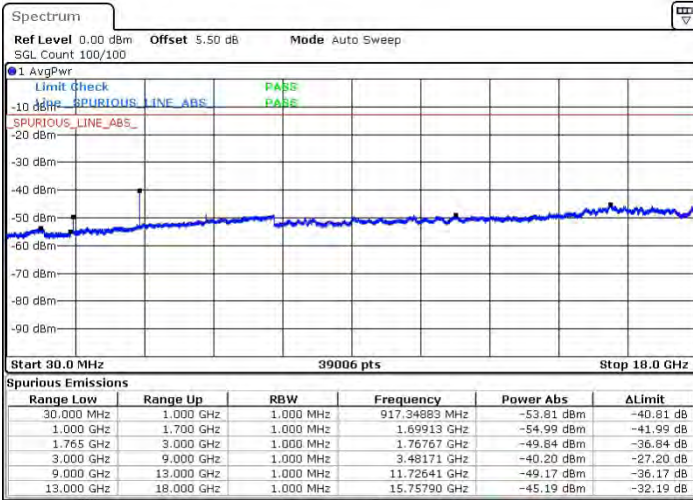




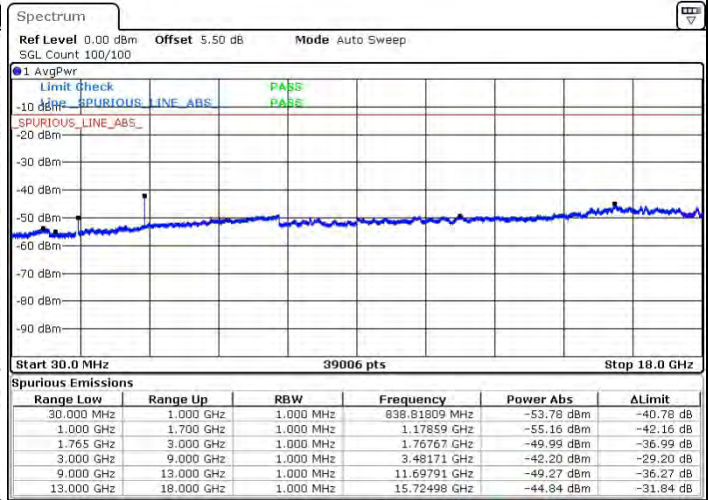
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 16 JAN 2015 10:29:09

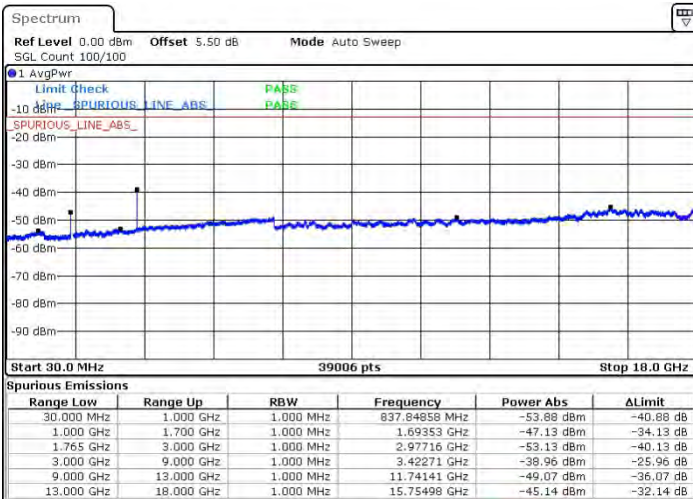
Highest Channel / 16QAM



Date: 16 JAN 2015 10:30:28

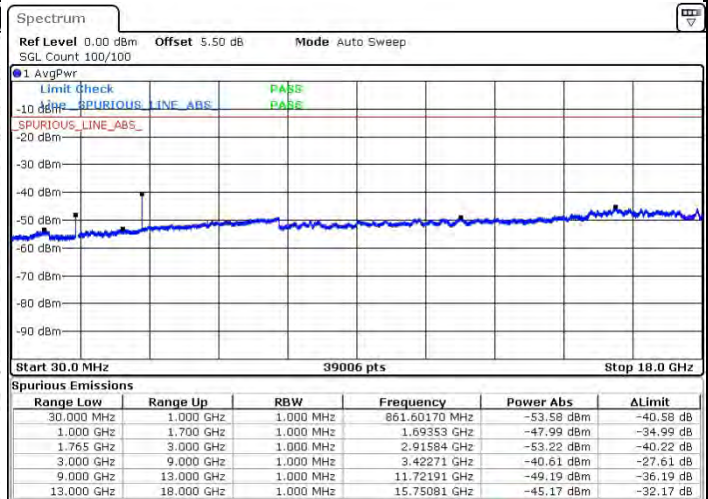
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 16 JAN 2015 10:32:30

Lowest Channel / 16QAM



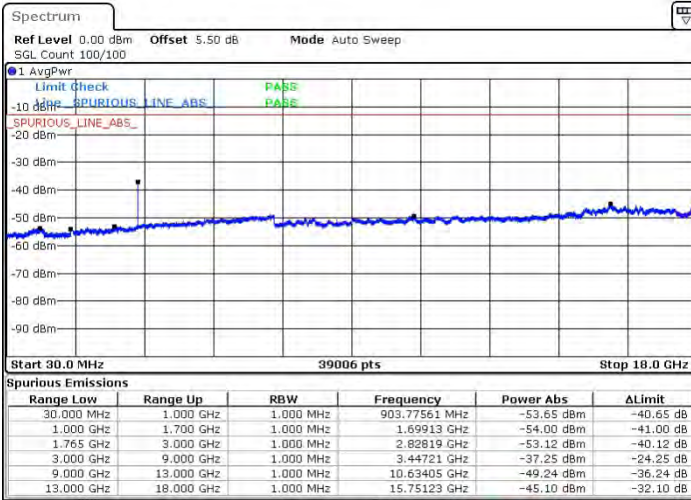
Date: 16 JAN 2015 10:33:48



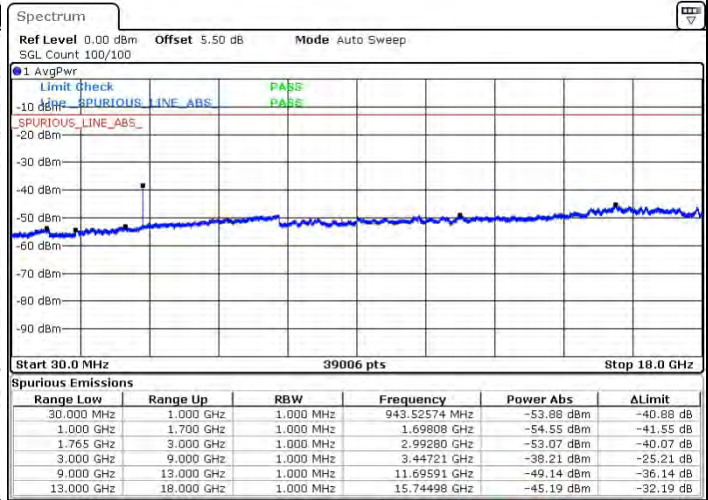
LTE Band 4 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM



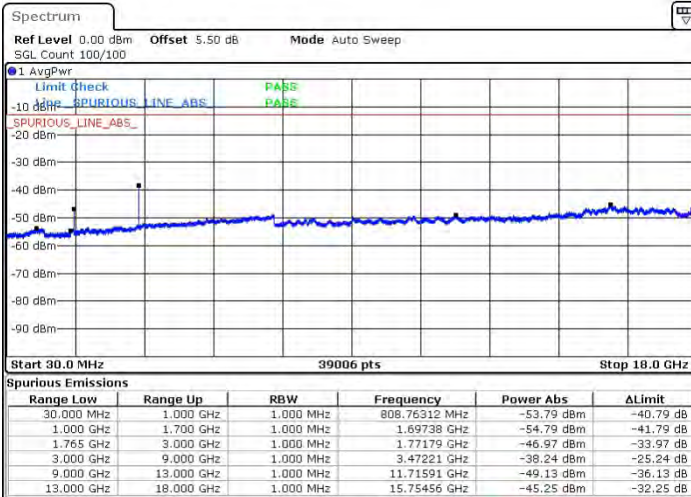
Date: 16 JAN 2015 10:35:50



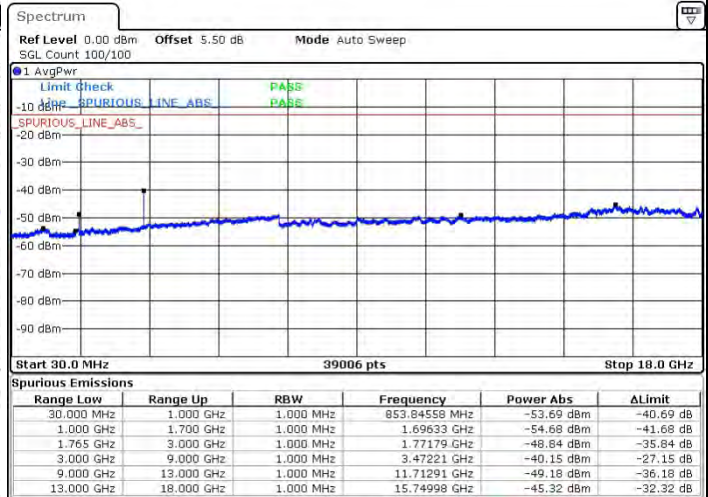
Date: 16 JAN 2015 10:37:08

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16 JAN 2015 10:39:10



Date: 16 JAN 2015 10:40:29

**Frequency Stability**

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0065	PASS
40	Normal Voltage	0.0054	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0047	
0	Normal Voltage	0.0054	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0050	
-30	Normal Voltage	0.0071	
20	Maximum Voltage	0.0040	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0058	

Note:

1. Normal Voltage = 3.8V ; Battery End Point (BEP) = 3.5 V ; Maximum Voltage =4.2V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



LTE Band 5

Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	RB Size	Result
Lowest CH	3.97	4.96	4.58	5.88	PASS
Middle CH	3.91	4.96	4.93	5.91	
Highest CH	3.94	4.81	5.25	5.83	

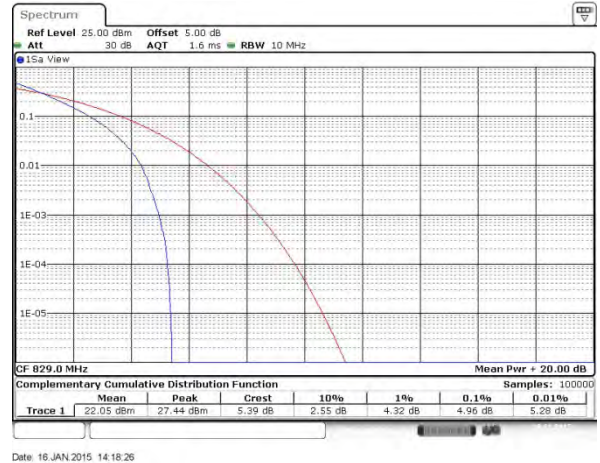


LTE Band 5 / 10MHz / QPSK

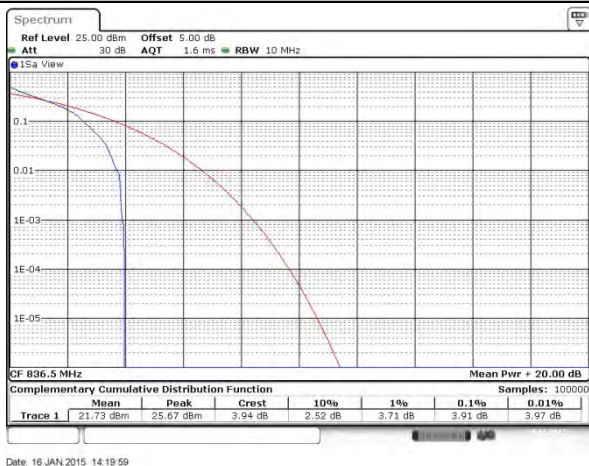
Lowest Channel / 1RB



Lowest Channel / Full RB



Middle Channel / 1RB



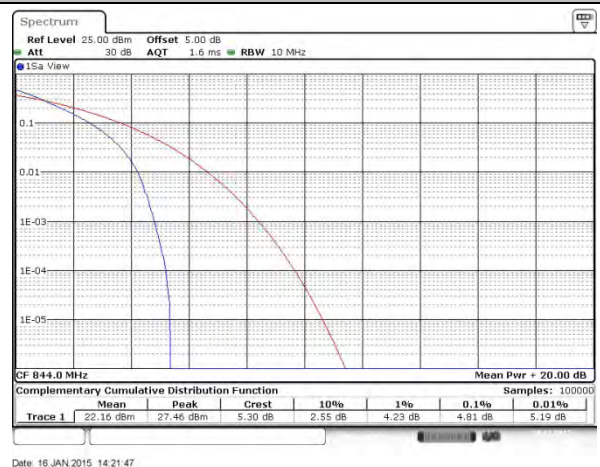
Middle Channel / Full RB



Highest Channel / 1RB



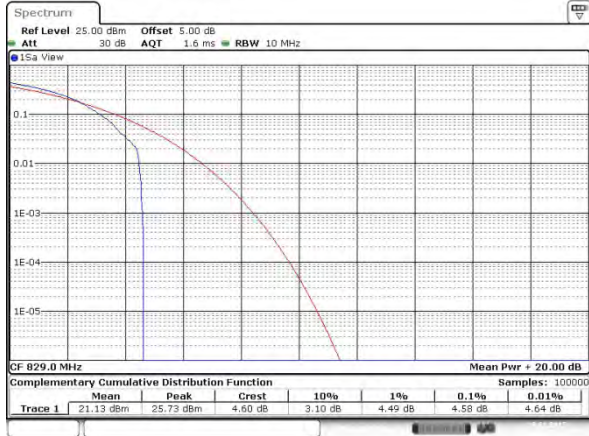
Highest Channel / Full RB





LTE Band 5 / 10MHz / 16QAM

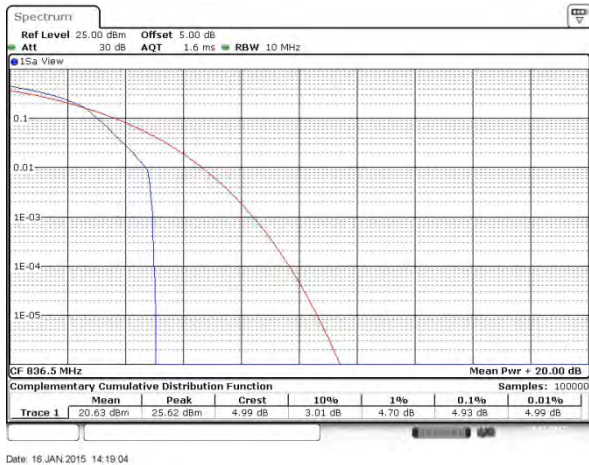
Lowest Channel / 1RB



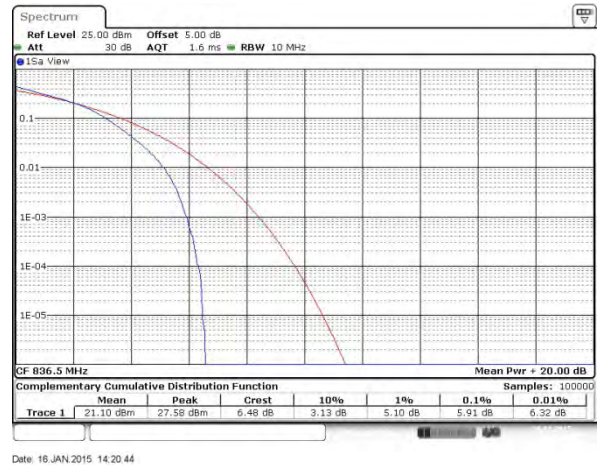
Lowest Channel / Full RB



Middle Channel / 1RB



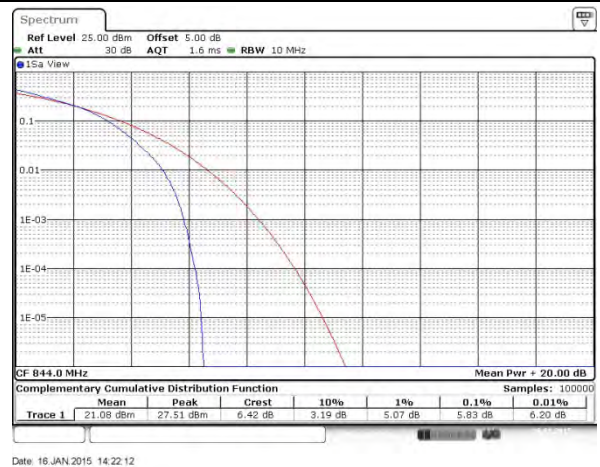
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



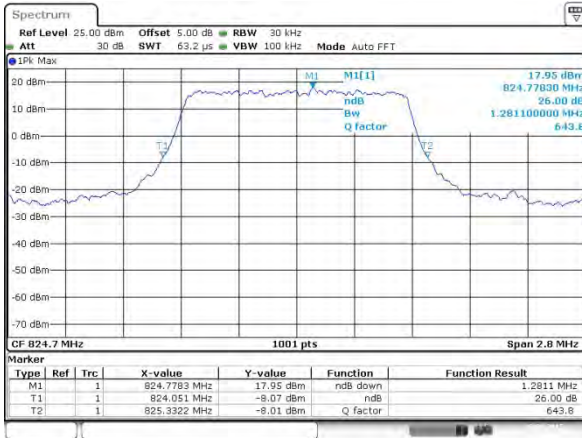
**26dB Bandwidth**

Mode	LTE Band 5 : 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	1.2811	1.2923	3.045	3.0509	5.045	5.025	10.01	9.97	-	-	-	-
Middle CH	1.2839	1.2951	3.045	3.0629	5.055	5.065	10.05	10.09	-	-	-	-
Highest CH	1.2811	1.3035	3.045	3.0569	5.055	5.075	10.07	9.97	-	-	-	-

