



15. BAND EDGE EMISSIONS

RULE PART(S)

FCC: §22.359, §24.238, §27.53 and § 90.691

FCC LIMITS

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

Part 27: (m)(4) (4) For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

TEST PROCEDURE

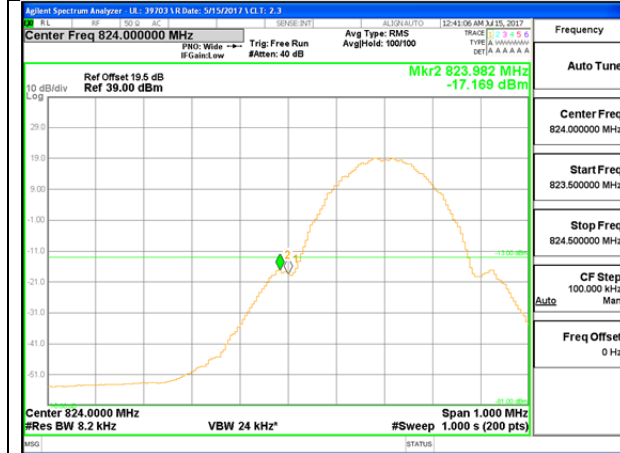
Per KDB 971168 D01 Power Meas License Digital Systems v02r02

The transmitter output was connected to an Agilent 8960 or 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.

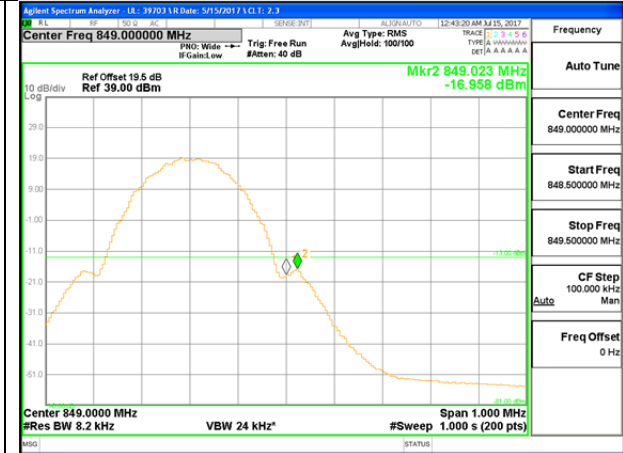
For each band edge measurement:

- Set the spectrum analyzer span to include the block edge frequency.
- 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.

