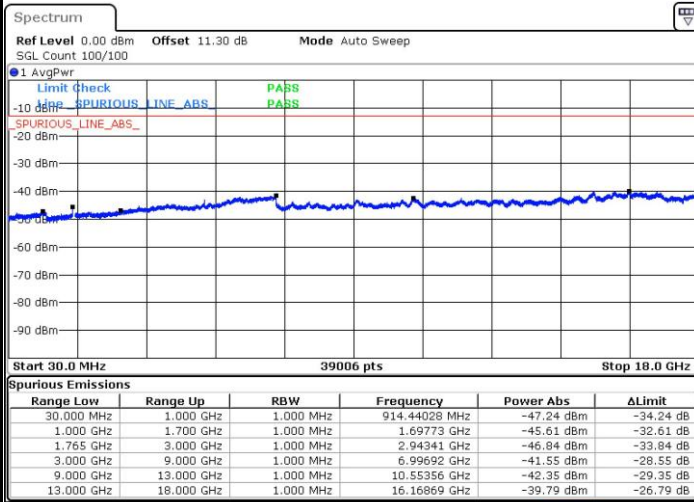




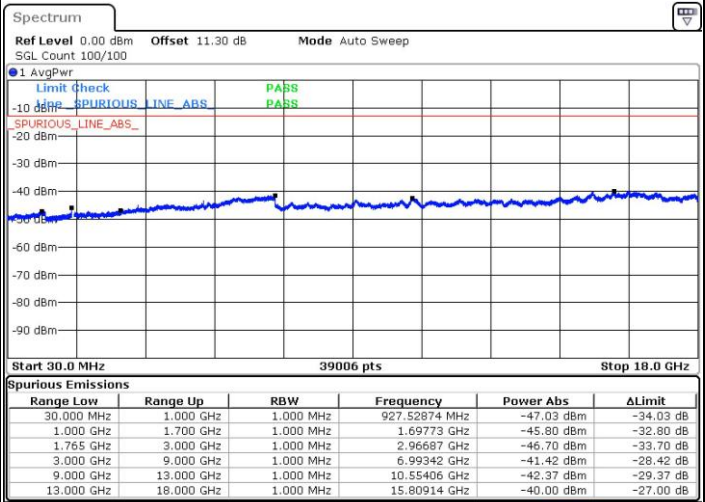
LTE Band 4 / 15MHz

Lowest Channel / QPSK



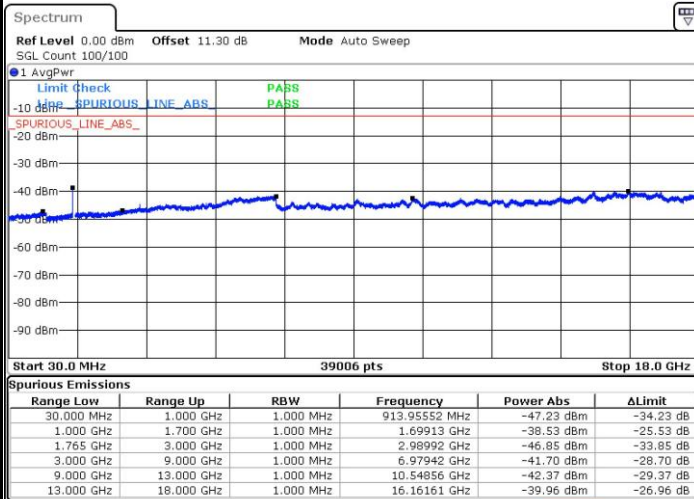
Date: 30 MAR 2018 19:53:19

Lowest Channel / 16QAM



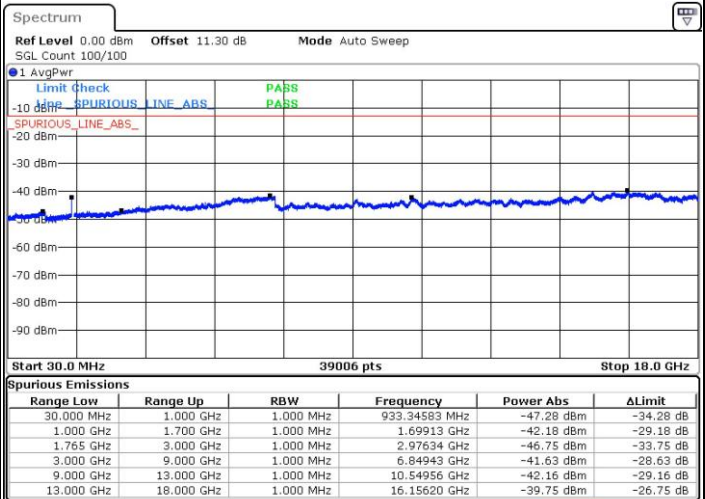
Date: 30 MAR 2018 19:54:13

Middle Channel / QPSK



Date: 30 MAR 2018 19:55:49

Middle Channel / 16QAM

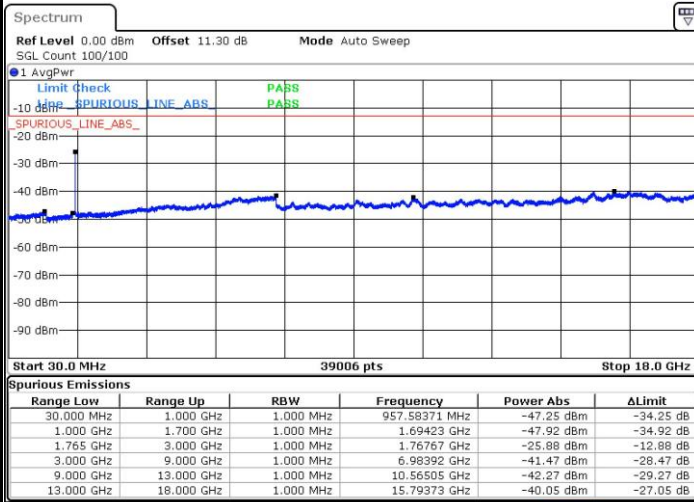


Date: 30 MAR 2018 19:56:43



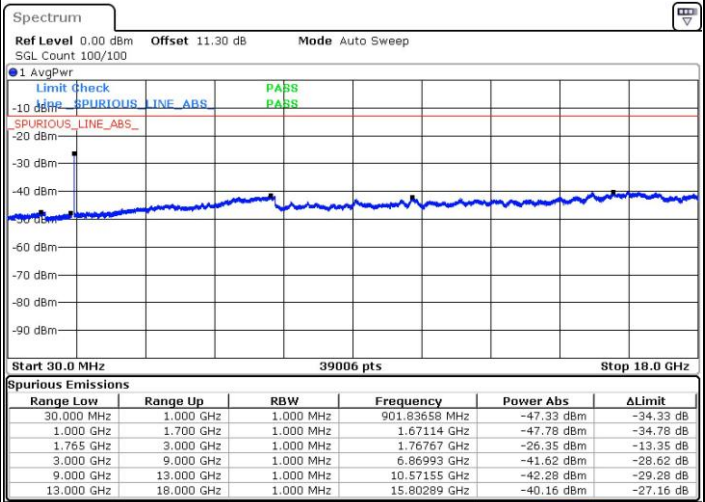
LTE Band 4 / 15MHz

Highest Channel / QPSK



Date: 30 MAR 2018 20:06:45

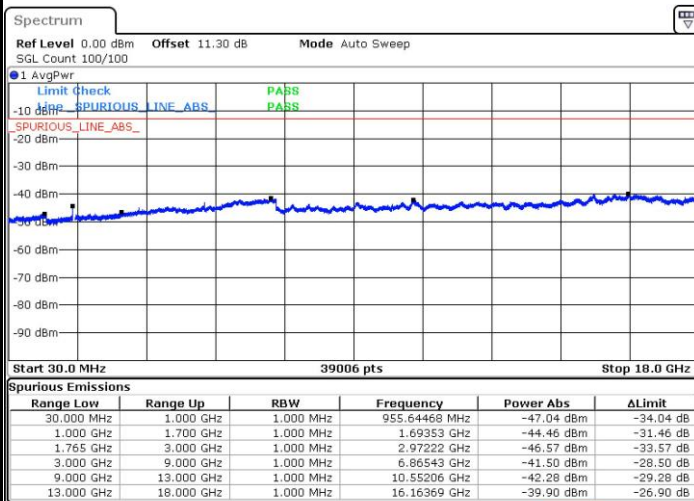
Highest Channel / 16QAM



Date: 30 MAR 2018 20:07:39

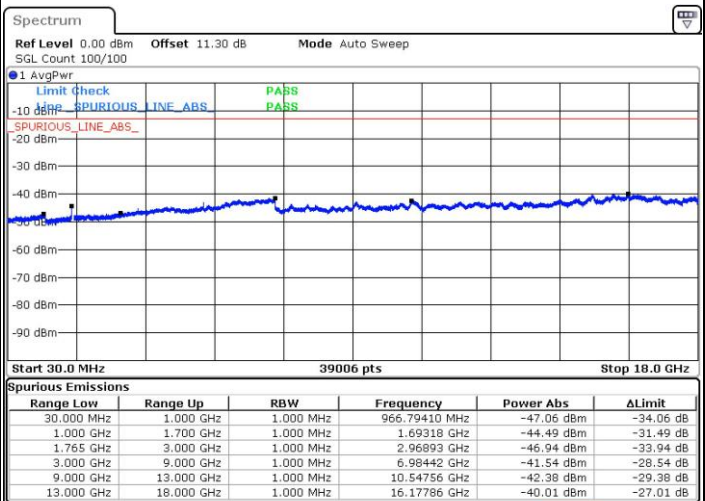
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Date: 30 MAR 2018 20:13:46

