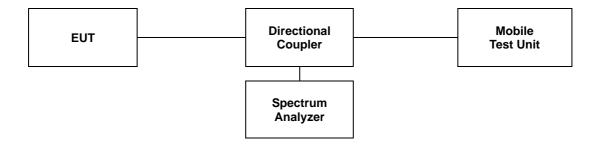


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6.2. Test Procedure

The test follows section 6 of FCC KDB Publication 971168 D01 v03r01.

- 1. Start frequency was set to 9 klb 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 \(\mathbb{m} \) to 26 \(\mathbb{m} \), 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 $\,\mathrm{kl\!h}$ or greater for frequencies less than 1 $\,\mathrm{Gl\!h}$ and frequencies greater than 1 $\,\mathrm{Gl\!h}$. However, in the 1 $\,\mathrm{ll\!h}$ 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 $\,\mathrm{dB}$ below the transmitter power.

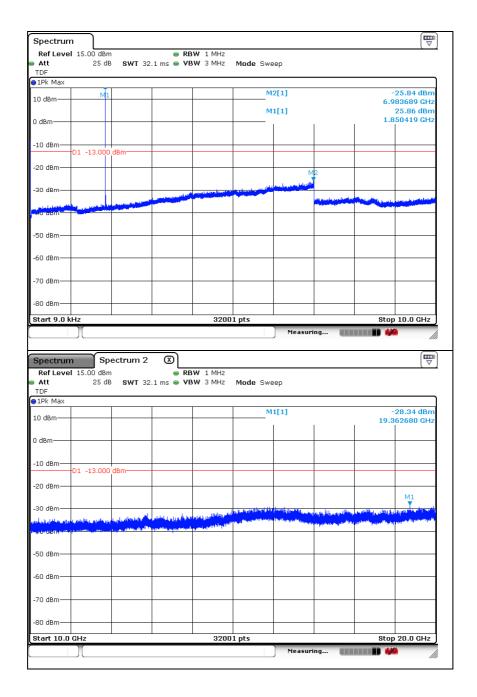


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6.3. Test Results

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

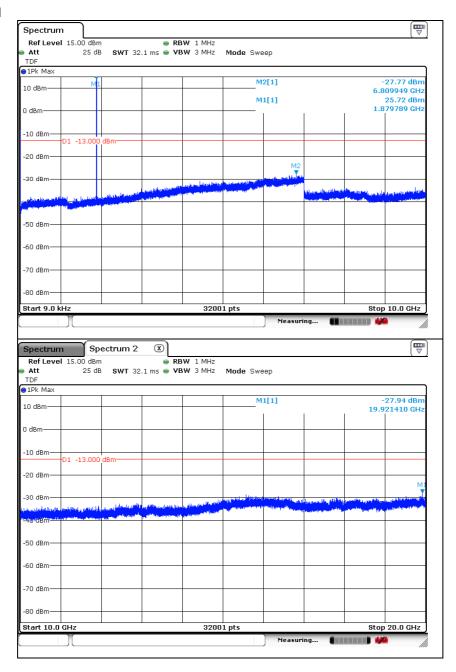
Low Channel





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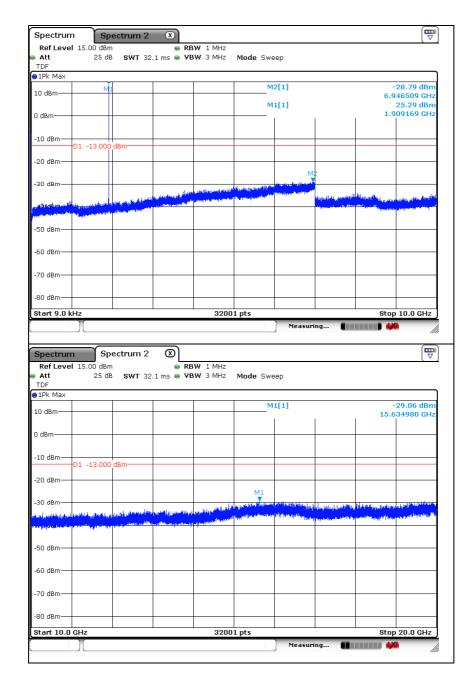
Middle Channel





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High Channel

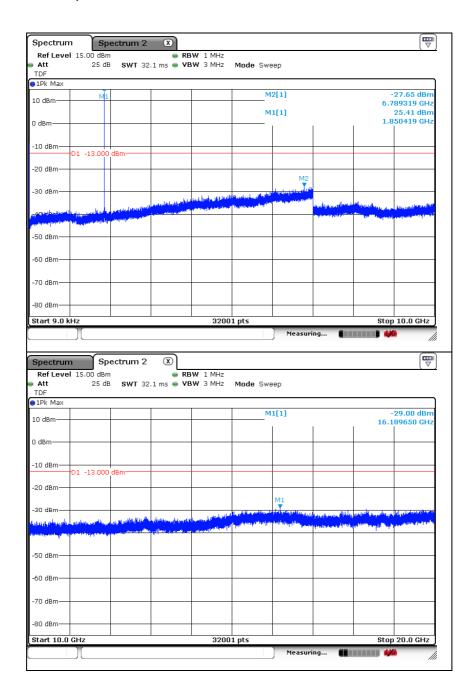




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LTE band 2 (3 胍 - QPSK)

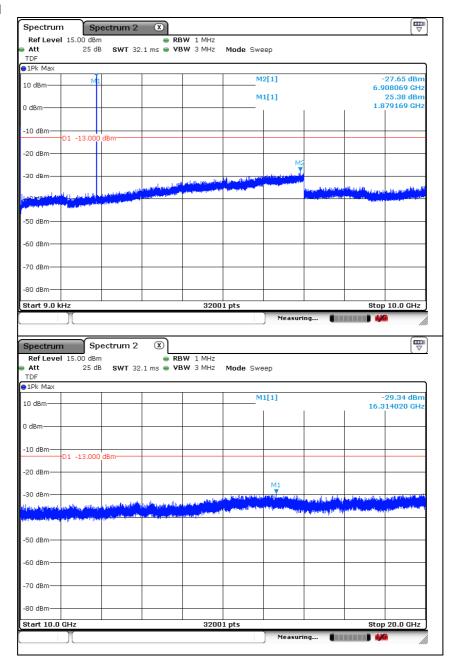
Low Channel





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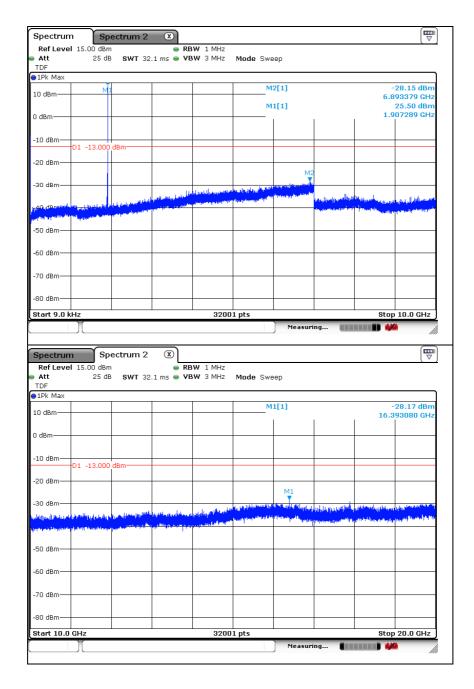
Middle Channel





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High Channel

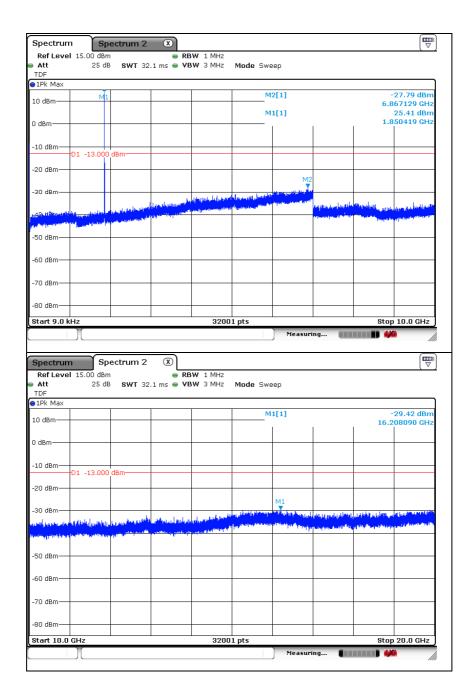




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LTE band 2 (5 胍 - QPSK)

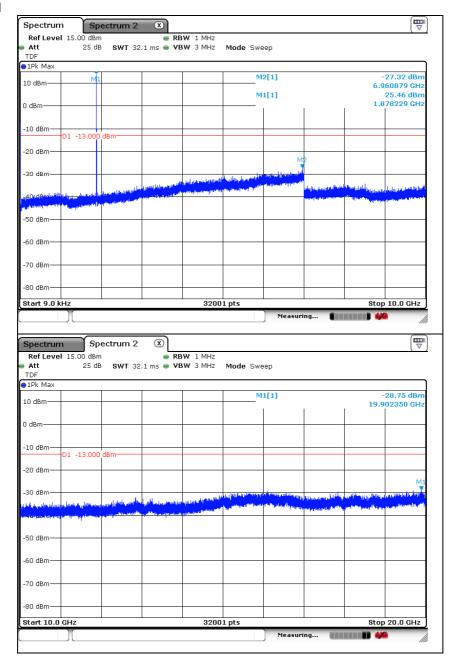
Low Channel





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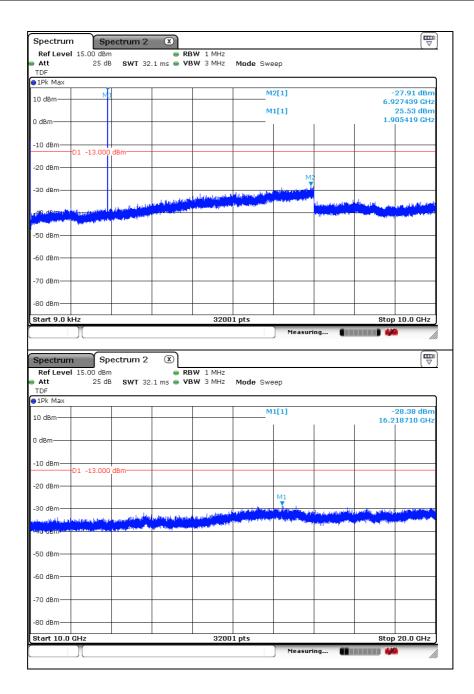
Middle Channel





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High Channel

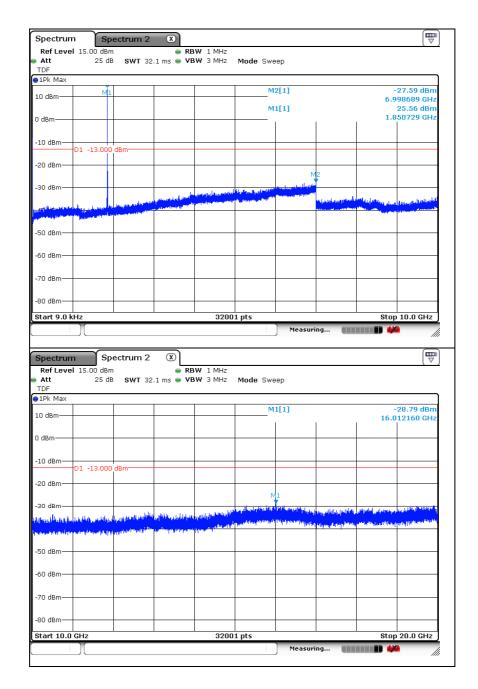




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LTE band 2 (10 Mb - QPSK)

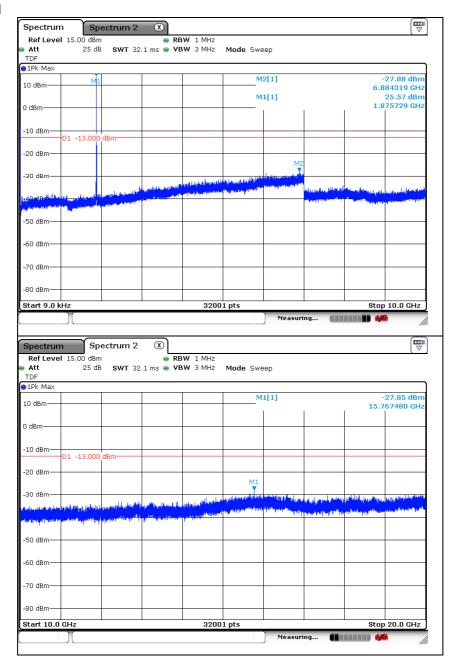
Low Channel





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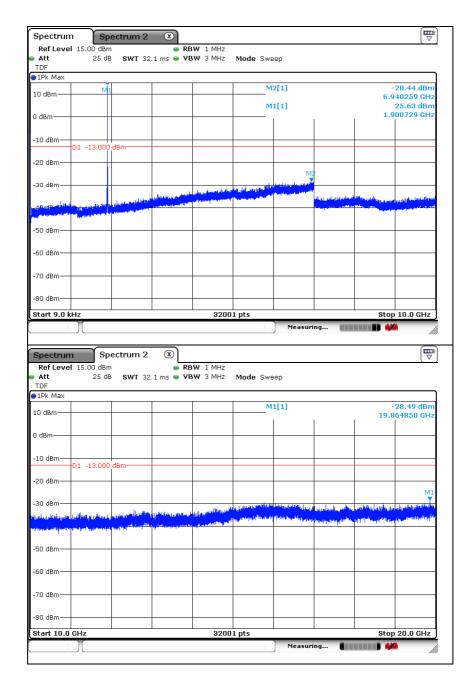
Middle Channel





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High Channel

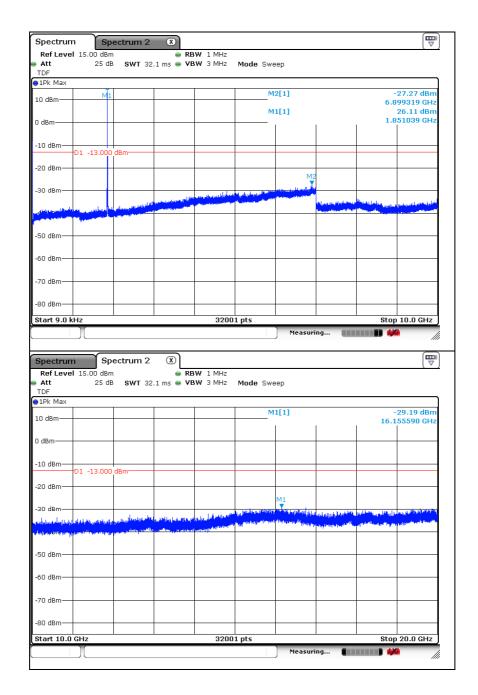




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LTE band 2 (15 Mb - QPSK)

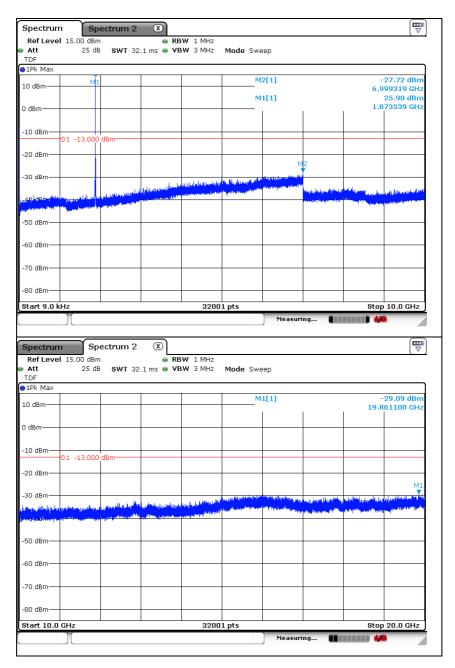
Low Channel





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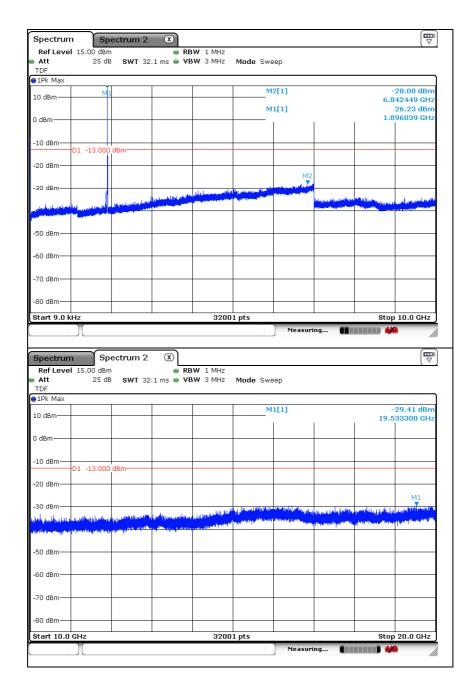
Middle Channel





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High Channel

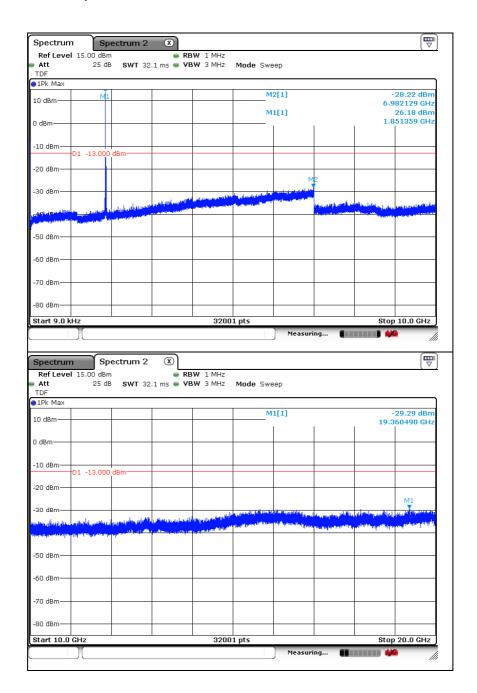




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LTE band 2 (20 Mb - QPSK)

