



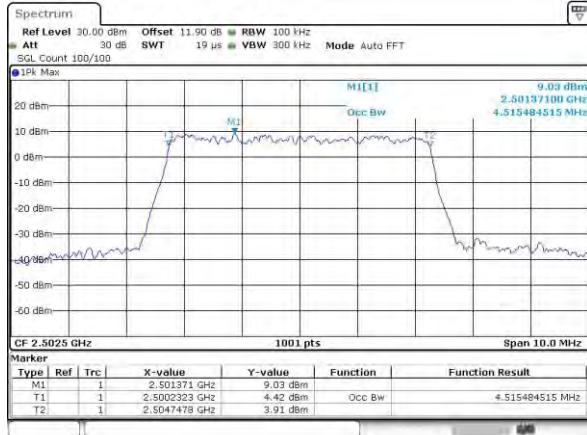
Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.52	4.51	9.01	8.93	13.49	13.43	18.46	18.3
Middle CH	-	-	-	-	4.5	4.52	8.99	9.03	13.49	13.46	18.5	18.3
Highest CH	-	-	-	-	4.52	4.52	9.09	9.03	13.43	13.49	18.46	18.42

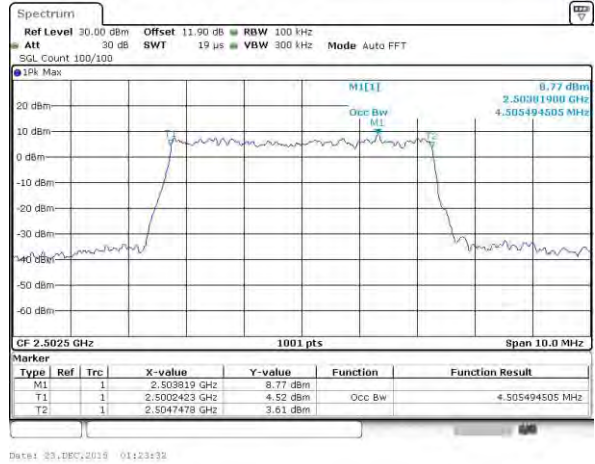


LTE Band 7

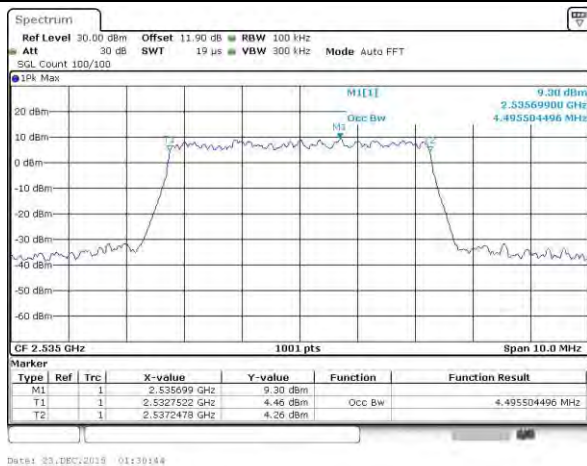
Lowest Channel / 5MHz / QPSK



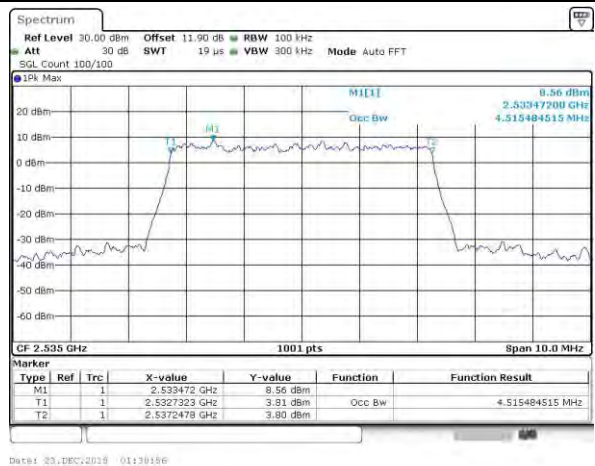
Lowest Channel / 5MHz / 16QAM



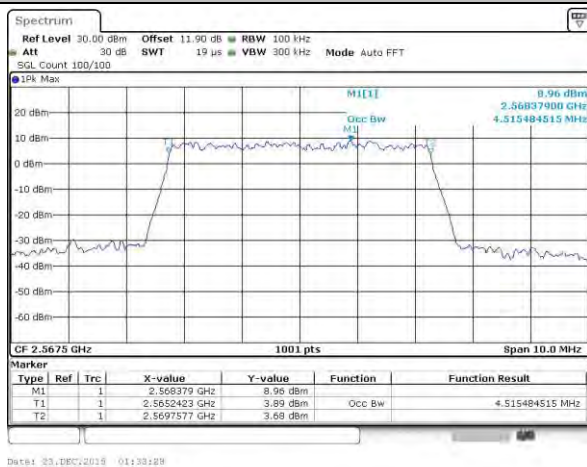
Middle Channel / 5MHz / QPSK



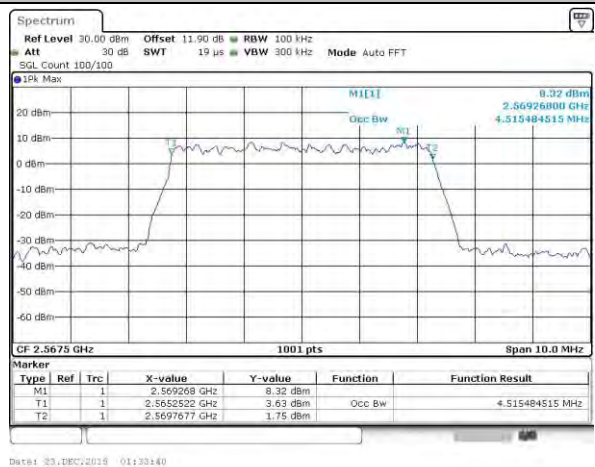
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



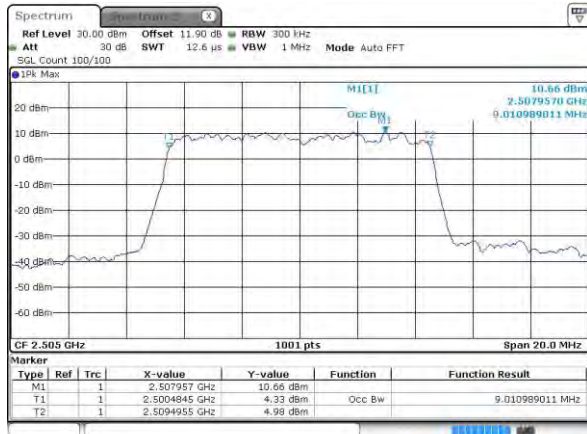
Highest Channel / 5MHz / 16QAM



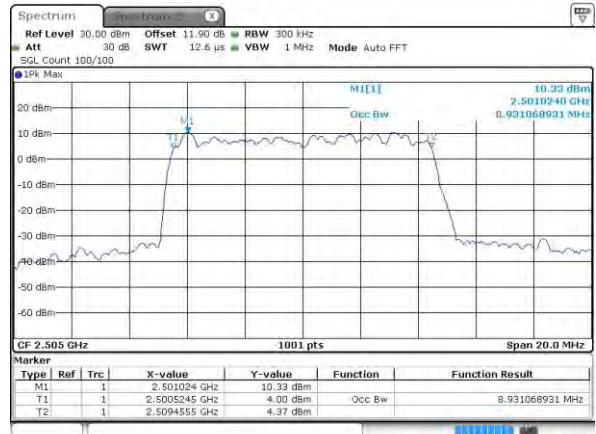


LTE Band 7

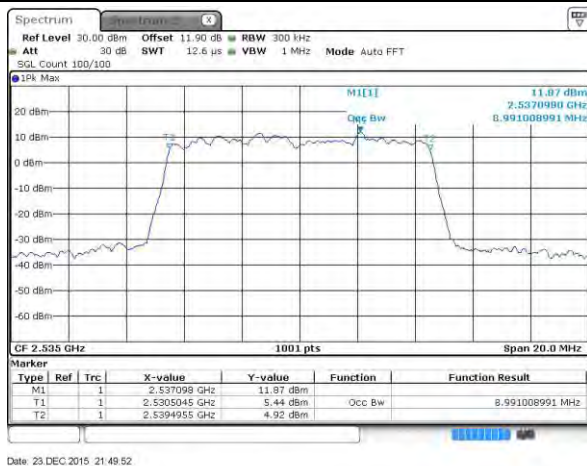
Lowest Channel / 10MHz / QPSK



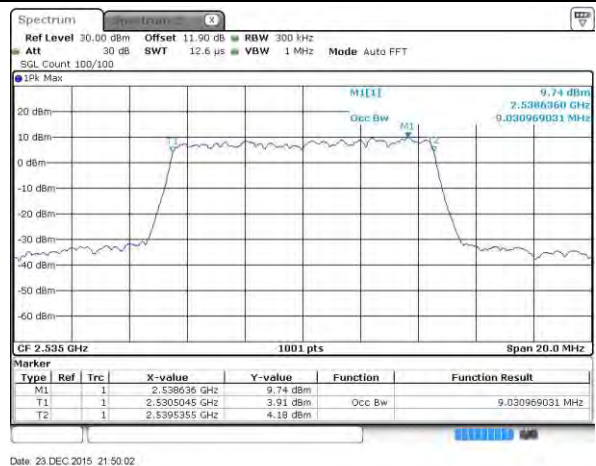
Lowest Channel / 10MHz / 16QAM



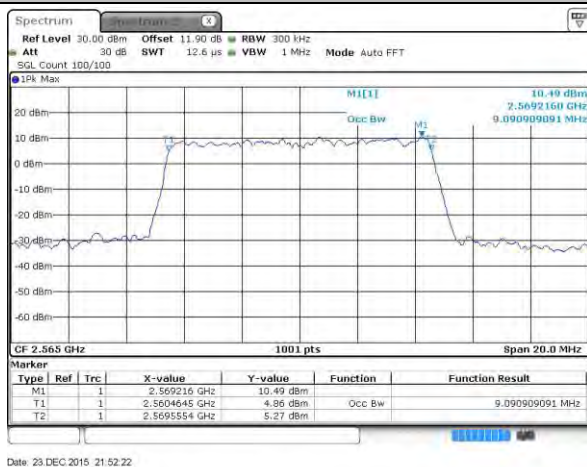
Middle Channel / 10MHz / QPSK



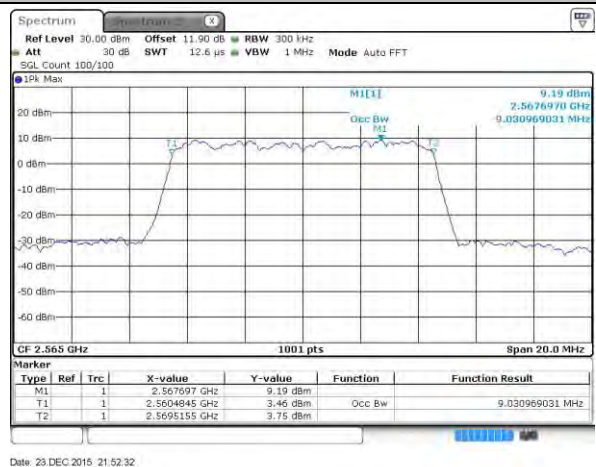
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



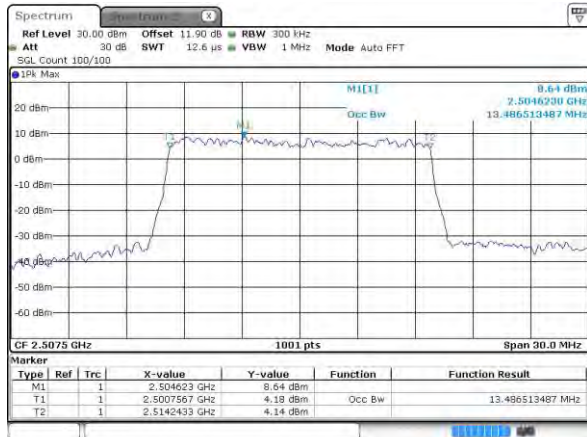
Highest Channel / 10MHz / 16QAM



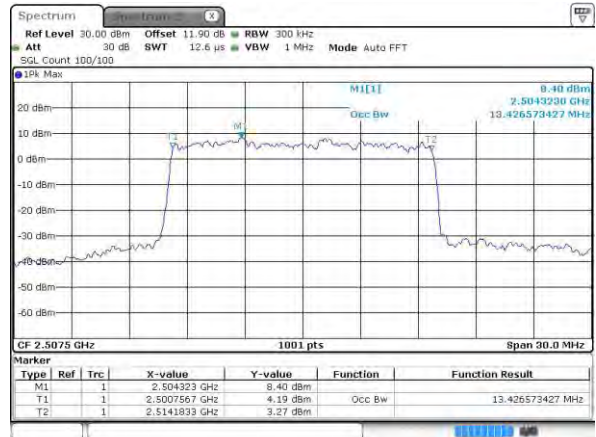


LTE Band 7

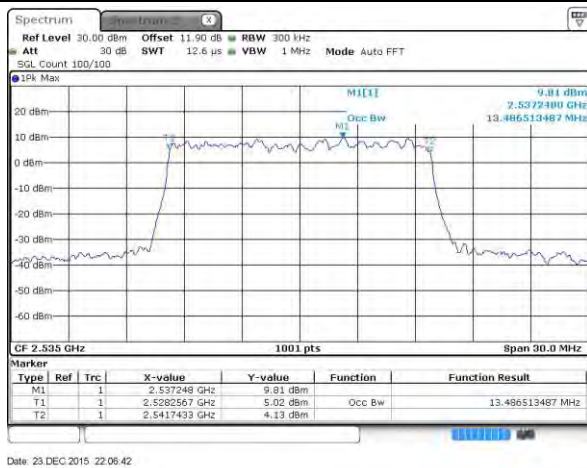
Lowest Channel / 15MHz / QPSK



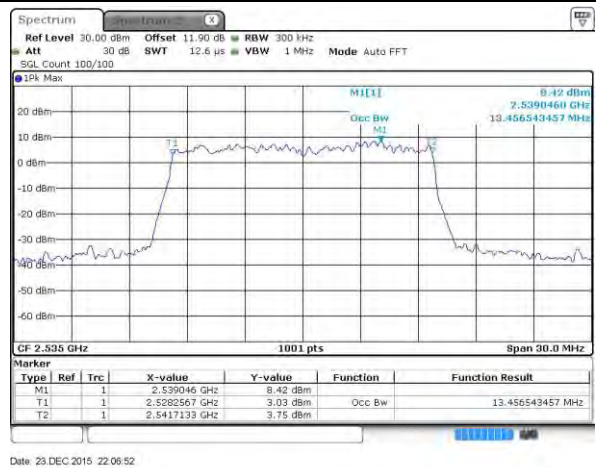
Lowest Channel / 15MHz / 16QAM



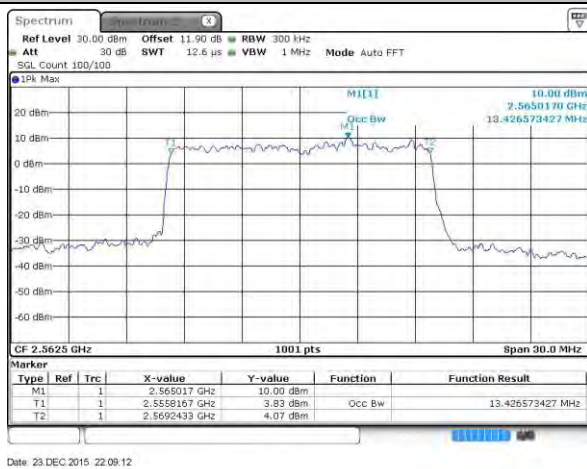
Middle Channel / 15MHz / QPSK



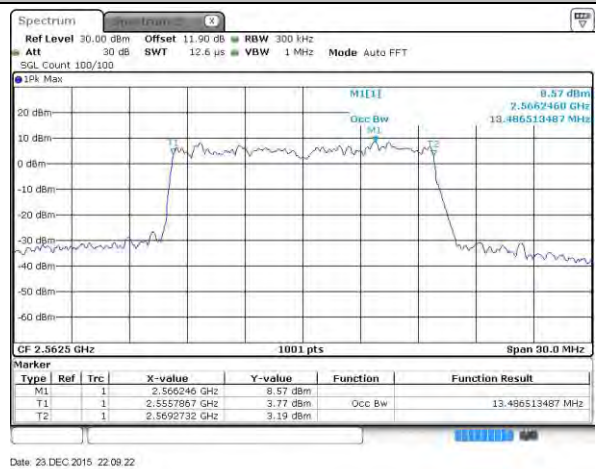
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK



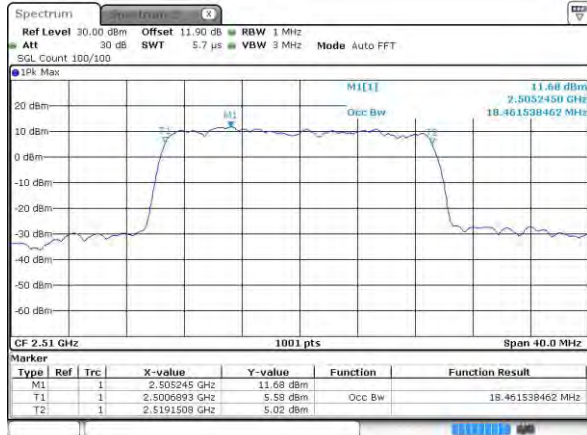
Highest Channel / 15MHz / 16QAM



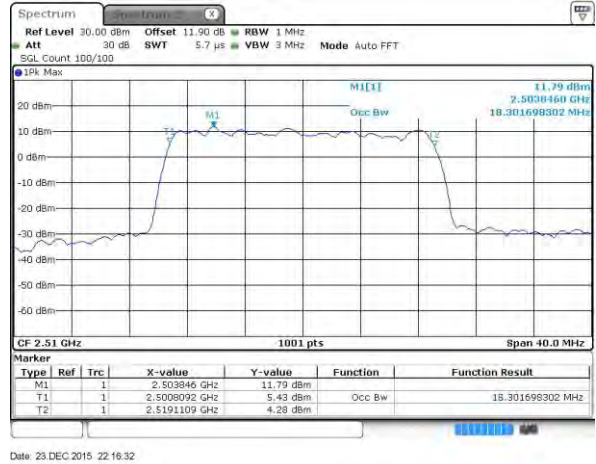


LTE Band 7

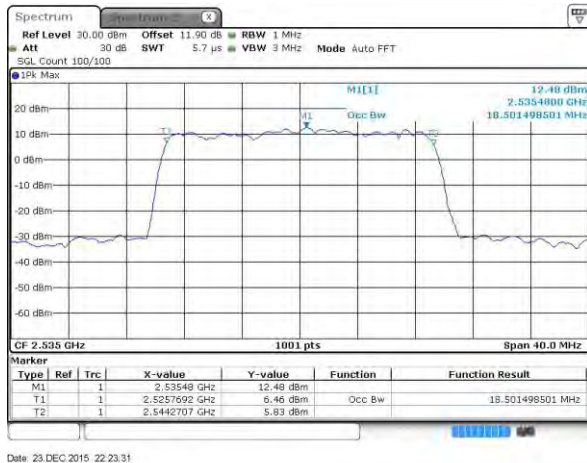
Lowest Channel / 20MHz / QPSK



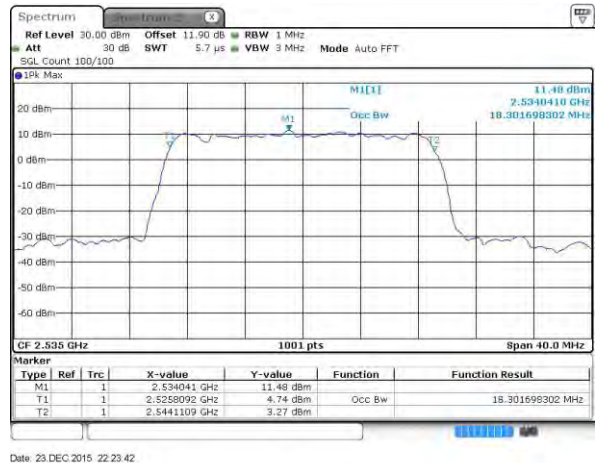
Lowest Channel / 20MHz / 16QAM



Middle Channel / 20MHz / QPSK



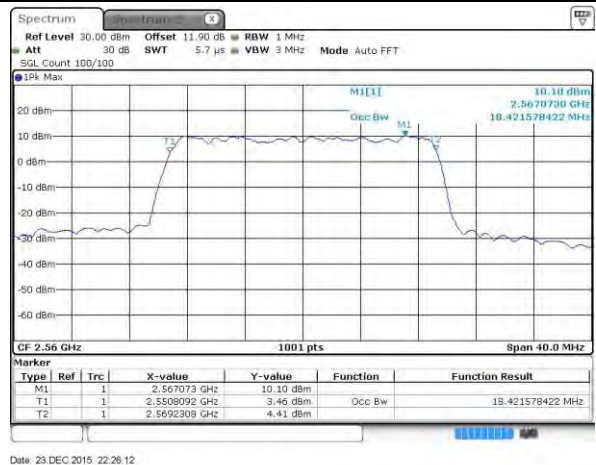
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM



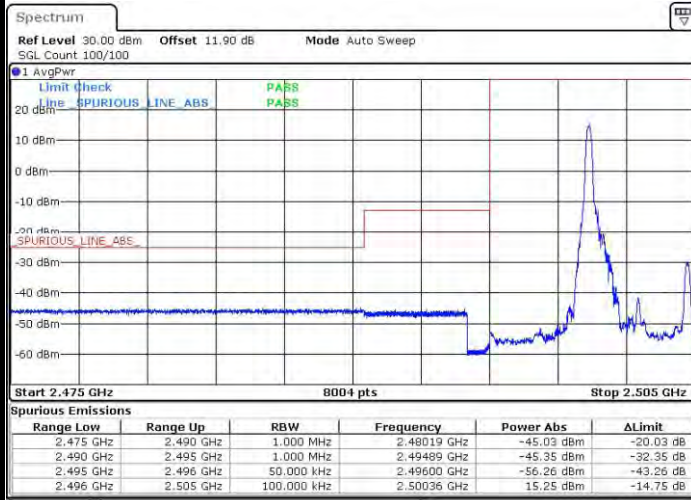


Conducted Band Edge

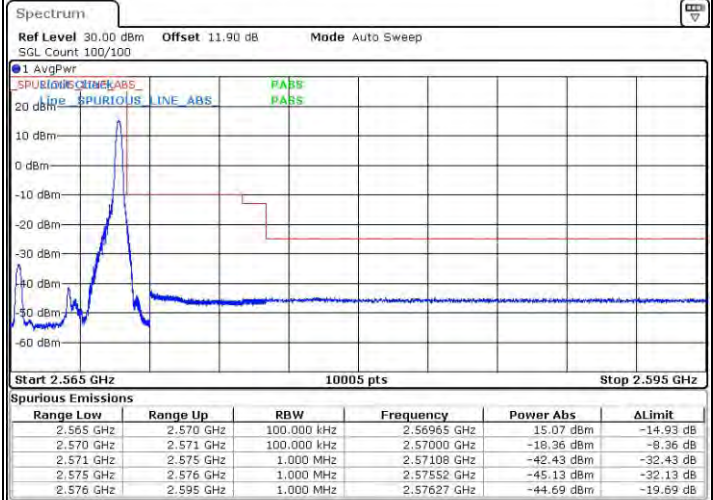


LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



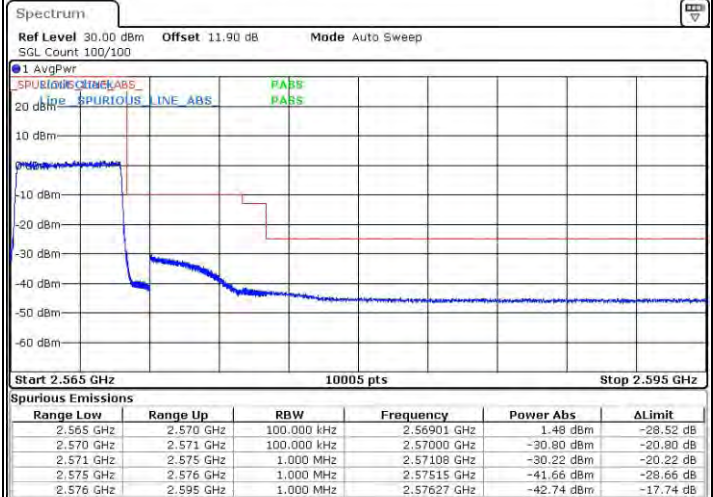
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



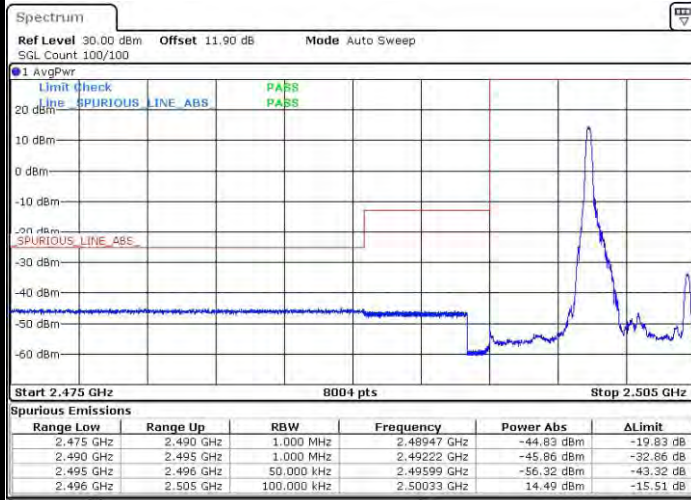
Highest Band Edge / Full RB



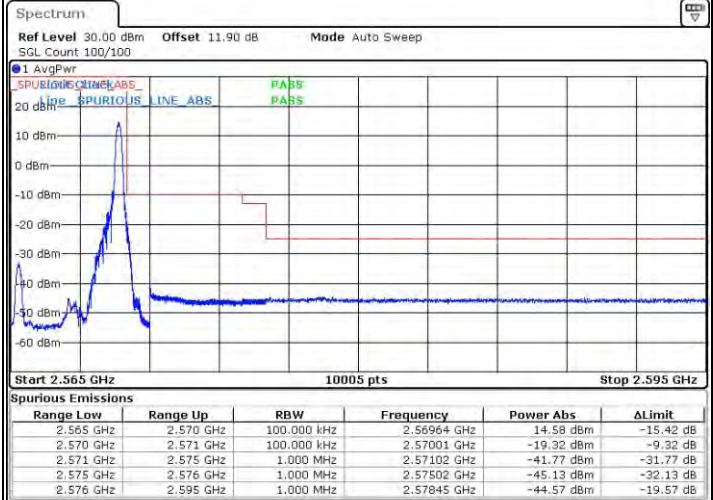


LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



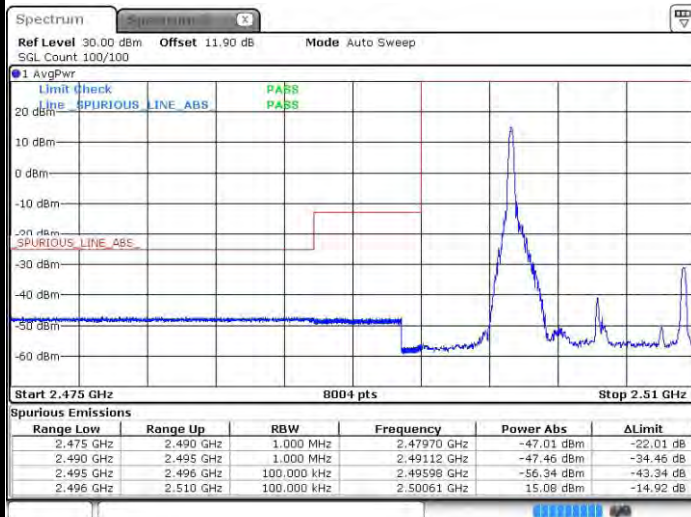
Highest Band Edge / Full RB



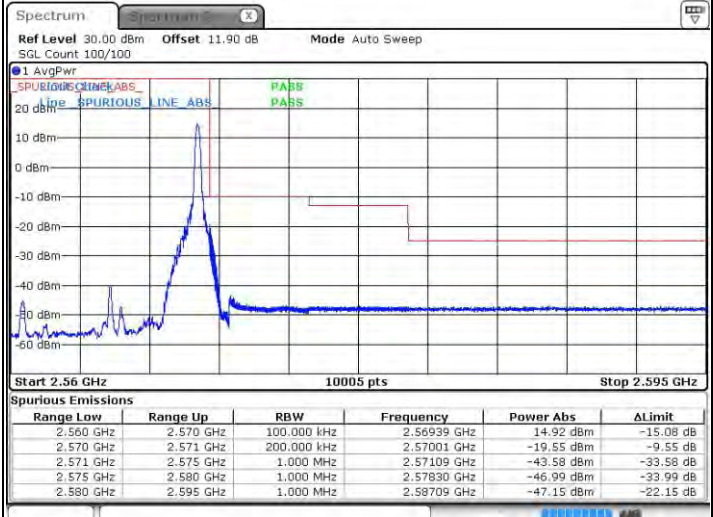


LTE Band 7 / 10MHz / QPSK

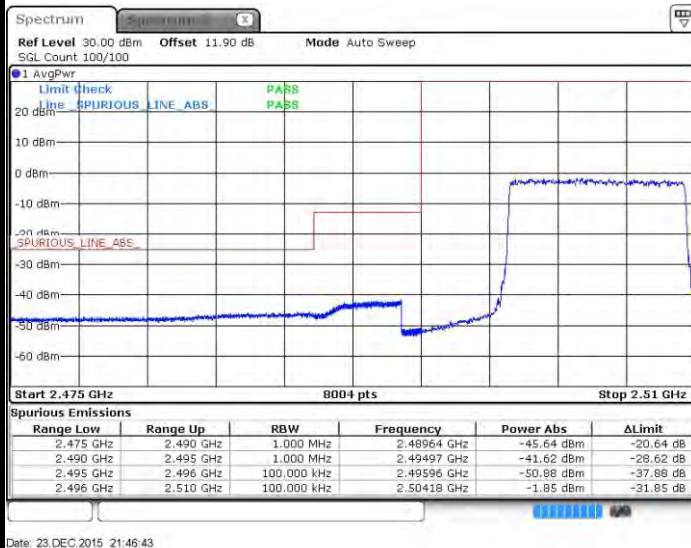
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



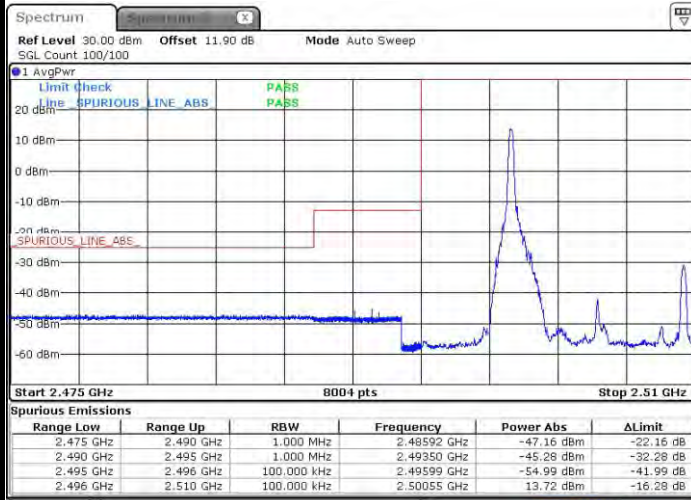
Highest Band Edge / Full RB



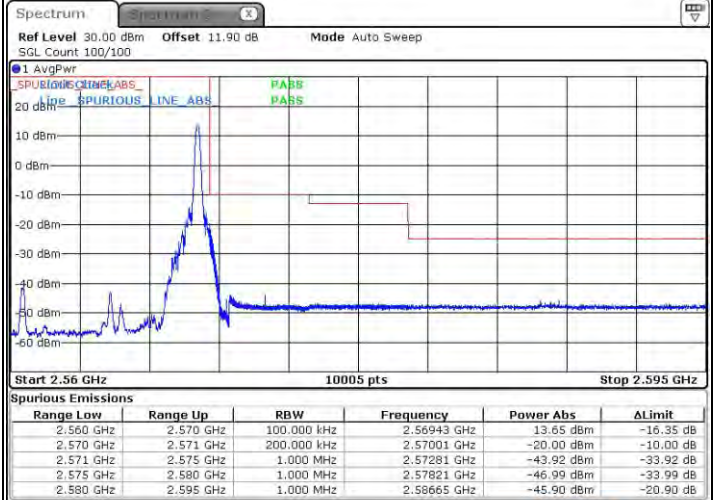


LTE Band 7 / 10MHz / 16QAM

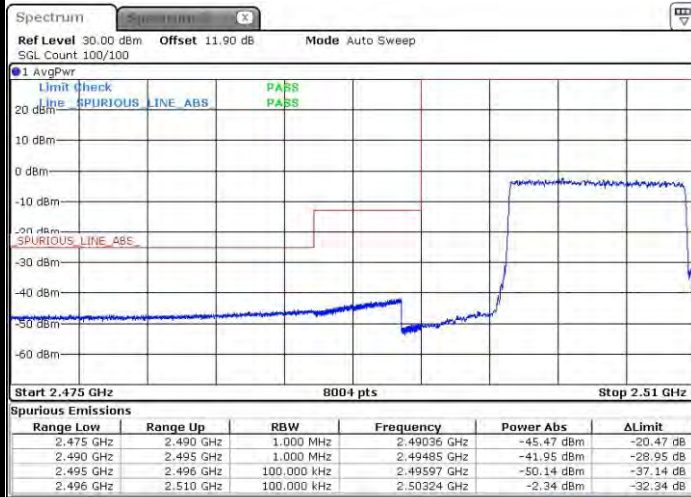
Lowest Band Edge / 1 RB



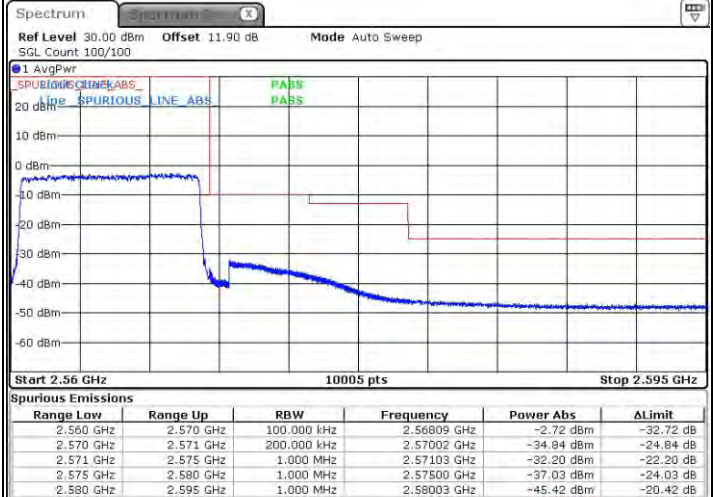
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



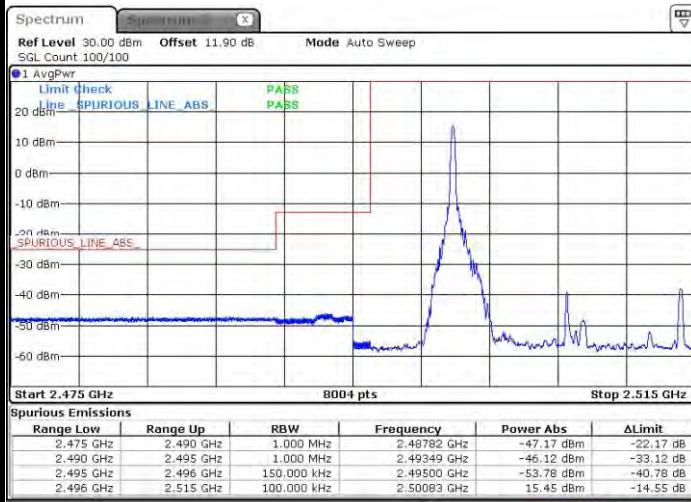
Highest Band Edge / Full RB



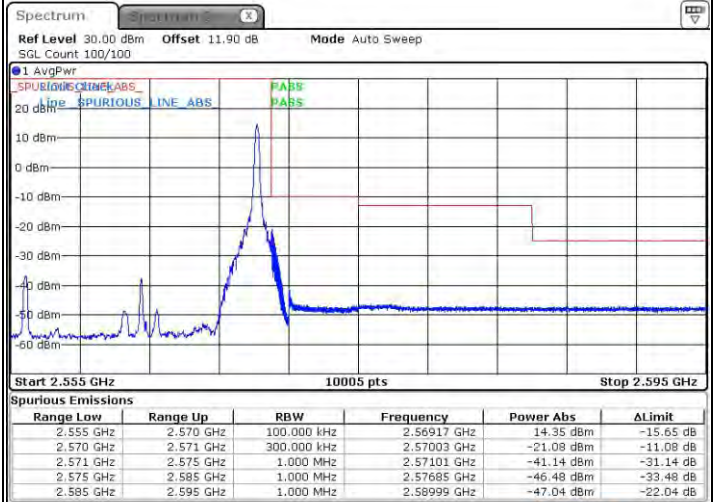


LTE Band 7 / 15MHz / QPSK

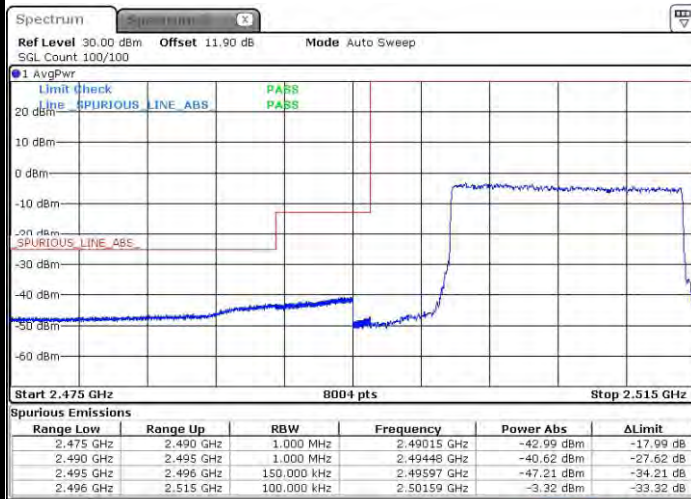
Lowest Band Edge / 1 RB



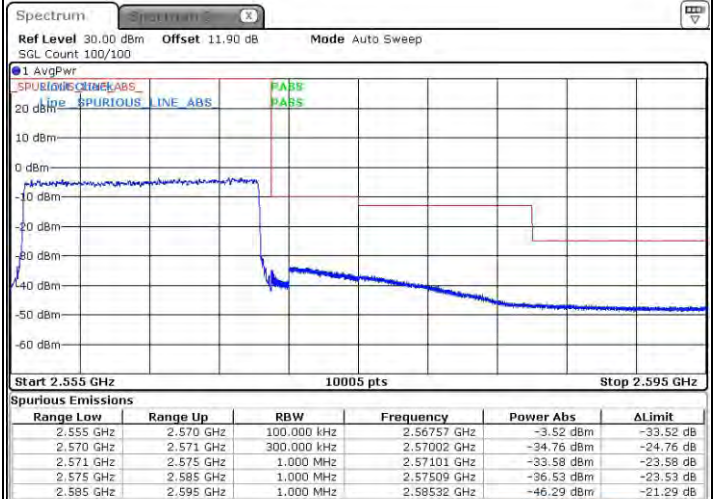
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



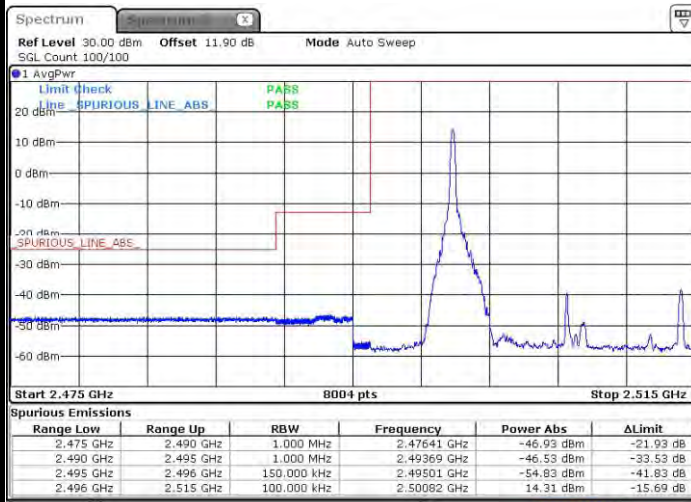
Highest Band Edge / Full RB



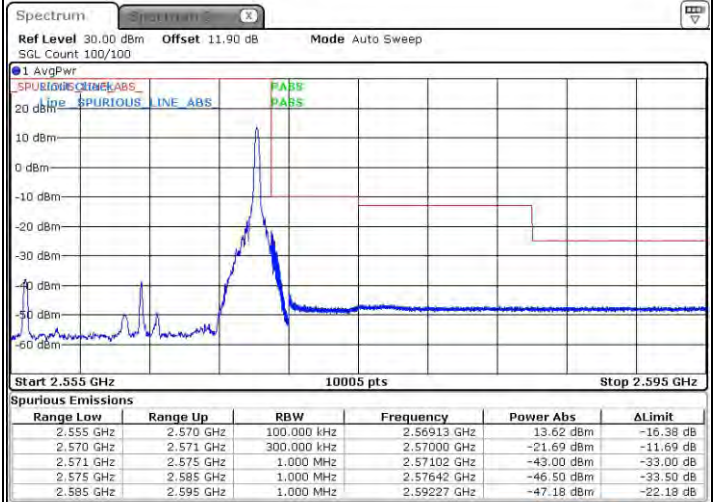


LTE Band 7 / 15MHz / 16QAM

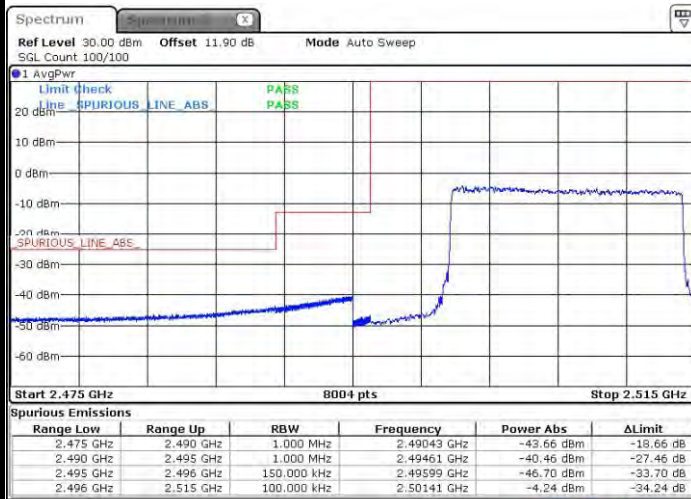
Lowest Band Edge / 1 RB



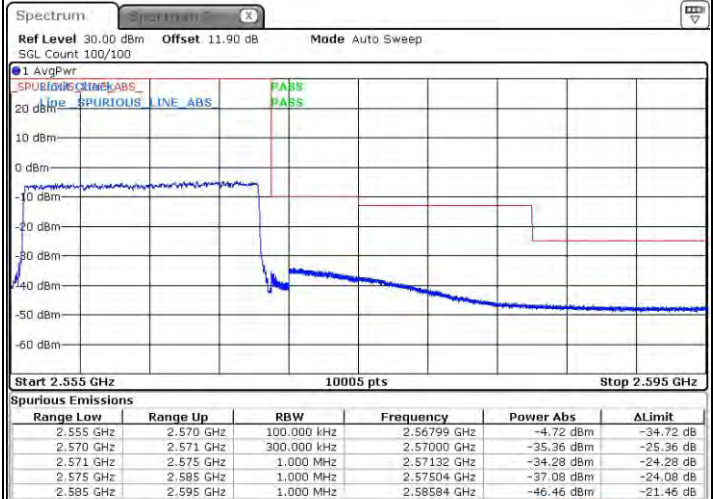
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