Lowest Channel / 16QAM

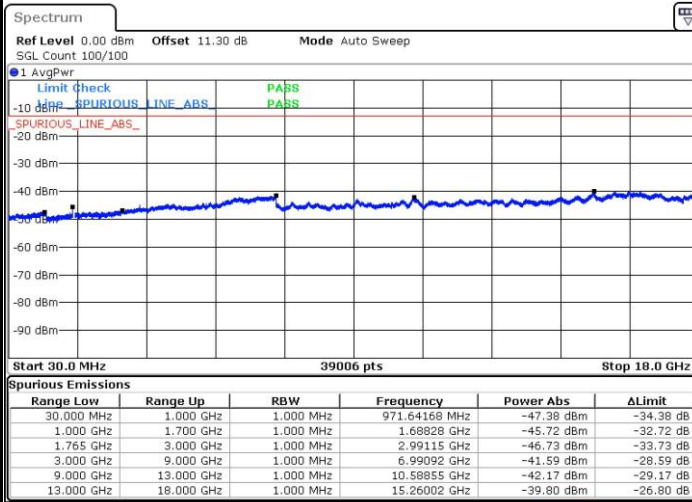


Date: 30 MAR 2018 20:14:40



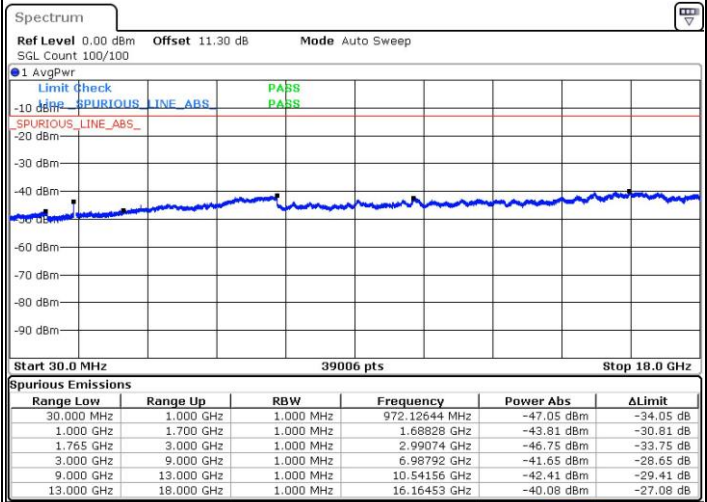
LTE Band 4 / 20MHz

Middle Channel / QPSK



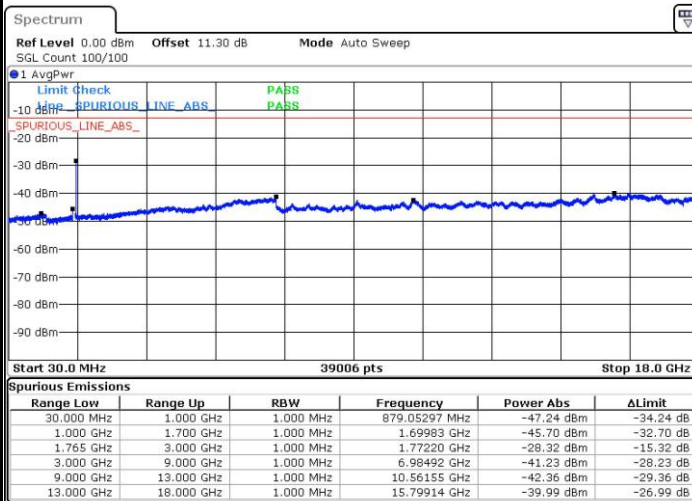
Date: 30 MAR 2018 20:16:16

Middle Channel / 16QAM



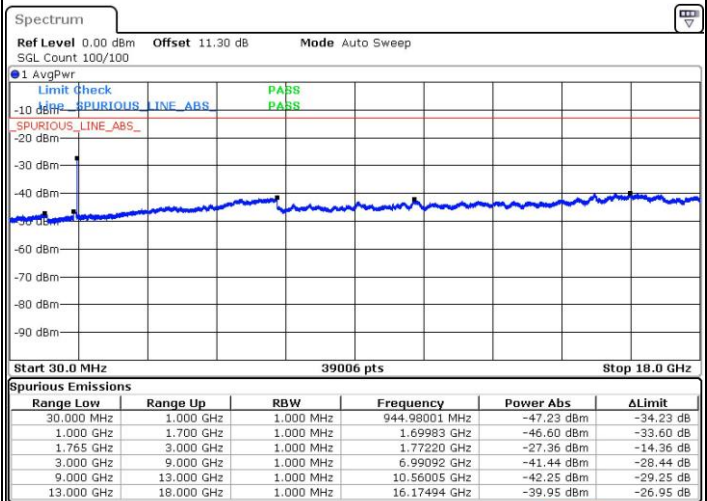
Date: 30 MAR 2018 20:17:10

Highest Channel / QPSK



Date: 30 MAR 2018 20:23:17

Highest Channel / 16QAM



Date: 30 MAR 2018 20:24:12

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	0.0012	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0040	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

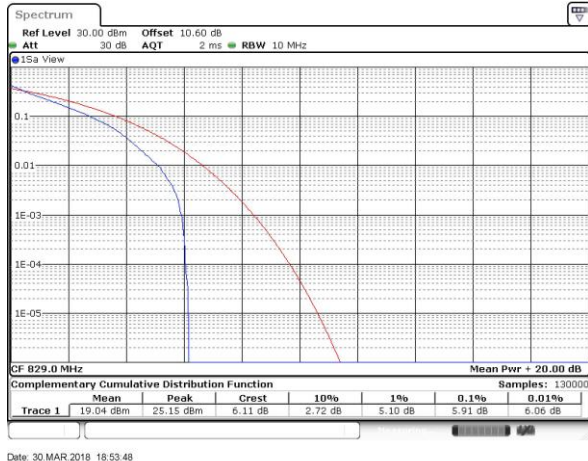
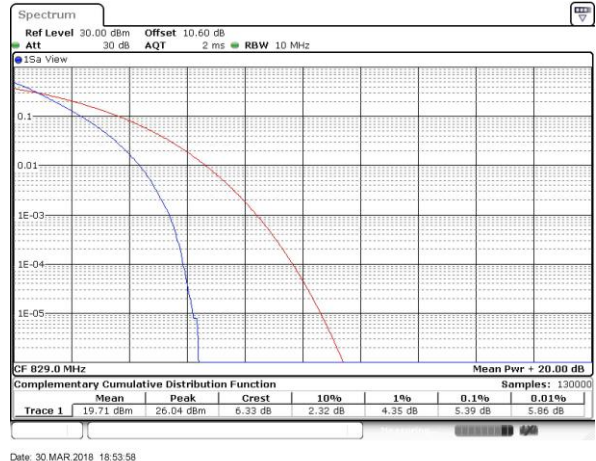
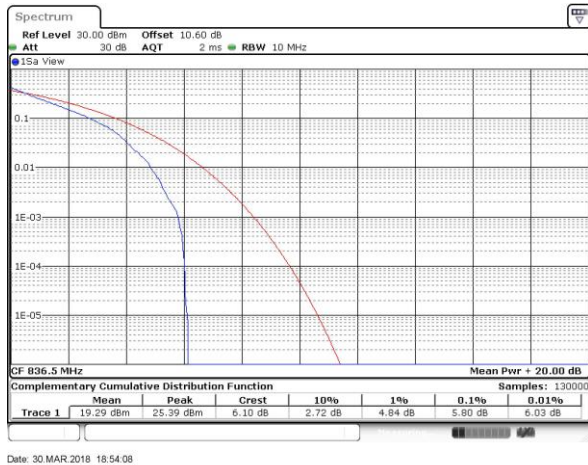
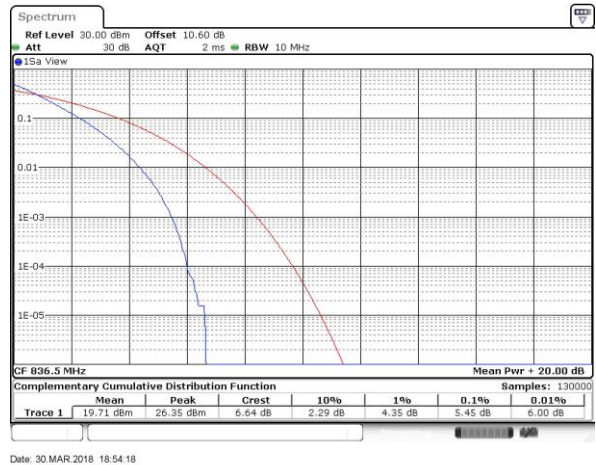
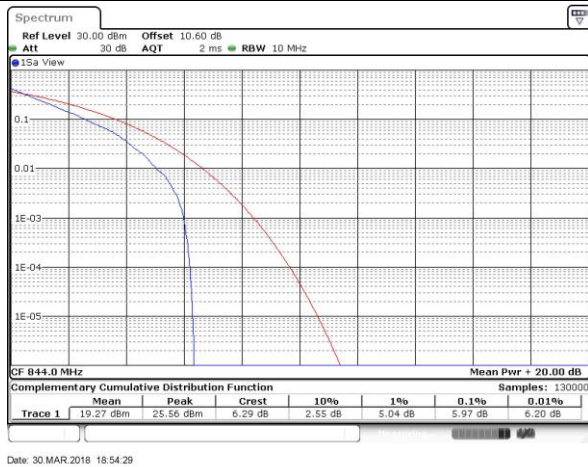
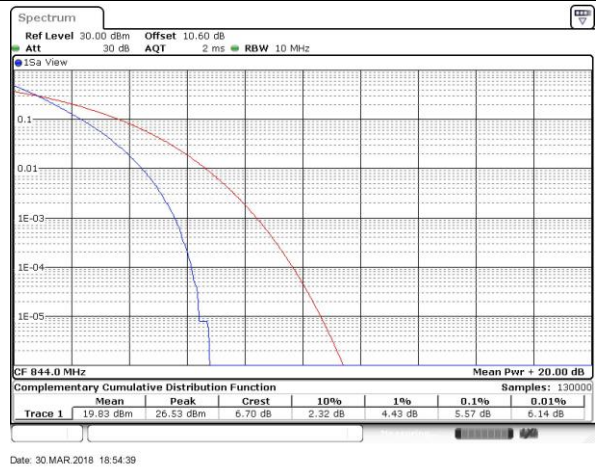
1. Normal Voltage =3.7 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

