



Conducted Band Edge



LTE Band 12 / 1.4MHz / QPSK

Lowest Band Edge / 1 RB



Date: 19 JUN 2017 22:23:12

Highest Band Edge / 1RB



Date: 19 JUN 2017 22:32:47

Lowest Band Edge / Full RB



Date: 19 JUN 2017 22:19:44

Highest Band Edge / Full RB



Date: 19 JUN 2017 22:29:19



LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Date: 19 JUN 2017 22:22:03

Highest Band Edge / 1 RB



Date: 19 JUN 2017 22:31:38

Lowest Band Edge / Full RB



Date: 19 JUN 2017 22:20:53

Highest Band Edge / Full RB

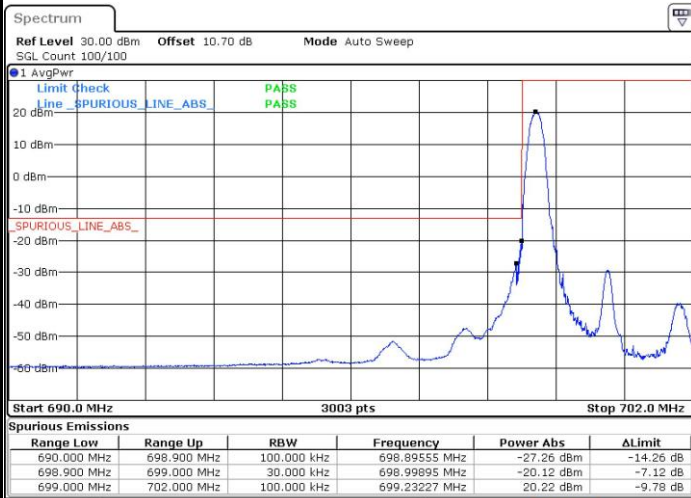


Date: 19 JUN 2017 22:30:29



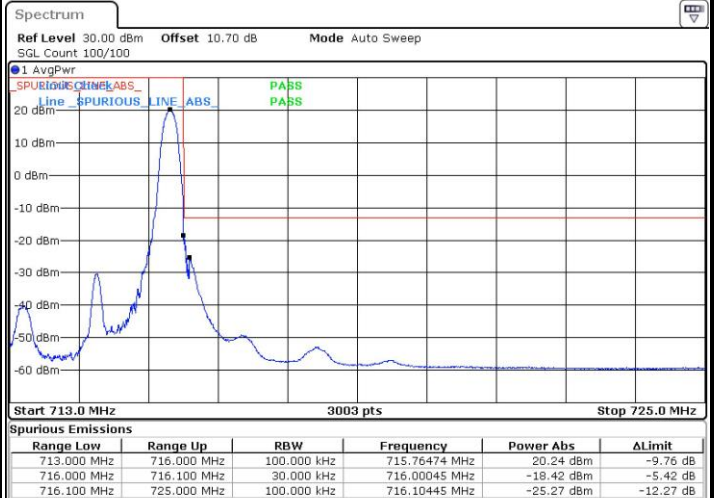
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



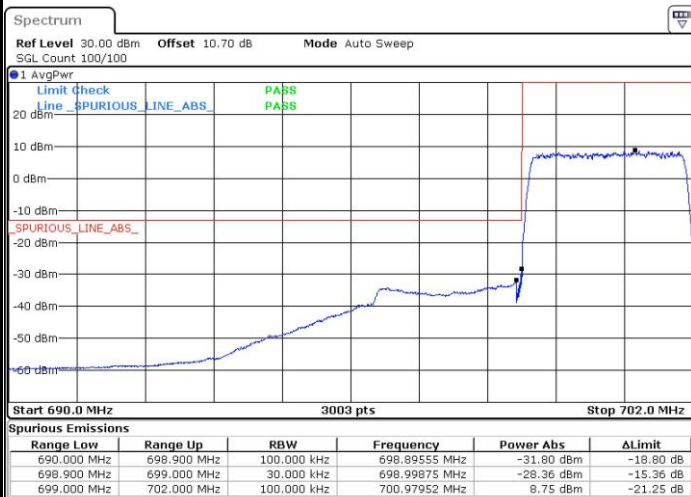
Date: 19 JUN 2017 20:52:47

Highest Band Edge / 1 RB



Date: 19 JUN 2017 21:02:24

Lowest Band Edge / Full RB



Date: 19 JUN 2017 20:49:20

Highest Band Edge / Full RB

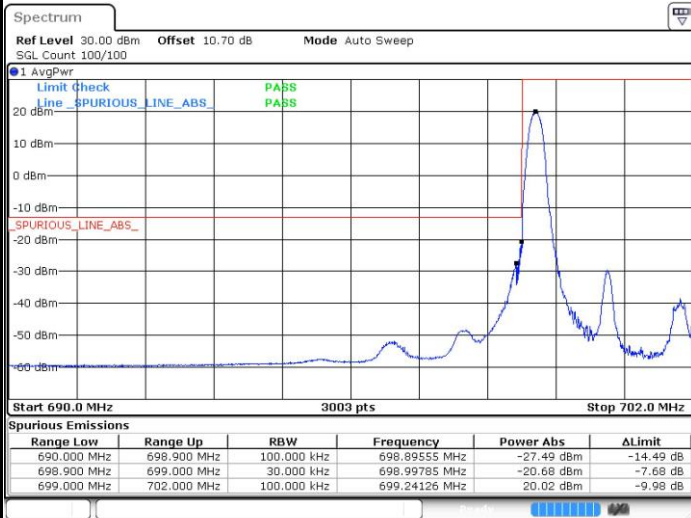


Date: 19 JUN 2017 20:58:57



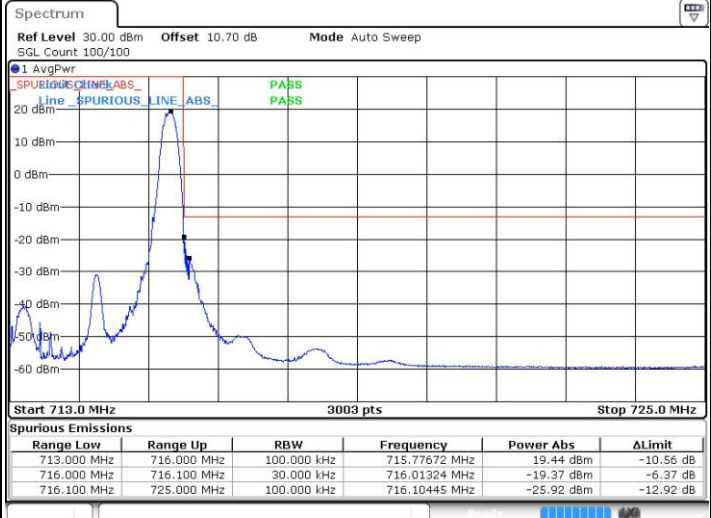
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



