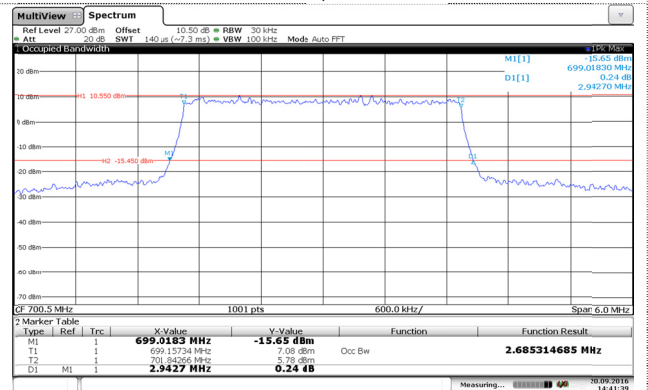
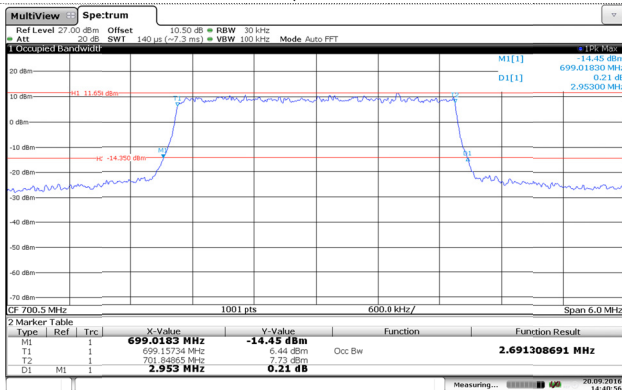


LTE Band 12-3MHz

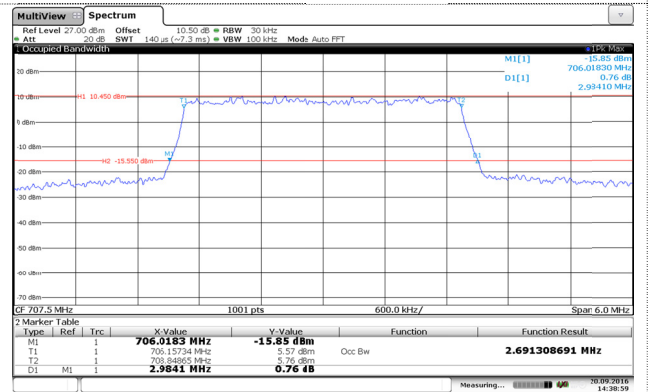
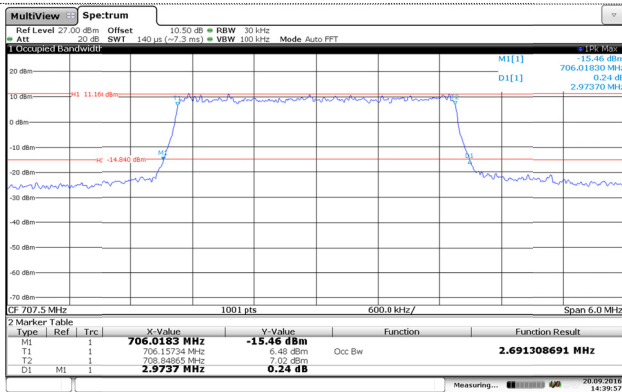
QPSK

16QAM



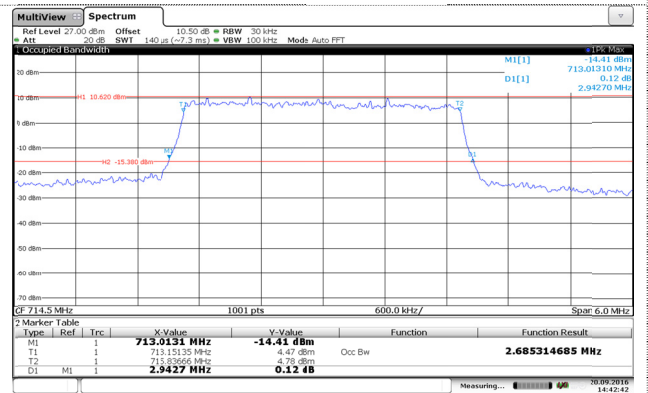
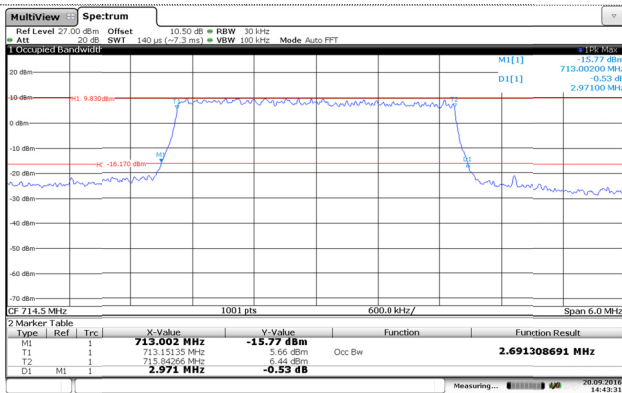
Channel Low

