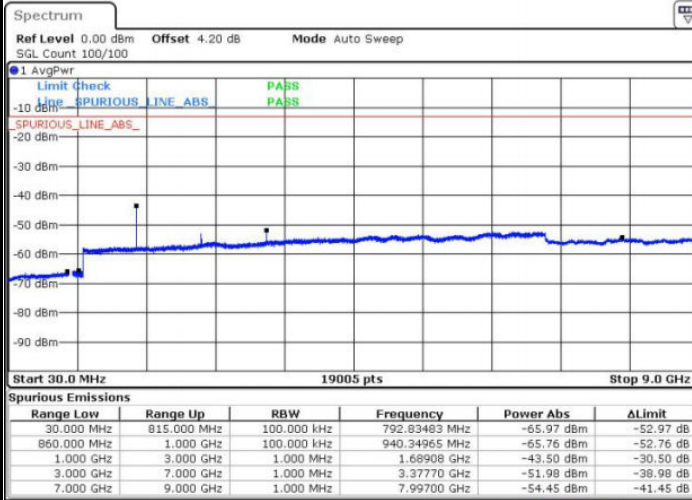




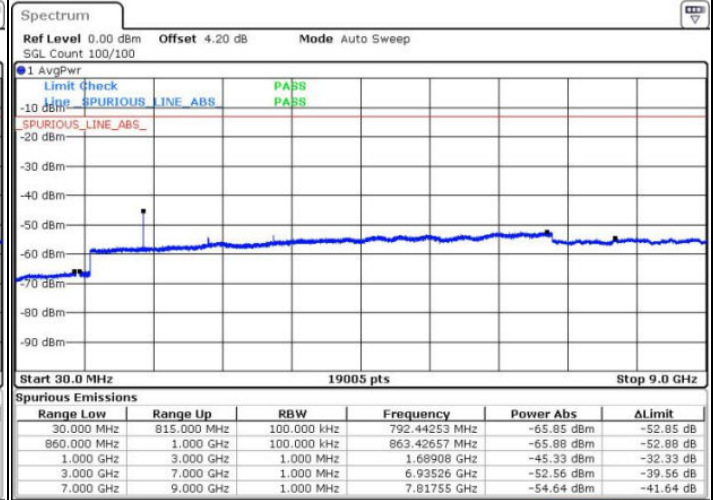
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 18 JAN 2016 20:01:47

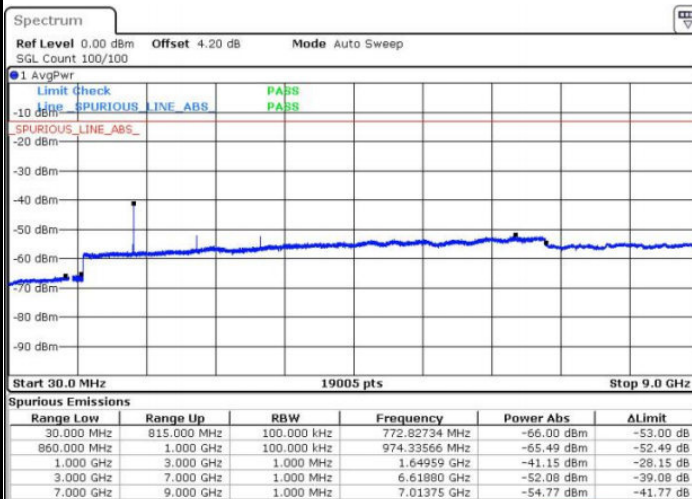
Highest Channel / 16QAM



Date: 18 JAN 2016 20:02:40

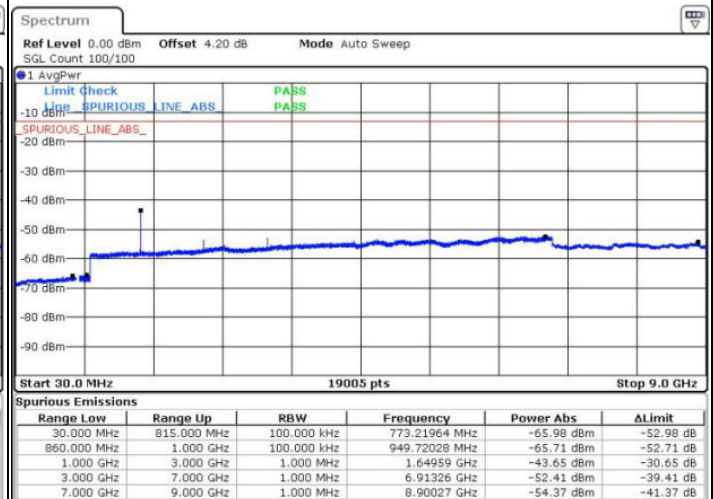
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 18 JAN 2016 20:12:22

Lowest Channel / 16QAM

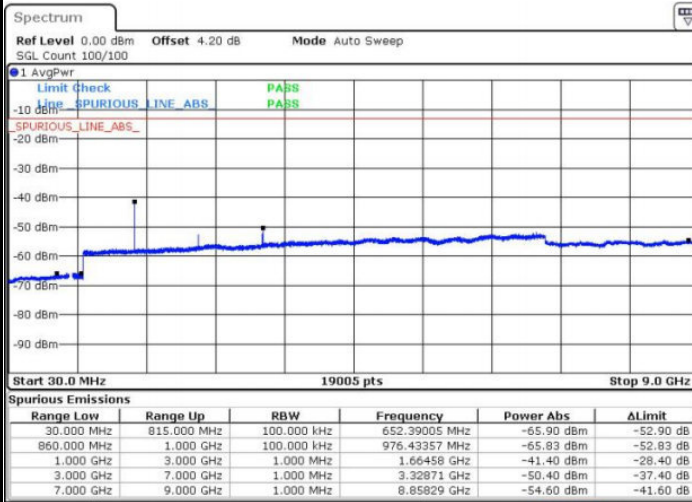


Date: 18 JAN 2016 20:13:16



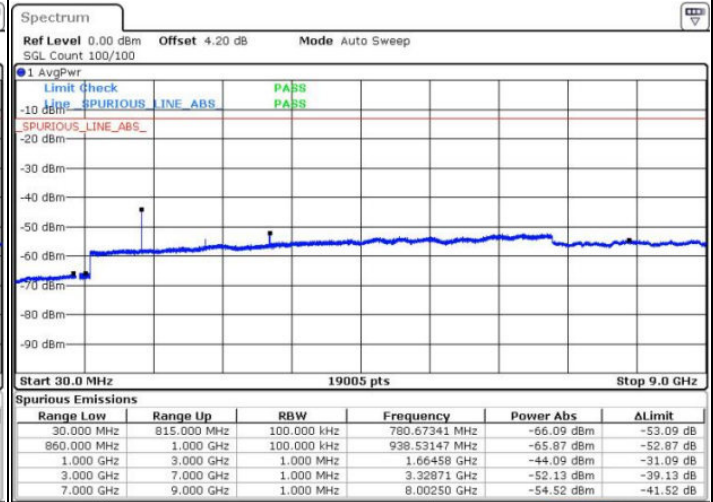
LTE Band 5 / 10MHz

Middle Channel / QPSK



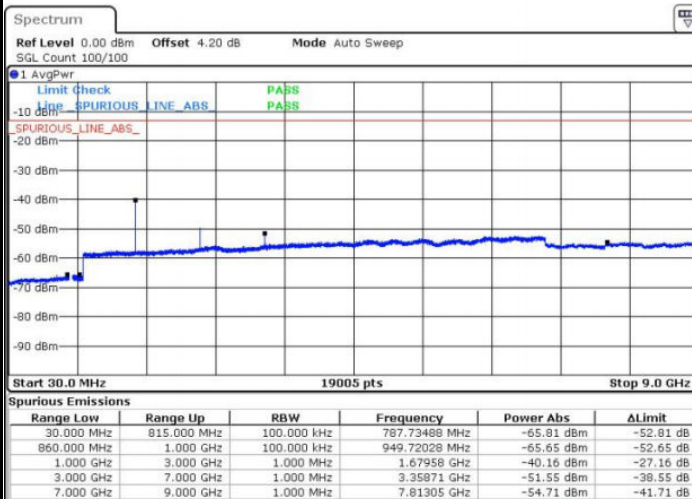
Date: 18 JAN 2016 20:14:51

Middle Channel / 16QAM



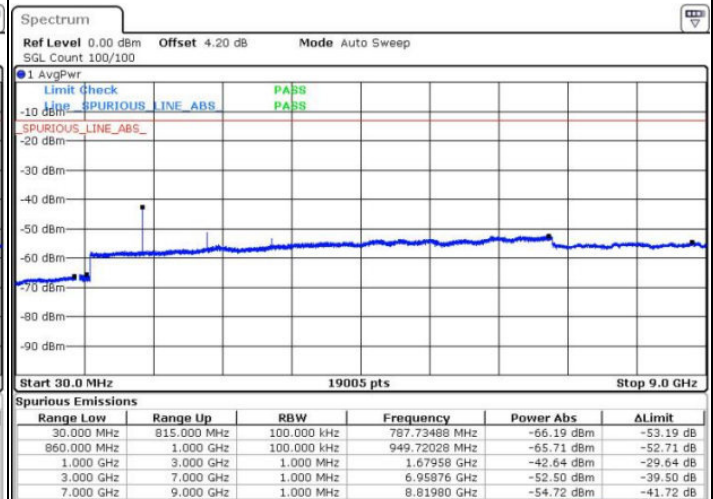
Date: 18 JAN 2016 20:15:44

Highest Channel / QPSK



Date: 18 JAN 2016 20:25:27

Highest Channel / 16QAM



Date: 18 JAN 2016 20:26:20

**Frequency Stability**

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0055	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0067	
-20	Normal Voltage	0.0078	
-30	Normal Voltage	0.0059	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0008	

