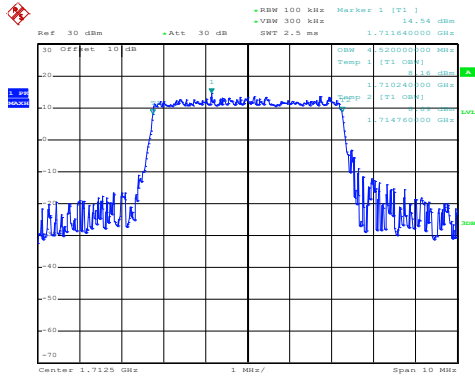


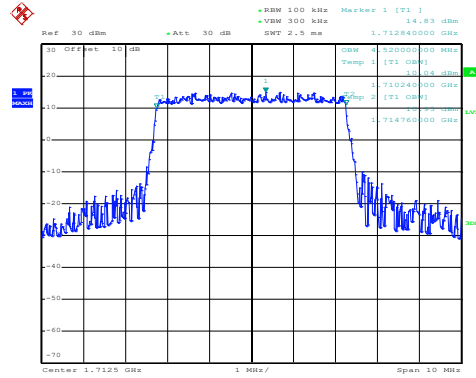
LTE Band 66: 99% Occupancy bandwidth
BW: 5MHz

16QAM



Date: 23.DEC.2020 14:06:46

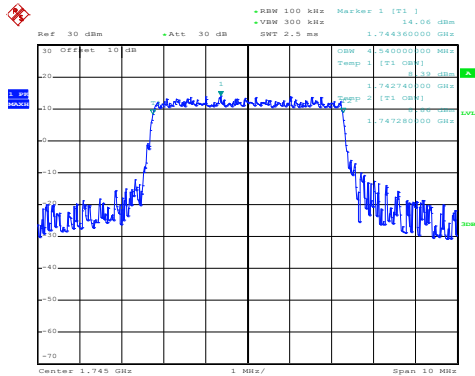
QPSK



Date: 23.DEC.2020 14:06:38

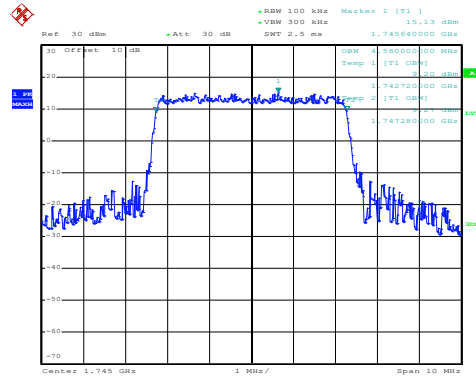
Lowest channel

16QAM



Date: 23.DEC.2020 14:21:44

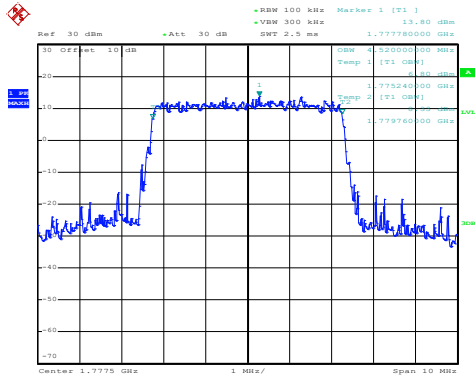
QPSK



Date: 23.DEC.2020 14:21:53

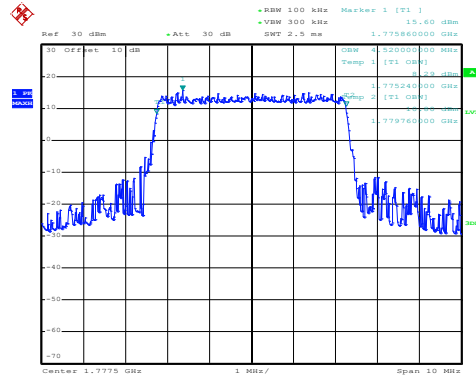
Middle channel

16QAM



Date: 23.DEC.2020 14:22:16

QPSK

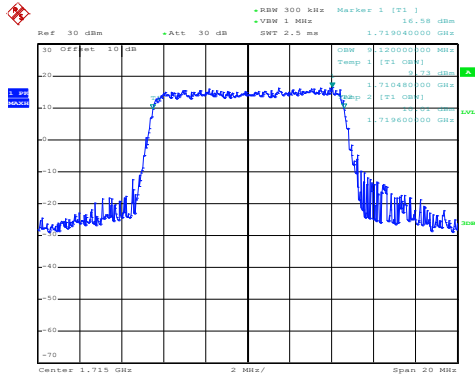


Date: 23.DEC.2020 14:22:08

Highest channel

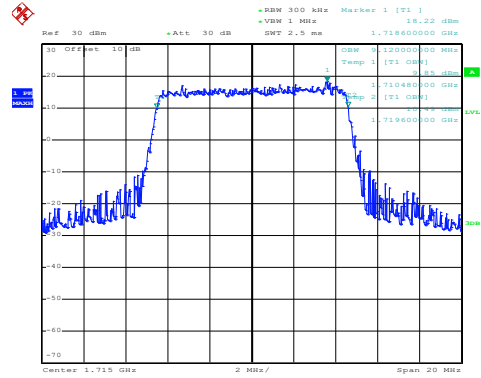
LTE Band 66: 99% Occupancy bandwidth
BW: 10MHz

16QAM



Date: 23.DEC.2020 14:23:29

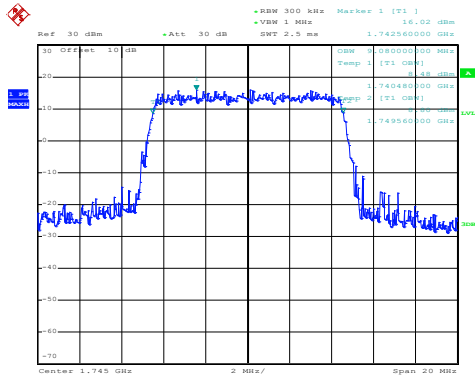
QPSK



Date: 23.DEC.2020 14:23:36

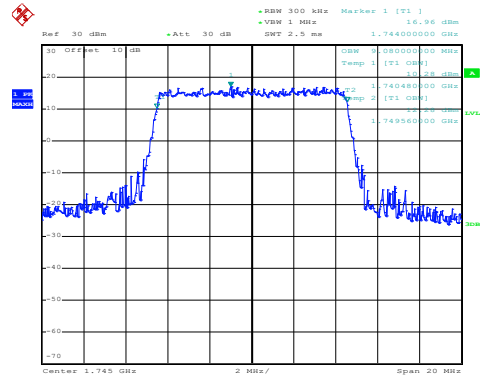
Lowest channel

16QAM



Date: 23.DEC.2020 14:24:00

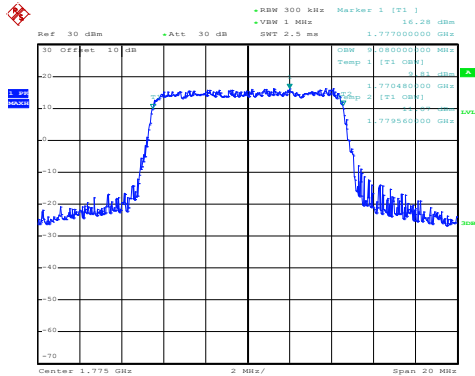
QPSK



Date: 23.DEC.2020 14:23:55

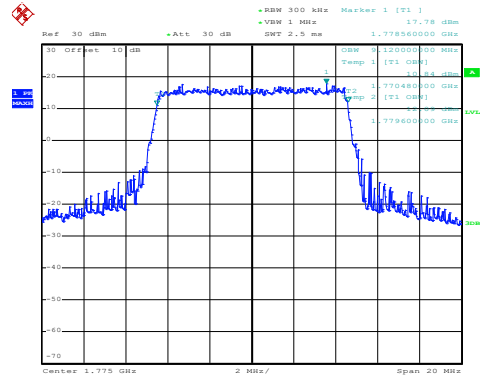
Middle channel

16QAM



Date: 23.DEC.2020 14:24:40

QPSK

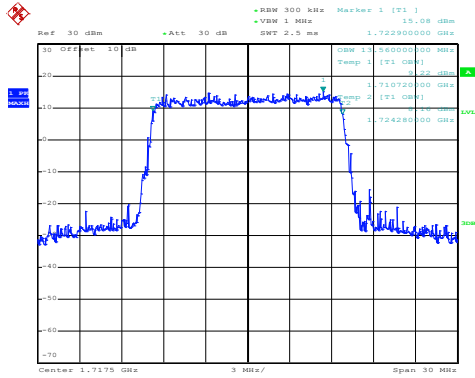


Date: 23.DEC.2020 14:24:47

Highest channel

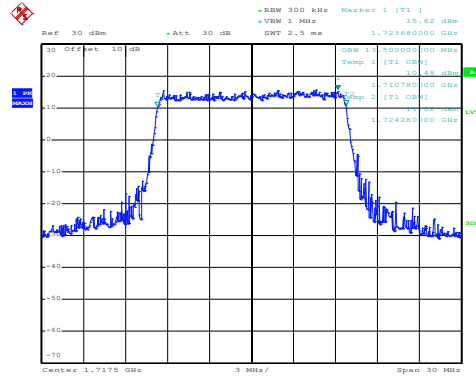
LTE Band 66: 99% Occupancy bandwidth
BW: 15MHz

16QAM



Date: 23.DEC.2020 14:25:21

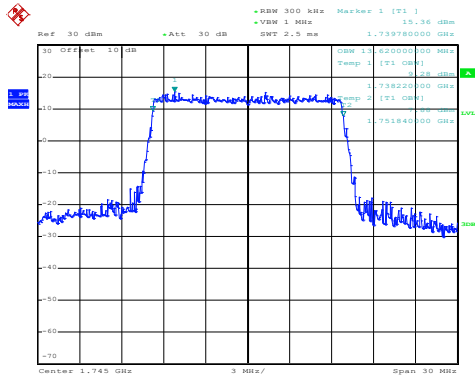
QPSK



Date: 23.DEC.2020 14:25:16

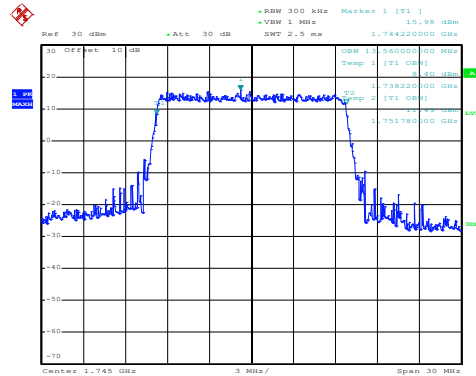
Lowest channel

16QAM



Date: 23.DEC.2020 14:26:04

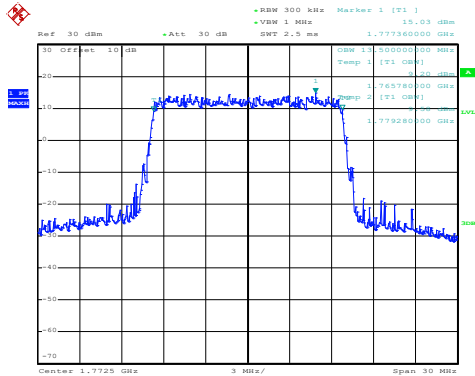
QPSK



Date: 23.DEC.2020 14:26:09

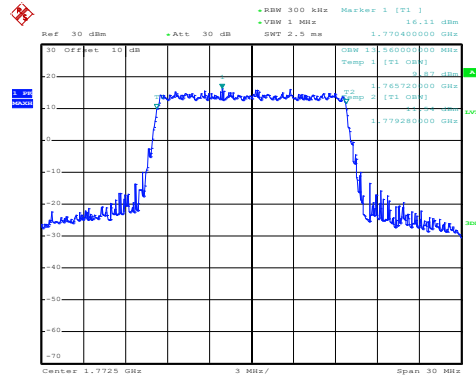
Middle channel

16QAM



Date: 23.DEC.2020 14:26:31

QPSK

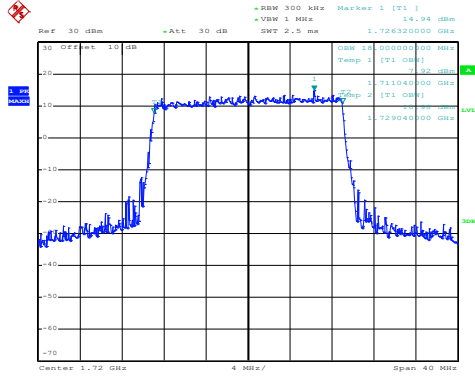


Date: 23.DEC.2020 14:26:26

Highest channel

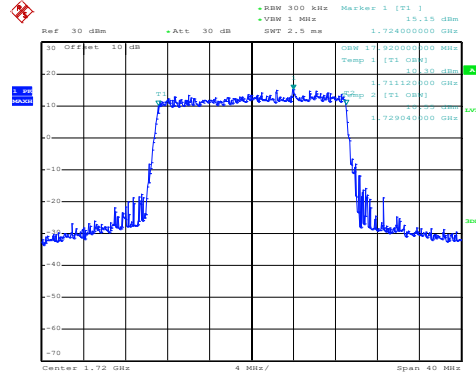
LTE Band 66: 99% Occupancy bandwidth
BW: 20MHz

16QAM



Date: 23.DEC.2020 14:27:24

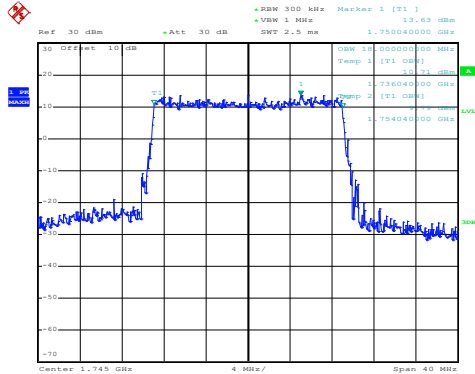
QPSK



Date: 23.DEC.2020 14:27:29

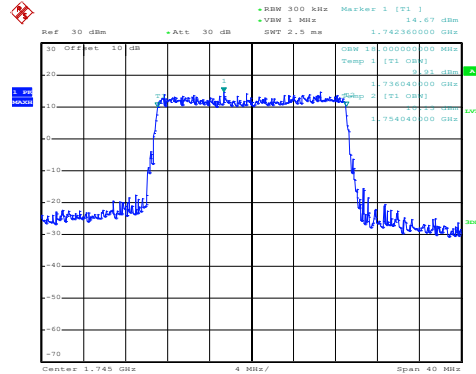
Lowest channel

16QAM



Date: 23.DEC.2020 14:27:47

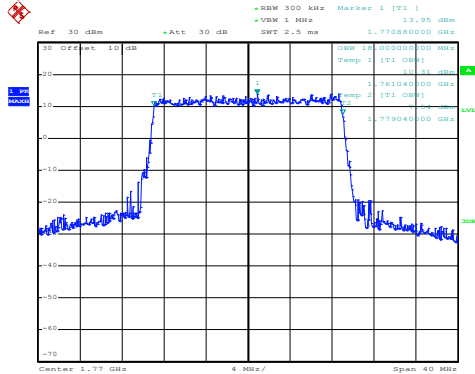
QPSK



Date: 23.DEC.2020 14:27:41

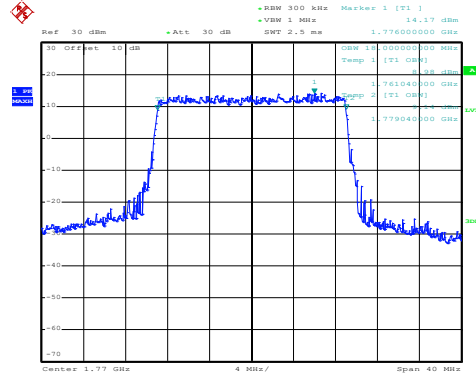
Middle channel

16QAM



Date: 23.DEC.2020 14:28:28

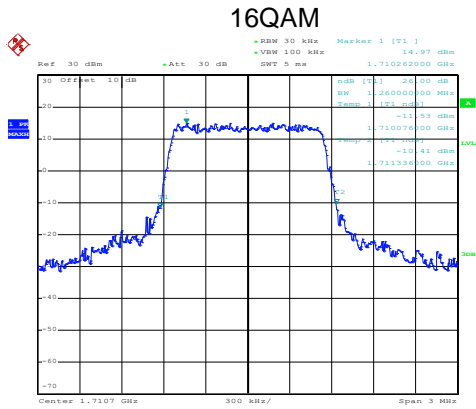
QPSK



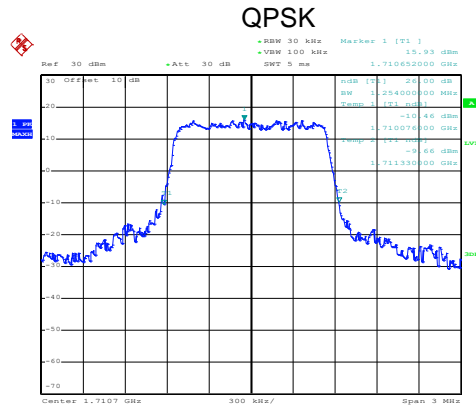
Date: 23.DEC.2020 14:28:34

Highest channel

LTE Band 66: -26dBc bandwidth
BW: 1.4MHz

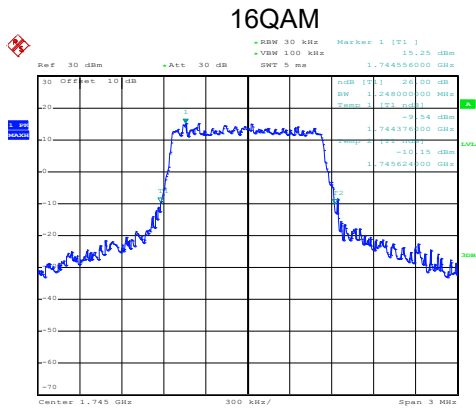


Date: 23.DEC.2020 14:01:52

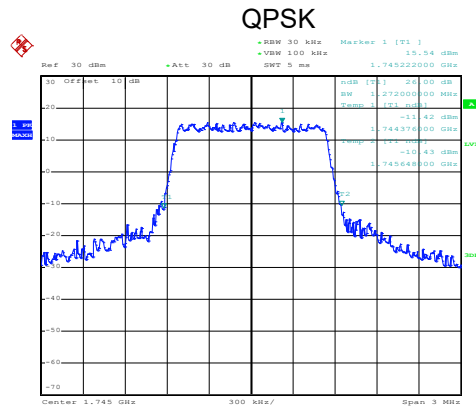


Date: 23.DEC.2020 14:02:03

Lowest channel

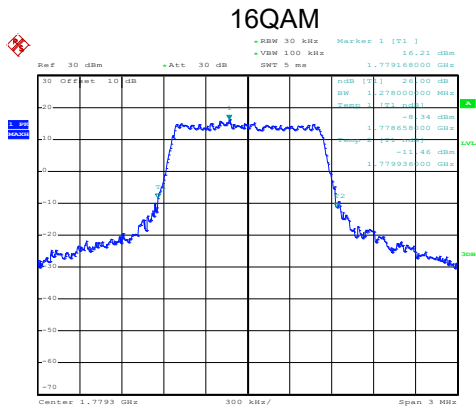


Date: 23.DEC.2020 14:02:24

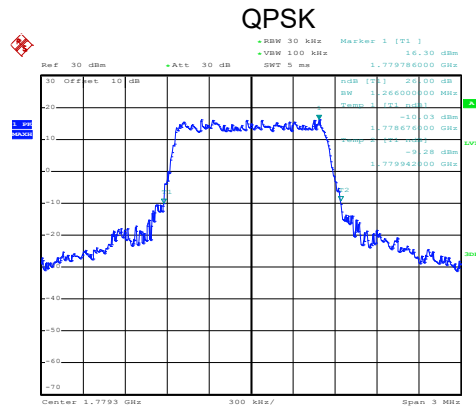


Date: 23.DEC.2020 14:02:15

Middle channel



Date: 23.DEC.2020 14:03:29

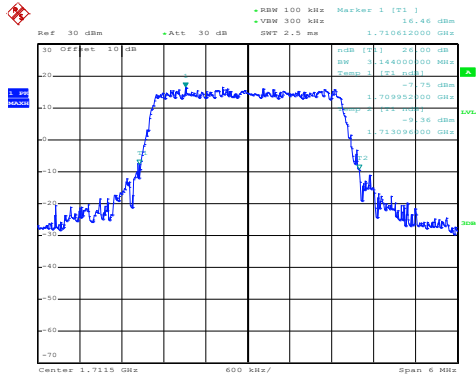


Date: 23.DEC.2020 14:03:37

Highest channel

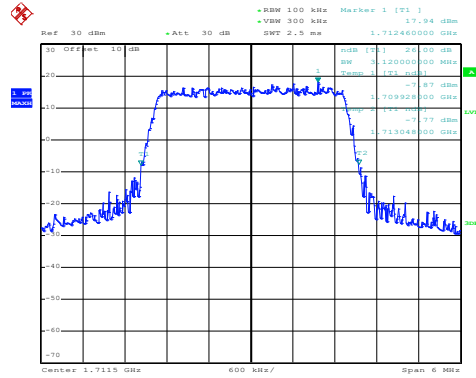
LTE Band 66: -26dBc bandwidth
BW: 3MHz

16QAM



Date: 23.DEC.2020 14:04:16

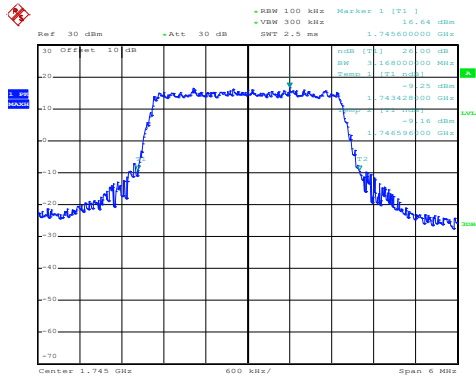
QPSK



Date: 23.DEC.2020 14:04:06

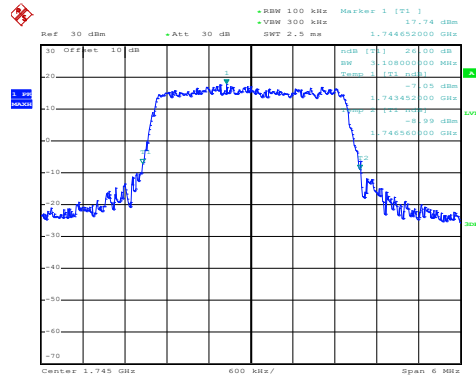
Lowest channel

16QAM



Date: 23.DEC.2020 14:05:08

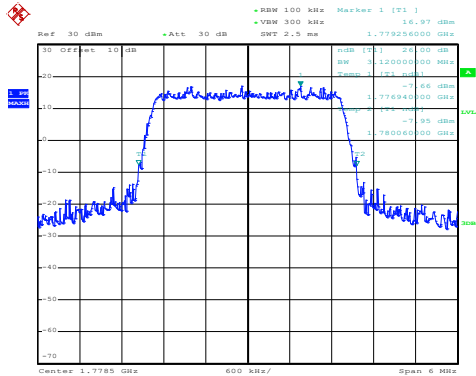
QPSK



Date: 23.DEC.2020 14:05:19

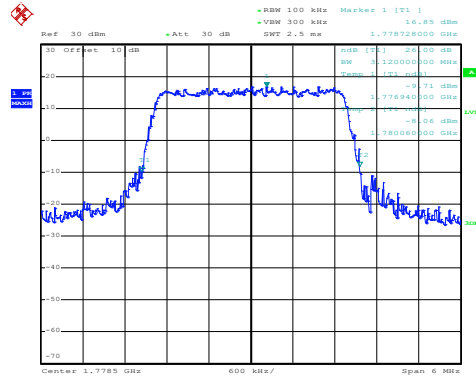
Middle channel

16QAM



Date: 23.DEC.2020 14:05:45

QPSK

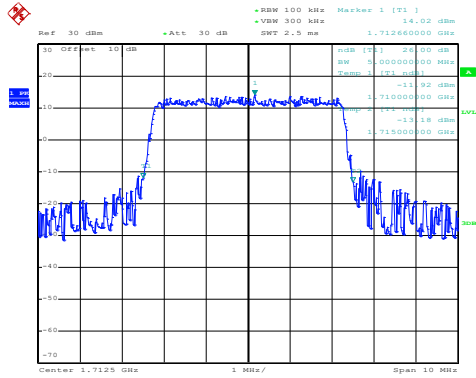


Date: 23.DEC.2020 14:05:37

Highest channel

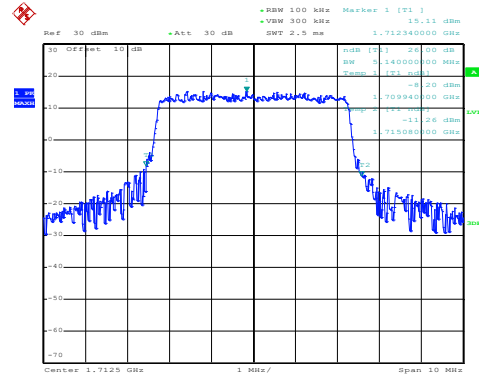
LTE Band 66: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 23.DEC.2020 14:06:53