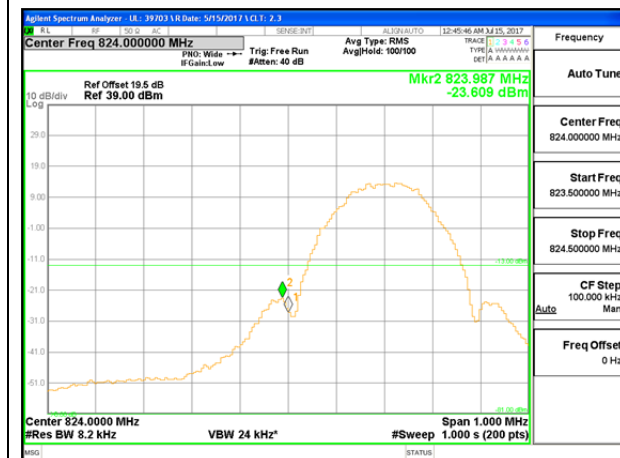
15.1. BAND EDGE PLOTS GSM



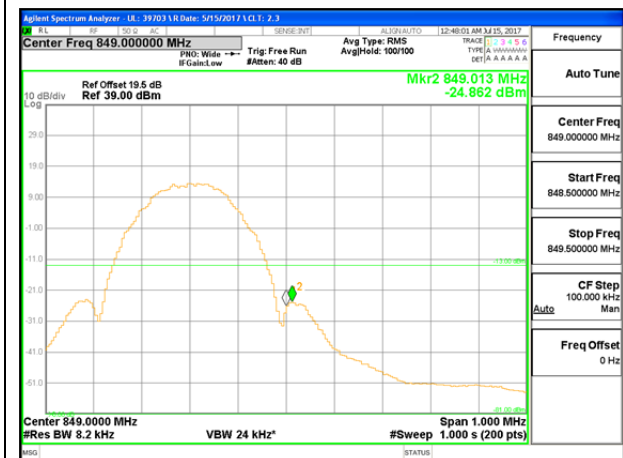
GSM850 GPRS Low Channel



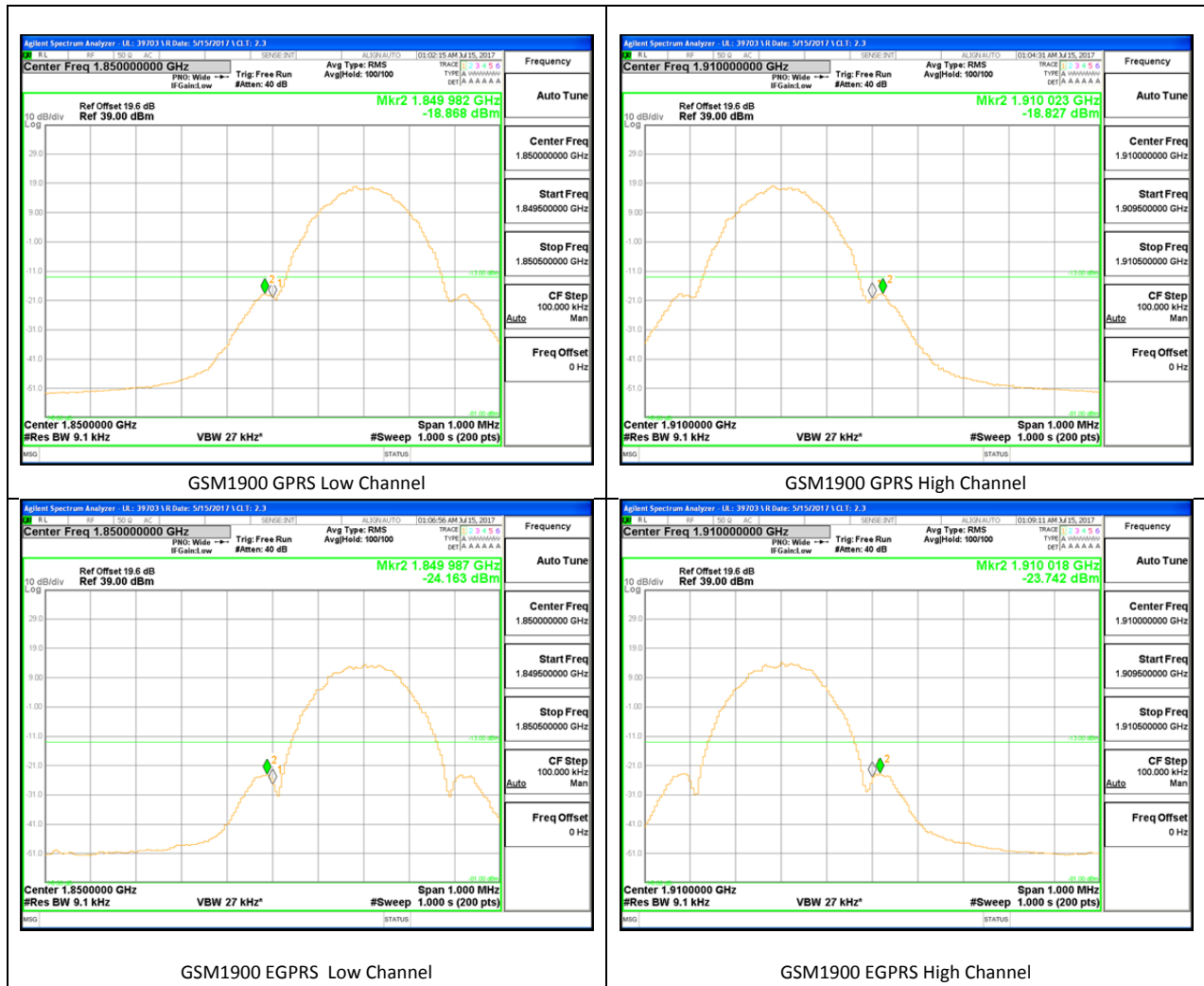
GSM850 GPRS High Channel



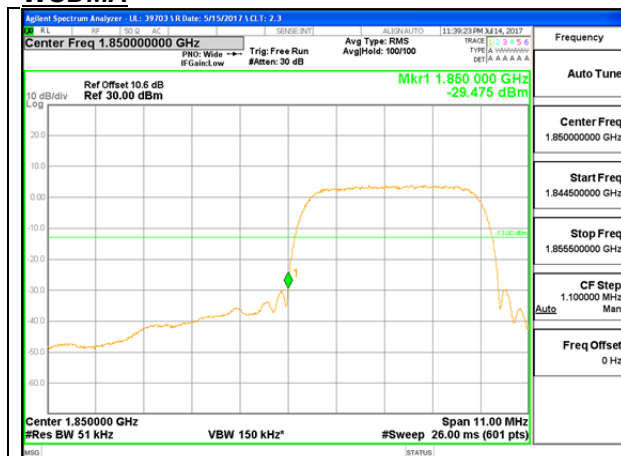
GSM850 EGPRS Low Channel



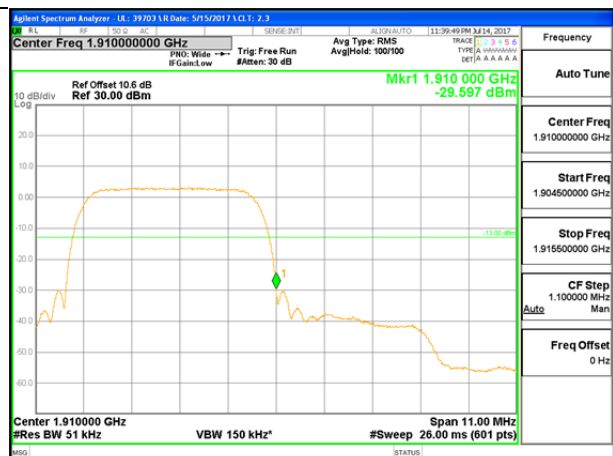
GSM850 EGPRS High Channel



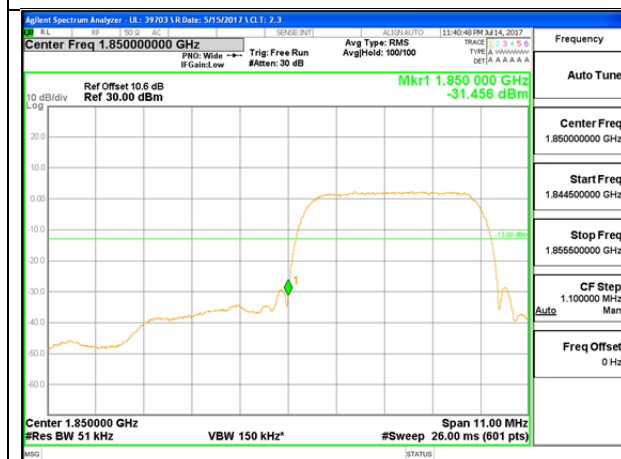
WCDMA



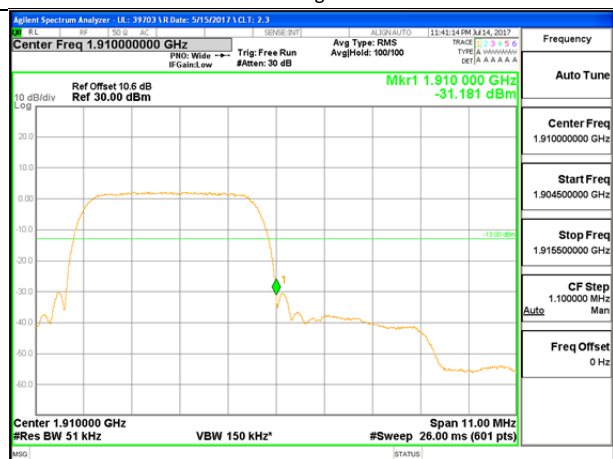
B2 REL99 Low Channel



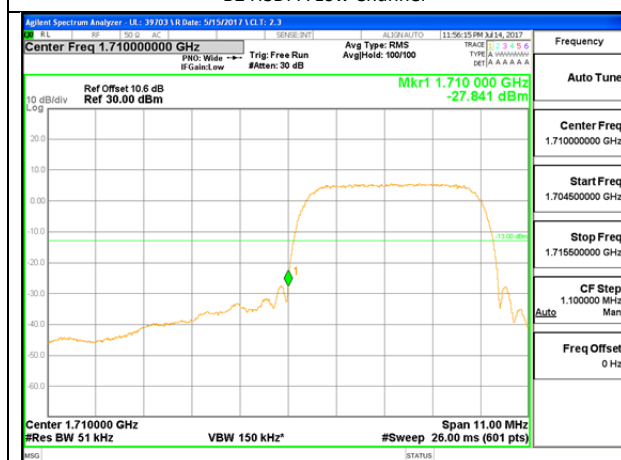
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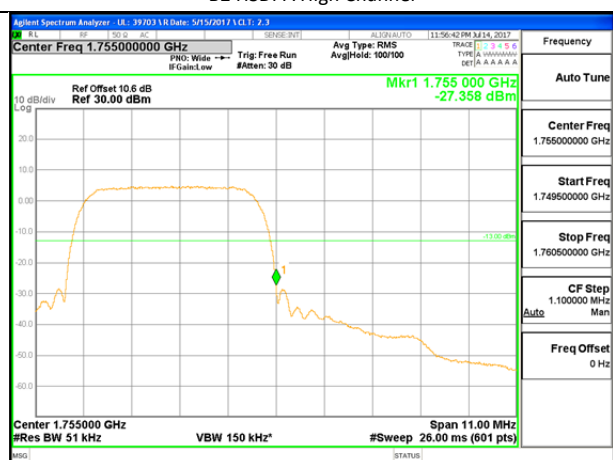
B2 HSDPA Low Channel



