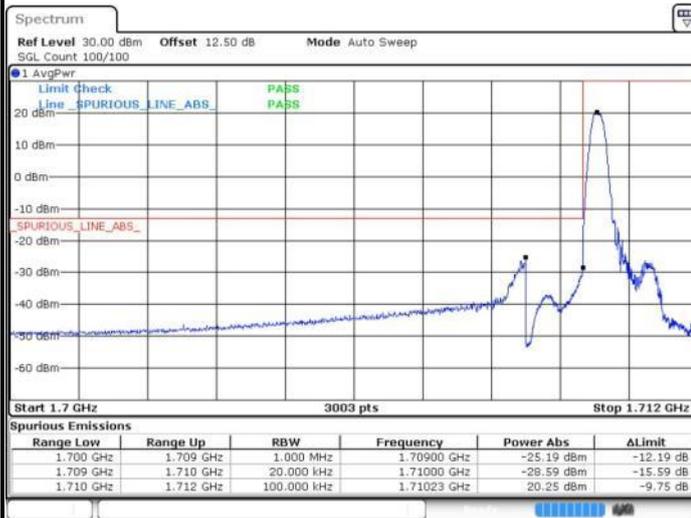




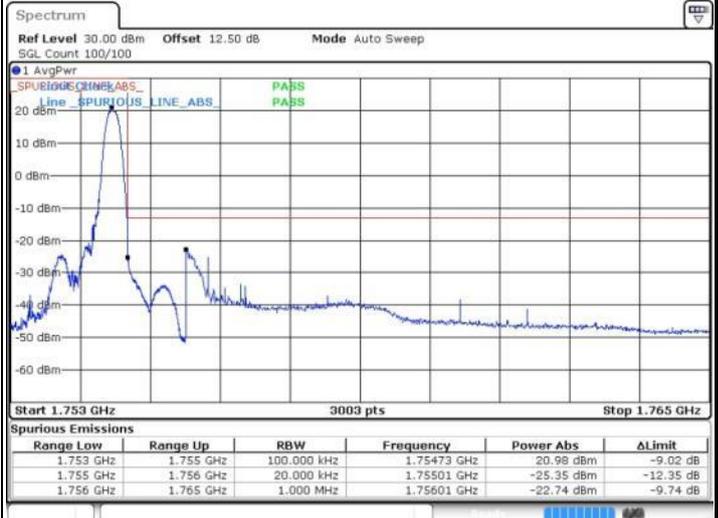
LTE Band 4 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 9 AUG 2015 11:38:22

Highest Band Edge / 1 RB



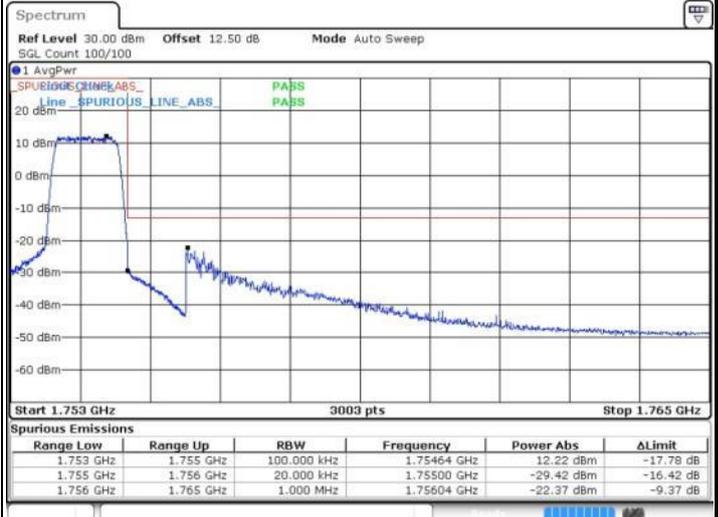
Date: 9 AUG 2015 14:44:41

Lowest Band Edge / Full RB



Date: 9 AUG 2015 11:40:41

Highest Band Edge / Full RB

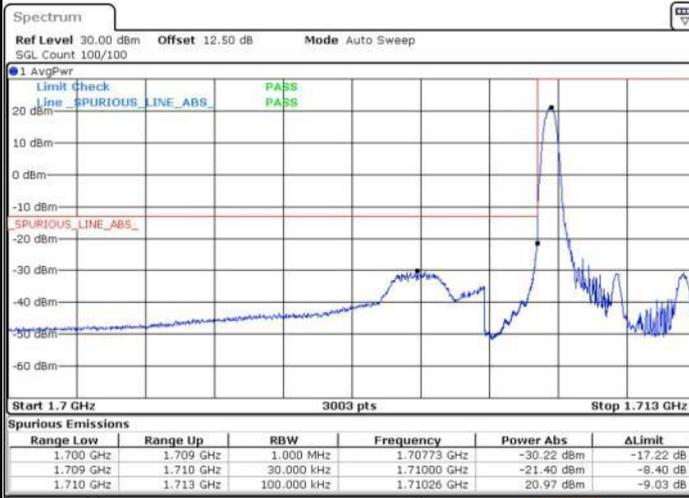


Date: 9 AUG 2015 14:47:00



LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



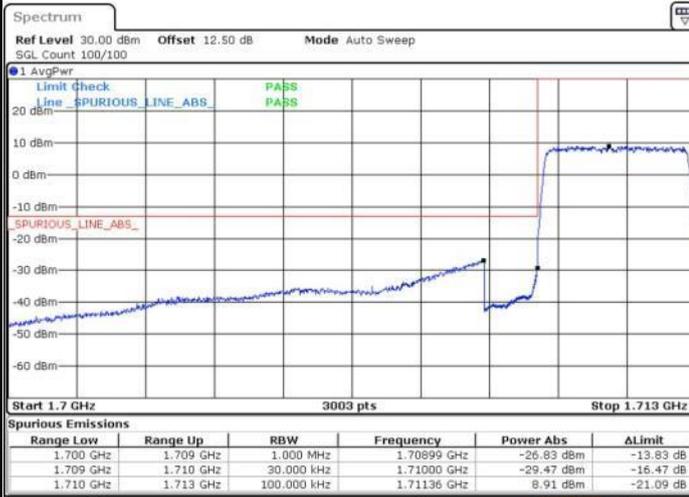
Date: 9 AUG 2015 10:09:57

Highest Band Edge / 1 RB



Date: 9 AUG 2015 10:19:37

Lowest Band Edge / Full RB



Date: 9 AUG 2015 10:12:15

Highest Band Edge / Full RB

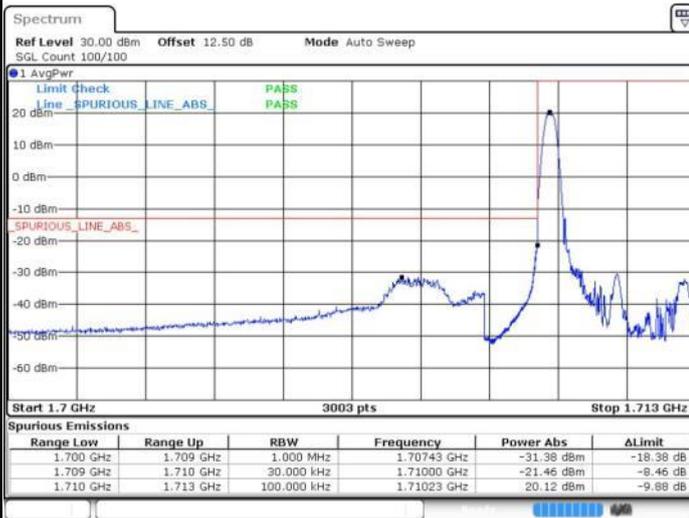


Date: 9 AUG 2015 10:21:56



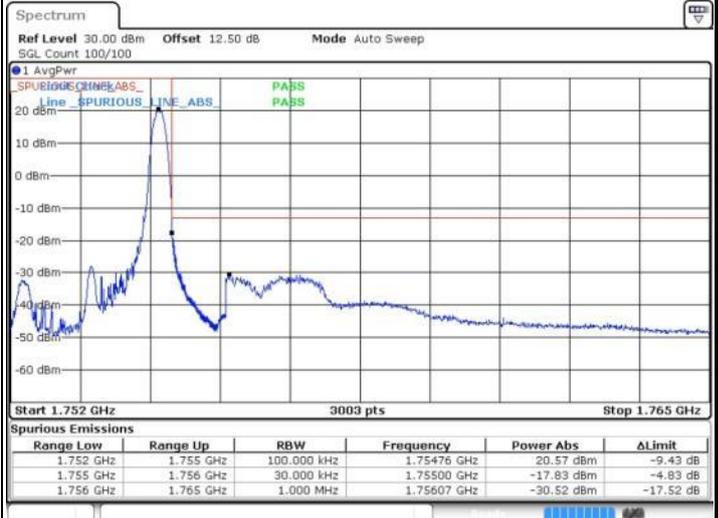
LTE Band 4 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 9 AUG 2015 10:11:06

Highest Band Edge / 1 RB



Date: 9 AUG 2015 10:20:46

Lowest Band Edge / Full RB



Date: 9 AUG 2015 10:13:24

Highest Band Edge / Full RB

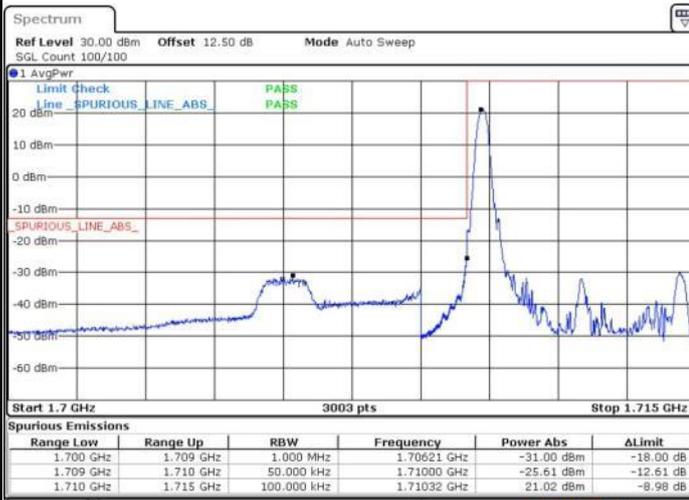


Date: 9 AUG 2015 10:23:06



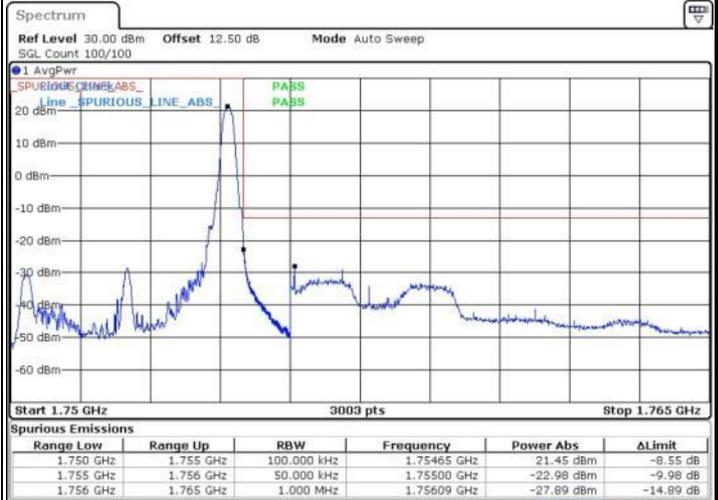
LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Date: 9 AUG 2015 10:26:47

Highest Band Edge / 1 RB



Date: 9 AUG 2015 10:36:28

Lowest Band Edge / Full RB



Date: 9 AUG 2015 10:29:05

Highest Band Edge / Full RB

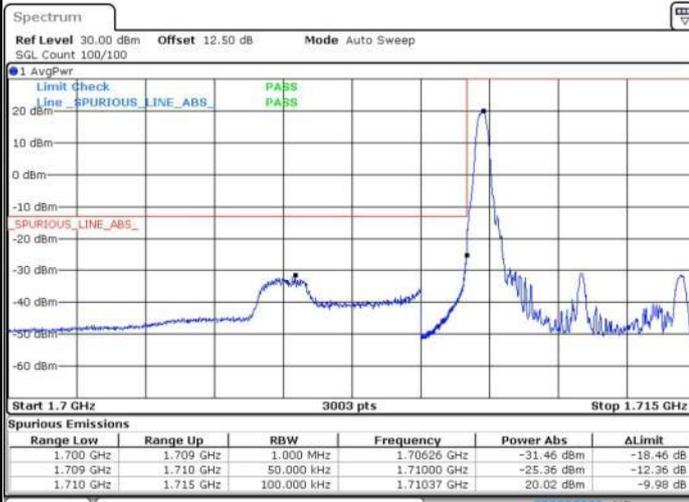


Date: 9 AUG 2015 10:38:47



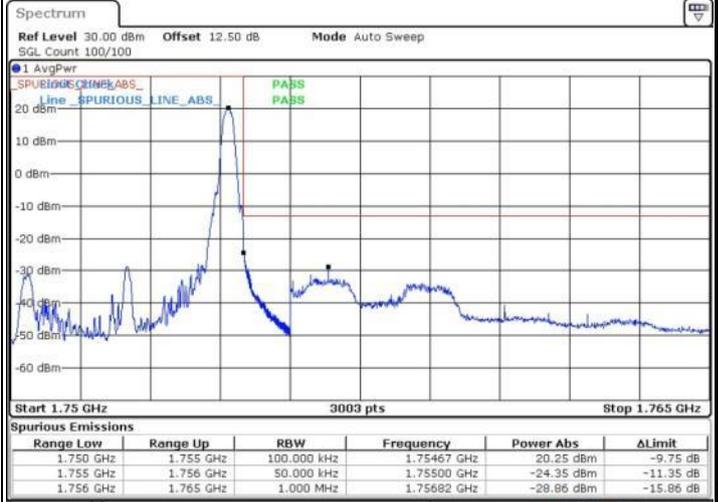
LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / 1RB



