



## 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	4.26	4.96	5.16	5.94	<b>PASS</b>
Middle CH	4.14	4.87	4.7	5.94	
Highest CH	4.2	4.93	4.96	5.83	



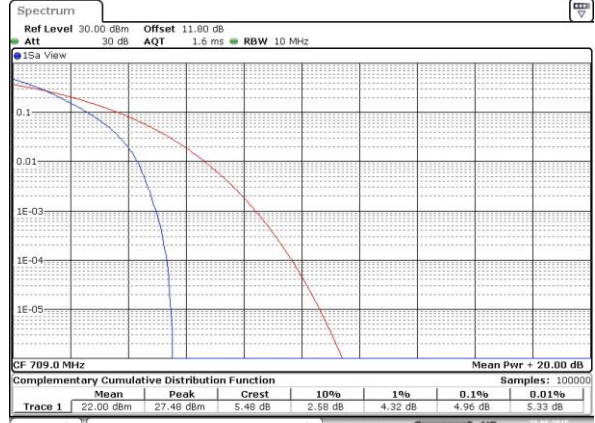
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 26 JUN 2015 16:16:45

Lowest Channel / Full RB



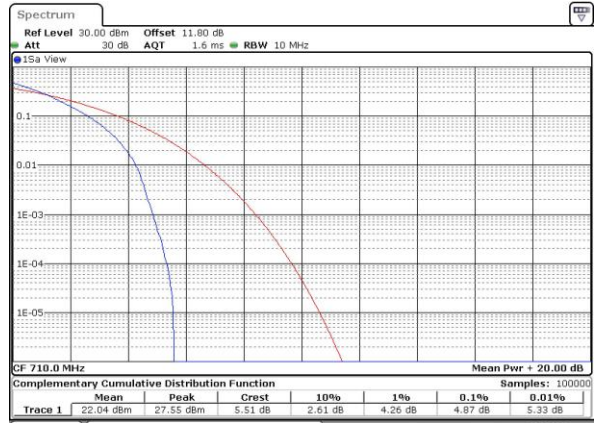
Date: 26 JUN 2015 16:17:12

Middle Channel / 1RB



Date: 26 JUN 2015 16:17:50

Middle Channel / Full RB



Date: 26 JUN 2015 16:17:27

Highest Channel / 1RB



Date: 26 JUN 2015 16:30:10

Highest Channel / Full RB



Date: 26 JUN 2015 16:30:38



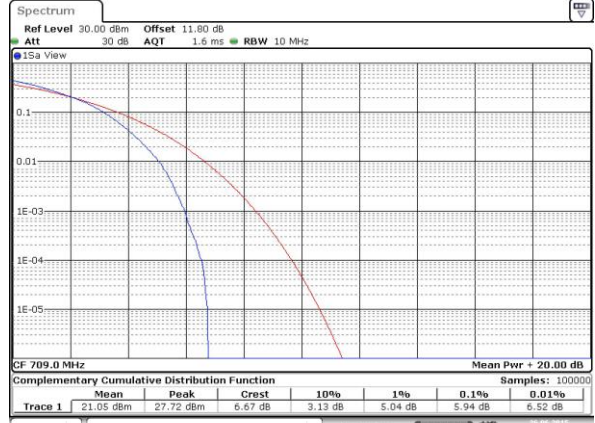
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



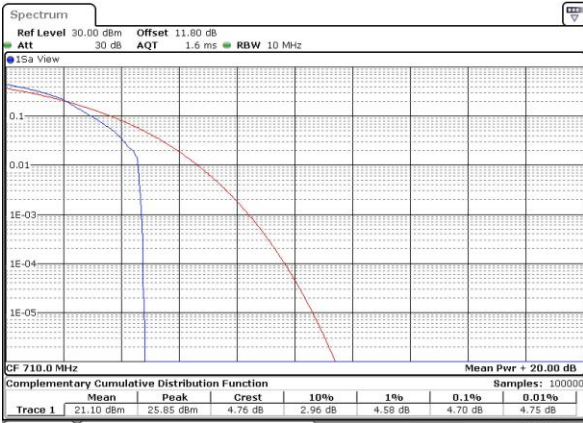
Date: 26 JUN 2015 16:12:32

Lowest Channel / Full RB



Date: 26 JUN 2015 16:13:28

Middle Channel / 1RB



Date: 26 JUN 2015 16:14:07

Middle Channel / Full RB



Date: 26 JUN 2015 16:15:08

Highest Channel / 1RB



Date: 26 JUN 2015 16:15:36

Highest Channel / Full RB



Date: 26 JUN 2015 16:16:16



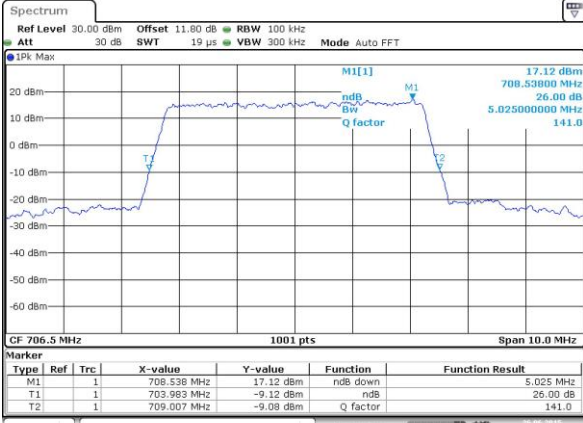
**26dB Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	5.03	5.04	9.99	9.87	-	-	-	-
Middle CH	-	-	-	-	5.05	5.05	9.93	9.87	-	-	-	-
Highest CH	-	-	-	-	5.05	5.07	10.03	9.93	-	-	-	-