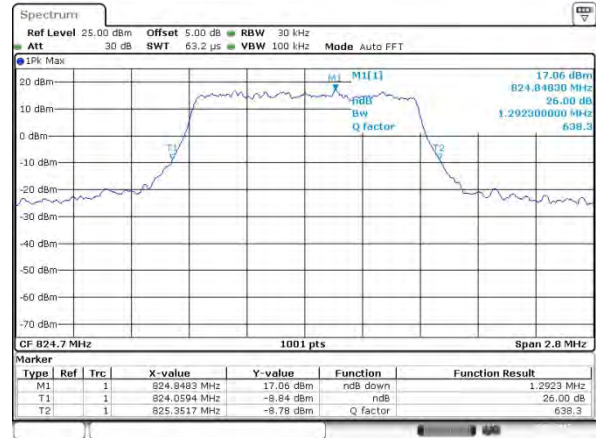


LTE Band 5

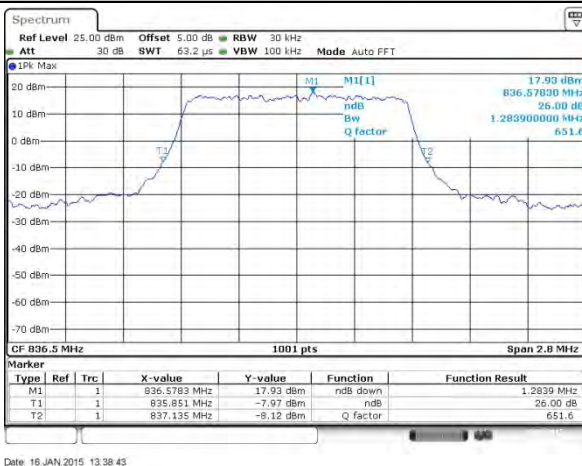
Lowest Channel / 1.4MHz / QPSK



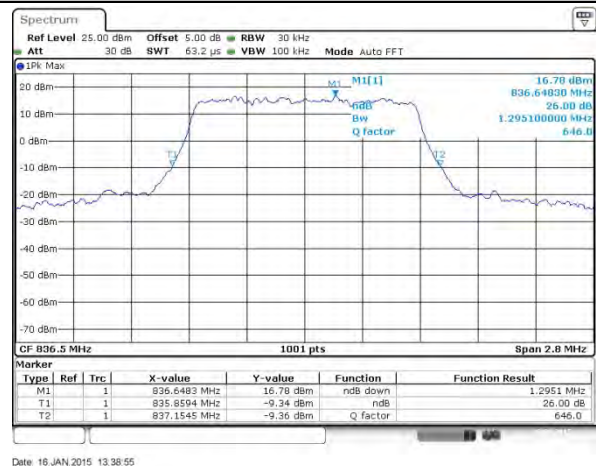
Lowest Channel / 1.4MHz / 16QAM



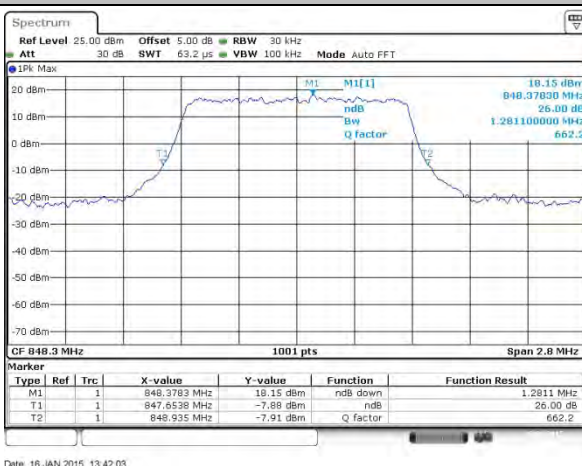
Middle Channel / 1.4MHz / QPSK



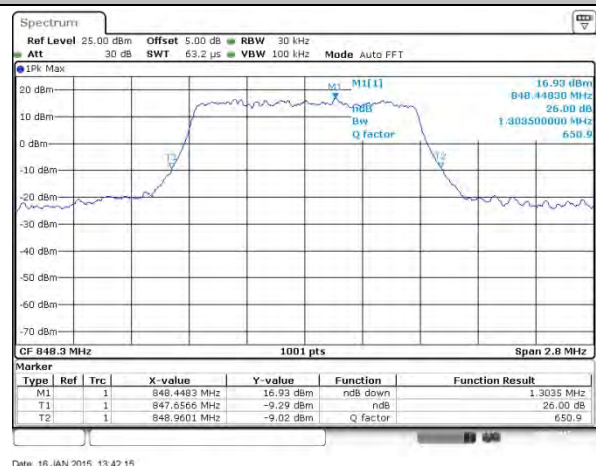
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



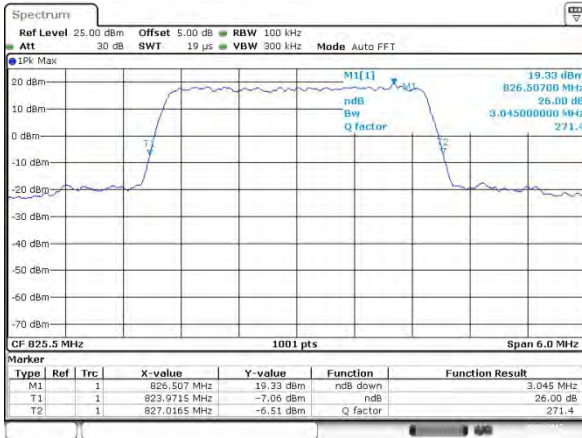
Highest Channel / 1.4MHz / 16QAM



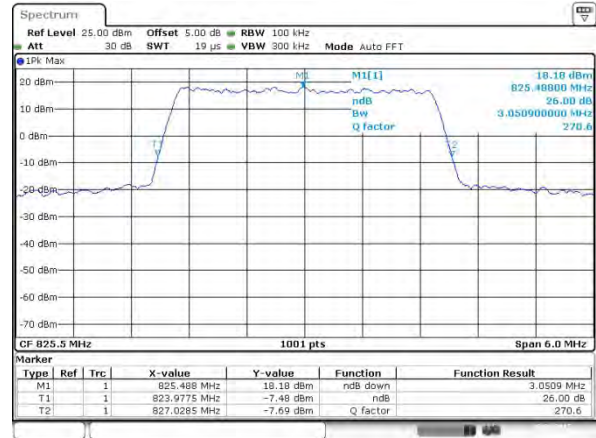


LTE Band 5

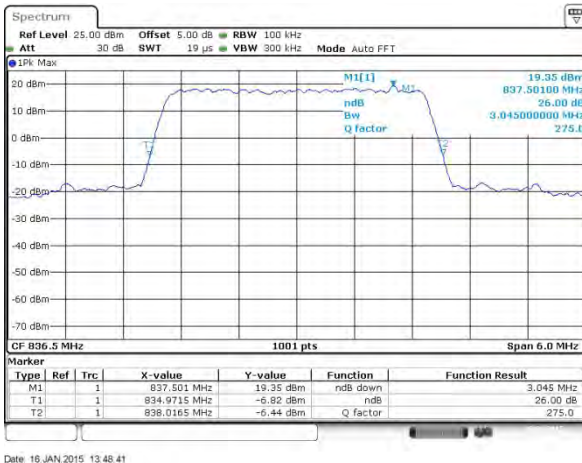
Lowest Channel / 3MHz / QPSK



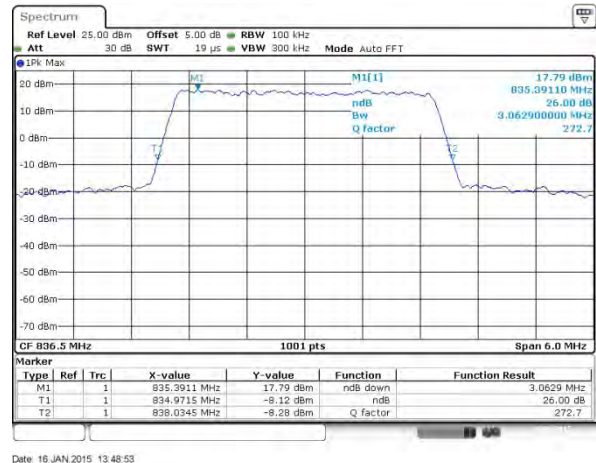
Lowest Channel / 3MHz / 16QAM



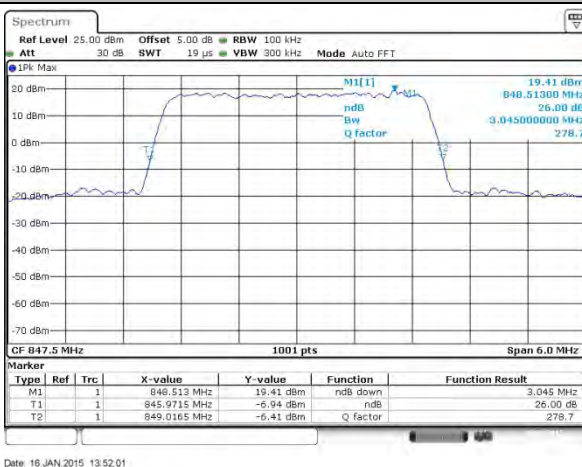
Middle Channel / 3MHz / QPSK



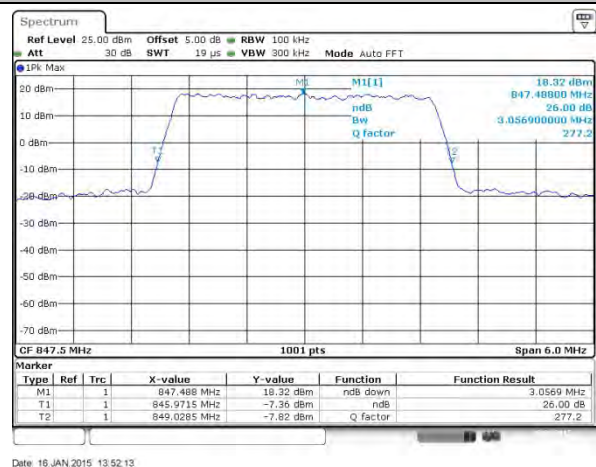
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



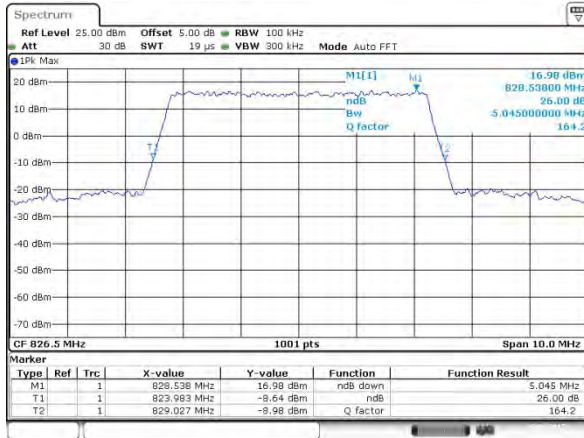
Highest Channel / 3MHz / 16QAM



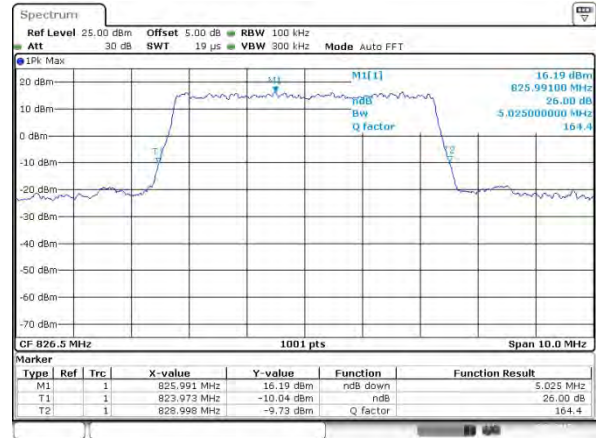


LTE Band 5

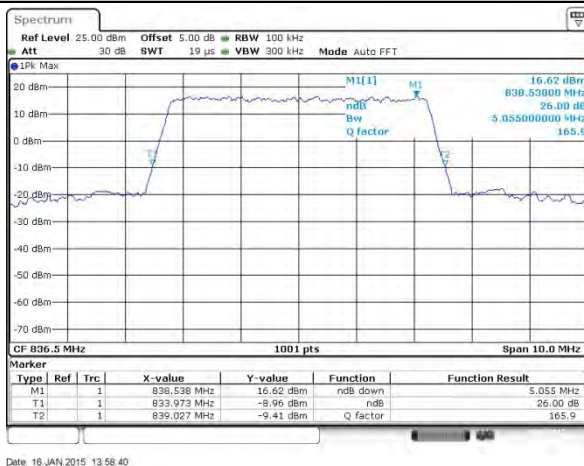
Lowest Channel / 5MHz / QPSK



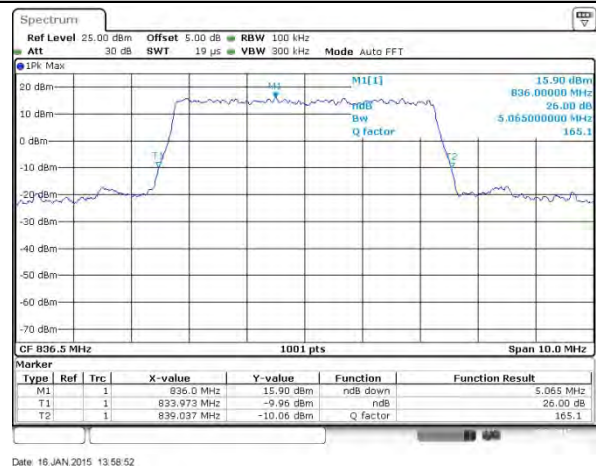
Lowest Channel / 5MHz / 16QAM



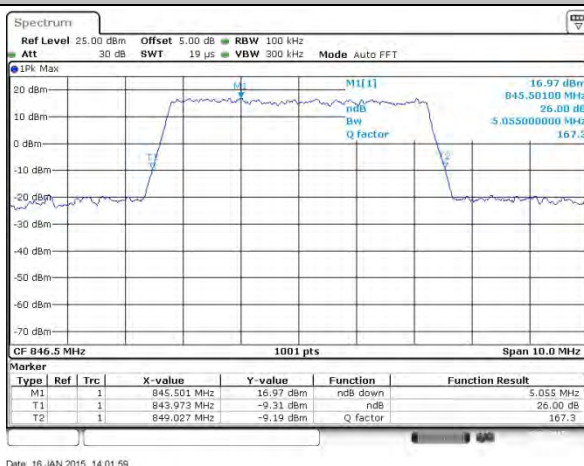
Middle Channel / 5MHz / QPSK



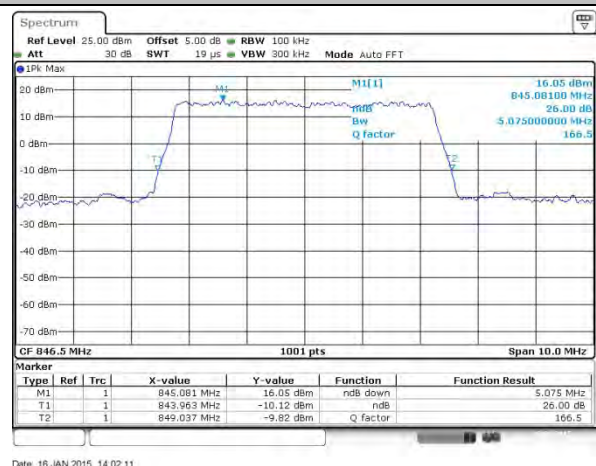
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



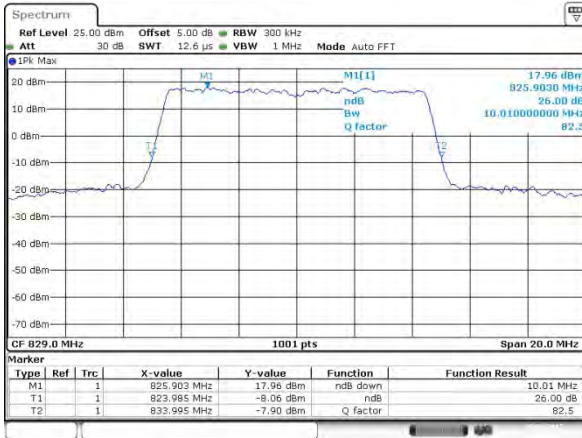
Highest Channel / 5MHz / 16QAM



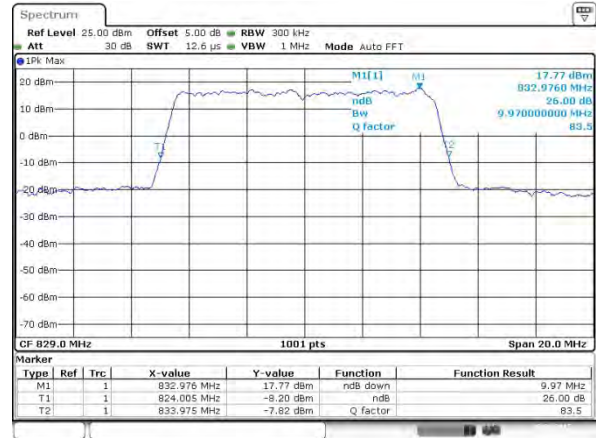


LTE Band 5

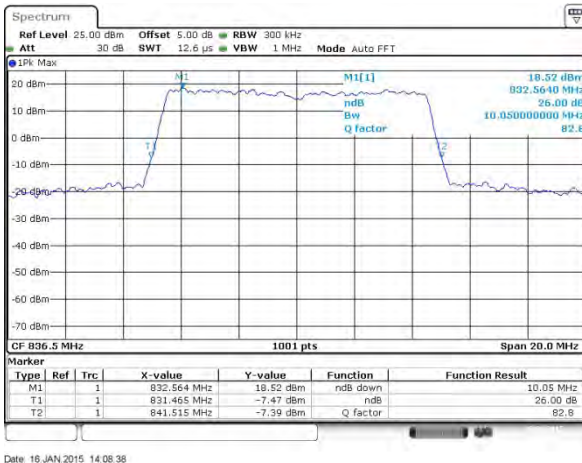
Lowest Channel / 10MHz / QPSK



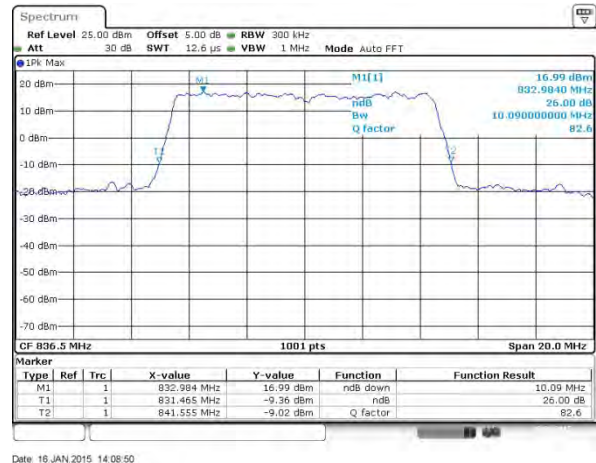
Lowest Channel / 10MHz / 16QAM



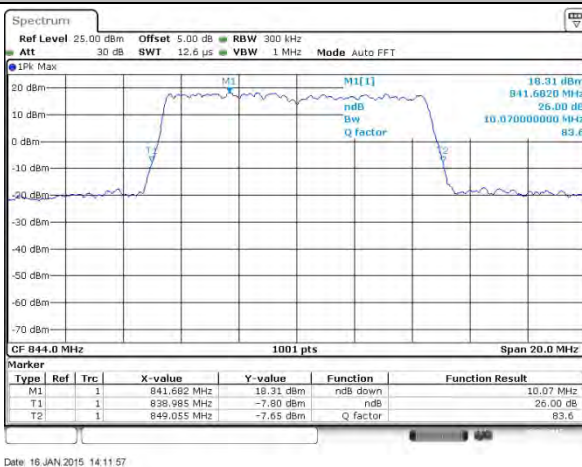
Middle Channel / 10MHz / QPSK



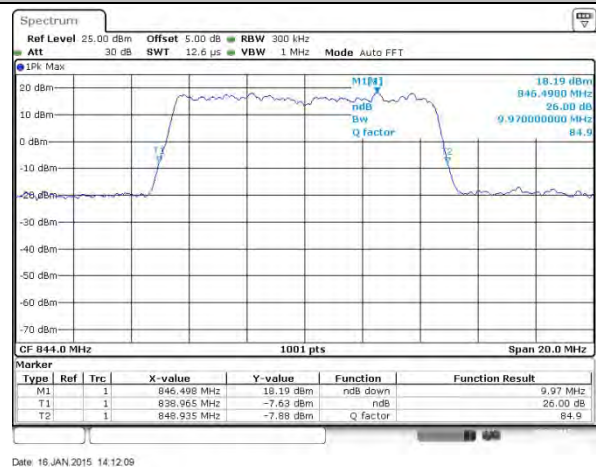
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