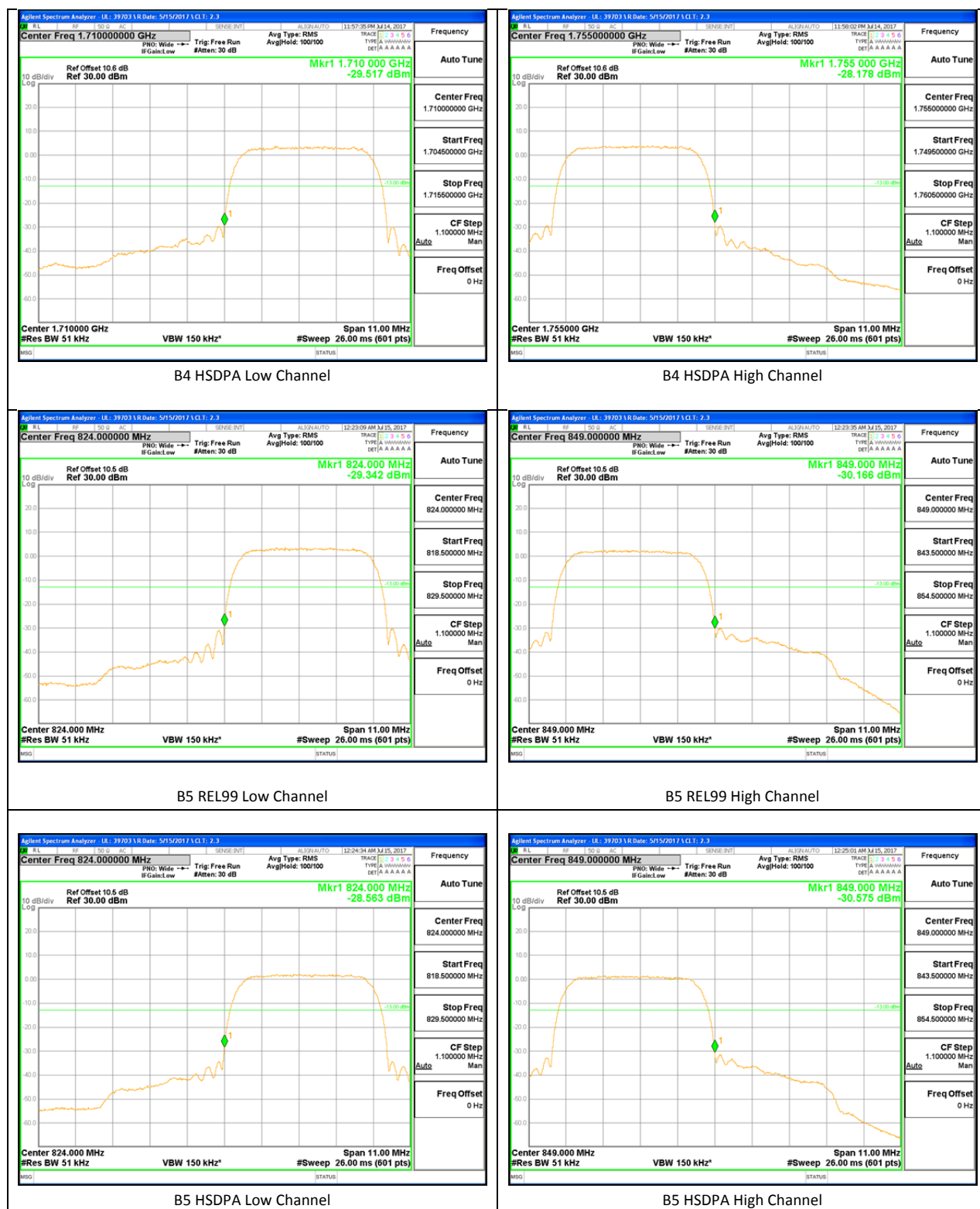
B2 HSDPA High Channel



B4 REL99 Low Channel



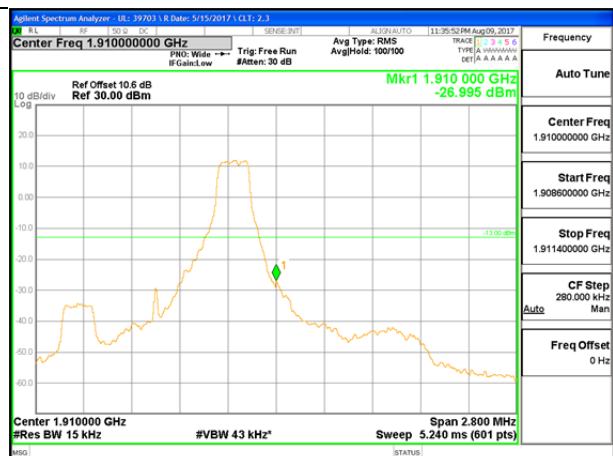
B4 REL99 High Channel



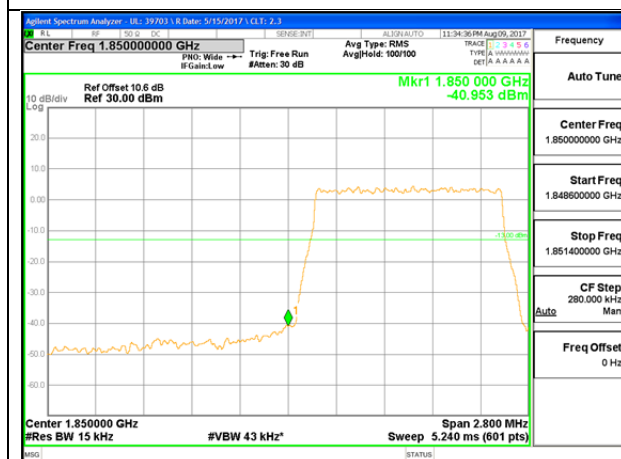
LTE Band 2



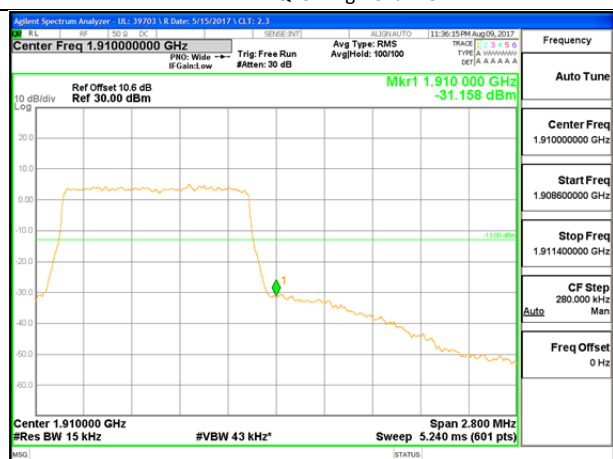
LTE B2 1.4MHz QPSK Low Channel 1RB