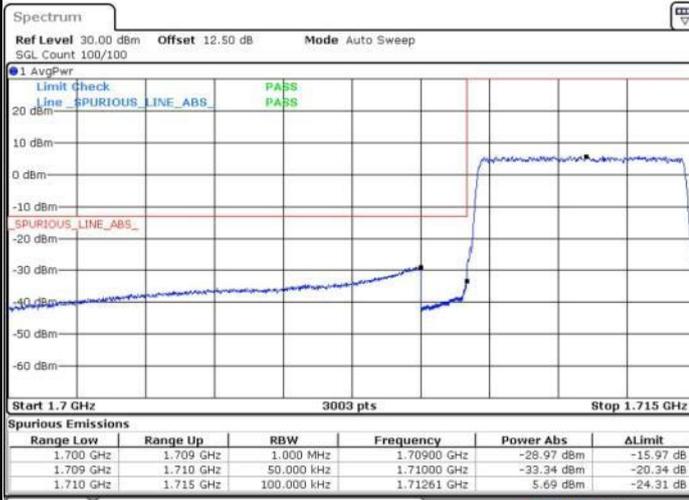
Date: 9 AUG 2015 10:27:56

Highest Band Edge / 1 RB



Date: 9 AUG 2015 10:37:37

Lowest Band Edge / Full RB



Date: 9 AUG 2015 10:30:15

Highest Band Edge / Full RB

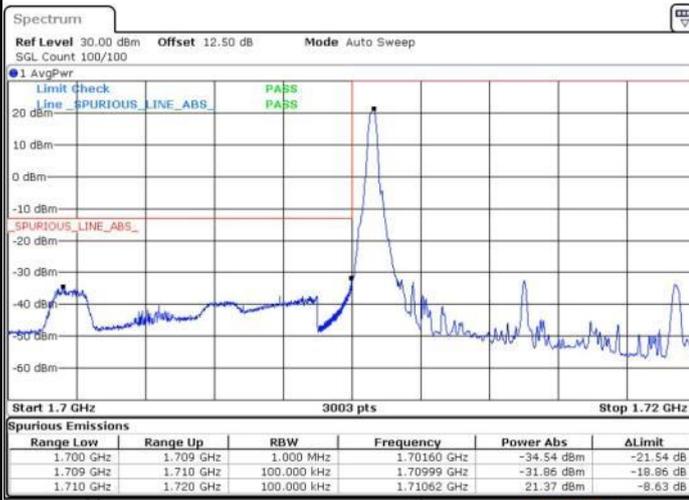


Date: 9 AUG 2015 10:39:56



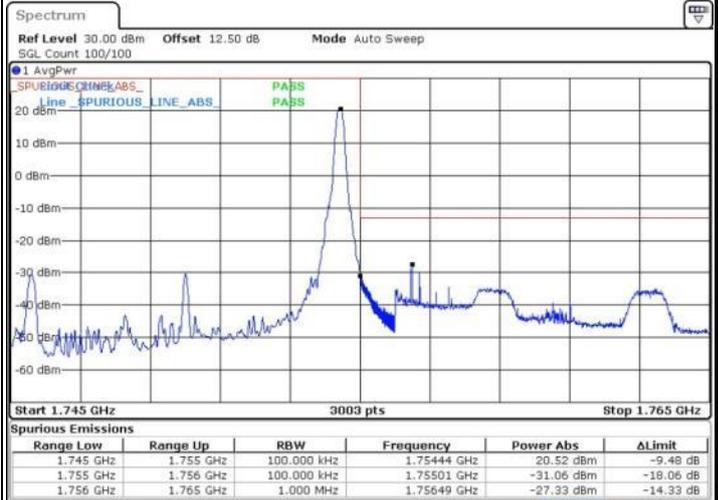
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB



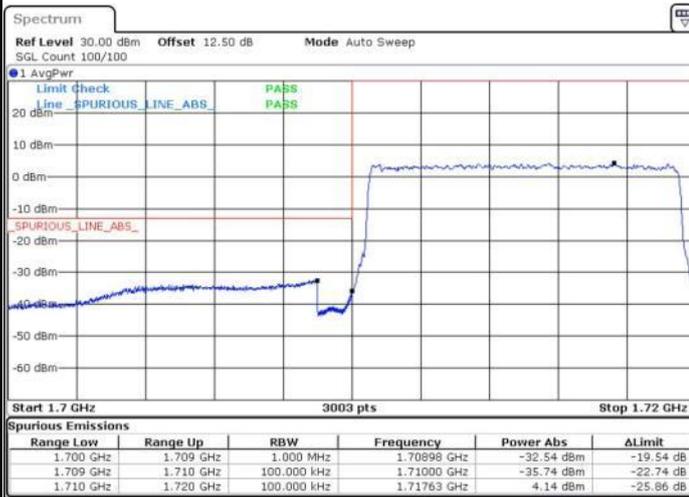
Date: 9 AUG 2015 10:43:37

Highest Band Edge / 1 RB



Date: 9 AUG 2015 10:53:16

Lowest Band Edge / Full RB



Date: 9 AUG 2015 10:45:55

Highest Band Edge / Full RB

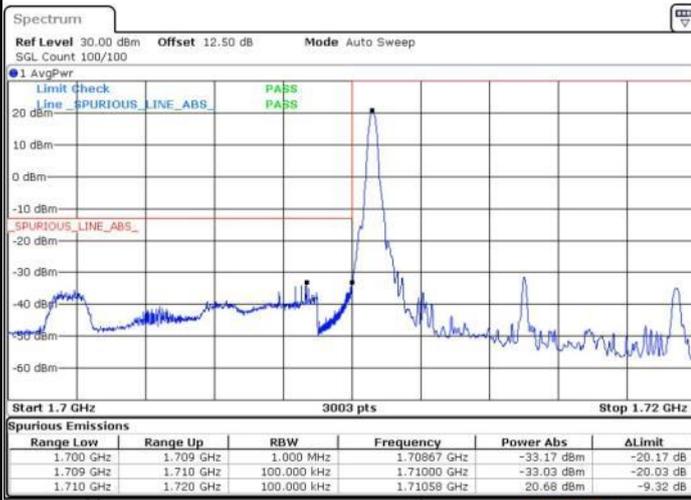


Date: 9 AUG 2015 10:55:34



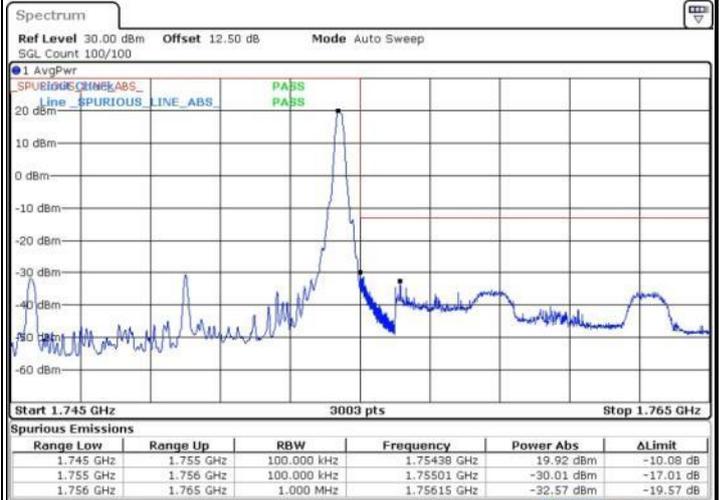
LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



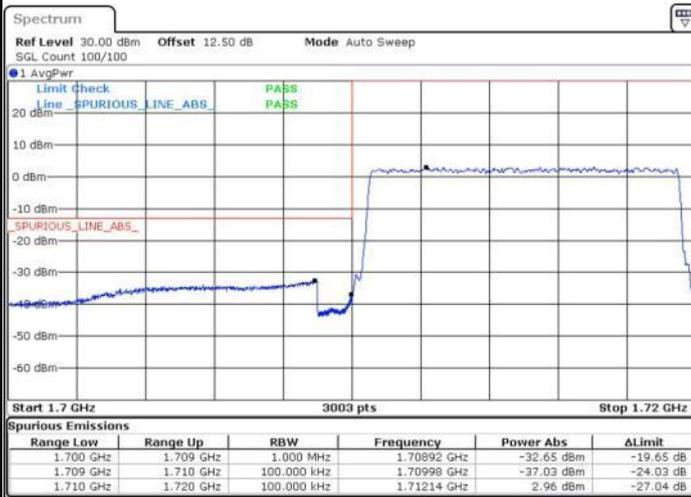
Date: 9 AUG 2015 10:44:46

Highest Band Edge / 1 RB



Date: 9 AUG 2015 10:54:25

Lowest Band Edge / Full RB



Date: 9 AUG 2015 10:47:04

Highest Band Edge / Full RB

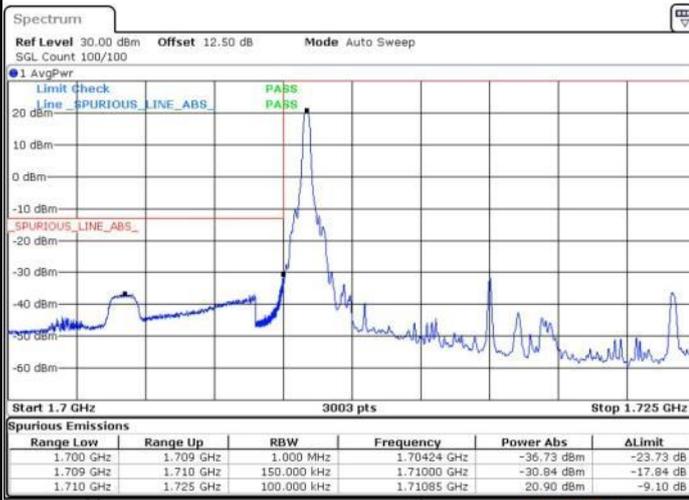


Date: 9 AUG 2015 10:56:44



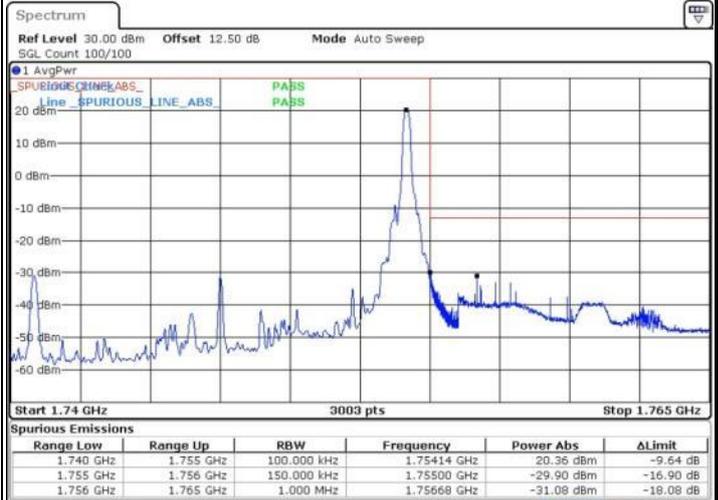
LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / 1 RB



