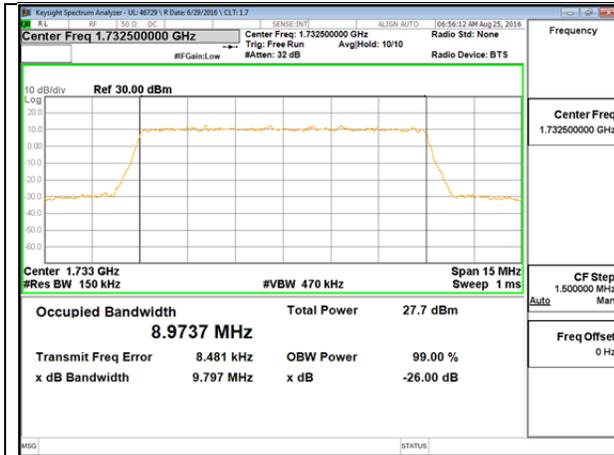
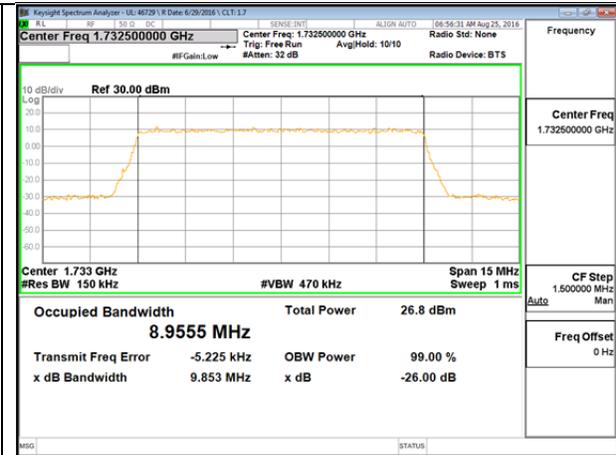