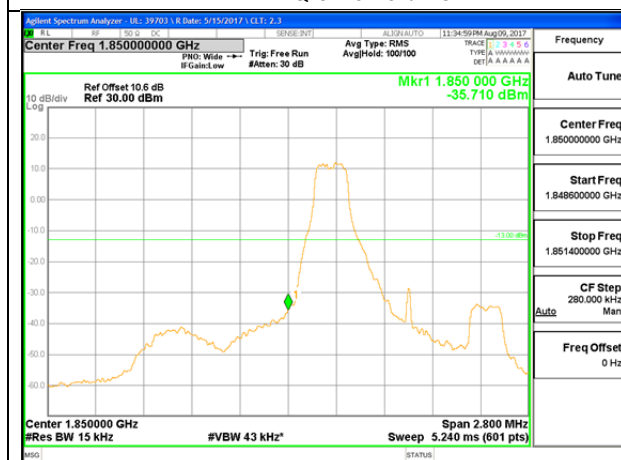
LTE B2 1.4MHz QPSK High Channel 1RB



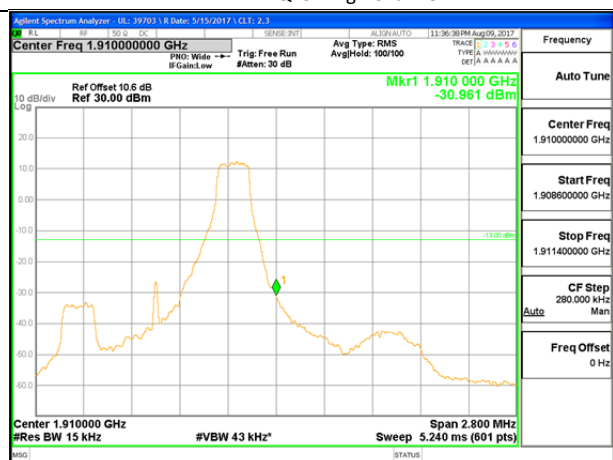
LTE B2 1.4MHz QPSK Low Channel FRB



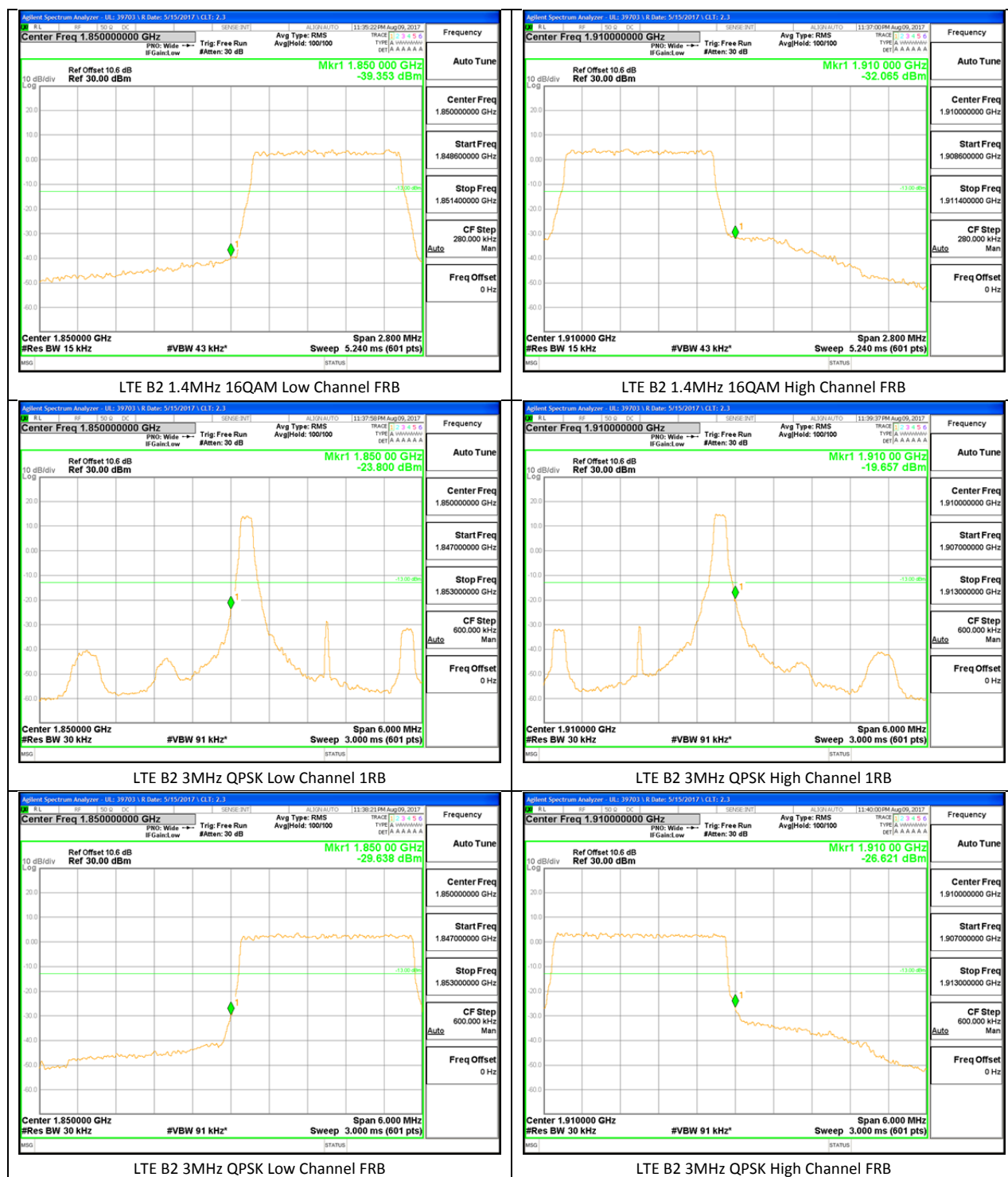
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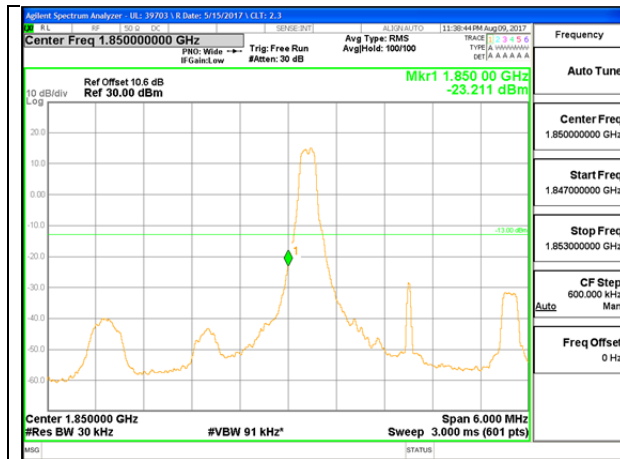


