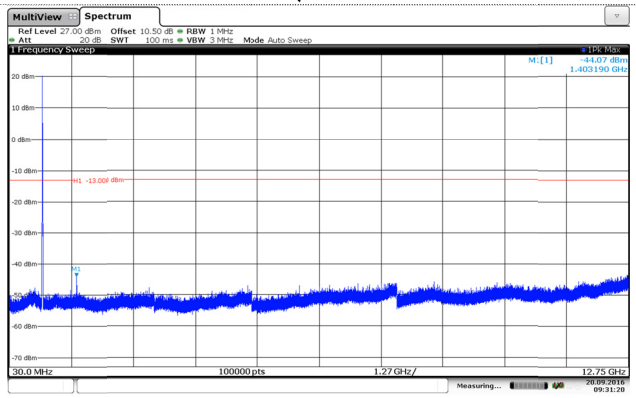
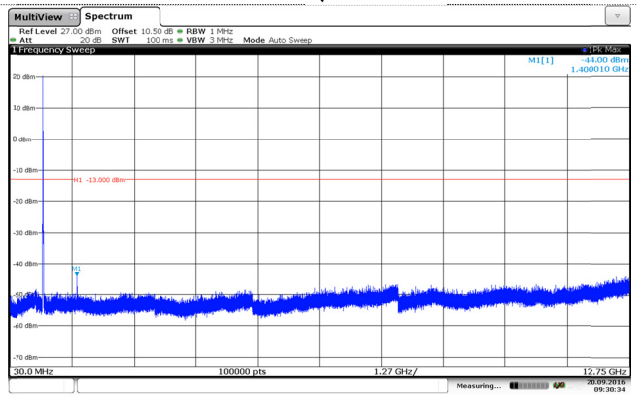
LTE Band 12-5MHz

