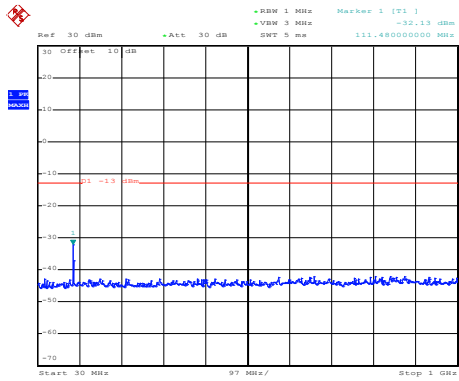
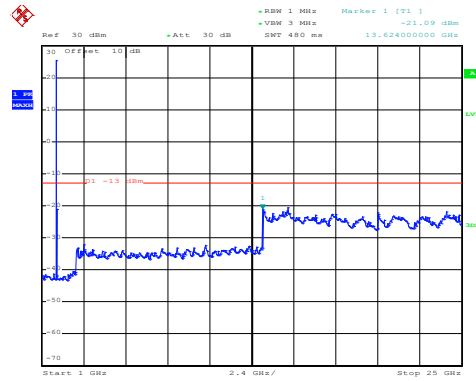


## LTE Band 2: QPSK & RB Size 1 BW: 20MHz Lowest channel



Date: 17.SEP.2019 10:08:01

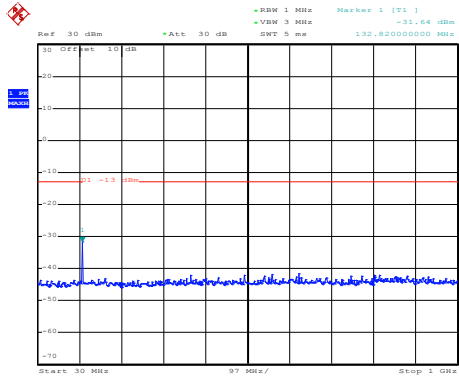
30MHz~1GHz



Date: 17.SEP.2019 10:12:34

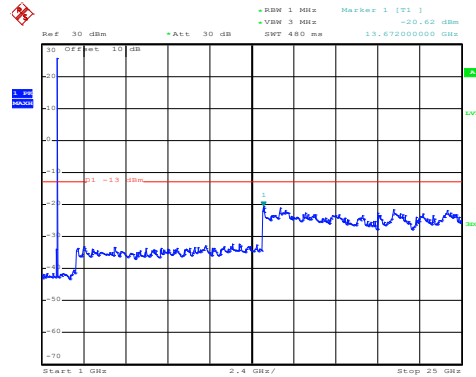
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:08:44

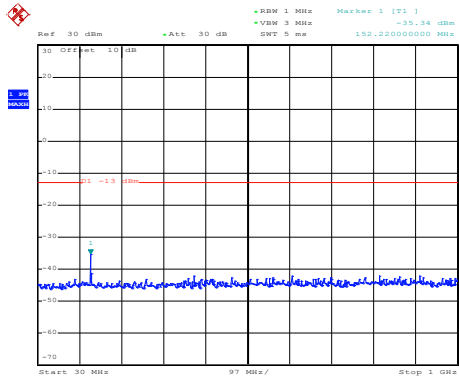
30MHz~1GHz



Date: 17.SEP.2019 10:11:12

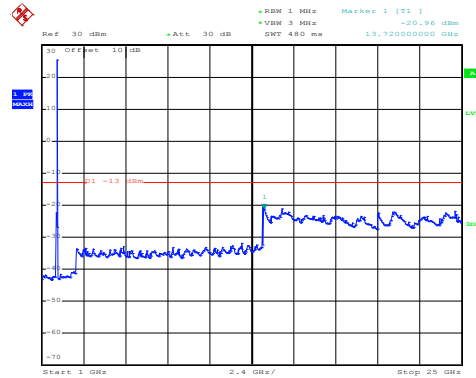
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:09:03

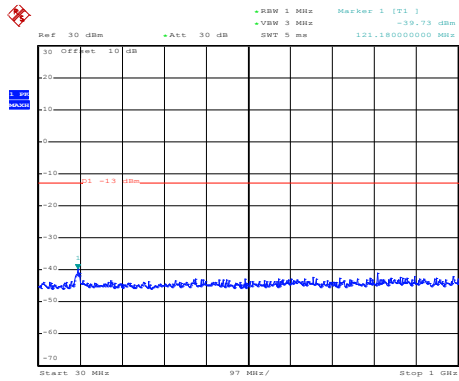
30MHz~1GHz



Date: 17.SEP.2019 10:10:51

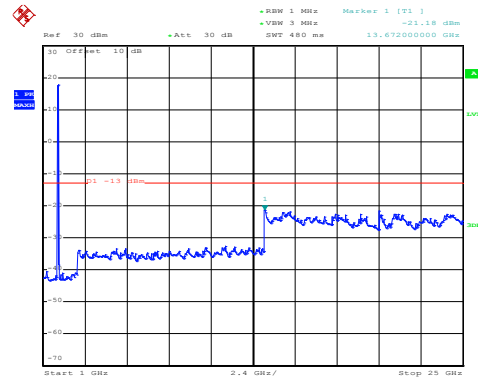
1GHz~25GHz

LTE Band 2: QPSK & RB Size 100  
 BW: 20MHz  
 Lowest channel



Date: 17.SEP.2019 10:08:16

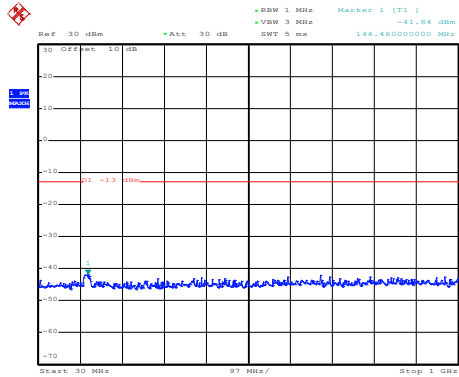
30MHz~1GHz



Date: 17.SEP.2019 10:12:10

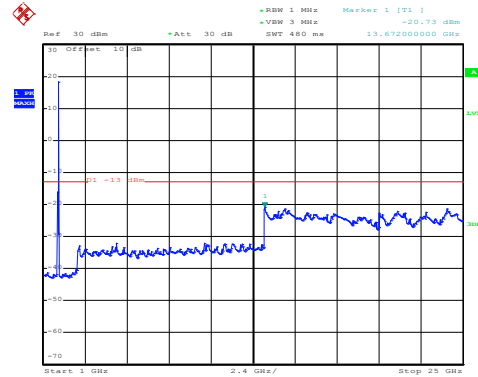
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:08:29

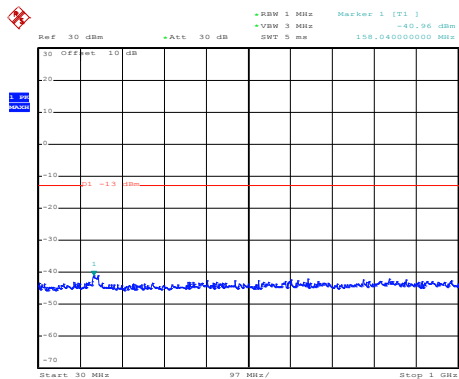
30MHz~1GHz



Date: 17.SEP.2019 10:11:47

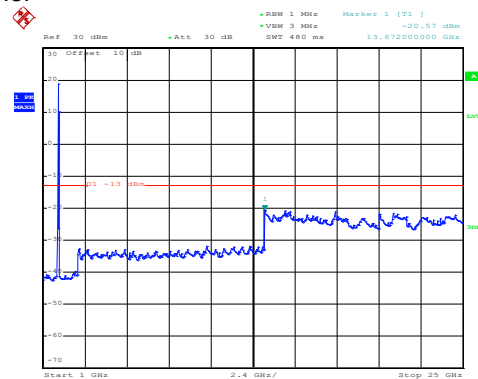
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:09:19

30MHz~1GHz

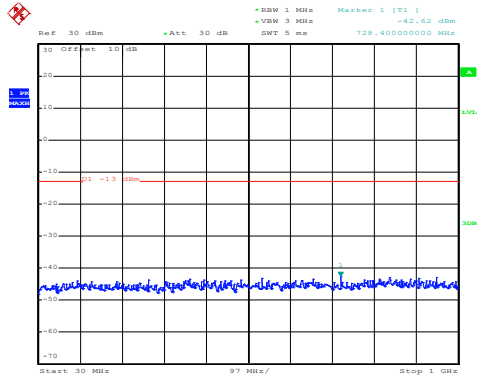


Date: 17.SEP.2019 10:10:26

1GHz~25GHz

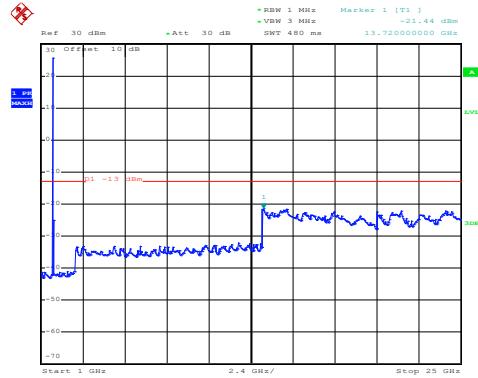
LTE Band 4 part:

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



Date: 17.SEP.2019 11:01:05

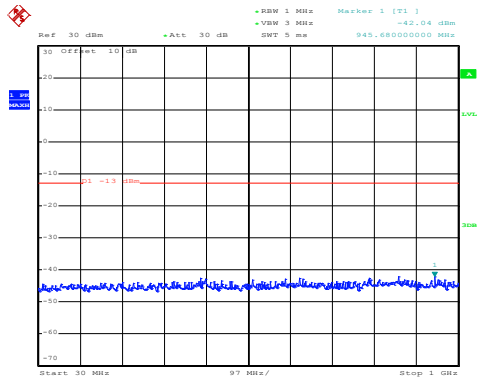
30MHz~1GHz



Date: 17.SEP.2019 10:27:07

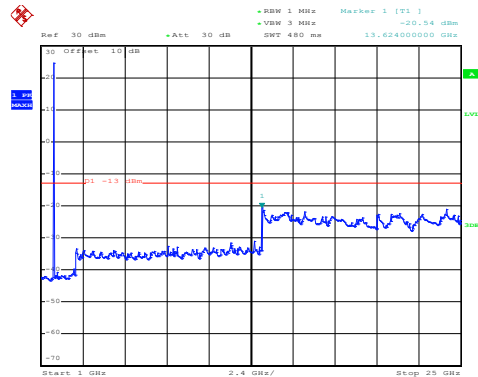
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 11:01:55

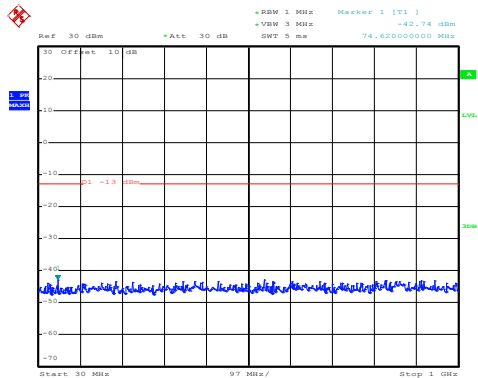
30MHz~1GHz



Date: 17.SEP.2019 10:28:26

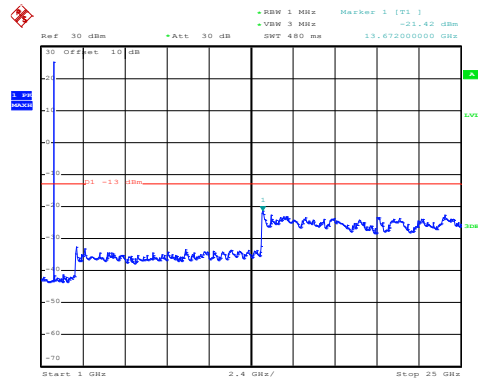
1GHz~25GHz

High channel



Date: 17.SEP.2019 11:02:17

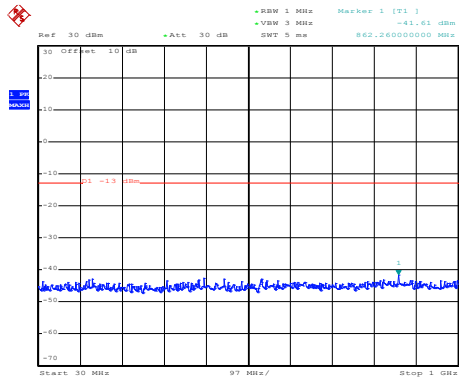
30MHz~1GHz



Date: 17.SEP.2019 10:28:48

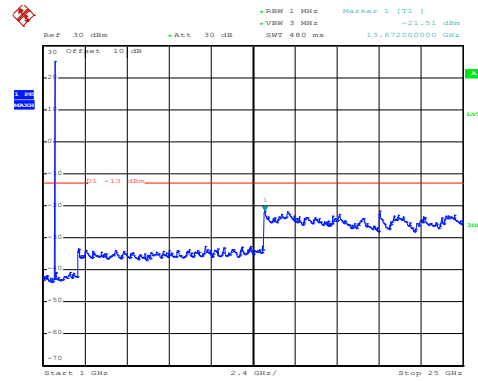
1GHz~25GHz

## LTE Band 4: 16 QAM & RB Size 6 BW: 1.4MHz Lowest channel



Date: 17.SEP.2019 11:01:20

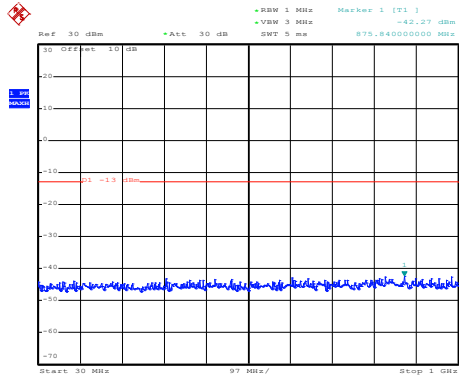
30MHz~1GHz



Date: 17.SEP.2019 10:27:34

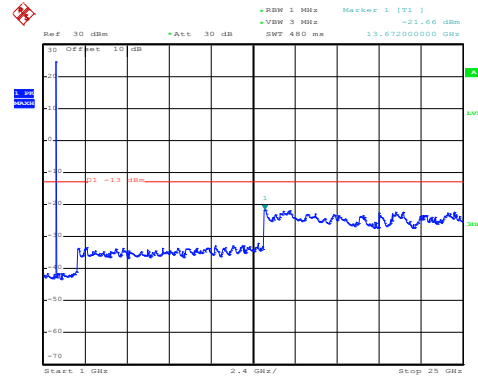
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 11:01:40

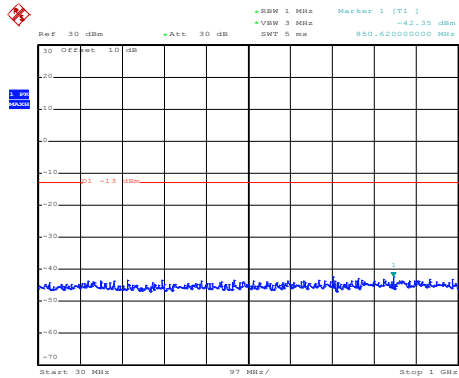
30MHz~1GHz



Date: 17.SEP.2019 10:28:01

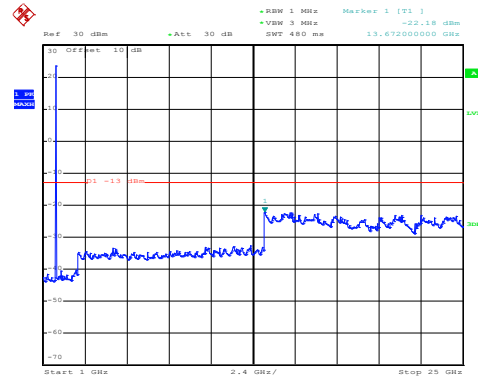
1GHz~25GHz

## High channel



Date: 17.SEP.2019 11:02:32

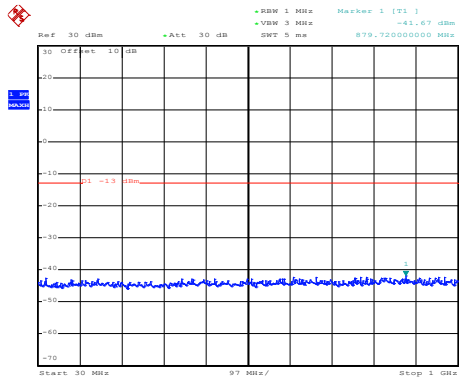
30MHz~1GHz



Date: 17.SEP.2019 10:29:08

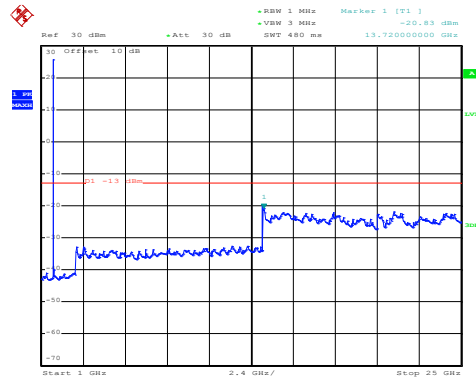
1GHz~25GHz

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



Date: 17.SEP.2019 11:00:59

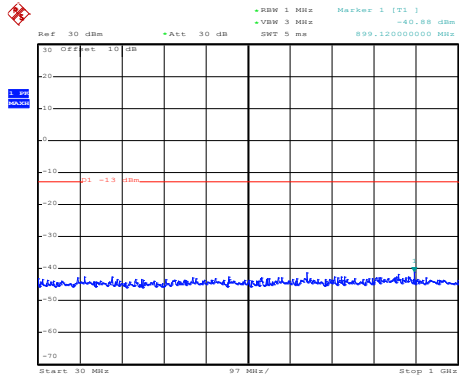
30MHz~1GHz



Date: 17.SEP.2019 10:26:47

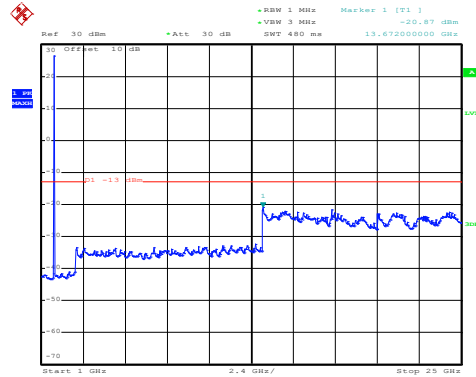
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 11:01:49

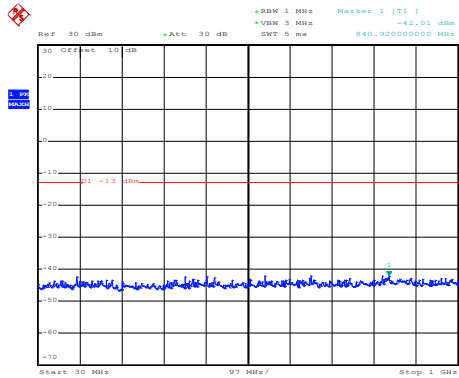
30MHz~1GHz



Date: 17.SEP.2019 10:28:12

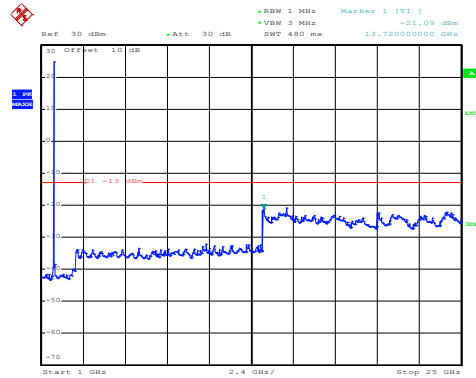
1GHz~25GHz

## High channel



Date: 17.SEP.2019 11:02:11

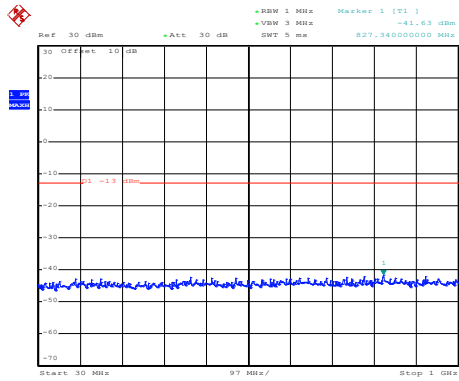
30MHz~1GHz



Date: 17.SEP.2019 10:28:42

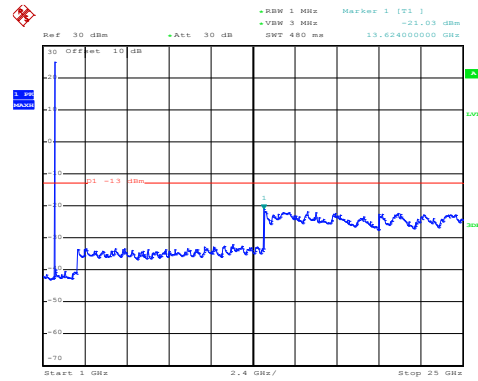
1GHz~25GHz

## LTE Band 4: QPSK & RB Size 6 BW: 1.4MHz Lowest channel



Date: 17.SEP.2019 11:01:14

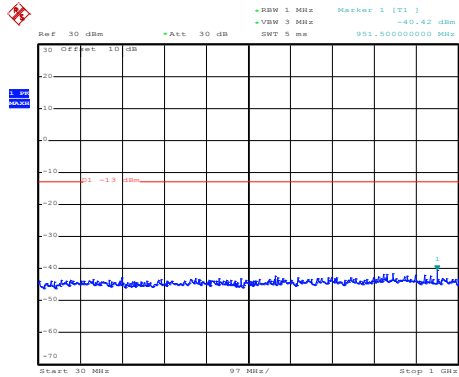
30MHz~1GHz



Date: 17.SEP.2019 10:27:25

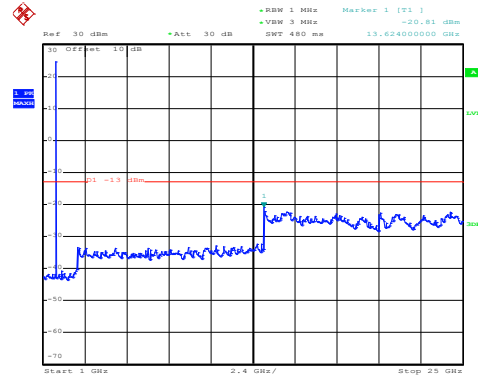
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 11:01:34