LTE Band 4 Plots

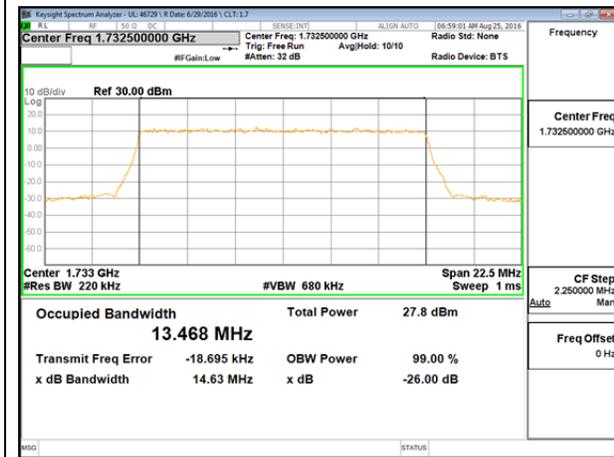




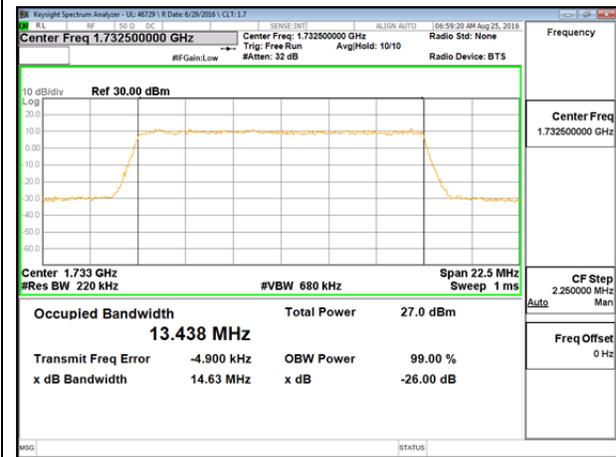
LTE B4 10MHz QPSK Middle Channel



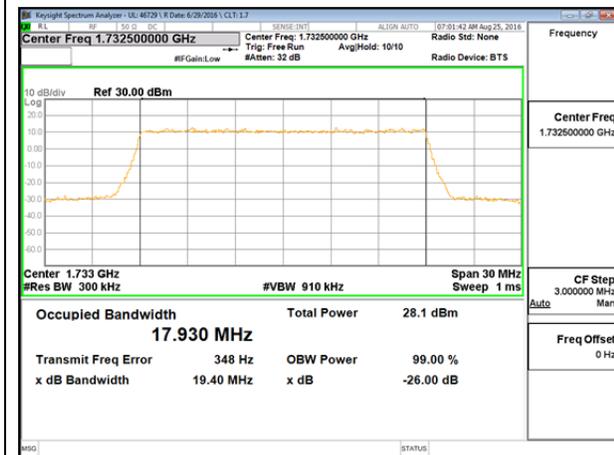
LTE B4 10MHz 16QAM Middle Channel



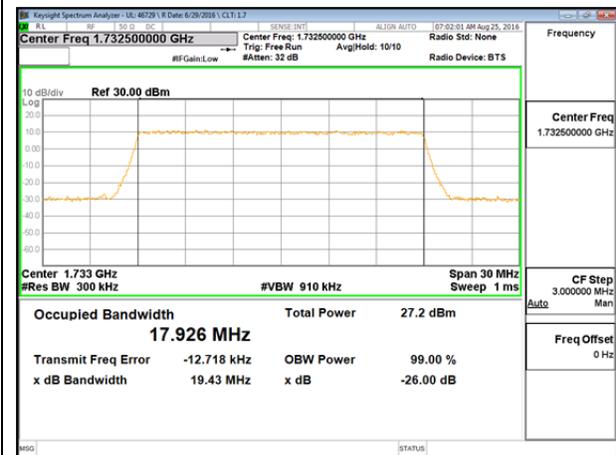
LTE B4 15MHz QPSK Middle Channel



LTE B4 15MHz 16QAM Middle Channel



LTE B4 20MHz QPSK Middle Channel



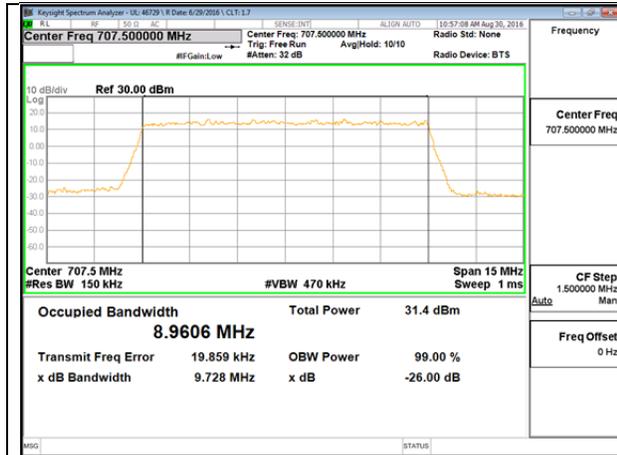
LTE B4 20MHz 16QAM Middle Channel

LTE Band 12 Data

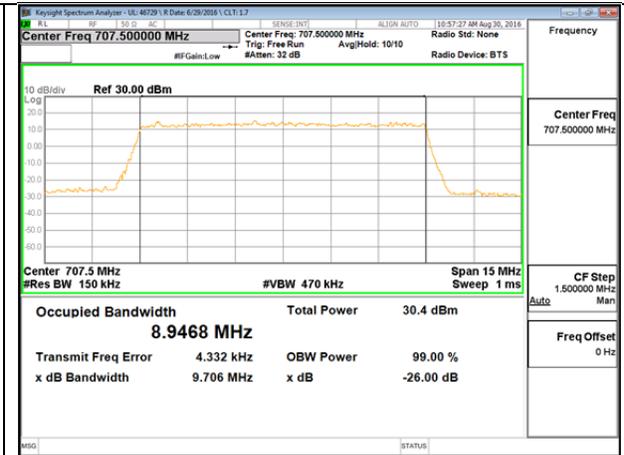
| BW(MHz) | Mode | RB/RB Size | f (MHz) | 99% BW (MHz) | -26dB BW (MHz) |
|---------|-------|------------|---------|--------------|----------------|
| 1.4 | QPSK | 6/0 | 699.7 | 1.086 | 1.229 |
| | | 6/0 | 707.5 | 1.080 | 1.226 |
| | | 6/0 | 715.3 | 1.085 | 1.230 |
| | 16QAM | 6/0 | 699.7 | 1.084 | 1.236 |
| | | 6/0 | 707.5 | 1.085 | 1.234 |
| | | 6/0 | 715.3 | 1.093 | 1.238 |
| 3 | QPSK | 15/0 | 700.5 | 2.700 | 2.984 |
| | | 15/0 | 707.5 | 2.698 | 2.989 |
| | | 15/0 | 714.5 | 2.704 | 3.003 |
| | 16QAM | 15/0 | 700.5 | 2.706 | 3.012 |
| | | 15/0 | 707.5 | 2.698 | 2.988 |
| | | 15/0 | 714.5 | 2.695 | 3.000 |
| 5 | QPSK | 25/0 | 701.5 | 4.507 | 4.959 |
| | | 25/0 | 707.5 | 4.492 | 4.954 |
| | | 25/0 | 713.5 | 4.485 | 4.933 |
| | 16QAM | 25/0 | 701.5 | 4.505 | 4.952 |
| | | 25/0 | 707.5 | 4.489 | 4.922 |
| | | 25/0 | 713.5 | 4.486 | 4.919 |
| 10 | QPSK | 50/0 | 704.0 | 8.966 | 9.800 |
| | | 50/0 | 707.5 | 8.961 | 9.728 |
| | | 50/0 | 711.0 | 8.970 | 9.766 |
| | 16QAM | 50/0 | 704.0 | 8.981 | 9.746 |
| | | 50/0 | 707.5 | 8.947 | 9.706 |
| | | 50/0 | 711.0 | 9.004 | 9.800 |

LTE Band 12 Plots





LTE B12 10MHz QPSK Middle Channel



LTE B12 10MHz 16QAM Middle Channel

LTE Band 17 Data

| BW(MHz) | Mode | RB/RB Size | f (MHz) | 99% BW (MHz) | -26dB BW (MHz) |
|---------|-------|------------|---------|--------------|----------------|
| 5 | QPSK | 25/0 | 706.5 | 4.490 | 4.936 |
| | | 25/0 | 710 | 4.486 | 4.919 |
| | | 25/0 | 713.5 | 4.503 | 4.950 |
| | 16QAM | 25/0 | 706.5 | 4.486 | 4.925 |
| | | 25/0 | 710 | 4.484 | 4.925 |
| | | 25/0 | 713.5 | 4.501 | 4.962 |
| 10 | QPSK | 50/0 | 709 | 8.971 | 9.724 |
| | | 50/0 | 710 | 8.986 | 9.710 |
| | | 50/0 | 711 | 8.973 | 9.731 |
| | 16QAM | 50/0 | 709 | 8.988 | 9.803 |
| | | 50/0 | 710 | 8.958 | 9.777 |
| | | 50/0 | 711 | 9.007 | 9.827 |