QPSK

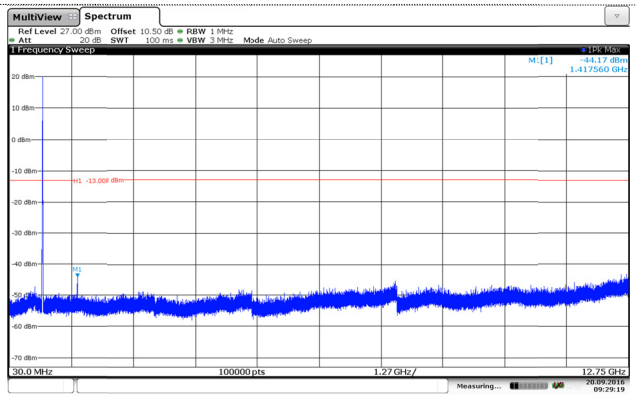


Channel Low

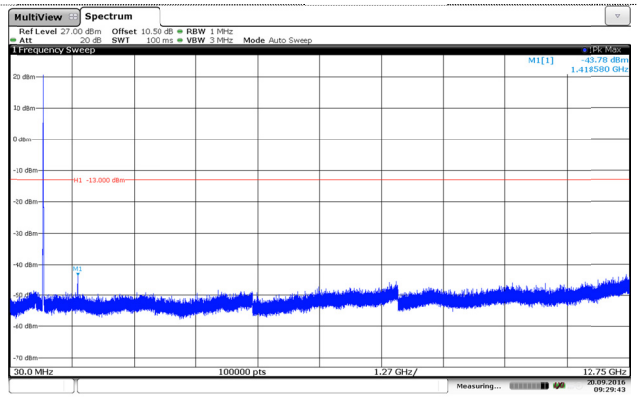
16QAM



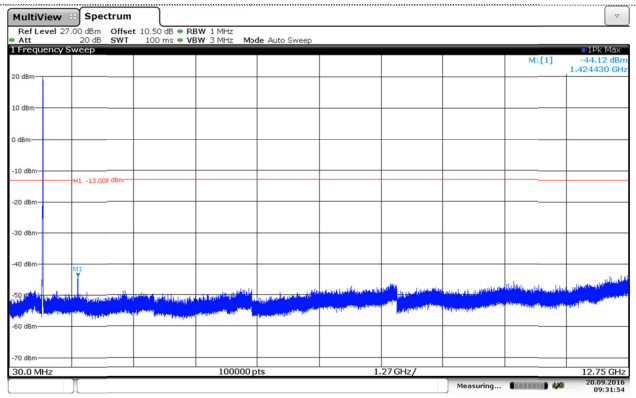
Channel Low



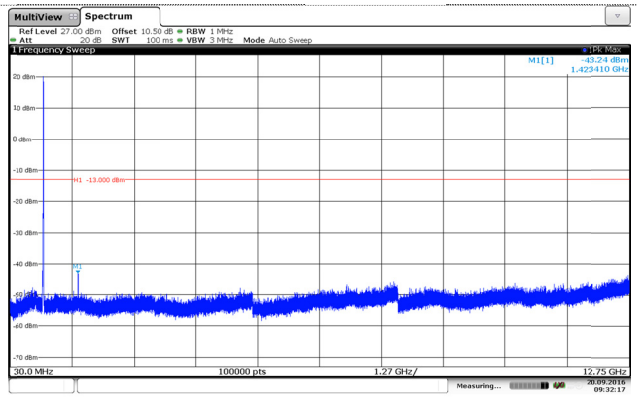
Channel Mid



Channel Mid



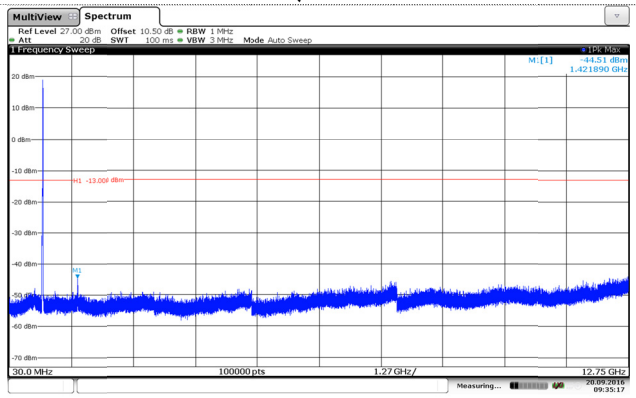
Channel High



Channel High

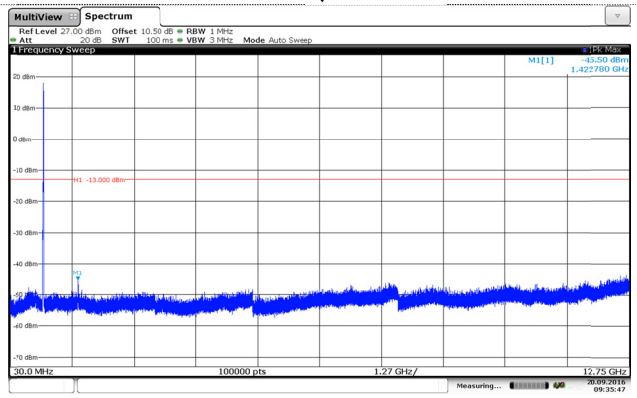
LTE Band 12-10MHz

