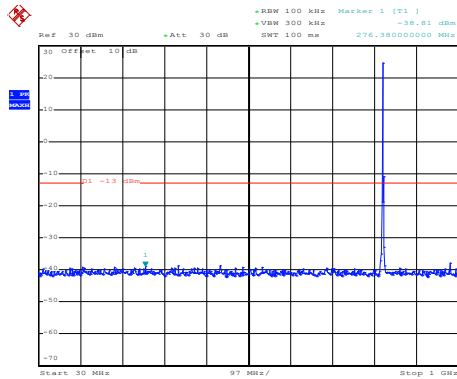
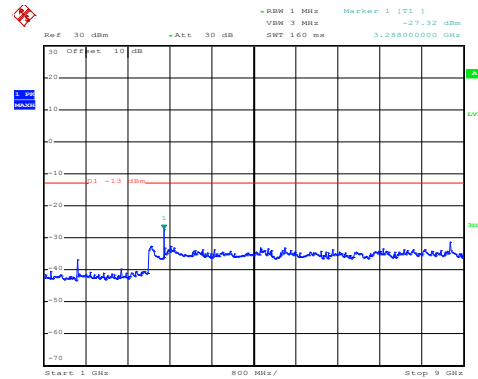


## LTE Band 5: QPSK & RB Size 1 BW: 1.4MHz Lowest channel



Date: 20.SEP.2019 11:08:07

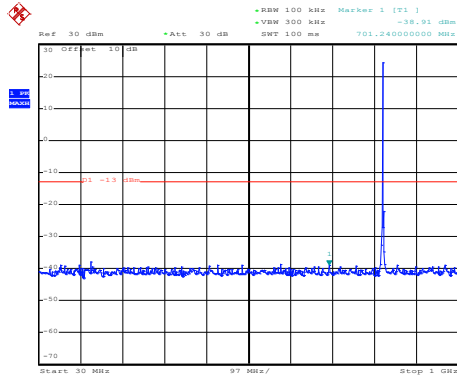
30MHz~1GHz



Date: 20.SEP.2019 10:43:40

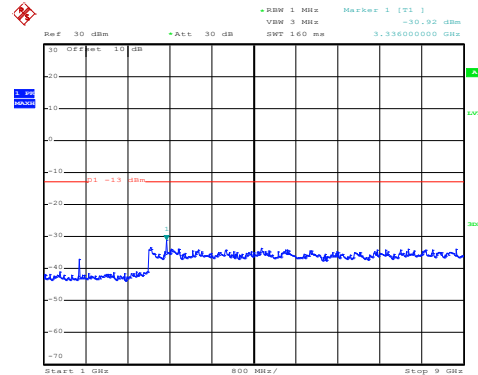
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:09:10

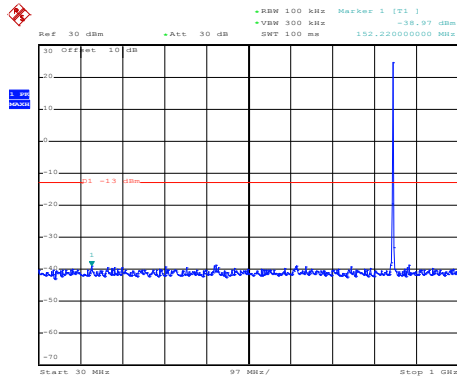
30MHz~1GHz



Date: 20.SEP.2019 10:44:25

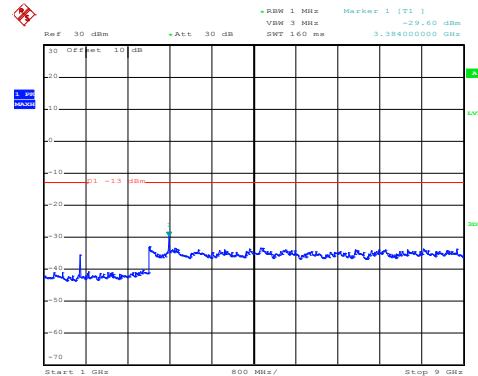
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:09:32

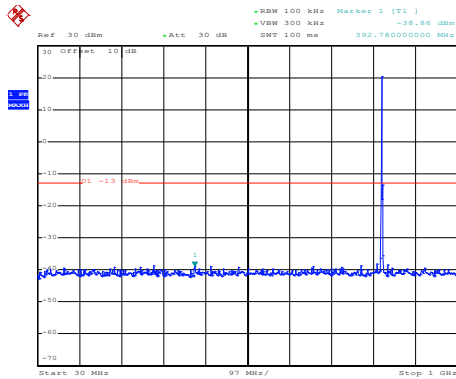
30MHz~1GHz



Date: 20.SEP.2019 10:51:12

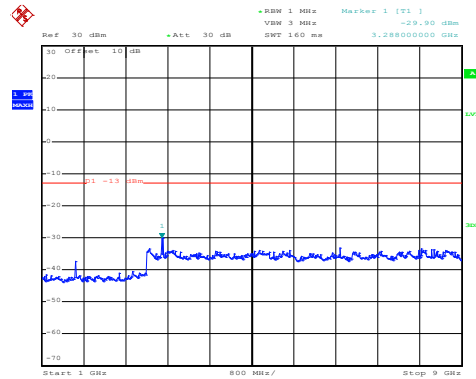
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 6 BW: 1.4MHz Lowest channel



Date: 20.SEP.2019 11:08:28

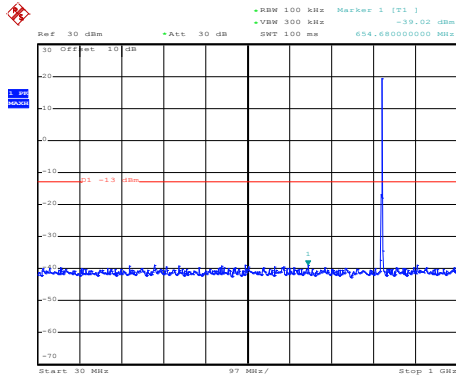
30MHz~1GHz



Date: 20.SEP.2019 10:43:55

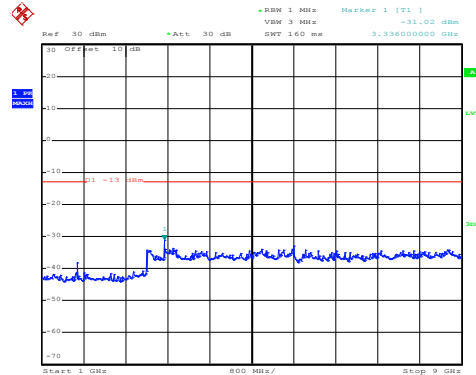
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:08:48

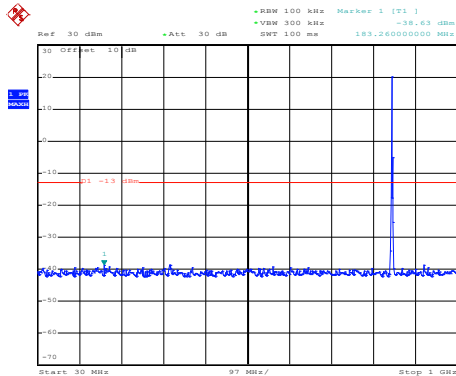
30MHz~1GHz



Date: 20.SEP.2019 10:44:11

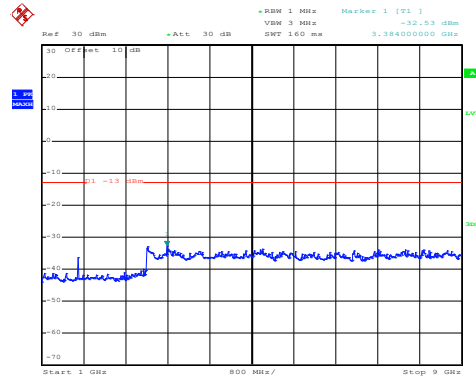
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:09:54

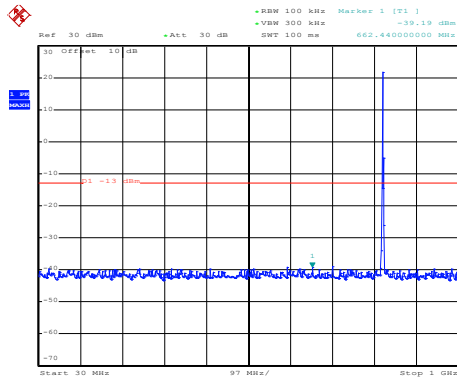
30MHz~1GHz



Date: 20.SEP.2019 10:51:28

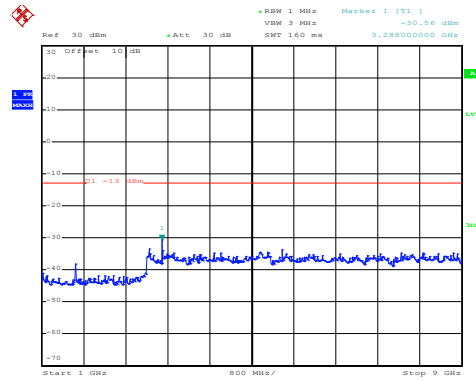
1GHz~9GHz

## LTE Band 5: 16 QAM & RB Size 1 BW: 3MHz Lowest channel



Date: 20.SEP.2019 11:05:34

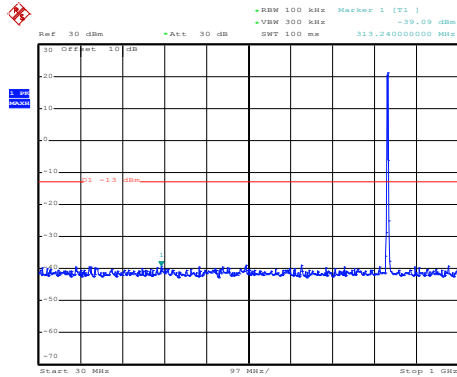
30MHz~1GHz



Date: 20.SEP.2019 10:52:12

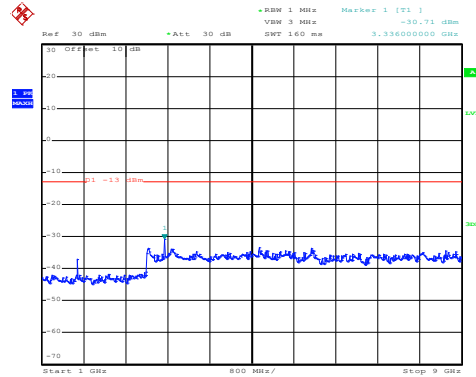
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:06:46

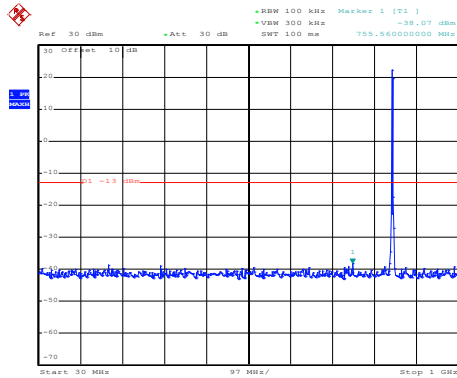
30MHz~1GHz



Date: 20.SEP.2019 10:52:57

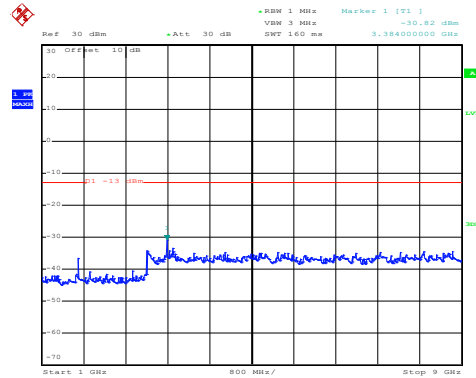
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:07:12

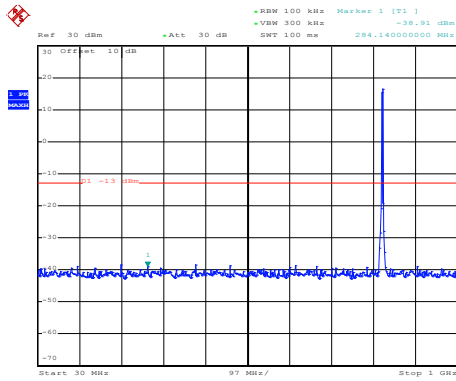
30MHz~1GHz



Date: 20.SEP.2019 10:53:19

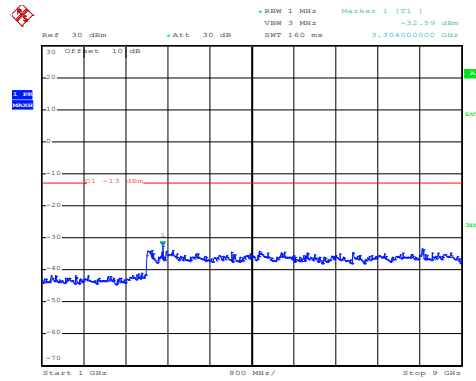
1GHz~9GHz

## LTE Band 5: 16 QAM & RB Size 15 BW: 3MHz Lowest channel



Date: 20.SEP.2019 11:05:56

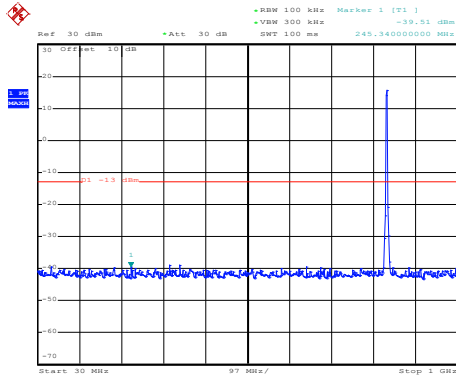
30MHz~1GHz



Date: 20.SEP.2019 10:52:26

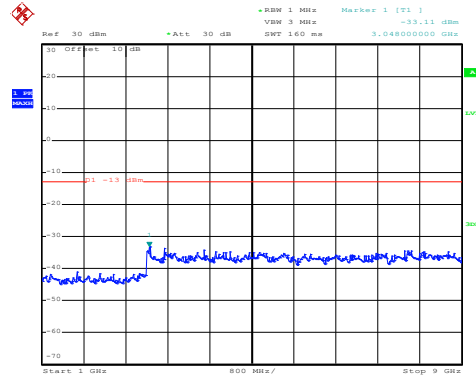
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:06:23

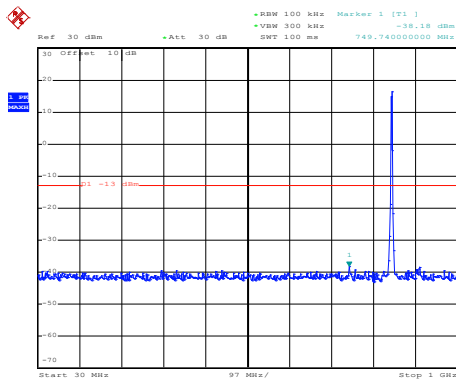
30MHz~1GHz



Date: 20.SEP.2019 10:52:42

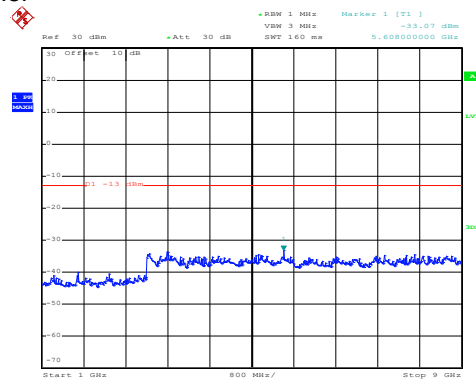
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:07:34

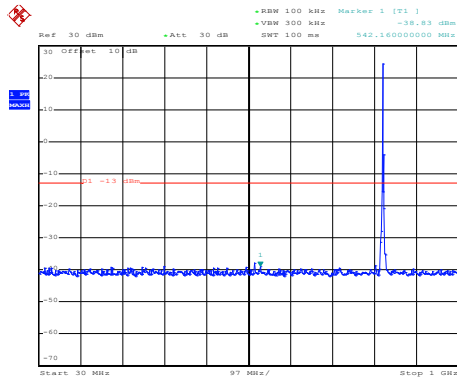
30MHz~1GHz



Date: 20.SEP.2019 10:53:33

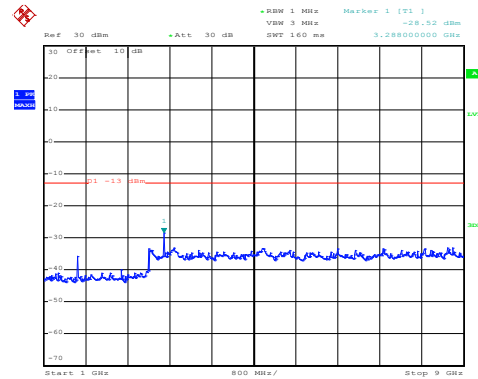
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 1 BW: 3MHz Lowest channel



Date: 20.SEP.2019 11:05:25

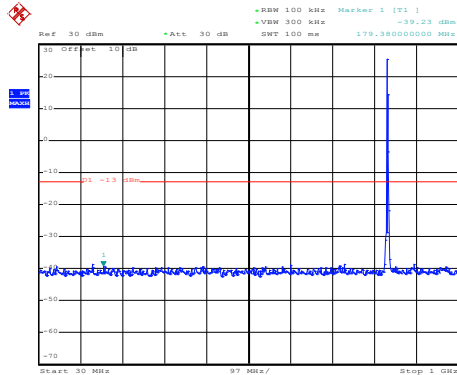
30MHz~1GHz



Date: 20.SEP.2019 10:52:06

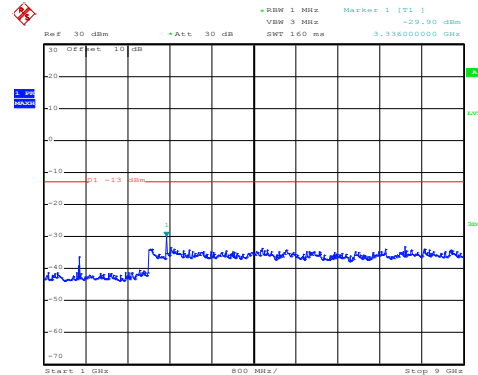
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:06:35

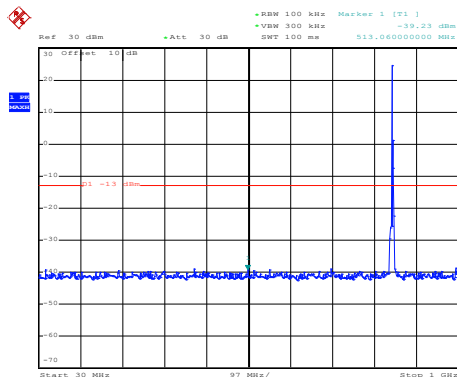
30MHz~1GHz



Date: 20.SEP.2019 10:52:51

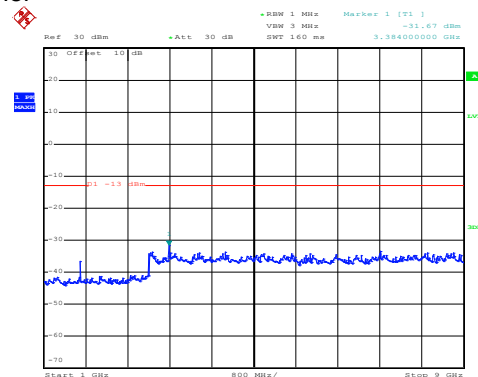
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:07:02

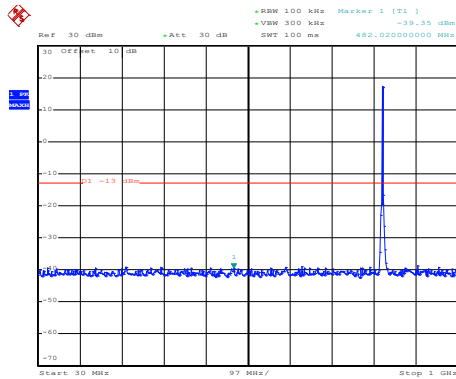
30MHz~1GHz



Date: 20.SEP.2019 10:53:13

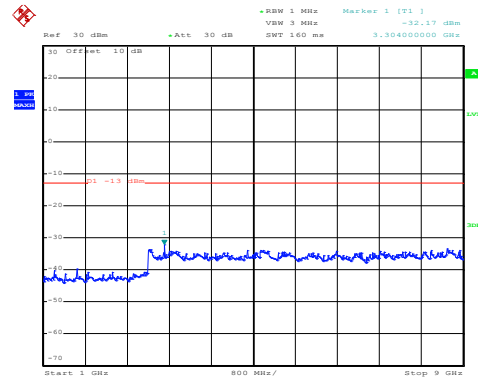
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 15 BW: 3MHz Lowest channel



Date: 20.SEP.2019 11:05:47

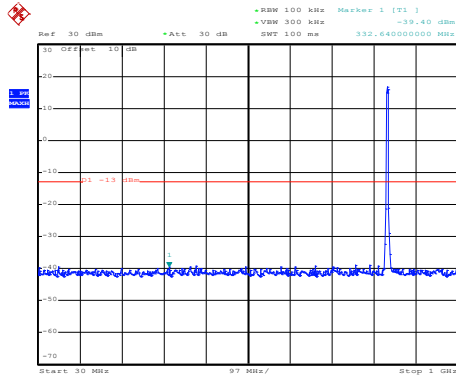
30MHz~1GHz



Date: 20.SEP.2019 10:52:20

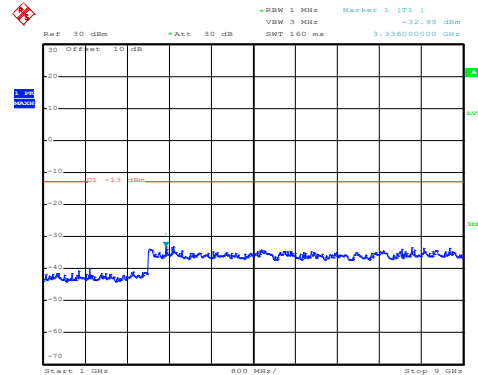
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:06:15

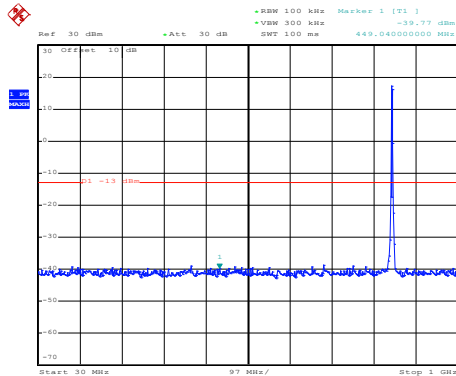
30MHz~1GHz



Date: 20.SEP.2019 10:52:37

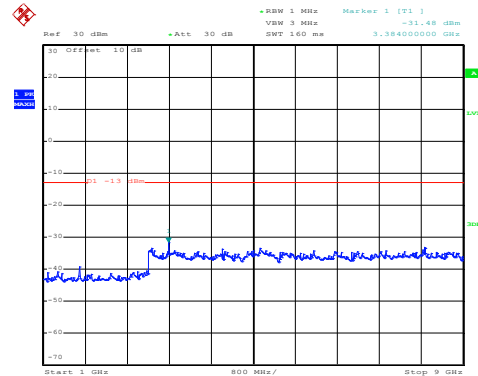
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:07:24

