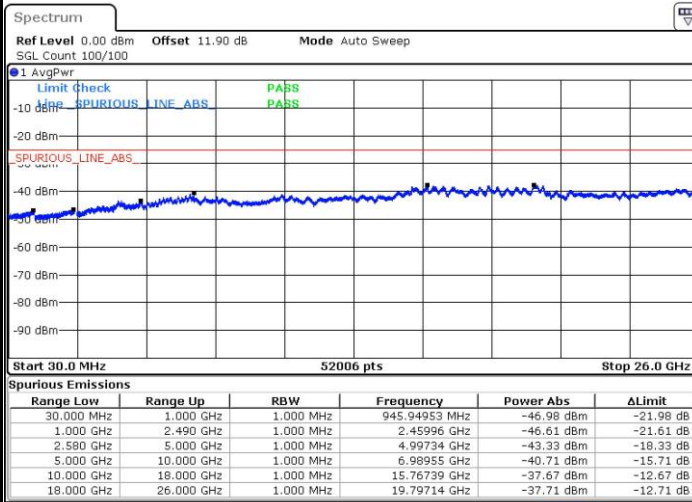




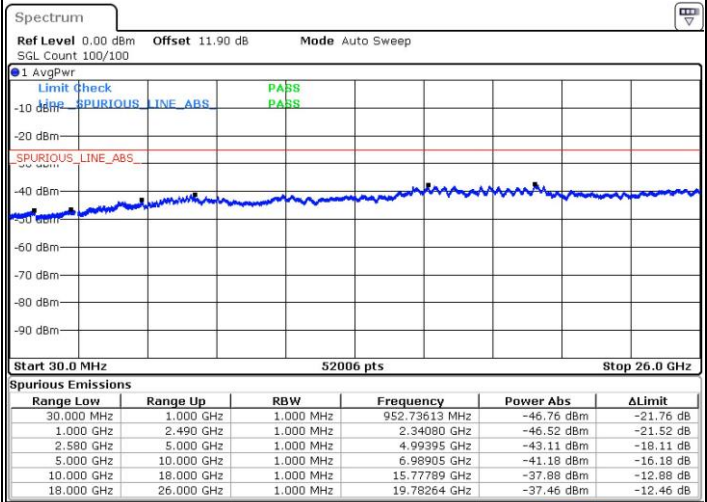
LTE Band 7 / 10MHz

Middle Channel / QPSK



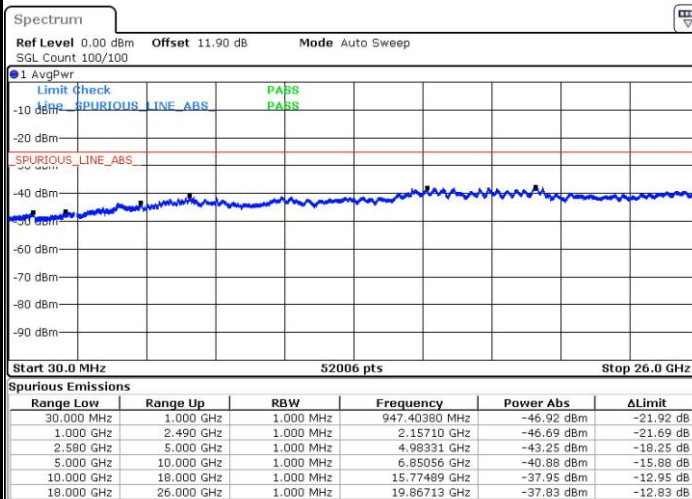
Date: 15 MAY 2017 22:28:40

Middle Channel / 16QAM



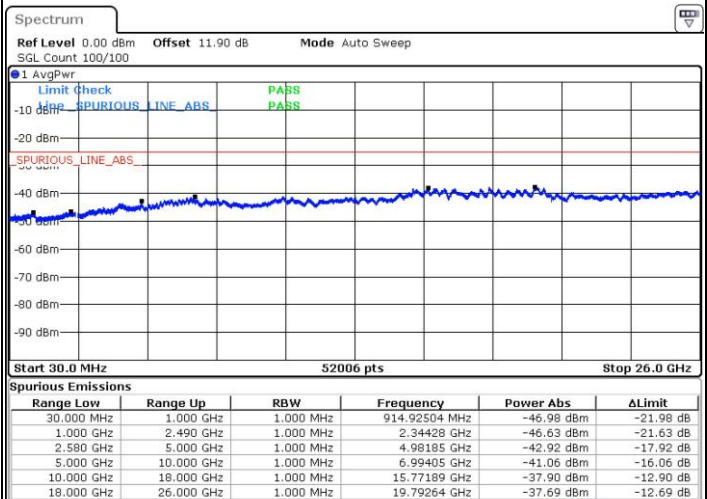
Date: 15 MAY 2017 22:29:34

Highest Channel / QPSK



Date: 15 MAY 2017 22:35:48

Highest Channel / 16QAM

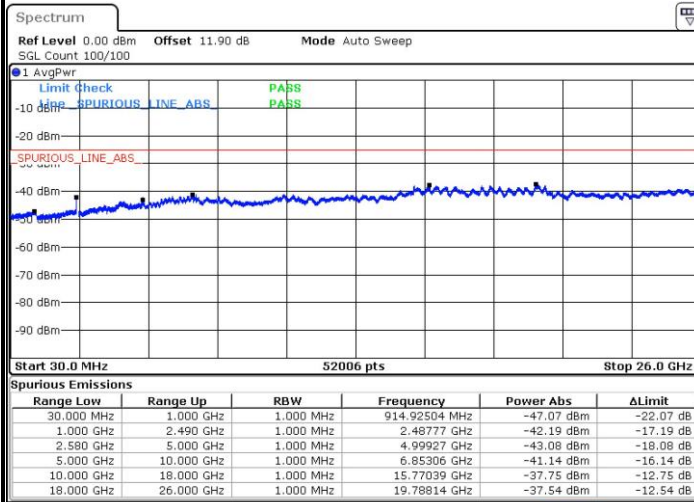


Date: 15 MAY 2017 22:36:42



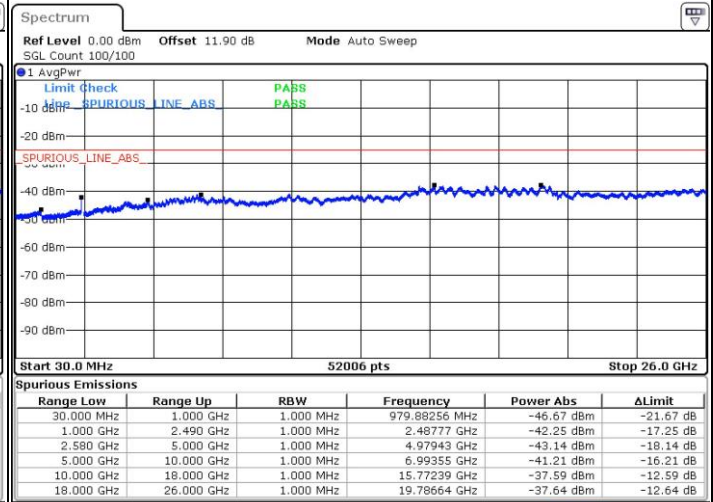
LTE Band 7 / 15MHz

Lowest Channel / QPSK



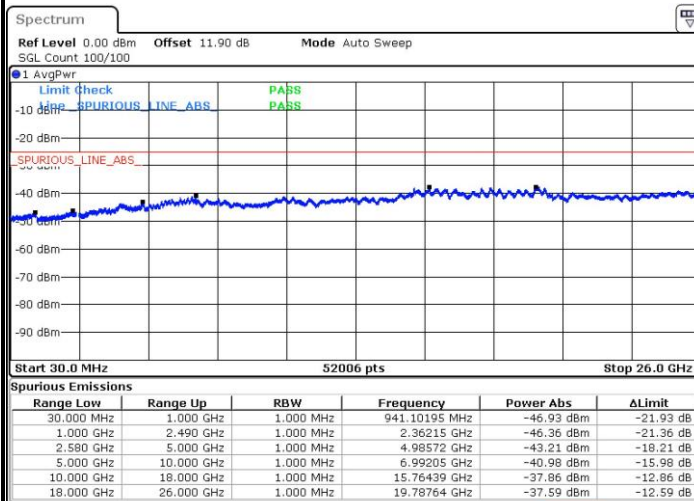
Date: 15 MAY 2017 22:42:55

Lowest Channel / 16QAM



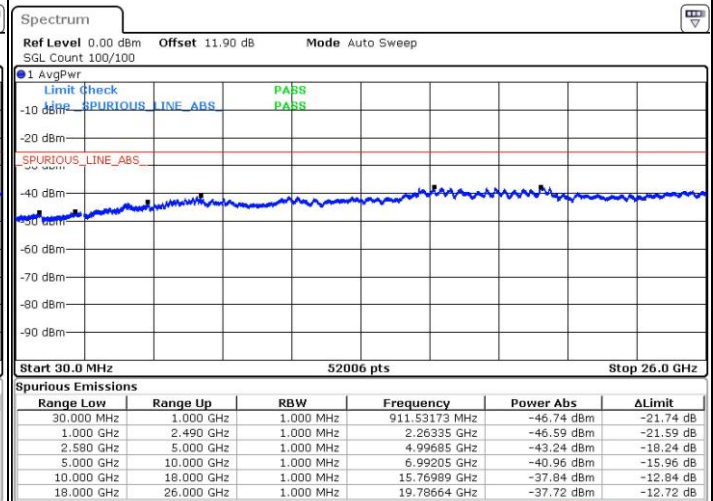
Date: 15 MAY 2017 22:43:49

Middle Channel / QPSK



Date: 15 MAY 2017 22:45:24

Middle Channel / 16QAM

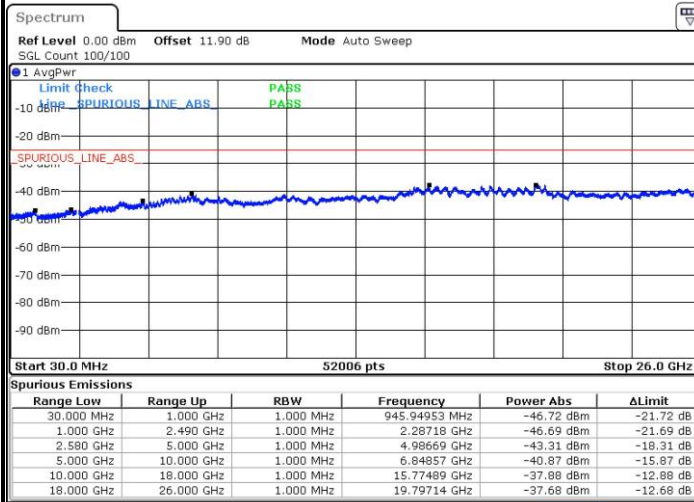


Date: 15 MAY 2017 22:46:18



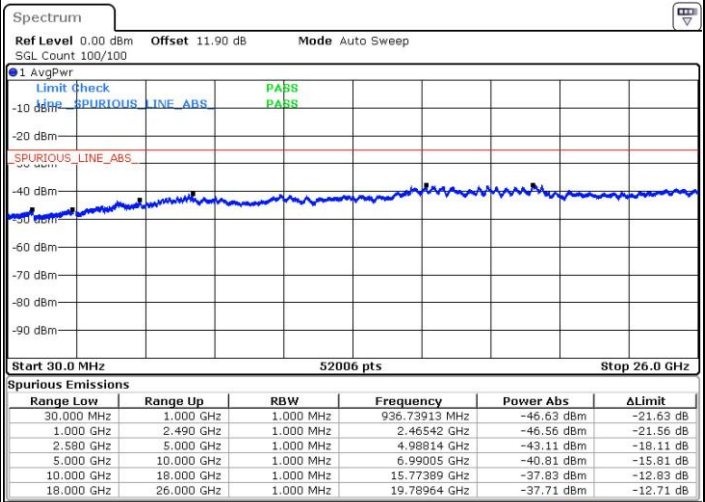
LTE Band 7 / 15MHz

Highest Channel / QPSK



Date: 15 MAY 2017 22:52:32

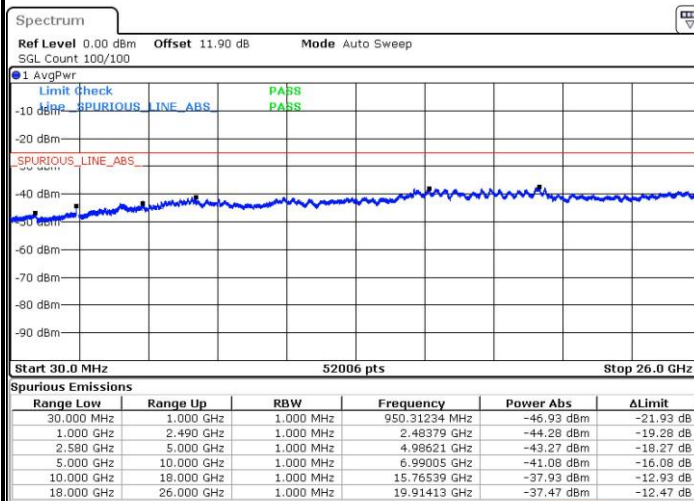
Highest Channel / 16QAM



Date: 15 MAY 2017 22:53:26

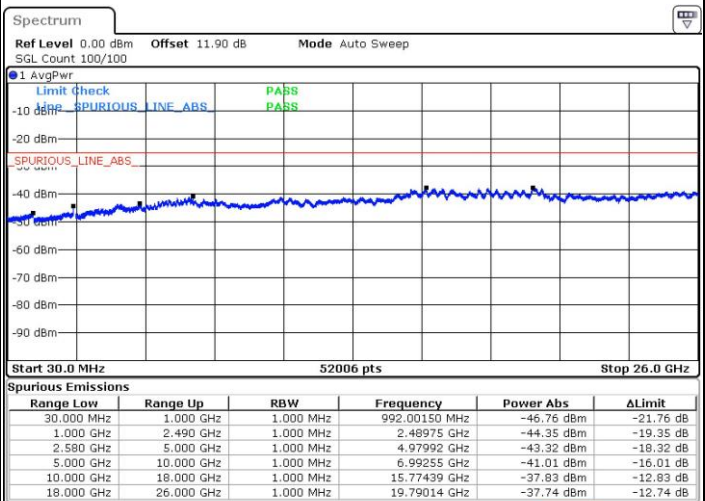
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 15 MAY 2017 22:59:40

