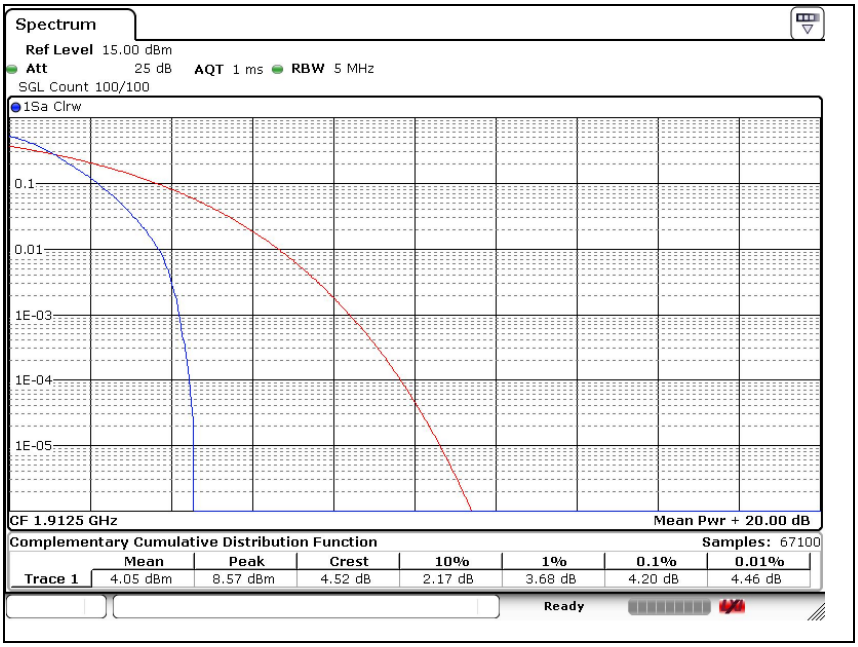
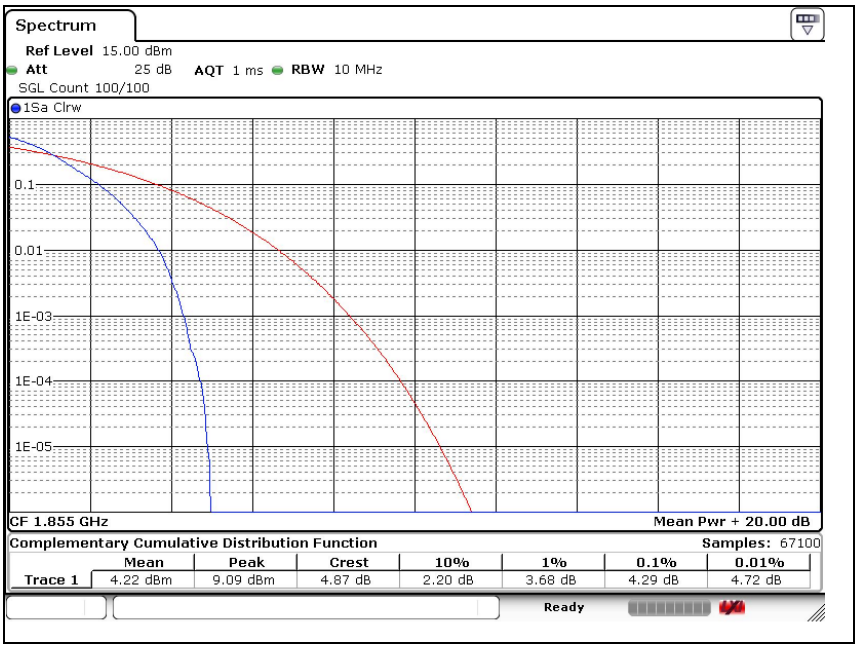
High Channel

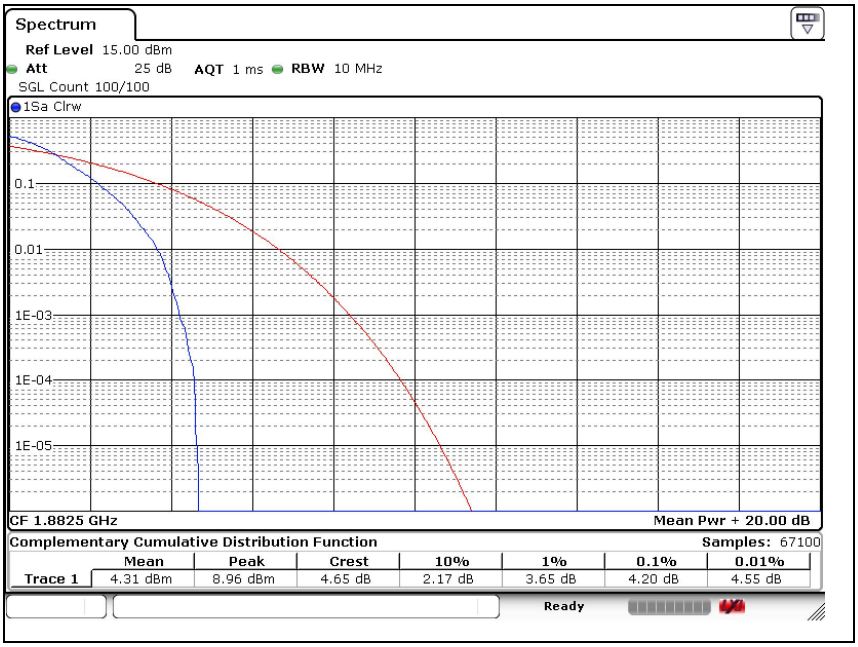


LTE band 25/2 (10 ㎒ – QPSK)

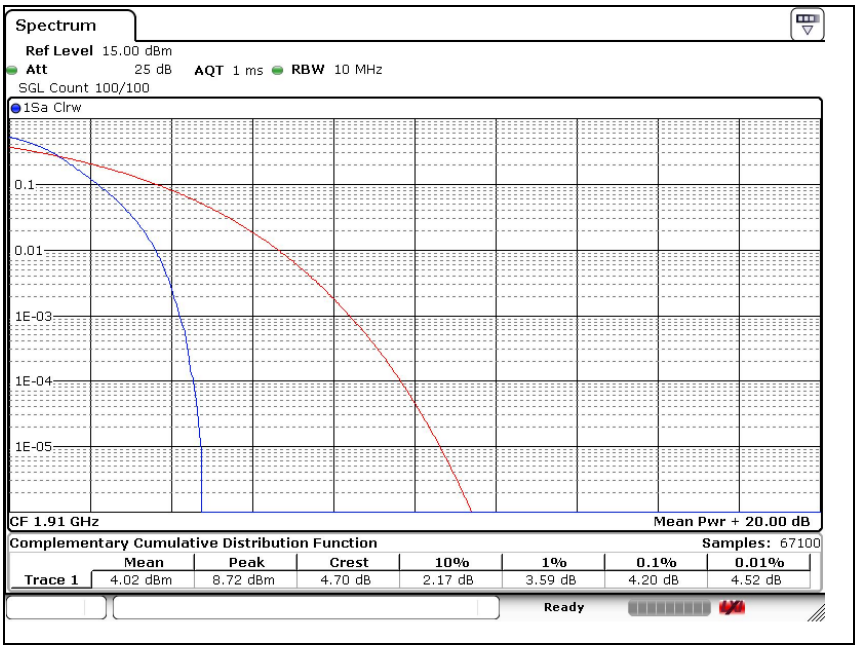
Low Channel



Middle Channel

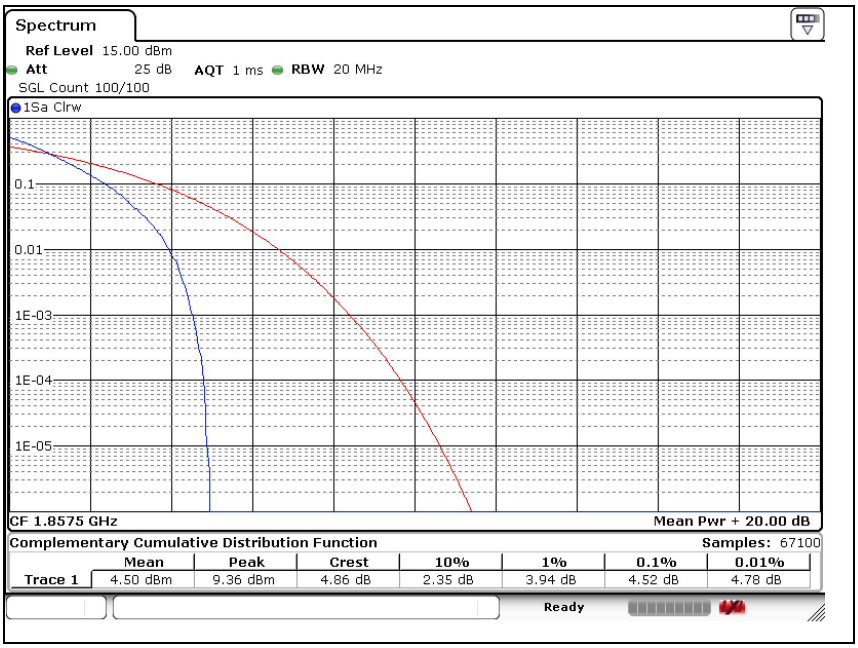


High Channel

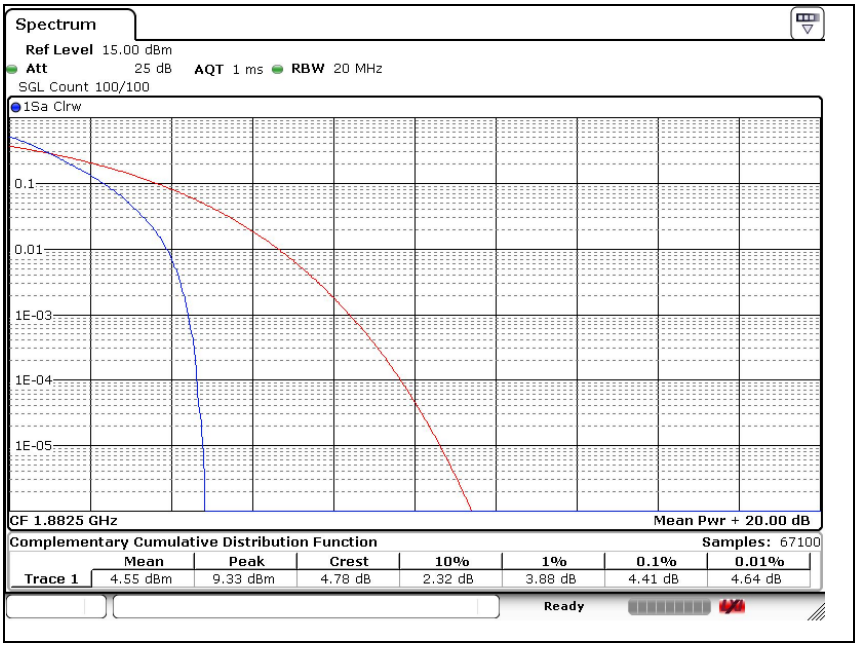


LTE band 25/2 (15 ㎒ – QPSK)

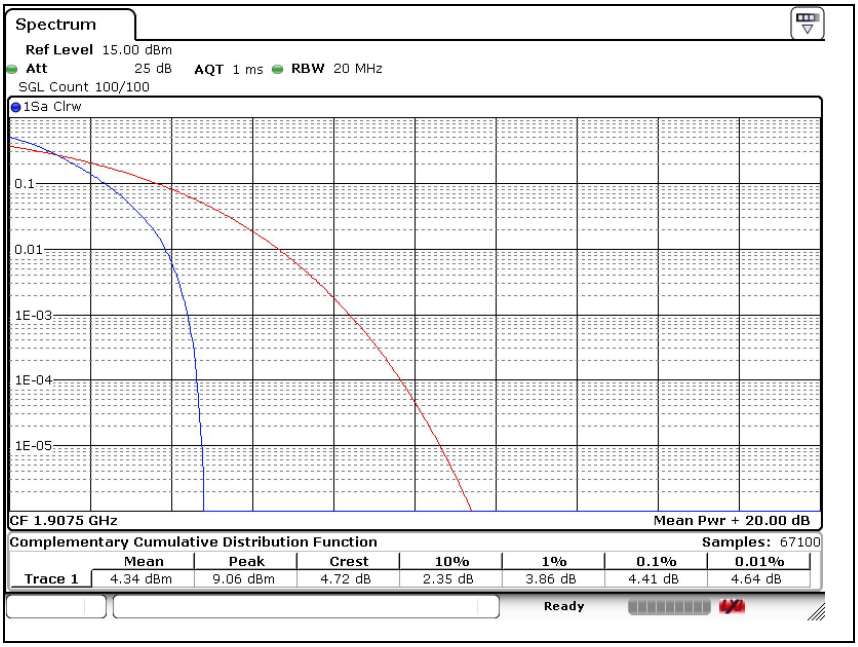
Low Channel



Middle Channel

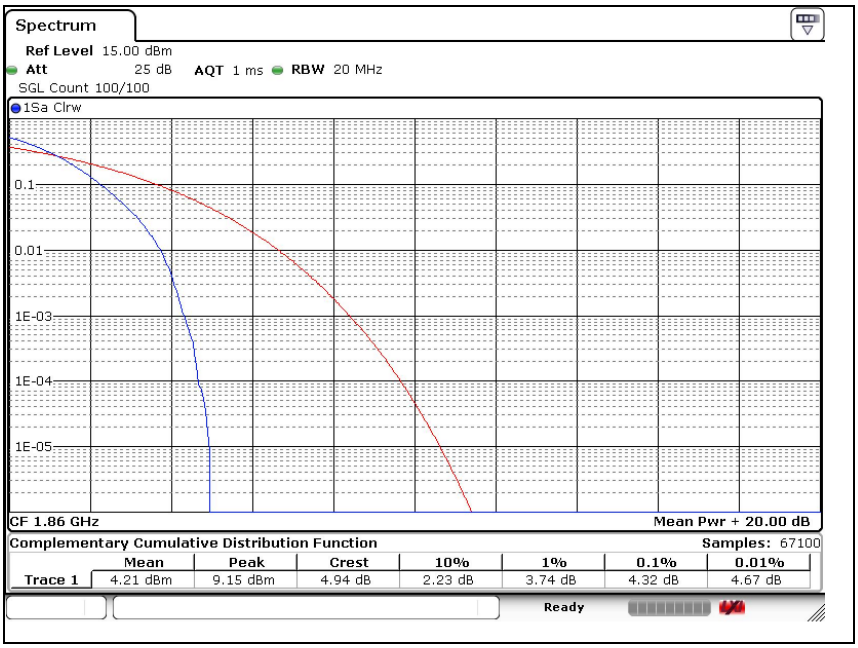


High Channel

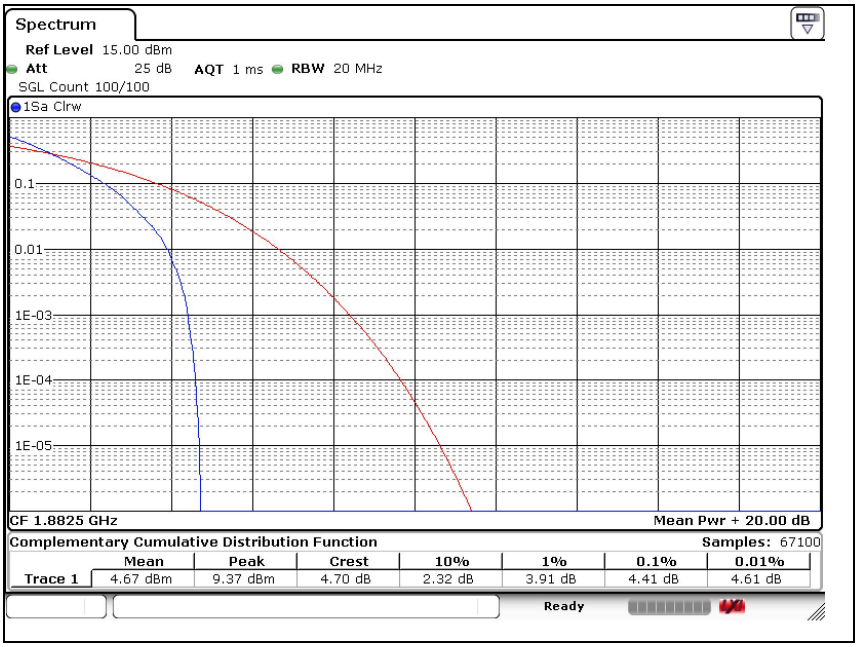


LTE band 25/2 (20 ㎒ – QPSK)

