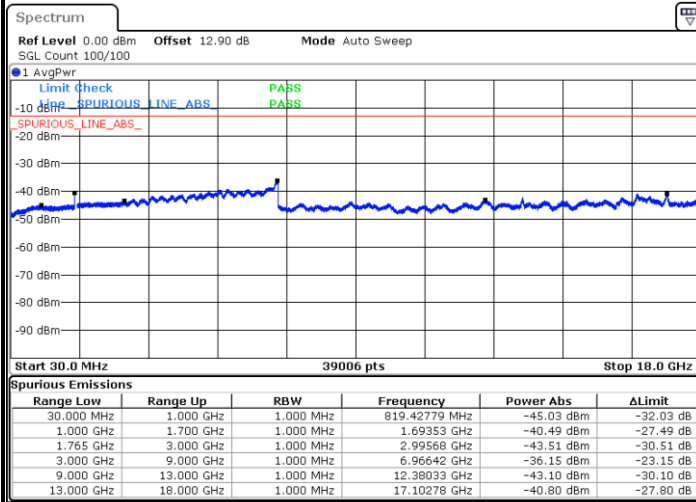




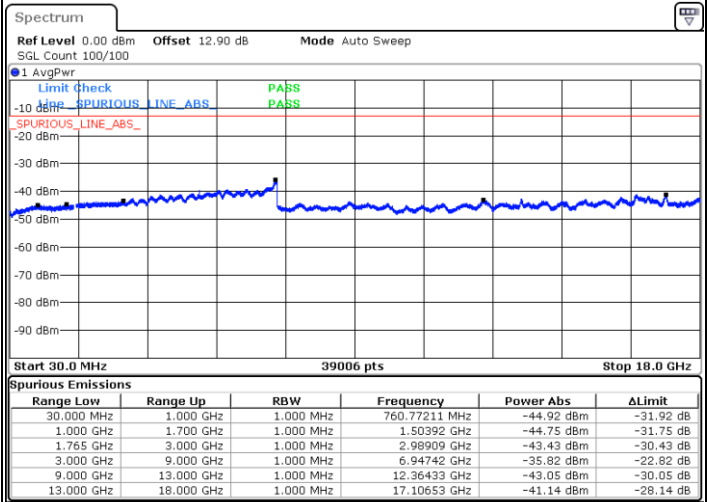
LTE Band 4 / 20MHz

Lowest Channel / 64QAM



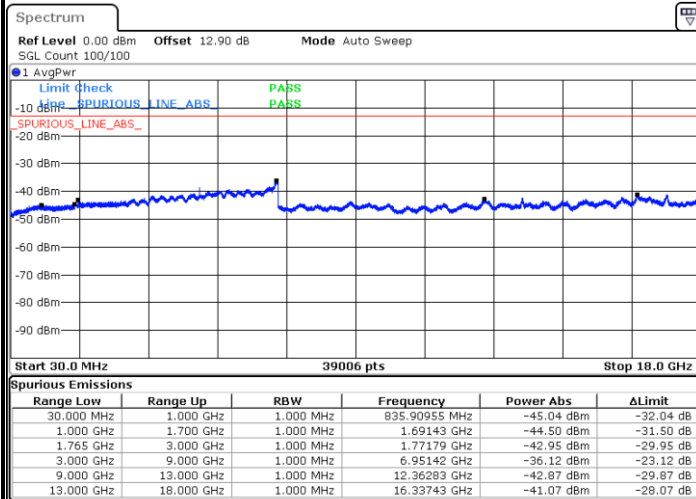
Date: 1.FEB.2018 22:45:27

Middle Channel / 64QAM



Date: 1.FEB.2018 22:46:48

Highest Channel / 64QAM



Date: 1.FEB.2018 22:50:25

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	0.0002	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0043	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0042	
20	Maximum Voltage	0.0026	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

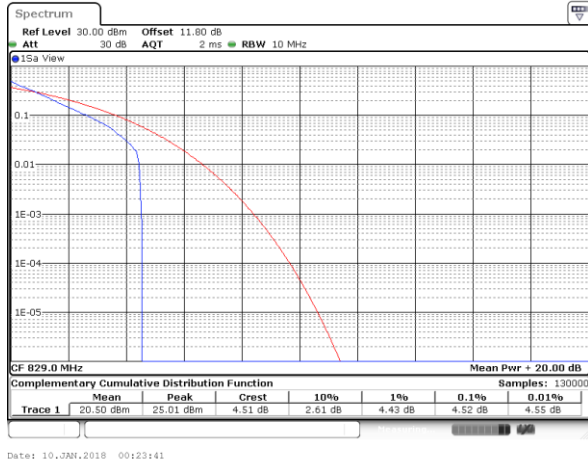
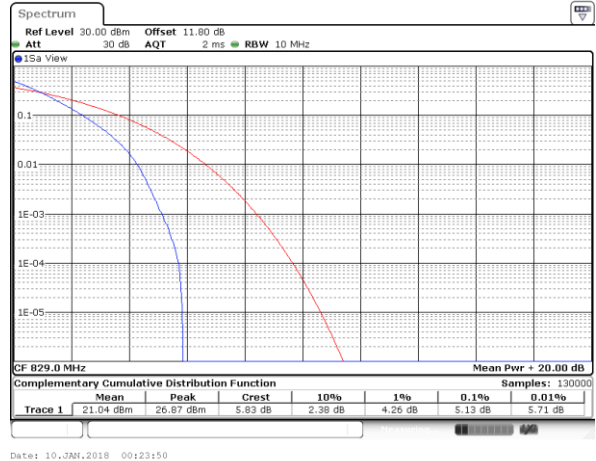
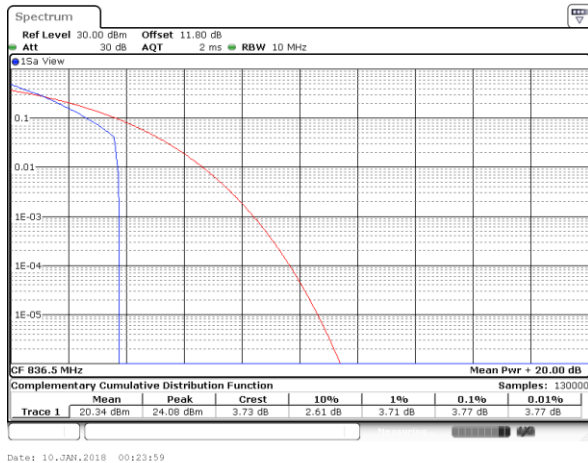
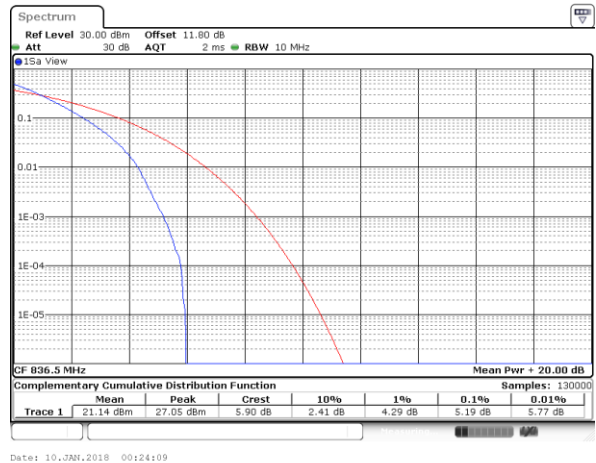
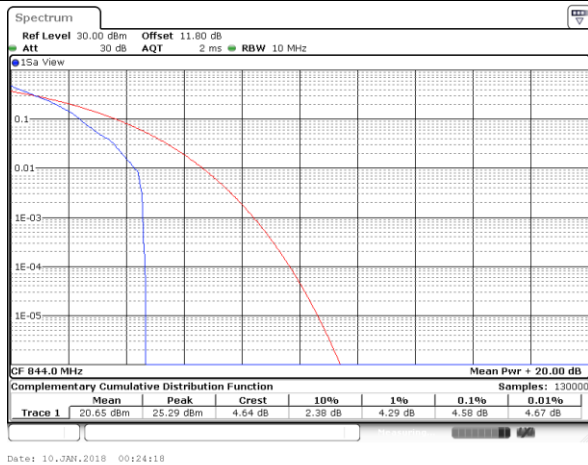
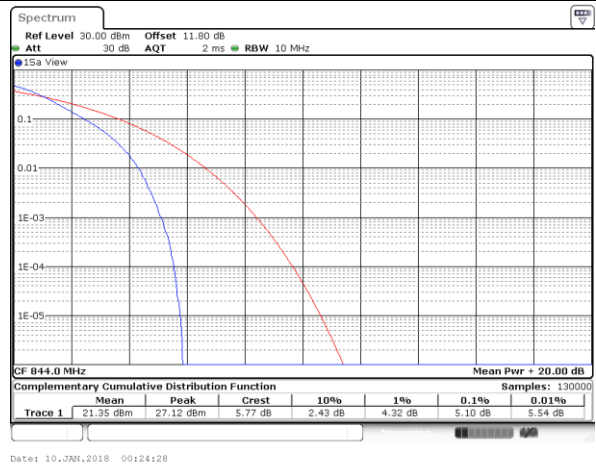
Note:

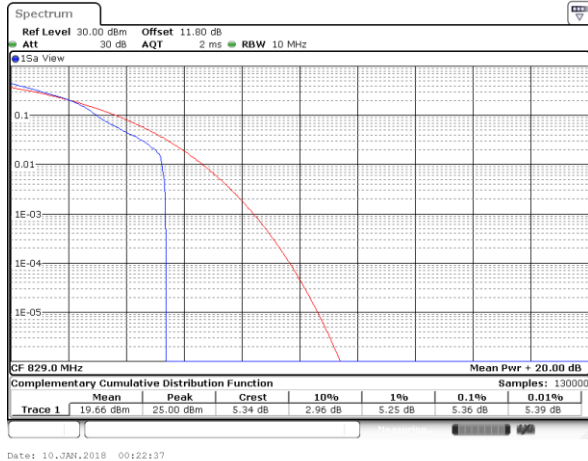
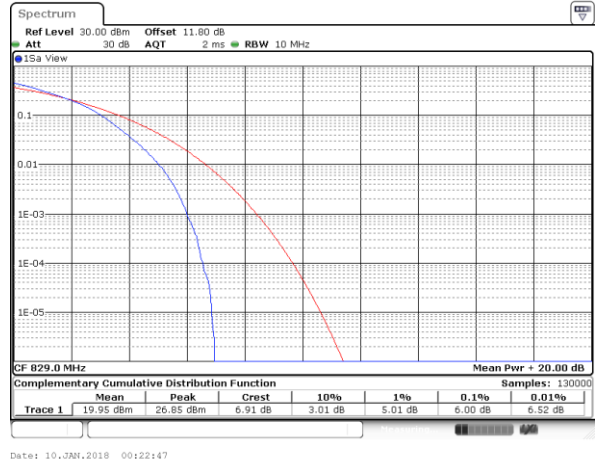
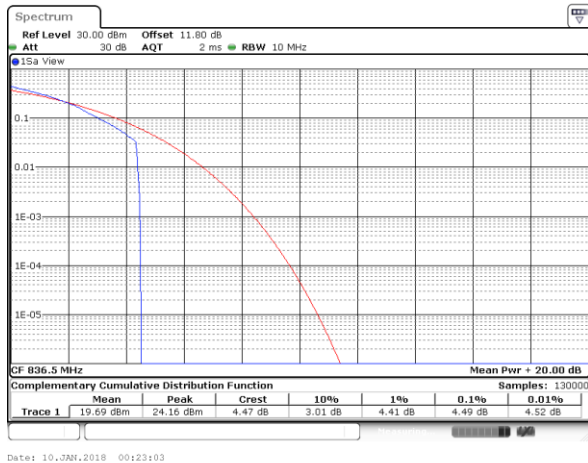
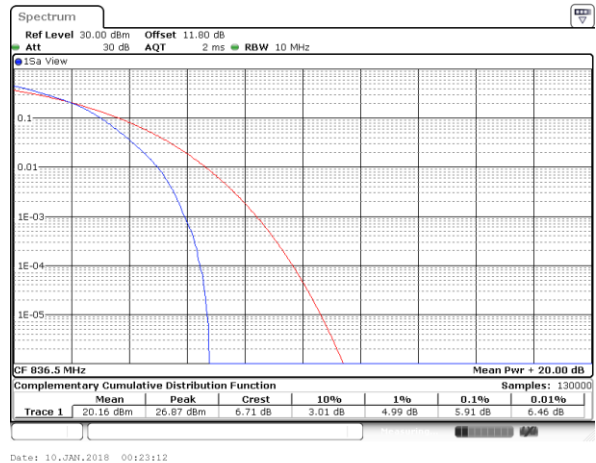
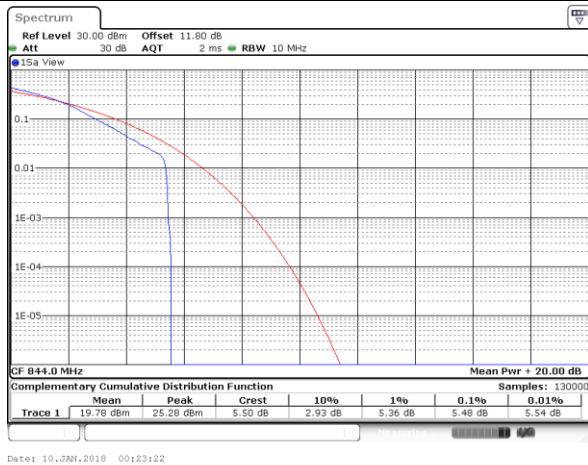
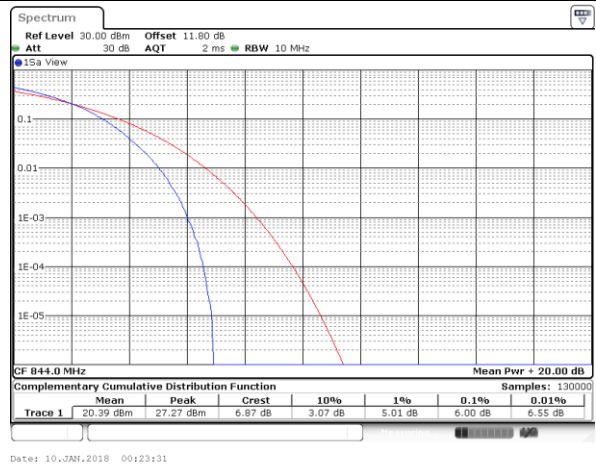
1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