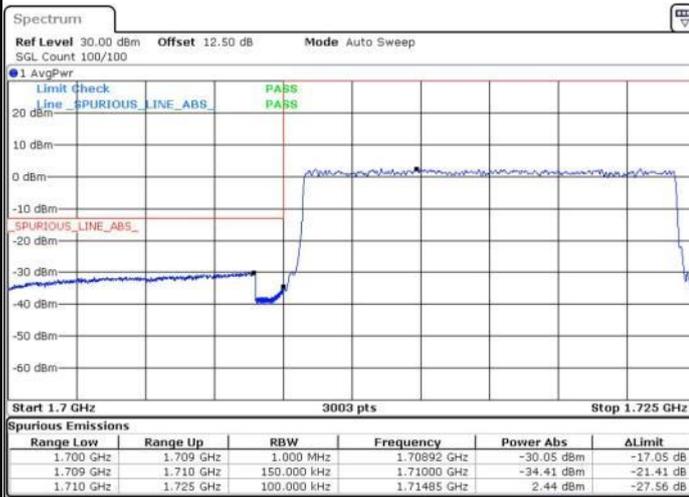
Date: 9 AUG 2015 11:03:35

Highest Band Edge / 1 RB



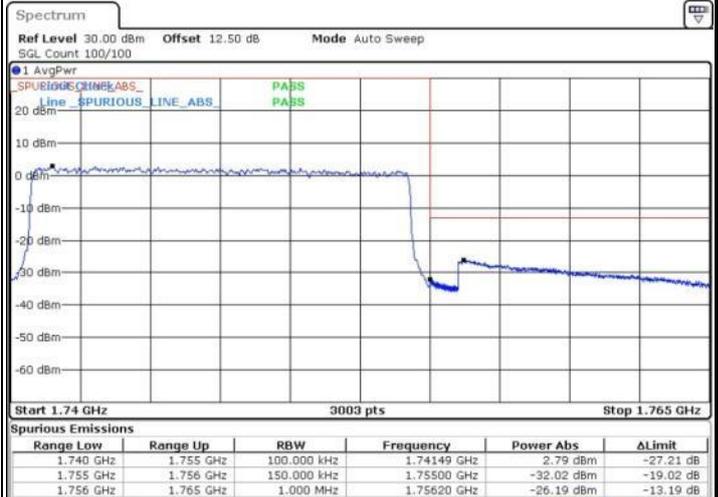
Date: 9 AUG 2015 11:13:16

Lowest Band Edge / Full RB



Date: 9 AUG 2015 11:05:54

Highest Band Edge / Full RB

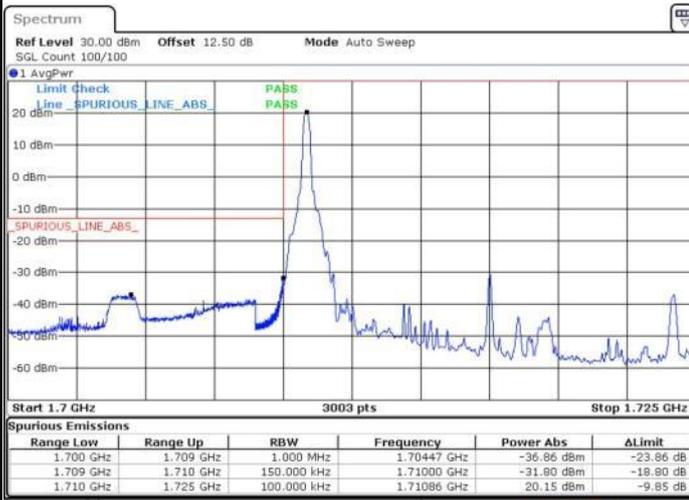


Date: 9 AUG 2015 11:15:35



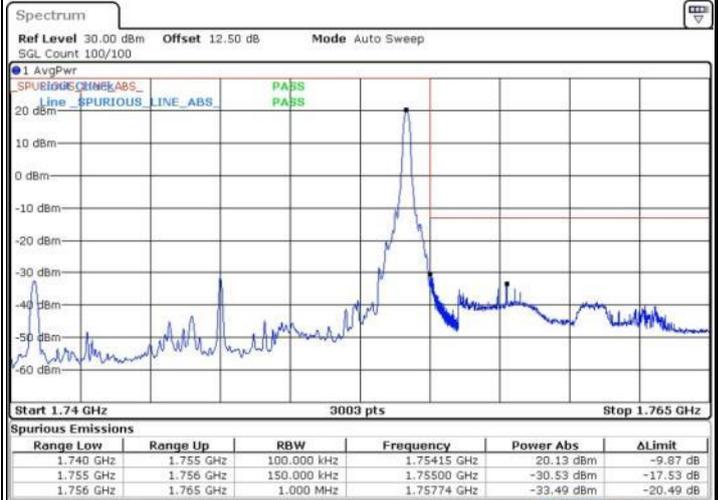
LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



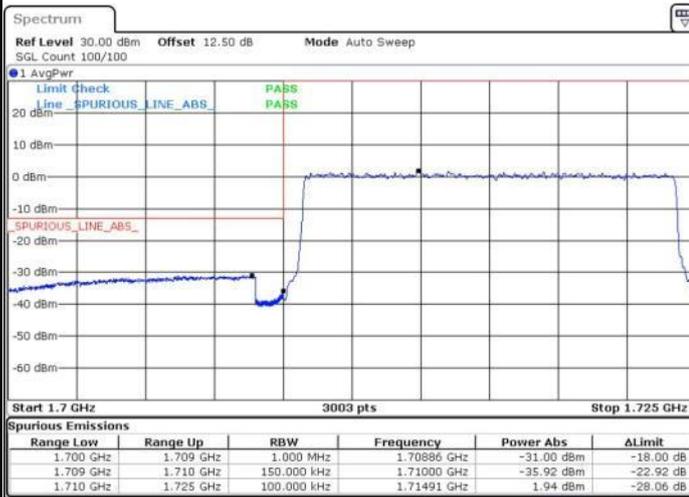
Date: 9 AUG 2015 11:04:45

Highest Band Edge / 1 RB



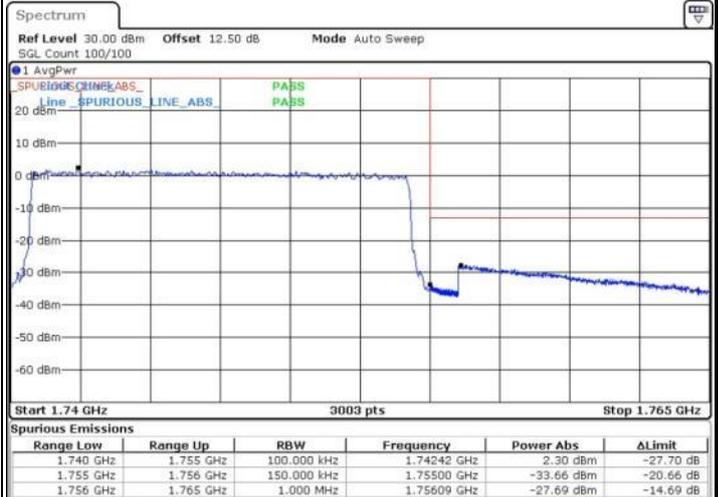
Date: 9 AUG 2015 11:14:26

Lowest Band Edge / Full RB



Date: 9 AUG 2015 11:07:03

Highest Band Edge / Full RB

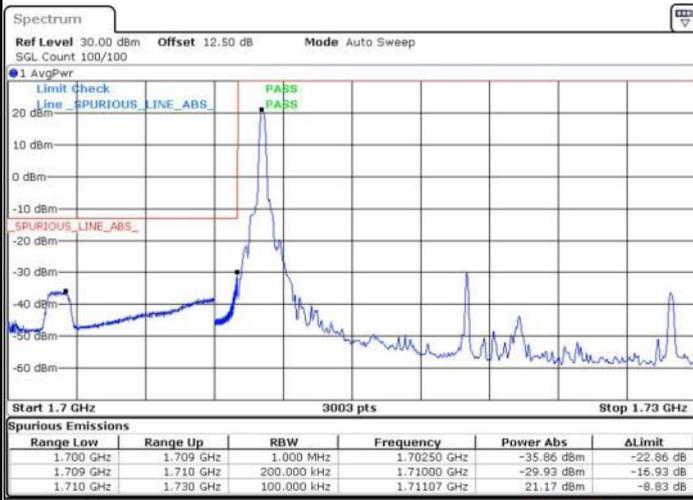


Date: 9 AUG 2015 11:16:44



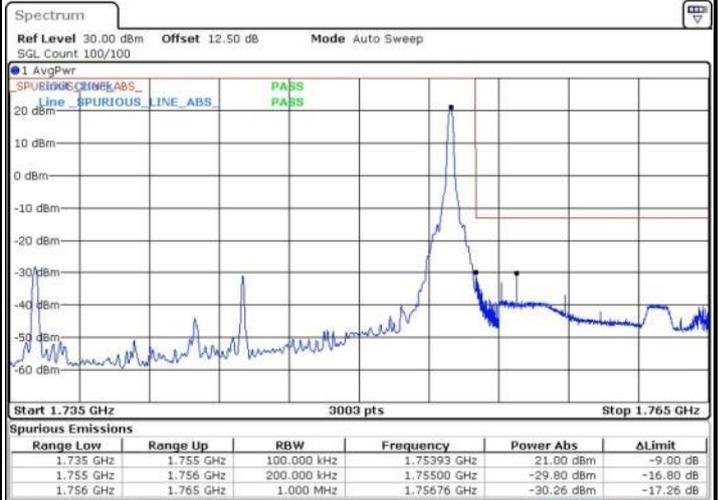
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / 1 RB



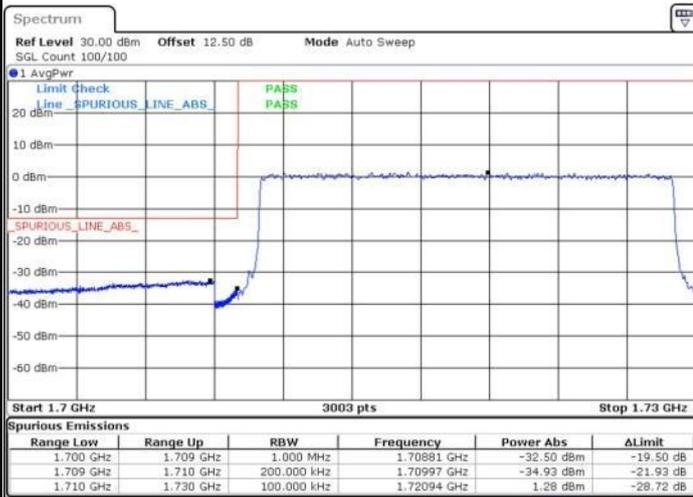
Date: 9 AUG 2015 11:20:25

Highest Band Edge / 1 RB



Date: 9 AUG 2015 11:30:05

Lowest Band Edge / Full RB



Date: 9 AUG 2015 11:22:44

Highest Band Edge / Full RB

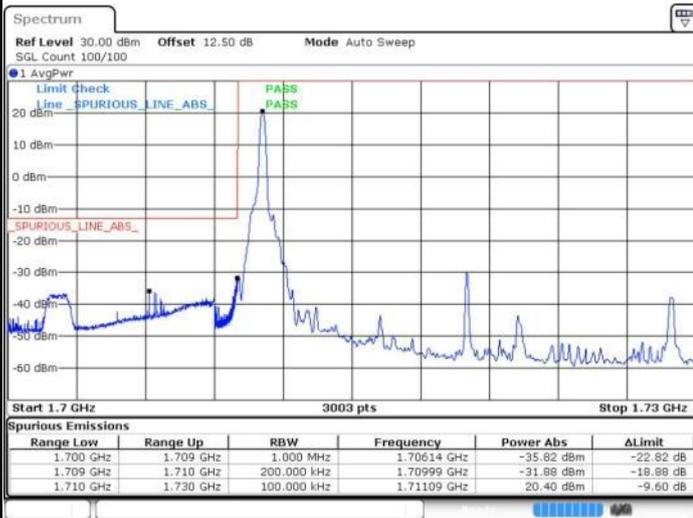


Date: 9 AUG 2015 11:32:24



LTE Band 4 / 20MHz / 16QAM

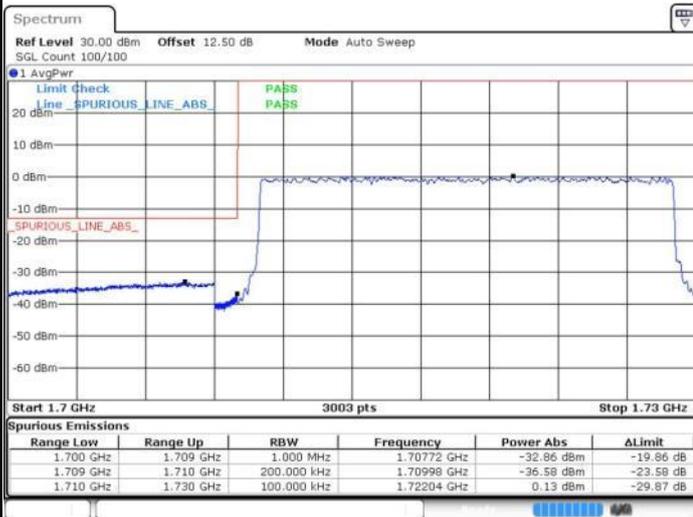
Lowest Band Edge / 1 RB



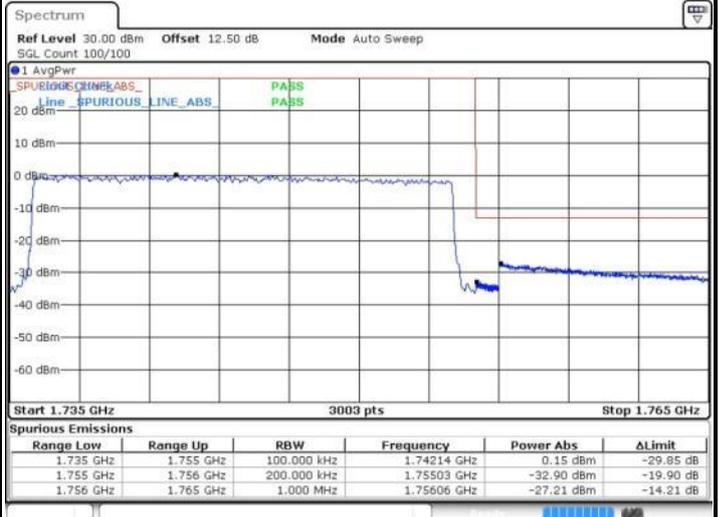
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