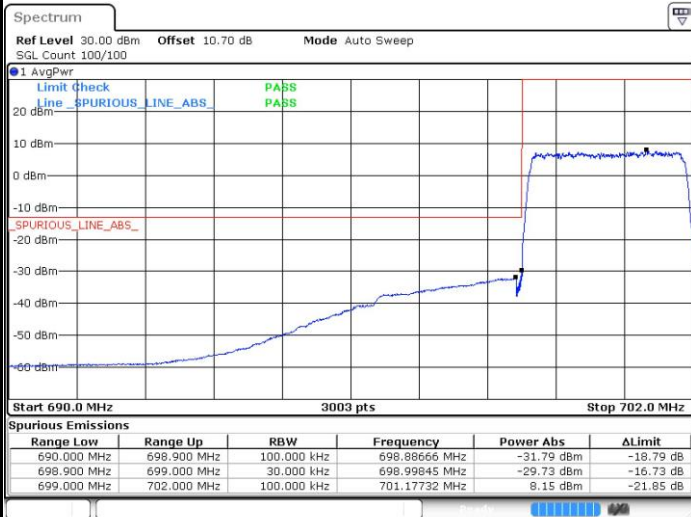
Date: 19 JUN 2017 20:51:38

Highest Band Edge / 1 RB



Date: 19 JUN 2017 21:01:15

Lowest Band Edge / Full RB



Date: 19 JUN 2017 20:50:29

Highest Band Edge / Full RB



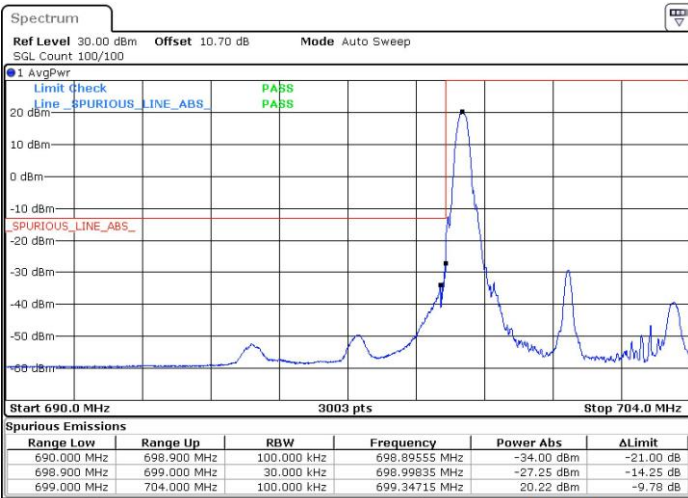
Date: 19 JUN 2017 21:00:06



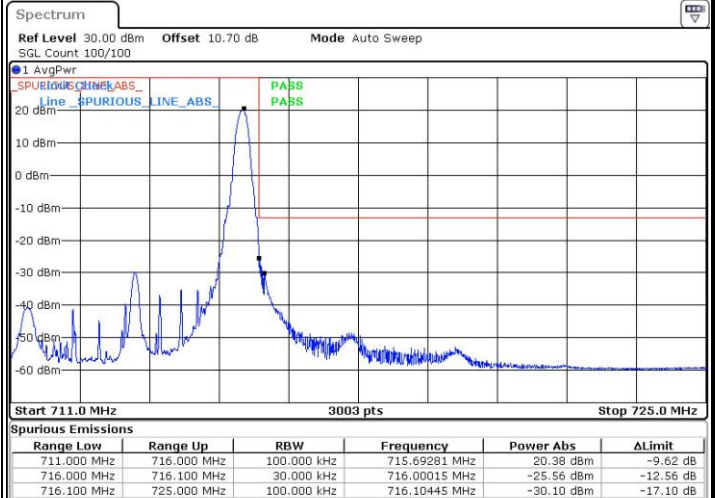
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



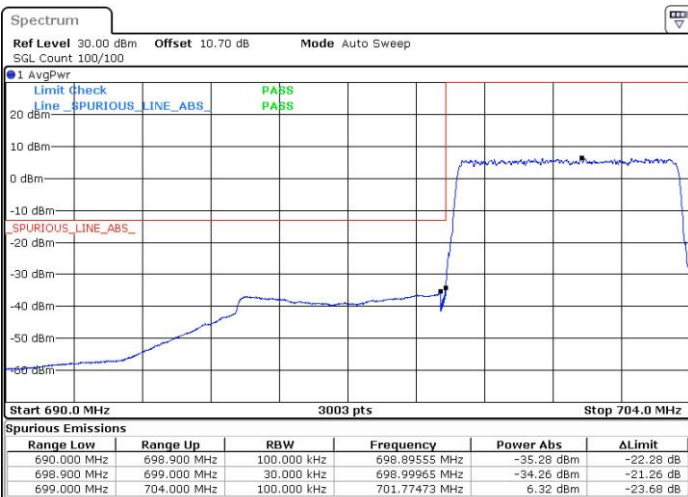
Date: 19 JUN 2017 21:09:31



Date: 19 JUN 2017 21:17:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 19 JUN 2017 21:06:03

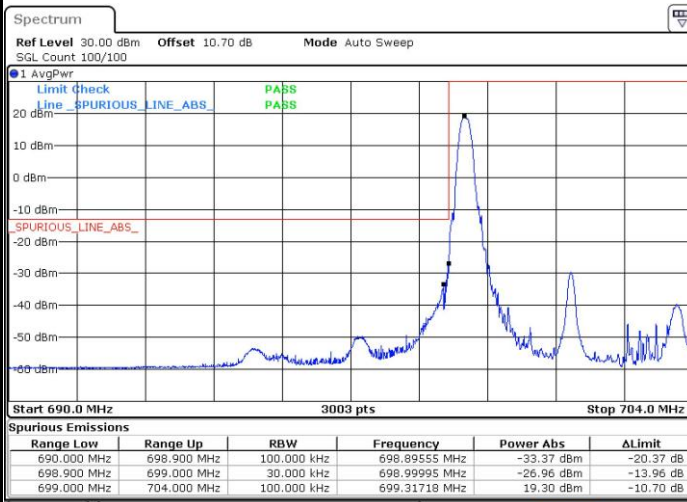


Date: 19 JUN 2017 21:15:40



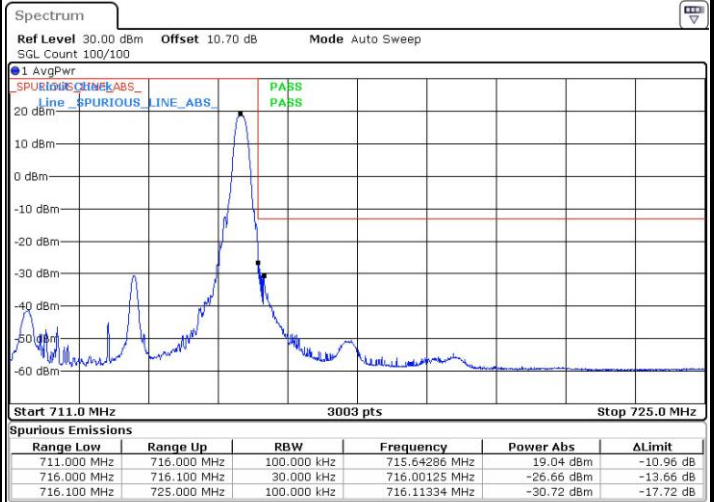
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



