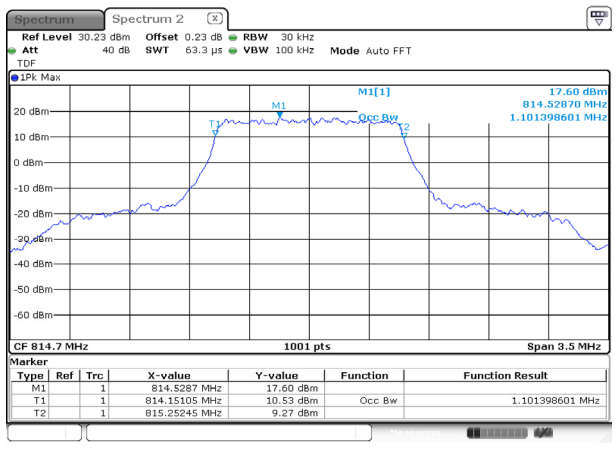
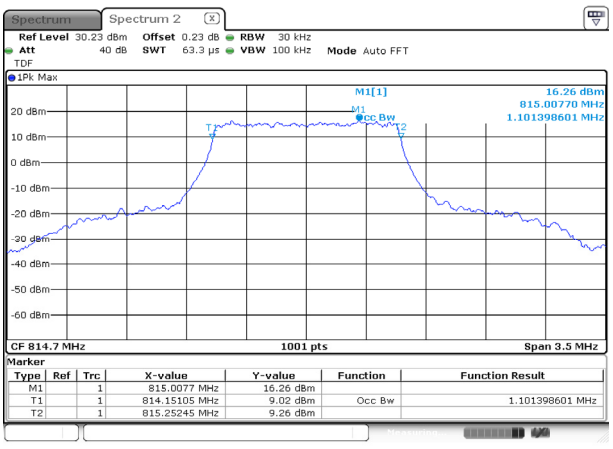
99% Occupied Bandwidth

Test mode: LTE Band 26 (Part 90S)

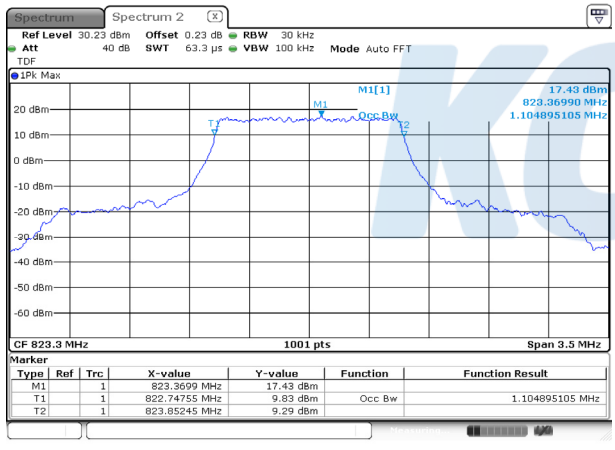
1.4M BW / QPSK / Low ch.



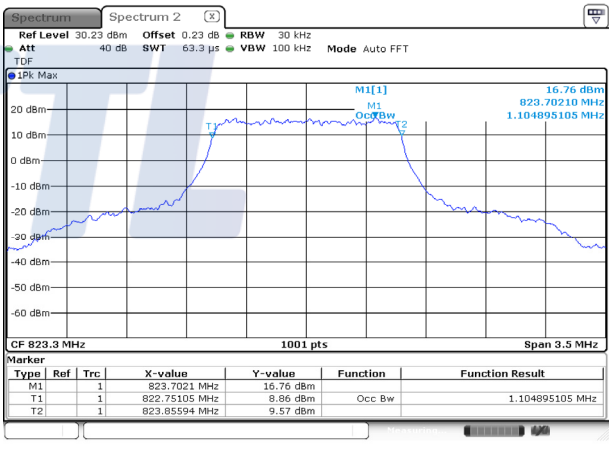
1.4M BW / 16QAM / Low ch.



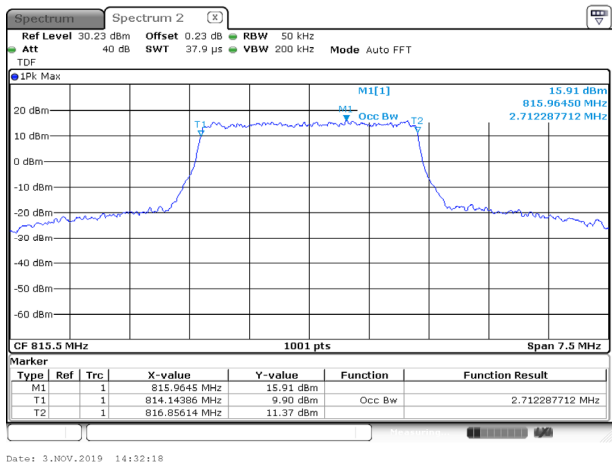
1.4M BW / QPSK / High ch.



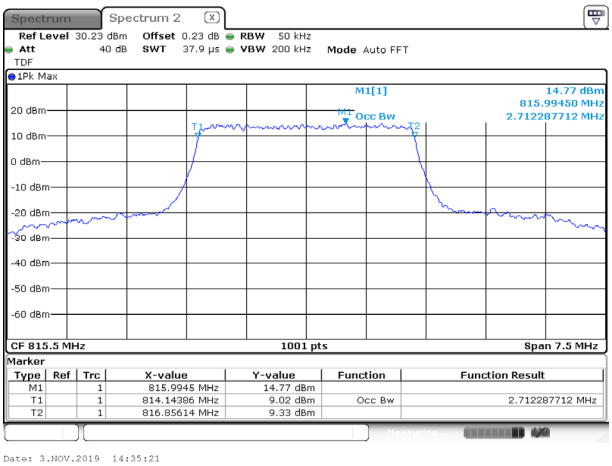
1.4M BW / 16QAM / High ch.



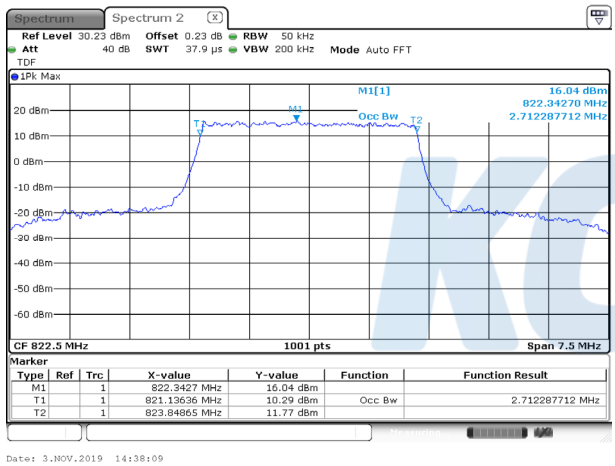
3M BW / QPSK / Low ch.



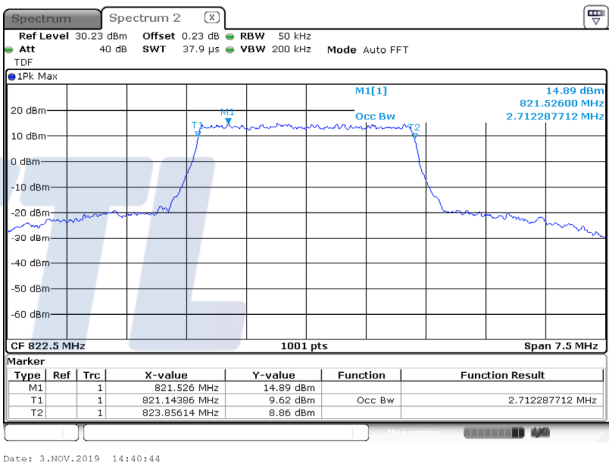
3M BW / 16QAM / Low ch.



