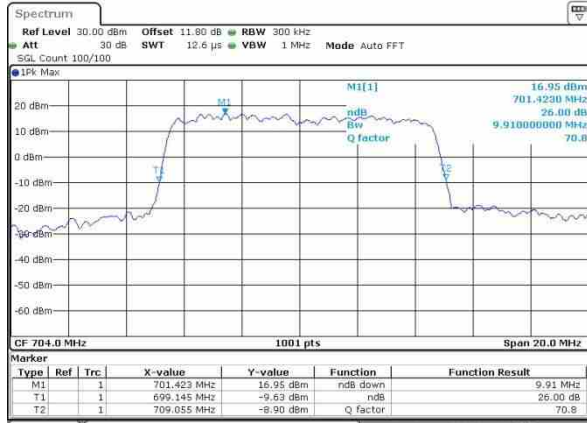


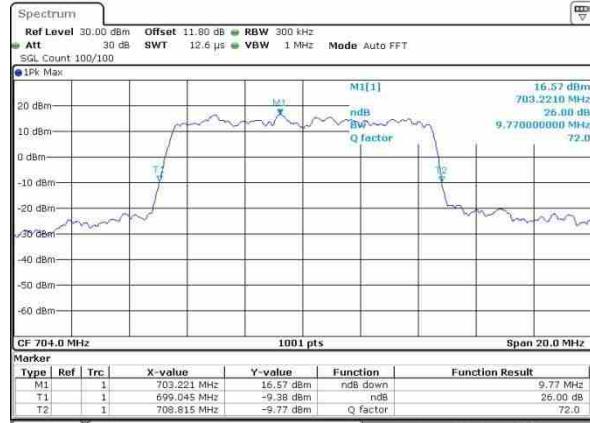


LTE Band 12

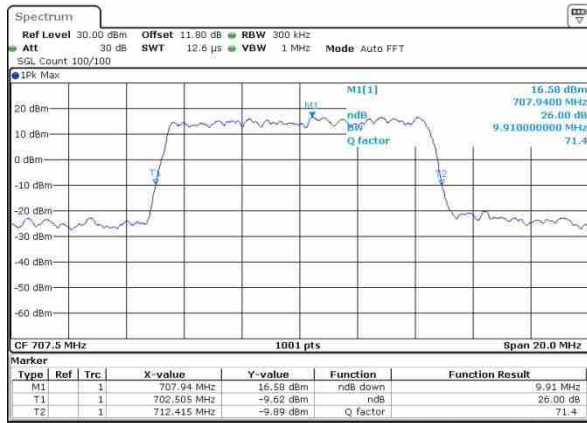
Lowest Channel / 10MHz / QPSK



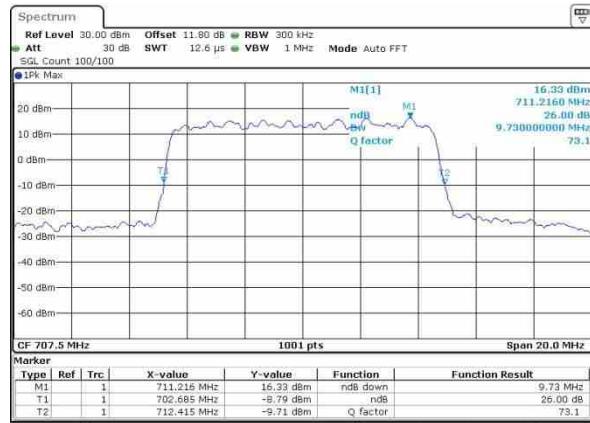
Lowest Channel / 10MHz / 16QAM



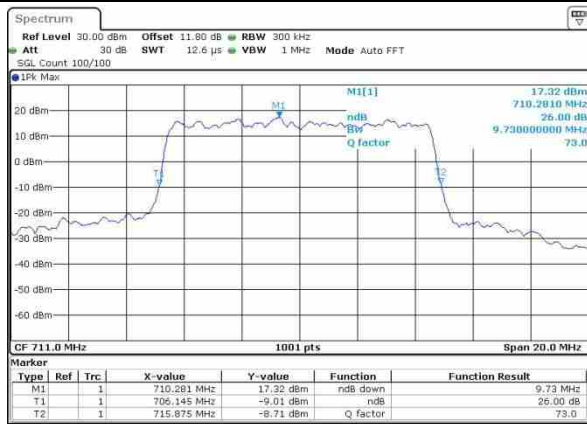
Middle Channel / 10MHz / QPSK



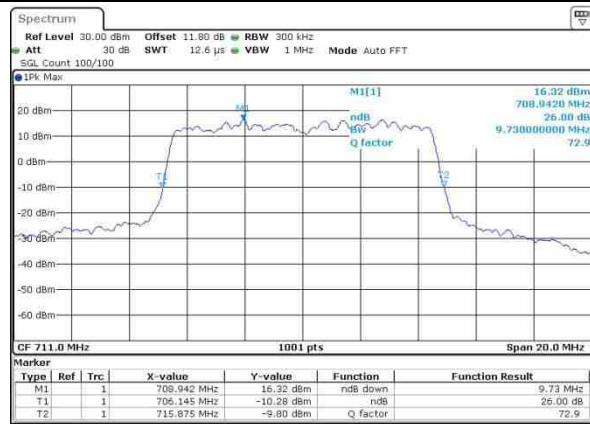
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM





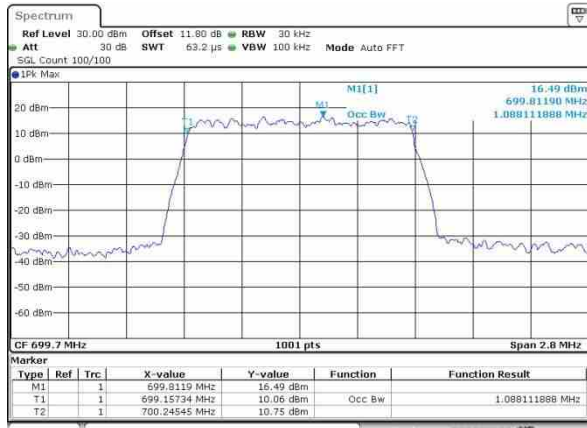
Occupied Bandwidth

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	1.09	2.72	2.71	4.48	4.47	9.05	9.05	-	-	-	-
Middle CH	1.1	1.09	2.72	2.73	4.5	4.47	8.99	8.99	-	-	-	-
Highest CH	1.09	1.1	2.72	2.72	4.49	4.48	8.97	9.03	-	-	-	-

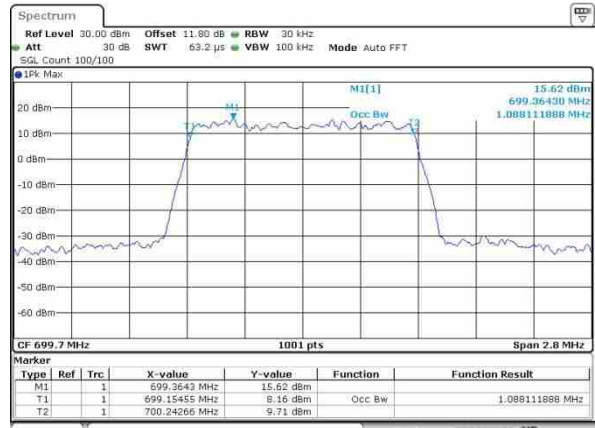


LTE Band 12

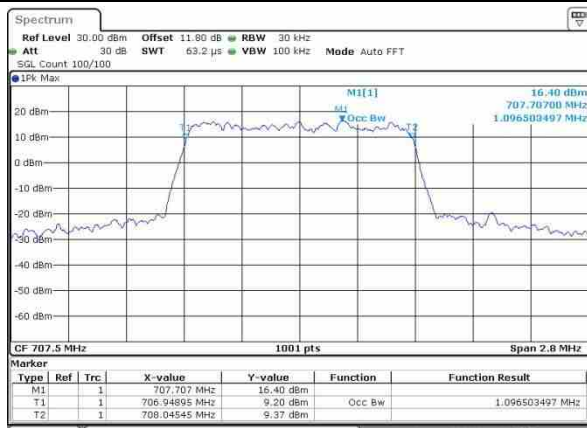
Lowest Channel / 1.4MHz / QPSK



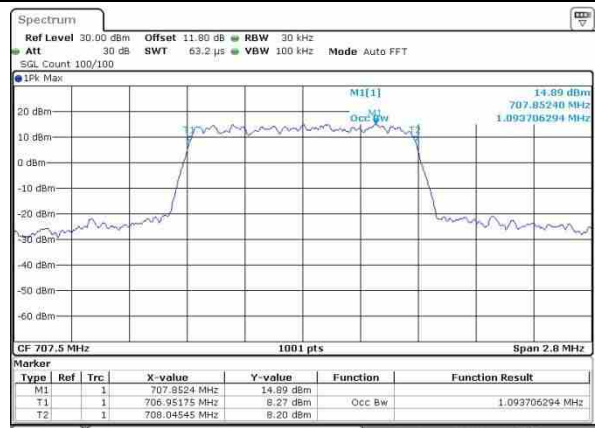
Lowest Channel / 1.4MHz / 16QAM



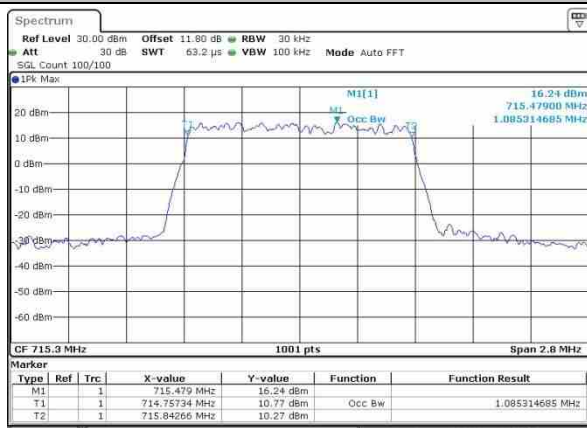
Middle Channel / 1.4MHz / QPSK



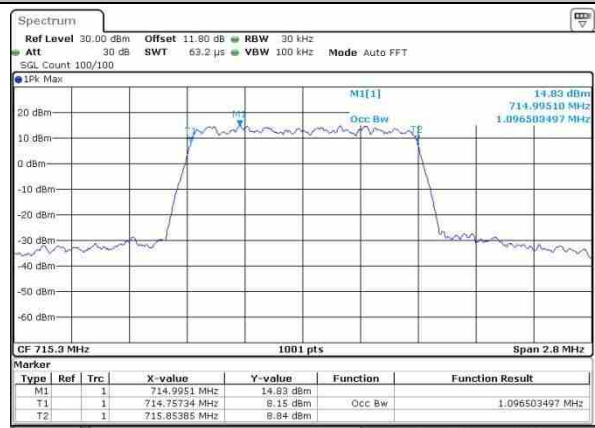
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