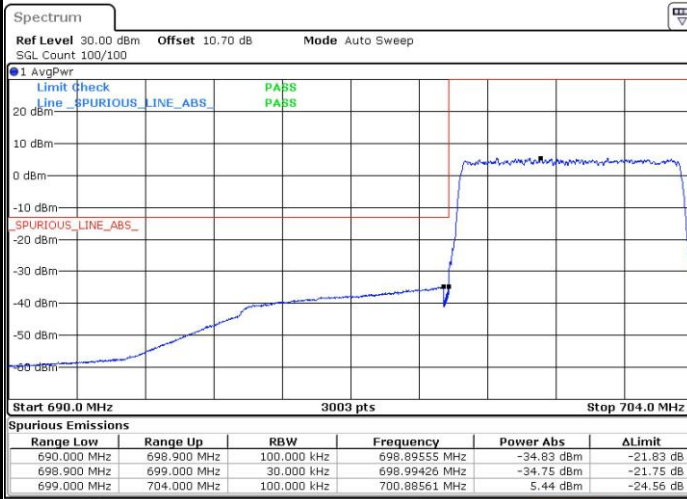
Date: 19 JUN 2017 21:08:22

Highest Band Edge / 1 RB



Date: 19 JUN 2017 21:19:08

Lowest Band Edge / Full RB



Date: 19 JUN 2017 21:07:12

Highest Band Edge / Full RB

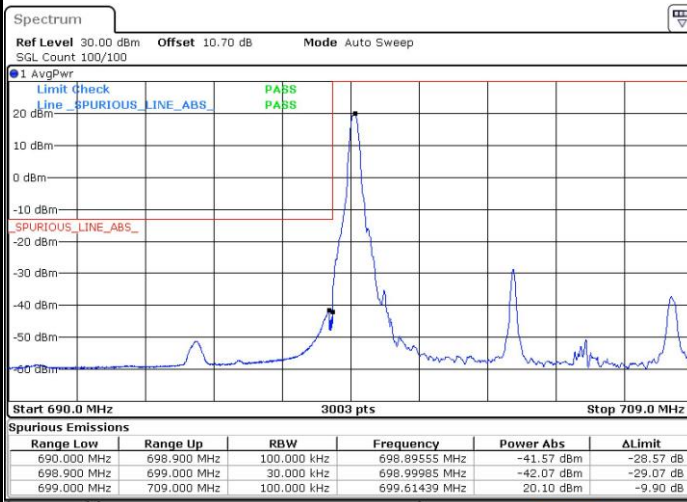


Date: 19 JUN 2017 21:16:50



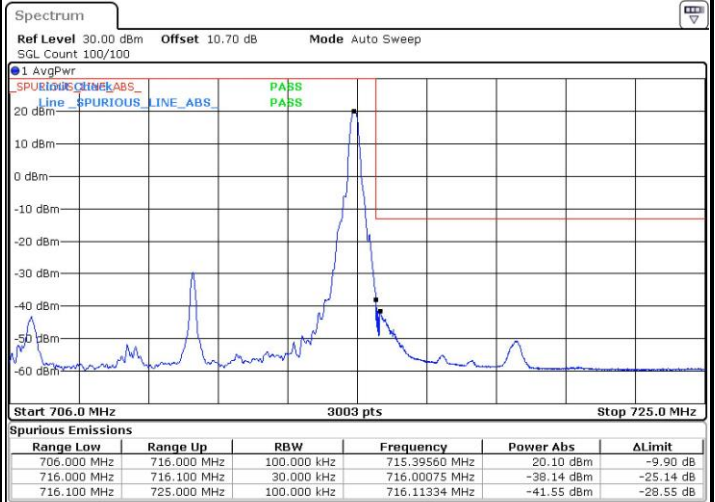
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



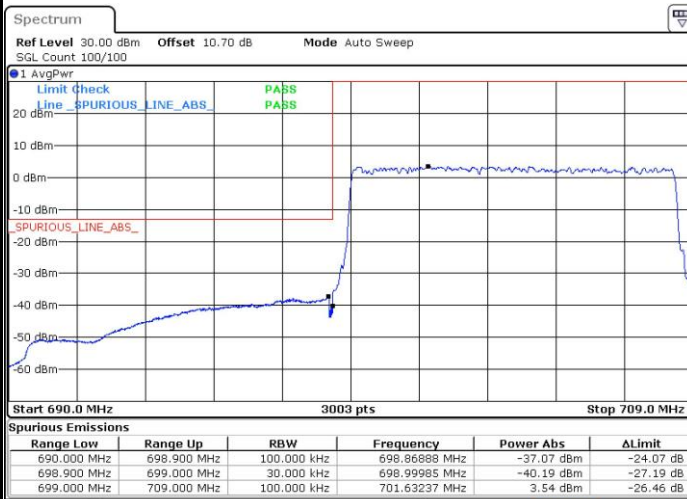
Date: 19 JUN 2017 21:26:15

Highest Band Edge / 1 RB



Date: 19 JUN 2017 21:35:51

Lowest Band Edge / Full RB



Date: 19 JUN 2017 21:22:47

Highest Band Edge / Full RB

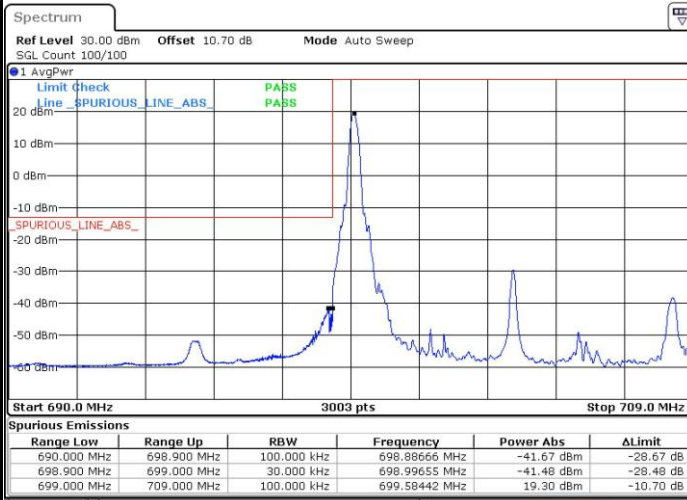


Date: 19 JUN 2017 21:32:24



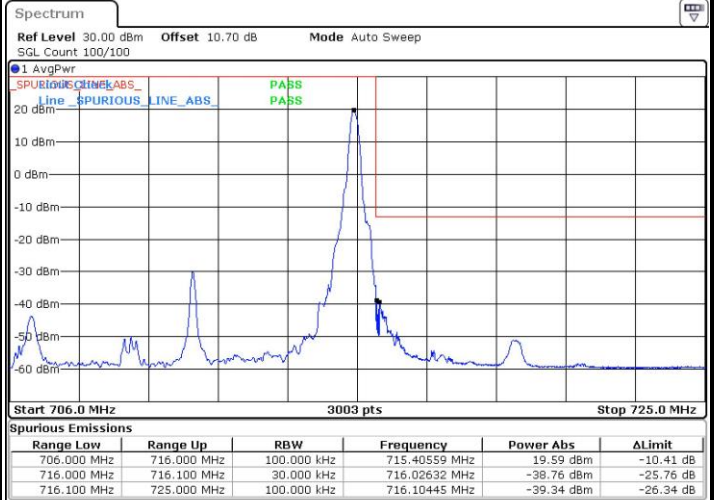
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