LTE B2 1.4MHz 16QAM Low Channel 1RB

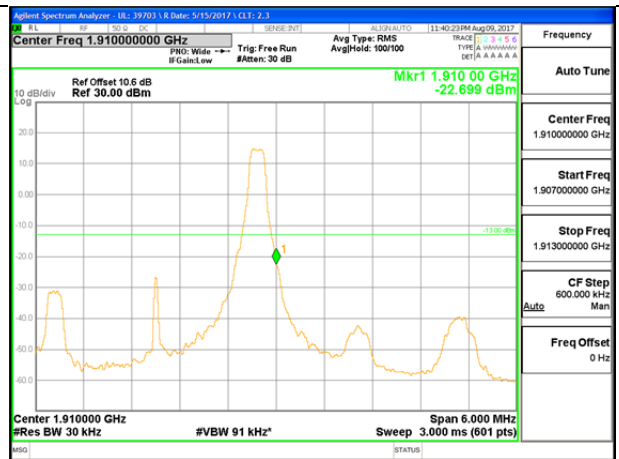


LTE B2 1.4MHz 16QAM High Channel 1RB

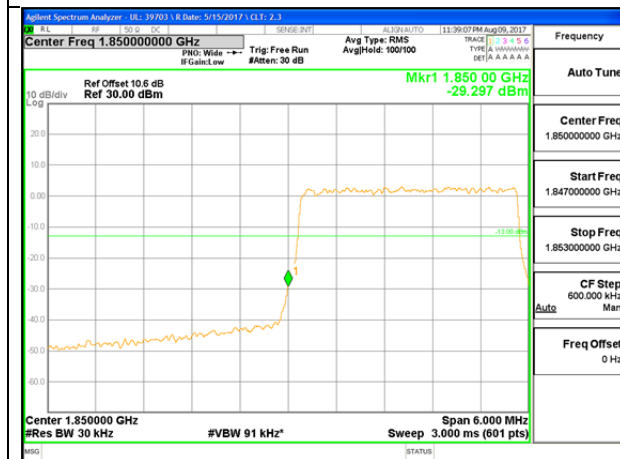




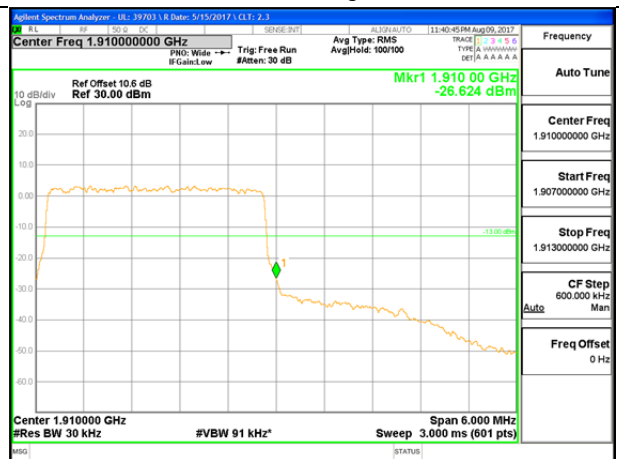
LTE B2 3MHz 16QAM Low Channel 1RB



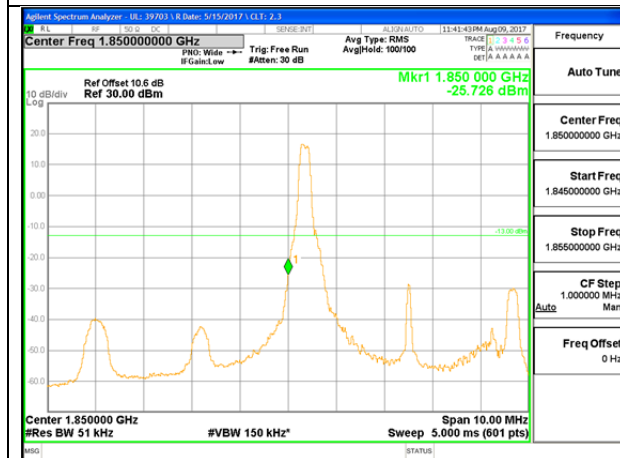
LTE B2 3MHz 16QAM High Channel 1RB



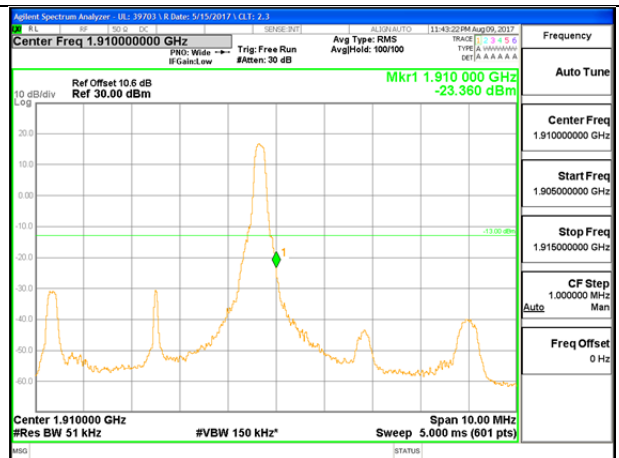
LTE B2 3MHz 16QAM Low Channel FRB



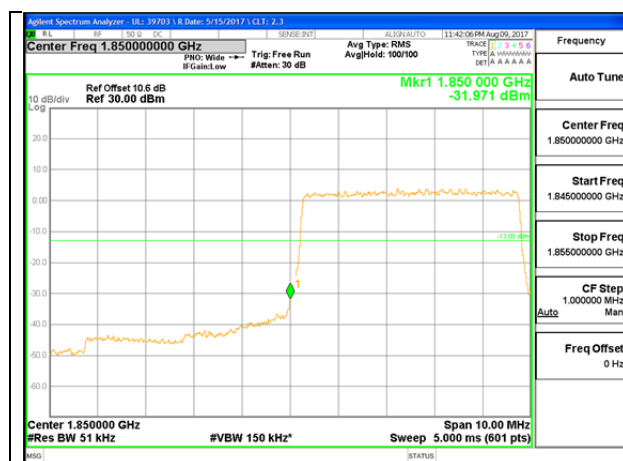
LTE B2 3MHz 16QAM High Channel FRB



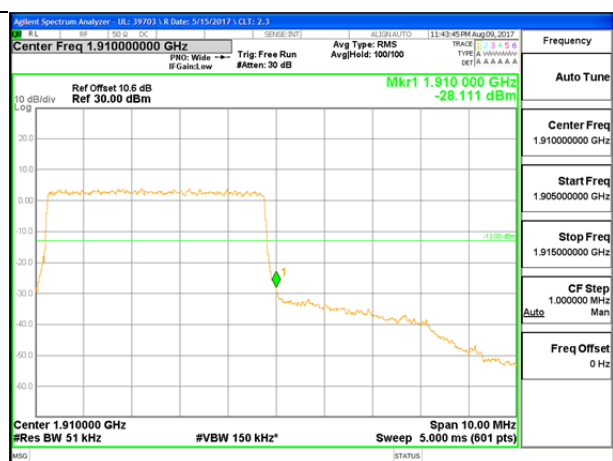
LTE B2 5MHz QPSK Low Channel 1RB



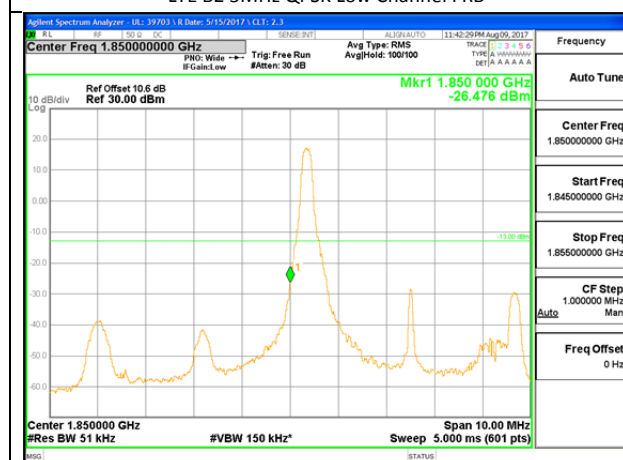
LTE B2 5MHz QPSK High Channel 1RB



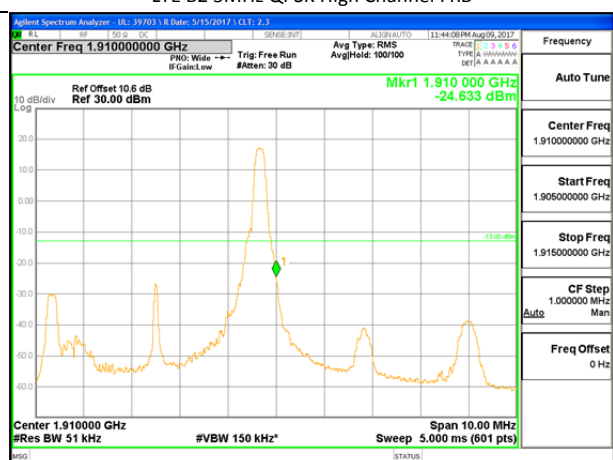
LTE B2 5MHz QPSK Low Channel FRB



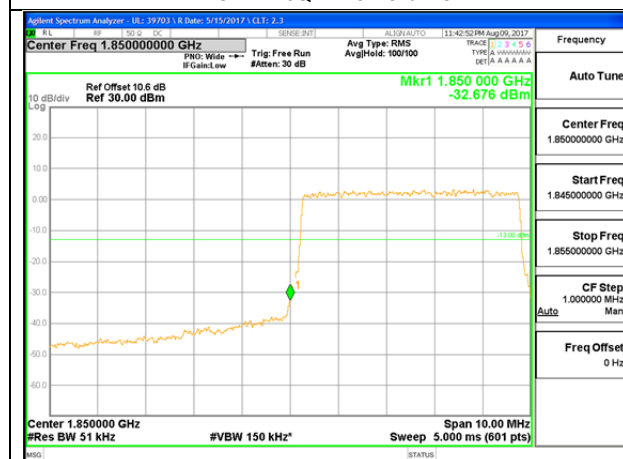
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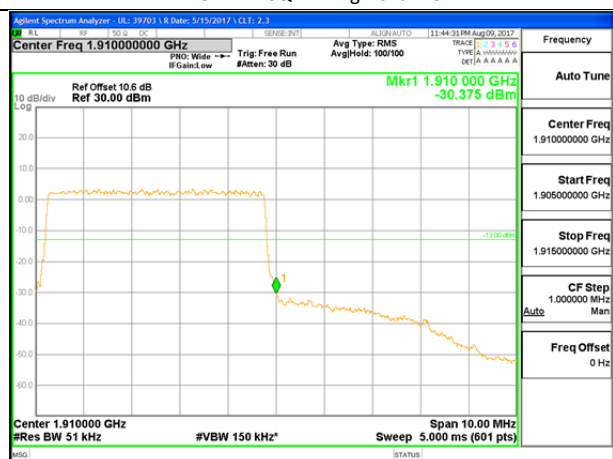
LTE B2 5MHz 16QAM Low Channel 1RB