LTE Band 17 Plots

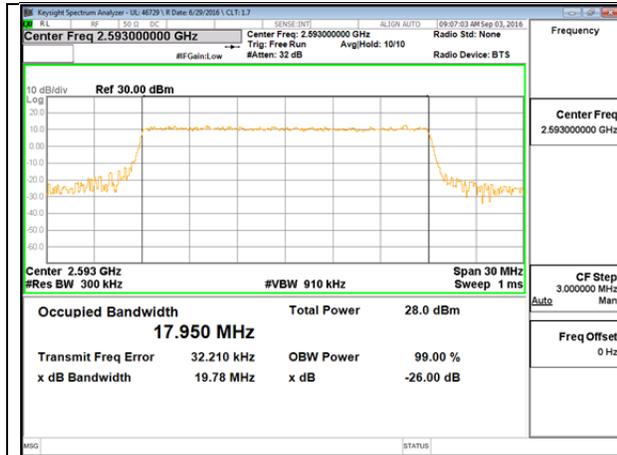


LTE Band 41 Data

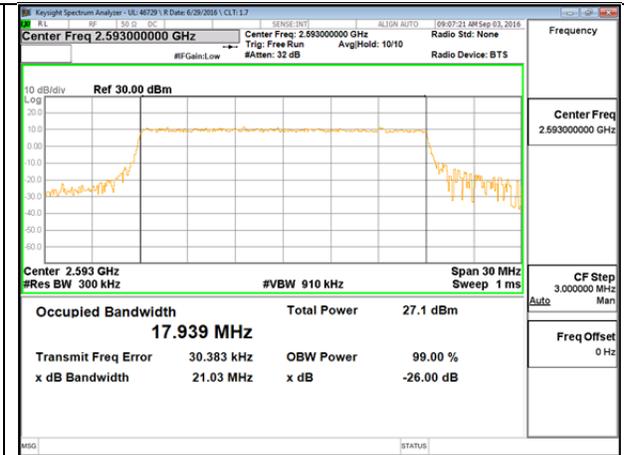
| BW(MHz) | Mode | RB/RB Size | f (MHz) | 99% BW (MHz) | -26dB BW (MHz) |
|---------|-------|------------|---------|--------------|----------------|
| 5 | QPSK | 25/0 | 2498.5 | 4.499 | 4.881 |
| | | 25/0 | 2593.0 | 4.490 | 4.976 |
| | | 25/0 | 2687.5 | 4.493 | 4.954 |
| | 16QAM | 25/0 | 2498.5 | 4.488 | 4.924 |
| | | 25/0 | 2593.0 | 4.486 | 4.893 |
| | | 25/0 | 2687.5 | 4.492 | 4.964 |
| 10 | QPSK | 50/0 | 2501.0 | 8.954 | 9.649 |
| | | 50/0 | 2593.0 | 8.979 | 9.749 |
| | | 50/0 | 2685.0 | 8.954 | 9.703 |
| | 16QAM | 50/0 | 2501.0 | 8.981 | 9.789 |
| | | 50/0 | 2593.0 | 8.956 | 9.946 |
| | | 50/0 | 2685.0 | 8.988 | 10.120 |
| 15 | QPSK | 75/0 | 2503.5 | 13.436 | 14.570 |
| | | 75/0 | 2593.0 | 13.440 | 15.110 |
| | | 75/0 | 2682.5 | 13.440 | 14.650 |
| | 16QAM | 75/0 | 2503.5 | 13.464 | 15.110 |
| | | 75/0 | 2593.0 | 13.475 | 15.250 |
| | | 75/0 | 2682.5 | 13.445 | 14.750 |
| 20 | QPSK | 100/0 | 2506.0 | 17.937 | 19.720 |
| | | 100/0 | 2593.0 | 17.950 | 19.780 |
| | | 100/0 | 2680.0 | 17.888 | 19.700 |
| | 16QAM | 100/0 | 2506.0 | 17.931 | 19.640 |
| | | 100/0 | 2593.0 | 17.939 | 21.030 |
| | | 100/0 | 2680.0 | 17.907 | 19.770 |

LTE Band 41 Plots





LTE B41 20MHz QPSK Middle Channel



LTE B41 20MHz 16QAM Middle Channel

9.3. BANDEDGE AND EMISSION MASK

RULE PART(S)

FCC: §22.359, §24.238, and §27.53

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

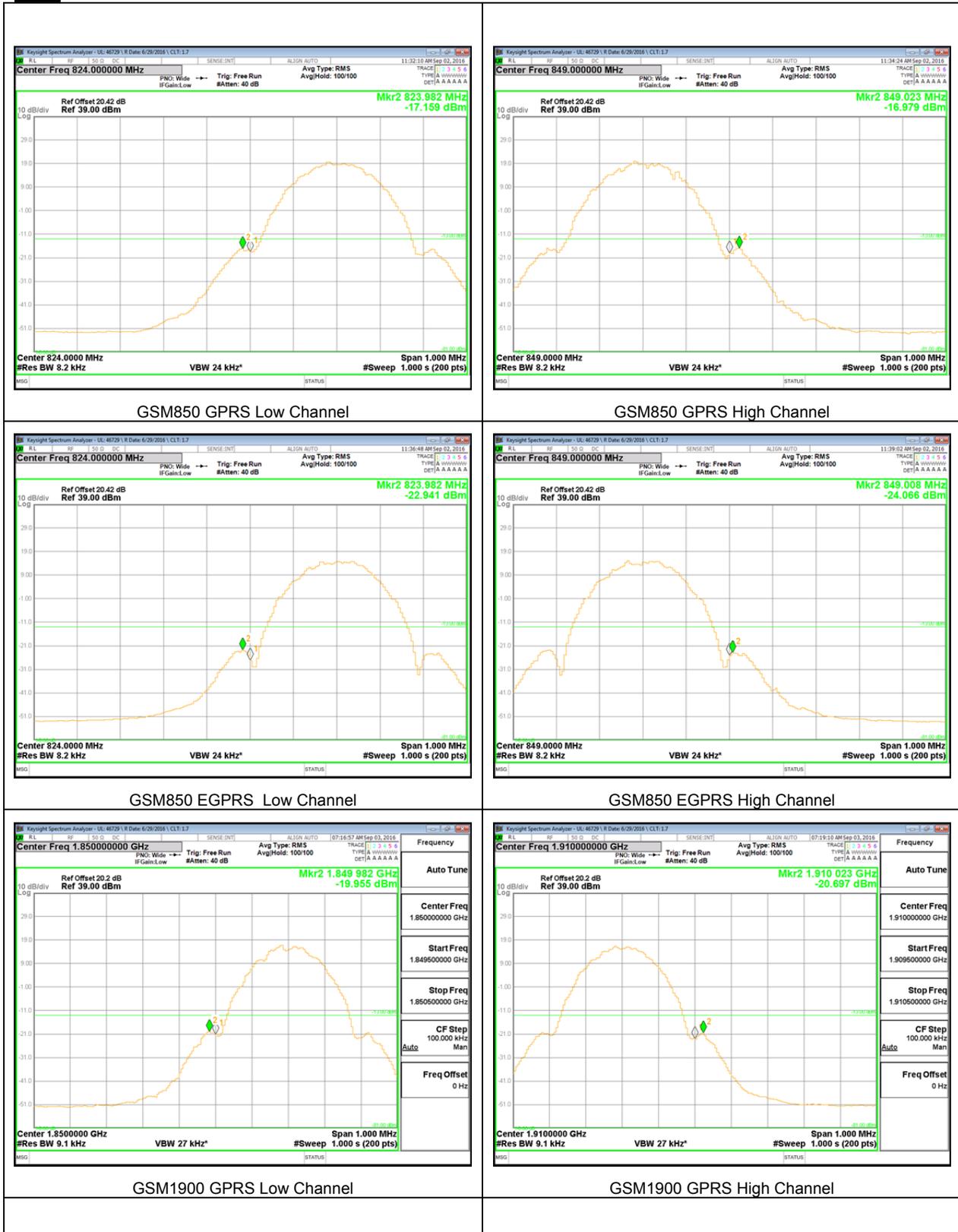
The transmitter output was connected to an Agilent 8960 or a CMW500 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