Low Channel



Middle Channel



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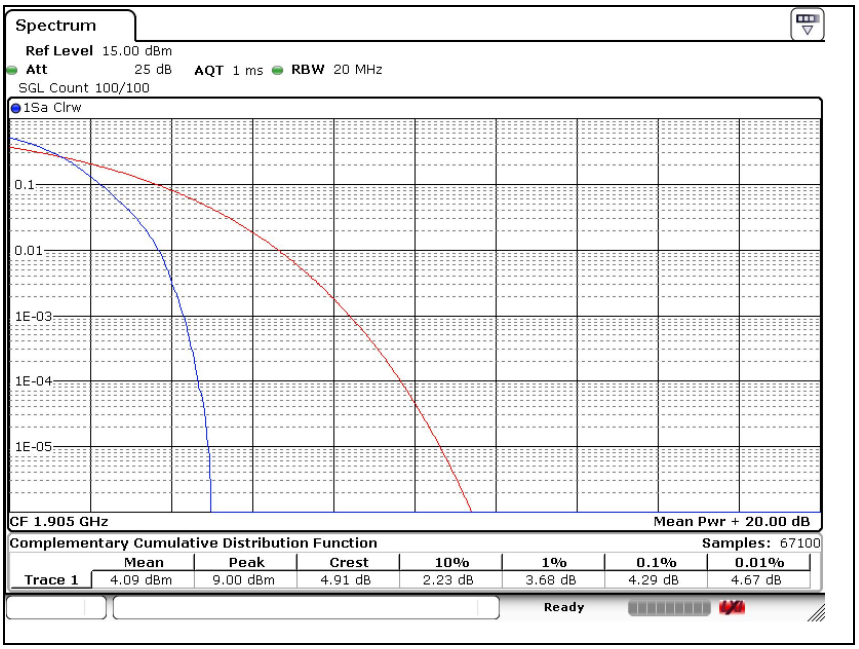
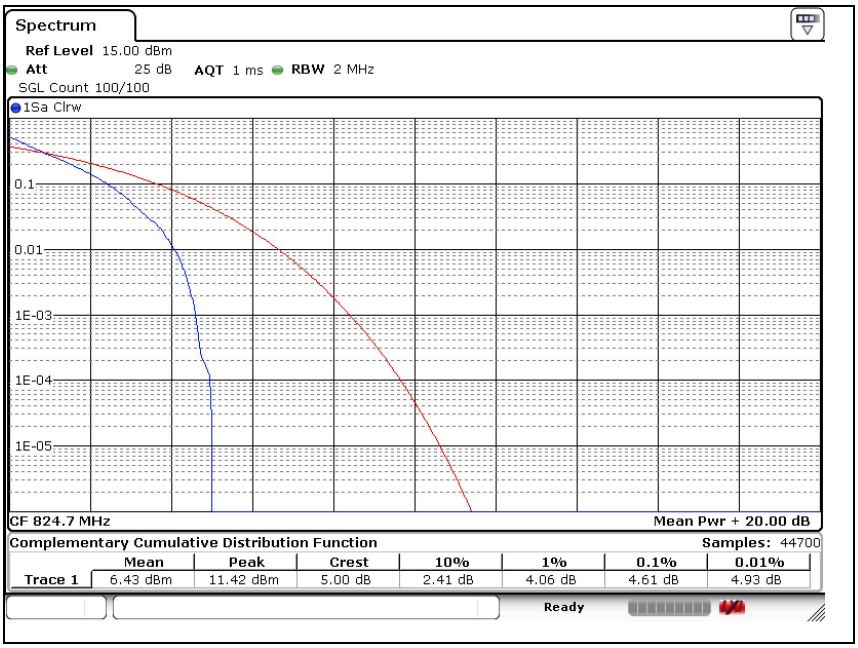
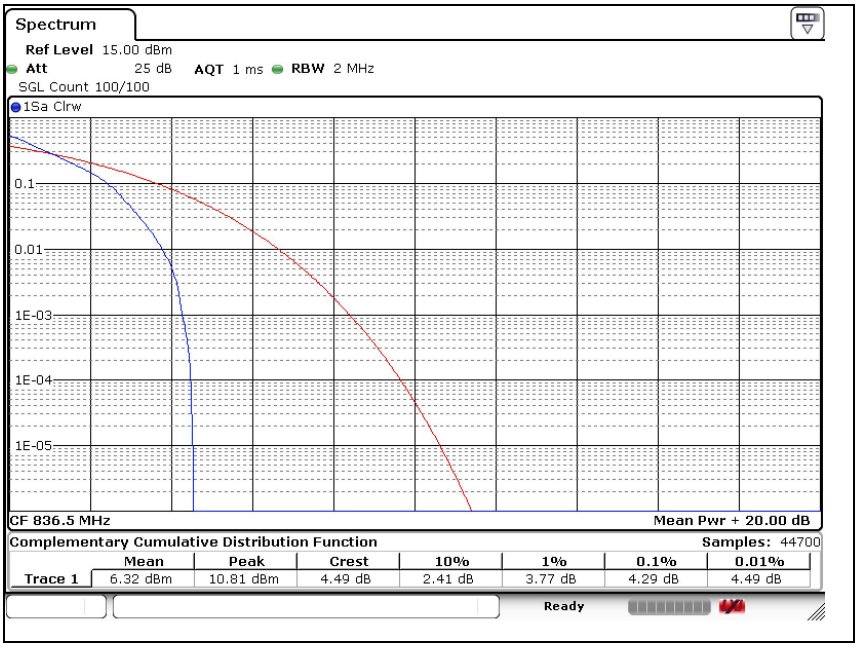


LTE band 26/5 (1.4 ㎒ – QPSK)

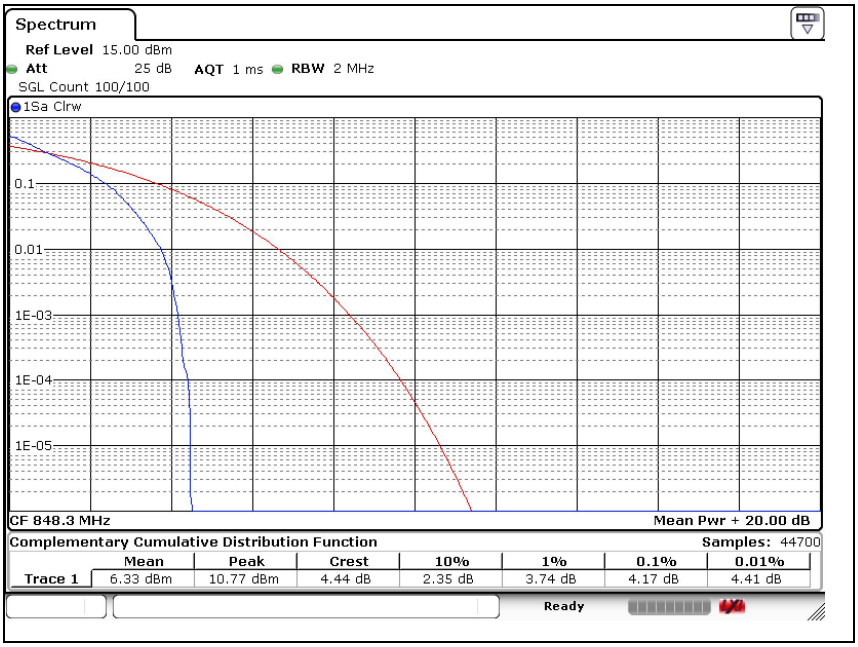
Low Channel



Middle Channel

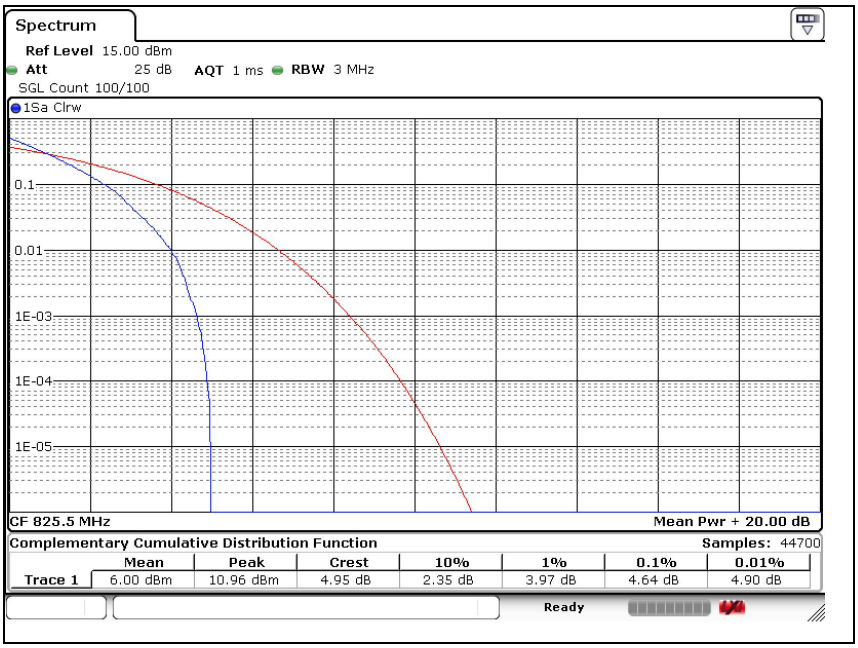


High Channel

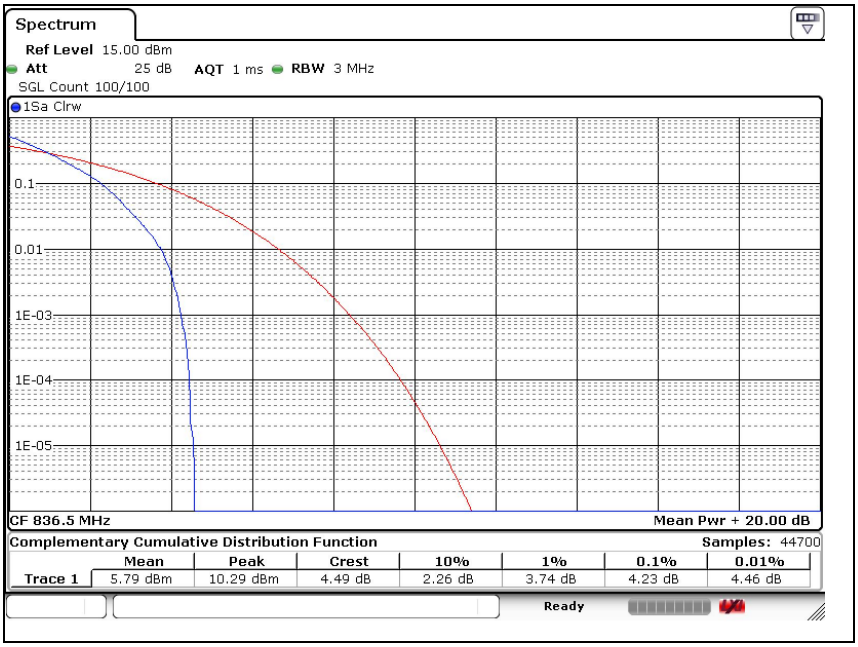


LTE band 26/5 (3 ㎒ – QPSK)

Low Channel



Middle Channel



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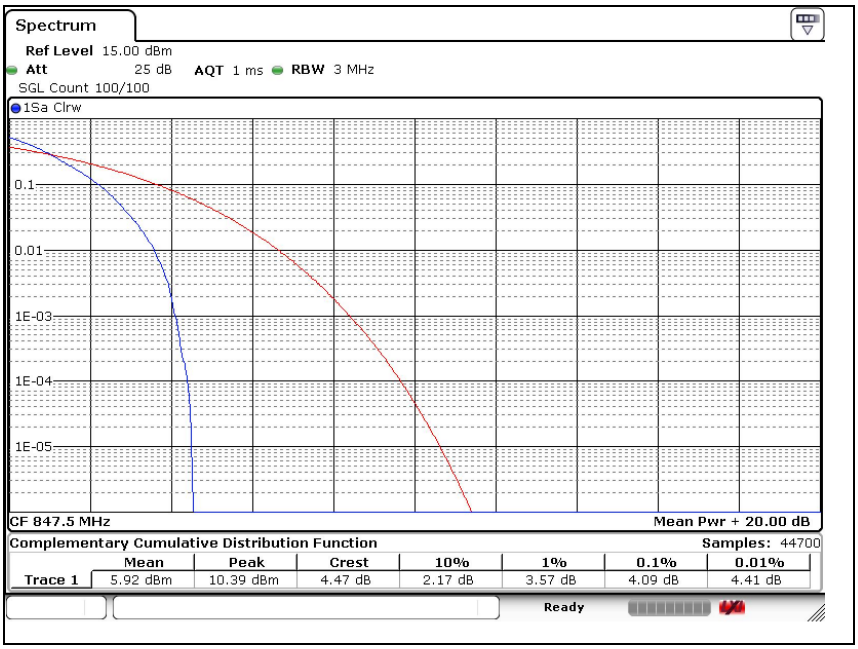
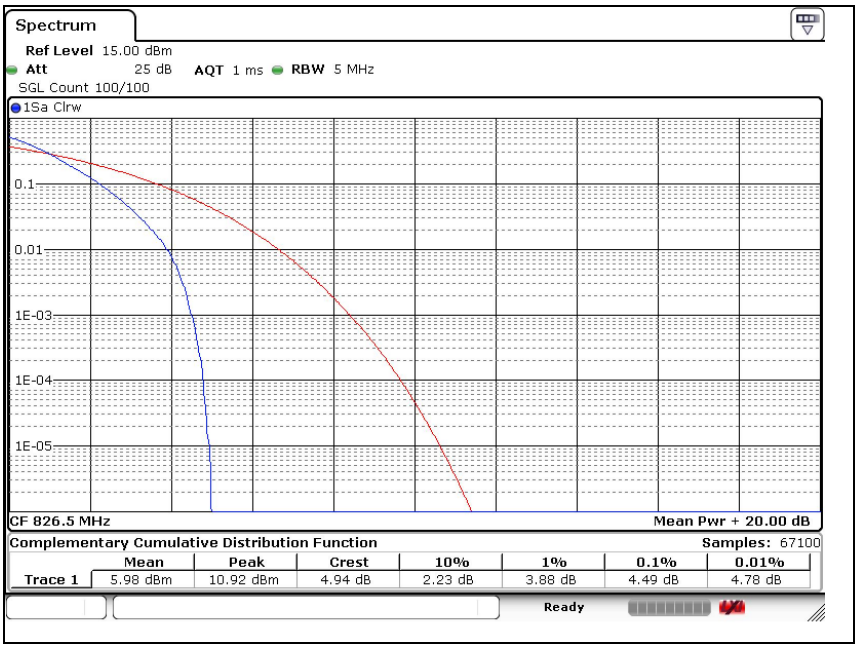
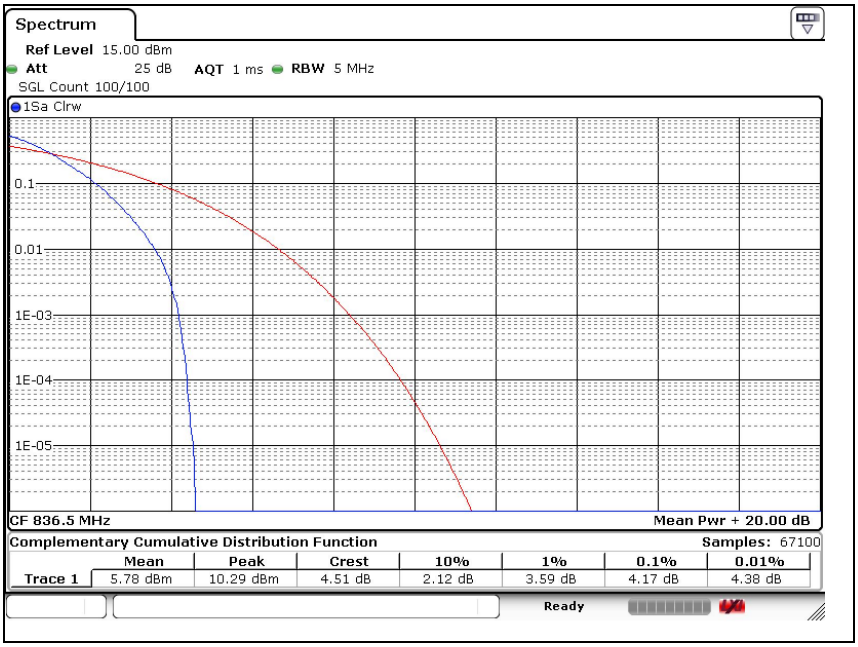


LTE band 26/5 (5 ㎒ – QPSK)

