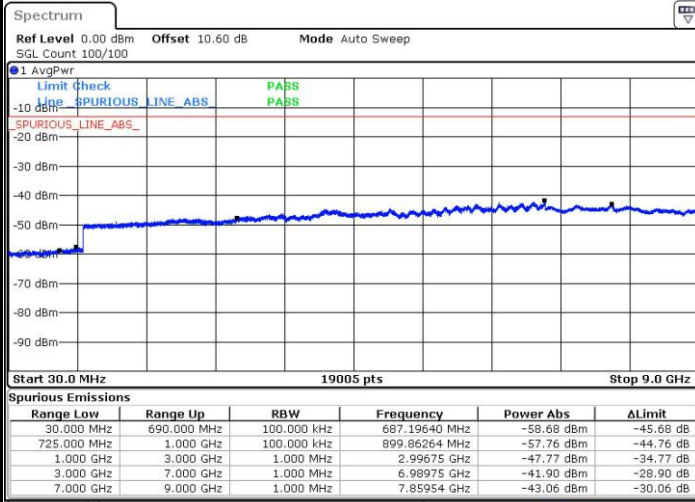




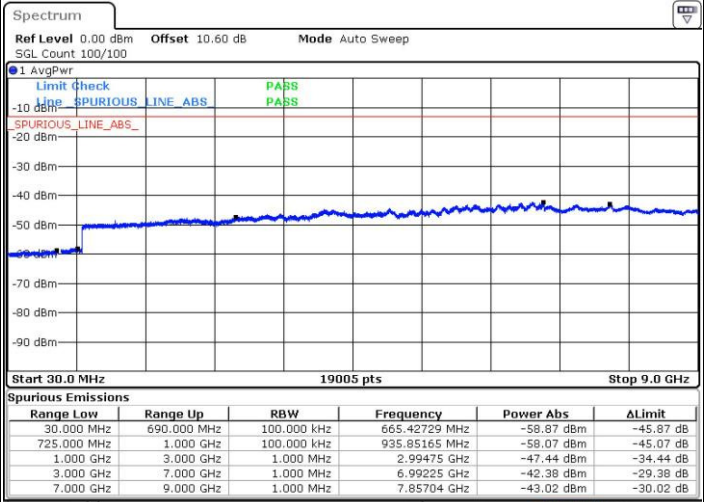
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 5 APR 2017 22:50:56

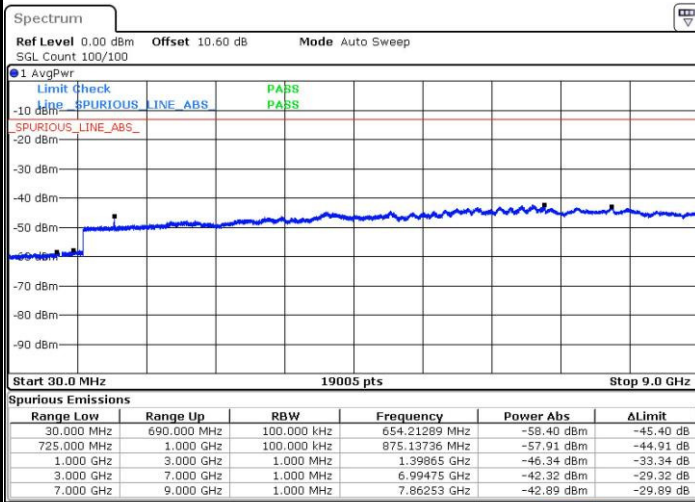
Highest Channel / 16QAM



Date: 5 APR 2017 22:51:50

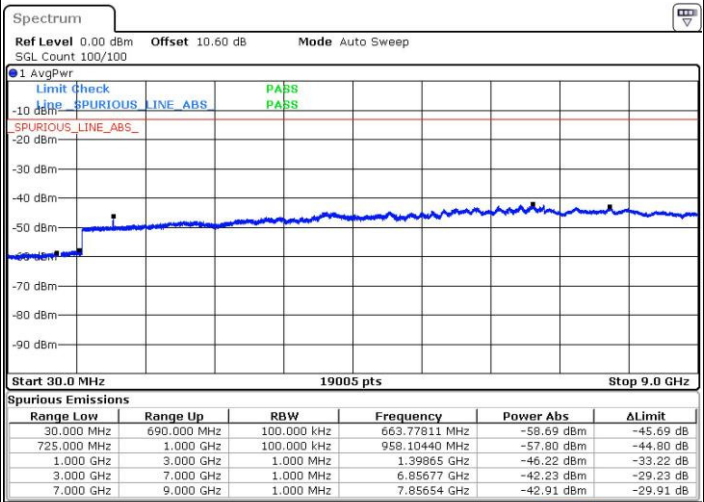
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 5 APR 2017 21:50:18

Lowest Channel / 16QAM



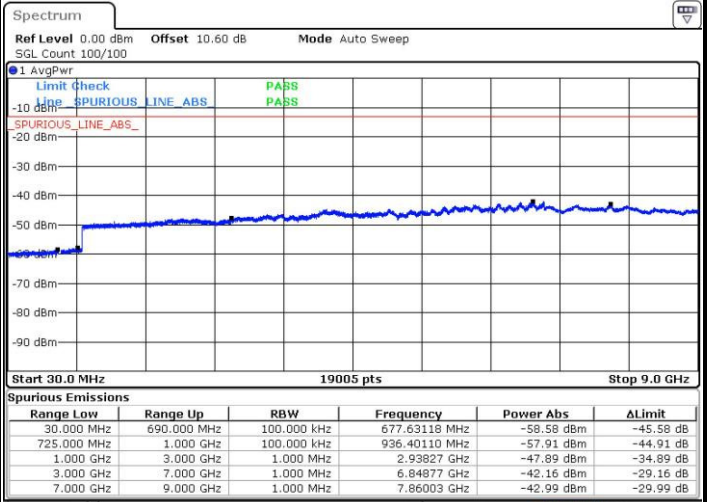
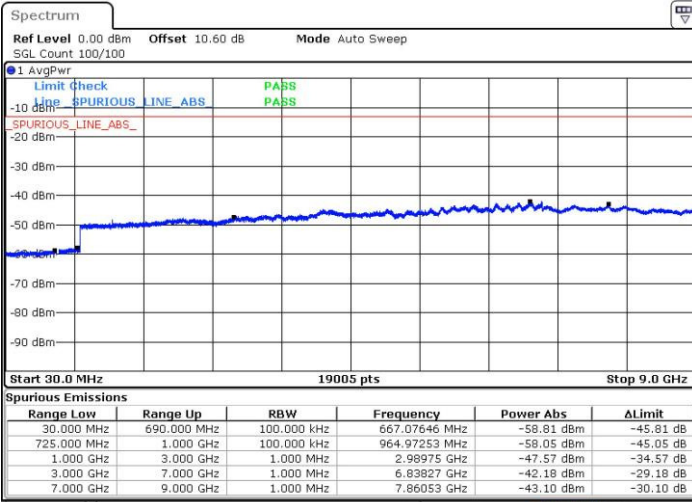
Date: 5 APR 2017 21:51:12



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

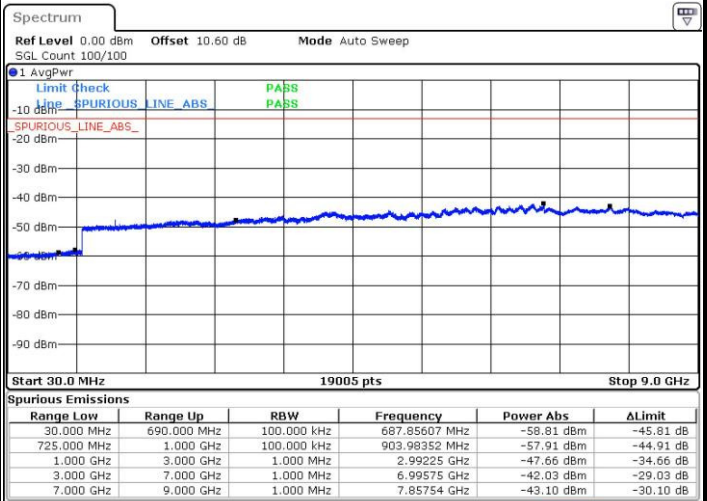
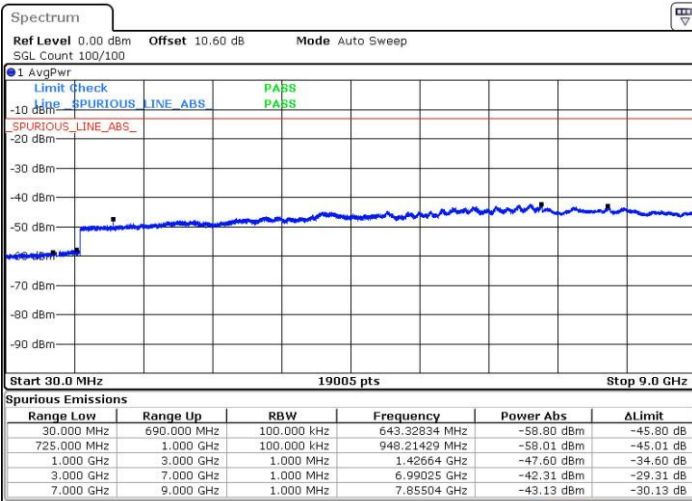


