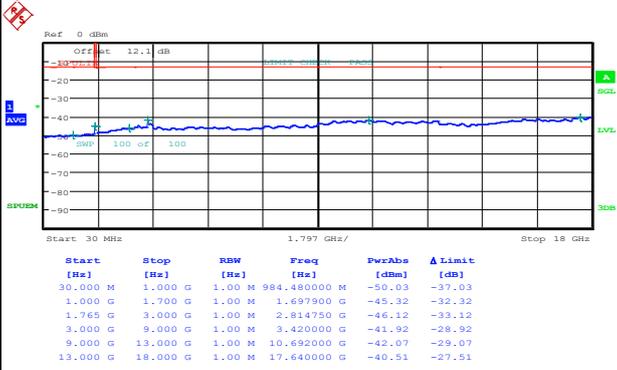




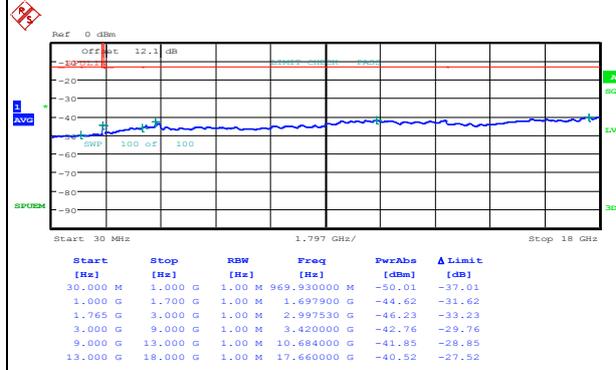
LTE Band 4 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



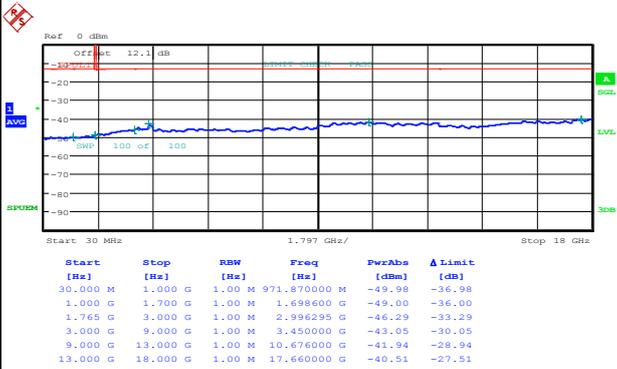
Date: 27.JAN.2015 20:20:18



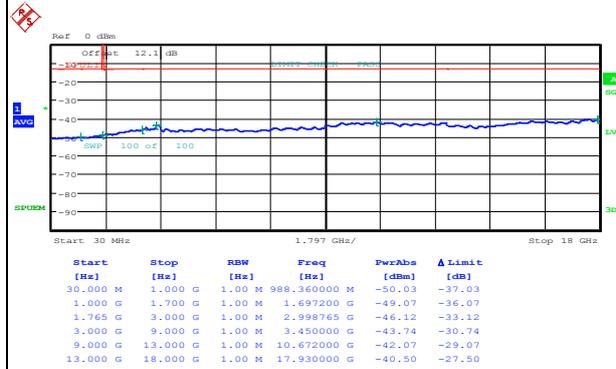
Date: 27.JAN.2015 20:21:28

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 27.JAN.2015 20:23:25



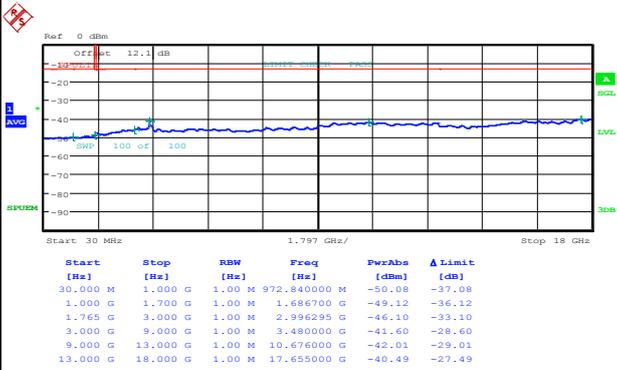
Date: 27.JAN.2015 20:24:35



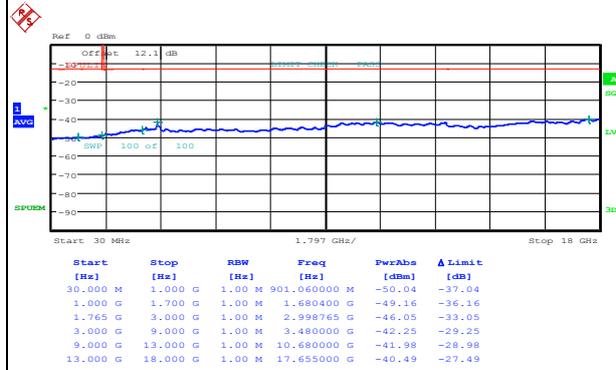
LTE Band 4 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 27.JAN.2015 20:31:12

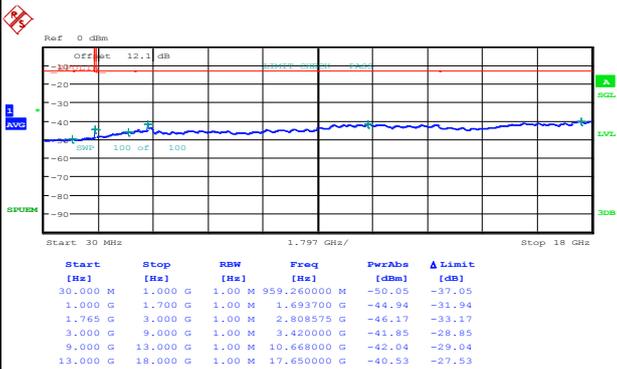


Date: 27.JAN.2015 20:32:22

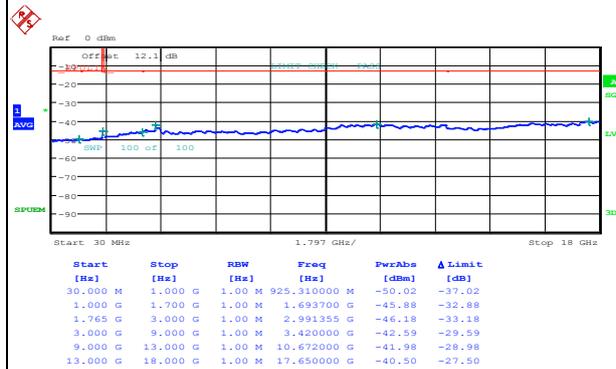
LTE Band 4 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 27.JAN.2015 20:39:03



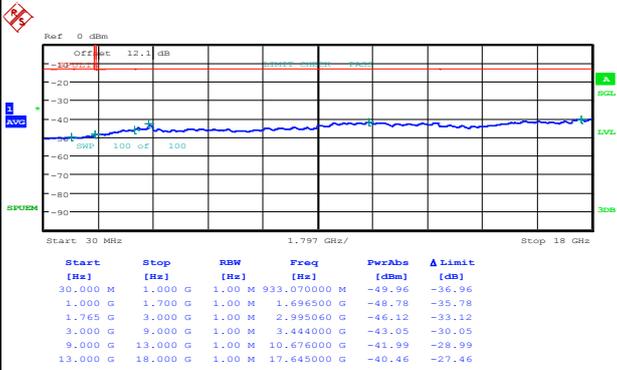
Date: 27.JAN.2015 20:40:13



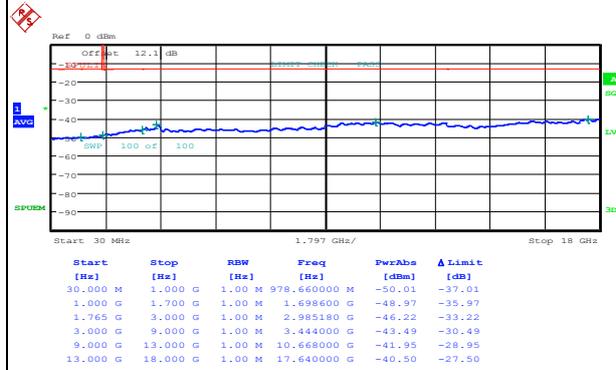
LTE Band 4 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM



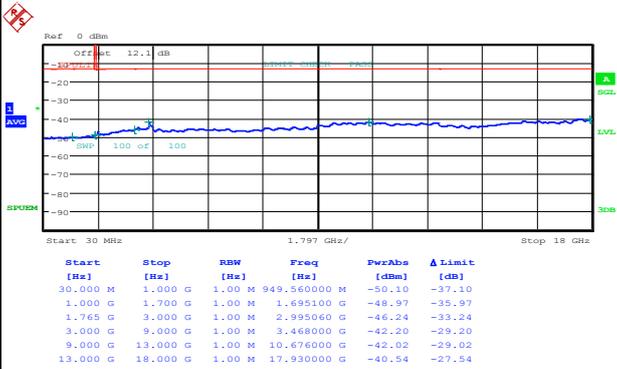
Date: 27.JAN.2015 20:42:10



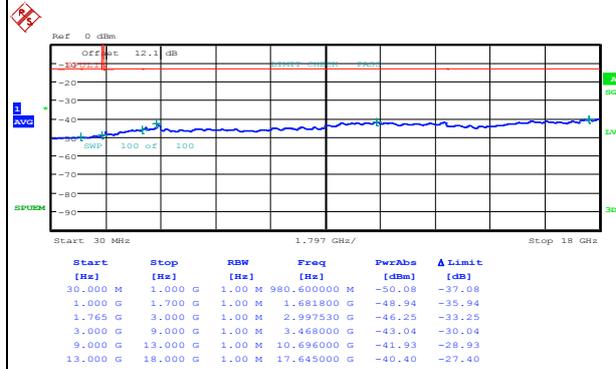
Date: 27.JAN.2015 20:43:20

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 27.JAN.2015 20:49:57



Date: 27.JAN.2015 20:51:07



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0070	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0061	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0065	
-10	Normal Voltage	0.0074	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage = 3.7V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage =4.1 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



## LTE Band 12

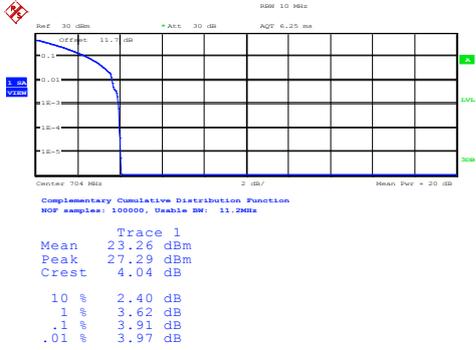
### Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.91	5.03	4.42	5.74	<b>PASS</b>
Middle CH	3.75	4.94	4.62	5.71	
Highest CH	3.65	4.81	4.39	5.54	



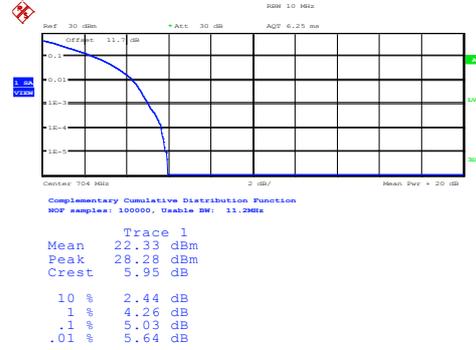
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



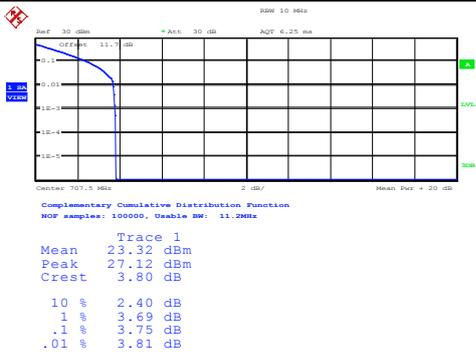
Date: 28.JAN.2015 01:51:12

Lowest Channel / Full RB



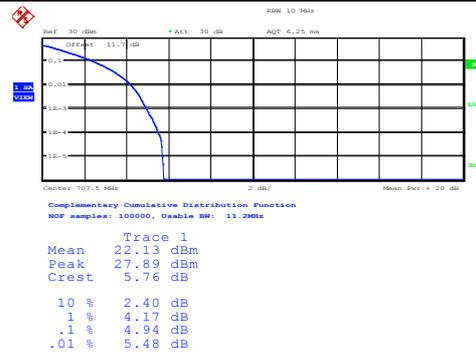
Date: 28.JAN.2015 01:50:59

Middle Channel / 1RB



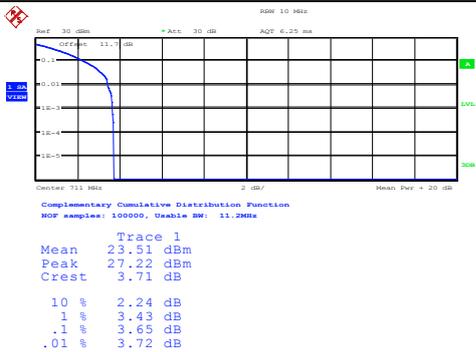
Date: 28.JAN.2015 01:51:25

Middle Channel / Full RB



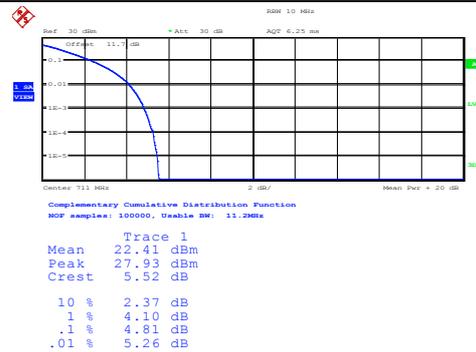
Date: 28.JAN.2015 01:51:39

Highest Channel / 1RB



Date: 28.JAN.2015 01:52:03

Highest Channel / Full RB

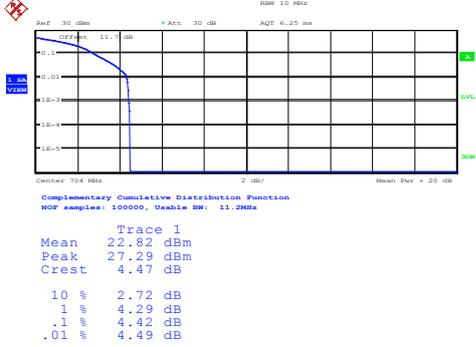


Date: 28.JAN.2015 01:51:51



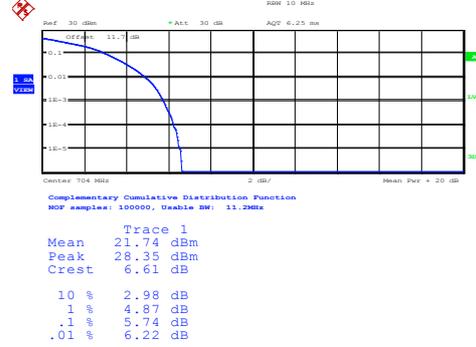
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



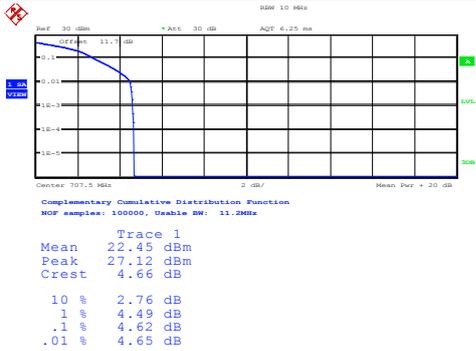
Date: 28.JAN.2015 01:49:13

Lowest Channel / Full RB



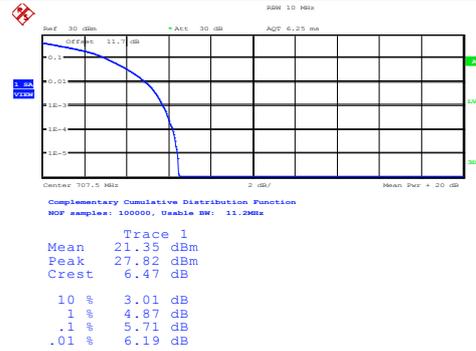
Date: 28.JAN.2015 01:49:00

Middle Channel / 1RB



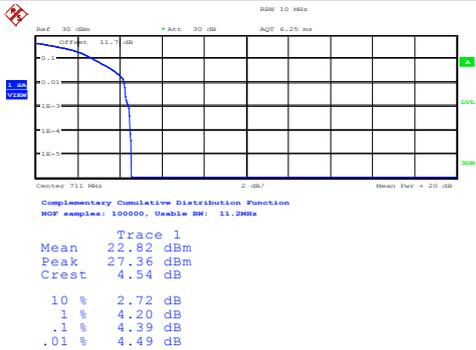
Date: 28.JAN.2015 01:50:10

Middle Channel / Full RB



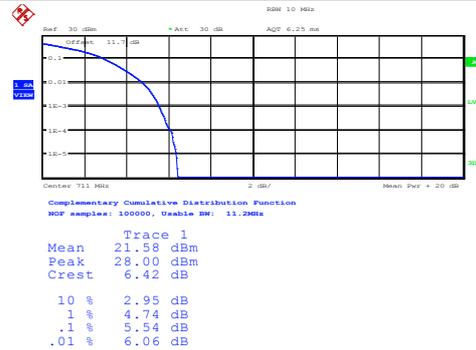
Date: 28.JAN.2015 01:50:22

Highest Channel / 1RB



Date: 28.JAN.2015 01:50:47

Highest Channel / Full RB



Date: 28.JAN.2015 01:50:34



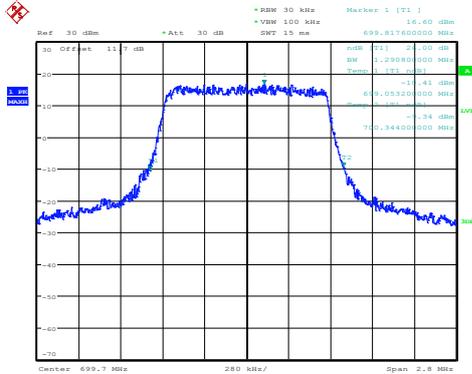
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.29	1.28	3.06	3.02	4.92	4.93	10.02	10.00	-	-	-	-
Middle CH	1.29	1.30	3.04	3.03	4.90	4.95	10.08	10.08	-	-	-	-
Highest CH	1.29	1.29	3.03	3.04	4.94	4.96	10.06	10.04	-	-	-	-



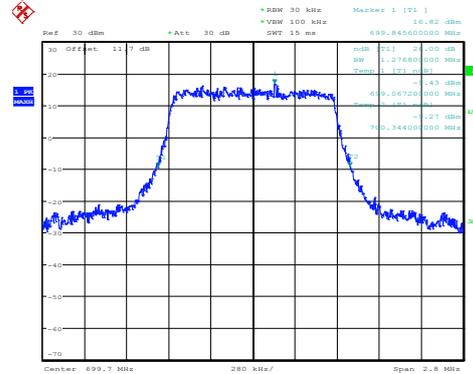
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



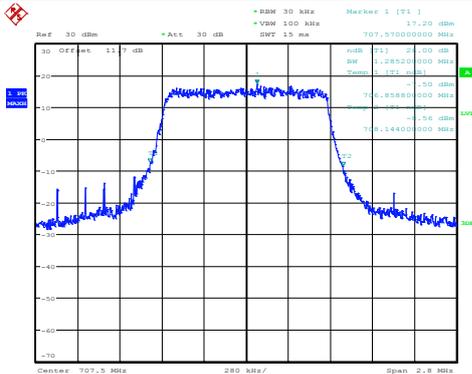
Date: 28.JAN.2015 01:28:10

Lowest Channel / 1.4MHz / 16QAM



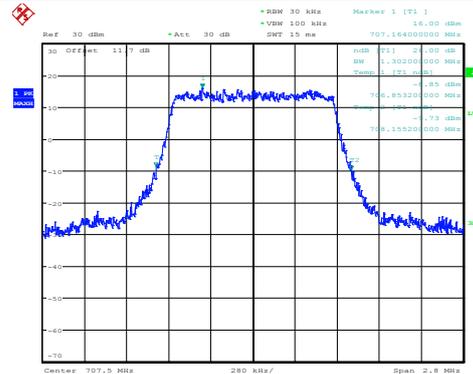
Date: 28.JAN.2015 01:27:57

Middle Channel / 1.4MHz / QPSK



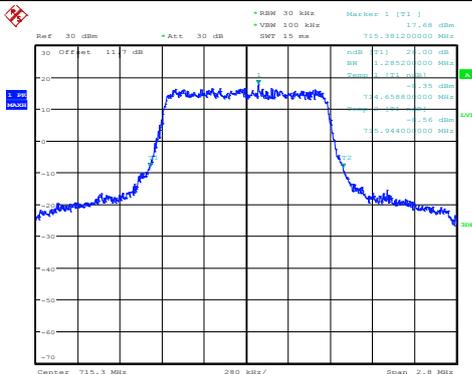
Date: 28.JAN.2015 01:36:46

Middle Channel / 1.4MHz / 16QAM



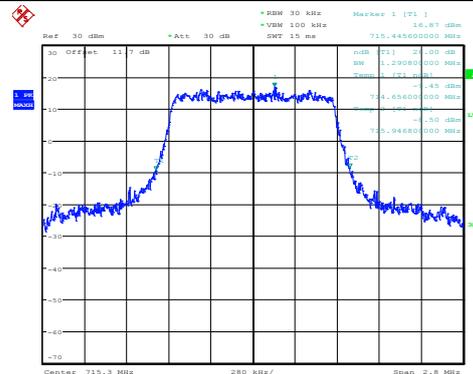
Date: 28.JAN.2015 01:36:59

Highest Channel / 1.4MHz / QPSK



Date: 28.JAN.2015 01:40:07

Highest Channel / 1.4MHz / 16QAM

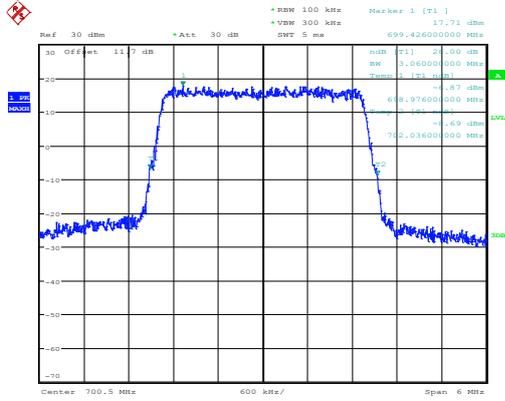


Date: 28.JAN.2015 01:39:54



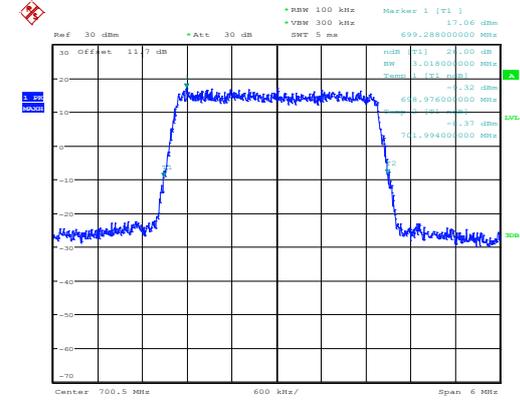
LTE Band 12

Lowest Channel / 3MHz / QPSK



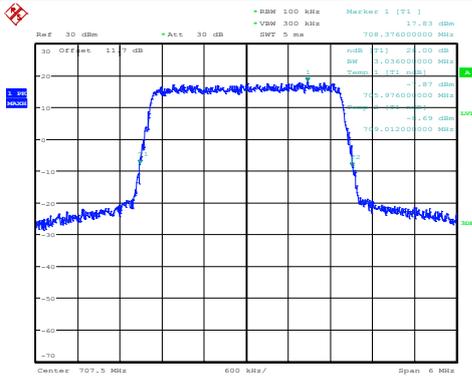
Date: 28.JAN.2015 00:31:34

Lowest Channel / 3MHz / 16QAM



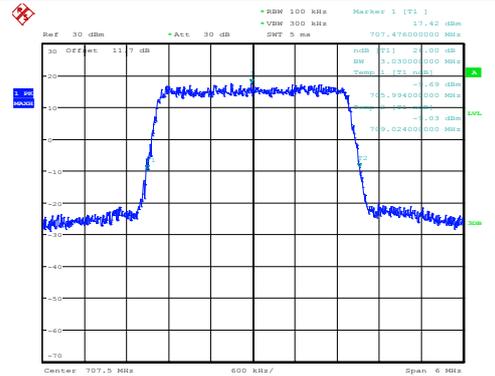
Date: 28.JAN.2015 00:31:22

Middle Channel / 3MHz / QPSK



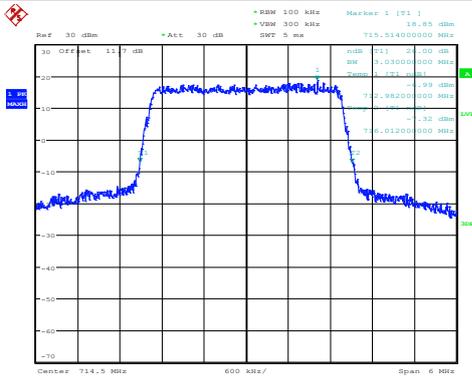
Date: 28.JAN.2015 00:39:09

Middle Channel / 3MHz / 16QAM



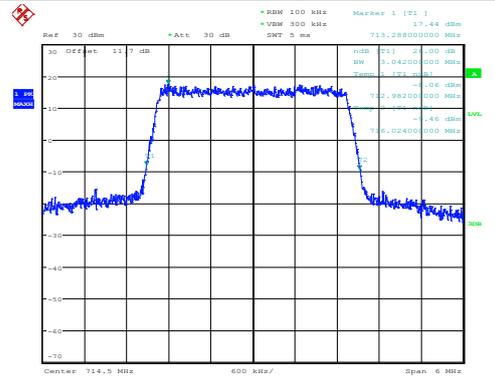
Date: 28.JAN.2015 00:39:22

Highest Channel / 3MHz / QPSK



Date: 28.JAN.2015 00:42:30

Highest Channel / 3MHz / 16QAM



Date: 28.JAN.2015 00:42:17







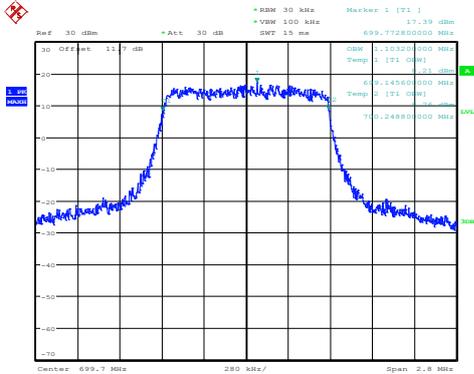
### Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.10	1.10	2.72	2.72	4.50	4.50	9.10	9.10	-	-	-	-
Middle CH	1.10	1.10	2.72	2.72	4.51	4.49	9.06	9.02	-	-	-	-
Highest CH	1.10	1.10	2.73	2.73	4.51	4.52	9.08	9.04	-	-	-	-



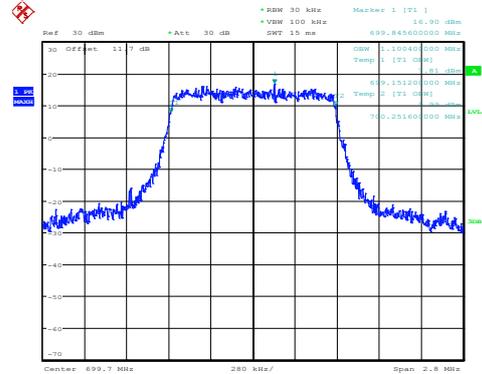
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