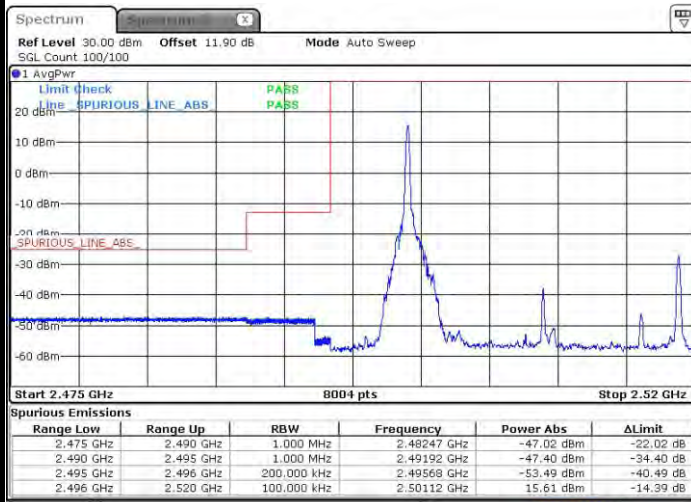
Highest Band Edge / Full RB



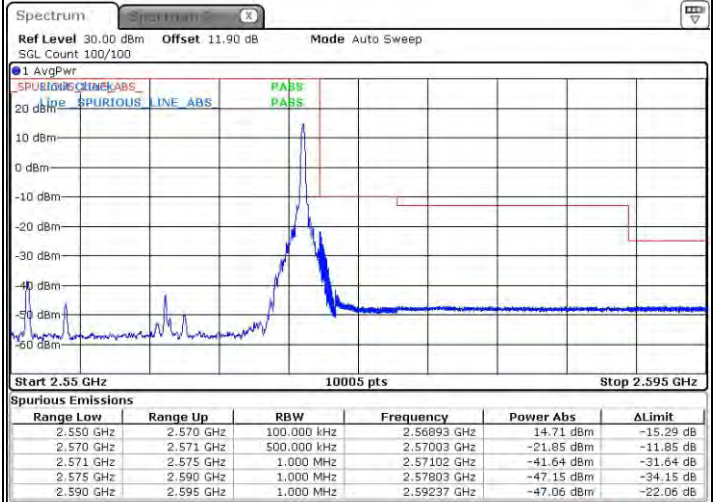


LTE Band 7 / 20MHz / QPSK

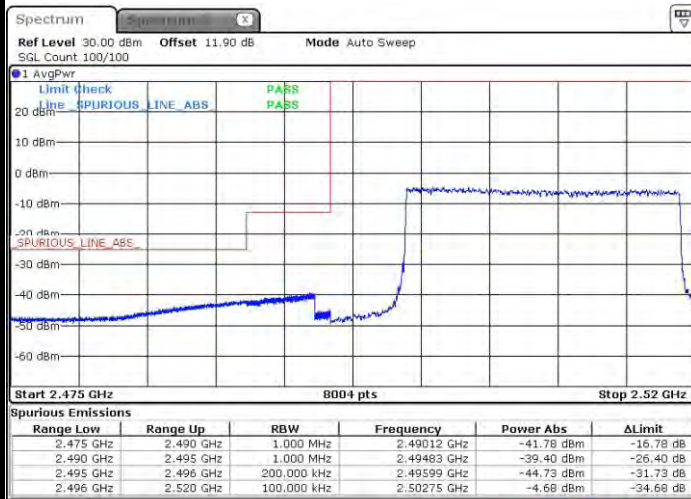
Lowest Band Edge / 1 RB



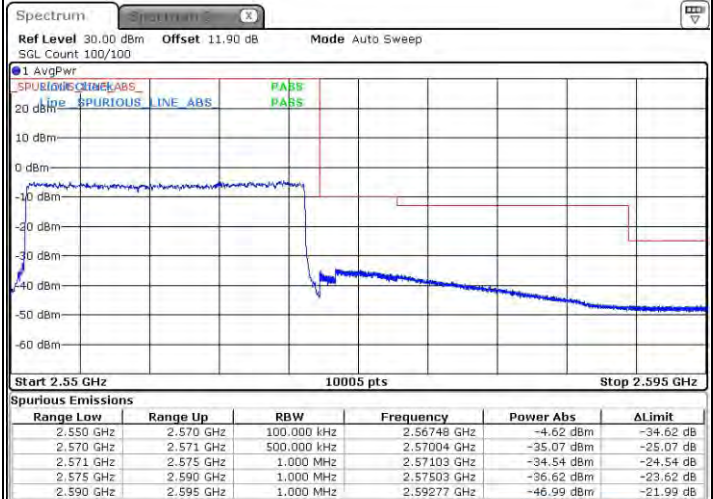
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



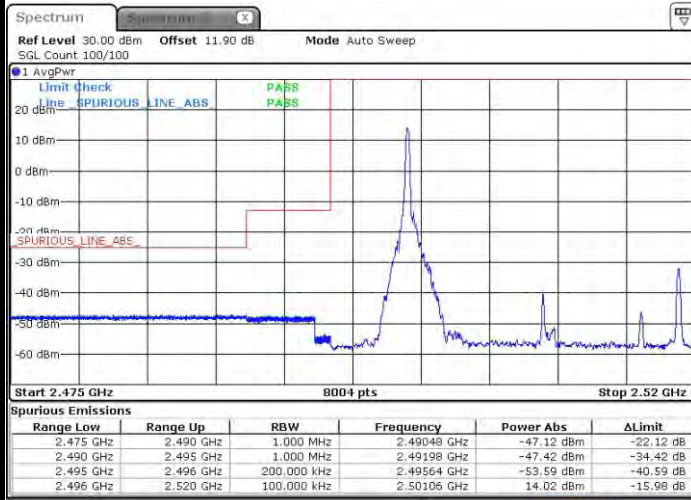
Highest Band Edge / Full RB



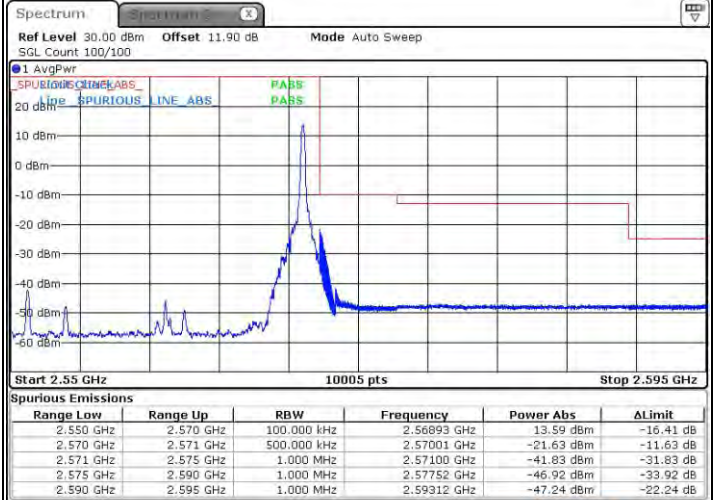


LTE Band 7 / 20MHz / 16QAM

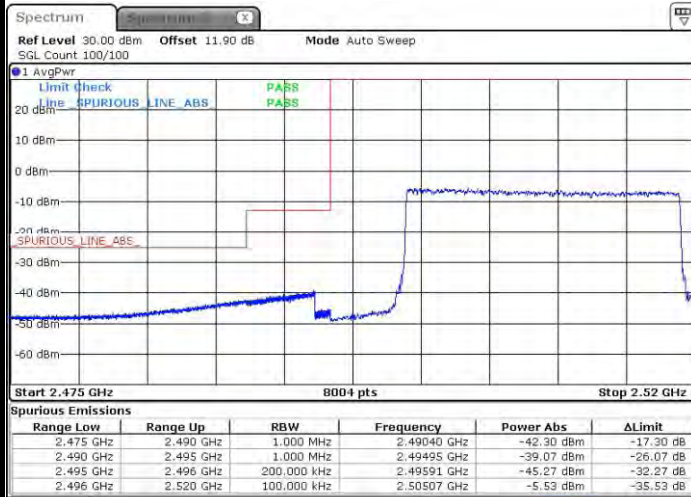
Lowest Band Edge / 1 RB



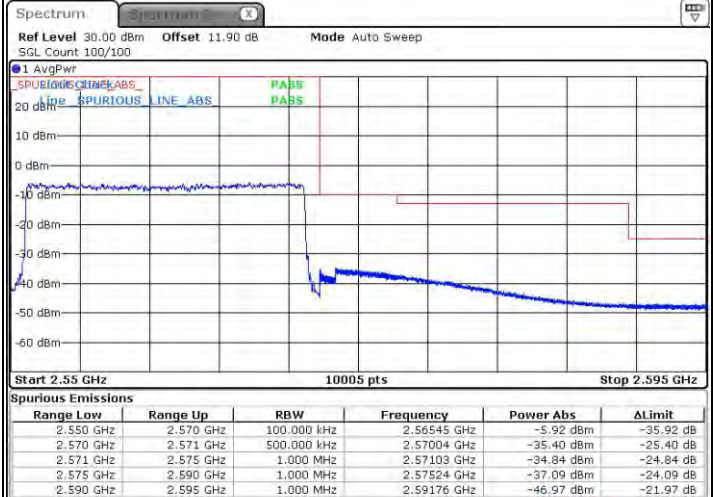
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



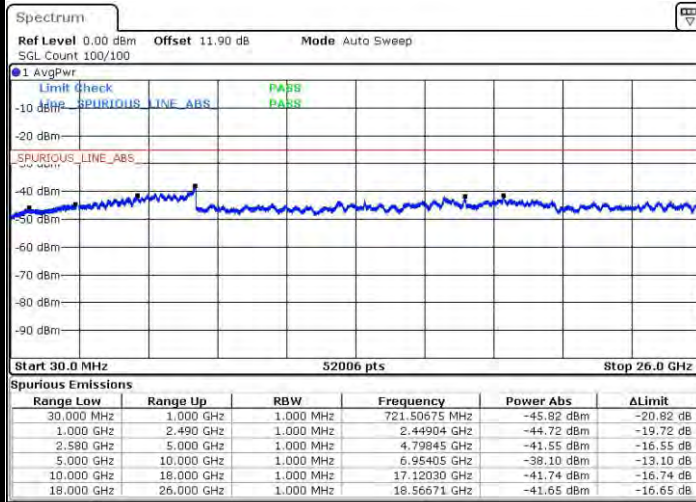


Conducted Spurious Emission



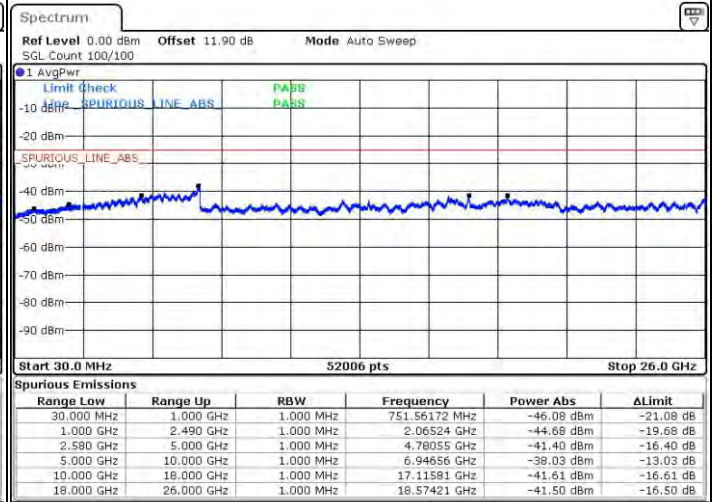
LTE Band 7 / 5MHz

Lowest Channel / QPSK



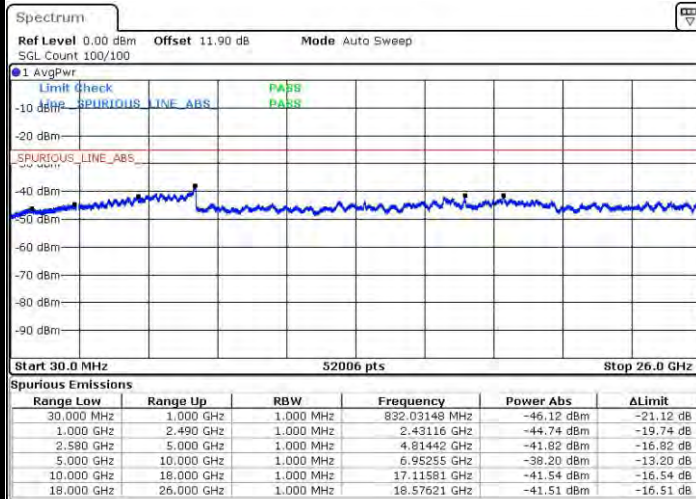
Date: 23.DEC.2015 01:29:32

Lowest Channel / 16QAM



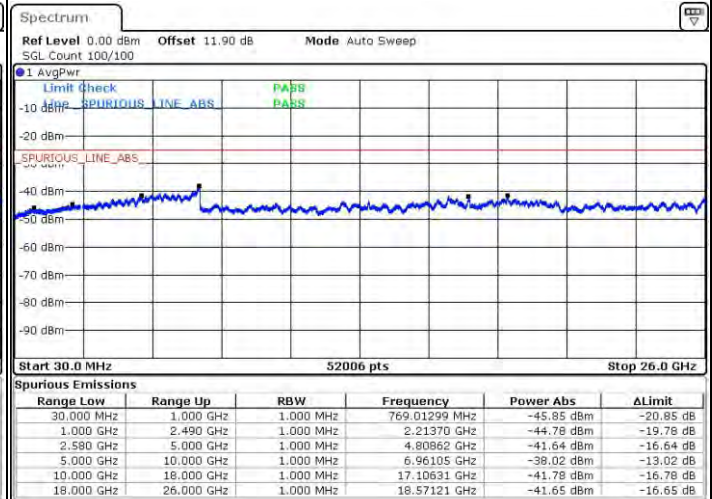
Date: 23.DEC.2015 01:30:31

Middle Channel / QPSK



Date: 23.DEC.2015 01:32:16

Middle Channel / 16QAM

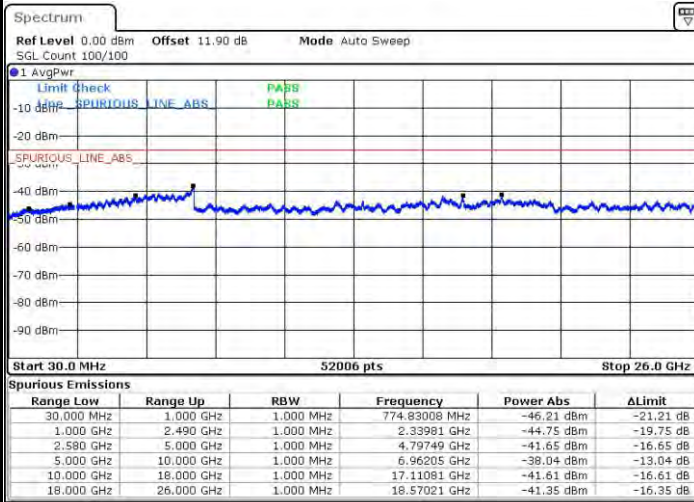


Date: 23.DEC.2015 01:33:16



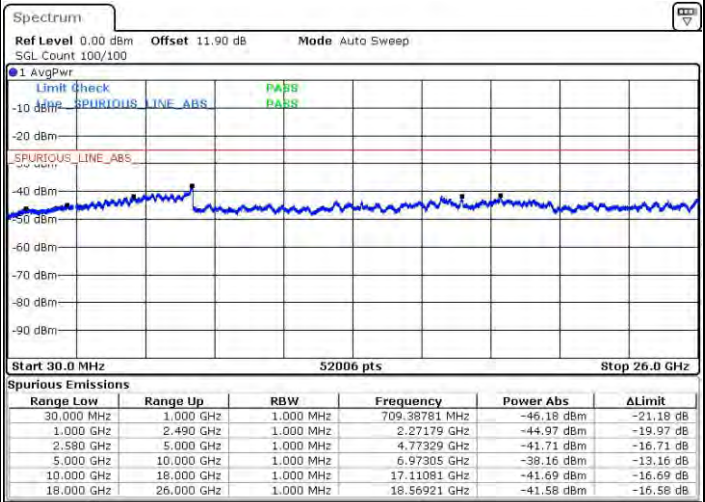
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 23.DEC.2015 01:39:43

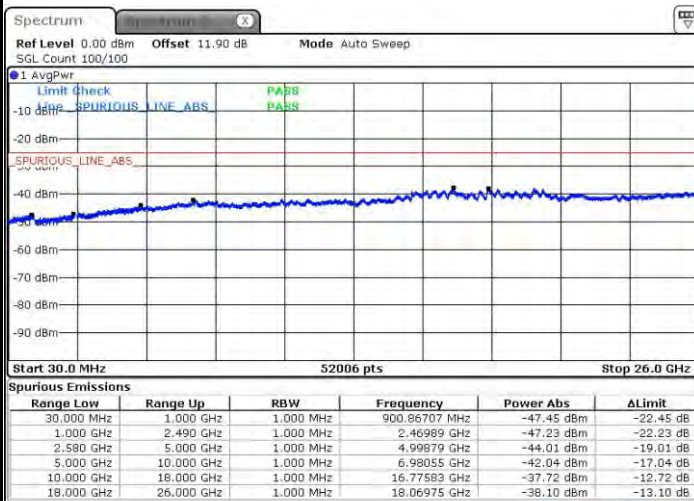
Highest Channel / 16QAM



Date: 23.DEC.2015 01:40:40

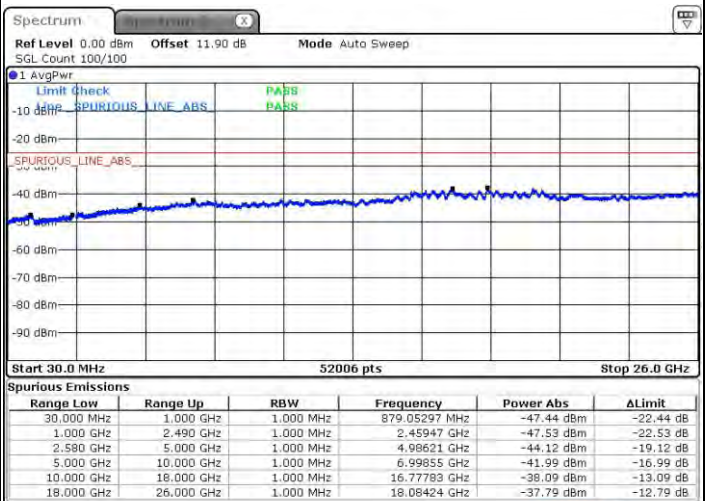
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 23.DEC.2015 21:48:47

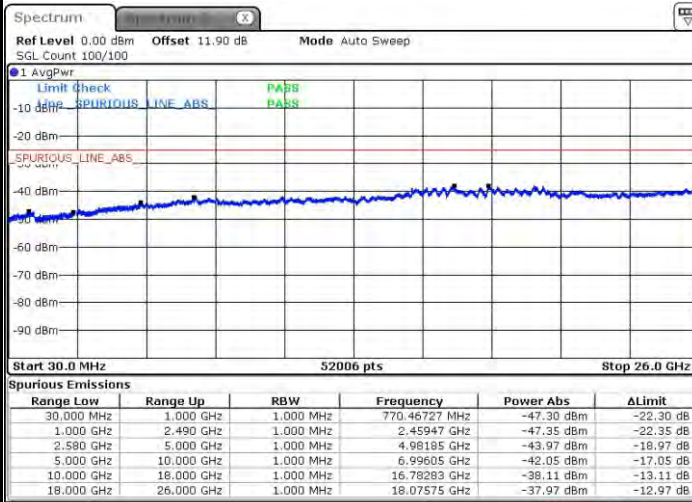
Lowest Channel / 16QAM



Date: 23.DEC.2015 21:49:41

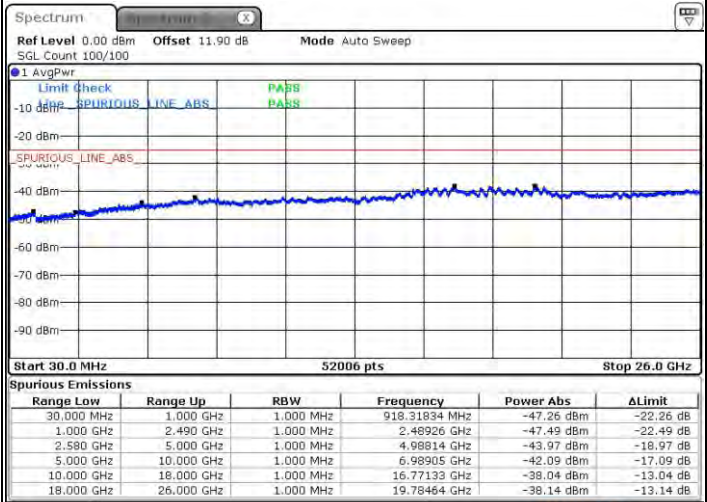
LTE Band 7 / 10MHz

Middle Channel / QPSK



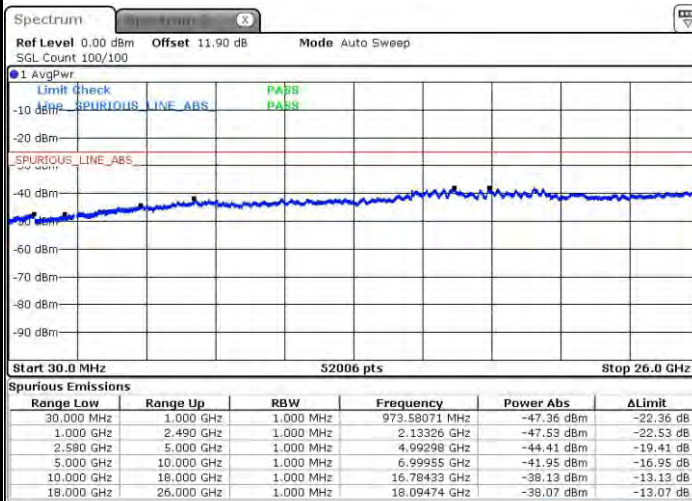
Date: 23.DEC.2015 21:51:17

Middle Channel / 16QAM



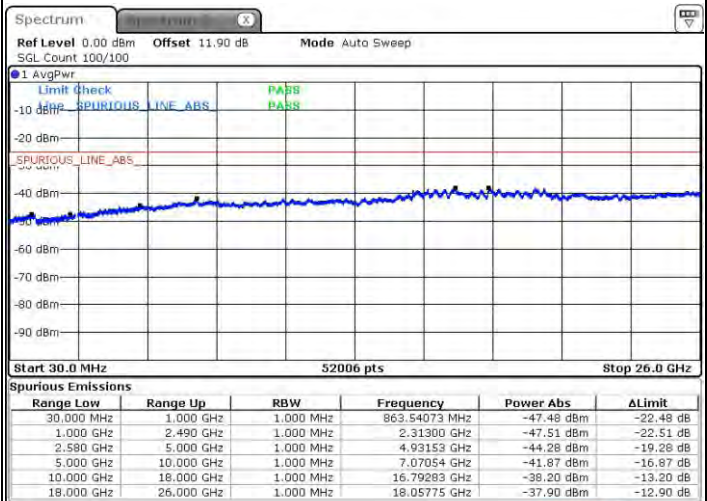
Date: 23 DEC 2015 21:52:11

Highest Channel / QPSK



Date: 23.DEC.2015 21:58:27

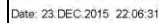
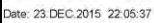
Highest Channel / 16QAM



