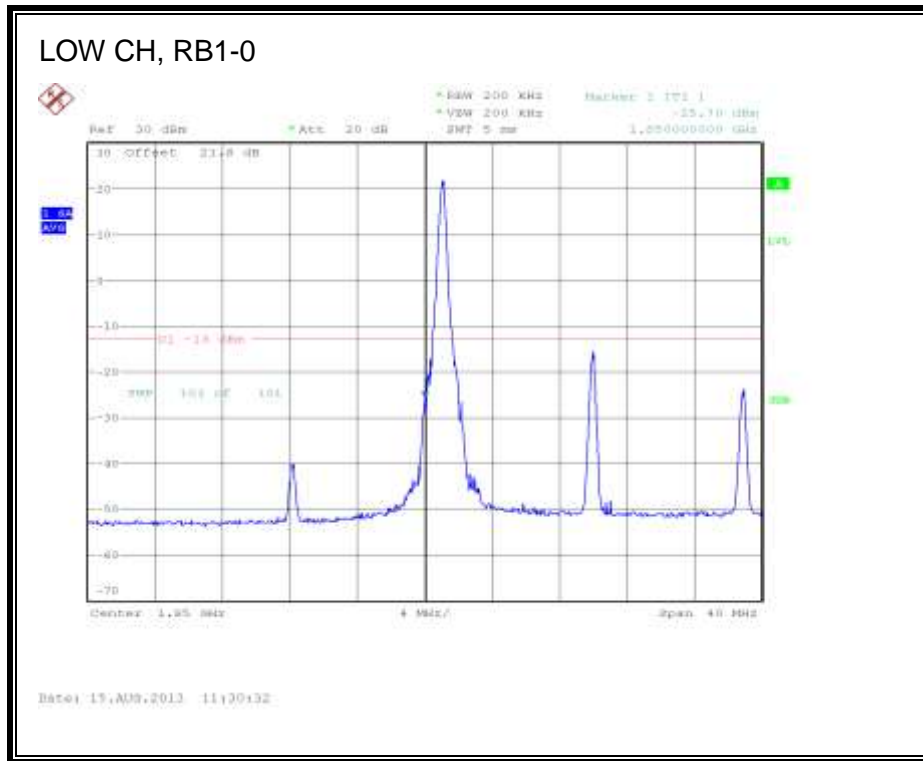


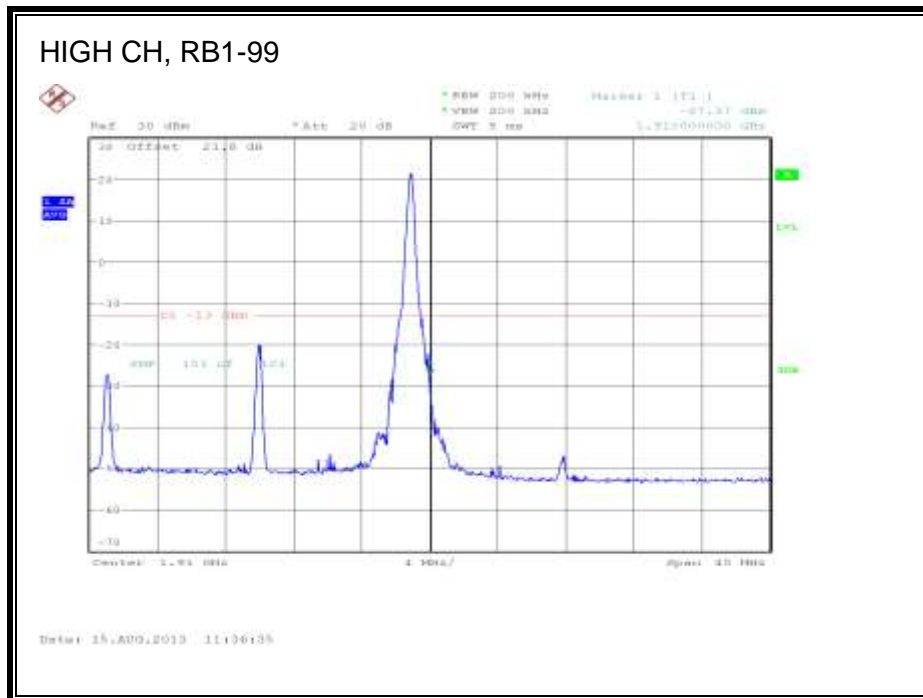
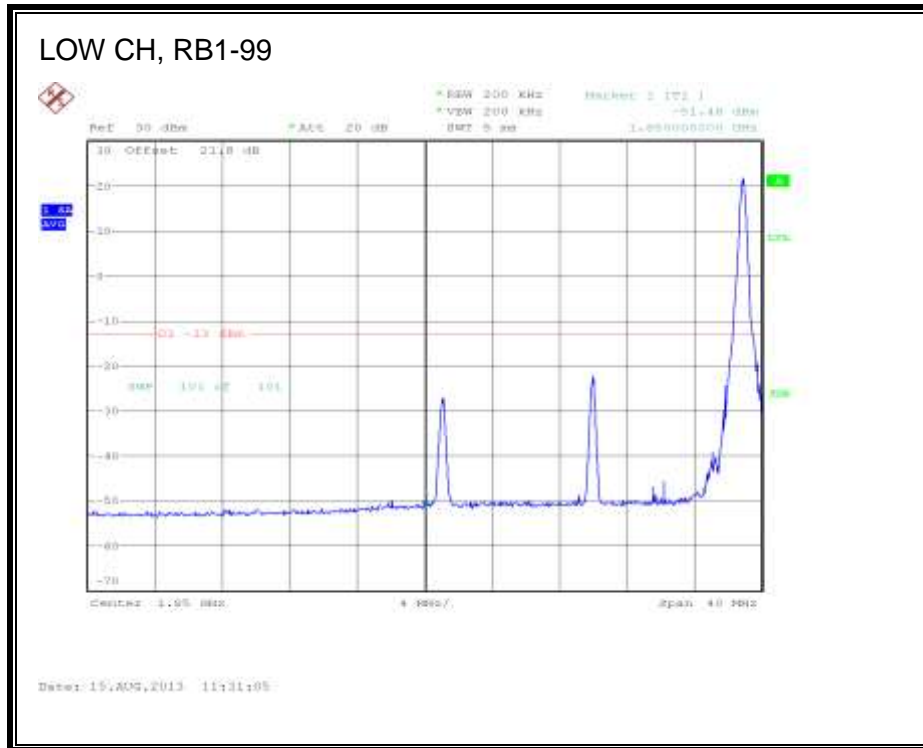






LTE 16QAM Band 2 (20.0 MHz BAND WIDTH)



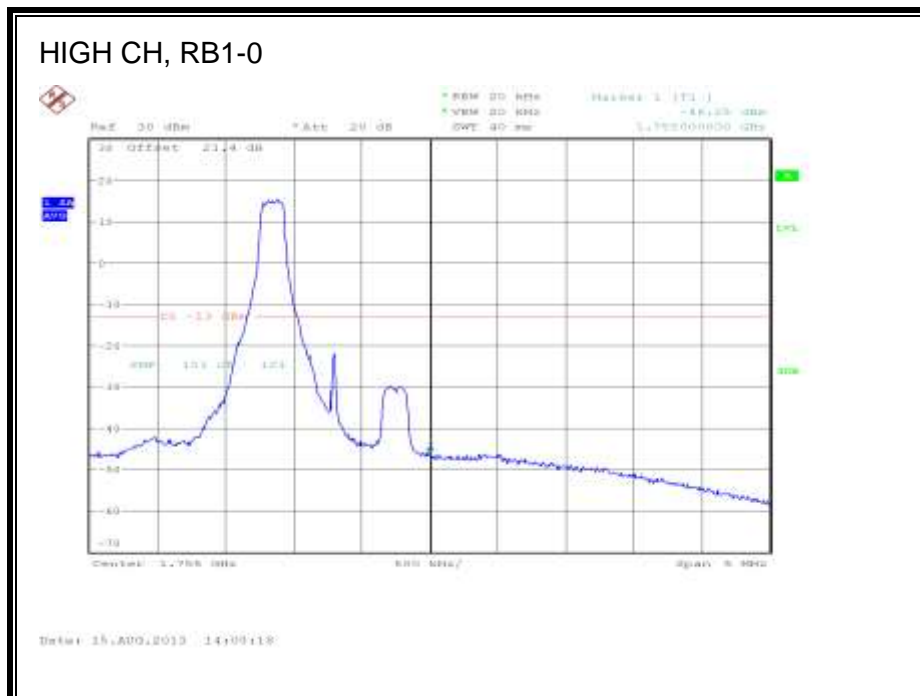
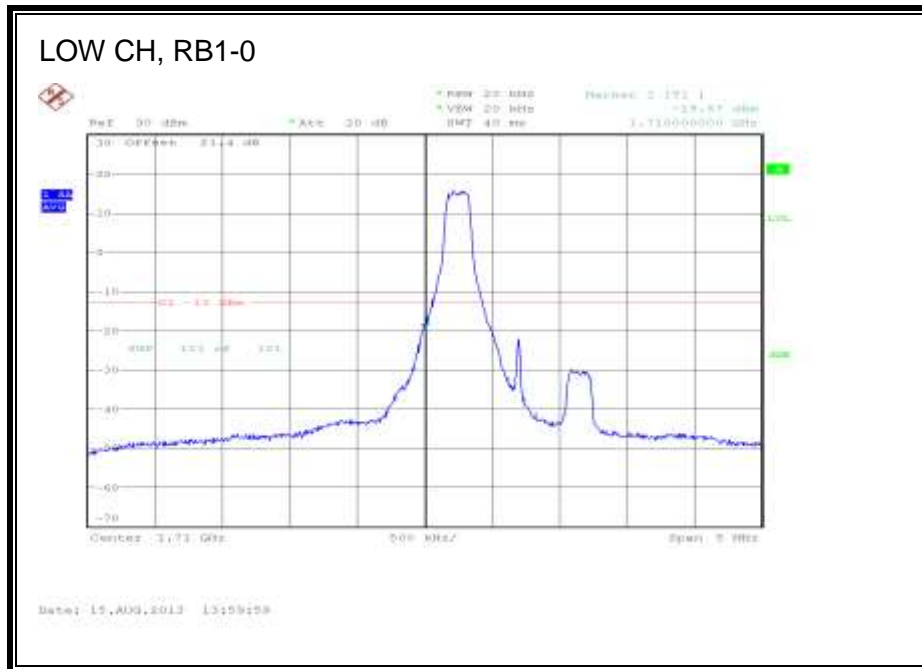