Lowest Channel / 16QAM

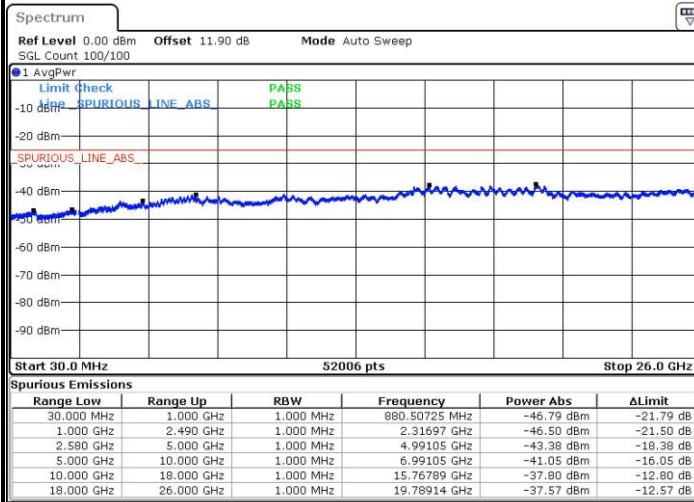


Date: 15 MAY 2017 23:00:34



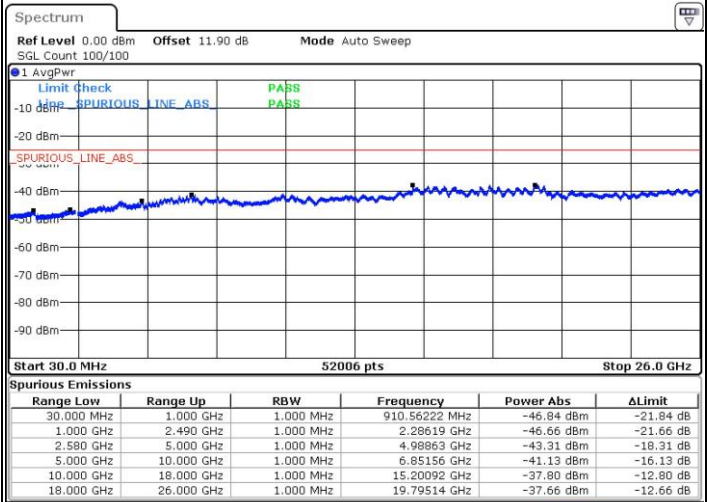
LTE Band 7 / 20MHz

Middle Channel / QPSK



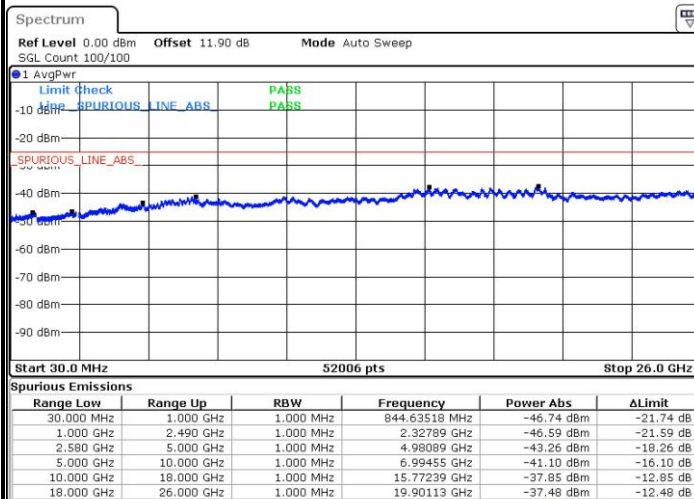
Date: 15 MAY 2017 23:02:08

Middle Channel / 16QAM



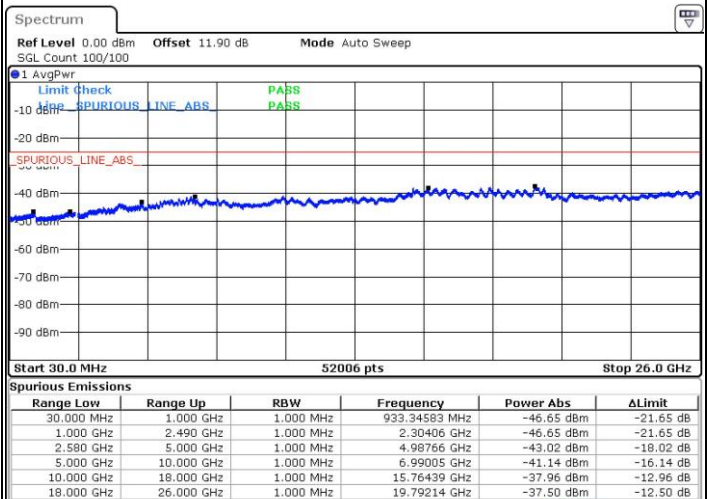
Date: 15 MAY 2017 23:03:02

Highest Channel / QPSK



Date: 15 MAY 2017 23:09:16

Highest Channel / 16QAM

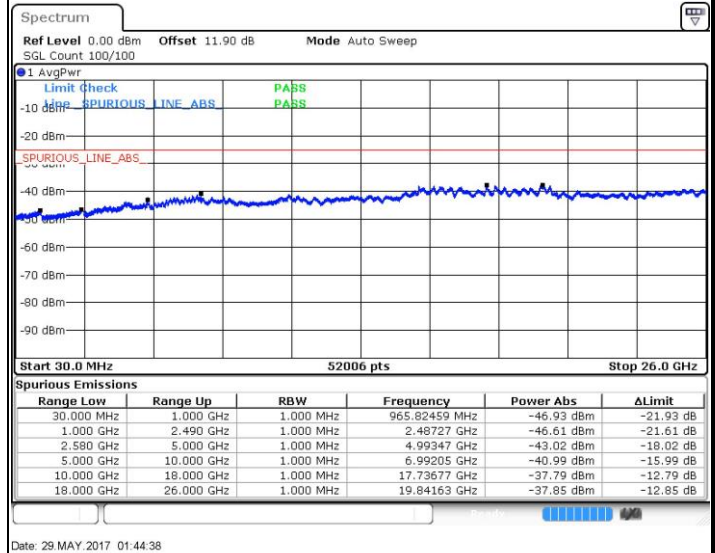


Date: 15 MAY 2017 23:10:10

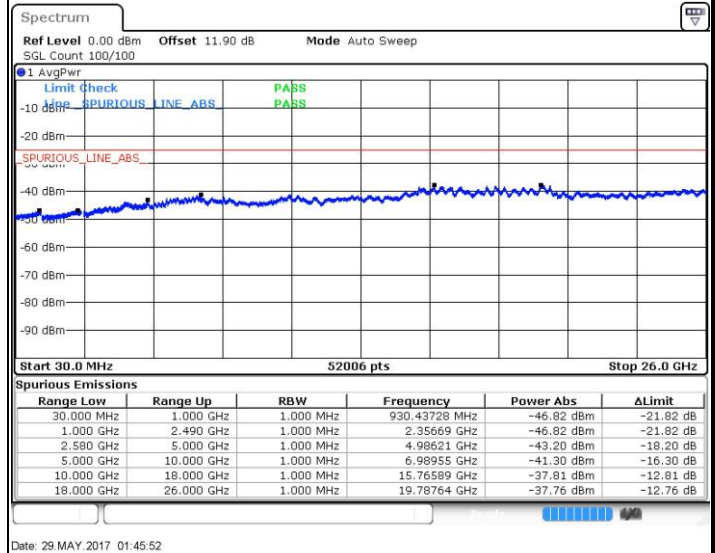


LTE Band 7 / 5MHz

Lowest Channel / 64QAM



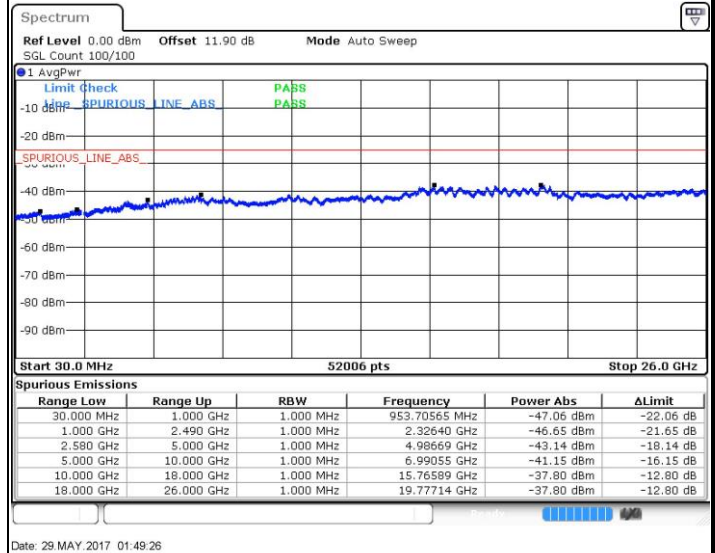
Middle Channel / 64QAM





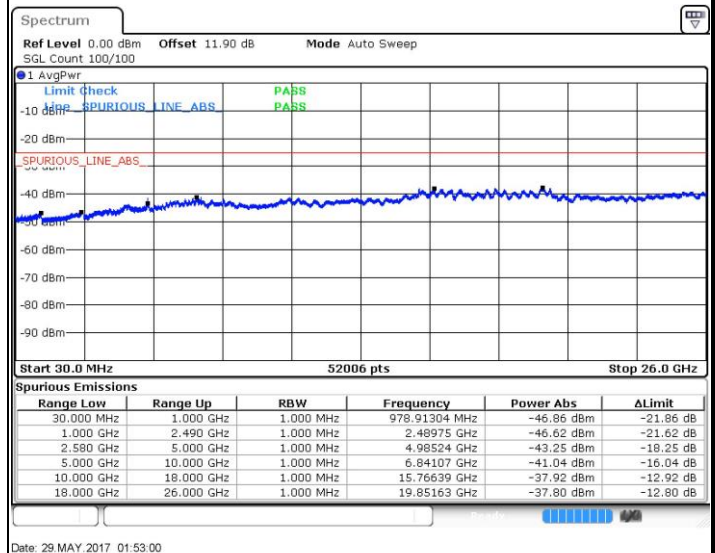
LTE Band 7 / 5MHz

Highest Channel / 64QAM



LTE Band 7 / 10MHz

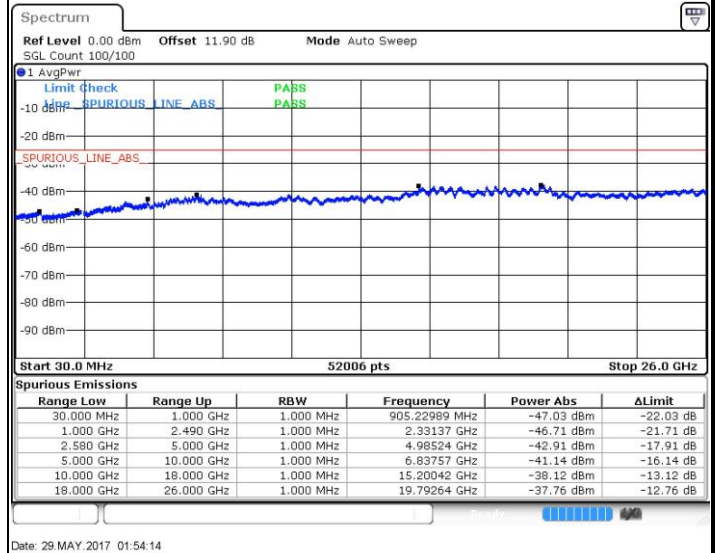
Lowest Channel / 64QAM