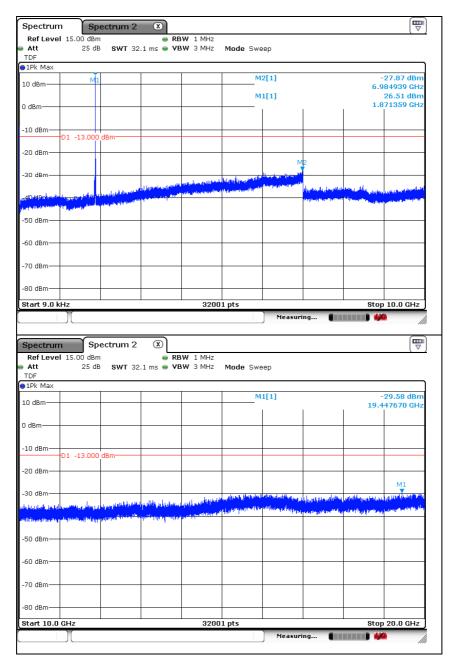
Low Channel





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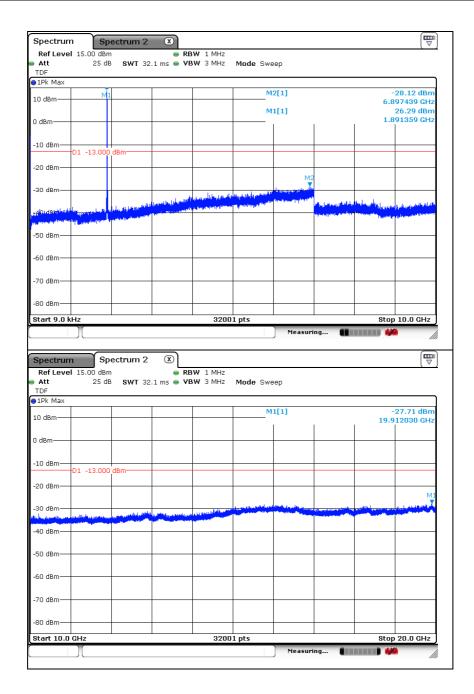
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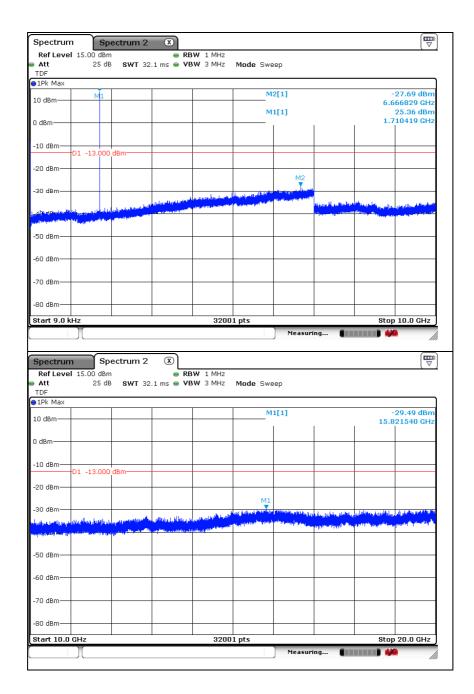
High Channel





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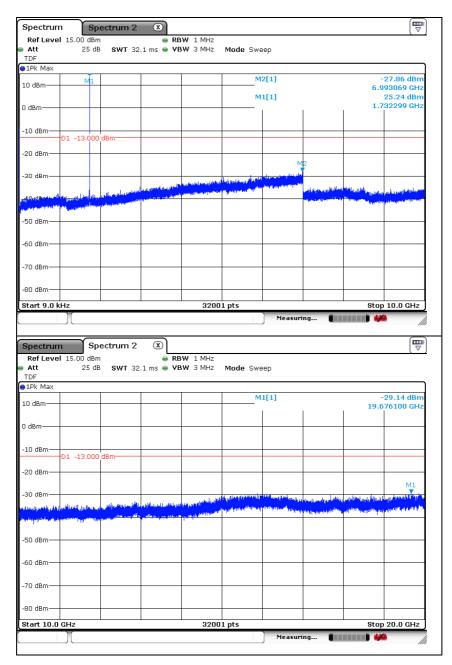
Low Channel





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Middle Channel



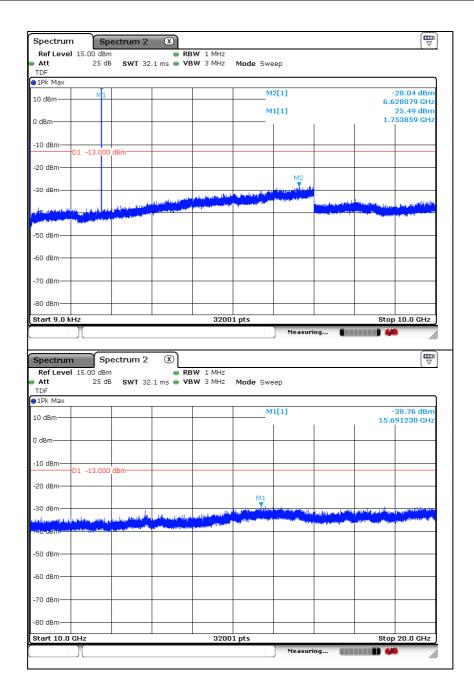
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High Channel

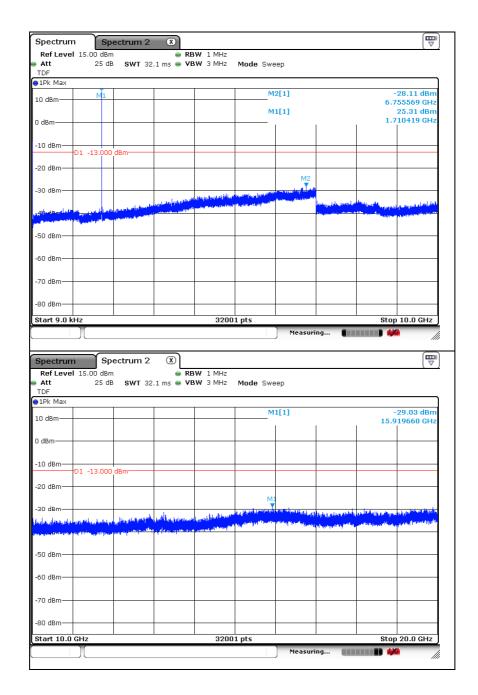




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LTE band 4 (3 版 - QPSK)

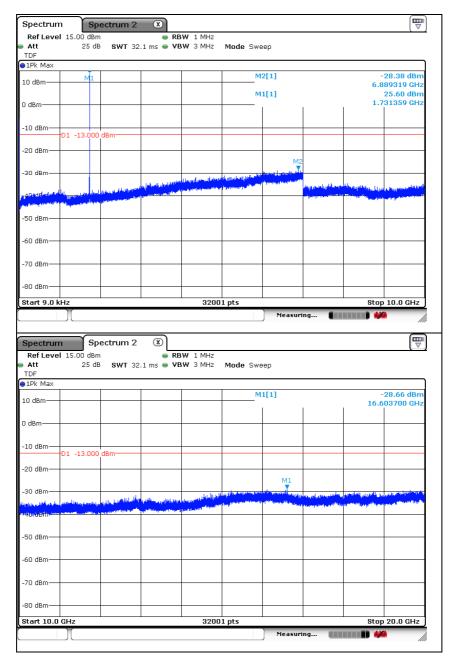
Low Channel





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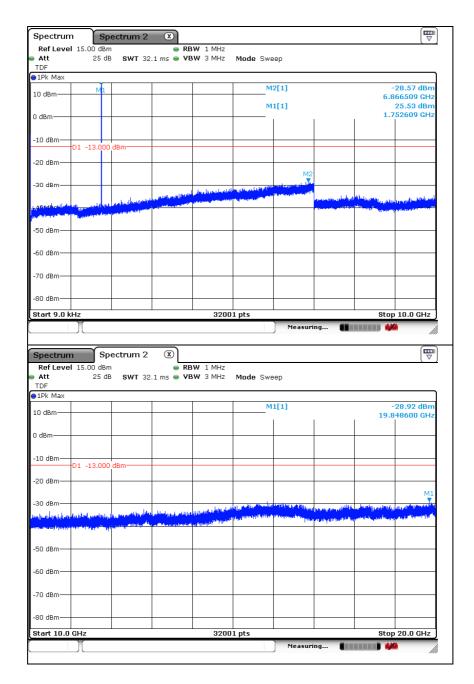
Middle Channel





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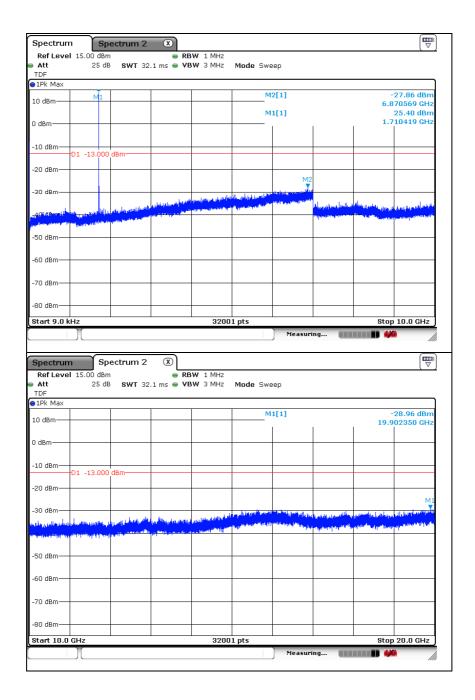
High Channel





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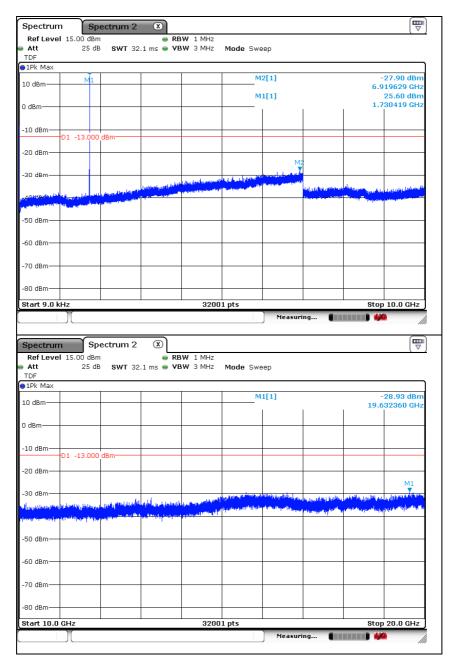
Low Channel





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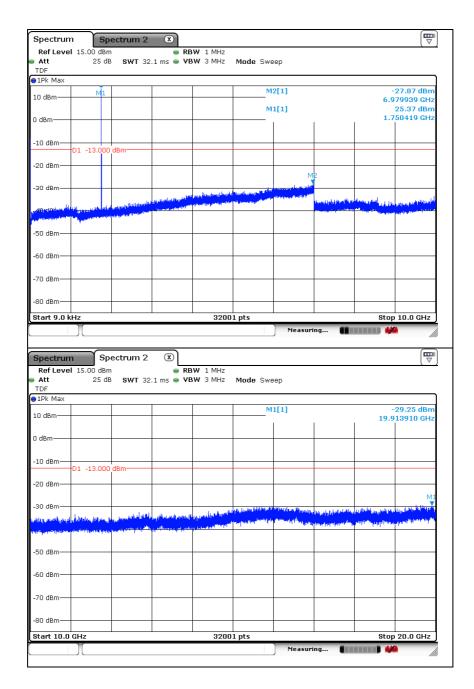
Middle Channel





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High Channel

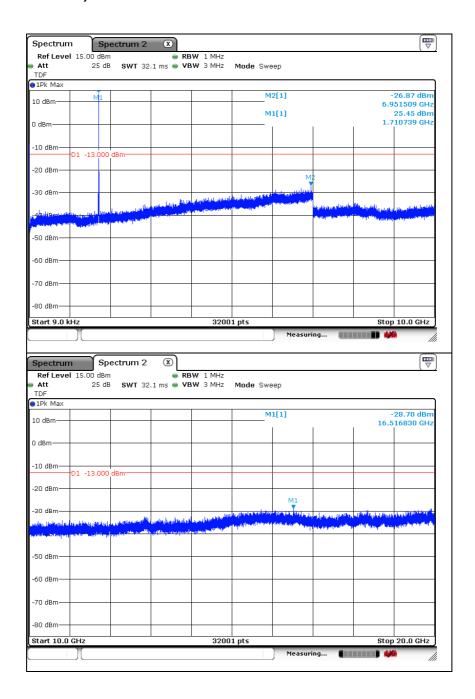




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LTE band 4 (10 Mb - QPSK)

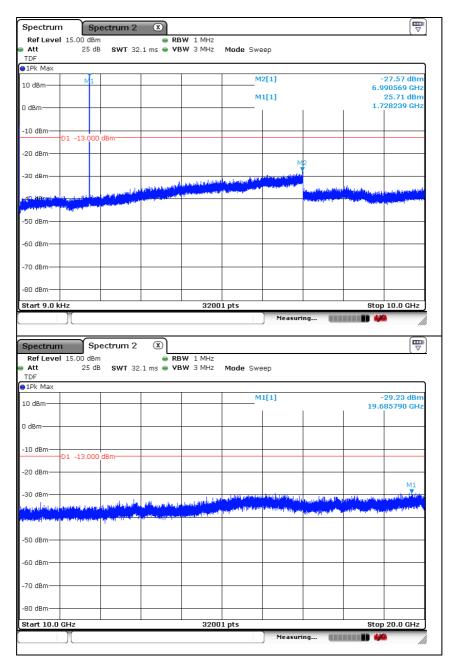
Low Channel





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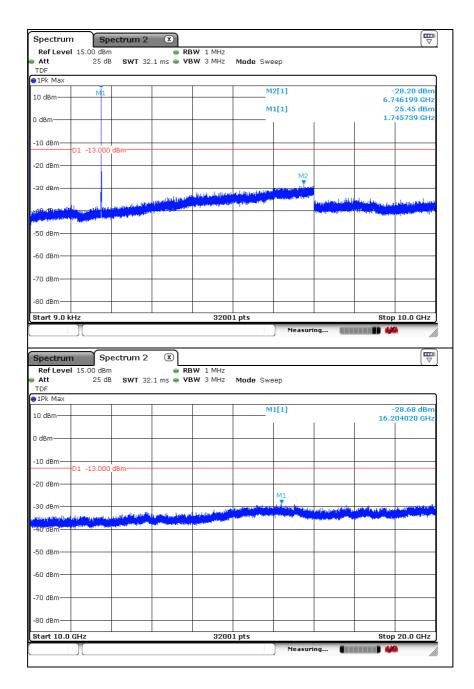
Middle Channel





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High Channel

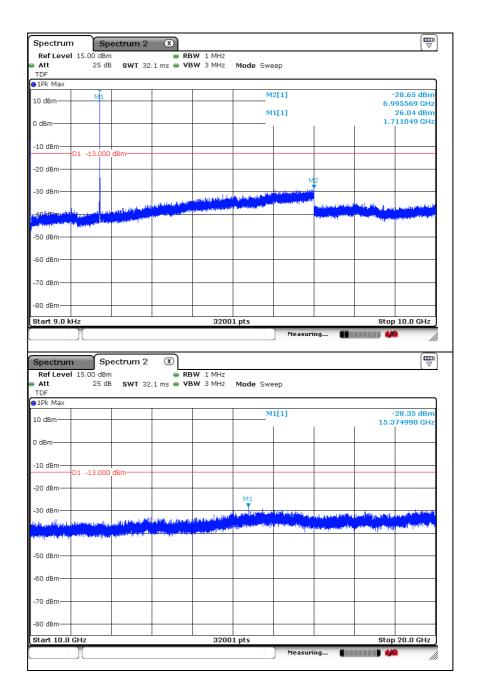




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LTE band 4 (15 Mb - QPSK)

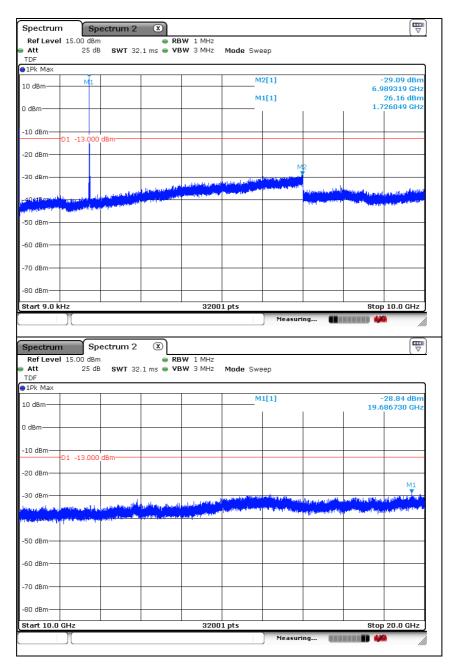
Low Channel





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Middle Channel



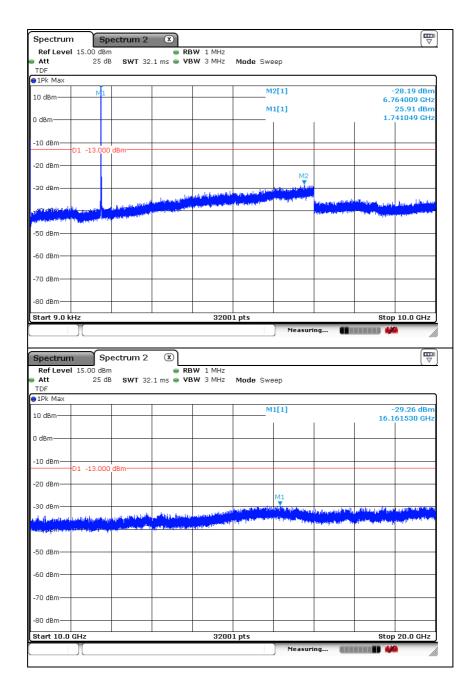
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High Channel

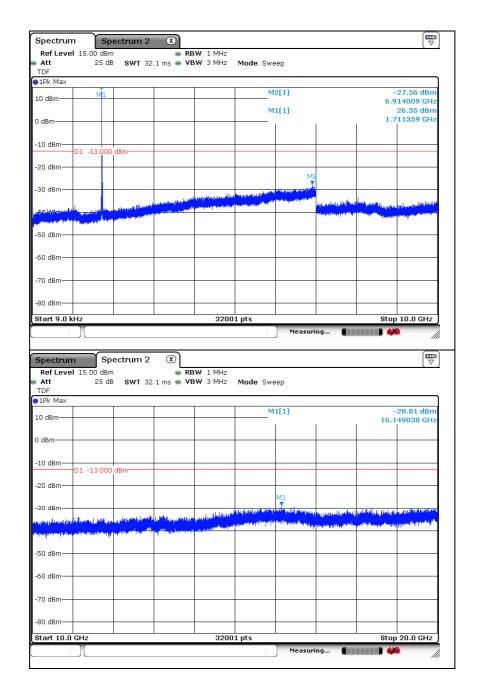




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LTE band 4 (20 Mb - QPSK)

