



2.6. Band Edge

2.6.1. Requirement

According to FCC section 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 $43 + 10 \log(P)$ dB.

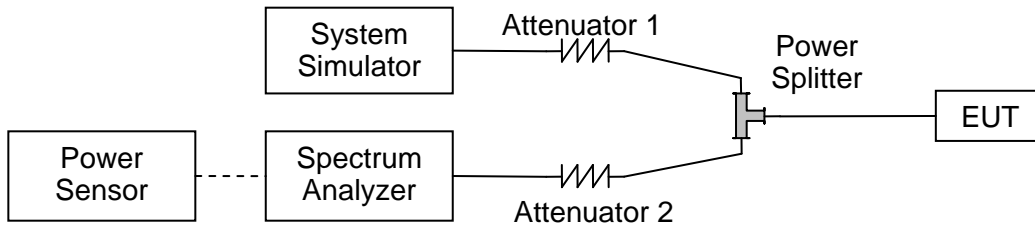
According to FCC section 24.238(a), The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

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 that $43 + 10 \log(P)$ 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 50 Ohm; 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.

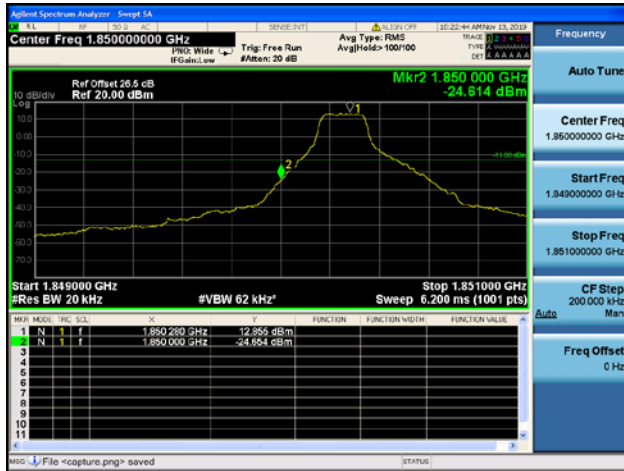


2.6.4. Test Result

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