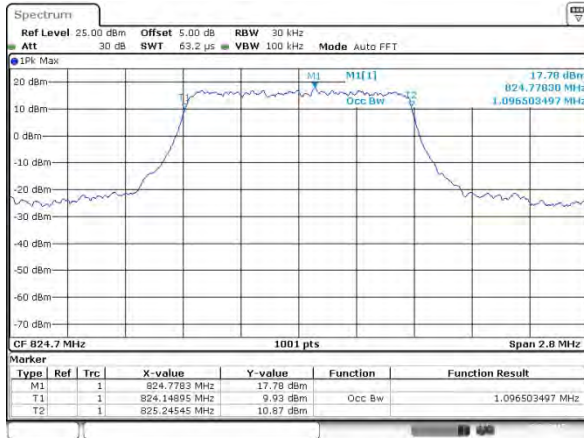
**Occupied Bandwidth**

Mode	LTE Band 5 : 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	1.1	1.1	2.72	2.73	4.51	4.5	9.05	9.03	-	-	-	-
Middle CH	1.1	1.1	2.73	2.73	4.51	4.51	9.09	9.01	-	-	-	-
Highest CH	1.1	1.1	2.72	2.73	4.51	4.51	9.09	9.03	-	-	-	-

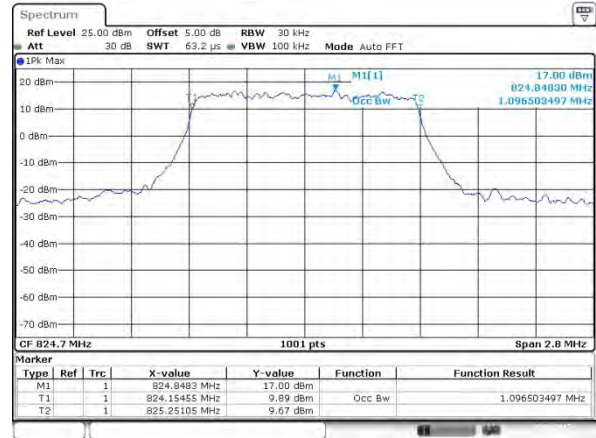


LTE Band 5

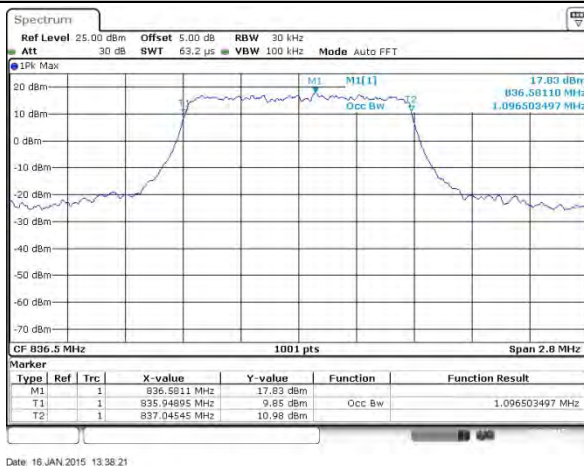
Lowest Channel / 1.4MHz / QPSK



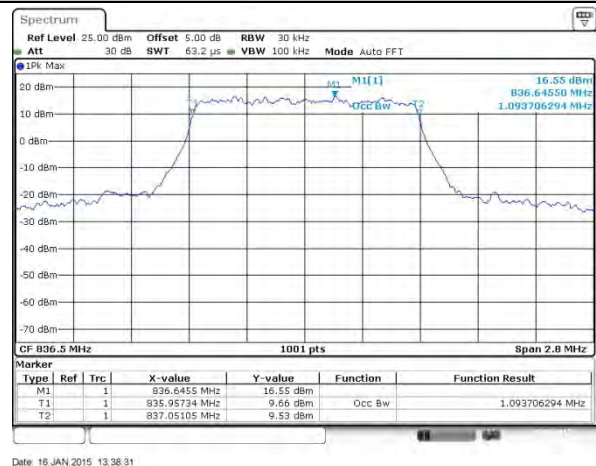
Lowest Channel / 1.4MHz / 16QAM



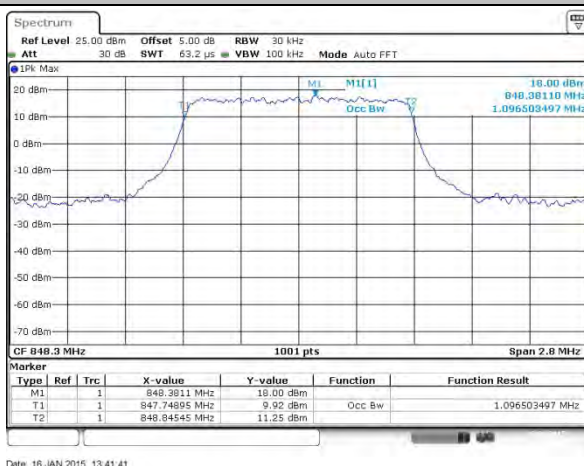
Middle Channel / 1.4MHz / QPSK



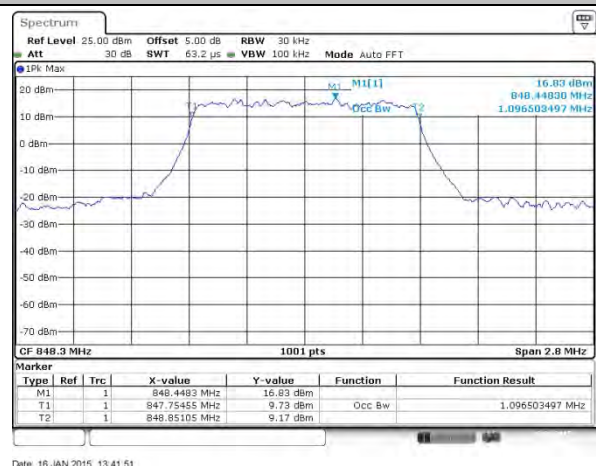
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



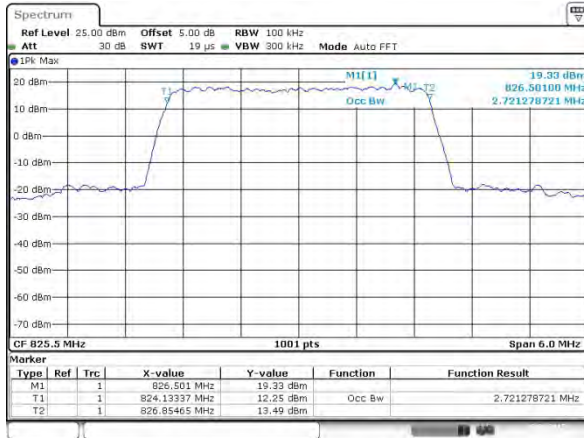
Highest Channel / 1.4MHz / 16QAM



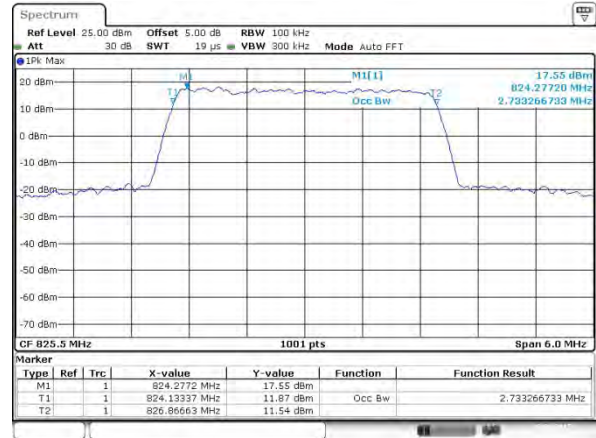


LTE Band 5

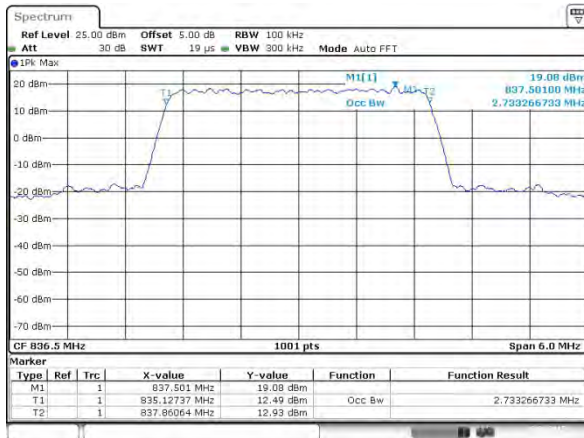
Lowest Channel / 3MHz / QPSK



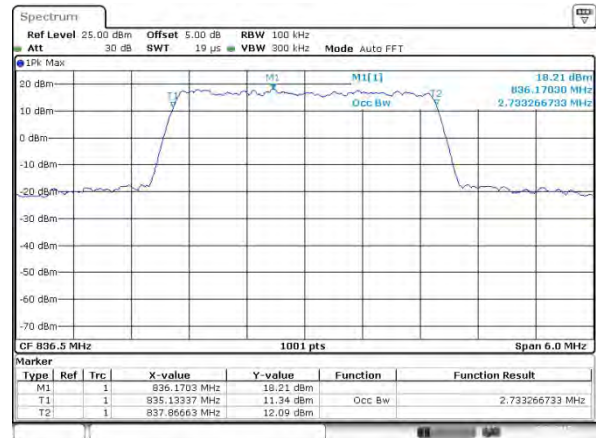
Lowest Channel / 3MHz / 16QAM



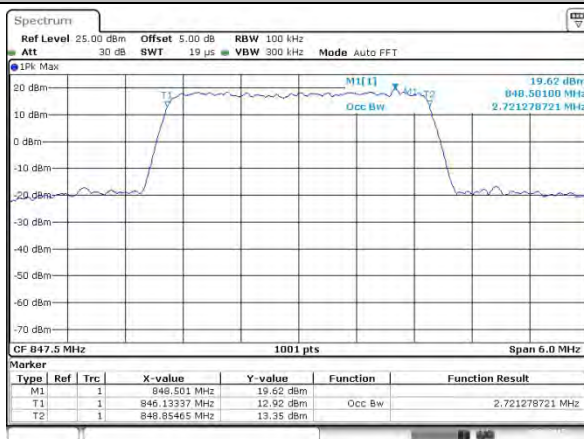
Middle Channel / 3MHz / QPSK



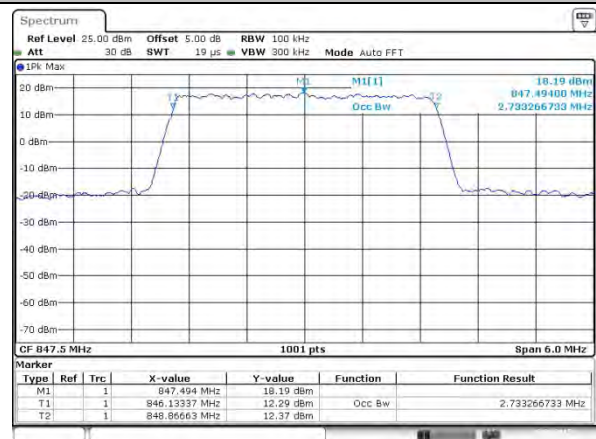
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



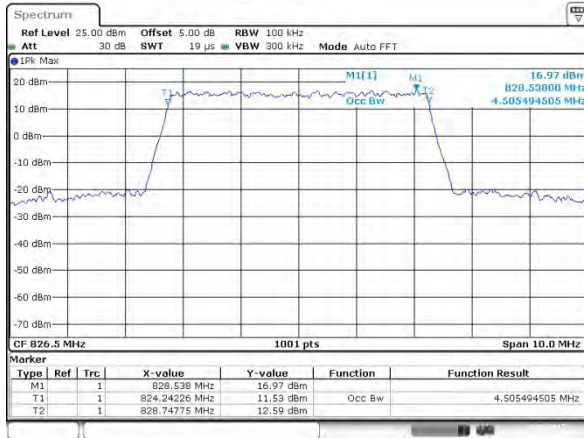
Highest Channel / 3MHz / 16QAM



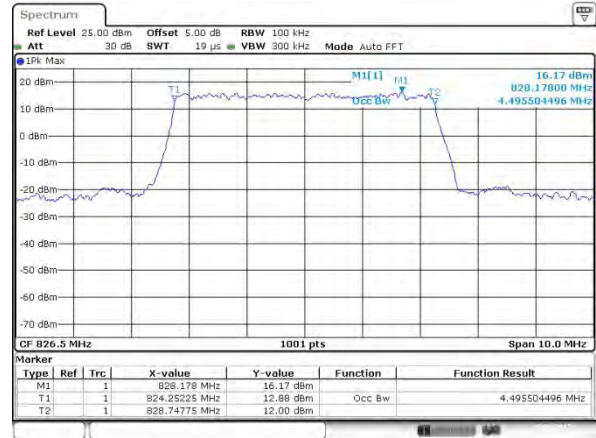


LTE Band 5

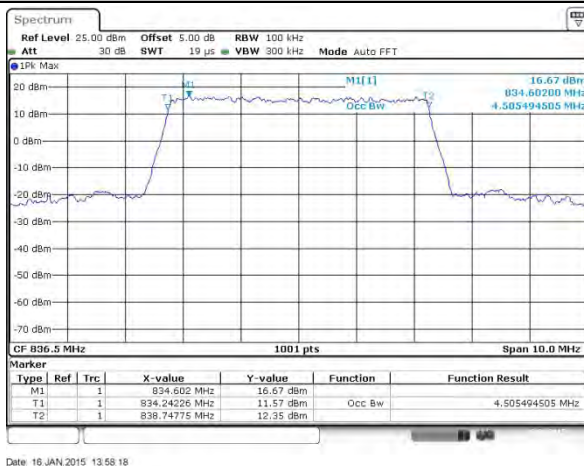
Lowest Channel / 5MHz / QPSK



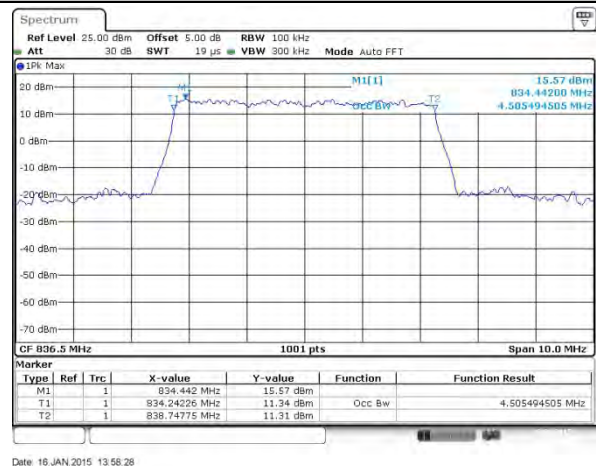
Lowest Channel / 5MHz / 16QAM



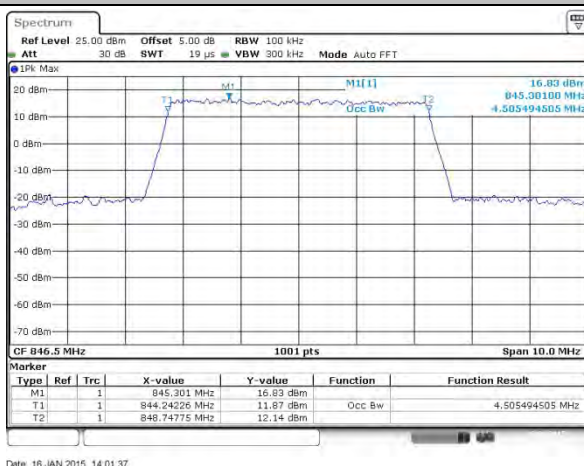
Middle Channel / 5MHz / QPSK



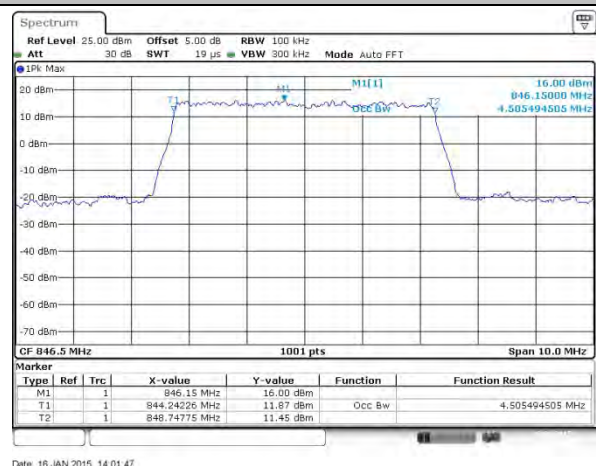
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