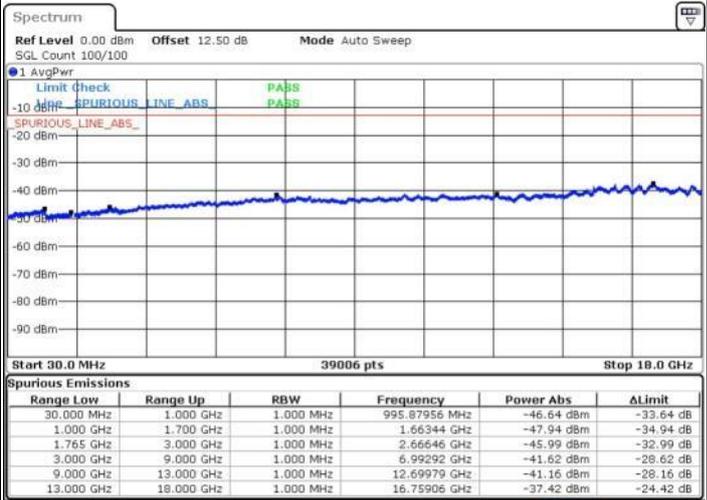
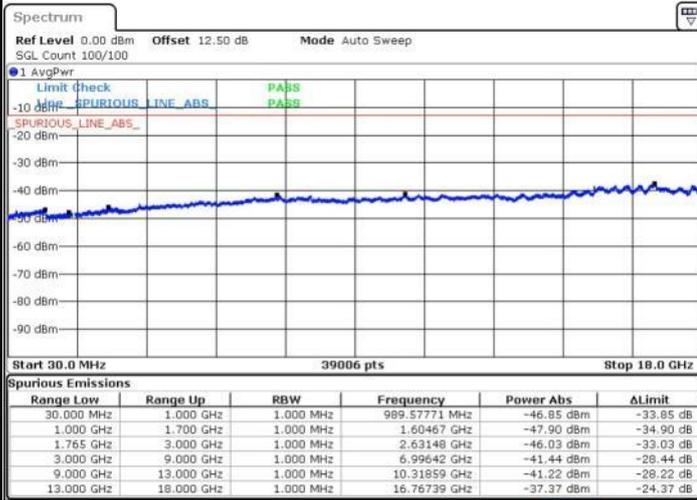
**Conducted Spurious Emission**



LTE Band 4 / 1.4MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

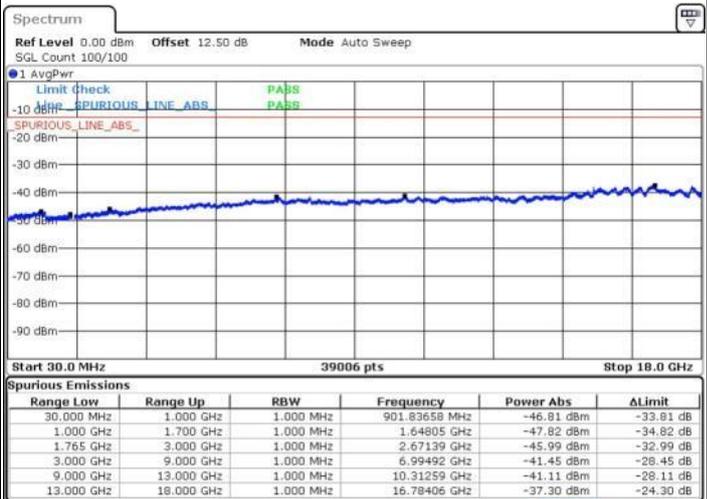
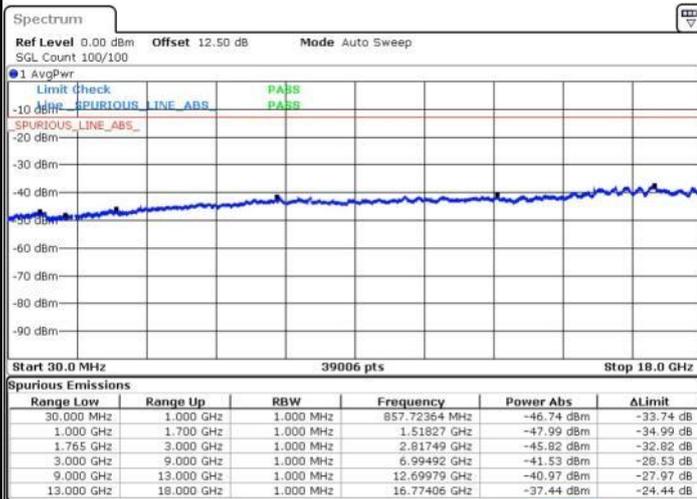


Date: 9 AUG 2015 11:41:36

Date: 9 AUG 2015 11:42:30

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 9 AUG 2015 14:40:45

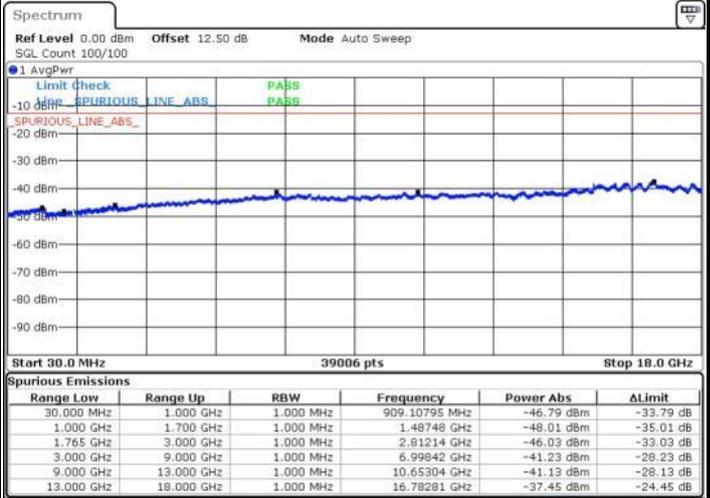
Date: 9 AUG 2015 14:41:40



LTE Band 4 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 9 AUG 2015 14:47:55

Date: 9 AUG 2015 14:48:49

LTE Band 4 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 9 AUG 2015 10:14:19

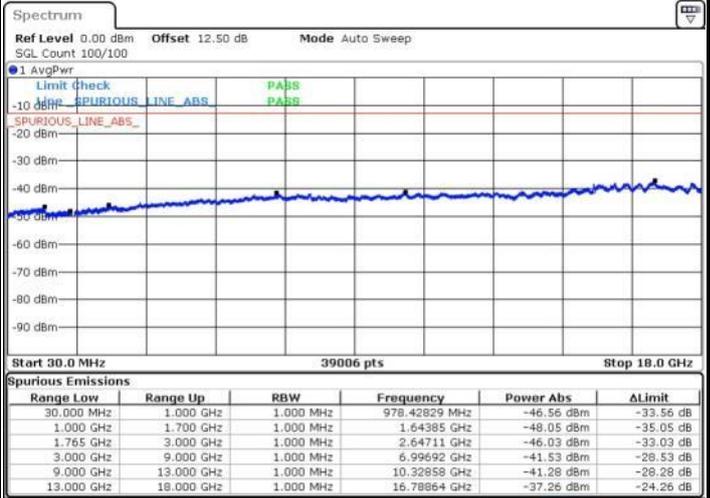
Date: 9 AUG 2015 10:15:14



LTE Band 4 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

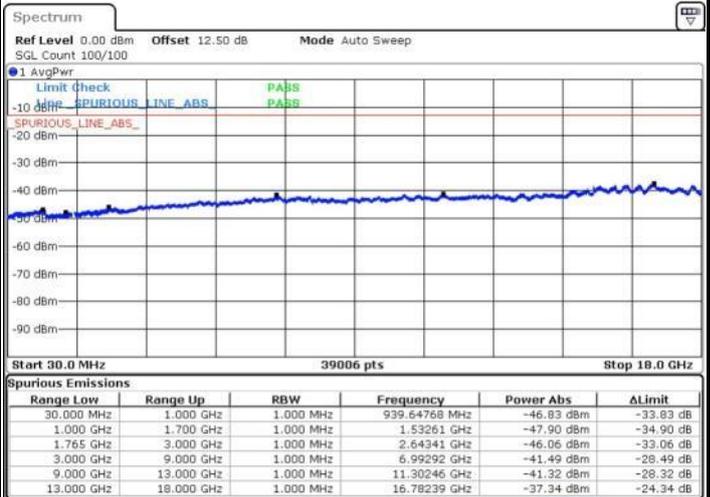
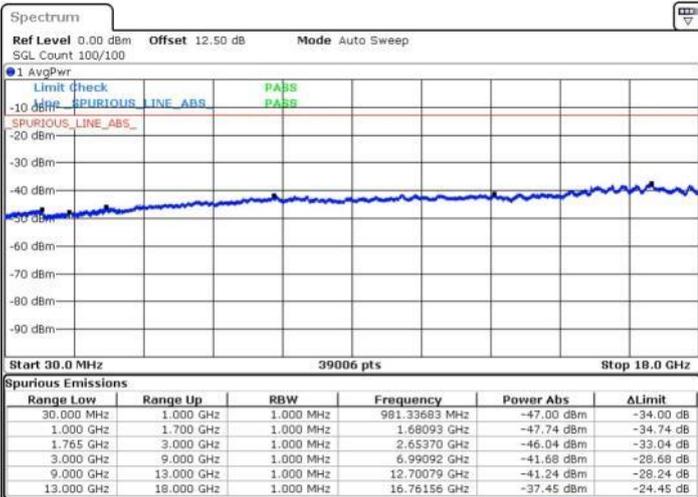