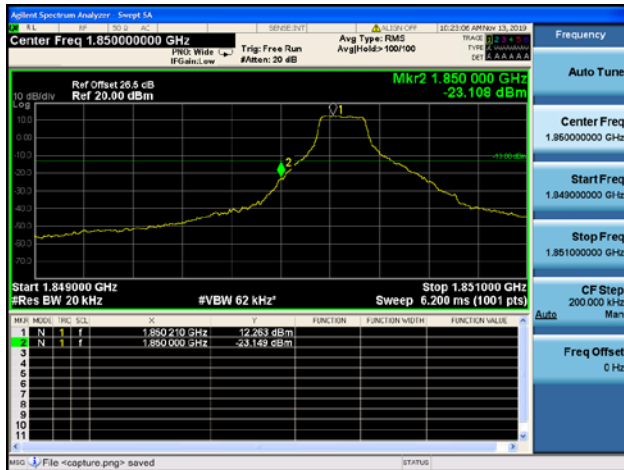
Band2 / 1.4MHz / Low CH / QPSK / 1 RB



Band2 / 1.4MHz / Low CH / QPSK / FULL RB



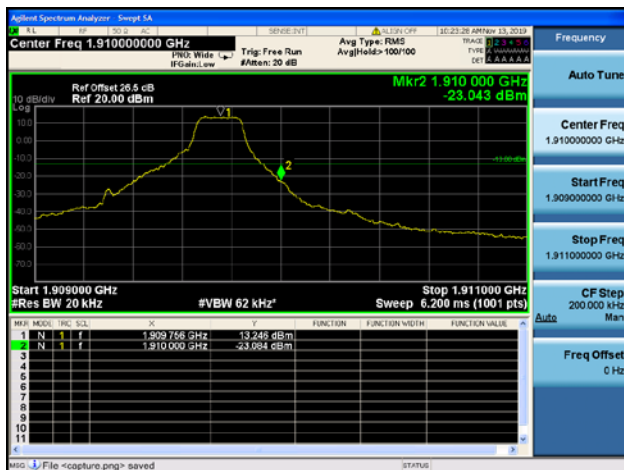
Band2 / 1.4MHz / Low CH / 16QAM / 1 RB



Band2 / 1.4MHz / Low CH / 16QAM / FULL RB



Band2 / 1.4MHz / High CH / QPSK / 1 RB

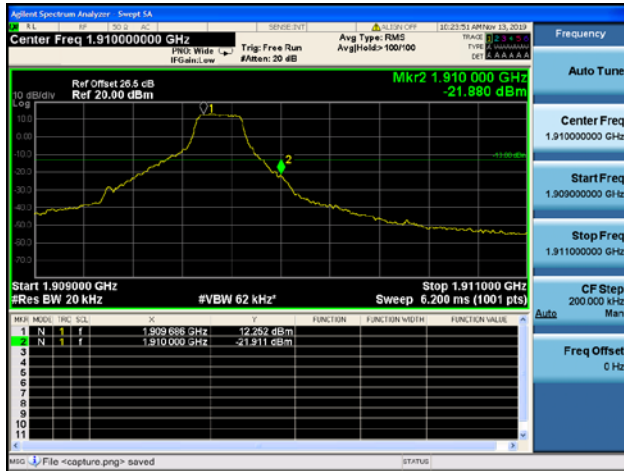


Band2 / 1.4MHz / High CH / QPSK / FULL RB

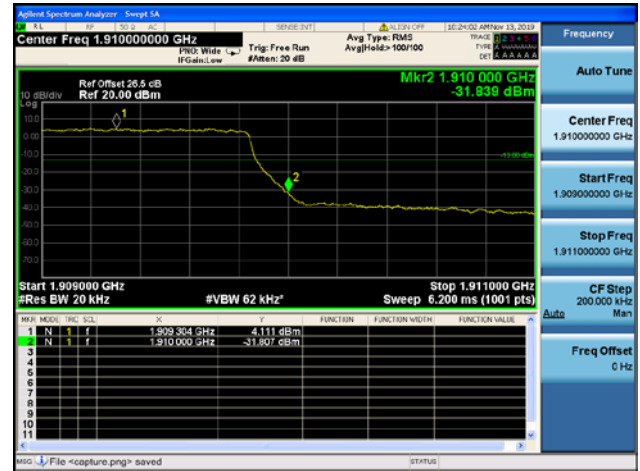




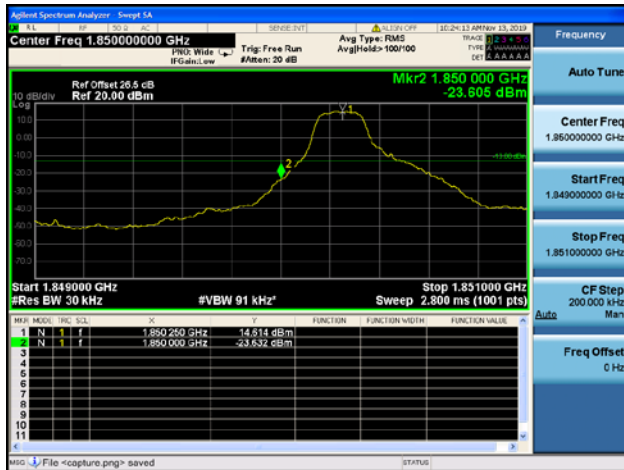
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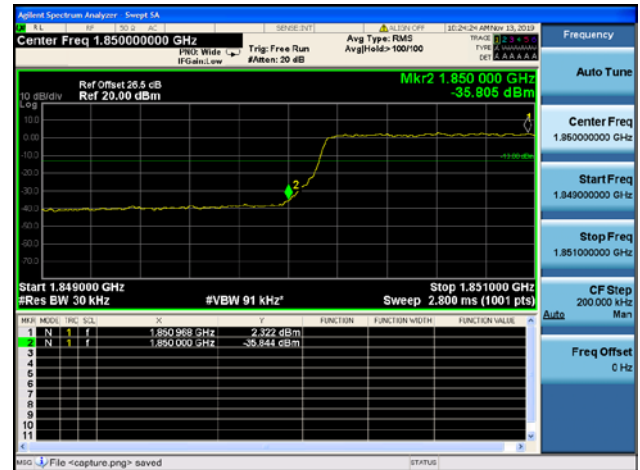
Band2 / 1.4MHz / High CH / 16QAM / FULL RB