Date: 5 APR 2017 21:53:42

Date: 5 APR 2017 21:52:48

Highest Channel / QPSK

Highest Channel / 16QAM



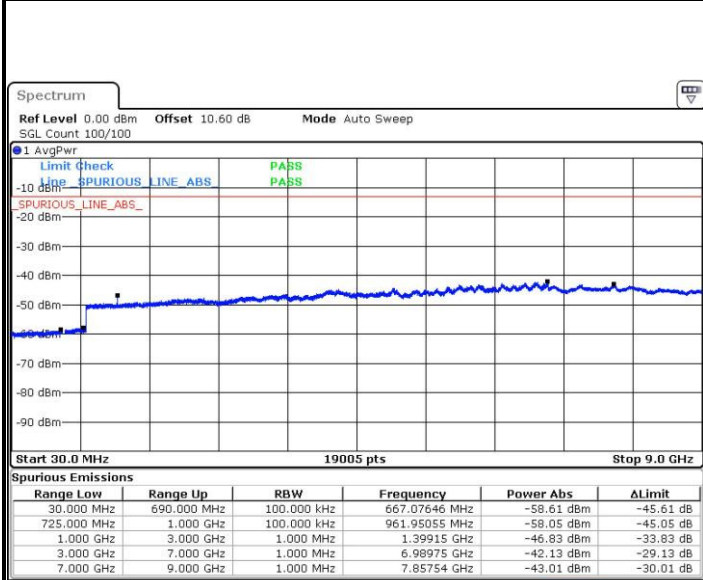
Date: 5 APR 2017 21:59:54

Date: 5 APR 2017 22:00:49



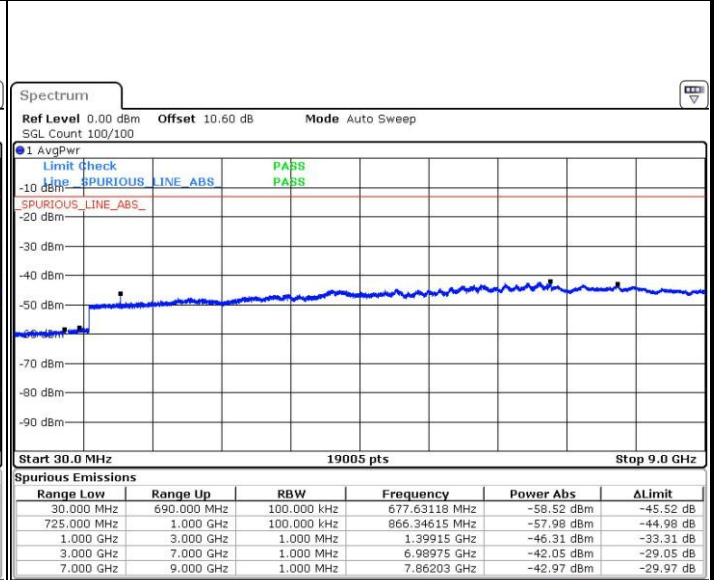
LTE Band 12 / 5MHz

Lowest Channel / QPSK



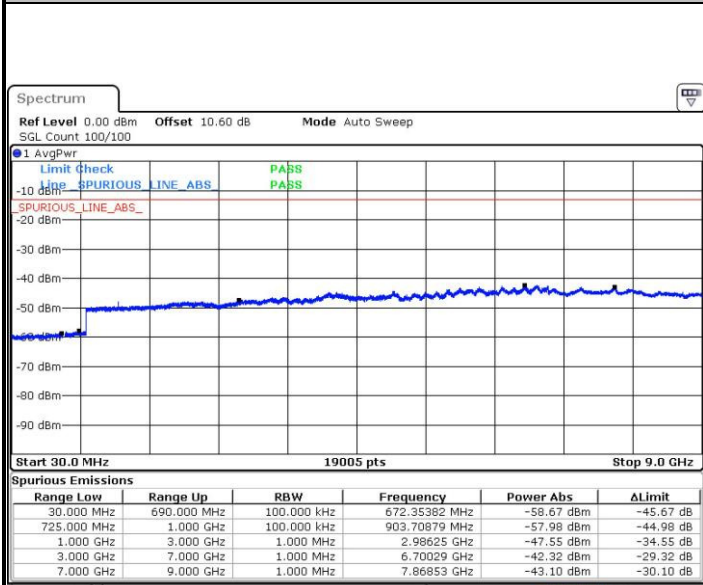
Date: 5 APR 2017 22:07:01

Lowest Channel / 16QAM



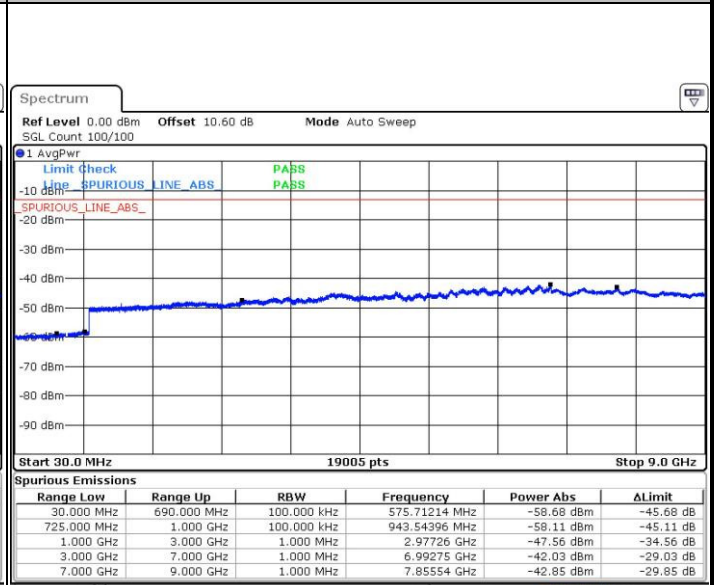
Date: 5 APR 2017 22:07:55

Middle Channel / QPSK



Date: 5 APR 2017 22:10:25

Middle Channel / 16QAM

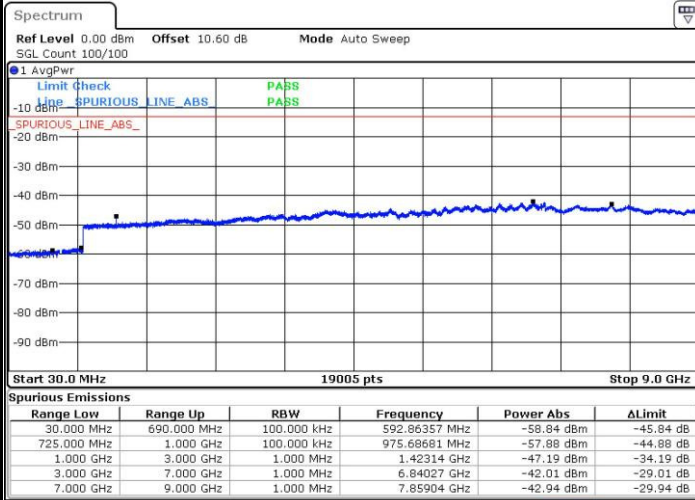


Date: 5 APR 2017 22:09:31



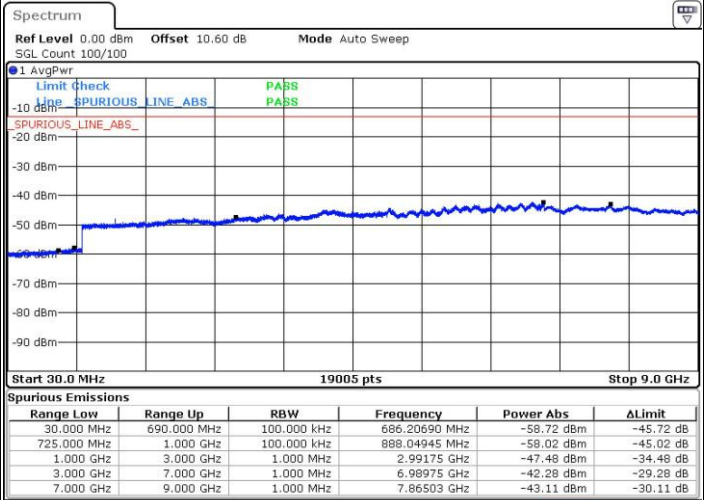
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 5 APR 2017 22:17:32

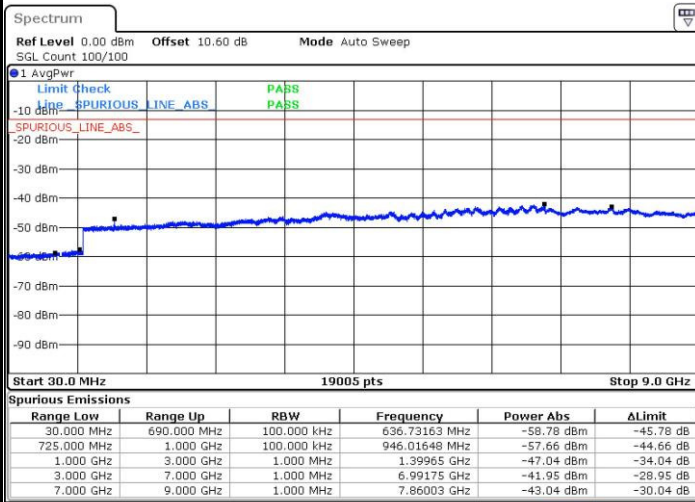
Highest Channel / 16QAM



Date: 5 APR 2017 22:16:38

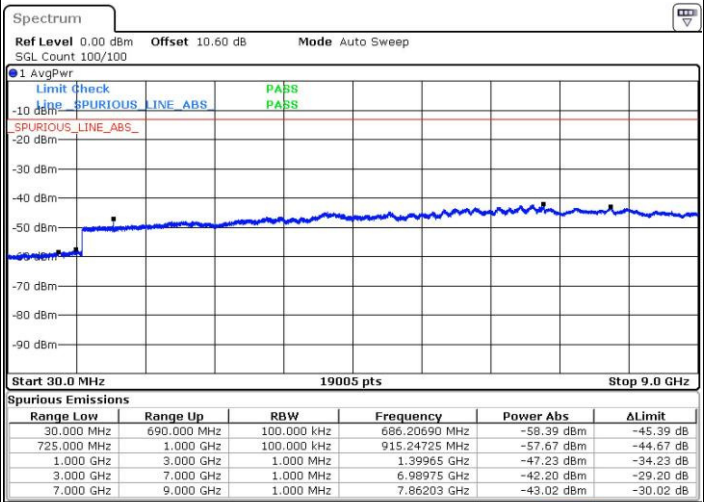
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 5 APR 2017 22:23:45