Note : LTE B41 Emission plot

1. RBW: 1MHz for Blue Trace
2. RBW: 2% of OBW for Red Trace

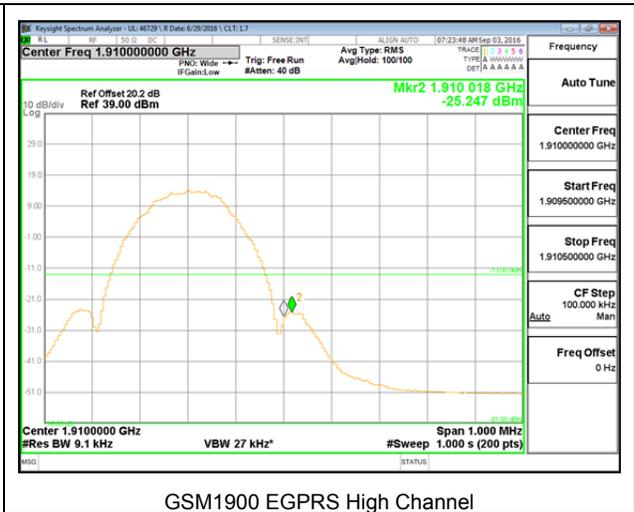
9.3.1. BANEDGE PLOTS

GSM



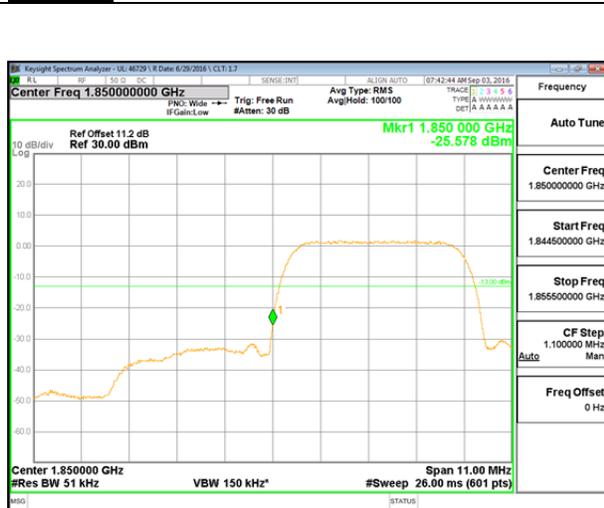


GSM1900 EGPRS Low Channel

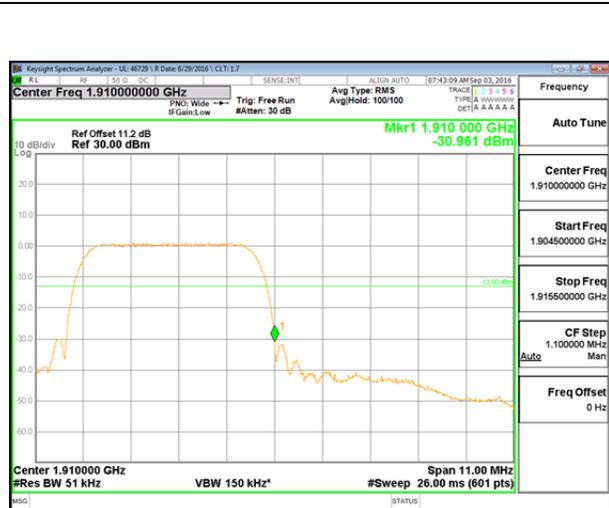


GSM1900 EGPRS High Channel

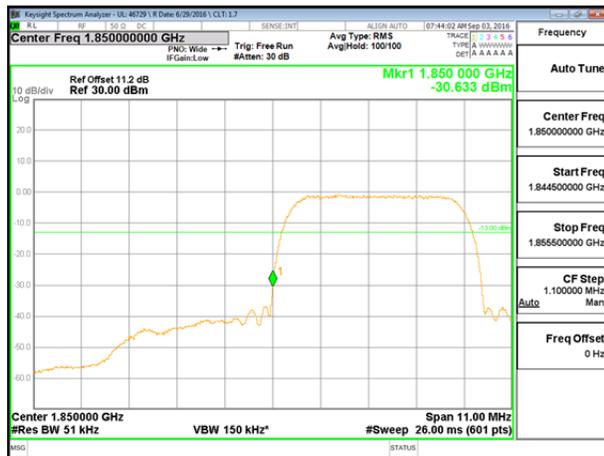
WCDMA



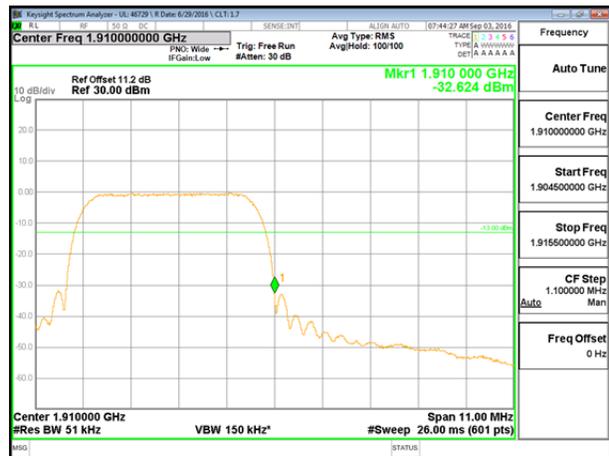
B2 REL99 Low Channel



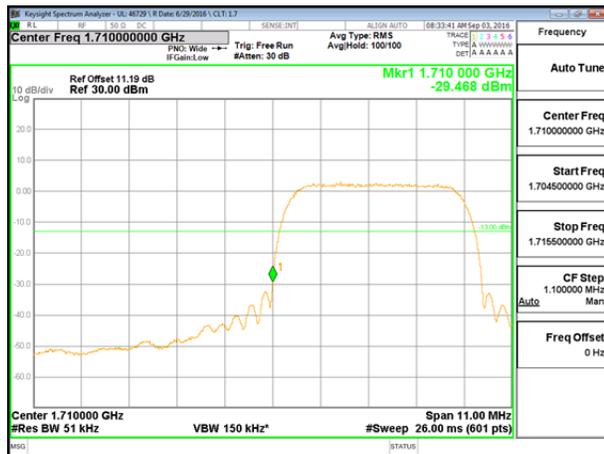
B2 REL99 High Channel



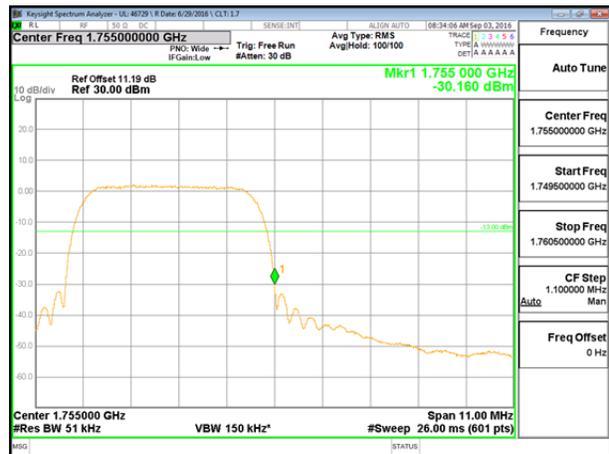