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	4.52	5.13	5.36	6	PASS
Middle CH	3.77	5.19	4.49	5.91	
Highest CH	4.58	5.1	5.48	6	
Mode	LTE Band 5 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.67	6.32	-	-	PASS
Middle CH	5.57	6.43	-	-	
Highest CH	6.41	6.29	-	-	

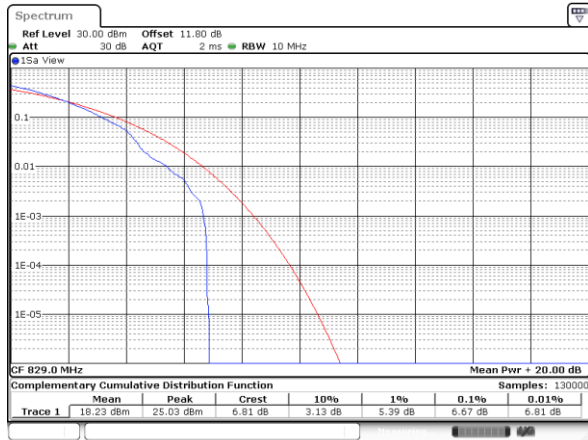
LTE Band 5 / 10MHz / QPSK
Lowest Channel / 1RB

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


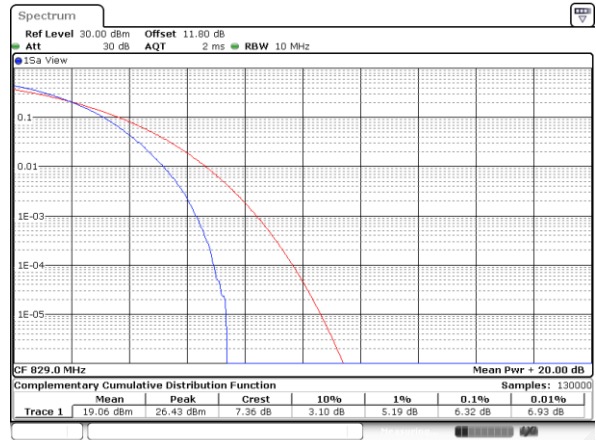


LTE Band 5 / 10MHz / 64QAM

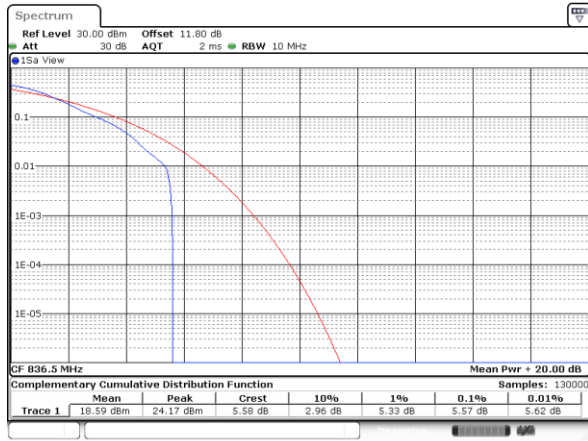
Lowest Channel / 1RB



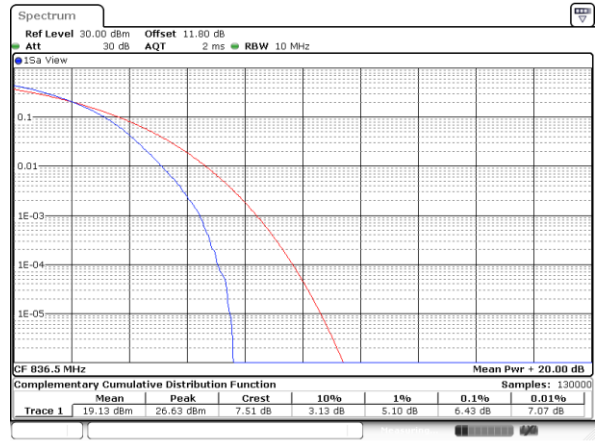
Lowest Channel / Full RB



Middle Channel / 1RB



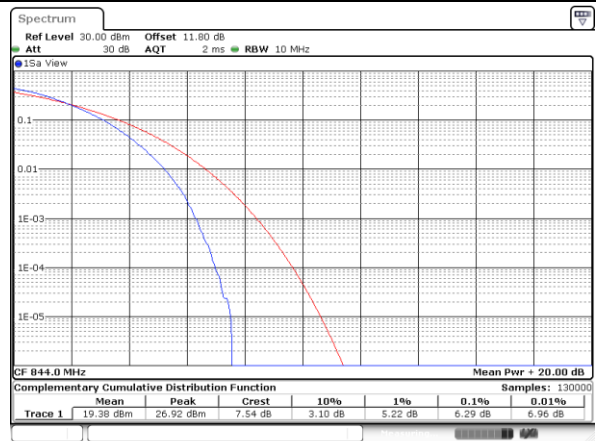
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



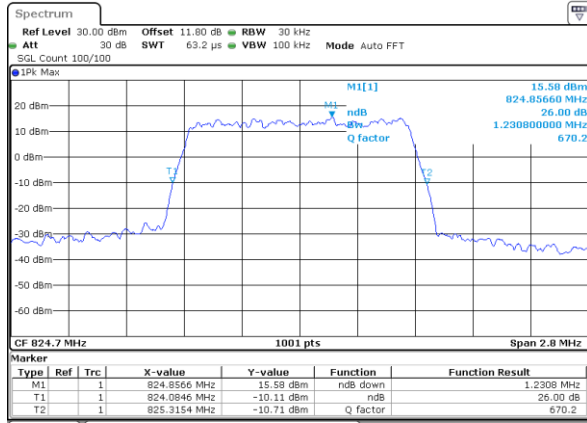
**26dB Bandwidth**

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	1.23	1.23	3.01	3.02	4.89	4.87	9.79	9.87	-	-	-	-
Middle CH	1.23	1.23	3.01	3.00	4.92	4.91	9.79	9.89	-	-	-	-
Highest CH	1.22	1.23	3.03	3.00	4.84	4.96	9.85	9.77	-	-	-	-
Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.22	-	3.00	-	4.88	-	9.91	-	-	-	-	-
Middle CH	1.23	-	3.00	-	4.89	-	9.71	-	-	-	-	-
Highest CH	1.23	-	3.03	-	4.95	-	9.91	-	-	-	-	-



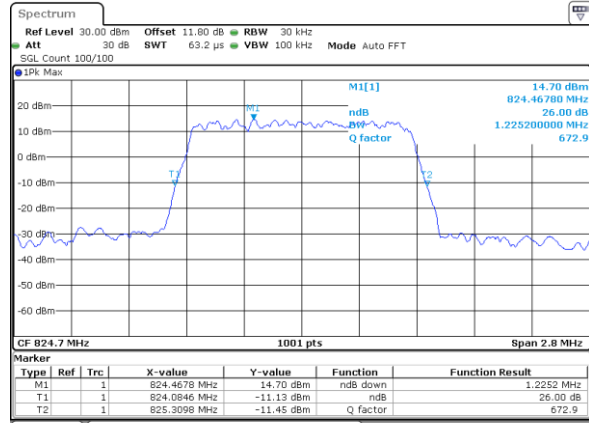
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