Lowest Channel / 16QAM

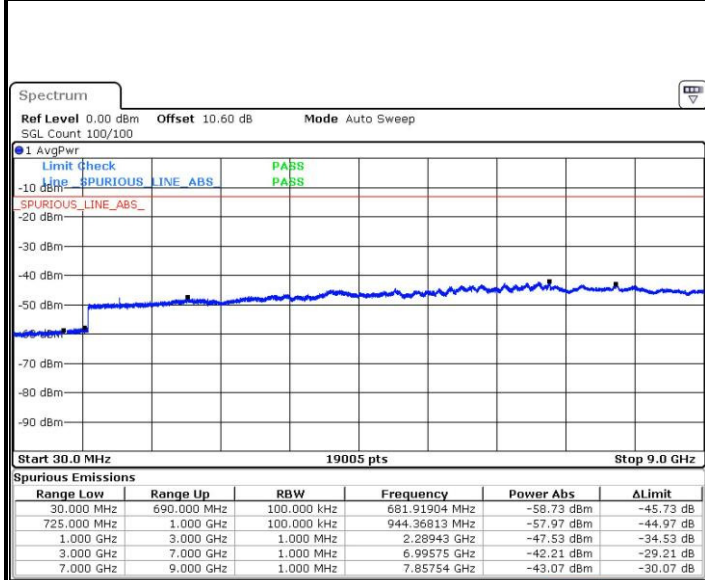


Date: 5 APR 2017 22:24:39



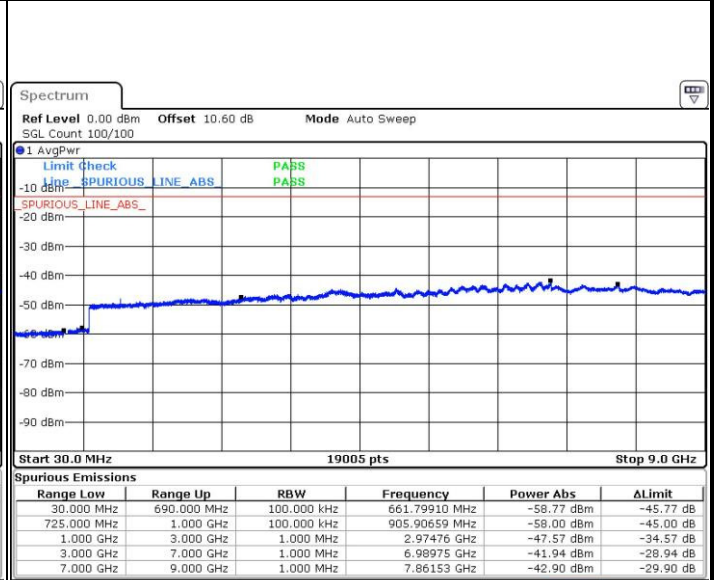
LTE Band 12 / 10MHz

Middle Channel / QPSK



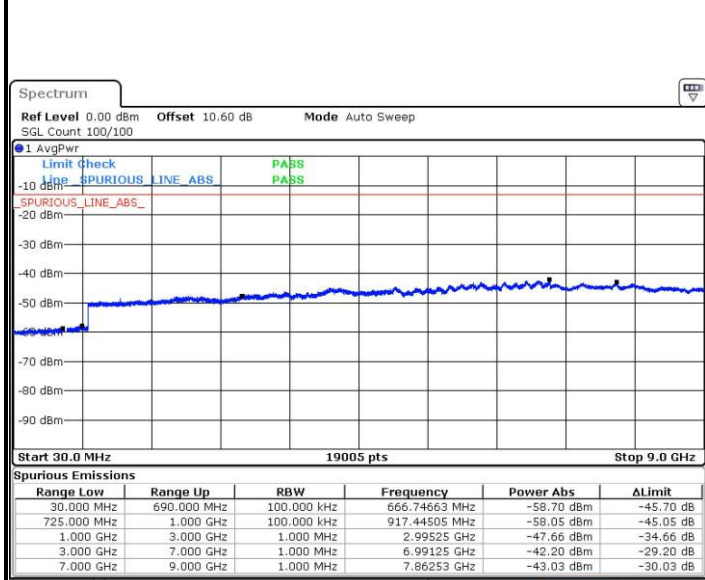
Date: 5 APR 2017 22:27:09

Middle Channel / 16QAM



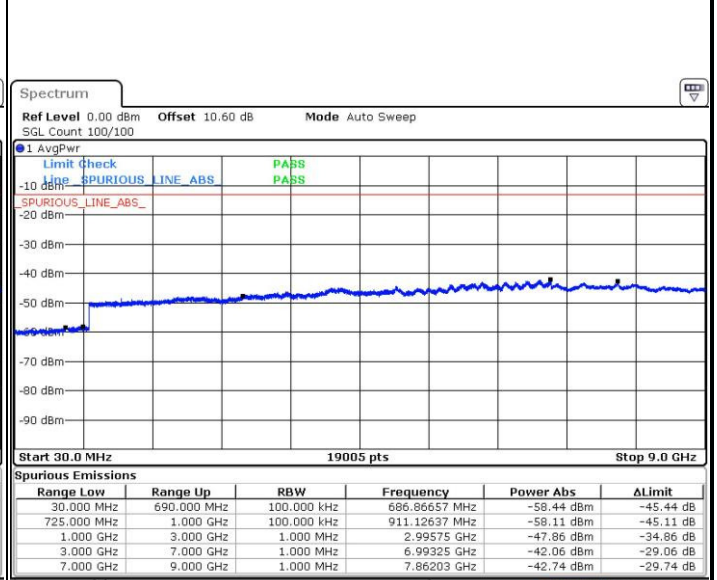
Date: 5 APR 2017 22:26:15

Highest Channel / QPSK



Date: 5 APR 2017 22:33:21

Highest Channel / 16QAM

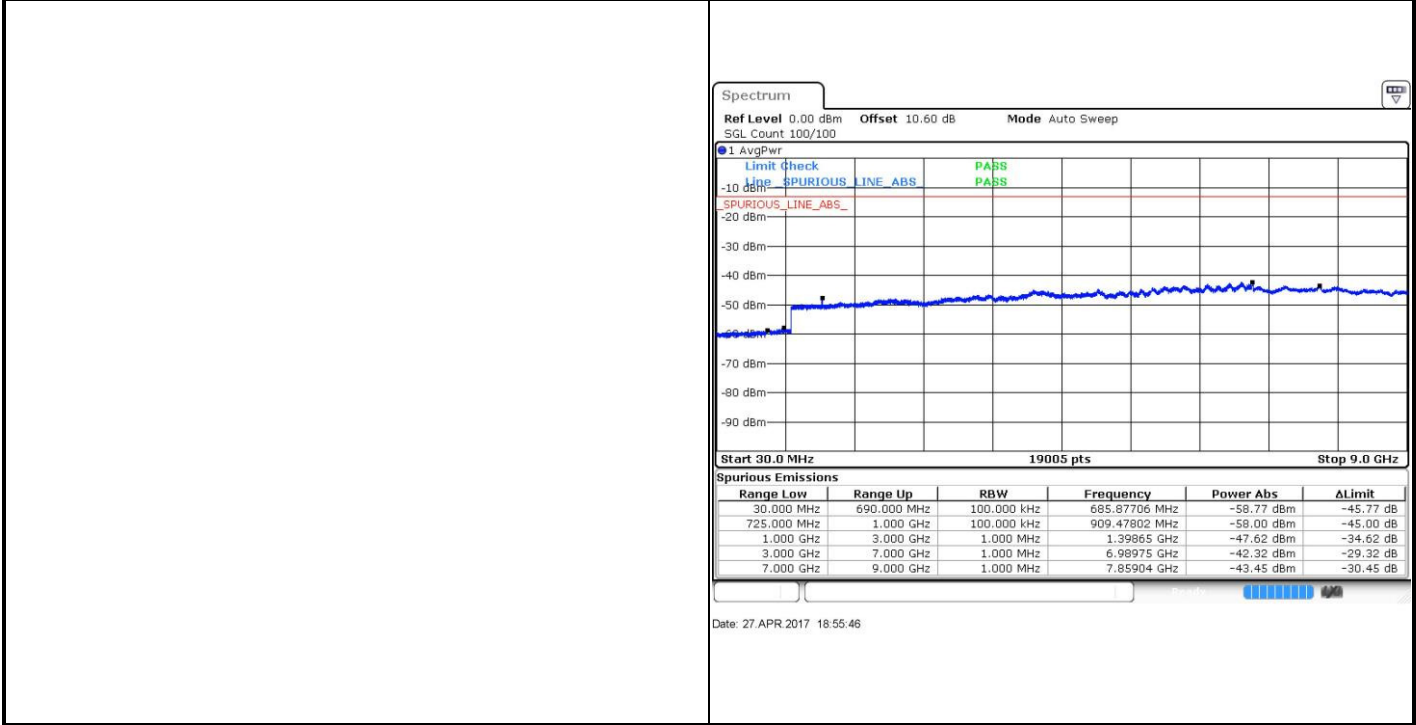


Date: 5 APR 2017 22:34:16

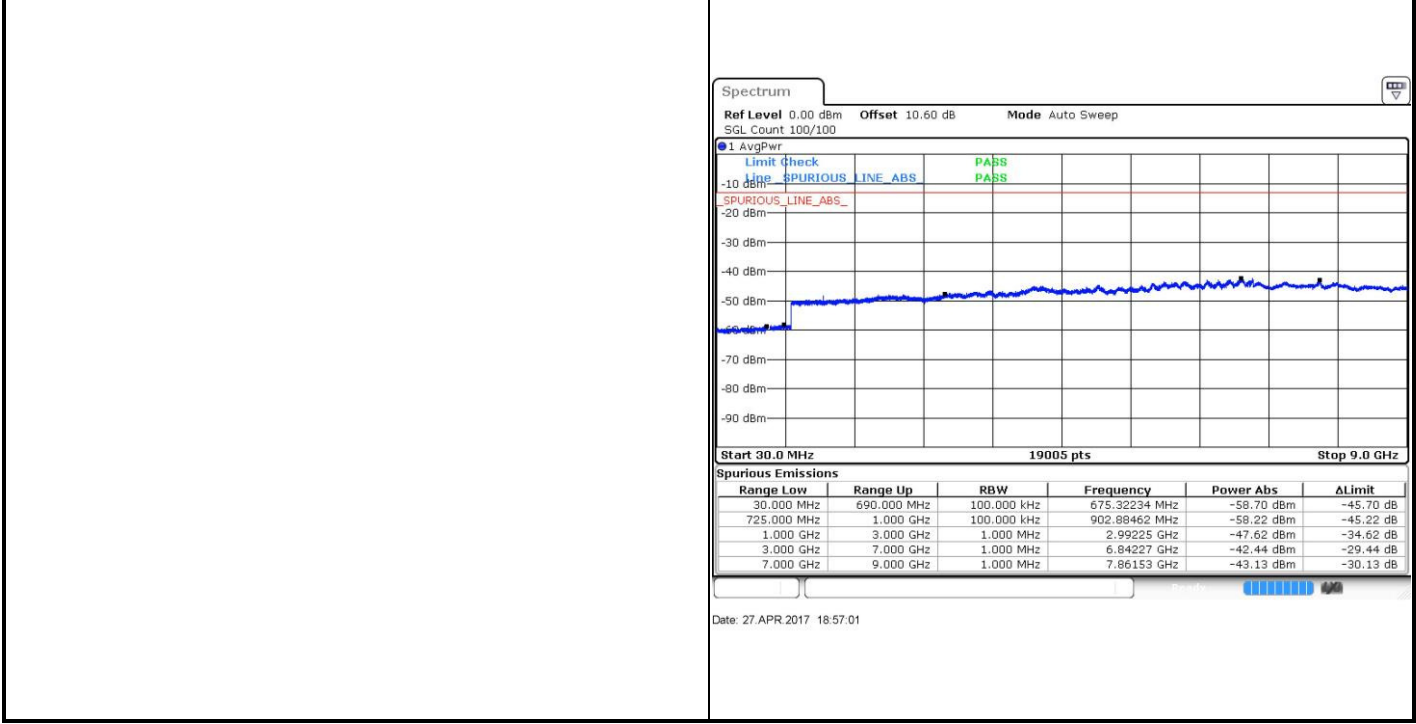