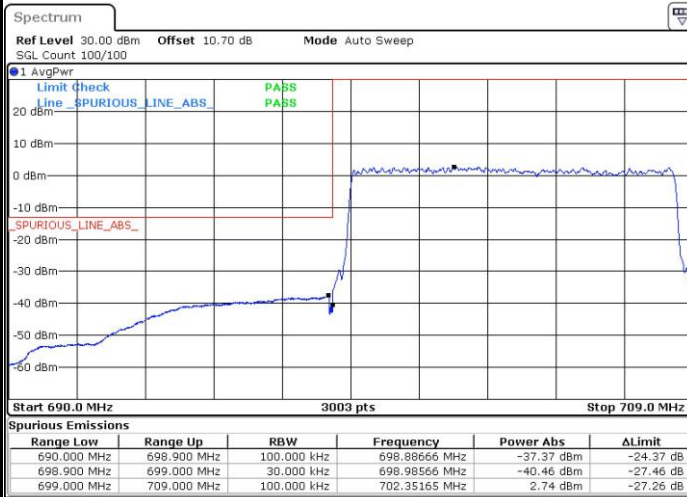
Date: 19 JUN 2017 21:25:05

Highest Band Edge / 1 RB



Date: 19 JUN 2017 21:34:42

Lowest Band Edge / Full RB



Date: 19 JUN 2017 21:23:56

Highest Band Edge / Full RB



Date: 19 JUN 2017 21:33:33

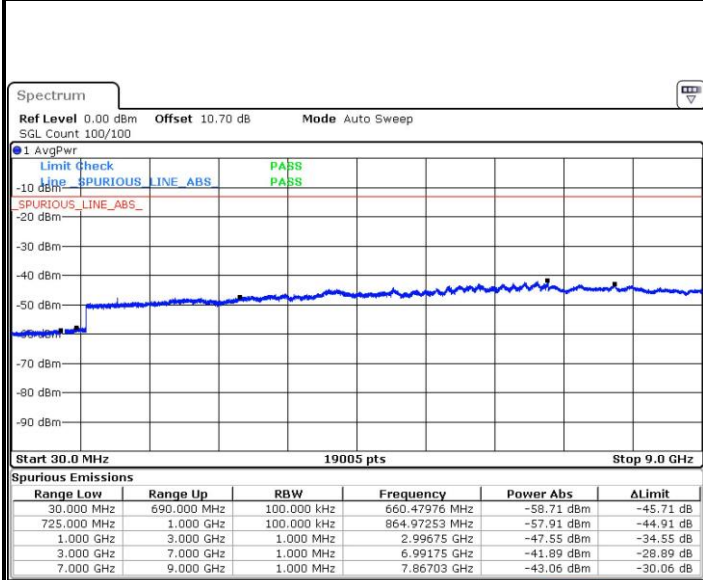


Conducted Spurious Emission



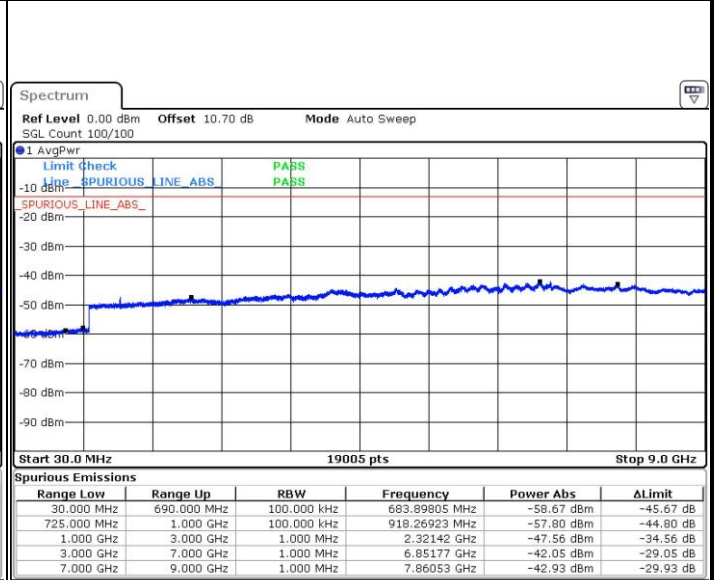
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



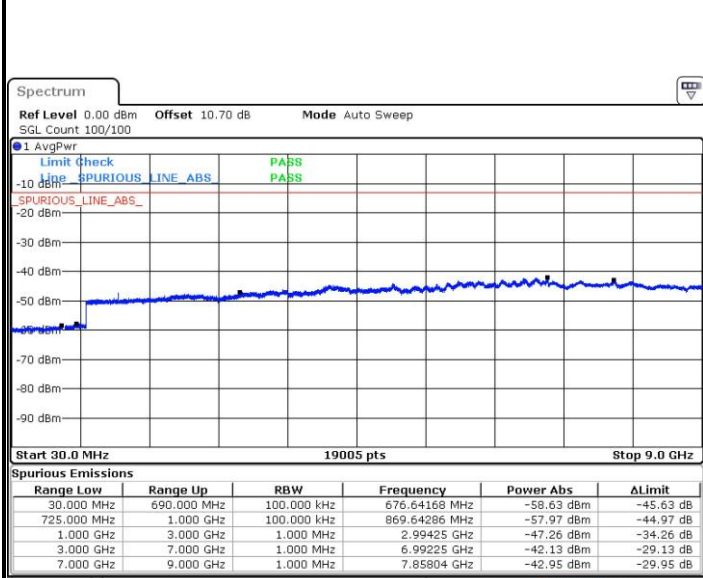
Date: 19 JUN 2017 22:24:06

Lowest Channel / 16QAM



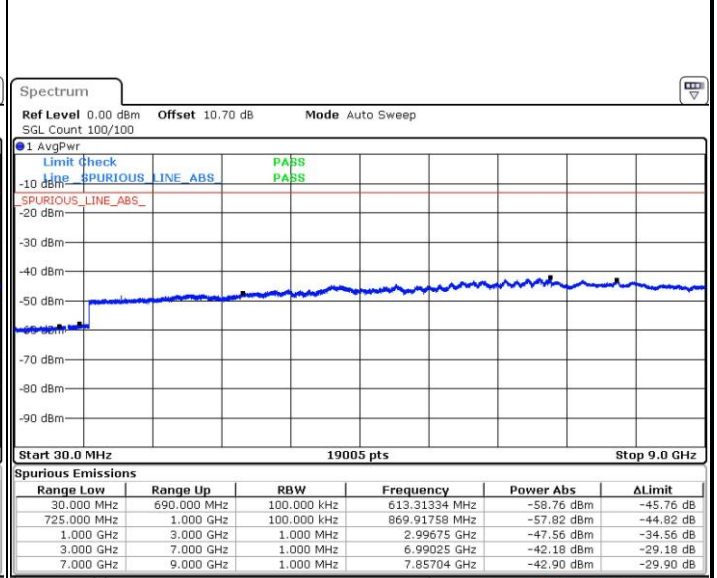
Date: 19 JUN 2017 22:25:00

Middle Channel / QPSK



Date: 19 JUN 2017 22:27:30

Middle Channel / 16QAM

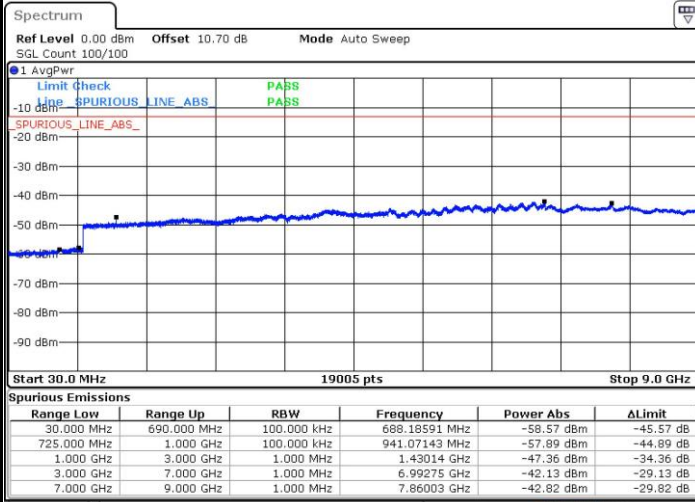


Date: 19 JUN 2017 22:26:36



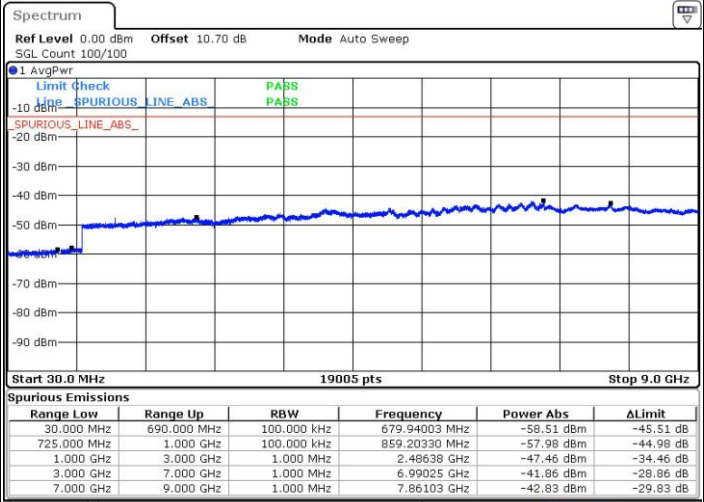
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 19 JUN 2017 22:33:41