B2 HSDPA Low Channel



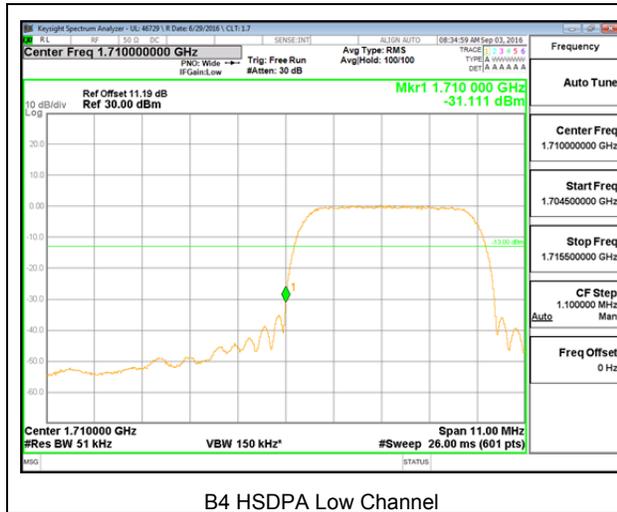
B2 HSDPA High Channel



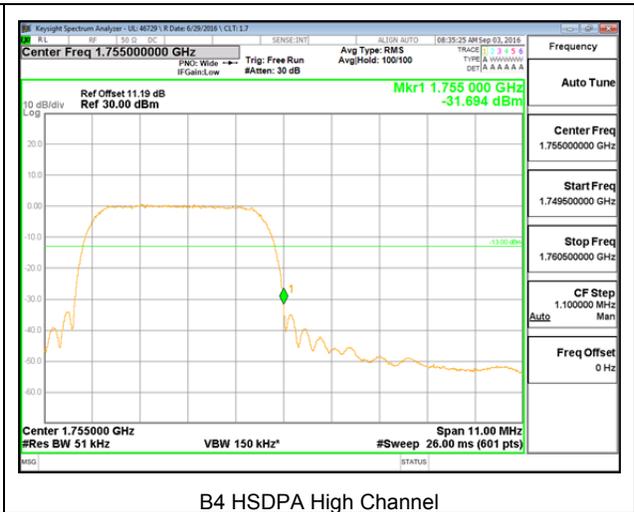
B4 REL99 Low Channel



B4 REL99 High Channel

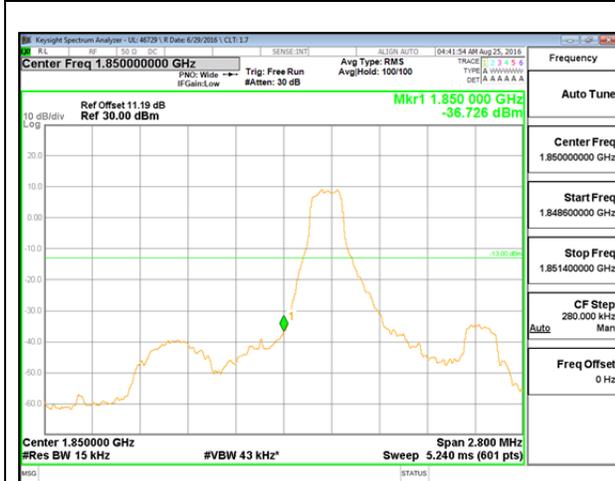


B4 HSDPA Low Channel



B4 HSDPA High Channel

LTE Band 2



LTE B2 1.4MHz QPSK Low Channel 1RB



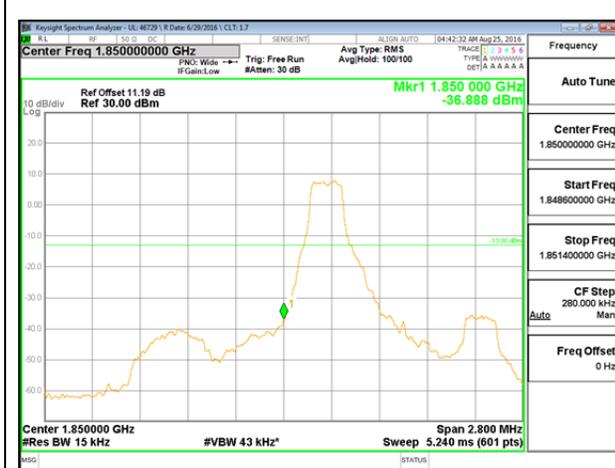
LTE B2 1.4MHz QPSK High Channel 1RB



LTE B2 1.4MHz QPSK Low Channel FRB



LTE B2 1.4MHz QPSK High Channel FRB



LTE B2 1.4MHz 16QAM Low Channel 1RB