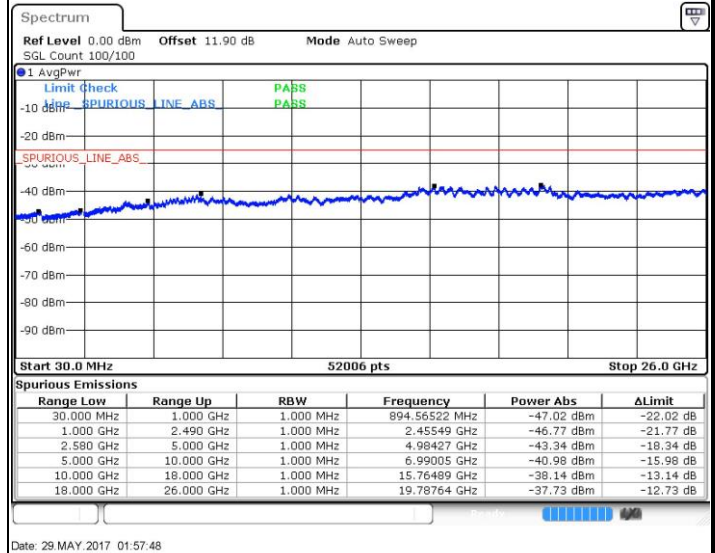


LTE Band 7 / 10MHz

Middle Channel / 64QAM



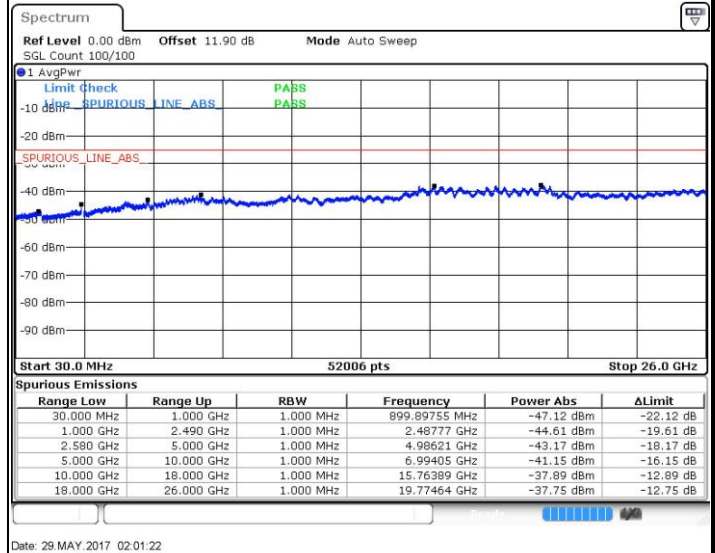
Highest Channel / 64QAM



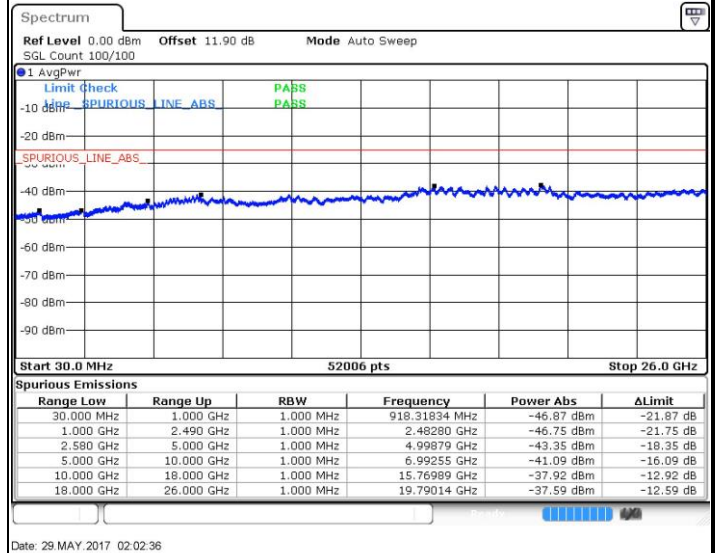


LTE Band 7 / 15MHz

Lowest Channel / 64QAM



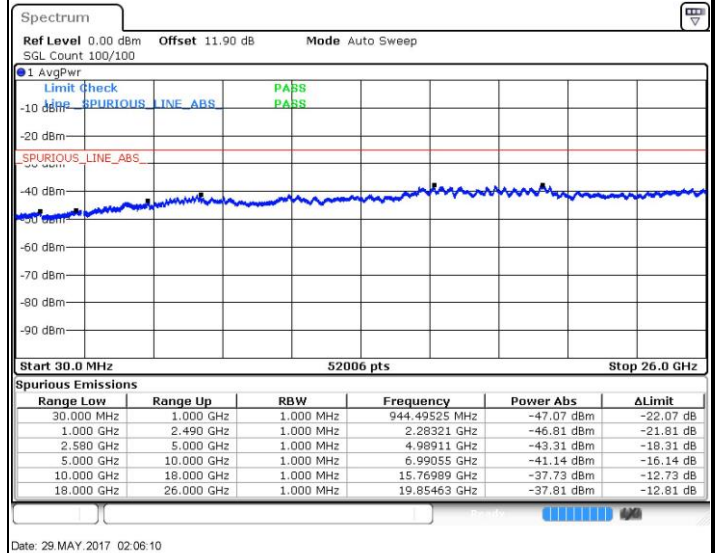
Middle Channel / 64QAM





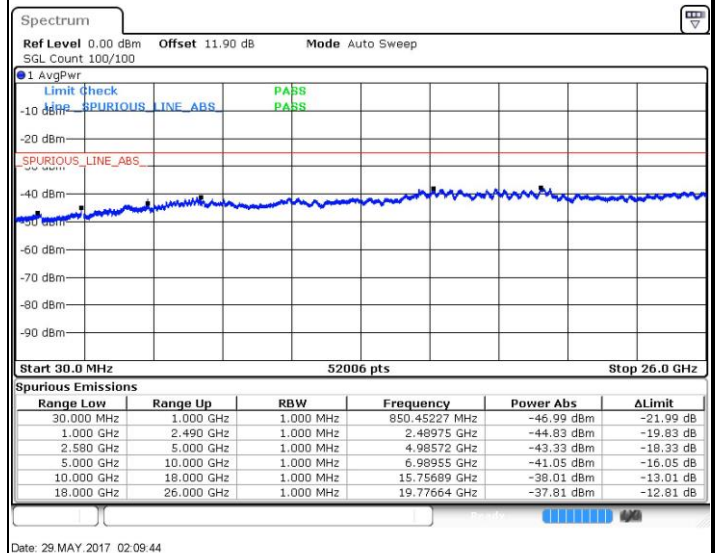
LTE Band 7 / 15MHz

Highest Channel / 64QAM



LTE Band 7 / 20MHz

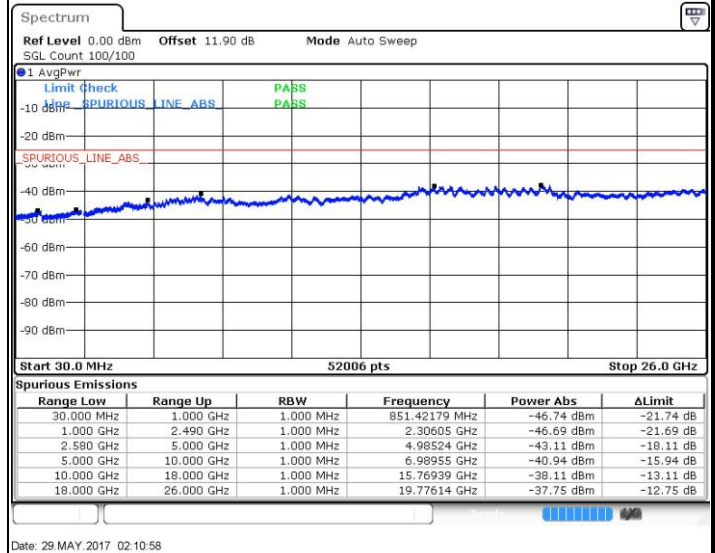
Lowest Channel / 64QAM



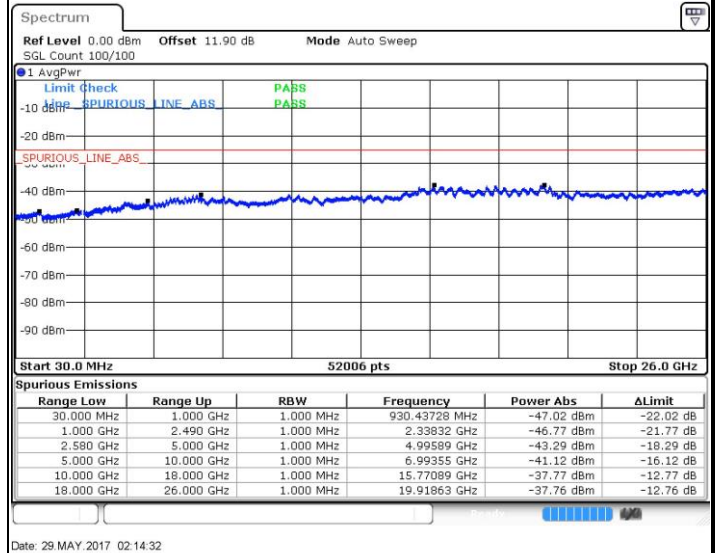


LTE Band 7 / 20MHz

Middle Channel / 64QAM



Highest Channel / 64QAM



Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0063	PASS
40	Normal Voltage	0.0057	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0061	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0005	