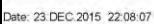
Date: 23 DEC 2015 21:59:21



Lowest Channel / 16QAM



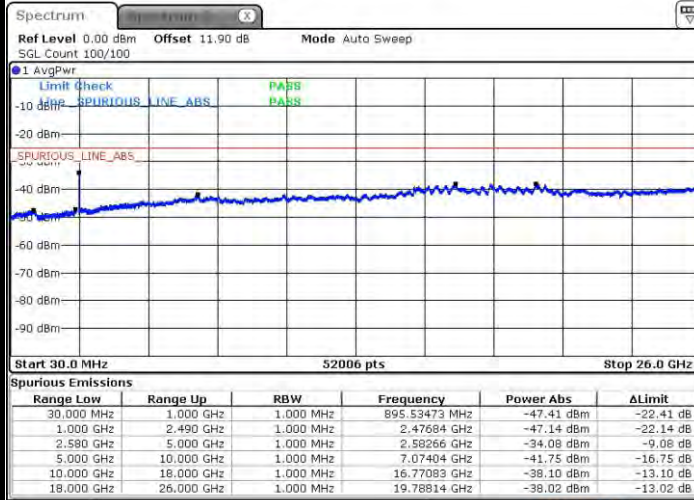
Middle Channel / 16QAM





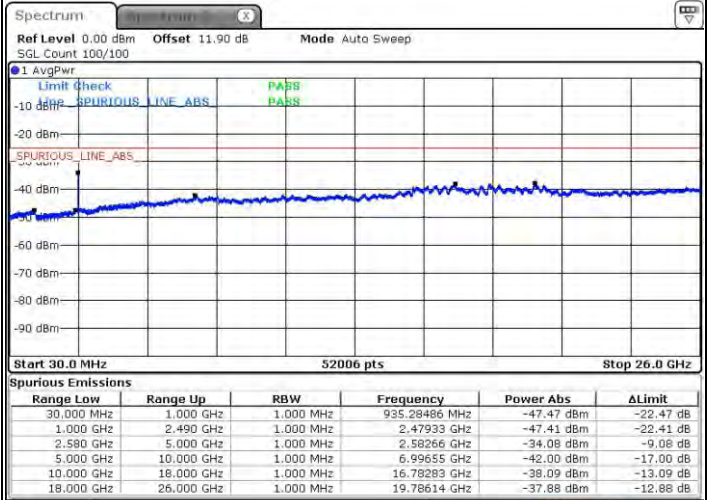
LTE Band 7 / 15MHz

Highest Channel / QPSK



Date: 23 DEC 2015 22:15:17

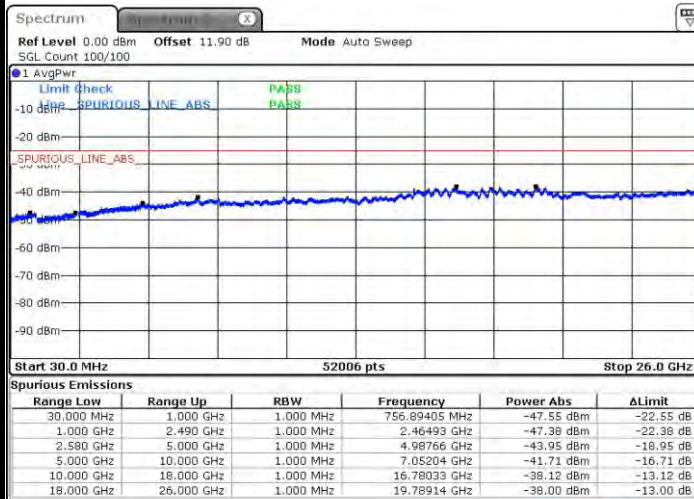
Highest Channel / 16QAM



Date: 23 DEC 2015 22:16:11

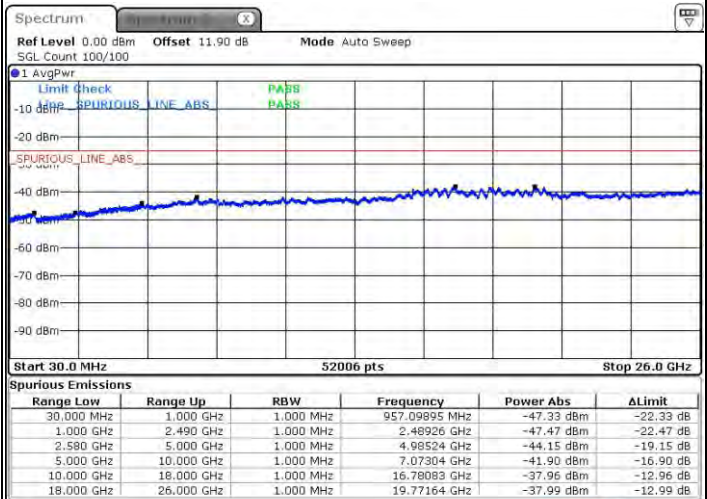
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 23 DEC 2015 22:22:26

Lowest Channel / 16QAM

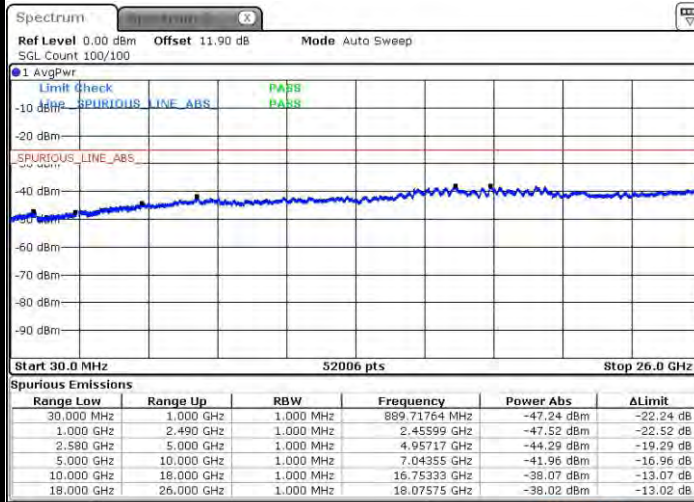


Date: 23 DEC 2015 22:23:20



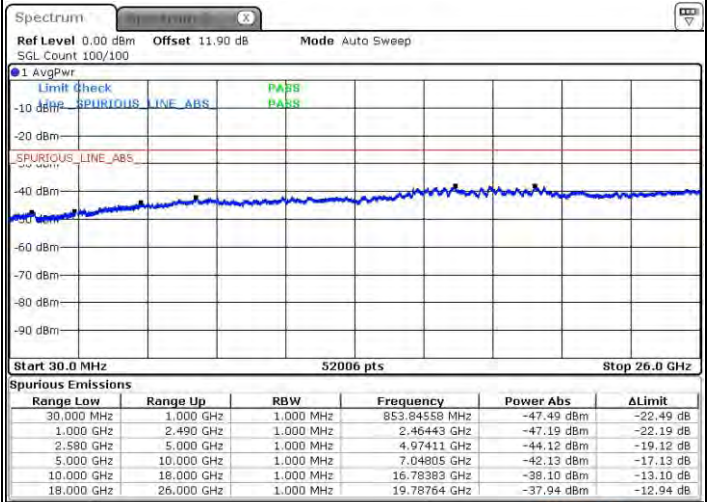
LTE Band 7 / 20MHz

Middle Channel / QPSK



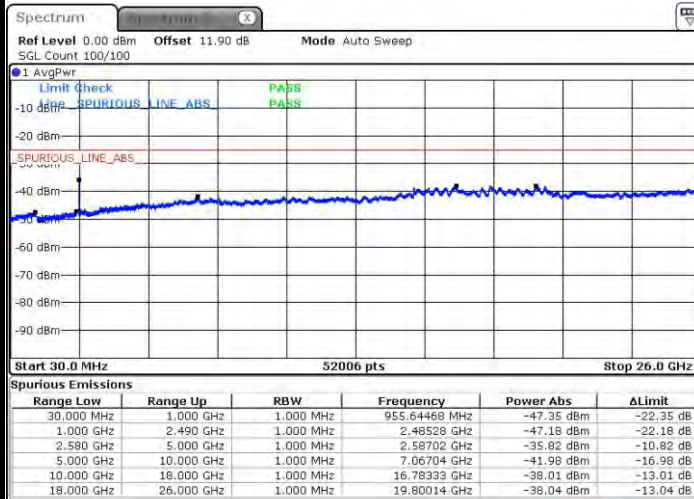
Date: 23 DEC 2015 22:24:56

Middle Channel / 16QAM



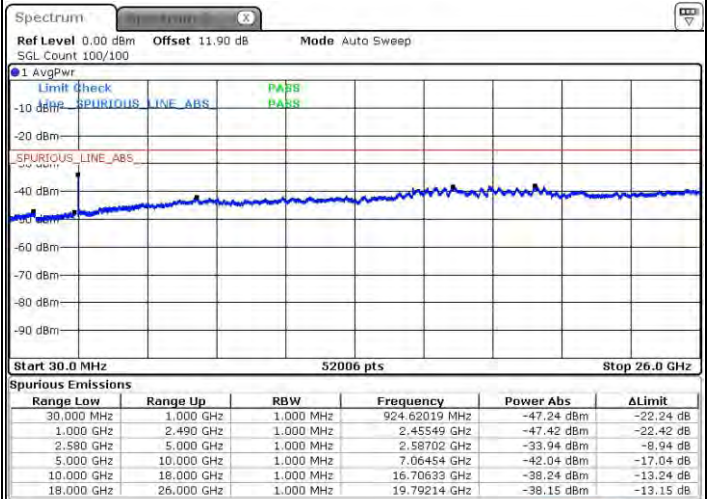
Date: 23 DEC 2015 22:25:50

Highest Channel / QPSK



Date: 23 DEC 2015 22:32:06

Highest Channel / 16QAM



Date: 23 DEC 2015 22:33:00

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.5 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.

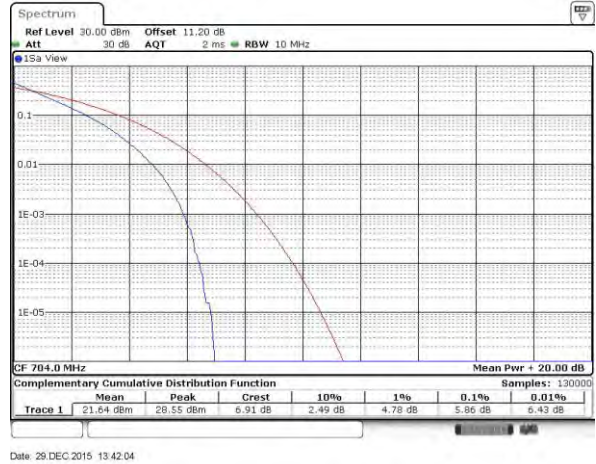
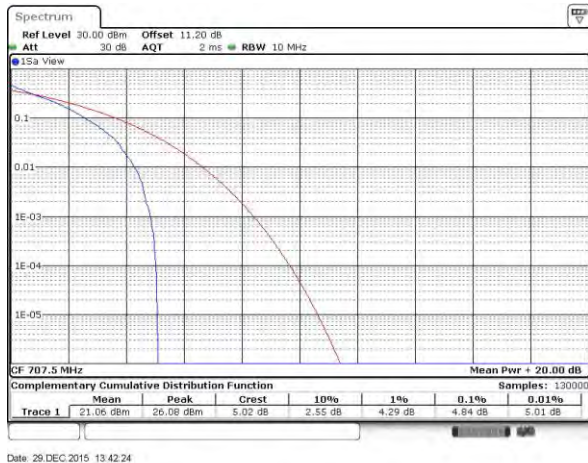
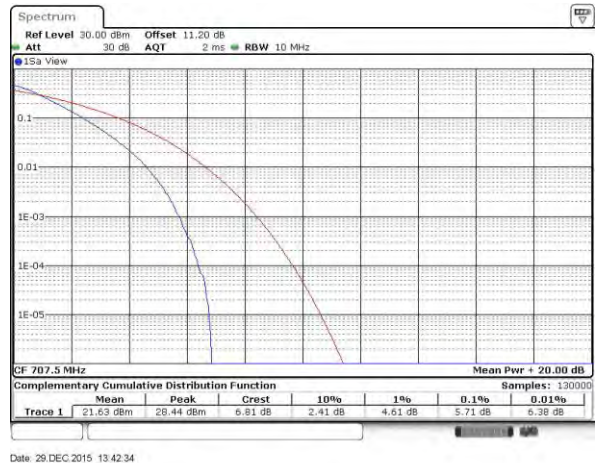


LTE Band 12

Peak-to-Average Ratio

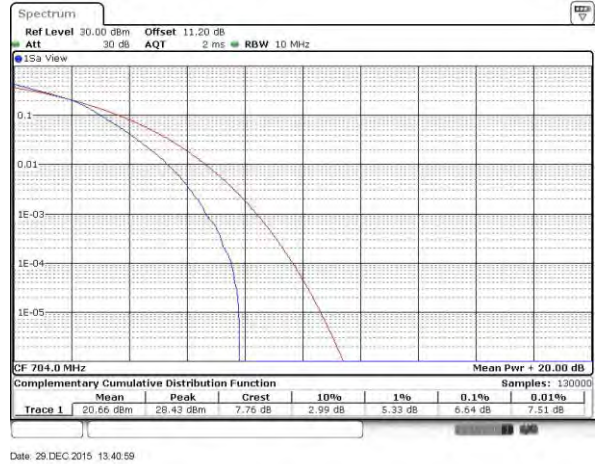
Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.7	5.86	5.57	6.64	PASS
Middle CH	4.84	5.71	6.12	6.7	
Highest CH	5.94	5.48	6.7	6.41	

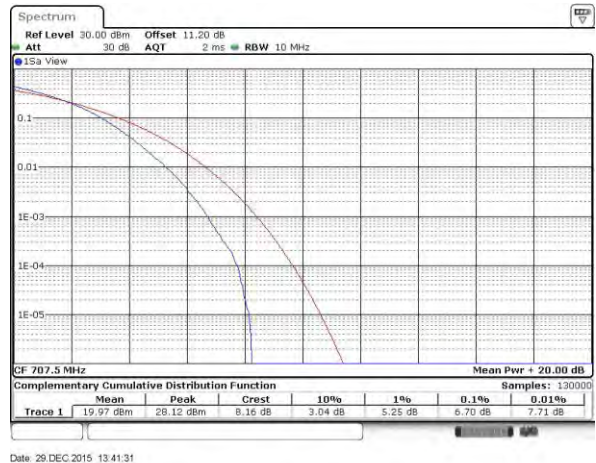
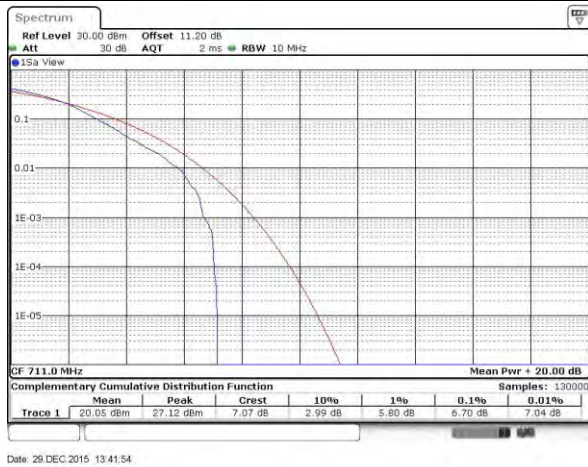
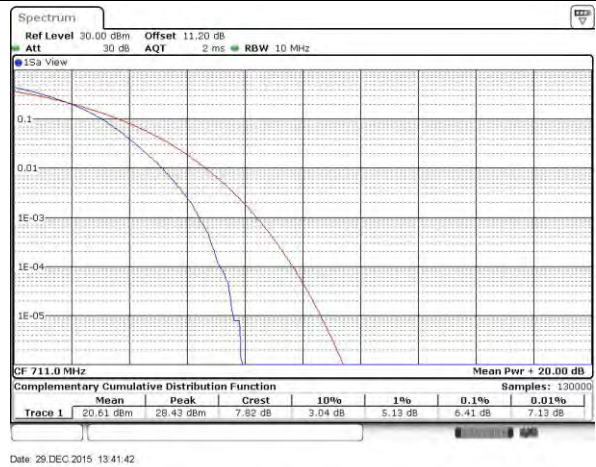
LTE Band 12 / 10MHz / QPSK
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel / 1RB

Middle Channel / Full RB

Highest Channel / 1RB

Highest Channel / Full RB


LTE Band 12 / 10MHz / 16QAM
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel / 1RB

Middle Channel / Full RB

Highest Channel / 1RB

Highest Channel / Full RB


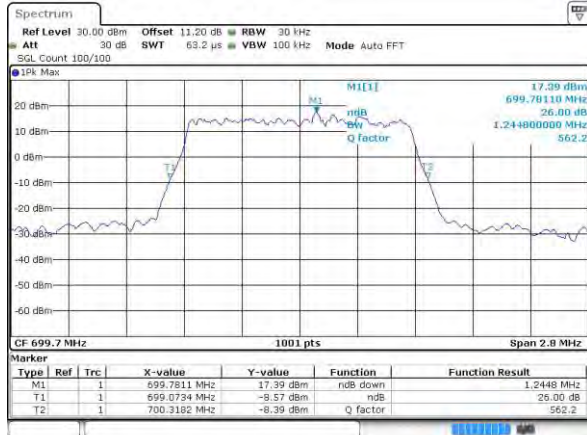
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.24	1.25	2.99	3.02	4.93	4.91	10.07	9.71	-	-	-	-
Middle CH	1.28	1.24	2.99	2.99	4.91	4.97	9.81	9.85	-	-	-	-
Highest CH	1.26	1.25	2.98	2.99	5.05	4.88	9.69	9.63	-	-	-	-

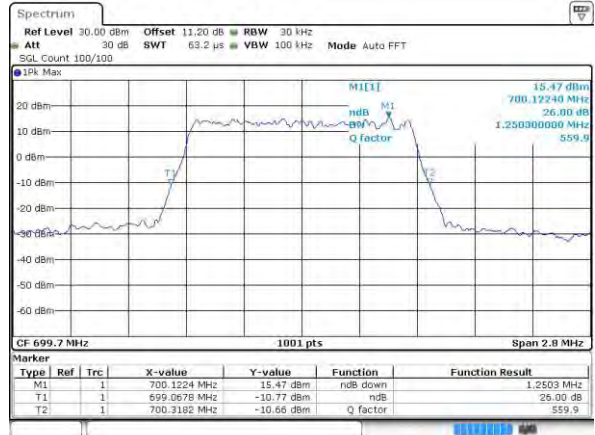


LTE Band 12

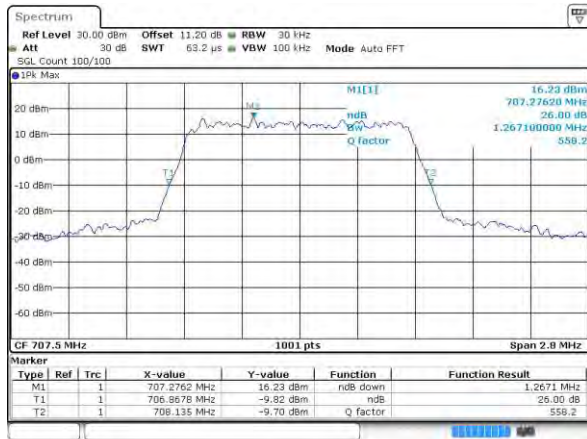
Lowest Channel / 1.4MHz / QPSK



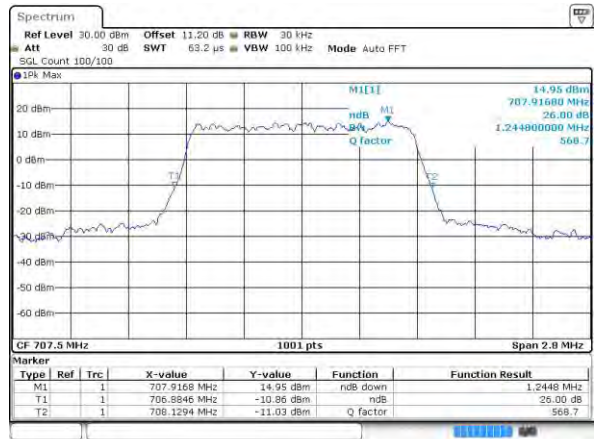
Lowest Channel / 1.4MHz / 16QAM



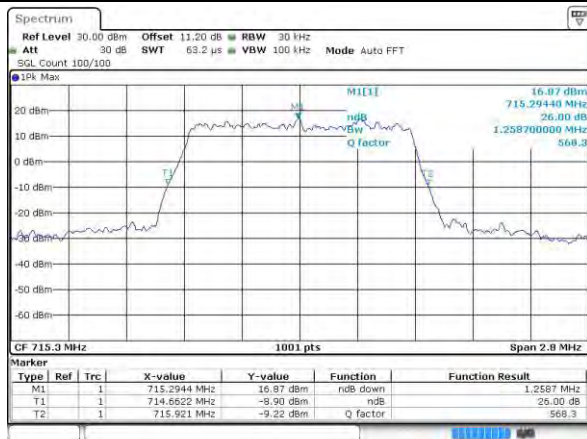
Middle Channel / 1.4MHz / QPSK



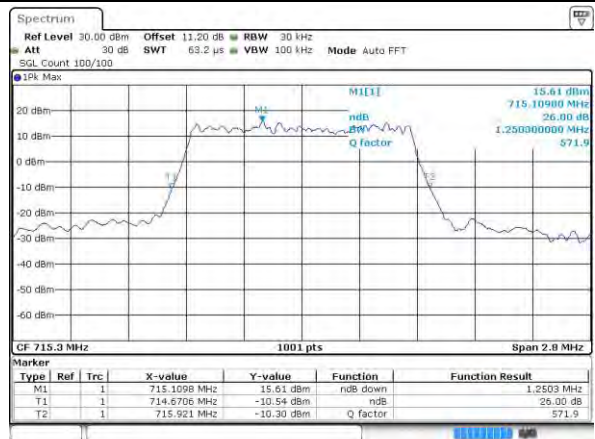
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