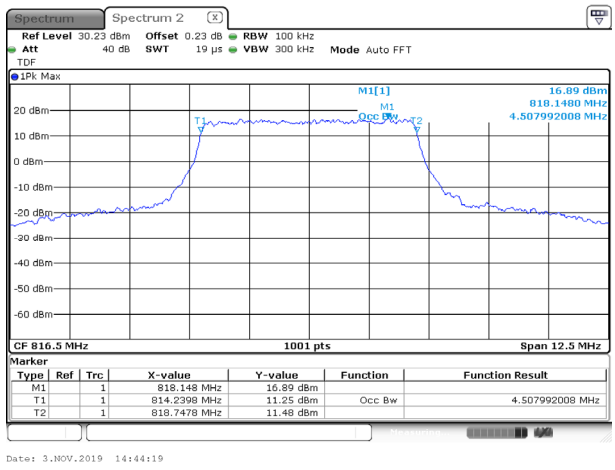
3M BW / QPSK / High ch.



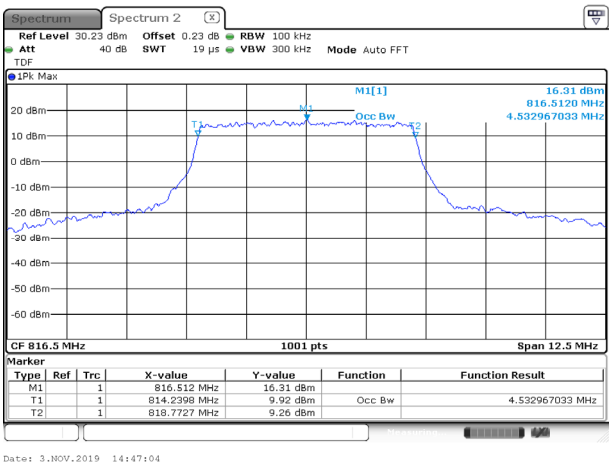
3M BW / 16QAM / High ch.



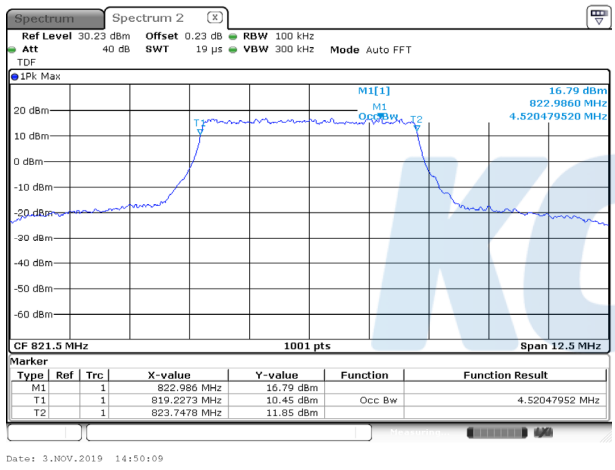
5M BW / QPSK / Low ch.



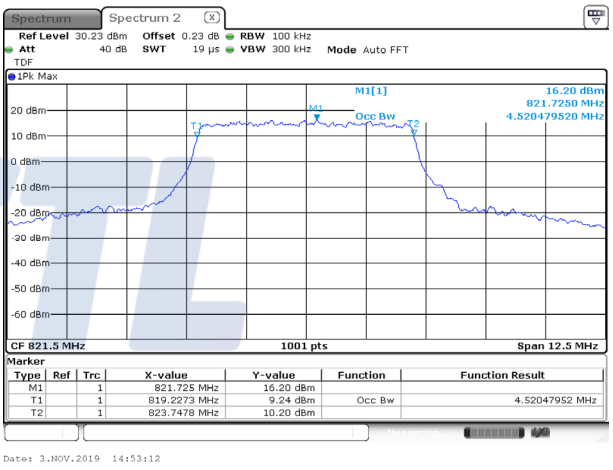
5M BW / 16QAM / Low ch.



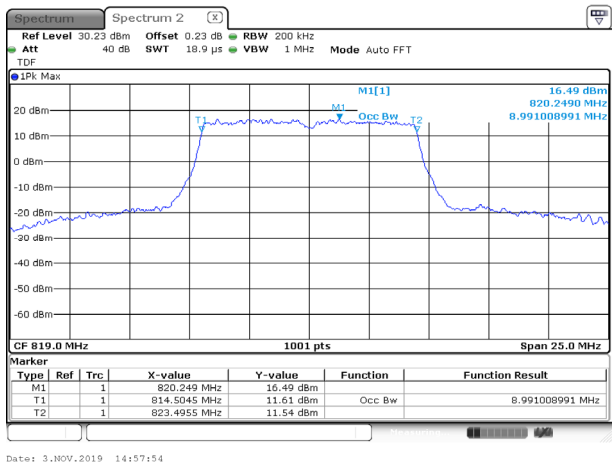
5M BW / QPSK / High ch.



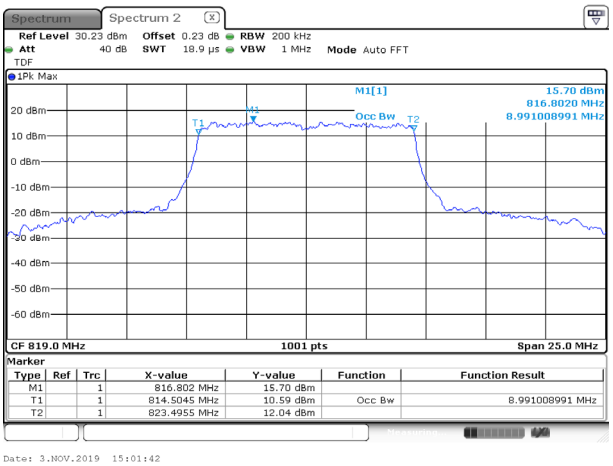
5M BW / 16QAM / High ch.



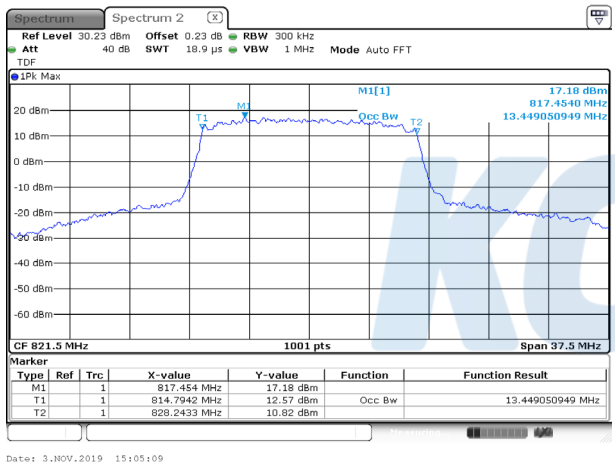
10M BW / QPSK / Mid ch.



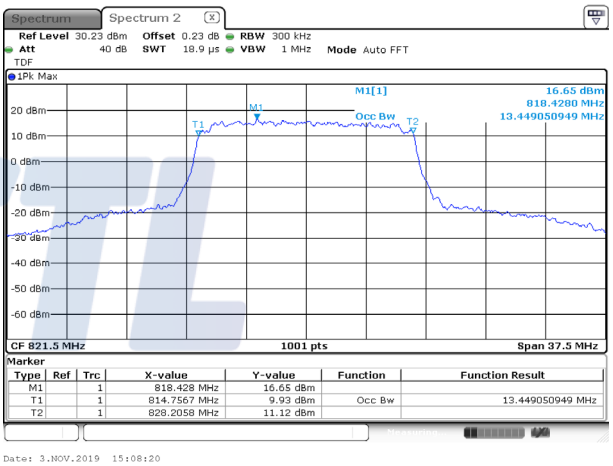
10M BW / 16QAM / Mid ch.