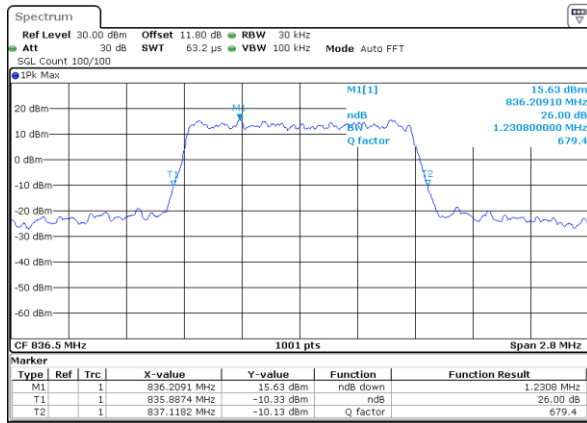
Date: 10.JAN.2018 00:02:04

Lowest Channel / 1.4MHz / 16QAM



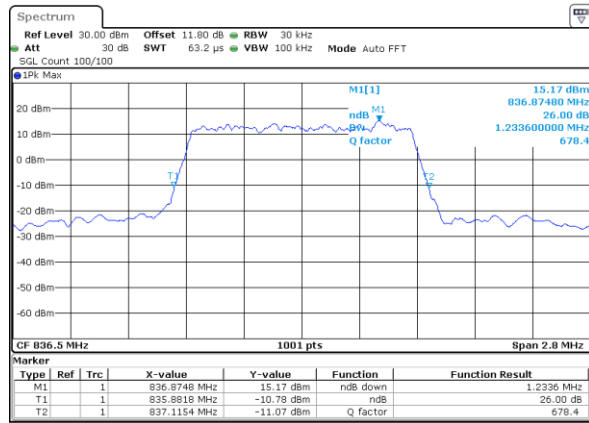
Date: 10.JAN.2018 00:01:52

Middle Channel / 1.4MHz / QPSK



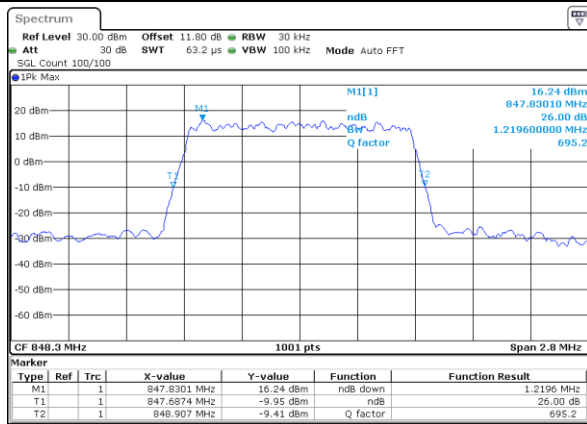
Date: 10.JAN.2018 00:11:06

Middle Channel / 1.4MHz / 16QAM



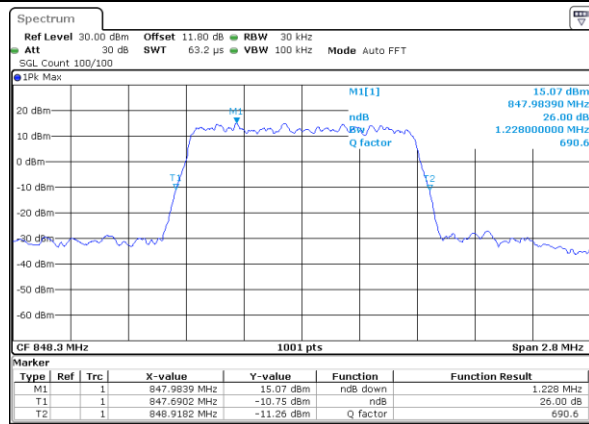
Date: 10.JAN.2018 00:11:18

Highest Channel / 1.4MHz / QPSK



Date: 10.JAN.2018 00:13:45

Highest Channel / 1.4MHz / 16QAM

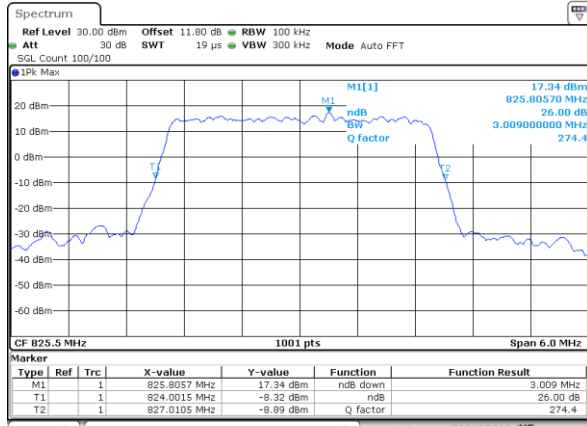


Date: 10.JAN.2018 00:13:56



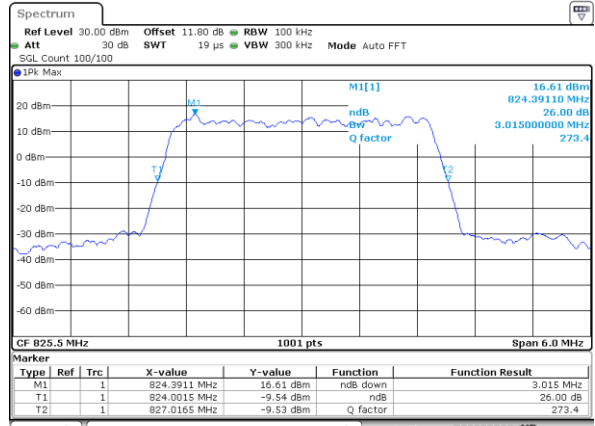
LTE Band 5

Lowest Channel / 3MHz / QPSK



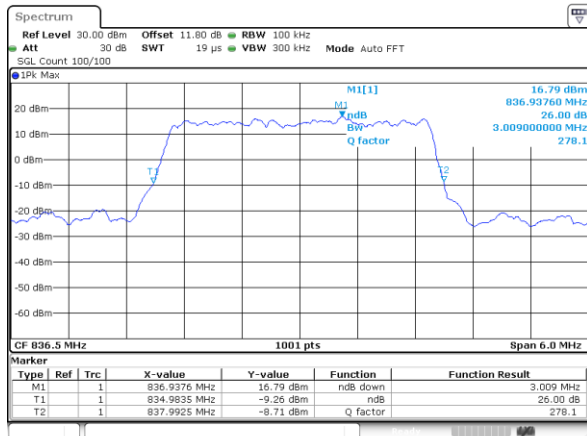
Date: 9,JAN,2018 22:56:13

Lowest Channel / 3MHz / 16QAM



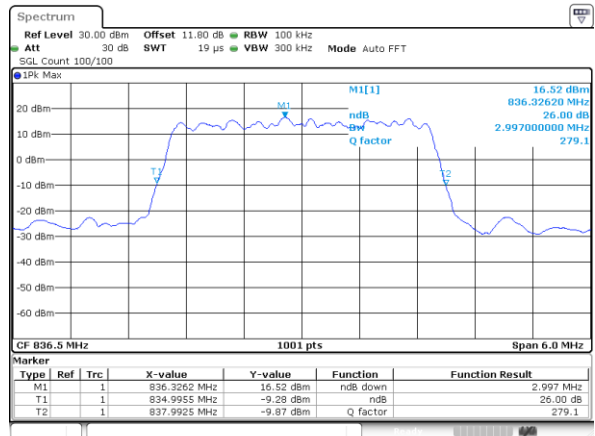
Date: 9,JAN,2018 22:56:25

Middle Channel / 3MHz / QPSK



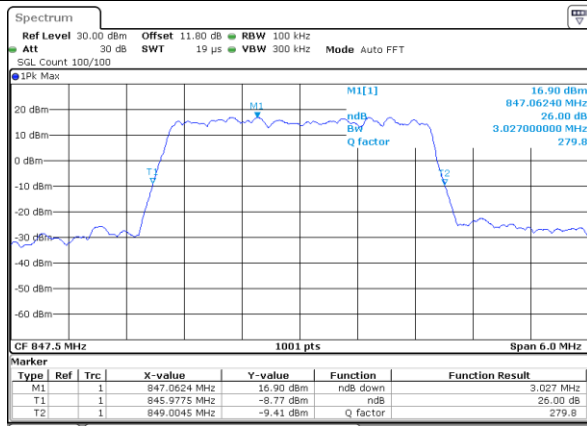
Date: 9,JAN,2018 23:05:28

Middle Channel / 3MHz / 16QAM



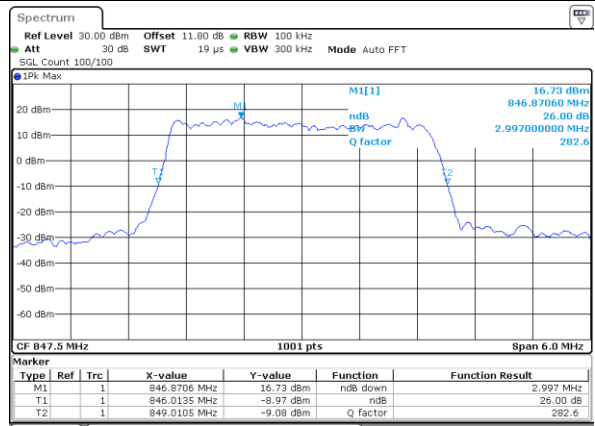
Date: 9,JAN,2018 23:05:39

Highest Channel / 3MHz / QPSK



Date: 9,JAN,2018 23:08:06

Highest Channel / 3MHz / 16QAM

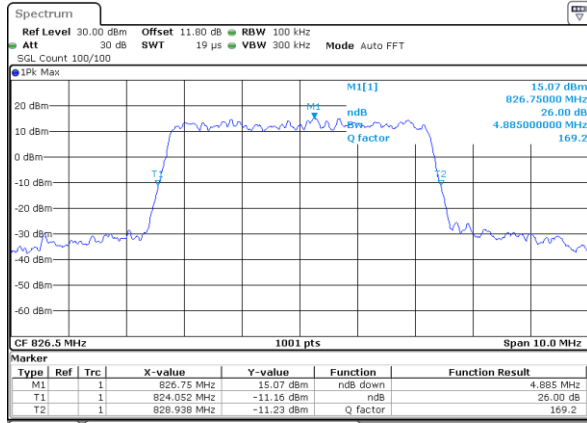


Date: 9,JAN,2018 23:08:18



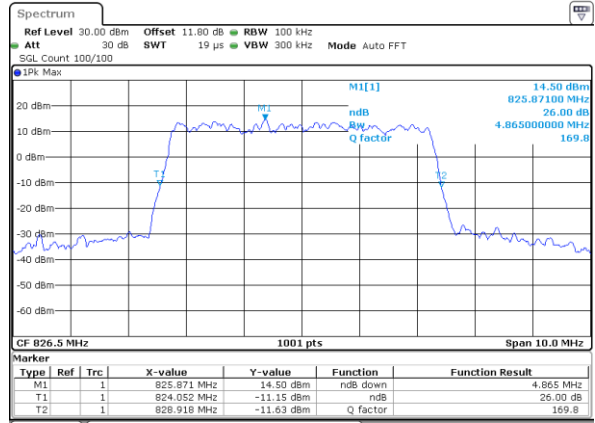
LTE Band 5

Lowest Channel / 5MHz / QPSK



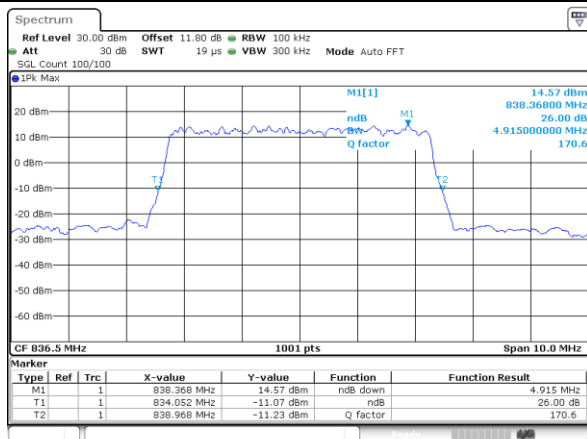
Date: 9,JAN,2018 23:17:21

Lowest Channel / 5MHz / 16QAM



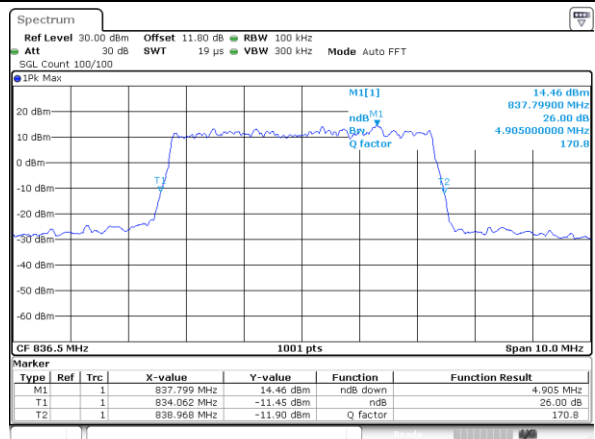
Date: 9,JAN,2018 23:17:32

Middle Channel / 5MHz / QPSK



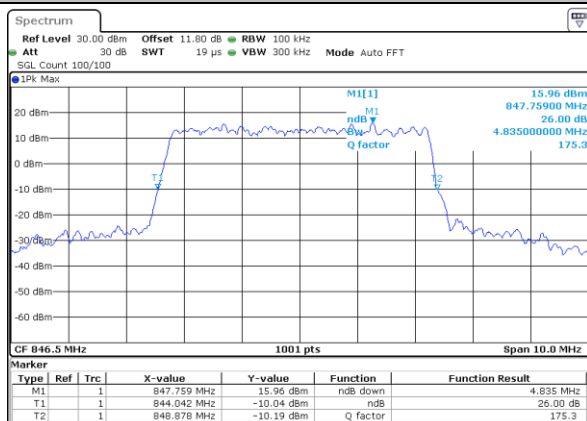
Date: 9,JAN,2018 23:26:35

Middle Channel / 5MHz / 16QAM



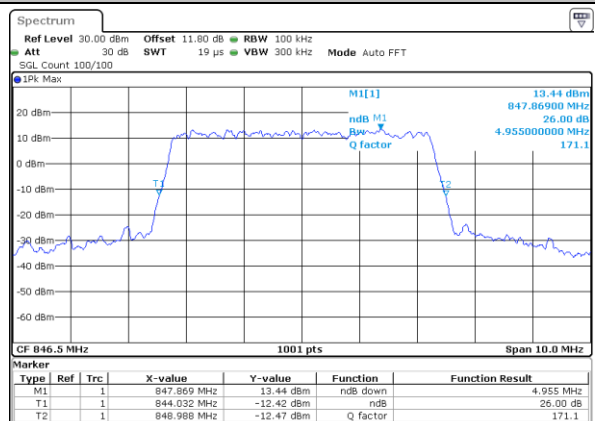
Date: 9,JAN,2018 23:26:46

Highest Channel / 5MHz / QPSK



Date: 9,JAN,2018 23:29:21

Highest Channel / 5MHz / 16QAM

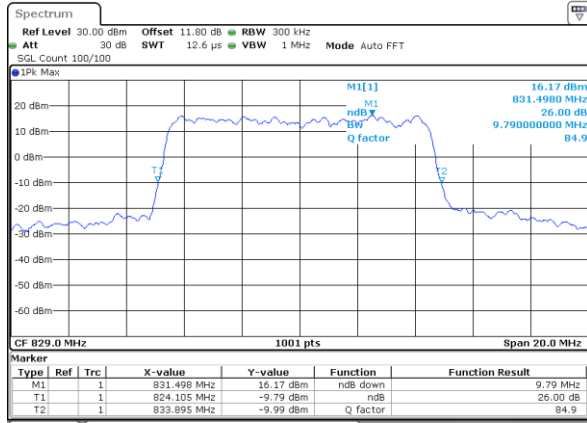


Date: 9,JAN,2018 23:29:32



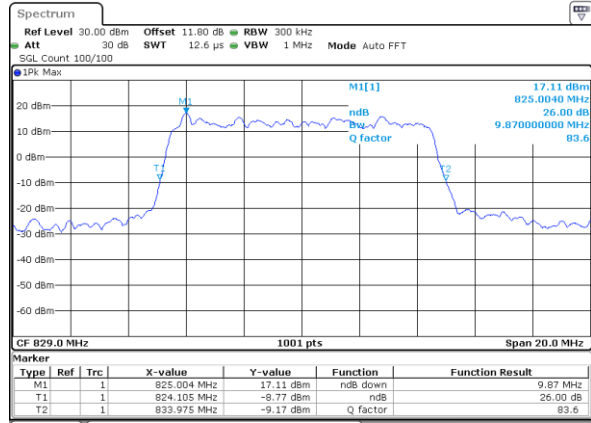
LTE Band 5

Lowest Channel / 10MHz / QPSK



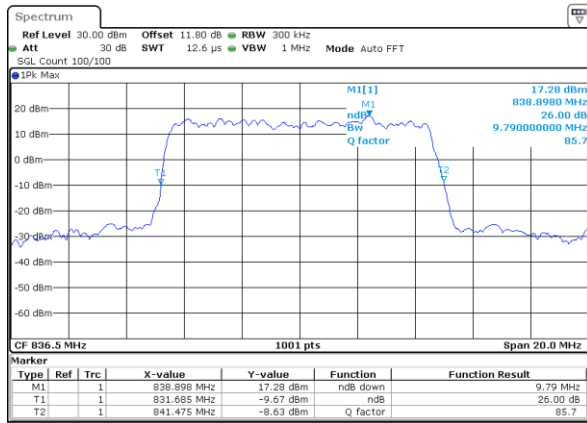
Date: 9, JAN, 2018 23:38:39

Lowest Channel / 10MHz / 16QAM



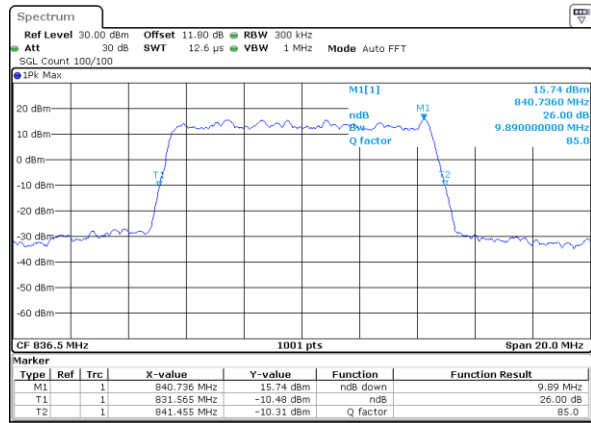
Date: 9, JAN, 2018 23:38:50

