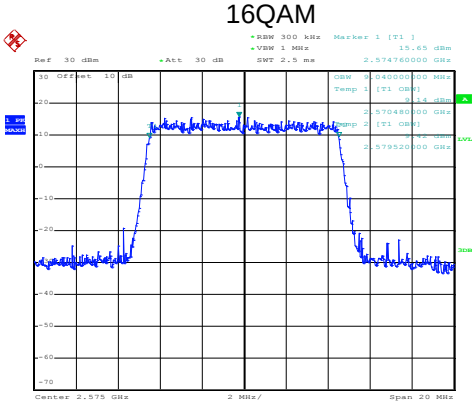
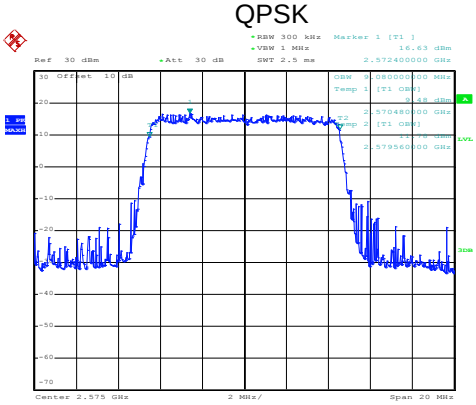
LTE Band 38: 99% Occupy bandwidth
BW: 10MHz

16QAM



Date: 31.JUL.2020 14:09:15

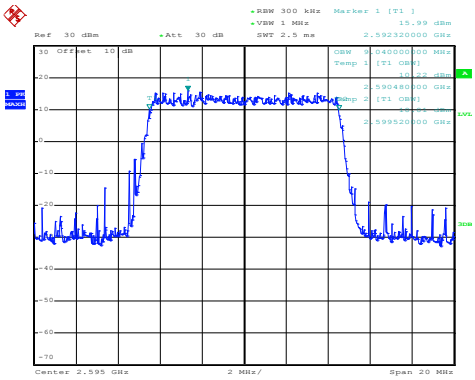
QPSK



Date: 31.JUL.2020 14:09:11

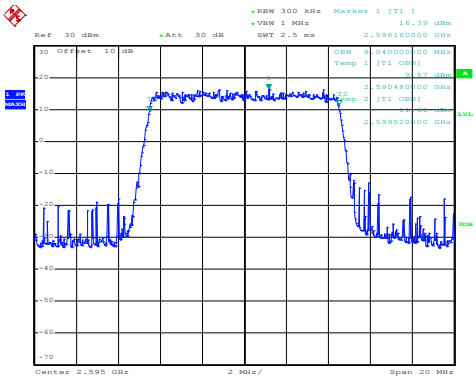
Lowest channel

16QAM



Date: 31.JUL.2020 14:09:58

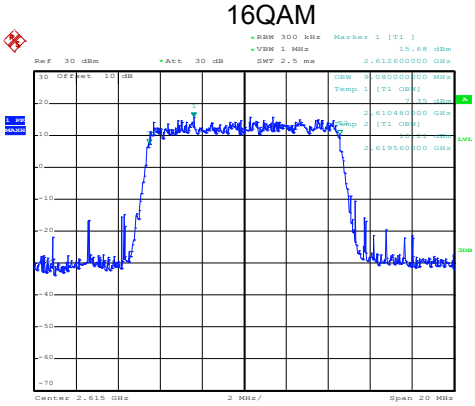
QPSK



Date: 31.JUL.2020 14:09:54

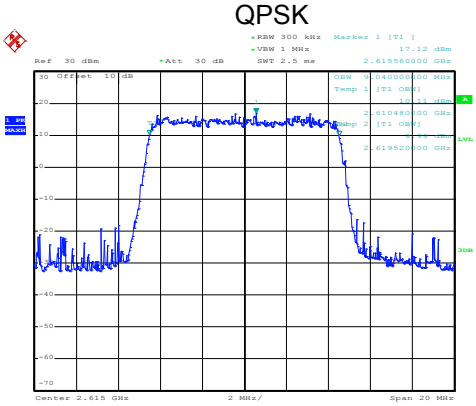
Middle channel

16QAM



Date: 31.JUL.2020 14:10:22

QPSK

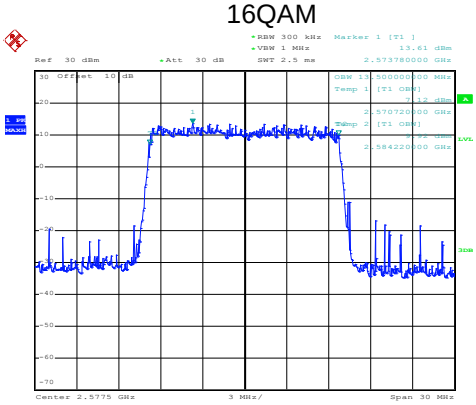


Date: 31.JUL.2020 14:10:18

Highest channel

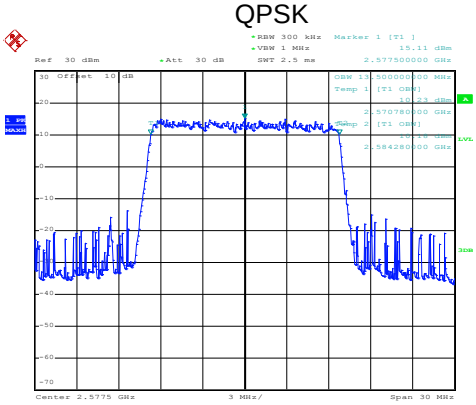
LTE Band 38: 99% Occupy bandwidth
BW: 15MHz

16QAM



Date: 31.JUL.2020 14:07:48

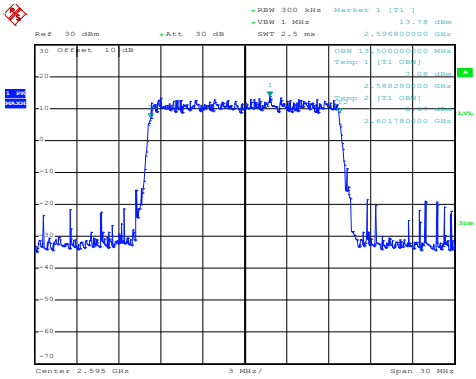
QPSK



Date: 31.JUL.2020 14:07:45

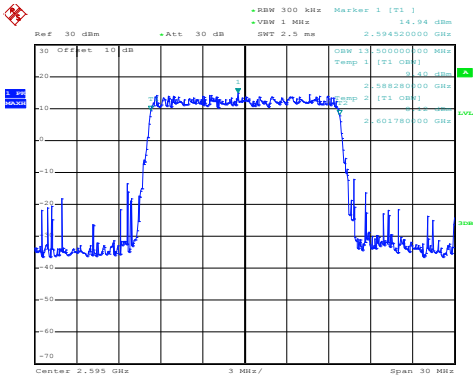
Lowest channel

16QAM



Date: 31.JUL.2020 14:08:05

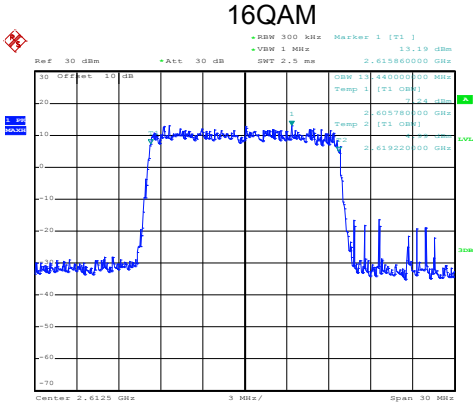
QPSK



Date: 31.JUL.2020 14:08:02

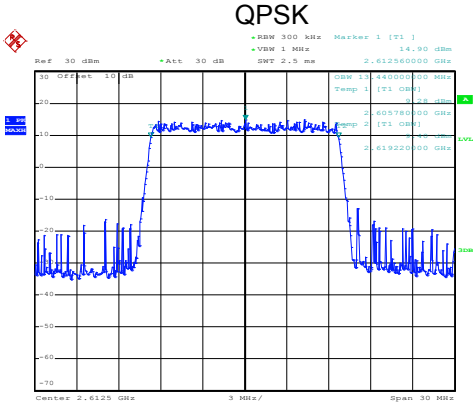
Middle channel

16QAM



Date: 31.JUL.2020 14:08:42

QPSK

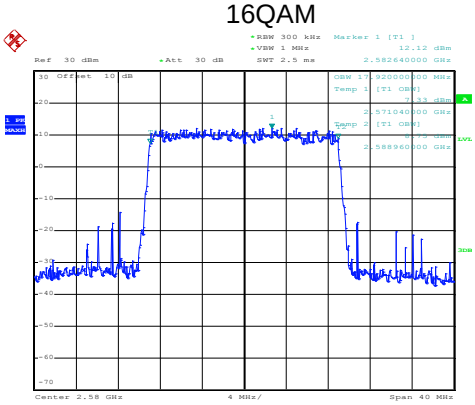


Date: 31.JUL.2020 14:08:38

Highest channel

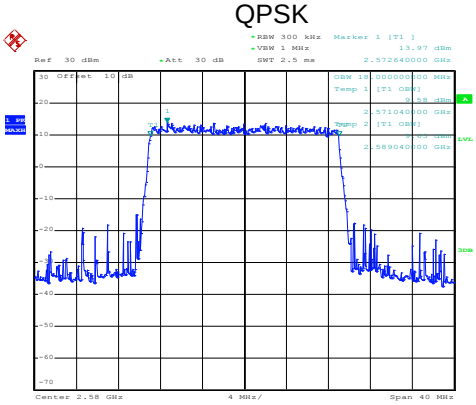
LTE Band 38: 99% Occupy bandwidth
BW: 20MHz

16QAM



Date: 31.JUL.2020 14:07:01

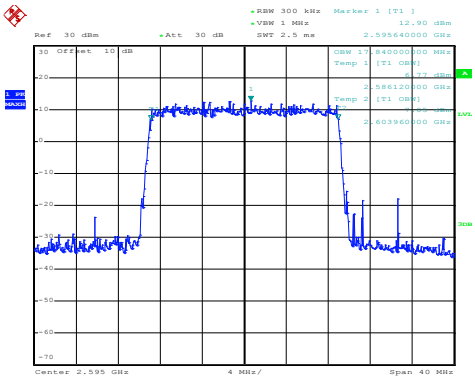
QPSK



Date: 31.JUL.2020 14:06:57

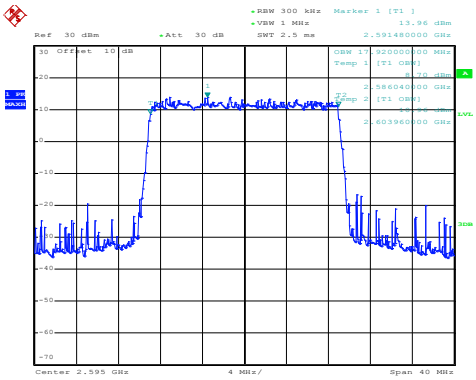
Lowest channel

16QAM



Date: 31.JUL.2020 14:06:45

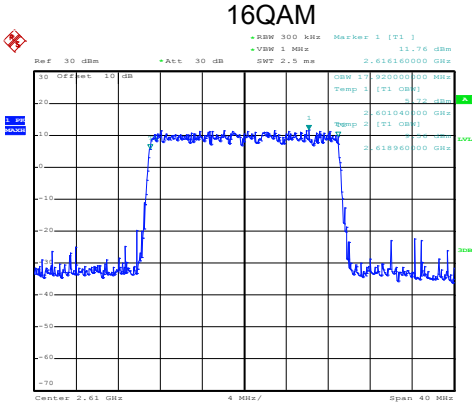
QPSK



Date: 31.JUL.2020 14:06:41

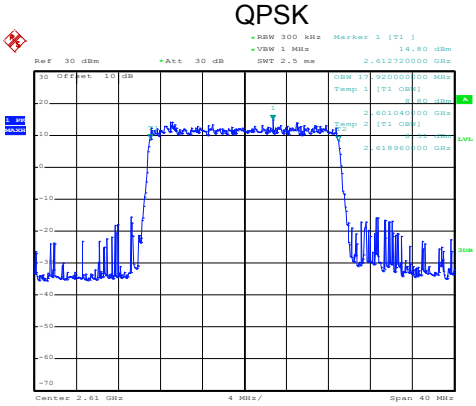
Middle channel

16QAM



Date: 31.JUL.2020 14:06:11

QPSK

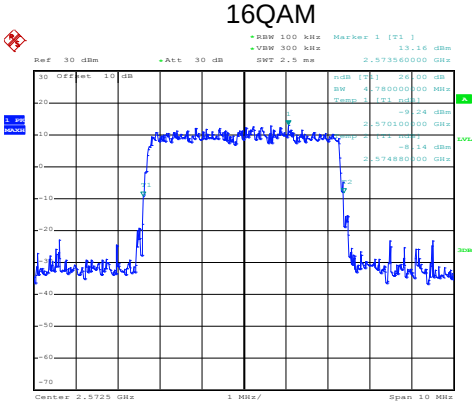


Date: 31.JUL.2020 14:06:07

Highest channel

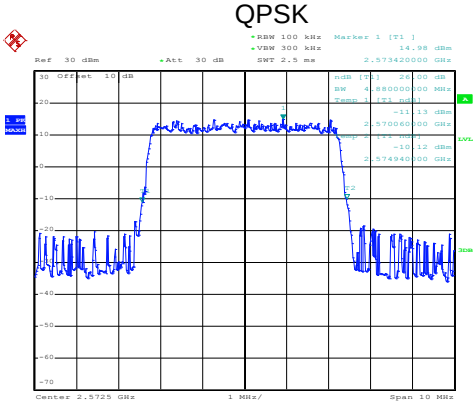
LTE Band 38: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 31.JUL.2020 14:11:02

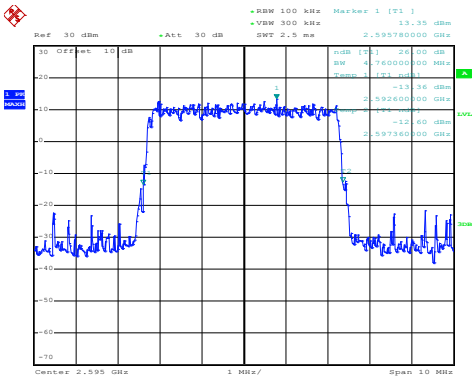
QPSK



Date: 31.JUL.2020 14:10:59

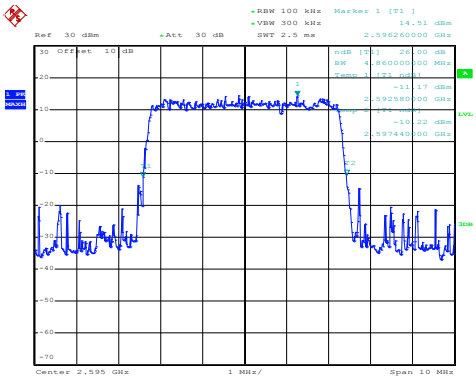
Lowest channel

16QAM



Date: 31.JUL.2020 14:11:36

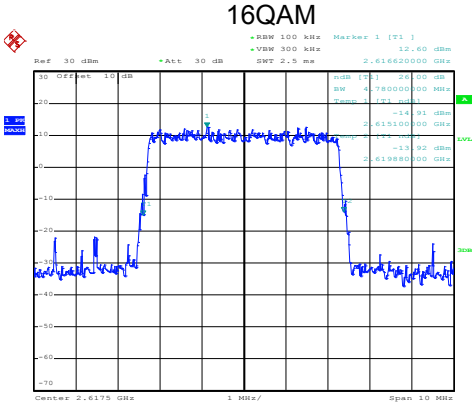
QPSK



Date: 31.JUL.2020 14:11:33

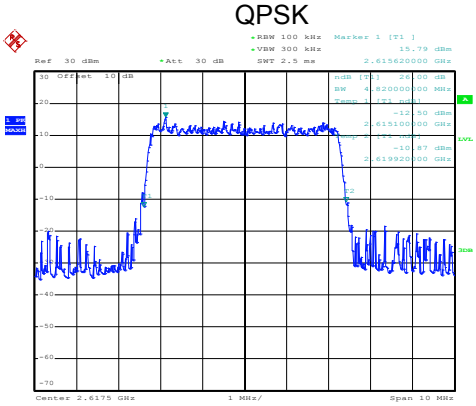
Middle channel

16QAM



Date: 31.JUL.2020 14:11:55

QPSK

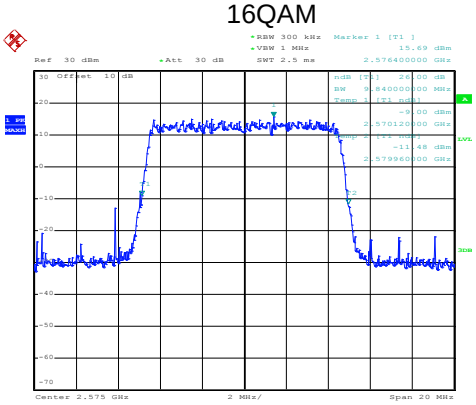


Date: 31.JUL.2020 14:11:51

Highest channel

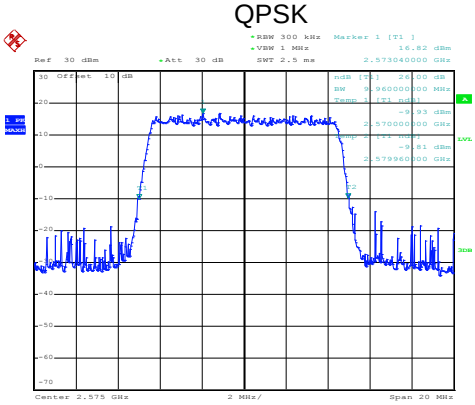
LTE Band 38: -26dBc bandwidth
BW: 10MHz

16QAM



Date: 31.JUL.2020 14:09:25

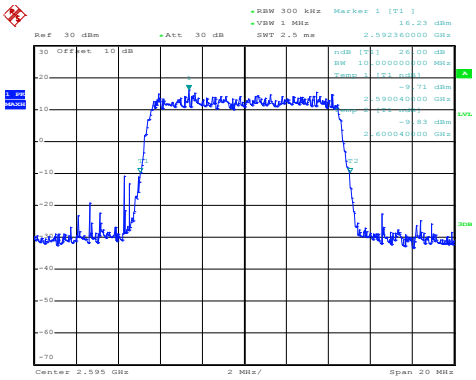
QPSK



Date: 31.JUL.2020 14:09:21

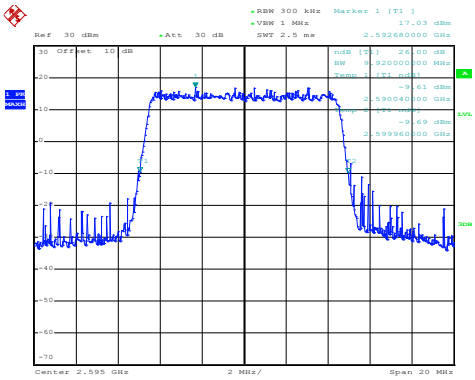
Lowest channel

16QAM



Date: 31.JUL.2020 14:09:47

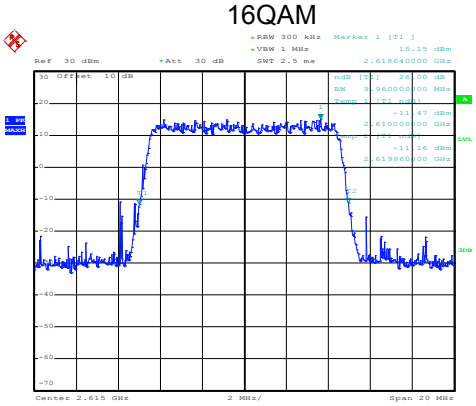
QPSK



Date: 31.JUL.2020 14:09:44

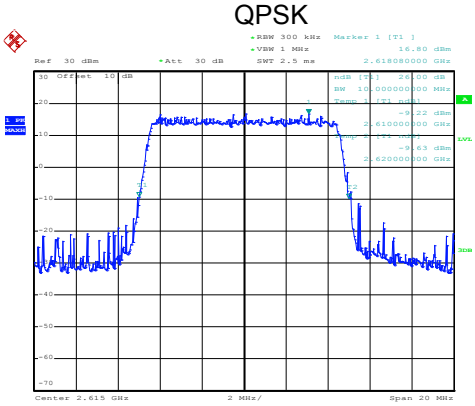
Middle channel

16QAM



Date: 31.JUL.2020 14:10:32

QPSK

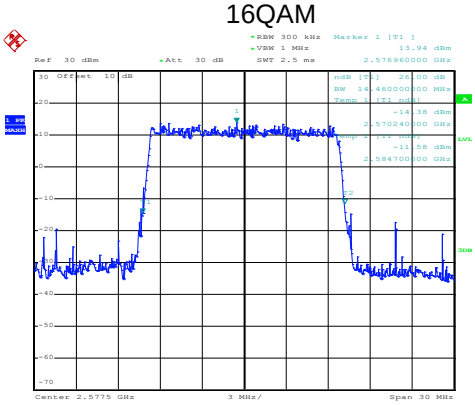


Date: 31.JUL.2020 14:10:28

Highest channel

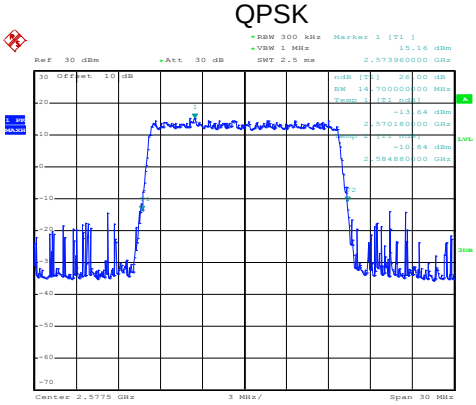
LTE Band 38: -26dBc bandwidth
BW: 15MHz

16QAM



Date: 31.JUL.2020 14:07:38

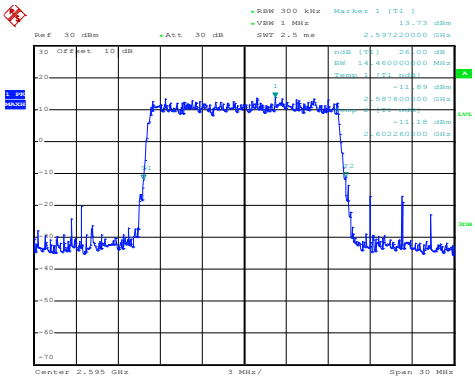
QPSK



Date: 31.JUL.2020 14:07:34

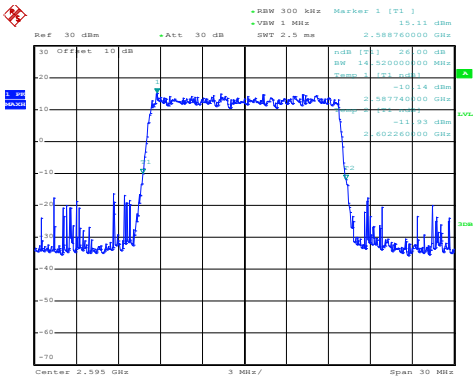
Lowest channel

16QAM



Date: 31.JUL.2020 14:08:15

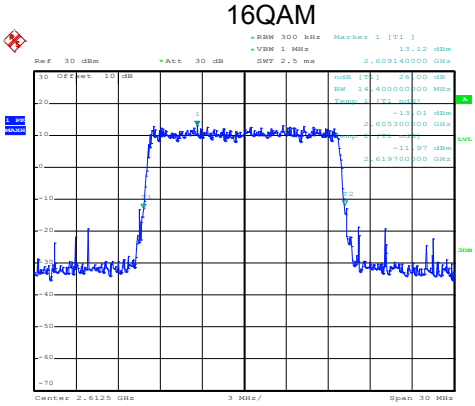
QPSK



Date: 31.JUL.2020 14:08:11

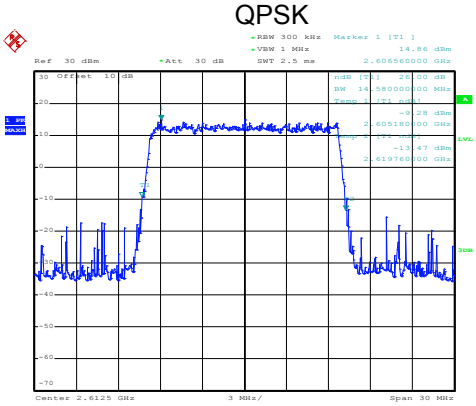
Middle channel

16QAM



Date: 31.JUL.2020 14:08:31

QPSK

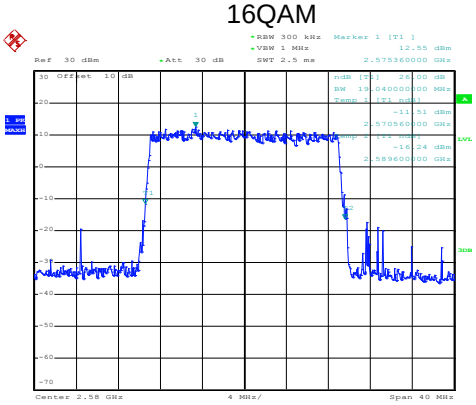


Date: 31.JUL.2020 14:08:28

Highest channel

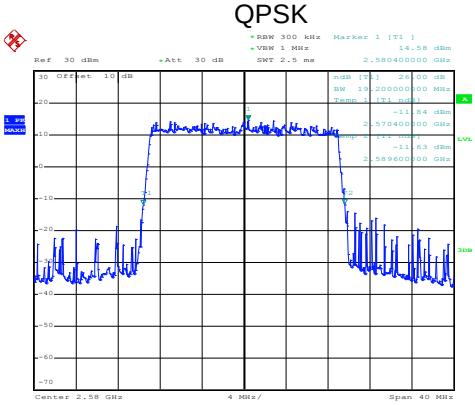
LTE Band 38: -26dBc bandwidth
BW: 20MHz

16QAM



Date: 31.JUL.2020 14:07:11

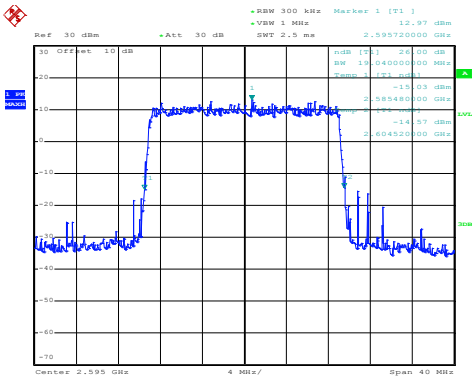
QPSK



Date: 31.JUL.2020 14:07:07

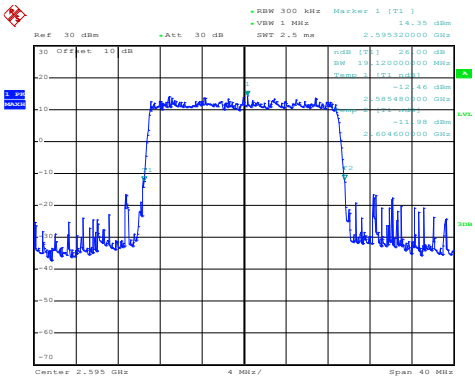
Lowest channel

16QAM



Date: 31.JUL.2020 14:06:34

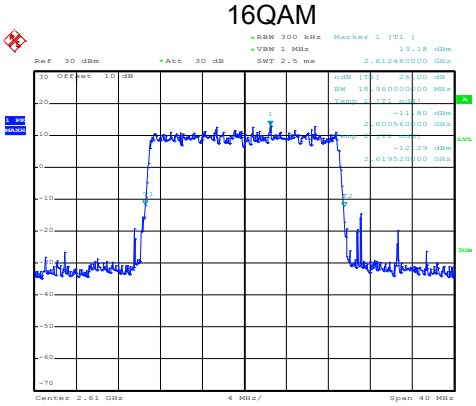
QPSK



Date: 31.JUL.2020 14:06:31

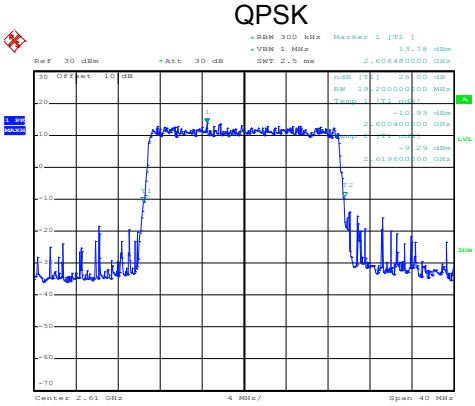
Middle channel

16QAM



Date: 31.JUL.2020 14:06:20

QPSK



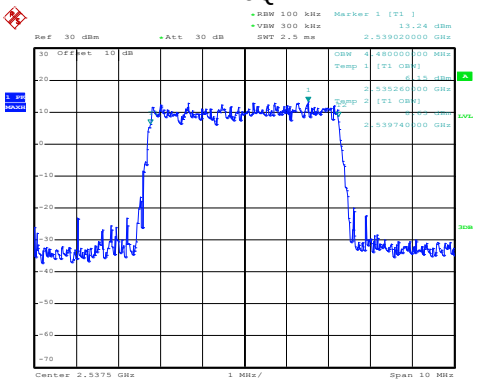
Date: 31.JUL.2020 14:06:17

Highest channel

LTE-Band 41 part:

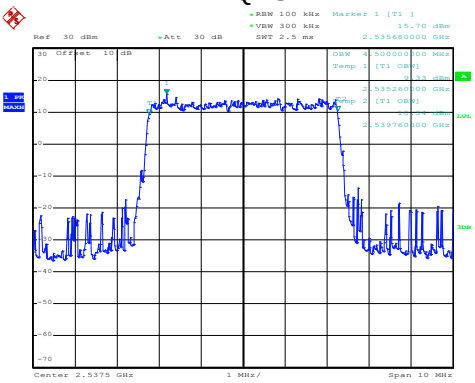
LTE Band 41: 99% Occupy bandwidth
BW: 5MHz

16QAM



Date: 31.JUL.2020 14:12:29

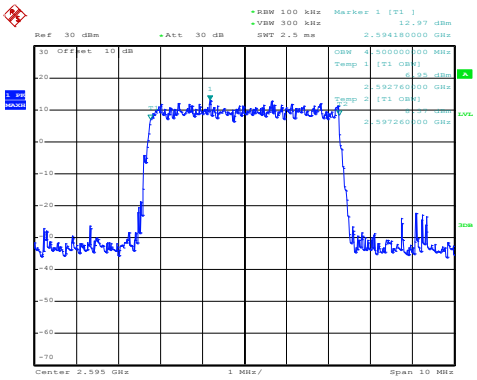
QPSK



Date: 31.JUL.2020 14:12:25

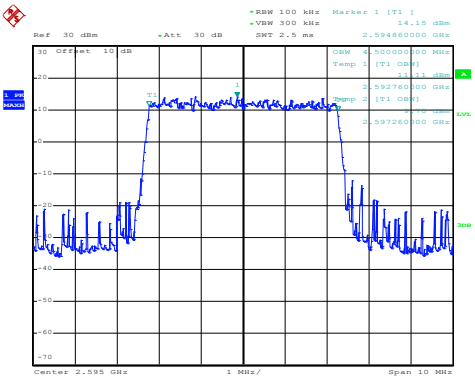
Lowest channel

16QAM



Date: 31.JUL.2020 14:13:09

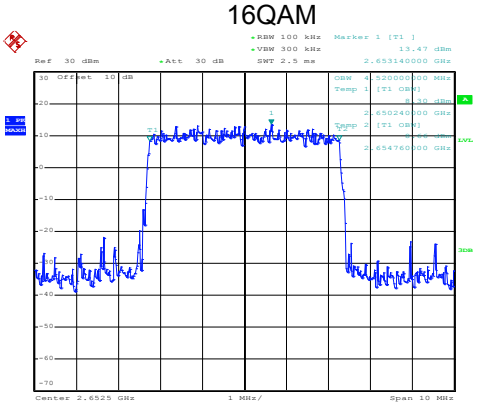
QPSK



Date: 31.JUL.2020 14:13:05

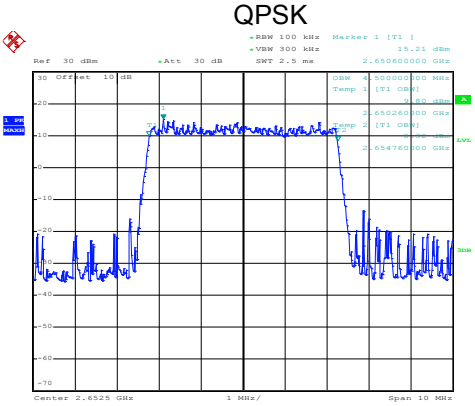
Middle channel

16QAM



Date: 31.JUL.2020 14:13:25

QPSK

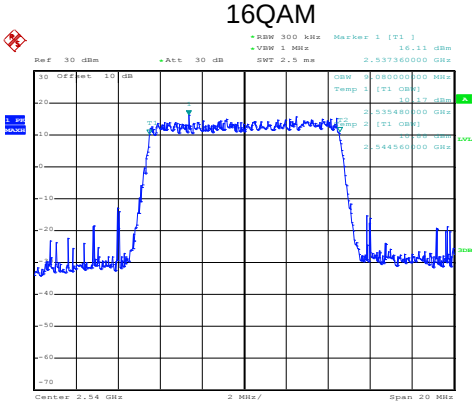


Date: 31.JUL.2020 14:13:21

Highest channel

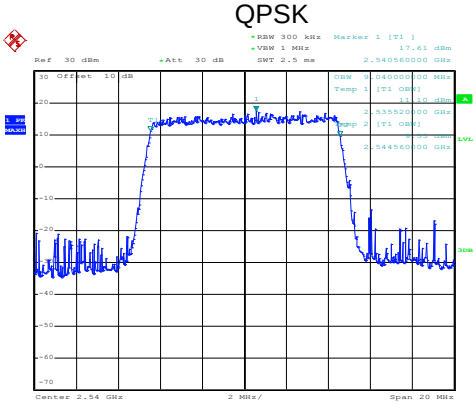
LTE Band 41: 99% Occupy bandwidth
BW: 10MHz