15M BW / QPSK / Mid ch.

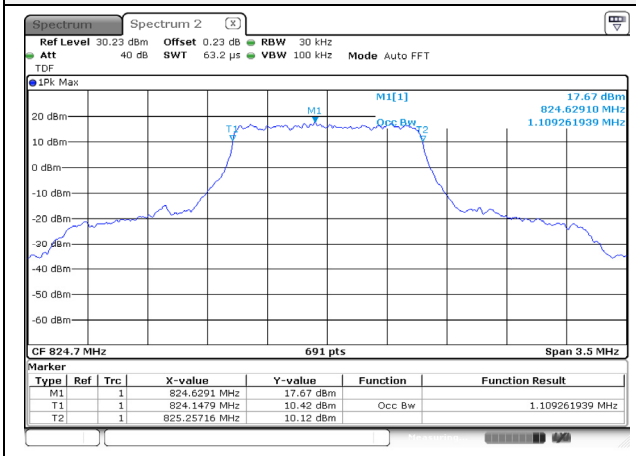


15M BW / 16QAM / Mid ch.

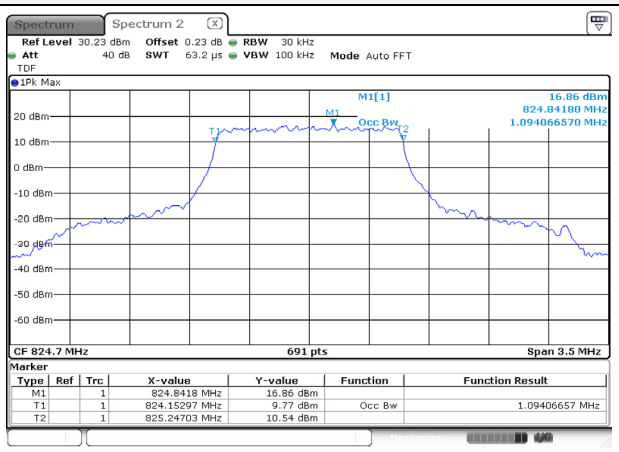


Test mode: LTE Band 26 (Part 22H)

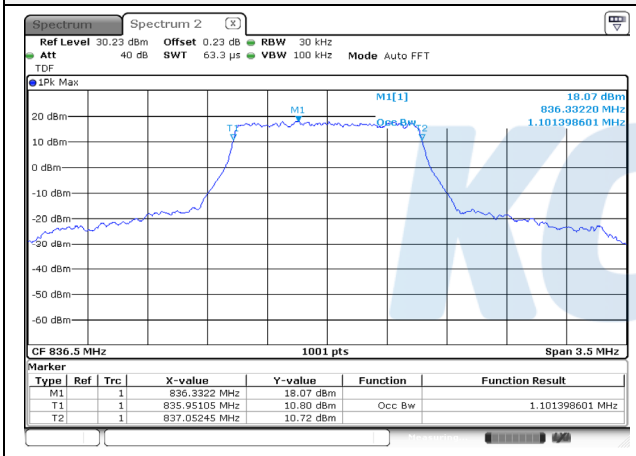
1.4M BW / QPSK / Low ch.



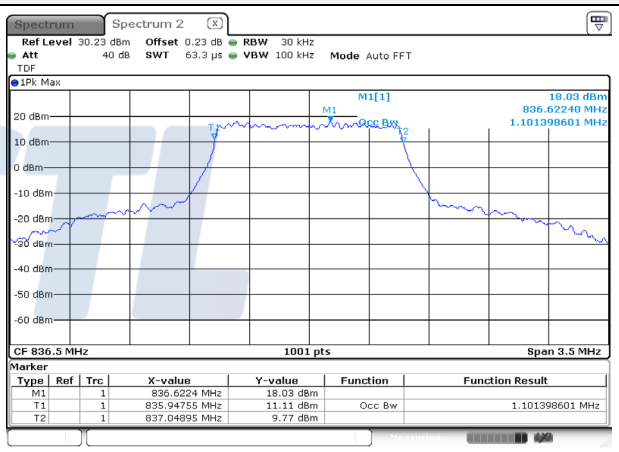
1.4M BW / 16QAM / Low ch.



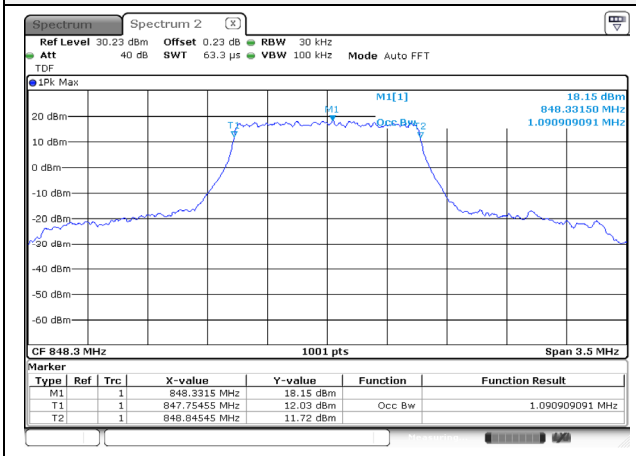
1.4M BW / QPSK / Mid ch.



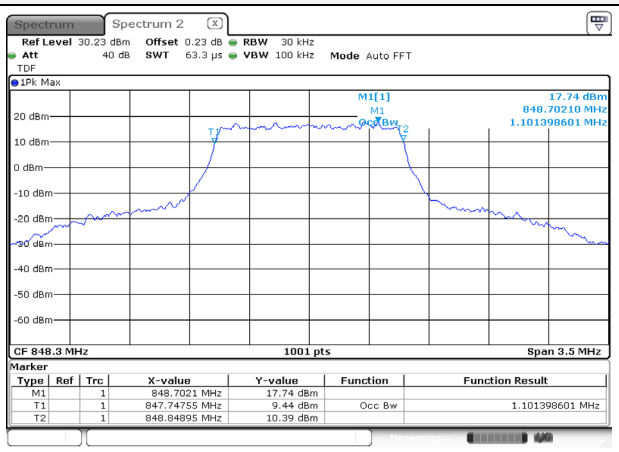
1.4M BW / 16QAM / Mid ch.



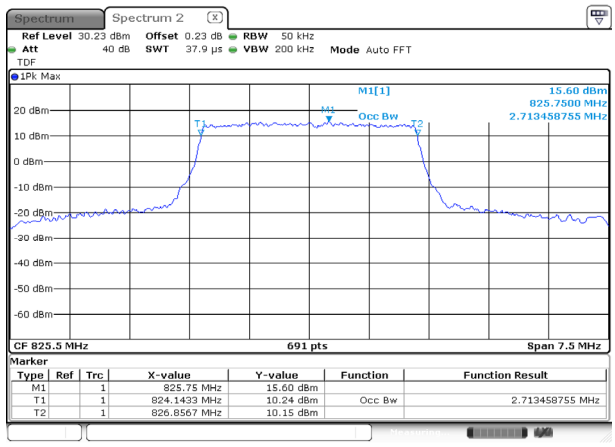
1.4M BW / QPSK / High ch.



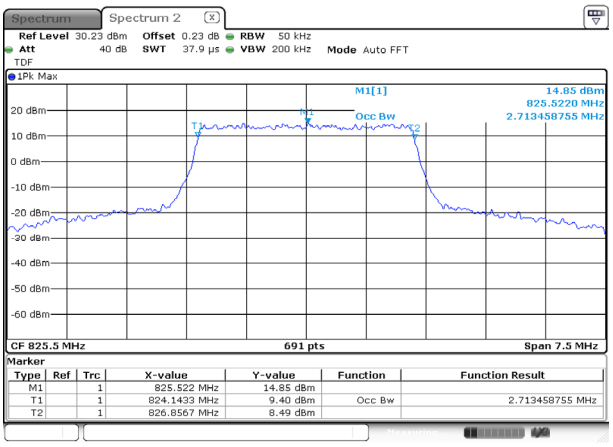
1.4M BW / 16QAM / High ch.