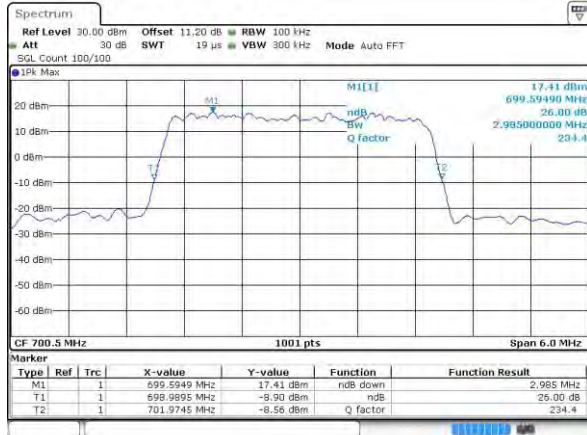
Highest Channel / 1.4MHz / 16QAM



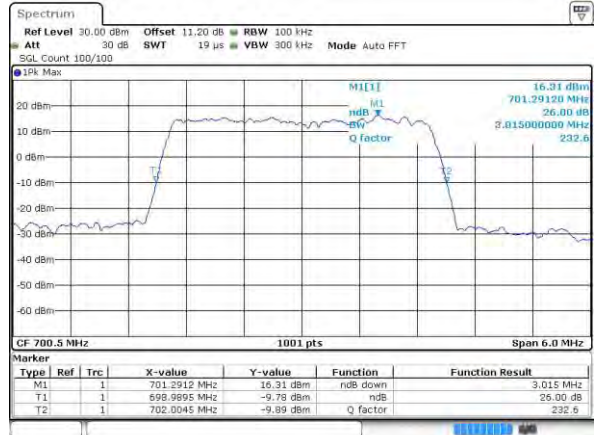


LTE Band 12

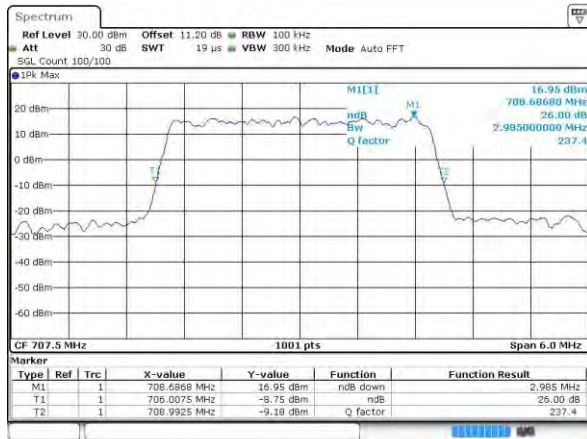
Lowest Channel / 3MHz / QPSK



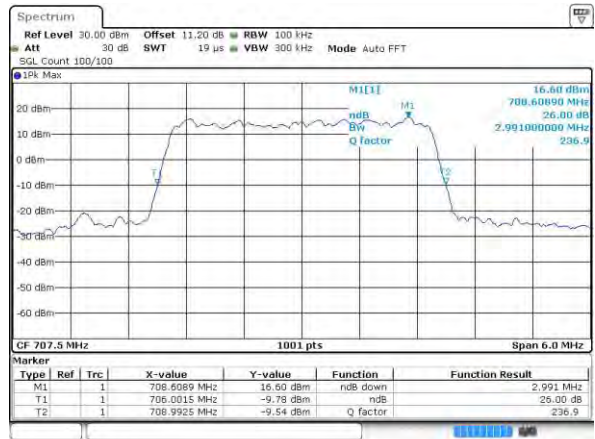
Lowest Channel / 3MHz / 16QAM



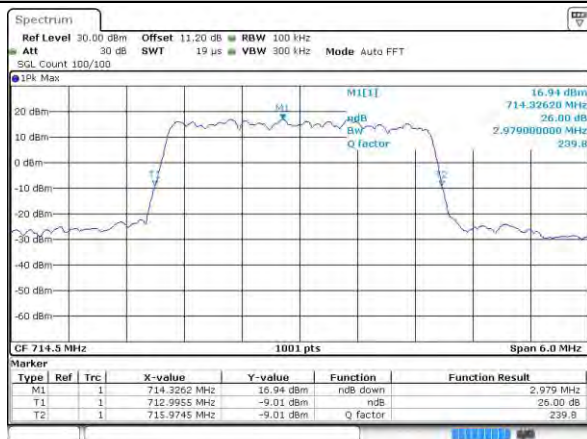
Middle Channel / 3MHz / QPSK



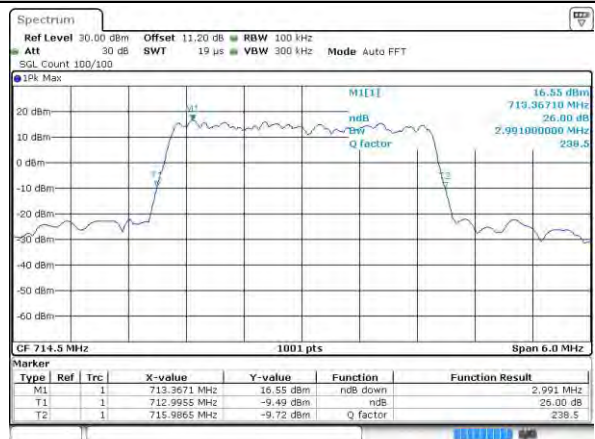
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



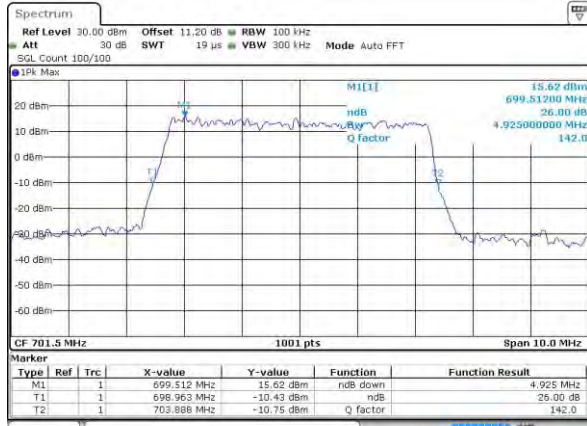
Highest Channel / 3MHz / 16QAM





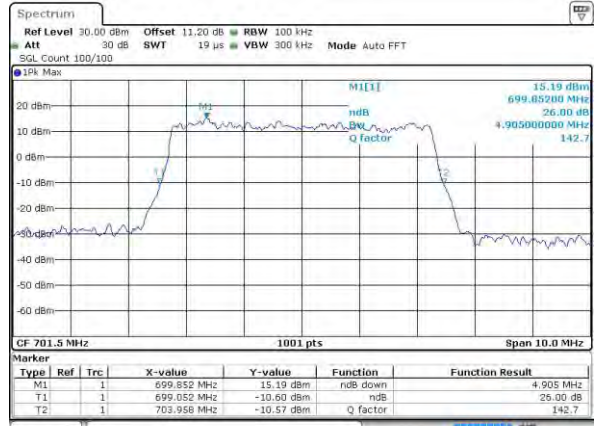
LTE Band 12

Lowest Channel / 5MHz / QPSK



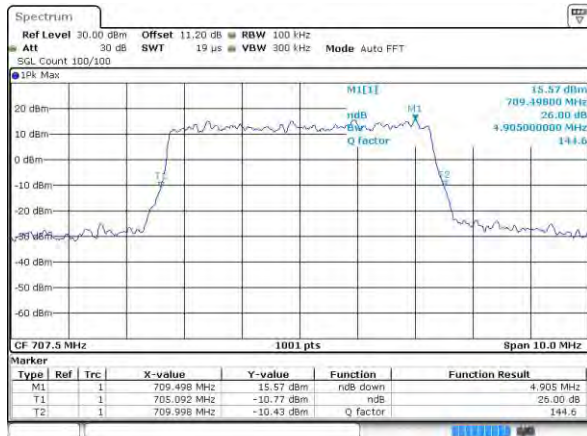
Date: 29 DEC 2015 11:48:19

Lowest Channel / 5MHz / 16QAM



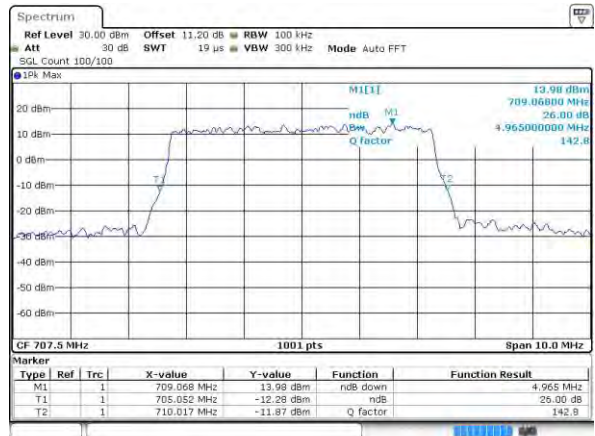
Date: 29 DEC 2015 11:48:08

Middle Channel / 5MHz / QPSK



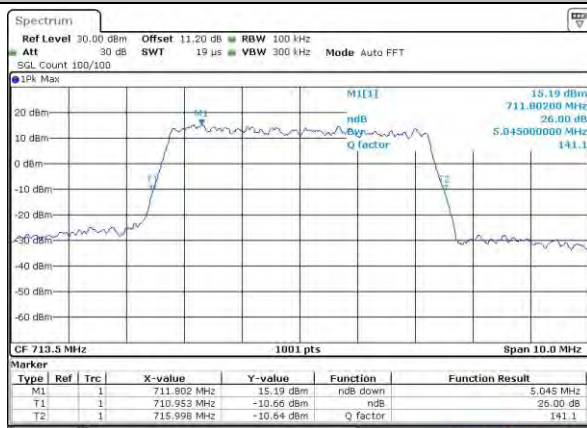
Date: 29 DEC 2015 11:58:49

Middle Channel / 5MHz / 16QAM



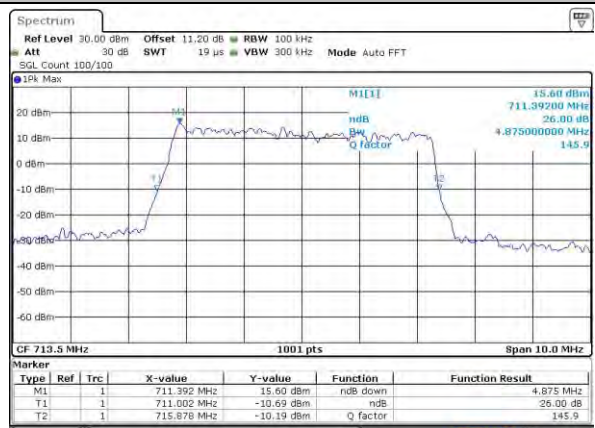
Date: 29 DEC 2015 11:58:59

Highest Channel / 5MHz / QPSK



Date: 29 DEC 2015 12:01:30

Highest Channel / 5MHz / 16QAM

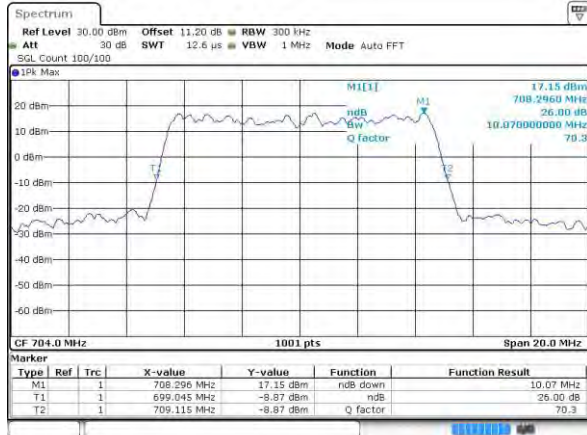


Date: 29 DEC 2015 12:01:19

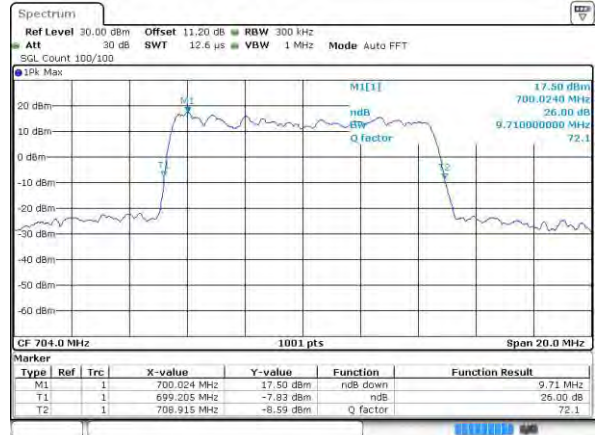


LTE Band 12

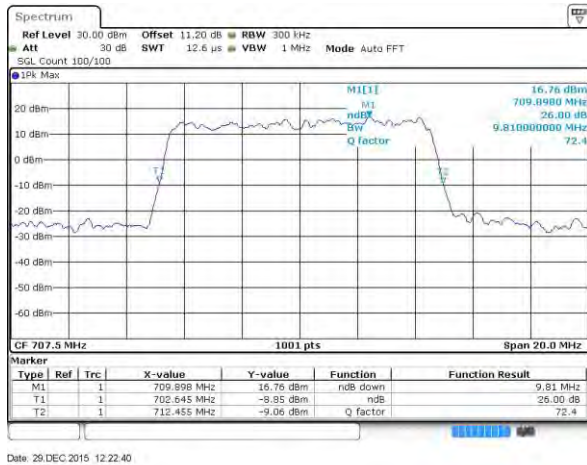
Lowest Channel / 10MHz / QPSK



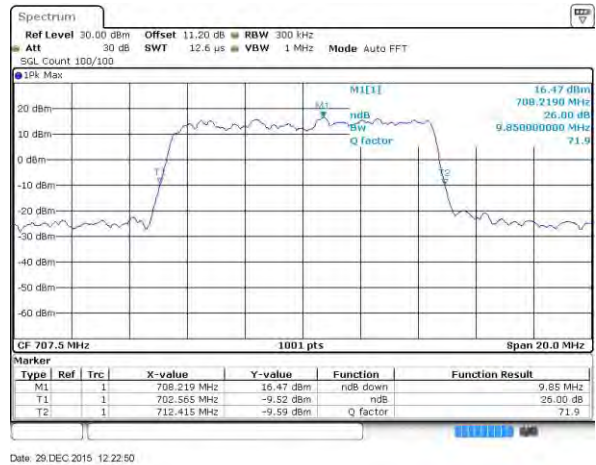
Lowest Channel / 10MHz / 16QAM



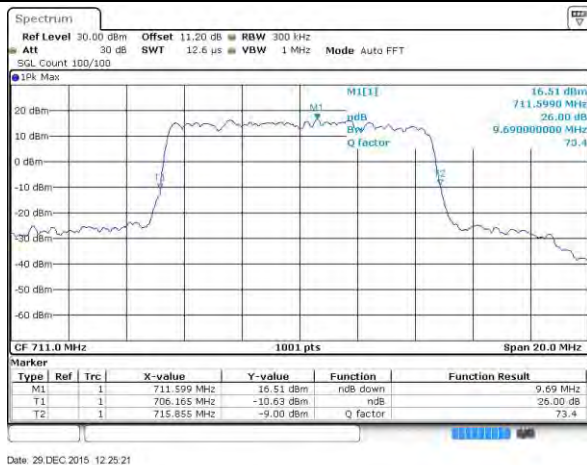
Middle Channel / 10MHz / QPSK



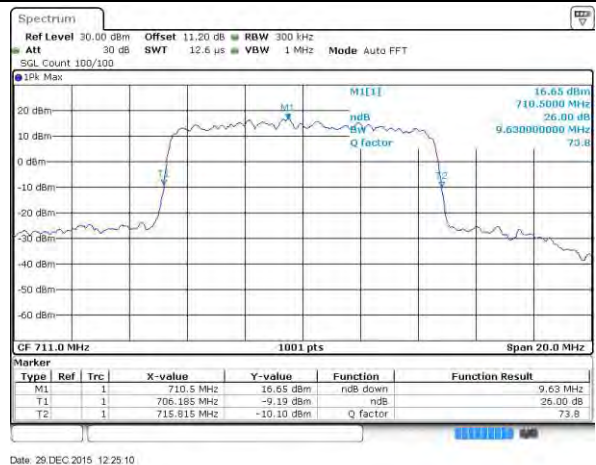
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



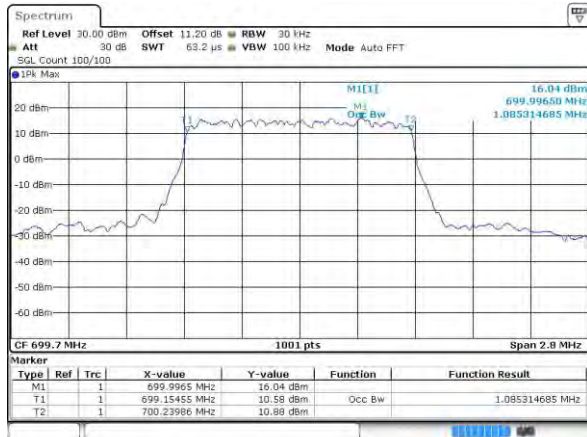
**Occupied Bandwidth**

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.1	2.72	2.72	4.52	4.52	9.05	9.11	-	-	-	-
Middle CH	1.09	1.09	2.73	2.72	4.5	4.5	9.05	9.03	-	-	-	-
Highest CH	1.09	1.09	2.72	2.72	4.49	4.5	8.99	8.97	-	-	-	-

