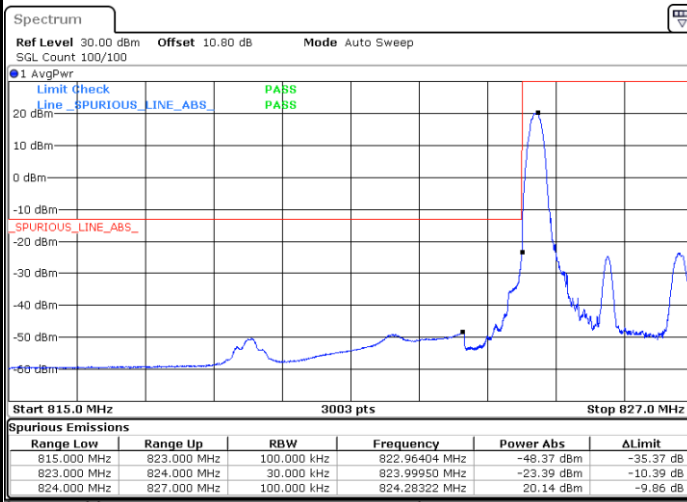




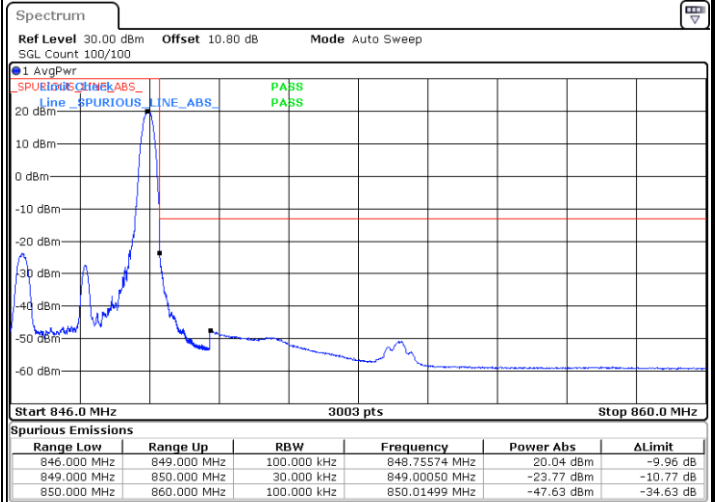
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



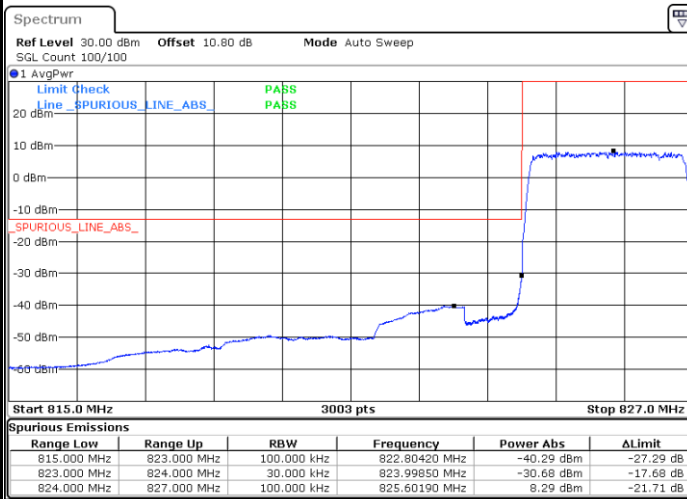
Date: 10 JUL 2017 01:40:55

Highest Band Edge / 1 RB



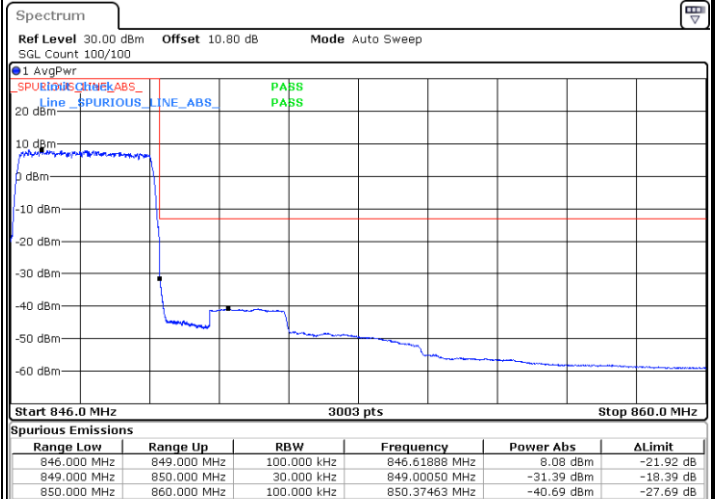
Date: 10 JUL 2017 01:52:25

Lowest Band Edge / Full RB



Date: 10 JUL 2017 01:44:12

Highest Band Edge / Full RB

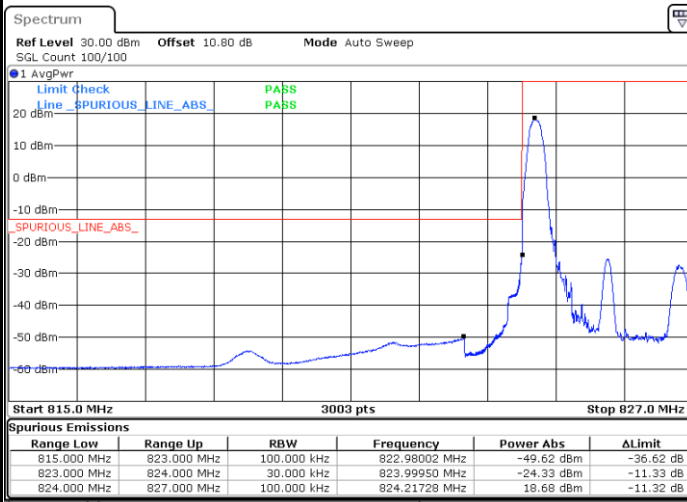


Date: 10 JUL 2017 01:55:42



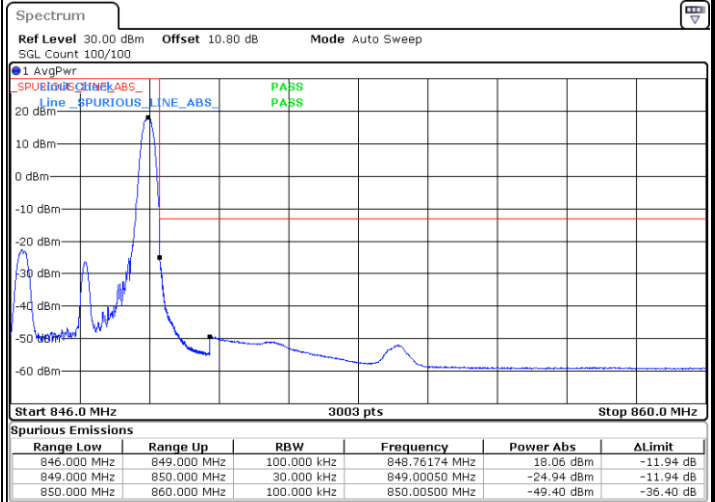
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



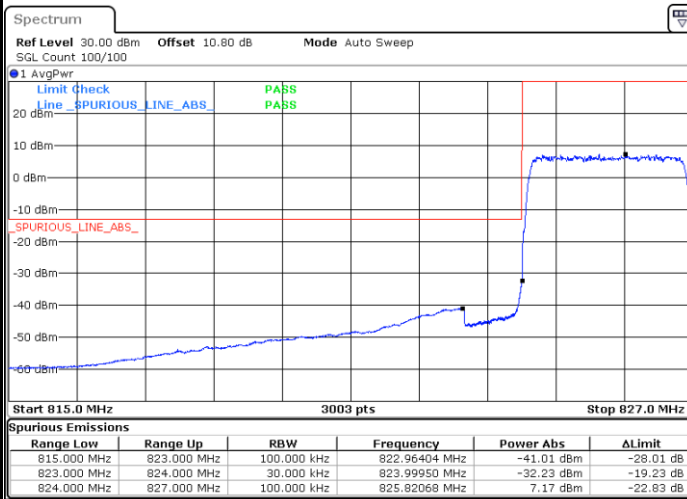
Date: 10 JUL 2017 01:42:33

Highest Band Edge / 1 RB



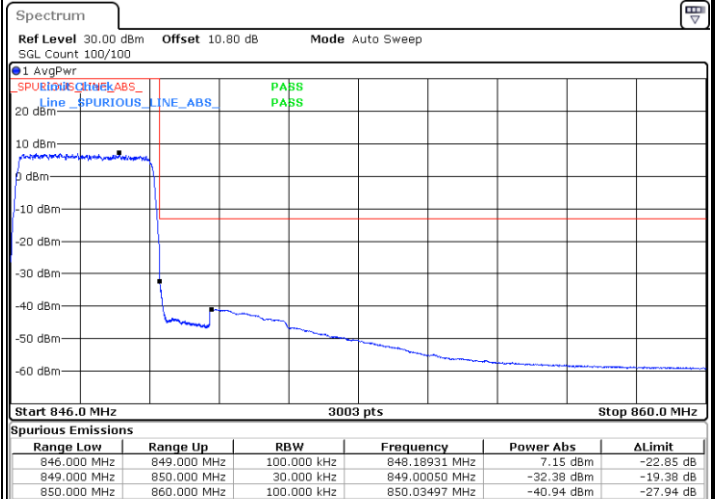
Date: 10 JUL 2017 01:54:03

Lowest Band Edge / Full RB



Date: 10 JUL 2017 01:45:51

Highest Band Edge / Full RB

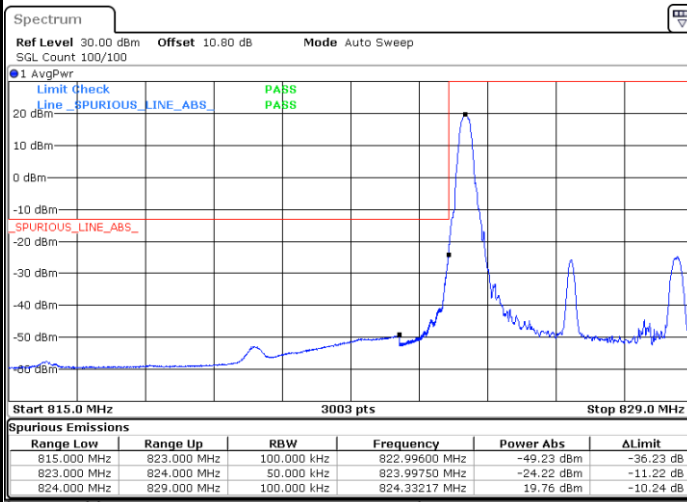


Date: 10 JUL 2017 01:57:21



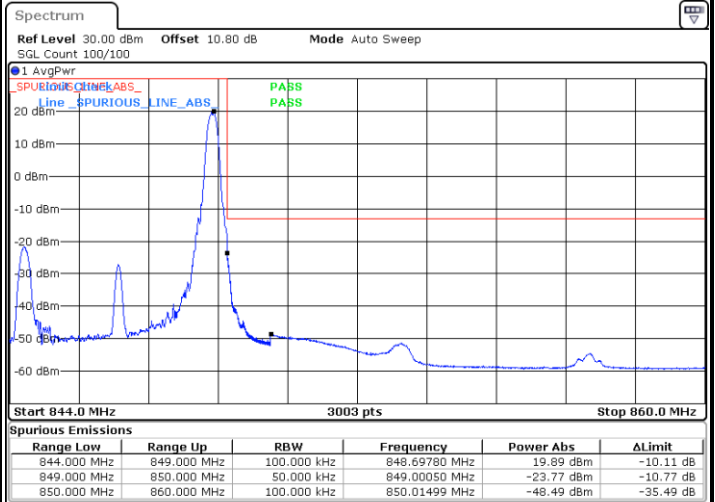
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