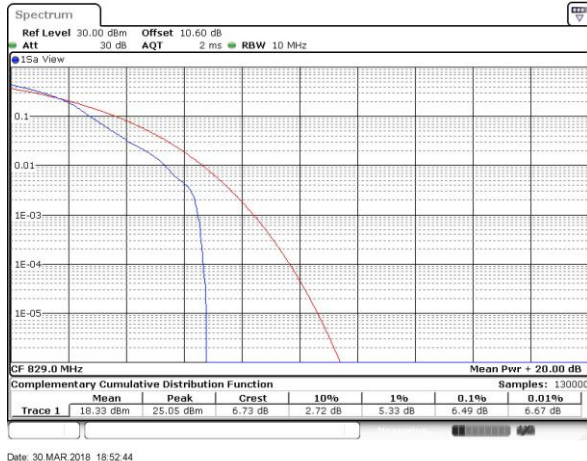


LTE Band 5

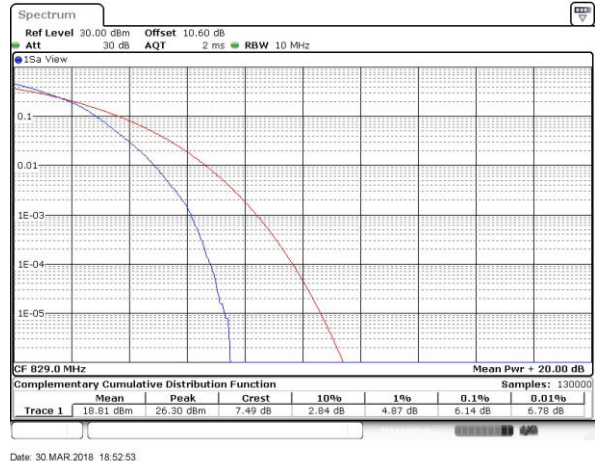
Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.91	5.39	6.49	6.14	PASS
Middle CH	5.8	5.45	6.7	6.12	
Highest CH	5.97	5.57	6.84	6.26	

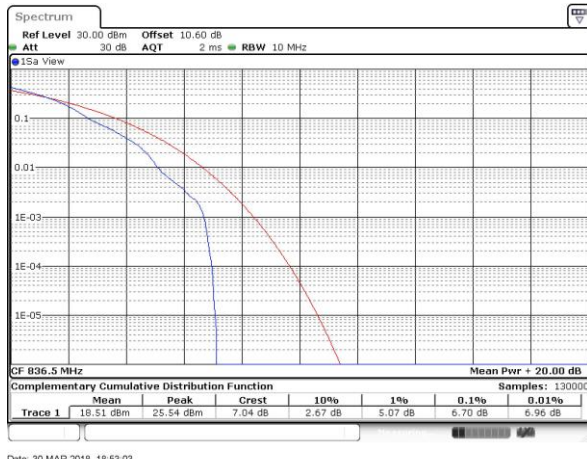
LTE Band 5 / 10MHz / QPSK
Lowest Channel / 1RB

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


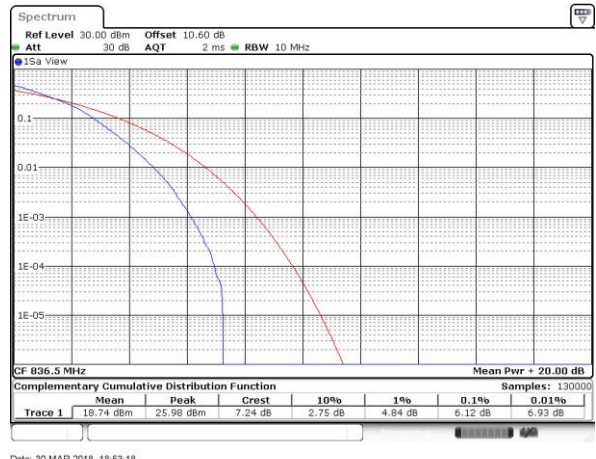
Date: 30 MAR 2018 18:52:44

Lowest Channel / Full RB


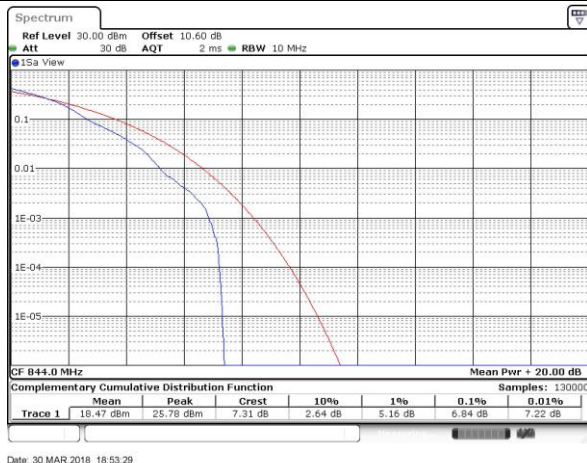
Date: 30 MAR 2018 18:52:53

Middle Channel / 1RB


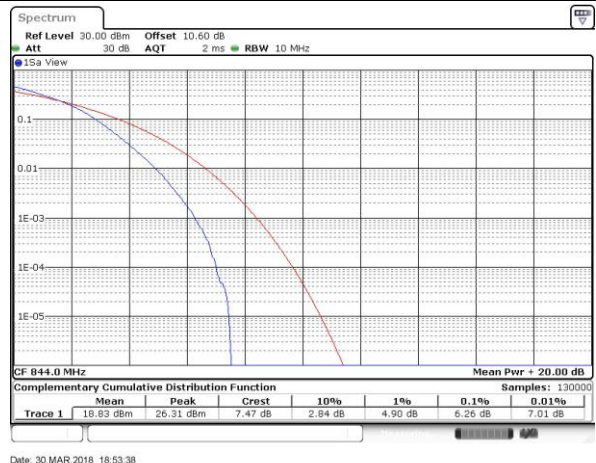
Date: 30 MAR 2018 18:53:03

Middle Channel / Full RB


Date: 30 MAR 2018 18:53:18

Highest Channel / 1RB


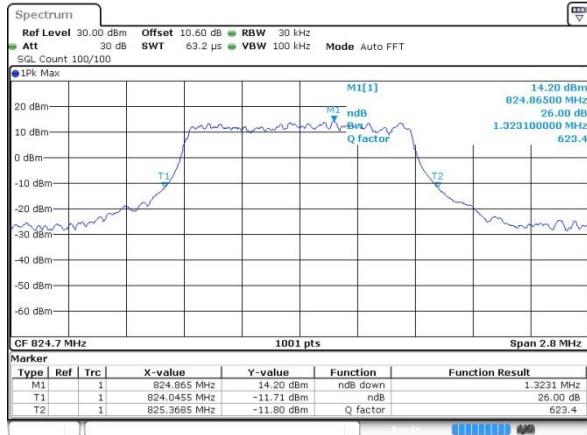
Date: 30 MAR 2018 18:53:29

Highest Channel / Full RB


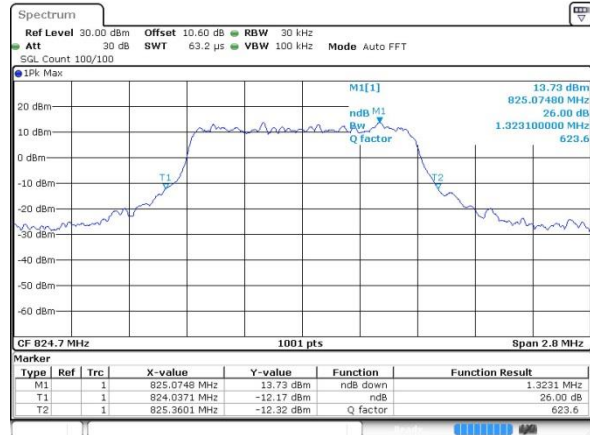
Date: 30 MAR 2018 18:53:38

**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	1.32	1.32	3.02	3.14	4.99	4.94	9.97	10.13	-	-	-	-
Middle CH	1.33	1.33	2.97	3.14	4.93	5.02	10.23	10.11	-	-	-	-
Highest CH	1.31	1.30	3.04	3.06	4.96	4.99	9.87	10.43	-	-	-	-