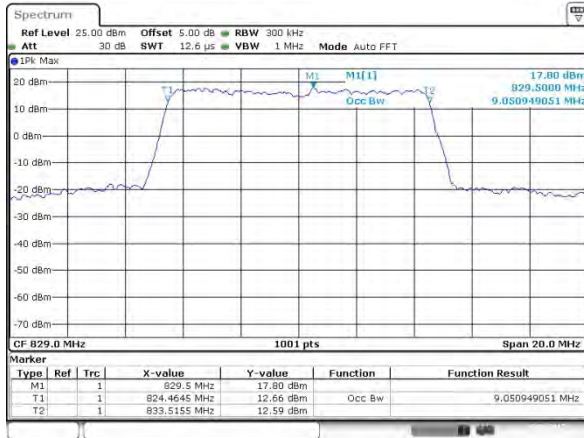
Highest Channel / 5MHz / 16QAM





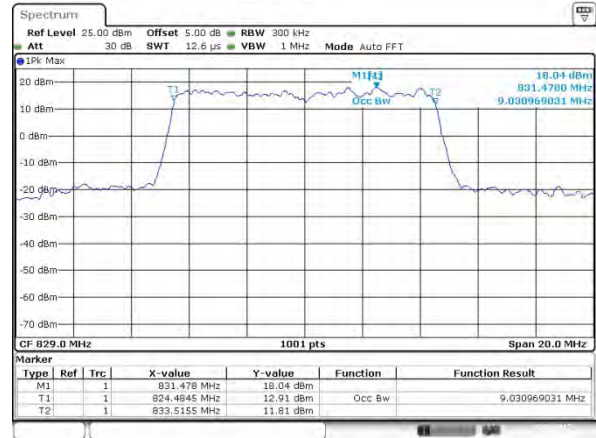
LTE Band 5

Lowest Channel / 10MHz / QPSK



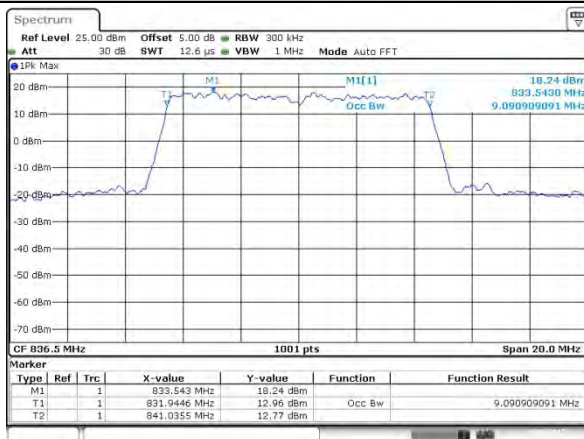
Date: 16 JAN 2015 14:04:57

Lowest Channel / 10MHz / 16QAM



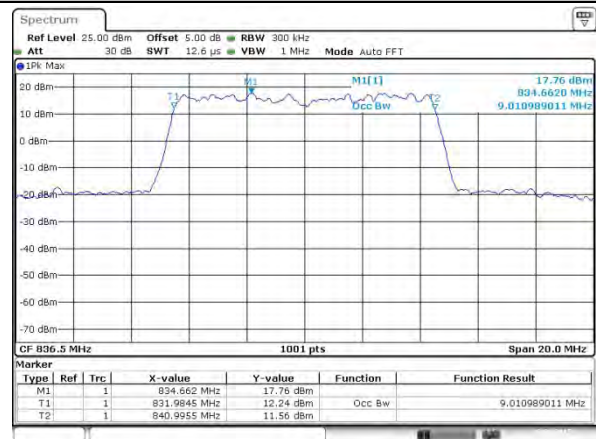
Date: 16 JAN 2015 14:05:07

Middle Channel / 10MHz / QPSK



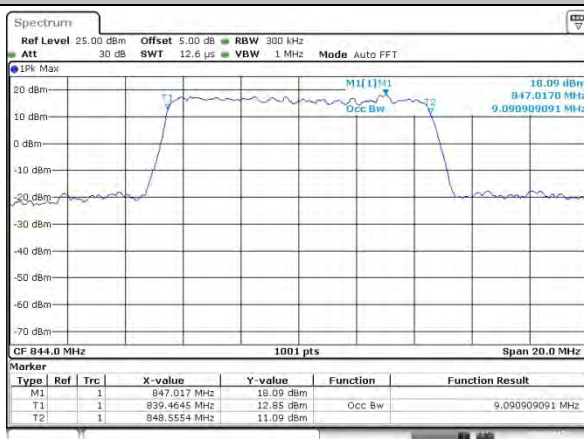
Date: 16 JAN 2015 14:08:16

Middle Channel / 10MHz / 16QAM



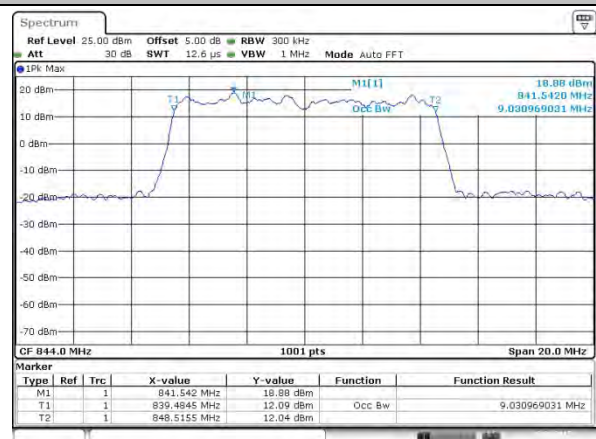
Date: 16 JAN 2015 14:08:26

Highest Channel / 10MHz / QPSK



Date: 16 JAN 2015 14:11:35

Highest Channel / 10MHz / 16QAM



Date: 16 JAN 2015 14:11:45

**Conducted Band Edge****LTE Band 5 / 1.4MHz / QPSK****Lowest Band Edge / 1RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



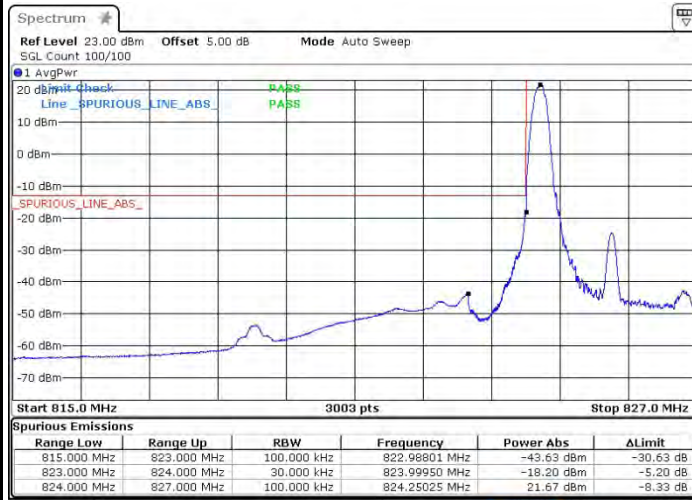
Highest Band Edge / Full RB



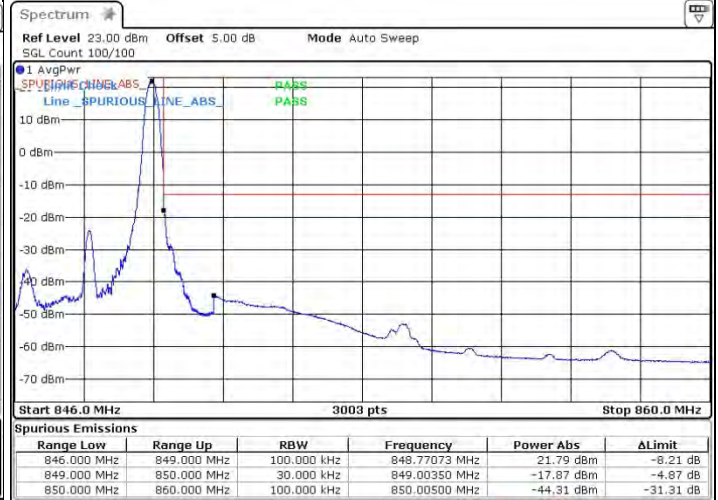


LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



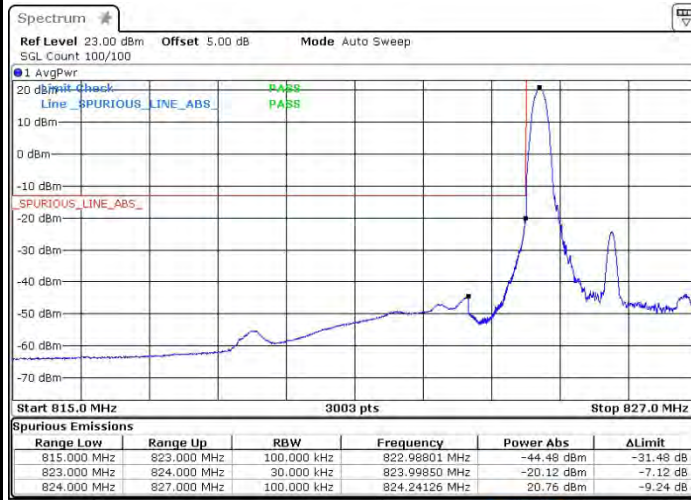
Highest Band Edge / Full RB



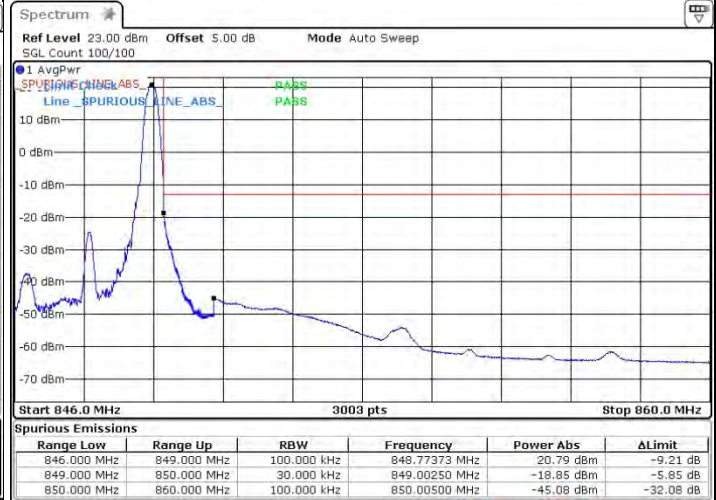


LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



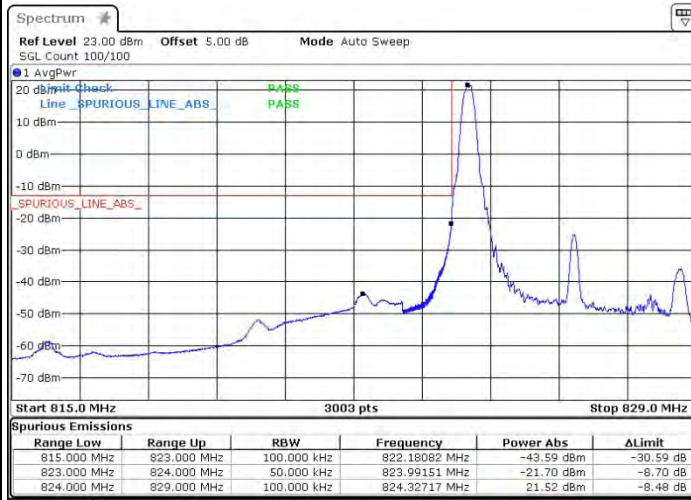
Highest Band Edge / Full RB



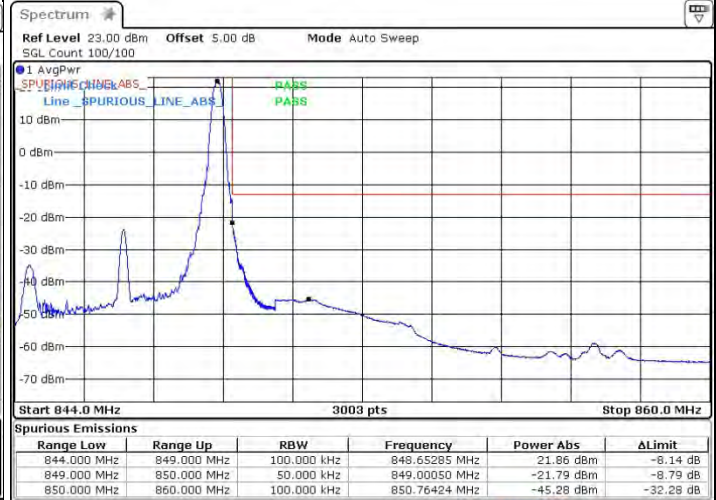


LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



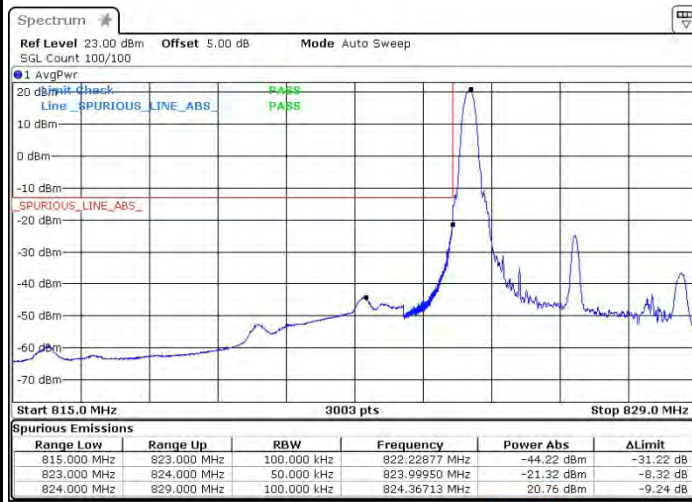
Highest Band Edge / Full RB



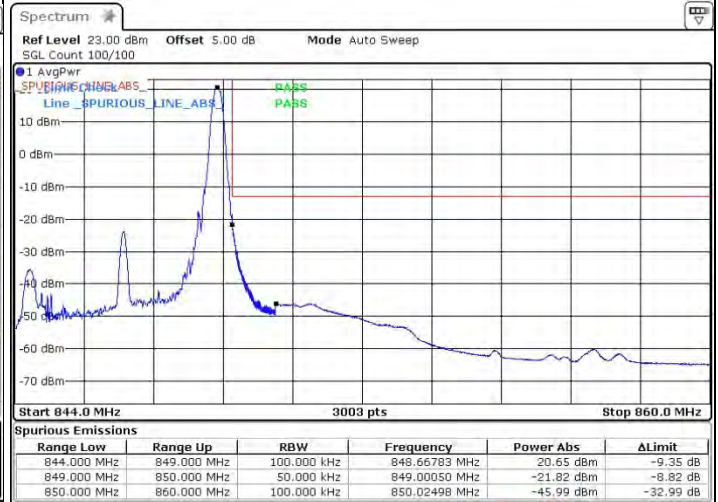


LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



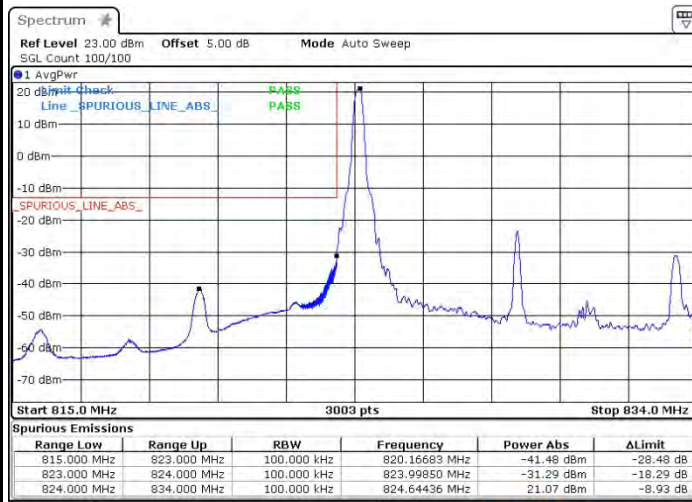
Highest Band Edge / Full RB



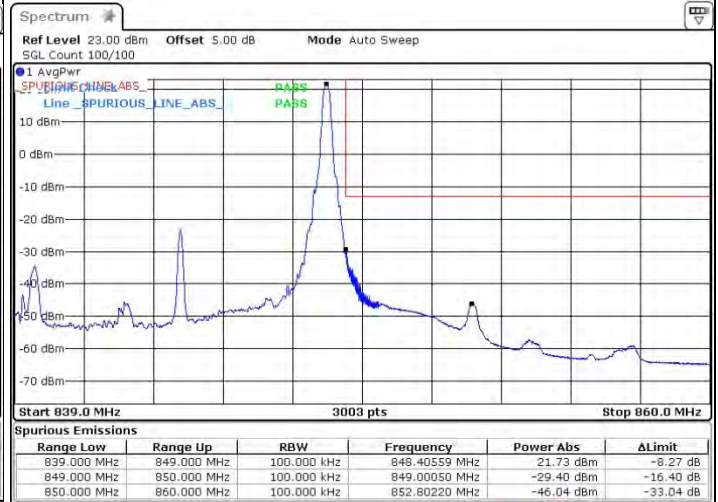


LTE Band 5 / 10MHz / QPSK

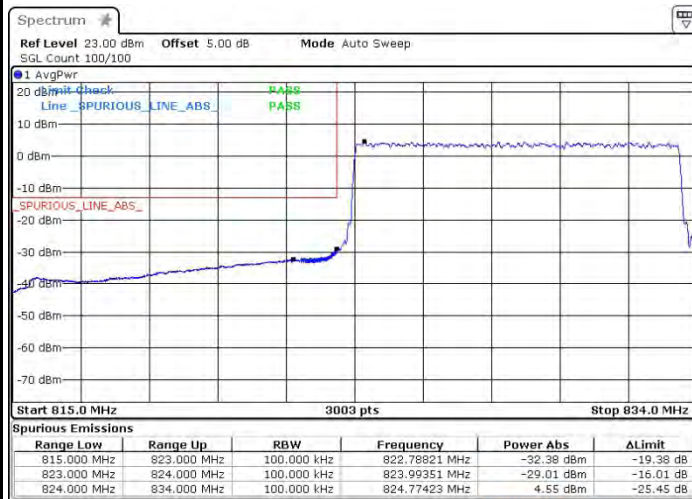
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



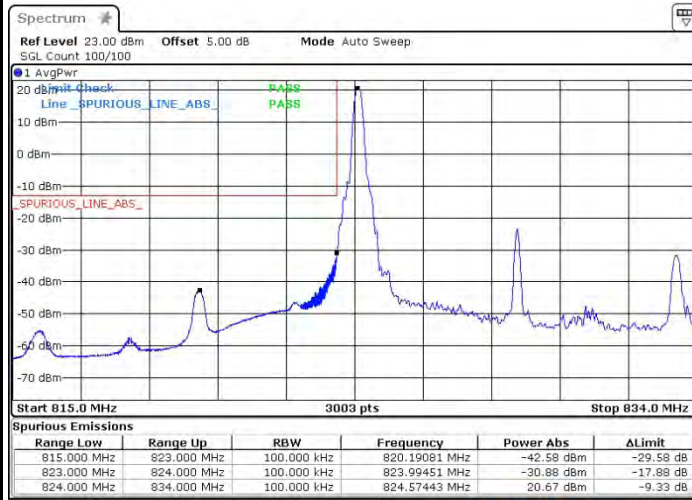
Highest Band Edge / Full RB



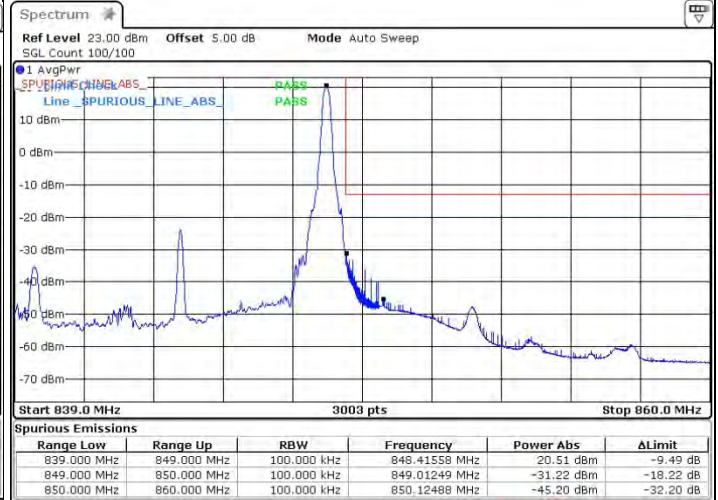


LTE Band 5 / 10MHz / 16QAM

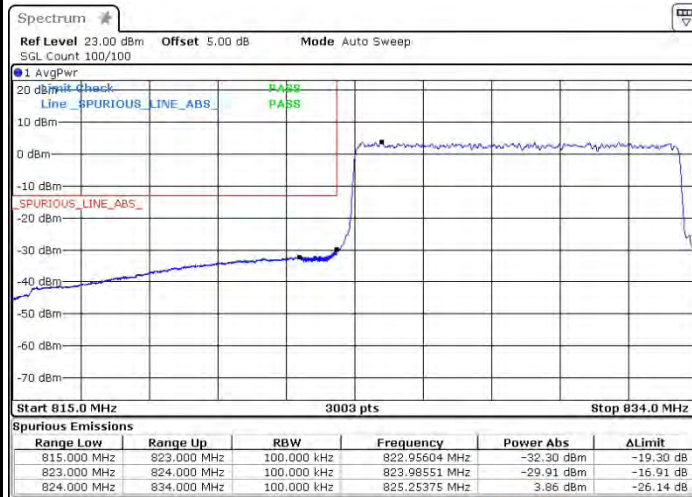
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