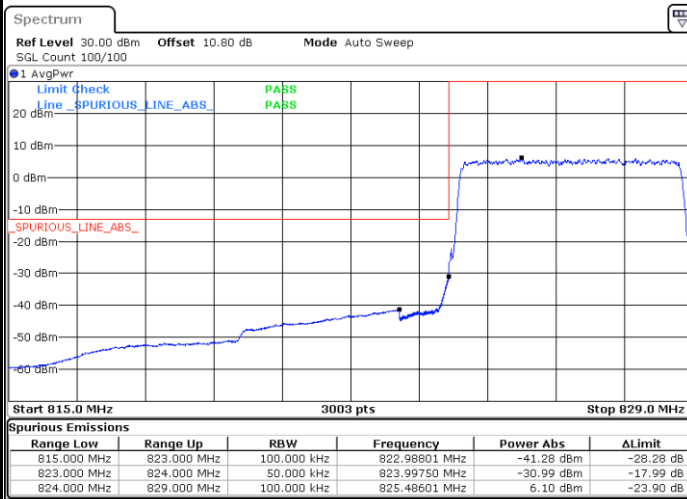
Date: 10 JUL 2017 02:01:27

Highest Band Edge / 1 RB



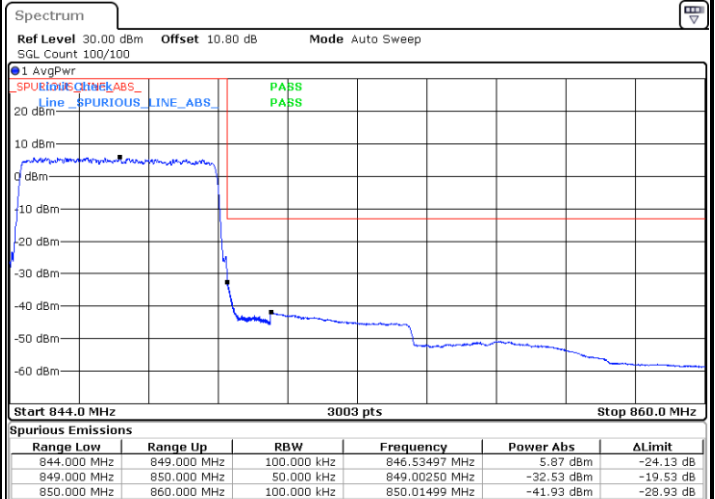
Date: 10 JUL 2017 02:12:57

Lowest Band Edge / Full RB



Date: 10 JUL 2017 02:04:45

Highest Band Edge / Full RB

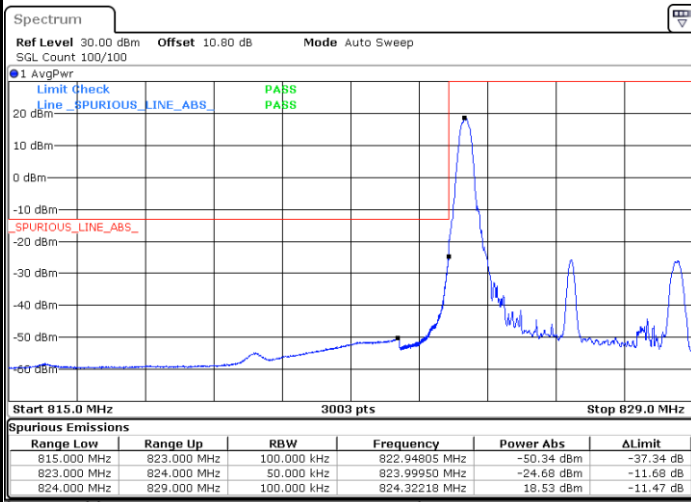


Date: 10 JUL 2017 02:16:15



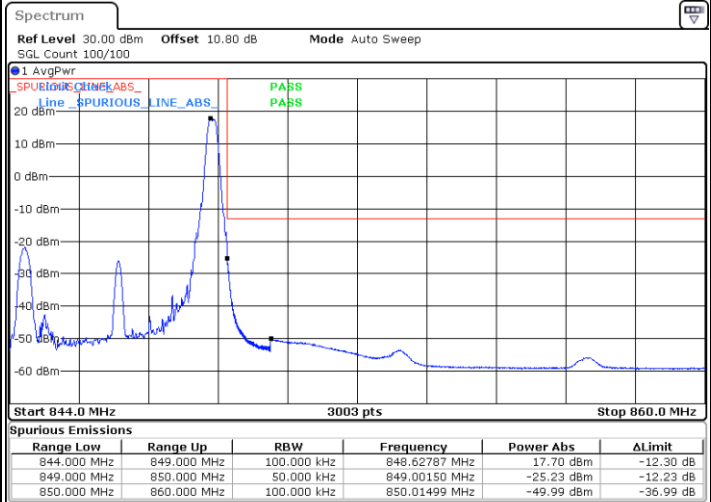
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



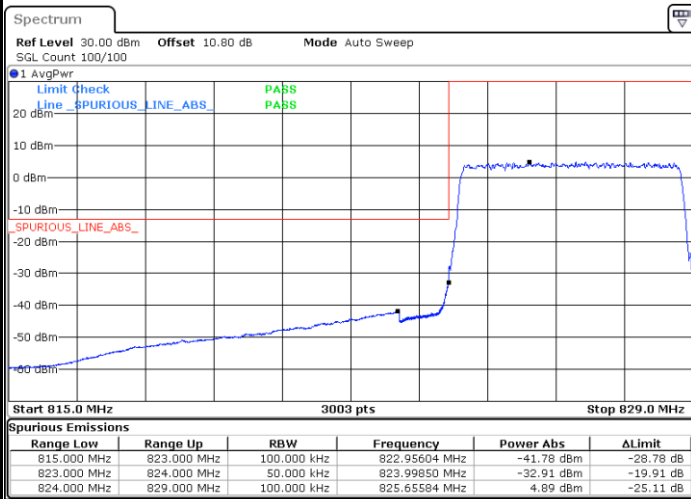
Date: 10 JUL 2017 02:03:06

Highest Band Edge / 1 RB



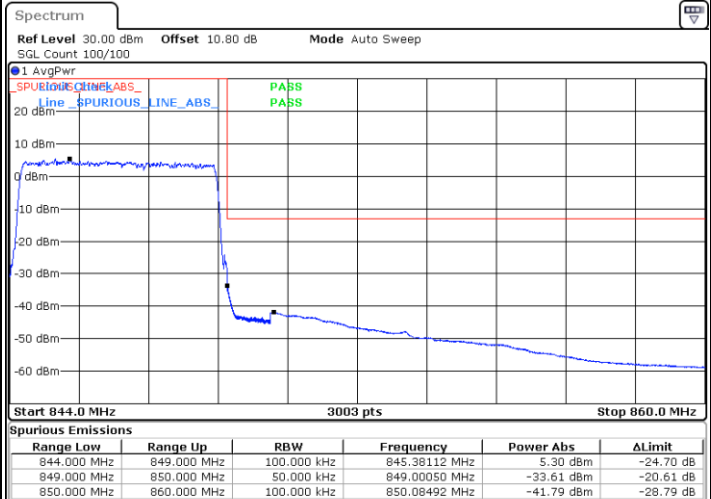
Date: 10 JUL 2017 02:14:36

Lowest Band Edge / Full RB



Date: 10 JUL 2017 02:06:23

Highest Band Edge / Full RB

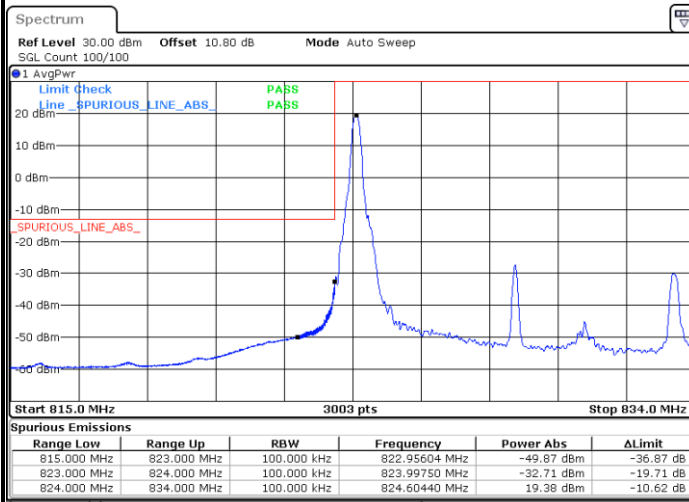


Date: 10 JUL 2017 02:17:54



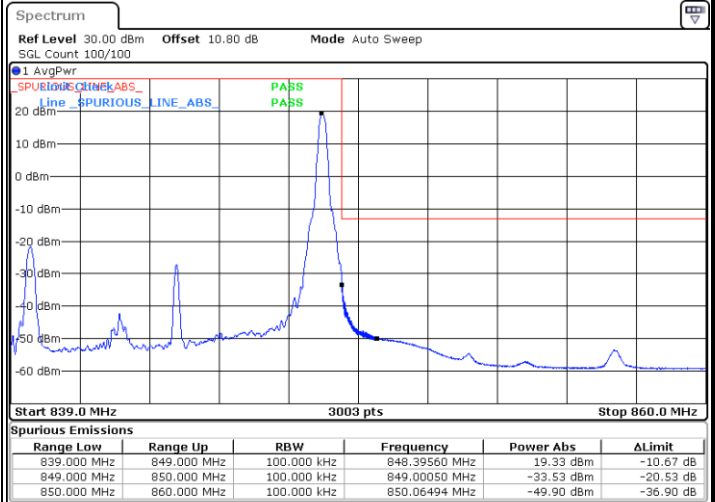
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



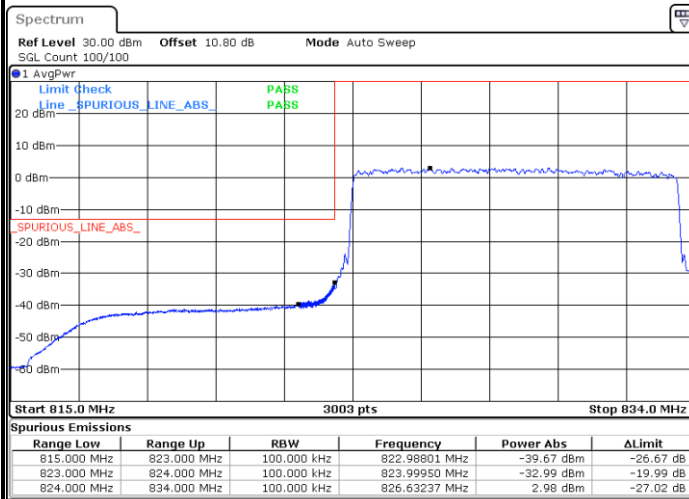
Date: 10 JUL 2017 02:22:00

Highest Band Edge / 1 RB



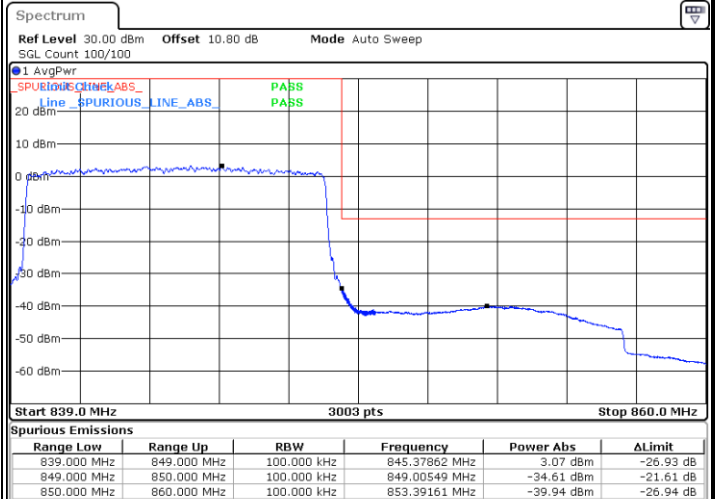
Date: 10 JUL 2017 02:33:30

Lowest Band Edge / Full RB



Date: 10 JUL 2017 02:25:18

Highest Band Edge / Full RB

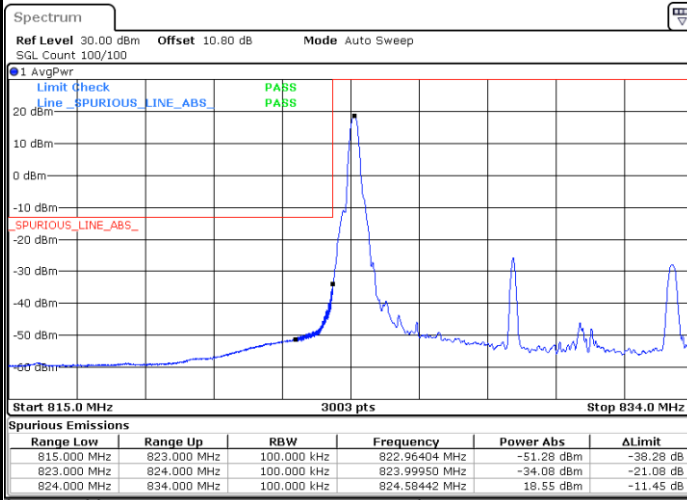


Date: 10 JUL 2017 02:36:48



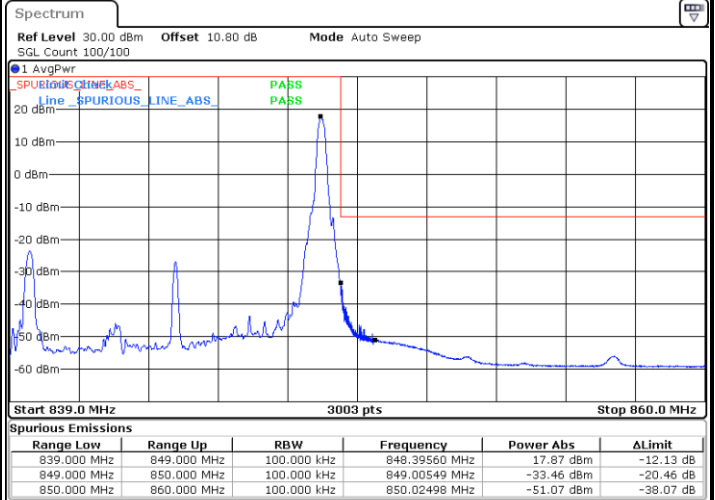
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