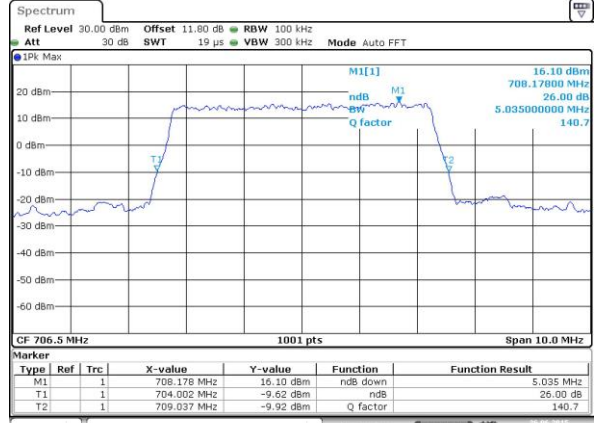
LTE Band 17

Lowest Channel / 5MHz / QPSK



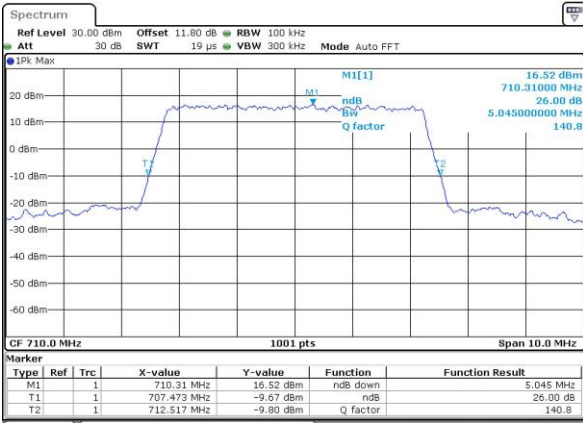
Date: 26 JUN 2015 15:07:20

Lowest Channel / 5MHz / 16QAM



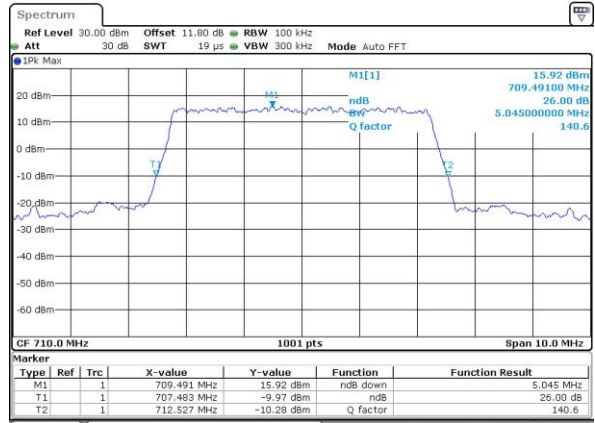
Date: 26 JUN 2015 15:07:50

Middle Channel / 5MHz / QPSK



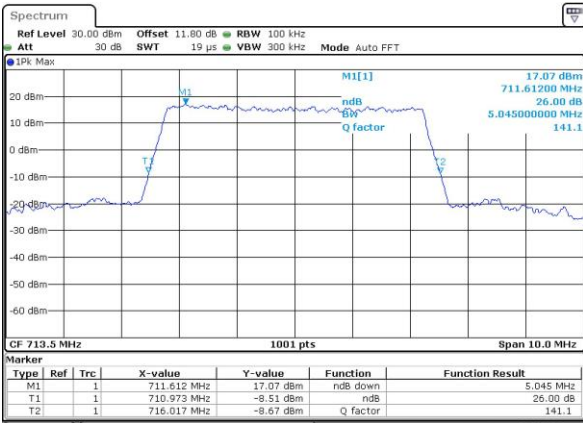
Date: 26 JUN 2015 15:18:00

Middle Channel / 5MHz / 16QAM



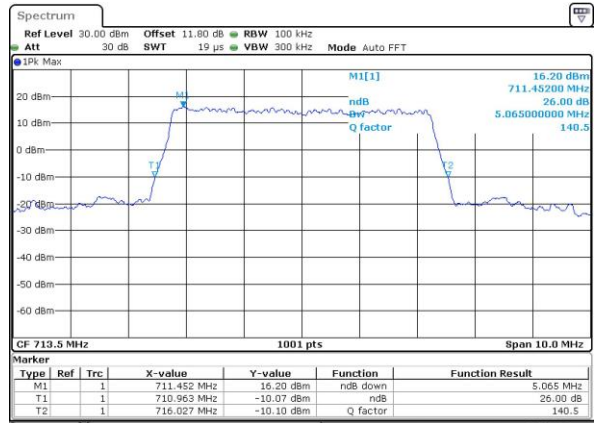
Date: 26 JUN 2015 15:18:30

Highest Channel / 5MHz / QPSK



Date: 26 JUN 2015 15:22:54

Highest Channel / 5MHz / 16QAM

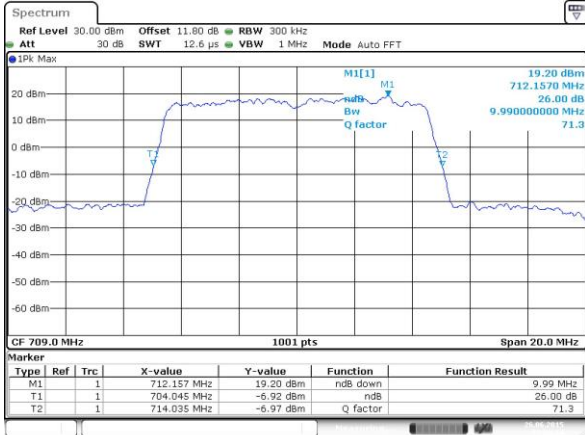


Date: 26 JUN 2015 15:23:26



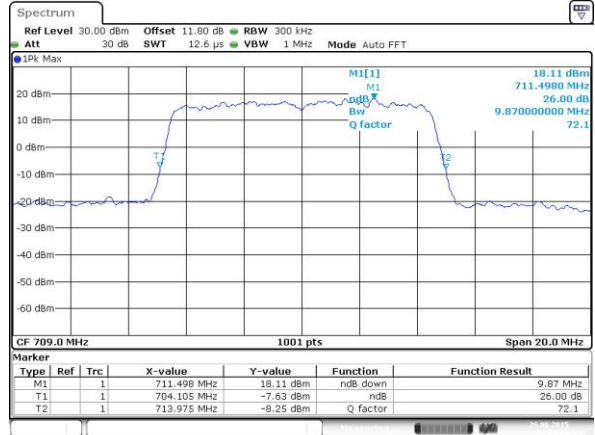
LTE Band 17

Lowest Channel / 10MHz / QPSK



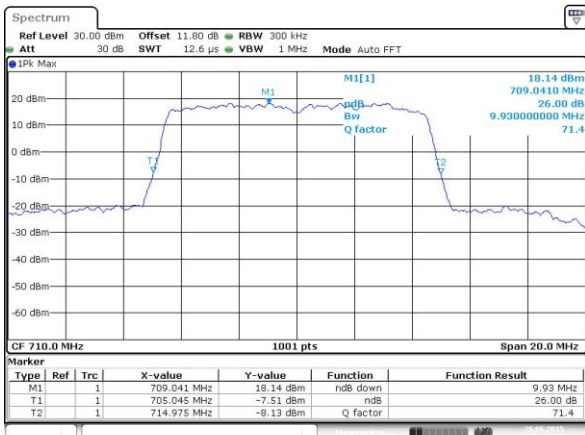
Date: 26 JUN 2015 15:33:34

Lowest Channel / 10MHz / 16QAM



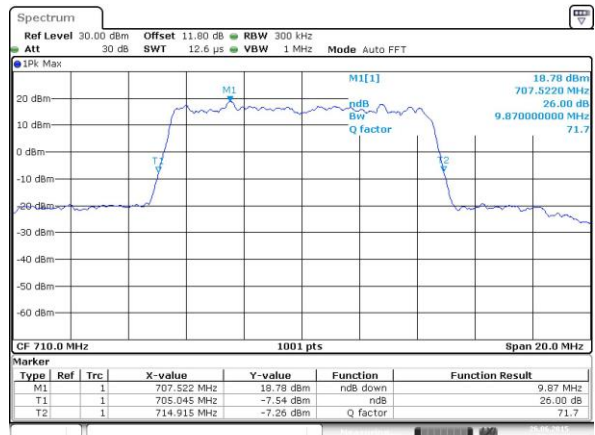
Date: 26 JUN 2015 15:34:04

Middle Channel / 10MHz / QPSK



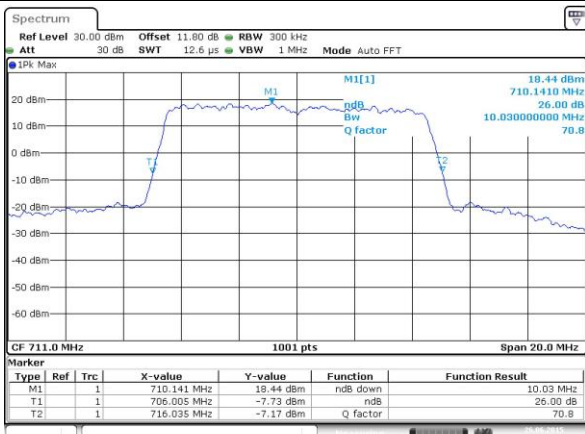
Date: 26 JUN 2015 15:44:11

Middle Channel / 10MHz / 16QAM



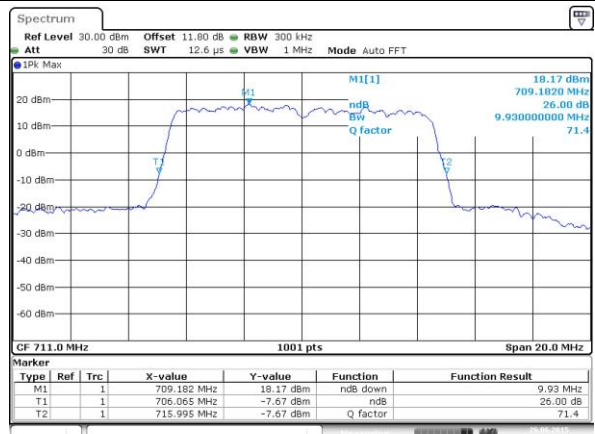
Date: 26 JUN 2015 15:44:41

Highest Channel / 10MHz / QPSK



Date: 26 JUN 2015 15:49:04

Highest Channel / 10MHz / 16QAM



Date: 26 JUN 2015 15:49:33



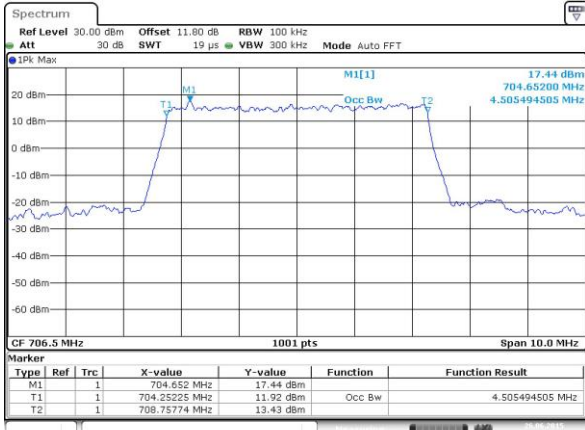
### Occupied Bandwidth

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
Lowest CH	-	-	-	-	4.51	4.5	9.03	8.99	-	-	-	-
Middle CH	-	-	-	-	4.5	4.49	9.07	8.97	-	-	-	-
Highest CH	-	-	-	-	4.51	4.51	9.05	9.01	-	-	-	-