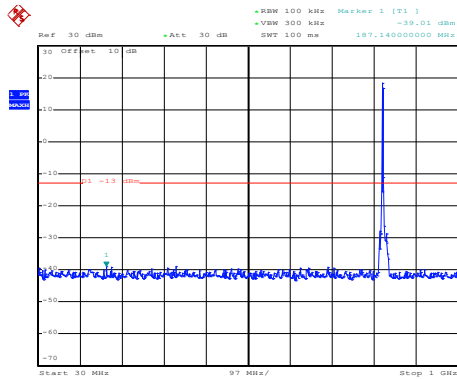
30MHz~1GHz



Date: 20.SEP.2019 10:53:27

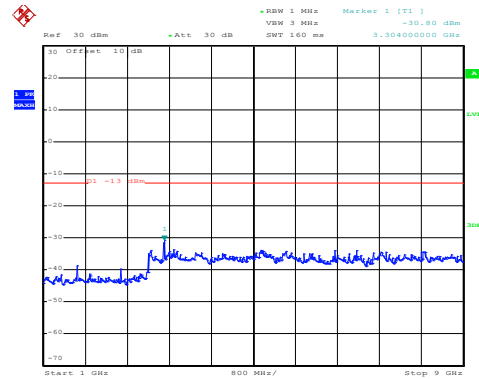
1GHz~9GHz

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



Date: 20.SEP.2019 11:02:40

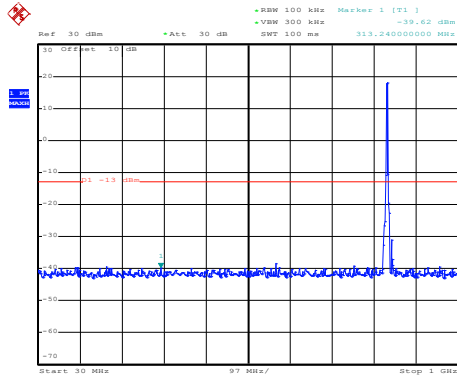
30MHz~1GHz



Date: 20.SEP.2019 10:54:18

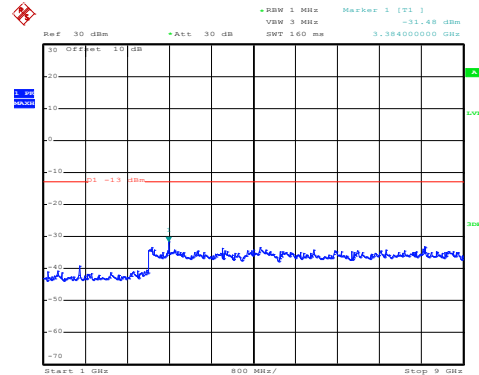
1GHz~9GHz

Middle channel



Date: 20.SEP.2019 11:04:01

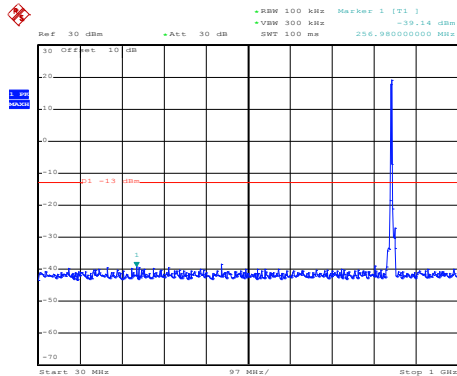
30MHz~1GHz



Date: 20.SEP.2019 10:53:27

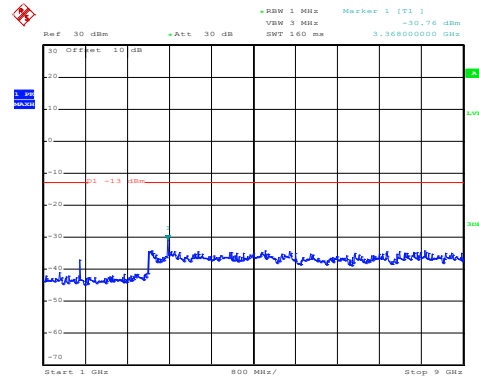
1GHz~9GHz

High channel



Date: 20.SEP.2019 11:04:25

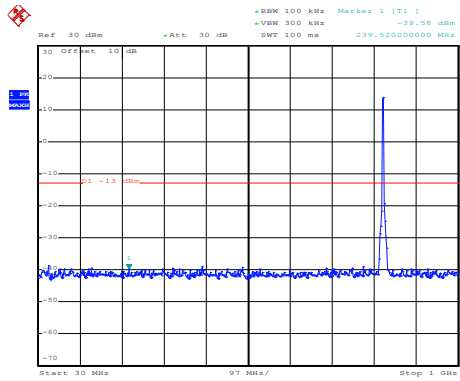
30MHz~1GHz



Date: 20.SEP.2019 10:55:24

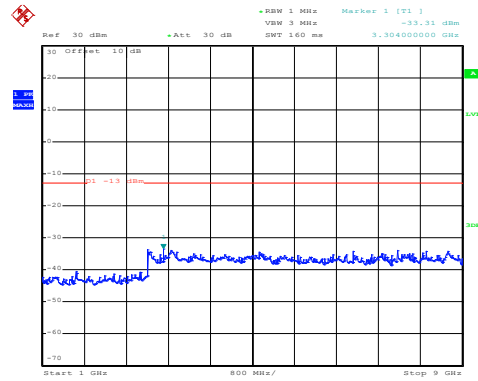
1GHz~9GHz

LTE Band 5: 16 QAM & RB Size 25  
 BW: 5MHz  
 Lowest channel



Date: 20.SEP.2019 11:03:04

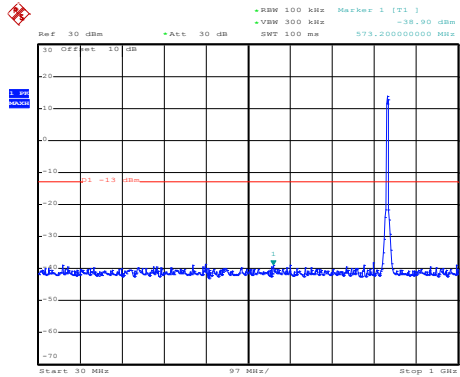
30MHz~1GHz



Date: 20.SEP.2019 10:54:34

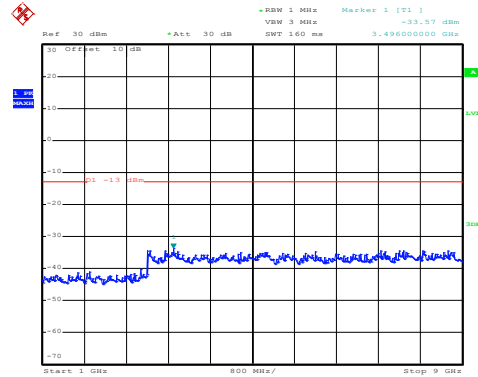
1GHz~9GHz

Middle channel



Date: 20.SEP.2019 11:03:29

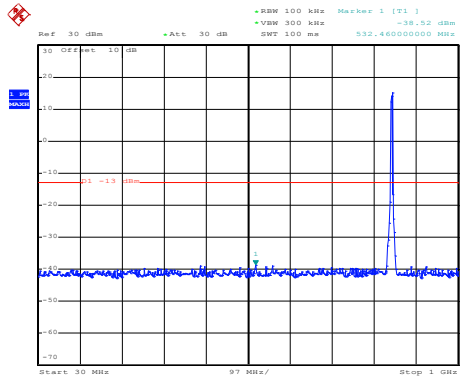
30MHz~1GHz



Date: 20.SEP.2019 10:54:53

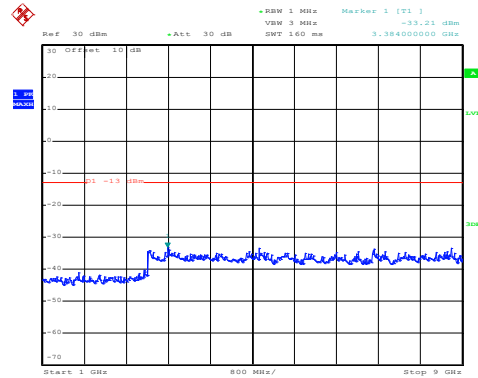
1GHz~9GHz

High channel



Date: 20.SEP.2019 11:04:52

30MHz~1GHz

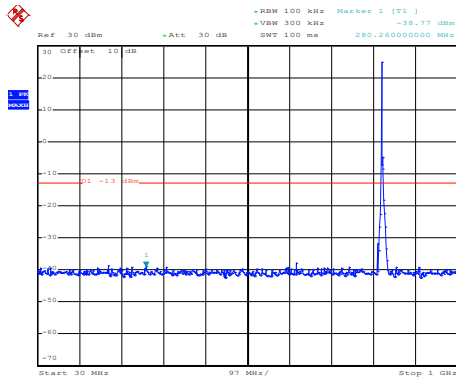


Date: 20.SEP.2019 10:55:39

1GHz~9GHz

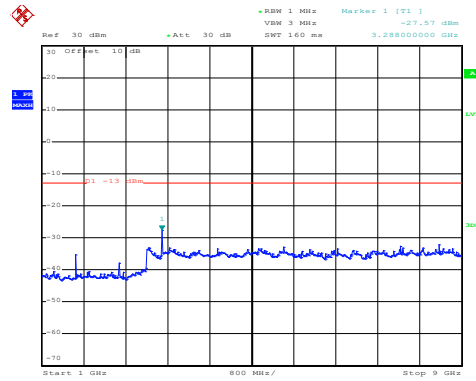


## LTE Band 5: QPSK & RB Size 1 BW: 5MHz Lowest channel



Date: 20.SEP.2019 11:02:31

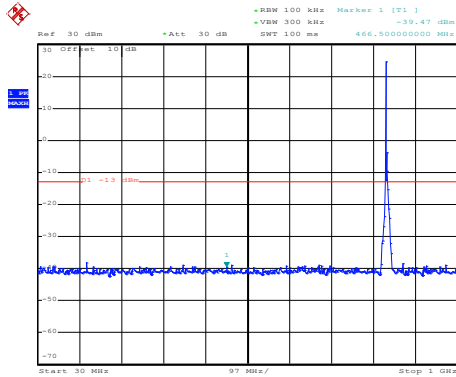
30MHz~1GHz



Date: 20.SEP.2019 10:54:11

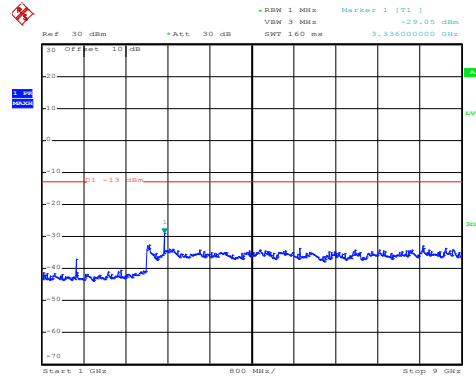
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:03:52

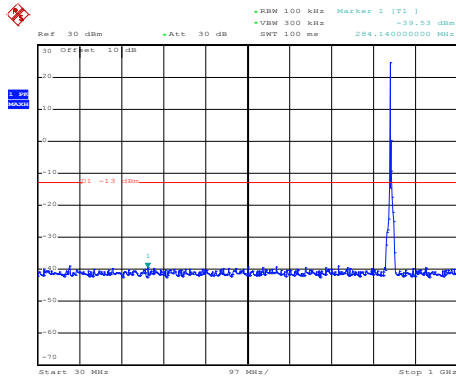
30MHz~1GHz



Date: 20.SEP.2019 10:55:04

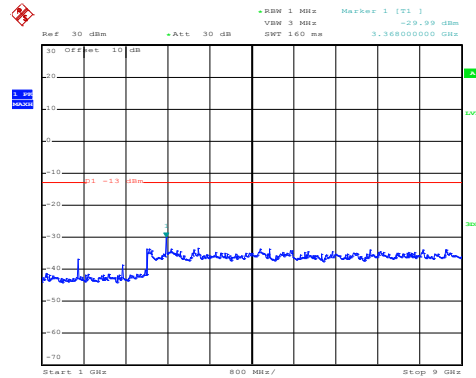
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:04:17

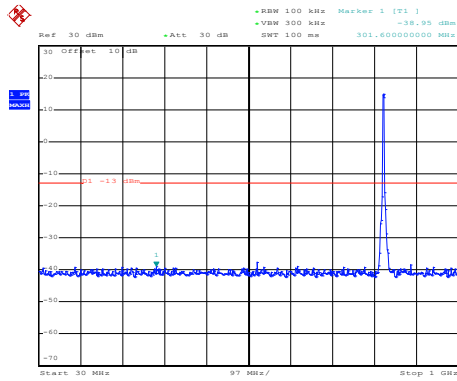
30MHz~1GHz



Date: 20.SEP.2019 10:55:19

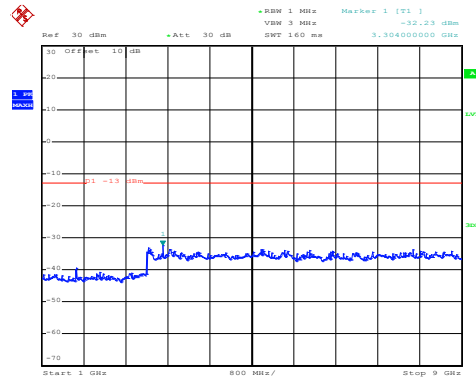
1GHz~9GHz

## LTE Band 5: QPSK & RB Size 25 BW: 5MHz Lowest channel



Date: 20.SEP.2019 11:02:53

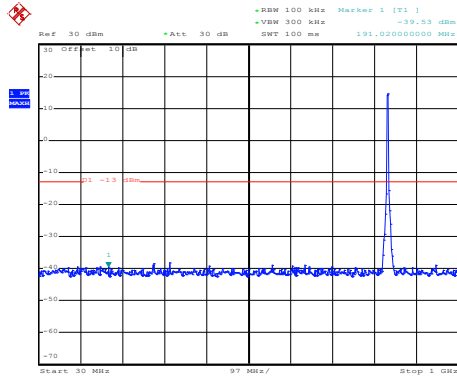
30MHz~1GHz



Date: 20.SEP.2019 10:54:29

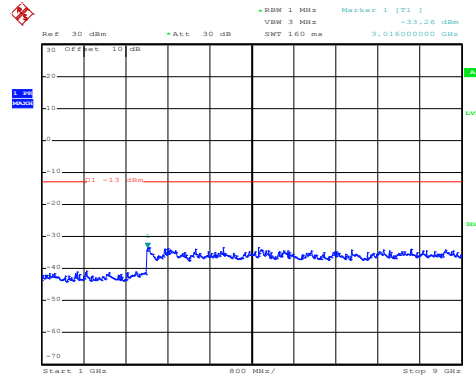
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:03:19

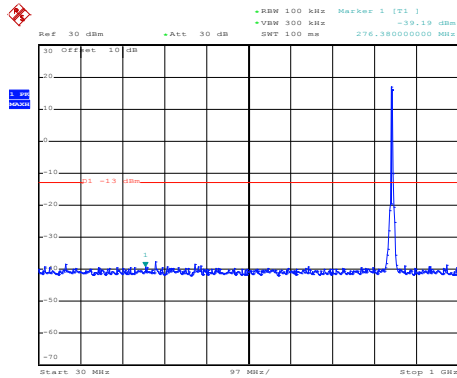
30MHz~1GHz



Date: 20.SEP.2019 10:54:47

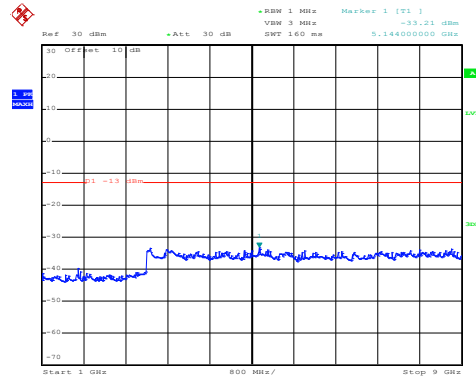
1GHz~9GHz

## High channel



Date: 20.SEP.2019 11:04:42

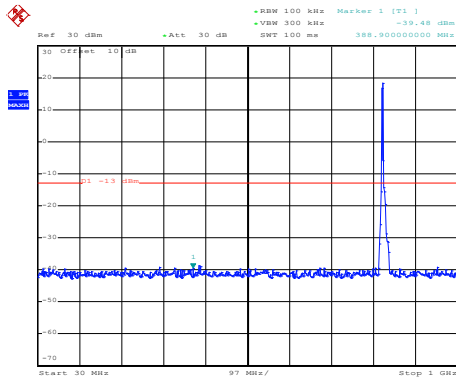
30MHz~1GHz



Date: 20.SEP.2019 10:55:33

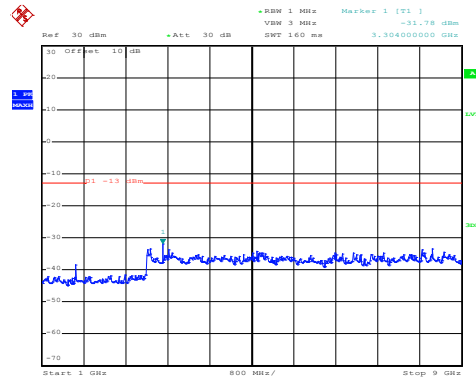
1GHz~9GHz

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



Date: 20.SEP.2019 11:01:29

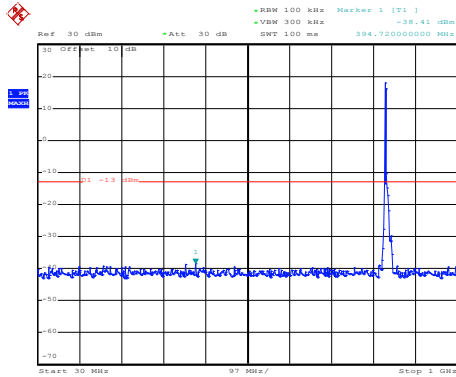
30MHz~1GHz



Date: 20.SEP.2019 10:56:29

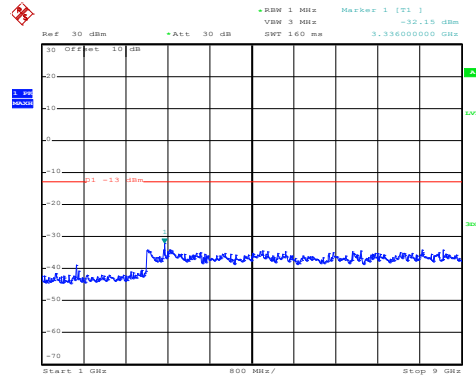
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:00:04

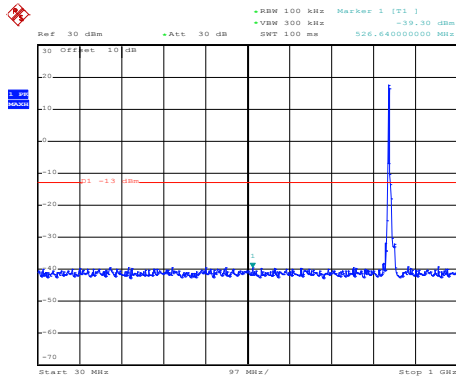
30MHz~1GHz



Date: 20.SEP.2019 10:57:15

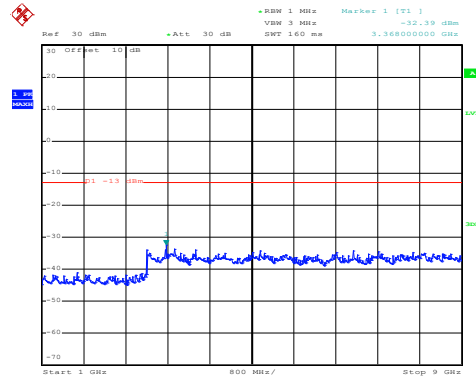
1GHz~9GHz

## High channel



Date: 20.SEP.2019 10:59:38

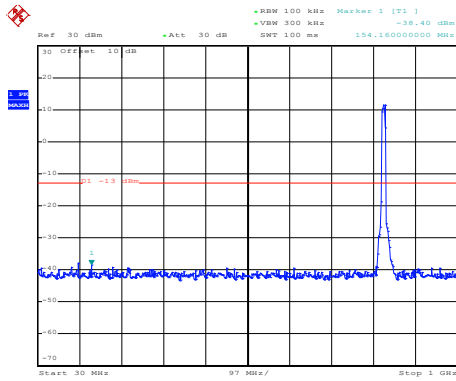
30MHz~1GHz



Date: 20.SEP.2019 10:57:33

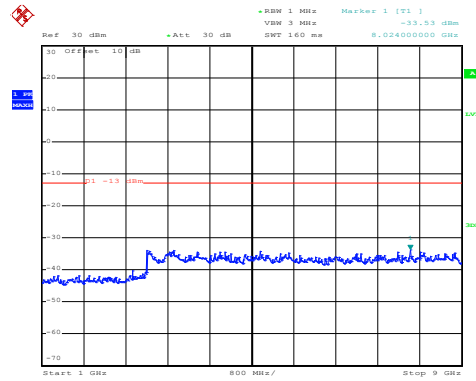
1GHz~9GHz

## LTE Band 5: 16 QAM & RB Size 50 BW: 10MHz Lowest channel



Date: 20.SEP.2019 11:01:04

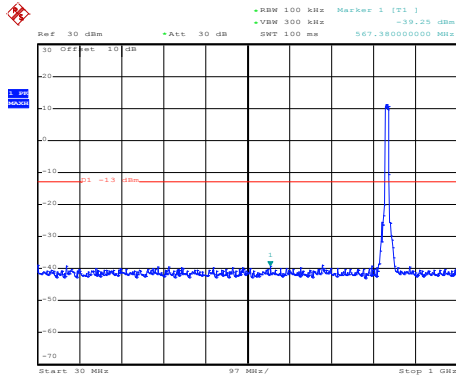
30MHz~1GHz



Date: 20.SEP.2019 10:57:00

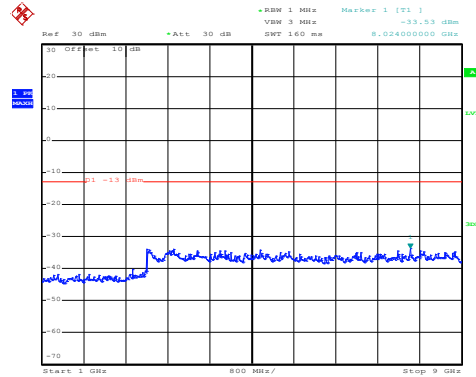
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 11:00:28

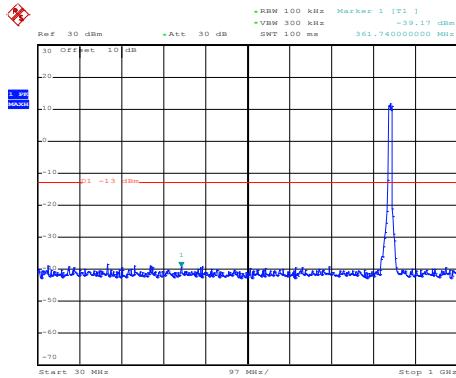
30MHz~1GHz



Date: 20.SEP.2019 10:57:00

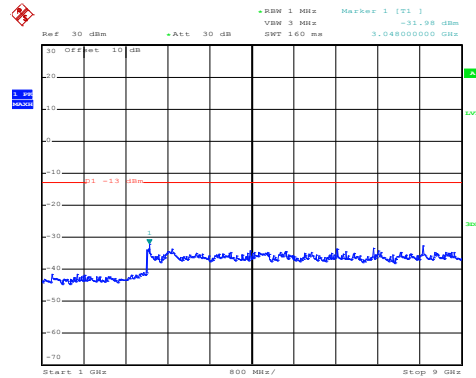
1GHz~9GHz

## High channel



Date: 20.SEP.2019 10:59:12

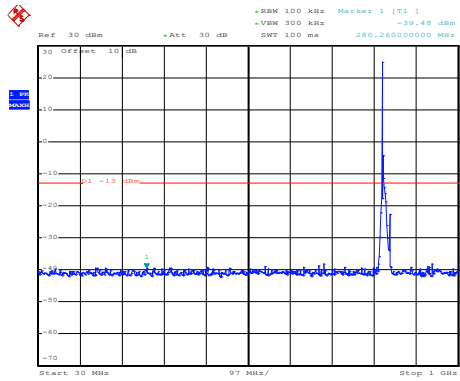
30MHz~1GHz



Date: 20.SEP.2019 10:57:52

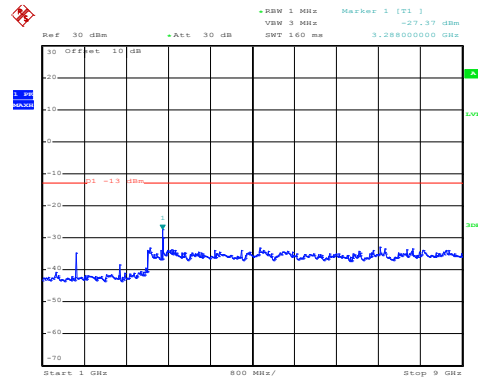
1GHz~9GHz

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



Date: 20.SEP.2019 11:01:18

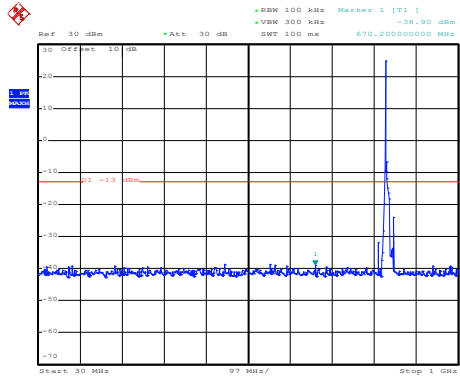
30MHz~1GHz



Date: 20.SEP.2019 10:56:23

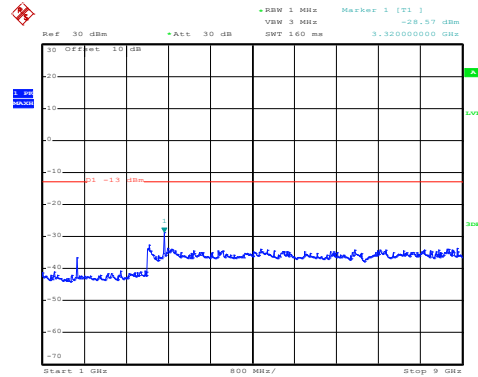
1GHz~9GHz

## Middle channel



Date: 20.SEP.2019 10:59:54

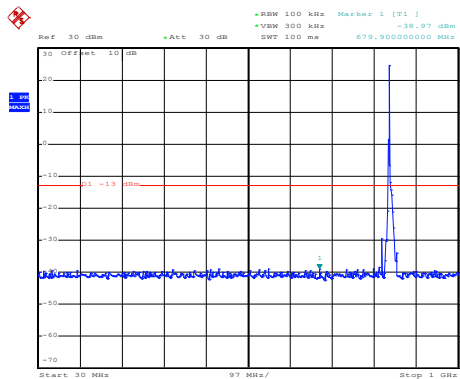
30MHz~1GHz



Date: 20.SEP.2019 10:57:09

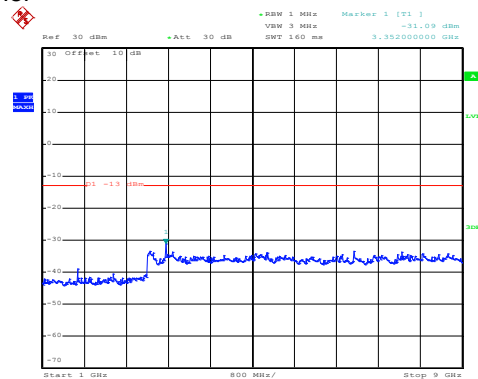
1GHz~9GHz

## High channel



Date: 20.SEP.2019 10:59:28

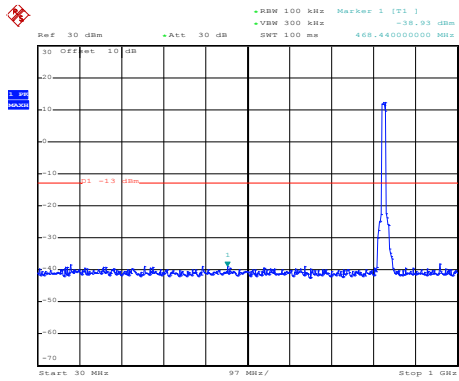
30MHz~1GHz



Date: 20.SEP.2019 10:57:27

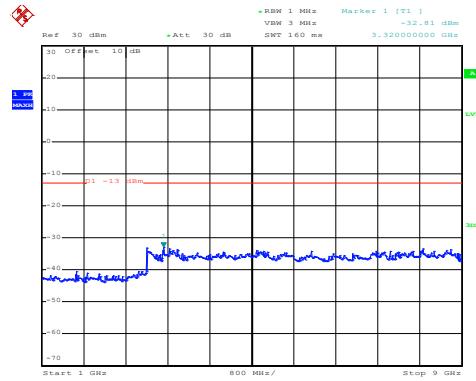
1GHz~9GHz

LTE Band 5: QPSK & RB Size 50  
 BW: 10MHz  
 Lowest channel



Date: 20.SEP.2019 11:00:55

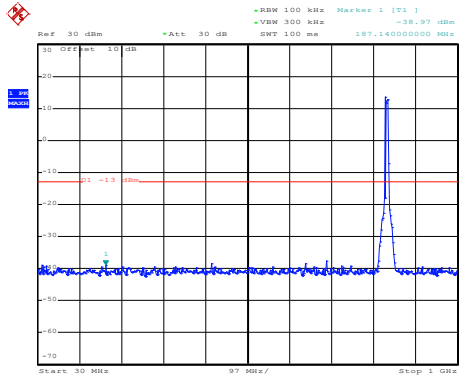
30MHz~1GHz



Date: 20.SEP.2019 10:56:38

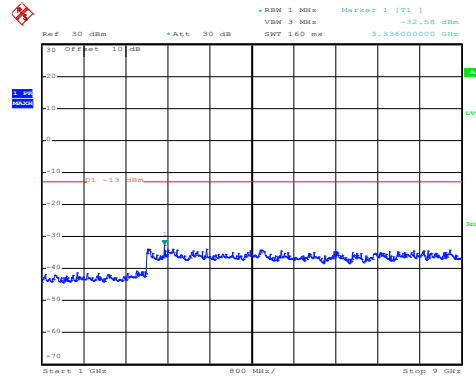
1GHz~9GHz

Middle channel



Date: 20.SEP.2019 11:00:18

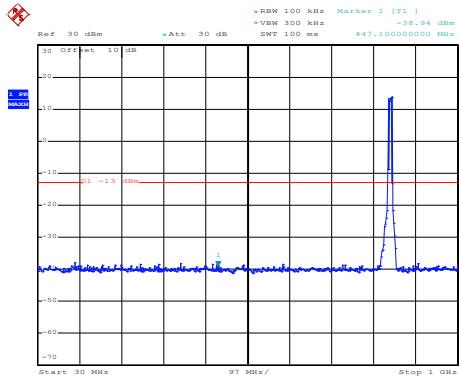
30MHz~1GHz



Date: 20.SEP.2019 10:56:55

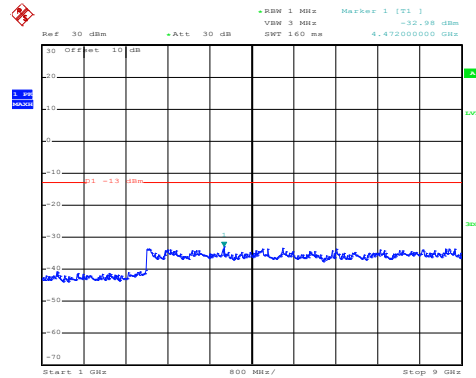
1GHz~9GHz

High channel



Date: 20.SEP.2019 10:59:01

30MHz~1GHz

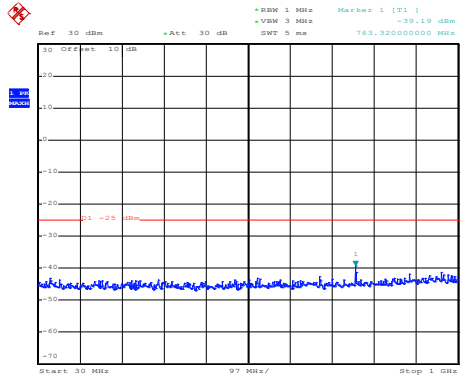


Date: 20.SEP.2019 10:57:45

1GHz~9GHz

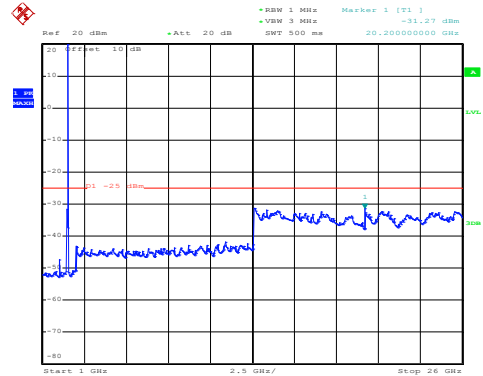
LTE Band 7 part:

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



Date: 20.SEP.2019 18:55:14

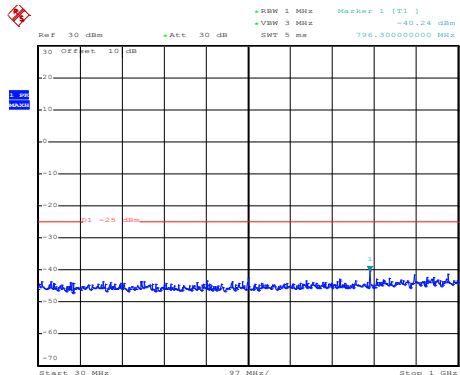
30MHz~1GHz



Date: 20.SEP.2019 12:01:01

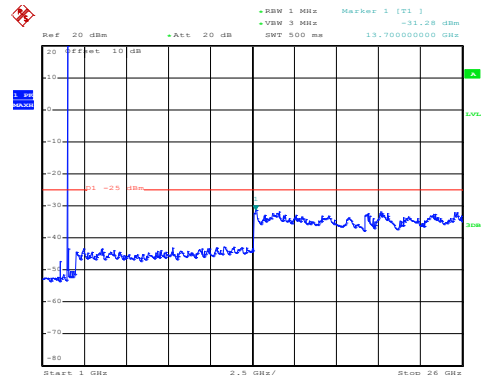
1GHz~26GHz

Middle channel



Date: 20.SEP.2019 18:55:58

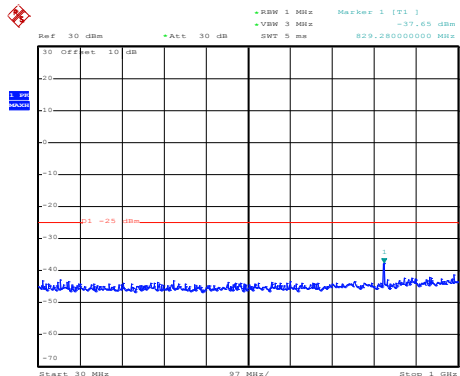
30MHz~1GHz



Date: 20.SEP.2019 12:02:05

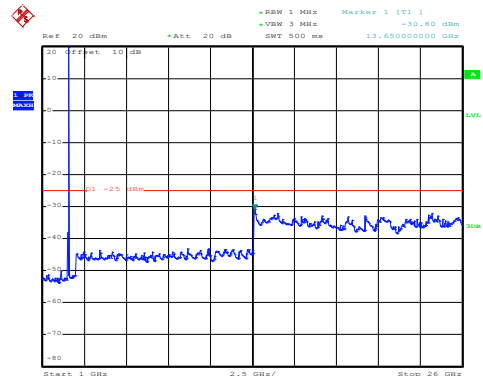
1GHz~26GHz

High channel



Date: 20.SEP.2019 18:56:30

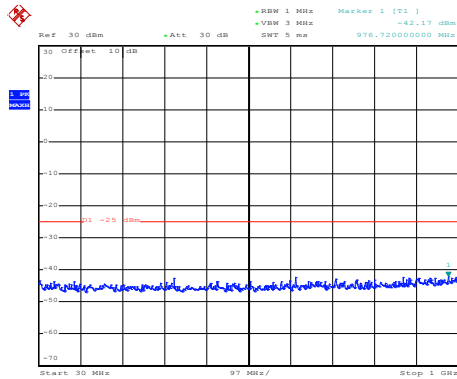
30MHz~1GHz



Date: 20.SEP.2019 12:02:27

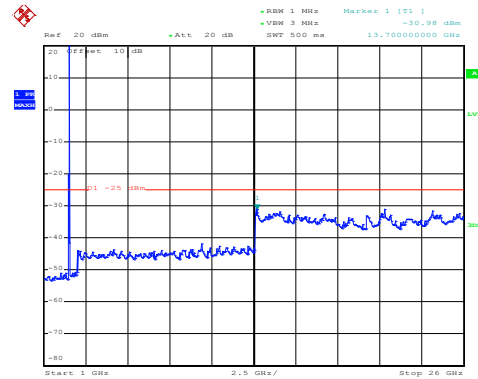
1GHz~26GHz

## LTE Band 7: 16 QAM & RB Size 25 BW: 5MHz Lowest channel



Date: 20.SEP.2019 18:55:28

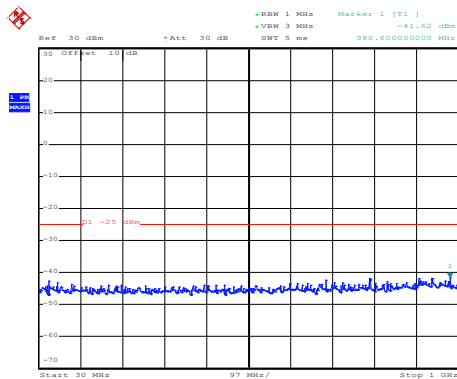
30MHz~1GHz



Date: 20.SEP.2019 12:01:23

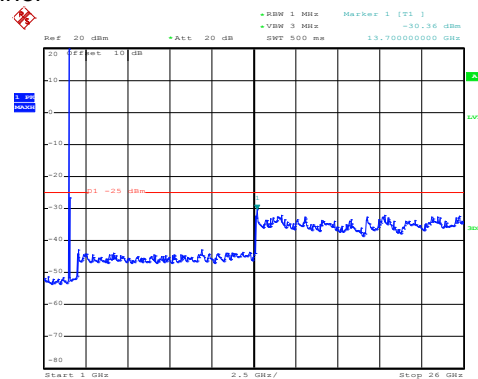
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:55:43

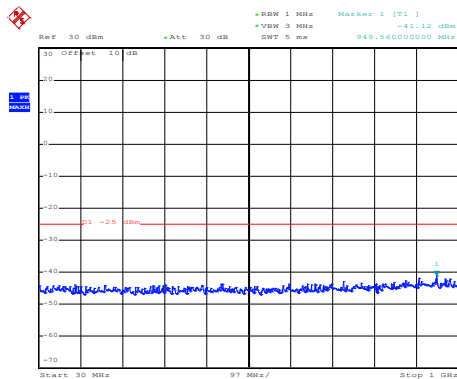
30MHz~1GHz



Date: 20.SEP.2019 12:01:43

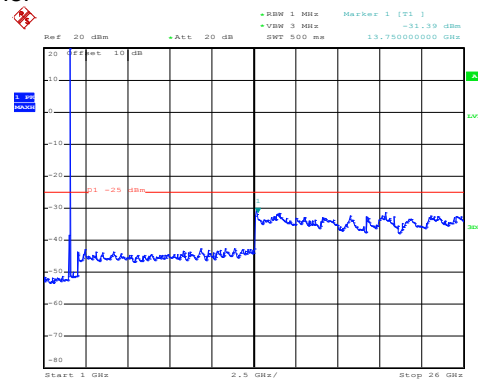
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:56:43

30MHz~1GHz

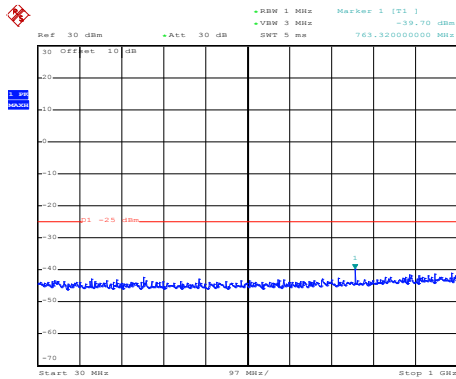


Date: 20.SEP.2019 12:03:01

1GHz~26GHz

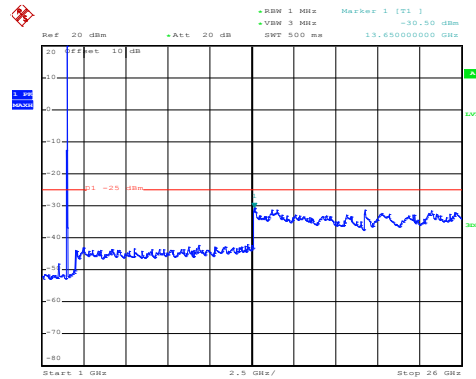


## LTE Band 7: QPSK & RB Size 1 BW: 5MHz Lowest channel



Date: 20.SEP.2019 18:55:09

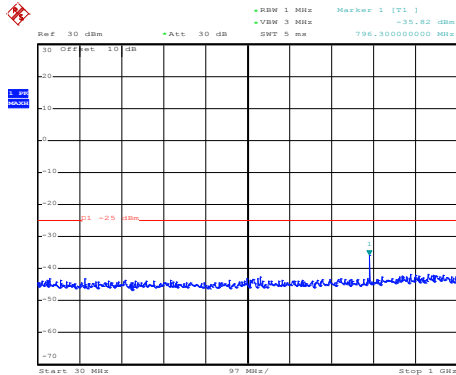
30MHz~1GHz



Date: 20.SEP.2019 12:00:46

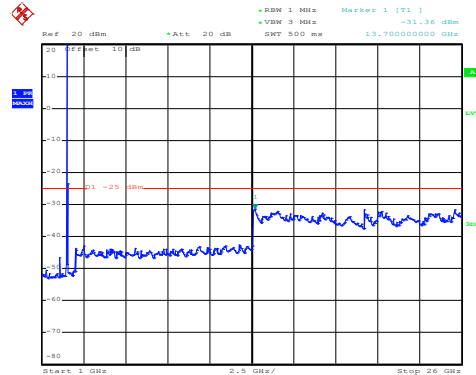
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:55:54

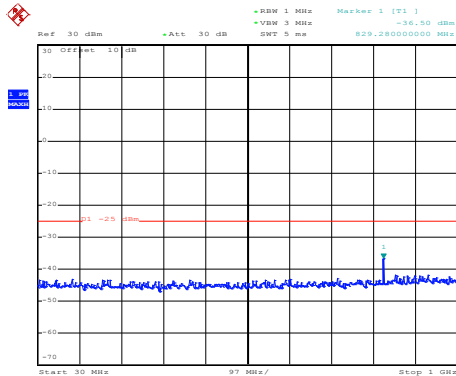
30MHz~1GHz



Date: 20.SEP.2019 12:01:56

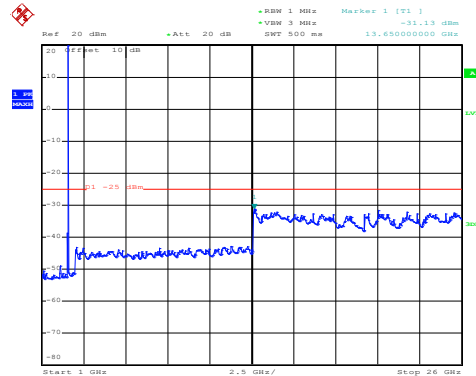
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:56:24

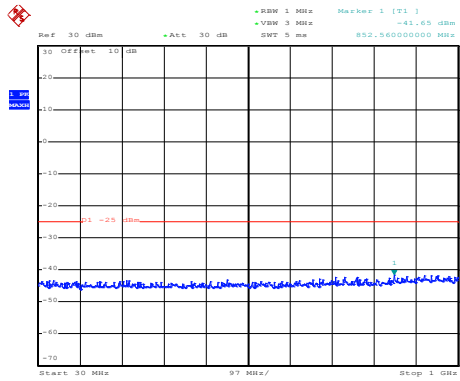
30MHz~1GHz



Date: 20.SEP.2019 12:02:20

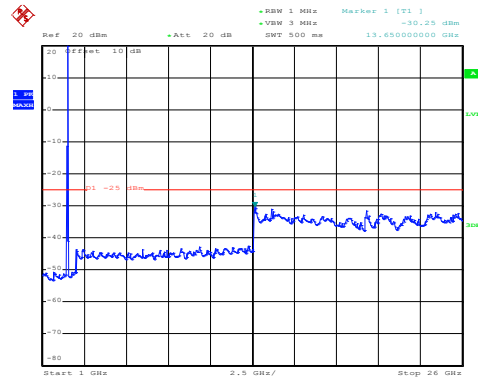
1GHz~26GHz

LTE Band 7: QPSK & RB Size 25  
 BW: 5MHz  
 Lowest channel



Date: 20.SEP.2019 18:55:23

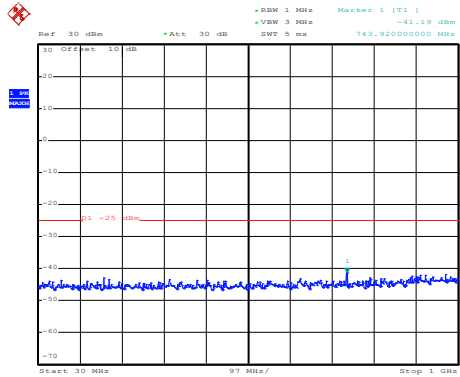
30MHz~1GHz



Date: 20.SEP.2019 12:01:12

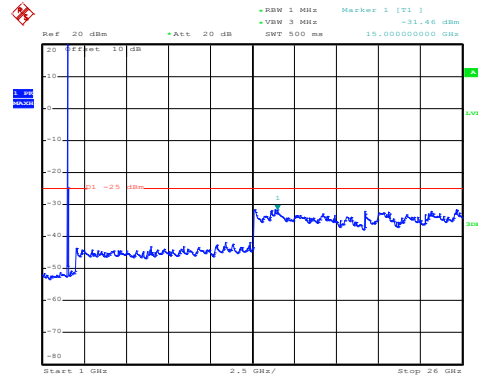
1GHz~26GHz

Middle channel



Date: 20.SEP.2019 18:55:39

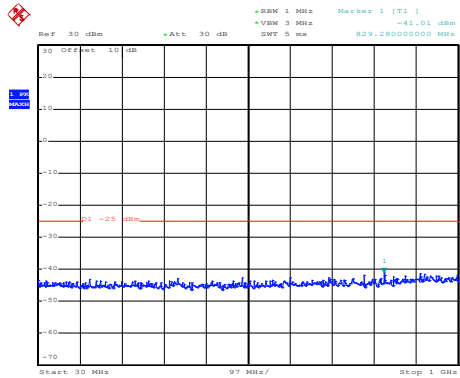
30MHz~1GHz



Date: 20.SEP.2019 12:01:37

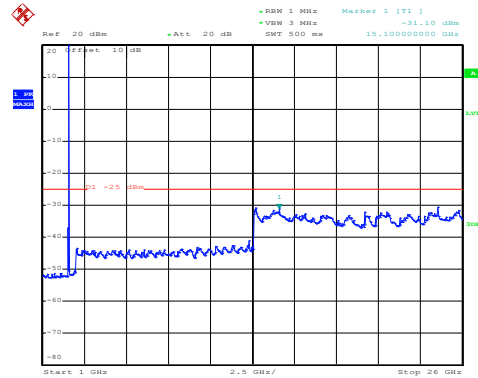
1GHz~26GHz

High channel



Date: 20.SEP.2019 18:56:38

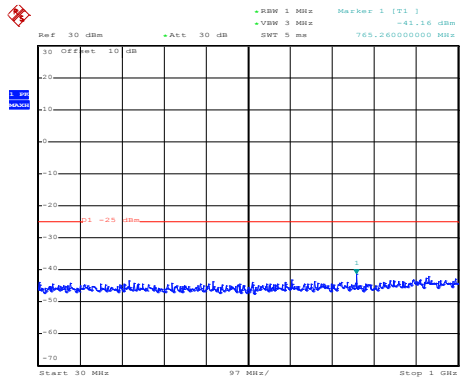
30MHz~1GHz



Date: 20.SEP.2019 12:02:46

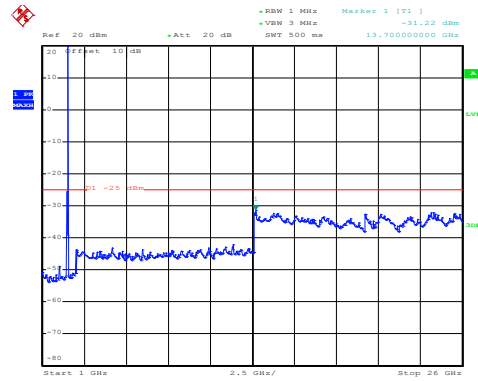
1GHz~26GHz

## LTE Band 7: 16 QAM & RB Size 1 BW: 10MHz Lowest channel



Date: 20.SEP.2019 18:53:45

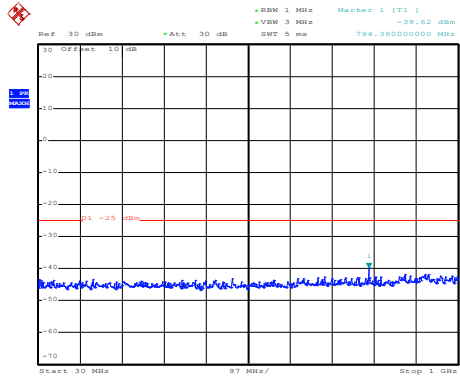
30MHz~1GHz



Date: 20.SEP.2019 11:58:32

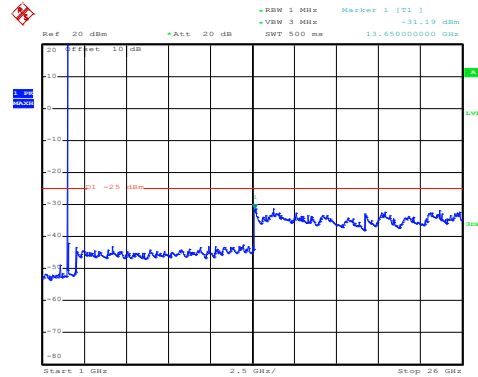
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:54:26

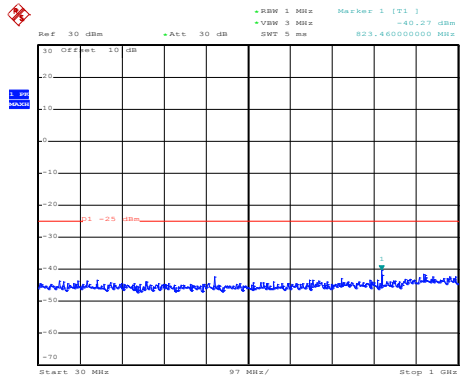
30MHz~1GHz



Date: 20.SEP.2019 11:59:36

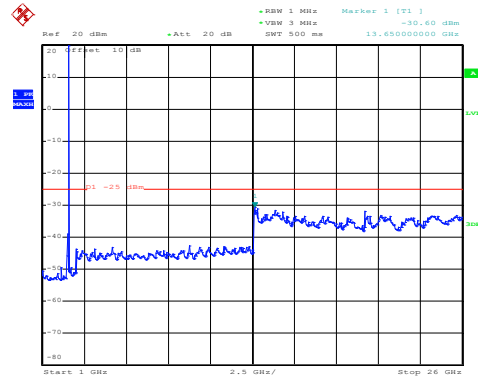
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:54:40

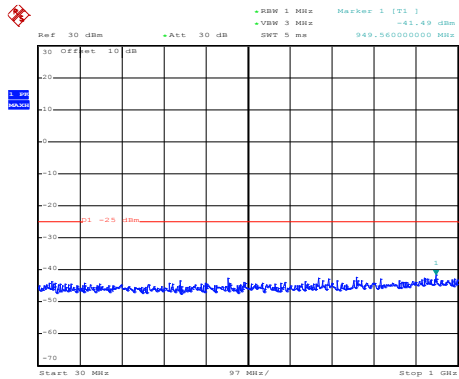
30MHz~1GHz



Date: 20.SEP.2019 11:59:56

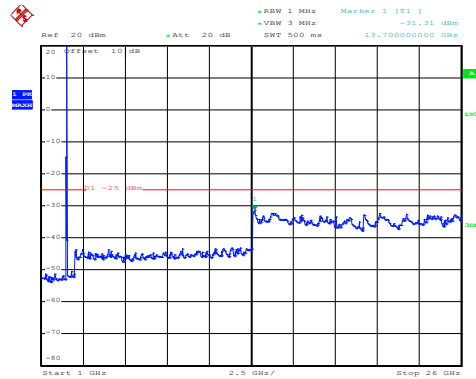
1GHz~26GHz

LTE Band 7: 16 QAM & RB Size 50  
 BW: 10MHz  
 Lowest channel



Date: 20.SEP.2019 18:53:57

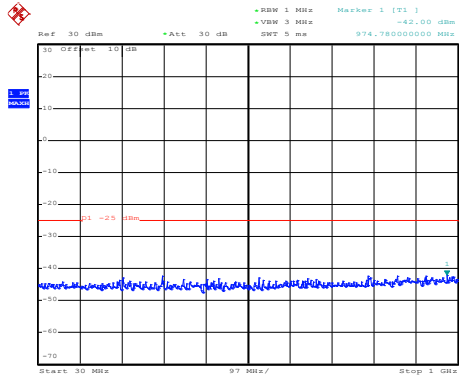
30MHz~1GHz



Date: 20.SEP.2019 11:58:51

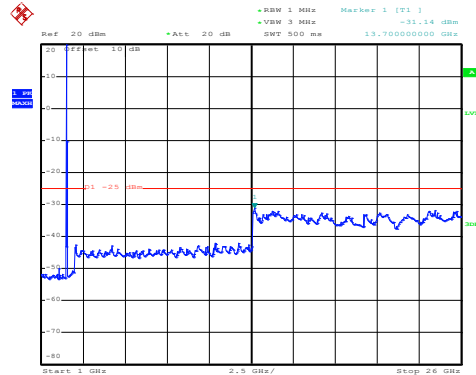
1GHz~26GHz

Middle channel



Date: 20.SEP.2019 18:54:12

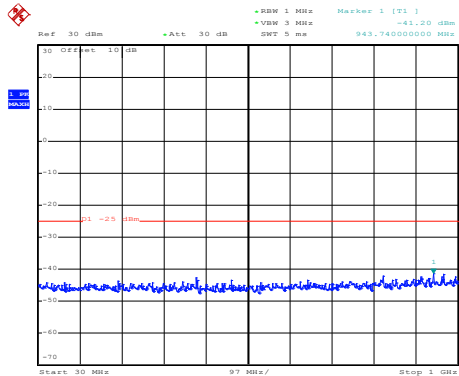
30MHz~1GHz



Date: 20.SEP.2019 11:59:17

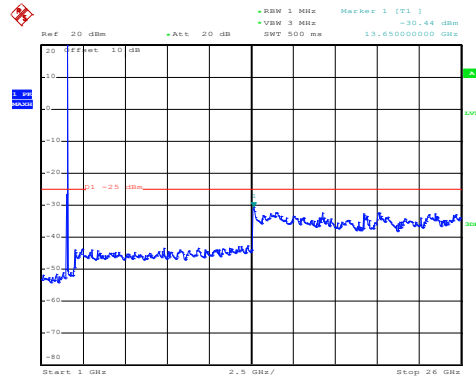
1GHz~26GHz

High channel



Date: 20.SEP.2019 18:54:52

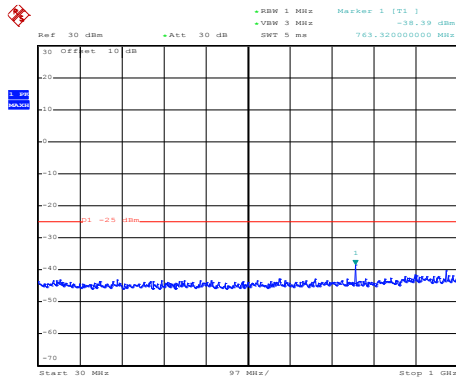
30MHz~1GHz



Date: 20.SEP.2019 12:00:17

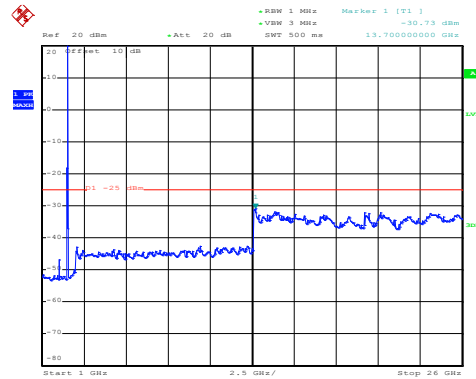
1GHz~26GHz

## LTE Band 7: QPSK & RB Size 1 BW: 10MHz Lowest channel



Date: 20.SEP.2019 18:53:42

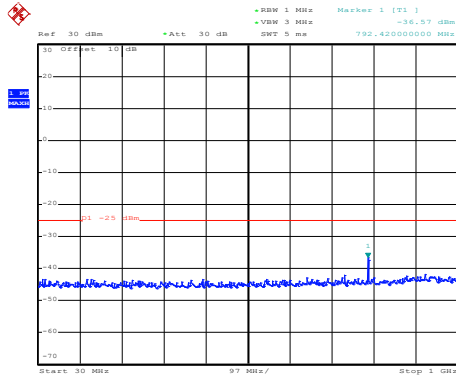
30MHz~1GHz



Date: 20.SEP.2019 11:58:23

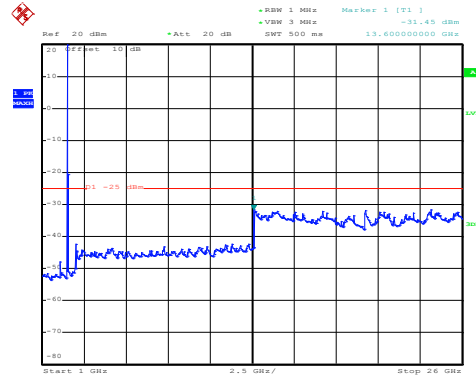
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:54:20