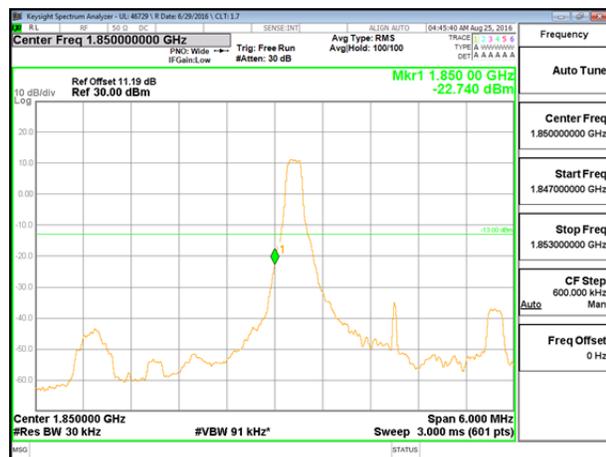
LTE B2 1.4MHz 16QAM High Channel 1RB



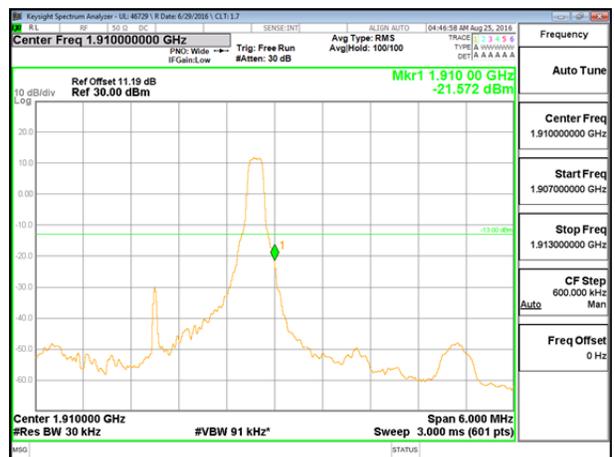
LTE B2 1.4MHz 16QAM Low Channel FRB



LTE B2 1.4MHz 16QAM High Channel FRB



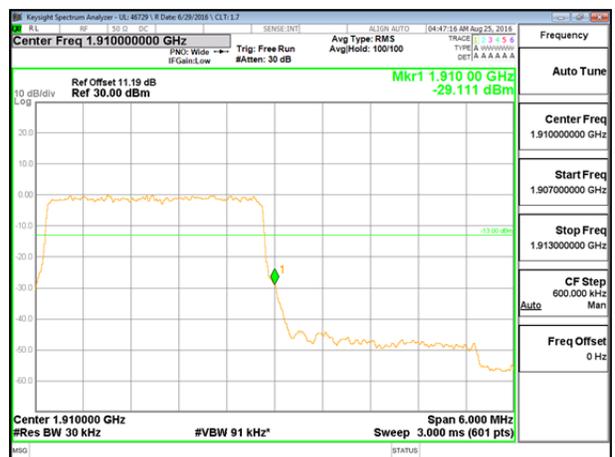
LTE B2 3MHz QPSK Low Channel 1RB



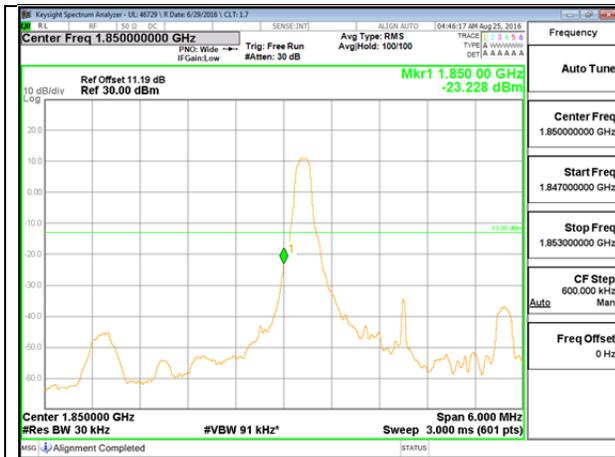
LTE B2 3MHz QPSK High Channel 1RB



LTE B2 3MHz QPSK Low Channel FRB



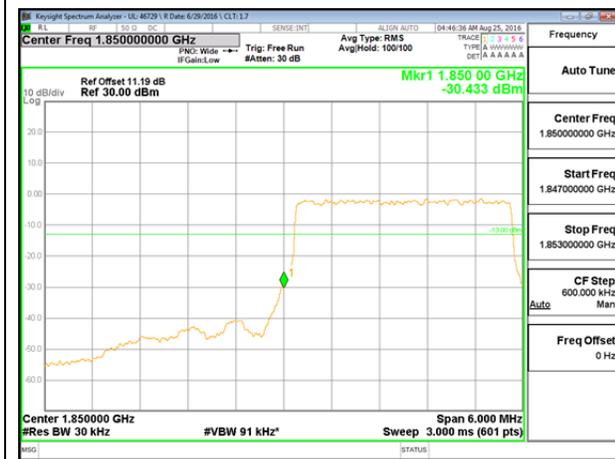
LTE B2 3MHz QPSK High Channel FRB



LTE B2 3MHz 16QAM Low Channel 1RB