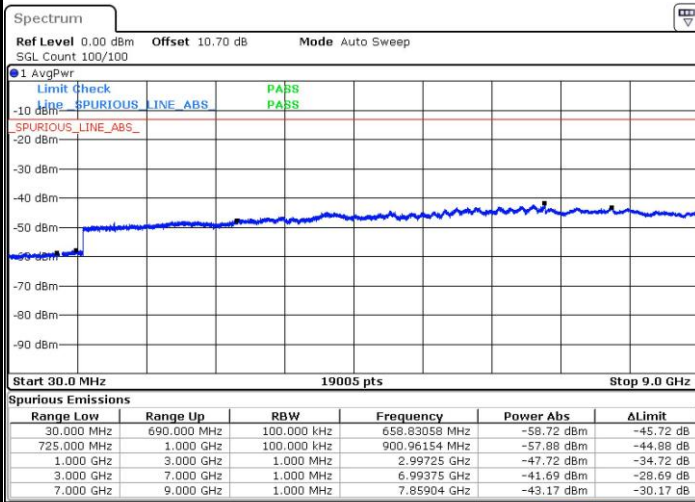
Highest Channel / 16QAM



Date: 19 JUN 2017 22:34:35

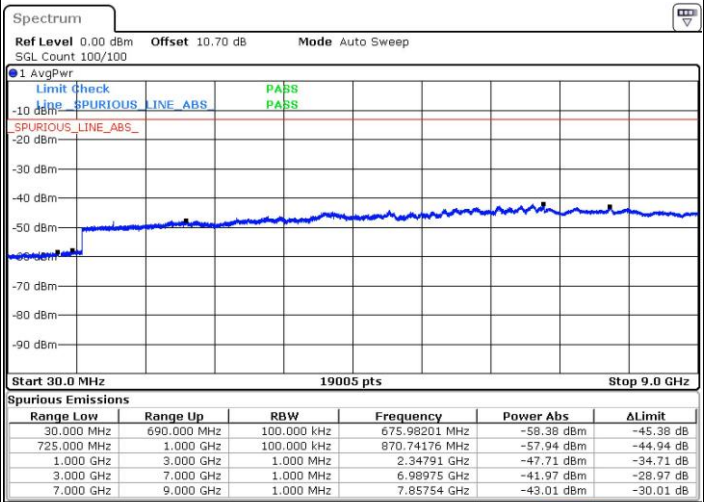
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 19 JUN 2017 20:53:42

Lowest Channel / 16QAM



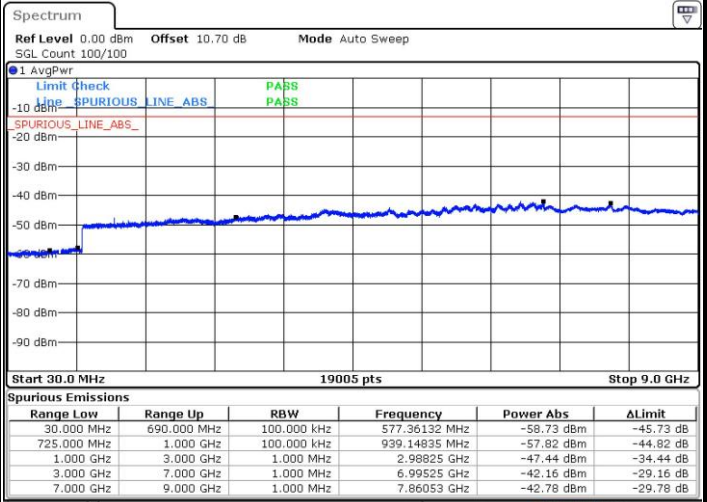
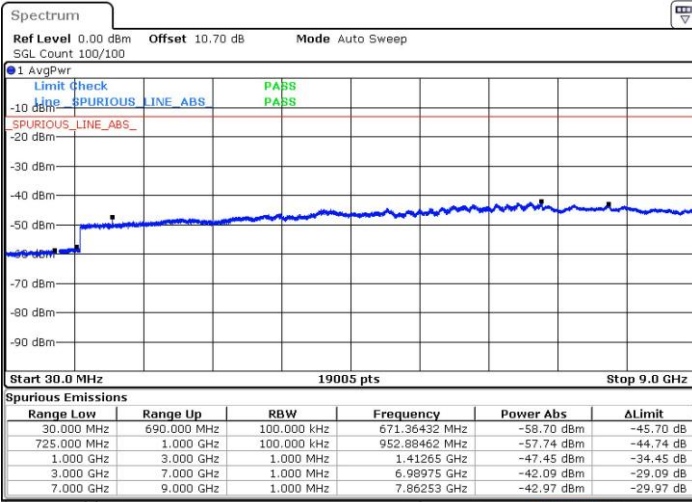
Date: 19 JUN 2017 20:54:37



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

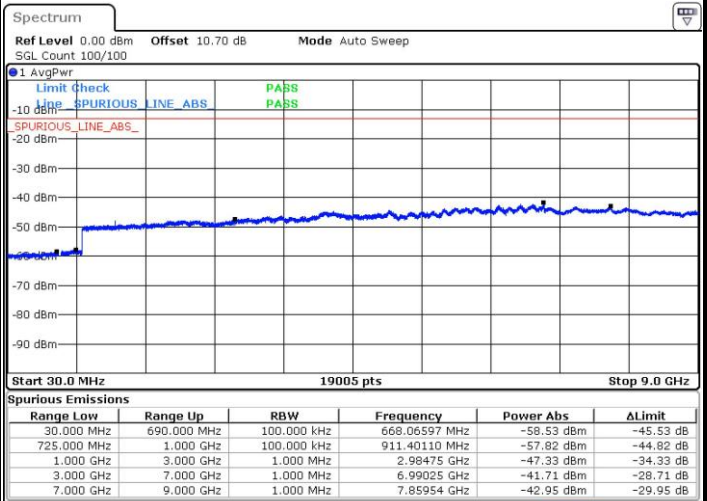
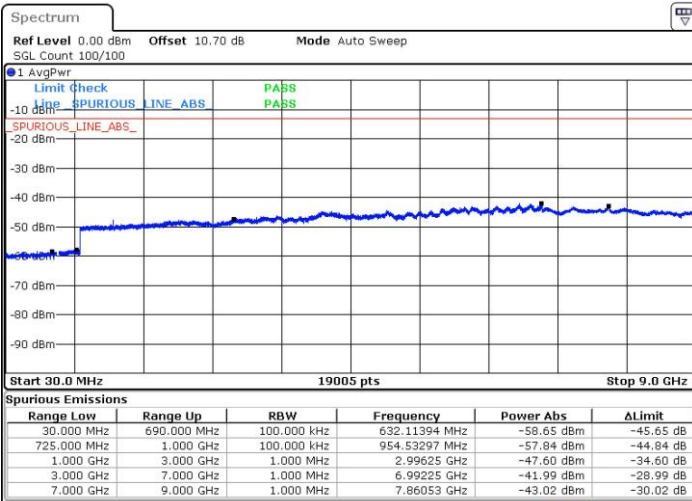