Channel Low



Channel Mid

Channel Mid



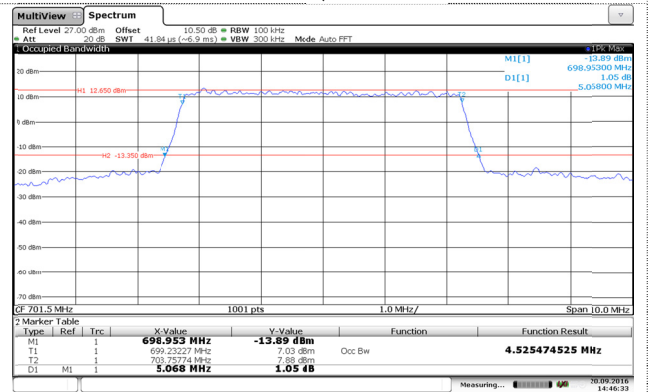
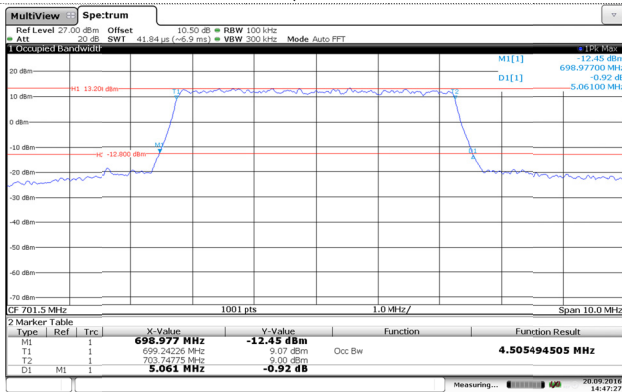
Channel High

Channel High

LTE Band 12-5MHz

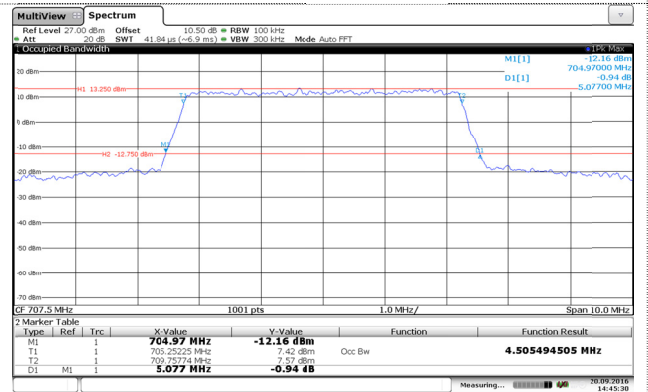
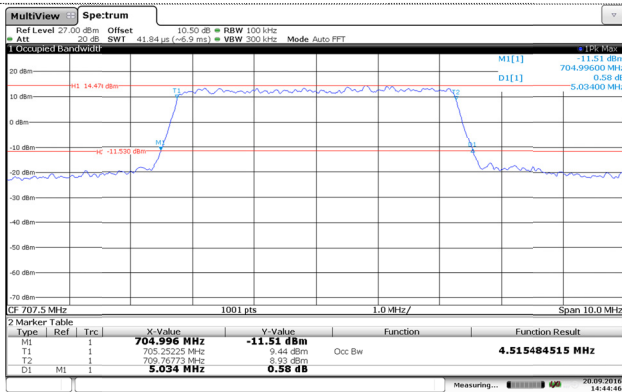
QPSK

16QAM



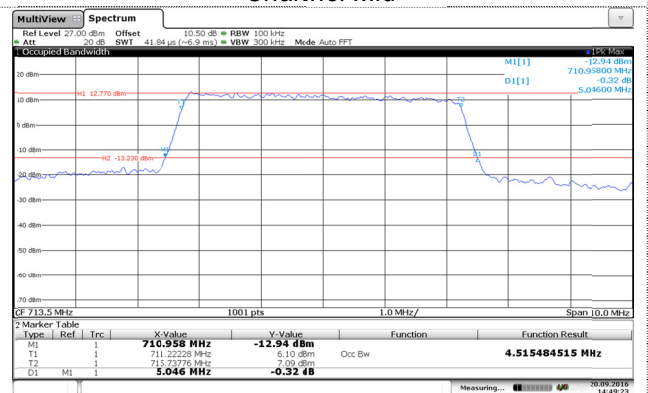
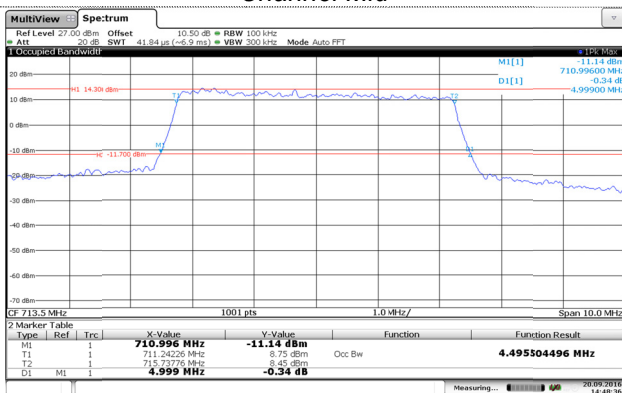
Channel Low