-30	Normal Voltage	0.0000	
20	Maximum Voltage	0.0059	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0057	

Note:

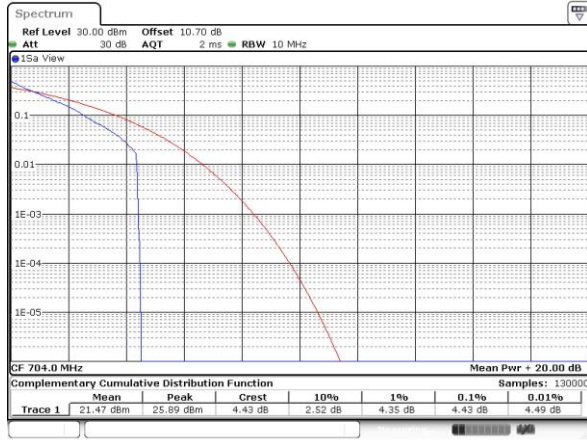
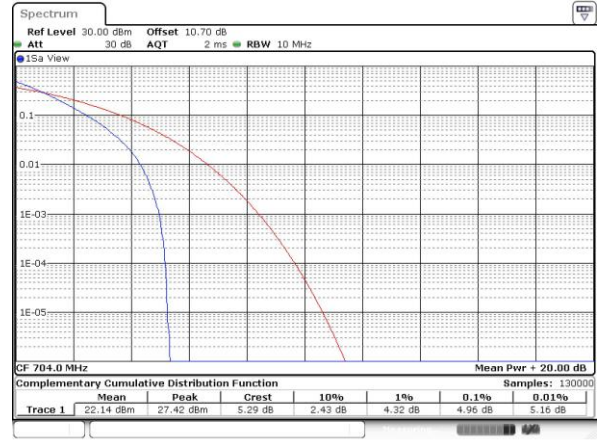
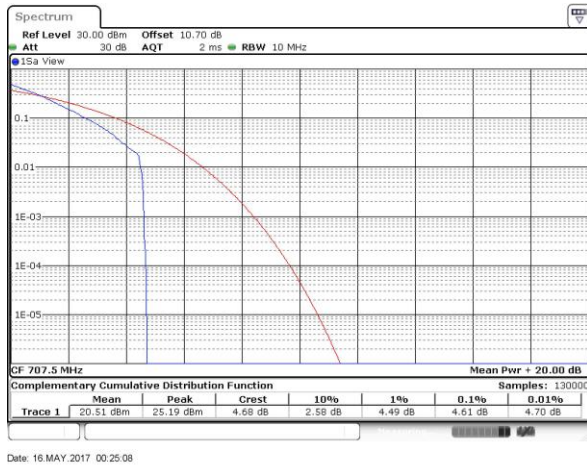
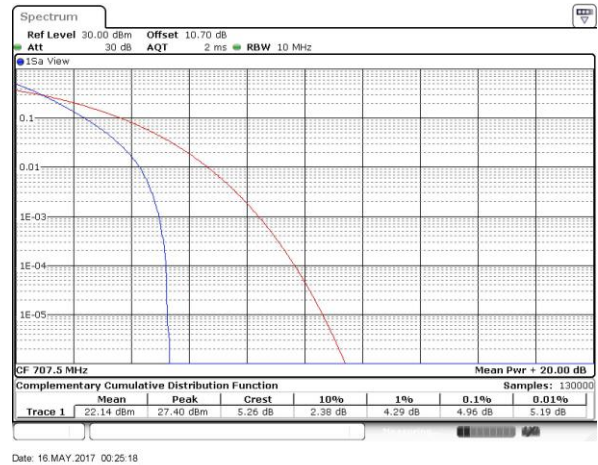
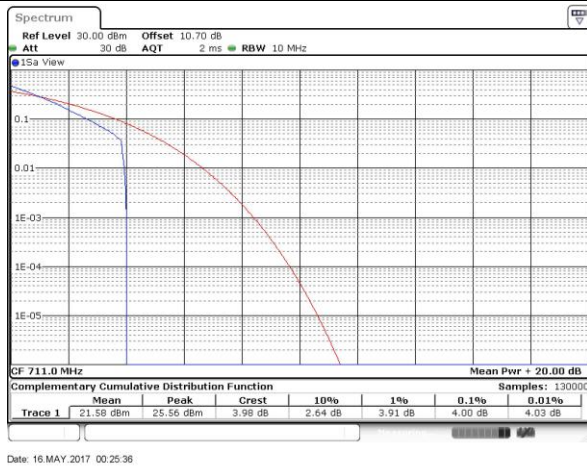
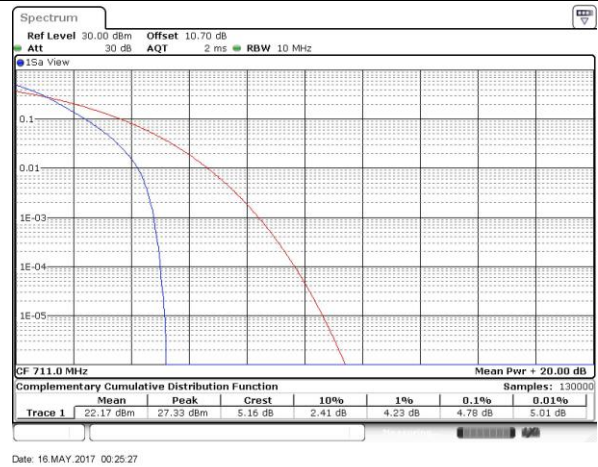
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

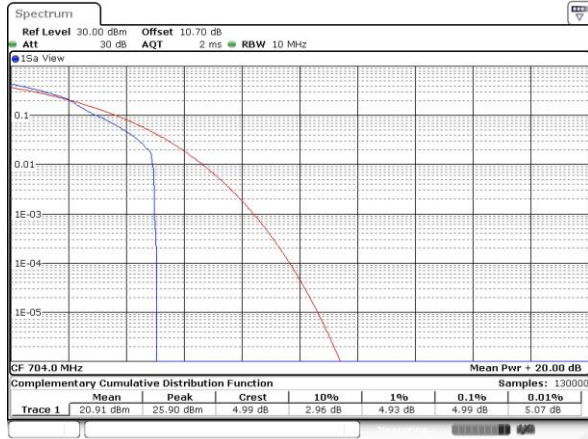


LTE Band 12

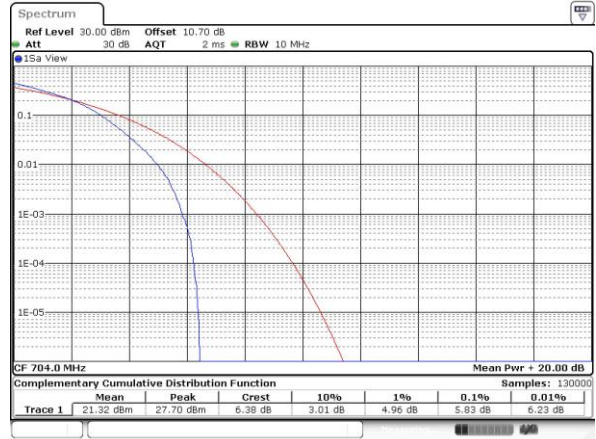
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.43	4.96	4.99	5.83	PASS
Middle CH	4.61	4.96	5.22	5.88	
Highest CH	4	4.78	4.72	5.8	
Mode	LTE Band 12 / 10MHz				
Mod.	-		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	5.25	5.88	PASS
Middle CH	-	-	5.01	5.86	
Highest CH	-	-	4.78	5.83	