Middle Channel / 10MHz / QPSK



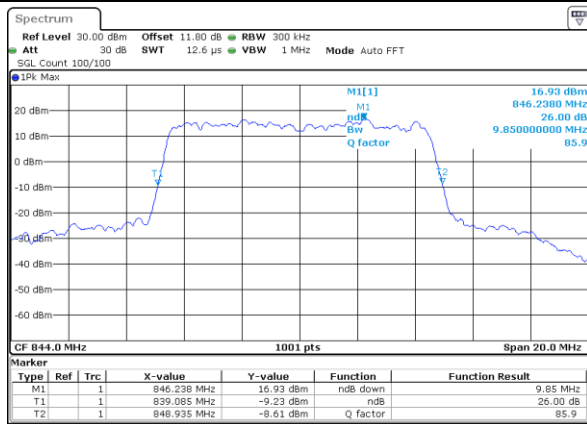
Date: 9, JAN, 2018 23:47:52

Middle Channel / 10MHz / 16QAM



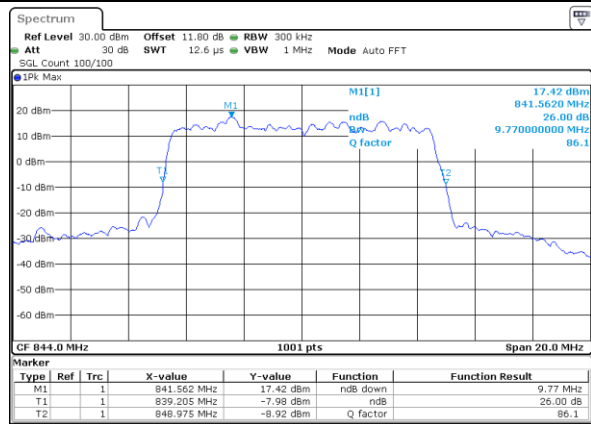
Date: 9, JAN, 2018 23:48:04

Highest Channel / 10MHz / QPSK



Date: 9, JAN, 2018 23:50:31

Highest Channel / 10MHz / 16QAM

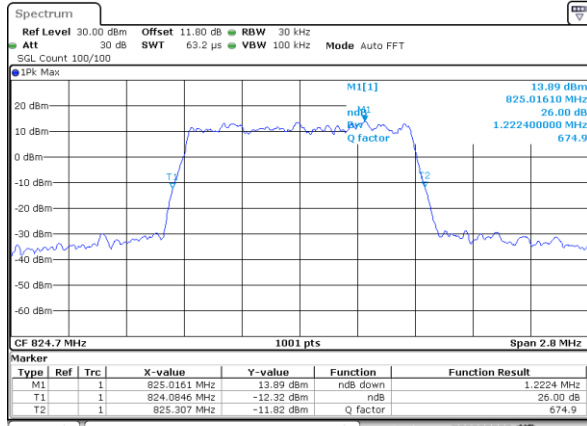


Date: 9, JAN, 2018 23:50:42



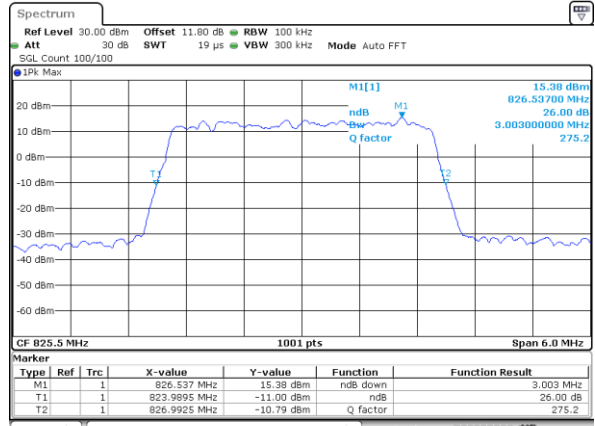
LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



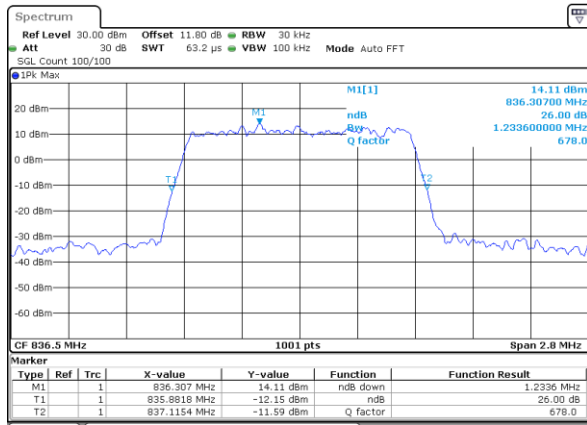
Date: 1.FEB.2018 23:37:34

Lowest Channel / 3MHz / 64QAM



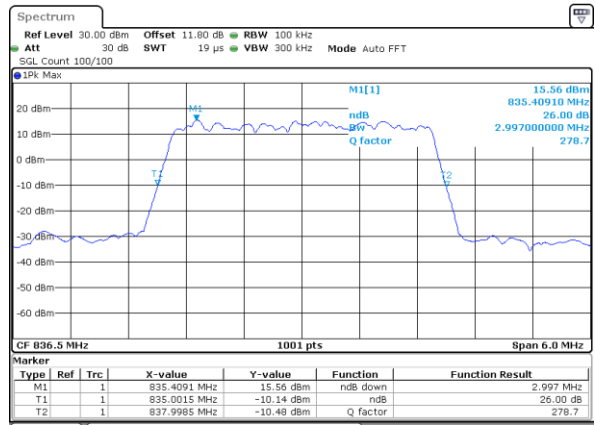
Date: 1.FEB.2018 23:05:46

Middle Channel / 1.4MHz / 64QAM



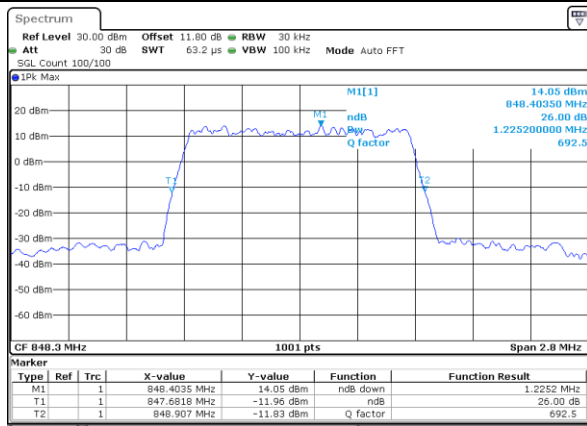
Date: 1.FEB.2018 23:42:12

Middle Channel / 3MHz / 64QAM



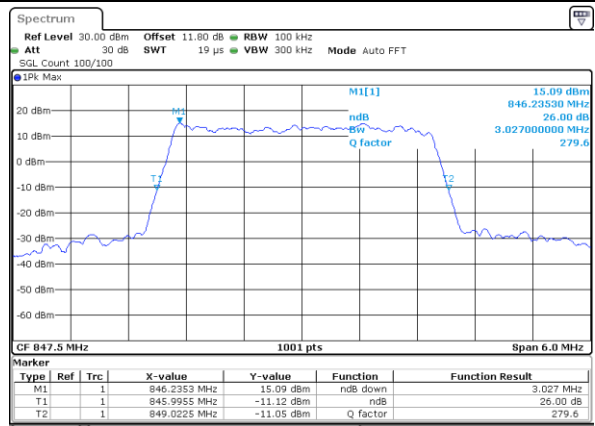
Date: 1.FEB.2018 23:10:25

Highest Channel / 1.4MHz / 64QAM



Date: 1.FEB.2018 23:43:33

Highest Channel / 3MHz / 64QAM

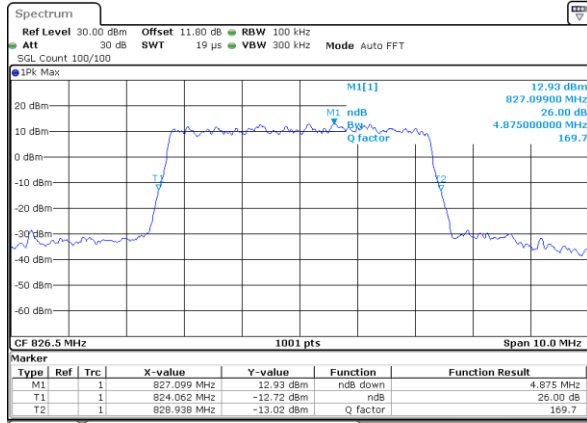


Date: 1.FEB.2018 23:11:45



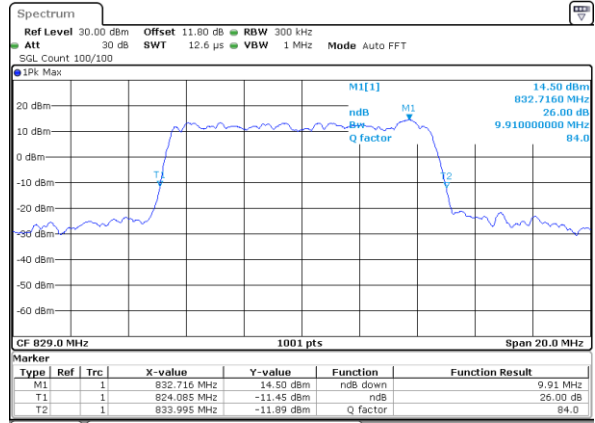
LTE Band 5

Lowest Channel / 5MHz / 64QAM



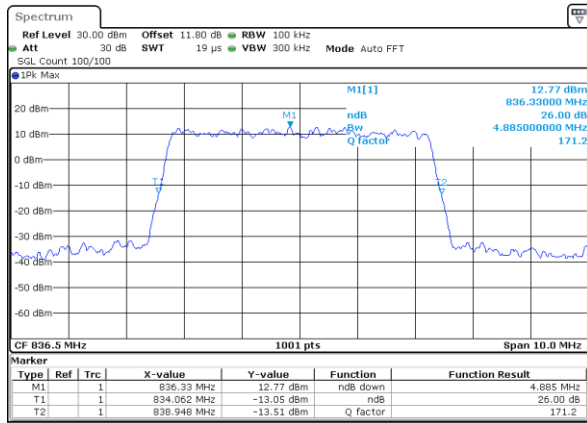
Date: 1.FEB.2018 23:16:23

Lowest Channel / 10MHz / 64QAM



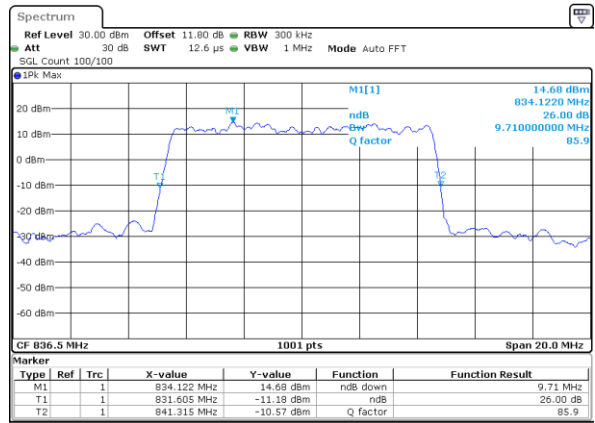
Date: 1.FEB.2018 23:26:58

Middle Channel / 5MHz / 64QAM



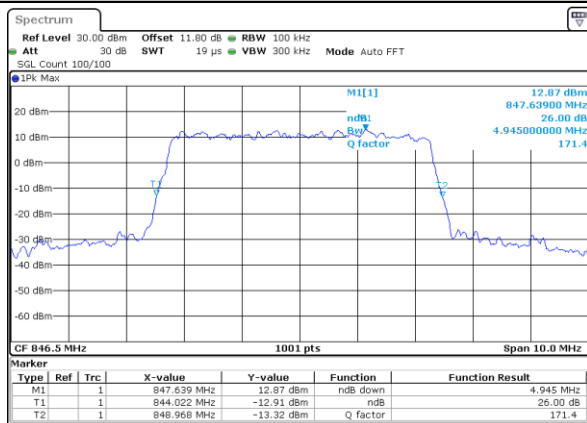
Date: 1.FEB.2018 23:21:00

Middle Channel / 10MHz / 64QAM



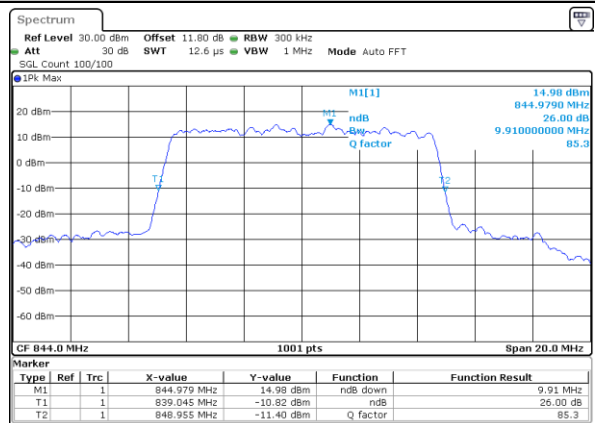
Date: 1.FEB.2018 23:31:36

Highest Channel / 5MHz / 64QAM



Date: 1.FEB.2018 23:22:20

Highest Channel / 10MHz / 64QAM



Date: 1.FEB.2018 23:32:56

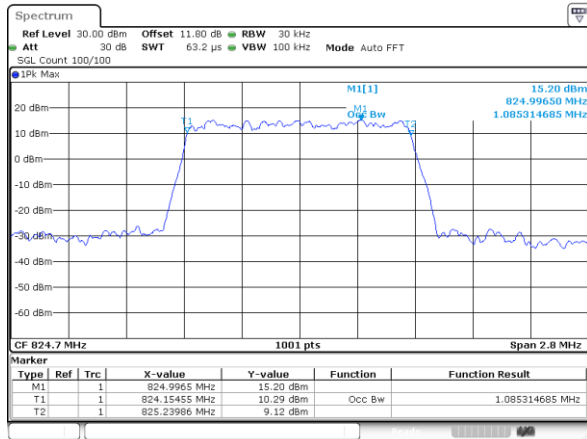
**Occupied Bandwidth**

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	1.09	1.09	2.71	2.72	4.50	4.49	9.05	8.99	-	-	-	-
Middle CH	1.09	1.09	2.72	2.72	4.49	4.50	9.05	8.97	-	-	-	-
Highest CH	1.09	1.09	2.74	2.70	4.48	4.50	9.03	9.03	-	-	-	-
Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09	-	2.72	-	4.48	-	9.03	-	-	-	-	-
Middle CH	1.09	-	2.72	-	4.49	-	9.01	-	-	-	-	-
Highest CH	1.09	-	2.72	-	4.49	-	8.99	-	-	-	-	-