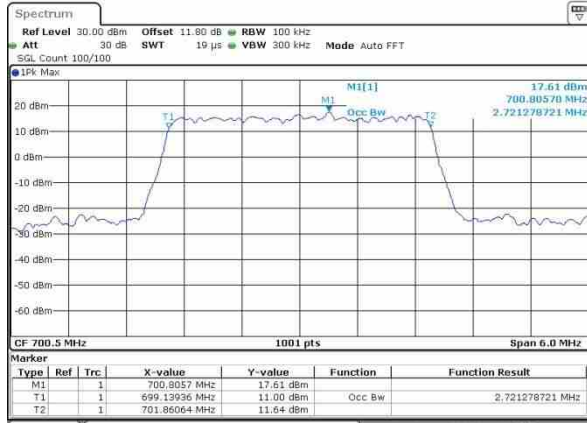
Highest Channel / 1.4MHz / 16QAM





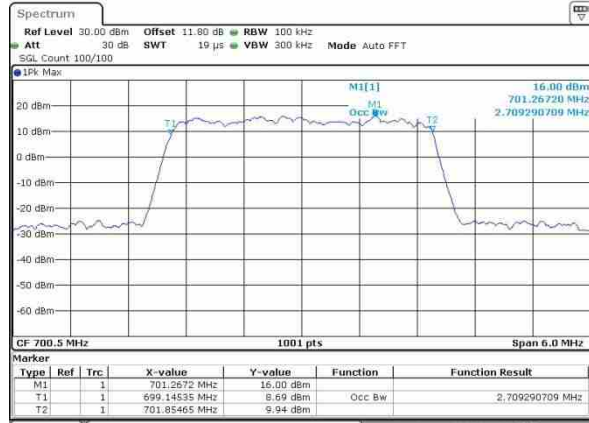
LTE Band 12

Lowest Channel / 3MHz / QPSK



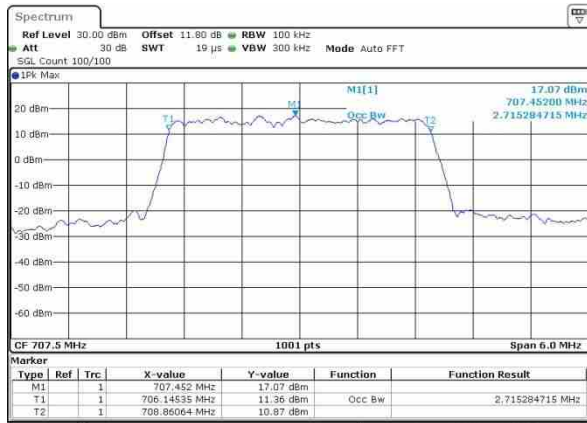
Date: 15.SEP.2015 11:14:51

Lowest Channel / 3MHz / 16QAM



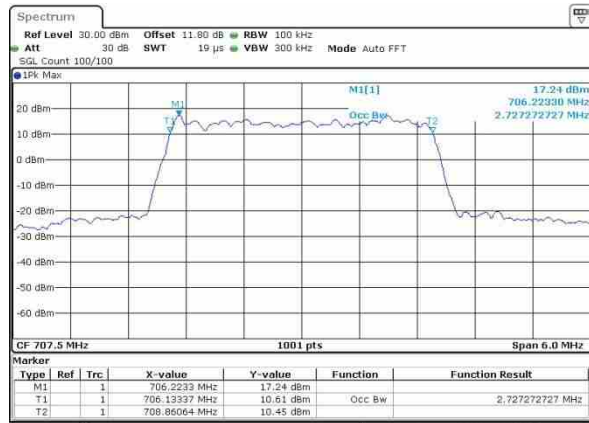
Date: 15.SEP.2015 11:15:03

Middle Channel / 3MHz / QPSK



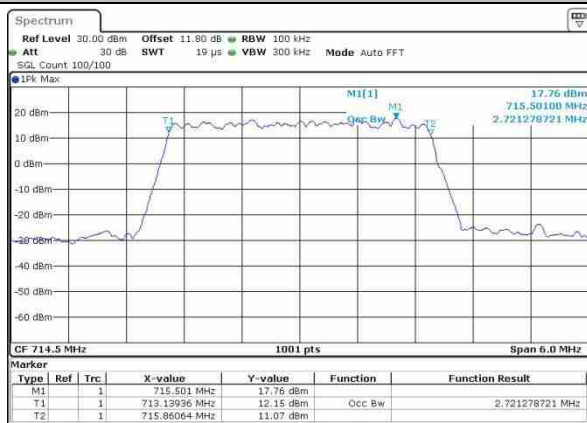
Date: 15.SEP.2015 11:25:25

Middle Channel / 3MHz / 16QAM



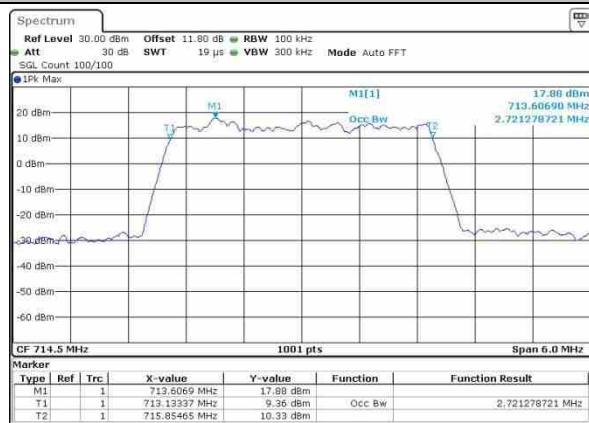
Date: 15.SEP.2015 11:25:13

Highest Channel / 3MHz / QPSK



Date: 15.SEP.2015 11:27:37

Highest Channel / 3MHz / 16QAM

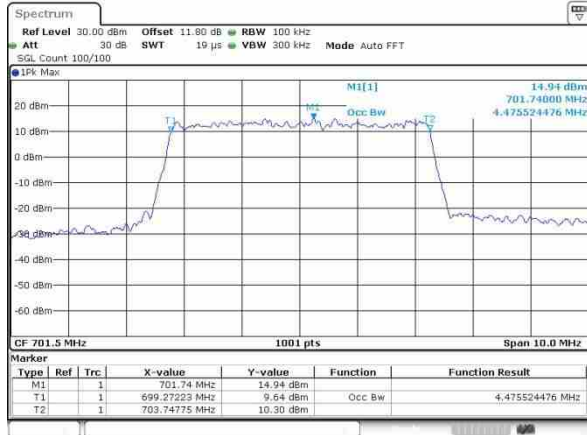


Date: 15.SEP.2015 11:28:09

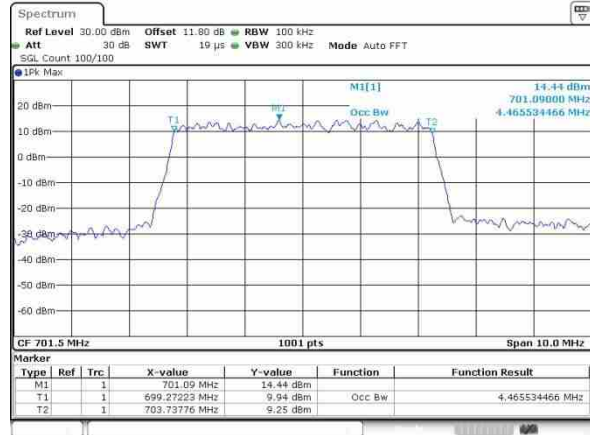


LTE Band 12

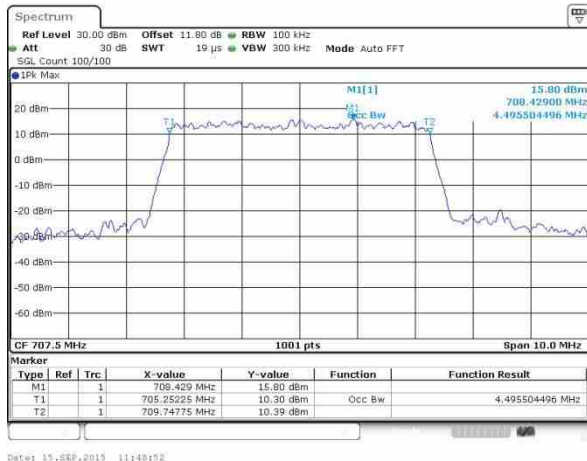
Lowest Channel / 5MHz / QPSK



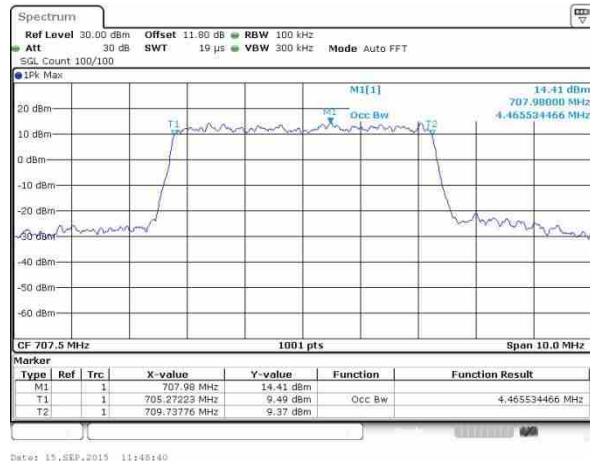
Lowest Channel / 5MHz / 16QAM



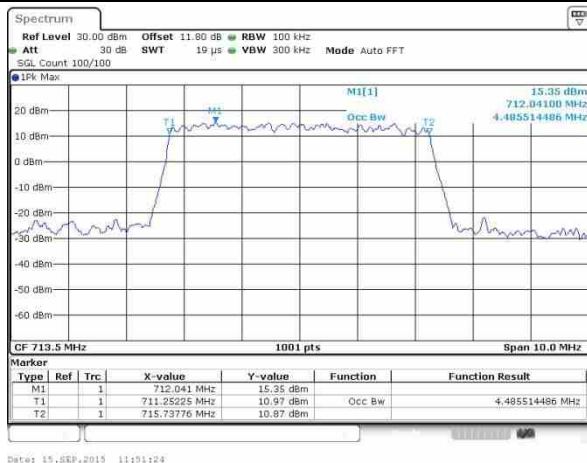
Middle Channel / 5MHz / QPSK



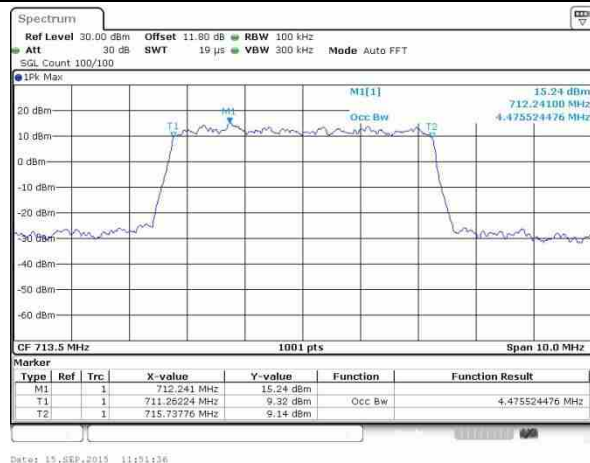
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



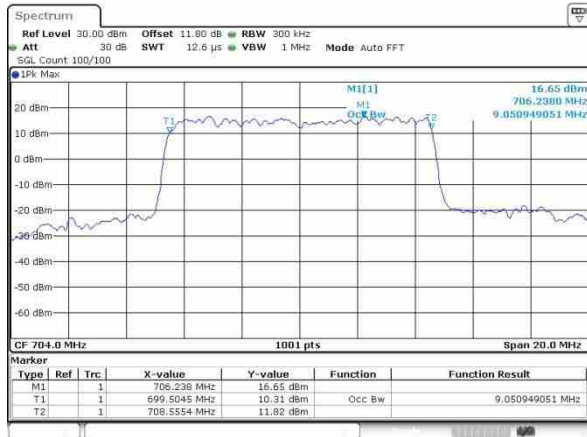
Highest Channel / 5MHz / 16QAM



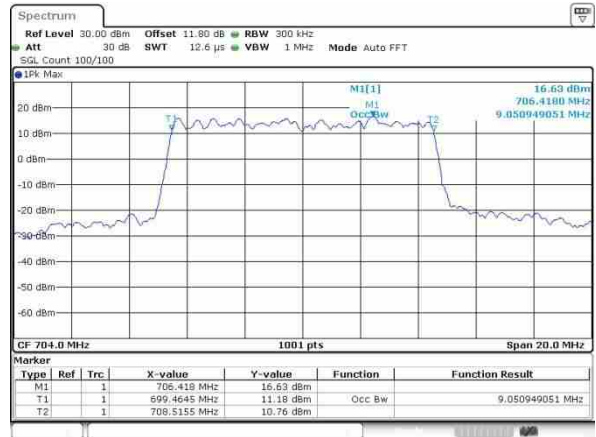


LTE Band 12

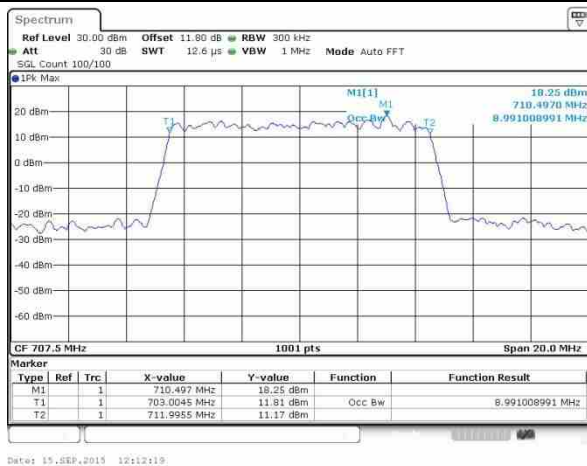
Lowest Channel / 10MHz / QPSK



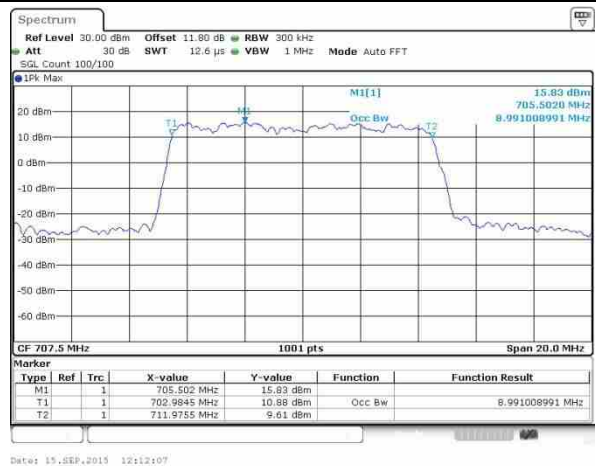
Lowest Channel / 10MHz / 16QAM



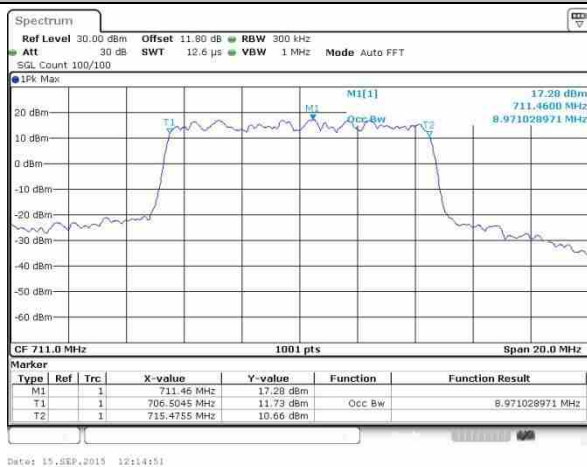
Middle Channel / 10MHz / QPSK



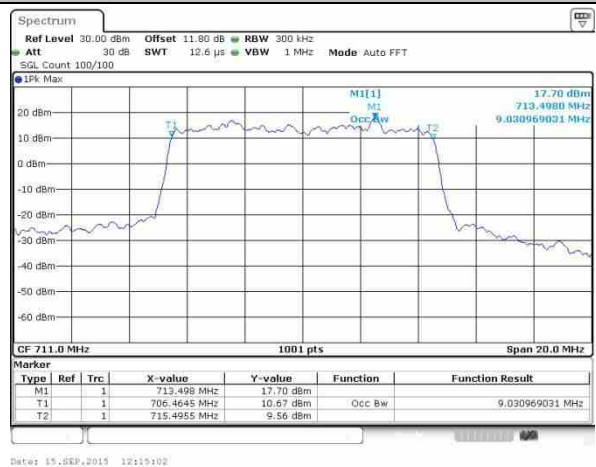
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