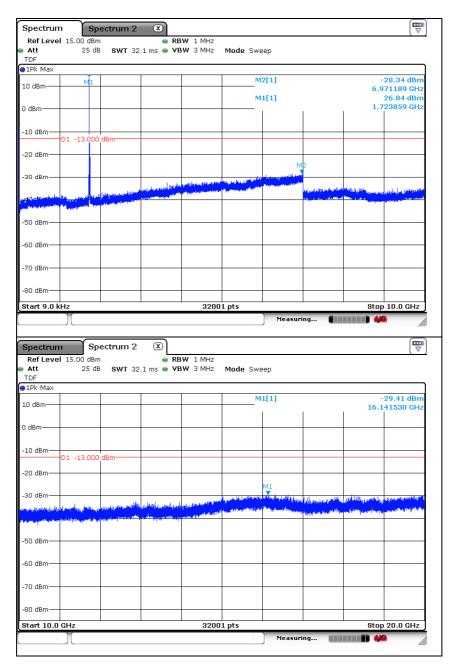
Low Channel





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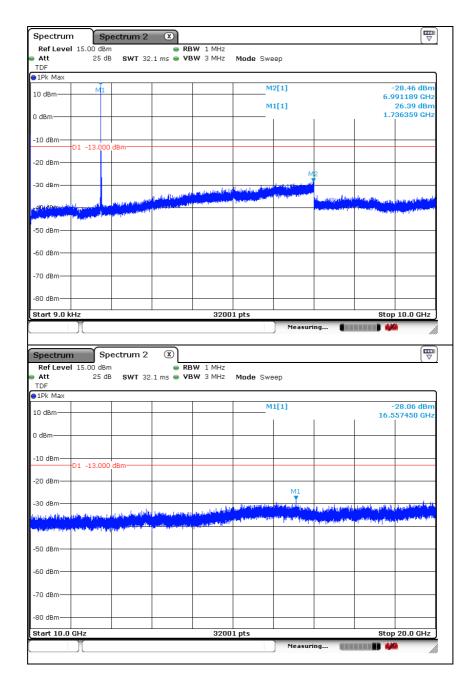
Middle Channel





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High Channel

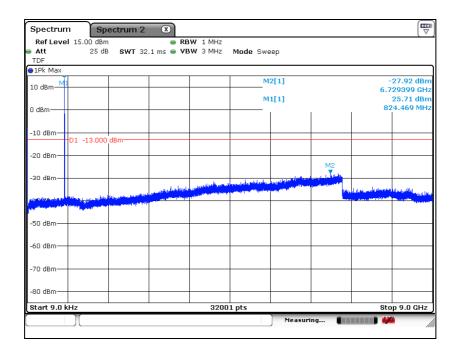




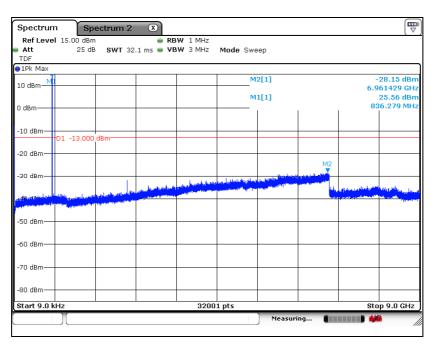
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LTE band 5 (1.4 胍 - QPSK)

Low Channel



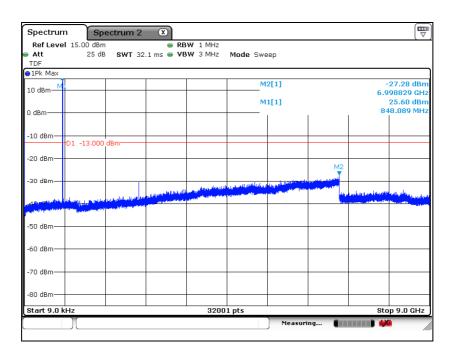
Middle Channel





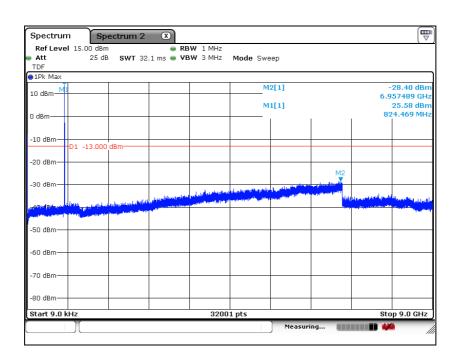
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High Channel



LTE band 5 (3 Mb - QPSK)

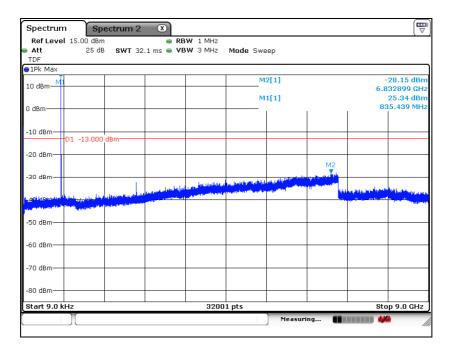
Low Channel



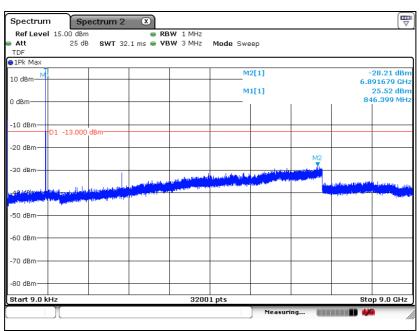


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Middle Channel



High Channel

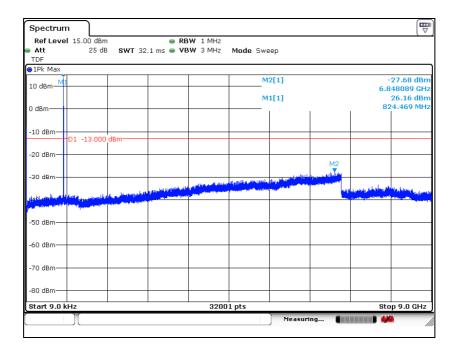




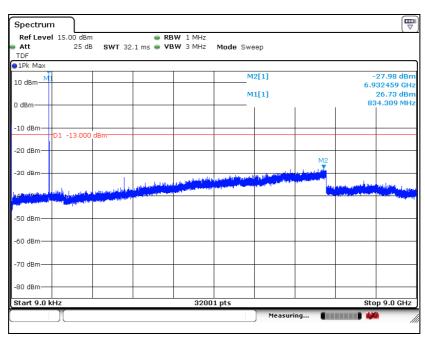
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LTE band 5 (5 Mb - QPSK)

Low Channel



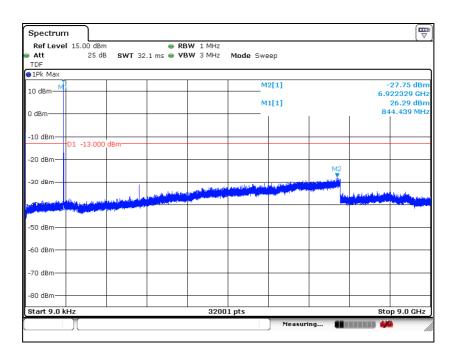
Middle Channel





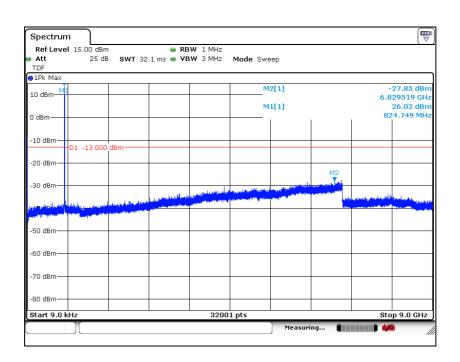
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High Channel



LTE band 5 (10 Mb - QPSK)

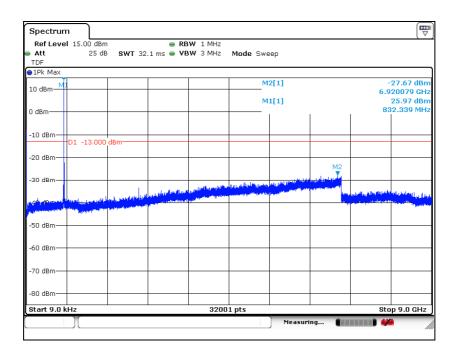
Low Channel



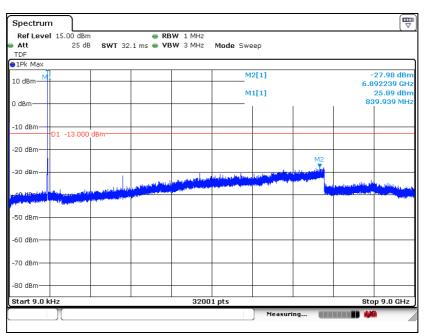


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Middle Channel



High Channel

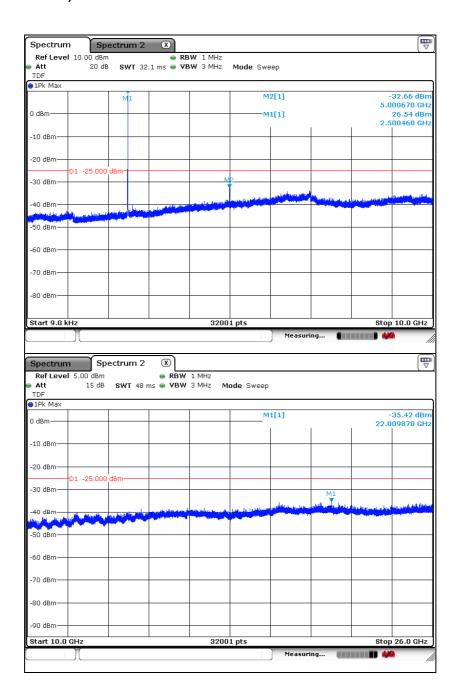




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LTE band 7 (5 Mb - QPSK)

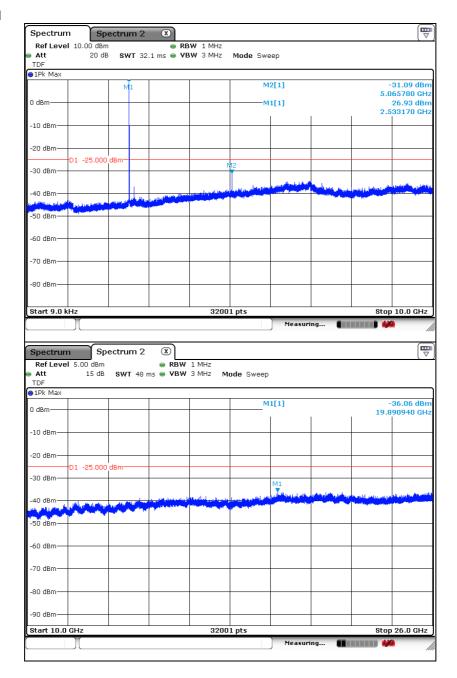
Low Channel





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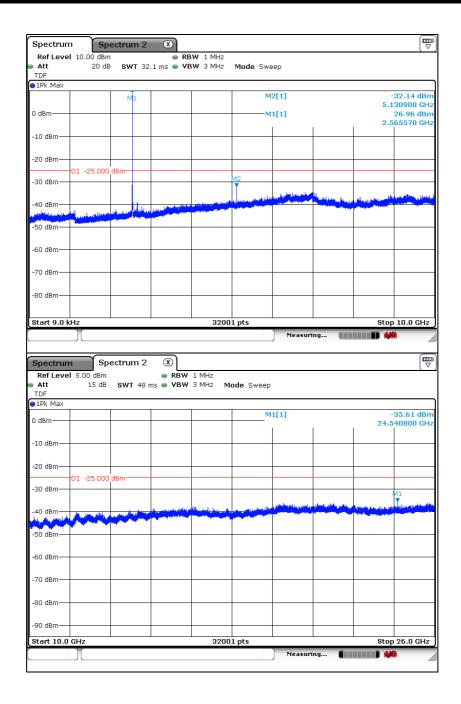
Middle Channel





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High Channel

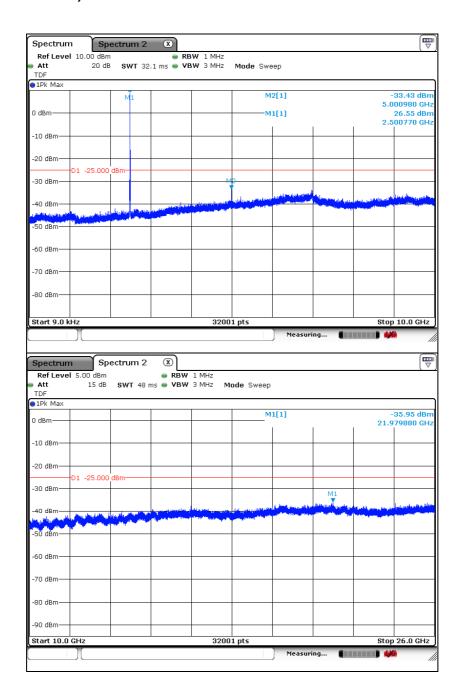




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LTE band 7 (10 脏 - QPSK)

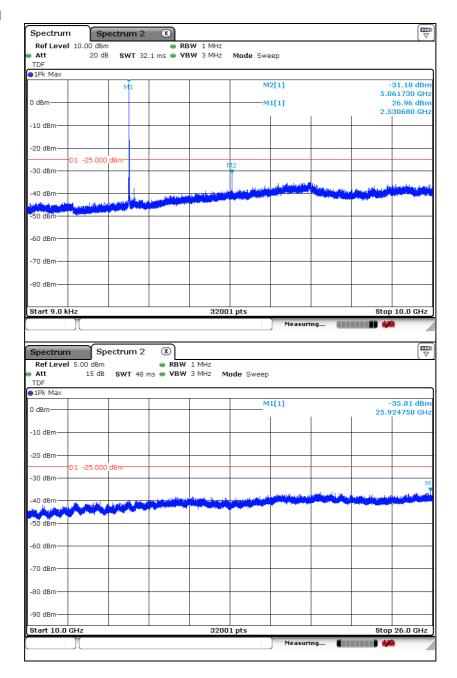
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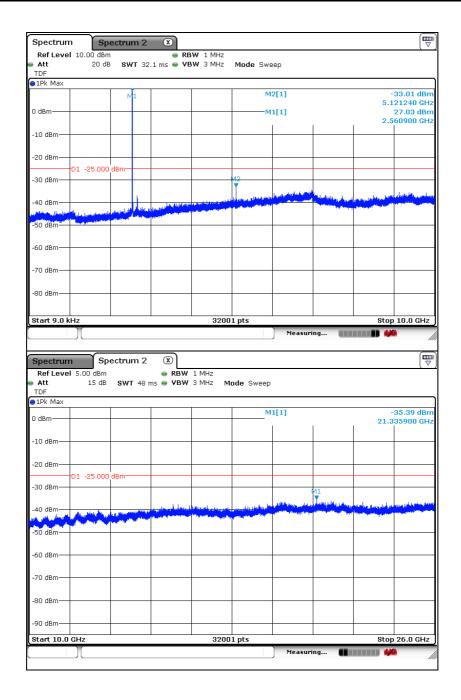
Middle Channel





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High Channel

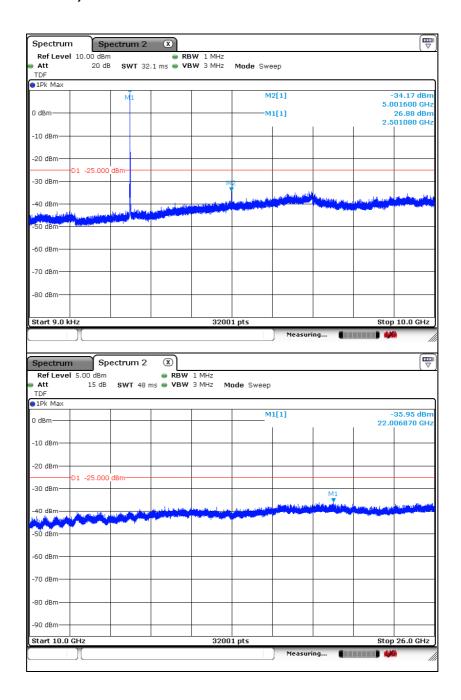




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LTE band 7 (15 Mb - QPSK)

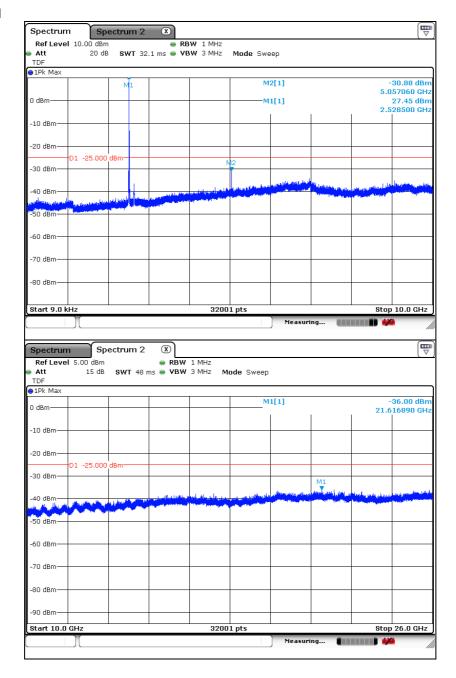
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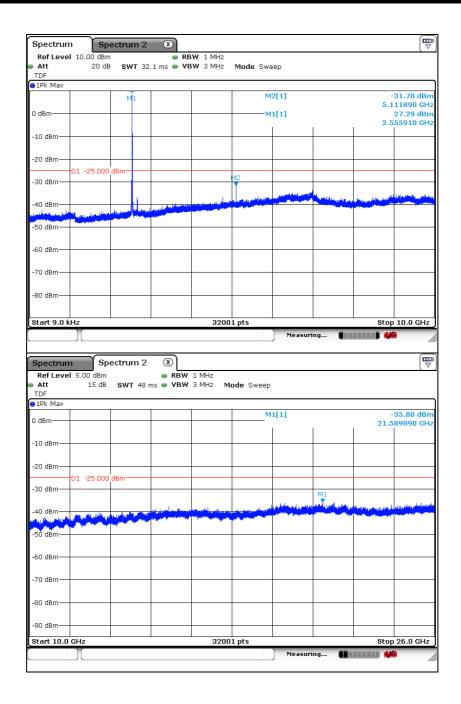
Middle Channel





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High Channel

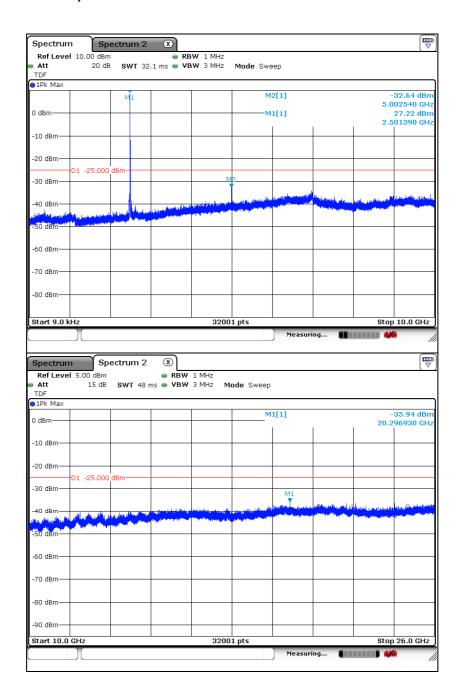




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LTE band 7 (20 Mb - QPSK)

