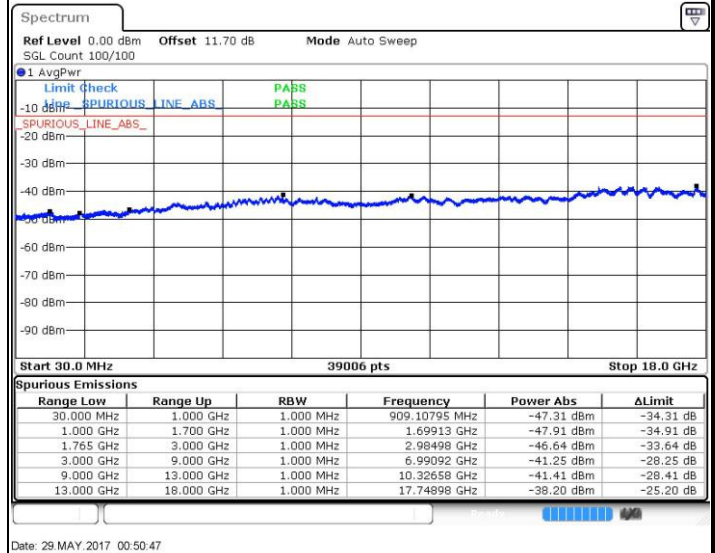


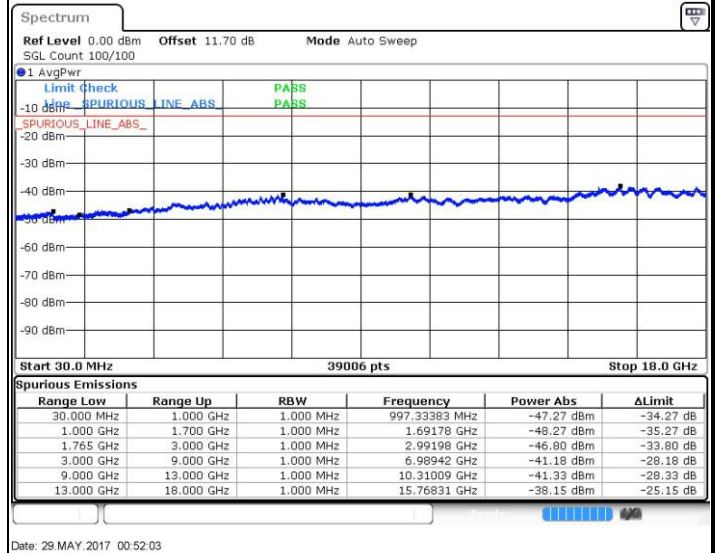


LTE Band 4 / 5MHz

Lowest Channel / 64QAM



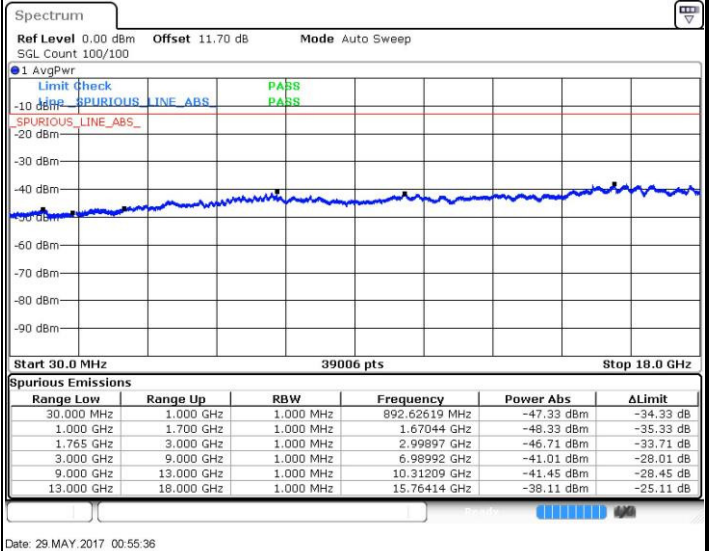
Middle Channel / 64QAM





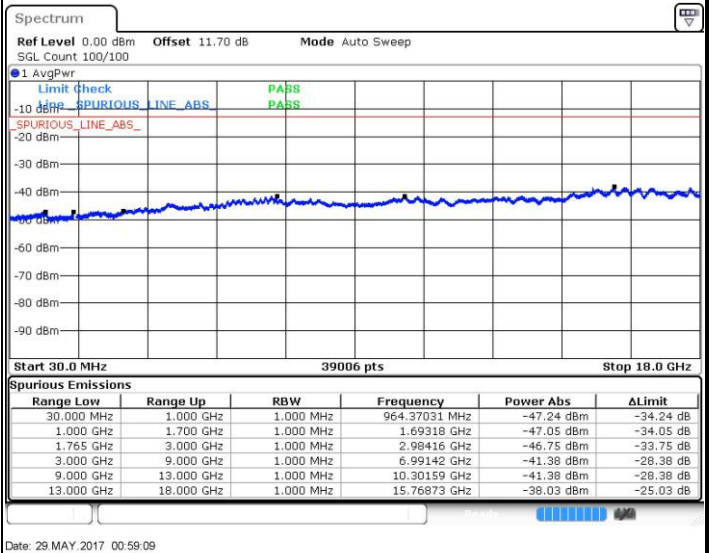
LTE Band 4 / 5MHz

Highest Channel / 64QAM



LTE Band 4 / 10MHz

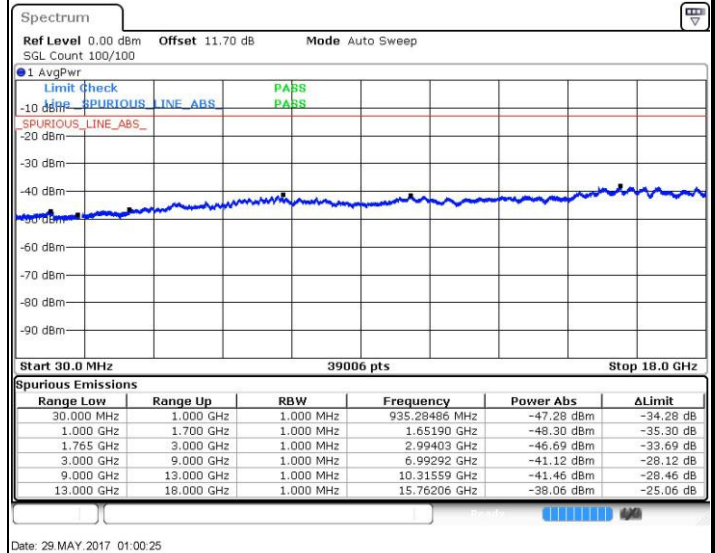
Lowest Channel / 64QAM



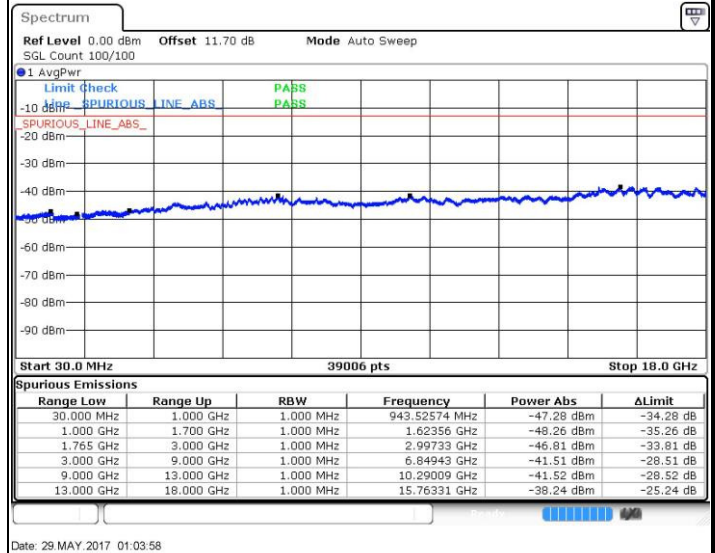


LTE Band 4 / 10MHz

Middle Channel / 64QAM



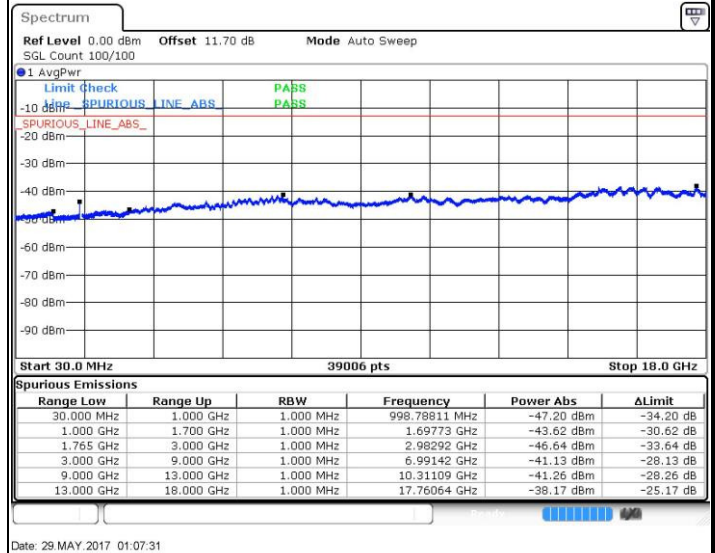
Highest Channel / 64QAM



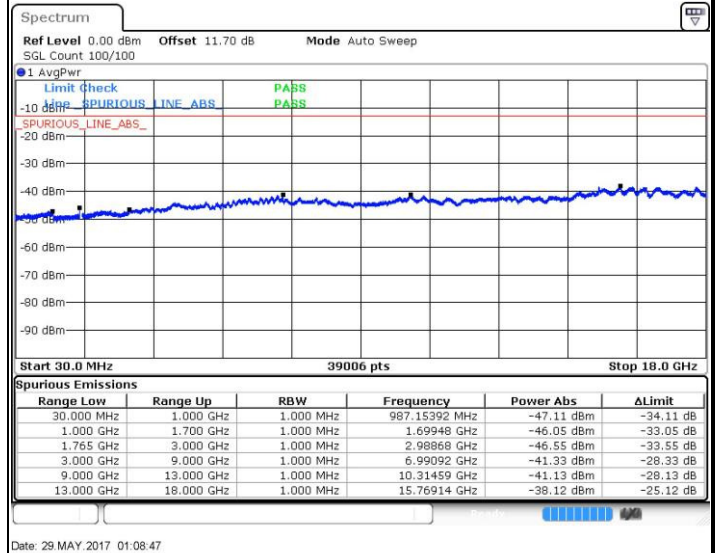


LTE Band 4 / 15MHz

Lowest Channel / 64QAM



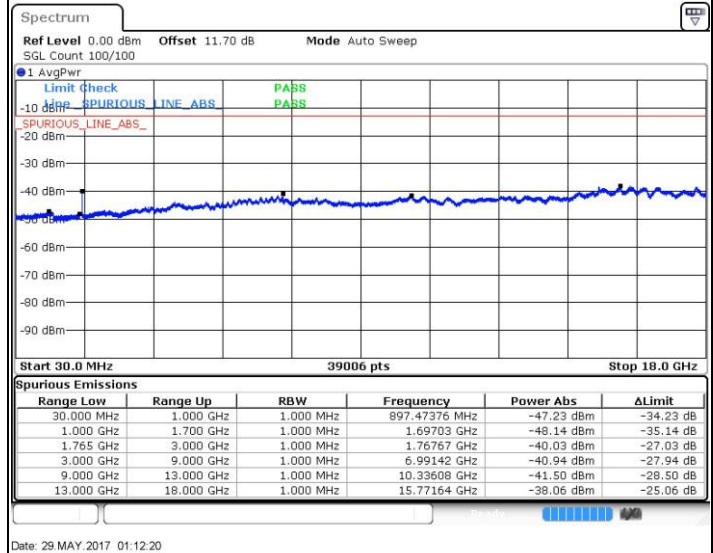
Middle Channel / 64QAM





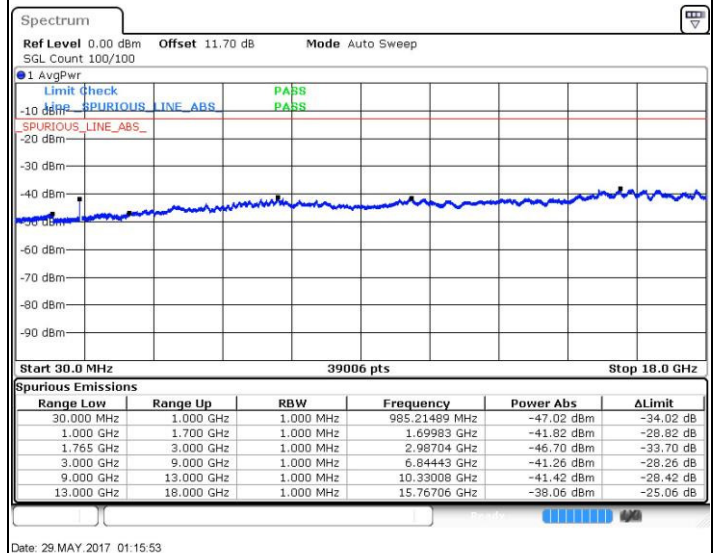
LTE Band 4 / 15MHz

Highest Channel / 64QAM



LTE Band 4 / 20MHz

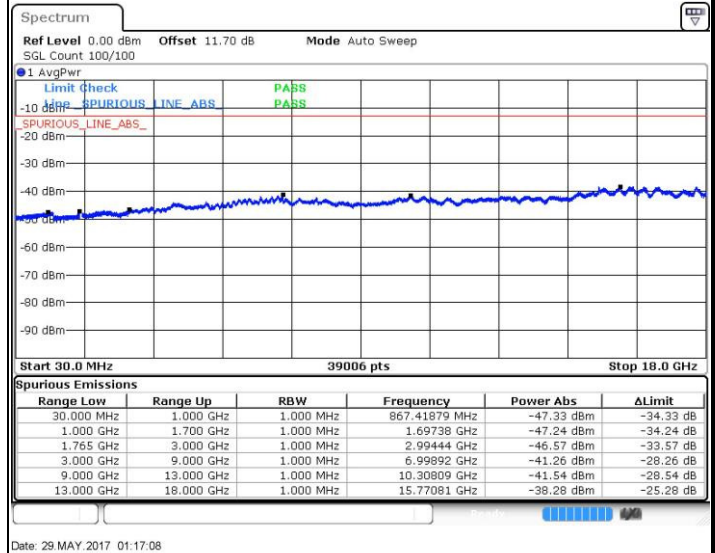
Lowest Channel / 64QAM



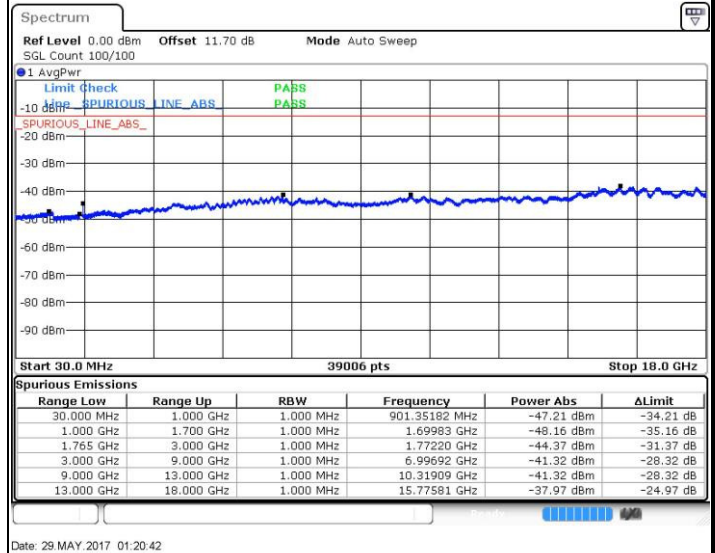


LTE Band 4 / 20MHz

Middle Channel / 64QAM



Highest Channel / 64QAM



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	0.0016	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 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	3.65	4.67	4.52	5.68	PASS
Middle CH	3.88	4.81	4.49	5.86	
Highest CH	4.17	4.75	5.13	5.71	
Mode	LTE Band 5 / 10MHz				
Mod.	-		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	4.12	5.68	PASS
Middle CH	-	-	4.55	6.12	
Highest CH	-	-	4.87	5.74	