LTE Band 5
Lowest Channel / 1.4MHz / QPSK


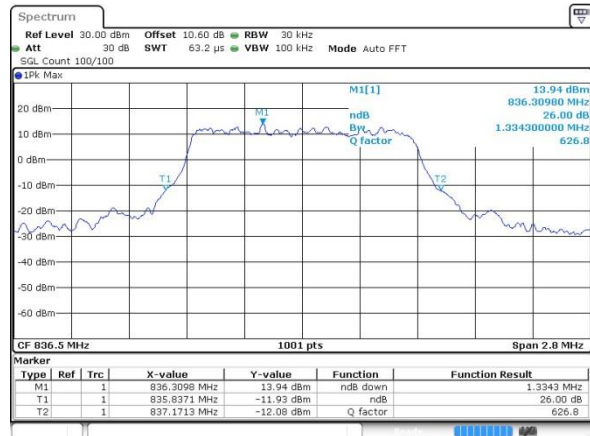
Date: 30 MAR 2018 18:20:10

Lowest Channel / 1.4MHz / 16QAM


Date: 30 MAR 2018 18:19:59

Middle Channel / 1.4MHz / QPSK

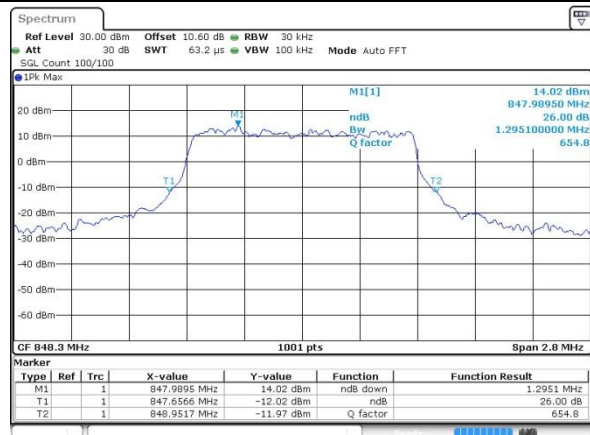

Date: 30 MAR 2018 18:55:34

Middle Channel / 1.4MHz / 16QAM


Date: 30 MAR 2018 18:41:24

Highest Channel / 1.4MHz / QPSK


Date: 30 MAR 2018 18:43:44

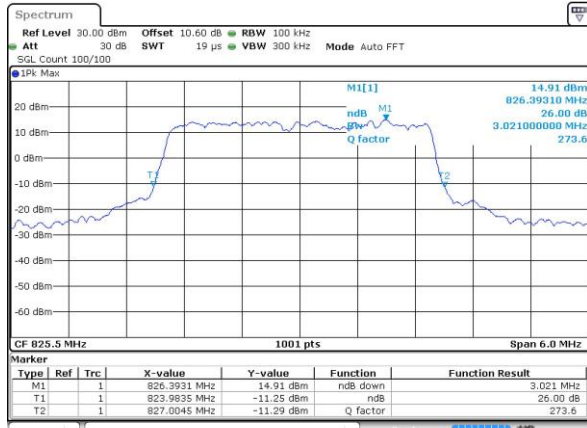
Highest Channel / 1.4MHz / 16QAM


Date: 30 MAR 2018 18:43:54



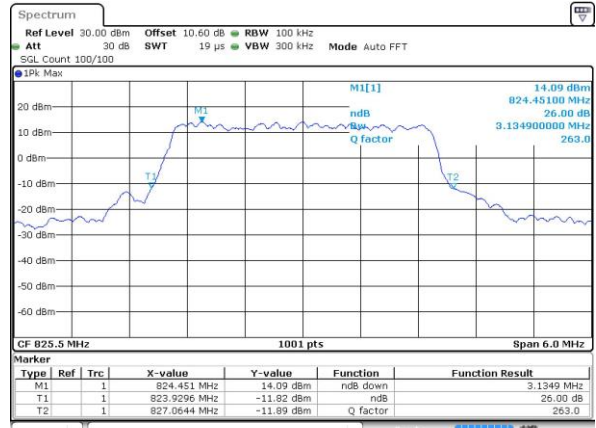
LTE Band 5

Lowest Channel / 3MHz / QPSK



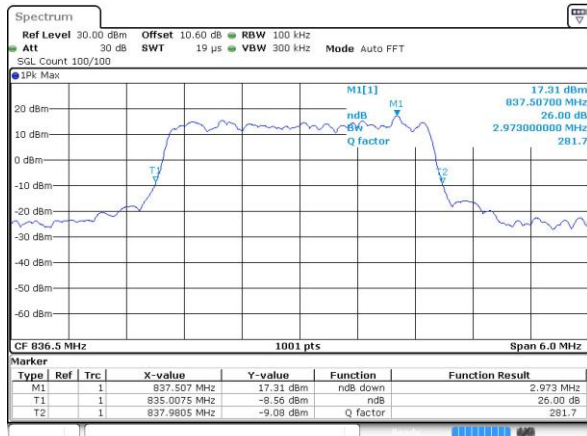
Date: 30 MAR 2018 17:18:20

Lowest Channel / 3MHz / 16QAM



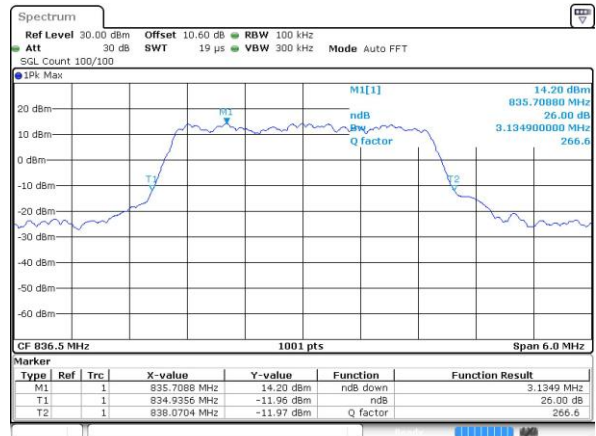
Date: 30 MAR 2018 17:18:30

Middle Channel / 3MHz / QPSK



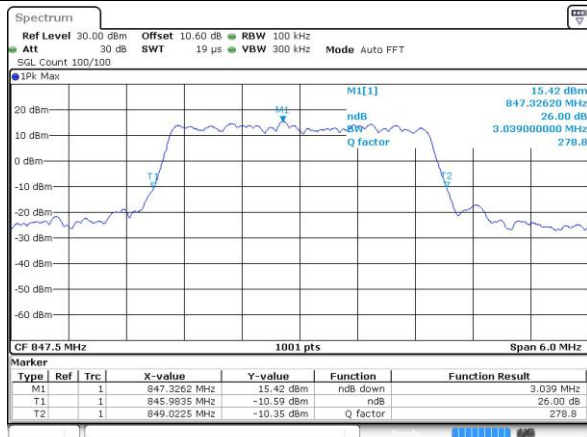
Date: 30 MAR 2018 17:27:21

Middle Channel / 3MHz / 16QAM



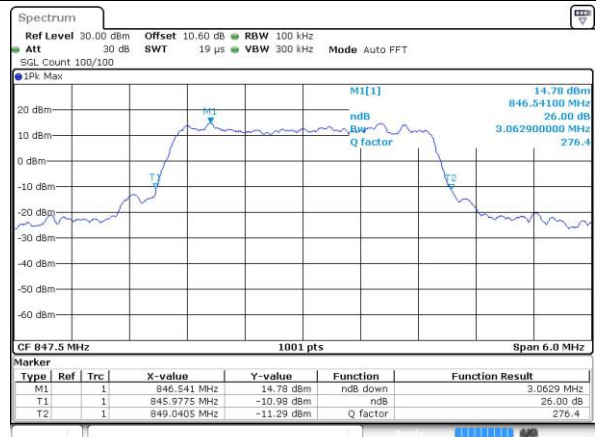
Date: 30 MAR 2018 17:27:31