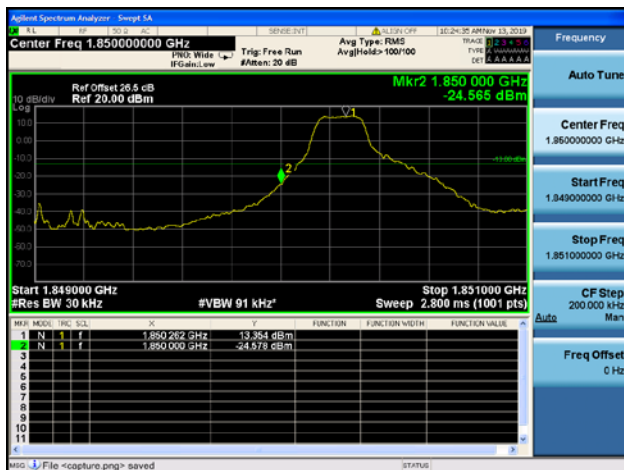
Band2 / 3MHz / Low CH / QPSK / 1 RB



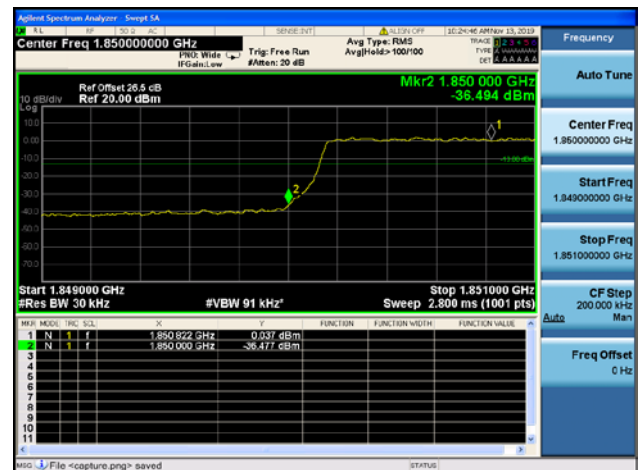
Band2 / 3MHz / Low CH / QPSK / FULL RB



Band2 / 3MHz / Low CH / 16QAM / 1 RB



Band2 / 3MHz / Low CH / 16QAM / FULL RB





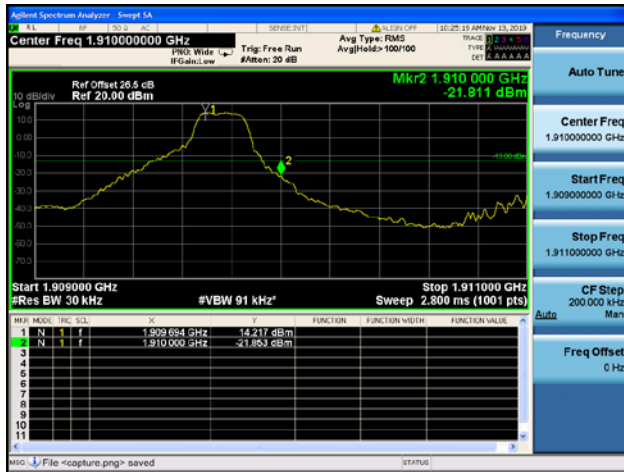
Band2 / 3MHz / High CH / QPSK / 1 RB



Band2 / 3MHz / High CH / QPSK / FULL RB



Band2 / 3MHz / High CH / 16QAM / 1 RB



Band2 / 3MHz / High CH / 16QAM / FULL RB



Band2 / 5MHz / Low CH / QPSK / 1 RB



Band2 / 5MHz / Low CH / QPSK / FULL RB





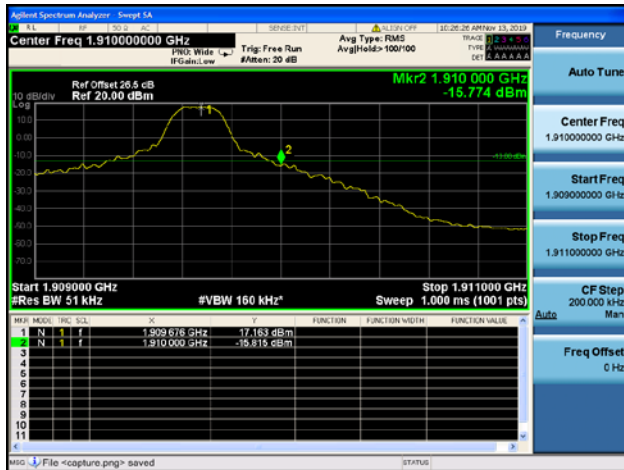
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Band2 / 5MHz / Low CH / 16QAM / FULL RB