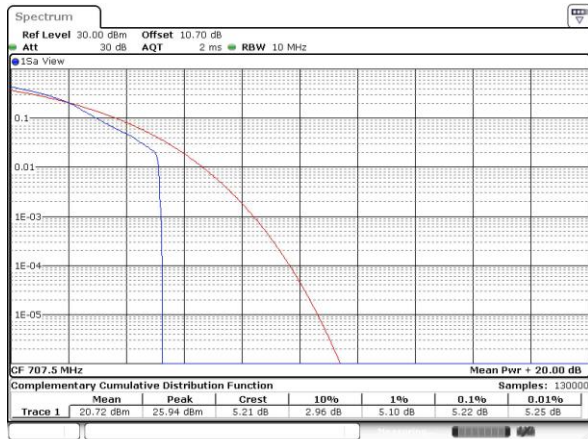
LTE Band 12 / 10MHz / QPSK
Lowest Channel / 1RB

Lowest Channel / Full RB

Middle Channel / 1RB

Middle Channel / Full RB

Highest Channel / 1RB

Highest Channel / Full RB


LTE Band 12 / 10MHz / 16QAM
Lowest Channel / 1RB


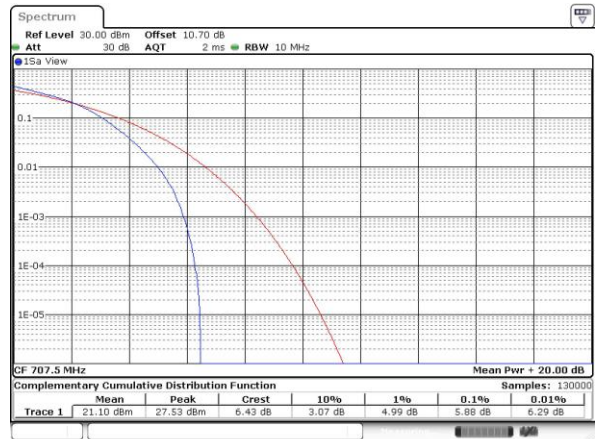
Date: 16 MAY 2017 00:24:01

Lowest Channel / Full RB


Date: 16 MAY 2017 00:23:51

Middle Channel / 1RB


Date: 16 MAY 2017 00:24:10

Middle Channel / Full RB


Date: 16 MAY 2017 00:24:20

Highest Channel / 1RB


Date: 16 MAY 2017 00:24:39

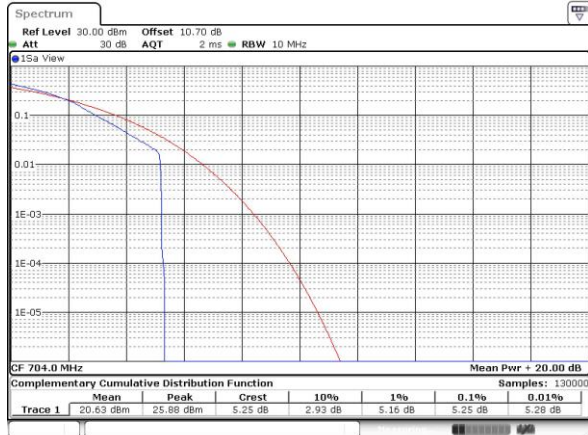
Highest Channel / Full RB


Date: 16 MAY 2017 00:24:29

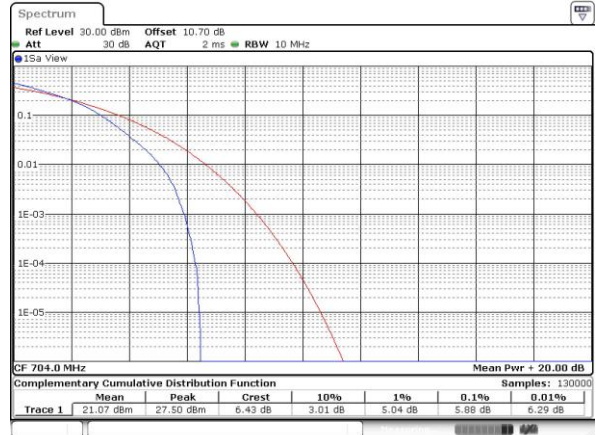


LTE Band 12 / 10MHz / 64QAM

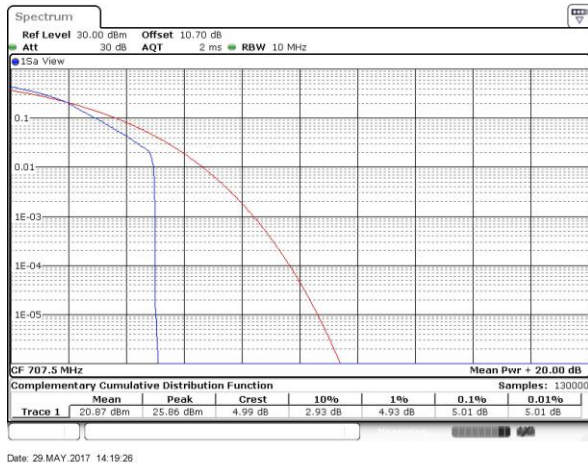
Lowest Channel / 1RB



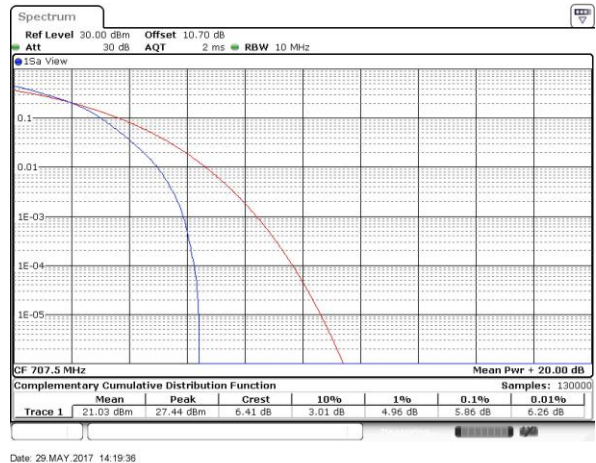
Lowest Channel / Full RB



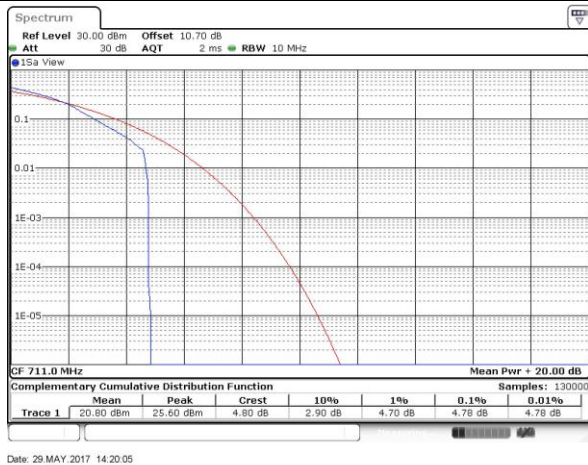
Middle Channel / 1RB



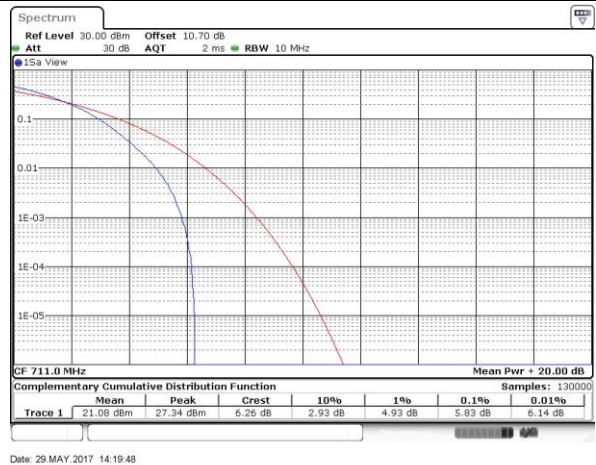
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



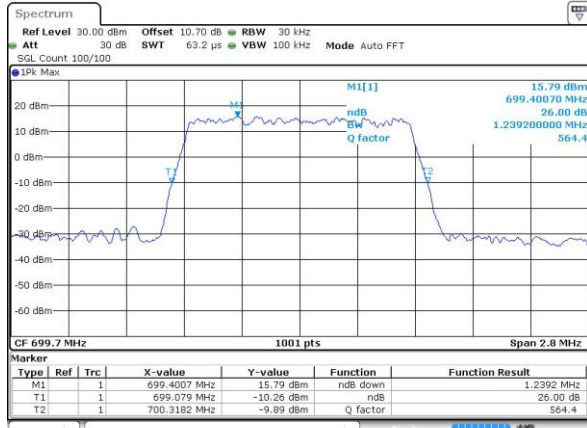
**26dB Bandwidth**

Mode	LTE Band 12 : 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	3.05	3.00	4.83	4.85	9.85	9.79	-	-	-	-
Middle CH	1.22	1.23	3.03	3.04	4.94	4.87	9.85	9.73	-	-	-	-
Highest CH	1.23	1.23	3.00	3.02	4.91	4.83	9.73	9.75	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	1.23	-	3.06	-	4.92	-	9.81	-	-	-	-
Middle CH	-	1.24	-	3.02	-	4.81	-	9.71	-	-	-	-
Highest CH	-	1.23	-	2.99	-	4.85	-	9.75	-	-	-	-



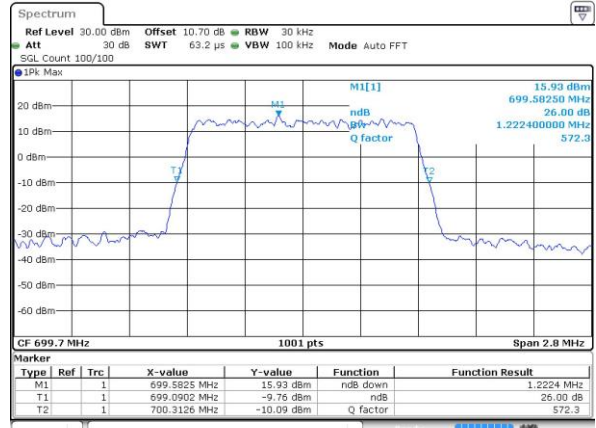
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