Highest Channel / 3MHz / QPSK



Date: 30 MAR 2018 17:29:51

Highest Channel / 3MHz / 16QAM

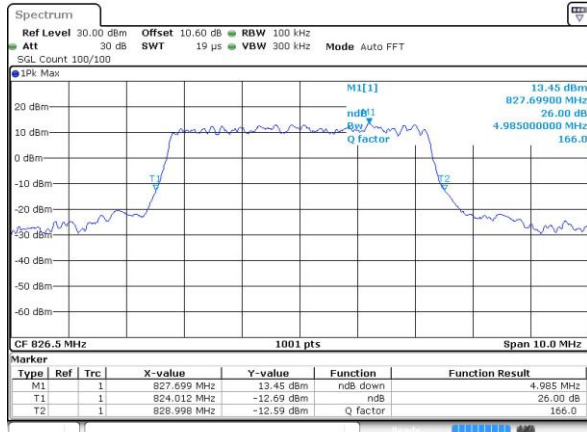


Date: 30 MAR 2018 17:30:01

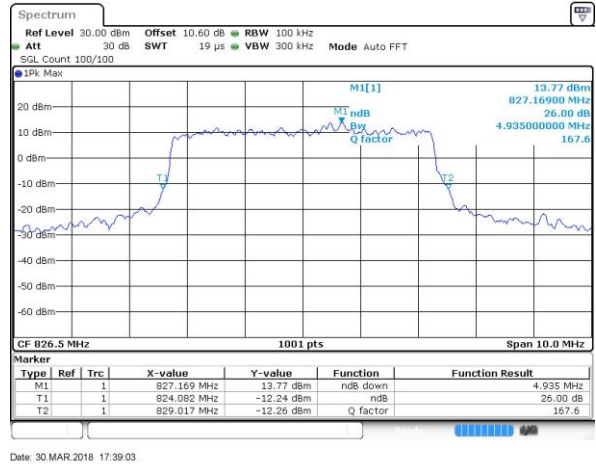


LTE Band 5

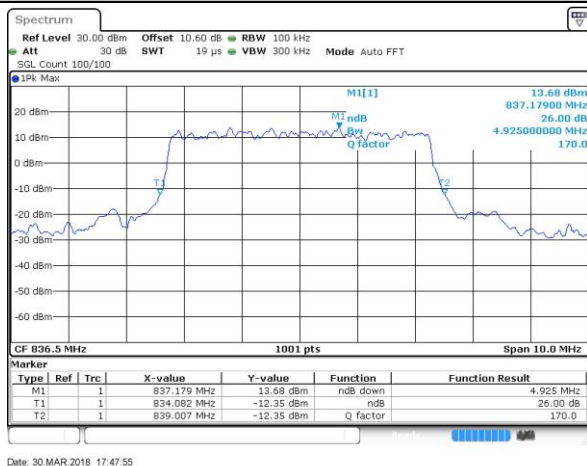
Lowest Channel / 5MHz / QPSK



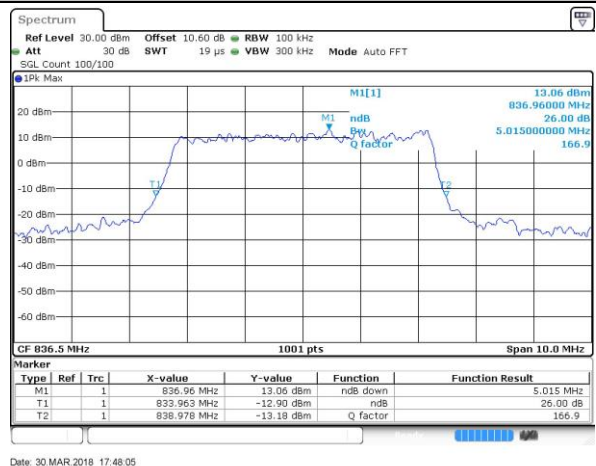
Lowest Channel / 5MHz / 16QAM



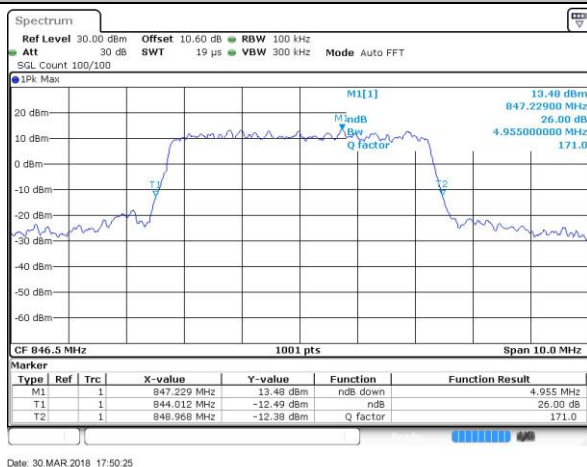
Middle Channel / 5MHz / QPSK



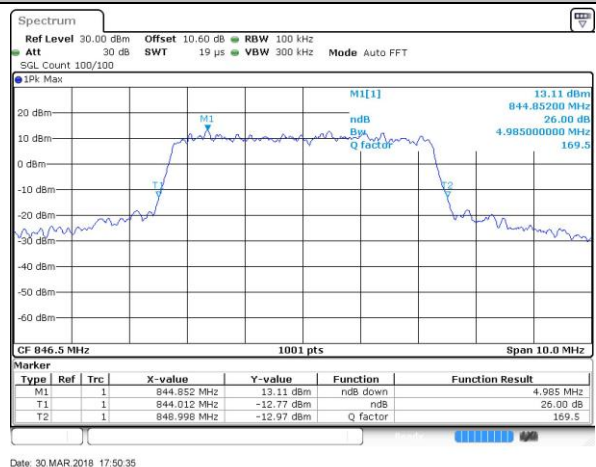
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



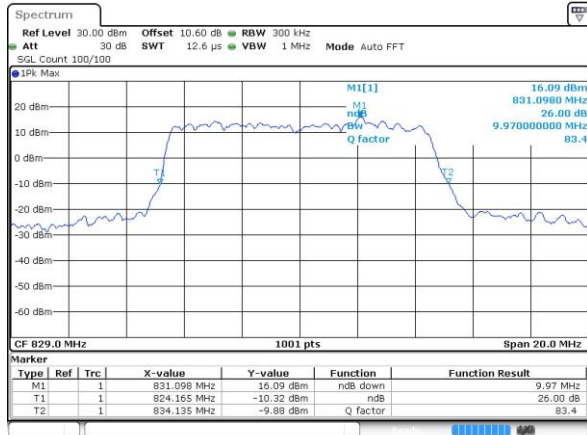
Highest Channel / 5MHz / 16QAM



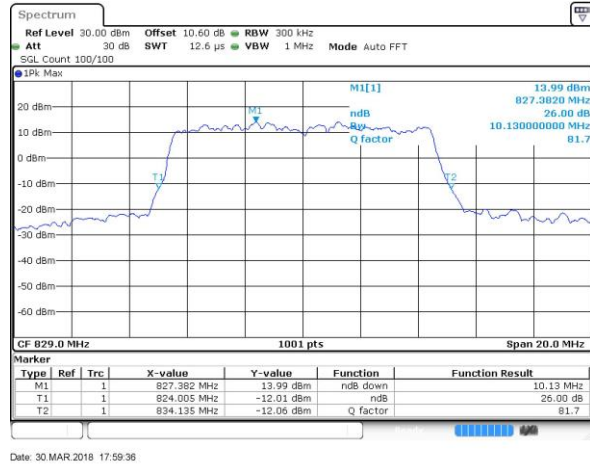


LTE Band 5

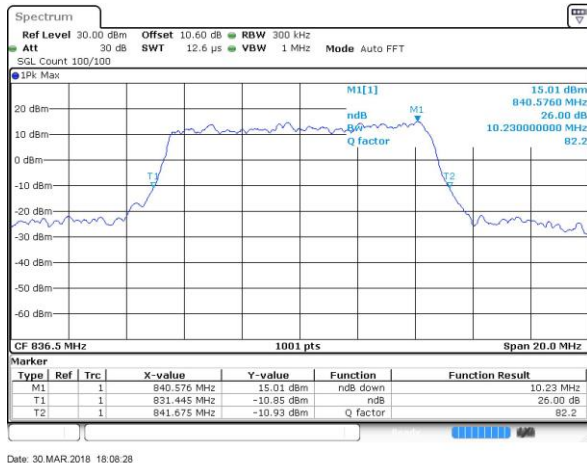
Lowest Channel / 10MHz / QPSK



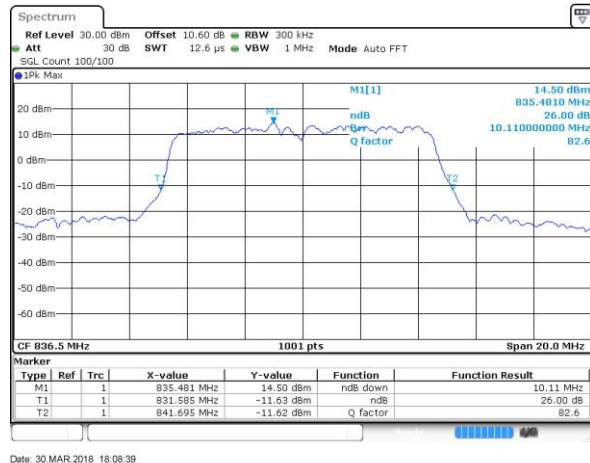
Lowest Channel / 10MHz / 16QAM



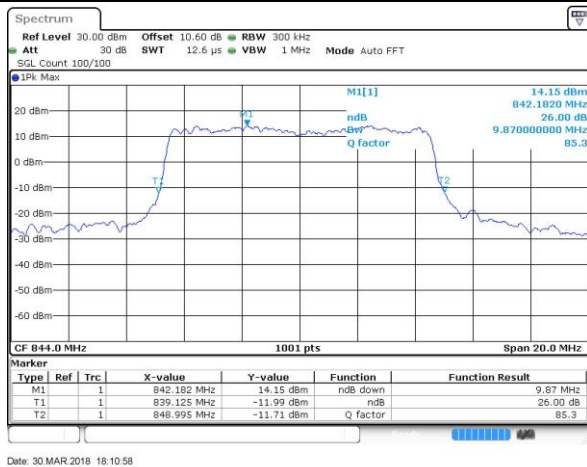
Middle Channel / 10MHz / QPSK



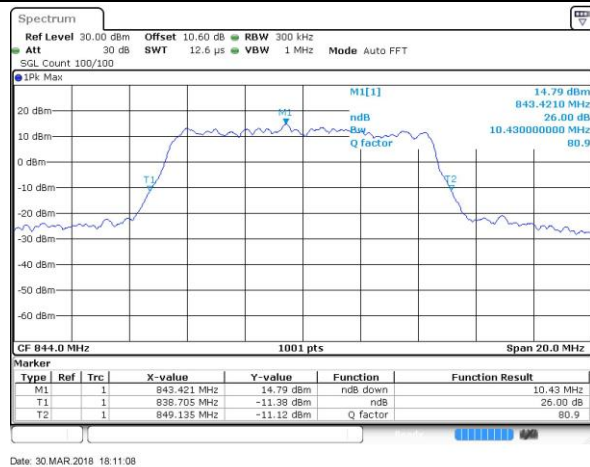
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

