



5MHz/QPSK/High CH

5MHz/16QAM/High CH





10MHz/QPSK/Low CH



10MHz/16QAM/Low CH



10MHz/QPSK/Mid CH



10MHz/16QAM/Mid CH



10MHz/QPSK/High CH



10MHz/16QAM/High CH





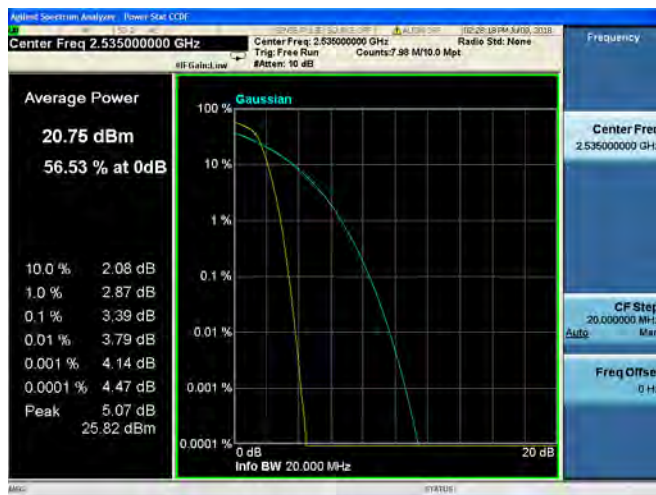
15MHz/QPSK/Low CH



15MHz/16QAM/Low CH



15MHz/QPSK/Mid CH



15MHz/16QAM/Mid CH



15MHz/QPSK/High CH



15MHz/16QAM/High CH

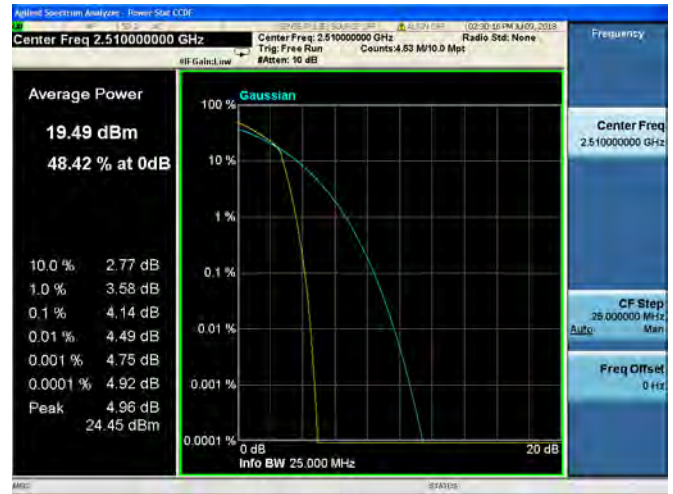




20MHz/QPSK/Low CH



20MHz/16QAM/Low CH



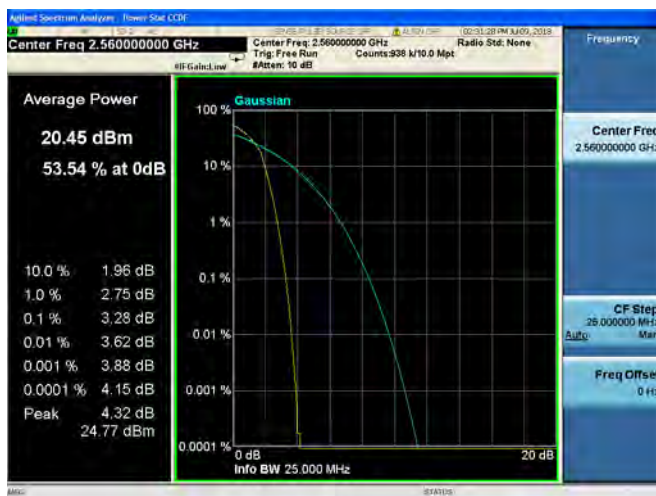
20MHz/QPSK/Mid CH



20MHz/16QAM/Mid CH



20MHz/QPSK/High CH



20MHz/16QAM/High CH

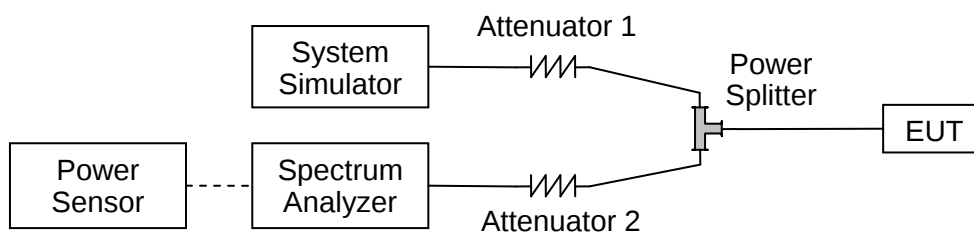


2.5. Conducted Spurious Emissions

2.5.1. Requirement

According to FCC section 2.1051, 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. This calculated to be -13dBm.

2.5.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.5.3. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

2.5.4. Test Result



LTE Band 2 1.4MHz BW Low Channel

QPSK



16QAM





LTE Band 2 1.4MHz BW Mid Channel

QPSK



16QAM





LTE Band 2 1.4MHz BW High Channel

QPSK



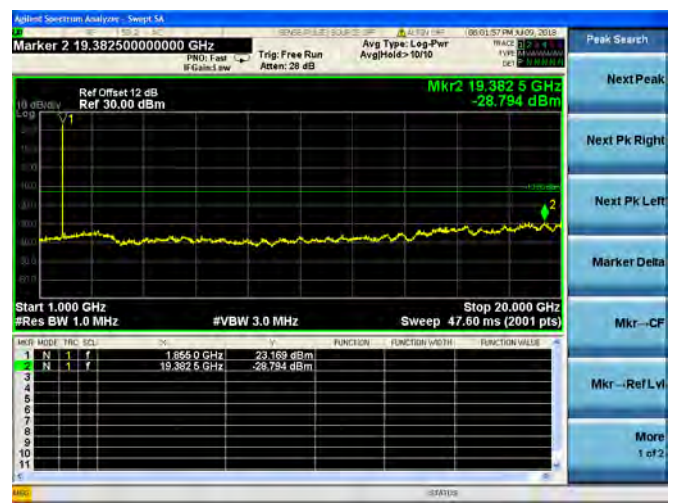
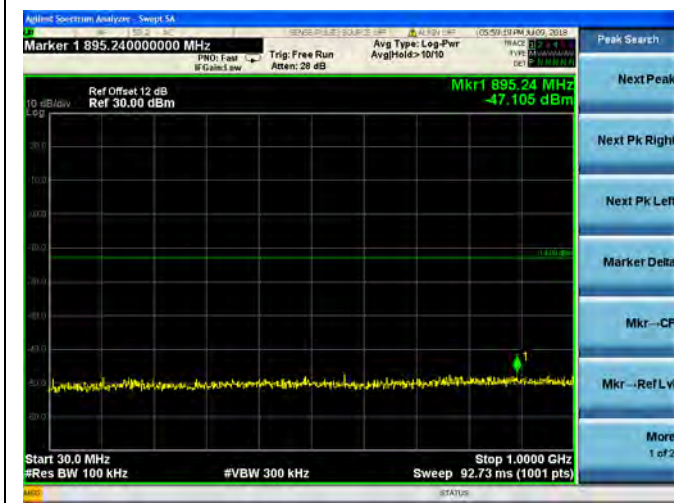
16QAM