16QAM



Date: 31.JUL.2020 14:14:21

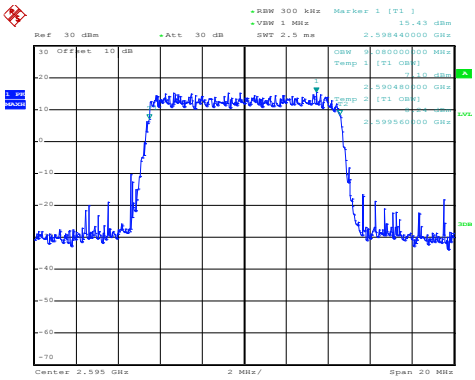
QPSK



Date: 31.JUL.2020 14:14:17

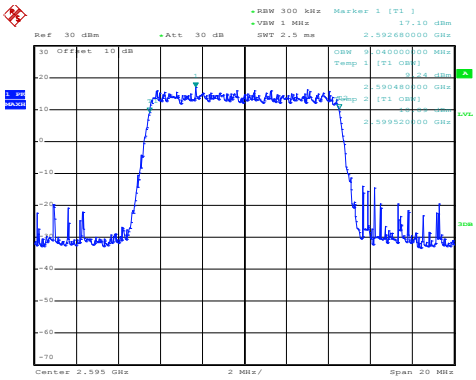
Lowest channel

16QAM



Date: 31.JUL.2020 14:14:33

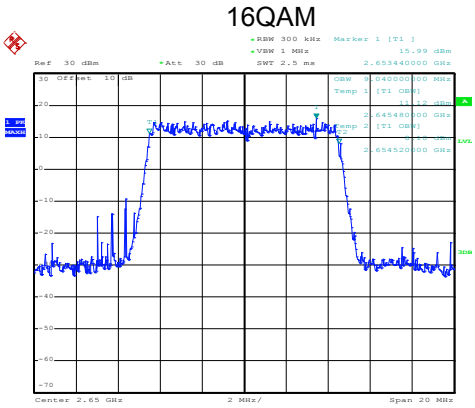
QPSK



Date: 31.JUL.2020 14:14:29

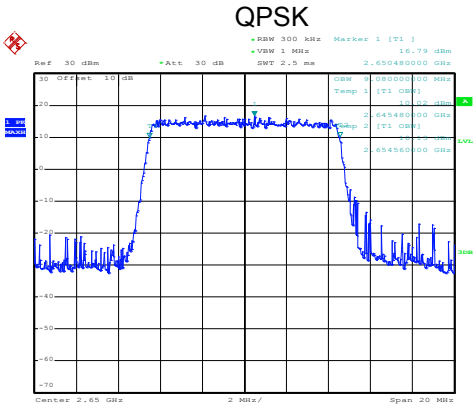
Middle channel

16QAM



Date: 31.JUL.2020 14:15:27

QPSK

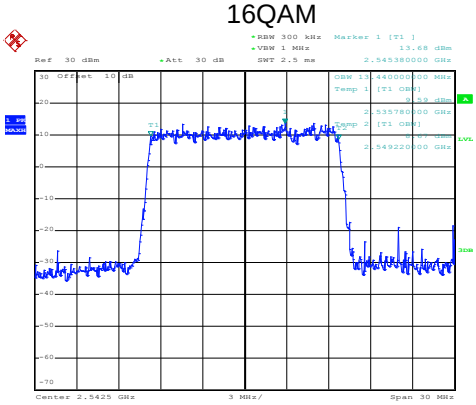


Date: 31.JUL.2020 14:15:23

Highest channel

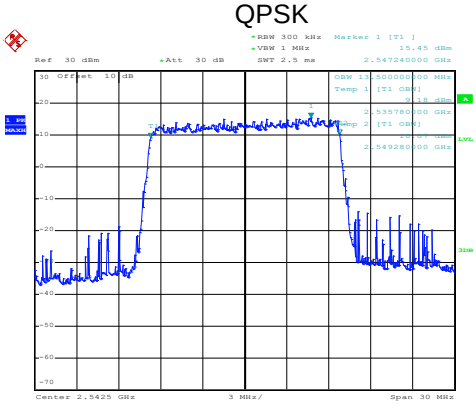
LTE Band 41: 99% Occupy bandwidth
BW: 15MHz

16QAM



Date: 31.JUL.2020 14:15:56

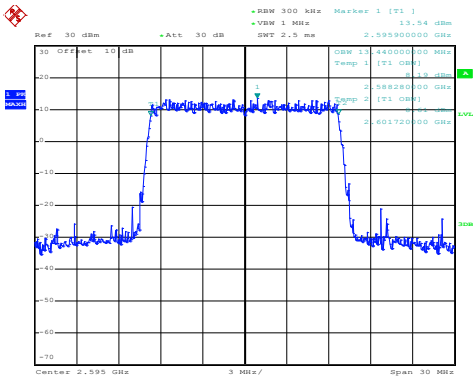
QPSK



Date: 31.JUL.2020 14:15:52

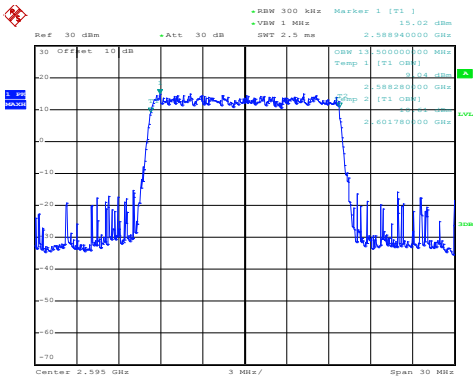
Lowest channel

16QAM



Date: 31.JUL.2020 14:16:35

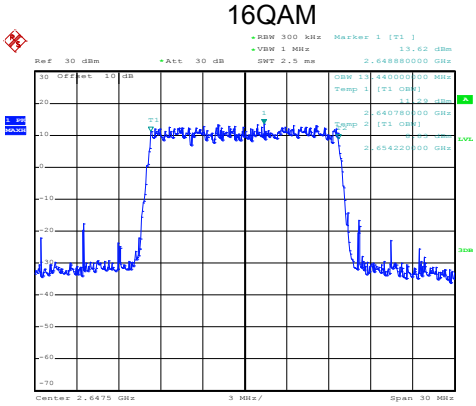
QPSK



Date: 31.JUL.2020 14:16:31

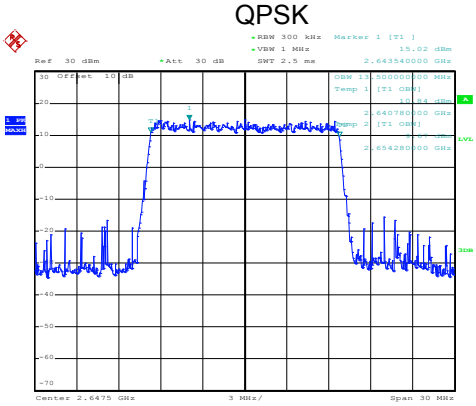
Middle channel

16QAM



Date: 31.JUL.2020 14:16:50

QPSK

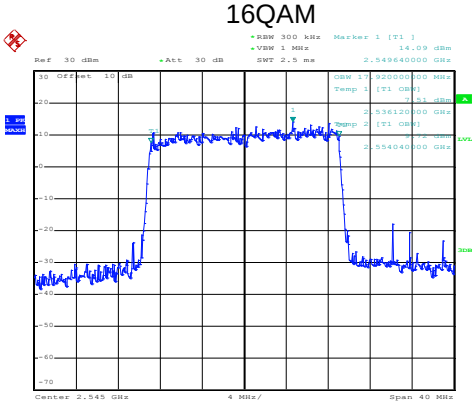


Date: 31.JUL.2020 14:16:46

Highest channel

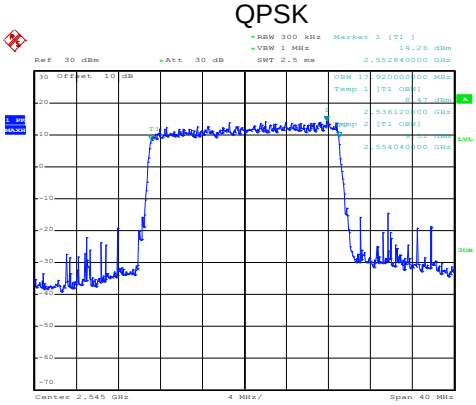
LTE Band 41: 99% Occupy bandwidth
BW: 20MHz

16QAM



Date: 31.JUL.2020 14:17:36

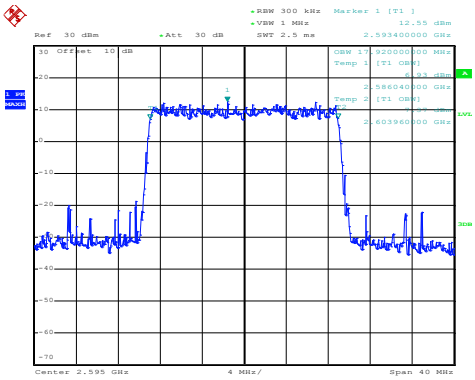
QPSK



Date: 31.JUL.2020 14:17:32

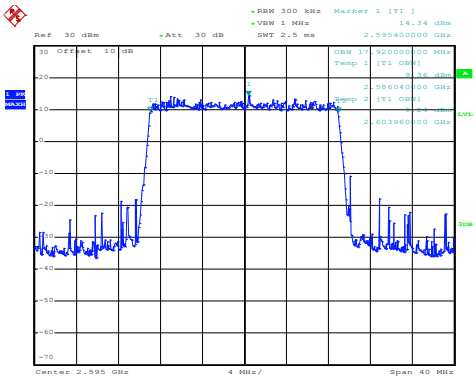
Lowest channel

16QAM



Date: 31.JUL.2020 14:17:49

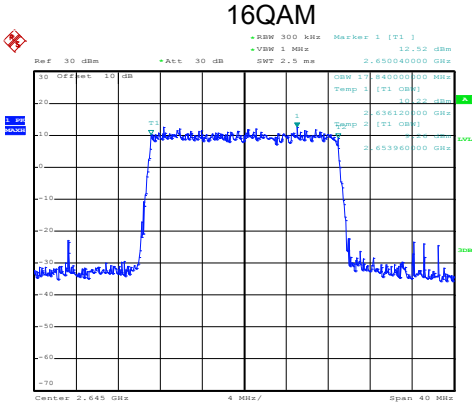
QPSK



Date: 31.JUL.2020 14:17:45

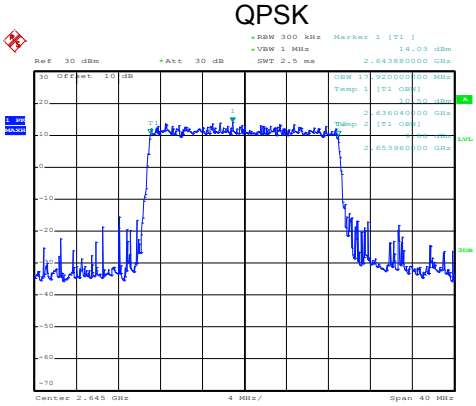
Middle channel

16QAM



Date: 31.JUL.2020 14:18:24

QPSK

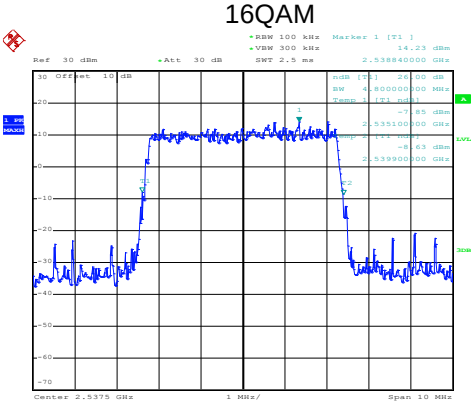


Date: 31.JUL.2020 14:18:20

Highest channel

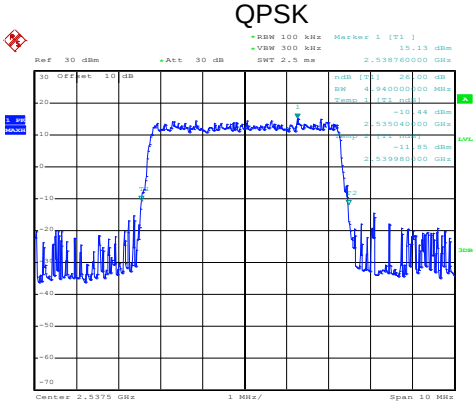
LTE Band 41: -26dBc bandwidth
BW: 5MHz

16QAM



Date: 31.JUL.2020 14:12:41

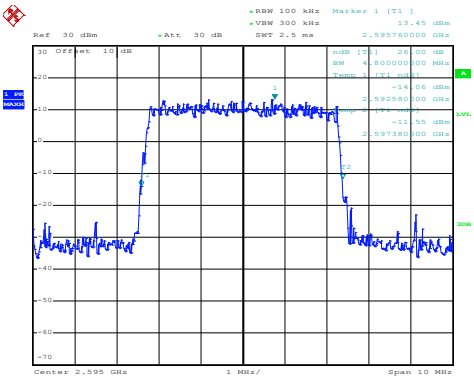
QPSK



Date: 31.JUL.2020 14:12:38

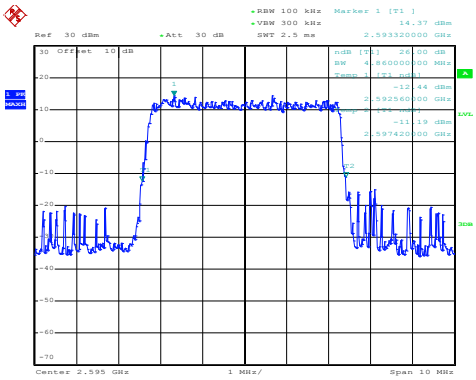
Lowest channel

16QAM



Date: 31.JUL.2020 14:12:59

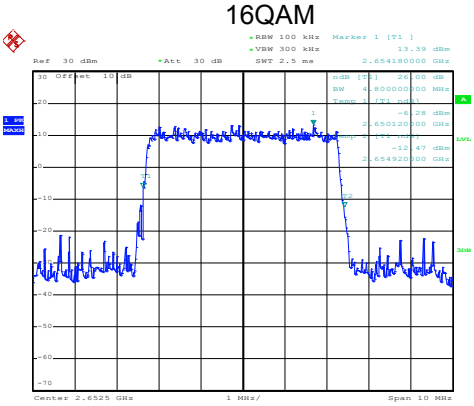
QPSK



Date: 31.JUL.2020 14:12:55

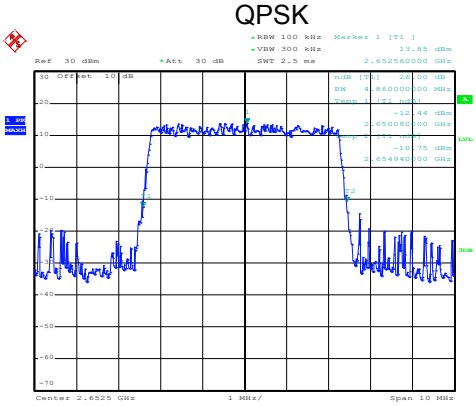
Middle channel

16QAM



Date: 31.JUL.2020 14:13:35

QPSK

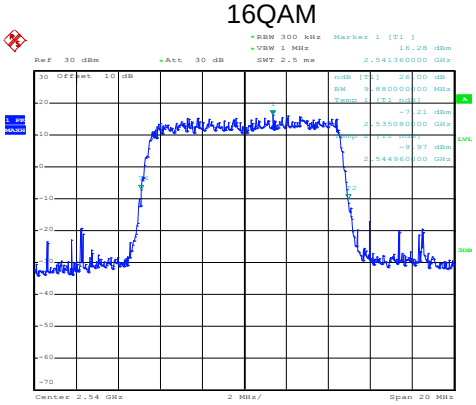


Date: 31.JUL.2020 14:13:31

Highest channel

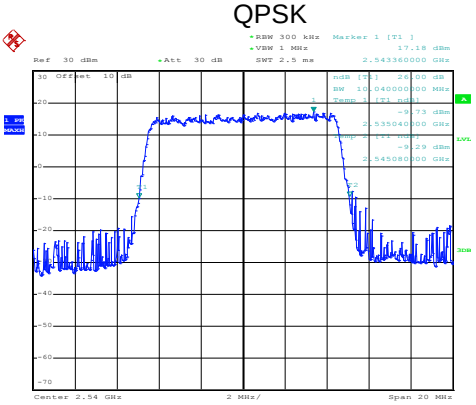
LTE Band 41: -26dBc bandwidth
BW: 10MHz

16QAM



Date: 31.JUL.2020 14:14:11

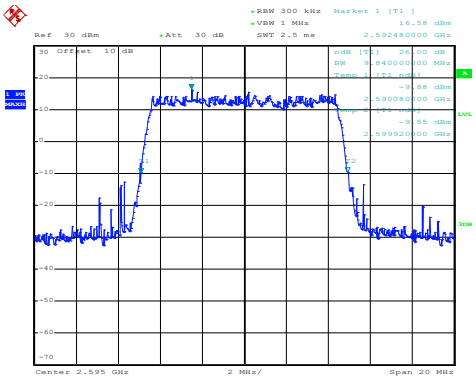
QPSK



Date: 31.JUL.2020 14:14:07

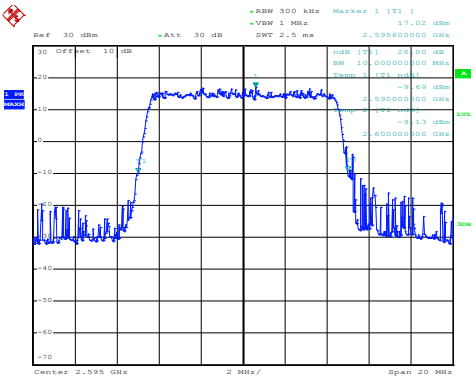
Lowest channel

16QAM



Date: 31.JUL.2020 14:14:48

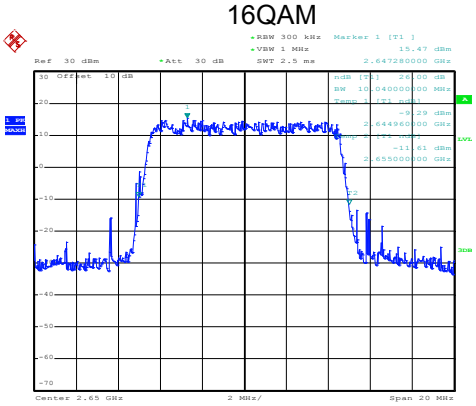
QPSK



Date: 31.JUL.2020 14:14:44

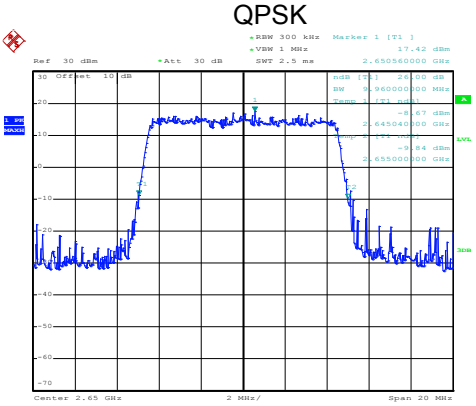
Middle channel

16QAM



Date: 31.JUL.2020 14:15:17

QPSK

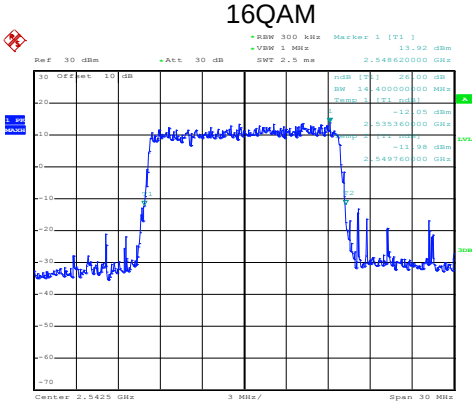


Date: 31.JUL.2020 14:15:13

Highest channel

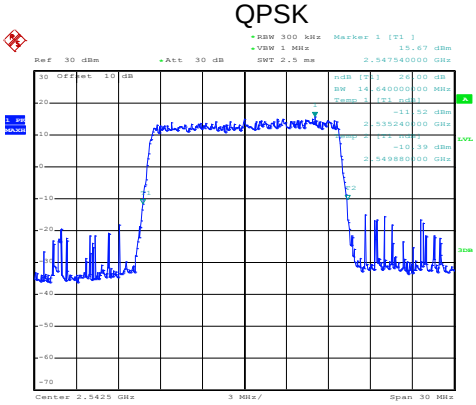
LTE Band 41: -26dBc bandwidth
BW: 15MHz

16QAM



Date: 31.JUL.2020 14:16:07

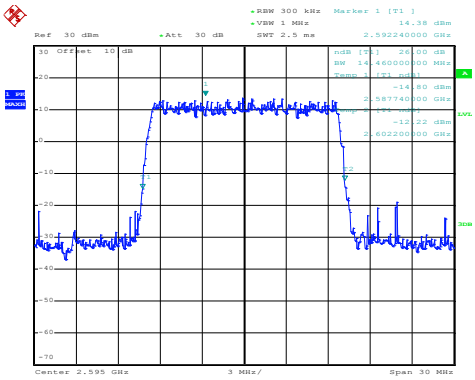
QPSK



Date: 31.JUL.2020 14:16:03

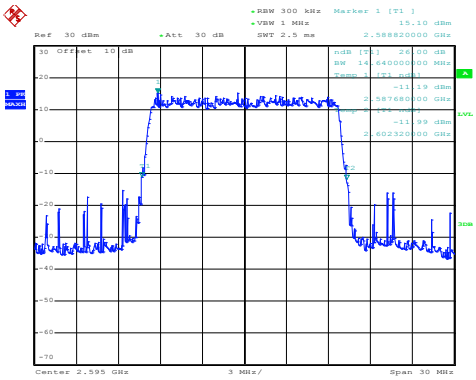
Lowest channel

16QAM



Date: 31.JUL.2020 14:16:24

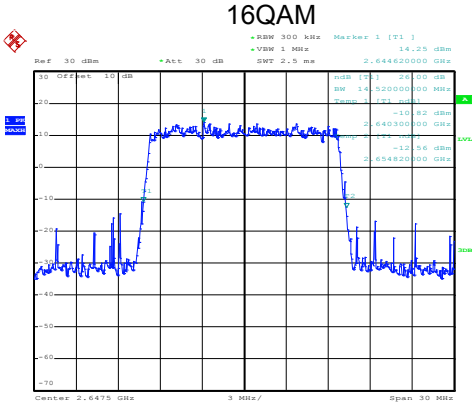
QPSK



Date: 31.JUL.2020 14:16:20

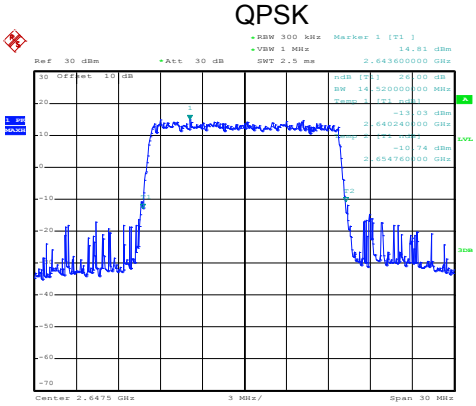
Middle channel

16QAM



Date: 31.JUL.2020 14:17:00

QPSK

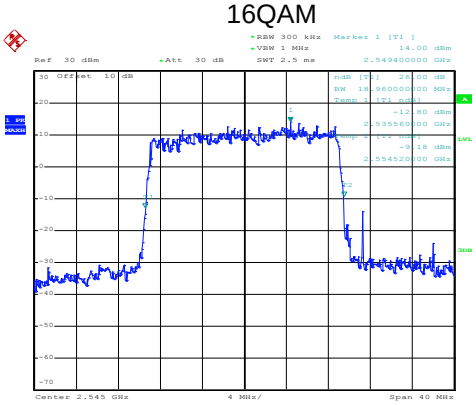


Date: 31.JUL.2020 14:16:56

Highest channel

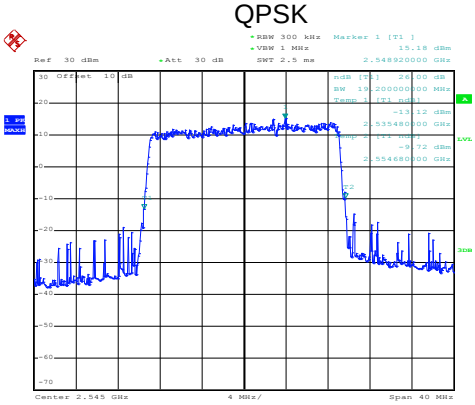
LTE Band 41: -26dBc bandwidth
BW: 20MHz

16QAM



Date: 31.JUL.2020 14:17:25

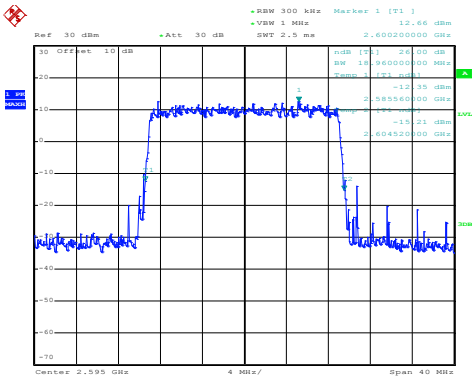
QPSK



Date: 31.JUL.2020 14:17:22

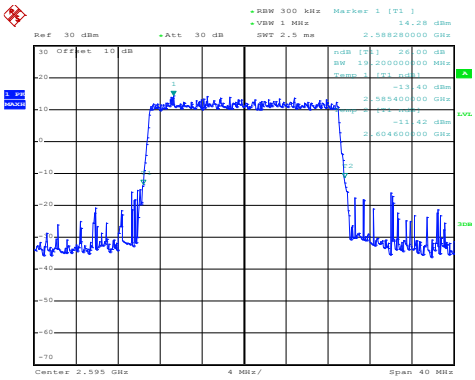
Lowest channel

16QAM



Date: 31.JUL.2020 14:17:59

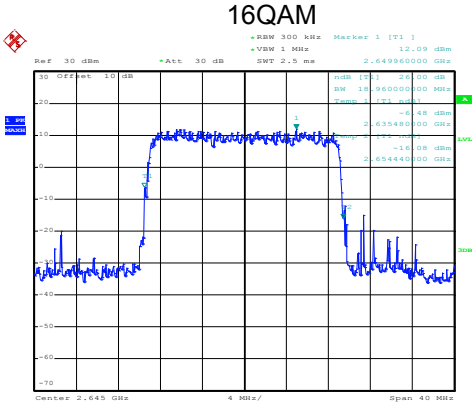
QPSK



Date: 31.JUL.2020 14:17:55

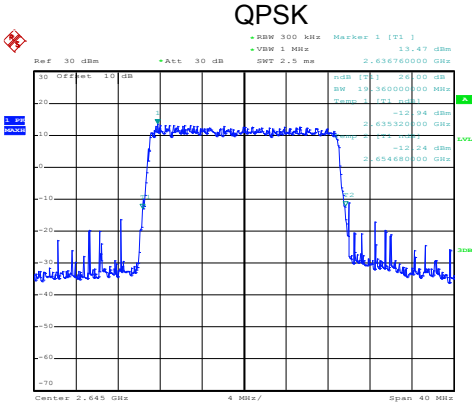
Middle channel

16QAM



Date: 31.JUL.2020 14:18:14

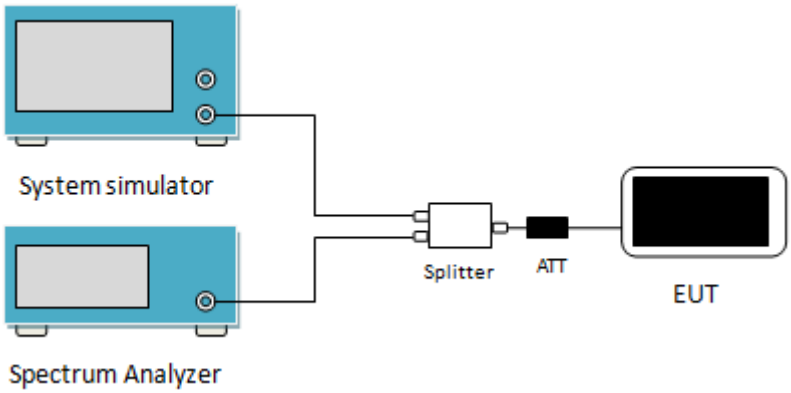
QPSK



Date: 31.JUL.2020 14:18:10

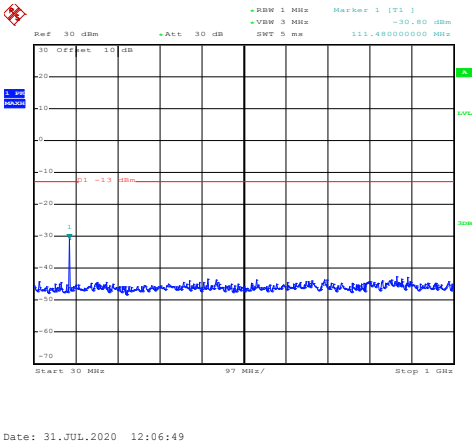
Highest channel

6.4 Out of band emission at antenna terminals

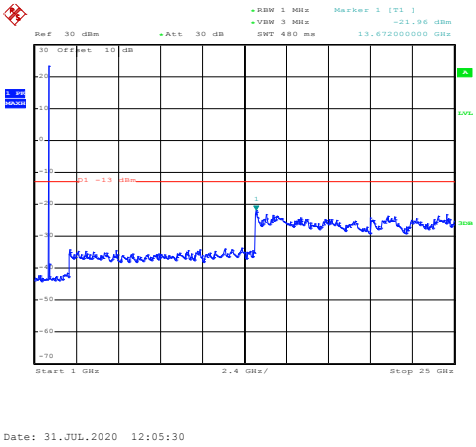
Test Requirement:	Part 22.917(a), Part 24.238 (a), part 27.53(h), Part 27.53(m)
Limit:	LTE Band 2 & 4 & 5: The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 $\log_{10}$(P) dB (-13 dBm). LTE Band 7 & 38 & 41: For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.
Test Setup:	
Test Procedure:	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: 16 QAM & RB Size 1
BW: 1.4MHz
Lowest channel