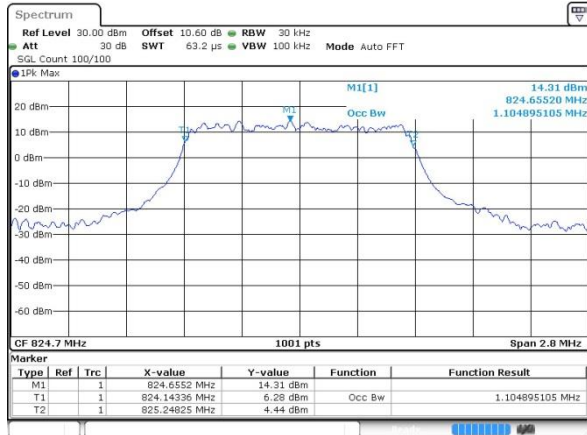
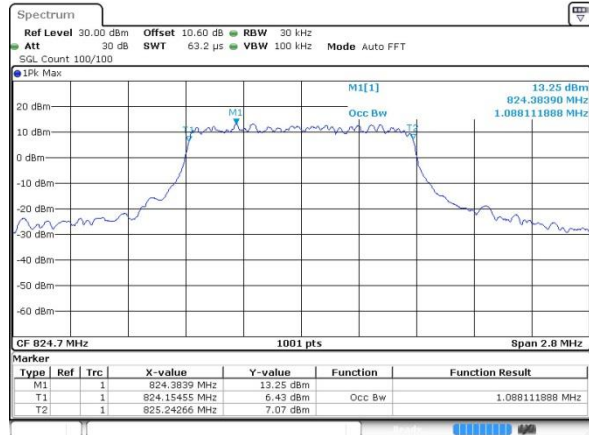
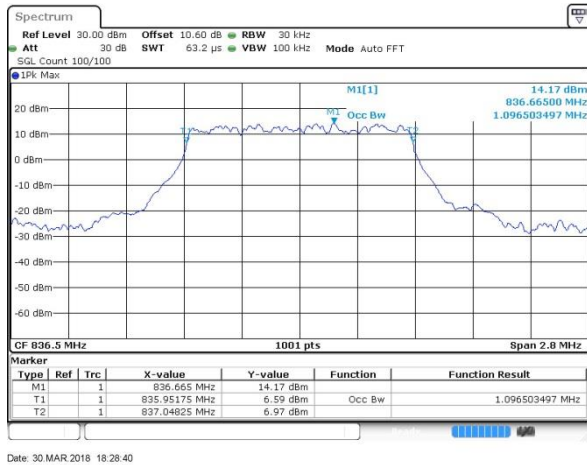
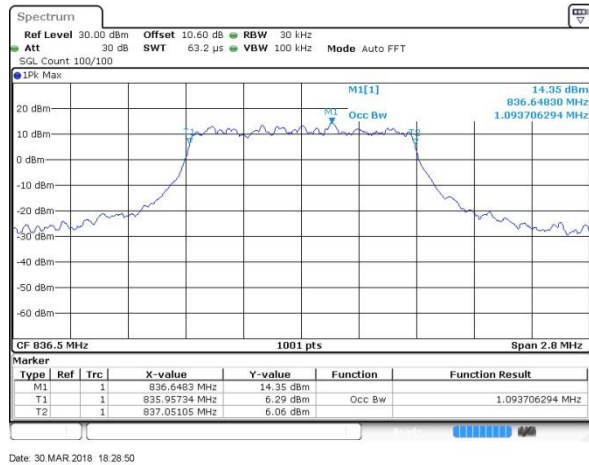
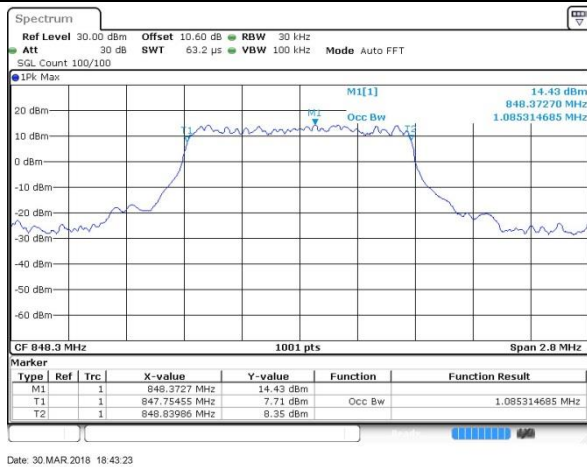
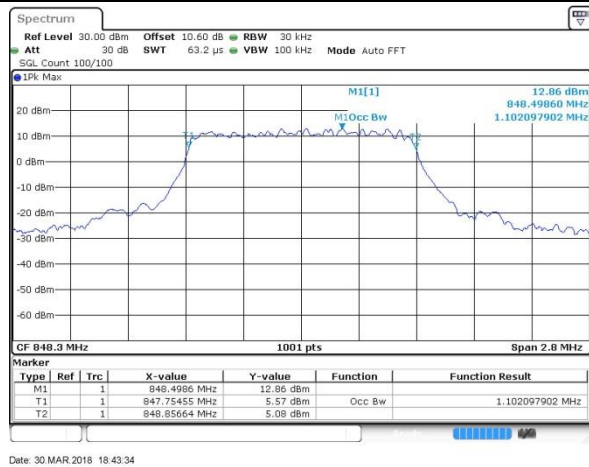


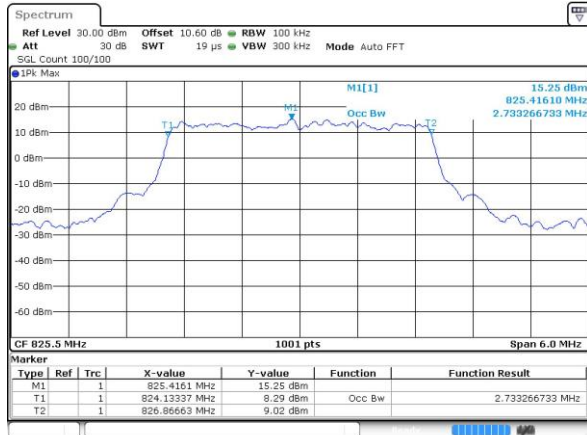
Highest Channel / 10MHz / 16QAM



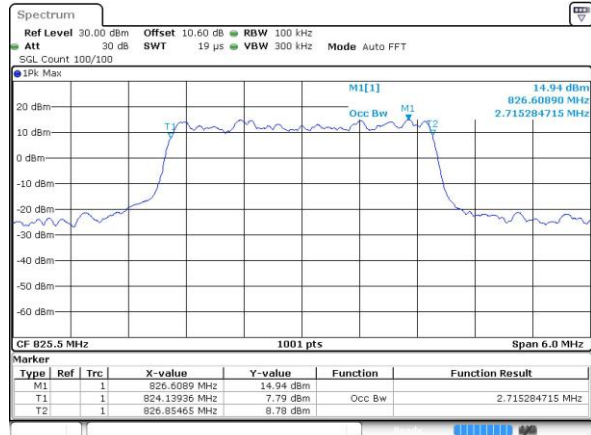
**Occupied Bandwidth**

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	1.09	2.73	2.72	4.5	4.5	9.07	9.09	-	-	-	-
Middle CH	1.1	1.09	2.72	2.73	4.51	4.5	9.13	9.03	-	-	-	-
Highest CH	1.09	1.1	2.73	2.72	4.5	4.49	9.03	8.95	-	-	-	-

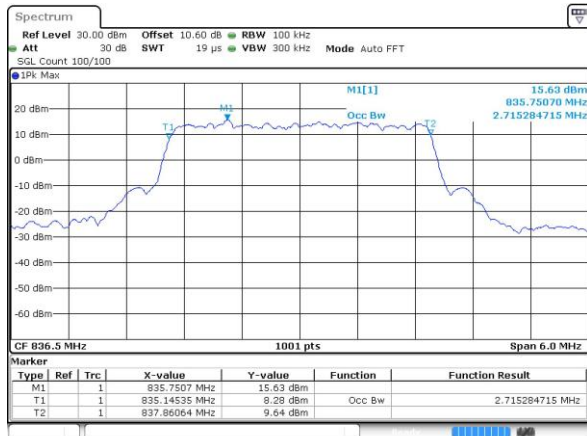
LTE Band 5
Lowest Channel / 1.4MHz / QPSK