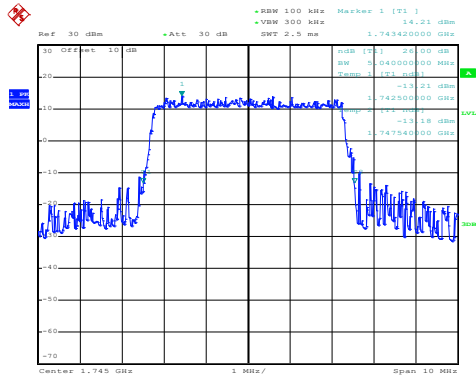
QPSK



Date: 23.DEC.2020 14:21:15

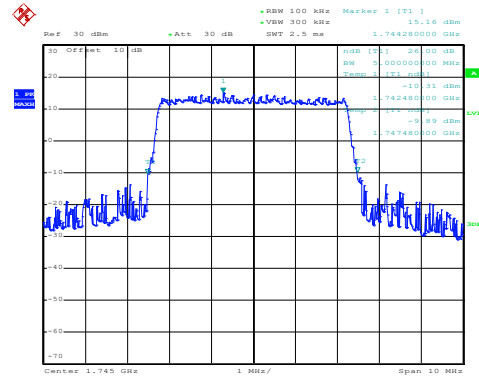
Lowest channel

16QAM



Date: 23.DEC.2020 14:21:38

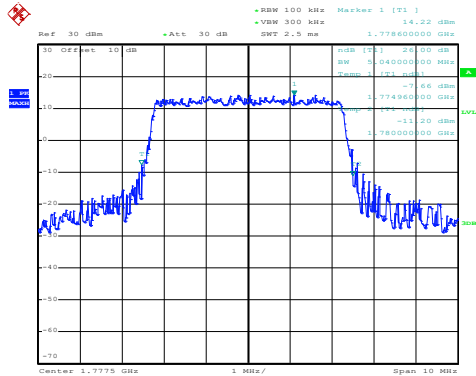
QPSK



Date: 23.DEC.2020 14:21:32

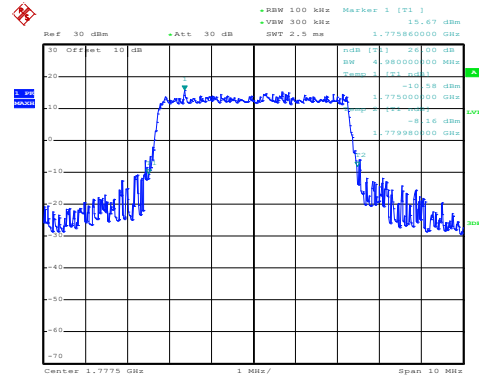
Middle channel

16QAM



Date: 23.DEC.2020 14:22:37

QPSK

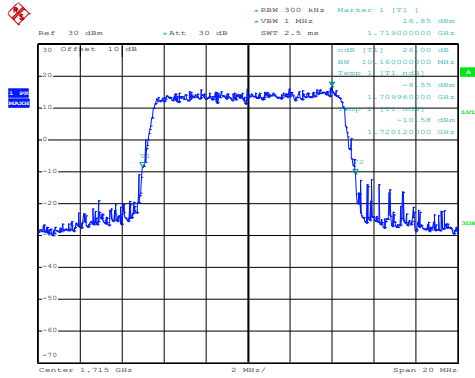


Date: 23.DEC.2020 14:22:26

Highest channel

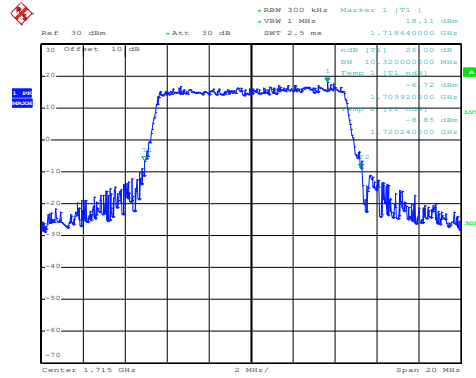
LTE Band 66: -26dBc bandwidth
BW: 10MHz

16QAM



Date: 23.DEC.2020 14:23:23

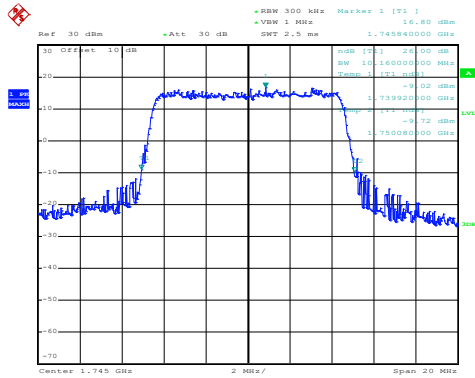
QPSK



Date: 23.DEC.2020 14:23:17

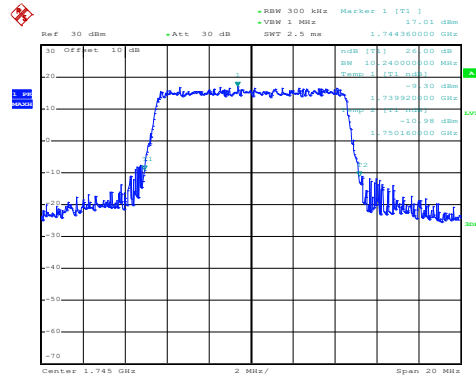
Lowest channel

16QAM



Date: 23.DEC.2020 14:24:06

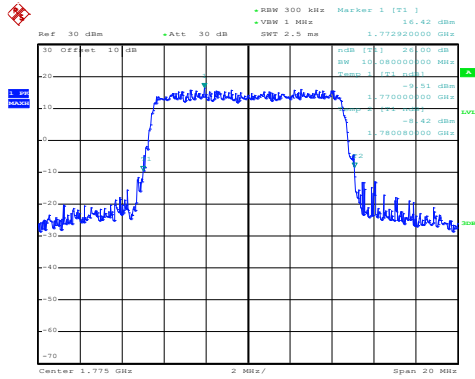
QPSK



Date: 23.DEC.2020 14:24:14

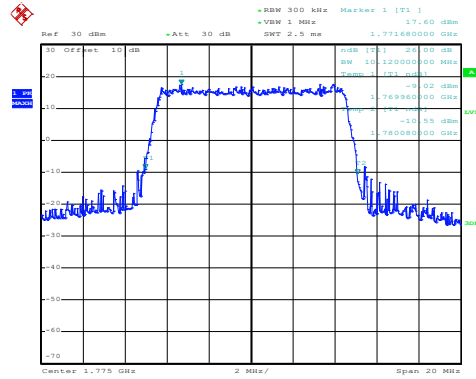
Middle channel

16QAM



Date: 23.DEC.2020 14:24:34

QPSK

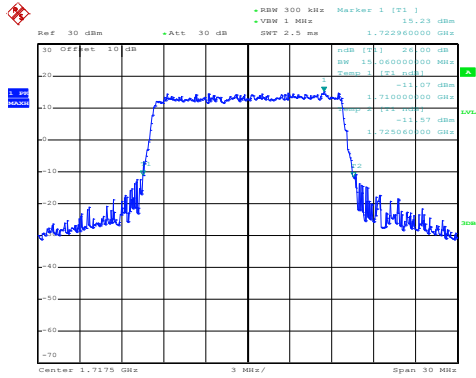


Date: 23.DEC.2020 14:24:28

Highest channel

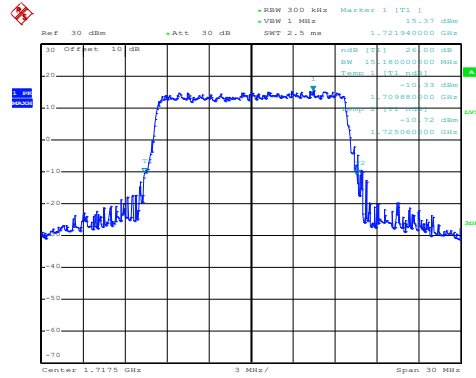
LTE Band 66: -26dBc bandwidth
BW: 15MHz

16QAM



Date: 23.DEC.2020 14:25:34

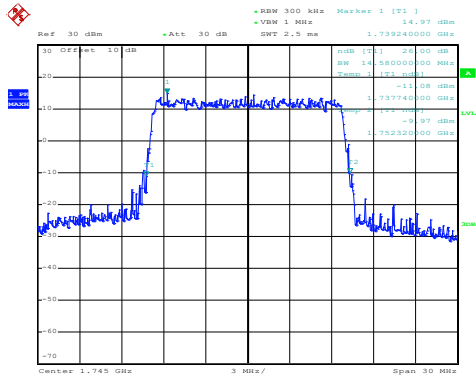
QPSK



Date: 23.DEC.2020 14:25:41

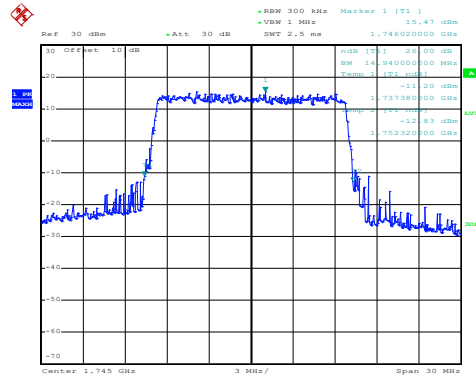
Lowest channel

16QAM



Date: 23.DEC.2020 14:25:57

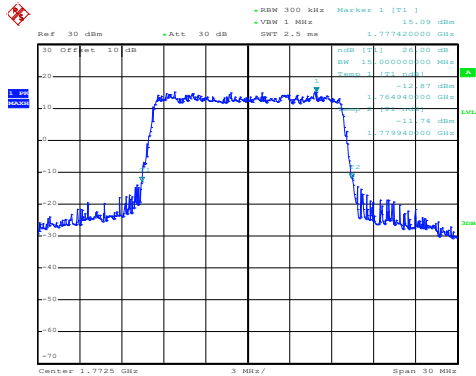
QPSK



Date: 23.DEC.2020 14:25:52

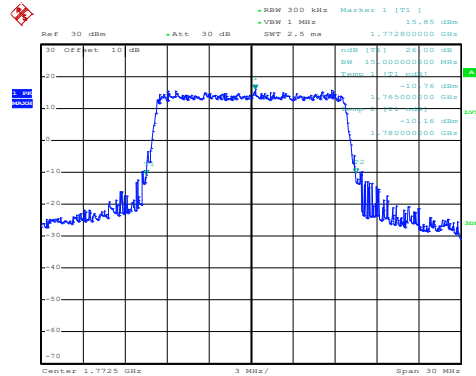
Middle channel

16QAM



Date: 23.DEC.2020 14:26:37

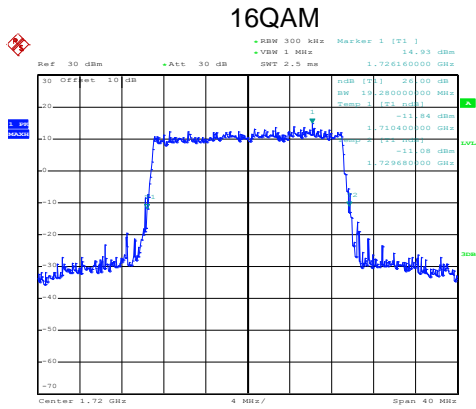
QPSK



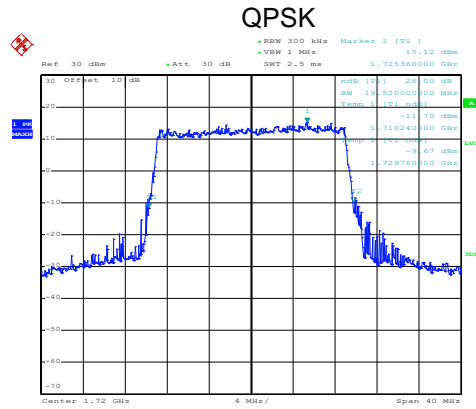
Date: 23.DEC.2020 14:26:45

Highest channel

LTE Band 66: -26dBc bandwidth
BW: 20MHz

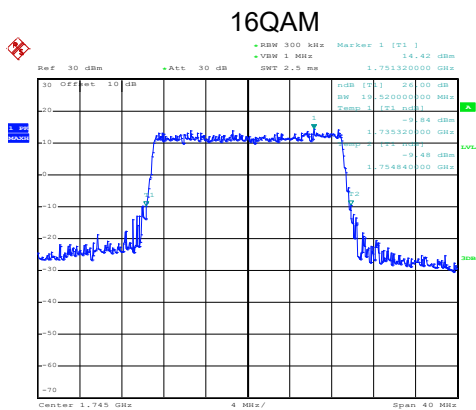


Date: 23.DEC.2020 14:27:17

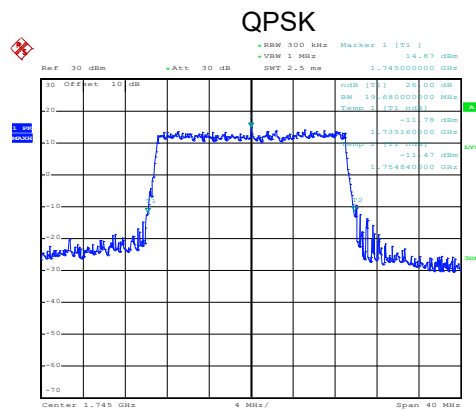


Date: 23.DEC.2020 14:27:12

Lowest channel

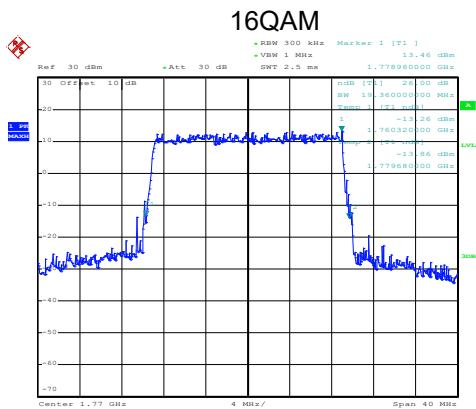


Date: 23.DEC.2020 14:27:53

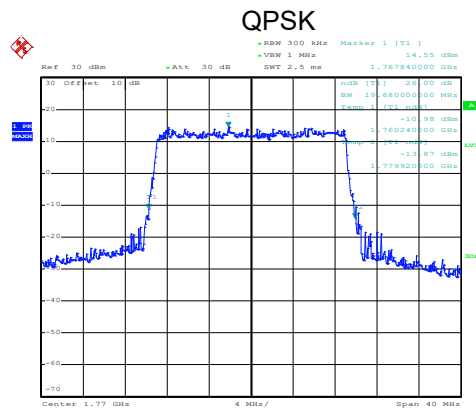


Date: 23.DEC.2020 14:27:59

Middle channel



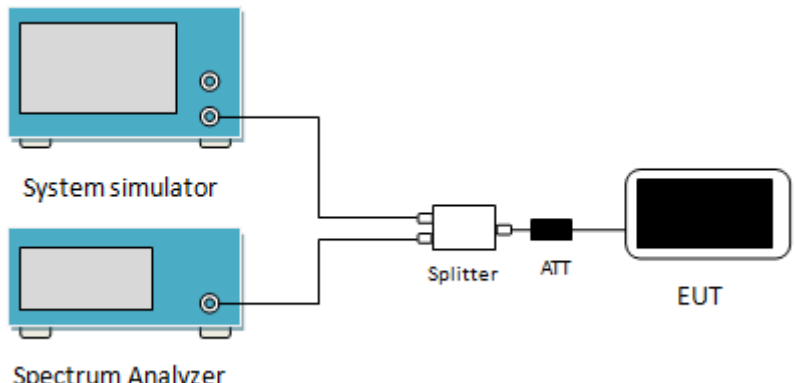
Date: 23.DEC.2020 14:28:22



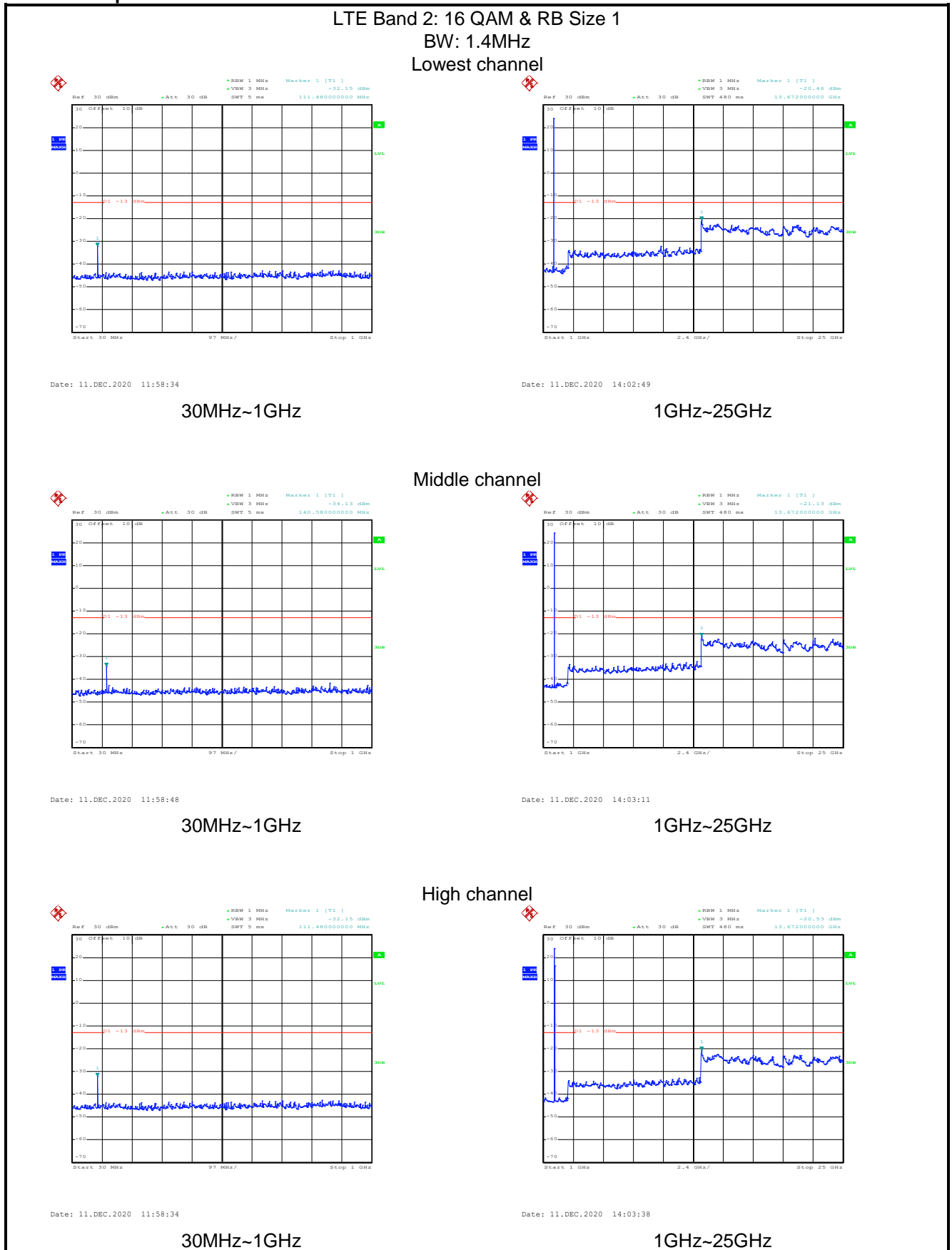
Date: 23.DEC.2020 14:28:17

Highest channel

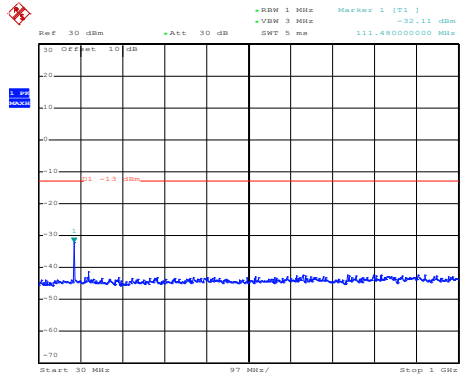
6.4 Out of band emission at antenna terminals

Test Requirement:	Part 22.917(a), Part 24.238 (a), part 27.53(c), part 27.53(g), part 27.53(h)
Limit:	LTE Band 2 & 5 & 12 & 13& 17& 66: 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 (-13 dBm).
Test Setup:	 <p>The diagram illustrates the test setup. On the left, there are two blue rectangular units: the top one is labeled 'System simulator' and the bottom one is labeled 'Spectrum Analyzer'. Both have a screen and two ports on the right side. A single cable connects the top port of the System simulator to the top port of the Spectrum Analyzer. Another cable connects the bottom port of the System simulator to the top port of a white 'Splitter' box. The bottom port of the Splitter is connected to a black 'ATT' (attenuator) box. The output of the ATT is connected to the antenna of a black 'EUT' (Equipment Under Test) device.</p>
Test Procedure:	<ol style="list-style-type: none"> 1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. 2 For the out of band: For Band 5 & 12 & 17 set the RBW=100 kHz, VBW=300 kHz and for Band 2 & 4 & 7 set the RBW=1 MHz, VBW=3 MHz when below 1 GHz, RBW =1 MHz, VBW=3 MHz when above 1 GHz, Start=30MHz, Stop= 10th harmonic. 3 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed
Remark:	Pre-scan all RB Size and offset, and found the RB Size and offset of worst case, so the report shows only the worst case test data.

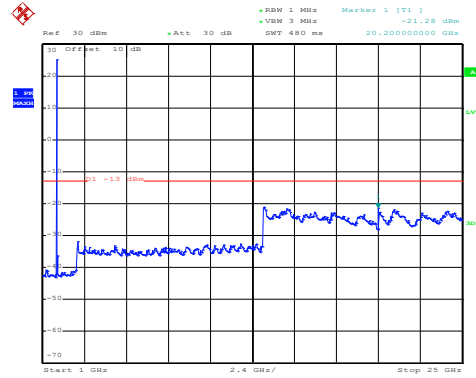
Test plots as follows (Conducted spurious emission) (worst case):
 LTE Band 2 part:



LTE Band 2: QPSK & RB Size 1 BW: 1.4MHz Lowest channel

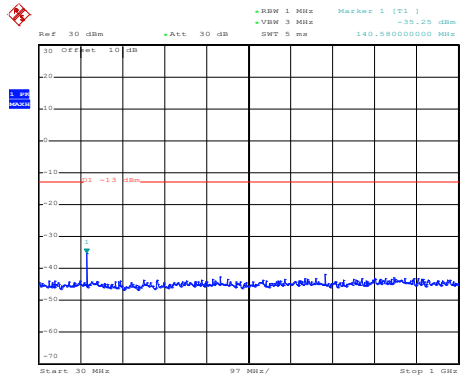


30MHz~1GHz

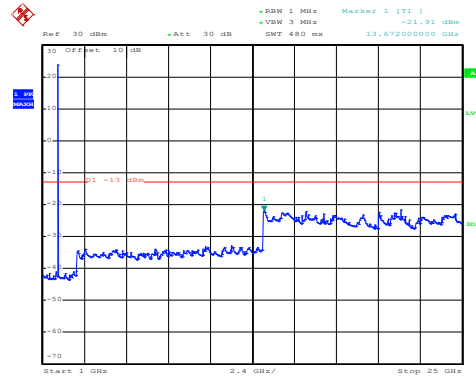


1GHz~25GHz

Middle channel

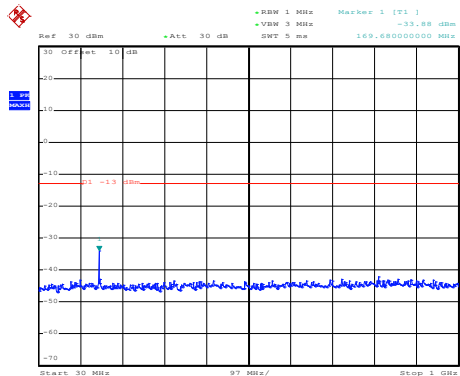


30MHz~1GHz

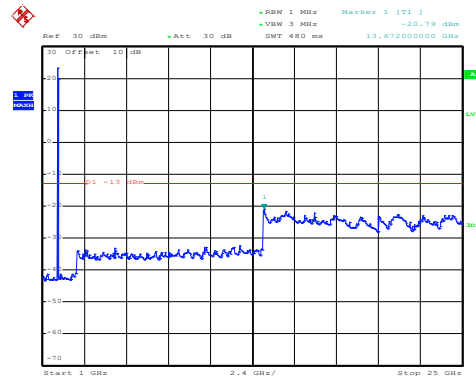


1GHz~25GHz

High channel

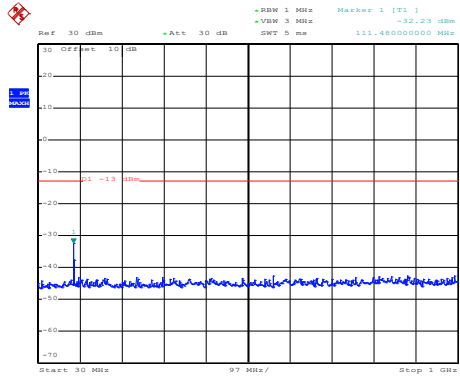


30MHz~1GHz



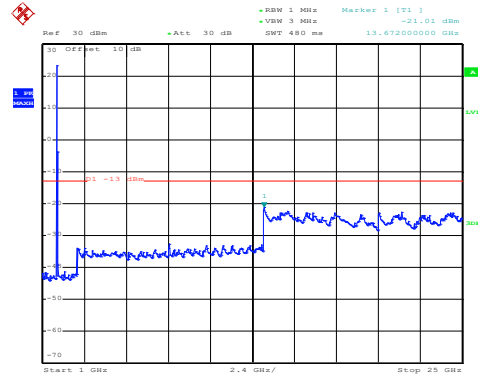
1GHz~25GHz

LTE Band 2: 16 QAM & RB Size 1 BW: 20MHz Lowest channel



Date: 11.DEC.2020 12:00:58

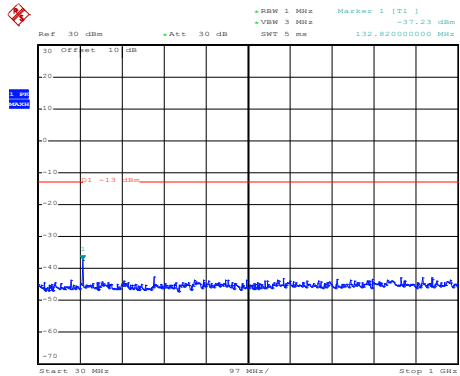
30MHz~1GHz



Date: 11.DEC.2020 14:04:11

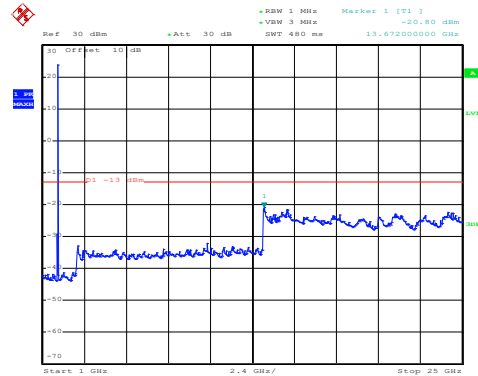
1GHz~25GHz

Middle channel



Date: 11.DEC.2020 12:01:12

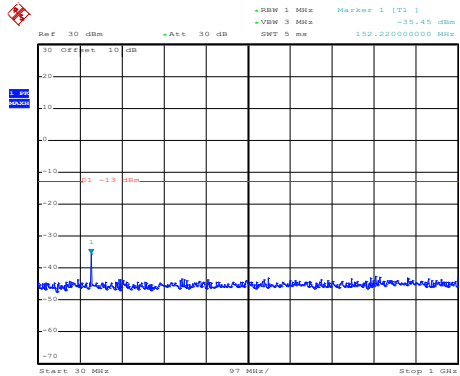
30MHz~1GHz



Date: 11.DEC.2020 14:04:32

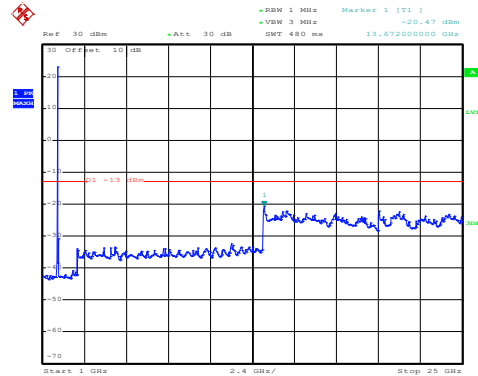
1GHz~25GHz

High channel



Date: 11.DEC.2020 12:01:28

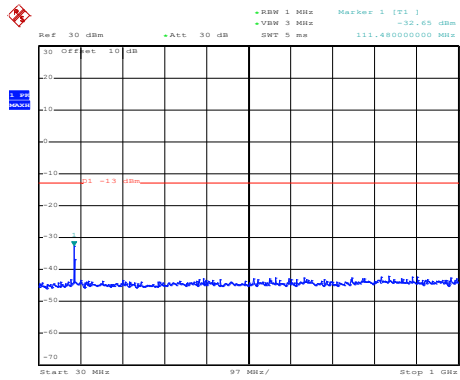
30MHz~1GHz



Date: 11.DEC.2020 14:04:52

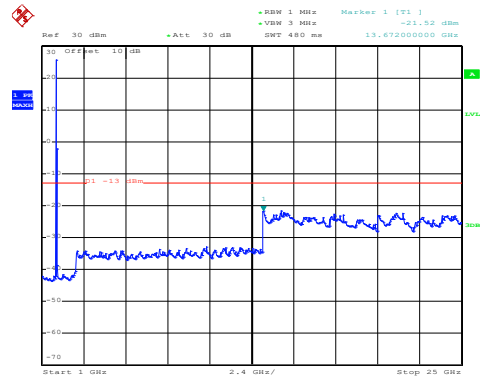
1GHz~25GHz

LTE Band 2: QPSK & RB Size 1 BW: 20MHz Lowest channel



Date: 11.DEC.2020 12:00:52

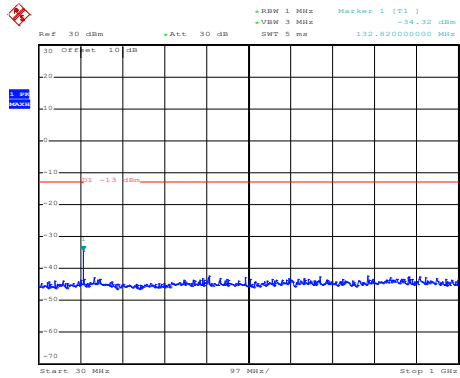
30MHz~1GHz



Date: 11.DEC.2020 14:04:03

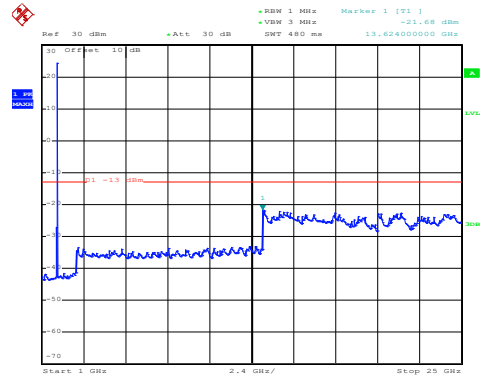
1GHz~25GHz

Middle channel



Date: 11.DEC.2020 12:01:09

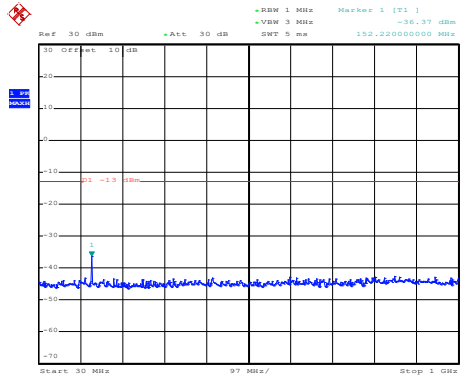
30MHz~1GHz



Date: 11.DEC.2020 14:04:24

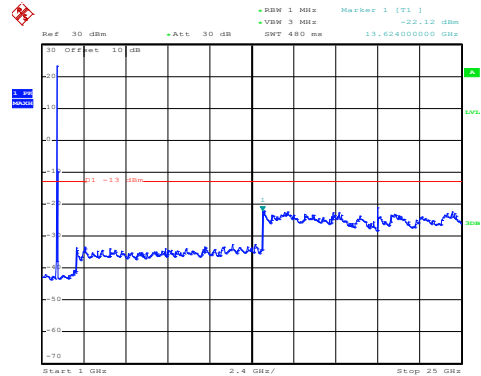
1GHz~25GHz

High channel



Date: 11.DEC.2020 12:01:24

30MHz~1GHz

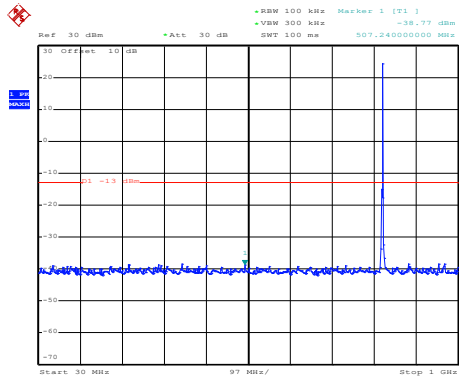


Date: 11.DEC.2020 14:04:45

1GHz~25GHz

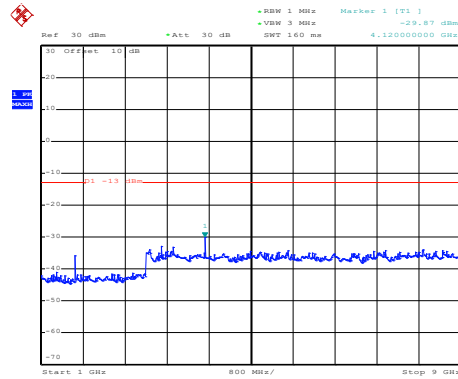
LTE Band 5 part:

LTE Band 5: 16 QAM & RB Size 1
 BW: 1.4MHz
 Lowest channel



Date: 11.DEC.2020 12:03:01

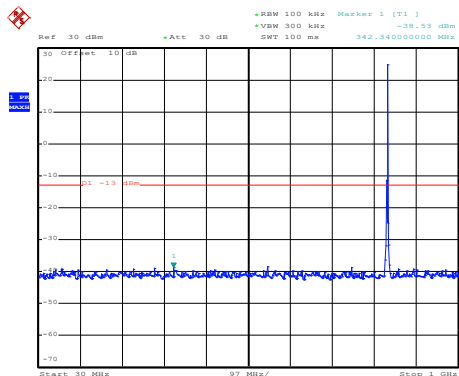
30MHz~1GHz



Date: 11.DEC.2020 14:07:54

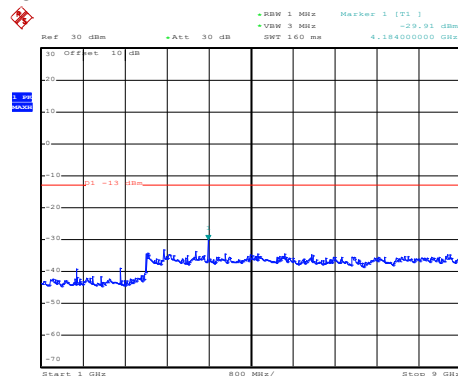
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 12:03:28

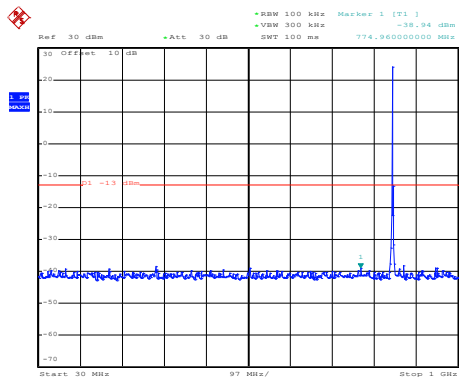
30MHz~1GHz



Date: 11.DEC.2020 14:08:10

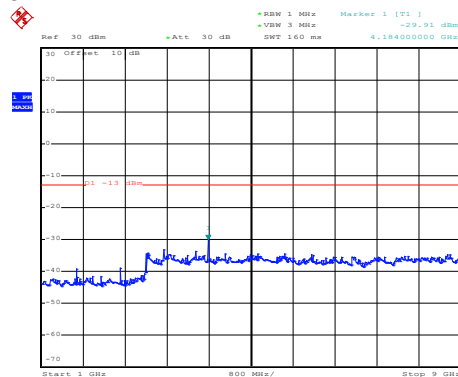
1GHz~9GHz

High channel



Date: 11.DEC.2020 12:03:51

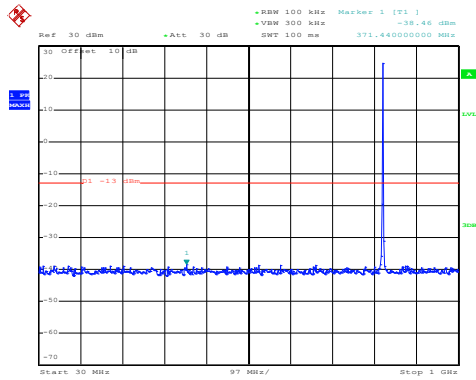
30MHz~1GHz



Date: 11.DEC.2020 14:08:10

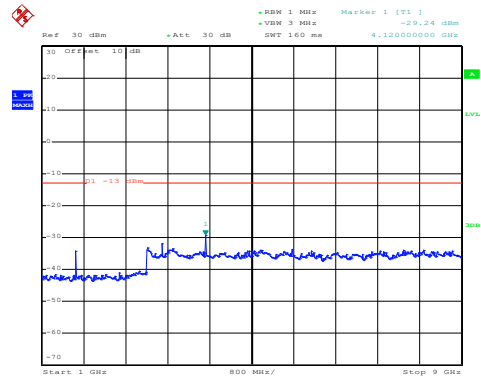
1GHz~9GHz

LTE Band 5: QPSK & RB Size 1 BW: 1.4MHz Lowest channel



Date: 11.DEC.2020 12:02:44

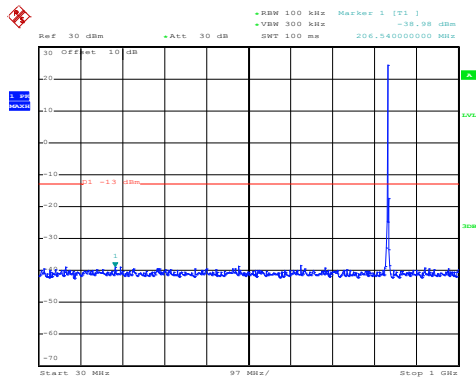
30MHz~1GHz



Date: 11.DEC.2020 14:07:48

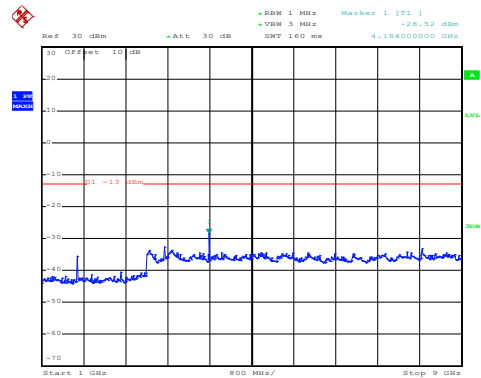
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 12:03:18

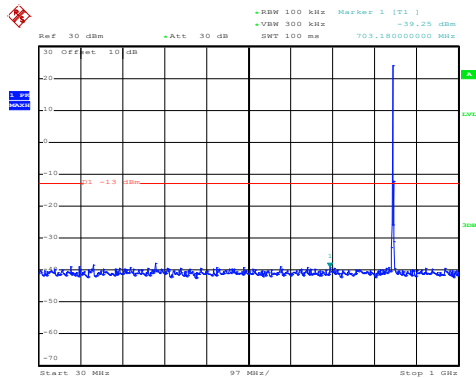
30MHz~1GHz



Date: 11.DEC.2020 14:08:06

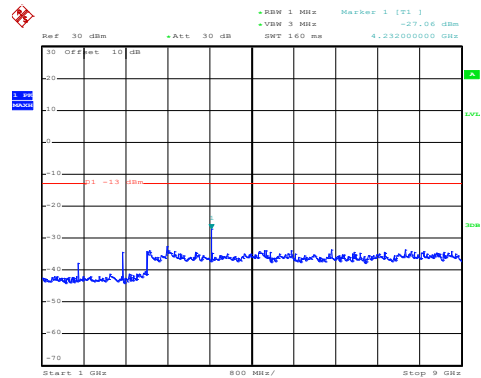
1GHz~9GHz

High channel



Date: 11.DEC.2020 12:03:44

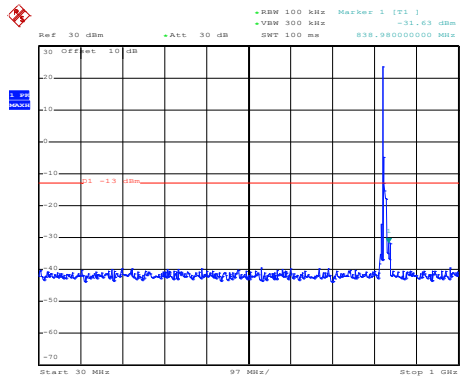
30MHz~1GHz



Date: 11.DEC.2020 14:08:22

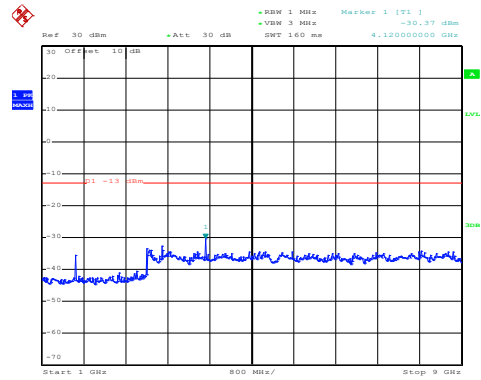
1GHz~9GHz

LTE Band 5: 16 QAM & RB Size 1 BW: 10MHz Lowest channel



Date: 11.DEC.2020 12:04:26

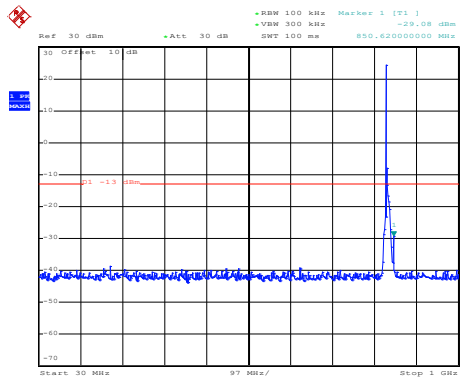
30MHz~1GHz



Date: 11.DEC.2020 14:08:57

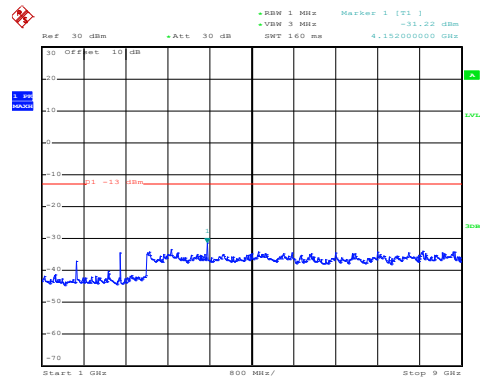
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 12:04:45

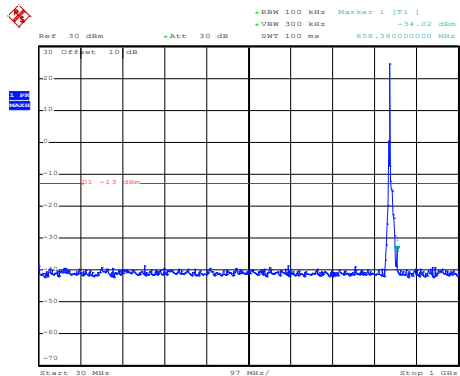
30MHz~1GHz



Date: 11.DEC.2020 14:09:14

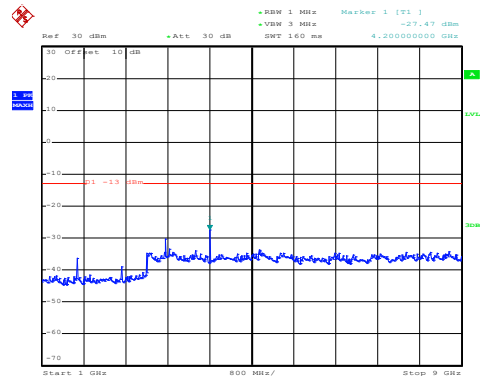
1GHz~9GHz

High channel



Date: 11.DEC.2020 12:05:10

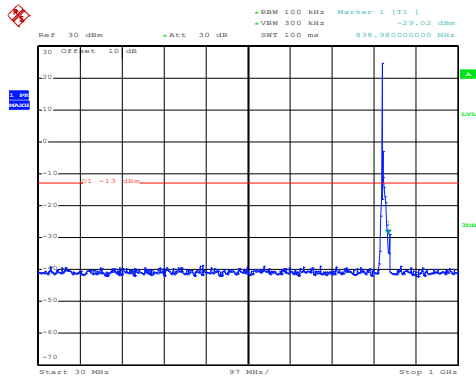
30MHz~1GHz



Date: 11.DEC.2020 14:09:32

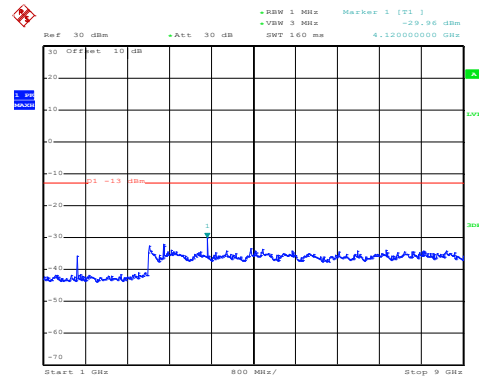
1GHz~9GHz

LTE Band 5: QPSK & RB Size 1 BW: 10MHz Lowest channel



Date: 11.DEC.2020 12:04:22

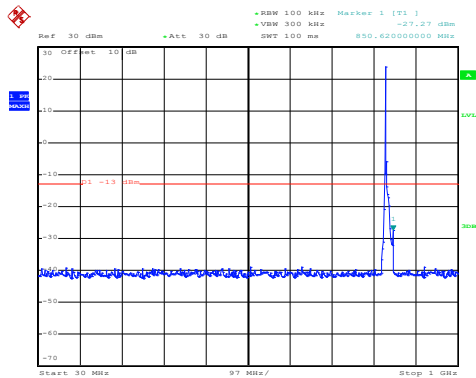
30MHz~1GHz



Date: 11.DEC.2020 14:08:52

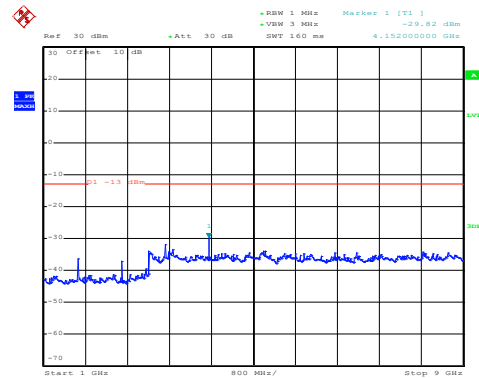
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 12:04:41

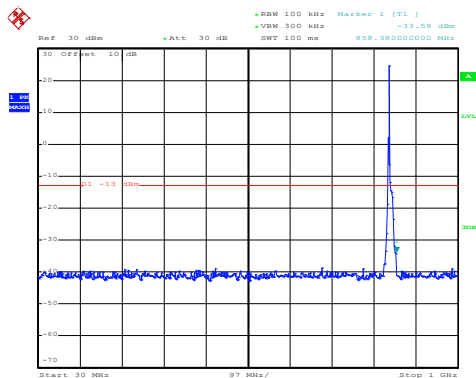
30MHz~1GHz



Date: 11.DEC.2020 14:09:09

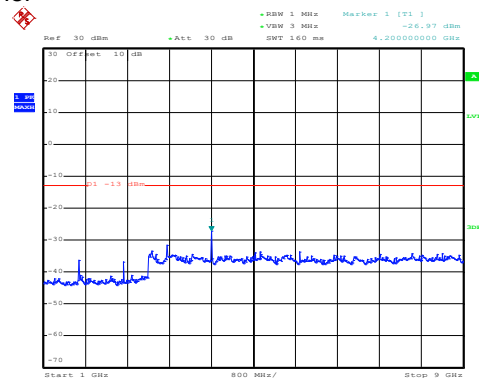
1GHz~9GHz

High channel



Date: 11.DEC.2020 12:04:58

30MHz~1GHz

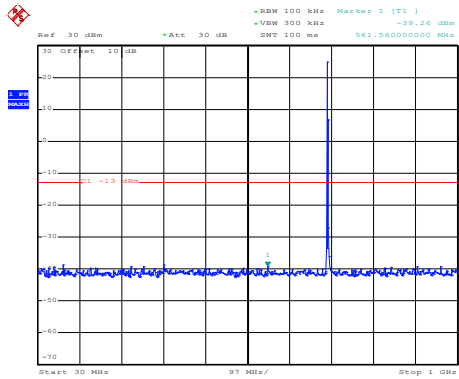


Date: 11.DEC.2020 14:09:26

1GHz~9GHz

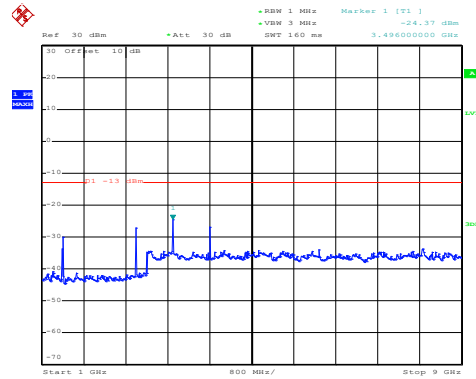
LTE Band 12 part:

LTE Band 12: 16 QAM & RB Size 1
 BW: 1.4MHz
 Lowest channel



Date: 11.DEC.2020 13:48:59

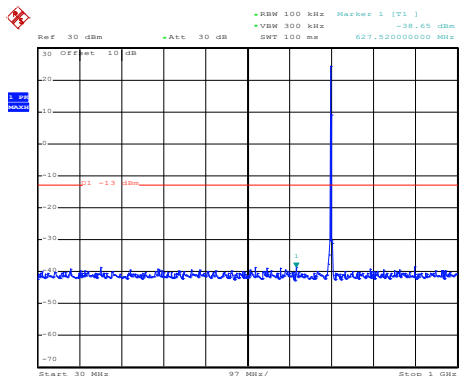
30MHz~1GHz



Date: 11.DEC.2020 14:10:24

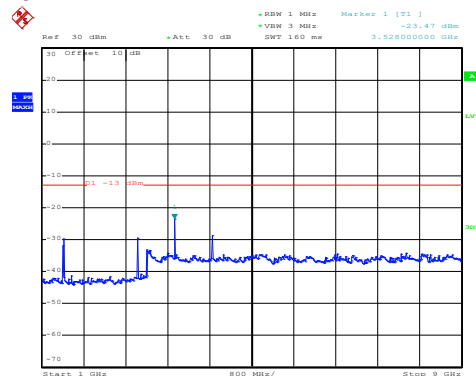
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:49:22

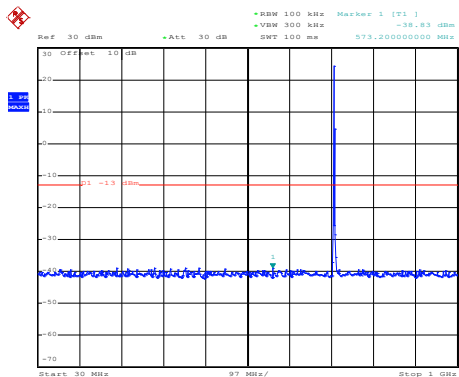
30MHz~1GHz



Date: 11.DEC.2020 14:11:21

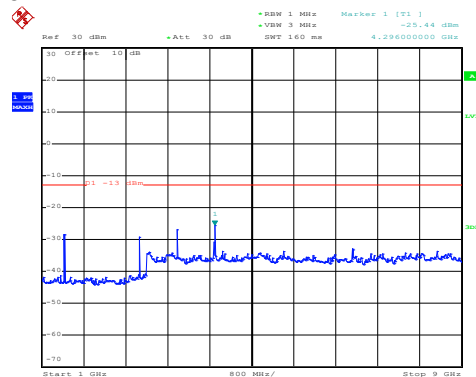
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:49:50

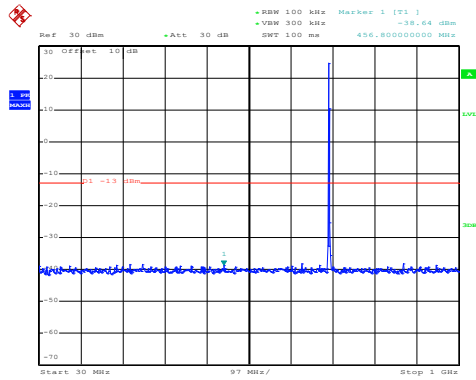
30MHz~1GHz



Date: 11.DEC.2020 14:12:00

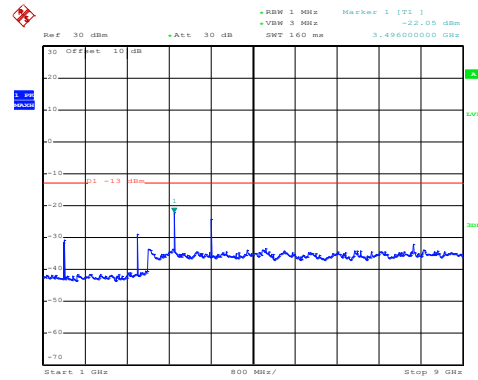
1GHz~9GHz

LTE Band 12: QPSK & RB Size 1 BW: 1.4MHz Lowest channel



Date: 11.DEC.2020 13:48:51

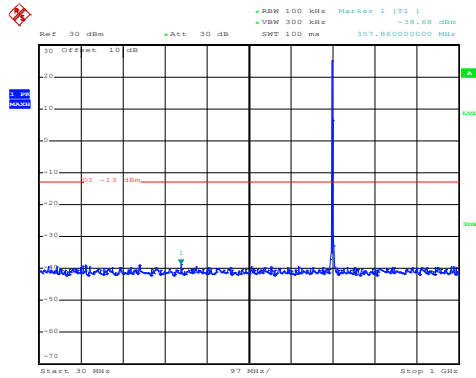
30MHz~1GHz



Date: 11.DEC.2020 14:10:16

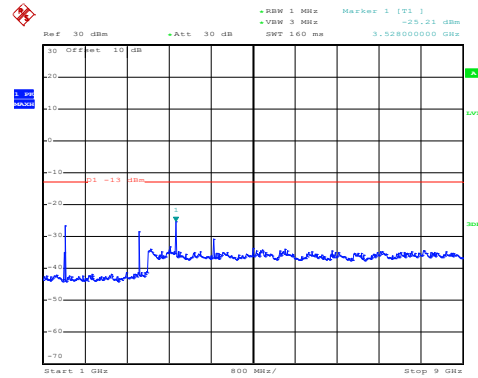
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:49:15

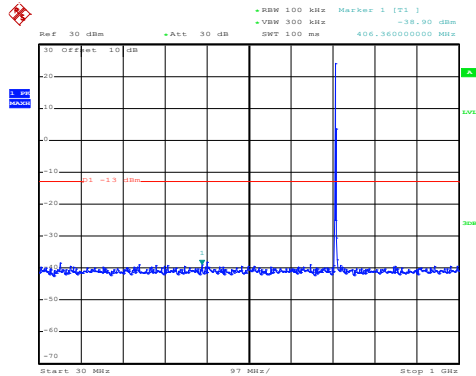
30MHz~1GHz



Date: 11.DEC.2020 14:11:13

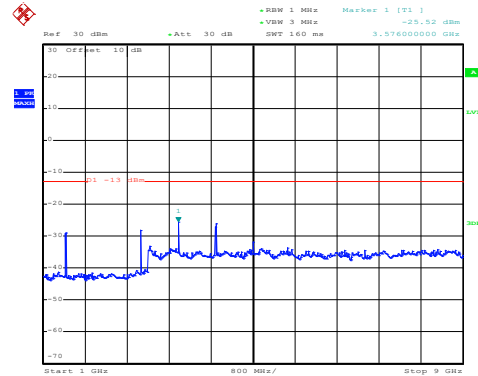
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:49:37

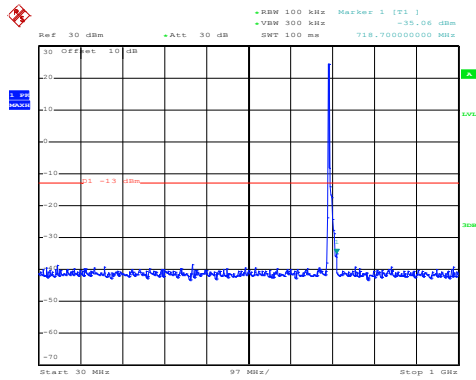
30MHz~1GHz



Date: 11.DEC.2020 14:11:42

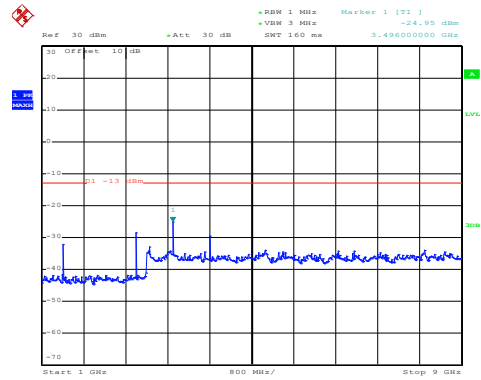
1GHz~9GHz

LTE Band 12: 16 QAM & RB Size 1 BW: 10MHz Lowest channel



Date: 11.DEC.2020 13:50:33

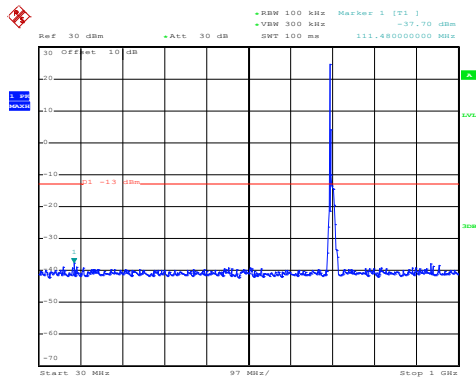
30MHz~1GHz



Date: 11.DEC.2020 14:12:43

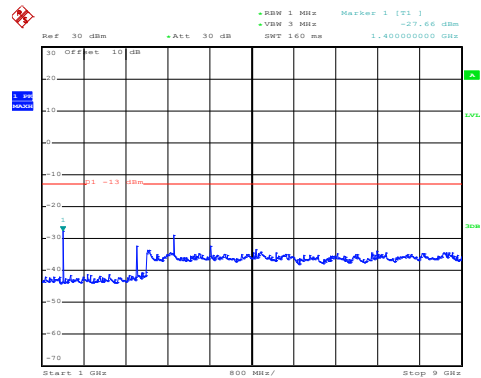
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:51:06

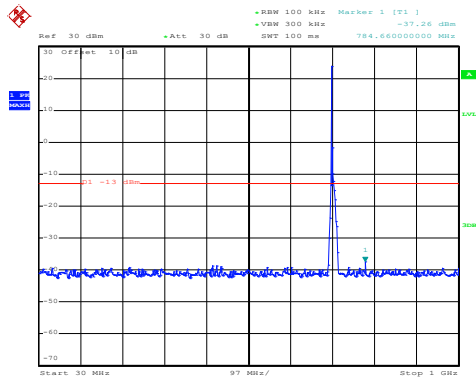
30MHz~1GHz



Date: 11.DEC.2020 14:13:02

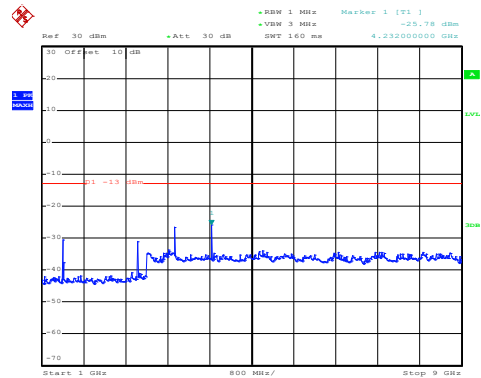
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:51:30