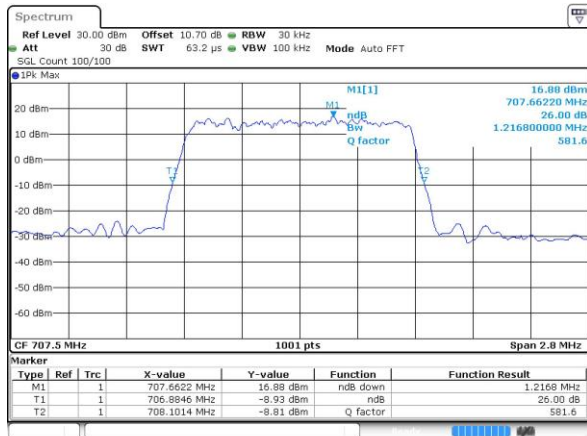
Date: 16 MAY 2017 00:26:53

Lowest Channel / 1.4MHz / 16QAM



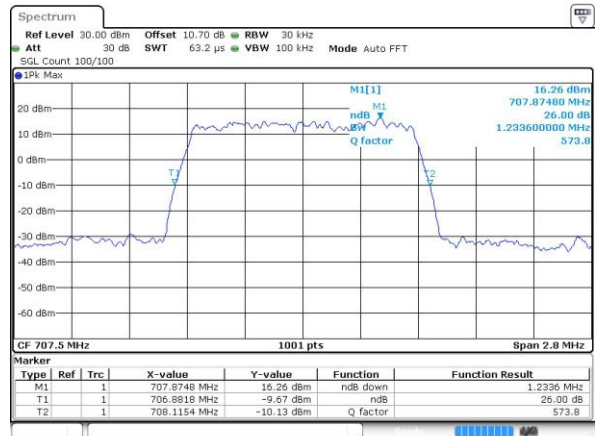
Date: 16 MAY 2017 00:27:13

Middle Channel / 1.4MHz / QPSK



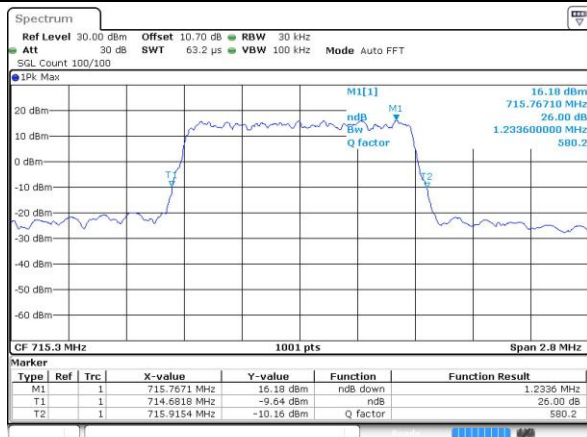
Date: 16 MAY 2017 00:14:11

Middle Channel / 1.4MHz / 16QAM



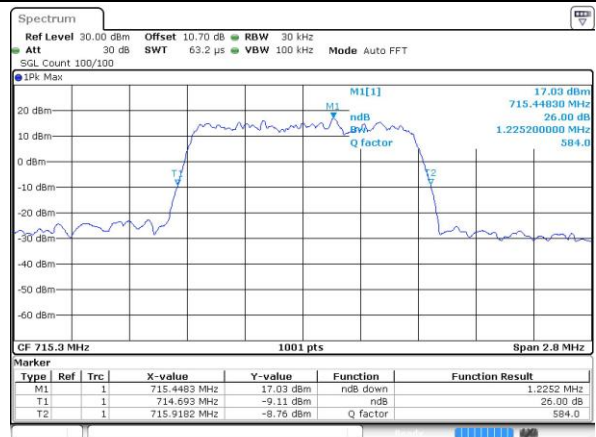
Date: 16 MAY 2017 00:14:21

Highest Channel / 1.4MHz / QPSK



Date: 16 MAY 2017 00:16:51

Highest Channel / 1.4MHz / 16QAM

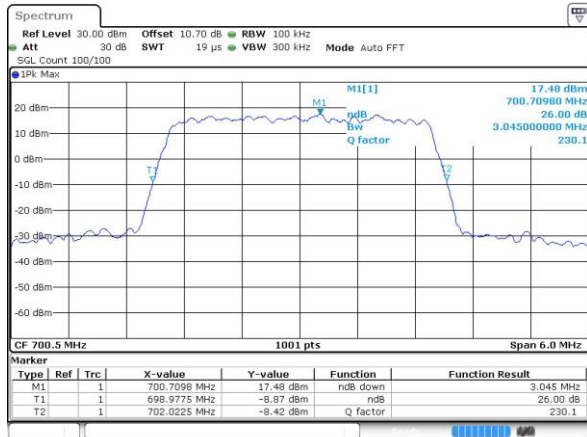


Date: 16 MAY 2017 00:16:41

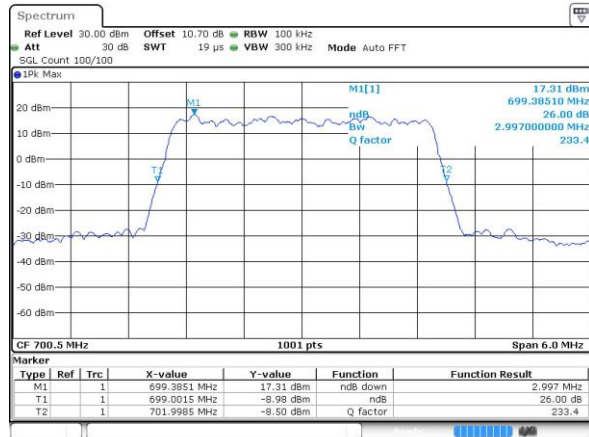


LTE Band 12

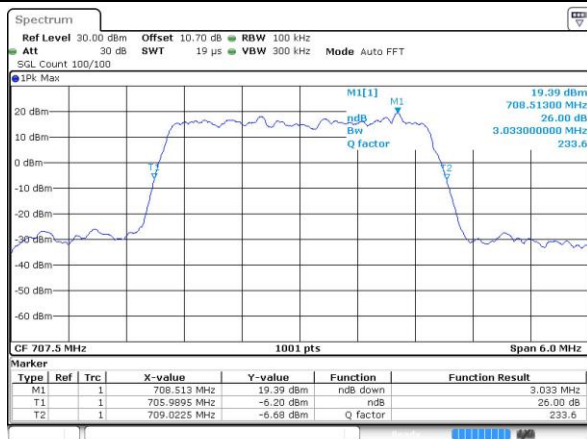
Lowest Channel / 3MHz / QPSK



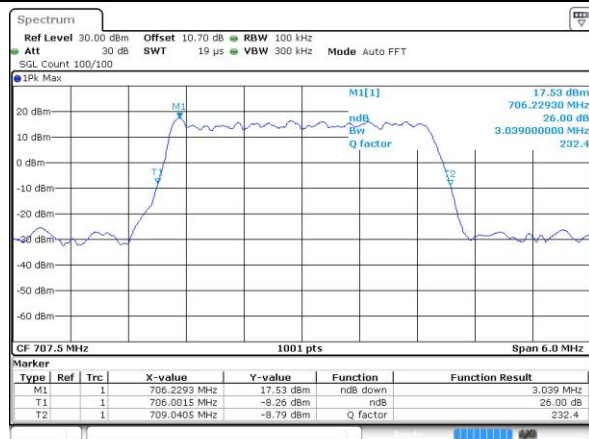
Lowest Channel / 3MHz / 16QAM



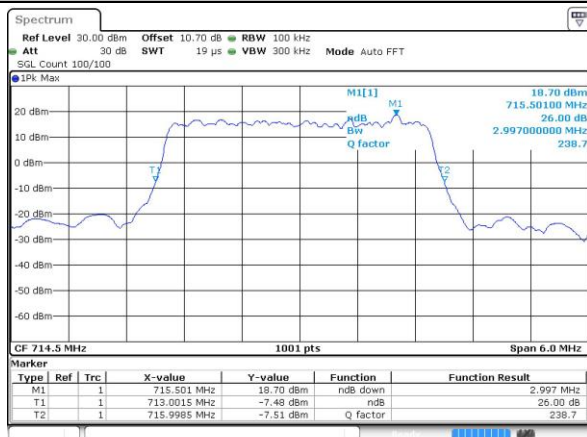
Middle Channel / 3MHz / QPSK



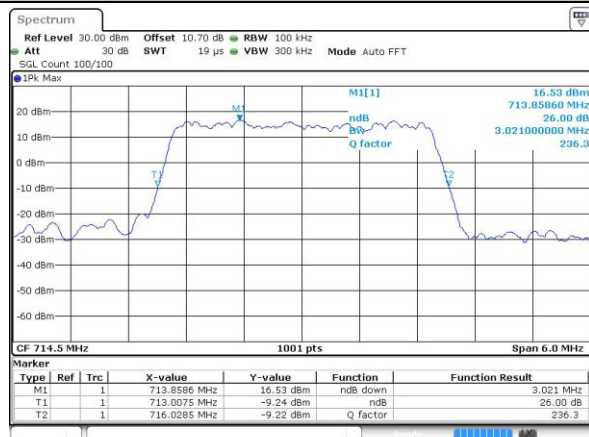
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