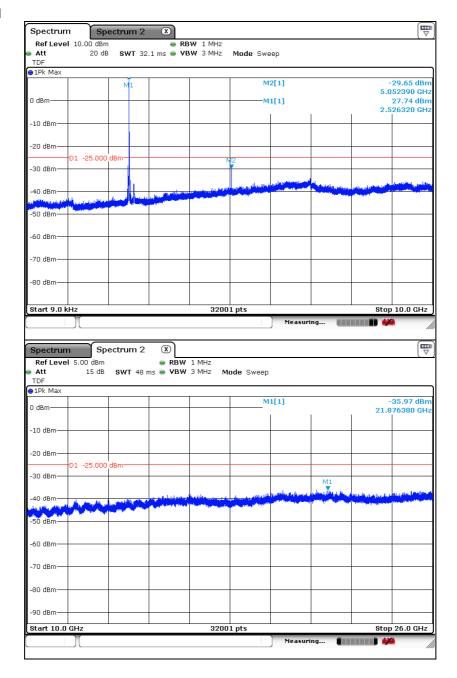
Low Channel





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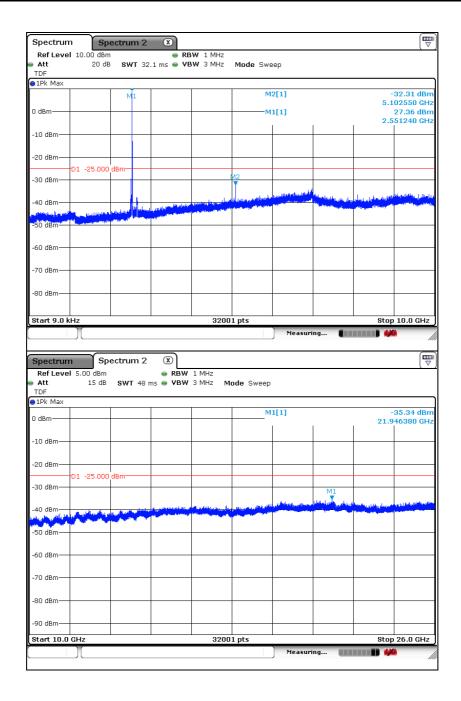
Middle Channel





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High Channel

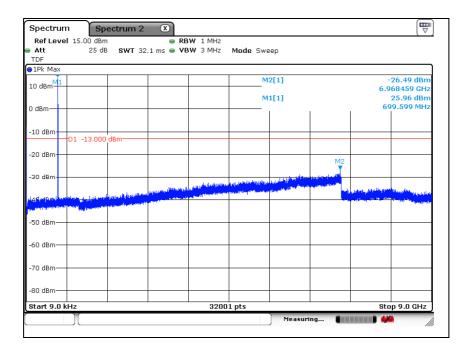




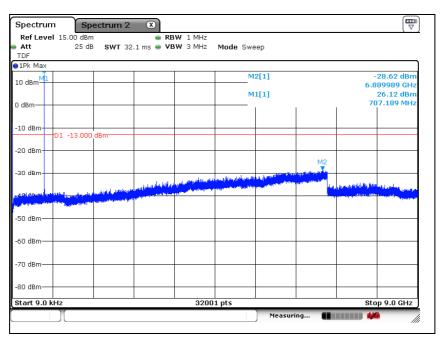
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LTE band 12 (1.4 Mb - QPSK)

Low Channel



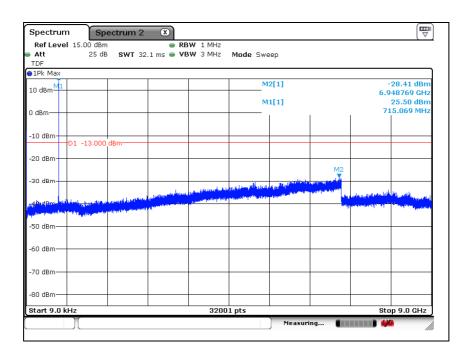
Middle Channel



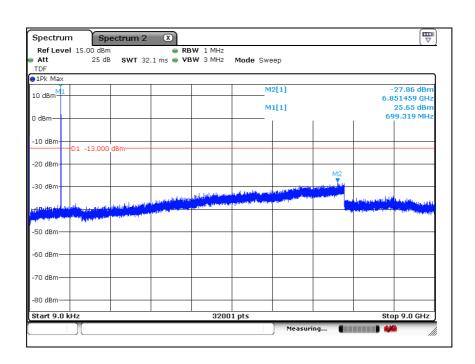


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High Channel



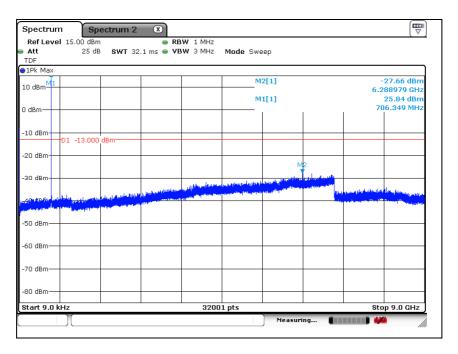
Low Channel



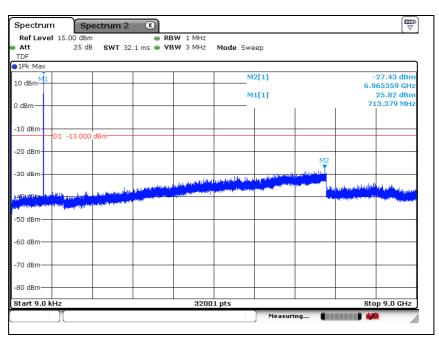


Report Number: F690501/RF-RTL013639-1 Page: 266 of 343

Middle Channel



High Channel

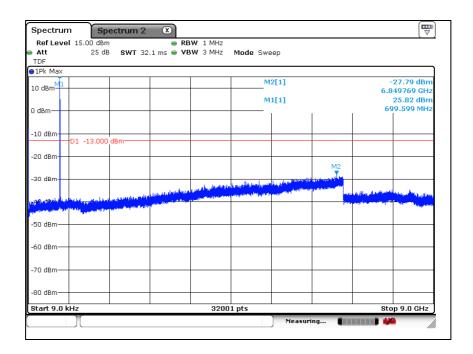




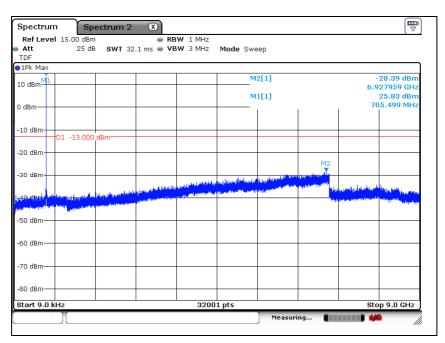
Report Number: F690501/RF-RTL013639-1 Page: 267 of 343

LTE band 12 (5 胍 - QPSK)

Low Channel



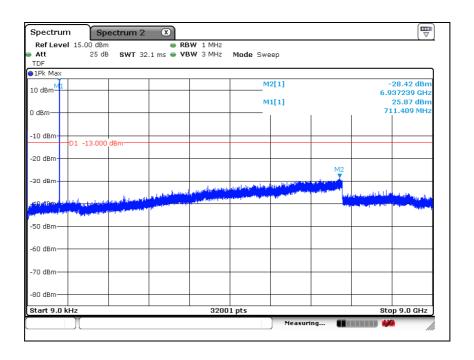
Middle Channel





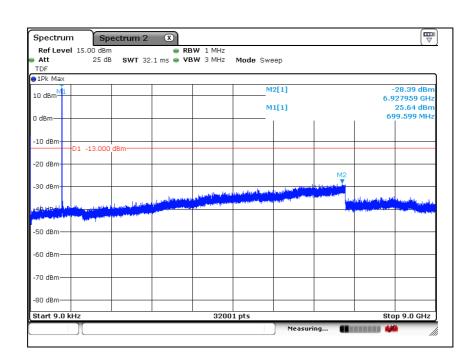
Report Number: F690501/RF-RTL013639-1 Page: 268 of 343

High Channel



LTE band 12 (10 Mb - QPSK)

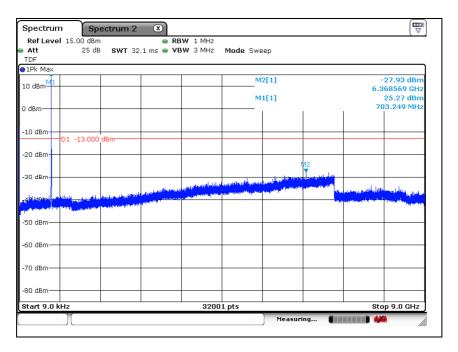
Low Channel



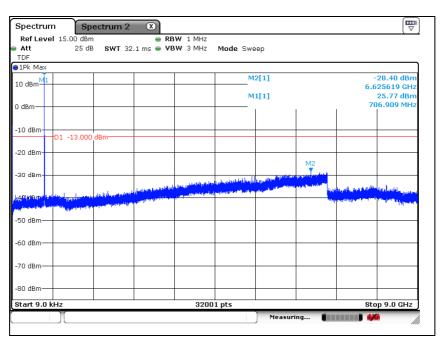


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Middle Channel



High Channel

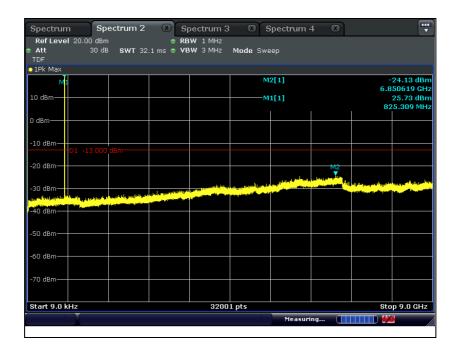




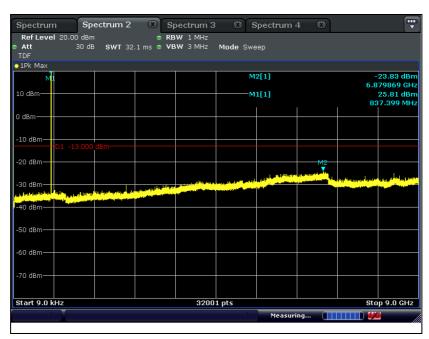
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LTE band 26 (1.4 Mb - QPSK)

Low Channel



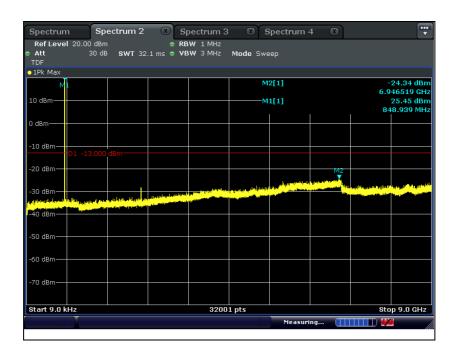
Middle Channel





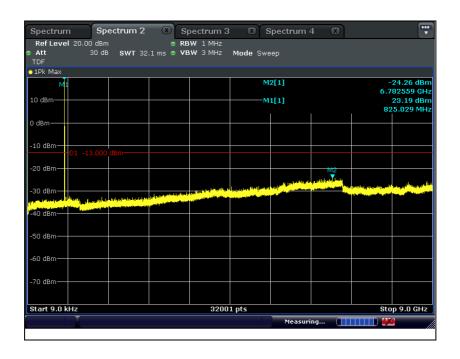
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High Channel



LTE band 26 (3 Mb - QPSK)

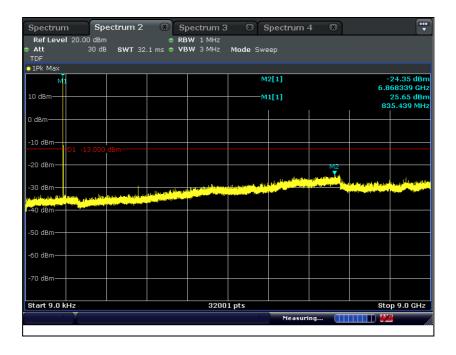
Low Channel



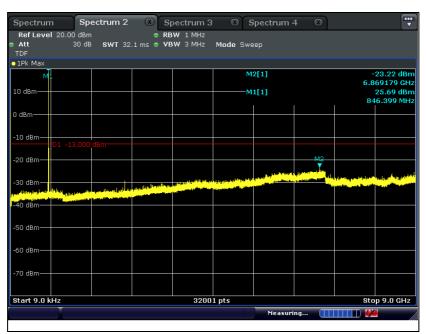


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Middle Channel



High Channel

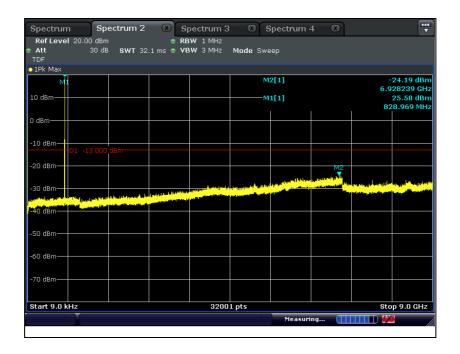




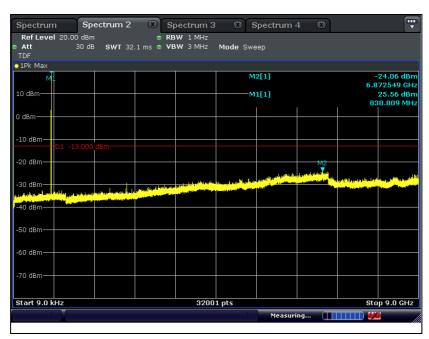
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LTE band 26 (5 Mb - QPSK)

Low Channel



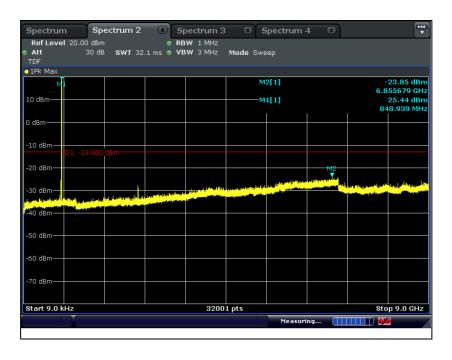
Middle Channel





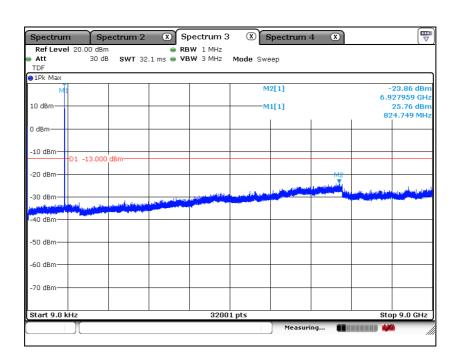
Report Number: F690501/RF-RTL013639-1 Page: 274 of 343

High Channel



LTE band 26 (10 Mb - QPSK)

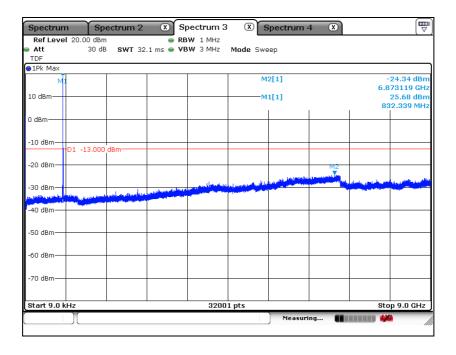
Low Channel



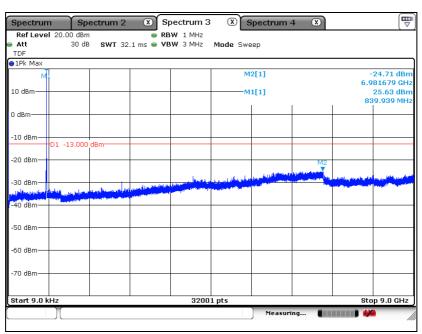


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Middle Channel



High Channel

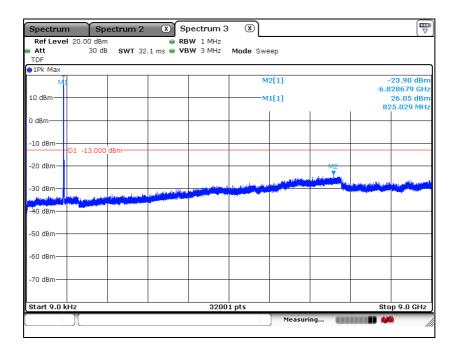




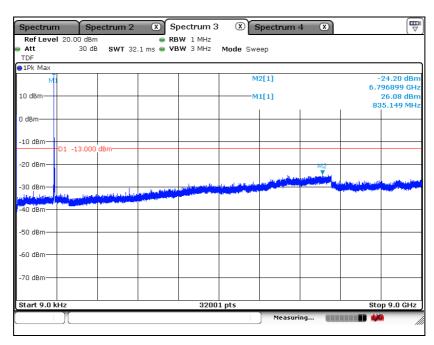
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LTE band 26 (15 Mb - QPSK)

Low Channel



High Channel





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7. Band Edge

7.1. 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) dB.
- §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.
- §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) dB.
- §27.53(h)(1), for operations in the 1 695-1 710 Mb, 1 710-1 755 Mb, 1 755-1 780 Mb, 1 915-1 920 Mb, 1 995-2 000 Mb, 2 000-2 020 Mb, 2 110-2 155 Mb, 2 155-2 180 Mb, 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 $43 + 10 \log_{10} (P) dB$.
- §27.53(m)(4), For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log₁₀ (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log₁₀ (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log₁₀ (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 log₁₀ (P) dB on all frequencies between 2490.5 Mb and 2496 Mb and 55 + 10 log₁₀ (P) dB at or below 2490.5 Mb. Mobile Satellite Service licensees operating on frequencies below 2495 Mb 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.

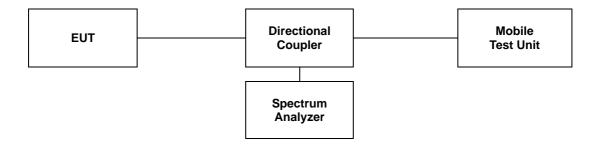


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7.2. Test Procedure

The test follows section 6.0 of FCC KDB Publication 971168 D01 v03r01.