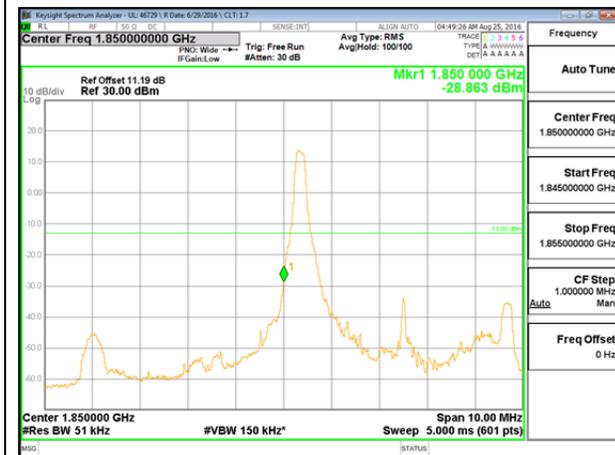
LTE B2 3MHz 16QAM High Channel 1RB



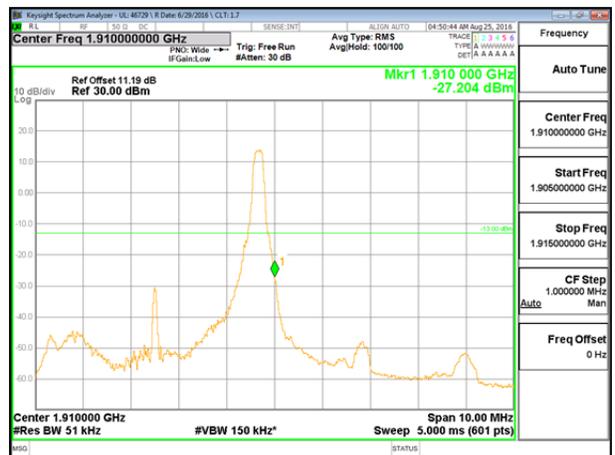
LTE B2 3MHz 16QAM Low Channel FRB



LTE B2 3MHz 16QAM High Channel FRB



LTE B2 5MHz QPSK Low Channel 1RB



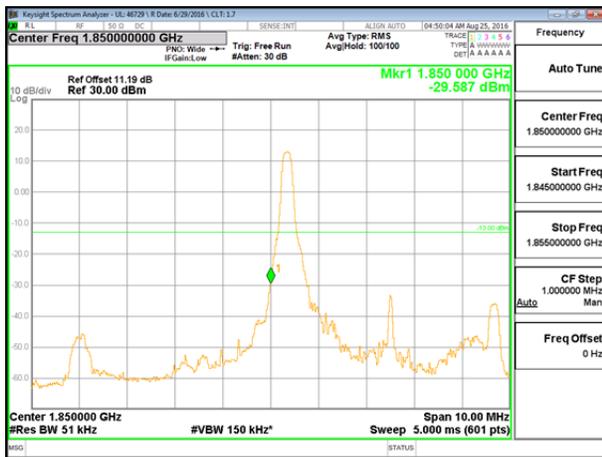
LTE B2 5MHz QPSK High Channel 1RB



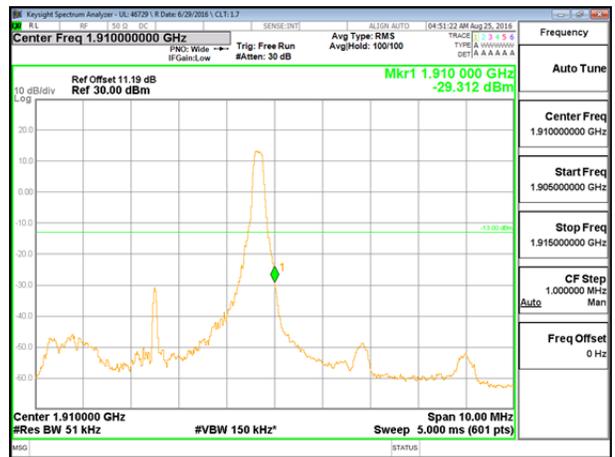
LTE B2 5MHz QPSK Low Channel FRB



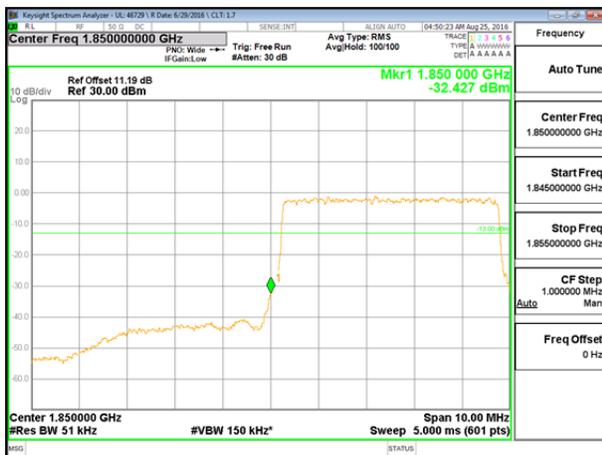
LTE B2 5MHz QPSK High Channel FRB



LTE B2 5MHz 16QAM Low Channel 1RB



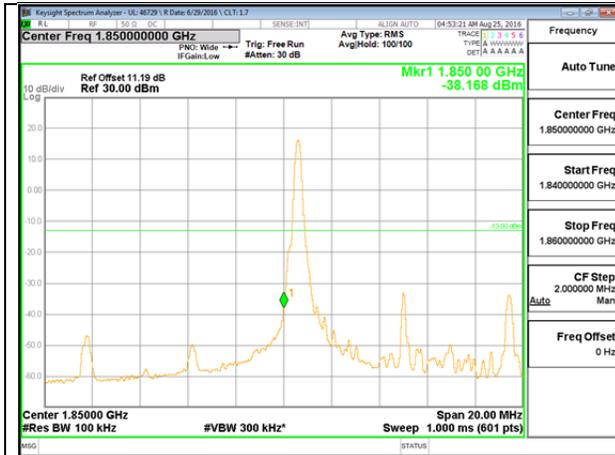