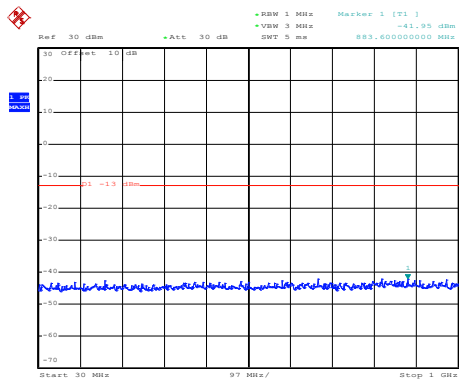
30MHz~1GHz



Date: 17.SEP.2019 10:27:47

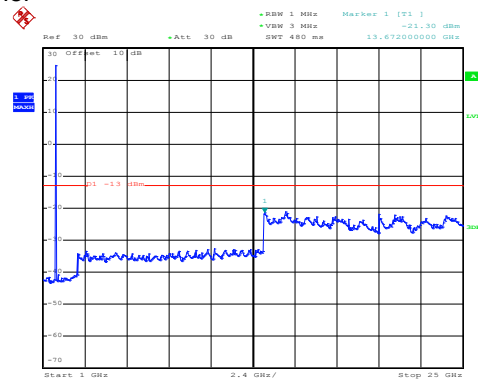
1GHz~25GHz

## High channel



Date: 17.SEP.2019 11:02:26

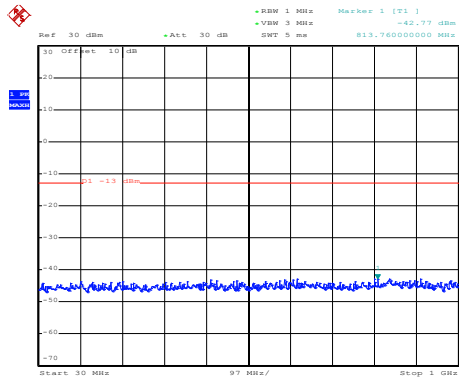
30MHz~1GHz



Date: 17.SEP.2019 10:29:01

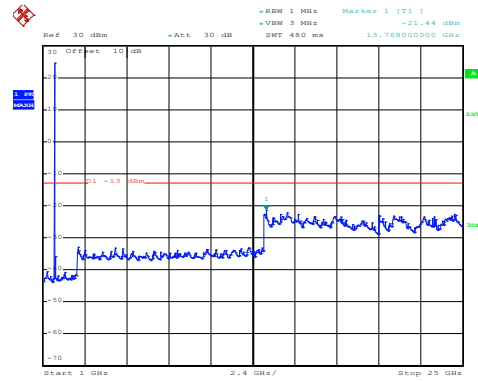
1GHz~25GHz

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



Date: 17.SEP.2019 10:58:31

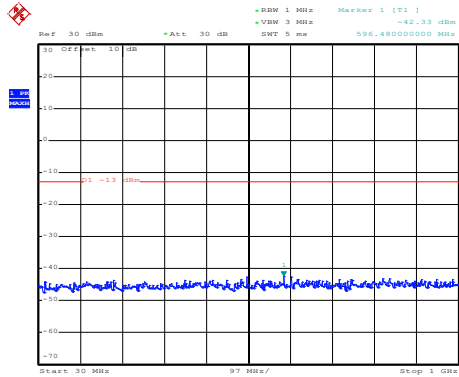
30MHz~1GHz



Date: 17.SEP.2019 10:29:46

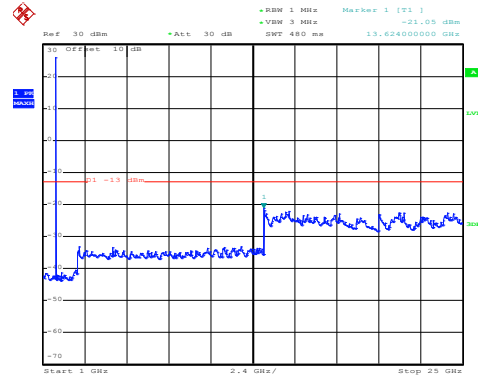
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 11:00:01

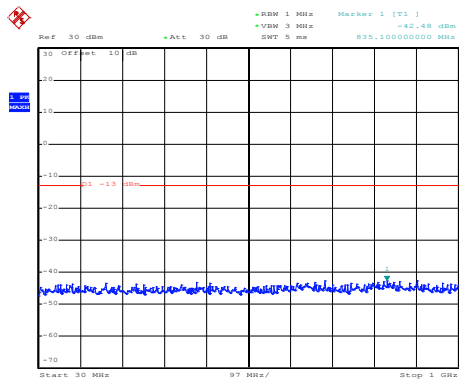
30MHz~1GHz



Date: 17.SEP.2019 10:31:09

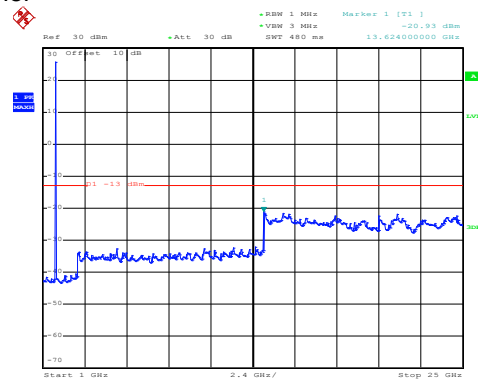
1GHz~25GHz

## High channel



Date: 17.SEP.2019 11:00:19

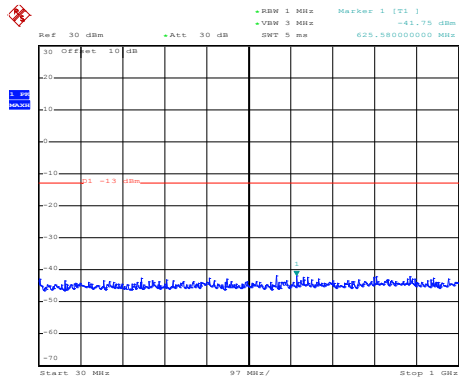
30MHz~1GHz



Date: 17.SEP.2019 10:31:56

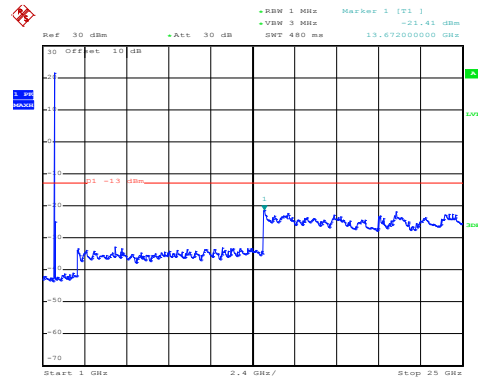
1GHz~25GHz

## LTE Band 4: 16 QAM & RB Size 15 BW: 3MHz Lowest channel



Date: 17.SEP.2019 10:59:20

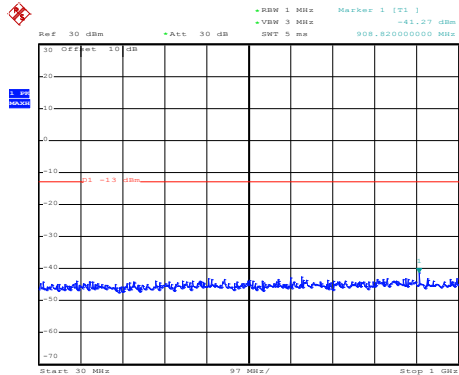
30MHz~1GHz



Date: 17.SEP.2019 10:30:09

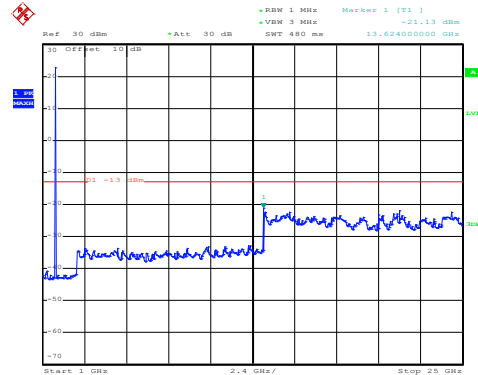
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:59:44

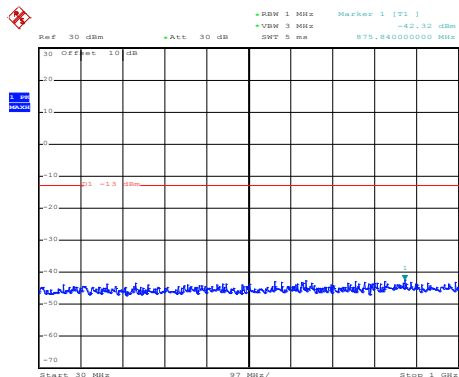
30MHz~1GHz



Date: 17.SEP.2019 10:30:46

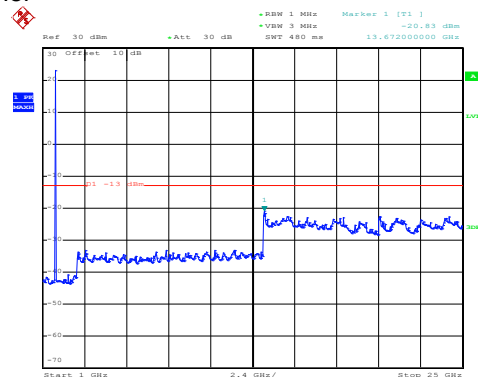
1GHz~25GHz

## High channel



Date: 17.SEP.2019 11:00:34

30MHz~1GHz

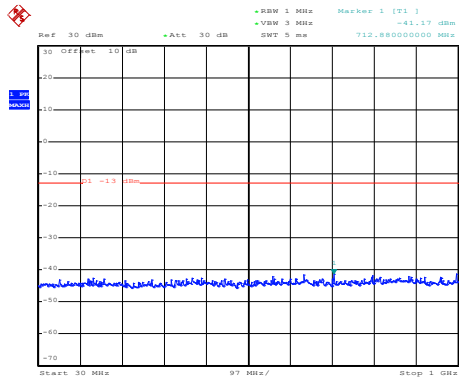


Date: 17.SEP.2019 10:32:14

1GHz~25GHz

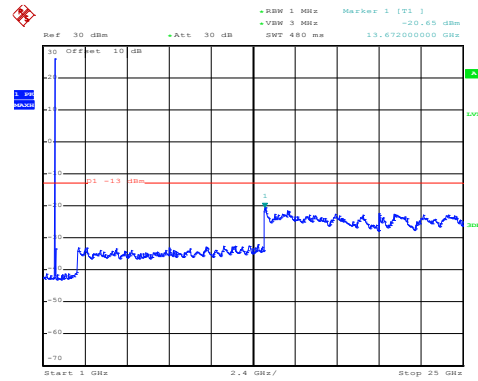


## LTE Band 4: QPSK & RB Size 1 BW: 3MHz Lowest channel



Date: 17.SEP.2019 10:58:25

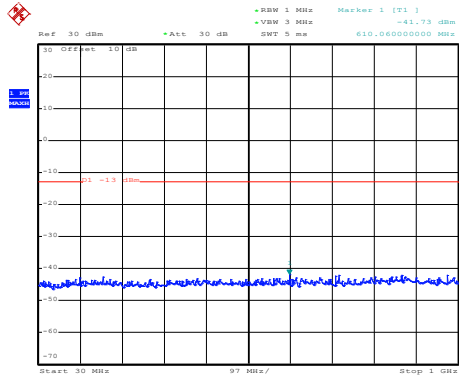
30MHz~1GHz



Date: 17.SEP.2019 10:29:39

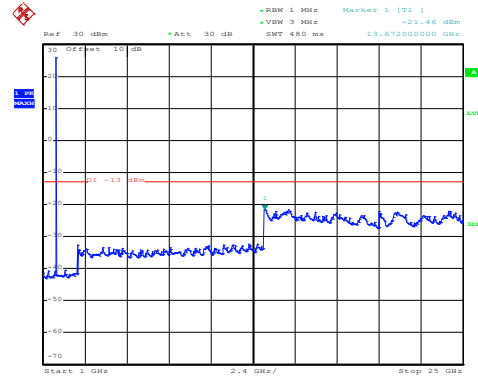
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:59:53

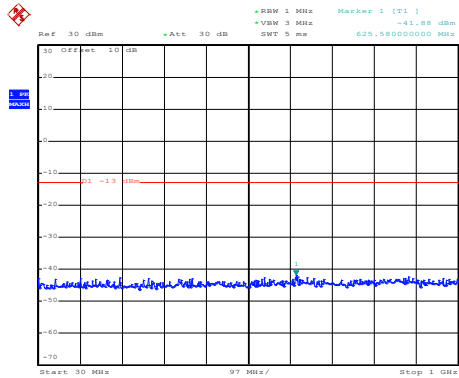
30MHz~1GHz



Date: 17.SEP.2019 10:31:02

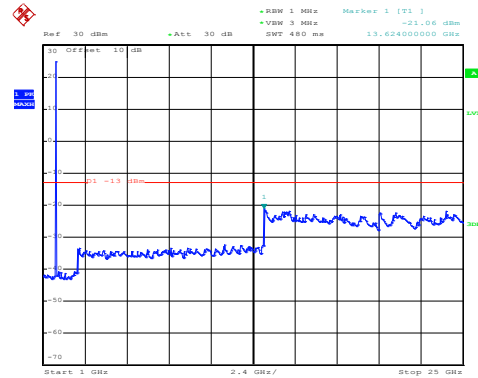
1GHz~25GHz

## High channel



Date: 17.SEP.2019 11:00:13

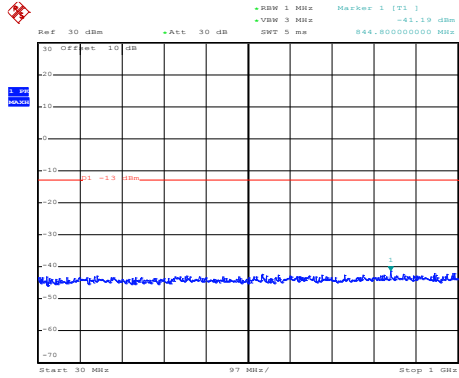
30MHz~1GHz



Date: 17.SEP.2019 10:31:40

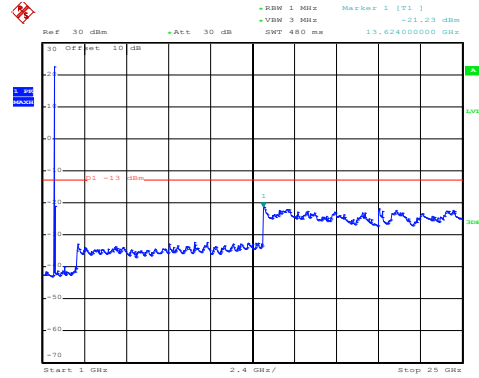
1GHz~25GHz

## LTE Band 4: QPSK & RB Size 15 BW: 3MHz Lowest channel



Date: 17.SEP.2019 10:59:13

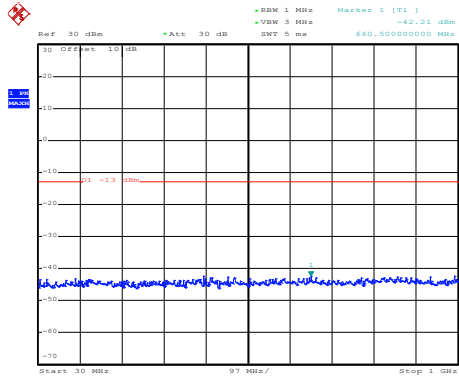
30MHz~1GHz



Date: 17.SEP.2019 10:30:27

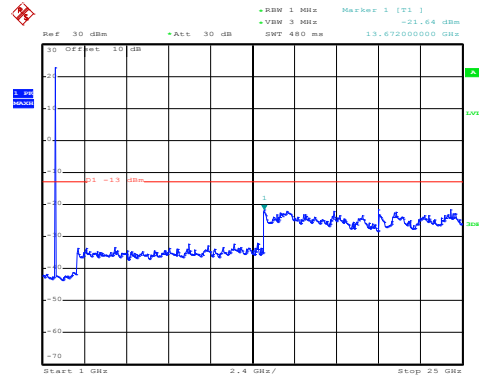
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:59:38

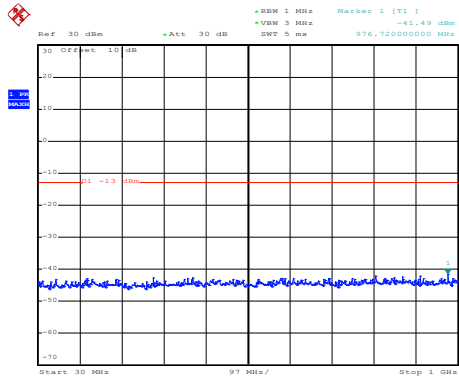
30MHz~1GHz



Date: 17.SEP.2019 10:30:39

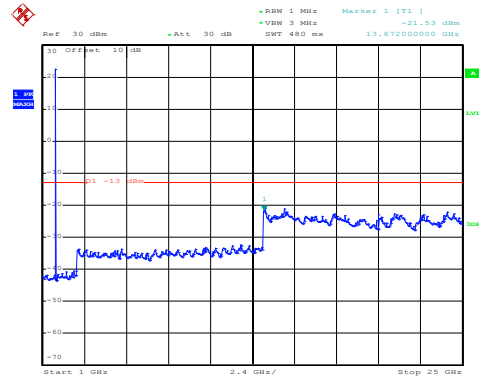
1GHz~25GHz

## High channel



Date: 17.SEP.2019 11:00:28

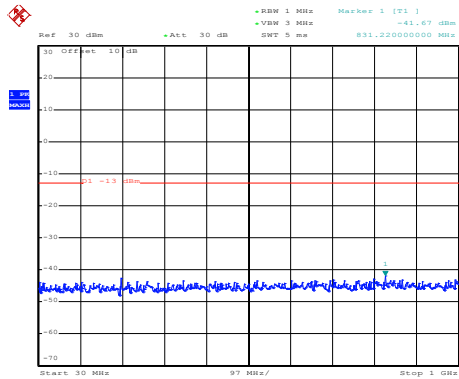
30MHz~1GHz



Date: 17.SEP.2019 10:32:07

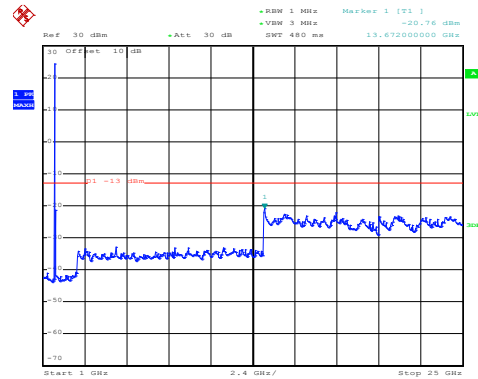
1GHz~25GHz

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



Date: 17.SEP.2019 10:55:52

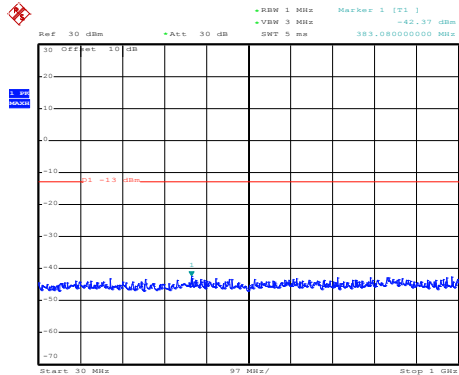
30MHz~1GHz



Date: 17.SEP.2019 10:32:49

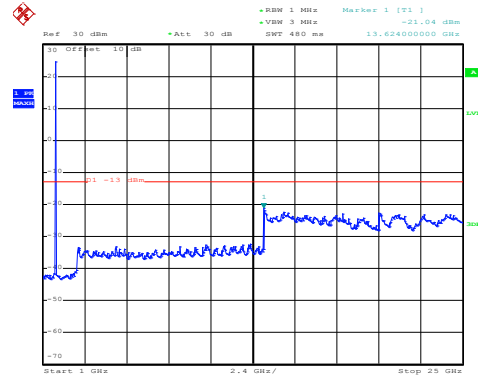
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:56:41