- a. Span was set large enough so as to capture all out of band emissions near the band edge.
- b. RBW ≥ 1 % of OBW
- c. $VBW \ge 3 \times RBW$.
- d. Detector = RMS.
- e. Trace mode = Average.
- f. Sweep time = Auto.
- g. The trace was allowed to stabilize.
- h. All path loss of frequency range was investigated and compensated to spectrum analyzer as TDF function.



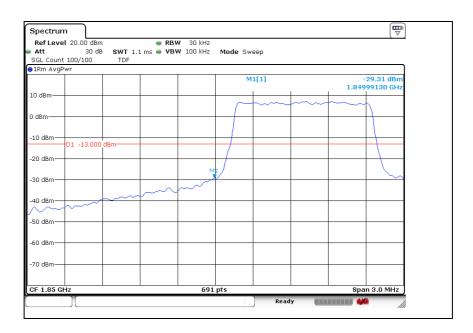


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7.3. Test Results

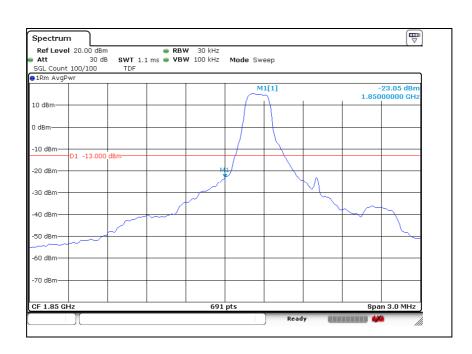
Ambient temperature : **(23** ± **1)** ℃ Relative humidity : 47 % R.H.

Low Channel



LTE band 2 (1.4 \m - QPSK_RB 1)

Low Channel

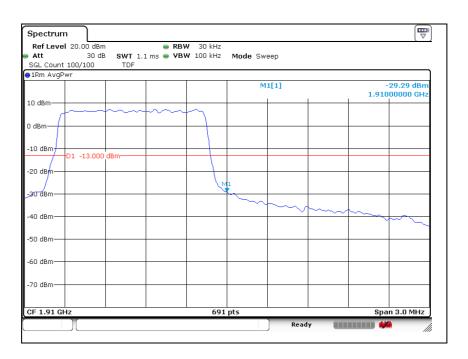




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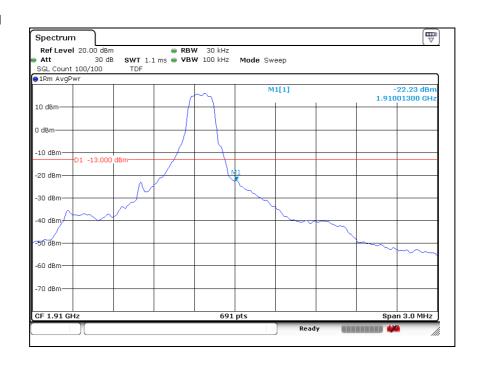
LTE band 2 (1.4 \m - QPSK_RB 6)

High Channel



LTE band 2 (1.4 \https://doi.org/10.1016

High Channel

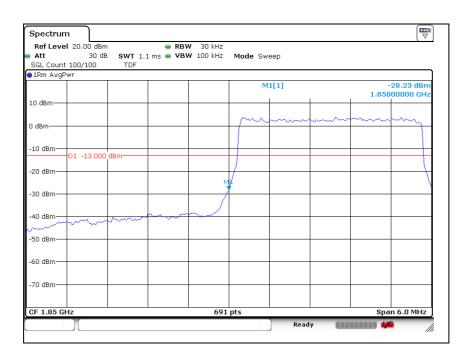




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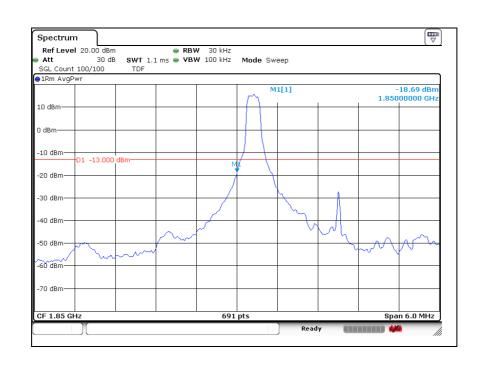
LTE band 2 (3 版 - QPSK_RB 15)

Low Channel



LTE band 2 (3 Mb - QPSK_RB 1)

Low Channel

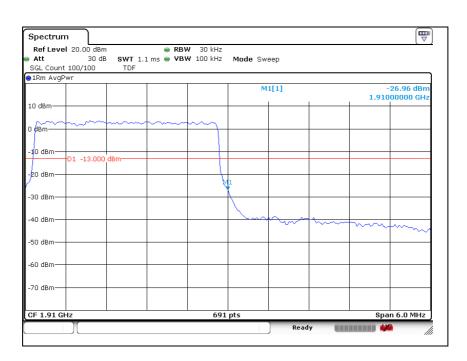




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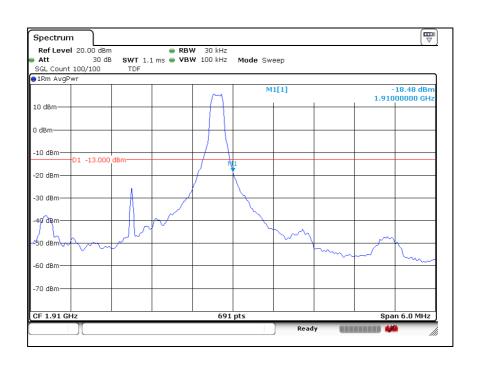
LTE band 2 (3 版 - QPSK_RB 15)

High Channel



LTE band 2 (3 Mb - QPSK_RB 1)

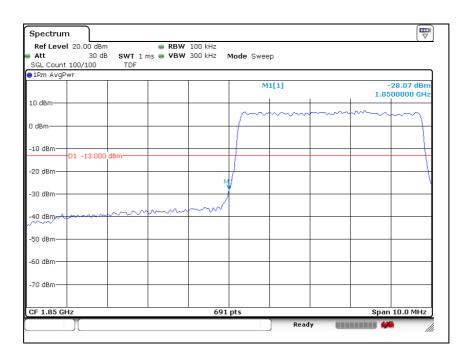
High Channel





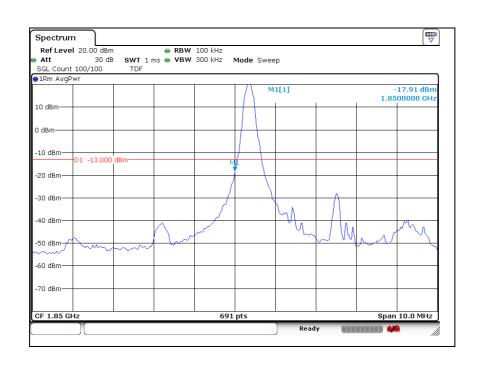
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Low Channel



LTE band 2 (5 Mb - QPSK_RB 1)

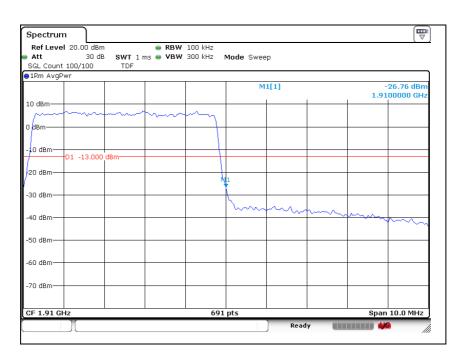
Low Channel





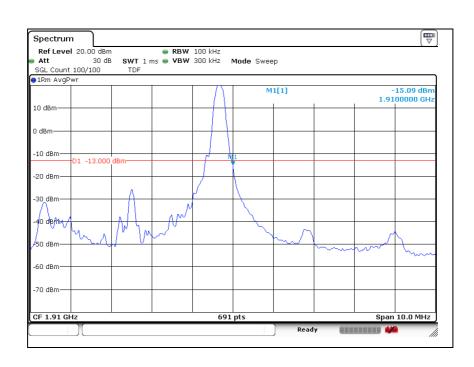
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High Channel



LTE band 2 (5 Mb - QPSK_RB 1)

High Channel

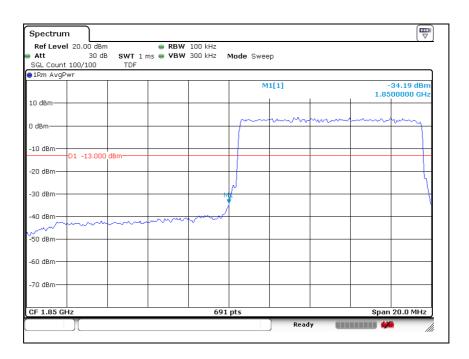




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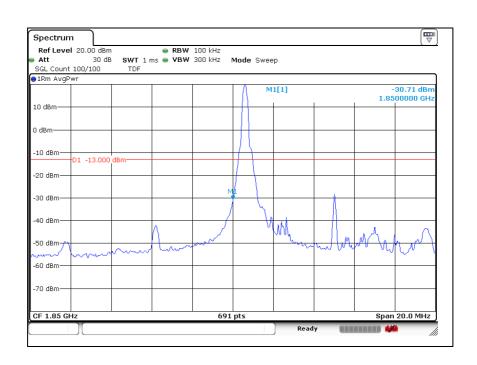
LTE band 2 (10 Mb - QPSK_RB 50)

Low Channel



LTE band 2 (10 \https://doi.org/10.1011/10.10

Low Channel

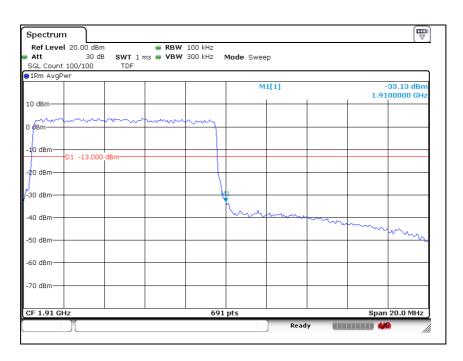




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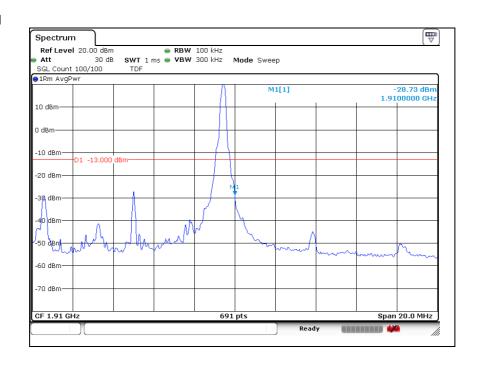
LTE band 2 (10 Mb - QPSK_RB 50)

High Channel



LTE band 2 (10 \https://doi.org/10.1011/10.10

High Channel

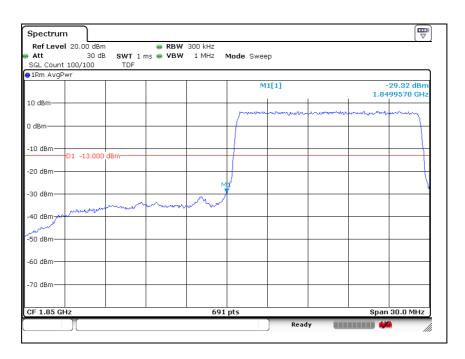




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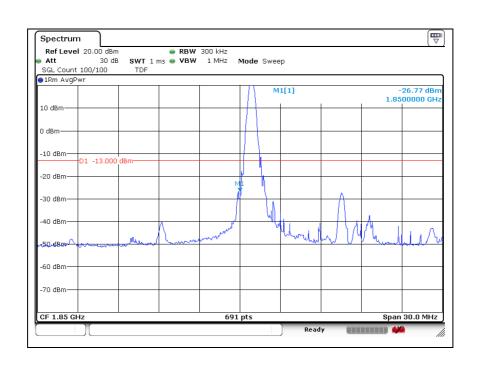
LTE band 2 (15 \(\mu \) - QPSK_RB 75)

Low Channel



LTE band 2 (15 \https://doi.org/10.1016/10.10

Low Channel

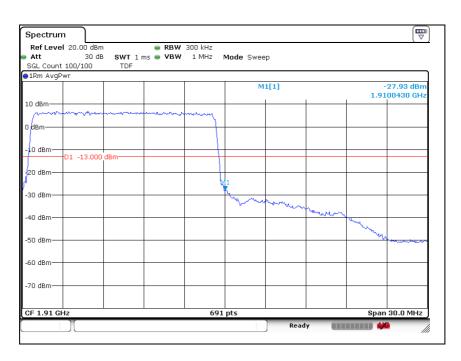




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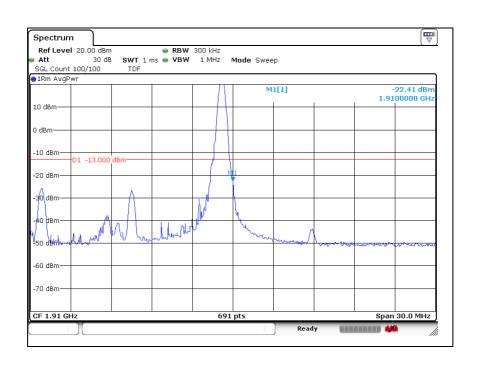
LTE band 2 (15 \(\mu \) - QPSK_RB 75)

High Channel



LTE band 2 (15 \https://doi.org/10.1016/10.10

High Channel

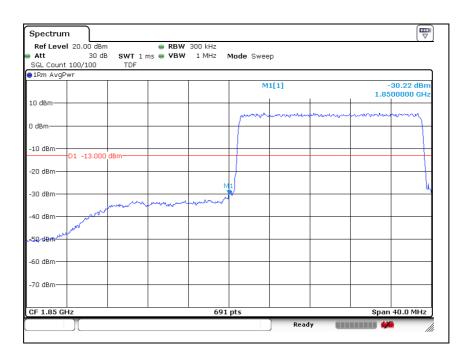




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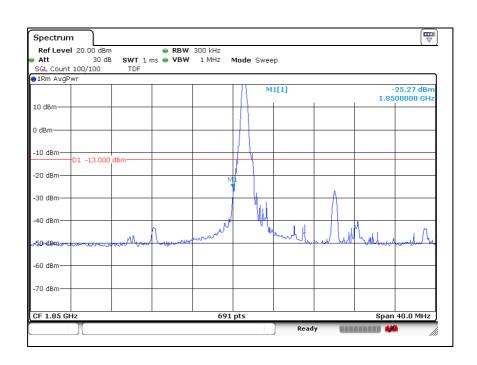
LTE band 2 (20 Mb - QPSK_RB 100)

Low Channel



LTE band 2 (20 \mathbb{Mb} - QPSK_RB 1)

Low Channel

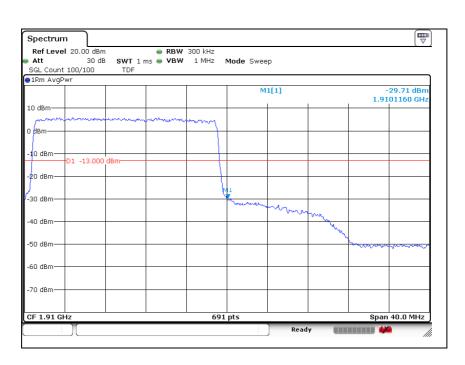




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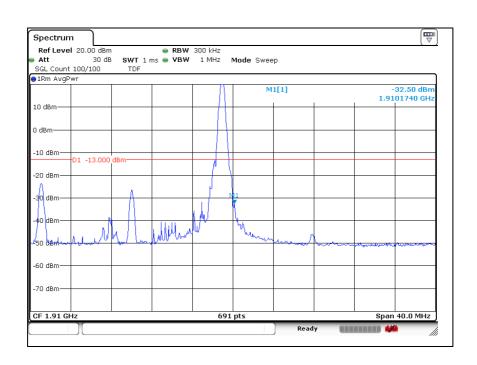
LTE band 2 (20 Mb - QPSK_RB 100)

High Channel



LTE band 2 (20 \mathbb{Mb} - QPSK_RB 1)

High Channel

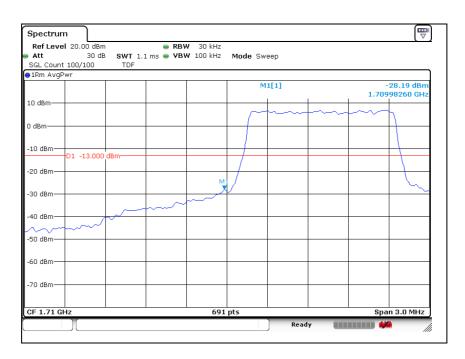




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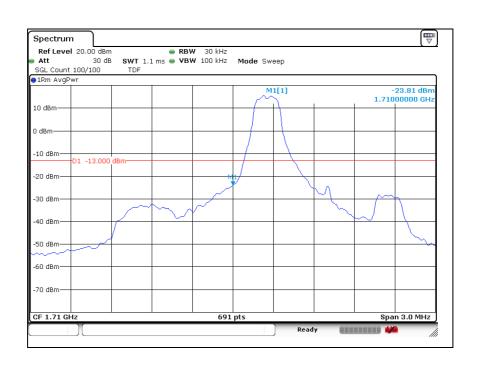
LTE band 4 (1.4 \m - QPSK_RB 6)

Low Channel



LTE band 4 (1.4 \https://doi.org/10.1016

Low Channel

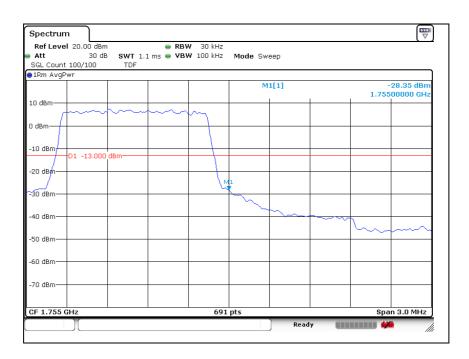




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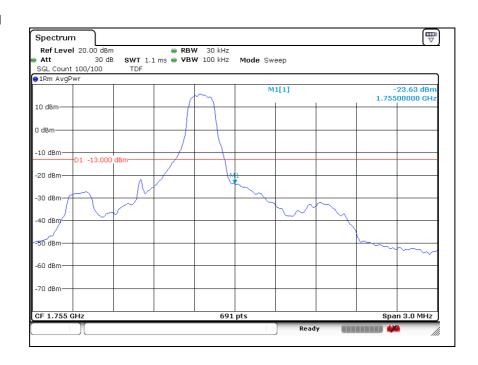
LTE band 4 (1.4 \m - QPSK_RB 6)