Note: Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.35 V



LTE Band 12

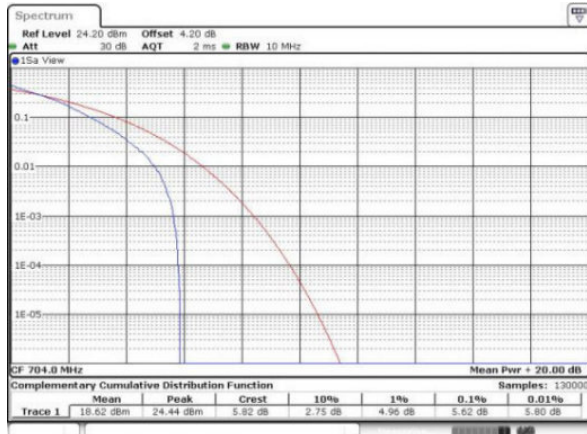
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.62	5.22	6.81	6.32	PASS
Middle CH	5.88	5.74	7.13	6.38	
Highest CH	5.22	5.59	6.67	6.35	

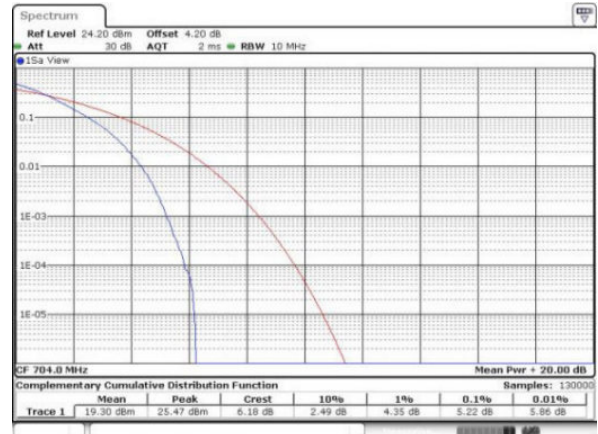


LTE Band 12 / 10MHz / QPSK

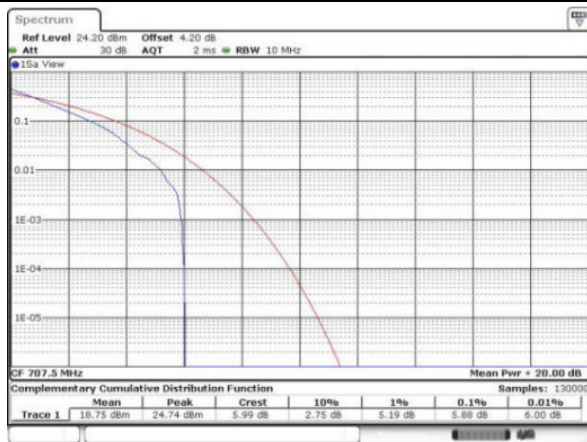
Lowest Channel / 1RB



Lowest Channel / Full RB



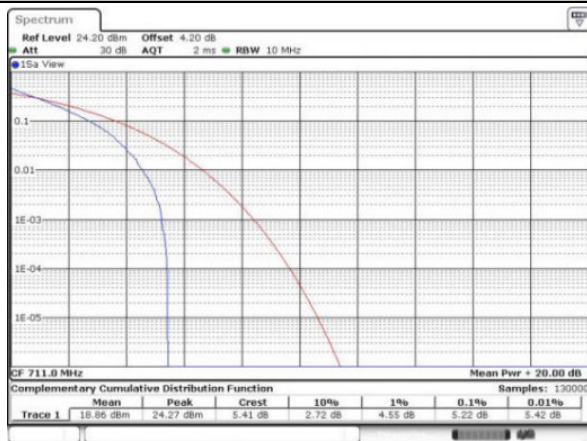
Middle Channel / 1RB



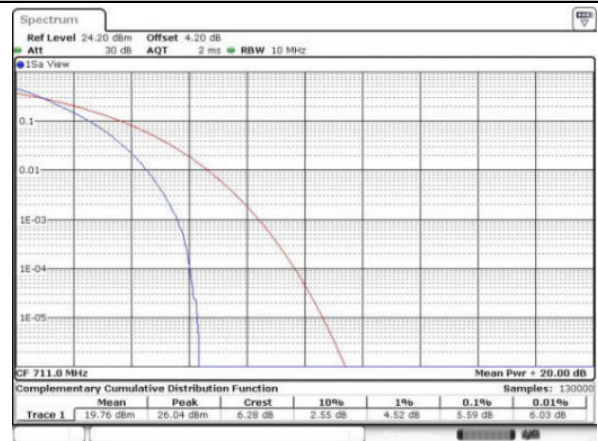
Middle Channel / Full RB



Highest Channel / 1RB



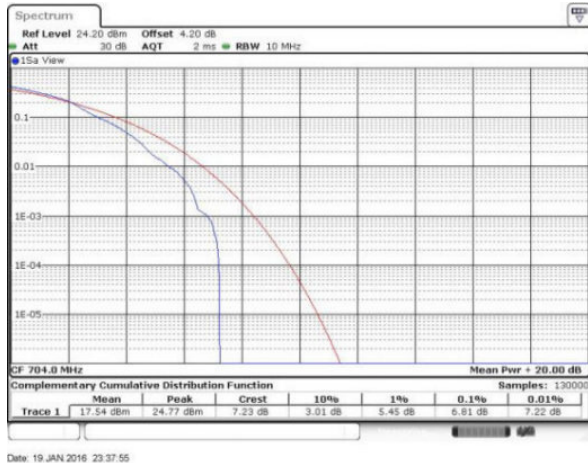
Highest Channel / Full RB



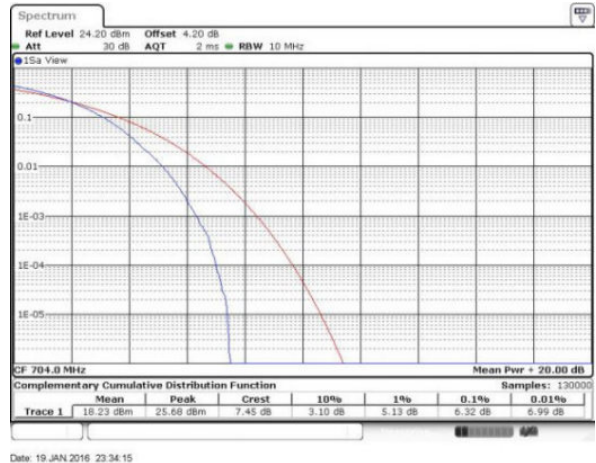


LTE Band 12 / 10MHz / 16QAM

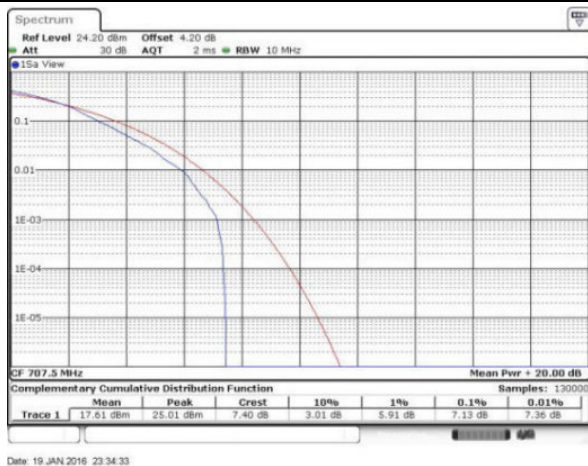
Lowest Channel / 1RB



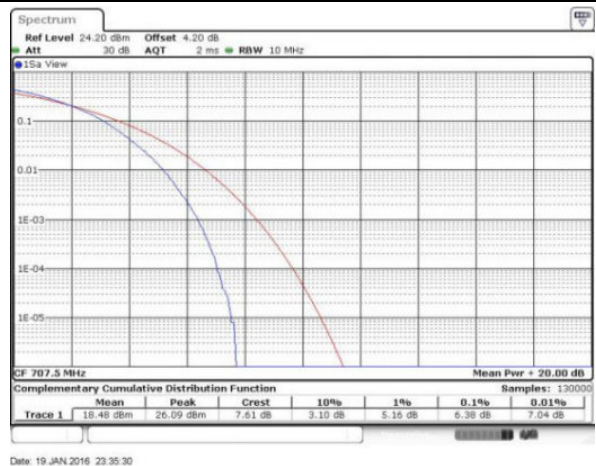
Lowest Channel / Full RB



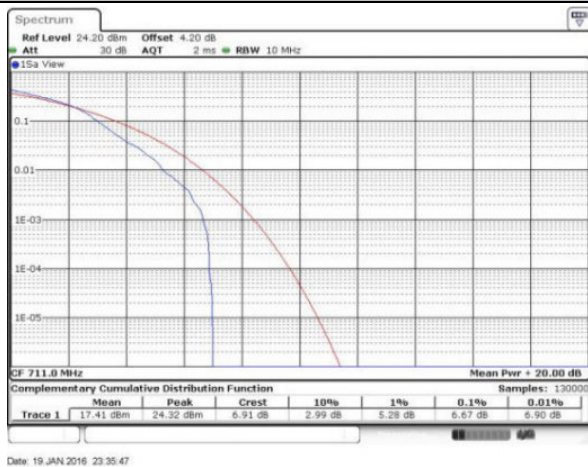
Middle Channel / 1RB



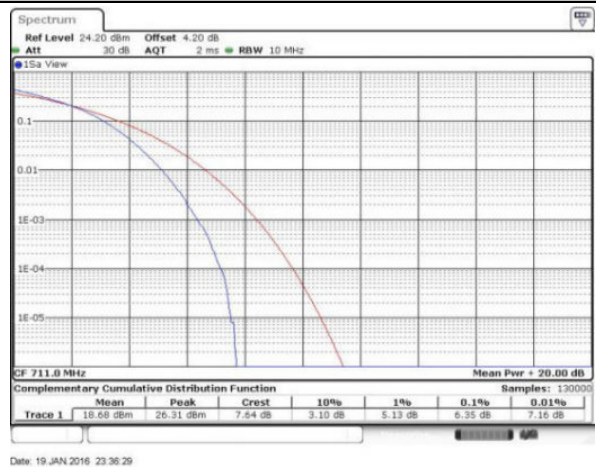
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



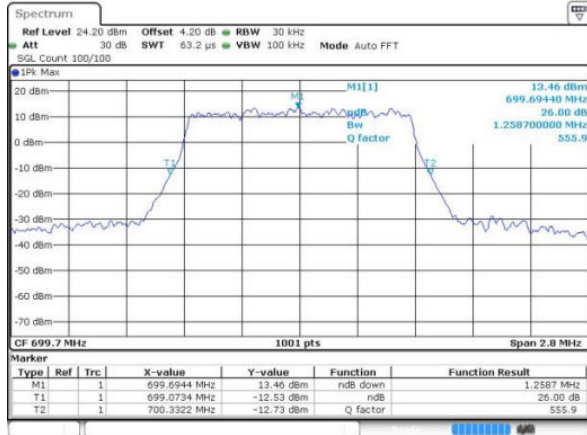
**26dB Bandwidth**

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	1.26	1.27	3.01	3.03	4.88	4.93	9.81	9.81	-	-	-	-
Middle CH	1.28	1.26	3.02	2.98	4.88	4.79	9.81	9.79	-	-	-	-
Highest CH	1.28	1.27	3	3	4.98	4.91	9.93	9.91	-	-	-	-



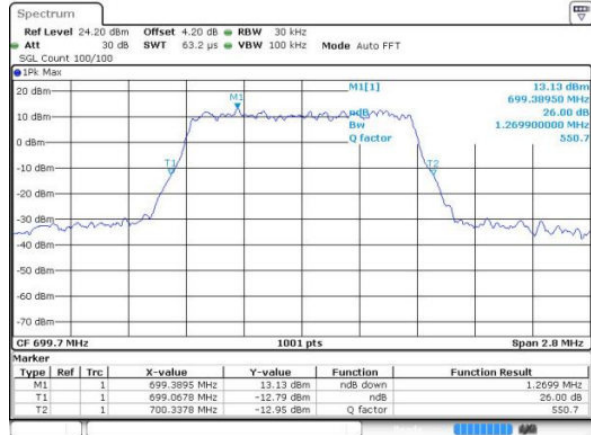
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