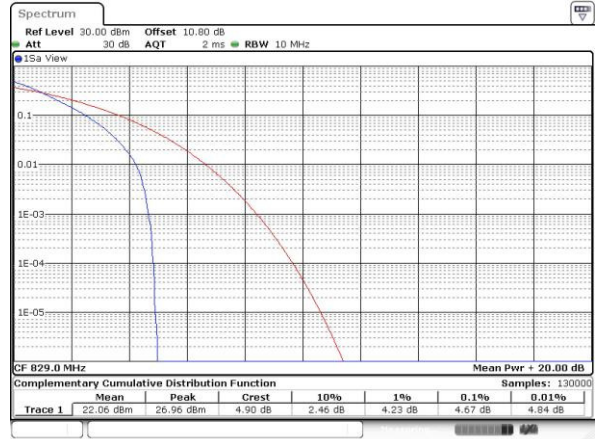


LTE Band 5 / 10MHz / QPSK

Lowest Channel / 1RB



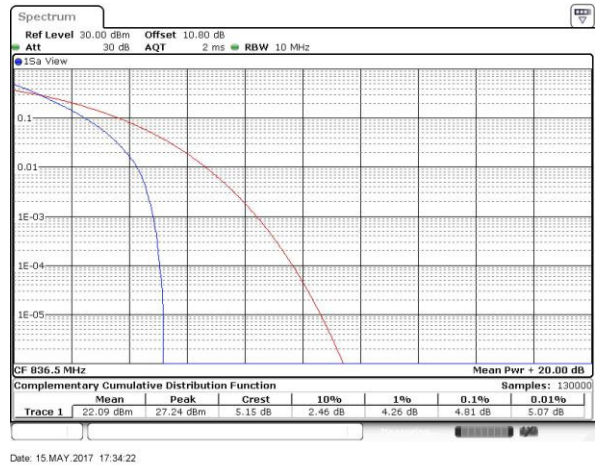
Lowest Channel / Full RB



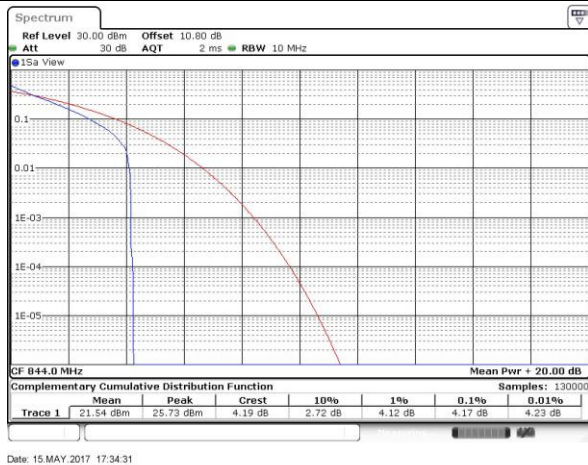
Middle Channel / 1RB



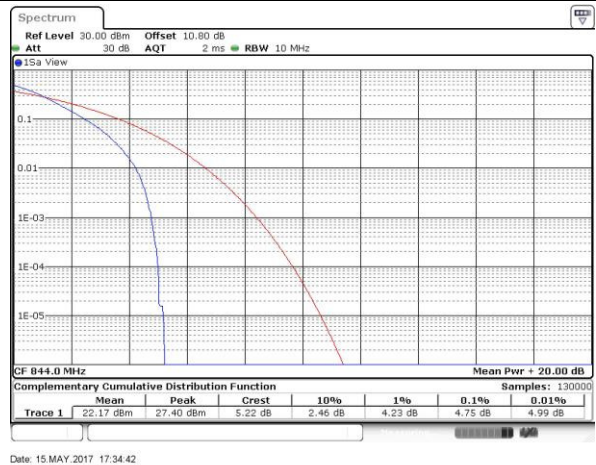
Middle Channel / Full RB



Highest Channel / 1RB



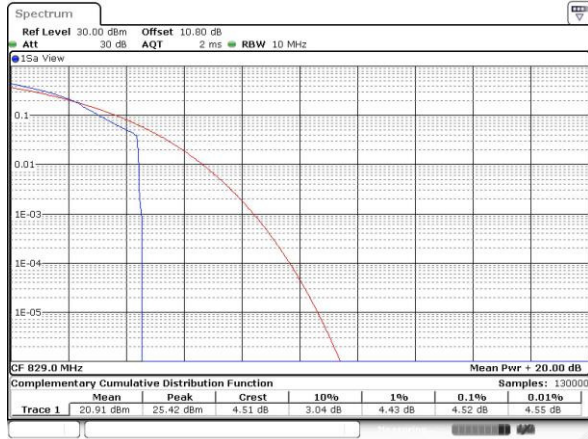
Highest Channel / Full RB



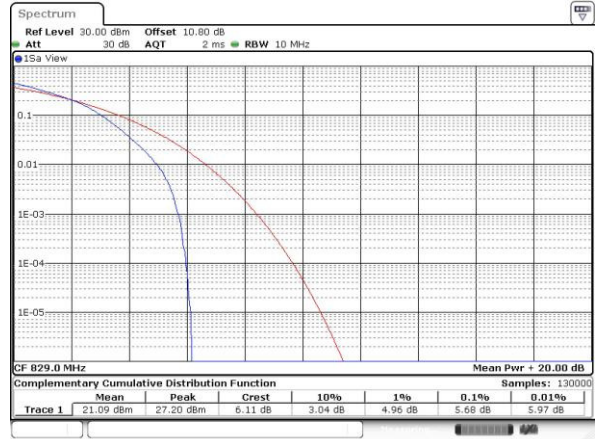


LTE Band 5 / 10MHz / 16QAM

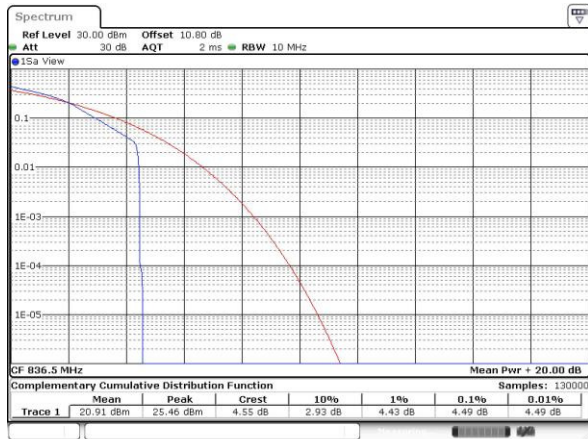
Lowest Channel / 1RB



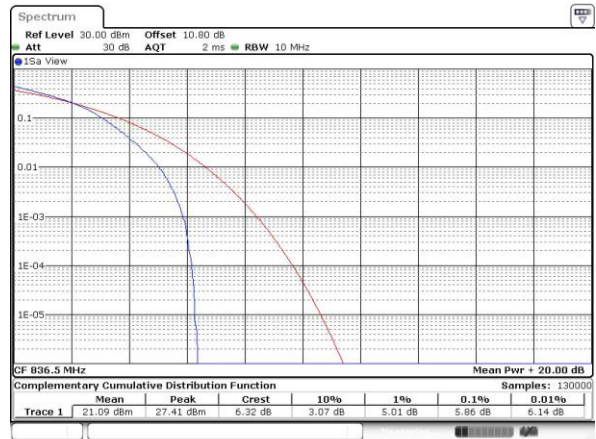
Lowest Channel / Full RB



Middle Channel / 1RB



Middle Channel / Full RB

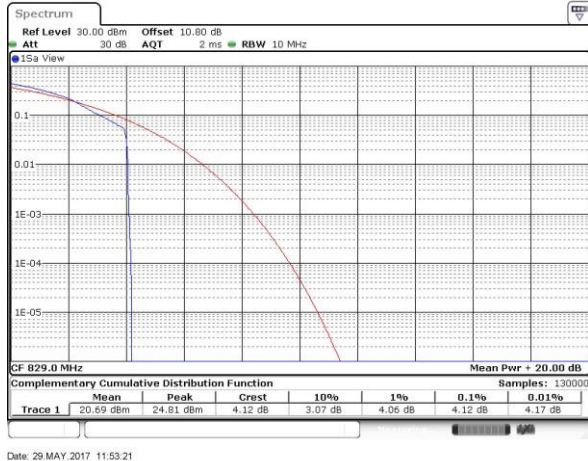
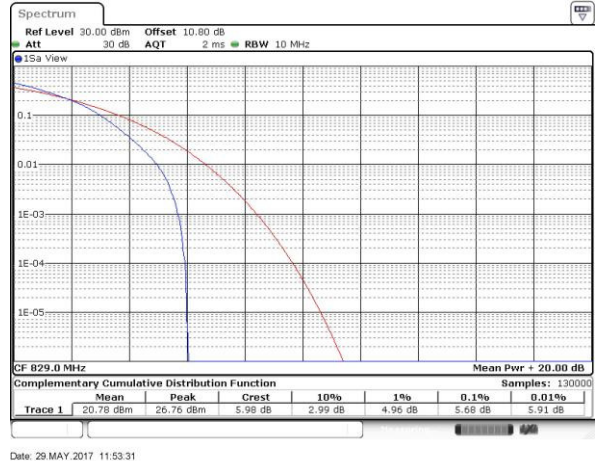
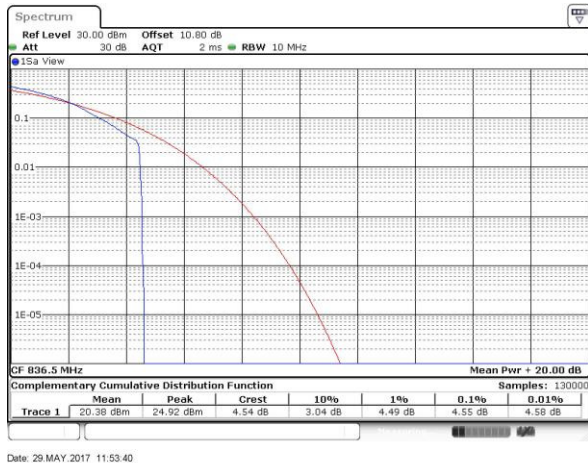
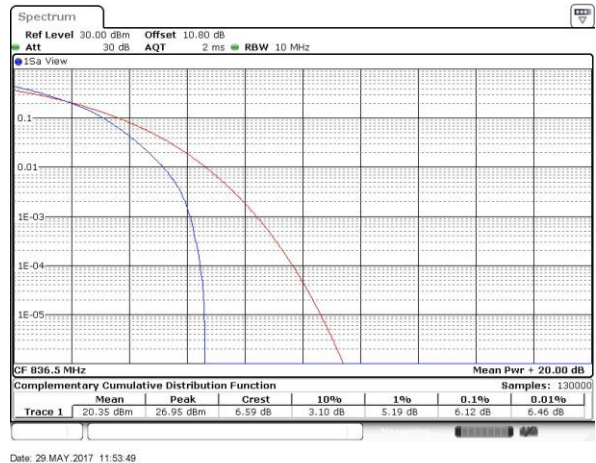
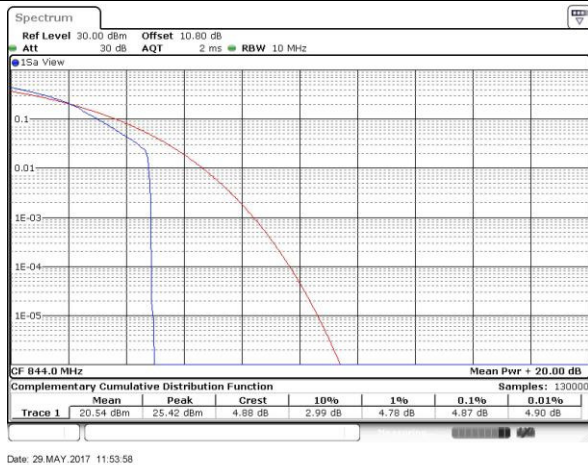
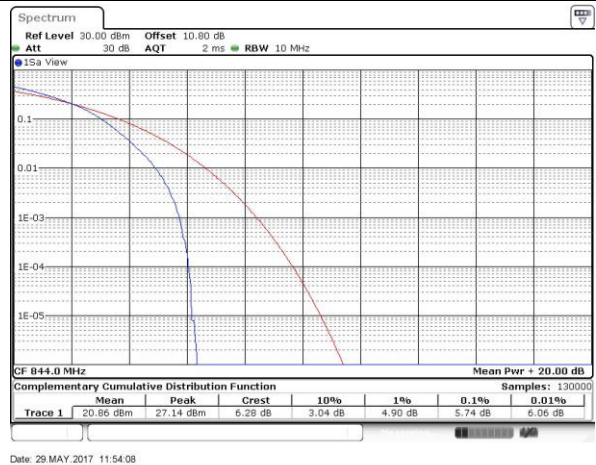


Highest Channel / 1RB



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


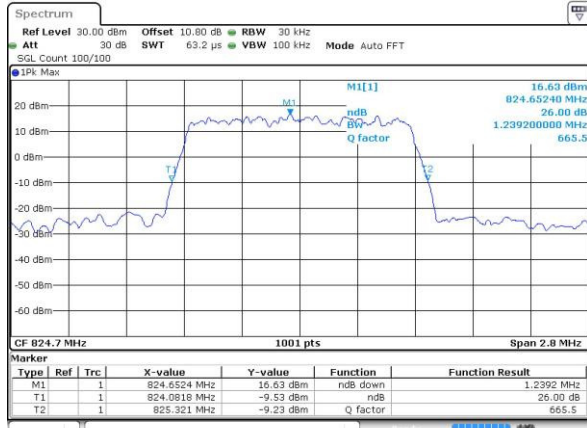
**26dB Bandwidth**

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	1.24	1.22	3.02	2.96	4.89	4.96	9.79	9.69	-	-	-	-
Middle CH	1.23	1.22	3.01	3.01	4.83	4.93	9.75	9.73	-	-	-	-
Highest CH	1.23	1.22	3.02	2.99	4.89	4.89	9.91	9.69	-	-	-	-
Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	1.23	-	3.00	-	4.80	-	9.75	-	-	-	-
Middle CH	-	1.23	-	3.03	-	5.00	-	9.73	-	-	-	-
Highest CH	-	1.23	-	3.00	-	4.93	-	9.85	-	-	-	-