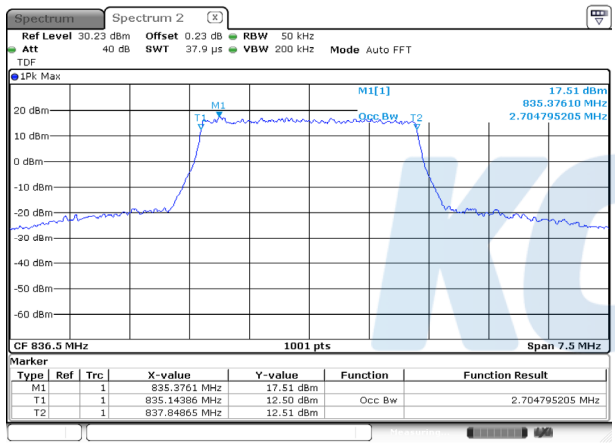
3M BW / QPSK / Low ch.



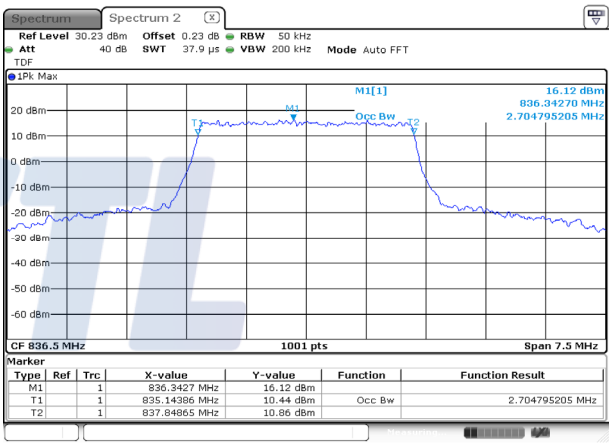
3M BW / 16QAM / Low ch.



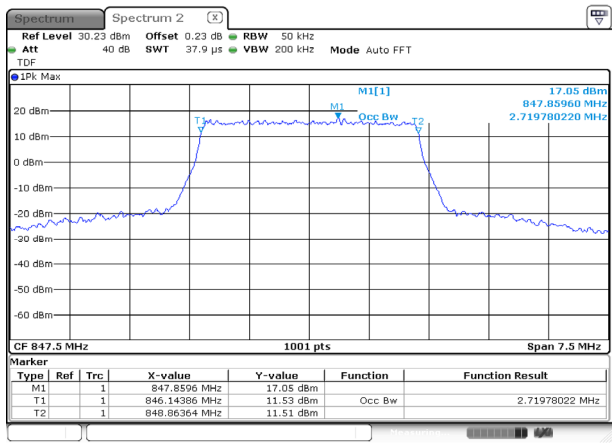
3M BW / QPSK / Mid ch.



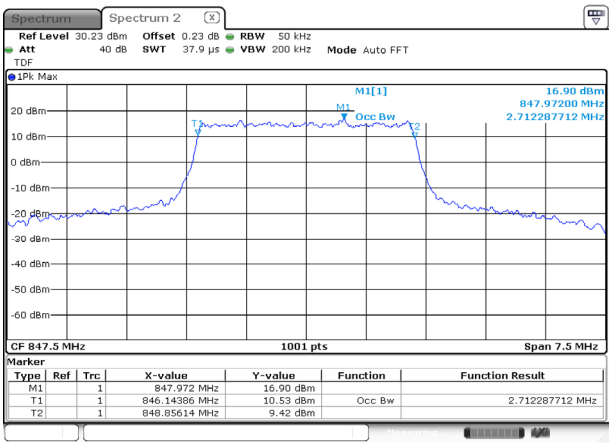
3M BW / 16QAM / Mid ch.



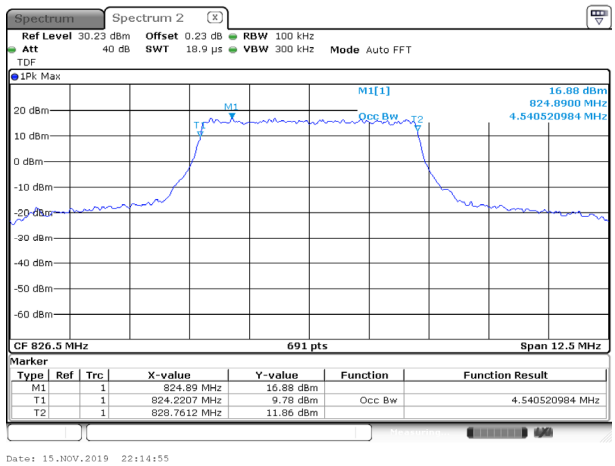
3M BW / QPSK / High ch.



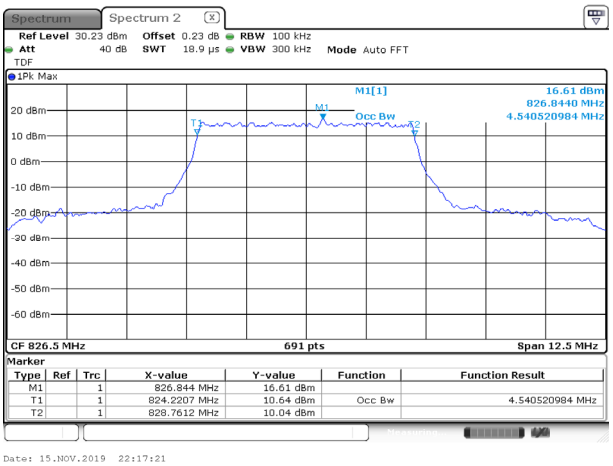
3M BW / 16QAM / High ch.



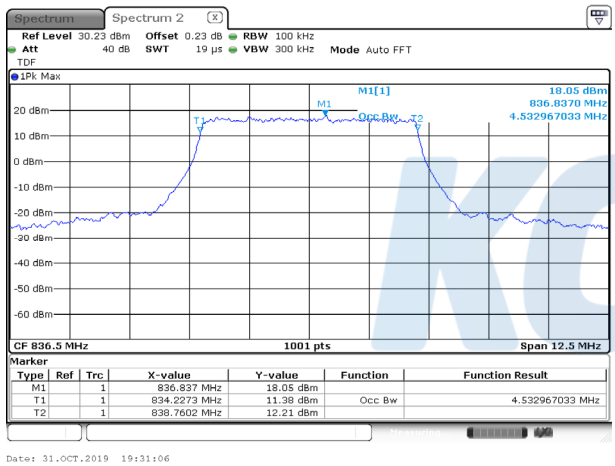
5M BW / QPSK / Low ch.



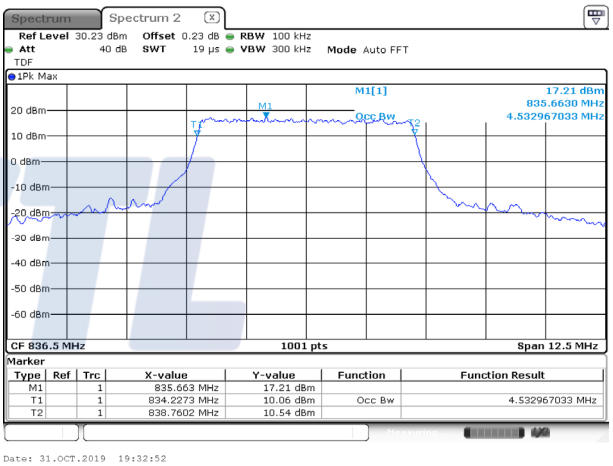
5M BW / 16QAM / Low ch.