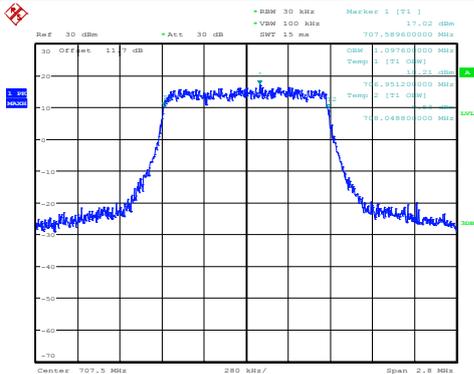
Date: 28.JAN.2015 01:27:32

Lowest Channel / 1.4MHz / 16QAM



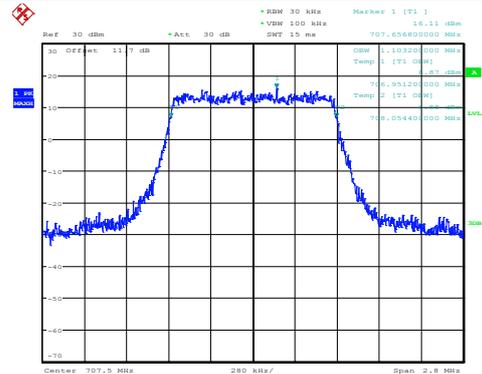
Date: 28.JAN.2015 01:27:44

Middle Channel / 1.4MHz / QPSK



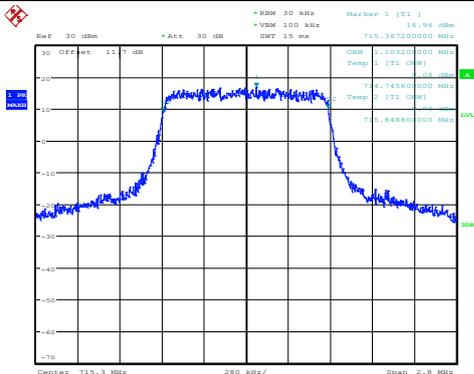
Date: 28.JAN.2015 01:36:34

Middle Channel / 1.4MHz / 16QAM



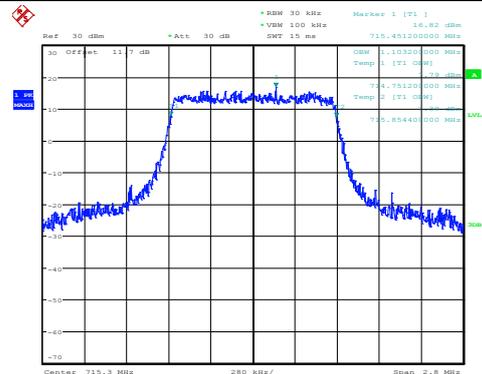
Date: 28.JAN.2015 01:36:23

Highest Channel / 1.4MHz / QPSK



Date: 28.JAN.2015 01:39:30

Highest Channel / 1.4MHz / 16QAM



Date: 28.JAN.2015 01:39:41



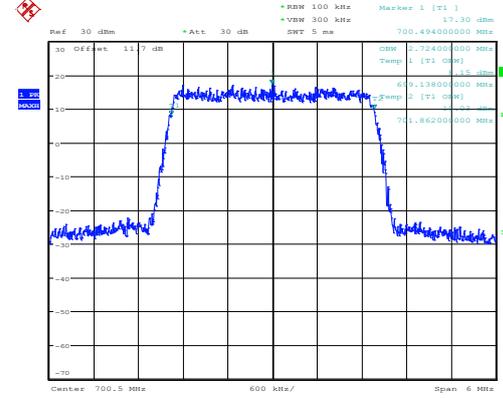
LTE Band 12

Lowest Channel / 3MHz / QPSK



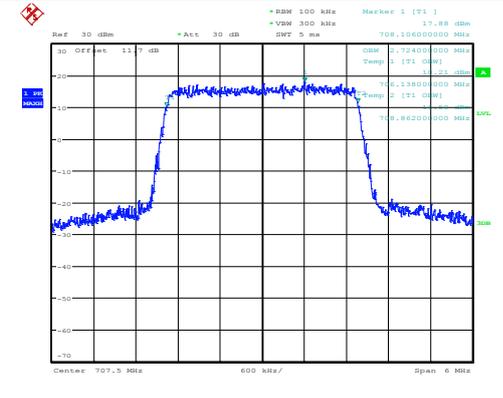
Date: 28.JAN.2015 00:30:57

Lowest Channel / 3MHz / 16QAM



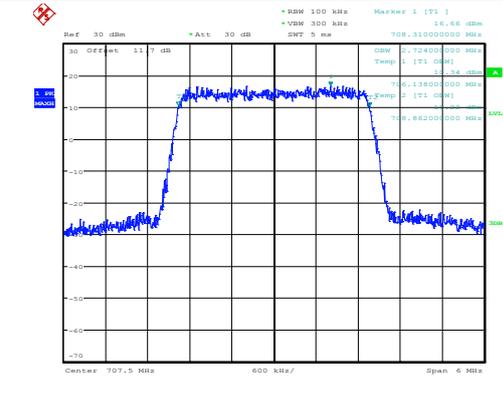
Date: 28.JAN.2015 00:31:09

Middle Channel / 3MHz / QPSK



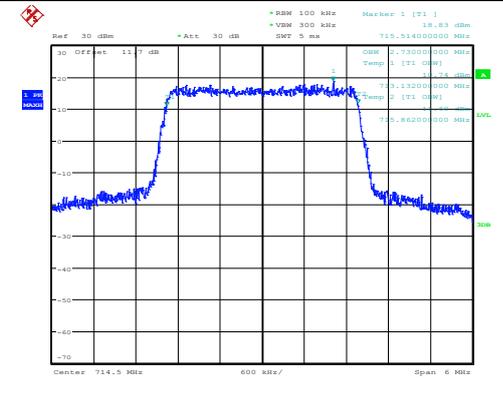
Date: 28.JAN.2015 00:38:57

Middle Channel / 3MHz / 16QAM



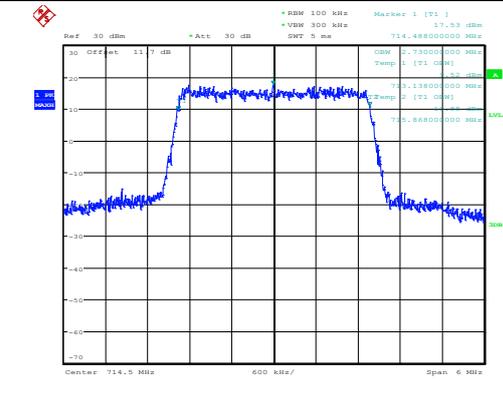
Date: 28.JAN.2015 00:38:45

Highest Channel / 3MHz / QPSK



Date: 28.JAN.2015 00:41:53

Highest Channel / 3MHz / 16QAM

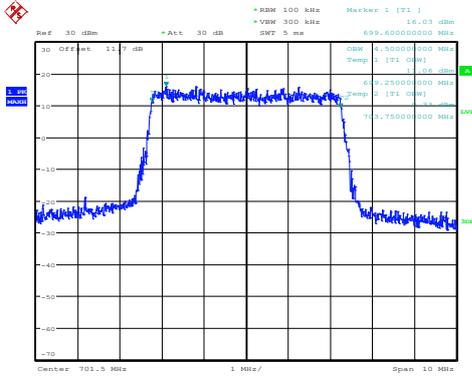


Date: 28.JAN.2015 00:42:04



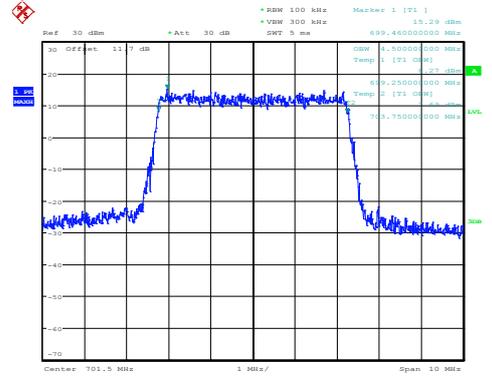
LTE Band 12

Lowest Channel / 5MHz / QPSK



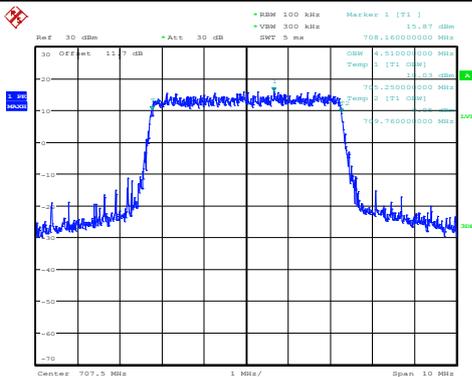
Date: 28.JAN.2015 00:49:41

Lowest Channel / 5MHz / 16QAM



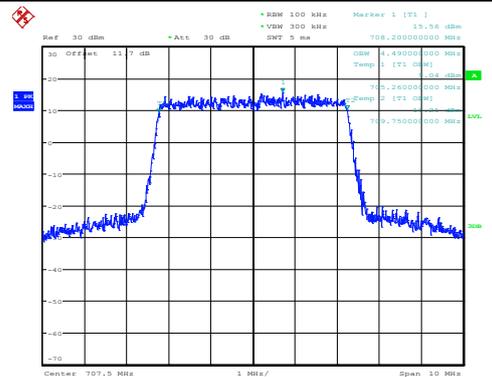
Date: 28.JAN.2015 00:49:52

Middle Channel / 5MHz / QPSK



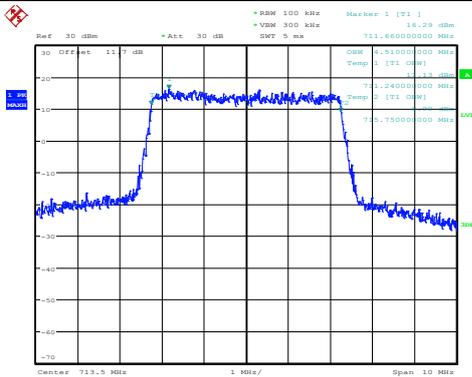
Date: 28.JAN.2015 00:57:38

Middle Channel / 5MHz / 16QAM



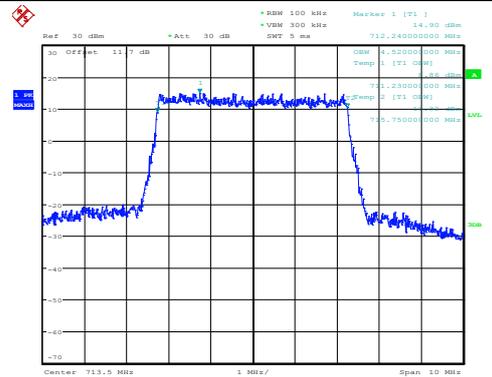
Date: 28.JAN.2015 00:57:28

Highest Channel / 5MHz / QPSK



Date: 28.JAN.2015 01:00:35

Highest Channel / 5MHz / 16QAM

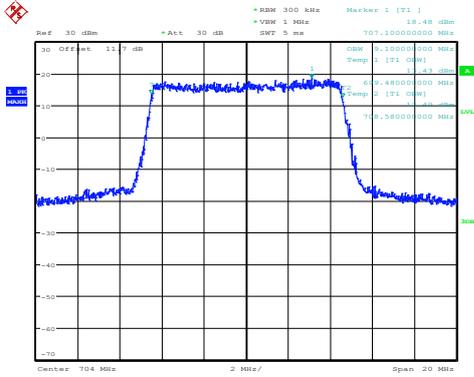


Date: 28.JAN.2015 01:00:46

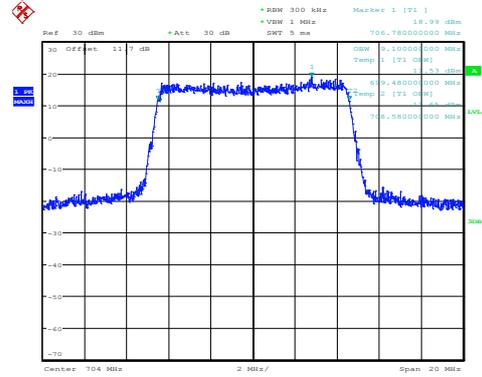


LTE Band 12

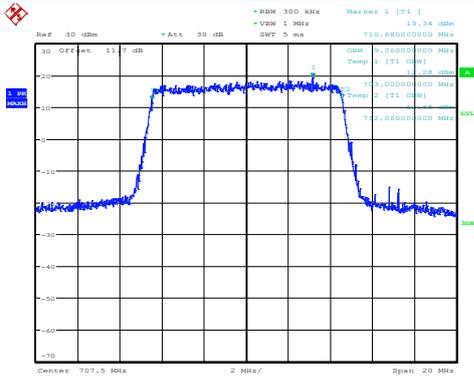
Lowest Channel / 10MHz / QPSK



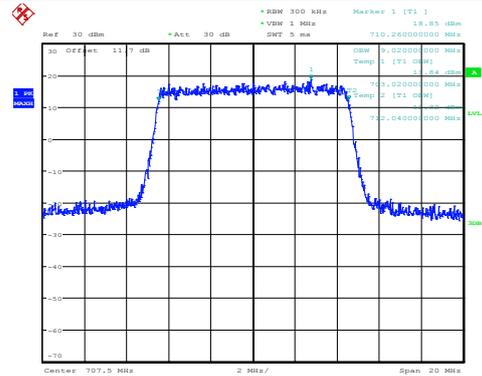
Lowest Channel / 10MHz / 16QAM



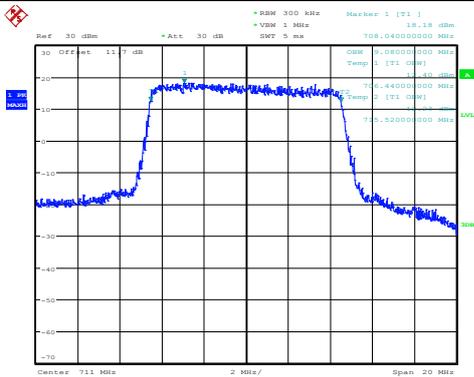
Middle Channel / 10MHz / QPSK



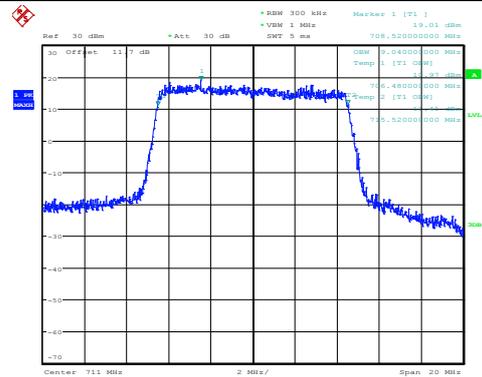
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

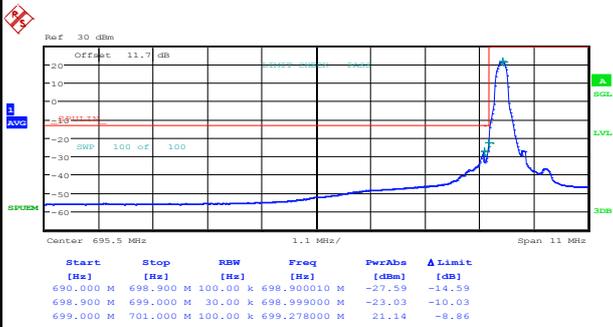




# Conducted Band Edge

## LTE Band 12 / 1.4MHz / QPSK

### Lowest Band Edge / 1 RB



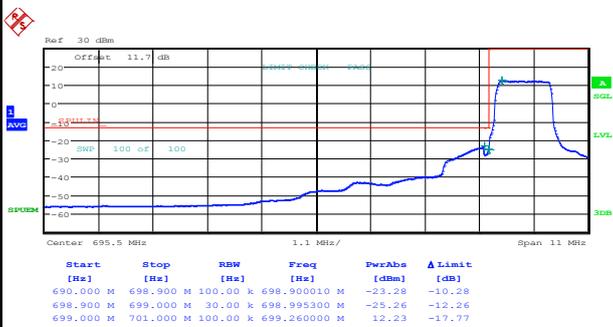
Date: 28.JAN.2015 01:33:51

### Highest Band Edge / 1RB



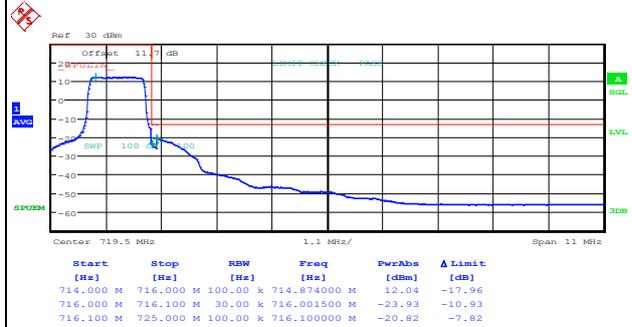
Date: 28.JAN.2015 01:44:47

### Lowest Band Edge / Full RB



Date: 28.JAN.2015 01:30:21

### Highest Band Edge / Full RB

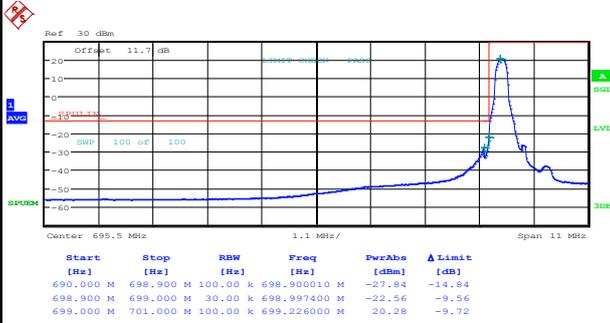


Date: 28.JAN.2015 01:41:16



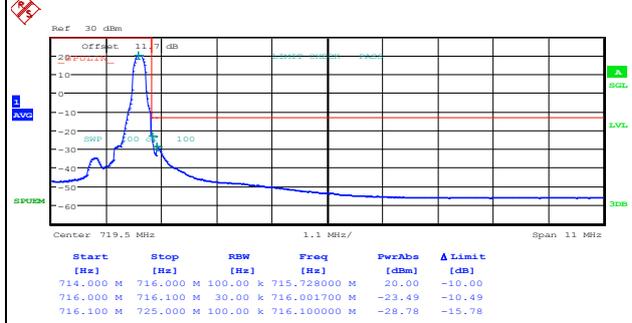
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



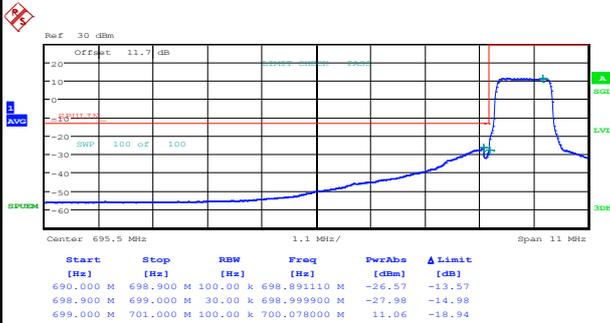
Date: 28.JAN.2015 01:32:41

Highest Band Edge / 1 RB



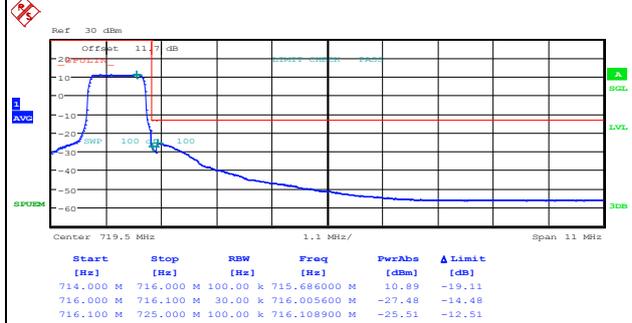
Date: 28.JAN.2015 01:43:37

Lowest Band Edge / Full RB



Date: 28.JAN.2015 01:31:31

Highest Band Edge / Full RB

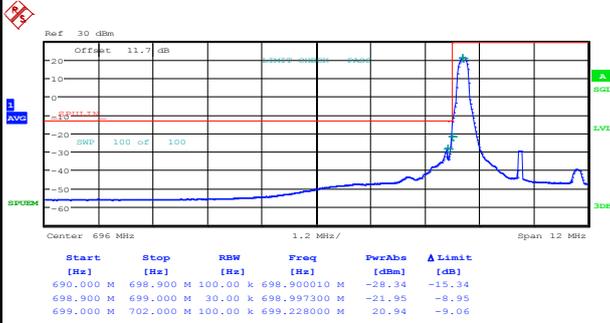


Date: 28.JAN.2015 01:42:27



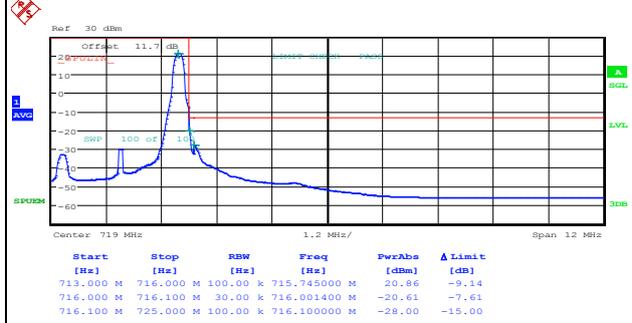
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



Date: 28.JAN.2015 00:36:14

Highest Band Edge / 1 RB



Date: 28.JAN.2015 00:47:10

Lowest Band Edge / Full RB



Date: 28.JAN.2015 00:32:44

Highest Band Edge / Full RB



Date: 28.JAN.2015 00:43:39



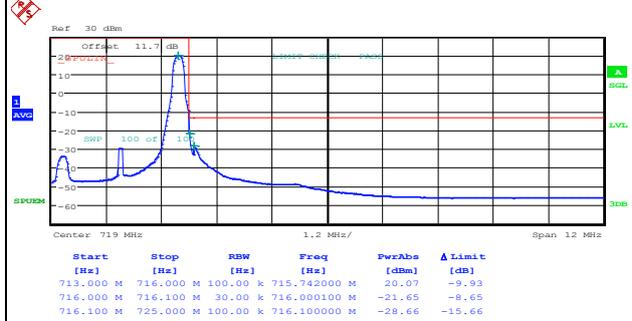
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



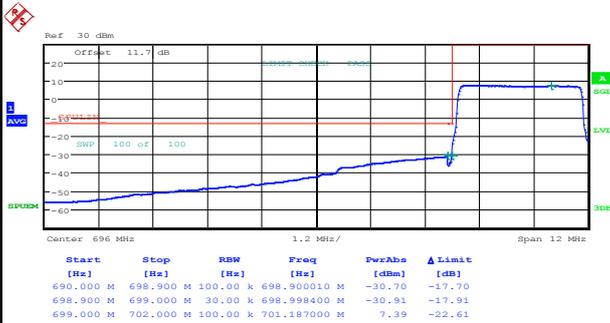
Date: 28.JAN.2015 00:35:04

Highest Band Edge / 1 RB



Date: 28.JAN.2015 00:46:00

Lowest Band Edge / Full RB



Date: 28.JAN.2015 00:33:54

Highest Band Edge / Full RB

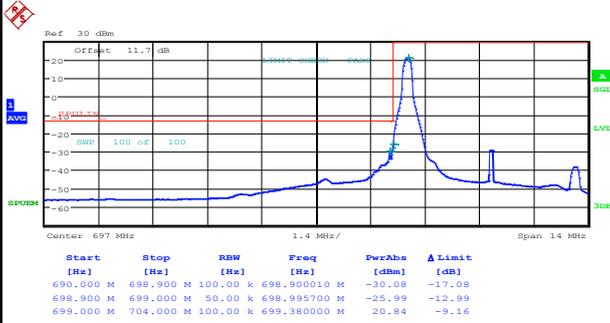


Date: 28.JAN.2015 00:44:49



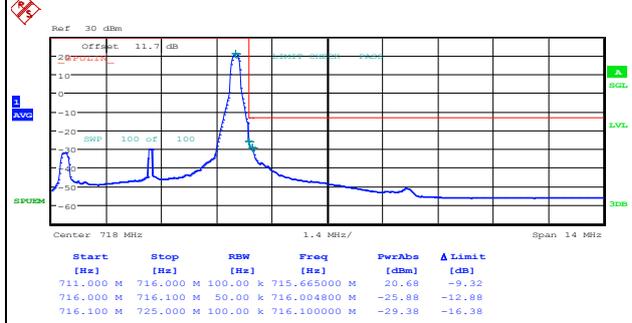
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



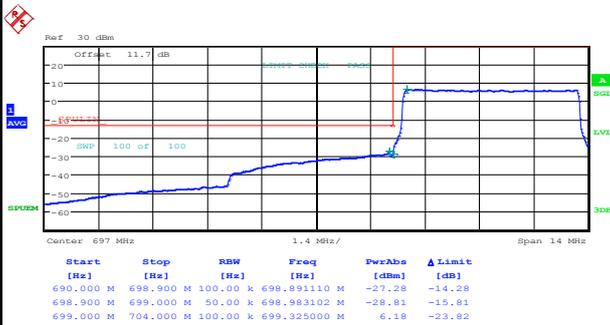
Date: 28.JAN.2015 00:54:57

Highest Band Edge / 1 RB



Date: 28.JAN.2015 01:04:41

Lowest Band Edge / Full RB



Date: 28.JAN.2015 00:51:27

Highest Band Edge / Full RB

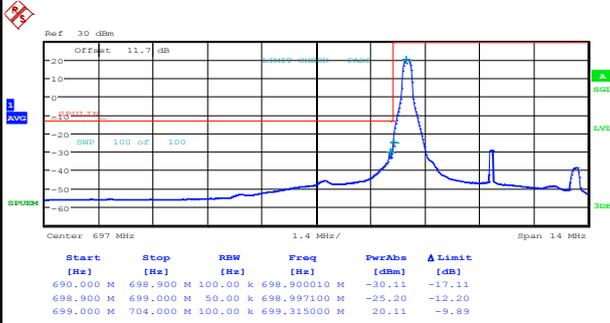


Date: 28.JAN.2015 01:02:21



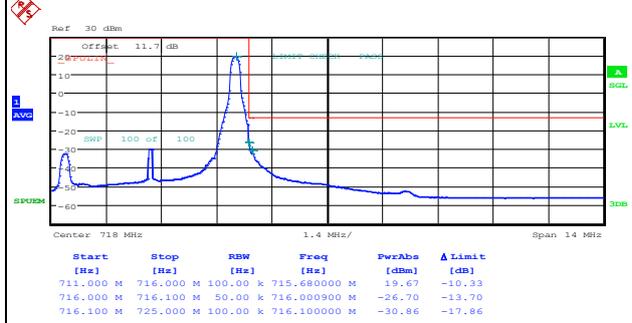
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