QPSK

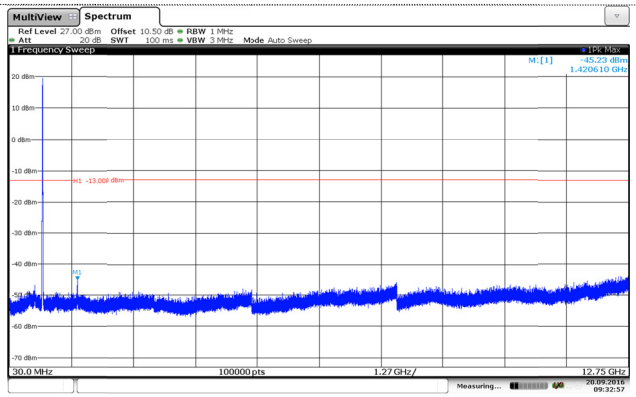


Channel Low

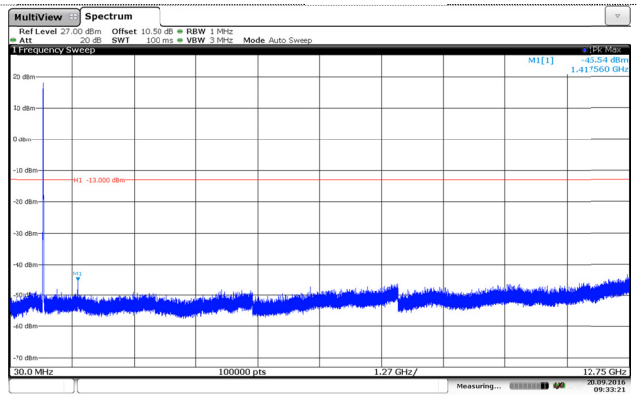
16QAM



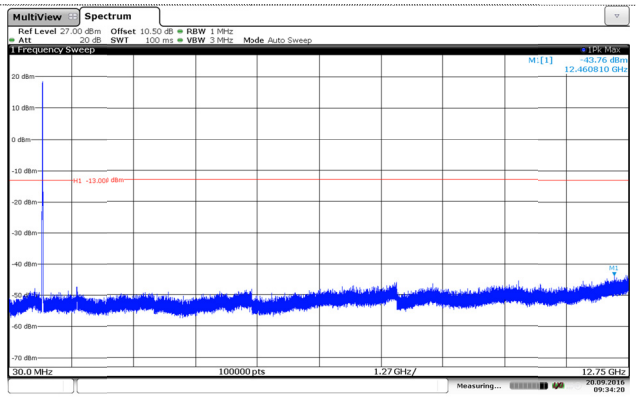
Channel Low



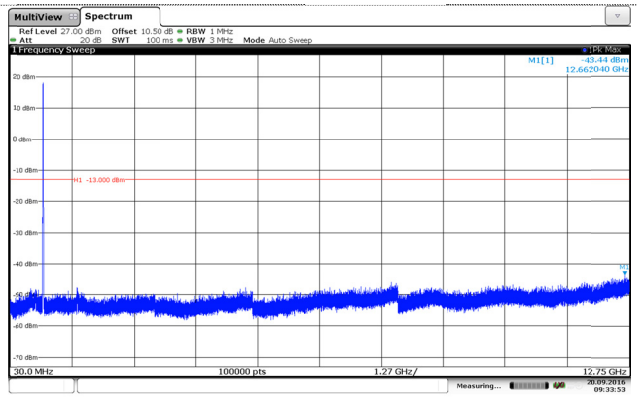
Channel Mid



Channel Mid



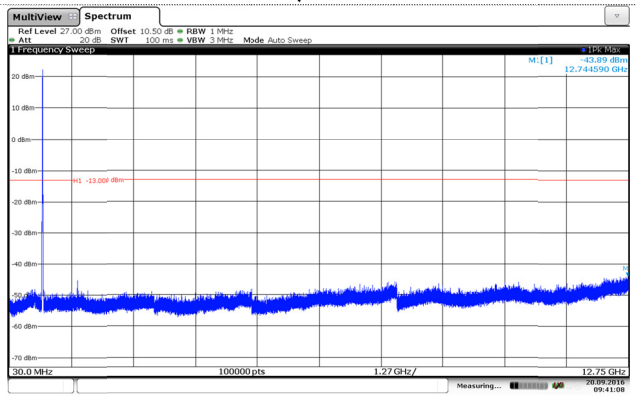
Channel High



Channel High

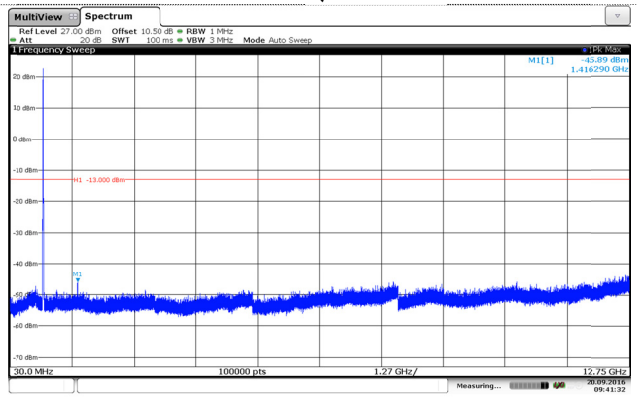
LTE Band 17-5MHz