Channel Low



Channel Mid

Channel Mid



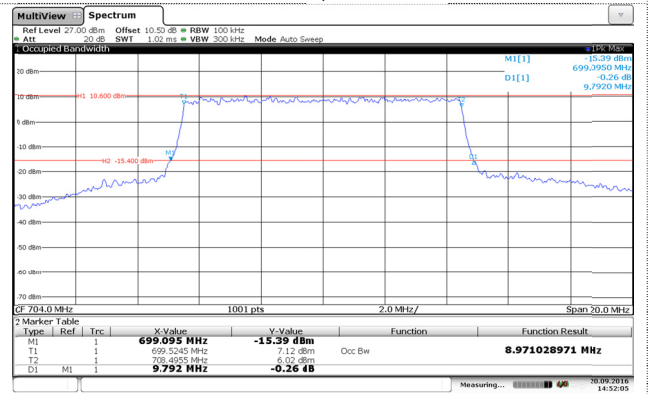
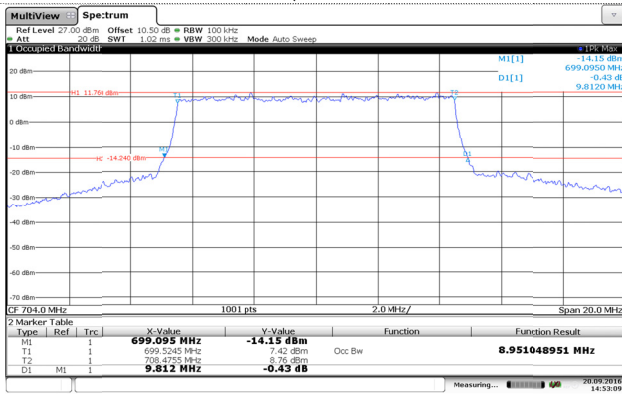
Channel High

Channel High

LTE Band 12-10MHz

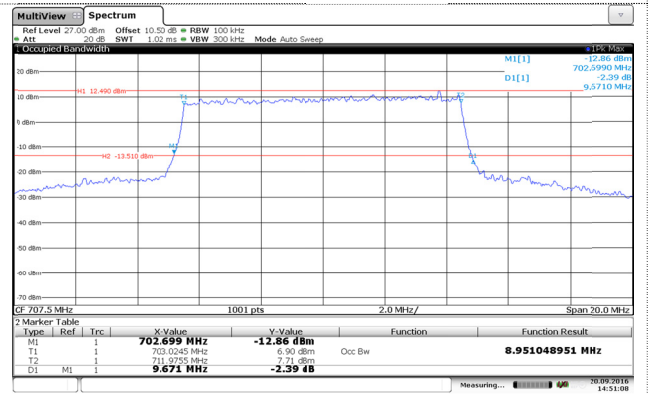
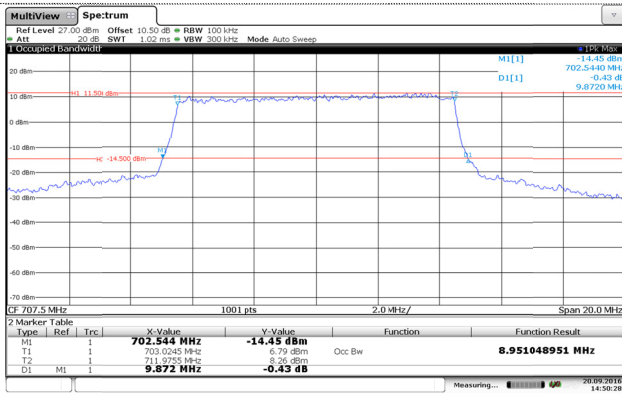
QPSK