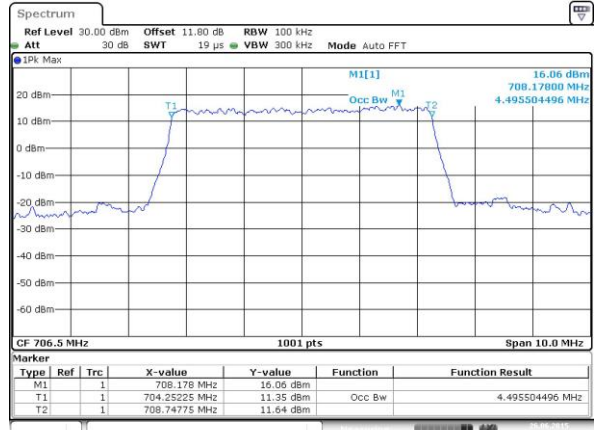
LTE Band 17

Lowest Channel / 5MHz / QPSK



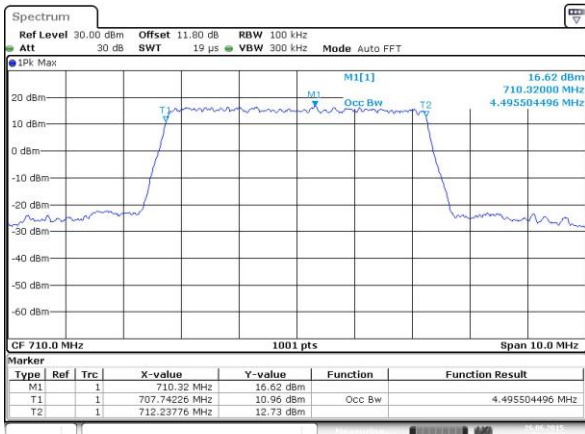
Date: 26 JUN 2015 15:06:22

Lowest Channel / 5MHz / 16QAM



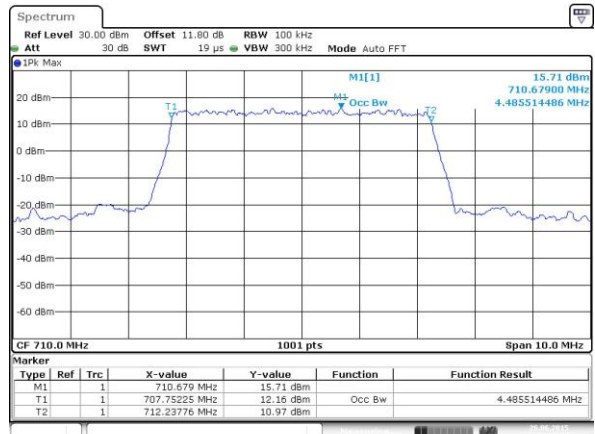
Date: 26 JUN 2015 15:06:50

Middle Channel / 5MHz / QPSK



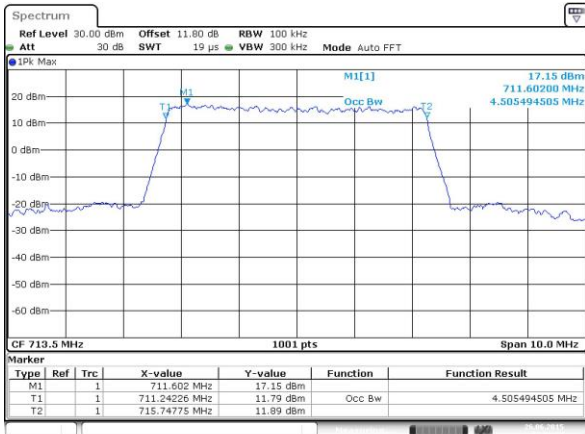
Date: 26 JUN 2015 15:17:03

Middle Channel / 5MHz / 16QAM



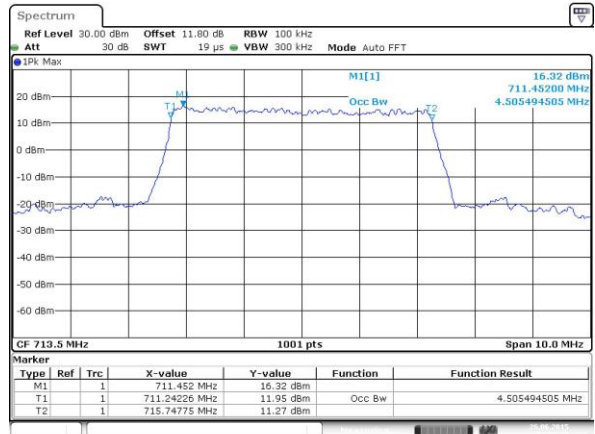
Date: 26 JUN 2015 15:17:33

Highest Channel / 5MHz / QPSK



Date: 26 JUN 2015 15:21:57

Highest Channel / 5MHz / 16QAM



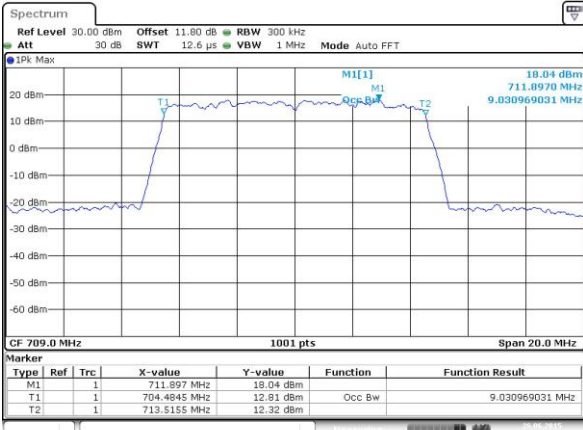
Date: 26 JUN 2015 15:22:25





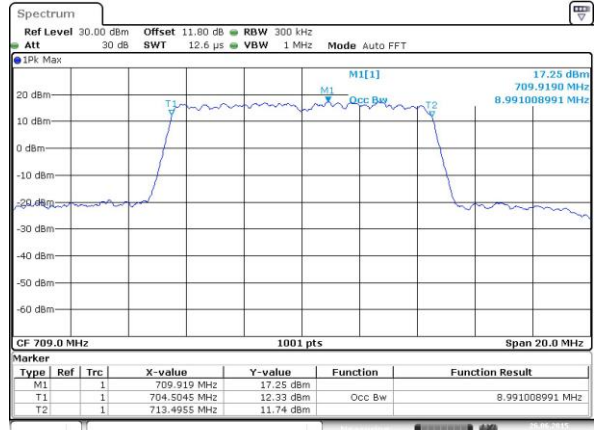
LTE Band 17

Lowest Channel / 10MHz / QPSK



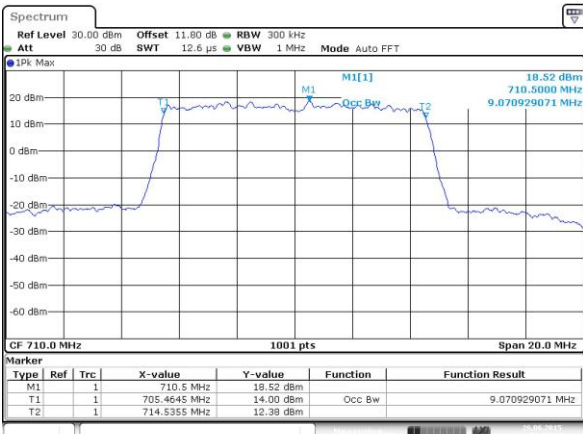
Date: 26 JUN 2015 15:32:37

Lowest Channel / 10MHz / 16QAM



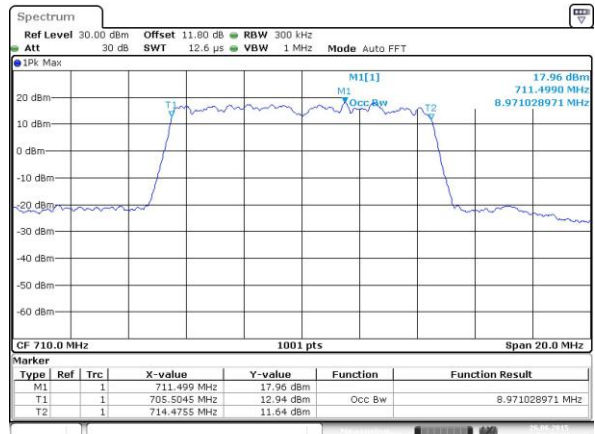