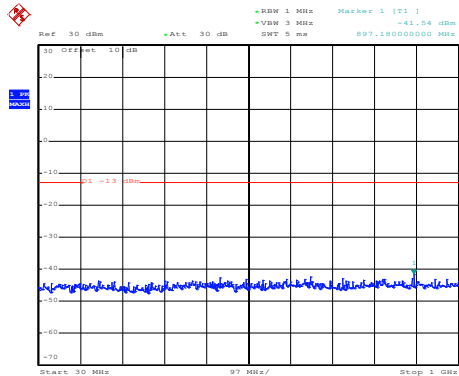
30MHz~1GHz



Date: 17.SEP.2019 10:34:04

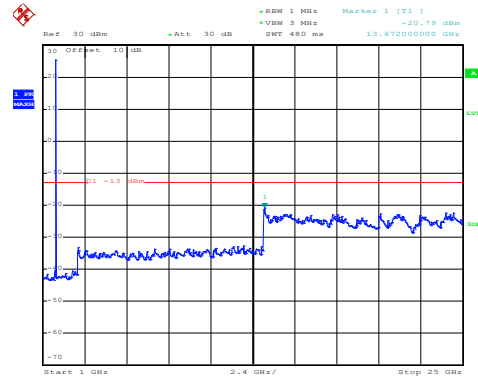
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:56:57

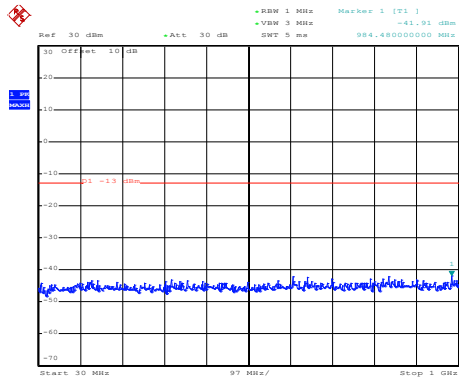
30MHz~1GHz



Date: 17.SEP.2019 10:34:38

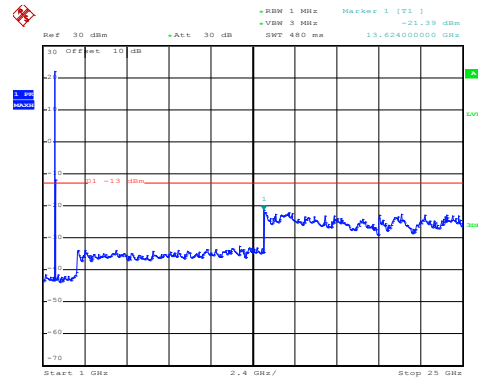
1GHz~25GHz

LTE Band 4: 16 QAM & RB Size 25  
 BW: 5MHz  
 Lowest channel



Date: 17.SEP.2019 10:56:07

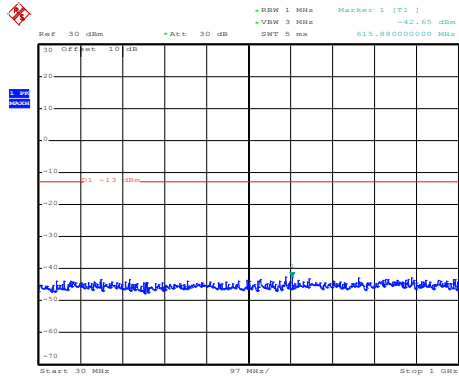
30MHz~1GHz



Date: 17.SEP.2019 10:33:11

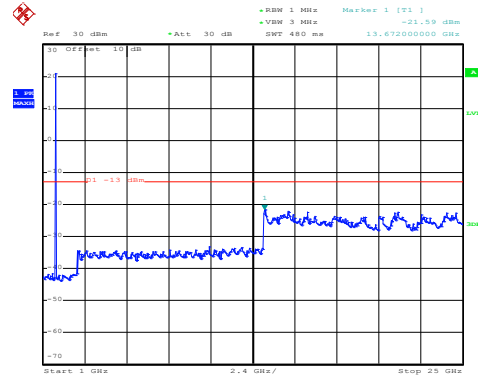
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:56:24

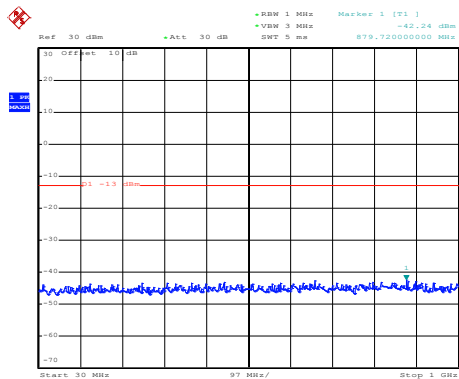
30MHz~1GHz



Date: 17.SEP.2019 10:33:43

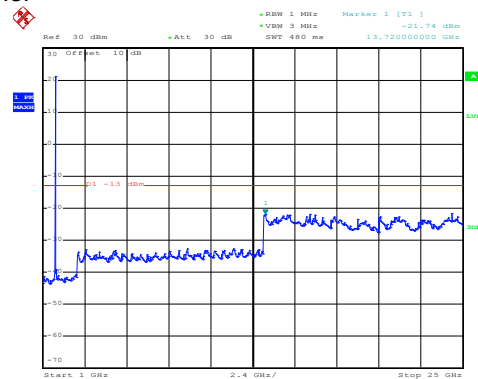
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:57:13

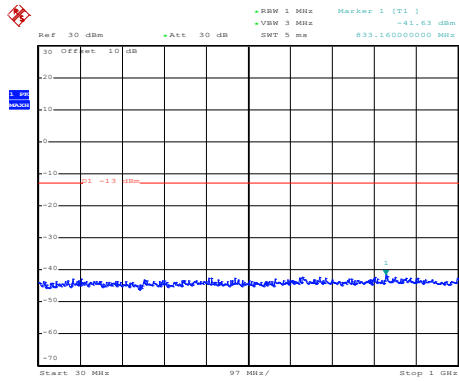
30MHz~1GHz



Date: 17.SEP.2019 10:35:21

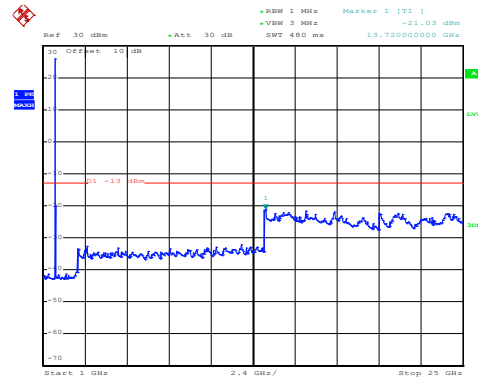
1GHz~25GHz

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



Date: 17.SEP.2019 10:55:47

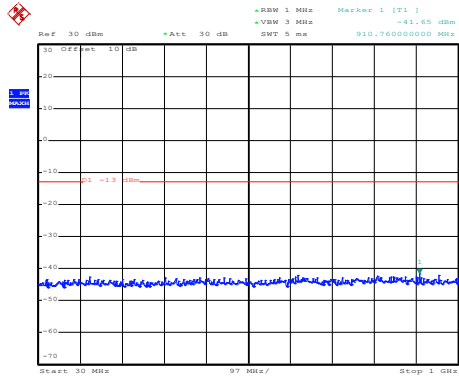
30MHz~1GHz



Date: 17.SEP.2019 10:32:41

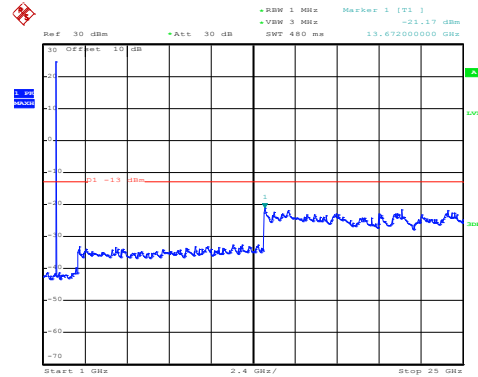
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:56:35

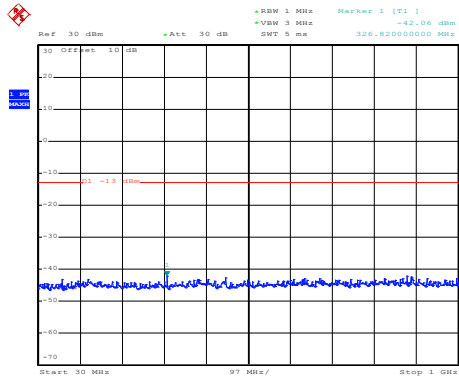
30MHz~1GHz



Date: 17.SEP.2019 10:33:55

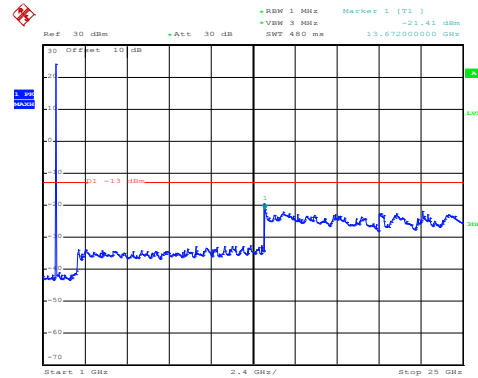
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:56:51

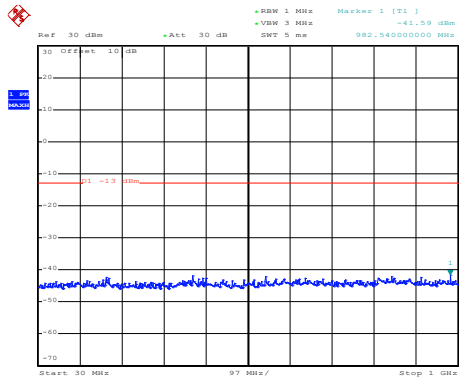
30MHz~1GHz



Date: 17.SEP.2019 10:34:22

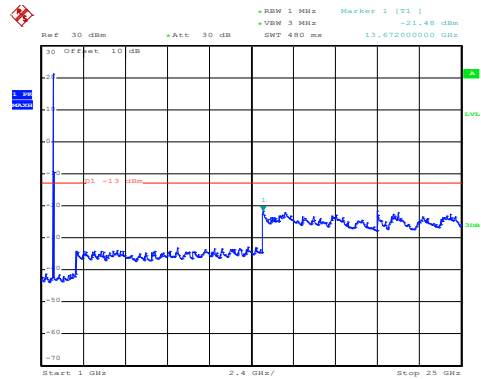
1GHz~25GHz

## LTE Band 4: QPSK & RB Size 25 BW: 5MHz Lowest channel



Date: 17.SEP.2019 10:56:01

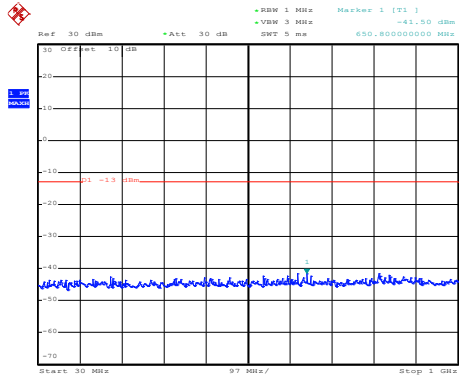
30MHz~1GHz



Date: 17.SEP.2019 10:33:20

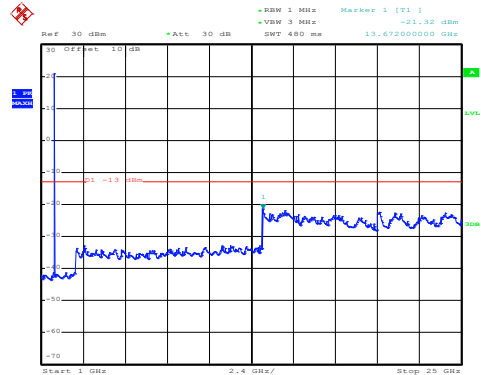
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:56:19

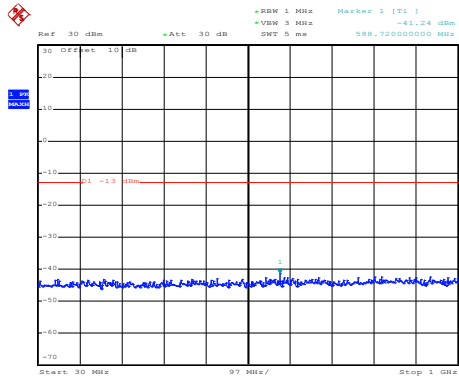
30MHz~1GHz



Date: 17.SEP.2019 10:33:36

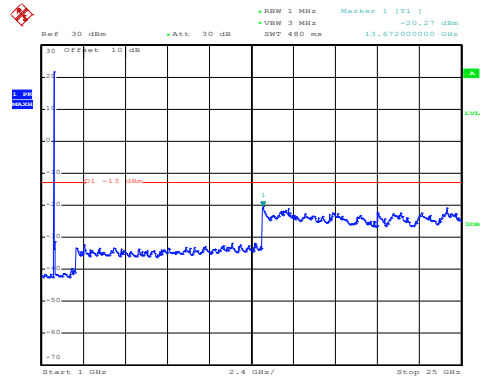
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:57:06

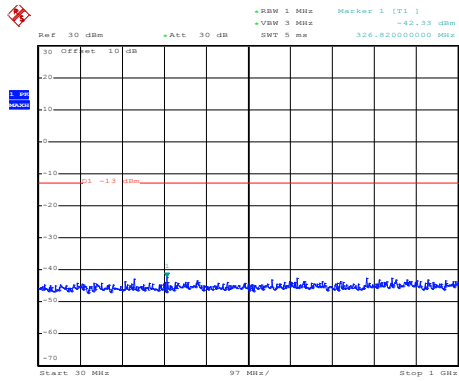
30MHz~1GHz



Date: 17.SEP.2019 10:35:09

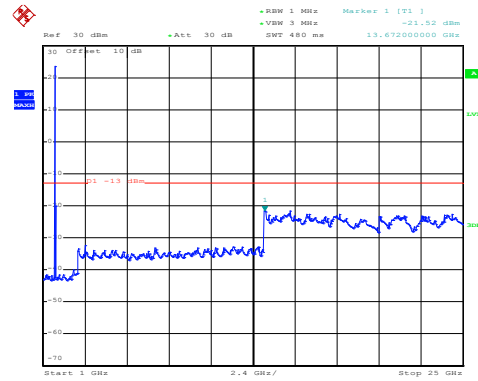
1GHz~25GHz

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



Date: 17.SEP.2019 10:53:08

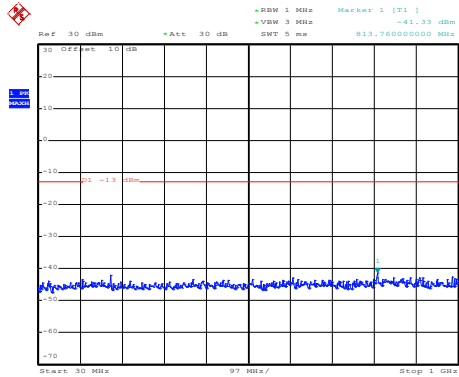
30MHz~1GHz



Date: 17.SEP.2019 10:36:03

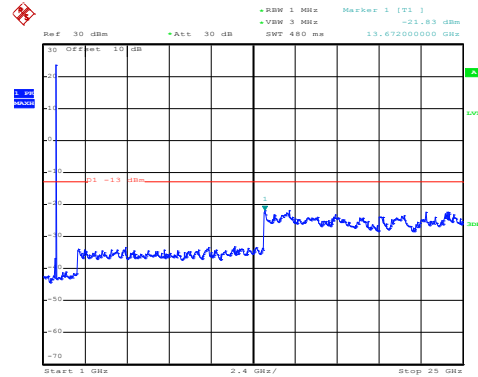
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:54:01

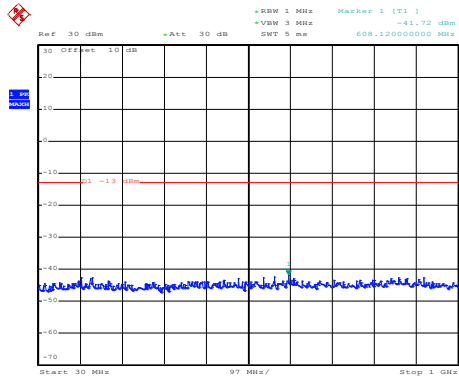
30MHz~1GHz



Date: 17.SEP.2019 10:37:02

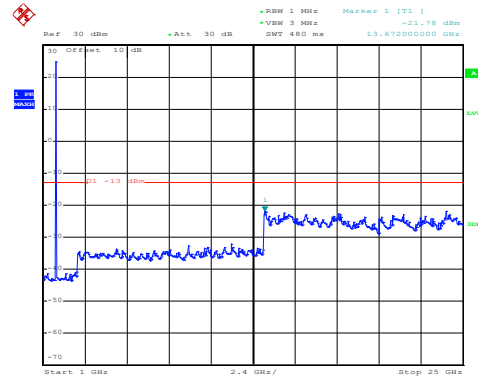
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:54:21

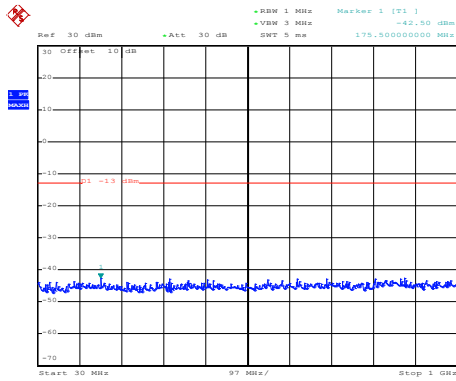
30MHz~1GHz



Date: 17.SEP.2019 10:37:24

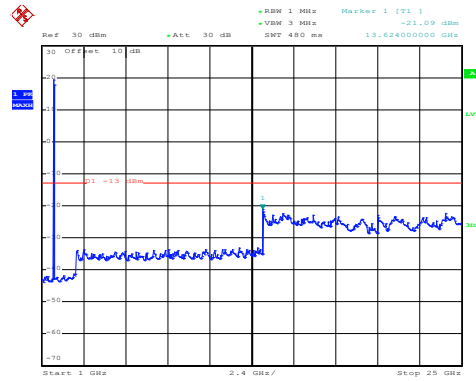
1GHz~25GHz

LTE Band 4: 16 QAM & RB Size 50  
 BW: 10MHz  
 Lowest channel



Date: 17.SEP.2019 10:53:24

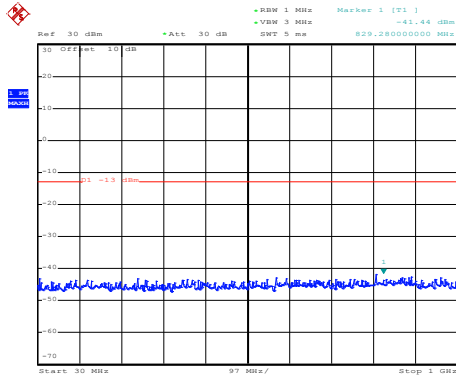
30MHz~1GHz



Date: 17.SEP.2019 10:36:24

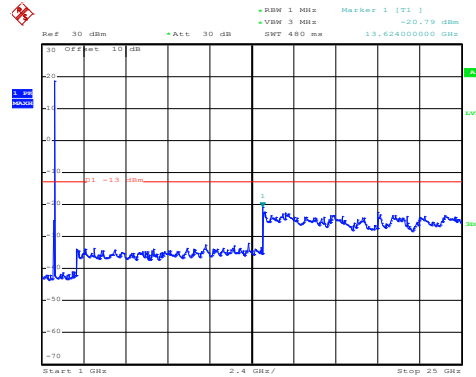
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:53:41

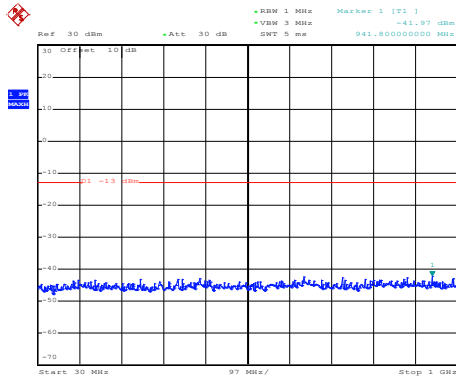
30MHz~1GHz



Date: 17.SEP.2019 10:36:44

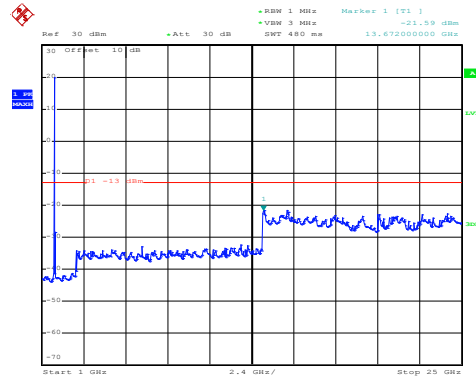
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:54:40