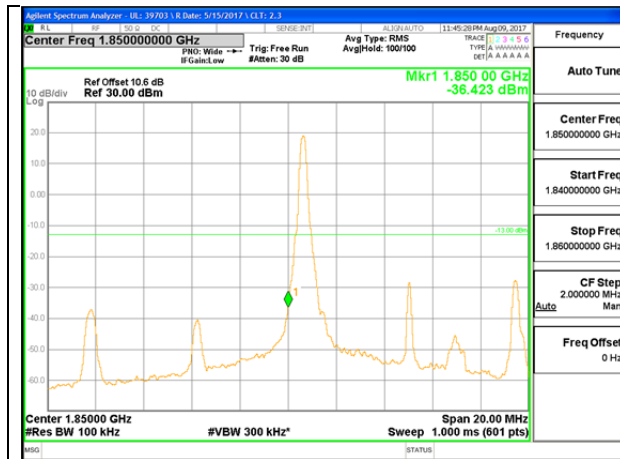
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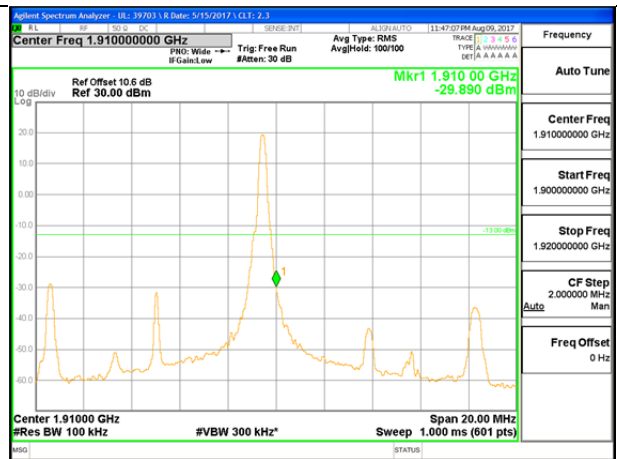
LTE B2 5MHz 16QAM Low Channel FRB