QPSK

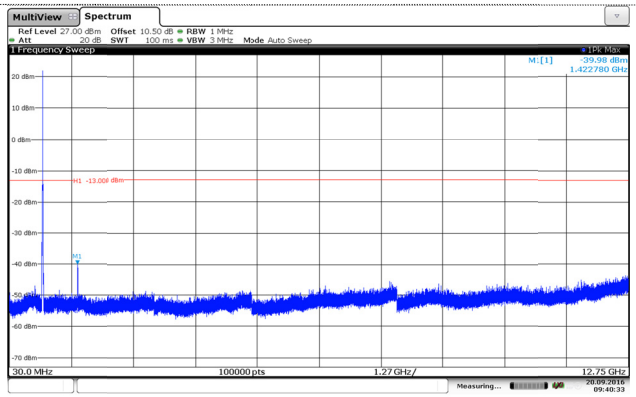


Channel Low

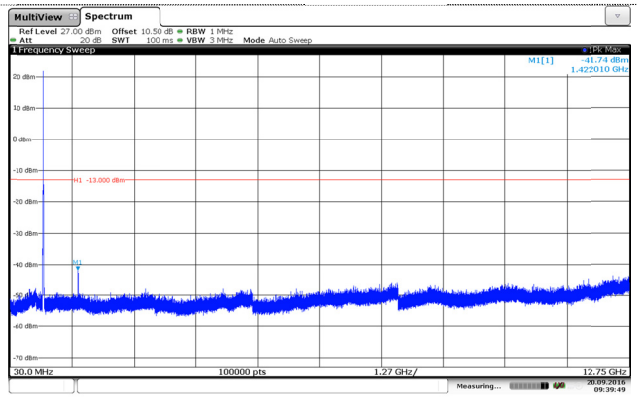
16QAM



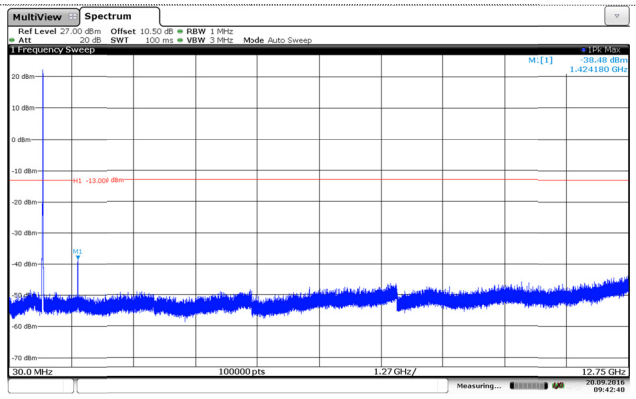
Channel Low



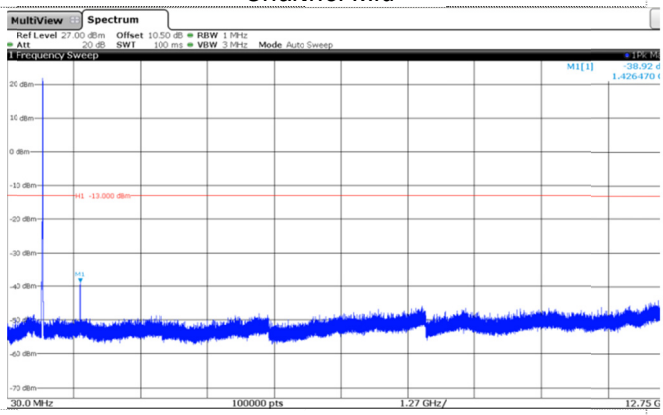
Channel Mid



Channel Mid



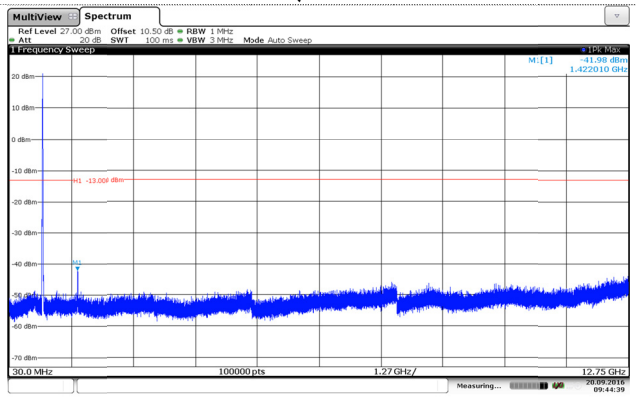
Channel High



Channel High

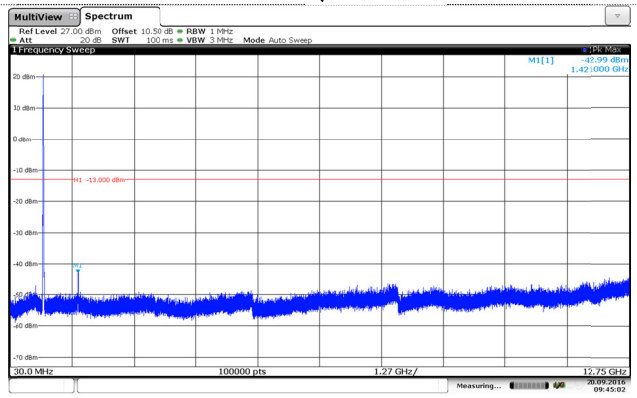
LTE Band 17-10MHz

QPSK