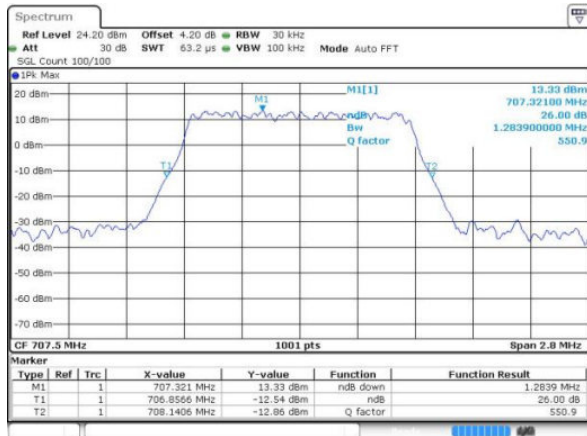
Date: 19 JAN 2016 21:58:16

Lowest Channel / 1.4MHz / 16QAM



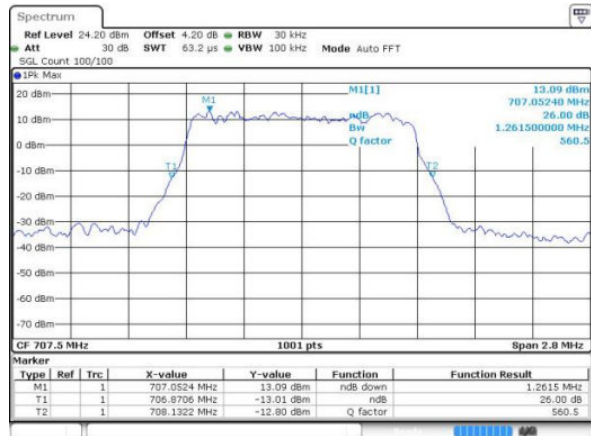
Date: 19 JAN 2016 21:58:26

Middle Channel / 1.4MHz / QPSK



Date: 19 JAN 2016 21:58:48

Middle Channel / 1.4MHz / 16QAM



Date: 19 JAN 2016 21:58:37

Highest Channel / 1.4MHz / QPSK



Date: 19 JAN 2016 21:58:59

Highest Channel / 1.4MHz / 16QAM

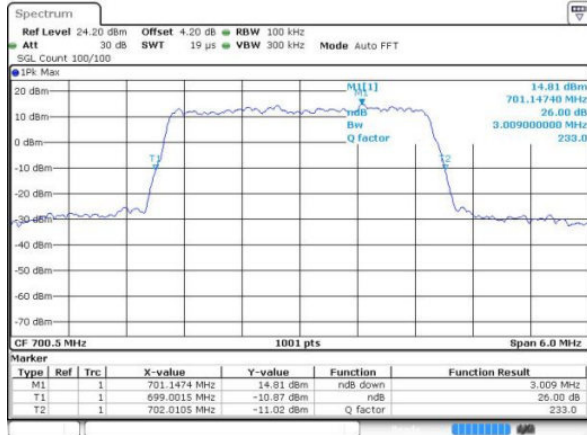


Date: 19 JAN 2016 21:59:09

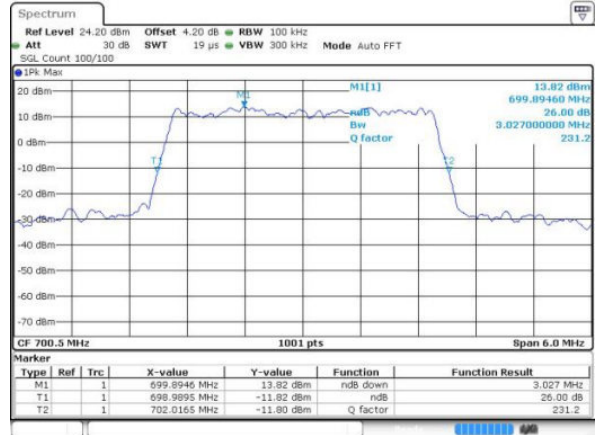


LTE Band 12

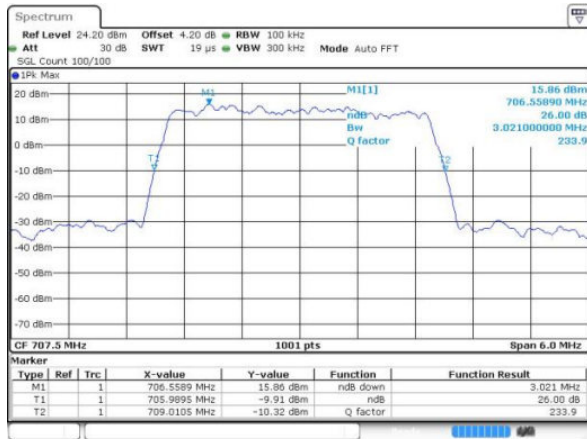
Lowest Channel / 3MHz / QPSK



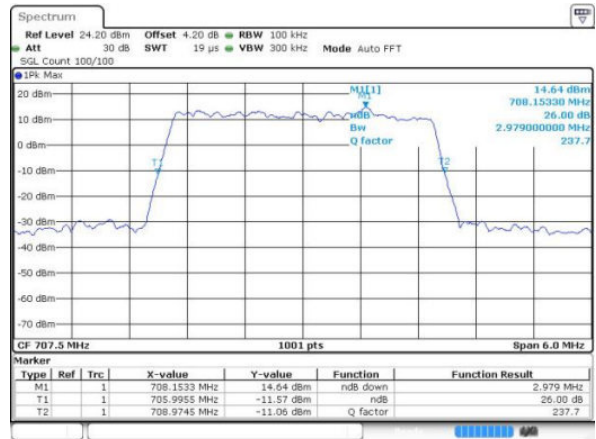
Lowest Channel / 3MHz / 16QAM



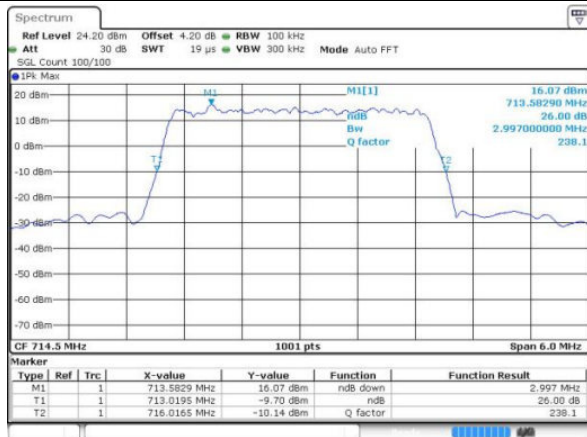
Middle Channel / 3MHz / QPSK



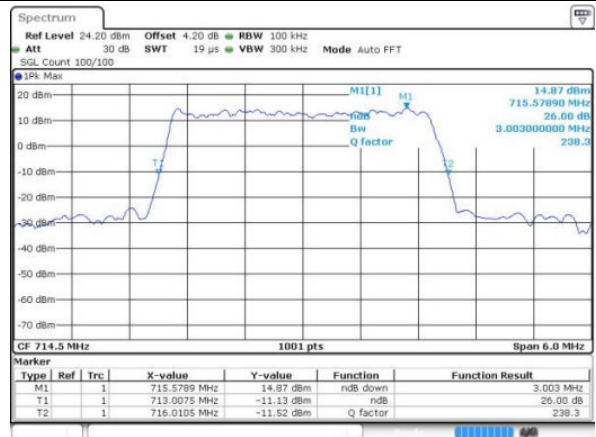
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