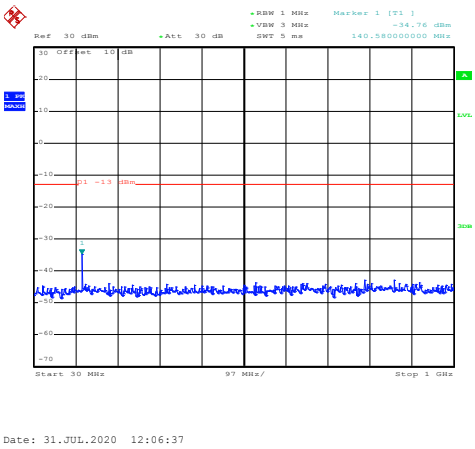


30MHz~1GHz

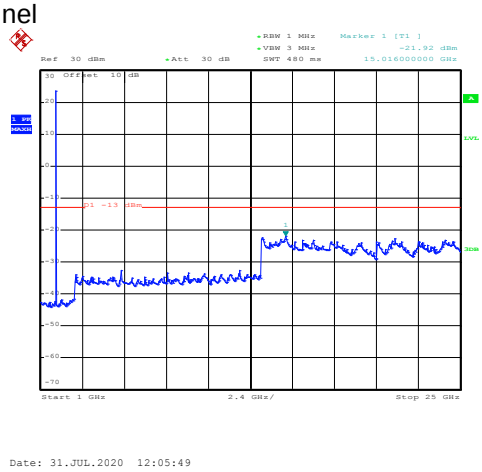


1GHz~25GHz

Middle channel

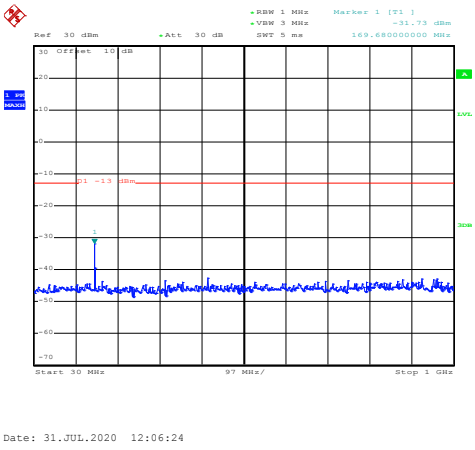


30MHz~1GHz

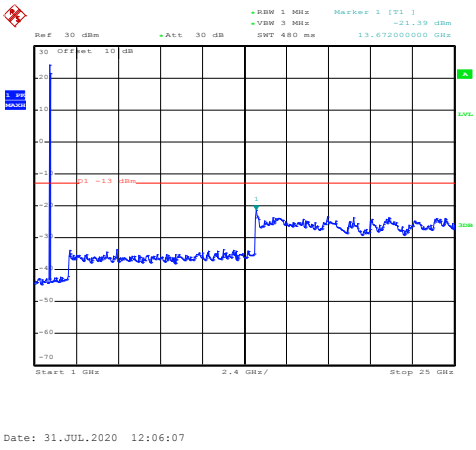


1GHz~25GHz

High channel

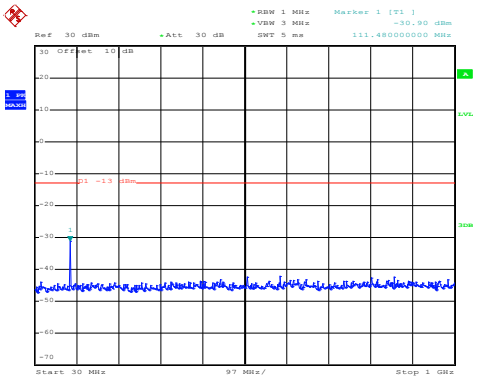


30MHz~1GHz



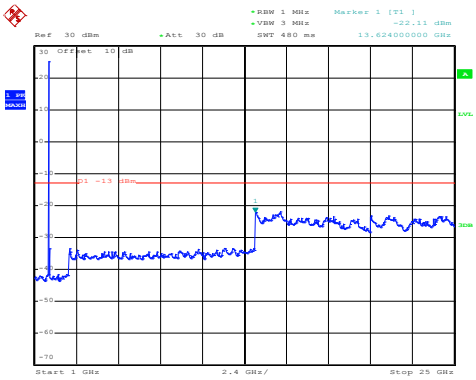
1GHz~25GHz

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



Date: 31.JUL.2020 12:06:45

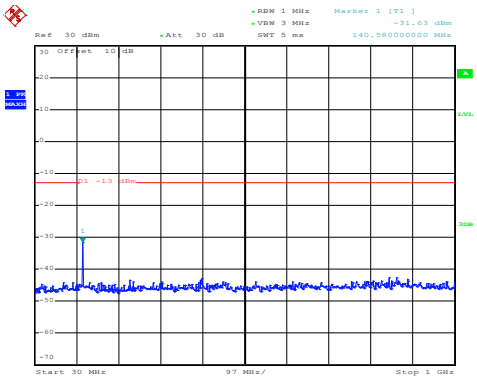
30MHz~1GHz



Date: 31.JUL.2020 12:05:23

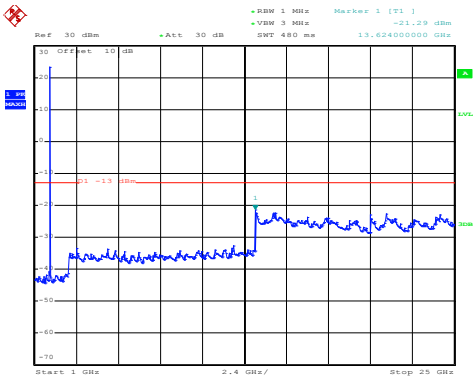
1GHz~25GHz

Middle channel



Date: 31.JUL.2020 12:06:32

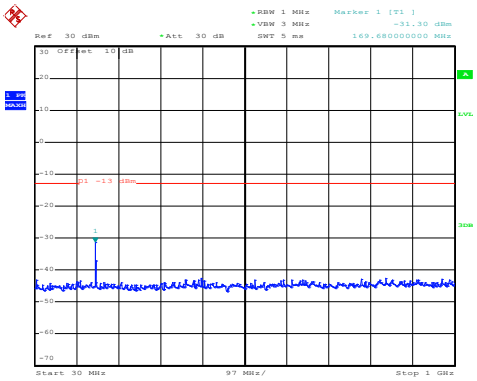
30MHz~1GHz



Date: 31.JUL.2020 12:05:40

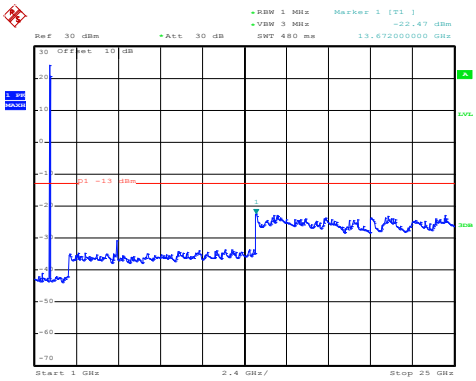
1GHz~25GHz

High channel



Date: 31.JUL.2020 12:06:19

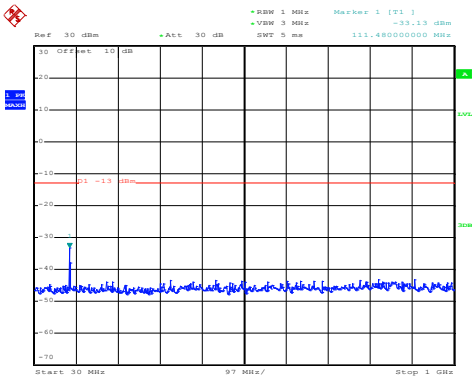
30MHz~1GHz



Date: 31.JUL.2020 12:06:01

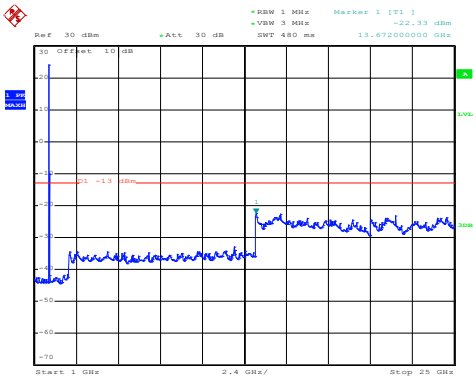
1GHz~25GHz

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



Date: 31.JUL.2020 12:01:34

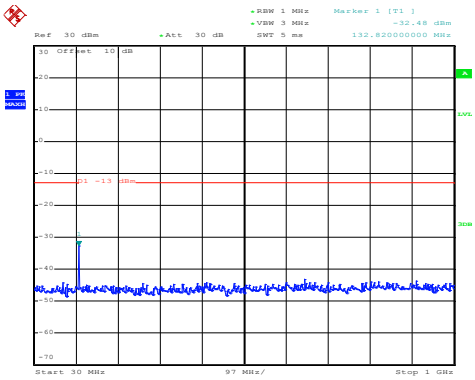
30MHz~1GHz



Date: 31.JUL.2020 12:03:06

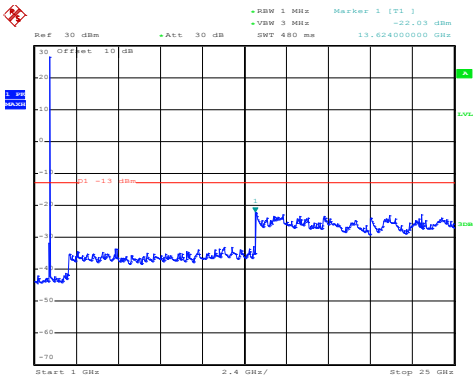
1GHz~25GHz

Middle channel



Date: 31.JUL.2020 12:01:46

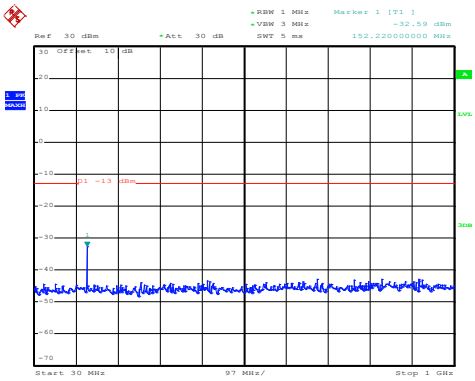
30MHz~1GHz



Date: 31.JUL.2020 12:02:46

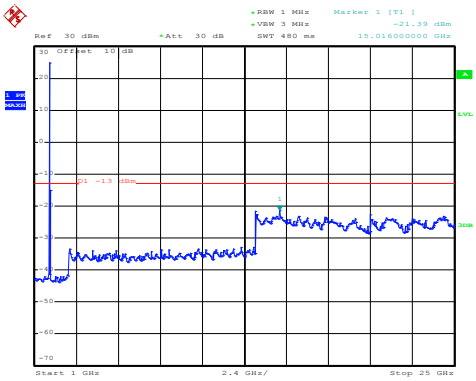
1GHz~25GHz

High channel



Date: 31.JUL.2020 12:01:58

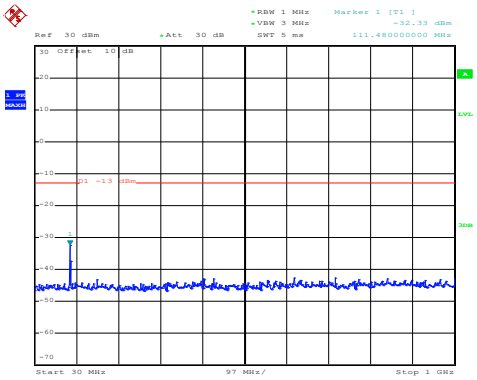
30MHz~1GHz



Date: 31.JUL.2020 12:02:25

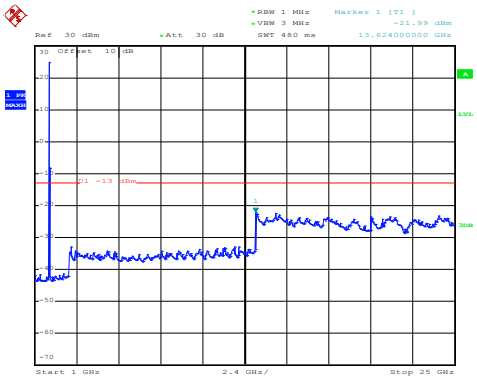
1GHz~25GHz

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



Date: 31.JUL.2020 12:01:29

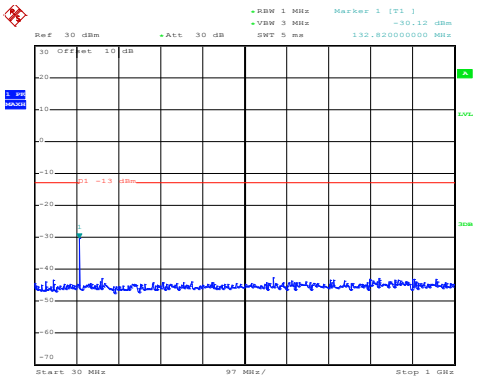
30MHz~1GHz



Date: 31.JUL.2020 12:02:59

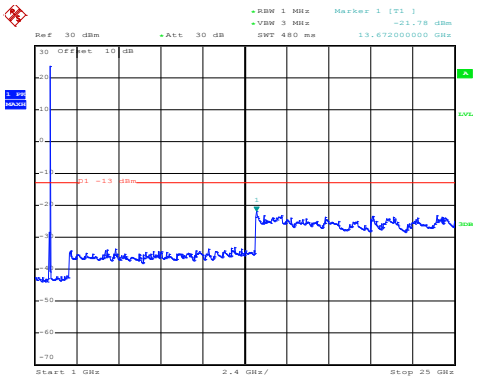
1GHz~25GHz

Middle channel



Date: 31.JUL.2020 12:01:41

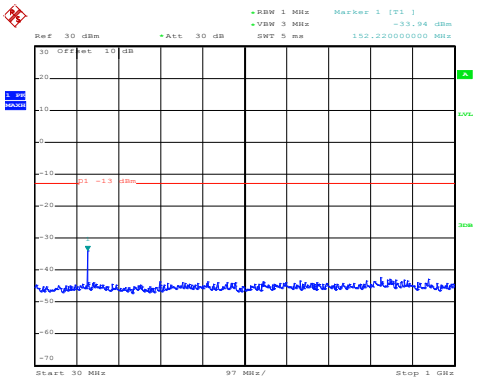
30MHz~1GHz



Date: 31.JUL.2020 12:02:39

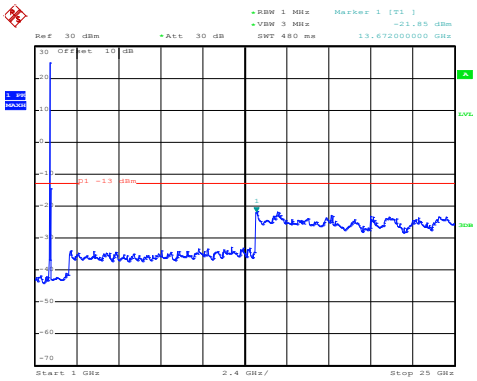
1GHz~25GHz

High channel



Date: 31.JUL.2020 12:01:54

30MHz~1GHz

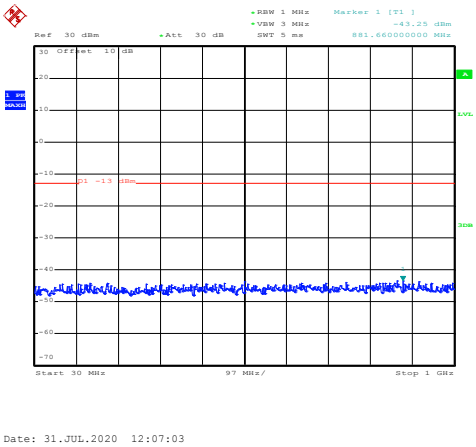


Date: 31.JUL.2020 12:02:12

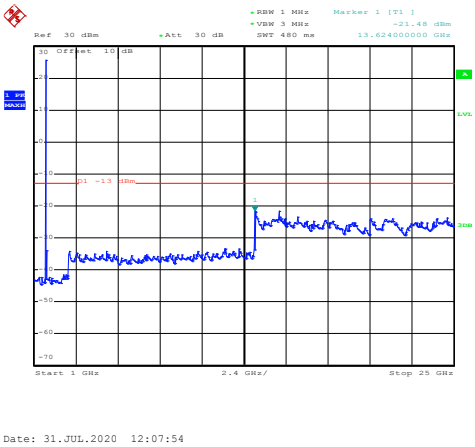
1GHz~25GHz

LTE Band 4 part:

LTE Band 4: 16 QAM & RB Size 1
BW: 1.4MHz
Lowest channel

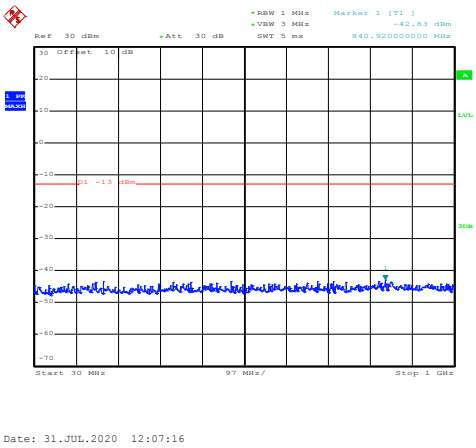


30MHz~1GHz

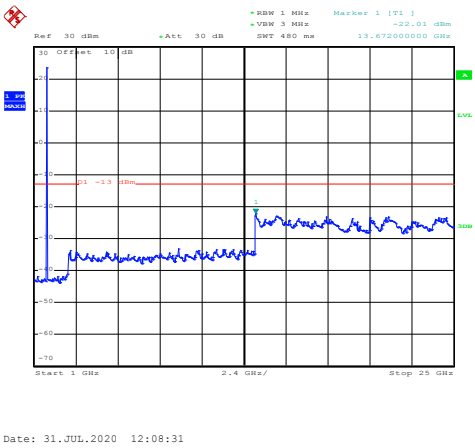


1GHz~25GHz

Middle channel

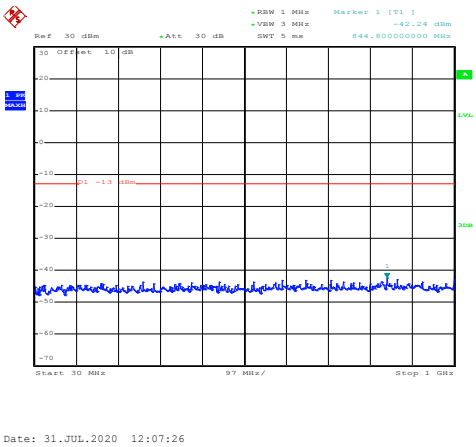


30MHz~1GHz

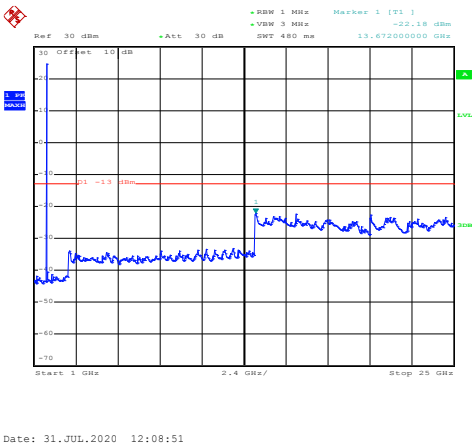


1GHz~25GHz

High channel

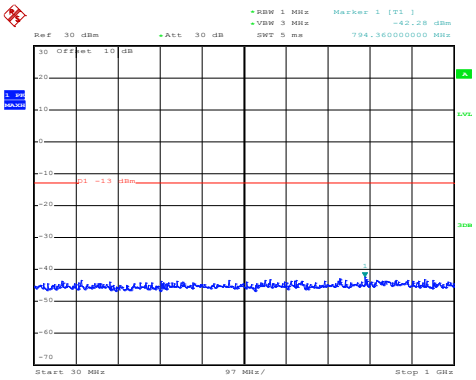


30MHz~1GHz



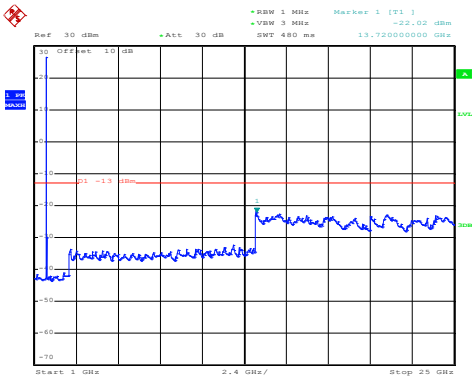
1GHz~25GHz

LTE Band 4: QPSK & RB Size 1
BW: 1.4MHz
Lowest channel



Date: 31.JUL.2020 12:06:59

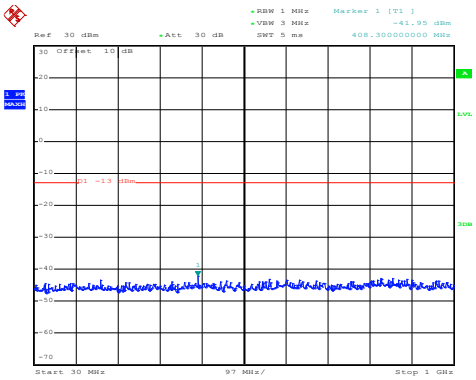
30MHz~1GHz



Date: 31.JUL.2020 12:07:48

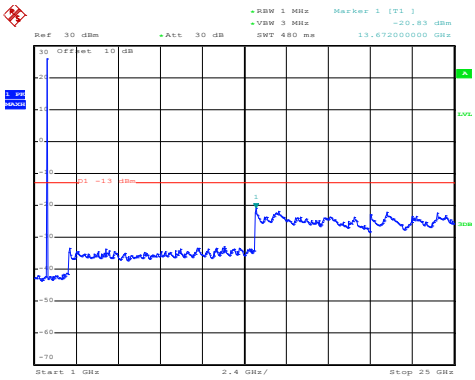
1GHz~25GHz

Middle channel



Date: 31.JUL.2020 12:07:11

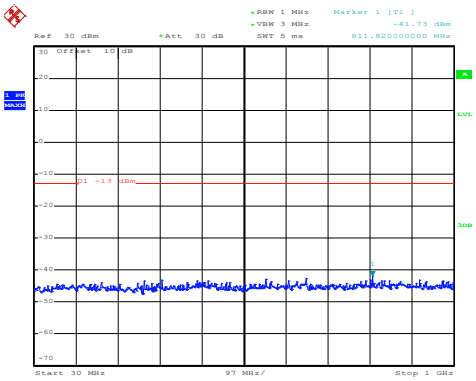
30MHz~1GHz



Date: 31.JUL.2020 12:08:21

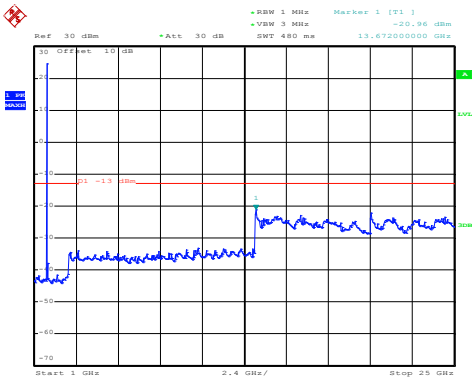
1GHz~25GHz

High channel



Date: 31.JUL.2020 12:07:21

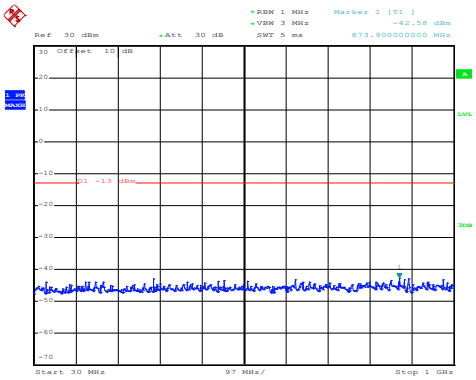
30MHz~1GHz



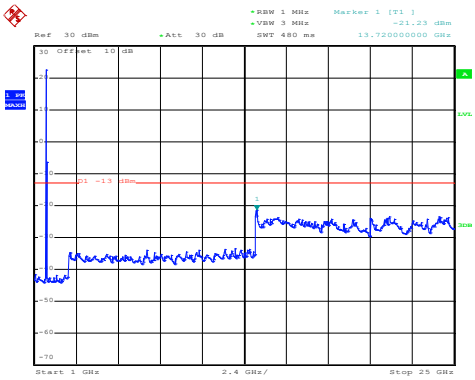
Date: 31.JUL.2020 12:08:43

1GHz~25GHz

LTE Band 4: 16 QAM & RB Size 1
BW: 20MHz
Lowest channel

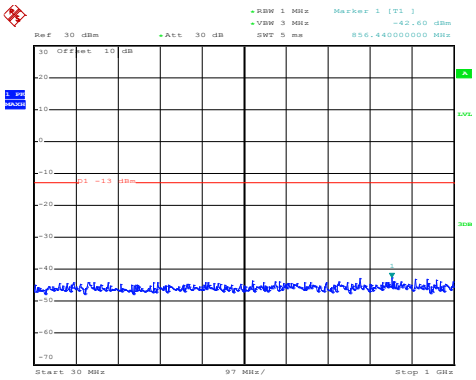


30MHz~1GHz

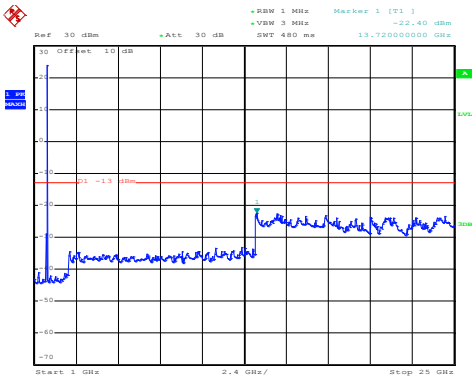


1GHz~25GHz

Middle channel

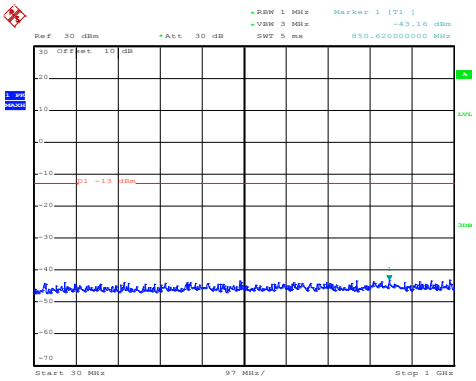


30MHz~1GHz

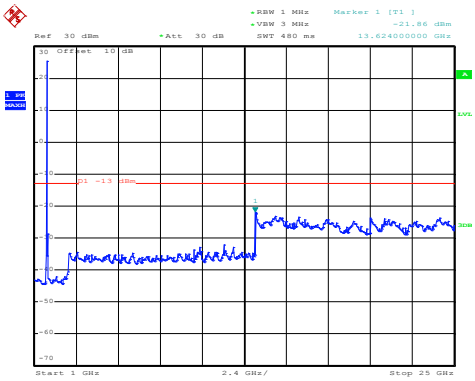


1GHz~25GHz

High channel

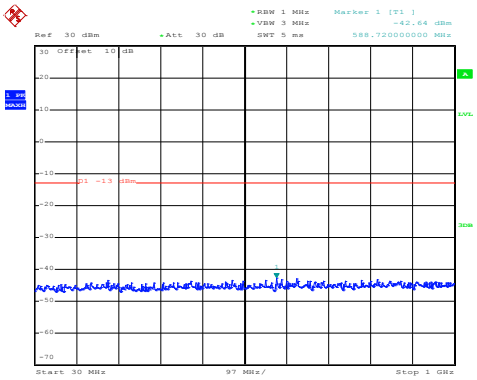


30MHz~1GHz



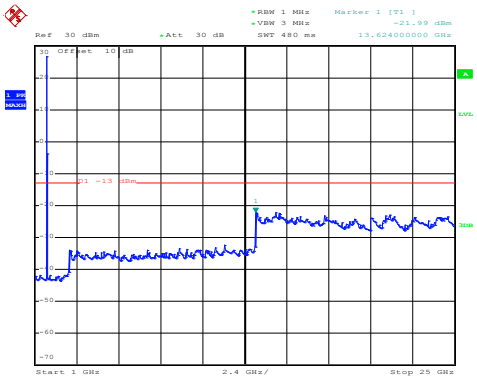
1GHz~25GHz

LTE Band 4: QPSK & RB Size 1
BW: 20MHz
Lowest channel



Date: 31.JUL.2020 12:01:16

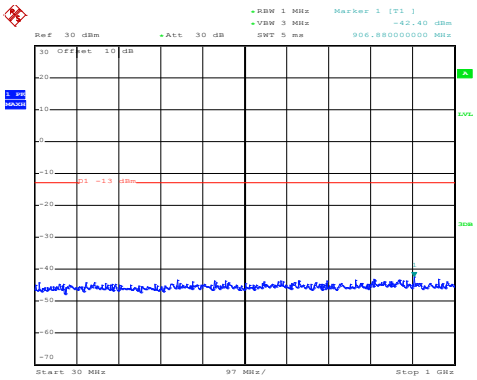
30MHz~1GHz



Date: 31.JUL.2020 11:59:44

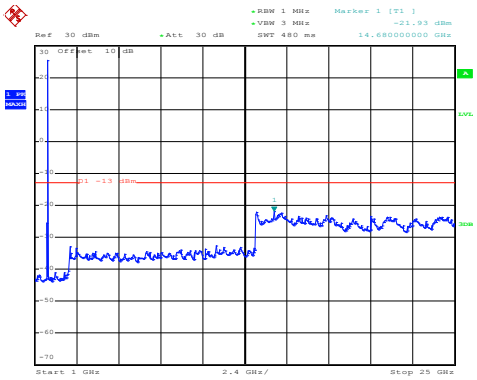
1GHz~25GHz

Middle channel



Date: 31.JUL.2020 12:01:02

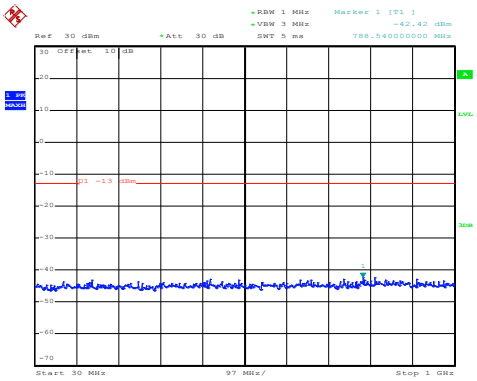
30MHz~1GHz



Date: 31.JUL.2020 12:00:07

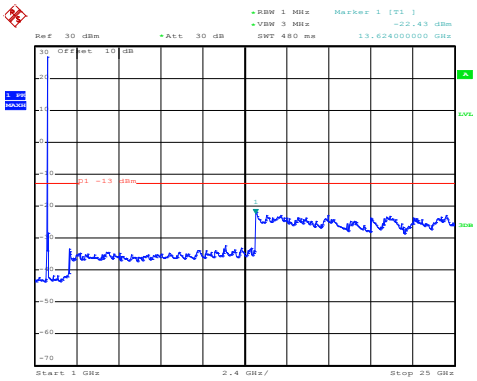
1GHz~25GHz

High channel



Date: 31.JUL.2020 12:00:48

30MHz~1GHz

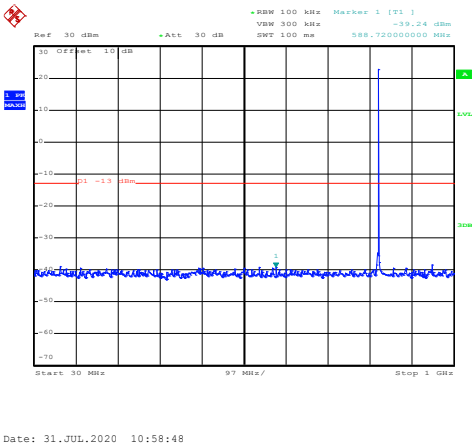


Date: 31.JUL.2020 12:00:31

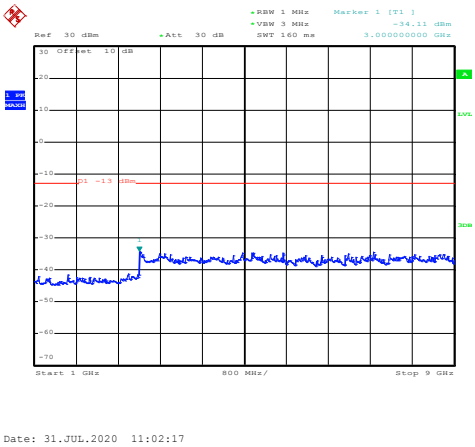
1GHz~25GHz

LTE Band 5 part:

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

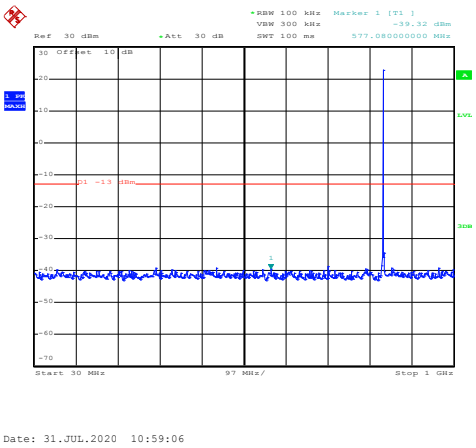


30MHz~1GHz

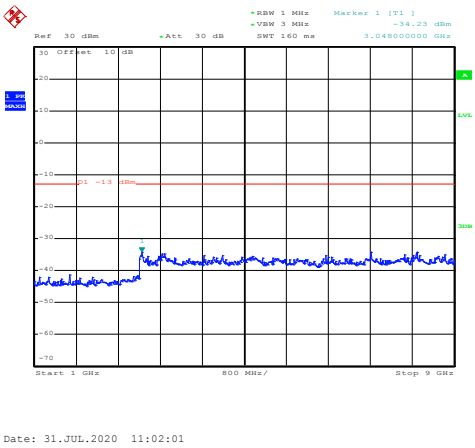


1GHz~9GHz

Middle channel

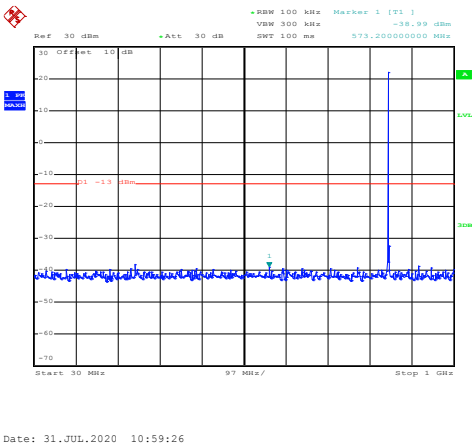


30MHz~1GHz

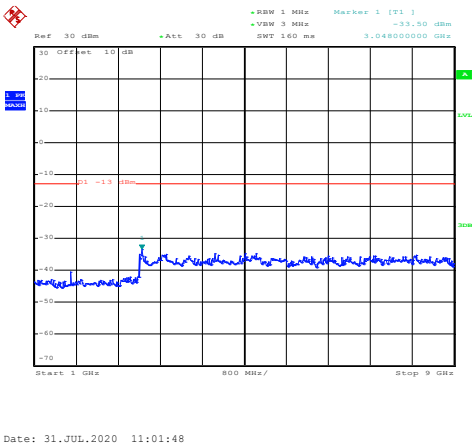


1GHz~9GHz

High channel

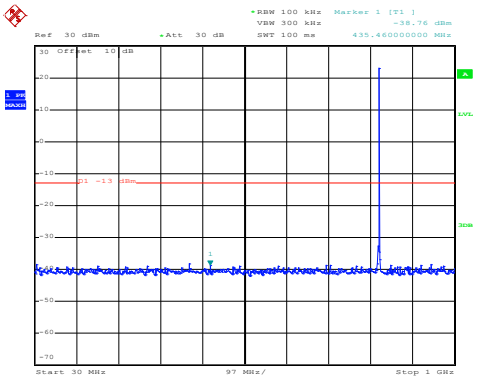


30MHz~1GHz



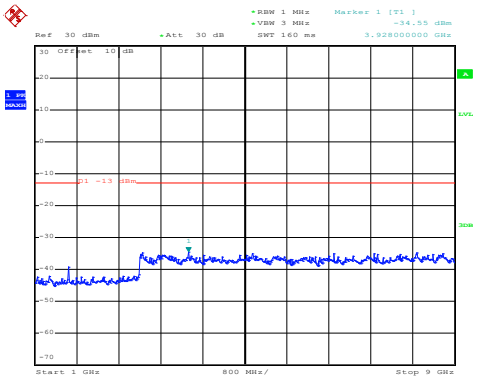
1GHz~9GHz

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



Date: 31.JUL.2020 10:58:37

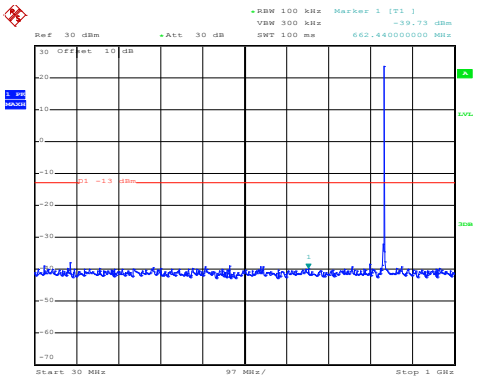
30MHz~1GHz



Date: 31.JUL.2020 11:02:09

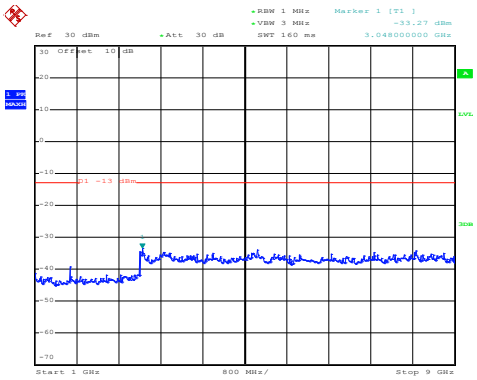
1GHz~9GHz

Middle channel



Date: 31.JUL.2020 10:59:00

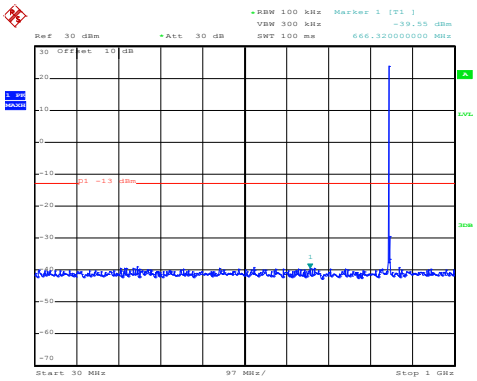
30MHz~1GHz



Date: 31.JUL.2020 11:01:56

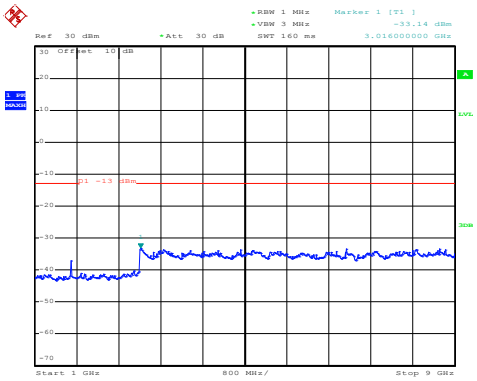
1GHz~9GHz

High channel



Date: 31.JUL.2020 10:59:20

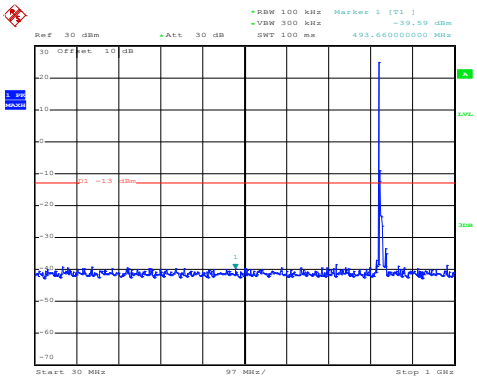
30MHz~1GHz



Date: 31.JUL.2020 11:01:43

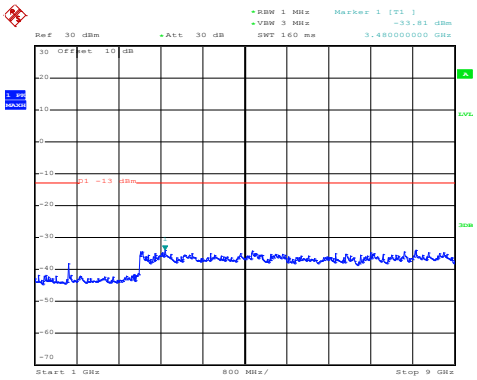
1GHz~9GHz

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



Date: 31.JUL.2020 11:57:31

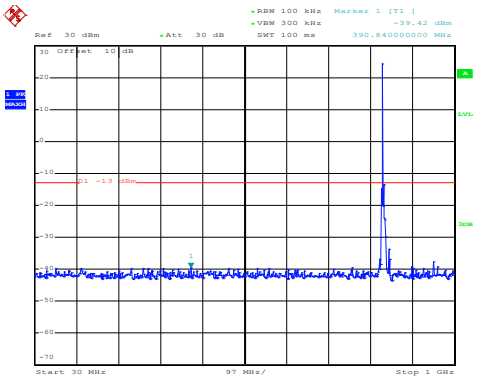
30MHz~1GHz



Date: 31.JUL.2020 11:59:08

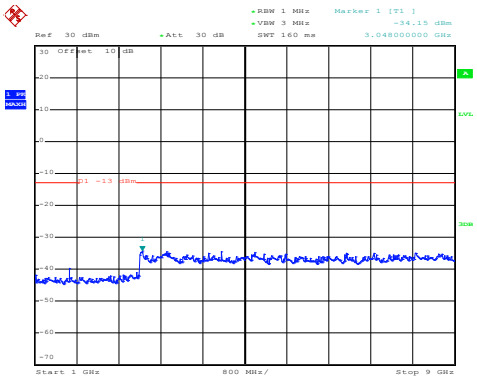
1GHz~9GHz

Middle channel



Date: 31.JUL.2020 11:57:48

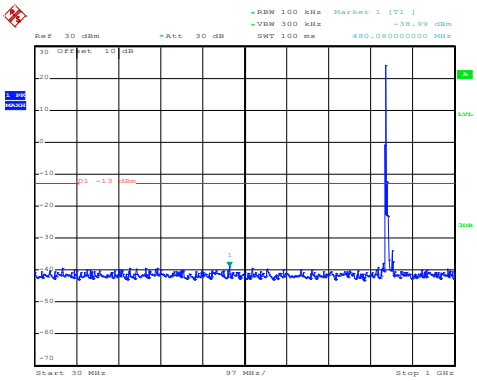
30MHz~1GHz



Date: 31.JUL.2020 11:58:50

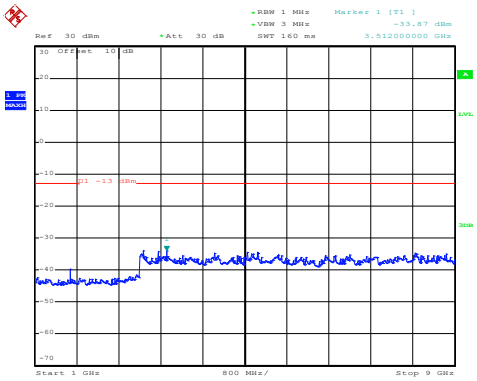
1GHz~9GHz

High channel



Date: 31.JUL.2020 11:58:07

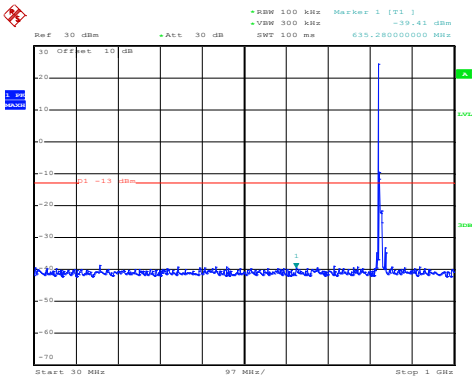
30MHz~1GHz



Date: 31.JUL.2020 11:58:35

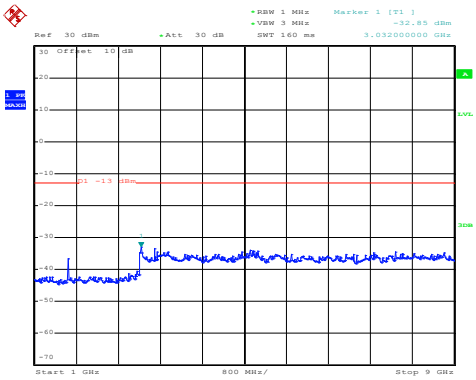
1GHz~9GHz

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



Date: 31.JUL.2020 11:57:21

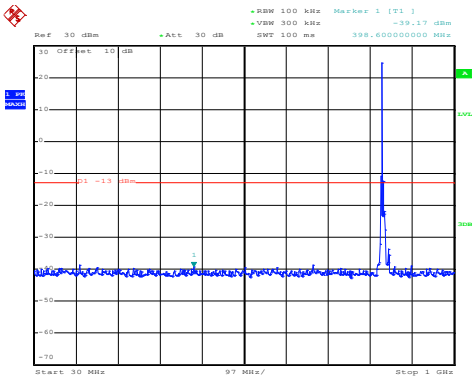
30MHz~1GHz



Date: 31.JUL.2020 11:59:01

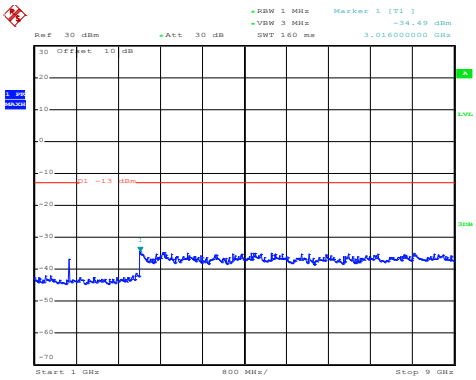
1GHz~9GHz

Middle channel



Date: 31.JUL.2020 11:57:42

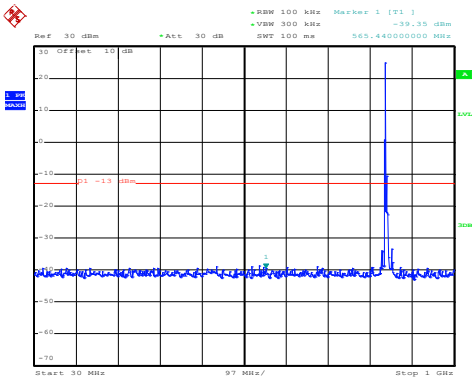
30MHz~1GHz



Date: 31.JUL.2020 11:58:44

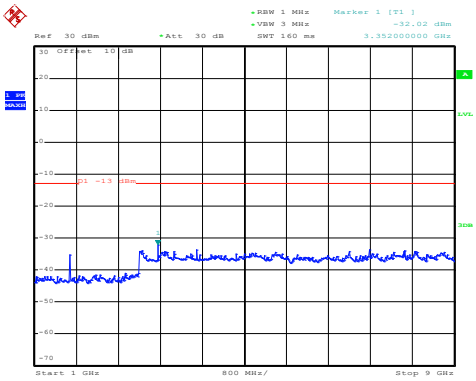
1GHz~9GHz

High channel



Date: 31.JUL.2020 11:58:00

30MHz~1GHz

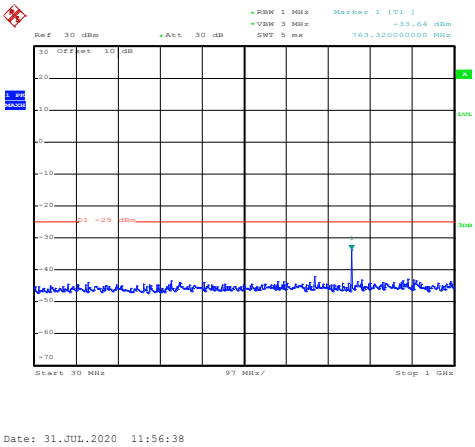


Date: 31.JUL.2020 11:58:29

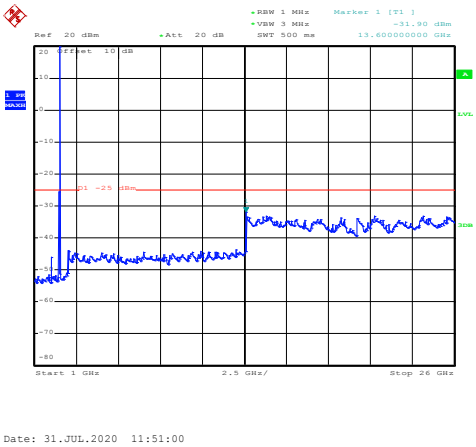
1GHz~9GHz

LTE Band 7 part:

LTE Band 7: 16 QAM & RB Size 1
BW: 5MHz
Lowest channel

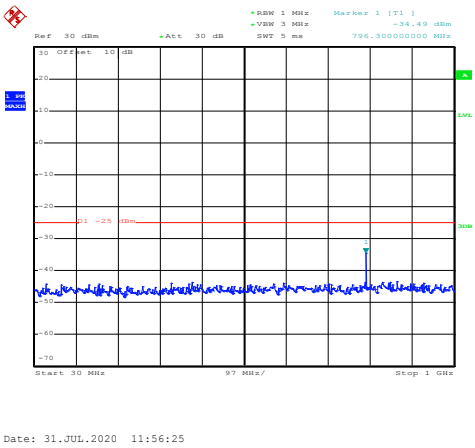


30MHz~1GHz

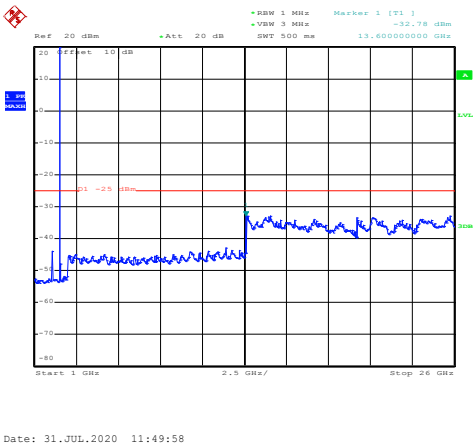


1GHz~26GHz

Middle channel

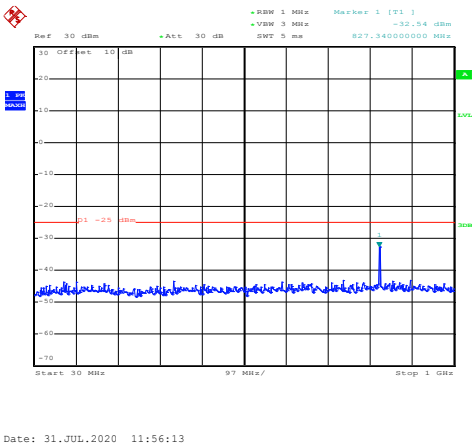


30MHz~1GHz

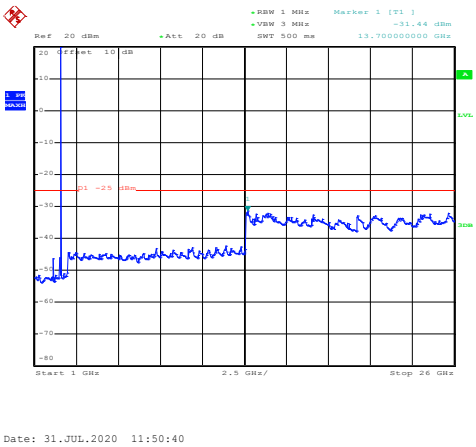


1GHz~26GHz

High channel

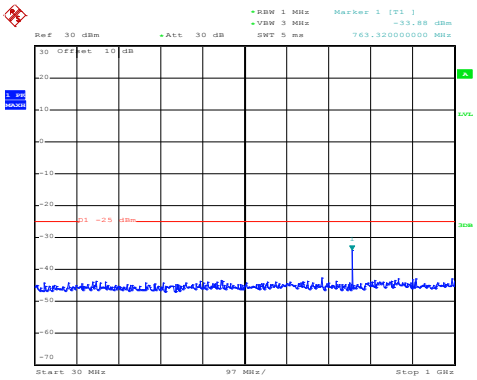


30MHz~1GHz

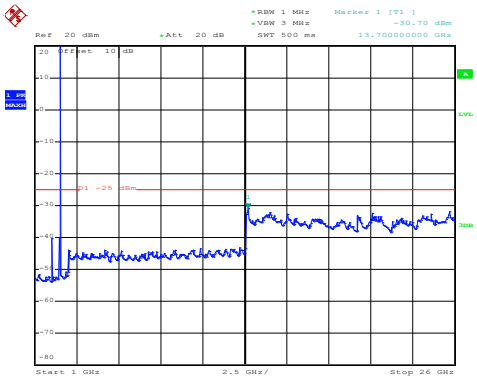


1GHz~26GHz

LTE Band 7: QPSK & RB Size 1
BW: 5MHz
Lowest channel

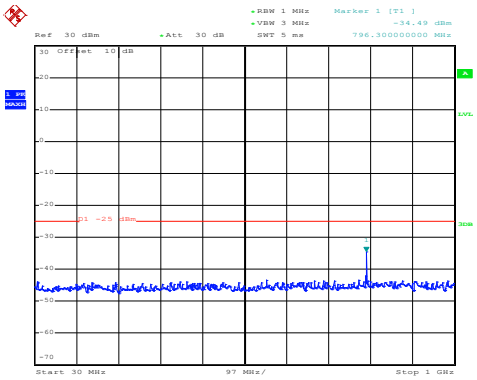


30MHz~1GHz

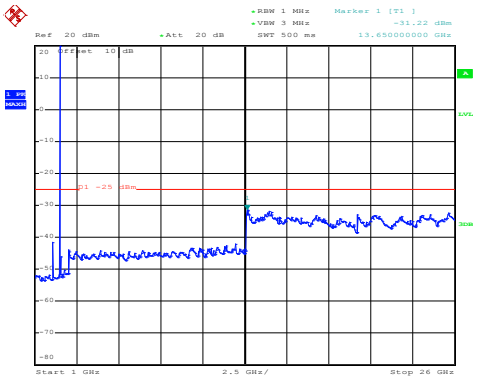


1GHz~26GHz

Middle channel

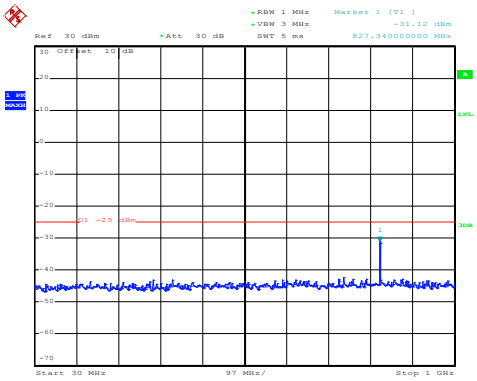


30MHz~1GHz

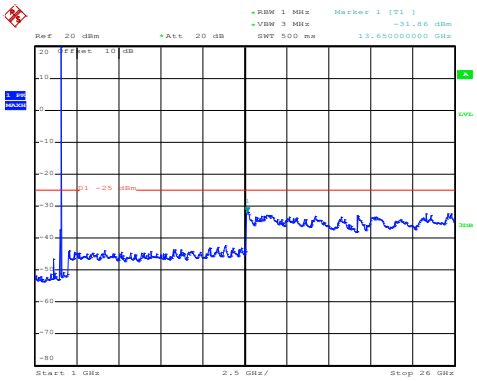


1GHz~26GHz

High channel

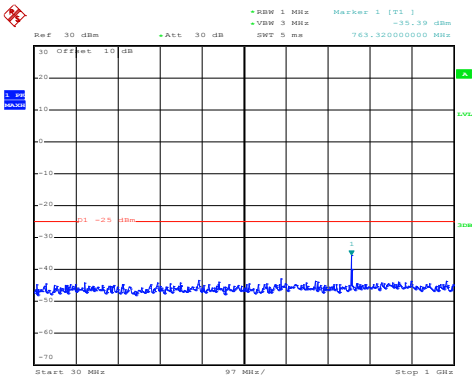


30MHz~1GHz



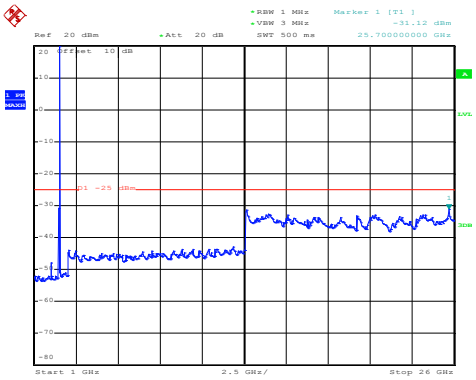
1GHz~26GHz

LTE Band 7: 16 QAM & RB Size 1
BW: 20MHz
Lowest channel



Date: 31.JUL.2020 11:41:35

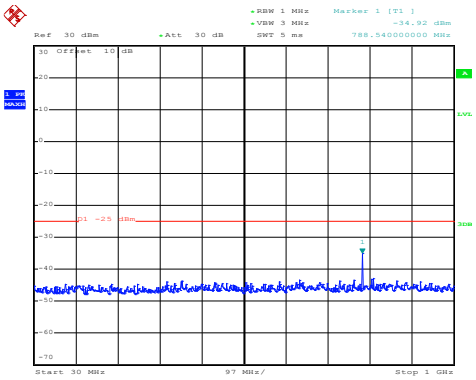
30MHz~1GHz



Date: 31.JUL.2020 11:47:48

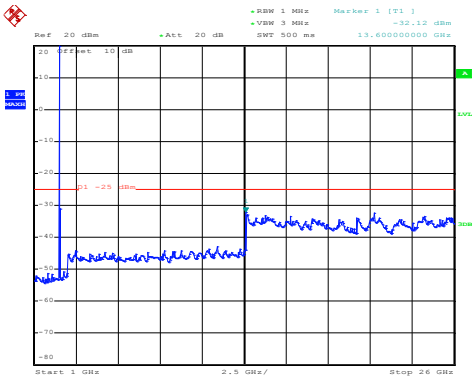
1GHz~26GHz

Middle channel



Date: 31.JUL.2020 11:41:20

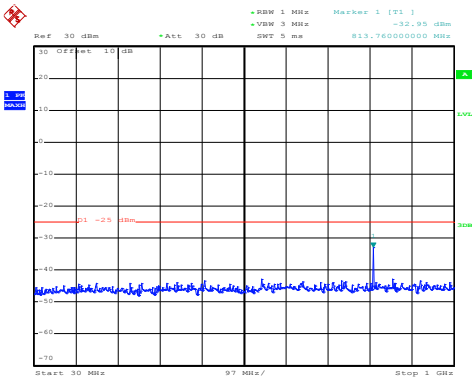
30MHz~1GHz



Date: 31.JUL.2020 11:48:11

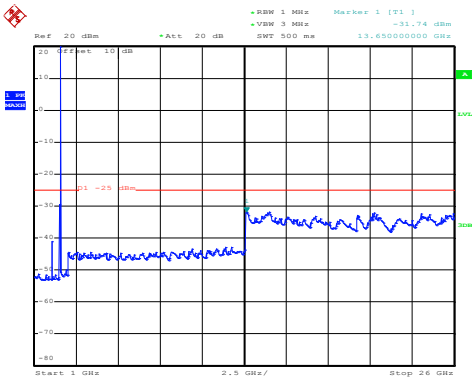
1GHz~26GHz

High channel



Date: 31.JUL.2020 11:41:06

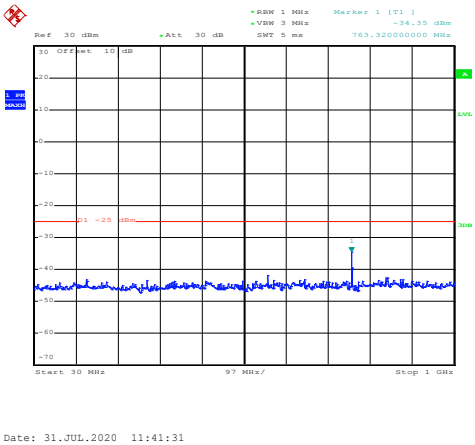
30MHz~1GHz



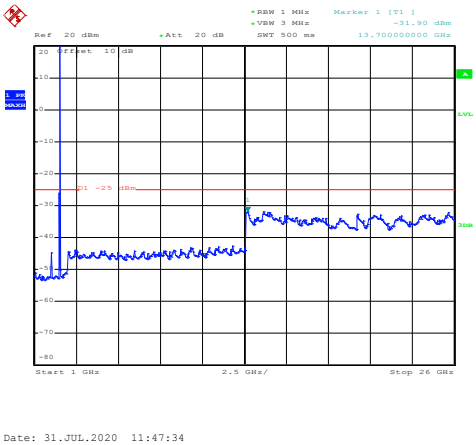
Date: 31.JUL.2020 11:48:46

1GHz~26GHz

LTE Band 7: QPSK & RB Size 1
BW: 20MHz
Lowest channel

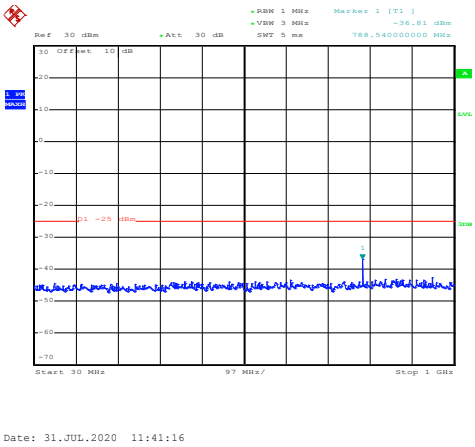


30MHz~1GHz

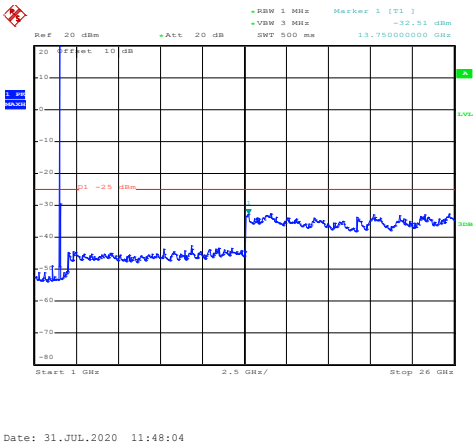


1GHz~26GHz

Middle channel

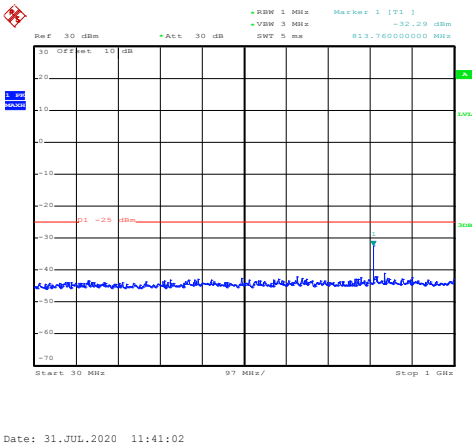


30MHz~1GHz

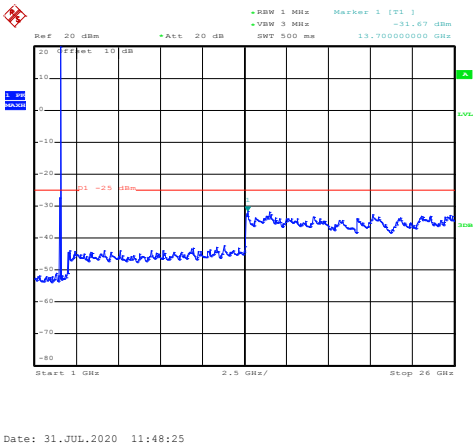


1GHz~26GHz

High channel



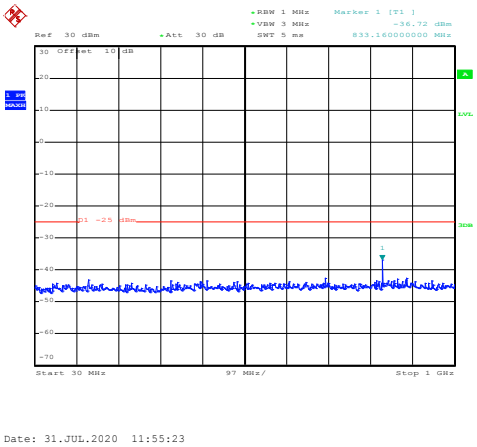
30MHz~1GHz



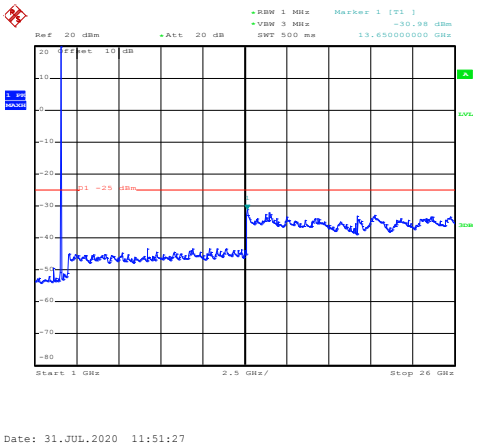
1GHz~26GHz

LTE Band 38 part:

LTE Band 38: 16 QAM & RB Size 1
BW: 5MHz
Lowest channel

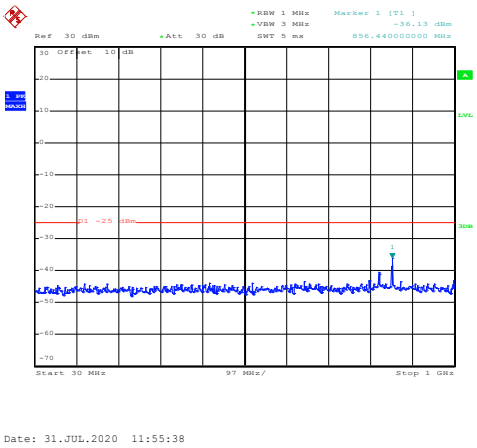


30MHz~1GHz

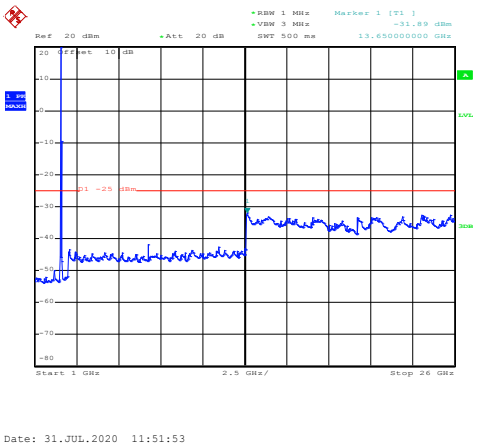


1GHz~26GHz

Middle channel

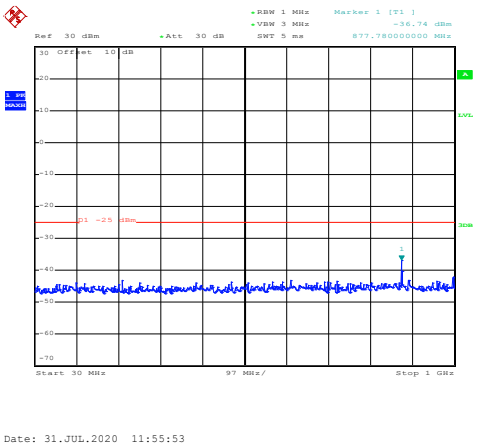


30MHz~1GHz

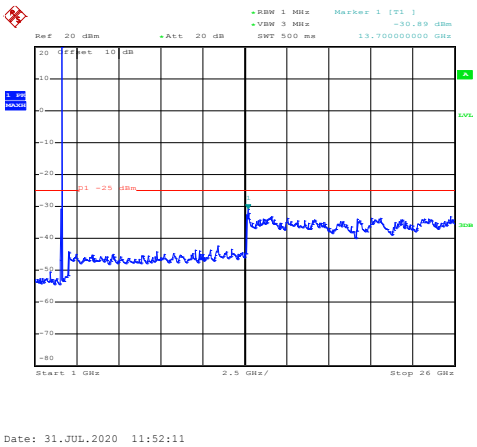


1GHz~26GHz

High channel

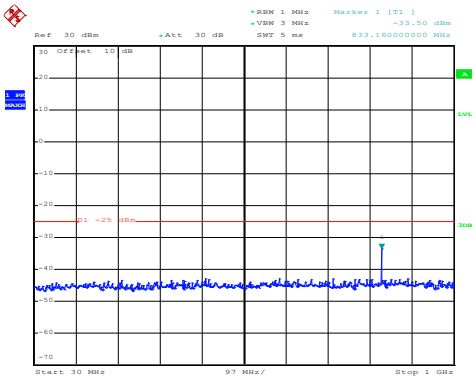


30MHz~1GHz



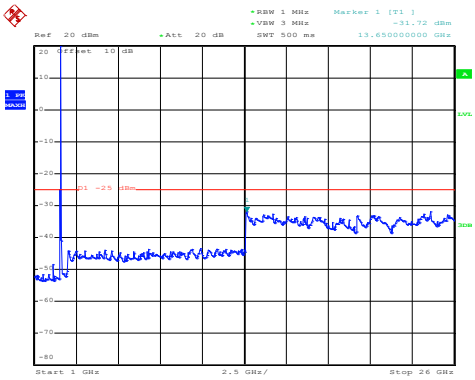
1GHz~26GHz

LTE Band 38: QPSK & RB Size 1
BW: 5MHz
Lowest channel



Date: 31.JUL.2020 11:55:17

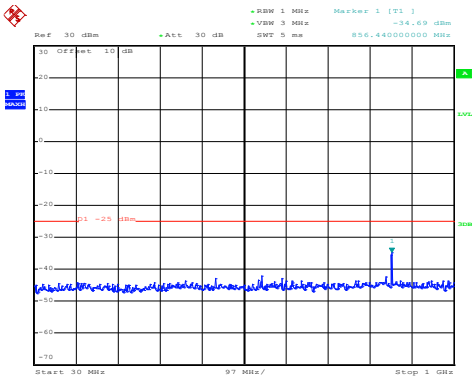
30MHz~1GHz



Date: 31.JUL.2020 11:51:18

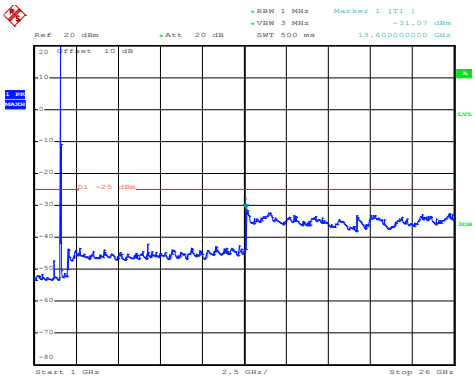
1GHz~26GHz

Middle channel



Date: 31.JUL.2020 11:55:34

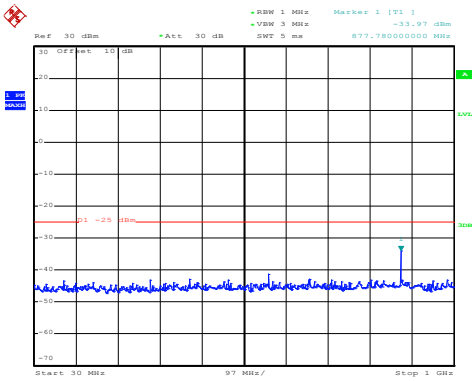
30MHz~1GHz



Date: 31.JUL.2020 11:51:44

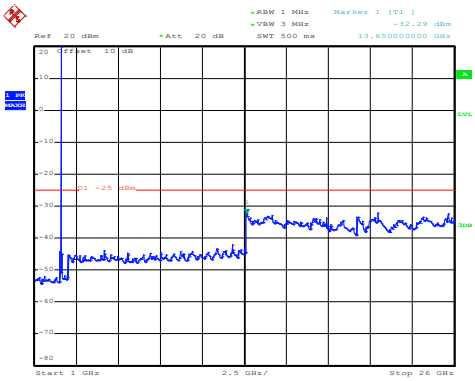
1GHz~26GHz

High channel



Date: 31.JUL.2020 11:55:48

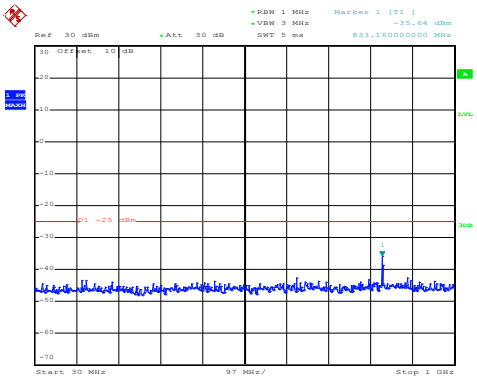
30MHz~1GHz



Date: 31.JUL.2020 11:52:05

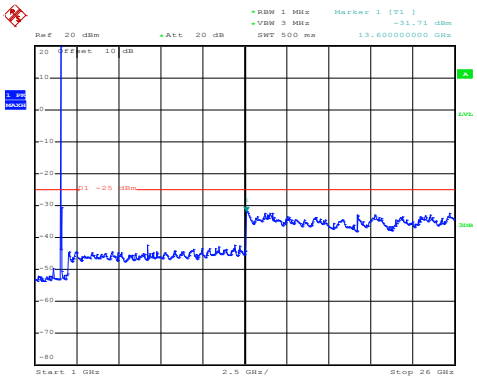
1GHz~26GHz

LTE Band 38: 16 QAM & RB Size 1
BW: 20MHz
Lowest channel



Date: 31.JUL.2020 11:44:07

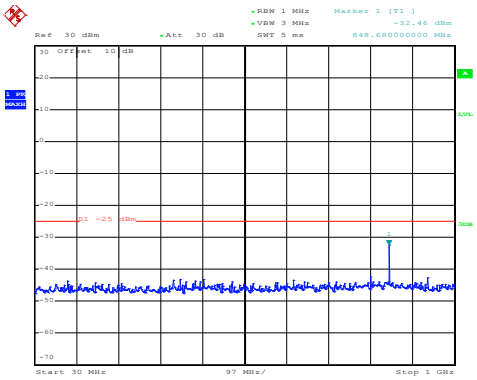
30MHz~1GHz



Date: 31.JUL.2020 11:44:43

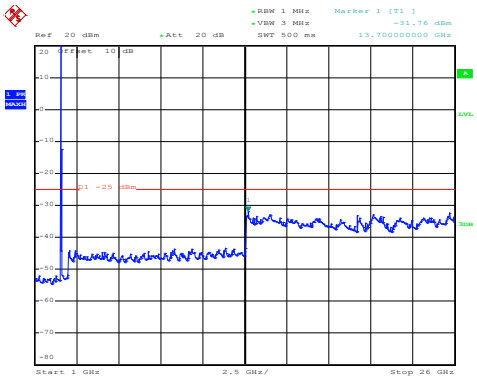
1GHz~26GHz

Middle channel



Date: 31.JUL.2020 11:43:49

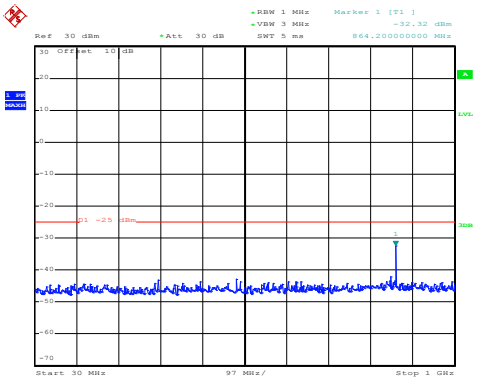
30MHz~1GHz



Date: 31.JUL.2020 11:45:09

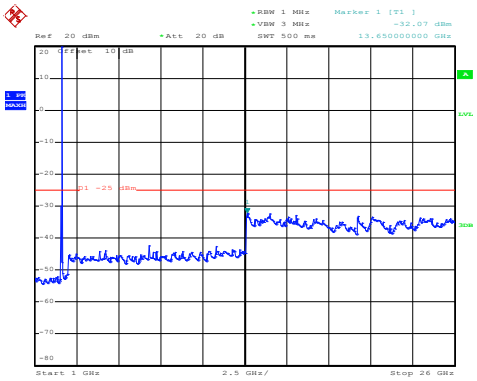
1GHz~26GHz

High channel



Date: 31.JUL.2020 11:43:34

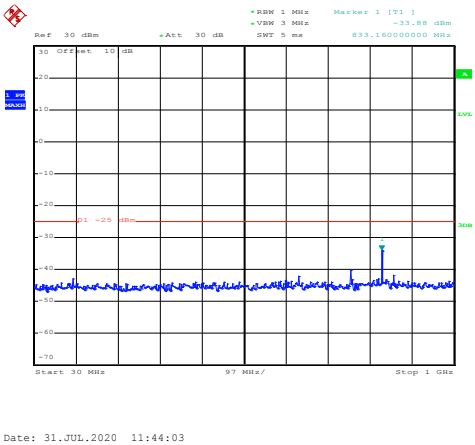
30MHz~1GHz



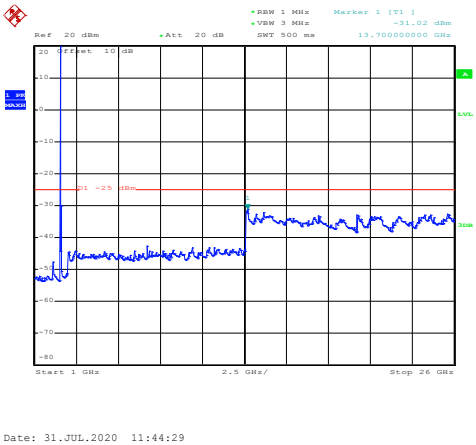
Date: 31.JUL.2020 11:45:30

1GHz~26GHz

LTE Band 38: QPSK & RB Size 1
BW: 20MHz
Lowest channel

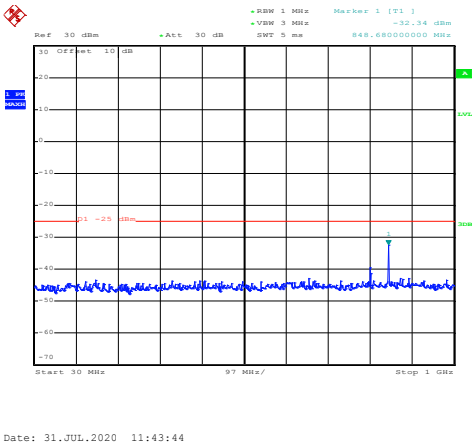


30MHz~1GHz

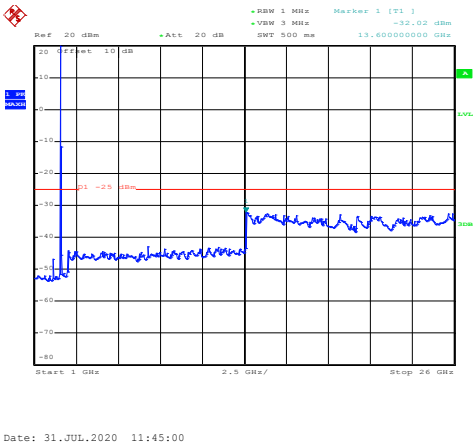


1GHz~26GHz

Middle channel

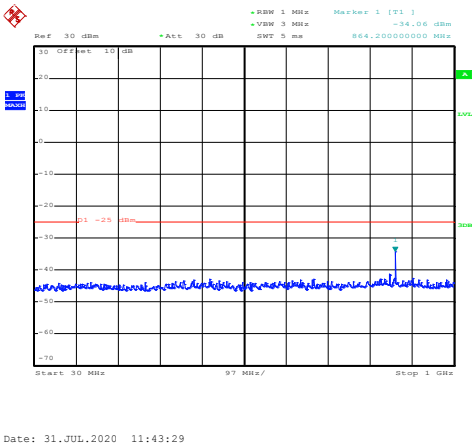


30MHz~1GHz

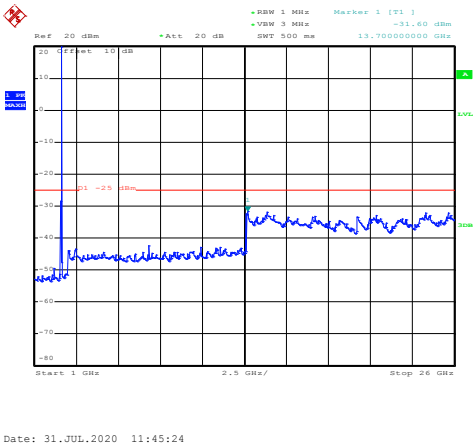


1GHz~26GHz

High channel



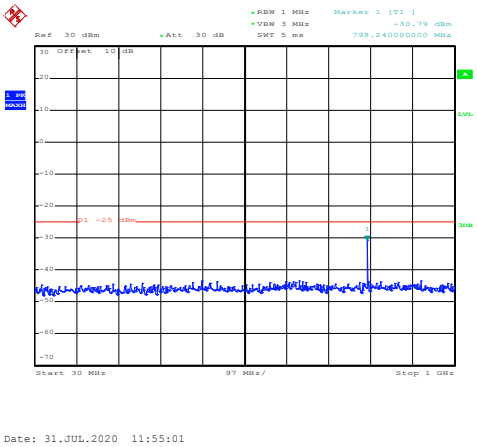
30MHz~1GHz



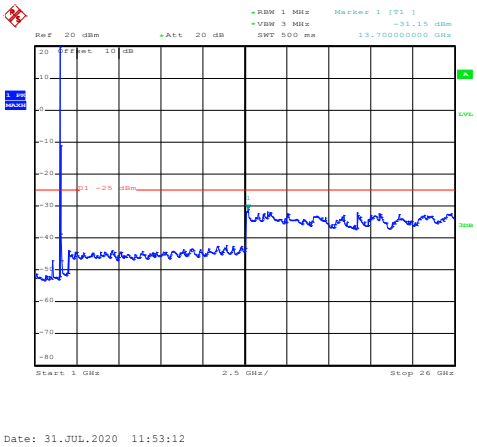
1GHz~26GHz

LTE Band 41 part:

LTE Band 41: 16 QAM & RB Size 1
BW: 5MHz
Lowest channel

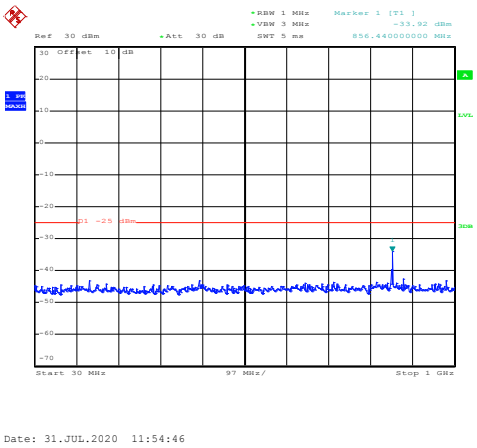


30MHz~1GHz

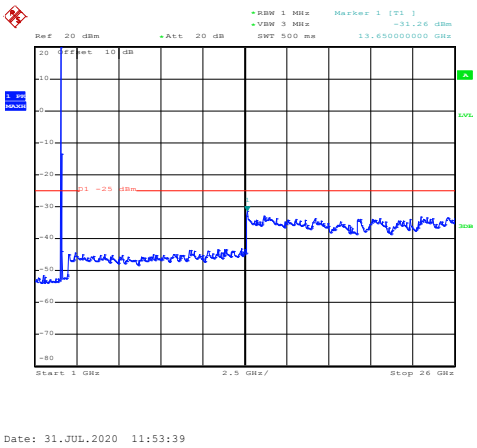


1GHz~26GHz

Middle channel

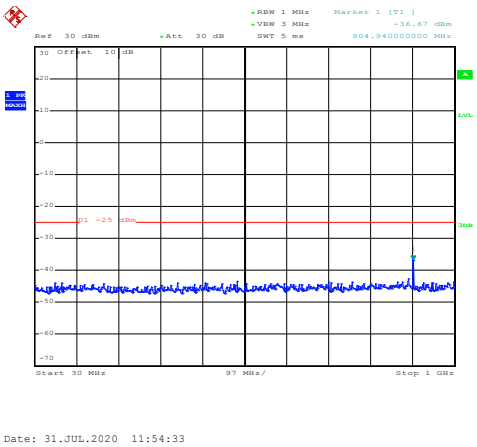


30MHz~1GHz

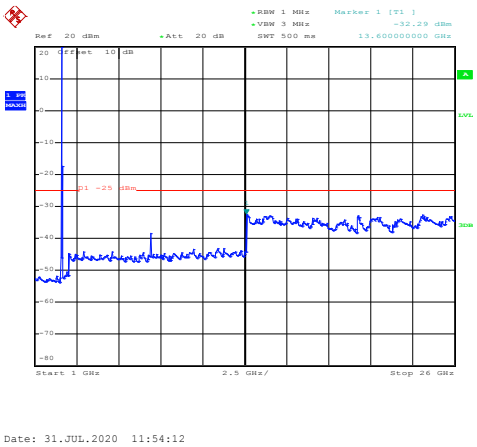


1GHz~26GHz

High channel

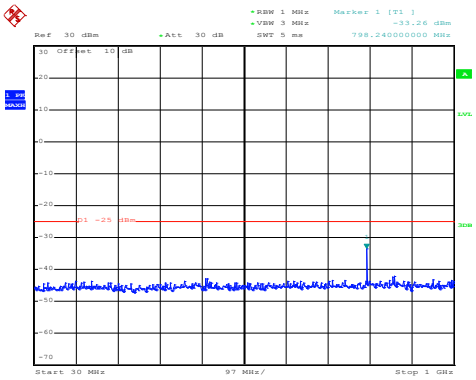


30MHz~1GHz

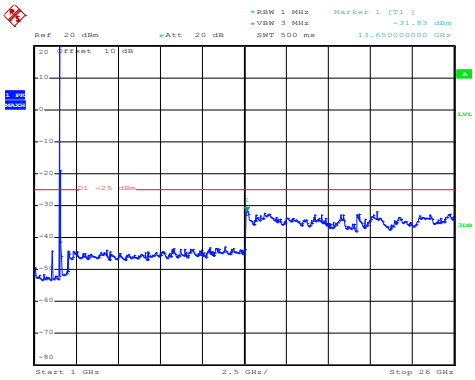


1GHz~26GHz

LTE Band 41: QPSK & RB Size 1
BW: 5MHz
Lowest channel

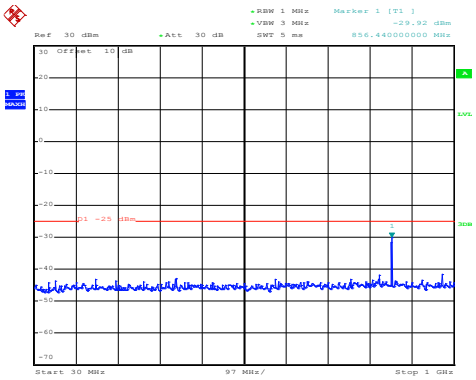


30MHz~1GHz

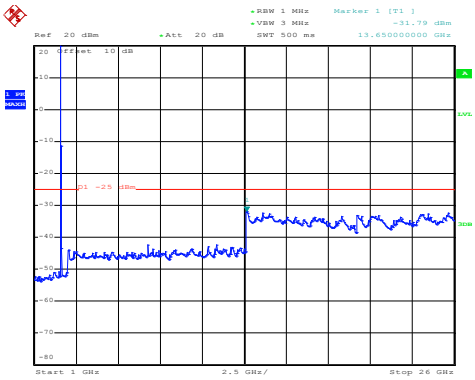


1GHz~26GHz

Middle channel

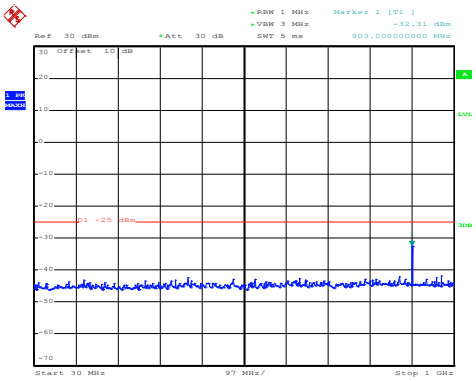


30MHz~1GHz

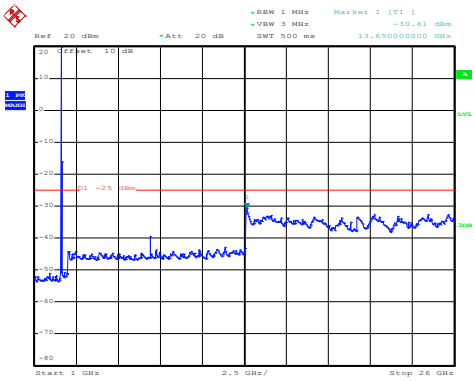


1GHz~26GHz

High channel

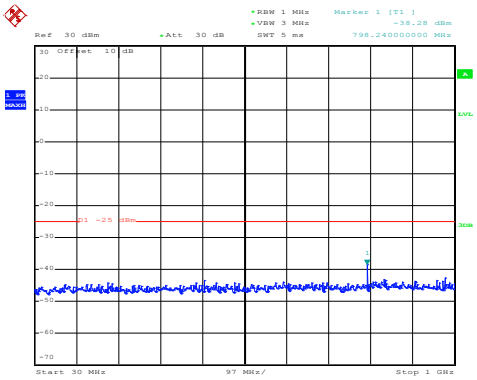


30MHz~1GHz



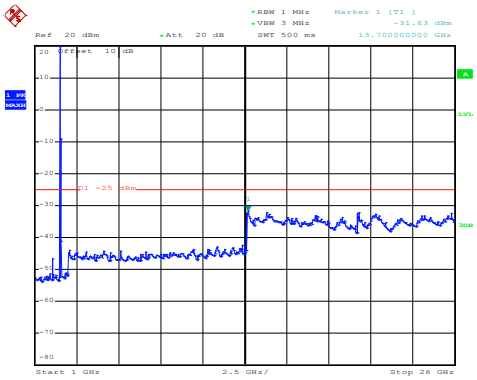
1GHz~26GHz

LTE Band 41: 16 QAM & RB Size 1
BW: 20MHz
Lowest channel



Date: 31.JUL.2020 11:42:14

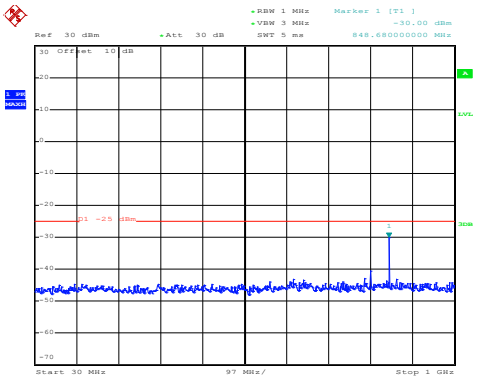
30MHz~1GHz



Date: 31.JUL.2020 11:47:05

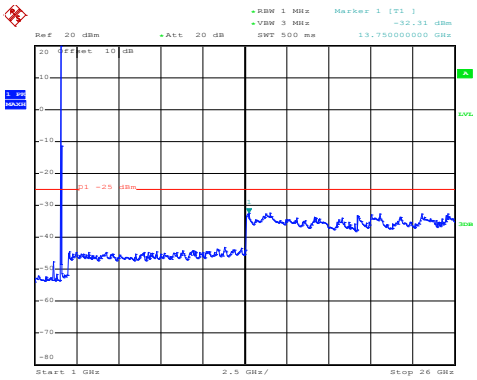
1GHz~26GHz

Middle channel



Date: 31.JUL.2020 11:42:39

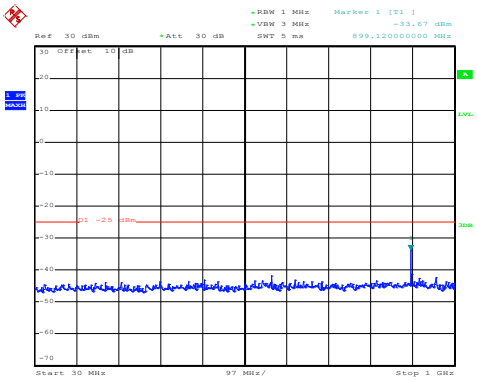
30MHz~1GHz



Date: 31.JUL.2020 11:46:40

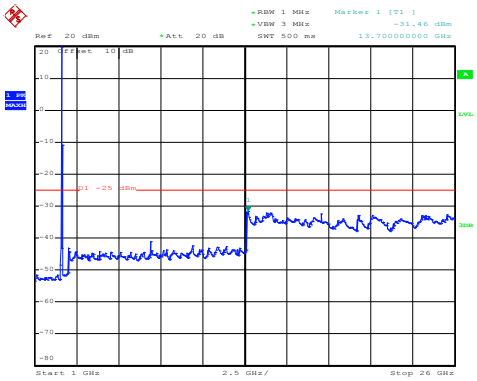
1GHz~26GHz

High channel



Date: 31.JUL.2020 11:42:54

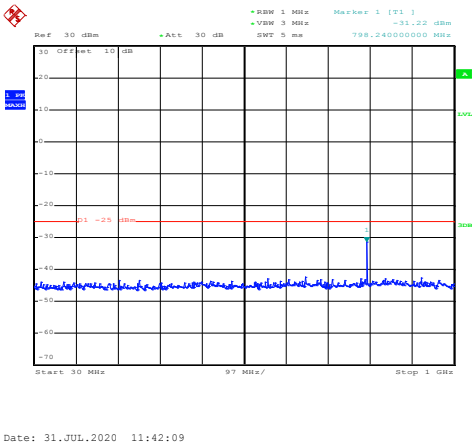
30MHz~1GHz



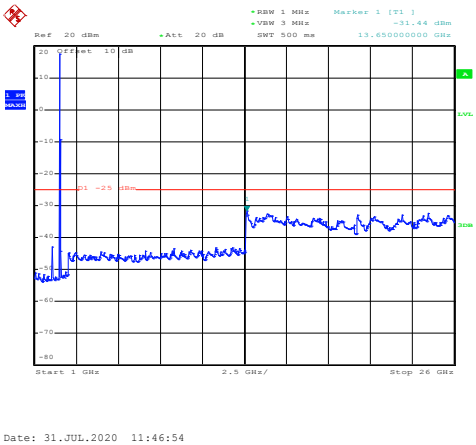
Date: 31.JUL.2020 11:46:15

1GHz~26GHz

LTE Band 41: QPSK & RB Size 1
BW: 20MHz
Lowest channel

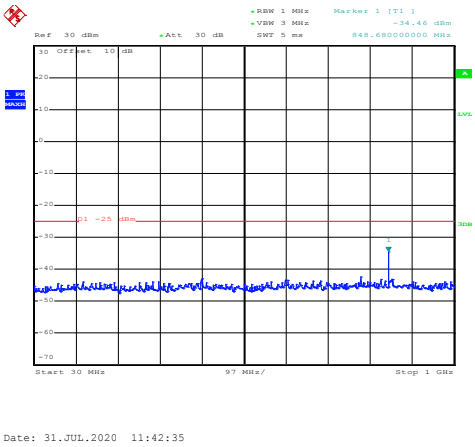


30MHz~1GHz

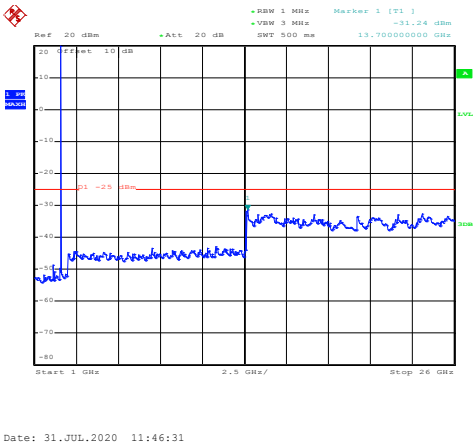


1GHz~26GHz

Middle channel

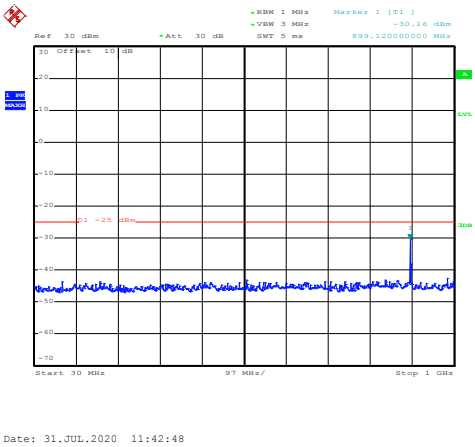


30MHz~1GHz

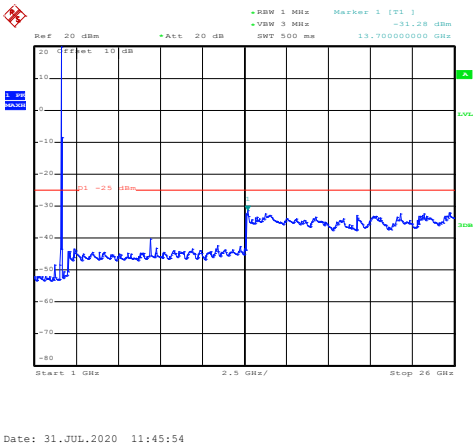


1GHz~26GHz

High channel



30MHz~1GHz

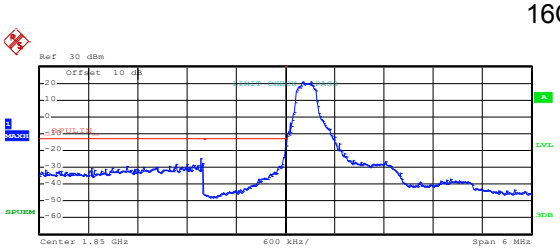


1GHz~26GHz

Band edge emission:

LTE Band 2 part:

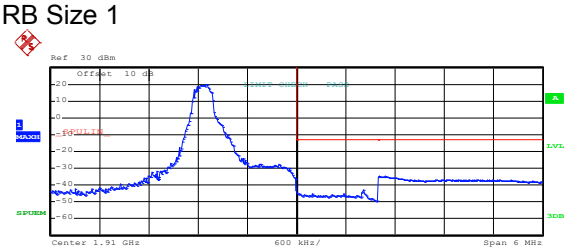
LTE Band 2, BW: 1.4MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.847 G	1.849 G	1.00 M	1.848962 G	-24.41	-11.41
1.849 G	1.850 G	30.00 k	1.849984 G	-24.24	-11.24
1.850 G	1.853 G	100.00 k	1.850219 G	20.87	-12.13

Date: 31.JUL.2020 10:35:28

Lowest channel

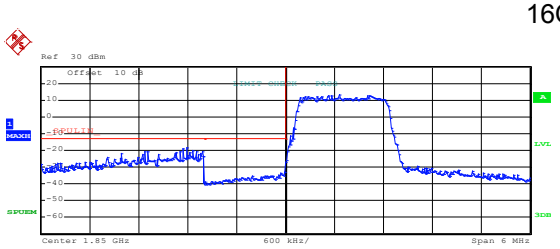


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.907 G	1.910 G	100.00 k	1.908911 G	19.94	-13.06
1.910 G	1.911 G	30.00 k	1.910816 G	-43.07	-30.07
1.911 G	1.913 G	1.00 M	1.911002 G	-34.54	-21.54

Date: 31.JUL.2020 10:36:35

Highest channel

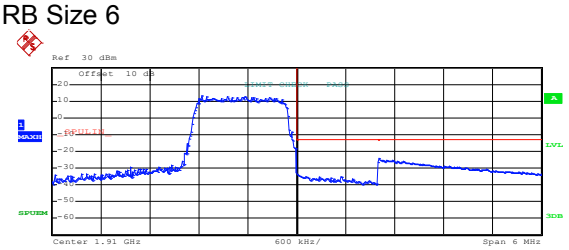
16QAM & RB Size 6



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.847 G	1.849 G	1.00 M	1.848792 G	-18.24	-5.24
1.849 G	1.850 G	30.00 k	1.849999 G	-32.75	-19.75
1.850 G	1.853 G	100.00 k	1.850657 G	13.14	-19.86

Date: 31.JUL.2020 10:35:47

Lowest channel



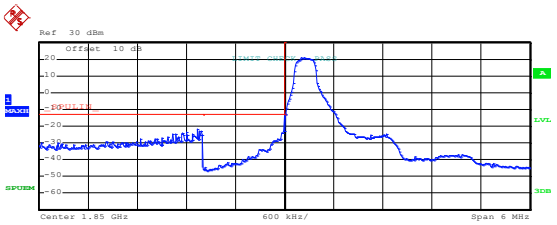
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.907 G	1.910 G	100.00 k	1.908836 G	13.36	-19.64
1.910 G	1.911 G	30.00 k	1.910011 G	-32.88	-19.88
1.911 G	1.913 G	1.00 M	1.911010 G	-24.37	-11.37

Date: 31.JUL.2020 10:36:20

Highest channel

LTE Band 2, BW: 1.4MHz

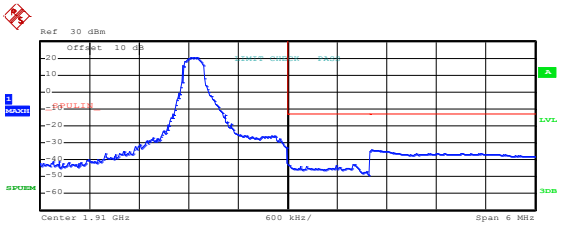
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.847 G	1.849 G	1.00 M	1.848930 G	-21.51	-8.51
1.849 G	1.850 G	30.00 k	1.849991 G	-23.02	-10.02
1.850 G	1.853 G	100.00 k	1.850207 G	20.88	-12.12

Date: 31.JUL.2020 10:35:16

Lowest channel

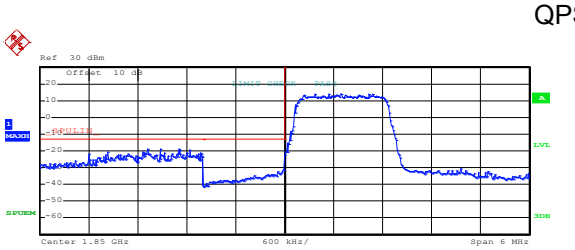


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.907 G	1.910 G	100.00 k	1.908872 G	20.55	-12.45
1.910 G	1.911 G	30.00 k	1.910002 G	-42.52	-29.52
1.911 G	1.913 G	1.00 M	1.911024 G	-34.32	-21.32

Date: 31.JUL.2020 10:36:30

Highest channel

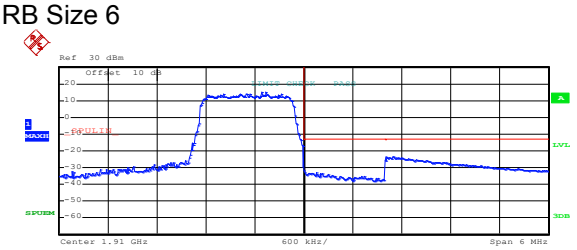
QPSK & RB Size 6



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.847 G	1.849 G	1.00 M	1.848470 G	-19.00	-6.00
1.849 G	1.850 G	30.00 k	1.849996 G	-31.08	-18.08
1.850 G	1.853 G	100.00 k	1.851080 G	14.19	-18.81

Date: 31.JUL.2020 10:35:34

Lowest channel

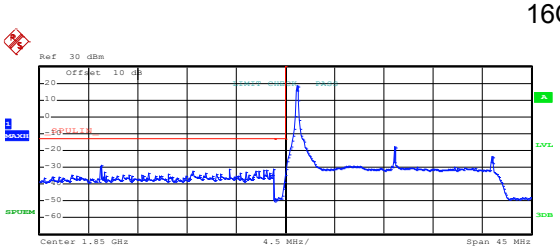


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.907 G	1.910 G	100.00 k	1.909526 G	14.99	-18.01
1.910 G	1.911 G	30.00 k	1.910001 G	-30.73	-17.73
1.911 G	1.913 G	1.00 M	1.911002 G	-23.36	-10.36

Date: 31.JUL.2020 10:36:15

Highest channel

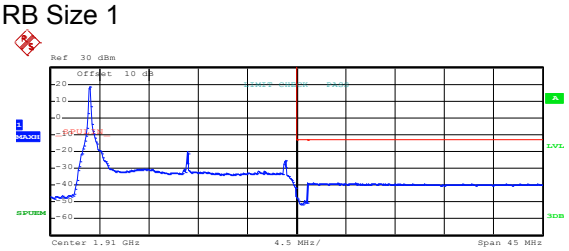
LTE Band 2, BW: 20MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.827 G	1.849 G	1.00 M	1.833112 G	-29.04	-16.04
1.849 G	1.850 G	30.00 k	1.849998 G	-38.78	-25.78
1.850 G	1.873 G	100.00 k	1.851058 G	18.54	-14.46

Date: 31.JUL.2020 10:37:43

Lowest channel

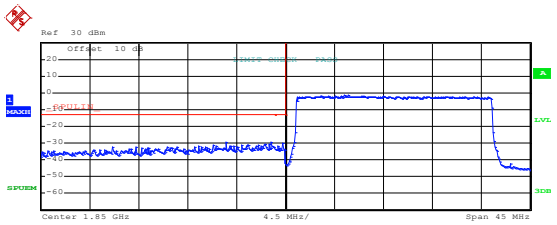


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.888 G	1.910 G	100.00 k	1.891100 G	18.38	-14.62
1.910 G	1.911 G	30.00 k	1.910001 G	-47.42	-34.42
1.911 G	1.933 G	1.00 M	1.911516 G	-38.82	-25.82

Date: 31.JUL.2020 10:37:07

Highest channel

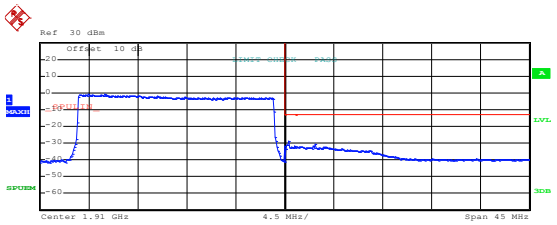
16QAM & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.827 G	1.849 G	1.00 M	1.848635 G	-29.49	-16.49
1.849 G	1.850 G	300.00 k	1.849719 G	-30.07	-17.07
1.850 G	1.873 G	100.00 k	1.855760 G	-1.34	-34.34

Date: 31.JUL.2020 10:37:59

Lowest channel



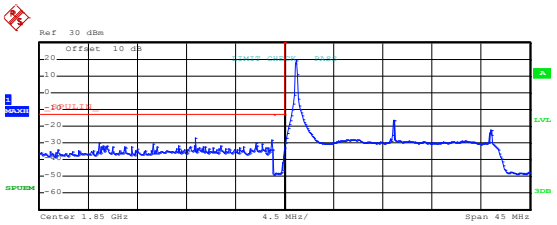
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.888 G	1.910 G	100.00 k	1.891910 G	-0.57	-33.57
1.910 G	1.911 G	300.00 k	1.910343 G	-28.81	-15.81
1.911 G	1.933 G	1.00 M	1.912806 G	-30.82	-17.82

Date: 31.JUL.2020 10:37:22

Highest channel

LTE Band 2, BW: 20MHz

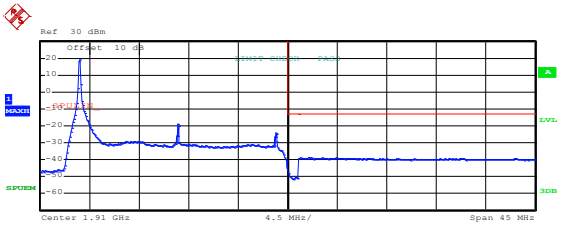
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.827 G	1.849 G	1.00 M	1.841755 G	-26.85	-13.85
1.849 G	1.850 G	30.00 k	1.849996 G	-37.89	-24.89
1.850 G	1.873 G	100.00 k	1.851103 G	19.32	-13.68