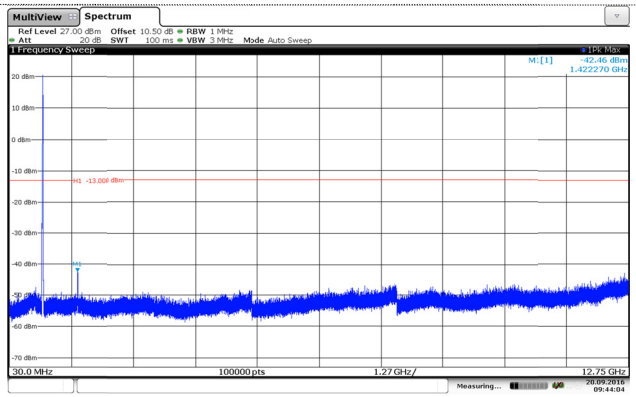


Channel Low

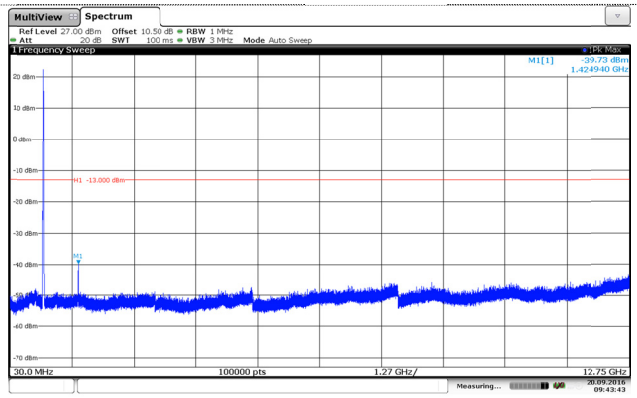
16QAM



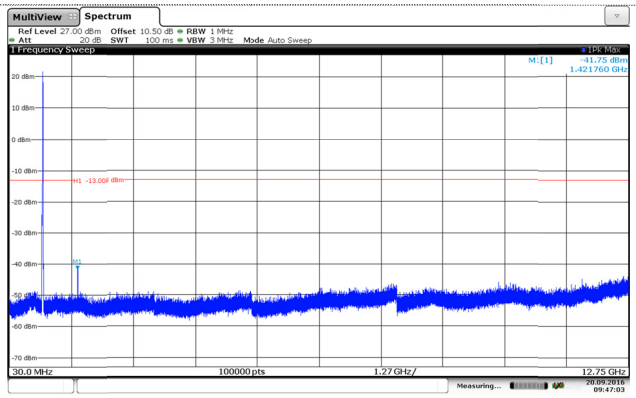
Channel Low



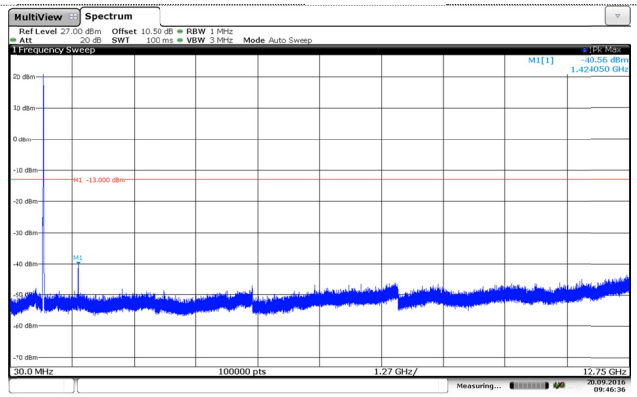
Channel Mid



Channel Mid



Channel High



Channel High

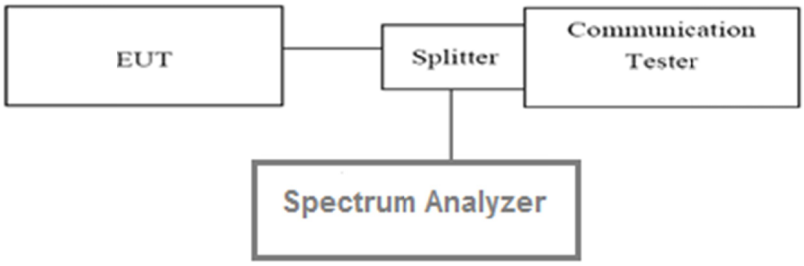
4.4. Band Edge compliance

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