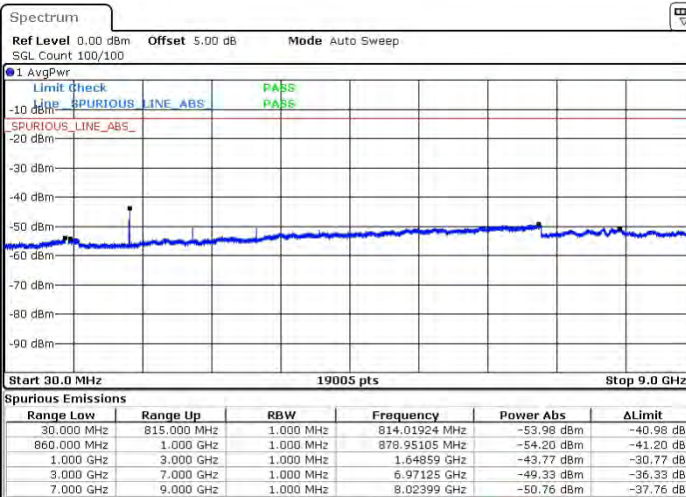


Conducted Spurious Emission

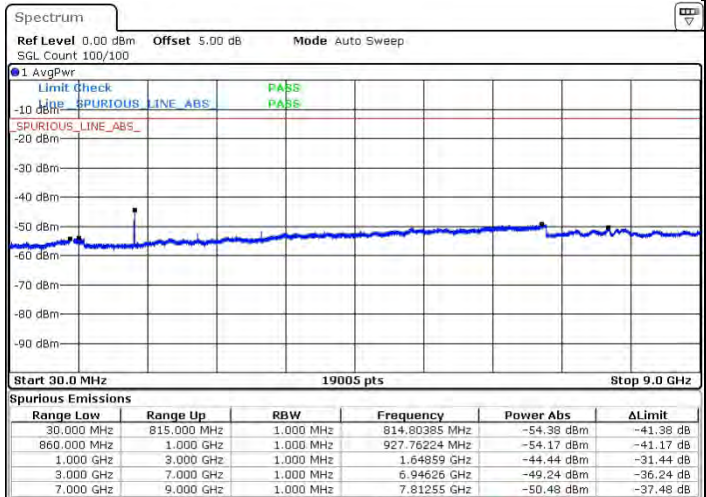
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



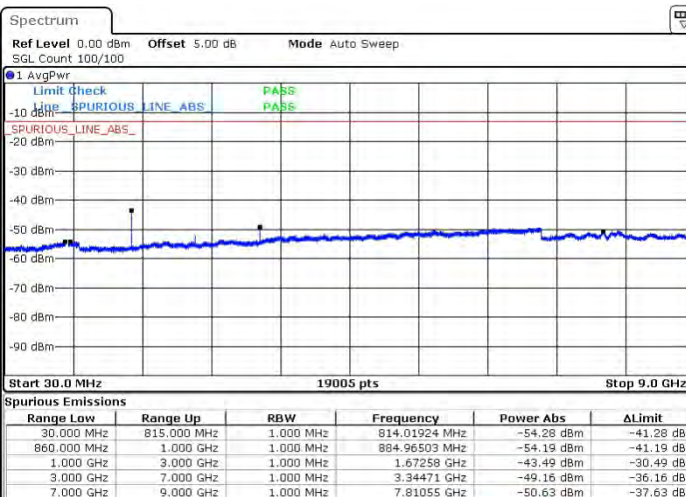
Date: 16 JAN 2015 13:36:43



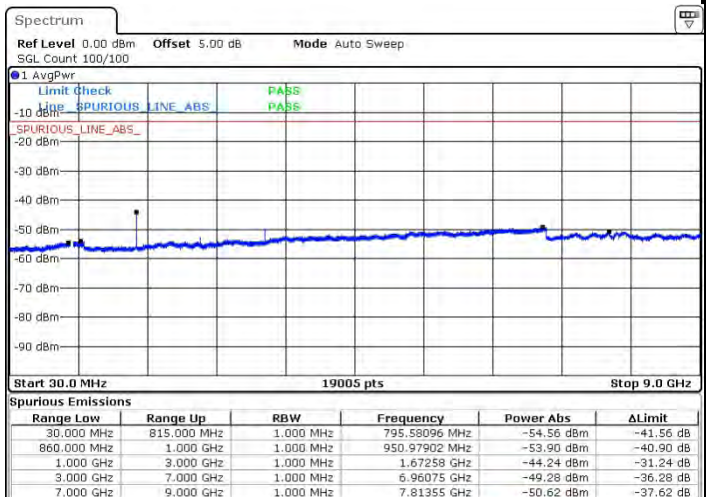
Date: 16 JAN 2015 13:38:01

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 16 JAN 2015 13:40:03

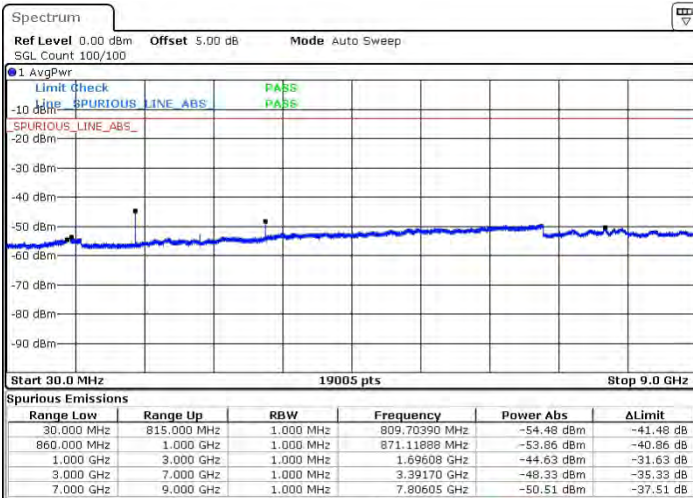


Date: 16 JAN 2015 13:41:21



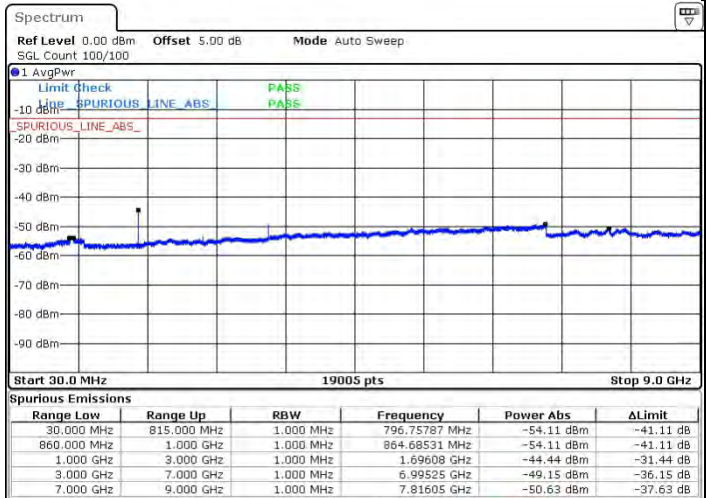
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 16 JAN 2015 13:43:22

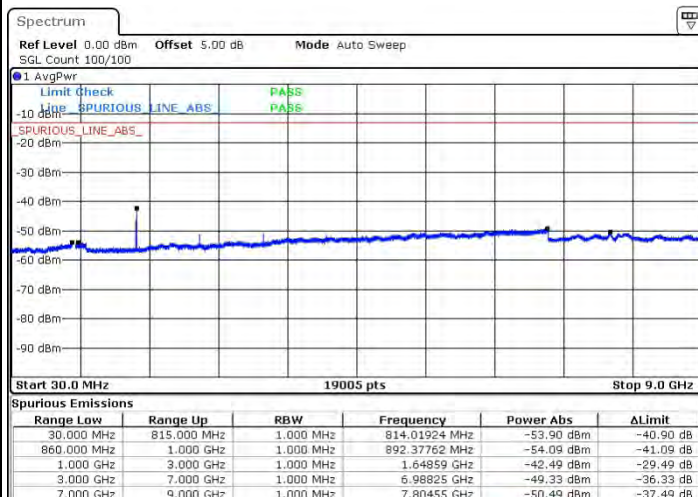
Highest Channel / 16QAM



Date: 16 JAN 2015 13:44:40

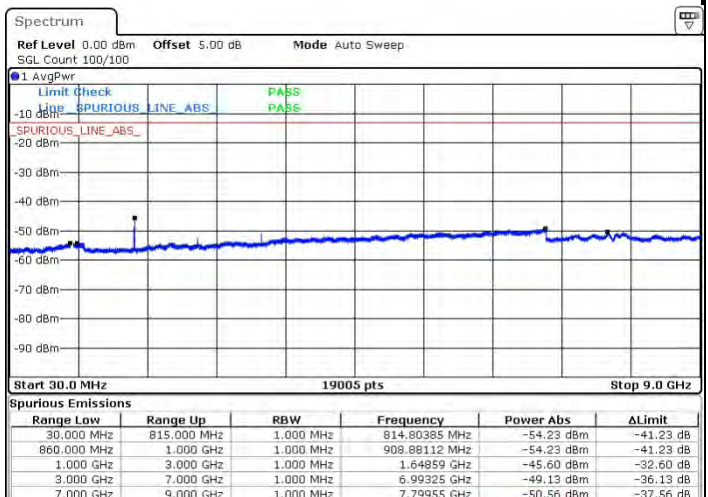
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 16 JAN 2015 13:46:42

Lowest Channel / 16QAM



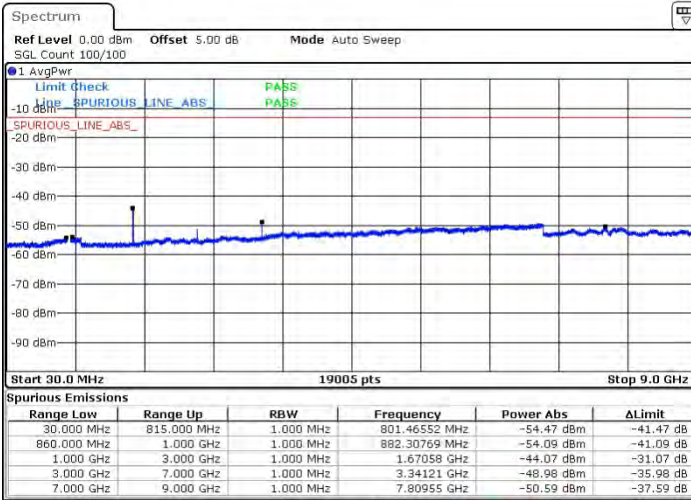
Date: 16 JAN 2015 13:48:00



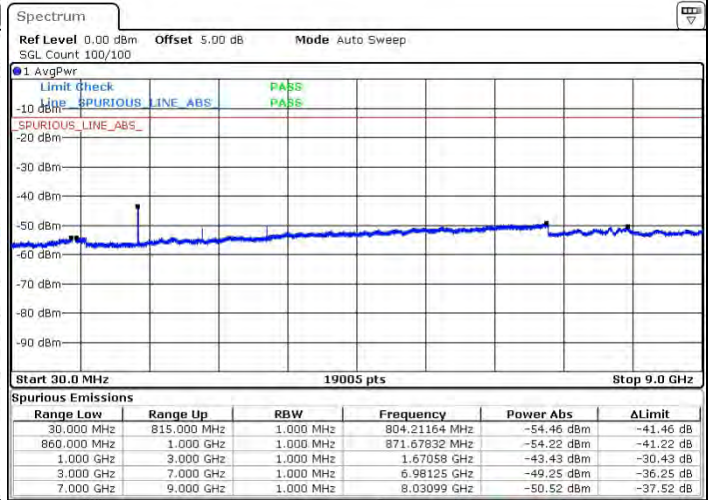
LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



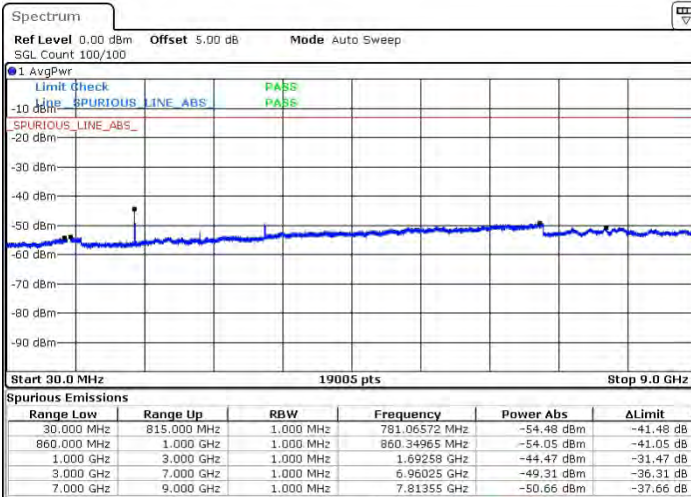
Date: 16 JAN 2015 13:50:01



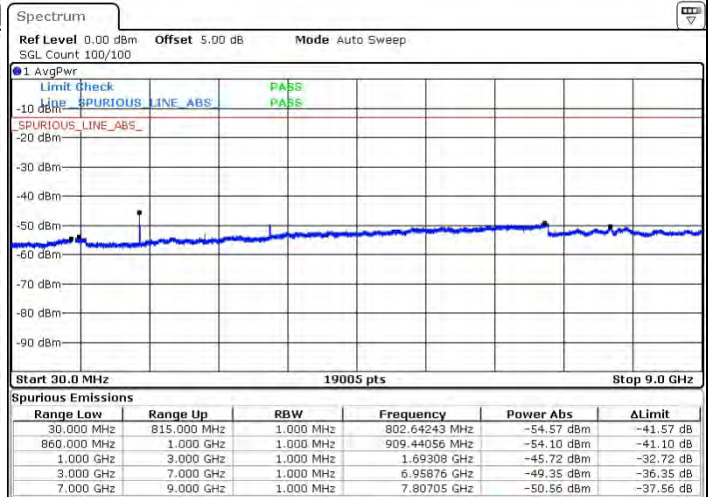
Date: 16 JAN 2015 13:51:19

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16 JAN 2015 13:53:21

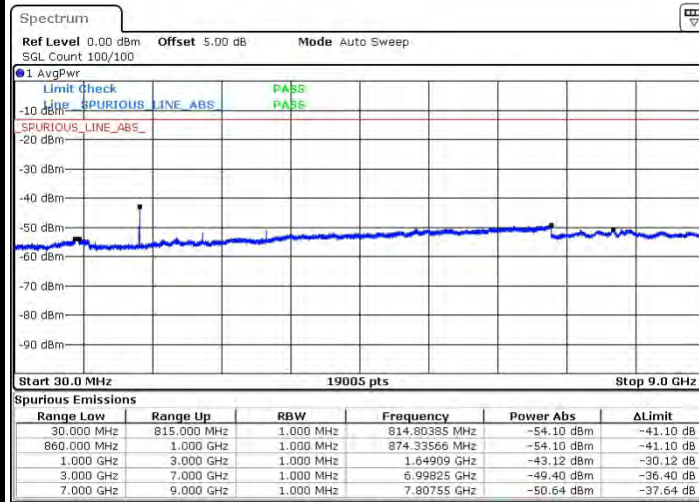


Date: 16 JAN 2015 13:54:38

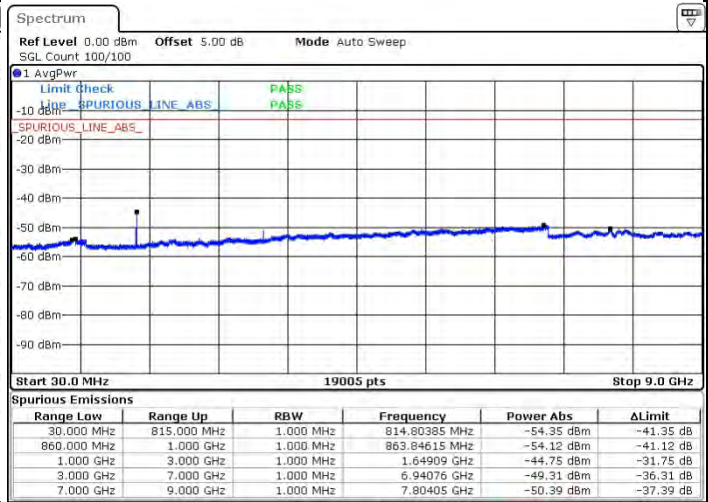


LTE Band 5 / 5MHz

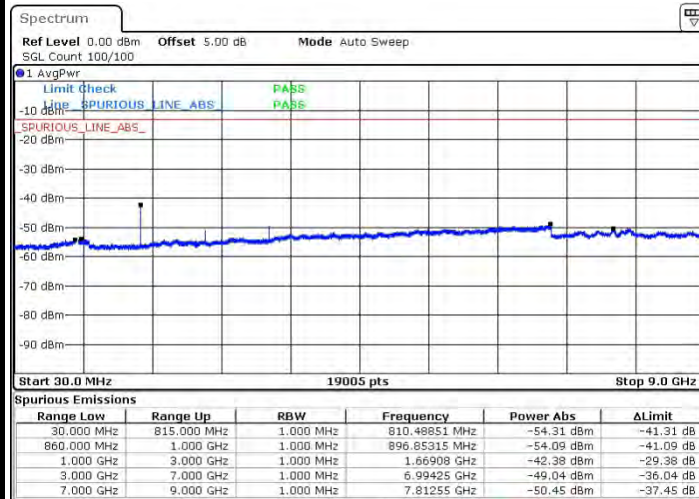
Lowest Channel / QPSK



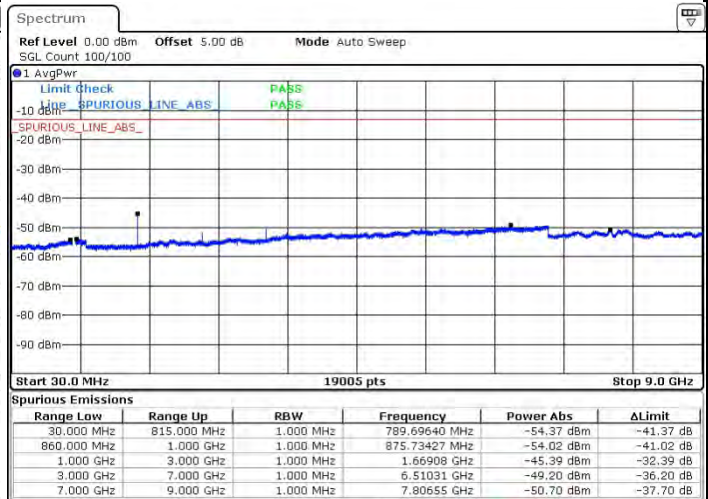
Lowest Channel / 16QAM



Middle Channel / QPSK



Middle Channel / 16QAM

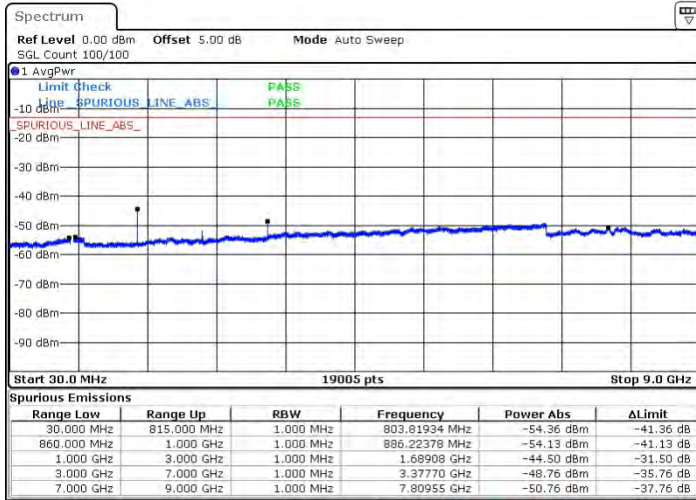




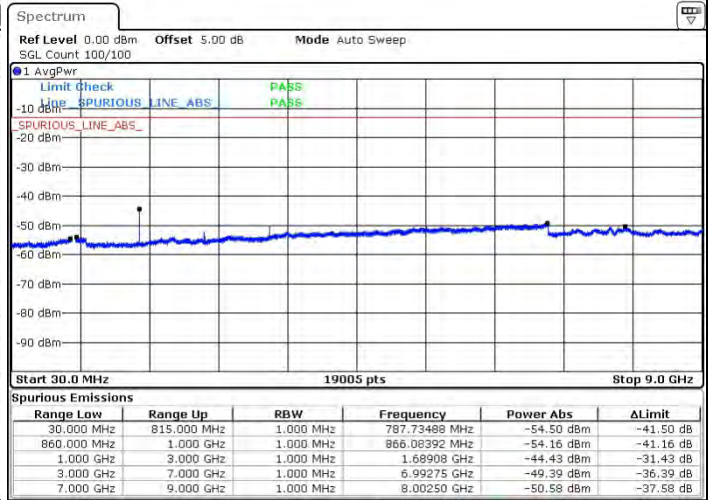
LTE Band 5 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16 JAN 2015 14:03:19