Date: 26 JUN 2015 15:33:04

Middle Channel / 10MHz / QPSK



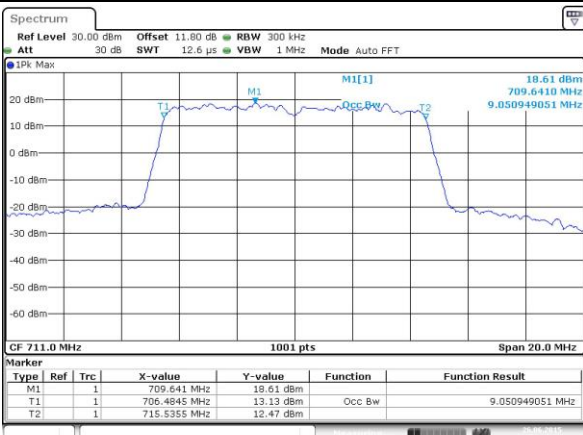
Date: 26 JUN 2015 15:43:15

Middle Channel / 10MHz / 16QAM



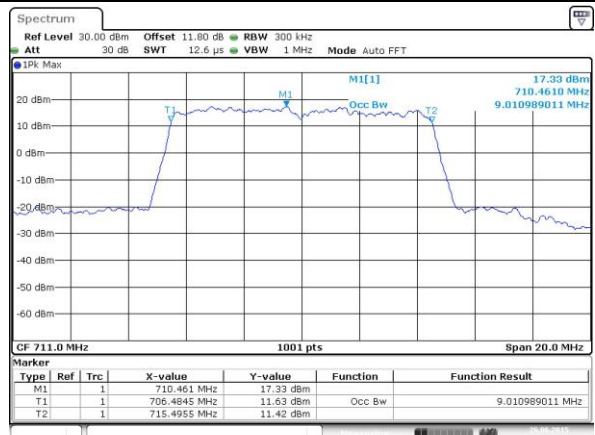
Date: 26 JUN 2015 15:43:42

Highest Channel / 10MHz / QPSK



Date: 26 JUN 2015 15:48:07

Highest Channel / 10MHz / 16QAM



Date: 26 JUN 2015 15:48:35

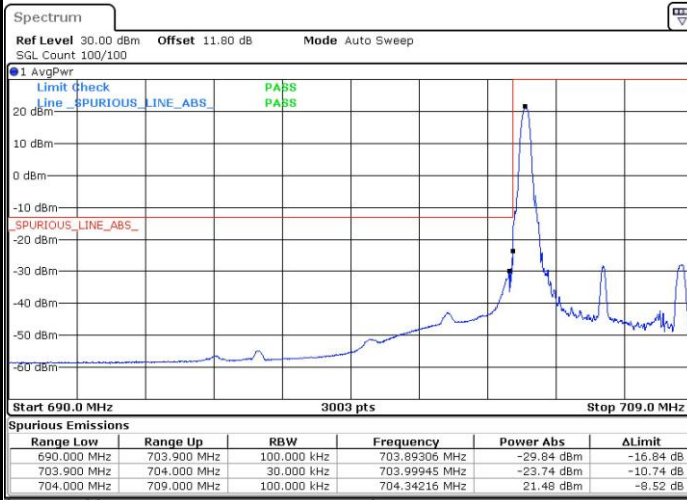


**Conducted Band Edge**



LTE Band 17 / 5MHz / QPSK

Lowest Band Edge / 1 RB



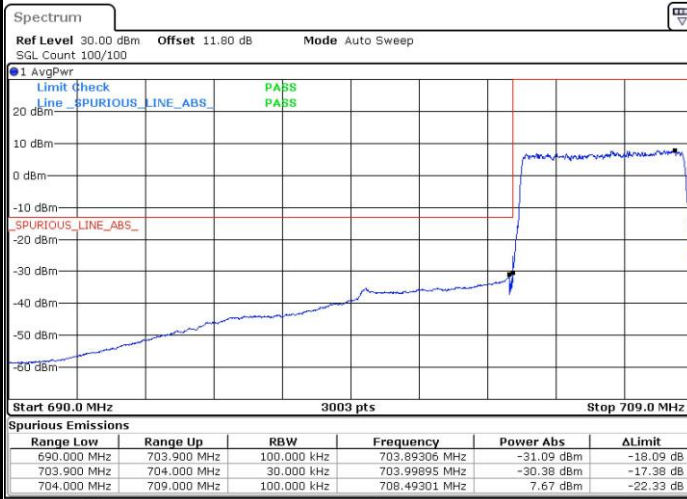
Date: 26.JUN.2015 15:09:16

Highest Band Edge / 1 RB



Date: 26.JUN.2015 15:24:51

Lowest Band Edge / Full RB



Date: 26.JUN.2015 15:12:09

Highest Band Edge / Full RB

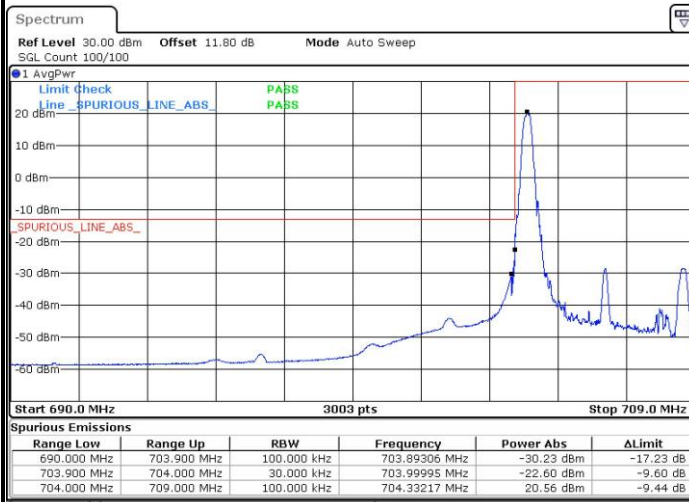


Date: 26.JUN.2015 15:27:43



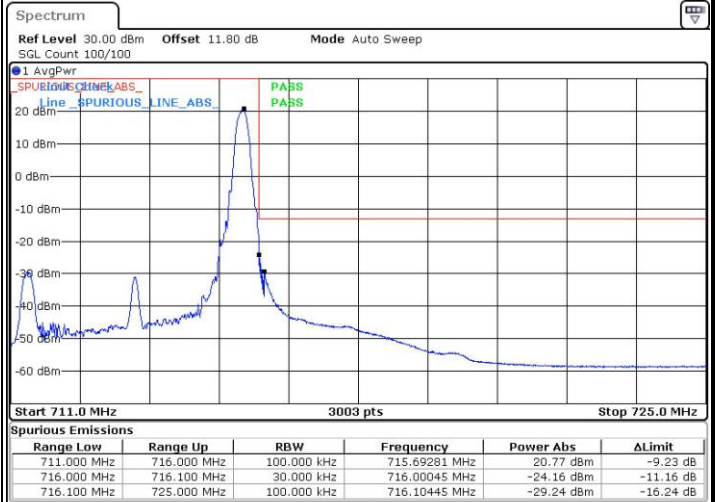
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