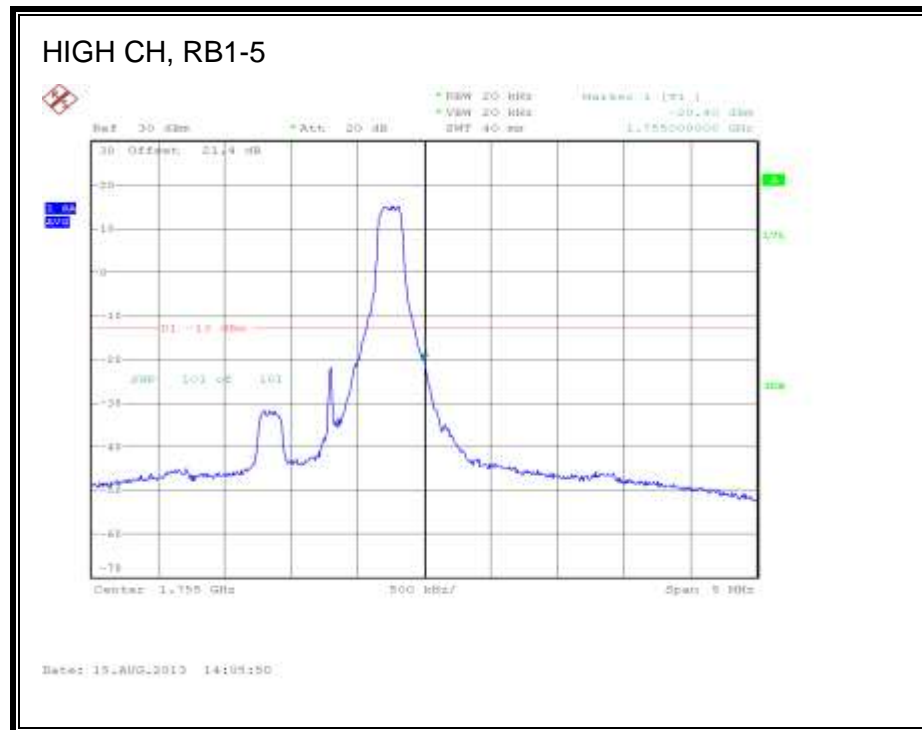
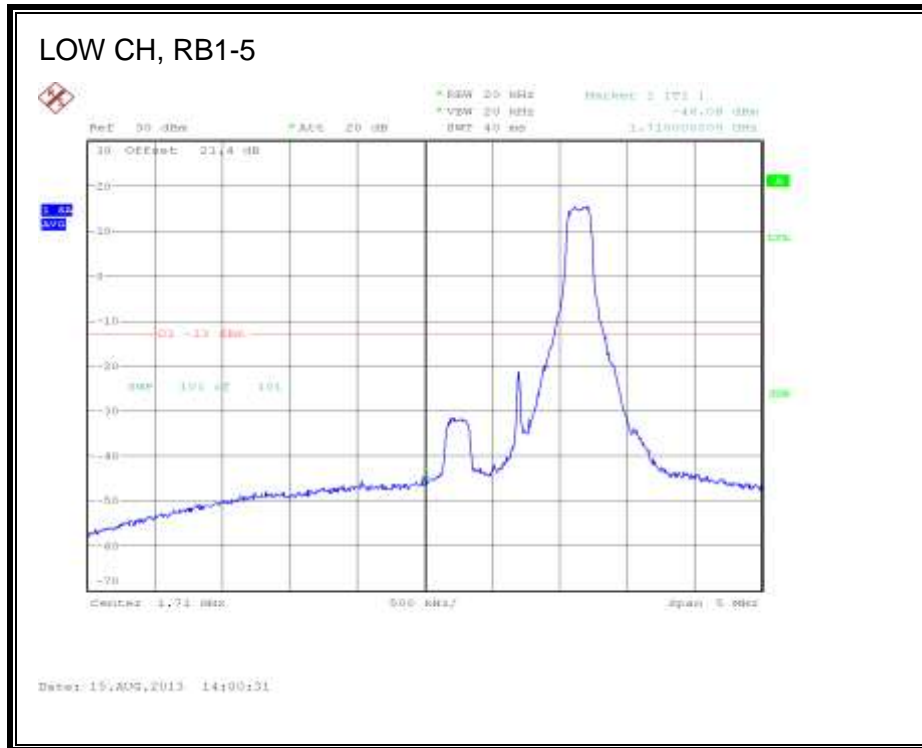


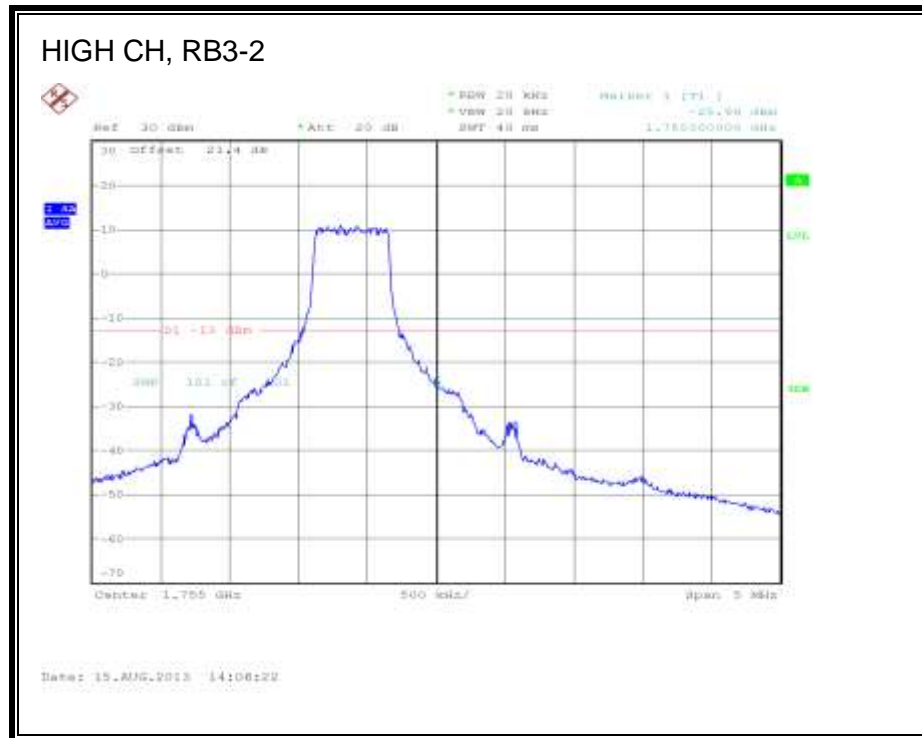


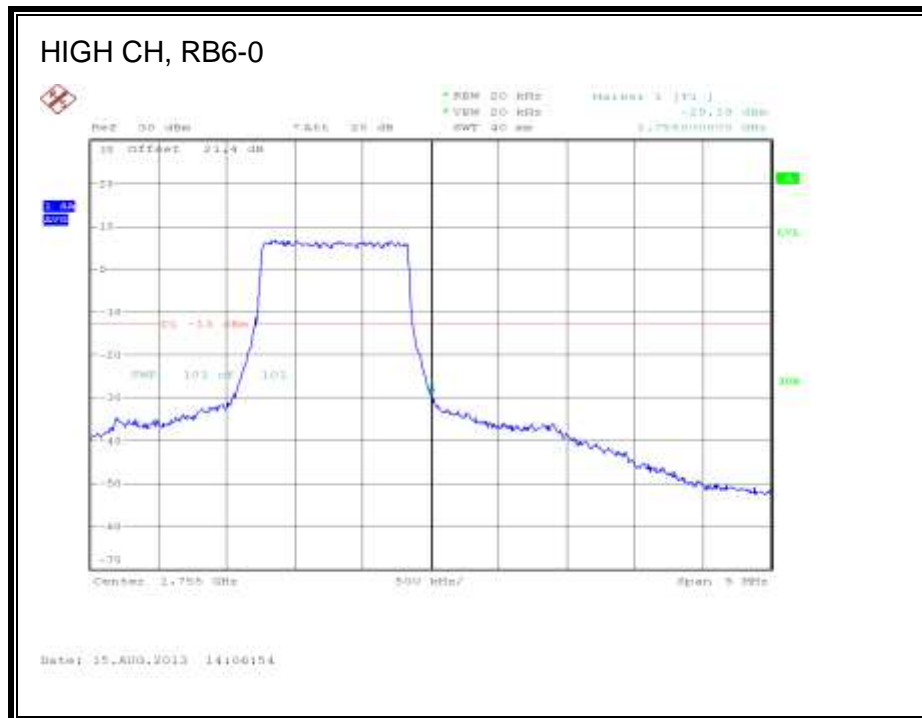
8.2.2. LTE BAND 4

LTE QPSK Band 4 (1.4 MHz BAND WIDTH)

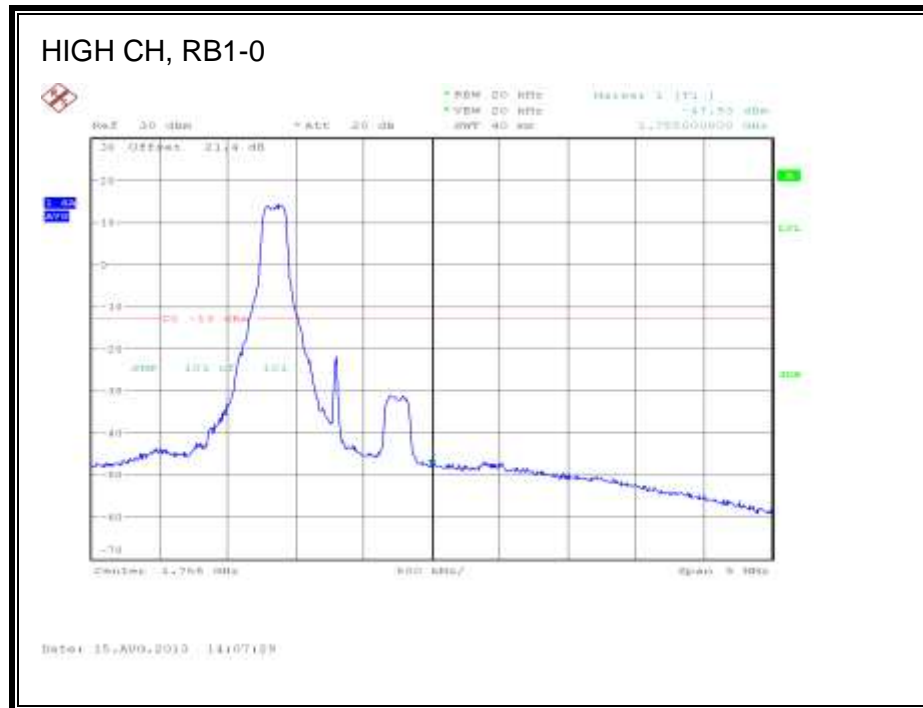
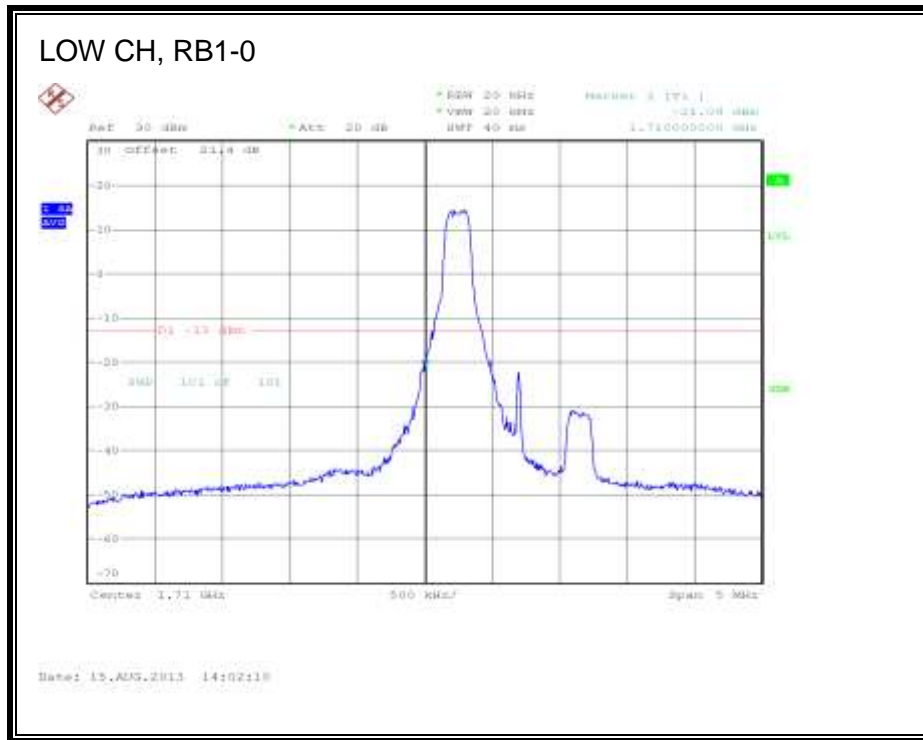