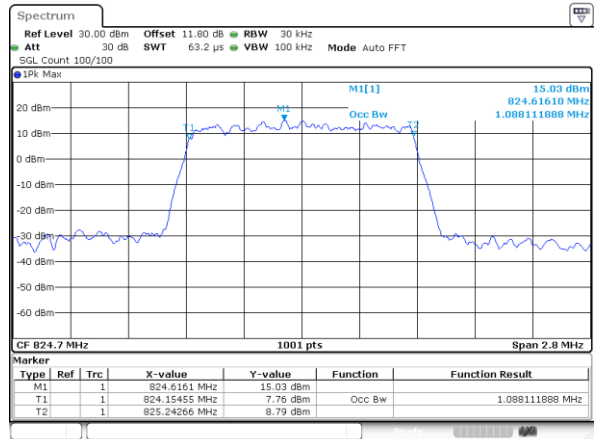


LTE Band 5

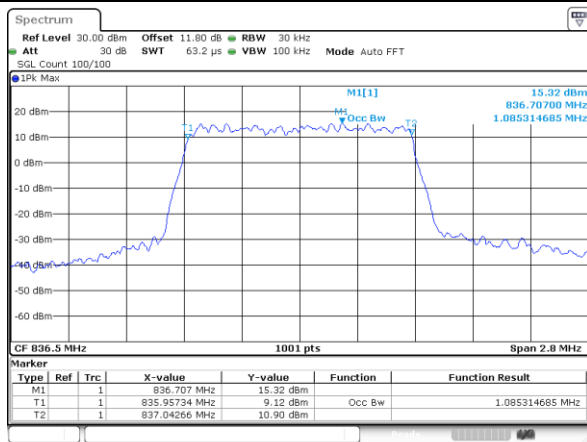
Lowest Channel / 1.4MHz / QPSK



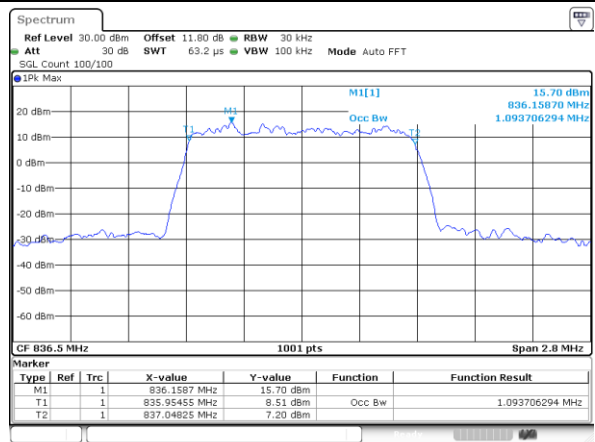
Lowest Channel / 1.4MHz / 16QAM



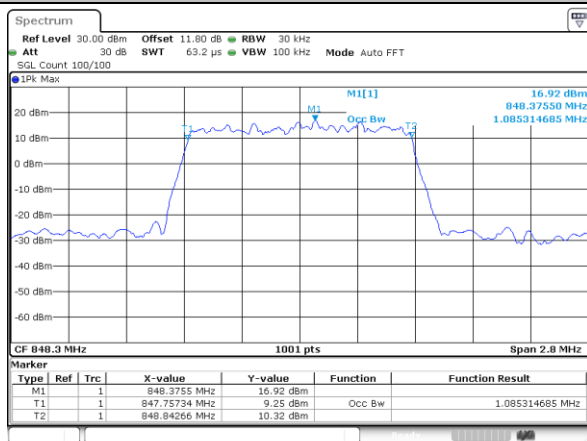
Middle Channel / 1.4MHz / QPSK



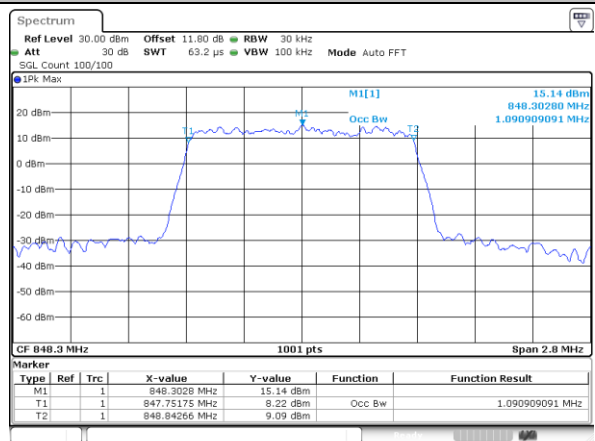
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