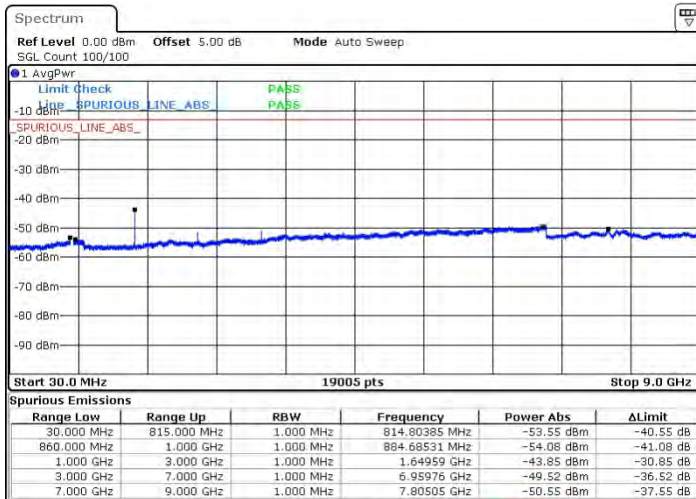


Date: 16 JAN 2015 14:04:37

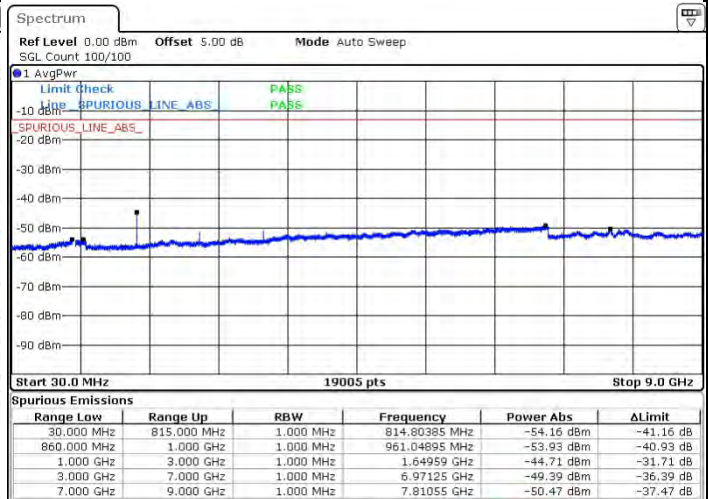
LTE Band 5 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 16 JAN 2015 14:06:38



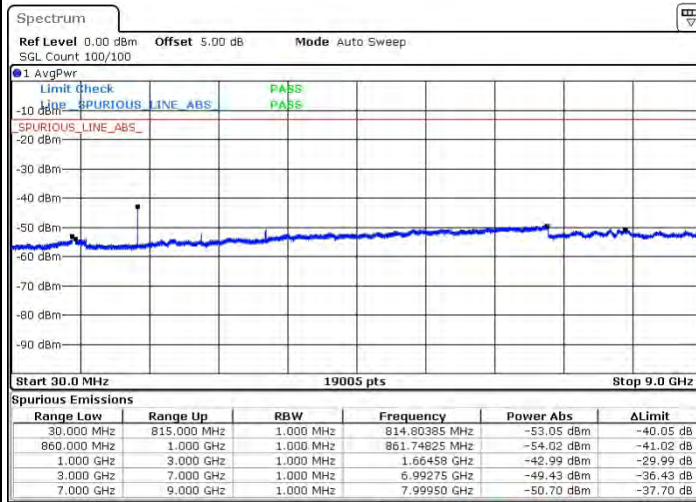
Date: 16 JAN 2015 14:07:56



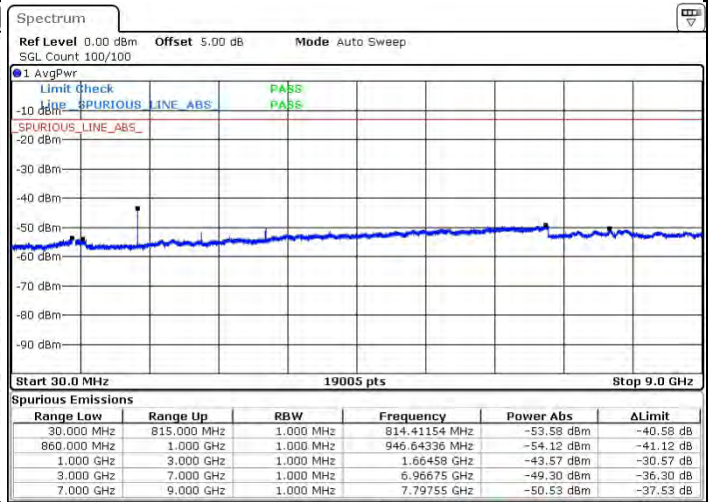
LTE Band 5 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



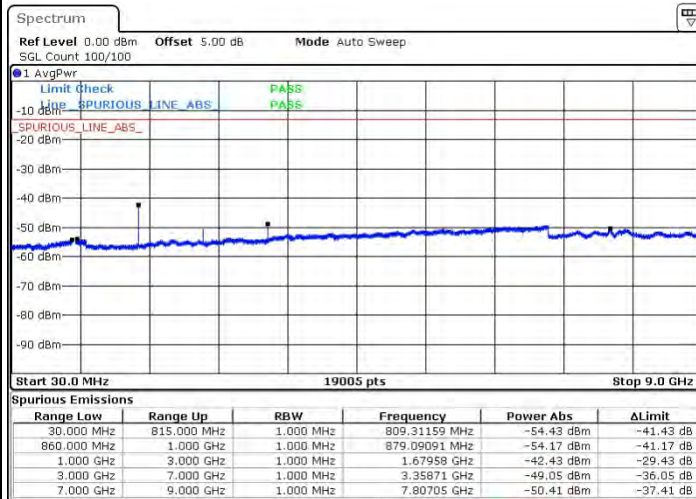
Date: 16 JAN 2015 14:09:58



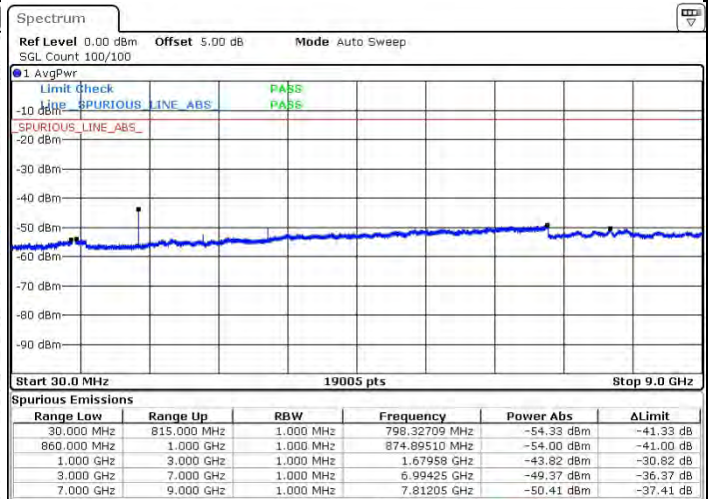
Date: 16 JAN 2015 14:11:15

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 16 JAN 2015 14:13:17



Date: 16 JAN 2015 14:14:35

**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	0.0013	PASS
40	Normal Voltage	0.0057	
30	Normal Voltage	0.0039	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0134	
0	Normal Voltage	0.0204	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0043	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0169	
20	Normal Voltage	0.0063	
20	Battery End Point	0.0084	

Note:

1. Normal Voltage = 3.8V ; Battery End Point (BEP) = 3.5 V ; Maximum Voltage =4.2V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



LTE Band 17

Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.16	4.29	4.12	5.30	PASS
Middle CH	3.71	4.35	4.58	5.28	
Highest CH	3.91	4.38	4.43	5.22	

LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 15.JAN.2015 21:29:04

Lowest Channel / Full RB



Date: 15.JAN.2015 21:28:33

Middle Channel / 1RB



Date: 15.JAN.2015 21:29:46

Middle Channel / Full RB



Date: 15.JAN.2015 21:29:33

Highest Channel / 1RB



Date: 15.JAN.2015 21:30:54

Highest Channel / Full RB



Date: 15.JAN.2015 21:31:04



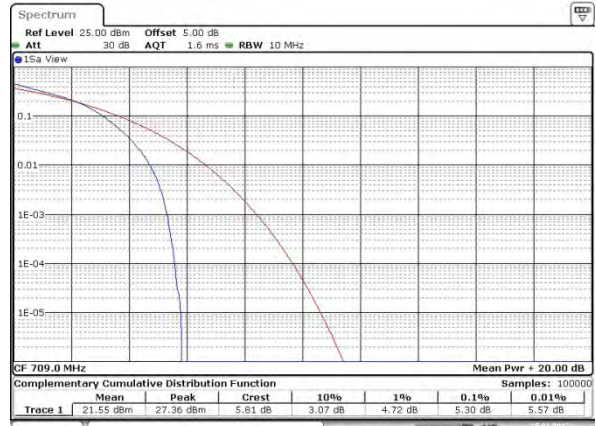
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



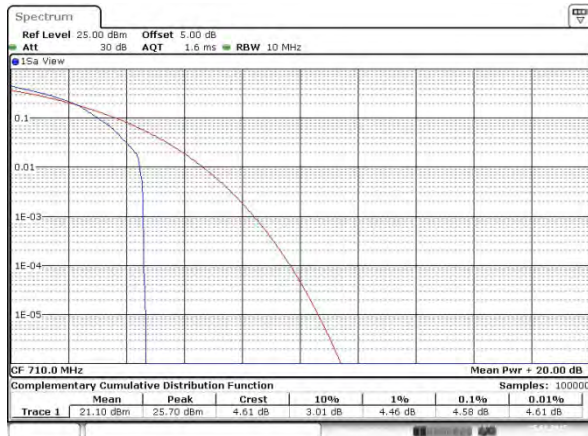
Date: 15 JAN 2015 21:25:18

Lowest Channel / Full RB



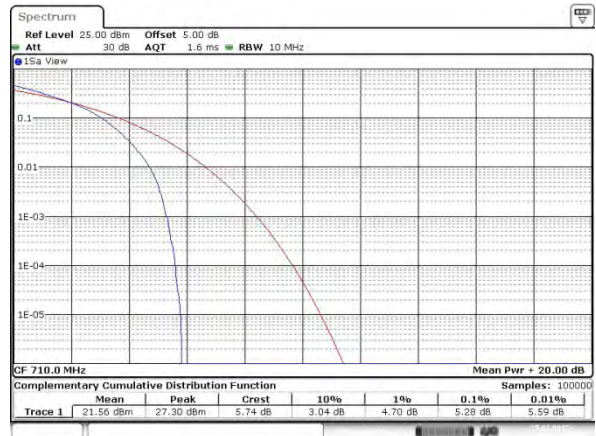
Date: 15 JAN 2015 21:27:28

Middle Channel / 1RB



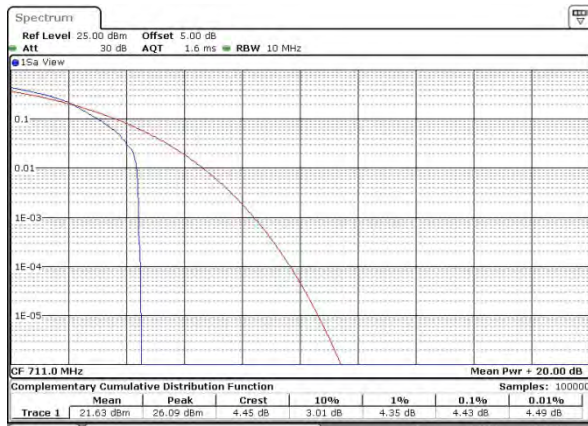
Date: 15 JAN 2015 21:29:14

Middle Channel / Full RB



Date: 15 JAN 2015 21:29:24

Highest Channel / 1RB



Date: 15 JAN 2015 21:30:24

Highest Channel / Full RB



Date: 15 JAN 2015 21:30:39

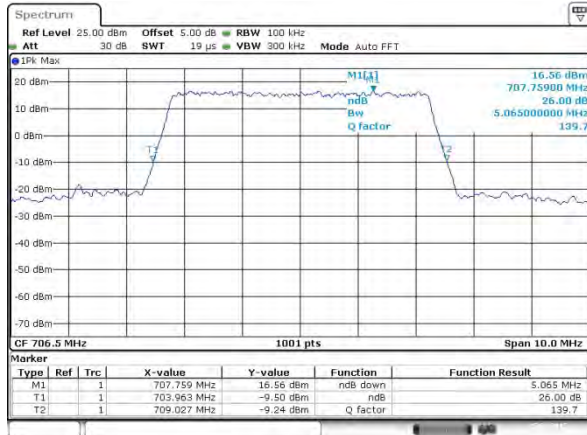
**26dB Bandwidth**

Mode	LTE Band 17 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Lowest CH	5.07	5.06	10.15	10.01
Middle CH	5.07	5.06	10.01	9.97
Highest CH	5.06	5.05	10.09	9.93