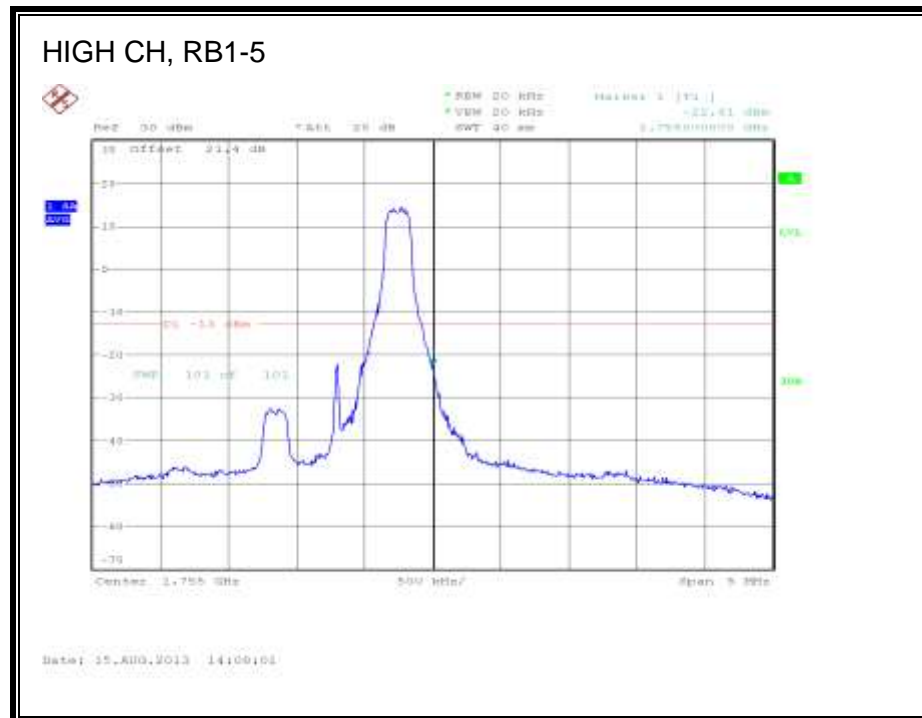
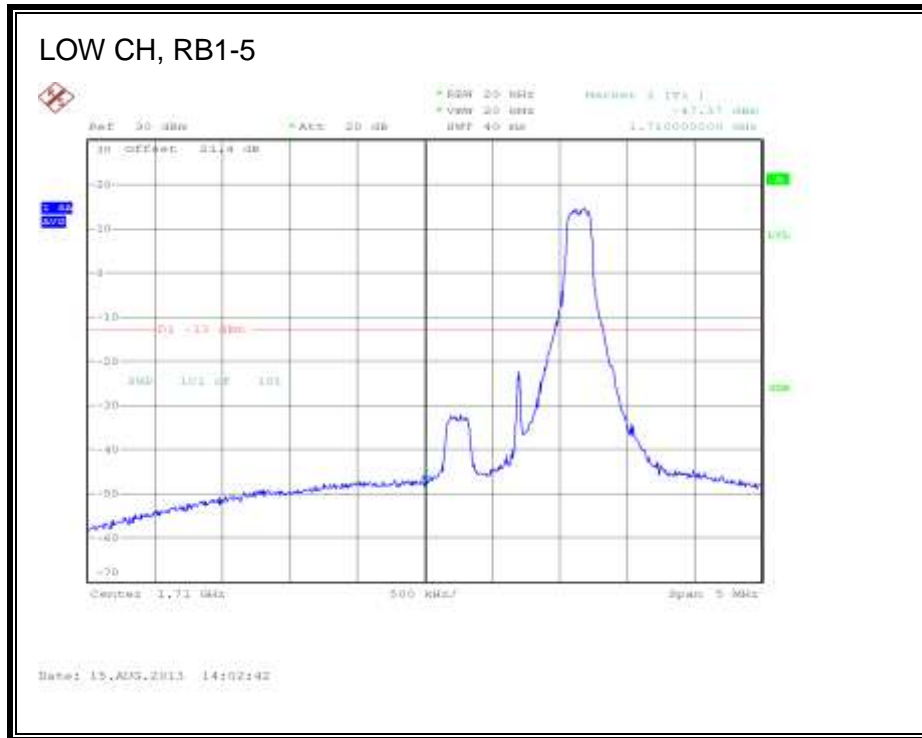


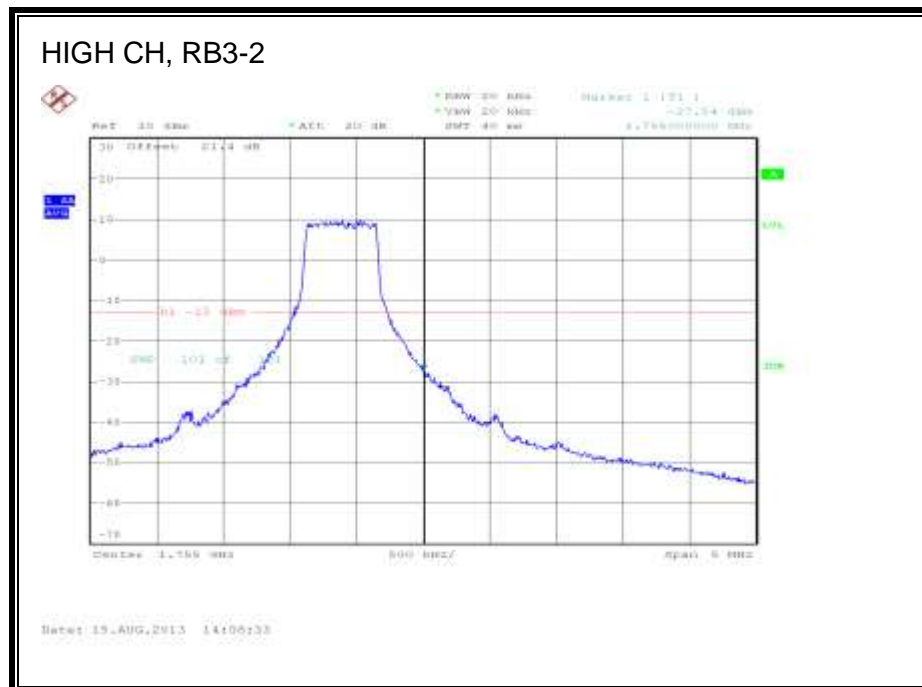
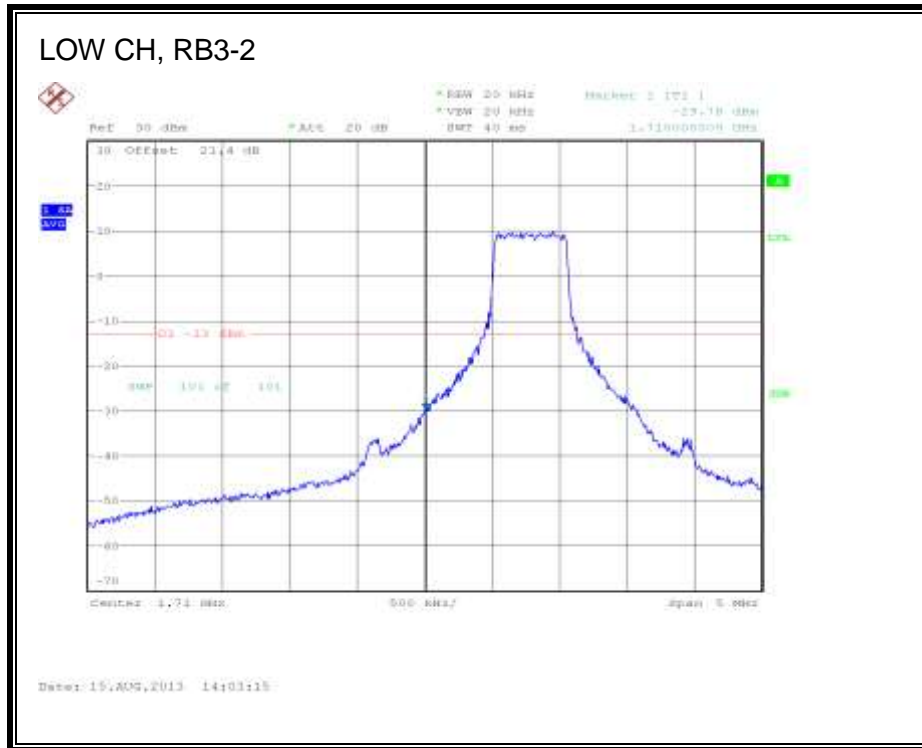


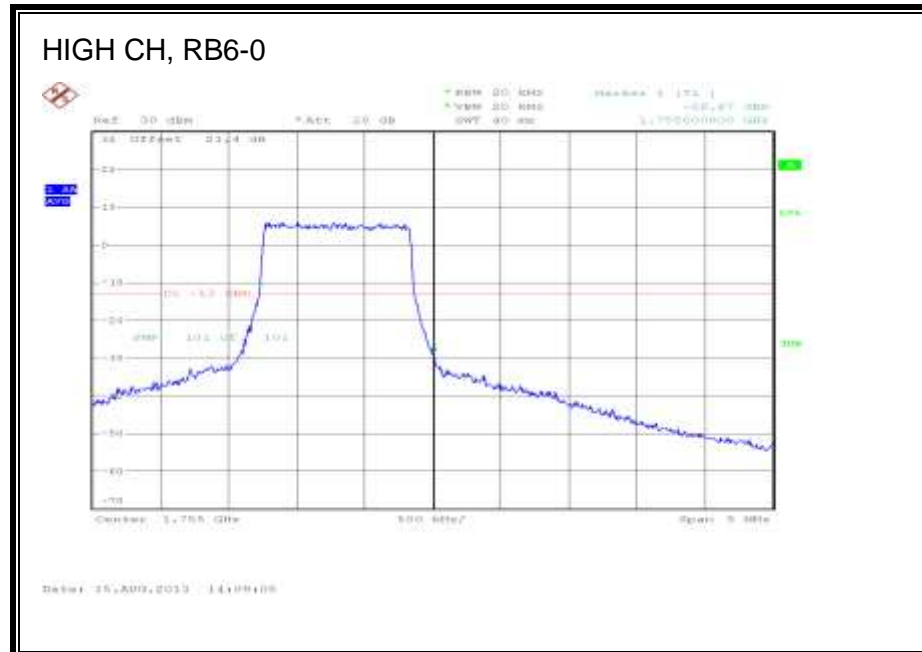
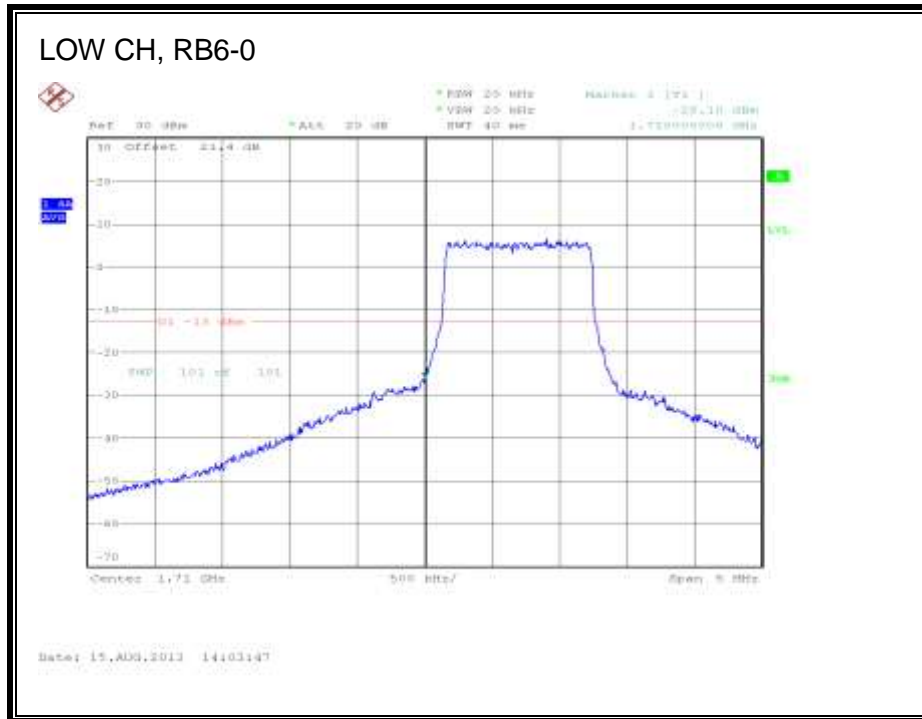


LTE 16QAM Band 4 (1.4 MHz BAND WIDTH)