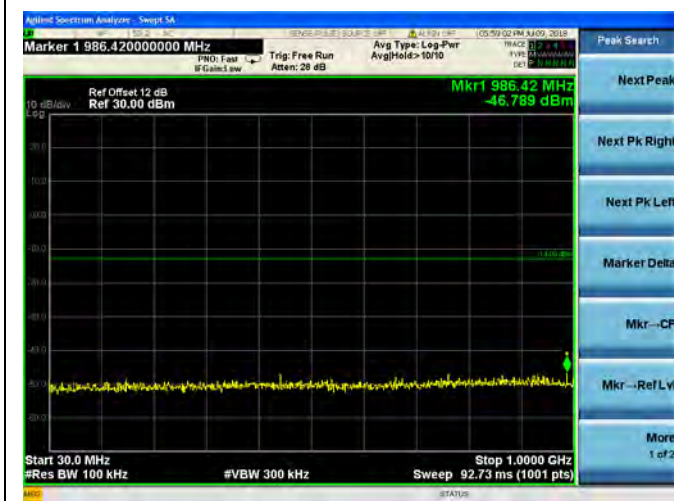


LTE Band 2 3MHz BW Low Channel

QPSK



16QAM





REPORT No.: SZ18060250W05

LTE Band 2 3MHz BW Mid Channel

QPSK



16QAM





LTE Band 2 3MHz BW High Channel

QPSK



16QAM





LTE Band 2 5MHz BW Low Channel

QPSK



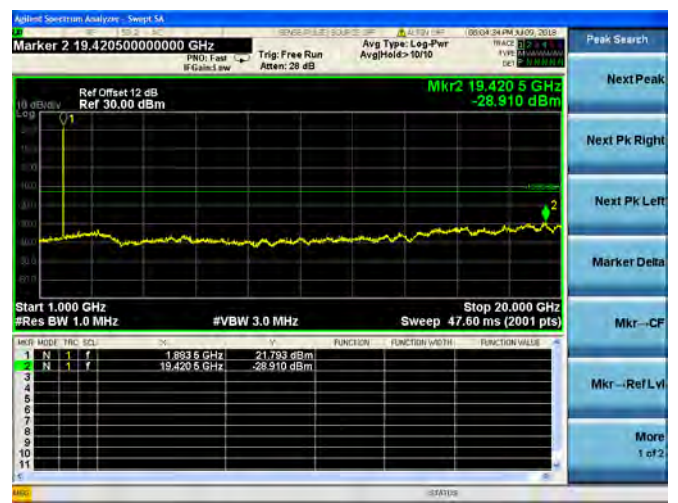
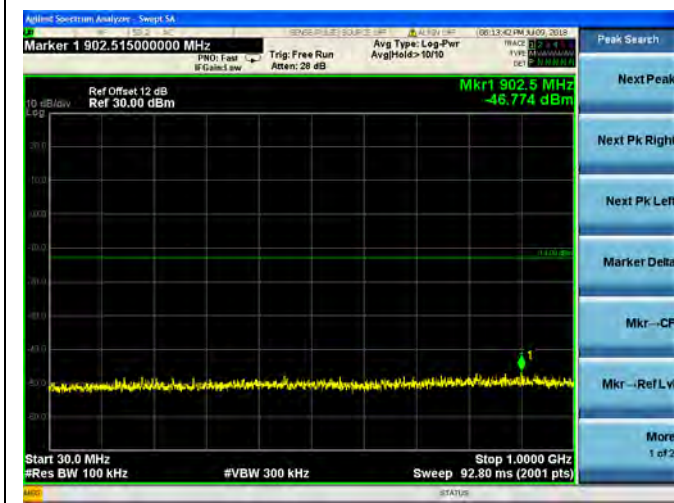
16QAM



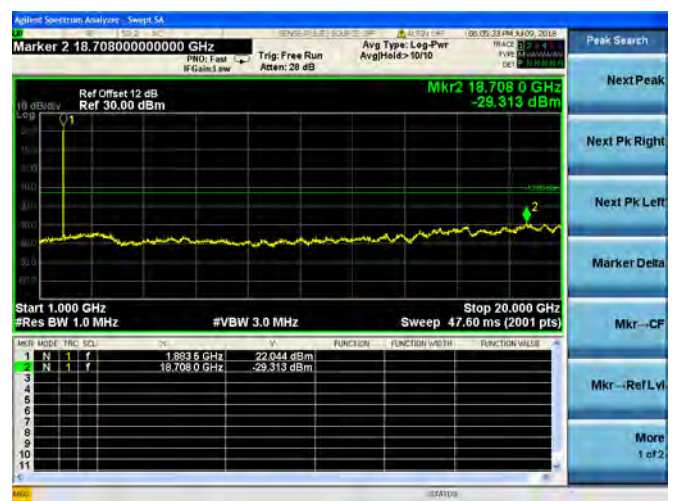
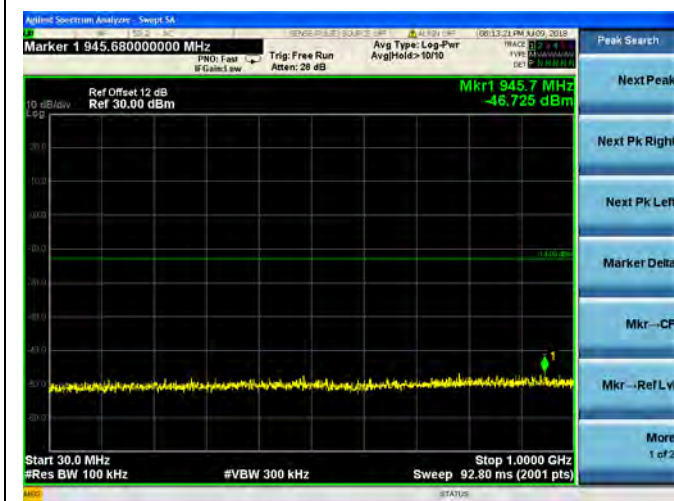