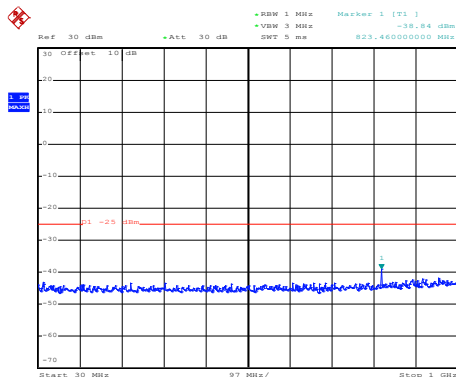
30MHz~1GHz



Date: 20.SEP.2019 11:59:27

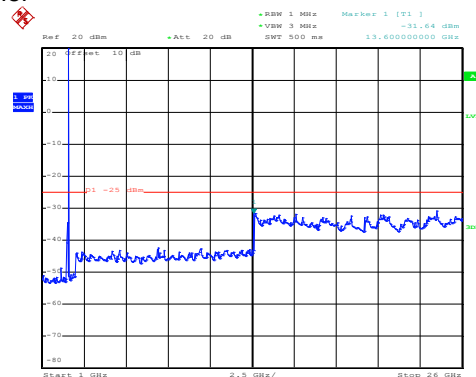
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:54:35

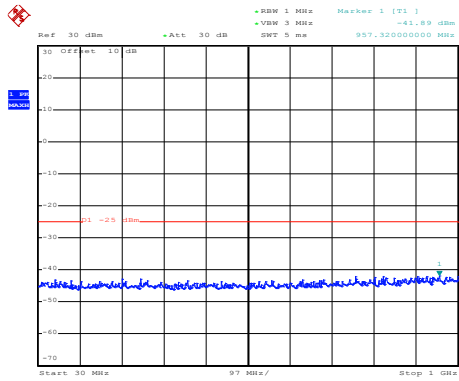
30MHz~1GHz



Date: 20.SEP.2019 11:59:48

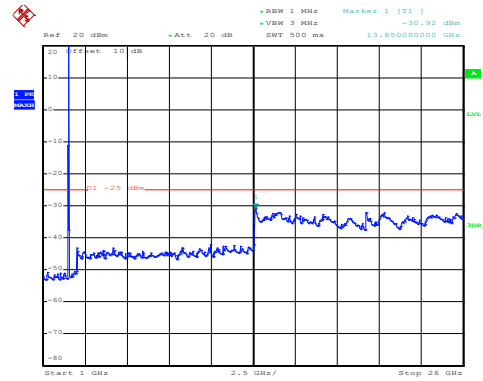
1GHz~26GHz

## LTE Band 7: QPSK & RB Size 50 BW: 10MHz Lowest channel



Date: 20.SEP.2019 18:53:53

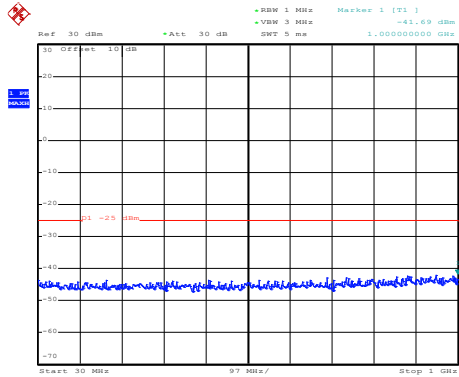
30MHz~1GHz



Date: 20.SEP.2019 11:58:44

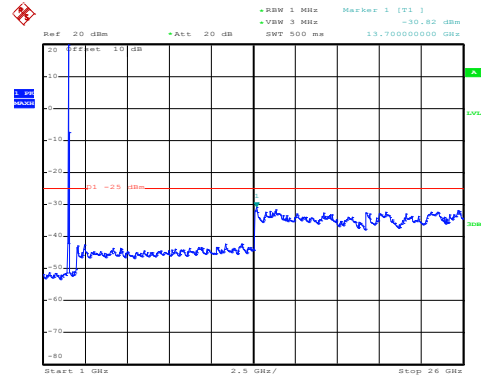
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:54:07

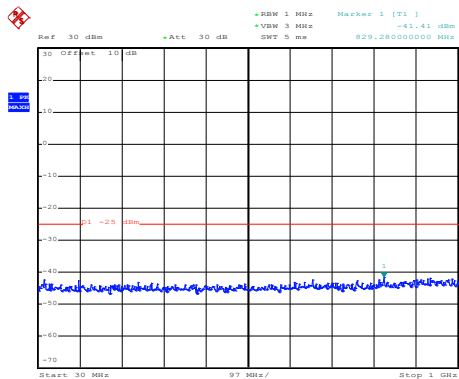
30MHz~1GHz



Date: 20.SEP.2019 11:59:05

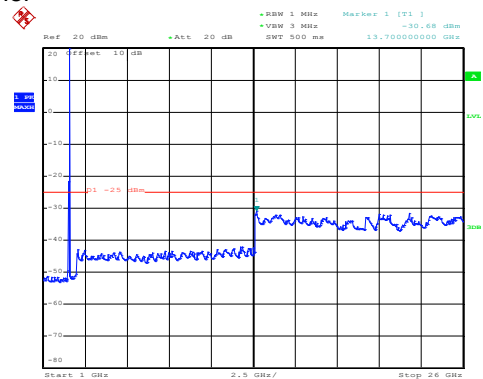
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:54:47

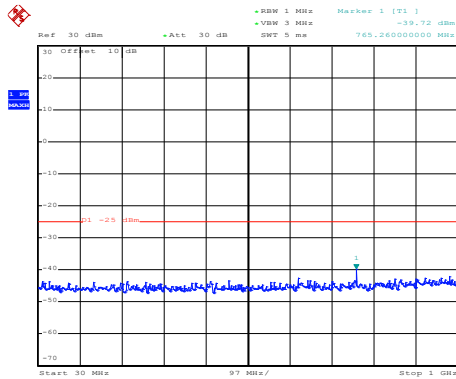
30MHz~1GHz



Date: 20.SEP.2019 12:00:10

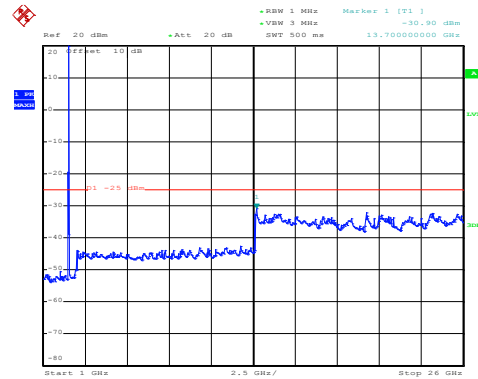
1GHz~26GHz

## LTE Band 7: 16 QAM & RB Size 1 BW: 15MHz Lowest channel



Date: 20.SEP.2019 18:52:14

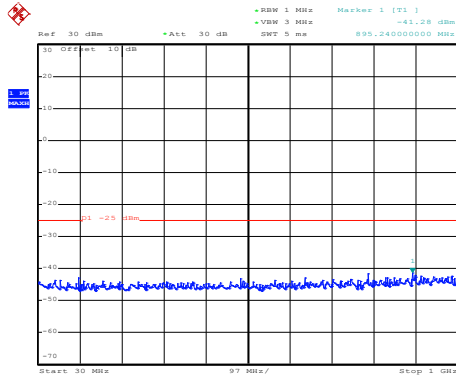
30MHz~1GHz



Date: 20.SEP.2019 11:55:53

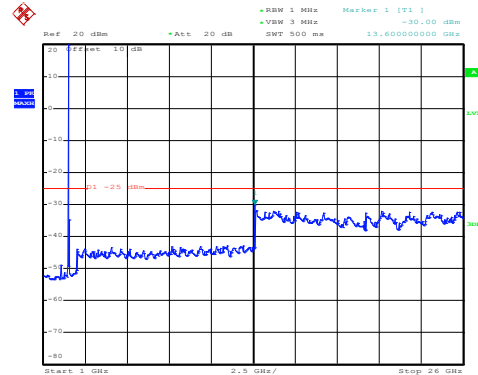
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:52:51

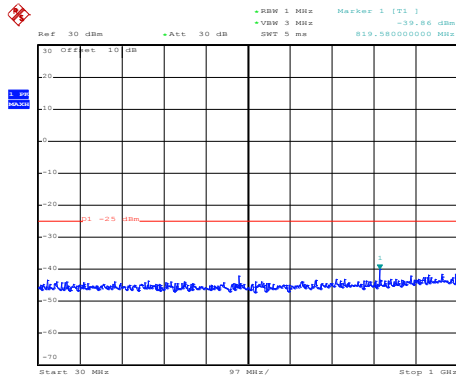
30MHz~1GHz



Date: 20.SEP.2019 11:57:09

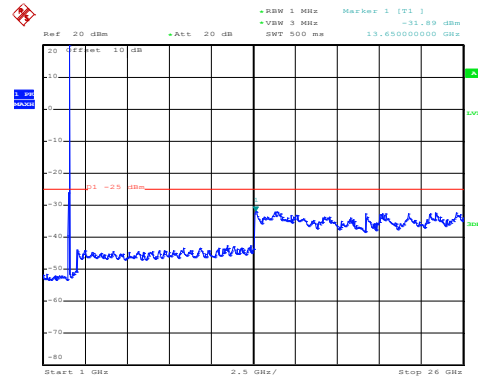
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:53:06

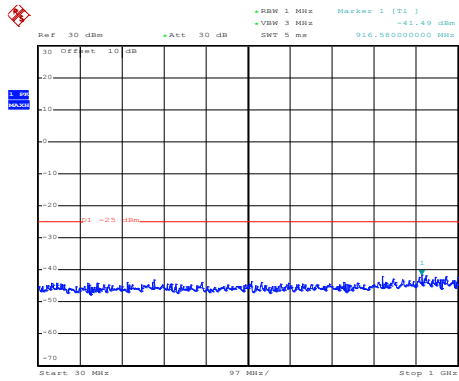
30MHz~1GHz



Date: 20.SEP.2019 11:57:35

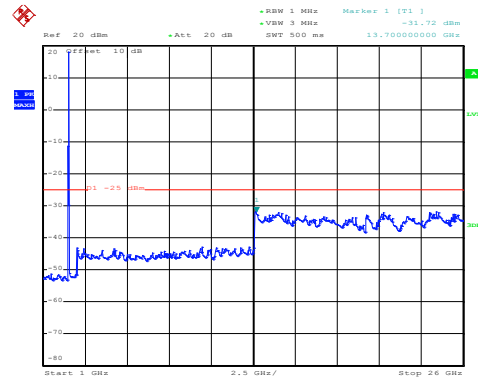
1GHz~26GHz

## LTE Band 7: 16 QAM & RB Size 75 BW: 15MHz Lowest channel



Date: 20.SEP.2019 18:52:26

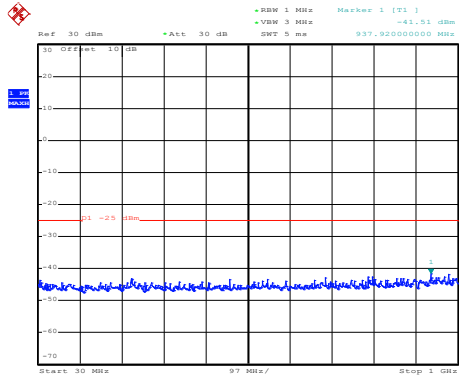
30MHz~1GHz



Date: 20.SEP.2019 11:56:12

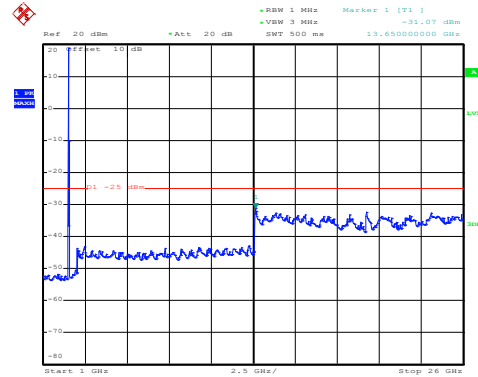
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:52:38

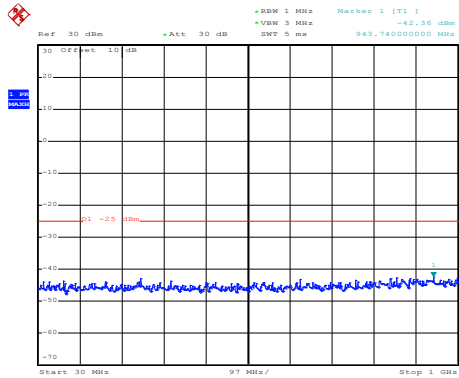
30MHz~1GHz



Date: 20.SEP.2019 11:56:32

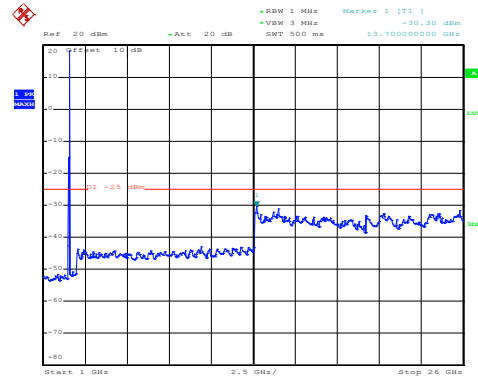
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:53:20

30MHz~1GHz

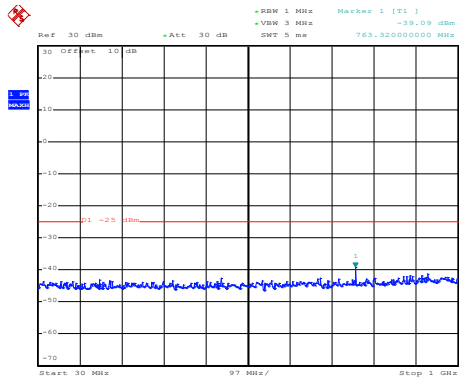


Date: 20.SEP.2019 11:57:56

1GHz~26GHz

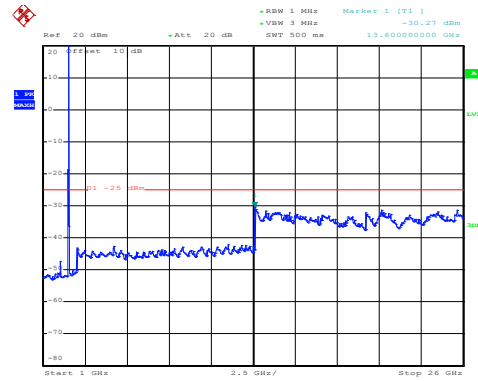


## LTE Band 7: QPSK & RB Size 1 BW: 15MHz Lowest channel



Date: 20.SEP.2019 18:52:09

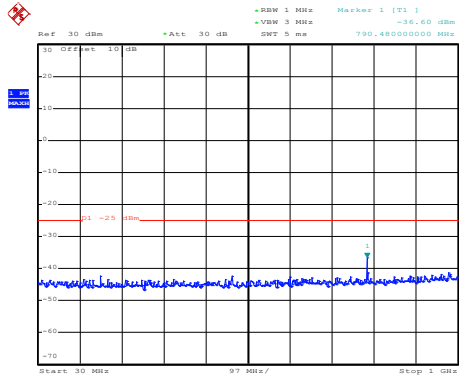
30MHz~1GHz



Date: 20.SEP.2019 11:55:46

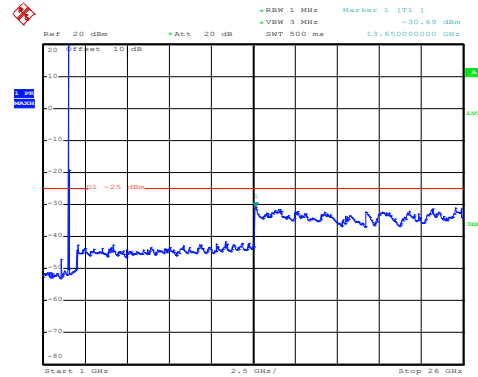
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:52:47

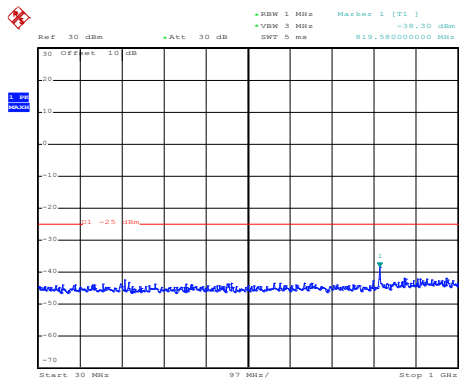
30MHz~1GHz



Date: 20.SEP.2019 11:57:00

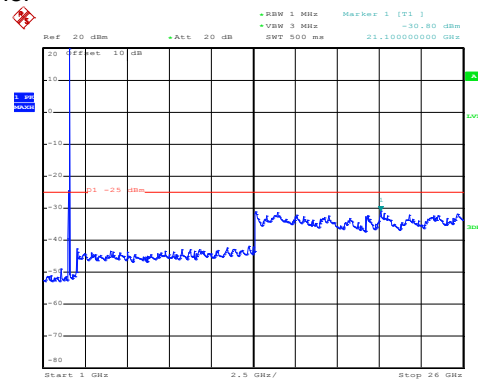
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:53:01

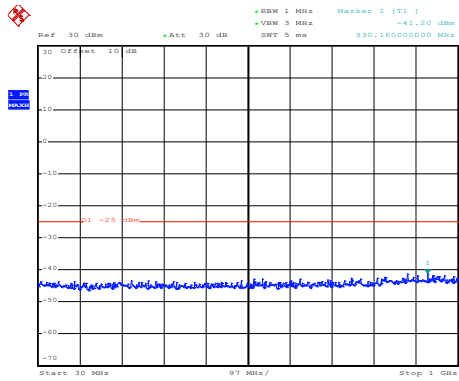
30MHz~1GHz



Date: 20.SEP.2019 11:57:27

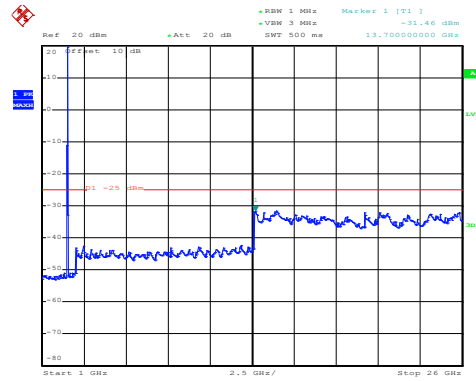
1GHz~26GHz

## LTE Band 7: QPSK & RB Size 75 BW: 15MHz Lowest channel



Date: 20.SEP.2019 18:52:23

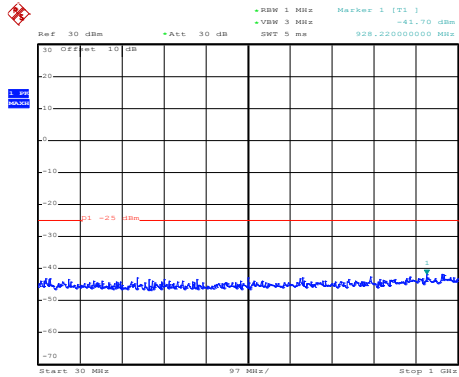
30MHz~1GHz



Date: 20.SEP.2019 11:56:04

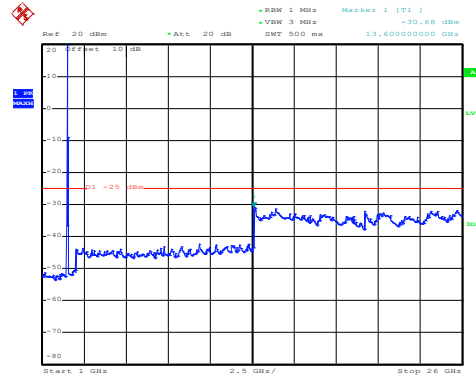
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:52:34

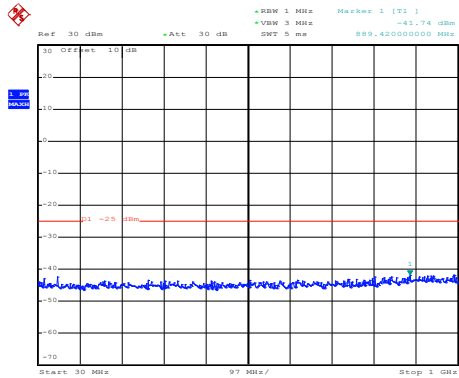
30MHz~1GHz



Date: 20.SEP.2019 11:56:26

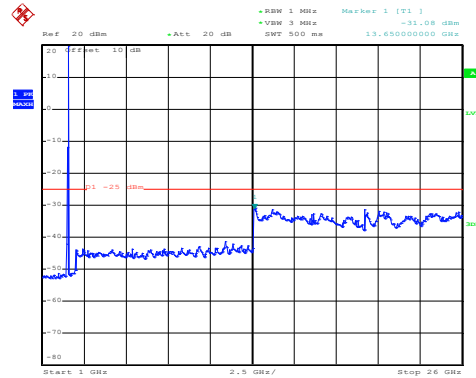
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:53:17

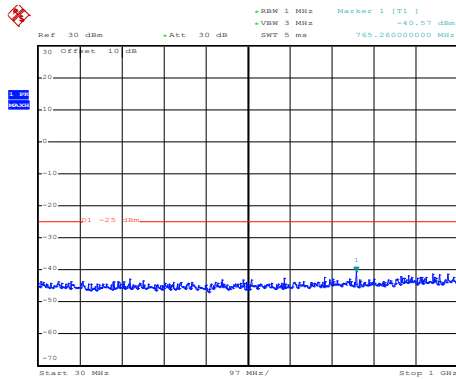
30MHz~1GHz



Date: 20.SEP.2019 11:57:48

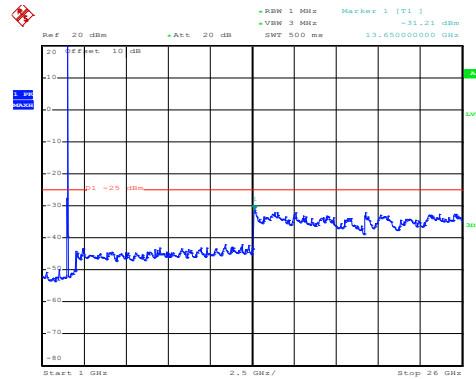
1GHz~26GHz

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



Date: 20.SEP.2019 18:51:46

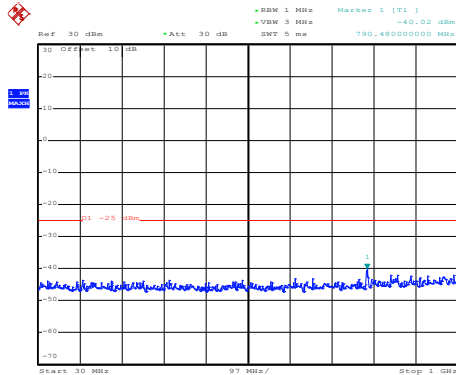
30MHz~1GHz



Date: 20.SEP.2019 11:55:14

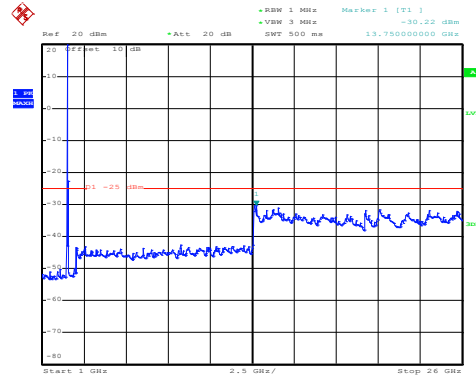
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:50:44