16QAM



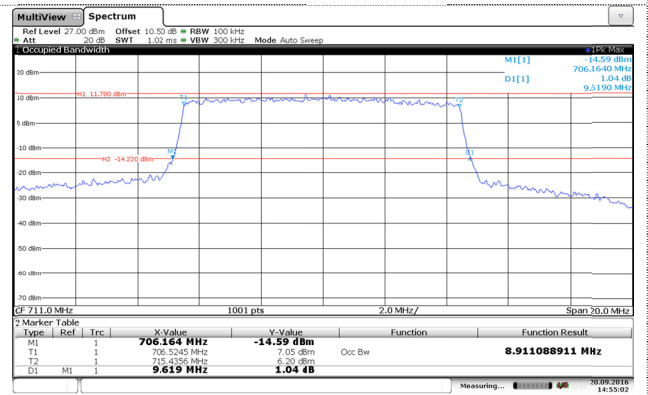
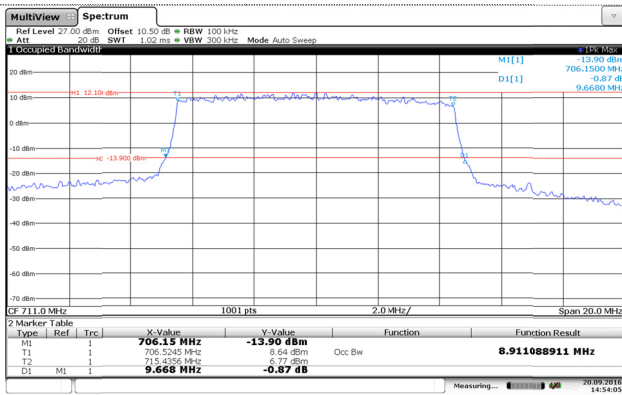
Channel Low