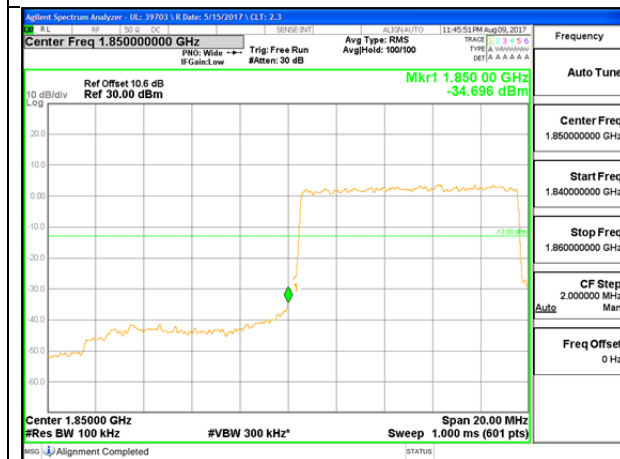
LTE B2 5MHz 16QAM High Channel FRB



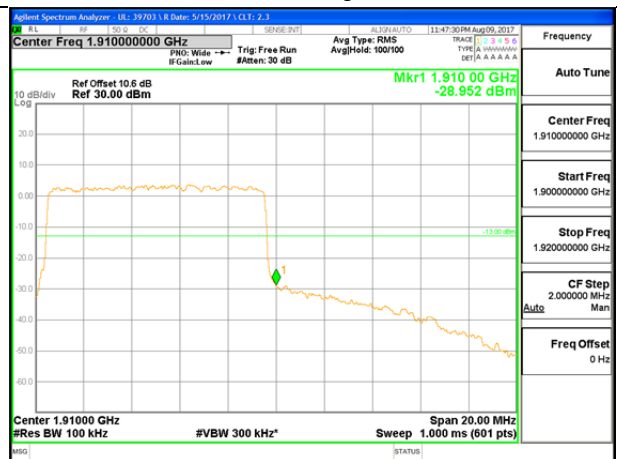
LTE B2 10MHz QPSK Low Channel 1RB



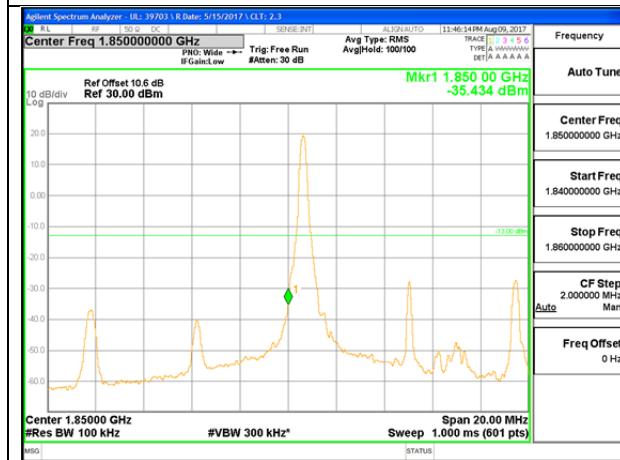
LTE B2 10MHz QPSK High Channel 1RB



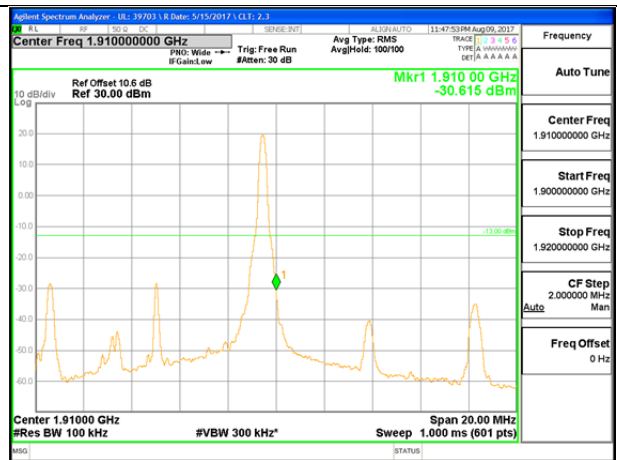
LTE B2 10MHz QPSK Low Channel FRB



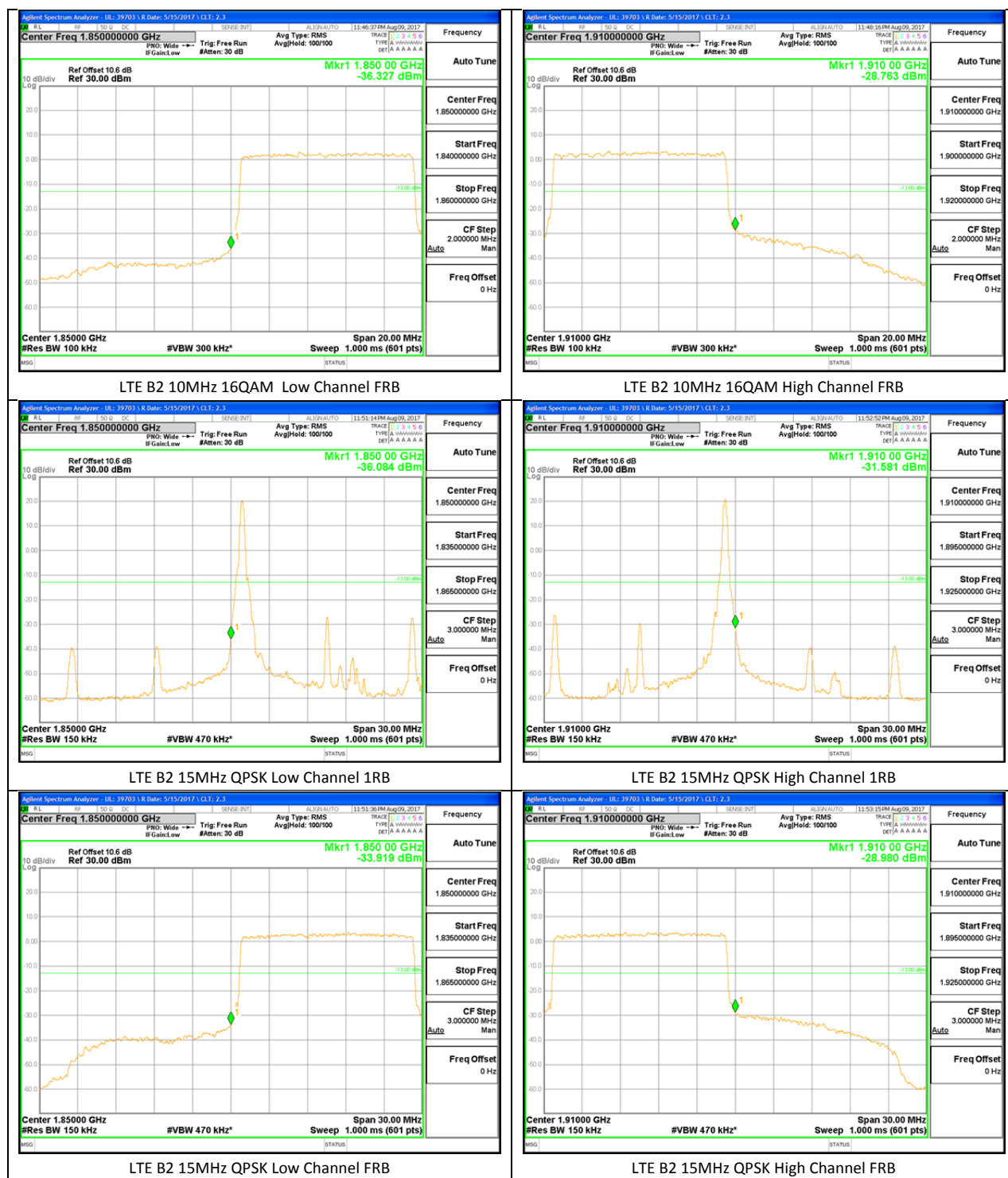
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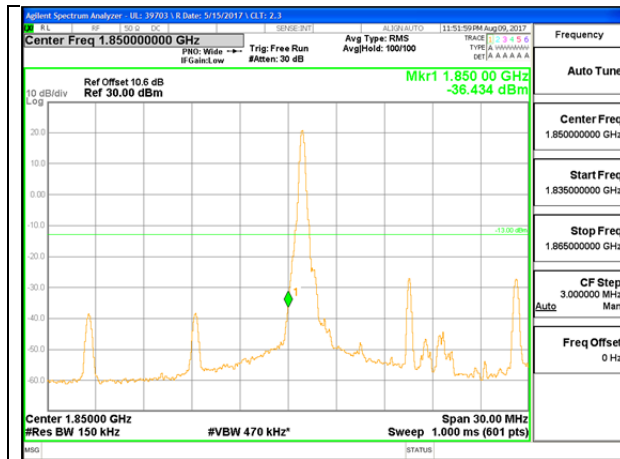