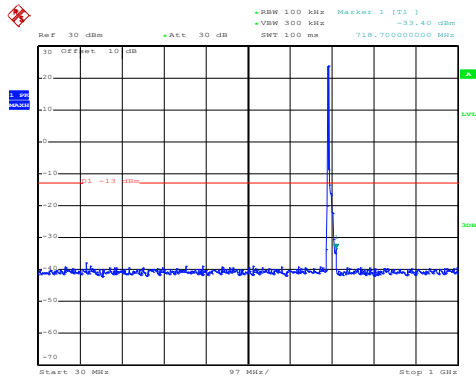
30MHz~1GHz



Date: 11.DEC.2020 14:13:20

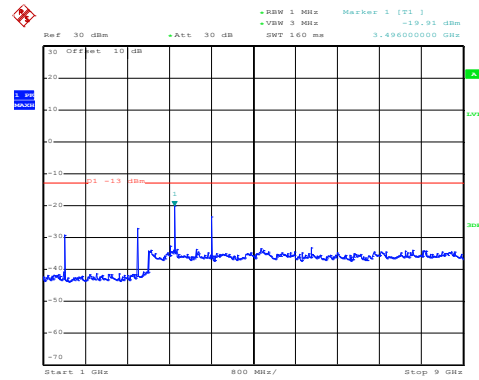
1GHz~9GHz

LTE Band 12: QPSK & RB Size 1 BW: 10MHz Lowest channel



Date: 11.DEC.2020 13:50:25

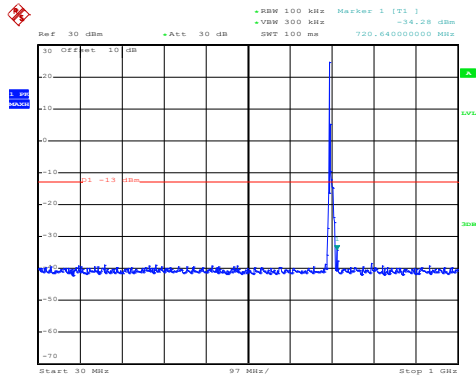
30MHz~1GHz



Date: 11.DEC.2020 14:12:37

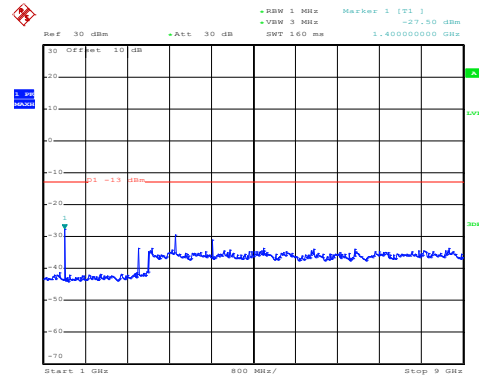
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:50:51

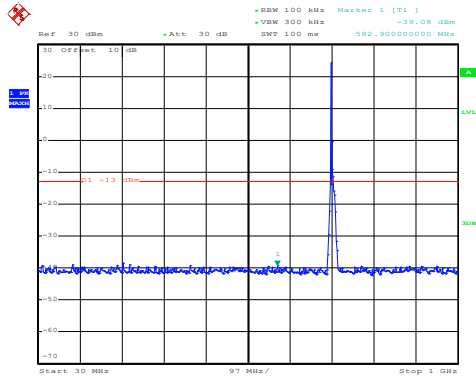
30MHz~1GHz



Date: 11.DEC.2020 14:12:55

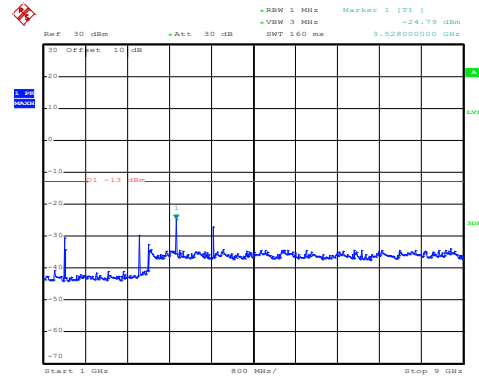
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:51:22

30MHz~1GHz

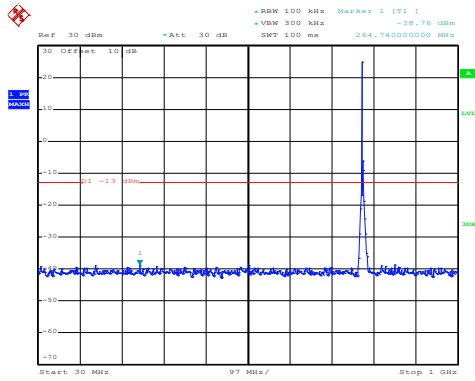


Date: 11.DEC.2020 14:13:14

1GHz~9GHz

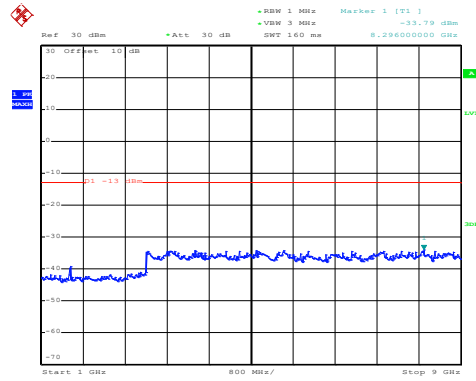
LTE Band 13 part:

LTE Band 13: 16 QAM & RB Size 1
 BW: 5MHz
 Lowest channel



Date: 11.DEC.2020 13:55:17

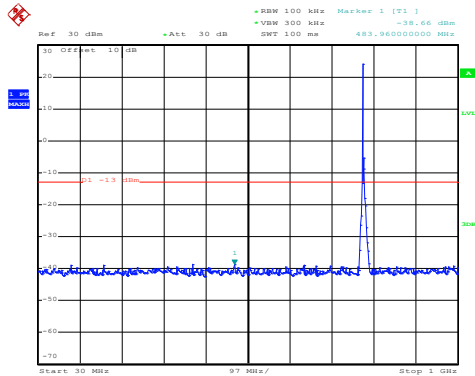
30MHz~1GHz



Date: 11.DEC.2020 14:18:54

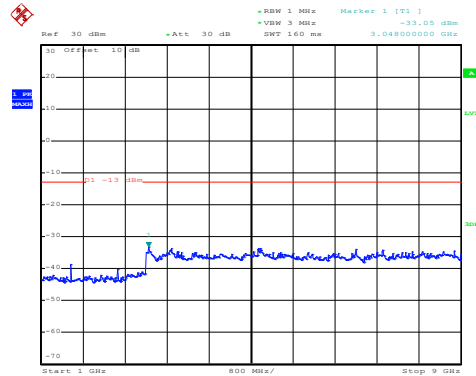
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:55:43

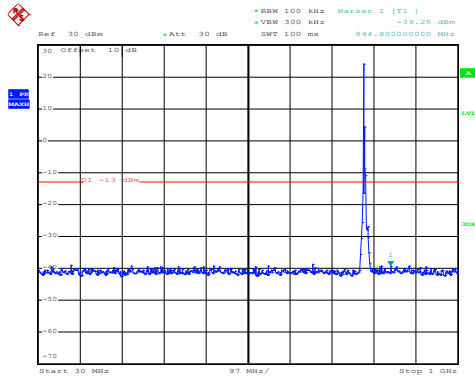
30MHz~1GHz



Date: 11.DEC.2020 14:19:19

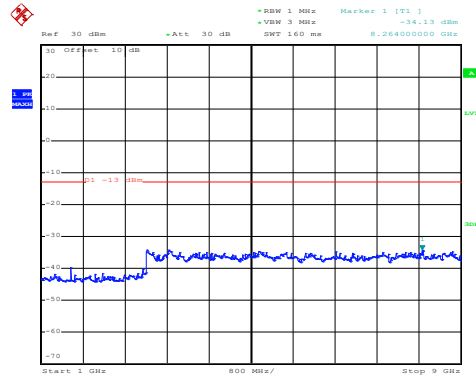
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:56:07

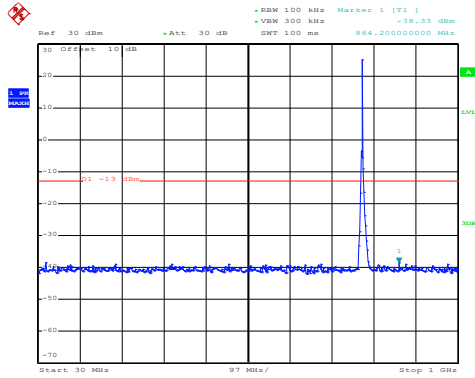
30MHz~1GHz



Date: 11.DEC.2020 14:20:10

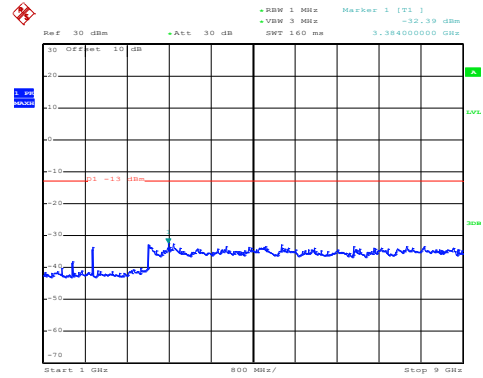
1GHz~9GHz

LTE Band 13: QPSK & RB Size 1 BW: 5MHz Lowest channel



Date: 11.DEC.2020 13:55:06

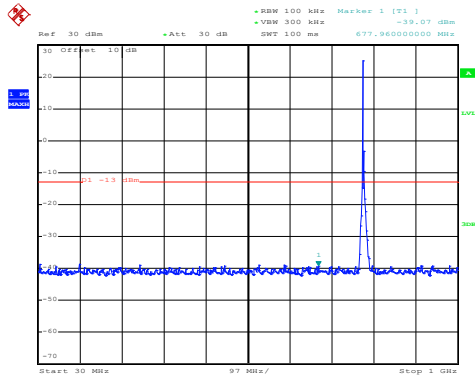
30MHz~1GHz



Date: 11.DEC.2020 14:18:46

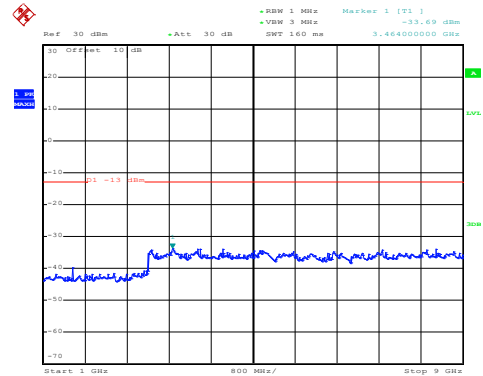
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:55:32

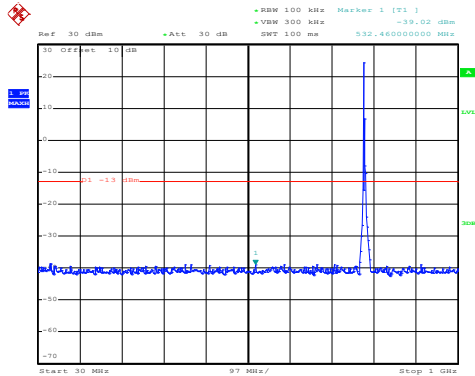
30MHz~1GHz



Date: 11.DEC.2020 14:19:12

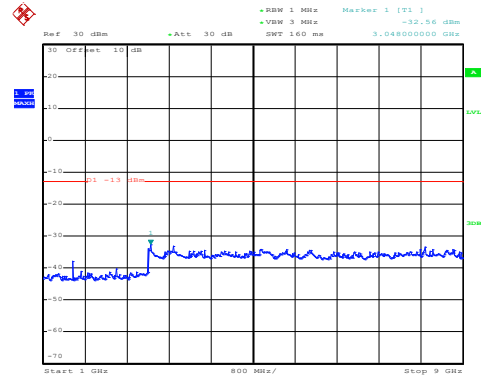
1GHz~9GHz

High channel



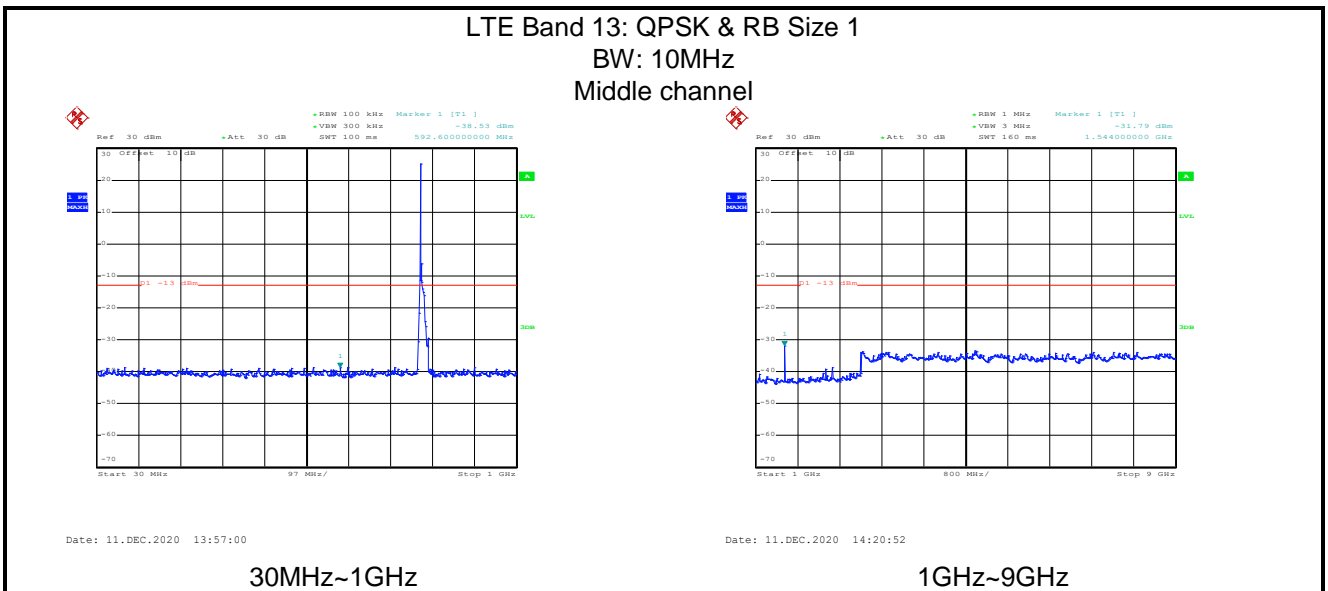
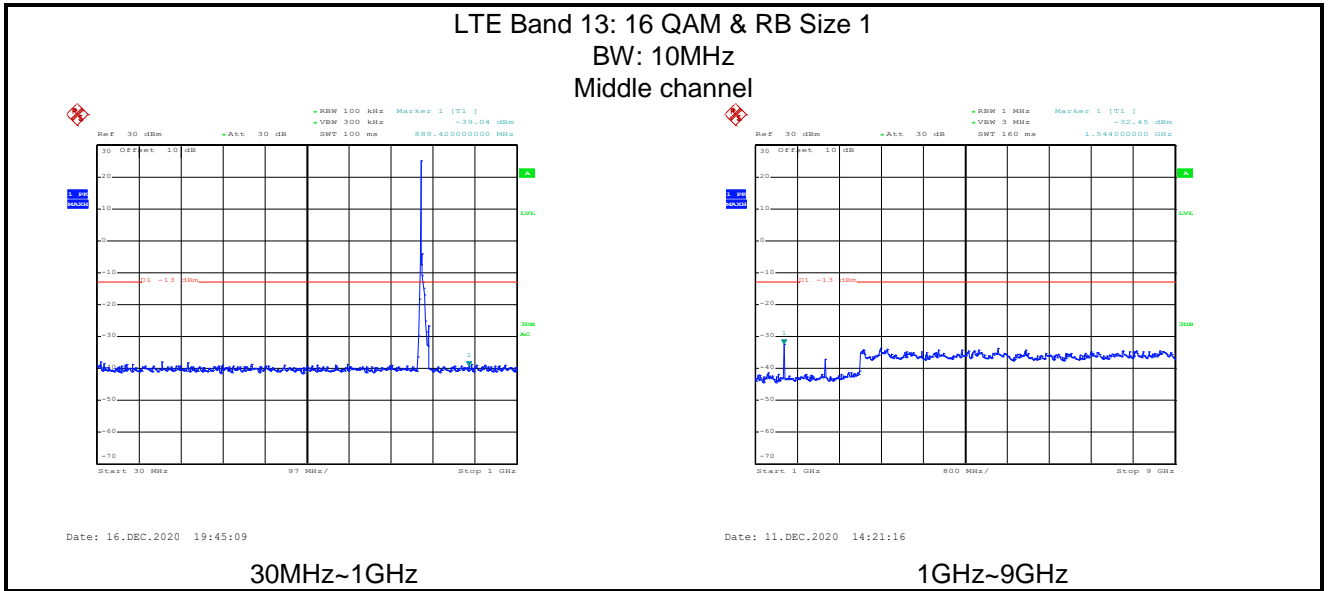
Date: 11.DEC.2020 13:55:58

30MHz~1GHz



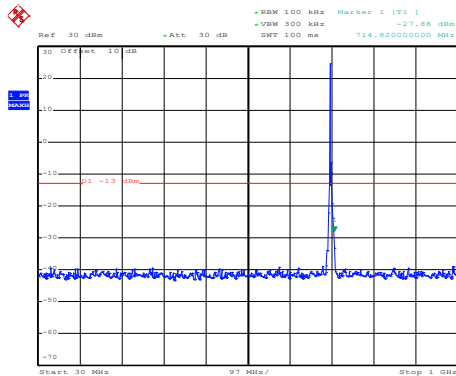
Date: 11.DEC.2020 14:20:04

1GHz~9GHz



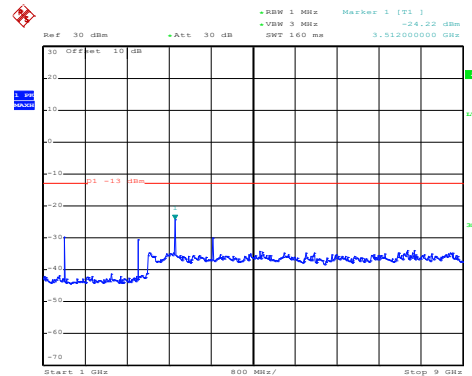
LTE Band 17 part:

LTE Band 17: 16 QAM & RB Size 1
 BW: 5MHz
 Lowest channel



Date: 11.DEC.2020 13:52:20

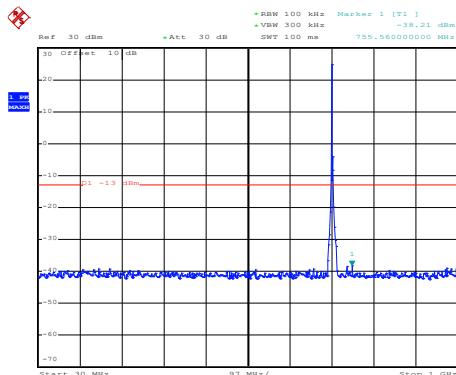
30MHz~1GHz



Date: 11.DEC.2020 14:13:51

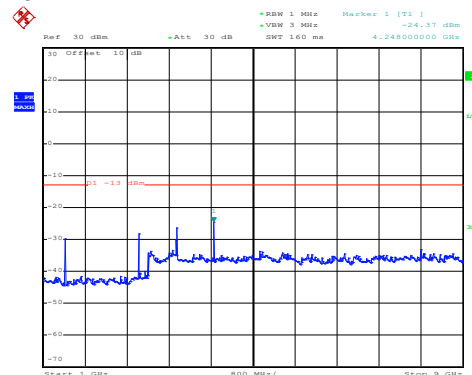
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:52:48

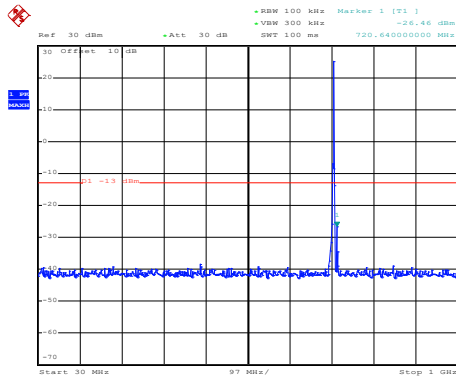
30MHz~1GHz



Date: 11.DEC.2020 14:14:10

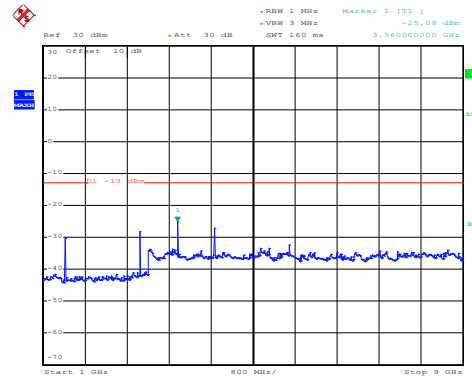
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:53:09

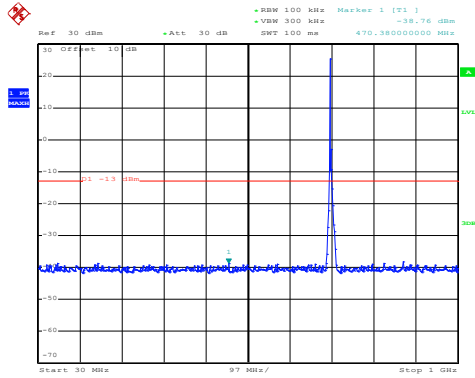
30MHz~1GHz



Date: 11.DEC.2020 14:14:37

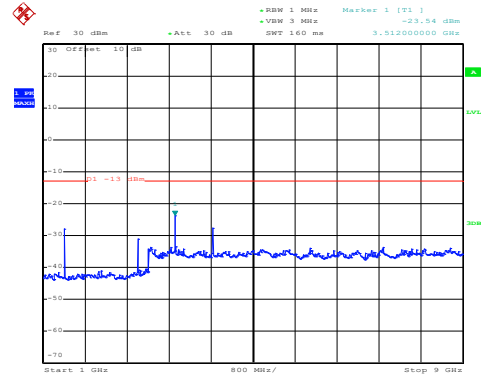
1GHz~9GHz

LTE Band 17: QPSK & RB Size 1 BW: 5MHz Lowest channel



Date: 11.DEC.2020 13:52:14

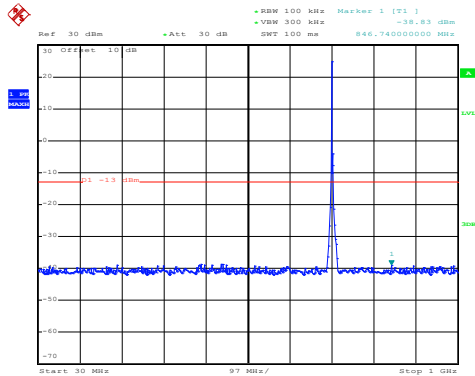
30MHz~1GHz



Date: 11.DEC.2020 14:13:46

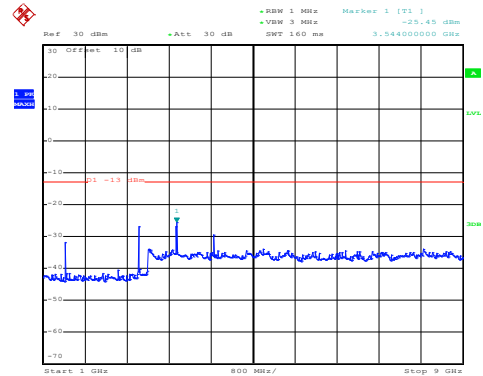
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:52:37

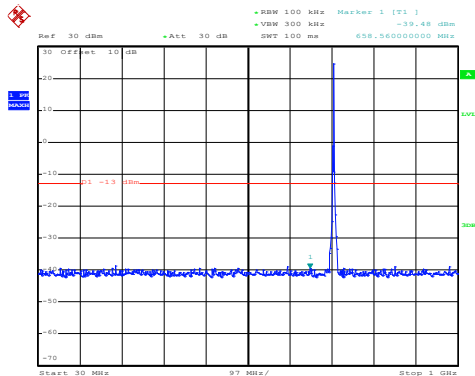
30MHz~1GHz



Date: 11.DEC.2020 14:14:01

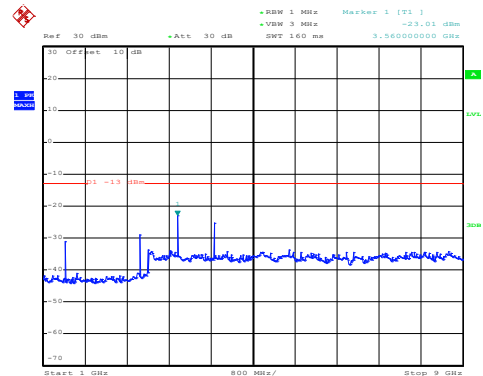
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:53:02

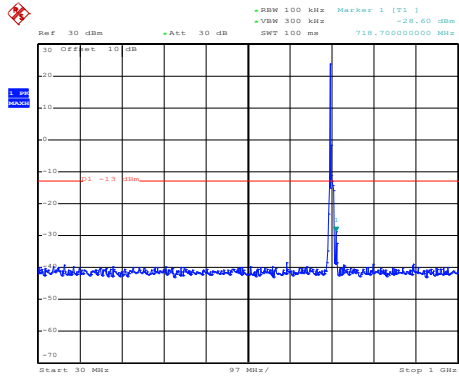
30MHz~1GHz



Date: 11.DEC.2020 14:14:27

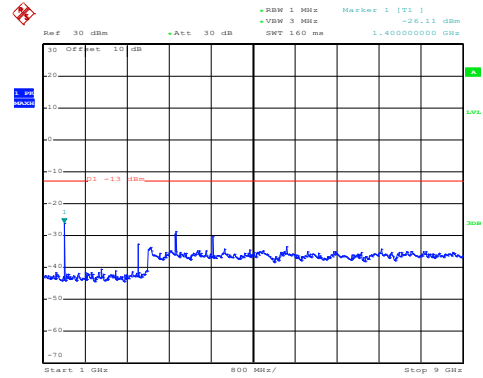
1GHz~9GHz

LTE Band 17: 16 QAM & RB Size 1 BW: 10MHz Lowest channel



Date: 11.DEC.2020 13:53:38

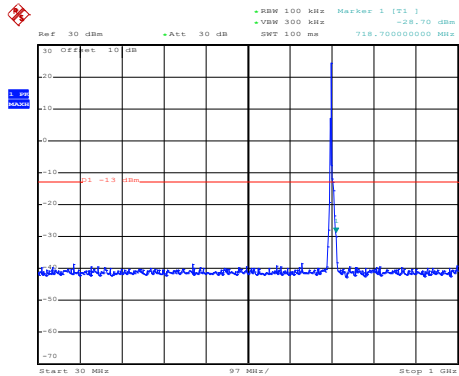
30MHz~1GHz



Date: 11.DEC.2020 14:15:21

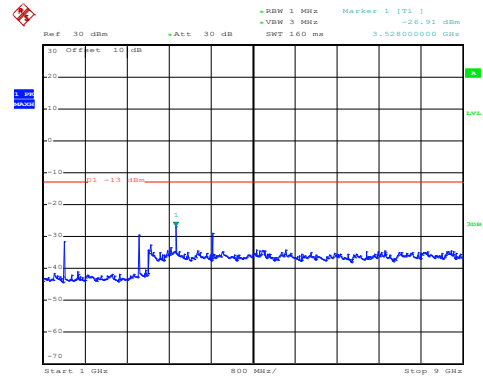
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:54:01

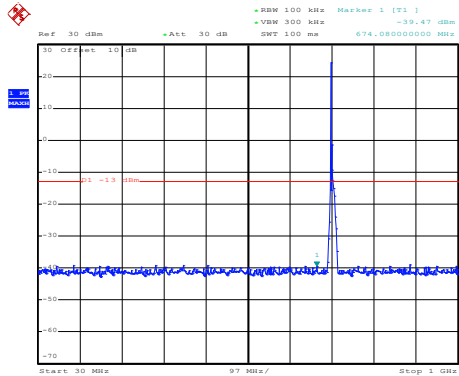
30MHz~1GHz



Date: 11.DEC.2020 14:15:40

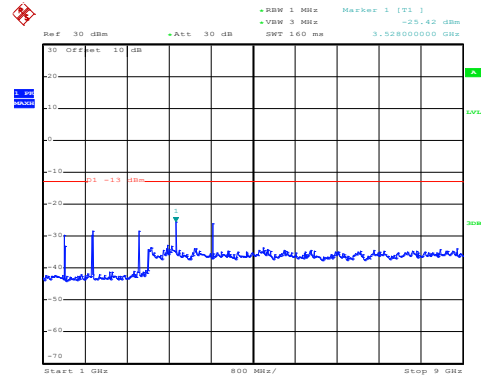
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:54:24