Band2 / 5MHz / High CH / QPSK / 1 RB



Band2 / 5MHz / High CH / QPSK / FULL RB



Band2 / 5MHz / High CH / 16QAM / 1 RB



Band2 / 5MHz / High CH / 16QAM / FULL RB





Band2 / 10MHz / Low CH / QPSK / 1 RB



Band2 / 10MHz / Low CH / QPSK / FULL RB



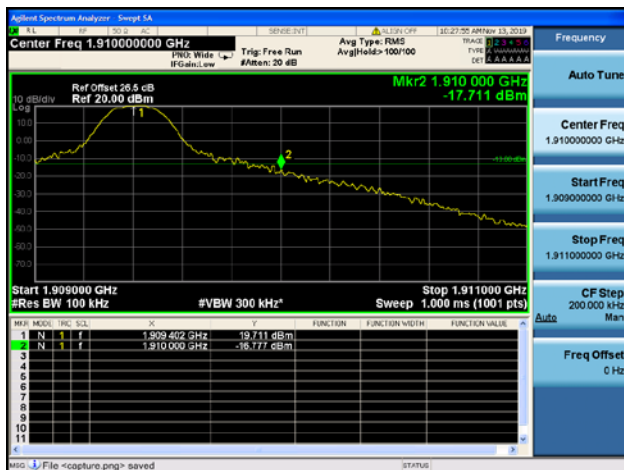
Band2 / 10MHz / Low CH / 16QAM / 1 RB



Band2 / 10MHz / Low CH / 16QAM / FULL RB



Band2 / 10MHz / High CH / QPSK / 1 RB



Band2 / 10MHz / High CH / QPSK / FULL RB





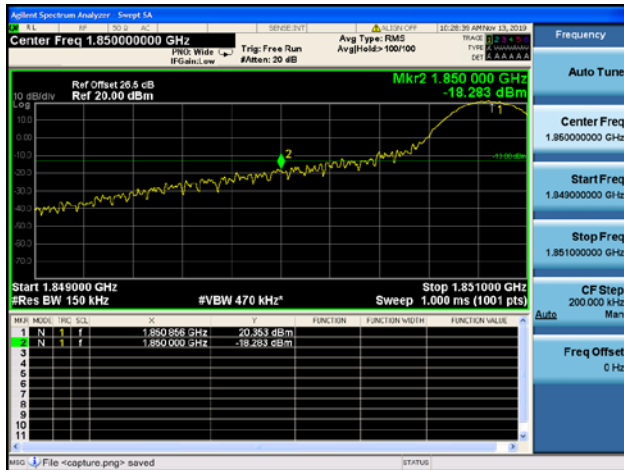
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Band2 / 10MHz / High CH / 16QAM / FULL RB