**LTE Band 12 / 1.4MHz**

**Lowest Channel / 64QAM**



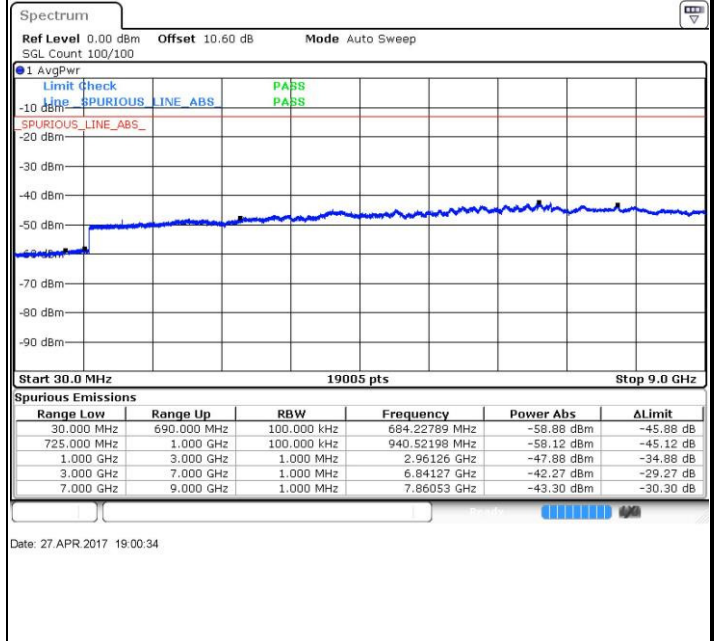
**Middle Channel / 64QAM**





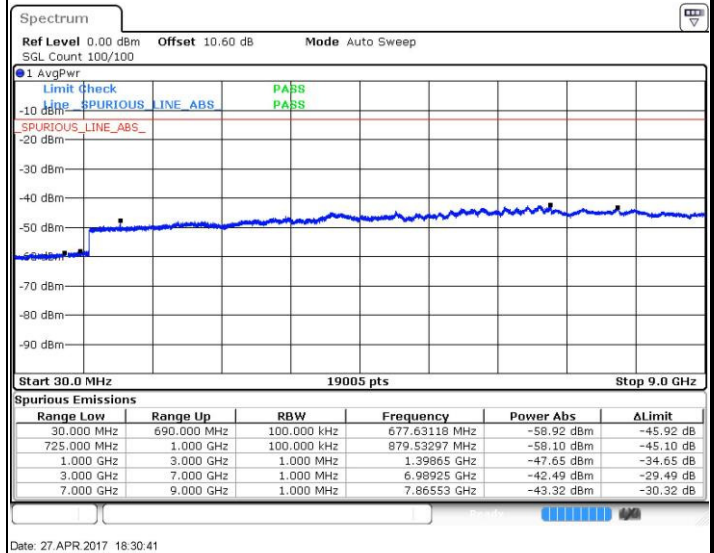
LTE Band 12 / 1.4MHz

Highest Channel / 64QAM



LTE Band 12 / 3MHz

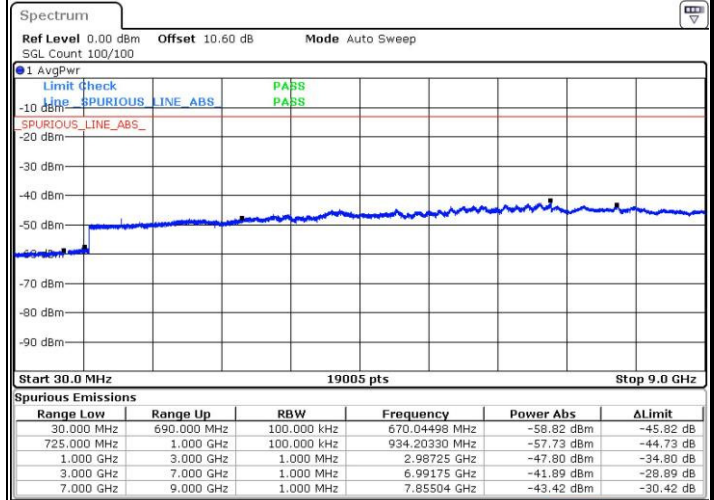
Lowest Channel / 64QAM





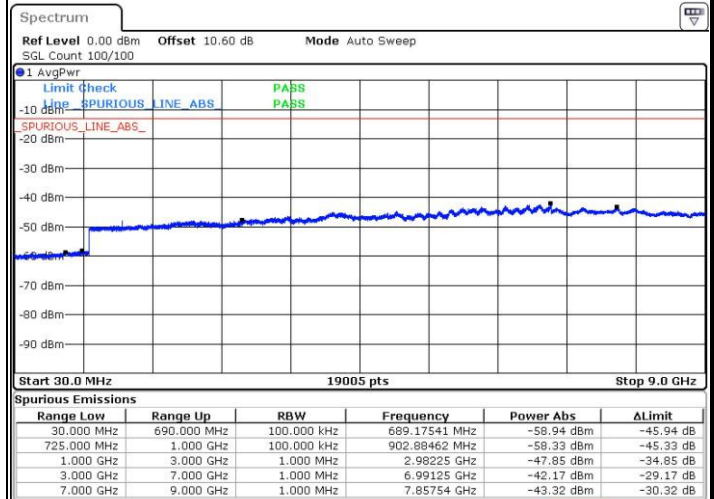
LTE Band 12 / 3MHz

Middle Channel / 64QAM



Date: 27.APR.2017 18:31:56

Highest Channel / 64QAM

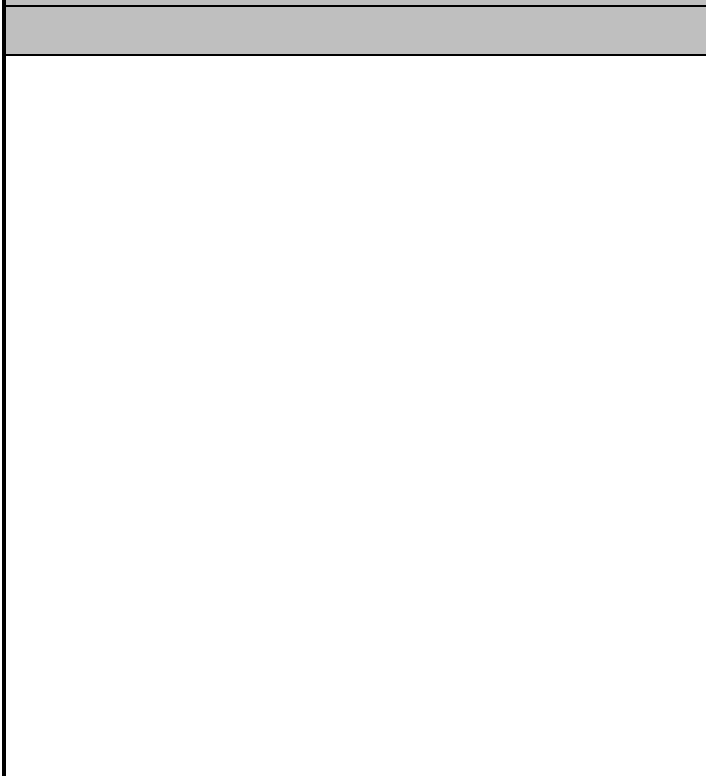


Date: 27.APR.2017 18:35:29

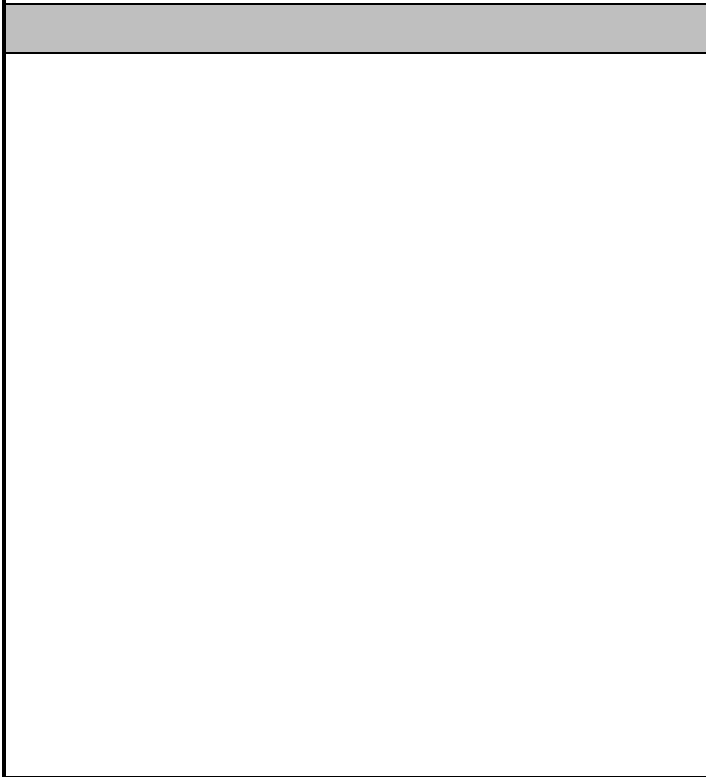
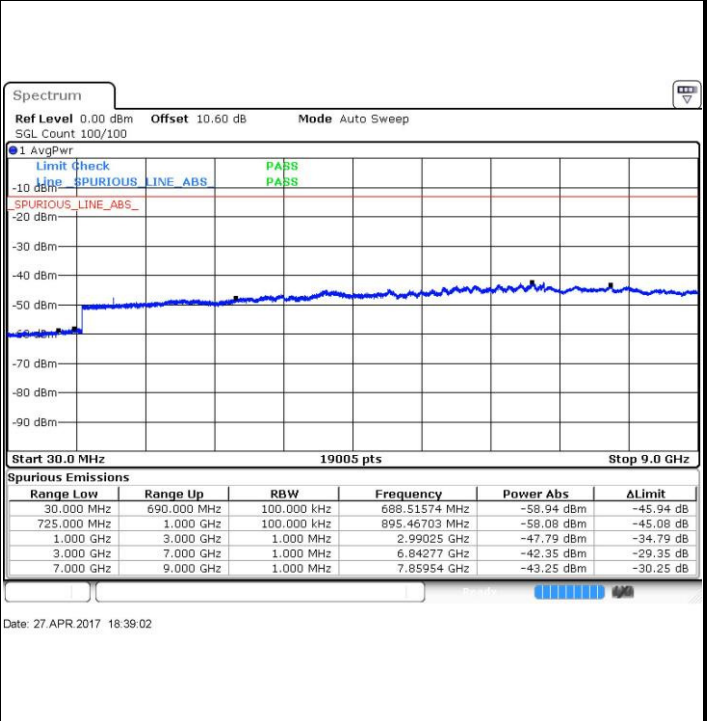