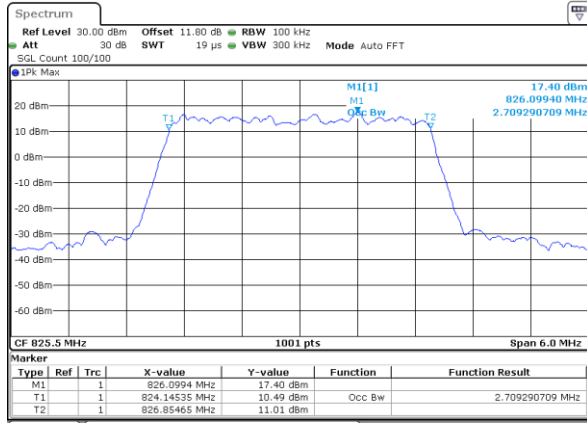
Highest Channel / 1.4MHz / 16QAM



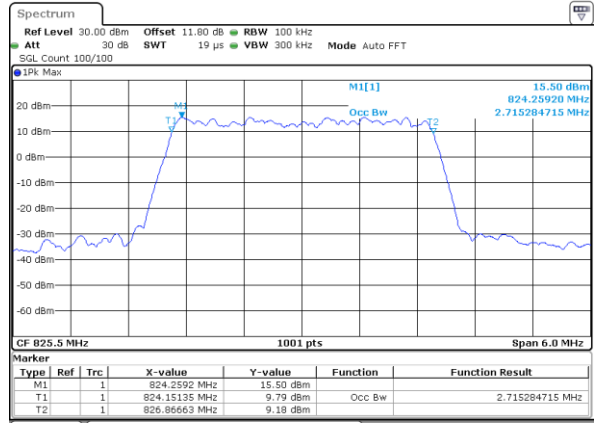


LTE Band 5

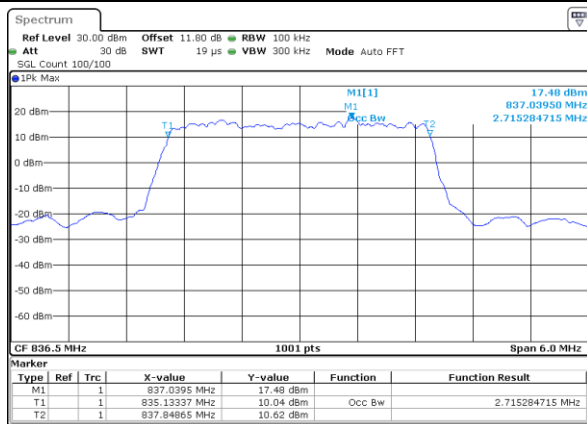
Lowest Channel / 3MHz / QPSK



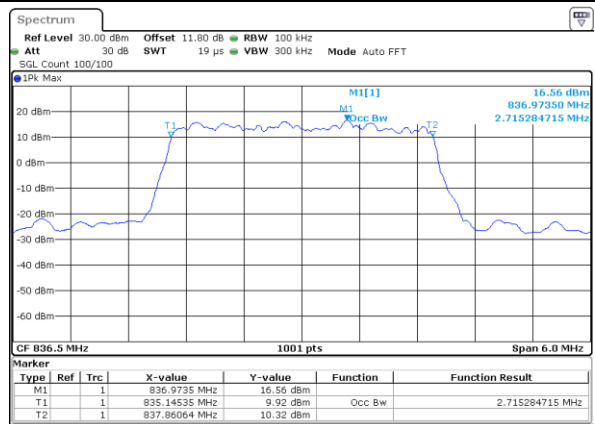
Lowest Channel / 3MHz / 16QAM



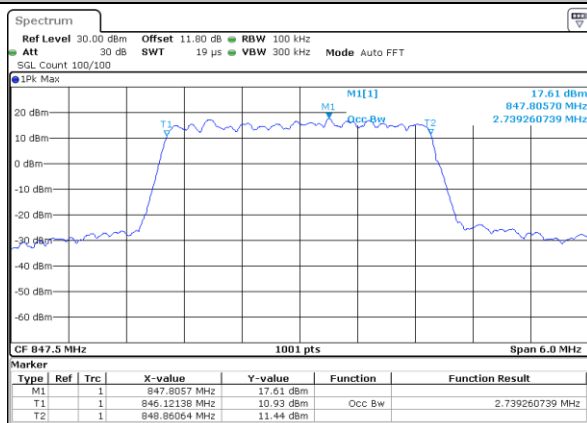
Middle Channel / 3MHz / QPSK



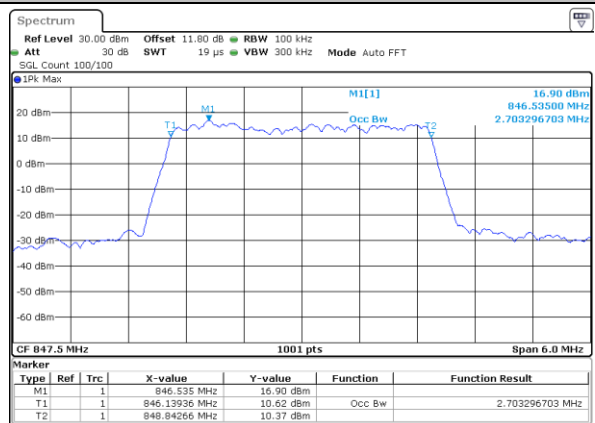
Middle Channel / 3MHz / 16QAM

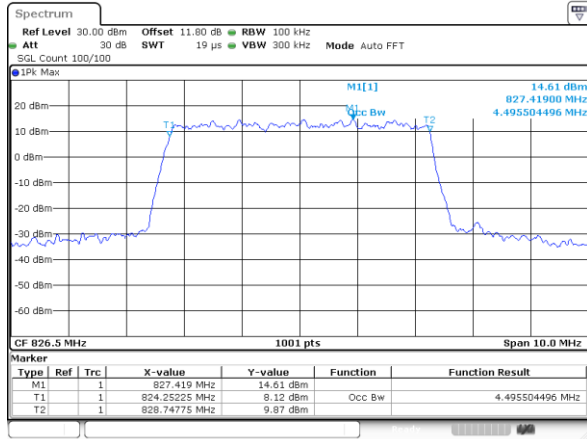
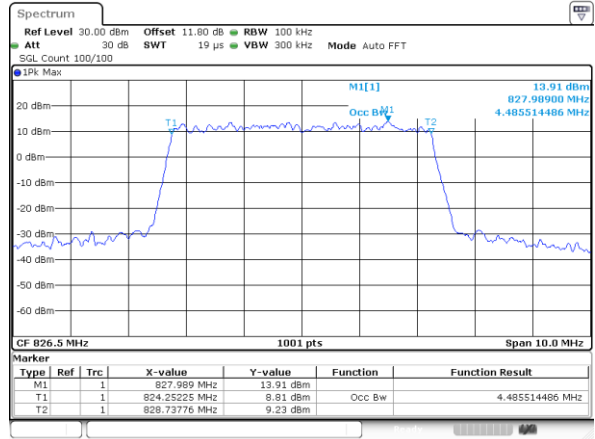
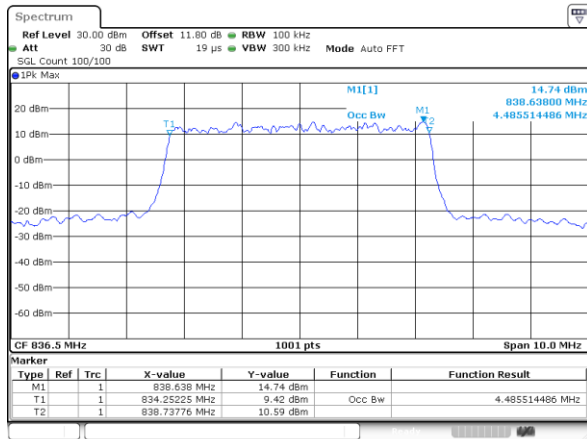
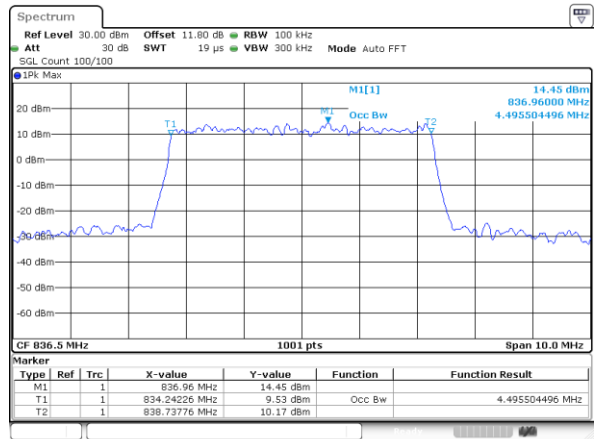
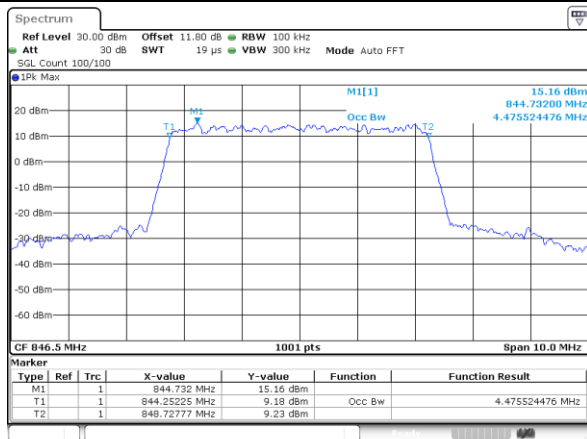
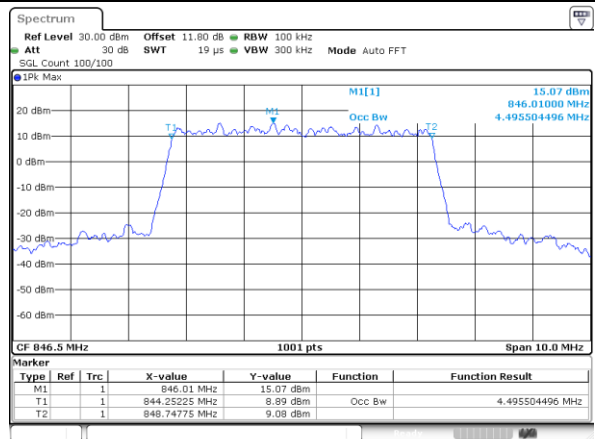


Highest Channel / 3MHz / QPSK



Highest Channel / 3MHz / 16QAM

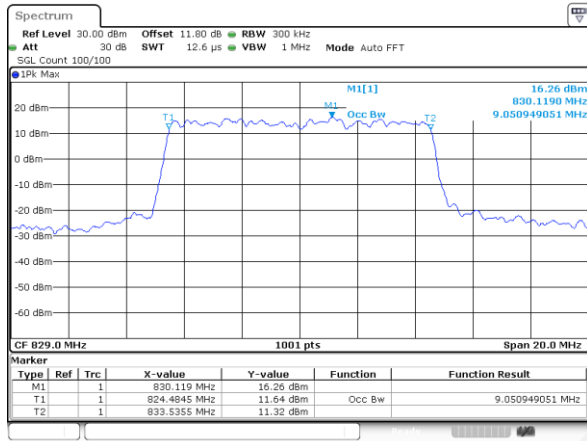


LTE Band 5
Lowest Channel / 5MHz / QPSK

Lowest Channel / 5MHz / 16QAM

Middle Channel / 5MHz / QPSK

Middle Channel / 5MHz / 16QAM

Highest Channel / 5MHz / QPSK

Highest Channel / 5MHz / 16QAM


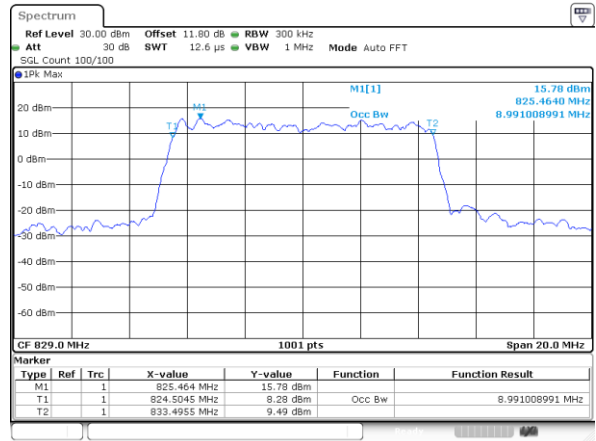


LTE Band 5

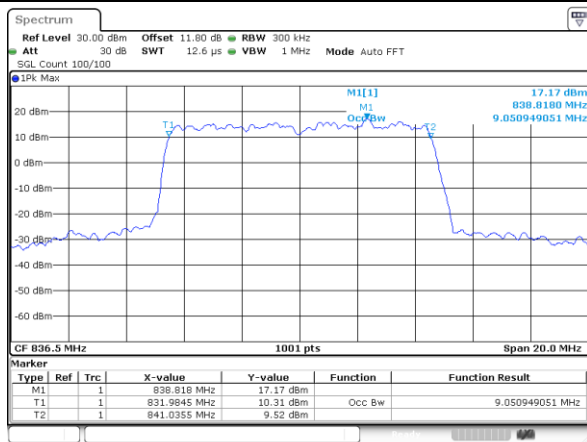
Lowest Channel / 10MHz / QPSK



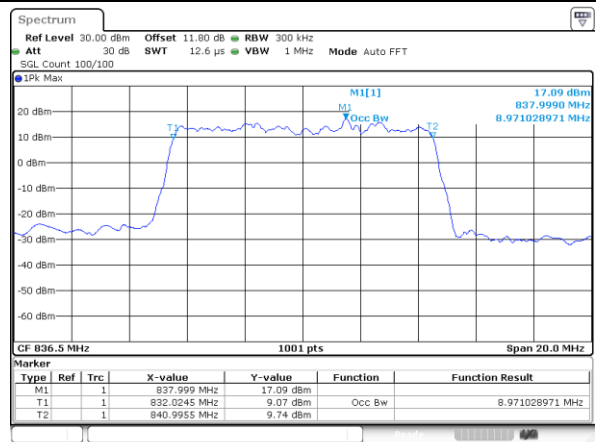
Lowest Channel / 10MHz / 16QAM



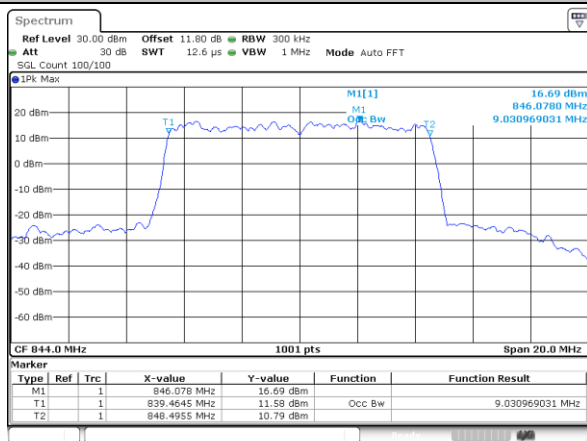
Middle Channel / 10MHz / QPSK



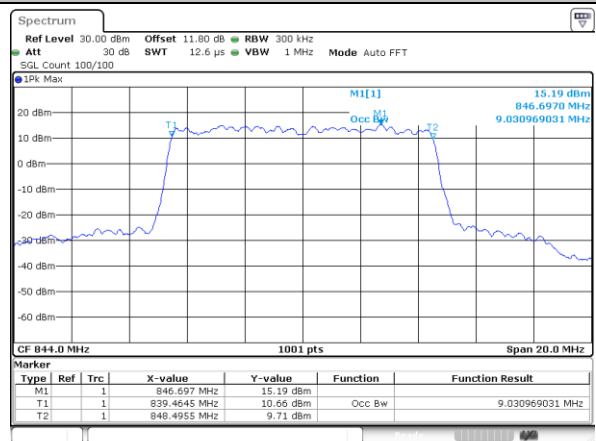
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



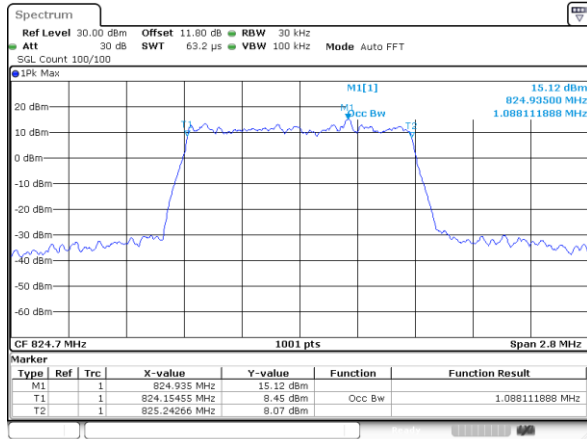
Highest Channel / 10MHz / 16QAM



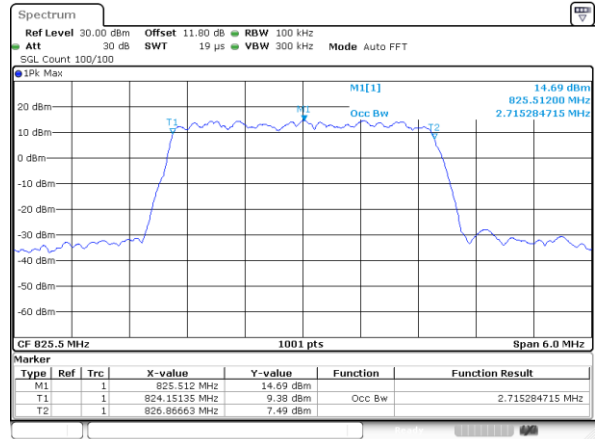


LTE Band 5

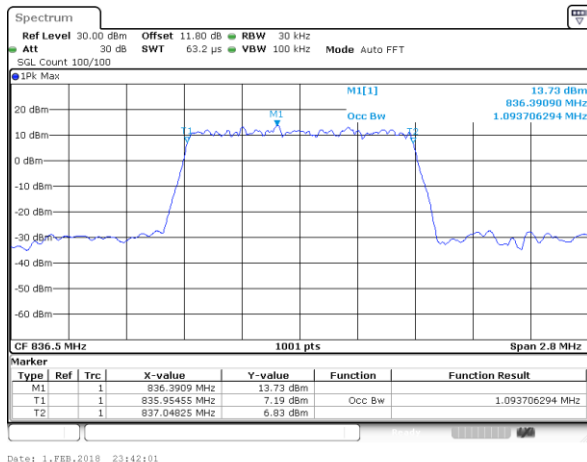
Lowest Channel / 1.4MHz / 64QAM



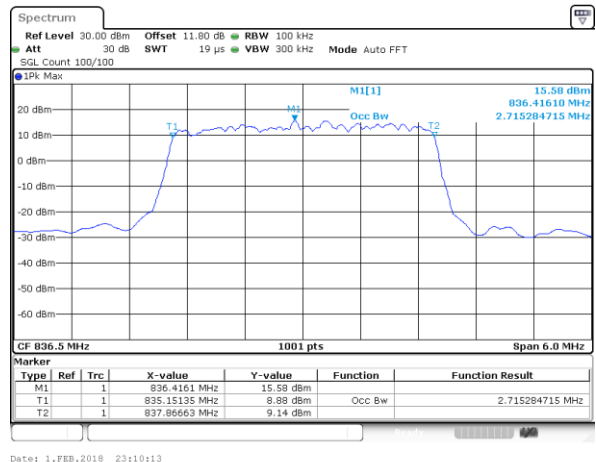
Lowest Channel / 3MHz / 64QAM



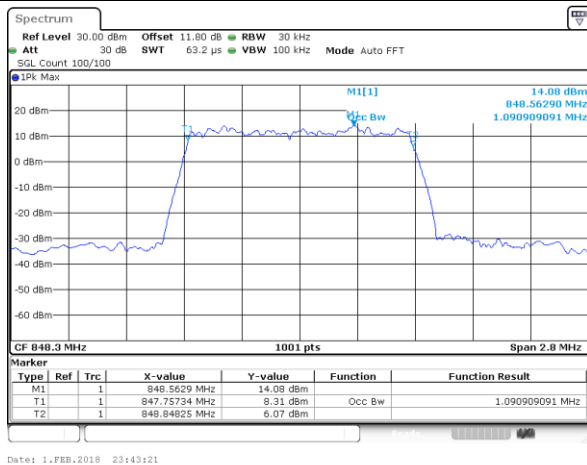
Middle Channel / 1.4MHz / 64QAM



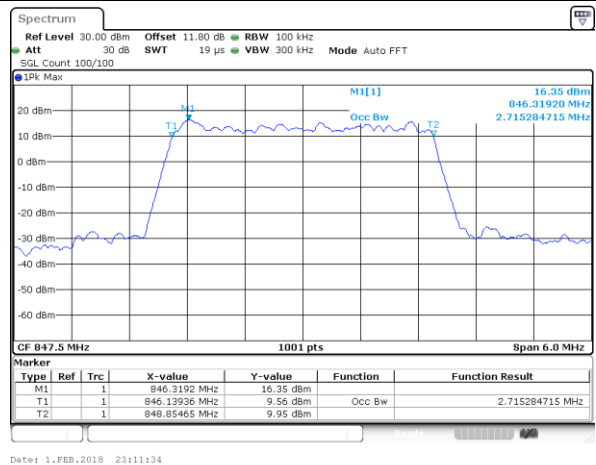
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