LTE Band 2 5MHz BW Mid Channel

QPSK



16QAM





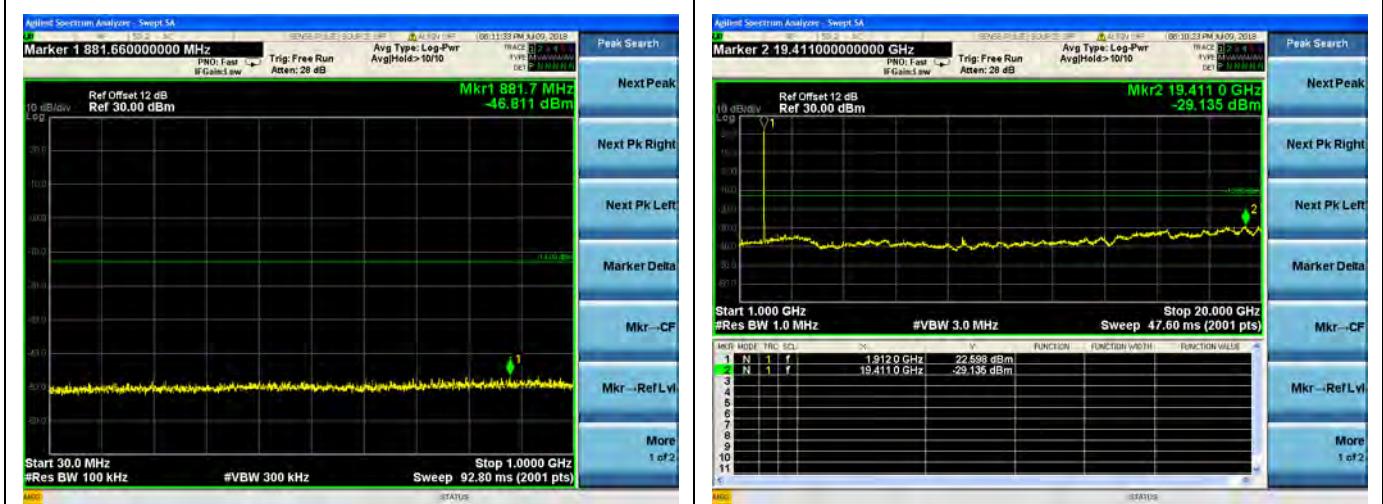
REPORT No.: SZ18060250W05

LTE Band 2 5MHz BW High Channel

QPSK



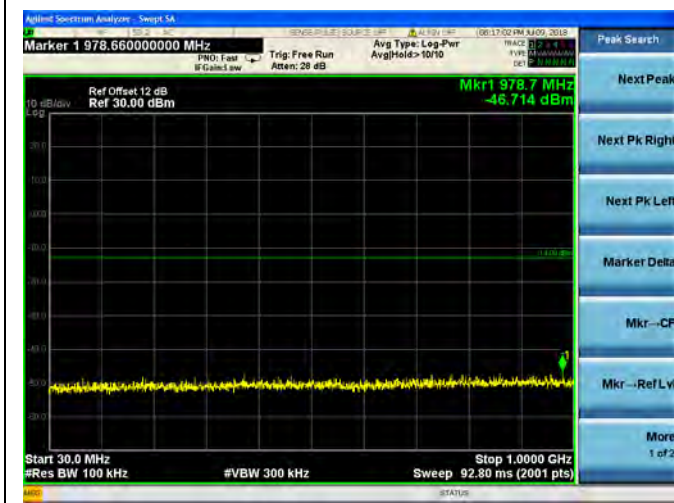
16QAM



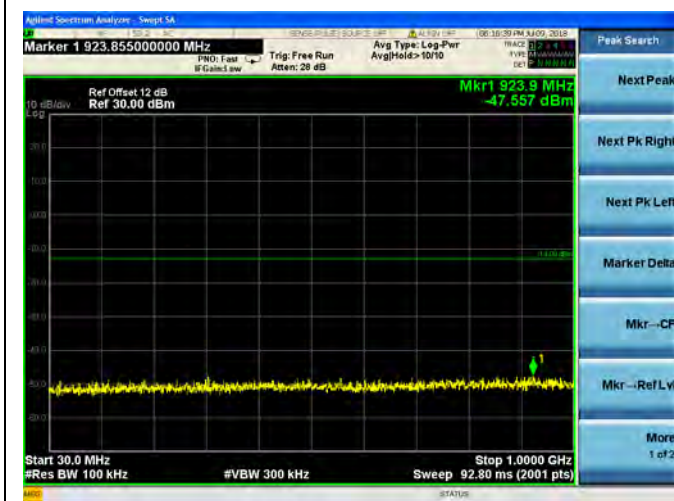


LTE Band 2 10MHz BW Low Channel

QPSK



16QAM





REPORT No.: SZ18060250W05

LTE Band 2 10MHz BW Mid Channel

QPSK



16QAM





LTE Band 2 10MHz BW High Channel

QPSK



16QAM





LTE Band 2 15MHz BW Low Channel

QPSK



16QAM





REPORT No.: SZ18060250W05

LTE Band 2 15MHz BW Mid Channel

QPSK



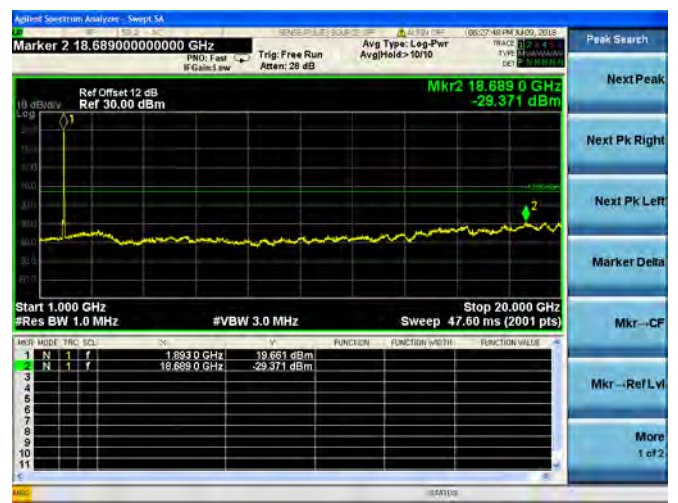
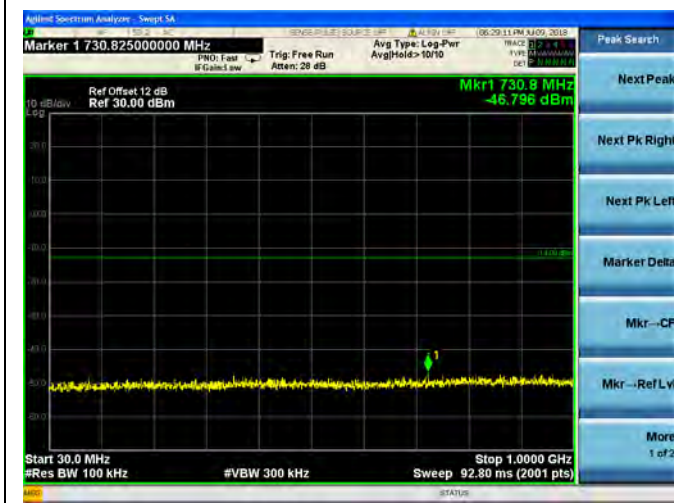
16QAM



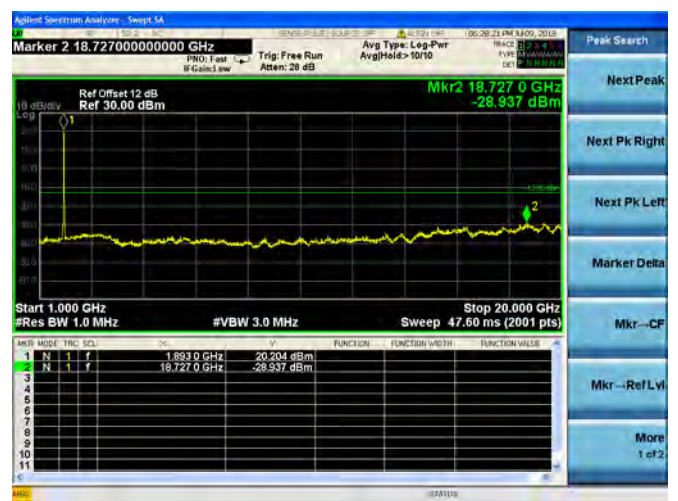
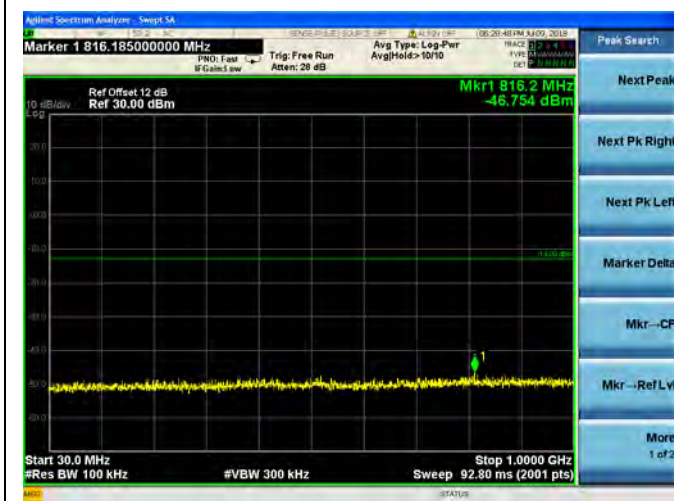