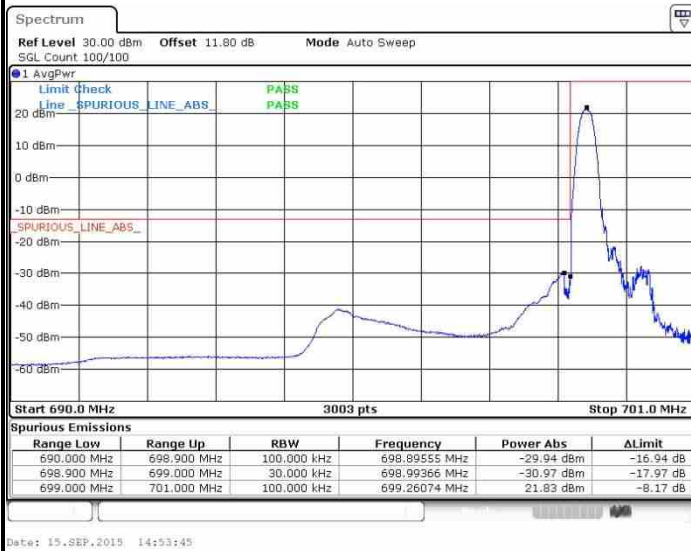


Conducted Band Edge



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



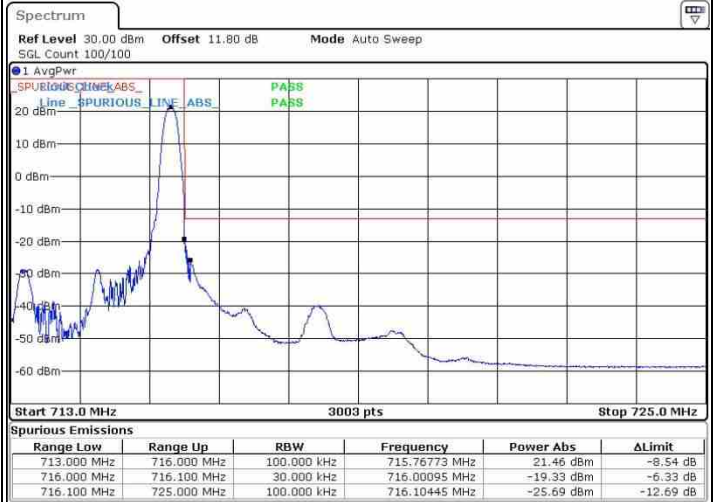


LTE Band 12 / 3MHz / QPSK

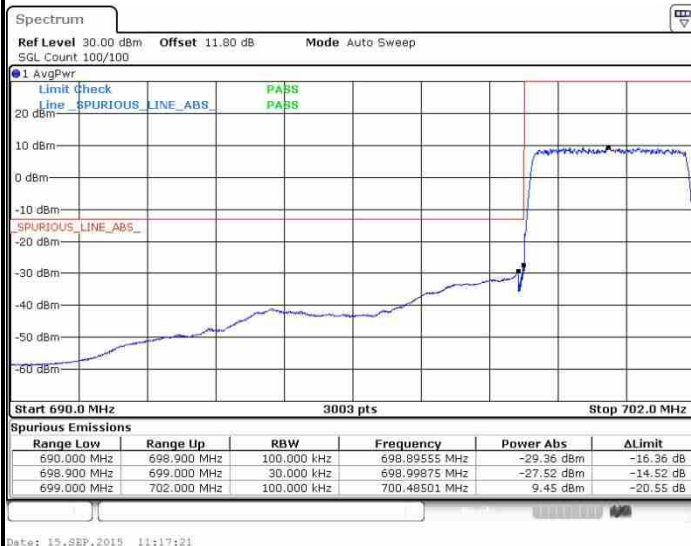
Lowest Band Edge / 1RB



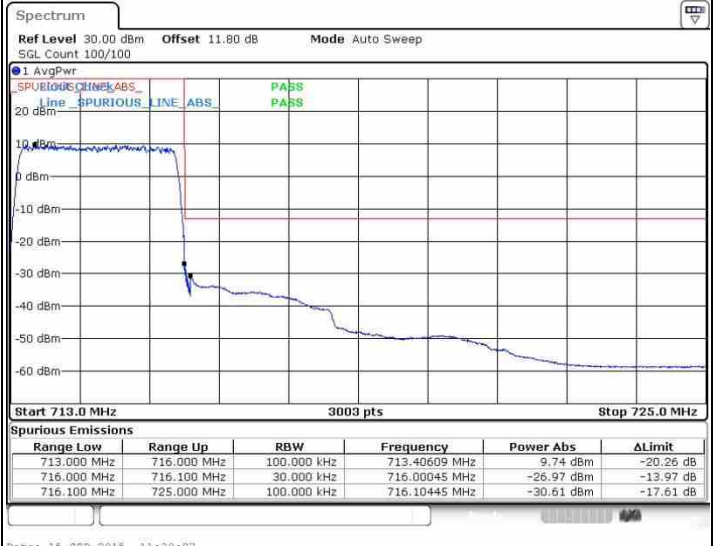
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



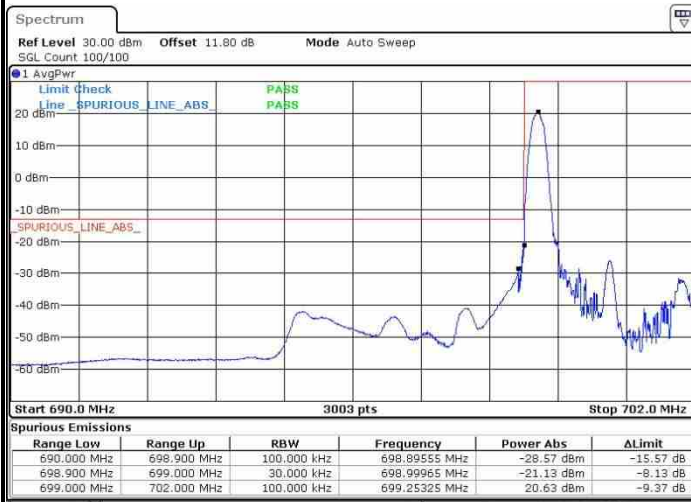
Highest Band Edge / Full RB





LTE Band 12 / 3MHz / 16QAM

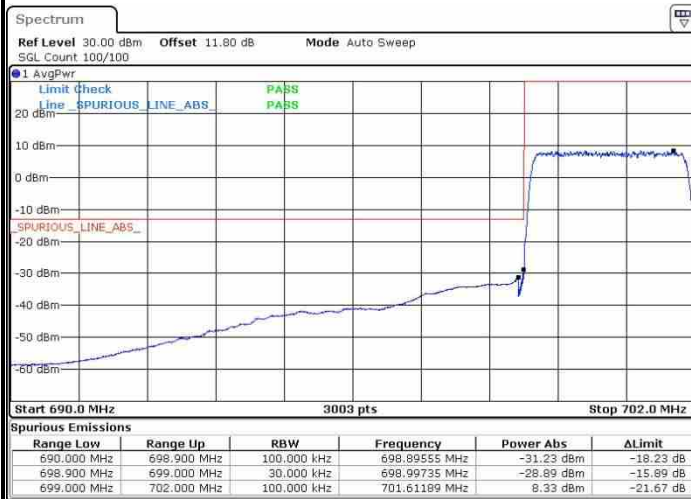
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



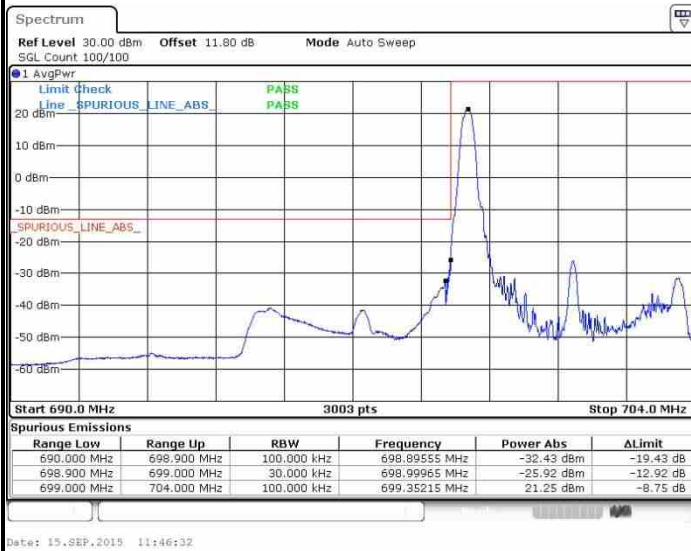
Highest Band Edge / Full RB



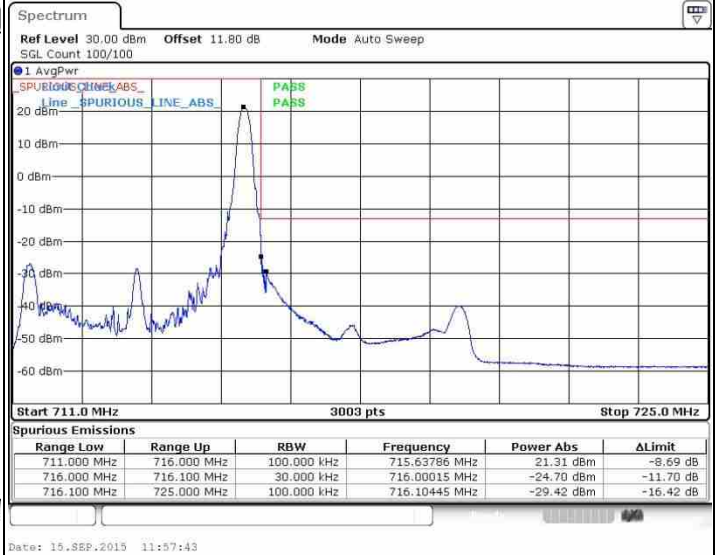


LTE Band 12 / 5MHz / QPSK

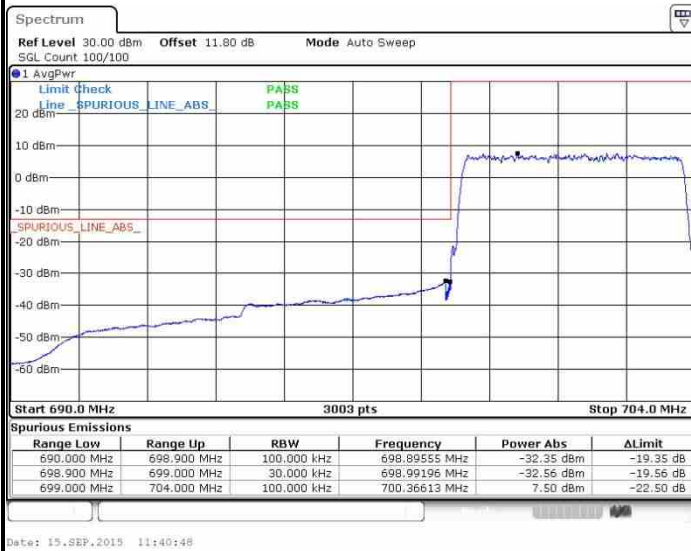
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



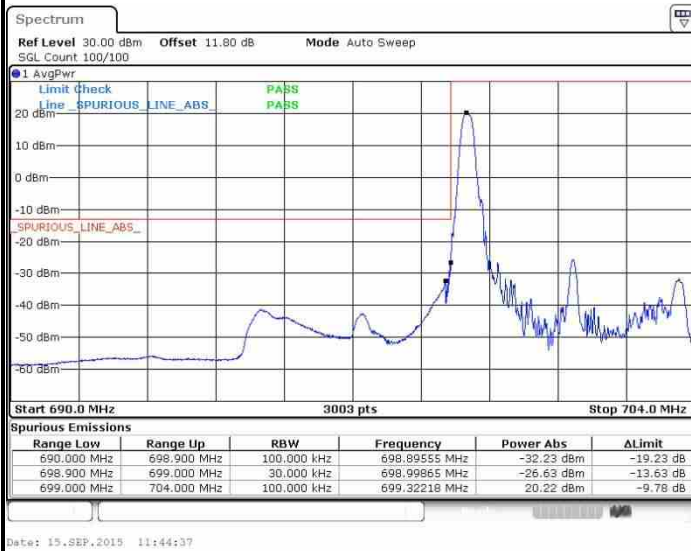
Highest Band Edge / Full RB



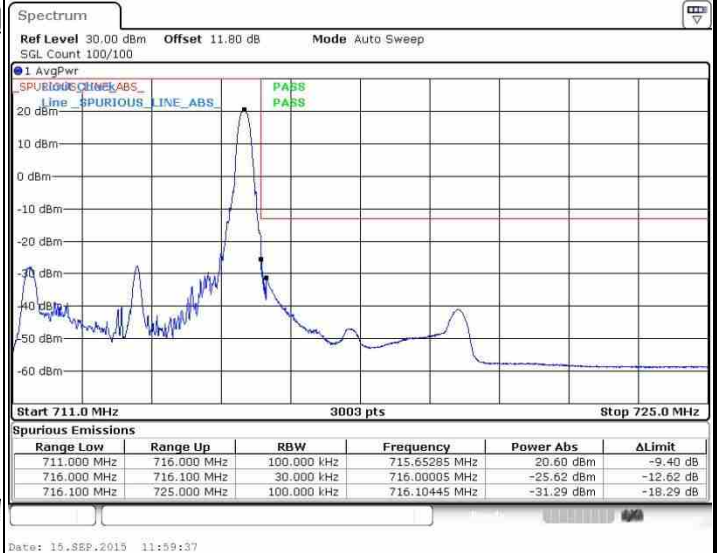


LTE Band 12 / 5MHz / 16QAM

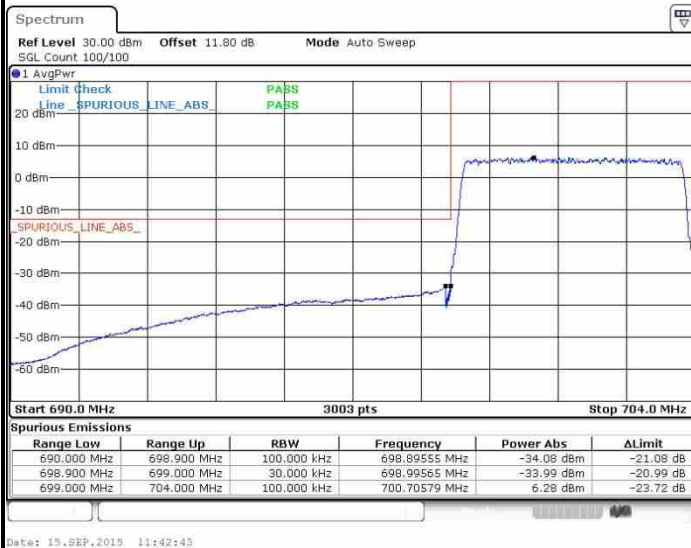
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