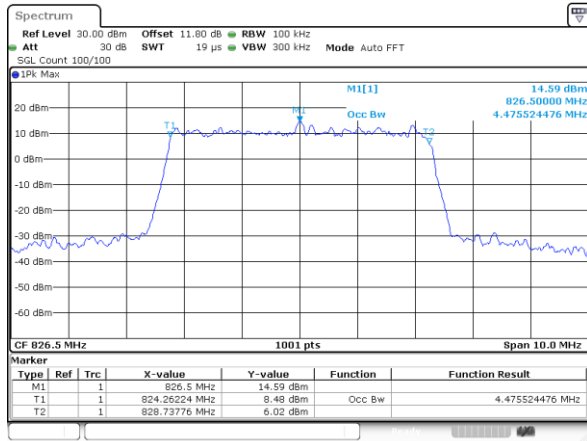
Highest Channel / 3MHz / 64QAM



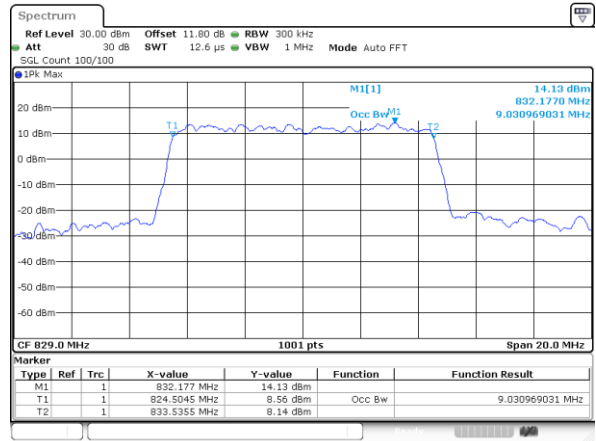


LTE Band 5

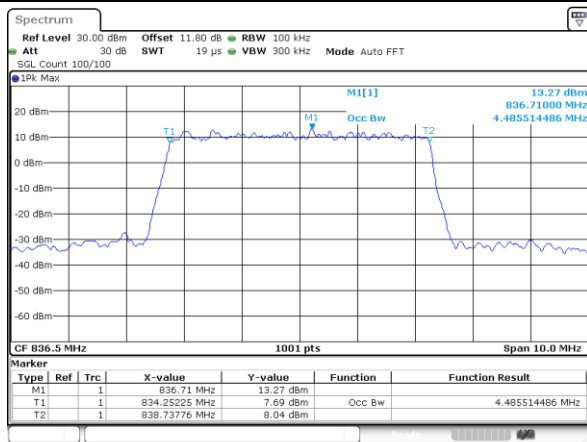
Lowest Channel / 5MHz / 64QAM



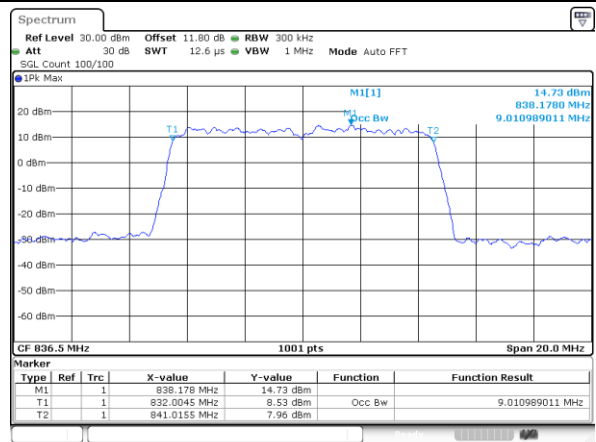
Lowest Channel / 10MHz / 64QAM



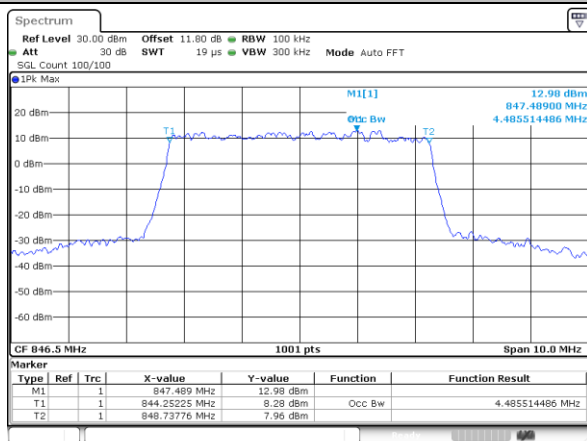
Middle Channel / 5MHz / 64QAM



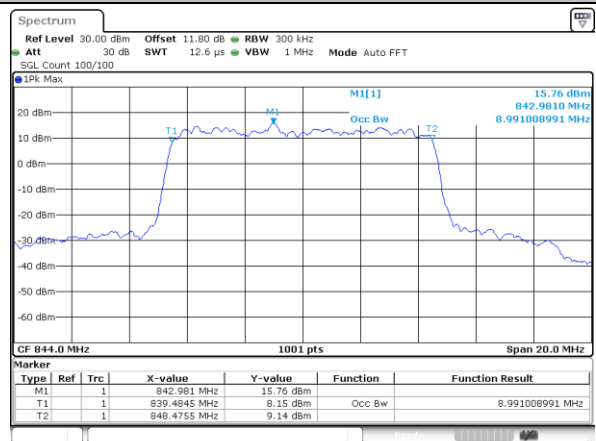
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM



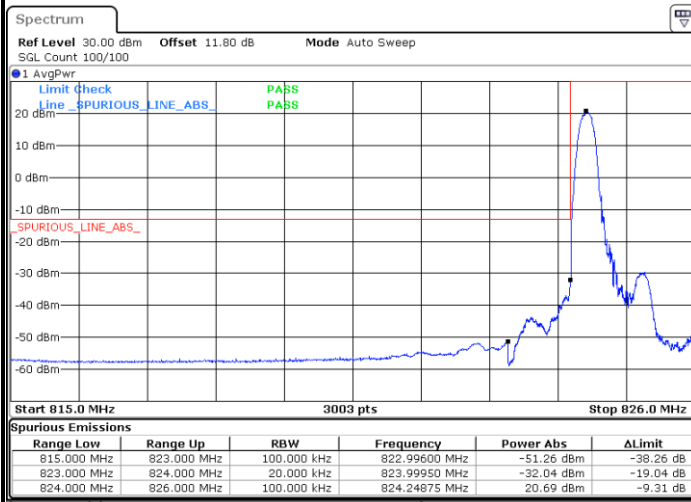


Conducted Band Edge

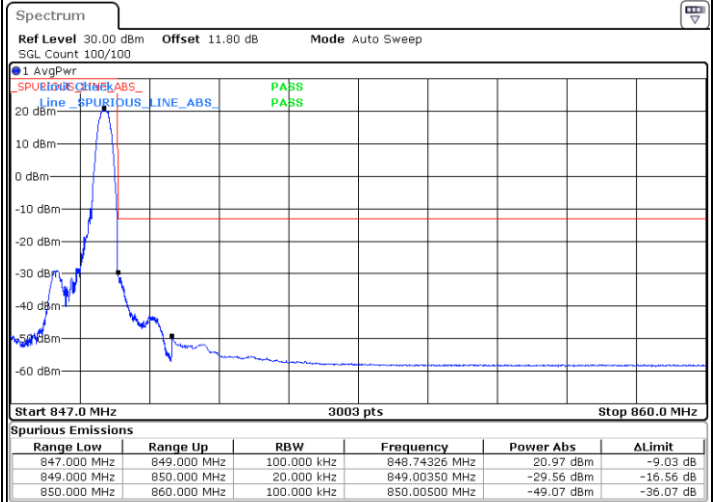


LTE Band 5 / 1.4MHz / QPSK

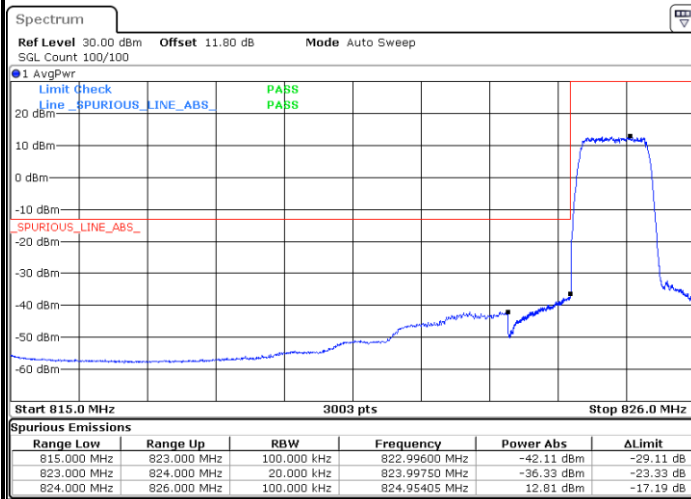
Lowest Band Edge / 1RB



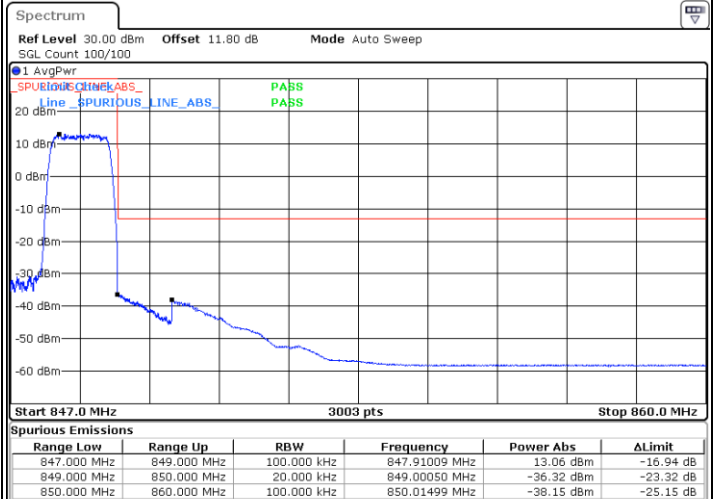
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



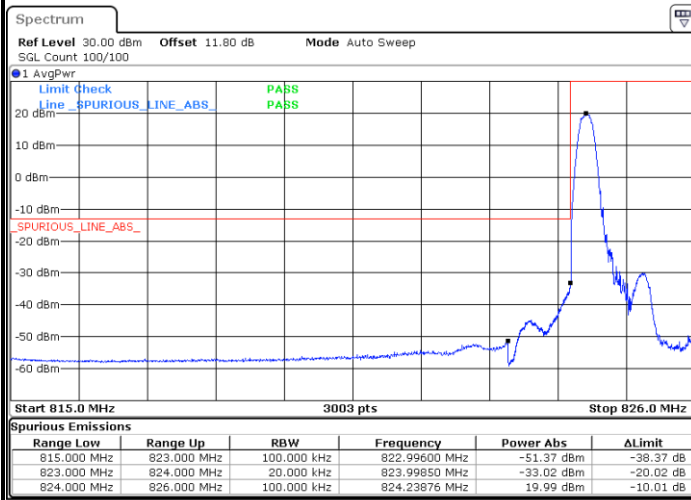
Highest Band Edge / Full RB





LTE Band 5 / 1.4MHz / 16QAM

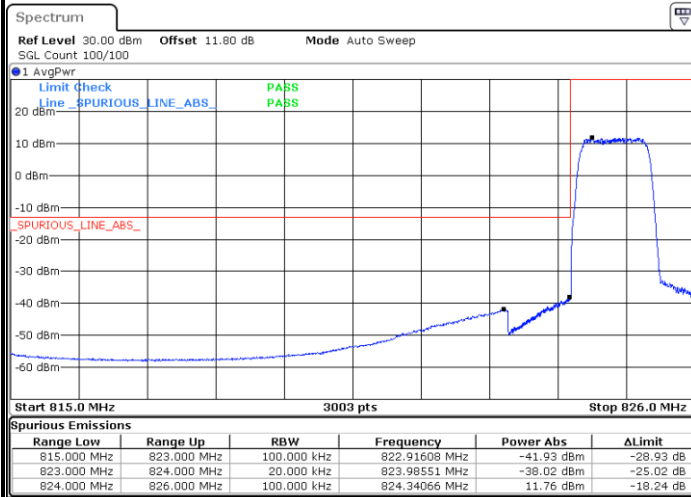
Lowest Band Edge / 1 RB



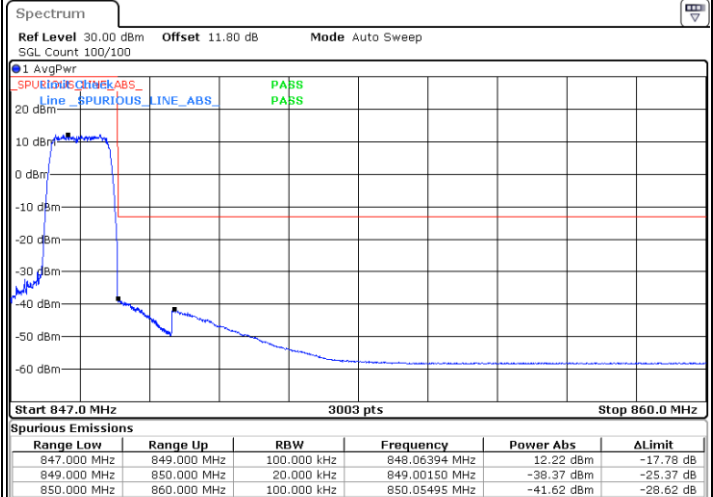
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