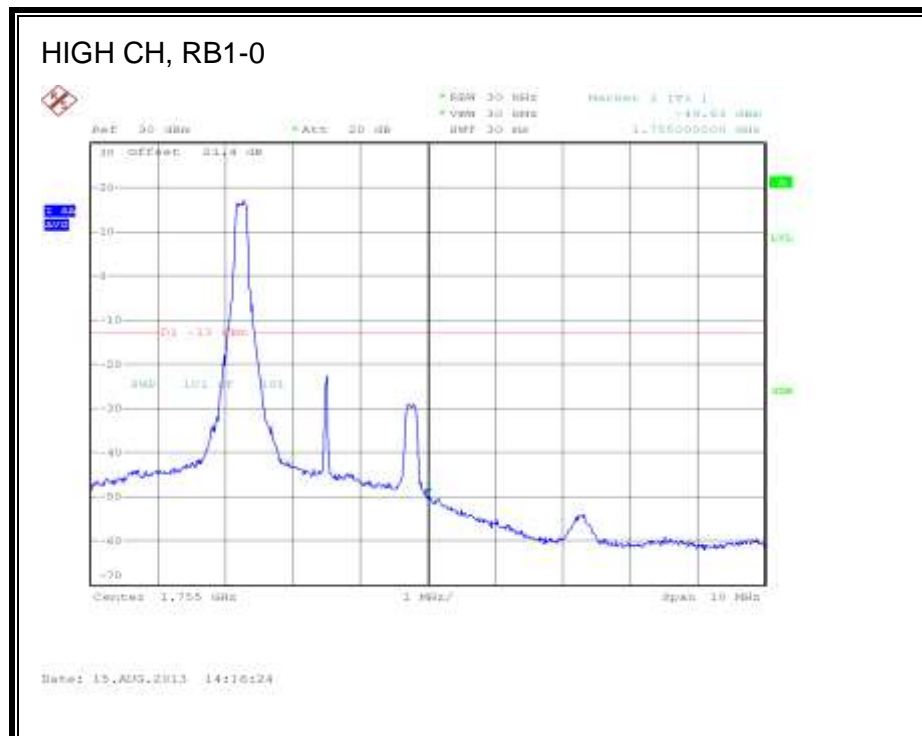
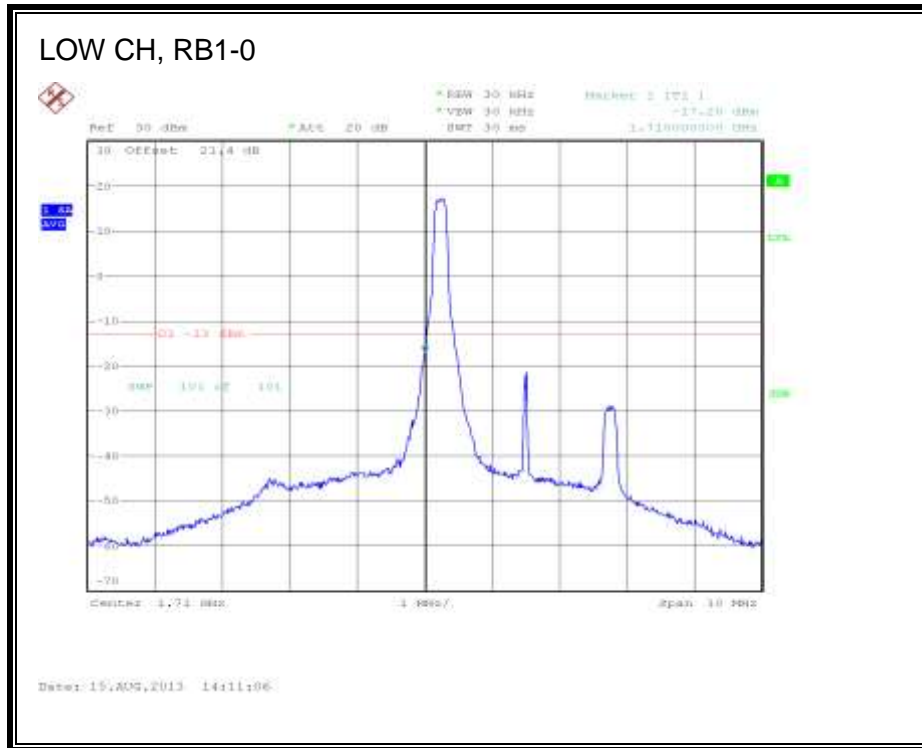


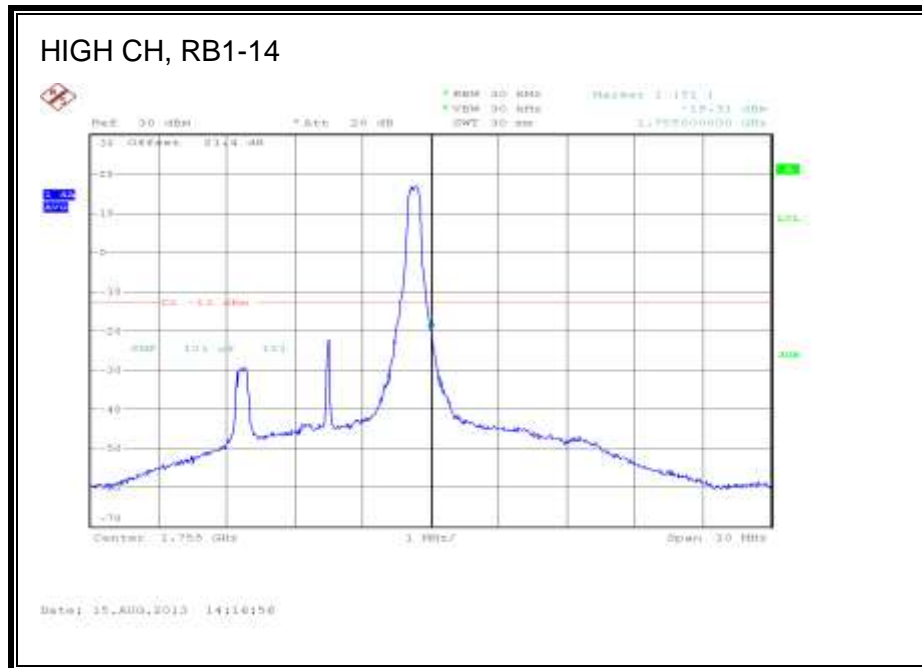
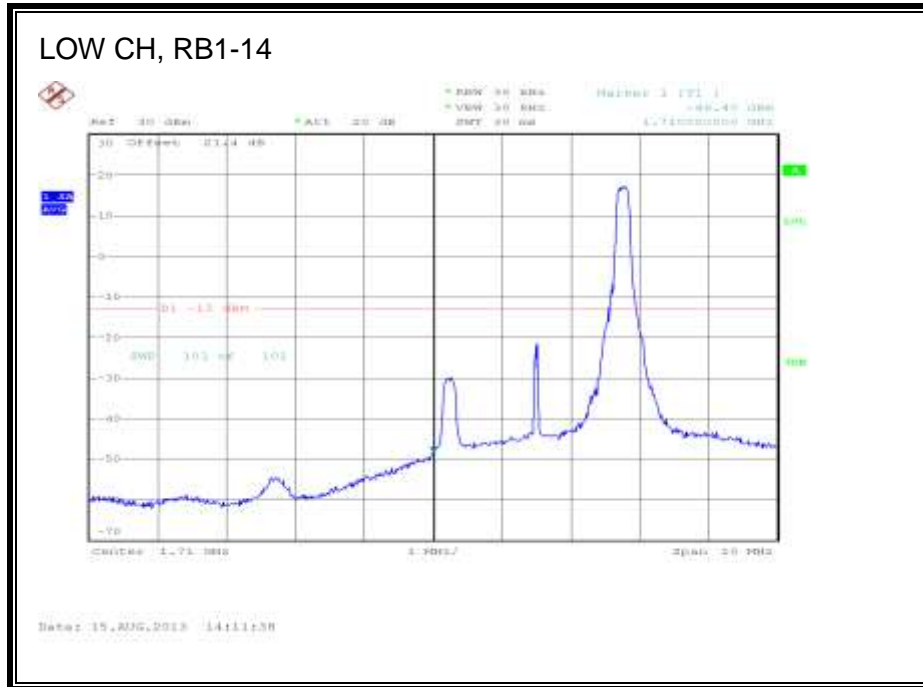


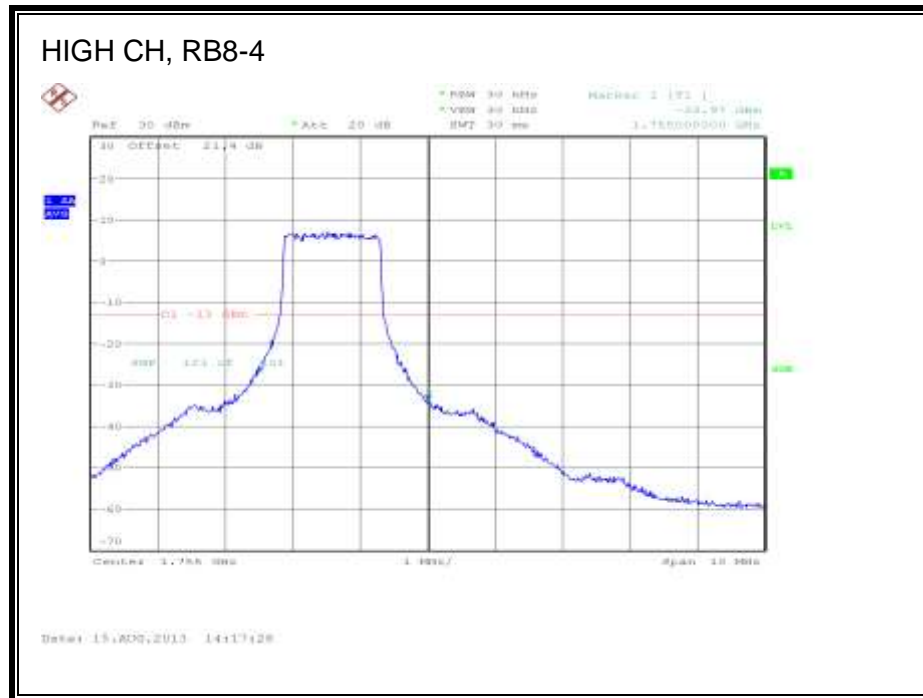
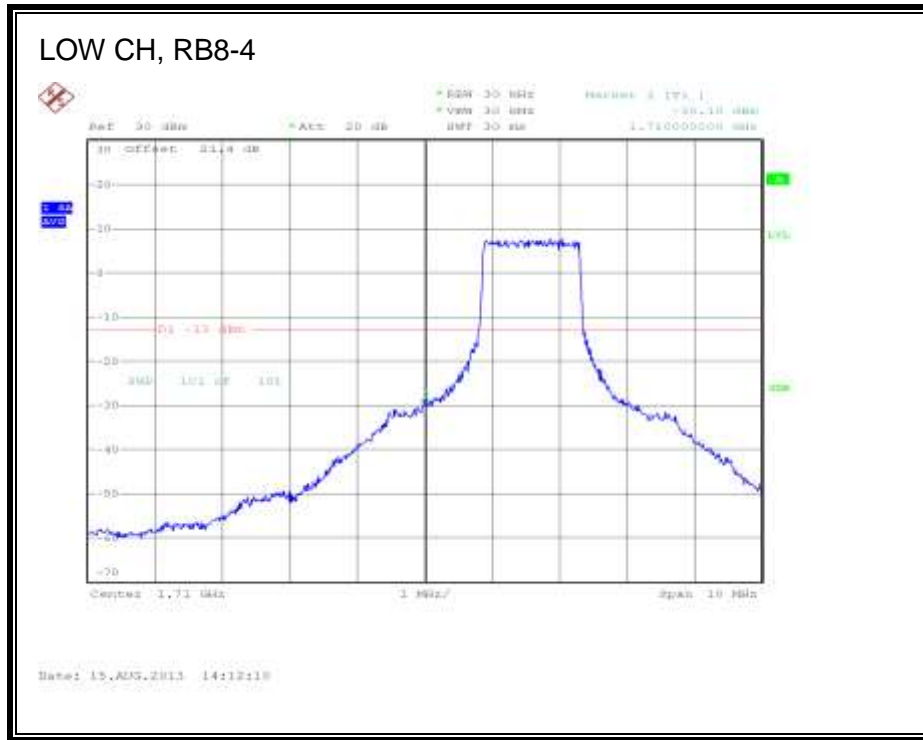