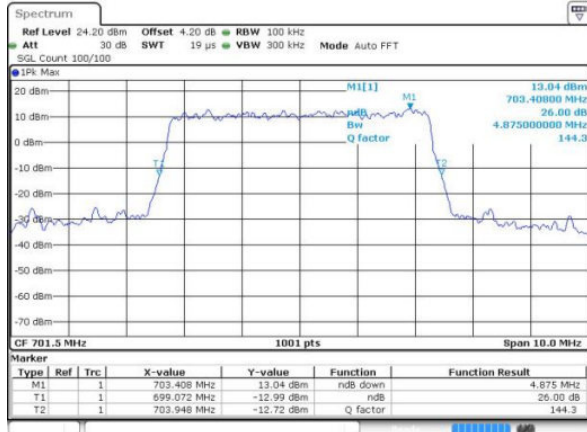
Highest Channel / 3MHz / 16QAM



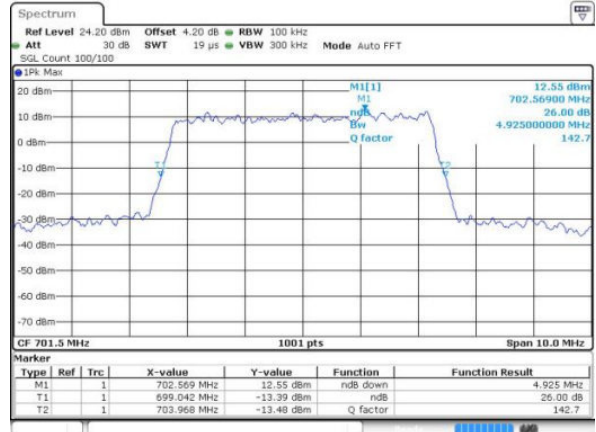


LTE Band 12

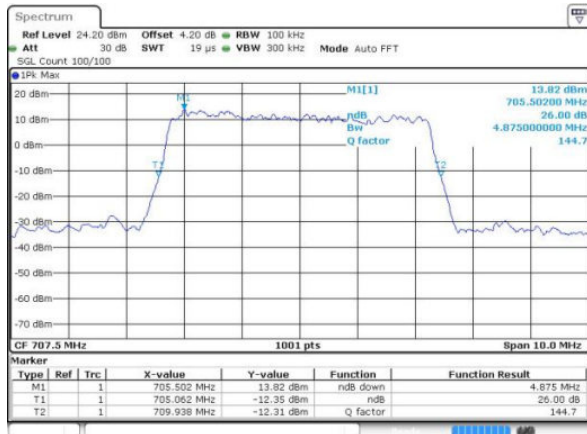
Lowest Channel / 5MHz / QPSK



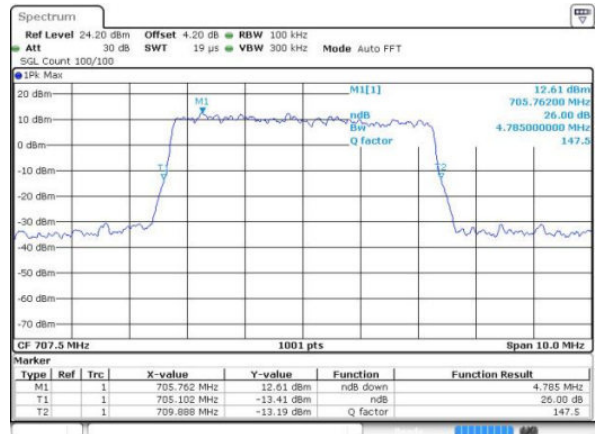
Lowest Channel / 5MHz / 16QAM



Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



Highest Channel / 5MHz / 16QAM





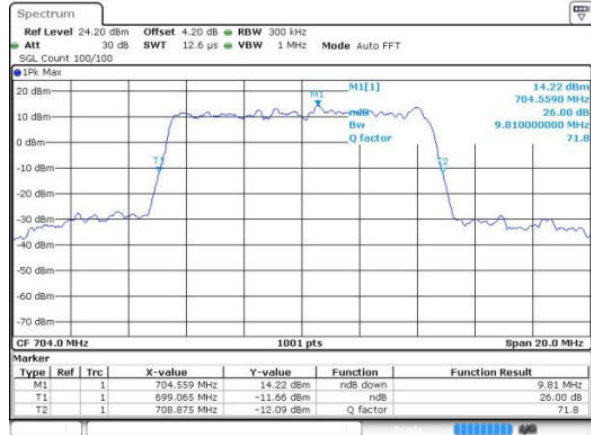
LTE Band 12

Lowest Channel / 10MHz / QPSK



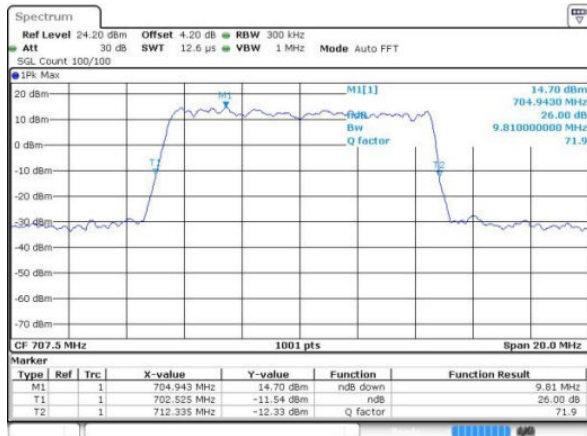
Date: 19 JAN 2016 23:09:40

Lowest Channel / 10MHz / 16QAM



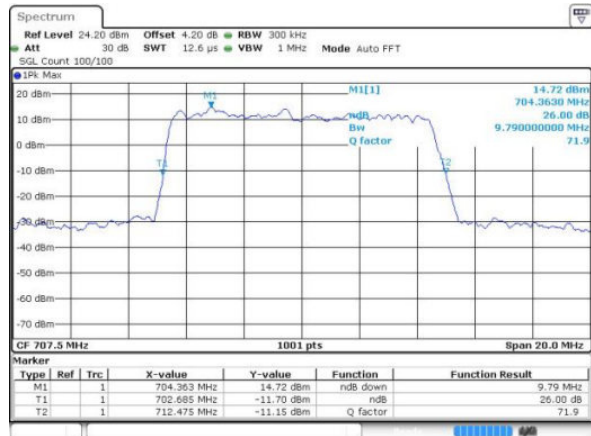
Date: 19 JAN 2016 23:09:51

Middle Channel / 10MHz / QPSK



Date: 19 JAN 2016 23:10:12

Middle Channel / 10MHz / 16QAM



Date: 19 JAN 2016 23:10:02

Highest Channel / 10MHz / QPSK



Date: 19 JAN 2016 23:10:23

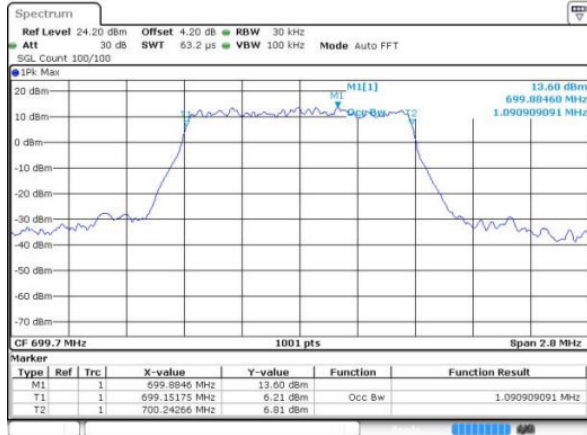
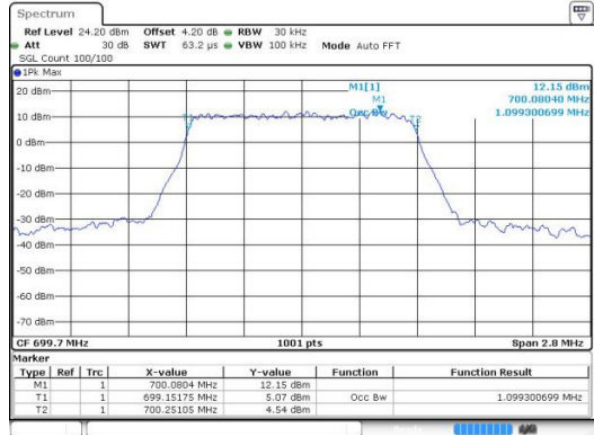
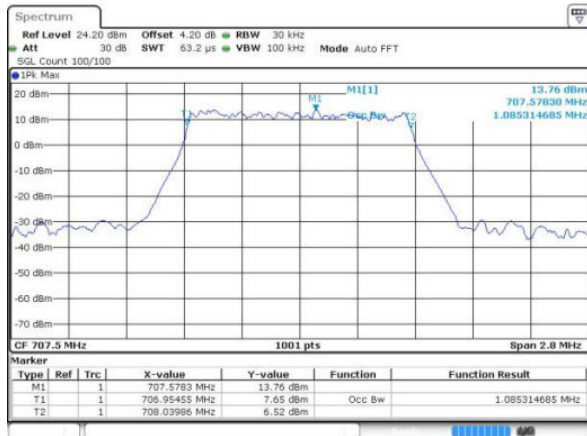
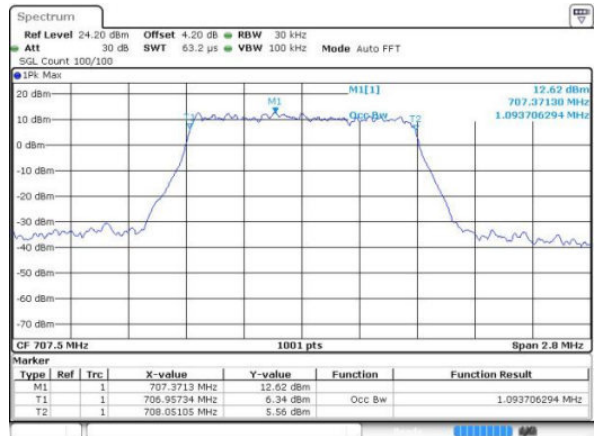
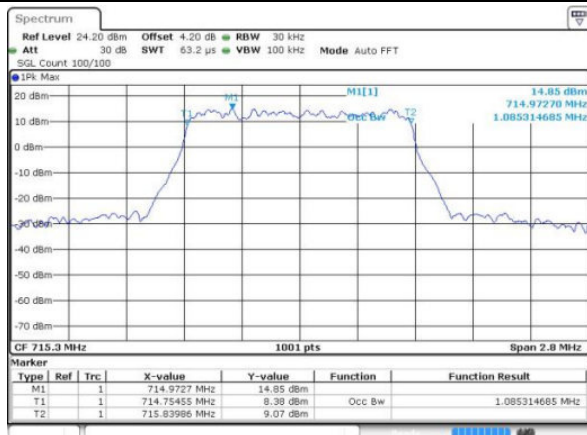
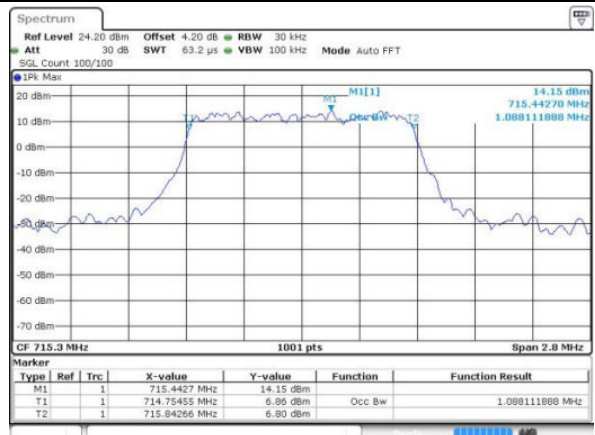
Highest Channel / 10MHz / 16QAM



Date: 19 JAN 2016 23:10:34

**Occupied Bandwidth**

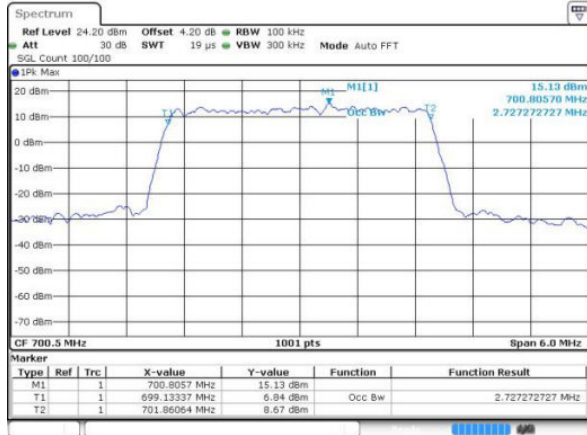
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.1	2.73	2.7	4.48	4.48	8.97	8.95	-	-	-	-
Middle CH	1.09	1.09	2.73	2.73	4.49	4.5	9.07	9.01	-	-	-	-
Highest CH	1.09	1.09	2.72	2.73	4.48	4.47	9.09	9.11	-	-	-	-