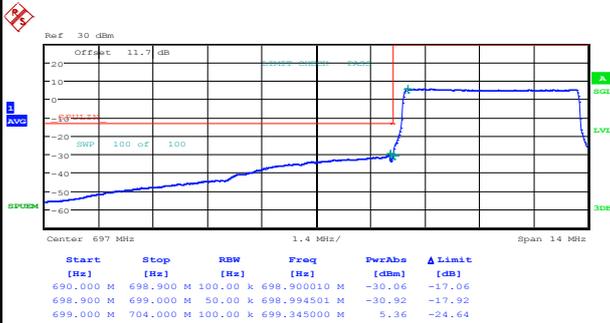
Date: 28.JAN.2015 00:53:47

Highest Band Edge / 1 RB



Date: 28.JAN.2015 01:05:51

Lowest Band Edge / Full RB



Date: 28.JAN.2015 00:52:37

Highest Band Edge / Full RB

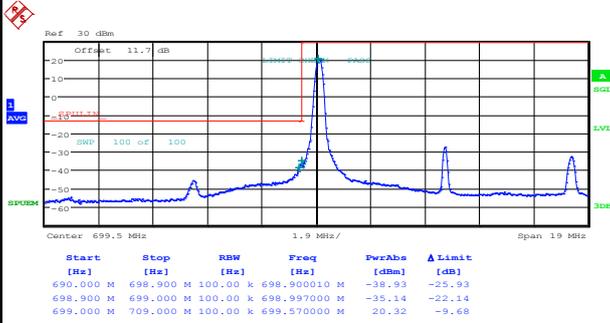


Date: 28.JAN.2015 01:03:31



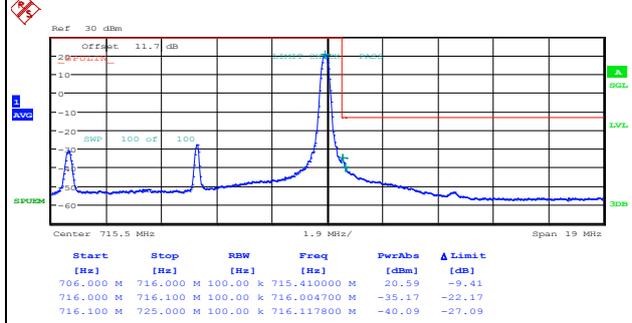
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



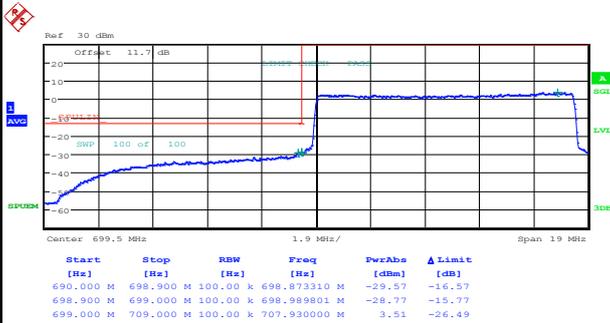
Date: 28.JAN.2015 01:13:38

Highest Band Edge / 1 RB



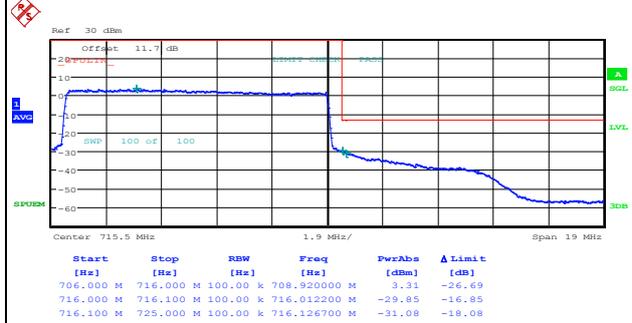
Date: 28.JAN.2015 01:24:46

Lowest Band Edge / Full RB



Date: 28.JAN.2015 01:10:08

Highest Band Edge / Full RB

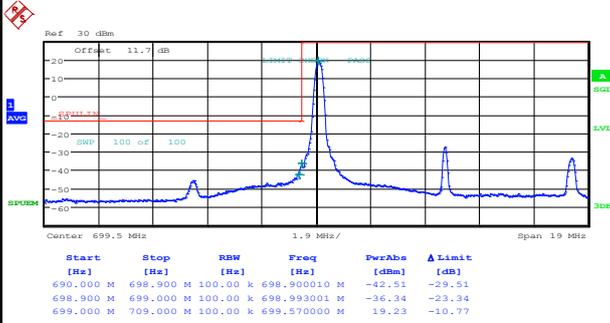


Date: 28.JAN.2015 01:21:02



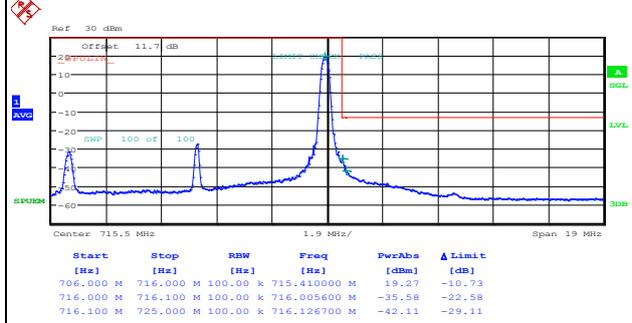
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



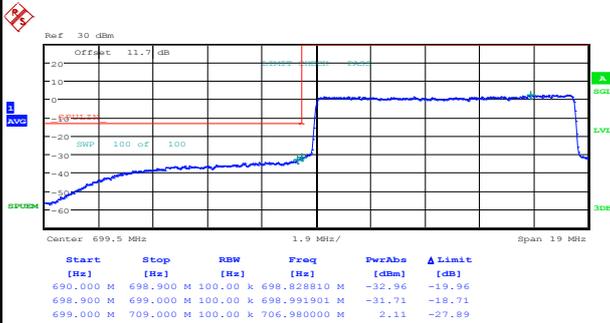
Date: 28.JAN.2015 01:12:28

Highest Band Edge / 1 RB



Date: 28.JAN.2015 01:23:29

Lowest Band Edge / Full RB



Date: 28.JAN.2015 01:11:18

Highest Band Edge / Full RB



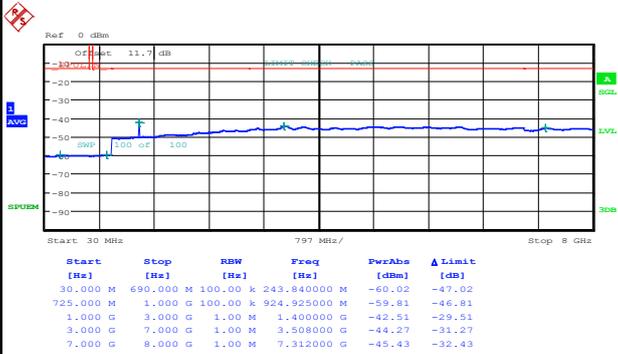
Date: 28.JAN.2015 01:22:18



# Conducted Spurious Emission

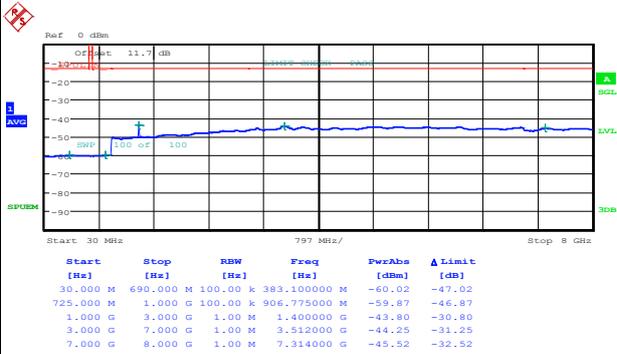
## LTE Band 12 / 1.4MHz

### Lowest Channel / QPSK



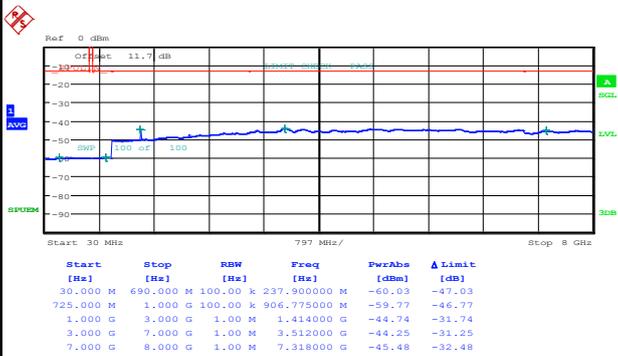
Date: 28.JAN.2015 01:35:01

### Lowest Channel / 16QAM



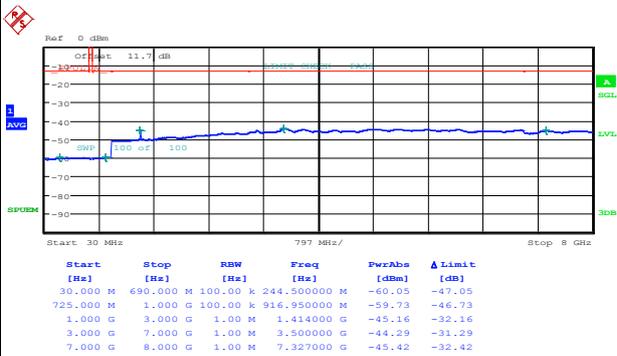
Date: 28.JAN.2015 01:36:11

### Middle Channel / QPSK



Date: 28.JAN.2015 01:39:19

### Middle Channel / 16QAM



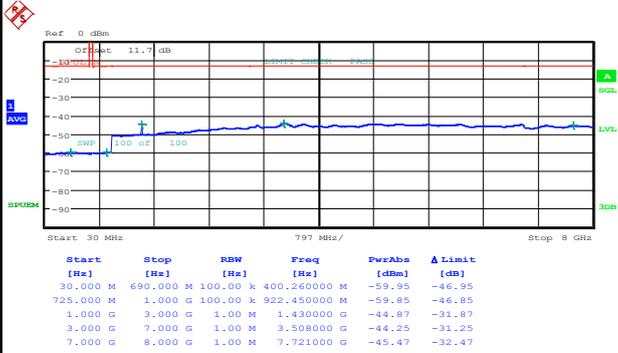
Date: 28.JAN.2015 01:38:09



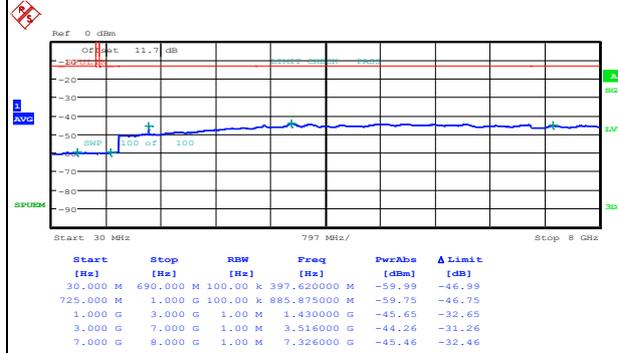
LTE Band 12 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 28.JAN.2015 01:45:57

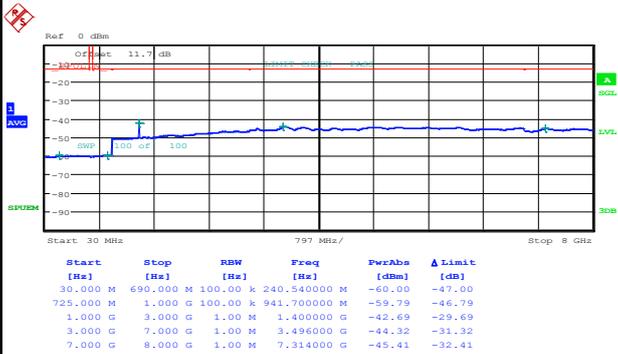


Date: 28.JAN.2015 01:47:07

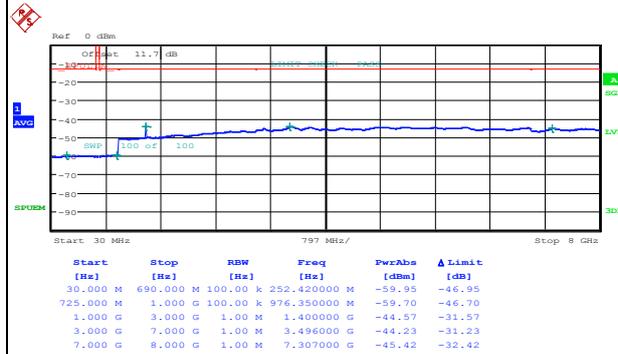
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 28.JAN.2015 00:37:24



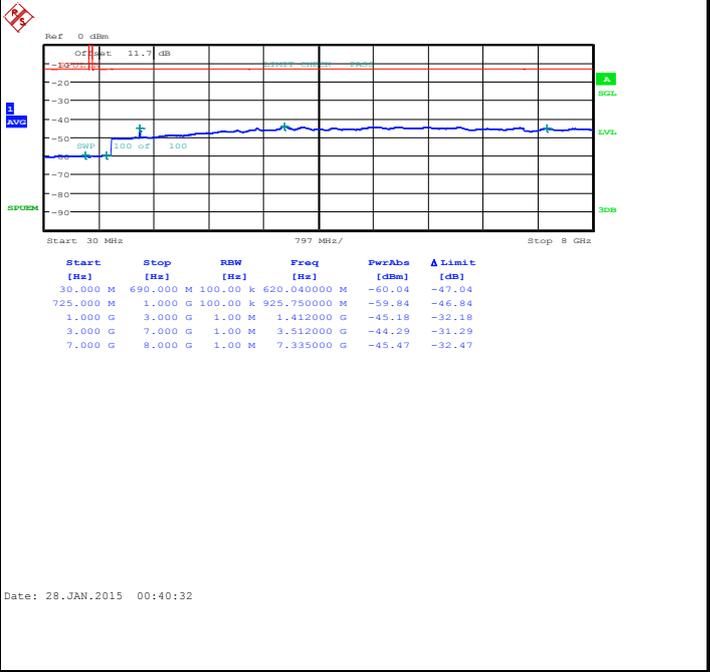
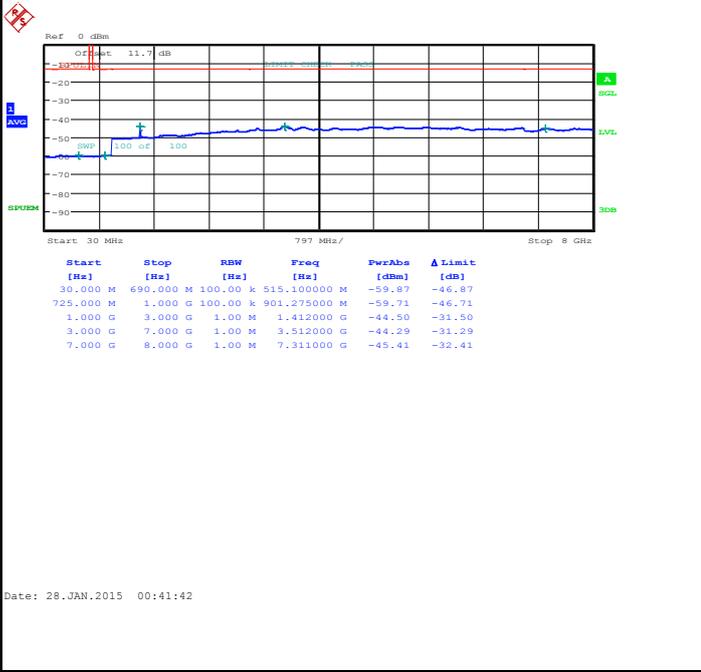
Date: 28.JAN.2015 00:38:34



LTE Band 12 / 3MHz

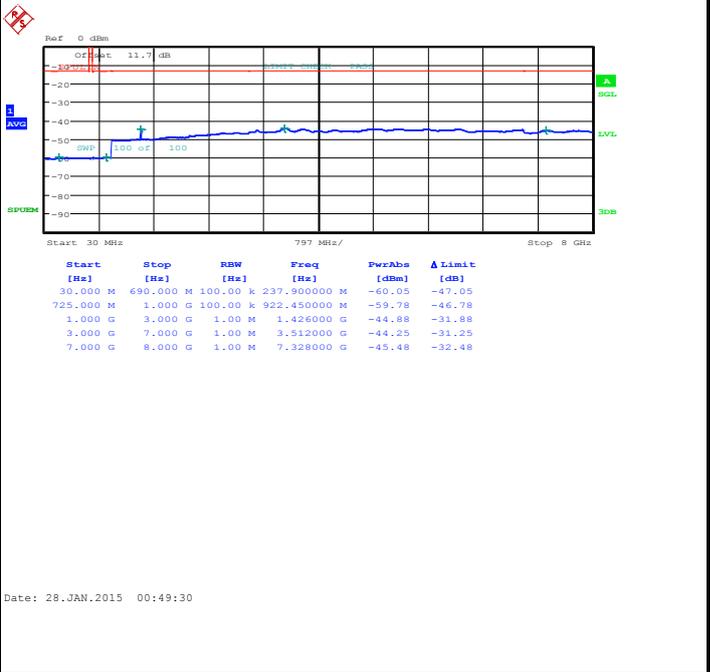
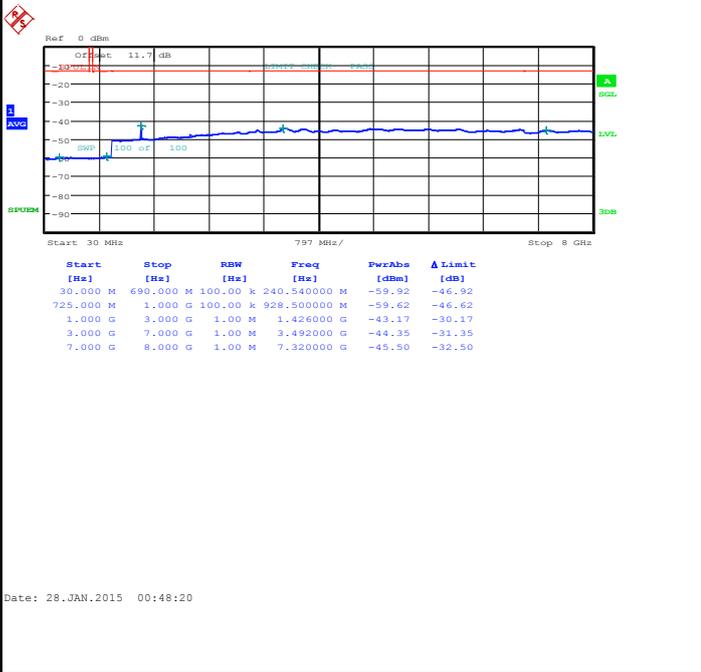
Middle Channel / QPSK

Middle Channel / 16QAM



Highest Channel / QPSK

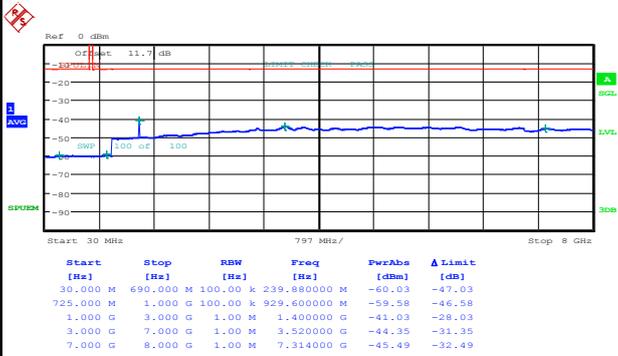
Highest Channel / 16QAM





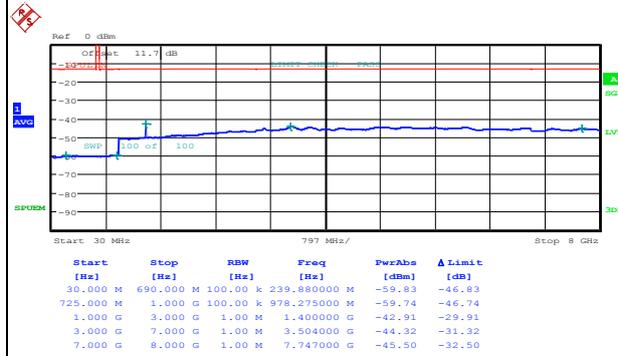
LTE Band 12 / 5MHz

Lowest Channel / QPSK



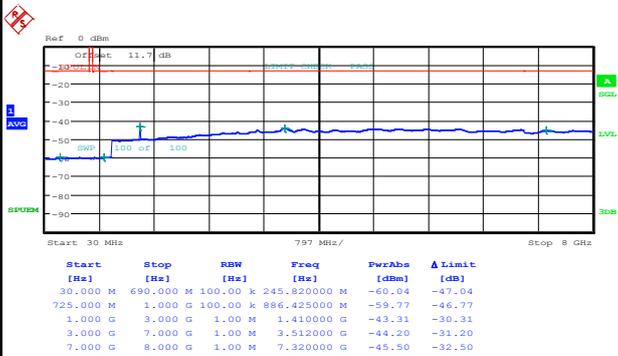
Date: 28.JAN.2015 00:56:07

Lowest Channel / 16QAM



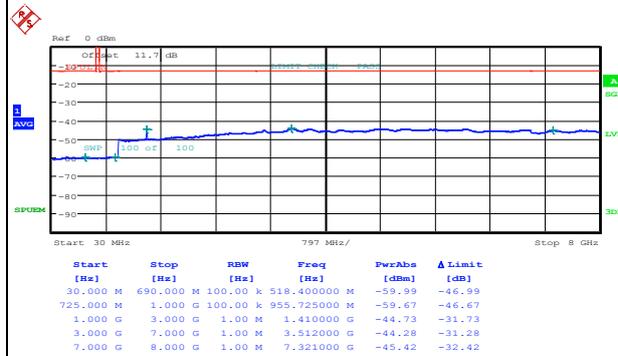
Date: 28.JAN.2015 00:57:17

Middle Channel / QPSK



Date: 28.JAN.2015 01:00:24

Middle Channel / 16QAM

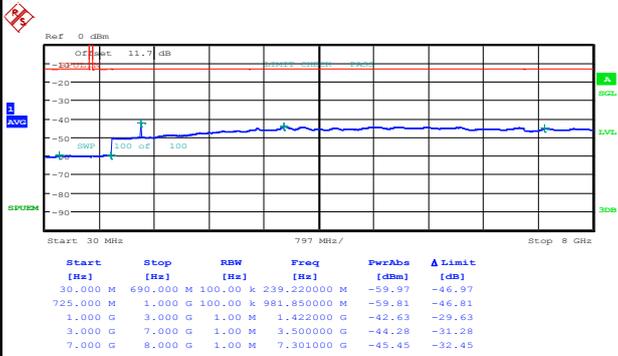


Date: 28.JAN.2015 00:59:14



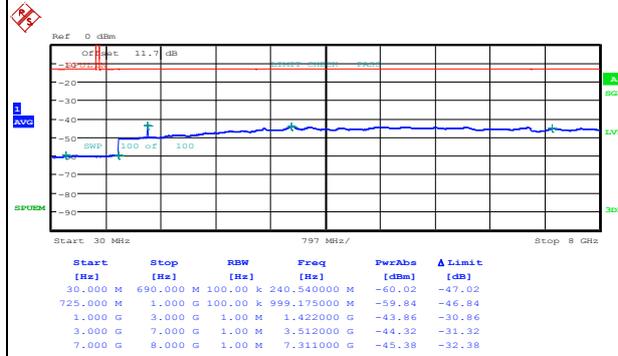
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 28.JAN.2015 01:08:11

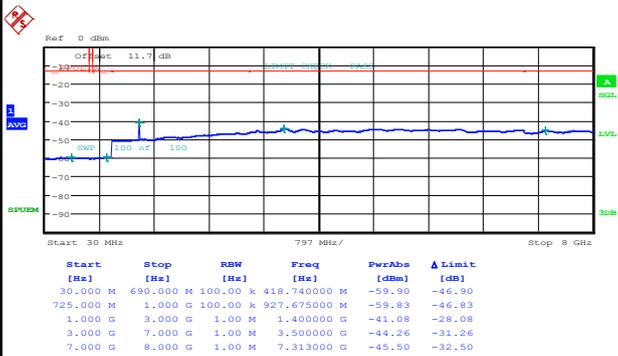
Highest Channel / 16QAM



Date: 28.JAN.2015 01:07:01

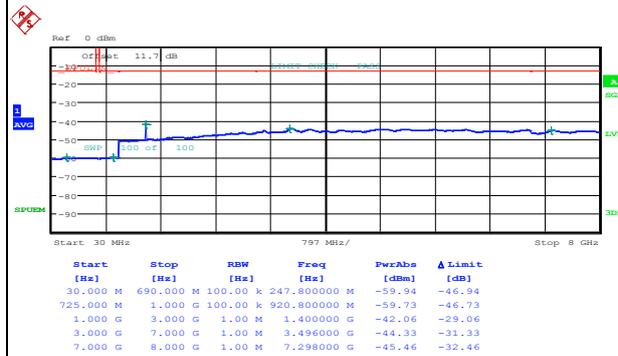
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 28.JAN.2015 01:14:48

Lowest Channel / 16QAM



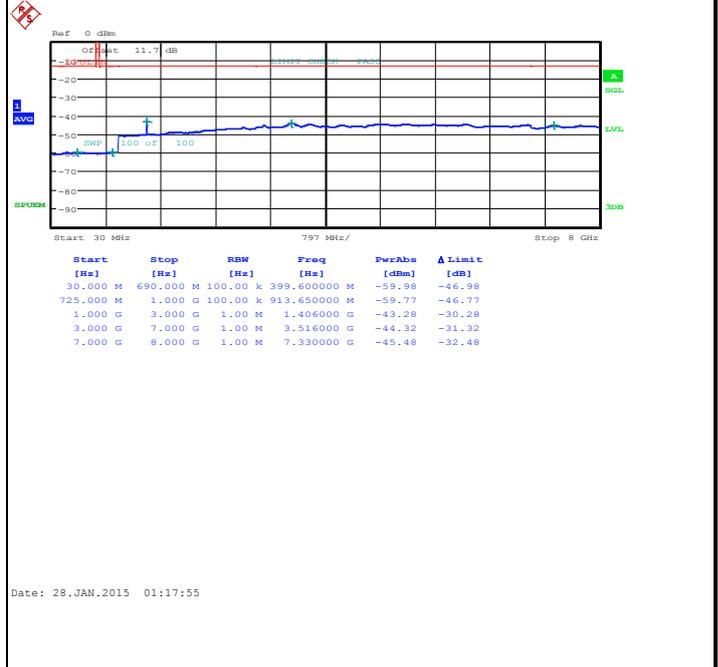
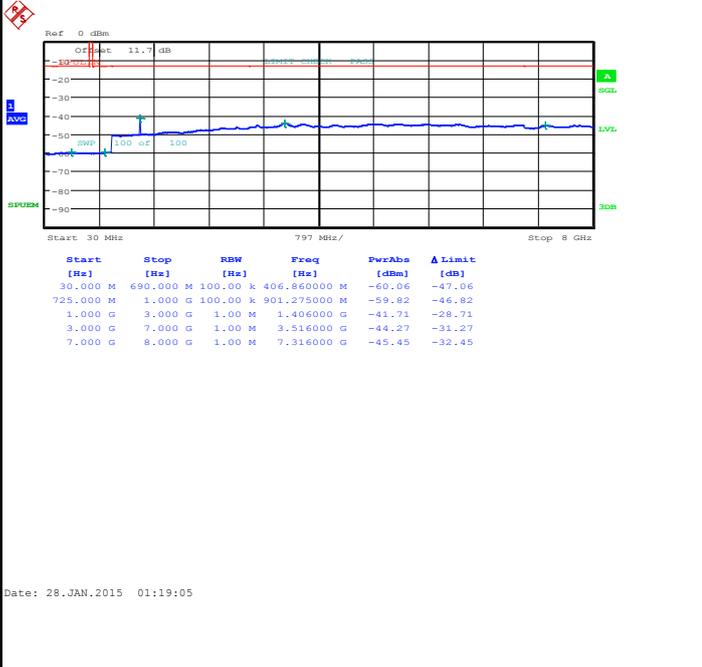
Date: 28.JAN.2015 01:15:58