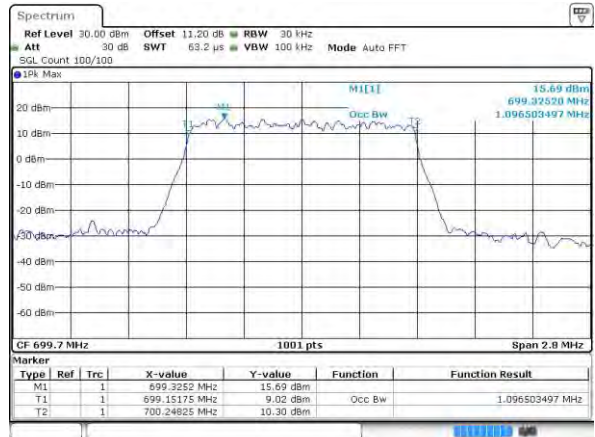


LTE Band 12

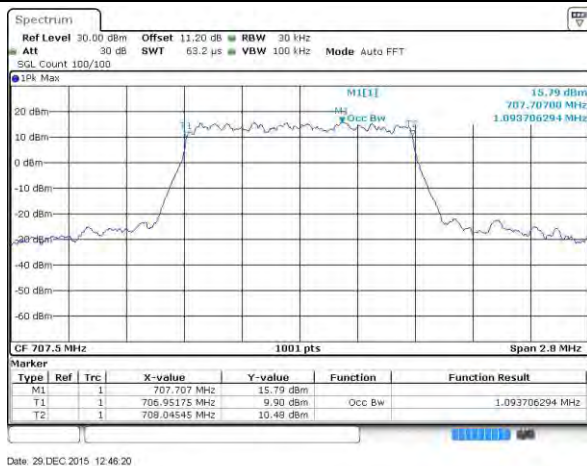
Lowest Channel / 1.4MHz / QPSK



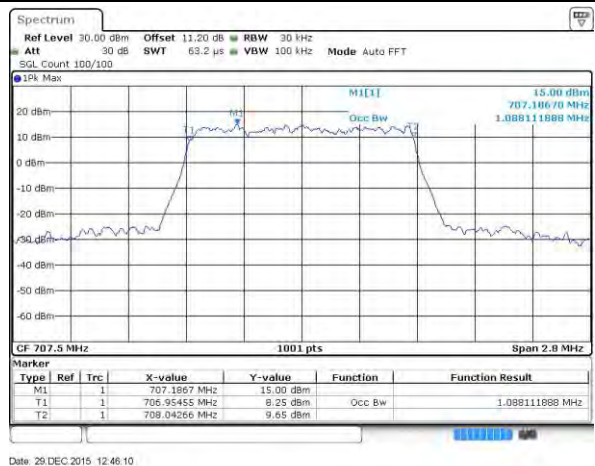
Lowest Channel / 1.4MHz / 16QAM



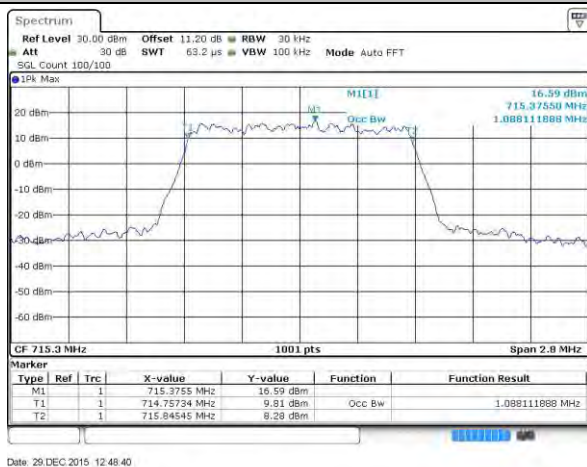
Middle Channel / 1.4MHz / QPSK



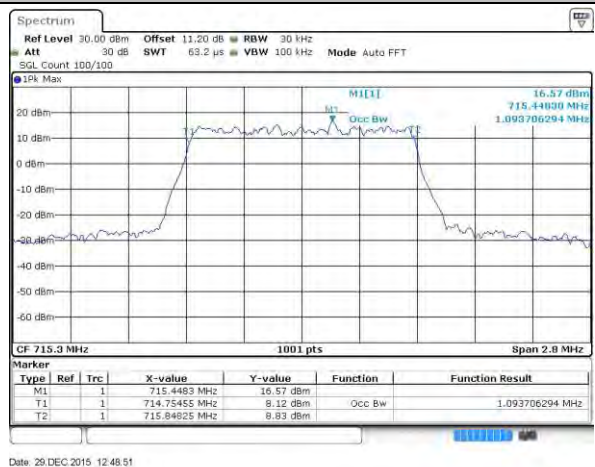
Middle Channel / 1.4MHz / 16QAM

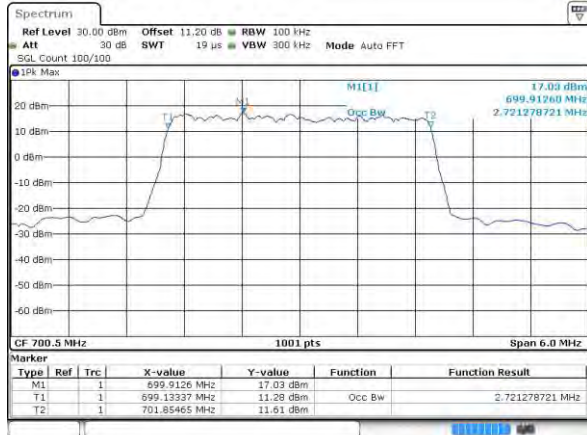


Highest Channel / 1.4MHz / QPSK

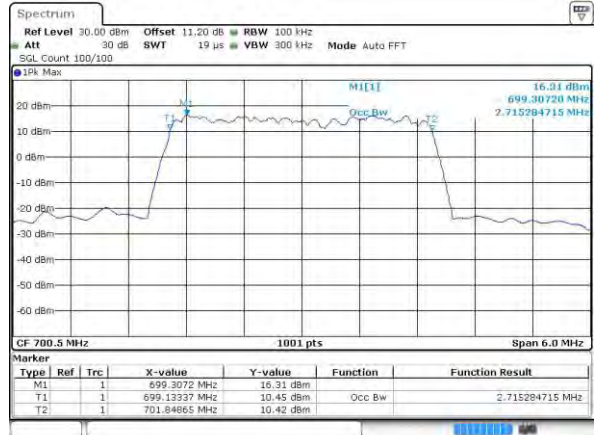


Highest Channel / 1.4MHz / 16QAM

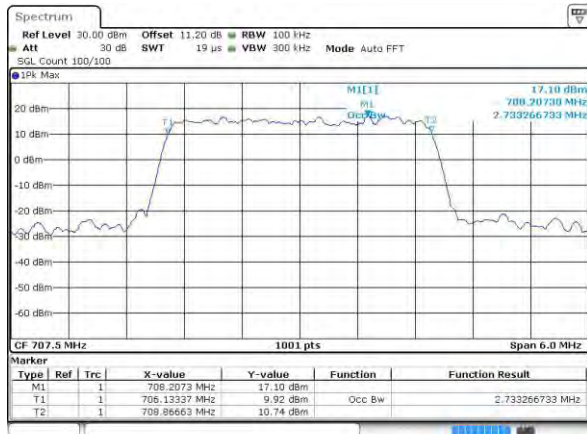


LTE Band 12
Lowest Channel / 3MHz / QPSK


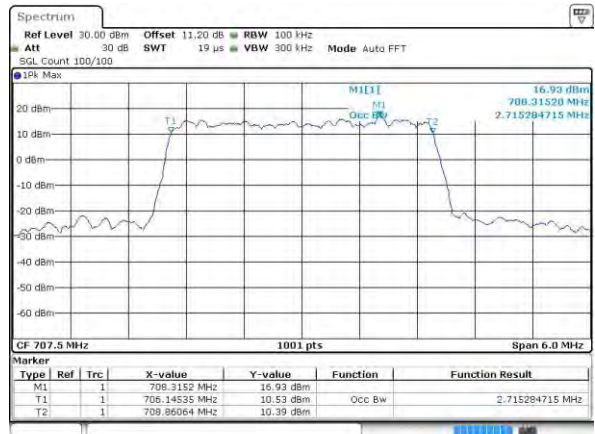
Date: 29 DEC 2015 11:02:00

Lowest Channel / 3MHz / 16QAM


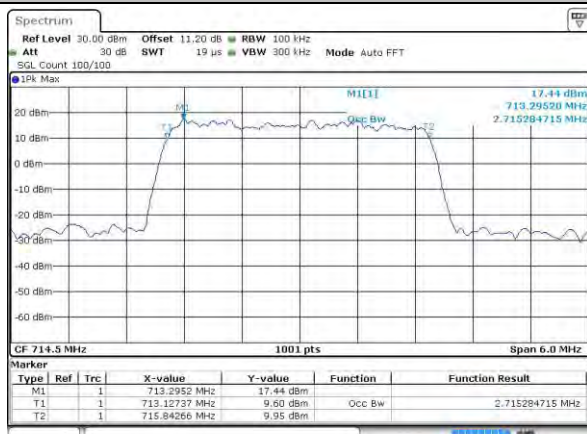
Date: 29 DEC 2015 11:02:11

Middle Channel / 3MHz / QPSK


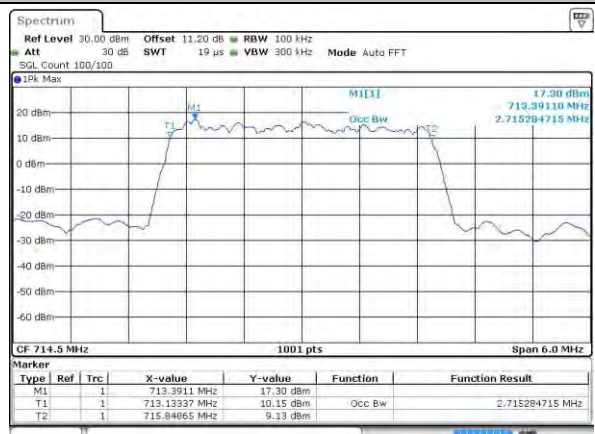
Date: 29 DEC 2015 11:12:51

Middle Channel / 3MHz / 16QAM


Date: 29 DEC 2015 11:12:40

Highest Channel / 3MHz / QPSK


Date: 29 DEC 2015 11:15:11

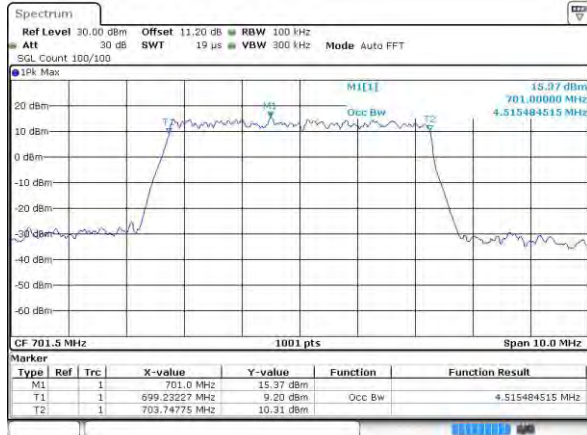
Highest Channel / 3MHz / 16QAM


Date: 29 DEC 2015 11:15:22



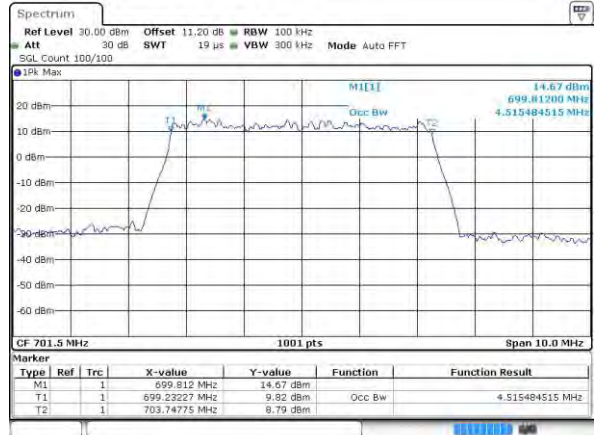
LTE Band 12

Lowest Channel / 5MHz / QPSK



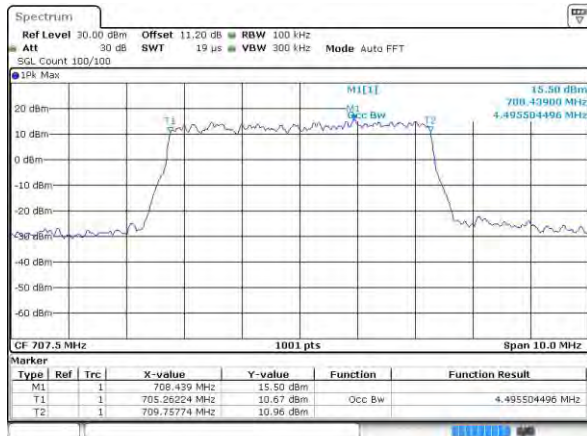
Date: 29 DEC 2015 11:47:47

Lowest Channel / 5MHz / 16QAM



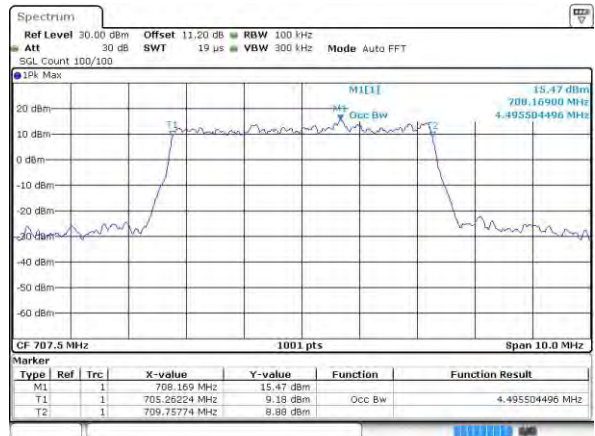
Date: 29 DEC 2015 11:47:58

Middle Channel / 5MHz / QPSK



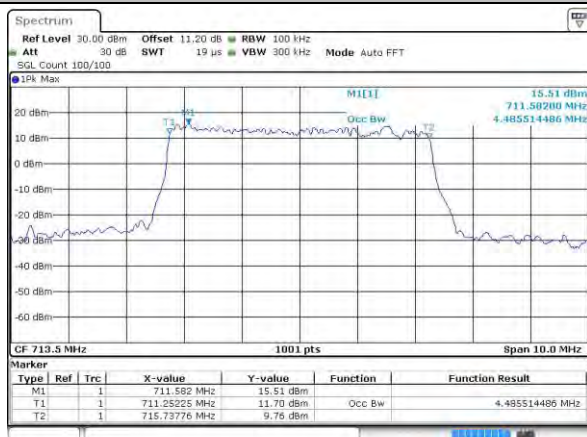
Date: 29 DEC 2015 11:58:38

Middle Channel / 5MHz / 16QAM



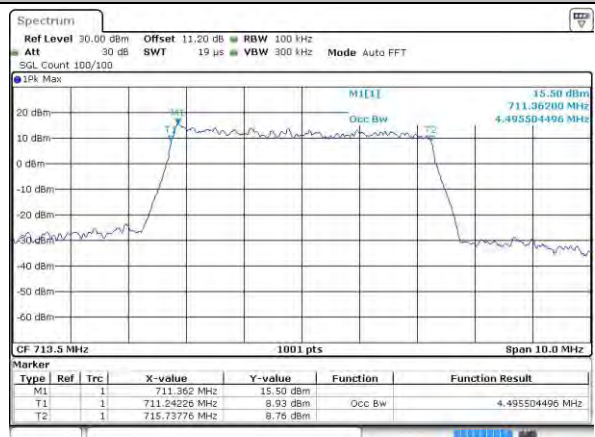
Date: 29 DEC 2015 11:58:28

Highest Channel / 5MHz / QPSK



Date: 29 DEC 2015 12:00:58

Highest Channel / 5MHz / 16QAM

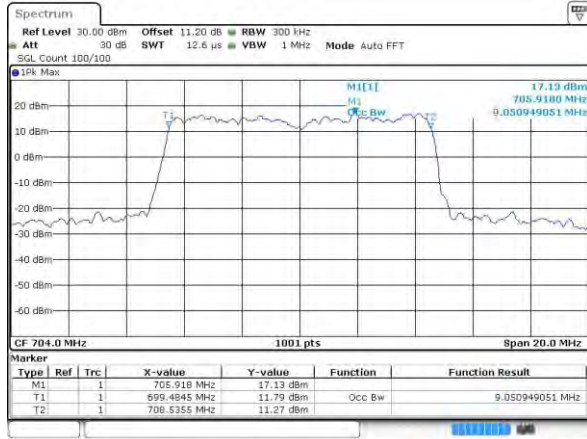


Date: 29 DEC 2015 12:01:09

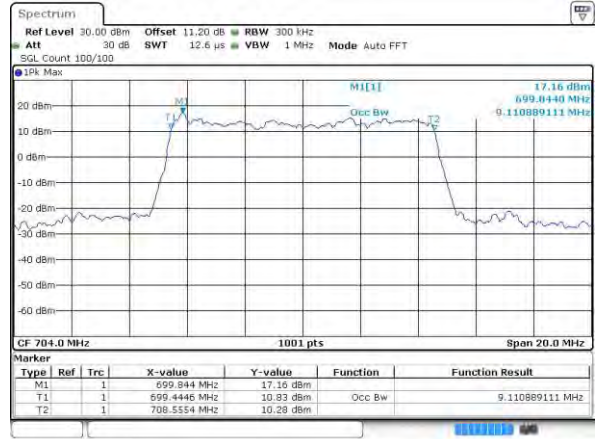


LTE Band 12

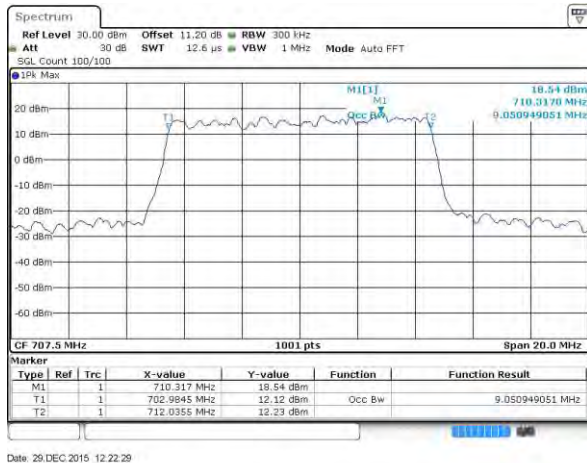
Lowest Channel / 10MHz / QPSK



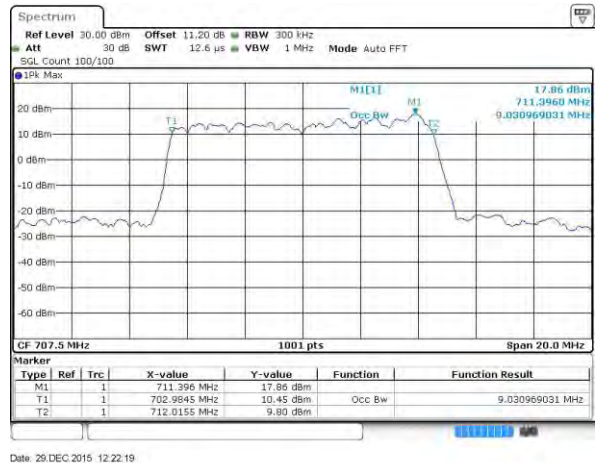
Lowest Channel / 10MHz / 16QAM



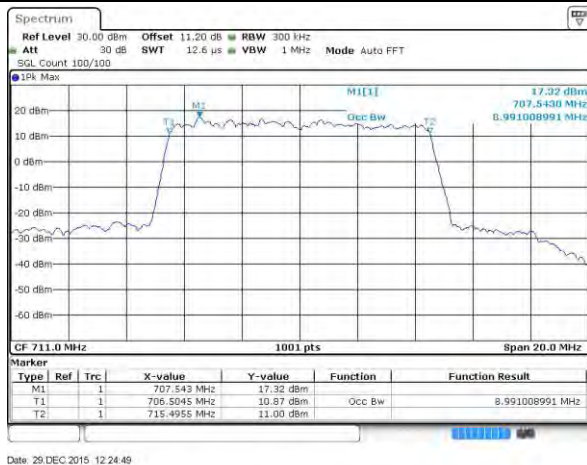
Middle Channel / 10MHz / QPSK



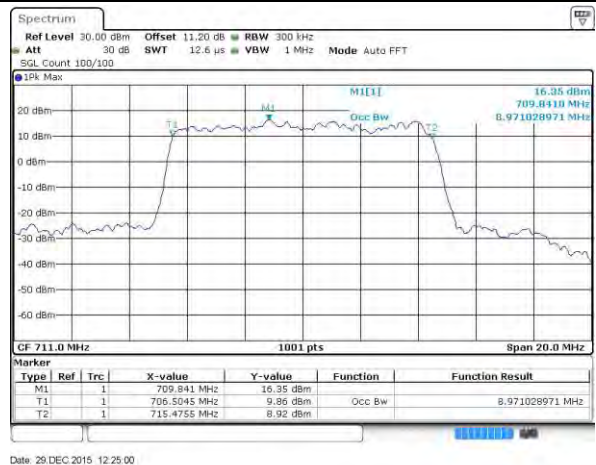
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



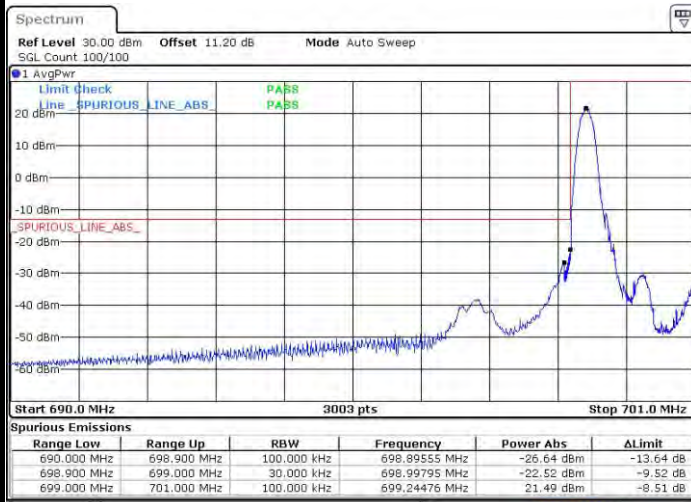


Conducted Band Edge



LTE Band 12 / 1.4MHz / QPSK

Lowest Band Edge / 1 RB



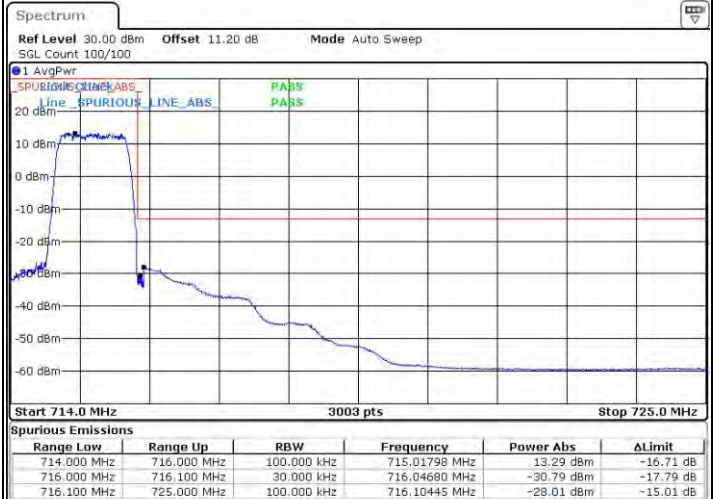
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



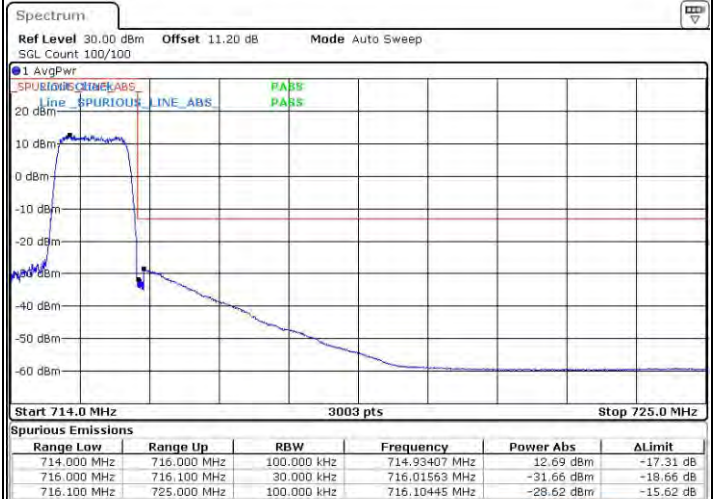
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



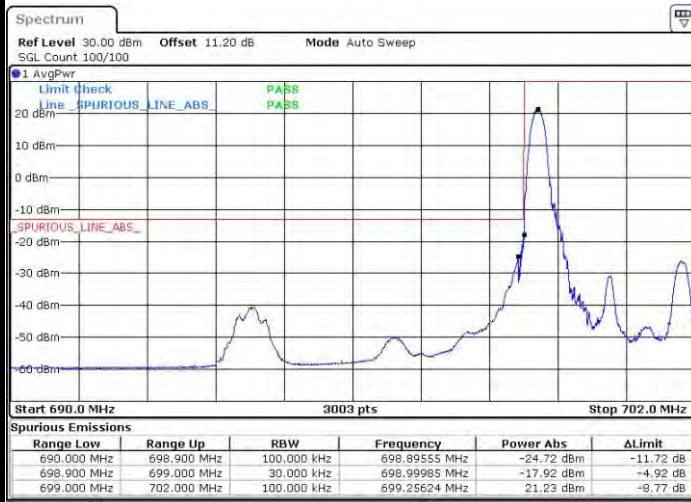
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / QPSK

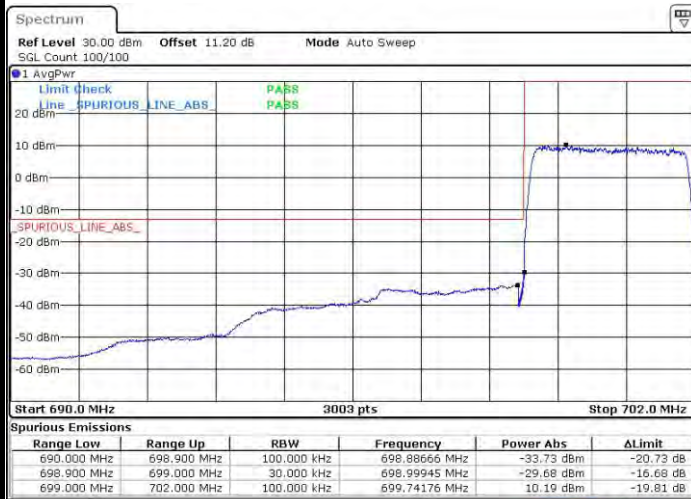
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