**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**



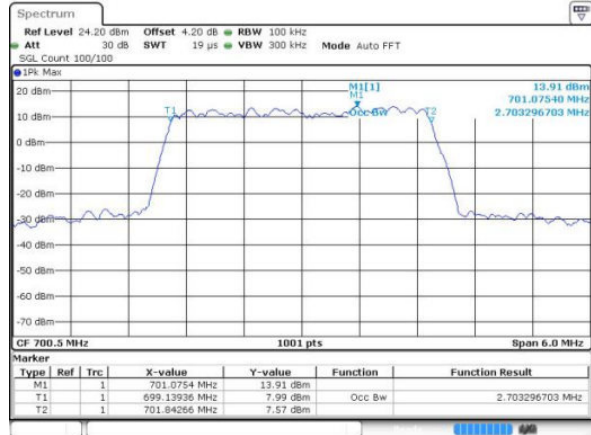
LTE Band 12

Lowest Channel / 3MHz / QPSK



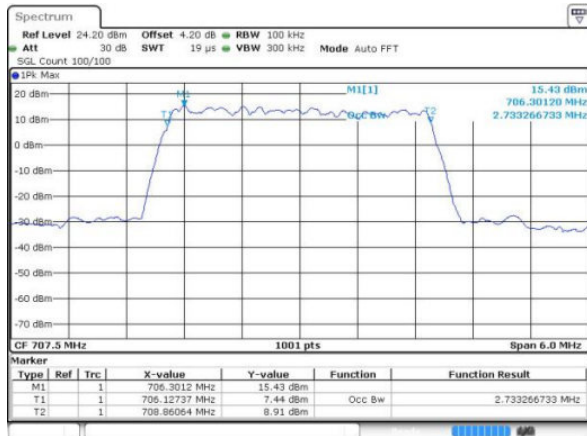
Date: 19 JAN 2016 22:21:00

Lowest Channel / 3MHz / 16QAM



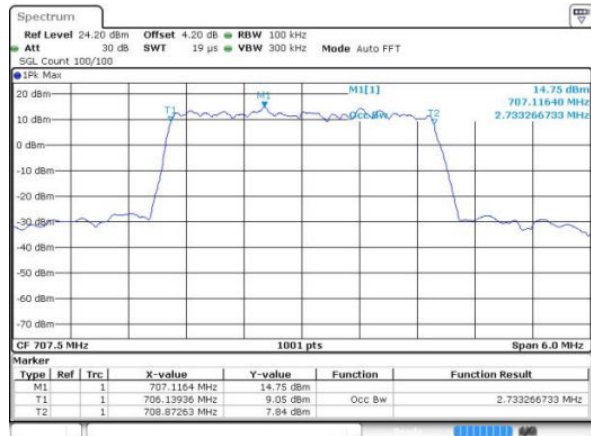
Date: 19 JAN 2016 22:21:11

Middle Channel / 3MHz / QPSK



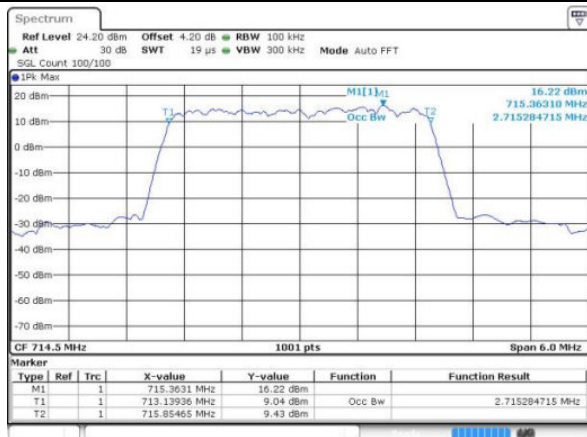
Date: 19 JAN 2016 22:21:32

Middle Channel / 3MHz / 16QAM



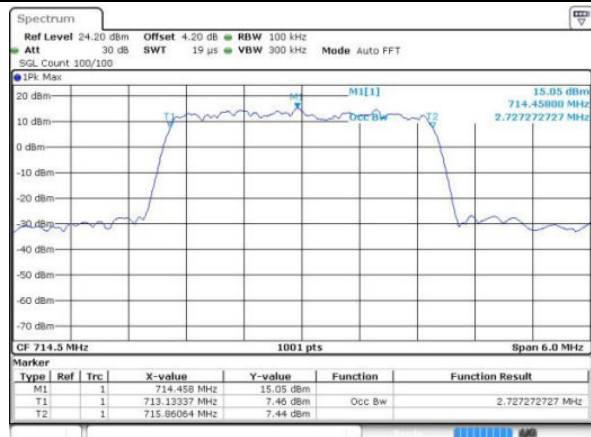
Date: 19 JAN 2016 22:21:21

Highest Channel / 3MHz / QPSK



Date: 19 JAN 2016 22:21:43

Highest Channel / 3MHz / 16QAM

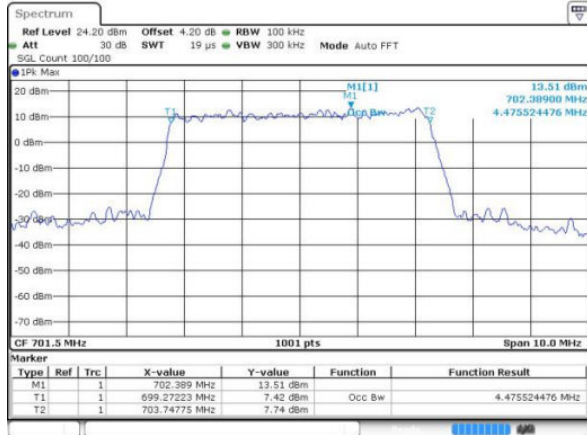


Date: 19 JAN 2016 22:21:53

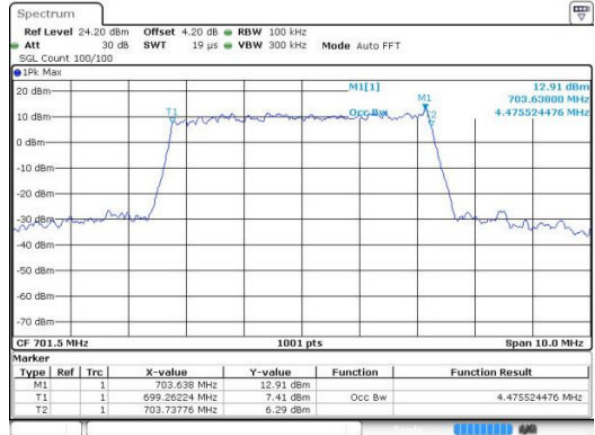


LTE Band 12

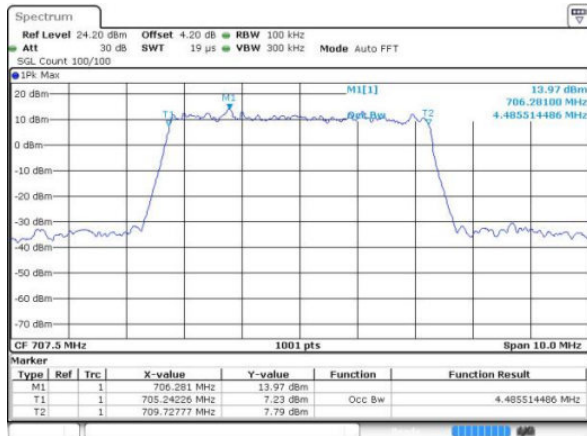
Lowest Channel / 5MHz / QPSK



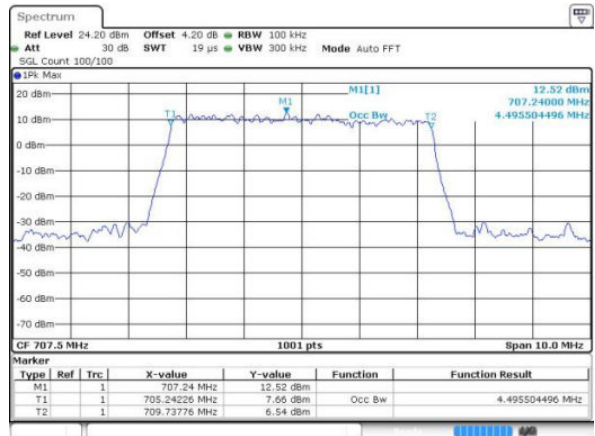
Lowest Channel / 5MHz / 16QAM



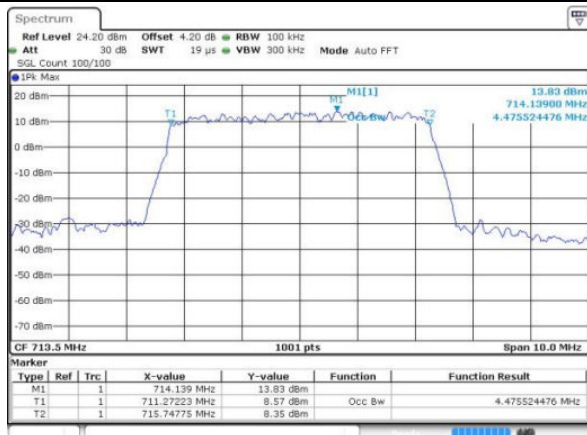