High Channel



LTE band 4 (1.4 \https://doi.org/10.1016

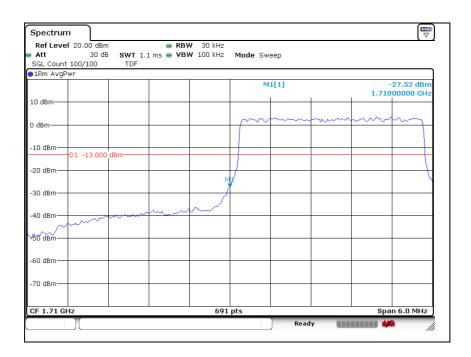
High Channel





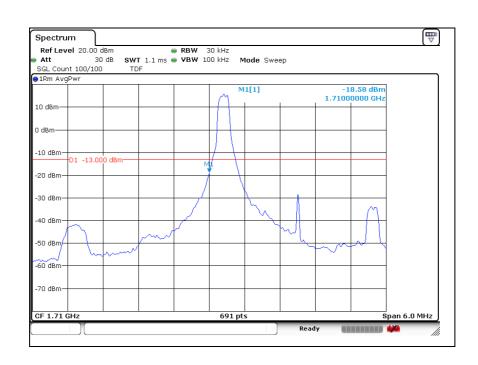
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Low Channel



LTE band 4 (3 Mb - QPSK_RB 1)

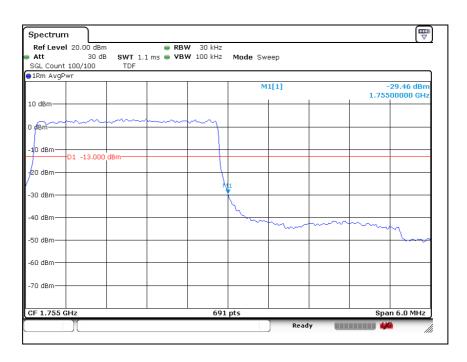
Low Channel





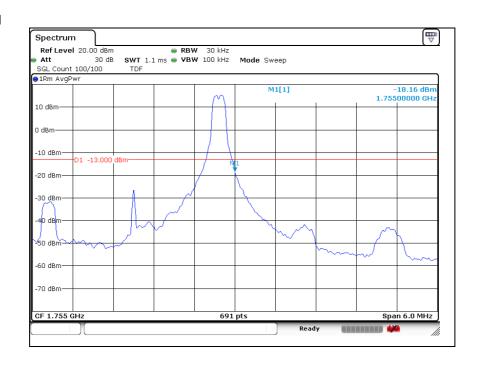
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High Channel



LTE band 4 (3 Mb - QPSK_RB 1)

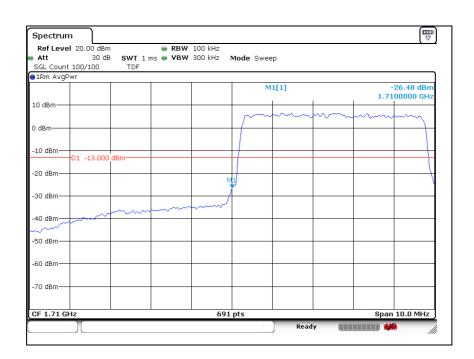
High Channel





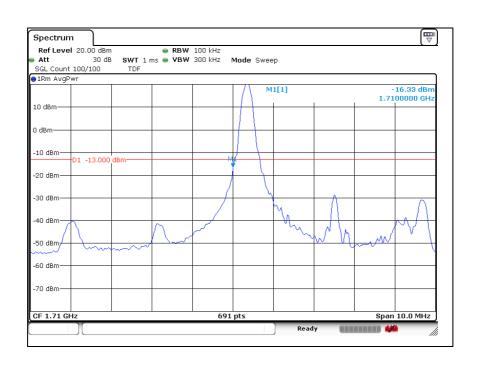
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Low Channel



LTE band 4 (5 M位 - QPSK_RB 1)

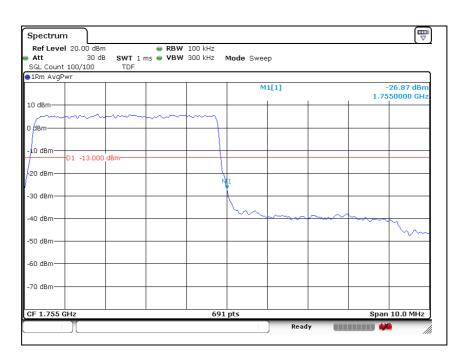
Low Channel





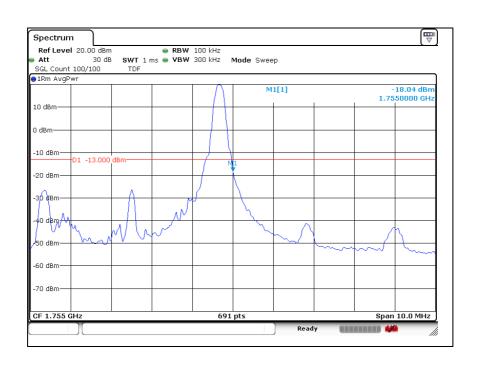
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High Channel



LTE band 4 (5 M位 - QPSK_RB 1)

High Channel

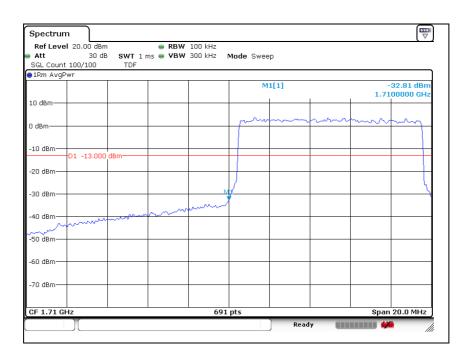




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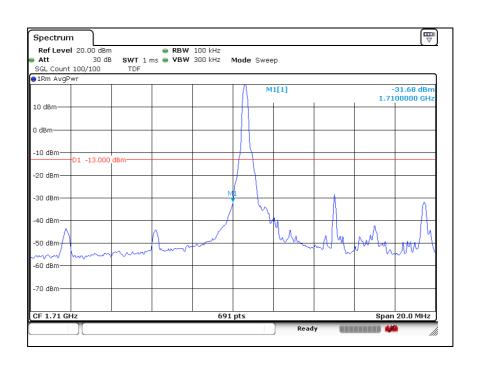
LTE band 4 (10 Mb - QPSK_RB 50)

Low Channel



LTE band 4 (10 \(\mathbb{M}\mathbb{L} - QPSK_RB 1 \)

Low Channel

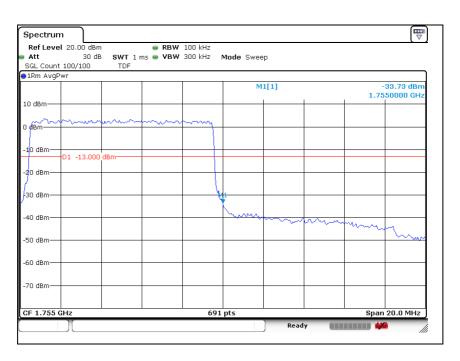




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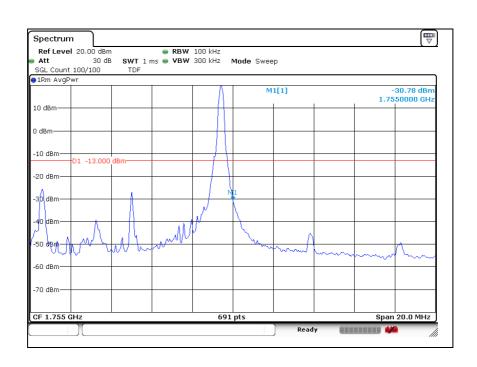
LTE band 4 (10 Mb - QPSK_RB 50)

High Channel



LTE band 4 (10 \(\mathbb{M}\mathbb{L} - QPSK_RB 1 \)

High Channel

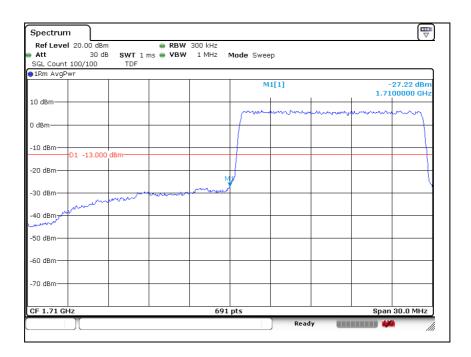




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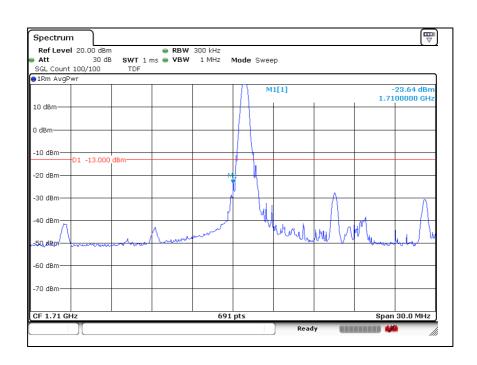
LTE band 4 (15 Mb - QPSK_RB 75)

Low Channel



LTE band 4 (15 \https://example.com/ LTE band 4

Low Channel

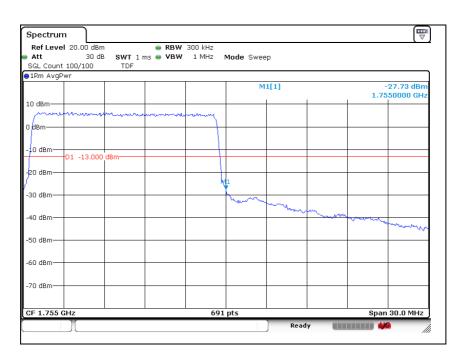




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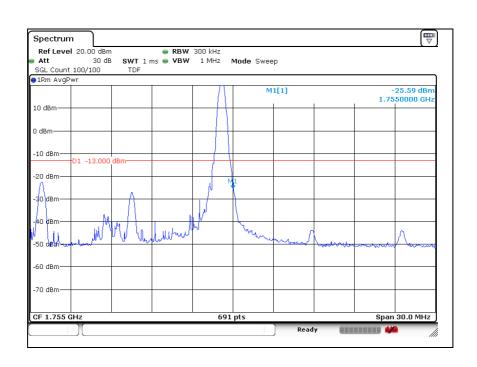
LTE band 4 (15 Mb - QPSK_RB 75)

High Channel



LTE band 4 (15 \https://example.com/ LTE band 4

High Channel

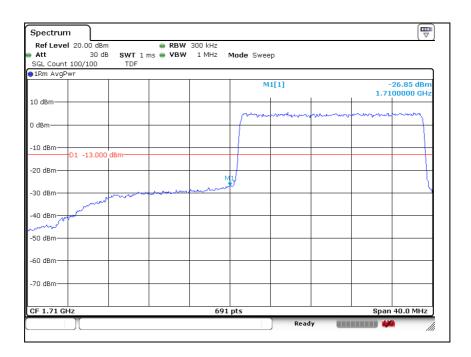




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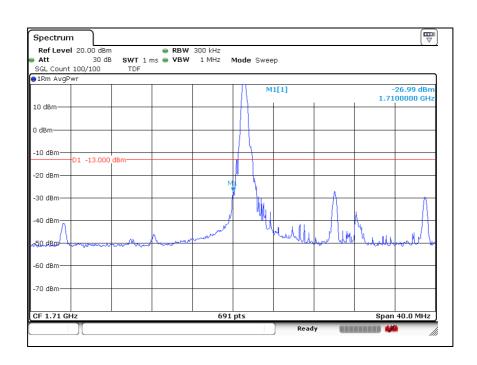
LTE band 4 (20 Mb - QPSK_RB 100)

Low Channel



LTE band 4 (20 \(\mathbb{M}\mathbb{D} - QPSK_RB 1 \)

Low Channel





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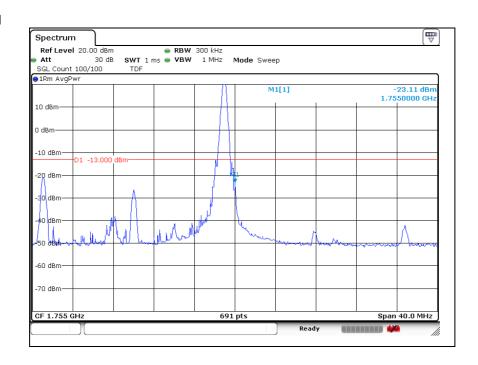
LTE band 4 (20 Mb - QPSK_RB 100)

High Channel



LTE band 4 (20 \(\mathbb{M}\mathbb{D} - QPSK_RB 1 \)

High Channel

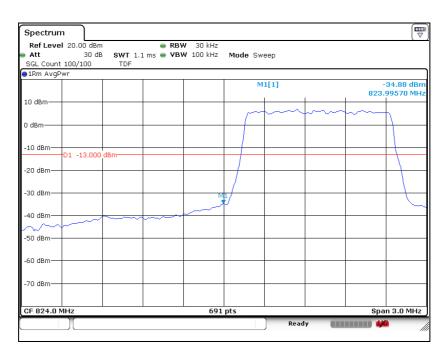




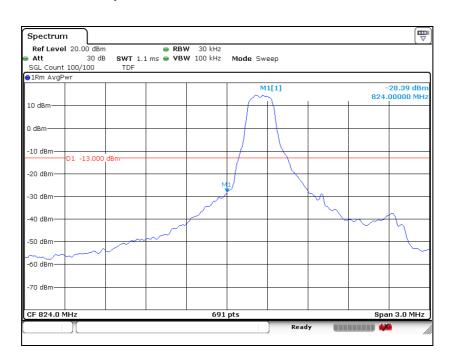
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LTE band 5 (1.4 \https://doi.org/10.1016

Low Channel



Low Channel

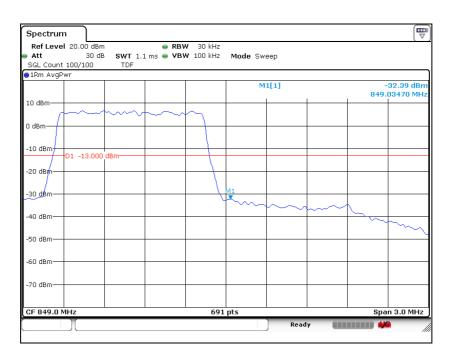




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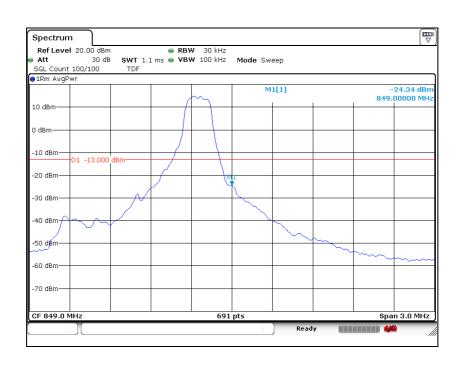
LTE band 5 (1.4 \mathbb{Mb} - QPSK_RB 6)

High Channel



LTE band 5 (1.4 \https://doi.org/10.1016

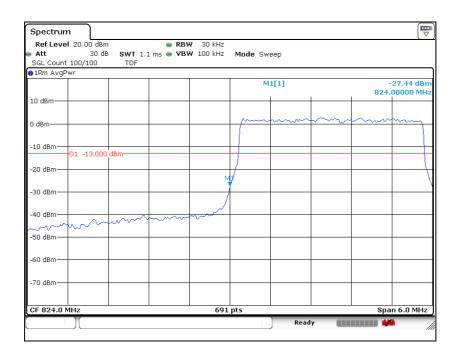
High Channel





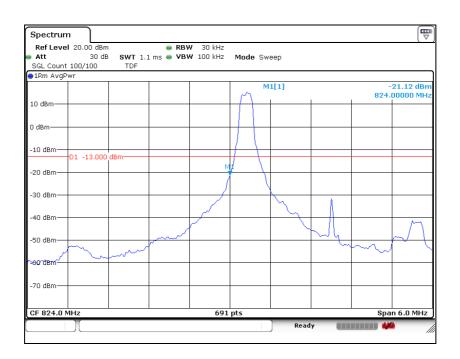
Report Number: F690501/RF-RTL013639-1 Page: 305 of 343

Low Channel



LTE band 5 (3 Mb - QPSK_RB 1)

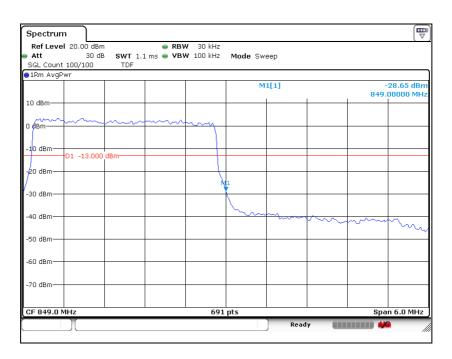
Low Channel





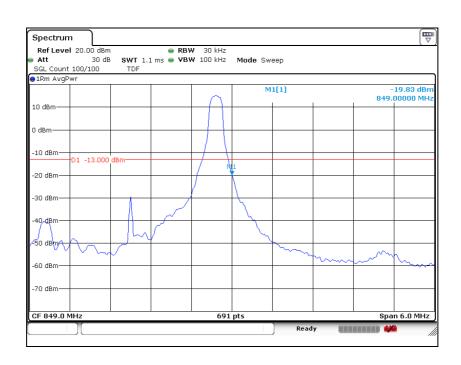
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High Channel



LTE band 5 (3 Mb - QPSK_RB 1)

High Channel

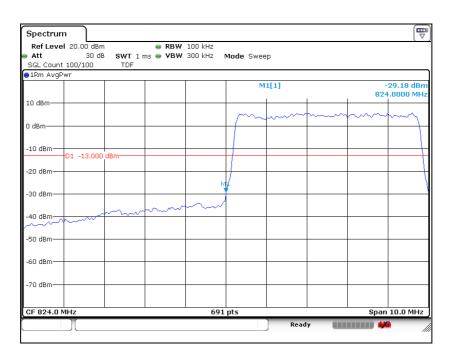




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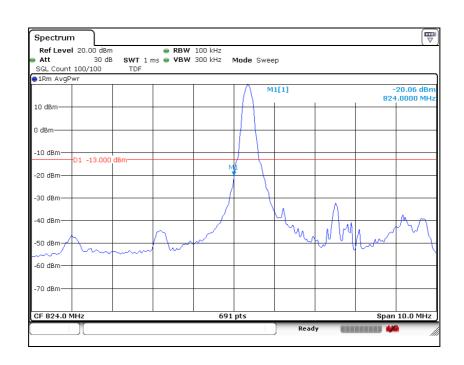
LTE band 5 (5 版 - QPSK_RB 25)

Low Channel



LTE band 5 (5 Mb - QPSK_RB 1)