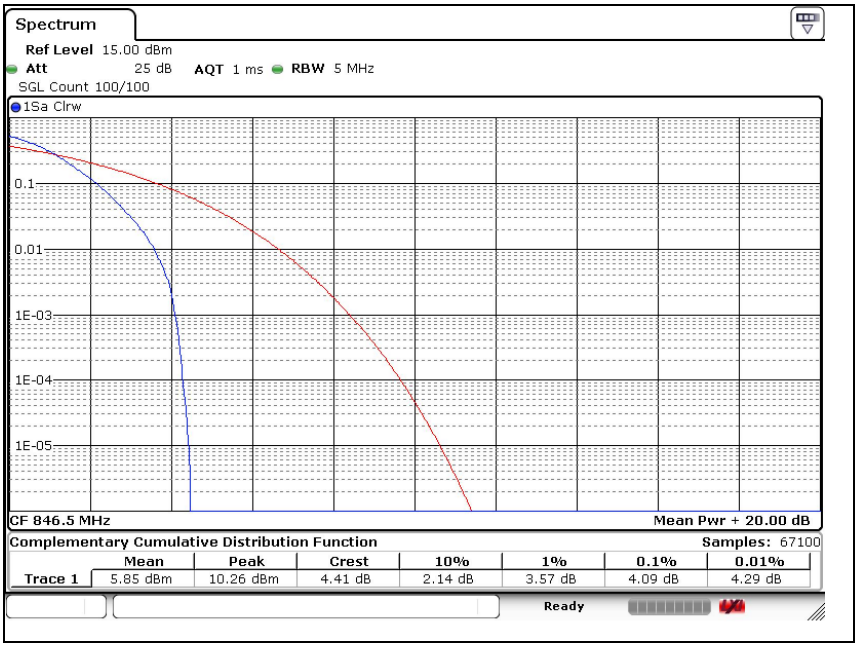
Low Channel



Middle Channel

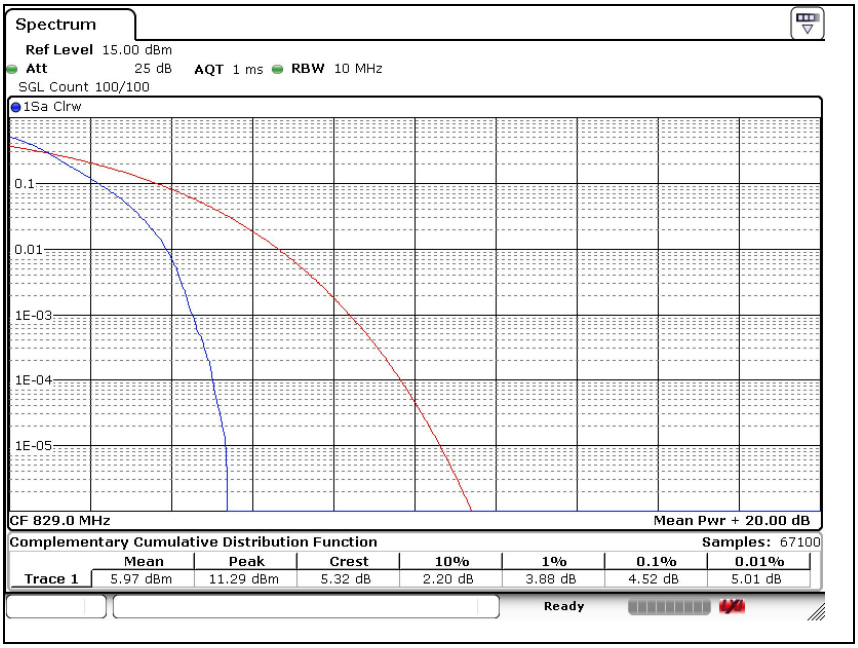


High Channel

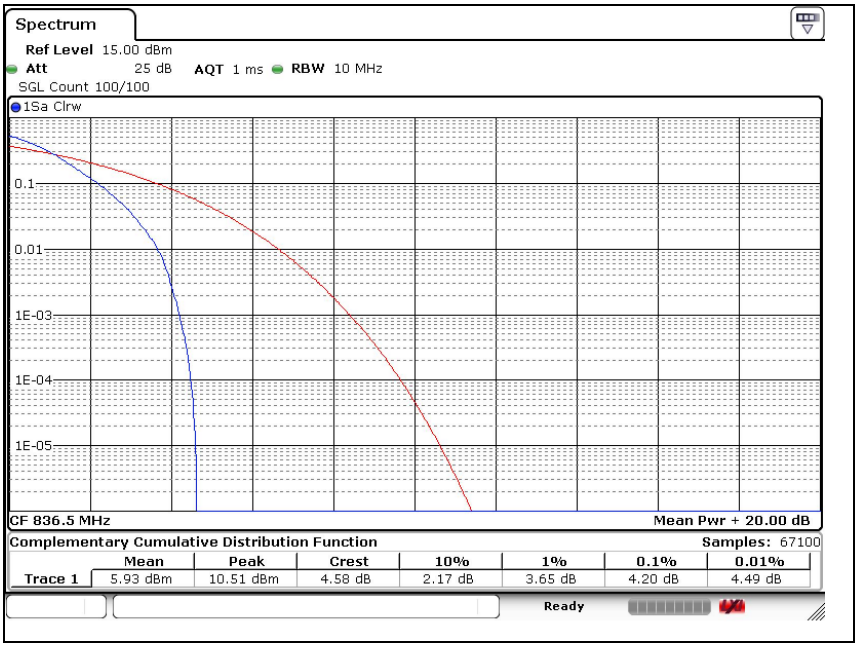


LTE band 26/5 (10 ㎒ – QPSK)

Low Channel



Middle Channel



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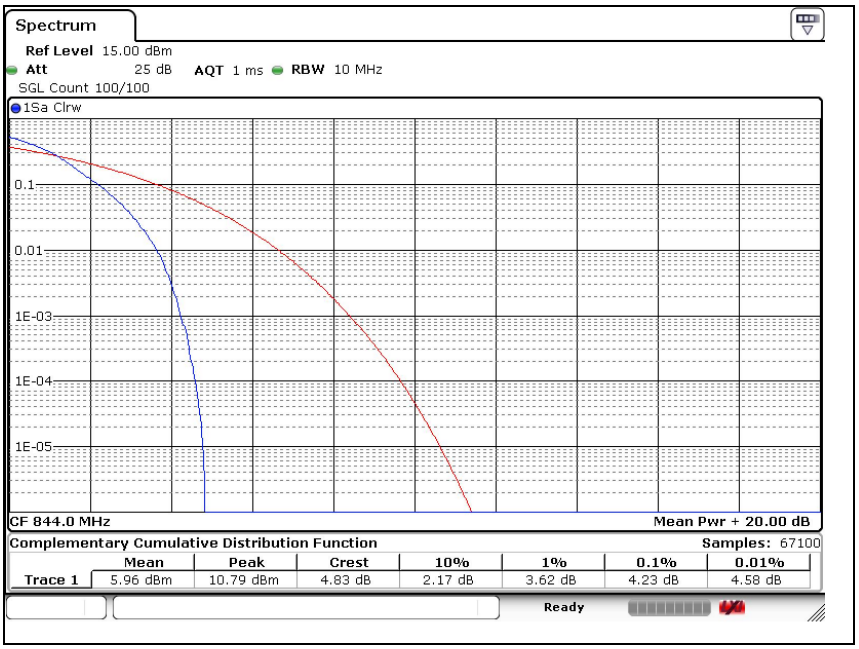
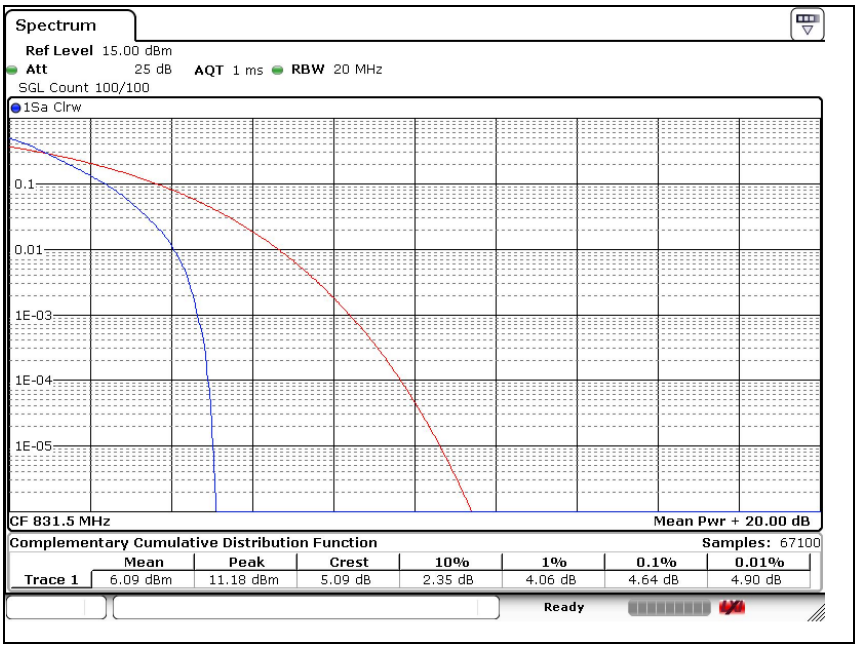
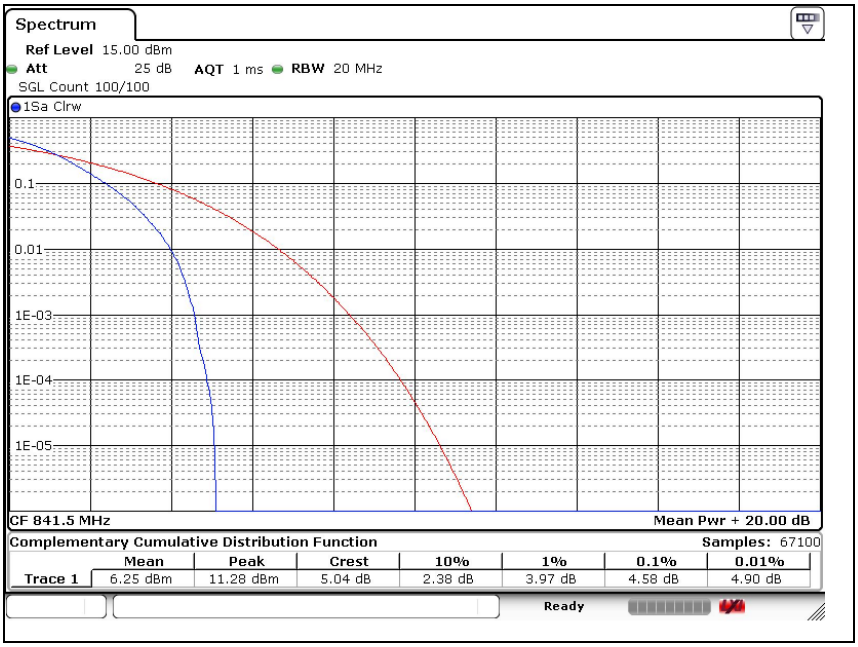


LTE band 26 (15 ㎒ – QPSK)

Low Channel

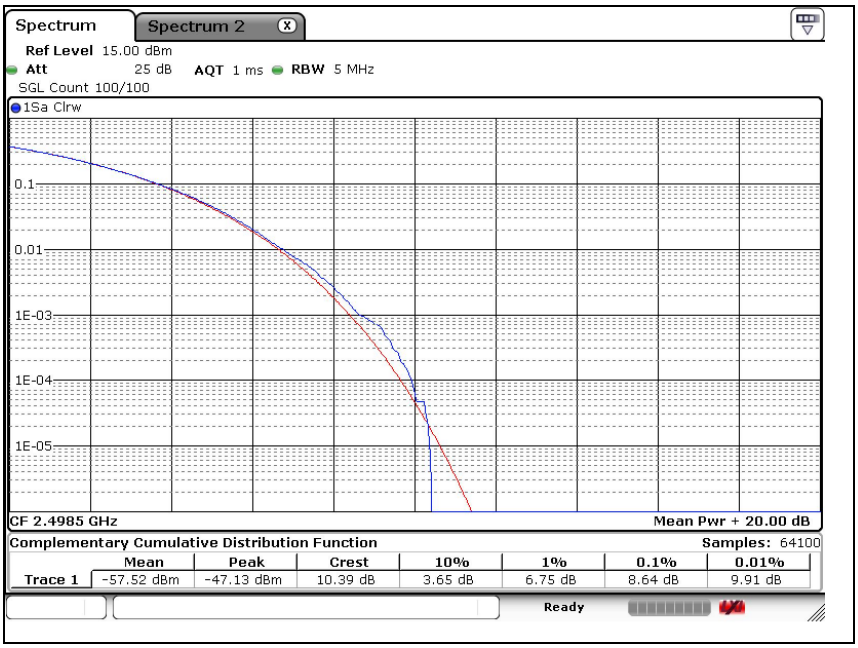


High Channel

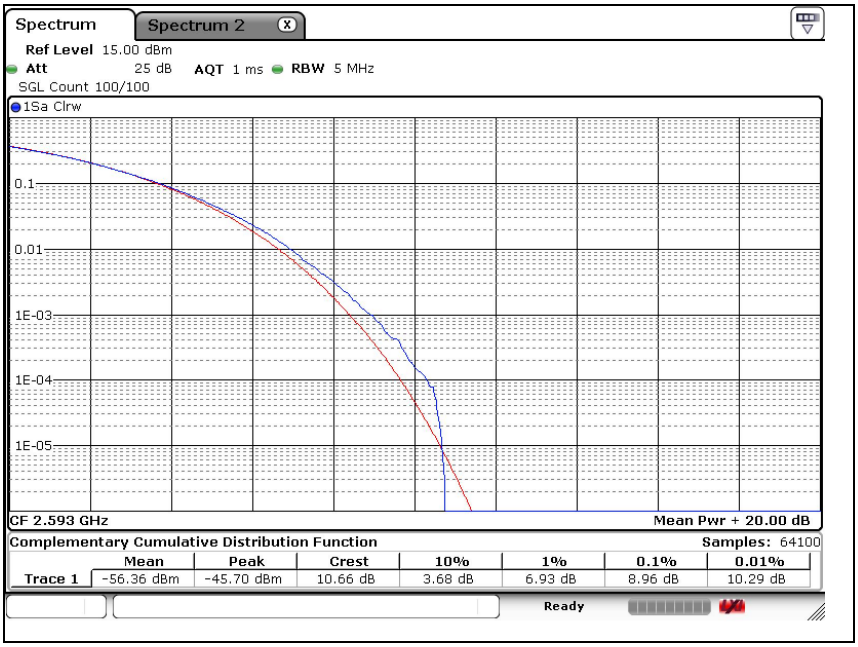


LTE band 41 (5 ㎒ – QPSK)

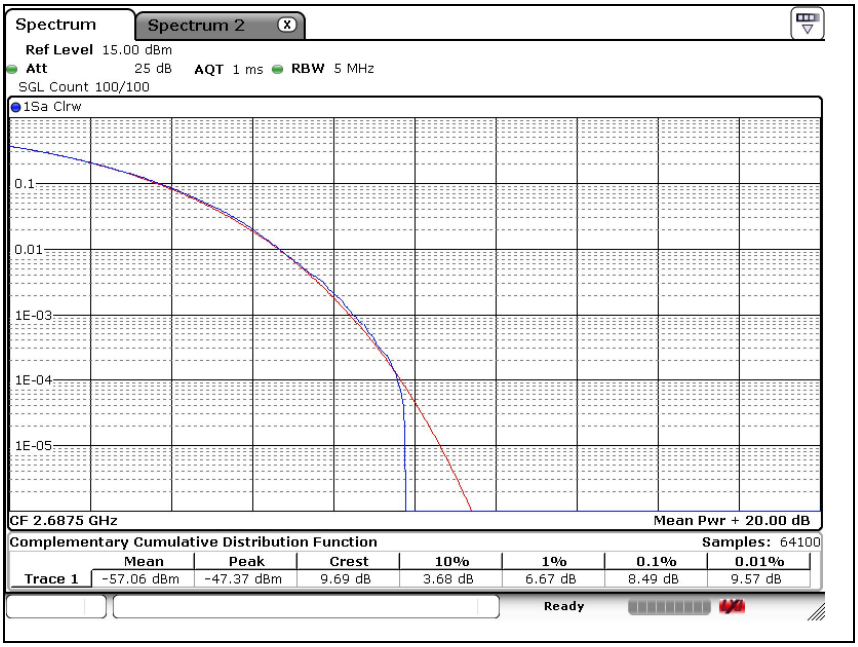
Low Channel



Middle Channel

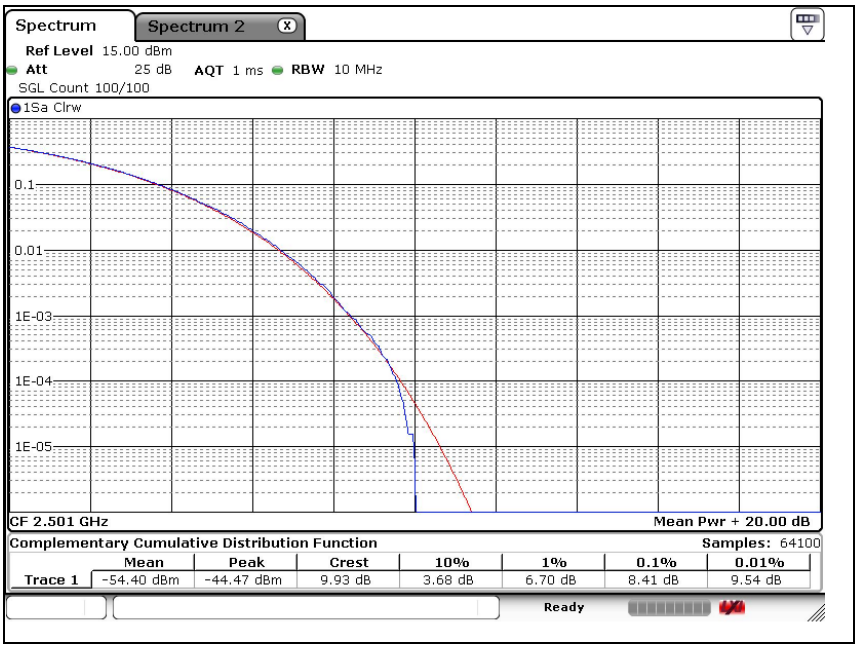


High Channel

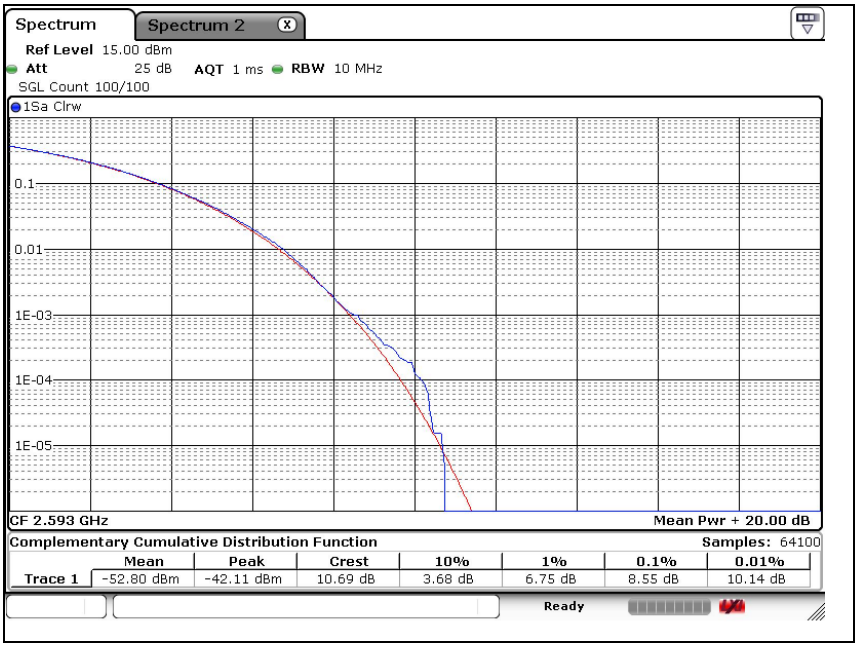


LTE band 41 (10 ㎒ – QPSK)