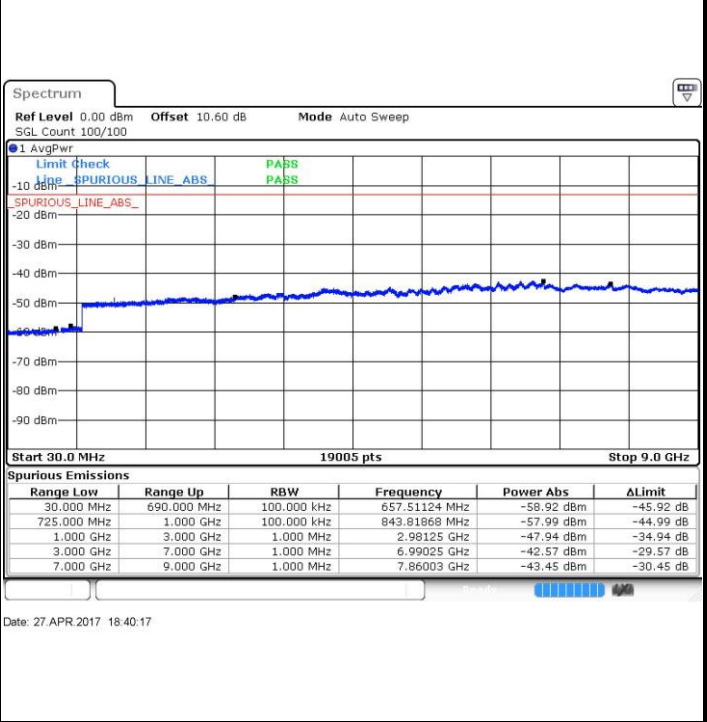
**LTE Band 12 / 5MHz**



**Lowest Channel / 64QAM**



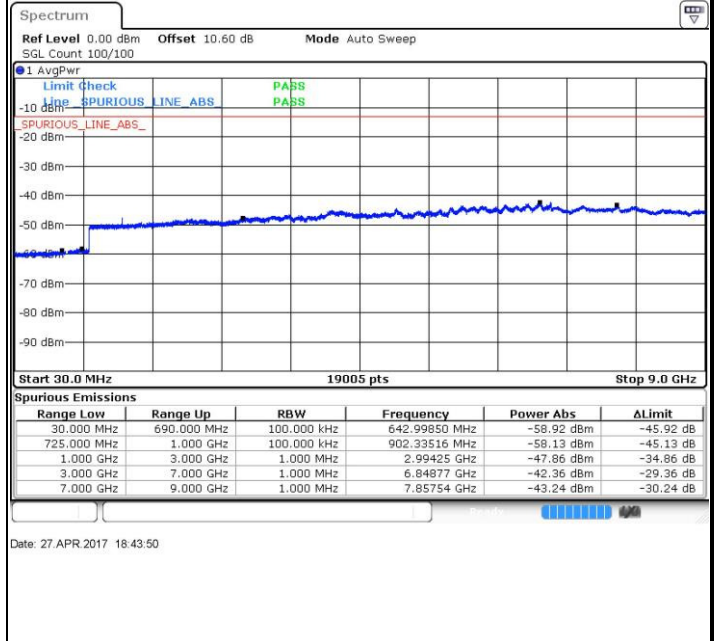
**Middle Channel / 64QAM**





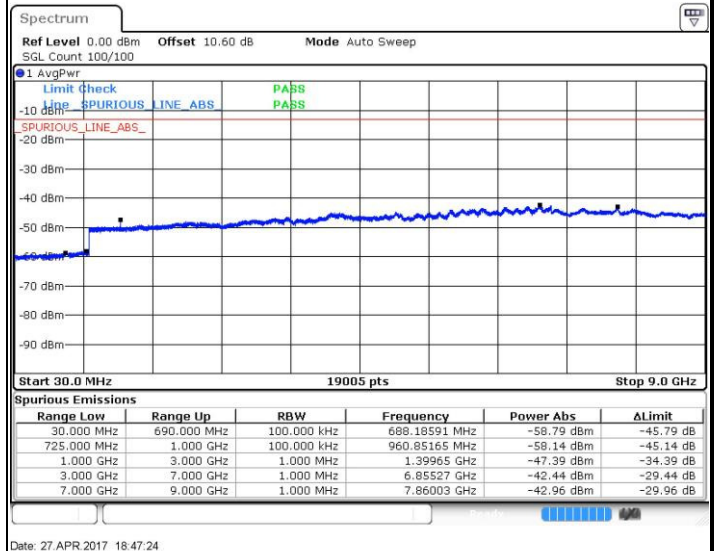
LTE Band 12 / 5MHz

Highest Channel / 64QAM



LTE Band 12 / 10MHz

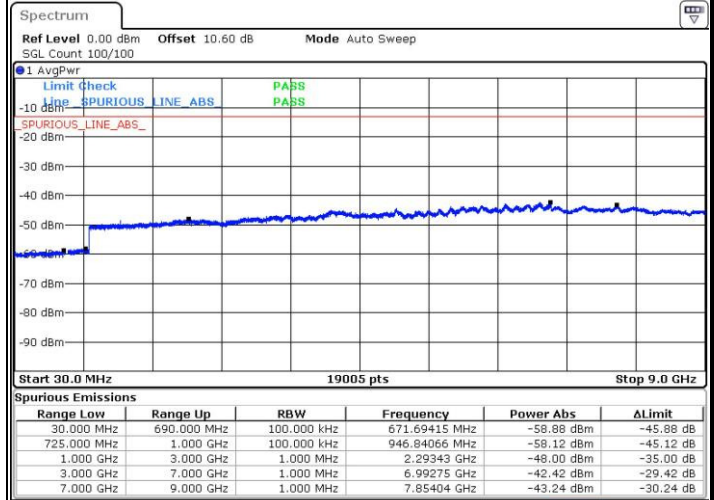
Lowest Channel / 64QAM





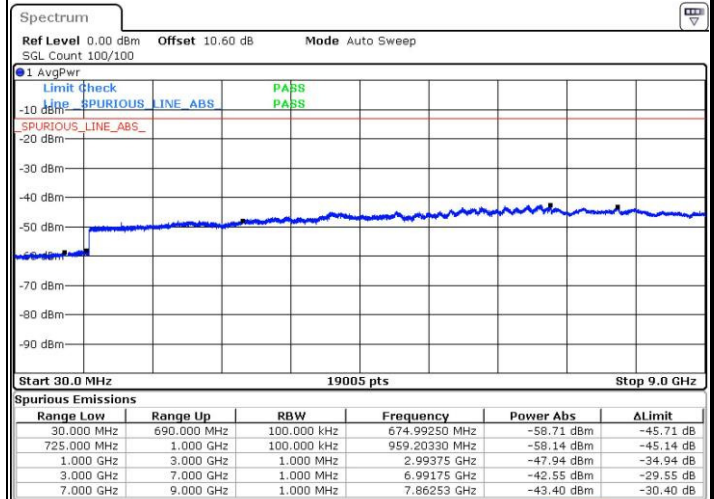
LTE Band 12 / 10MHz

Middle Channel / 64QAM



Date: 27.APR.2017 18:48:39

Highest Channel / 64QAM



Date: 27.APR.2017 18:52:12



**Frequency Stability**

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0120	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0003	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0122	

**Note:**

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 17

## Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.61	5.01	5.62	5.88	PASS
Middle CH	4.43	5.1	5.1	6	
Highest CH	4.26	5.28	5.07	5.97	
Mod.	-		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	5.39	5.97	PASS
Middle CH	-	-	4.84	5.91	
Highest CH	-	-	4.87	6	



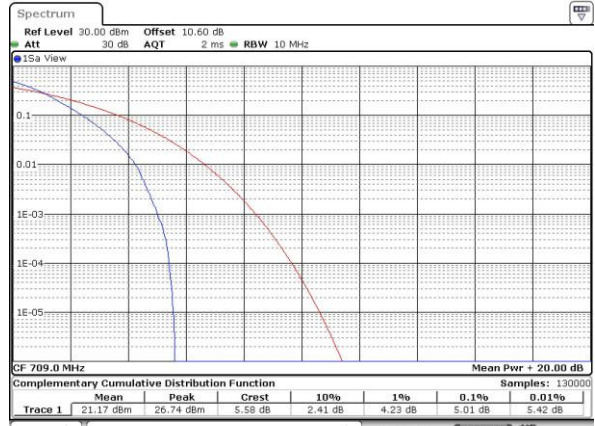
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