Channel Low



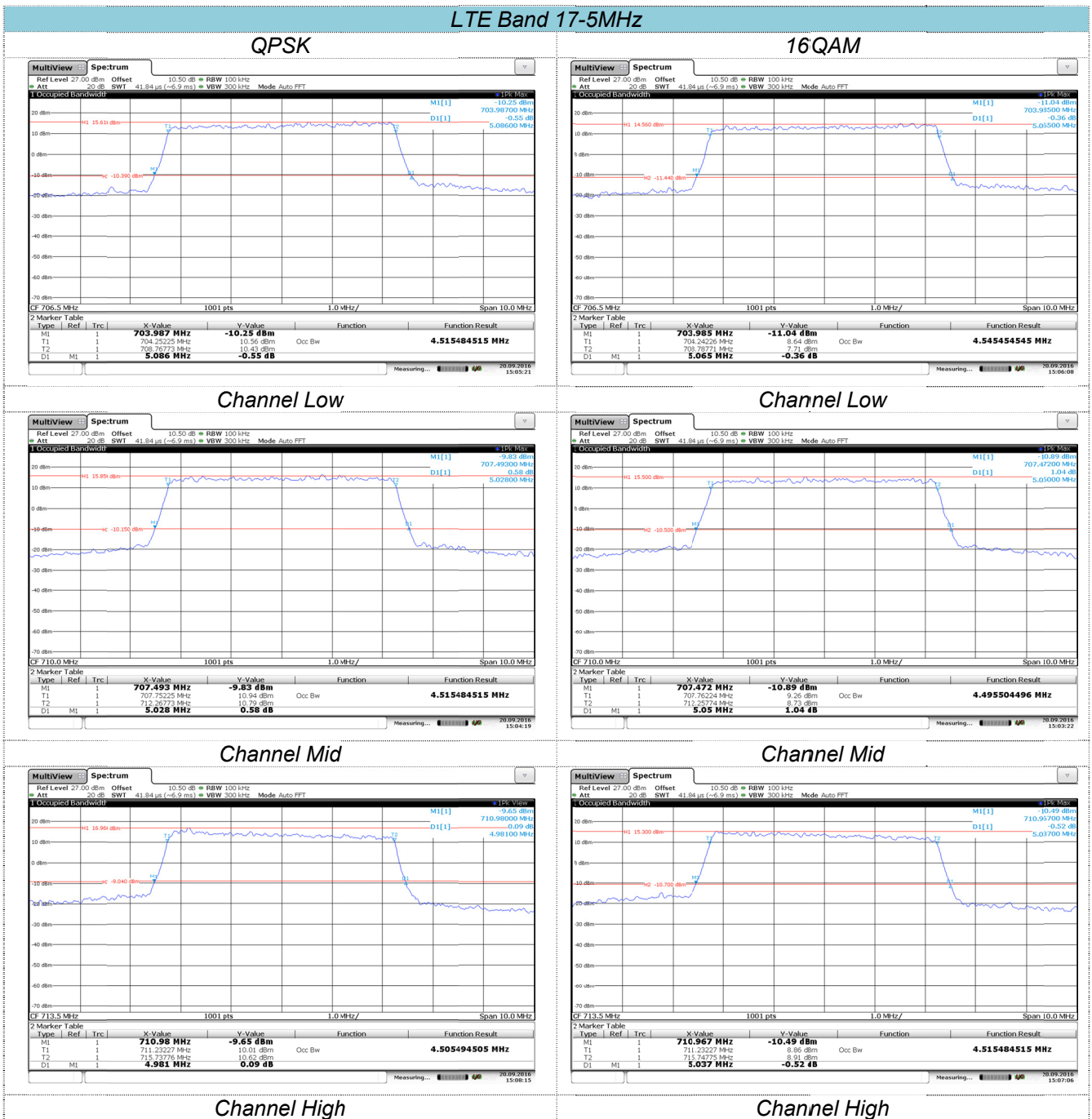
Channel Mid

Channel Mid



Channel High

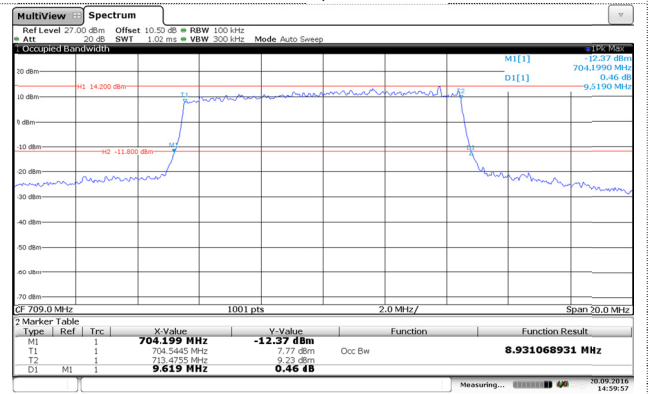
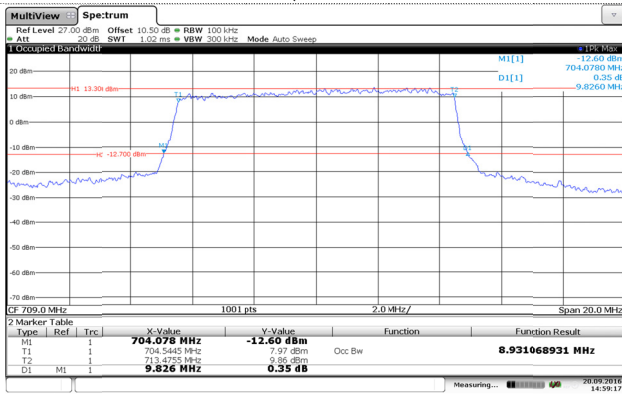
Channel High



LTE Band 17-10MHz

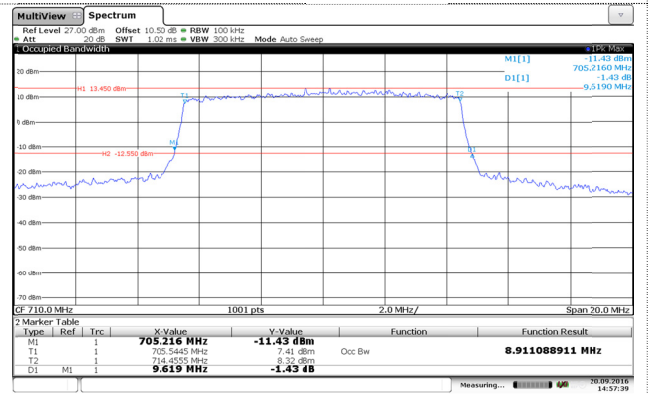
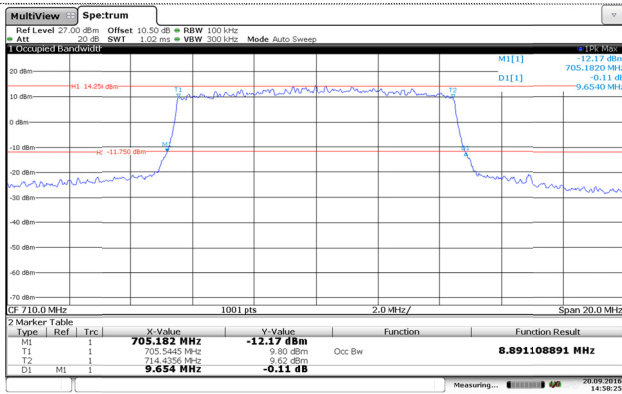
QPSK