Low Channel

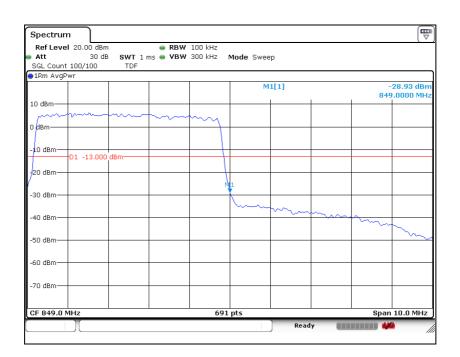




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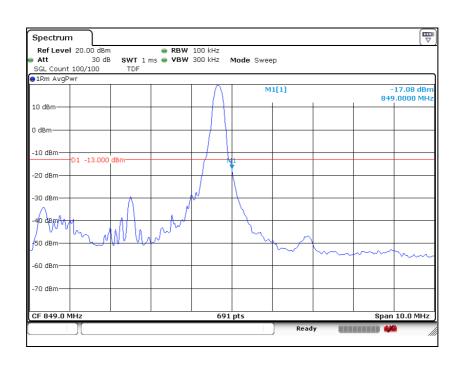
LTE band 5 (5 版 - QPSK_RB 25)

High Channel



LTE band 5 (5 Mb - QPSK_RB 1)

High Channel

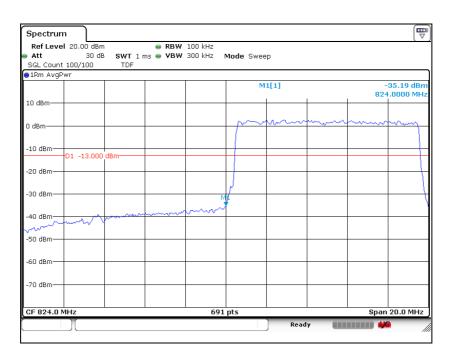




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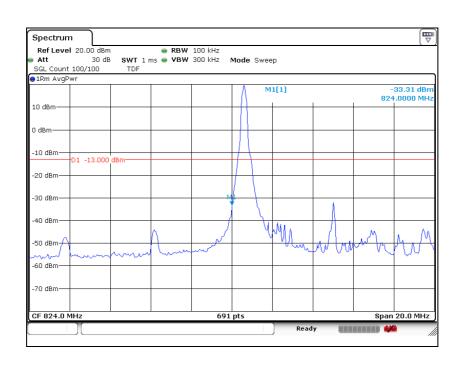
LTE band 5 (10 Mb - QPSK_RB 50)

Low Channel



LTE band 5 (10 \(\mathbb{M}\mathbb{L} - QPSK_RB 1 \)

Low Channel

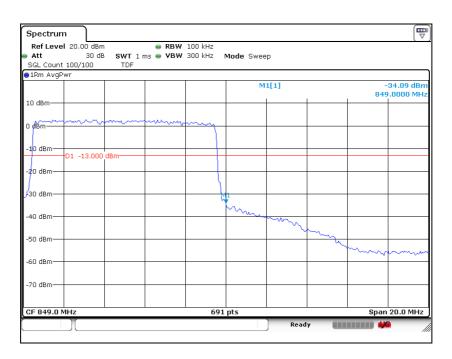




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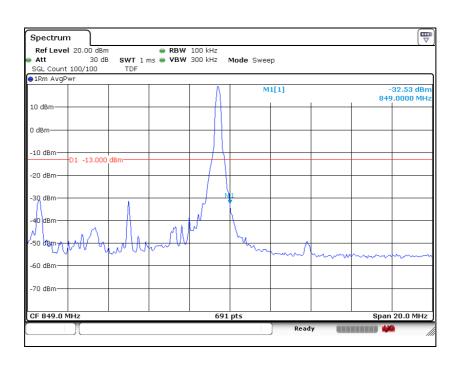
LTE band 5 (10 Mb - QPSK_RB 50)

High Channel



LTE band 5 (10 \(\mathbb{M}\mathbb{L} - QPSK_RB 1 \)

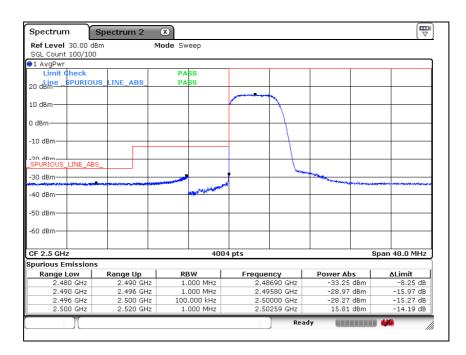
High Channel





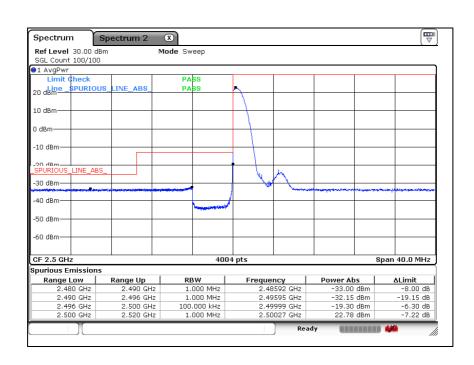
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Low Channel



LTE band 7 (5 M位 - QPSK_RB 1)

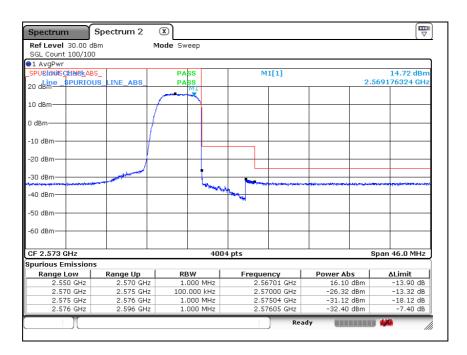
Low Channel





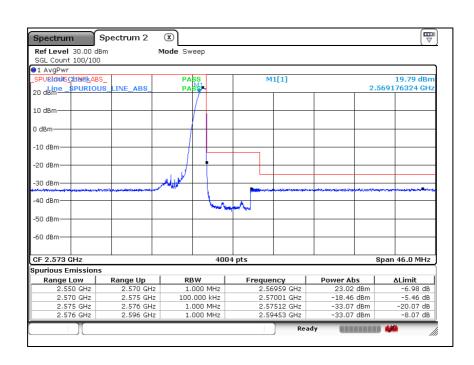
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High Channel



LTE band 7 (5 M位 - QPSK_RB 1)

High Channel

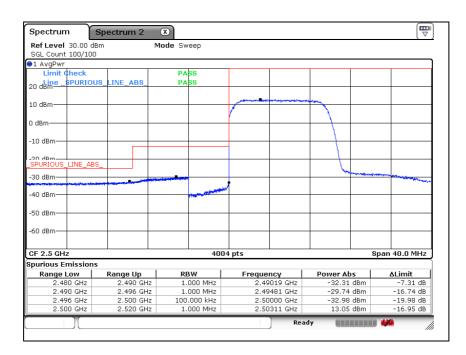




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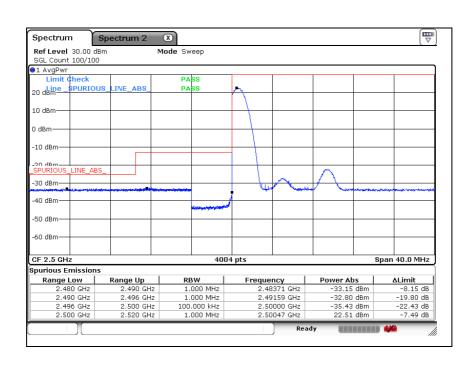
LTE band 7 (10 Mb - QPSK_RB 50)

Low Channel



LTE band 7 (10 \https://doi.org/10.1011/10.10

Low Channel

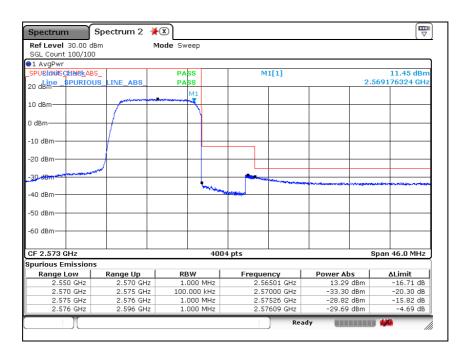




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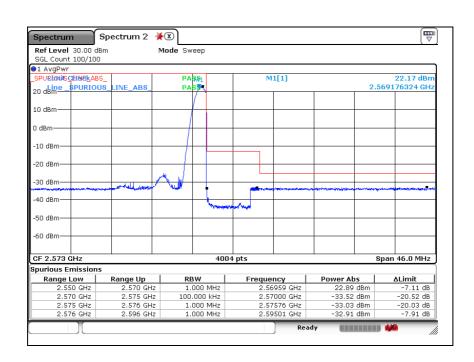
LTE band 7 (10 Mb - QPSK_RB 50)

High Channel



LTE band 7 (10 \https://doi.org/10.1011/10.10

High Channel

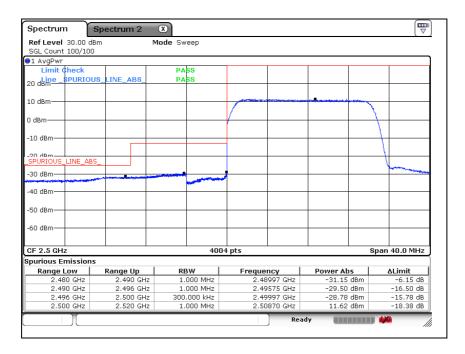




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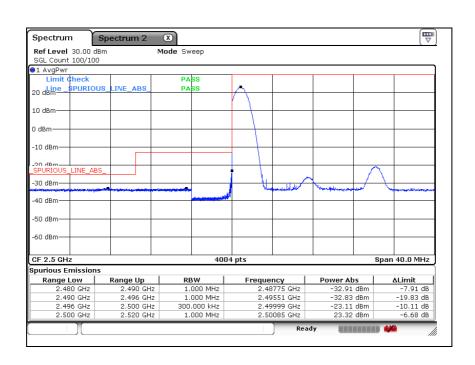
LTE band 7 (15 Mb - QPSK_RB 75)

Low Channel



LTE band 7 (15 \https://example.com/ LTE band 7 (15 \https://example.com/ - QPSK_RB 1)

Low Channel

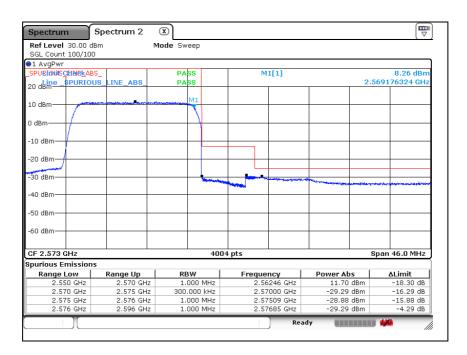




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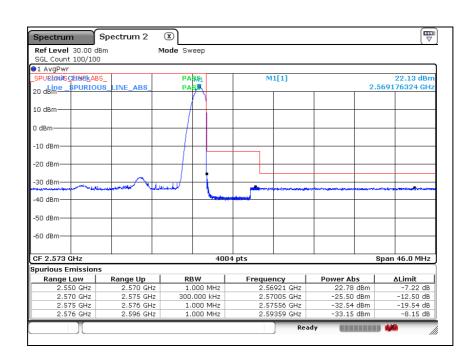
LTE band 7 (15 Mb - QPSK_RB 75)

High Channel



LTE band 7 (15 \https://example.com/ LTE band 7 (15 \https://example.com/ - QPSK_RB 1)

High Channel

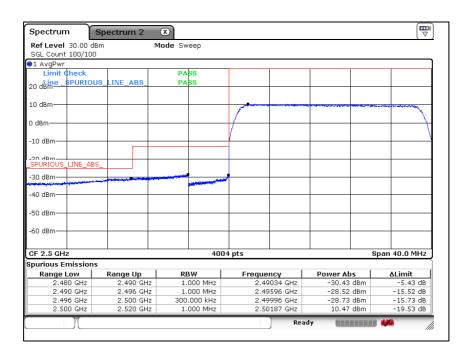




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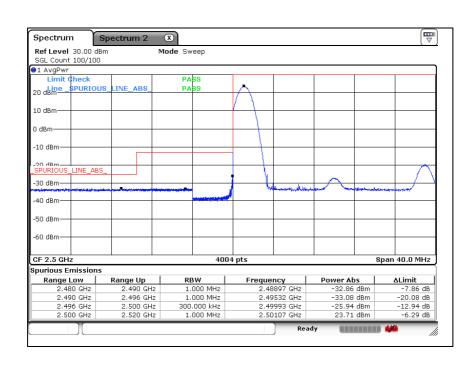
LTE band 7 (20 Mb - QPSK_RB 100)

Low Channel



LTE band 7 (20 版 - QPSK_RB 1)

Low Channel

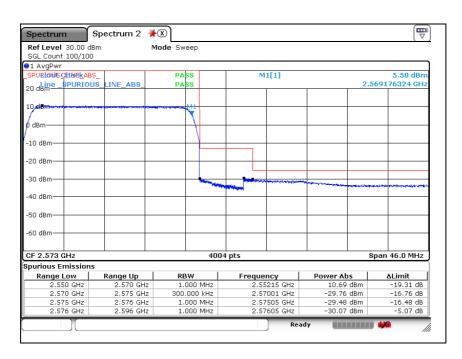




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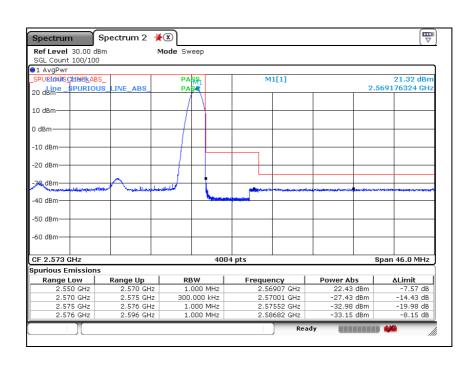
LTE band 7 (20 Mb - QPSK_RB 100)

High Channel



LTE band 7 (20 版 - QPSK_RB 1)

High Channel

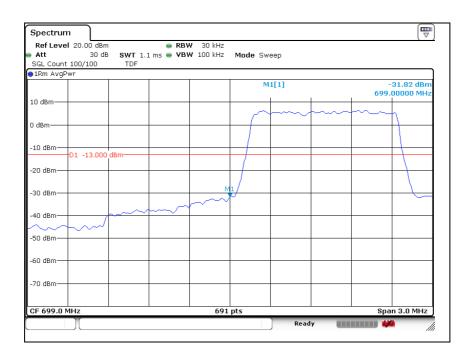




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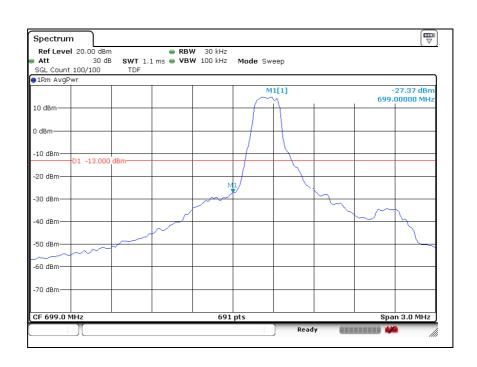
LTE band 12 (1.4 Mb - QPSK_RB 6)

Low Channel



LTE band 12 (1.4 \m - QPSK_RB 1)

Low Channel

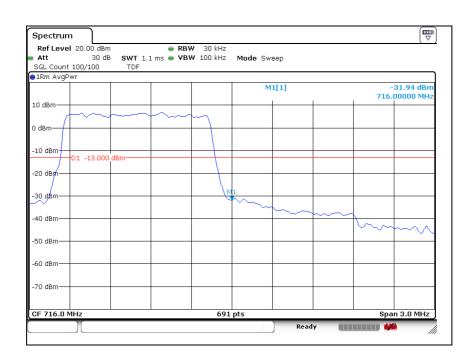




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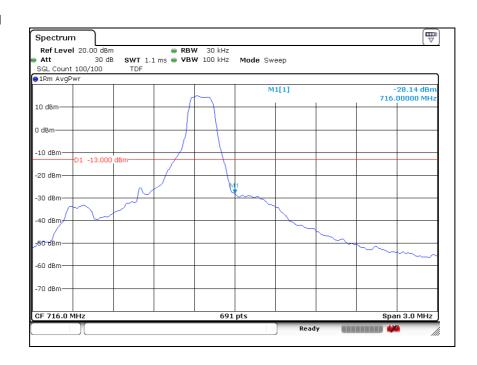
LTE band 12 (1.4 Mb - QPSK_RB 6)

High Channel



LTE band 12 (1.4 \m - QPSK_RB 1)

High Channel

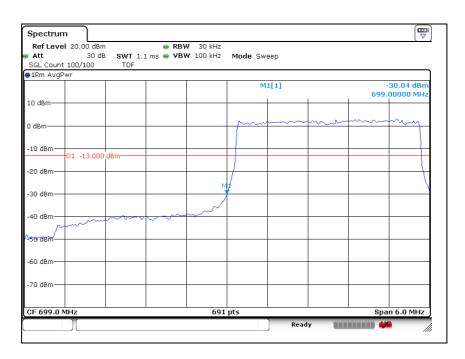




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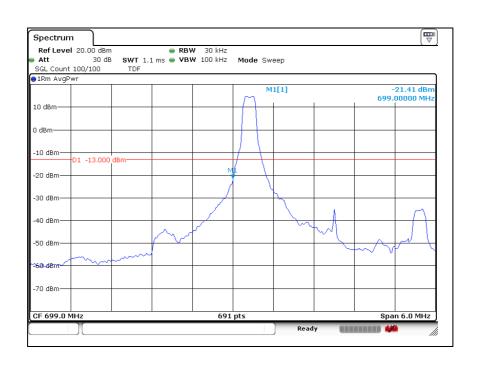
LTE band 12 (3 Mb - QPSK_RB 15)

Low Channel



LTE band 12 (3 版 - QPSK_RB 1)

Low Channel

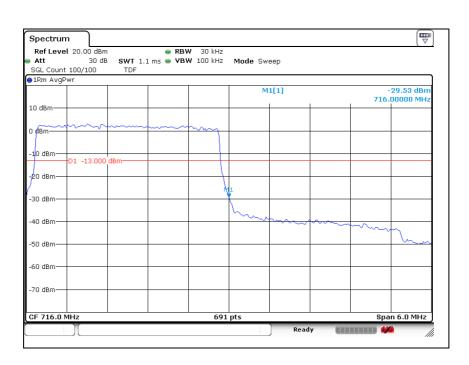




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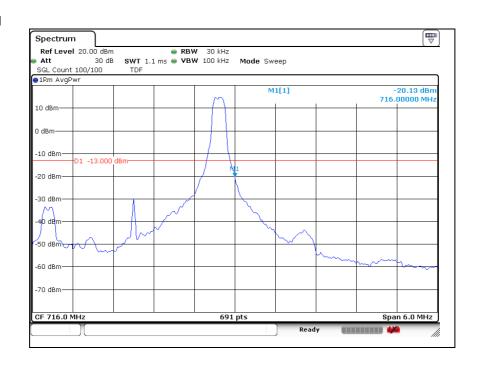
LTE band 12 (3 Mb - QPSK_RB 15)