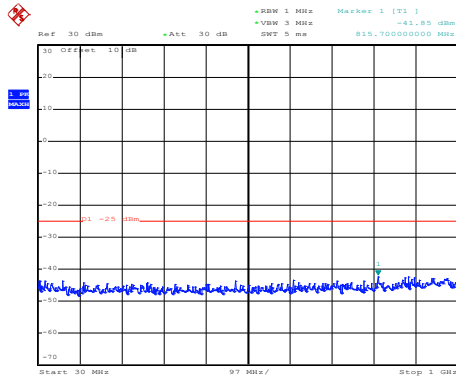
30MHz~1GHz



Date: 20.SEP.2019 11:53:47

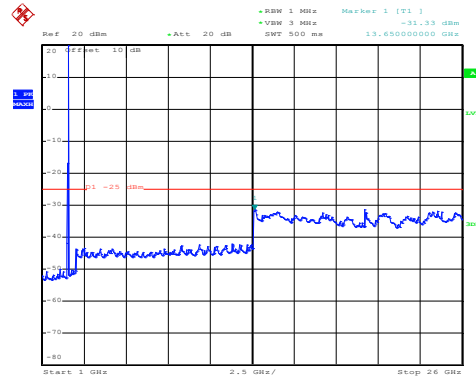
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:51:01