Date: 9 AUG 2015 10:16:51

Date: 9 AUG 2015 10:17:46

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 9 AUG 2015 10:24:01

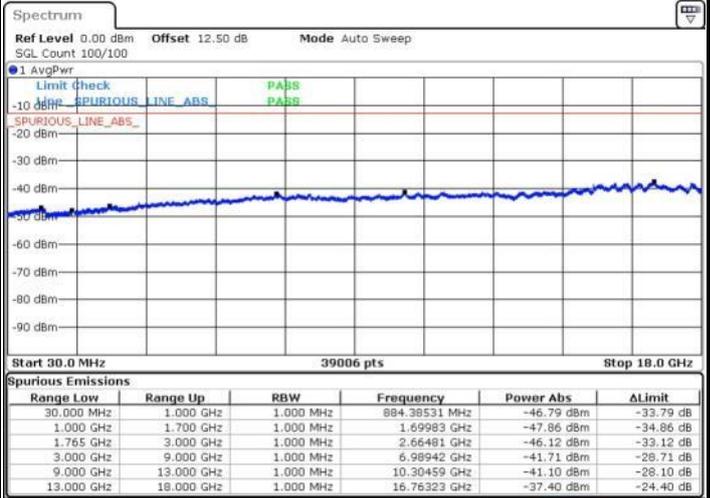
Date: 9 AUG 2015 10:24:56



LTE Band 4 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

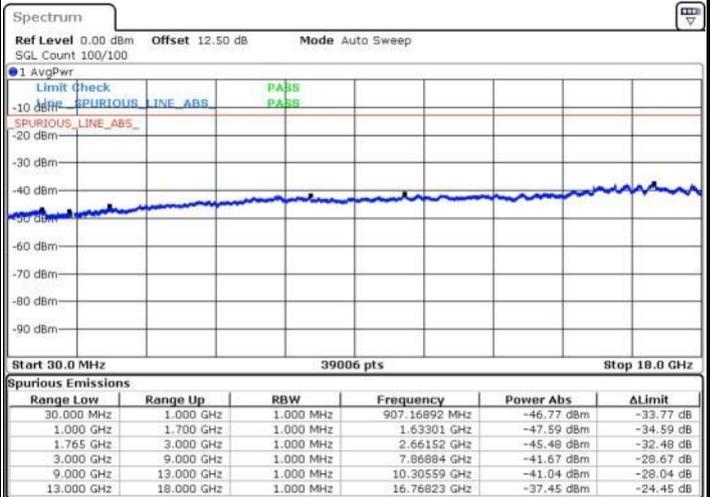


Date: 9 AUG 2015 10:31:10

Date: 9 AUG 2015 10:32:04

Middle Channel / QPSK

Middle Channel / 16QAM



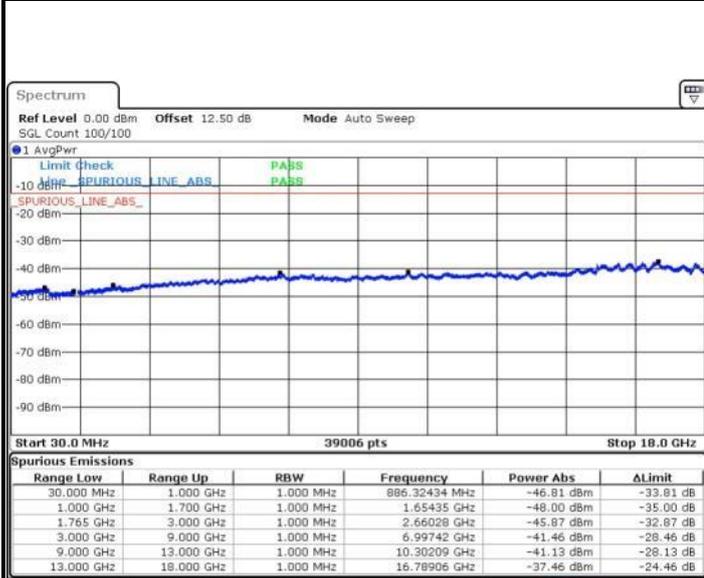
Date: 9 AUG 2015 10:33:41

Date: 9 AUG 2015 10:34:36



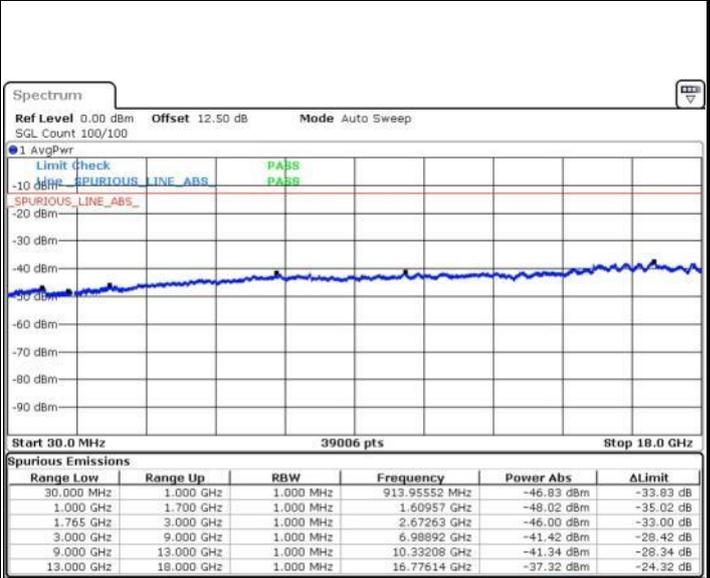
LTE Band 4 / 5MHz

Highest Channel / QPSK



Date: 9 AUG 2015 10:40:51

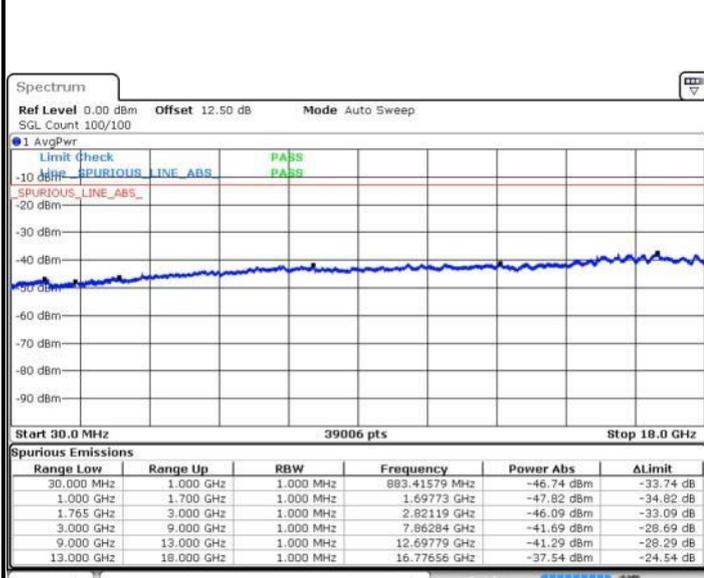
Highest Channel / 16QAM



Date: 9 AUG 2015 10:41:46

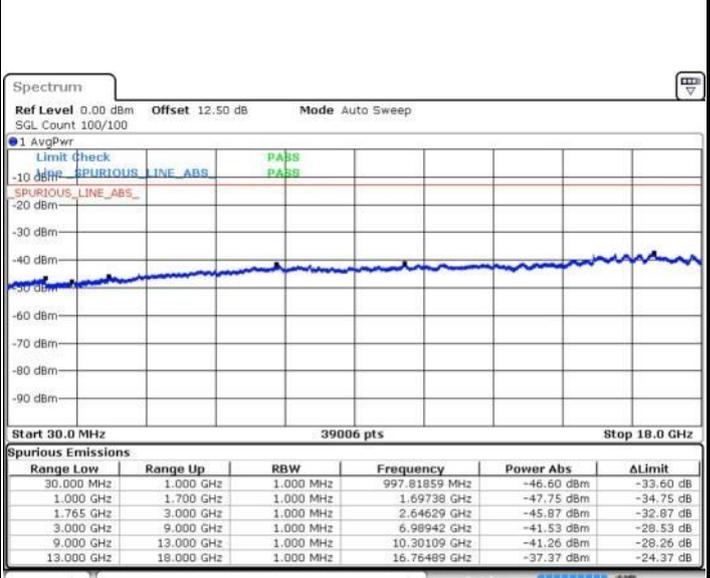
LTE Band 4 / 10MHz

Lowest Channel / QPSK



Date: 9 AUG 2015 10:47:58

Lowest Channel / 16QAM



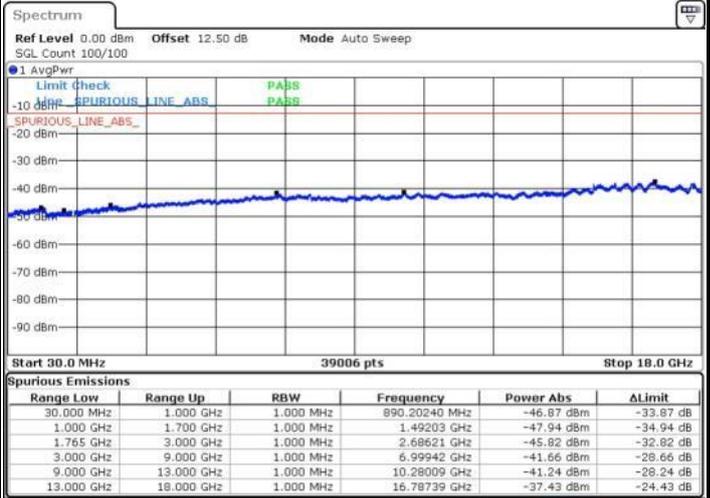
Date: 9 AUG 2015 10:48:54



LTE Band 4 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

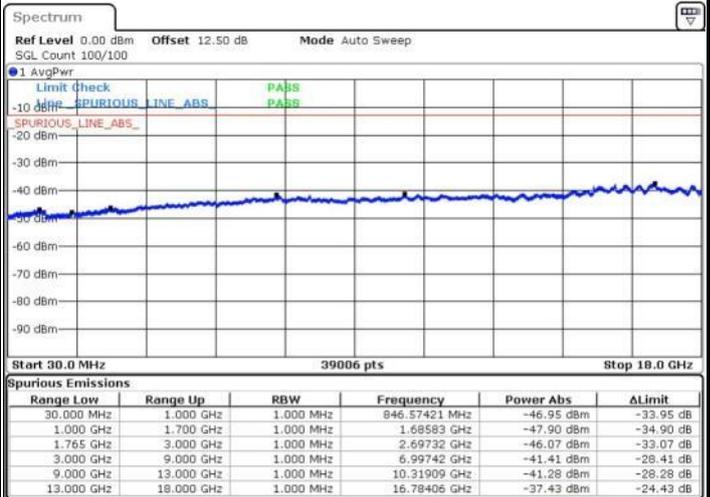


Date: 9 AUG 2015 10:50:30

Date: 9 AUG 2015 10:51:25

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 9 AUG 2015 10:57:39

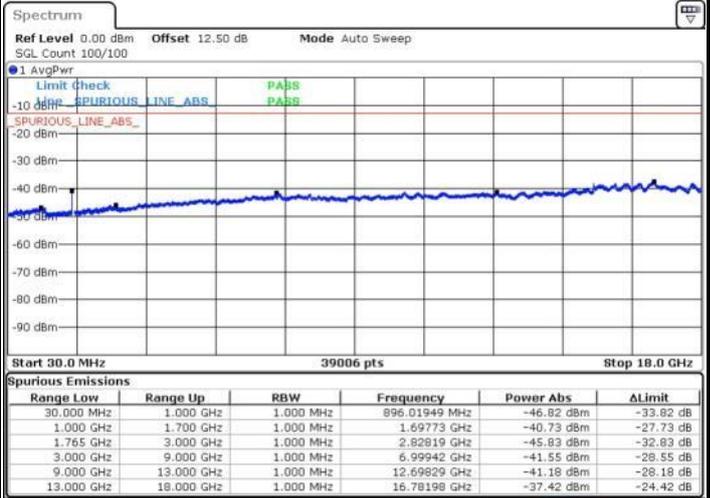
Date: 9 AUG 2015 10:58:33



LTE Band 4 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

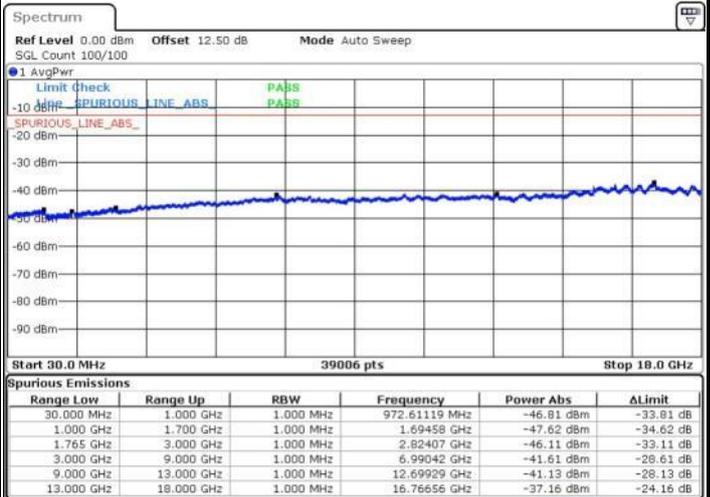


Date: 9 AUG 2015 11:07:58

Date: 9 AUG 2015 11:08:53

Middle Channel / QPSK

Middle Channel / 16QAM



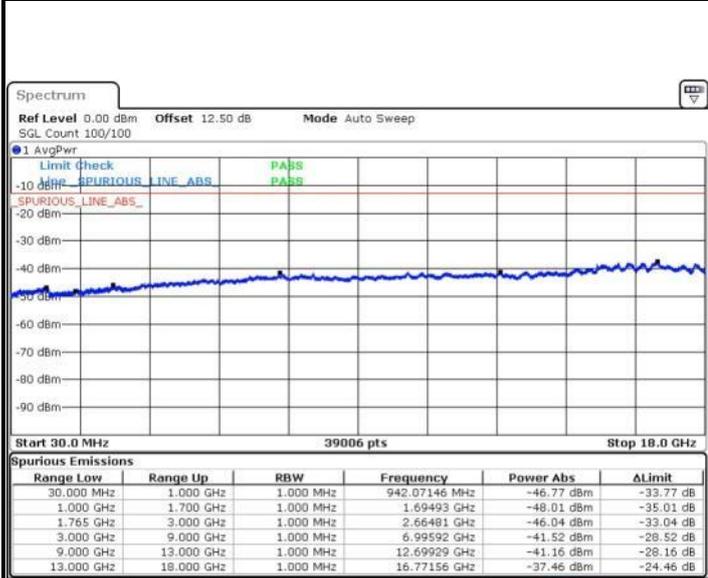
Date: 9 AUG 2015 11:10:30

Date: 9 AUG 2015 11:11:25



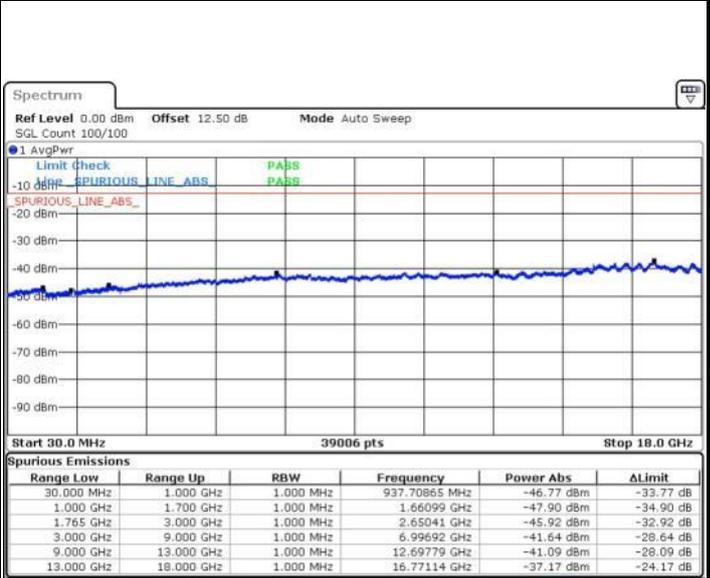
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 9 AUG 2015 11:17:39