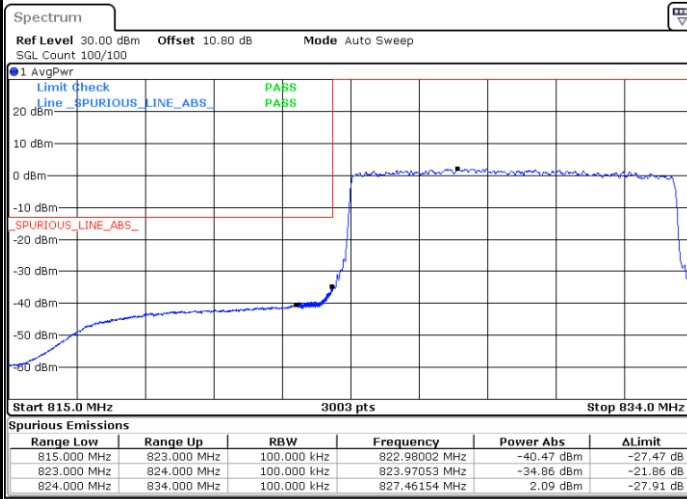
Date: 10 JUL 2017 02:23:39

Highest Band Edge / 1 RB



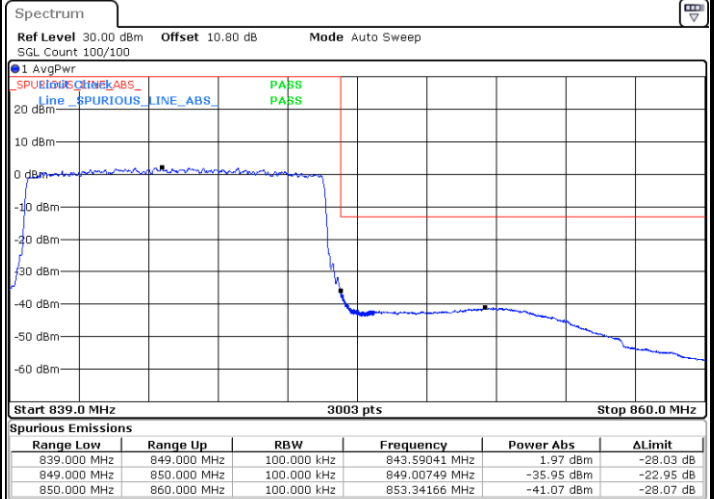
Date: 10 JUL 2017 02:35:09

Lowest Band Edge / Full RB



Date: 10 JUL 2017 02:26:56

Highest Band Edge / Full RB



Date: 10 JUL 2017 02:38:26



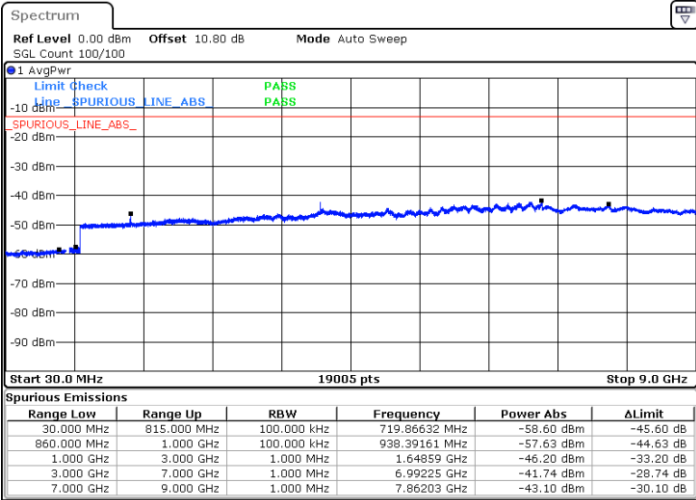
**Conducted Spurious Emission**



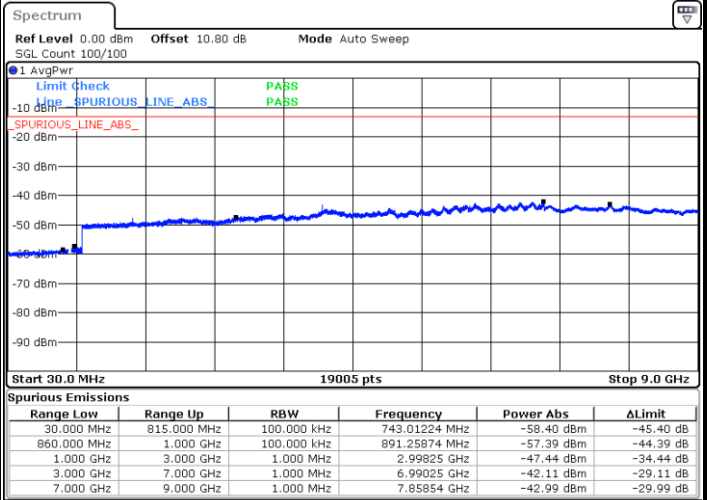
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



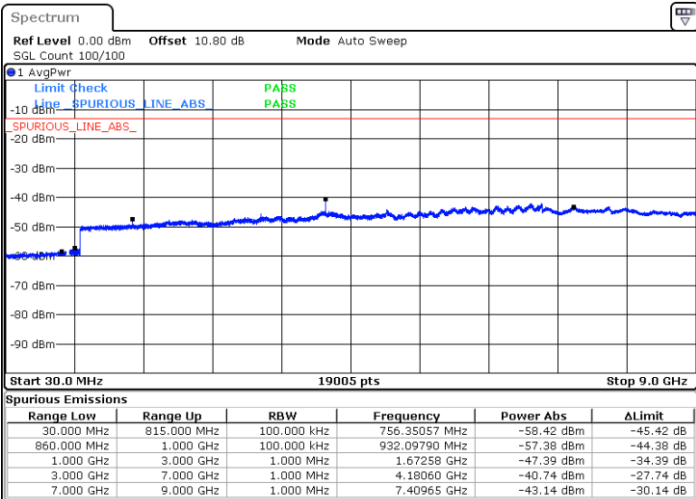
Date: 10 JUL 2017 02:53:54



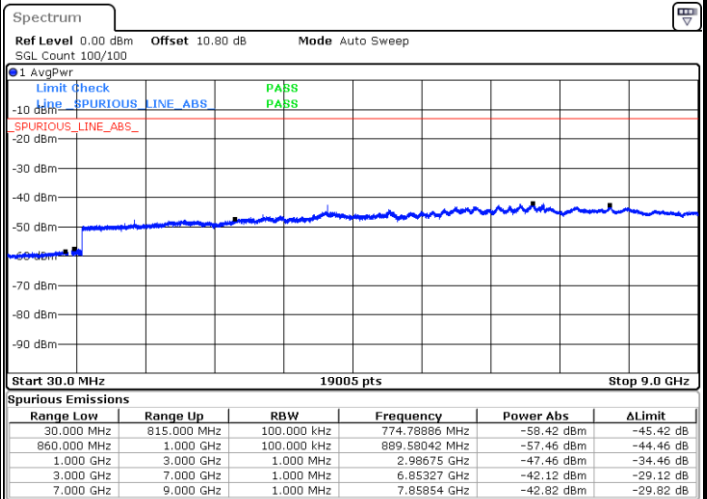
Date: 10 JUL 2017 02:54:48

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 10 JUL 2017 02:56:22



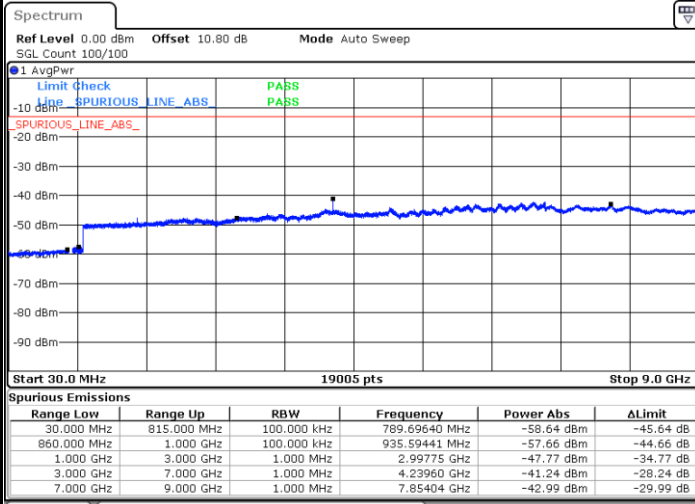
Date: 10 JUL 2017 02:57:15





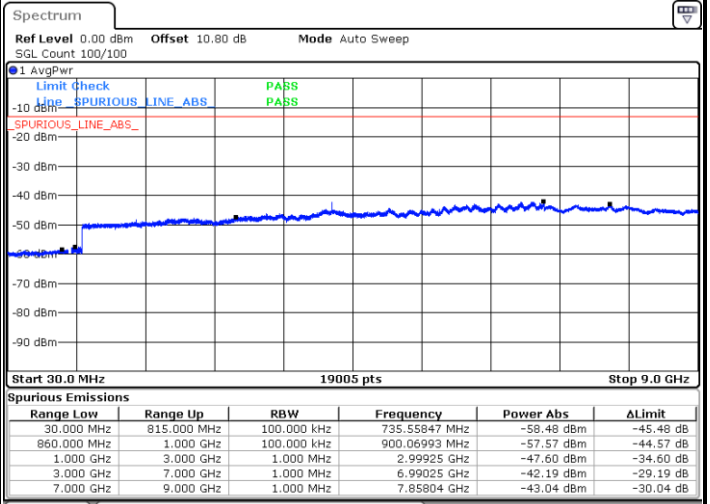
LTE Band 5 / 1.4MHz

Highest Channel / QPSK



Date: 10 JUL 2017 03:05:24

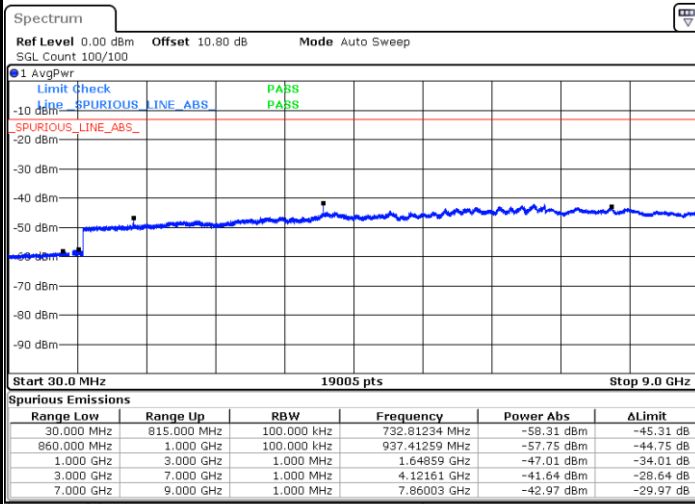
Highest Channel / 16QAM



Date: 10 JUL 2017 03:06:18

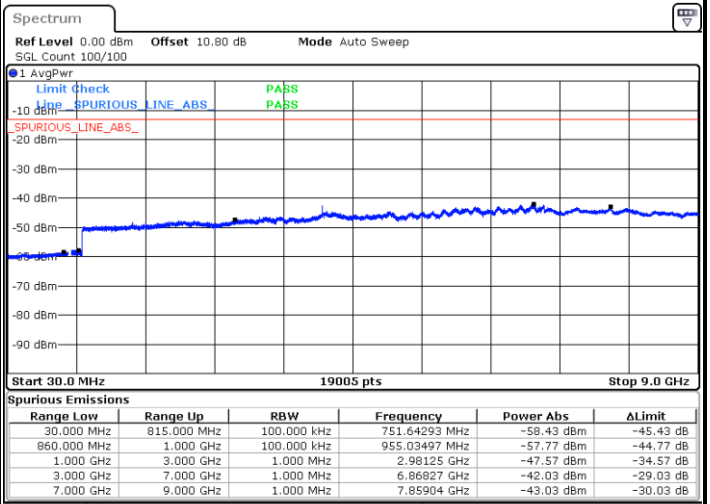
LTE Band 5 / 3MHz

Lowest Channel / QPSK



Date: 10 JUL 2017 01:46:45

Lowest Channel / 16QAM



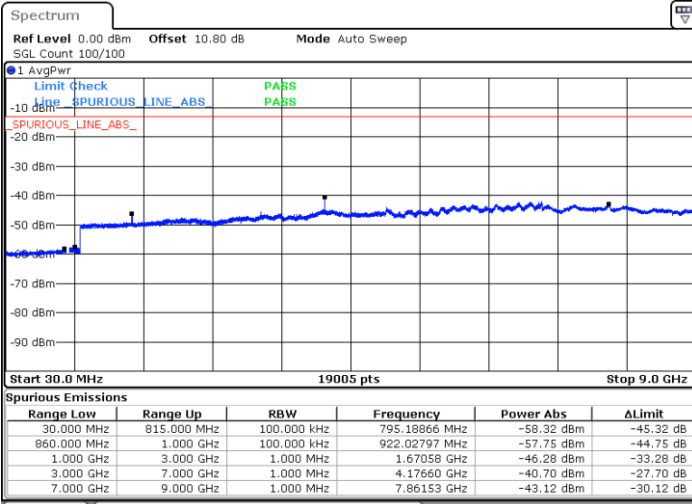
Date: 10 JUL 2017 01:47:39



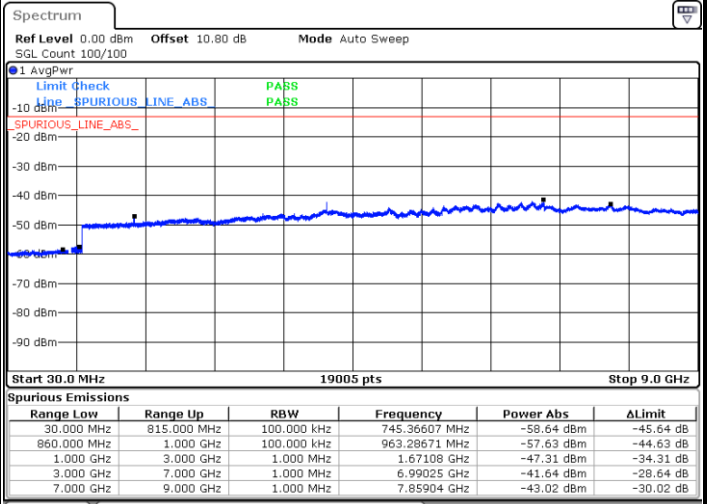
LTE Band 5 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