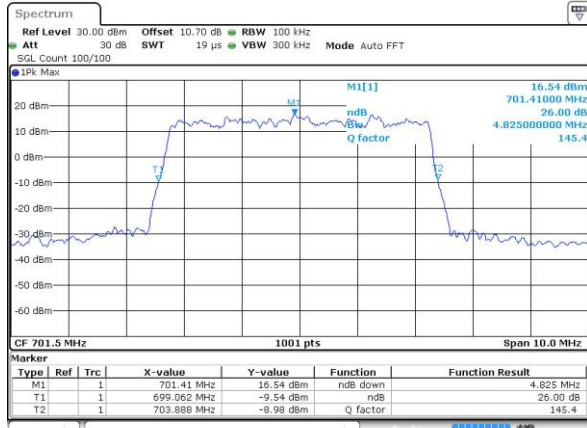
Highest Channel / 3MHz / 16QAM





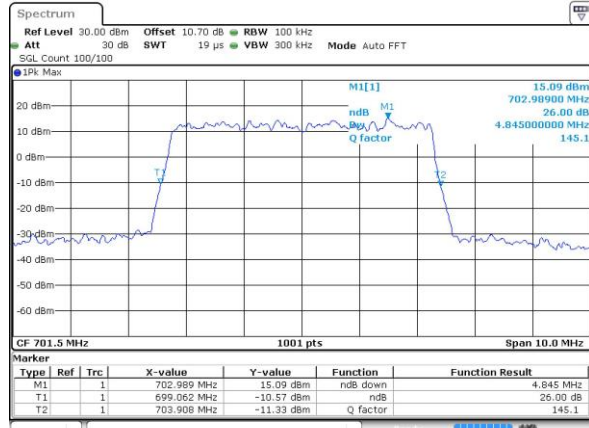
LTE Band 12

Lowest Channel / 5MHz / QPSK



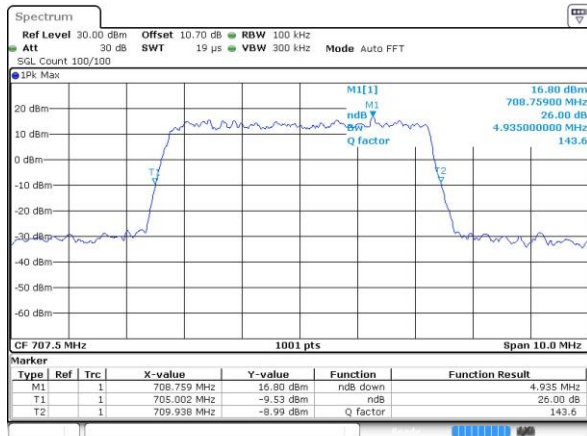
Date: 15 MAY 2017 23:32:57

Lowest Channel / 5MHz / 16QAM



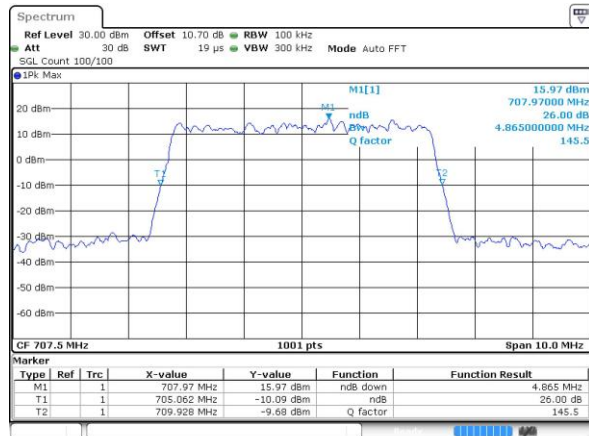
Date: 15 MAY 2017 23:32:47

Middle Channel / 5MHz / QPSK



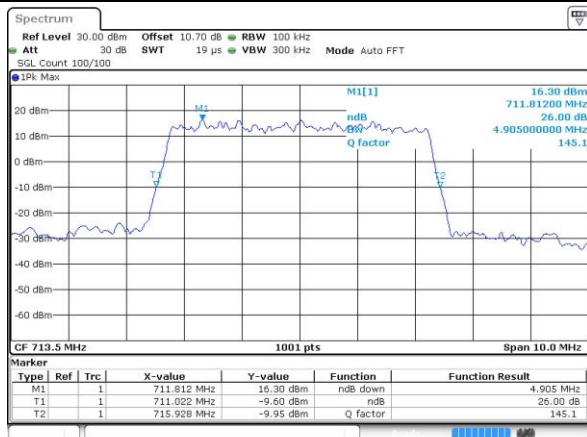
Date: 15 MAY 2017 23:39:53

Middle Channel / 5MHz / 16QAM



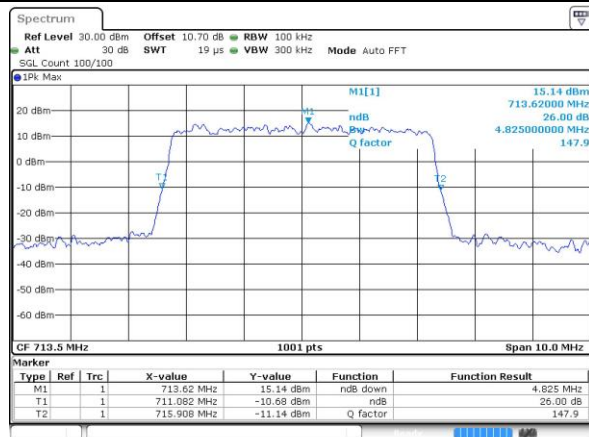
Date: 15 MAY 2017 23:40:04

Highest Channel / 5MHz / QPSK



Date: 15 MAY 2017 23:42:34

Highest Channel / 5MHz / 16QAM

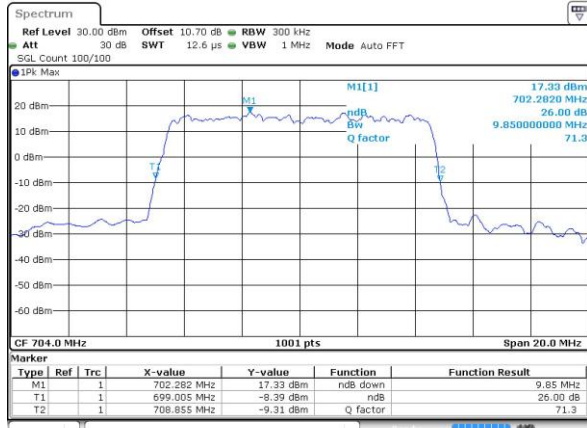


Date: 15 MAY 2017 23:42:23



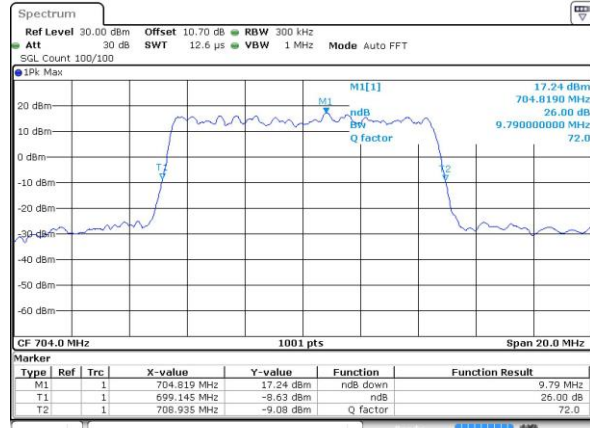
LTE Band 12

Lowest Channel / 10MHz / QPSK



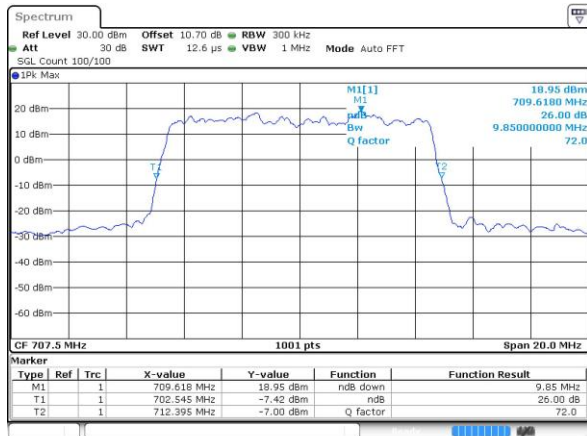
Date: 15 MAY 2017 23:49:40

Lowest Channel / 10MHz / 16QAM



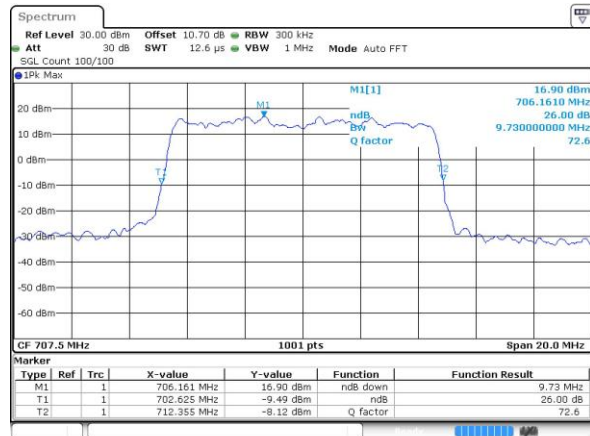
Date: 15 MAY 2017 23:49:30

Middle Channel / 10MHz / QPSK



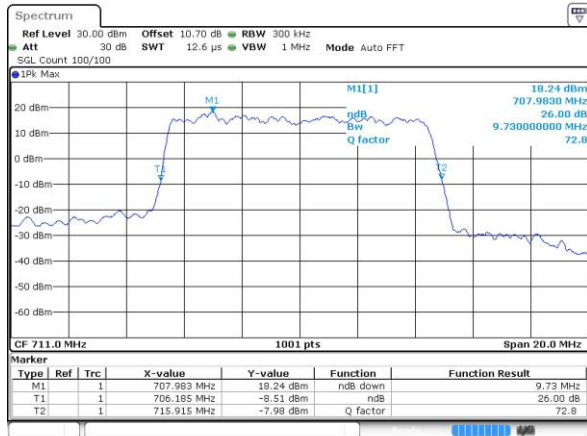
Date: 15 MAY 2017 23:56:36

Middle Channel / 10MHz / 16QAM



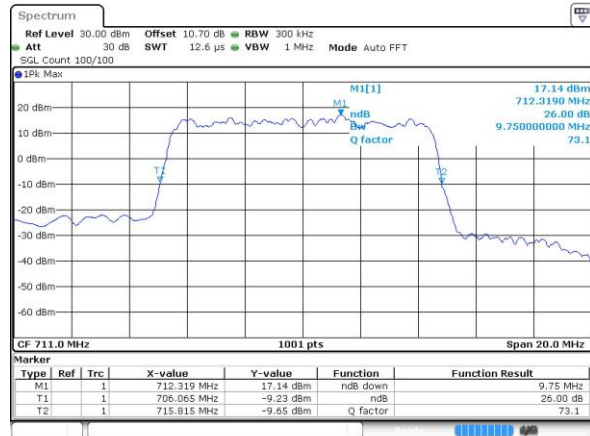
Date: 15 MAY 2017 23:56:47

Highest Channel / 10MHz / QPSK



Date: 15 MAY 2017 23:59:16

Highest Channel / 10MHz / 16QAM

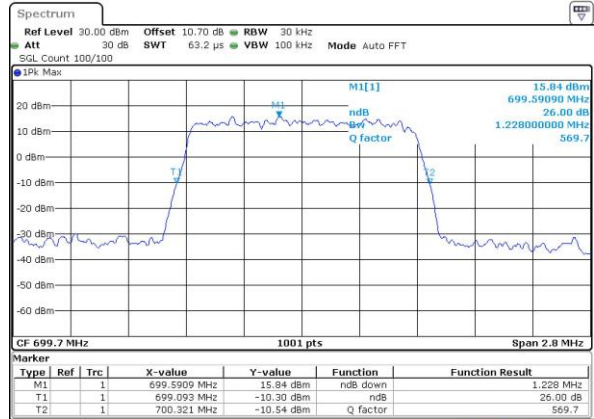


Date: 15 MAY 2017 23:59:06



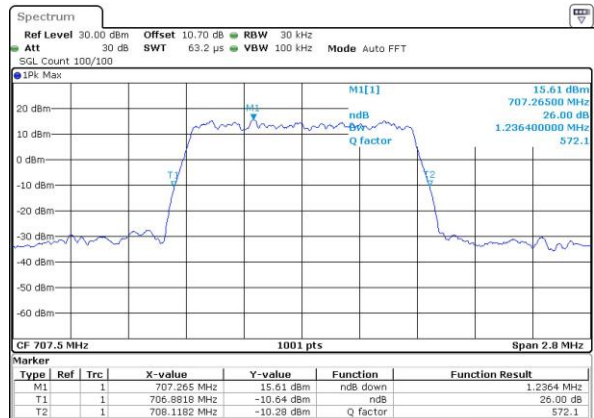