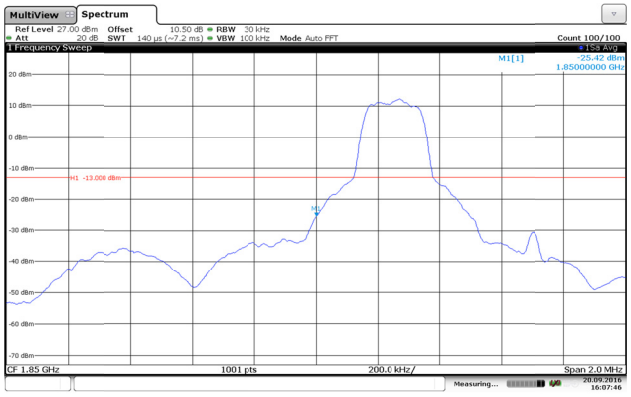


TEST PROCEDURE

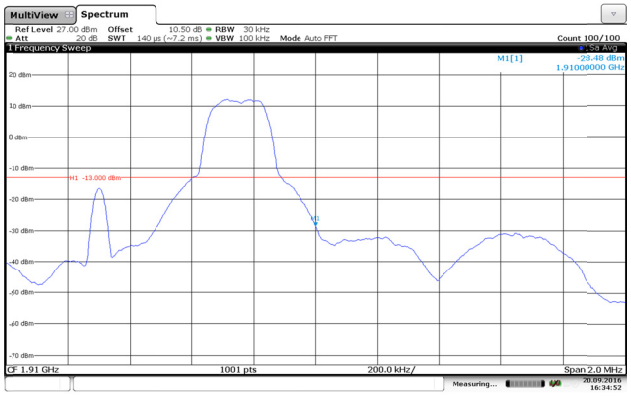
1. The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.
2. The band edges of low and high channels for the highest RF powers were measured. Set RBW>= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
3. Set spectrum analyzer with RMS detector.