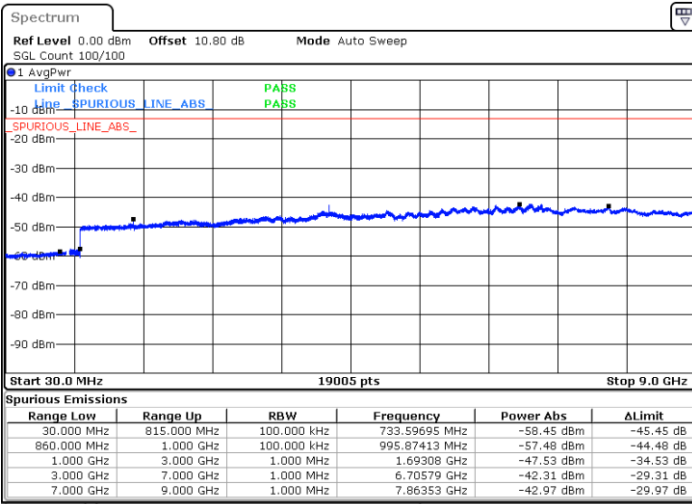
Date: 10.JUL.2017 01:49:13



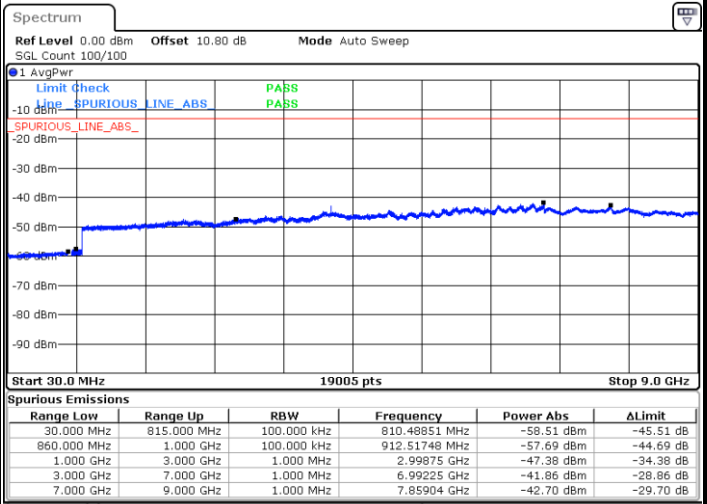
Date: 10.JUL.2017 01:50:06

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 10.JUL.2017 01:58:15



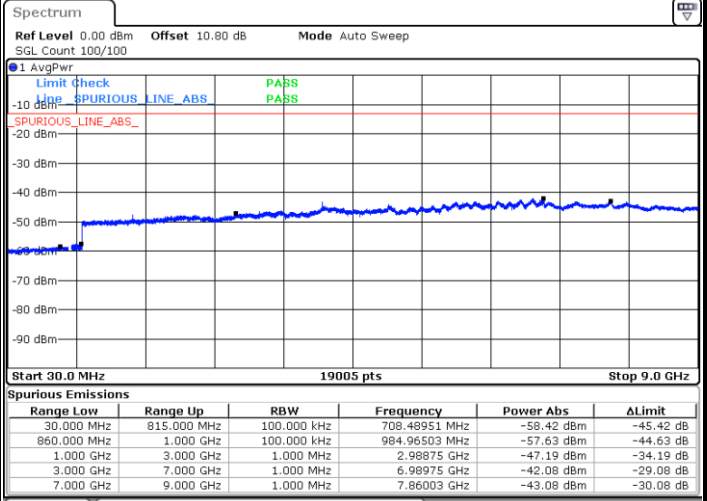
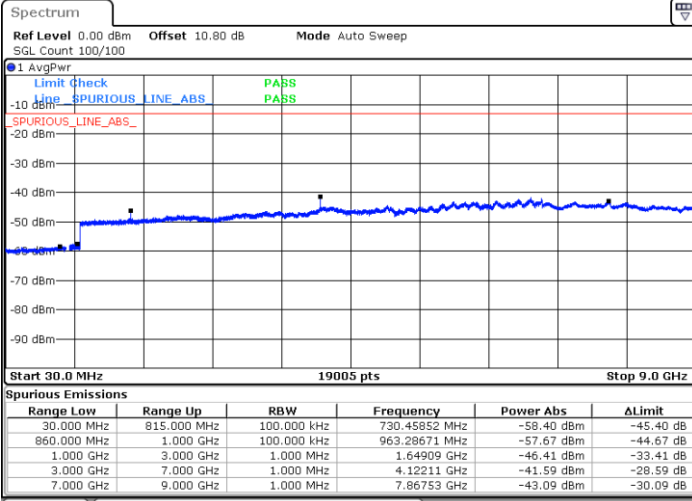
Date: 10.JUL.2017 01:59:09



LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

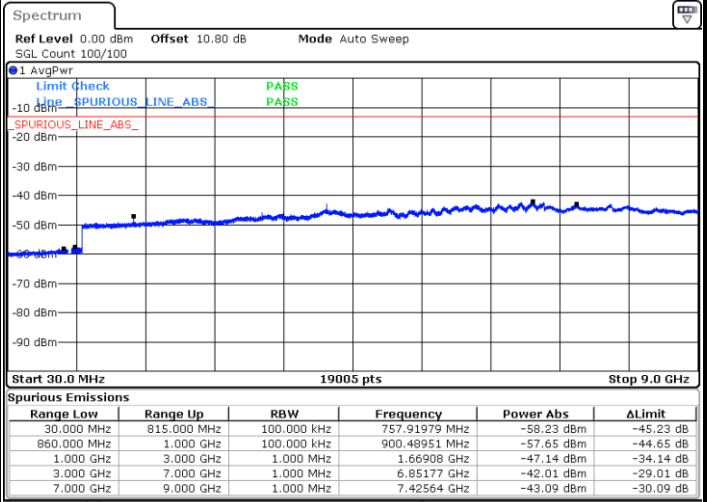
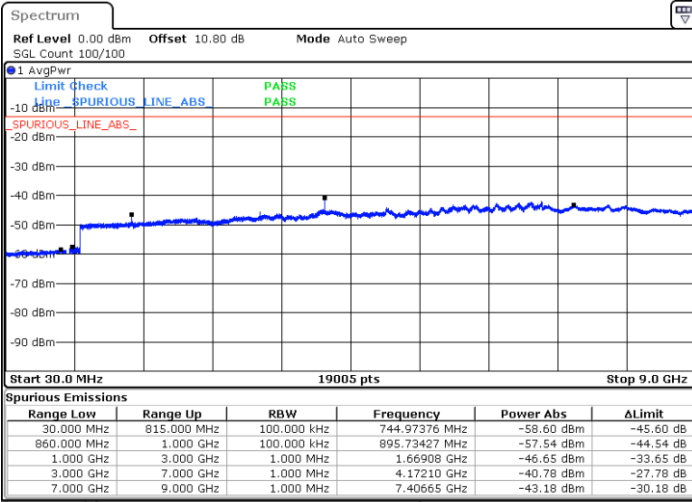