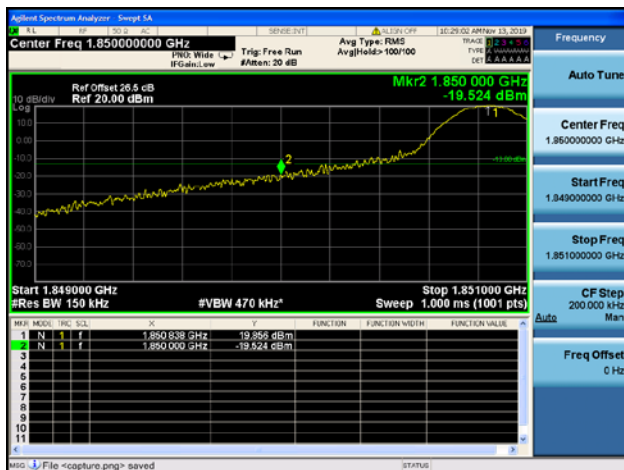
Band2 / 15MHz / Low CH / QPSK / 1 RB



Band2 / 15MHz / Low CH / QPSK / FULL RB



Band2 / 15MHz / Low CH / 16QAM / 1 RB



Band2 / 15MHz / Low CH / 16QAM / FULL RB





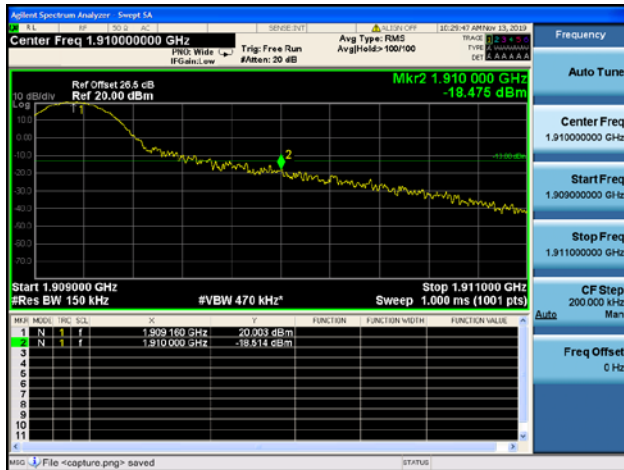
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Band2 / 15MHz / High CH / QPSK / FULL RB