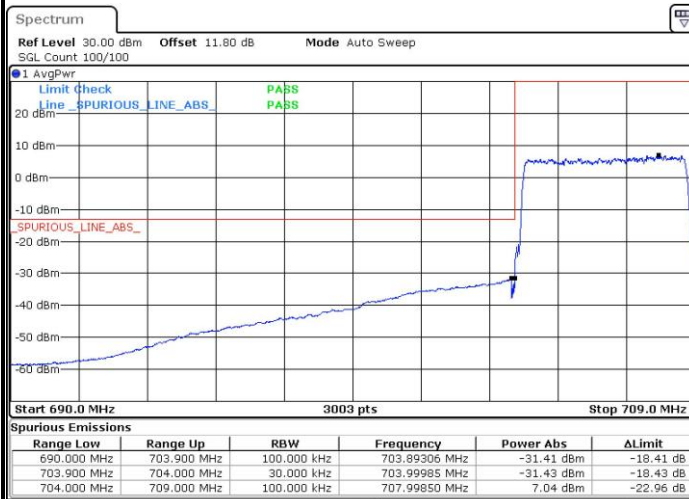
Date: 26.JUN.2015 15:10:43

Highest Band Edge / 1 RB



Date: 26.JUN.2015 15:26:17

Lowest Band Edge / Full RB



Date: 26.JUN.2015 15:13:35

Highest Band Edge / Full RB

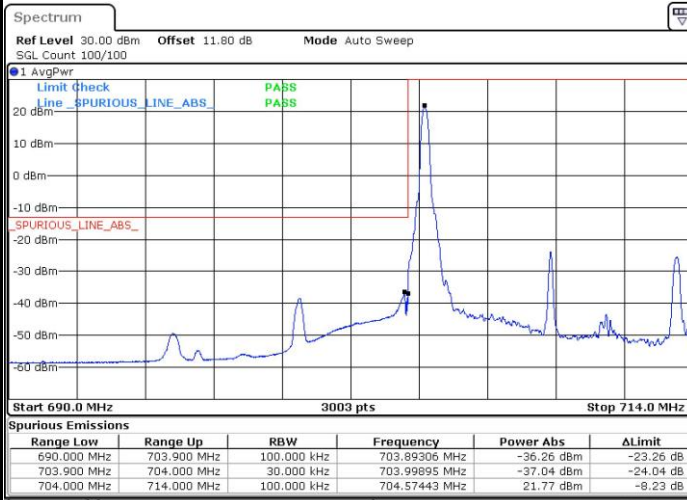


Date: 26.JUN.2015 15:29:08



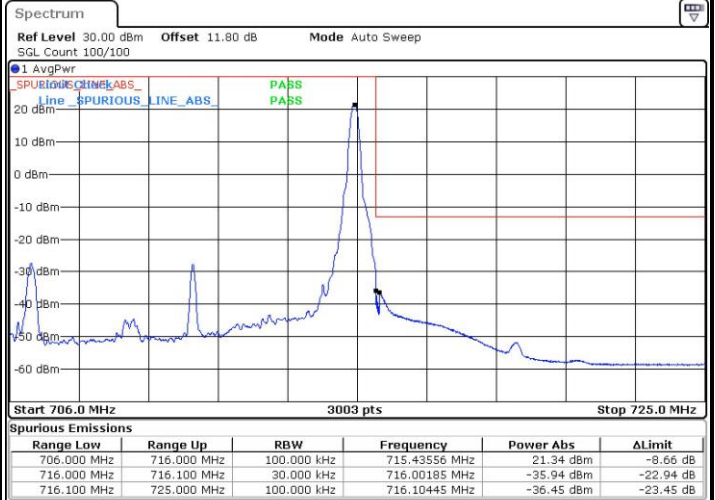
LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



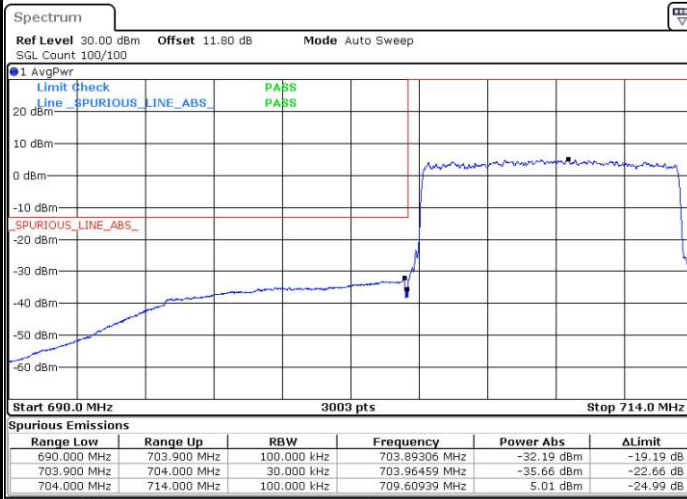
Date: 26.JUN.2015 15:35:30

Highest Band Edge / 1 RB



Date: 26.JUN.2015 15:50:58

Lowest Band Edge / Full RB



Date: 26.JUN.2015 15:38:22

Highest Band Edge / Full RB

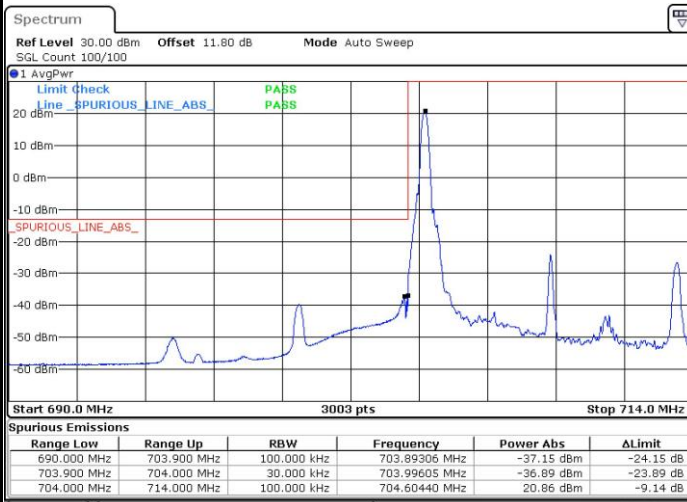


Date: 26.JUN.2015 15:53:49



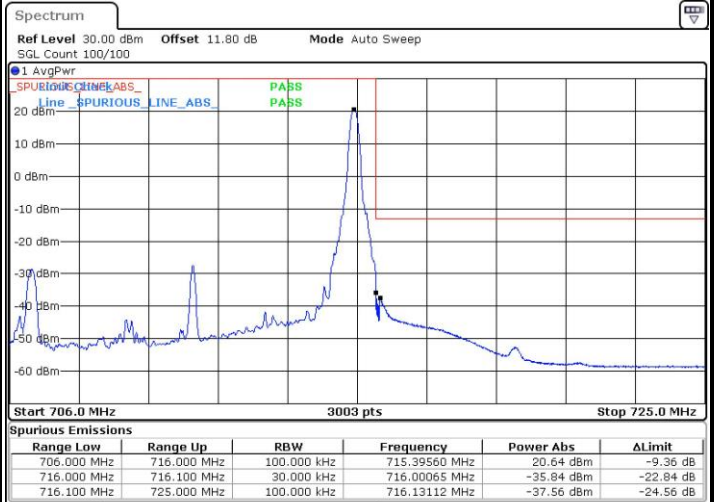
LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