LTE Band 12 / 10MHz

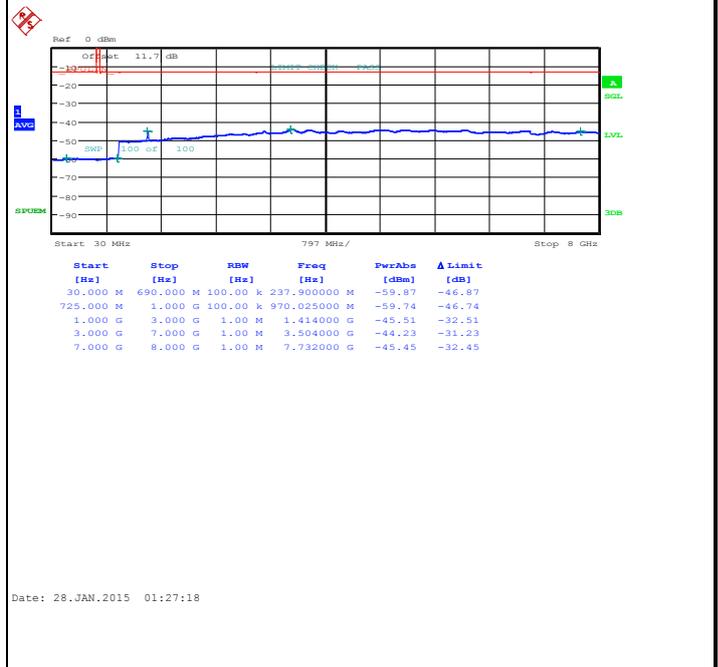
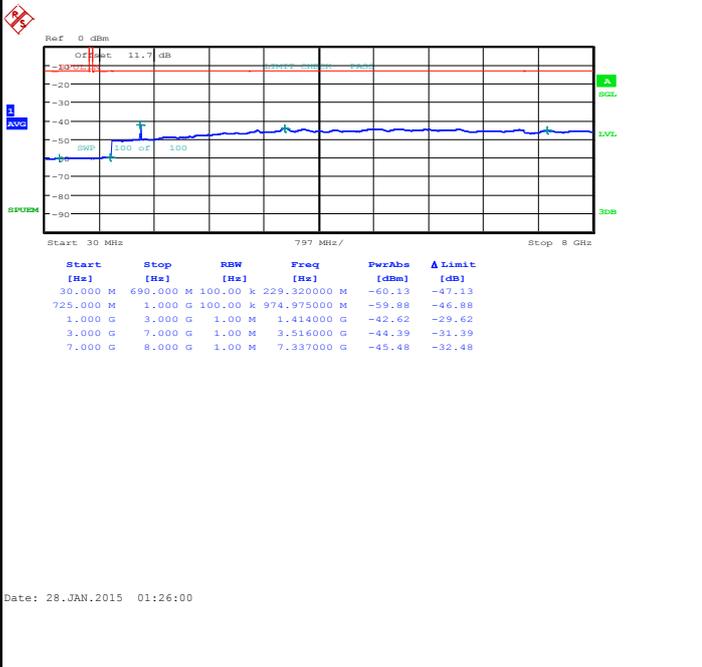
Middle Channel / QPSK

Middle Channel / 16QAM



Highest Channel / QPSK

Highest Channel / 16QAM





**Frequency Stability**

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0107	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0095	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0100	
20	Maximum Voltage	0.0103	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0110	

**Note:**

1. Normal Voltage = 3.7V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage =4.1 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 1.4MHz	Within Band
		Frequency Offset ( $\Delta f$ ) (Hz)	Result
50	Normal Voltage	-0.1	PASS
40	Normal Voltage	-7.6	
30	Normal Voltage	0.1	
20(Ref.)	Normal Voltage	0.0	
10	Normal Voltage	-6.7	
0	Normal Voltage	0.2	
-10	Normal Voltage	0.3	
-20	Normal Voltage	-1.0	
-30	Normal Voltage	-7.1	
20	Maximum Voltage	-7.3	
20	Normal Voltage	0.0	
20	Battery End Point	-7.8	

$|\text{MAX}(\Delta f)| = 7.8\text{Hz}$

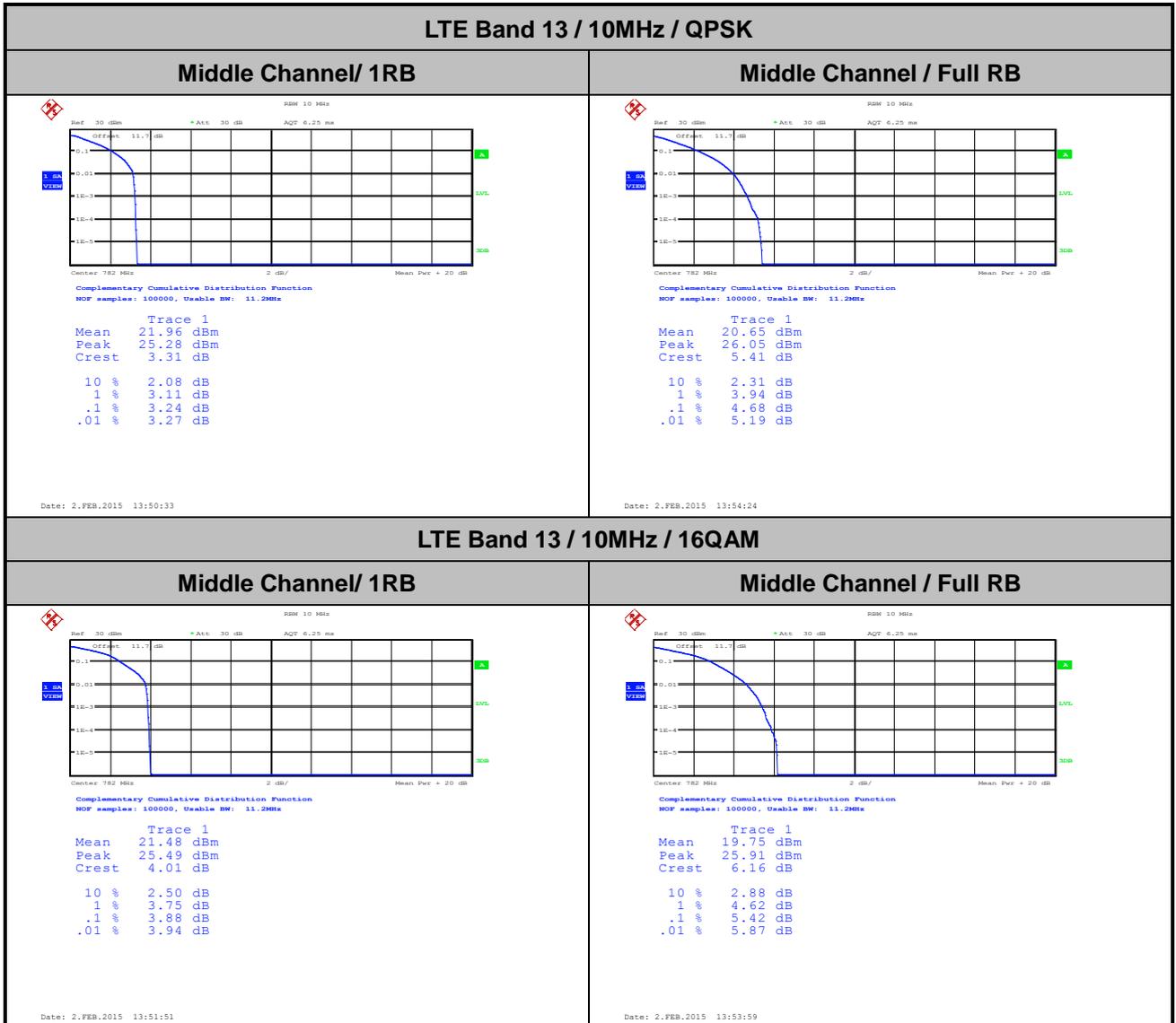
Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L -  \text{MAX}(\Delta f) $	699.119996	$\geq 698 \text{ MHz}$	PASS
$f_H +  \text{MAX}(\Delta f) $	715.880773	$\leq 716 \text{ MHz}$	



# LTE Band 13

## Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				Limit: 13dB
Mod.	QPSK		16QAM		
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.24	4.68	3.88	5.42	
Highest CH	-	-	-	-	





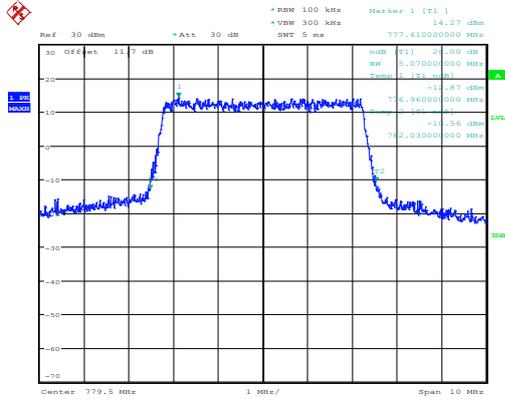
**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	5.07	4.99	-	-	-	-	-	-
Middle CH	-	-	-	-	4.99	4.96	10.06	9.98	-	-	-	-
Highest CH	-	-	-	-	4.96	4.90	-	-	-	-	-	-



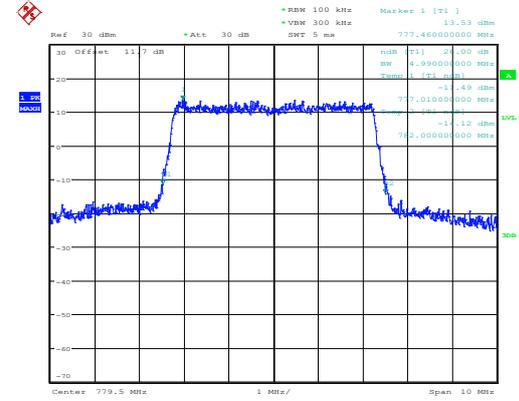
LTE Band 13

Lowest Channel / 5MHz / QPSK



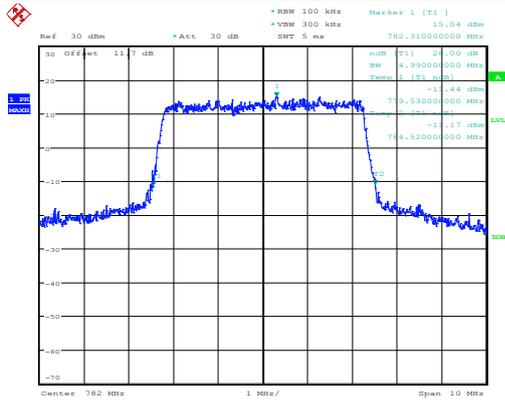
Date: 2.FEB.2015 12:03:19

Lowest Channel / 5MHz / 16QAM



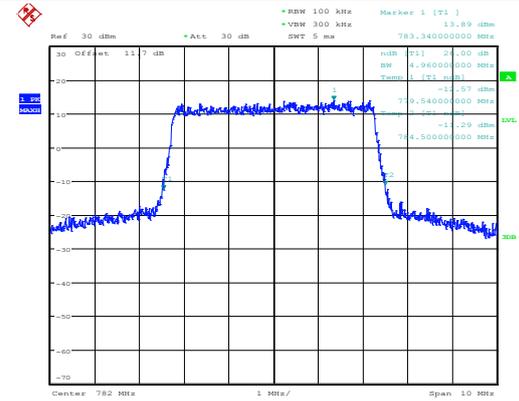
Date: 2.FEB.2015 12:03:06

Middle Channel / 5MHz / QPSK



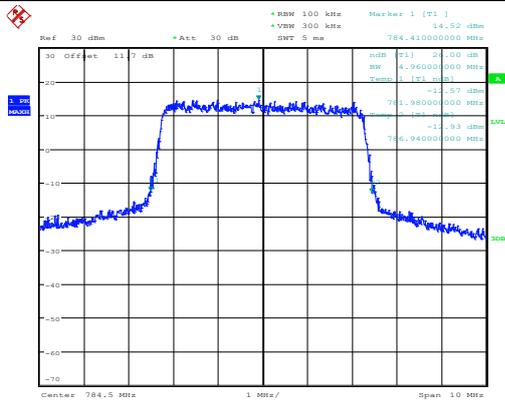
Date: 2.FEB.2015 12:08:11

Middle Channel / 5MHz / 16QAM



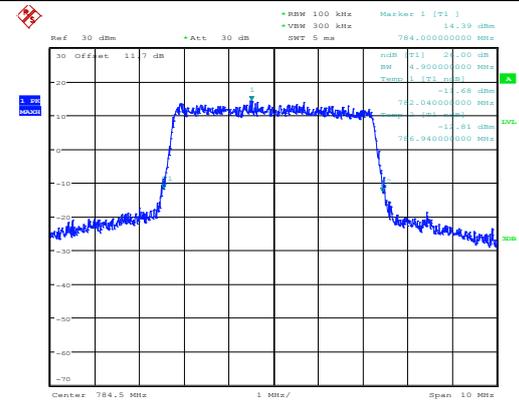
Date: 2.FEB.2015 12:08:24

Highest Channel / 5MHz / QPSK



Date: 2.FEB.2015 12:09:34

Highest Channel / 5MHz / 16QAM

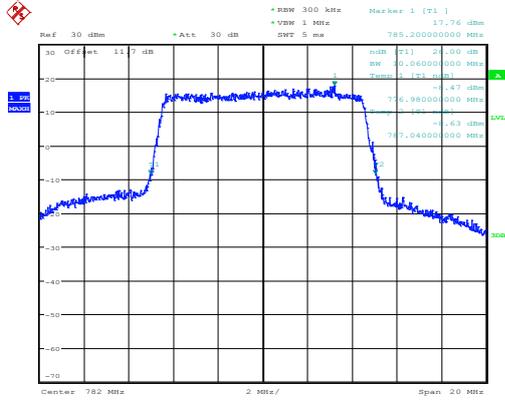


Date: 2.FEB.2015 12:09:21



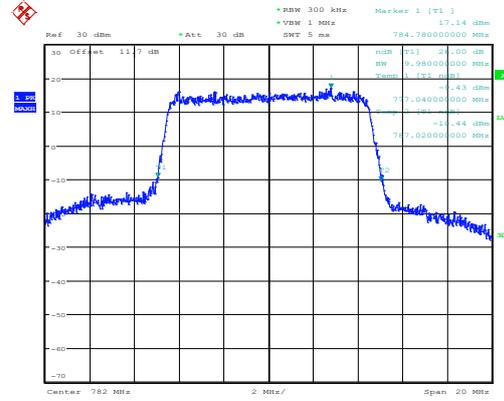
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2.FEB.2015 12:12:48

Middle Channel / 10MHz / 16QAM



Date: 2.FEB.2015 12:12:36



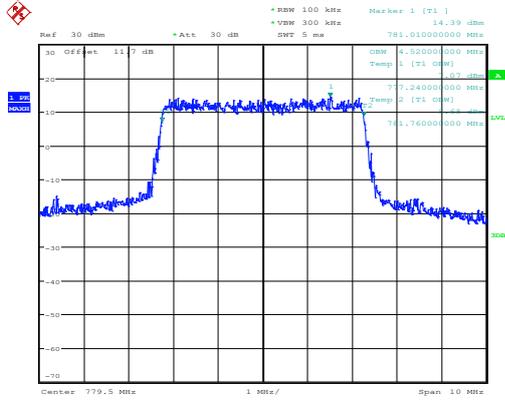
### Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.52	4.50	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	4.50	9.08	9.04	-	-	-	-
Highest CH	-	-	-	-	4.51	4.50	-	-	-	-	-	-



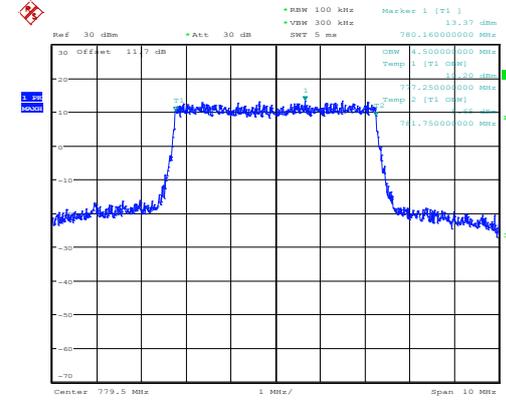
LTE Band 13

Lowest Channel / 5MHz / QPSK



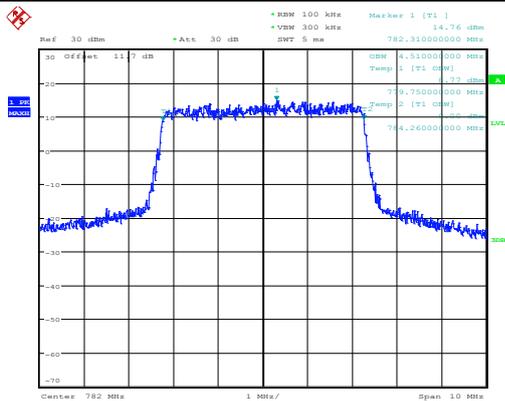
Date: 2.FEB.2015 12:00:23

Lowest Channel / 5MHz / 16QAM



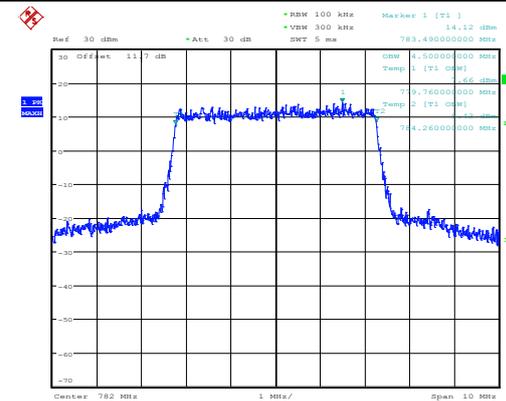
Date: 2.FEB.2015 12:02:53

Middle Channel / 5MHz / QPSK



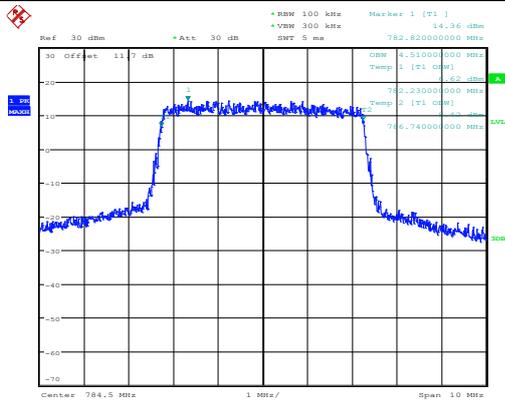
Date: 2.FEB.2015 12:08:46

Middle Channel / 5MHz / 16QAM



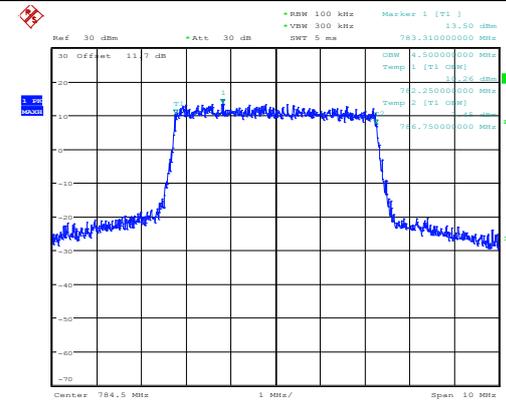
Date: 2.FEB.2015 12:08:35

Highest Channel / 5MHz / QPSK



Date: 2.FEB.2015 12:08:57

Highest Channel / 5MHz / 16QAM

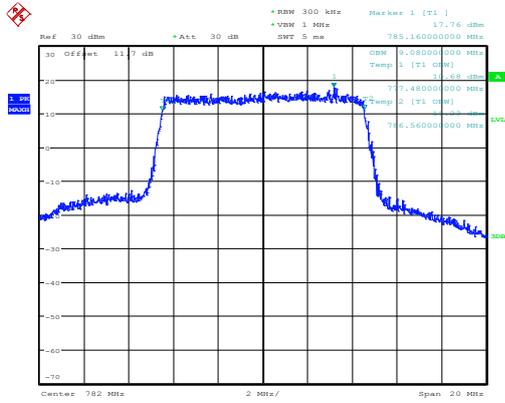


Date: 2.FEB.2015 12:09:08



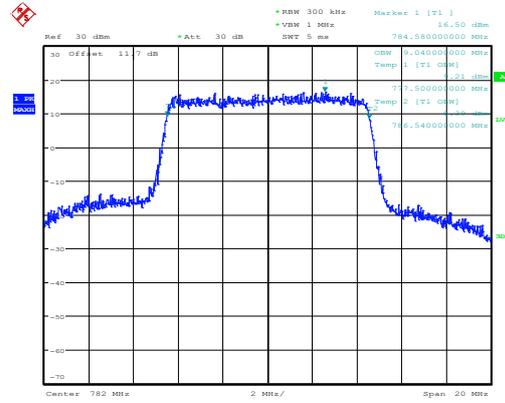
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2.FEB.2015 12:12:12

Middle Channel / 10MHz / 16QAM



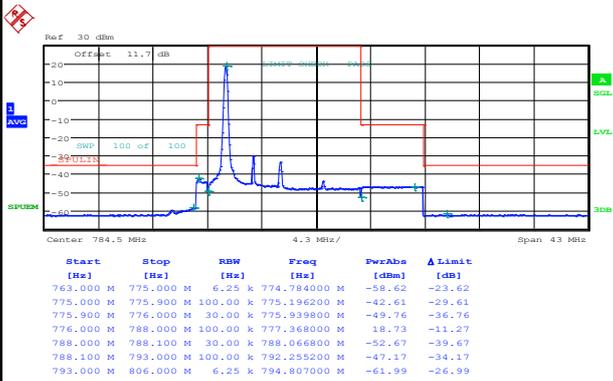
Date: 2.FEB.2015 12:12:23



# Conducted Band Edge

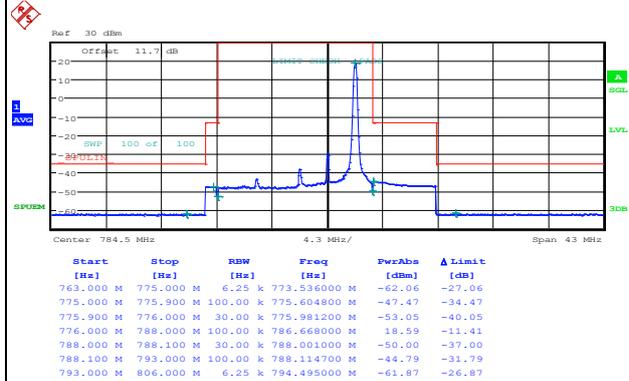
## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



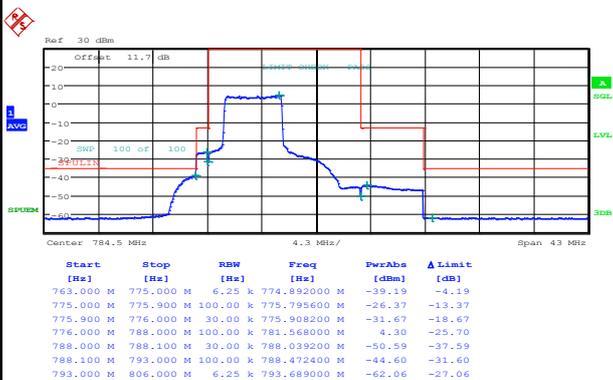
Date: 2.FEB.2015 10:44:08

### Highest Band Edge / 1 RB



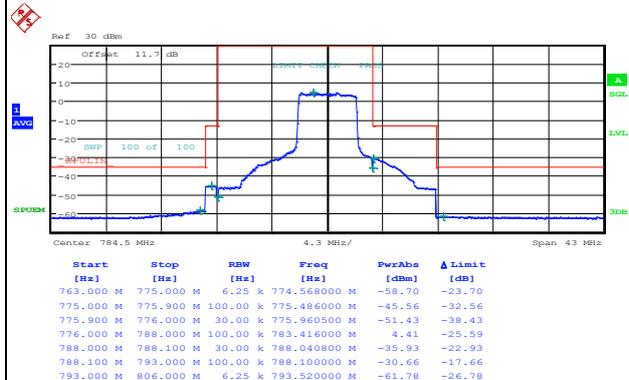
Date: 2.FEB.2015 11:04:51

### Lowest Band Edge / Full RB



Date: 2.FEB.2015 10:55:04

### Highest Band Edge / Full RB

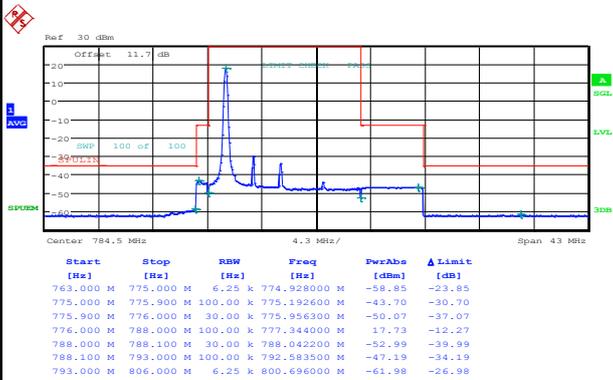


Date: 2.FEB.2015 10:57:14



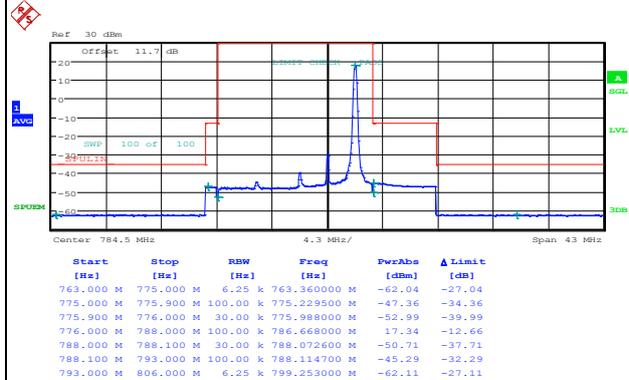
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



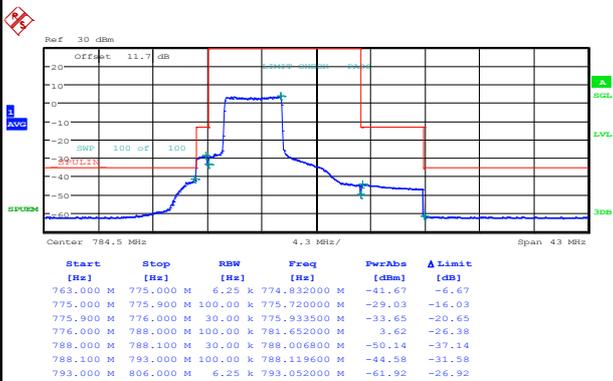
Date: 2.FEB.2015 10:47:08

Highest Band Edge / 1 RB



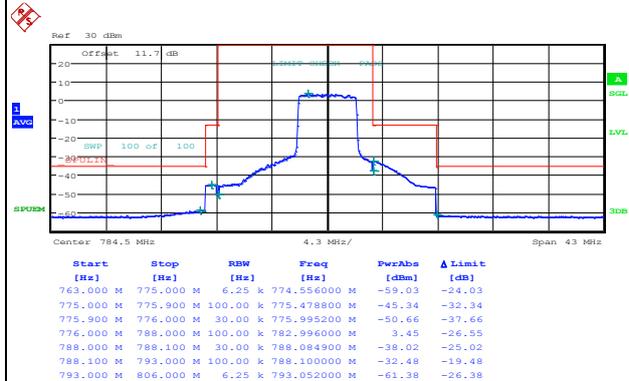
Date: 2.FEB.2015 11:02:57

Lowest Band Edge / Full RB



Date: 2.FEB.2015 10:49:12

Highest Band Edge / Full RB

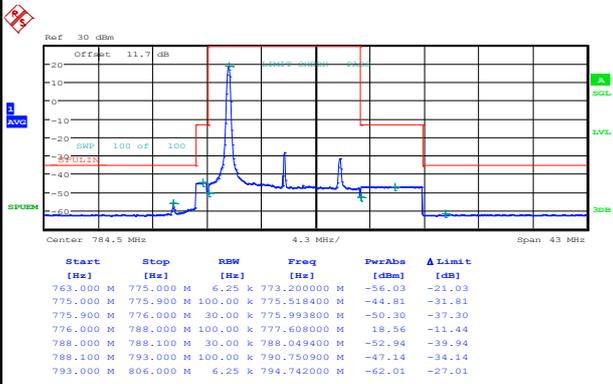


Date: 2.FEB.2015 10:59:52



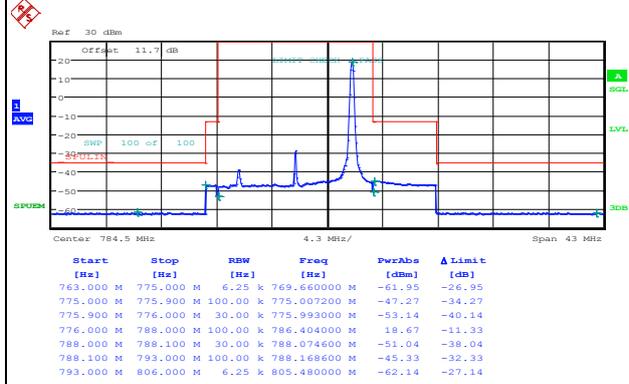
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