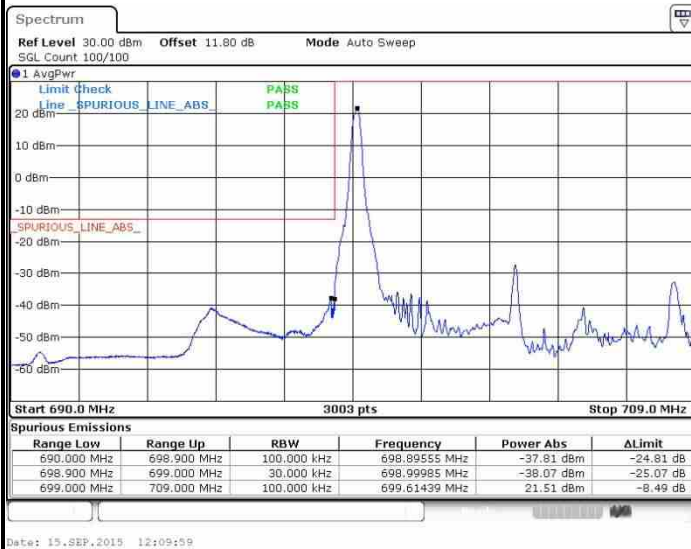
Highest Band Edge / Full RB



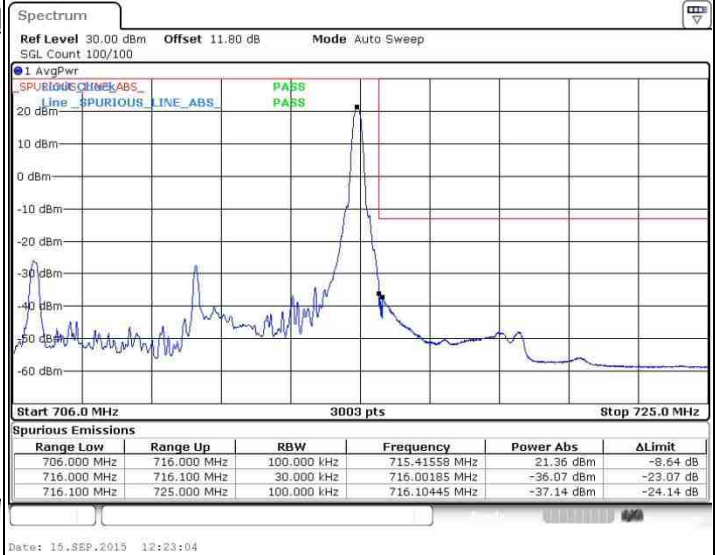


LTE Band 12 / 10MHz / QPSK

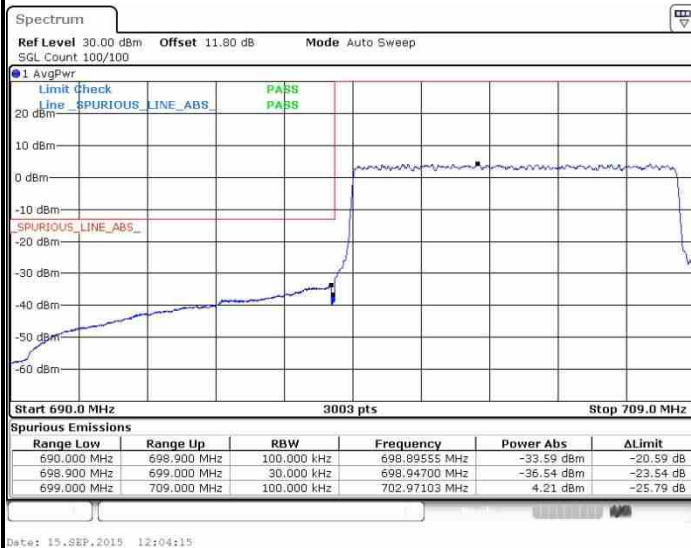
Lowest Band Edge / 1 RB



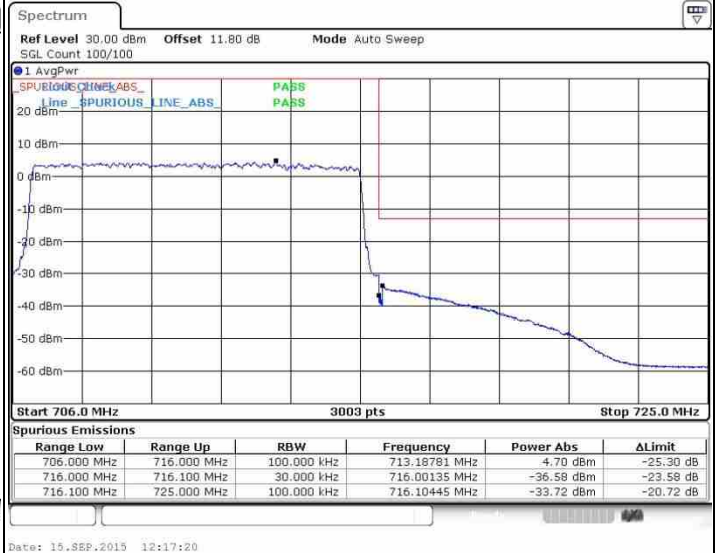
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



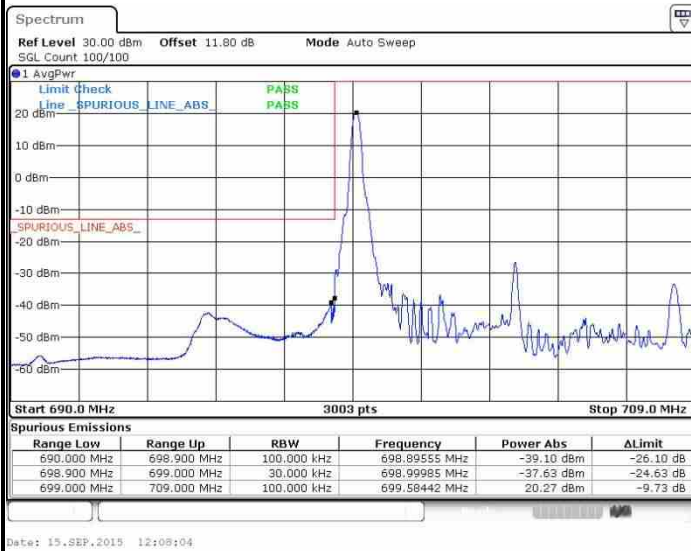
Highest Band Edge / Full RB



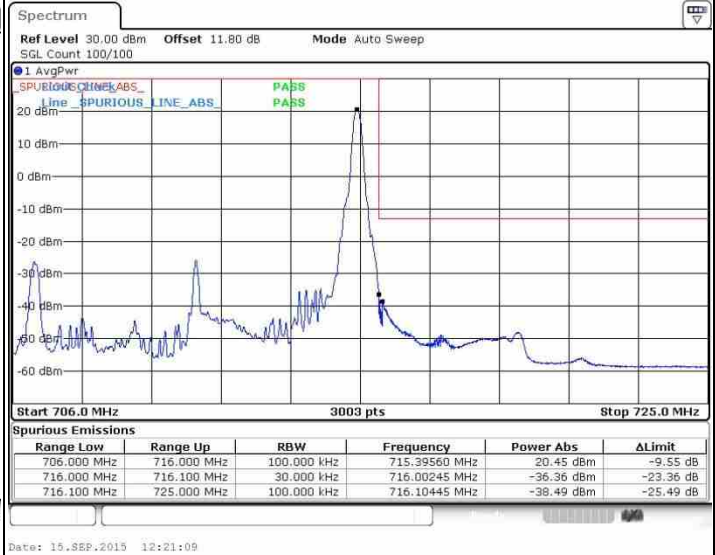


LTE Band 12 / 10MHz / 16QAM

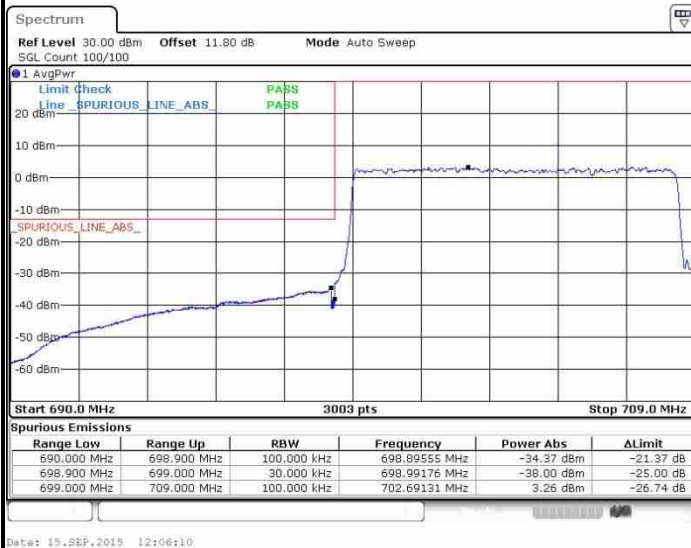
Lowest Band Edge / 1 RB



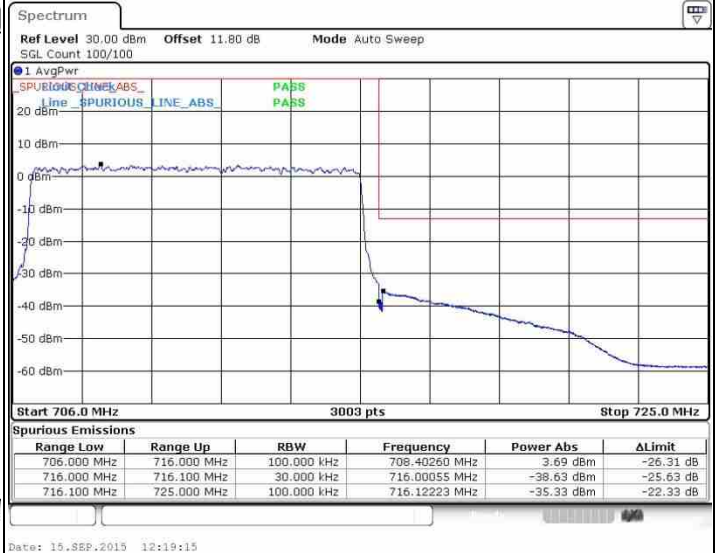
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



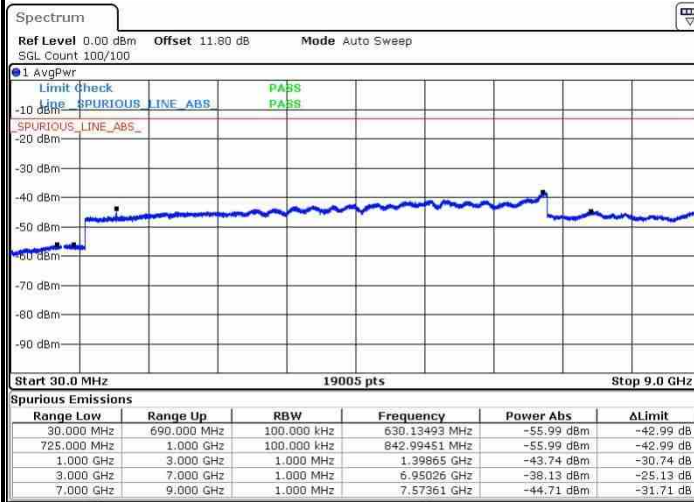


Conducted Spurious Emission



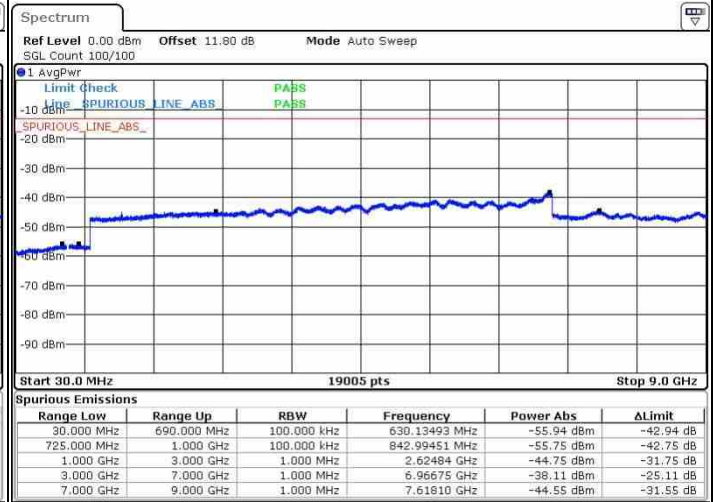
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



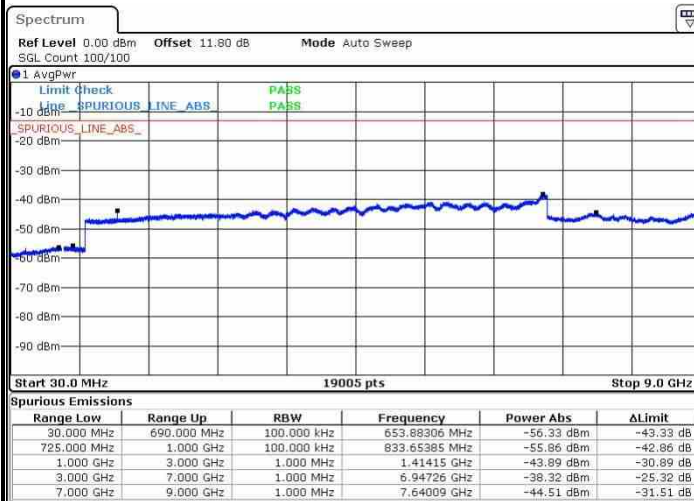
Date: 15.SEP.2015 14:54:43

Lowest Channel / 16QAM



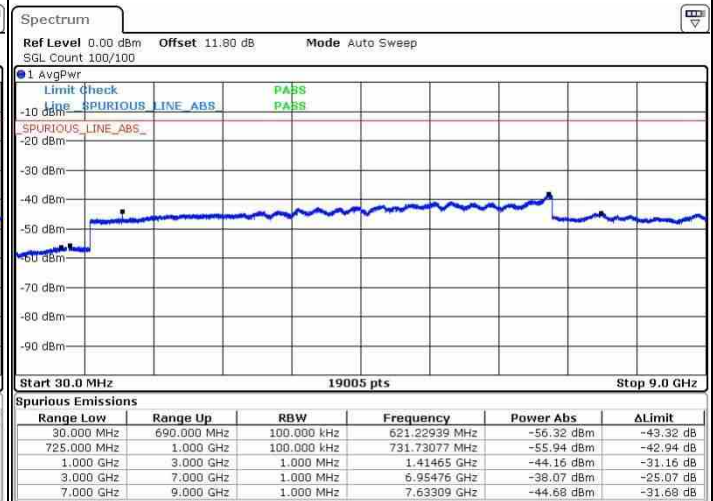
Date: 15.SEP.2015 14:55:42

Middle Channel / QPSK



Date: 15.SEP.2015 14:58:25

Middle Channel / 16QAM

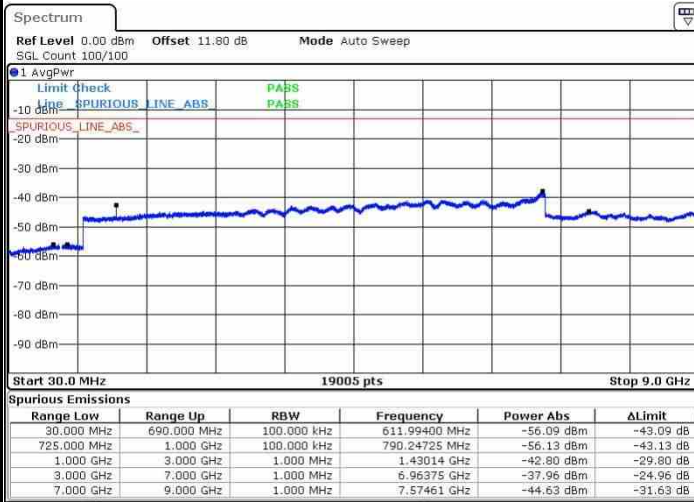


Date: 15.SEP.2015 14:57:27



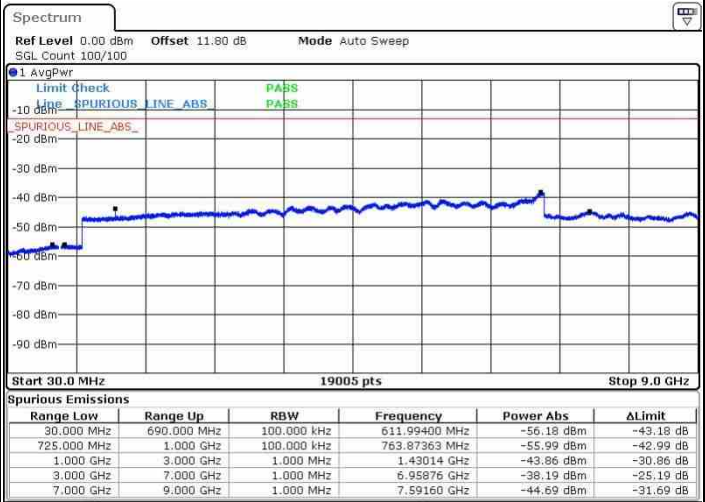
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 15.SEP.2015 15:07:48