TEST RESULTS

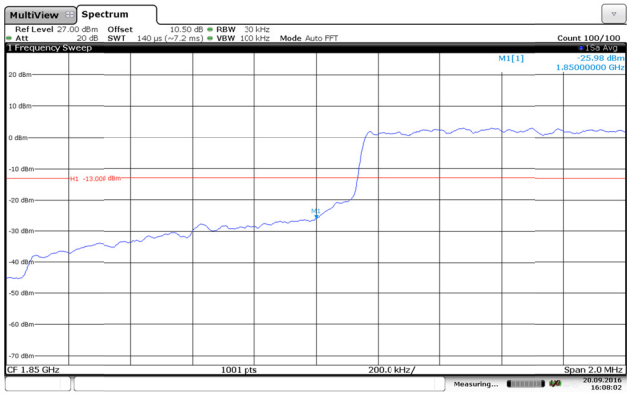
LTE Band 2-1.4MHz-QPSK



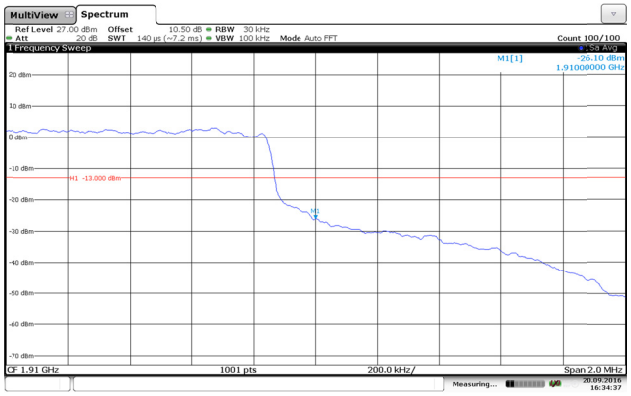
Channel Low-1RB#



Channel High-1RB#

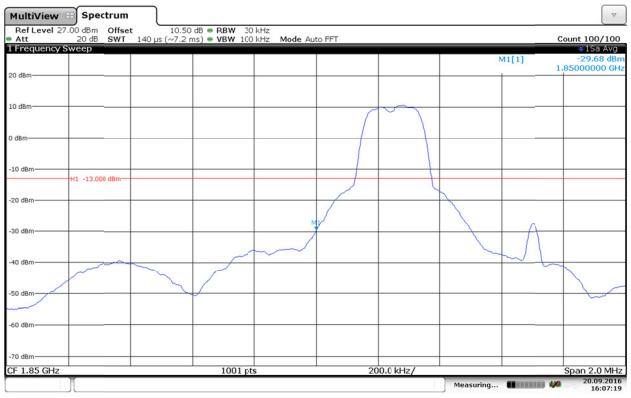


Channel Low-Full RB#

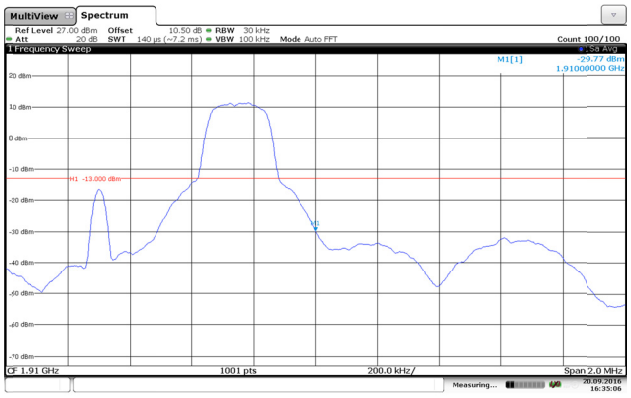


Channel High-Full RB#

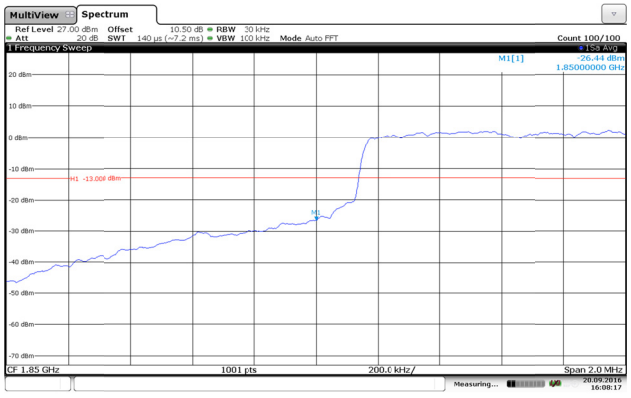
LTE Band 2-1.4MHz-16QAM



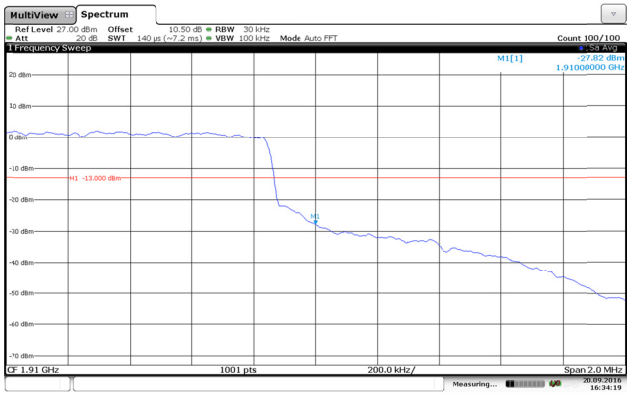
Channel Low-1RB#



Channel High-1RB#

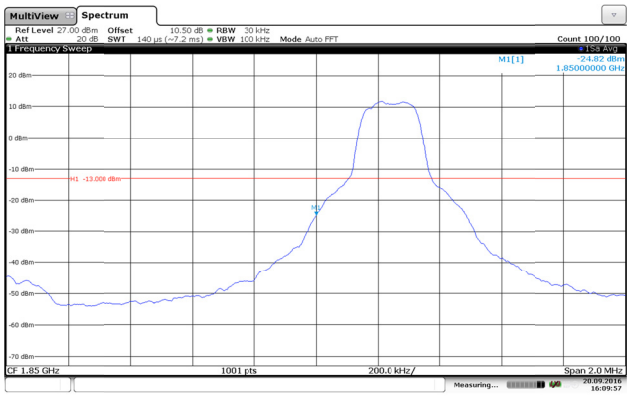


Channel Low-Full RB#