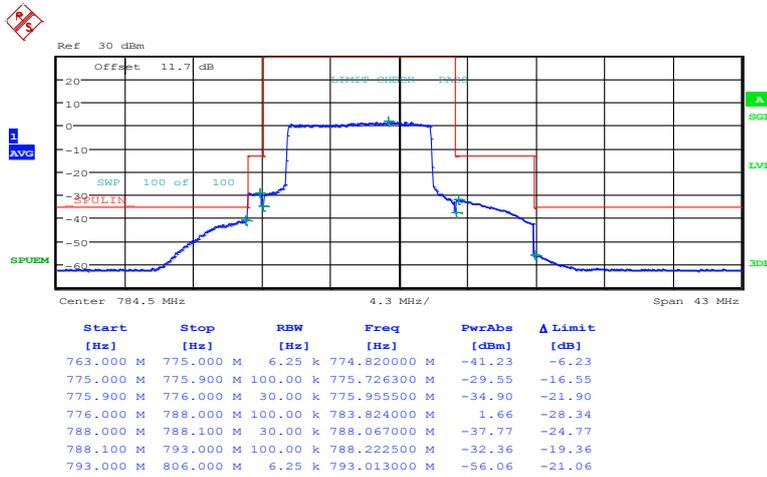
Date: 2.FEB.2015 11:27:12

Highest Band Edge / 1 RB



Date: 2.FEB.2015 11:35:13

Band Edge / Full RB

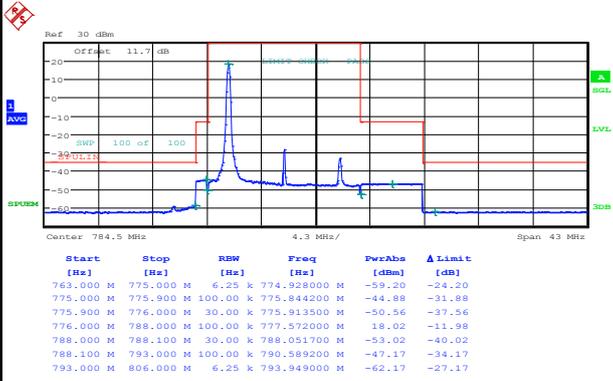


Date: 2.FEB.2015 11:39:04



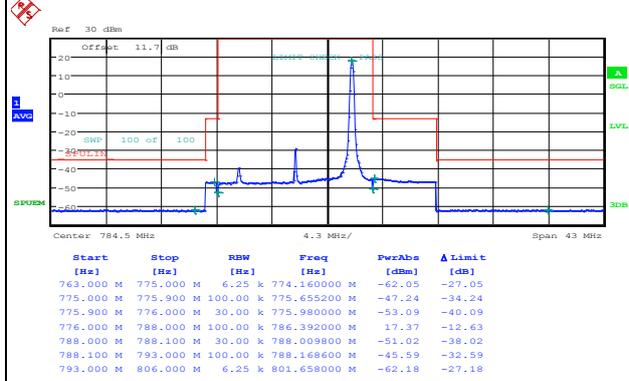
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



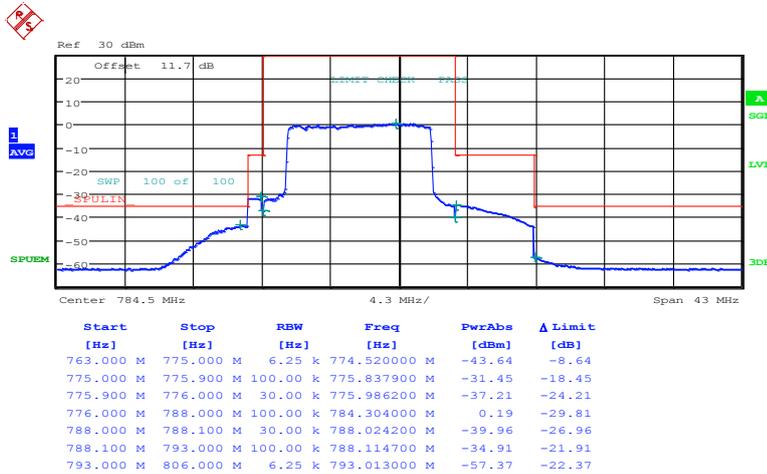
Date: 2.FEB.2015 11:30:08

Highest Band Edge / 1 RB



Date: 2.FEB.2015 11:33:10

Band Edge / Full RB

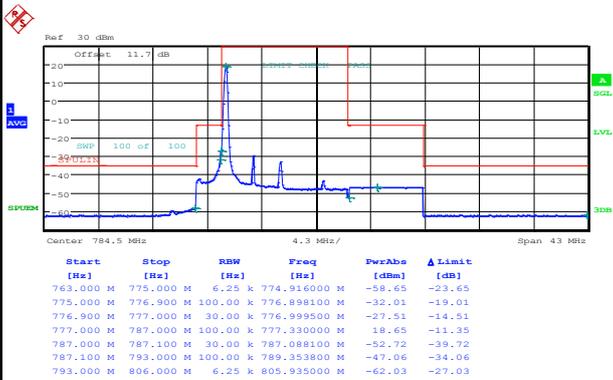


Date: 2.FEB.2015 11:41:40



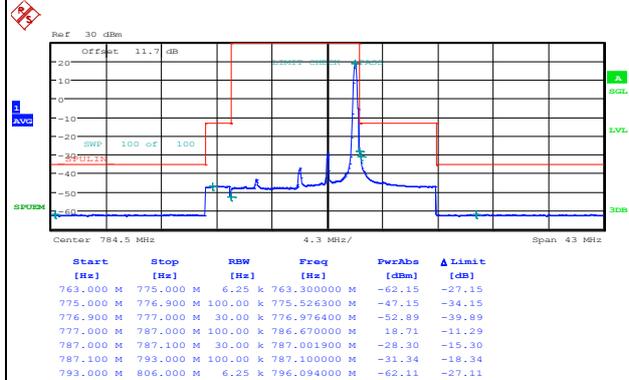
IC LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



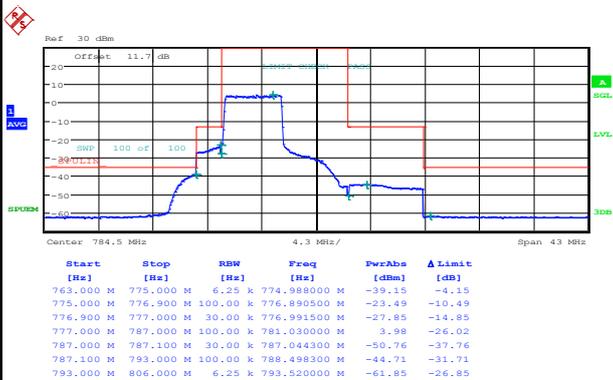
Date: 2.FEB.2015 11:25:10

Highest Band Edge / 1 RB



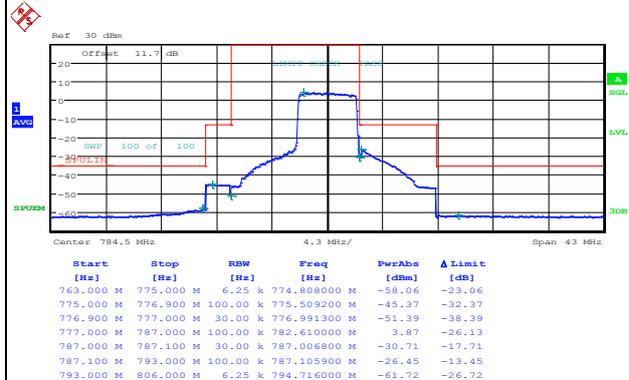
Date: 2.FEB.2015 11:06:55

Lowest Band Edge / Full RB



Date: 2.FEB.2015 11:16:17

Highest Band Edge / Full RB

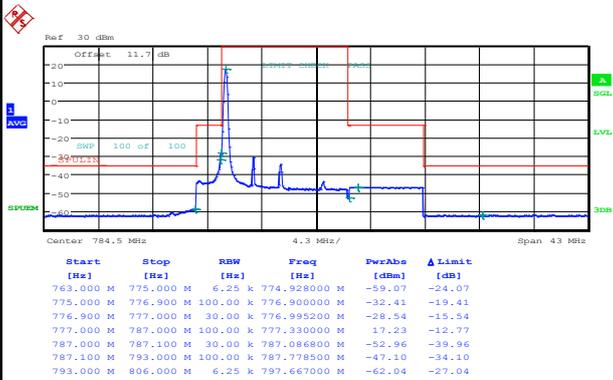


Date: 2.FEB.2015 11:13:55



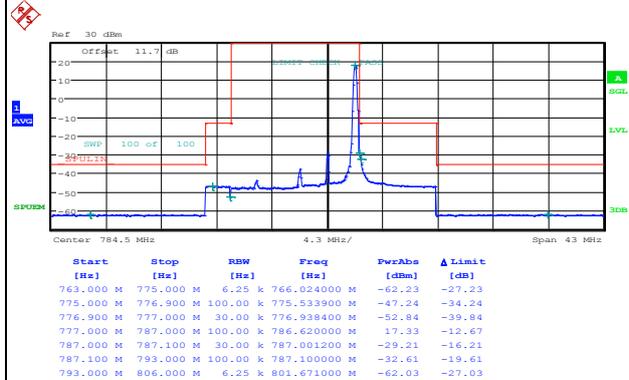
IC LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



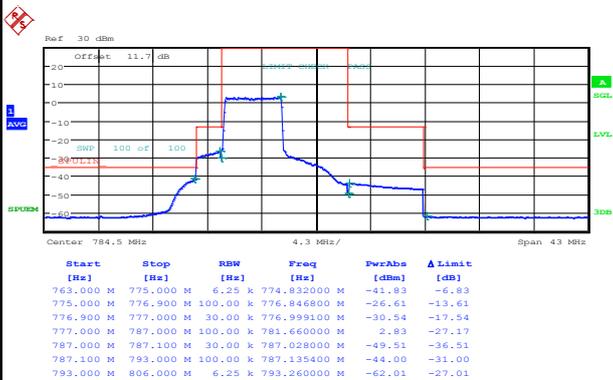
Date: 2.FEB.2015 11:23:09

Highest Band Edge / 1 RB



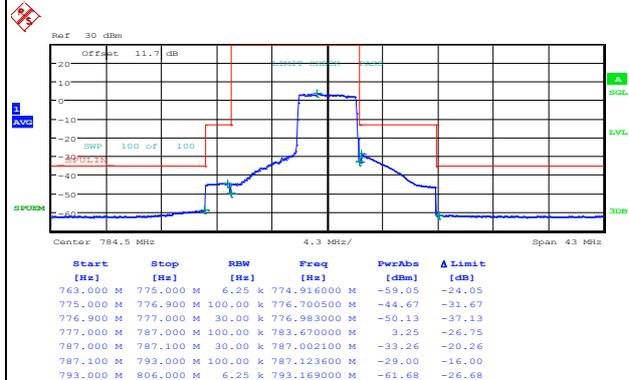
Date: 2.FEB.2015 11:09:49

Lowest Band Edge / Full RB



Date: 2.FEB.2015 11:19:01

Highest Band Edge / Full RB



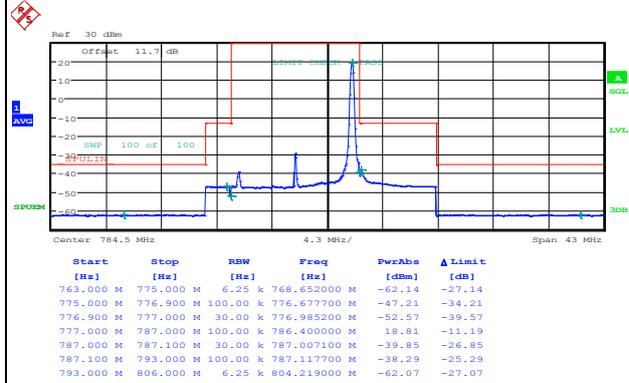
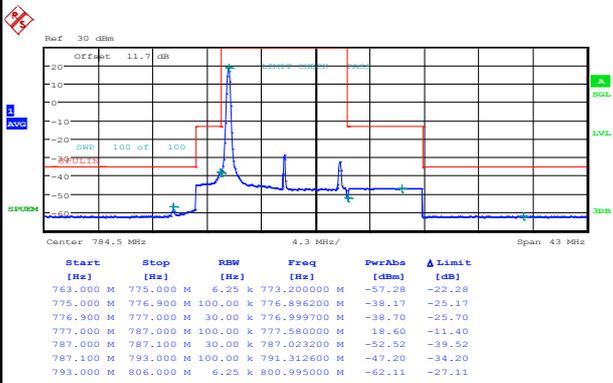
Date: 2.FEB.2015 11:11:46



IC LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

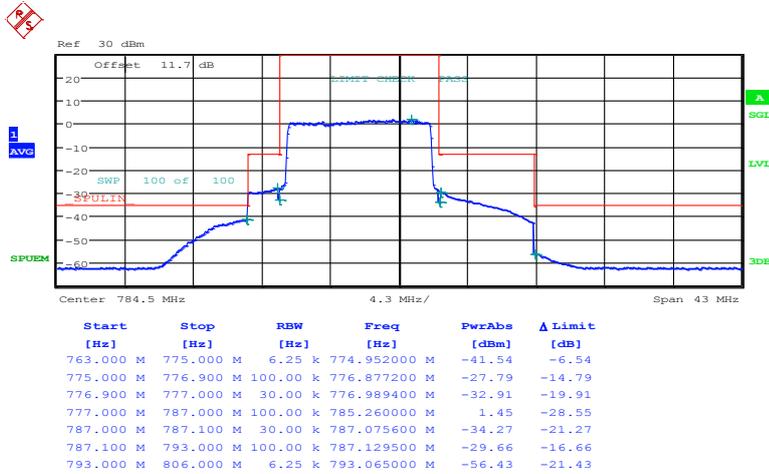
Highest Band Edge / 1 RB



Date: 2.FEB.2015 11:54:30

Date: 2.FEB.2015 11:48:25

Band Edge / Full RB

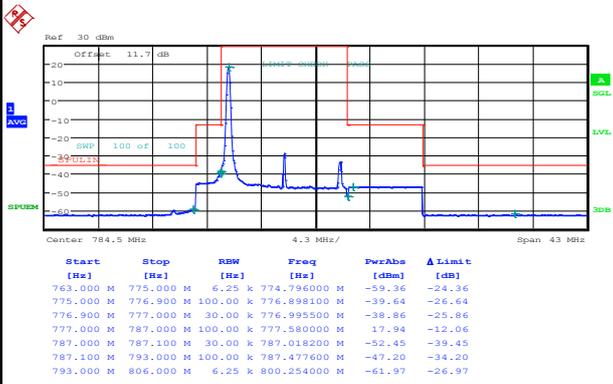


Date: 2.FEB.2015 11:46:18



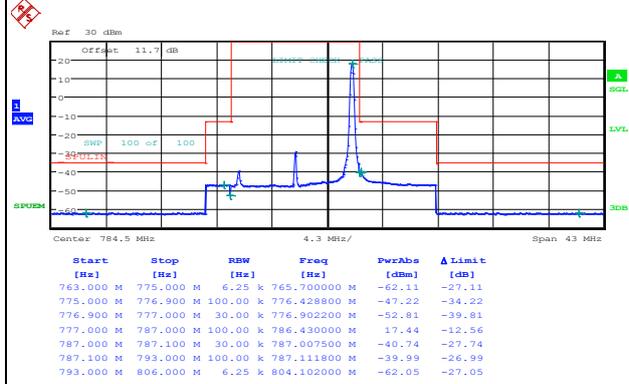
IC LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



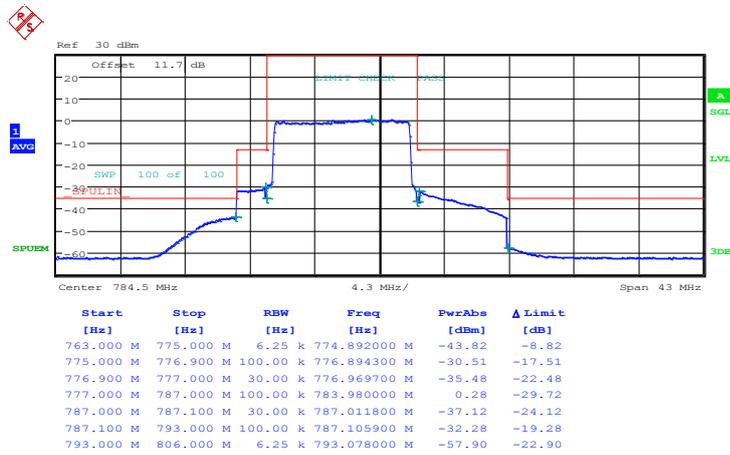
Date: 2.FEB.2015 11:52:34

Highest Band Edge / 1 RB



Date: 2.FEB.2015 11:50:28

Band Edge / Full RB



Date: 2.FEB.2015 11:43:58



# Conducted Spurious Emission

## LTE Band 13 / 5MHz

### Lowest Channel / QPSK



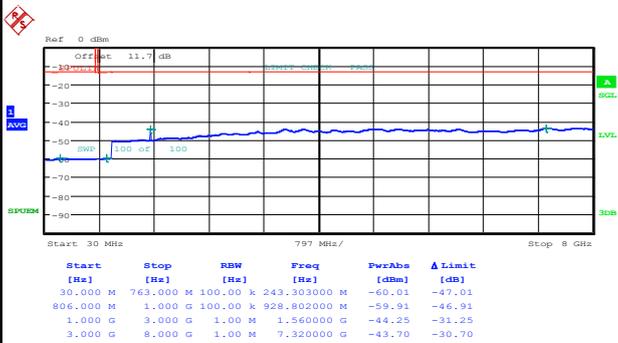
Date: 2.FEB.2015 12:04:29

### Lowest Channel / 16QAM



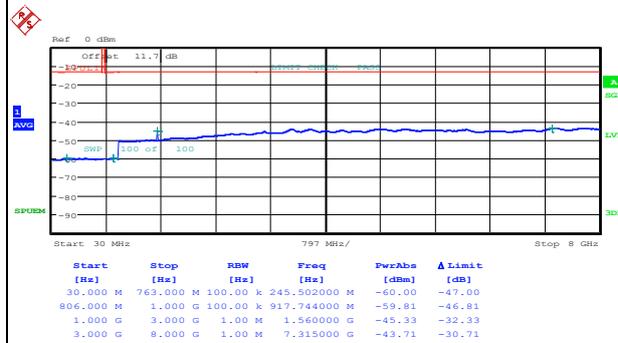
Date: 2.FEB.2015 12:05:39

### Middle Channel / QPSK



Date: 2.FEB.2015 12:07:58

### Middle Channel / 16QAM

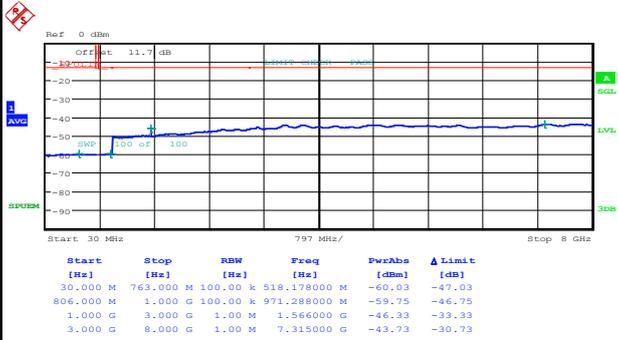


Date: 2.FEB.2015 12:06:49



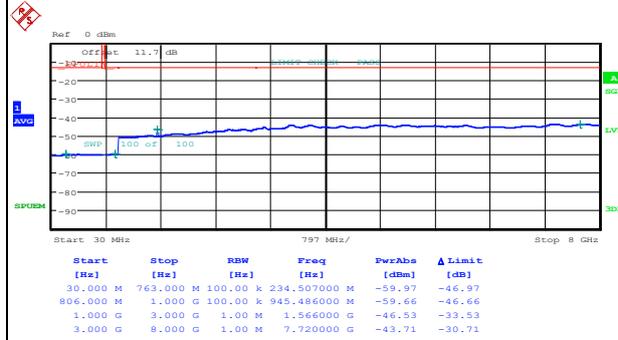
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 2.FEB.2015 12:10:45

Highest Channel / 16QAM



Date: 2.FEB.2015 12:11:57

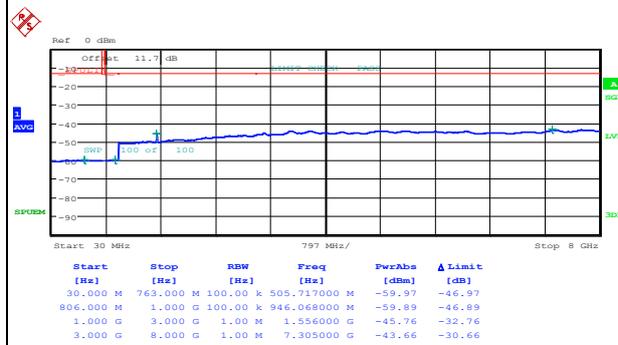
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 2.FEB.2015 12:15:08

Middle Channel / 16QAM



Date: 2.FEB.2015 12:13:58



### Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0146	PASS
40	Normal Voltage	0.0130	
30	Normal Voltage	0.0148	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0152	
0	Normal Voltage	0.0129	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0142	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0138	

**Note:**

1. Normal Voltage = 3.7V ; Battery End Point (BEP) = 3.5 V ; Maximum Voltage =4.1 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Within Band
		Frequency Offset ( $\Delta f$ ) (Hz)	Result
50	Normal Voltage	11.4	PASS
40	Normal Voltage	10.2	
30	Normal Voltage	11.6	
20(Ref.)	Normal Voltage	0.0	
10	Normal Voltage	11.9	
0	Normal Voltage	10.1	
-10	Normal Voltage	1.1	
-20	Normal Voltage	0.2	
-30	Normal Voltage	1.2	
20	Maximum Voltage	11.1	
20	Normal Voltage	0.0	
20	Battery End Point	10.8	

$|\text{MAX}(\Delta f)| = 11.9\text{Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L -  \text{MAX}(\Delta f) $	777.137814	$\geq 777 \text{ MHz}$	PASS
$f_H +  \text{MAX}(\Delta f) $	786.862186	$\leq 787 \text{ MHz}$	



## LTE Band 17

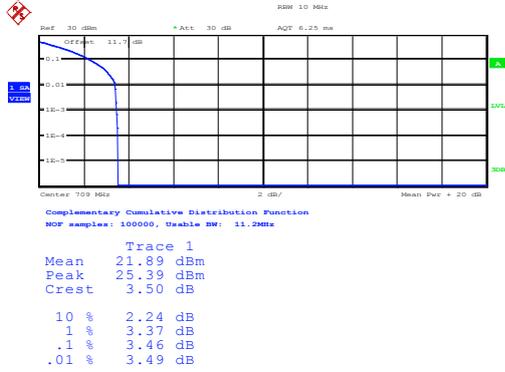
### Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.46	4.90	4.10	5.51	<b>PASS</b>
Middle CH	3.56	5.00	4.01	5.64	
Highest CH	3.94	5.00	4.62	5.71	



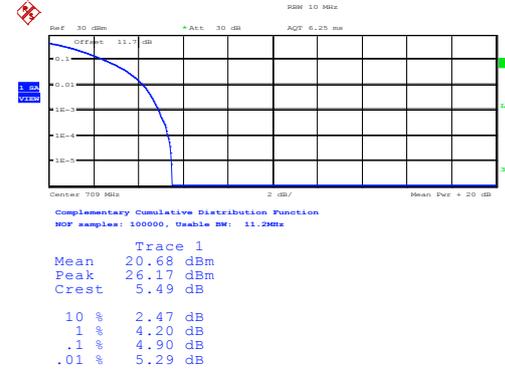
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



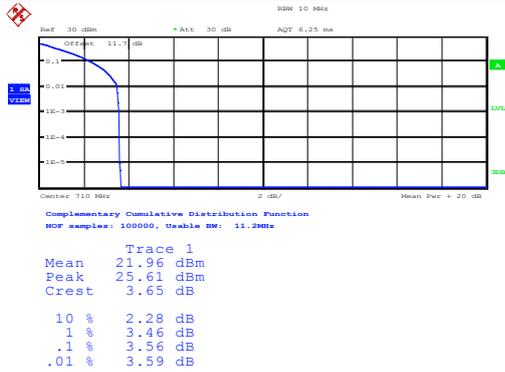
Date: 2.FEB.2015 10:37:05

Lowest Channel / Full RB



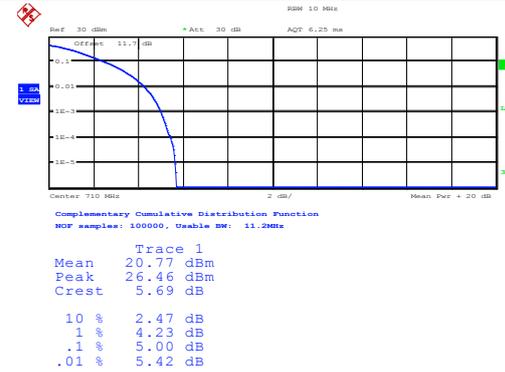
Date: 2.FEB.2015 10:37:28

Middle Channel/ 1RB



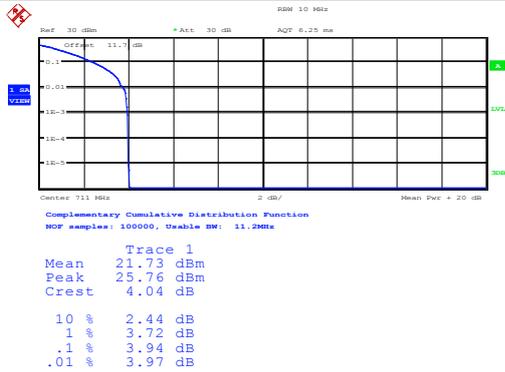
Date: 2.FEB.2015 10:37:59

Middle Channel / Full RB



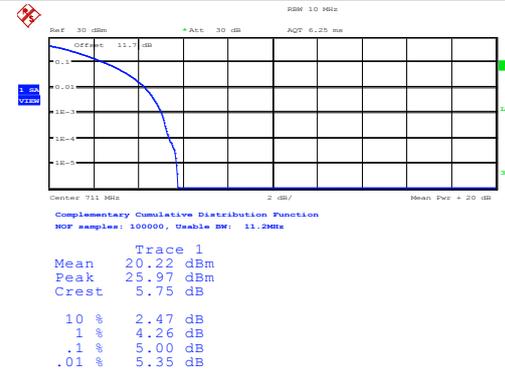
Date: 2.FEB.2015 10:38:36

Highest Channel/ 1RB



Date: 2.FEB.2015 10:38:55

Highest Channel / Full RB

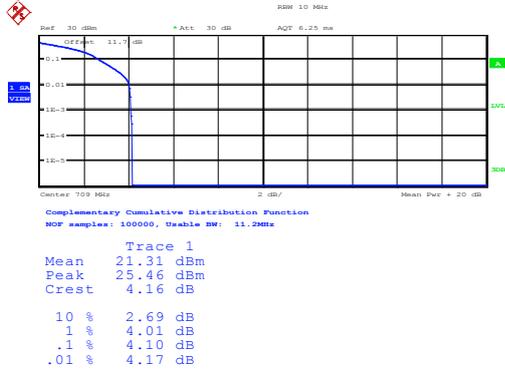


Date: 2.FEB.2015 10:39:07



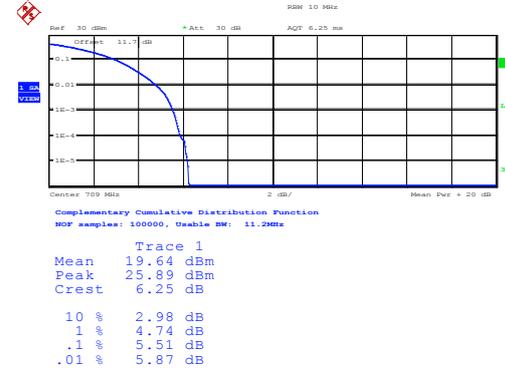
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