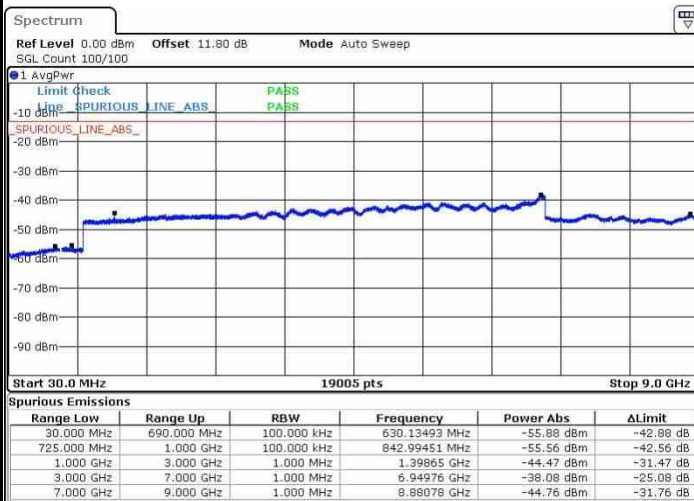
Highest Channel / 16QAM



Date: 15.SEP.2015 15:08:47

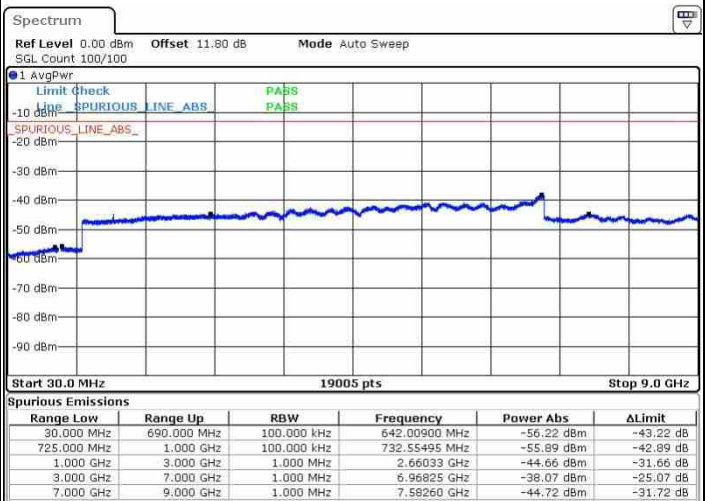
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 15.SEP.2015 11:24:02

Lowest Channel / 16QAM

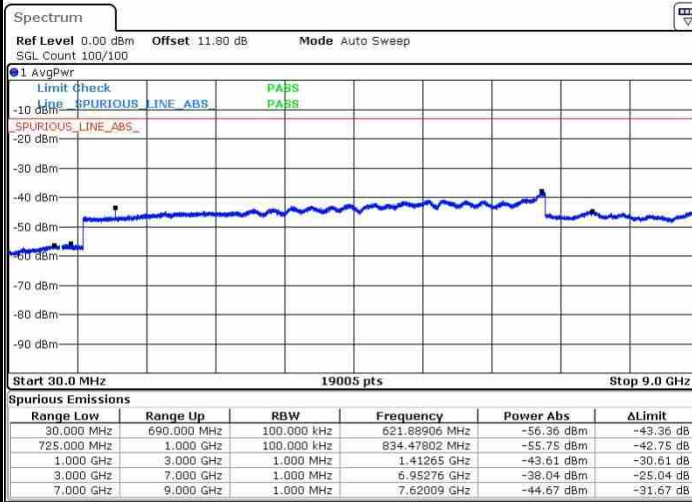


Date: 15.SEP.2015 11:25:01



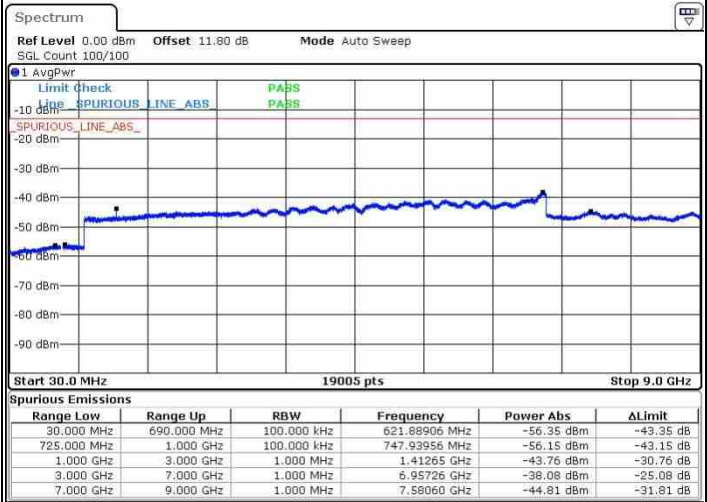
LTE Band 12 / 3MHz

Middle Channel / QPSK



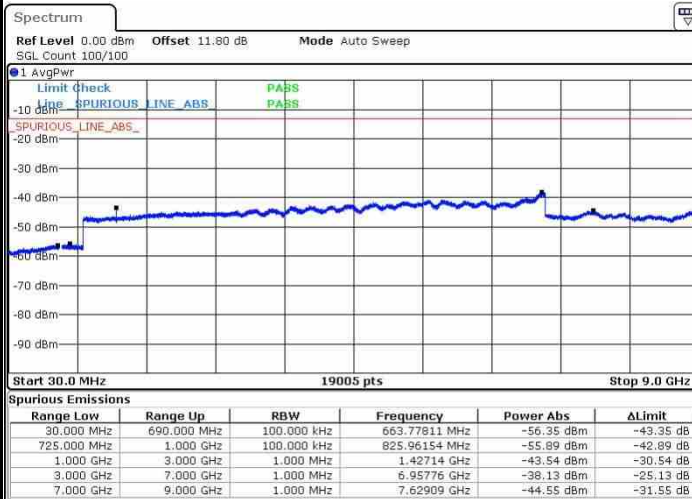
Date: 15.SEP.2015 11:27:44

Middle Channel / 16QAM



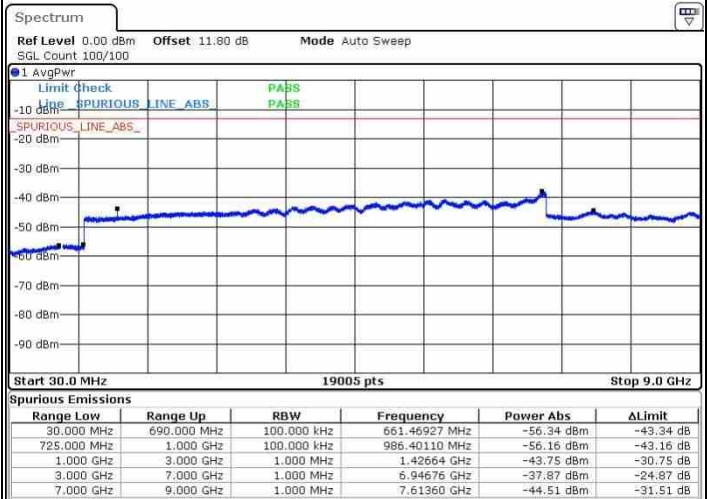
Date: 15.SEP.2015 11:26:46

Highest Channel / QPSK



Date: 15.SEP.2015 11:37:08

Highest Channel / 16QAM

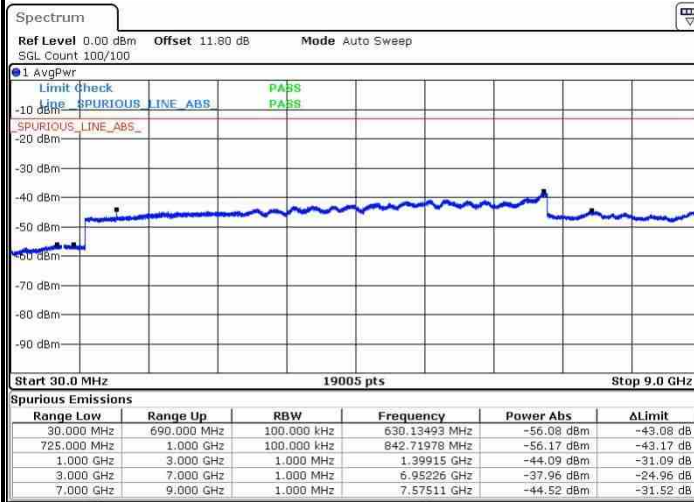


Date: 15.SEP.2015 11:38:06



LTE Band 12 / 5MHz

Lowest Channel / QPSK



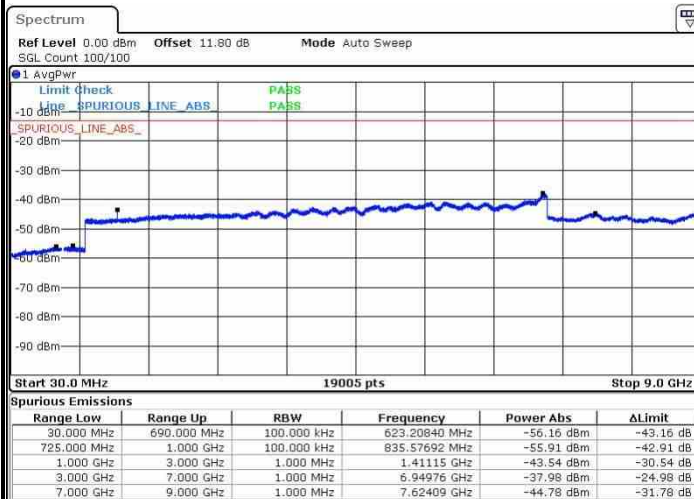
Date: 15.SEP.2015 11:47:29

Lowest Channel / 16QAM



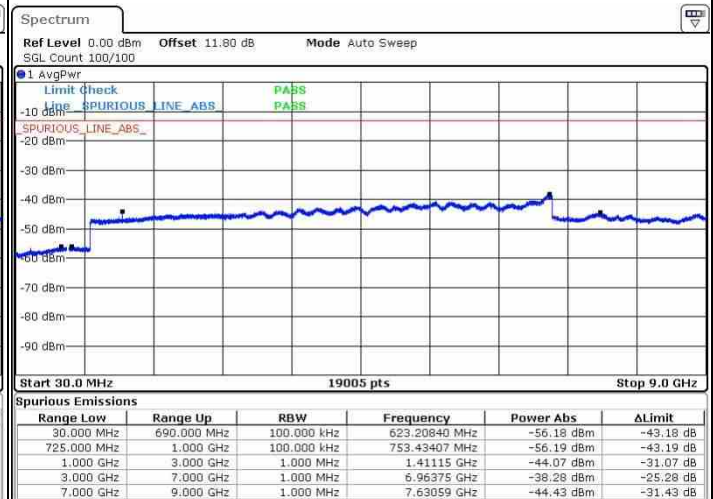
Date: 15.SEP.2015 11:48:28

Middle Channel / QPSK



Date: 15.SEP.2015 11:51:11

Middle Channel / 16QAM

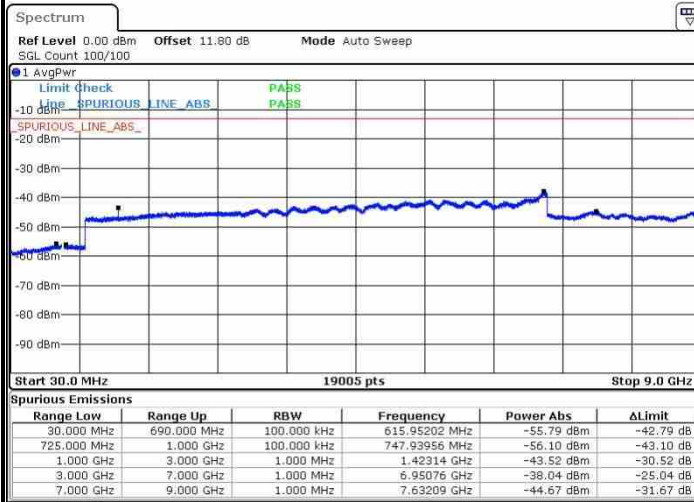


Date: 15.SEP.2015 11:50:13



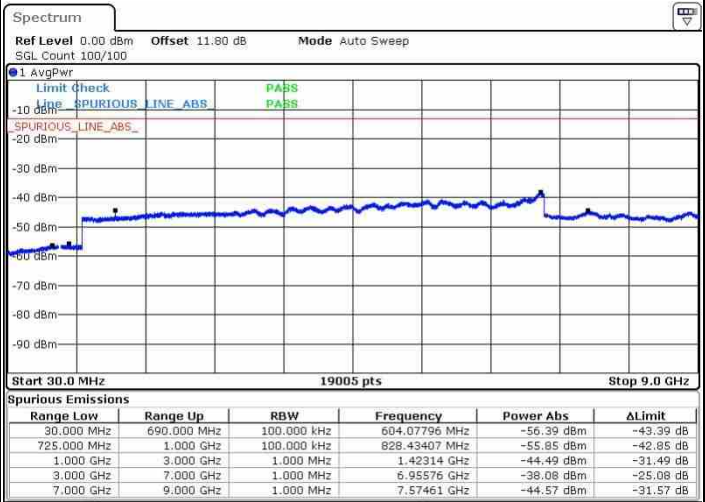
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 15.SEP.2015 12:01:33