Date: 31.JUL.2020 10:37:38

Lowest channel

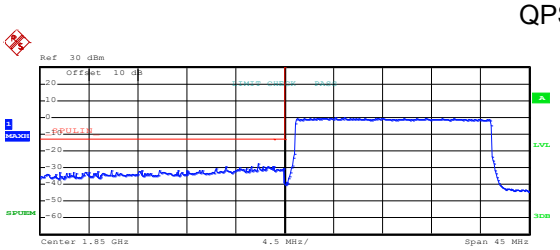


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.888 G	1.910 G	100.00 k	1.891078 G	19.29	-13.71
1.910 G	1.911 G	30.00 k	1.910037 G	-46.55	-33.55
1.911 G	1.933 G	1.00 M	1.913150 G	-38.86	-25.86

Date: 31.JUL.2020 10:36:58

Highest channel

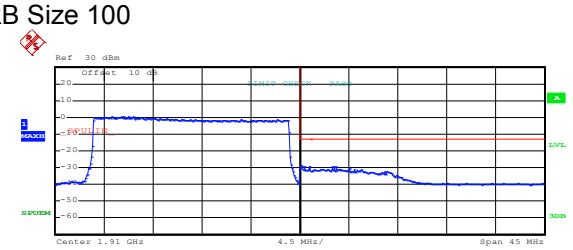
QPSK & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.827 G	1.849 G	1.00 M	1.847517 G	-27.79	-14.79
1.849 G	1.850 G	300.00 k	1.849037 G	-29.58	-16.58
1.850 G	1.873 G	100.00 k	1.854658 G	-0.29	-33.29

Date: 31.JUL.2020 10:37:55

Lowest channel



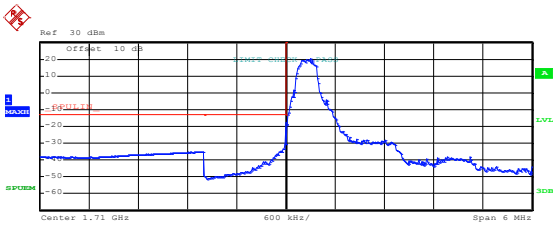
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.888 G	1.910 G	100.00 k	1.894273 G	0.68	-32.32
1.910 G	1.911 G	300.00 k	1.910163 G	-28.81	-15.81
1.911 G	1.933 G	1.00 M	1.913150 G	-29.11	-16.11

Date: 31.JUL.2020 10:37:18

Highest channel

LTE Band 4 part:

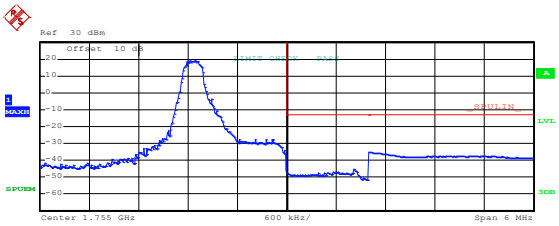
LTE Band 4, BW: 1.4MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.707 G	1.709 G	1.00 M	1.708968 G	-34.98	-21.98
1.709 G	1.710 G	30.00 k	1.709992 G	-30.51	-17.51
1.710 G	1.713 G	100.00 k	1.710294 G	20.45	-12.55

Date: 31.JUL.2020 10:41:09

Lowest channel

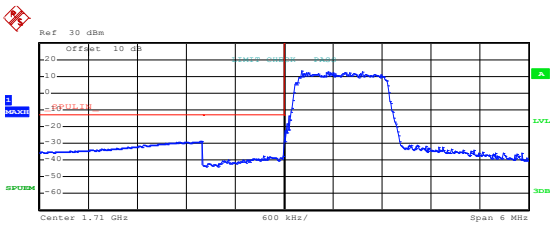


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.752 G	1.755 G	100.00 k	1.753818 G	19.47	-13.53
1.755 G	1.756 G	30.00 k	1.755806 G	-45.40	-32.40
1.756 G	1.758 G	1.00 M	1.756032 G	-35.12	-22.12

Date: 31.JUL.2020 10:40:30

Highest channel

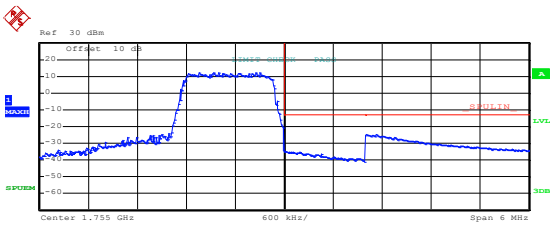
16QAM & RB Size 6



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.707 G	1.709 G	1.00 M	1.708968 G	-28.52	-15.52
1.709 G	1.710 G	30.00 k	1.709742 G	-37.75	-24.75
1.710 G	1.713 G	100.00 k	1.710216 G	13.43	-19.57

Date: 31.JUL.2020 10:40:59

Lowest channel



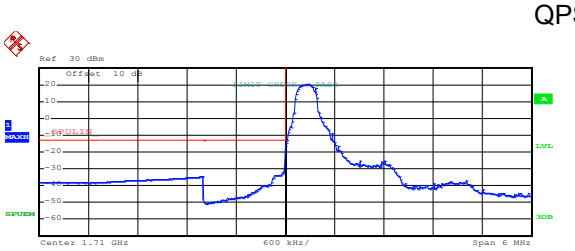
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.752 G	1.755 G	100.00 k	1.754139 G	12.16	-20.84
1.755 G	1.756 G	30.00 k	1.755008 G	-34.11	-21.11
1.756 G	1.758 G	1.00 M	1.756016 G	-24.61	-11.61

Date: 31.JUL.2020 10:40:39

Highest channel

LTE Band 4, BW: 1.4MHz

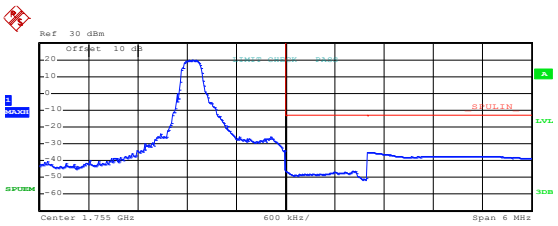
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.707 G	1.709 G	1.00 M	1.708968 G	-34.63	-21.63
1.709 G	1.710 G	30.00 k	1.709992 G	-29.17	-16.17
1.710 G	1.713 G	100.00 k	1.710273 G	20.50	-12.50

Date: 31.JUL.2020 10:41:05

Lowest channel

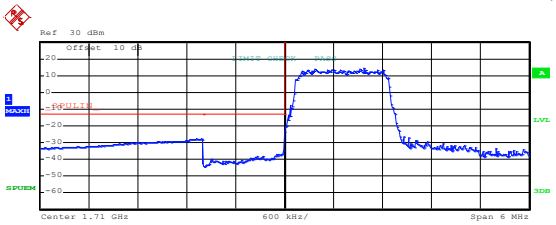


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.752 G	1.755 G	100.00 k	1.753818 G	19.92	-13.08
1.755 G	1.756 G	30.00 k	1.755815 G	-45.35	-32.35
1.756 G	1.758 G	1.00 M	1.756000 G	-34.97	-21.97

Date: 31.JUL.2020 10:40:25

Highest channel

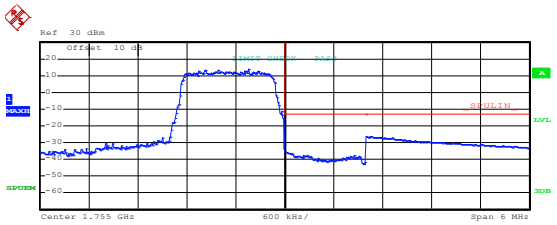
QPSK & RB Size 6



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.707 G	1.709 G	1.00 M	1.708984 G	-27.47	-14.47
1.709 G	1.710 G	30.00 k	1.709960 G	-36.96	-23.96
1.710 G	1.713 G	100.00 k	1.710969 G	14.25	-18.75

Date: 31.JUL.2020 10:40:55

Lowest channel

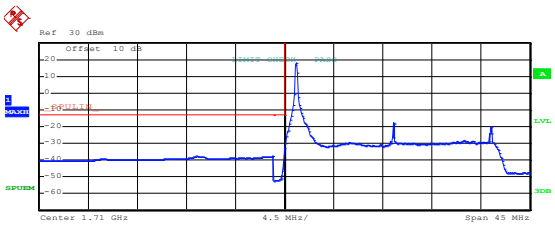


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.752 G	1.755 G	100.00 k	1.754559 G	13.96	-19.04
1.755 G	1.756 G	30.00 k	1.755056 G	-35.25	-22.25
1.756 G	1.758 G	1.00 M	1.756048 G	-26.50	-13.50

Date: 31.JUL.2020 10:40:35

Highest channel

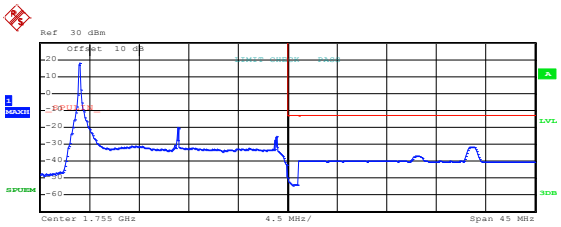
LTE Band 4, BW: 20MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.688 G	1.709 G	1.00 M	1.709000 G	-37.66	-24.66
1.709 G	1.710 G	30.00 k	1.709992 G	-40.63	-27.63
1.710 G	1.732 G	100.00 k	1.711057 G	18.29	-14.71

Date: 31.JUL.2020 10:38:49

Lowest channel

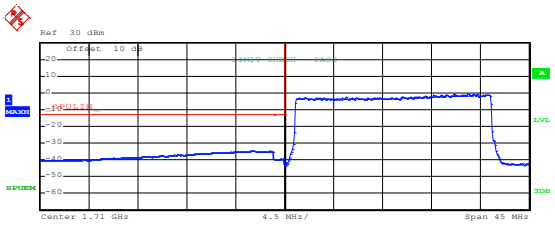


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.732 G	1.755 G	100.00 k	1.736055 G	17.87	-15.13
1.755 G	1.756 G	30.00 k	1.755024 G	-49.65	-36.65
1.756 G	1.778 G	1.00 M	1.771952 G	-31.41	-18.41

Date: 31.JUL.2020 10:39:57

Highest channel

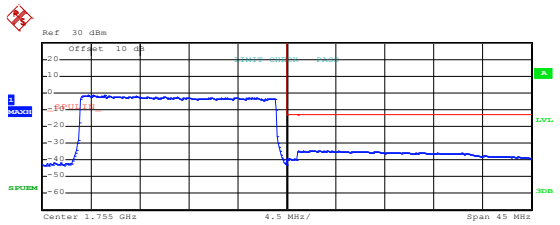
16QAM & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.688 G	1.709 G	1.00 M	1.706919 G	-34.53	-21.53
1.709 G	1.710 G	300.00 k	1.709984 G	-39.14	-26.14
1.710 G	1.732 G	100.00 k	1.725525 G	-0.73	-33.73

Date: 31.JUL.2020 10:39:10

Lowest channel



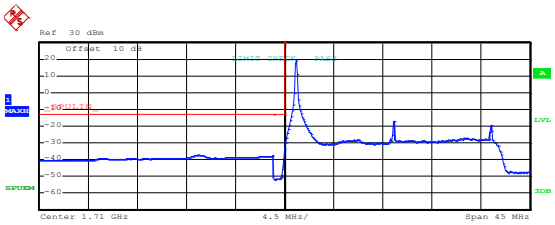
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.732 G	1.755 G	100.00 k	1.738283 G	-1.13	-34.13
1.755 G	1.756 G	300.00 k	1.755137 G	-39.29	-26.29
1.756 G	1.778 G	1.00 M	1.757214 G	-34.47	-21.47

Date: 31.JUL.2020 10:39:40

Highest channel

LTE Band 4, BW: 20MHz

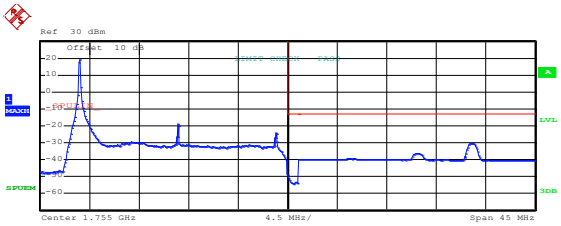
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.688 G	1.709 G	1.00 M	1.702065 G	-37.24	-24.24
1.709 G	1.710 G	30.00 k	1.709992 G	-40.70	-27.70
1.710 G	1.732 G	100.00 k	1.711103 G	19.14	-13.86

Date: 31.JUL.2020 10:38:41

Lowest channel

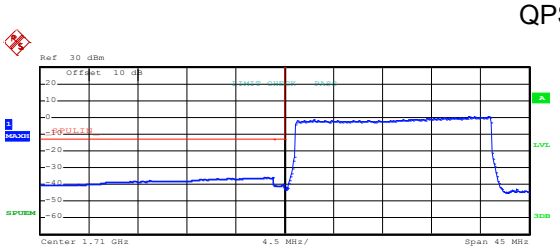


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.732 G	1.755 G	100.00 k	1.736100 G	18.93	-14.07
1.755 G	1.756 G	30.00 k	1.755016 G	-49.37	-36.37
1.756 G	1.778 G	1.00 M	1.771778 G	-30.61	-17.61

Date: 31.JUL.2020 10:39:51

Highest channel

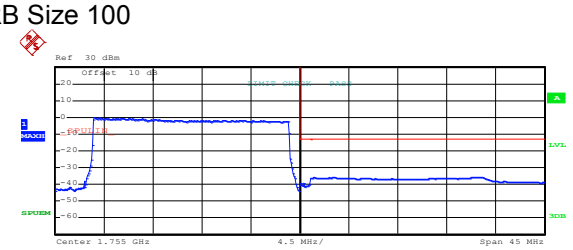
QPSK & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.688 G	1.709 G	1.00 M	1.709000 G	-35.96	-22.96
1.709 G	1.710 G	300.00 k	1.709984 G	-39.84	-26.84
1.710 G	1.732 G	100.00 k	1.728698 G	0.49	-32.51

Date: 31.JUL.2020 10:39:06

Lowest channel



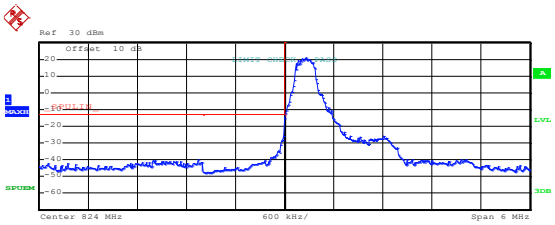
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.732 G	1.755 G	100.00 k	1.736100 G	-0.33	-33.33
1.755 G	1.756 G	300.00 k	1.755089 G	-39.12	-26.12
1.756 G	1.778 G	1.00 M	1.771431 G	-35.56	-22.56

Date: 31.JUL.2020 10:39:35

Highest channel

LTE Band 5 part:

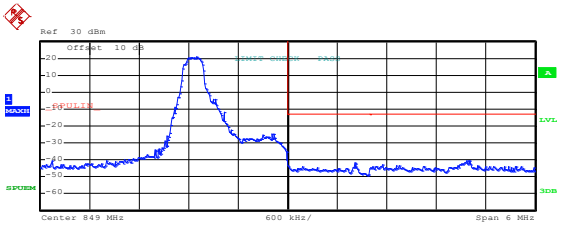
LTE Band 5, BW: 1.4MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
821.000 M	823.000 M	100.00 k	822.946000 M	-40.05	-27.05
823.000 M	824.000 M	30.00 k	823.994000 M	-26.02	-13.02
824.000 M	827.000 M	100.00 k	824.267000 M	20.65	-12.35

Date: 31.JUL.2020 10:41:37

Lowest channel

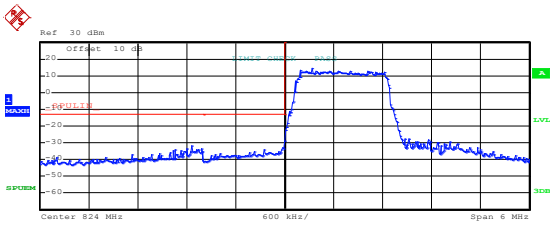


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
846.000 M	849.000 M	100.00 k	847.899000 M	20.77	-12.23
849.000 M	850.000 M	30.00 k	849.002000 M	-41.31	-28.31
850.000 M	852.000 M	100.00 k	851.176000 M	-40.33	-27.33

Date: 31.JUL.2020 10:42:10

Highest channel

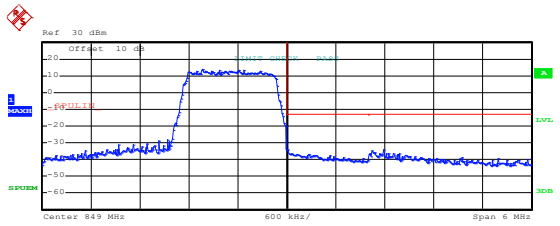
16QAM & RB Size 6



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
821.000 M	823.000 M	100.00 k	822.860000 M	-31.92	-18.92
823.000 M	824.000 M	30.00 k	823.973000 M	-32.70	-19.70
824.000 M	827.000 M	100.00 k	824.330000 M	14.73	-18.27

Date: 31.JUL.2020 10:41:46

Lowest channel



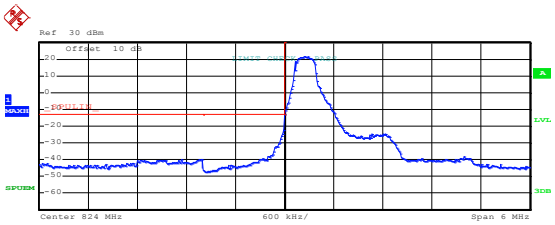
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
846.000 M	849.000 M	100.00 k	847.971000 M	13.98	-19.02
849.000 M	850.000 M	30.00 k	849.015000 M	-33.80	-20.80
850.000 M	852.000 M	100.00 k	850.192000 M	-33.84	-20.84

Date: 31.JUL.2020 10:42:00

Highest channel

LTE Band 5, BW: 1.4MHz

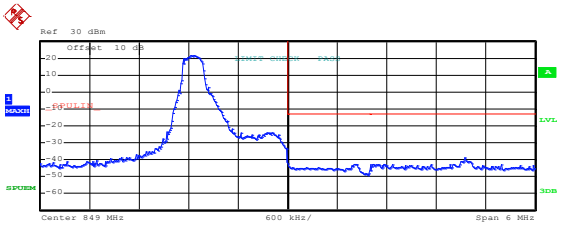
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
821.000 M	823.000 M	100.00 k	822.988000 M	-39.85	-26.85
823.000 M	824.000 M	30.00 k	823.992000 M	-22.11	-9.11
824.000 M	827.000 M	100.00 k	824.234000 M	21.38	-11.62

Date: 31.JUL.2020 10:41:31

Lowest channel

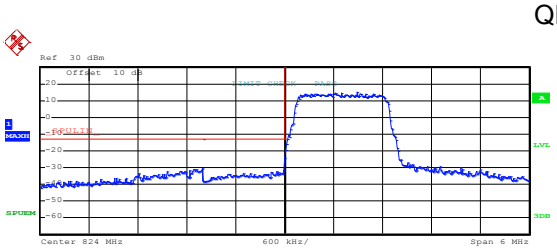


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
846.000 M	849.000 M	100.00 k	847.824000 M	21.57	-11.43
849.000 M	850.000 M	30.00 k	849.001000 M	-42.07	-29.07
850.000 M	852.000 M	100.00 k	851.146000 M	-38.90	-25.90

Date: 31.JUL.2020 10:42:05

Highest channel

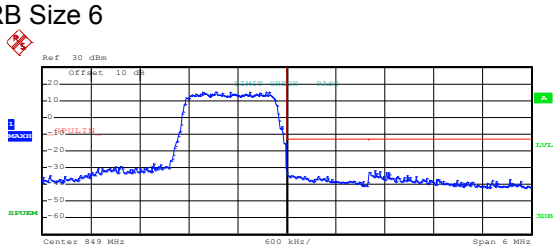
QPSK & RB Size 6



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
821.000 M	823.000 M	100.00 k	822.990000 M	-30.25	-17.25
823.000 M	824.000 M	30.00 k	823.997000 M	-31.73	-18.73
824.000 M	827.000 M	100.00 k	824.891000 M	14.83	-18.17

Date: 31.JUL.2020 10:41:42

Lowest channel

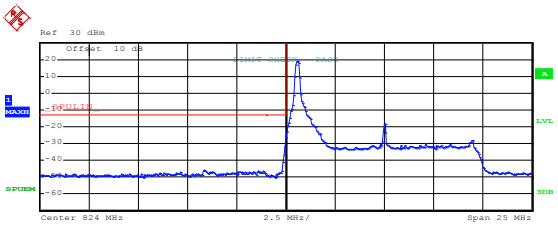


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
846.000 M	849.000 M	100.00 k	848.544000 M	15.30	-17.70
849.000 M	850.000 M	30.00 k	849.001000 M	-31.15	-18.15
850.000 M	852.000 M	100.00 k	850.082000 M	-31.88	-18.88

Date: 31.JUL.2020 10:41:56

Highest channel

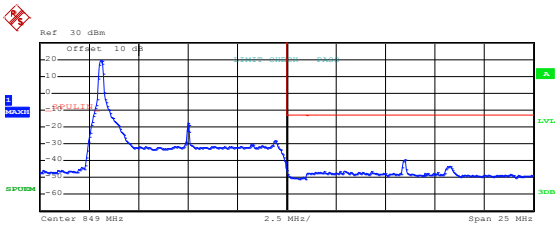
LTE Band 5, BW: 10MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
811.500 M	823.000 M	100.00 k	819.837500 M	-45.83	-32.83
823.000 M	824.000 M	30.00 k	823.994000 M	-31.91	-18.91
824.000 M	836.500 M	100.00 k	824.612500 M	19.04	-13.96

Date: 31.JUL.2020 10:43:11

Lowest channel

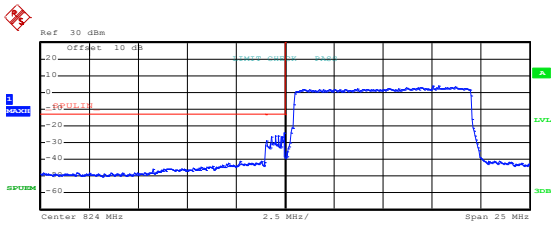


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
836.500 M	849.000 M	100.00 k	839.587500 M	19.41	-13.59
849.000 M	850.000 M	30.00 k	849.003000 M	-45.40	-32.40
850.000 M	861.500 M	100.00 k	854.979500 M	-39.20	-26.20

Date: 31.JUL.2020 10:42:38

Highest channel

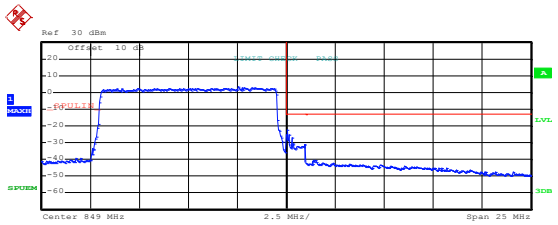
16QAM & RB Size 50



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
811.500 M	823.000 M	100.00 k	821.712000 M	-40.79	-27.79
823.000 M	824.000 M	300.00 k	823.990000 M	-24.29	-11.29
824.000 M	836.500 M	100.00 k	831.825000 M	3.98	-29.02

Date: 31.JUL.2020 10:43:39

Lowest channel



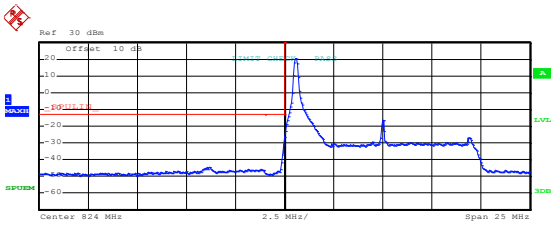
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
836.500 M	849.000 M	100.00 k	846.550000 M	3.32	-29.68
849.000 M	850.000 M	300.00 k	849.031000 M	-22.18	-9.18
850.000 M	861.500 M	100.00 k	850.506000 M	-40.51	-27.51

Date: 31.JUL.2020 10:42:54

Highest channel

LTE Band 5, BW: 10MHz

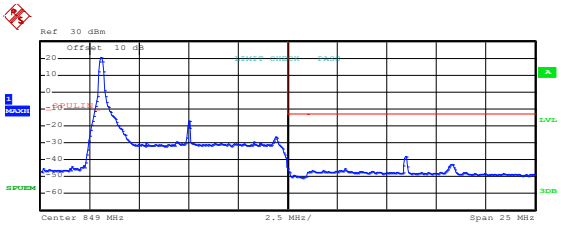
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
811.500 M	823.000 M	100.00 k	820.182500 M	-44.70	-31.70
823.000 M	824.000 M	30.00 k	823.979000 M	-31.36	-18.36
824.000 M	836.500 M	100.00 k	824.612500 M	20.34	-12.66

Date: 31.JUL.2020 10:43:06

Lowest channel

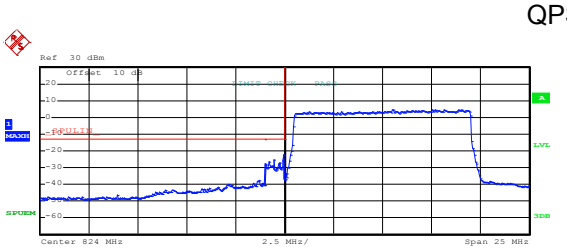


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
836.500 M	849.000 M	100.00 k	839.575000 M	20.39	-12.61
849.000 M	850.000 M	30.00 k	849.011000 M	-45.10	-32.10
850.000 M	861.500 M	100.00 k	854.968000 M	-38.21	-25.21

Date: 31.JUL.2020 10:42:33

Highest channel

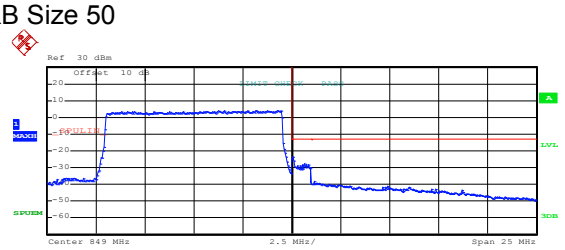
QPSK & RB Size 50



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
811.500 M	823.000 M	100.00 k	822.678000 M	-37.66	-24.66
823.000 M	824.000 M	300.00 k	823.984000 M	-22.25	-9.25
824.000 M	836.500 M	100.00 k	829.537500 M	4.45	-28.55

Date: 31.JUL.2020 10:43:34

Lowest channel



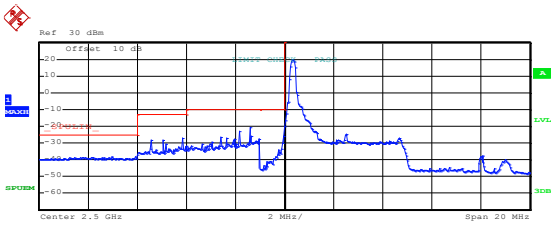
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
836.500 M	849.000 M	100.00 k	848.287500 M	4.06	-28.94
849.000 M	850.000 M	300.00 k	849.027000 M	-23.31	-10.31
850.000 M	861.500 M	100.00 k	850.149500 M	-38.10	-25.10

Date: 31.JUL.2020 10:42:50

Highest channel

LTE Band 7 part:

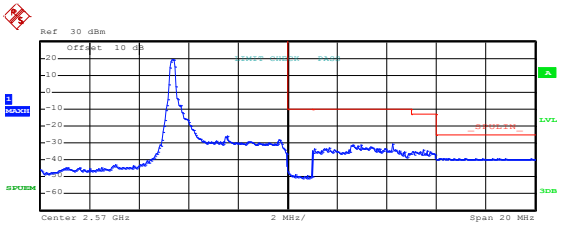
LTE Band 7, BW: 5MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.490 G	2.494 G	1.00 M	2.493936 G	-37.94	-12.94
2.494 G	2.496 G	1.00 M	2.495842 G	-27.16	-14.16
2.496 G	2.499 G	1.00 M	2.498601 G	-20.54	-10.54
2.499 G	2.500 G	30.00 k	2.499995 G	-25.81	-15.81
2.500 G	2.510 G	100.00 k	2.500320 G	19.49	-13.51

Date: 31.JUL.2020 11:22:51

Lowest channel

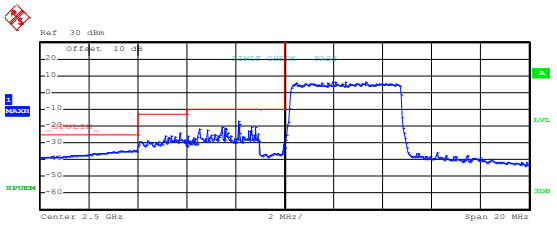


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.560 G	2.570 G	100.00 k	2.565310 G	19.42	-13.58
2.570 G	2.571 G	30.00 k	2.570006 G	-44.78	-34.78
2.571 G	2.575 G	1.00 M	2.574248 G	-30.58	-20.58
2.575 G	2.576 G	1.00 M	2.575475 G	-33.81	-20.81
2.576 G	2.580 G	1.00 M	2.576304 G	-39.07	-14.07

Date: 31.JUL.2020 11:23:28

Highest channel

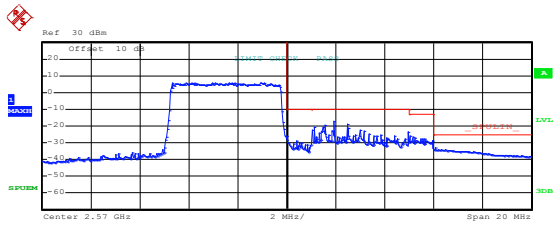
16QAM & RB Size 25



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.490 G	2.494 G	1.00 M	2.493328 G	-34.72	-9.72
2.494 G	2.496 G	1.00 M	2.495736 G	-23.90	-10.90
2.496 G	2.499 G	1.00 M	2.498118 G	-16.86	-6.86
2.499 G	2.500 G	100.00 k	2.499999 G	-31.08	-21.08
2.500 G	2.510 G	100.00 k	2.503300 G	6.29	-26.71

Date: 31.JUL.2020 11:23:10

Lowest channel



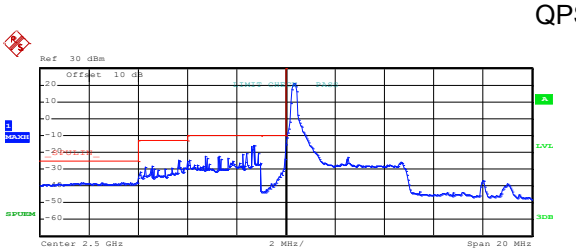
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.560 G	2.570 G	100.00 k	2.567890 G	5.76	-27.24
2.570 G	2.571 G	100.00 k	2.570002 G	-26.02	-16.02
2.571 G	2.575 G	1.00 M	2.571936 G	-17.32	-7.32
2.575 G	2.576 G	1.00 M	2.575043 G	-26.11	-13.11
2.576 G	2.580 G	1.00 M	2.576064 G	-32.81	-7.81

Date: 31.JUL.2020 11:23:47

Highest channel

LTE Band 7, BW: 5MHz

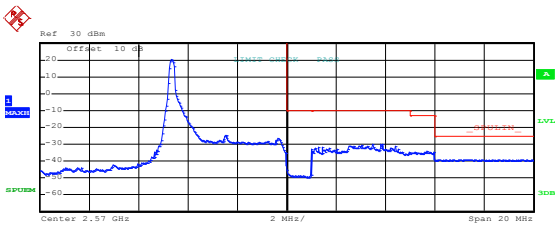
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.490 G	2.494 G	1.00 M	2.493380 G	-38.08	-13.08
2.494 G	2.496 G	1.00 M	2.495644 G	-24.50	-11.50
2.496 G	2.499 G	1.00 M	2.498661 G	-15.90	-5.90
2.499 G	2.500 G	30.00 k	2.499987 G	-23.90	-13.90
2.500 G	2.510 G	100.00 k	2.500340 G	20.86	-12.14

Date: 31.JUL.2020 11:22:45

Lowest channel

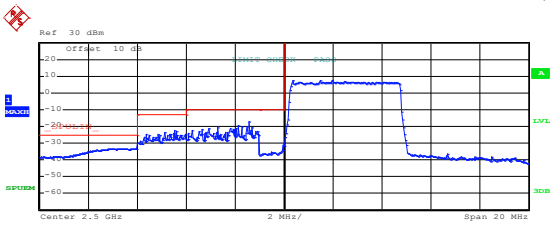


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.560 G	2.570 G	100.00 k	2.565320 G	20.34	-12.66
2.570 G	2.571 G	30.00 k	2.570003 G	-43.49	-33.49
2.571 G	2.575 G	1.00 M	2.573884 G	-29.92	-19.92
2.575 G	2.576 G	1.00 M	2.575664 G	-33.98	-20.98
2.576 G	2.580 G	1.00 M	2.579148 G	-38.97	-13.97

Date: 31.JUL.2020 11:23:23

Highest channel

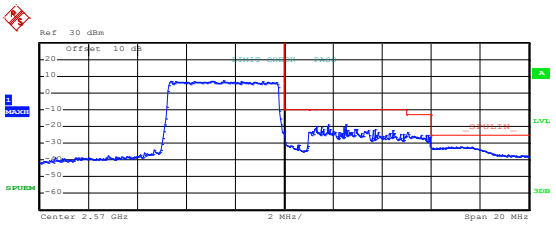
QPSK & RB Size 25



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.490 G	2.494 G	1.00 M	2.493728 G	-33.22	-8.22
2.494 G	2.496 G	1.00 M	2.495524 G	-22.18	-9.18
2.496 G	2.499 G	1.00 M	2.498553 G	-17.22	-7.22
2.499 G	2.500 G	100.00 k	2.499994 G	-30.96	-20.96
2.500 G	2.510 G	100.00 k	2.500370 G	7.47	-25.53

Date: 31.JUL.2020 11:23:06

Lowest channel

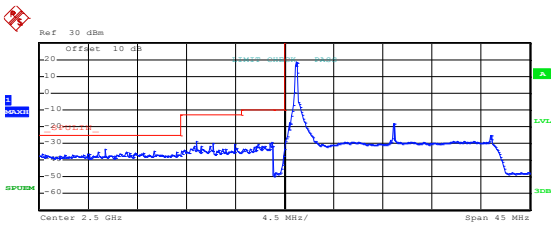


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.560 G	2.570 G	100.00 k	2.567520 G	7.48	-25.52
2.570 G	2.571 G	100.00 k	2.570001 G	-22.86	-12.86
2.571 G	2.575 G	1.00 M	2.572516 G	-18.72	-8.72
2.575 G	2.576 G	1.00 M	2.575048 G	-23.70	-10.70
2.576 G	2.580 G	1.00 M	2.577024 G	-32.21	-7.21