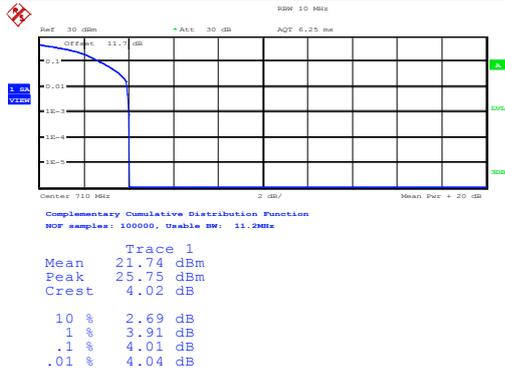
Date: 2.FEB.2015 10:34:55

Lowest Channel / Full RB



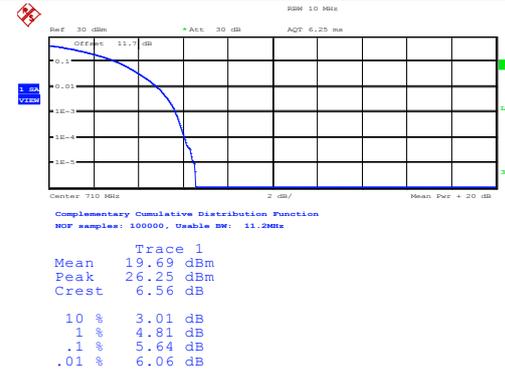
Date: 2.FEB.2015 10:35:10

Middle Channel/ 1RB



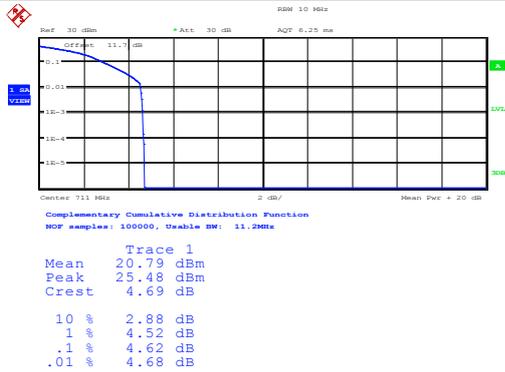
Date: 2.FEB.2015 10:35:23

Middle Channel / Full RB



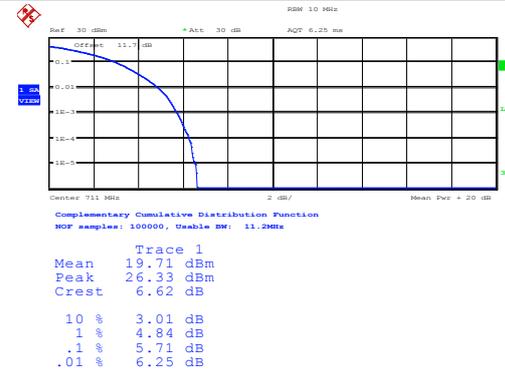
Date: 2.FEB.2015 10:35:36

Highest Channel/ 1RB



Date: 2.FEB.2015 10:35:49

Highest Channel / Full RB



Date: 2.FEB.2015 10:36:31



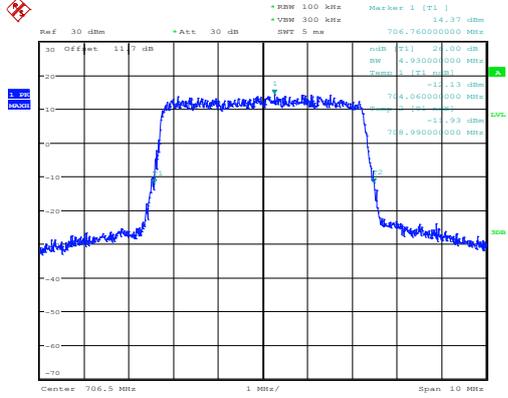
**26dB Bandwidth**

Mode	LTE Band 17 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.93	4.88	10.16	10.10	-	-	-	-
Middle CH	-	-	-	-	5.02	4.95	10.12	10.04	-	-	-	-
Highest CH	-	-	-	-	4.98	4.98	10.16	9.98	-	-	-	-

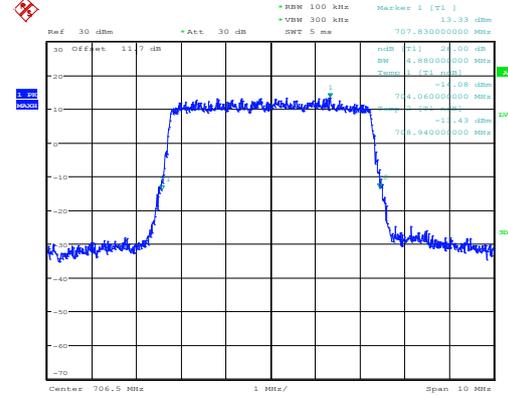


LTE Band 17

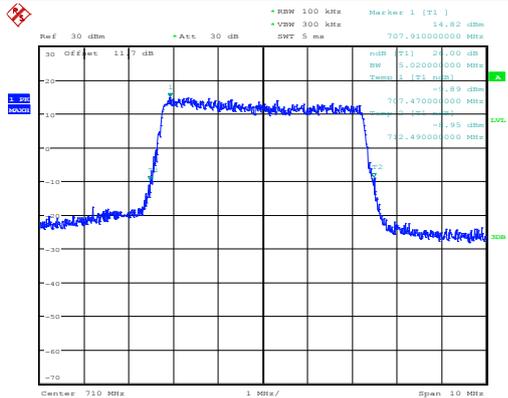
Lowest Channel / 5MHz / QPSK



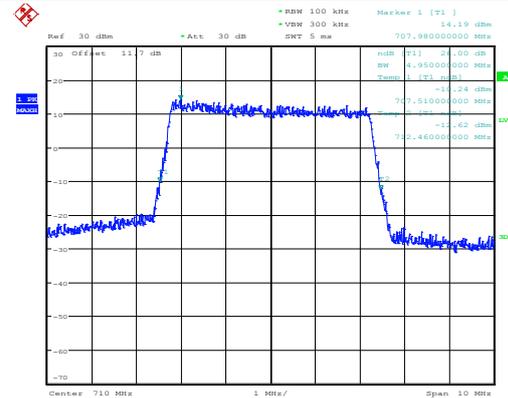
Lowest Channel / 5MHz / 16QAM



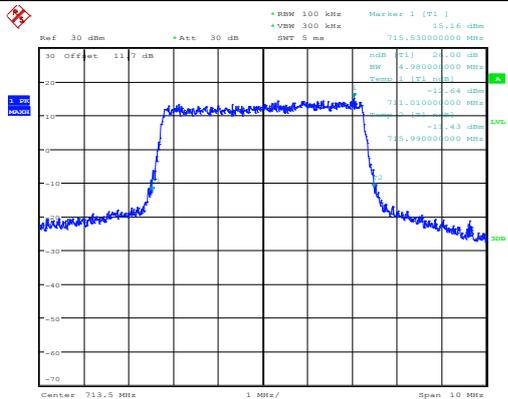
Middle Channel / 5MHz / QPSK



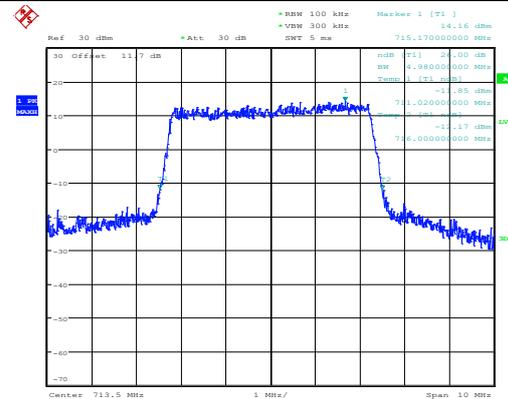
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



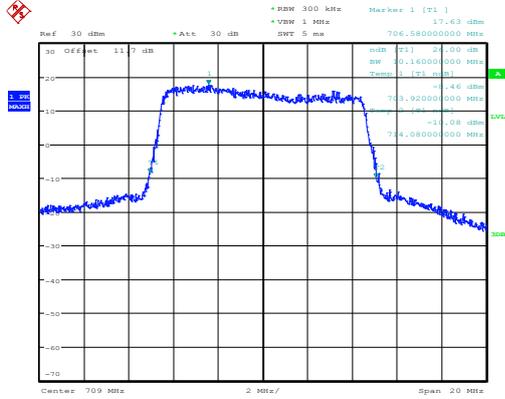
Highest Channel / 5MHz / 16QAM





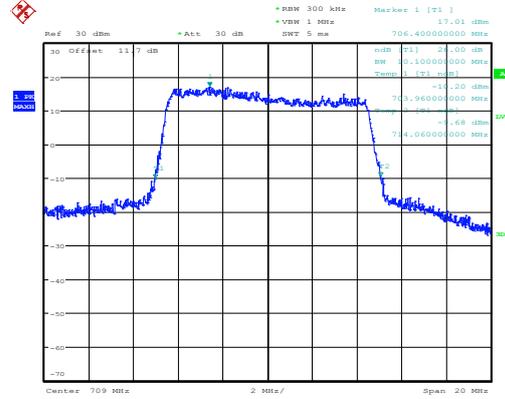
LTE Band 17

Lowest Channel / 10MHz / QPSK



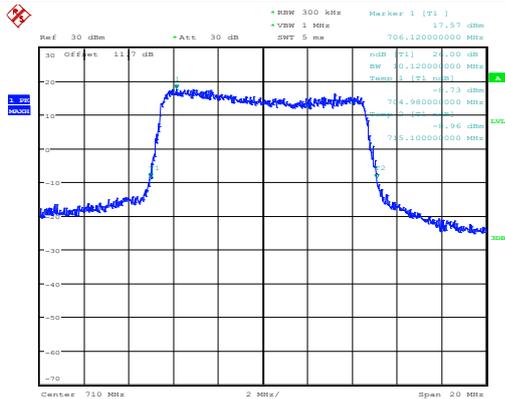
Date: 2.FEB.2015 10:16:23

Lowest Channel / 10MHz / 16QAM



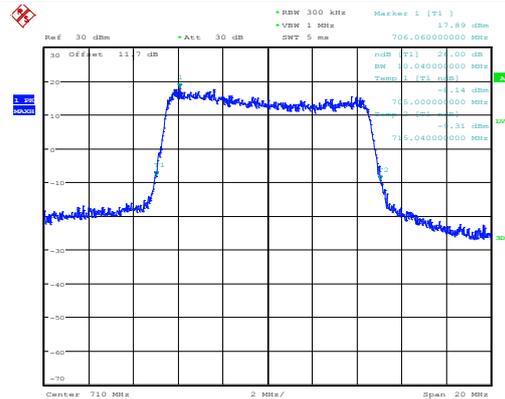
Date: 2.FEB.2015 10:16:36

Middle Channel / 10MHz / QPSK



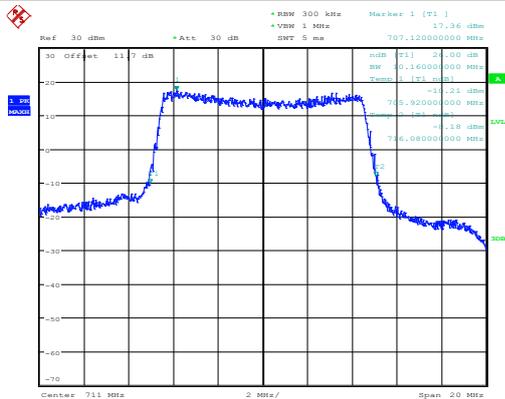
Date: 2.FEB.2015 10:24:17

Middle Channel / 10MHz / 16QAM



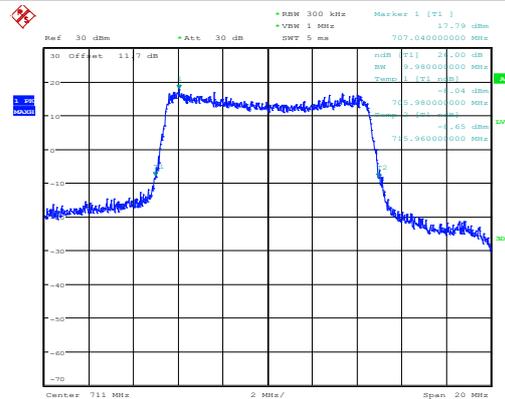
Date: 2.FEB.2015 10:24:30

Highest Channel / 10MHz / QPSK



Date: 2.FEB.2015 10:27:24

Highest Channel / 10MHz / 16QAM



Date: 2.FEB.2015 10:27:37



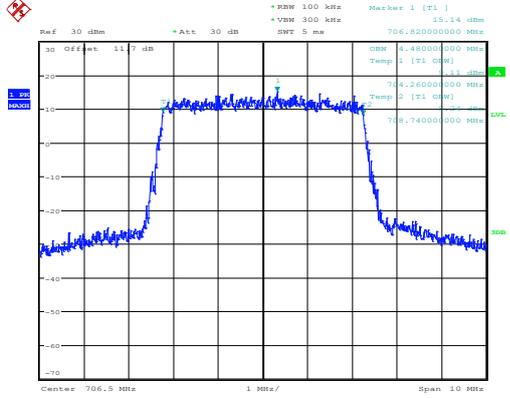
### Occupied Bandwidth

Mode	LTE Band 17 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.48	4.50	9.10	9.06	-	-	-	-
Middle CH	-	-	-	-	4.51	4.52	9.14	9.12	-	-	-	-
Highest CH	-	-	-	-	4.51	4.50	9.16	9.12	-	-	-	-



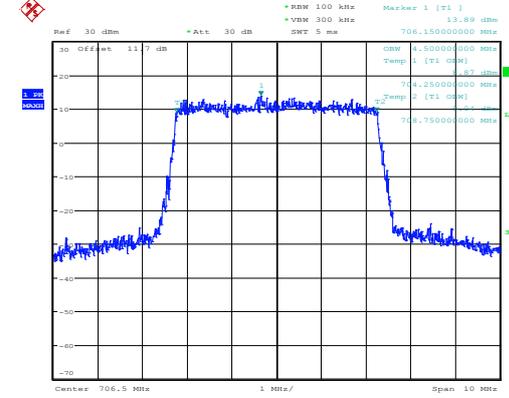
LTE Band 17

Lowest Channel / 5MHz / QPSK



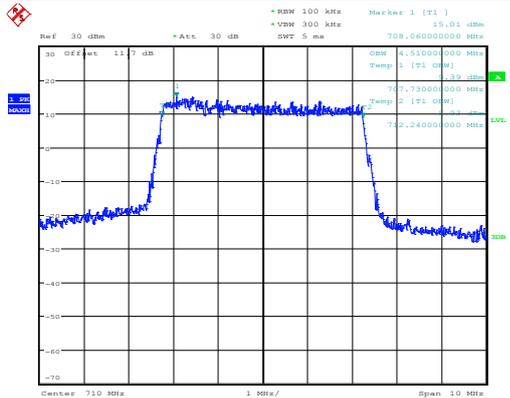
Date: 2.FEB.2015 09:56:56

Lowest Channel / 5MHz / 16QAM



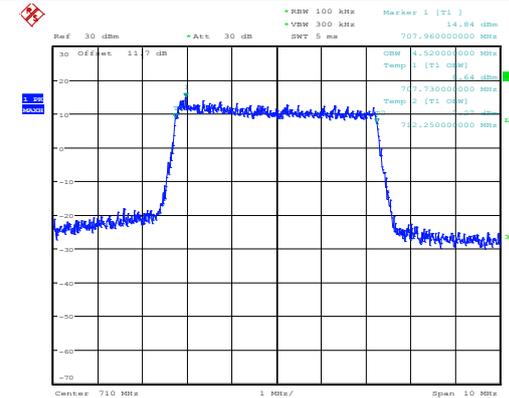
Date: 2.FEB.2015 09:57:07

Middle Channel / 5MHz / QPSK



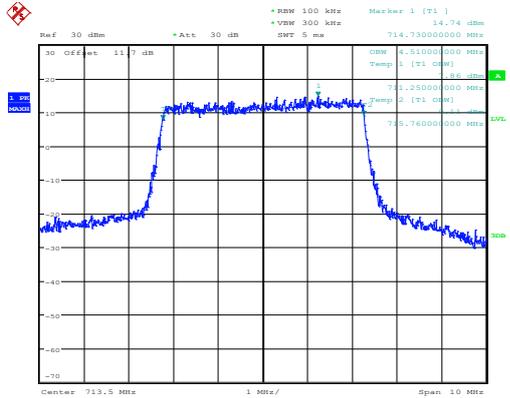
Date: 2.FEB.2015 10:04:42

Middle Channel / 5MHz / 16QAM



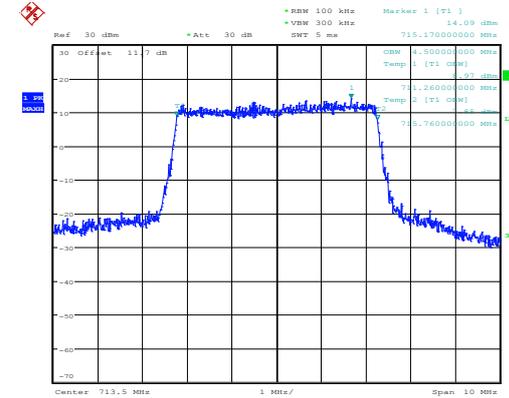
Date: 2.FEB.2015 10:04:53

Highest Channel / 5MHz / QPSK



Date: 2.FEB.2015 10:07:49

Highest Channel / 5MHz / 16QAM



Date: 2.FEB.2015 10:08:00

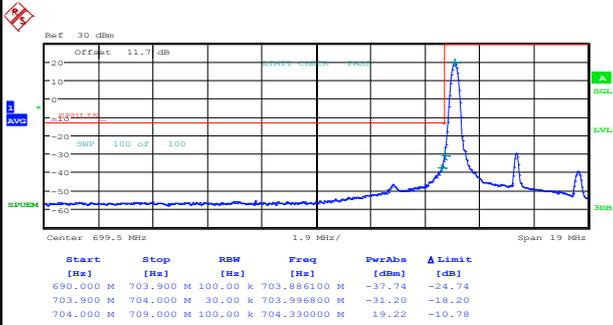




# Conducted Band Edge

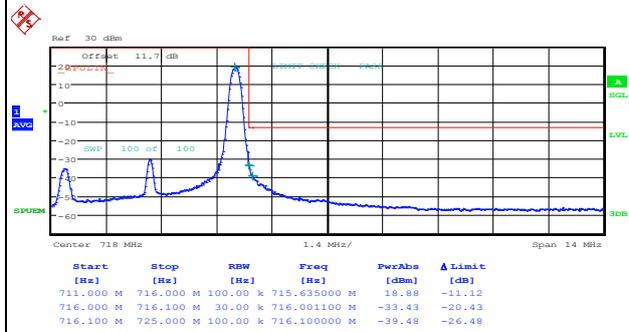
## LTE Band 17 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



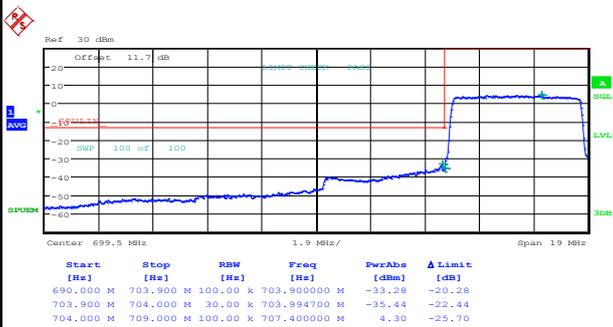
Date: 2.FEB.2015 09:58:42

### Highest Band Edge / 1 RB



Date: 2.FEB.2015 10:09:36

### Lowest Band Edge / Full RB



Date: 2.FEB.2015 10:01:02

### Highest Band Edge / Full RB

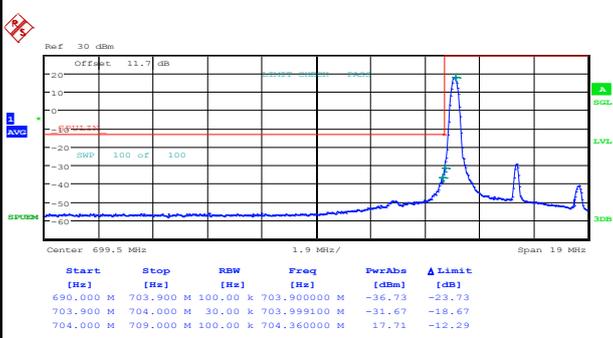


Date: 2.FEB.2015 10:11:56



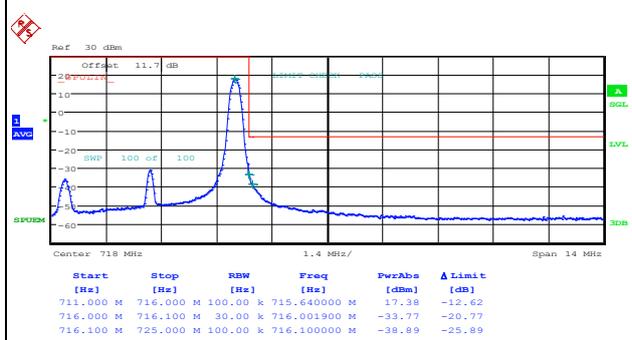
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



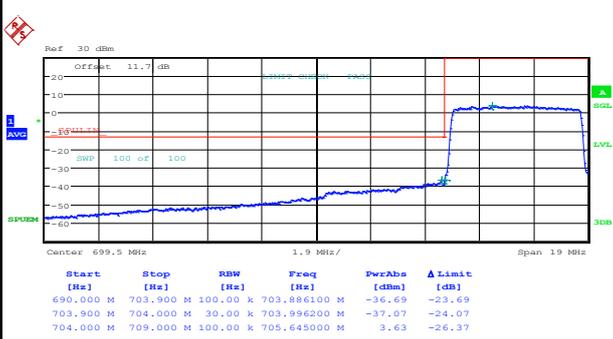
Date: 2.FEB.2015 09:59:52

Highest Band Edge / 1 RB



Date: 2.FEB.2015 10:10:45

Lowest Band Edge / Full RB



Date: 2.FEB.2015 10:02:12

Highest Band Edge / Full RB

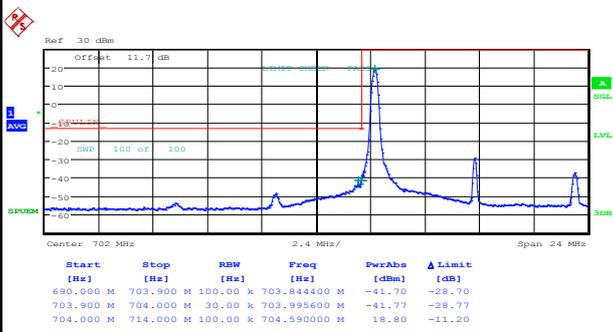


Date: 2.FEB.2015 10:13:08



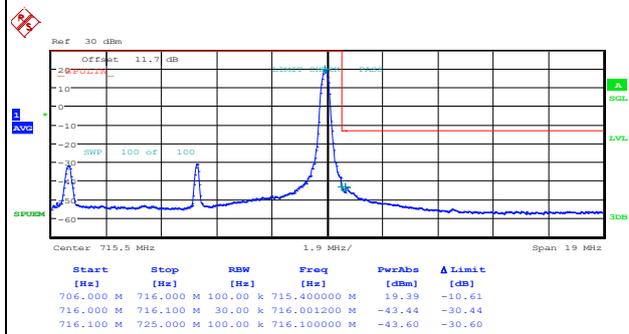
LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



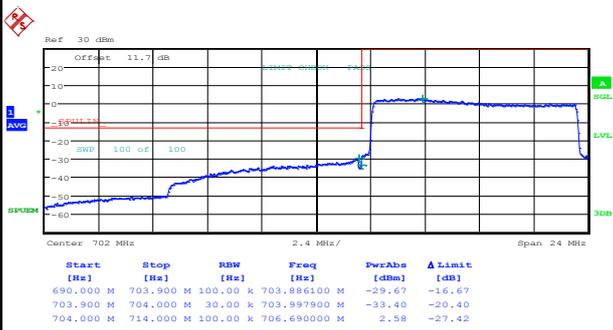
Date: 2.FEB.2015 10:17:46

Highest Band Edge / 1 RB



Date: 2.FEB.2015 10:28:47

Lowest Band Edge / Full RB



Date: 2.FEB.2015 10:20:13

Highest Band Edge / Full RB

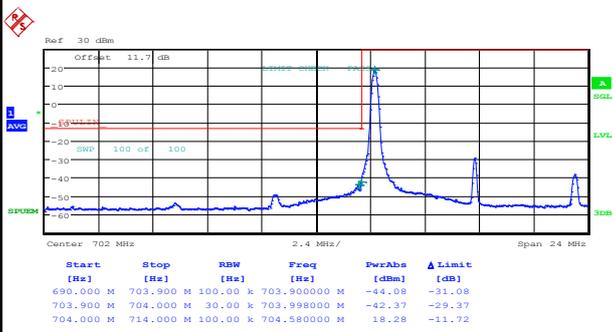


Date: 2.FEB.2015 10:31:06



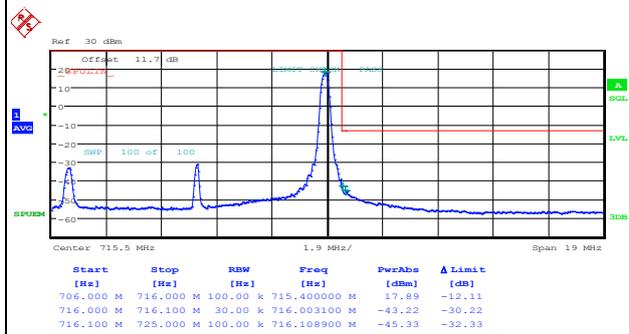
LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