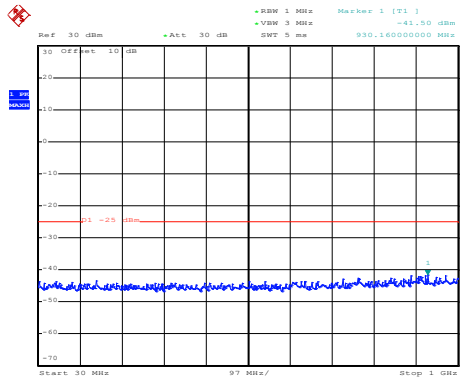
30MHz~1GHz



Date: 20.SEP.2019 11:53:20

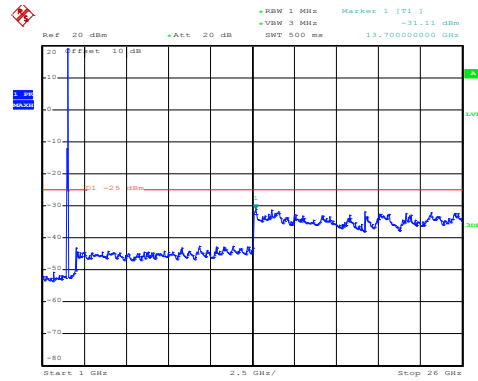
1GHz~26GHz

LTE Band 7: 16 QAM & RB Size 100  
 BW: 20MHz  
 Lowest channel



Date: 20.SEP.2019 18:51:29

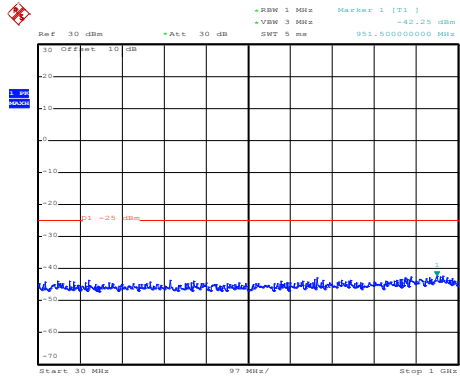
30MHz~1GHz



Date: 20.SEP.2019 11:54:53

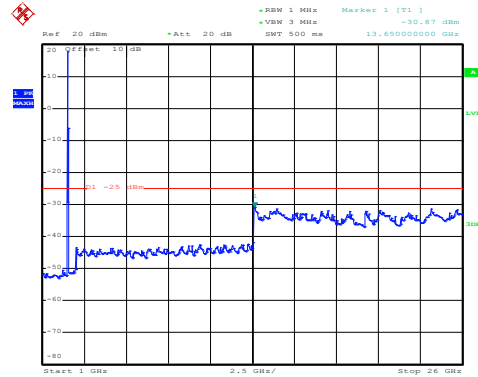
1GHz~26GHz

Middle channel



Date: 20.SEP.2019 18:50:33

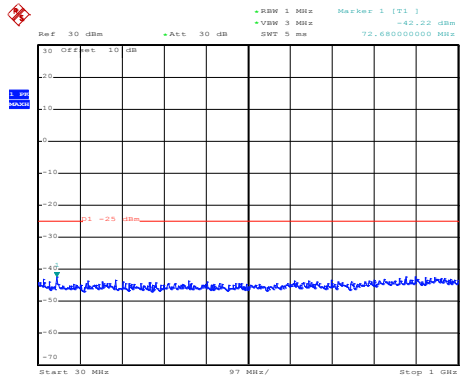
30MHz~1GHz



Date: 20.SEP.2019 11:54:19

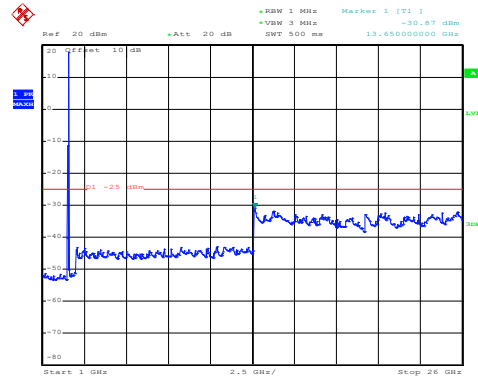
1GHz~26GHz

High channel



Date: 20.SEP.2019 18:51:12

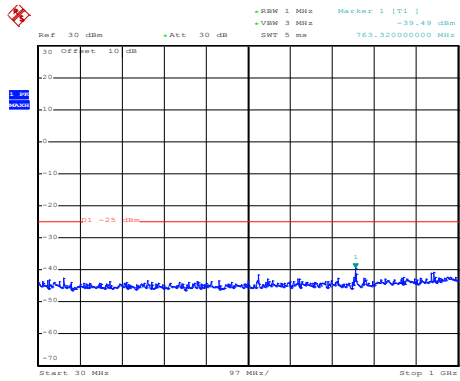
30MHz~1GHz



Date: 20.SEP.2019 11:52:41

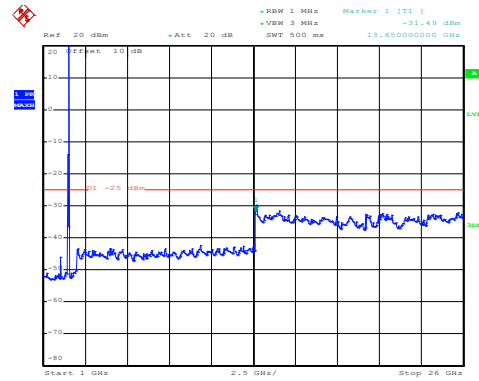
1GHz~26GHz

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



Date: 20.SEP.2019 18:51:39

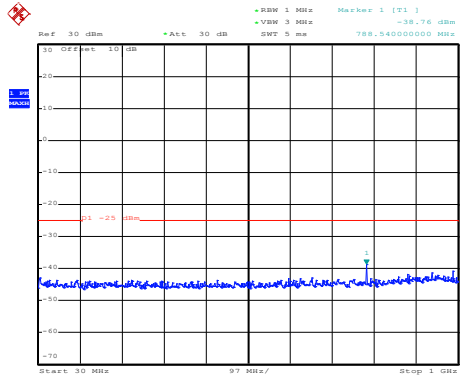
30MHz~1GHz



Date: 20.SEP.2019 11:55:05

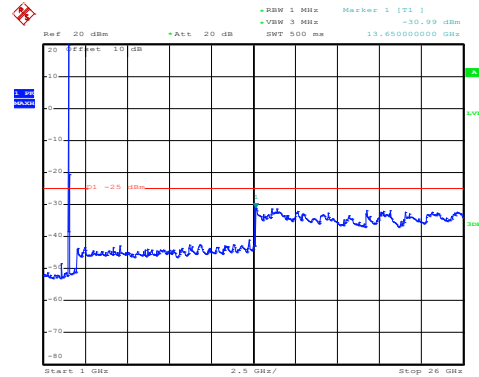
1GHz~26GHz

## Middle channel



Date: 20.SEP.2019 18:50:40

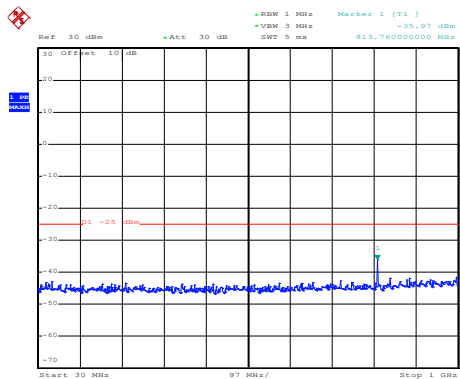
30MHz~1GHz



Date: 20.SEP.2019 11:53:38

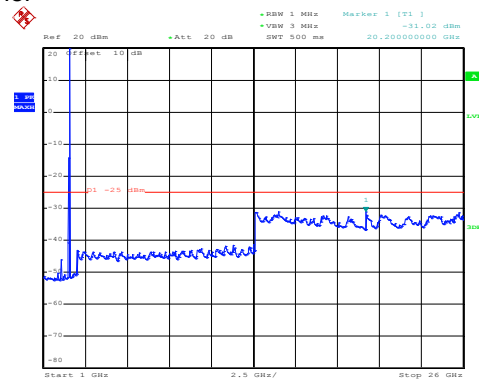
1GHz~26GHz

## High channel



Date: 20.SEP.2019 18:50:57

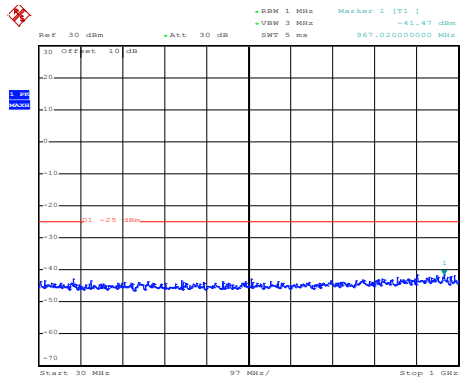
30MHz~1GHz



Date: 20.SEP.2019 11:53:04

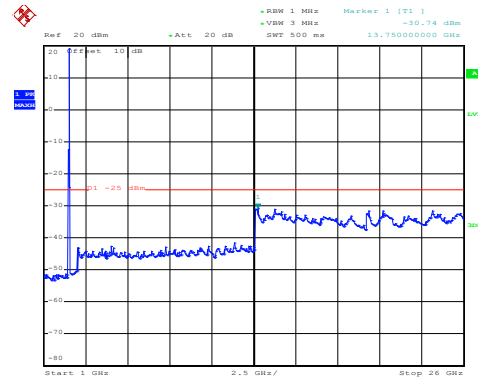
1GHz~26GHz

LTE Band 7: QPSK & RB Size 100  
 BW: 20MHz  
 Lowest channel



Date: 20.SEP.2019 18:51:24

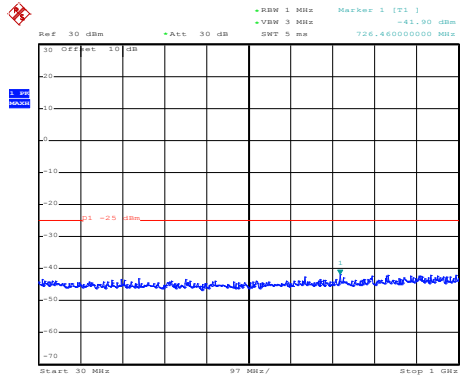
30MHz~1GHz



Date: 20.SEP.2019 11:54:44

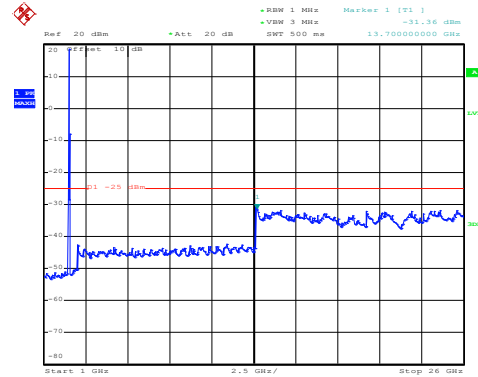
1GHz~26GHz

Middle channel



Date: 20.SEP.2019 18:50:29

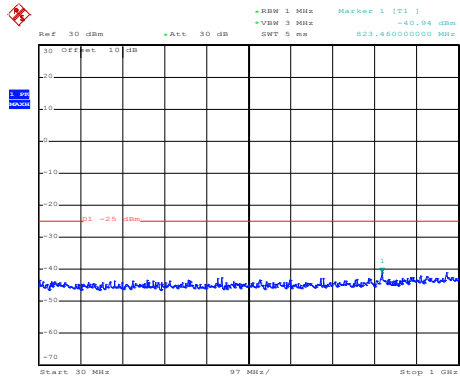
30MHz~1GHz



Date: 20.SEP.2019 11:54:01

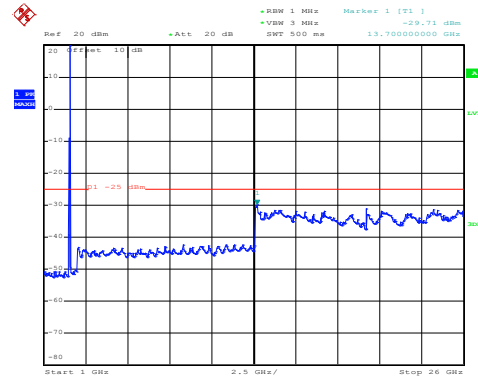
1GHz~26GHz

High channel



Date: 20.SEP.2019 18:51:08

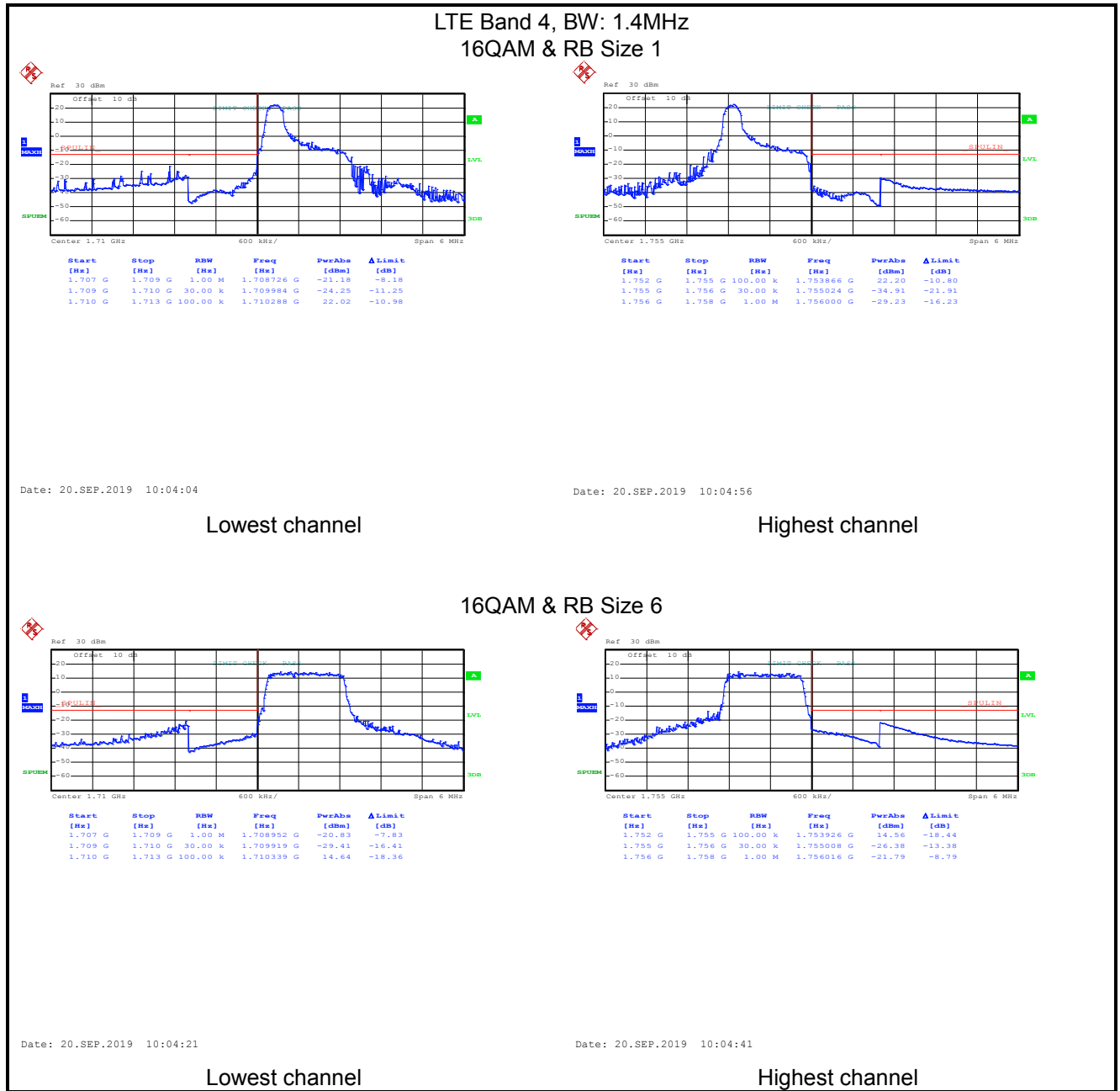
30MHz~1GHz



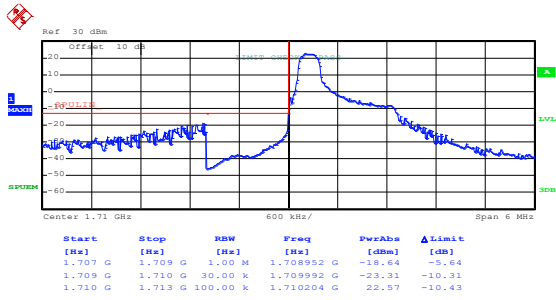
Date: 20.SEP.2019 11:52:32

1GHz~26GHz

**Band edge emission:**  
**LTE Band 4 part:**

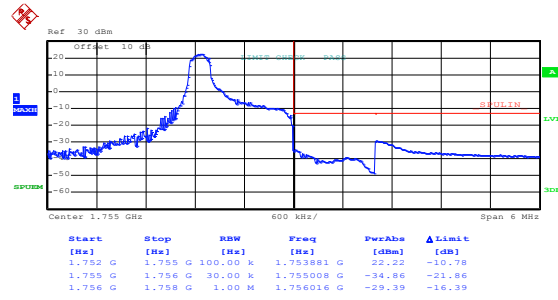


## LTE Band 4, BW: 1.4MHz QPSK & RB Size 1



Date: 20.SEP.2019 10:03:58

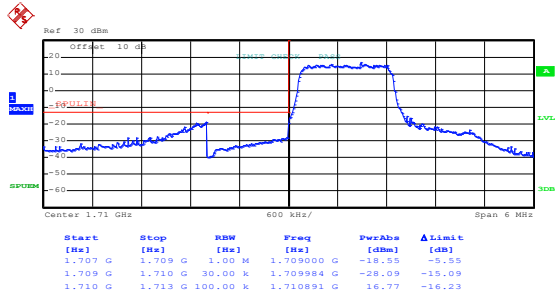
Lowest channel



Date: 20.SEP.2019 10:04:51

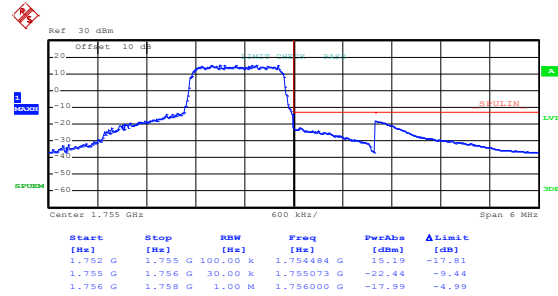
Highest channel

## QPSK & RB Size 6



Date: 20.SEP.2019 10:04:15

Lowest channel

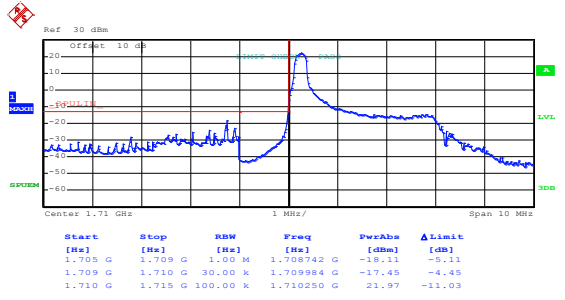


Date: 20.SEP.2019 10:04:36

Highest channel

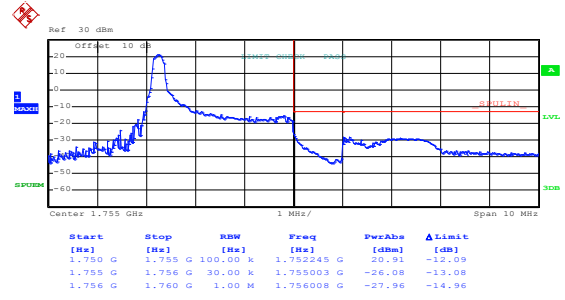


## LTE Band 4, BW: 3MHz 16QAM & RB Size 1



Date: 20.SEP.2019 13:45:48

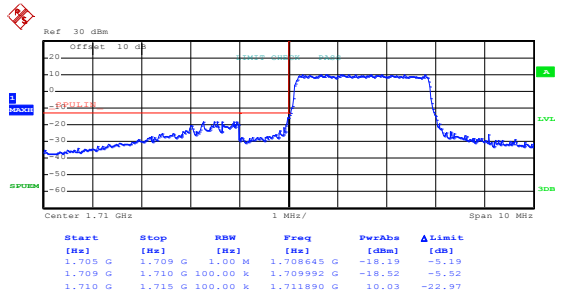
Lowest channel



Date: 20.SEP.2019 13:46:40

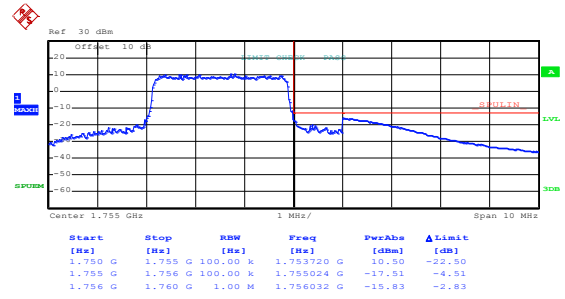
Highest channel

## 16QAM & RB Size 15



Date: 20.SEP.2019 13:46:09

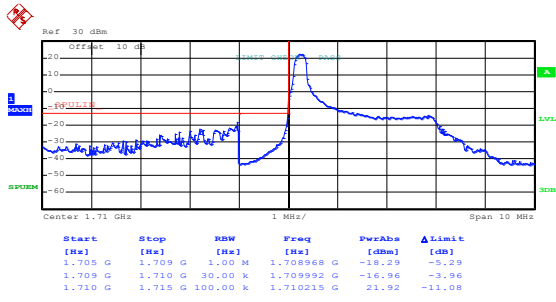
Lowest channel



Date: 20.SEP.2019 10:05:48

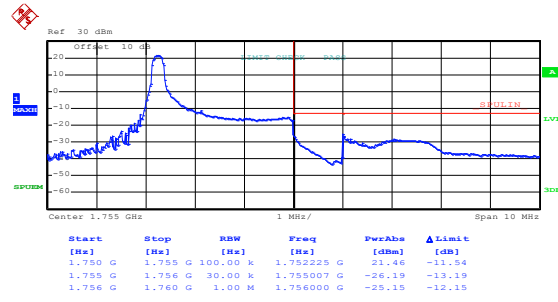
Highest channel

## LTE Band 4, BW: 3MHz QPSK & RB Size 1



Date: 20.SEP.2019 13:45:39

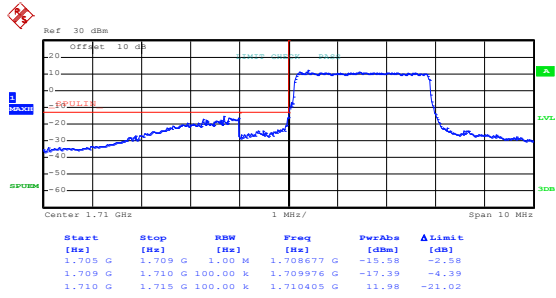
Lowest channel



Date: 20.SEP.2019 13:46:34

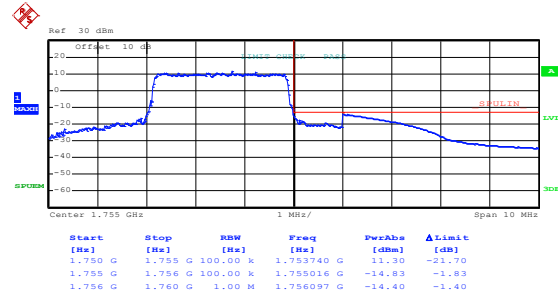
Highest channel

## QPSK & RB Size 15



Date: 20.SEP.2019 13:46:03

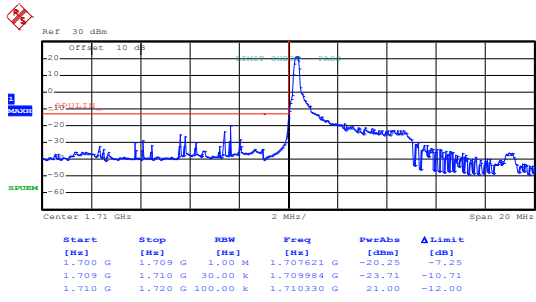
Lowest channel



Date: 20.SEP.2019 10:05:42

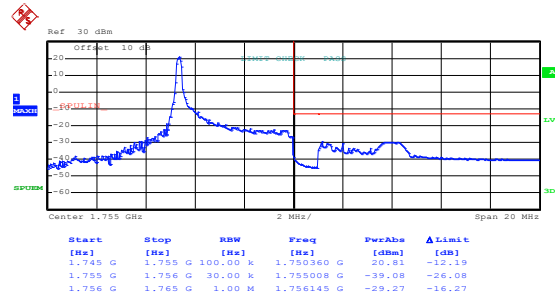
Highest channel

## LTE Band 4, BW: 5MHz 16QAM & RB Size 1



Date: 20.SEP.2019 10:07:14

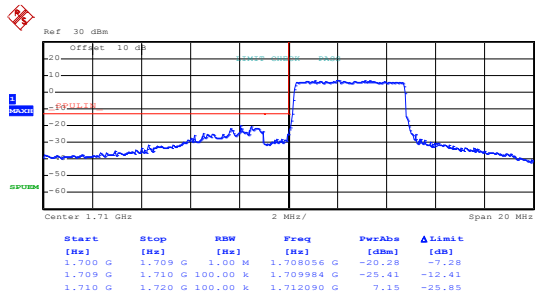
Lowest channel



Date: 20.SEP.2019 10:08:14

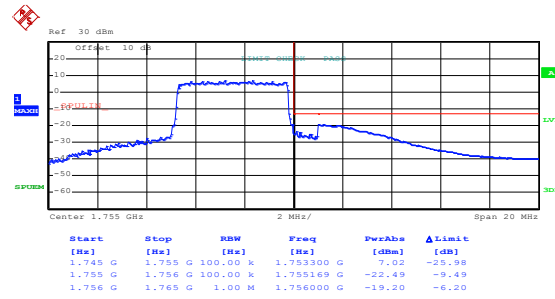
Highest channel

## 16QAM & RB Size 25



Date: 20.SEP.2019 10:07:35

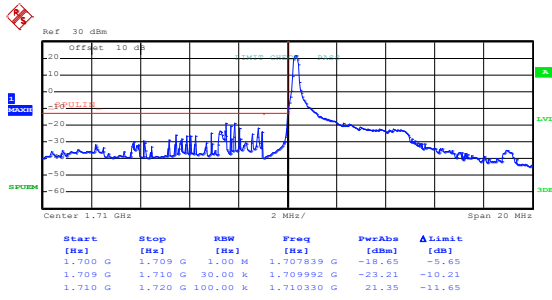
Lowest channel



Date: 20.SEP.2019 10:07:52

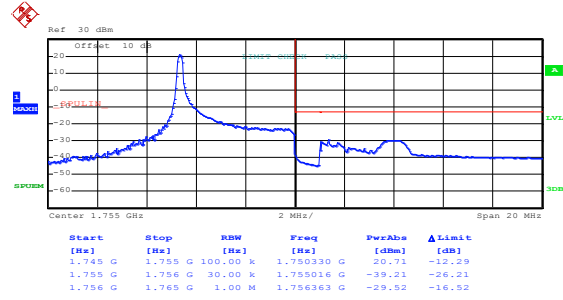
Highest channel

## LTE Band 4, BW: 5MHz QPSK & RB Size 1



Date: 20.SEP.2019 10:07:09

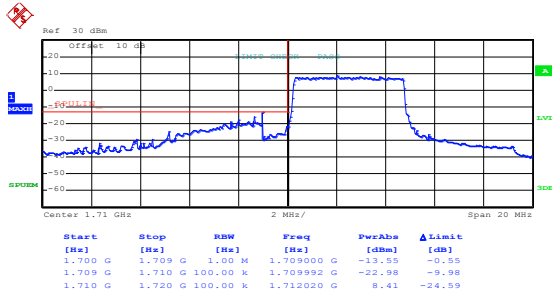
Lowest channel



Date: 20.SEP.2019 10:08:08

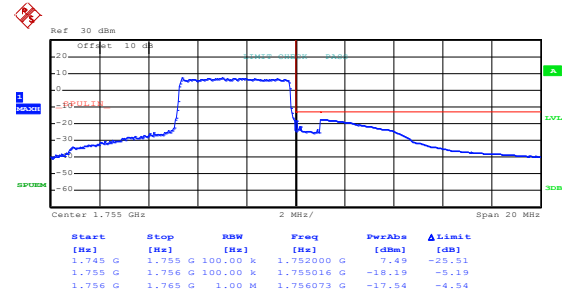
Highest channel

## QPSK & RB Size 25



Date: 20.SEP.2019 10:07:29

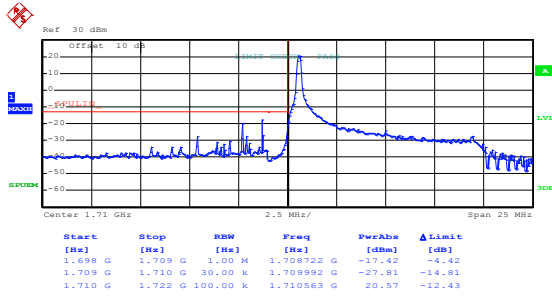
Lowest channel



Date: 20.SEP.2019 10:07:47

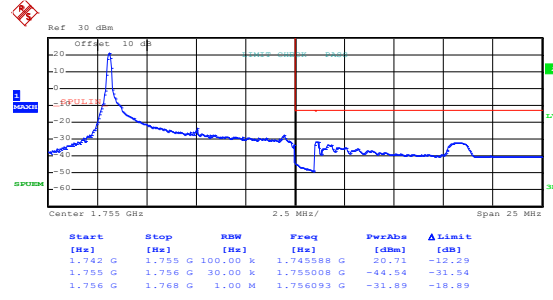
Highest channel

## LTE Band 4, BW: 10MHz 16QAM & RB Size 1



Date: 20.SEP.2019 10:10:10

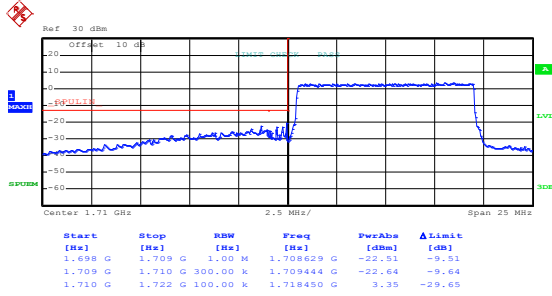
Lowest channel



Date: 20.SEP.2019 10:08:44

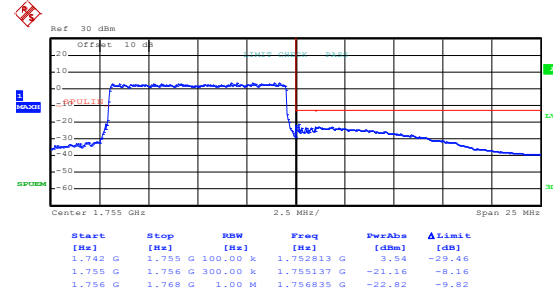
Highest channel

## 16QAM & RB Size 50



Date: 20.SEP.2019 10:09:39

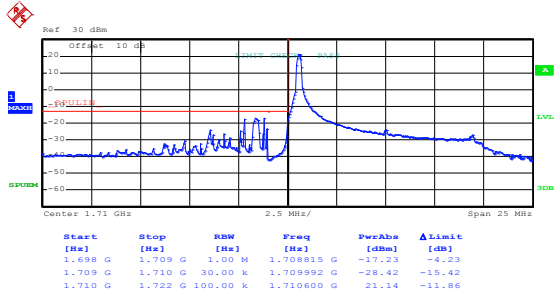
Lowest channel



Date: 20.SEP.2019 10:09:05

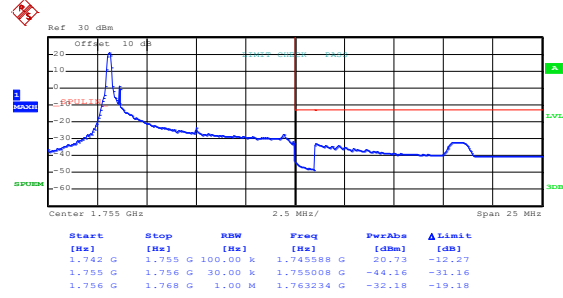
Highest channel

## LTE Band 4, BW: 10MHz QPSK & RB Size 1



Date: 20.SEP.2019 10:09:52

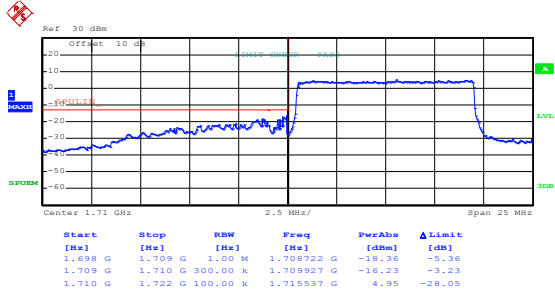
Lowest channel



Date: 20.SEP.2019 10:08:39

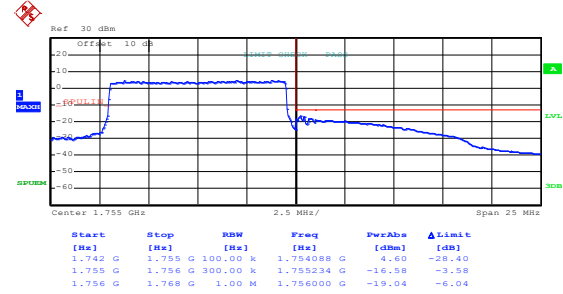
Highest channel

## QPSK & RB Size 50



Date: 20.SEP.2019 10:09:33

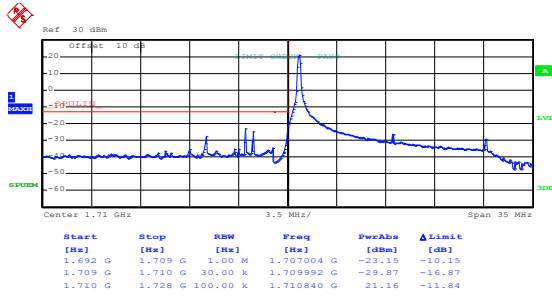
Lowest channel



Date: 20.SEP.2019 10:09:00

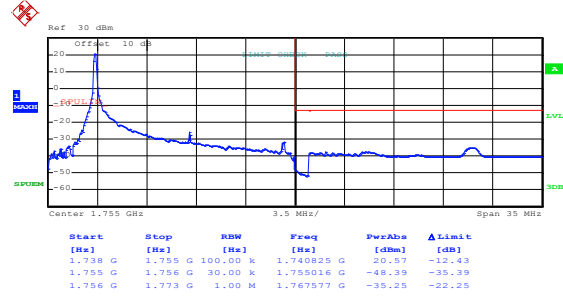
Highest channel

## LTE Band 4, BW: 15MHz 16QAM & RB Size 1



Date: 20.SEP.2019 10:10:40

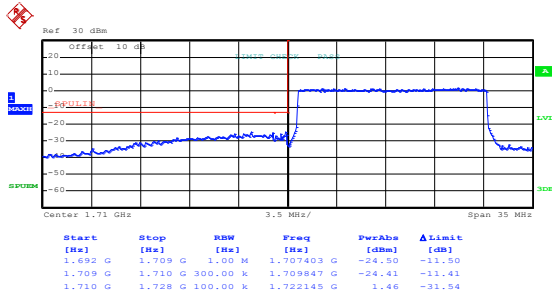
Lowest channel



Date: 20.SEP.2019 10:12:25

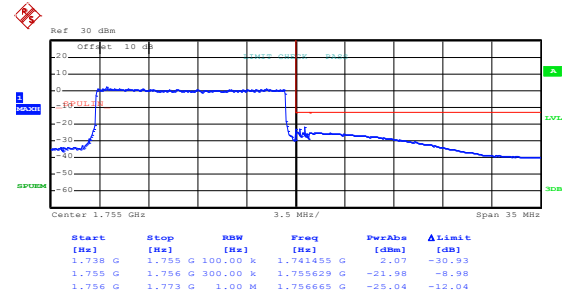
Highest channel

## 16QAM & RB Size 75



Date: 20.SEP.2019 10:11:40

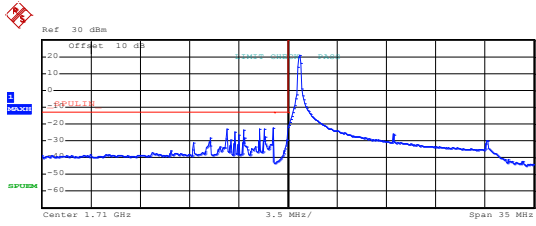
Lowest channel



Date: 20.SEP.2019 10:12:03

Highest channel

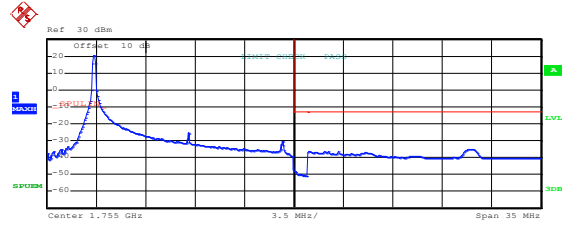
## LTE Band 4, BW: 15MHz QPSK & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.692 G	1.709 G	1.00 M	1.709000 G	-22.27	-9.27
1.709 G	1.710 G	30.00 k	1.709992 G	-29.72	-16.72
1.710 G	1.728 G	100.00 k	1.710840 G	20.98	-12.02

Date: 20.SEP.2019 10:10:35

Lowest channel

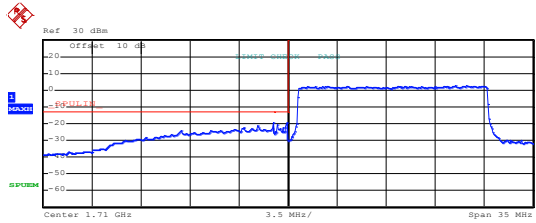


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.738 G	1.755 G	100.00 k	1.740843 G	20.56	-12.44
1.755 G	1.756 G	30.00 k	1.755028 G	-47.94	-34.94
1.756 G	1.773 G	1.00 M	1.767577 G	-35.17	-22.17

Date: 20.SEP.2019 10:12:20

Highest channel

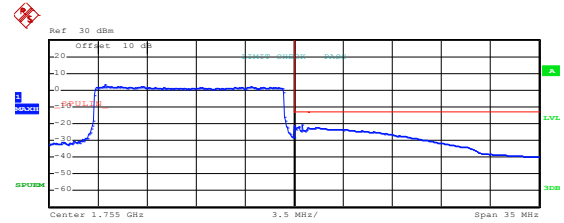
## QPSK & RB Size 75



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.692 G	1.709 G	1.00 M	1.709000 G	-19.32	-6.32
1.709 G	1.710 G	300.00 k	1.709984 G	-19.26	-6.26
1.710 G	1.728 G	100.00 k	1.721988 G	2.62	-30.38

Date: 20.SEP.2019 10:11:35

Lowest channel



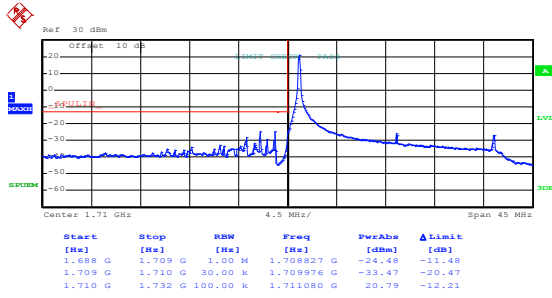
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.738 G	1.755 G	100.00 k	1.741455 G	3.25	-29.75
1.755 G	1.756 G	300.00 k	1.755556 G	-20.36	-7.36
1.756 G	1.773 G	1.00 M	1.756000 G	-22.40	-9.40

Date: 20.SEP.2019 10:11:57

Highest channel

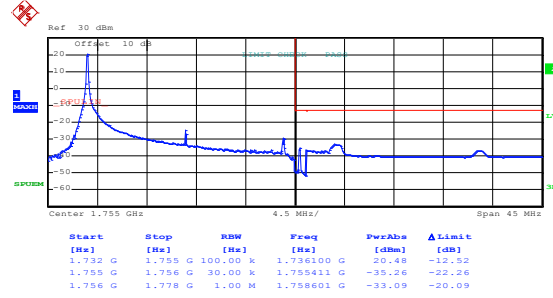


## LTE Band 4, BW: 20MHz 16QAM & RB Size 1



Date: 20.SEP.2019 10:13:58

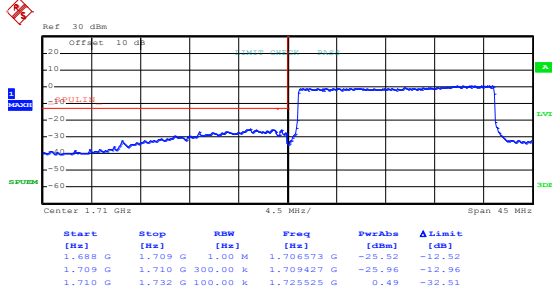
Lowest channel



Date: 20.SEP.2019 10:12:55

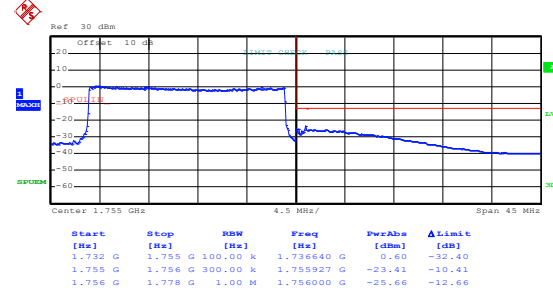
Highest channel

## 16QAM & RB Size 100



Date: 20.SEP.2019 10:13:38

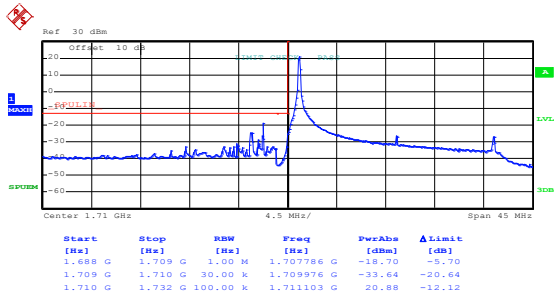
Lowest channel



Date: 20.SEP.2019 10:13:14

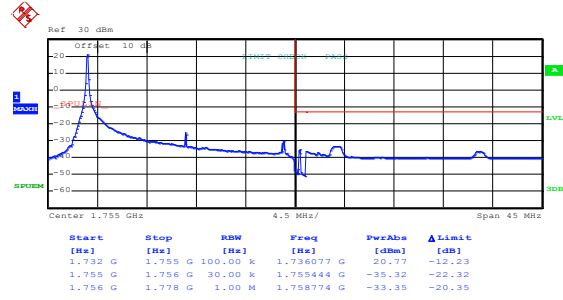
Highest channel

## LTE Band 4, BW: 20MHz QPSK & RB Size 1



Date: 20.SEP.2019 10:13:51

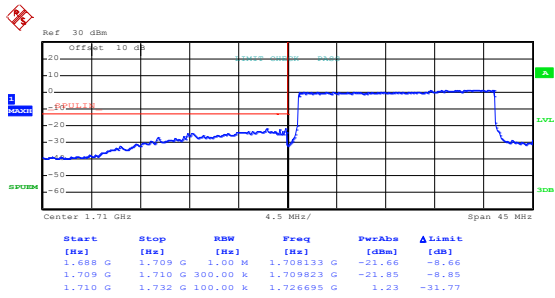
Lowest channel



Date: 20.SEP.2019 10:12:49

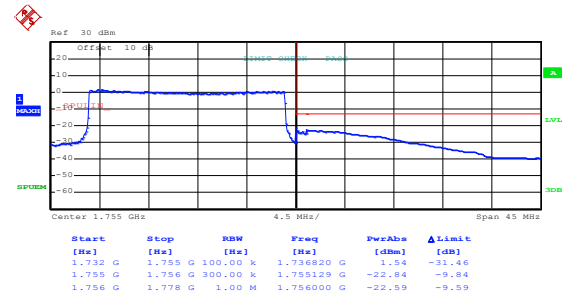
Highest channel

## QPSK & RB Size 100



Date: 20.SEP.2019 10:13:32

Lowest channel

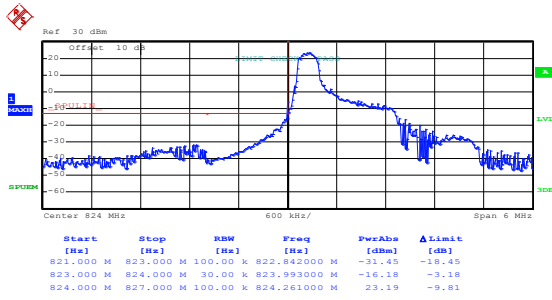


Date: 20.SEP.2019 10:13:09

Highest channel

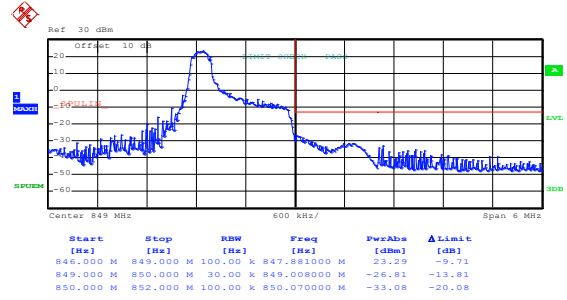
LTE Band 5 part:

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



Date: 20.SEP.2019 09:55:25

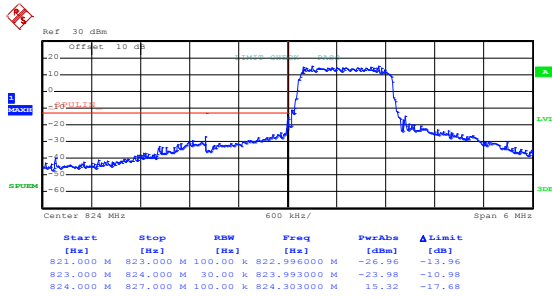
Lowest channel



Date: 20.SEP.2019 09:56:15

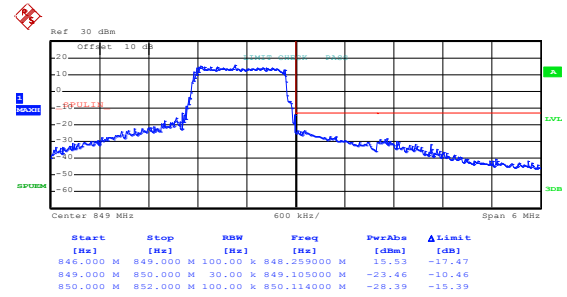
Highest channel

16QAM & RB Size 6



Date: 20.SEP.2019 09:55:40

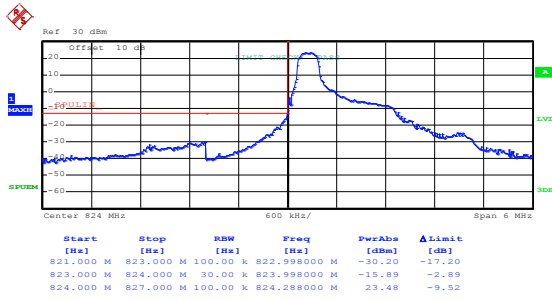
Lowest channel



Date: 20.SEP.2019 09:55:59

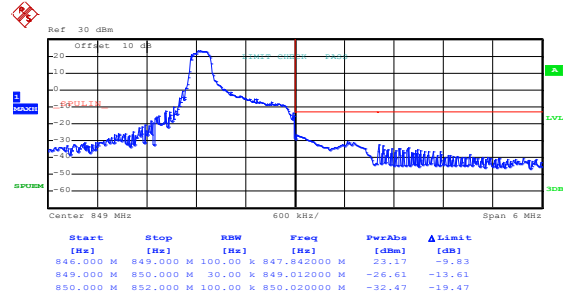
Highest channel

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



Date: 20.SEP.2019 09:55:19

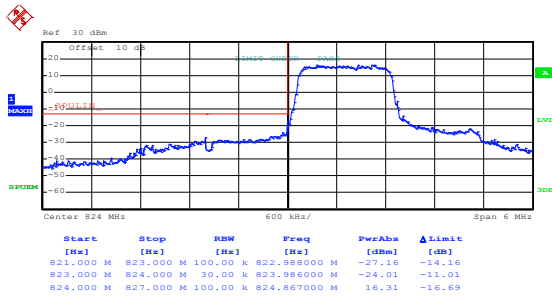
Lowest channel



Date: 20.SEP.2019 09:56:11

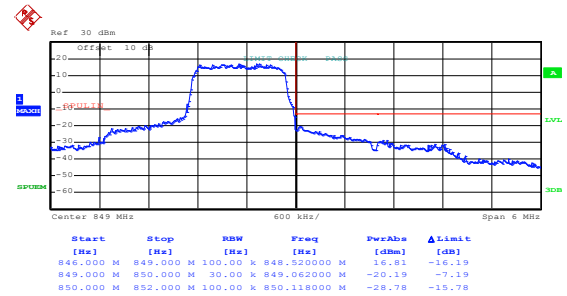
Highest channel

## QPSK & RB Size 6



Date: 20.SEP.2019 09:55:35

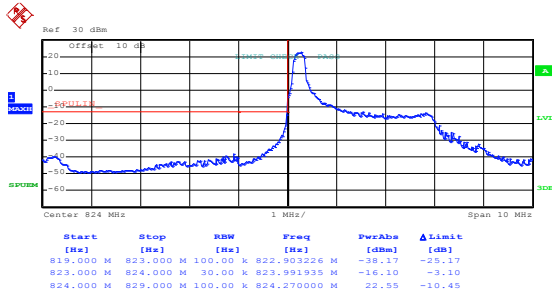
Lowest channel



Date: 20.SEP.2019 09:55:53

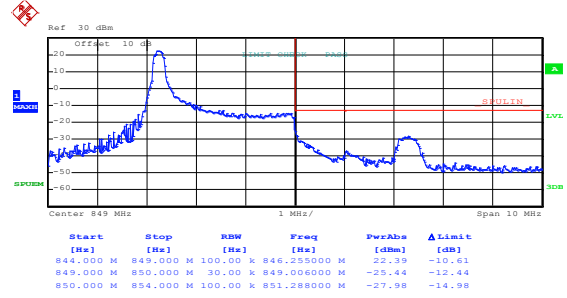
Highest channel

## LTE Band 5, BW: 3MHz 16QAM & RB Size 1



Date: 20.SEP.2019 09:58:44

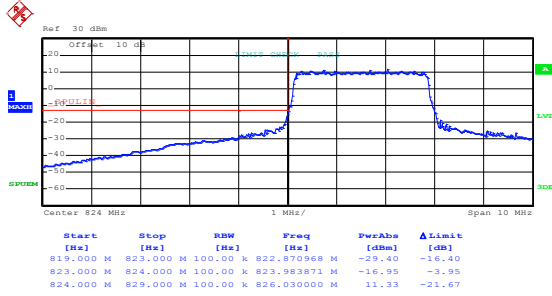
Lowest channel



Date: 20.SEP.2019 09:56:53

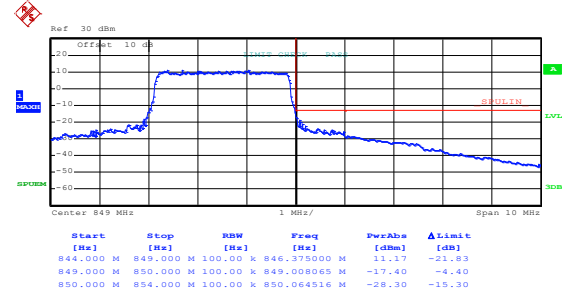
Highest channel

## 16QAM & RB Size 15



Date: 20.SEP.2019 09:58:23

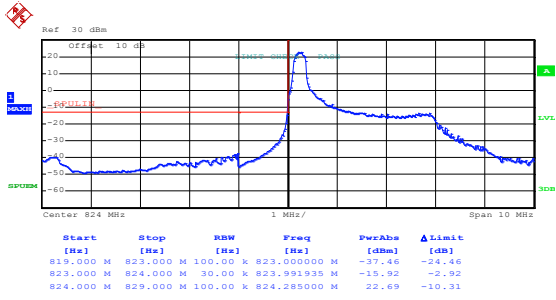
Lowest channel



Date: 20.SEP.2019 09:57:46

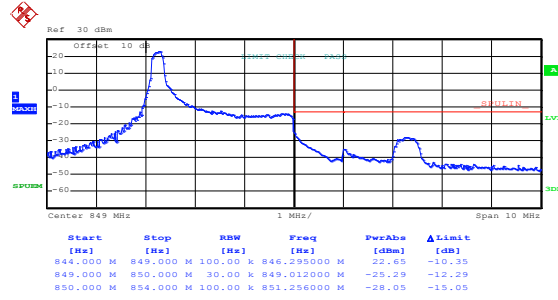
Highest channel

## LTE Band 5, BW: 3MHz QPSK & RB Size 1



Date: 20.SEP.2019 09:58:37

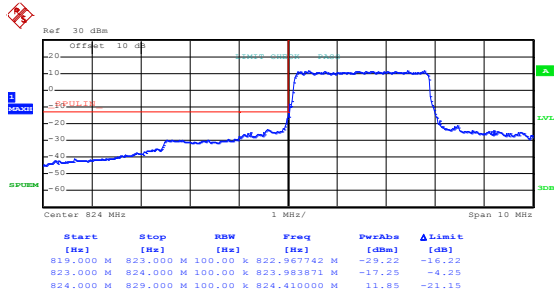
Lowest channel



Date: 20.SEP.2019 09:56:48

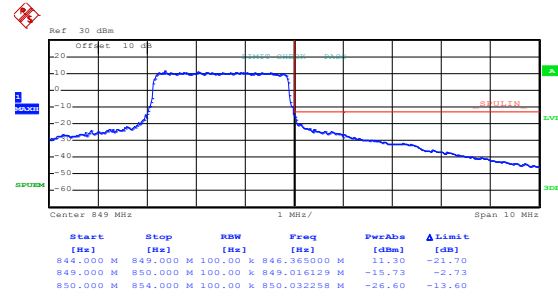
Highest channel

## QPSK & RB Size 15



Date: 20.SEP.2019 09:58:17

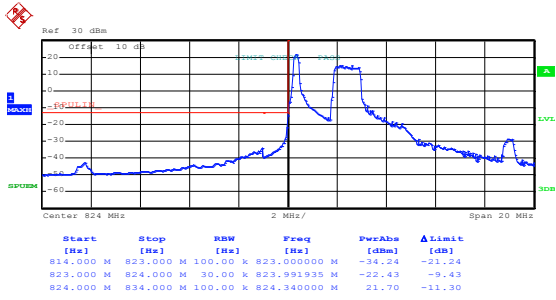
Lowest channel



Date: 20.SEP.2019 09:57:40

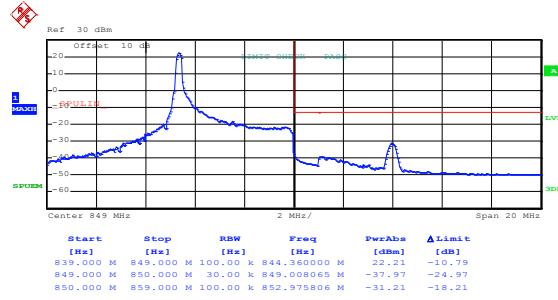
Highest channel

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



Date: 20.SEP.2019 09:59:33

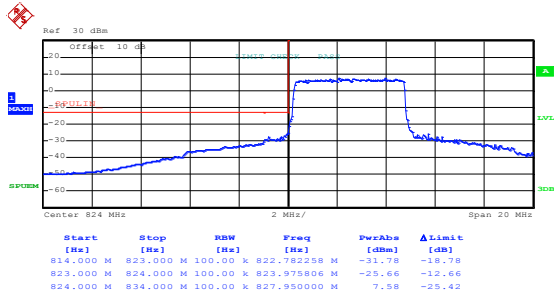
Lowest channel



Date: 20.SEP.2019 10:00:43

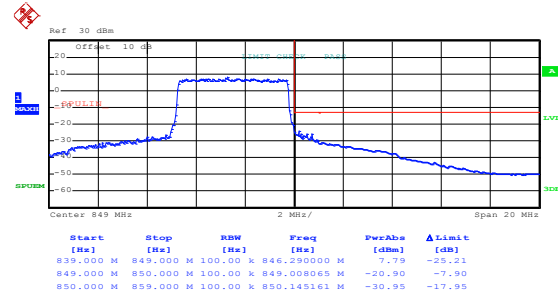
Highest channel

## 16QAM & RB Size 25



Date: 20.SEP.2019 09:59:57

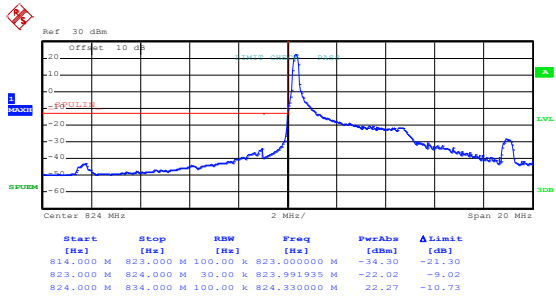
Lowest channel



Date: 20.SEP.2019 10:00:16

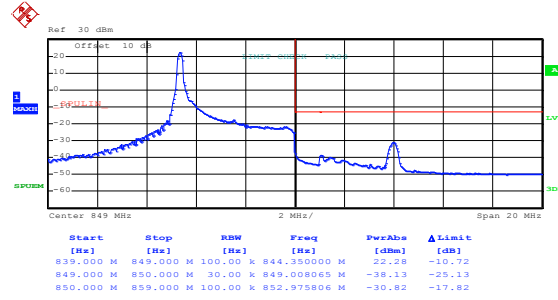
Highest channel

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



Date: 20.SEP.2019 09:59:26

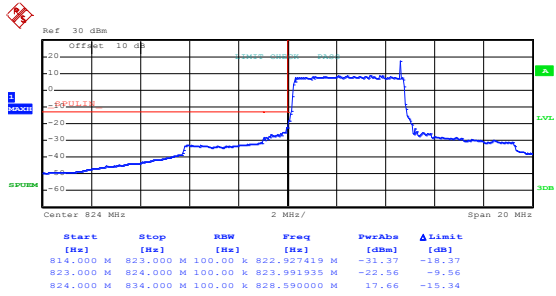
Lowest channel



Date: 20.SEP.2019 10:00:31

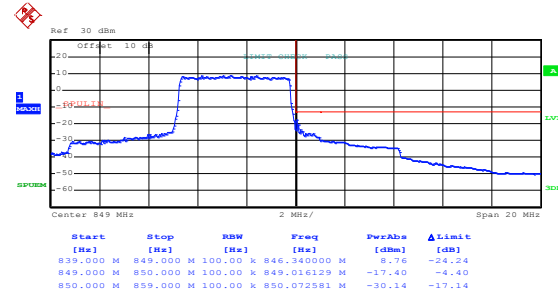
Highest channel

## QPSK & RB Size 25



Date: 20.SEP.2019 09:59:48

Lowest channel

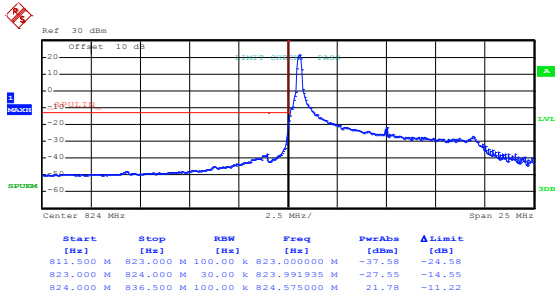


Date: 20.SEP.2019 10:00:11

Highest channel

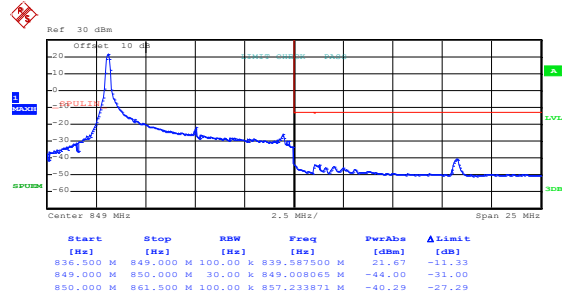


## LTE Band 5, BW: 10MHz 16QAM & RB Size 1



Date: 20.SEP.2019 10:02:48

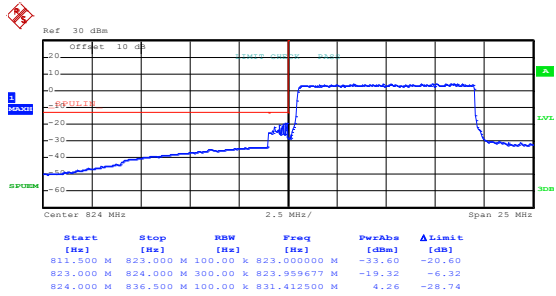
Lowest channel



Date: 20.SEP.2019 10:01:26

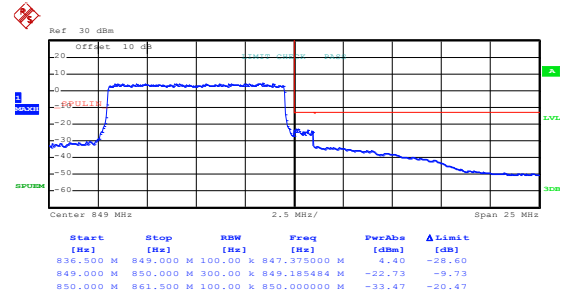
Highest channel

## 16QAM & RB Size 50



Date: 20.SEP.2019 10:02:27

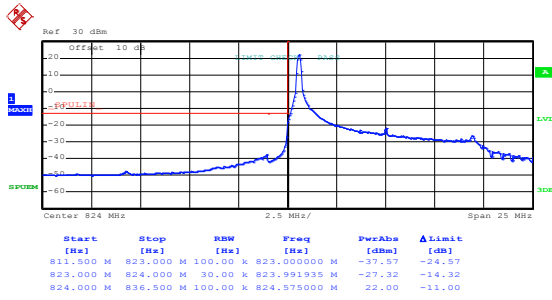
Lowest channel



Date: 20.SEP.2019 10:01:54

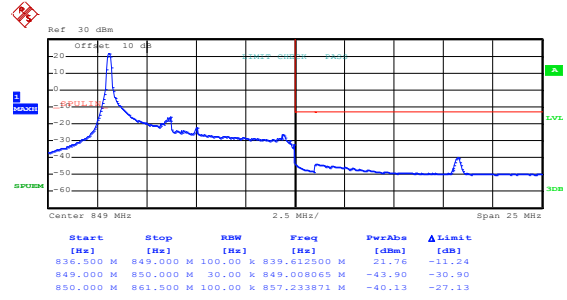
Highest channel

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



Date: 20.SEP.2019 10:02:42

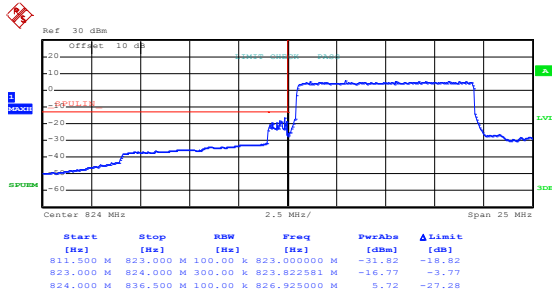
Lowest channel



Date: 20.SEP.2019 10:01:21

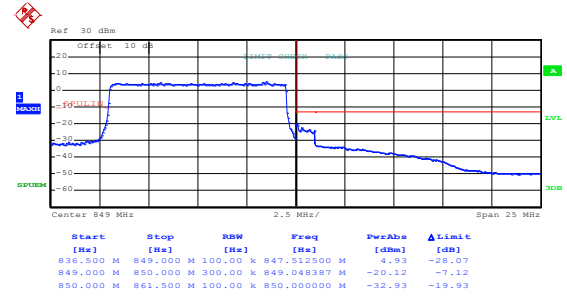
Highest channel

## QPSK & RB Size 50



Date: 20.SEP.2019 10:02:18

Lowest channel

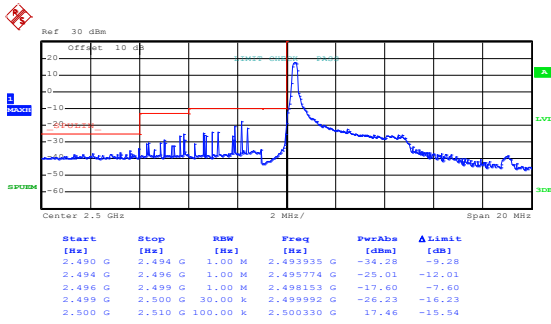


Date: 20.SEP.2019 10:01:49

Highest channel

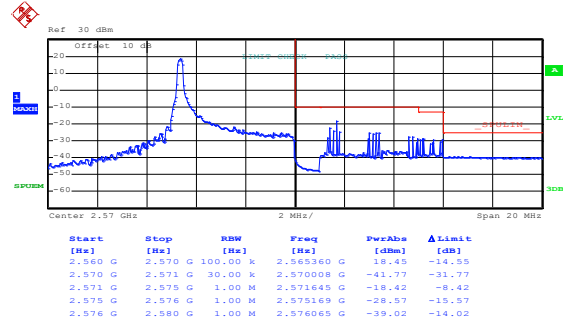
LTE Band 7 part:

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



Date: 14.OCT.2019 14:34:20

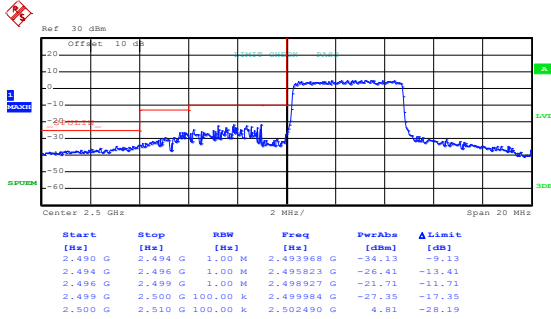
Lowest channel



Date: 14.OCT.2019 14:36:16

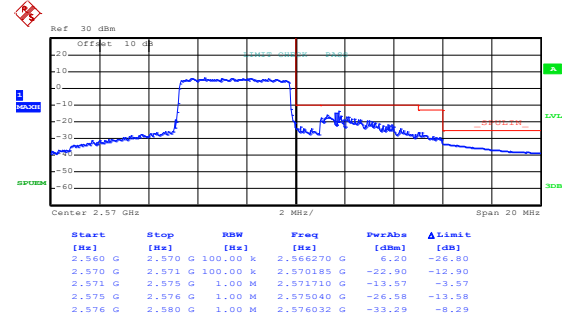
Highest channel

16QAM & RB Size 25



Date: 14.OCT.2019 14:34:50

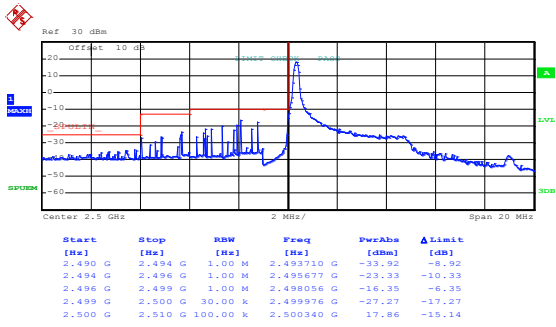
Lowest channel



Date: 14.OCT.2019 14:35:56

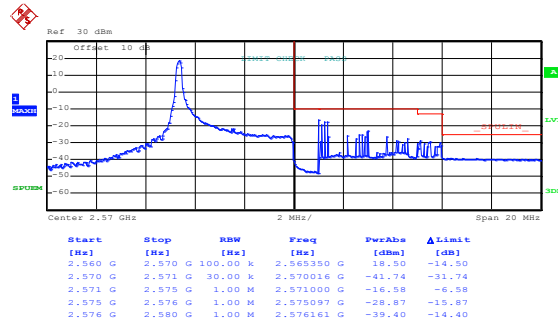
Highest channel

## LTE Band 7, BW: 5MHz QPSK & RB Size 1



Date: 14.OCT.2019 14:34:08

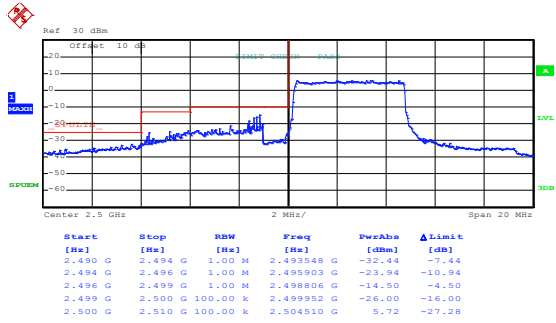
Lowest channel



Date: 14.OCT.2019 14:36:10

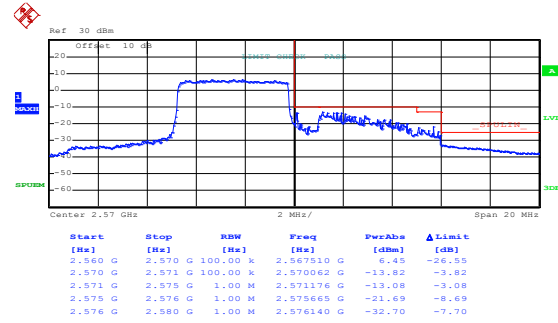
Highest channel

## QPSK & RB Size 25



Date: 14.OCT.2019 14:34:36

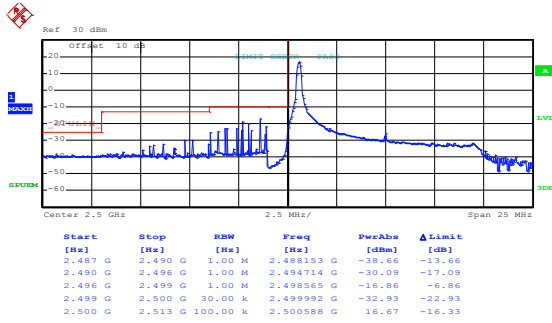
Lowest channel



Date: 14.OCT.2019 14:35:33

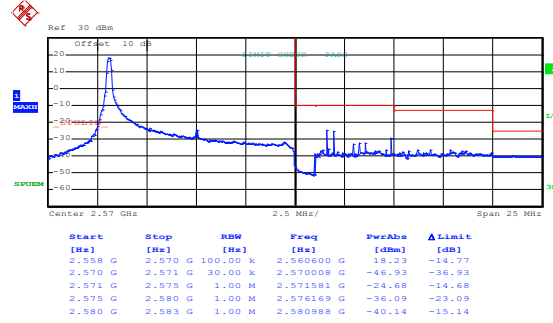
Highest channel

## LTE Band 7, BW: 10MHz 16QAM & RB Size 1



Date: 14.OCT.2019 14:43:12

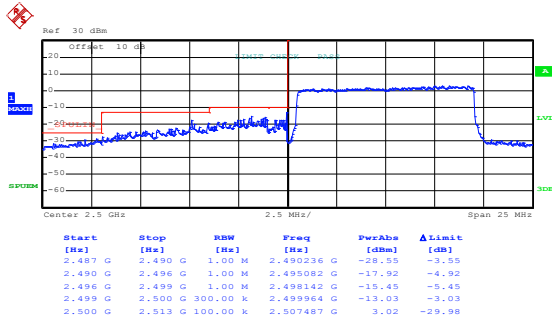
Lowest channel



Date: 14.OCT.2019 14:43:47

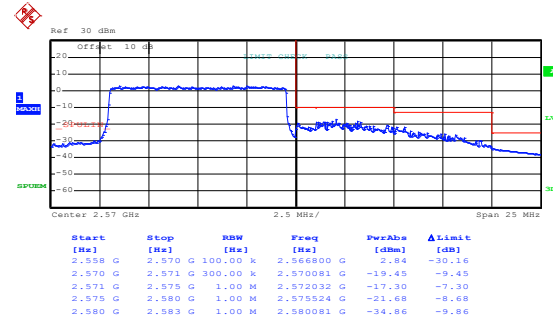
Highest channel

## 16QAM & RB Size 50



Date: 14.OCT.2019 14:42:35

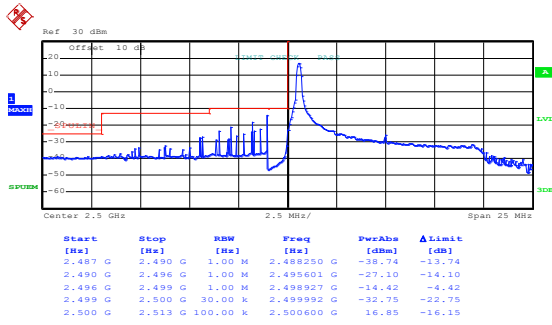
Lowest channel



Date: 14.OCT.2019 14:44:10

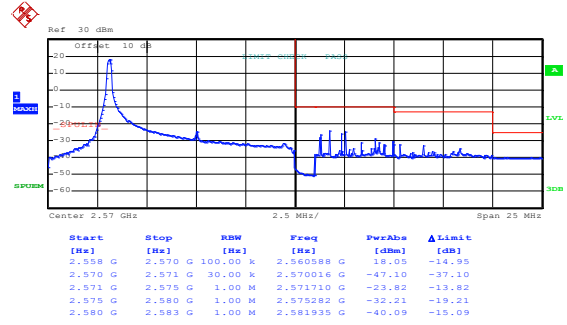
Highest channel

## LTE Band 7, BW: 10MHz QPSK & RB Size 1



Date: 14.OCT.2019 14:43:03

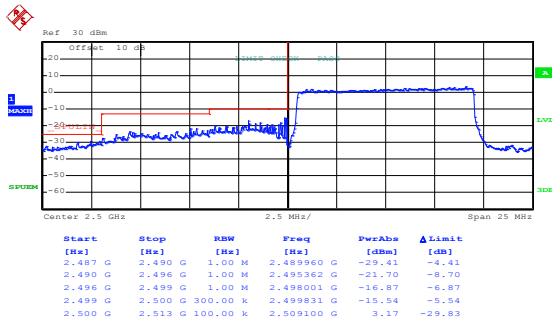
Lowest channel



Date: 14.OCT.2019 14:43:41

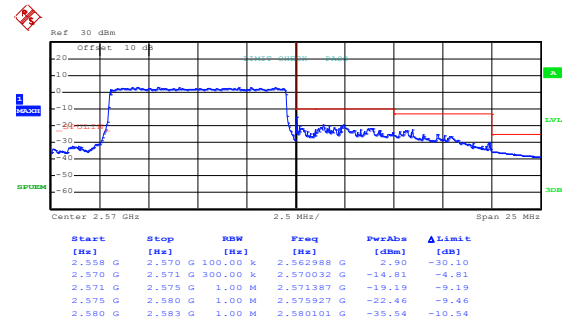
Highest channel

## QPSK & RB Size 50



Date: 14.OCT.2019 14:42:22

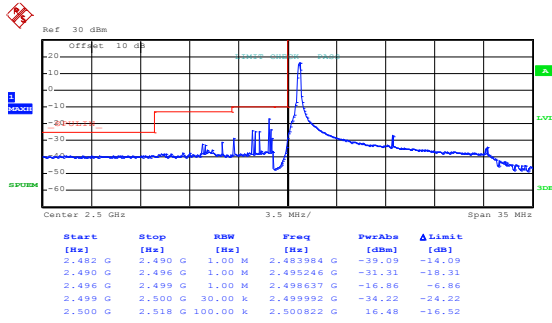
Lowest channel



Date: 14.OCT.2019 14:44:01

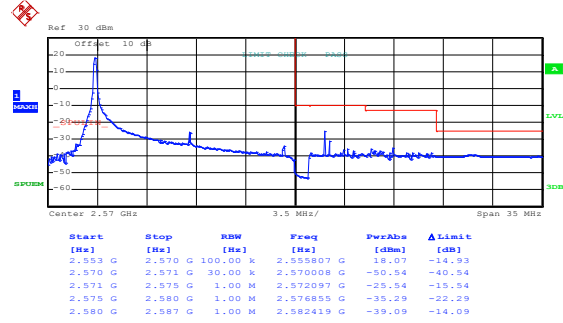
Highest channel

## LTE Band 7, BW: 15MHz 16QAM & RB Size 1



Date: 14.OCT.2019 14:45:54

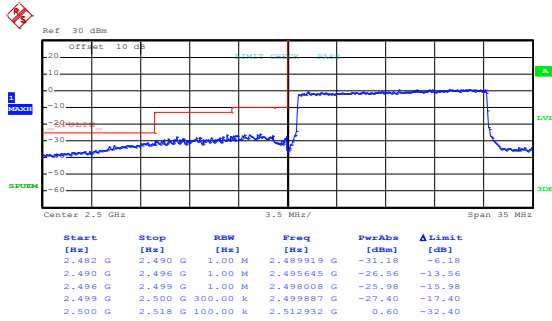
Lowest channel



Date: 14.OCT.2019 14:45:24

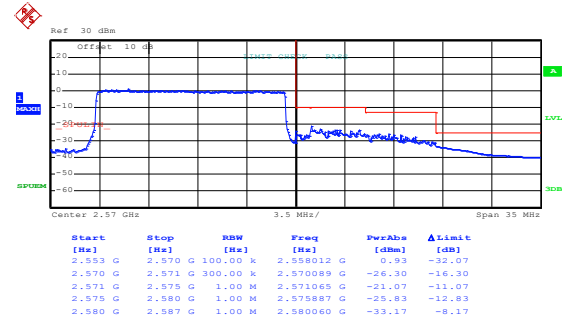
Highest channel

## 16QAM & RB Size 75



Date: 14.OCT.2019 14:46:14

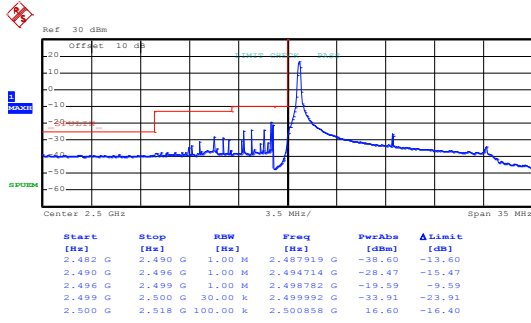
Lowest channel



Date: 14.OCT.2019 14:45:05

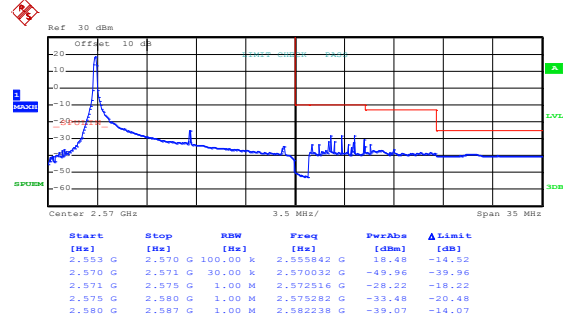
Highest channel

## LTE Band 7, BW: 15MHz QPSK & RB Size 1



Date: 14.OCT.2019 14:45:48

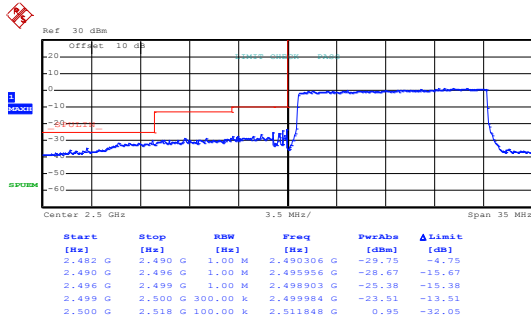
Lowest channel



Date: 14.OCT.2019 14:45:20

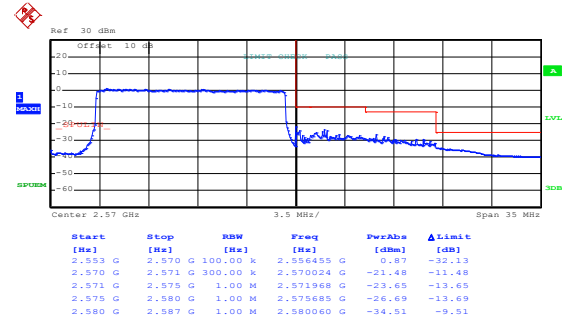
Highest channel

## QPSK & RB Size 75



Date: 14.OCT.2019 14:46:08

Lowest channel

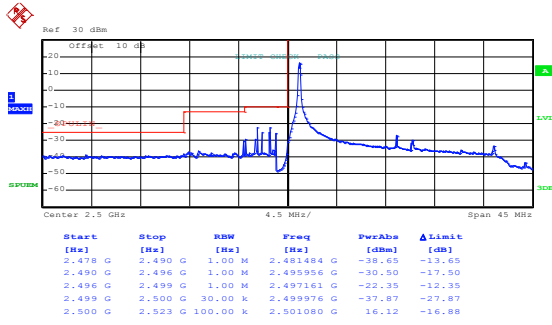


Date: 14.OCT.2019 14:44:59

Highest channel

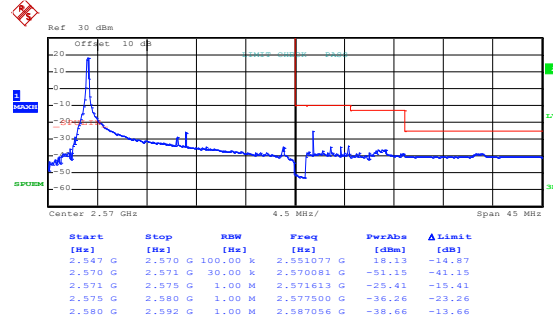


## LTE Band 7, BW: 20MHz 16QAM & RB Size 1



Date: 14.OCT.2019 14:47:11

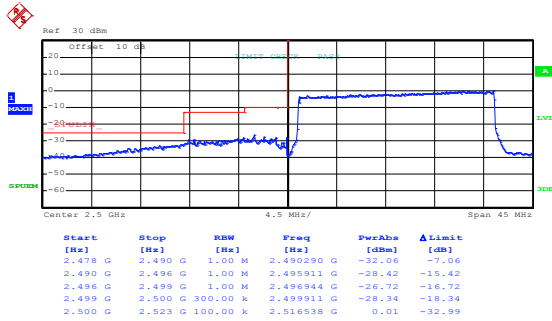
Lowest channel



Date: 14.OCT.2019 14:47:27

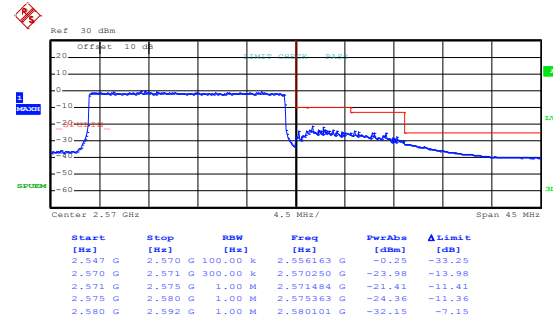
Highest channel

## 16QAM & RB Size 100



Date: 14.OCT.2019 14:46:53

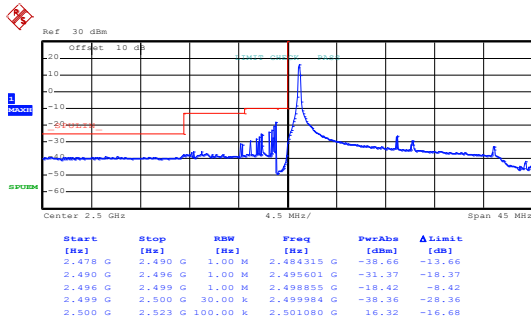
Lowest channel



Date: 14.OCT.2019 14:47:51

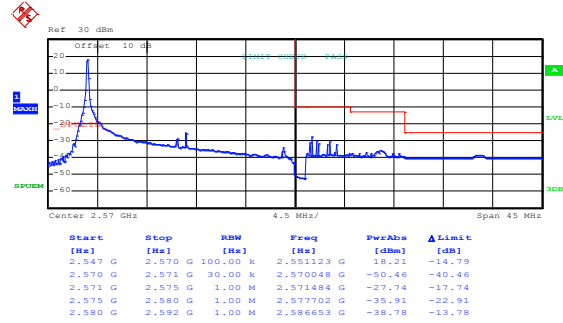
Highest channel

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



Date: 14.OCT.2019 14:47:06

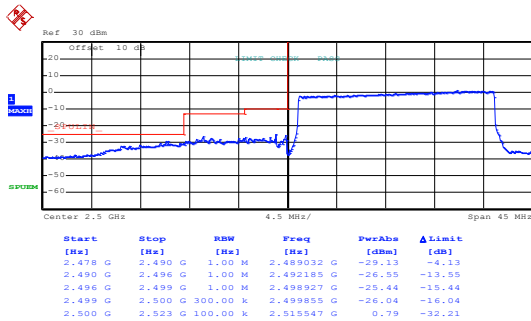
Lowest channel



Date: 14.OCT.2019 14:47:23

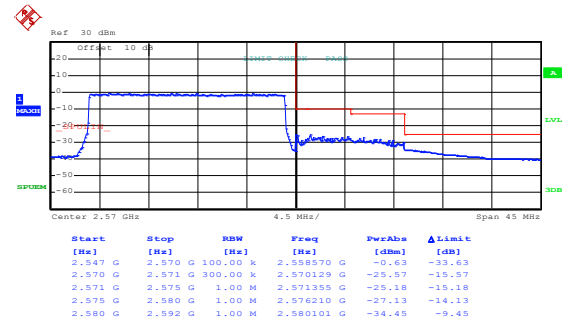
Highest channel

## QPSK & RB Size 100



Date: 14.OCT.2019 14:46:47

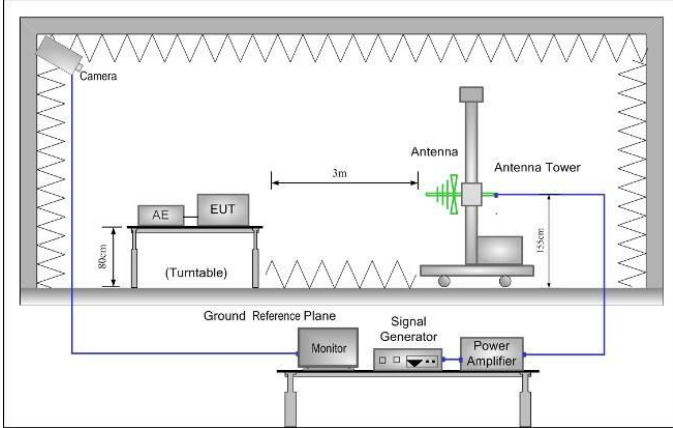
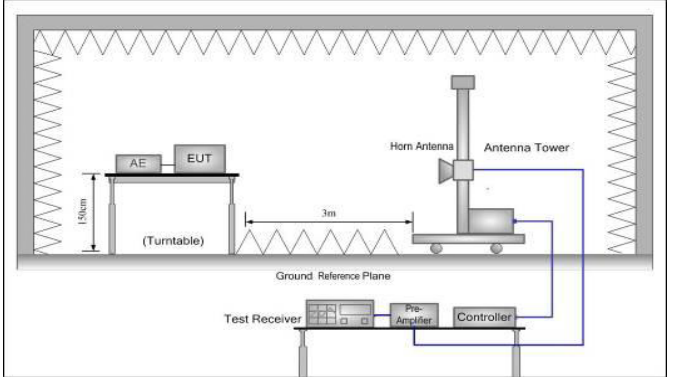
Lowest channel



Date: 14.OCT.2019 14:47:44

Highest channel

## 6.5 Field strength of spurious radiation measurement

<p>Test Requirement:</p>	<p>Part 22.917(b), Part 24.238 (a), Part 27.53(g), Part 27.53(m), Part 27.53(h)</p>
<p>Limit:</p>	<p>LTE Band 4 &amp; 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 <math>43 + 10 \log_{10}(P)</math> dB (-13 dBm).          LTE Band 7:          For mobile digital stations, the attenuation factor shall be not less than <math>40 + 10 \log (P)</math> dB on all frequencies between the channel edge and 5 megahertz from the channel edge, <math>43 + 10 \log (P)</math> dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and <math>55 + 10 \log (P)</math> 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 <math>43 + 10 \log (P)</math> dB on all frequencies between 2490.5 MHz and 2496 MHz and <math>55 + 10 \log (P)</math> dB at or below 2490.5 MHz.</p>
<p>Test setup:</p>	<p>Below 1GHz</p>  <p>Above 1GHz</p> 
<p>Test Procedure:</p>	<ol style="list-style-type: none"> <li>1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li> <li>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.</li> <li>3. The frequency range up to tenth harmonic was investigated for each</li> </ol>

	<p>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.</p> <p>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.</p> $\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 5.10 for details
Test mode:	Refer to section 5.3 for details.
Test results:	Passed

**Measurement Data:**

**LTE Band 4 part:**

LTE Band 4, WB: 1.4MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3421.40	Vertical	-50.65	-13.00	Pass
5132.10	V	-40.20		
6842.80	V	-39.55		
3421.40	Horizontal	-49.27		
5132.10	H	-41.69		
6842.80	H	-38.21		
<b>Middle Channel</b>				
3465.00	Vertical	-49.63	-13.00	Pass
5197.50	V	-39.31		
6930.00	V	-40.25		
3465.00	Horizontal	-48.52		
5197.50	H	-42.52		
6930.00	H	-39.79		
<b>Highest Channel</b>				
3508.60	Vertical	-49.63	-13.00	Pass
5262.90	V	-38.75		
7017.20	V	-38.51		
3508.60	Horizontal	-48.22		
5262.90	H	-41.79		
7017.20	H	-39.48		
<p>Note:</p> <ol style="list-style-type: none"> <li>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</li> <li>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</li> </ol>				

LTE Band 4, WB: 3MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3423.00	Vertical	-46.65	-13.00	Pass
5134.50	V	-38.25		
6846.00	V	-37.45		
3423.00	Horizontal	-45.52		
5134.50	H	-41.79		
6846.00	H	-36.69		
<b>Middle Channel</b>				
3465.00	Vertical	-46.58	-13.00	Pass
5197.50	V	-39.76		
6930.00	V	-34.15		
3465.00	Horizontal	-47.56		
5197.50	H	-42.59		
6930.00	H	-39.79		
<b>Highest Channel</b>				
3507.00	Vertical	-46.52	-13.00	Pass
5260.50	V	-39.15		
7014.00	V	-39.47		
3507.00	Horizontal	-46.69		
5260.50	H	-42.58		
7014.00	H	-39.72		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 4, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3425.00	Vertical	-49.63	-13.00	Pass
5137.50	V	-39.56		
6850.00	V	-38.52		
3425.00	Horizontal	-48.51		
5137.50	H	-42.56		
6850.00	H	-39.77		
<b>Middle Channel</b>				
3465.00	Vertical	-48.52	-13.00	Pass
5197.50	V	-40.25		
6930.00	V	-39.81		
3465.00	Horizontal	-47.55		
5197.50	H	-41.72		
6930.00	H	-38.56		
<b>Highest Channel</b>				
3505.00	Vertical	-48.56	-13.00	Pass
5257.50	V	-39.63		
7010.00	V	-37.15		
3505.00	Horizontal	-47.96		
5257.50	H	-42.25		
7010.00	H	-39.15		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 4, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3430.00	Vertical	-47.63	-13.00	Pass
5145.00	V	-39.63		
6860.00	V	-38.52		
3430.00	Horizontal	-46.63		
5145.00	H	-42.51		
6860.00	H	-37.46		
<b>Middle Channel</b>				
3465.00	Vertical	-47.56	-13.00	Pass
5197.50	V	-40.26		
6930.00	V	-36.63		
3465.00	Horizontal	-48.51		
5197.50	H	-41.72		
6930.00	H	-38.47		
<b>Highest Channel</b>				
3500.00	Vertical	-47.63	-13.00	Pass
5250.00	V	-40.25		
7000.00	V	-39.61		
3500.00	Horizontal	-45.52		
5250.00	H	-41.77		
7000.00	H	-39.48		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 4, WB: 15MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3435.00	Vertical	-48.52	-13.00	Pass
5152.50	V	-40.23		
6870.00	V	-39.65		
3435.00	Horizontal	-47.15		
5152.50	H	-43.25		
6870.00	H	-39.78		
<b>Middle Channel</b>				
3465.00	Vertical	-47.25	-13.00	Pass
5197.50	V	-39.36		
6930.00	V	-40.12		
3465.00	Horizontal	-46.63		
5197.50	H	-41.77		
6930.00	H	-39.58		
<b>Highest Channel</b>				
3495.00	Vertical	-47.63	-13.00	Pass
5242.50	V	-39.56		
6990.00	V	-38.52		
3495.00	Horizontal	-48.51		
5242.50	H	-42.56		
6990.00	H	-39.77		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				



LTE Band 4, WB: 20MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3440.00	Vertical	-47.63	-13.00	Pass
5160.00	V	-39.65		
6880.00	V	-40.52		
3440.00	Horizontal	-46.61		
5160.00	H	-42.75		
6880.00	H	-39.77		
<b>Middle Channel</b>				
3465.00	Vertical	-46.63	-13.00	Pass
5197.50	V	-40.25		
6930.00	V	-41.32		
3465.00	Horizontal	-45.52		
5197.50	H	-42.69		
6930.00	H	-38.89		
<b>Highest Channel</b>				
3490.00	Vertical	-47.25	-13.00	Pass
5235.00	V	-40.23		
6980.00	V	-39.65		
3490.00	Horizontal	-47.19		
5235.00	H	-42.25		
6980.00	H	-38.78		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

**LTE Band 5 part:**

LTE Band 5, WB: 1.4MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1649.40	Vertical	-53.76	-13.00	Pass
2474.10	V	-46.79		
3298.80	V	-39.06		
1649.40	Horizontal	-54.60		
2474.10	H	-42.14		
3298.80	H	-41.09		
<b>Middle Channel</b>				
1673.00	Vertical	-52.23	-13.00	Pass
2509.50	V	-45.63		
3346.00	V	-39.31		
1673.00	Horizontal	-54.23		
2509.50	H	-42.73		
3346.00	H	-41.78		
<b>Highest Channel</b>				
1696.60	Vertical	-52.23	-13.00	Pass
2544.90	V	-45.61		
3393.20	V	-40.32		
1696.60	Horizontal	-53.63		
2544.90	H	-41.75		
3393.20	H	-42.79		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 5, WB: 3MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1651.00	Vertical	-51.25	-13.00	Pass
2476.50	V	-45.63		
3302.00	V	-39.58		
1651.00	Horizontal	-51.42		
2476.50	H	-42.63		
3302.00	H	-43.79		
<b>Middle Channel</b>				
1673.00	Vertical	-51.25	-13.00	Pass
2509.50	V	-45.63		
3346.00	V	-39.61		
1673.00	Horizontal	-52.72		
2509.50	H	-41.77		
3346.00	H	-43.56		
<b>Highest Channel</b>				
1695.00	Vertical	-51.25	-13.00	Pass
2542.50	V	-46.32		
3390.00	V	-39.76		
1695.00	Horizontal	-52.25		
2542.50	H	-42.15		
3390.00	H	-41.79		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 5, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1653.00	Vertical	-54.26	-13.00	Pass
2479.50	V	-45.36		
3306.00	V	-40.79		
1653.00	Horizontal	-53.36		
2479.50	H	-41.79		
3306.00	H	-42.71		
<b>Middle Channel</b>				
1673.00	Vertical	-51.23	-13.00	Pass
2509.50	V	-45.21		
3346.00	V	-40.56		
1673.00	Horizontal	-54.73		
2509.50	H	-41.76		
3346.00	H	-42.58		
<b>Highest Channel</b>				
1693.00	Vertical	-51.47	-13.00	Pass
2539.50	V	-46.63		
3386.00	V	-40.59		
1693.00	Horizontal	-52.25		
2539.50	H	-42.12		
3386.00	H	-43.25		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 5, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
1658.00	Vertical	-53.23	-13.00	Pass
2487.00	V	-46.63		
3316.00	V	-39.61		
1658.00	Horizontal	-52.23		
2487.00	H	-41.72		
3316.00	H	-41.79		
<b>Middle Channel</b>				
1673.00	Vertical	-52.23	-13.00	Pass
2509.50	V	-46.63		
3346.00	V	-40.69		
1673.00	Horizontal	-53.25		
2509.50	H	-41.76		
3346.00	H	-42.77		
<b>Highest Channel</b>				
1688.00	Vertical	-52.25	-13.00	Pass
2532.00	V	-46.32		
3376.00	V	-39.18		
1688.00	Horizontal	-53.25		
2532.00	H	-41.79		
3376.00	H	-42.53		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

**LTE Band 7 part:**

LTE Band 7, WB: 5MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
5005.00	Vertical	-45.45	-25.00	Pass
7507.50	V	-37.65		
10010.00	V	-33.29		
5005.00	Horizontal	-45.70		
7507.50	H	-38.61		
10010.00	H	-32.64		
<b>Middle Channel</b>				
5070.00	Vertical	-44.23	-25.00	Pass
7605.00	V	-36.63		
10140.00	V	-32.56		
5070.00	Horizontal	-44.79		
7605.00	H	-37.61		
10140.00	H	-31.44		
<b>Highest Channel</b>				
5135.00	Vertical	-46.50	-25.00	Pass
7702.50	V	-38.98		
10270.00	V	-34.56		
5135.00	Horizontal	-46.97		
7702.50	H	-37.15		
10270.00	H	-33.45		
<p>Note:</p> <ol style="list-style-type: none"> <li>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</li> <li>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</li> </ol>				

LTE Band 7, WB: 10MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
5010.00	Vertical	-44.53	-25.00	Pass
7515.00	V	-36.51		
10020.00	V	-32.25		
5010.00	Horizontal	-46.72		
7515.00	H	-34.19		
10020.00	H	-31.74		
<b>Middle Channel</b>				
5070.00	Vertical	-42.32	-25.00	Pass
7605.00	V	-34.25		
10140.00	V	-29.63		
5070.00	Horizontal	-46.32		
7605.00	H	-36.16		
10140.00	H	-35.79		
<b>Highest Channel</b>				
5130.00	Vertical	-42.26	-25.00	Pass
7695.00	V	-33.63		
10260.00	V	-32.54		
5130.00	Horizontal	-44.95		
7695.00	H	-36.15		
10260.00	H	-35.79		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

LTE Band 7, WB: 15MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
5015.00	Vertical	-44.23	-25.00	Pass
7522.50	V	-36.63		
10030.00	V	-34.56		
5015.00	Horizontal	-47.16		
7522.50	H	-37.99		
10030.00	H	-31.57		
<b>Middle Channel</b>				
5070.00	Vertical	-43.25	-25.00	Pass
7605.00	V	-36.65		
10140.00	V	-31.59		
5070.00	Horizontal	-45.52		
7605.00	H	-36.19		
10140.00	H	-32.77		
<b>Highest Channel</b>				
5125.00	Vertical	-45.52	-25.00	Pass
7687.50	V	-37.34		
10250.00	V	-35.62		
5125.00	Horizontal	-45.51		
7687.50	H	-36.89		
10250.00	H	-32.71		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				



LTE Band 7, WB: 20MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
5020.00	Vertical	-45.52	-25.00	Pass
7530.00	V	-36.63		
10040.00	V	-33.21		
5020.00	Horizontal	-45.52		
7530.00	H	-36.65		
10040.00	H	-32.72		
<b>Middle Channel</b>				
5070.00	Vertical	-42.52	-25.00	Pass
7605.00	V	-33.17		
10140.00	V	-30.23		
5070.00	Horizontal	-45.61		
7605.00	H	-35.77		
10140.00	H	-36.25		
<b>Highest Channel</b>				
5120.00	Vertical	-43.23	-25.00	Pass
7680.00	V	-34.56		
10240.00	V	-32.26		
5120.00	Horizontal	-44.51		
7680.00	H	-36.67		
10240.00	H	-35.47		
<p><i>Note:</i></p> <ol style="list-style-type: none"> <li><i>The emission levels of below 1 GHz are 20 dB lower than the limit so not show in this report.</i></li> <li><i>For above 1 GHz, all test modes were performed, and just the worst case shown in the report.</i></li> </ol>				

## 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:	±2.5ppm
Test setup:	
Test procedure:	<ol style="list-style-type: none"> <li>1. The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.</li> <li>3. The EUT was placed inside the temperature chamber.</li> <li>4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency.</li> <li>5. Turn EUT off and set the chamber temperature to -30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached</li> </ol>
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 4 part:**

Reference Frequency: LTE Band 4 (10MHz) Middle channel=20175 channel=1732.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
<b>QPSK</b>					
3.70	-30	175	0.101010	±2.5	Pass
	-20	163	0.094084		
	-10	147	0.084848		
	0	125	0.072150		
	10	149	0.086003		
	20	130	0.075036		
	30	104	0.060029		
	40	158	0.091198		
	50	144	0.083117		
<b>16QAM</b>					
3.70	-30	145	0.083694	±2.5	Pass
	-20	126	0.072727		
	-10	135	0.077922		
	0	140	0.080808		
	10	120	0.069264		
	20	108	0.062338		
	30	131	0.075613		
	40	118	0.068110		
	50	129	0.074459		
<i>Note: Only the worst case shown in the report.</i>					

**LTE Band 5 part:**

Reference Frequency: LTE Band 5 (10MHz) Middle channel=20525 channel=836.50MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
<b>QPSK</b>					
3.70	-30	170	0.203228	±2.5	Pass
	-20	136	0.162582		
	-10	145	0.173341		
	0	152	0.181710		
	10	108	0.129109		
	20	116	0.138673		
	30	120	0.143455		
	40	148	0.176928		
	50	119	0.142259		
<b>16QAM</b>					
3.70	-30	194	0.231919	±2.5	Pass
	-20	152	0.181710		
	-10	186	0.222355		
	0	172	0.205619		
	10	170	0.203228		
	20	135	0.161387		
	30	148	0.176928		
	40	186	0.222355		
	50	180	0.215182		

*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 (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
<b>QPSK</b>					
3.70	-30	185	0.072978	±2.5	Pass
	-20	135	0.053254		
	-10	148	0.058383		
	0	140	0.055227		
	10	155	0.061144		
	20	163	0.064300		
	30	106	0.041815		
	40	117	0.046154		
	50	158	0.062327		
<b>16QAM</b>					
3.70	-30	180	0.071006	±2.5	Pass
	-20	163	0.064300		
	-10	154	0.060750		
	0	128	0.050493		
	10	167	0.065878		
	20	146	0.057594		
	30	152	0.059961		
	40	175	0.069034		
	50	143	0.056410		
<i>Note: Only the worst case shown in the report.</i>					

## 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:	±2.5ppm
Test setup:	
Test procedure:	<ol style="list-style-type: none"> <li>1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage.</li> <li>2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.</li> <li>3. Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.</li> </ol>
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 4 part:**

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	87	0.050216	±2.5	Pass
	3.70	45	0.025974		
	3.50	63	0.036364		
16QAM					
25	4.20	95	0.054834	±2.5	Pass
	3.70	27	0.015584		
	3.50	48	0.027706		

*Note: Only the worst case shown in the report.*

**LTE Band 5 part:**

Reference Frequency: LTE Band 5(10MHz) Middle channel=20525 channel=836.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	63	0.075314	±2.5	Pass
	3.70	45	0.053796		
	3.50	58	0.069337		
16QAM					
25	4.20	78	0.093246	±2.5	Pass
	3.70	63	0.075314		
	3.50	49	0.058577		

*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 (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.20	96	0.037870	±2.5	Pass
	3.70	75	0.029586		
	3.50	82	0.032347		
16QAM					
25	4.20	80	0.031558	±2.5	Pass
	3.70	64	0.025247		
	3.50	43	0.016963		

*Note: Only the worst case shown in the report.*