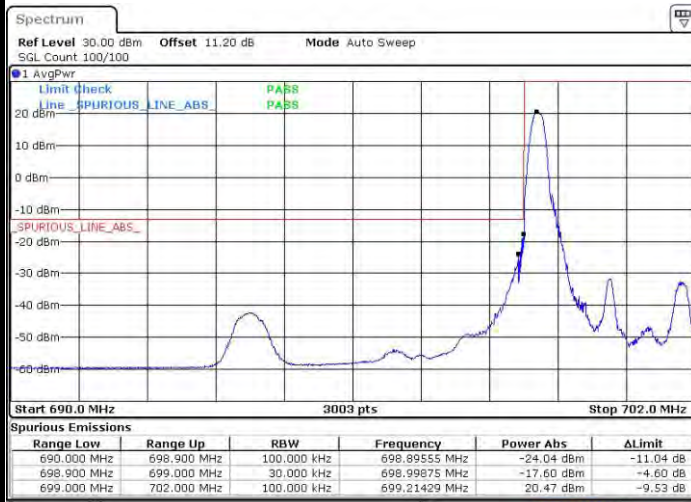
Highest Band Edge / Full RB



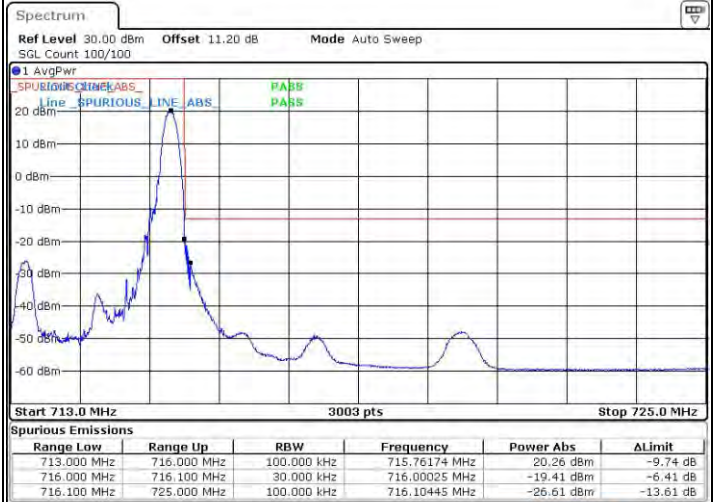


LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



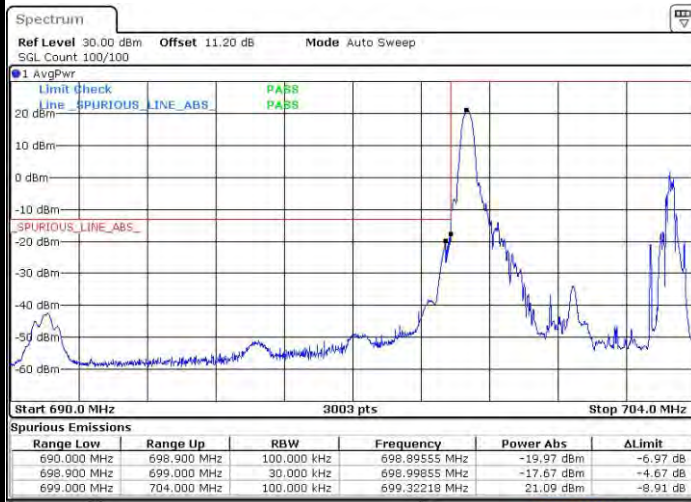
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / QPSK

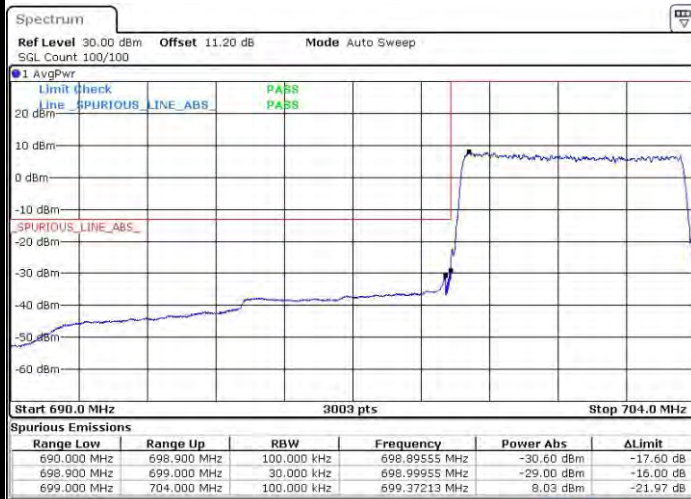
Lowest Band Edge / 1 RB



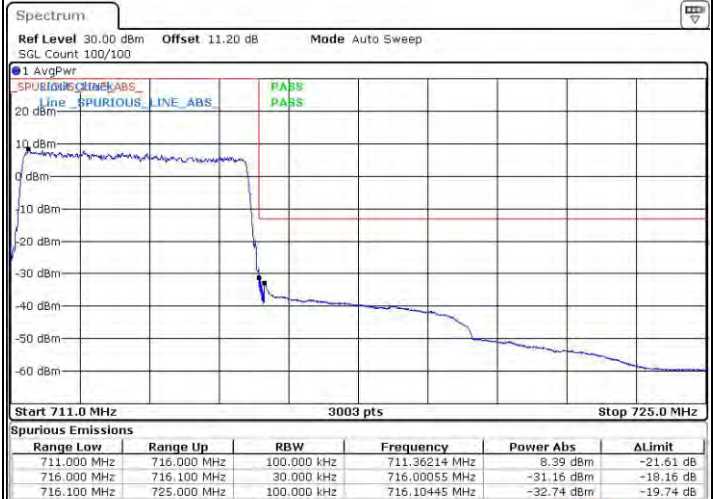
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



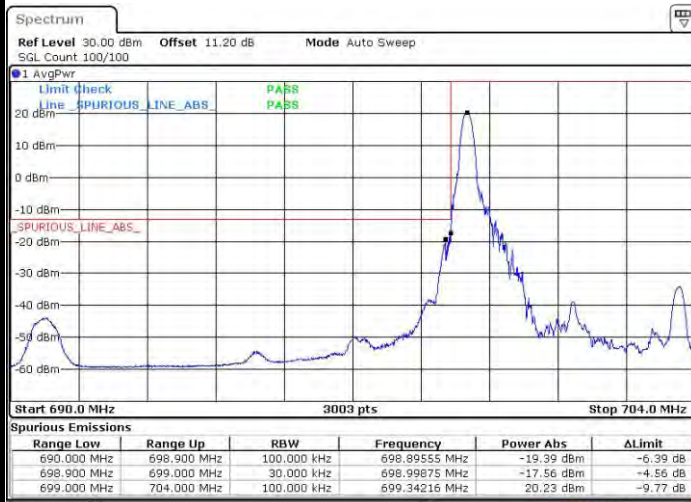
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

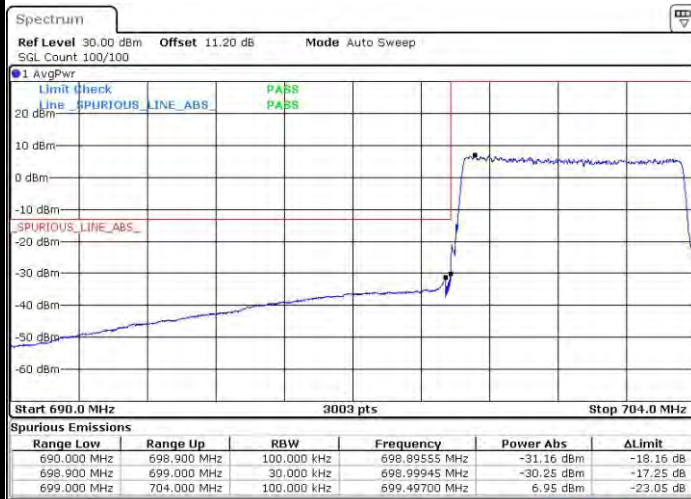
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



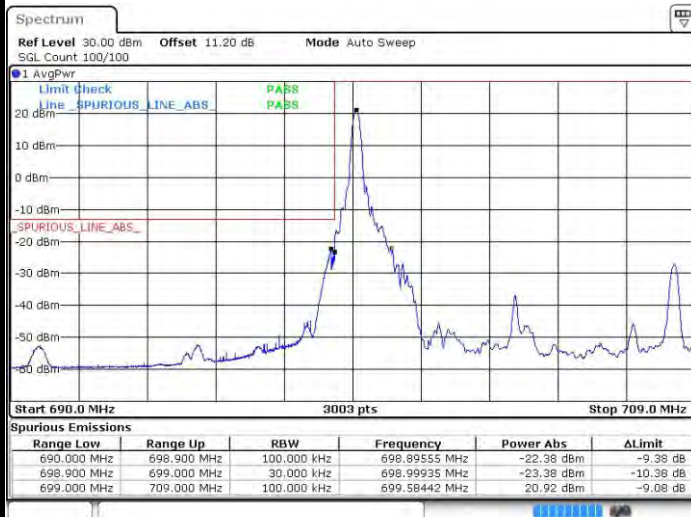
Highest Band Edge / Full RB



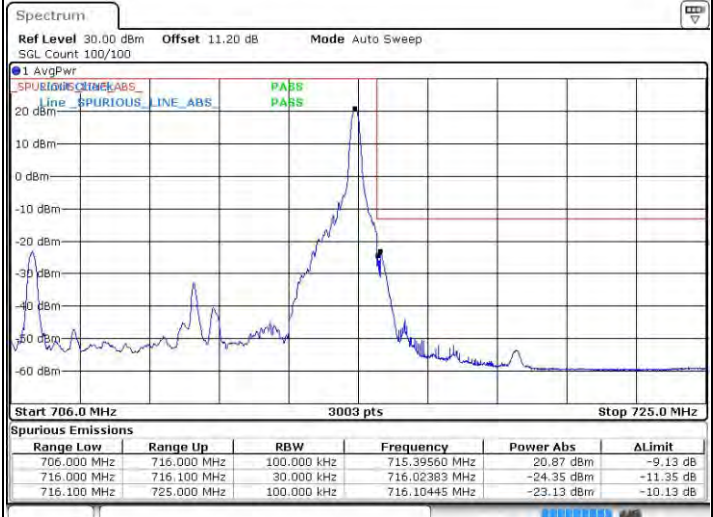


LTE Band 12 / 10MHz / QPSK

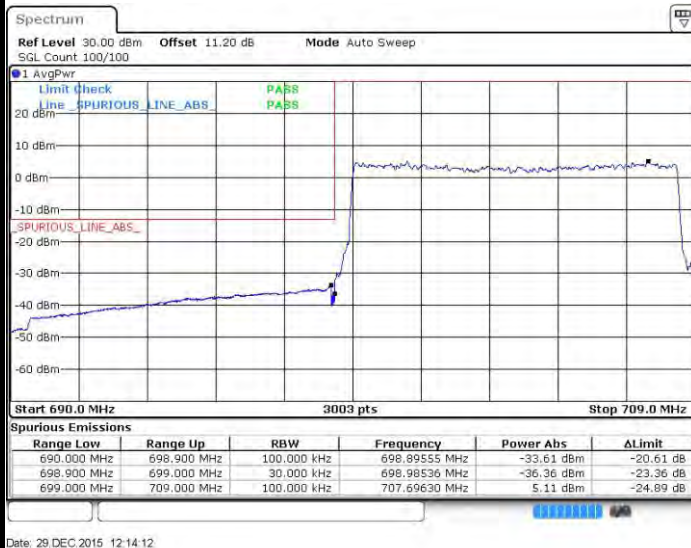
Lowest Band Edge / 1 RB



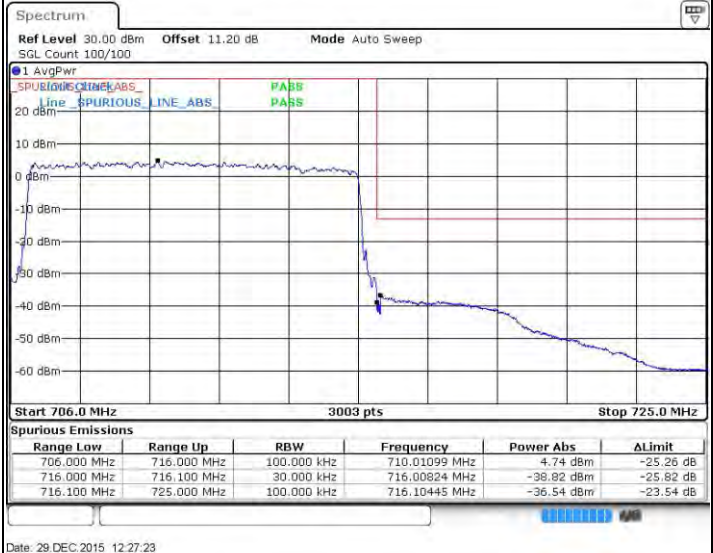
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



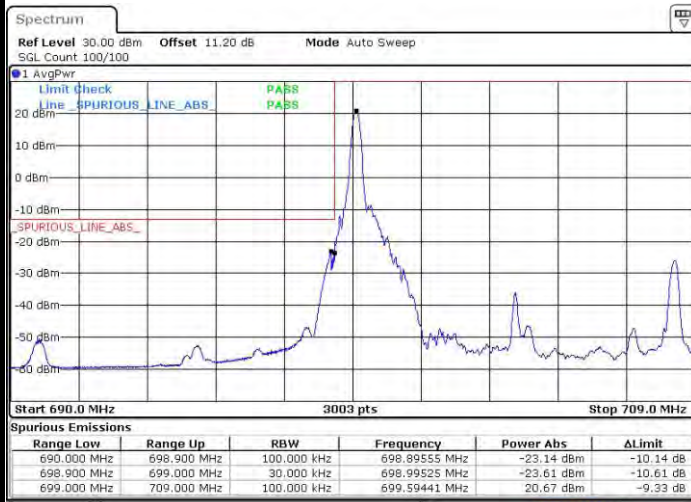
Highest Band Edge / Full RB



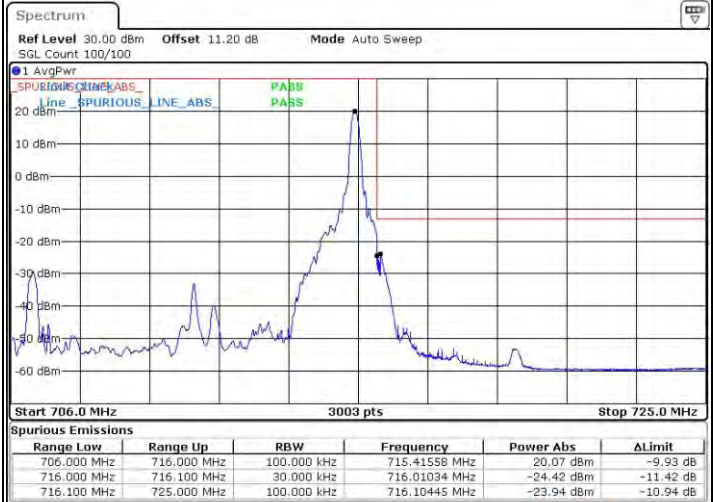


LTE Band 12 / 10MHz / 16QAM

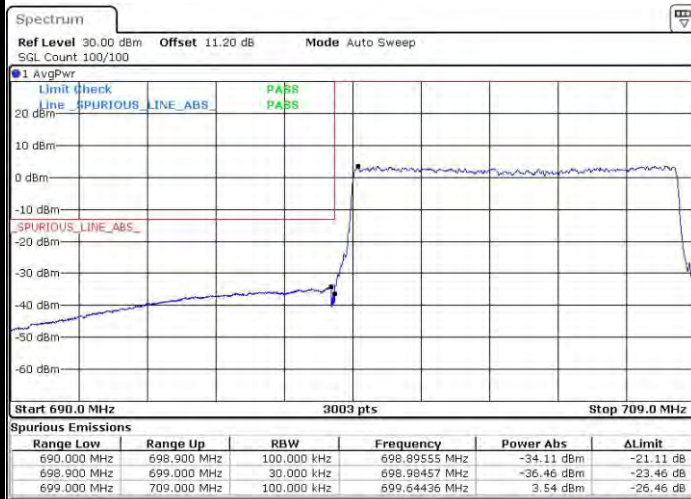
Lowest Band Edge / 1 RB



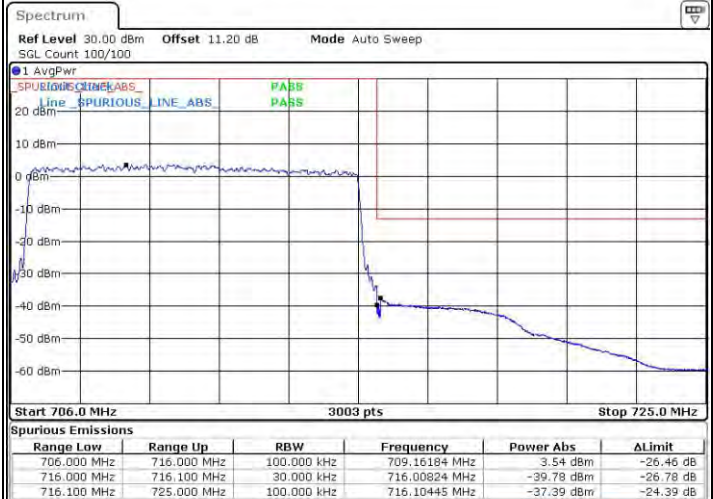
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



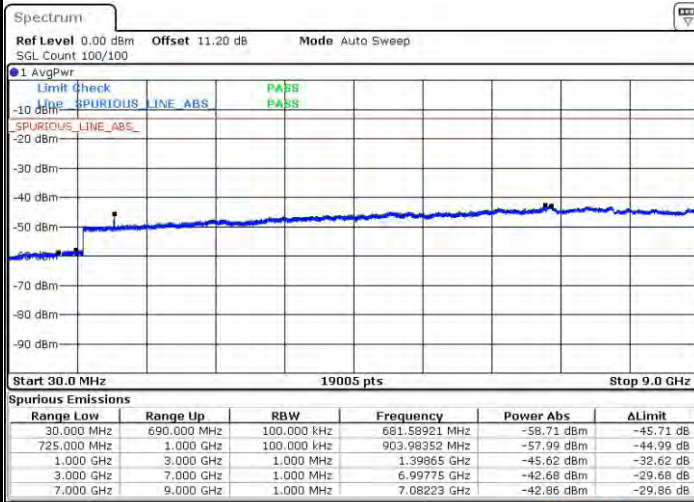


Conducted Spurious Emission



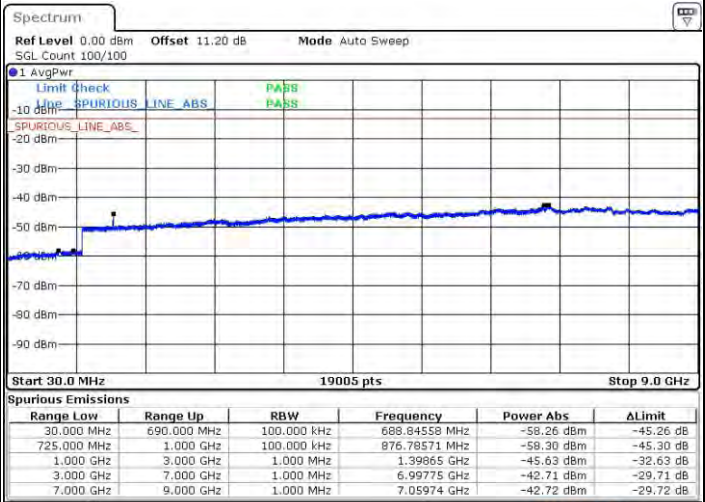
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



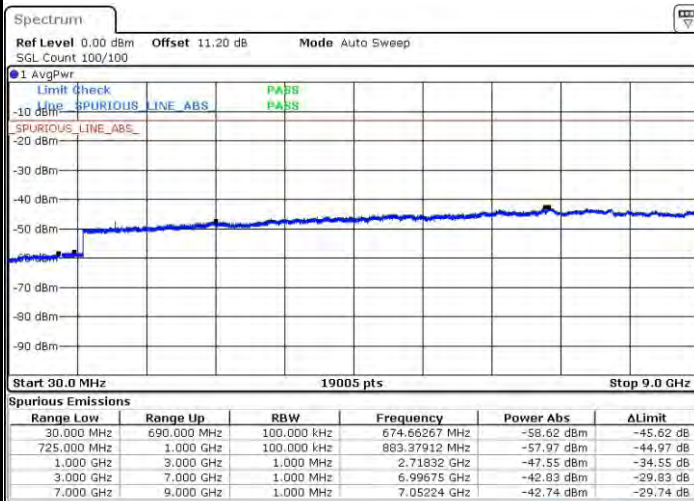
Date: 29 DEC 2015 12:45:05

Lowest Channel / 16QAM



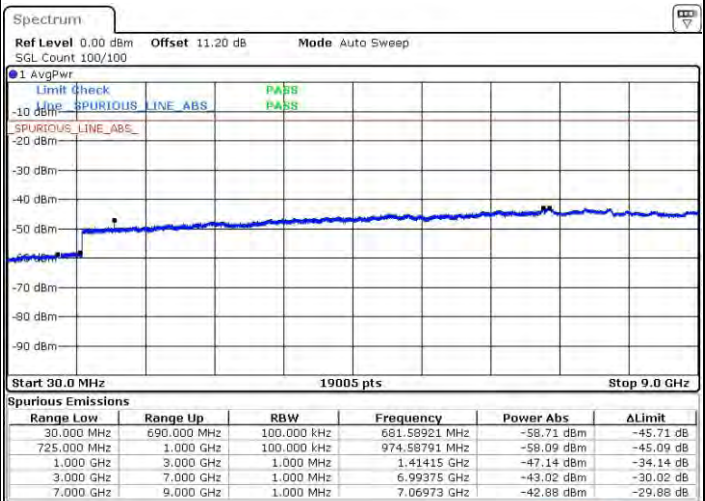
Date: 29 DEC 2015 12:45:59

Middle Channel / QPSK



Date: 29 DEC 2015 12:48:30

Middle Channel / 16QAM

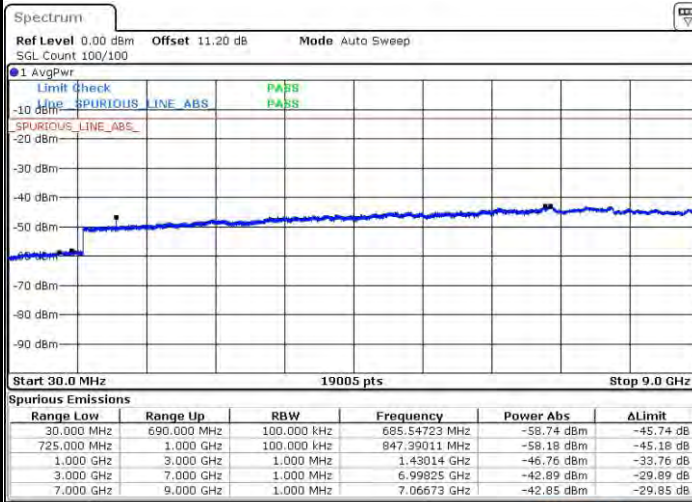


Date: 29 DEC 2015 12:47:36



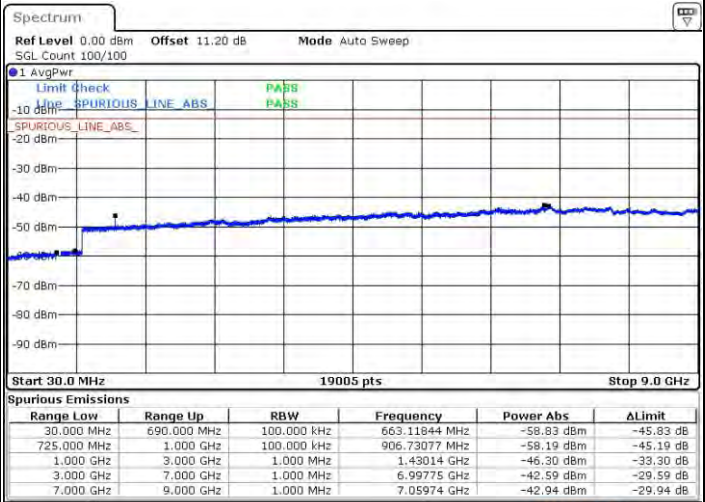
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 29 DEC 2015 13:39:54