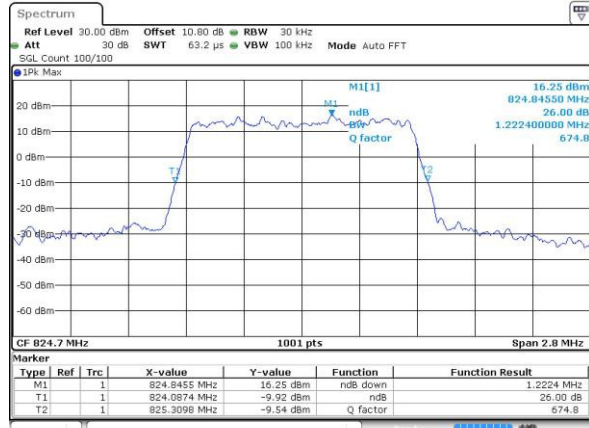
LTE Band 5

Lowest Channel / 1.4MHz / QPSK



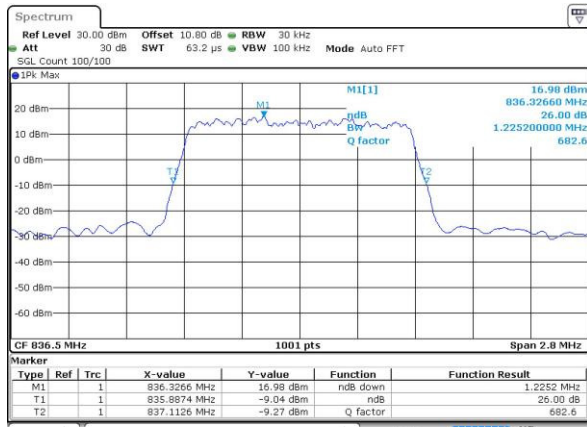
Date: 15 MAY 2017 15:48:30

Lowest Channel / 1.4MHz / 16QAM



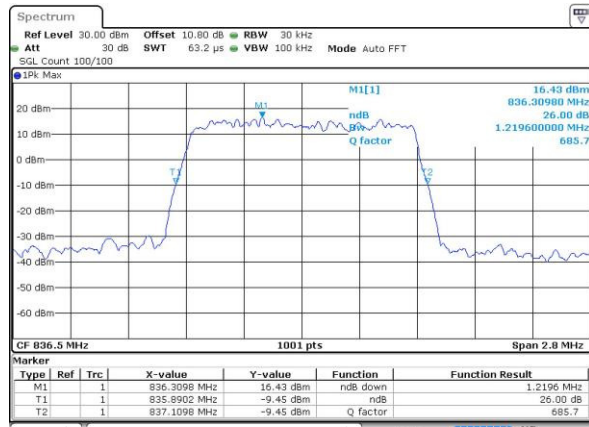
Date: 15 MAY 2017 15:48:19

Middle Channel / 1.4MHz / QPSK



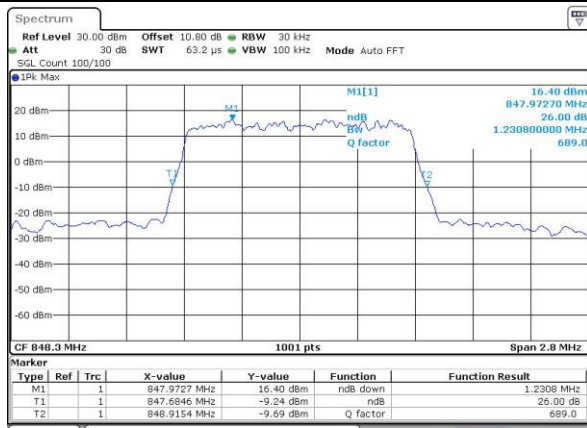
Date: 15 MAY 2017 15:57:27

Middle Channel / 1.4MHz / 16QAM



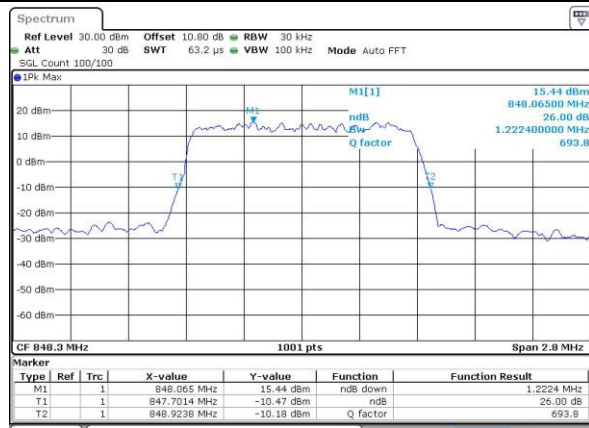
Date: 15 MAY 2017 15:57:37

Highest Channel / 1.4MHz / QPSK



Date: 15 MAY 2017 15:59:57

Highest Channel / 1.4MHz / 16QAM

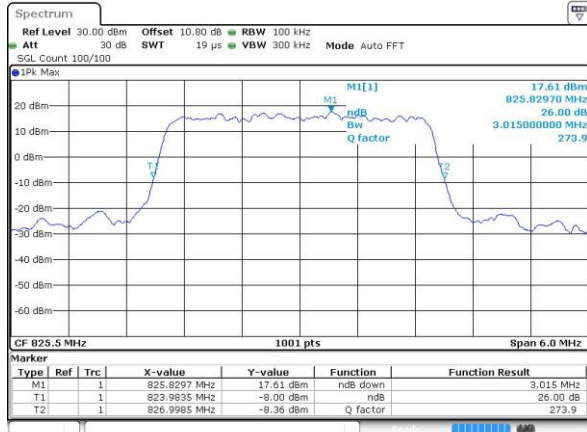


Date: 15 MAY 2017 16:00:07



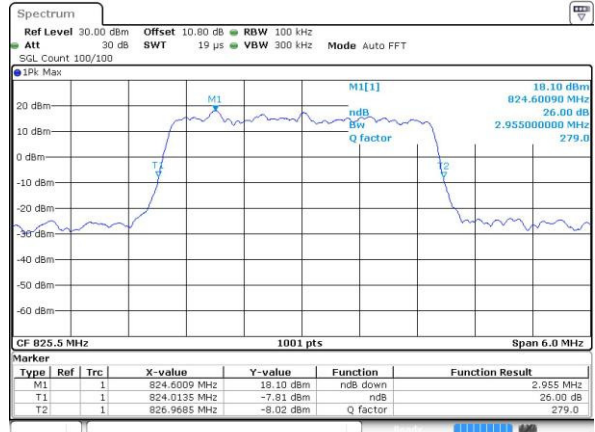
LTE Band 5

Lowest Channel / 3MHz / QPSK



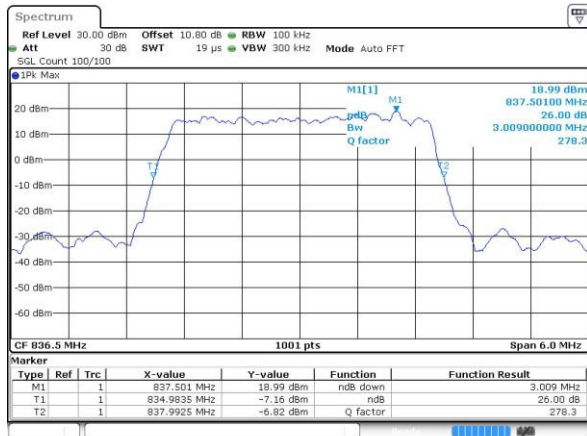
Date: 15 MAY 2017 16:09:03

Lowest Channel / 3MHz / 16QAM



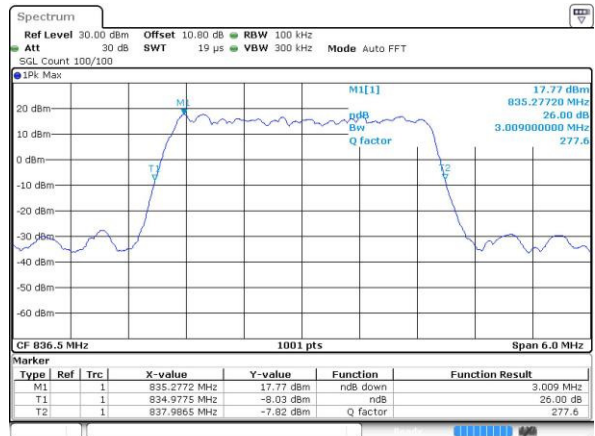
Date: 15 MAY 2017 16:09:14

Middle Channel / 3MHz / QPSK



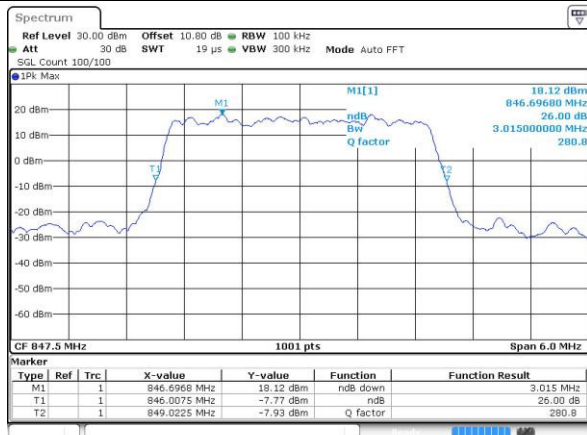
Date: 15 MAY 2017 16:39:41

Middle Channel / 3MHz / 16QAM