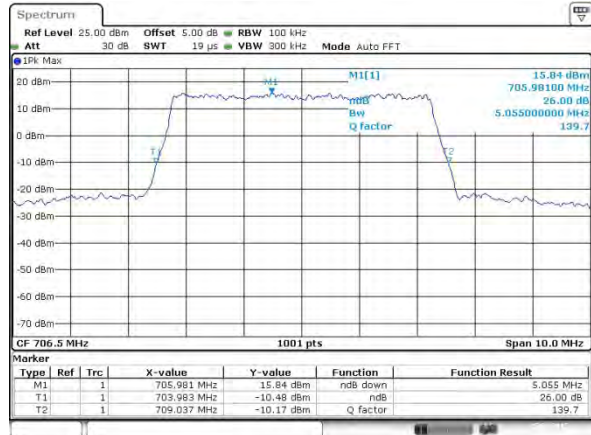
LTE Band 17

Lowest Channel / 5MHz / QPSK



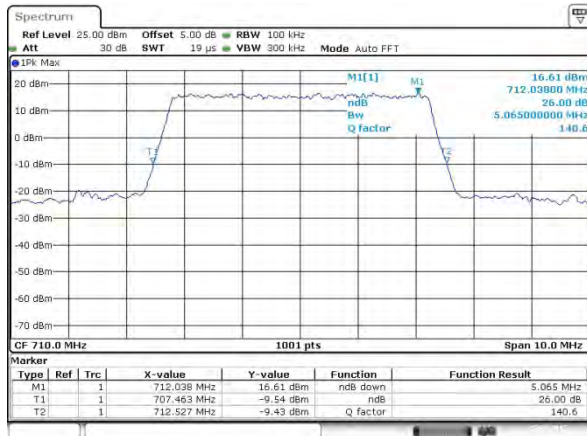
Date: 15 JAN 2015 21:05:39

Lowest Channel / 5MHz / 16QAM



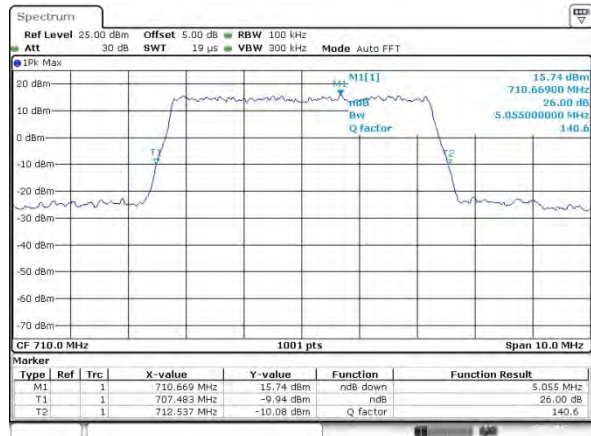
Date: 15 JAN 2015 21:05:50

Middle Channel / 5MHz / QPSK



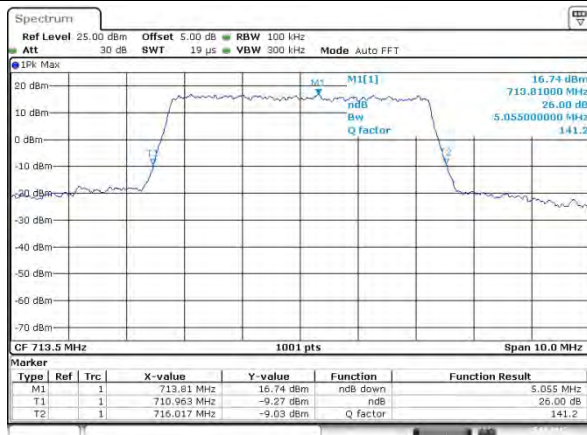
Date: 15 JAN 2015 21:08:58

Middle Channel / 5MHz / 16QAM



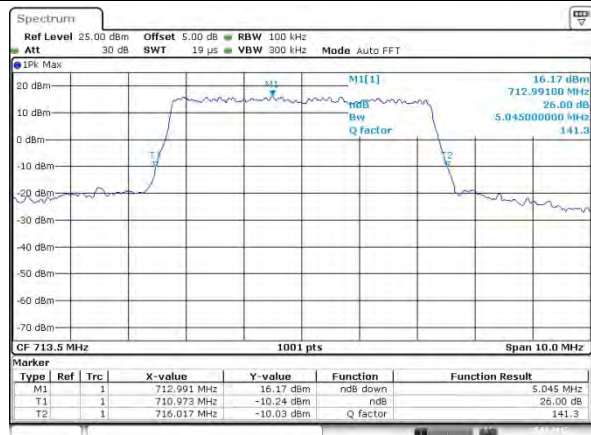
Date: 15 JAN 2015 21:09:10

Highest Channel / 5MHz / QPSK



Date: 15 JAN 2015 21:12:17

Highest Channel / 5MHz / 16QAM

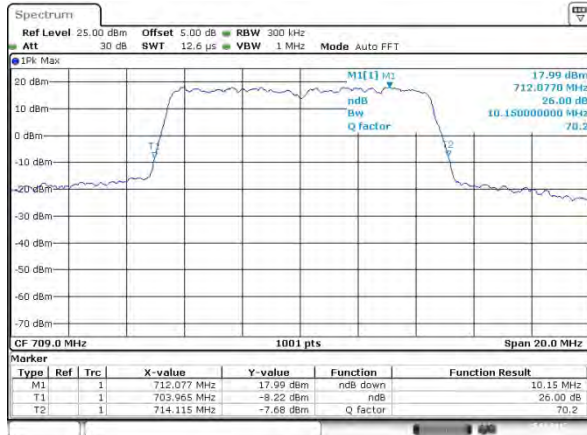


Date: 15 JAN 2015 21:12:29

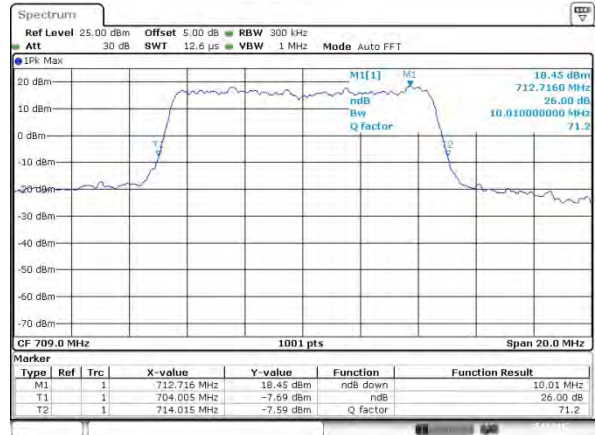


LTE Band 17

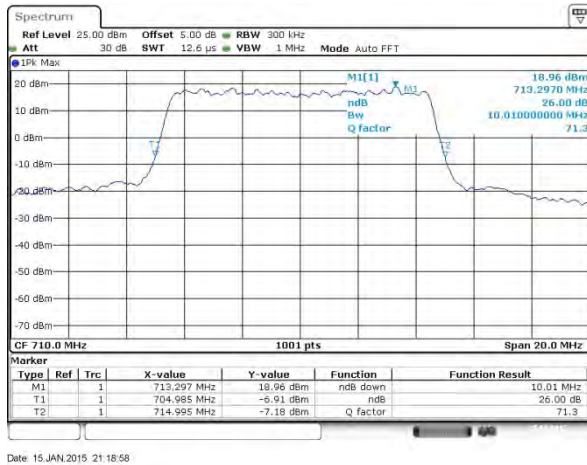
Lowest Channel / 10MHz / QPSK



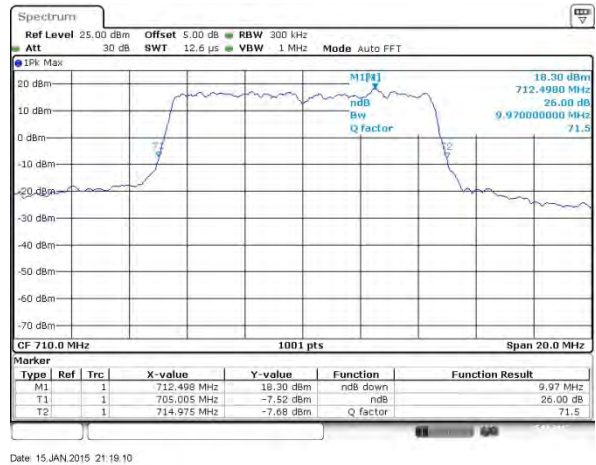
Lowest Channel / 10MHz / 16QAM



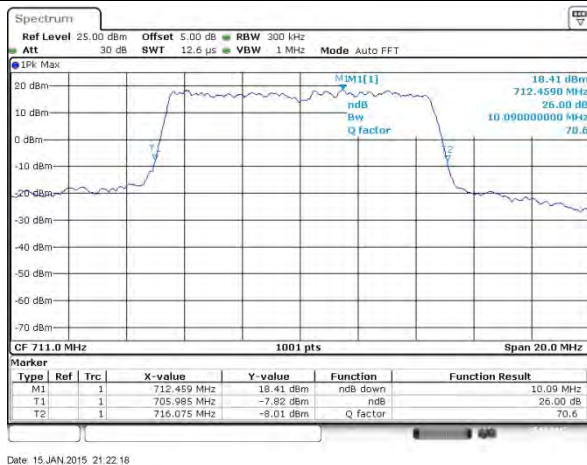
Middle Channel / 10MHz / QPSK



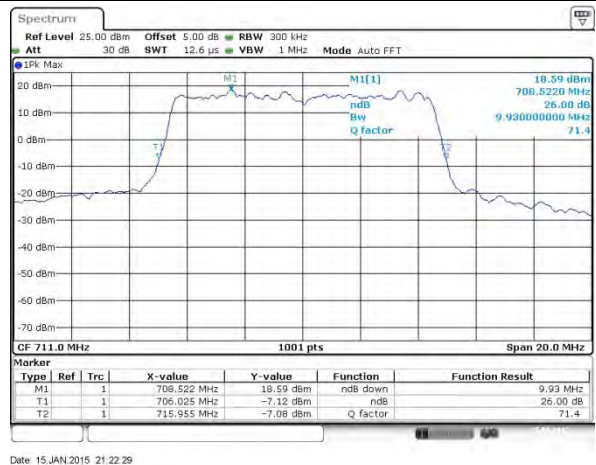
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



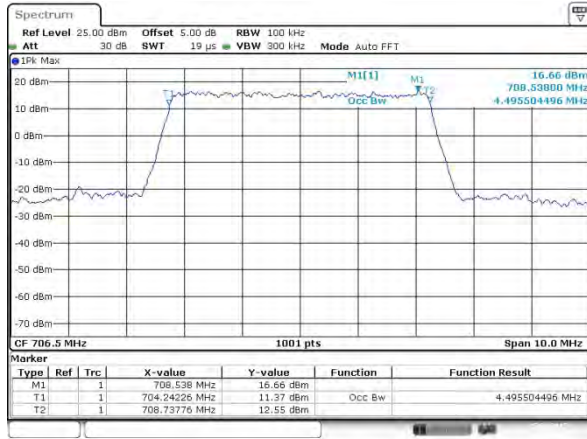
**Occupied Bandwidth**

Mode	LTE Band 17 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Lowest CH	4.50	4.50	9.09	9.03
Middle CH	4.50	4.50	9.11	9.01
Highest CH	4.50	4.50	9.03	9.05