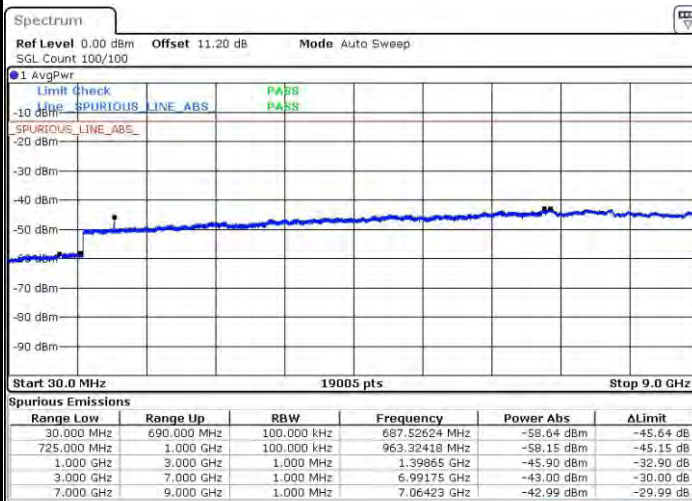
Highest Channel / 16QAM



Date: 29 DEC 2015 13:40:49

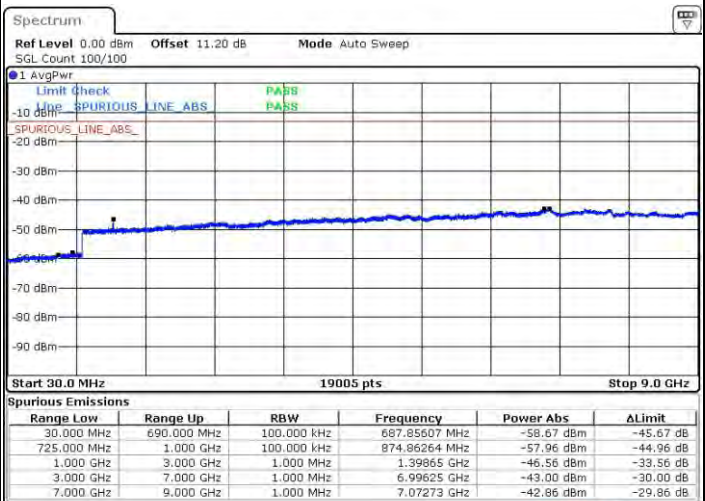
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 29 DEC 2015 11:11:36

Lowest Channel / 16QAM

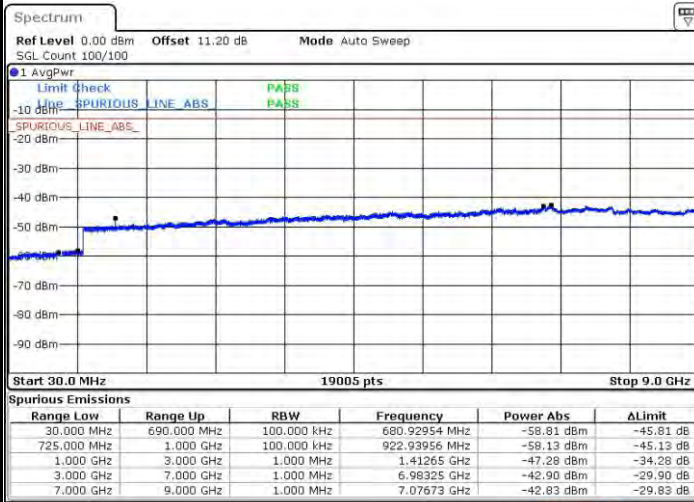


Date: 29 DEC 2015 11:12:30



LTE Band 12 / 3MHz

Middle Channel / QPSK



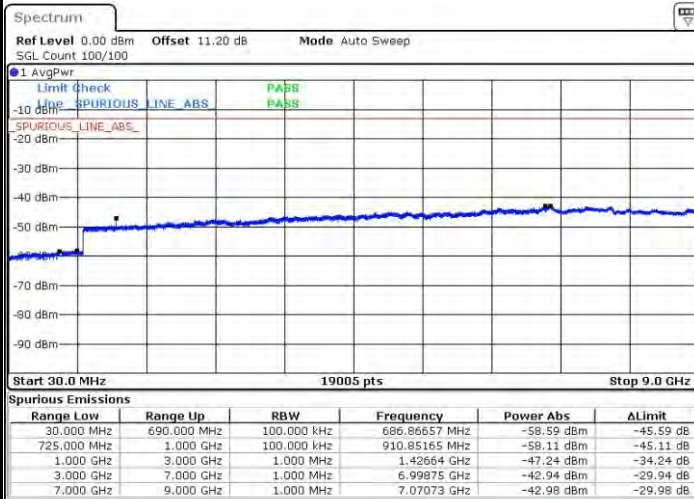
Date: 29 DEC 2015 11:15:01

Middle Channel / 16QAM



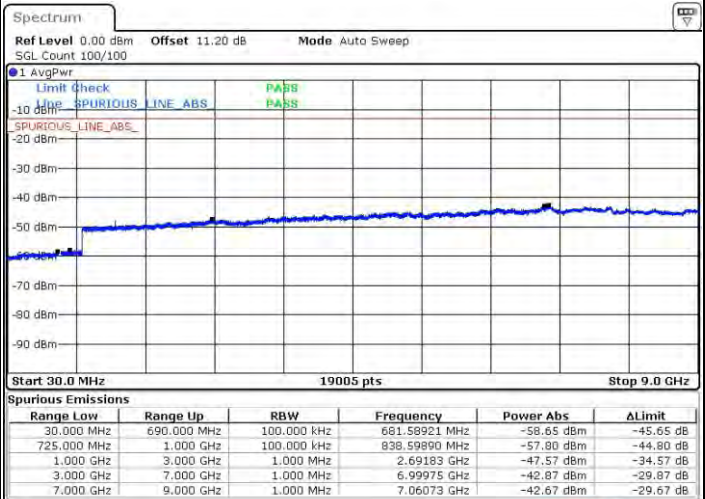
Date: 29 DEC 2015 11:14:06

Highest Channel / QPSK



Date: 29 DEC 2015 11:46:43

Highest Channel / 16QAM

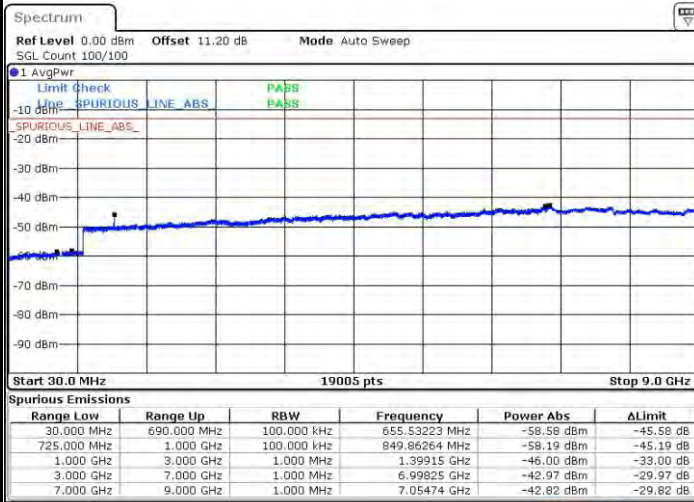


Date: 29 DEC 2015 11:47:37



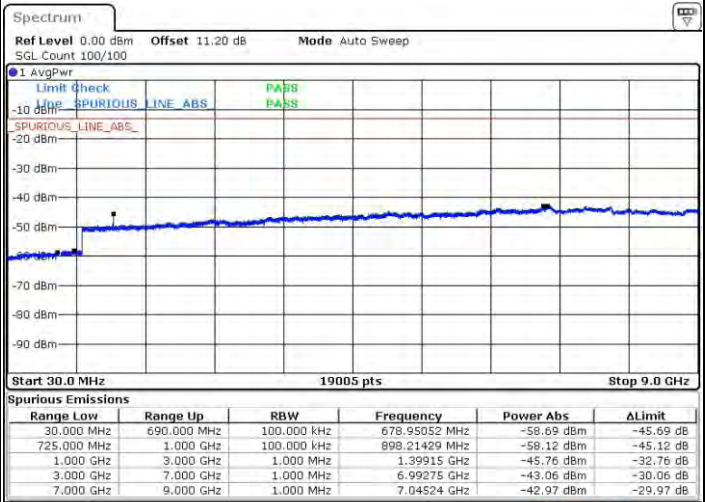
LTE Band 12 / 5MHz

Lowest Channel / QPSK



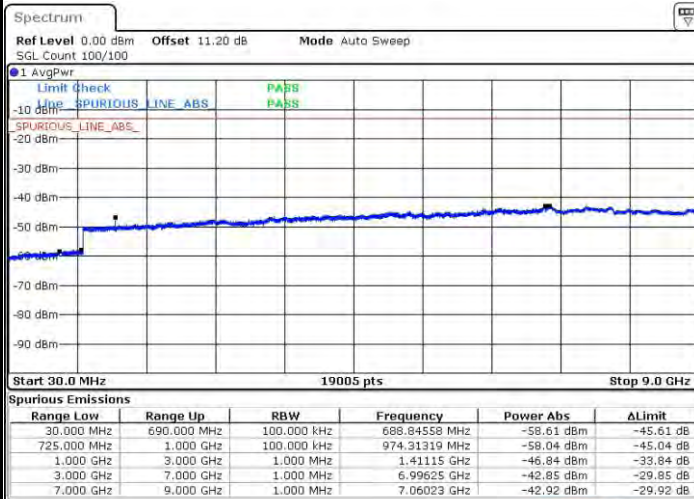
Date: 29 DEC 2015 11:57:23

Lowest Channel / 16QAM



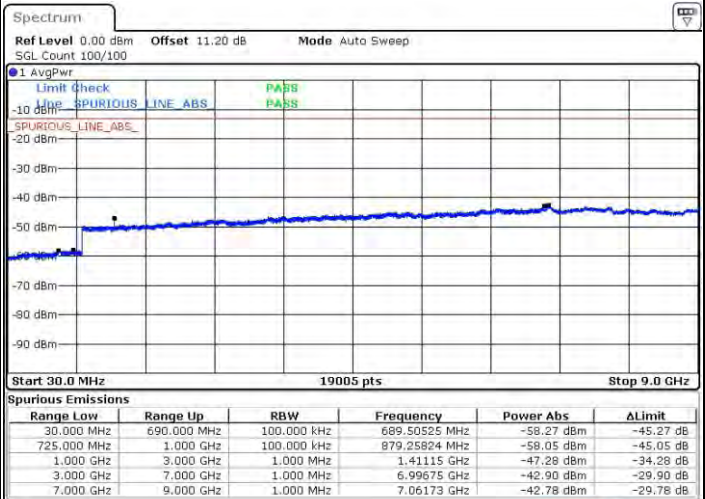
Date: 29 DEC 2015 11:58:17

Middle Channel / QPSK



Date: 29 DEC 2015 12:00:48

Middle Channel / 16QAM

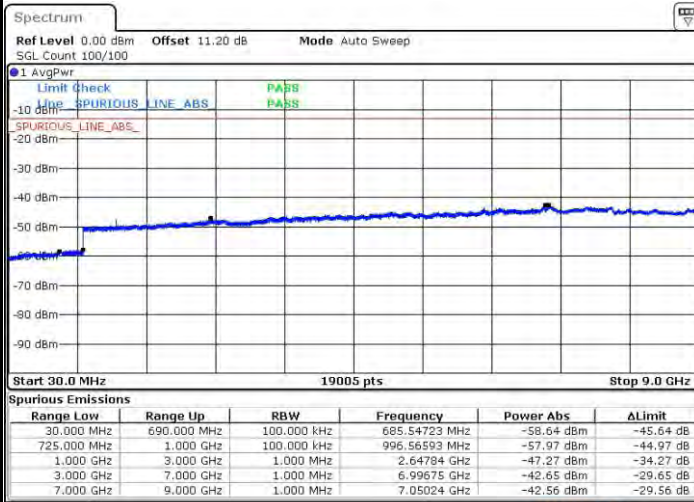


Date: 29 DEC 2015 11:59:54



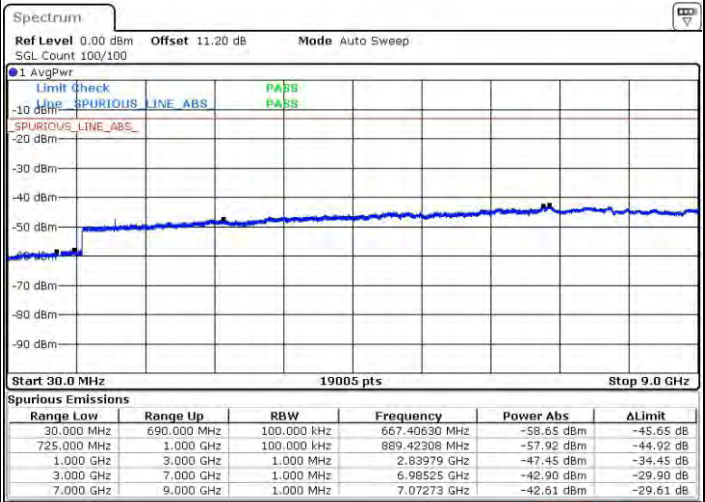
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 29 DEC 2015 12:11:28

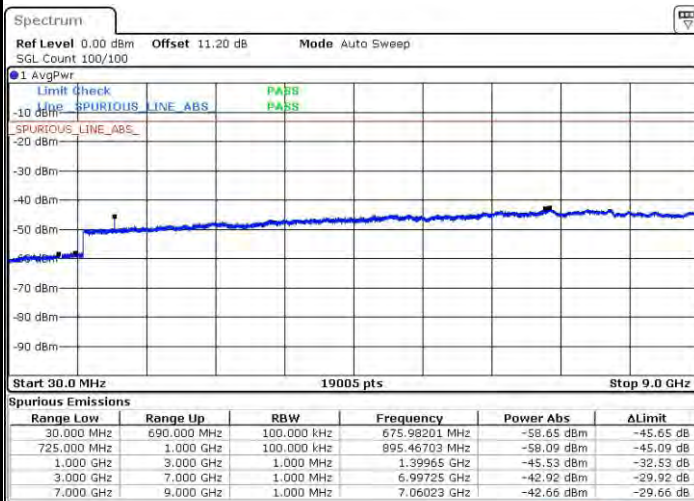
Highest Channel / 16QAM



Date: 29 DEC 2015 12:10:34

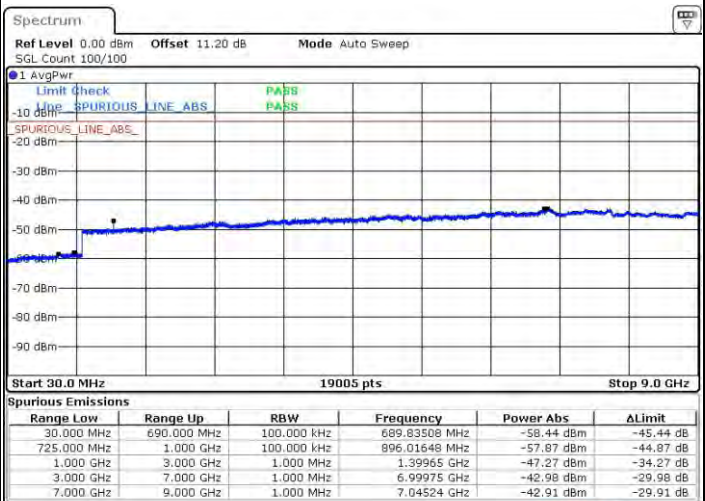
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 29 DEC 2015 12:21:14

Lowest Channel / 16QAM

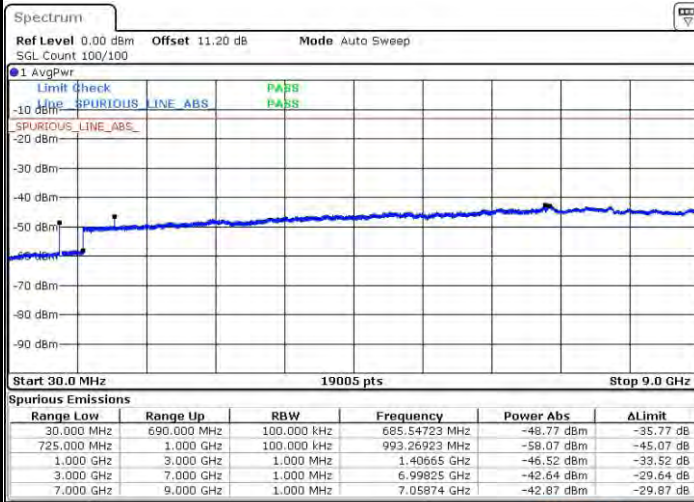


Date: 29 DEC 2015 12:22:08



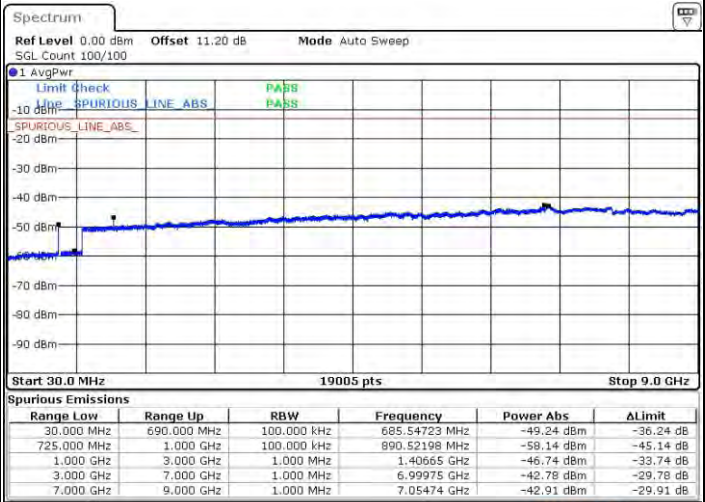
LTE Band 12 / 10MHz

Middle Channel / QPSK



Date: 29 DEC.2015 12:24:39

Middle Channel / 16QAM



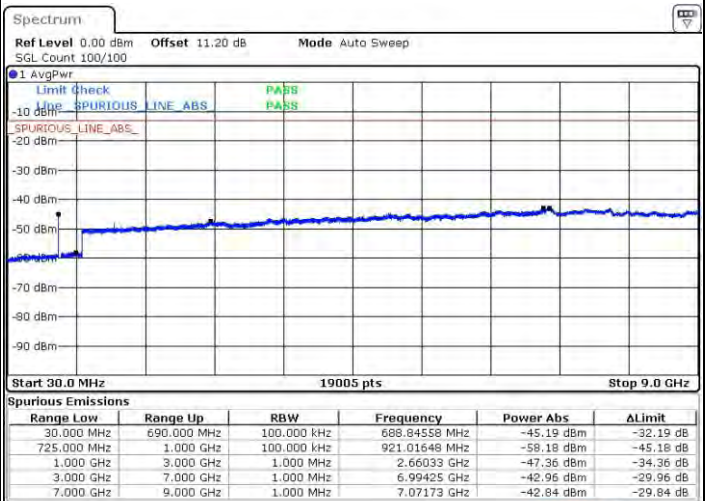
Date: 29 DEC.2015 12:23:45

Highest Channel / QPSK



Date: 29 DEC.2015 12:34:25

Highest Channel / 16QAM



Date: 29 DEC.2015 12:35:19

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	0.0025	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0065	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0072	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage =4.35V
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 5MHz	Within Band
		Frequency Offset (Δf) (Hz)	Result
50	Normal Voltage	-1.8	PASS
40	Normal Voltage	0.4	
30	Normal Voltage	-1.6	
20(Ref.)	Normal Voltage	0	
10	Normal Voltage	1.4	
0	Normal Voltage	-1.9	
-10	Normal Voltage	-0.5	
-20	Normal Voltage	-4.6	
-30	Normal Voltage	1.7	
20	Maximum Voltage	1	
20	Normal Voltage	0	
20	Battery End Point	-5.1	

$|\text{MAX}(\Delta f)|$ 5.1= Hz

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	699.104995	$\geq 698 \text{ MHz}$	PASS
$f_H + \text{MAX}(\Delta f) $	715.880005	$\leq 716 \text{ MHz}$	