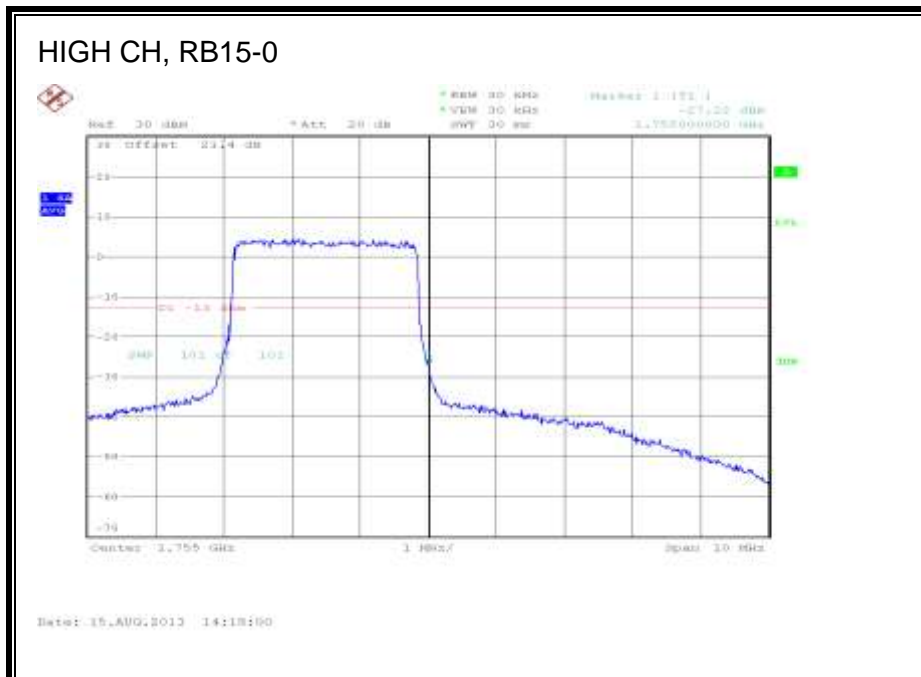
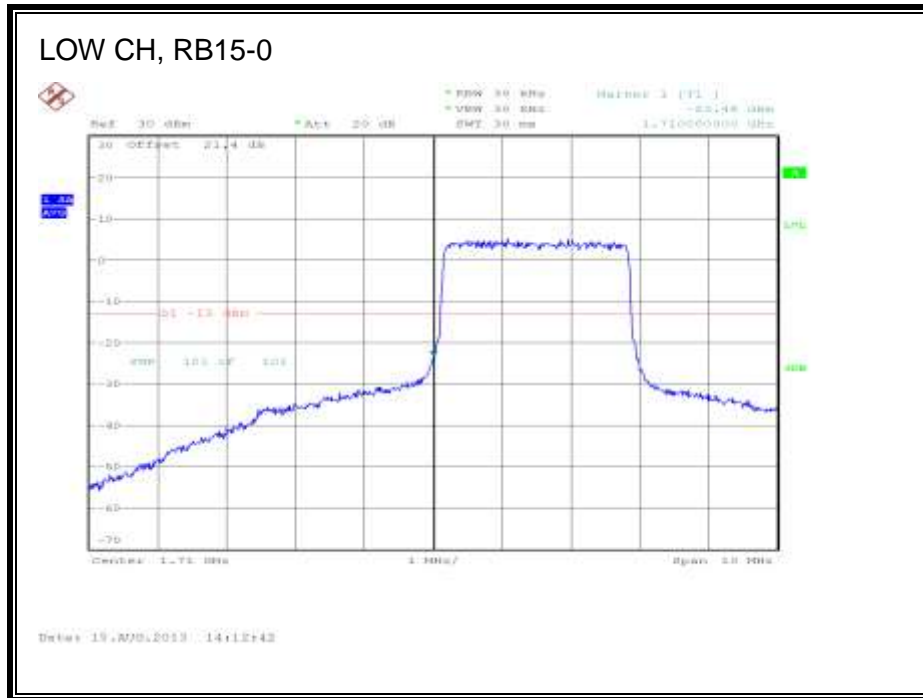


LTE QPSK Band 4 (3.0 MHz BAND WIDTH)

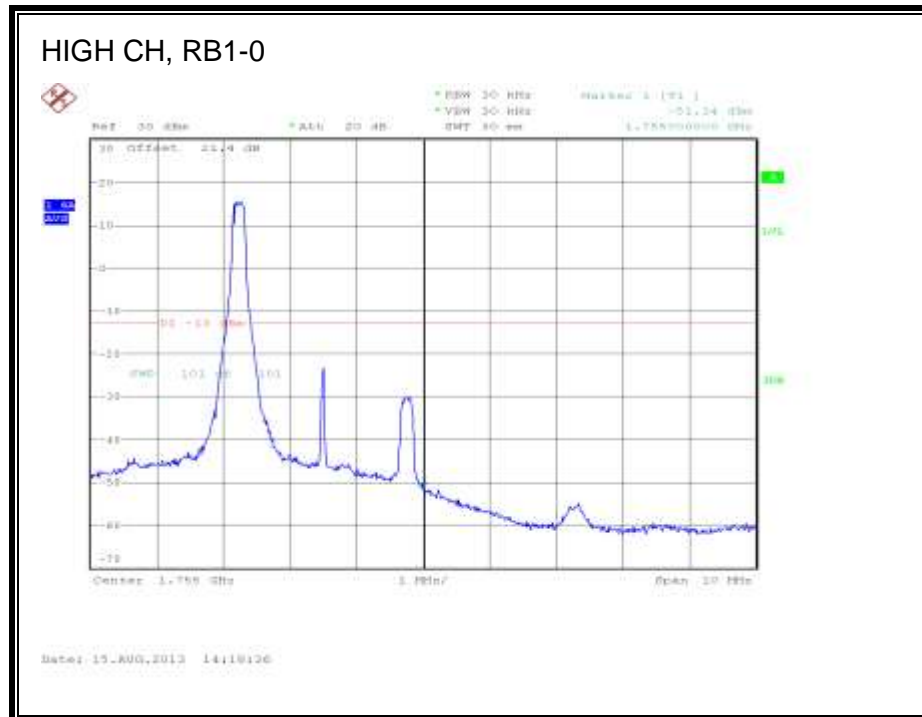
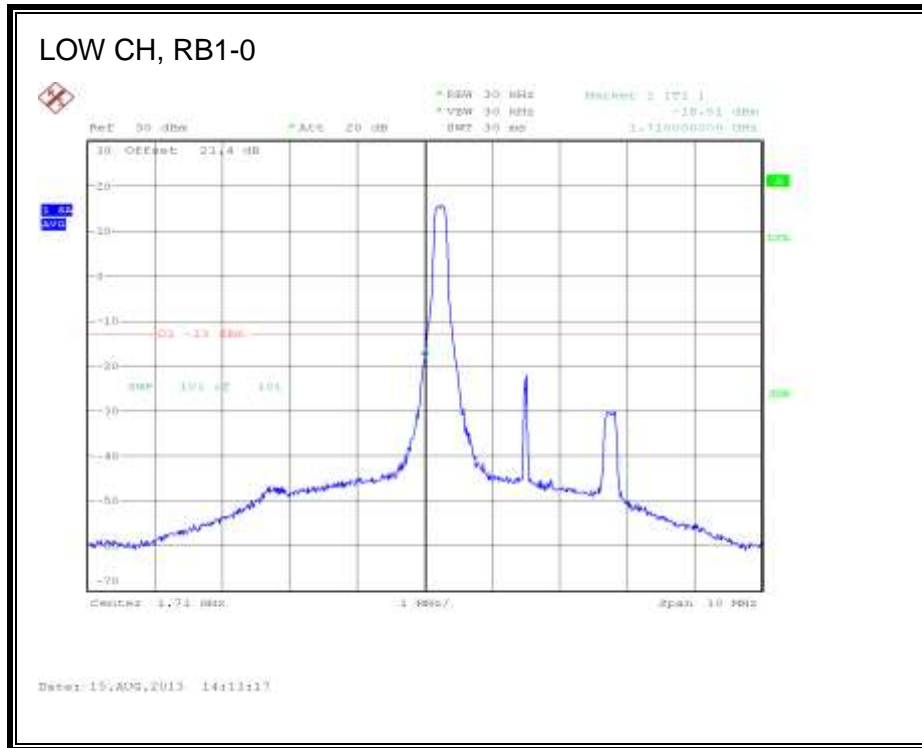


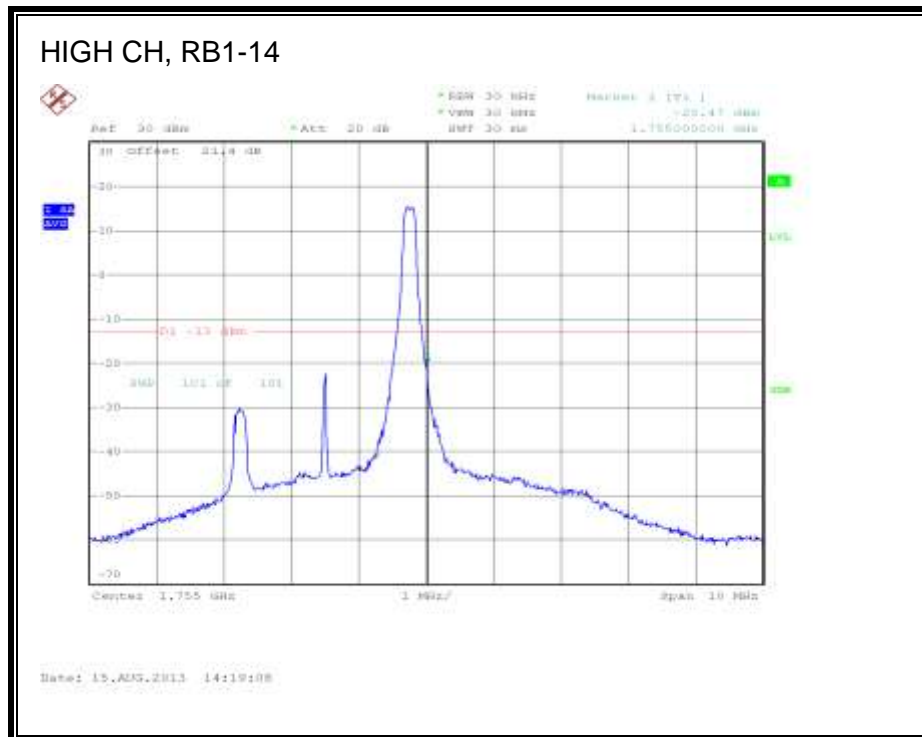
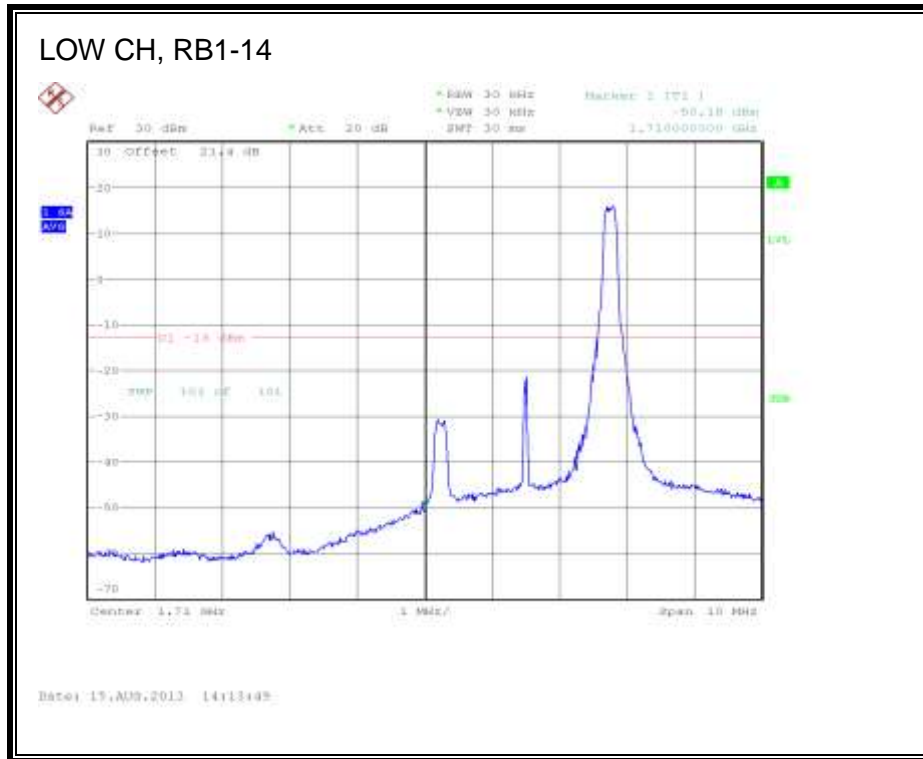