Middle Channel / 5MHz / QPSK



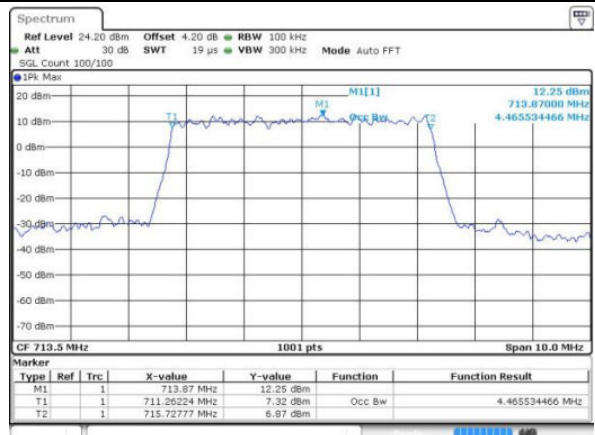
Middle Channel / 5MHz / 16QAM

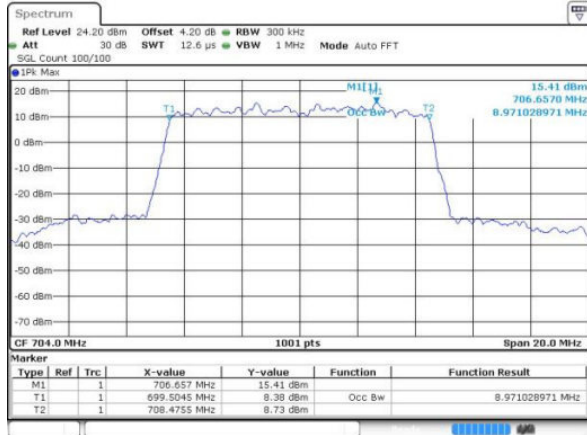


Highest Channel / 5MHz / QPSK

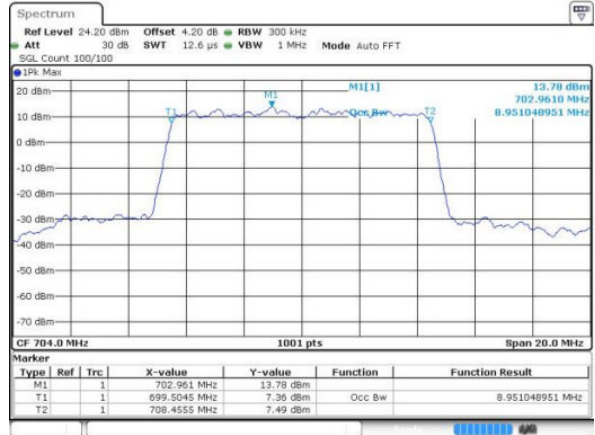


Highest Channel / 5MHz / 16QAM

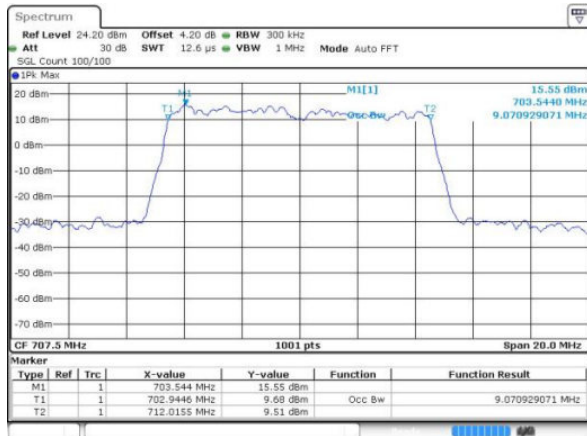


**LTE Band 12****Lowest Channel / 10MHz / QPSK**

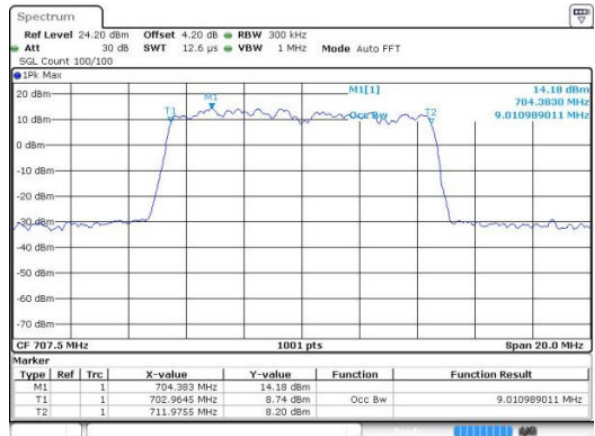
Date: 19 JAN 2016 23:37:17

Lowest Channel / 10MHz / 16QAM

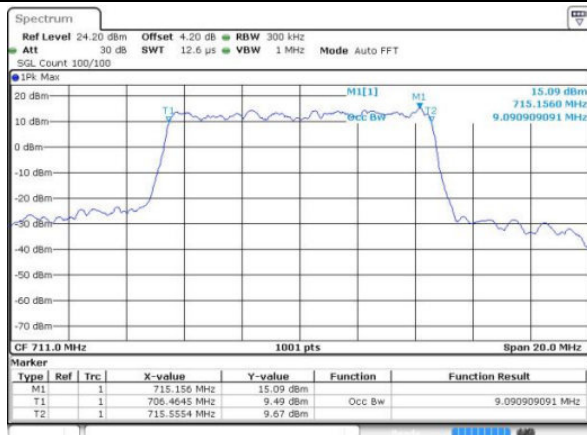
Date: 19 JAN 2016 23:08:47

Middle Channel / 10MHz / QPSK

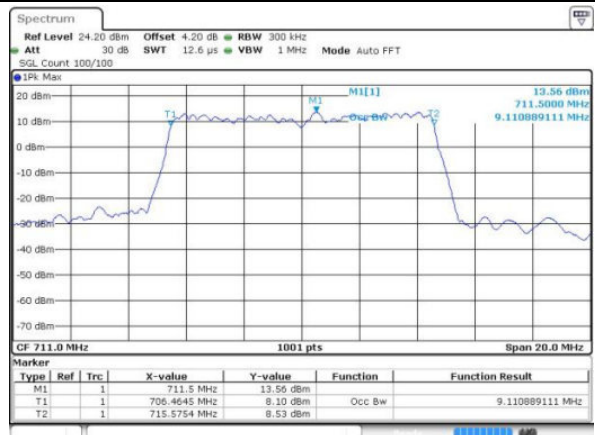
Date: 19 JAN 2016 23:09:08

Middle Channel / 10MHz / 16QAM

Date: 19 JAN 2016 23:08:57

Highest Channel / 10MHz / QPSK

Date: 19 JAN 2016 23:09:19

Highest Channel / 10MHz / 16QAM

Date: 19 JAN 2016 23:09:29

**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

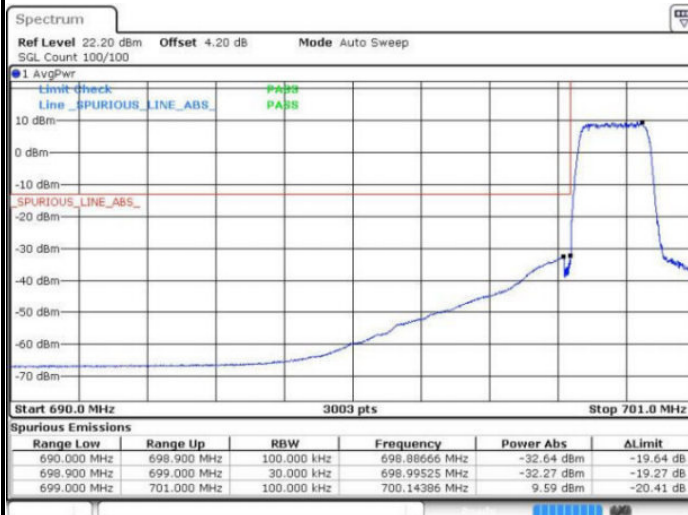
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