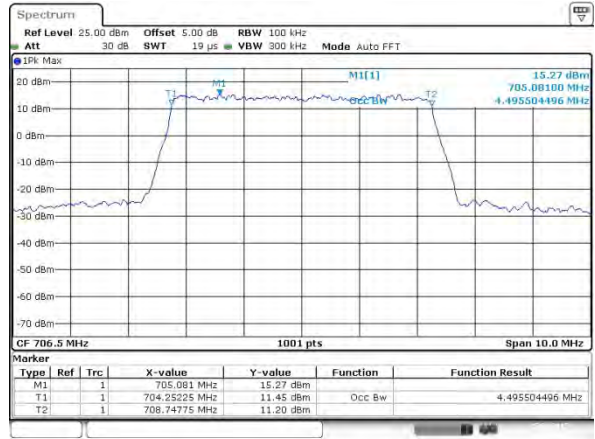
LTE Band 17

Lowest Channel / 5MHz / QPSK



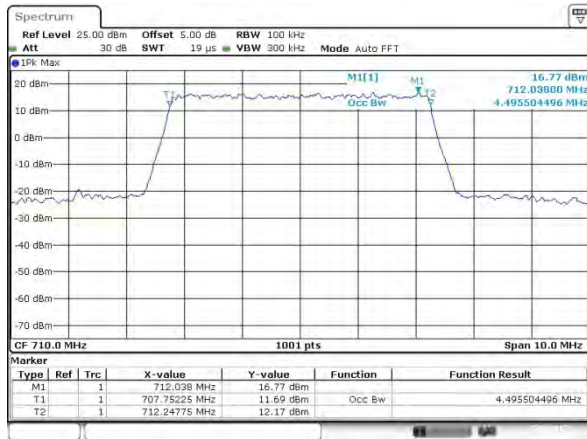
Date: 15 JAN 2015 21:05:17

Lowest Channel / 5MHz / 16QAM



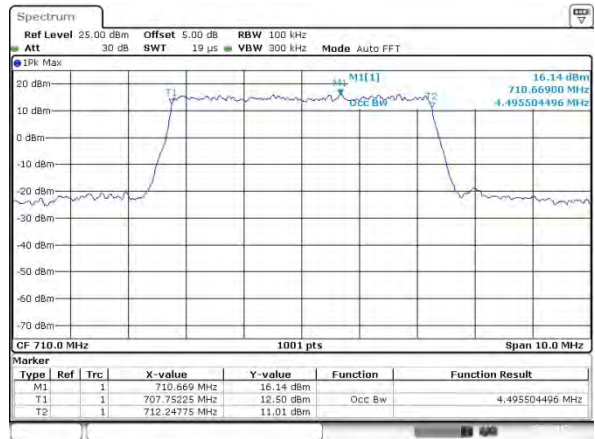
Date: 15 JAN 2015 21:05:27

Middle Channel / 5MHz / QPSK



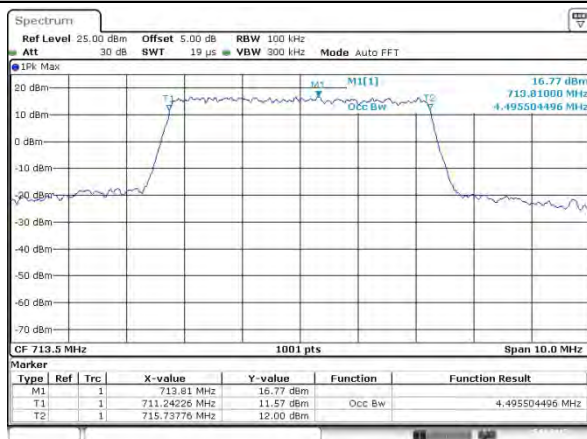
Date: 15 JAN 2015 21:08:36

Middle Channel / 5MHz / 16QAM



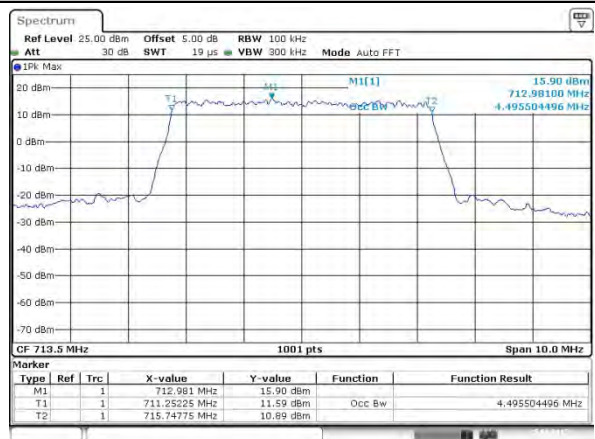
Date: 15 JAN 2015 21:08:46

Highest Channel / 5MHz / QPSK



Date: 15 JAN 2015 21:11:55

Highest Channel / 5MHz / 16QAM

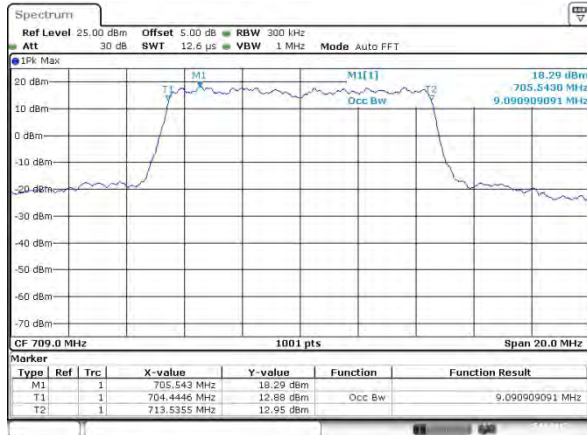


Date: 15 JAN 2015 21:12:05



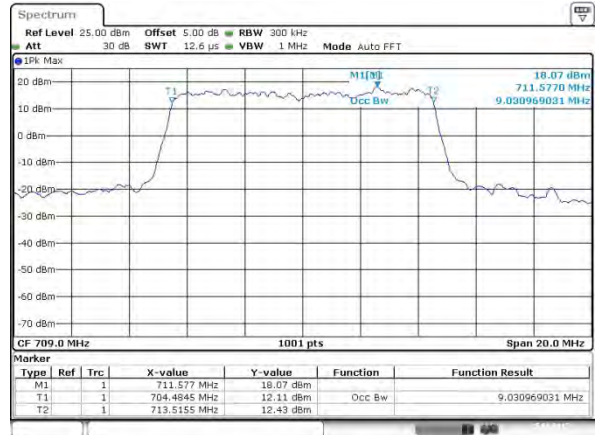
LTE Band 17

Lowest Channel / 10MHz / QPSK



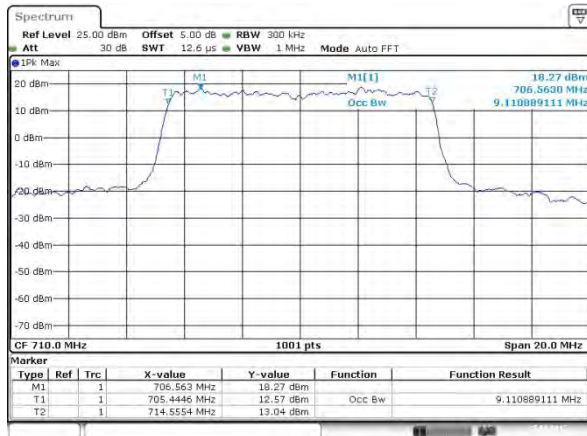
Date: 15 JAN 2015 21:15:17

Lowest Channel / 10MHz / 16QAM



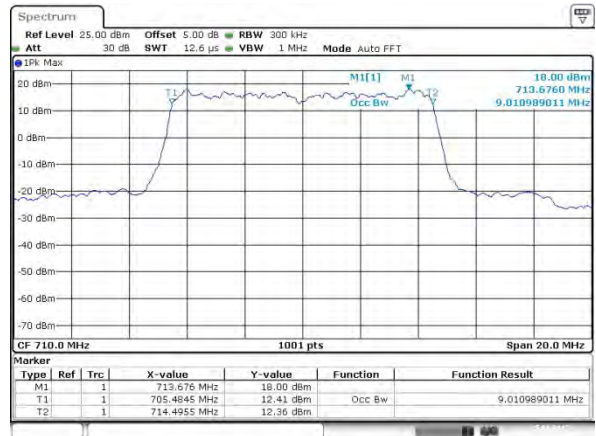
Date: 15 JAN 2015 21:15:27

Middle Channel / 10MHz / QPSK



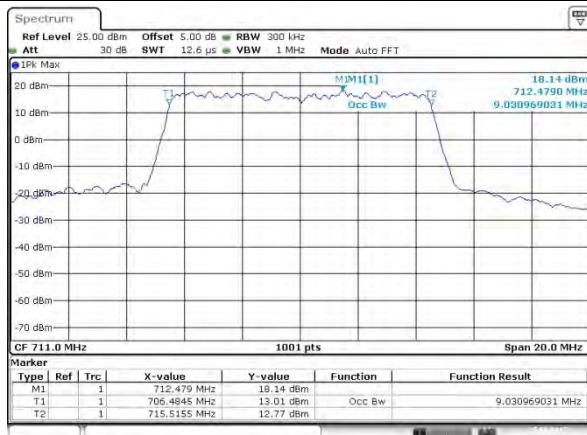
Date: 15 JAN 2015 21:18:36

Middle Channel / 10MHz / 16QAM



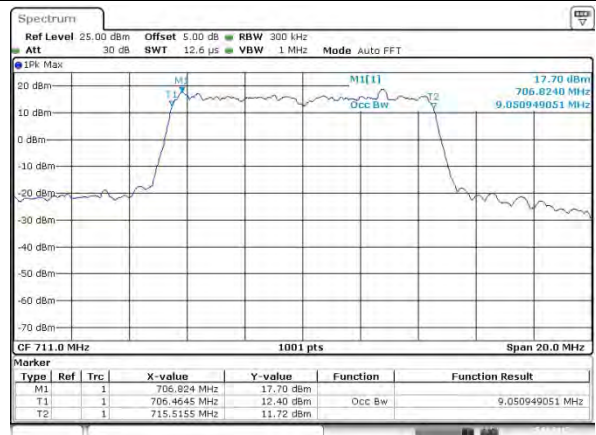
Date: 15 JAN 2015 21:18:46

Highest Channel / 10MHz / QPSK

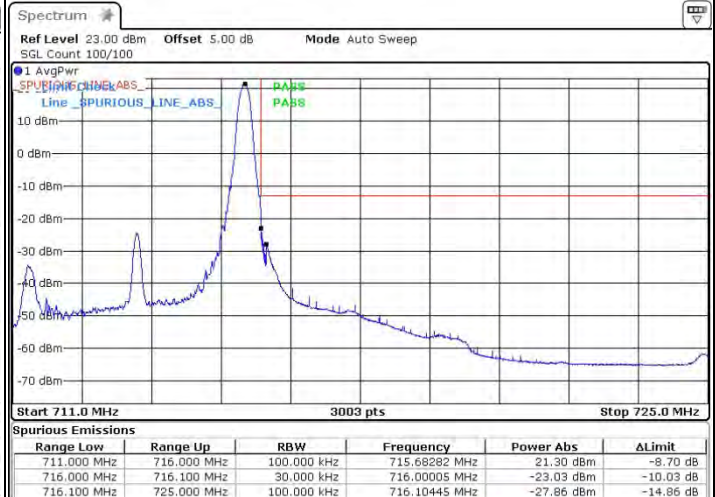


Date: 15 JAN 2015 21:21:56

Highest Channel / 10MHz / 16QAM



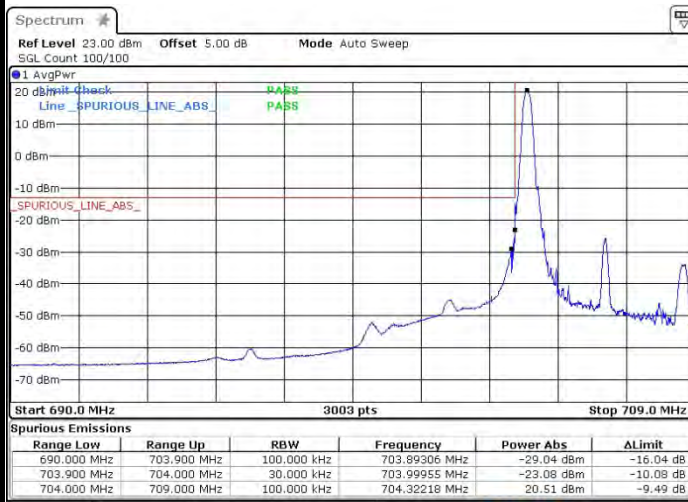
Date: 15 JAN 2015 21:22:06

**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**

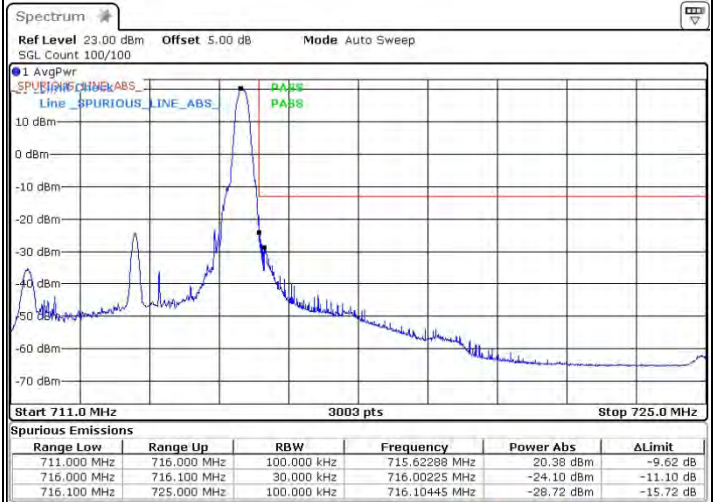


LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



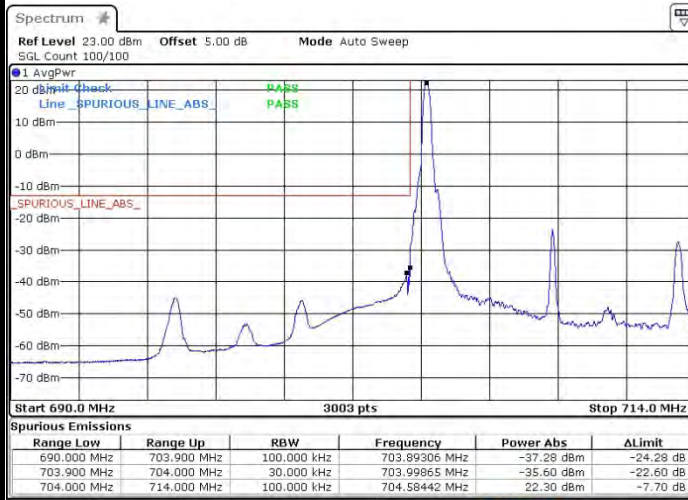
Highest Band Edge / Full RB



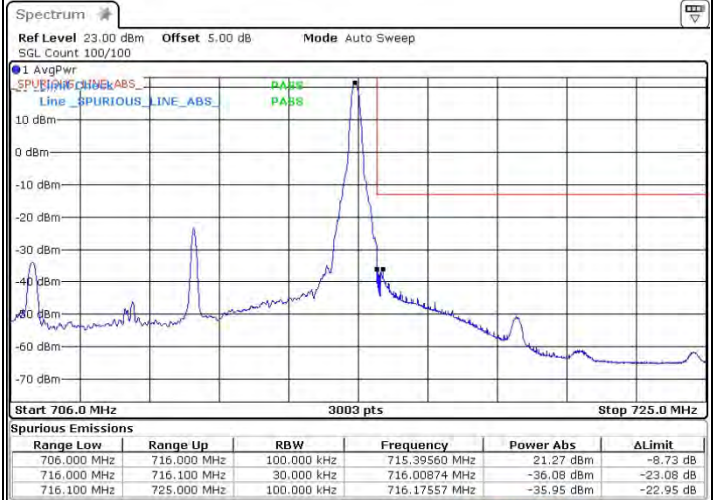


LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



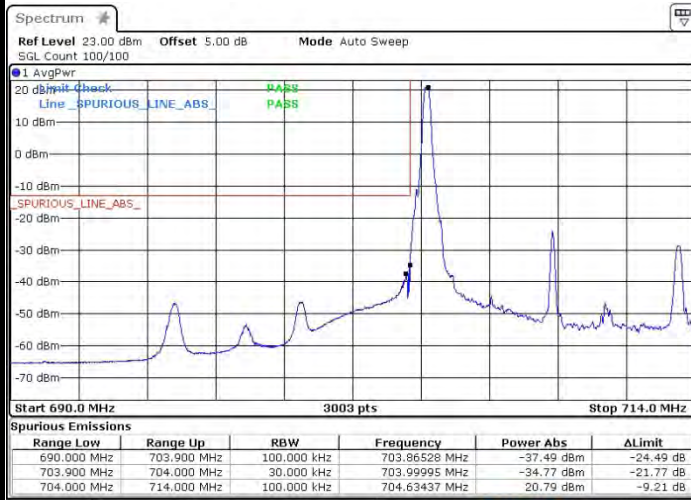
Highest Band Edge / Full RB



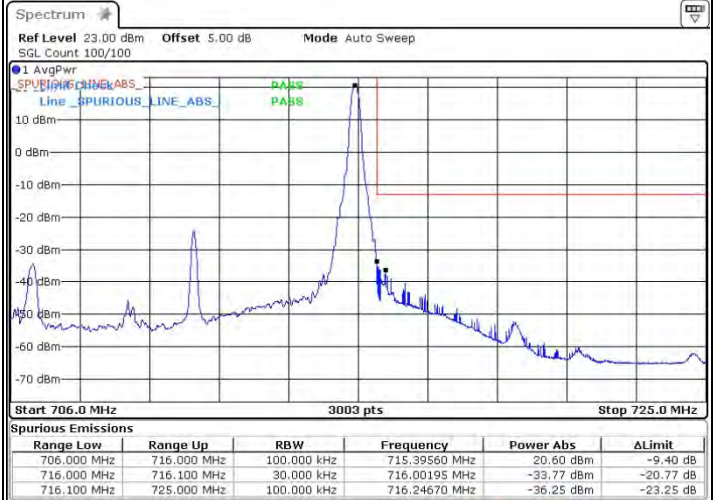


LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

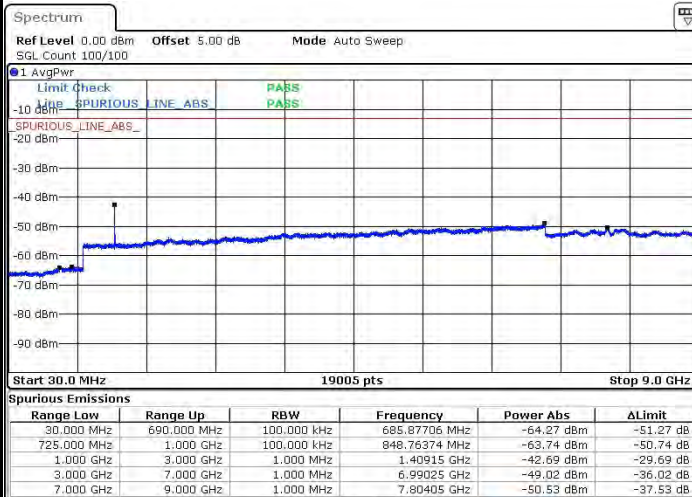




Conducted Spurious Emission

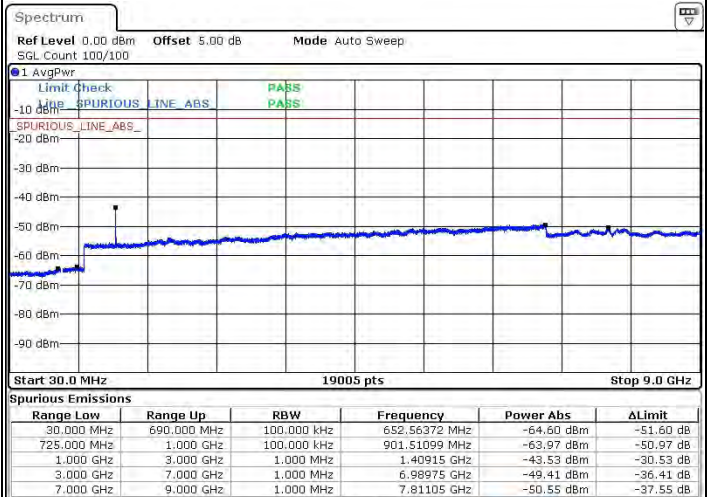
LTE Band 17 / 5MHz

Lowest Channel / QPSK



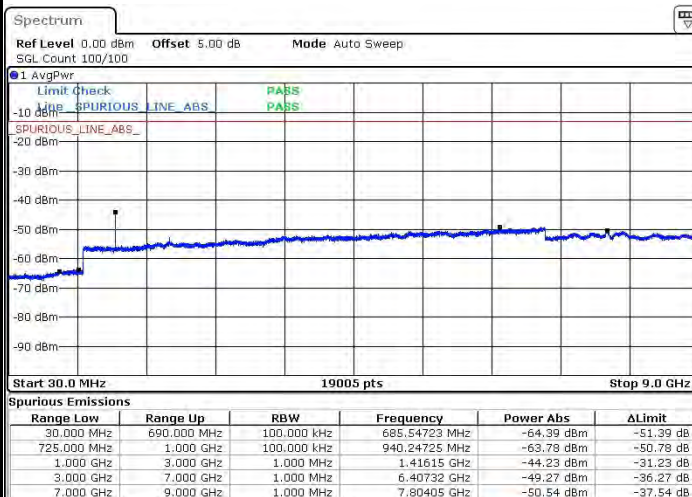
Date: 15 JAN 2015 21:06:58

Lowest Channel / 16QAM



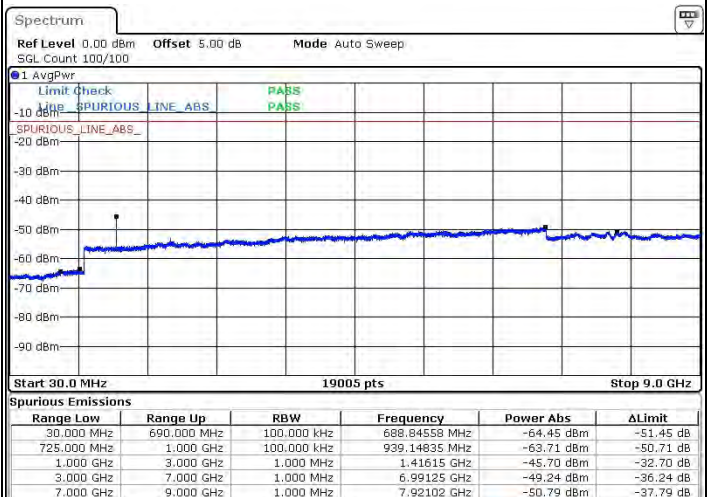
Date: 15 JAN 2015 21:08:16

Middle Channel / QPSK



Date: 15 JAN 2015 21:10:17

Middle Channel / 16QAM

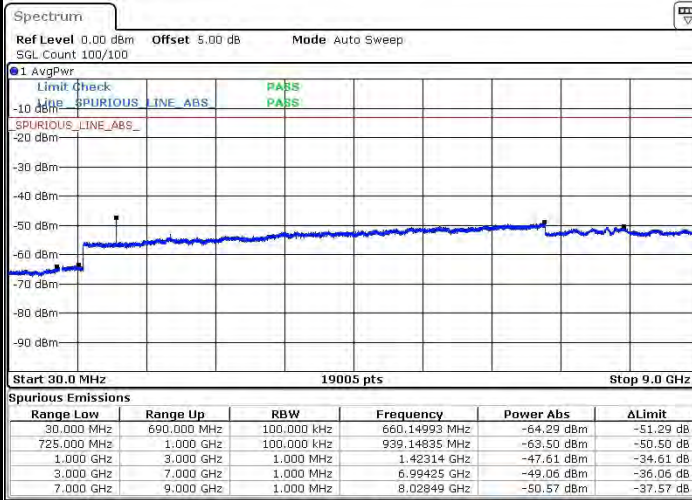


Date: 15 JAN 2015 21:11:35



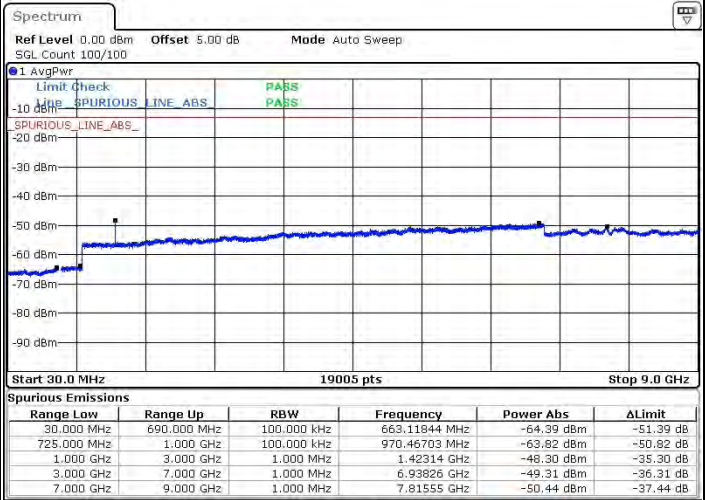
LTE Band 17 / 5MHz

Highest Channel / QPSK



Date: 15 JAN 2015 21:13:37

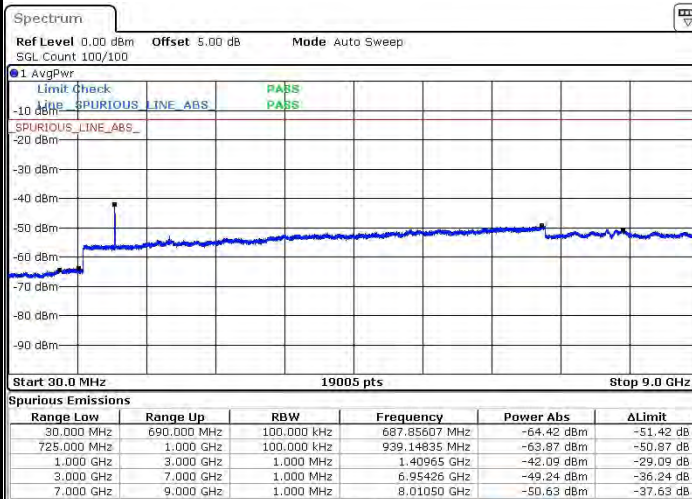
Highest Channel / 16QAM



Date: 15 JAN 2015 21:14:57

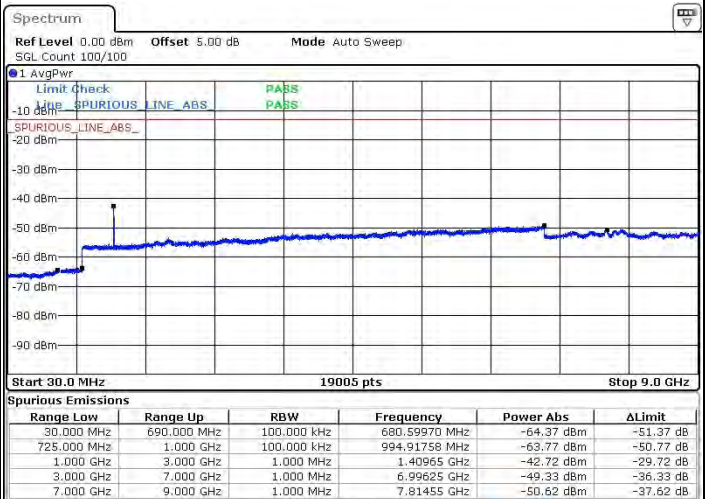
LTE Band 17 / 10MHz

Lowest Channel / QPSK



Date: 15 JAN 2015 21:16:58

Lowest Channel / 16QAM

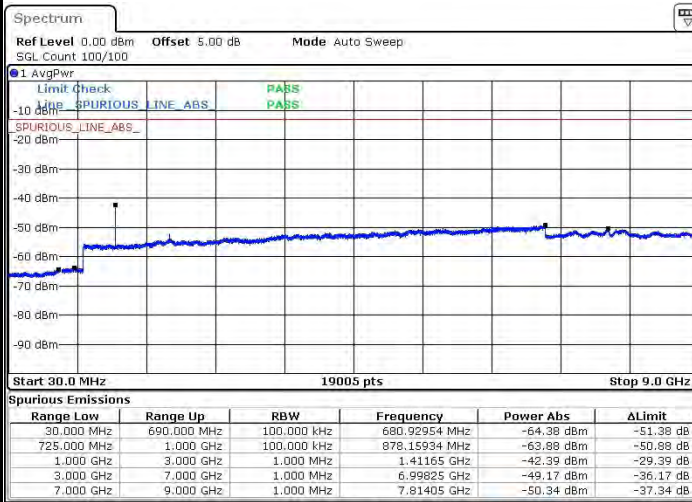


Date: 15 JAN 2015 21:18:16



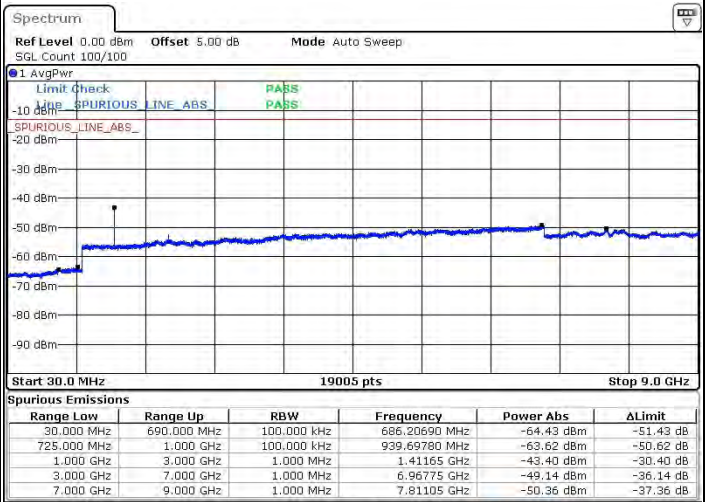
LTE Band 17 / 10MHz

Middle Channel / QPSK



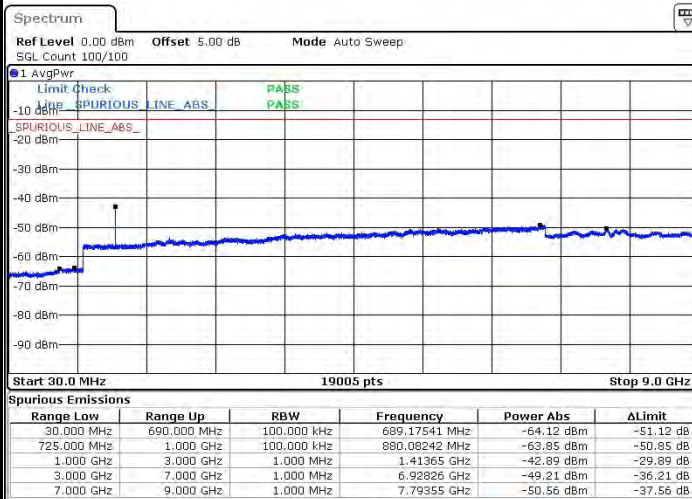
Date: 15 JAN 2015 21:20:18

Middle Channel / 16QAM



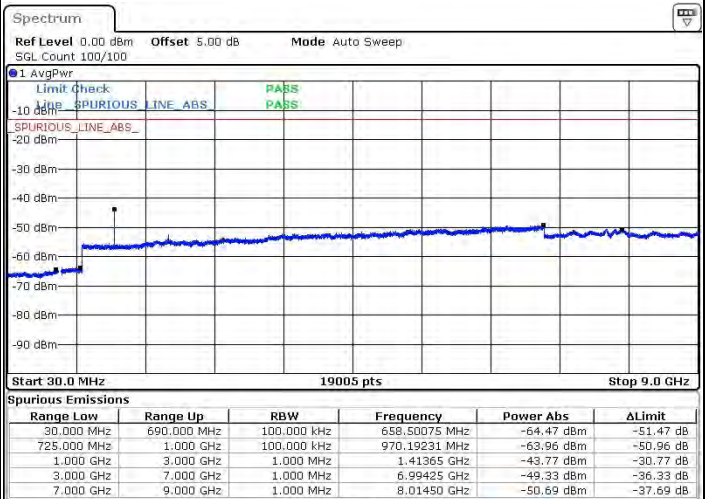
Date: 15 JAN 2015 21:21:36

Highest Channel / QPSK



Date: 15 JAN 2015 21:23:37

Highest Channel / 16QAM



Date: 15 JAN 2015 21:24:55

**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	0.0007	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0034	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0037	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0028	

Note:

3. Normal Voltage = 3.8V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage =4.2 V
4. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.