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


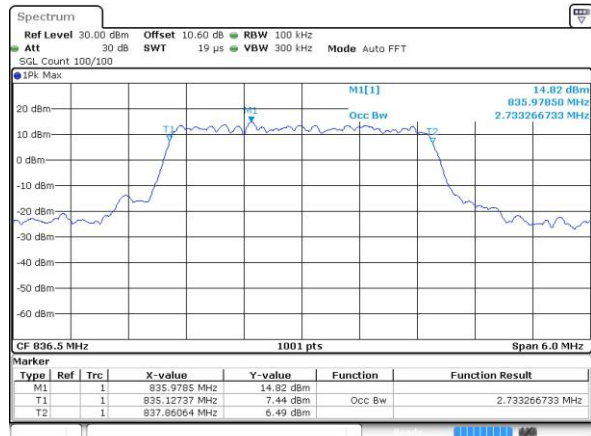
Date: 30 MAR 2018 17:17:59

Lowest Channel / 3MHz / 16QAM


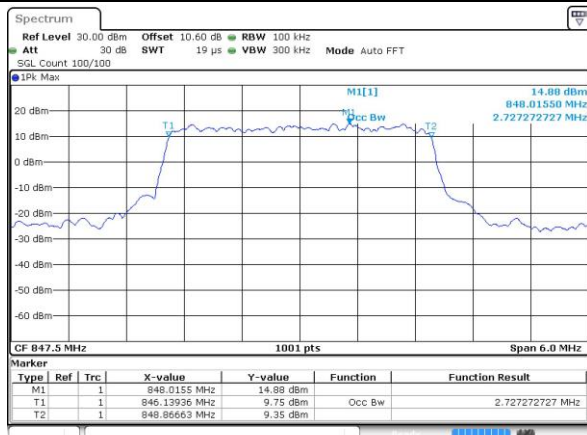
Date: 30 MAR 2018 17:18:09

Middle Channel / 3MHz / QPSK


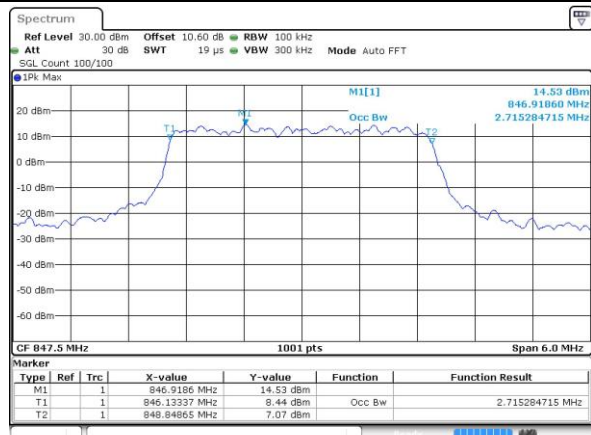
Date: 30 MAR 2018 17:27:00

Middle Channel / 3MHz / 16QAM


Date: 30 MAR 2018 17:27:11

Highest Channel / 3MHz / QPSK


Date: 30 MAR 2018 17:29:30

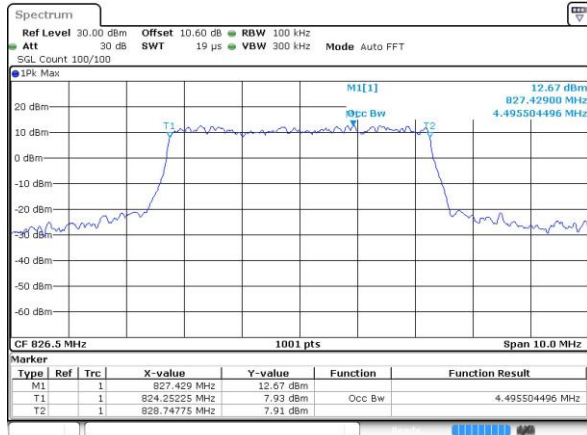
Highest Channel / 3MHz / 16QAM


Date: 30 MAR 2018 17:29:41



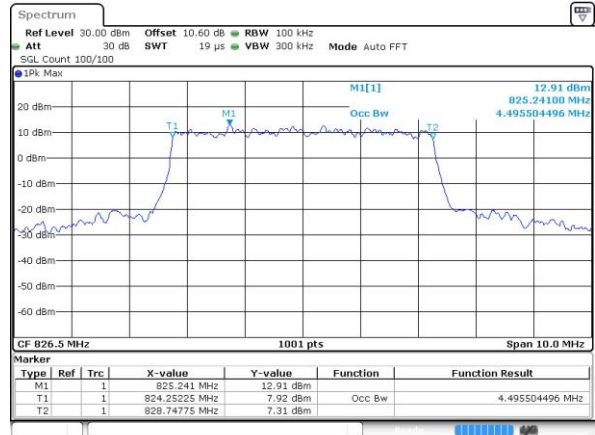
LTE Band 5

Lowest Channel / 5MHz / QPSK



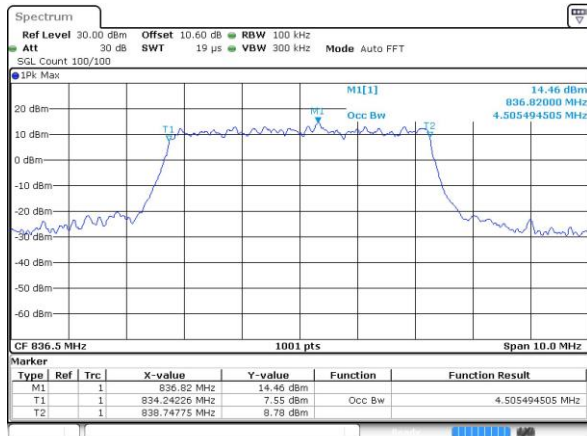
Date: 30 MAR 2018 17:38:32

Lowest Channel / 5MHz / 16QAM



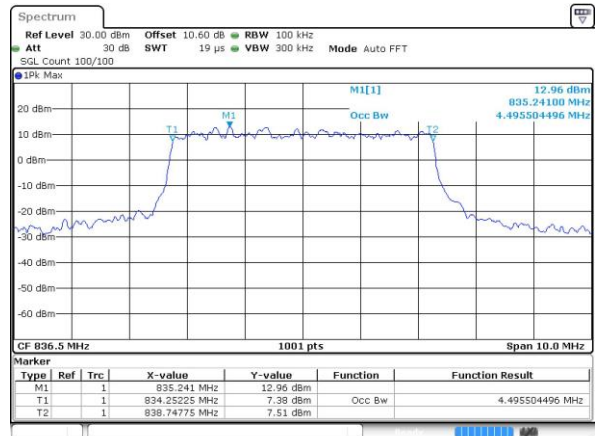
Date: 30 MAR 2018 17:38:42

Middle Channel / 5MHz / QPSK



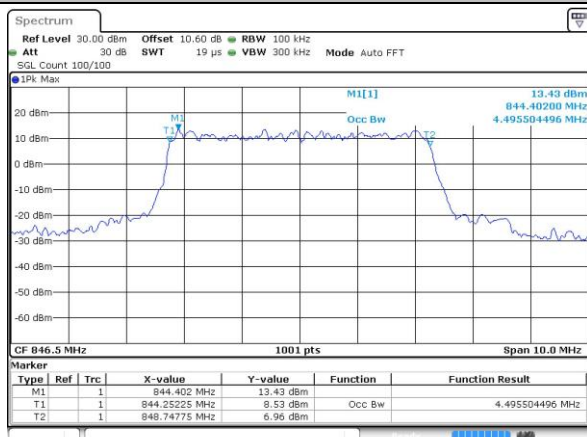
Date: 30 MAR 2018 17:47:34

Middle Channel / 5MHz / 16QAM



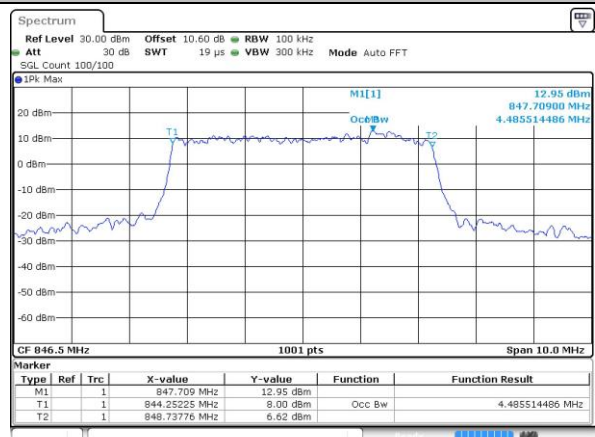
Date: 30 MAR 2018 17:47:44

Highest Channel / 5MHz / QPSK

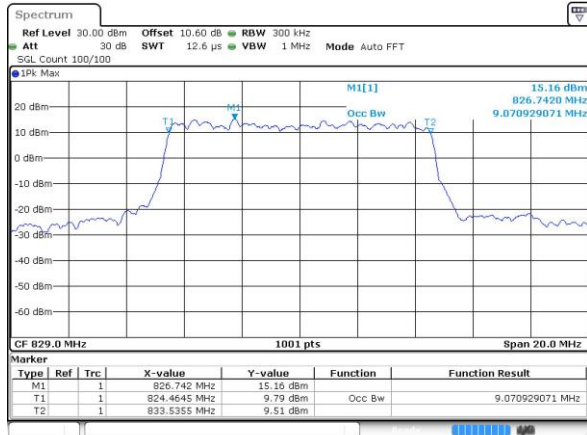


Date: 30 MAR 2018 17:50:04

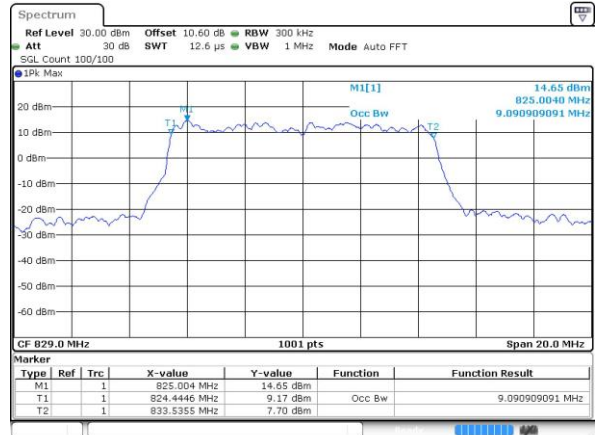
Highest Channel / 5MHz / 16QAM



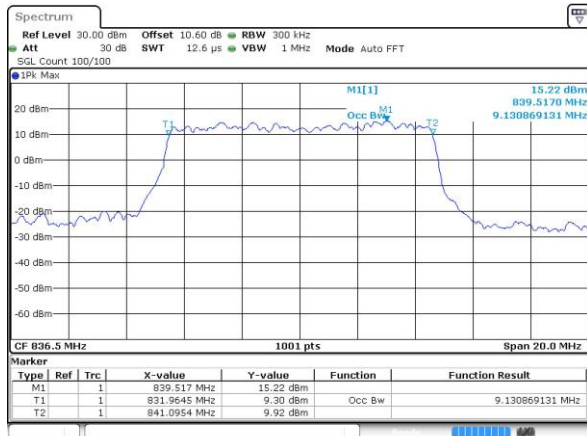
Date: 30 MAR 2018 17:50:14