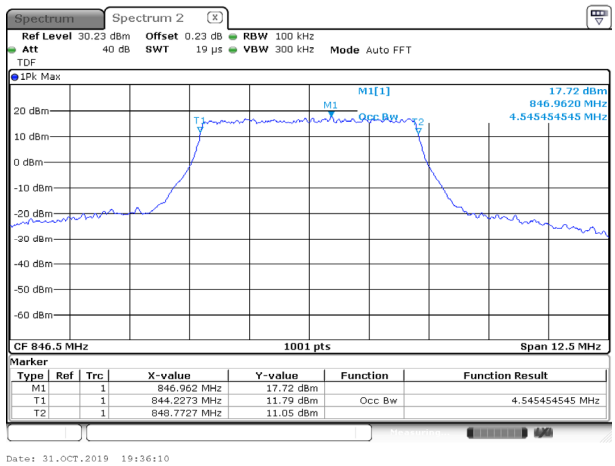
5M BW / QPSK / Mid ch.



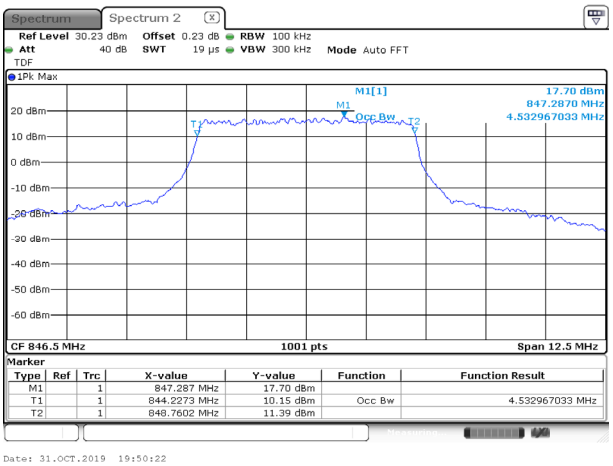
5M BW / 16QAM / Mid ch.



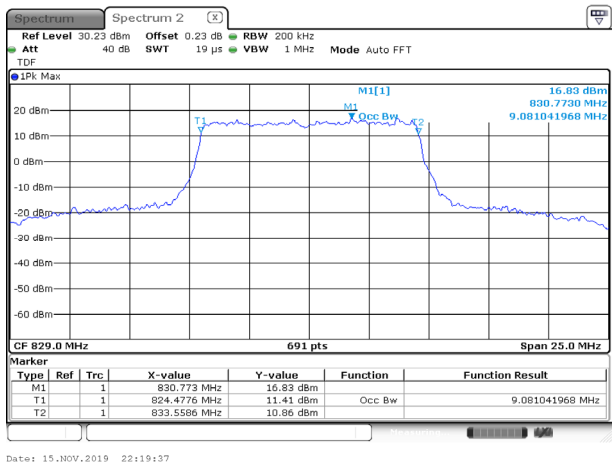
5M BW / QPSK / High ch.



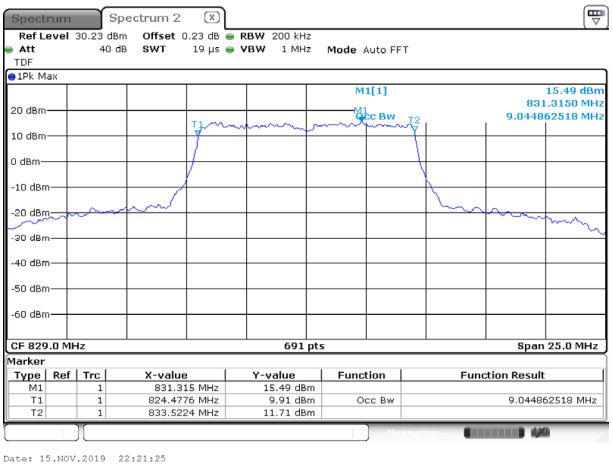
5M BW / 16QAM / High ch.



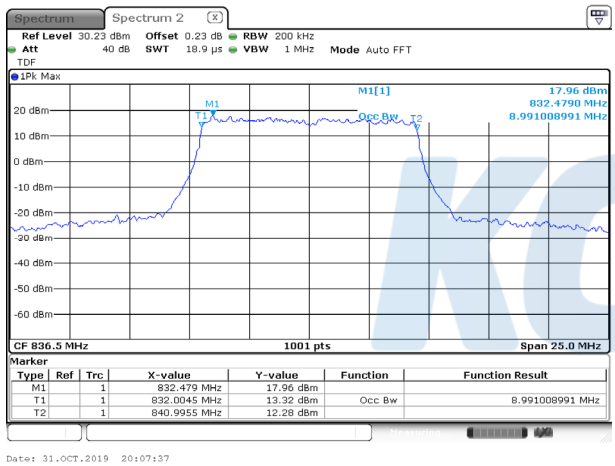
10M BW / QPSK / Low ch.



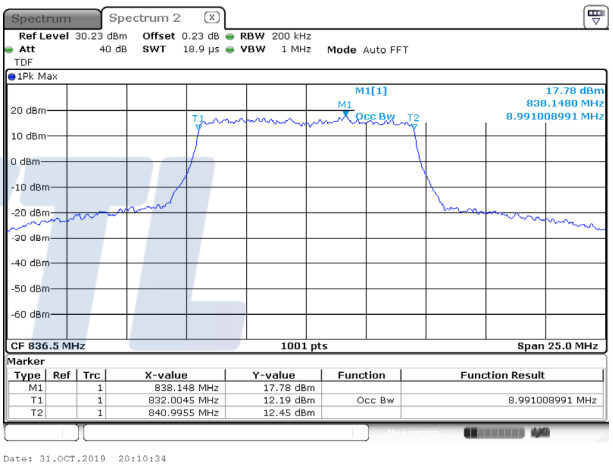
10M BW / 16QAM / Low ch.



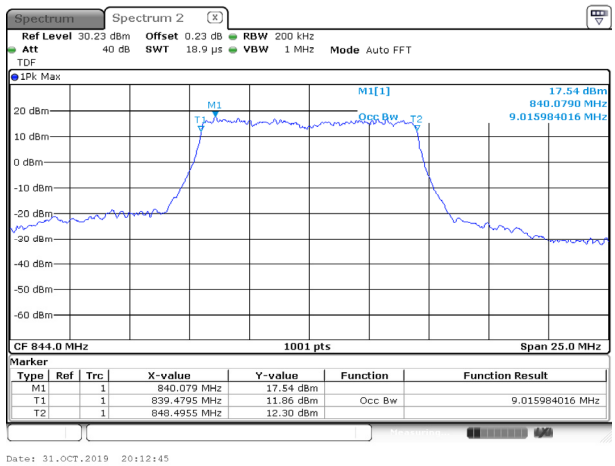
10M BW / QPSK / Mid ch.



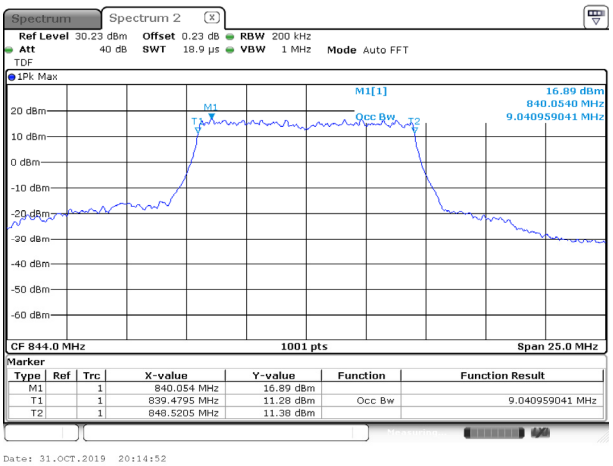
10M BW / 16QAM / Mid ch.