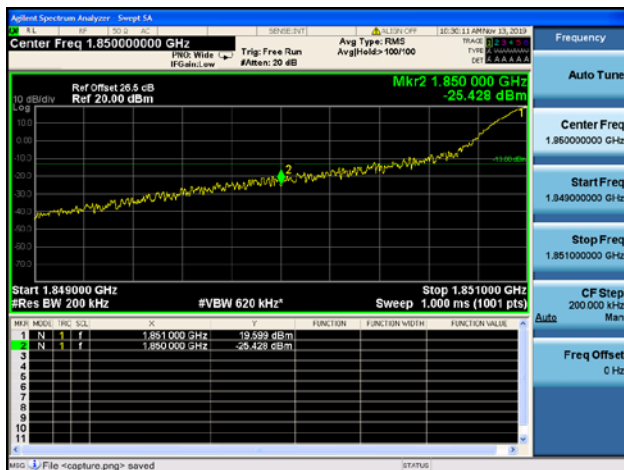
Band2 / 15MHz / High CH / 16QAM / 1 RB



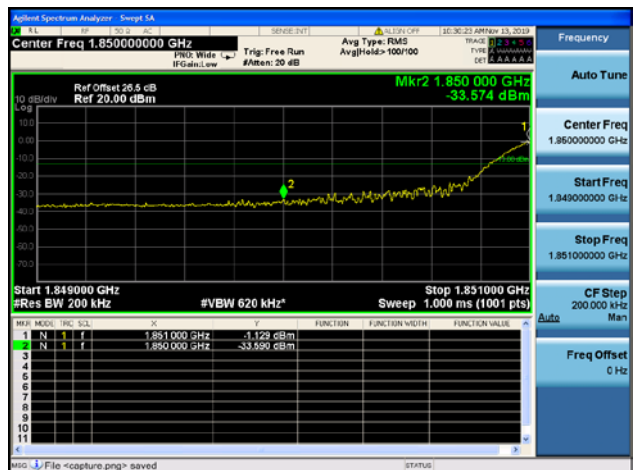
Band2 / 15MHz / High CH / 16QAM / FULL RB