16QAM



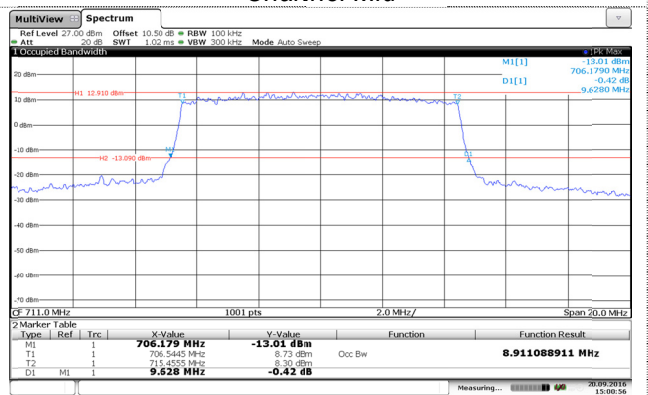
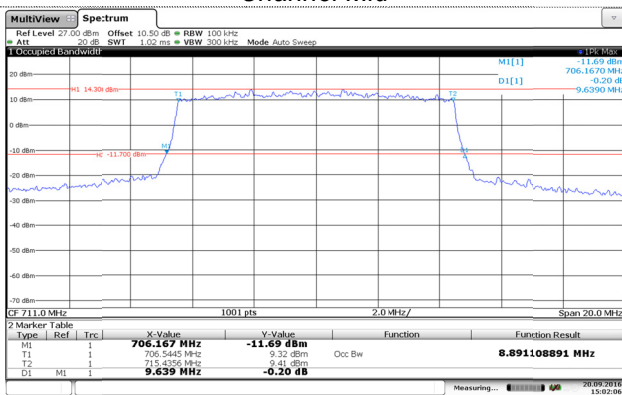
Channel Low

Channel Low



Channel Mid

Channel Mid



Channel High

Channel High

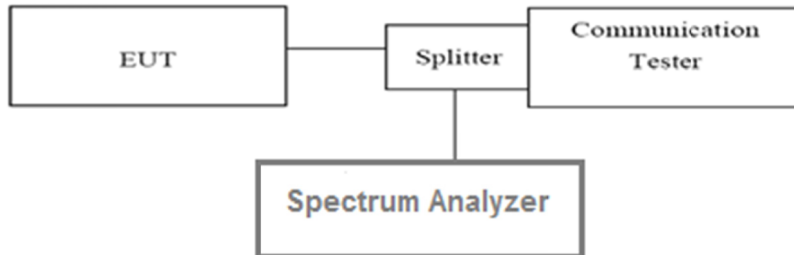
4.3. Out of band emission at antenna terminals

LIMIT

Part 24.238 and Part 22.917 specify that 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.

The specification that emissions shall be attenuated below the transmitter power (P) by at least $43 + 10 \log(P)$ dB, translates in the relevant power range (1 to 0.001 W) to -13 dBm. At 1 W the specified minimum attenuation becomes 43 dB and relative to a 30 dBm (1 W) carrier becomes a limit of -13 dBm. At 0.001 W (0 dBm) the minimum attenuation is 13 dB, which again yields a limit of -13 dBm. In this way a translation of the specification from relative to absolute terms is carried out.

TEST CONFIGURATION



TEST PROCEDURE

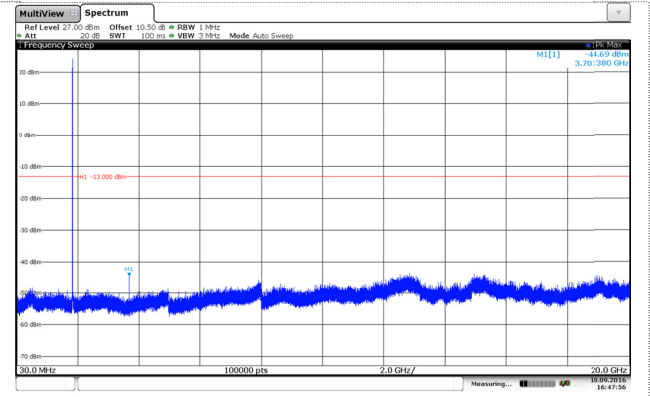
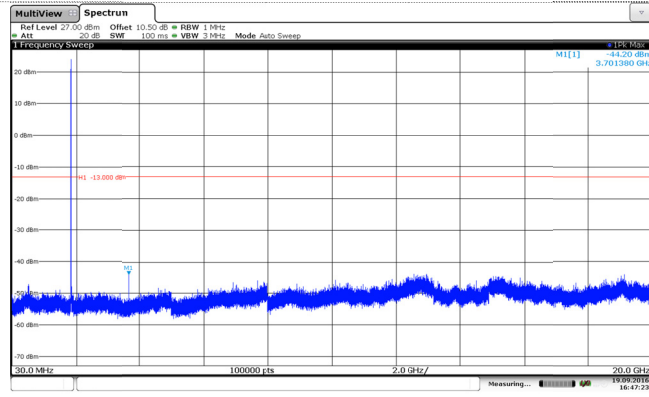
1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
2. The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.
3. For the out of band: Set the RBW= 1MHz, VBW = 3MHz, Start=30MHz, Stop= 10th harmonic.