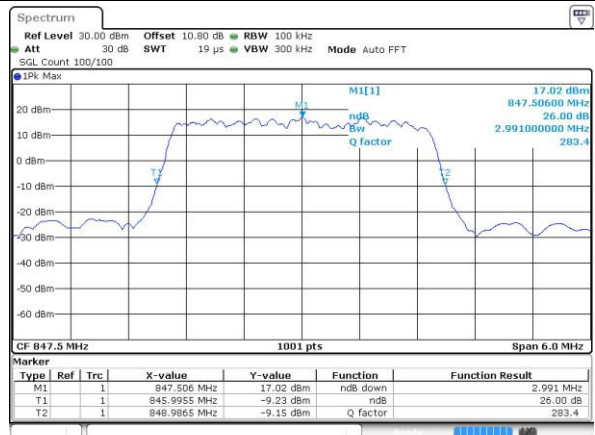
Date: 15 MAY 2017 16:39:52

Highest Channel / 3MHz / QPSK



Date: 15 MAY 2017 16:42:12

Highest Channel / 3MHz / 16QAM

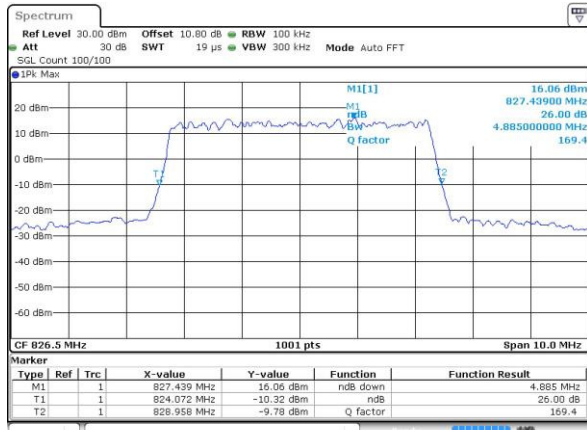


Date: 15 MAY 2017 16:42:22

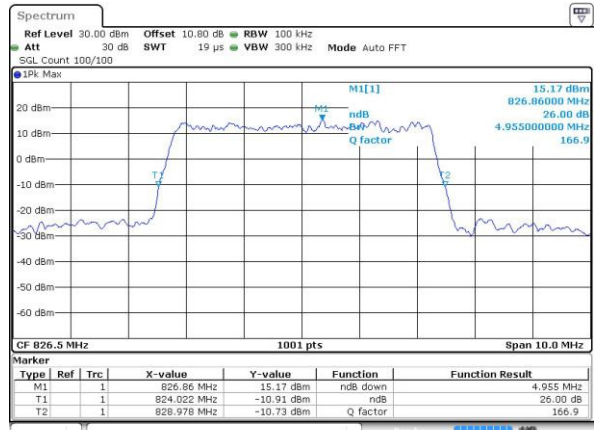


LTE Band 5

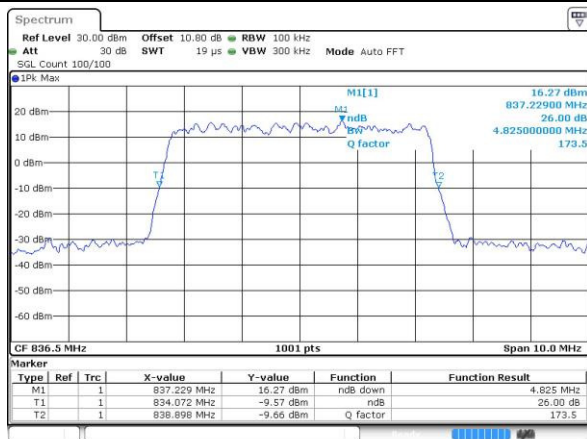
Lowest Channel / 5MHz / QPSK



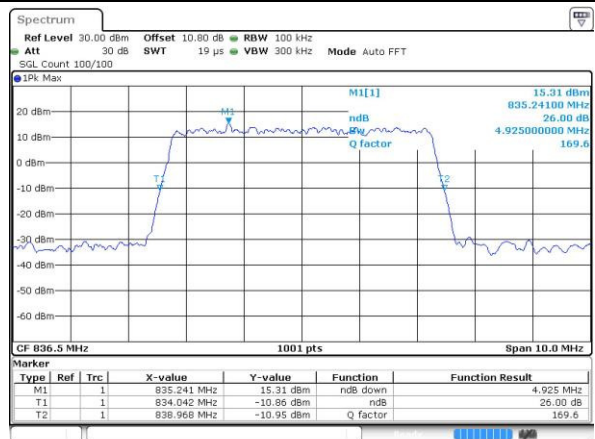
Lowest Channel / 5MHz / 16QAM



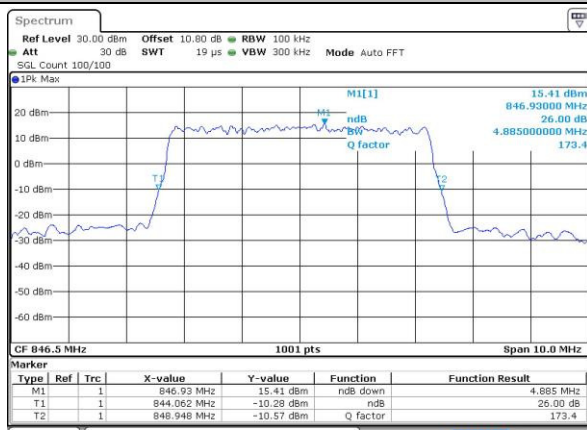
Middle Channel / 5MHz / QPSK



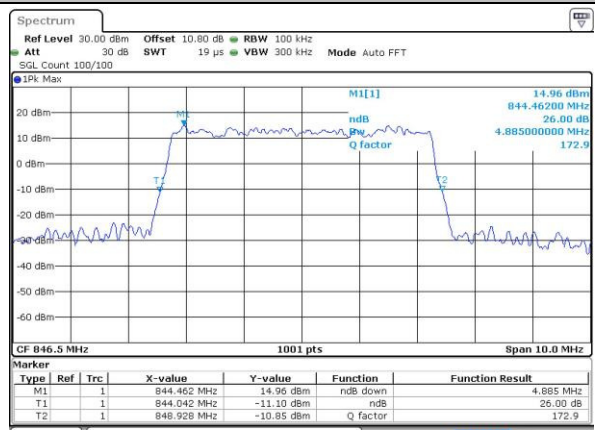
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



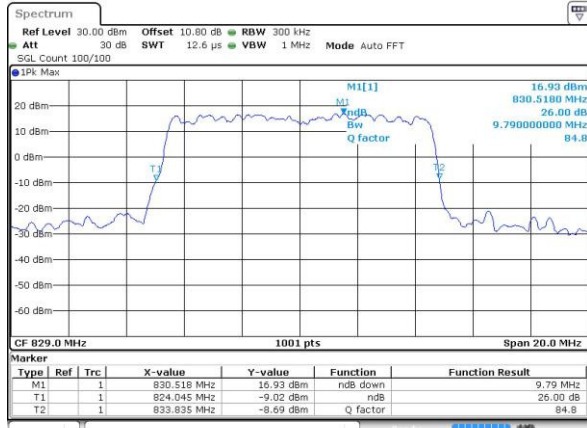
Highest Channel / 5MHz / 16QAM



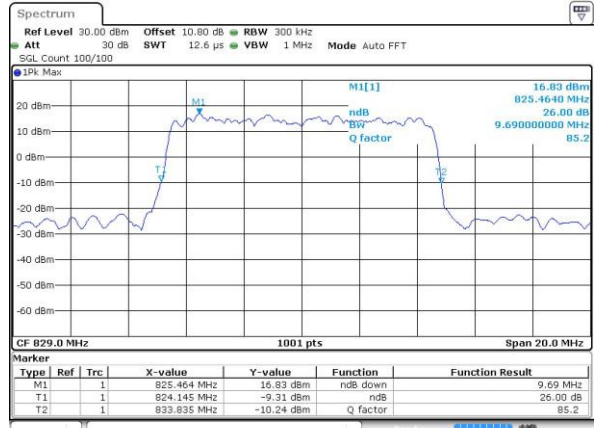


LTE Band 5

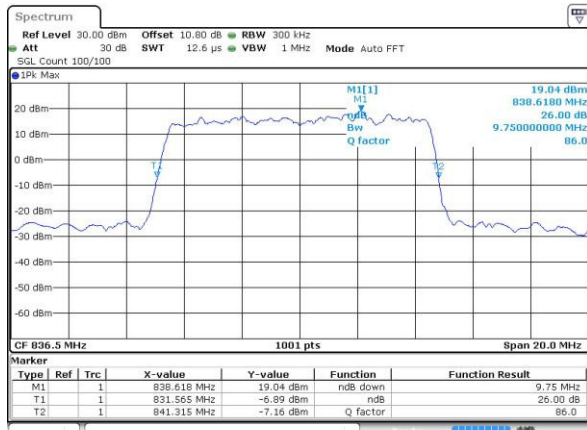
Lowest Channel / 10MHz / QPSK



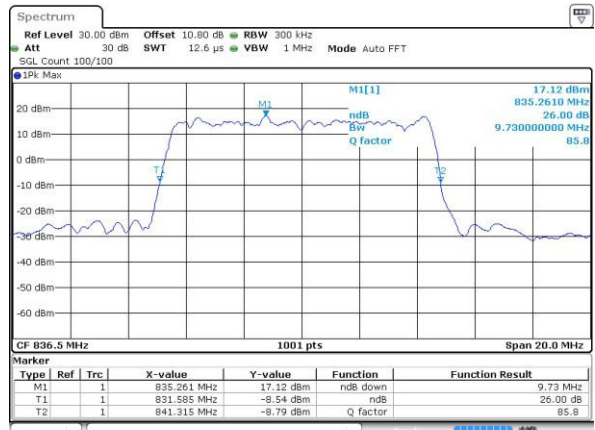
Lowest Channel / 10MHz / 16QAM



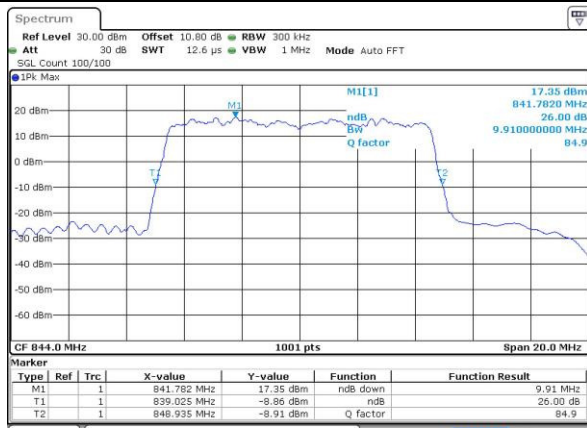
Middle Channel / 10MHz / QPSK



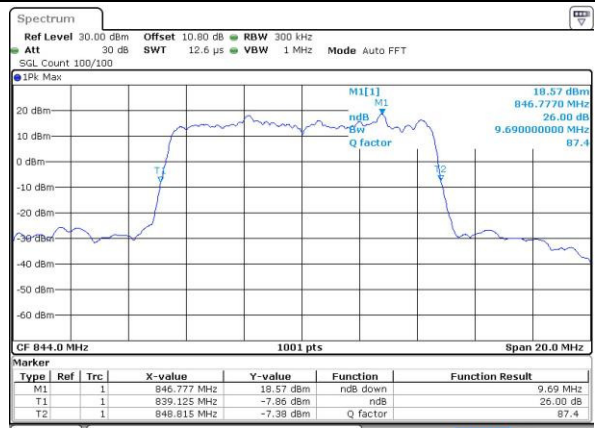
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