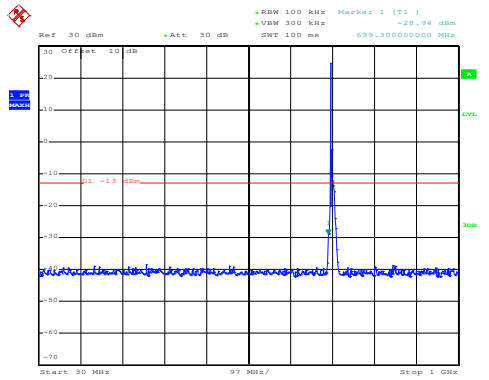
30MHz~1GHz



Date: 11.DEC.2020 14:16:07

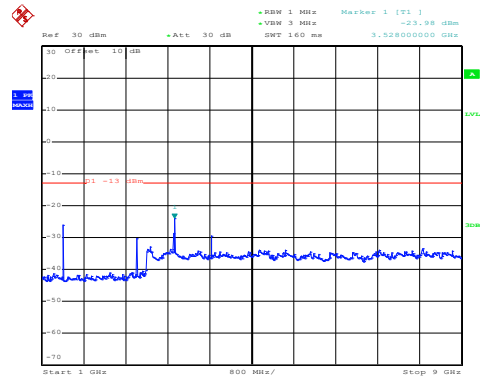
1GHz~9GHz

LTE Band 17: QPSK & RB Size 1 BW: 10MHz Lowest channel



Date: 11.DEC.2020 13:53:33

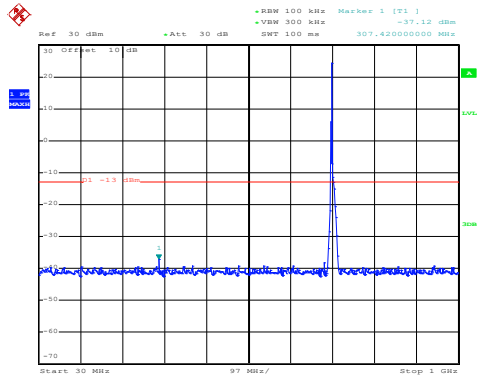
30MHz~1GHz



Date: 11.DEC.2020 14:15:14

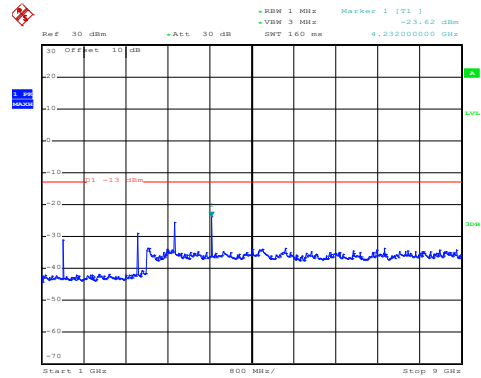
1GHz~9GHz

Middle channel



Date: 11.DEC.2020 13:53:53

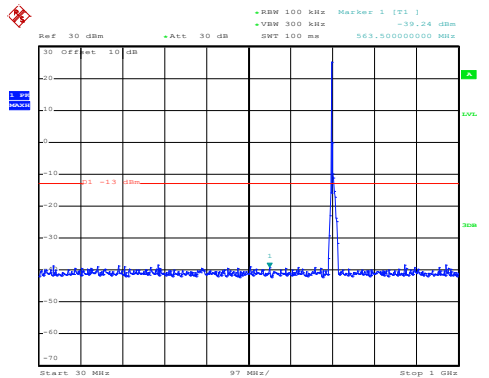
30MHz~1GHz



Date: 11.DEC.2020 14:15:33

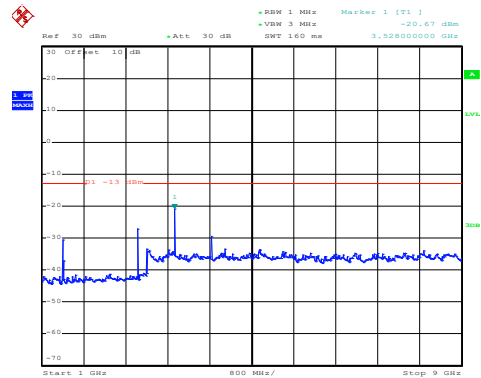
1GHz~9GHz

High channel



Date: 11.DEC.2020 13:54:15

30MHz~1GHz

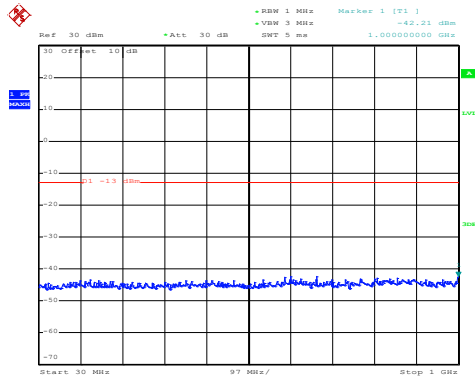


Date: 11.DEC.2020 14:15:52

1GHz~9GHz

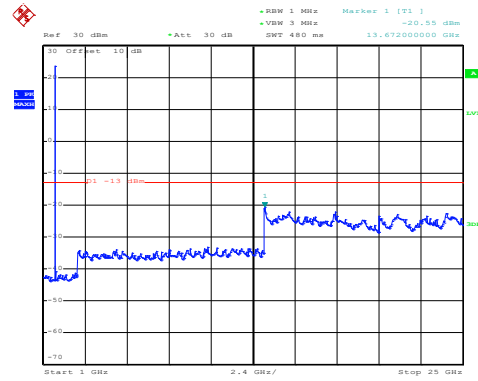
LTE Band 66 part:

LTE Band 66: 16 QAM & RB Size 1
 BW: 1.4MHz
 Lowest channel



Date: 23.DEC.2020 14:00:57

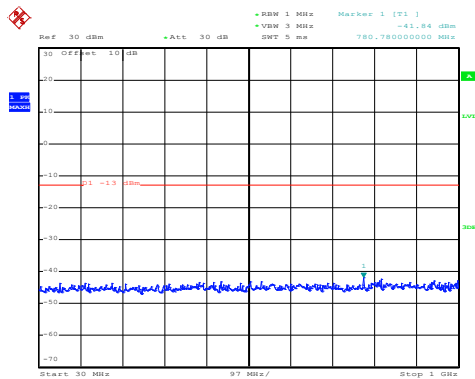
30MHz~1GHz



Date: 23.DEC.2020 13:59:00

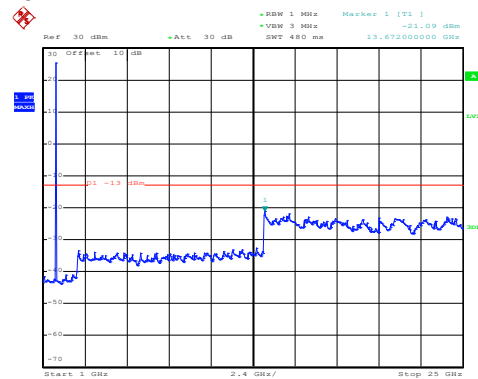
1GHz~25GHz

Middle channel



Date: 23.DEC.2020 14:00:37

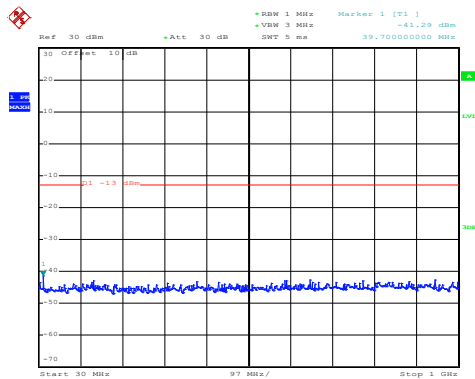
30MHz~1GHz



Date: 23.DEC.2020 13:59:29

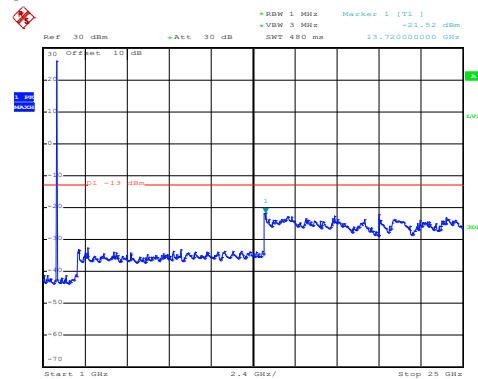
1GHz~25GHz

High channel



Date: 23.DEC.2020 14:00:19

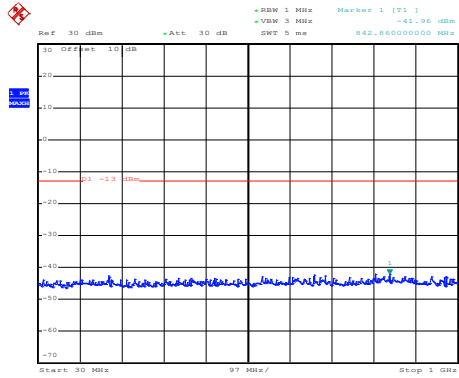
30MHz~1GHz



Date: 23.DEC.2020 13:59:53

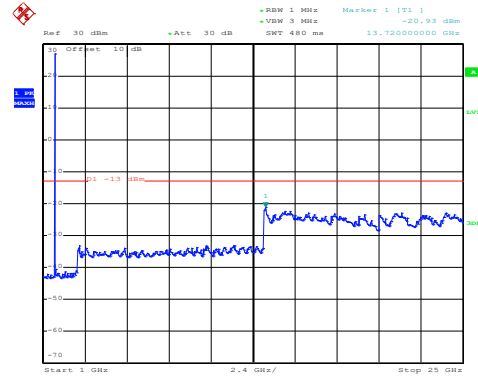
1GHz~25GHz

LTE Band 66: QPSK & RB Size 1 BW: 1.4MHz Lowest channel



Date: 23.DEC.2020 14:00:51

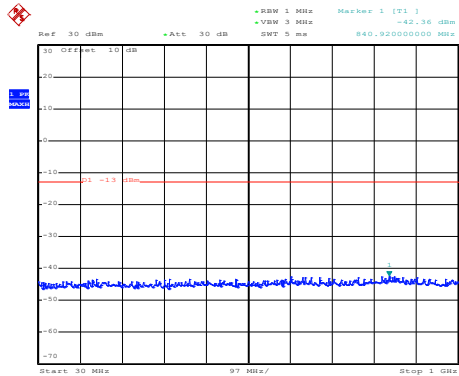
30MHz~1GHz



Date: 23.DEC.2020 13:58:52

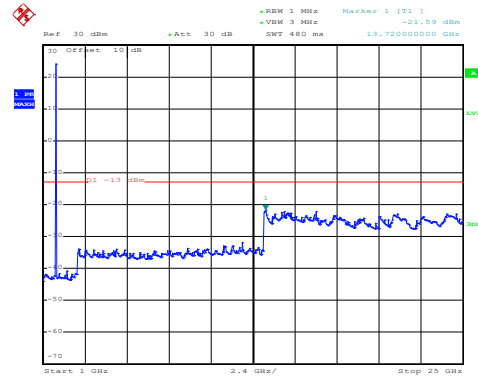
1GHz~25GHz

Middle channel



Date: 23.DEC.2020 14:00:32

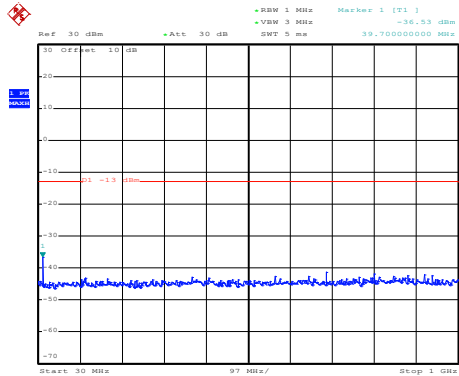
30MHz~1GHz



Date: 23.DEC.2020 13:59:17

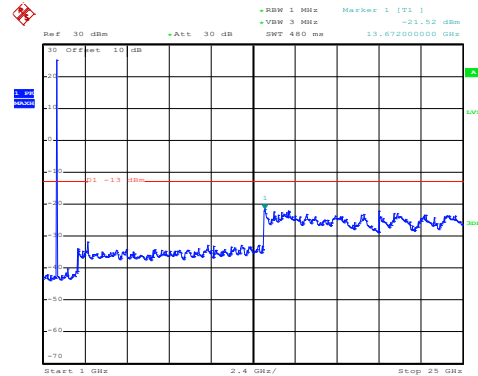
1GHz~25GHz

High channel



Date: 23.DEC.2020 14:00:11

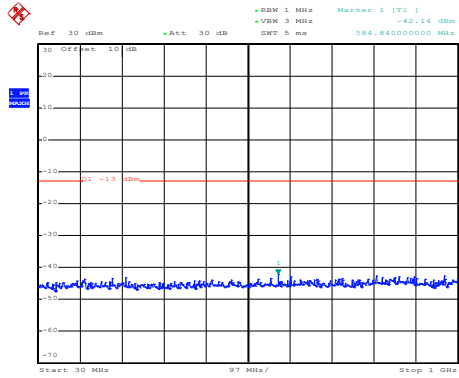
30MHz~1GHz



Date: 23.DEC.2020 13:59:44

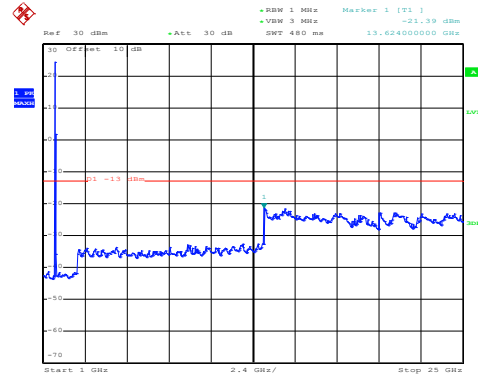
1GHz~25GHz

LTE Band 66: 16 QAM & RB Size 1 BW: 20MHz Lowest channel



Date: 23.DEC.2020 13:56:23

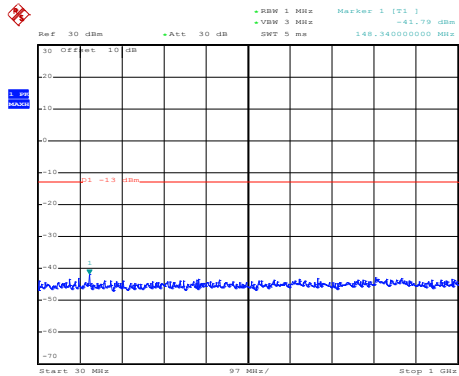
30MHz~1GHz



Date: 23.DEC.2020 13:58:21

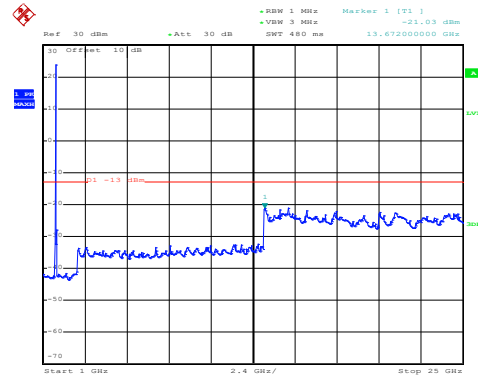
1GHz~25GHz

Middle channel



Date: 23.DEC.2020 13:56:38

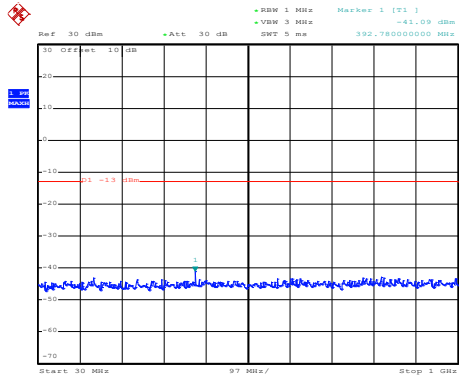
30MHz~1GHz



Date: 23.DEC.2020 13:57:50

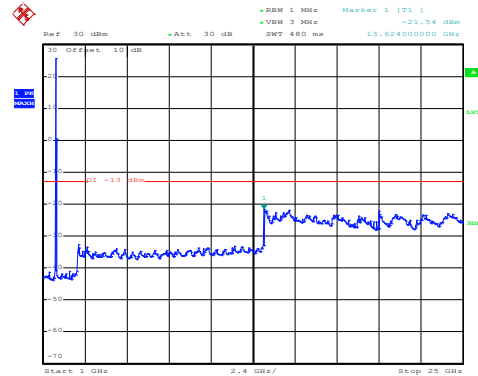
1GHz~25GHz

High channel



Date: 23.DEC.2020 13:56:53

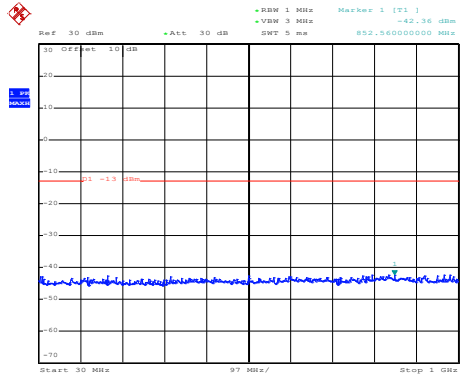
30MHz~1GHz



Date: 23.DEC.2020 13:57:17

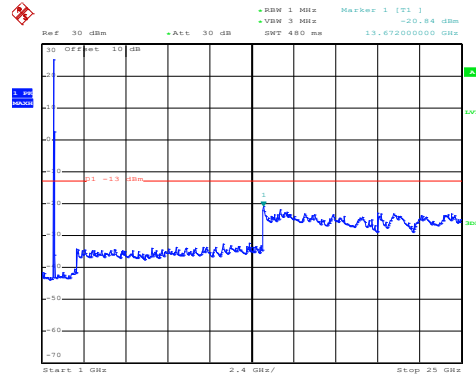
1GHz~25GHz

LTE Band 66: QPSK & RB Size 1 BW: 20MHz Lowest channel



Date: 23.DEC.2020 13:56:18

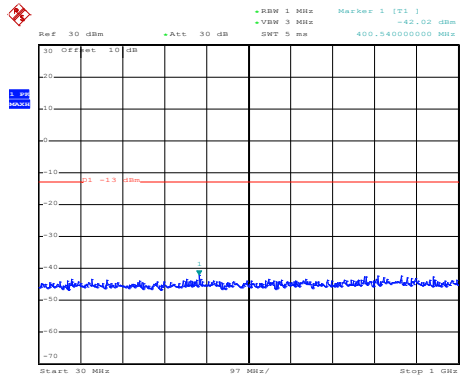
30MHz~1GHz



Date: 23.DEC.2020 13:58:04

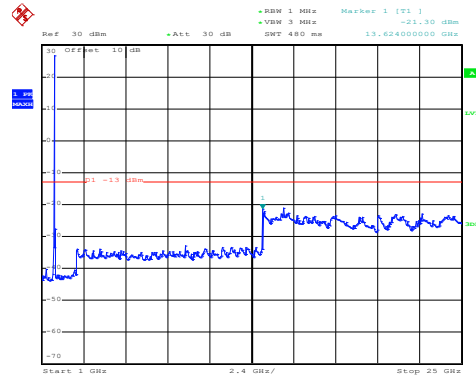
1GHz~25GHz

Middle channel



Date: 23.DEC.2020 13:56:34

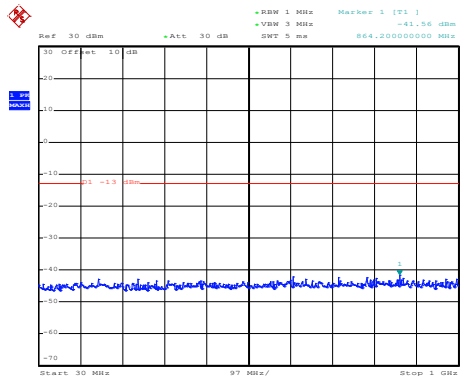
30MHz~1GHz



Date: 23.DEC.2020 13:57:31

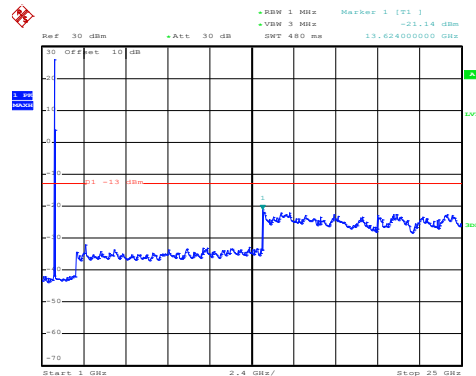
1GHz~25GHz

High channel



Date: 23.DEC.2020 13:56:49

30MHz~1GHz

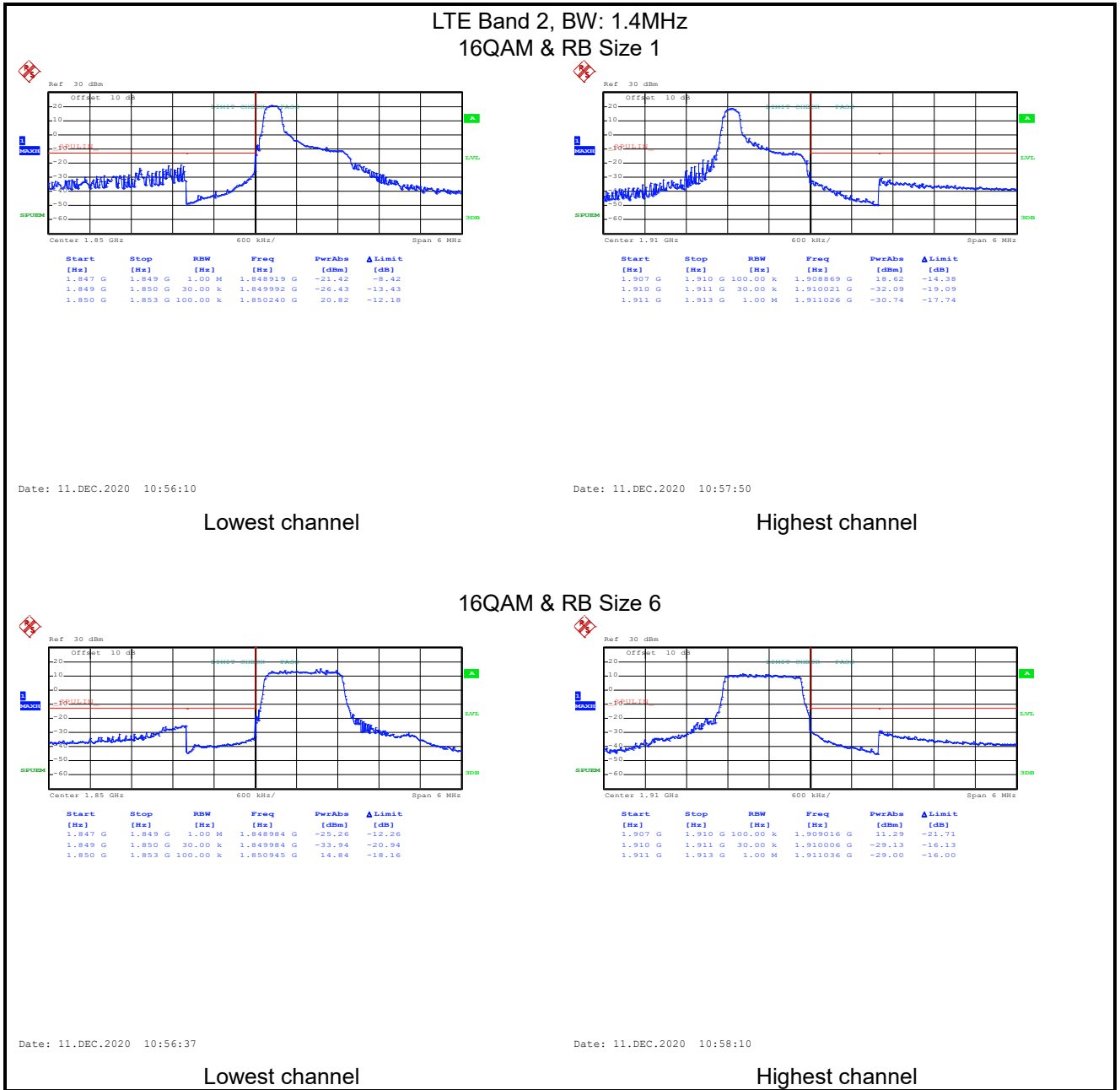


Date: 23.DEC.2020 13:57:05

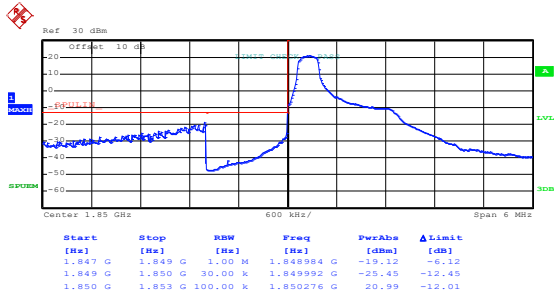
1GHz~25GHz

Band edge emission:

LTE Band 2 part:

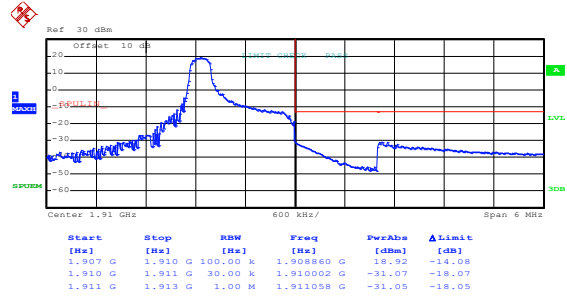


LTE Band 2, BW: 1.4MHz QPSK & RB Size 1



Date: 11.DEC.2020 10:55:55

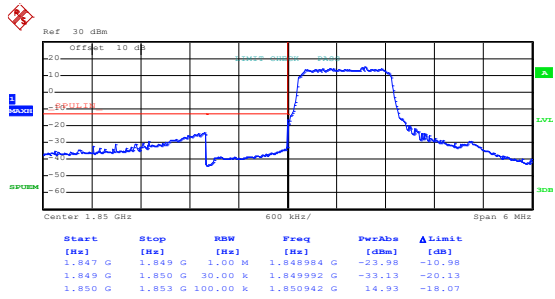
Lowest channel



Date: 11.DEC.2020 10:57:42

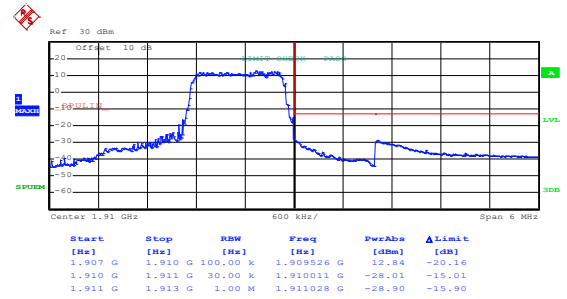
Highest channel

QPSK & RB Size 6



Date: 11.DEC.2020 10:56:29

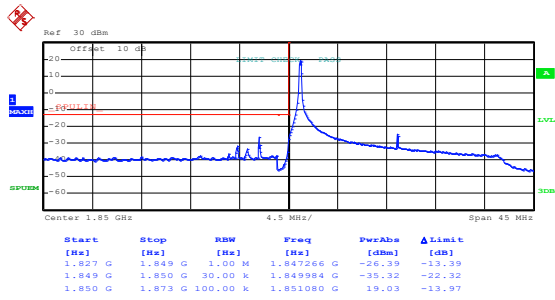
Lowest channel



Date: 11.DEC.2020 10:57:59

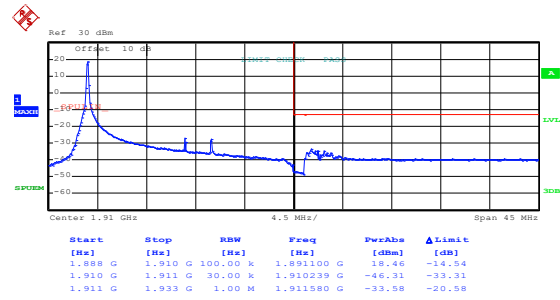
Highest channel

LTE Band 2, BW: 20MHz 16QAM & RB Size 1



Date: 11.DEC.2020 10:59:01

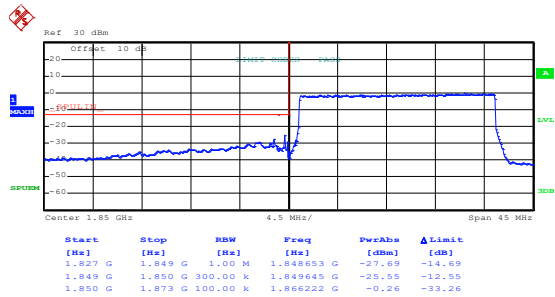
Lowest channel



Date: 11.DEC.2020 11:01:12

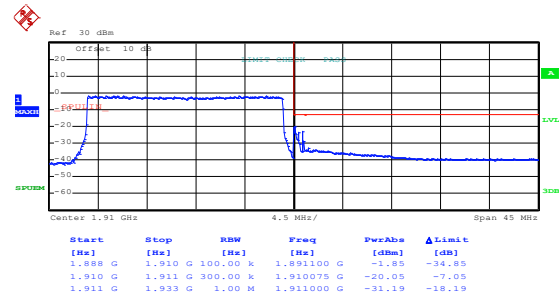
Highest channel

16QAM & RB Size 100



Date: 11.DEC.2020 11:00:24

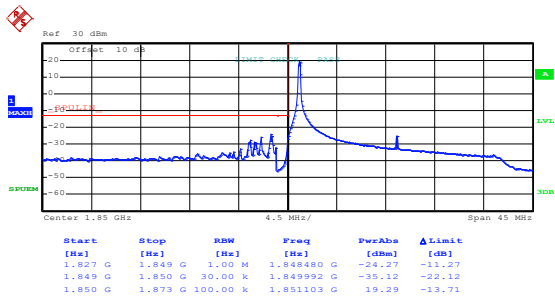
Lowest channel



Date: 11.DEC.2020 11:07:20

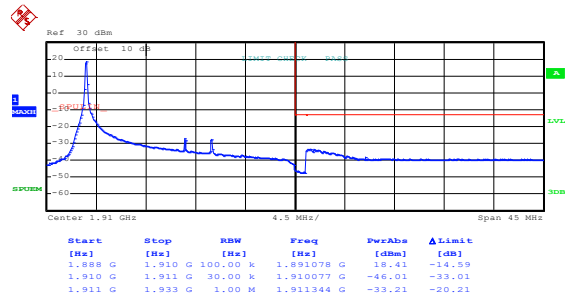
Highest channel

LTE Band 2, BW: 20MHz QPSK & RB Size 1



Date: 11.DEC.2020 10:58:55

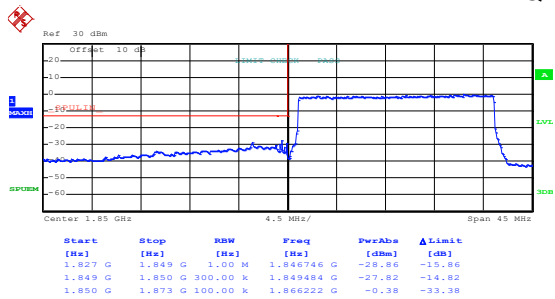
Lowest channel



Date: 11.DEC.2020 11:01:06

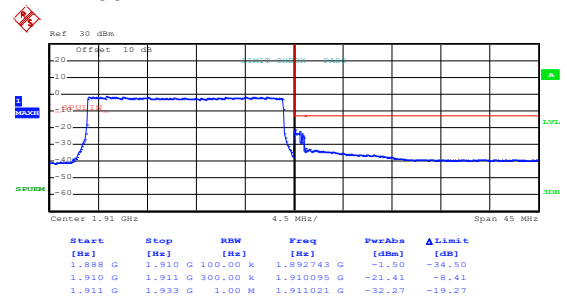
Highest channel

QPSK & RB Size 100



Date: 11.DEC.2020 11:00:18

Lowest channel

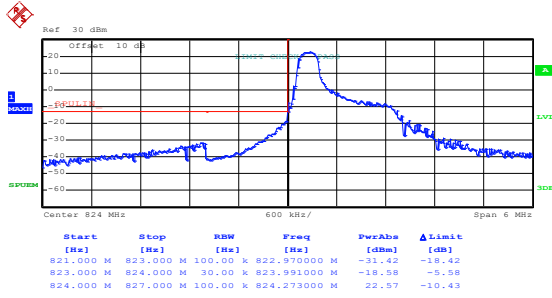


Date: 11.DEC.2020 11:02:05

Highest channel

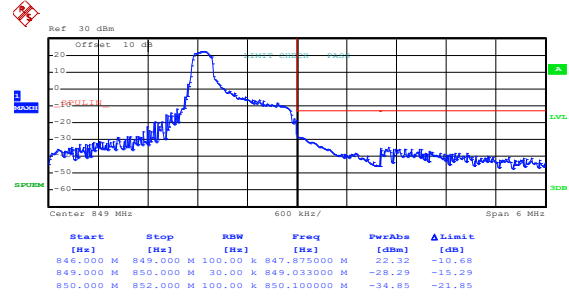
LTE Band 5 part:

LTE Band 5, BW: 1.4MHz
16QAM & RB Size 1



Date: 11.DEC.2020 11:12:44

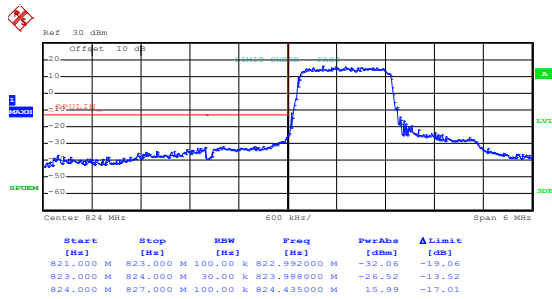
Lowest channel



Date: 11.DEC.2020 11:13:34

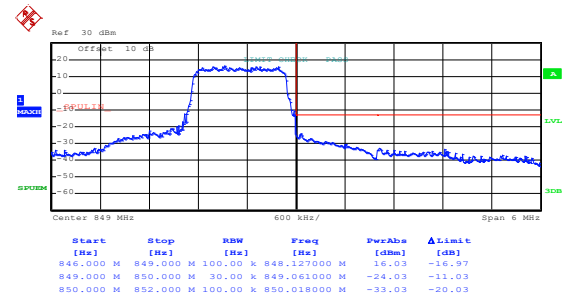
Highest channel

16QAM & RB Size 6



Date: 11.DEC.2020 11:12:57

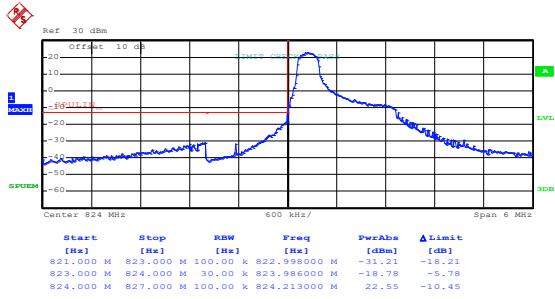
Lowest channel



Date: 11.DEC.2020 11:13:54

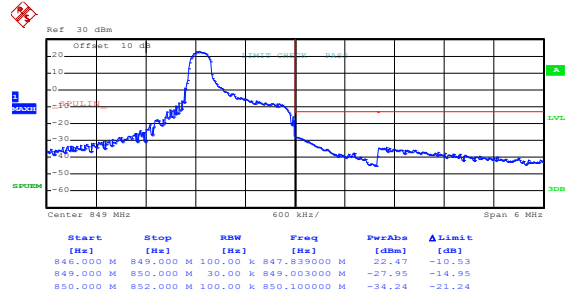
Highest channel

LTE Band 5, BW: 1.4MHz QPSK & RB Size 1



Date: 11.DEC.2020 11:12:36

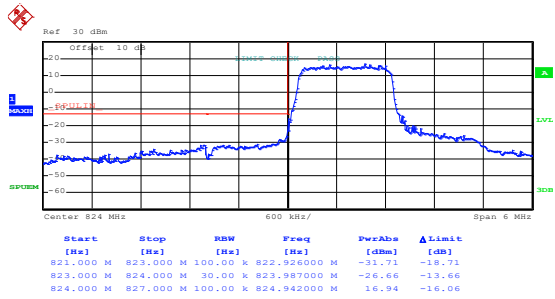
Lowest channel



Date: 11.DEC.2020 11:13:23

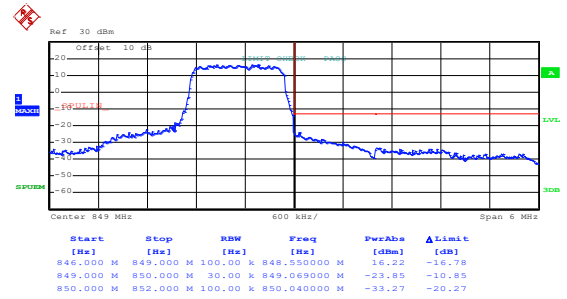
Highest channel

QPSK & RB Size 6



Date: 11.DEC.2020 11:12:53

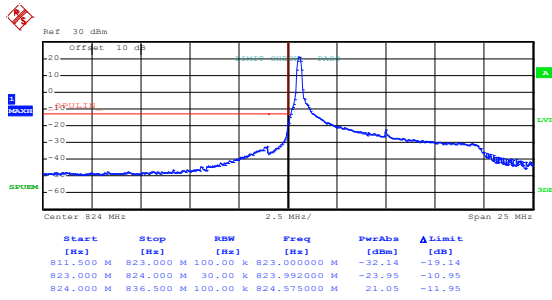
Lowest channel



Date: 11.DEC.2020 11:13:48

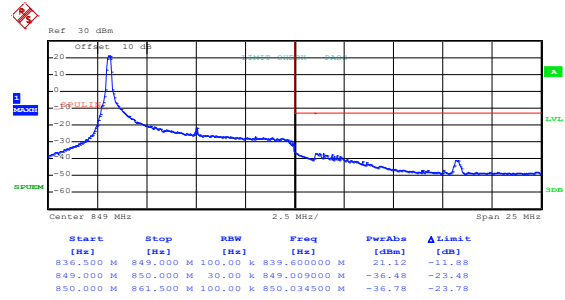
Highest channel

LTE Band 5, BW: 10MHz 16QAM & RB Size 1



Date: 11.DEC.2020 11:14:55

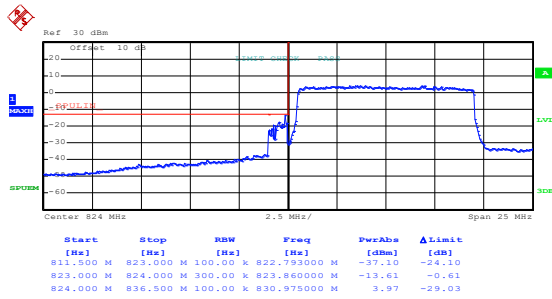
Lowest channel



Date: 11.DEC.2020 11:15:57

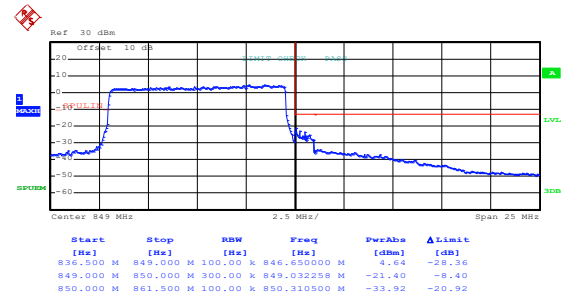
Highest channel

16QAM & RB Size 50



Date: 11.DEC.2020 11:15:25

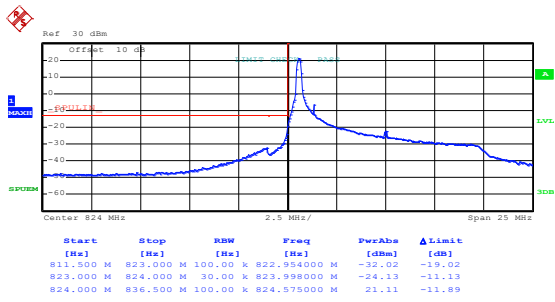
Lowest channel



Date: 11.DEC.2020 11:16:39

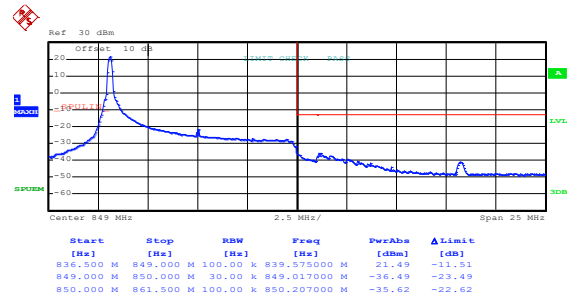
Highest channel

LTE Band 5, BW: 10MHz QPSK & RB Size 1



Date: 11.DEC.2020 11:14:47

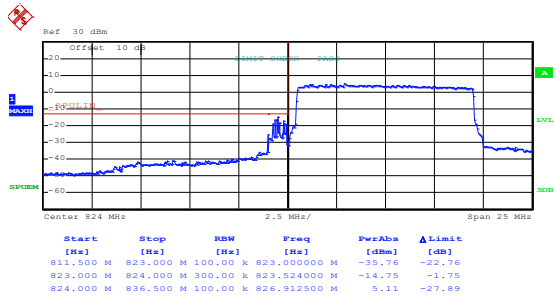
Lowest channel



Date: 11.DEC.2020 11:15:50

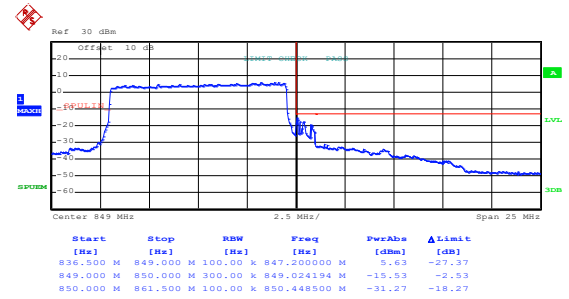
Highest channel

QPSK & RB Size 50



Date: 11.DEC.2020 11:15:18

Lowest channel

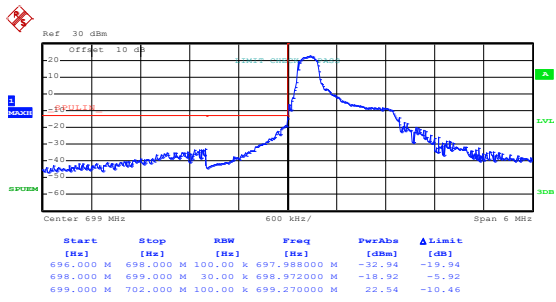


Date: 11.DEC.2020 11:16:33

Highest channel

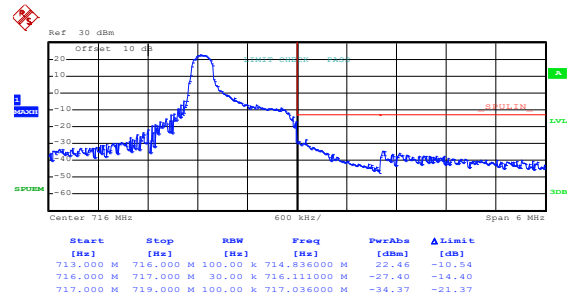
LTE band 12 part:

LTE Band 12, BW: 1.4MHz
16QAM & RB Size 1



Date: 11.DEC.2020 11:18:03

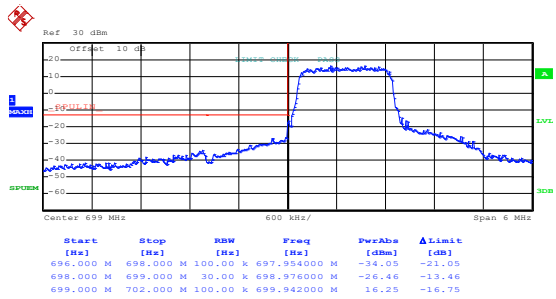
Lowest channel



Date: 11.DEC.2020 11:18:51

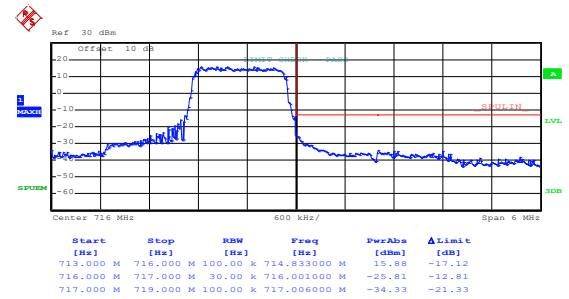
Highest channel

16QAM & RB Size 6



Date: 11.DEC.2020 11:18:19

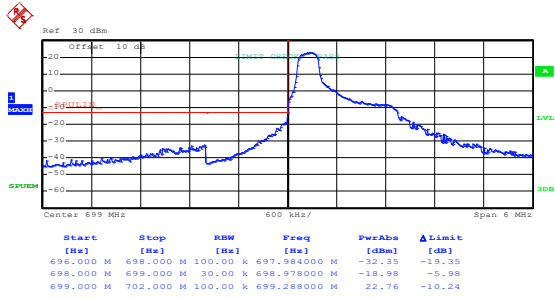
Lowest channel



Date: 11.DEC.2020 11:19:05

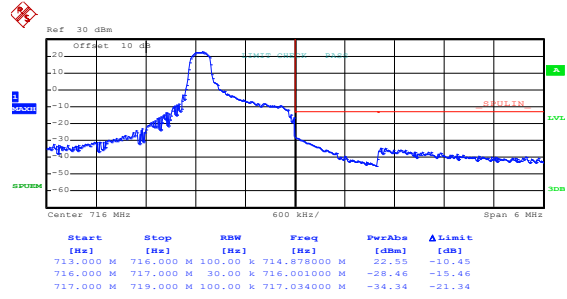
Highest channel

LTE Band 12, BW: 1.4MHz QPSK & RB Size 1



Date: 11.DEC.2020 11:17:54

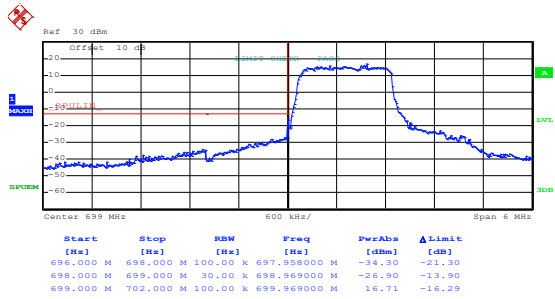
Lowest channel



Date: 11.DEC.2020 11:18:44

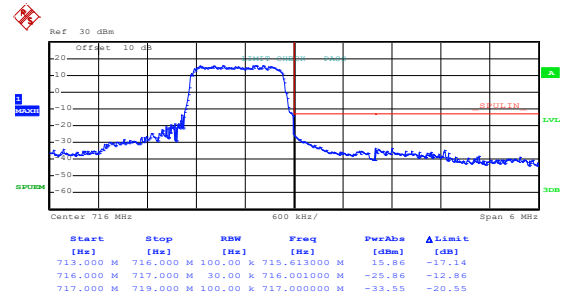
Highest channel

QPSK & RB Size 6



Date: 11.DEC.2020 11:18:15

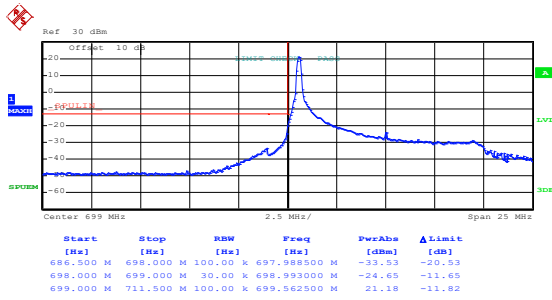
Lowest channel



Date: 11.DEC.2020 11:19:00

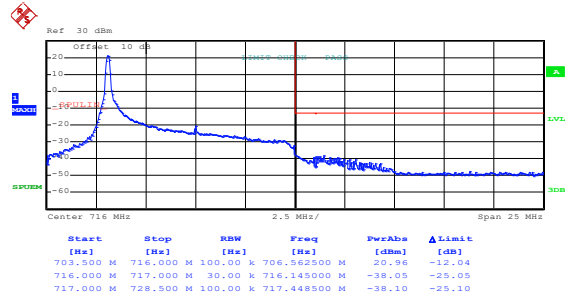
Highest channel

LTE Band 12, BW: 10MHz 16QAM & RB Size 1



Date: 11.DEC.2020 11:19:54

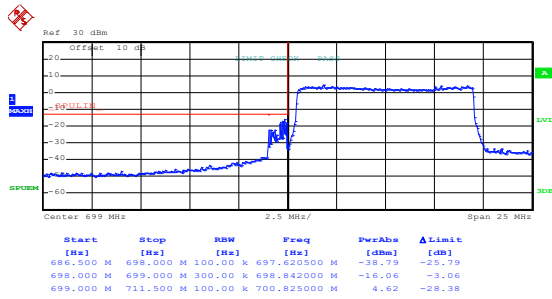
Lowest channel



Date: 11.DEC.2020 11:22:35

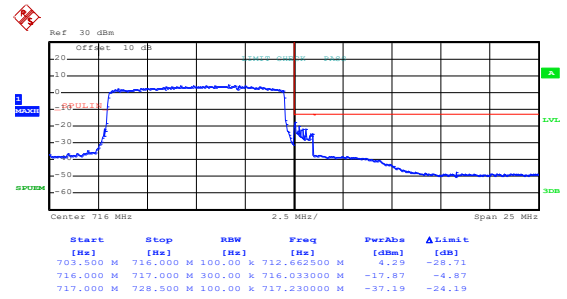
Highest channel

16QAM & RB Size 50



Date: 11.DEC.2020 11:20:28

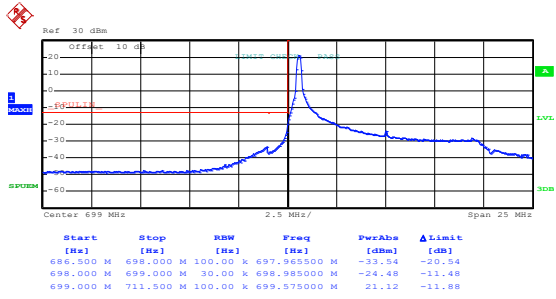
Lowest channel



Date: 11.DEC.2020 11:23:08

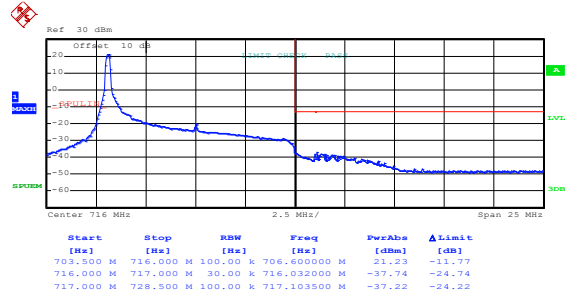
Highest channel

LTE Band 12, BW: 10MHz QPSK & RB Size 1



Date: 11.DEC.2020 11:19:46

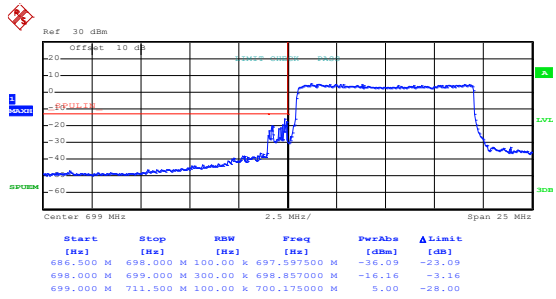
Lowest channel



Date: 11.DEC.2020 11:22:30

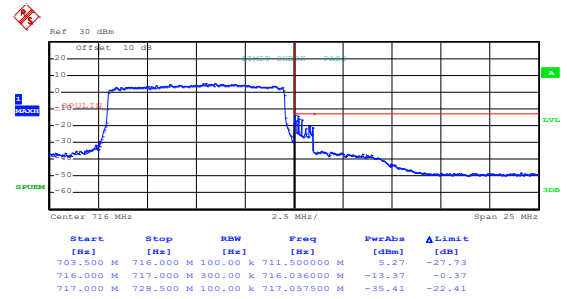
Highest channel

QPSK & RB Size 50



Date: 11.DEC.2020 11:20:14

Lowest channel

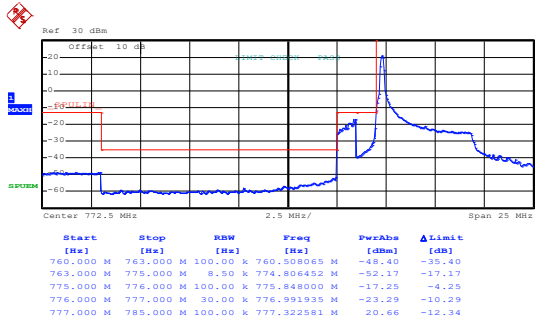


Date: 11.DEC.2020 11:23:01

Highest channel

LTE Band 13 part:

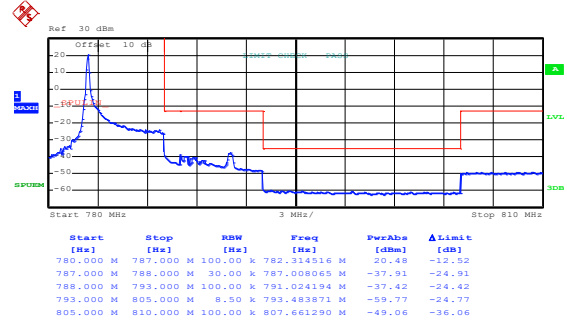
LTE Band 13, BW: 5MHz
16QAM & RB Size 1



Date: 27.JAN.2021 17:41:04

Lowest channel

Reading level showed in test plots + correction factor.
Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
763MHz~775MHz Result= $-52.17+(-1.34)=-53.51$

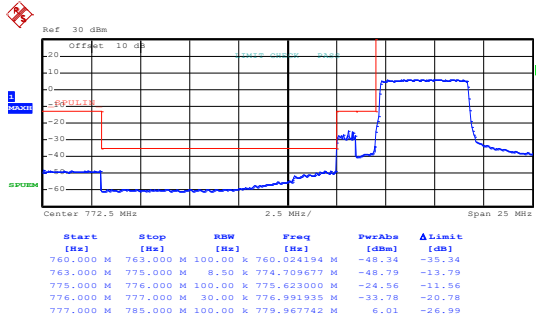


Date: 27.JAN.2021 17:43:36

Highest channel

Reading level showed in test plots + correction factor.
Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
793MHz~805MHz Result= $-59.77+(-1.34)=-61.11$

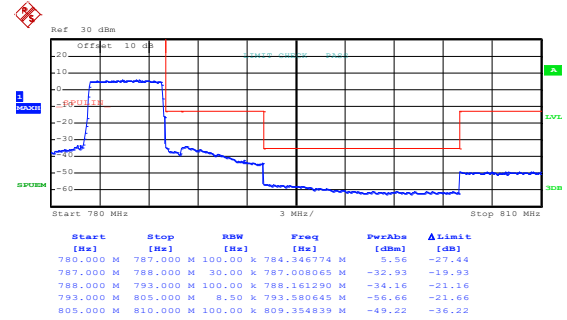
16QAM & RB Size 25



Date: 27.JAN.2021 17:41:59

Lowest channel

Reading level showed in test plots + correction factor.
Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
763MHz~775MHz Result= $-48.79+(-1.34)=-50.13$

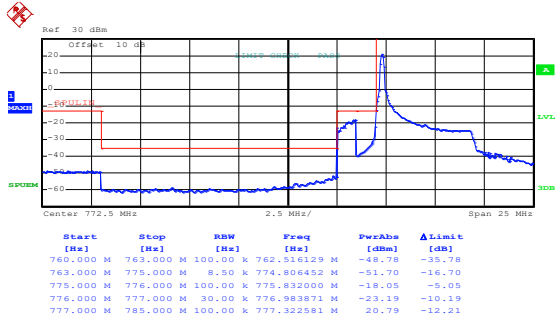


Date: 27.JAN.2021 17:44:07

Highest channel

Reading level showed in test plots + correction factor.
Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
793MHz~805MHz Result= $-56.66+(-1.34)=-58.00$

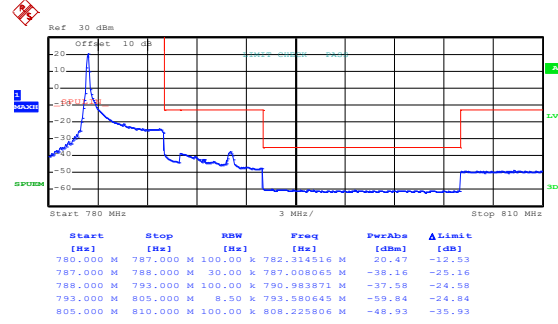
LTE Band 13, BW: 5MHz QPSK & RB Size 1



Date: 27.JAN.2021 17:40:53

Lowest channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 763MHz~775MHz Result= $-51.70+(-1.34)=-53.04$