Low Channel



Middle Channel



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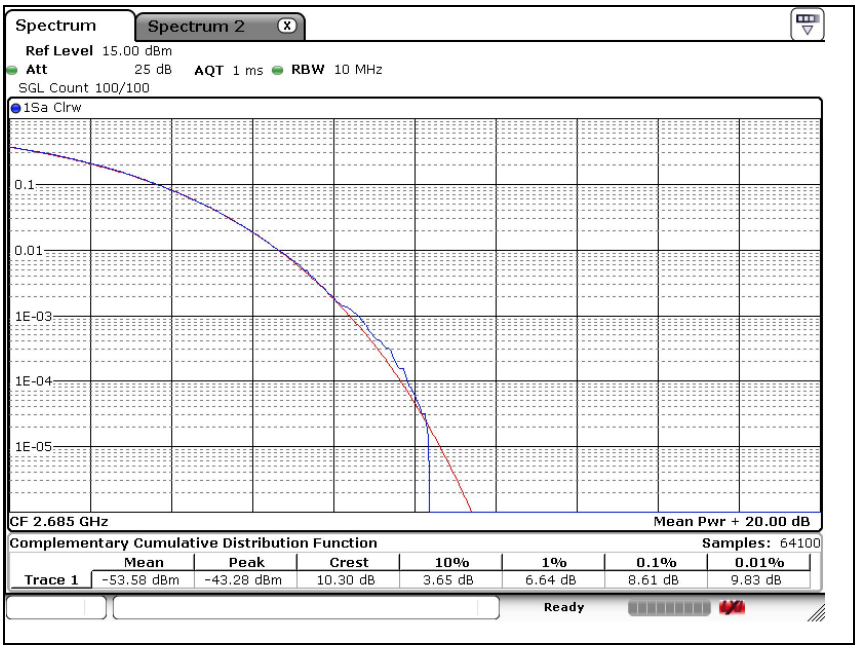
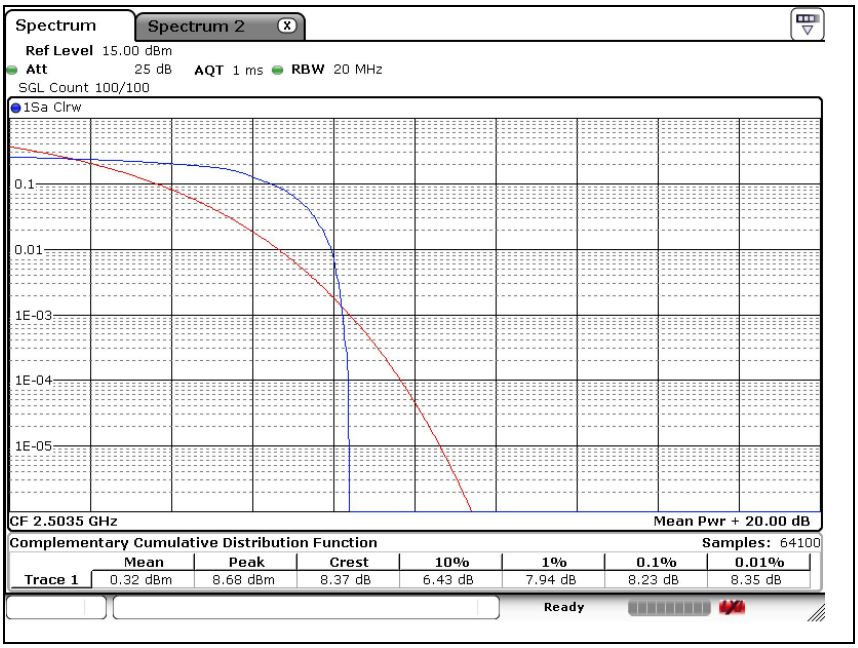


LTE band 41 (15 ㎒ – QPSK)

Low Channel



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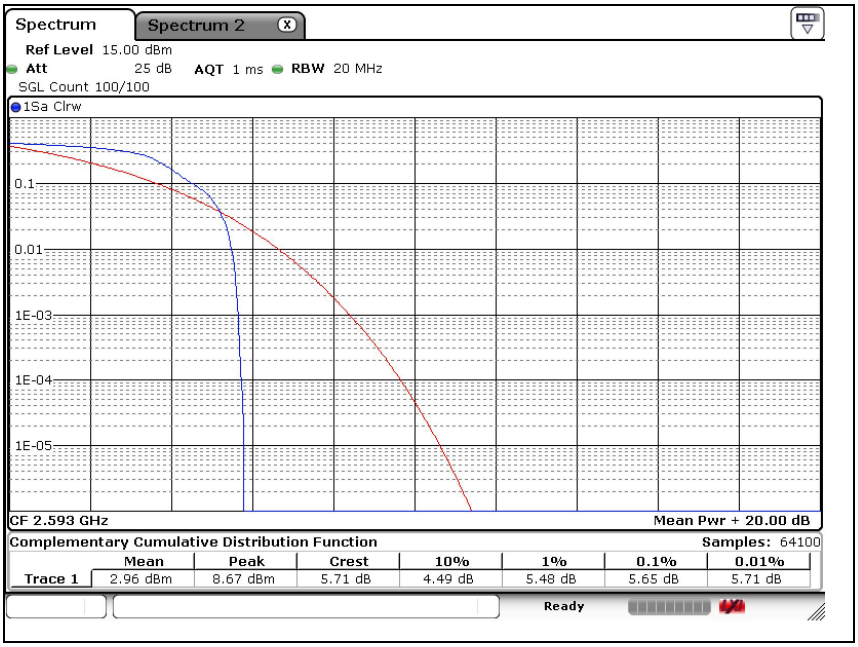

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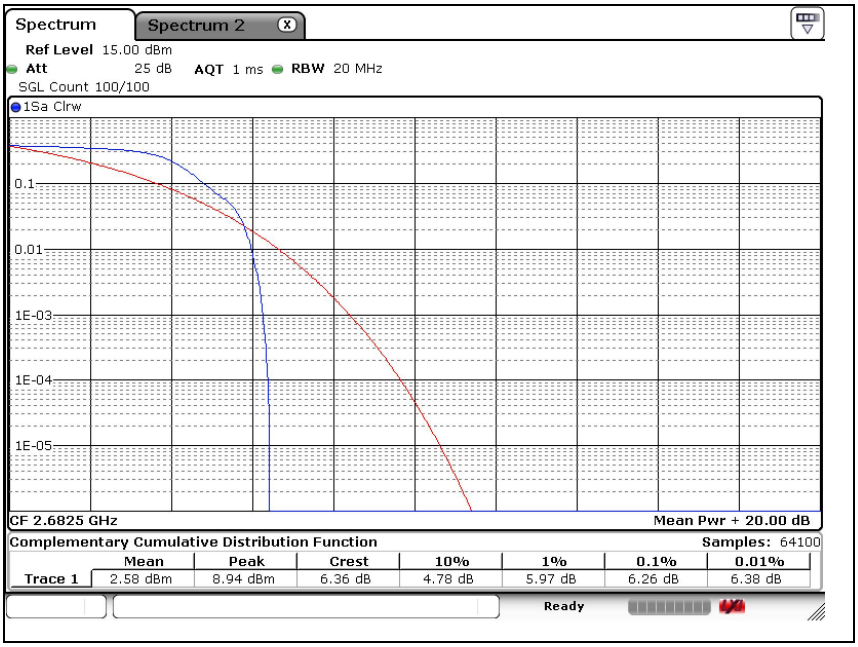
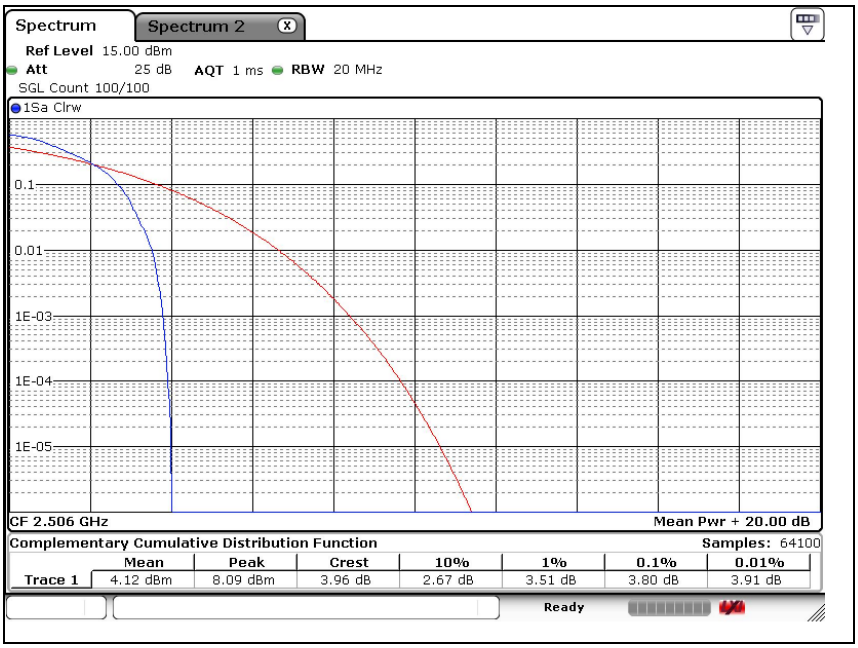
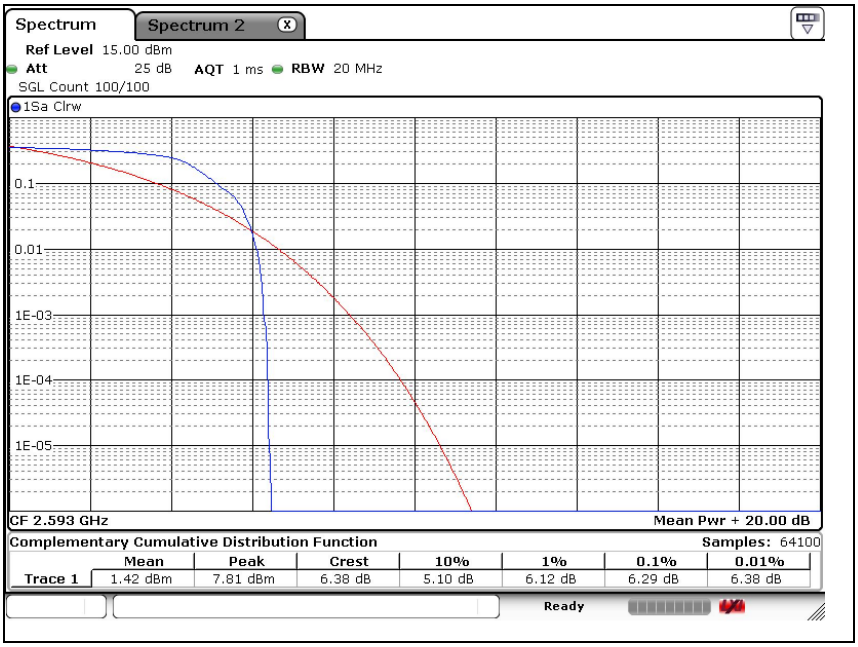


LTE band 41 (20 ㎒ – QPSK)

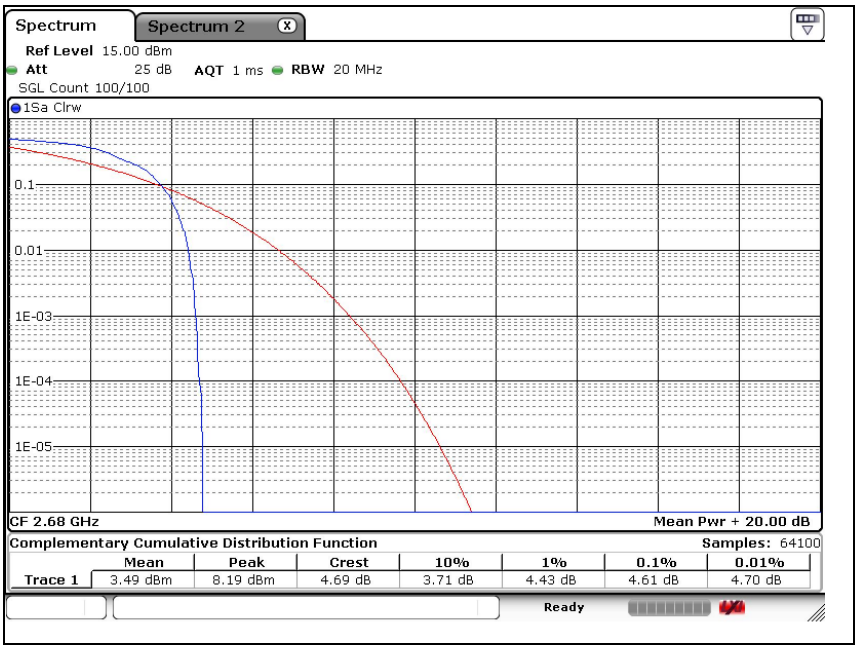
Low Channel



Middle Channel

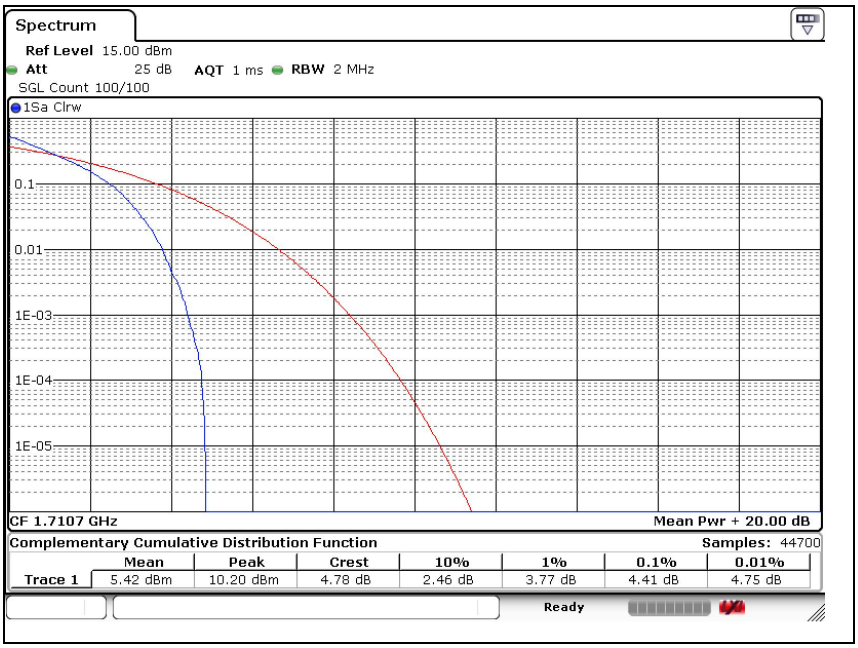


High Channel

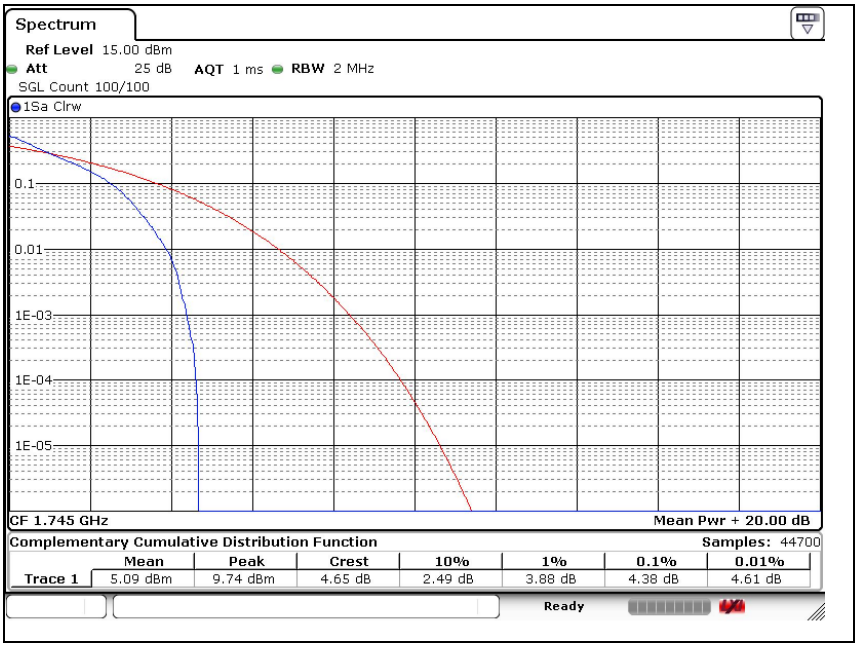


LTE band 66/4 (1.4 ㎒ – QPSK)