Date: 31.JUL.2020 11:23:42

Highest channel

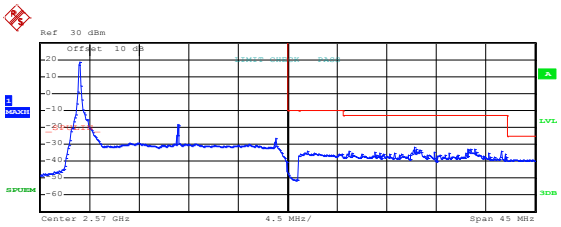
LTE Band 7, BW: 20MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.478 G	2.490 G	1.00 M	2.483532 G	-33.24	-8.24
2.490 G	2.496 G	1.00 M	2.491891 G	-28.72	-15.72
2.496 G	2.499 G	1.00 M	2.498871 G	-29.63	-19.63
2.499 G	2.500 G	30.00 k	2.499990 G	-37.38	-27.38
2.500 G	2.523 G	100.00 k	2.501103 G	18.71	-14.29

Date: 31.JUL.2020 11:39:21

Lowest channel

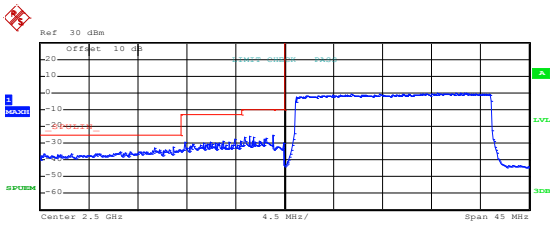


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.570 G	100.00 k	2.551077 G	18.86	-14.14
2.570 G	2.571 G	30.00 k	2.570007 G	-47.18	-37.18
2.571 G	2.575 G	1.00 M	2.571772 G	-34.24	-24.24
2.575 G	2.590 G	1.00 M	2.581540 G	-31.84	-18.84
2.590 G	2.592 G	1.00 M	2.590603 G	-39.20	-14.20

Date: 31.JUL.2020 11:39:56

Highest channel

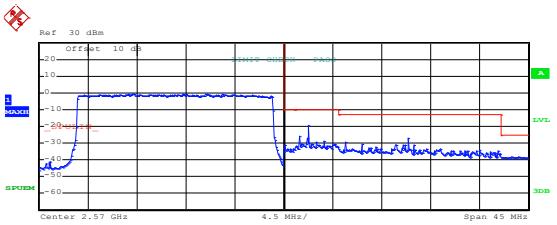
16QAM & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.478 G	2.490 G	1.00 M	2.489694 G	-32.35	-7.35
2.490 G	2.496 G	1.00 M	2.495406 G	-27.39	-14.39
2.496 G	2.499 G	1.00 M	2.498949 G	-25.09	-15.09
2.499 G	2.500 G	300.00 k	2.499977 G	-29.87	-19.87
2.500 G	2.523 G	100.00 k	2.516515 G	-0.05	-33.05

Date: 31.JUL.2020 11:39:37

Lowest channel

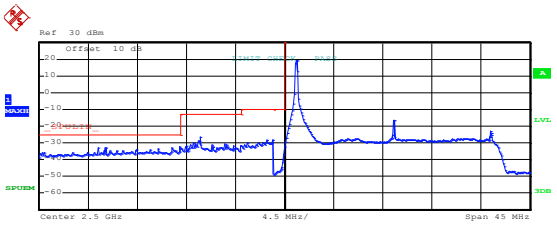


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.570 G	100.00 k	2.556140 G	-0.52	-33.52
2.570 G	2.571 G	300.00 k	2.570082 G	-30.88	-20.88
2.571 G	2.575 G	1.00 M	2.572264 G	-19.31	-9.31
2.575 G	2.590 G	1.00 M	2.581420 G	-27.15	-14.15
2.590 G	2.592 G	1.00 M	2.591613 G	-38.22	-13.22

Date: 31.JUL.2020 11:40:14

Highest channel

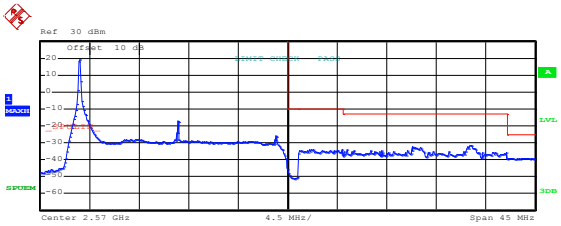
LTE Band 7, BW: 20MHz
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.478 G	2.490 G	1.00 M	2.490344 G	-32.33	-7.33
2.490 G	2.496 G	1.00 M	2.492299 G	-26.17	-13.17
2.496 G	2.499 G	1.00 M	2.498979 G	-27.98	-17.98
2.499 G	2.500 G	30.00 k	2.499980 G	-37.06	-27.06
2.500 G	2.523 G	100.00 k	2.501080 G	19.39	-13.61

Date: 31.JUL.2020 11:39:14

Lowest channel

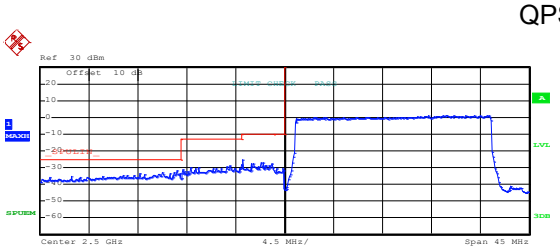


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.570 G	100.00 k	2.551100 G	19.40	-13.60
2.570 G	2.571 G	30.00 k	2.570025 G	-45.63	-35.63
2.571 G	2.575 G	1.00 M	2.572144 G	-33.90	-23.90
2.575 G	2.590 G	1.00 M	2.586580 G	-31.44	-18.44
2.590 G	2.592 G	1.00 M	2.591790 G	-39.04	-14.04

Date: 31.JUL.2020 11:39:49

Highest channel

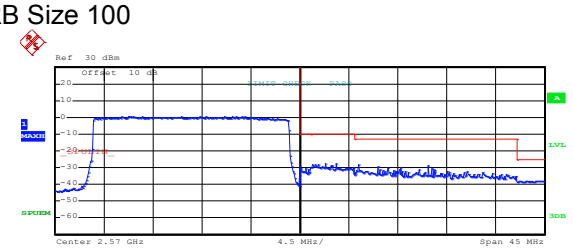
QPSK & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.478 G	2.490 G	1.00 M	2.490058 G	-31.51	-6.51
2.490 G	2.496 G	1.00 M	2.494972 G	-28.99	-15.99
2.496 G	2.499 G	1.00 M	2.496123 G	-25.53	-15.53
2.499 G	2.500 G	300.00 k	2.499840 G	-30.52	-20.52
2.500 G	2.523 G	100.00 k	2.514580 G	1.08	-31.92

Date: 31.JUL.2020 11:39:33

Lowest channel



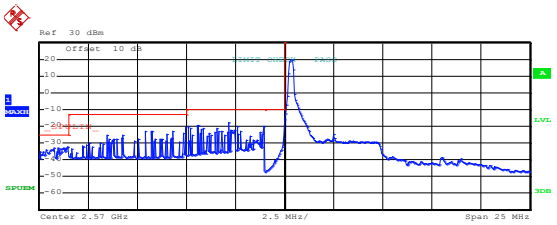
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.570 G	100.00 k	2.563745 G	0.49	-32.51
2.570 G	2.571 G	300.00 k	2.570021 G	-29.38	-19.38
2.571 G	2.575 G	1.00 M	2.573368 G	-27.42	-17.42
2.575 G	2.590 G	1.00 M	2.575405 G	-28.45	-15.45
2.590 G	2.592 G	1.00 M	2.590350 G	-37.96	-12.96

Date: 31.JUL.2020 11:40:09

Highest channel

LTE band 38 part:

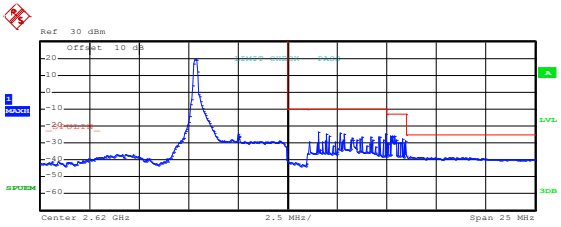
LTE Band 38, BW: 5MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.558 G	2.559 G	1.00 M	2.558915 G	-32.50	-7.50
2.559 G	2.565 G	1.00 M	2.564952 G	-20.54	-7.54
2.565 G	2.569 G	1.00 M	2.567097 G	-17.83	-7.83
2.569 G	2.570 G	30.00 k	2.569992 G	-27.87	-17.87
2.570 G	2.583 G	100.00 k	2.570325 G	19.98	-13.02

Date: 31.JUL.2020 16:03:16

Lowest channel

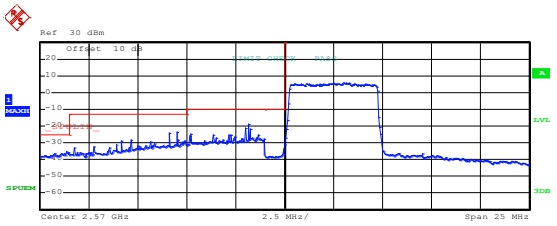


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.607 G	2.620 G	100.00 k	2.615362 G	19.41	-13.59
2.620 G	2.621 G	30.00 k	2.620185 G	-40.89	-30.89
2.621 G	2.625 G	1.00 M	2.621516 G	-23.59	-13.59
2.625 G	2.626 G	1.00 M	2.625177 G	-25.69	-12.69
2.626 G	2.632 G	1.00 M	2.626052 G	-37.66	-12.66

Date: 31.JUL.2020 16:01:31

Highest channel

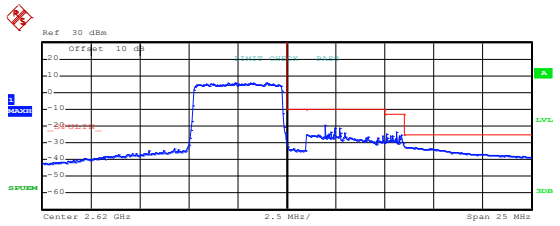
16QAM & RB Size 25



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.558 G	2.559 G	1.00 M	2.558843 G	-35.35	-10.35
2.559 G	2.565 G	1.00 M	2.564468 G	-23.60	-10.60
2.565 G	2.569 G	1.00 M	2.568097 G	-18.94	-8.94
2.569 G	2.570 G	100.00 k	2.569992 G	-34.05	-24.05
2.570 G	2.583 G	100.00 k	2.573163 G	5.74	-27.26

Date: 31.JUL.2020 16:03:52

Lowest channel



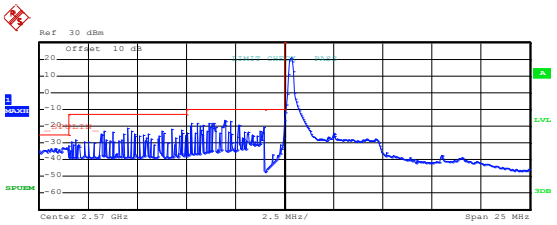
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.607 G	2.620 G	100.00 k	2.618937 G	5.93	-27.07
2.620 G	2.621 G	100.00 k	2.620024 G	-31.22	-21.22
2.621 G	2.625 G	1.00 M	2.621903 G	-19.39	-9.39
2.625 G	2.626 G	1.00 M	2.625613 G	-23.44	-10.44
2.626 G	2.632 G	1.00 M	2.626105 G	-32.66	-7.66

Date: 31.JUL.2020 16:00:43

Highest channel

LTE Band 38, BW: 5MHz

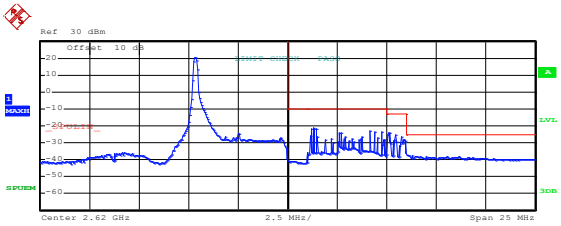
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.558 G	2.559 G	1.00 M	2.558710 G	-32.73	-7.73
2.559 G	2.565 G	1.00 M	2.561952 G	-21.39	-8.39
2.565 G	2.569 G	1.00 M	2.566903 G	-16.33	-6.33
2.569 G	2.570 G	30.00 k	2.569992 G	-27.55	-17.55
2.570 G	2.583 G	100.00 k	2.570325 G	20.64	-12.36

Date: 31.JUL.2020 16:02:45

Lowest channel

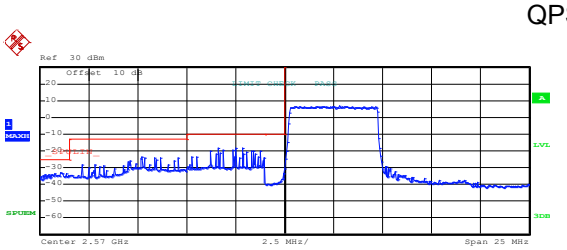


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.607 G	2.620 G	100.00 k	2.615350 G	20.35	-12.65
2.620 G	2.621 G	30.00 k	2.620048 G	-39.65	-29.65
2.621 G	2.625 G	1.00 M	2.621258 G	-21.44	-11.44
2.625 G	2.626 G	1.00 M	2.625081 G	-24.23	-11.23
2.626 G	2.632 G	1.00 M	2.626157 G	-36.82	-11.82

Date: 31.JUL.2020 16:01:08

Highest channel

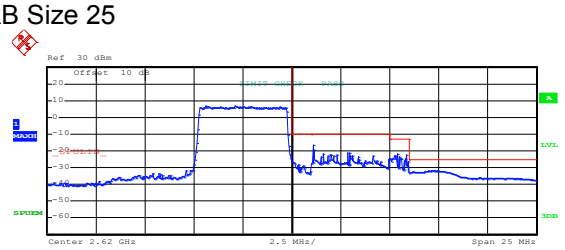
QPSK & RB Size 25



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.558 G	2.559 G	1.00 M	2.558528 G	-32.58	-7.58
2.559 G	2.565 G	1.00 M	2.562629 G	-23.53	-10.53
2.565 G	2.569 G	1.00 M	2.566581 G	-18.26	-8.26
2.569 G	2.570 G	100.00 k	2.569984 G	-33.68	-23.68
2.570 G	2.583 G	100.00 k	2.572812 G	6.68	-26.32

Date: 31.JUL.2020 16:03:42

Lowest channel

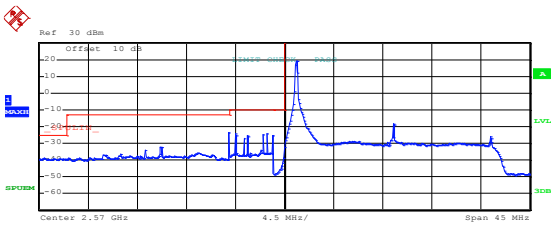


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.607 G	2.620 G	100.00 k	2.617100 G	6.75	-26.25
2.620 G	2.621 G	100.00 k	2.620073 G	-26.28	-16.28
2.621 G	2.625 G	1.00 M	2.621065 G	-16.39	-6.39
2.625 G	2.626 G	1.00 M	2.625371 G	-21.64	-8.64
2.626 G	2.632 G	1.00 M	2.627206 G	-31.91	-6.91

Date: 31.JUL.2020 16:00:31

Highest channel

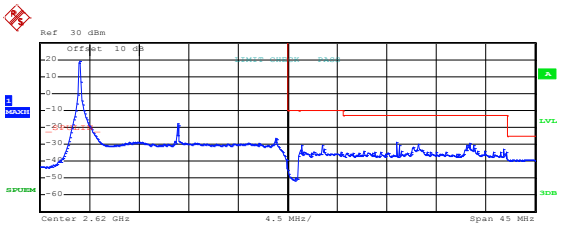
LTE Band 38, BW: 20MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.550 G	1.00 M	2.547964 G	-38.92	-13.92
2.550 G	2.565 G	1.00 M	2.565000 G	-23.31	-13.31
2.565 G	2.569 G	1.00 M	2.565484 G	-24.00	-14.00
2.569 G	2.570 G	30.00 k	2.569984 G	-38.60	-28.60
2.570 G	2.592 G	100.00 k	2.571125 G	19.14	-13.86

Date: 31.JUL.2020 16:16:12

Lowest channel

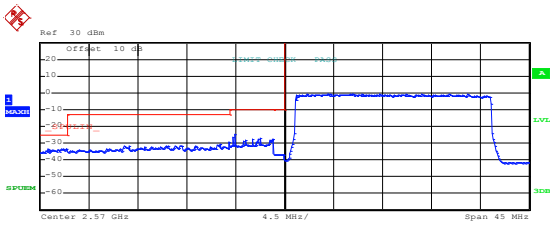


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.598 G	2.620 G	100.00 k	2.601055 G	19.28	-13.72
2.620 G	2.621 G	30.00 k	2.620009 G	-45.29	-35.29
2.621 G	2.625 G	1.00 M	2.621220 G	-30.42	-20.42
2.625 G	2.640 G	1.00 M	2.629875 G	-28.87	-15.87
2.640 G	2.643 G	1.00 M	2.640588 G	-38.92	-13.92

Date: 31.JUL.2020 16:17:50

Highest channel

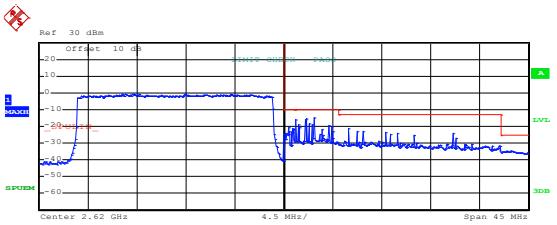
16QAM & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.550 G	1.00 M	2.549415 G	-33.55	-8.55
2.550 G	2.565 G	1.00 M	2.564879 G	-29.45	-16.45
2.565 G	2.569 G	1.00 M	2.565387 G	-24.56	-14.56
2.569 G	2.570 G	300.00 k	2.569524 G	-36.77	-26.77
2.570 G	2.592 G	100.00 k	2.586807 G	-0.65	-33.65

Date: 31.JUL.2020 16:16:42

Lowest channel



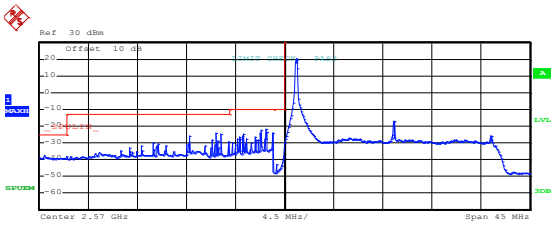
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.598 G	2.620 G	100.00 k	2.606072 G	-0.52	-33.52
2.620 G	2.621 G	300.00 k	2.620474 G	-20.79	-10.79
2.621 G	2.625 G	1.00 M	2.622812 G	-14.67	-4.67
2.625 G	2.640 G	1.00 M	2.625930 G	-21.04	-8.04
2.640 G	2.643 G	1.00 M	2.641010 G	-34.85	-9.85

Date: 31.JUL.2020 16:18:23

Highest channel

LTE Band 38, BW: 20MHz

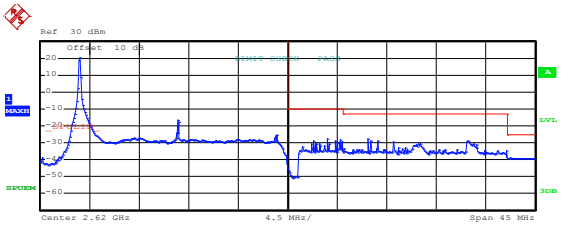
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.550 G	1.00 M	2.547944 G	-37.72	-12.72
2.550 G	2.565 G	1.00 M	2.563669 G	-24.16	-11.16
2.565 G	2.569 G	1.00 M	2.568290 G	-21.72	-11.72
2.569 G	2.570 G	30.00 k	2.569992 G	-38.20	-28.20
2.570 G	2.592 G	100.00 k	2.571080 G	20.08	-12.92

Date: 31.JUL.2020 16:15:36

Lowest channel

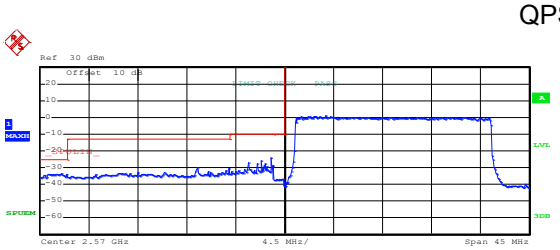


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.598 G	2.620 G	100.00 k	2.601078 G	20.23	-12.77
2.620 G	2.621 G	30.00 k	2.620011 G	-43.23	-33.23
2.621 G	2.625 G	1.00 M	2.623580 G	-27.37	-17.37
2.625 G	2.640 G	1.00 M	2.627280 G	-27.85	-14.85
2.640 G	2.643 G	1.00 M	2.640213 G	-38.92	-13.92

Date: 31.JUL.2020 16:17:40

Highest channel

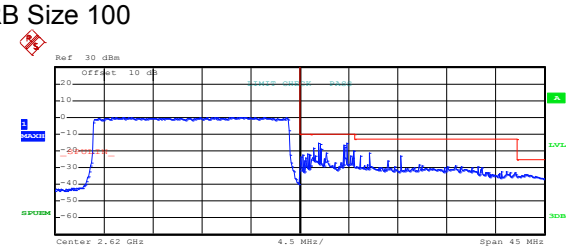
QPSK & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.547 G	2.550 G	1.00 M	2.549415 G	-33.45	-8.45
2.550 G	2.565 G	1.00 M	2.561976 G	-29.76	-16.76
2.565 G	2.569 G	1.00 M	2.568710 G	-24.24	-14.24
2.569 G	2.570 G	300.00 k	2.569548 G	-36.74	-26.74
2.570 G	2.592 G	100.00 k	2.573780 G	0.79	-32.21

Date: 31.JUL.2020 16:17:00

Lowest channel



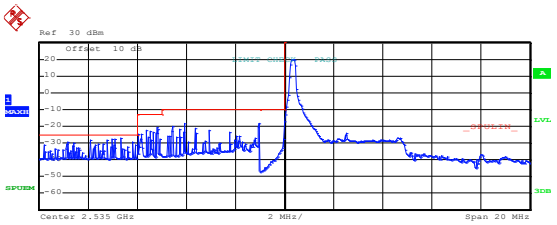
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.598 G	2.620 G	100.00 k	2.614645 G	0.18	-32.82
2.620 G	2.621 G	300.00 k	2.620710 G	-21.75	-11.75
2.621 G	2.625 G	1.00 M	2.624284 G	-15.04	-5.04
2.625 G	2.640 G	1.00 M	2.626350 G	-21.06	-8.06
2.640 G	2.643 G	1.00 M	2.640843 G	-33.98	-8.98

Date: 31.JUL.2020 16:18:08

Highest channel

LTE band 41 part:

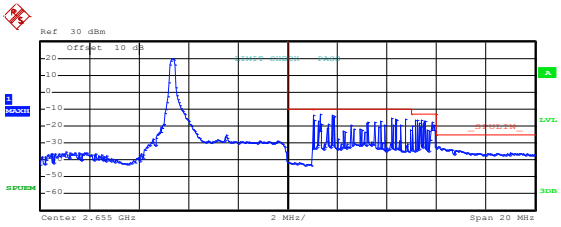
LTE Band 41, BW: 5MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.525 G	2.529 G	1.00 M	2.528290 G	-27.26	-2.26
2.529 G	2.530 G	1.00 M	2.529782 G	-20.61	-7.61
2.530 G	2.534 G	1.00 M	2.530903 G	-18.24	-8.24
2.534 G	2.535 G	30.00 k	2.534992 G	-28.63	-18.63
2.535 G	2.545 G	100.00 k	2.535360 G	19.88	-13.12

Date: 31.JUL.2020 11:26:13

Lowest channel

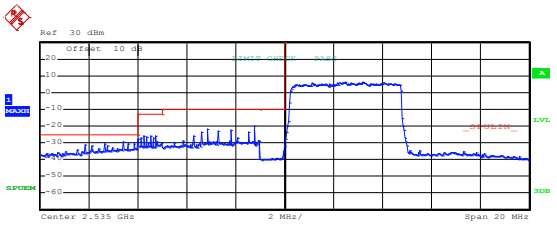


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.645 G	2.655 G	100.00 k	2.650370 G	19.80	-13.20
2.655 G	2.656 G	30.00 k	2.655074 G	-41.14	-31.14
2.656 G	2.660 G	1.00 M	2.656312 G	-13.20	-3.20
2.660 G	2.661 G	1.00 M	2.660235 G	-16.42	-3.42
2.661 G	2.665 G	1.00 M	2.661108 G	-32.42	-7.42

Date: 31.JUL.2020 11:28:02

Highest channel

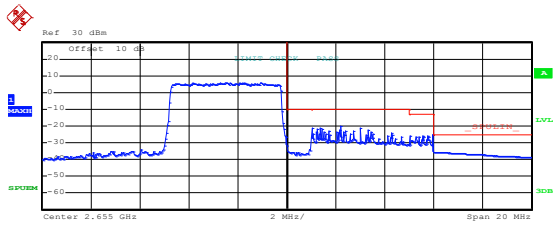
16QAM & RB Size 25



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.525 G	2.529 G	1.00 M	2.528387 G	-29.12	-4.12
2.529 G	2.530 G	1.00 M	2.529694 G	-25.67	-12.67
2.530 G	2.534 G	1.00 M	2.533710 G	-20.05	-10.05
2.534 G	2.535 G	100.00 k	2.534984 G	-35.91	-25.91
2.535 G	2.545 G	100.00 k	2.537480 G	6.08	-26.92

Date: 31.JUL.2020 11:26:46

Lowest channel



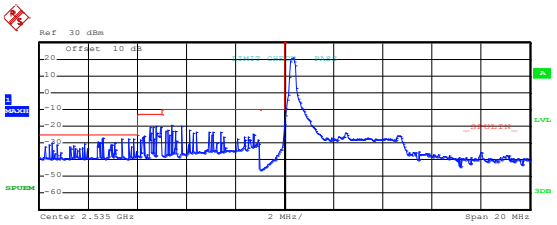
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.645 G	2.655 G	100.00 k	2.653280 G	5.96	-27.04
2.655 G	2.656 G	100.00 k	2.655016 G	-32.14	-22.14
2.656 G	2.660 G	1.00 M	2.657161 G	-20.02	-10.02
2.660 G	2.661 G	1.00 M	2.660952 G	-25.43	-12.43
2.661 G	2.665 G	1.00 M	2.661129 G	-35.74	-10.74

Date: 31.JUL.2020 11:30:14

Highest channel

LTE Band 41, BW: 5MHz

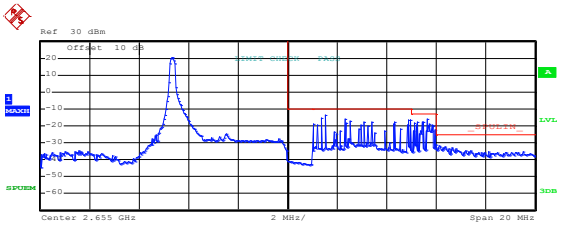
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.525 G	2.529 G	1.00 M	2.527581 G	-27.10	-2.10
2.529 G	2.530 G	1.00 M	2.529758 G	-19.97	-6.97
2.530 G	2.534 G	1.00 M	2.530355 G	-19.16	-9.16
2.534 G	2.535 G	30.00 k	2.534992 G	-28.33	-18.33
2.535 G	2.545 G	100.00 k	2.535340 G	20.66	-12.34

Date: 31.JUL.2020 11:25:49

Lowest channel

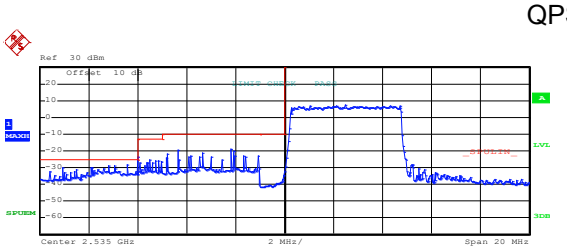


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.645 G	2.655 G	100.00 k	2.650330 G	20.43	-12.57
2.655 G	2.656 G	30.00 k	2.655169 G	-40.85	-30.85
2.656 G	2.660 G	1.00 M	2.656504 G	-13.43	-3.43
2.660 G	2.661 G	1.00 M	2.660643 G	-16.05	-3.05
2.661 G	2.665 G	1.00 M	2.661104 G	-31.46	-6.46

Date: 31.JUL.2020 11:27:29

Highest channel

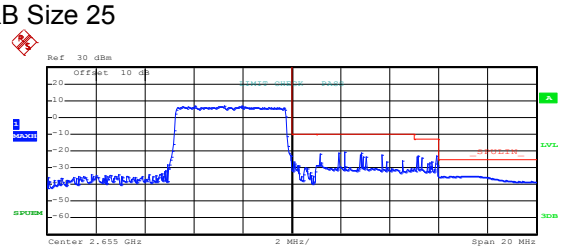
QPSK & RB Size 25



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.525 G	2.529 G	1.00 M	2.528516 G	-28.03	-3.03
2.529 G	2.530 G	1.00 M	2.529000 G	-23.76	-10.76
2.530 G	2.534 G	1.00 M	2.532774 G	-19.04	-9.04
2.534 G	2.535 G	100.00 k	2.534976 G	-34.75	-24.75
2.535 G	2.545 G	100.00 k	2.537480 G	7.37	-25.63

Date: 31.JUL.2020 11:26:34

Lowest channel

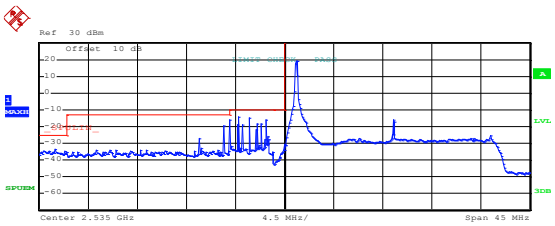


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.645 G	2.655 G	100.00 k	2.651040 G	7.03	-25.97
2.655 G	2.656 G	100.00 k	2.655056 G	-26.51	-16.51
2.656 G	2.660 G	1.00 M	2.657129 G	-20.70	-10.70
2.660 G	2.661 G	1.00 M	2.660903 G	-22.80	-9.80
2.661 G	2.665 G	1.00 M	2.662194 G	-35.04	-10.04

Date: 31.JUL.2020 11:28:58

Highest channel

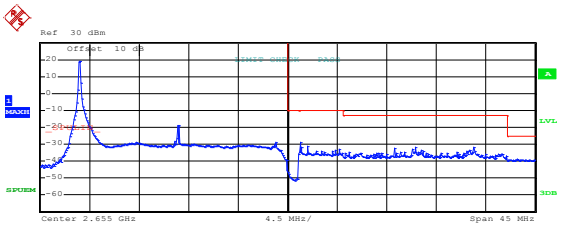
LTE Band 41, BW: 20MHz
16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.513 G	2.515 G	1.00 M	2.513915 G	-33.48	-8.48
2.515 G	2.530 G	1.00 M	2.529415 G	-19.18	-6.18
2.530 G	2.534 G	1.00 M	2.530800 G	-14.24	-4.24
2.534 G	2.535 G	30.00 k	2.534957 G	-34.06	-24.06
2.535 G	2.558 G	100.00 k	2.536125 G	19.22	-13.78

Date: 31.JUL.2020 11:36:55

Lowest channel

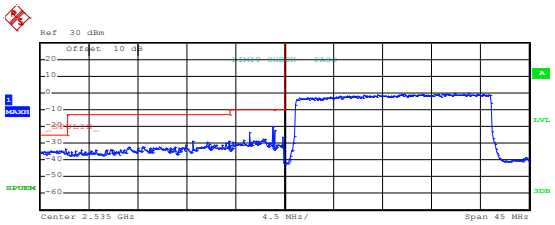


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.632 G	2.655 G	100.00 k	2.636122 G	18.96	-14.04
2.655 G	2.656 G	30.00 k	2.655020 G	-46.34	-36.34
2.656 G	2.660 G	1.00 M	2.656160 G	-28.93	-18.93
2.660 G	2.675 G	1.00 M	2.671865 G	-31.86	-18.86
2.675 G	2.678 G	1.00 M	2.675920 G	-38.88	-13.88

Date: 31.JUL.2020 11:37:53

Highest channel

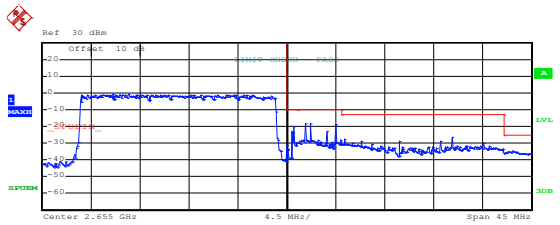
16QAM & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.513 G	2.515 G	1.00 M	2.514865 G	-33.44	-8.44
2.515 G	2.530 G	1.00 M	2.526520 G	-28.55	-15.55
2.530 G	2.534 G	1.00 M	2.533916 G	-20.05	-10.05
2.534 G	2.535 G	300.00 k	2.534114 G	-22.35	-12.35
2.535 G	2.558 G	100.00 k	2.550683 G	0.13	-32.87

Date: 31.JUL.2020 11:37:19

Lowest channel



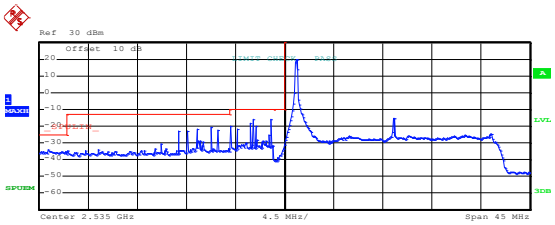
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.632 G	2.655 G	100.00 k	2.640442 G	-0.86	-33.86
2.655 G	2.656 G	300.00 k	2.655609 G	-20.23	-10.23
2.656 G	2.660 G	1.00 M	2.656676 G	-18.29	-8.29
2.660 G	2.675 G	1.00 M	2.670155 G	-26.47	-13.47
2.675 G	2.678 G	1.00 M	2.675785 G	-34.70	-9.70

Date: 31.JUL.2020 11:38:25

Highest channel

LTE Band 41, BW: 20MHz

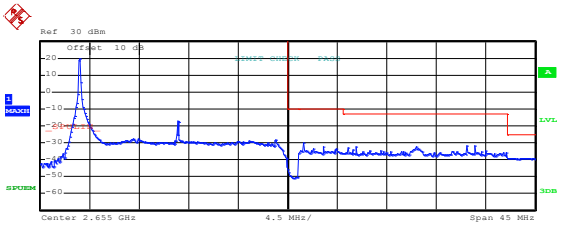
QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.513 G	2.515 G	1.00 M	2.513272 G	-34.22	-9.22
2.515 G	2.530 G	1.00 M	2.528260 G	-20.45	-7.45
2.530 G	2.534 G	1.00 M	2.533768 G	-16.02	-6.02
2.534 G	2.535 G	30.00 k	2.534986 G	-33.42	-23.42
2.535 G	2.558 G	100.00 k	2.536125 G	19.83	-13.17

Date: 31.JUL.2020 11:36:47

Lowest channel

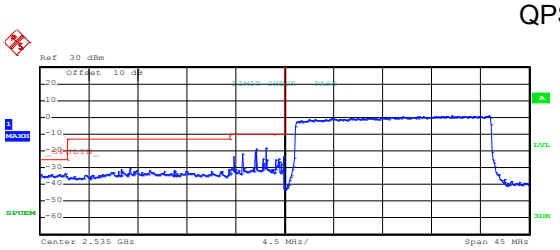


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.632 G	2.655 G	100.00 k	2.636077 G	19.71	-13.29
2.655 G	2.656 G	30.00 k	2.655017 G	-45.07	-35.07
2.656 G	2.660 G	1.00 M	2.656396 G	-29.92	-19.92
2.660 G	2.675 G	1.00 M	2.672000 G	-31.43	-18.43
2.675 G	2.678 G	1.00 M	2.675853 G	-39.28	-14.28

Date: 31.JUL.2020 11:37:44

Highest channel

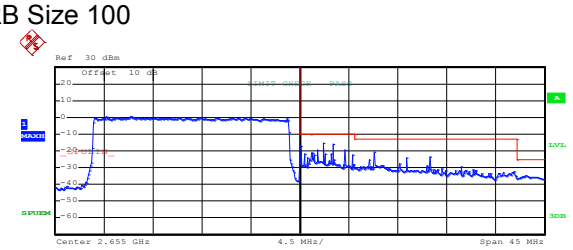
QPSK & RB Size 100



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.513 G	2.515 G	1.00 M	2.514877 G	-33.34	-8.34
2.515 G	2.530 G	1.00 M	2.520805 G	-30.43	-17.43
2.530 G	2.534 G	1.00 M	2.533288 G	-18.38	-8.38
2.534 G	2.535 G	300.00 k	2.534915 G	-23.30	-13.30
2.535 G	2.558 G	100.00 k	2.550390 G	1.01	-31.99

Date: 31.JUL.2020 11:37:13

Lowest channel

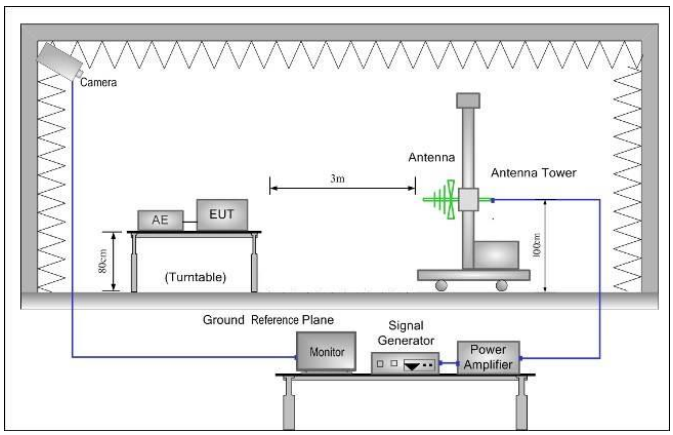
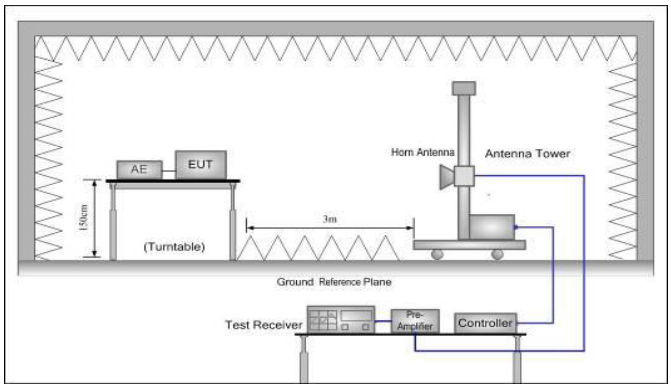


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
2.632 G	2.655 G	100.00 k	2.639475 G	0.32	-32.68
2.655 G	2.656 G	300.00 k	2.655057 G	-16.88	-6.88
2.656 G	2.660 G	1.00 M	2.657168 G	-15.51	-5.51
2.660 G	2.675 G	1.00 M	2.661860 G	-20.34	-7.34
2.675 G	2.678 G	1.00 M	2.675828 G	-34.56	-9.56

Date: 31.JUL.2020 11:38:15

Highest channel

6.5 Field strength of spurious radiation measurement

Test Requirement:	Part 22.917(a), Part 24.238 (a), Part 27.53(m), Part 27.53(h)
Limit:	LTE Band 2 & 4 & 5: 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). LTE Band 7 & 38 & 41: For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz.
Test setup:	Below 1GHz  Above 1GHz 
Test Procedure:	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. output (dBm) + Antenna Gain(dB/dBi) – 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)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3701.40	-59.92	12.64	0.75	-48.03	-13.00	-35.03	Vertical
5552.10	-55.39	12.76	1.13	-43.76	-13.00	-30.76	Vertical
7402.00	-41.34	11.44	1.63	-31.53	-13.00	-18.53	Vertical
3701.40	-56.99	12.64	0.75	-45.10	-13.00	-32.10	Horizontal
5552.10	-56.01	12.76	1.13	-44.38	-13.00	-31.38	Horizontal
7402.00	-37.15	11.44	1.63	-27.34	-13.00	-14.34	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3760.00	-59.85	12.71	0.79	-47.93	-13.00	-34.93	Vertical
5640.00	-55.46	12.87	1.15	-43.74	-13.00	-30.74	Vertical
7520.00	-41.56	11.48	1.66	-31.74	-13.00	-18.74	Vertical
3760.00	-56.83	12.71	0.79	-44.91	-13.00	-31.91	Horizontal
5640.00	-56.08	12.87	1.15	-44.36	-13.00	-31.36	Horizontal
7520.00	-37.31	11.48	1.66	-27.49	-13.00	-14.49	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3816.60	-59.97	12.78	0.81	-48.00	-13.00	-35.00	Vertical
5724.90	-55.39	12.97	1.19	-43.61	-13.00	-30.61	Vertical
7633.20	-41.58	11.34	1.71	-31.95	-13.00	-18.95	Vertical
3816.60	-57.10	12.78	0.81	-45.13	-13.00	-32.13	Horizontal
5724.90	-56.46	12.97	1.19	-44.68	-13.00	-31.68	Horizontal
7633.20	-36.70	11.34	1.71	-27.07	-13.00	-14.07	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)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3720.00	-59.94	12.66	0.77	-48.05	-13.00	-35.05	Vertical
5580.00	-54.87	12.80	1.15	-43.22	-13.00	-30.22	Vertical
7440.00	-42.15	11.46	1.64	-32.33	-13.00	-19.33	Vertical
3720.00	-57.12	12.66	0.77	-45.23	-13.00	-32.23	Horizontal
5580.00	-56.77	12.80	1.15	-45.12	-13.00	-32.12	Horizontal
7440.00	-37.00	11.46	1.64	-27.18	-13.00	-14.18	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3760.00	-60.42	12.71	0.79	-48.50	-13.00	-35.50	Vertical
5640.00	-55.30	12.87	1.15	-43.58	-13.00	-30.58	Vertical
7520.00	-41.95	11.48	1.66	-32.13	-13.00	-19.13	Vertical
3760.00	-57.18	12.71	0.79	-45.26	-13.00	-32.26	Horizontal
5640.00	-56.93	12.87	1.15	-45.21	-13.00	-32.21	Horizontal
7520.00	-37.20	11.48	1.66	-27.38	-13.00	-14.38	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3800.00	-60.74	12.76	0.79	-48.77	-13.00	-35.77	Vertical
5700.00	-54.98	12.94	1.18	-43.22	-13.00	-30.22	Vertical
7600.00	-42.02	11.38	1.69	-32.33	-13.00	-19.33	Vertical
3800.00	-57.01	12.76	0.79	-45.04	-13.00	-32.04	Horizontal
5700.00	-57.28	12.94	1.18	-45.52	-13.00	-32.52	Horizontal
7600.00	-37.25	11.38	1.69	-27.56	-13.00	-14.56	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

LTE Band 4 part:

Band 4 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3421.40	-60.41	12.24	0.70	-48.87	-13.00	-35.87	Vertical
5132.10	-57.03	12.92	1.01	-45.12	-13.00	-32.12	Vertical
6842.80	-50.49	11.42	1.53	-40.60	-13.00	-27.60	Vertical
3421.40	-60.49	12.24	0.70	-48.95	-13.00	-35.95	Horizontal
5132.10	-56.94	12.92	1.01	-45.03	-13.00	-32.03	Horizontal
6842.80	-49.14	11.42	1.53	-39.25	-13.00	-26.25	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3465.00	-60.09	12.33	0.72	-48.48	-13.00	-35.48	Vertical
5197.50	-56.65	12.88	1.04	-44.81	-13.00	-31.81	Vertical
6930.00	-50.69	11.30	1.56	-40.95	-13.00	-27.95	Vertical
3465.00	-60.51	12.33	0.72	-48.90	-13.00	-35.90	Horizontal
5197.50	-57.02	12.88	1.04	-45.18	-13.00	-32.18	Horizontal
6930.00	-49.31	11.30	1.56	-39.57	-13.00	-26.57	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3508.60	-60.56	12.41	0.74	-48.89	-13.00	-35.89	Vertical
5262.90	-56.79	12.84	1.07	-45.02	-13.00	-32.02	Vertical
7017.20	-50.11	11.21	1.58	-40.48	-13.00	-27.48	Vertical
3508.60	-60.10	12.41	0.74	-48.43	-13.00	-35.43	Horizontal
5262.90	-57.00	12.84	1.07	-45.23	-13.00	-32.23	Horizontal
7017.20	-49.51	11.21	1.58	-39.88	-13.00	-26.88	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

Band 4 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3440.00	-60.20	12.28	0.71	-48.63	-13.00	-35.63	Vertical
5160.00	-57.31	12.90	1.03	-45.44	-13.00	-32.44	Vertical
6880.00	-50.50	11.37	1.54	-40.67	-13.00	-27.67	Vertical
3440.00	-60.31	12.28	0.71	-48.74	-13.00	-35.74	Horizontal
5160.00	-57.32	12.90	1.03	-45.45	-13.00	-32.45	Horizontal
6880.00	-49.16	11.37	1.54	-39.33	-13.00	-26.33	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3465.00	-59.75	12.33	0.72	-48.14	-13.00	-35.14	Vertical
5197.50	-57.71	12.88	1.04	-45.87	-13.00	-32.87	Vertical
6930.00	-50.33	11.30	1.56	-40.59	-13.00	-27.59	Vertical
3465.00	-60.76	12.33	0.72	-49.15	-13.00	-36.15	Horizontal
5197.50	-57.76	12.88	1.04	-45.92	-13.00	-32.92	Horizontal
6930.00	-48.65	11.30	1.56	-38.91	-13.00	-25.91	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
3490.00	-59.36	12.38	0.73	-47.71	-13.00	-34.71	Vertical
5235.00	-57.30	12.86	1.06	-45.50	-13.00	-32.50	Vertical
6980.00	-50.44	11.23	1.57	-40.78	-13.00	-27.78	Vertical
3490.00	-60.56	12.38	0.73	-48.91	-13.00	-35.91	Horizontal
5235.00	-58.00	12.86	1.06	-46.20	-13.00	-33.20	Horizontal
6980.00	-49.01	11.23	1.57	-39.35	-13.00	-26.35	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

Band 5 (1.4MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1649.40	-68.02	9.57	0.20	-58.65	-13.00	-45.65	Vertical
2474.10	-65.06	10.86	0.43	-54.63	-13.00	-41.63	Vertical
3298.80	-55.92	12.00	0.64	-44.56	-13.00	-31.56	Vertical
1649.40	-66.69	9.57	0.20	-57.32	-13.00	-44.32	Horizontal
2474.10	-59.52	10.86	0.43	-49.09	-13.00	-36.09	Horizontal
3298.80	-54.44	12.00	0.64	-43.08	-13.00	-30.08	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1673.30	-67.72	9.66	0.22	-58.28	-13.00	-45.28	Vertical
2509.50	-64.79	10.91	0.46	-54.34	-13.00	-41.34	Vertical
3346.00	-55.91	12.09	0.66	-44.48	-13.00	-31.48	Vertical
1673.30	-66.28	9.66	0.22	-56.84	-13.00	-43.84	Horizontal
2509.50	-59.52	10.91	0.46	-49.07	-13.00	-36.07	Horizontal
3346.00	-54.66	12.09	0.66	-43.23	-13.00	-30.23	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1696.60	-68.09	9.74	0.23	-58.58	-13.00	-45.58	Vertical
2544.90	-64.89	10.94	0.49	-54.44	-13.00	-41.44	Vertical
3393.20	-56.41	12.19	0.68	-44.90	-13.00	-31.90	Vertical
1696.60	-66.77	9.74	0.23	-57.26	-13.00	-44.26	Horizontal
2544.90	-59.20	10.94	0.49	-48.75	-13.00	-35.75	Horizontal
3393.20	-54.94	12.19	0.68	-43.43	-13.00	-30.43	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)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1658.00	-68.38	9.60	0.21	-58.99	-13.00	-45.99	Vertical
2487.00	-64.97	10.88	0.45	-54.54	-13.00	-41.54	Vertical
3316.00	-55.59	12.03	0.65	-44.21	-13.00	-31.21	Vertical
1658.00	-67.08	9.60	0.21	-57.69	-13.00	-44.69	Horizontal
2487.00	-59.26	10.88	0.45	-48.83	-13.00	-35.83	Horizontal
3316.00	-54.86	12.03	0.65	-43.48	-13.00	-30.48	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1673.30	-68.03	9.66	0.21	-58.58	-13.00	-45.58	Vertical
2509.50	-64.50	10.91	0.46	-54.05	-13.00	-41.05	Vertical
3346.00	-55.66	12.09	0.66	-44.23	-13.00	-31.23	Vertical
1673.30	-67.38	9.66	0.21	-57.93	-13.00	-44.93	Horizontal
2509.50	-59.56	10.91	0.46	-49.11	-13.00	-36.11	Horizontal
3346.00	-55.30	12.09	0.66	-43.87	-13.00	-30.87	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
1688.00	-68.23	9.71	0.23	-58.75	-13.00	-45.75	Vertical
2532.00	-64.72	10.93	0.48	-54.27	-13.00	-41.27	Vertical
3376.00	-55.50	12.15	0.67	-44.02	-13.00	-31.02	Vertical
1688.00	-67.78	9.71	0.23	-58.30	-13.00	-45.30	Horizontal
2532.00	-59.44	10.93	0.48	-48.99	-13.00	-35.99	Horizontal
3376.00	-55.12	12.15	0.67	-43.64	-13.00	-30.64	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

LTE Band 7 part:

Band 7 (5MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5005.00	-57.80	13.00	0.94	-45.74	-25.00	-20.74	Vertical
7507.50	-47.37	11.49	1.65	-37.53	-25.00	-12.53	Vertical
10010.00	-40.17	11.69	1.91	-30.39	-25.00	-5.39	Vertical
5005.00	-57.78	13.00	0.94	-45.72	-25.00	-20.72	Horizontal
7507.50	-44.40	11.49	1.65	-34.56	-25.00	-9.56	Horizontal
10010.00	-42.09	11.69	1.91	-32.31	-25.00	-7.31	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5070.00	-57.63	12.96	0.98	-45.65	-25.00	-20.65	Vertical
7605.00	-47.20	11.37	1.69	-37.52	-25.00	-12.52	Vertical
10140.00	-40.29	11.62	1.94	-30.61	-25.00	-5.61	Vertical
5070.00	-57.52	12.96	0.98	-45.54	-25.00	-20.54	Horizontal
7605.00	-44.23	11.37	1.69	-34.55	-25.00	-9.55	Horizontal
10140.00	-42.16	11.62	1.94	-32.48	-25.00	-7.48	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5135.00	-57.21	12.92	1.01	-45.30	-25.00	-20.30	Vertical
7702.50	-47.51	11.26	1.72	-37.97	-25.00	-12.97	Vertical
10270.00	-39.99	11.54	1.95	-30.40	-25.00	-5.40	Vertical
5135.00	-57.24	12.92	1.01	-45.33	-25.00	-20.33	Horizontal
7702.50	-44.11	11.26	1.72	-34.57	-25.00	-9.57	Horizontal
10270.00	-42.35	11.54	1.95	-32.76	-25.00	-7.76	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

Band 7 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5020.00	-57.13	12.99	0.97	-45.11	-25.00	-20.11	Vertical
7530.00	-48.13	11.46	1.68	-38.35	-25.00	-13.35	Vertical
10040.00	-40.40	11.68	1.94	-30.66	-25.00	-5.66	Vertical
5020.00	-57.33	12.99	0.97	-45.31	-25.00	-20.31	Horizontal
7530.00	-44.70	11.46	1.68	-34.92	-25.00	-9.92	Horizontal
10040.00	-42.51	11.68	1.94	-32.77	-25.00	-7.77	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5070.00	-57.15	12.96	0.98	-45.17	-25.00	-20.17	Vertical
7605.00	-48.02	11.37	1.69	-38.34	-25.00	-13.34	Vertical
10140.00	-40.09	11.62	1.94	-30.41	-25.00	-5.41	Vertical
5070.00	-57.25	12.96	0.98	-45.27	-25.00	-20.27	Horizontal
7605.00	-44.61	11.37	1.69	-34.93	-25.00	-9.93	Horizontal
10140.00	-42.59	11.62	1.94	-32.91	-25.00	-7.91	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5120.00	-57.12	12.93	1.00	-45.19	-25.00	-20.19	Vertical
7680.00	-47.97	11.28	1.72	-38.41	-25.00	-13.41	Vertical
10240.00	-39.64	11.56	1.95	-30.03	-25.00	-5.03	Vertical
5120.00	-57.39	12.93	1.00	-45.46	-25.00	-20.46	Horizontal
7680.00	-44.22	11.28	1.72	-34.66	-25.00	-9.66	Horizontal
10240.00	-42.03	11.56	1.95	-32.42	-25.00	-7.42	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

LTE Band 38 part:

Band 38 (5MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5145.00	-58.61	13.00	0.94	-46.55	-25.00	-33.55	Vertical
7717.50	-36.76	11.50	1.65	-26.91	-25.00	-13.91	Vertical
10290.00	-42.56	11.70	1.91	-32.77	-25.00	-19.77	Vertical
5145.00	-57.99	13.00	0.94	-45.93	-25.00	-32.93	Horizontal
7717.50	-34.80	11.50	1.65	-24.95	-25.00	-11.95	Horizontal
10290.00	-40.02	11.70	1.91	-30.23	-25.00	-17.23	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5190.00	-58.28	12.89	1.04	-46.43	-25.00	-33.43	Vertical
7785.00	-36.53	11.17	1.73	-27.09	-25.00	-14.09	Vertical
10380.00	-42.68	11.48	1.97	-33.17	-25.00	-20.17	Vertical
5190.00	-57.77	12.89	1.04	-45.92	-25.00	-32.92	Horizontal
7785.00	-34.56	11.17	1.73	-25.12	-25.00	-12.12	Horizontal
10380.00	-40.09	11.48	1.97	-30.58	-25.00	-17.58	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5235.00	-57.75	12.78	1.11	-46.08	-25.00	-33.08	Vertical
7852.50	-36.64	10.92	1.82	-27.54	-25.00	-14.54	Vertical
10470.00	-42.21	11.25	2.00	-32.96	-25.00	-19.96	Vertical
5235.00	-57.38	12.78	1.11	-45.71	-25.00	-32.71	Horizontal
7852.50	-34.24	10.92	1.82	-25.14	-25.00	-12.14	Horizontal
10470.00	-40.11	11.25	2.00	-30.86	-25.00	-17.86	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

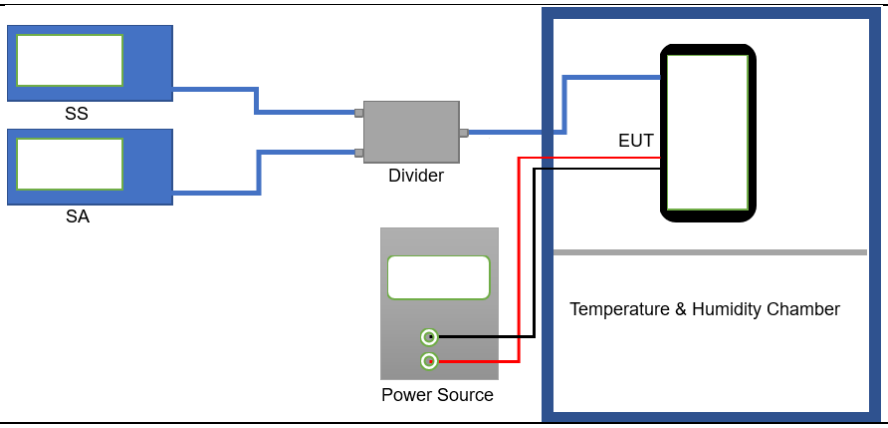
Band 38 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5160.00	-58.59	12.99	0.95	-46.55	-25.00	-33.55	Vertical
7740.00	-36.57	11.48	1.66	-26.75	-25.00	-13.75	Vertical
10320.00	-42.14	11.69	1.92	-32.37	-25.00	-19.37	Vertical
5160.00	-58.28	12.99	0.95	-46.24	-25.00	-33.24	Horizontal
7740.00	-34.43	11.48	1.66	-24.61	-25.00	-11.61	Horizontal
10320.00	-40.34	11.69	1.92	-30.57	-25.00	-17.57	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5190.00	-58.36	12.89	1.04	-46.51	-25.00	-33.51	Vertical
7785.00	-36.07	11.17	1.73	-26.63	-25.00	-13.63	Vertical
10380.00	-42.27	11.48	1.97	-32.76	-25.00	-19.76	Vertical
5190.00	-57.70	12.89	1.04	-45.85	-25.00	-32.85	Horizontal
7785.00	-33.70	11.17	1.73	-24.26	-25.00	-11.26	Horizontal
10380.00	-40.04	11.48	1.97	-30.53	-25.00	-17.53	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5220.00	-58.55	12.78	1.10	-46.87	-25.00	-33.87	Vertical
7830.00	-35.43	10.91	1.79	-26.31	-25.00	-13.31	Vertical
10440.00	-42.26	11.27	1.99	-32.98	-25.00	-19.98	Vertical
5220.00	-57.33	12.78	1.10	-45.65	-25.00	-32.65	Horizontal
7830.00	-33.72	10.91	1.79	-24.60	-25.00	-11.60	Horizontal
10440.00	-40.03	11.27	1.99	-30.75	-25.00	-17.75	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

LTE Band 41 part:

Band 41 (5MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
4997.00	-58.06	13.00	0.94	-46.00	-25.00	-33.00	Vertical
7495.50	-35.15	11.50	1.65	-25.30	-25.00	-12.30	Vertical
9994.00	-42.43	11.70	1.91	-32.64	-25.00	-19.64	Vertical
4997.00	-58.71	13.00	0.94	-46.65	-25.00	-33.65	Horizontal
7495.50	-30.42	11.50	1.65	-20.57	-25.00	-7.57	Horizontal
9994.00	-44.17	11.70	1.91	-34.38	-25.00	-21.38	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5186.00	-57.76	12.89	1.04	-45.91	-25.00	-32.91	Vertical
7779.00	-34.73	11.17	1.73	-25.29	-25.00	-12.29	Vertical
10372.00	-42.34	11.48	1.97	-32.83	-25.00	-19.83	Vertical
5186.00	-58.30	12.89	1.04	-46.45	-25.00	-33.45	Horizontal
7779.00	-30.00	11.17	1.73	-20.56	-25.00	-7.56	Horizontal
10372.00	-43.73	11.48	1.97	-34.22	-25.00	-21.22	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5375.00	-58.03	12.78	1.11	-46.36	-25.00	-33.36	Vertical
8062.50	-34.65	10.92	1.82	-25.55	-25.00	-12.55	Vertical
10750.00	-41.67	11.25	2.00	-32.42	-25.00	-19.42	Vertical
5375.00	-57.89	12.78	1.11	-46.22	-25.00	-33.22	Horizontal
8062.50	-29.67	10.92	1.82	-20.57	-25.00	-7.57	Horizontal
10750.00	-43.75	11.25	2.00	-34.50	-25.00	-21.50	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

Band 41 (20MHz)							
Lowest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5012.00	-58.46	12.99	0.95	-46.42	-25.00	-33.42	Vertical
7518.00	-35.09	11.48	1.66	-25.27	-25.00	-12.27	Vertical
10024.00	-42.14	11.69	1.92	-32.37	-25.00	-19.37	Vertical
5012.00	-59.07	12.99	0.95	-47.03	-25.00	-34.03	Horizontal
7518.00	-30.12	11.48	1.66	-20.30	-25.00	-7.30	Horizontal
10024.00	-44.54	11.69	1.92	-34.77	-25.00	-21.77	Horizontal
Middle channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5186.00	-57.81	12.89	1.04	-45.96	-25.00	-32.96	Vertical
7779.00	-35.17	11.17	1.73	-25.73	-25.00	-12.73	Vertical
10372.00	-41.85	11.48	1.97	-32.34	-25.00	-19.34	Vertical
5186.00	-59.08	12.89	1.04	-47.23	-25.00	-34.23	Horizontal
7779.00	-29.97	11.17	1.73	-20.53	-25.00	-7.53	Horizontal
10372.00	-44.63	11.48	1.97	-35.12	-25.00	-22.12	Horizontal
Highest channel							
Frequency (MHz)	Level at antenna terminals (dBm)	Substitute antenna gain (dBi)	Cable Loss (dBi)	Spurous Emission level (dBm)	Limit Line (dBm)	Over Limit (dBm)	Polarization
5360.00	-57.38	12.78	1.10	-45.70	-25.00	-32.70	Vertical
8040.00	-34.66	10.91	1.79	-25.54	-25.00	-12.54	Vertical
10720.00	-41.98	11.27	1.99	-32.70	-25.00	-19.70	Vertical
5360.00	-58.84	12.78	1.10	-47.16	-25.00	-34.16	Horizontal
8040.00	-30.10	10.91	1.79	-20.98	-25.00	-7.98	Horizontal
10720.00	-44.75	11.27	1.99	-35.47	-25.00	-22.47	Horizontal
Remark: *The emission levels of below 1 GHz are lower than the limit 20dB and not show in test report.*							

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 & 4 & 7 & 38 & 41
Test setup:	
Test procedure:	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℃ operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to –30℃. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10℃ increased per stage until the highest temperature of +50℃ 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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	168	0.089362	Within authorized band for Band 2	Pass
	-20	163	0.086702		
	-10	154	0.081915		
	0	137	0.072872		
	10	133	0.070745		
	20	127	0.067553		
	30	123	0.065426		
	40	117	0.062234		
	50	143	0.076064		
16QAM					
3.85	-30	172	0.091489	Within authorized band for Band 2	Pass
	-20	126	0.067021		
	-10	115	0.061170		
	0	152	0.080851		
	10	146	0.077660		
	20	139	0.073936		
	30	131	0.069681		
	40	166	0.088298		
	50	157	0.083511		
Note: Only the worst case shown in the report.					

LTE Band 4 part:

Reference Frequency: LTE Band 4 (10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	180	0.103896	Within authorized band for Band 4	Pass
	-20	175	0.101010		
	-10	168	0.096970		
	0	160	0.092352		
	10	154	0.088889		
	20	146	0.084271		
	30	140	0.080808		
	40	132	0.076190		
	50	121	0.069841		
16QAM					
3.85	-30	177	0.102165	Within authorized band for Band 4	Pass
	-20	169	0.097547		
	-10	162	0.093506		
	0	152	0.087734		
	10	143	0.082540		
	20	137	0.079076		
	30	131	0.075613		
	40	120	0.069264		
	50	115	0.066378		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	166	0.198446	±2.5	Pass
	-20	157	0.187687		
	-10	150	0.179319		
	0	141	0.168559		
	10	134	0.160191		
	20	123	0.147041		
	30	117	0.139868		
	40	111	0.132696		
	50	101	0.120741		
16QAM					
3.85	-30	168	0.200837	±2.5	Pass
	-20	159	0.190078		
	-10	152	0.181710		
	0	145	0.173341		
	10	138	0.164973		
	20	130	0.155409		
	30	126	0.150628		
	40	119	0.142259		
	50	107	0.127914		
Note: Only the worst case shown in the report.					

LTE Band 7 part:

Reference Frequency: LTE Band 7 (10MHz) Middle channel=21100 Frequency=2535.00MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	170	0.067061	Within authorized band for Band 7	Pass
	-20	163	0.064300		
	-10	156	0.061538		
	0	149	0.058777		
	10	142	0.056016		
	20	134	0.052860		
	30	127	0.050099		
	40	119	0.046943		
	50	110	0.043393		
16QAM					
3.85	-30	176	0.069428	Within authorized band for Band 7	Pass
	-20	164	0.064694		
	-10	156	0.061538		
	0	150	0.059172		
	10	143	0.056410		
	20	133	0.052465		
	30	127	0.050099		
	40	122	0.048126		
	50	113	0.044576		
Note: Only the worst case shown in the report.					

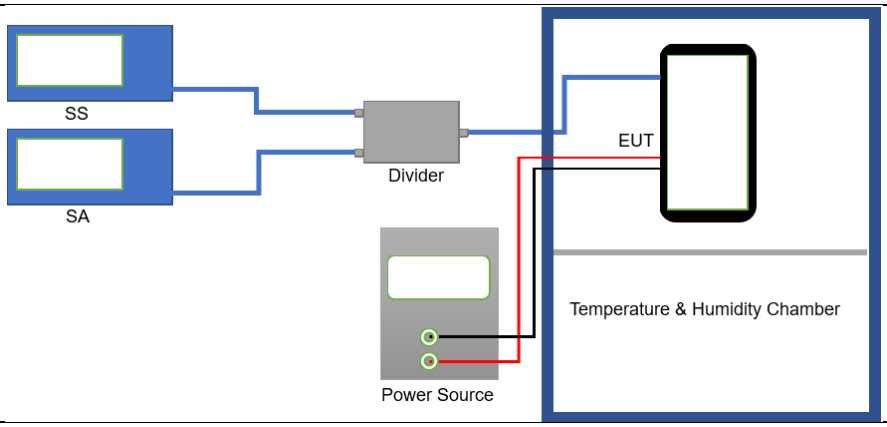
LTE Band 38 part:

Reference Frequency: LTE Band 38 (10MHz) Middle channel=38000 channel=2595.00MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	168	0.064740	Within authorized band for Band 38	Pass
	-20	159	0.061272		
	-10	153	0.058960		
	0	118	0.045472		
	10	143	0.055106		
	20	134	0.051638		
	30	125	0.048170		
	40	111	0.042775		
	50	102	0.039306		
16QAM					
3.85	-30	172	0.066281	Within authorized band for Band 38	Pass
	-20	156	0.060116		
	-10	140	0.053950		
	0	130	0.050096		
	10	120	0.046243		
	20	110	0.042389		
	30	134	0.051638		
	40	148	0.057033		
	50	165	0.063584		
Note: Only the worst case shown in the report.					

LTE Band 41 part:

Reference Frequency: LTE Band 41 (10MHz) Middle channel=40640 channel=2595.00MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	167	0.064355	Within authorized band for Band 41	Pass
	-20	159	0.061272		
	-10	150	0.057803		
	0	144	0.055491		
	10	137	0.052794		
	20	130	0.050096		
	30	124	0.047784		
	40	116	0.044701		
	50	105	0.040462		
16QAM					
3.85	-30	170	0.065511	Within authorized band for Band 41	Pass
	-20	160	0.061657		
	-10	153	0.058960		
	0	145	0.055877		
	10	136	0.052408		
	20	130	0.050096		
	30	121	0.046628		
	40	116	0.044701		
	50	109	0.042004		
Note: Only the worst case shown in the report.					

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 & 4 & 7 & 38 & 41
Test setup:	
Test procedure:	1. Set chamber temperature to 25℃. 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 (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.40	79	0.042021	Within authorized band for Band 2	Pass
	3.85	65	0.034574		
	3.50	54	0.028723		
16QAM					
25	4.40	83	0.044149	Within authorized band for Band 2	Pass
	3.85	71	0.037766		
	3.50	58	0.030851		
Note: Only the worst case shown in the report.					

LTE Band 4 part:

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.40	83	0.047908	Within authorized band for Band 4	Pass
	3.85	69	0.039827		
	3.50	54	0.031169		
16QAM					
25	4.40	88	0.050794	Within authorized band for Band 4	Pass
	3.85	72	0.041558		
	3.50	57	0.032900		
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 (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.40	82	0.098027	±2.5	Pass
	3.85	67	0.080096		
	3.50	56	0.066946		
16QAM					
25	4.40	84	0.100418	±2.5	Pass
	3.85	70	0.083682		
	3.50	61	0.072923		
Note: Only the worst case shown in the report.					

LTE Band 7 part:

Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.40	80	0.031558	Within authorized band for Band 7	Pass
	3.85	74	0.029191		
	3.50	63	0.024852		
16QAM					
25	4.40	85	0.033531	Within authorized band for Band 7	Pass
	3.85	73	0.028797		
	3.50	61	0.024063		
Note: Only the worst case shown in the report.					

LTE Band 38 part:

Reference Frequency: LTE Band 38(10MHz) Middle channel=38000 channel=2595.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.40	79	0.030443	Within authorized band for Band 38	Pass
	3.85	65	0.025048		
	3.50	59	0.022736		
16QAM					
25	4.40	83	0.031985	Within authorized band for Band 38	Pass
	3.85	70	0.026975		
	3.50	52	0.020039		
Note: Only the worst case shown in the report.					

LTE Band 41 part:

Reference Frequency: LTE Band 41(10MHz) Middle channel=40640 channel=2595.00MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.40	77	0.029672	Within authorized band for Band 41	Pass
	3.85	80	0.030829		
	3.50	96	0.036994		
16QAM					
25	4.40	88	0.033911	Within authorized band for Band 41	Pass
	3.85	90	0.034682		
	3.50	74	0.028516		
Note: Only the worst case shown in the report.					

8 EUT Constructional Details

Reference to the test report No. CCISE200711001

------End of report------