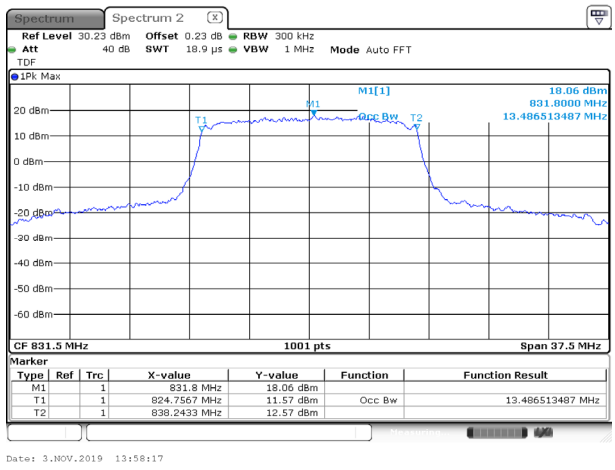
10M BW / QPSK / High ch.



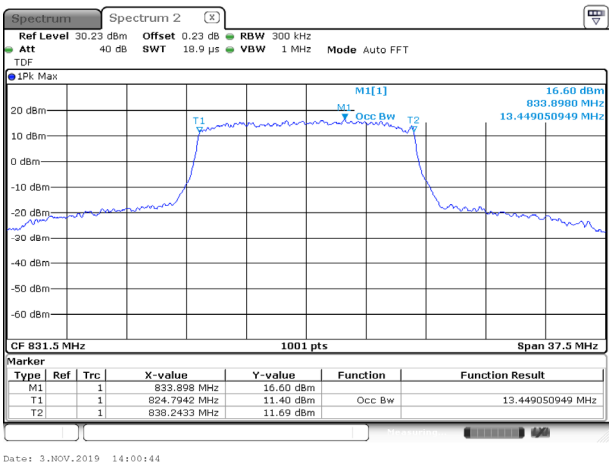
10M BW / 16QAM / High ch.



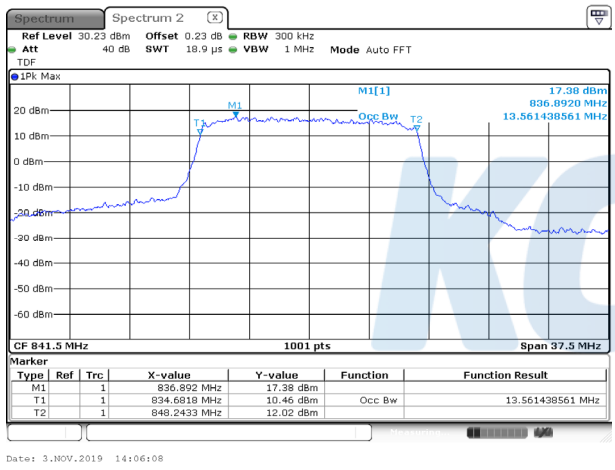
15M BW / QPSK / Low ch.



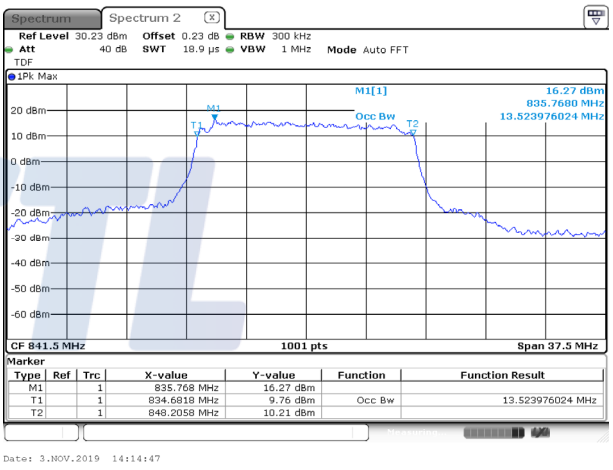
15M BW / 16QAM / Low ch.



15M BW / QPSK / High ch.

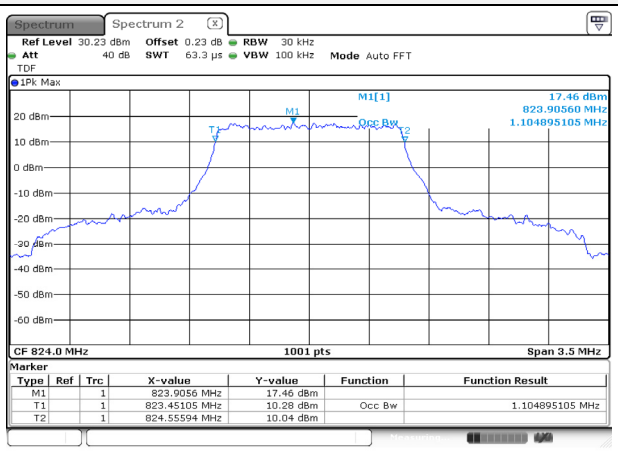


15M BW / 16QAM / High ch.