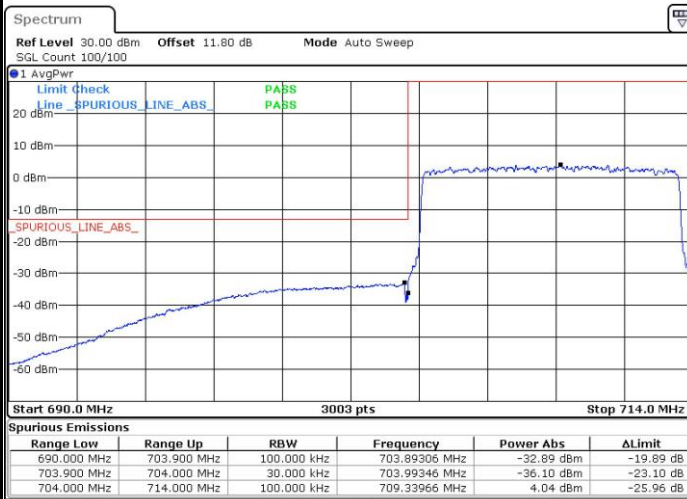
Date: 26.JUN.2015 15:36:56

Highest Band Edge / 1 RB



Date: 26.JUN.2015 15:52:23

Lowest Band Edge / Full RB



Date: 26.JUN.2015 15:39:49

Highest Band Edge / Full RB



Date: 26.JUN.2015 16:07:41



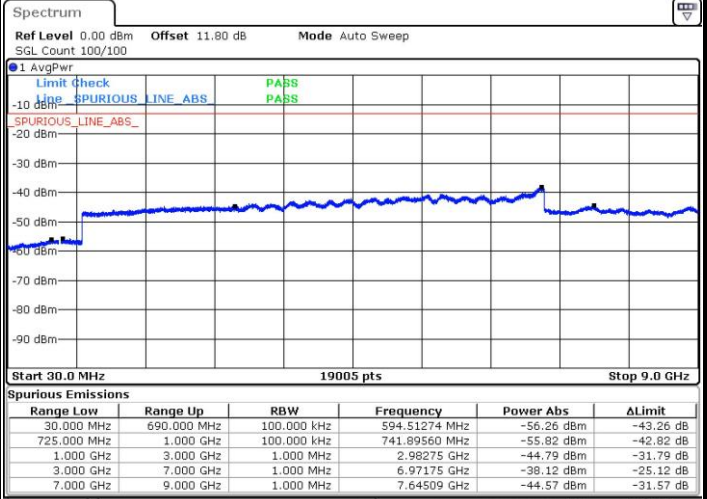
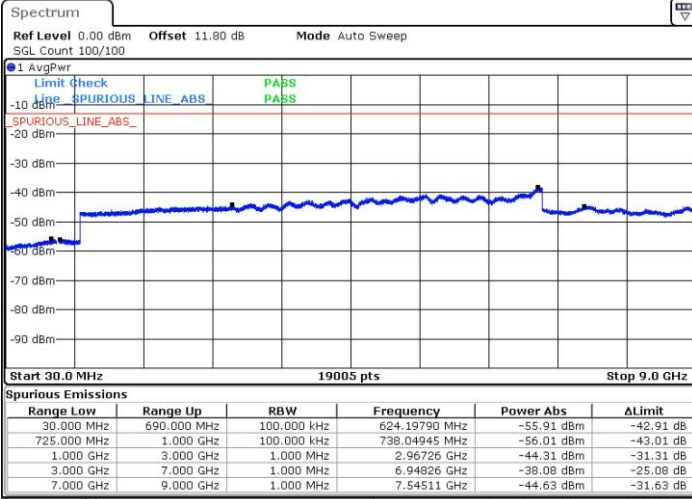
**Conducted Spurious Emission**