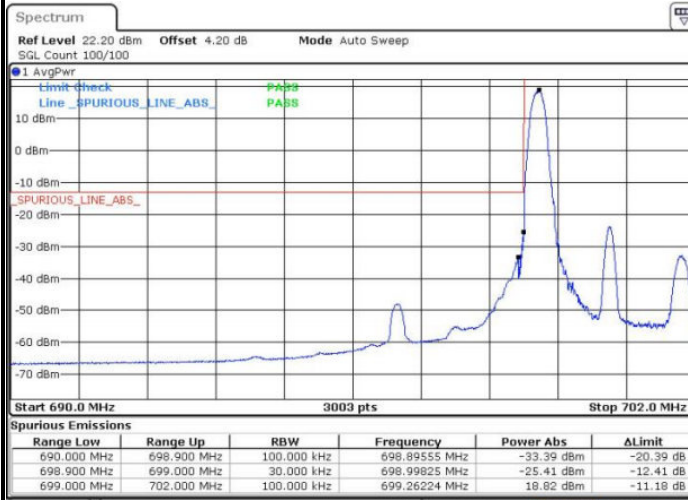
Highest Band Edge / Full RB



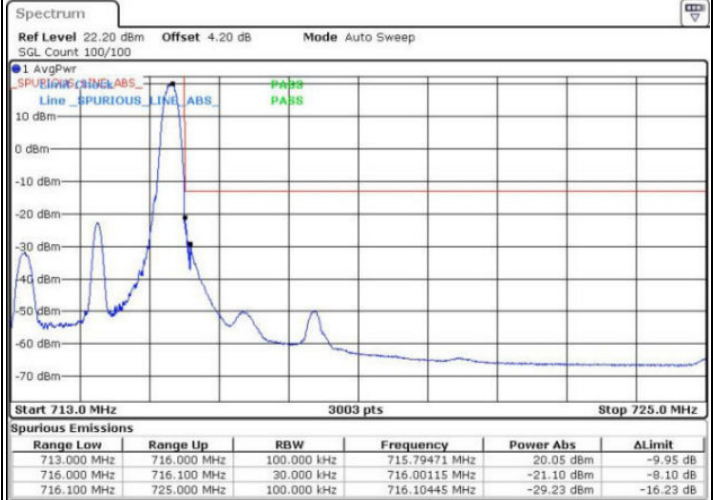


LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



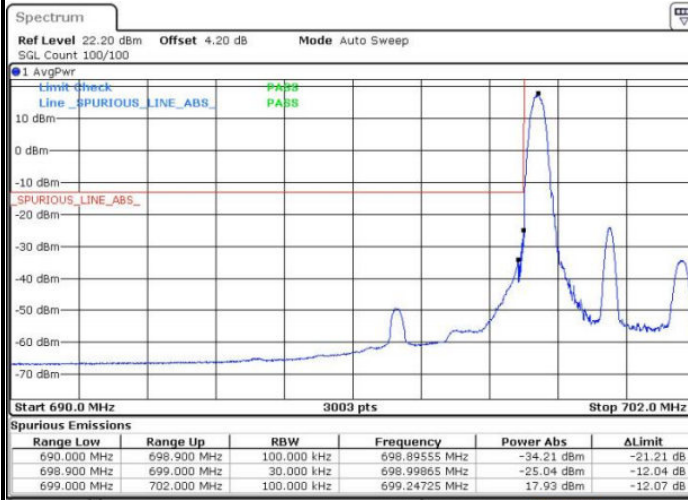
Highest Band Edge / Full RB



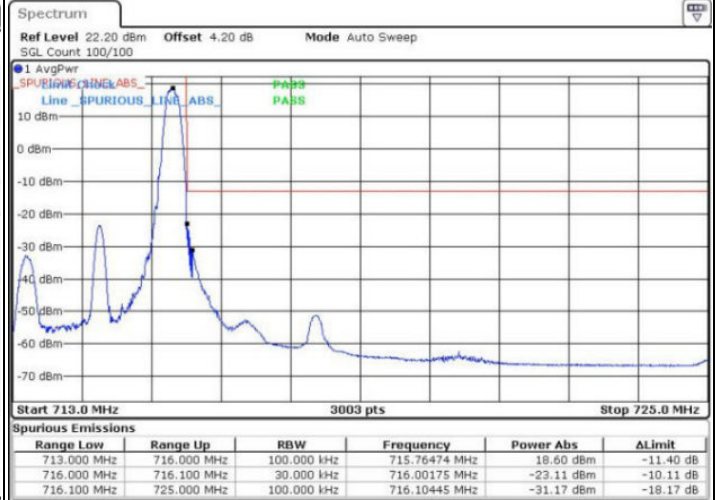


LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



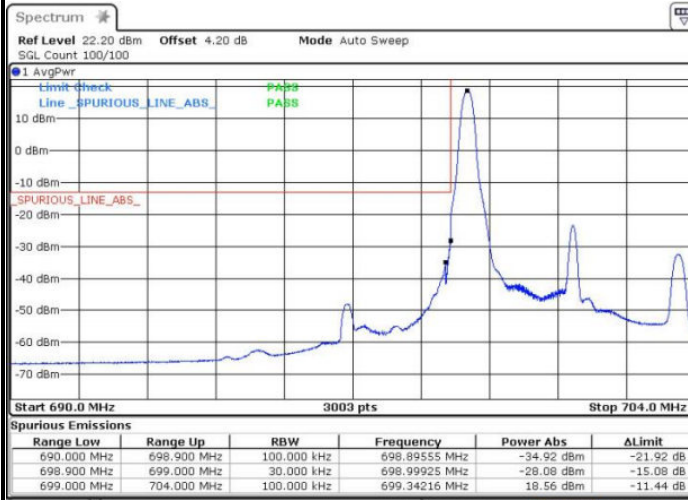
Highest Band Edge / Full RB



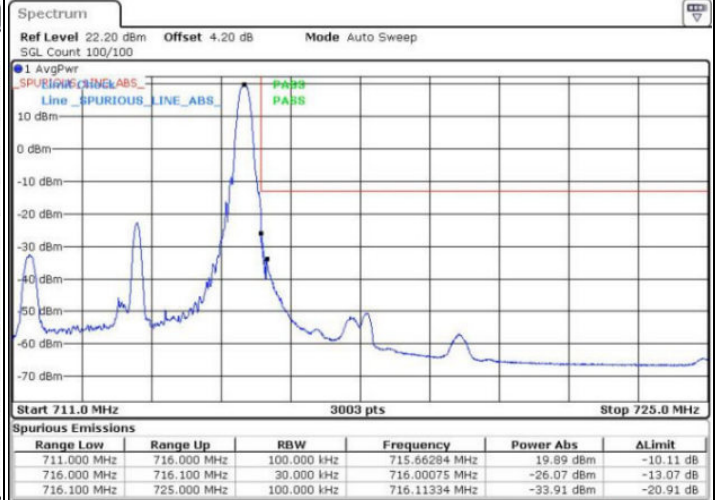


LTE Band 12 / 5MHz / QPSK

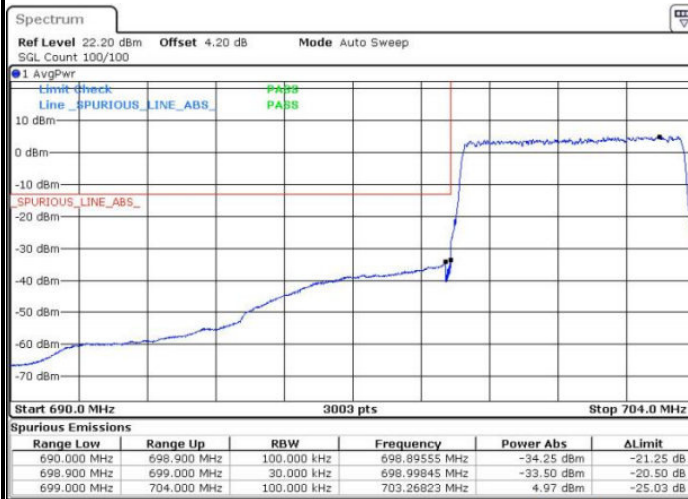