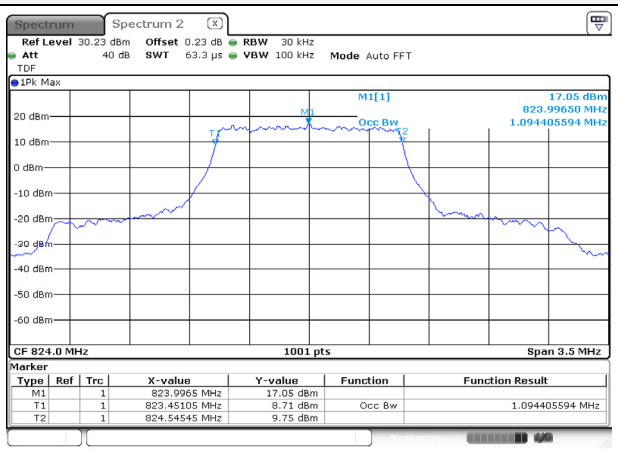


Straddle channel

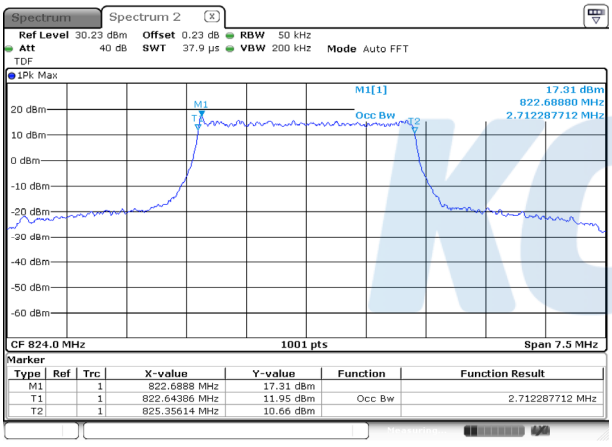
1.4M BW / QPSK



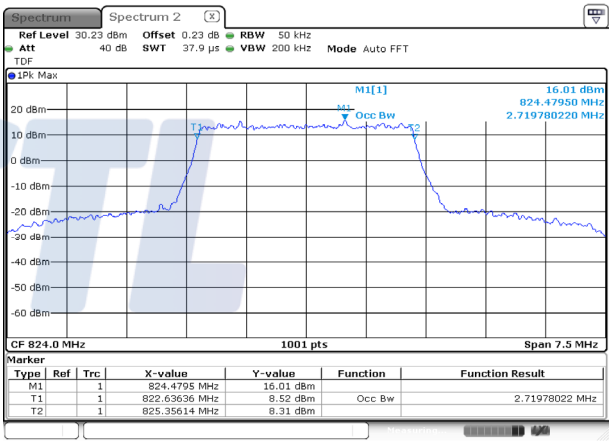
1.4M BW / 16QAM



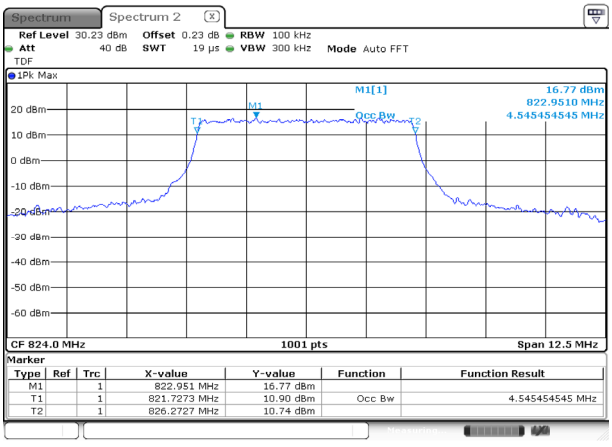
3M BW / QPSK



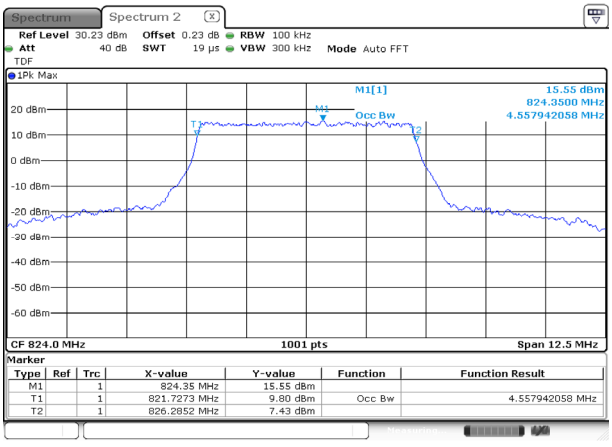
3M BW / 16QAM



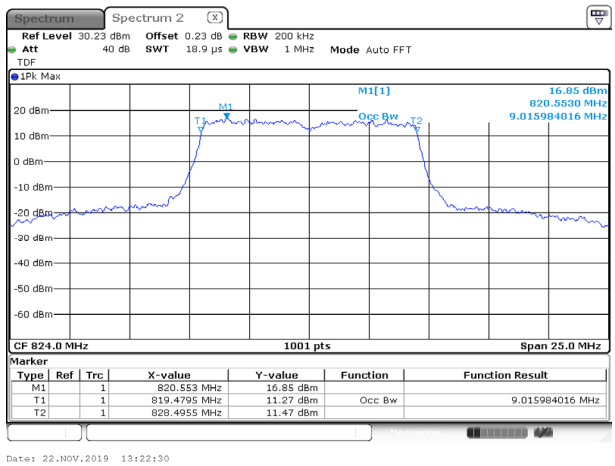
5M BW / QPSK



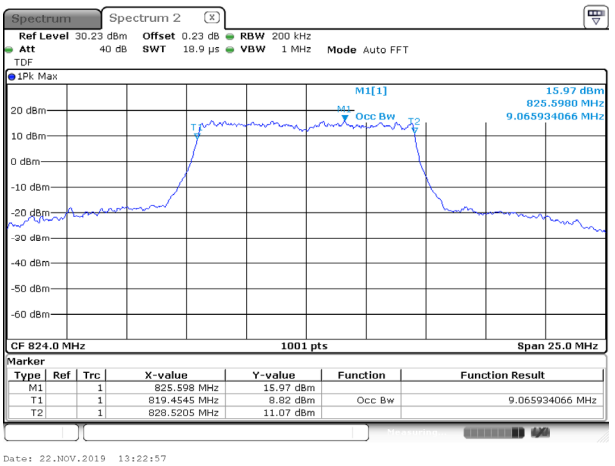
5M BW / 16QAM



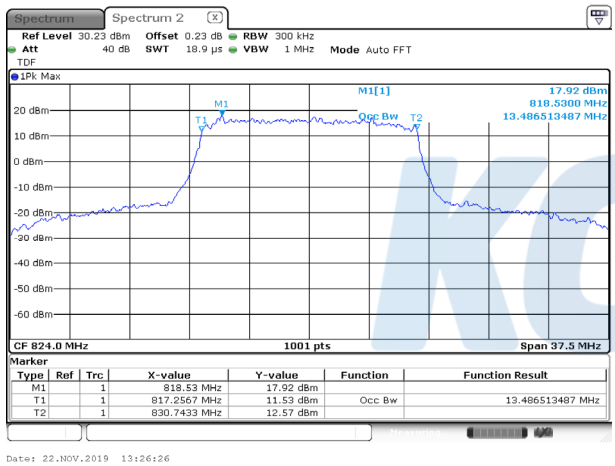
10M BW / QPSK



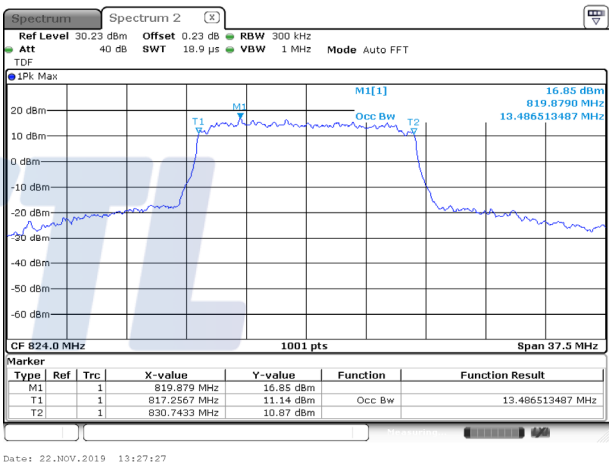
10M BW / 16QAM



15M BW / QPSK

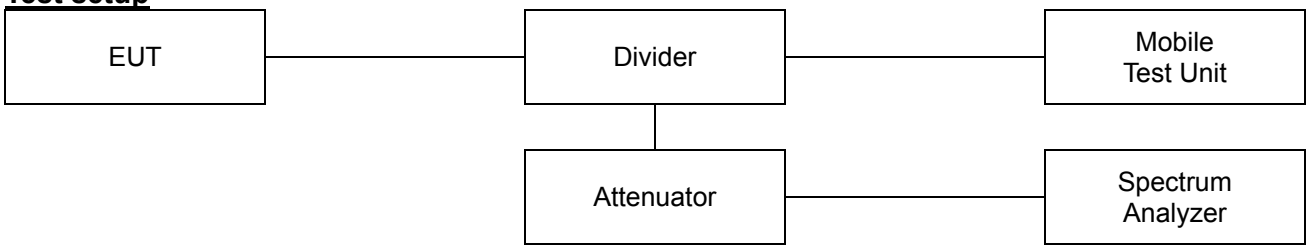


15M BW / 16QAM



7.3. Spurious Emissions at Antenna Terminal

Test setup



Limit

According to §22.917(a), 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 + 10log($P_{[Watts]}$) ㏈.

According to §90.691(a), Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee’s frequency block by up to and including 37.5 ㎑, 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 + 10Log_{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 where f is greater than 12.5 ㎑.

(2) For any frequency removed from the EA licensee’s frequency block greater than 37.5 ㎑, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log_{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 ㎑.