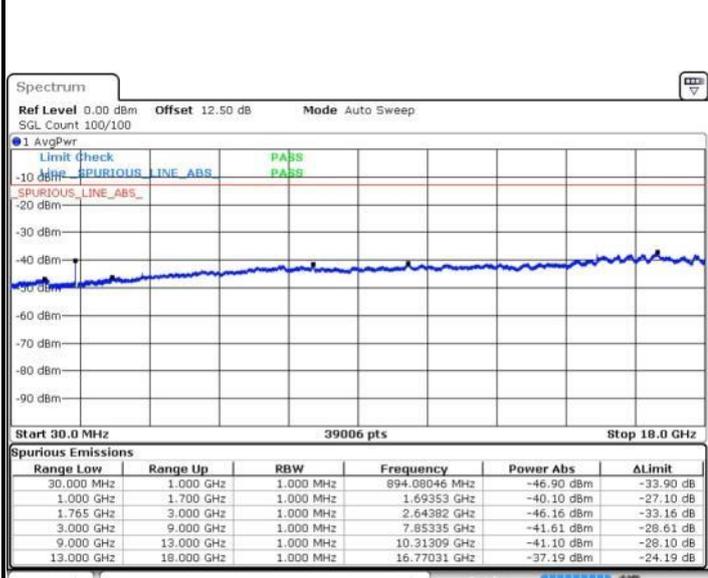
Highest Channel / 16QAM



Date: 9 AUG 2015 11:18:34

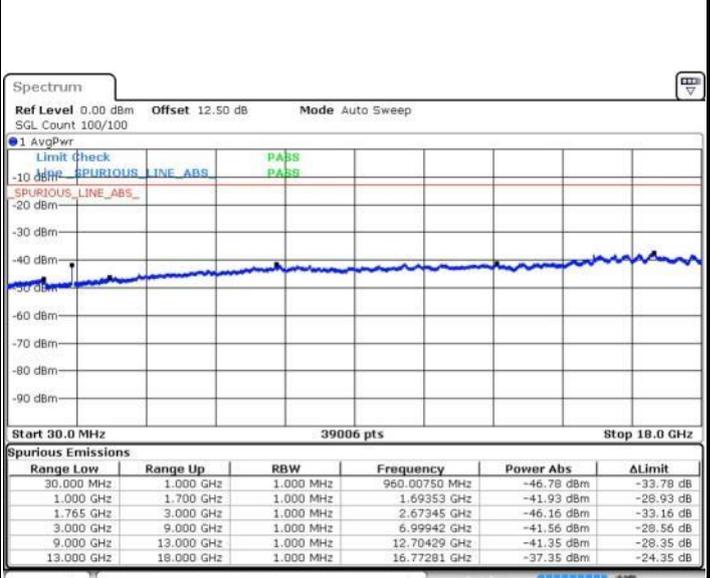
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 9 AUG 2015 11:24:48

Lowest Channel / 16QAM



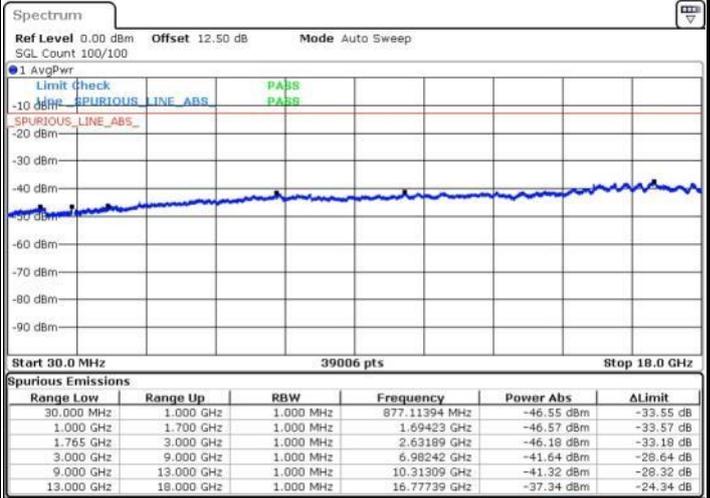
Date: 9 AUG 2015 11:25:43



LTE Band 4 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

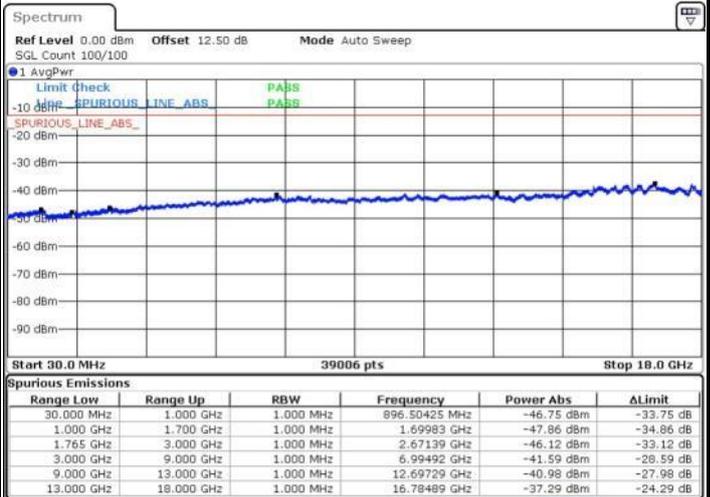
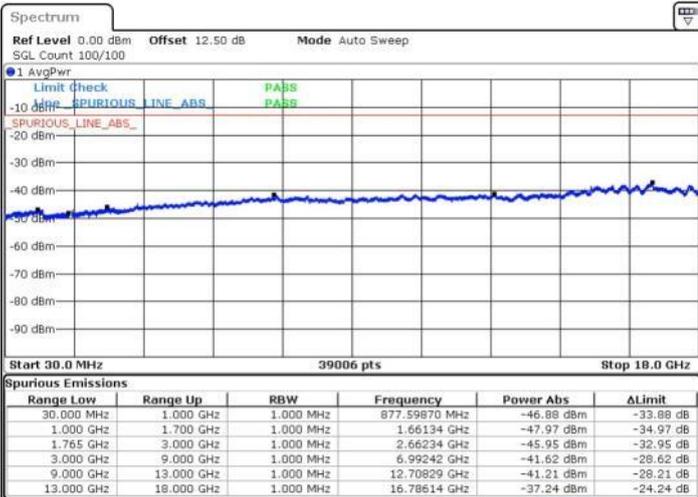


Date: 9 AUG 2015 11:27:20

Date: 9 AUG 2015 11:28:14

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 9 AUG 2015 11:34:28

Date: 9 AUG 2015 11:35:22



**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	0.0001	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

**Note:**

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



## LTE Band 5

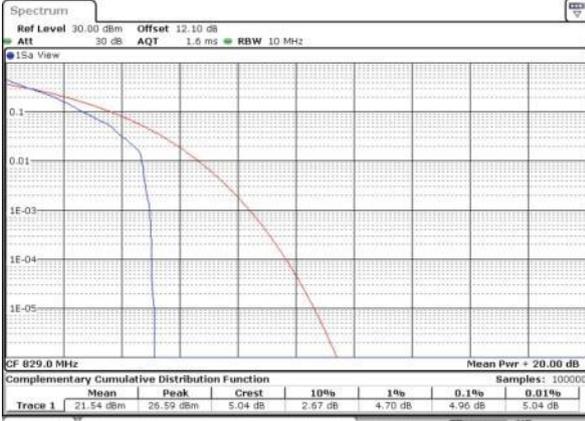
### Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.96	5.25	5.71	6.14	<b>PASS</b>
Middle CH	4.87	5.25	5.65	6.17	
Highest CH	4.93	5.28	5.88	6.2	



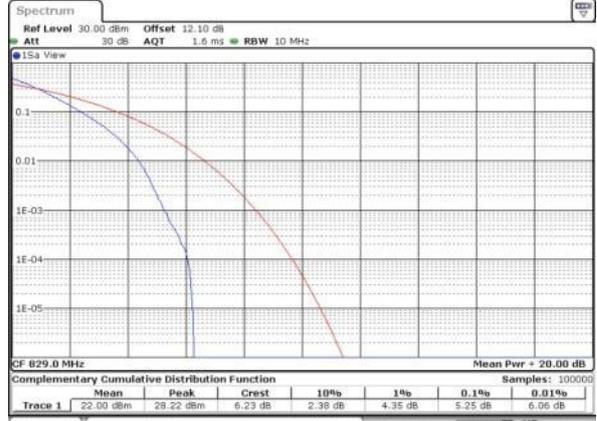
LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 9 AUG 2015 16:29:57

Lowest Channel / Full RB



Date: 9 AUG 2015 16:30:07

Middle Channel / 1RB



Date: 9 AUG 2015 16:30:17

Middle Channel / Full RB



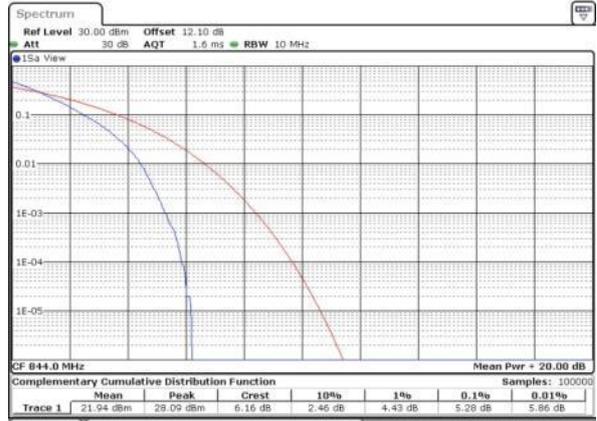
Date: 9 AUG 2015 16:30:27

Highest Channel / 1RB



Date: 9 AUG 2015 16:30:37

Highest Channel / Full RB

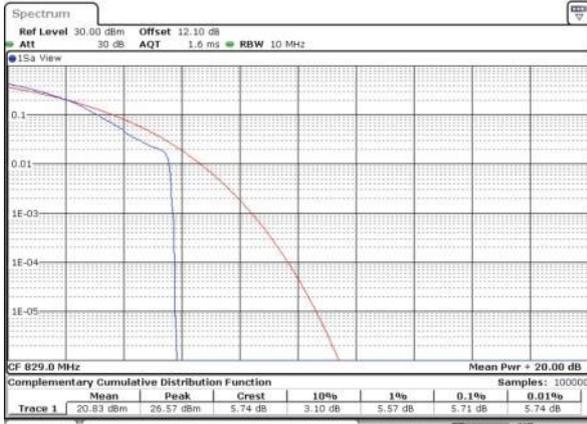


Date: 9 AUG 2015 16:30:46



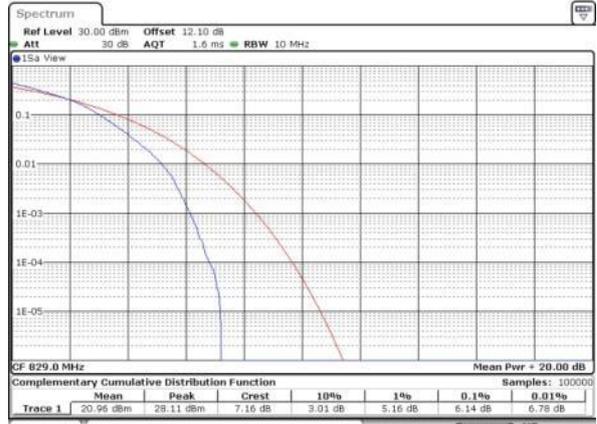
LTE Band 5 / 10MHz / 16QAM

Lowest Channel / 1RB



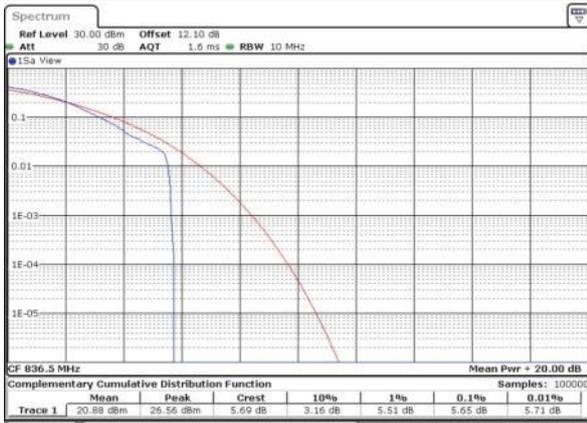
Date: 9 AUG 2015 16:27:16

Lowest Channel / Full RB



Date: 9 AUG 2015 16:27:27

Middle Channel / 1RB



Date: 9 AUG 2015 16:29:17

Middle Channel / Full RB



Date: 9 AUG 2015 16:29:27

Highest Channel / 1RB



Date: 9 AUG 2015 16:29:37

Highest Channel / Full RB



Date: 9 AUG 2015 16:29:47



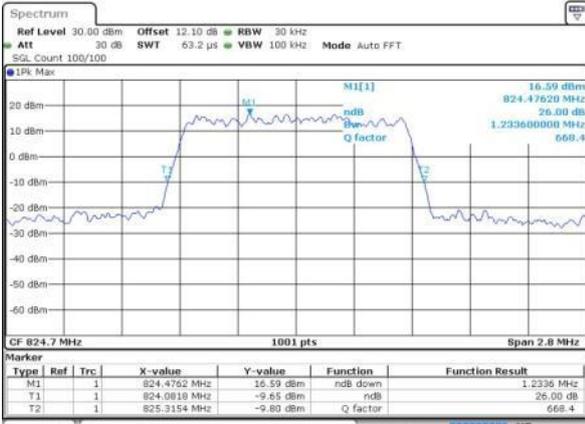
**26dB Bandwidth**

Mode	LTE Band 5 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.23	1.23	3.05	3.05	4.9	4.93	9.65	9.77	-	-	-	-
Middle CH	1.24	1.24	3.04	3.04	4.9	4.88	9.75	9.91	-	-	-	-
Highest CH	1.22	1.23	3.01	3.06	4.76	4.91	9.77	9.79	-	-	-	-