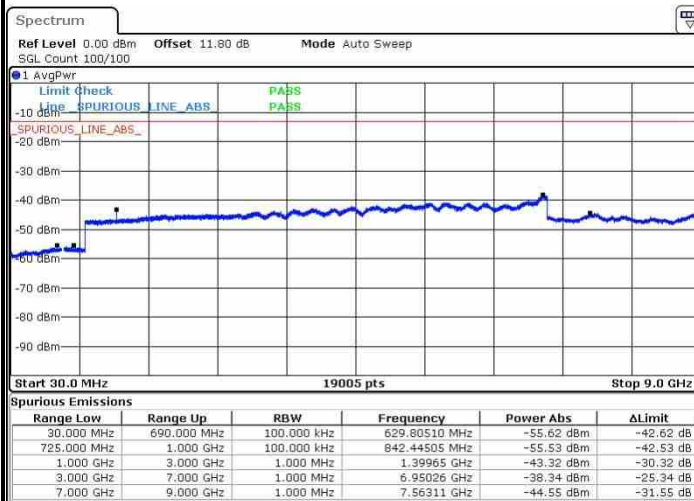
Highest Channel / 16QAM



Date: 15.SEP.2015 12:00:35

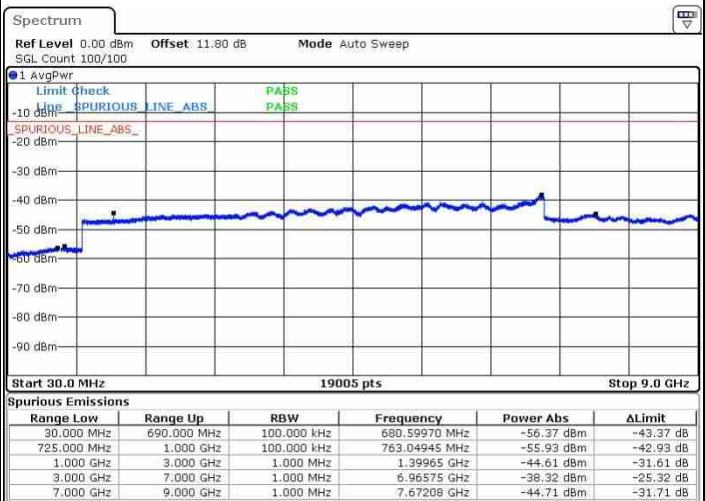
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 15.SEP.2015 12:10:56

Lowest Channel / 16QAM

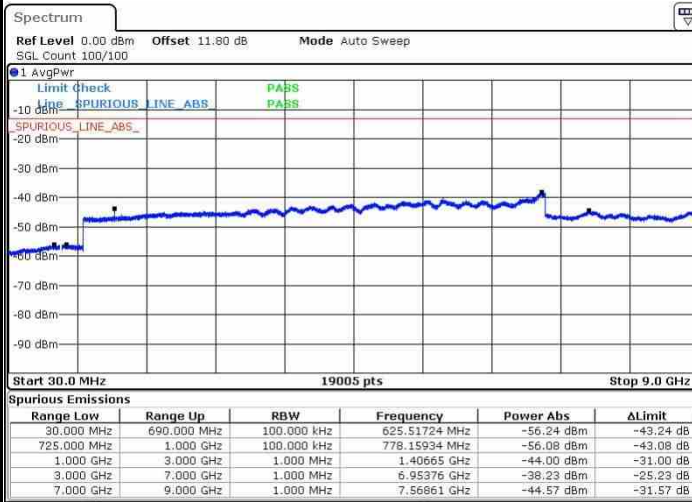


Date: 15.SEP.2015 12:11:54



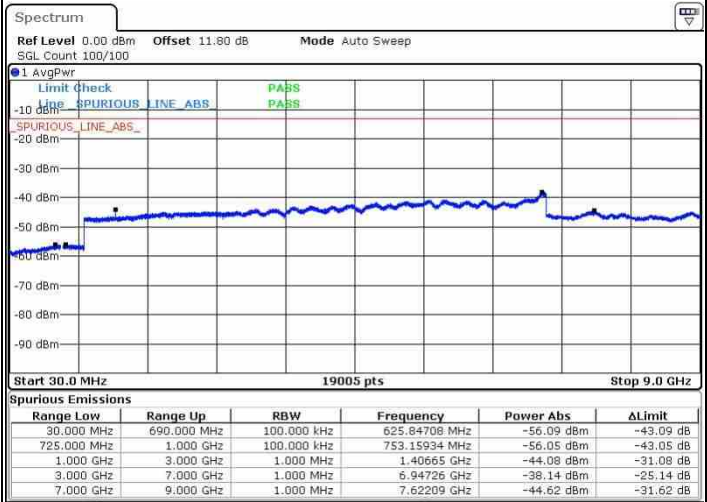
LTE Band 12 / 10MHz

Middle Channel / QPSK



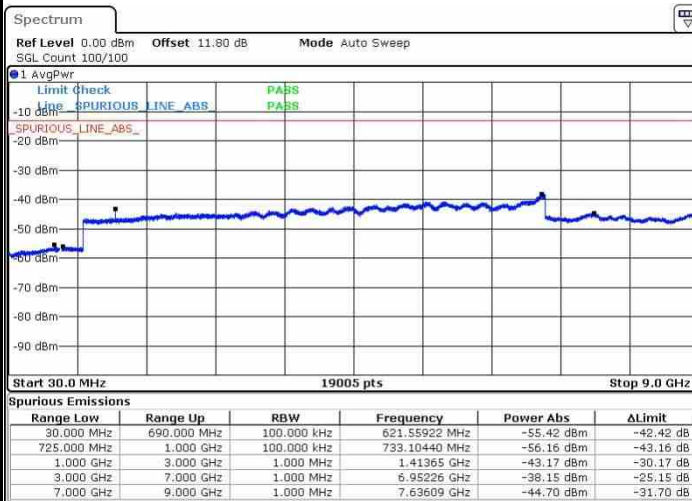
Date: 15.SEP.2015 12:14:38

Middle Channel / 16QAM



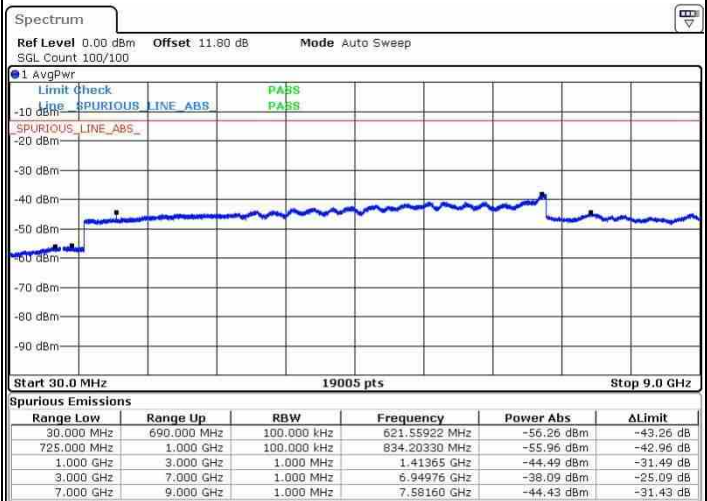
Date: 15.SEP.2015 12:13:40

Highest Channel / QPSK



Date: 15.SEP.2015 12:24:01

Highest Channel / 16QAM



Date: 15.SEP.2015 12:24:59

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	0.0098	PASS
40	Normal Voltage	0.0092	
30	Normal Voltage	0.0090	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0065	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0079	

Note:

1. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage =4.2 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 17

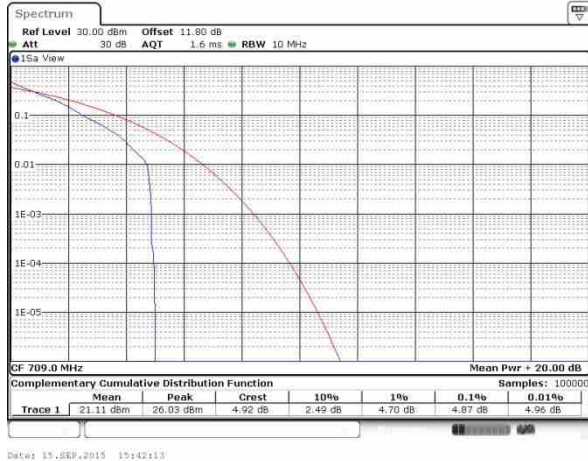
Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.87	4.99	5.8	5.86	PASS
Middle CH	4.99	4.96	6	5.86	
Highest CH	4.93	4.96	5.88	5.83	



LTE Band 17 / 10MHz / QPSK

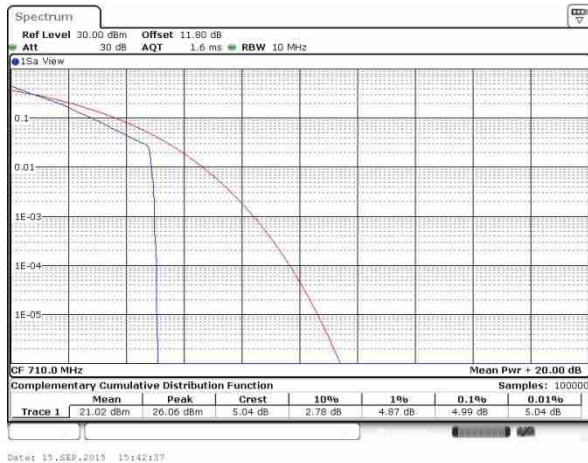
Lowest Channel / 1RB



Lowest Channel / Full RB



Middle Channel/ 1RB



Middle Channel / Full RB

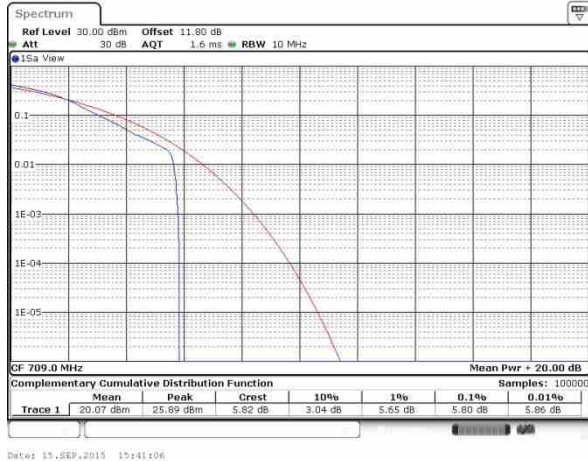
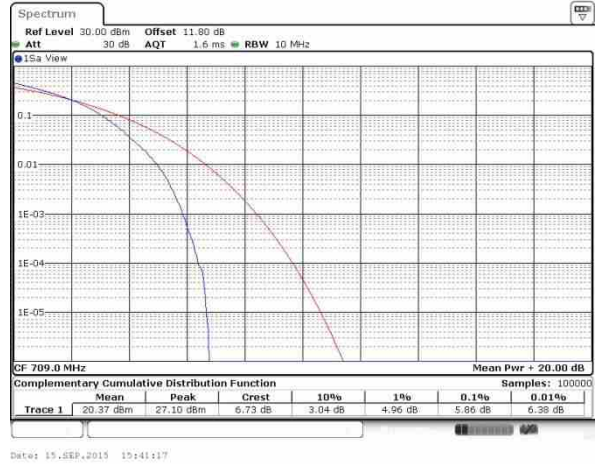
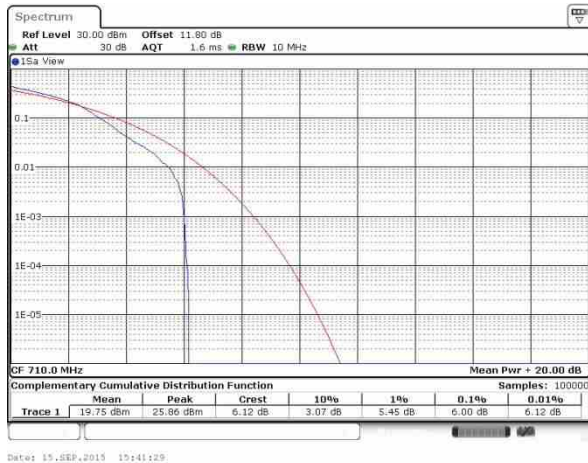
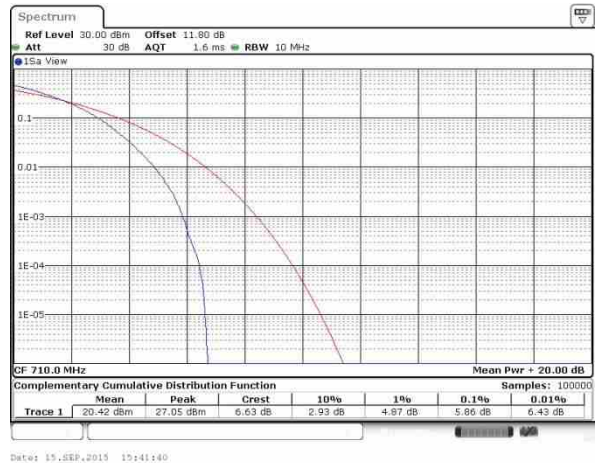
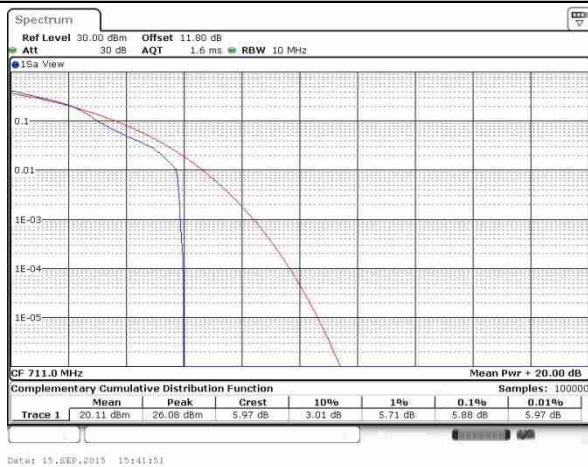
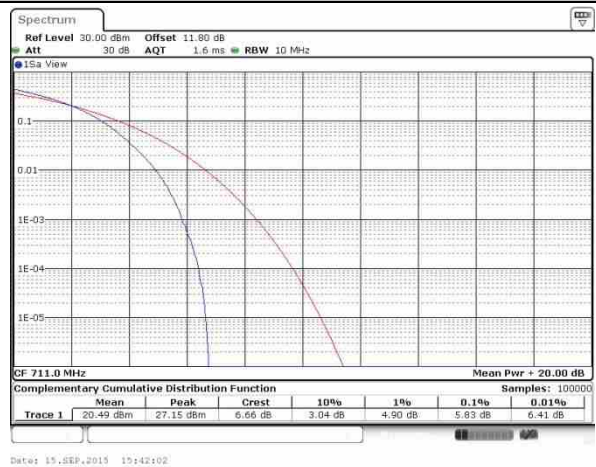


Highest Channel/ 1RB



Highest Channel / Full RB



LTE Band 17 / 10MHz / 16QAM
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel/ 1RB