LTE Band 5
Lowest Channel / 10MHz / QPSK


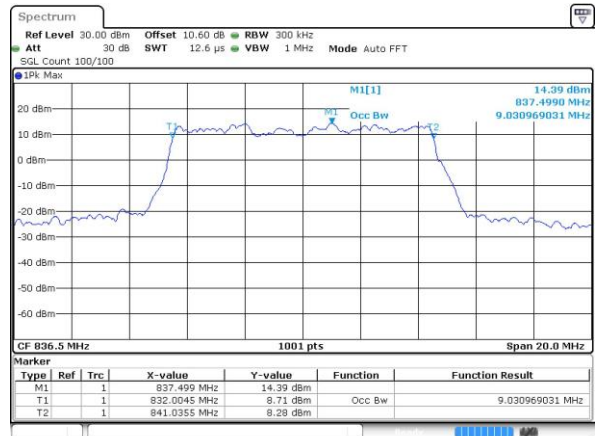
Date: 30 MAR 2018 17:59:05

Lowest Channel / 10MHz / 16QAM


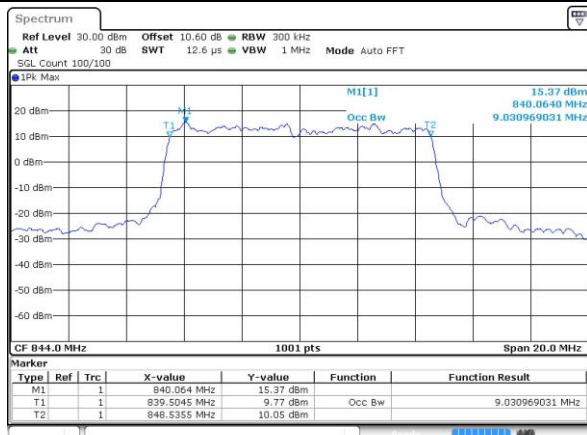
Date: 30 MAR 2018 17:58:16

Middle Channel / 10MHz / QPSK


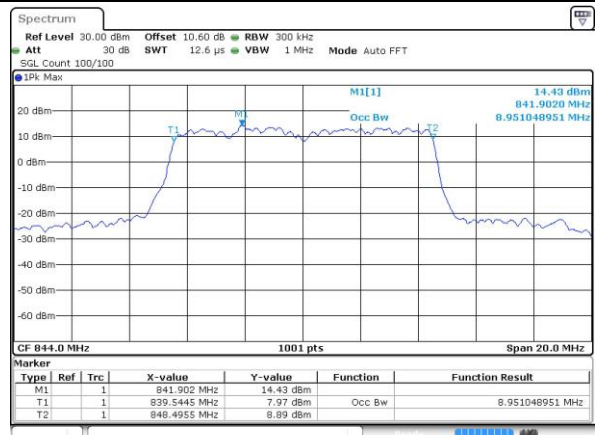
Date: 30 MAR 2018 18:08:07

Middle Channel / 10MHz / 16QAM


Date: 30 MAR 2018 18:08:18

Highest Channel / 10MHz / QPSK


Date: 30 MAR 2018 18:10:37

Highest Channel / 10MHz / 16QAM


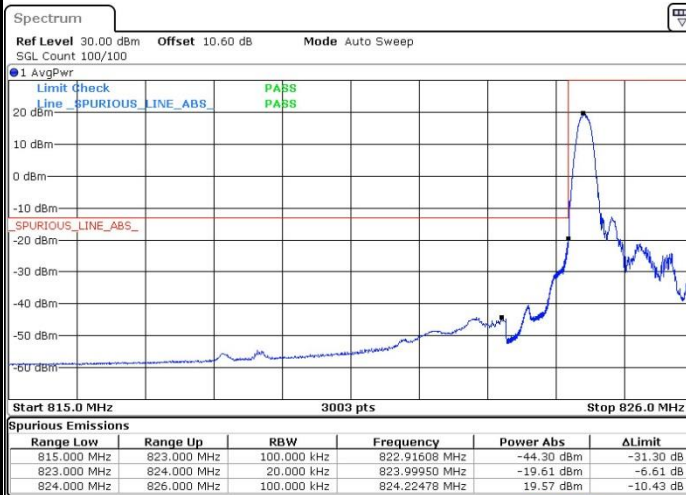
Date: 30 MAR 2018 18:10:48



Conducted Band Edge

LTE Band 5 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



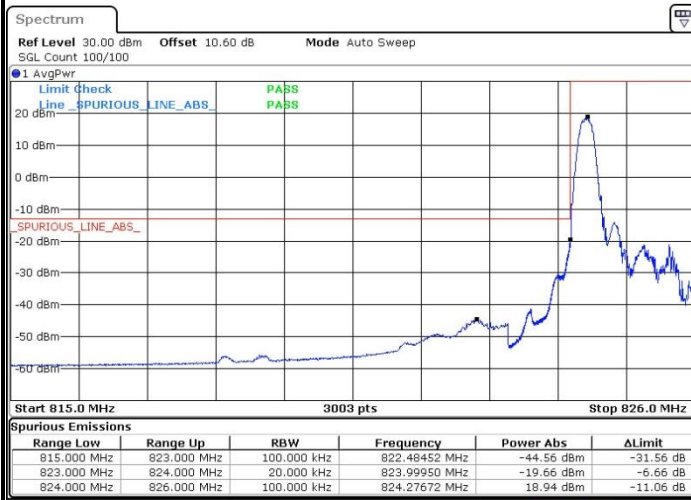
Highest Band Edge / Full RB





LTE Band 5 / 1.4MHz / 16QAM

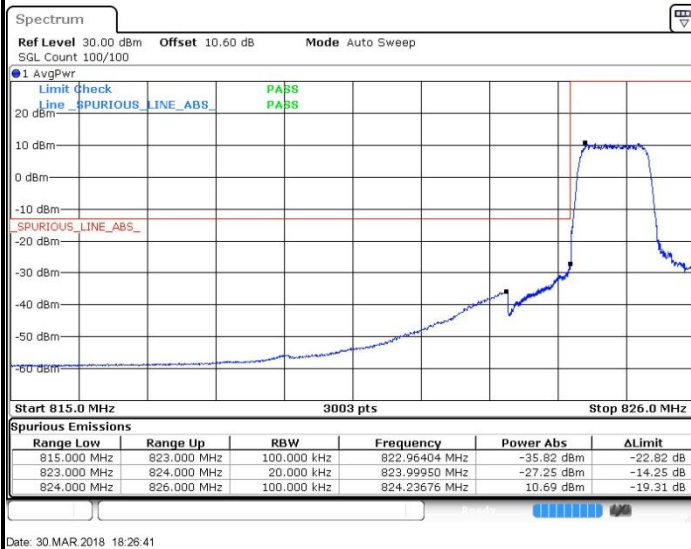
Lowest Band Edge / 1 RB



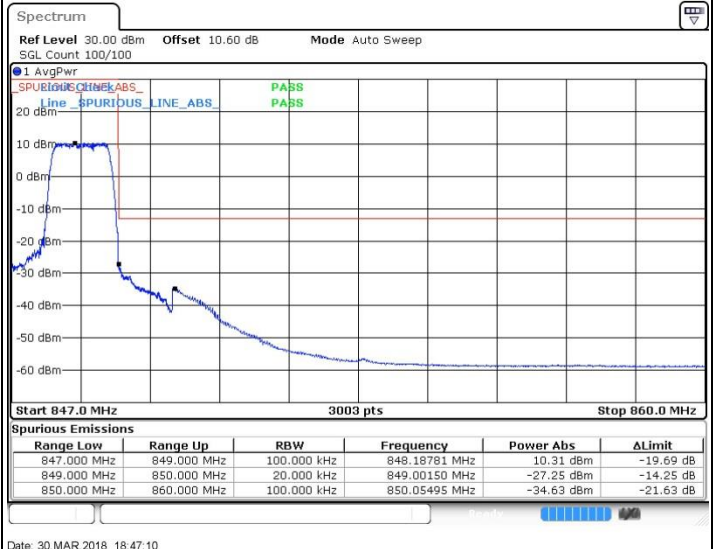
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



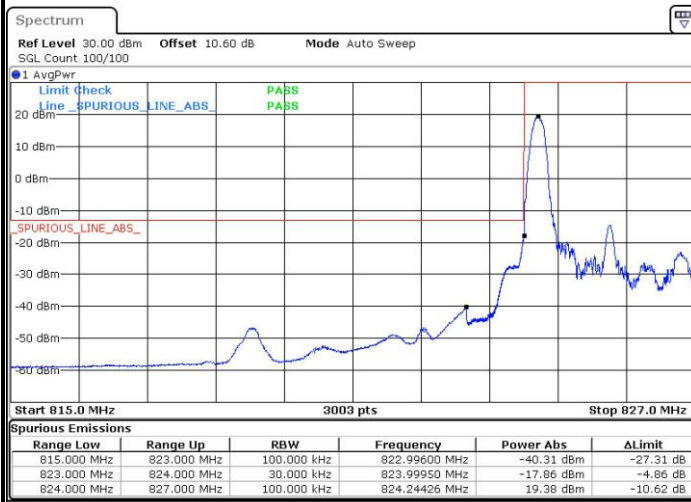
Highest Band Edge / Full RB





LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



Date: 30.MAR.2018 17:20:08

Highest Band Edge / 1 RB



Date: 30.MAR.2018 17:31:40

Lowest Band Edge / Full RB



Date: 30.MAR.2018 17:23:24

Highest Band Edge / Full RB



Date: 30.MAR.2018 17:34:55