LTE Band 12

Lowest Channel / 1.4MHz / 64QAM



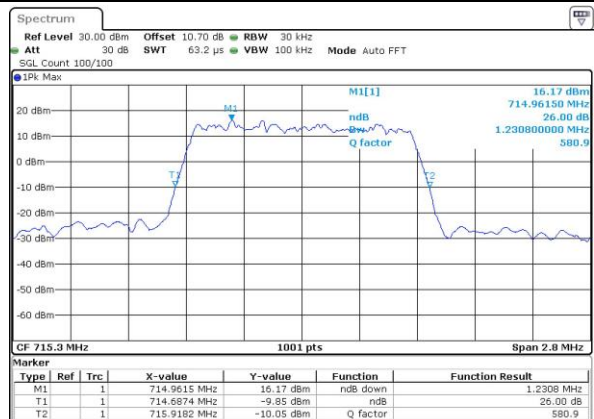
Date: 29 MAY 2017 14:09:27

Middle Channel / 1.4MHz / 64QAM



Date: 29 MAY 2017 14:13:00

Highest Channel / 1.4MHz / 64QAM

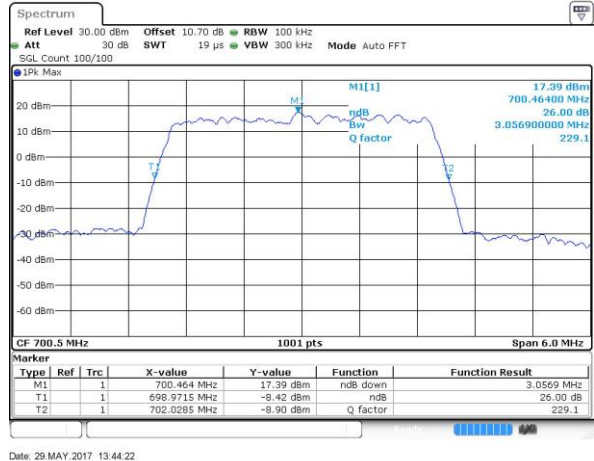


Date: 29 MAY 2017 14:14:15

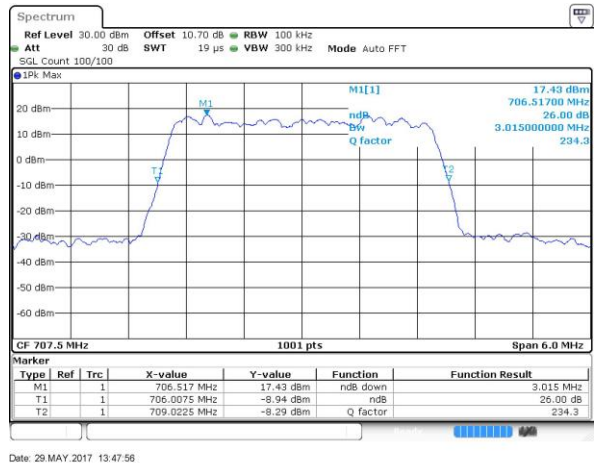


LTE Band 12

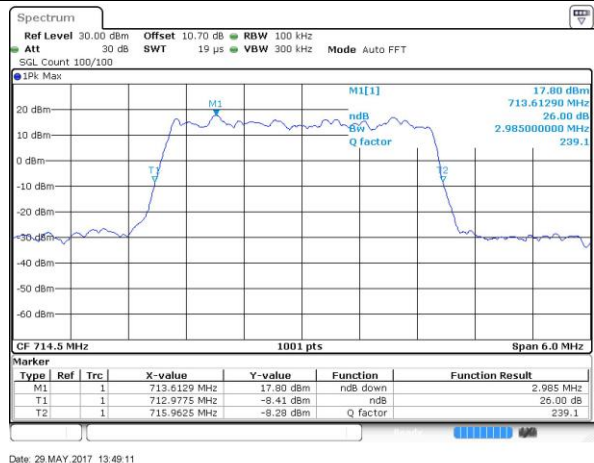
Lowest Channel / 3MHz / 64QAM



Middle Channel / 3MHz / 64QAM



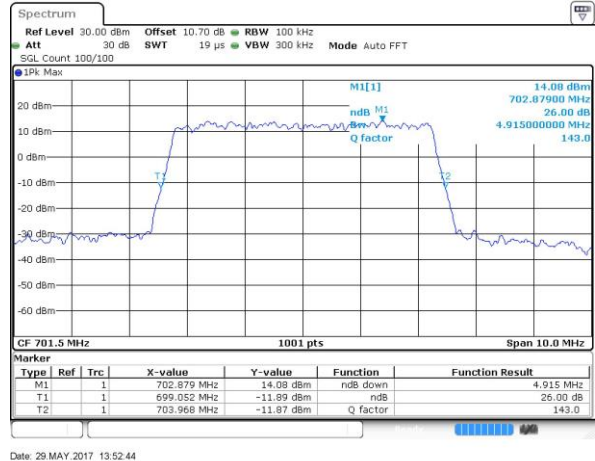
Highest Channel / 3MHz / 64QAM



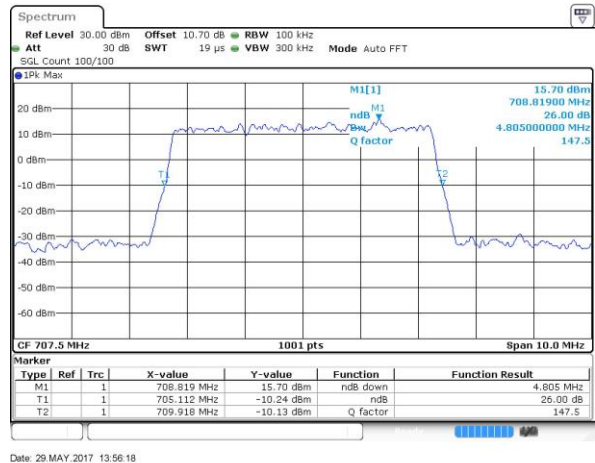


LTE Band 12

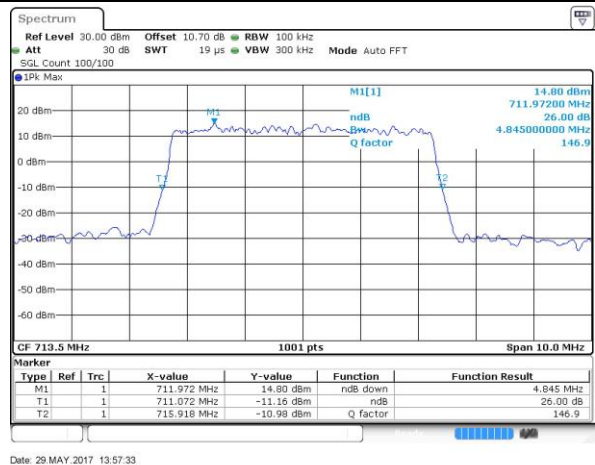
Lowest Channel / 5MHz / 64QAM



Middle Channel / 5MHz / 64QAM



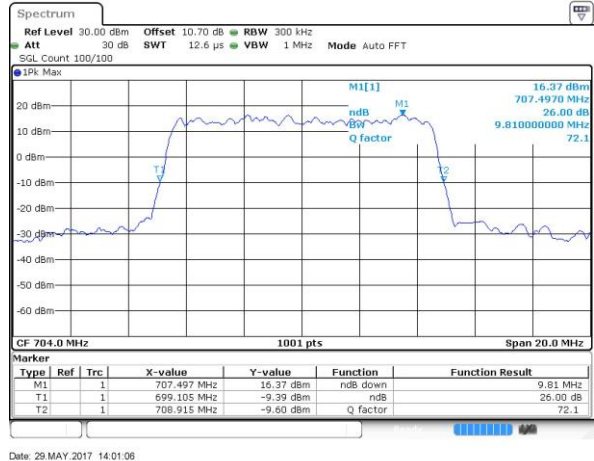
Highest Channel / 5MHz / 64QAM



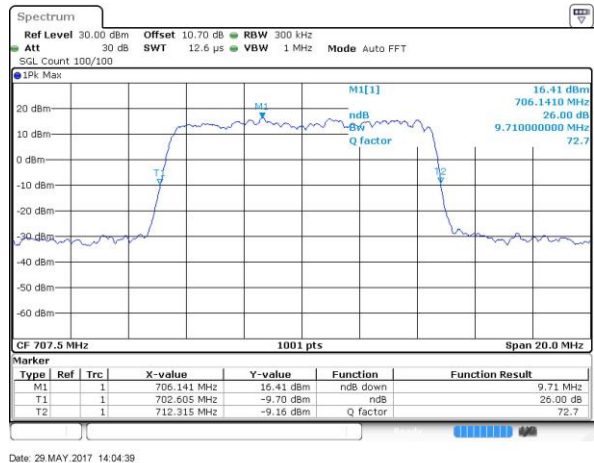


LTE Band 12

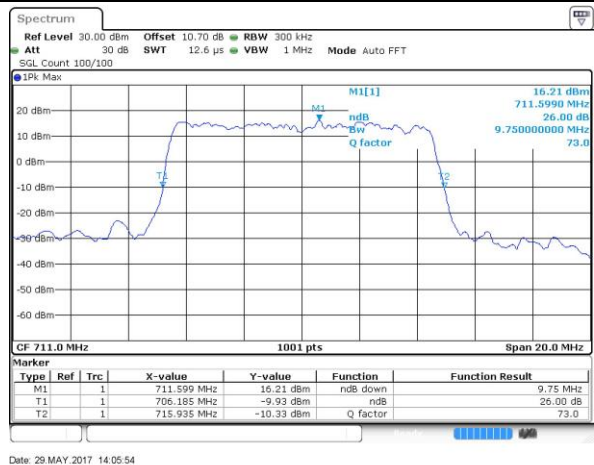
Lowest Channel / 10MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 10MHz / 64QAM



**Occupied Bandwidth**

Mode	LTE Band 12 : 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	2.72	2.73	4.49	4.49	9.11	9.05	-	-	-	-
Middle CH	1.09	1.08	2.73	2.7	4.5	4.5	9.03	9.05	-	-	-	-
Highest CH	1.08	1.09	2.7	2.73	4.51	4.49	9.03	9.03	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	1.09	-	2.7	-	4.5	-	8.99	-	-	-	-
Middle CH	-	1.08	-	2.73	-	4.48	-	8.97	-	-	-	-
Highest CH	-	1.09	-	2.73	-	4.51	-	9.01	-	-	-	-