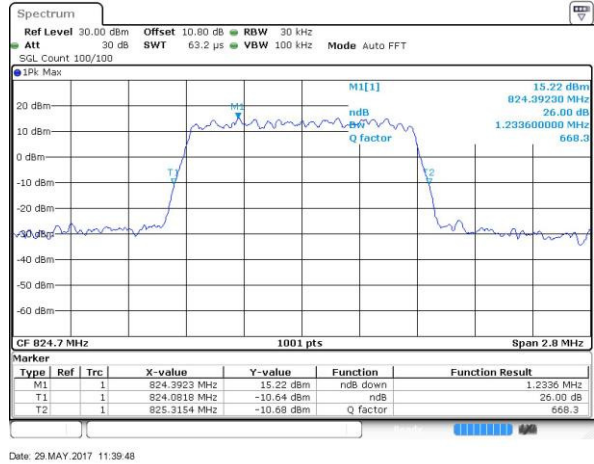
Highest Channel / 10MHz / 16QAM



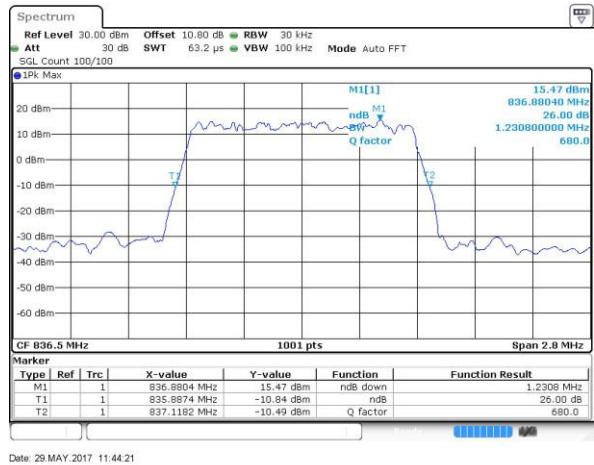


LTE Band 5

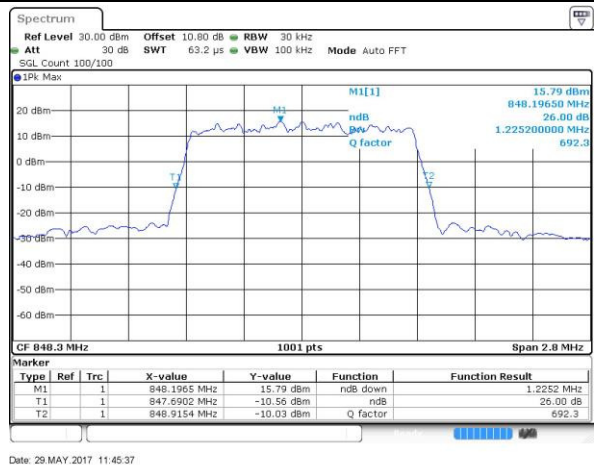
Lowest Channel / 1.4MHz / 64QAM



Middle Channel / 1.4MHz / 64QAM



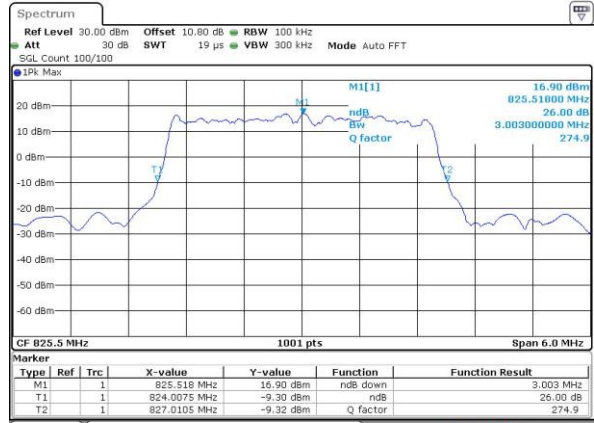
Highest Channel / 1.4MHz / 64QAM



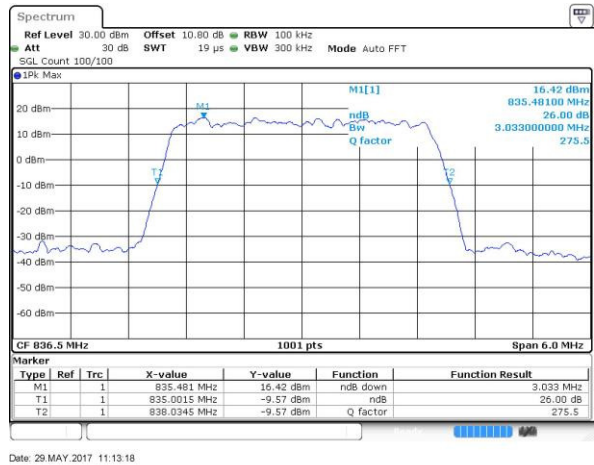


LTE Band 5

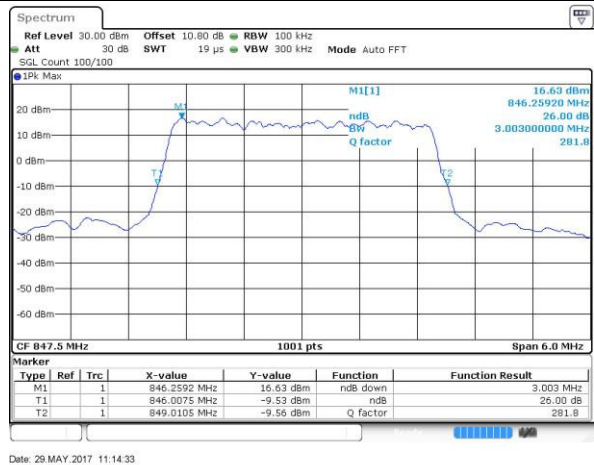
Lowest Channel / 3MHz / 64QAM



Middle Channel /3MHz / 64QAM



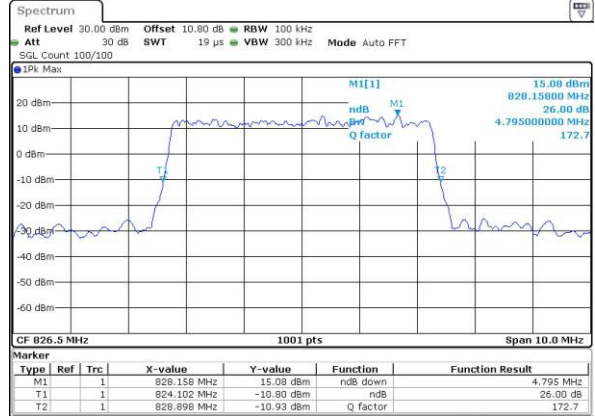
Highest Channel /3MHz / 64QAM



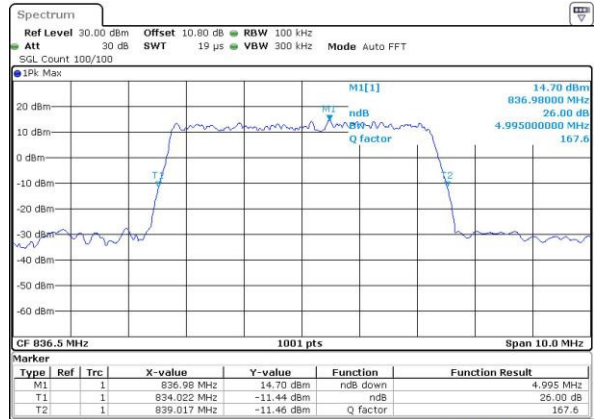


LTE Band 5

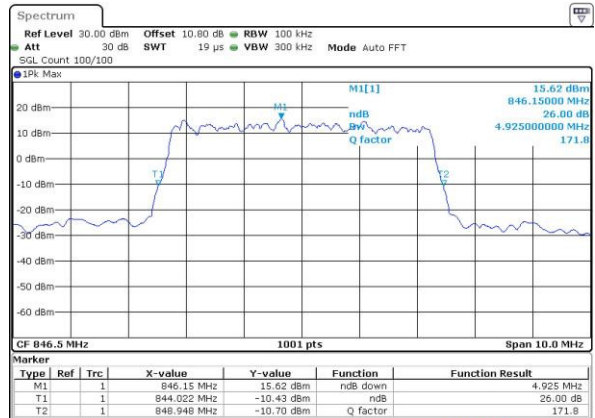
Lowest Channel / 5MHz / 64QAM



Middle Channel / 5MHz / 64QAM



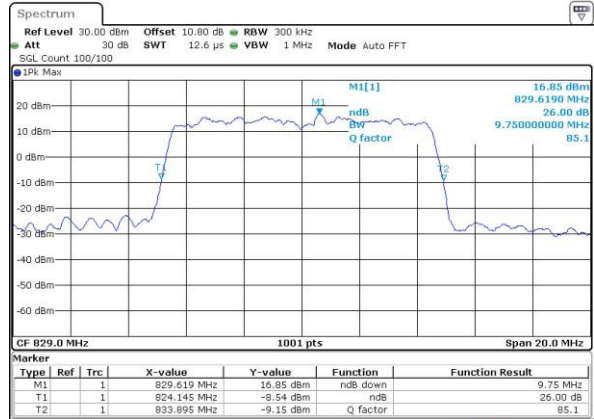
Highest Channel / 5MHz / 64QAM





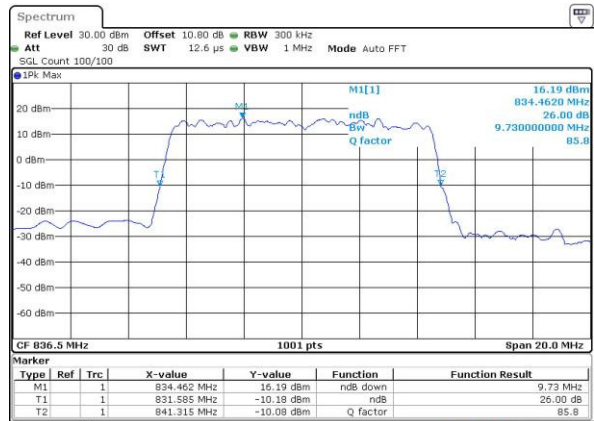
LTE Band 5

Lowest Channel / 10MHz / 64QAM



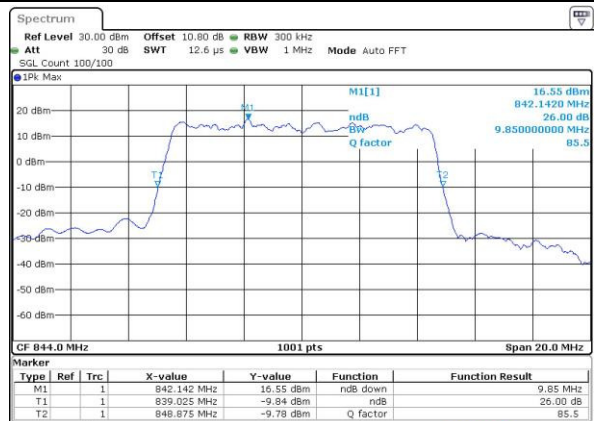
Date: 29 MAY 2017 11:29:27

Middle Channel / 10MHz / 64QAM



Date: 29 MAY 2017 11:34:00

Highest Channel / 10MHz / 64QAM



Date: 29 MAY 2017 11:35:15

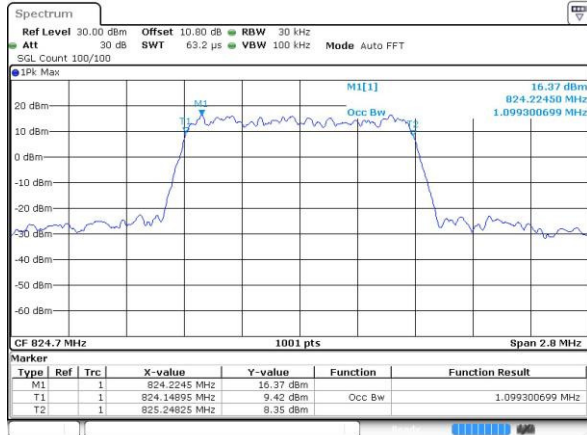
**Occupied Bandwidth**

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	2.73	4.5	4.48	9.09	8.99	-	-	-	-
Middle CH	1.09	1.08	2.73	2.72	4.5	4.49	9.03	9.09	-	-	-	-
Highest CH	1.09	1.09	2.72	2.7	4.51	4.51	9.03	9.01	-	-	-	-
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	-	2.71	-	4.49	-	9.05	-	-	-	-
Middle CH	-	1.09	-	2.72	-	4.51	-	9.05	-	-	-	-
Highest CH	-	1.1	-	2.73	-	4.48	-	9.05	-	-	-	-