Date: 19 JUN 2017 20:57:07

Date: 19 JUN 2017 20:56:13

Highest Channel / QPSK

Highest Channel / 16QAM



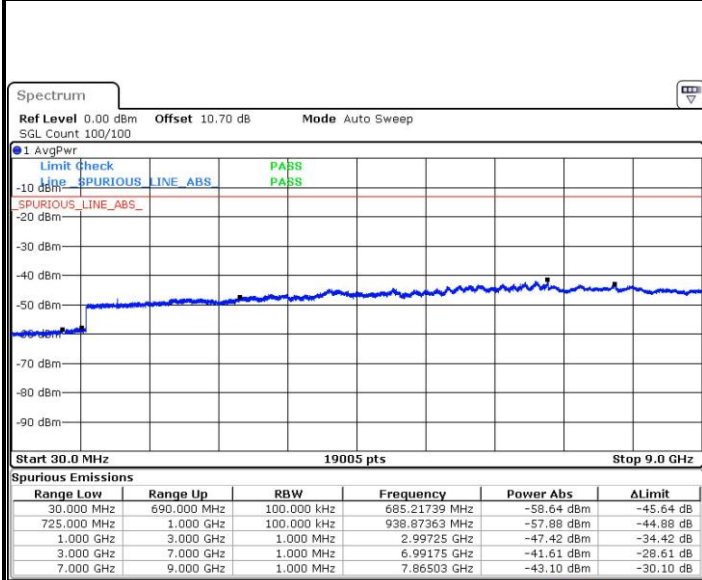
Date: 19 JUN 2017 21:03:19

Date: 19 JUN 2017 21:04:13



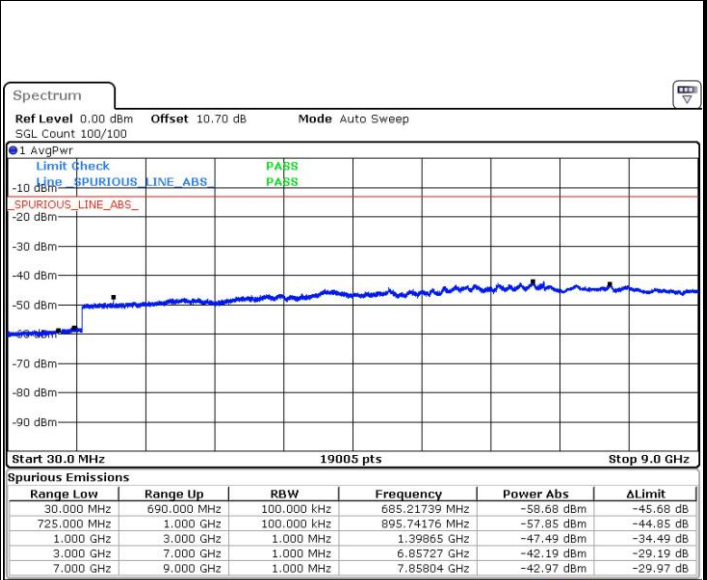
LTE Band 12 / 5MHz

Lowest Channel / QPSK



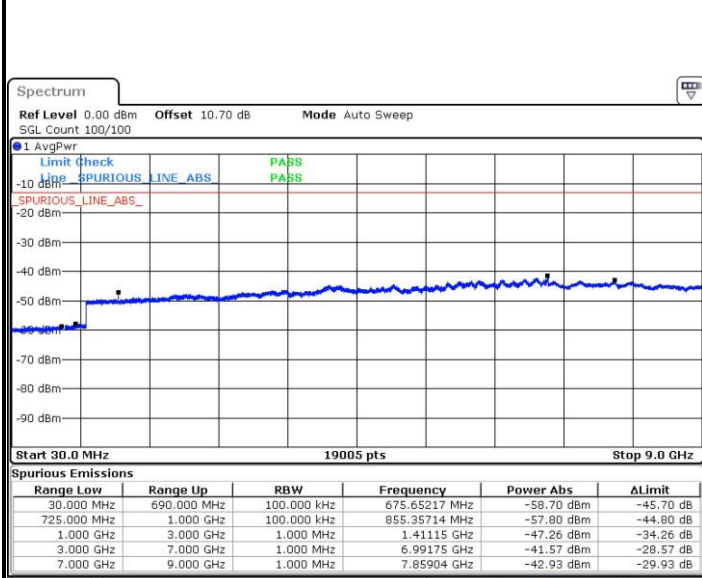
Date: 19 JUN 2017 21:10:25

Lowest Channel / 16QAM



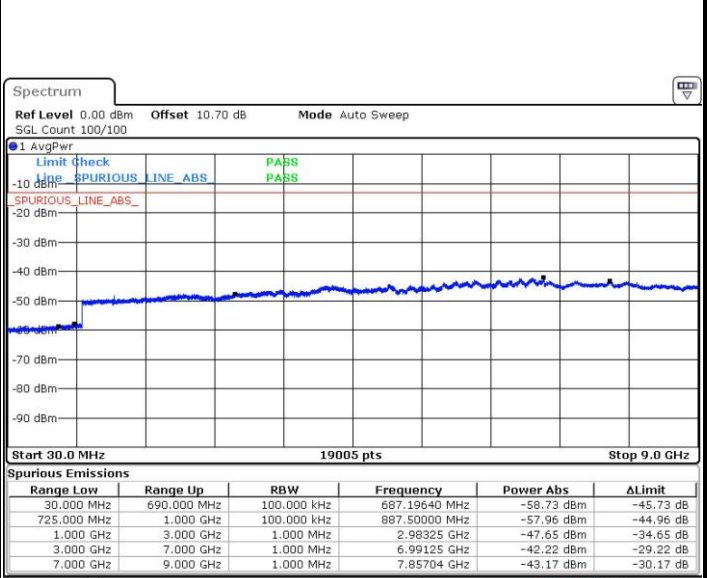
Date: 19 JUN 2017 21:11:20

Middle Channel / QPSK



Date: 19 JUN 2017 21:13:50

Middle Channel / 16QAM

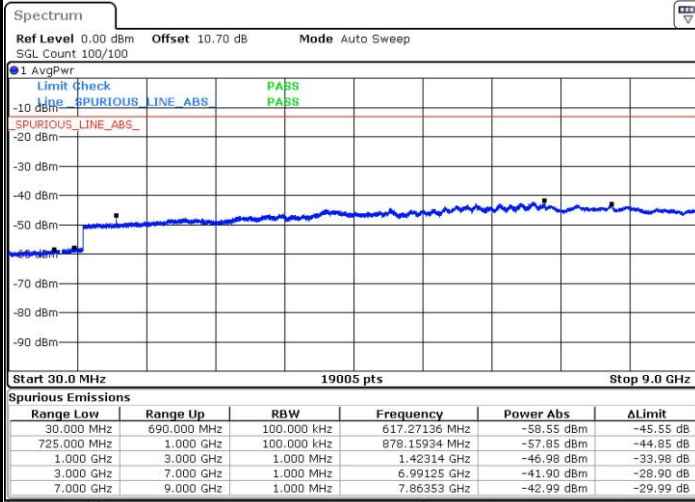


Date: 19 JUN 2017 21:12:56



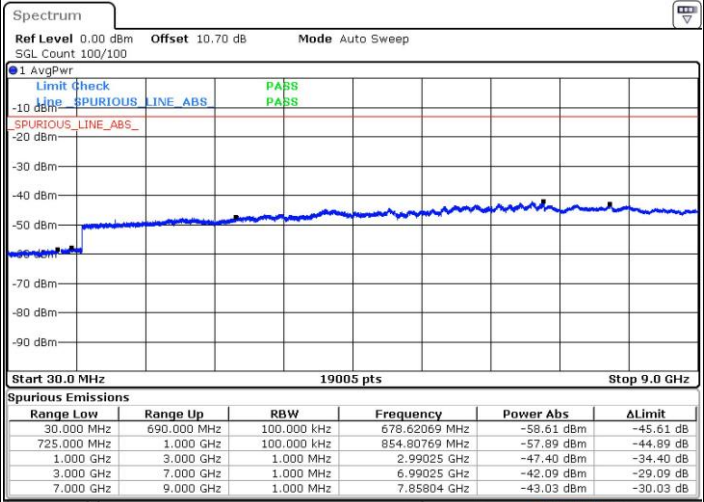
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 19 JUN 2017 21:20:57

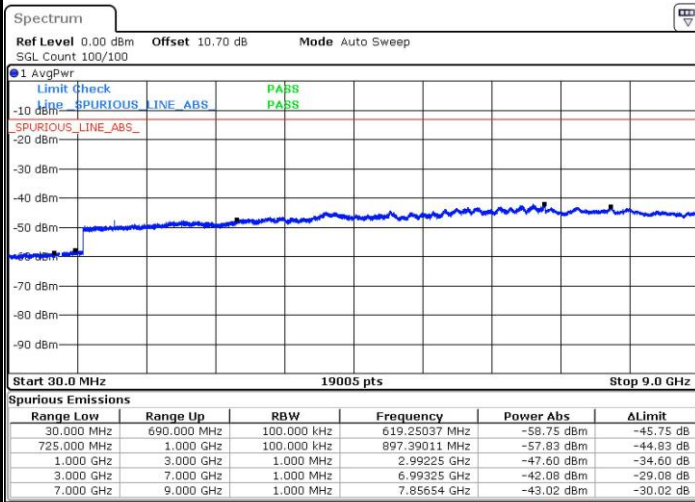
Highest Channel / 16QAM



Date: 19 JUN 2017 21:20:03

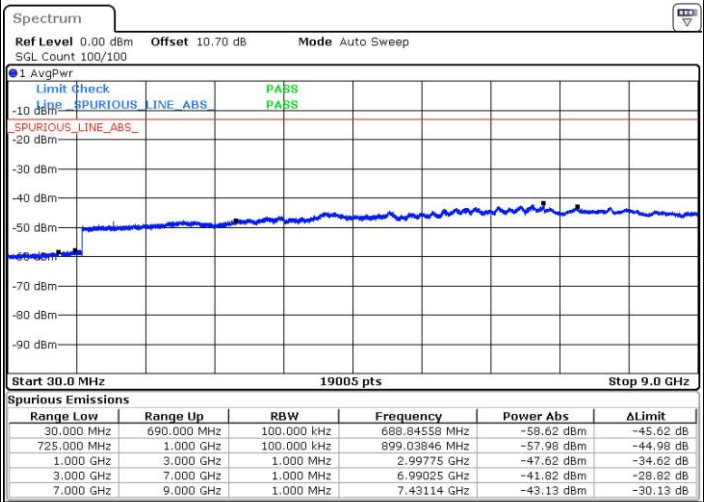
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 19 JUN 2017 21:27:09