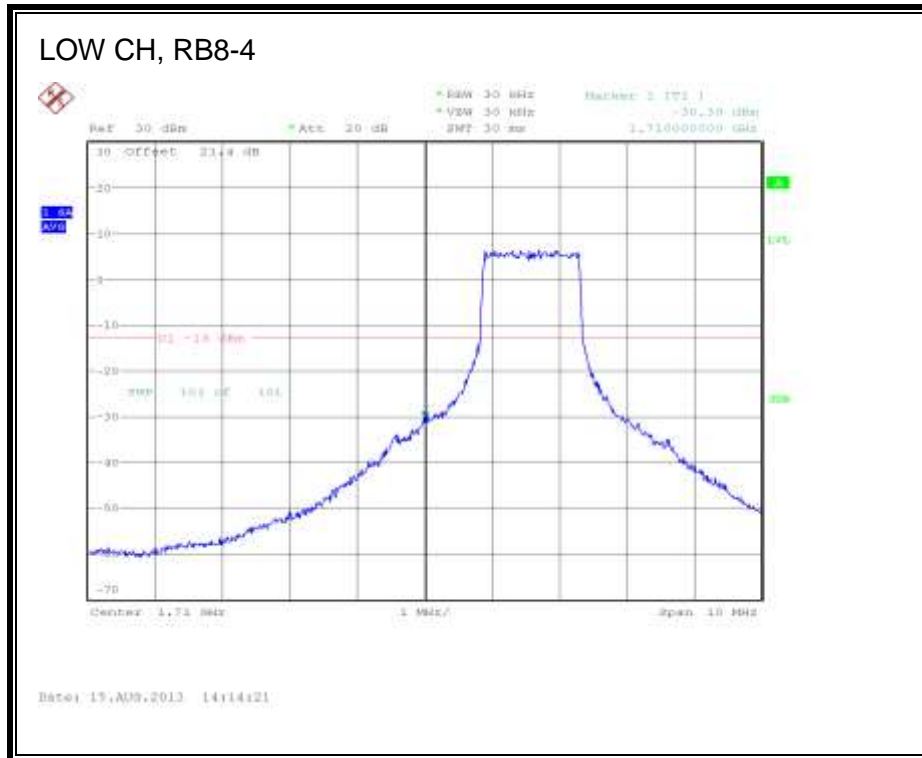




LTE 16QAM Band 4 (3.0 MHz BAND WIDTH)

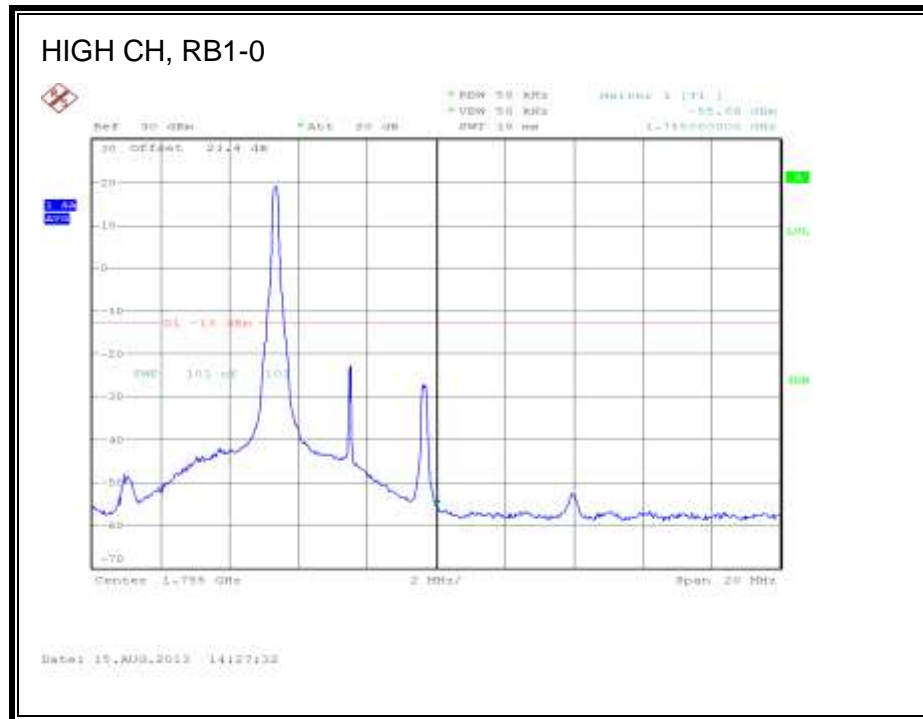
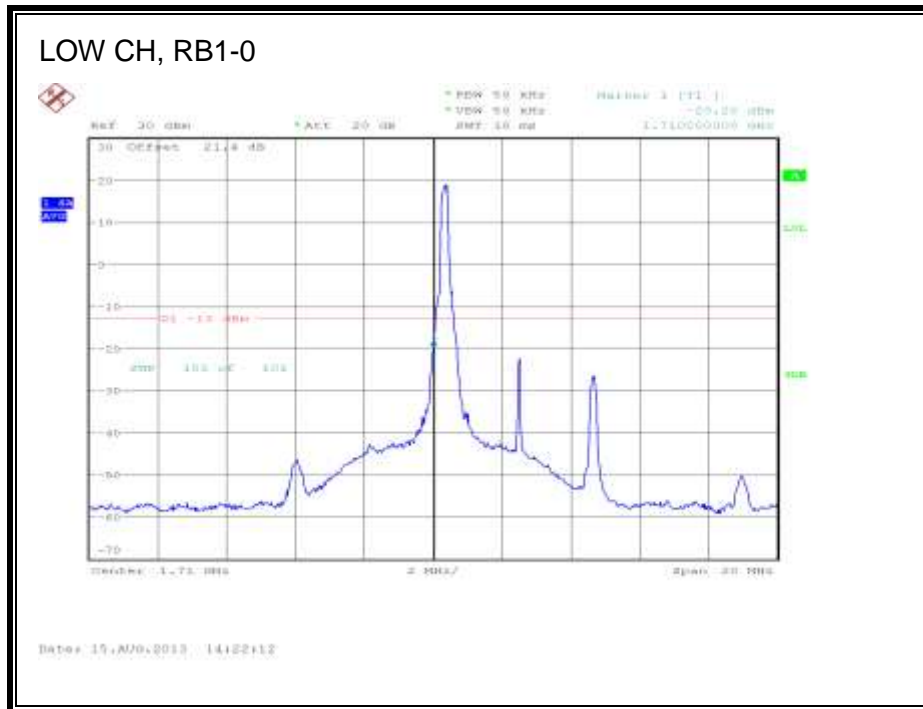


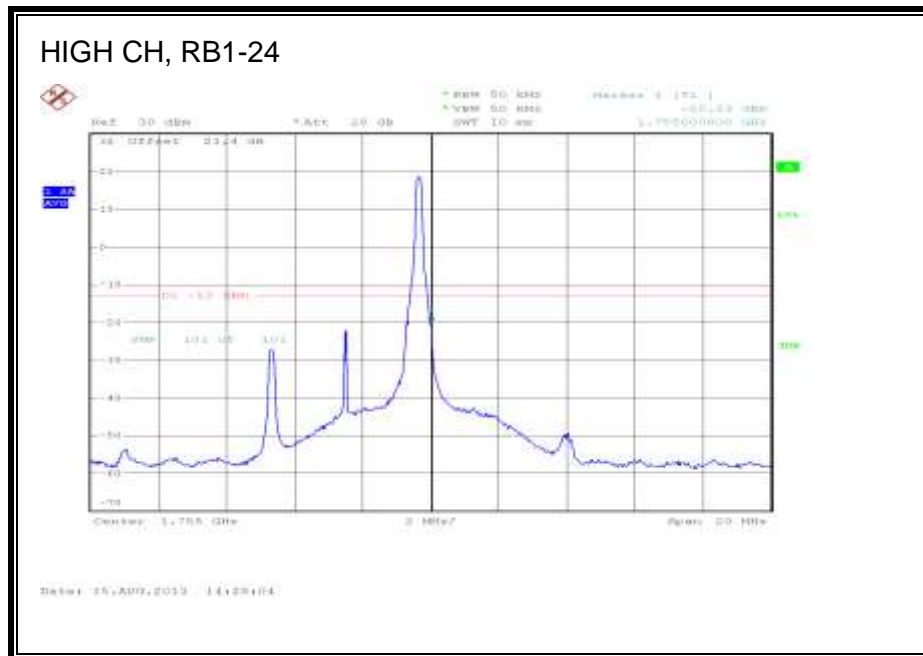
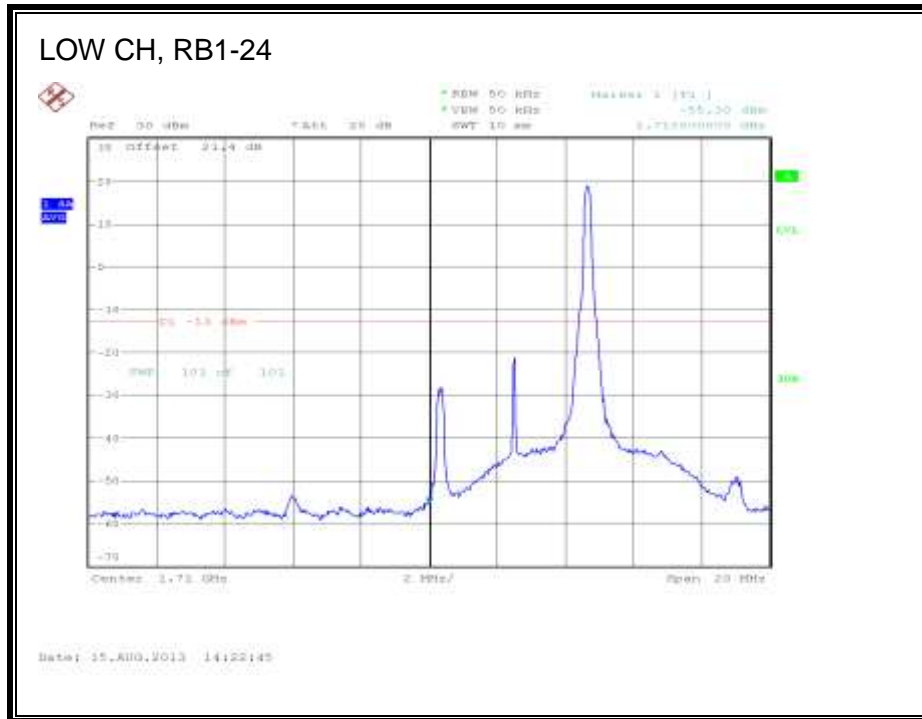


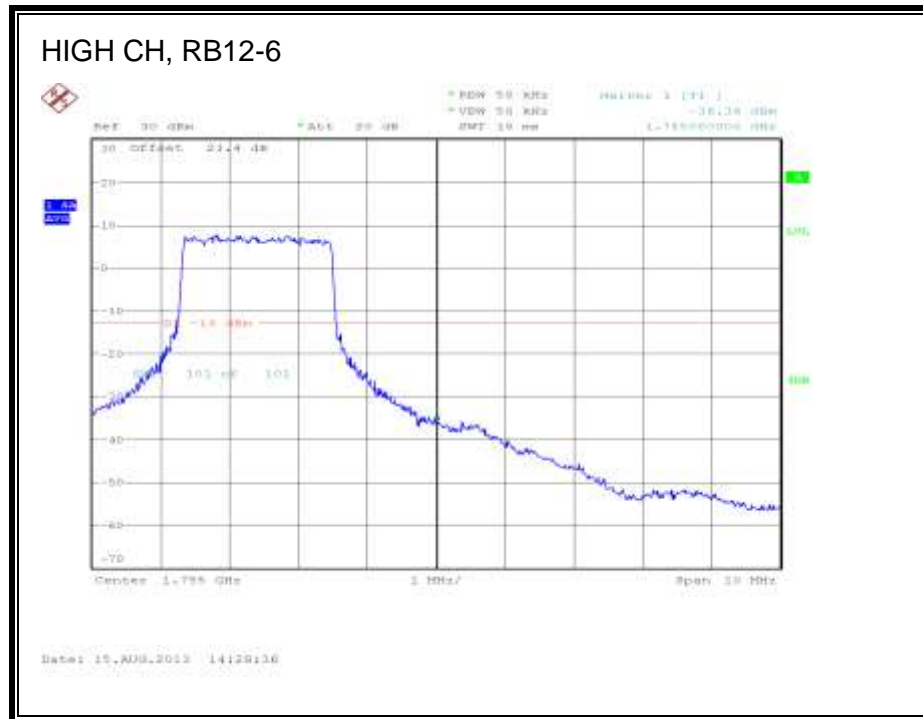




LTE QPSK Band 4 (5.0 MHz BAND WIDTH)