LTE Band 2 15MHz BW High Channel

QPSK



16QAM





LTE Band 2 20MHz BW Low Channel

QPSK



16QAM





LTE Band 2 20MHz BW Mid Channel

QPSK



16QAM





LTE Band 2 20MHz BW High Channel

QPSK



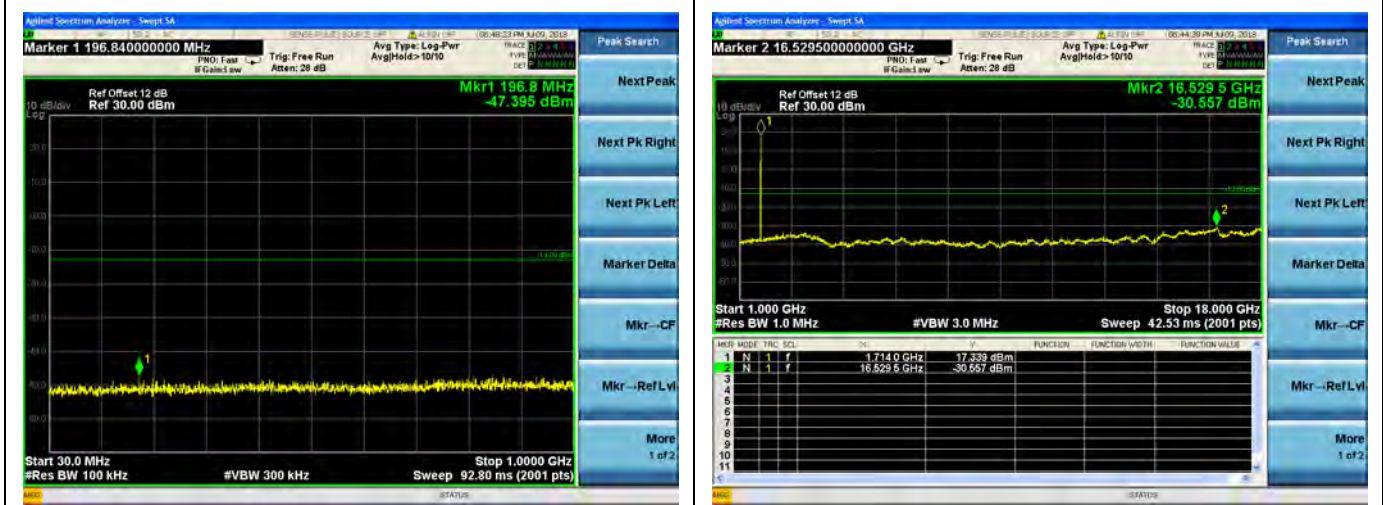
16QAM





LTE Band 4 1.4MHz BW Low Channel

QPSK



16QAM





LTE Band 4 1.4MHz BW Mid Channel

QPSK



16QAM





LTE Band 4 1.4MHz BW High Channel

QPSK



16QAM





LTE Band 4 3MHz BW Low Channel

QPSK



16QAM





LTE Band 4 3MHz BW Mid Channel

QPSK



16QAM





LTE Band 4 3MHz BW High Channel

QPSK



16QAM





REPORT No.: SZ18060250W05

LTE Band 4 5MHz BW Low Channel

QPSK



16QAM





LTE Band 4 5MHz BW Mid Channel

QPSK



16QAM





LTE Band 4 5MHz BW High Channel

QPSK



16QAM





LTE Band 4 10MHz BW Low Channel

QPSK



16QAM



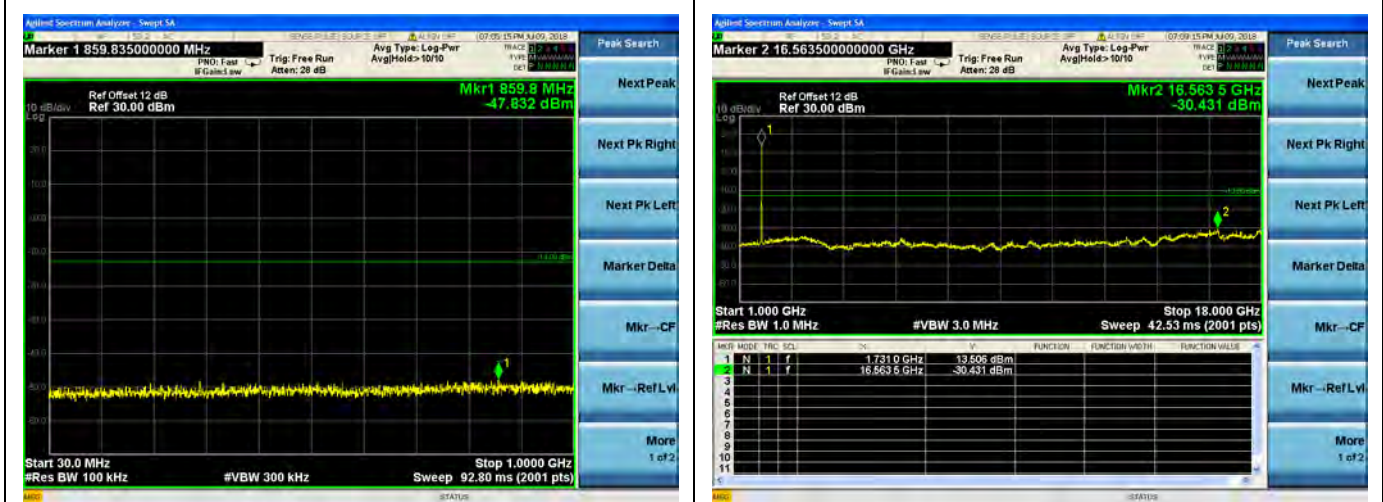


LTE Band 4 10MHz BW Mid Channel