Date: 5 APR 2017 23:50:00

Lowest Channel / Full RB



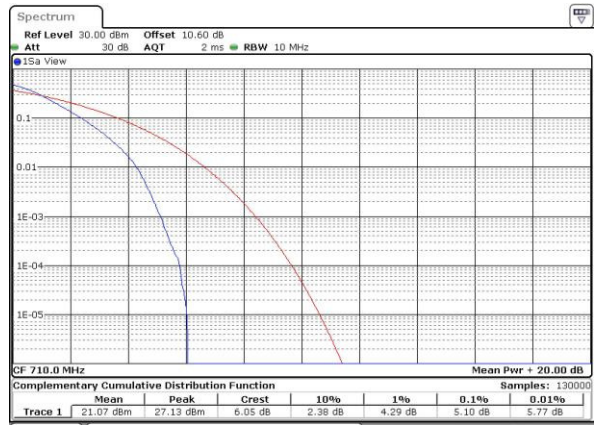
Date: 5 APR 2017 23:50:13

Middle Channel / 1RB



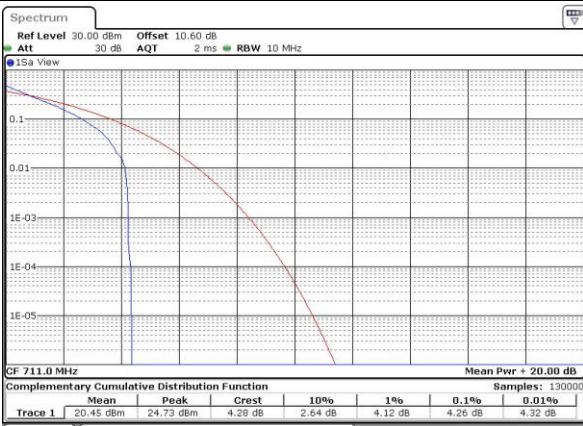
Date: 5 APR 2017 23:50:23

Middle Channel / Full RB



Date: 5 APR 2017 23:50:33

Highest Channel / 1RB



Date: 5 APR 2017 23:50:43

Highest Channel / Full RB



Date: 5 APR 2017 23:50:53



LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 5 APR 2017 23:46:20

Lowest Channel / Full RB



Date: 5 APR 2017 23:46:50

Middle Channel / 1RB



Date: 5 APR 2017 23:47:22

Middle Channel / Full RB



Date: 5 APR 2017 23:47:38

Highest Channel / 1RB



Date: 5 APR 2017 23:48:59

Highest Channel / Full RB

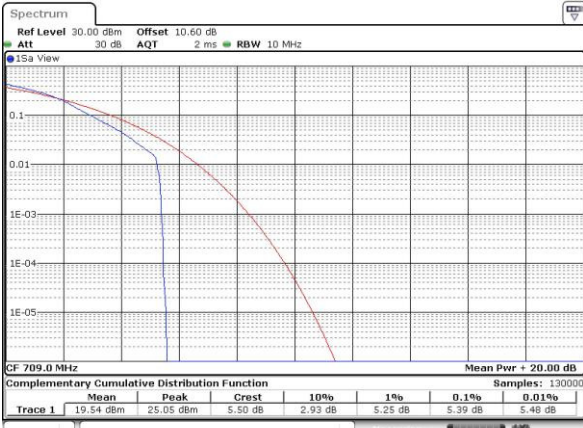


Date: 5 APR 2017 23:49:50



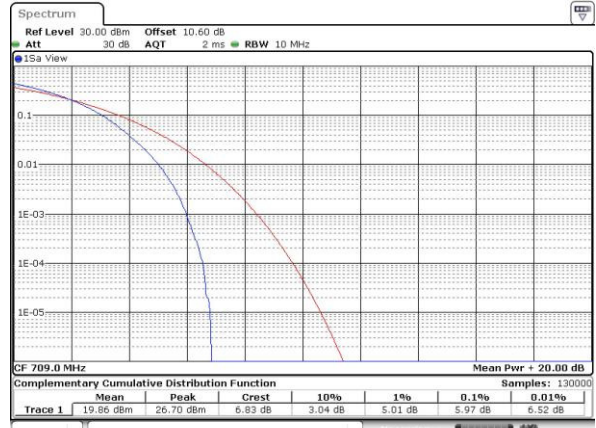
LTE Band 17 / 10MHz / 64QAM

Lowest Channel / 1RB



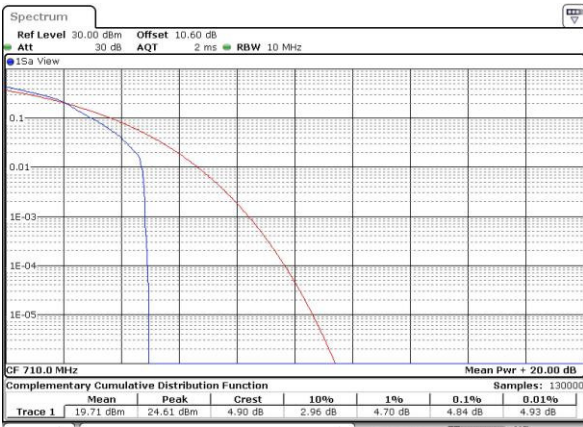
Date: 27 APR 2017 19:24:51

Lowest Channel / Full RB



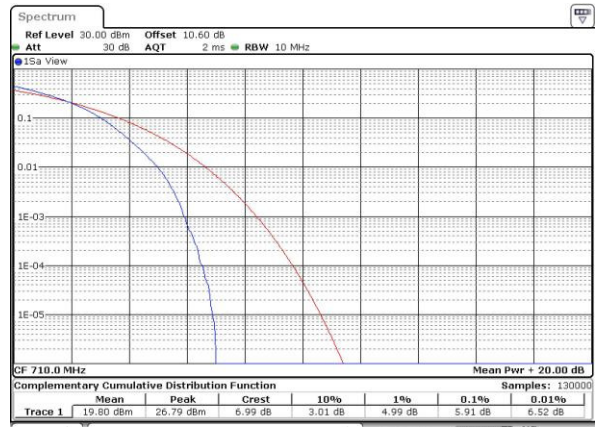
Date: 27 APR 2017 19:25:01

Middle Channel / 1RB



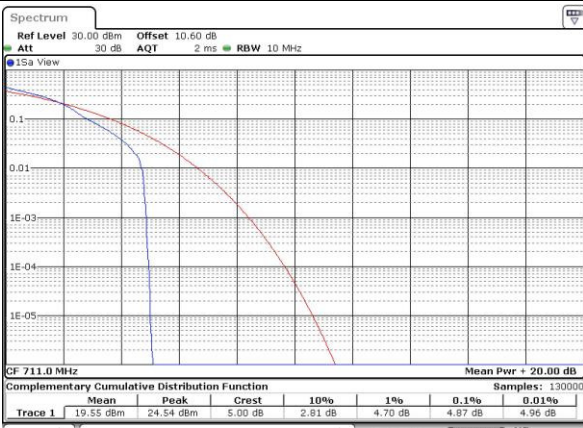
Date: 27 APR 2017 19:25:13

Middle Channel / Full RB



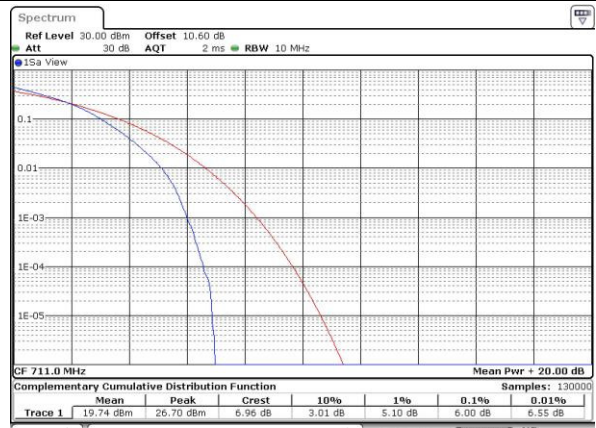
Date: 27 APR 2017 19:25:23

Highest Channel / 1RB



Date: 27 APR 2017 19:25:34

Highest Channel / Full RB



Date: 27 APR 2017 19:25:43





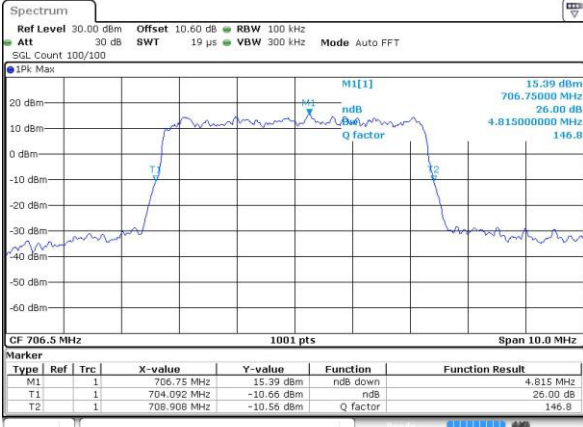
**26dB Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	4.82	4.92	9.83	9.75	-	-	-	-
Middle CH	-	-	-	-	4.90	4.90	9.79	9.89	-	-	-	-
Highest CH	-	-	-	-	4.91	4.77	9.77	9.77	-	-	-	-
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	-	-	-	-	4.89	-	9.81	-	-	-	-
Middle CH	-	-	-	-	-	4.80	-	9.67	-	-	-	-
Highest CH	-	-	-	-	-	4.86	-	9.75	-	-	-	-