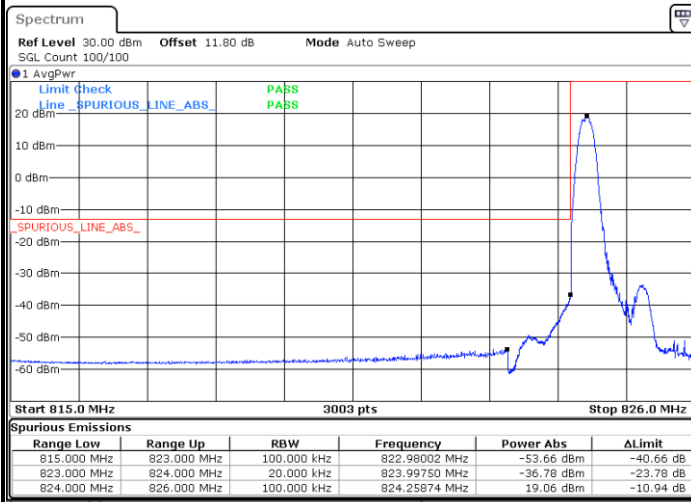
Highest Band Edge / Full RB



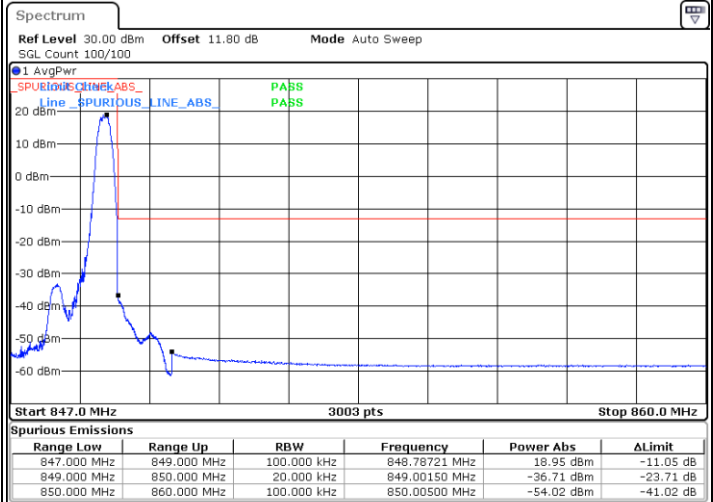


LTE Band 5 / 1.4MHz / 64QAM

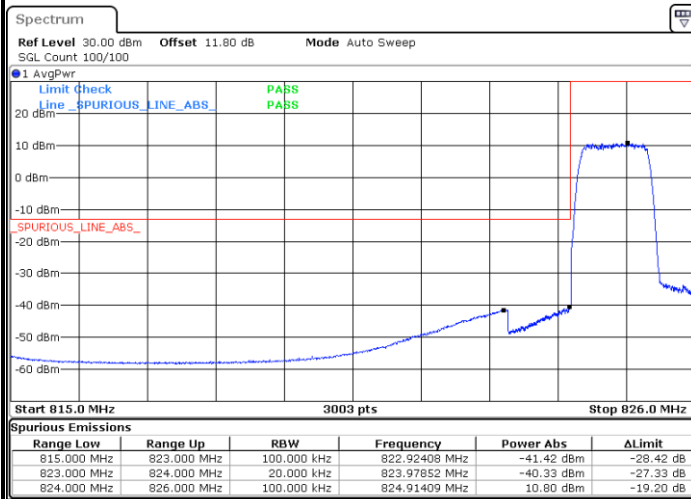
Lowest Band Edge / 1 RB



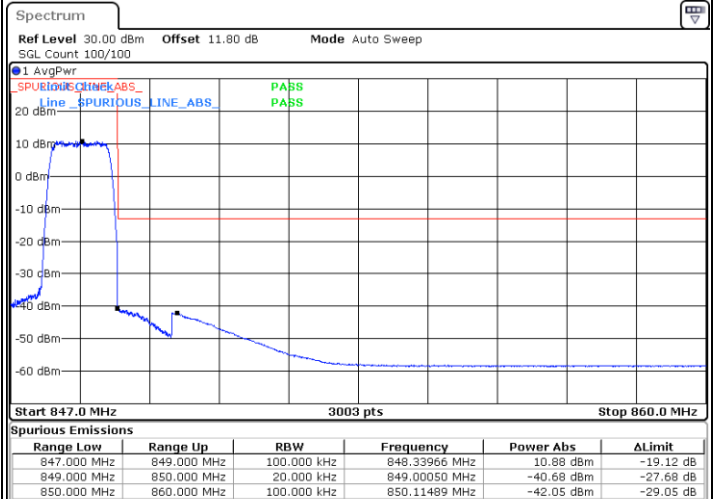
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



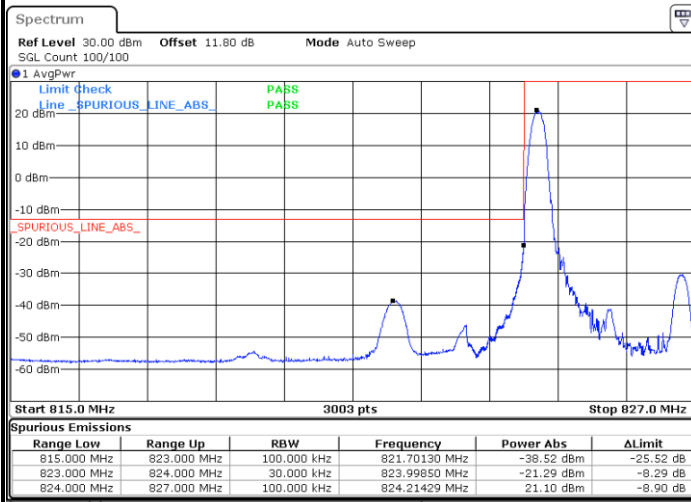
Highest Band Edge / Full RB



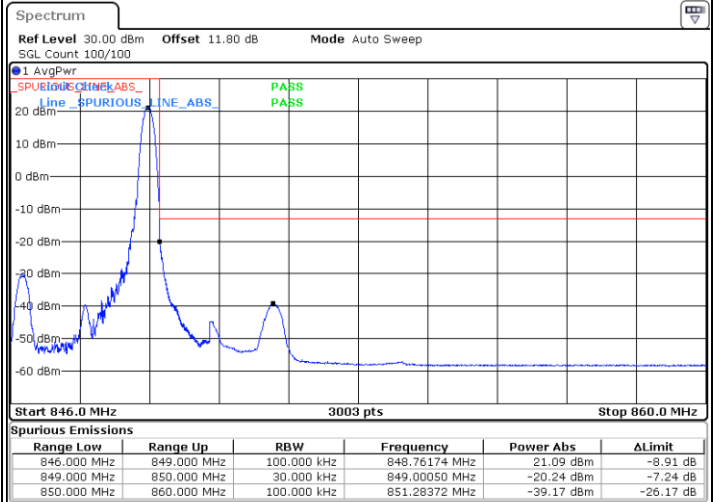


LTE Band 5 / 3MHz / QPSK

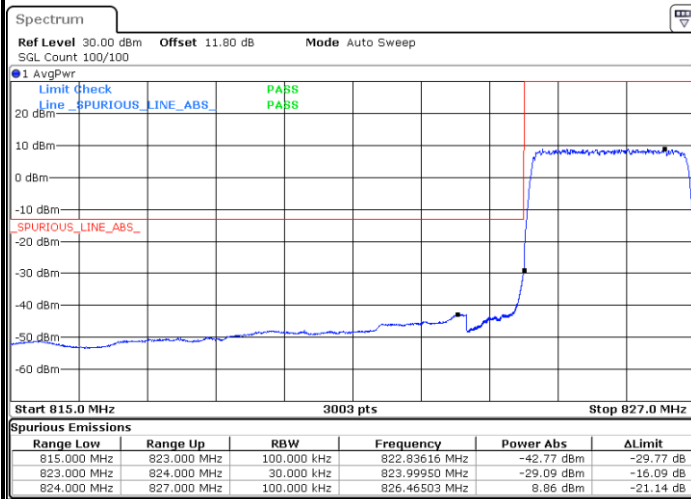
Lowest Band Edge / 1RB



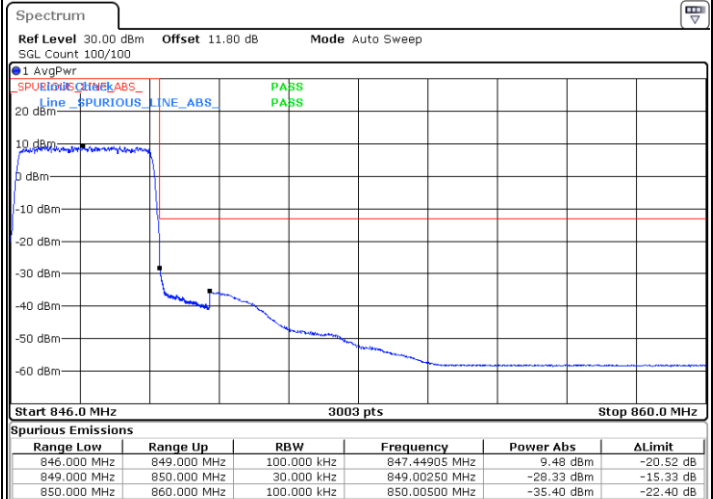
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



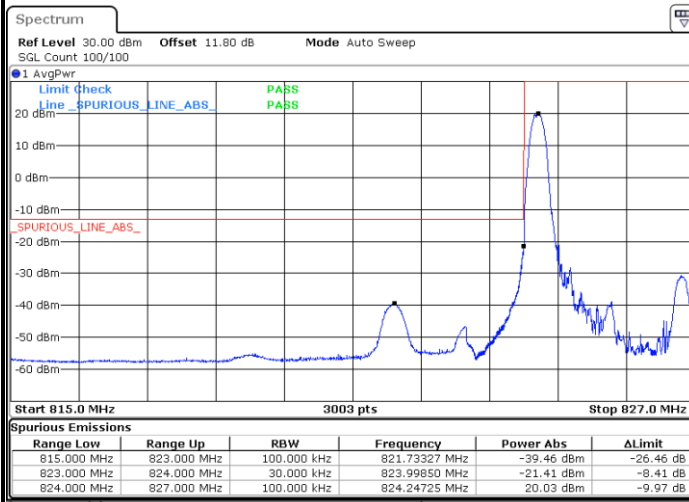
Highest Band Edge / Full RB



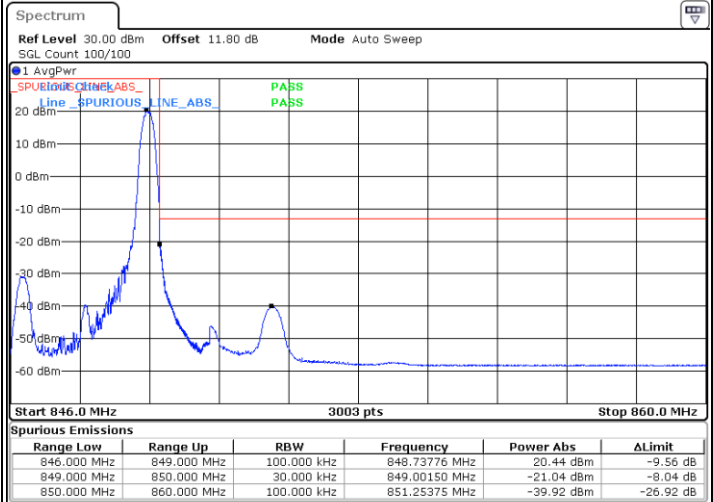


LTE Band 5 / 3MHz / 16QAM

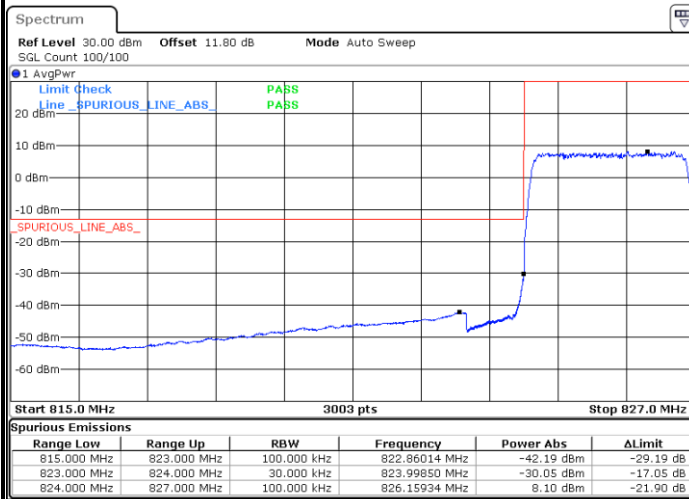
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