QPSK



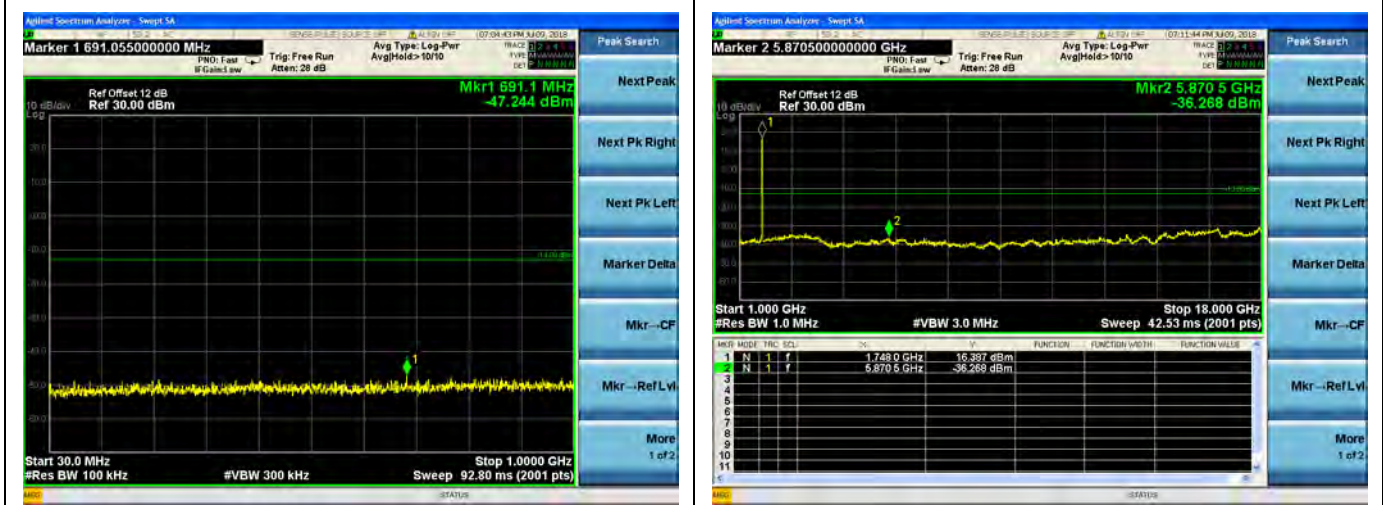
16QAM





LTE Band 4 10MHz BW High Channel

QPSK



16QAM





LTE Band 4 15MHz BW Low Channel

QPSK



16QAM





LTE Band 4 15MHz BW Mid Channel

QPSK



16QAM





LTE Band 4 15MHz BW High Channel

QPSK



16QAM





LTE Band 4 20MHz BW Low Channel

QPSK



16QAM





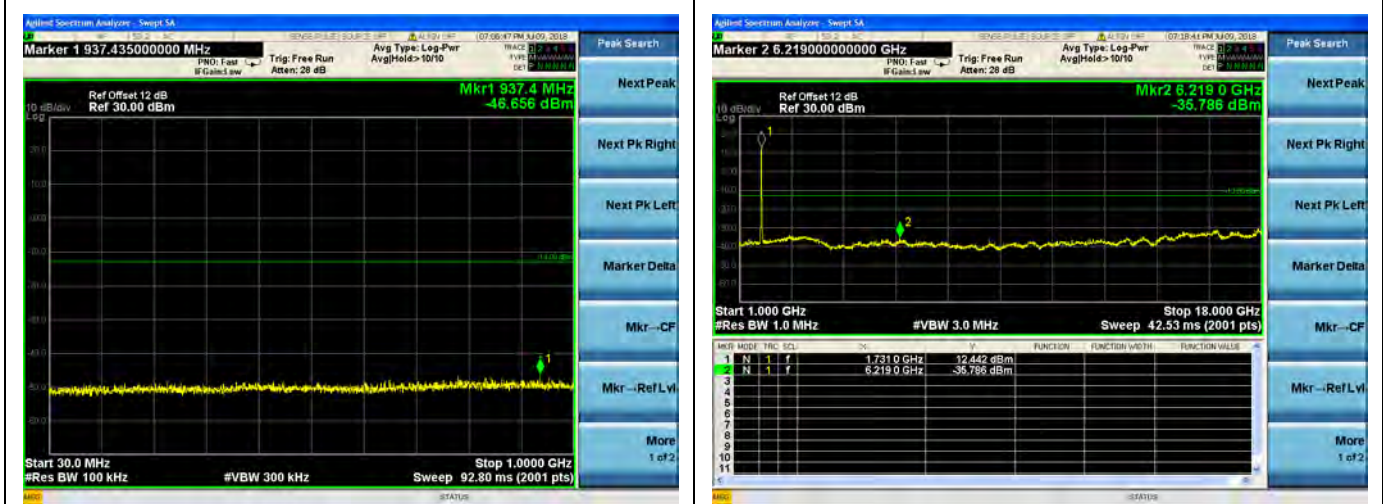
REPORT No.: SZ18060250W05

LTE Band 4 20MHz BW Mid Channel

QPSK



16QAM





LTE Band 4 20MHz BW High Channel

QPSK



16QAM



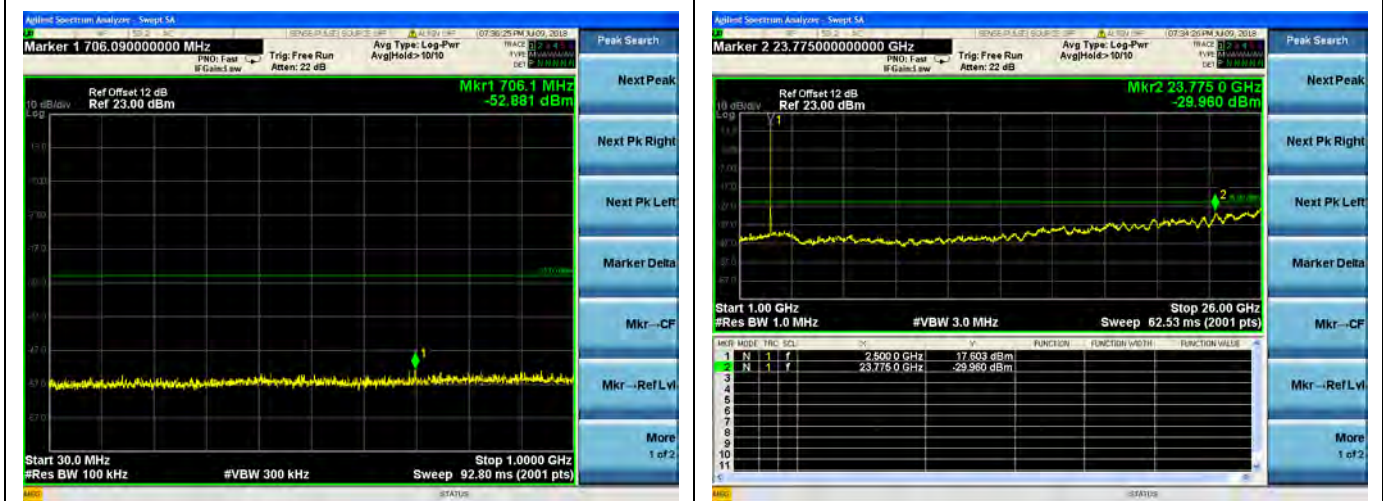


LTE Band 7 5MHz BW Low Channel

QPSK



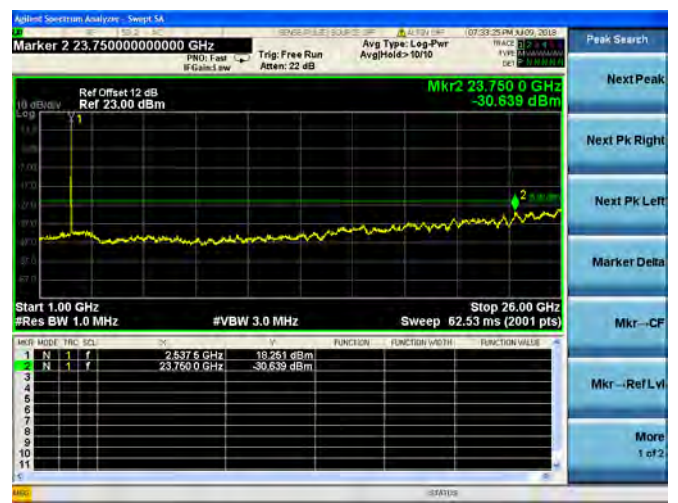
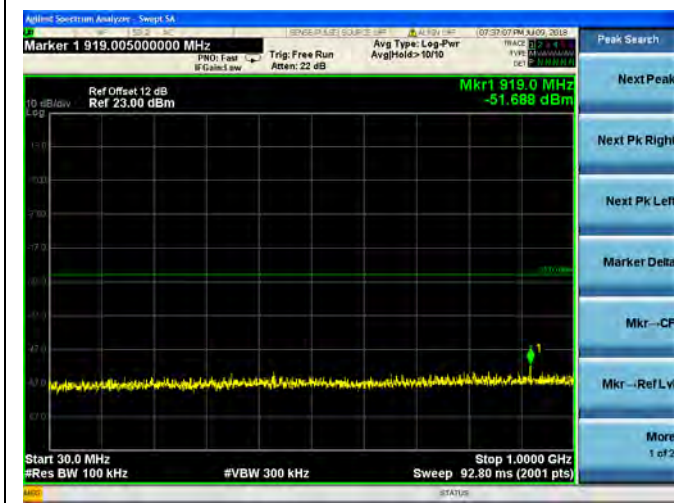
16QAM



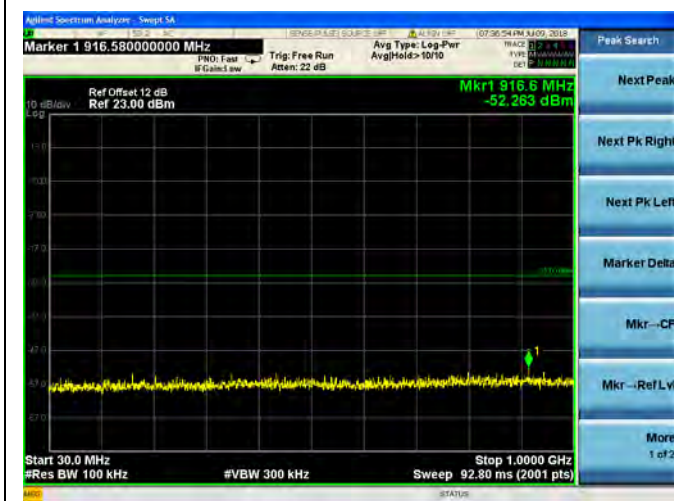


LTE Band 7 5MHz BW Mid Channel

QPSK



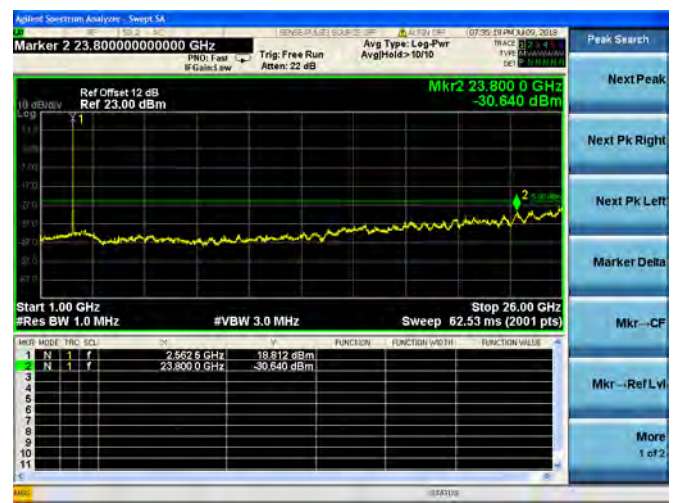
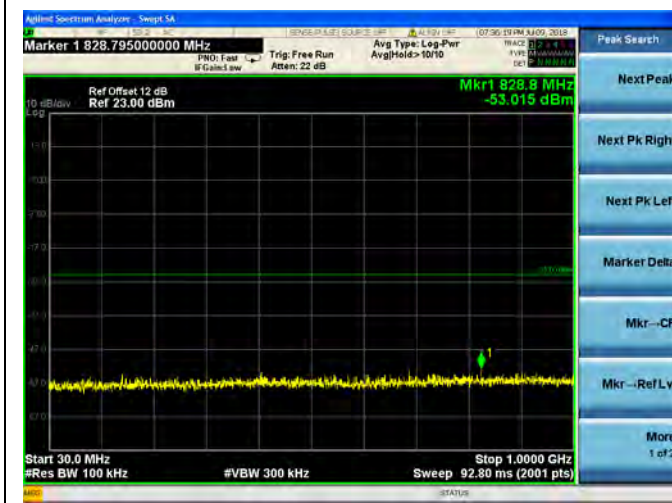
16QAM