Date: 10.JUL.2017 02:07:18

Date: 10.JUL.2017 02:08:12

Middle Channel / QPSK

Middle Channel / 16QAM



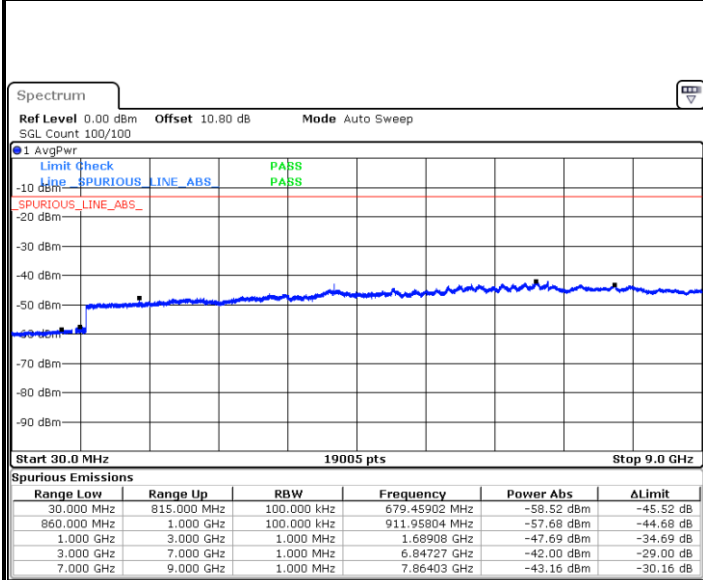
Date: 10.JUL.2017 02:09:45

Date: 10.JUL.2017 02:10:39



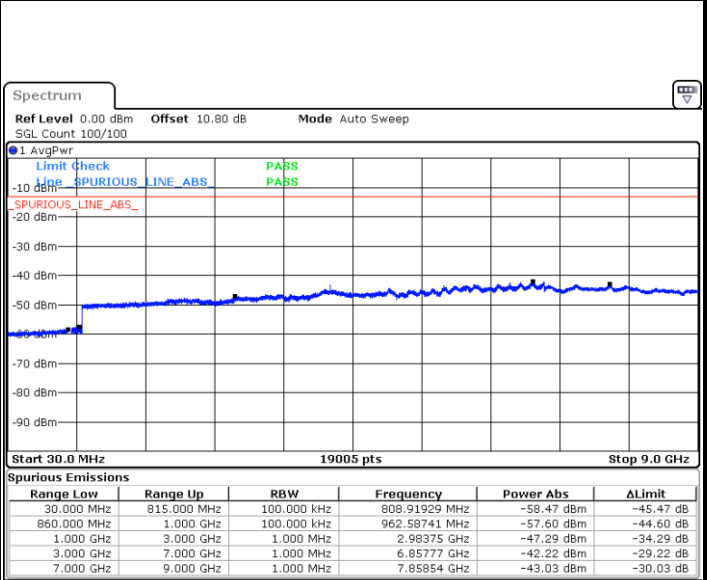
LTE Band 5 / 5MHz

Highest Channel / QPSK



Date: 10 JUL 2017 02:18:48

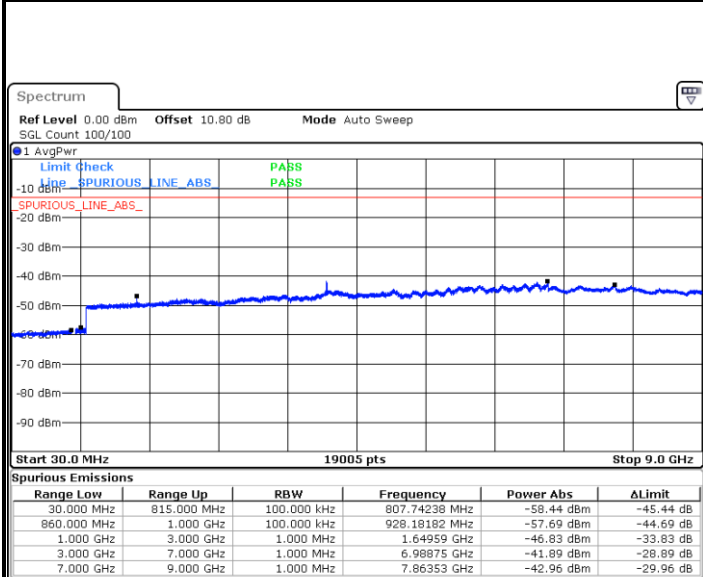
Highest Channel / 16QAM



Date: 10 JUL 2017 02:19:42

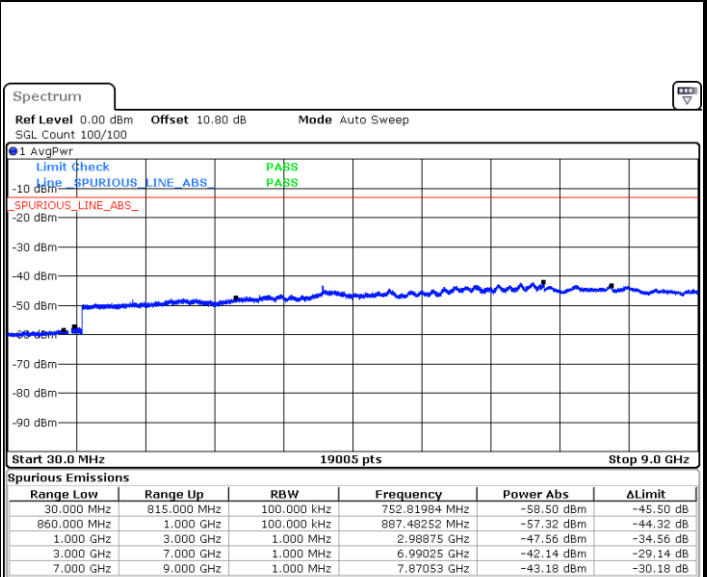
LTE Band 5 / 10MHz

Lowest Channel / QPSK



Date: 10 JUL 2017 02:27:51

Lowest Channel / 16QAM

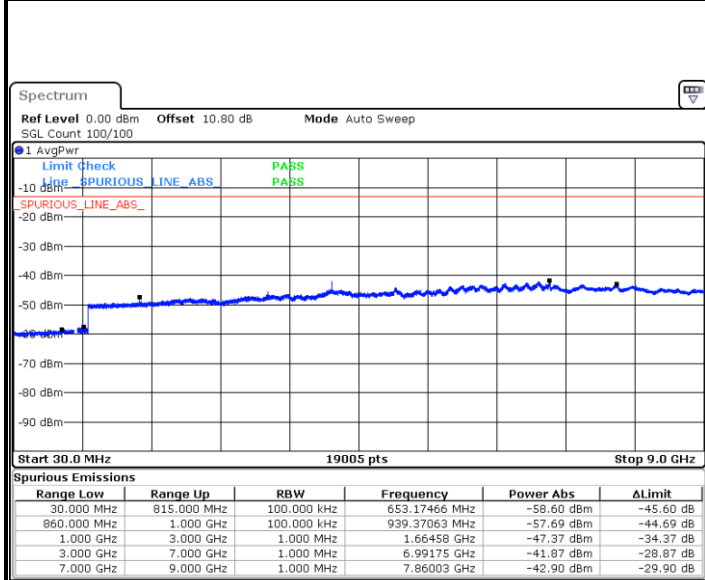


Date: 10 JUL 2017 02:28:44



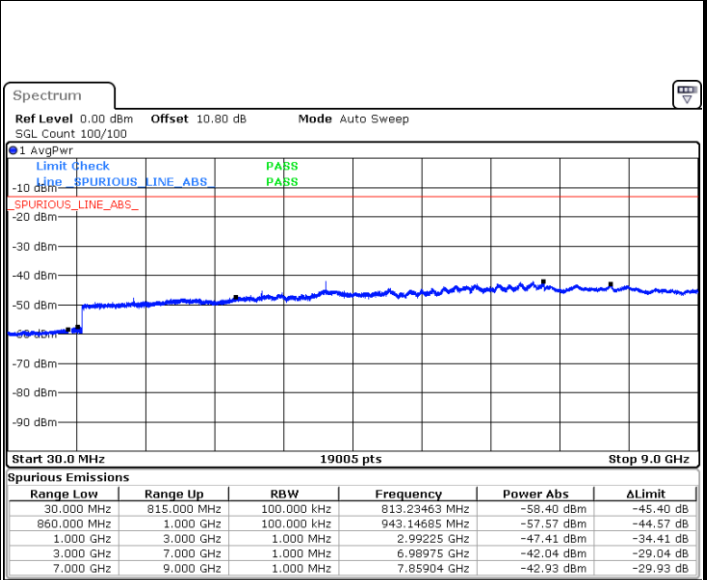
LTE Band 5 / 10MHz

Middle Channel / QPSK



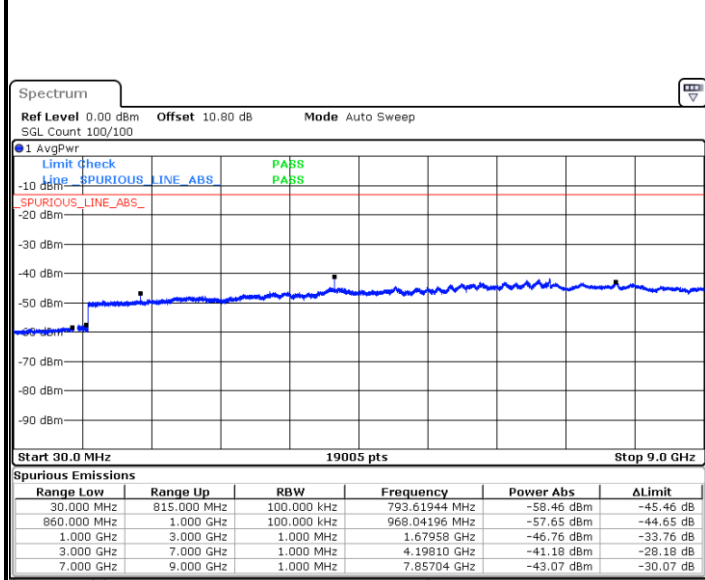
Date: 10.JUL.2017 02:30:18

Middle Channel / 16QAM



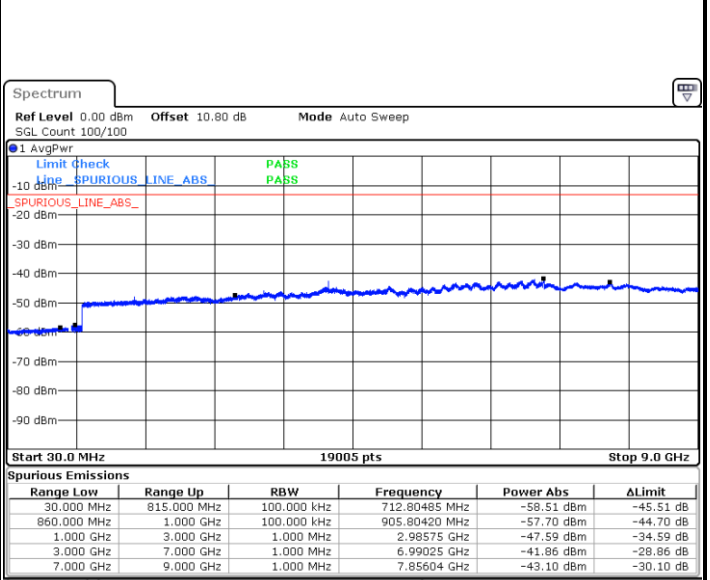
Date: 10.JUL.2017 02:31:12

Highest Channel / QPSK



Date: 10.JUL.2017 02:39:21

Highest Channel / 16QAM



Date: 10.JUL.2017 02:40:14



### 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	0.0004	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0020	
-10	Normal Voltage	0.0033	
-20	Normal Voltage	0.0050	
-30	Normal Voltage	0.0041	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

**Note:**

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =3.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 12

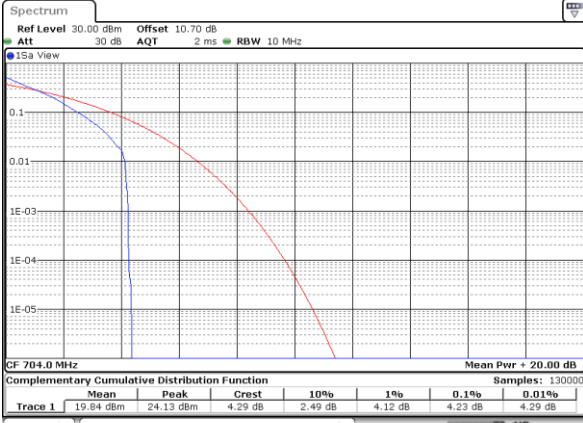
### Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.23	4.64	5.1	5.65	<b>PASS</b>
Middle CH	4.17	4.72	5.25	5.62	
Highest CH	4.29	4.52	4.93	5.65	



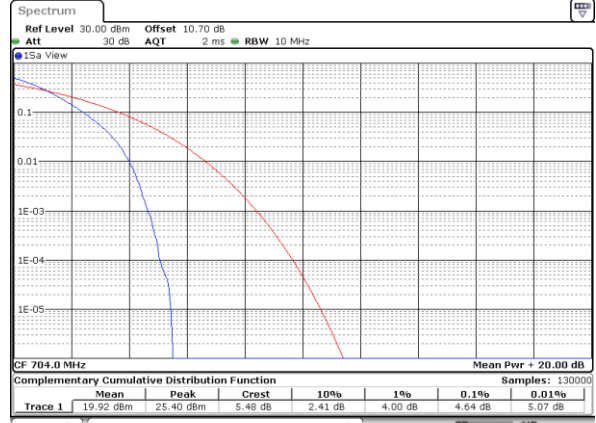
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



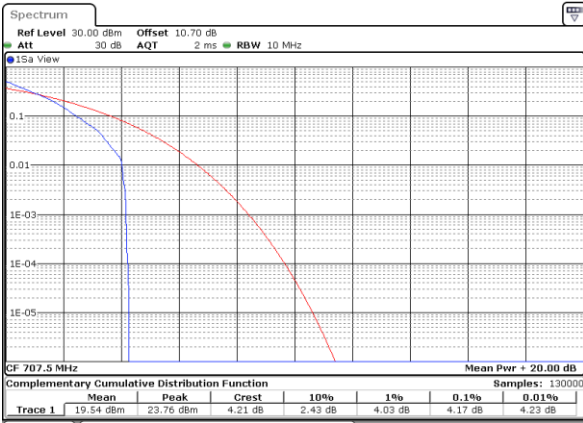
Date: 10 JUL 2017 04:35:42

Lowest Channel / Full RB



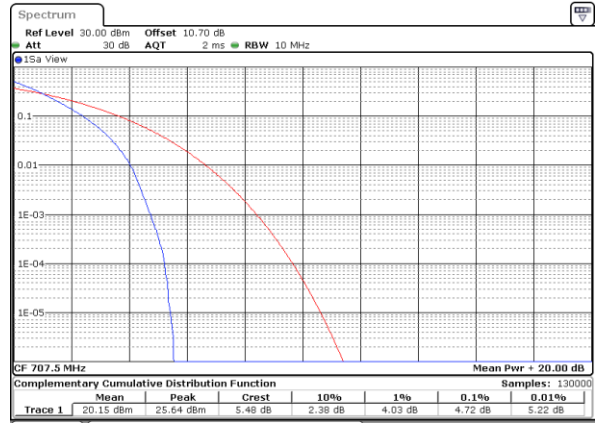
Date: 10 JUL 2017 04:31:25

Middle Channel / 1RB



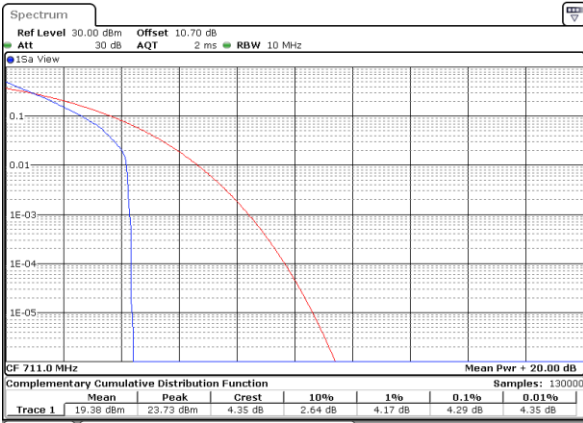
Date: 10 JUL 2017 04:35:51

Middle Channel / Full RB



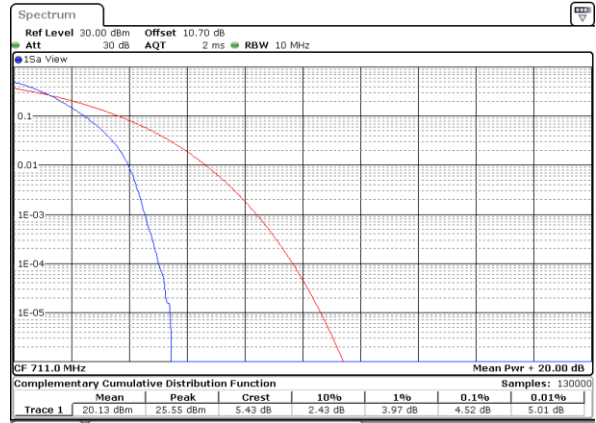
Date: 10 JUL 2017 04:38:49

Highest Channel / 1RB



Date: 10 JUL 2017 04:39:07

Highest Channel / Full RB



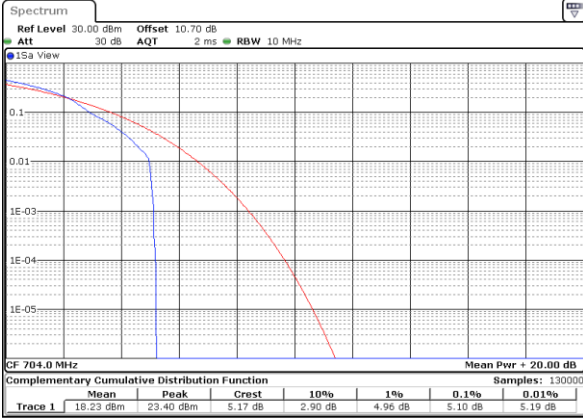
Date: 10 JUL 2017 04:38:58





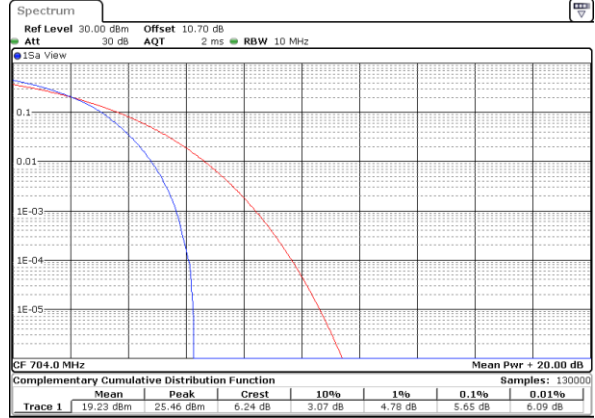
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