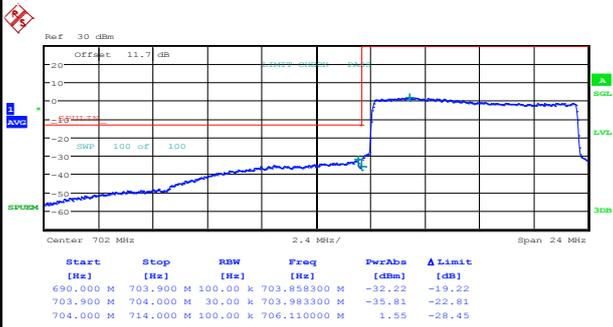
Date: 2.FEB.2015 10:19:01

Highest Band Edge / 1 RB



Date: 2.FEB.2015 10:29:56

Lowest Band Edge / Full RB



Date: 2.FEB.2015 10:21:22

Highest Band Edge / Full RB



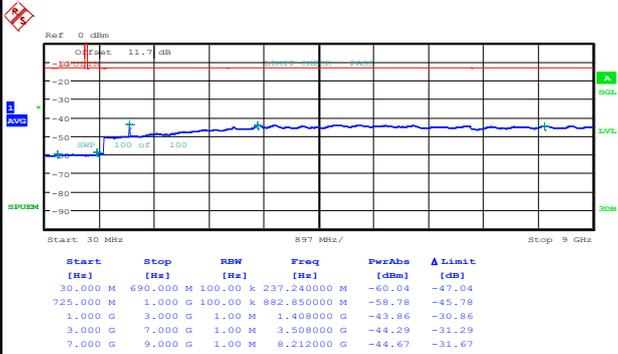
Date: 2.FEB.2015 10:32:16



# Conducted Spurious Emission

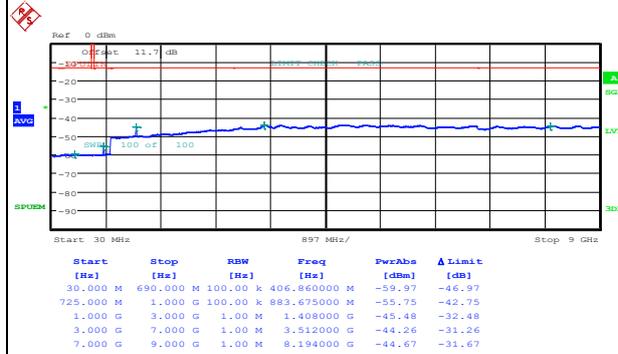
## LTE Band 17 / 5MHz

### Lowest Channel / QPSK



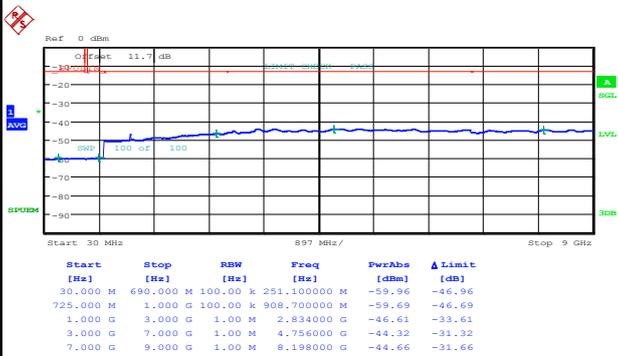
Date: 2.FEB.2015 10:03:21

### Lowest Channel / 16QAM



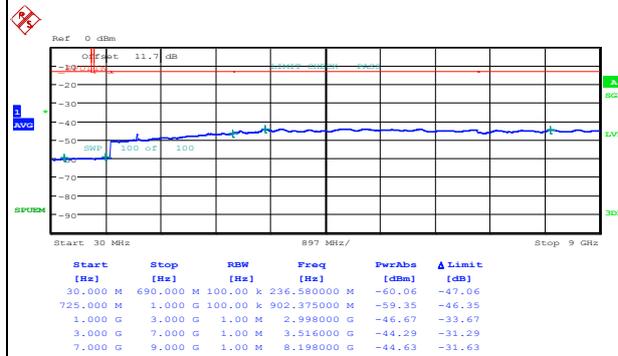
Date: 2.FEB.2015 10:04:31

### Middle Channel / QPSK



Date: 2.FEB.2015 10:06:28

### Middle Channel / 16QAM

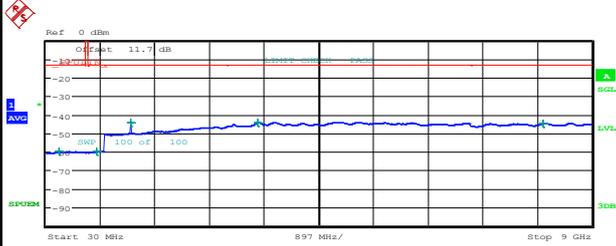


Date: 2.FEB.2015 10:07:38



LTE Band 17 / 5MHz

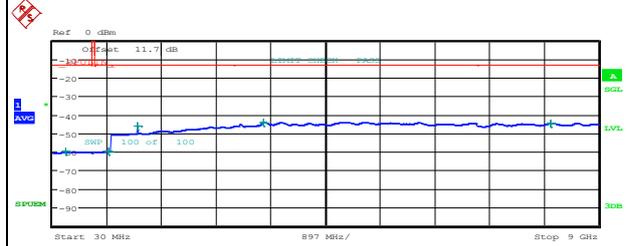
Highest Channel / QPSK



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	239.880000 M	-60.03	-47.03
725.000 M	1.000 G	100.00 k	868.825000 M	-59.80	-46.80
1.000 G	3.000 G	1.00 M	1.422000 G	-44.27	-31.27
3.000 G	7.000 G	1.00 M	3.504000 G	-44.20	-31.20
7.000 G	9.000 G	1.00 M	8.192000 G	-44.69	-31.69

Date: 2.FEB.2015 10:14:21

Highest Channel / 16QAM

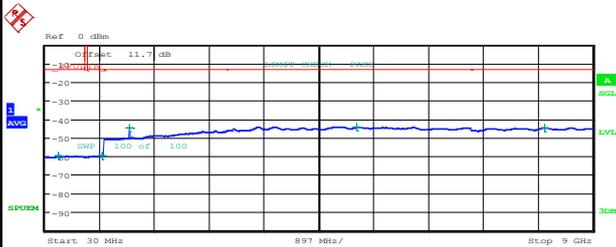


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	241.860000 M	-60.02	-47.02
725.000 M	1.000 G	100.00 k	943.350000 M	-59.83	-46.83
1.000 G	3.000 G	1.00 M	1.422000 G	-46.09	-33.09
3.000 G	7.000 G	1.00 M	3.496000 G	-44.29	-31.29
7.000 G	9.000 G	1.00 M	8.206000 G	-44.65	-31.65

Date: 2.FEB.2015 10:15:34

LTE Band 17 / 10MHz

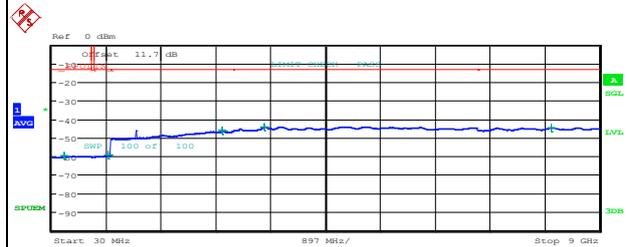
Lowest Channel / QPSK



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	241.200000 M	-59.90	-46.90
725.000 M	1.000 G	100.00 k	961.775000 M	-59.75	-46.75
1.000 G	3.000 G	1.00 M	1.410000 G	-44.98	-31.98
3.000 G	7.000 G	1.00 M	5.136000 G	-44.29	-31.29
7.000 G	9.000 G	1.00 M	8.204000 G	-44.68	-31.68

Date: 2.FEB.2015 10:22:32

Lowest Channel / 16QAM



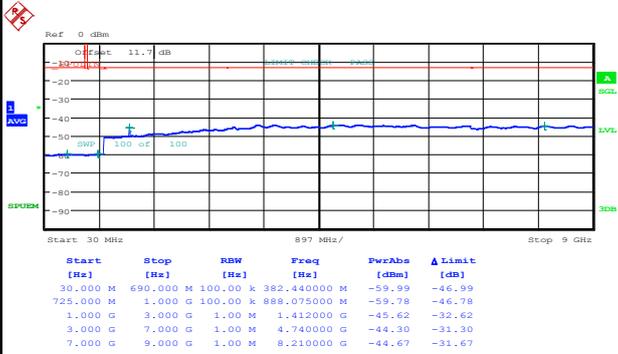
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	690.000 M	100.00 k	237.900000 M	-60.01	-47.01
725.000 M	1.000 G	100.00 k	934.350000 M	-59.61	-46.61
1.000 G	3.000 G	1.00 M	2.820000 G	-46.24	-33.24
3.000 G	7.000 G	1.00 M	3.504000 G	-44.26	-31.26
7.000 G	9.000 G	1.00 M	8.204000 G	-44.65	-31.65

Date: 2.FEB.2015 10:23:42



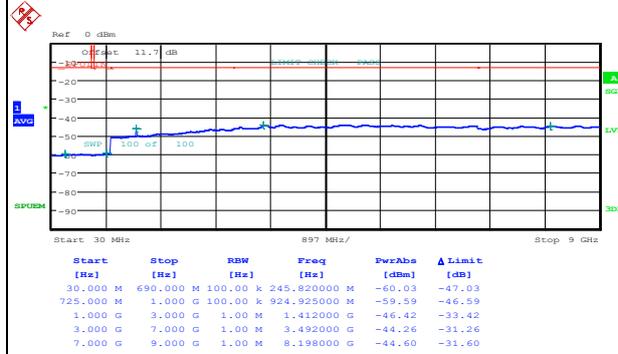
LTE Band 17 / 10MHz

Middle Channel / QPSK



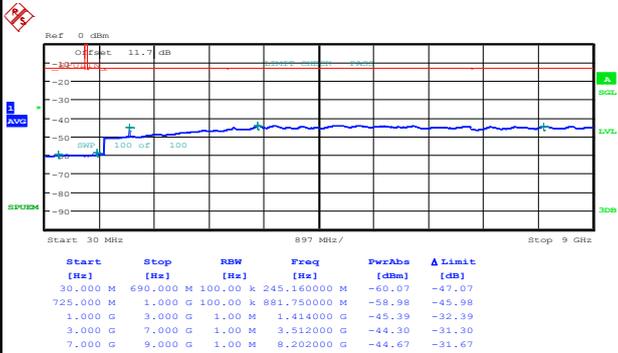
Date: 2.FEB.2015 10:25:40

Middle Channel / 16QAM



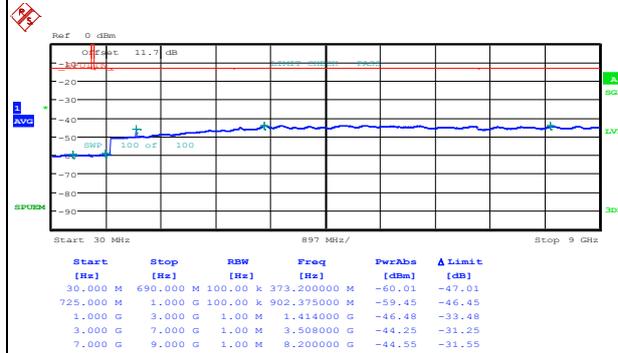
Date: 2.FEB.2015 10:26:50

Highest Channel / QPSK



Date: 2.FEB.2015 10:33:25

Highest Channel / 16QAM



Date: 2.FEB.2015 10:34:35



**Frequency Stability**

Test Conditions		LTE Band 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0104	
30	Normal Voltage	0.0107	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0086	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0100	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

**Note:**

1. Normal Voltage = 3.7V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage =4.1 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Test Conditions		LTE Band 17 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Within Band
		Frequency Offset ( $\Delta f$ ) (Hz)	Result
50	Normal Voltage	1.2	PASS
40	Normal Voltage	-7.4	
30	Normal Voltage	-7.6	
20(Ref.)	Normal Voltage	0.0	
10	Normal Voltage	1.0	
0	Normal Voltage	-0.4	
-10	Normal Voltage	-0.5	
-20	Normal Voltage	-6.1	
-30	Normal Voltage	-0.2	
20	Maximum Voltage	-7.1	
20	Normal Voltage	0.0	
20	Battery End Point	0.2	

$|\text{MAX}(\Delta f)| = 7.6\text{Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L -  \text{MAX}(\Delta f) $	704.141021	$\geq 704 \text{ MHz}$	PASS
$f_H +  \text{MAX}(\Delta f) $	715.852569	$\leq 716 \text{ MHz}$	



## Appendix B. Test Results of Radiated Test

### ERP/EIRP

LTE Band 4 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.99	0.1581	18.51	0.0710
Middle		1	0	22.41	0.1742	18.48	0.0705
Highest		1	0	23.45	0.2213	18.98	0.0791
Lowest	16QAM	1	0	21.37	0.1371	17.50	0.0562
Middle		1	0	21.70	0.1479	17.06	0.0508
Highest		1	0	23.00	0.1995	18.62	0.0728
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.32	0.1706	18.44	0.0698
Middle		1	0	22.45	0.1758	18.52	0.0711
Highest		1	0	23.67	0.2328	19.16	0.0824
Lowest	16QAM	1	0	21.16	0.1306	17.53	0.0566
Middle		1	0	21.53	0.1422	17.66	0.0583
Highest		1	0	22.68	0.1854	18.18	0.0658
Limit	EIRP < 1W			Result		PASS	



LTE Band 4 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.10	0.1622	18.69	0.0740
Middle		1	0	22.31	0.1702	18.53	0.0713
Highest		1	0	23.45	0.2213	18.74	0.0748
Lowest	16QAM	1	0	21.28	0.1343	17.13	0.0516
Middle		1	0	21.70	0.1479	17.60	0.0575
Highest		1	0	22.49	0.1774	17.46	0.0557
Limit	EIRP < 1W			Result		PASS	

LTE Band 4/ 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.49	0.1774	18.74	0.0748
Middle		1	0	22.35	0.1718	18.49	0.0706
Highest		1	0	23.61	0.2296	18.95	0.0785
Lowest	16QAM	1	0	21.91	0.1552	18.01	0.0632
Middle		1	0	22.02	0.1592	18.09	0.0644
Highest		1	0	22.88	0.1941	18.65	0.0733
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 15MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.33	0.1710	18.57	0.0720
Middle		1	0	22.60	0.1820	18.35	0.0684
Highest		1	0	22.99	0.1991	18.64	0.0731
Lowest	16QAM	1	0	21.66	0.1466	17.85	0.0610
Middle		1	0	21.41	0.1384	17.06	0.0508
Highest		1	0	21.95	0.1567	17.43	0.0553
Limit	EIRP < 1W			Result		PASS	



LTE Band 4 / 20MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.47	0.1766	18.77	0.0753
Middle		1	0	22.39	0.1734	18.19	0.0659
Highest		1	0	22.74	0.1879	18.41	0.0693
Lowest	16QAM	1	0	21.58	0.1439	17.69	0.0587
Middle		1	0	21.65	0.1462	17.45	0.0556
Highest		1	0	21.92	0.1556	17.20	0.0525
Limit	EIRP < 1W			Result		PASS	



LTE Band 12 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.37	0.0546	0.85	0.0012
Middle		1	0	16.90	0.0490	1.18	0.0013
Highest		1	0	17.56	0.0570	1.53	0.0014
Lowest	16QAM	1	0	15.70	0.0372	-0.27	0.0009
Middle		1	0	15.69	0.0371	0.25	0.0011
Highest		1	0	16.25	0.0422	0.71	0.0012
Limit	ERP < 3W			Result		PASS	

LTE Band 12 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.58	0.0573	0.86	0.0012
Middle		1	0	17.24	0.0530	1.42	0.0014
Highest		1	0	17.56	0.0570	1.46	0.0014
Lowest	16QAM	1	0	16.74	0.0472	0.11	0.0010
Middle		1	0	16.63	0.0460	0.10	0.0010
Highest		1	0	16.40	0.0437	0.41	0.0011
Limit	ERP < 3W			Result		PASS	

LTE Band 12 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.53	0.0566	0.76	0.0012
Middle		1	0	17.15	0.0519	1.37	0.0014
Highest		1	0	17.68	0.0586	1.00	0.0013
Lowest	16QAM	1	0	16.36	0.0433	-0.04	0.0010
Middle		1	0	16.71	0.0469	-0.16	0.0010
Highest		1	0	17.16	0.0520	1.07	0.0013
Limit	ERP < 3W			Result		PASS	



LTE Band 12 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.48	0.0560	0.15	0.0010
Middle		1	0	16.79	0.0478	1.01	0.0013
Highest		1	0	17.43	0.0553	1.39	0.0014
Lowest	16QAM	1	0	16.62	0.0459	0.32	0.0011
Middle		1	0	16.68	0.0466	-0.15	0.0010
Highest		1	0	16.57	0.0454	-0.36	0.0009
Limit	ERP < 3W			Result		PASS	



LTE Band 12 / 1.4MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.52	0.0895	3.00	0.0020
Middle		1	0	19.05	0.0804	3.33	0.0022
Highest		1	0	19.71	0.0935	3.68	0.0023
Lowest	16QAM	1	0	17.85	0.0610	1.88	0.0015
Middle		1	0	17.84	0.0608	2.40	0.0017
Highest		1	0	18.40	0.0692	2.86	0.0019
Limit	ERP < 5W			Result		PASS	

LTE Band 12 / 3MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.73	0.0940	3.01	0.0020
Middle		1	0	19.39	0.0869	3.57	0.0023
Highest		1	0	19.71	0.0935	3.61	0.0023
Lowest	16QAM	1	0	18.89	0.0774	2.26	0.0017
Middle		1	0	18.78	0.0755	2.25	0.0017
Highest		1	0	18.55	0.0716	2.56	0.0018
Limit	ERP < 5W			Result		PASS	

LTE Band 12 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.68	0.0929	2.91	0.0020
Middle		1	0	19.30	0.0851	3.52	0.0022
Highest		1	0	19.83	0.0962	3.15	0.0021
Lowest	16QAM	1	0	18.51	0.0710	2.11	0.0016
Middle		1	0	18.86	0.0769	1.99	0.0016
Highest		1	0	19.31	0.0853	3.22	0.0021
Limit	ERP < 5W			Result		PASS	



LTE Band 12 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.63	0.0918	2.30	0.0017
Middle		1	0	18.94	0.0783	3.16	0.0021
Highest		1	0	19.58	0.0908	3.54	0.0023
Lowest	16QAM	1	0	18.77	0.0753	2.47	0.0018
Middle		1	0	18.83	0.0764	2.00	0.0016
Highest		1	0	18.72	0.0745	1.79	0.0015
Limit	ERP < 5W			Result		PASS	



LTE Band 13 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	20.85	0.1216	6.73	0.0047
Middle		1	0	21.72	0.1486	8.19	0.0066
Highest		1	0	21.74	0.1493	8.58	0.0072
Lowest	16QAM	1	0	20.19	0.1045	5.31	0.0034
Middle		1	0	21.36	0.1368	7.25	0.0053
Highest		1	0	20.70	0.1175	7.35	0.0054
Limit	ERP < 3W			Result		PASS	

LTE Band 13 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	-	-	-	-
Middle		1	0	21.87	0.1538	8.04	0.0064
Highest		1	0	-	-	-	-
Lowest	16QAM	1	0	-	-	-	-
Middle		1	0	21.00	0.1259	6.42	0.0044
Highest		1	0	-	-	-	-
Limit	ERP < 3W			Result		PASS	



LTE Band 13 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.00	0.1995	8.88	0.0077
Middle		1	0	23.87	0.2438	10.34	0.0108
Highest		1	0	23.89	0.2449	10.73	0.0118
Lowest	16QAM	1	0	22.34	0.1714	7.46	0.0056
Middle		1	0	23.51	0.2244	9.40	0.0087
Highest		1	0	22.85	0.1928	9.50	0.0089
Limit	ERP < 5W			Result		PASS	

LTE Band 13 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	-	-	-	-
Middle		1	0	24.02	0.2523	10.19	0.0104
Highest		1	0	-	-	-	-
Lowest	16QAM	1	0	-	-	-	-
Middle		1	0	23.15	0.2065	8.57	0.0072
Highest		1	0	-	-	-	-
Limit	ERP < 5W			Result		PASS	



LTE Band 17 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.20	0.0525	1.54	0.0014
Middle		1	0	17.05	0.0507	1.55	0.0014
Highest		1	0	16.80	0.0479	1.15	0.0013
Lowest	16QAM	1	0	16.21	0.0418	0.60	0.0011
Middle		1	0	16.76	0.0474	0.71	0.0012
Highest		1	0	16.57	0.0454	0.25	0.0011
Limit	ERP < 3W			Result		PASS	

LTE Band 17 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.26	0.0532	1.43	0.0014
Middle		1	0	17.23	0.0528	1.42	0.0014
Highest		1	0	17.49	0.0561	1.46	0.0014
Lowest	16QAM	1	0	16.89	0.0489	0.71	0.0012
Middle		1	0	16.90	0.0490	0.58	0.0011
Highest		1	0	16.93	0.0493	0.66	0.0012
Limit	ERP < 3W			Result		PASS	



LTE Band 17 / 5MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.35	0.0861	3.69	0.0023
Middle		1	0	19.20	0.0832	3.70	0.0023
Highest		1	0	18.95	0.0785	3.30	0.0021
Lowest	16QAM	1	0	18.36	0.0685	2.75	0.0019
Middle		1	0	18.91	0.0778	2.86	0.0019
Highest		1	0	18.72	0.0745	2.40	0.0017
Limit	ERP < 5W			Result		PASS	

LTE Band 17 / 10MHz							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	19.41	0.0873	3.58	0.0023
Middle		1	0	19.38	0.0867	3.57	0.0023
Highest		1	0	19.64	0.0920	3.61	0.0023
Lowest	16QAM	1	0	19.04	0.0802	2.86	0.0019
Middle		1	0	19.05	0.0804	2.73	0.0019
Highest		1	0	19.08	0.0809	2.81	0.0019
Limit	ERP < 5W			Result		PASS	