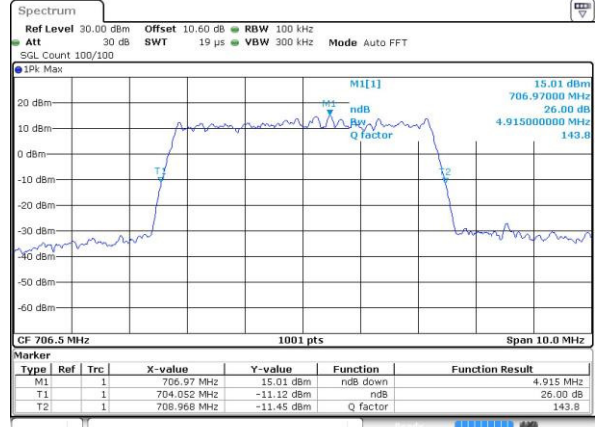
LTE Band 17

Lowest Channel / 5MHz / QPSK



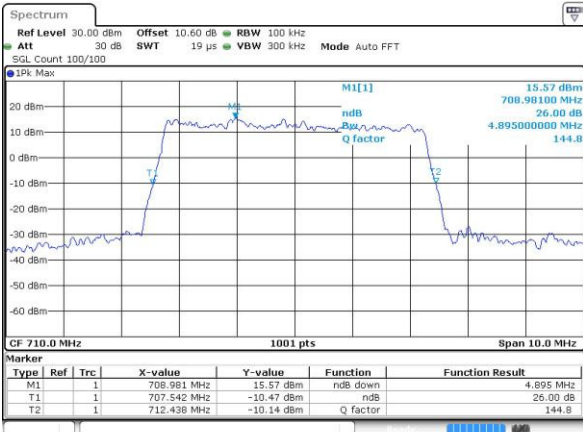
Date: 5 APR 2017 23:13:10

Lowest Channel / 5MHz / 16QAM



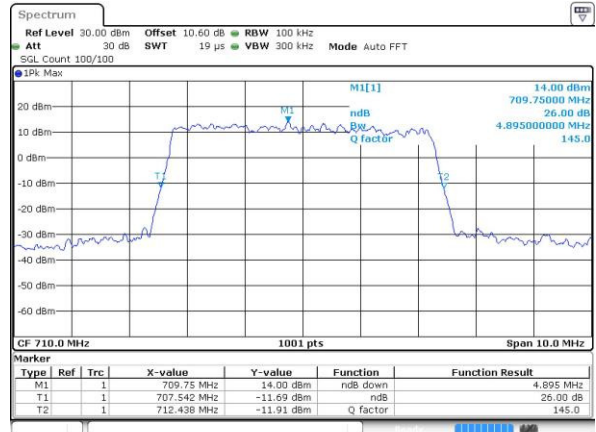
Date: 5 APR 2017 23:13:21

Middle Channel / 5MHz / QPSK



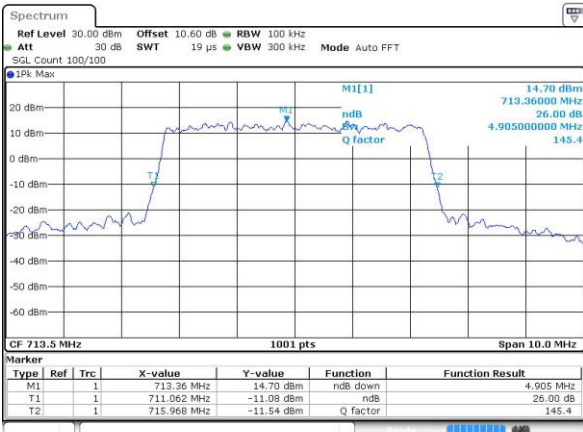
Date: 5 APR 2017 23:20:17

Middle Channel / 5MHz / 16QAM



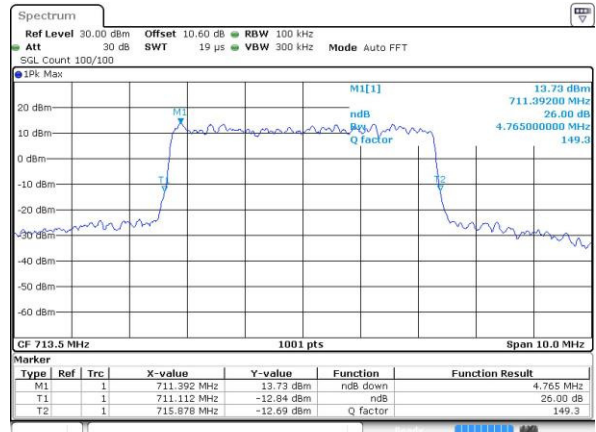
Date: 5 APR 2017 23:20:27

Highest Channel / 5MHz / QPSK



Date: 5 APR 2017 23:22:47

Highest Channel / 5MHz / 16QAM

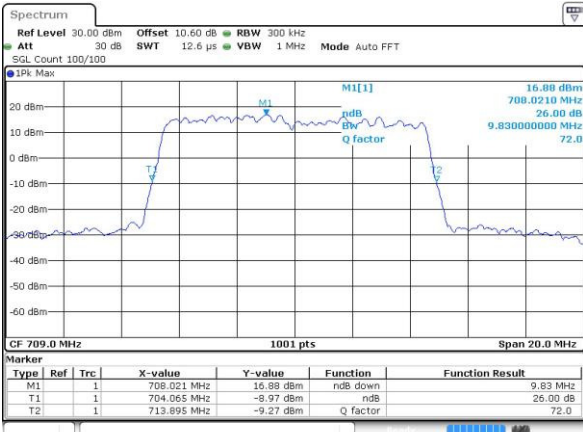


Date: 5 APR 2017 23:22:57



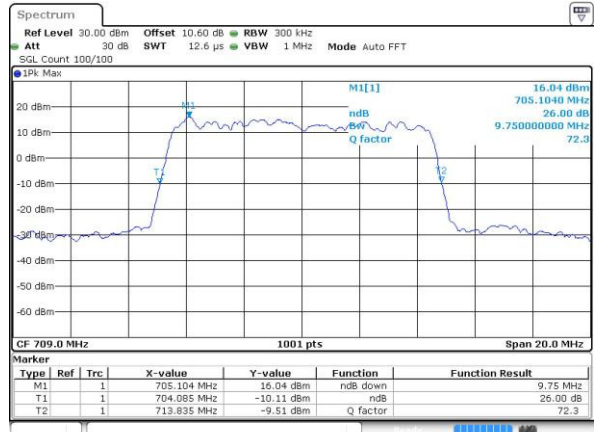
LTE Band 17

Lowest Channel / 10MHz / QPSK



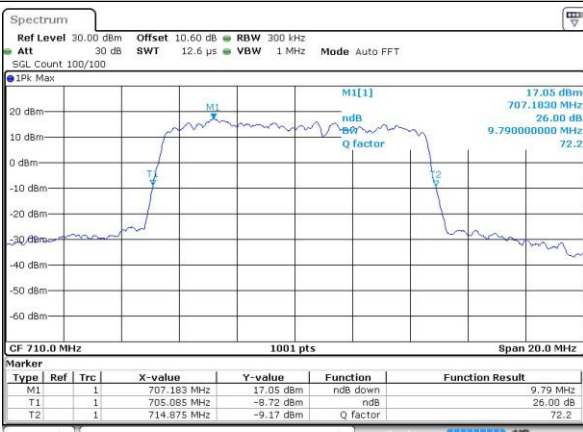
Date: 5 APR 2017 23:29:53

Lowest Channel / 10MHz / 16QAM



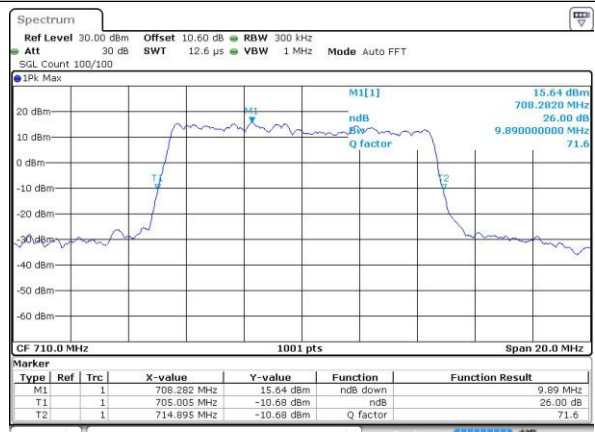
Date: 5 APR 2017 23:30:03

Middle Channel / 10MHz / QPSK



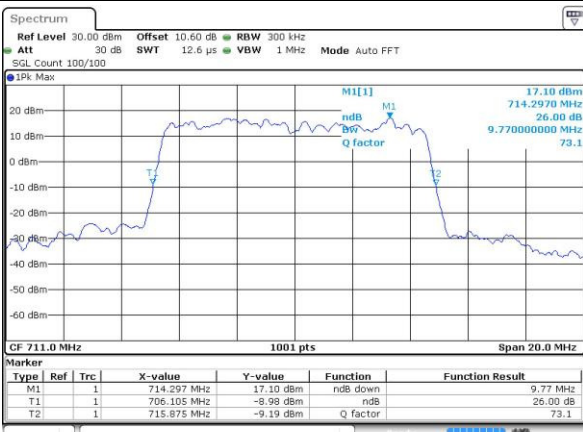
Date: 5 APR 2017 23:36:59

Middle Channel / 10MHz / 16QAM



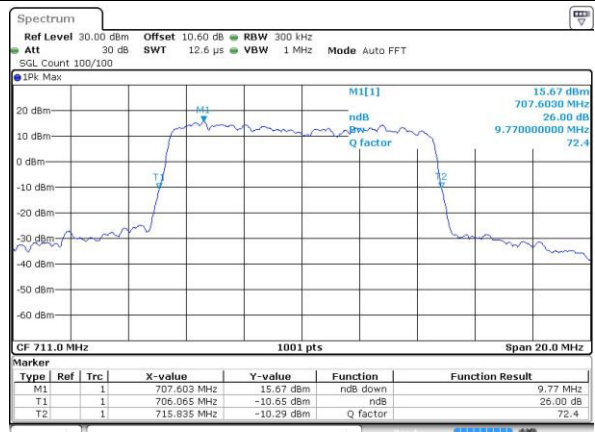
Date: 5 APR 2017 23:37:09

Highest Channel / 10MHz / QPSK



Date: 5 APR 2017 23:39:29

Highest Channel / 10MHz / 16QAM

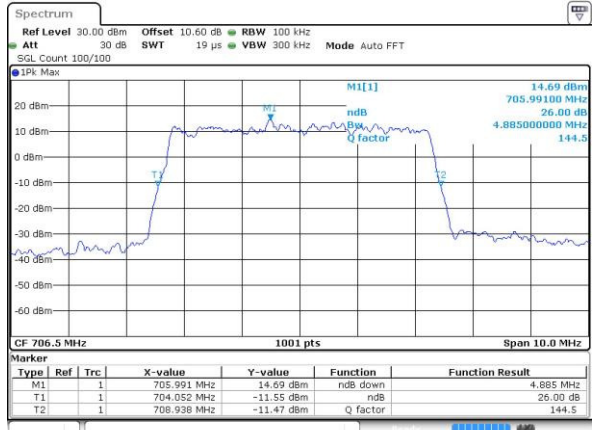


Date: 5 APR 2017 23:39:39



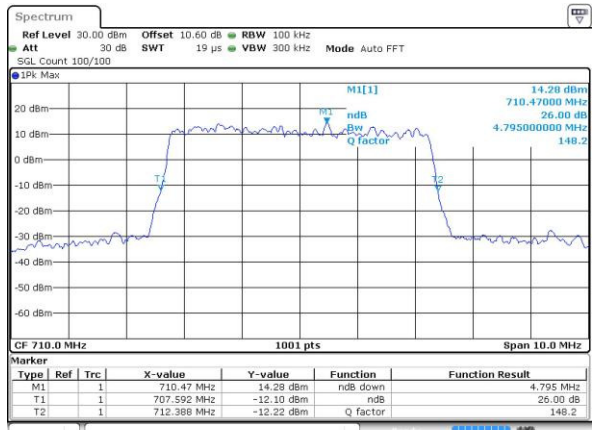
LTE Band 17

Lowest Channel / 5MHz / 64QAM



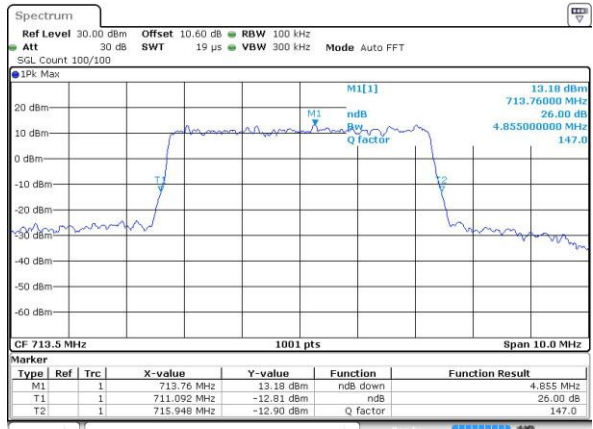
Date: 27 APR 2017 19:07:22

Middle Channel / 5MHz / 64QAM