30MHz~1GHz

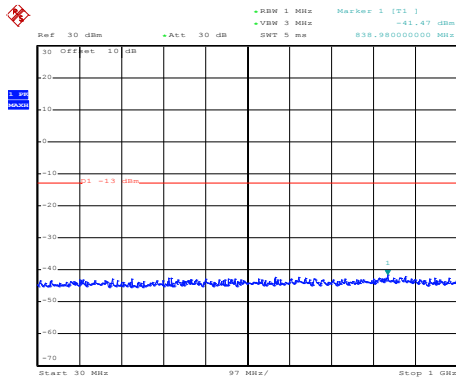


Date: 17.SEP.2019 10:37:57

1GHz~25GHz

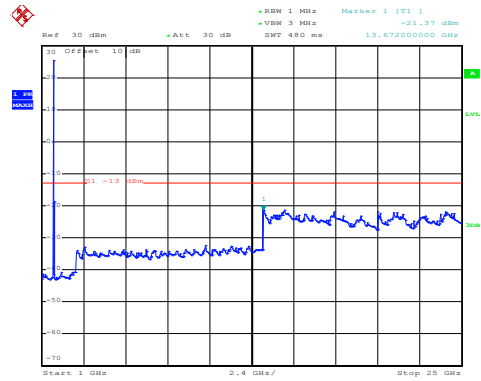


## LTE Band 4: QPSK & RB Size 1 BW: 10MHz Lowest channel



Date: 17.SEP.2019 10:53:02

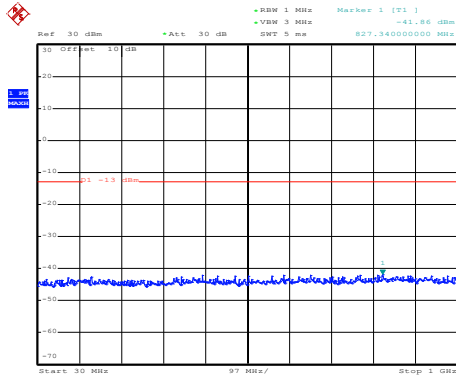
30MHz~1GHz



Date: 17.SEP.2019 10:35:52

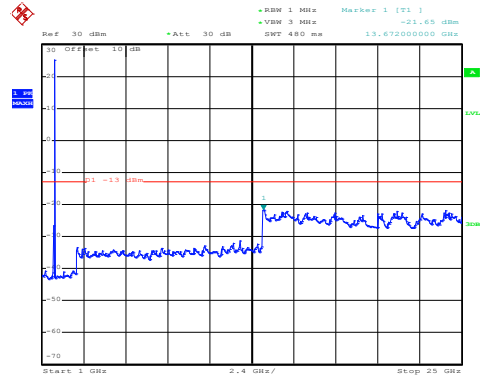
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:53:55

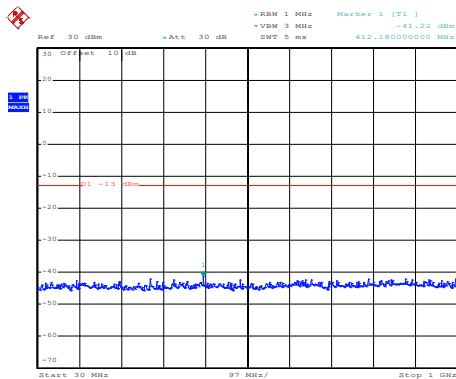
30MHz~1GHz



Date: 17.SEP.2019 10:36:55

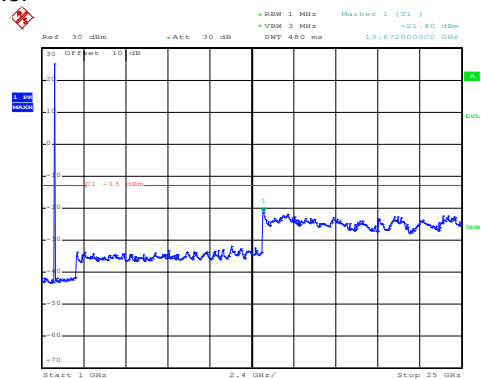
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:54:15

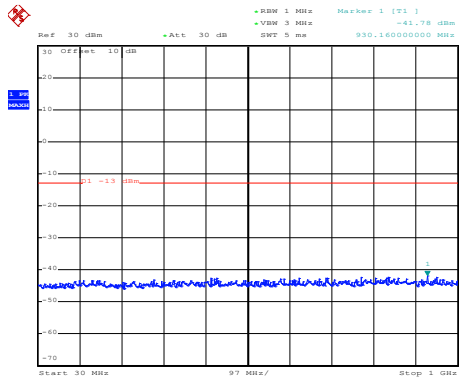
30MHz~1GHz



Date: 17.SEP.2019 10:37:17

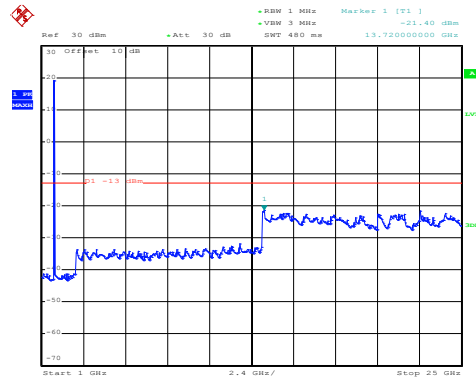
1GHz~25GHz

## LTE Band 4: QPSK & RB Size 50 BW: 10MHz Lowest channel



Date: 17.SEP.2019 10:53:18

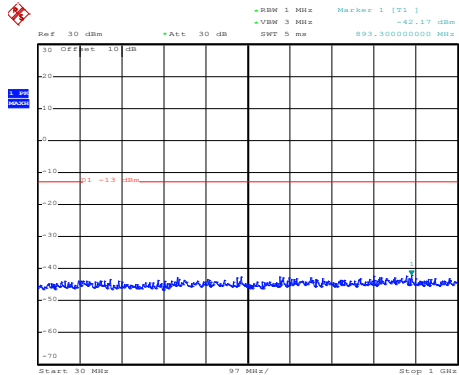
30MHz~1GHz



Date: 17.SEP.2019 10:36:17

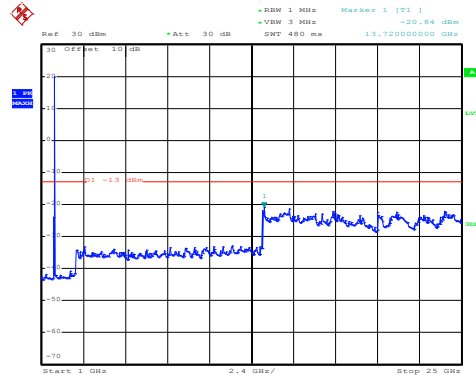
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:53:35

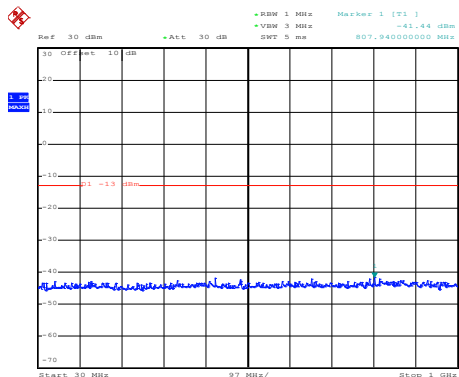
30MHz~1GHz



Date: 17.SEP.2019 10:36:37

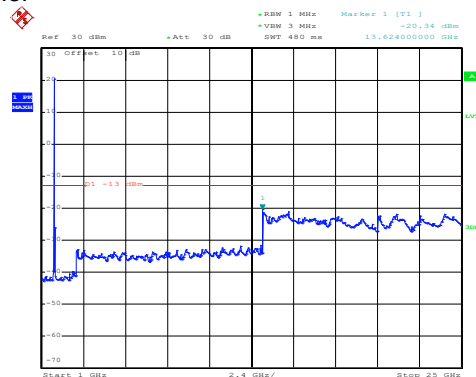
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:54:35

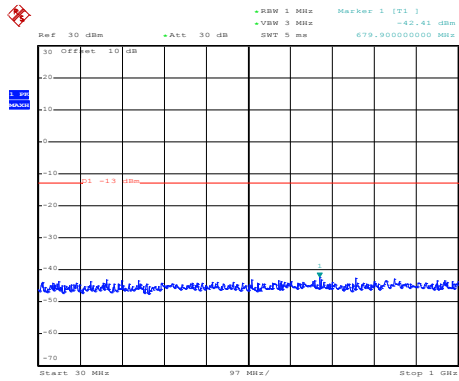
30MHz~1GHz



Date: 17.SEP.2019 10:37:50

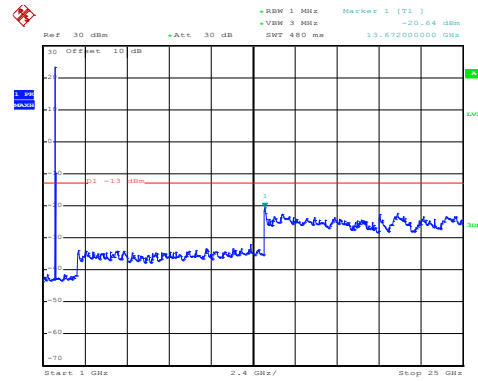
1GHz~25GHz

LTE Band 4: 16 QAM & RB Size 1  
 BW: 15MHz  
 Lowest channel



Date: 17.SEP.2019 10:51:06

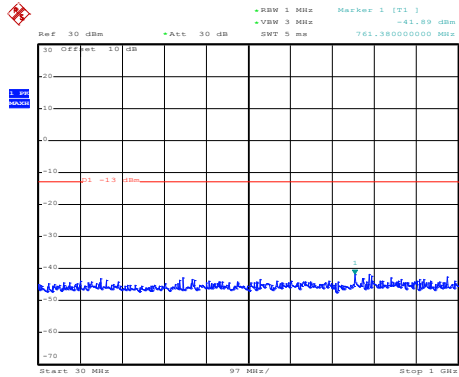
30MHz~1GHz



Date: 17.SEP.2019 10:38:27

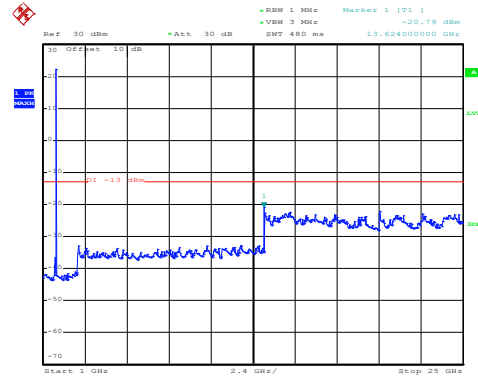
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:51:54

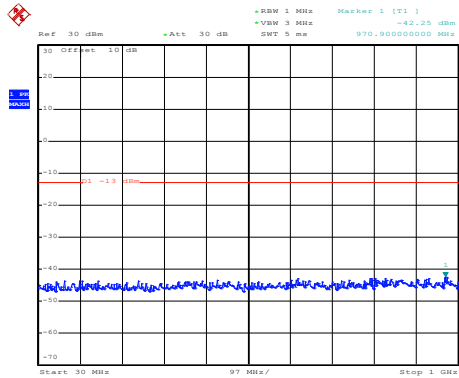
30MHz~1GHz



Date: 17.SEP.2019 10:39:44

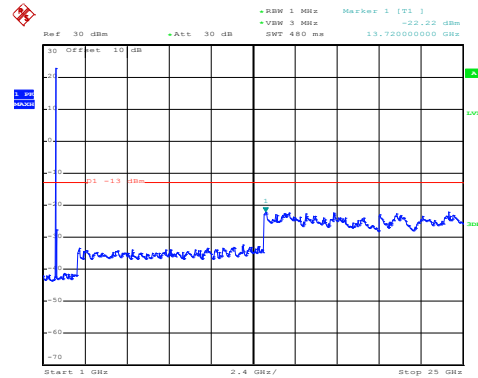
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:52:17

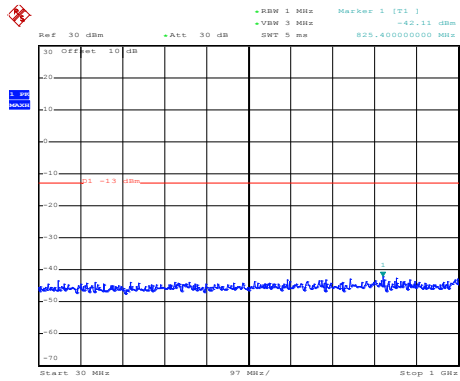
30MHz~1GHz



Date: 17.SEP.2019 10:40:11

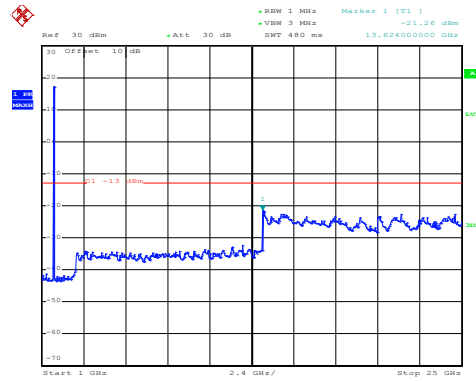
1GHz~25GHz

LTE Band 4: 16 QAM & RB Size 75  
 BW: 15MHz  
 Lowest channel



Date: 17.SEP.2019 10:51:22

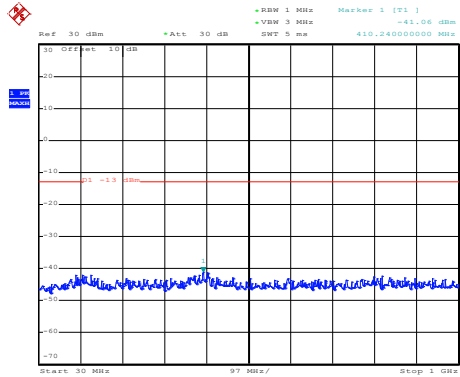
30MHz~1GHz



Date: 17.SEP.2019 10:39:01

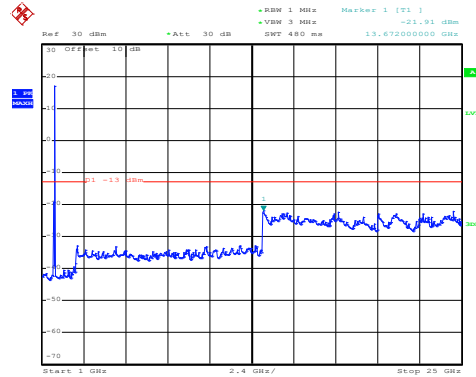
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:51:39

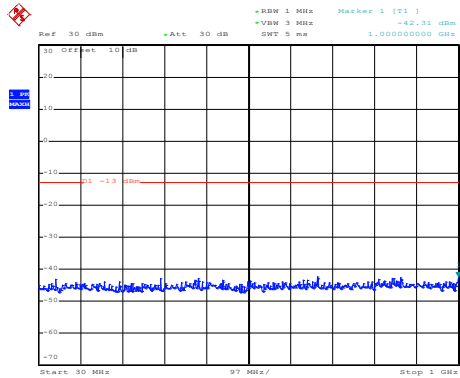
30MHz~1GHz



Date: 17.SEP.2019 10:39:24

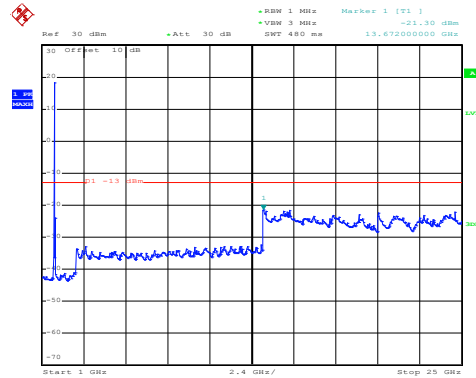
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:52:34

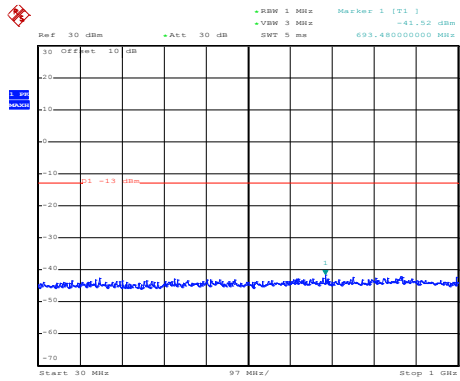
30MHz~1GHz



Date: 17.SEP.2019 10:40:32

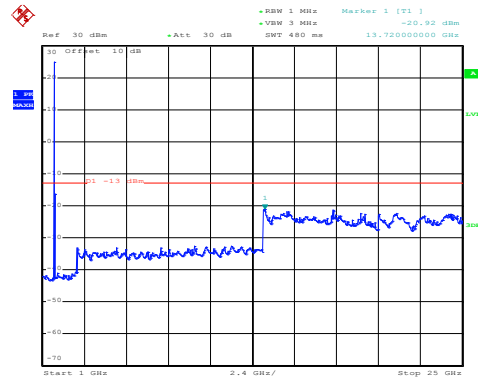
1GHz~25GHz

LTE Band 4: QPSK & RB Size 1  
 BW: 15MHz  
 Lowest channel



Date: 17.SEP.2019 10:51:00

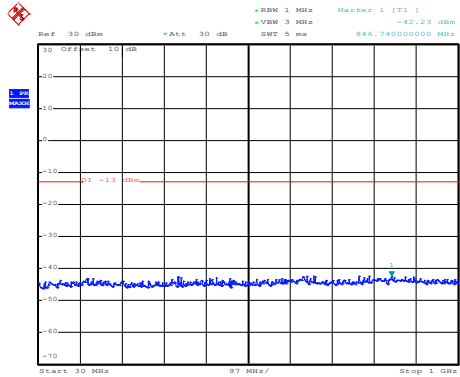
30MHz~1GHz



Date: 17.SEP.2019 10:38:20

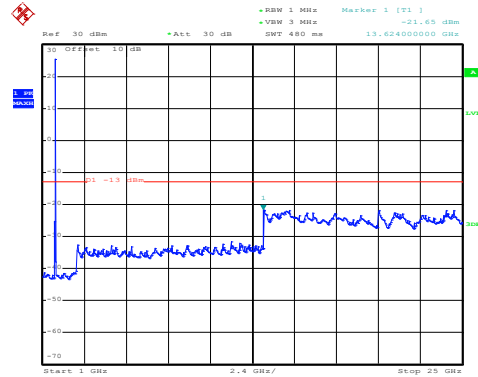
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:51:49

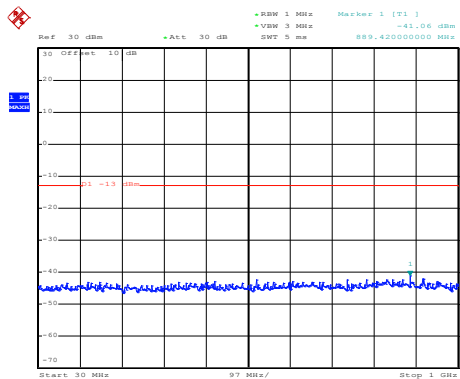
30MHz~1GHz



Date: 17.SEP.2019 10:39:37

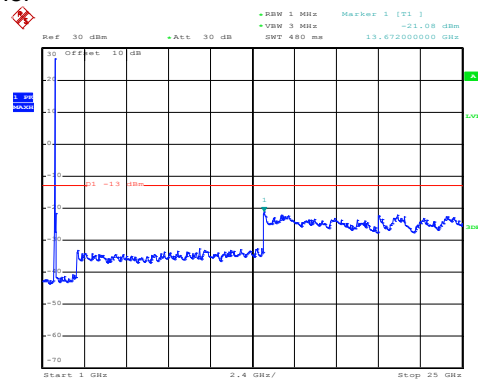
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:52:11

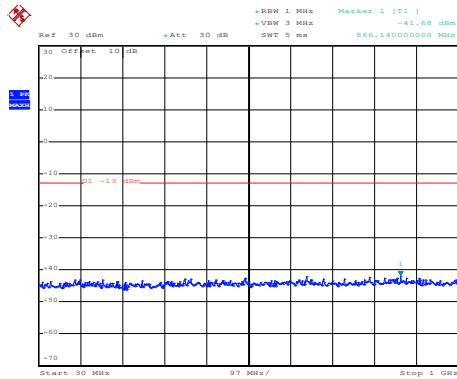
30MHz~1GHz



Date: 17.SEP.2019 10:40:02

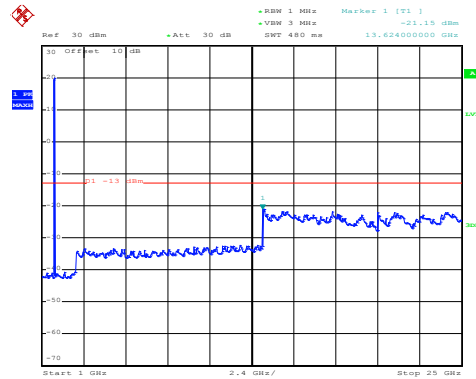
1GHz~25GHz

## LTE Band 4: QPSK & RB Size 75 BW: 15MHz Lowest channel



Date: 17.SEP.2019 10:51:15

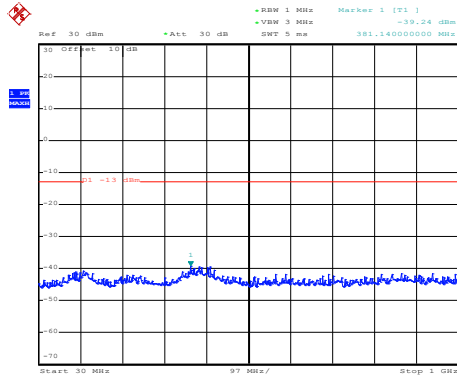
30MHz~1GHz



Date: 17.SEP.2019 10:38:53

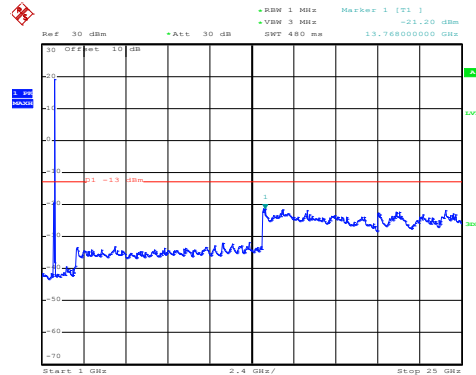
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:51:34