Low Channel



Middle Channel



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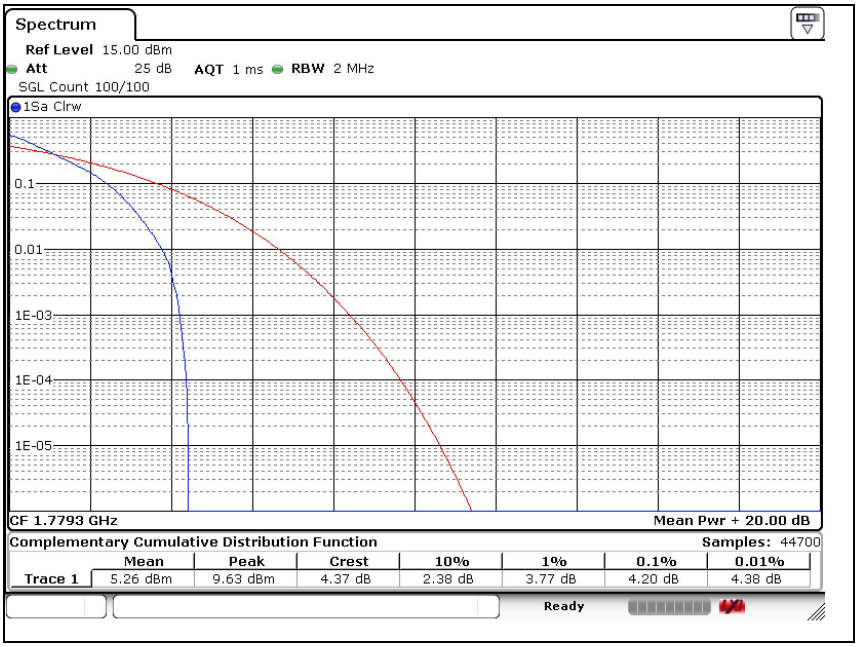
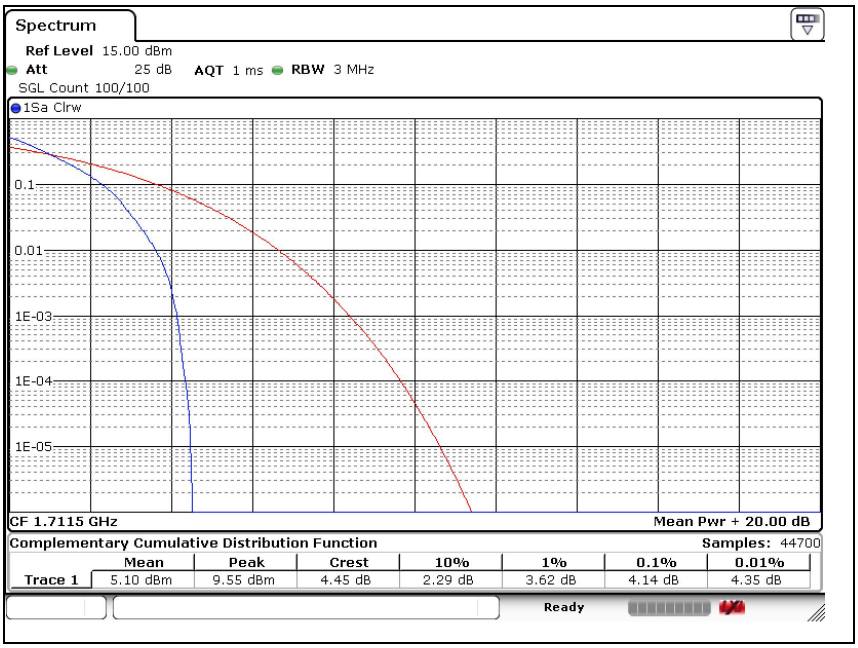
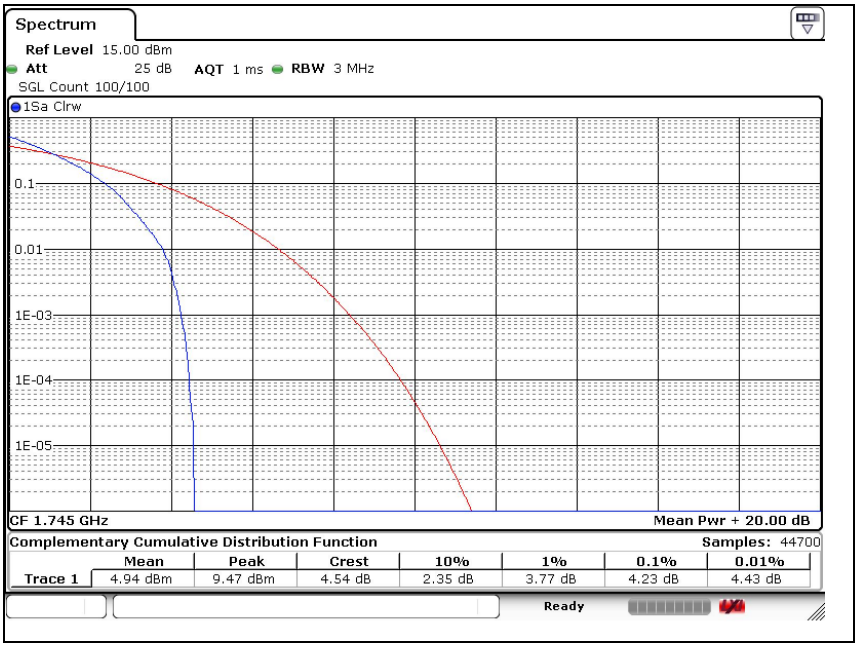


LTE band 66/4 (3 ㎒ – QPSK)

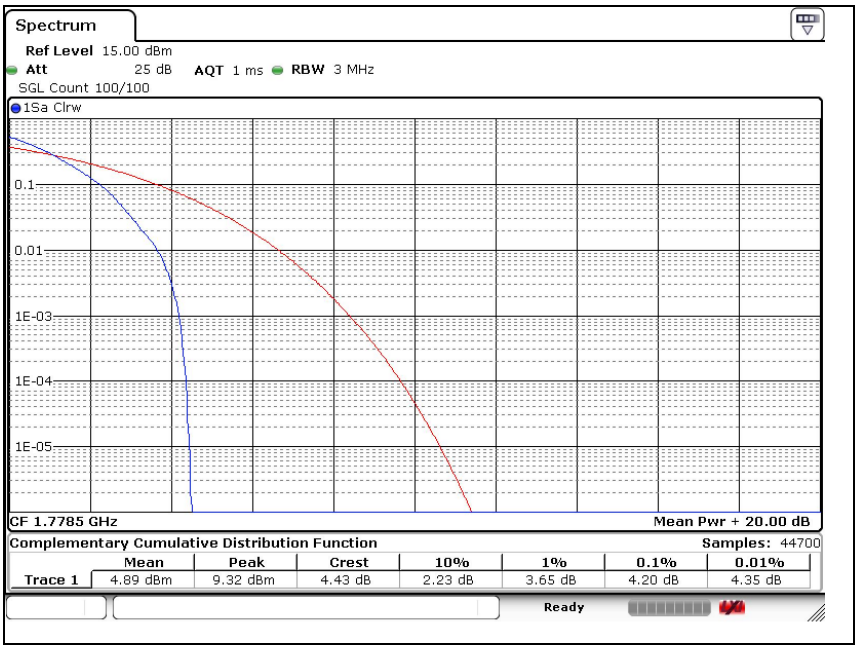
Low Channel



Middle Channel

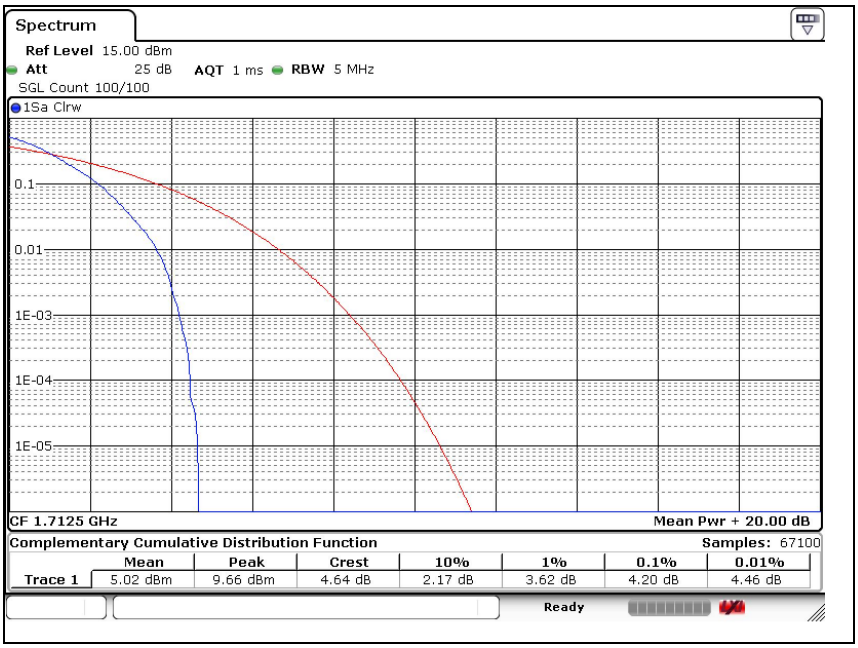


High Channel

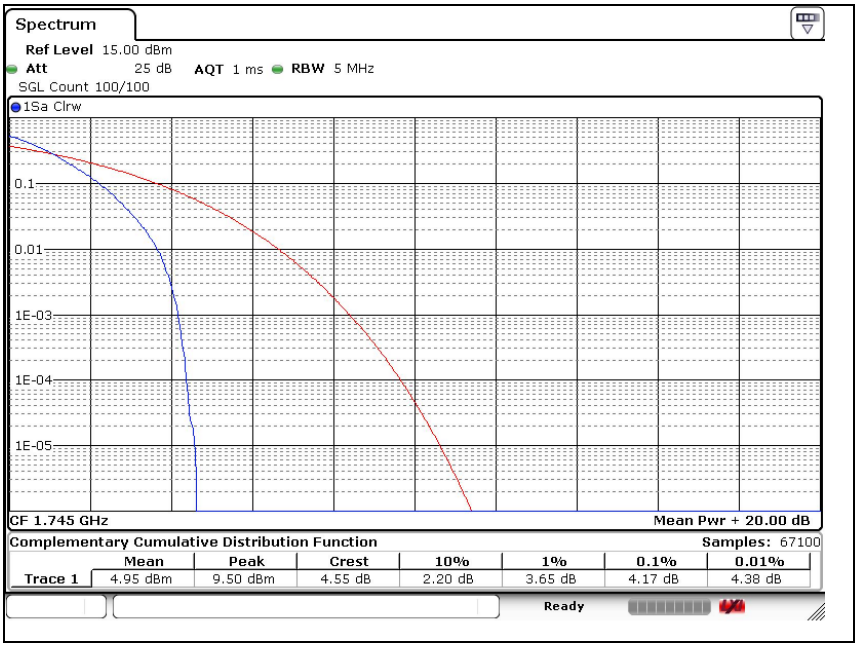


LTE band 66/4 (5 ㎒ – QPSK)

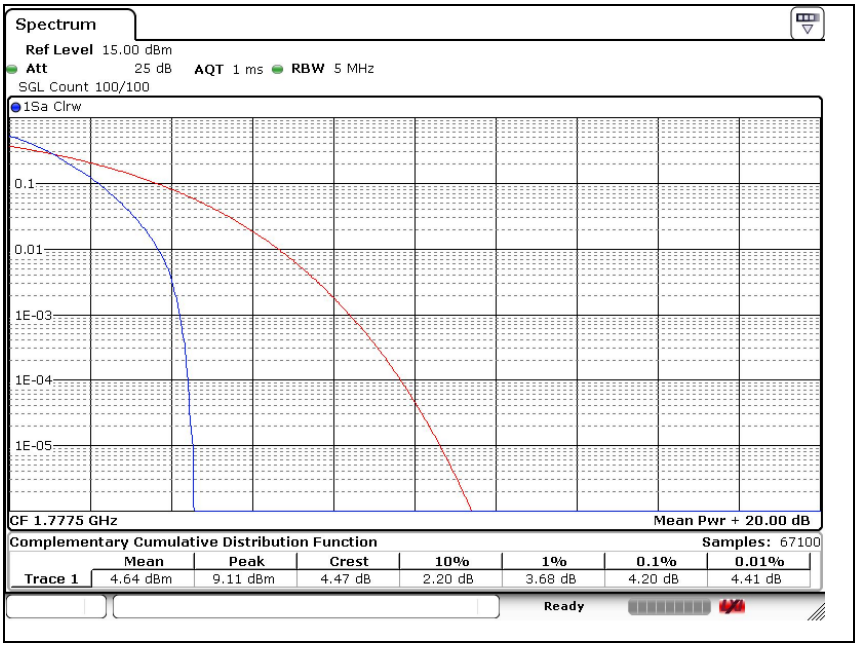
Low Channel



Middle Channel

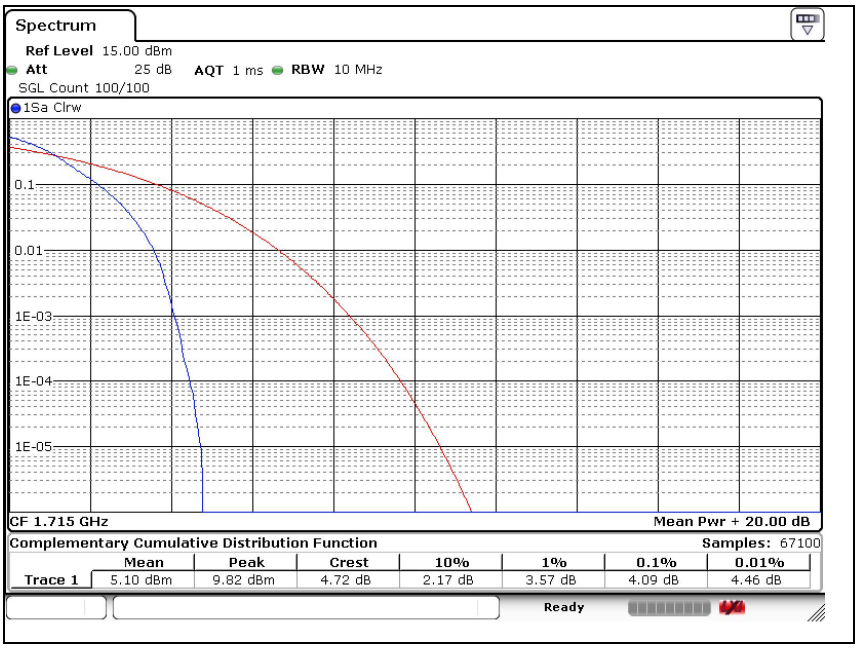


High Channel

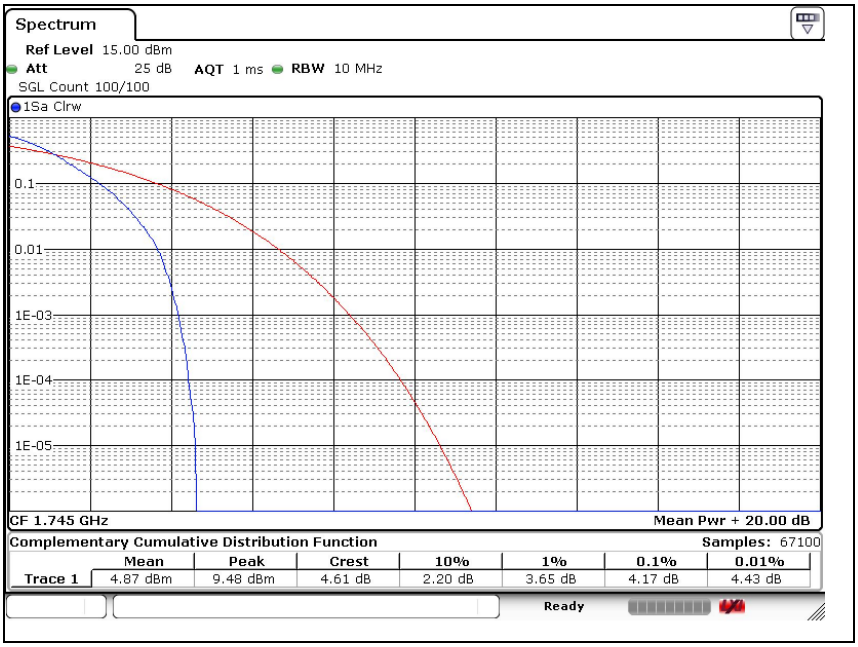


LTE band 66/4 (10 ㎒ – QPSK)

Low Channel



Middle Channel



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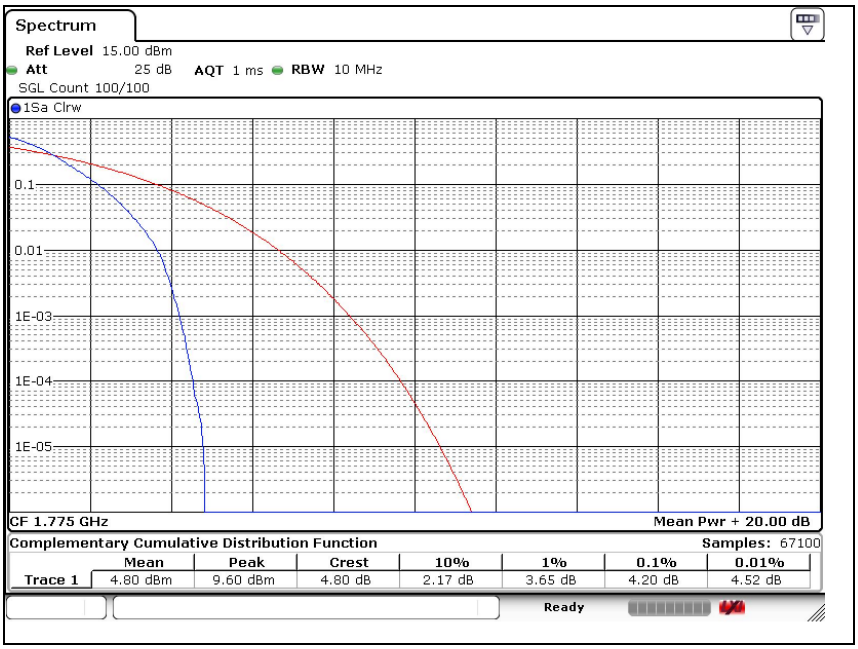
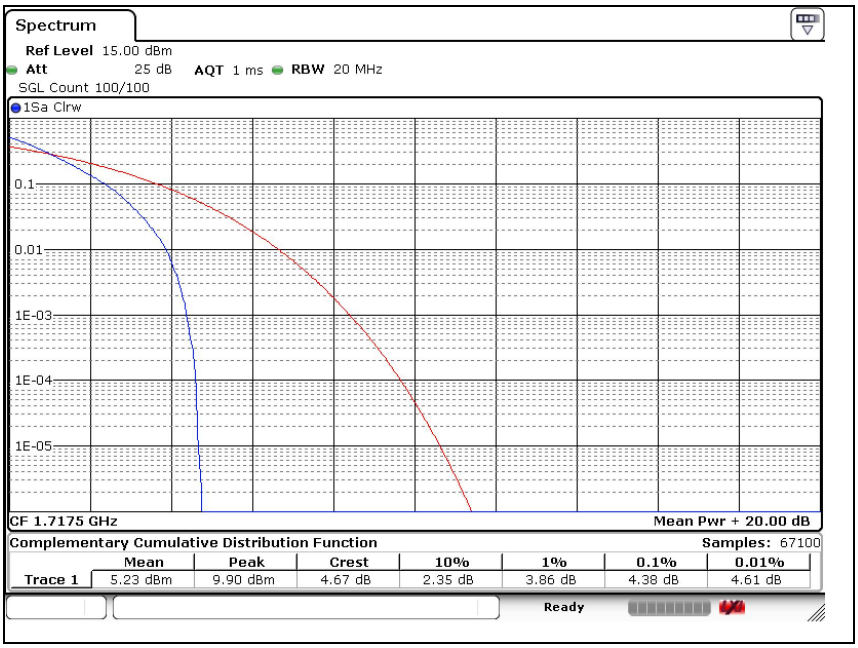
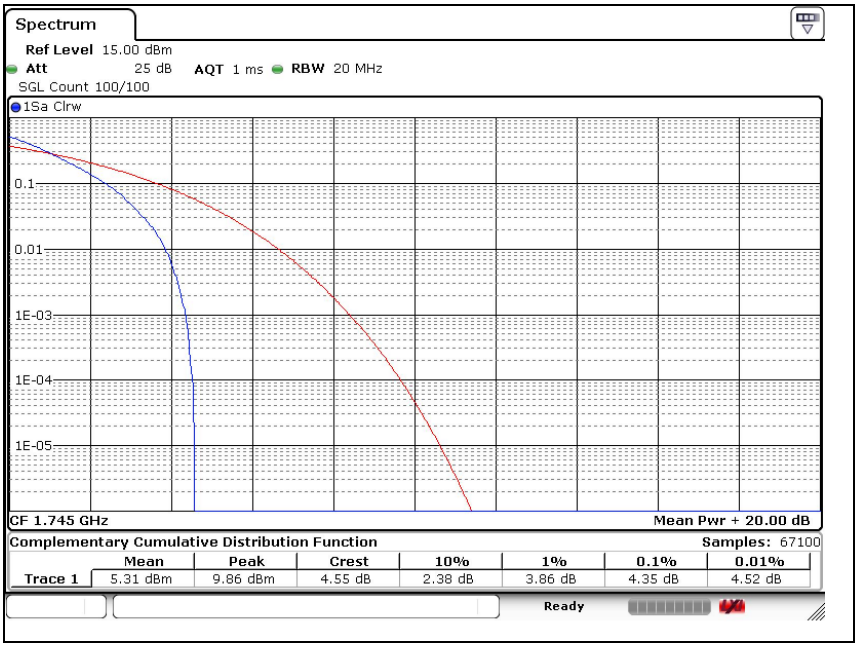


LTE band 66/4 (15 ㎒ – QPSK)

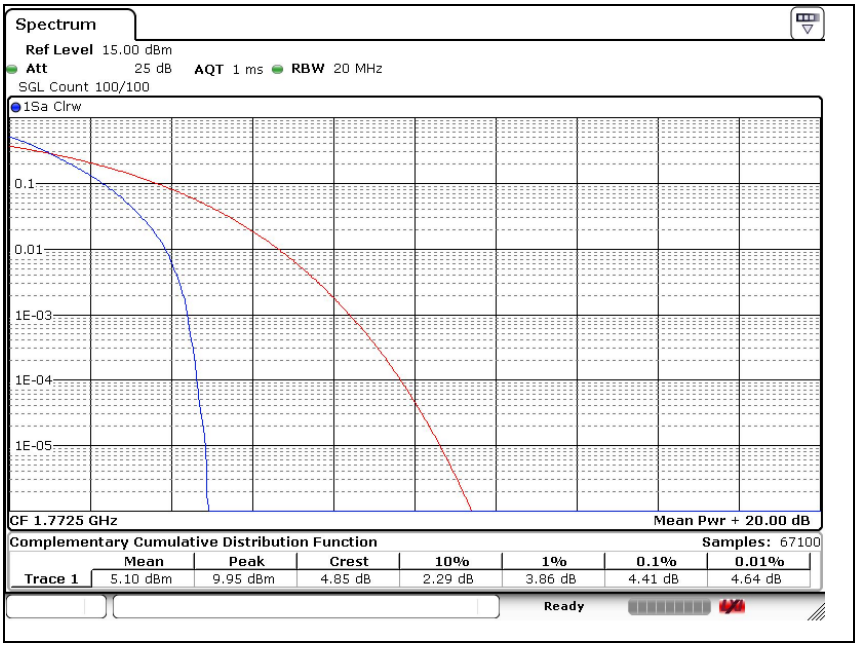
Low Channel



Middle Channel

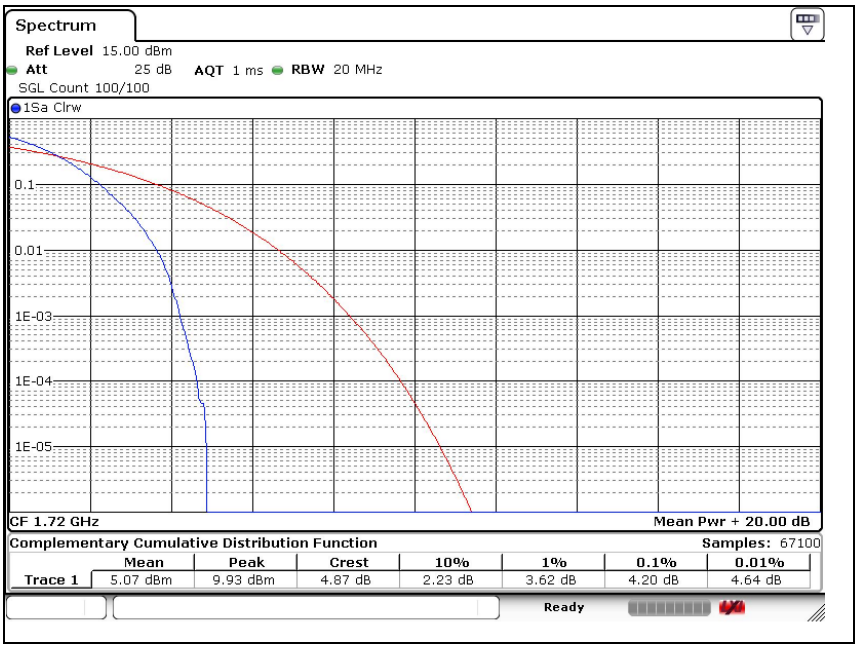


High Channel

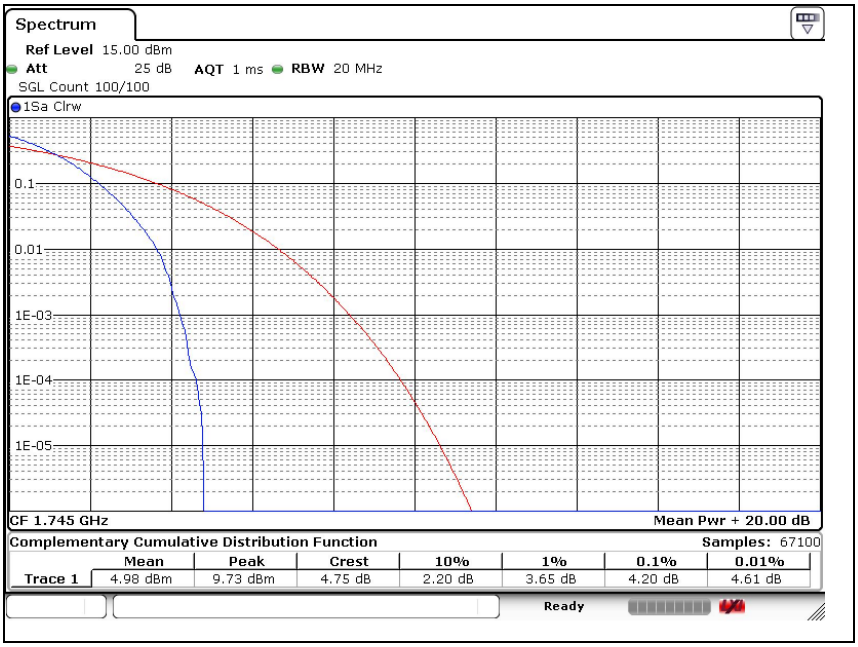


LTE band 66/4 (20 ㎒ – QPSK)

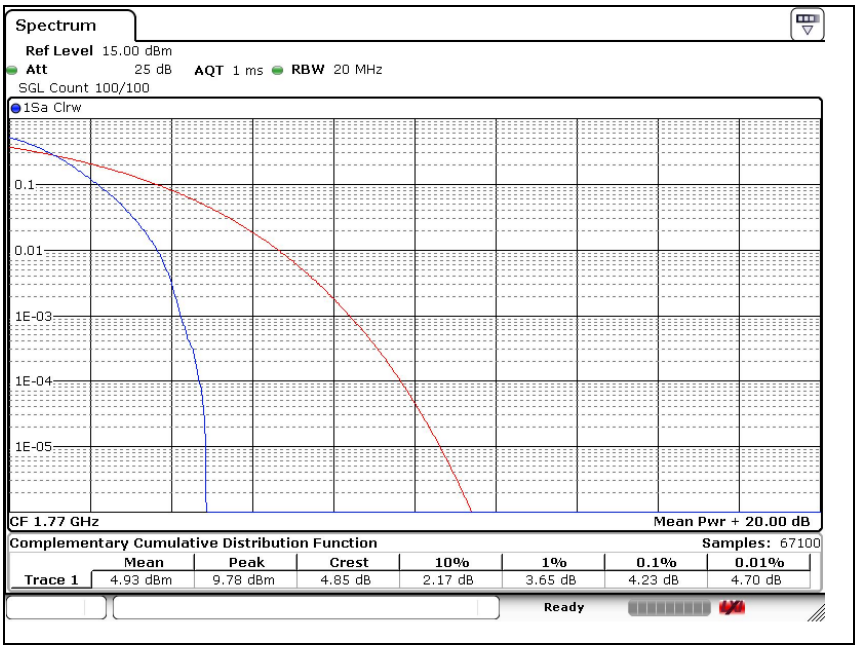
Low Channel



Middle Channel

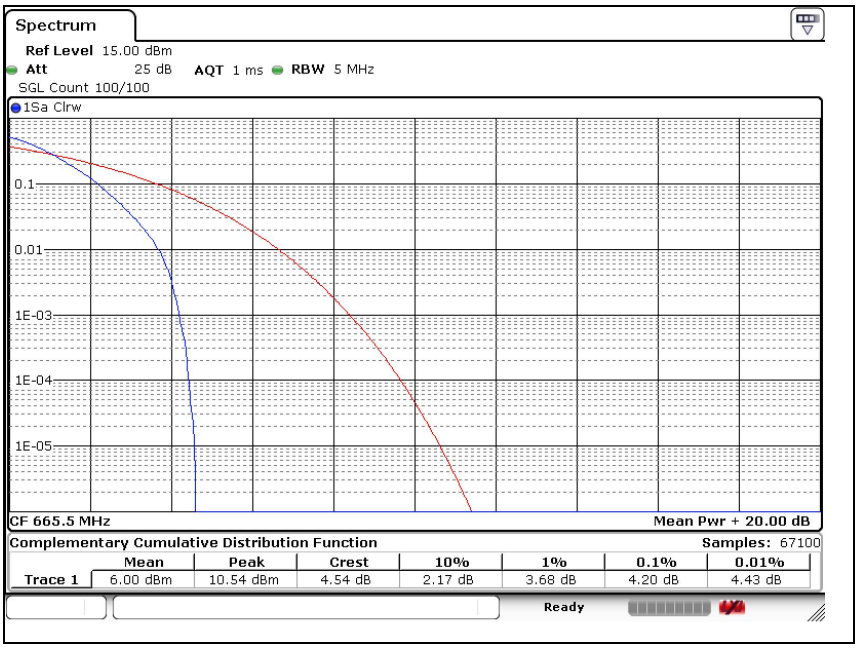


High Channel

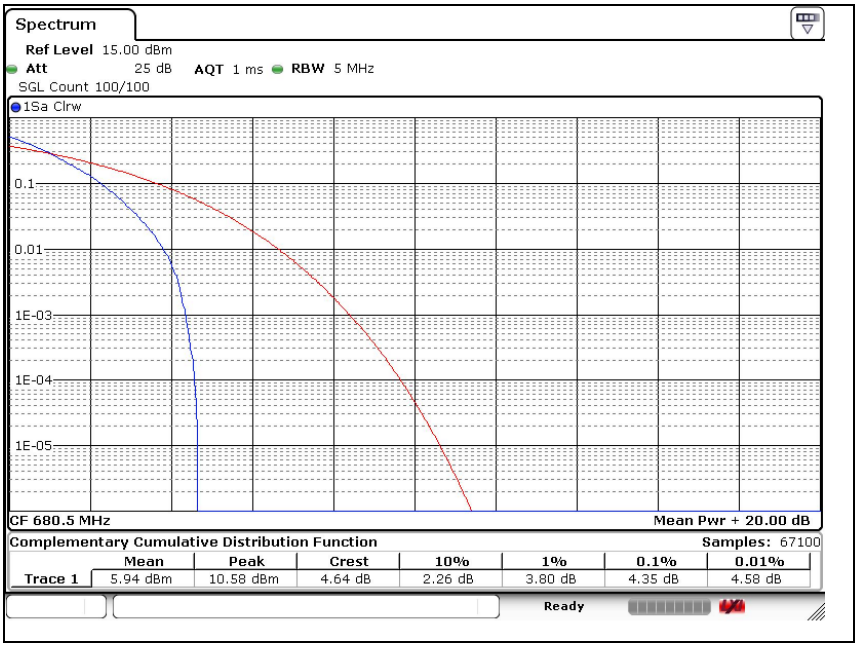


LTE band 71 (5 ㎒ – QPSK)