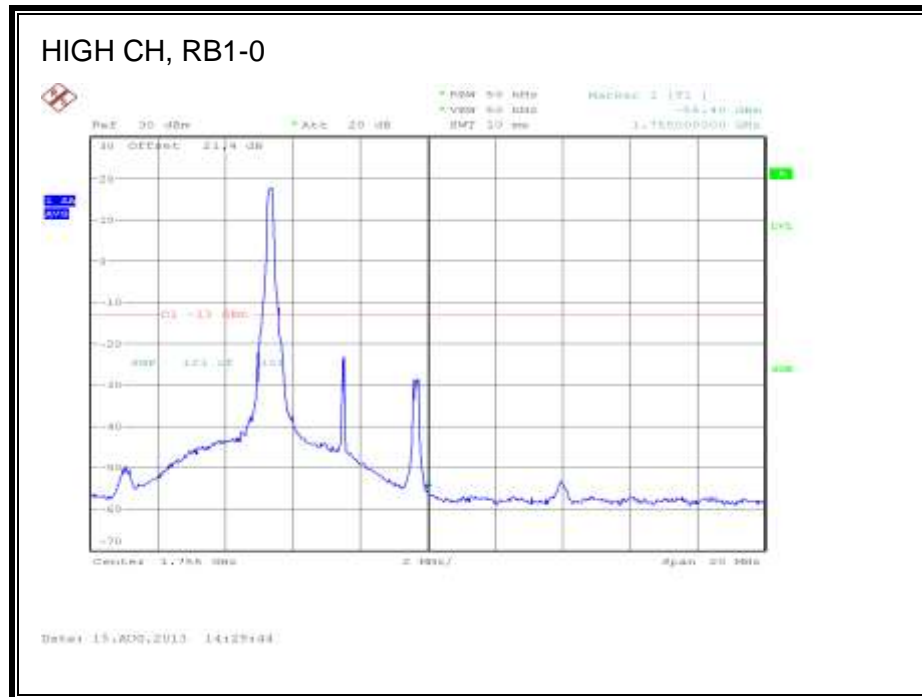
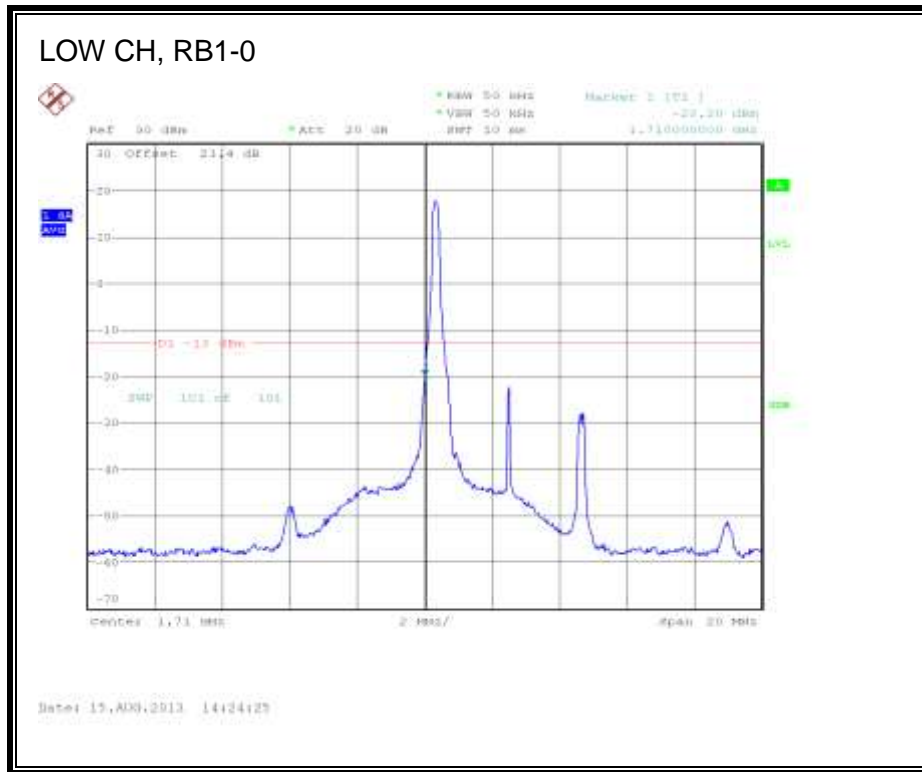


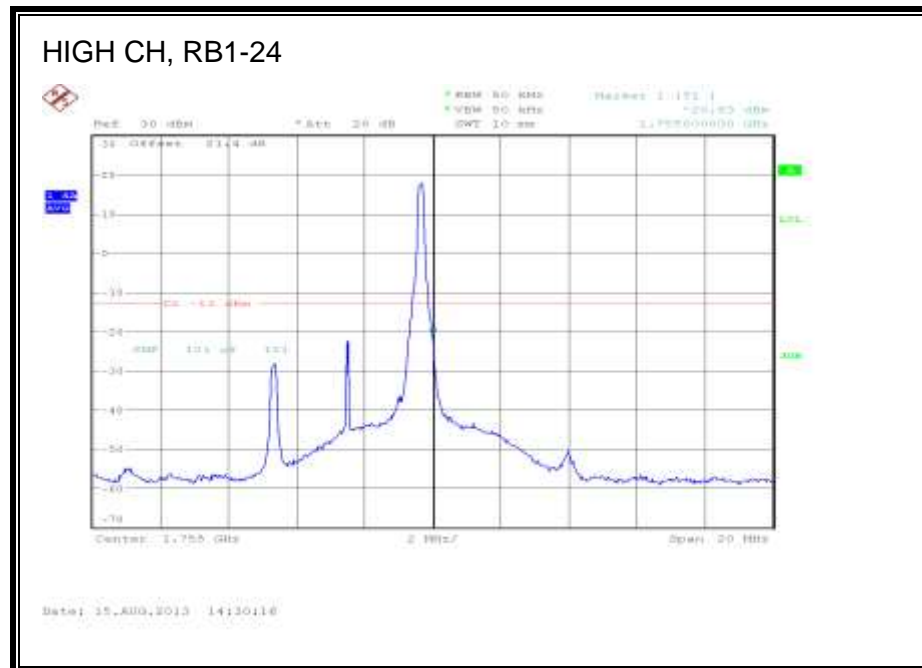
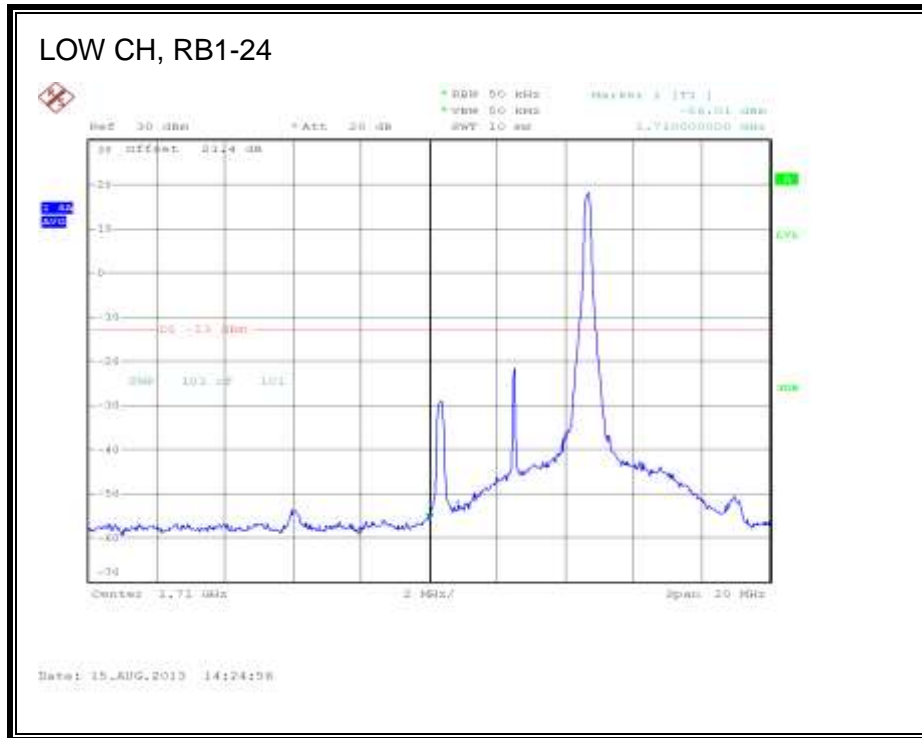


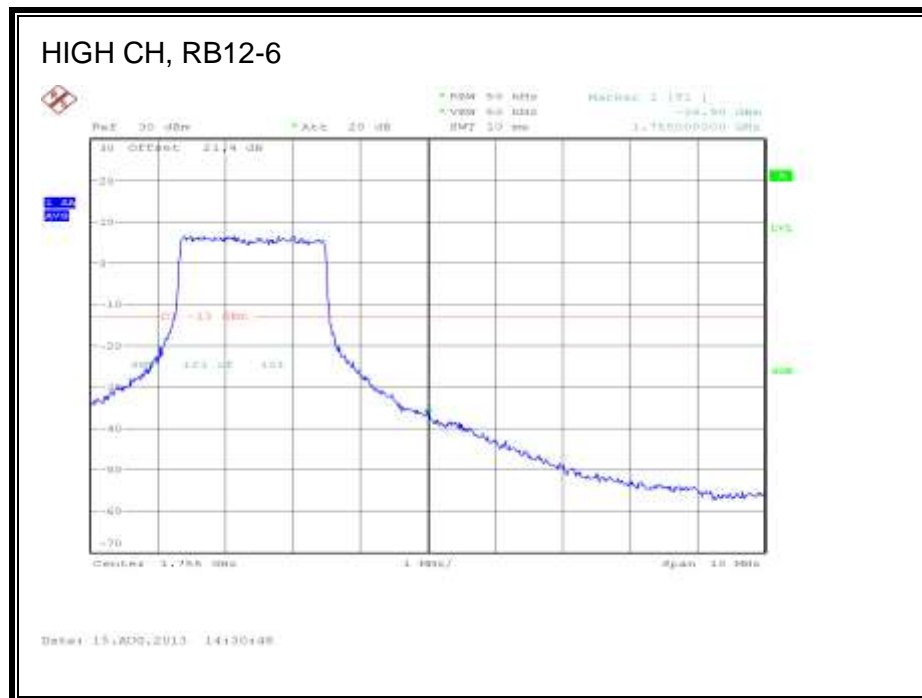


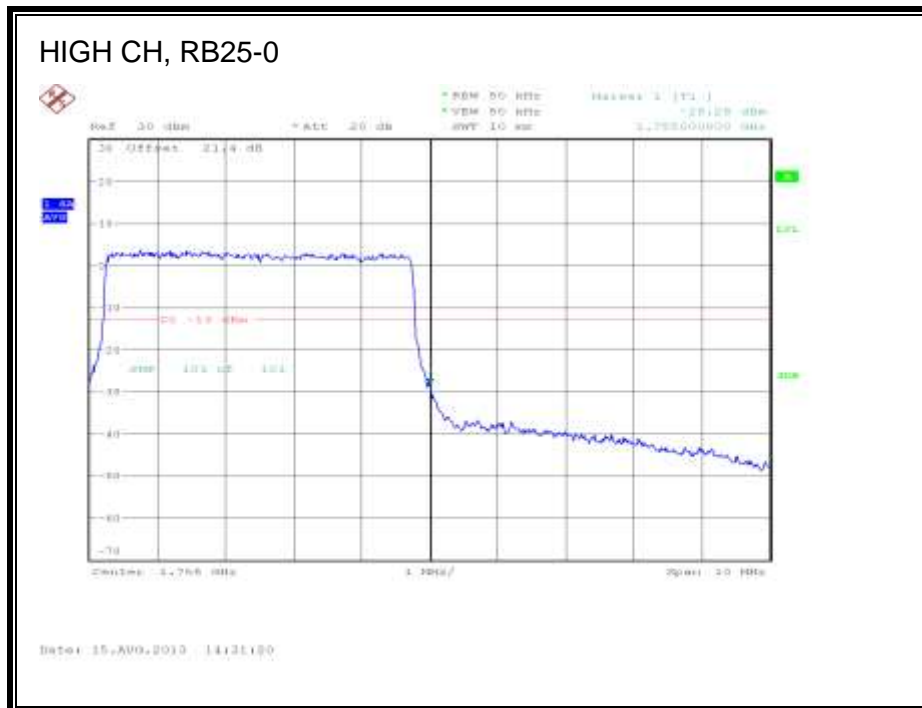
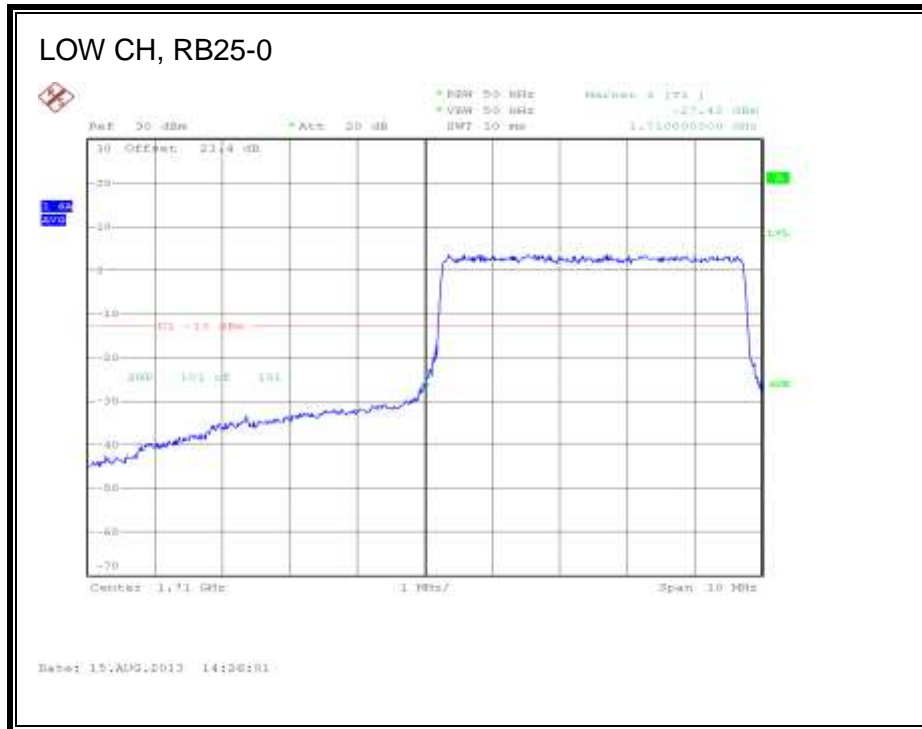