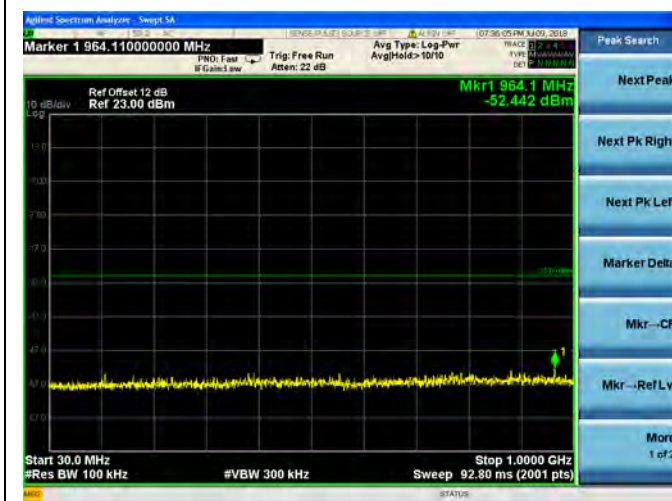


LTE Band 7 5MHz BW High Channel

QPSK



16QAM





LTE Band 7 10MHz BW Low Channel

QPSK



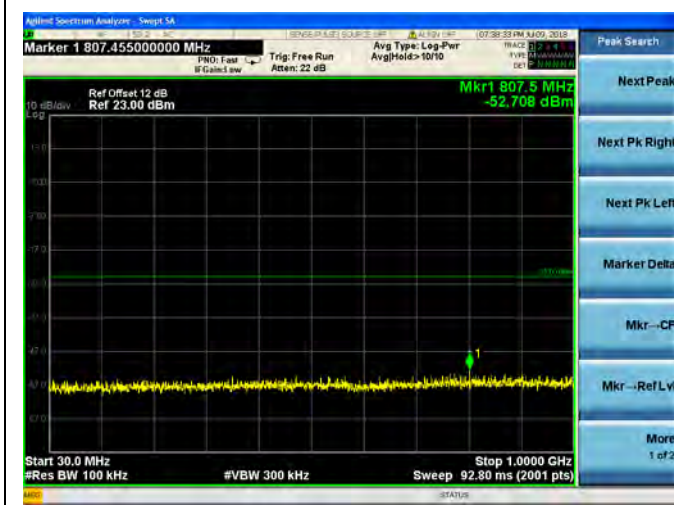
16QAM



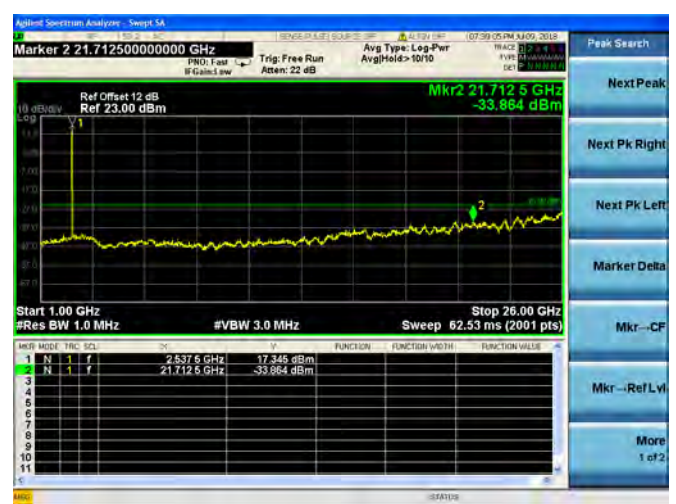


LTE Band 7 10MHz BW Mid Channel

QPSK



16QAM



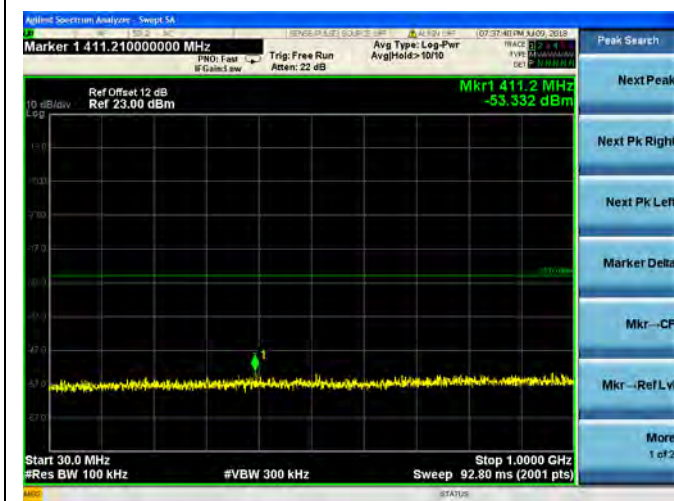


LTE Band 7 10MHz BW High Channel

QPSK



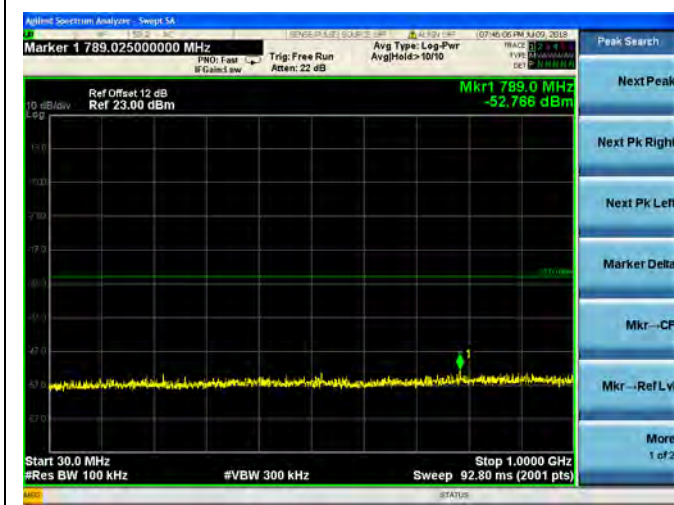
16QAM





LTE Band 7 15MHz BW Low Channel

QPSK



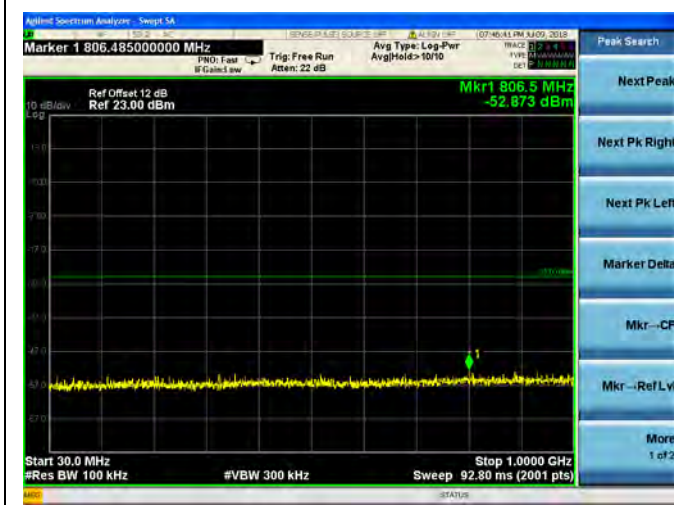
16QAM



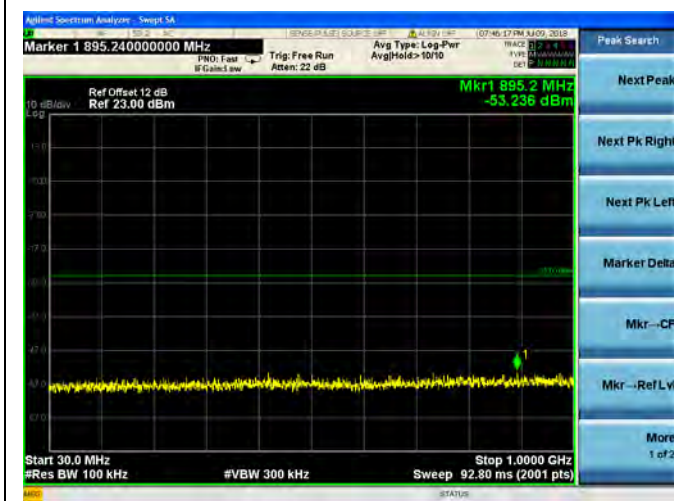


LTE Band 7 15MHz BW Mid Channel

QPSK



16QAM



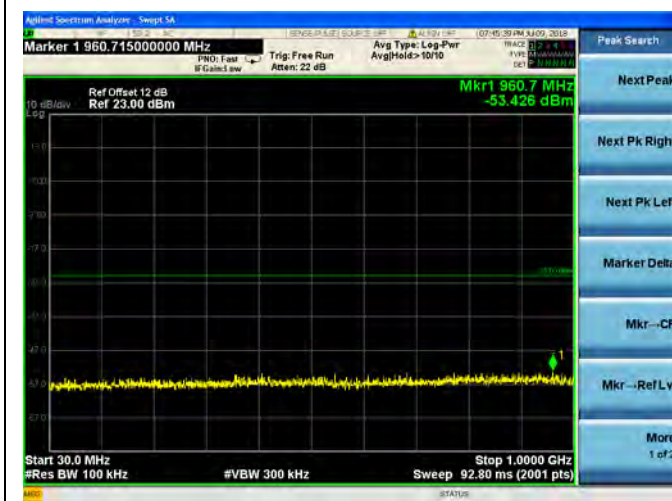


LTE Band 7 15MHz BW High Channel

QPSK



16QAM



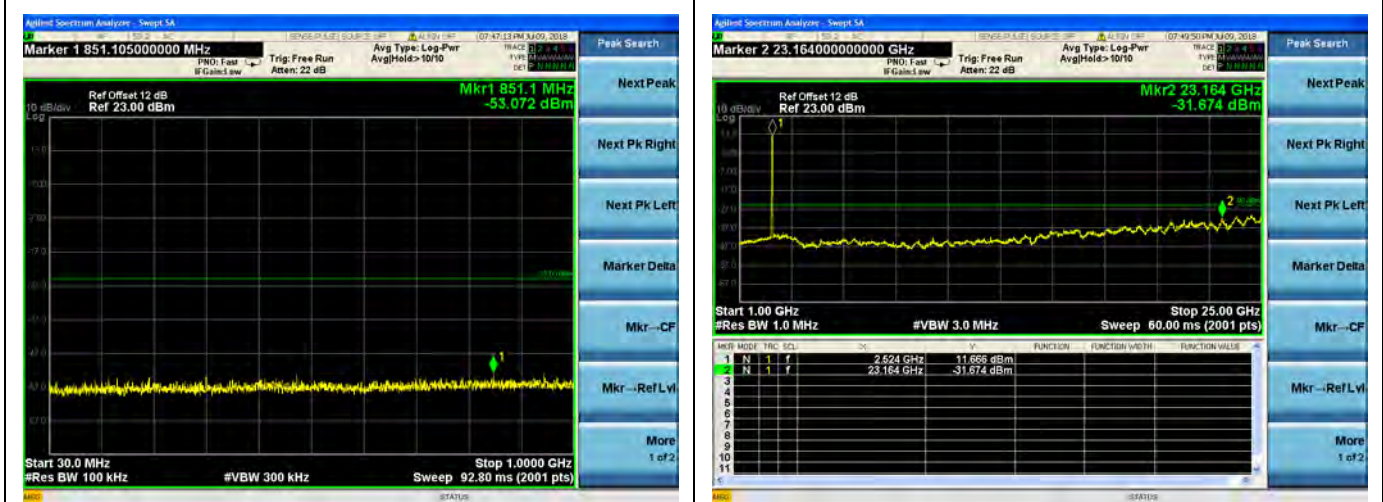


LTE Band 7 20MHz BW Low Channel

QPSK



16QAM





REPORT No.: SZ18060250W05

LTE Band 7 20MHz BW Mid Channel

QPSK



16QAM



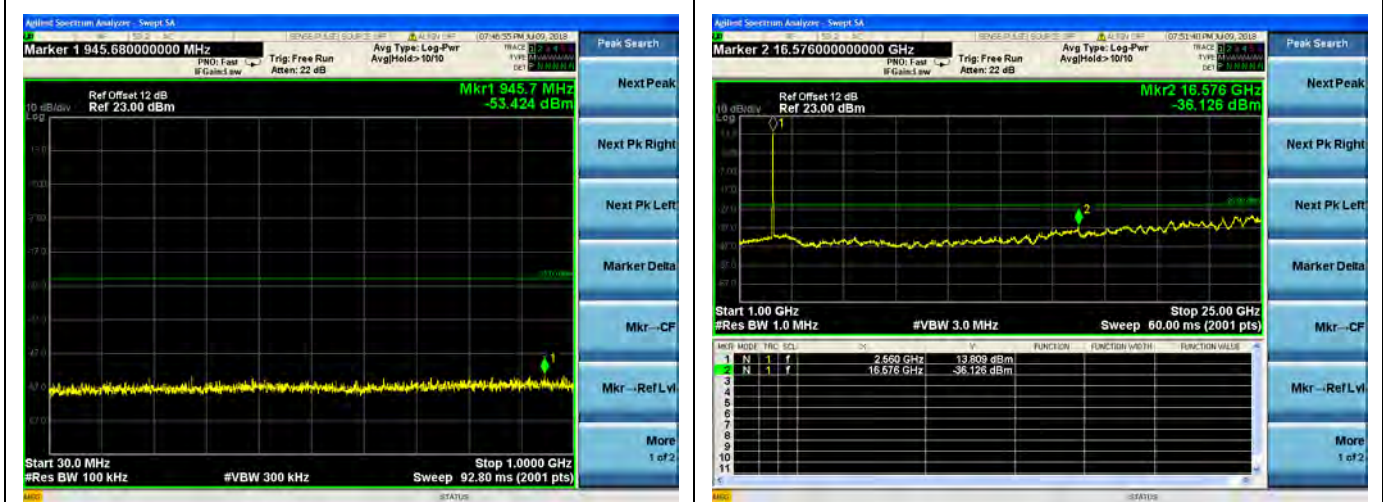