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



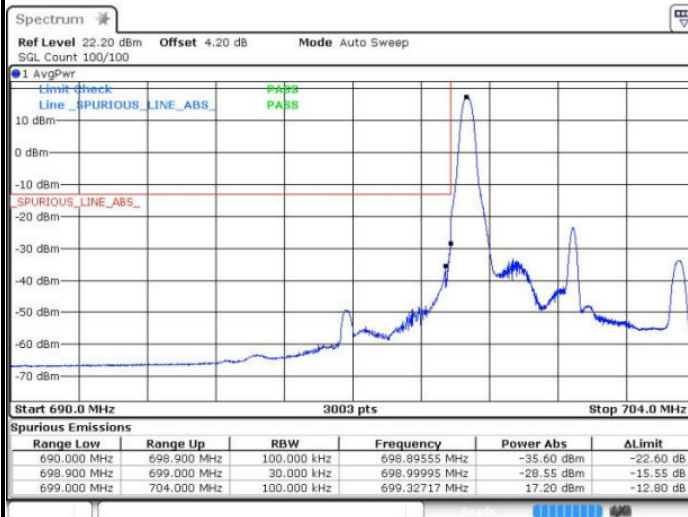
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

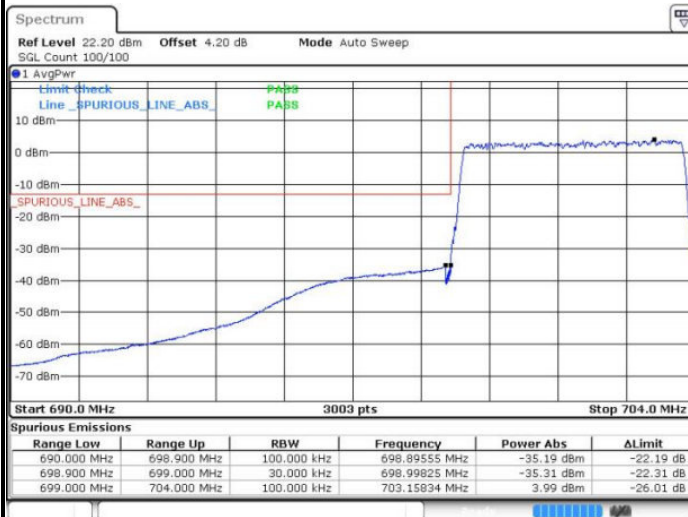
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



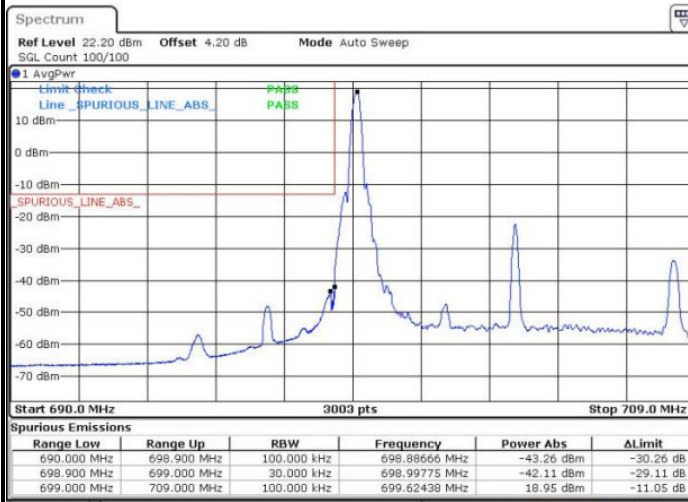
Highest Band Edge / Full RB



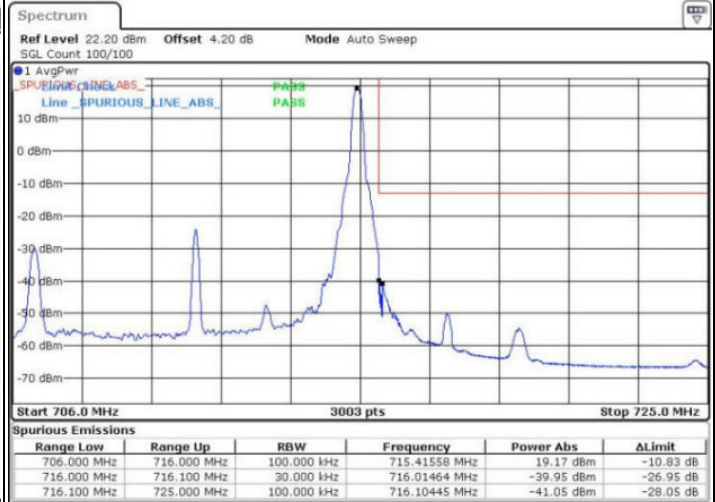


LTE Band 12 / 10MHz / QPSK

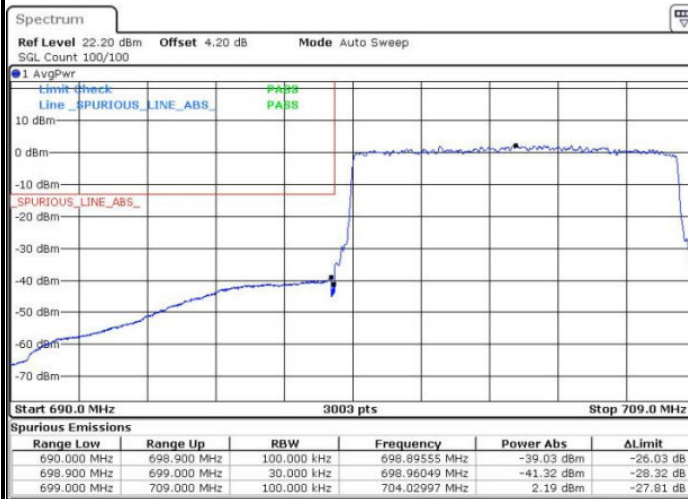
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