TEST RESULTS

LTE Band 2-1.4MHz

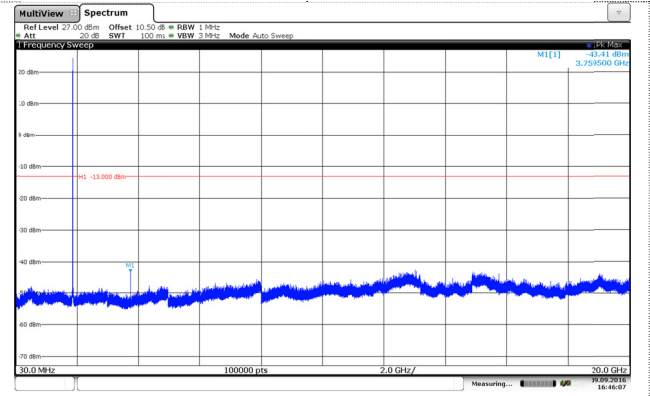
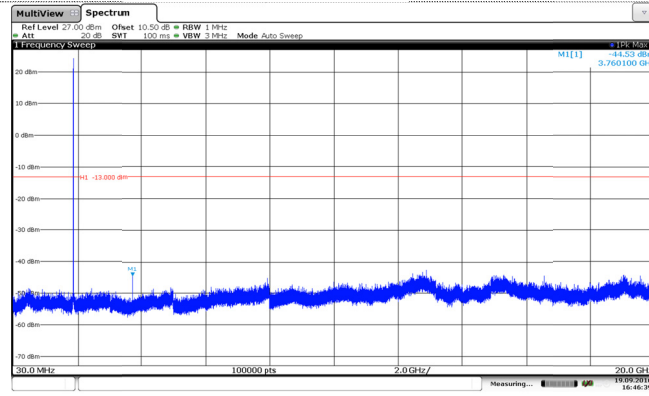
QPSK

16QAM



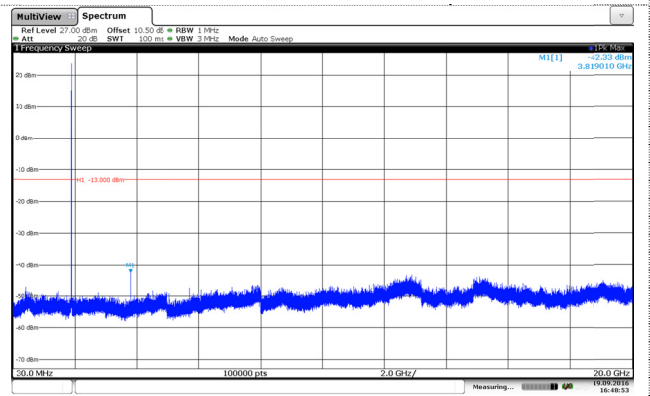
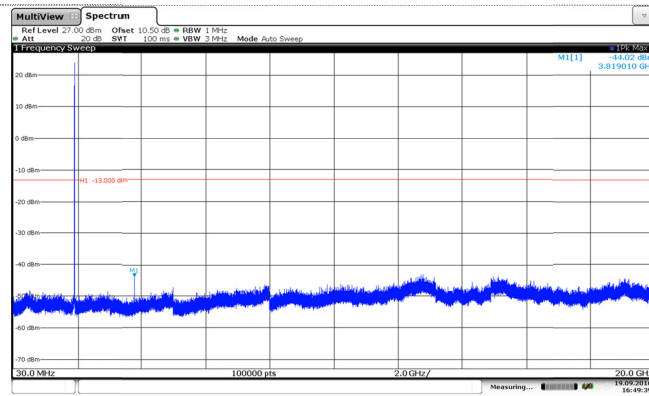
Channel Low