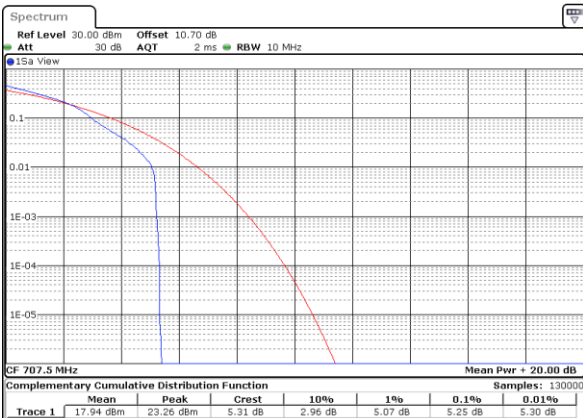
Date: 10 JUL 2017 04:29:10

Lowest Channel / Full RB



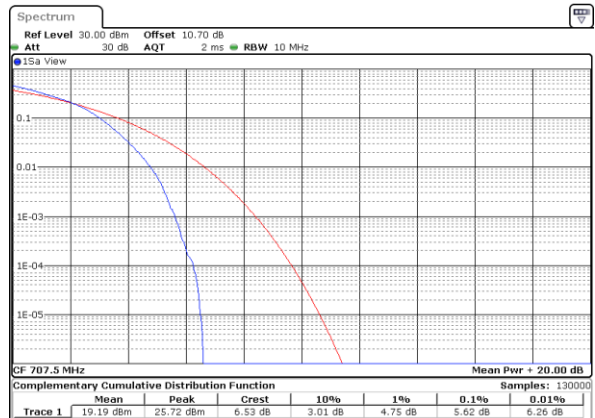
Date: 10 JUL 2017 04:19:18

Middle Channel / 1RB



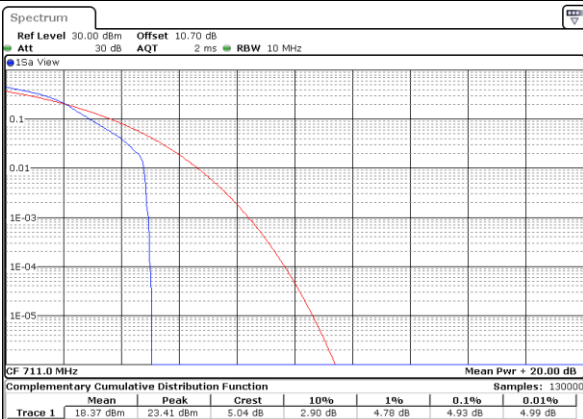
Date: 10 JUL 2017 04:29:21

Middle Channel / Full RB



Date: 10 JUL 2017 04:29:29

Highest Channel / 1RB



Date: 10 JUL 2017 04:31:15

Highest Channel / Full RB



Date: 10 JUL 2017 04:31:06



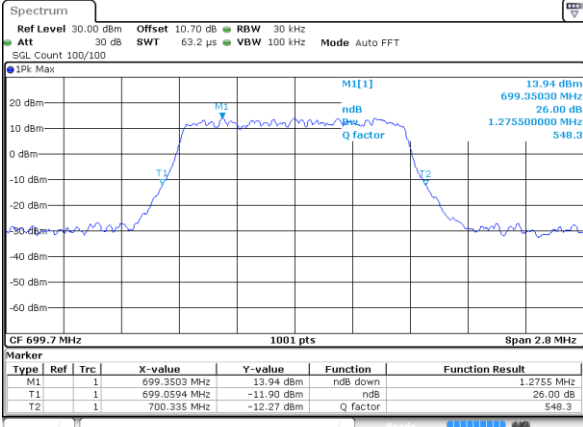
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.28	1.28	3.06	3.01	4.92	4.94	9.77	9.95	-	-	-	-
Middle CH	1.28	1.29	2.99	3.00	4.86	4.89	10.13	9.83	-	-	-	-
Highest CH	1.29	1.30	3.00	3.00	4.85	4.92	9.85	9.61	-	-	-	-



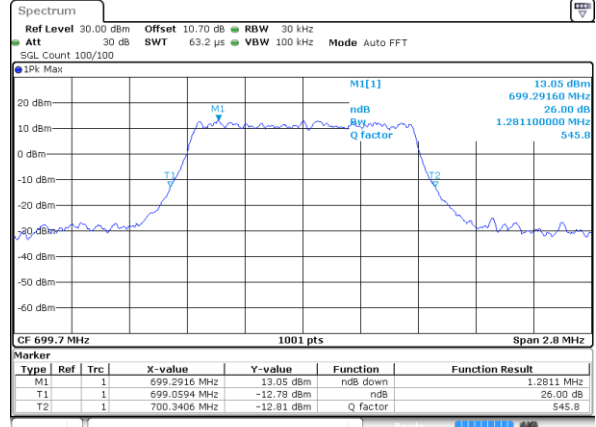
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