Test procedure

971168 D01 v03r01 - Section 6
ANSI 63.26-2015 – Section 5.7

Test settings

1) Start frequency was set to 30 ㎒ and stop frequency was set to at least 10th the fundamental frequency.
2) Detector = RMS
3) Sweep time = auto couple.
4) Trace mode = trace average
5) Allow trace to fully stabilize.
6) Please see test notes below RBW and VBW settings.

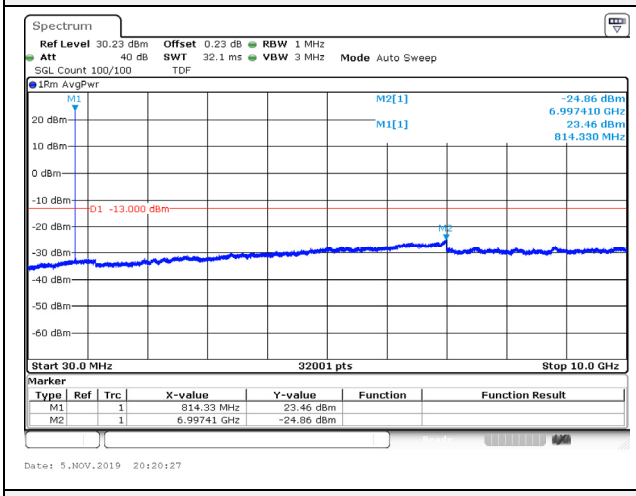
Notes:

1. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 ㎑ or greater for frequencies less than 1 ㎓ and 1 ㎒ or greater for frequencies greater than 1 ㎓.
   The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 ㏈ below the transmitter power.

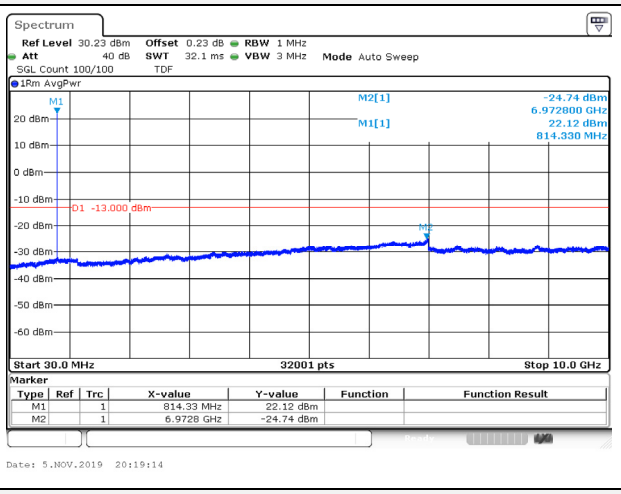
Test results

Test mode: LTE Band 26 (Part 90S)

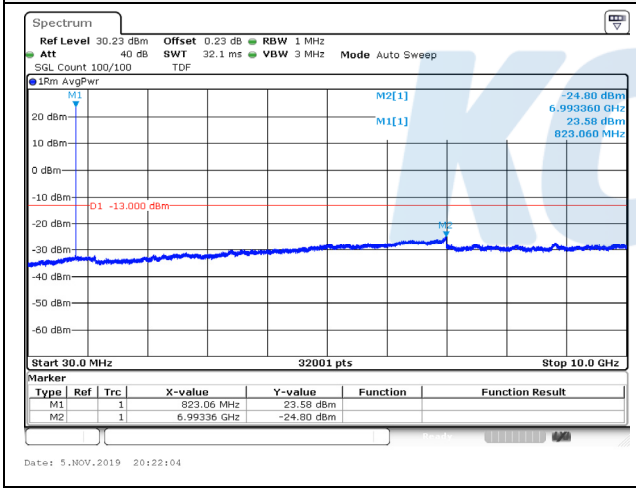
1.4M BW / QPSK / Low ch.



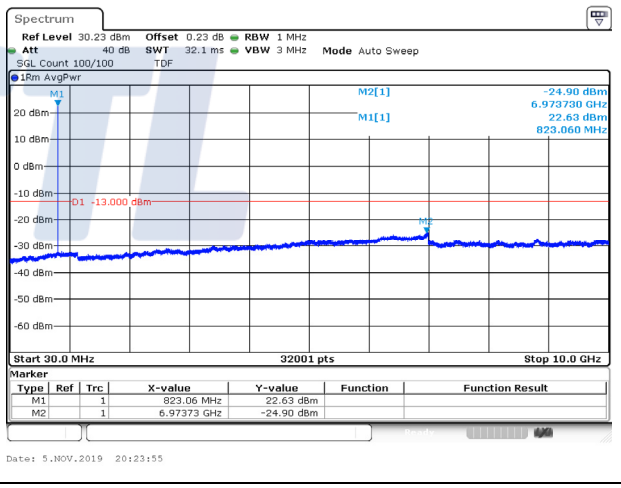
1.4M BW / 16QAM / Low ch.



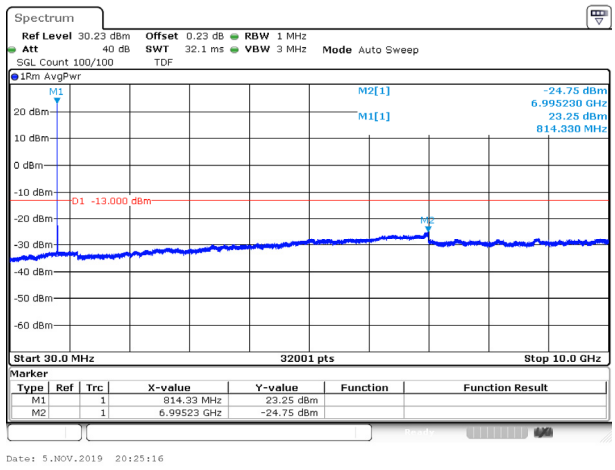
1.4M BW / QPSK / High ch.



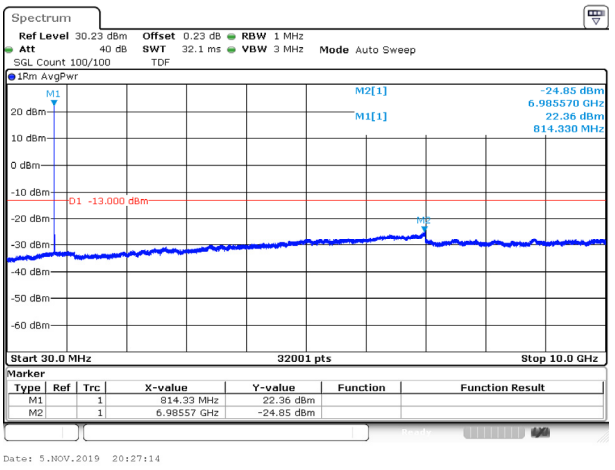
1.4M BW / 16QAM / High ch.



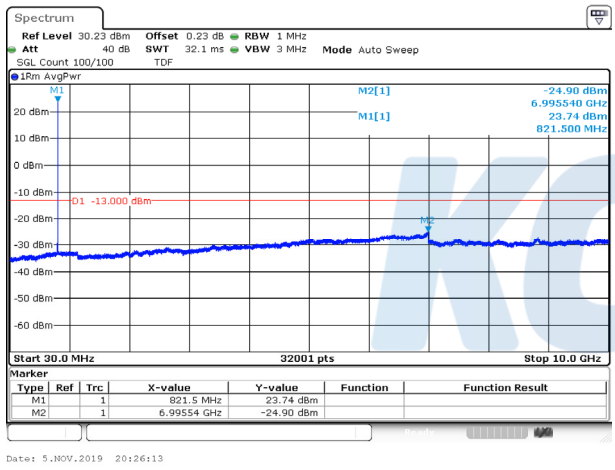
3M BW / QPSK / Low ch.



3M BW / 16QAM / Low ch.



3M BW / QPSK / High ch.



3M BW / 16QAM / High ch.