LTE B2 5MHz 16QAM High Channel 1RB



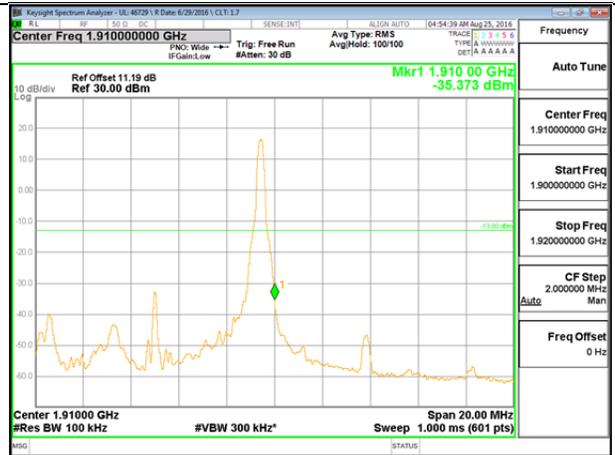
LTE B2 5MHz 16QAM Low Channel FRB



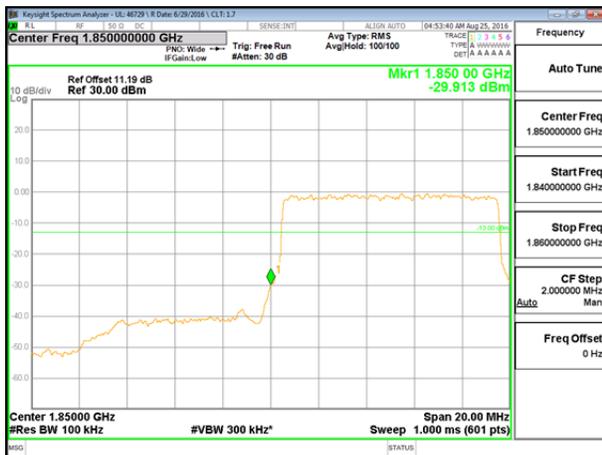
LTE B2 5MHz 16QAM High Channel FRB



LTE B2 10MHz QPSK Low Channel 1RB



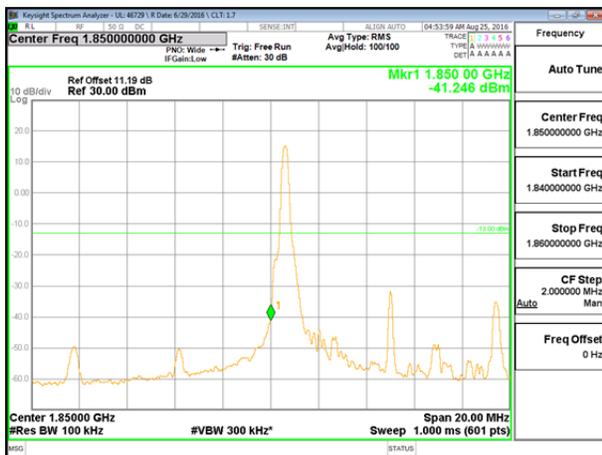
LTE B2 10MHz QPSK High Channel 1RB



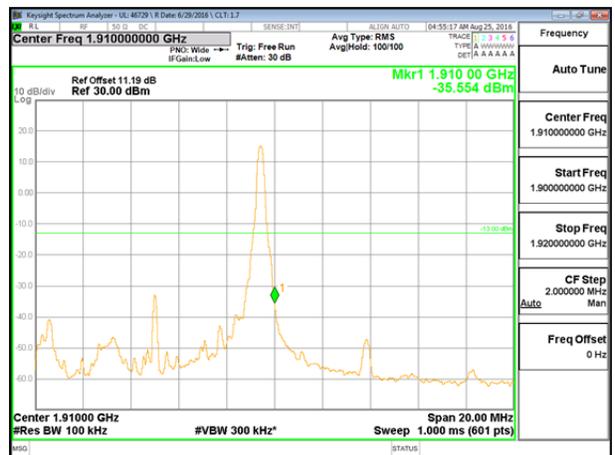
LTE B2 10MHz QPSK Low Channel FRB



LTE B2 10MHz QPSK High Channel FRB



LTE B2 10MHz 16QAM Low Channel 1RB



LTE B2 10MHz 16QAM High Channel 1RB