**Radiated Spurious Emission**

LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3704	-39.21	-13	-26.21	-58.43	-45.79	1.67	8.24	H
	7408	-43.31	-13	-30.31	-72.16	-52.47	2.46	11.62	H
	9256	-41.58	-13	-28.58	-72.27	-51.64	2.54	12.60	H
	3704	-43.52	-13	-30.52	-62.48	-50.1	1.67	8.24	V
	7408	-46.45	-13	-33.45	-74.71	-55.61	2.46	11.62	V
	9256	-43.14	-13	-30.14	-73.41	-53.2	2.54	12.60	V
Middle	3756	-43.46	-13	-30.46	-62.24	-50.08	1.68	8.31	H
	5632	-40.23	-13	-27.23	-64.05	-47.28	2.70	9.75	H
	7508	-44.09	-13	-31.09	-73.4	-53.47	2.43	11.80	H
	9380	-43.48	-13	-30.48	-75.06	-53.46	2.56	12.55	H
	3756	-42.66	-13	-29.66	-61.53	-49.28	1.68	8.31	V
	5632	-45.35	-13	-32.35	-67.65	-52.4	2.70	9.75	V
	7508	-47.37	-13	-34.37	-75.61	-56.75	2.43	11.80	V
	9380	-45.33	-13	-32.33	-74.53	-55.31	2.56	12.55	V
Highest	3804	-38.22	-13	-25.22	-59.55	-44.89	1.70	8.36	H
	7608	-44.73	-13	-31.73	-75.36	-54.2	2.39	11.86	H
	9508	-40.40	-13	-27.40	-74.21	-50.3	2.59	12.50	H
	3804	-40.11	-13	-27.11	-60.6	-46.78	1.70	8.36	V
	7608	-47.34	-13	-34.34	-77.12	-56.81	2.39	11.86	V
	9508	-42.40	-13	-29.40	-73.86	-52.3	2.59	12.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-39.31	-13	-26.31	-56.01	-45.38	1.58	7.65	H
	5132	-44.49	-13	-31.49	-67.39	-51.78	2.41	9.70	H
	6840	-33.41	-13	-20.41	-60.88	-41.38	2.64	10.61	H
	8552	-33.08	-13	-20.08	-64.01	-43.21	2.39	12.52	H
	10260	-40.88	-13	-27.88	-73.53	-50.49	2.69	12.30	H
	3420	-41.51	-13	-28.51	-57.36	-47.58	1.58	7.65	V
	5132	-48.19	-13	-35.19	-70.49	-55.48	2.41	9.70	V
	6840	-36.55	-13	-23.55	-63.05	-44.52	2.64	10.61	V
	8552	-35.25	-13	-22.25	-64.57	-45.38	2.39	12.52	V
10260	-44.42	-13	-31.42	-74.73	-54.03	2.69	12.30	V	
Middle	3464	-43.43	-13	-30.43	-60.34	-49.68	1.59	7.84	H
	5196	-47.64	-13	-34.64	-70.63	-54.89	2.45	9.70	H
	6928	-33.48	-13	-20.48	-60.89	-41.58	2.61	10.71	H
	8660	-35.53	-13	-22.53	-66.33	-45.68	2.41	12.56	H
	10392	-43.61	-13	-30.61	-74.85	-53.27	2.69	12.36	H
	3464	-42.42	-13	-29.42	-59.49	-48.67	1.59	7.84	V
	5196	-51.35	-13	-38.35	-74.09	-58.6	2.45	9.70	V
	6928	-37.70	-13	-24.70	-63.87	-45.8	2.61	10.71	V
	8660	-37.85	-13	-24.85	-67.04	-48	2.41	12.56	V
10392	-44.54	-13	-31.54	-75.51	-54.2	2.69	12.36	V	
Highest	3508	-36.28	-13	-23.28	-53.49	-42.68	1.61	8.01	H
	5260	-45.25	-13	-32.25	-67.9	-52.46	2.49	9.70	H
	7016	-26.34	-13	-13.34	-54.05	-34.59	2.59	10.83	H
	8768	-34.51	-13	-21.51	-65.12	-44.68	2.43	12.61	H
	10524	-40.38	-13	-27.38	-71.97	-50.09	2.69	12.40	H
	3508	-39.40	-13	-26.40	-57.08	-45.8	1.61	8.01	V
	5260	-50.54	-13	-37.54	-73.38	-57.75	2.49	9.70	V
	7016	-33.44	-13	-20.44	-61.54	-41.69	2.59	10.83	V
	8768	-33.11	-13	-20.11	-63.33	-43.28	2.43	12.61	V
10524	-44.29	-13	-31.29	-75.35	-54	2.69	12.40	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-39.21	-13	-26.21	-55.95	-45.28	1.58	7.65	H
	5132	-45.49	-13	-32.49	-68.11	-52.78	2.41	9.70	H
	6840	-34.21	-13	-21.21	-61.07	-42.18	2.64	10.61	H
	8552	-33.45	-13	-20.45	-64.26	-43.58	2.39	12.52	H
	10260	-41.39	-13	-28.39	-73.18	-51	2.69	12.30	H
	3420	-46.21	-13	-33.21	-62.34	-52.28	1.58	7.65	V
	5132	-49.19	-13	-36.19	-71.62	-56.48	2.41	9.70	V
	6840	-35.31	-13	-22.31	-61.62	-43.28	2.64	10.61	V
	8552	-37.48	-13	-24.48	-66.03	-47.61	2.39	12.52	V
10260	-45.48	-13	-32.48	-76.09	-55.09	2.69	12.30	V	
Middle	3464	-40.32	-13	-27.32	-57.64	-46.57	1.59	7.84	H
	5192	-45.22	-13	-32.22	-68.02	-52.47	2.45	9.70	H
	6924	-33.19	-13	-20.19	-60.26	-41.28	2.62	10.71	H
	8656	-33.25	-13	-20.25	-64.39	-43.4	2.41	12.56	H
	10388	-42.51	-13	-29.51	-73.73	-52.17	2.69	12.36	H
	3464	-41.30	-13	-28.30	-58.05	-47.55	1.59	7.84	V
	5192	-50.23	-13	-37.23	-72.24	-57.48	2.45	9.70	V
	6924	-34.58	-13	-21.58	-61.29	-42.67	2.62	10.71	V
	8656	-37.06	-13	-24.06	-66.32	-47.21	2.41	12.56	V
10388	-44.62	-13	-31.62	-75.63	-54.28	2.69	12.36	V	
Highest	3504	-36.49	-13	-23.49	-53.33	-42.89	1.61	8.00	H
	5256	-45.46	-13	-32.46	-68.16	-52.68	2.48	9.70	H
	7008	-28.25	-13	-15.25	-56.17	-36.48	2.59	10.82	H
	8760	-35.49	-13	-22.49	-66.6	-45.66	2.43	12.60	H
	10512	-40.29	-13	-27.29	-72.08	-50	2.69	12.40	H
	3504	-38.18	-13	-25.18	-56.09	-44.58	1.61	8.00	V
	5256	-49.16	-13	-36.16	-72.02	-56.38	2.48	9.70	V
	7008	-31.64	-13	-18.64	-58.94	-39.87	2.59	10.82	V
	8760	-32.14	-13	-19.14	-62.5	-42.31	2.43	12.60	V
10512	-44.31	-13	-31.31	-75.47	-54.02	2.69	12.40	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3424	-47.75	-13	-34.75	-64.61	-53.84	1.58	7.67	H
	5136	-49.98	-13	-36.98	-73.19	-57.26	2.42	9.70	H
	6844	-41.18	-13	-28.18	-68.33	-49.15	2.64	10.61	H
	8556	-36.21	-13	-23.21	-66.9	-46.35	2.39	12.52	H
	3424	-46.26	-13	-33.26	-63	-52.35	1.58	7.67	V
	5136	-53.08	-13	-40.08	-75.32	-60.36	2.42	9.70	V
	5844	-43.01	-13	-30.01	-69.58	-50.02	2.82	9.84	V
Middle	8556	-39.01	-13	-26.01	-68.79	-49.15	2.39	12.52	V
	3464	-46.15	-13	-33.15	-63.79	-52.4	1.59	7.84	H
	5196	-51.25	-13	-38.25	-74.11	-58.5	2.45	9.70	H
	6924	-39.51	-13	-26.51	-67.13	-47.6	2.62	10.71	H
	8656	-38.55	-13	-25.55	-69.6	-48.7	2.41	12.56	H
	10388	-45.14	-13	-32.14	-76.98	-54.8	2.69	12.36	H
	3464	-47.25	-13	-34.25	-64.71	-53.5	1.59	7.84	V
	5196	-53.15	-13	-40.15	-75.84	-60.4	2.45	9.70	V
	6924	-42.11	-13	-29.11	-69.62	-50.2	2.62	10.71	V
Highest	8656	-39.35	-13	-26.35	-69.19	-49.5	2.41	12.56	V
	10388	-46.14	-13	-33.14	-77.54	-55.8	2.69	12.36	V
	3504	-44.60	-13	-31.60	-62.12	-51	1.61	8.00	H
	5256	-51.02	-13	-38.02	-73.72	-58.24	2.48	9.70	H
	7004	-36.63	-13	-23.63	-64.25	-44.85	2.59	10.81	H
	8756	-38.74	-13	-25.74	-70.08	-48.91	2.43	12.60	H
	3504	-46.71	-13	-33.71	-64.32	-53.11	1.61	8.00	V
	5256	-53.67	-13	-40.67	-76.59	-60.89	2.48	9.70	V
7004	-39.80	-13	-26.80	-67.29	-48.02	2.59	10.81	V	
8756	-40.18	-13	-27.18	-70.59	-50.35	2.43	12.60	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3424	-48.11	-13	-35.11	-65.27	-54.2	1.58	7.67	H
	5136	-51.12	-13	-38.12	-73.88	-58.4	2.42	9.70	H
	6848	-41.62	-13	-28.62	-68.33	-49.6	2.64	10.62	H
	8556	-38.46	-13	-25.46	-69.22	-48.6	2.39	12.52	H
	10268	-43.79	-13	-30.79	-75.37	-53.4	2.69	12.31	H
	3424	-49.31	-13	-36.31	-65.72	-55.4	1.58	7.67	V
	5136	-53.22	-13	-40.22	-75.59	-60.5	2.42	9.70	V
	6848	-42.82	-13	-29.82	-68.94	-50.8	2.64	10.62	V
	8556	-38.66	-13	-25.66	-68.17	-48.8	2.39	12.52	V
10268	-46.59	-13	-33.59	-77.05	-56.2	2.69	12.31	V	
Middle	3460	-47.32	-13	-34.32	-64.24	-53.55	1.59	7.82	H
	5188	-51.95	-13	-38.95	-73.78	-59.2	2.45	9.70	H
	6916	-38.12	-13	-25.12	-65.8	-46.2	2.62	10.70	H
	8644	-39.15	-13	-26.15	-69.84	-49.3	2.41	12.56	H
	10372	-43.74	-13	-30.74	-74.72	-53.4	2.69	12.35	H
	3460	-47.37	-13	-34.37	-64.22	-53.6	1.59	7.82	V
	5188	-44.95	-13	-31.95	-76.26	-52.2	2.45	9.70	V
	6916	-40.22	-13	-27.22	-67.38	-48.3	2.62	10.70	V
	8644	-38.65	-13	-25.65	-68	-48.8	2.41	12.56	V
10372	-46.74	-13	-33.74	-76.83	-56.4	2.69	12.35	V	
Highest	3496	-46.42	-13	-33.42	-64.19	-52.8	1.60	7.98	H
	5240	-52.58	-13	-39.58	-75.46	-59.8	2.48	9.70	H
	6988	-38.31	-13	-25.31	-66.24	-46.5	2.59	10.79	H
	8732	-41.13	-13	-28.13	-72.13	-51.3	2.43	12.59	H
	10476	-44.40	-13	-31.40	-76.28	-54.1	2.69	12.39	H
	3496	-49.22	-13	-36.22	-66.77	-55.6	1.60	7.98	V
	5240	-54.18	-13	-41.18	-77.64	-61.4	2.48	9.70	V
	6988	-41.31	-13	-28.31	-68.58	-49.5	2.59	10.79	V
	8732	-40.13	-13	-27.13	-70.48	-50.3	2.43	12.59	V
10476	-46.50	-13	-33.50	-77.3	-56.2	2.69	12.39	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3424	-47.51	-13	-34.51	-64.33	-53.6	1.58	7.67	H
	5136	-50.92	-13	-37.92	-73.31	-58.2	2.42	9.70	H
	6848	-39.92	-13	-26.92	-66.52	-47.9	2.64	10.62	H
	8560	-38.66	-13	-25.66	-68.9	-48.8	2.39	12.52	H
	10268	-43.59	-13	-30.59	-75.12	-53.2	2.69	12.31	H
	3424	-51.11	-13	-38.11	-68.29	-57.2	1.58	7.67	V
	5136	-53.02	-13	-40.02	-75.29	-60.3	2.42	9.70	V
	6848	-42.22	-13	-29.22	-68.99	-50.2	2.64	10.62	V
	8560	-41.26	-13	-28.26	-70.56	-51.4	2.39	12.52	V
10268	-46.09	-13	-33.09	-77.21	-55.7	2.69	12.31	V	
Middle	3456	-44.08	-13	-31.08	-61.28	-50.3	1.59	7.81	H
	5180	-49.94	-13	-36.94	-72.69	-57.2	2.44	9.70	H
	6908	-36.83	-13	-23.83	-63.94	-44.9	2.62	10.69	H
	8632	-37.35	-13	-24.35	-68.61	-47.5	2.40	12.55	H
	10360	-43.15	-13	-30.15	-74.91	-52.8	2.69	12.34	H
	3456	-48.58	-13	-35.58	-64.73	-54.8	1.59	7.81	V
	5180	-53.04	-13	-40.04	-76.01	-60.3	2.44	9.70	V
	6908	-39.13	-13	-26.13	-66.28	-47.2	2.62	10.69	V
	8632	-38.15	-13	-25.15	-67.97	-48.3	2.40	12.55	V
10360	-46.15	-13	-33.15	-76.87	-55.8	2.69	12.34	V	
Highest	3484	-49.27	-13	-36.27	-67.08	-55.6	1.60	7.93	H
	5228	-54.27	-13	-41.27	-76.83	-61.5	2.47	9.70	H
	6968	-39.54	-13	-26.54	-67.36	-47.7	2.60	10.76	H
	8708	-42.24	-13	-29.24	-73.36	-52.4	2.42	12.58	H
	10448	-45.61	-13	-32.61	-76.74	-55.3	2.69	12.38	H
	3484	-50.37	-13	-37.37	-68.11	-56.7	1.60	7.93	V
	5228	-55.27	-13	-42.27	-77.98	-62.5	2.47	9.70	V
	6968	-42.64	-13	-29.64	-70	-50.8	2.60	10.76	V
	8708	-43.64	-13	-30.64	-72.93	-53.8	2.42	12.58	V
10448	-46.71	-13	-33.71	-77.51	-56.4	2.69	12.38	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3428	-50.10	-13	-37.10	-67.36	-56.2	1.58	7.68	H
	5136	-50.52	-13	-37.52	-73.54	-57.8	2.42	9.70	H
	6848	-40.22	-13	-27.22	-67.49	-48.2	2.64	10.62	H
	8560	-37.06	-13	-24.06	-67.93	-47.2	2.39	12.52	H
	10272	-43.89	-13	-30.89	-75.56	-53.5	2.69	12.31	H
	3428	-52.10	-13	-39.10	-68.39	-58.2	1.58	7.68	V
	5136	-53.12	-13	-40.12	-75.73	-60.4	2.42	9.70	V
	6848	-41.82	-13	-28.82	-67.66	-49.8	2.64	10.62	V
	8560	-40.56	-13	-27.56	-69.54	-50.7	2.39	12.52	V
10272	-46.59	-13	-33.59	-77.43	-56.2	2.69	12.31	V	
Middle	3452	-46.40	-13	-33.40	-63.74	-52.6	1.59	7.79	H
	5176	-50.54	-13	-37.54	-73.57	-57.8	2.44	9.70	H
	6900	-39.74	-13	-26.74	-66.51	-47.8	2.62	10.68	H
	8620	-39.55	-13	-26.55	-70.01	-49.7	2.40	12.55	H
	10344	-43.06	-13	-30.06	-75.39	-52.7	2.69	12.34	H
	3452	-46.00	-13	-33.00	-63.41	-52.2	1.59	7.79	V
	5176	-53.54	-13	-40.54	-76.14	-60.8	2.44	9.70	V
	6900	-40.24	-13	-27.24	-68.24	-48.3	2.62	10.68	V
	8620	-41.05	-13	-28.05	-70.55	-51.2	2.40	12.55	V
10344	-45.16	-13	-32.16	-76.67	-54.8	2.69	12.34	V	
Highest	3476	-48.90	-13	-35.90	-65.34	-55.2	1.60	7.89	H
	5212	-52.26	-13	-39.26	-75.35	-59.5	2.46	9.70	H
	6948	-40.37	-13	-27.37	-67.31	-48.5	2.61	10.74	H
	8684	-41.04	-13	-28.04	-72.06	-51.2	2.41	12.57	H
	10420	-44.23	-13	-31.23	-76.63	-53.9	2.69	12.37	H
	3476	-49.30	-13	-36.30	-66.53	-55.6	1.60	7.89	V
	5212	-54.26	-13	-41.26	-76.81	-61.5	2.46	9.70	V
	6948	-43.67	-13	-30.67	-70.24	-51.8	2.61	10.74	V
	8684	-41.54	-13	-28.54	-70.64	-51.7	2.41	12.57	V
10420	-46.73	-13	-33.73	-77.33	-56.4	2.69	12.37	V	

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-59.54	-13	-46.54	-69.35	-61.3	0.98	4.89	H
	2472	-48.12	-13	-35.12	-61.1	-50	1.28	5.32	H
	3296	-49.19	-13	-36.19	-66	-52.6	1.54	7.10	H
	1648	-58.42	-13	-45.42	-65.86	-60.18	0.98	4.89	V
	2472	-44.02	-13	-31.02	-59.82	-45.9	1.28	5.32	V
	3296	-53.37	-13	-40.37	-68.72	-56.78	1.54	7.10	V
Middle	1672	-51.18	-13	-38.18	-60.35	-52.86	0.99	4.82	H
	2504	-43.32	-13	-30.32	-56.51	-45.28	1.29	5.40	H
	3336	-46.90	-13	-33.90	-63.37	-50.48	1.55	7.28	H
	1672	-52.01	-13	-39.01	-59.23	-53.69	0.99	4.82	V
	2504	-41.52	-13	-28.52	-57.13	-43.48	1.29	5.40	V
	3336	-48.49	-13	-35.49	-63.59	-52.07	1.55	7.28	V
Highest	1688	-48.75	-13	-35.75	-57.98	-50.38	1.00	4.77	H
	2536	-47.30	-13	-34.30	-61.41	-49.28	1.30	5.43	H
	3376	-50.15	-13	-37.15	-66.98	-53.89	1.57	7.45	H
	1688	-51.37	-13	-38.37	-58.31	-53	1.00	4.77	V
	2536	-45.52	-13	-32.52	-61.37	-47.5	1.30	5.43	V
	3376	-50.46	-13	-37.46	-65.92	-54.2	1.57	7.45	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4998	-53.88	-25	-28.88	-77.1	-61.24	2.34	9.70	H
	7500	-37.48	-25	-12.48	-66.44	-46.85	2.43	11.80	H
	10002	-42.39	-25	-17.39	-74.08	-51.89	2.70	12.20	H
	4998	-55.67	-25	-30.67	-77.2	-63.03	2.34	9.70	V
	7500	-40.69	-25	-15.69	-69.18	-50.06	2.43	11.80	V
	10002	-44.62	-25	-19.62	-74.76	-54.12	2.70	12.20	V
Middle	5064	-53.69	-25	-28.69	-76.77	-61.02	2.37	9.70	H
	7596	-36.13	-25	-11.13	-64.62	-45.59	2.40	11.86	H
	10128	-45.44	-25	-20.44	-77.07	-55	2.70	12.25	H
	5064	-55.08	-25	-30.08	-76.83	-62.41	2.37	9.70	V
	7596	-41.02	-25	-16.02	-69.16	-50.48	2.40	11.86	V
	10128	-46.78	-25	-21.78	-77.29	-56.34	2.70	12.25	V
Highest	5130	-53.71	-25	-28.71	-76.57	-61	2.41	9.70	H
	7698	-32.84	-25	-7.84	-61.61	-42.39	2.37	11.92	H
	10260	-44.28	-25	-19.28	-75.99	-53.89	2.69	12.30	H
	5130	-54.29	-25	-29.29	-76.45	-61.58	2.41	9.70	V
	7698	-37.06	-25	-12.06	-65.23	-46.61	2.37	11.92	V
	10260	-45.28	-25	-20.28	-75.94	-54.89	2.69	12.30	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-57.81	-13.00	-44.81	-68.00	-59.47	0.87	4.68	H
	2096	-54.25	-13.00	-41.25	-66.87	-55.12	1.16	4.19	H
	2800	-52.01	-13.00	-39.01	-67.47	-54.12	1.38	5.64	H
	1400	-56.47	-13.00	-43.47	-66.15	-58.13	0.87	4.68	V
	2096	-49.53	-13.00	-36.53	-63.04	-50.40	1.16	4.19	V
	2800	-49.67	-13.00	-36.67	-66.28	-51.78	1.38	5.64	V
Middle	1416	-53.73	-13.00	-40.73	-64.28	-55.48	0.87	4.78	H
	2120	-57.18	-13.00	-44.18	-70.22	-58.12	1.17	4.26	H
	2832	-55.20	-13.00	-42.20	-70.96	-57.32	1.39	5.67	H
	1416	-54.55	-13.00	-41.55	-64.24	-56.30	0.87	4.78	V
	2120	-52.23	-13.00	-39.23	-66.15	-53.17	1.17	4.26	V
	2832	-53.29	-13.00	-40.29	-69.99	-55.41	1.39	5.67	V
Highest	1432	-49.48	-13.00	-36.48	-59.89	-51.33	0.88	4.88	H
	2144	-54.18	-13.00	-41.18	-67.95	-55.18	1.18	4.33	H
	2856	-53.25	-13.00	-40.25	-69.03	-55.38	1.40	5.68	H
	1432	-50.32	-13.00	-37.32	-59.49	-52.17	0.88	4.88	V
	2144	-49.38	-13.00	-36.38	-64.07	-50.38	1.18	4.33	V
	2856	-51.36	-13.00	-38.36	-68.22	-53.49	1.40	5.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-58.64	-13.00	-45.64	-69.12	-60.30	0.87	4.68	H
	2096	-53.34	-13.00	-40.34	-66.26	-54.21	1.16	4.19	H
	2800	-52.57	-13.00	-39.57	-68.22	-54.68	1.38	5.64	H
	1400	-55.50	-13.00	-42.50	-65.02	-57.16	0.87	4.68	V
	2096	-49.46	-13.00	-36.46	-62.06	-50.33	1.16	4.19	V
	2800	-49.92	-13.00	-36.92	-66.41	-52.03	1.38	5.64	V
Middle	1416	-53.53	-13.00	-40.53	-64.04	-55.28	0.87	4.78	H
	2120	-58.46	-13.00	-45.46	-71.46	-59.40	1.17	4.26	H
	2824	-55.88	-13.00	-42.88	-71.38	-58.00	1.39	5.66	H
	1416	-56.37	-13.00	-43.37	-65.97	-58.12	0.87	4.78	V
	2120	-53.35	-13.00	-40.35	-66.98	-54.29	1.17	4.26	V
	2824	-53.57	-13.00	-40.57	-70.20	-55.69	1.39	5.66	V
Highest	1424	-51.40	-13.00	-38.40	-62.06	-53.20	0.88	4.83	H
	2144	-55.00	-13.00	-42.00	-68.19	-56.00	1.18	4.33	H
	2856	-53.18	-13.00	-40.18	-69.16	-55.31	1.40	5.68	H
	1424	-52.35	-13.00	-39.35	-61.43	-54.15	0.88	4.83	V
	2144	-49.39	-13.00	-36.39	-63.82	-50.39	1.18	4.33	V
	2856	-50.35	-13.00	-37.35	-67.24	-52.48	1.40	5.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-58.54	-13.00	-45.54	-68.64	-60.20	0.87	4.68	H
	2096	-54.42	-13.00	-41.42	-67.45	-55.29	1.16	4.19	H
	2800	-52.07	-13.00	-39.07	-67.51	-54.18	1.38	5.64	H
	1400	-55.46	-13.00	-42.46	-65.21	-57.12	0.87	4.68	V
	2096	-49.47	-13.00	-36.47	-62.80	-50.34	1.16	4.19	V
	2800	-49.29	-13.00	-36.29	-65.99	-51.40	1.38	5.64	V
Middle	1408	-54.59	-13.00	-41.59	-64.98	-56.30	0.87	4.73	H
	2120	-59.34	-13.00	-46.34	-72.38	-60.28	1.17	4.26	H
	2824	-57.36	-13.00	-44.36	-72.55	-59.48	1.39	5.66	H
	1408	-55.69	-13.00	-42.69	-65.04	-57.40	0.87	4.73	V
	2120	-54.26	-13.00	-41.26	-68.73	-55.20	1.17	4.26	V
	2824	-55.31	-13.00	-42.31	-71.60	-57.43	1.39	5.66	V
Highest	1424	-56.40	-13.00	-43.40	-66.90	-58.20	0.88	4.83	H
	2136	-54.41	-13.00	-41.41	-68.07	-55.39	1.18	4.31	H
	2848	-52.49	-13.00	-39.49	-67.90	-54.62	1.40	5.68	H
	1424	-56.41	-13.00	-43.41	-65.86	-58.21	0.88	4.83	V
	2136	-48.40	-13.00	-35.40	-63.02	-49.38	1.18	4.31	V
	2848	-49.55	-13.00	-36.55	-65.65	-51.68	1.40	5.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-58.46	-13.00	-45.46	-68.37	-60.12	0.87	4.68	H
	2096	-54.52	-13.00	-41.52	-67.45	-55.39	1.16	4.19	H
	2800	-52.37	-13.00	-39.37	-67.77	-54.48	1.38	5.64	H
	1400	-55.74	-13.00	-42.74	-64.76	-57.40	0.87	4.68	V
	2096	-49.41	-13.00	-36.41	-62.54	-50.28	1.16	4.19	V
	2800	-49.25	-13.00	-36.25	-65.84	-51.36	1.38	5.64	V
Middle	1408	-53.56	-13.00	-40.56	-64.25	-55.27	0.87	4.73	H
	2112	-55.45	-13.00	-42.45	-68.57	-56.37	1.17	4.24	H
	2816	-55.32	-13.00	-42.32	-70.76	-57.43	1.39	5.65	H
	1408	-53.43	-13.00	-40.43	-63.24	-55.14	0.87	4.73	V
	2112	-51.39	-13.00	-38.39	-64.80	-52.31	1.17	4.24	V
	2816	-53.38	-13.00	-40.38	-69.83	-55.49	1.39	5.65	V
Highest	1416	-53.52	-13.00	-40.52	-63.79	-55.27	0.87	4.78	H
	2120	-57.46	-13.00	-44.46	-70.75	-58.40	1.17	4.26	H
	2824	-56.36	-13.00	-43.36	-71.68	-58.48	1.39	5.66	H
	1416	-55.52	-13.00	-42.52	-64.95	-57.27	0.87	4.78	V
	2120	-53.34	-13.00	-40.34	-67.56	-54.28	1.17	4.26	V
	2824	-53.36	-13.00	-40.36	-70.12	-55.48	1.39	5.66	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 13 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1552	-61.15	-13	-48.15	-71.23	-63.22	0.94	5.15	H
	2328	-61.11	-13	-48.11	-74.49	-62.61	1.24	4.88	H
	3112	-57.31	-13	-44.31	-74.26	-59.97	1.48	6.29	H
	1552	-63.25	-13	-50.25	-71.22	-65.32	0.94	5.15	V
	2328	-59.55	-13	-46.55	-74.48	-61.05	1.24	4.88	V
	3112	-58.36	-13	-45.36	-74.17	-61.02	1.48	6.29	V
Middle	1560	-59.96	-42.15	-17.81	-70.01	-62.00	0.94	5.13	H
	2344	-61.87	-13	-48.87	-75.04	-63.41	1.24	4.93	H
	3120	-58.51	-13	-45.51	-75.57	-61.20	1.49	6.33	H
	1560	-62.47	-42.15	-20.32	-70.64	-64.51	0.94	5.13	V
	2344	-59.78	-13	-46.78	-74.71	-61.32	1.24	4.93	V
	3120	-59.86	-13	-46.86	-75.76	-62.55	1.49	6.33	V
Highest	1568	-59.61	-42.15	-17.46	-69.74	-61.63	0.94	5.11	H
	2344	-60.47	-13	-47.47	-73.71	-62.01	1.24	4.93	H
	3128	-58.27	-13	-45.27	-75.33	-61.00	1.49	6.36	H
	1568	-61.55	-42.15	-19.40	-69.68	-63.57	0.94	5.11	V
	2344	-58.34	-13	-45.34	-73.21	-59.88	1.24	4.93	V
	3128	-59.79	-13	-46.79	-75.75	-62.52	1.49	6.36	V

LTE Band 13 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1552	-61.10	-13	-48.10	-71.61	-63.17	0.94	5.15	H
	2336	-61.26	-13	-48.26	-74.33	-62.78	1.24	4.91	H
	3104	-58.85	-13	-45.85	-75.83	-61.48	1.48	6.26	H
	1552	-64.11	-13	-51.11	-72	-66.18	0.94	5.15	V
	2336	-58.53	-13	-45.53	-73.77	-60.05	1.24	4.91	V
	3104	-59.67	-13	-46.67	-75.56	-62.3	1.48	6.26	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1408	-51.73	-13	-38.73	-62.03	-53.44	0.87	4.73	H
	2112	-54.18	-13	-41.18	-66.90	-55.10	1.17	4.24	H
	2816	-54.07	-13	-41.07	-69.56	-56.18	1.39	5.65	H
	1408	-60.07	-13	-47.07	-69.56	-61.78	0.87	4.73	V
	2112	-58.06	-13	-45.06	-71.40	-58.98	1.17	4.24	V
	2816	-54.36	-13	-41.36	-70.60	-56.47	1.39	5.65	V
Middle	1416	-46.80	-13	-33.80	-57.10	-48.55	0.87	4.78	H
	2120	-52.62	-13	-39.62	-65.69	-53.56	1.17	4.26	H
	2832	-50.15	-13	-37.15	-65.70	-52.27	1.39	5.67	H
	1416	-56.36	-13	-43.36	-65.83	-58.11	0.87	4.78	V
	2120	-55.39	-13	-42.39	-69.07	-56.33	1.17	4.26	V
	2832	-51.85	-13	-38.85	-68.18	-53.97	1.39	5.67	V
Highest	1424	-53.05	-13	-40.05	-63.30	-54.85	0.88	4.83	H
	2136	-51.02	-13	-38.02	-64.13	-52.00	1.18	4.31	H
	2848	-49.99	-13	-36.99	-65.64	-52.12	1.40	5.68	H
	1424	-59.06	-13	-46.06	-68.21	-60.86	0.88	4.83	V
	2136	-55.16	-13	-42.16	-69.21	-56.14	1.18	4.31	V
	2848	-50.74	-13	-37.74	-66.84	-52.87	1.40	5.68	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1408	-51.25	-13	-38.25	-61.56	-52.96	0.87	4.73	H
	2112	-52.46	-13	-39.46	-65.14	-53.38	1.17	4.24	H
	2816	-54.50	-13	-41.50	-69.74	-56.61	1.39	5.65	H
	1408	-60.17	-13	-47.17	-69.80	-61.88	0.87	4.73	V
	2112	-57.95	-13	-44.95	-71.26	-58.87	1.17	4.24	V
	2816	-54.55	-13	-41.55	-70.90	-56.66	1.39	5.65	V
Middle	1408	-51.08	-13	-38.08	-61.35	-52.79	0.87	4.73	H
	2120	-53.47	-13	-40.47	-66.30	-54.41	1.17	4.26	H
	2824	-54.56	-13	-41.56	-70.10	-56.68	1.39	5.66	H
	1408	-59.81	-13	-46.81	-69.34	-61.52	0.87	4.73	V
	2120	-57.55	-13	-44.55	-71.34	-58.49	1.17	4.26	V
	2824	-53.88	-13	-40.88	-70.24	-56.00	1.39	5.66	V
Highest	1416	-50.40	-13	-37.40	-60.78	-52.15	0.87	4.78	H
	2120	-53.28	-13	-40.28	-66.15	-54.22	1.17	4.26	H
	2824	-53.62	-13	-40.62	-68.99	-55.74	1.39	5.66	H
	1416	-59.80	-13	-46.80	-69.31	-61.55	0.87	4.78	V
	2120	-56.08	-13	-43.08	-69.78	-57.02	1.17	4.26	V
	2824	-53.77	-13	-40.77	-70.26	-55.89	1.39	5.66	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.