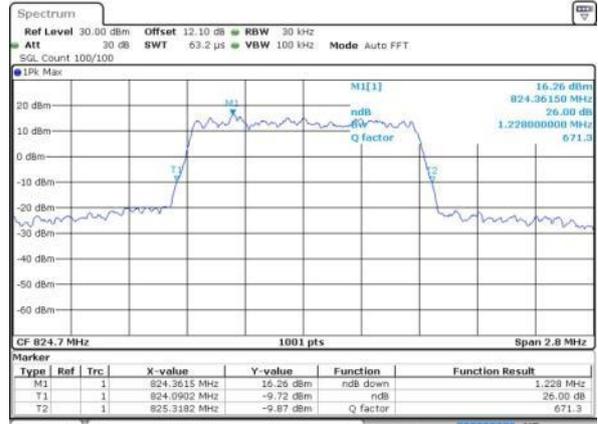
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



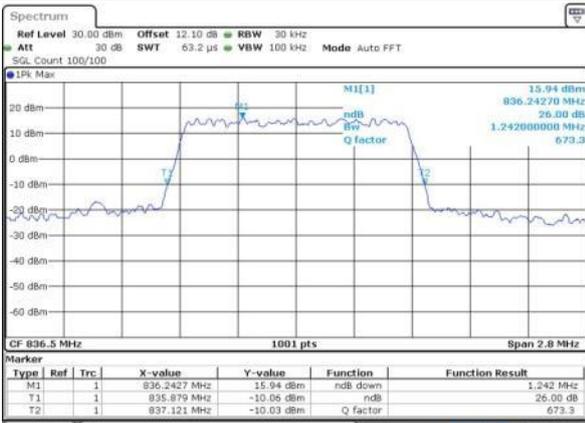
Date: 9 AUG 2015 16:04:38

Lowest Channel / 1.4MHz / 16QAM



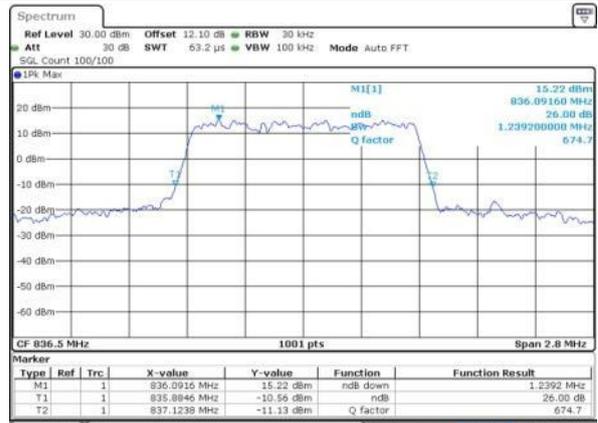
Date: 9 AUG 2015 16:04:27

Middle Channel / 1.4MHz / QPSK



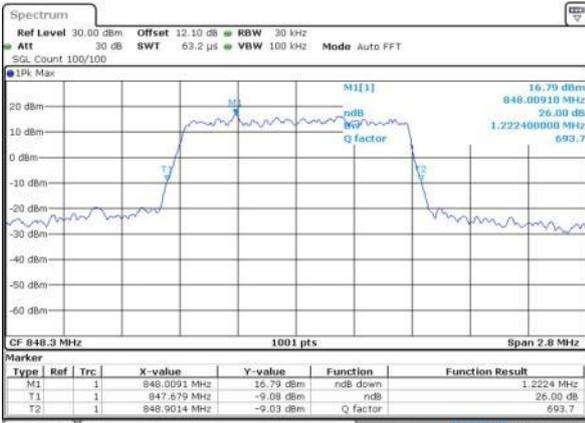
Date: 9 AUG 2015 16:14:35

Middle Channel / 1.4MHz / 16QAM



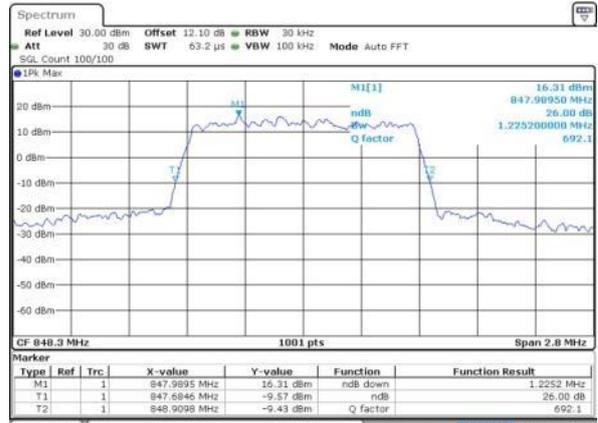
Date: 9 AUG 2015 16:14:46

Highest Channel / 1.4MHz / QPSK



Date: 9 AUG 2015 16:17:06

Highest Channel / 1.4MHz / 16QAM

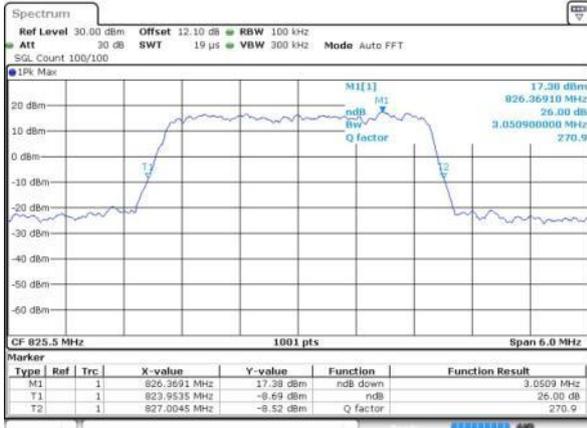


Date: 9 AUG 2015 16:17:17



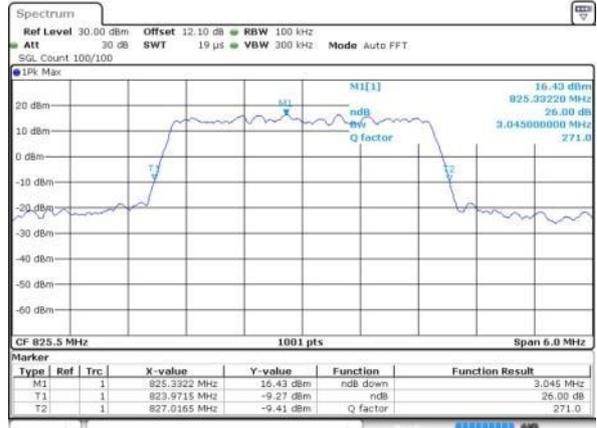
LTE Band 5

Lowest Channel / 3MHz / QPSK



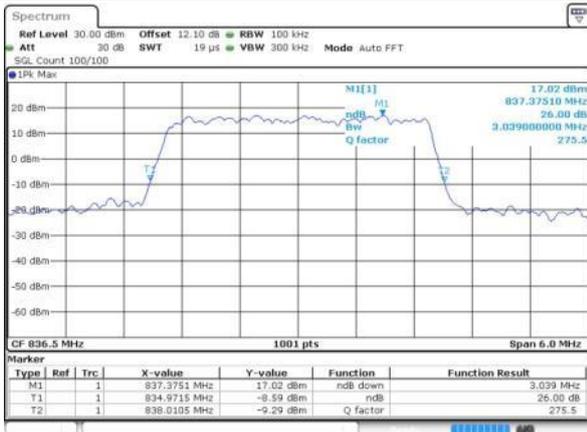
Date: 9 AUG 2015 14:56:07

Lowest Channel / 3MHz / 16QAM



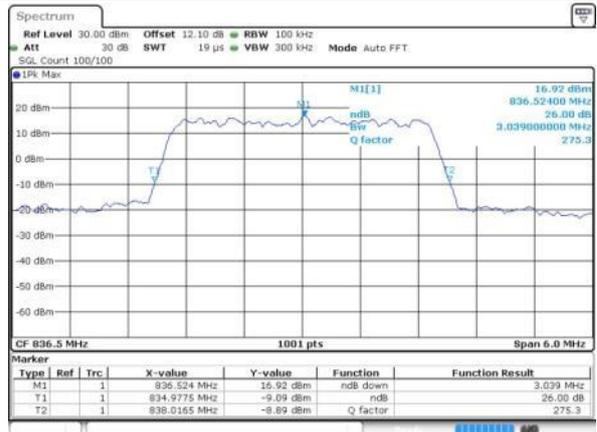
Date: 9 AUG 2015 14:56:18

Middle Channel / 3MHz / QPSK



Date: 9 AUG 2015 15:06:15

Middle Channel / 3MHz / 16QAM



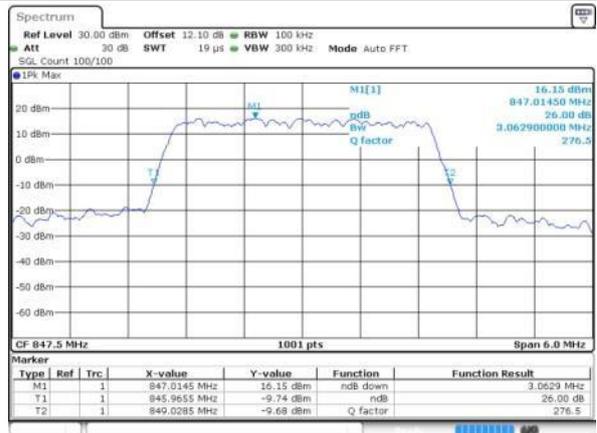
Date: 9 AUG 2015 15:06:26

Highest Channel / 3MHz / QPSK



Date: 9 AUG 2015 15:08:46

Highest Channel / 3MHz / 16QAM

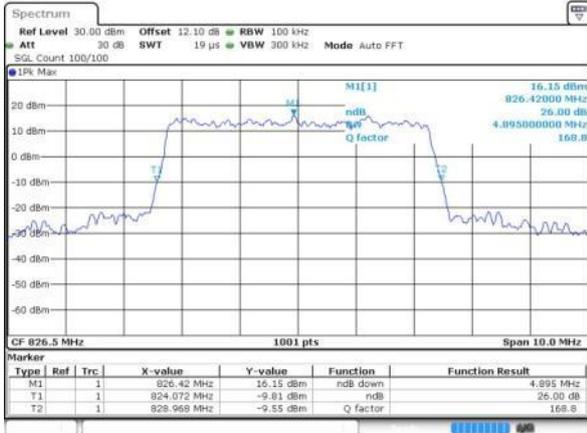


Date: 9 AUG 2015 15:08:56



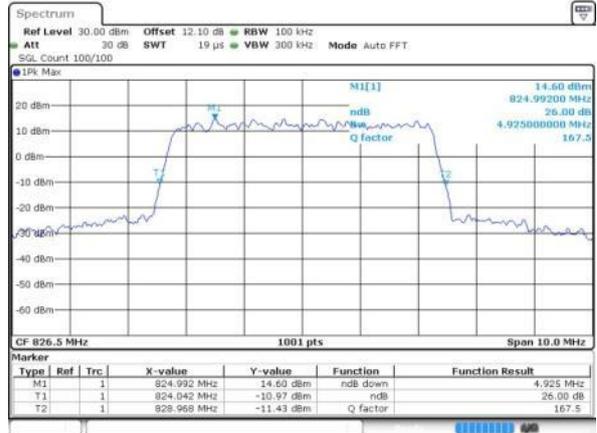
LTE Band 5

Lowest Channel / 5MHz / QPSK



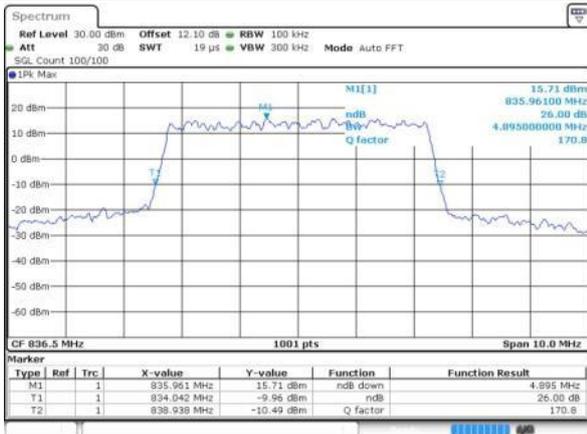
Date: 9 AUG 2015 15:18:54

Lowest Channel / 5MHz / 16QAM



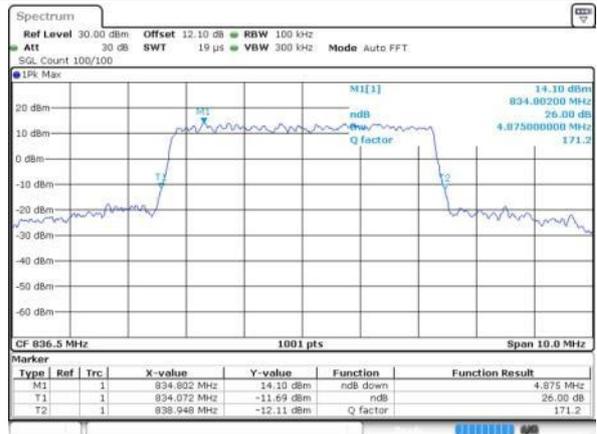
Date: 9 AUG 2015 15:19:04

Middle Channel / 5MHz / QPSK



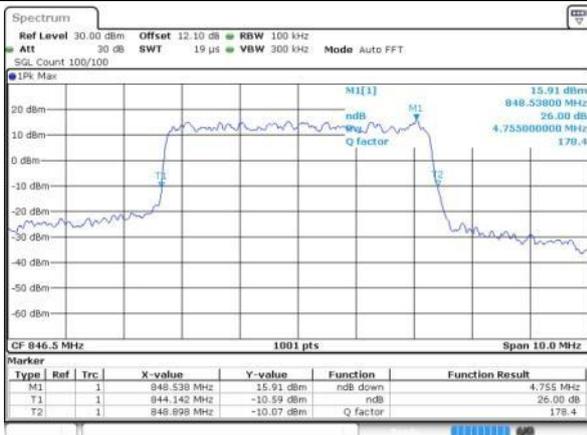
Date: 9 AUG 2015 15:29:01

Middle Channel / 5MHz / 16QAM



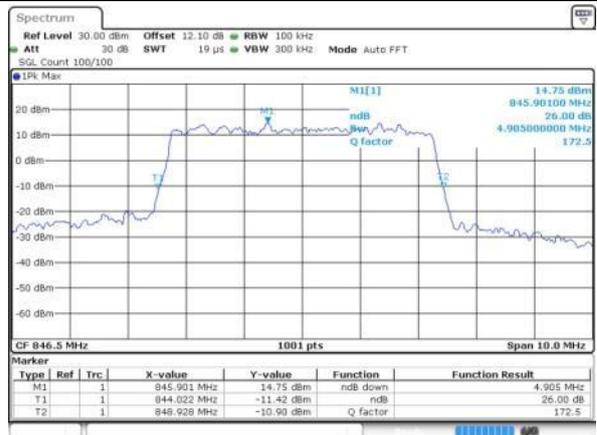
Date: 9 AUG 2015 15:29:12