LTE Band 17 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

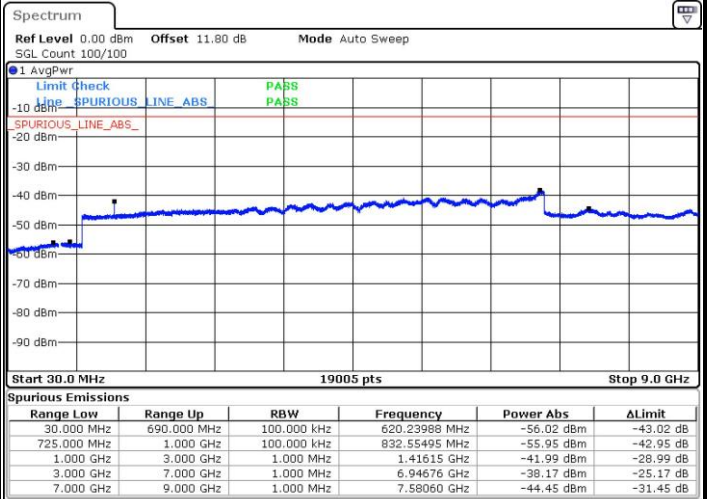


Date: 26 JUN.2015 15:15:04

Date: 26 JUN.2015 15:16:34

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 26 JUN.2015 15:19:58

Date: 26 JUN.2015 15:21:28





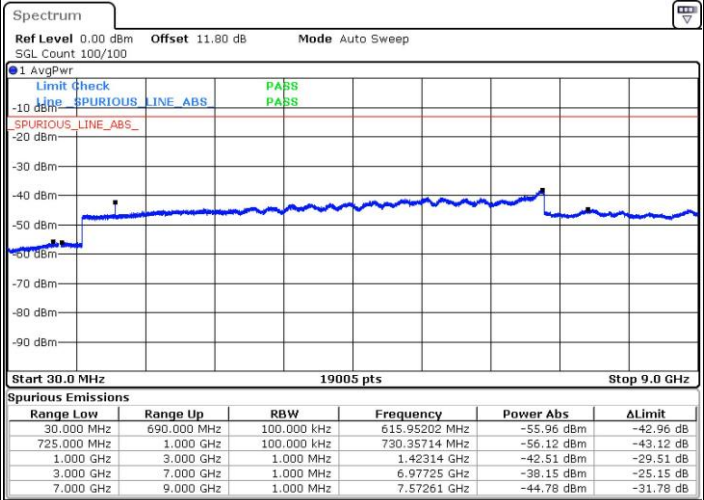
LTE Band 17 / 5MHz

Highest Channel / QPSK



Date: 26 JUN.2015 15:30:37

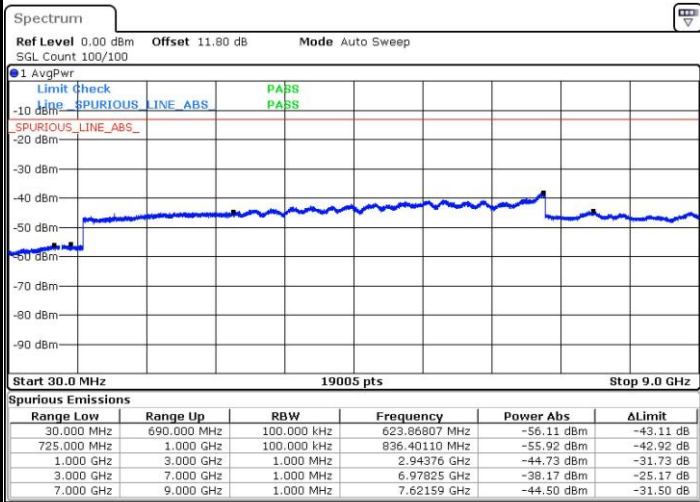
Highest Channel / 16QAM



Date: 26 JUN.2015 15:32:08

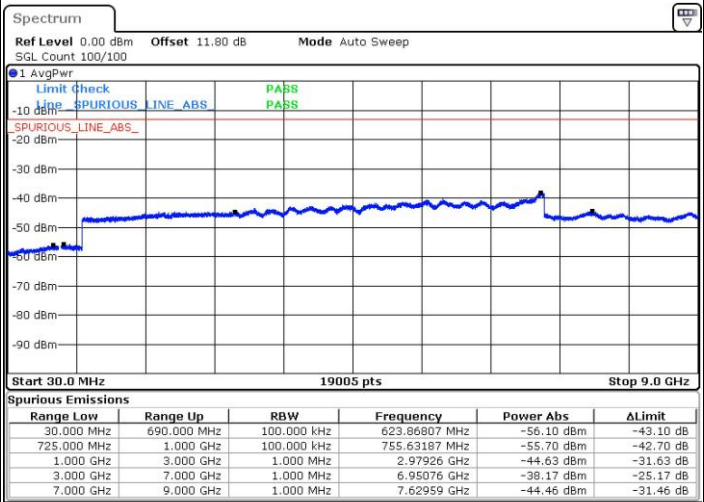
LTE Band 17 / 10MHz

Lowest Channel / QPSK



Date: 26 JUN.2015 15:41:17

Lowest Channel / 16QAM

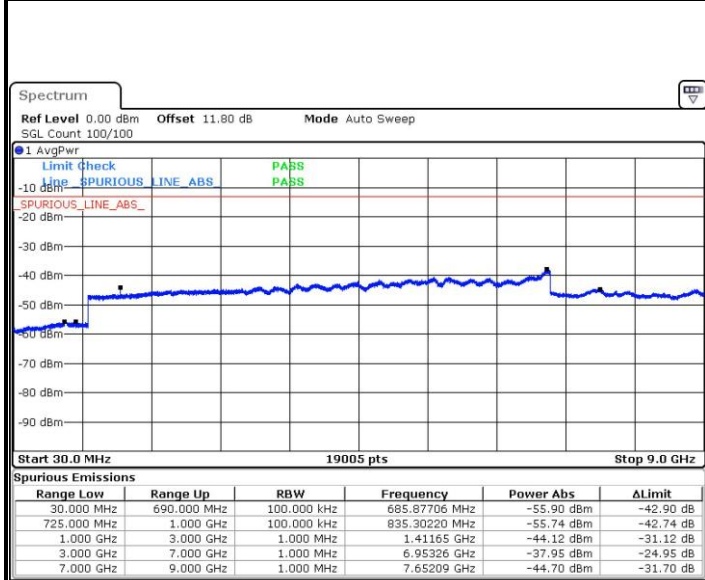


Date: 26 JUN.2015 15:42:47



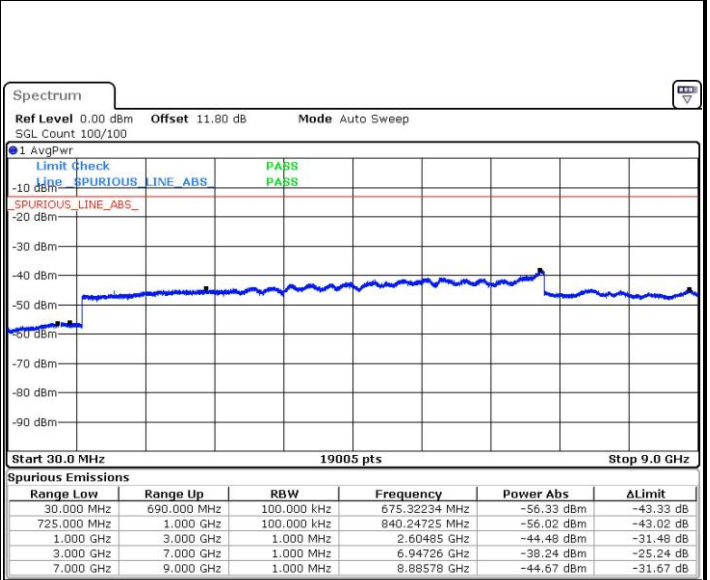
LTE Band 17 / 10MHz

Middle Channel / QPSK



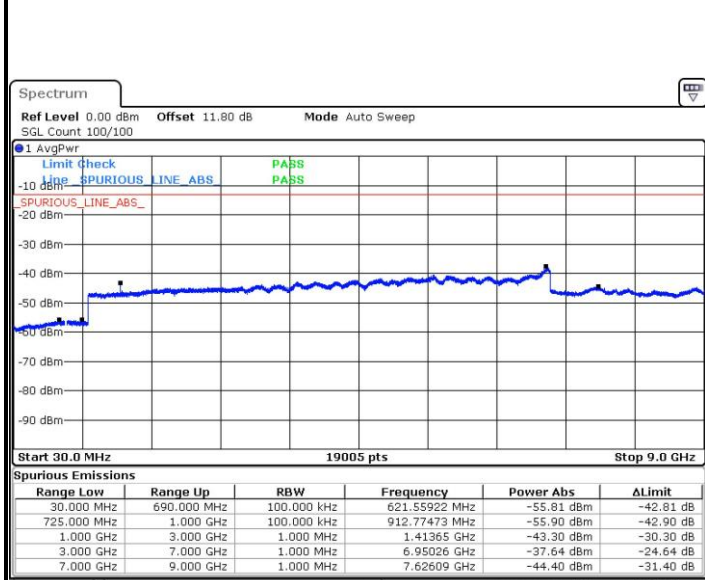
Date: 26.JUN.2015 15:46:09

Middle Channel / 16QAM



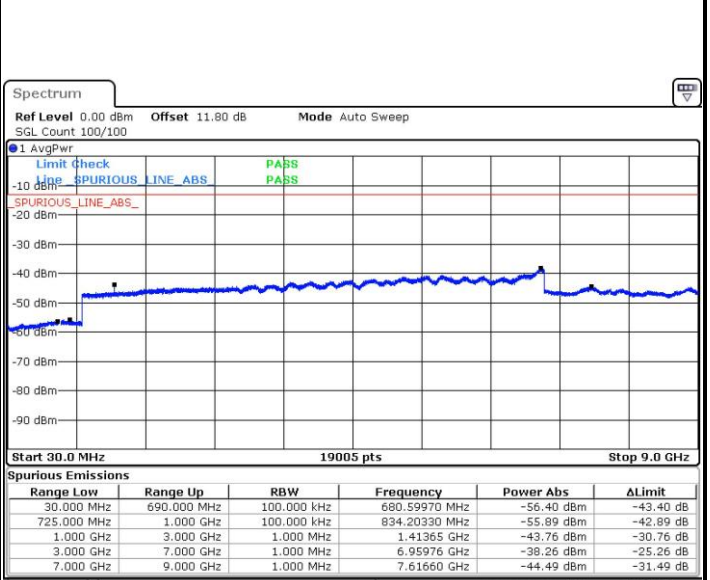
Date: 26.JUN.2015 15:47:38

Highest Channel / QPSK



Date: 26.JUN.2015 16:09:10

Highest Channel / 16QAM



Date: 26.JUN.2015 16:10:40



**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	0.0080	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0077	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0092	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0073	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0097	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0096	

**Note:**

1. Normal Voltage = 3.9V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage =4.35 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	5.7	PASS
40	Normal Voltage	0.4	
30	Normal Voltage	5.5	
20(Ref.)	Normal Voltage	0	
10	Normal Voltage	0.1	
0	Normal Voltage	6.5	
-10	Normal Voltage	0.5	
-20	Normal Voltage	5.2	
-30	Normal Voltage	0.1	
20	Maximum Voltage	6.9	
20	Normal Voltage	0	
20	Battery End Point	6.8	

$|\text{MAX}(\Delta f)| 6.9 = \text{Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L -  \text{MAX}(\Delta f) $	704.139993	$\geq 704 \text{ MHz}$	PASS
$f_H +  \text{MAX}(\Delta f) $	715.860007	$\leq 716 \text{ MHz}$	