Lowest Channel / 16QAM



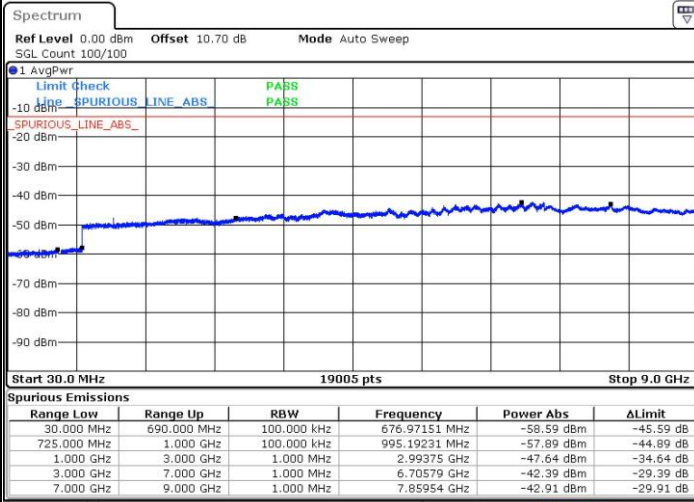
Date: 19 JUN 2017 21:28:04



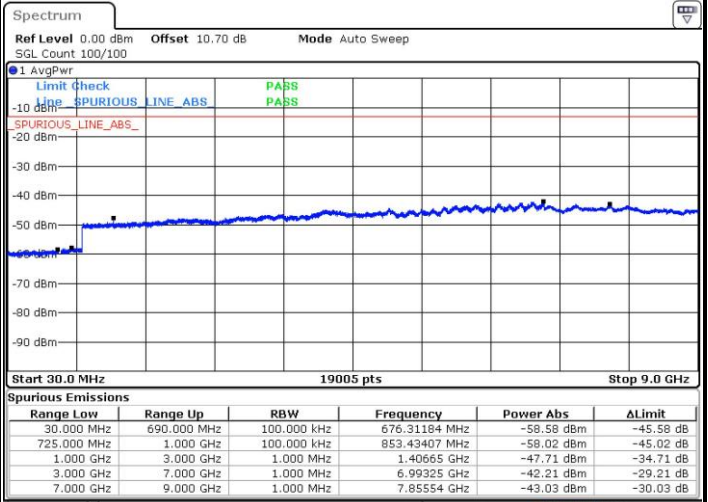
LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



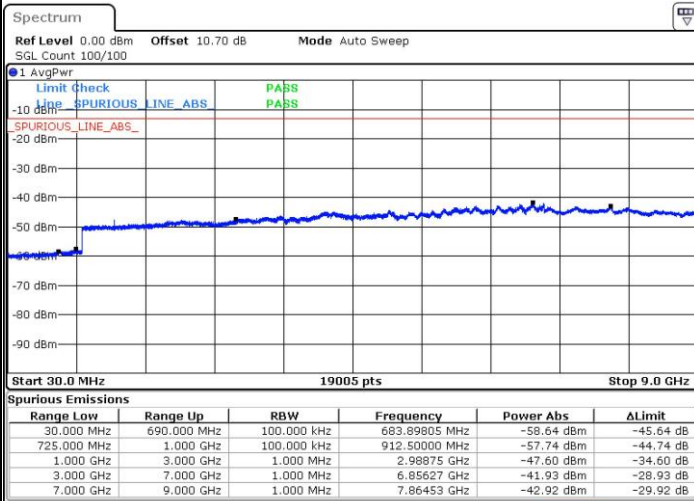
Date: 19 JUN 2017 21:30:34



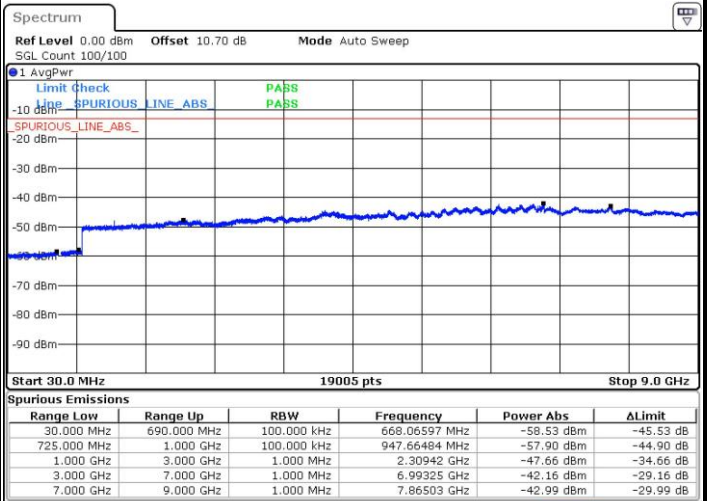
Date: 19 JUN 2017 21:29:39

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 19 JUN 2017 21:36:46



Date: 19 JUN 2017 21:37:40



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	0.0031	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0041	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0040	
0	Normal Voltage	0.0122	
-10	Normal Voltage	0.0170	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0047	
20	Maximum Voltage	0.0042	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0023	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	2.38	4.96	3.54	5.91	
Highest CH	-	-	-	-	



LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 22 JUN 2017 23:54:59

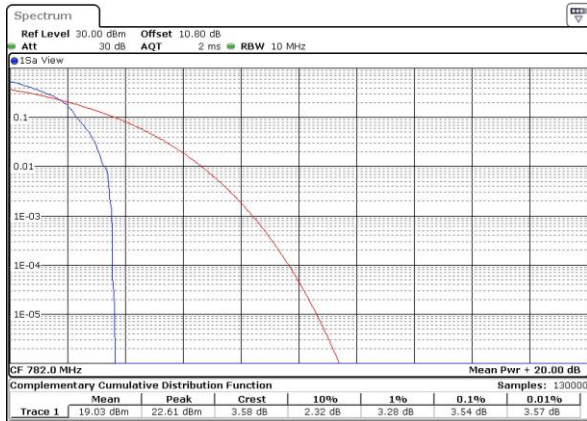
Middle Channel / Full RB



Date: 22 JUN 2017 23:55:32

LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 22 JUN 2017 23:54:25

Middle Channel / Full RB



Date: 22 JUN 2017 23:54:39



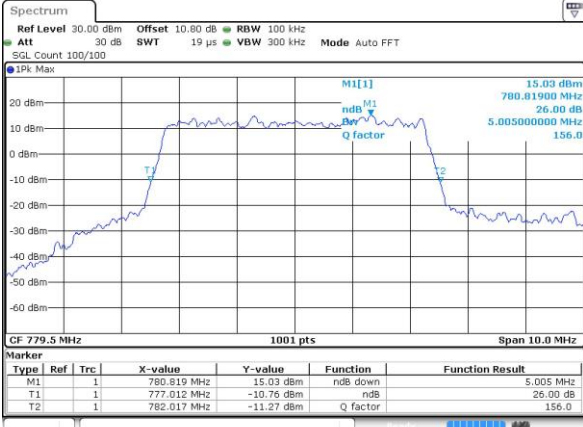
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	5.01	4.94	-	-	-	-	-	-
Middle CH	-	-	-	-	4.87	4.95	9.75	9.59	-	-	-	-
Highest CH	-	-	-	-	5.01	4.86	-	-	-	-	-	-