Date: 27 APR 2017 19:10:55

Highest Channel / 5MHz / 64QAM

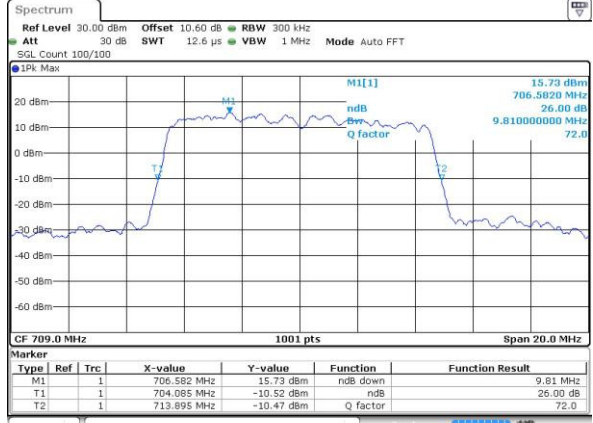


Date: 27 APR 2017 19:12:10



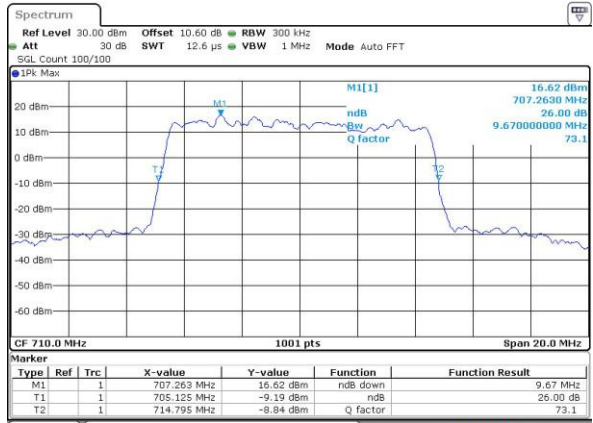
LTE Band 17

Lowest Channel / 10MHz / 64QAM



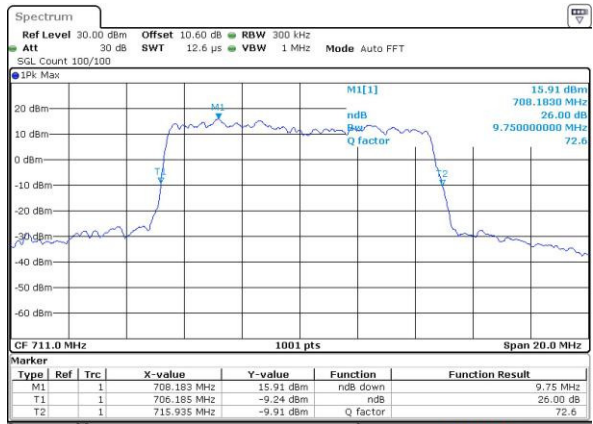
Date: 27 APR 2017 19:15:44

Middle Channel / 10MHz / 64QAM



Date: 27 APR 2017 19:18:08

Highest Channel / 10MHz / 64QAM



Date: 27 APR 2017 19:21:28



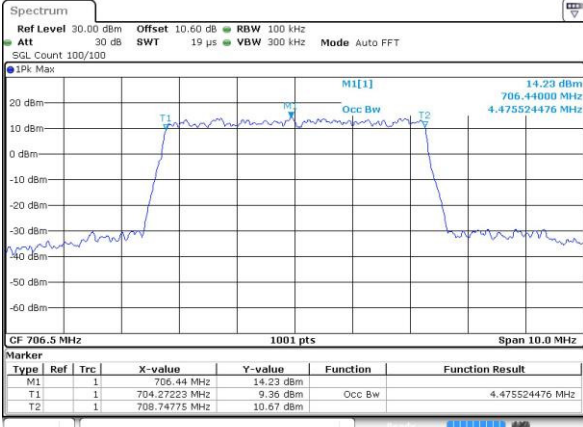
**Occupied Bandwidth**

Mode	LTE Band 17 : 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	-	-	-	-	4.48	4.49	9.03	8.99	-	-	-	-
Middle CH	-	-	-	-	4.5	4.49	9.03	8.99	-	-	-	-
Highest CH	-	-	-	-	4.52	4.51	9.13	9.03	-	-	-	-
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM	-	64QAM
Lowest CH	-	-	-	-	-	4.49	-	9.01	-	-	-	-
Middle CH	-	-	-	-	-	4.49	-	9.01	-	-	-	-
Highest CH	-	-	-	-	-	4.5	-	9.05	-	-	-	-



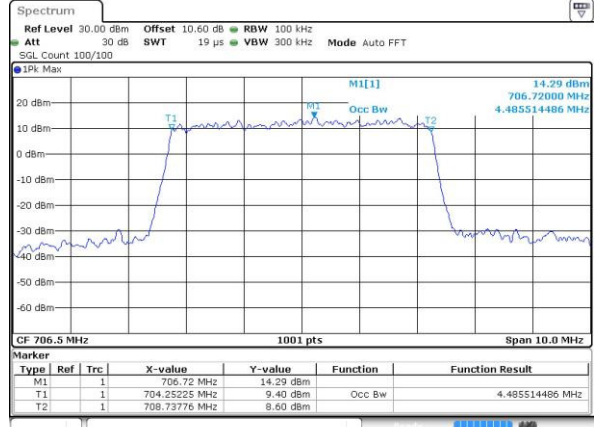
LTE Band 17

Lowest Channel / 5MHz / QPSK



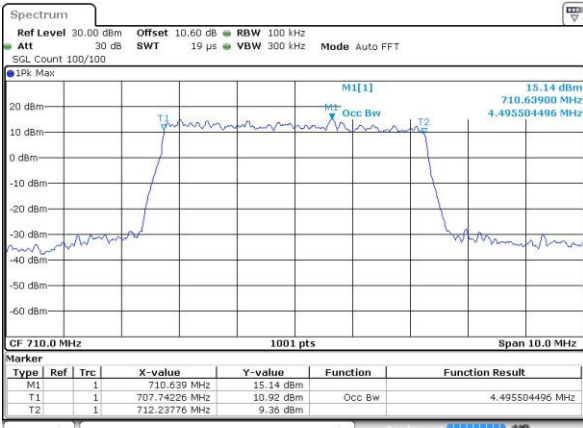
Date: 5 APR 2017 23:12:50

Lowest Channel / 5MHz / 16QAM



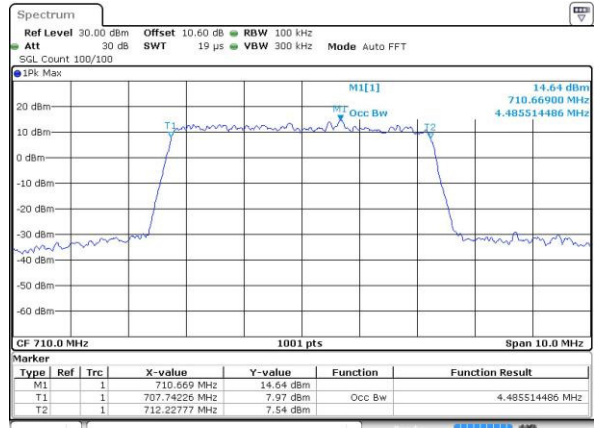
Date: 5 APR 2017 23:13:00

Middle Channel / 5MHz / QPSK



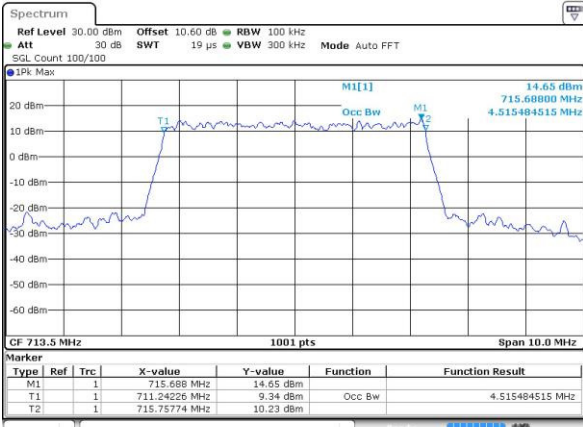
Date: 5 APR 2017 23:19:56

Middle Channel / 5MHz / 16QAM



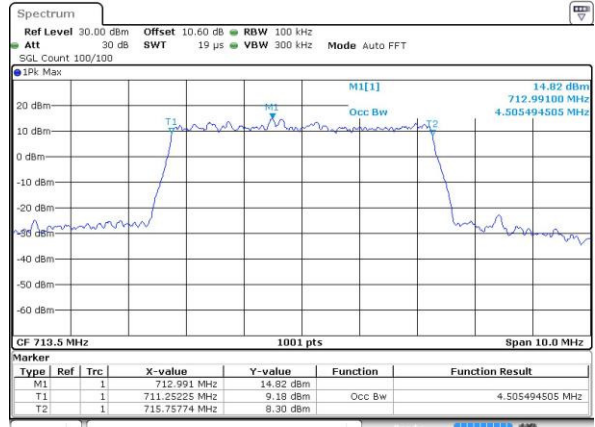
Date: 5 APR 2017 23:20:07

Highest Channel / 5MHz / QPSK



Date: 5 APR 2017 23:22:26

Highest Channel / 5MHz / 16QAM



Date: 5 APR 2017 23:22:36