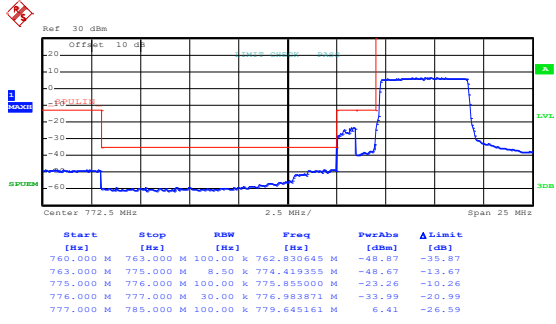


Date: 27.JAN.2021 17:43:26

Highest channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 793MHz~805MHz Result= $-59.84+(-1.34)=-61.18$

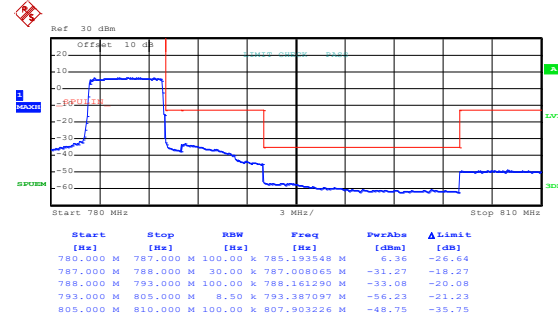
QPSK & RB Size 25



Date: 27.JAN.2021 17:41:41

Lowest channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 763MHz~775MHz Result= $-48.67+(-1.34)=-50.01$



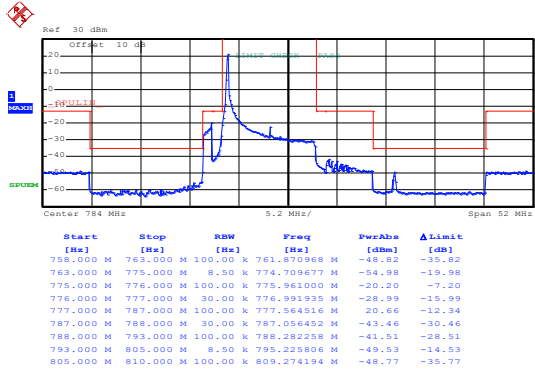
Date: 27.JAN.2021 17:43:52

Highest channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 793MHz~805MHz Result= $-56.23+(-1.34)=-57.57$

LTE Band 13, BW: 10MHz

16QAM & RB Size 1

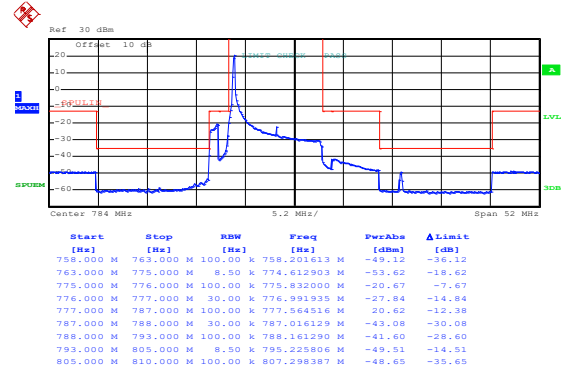


Date: 11.DEC.2020 11:28:57

Middle channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 763MHz~775MHz Result= $-54.98+(-1.34)=-56.32$
 793MHz~805MHz Result= $-49.53+(-1.34)=-50.87$

QPSK & RB Size 1

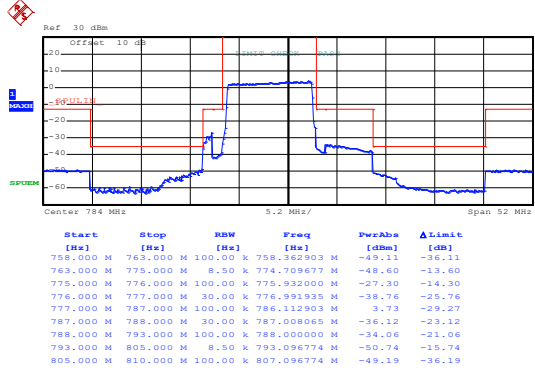


Date: 11.DEC.2020 11:28:51

Middle channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 763MHz~775MHz Result= $-53.62+(-1.34)=-54.96$
 793MHz~805MHz Result= $-49.51+(-1.34)=-50.85$

16QAM & RB Size 50

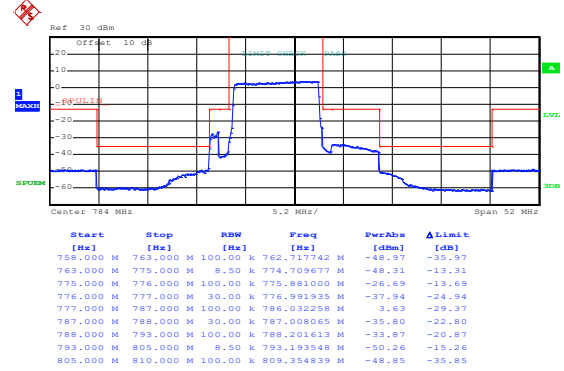


Date: 11.DEC.2020 11:30:02

Middle channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 763MHz~775MHz Result= $-48.60+(-1.34)=-49.94$
 793MHz~805MHz Result= $-50.74+(-1.34)=-52.08$

QPSK & RB Size 50



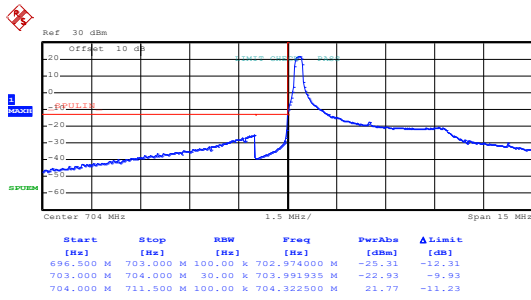
Date: 11.DEC.2020 11:29:56

Middle channel

Reading level showed in test plots + correction factor.
 Correction factor = $10\lg(BW_{Reference}/BW_{Measured}) = -1.34$
 763MHz~775MHz Result= $-48.31+(-1.34)=-49.65$
 793MHz~805MHz Result= $-50.26+(-1.34)=-51.60$

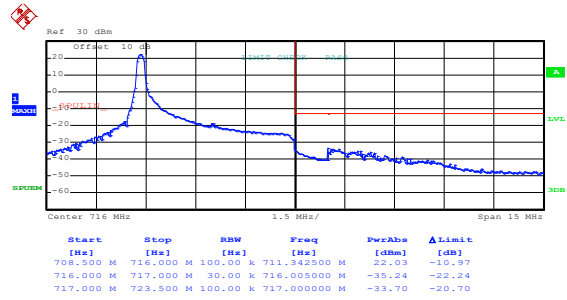
LTE Band 17 part:

LTE Band 17, BW: 5MHz
16QAM & RB Size 1



Date: 11.DEC.2020 11:33:41

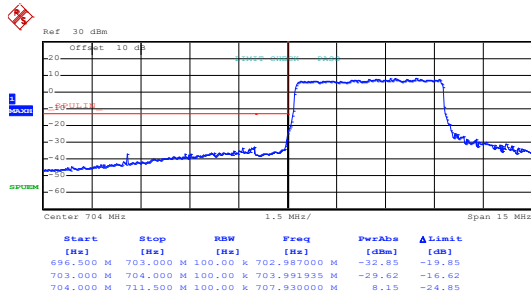
Lowest channel



Date: 11.DEC.2020 11:35:17

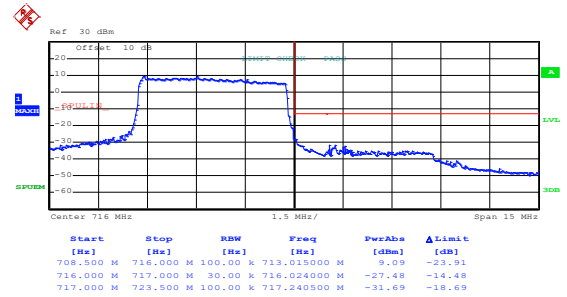
Highest channel

16QAM & RB Size 25



Date: 11.DEC.2020 11:34:32

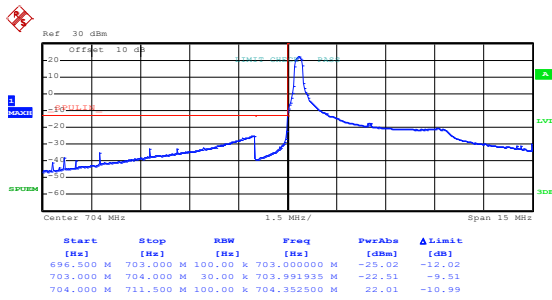
Lowest channel



Date: 11.DEC.2020 11:35:39

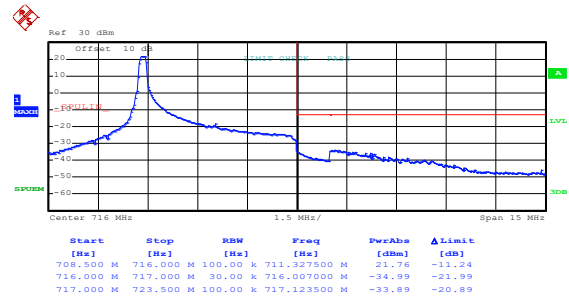
Highest channel

LTE Band 17, BW: 5MHz QPSK & RB Size 1



Date: 11.DEC.2020 11:32:58

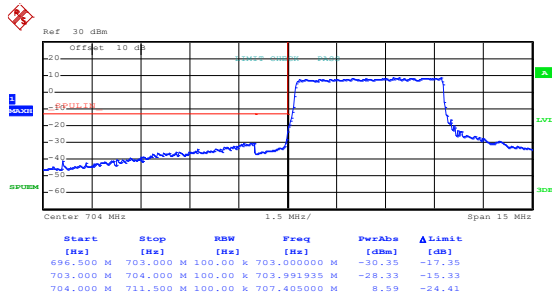
Lowest channel



Date: 11.DEC.2020 11:35:07

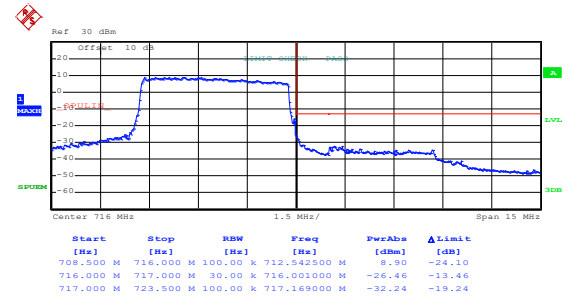
Highest channel

QPSK & RB Size 25



Date: 11.DEC.2020 11:34:18

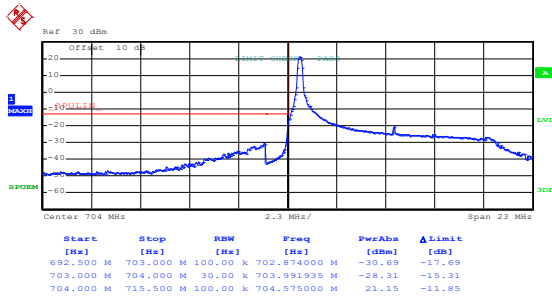
Lowest channel



Date: 11.DEC.2020 11:35:33

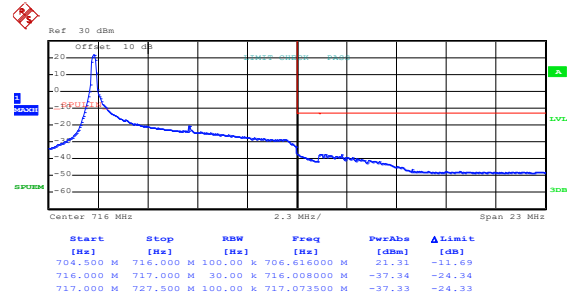
Highest channel

LTE Band 17, BW: 10MHz 16QAM & RB Size 1



Date: 11.DEC.2020 11:36:34

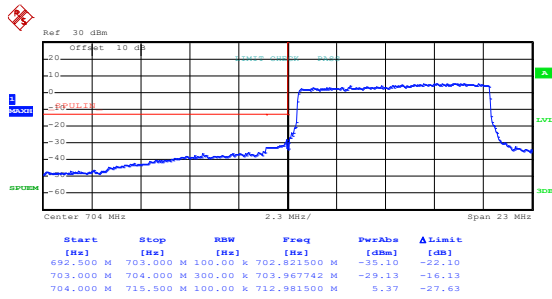
Lowest channel



Date: 11.DEC.2020 11:40:11

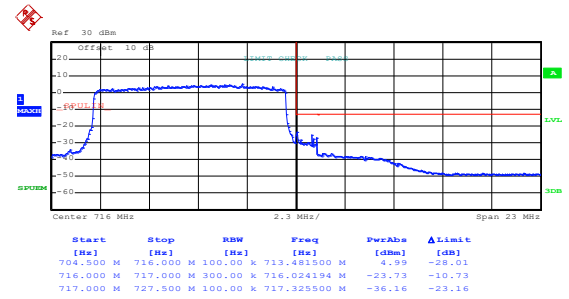
Highest channel

16QAM & RB Size 50



Date: 11.DEC.2020 11:38:10

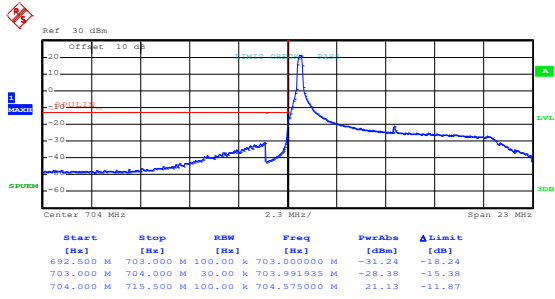
Lowest channel



Date: 11.DEC.2020 11:40:54

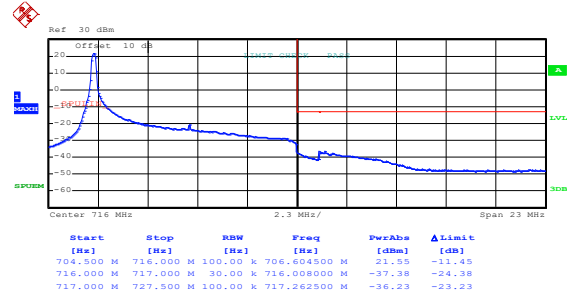
Highest channel

LTE Band 17, BW: 10MHz QPSK & RB Size 1



Date: 11.DEC.2020 11:36:24

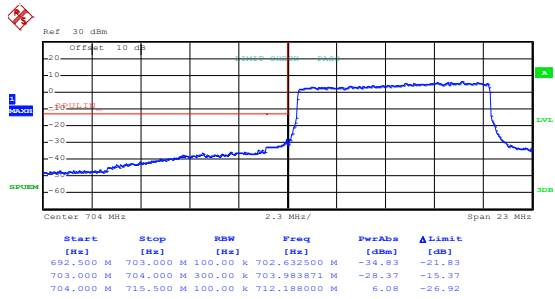
Lowest channel



Date: 11.DEC.2020 11:39:44

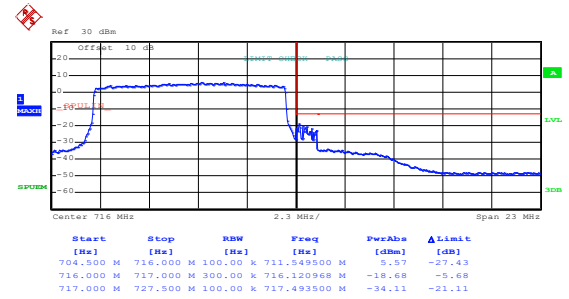
Highest channel

QPSK & RB Size 50



Date: 11.DEC.2020 11:38:04

Lowest channel

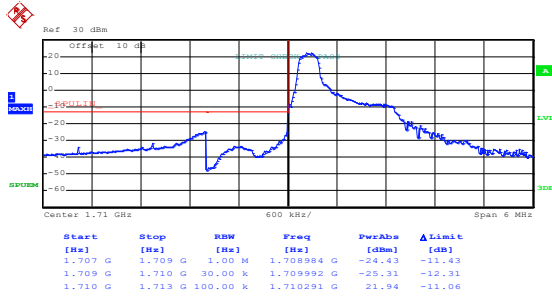


Date: 11.DEC.2020 11:40:47

Highest channel

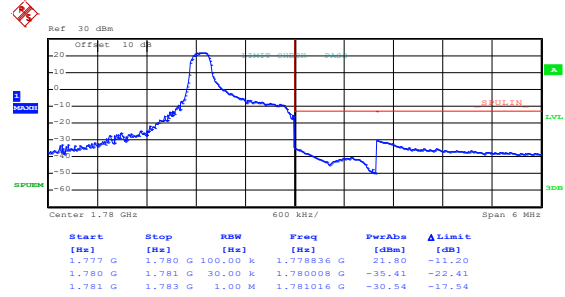
LTE Band 66 part:

LTE Band 66, BW: 1.4MHz
16QAM & RB Size 1



Date: 23.DEC.2020 13:51:28

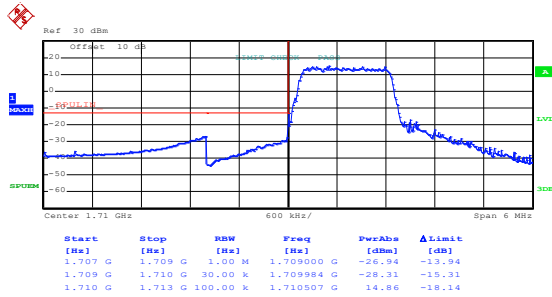
Lowest channel



Date: 23.DEC.2020 13:53:23

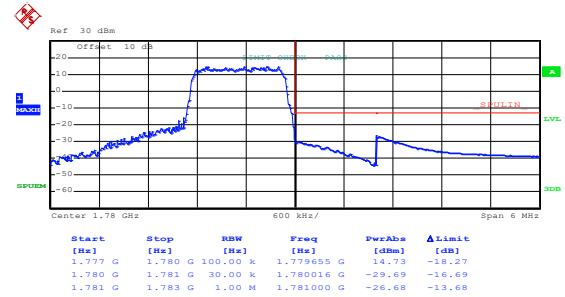
Highest channel

16QAM & RB Size 6



Date: 23.DEC.2020 13:51:55

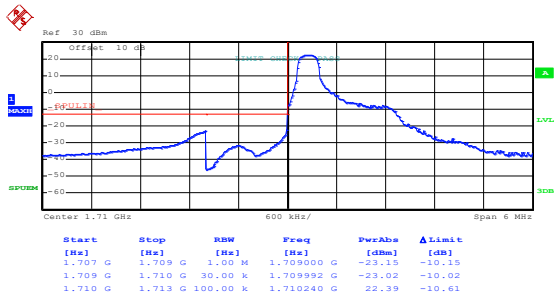
Lowest channel



Date: 23.DEC.2020 13:52:38

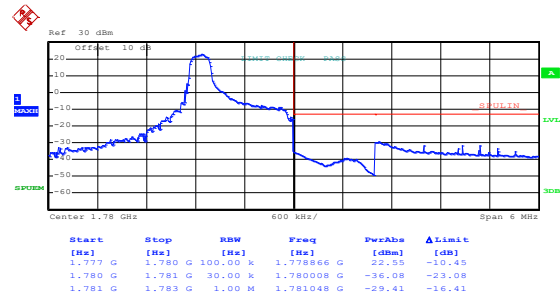
Highest channel

LTE Band 66, BW: 1.4MHz QPSK & RB Size 1



Date: 23.DEC.2020 13:49:17

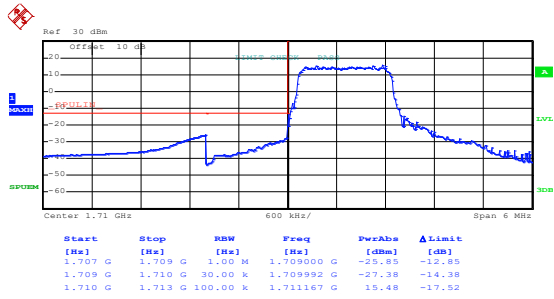
Lowest channel



Date: 23.DEC.2020 13:53:05

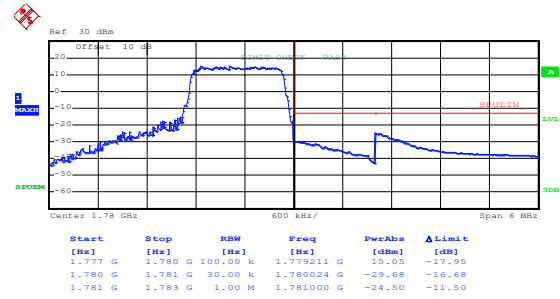
Highest channel

QPSK & RB Size 6



Date: 23.DEC.2020 13:51:45

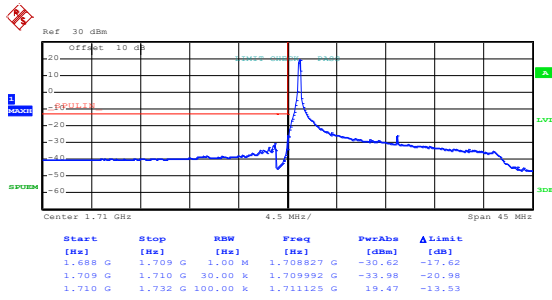
Lowest channel



Date: 23.DEC.2020 13:52:28

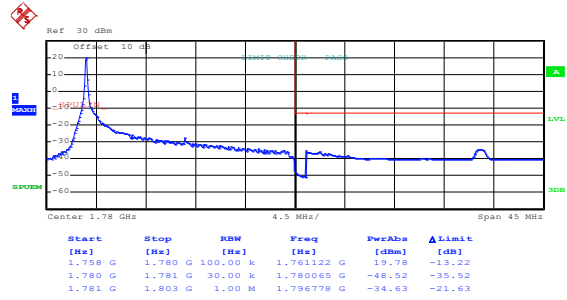
Highest channel

LTE Band 66, BW: 20MHz 16QAM & RB Size 1



Date: 23.DEC.2020 13:55:47

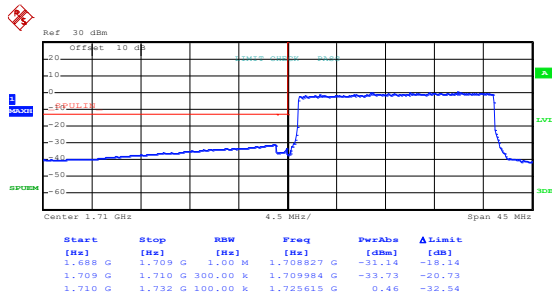
Lowest channel



Date: 23.DEC.2020 13:54:29

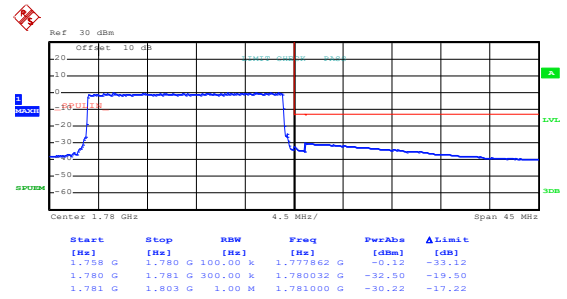
Highest channel

16QAM & RB Size 100



Date: 23.DEC.2020 13:55:22

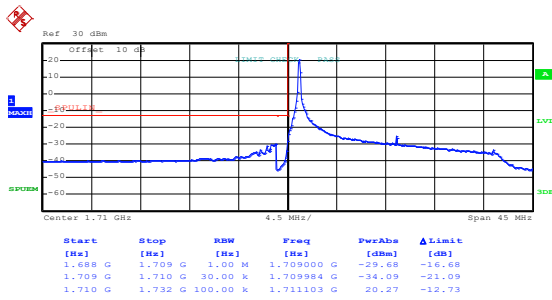
Lowest channel



Date: 23.DEC.2020 13:54:59

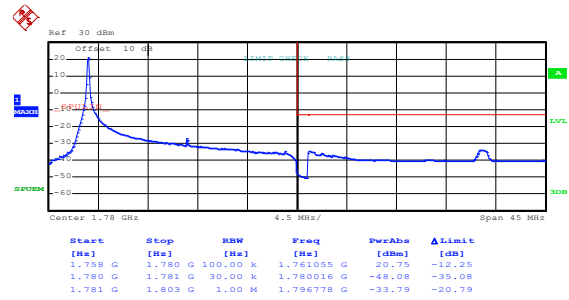
Highest channel

LTE Band 66, BW: 20MHz QPSK & RB Size 1



Date: 23.DEC.2020 13:55:38

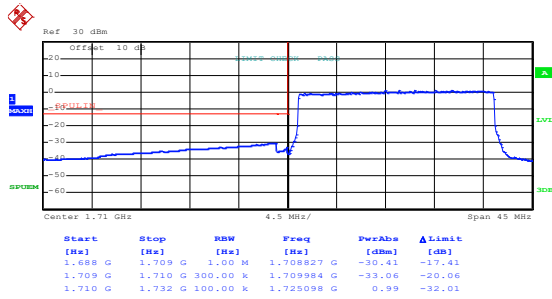
Lowest channel



Date: 23.DEC.2020 13:54:13

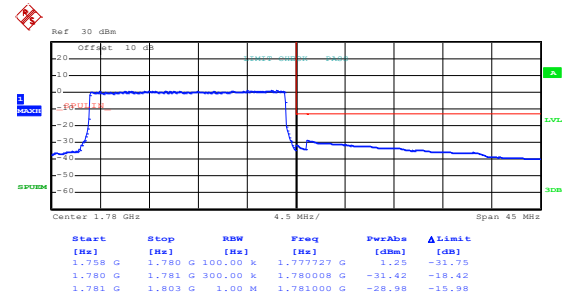
Highest channel

QPSK & RB Size 100



Date: 23.DEC.2020 13:55:15

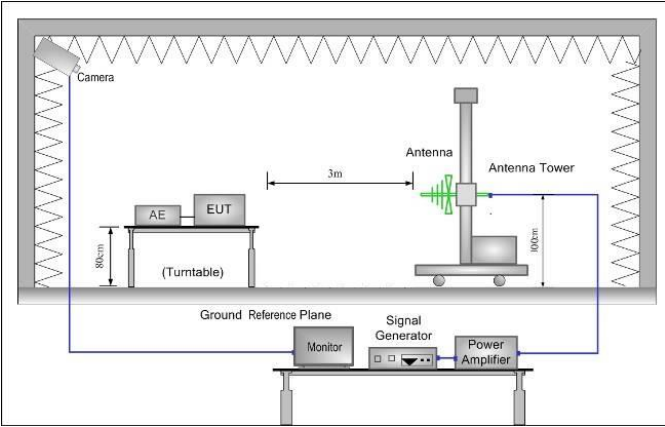
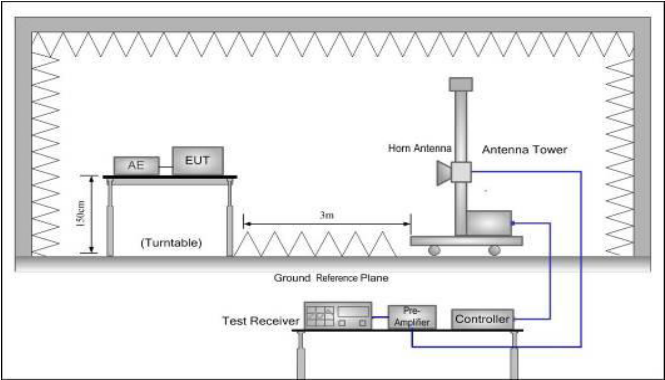
Lowest channel



Date: 23.DEC.2020 13:54:53

Highest channel

6.5 Field strength of spurious radiation measurement

Test Requirement:	Part 22.917(a), Part 24.238 (a), Part 27.53(c), Part 27.53(g), Part 27.53(h)
Limit:	<p>LTE Band 2 & 5 & 12 & 13& 17& 66:</p> <p>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 (-13 dBm).</p>
Test setup:	<p>Below 1GHz</p>  <p>Above 1GHz</p> 
Test Procedure:	<ol style="list-style-type: none"> 1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. $ERP / EIRP = S.G. \text{ output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed

Measurement Data:
LTE Band 2 part:

Band 2 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3701.40	-52.58	12.64	0.75	-40.69	-13.00	-27.69	Vertical
5552.10	-45.46	12.76	1.13	-33.83	-13.00	-20.83	Vertical
7402.00	-39.70	11.44	1.63	-29.89	-13.00	-16.89	Vertical
3701.40	-51.62	12.64	0.75	-39.73	-13.00	-26.73	Horizontal
5552.10	-45.27	12.76	1.13	-33.64	-13.00	-20.64	Horizontal
7402.00	-49.68	11.44	1.63	-39.87	-13.00	-26.87	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3760.00	-51.57	12.71	0.79	-39.65	-13.00	-26.65	Vertical
5640.00	-44.17	12.87	1.15	-32.45	-13.00	-19.45	Vertical
7520.00	-37.97	11.48	1.66	-28.15	-13.00	-15.15	Vertical
3760.00	-46.90	12.71	0.79	-34.98	-13.00	-21.98	Horizontal
5640.00	-47.37	12.87	1.15	-35.65	-13.00	-22.65	Horizontal
7520.00	-50.00	11.48	1.66	-40.18	-13.00	-27.18	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3816.60	-51.62	12.78	0.81	-39.65	-13.00	-26.65	Vertical
5724.90	-45.93	12.97	1.19	-34.15	-13.00	-21.15	Vertical
7633.20	-38.41	11.34	1.71	-28.78	-13.00	-15.78	Vertical
3816.60	-52.62	12.78	0.81	-40.65	-13.00	-27.65	Horizontal
5724.90	-45.17	12.97	1.19	-33.39	-13.00	-20.39	Horizontal
7633.20	-48.34	11.34	1.71	-38.71	-13.00	-25.71	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 2 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3720.00	-51.54	12.66	0.77	-39.65	-13.00	-26.65	Vertical
5580.00	-44.17	12.80	1.15	-32.52	-13.00	-19.52	Vertical
7440.00	-38.27	11.46	1.64	-28.45	-13.00	-15.45	Vertical
3720.00	-48.88	12.66	0.77	-36.99	-13.00	-23.99	Horizontal
5580.00	-46.21	12.80	1.15	-34.56	-13.00	-21.56	Horizontal
7440.00	-50.01	11.46	1.64	-40.19	-13.00	-27.19	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3760.00	-52.87	12.71	0.79	-40.95	-13.00	-27.95	Vertical
5640.00	-43.50	12.87	1.15	-31.78	-13.00	-18.78	Vertical
7520.00	-39.77	11.48	1.66	-29.95	-13.00	-16.95	Vertical
3760.00	-45.38	12.71	0.79	-33.46	-13.00	-20.46	Horizontal
5640.00	-48.39	12.87	1.15	-36.67	-13.00	-23.67	Horizontal
7520.00	-49.39	11.48	1.66	-39.57	-13.00	-26.57	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3800.00	-52.55	12.76	0.79	-40.58	-13.00	-27.58	Vertical
5700.00	-48.45	12.94	1.18	-36.69	-13.00	-23.69	Vertical
7600.00	-39.66	11.38	1.69	-29.97	-13.00	-16.97	Vertical
3800.00	-51.62	12.76	0.79	-39.65	-13.00	-26.65	Horizontal
5700.00	-45.93	12.94	1.18	-34.17	-13.00	-21.17	Horizontal
7600.00	-48.67	11.38	1.69	-38.98	-13.00	-25.98	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 5 part:

Band 5 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1649.40	-55.51	9.57	0.20	-46.14	-13.00	-33.14	Vertical
2474.10	-54.39	10.86	0.43	-43.96	-13.00	-30.96	Vertical
3298.80	-51.99	12.00	0.64	-40.63	-13.00	-27.63	Vertical
1649.40	-55.57	9.57	0.20	-46.20	-13.00	-33.20	Horizontal
2474.10	-54.23	10.86	0.43	-43.80	-13.00	-30.80	Horizontal
3298.80	-50.81	12.00	0.64	-39.45	-13.00	-26.45	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1673.30	-55.00	9.66	0.22	-45.56	-13.00	-32.56	Vertical
2509.50	-52.61	10.91	0.46	-42.16	-13.00	-29.16	Vertical
3346.00	-51.38	12.09	0.66	-39.95	-13.00	-26.95	Vertical
1673.30	-55.29	9.66	0.22	-45.85	-13.00	-32.85	Horizontal
2509.50	-52.62	10.91	0.46	-42.17	-13.00	-29.17	Horizontal
3346.00	-49.41	12.09	0.66	-37.98	-13.00	-24.98	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1696.60	-53.88	9.74	0.23	-44.37	-13.00	-31.37	Vertical
2544.90	-56.10	10.94	0.49	-45.65	-13.00	-32.65	Vertical
3393.20	-51.73	12.19	0.68	-40.22	-13.00	-27.22	Vertical
1696.60	-55.16	9.74	0.23	-45.65	-13.00	-32.65	Horizontal
2544.90	-52.43	10.94	0.49	-41.98	-13.00	-28.98	Horizontal
3393.20	-48.18	12.19	0.68	-36.67	-13.00	-23.67	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 5 (10MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1658.00	-54.98	9.60	0.21	-45.59	-13.00	-32.59	Vertical
2487.00	-52.57	10.88	0.45	-42.14	-13.00	-29.14	Vertical
3316.00	-51.03	12.03	0.65	-39.65	-13.00	-26.65	Vertical
1658.00	-54.68	9.60	0.21	-45.29	-13.00	-32.29	Horizontal
2487.00	-52.60	10.88	0.45	-42.17	-13.00	-29.17	Horizontal
3316.00	-49.90	12.03	0.65	-38.52	-13.00	-25.52	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1673.30	-54.10	9.66	0.21	-44.65	-13.00	-31.65	Vertical
2509.50	-51.84	10.91	0.46	-41.39	-13.00	-28.39	Vertical
3346.00	-50.08	12.09	0.66	-38.65	-13.00	-25.65	Vertical
1673.30	-53.63	9.66	0.21	-44.18	-13.00	-31.18	Horizontal
2509.50	-52.23	10.91	0.46	-41.78	-13.00	-28.78	Horizontal
3346.00	-48.12	12.09	0.66	-36.69	-13.00	-23.69	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1688.00	-55.00	9.71	0.23	-45.52	-13.00	-32.52	Vertical
2532.00	-54.61	10.93	0.48	-44.16	-13.00	-31.16	Vertical
3376.00	-51.08	12.15	0.67	-39.60	-13.00	-26.60	Vertical
1688.00	-54.61	9.71	0.23	-45.13	-13.00	-32.13	Horizontal
2532.00	-53.03	10.93	0.48	-42.58	-13.00	-29.58	Horizontal
3376.00	-47.26	12.15	0.67	-35.78	-13.00	-22.78	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 12 part:

Band 12 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1399.40	-56.62	7.80	0.11	-48.93	-13.00	-35.93	Vertical
2099.10	-57.69	10.34	0.29	-47.64	-13.00	-34.64	Vertical
2798.80	-54.10	11.20	0.53	-43.43	-13.00	-30.43	Vertical
1399.40	-56.39	7.80	0.11	-48.70	-13.00	-35.70	Horizontal
2099.10	-58.26	10.34	0.29	-48.21	-13.00	-35.21	Horizontal
2798.80	-53.56	11.20	0.53	-42.89	-13.00	-29.89	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1415.00	-54.44	7.92	0.13	-46.65	-13.00	-33.65	Vertical
2122.50	-57.20	10.37	0.32	-47.15	-13.00	-34.15	Vertical
2830.00	-53.20	11.23	0.55	-42.52	-13.00	-29.52	Vertical
1415.00	-55.44	7.92	0.13	-47.65	-13.00	-34.65	Horizontal
2122.50	-58.03	10.37	0.32	-47.98	-13.00	-34.98	Horizontal
2830.00	-52.01	11.23	0.55	-41.33	-13.00	-28.33	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1430.60	-53.40	8.04	0.16	-45.52	-13.00	-32.52	Vertical
2145.90	-56.21	10.40	0.35	-46.16	-13.00	-33.16	Vertical
2861.20	-52.46	11.26	0.58	-41.78	-13.00	-28.78	Vertical
1430.60	-54.53	8.04	0.16	-46.65	-13.00	-33.65	Horizontal
2145.90	-55.36	10.40	0.35	-45.31	-13.00	-32.31	Horizontal
2861.20	-53.25	11.26	0.58	-42.57	-13.00	-29.57	Horizontal
<i>Remark:</i>							
<i>The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.</i>							

Band 12 (10MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1408.00	-54.39	7.86	0.12	-46.65	-13.00	-33.65	Vertical
2112.00	-55.31	10.36	0.30	-45.25	-13.00	-32.25	Vertical
2816.00	-52.07	11.22	0.54	-41.39	-13.00	-28.39	Vertical
1408.00	-55.39	7.86	0.12	-47.65	-13.00	-34.65	Horizontal
2112.00	-56.04	10.36	0.30	-45.98	-13.00	-32.98	Horizontal
2816.00	-52.40	11.22	0.54	-41.72	-13.00	-28.72	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1415.00	-53.44	7.92	0.13	-45.65	-13.00	-32.65	Vertical
2122.50	-58.00	10.37	0.32	-47.95	-13.00	-34.95	Vertical
2830.00	-52.04	11.23	0.55	-41.36	-13.00	-28.36	Vertical
1415.00	-54.44	7.92	0.13	-46.65	-13.00	-33.65	Horizontal
2122.50	-57.03	10.37	0.32	-46.98	-13.00	-33.98	Horizontal
2830.00	-51.86	11.23	0.55	-41.18	-13.00	-28.18	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1422.00	-52.48	7.98	0.15	-44.65	-13.00	-31.65	Vertical
2133.00	-56.23	10.39	0.34	-46.18	-13.00	-33.18	Vertical
2844.00	-52.37	11.24	0.57	-41.70	-13.00	-28.70	Vertical
1422.00	-53.48	7.98	0.15	-45.65	-13.00	-32.65	Horizontal
2133.00	-54.44	10.39	0.34	-44.39	-13.00	-31.39	Horizontal
2844.00	-51.92	11.24	0.57	-41.25	-13.00	-28.25	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 13 part:

Band 13 (5MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1559.00	-59.25	9.07	0.17	-50.35	-40.00	-10.35	Vertical
2338.50	-56.76	10.67	0.40	-46.49	-13.00	-33.49	Vertical
3118.00	-53.18	11.64	0.59	-42.13	-13.00	-29.13	Vertical
1559.00	-56.55	9.07	0.17	-47.65	-40.00	-7.65	Horizontal
2338.50	-56.61	10.67	0.40	-46.34	-13.00	-33.34	Horizontal
3118.00	-53.12	11.64	0.59	-42.07	-13.00	-29.07	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1564.00	-58.58	9.11	0.18	-49.65	-40.00	-9.65	Vertical
2346.00	-55.80	10.68	0.40	-45.52	-13.00	-32.52	Vertical
3128.00	-52.39	11.66	0.60	-41.33	-13.00	-28.33	Vertical
1564.00	-55.58	9.11	0.18	-46.65	-40.00	-6.65	Horizontal
2346.00	-55.45	10.68	0.40	-45.17	-13.00	-32.17	Horizontal
3128.00	-52.83	11.66	0.60	-41.77	-13.00	-28.77	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1569.00	-57.62	9.15	0.18	-48.65	-40.00	-8.65	Vertical
2353.50	-54.38	10.69	0.41	-44.10	-13.00	-31.10	Vertical
3138.00	-53.76	11.68	0.61	-42.69	-13.00	-29.69	Vertical
1569.00	-53.38	9.15	0.18	-44.41	-40.00	-14.41	Horizontal
2353.50	-49.93	10.69	0.41	-39.65	-13.00	-26.65	Horizontal
3138.00	-49.74	11.68	0.61	-38.67	-13.00	-25.67	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 13 (10MHz)							
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1564.00	-59.45	9.11	0.18	-50.52	-40.00	-10.52	Vertical
2346.00	-57.93	10.68	0.40	-47.65	-13.00	-34.65	Vertical
3128.00	-53.72	11.66	0.60	-42.66	-13.00	-29.66	Vertical
1564.00	-58.90	9.11	0.18	-49.97	-40.00	-9.97	Horizontal
2346.00	-55.80	10.68	0.40	-45.52	-13.00	-32.52	Horizontal
3128.00	-49.62	11.66	0.60	-38.56	-13.00	-25.56	Horizontal

Remark:
The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.

LTE Band 17 part:

Band 17 (5MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1413.00	-55.42	7.90	0.12	-47.64	-13.00	-34.64	Vertical
2119.50	-56.79	10.37	0.31	-46.73	-13.00	-33.73	Vertical
2826.00	-53.16	11.23	0.54	-42.47	-13.00	-29.47	Vertical
1413.00	-53.66	7.90	0.12	-45.88	-13.00	-32.88	Horizontal
2119.50	-56.96	10.37	0.31	-46.90	-13.00	-33.90	Horizontal
2826.00	-53.02	11.23	0.54	-42.33	-13.00	-29.33	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1420.00	-54.07	7.96	0.14	-46.25	-13.00	-33.25	Vertical
2130.00	-56.03	10.38	0.33	-45.98	-13.00	-32.98	Vertical
2840.00	-52.15	11.24	0.56	-41.47	-13.00	-28.47	Vertical
1420.00	-53.39	7.96	0.14	-45.57	-13.00	-32.57	Horizontal
2130.00	-56.74	10.38	0.33	-46.69	-13.00	-33.69	Horizontal
2840.00	-52.25	11.24	0.56	-41.57	-13.00	-28.57	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1427.00	-54.19	8.02	0.16	-46.33	-13.00	-33.33	Vertical
2140.50	-55.58	10.40	0.34	-45.52	-13.00	-32.52	Vertical
2854.00	-52.66	11.25	0.57	-41.98	-13.00	-28.98	Vertical
1427.00	-54.51	8.02	0.16	-46.65	-13.00	-33.65	Horizontal
2140.50	-54.24	10.40	0.34	-44.18	-13.00	-31.18	Horizontal
2854.00	-55.95	11.25	0.57	-45.27	-13.00	-32.27	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

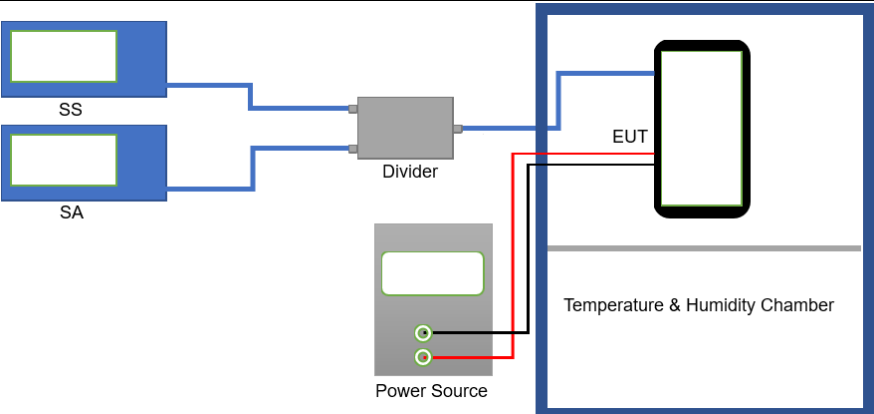
Band 17 (10MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1418.00	-54.46	7.94	0.13	-46.65	-13.00	-33.65	Vertical
2127.00	-55.58	10.38	0.32	-45.52	-13.00	-32.52	Vertical
2836.00	-52.47	11.24	0.56	-41.79	-13.00	-28.79	Vertical
1418.00	-54.13	7.94	0.13	-46.32	-13.00	-33.32	Horizontal
2127.00	-54.21	10.38	0.32	-44.15	-13.00	-31.15	Horizontal
2836.00	-52.47	11.24	0.56	-41.79	-13.00	-28.79	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1420.00	-53.34	7.96	0.14	-45.52	-13.00	-32.52	Vertical
2130.00	-54.44	10.38	0.33	-44.39	-13.00	-31.39	Vertical
2840.00	-52.87	11.24	0.56	-42.19	-13.00	-29.19	Vertical
1420.00	-53.80	7.96	0.14	-45.98	-13.00	-32.98	Horizontal
2130.00	-55.60	10.38	0.33	-45.55	-13.00	-32.55	Horizontal
2840.00	-52.95	11.24	0.56	-42.27	-13.00	-29.27	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1422.00	-54.48	7.98	0.15	-46.65	-13.00	-33.65	Vertical
2133.00	-54.20	10.39	0.34	-44.15	-13.00	-31.15	Vertical
2844.00	-52.95	11.24	0.57	-42.28	-13.00	-29.28	Vertical
1422.00	-57.78	7.98	0.15	-49.95	-13.00	-36.95	Horizontal
2133.00	-58.57	10.39	0.34	-48.52	-13.00	-35.52	Horizontal
2844.00	-52.42	11.24	0.57	-41.75	-13.00	-28.75	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

LTE Band 66 part:

Band 66 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3421.40	-52.10	12.24	0.70	-40.56	-13.00	-27.56	Vertical
5132.10	-48.38	12.92	1.01	-36.47	-13.00	-23.47	Vertical
6842.80	-39.79	11.42	1.53	-29.90	-13.00	-16.90	Vertical
3421.40	-52.36	12.24	0.70	-40.82	-13.00	-27.82	Horizontal
5132.10	-47.89	12.92	1.01	-35.98	-13.00	-22.98	Horizontal
6842.80	-39.84	11.42	1.53	-29.95	-13.00	-16.95	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3490.00	-51.30	12.38	0.73	-39.65	-13.00	-26.65	Vertical
5235.00	-48.45	12.86	1.06	-36.65	-13.00	-23.65	Vertical
6980.00	-39.50	11.23	1.57	-29.84	-13.00	-16.84	Vertical
3490.00	-53.17	12.38	0.73	-41.52	-13.00	-28.52	Horizontal
5235.00	-48.05	12.86	1.06	-36.25	-13.00	-23.25	Horizontal
6980.00	-38.40	11.23	1.57	-28.74	-13.00	-15.74	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3558.60	-50.51	12.47	0.74	-38.78	-13.00	-25.78	Vertical
5337.90	-46.91	12.80	1.08	-35.19	-13.00	-22.19	Vertical
7117.20	-37.20	11.27	1.59	-27.52	-13.00	-14.52	Vertical
3558.60	-54.19	12.47	0.74	-42.46	-13.00	-29.46	Horizontal
5337.90	-47.37	12.80	1.08	-35.65	-13.00	-22.65	Horizontal
7117.20	-39.65	11.27	1.59	-29.97	-13.00	-16.97	Horizontal
Remark: The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.							

Band 66 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3440.00	-51.22	12.28	0.71	-39.65	-13.00	-26.65	Vertical
5160.00	-47.39	12.90	1.03	-35.52	-13.00	-22.52	Vertical
6880.00	-40.24	11.37	1.54	-30.41	-13.00	-17.41	Vertical
3440.00	-51.22	12.28	0.71	-39.65	-13.00	-26.65	Horizontal
5160.00	-47.28	12.90	1.03	-35.41	-13.00	-22.41	Horizontal
6880.00	-39.62	11.37	1.54	-29.79	-13.00	-16.79	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3490.00	-52.15	12.38	0.73	-40.50	-13.00	-27.50	Vertical
5235.00	-48.45	12.86	1.06	-36.65	-13.00	-23.65	Vertical
6980.00	-40.09	11.23	1.57	-30.43	-13.00	-17.43	Vertical
3490.00	-52.24	12.38	0.73	-40.59	-13.00	-27.59	Horizontal
5235.00	-50.55	12.86	1.06	-38.75	-13.00	-25.75	Horizontal
6980.00	-39.64	11.23	1.57	-29.98	-13.00	-16.98	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurious Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3540.00	-50.16	12.45	0.74	-38.45	-13.00	-25.45	Vertical
5310.00	-48.35	12.81	1.08	-36.62	-13.00	-23.62	Vertical
7080.00	-39.61	11.25	1.59	-29.95	-13.00	-16.95	Vertical
3540.00	-53.23	12.45	0.74	-41.52	-13.00	-28.52	Horizontal
5310.00	-47.21	12.81	1.08	-35.48	-13.00	-22.48	Horizontal
7080.00	-39.64	11.25	1.59	-29.98	-13.00	-16.98	Horizontal
<i>Remark:</i>							
<i>The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.</i>							

6.6 Frequency stability V.S. Temperature measurement

Test Requirement:	Part 22.355, Part 24.235, Part 27.54, Part 2.1055(a)(1)(b)
Limit:	±2.5 ppm for Band 5 Within authorized band for Band 2 & 5 & 12 & 13& 17& 66
Test setup:	
Test procedure:	<ol style="list-style-type: none"> 1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):

LTE Band 2 part:

Reference Frequency: LTE Band 2 (10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	168	0.089362	Within authorized band for Band 2	Pass
	-20	150	0.079787		
	-10	143	0.076064		
	0	120	0.063830		
	10	136	0.072340		
	20	128	0.068085		
	30	162	0.086170		
	40	114	0.060638		
	50	105	0.055851		
16QAM					
3.80	-30	166	0.088298	Within authorized band for Band 2	Pass
	-20	158	0.084043		
	-10	143	0.076064		
	0	138	0.073404		
	10	123	0.065426		
	20	116	0.061702		
	30	150	0.079787		
	40	108	0.057447		
	50	130	0.069149		

Note: Only the worst case shown in the report.

LTE Band 5 part:

Reference Frequency: LTE Band 5 (10MHz) Middle channel=20525 channel=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	173	0.206814	±2.5	Pass
	-20	159	0.190078		
	-10	165	0.197250		
	0	146	0.174537		
	10	137	0.163778		
	20	125	0.149432		
	30	130	0.155409		
	40	153	0.182905		
	50	115	0.137478		
16QAM					
3.80	-30	170	0.203228	±2.5	Pass
	-20	161	0.192469		
	-10	157	0.187687		
	0	140	0.167364		
	10	131	0.156605		
	20	149	0.178123		
	30	124	0.148237		
	40	116	0.138673		
	50	102	0.121937		

Note: Only the worst case shown in the report.

LTE Band 12 part:

Reference Frequency: LTE Band 12 (10MHz) Middle channel=23095 channel=707.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	168	0.237456	Within authorized band for Band 12	Pass
	-20	150	0.212014		
	-10	142	0.200707		
	0	136	0.192226		
	10	157	0.221908		
	20	126	0.178092		
	30	131	0.185159		
	40	117	0.165371		
	50	107	0.151237		
16QAM					
3.80	-30	165	0.233216	Within authorized band for Band 12	Pass
	-20	159	0.224735		
	-10	143	0.202120		
	0	135	0.190813		
	10	127	0.179505		
	20	115	0.162544		
	30	102	0.144170		
	40	120	0.169611		
	50	151	0.213428		
<i>Note: Only the worst case shown in the report.</i>					

LTE Band 13 part:

Reference Frequency: LTE Band 13 (10MHz) Middle channel=23230 channel=782.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	170	0.217391	Within authorized band for Band 13	Pass
	-20	163	0.208440		
	-10	156	0.199488		
	0	148	0.189258		
	10	130	0.166240		
	20	124	0.158568		
	30	117	0.149616		
	40	140	0.179028		
	50	106	0.135550		
16QAM					
3.70	-30	169	0.216113	Within authorized band for Band 13	Pass
	-20	156	0.199488		
	-10	146	0.186701		
	0	137	0.175192		
	10	123	0.157289		
	20	162	0.207161		
	30	114	0.145780		
	40	130	0.166240		
	50	103	0.131714		

Note: Only the worst case shown in the report.

LTE Band 17 part:

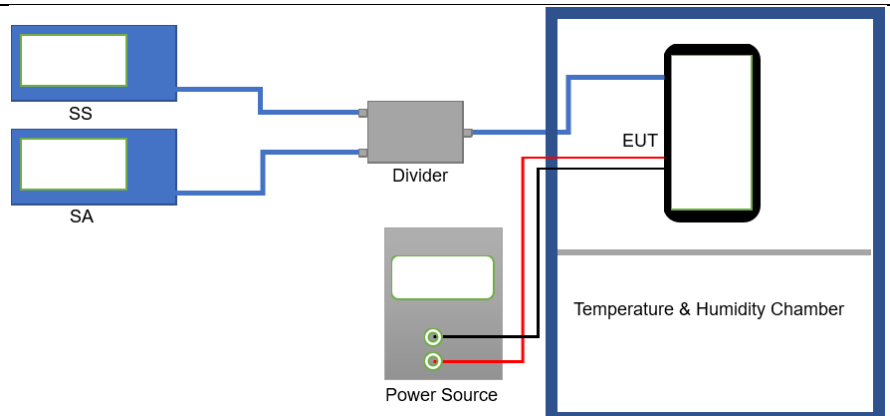
Reference Frequency: LTE Band 17 (10MHz) Middle channel=23790 channel=710.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	171	0.240845	Within authorized band for Band 17	Pass
	-20	157	0.221127		
	-10	141	0.198592		
	0	134	0.188732		
	10	164	0.230986		
	20	126	0.177465		
	30	108	0.152113		
	40	150	0.211268		
	50	119	0.167606		
16QAM					
3.80	-30	170	0.239437	Within authorized band for Band 17	Pass
	-20	163	0.229577		
	-10	157	0.221127		
	0	140	0.197183		
	10	131	0.184507		
	20	125	0.176056		
	30	118	0.166197		
	40	149	0.209859		
	50	110	0.154930		

Note: Only the worst case shown in the report.

LTE Band 66 part:

Reference Frequency: LTE Band 66 (10MHz) Middle channel=132322 channel=1745.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	174	0.099713	Within authorized band for Band 66	Pass
	-20	154	0.088252		
	-10	167	0.095702		
	0	143	0.081948		
	10	137	0.078510		
	20	120	0.068768		
	30	160	0.091691		
	40	130	0.074499		
	50	112	0.064183		
16QAM					
3.70	-30	170	0.097421	Within authorized band for Band 66	Pass
	-20	143	0.081948		
	-10	160	0.091691		
	0	136	0.077937		
	10	152	0.087106		
	20	129	0.073926		
	30	113	0.064756		
	40	120	0.068768		
	50	101	0.057880		
<p><i>Note: Only the worst case shown in the report.</i></p>					

6.7 Frequency stability V.S. Voltage measurement

Test Requirement:	Part 22.355, Part 24.235, Part 27.54, Part 2.1055(d)(2)
Limit:	±2.5 ppm for Band 5 Within authorized band for Band 2 & 5 & 12 & 13& 17& 66
Test setup:	
Test procedure:	<ol style="list-style-type: none"> 1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details
Test results:	Passed

Measurement Data (worst case):

LTE Band 2 part:

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	83	0.044149	Within authorized band for Band 2	Pass
	3.80	72	0.038298		
	3.50	61	0.032447		
16QAM					
25	4.35	80	0.042553	Within authorized band for Band 2	Pass
	3.80	70	0.037234		
	3.50	63	0.033511		

Note: Only the worst case shown in the report.

LTE Band 5 part:

Reference Frequency: LTE Band 5(10MHz) Middle channel=20525 channel=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	81	0.096832	±2.5	Pass
	3.80	70	0.083682		
	3.50	61	0.072923		
16QAM					
25	4.35	80	0.095637	±2.5	Pass
	3.80	75	0.089659		
	3.50	66	0.078900		

Note: Only the worst case shown in the report.

LTE Band 12 part:

Reference Frequency: LTE Band 12(10MHz) Middle channel=23095 channel=707.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	87	0.122968	Within authorized band for Band 12	Pass
	3.80	75	0.106007		
	3.50	65	0.091873		
16QAM					
25	4.35	84	0.118728	Within authorized band for Band 12	Pass
	3.80	73	0.103180		
	3.50	63	0.089046		

Note: Only the worst case shown in the report.

LTE Band 13 part:

Reference Frequency: LTE Band 13(10MHz) Middle channel=23230 channel=782.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	80	0.102302	Within authorized band for Band 13	Pass
	3.70	71	0.090793		
	3.50	64	0.081841		
16QAM					
25	4.20	70	0.089514	Within authorized band for Band 13	Pass
	3.70	59	0.075448		
	3.50	63	0.080563		

Note: Only the worst case shown in the report.

LTE Band 17 part:

Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 channel=710.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	83	0.116901	Within authorized band for Band 17	Pass
	3.80	72	0.101408		
	3.50	62	0.087324		
16QAM					
25	4.35	82	0.115493	Within authorized band for Band 17	Pass
	3.80	73	0.102817		
	3.50	64	0.090141		

Note: Only the worst case shown in the report.

LTE Band 66 part:

Reference Frequency: LTE Band 66(10MHz) Middle channel=132332 channel=1745.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	80	0.045845	Within authorized band for Band 66	Pass
	3.70	70	0.040115		
	3.50	60	0.034384		
16QAM					
25	4.20	79	0.045272	Within authorized band for Band 66	Pass
	3.70	63	0.036103		
	3.50	57	0.032665		

Note: Only the worst case shown in the report.