Low Channel



Middle Channel



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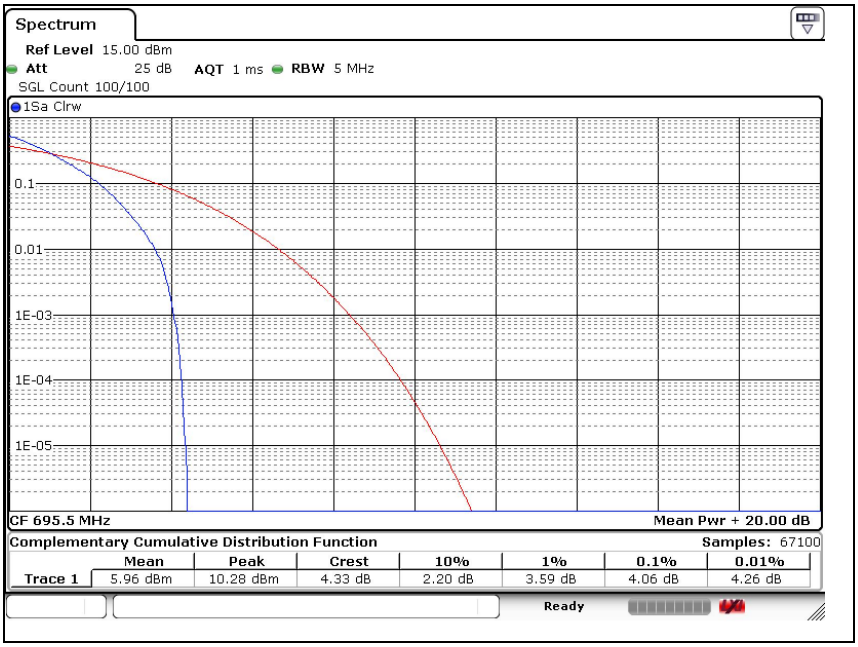
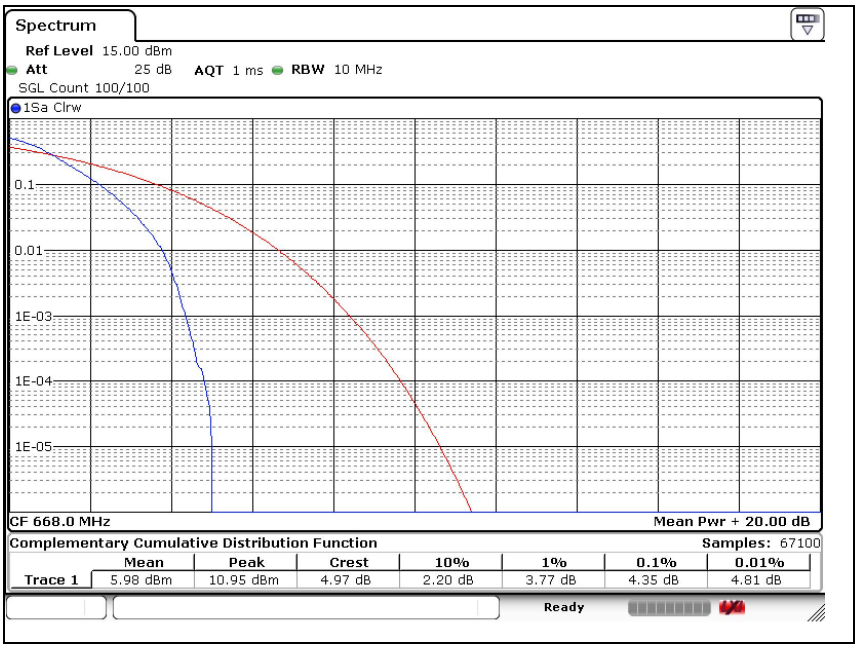
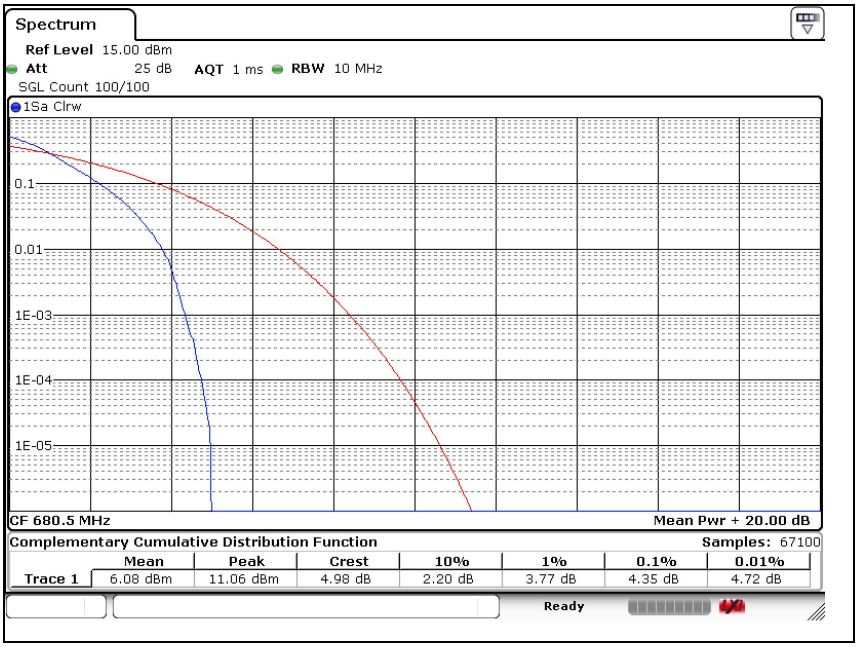


LTE band 71 (10 ㎒ – QPSK)

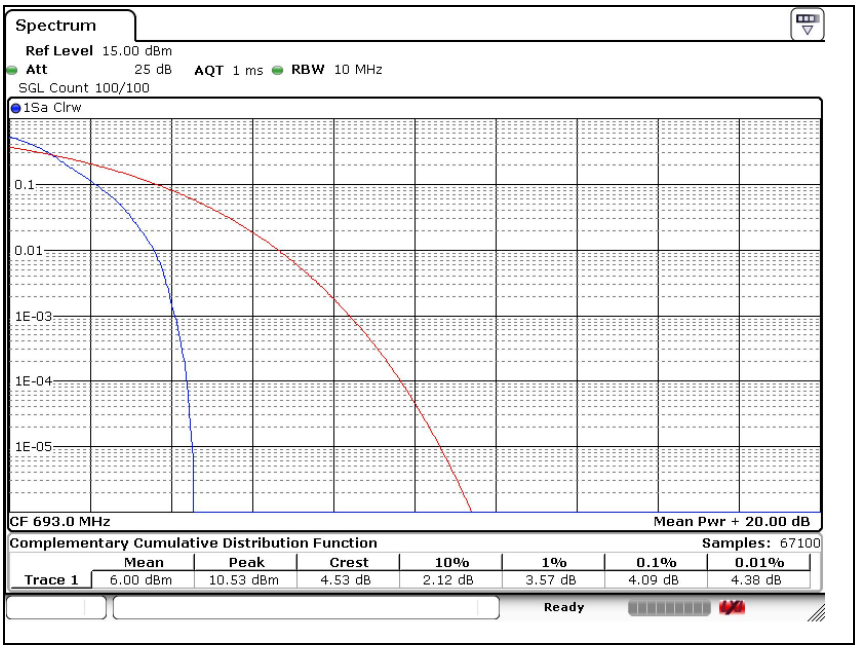
Low Channel



Middle Channel

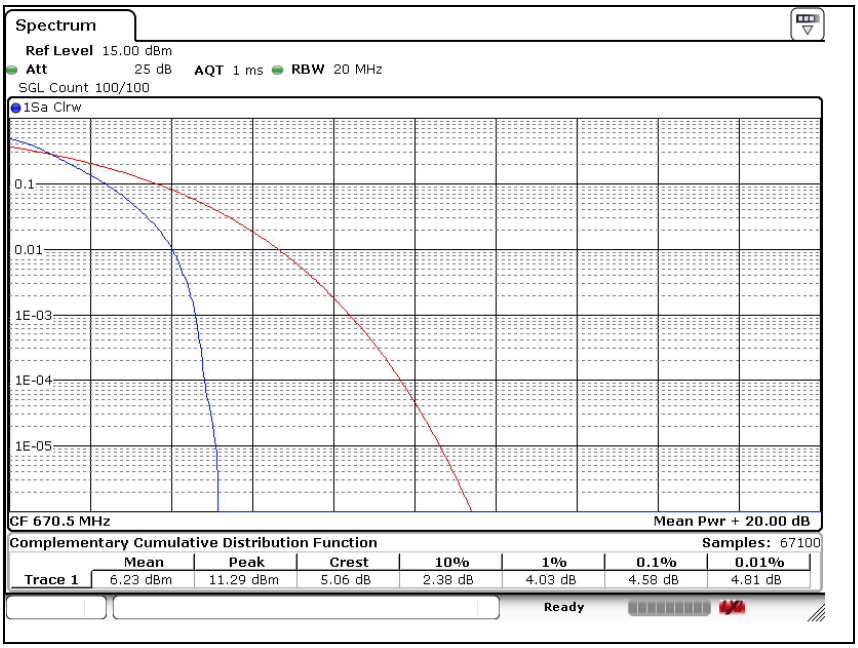


High Channel

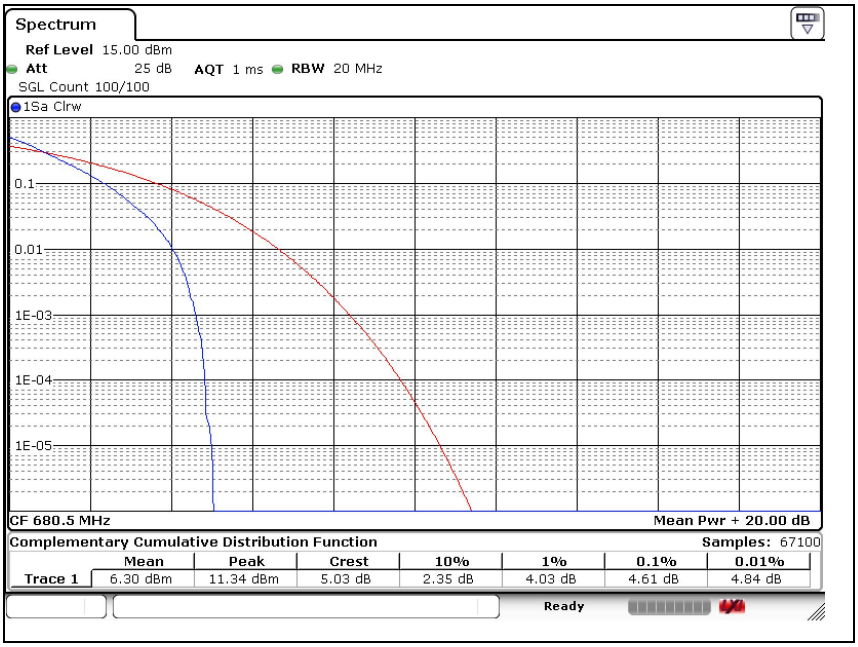


LTE band 71 (15 ㎒ – QPSK)

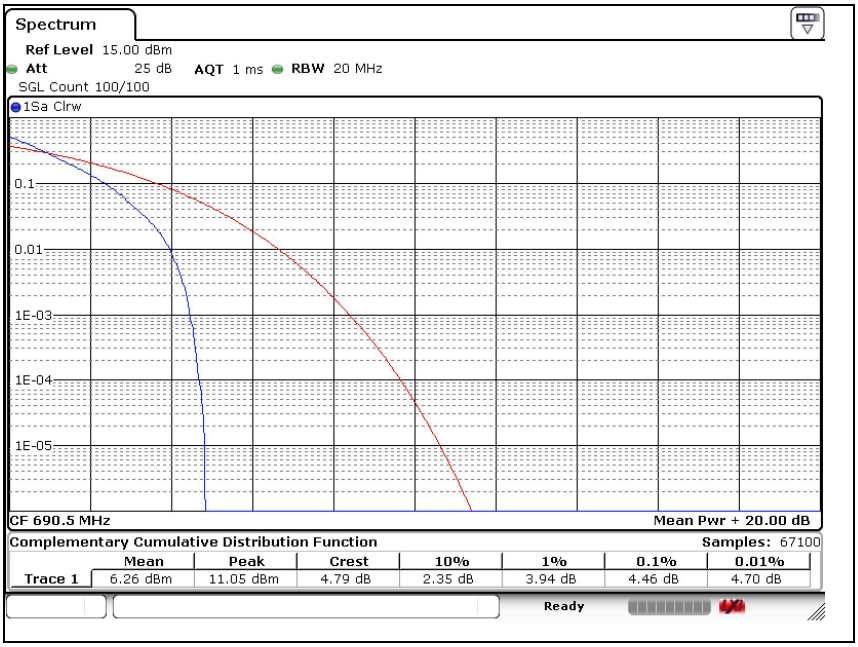
Low Channel



Middle Channel

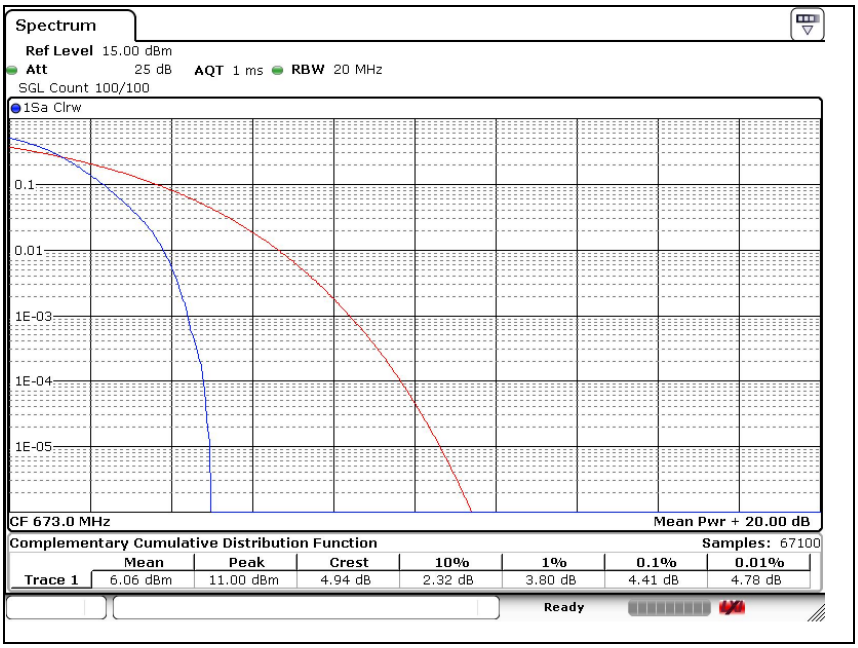


High Channel

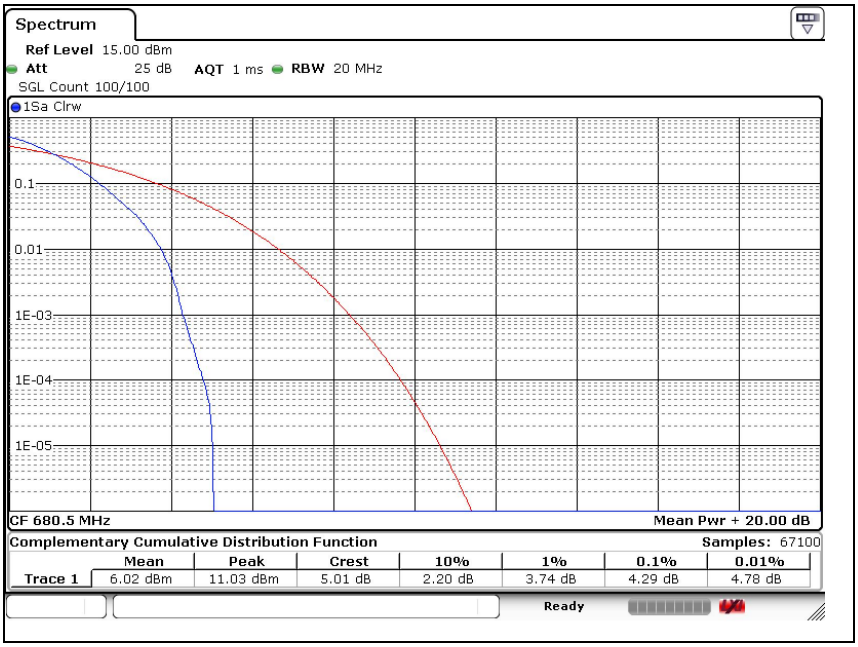


LTE band 71 (20 ㎒ – QPSK)

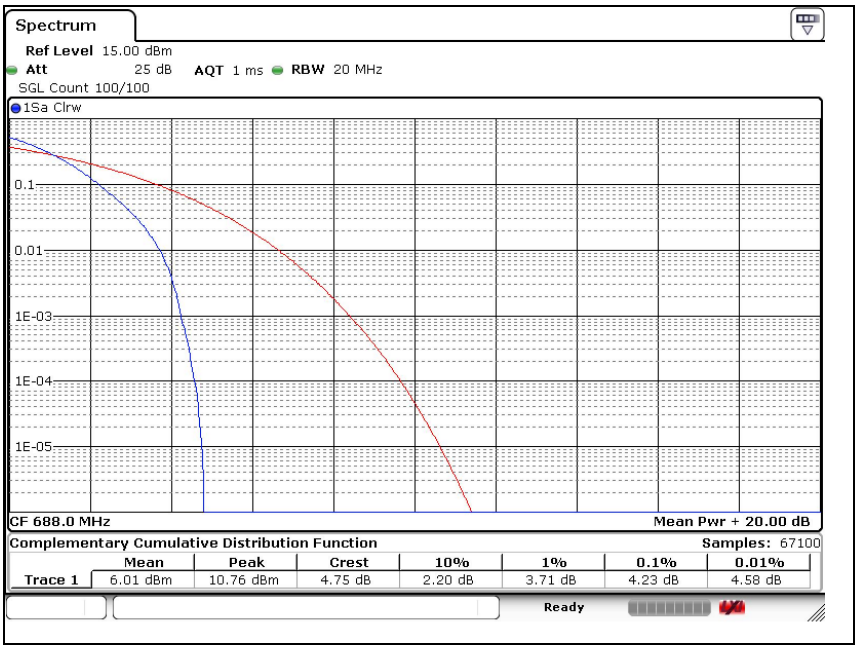
Low Channel



Middle Channel



High Channel



5. Spurious Emissions at Antenna Terminal

5.1. Limit

- §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) ㏈.