LTE B2 10MHz 16QAM Low Channel 1RB

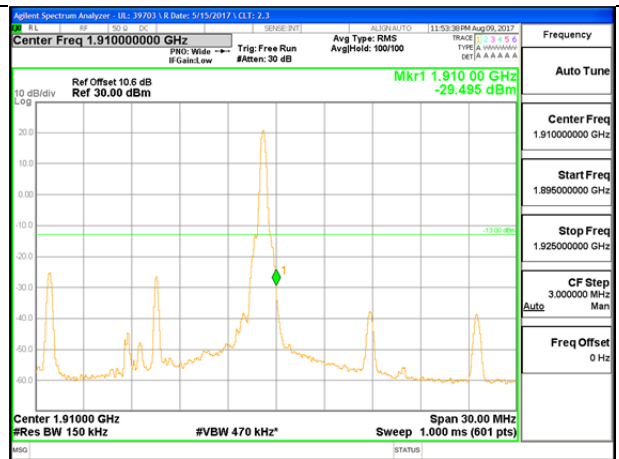


LTE B2 10MHz 16QAM High Channel 1RB

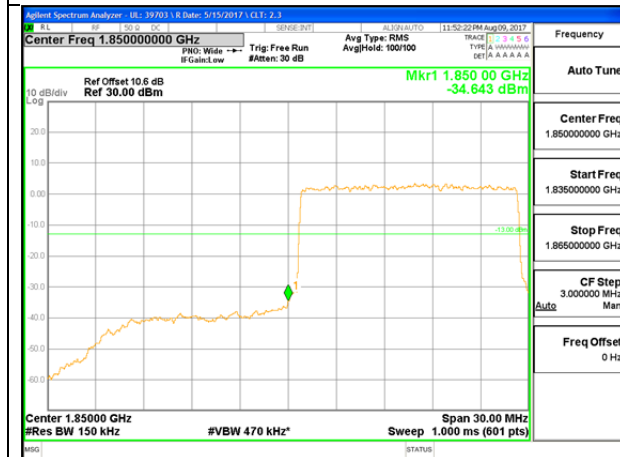




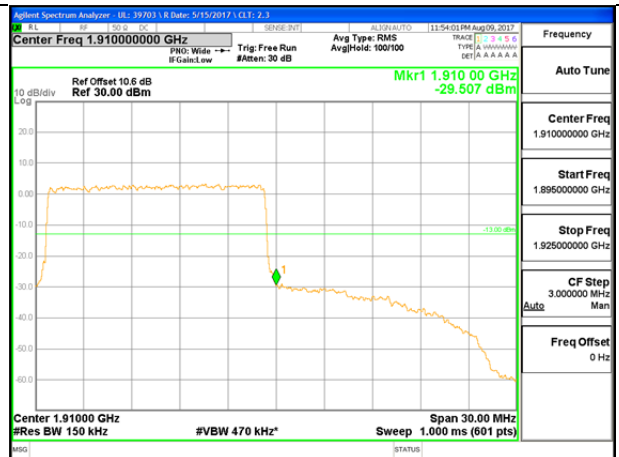
LTE B2 15MHz 16QAM Low Channel 1RB



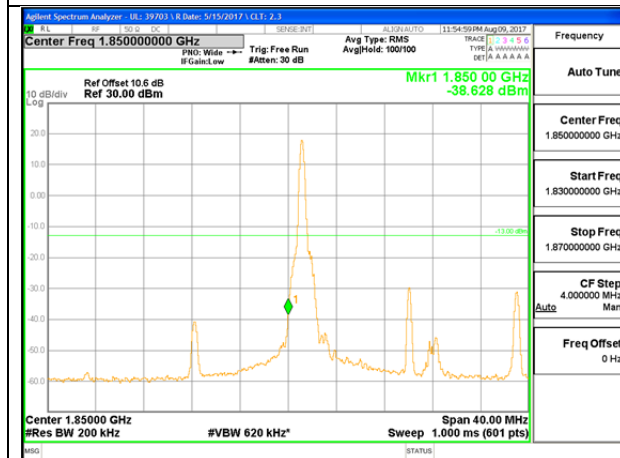
LTE B2 15MHz 16QAM High Channel 1RB



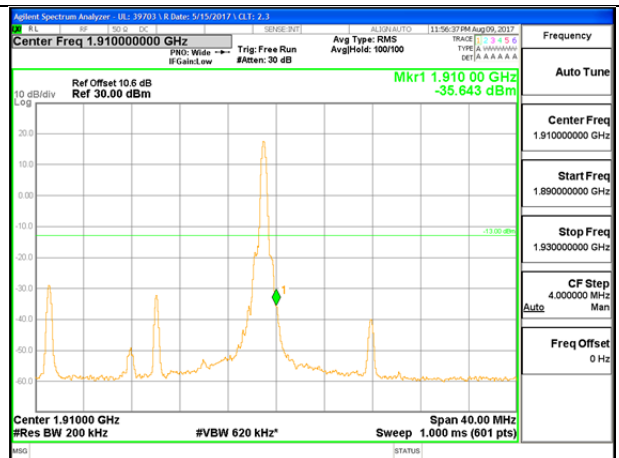
LTE B2 15MHz 16QAM Low Channel FRB



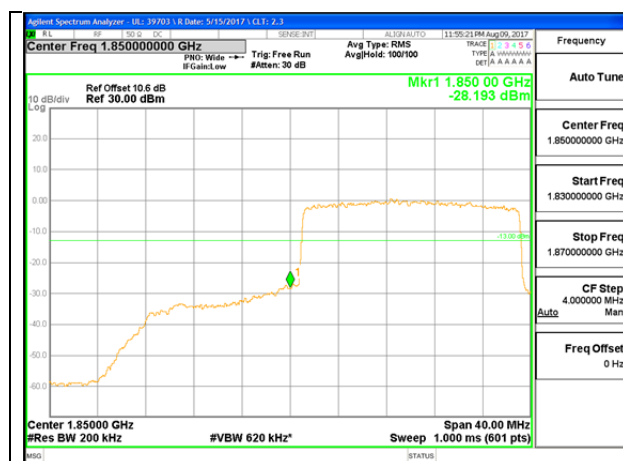
LTE B2 15MHz 16QAM High Channel FRB



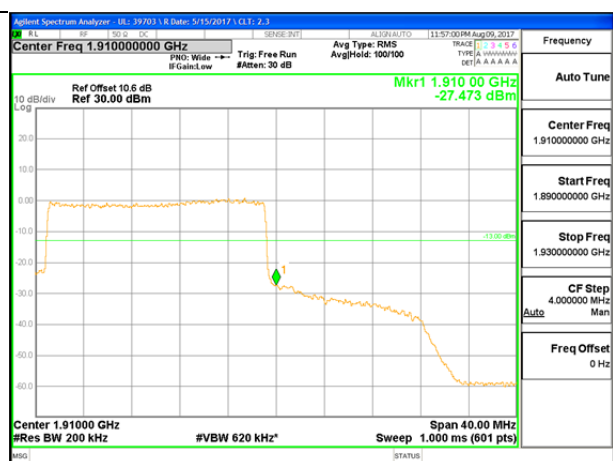
LTE B2 20MHz QPSK Low Channel 1RB



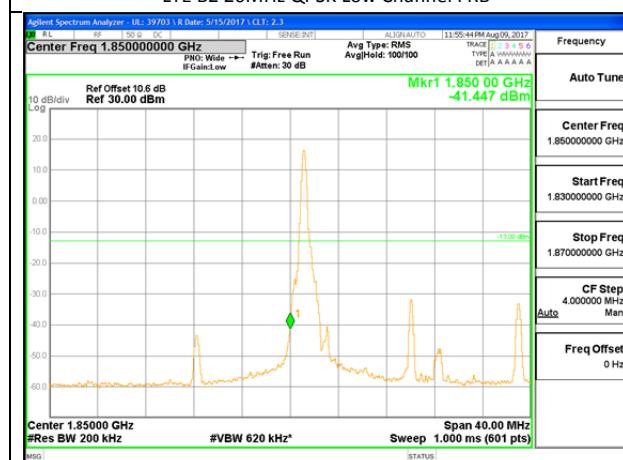
LTE B2 20MHz QPSK High Channel 1RB



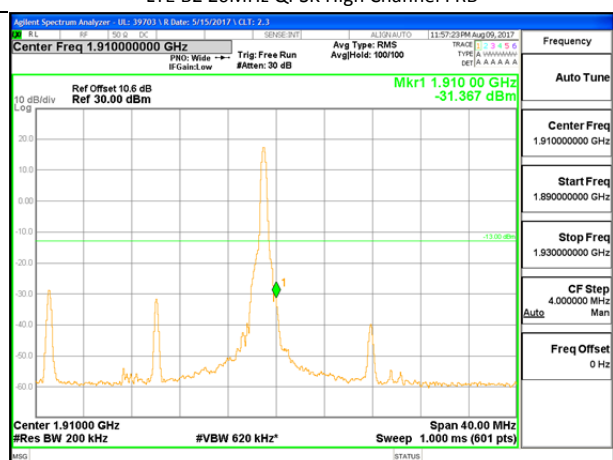
LTE B2 20MHz QPSK Low Channel FRB



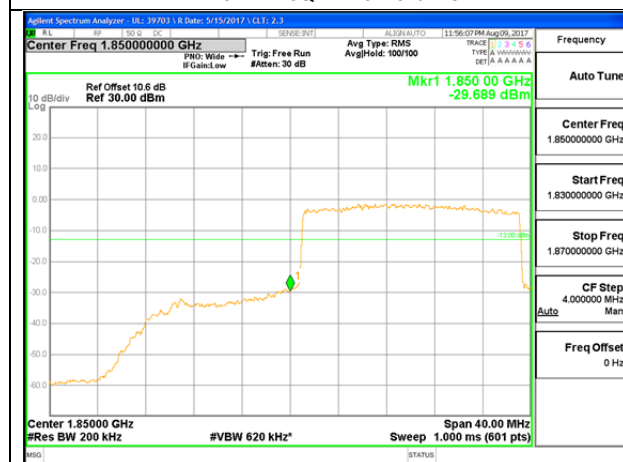
LTE B2 20MHz QPSK High Channel FRB



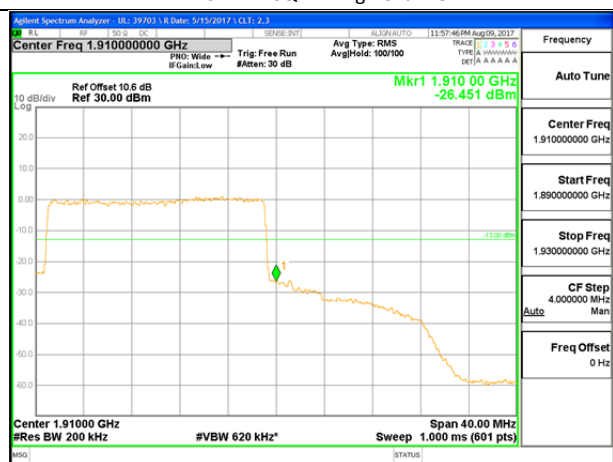
LTE B2 20MHz 16QAM Low Channel 1RB



LTE B2 20MHz 16QAM High Channel 1RB



LTE B2 20MHz 16QAM Low Channel FRB



LTE B2 20MHz 16QAM High Channel FRB

LTE Band 7