LTE Band 7 20MHz BW High Channel

QPSK



16QAM





2.6. Band Edge

2.6.1. Requirement

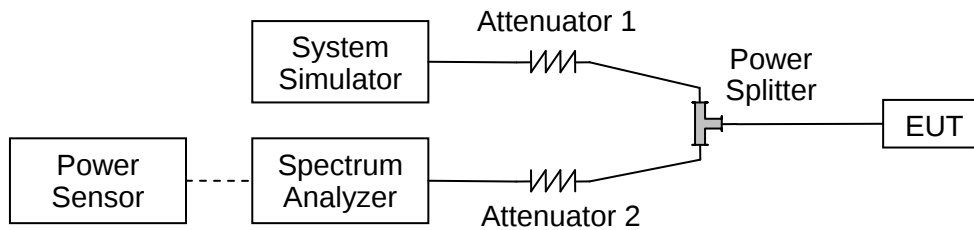
According to FCC section 24.238(a), The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

According to FCC section 27.53(g), For operations in the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log(P)$ dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

According to FCC section 27.53(h), For operations in the 1710–1755MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $43 + 10 \log_{10}(P)$ dB.

According to FCC section 27.53(m) (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.

2.6.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

2.6.3. Test procedure

KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

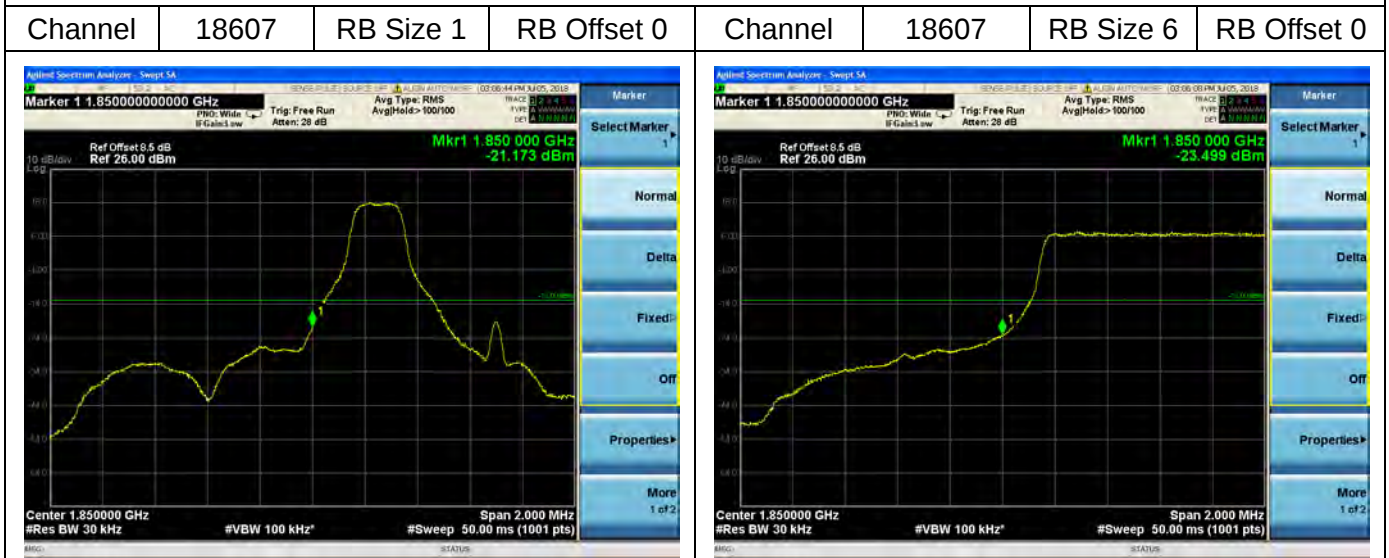
2.6.4. Test Result

The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.