LTE 16QAM Band 4 (5.0 MHz BAND WIDTH)

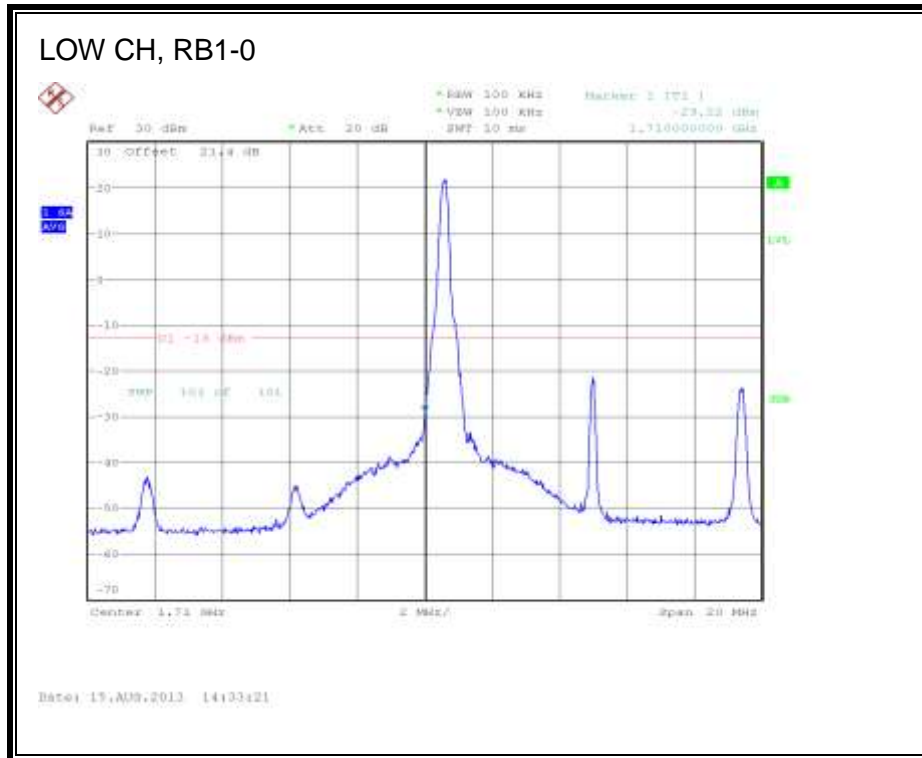


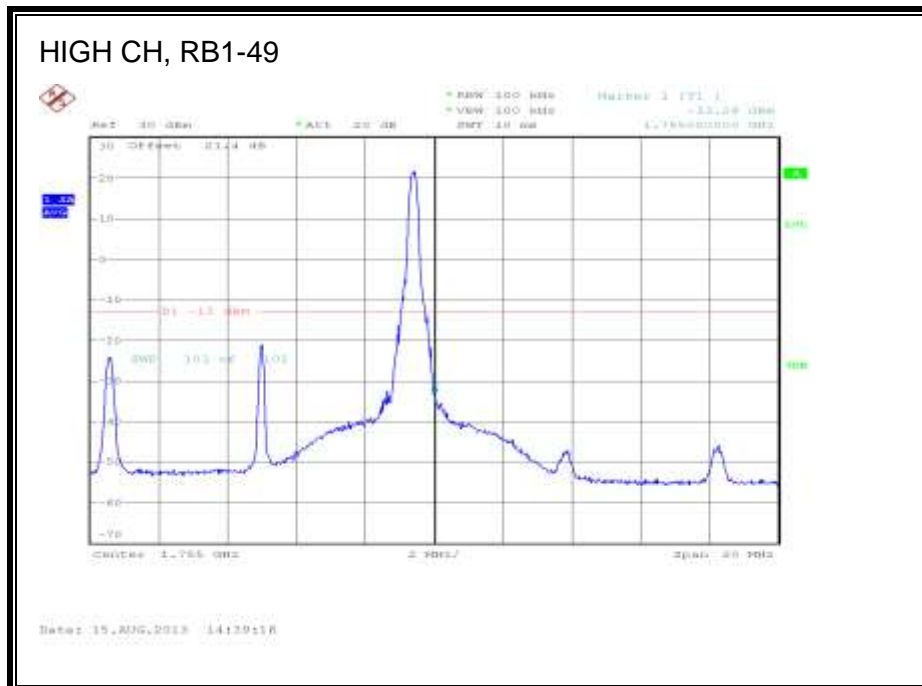
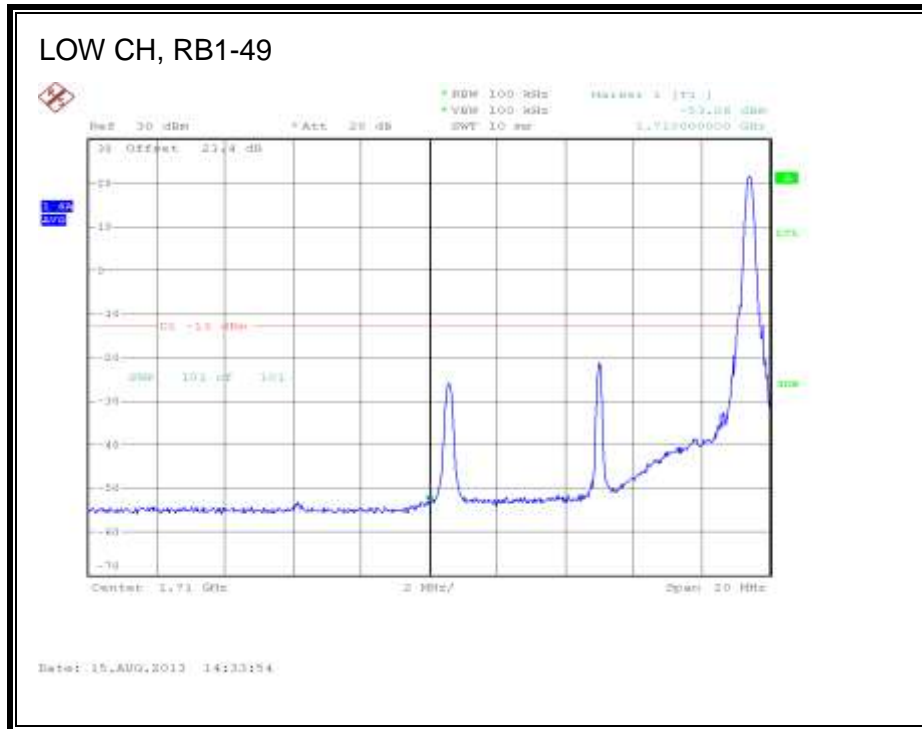


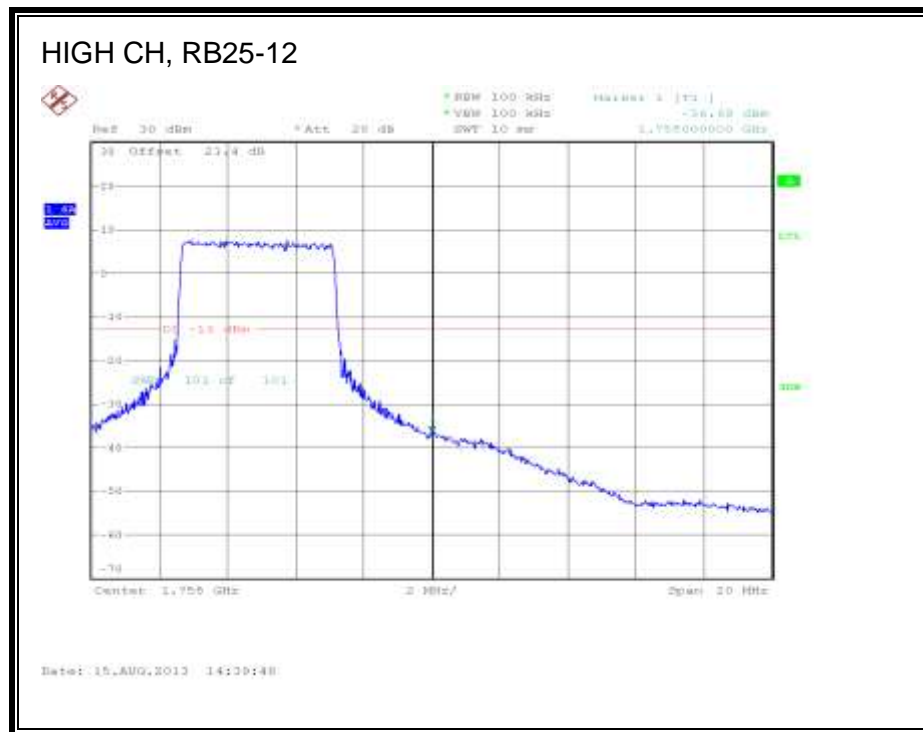


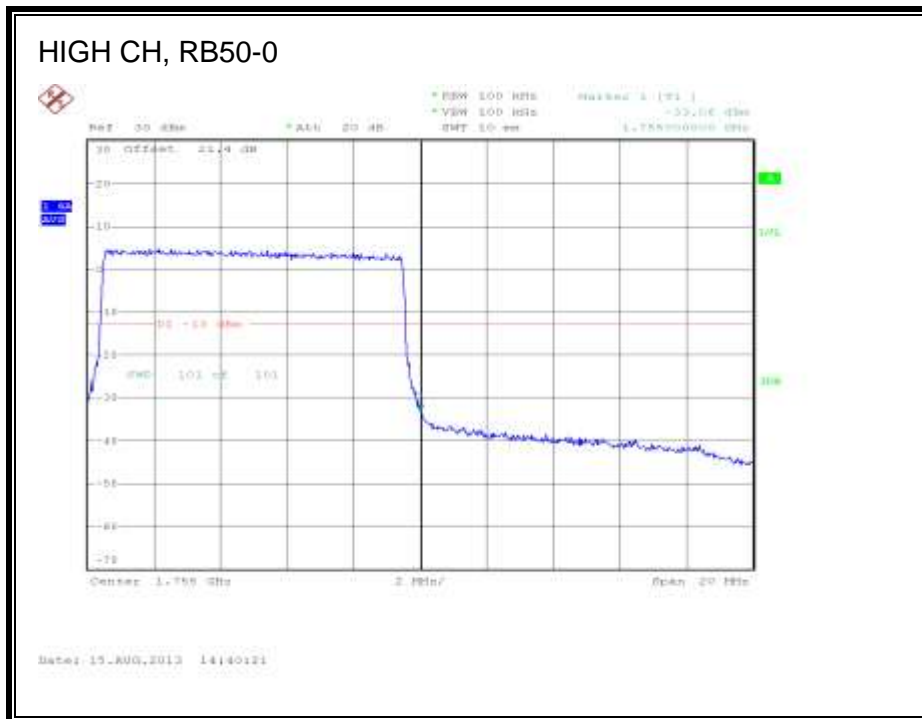


LTE QPSK Band 4 (10.0 MHz BAND WIDTH)









LTE 16QAM Band 4 (10.0 MHz BAND WIDTH)