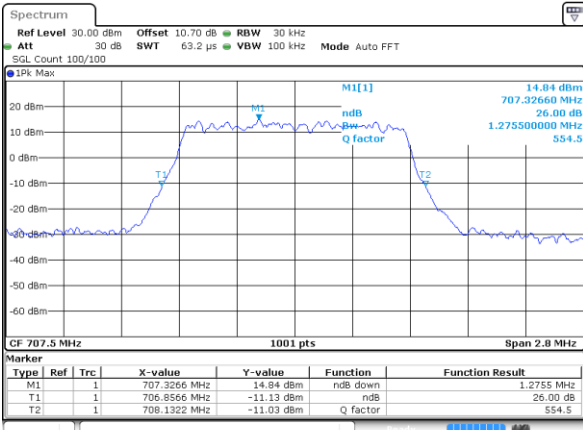
Date: 10 JUL 2017 04:00:49

Lowest Channel / 1.4MHz / 16QAM



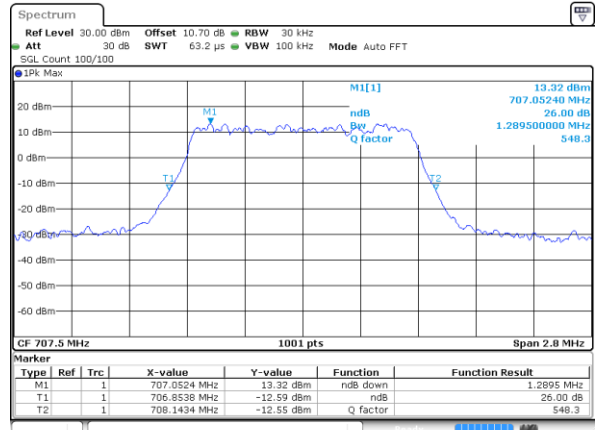
Date: 10 JUL 2017 04:00:39

Middle Channel / 1.4MHz / QPSK



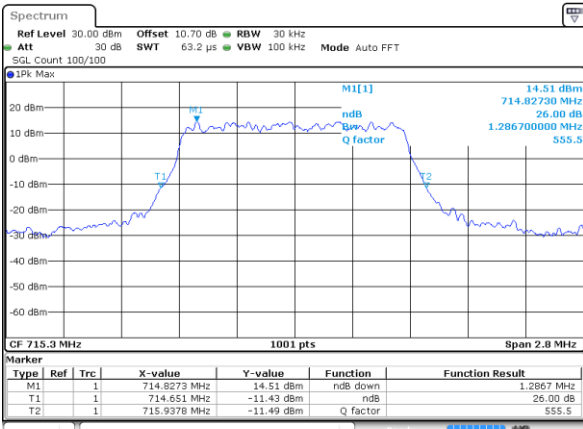
Date: 10 JUL 2017 04:07:41

Middle Channel / 1.4MHz / 16QAM



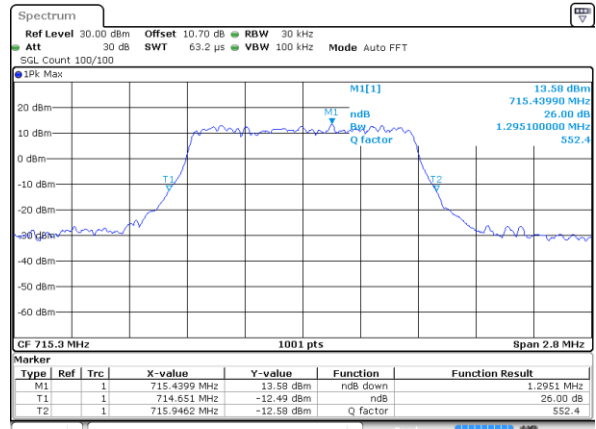
Date: 10 JUL 2017 04:07:51

Highest Channel / 1.4MHz / QPSK



Date: 10 JUL 2017 04:10:19

Highest Channel / 1.4MHz / 16QAM

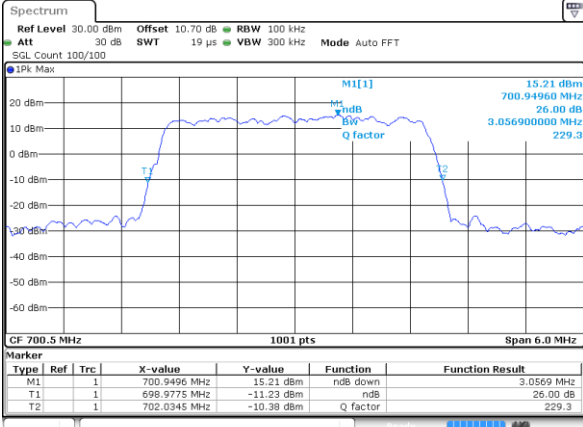


Date: 10 JUL 2017 04:10:09



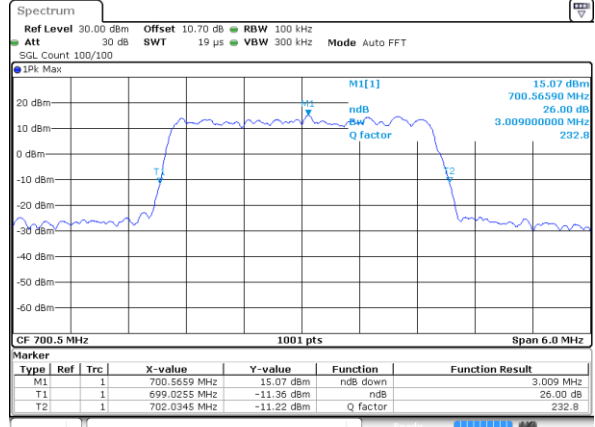
LTE Band 12

Lowest Channel / 3MHz / QPSK



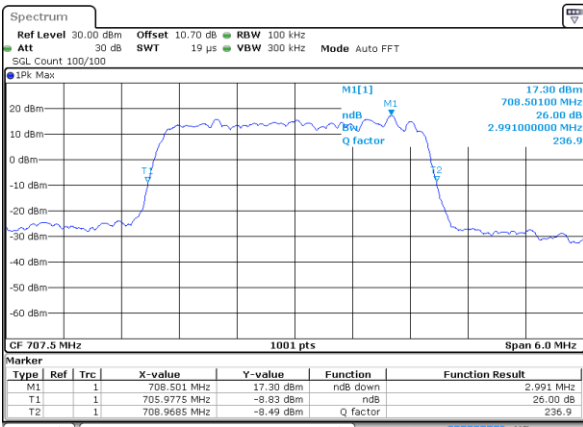
Date: 10 JUL 2017 03:09:46

Lowest Channel / 3MHz / 16QAM



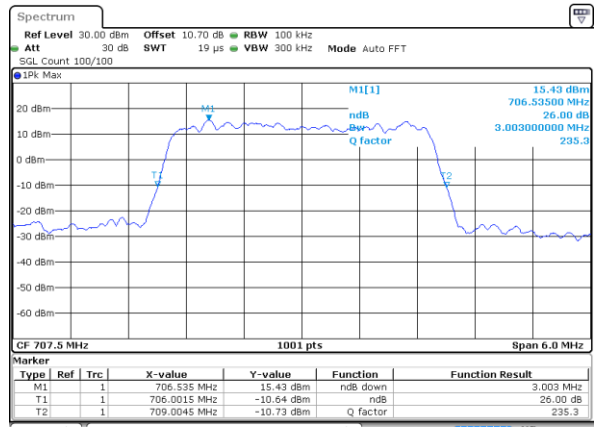
Date: 10 JUL 2017 03:09:36

Middle Channel / 3MHz / QPSK



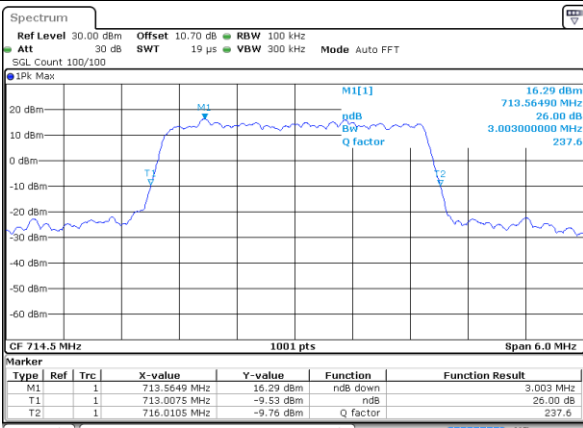
Date: 10 JUL 2017 03:16:38

Middle Channel / 3MHz / 16QAM



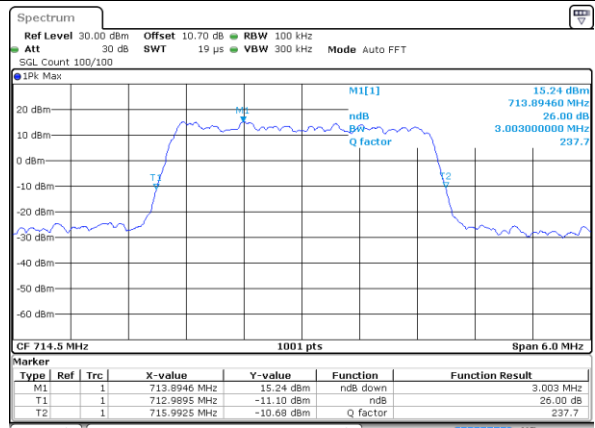
Date: 10 JUL 2017 03:16:48

Highest Channel / 3MHz / QPSK



Date: 10 JUL 2017 03:19:16

Highest Channel / 3MHz / 16QAM

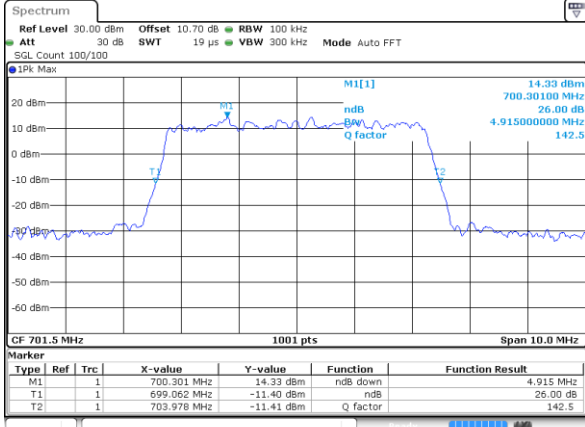


Date: 10 JUL 2017 03:19:06



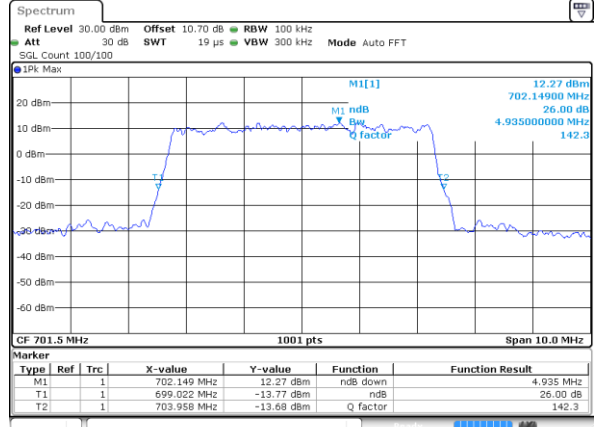
LTE Band 12

Lowest Channel / 5MHz / QPSK



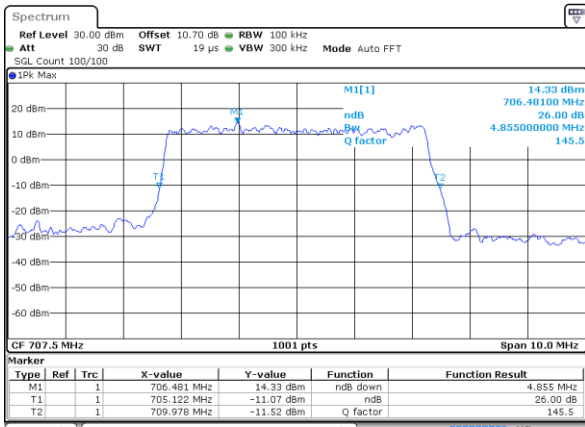
Date: 10 JUL 2017 03:26:19

Lowest Channel / 5MHz / 16QAM



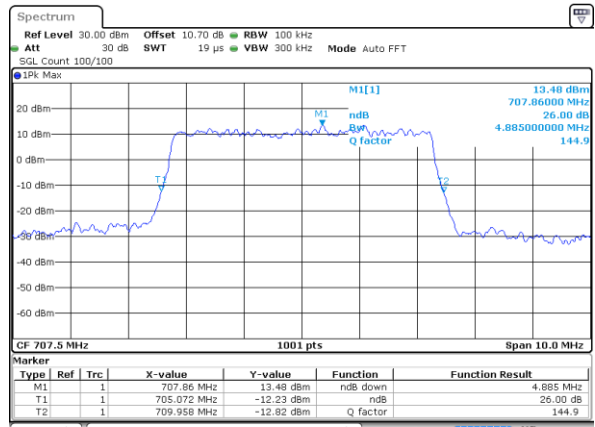
Date: 10 JUL 2017 03:26:09

Middle Channel / 5MHz / QPSK



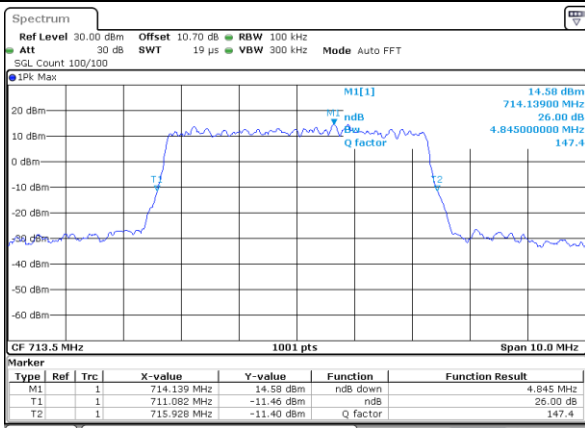
Date: 10 JUL 2017 03:33:11

Middle Channel / 5MHz / 16QAM



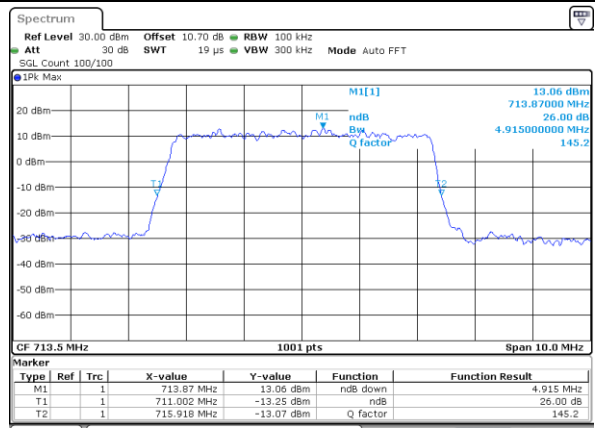
Date: 10 JUL 2017 03:33:21

Highest Channel / 5MHz / QPSK



Date: 10 JUL 2017 03:37:13

Highest Channel / 5MHz / 16QAM

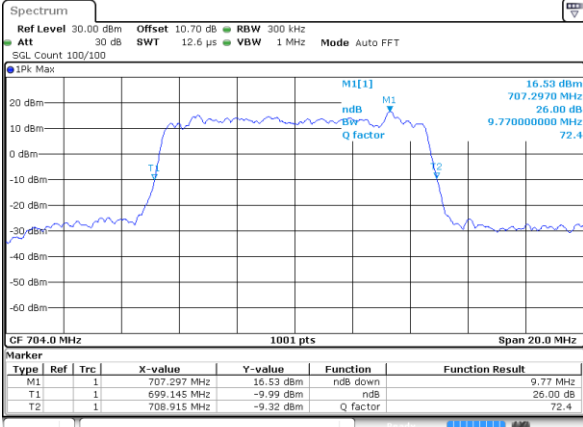


Date: 10 JUL 2017 03:37:03



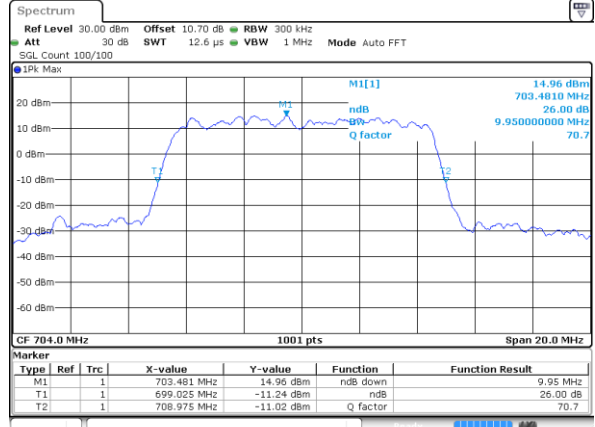
LTE Band 12

Lowest Channel / 10MHz / QPSK



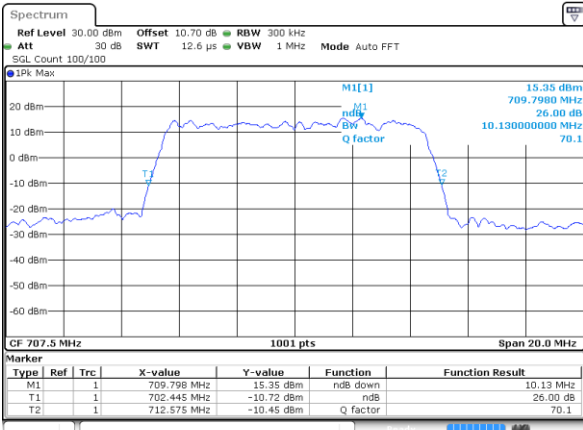
Date: 10 JUL 2017 03:44:16

Lowest Channel / 10MHz / 16QAM



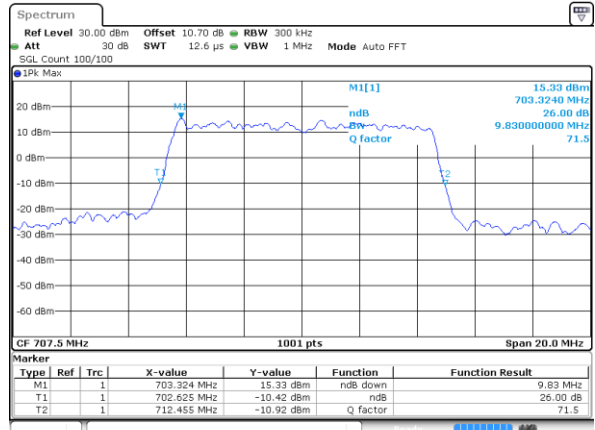
Date: 10 JUL 2017 03:44:06

Middle Channel / 10MHz / QPSK



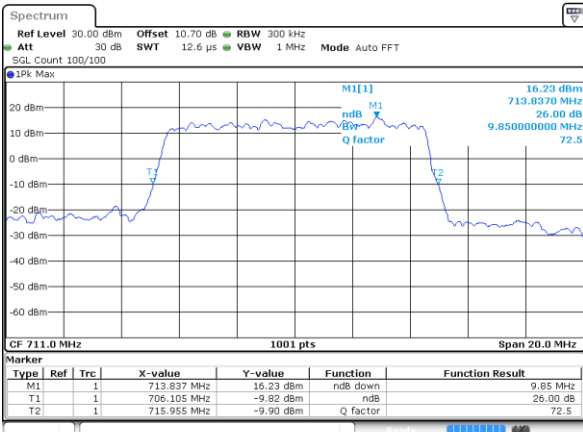
Date: 10 JUL 2017 03:51:08

Middle Channel / 10MHz / 16QAM



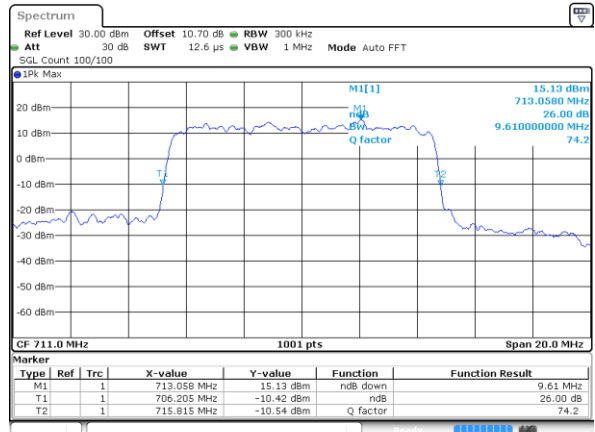
Date: 10 JUL 2017 03:51:18

Highest Channel / 10MHz / QPSK



Date: 10 JUL 2017 03:53:46

Highest Channel / 10MHz / 16QAM



Date: 10 JUL 2017 03:53:36



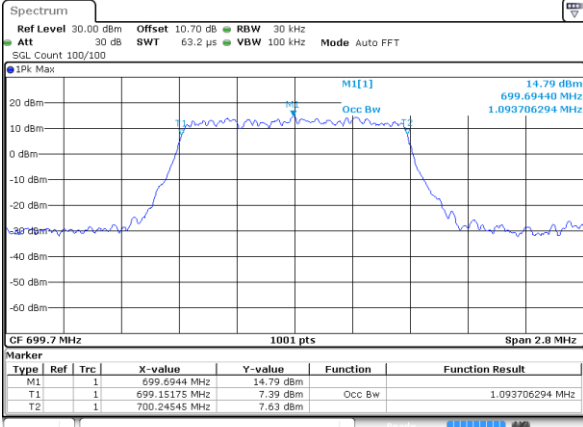
### Occupied Bandwidth

Mode	LTE Band 12 : 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	1.1	2.71	2.7	4.51	4.49	8.99	8.97	-	-	-	-
Middle CH	1.09	1.1	2.71	2.72	4.49	4.5	9.03	9.03	-	-	-	-
Highest CH	1.09	1.1	2.71	2.73	4.52	4.51	8.97	8.97	-	-	-	-



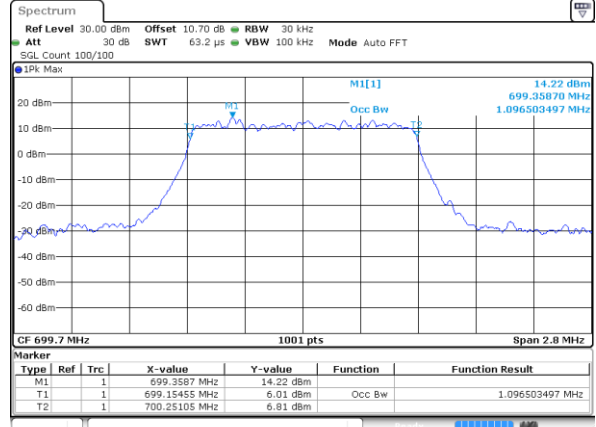
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