Middle Channel / Full RB

Highest Channel/ 1RB

Highest Channel / Full RB




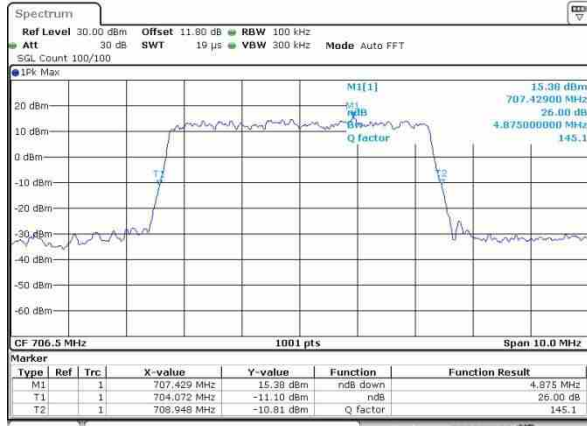
26dB Bandwidth

Mode	LTE Band 17 : 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	-	-	-	-	4.88	4.92	9.65	9.93	-	-	-	-
Middle CH	-	-	-	-	4.95	4.85	9.91	9.77	-	-	-	-
Highest CH	-	-	-	-	4.87	4.93	9.77	9.81	-	-	-	-

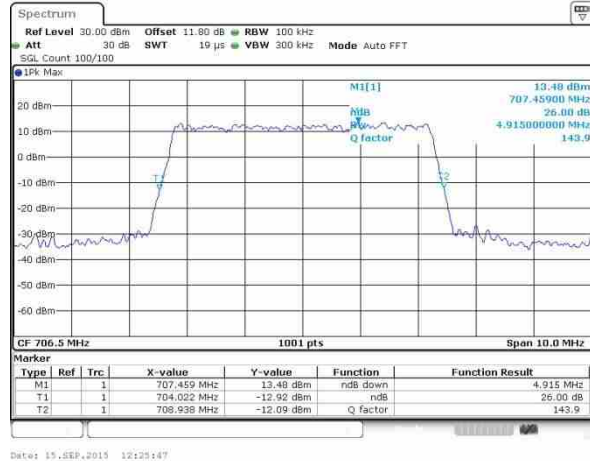


LTE Band 17

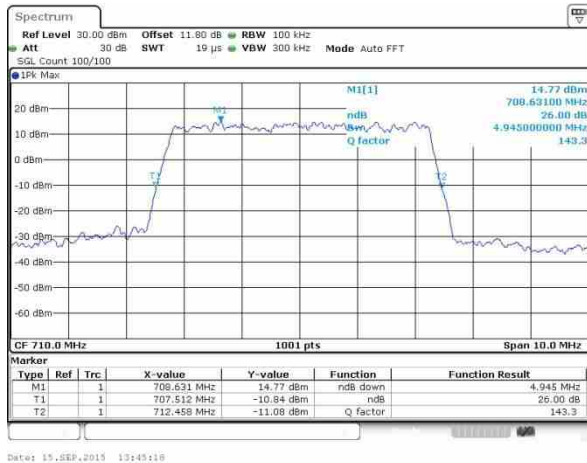
Lowest Channel / 5MHz / QPSK



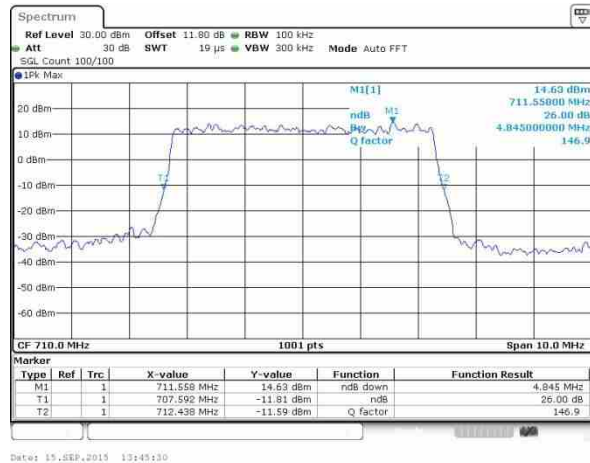
Lowest Channel / 5MHz / 16QAM



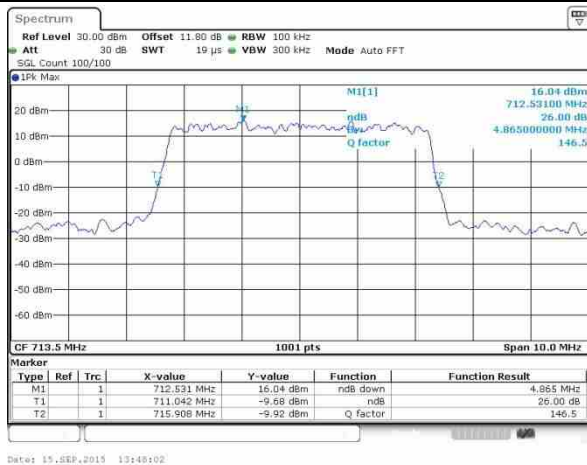
Middle Channel / 5MHz / QPSK



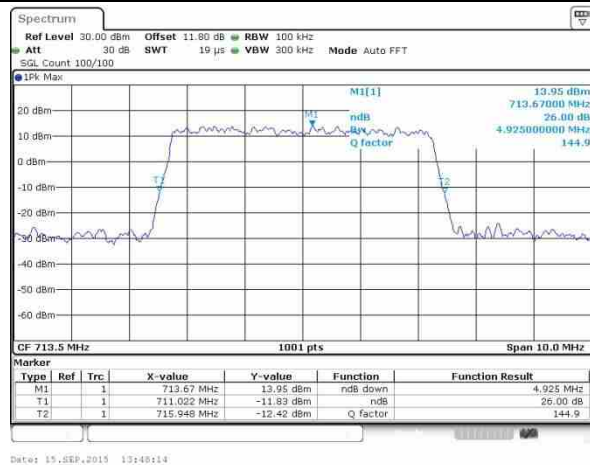
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



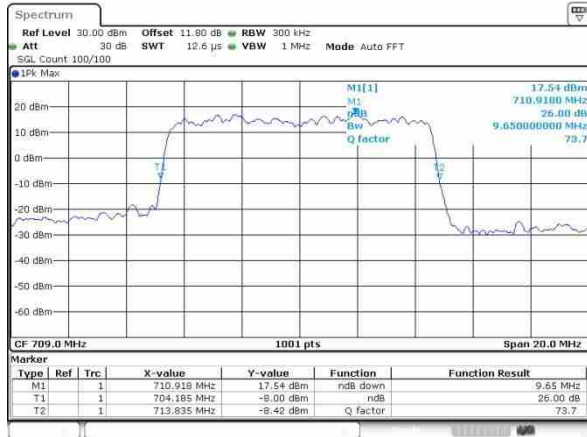
Highest Channel / 5MHz / 16QAM



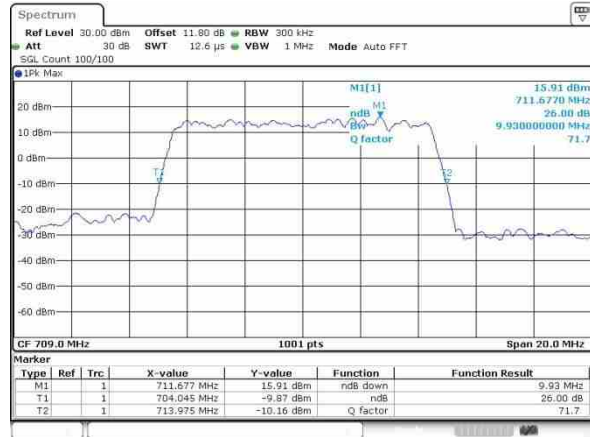


LTE Band 17

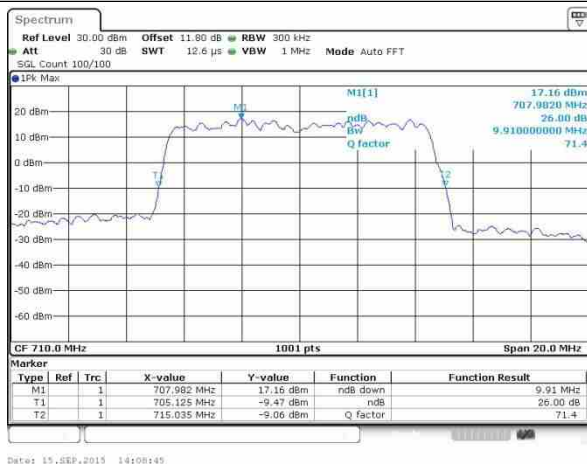
Lowest Channel / 10MHz / QPSK



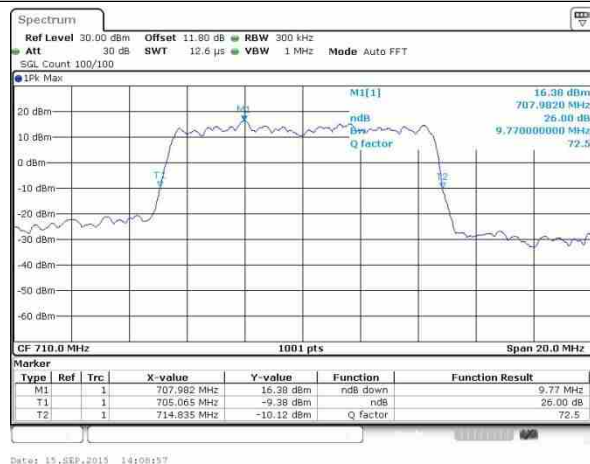
Lowest Channel / 10MHz / 16QAM



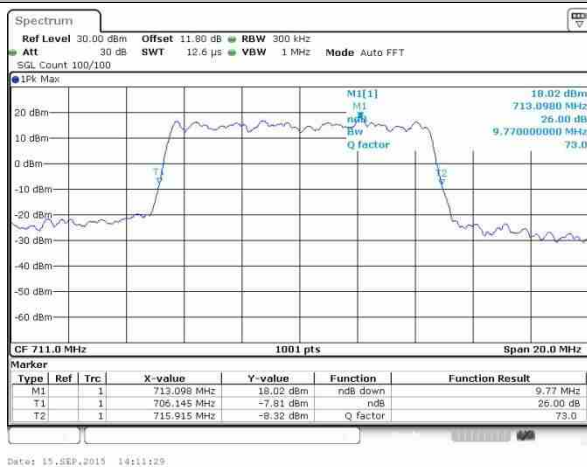
Middle Channel / 10MHz / QPSK



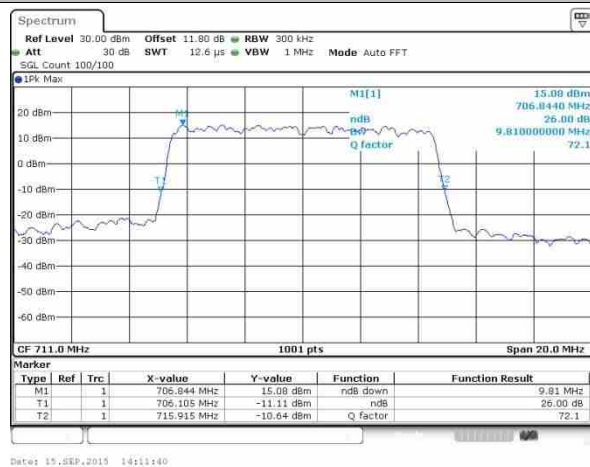
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM





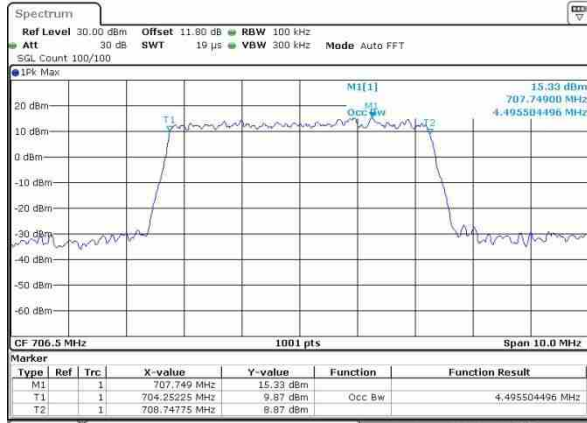
Occupied Bandwidth

Mode	LTE Band 17 : 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	-	-	-	-	4.5	4.47	9.03	8.99	-	-	-	-
Middle CH	-	-	-	-	4.5	4.5	9.03	8.99	-	-	-	-
Highest CH	-	-	-	-	4.5	4.49	9.01	9.05	-	-	-	-

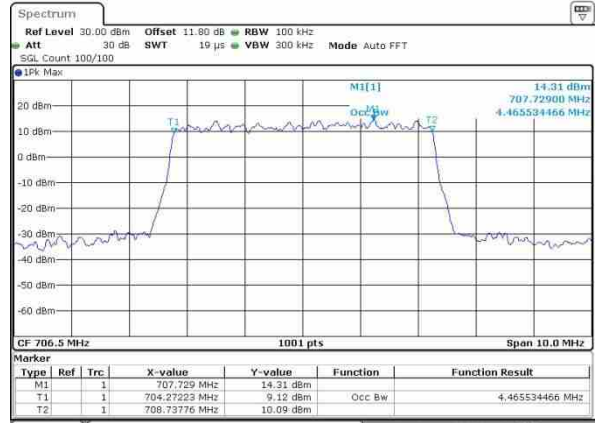


LTE Band 17

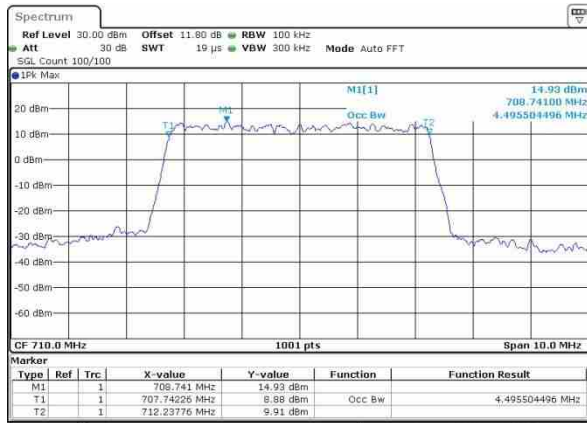
Lowest Channel / 5MHz / QPSK



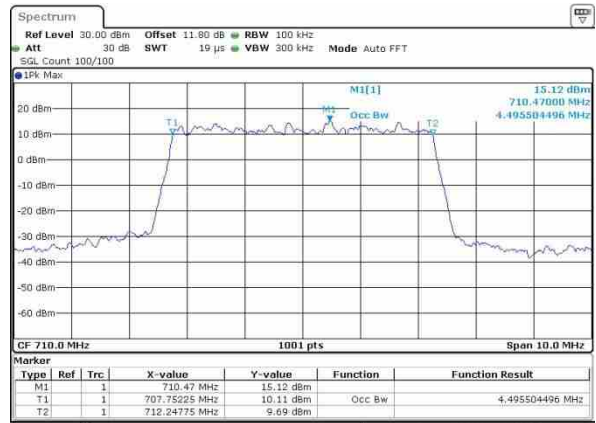
Lowest Channel / 5MHz / 16QAM



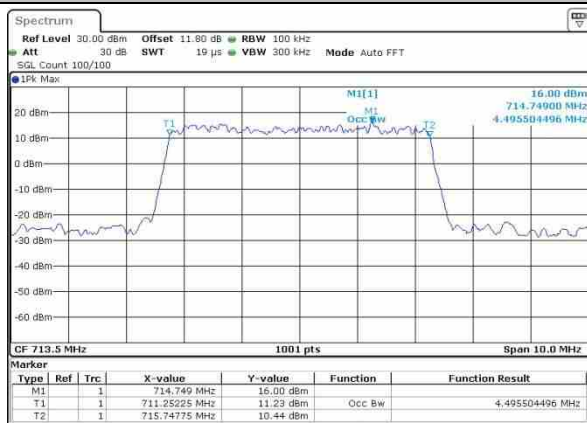
Middle Channel / 5MHz / QPSK



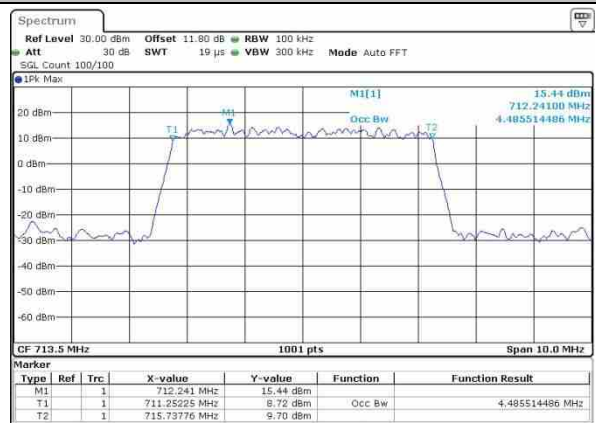
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