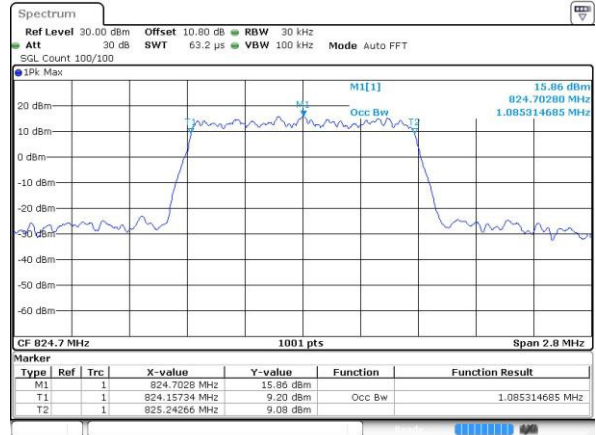


LTE Band 5

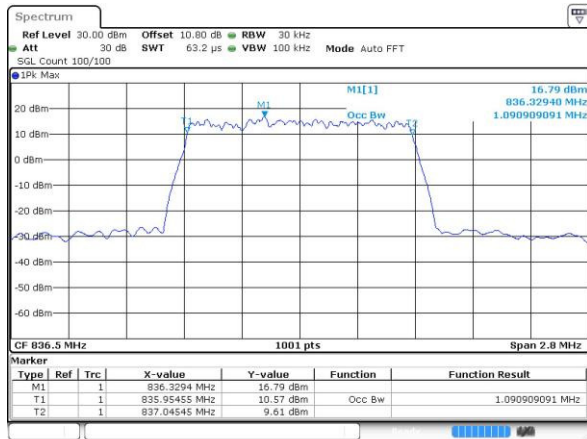
Lowest Channel / 1.4MHz / QPSK



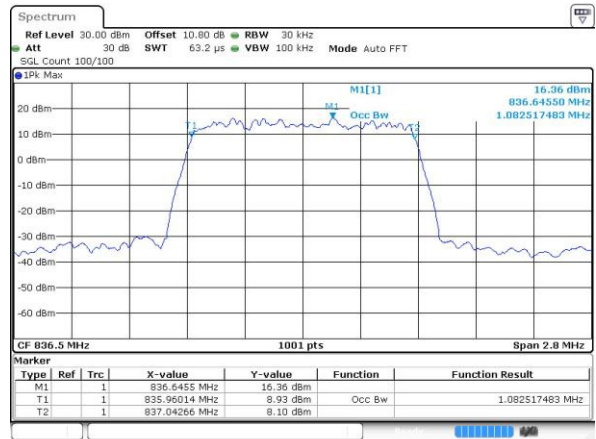
Lowest Channel / 1.4MHz / 16QAM



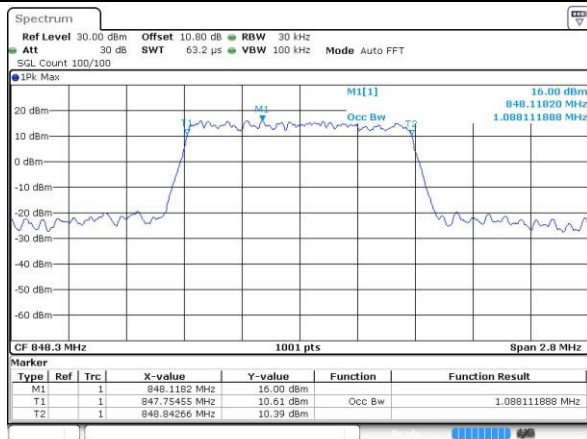
Middle Channel / 1.4MHz / QPSK



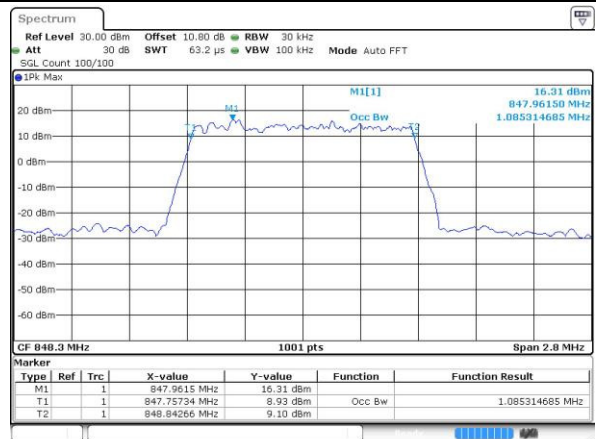
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