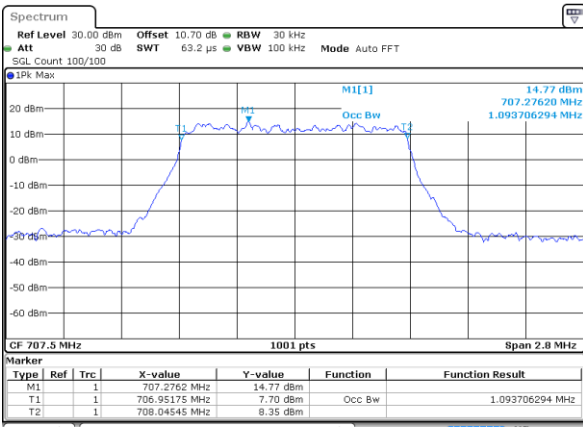
Date: 10 JUL 2017 04:00:18

Lowest Channel / 1.4MHz / 16QAM



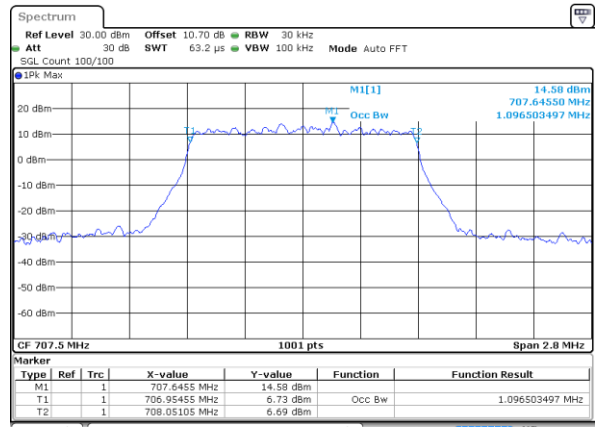
Date: 10 JUL 2017 04:00:29

Middle Channel / 1.4MHz / QPSK



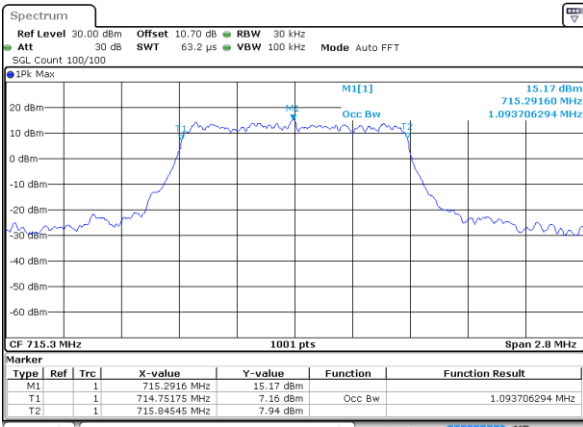
Date: 10 JUL 2017 04:07:31

Middle Channel / 1.4MHz / 16QAM



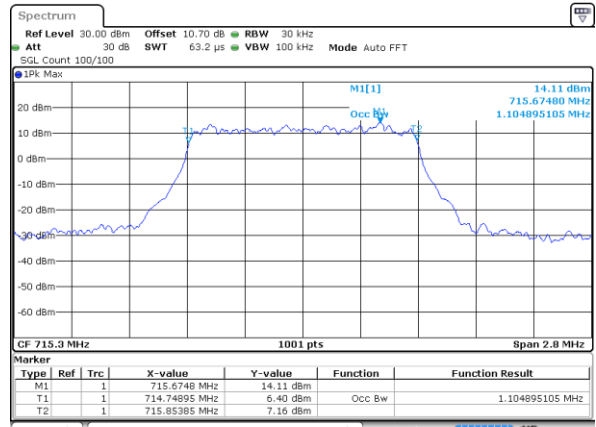
Date: 10 JUL 2017 04:07:21

Highest Channel / 1.4MHz / QPSK



Date: 10 JUL 2017 04:09:49

Highest Channel / 1.4MHz / 16QAM



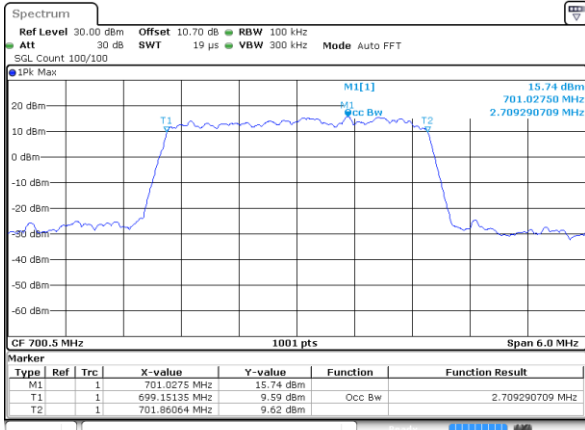
Date: 10 JUL 2017 04:09:59





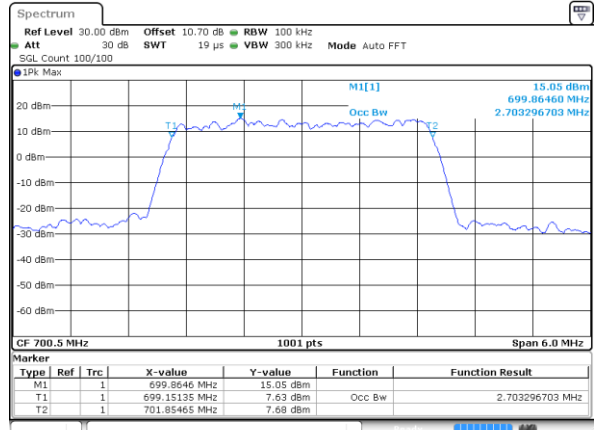
LTE Band 12

Lowest Channel / 3MHz / QPSK



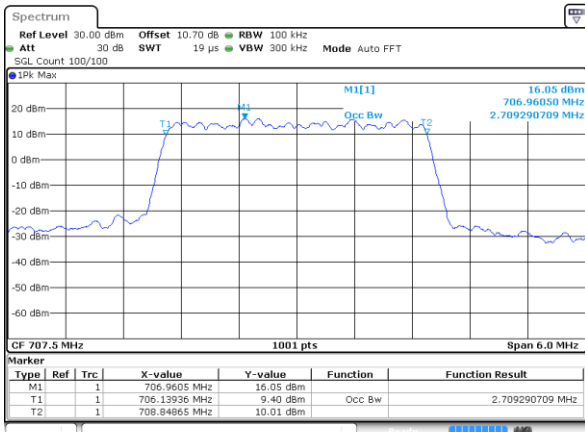
Date: 10 JUL 2017 03:09:16

Lowest Channel / 3MHz / 16QAM



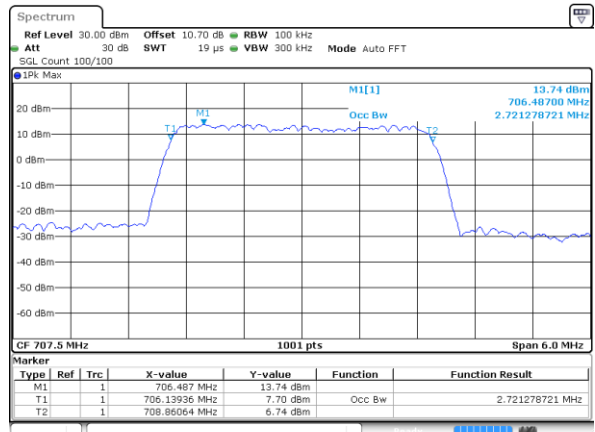
Date: 10 JUL 2017 03:09:26

Middle Channel / 3MHz / QPSK



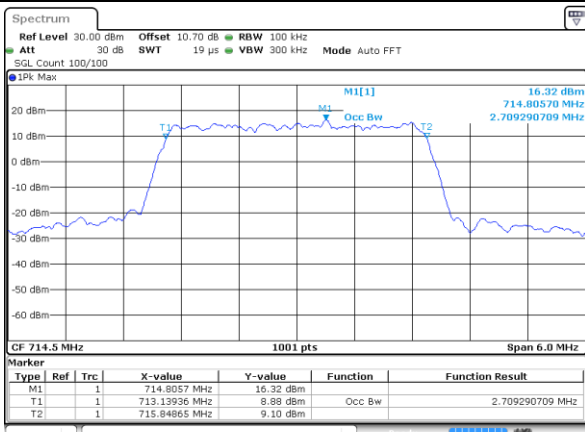
Date: 10 JUL 2017 03:16:28

Middle Channel / 3MHz / 16QAM



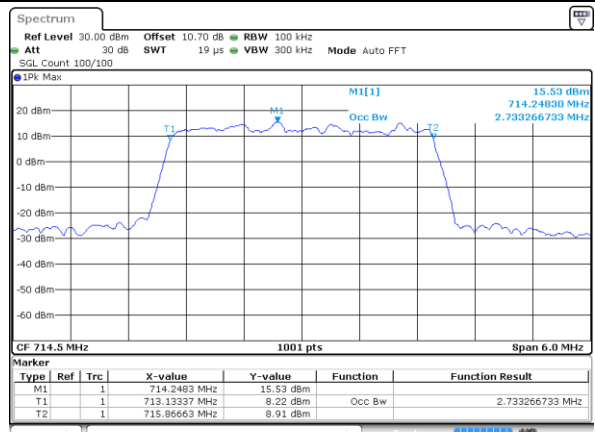
Date: 10 JUL 2017 03:16:18

Highest Channel / 3MHz / QPSK



Date: 10 JUL 2017 03:18:46

Highest Channel / 3MHz / 16QAM

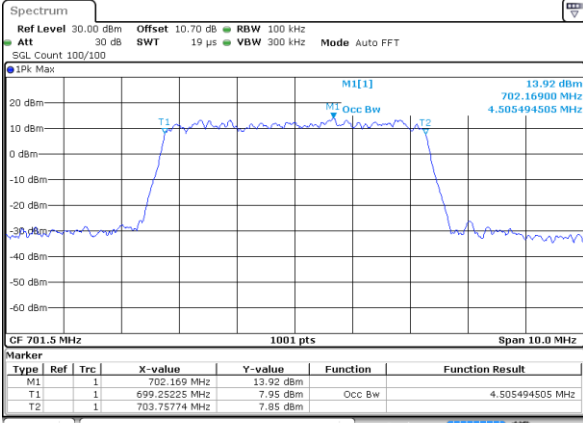


Date: 10 JUL 2017 03:18:56



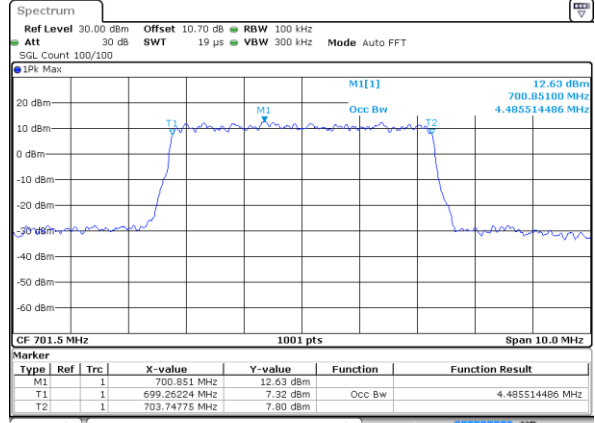
LTE Band 12

Lowest Channel / 5MHz / QPSK



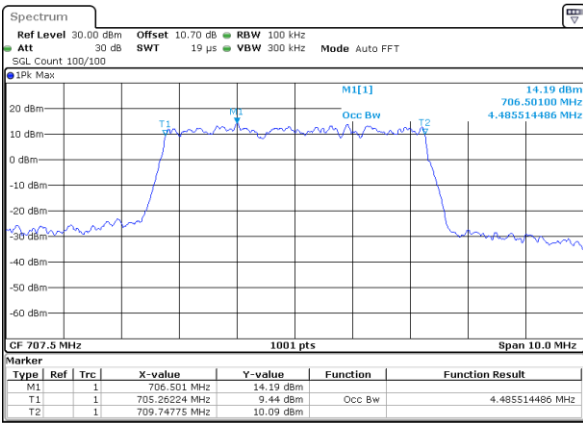
Date: 10 JUL 2017 03:25:49

Lowest Channel / 5MHz / 16QAM



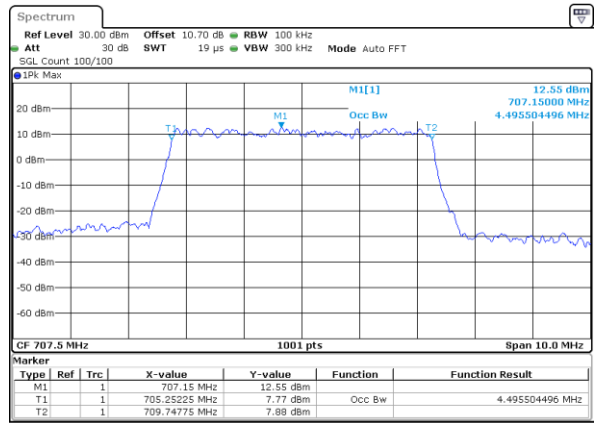
Date: 10 JUL 2017 03:25:59

Middle Channel / 5MHz / QPSK



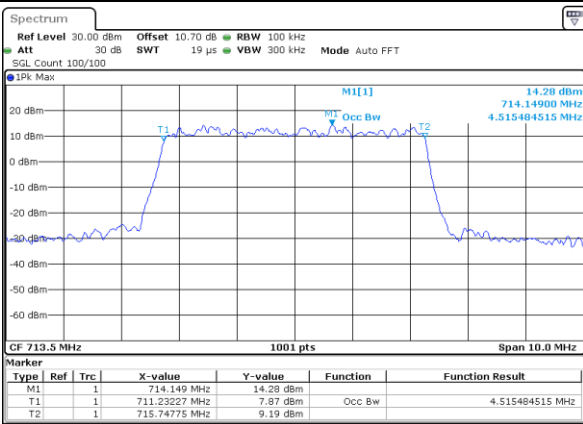
Date: 10 JUL 2017 03:33:01

Middle Channel / 5MHz / 16QAM



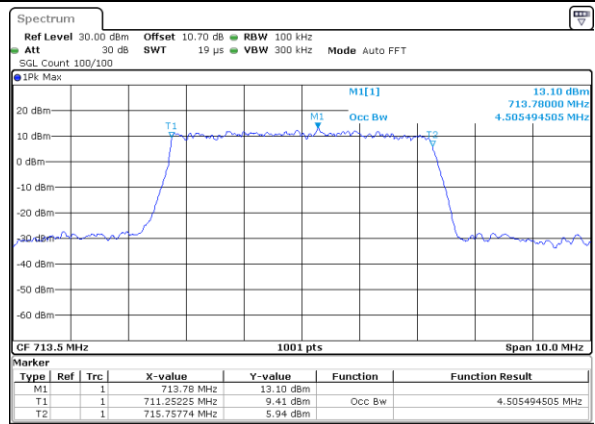
Date: 10 JUL 2017 03:32:51

Highest Channel / 5MHz / QPSK



Date: 10 JUL 2017 03:35:19

Highest Channel / 5MHz / 16QAM



Date: 10 JUL 2017 03:35:29