Highest Channel / 5MHz / QPSK



Date: 9 AUG 2015 15:31:32

Highest Channel / 5MHz / 16QAM

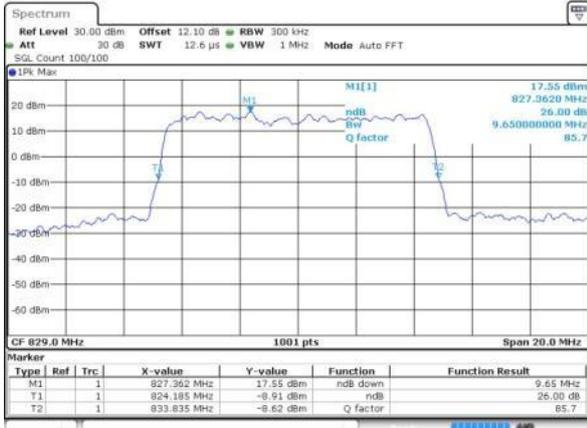


Date: 9 AUG 2015 15:31:43



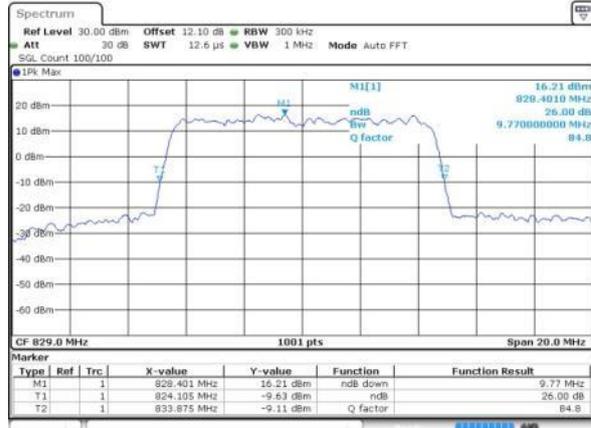
LTE Band 5

Lowest Channel / 10MHz / QPSK



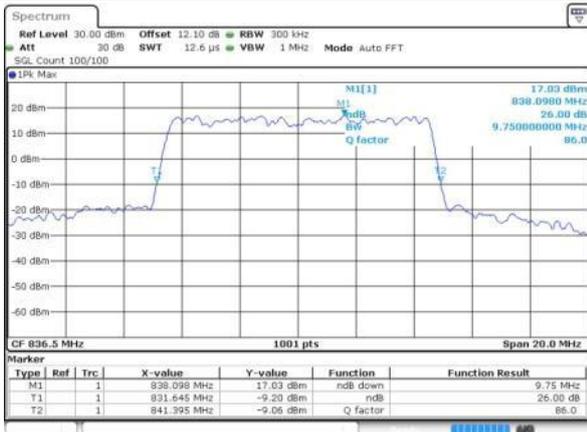
Date: 9 AUG 2015 15:41:40

Lowest Channel / 10MHz / 16QAM



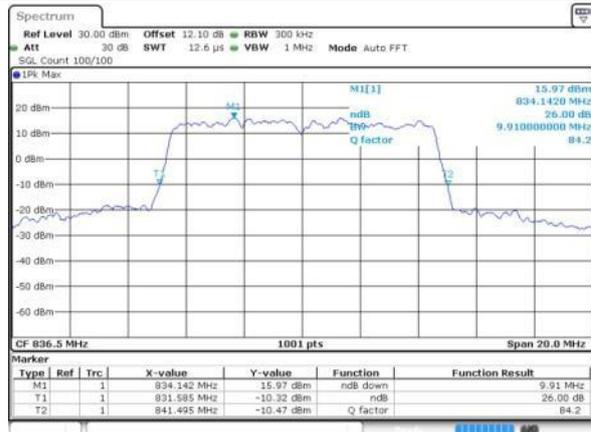
Date: 9 AUG 2015 15:41:51

Middle Channel / 10MHz / QPSK



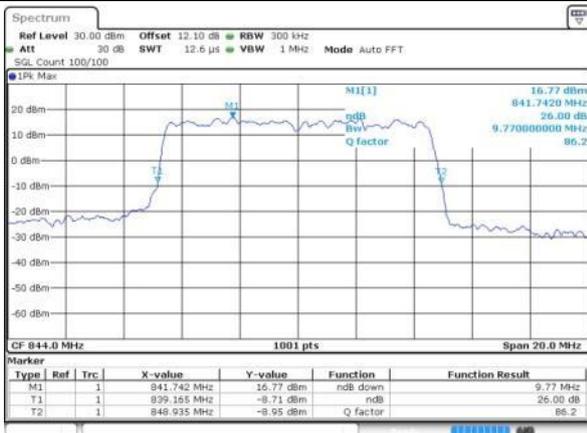
Date: 9 AUG 2015 15:51:48

Middle Channel / 10MHz / 16QAM



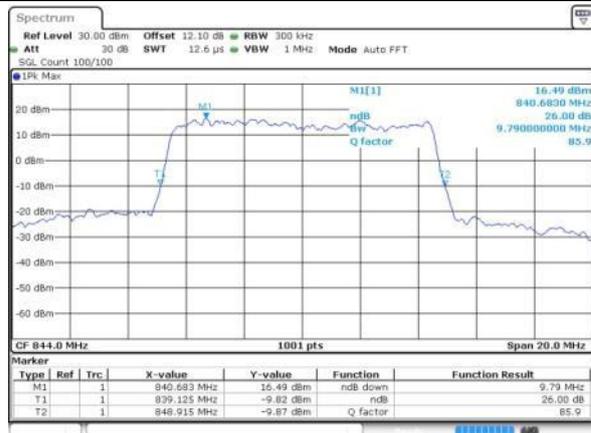
Date: 9 AUG 2015 15:51:56

Highest Channel / 10MHz / QPSK



Date: 9 AUG 2015 15:54:19

Highest Channel / 10MHz / 16QAM



Date: 9 AUG 2015 15:54:30



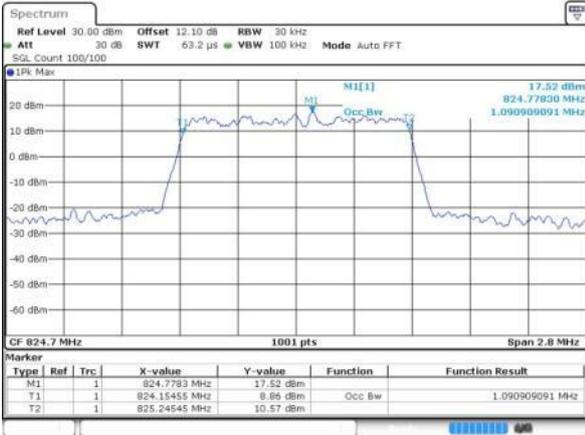
### Occupied Bandwidth

Mode	LTE Band 5 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.72	2.73	4.49	4.49	9.03	9.03	-	-	-	-
Middle CH	1.08	1.1	2.72	2.7	4.48	4.48	9.05	9.01	-	-	-	-
Highest CH	1.09	1.09	2.73	2.72	4.49	4.47	9.05	9.05	-	-	-	-



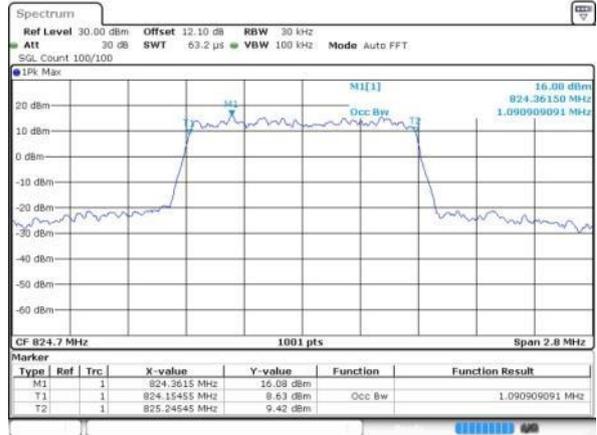
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



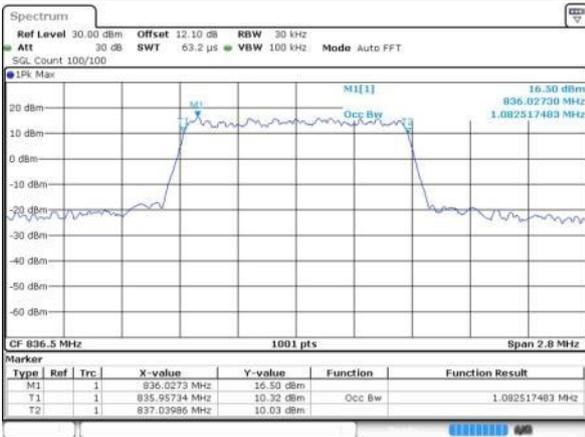
Date: 9 AUG 2015 16:04:06

Lowest Channel / 1.4MHz / 16QAM



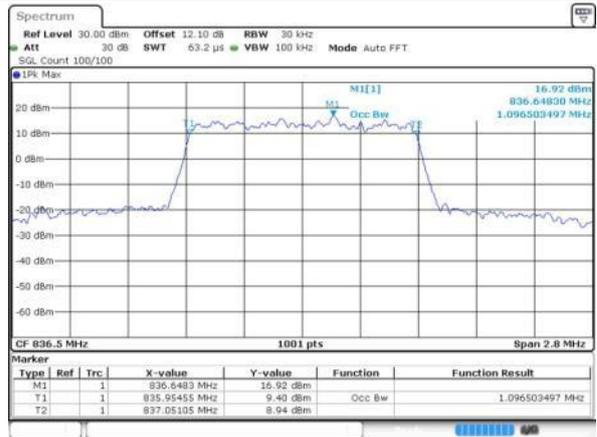
Date: 9 AUG 2015 16:04:17

Middle Channel / 1.4MHz / QPSK



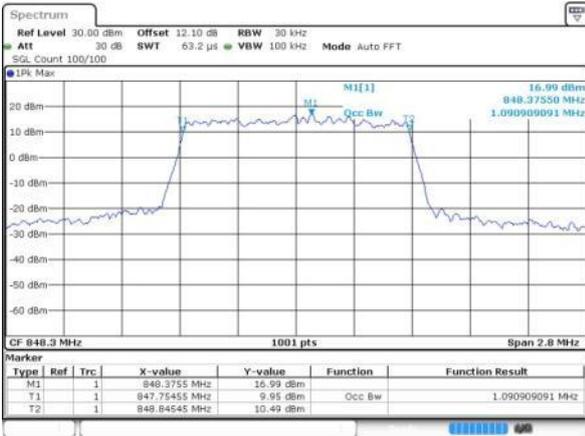
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Middle Channel / 1.4MHz / 16QAM



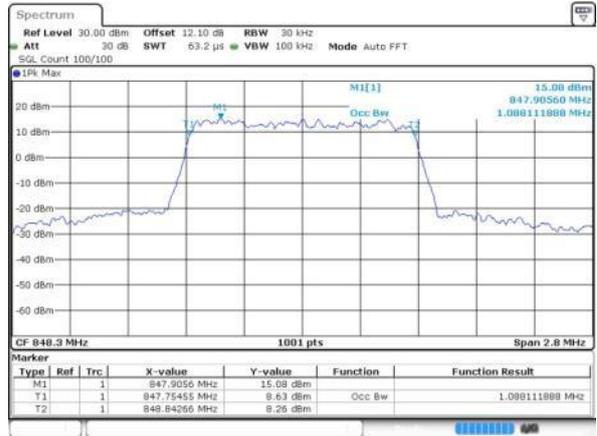
Date: 9 AUG 2015 16:14:25

Highest Channel / 1.4MHz / QPSK



Date: 9 AUG 2015 16:16:45

Highest Channel / 1.4MHz / 16QAM



Date: 9 AUG 2015 16:16:56