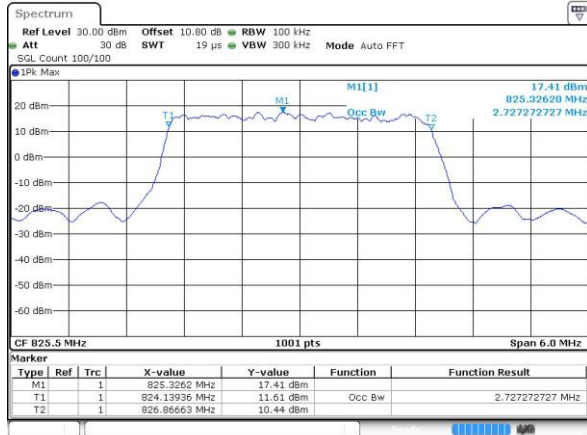
Highest Channel / 1.4MHz / 16QAM





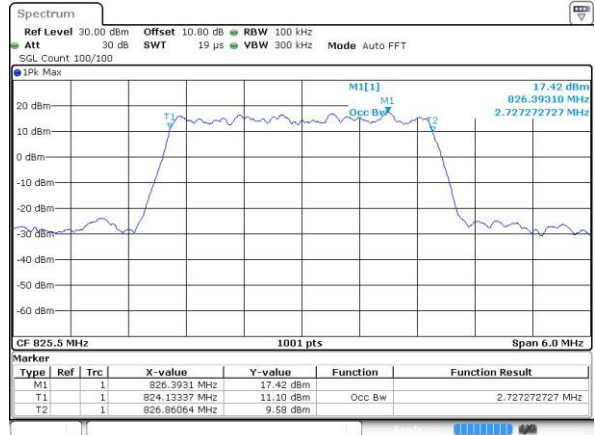
LTE Band 5

Lowest Channel / 3MHz / QPSK



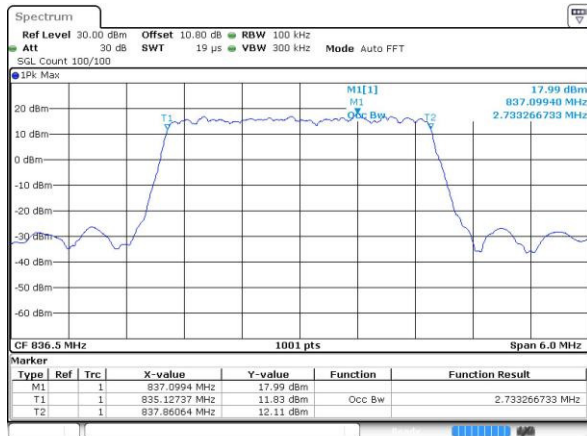
Date: 15 MAY 2017 16:08:43

Lowest Channel / 3MHz / 16QAM



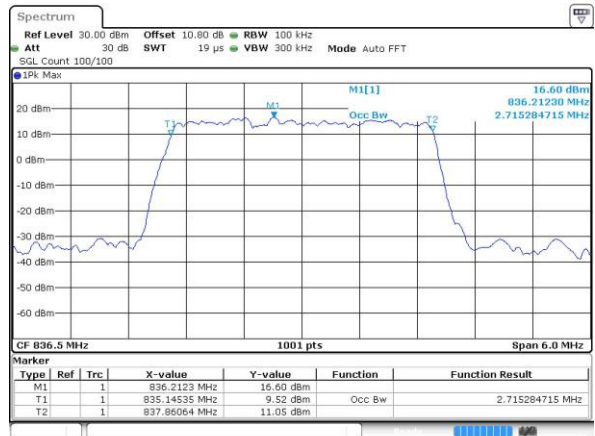
Date: 15 MAY 2017 16:08:53

Middle Channel / 3MHz / QPSK



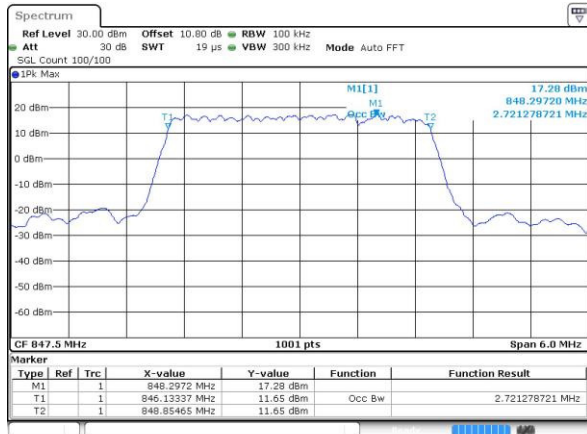
Date: 15 MAY 2017 16:39:20

Middle Channel / 3MHz / 16QAM



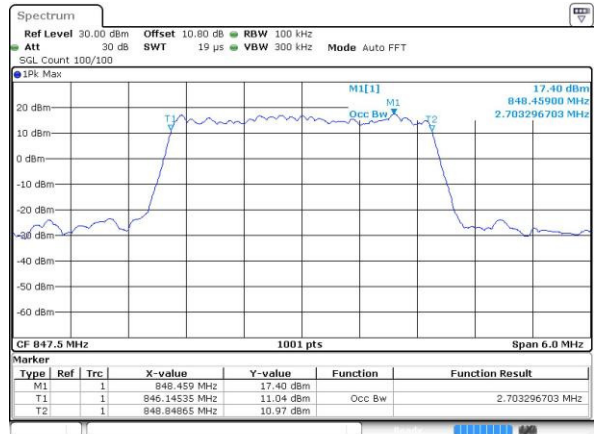
Date: 15 MAY 2017 16:39:31

Highest Channel / 3MHz / QPSK



Date: 15 MAY 2017 16:41:51

Highest Channel / 3MHz / 16QAM

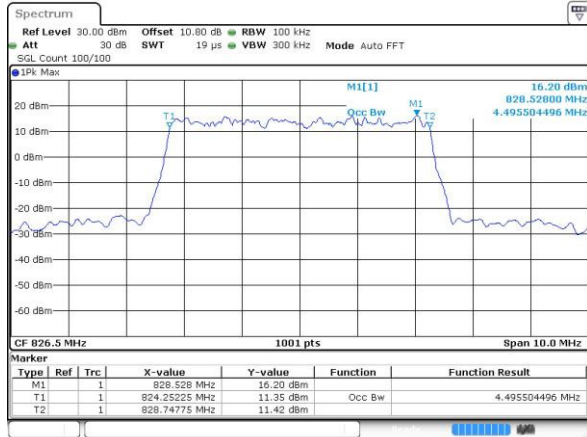


Date: 15 MAY 2017 16:42:01



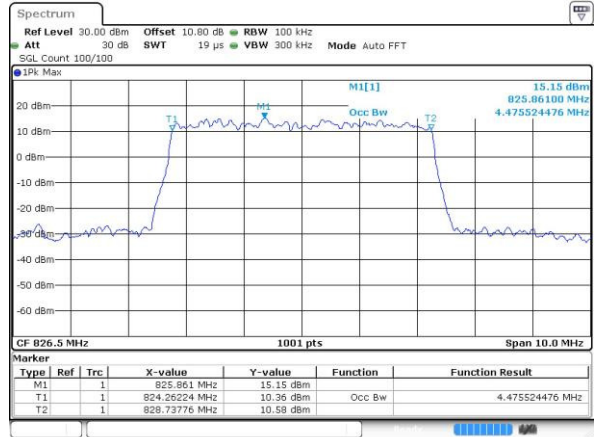
LTE Band 5

Lowest Channel / 5MHz / QPSK



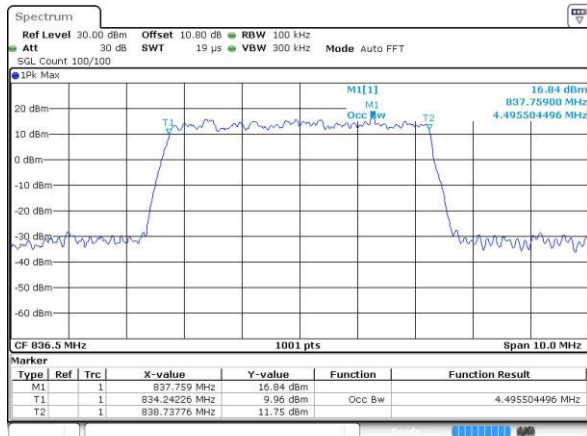
Date: 15 MAY 2017 16:50:57

Lowest Channel / 5MHz / 16QAM



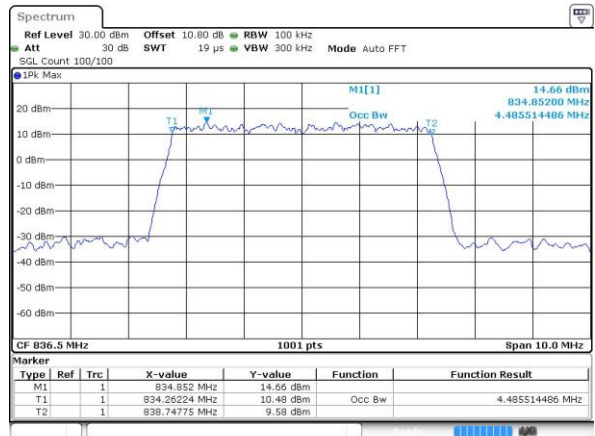
Date: 15 MAY 2017 16:51:07