Band2 / 20MHz / Low CH / QPSK / 1 RB

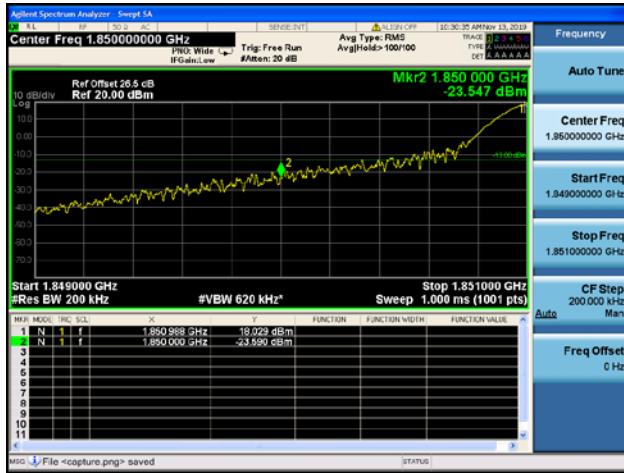


Band2 / 20MHz / Low CH / QPSK / FULL RB





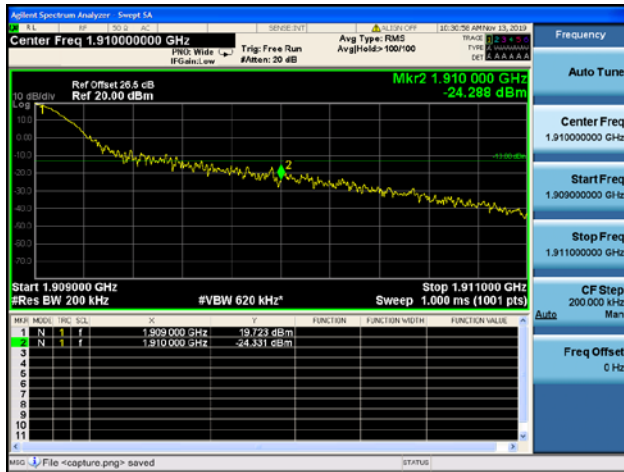
Band2 / 20MHz / Low CH / 16QAM / 1 RB



Band2 / 20MHz / Low CH / 16QAM / FULL RB



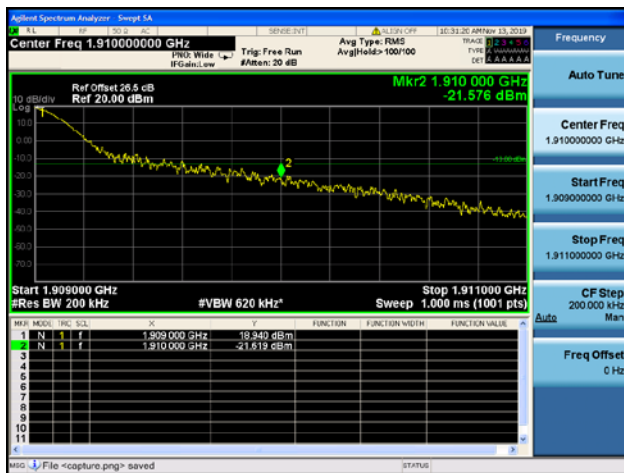
Band2 / 20MHz / High CH / QPSK / 1 RB



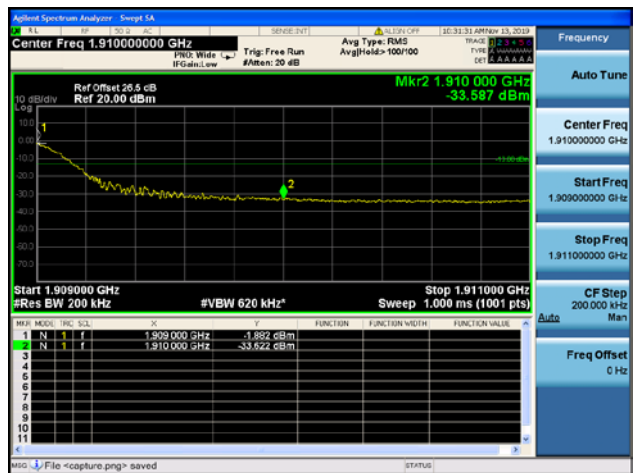
Band2 / 20MHz / High CH / QPSK / FULL RB



Band2 / 20MHz / High CH / 16QAM / 1 RB



Band2 / 20MHz / High CH / 16QAM / FULL RB





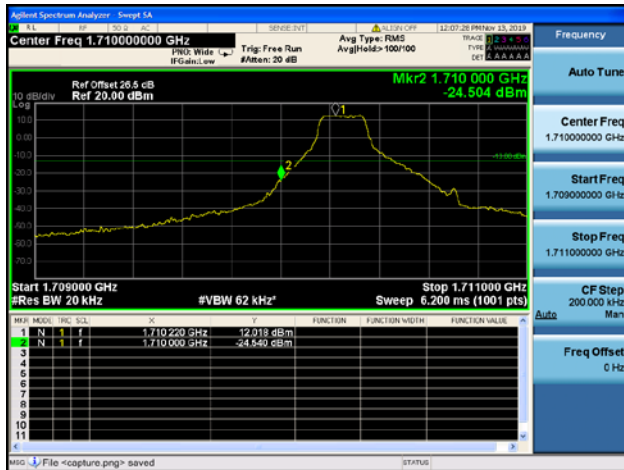
Band4 / 1.4MHz / Low CH / QPSK / 1 RB



Band4 / 1.4MHz / Low CH / QPSK / FULL RB



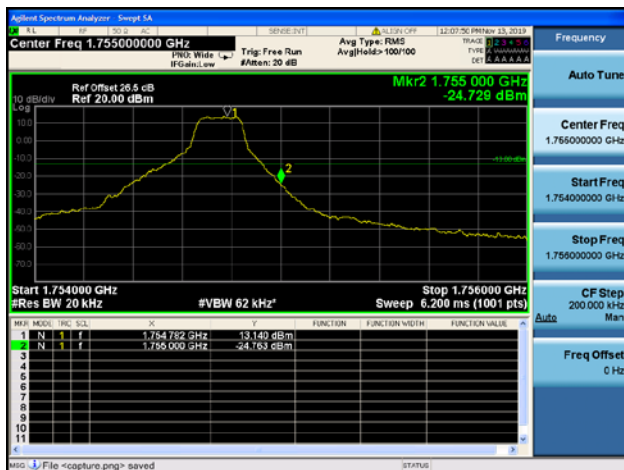
Band4 / 1.4MHz / Low CH / 16QAM / 1 RB



Band4 / 1.4MHz / Low CH / 16QAM / FULL RB



Band4 / 1.4MHz / High CH / QPSK / 1 RB



Band4 / 1.4MHz / High CH / QPSK / FULL RB