Channel Low



Channel Mid

Channel Mid



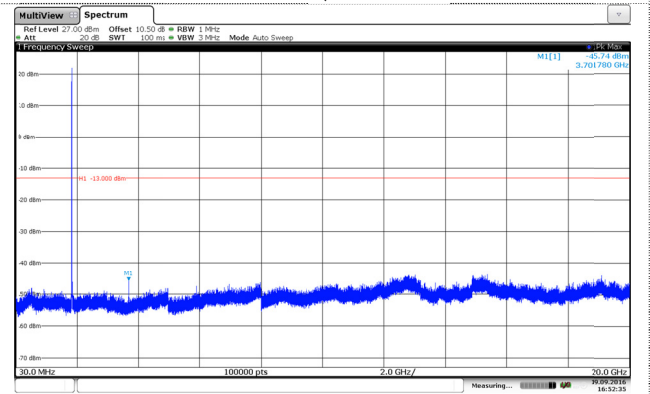
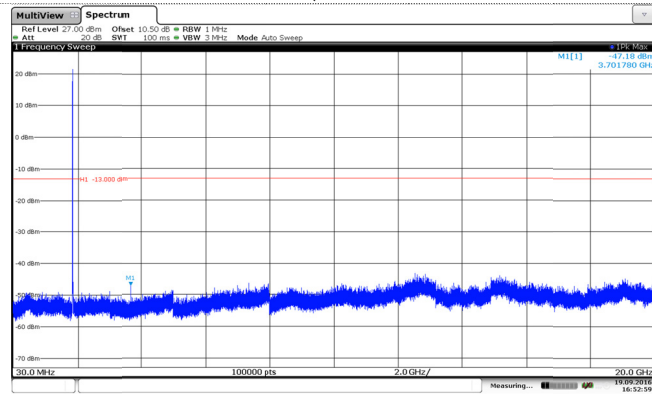
Channel High

Channel High

LTE Band 2-3MHz

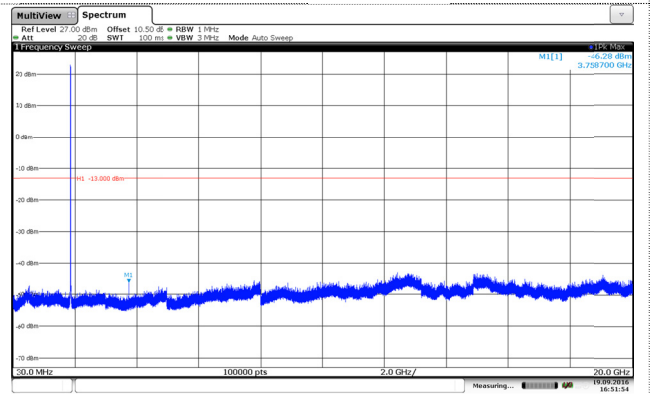
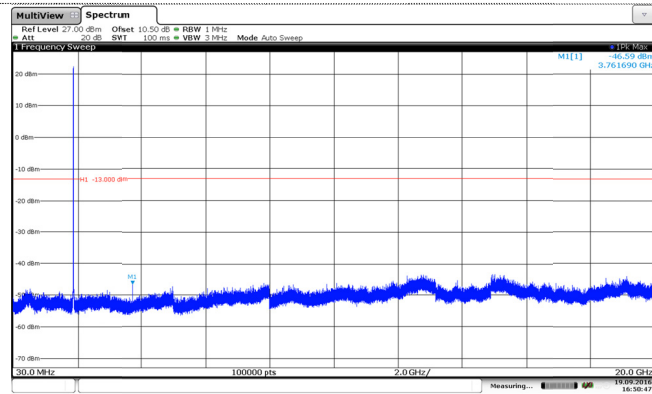
QPSK

16QAM



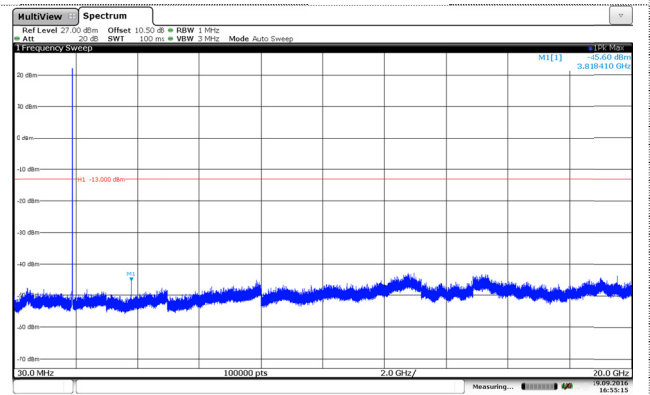
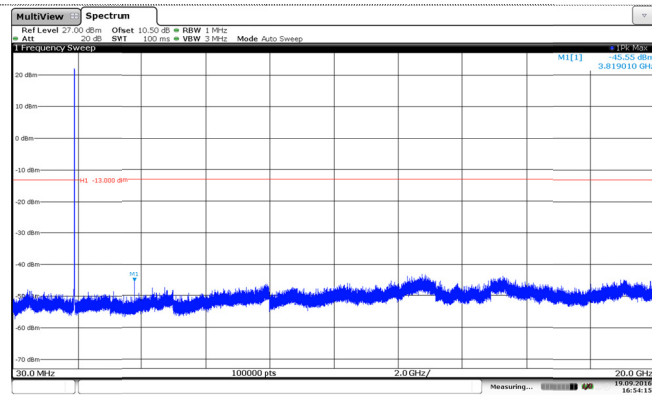
Channel Low

Channel Low



Channel Mid

Channel Mid



Channel High

Channel High