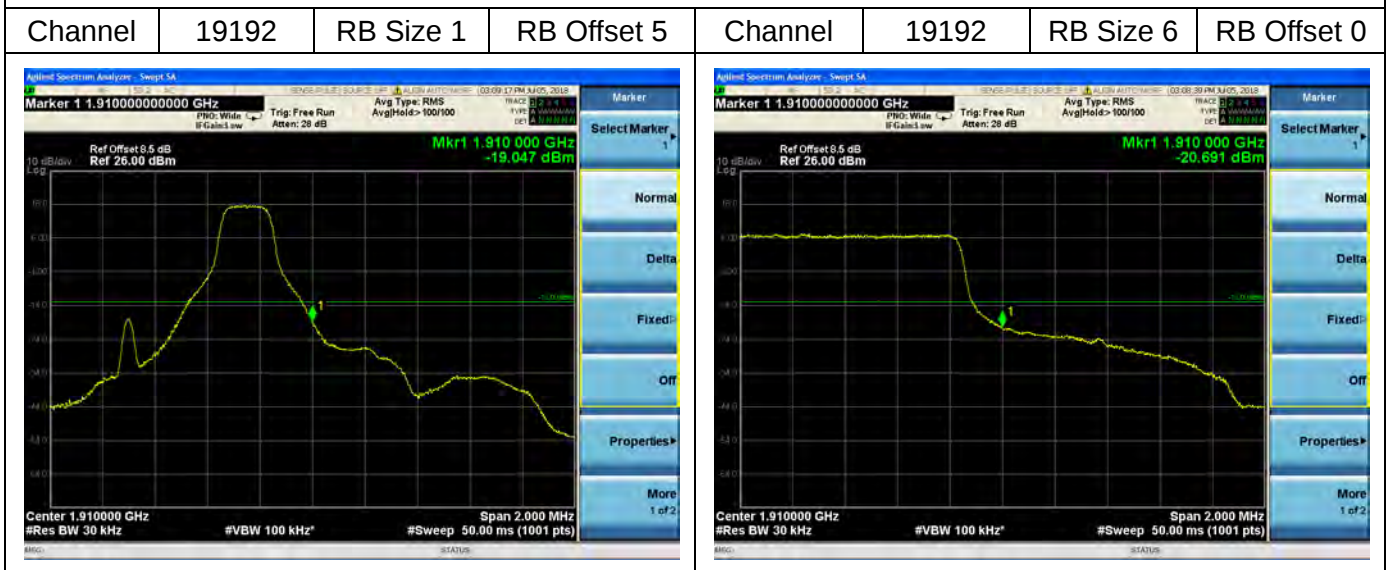


LTE Band 2

Channel Bandwidth: 1.4MHz



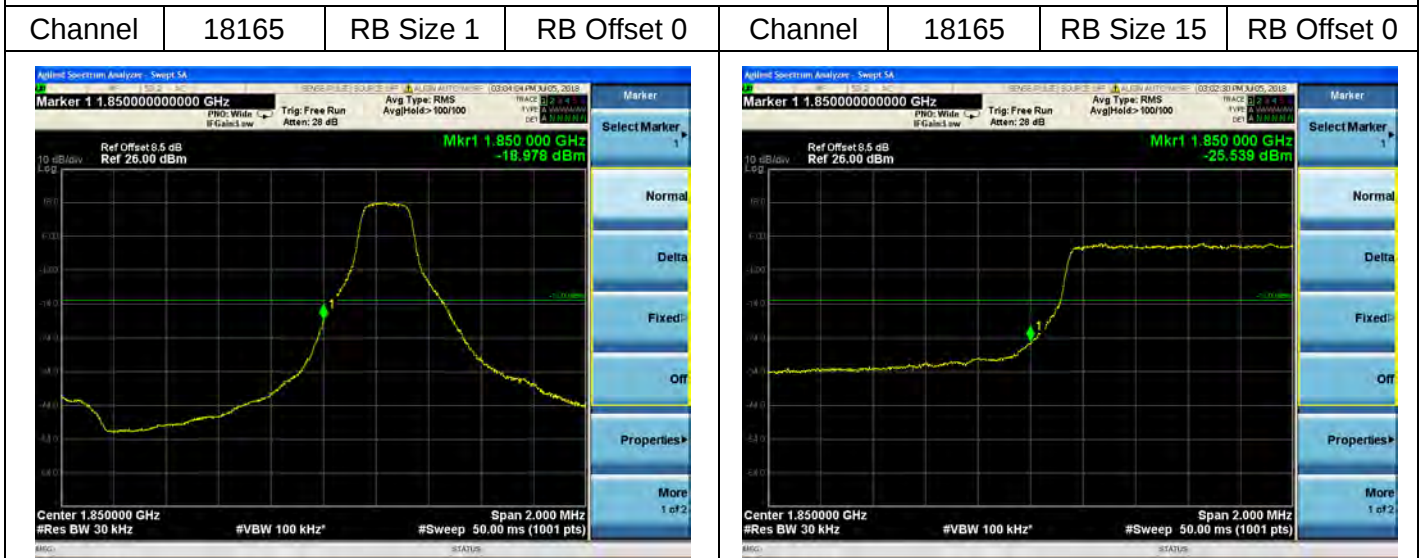
Channel Bandwidth: 1.4MHz



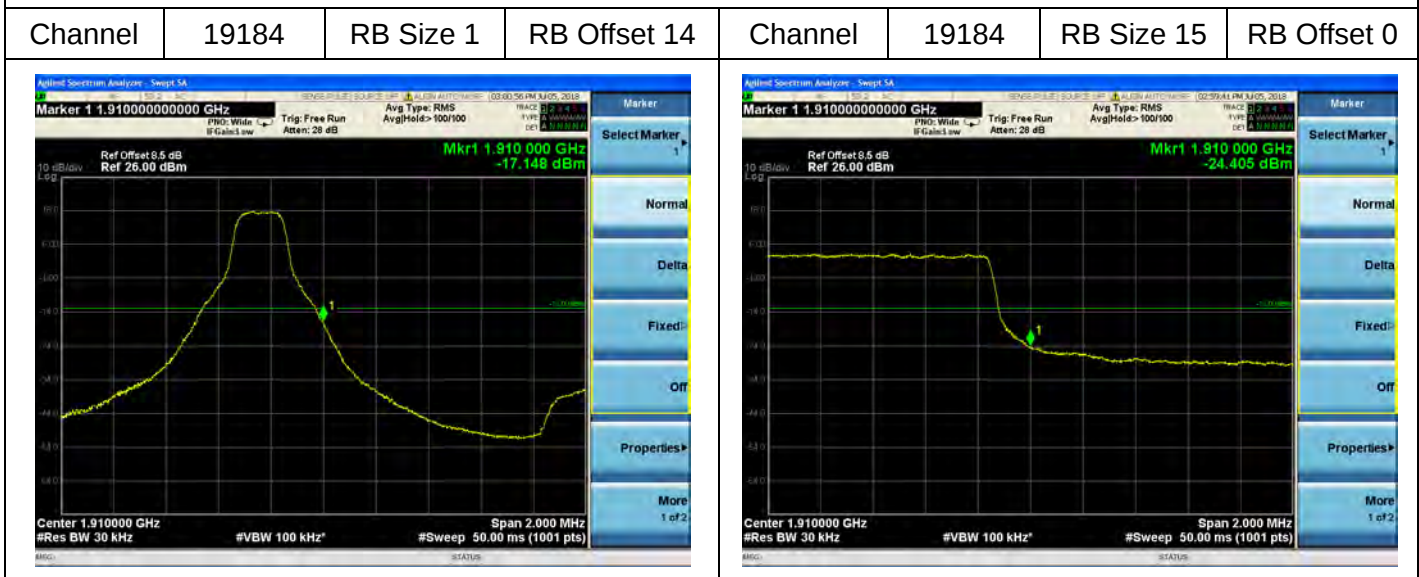


LTE Band 2

Channel Bandwidth: 3MHz



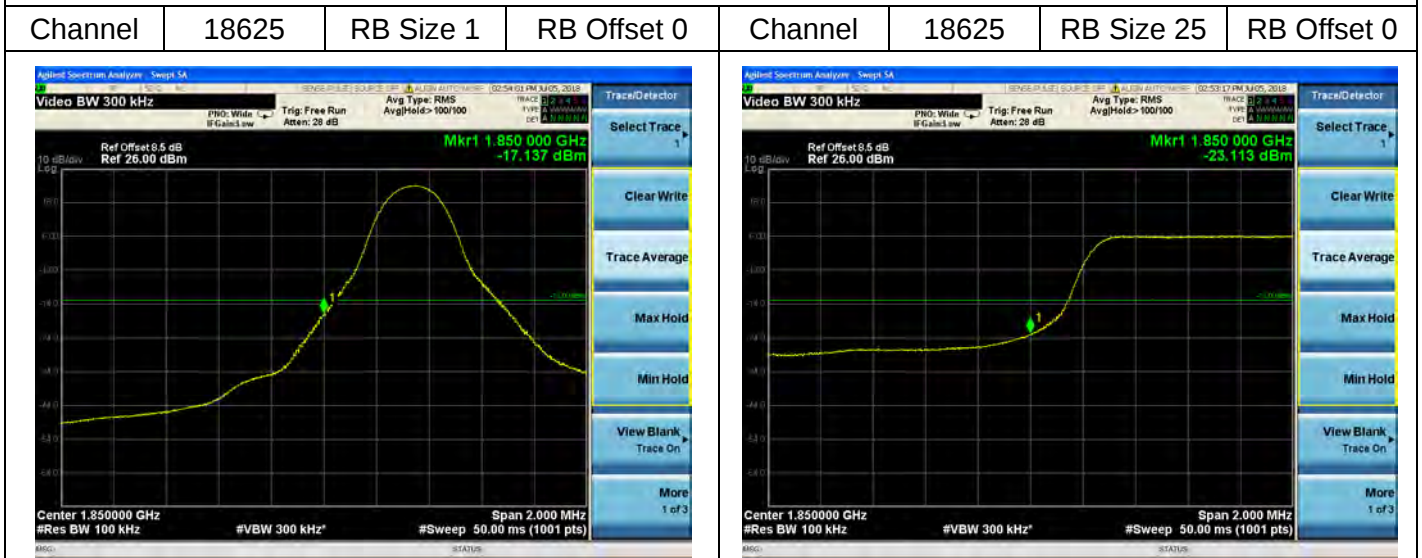
Channel Bandwidth: 3MHz



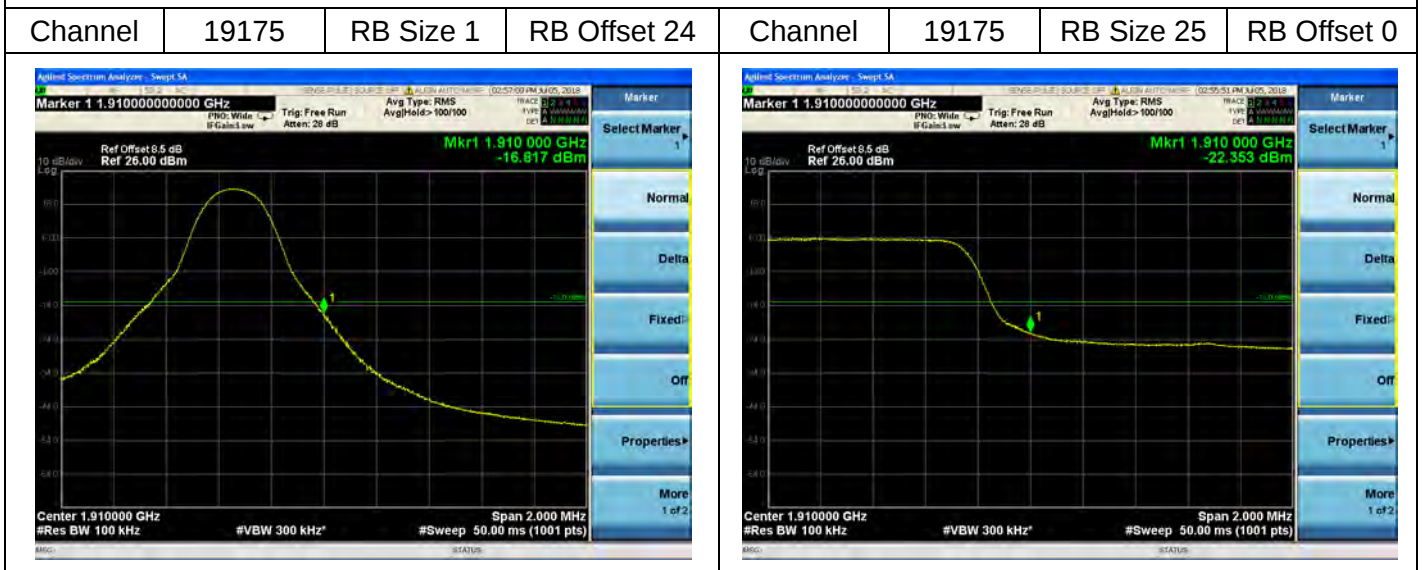


LTE Band 2

Channel Bandwidth: 5MHz



Channel Bandwidth: 5MHz





LTE Band 2

Channel Bandwidth: 10MHz

Channel	18650	RB Size 1	RB Offset 0	Channel	18650	RB Size 50	RB Offset 0
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Channel Bandwidth: 10MHz

Channel	19150	RB Size 1	RB Offset 49	Channel	19150	RB Size 50	RB Offset 0
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LTE Band 2

Channel Bandwidth: 15MHz

Channel	18675	RB Size 1	RB Offset 0	Channel	18675	RB Size 75	RB Offset 0
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Channel Bandwidth: 15MHz

Channel	19125	RB Size 1	RB Offset 74	Channel	19125	RB Size 75	RB Offset 0
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