High Channel



LTE band 12 (3 版 - QPSK_RB 1)

High Channel

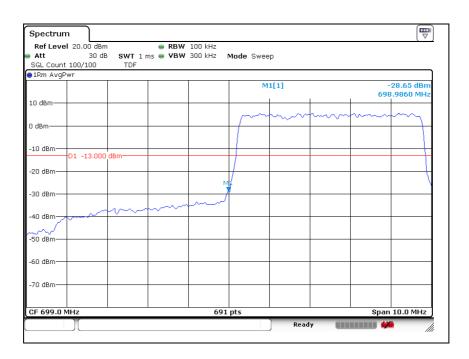




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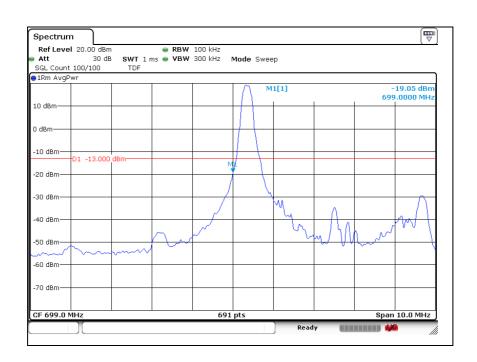
LTE band 12 (5 Mb - QPSK_RB 25)

Low Channel



LTE band 12 (5 版 - QPSK_RB 1)

Low Channel

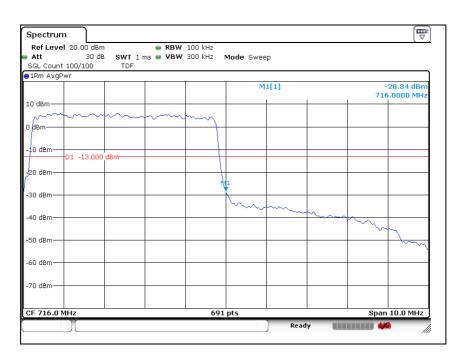




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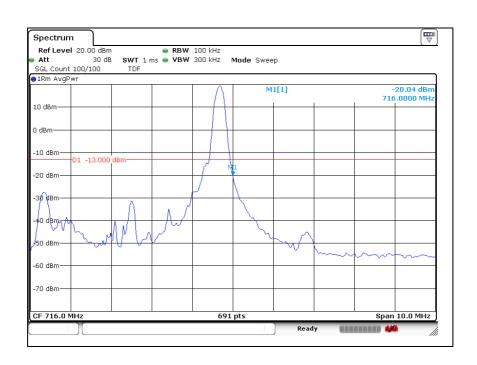
LTE band 12 (5 Mb - QPSK_RB 25)

High Channel



LTE band 12 (5 版 - QPSK_RB 1)

High Channel

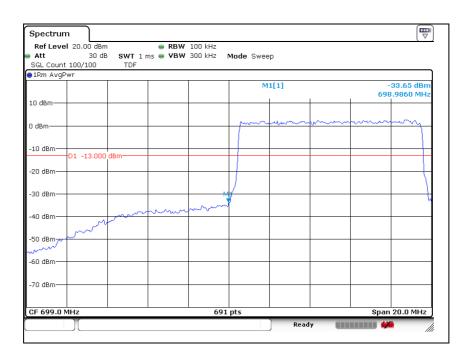




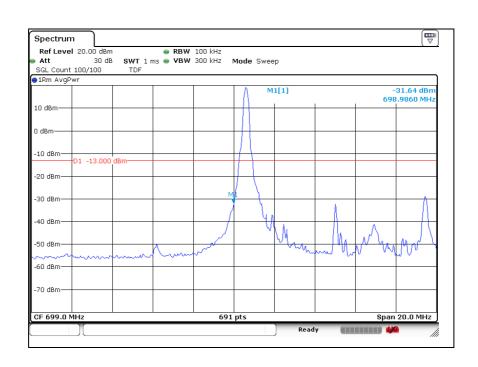
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LTE band 12 (10 \(\mu \) - QPSK_RB 50)

Low Channel



Low Channel

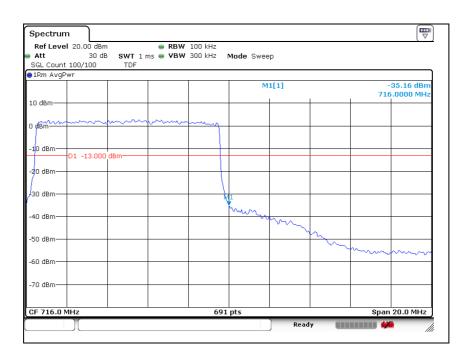




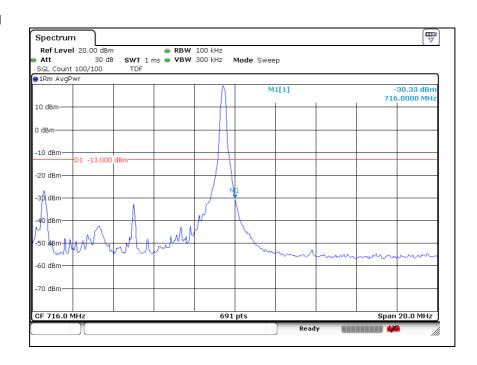
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LTE band 12 (10 \(\mu \) - QPSK_RB 50)

High Channel



High Channel





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LTE band 26 (1.4 Mb - QPSK_RB 6)

Low Channel



LTE band 26 (1.4 Mb - QPSK_RB 1)

Low Channel





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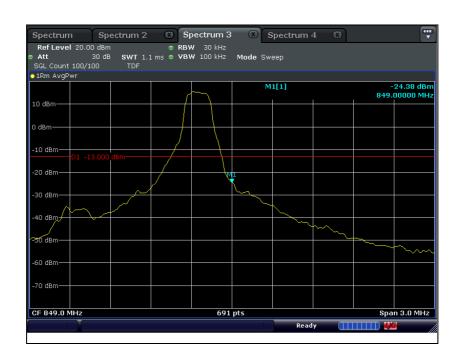
LTE band 26 (1.4 Mb - QPSK_RB 6)

High Channel



LTE band 26 (1.4 \m - QPSK_RB 1)

High Channel

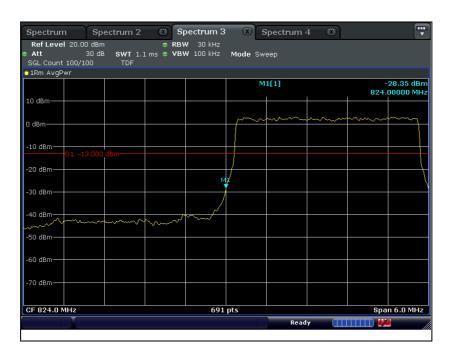




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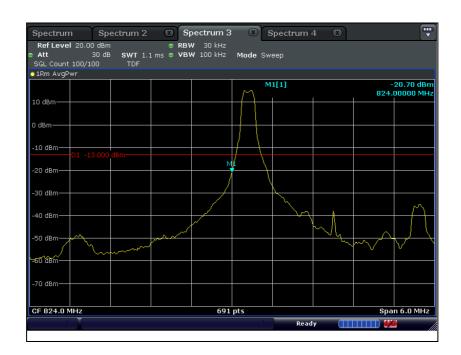
LTE band 26 (3 Mb - QPSK_RB 15)

Low Channel



LTE band 26 (3 版 - QPSK_RB 1)

Low Channel



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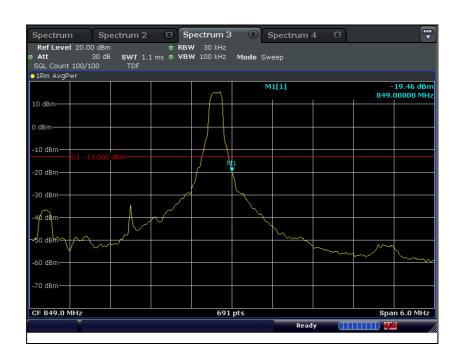
LTE band 26 (3 Mb - QPSK_RB 15)

High Channel



LTE band 26 (3 版 - QPSK_RB 1)

High Channel





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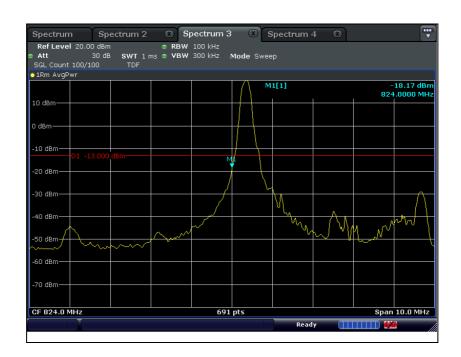
LTE band 26 (5 Mb - QPSK_RB 25)

Low Channel



LTE band 26 (5 版 - QPSK_RB 1)

Low Channel





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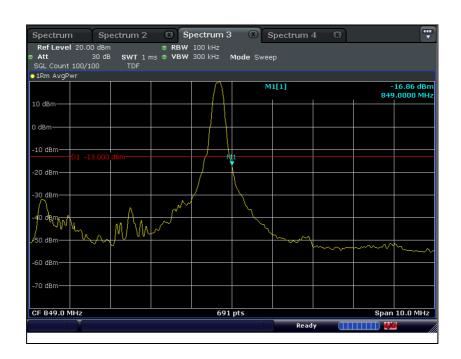
LTE band 26 (5 Mb - QPSK_RB 25)

High Channel



LTE band 26 (5 版 - QPSK_RB 1)

High Channel





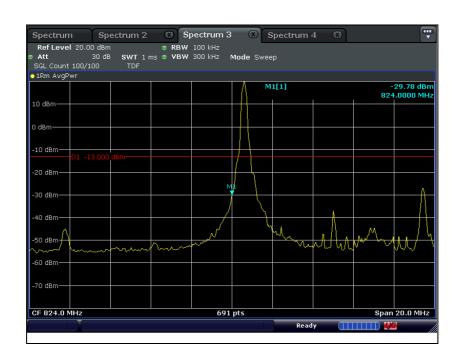
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LTE band 26 (10 \(\mu \) - QPSK_RB 50)

Low Channel



Low Channel





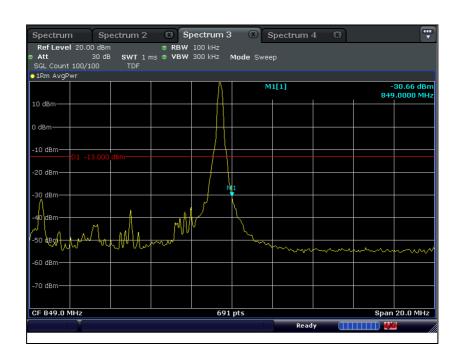
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LTE band 26 (10 \(\mu \) - QPSK_RB 50)

High Channel



High Channel

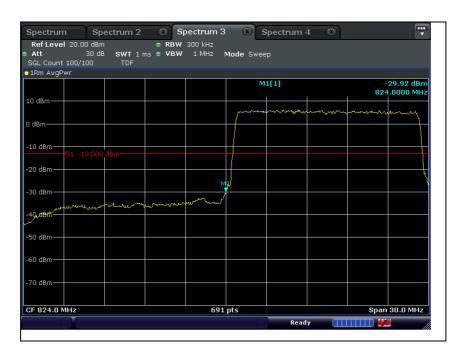




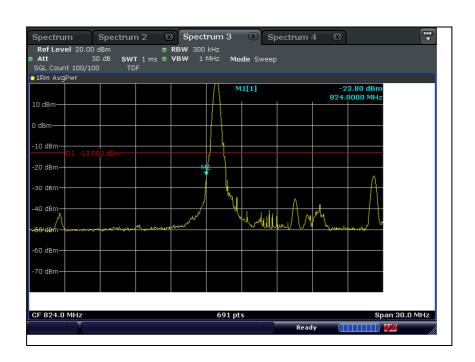
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LTE band 26 (15 \(\mu \) - QPSK_RB 75)

Low Channel



Low Channel

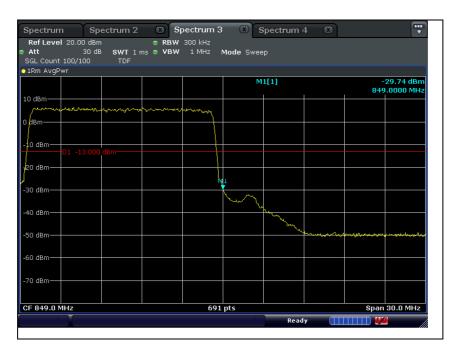




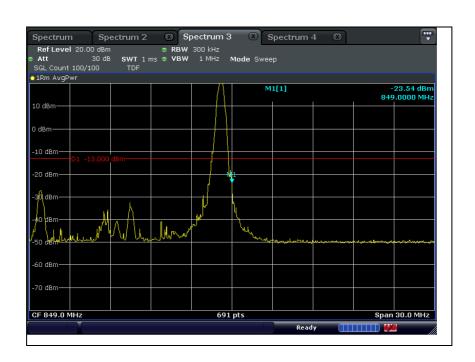
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LTE band 26 (15 \(\mu \) - QPSK_RB 75)

High Channel



High Channel





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8. Frequency Stability

8.1. Limit

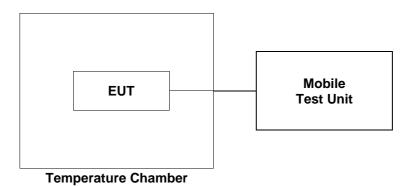
- § 2.1055 (a), § 2.1055 (d) & following:
- <u>§22.355</u>, the carrier frequency of each transmitter in the Public Mobile Services must be maintained within the tolerances given in Table of this section.

For Mobile devices operating in the 824 to 849 Mb band at a power level less than or equal to 3 Watts, the limit specified in Table C-1 is +/- 2.5 ppm.

- <u>§24.235</u>, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.
- §27.54, the frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

8.2. Test Procedure

- 1. Frequency Stability vs. Temperature: The equipment under test was connected to an external DC power supply and the RF output was connected to a Mobile Test Unit via feed-through attenuators.
- 2. The EUT was placed inside the temperature chamber.
- 3. After the temperature stabilized for approximately 20 minutes, the frequency output was recorded from Mobile Test Unit.





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8.3. Test Results

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

LTE band 2 at middle channel

Reference Frequency: 1 880.0 Mb

Frequency Stability versus Temperature

Environment		Frequency Measure	with Time Elapse
Temperature (℃)		Frequency Error (Hz)	ppm
50		3	0.001 6
40		5	0.002 7
30	12.0	3	0.001 6
23		1	0.000 5
10		4	0.002 1
0		1	0.000 5
-10		-3	-0.001 6
-20		1	0.000 5
-30		-1	-0.000 5

Frequency Stability versus Power Supply

Environment	Power Supplied (V _{dc})	Frequency Measure with Time Elapse	
Temperature (℃)		Frequency Error (Hz)	ppm
22	13.8	1	0.000 5
23	10.2	2	0.001 1



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LTE band 4 at middle channel

Reference Frequency: 1 732	2.5	MHz.	
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Frequency Stability versus Temperature

Environment	Power Supplied (V _{dc})	Frequency Measure	with Time Elapse
Temperature (℃)		Frequency Error (Hz)	ppm
50		-1	-0.000 6
40		1	0.000 6
30	12.0	3	0.001 7
23		-2	-0.001 2
10		1	0.000 6
0		-3	-0.001 7
-10		2	0.001 2
-20		3	0.001 7
-30		-1	-0.000 6

Frequency Stability versus Power Supply

Environment	Power Supplied (V _{dc})	Frequency Measure with Time Elapse	
Temperature (℃)		Frequency Error (Hz)	ppm
23	13.8	-1	-0.000 6
	10.2	1	0.000 6



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LTE band 5 at middle channel

Reference Frequency: 836.5 Mbz

Frequency Stability versus Temperature

Environment Power Temperature (℃) Supplied (V _{dc})		Frequency Measure with Time Elapse	
	Supplied (V _{dc})	Frequency Error (Hz)	ppm
50		-2	-0.002 4
40	12.0	3	0.003 6
30		5	0.006 0
23		1	0.001 2
10		0	0.000 0
0		1	0.001 2
-10		-1	-0.001 2
-20		-2	-0.002 4
-30		1	0.001 2

Frequency Stability versus Power Supply

Environment	Power Supplied (V _{dc})	Frequency Measure with Time Elapse	
Temperature (℃)		Frequency Error (Hz)	ppm
23	13.8	1	0.001 2
	10.2	-1	-0.001 2



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LTE band 7 at middle channel

Reference Frequency: 2 535.0 Mb

Frequency Stability versus Temperature

Environment		Frequency Measure	with Time Elapse
Temperature (℃)		Frequency Error (Hz)	ppm
50		3	0.001 2
40		4	0.001 6
30	12.0	-1	-0.000 4
23		2	0.000 8
10		1	0.000 4
0		3	0.001 2
-10		1	0.000 4
-20		-2	-0.000 8
-30		-4	-0.001 6

Frequency Stability versus Power Supply

Environment	ronment Power		re with Time Elapse	
Temperature (℃)	Supplied (V _{dc})	Frequency Error (Hz)	ppm	
23	13.8	-2	-0.000 8	
	10.2	-3	-0.001 2	



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LTE band 12 at middle channel

Reference Frequency: 707.5 Mb

Frequency Stability versus Temperature

Environment		Frequency Measure	with Time Elapse
Temperature (℃)		Frequency Error (Hz)	ppm
50		-4	-0.005 7
40	12.0	-3	-0.004 2
30		1	0.001 4
23		-2	-0.002 8
10		1	0.001 4
0		-3	-0.004 2
-10		1	0.001 4
-20		2	0.002 8
-30		-2	-0.002 8

Frequency Stability versus Power Supply

Environment	Power Supplied (V _{dc})	Frequency Measure with Time Elapse	
Temperature (℃)		Frequency Error (Hz)	ppm
23	13.8	-1	-0.001 4
	10.2	-1	-0.001 4



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LTE band 26 at middle channel

Reference Frequency: 836.5 Mb

Frequency Stability versus Temperature

Environment	Environment Power Temperature (℃) Supplied (V _{dc})	Frequency Measure	with Time Elapse
Temperature (℃)		Frequency Error (Hz)	ppm
50		1	0.001 2
40		2	0.002 4
30	12.0	-3	-0.003 6
23		1	0.001 2
10		-2	-0.002 4
0		1	0.001 2
-10		-2	-0.002 4
-20		5	0.006 0
-30		-1	-0.001 2

Frequency Stability versus Power Supply

Environment Temperature (℃)	Power Supplied (V _{dc})	Frequency Measure with Time Elapse	
		Frequency Error (Hz)	ppm
23	13.8	-2	-0.002 4
	10.2	1	0.001 2

- End of the Test Report -