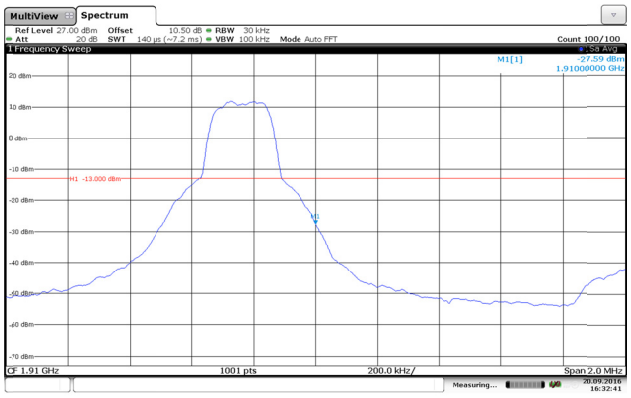


Channel High-Full RB#

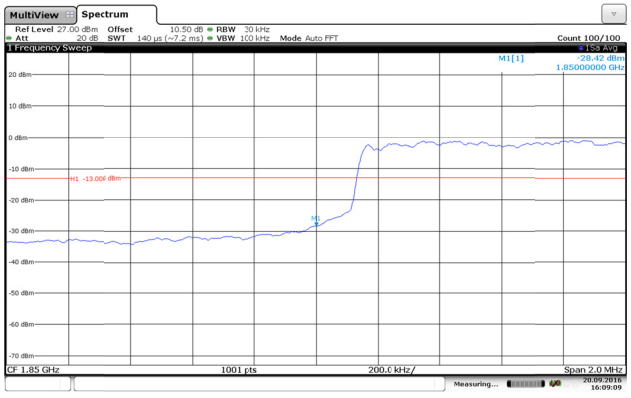
LTE Band 2-3MHz-QPSK



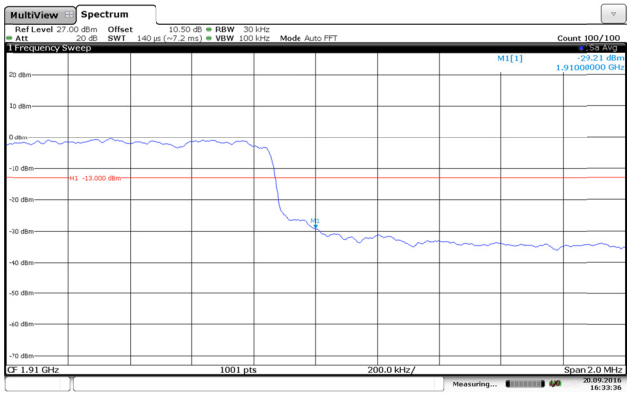
Channel Low-1RB#



Channel High-1RB#

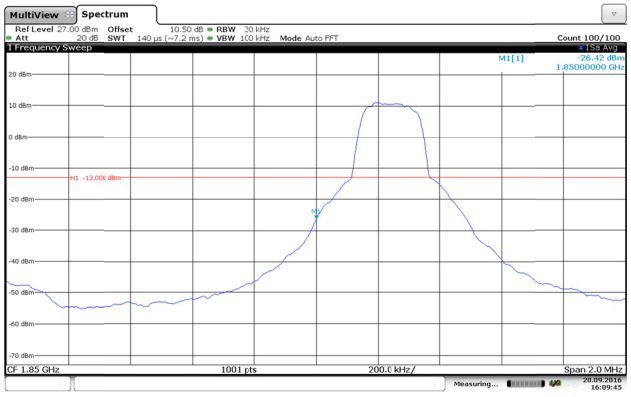


Channel Low-Full RB#

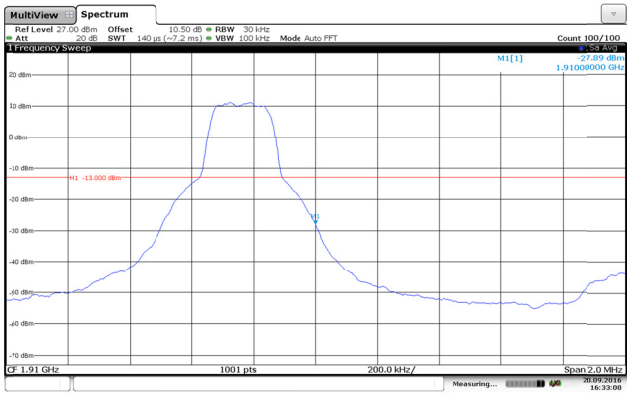


Channel High-Full RB#

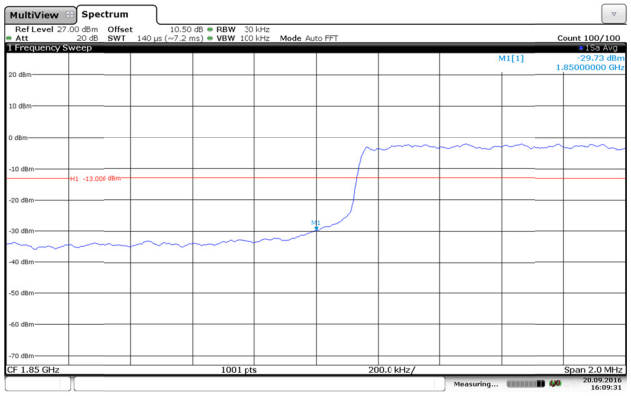
LTE Band 2-3MHz-16QAM



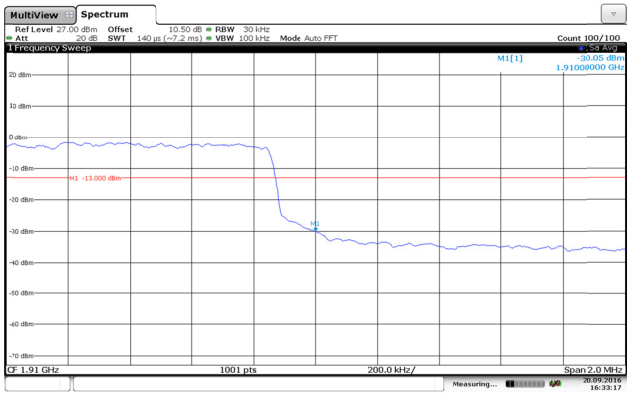
Channel Low-1RB#



Channel High-1RB#



Channel Low-Full RB#



Channel High-Full RB#