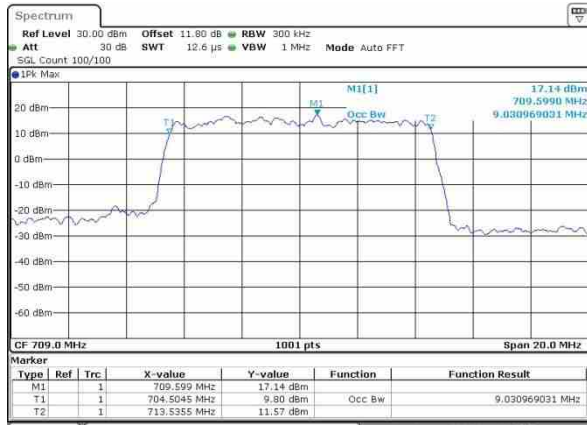
Highest Channel / 5MHz / 16QAM



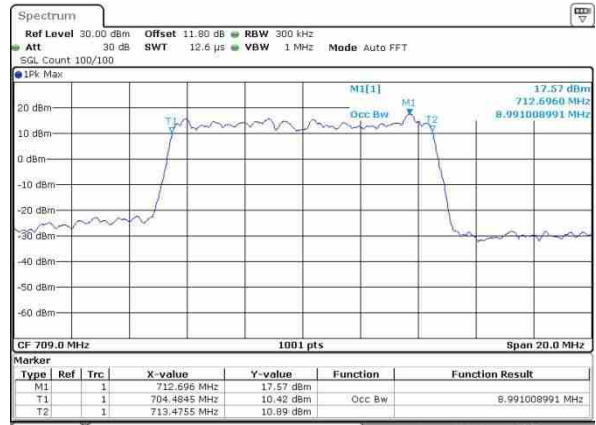


LTE Band 17

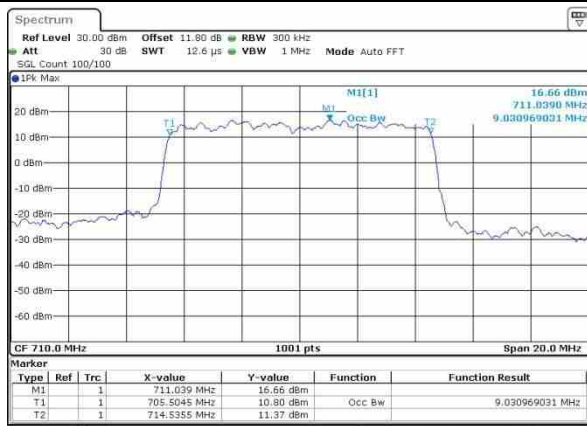
Lowest Channel / 10MHz / QPSK



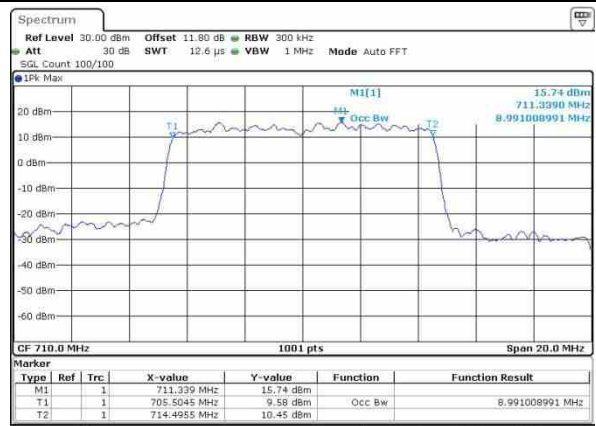
Lowest Channel / 10MHz / 16QAM



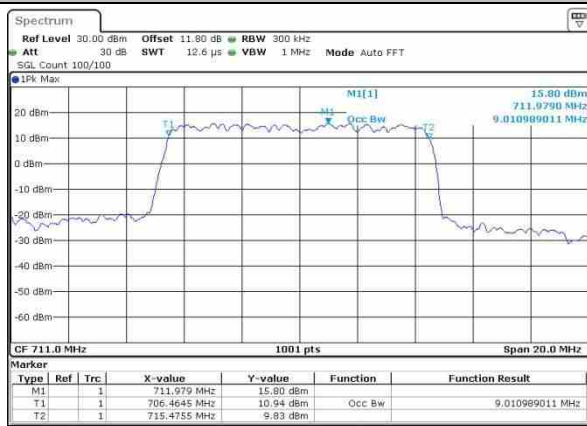
Middle Channel / 10MHz / QPSK



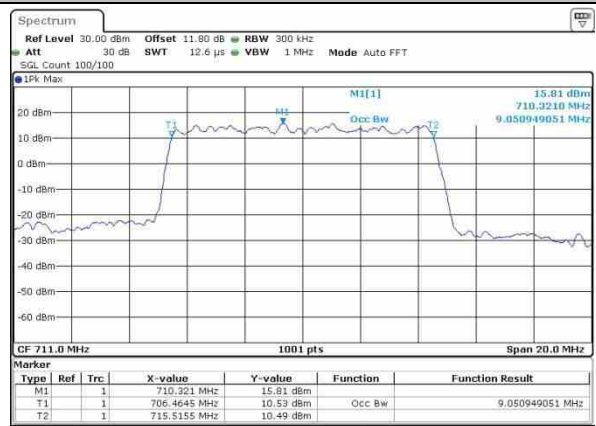
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



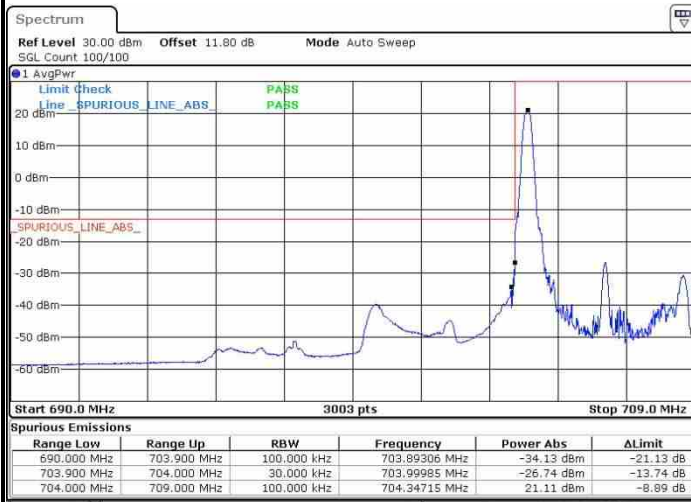


Conducted Band Edge



LTE Band 17 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



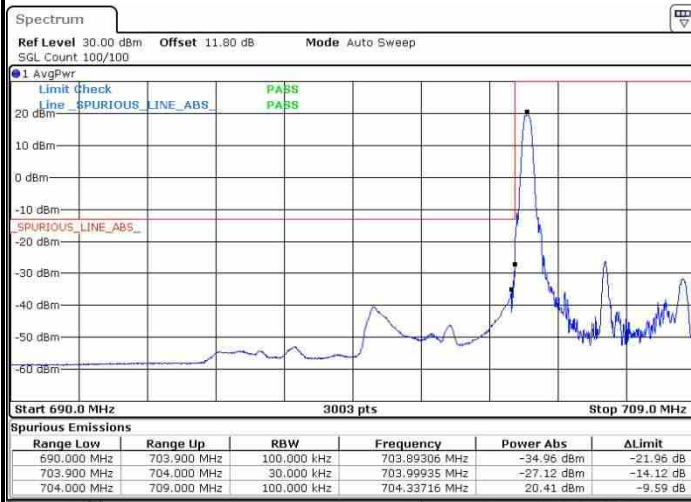
Highest Band Edge / Full RB





LTE Band 17 / 5MHz / 16QAM

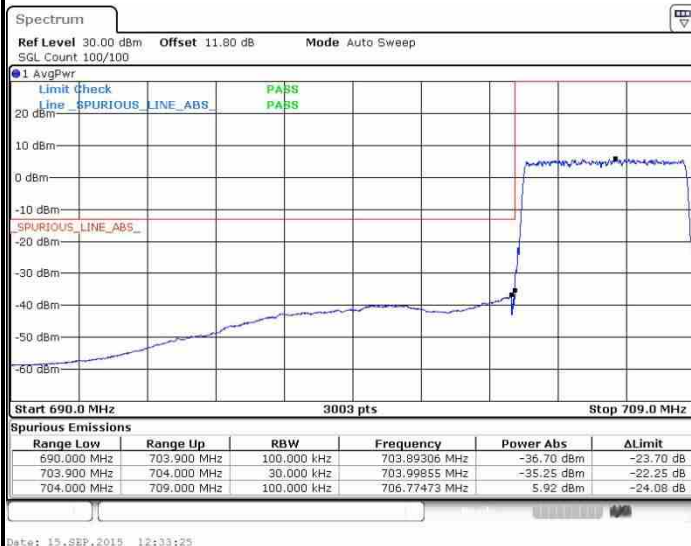
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



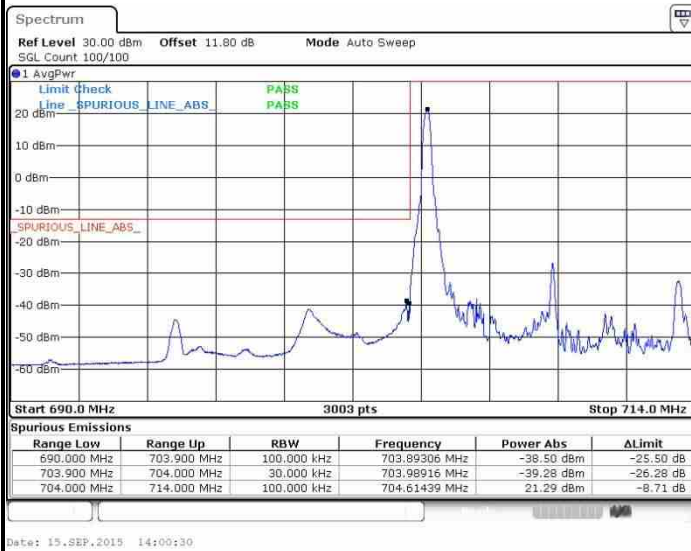
Highest Band Edge / Full RB



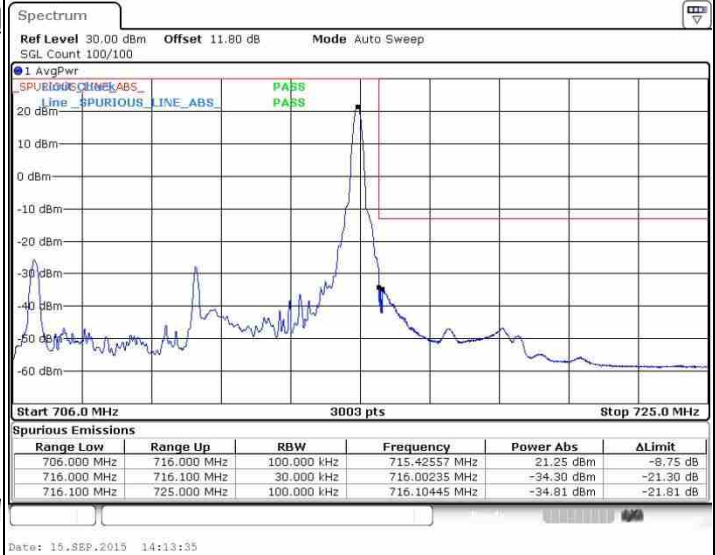


LTE Band 17 / 10MHz / QPSK

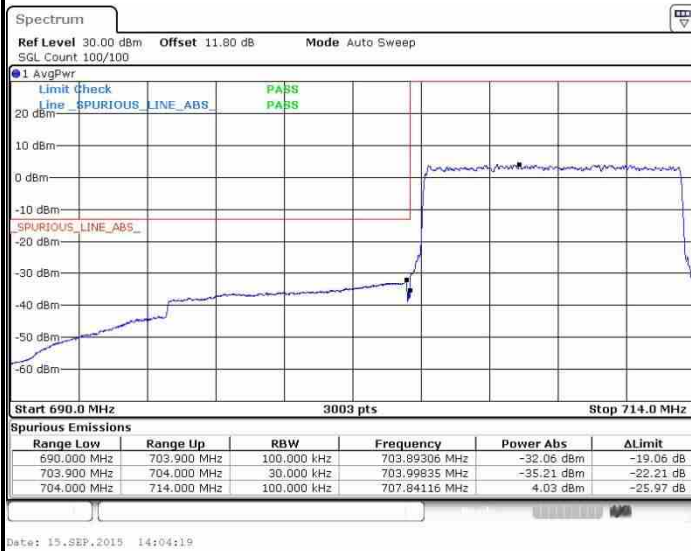
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