Middle Channel / 5MHz / QPSK



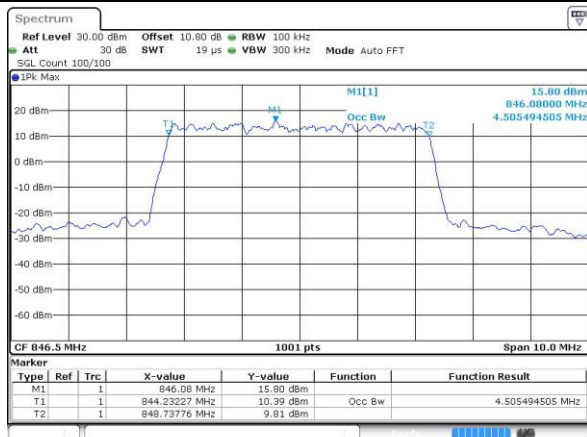
Date: 15 MAY 2017 17:00:03

Middle Channel / 5MHz / 16QAM



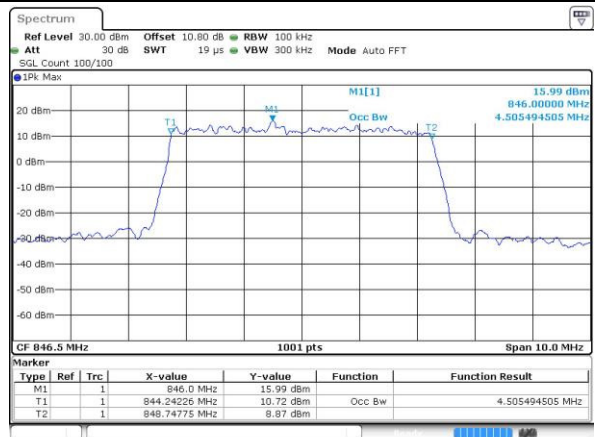
Date: 15 MAY 2017 17:00:13

Highest Channel / 5MHz / QPSK



Date: 15 MAY 2017 17:02:33

Highest Channel / 5MHz / 16QAM

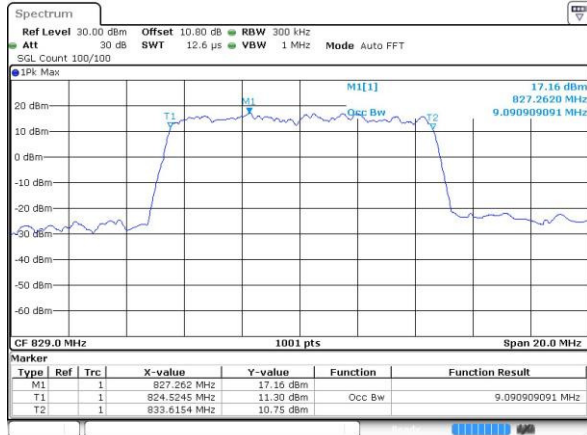


Date: 15 MAY 2017 17:02:43

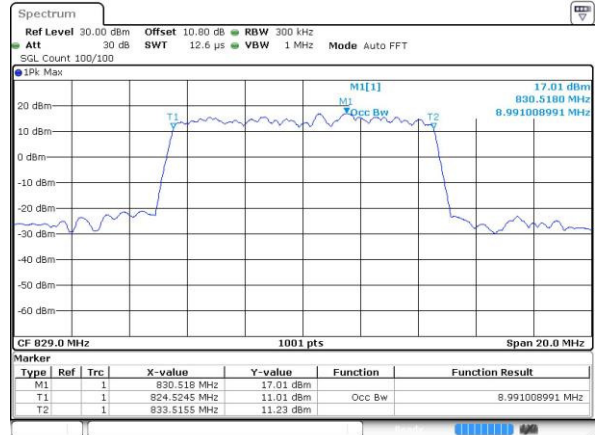


LTE Band 5

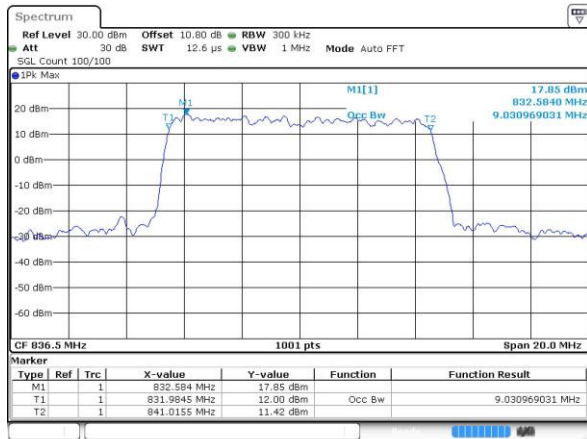
Lowest Channel / 10MHz / QPSK



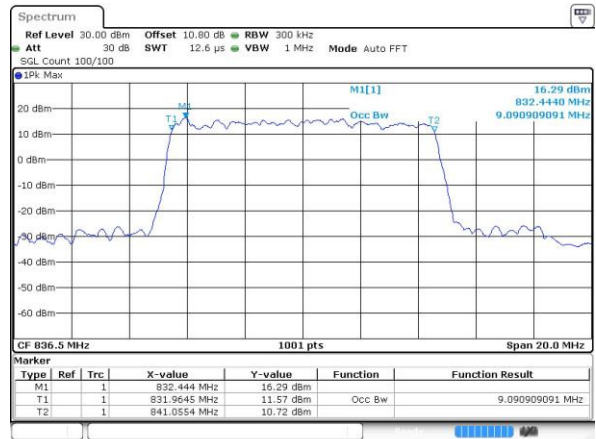
Lowest Channel / 10MHz / 16QAM



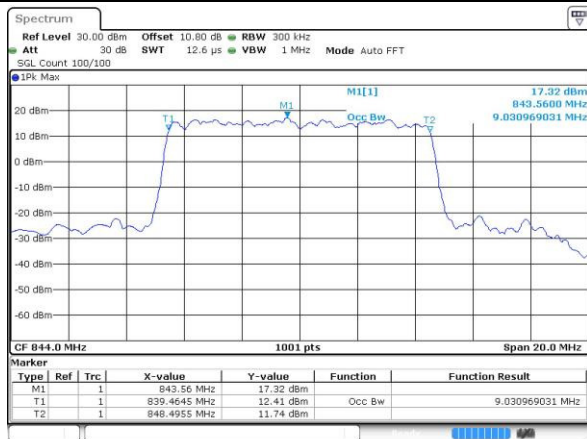
Middle Channel / 10MHz / QPSK



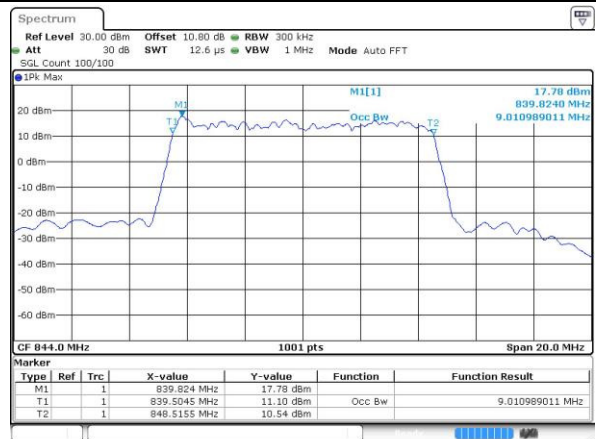
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



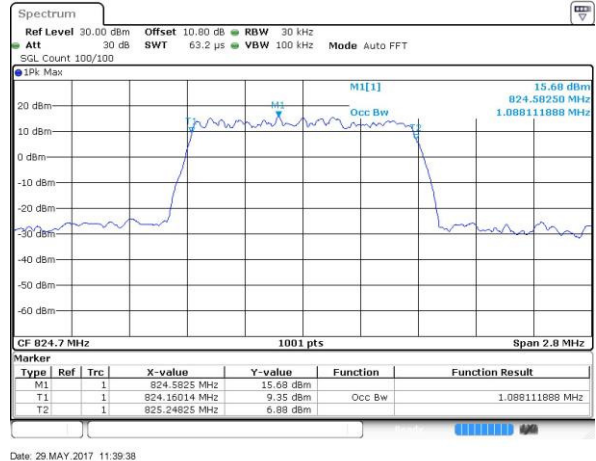
Highest Channel / 10MHz / 16QAM



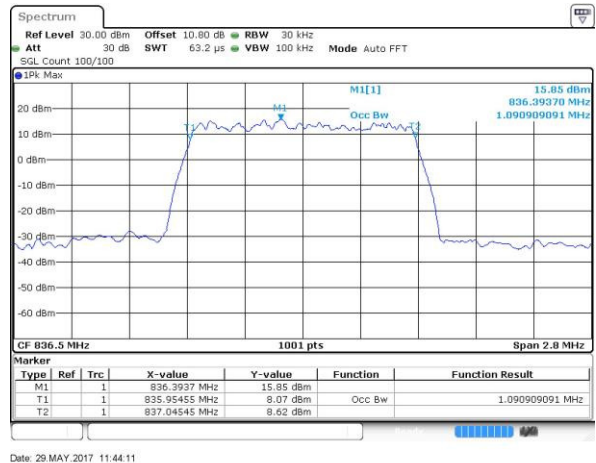


LTE Band 5

Lowest Channel / 1.4MHz / 64QAM



Middle Channel / 1.4MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM