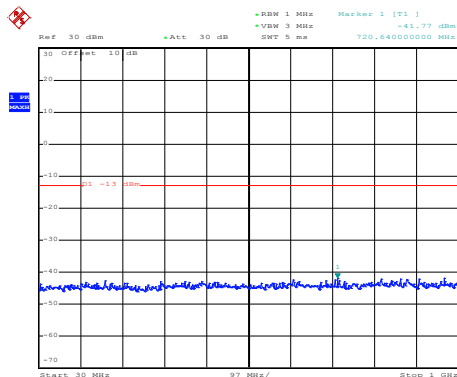
30MHz~1GHz



Date: 17.SEP.2019 10:39:17

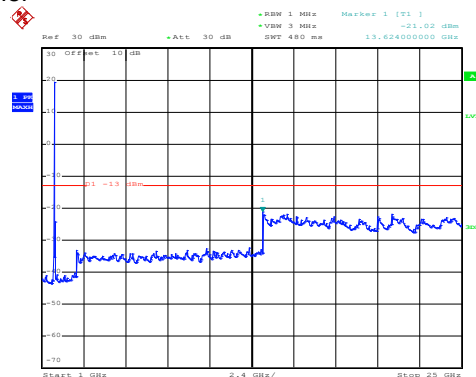
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:52:28

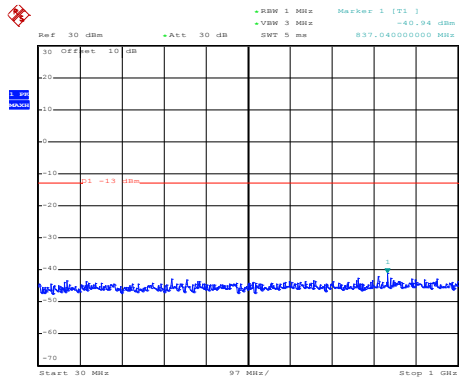
30MHz~1GHz



Date: 17.SEP.2019 10:40:23

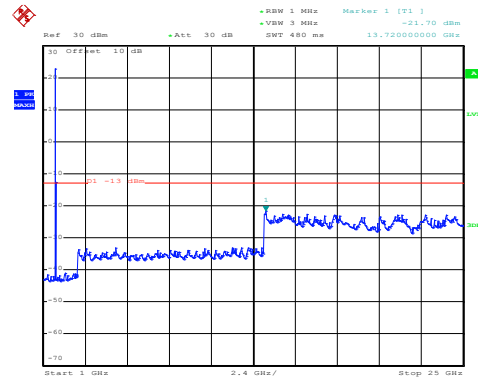
1GHz~25GHz

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



Date: 17.SEP.2019 10:50:21

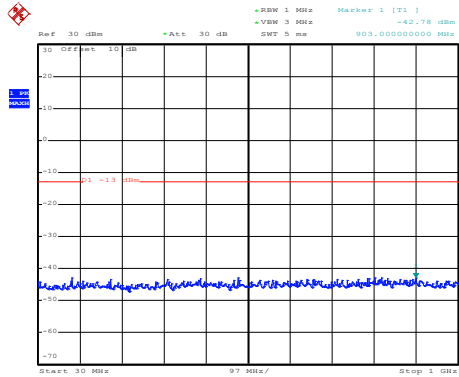
30MHz~1GHz



Date: 17.SEP.2019 10:41:30

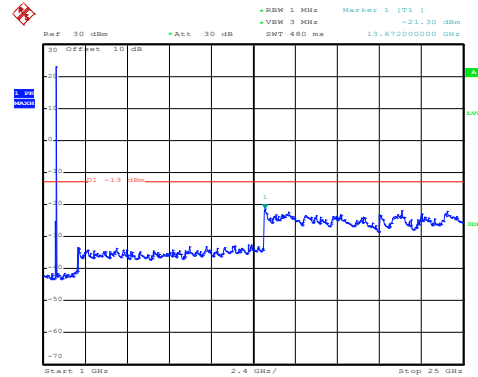
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:49:20

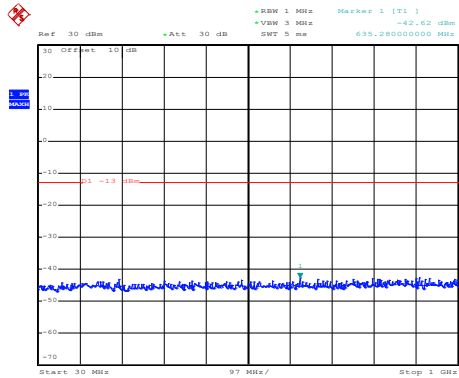
30MHz~1GHz



Date: 17.SEP.2019 10:42:37

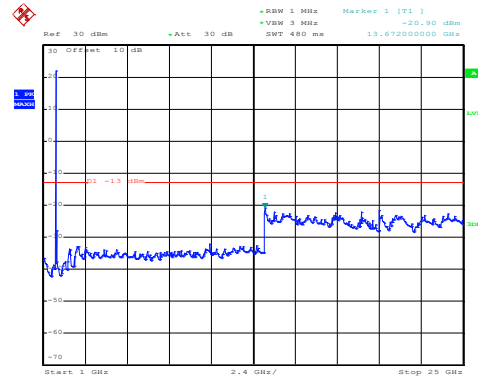
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:48:50

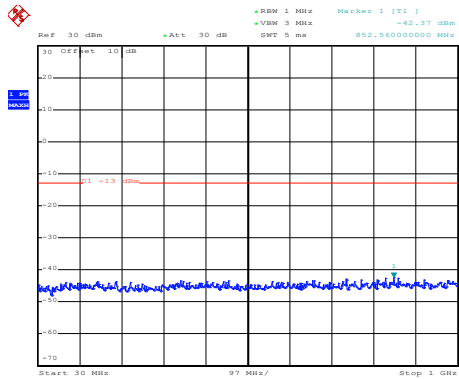
30MHz~1GHz



Date: 17.SEP.2019 10:43:03

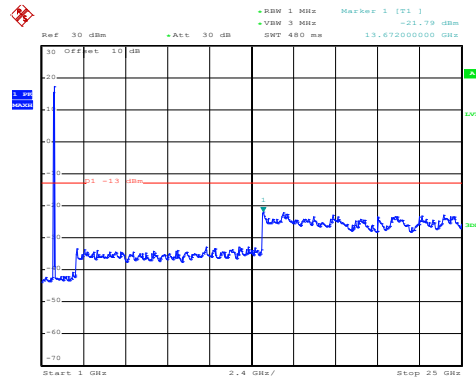
1GHz~25GHz

LTE Band 4: 16 QAM & RB Size 100  
 BW: 20MHz  
 Lowest channel



Date: 17.SEP.2019 10:50:07

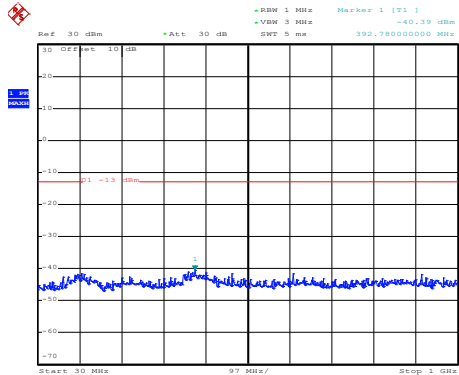
30MHz~1GHz



Date: 17.SEP.2019 10:41:50

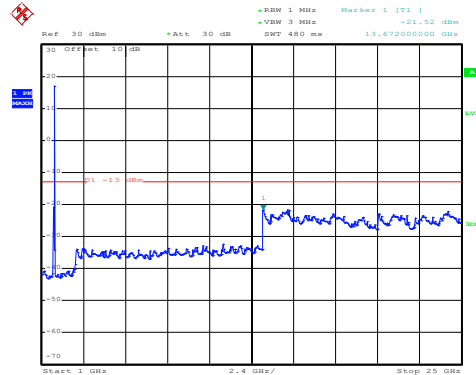
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:49:36

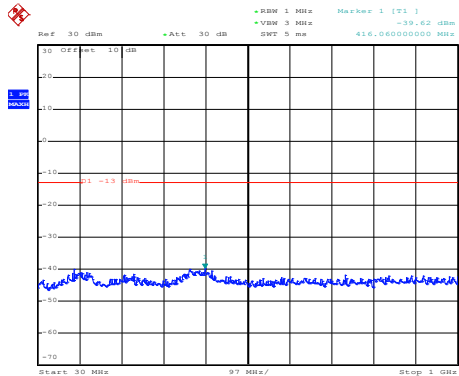
30MHz~1GHz



Date: 17.SEP.2019 10:42:15

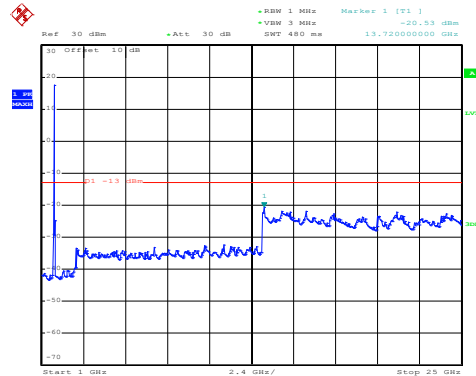
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:47:20

30MHz~1GHz

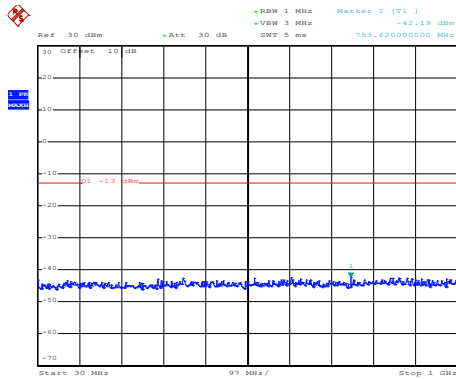


Date: 17.SEP.2019 10:43:24

1GHz~25GHz

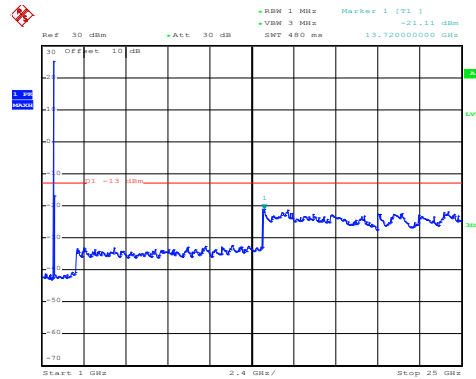


## LTE Band 4: QPSK & RB Size 1 BW: 20MHz Lowest channel



Date: 17.SEP.2019 10:50:15

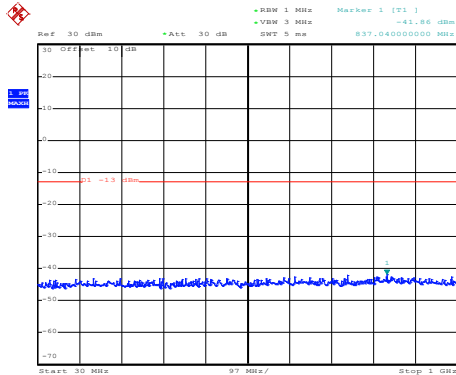
30MHz~1GHz



Date: 17.SEP.2019 10:41:22

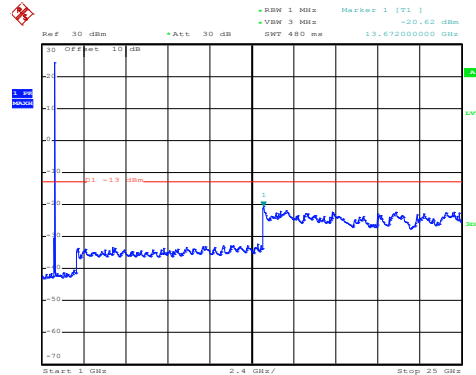
1GHz~25GHz

## Middle channel



Date: 17.SEP.2019 10:49:14

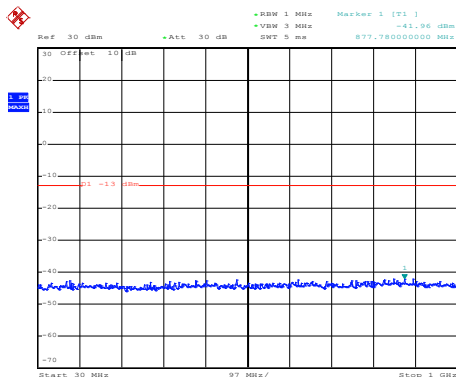
30MHz~1GHz



Date: 17.SEP.2019 10:42:29

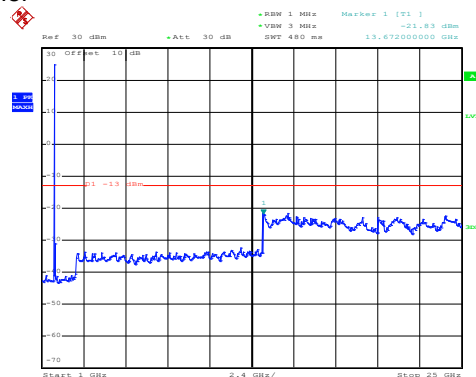
1GHz~25GHz

## High channel



Date: 17.SEP.2019 10:48:36

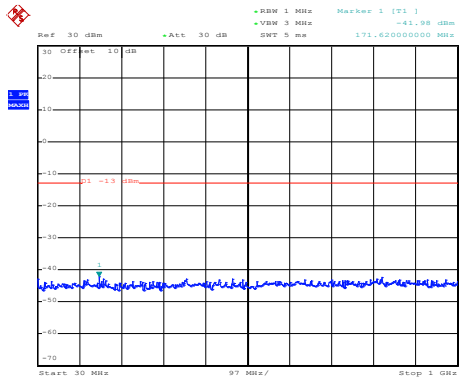
30MHz~1GHz



Date: 17.SEP.2019 10:42:52

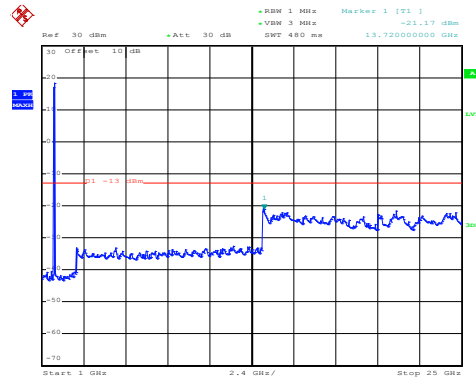
1GHz~25GHz

LTE Band 4: QPSK & RB Size 100  
 BW: 20MHz  
 Lowest channel



Date: 17.SEP.2019 10:50:00

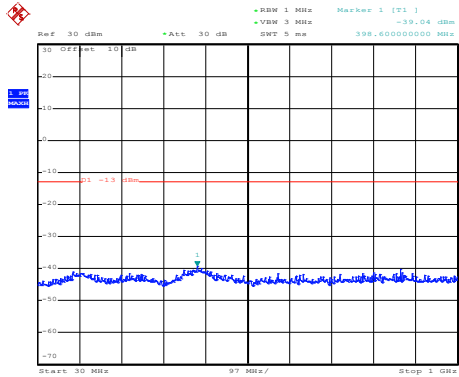
30MHz~1GHz



Date: 17.SEP.2019 10:41:43

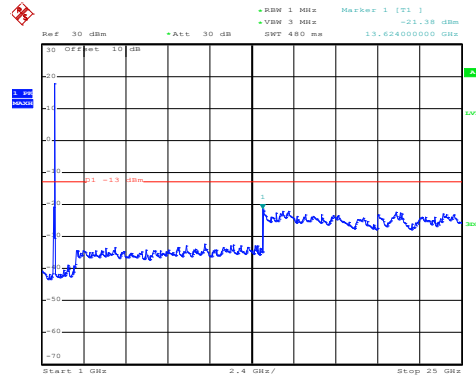
1GHz~25GHz

Middle channel



Date: 17.SEP.2019 10:49:31

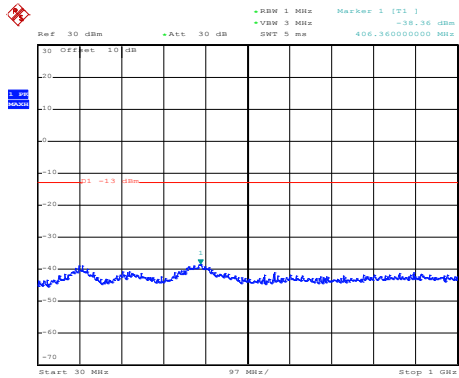
30MHz~1GHz



Date: 17.SEP.2019 10:42:03

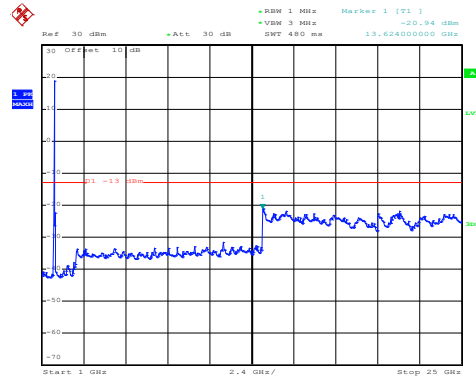
1GHz~25GHz

High channel



Date: 17.SEP.2019 10:44:25

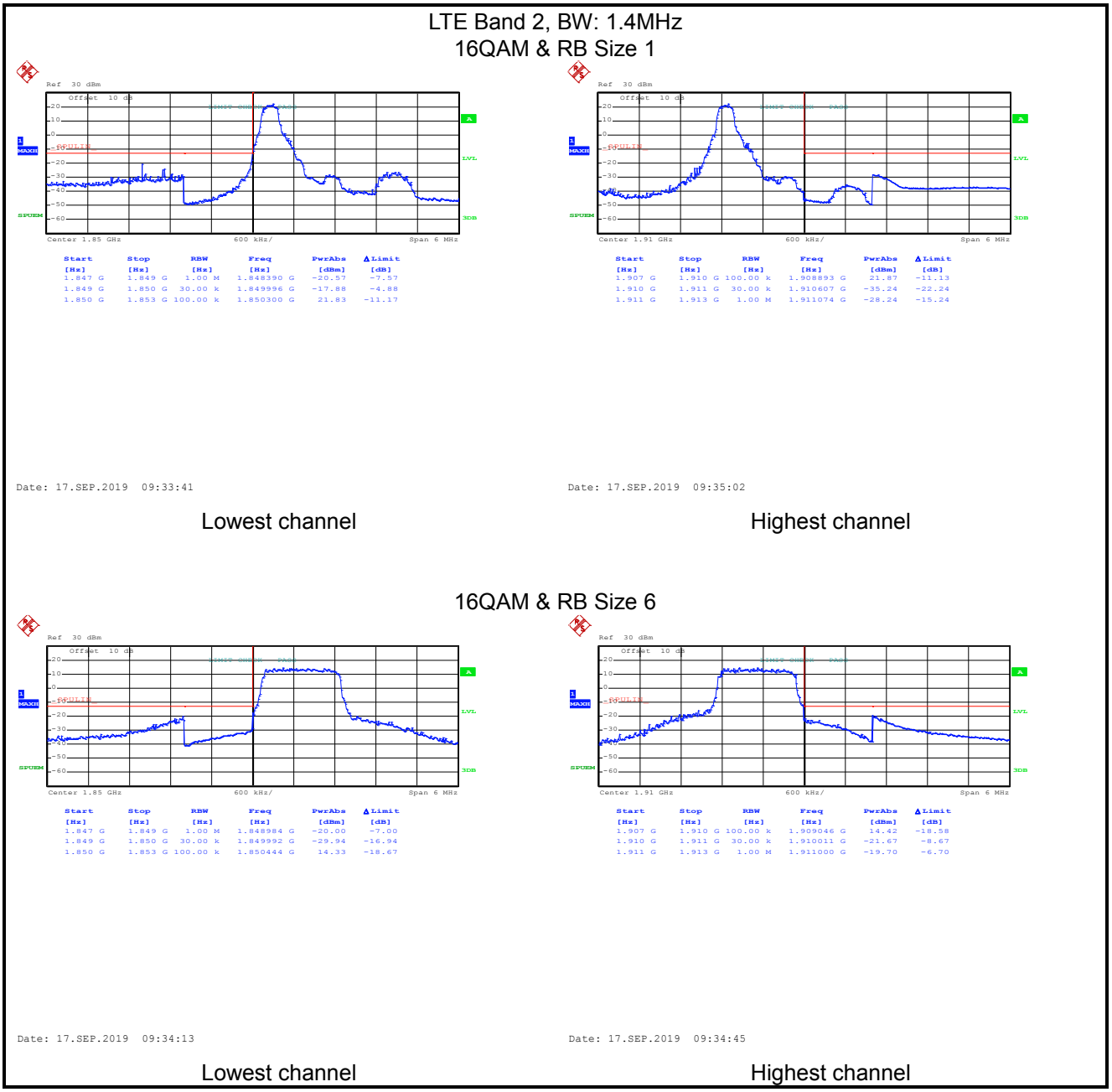
30MHz~1GHz



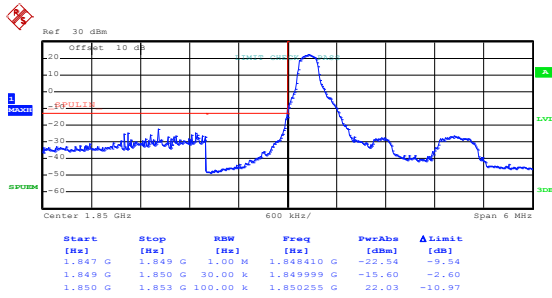
Date: 17.SEP.2019 10:43:15

1GHz~25GHz

**Band edge emission:**  
**LTE Band 2 part:**

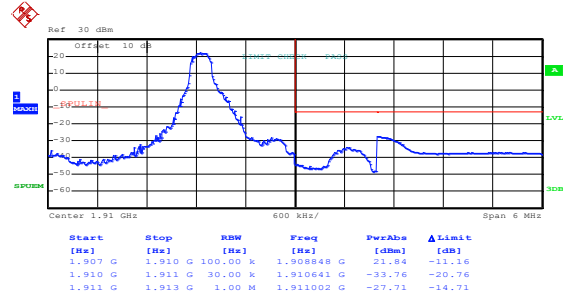


## LTE Band 2, BW: 1.4MHz QPSK & RB Size 1



Date: 17.SEP.2019 09:33:28

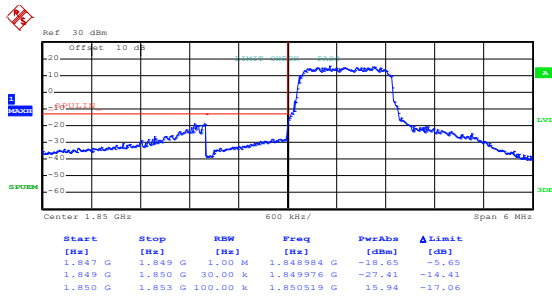
Lowest channel



Date: 17.SEP.2019 09:34:55

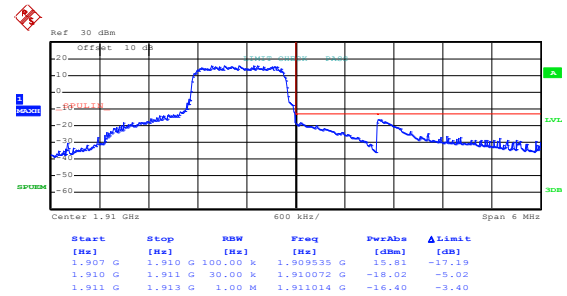
Highest channel

## QPSK & RB Size 6



Date: 17.SEP.2019 09:34:04

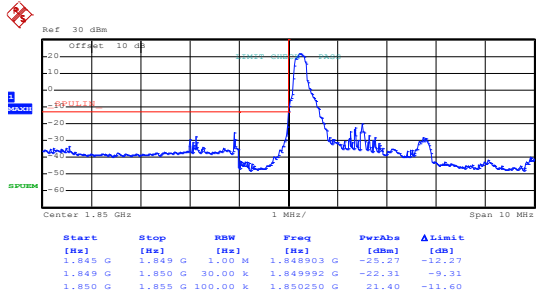
Lowest channel



Date: 17.SEP.2019 09:34:37

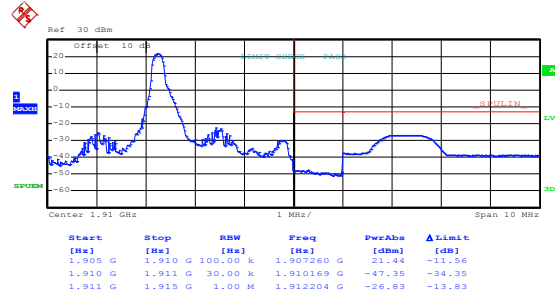
Highest channel

## LTE Band 2, BW: 3MHz 16QAM & RB Size 1



Date: 17.SEP.2019 09:37:51

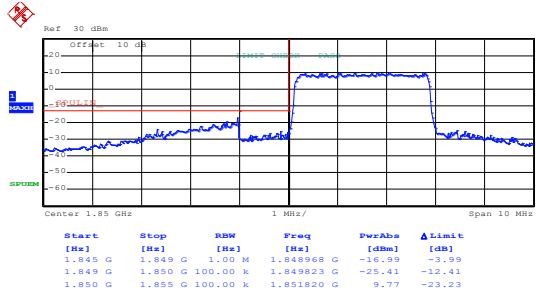
Lowest channel



Date: 17.SEP.2019 09:36:01

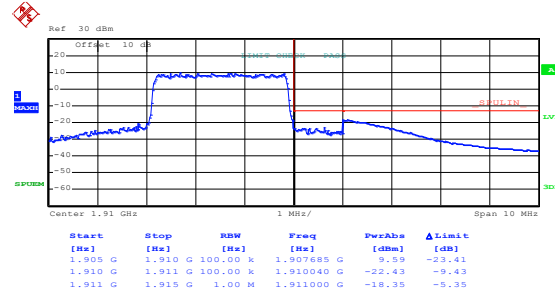
Highest channel

## 16QAM & RB Size 15



Date: 17.SEP.2019 09:37:27

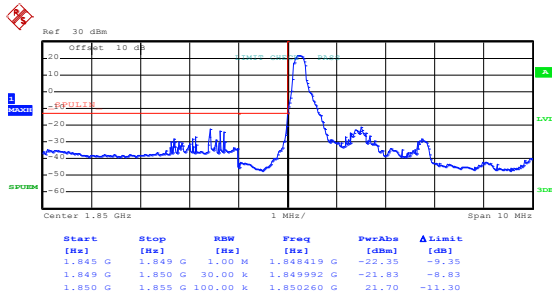
Lowest channel



Date: 17.SEP.2019 09:36:48

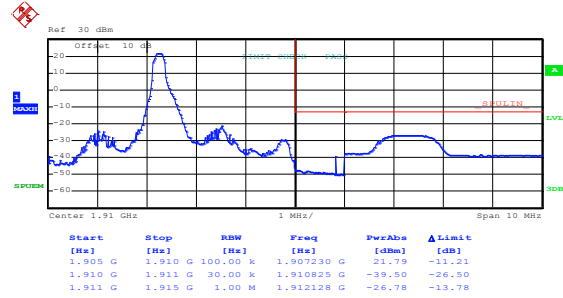
Highest channel

## LTE Band 2, BW: 3MHz QPSK & RB Size 1



Date: 17.SEP.2019 09:37:41

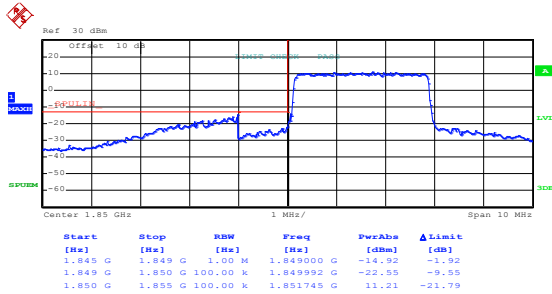
Lowest channel



Date: 17.SEP.2019 09:35:47

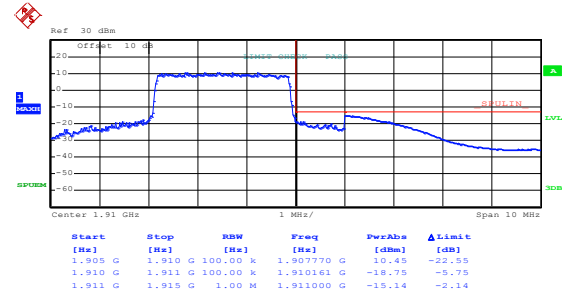
Highest channel

## QPSK & RB Size 15



Date: 17.SEP.2019 09:37:20

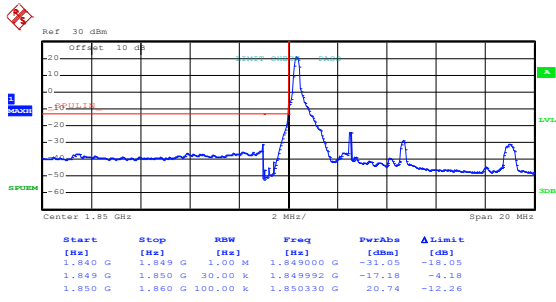
Lowest channel



Date: 17.SEP.2019 09:36:42

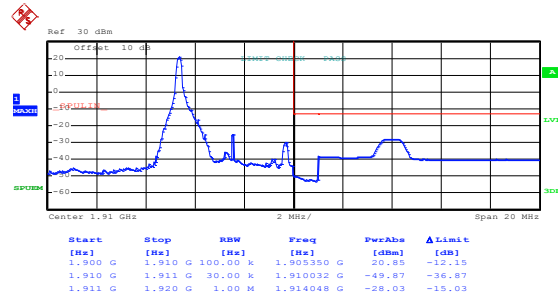
Highest channel

## LTE Band 2, BW: 5MHz 16QAM & RB Size 1



Date: 17.SEP.2019 09:38:31

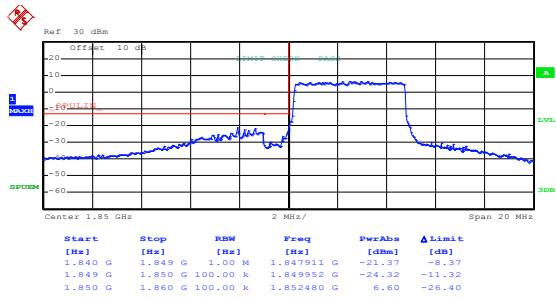
Lowest channel



Date: 17.SEP.2019 09:39:30

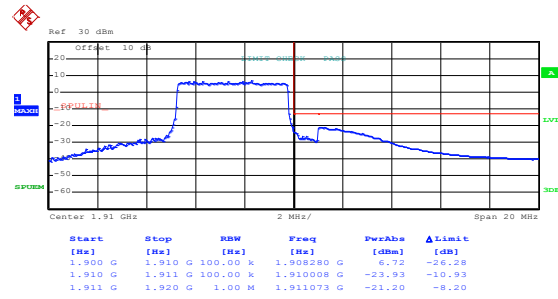
Highest channel

## 16QAM & RB Size 25



Date: 17.SEP.2019 09:38:49

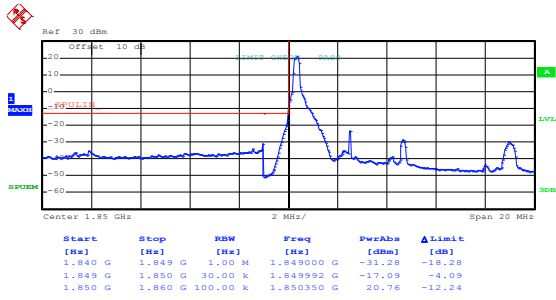
Lowest channel



Date: 17.SEP.2019 09:39:11

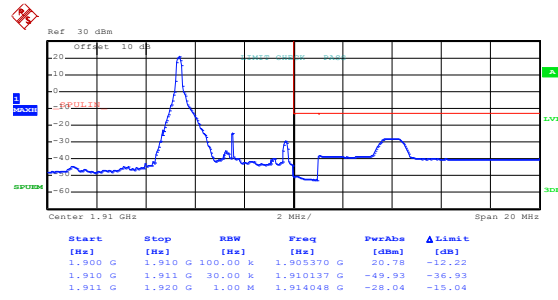
Highest channel

## LTE Band 2, BW: 5MHz QPSK & RB Size 1



Date: 17.SEP.2019 09:38:26

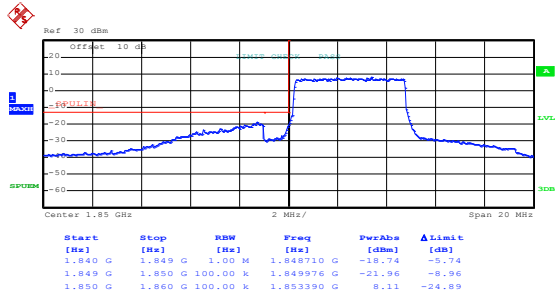
Lowest channel



Date: 17.SEP.2019 09:39:25

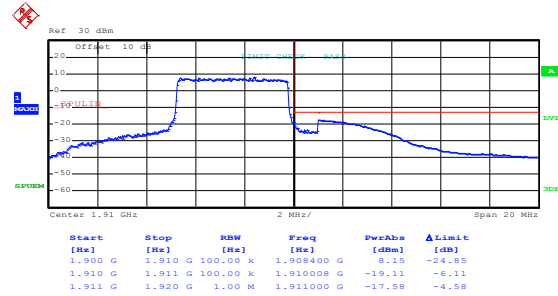
Highest channel

## QPSK & RB Size 25



Date: 17.SEP.2019 09:38:44

Lowest channel

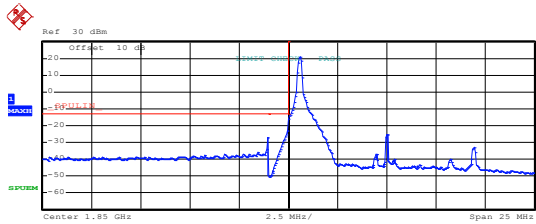


Date: 17.SEP.2019 09:39:06

Highest channel



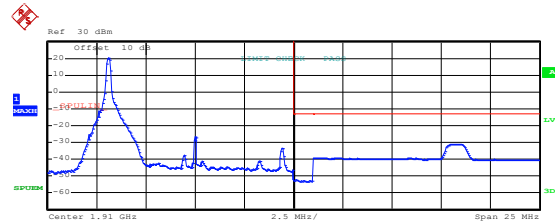
## LTE Band 2, BW: 10MHz 16QAM & RB Size 1



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.837 G	1.849 G	1.00 M	1.849000 G	-27.19	-14.19
1.849 G	1.850 G	30.00 k	1.849984 G	-23.14	-10.14
1.850 G	1.863 G	100.00 k	1.850575 G	20.82	-12.18

Date: 17.SEP.2019 09:41:17

Lowest channel

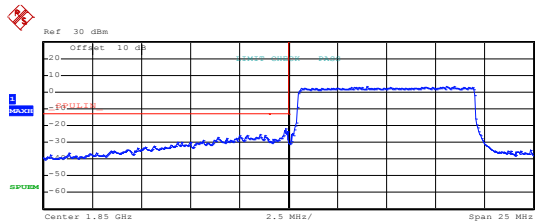


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.898 G	1.910 G	100.00 k	1.900375 G	20.52	-12.48
1.910 G	1.911 G	30.00 k	1.910113 G	-51.77	-38.77
1.911 G	1.923 G	1.00 M	1.918419 G	-30.83	-17.83

Date: 17.SEP.2019 09:40:04

Highest channel

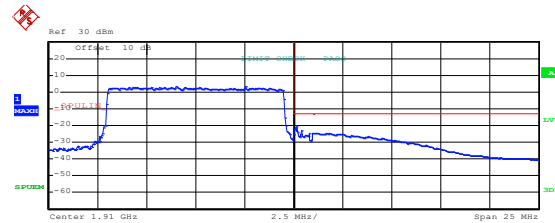
## 16QAM & RB Size 50



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.837 G	1.849 G	1.00 M	1.848936 G	-25.37	-12.37
1.849 G	1.850 G	300.00 k	1.849823 G	-23.92	-8.92
1.850 G	1.863 G	100.00 k	1.858038 G	3.13	-29.87

Date: 17.SEP.2019 09:40:53

Lowest channel

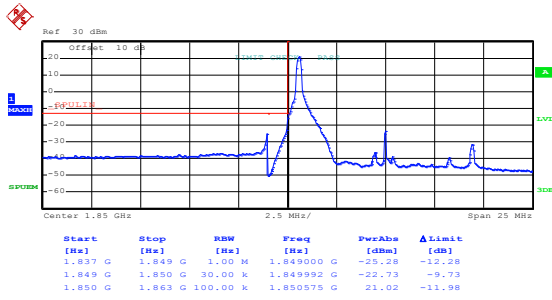


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	ΔLimit [dB]
1.898 G	1.910 G	100.00 k	1.904019 G	3.30	-29.70
1.910 G	1.911 G	300.00 k	1.910129 G	-20.00	-7.00
1.911 G	1.923 G	1.00 M	1.911185 G	-24.55	-11.55

Date: 17.SEP.2019 09:40:24

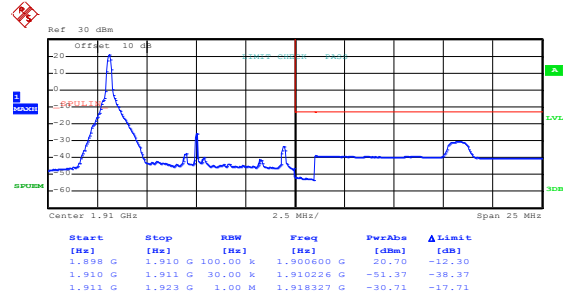
Highest channel

## LTE Band 2, BW: 10MHz QPSK & RB Size 1



Date: 17.SEP.2019 09:41:11

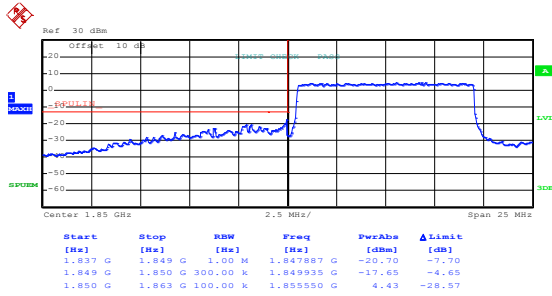
Lowest channel



Date: 17.SEP.2019 09:40:00

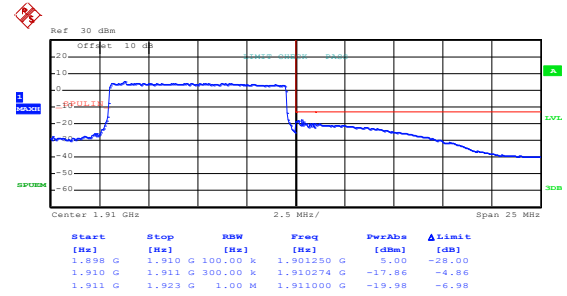
Highest channel

## QPSK & RB Size 50



Date: 17.SEP.2019 09:40:46

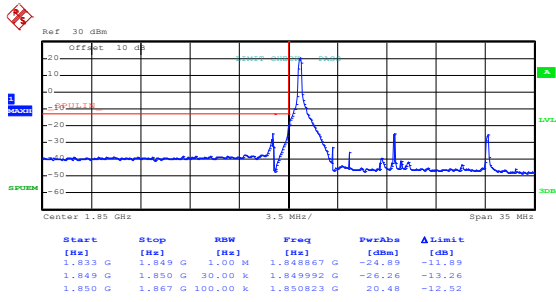
Lowest channel



Date: 17.SEP.2019 09:40:19

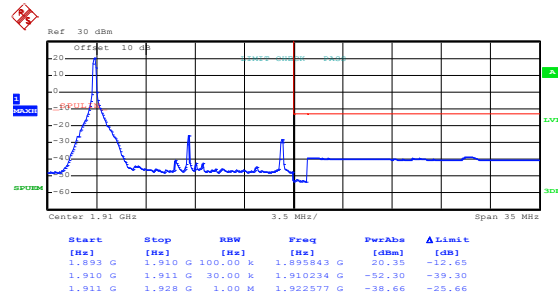
Highest channel

## LTE Band 2, BW: 15MHz 16QAM & RB Size 1



Date: 17.SEP.2019 09:41:49

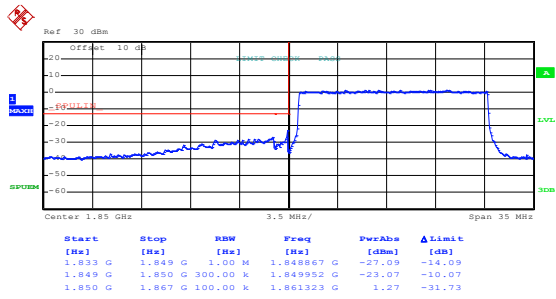
Lowest channel



Date: 17.SEP.2019 09:42:50

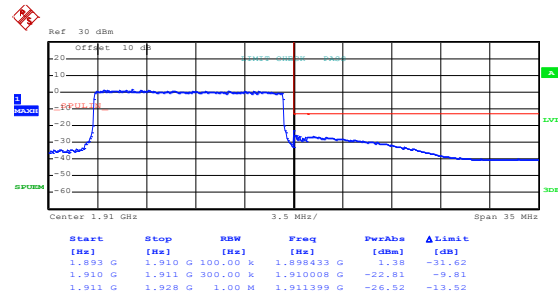
Highest channel

## 16QAM & RB Size 75



Date: 17.SEP.2019 09:42:09

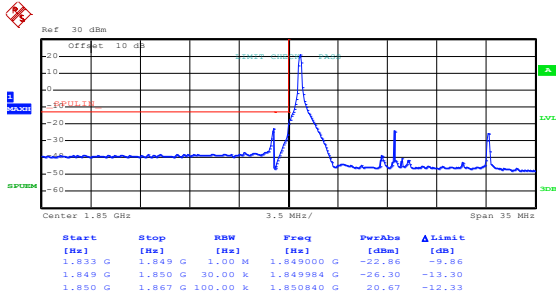
Lowest channel



Date: 17.SEP.2019 09:42:33

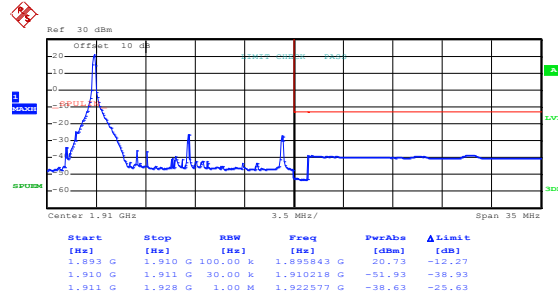
Highest channel

## LTE Band 2, BW: 15MHz QPSK & RB Size 1



Date: 17.SEP.2019 09:41:44

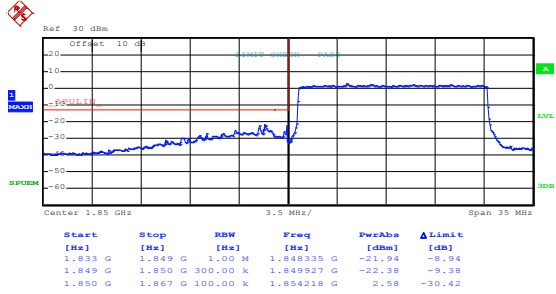
Lowest channel



Date: 17.SEP.2019 09:42:46

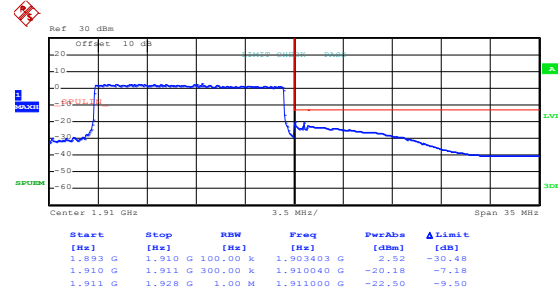
Highest channel

## QPSK & RB Size 75



Date: 17.SEP.2019 09:42:02

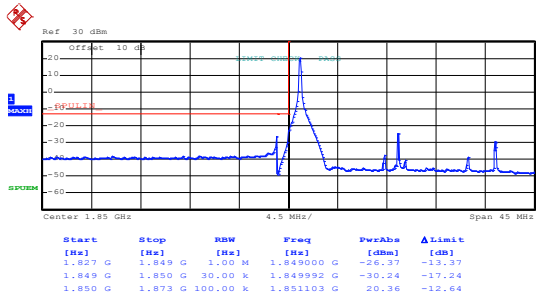
Lowest channel



Date: 17.SEP.2019 09:42:27

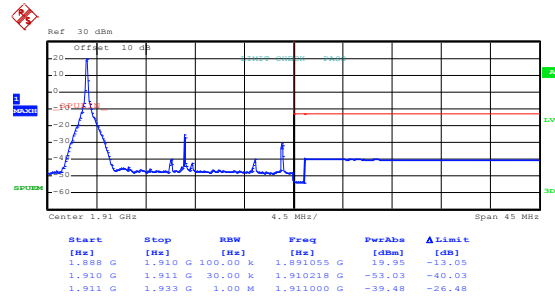
Highest channel

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



Date: 17.SEP.2019 09:45:06

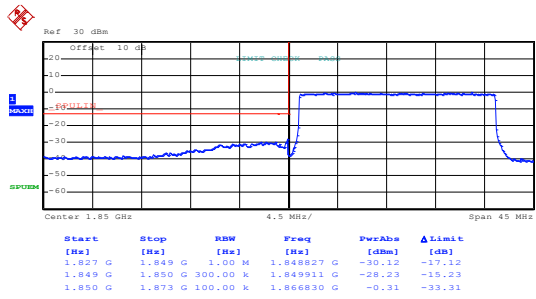
Lowest channel



Date: 17.SEP.2019 09:45:38

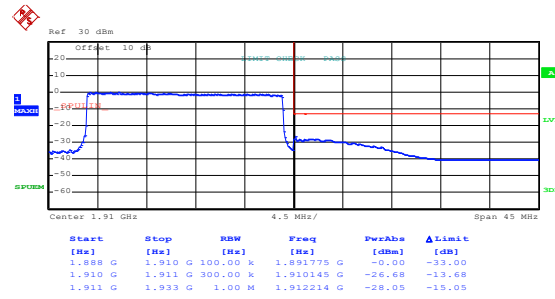
Highest channel

## 16QAM & RB Size 100



Date: 17.SEP.2019 09:44:35

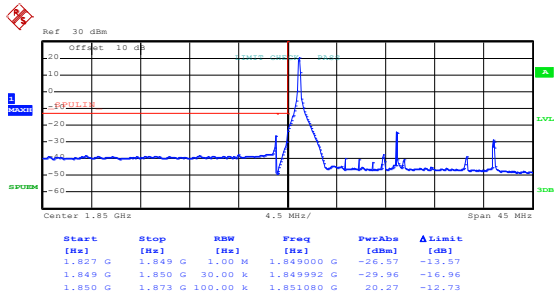
Lowest channel



Date: 17.SEP.2019 09:46:01

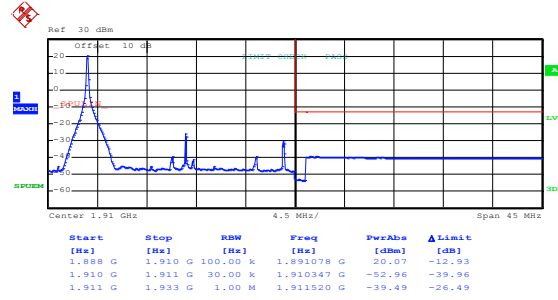
Highest channel

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



Date: 17.SEP.2019 09:44:53

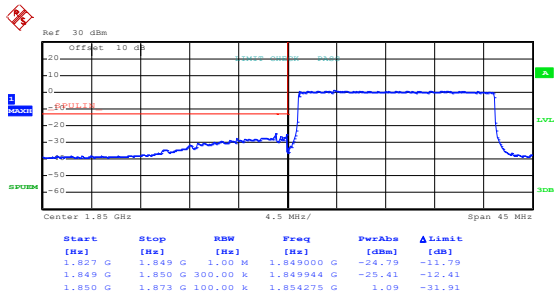
Lowest channel



Date: 17.SEP.2019 09:45:33

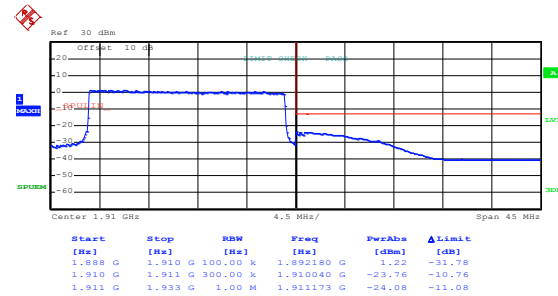
Highest channel

## QPSK & RB Size 100



Date: 17.SEP.2019 09:44:26

Lowest channel

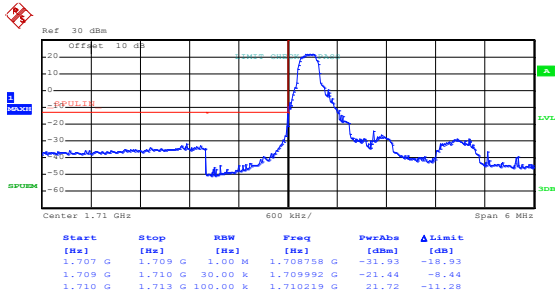


Date: 17.SEP.2019 09:45:54

Highest channel

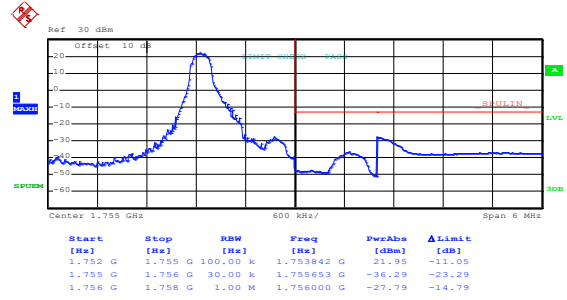
LTE Band 4 part:

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



Date: 17.SEP.2019 09:47:16

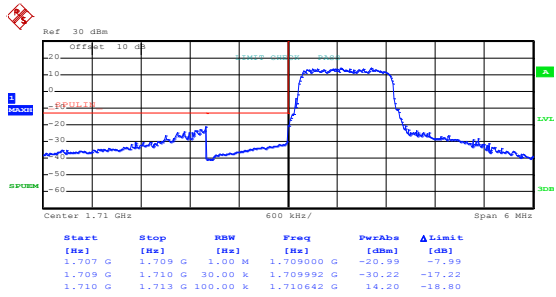
Lowest channel



Date: 17.SEP.2019 09:48:18

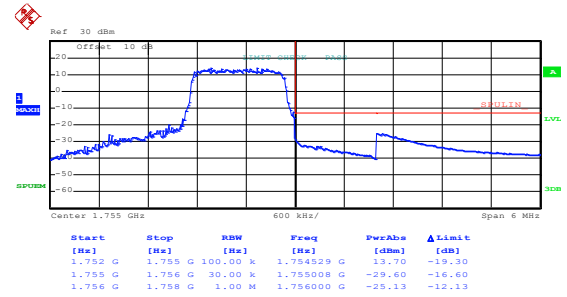
Highest channel

16QAM & RB Size 6



Date: 17.SEP.2019 09:47:37

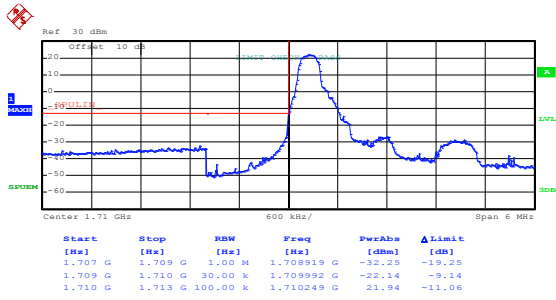
Lowest channel



Date: 17.SEP.2019 09:48:00

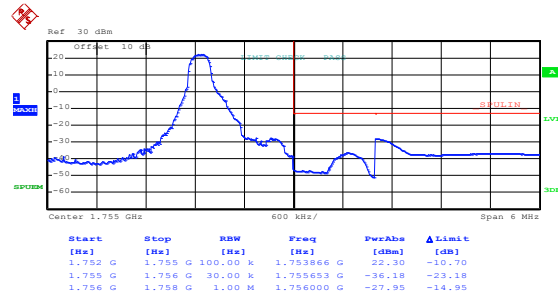
Highest channel

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



Date: 17.SEP.2019 09:47:23

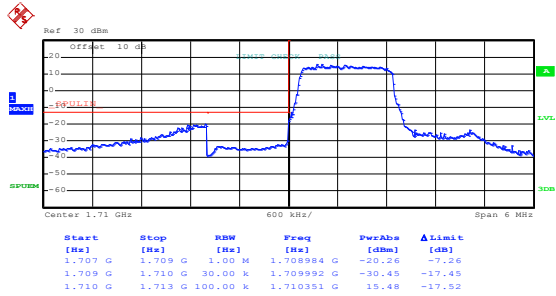
Lowest channel



Date: 17.SEP.2019 09:48:14

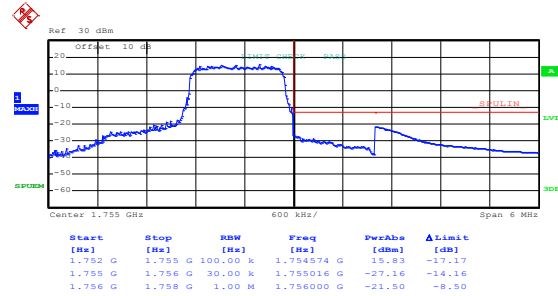
Highest channel

## QPSK & RB Size 6



Date: 17.SEP.2019 09:47:32

Lowest channel

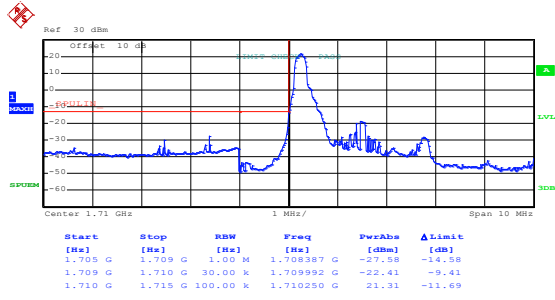


Date: 17.SEP.2019 09:47:54

Highest channel

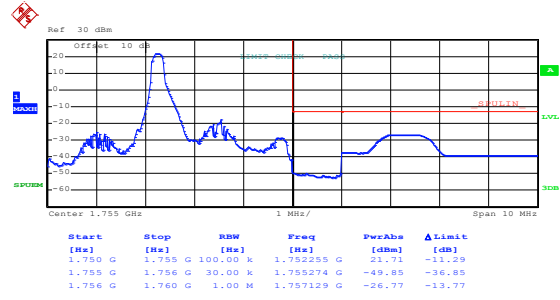


## LTE Band 4, BW: 3MHz 16QAM & RB Size 1



Date: 17.SEP.2019 09:50:26

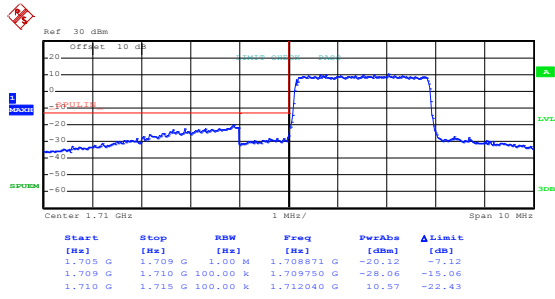
Lowest channel



Date: 17.SEP.2019 09:49:06

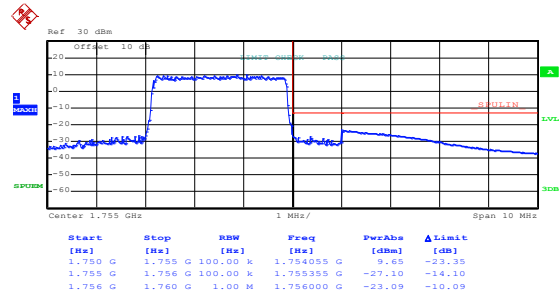
Highest channel

## 16QAM & RB Size 15



Date: 17.SEP.2019 09:50:06

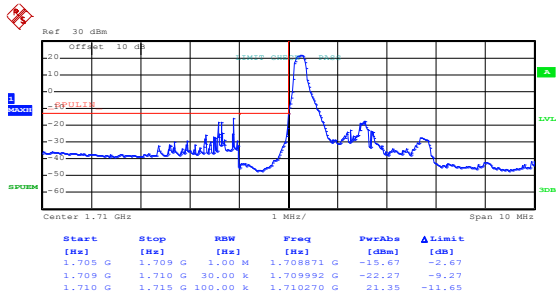
Lowest channel



Date: 17.SEP.2019 09:49:34

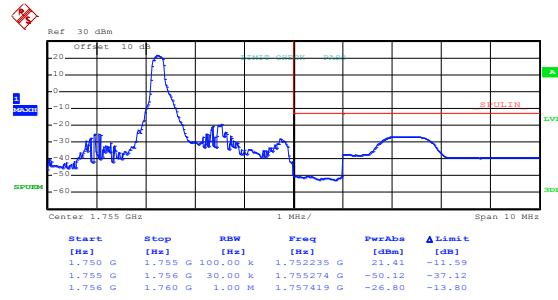
Highest channel

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



Date: 17.SEP.2019 09:50:20

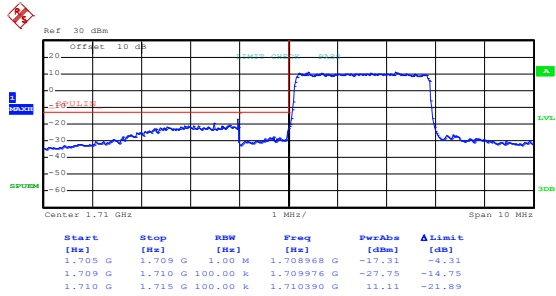
Lowest channel



Date: 17.SEP.2019 09:48:49

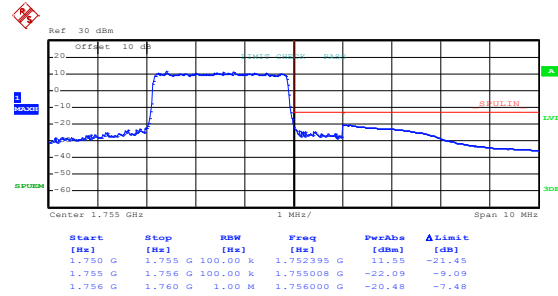
Highest channel

## QPSK & RB Size 15



Date: 17.SEP.2019 09:49:59

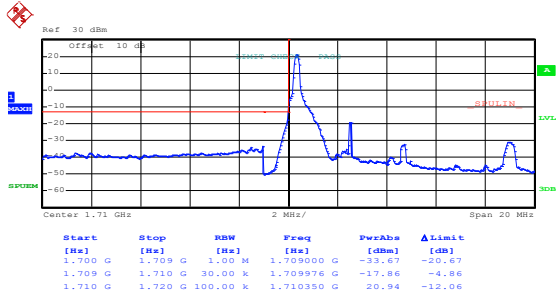
Lowest channel



Date: 17.SEP.2019 09:49:29

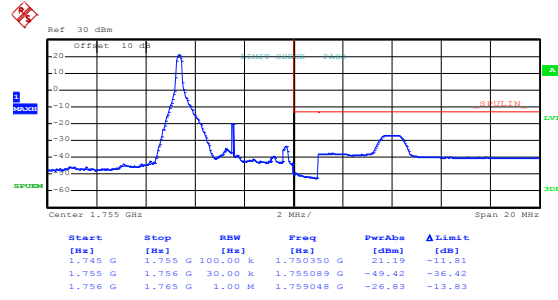
Highest channel

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



Date: 17.SEP.2019 09:50:58

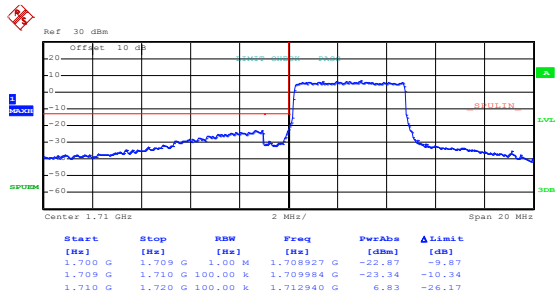
Lowest channel



Date: 17.SEP.2019 09:52:05

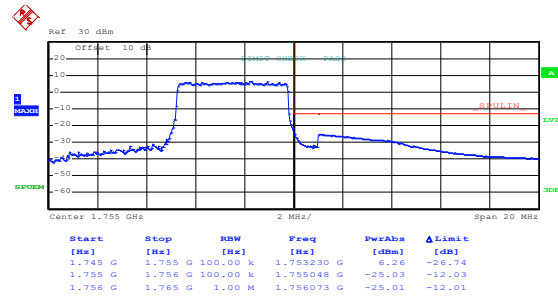
Highest channel

## 16QAM & RB Size 25



Date: 17.SEP.2019 09:51:19

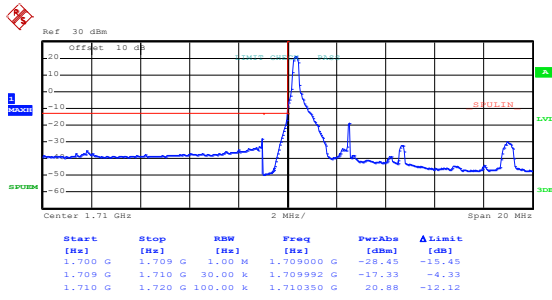
Lowest channel



Date: 17.SEP.2019 09:51:39

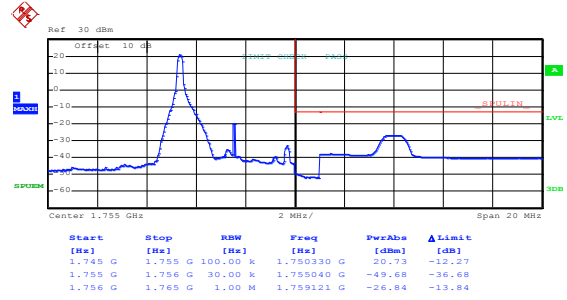
Highest channel

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



Date: 17.SEP.2019 09:50:54

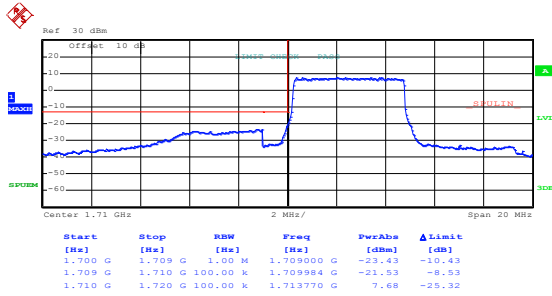
Lowest channel



Date: 17.SEP.2019 09:51:55

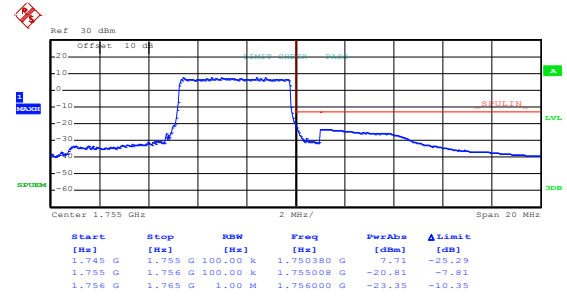
Highest channel

## QPSK & RB Size 25



Date: 17.SEP.2019 09:51:14

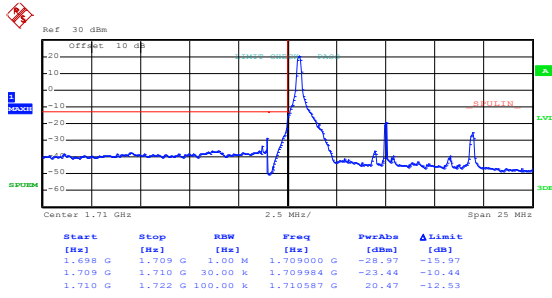
Lowest channel



Date: 17.SEP.2019 09:51:33

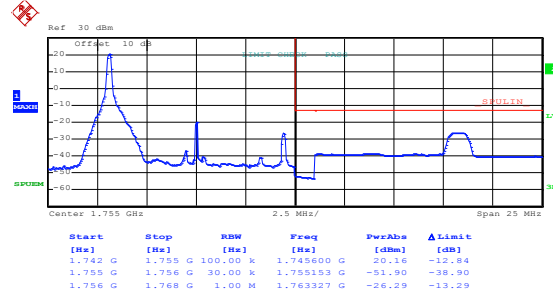
Highest channel

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



Date: 17.SEP.2019 09:53:44

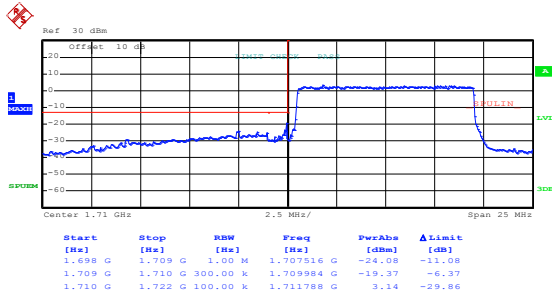
Lowest channel



Date: 17.SEP.2019 09:52:35

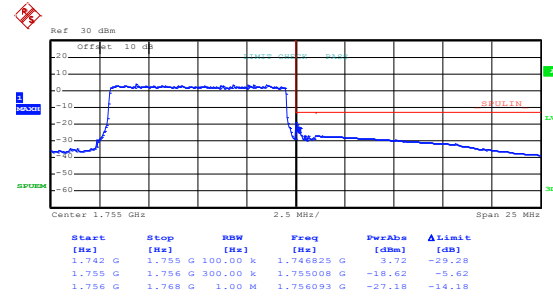
Highest channel

## 16QAM & RB Size 50



Date: 17.SEP.2019 09:53:24

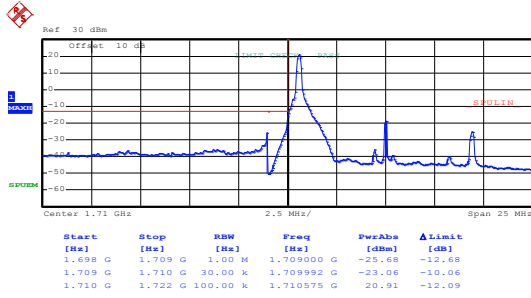
Lowest channel



Date: 17.SEP.2019 09:52:58

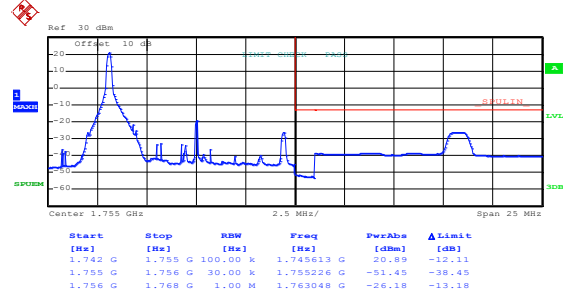
Highest channel

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



Date: 17.SEP.2019 09:53:40

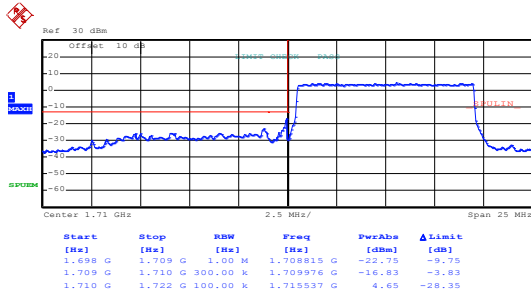
Lowest channel



Date: 17.SEP.2019 09:52:30

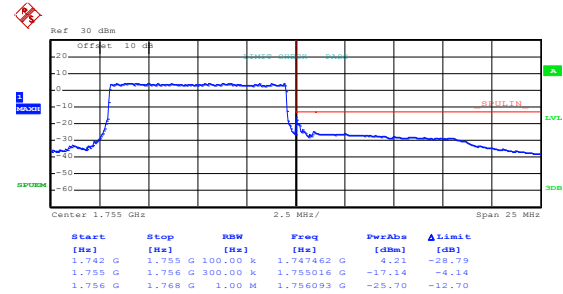
Highest channel

## QPSK & RB Size 50



Date: 17.SEP.2019 09:53:18

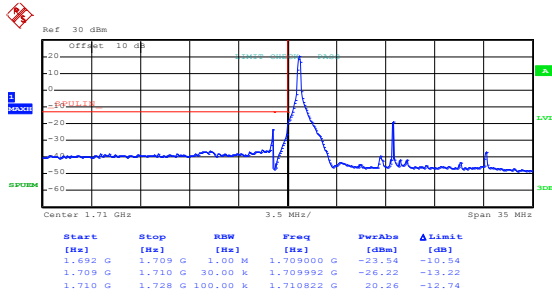
Lowest channel



Date: 17.SEP.2019 09:52:49

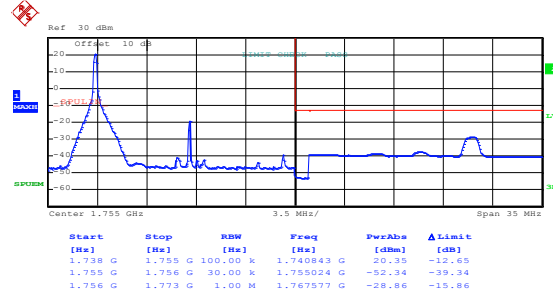
Highest channel

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



Date: 17.SEP.2019 09:54:30

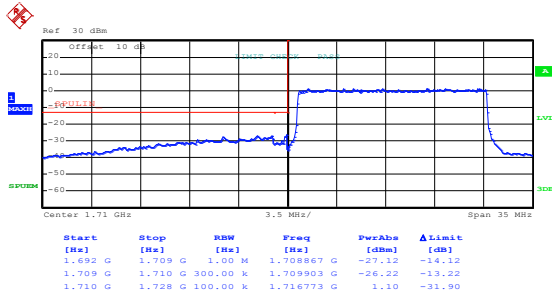
Lowest channel



Date: 17.SEP.2019 09:55:31

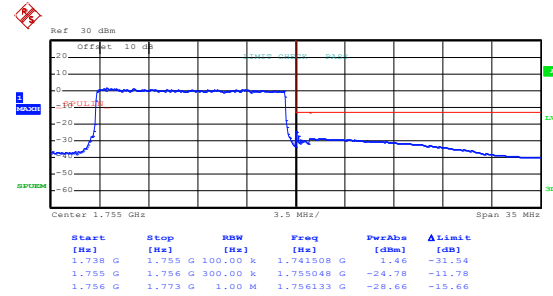
Highest channel

## 16QAM & RB Size 75



Date: 17.SEP.2019 09:54:51

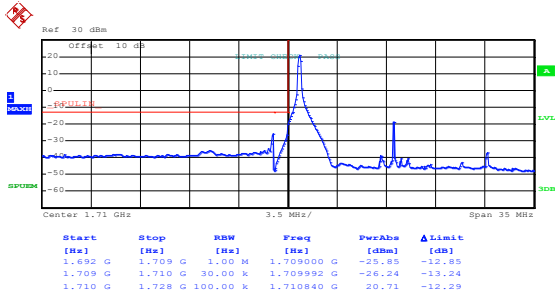
Lowest channel



Date: 17.SEP.2019 09:55:12

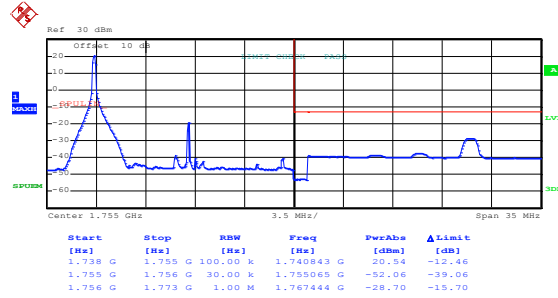
Highest channel

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



Date: 17.SEP.2019 09:54:25

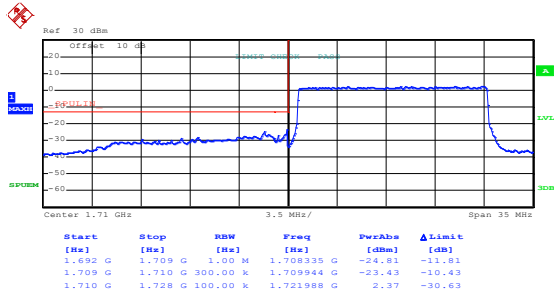
Lowest channel



Date: 17.SEP.2019 09:55:26

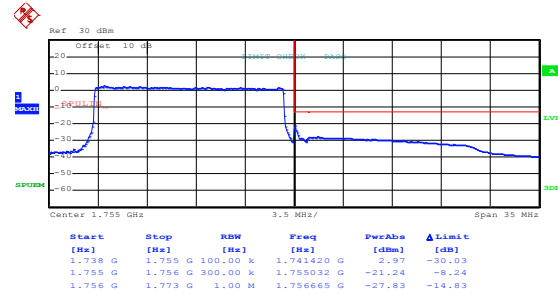
Highest channel

## QPSK & RB Size 75



Date: 17.SEP.2019 09:54:46

Lowest channel

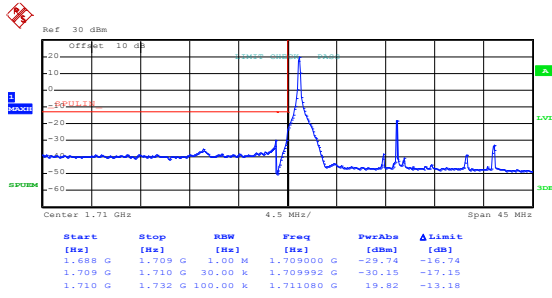


Date: 17.SEP.2019 09:55:06

Highest channel

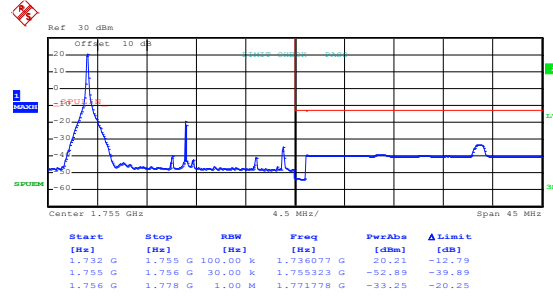


## LTE Band 4, BW: 20MHz 16QAM & RB Size 1



Date: 17.SEP.2019 09:57:10

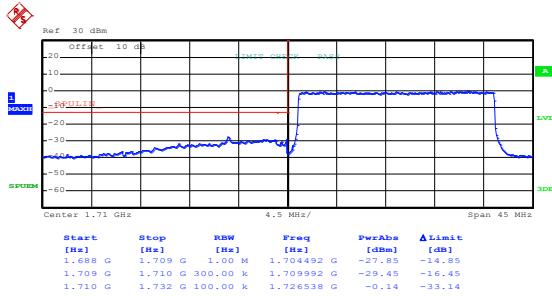
Lowest channel



Date: 17.SEP.2019 09:56:02

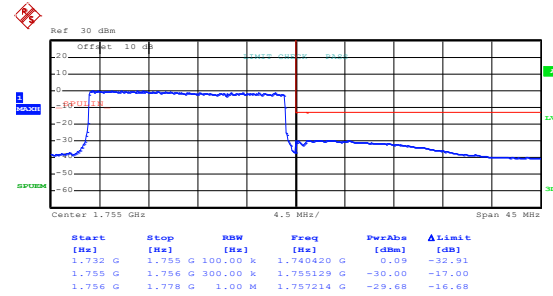
Highest channel

## 16QAM & RB Size 100



Date: 17.SEP.2019 09:56:44

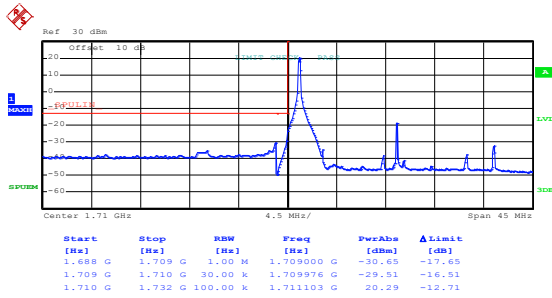
Lowest channel



Date: 17.SEP.2019 09:56:24

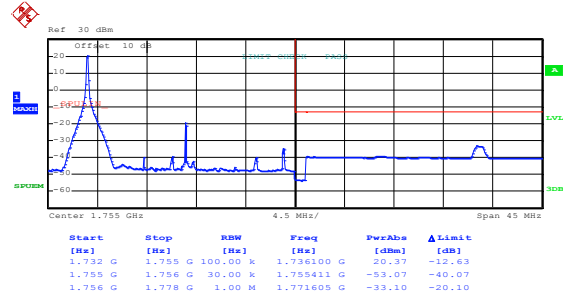
Highest channel

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



Date: 17.SEP.2019 09:57:05

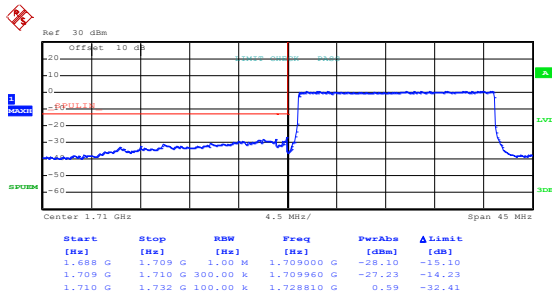
Lowest channel



Date: 17.SEP.2019 09:55:56

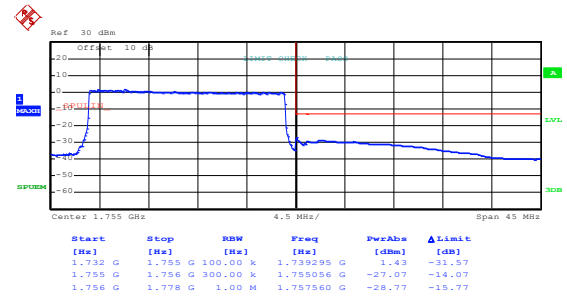
Highest channel

## QPSK & RB Size 100



Date: 17.SEP.2019 09:56:39

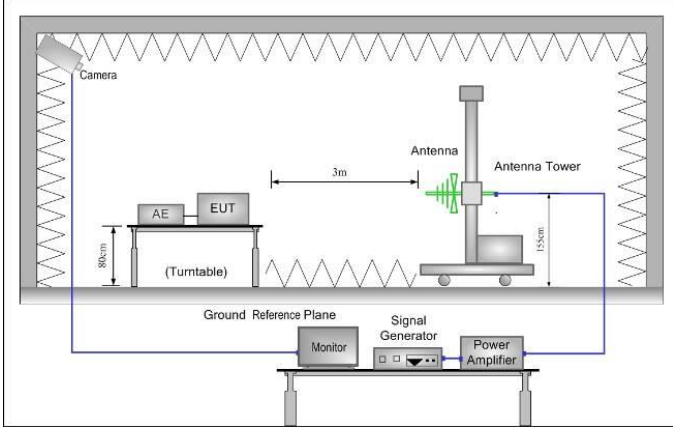
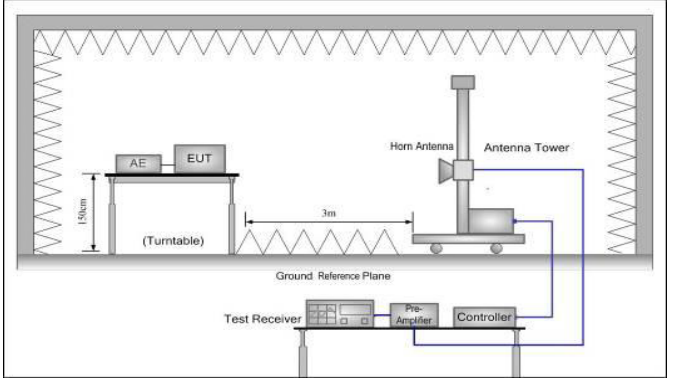
Lowest channel



Date: 17.SEP.2019 09:56:19

Highest channel

## 6.5 Field strength of spurious radiation measurement

Test Requirement:	Part 24.238 (a), Part 27.53(h)
Limit:	<p>LTE Band 2 &amp; 4:</p> <p>The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least <math>43 + 10 \log_{10}(P)</math> dB (-13 dBm).</p>
Test setup:	<p>Below 1GHz</p>  <p>Above 1GHz</p> 
Test Procedure:	<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 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.</li> <li>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.  <math display="block">ERP / EIRP = S.G. \text{ output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}</math> </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:**

**LTE Band 2 part:**

LTE Band 2, WB: 1.4MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3701.40	Vertical	-49.58	-13.00	Pass
5552.10	V	-42.38		
7402.00	V	-37.83		
3701.40	Horizontal	-49.68		
5552.10	H	-42.53		
7402.00	H	-36.68		
<b>Middle Channel</b>				
3760.00	Vertical	-49.61	-13.00	Pass
5640.00	V	-42.47		
7520.00	V	-37.89		
3760.00	Horizontal	-49.72		
5640.00	H	-42.61		
7520.00	H	-36.89		
<b>Highest Channel</b>				
3816.60	Vertical	-49.56	-13.00	Pass
5724.90	V	-42.68		
7633.20	V	-37.64		
3816.60	Horizontal	-49.86		
5724.90	H	-42.58		
7633.20	H	-36.98		
<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 2, WB: 20MHz				
RB size 1 & RB offset 0				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
<b>Lowest Channel</b>				
3720.00	Vertical	-49.54	-13.00	Pass
5580.00	V	-42.67		
7440.00	V	-37.59		
3720.00	Horizontal	-49.83		
5580.00	H	-42.56		
7440.00	H	-36.89		
<b>Middle Channel</b>				
3760.00	Vertical	-49.58	-13.00	Pass
5640.00	V	-42.64		
7520.00	V	-37.83		
3760.00	Horizontal	-49.38		
5640.00	H	-42.58		
7520.00	H	-36.94		
<b>Highest Channel</b>				
3800.00	Vertical	-49.61	-13.00	Pass
5700.00	V	-42.53		
7600.00	V	-37.86		
3800.00	Horizontal	-49.97		
5700.00	H	-42.68		
7600.00	H	-39.87		
<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 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	-50.70	-13.00	Pass
5132.10	V	-45.81		
6842.80	V	-38.77		
3421.40	Horizontal	-49.96		
5132.10	H	-45.30		
6842.80	H	-39.12		
<b>Middle Channel</b>				
3465.00	Vertical	-50.74	-13.00	Pass
5197.50	V	-45.86		
6930.00	V	-38.92		
3465.00	Horizontal	-49.87		
5197.50	H	-45.64		
6930.00	H	-39.89		
<b>Highest Channel</b>				
3508.60	Vertical	-50.78	-13.00	Pass
5262.90	V	-45.92		
7017.20	V	-38.94		
3508.60	Horizontal	-49.89		
5262.90	H	-45.67		
7017.20	H	-39.86		
<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	-50.38	-13.00	Pass
5160.00	V	-45.87		
6880.00	V	-38.94		
3440.00	Horizontal	-49.57		
5160.00	H	-45.83		
6880.00	H	-39.24		
<b>Middle Channel</b>				
3465.00	Vertical	-50.77	-13.00	Pass
5197.50	V	-45.67		
6930.00	V	-38.54		
3465.00	Horizontal	-49.86		
5197.50	H	-45.37		
6930.00	H	-39.92		
<b>Highest Channel</b>				
3490.00	Vertical	-50.84	-13.00	Pass
5235.00	V	-45.83		
6980.00	V	-38.64		
3490.00	Horizontal	-49.85		
5235.00	H	-45.73		
6980.00	H	-39.68		
<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 24.235, Part 27.54, Part 2.1055(a)(1)(b)
Limit:	Within authorized band
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 2 part:**

Reference Frequency: LTE Band 2 (10MHz) Middle channel=18900 channel=1880.00MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
<b>QPSK</b>					
3.80	-30	186	0.098936	Within authorized band	Pass
	-20	147	0.078191		
	-10	159	0.084574		
	0	136	0.072340		
	10	171	0.090957		
	20	155	0.082447		
	30	136	0.072340		
	40	180	0.095745		
	50	184	0.097872		
<b>16QAM</b>					
3.80	-30	177	0.094149	Within authorized band	Pass
	-20	155	0.082447		
	-10	146	0.077660		
	0	132	0.070213		
	10	110	0.058511		
	20	113	0.060106		
	30	148	0.078723		
	40	170	0.090426		
	50	174	0.092553		
<i>Note: Only the worst case shown in the report.</i>					

**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>					
3.80	-30	199	0.114863	Within authorized band	Pass
	-20	147	0.084848		
	-10	185	0.106782		
	0	186	0.107359		
	10	175	0.101010		
	20	172	0.099278		
	30	123	0.070996		
	40	145	0.083694		
	50	156	0.090043		
<b>16QAM</b>					
3.80	-30	185	0.106782	Within authorized band	Pass
	-20	174	0.100433		
	-10	163	0.094084		
	0	123	0.070996		
	10	141	0.081385		
	20	112	0.064646		
	30	104	0.060029		
	40	180	0.103896		
	50	182	0.105051		
<i>Note: Only the worst case shown in the report.</i>					

## 6.7 Frequency stability V.S. Voltage measurement

Test Requirement:	Part 24.235, Part 27.54, Part 2.1055(d)(2)
Limit:	Within authorized band
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 2 part:**

Reference Frequency: LTE Band 2(10MHz) Middle channel=18900 channel=1880.00MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	98	0.052128	Within authorized band	Pass
	3.80	58	0.030851		
	3.50	63	0.033511		
16QAM					
25	4.35	78	0.041489	Within authorized band	Pass
	3.80	55	0.029255		
	3.50	66	0.035106		

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

**LTE Band 4 part:**

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 channel=1732.50MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	4.35	66	0.038095	Within authorized band	Pass
	3.80	32	0.018470		
	3.50	45	0.025974		
16QAM					
25	4.35	76	0.043867	Within authorized band	Pass
	3.80	45	0.025974		
	3.50	20	0.011544		

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