- §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) ㏈.

- §27.53(g), 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) ㏈.

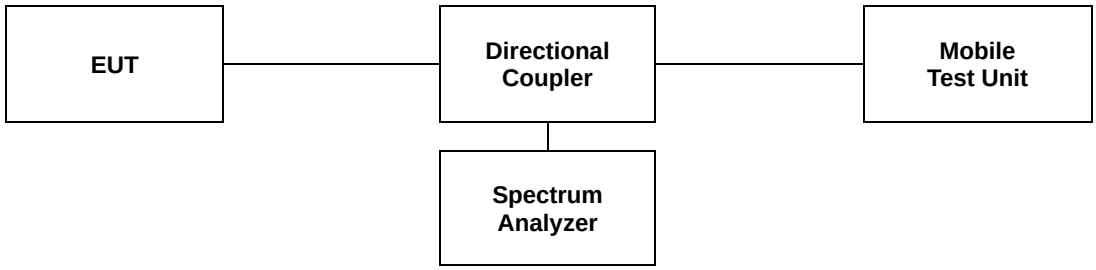
- §27.53(h)(1), for operations in the 1 695-1 710 ㎒, 1 710-1 755 ㎒, 1 755-1 780 ㎒, 1 915-1 920 ㎒, 1 995-2 000 ㎒, 2 000-2 020 ㎒, 2 110-2 155 ㎒, 2 155-2 180 ㎒, and 2 180-2 200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 $\log_{10}$ (P) ㏈.

- §27.53(m)(4), For mobile digital stations, the attenuation factor shall be not less than 40 + 10 $\log_{10}$ (P) ㏈ on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 $\log_{10}$ (P) ㏈ on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 $\log_{10}$ (P) ㏈ 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 $\log_{10}$ (P) ㏈ on all frequencies between 2490.5 ㎒ and 2496 ㎒ and 55 + 10 $\log_{10}$ (P) ㏈ at or below 2490.5 ㎒. Mobile Satellite Service licensees operating on frequencies below 2495 ㎒ 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.

5.2. Test Procedure

The test follows section 5.7 of ANSI C63.26-2015.

1. Start frequency was set to 9 ㎑ and stop frequency was set to at least 10* the fundamental frequency.
2. Detector = Peak.
3. Trace mode = Max hold.
4. Sweep time = Auto couple.
5. The trace was allowed to stabilize.
6. Please see notes below for RBW and VBW settings.
7. For plots showing conducted spurious emissions from 9 ㎑ to 27 ㎓, all path loss of wide frequency range was investigated and compensated to spectrum analyzer as correction factor.



Note;

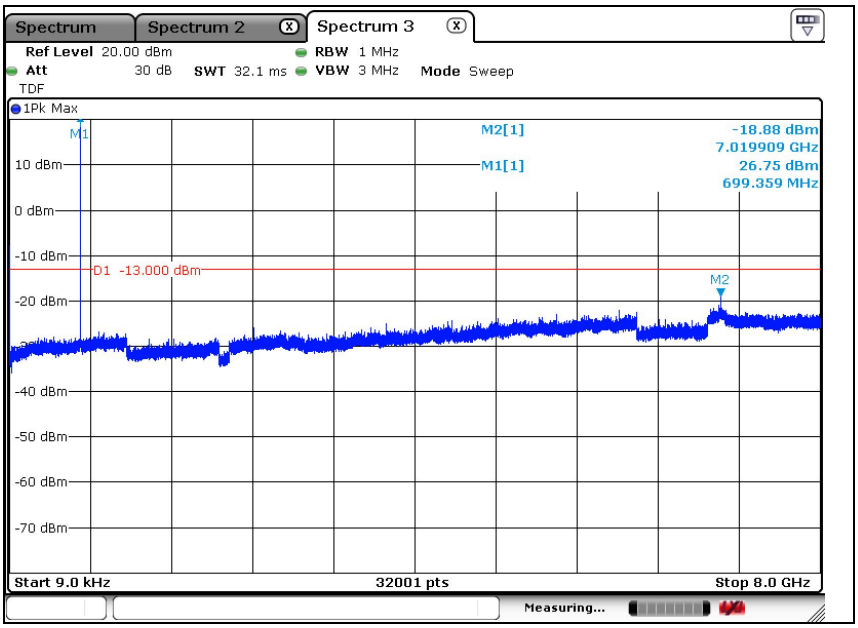
Compliance with the applicable limits is based on the use of measurement instrumentation employing a resolution bandwidth of 100 ㎑ or greater for frequencies less than 1 ㎓ and frequencies greater than 1 ㎓. However, in the 1 ㎒ bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two point, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 ㏈ below the transmitter power.

5.3. Test Results

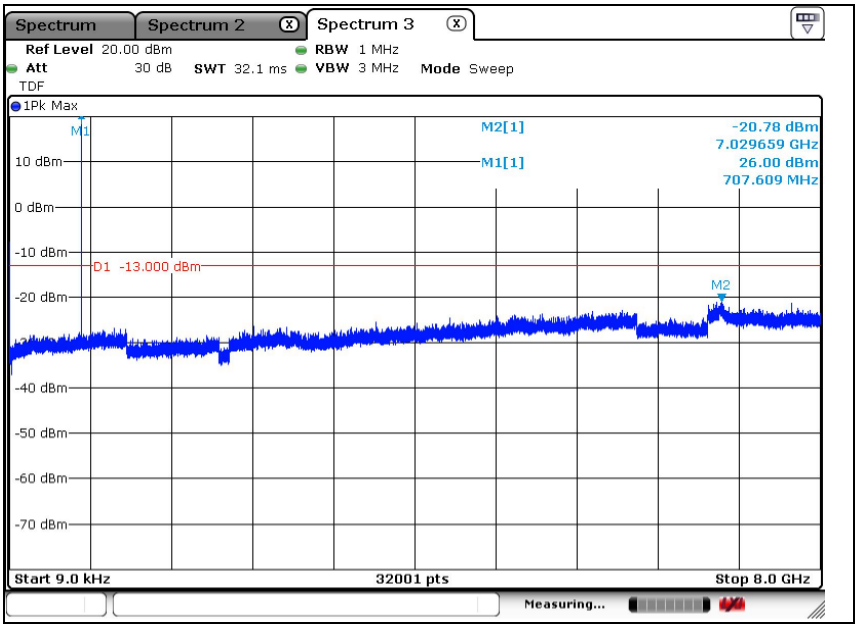
Ambient temperature : (23 ± 1) ℃
Relative humidity : 47 % R.H.

- Test plots

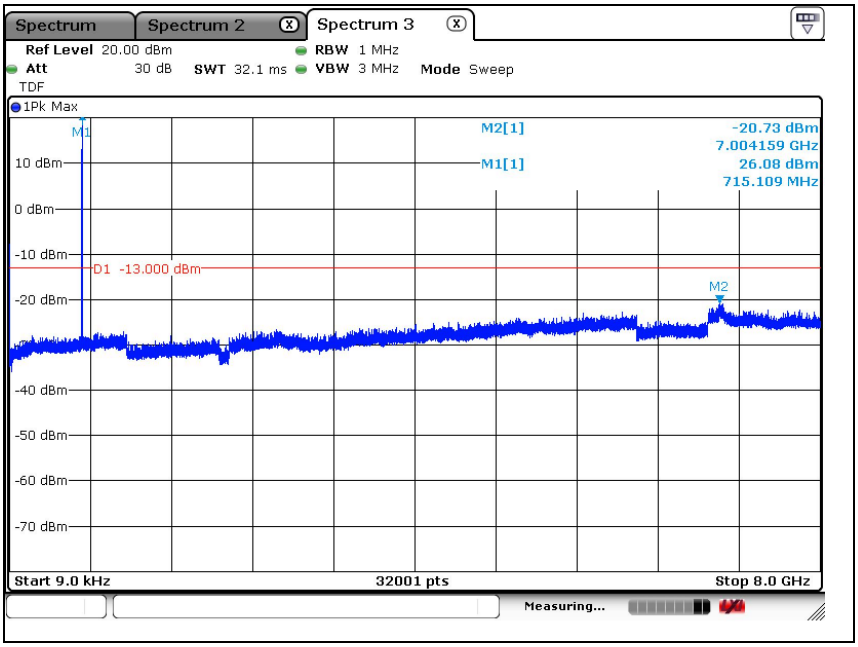
LTE band 12 (1.4 ㎒ – QPSK)
Low Channel



Middle Channel

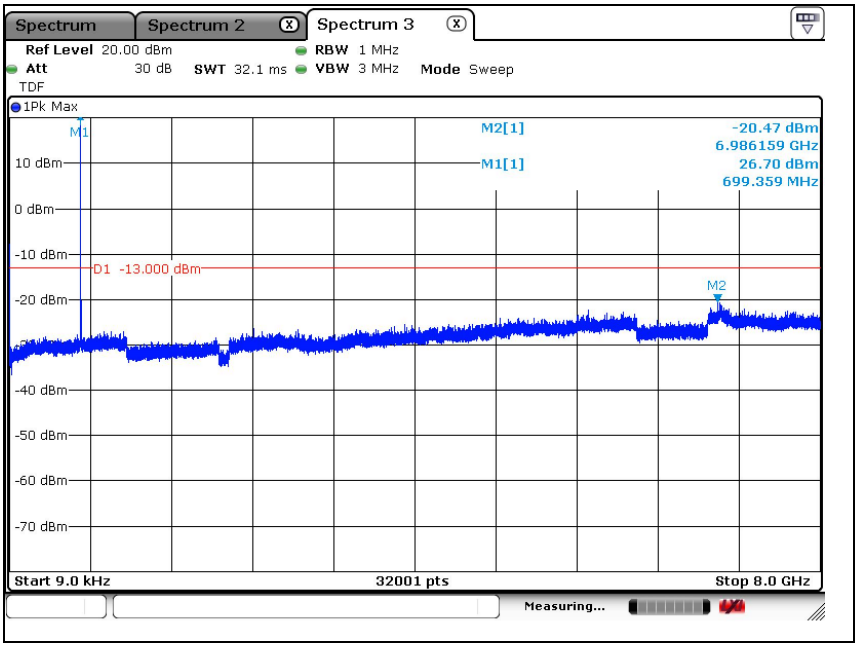


High Channel

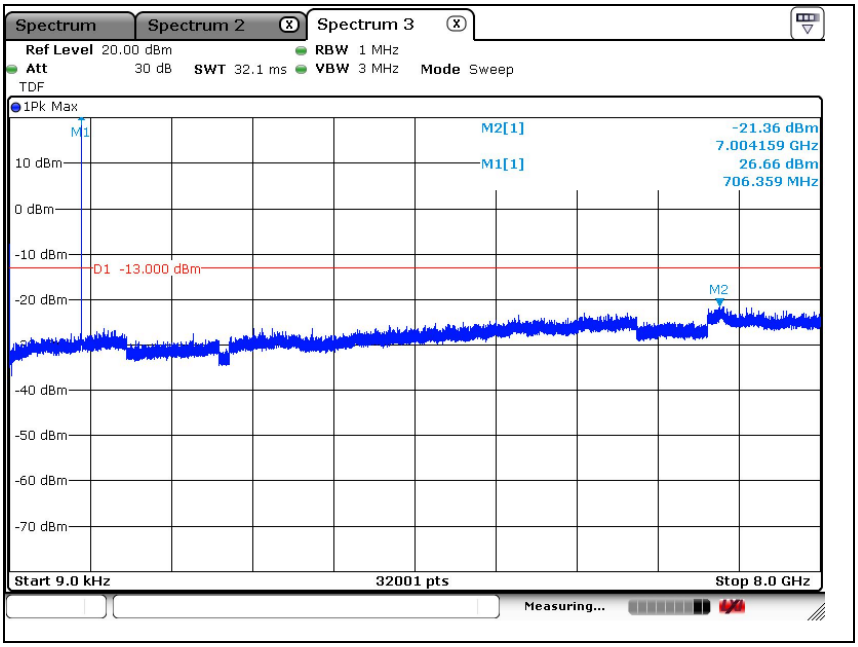


LTE band 12 (3 ㎒ – QPSK)

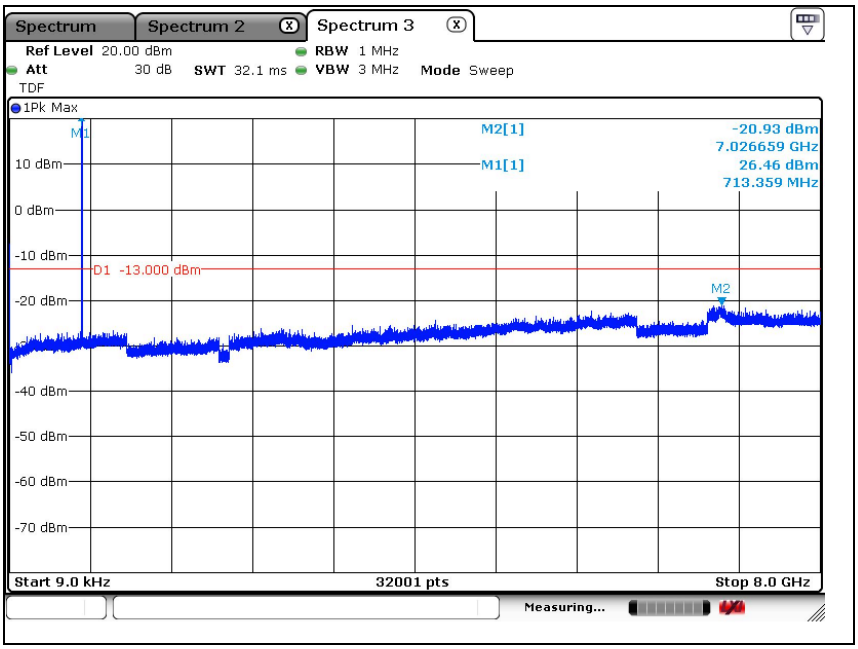
Low Channel



Middle Channel

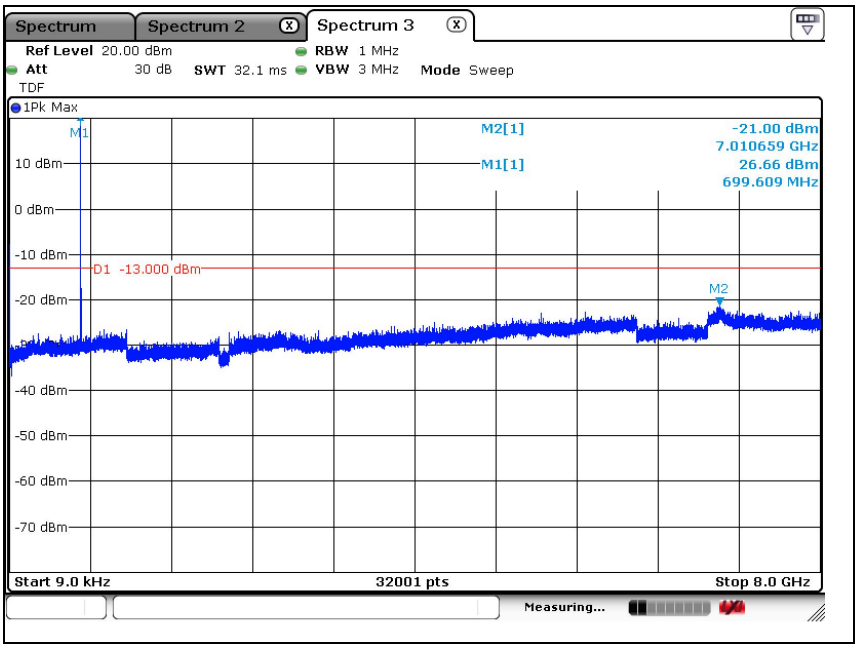


High Channel



LTE band 12 (5 ㎒ – QPSK)

Low Channel



Middle Channel