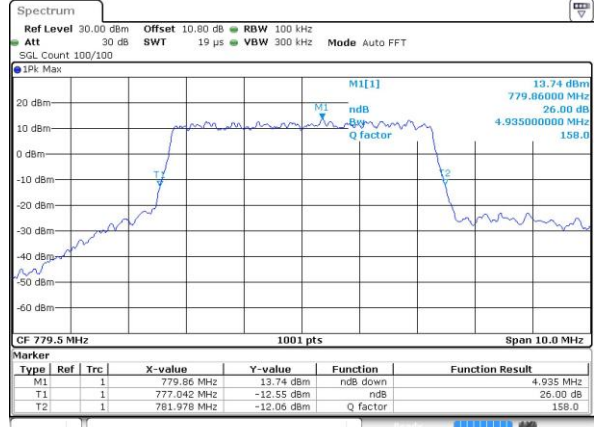
LTE Band 13

Lowest Channel / 5MHz / QPSK



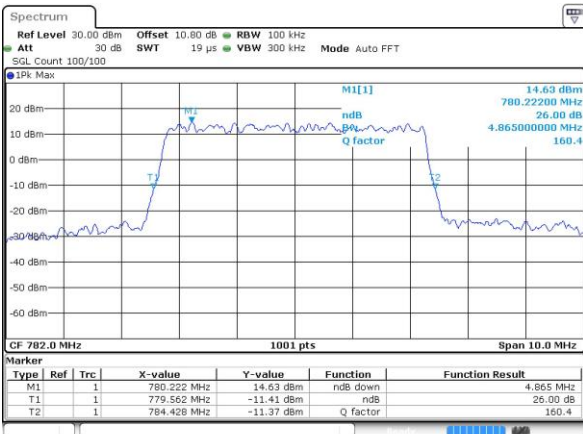
Date: 22 JUN 2017 23:19:05

Lowest Channel / 5MHz / 16QAM



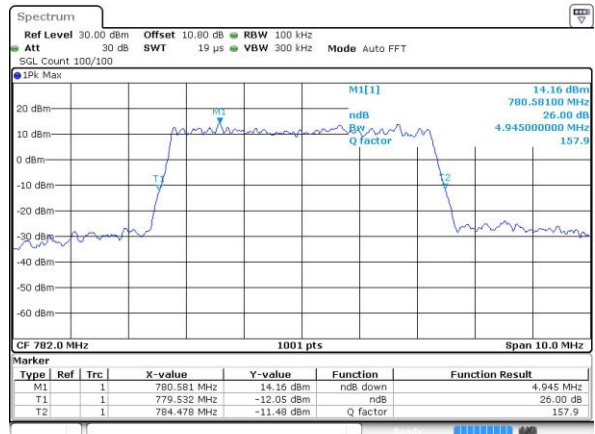
Date: 22 JUN 2017 23:18:54

Middle Channel / 5MHz / QPSK



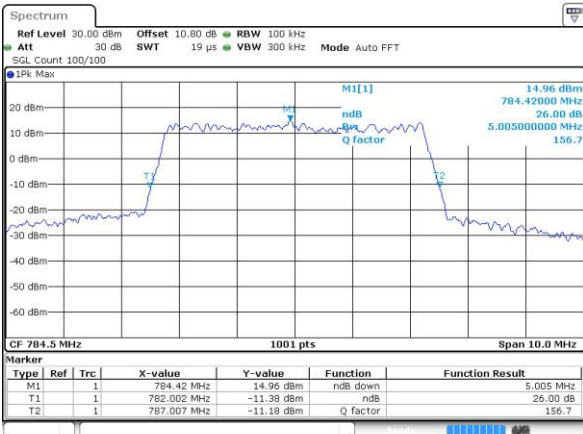
Date: 22 JUN 2017 23:30:11

Middle Channel / 5MHz / 16QAM



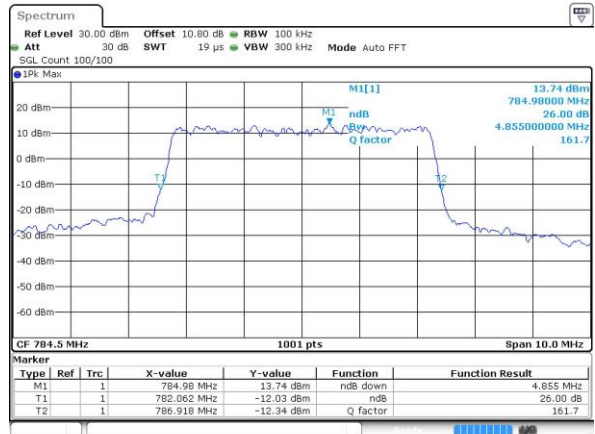
Date: 22 JUN 2017 23:30:22

Highest Channel / 5MHz / QPSK



Date: 22 JUN 2017 23:31:24

Highest Channel / 5MHz / 16QAM

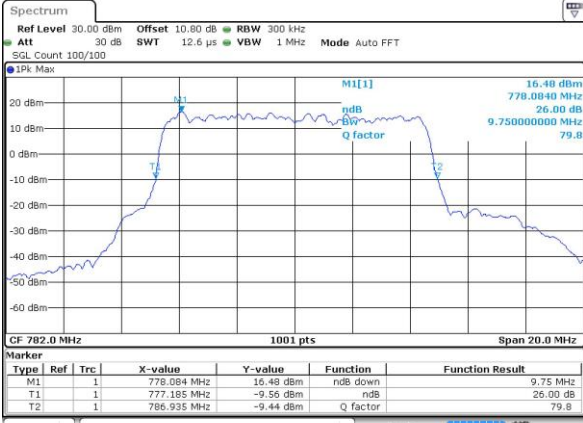


Date: 22 JUN 2017 23:31:14



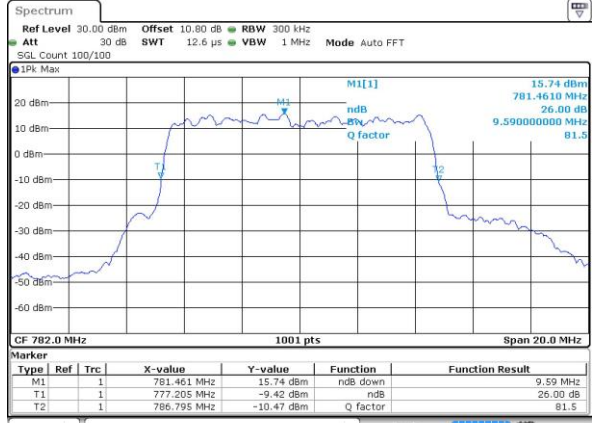
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 22 JUN 2017 23:42:07

Middle Channel / 10MHz / 16QAM



Date: 22 JUN 2017 23:41:57



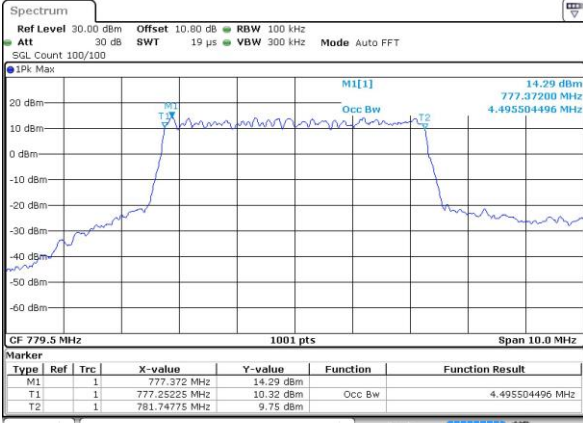
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.5	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.5	4.5	9.01	9.03	-	-	-	-
Highest CH	-	-	-	-	4.48	4.5	-	-	-	-	-	-



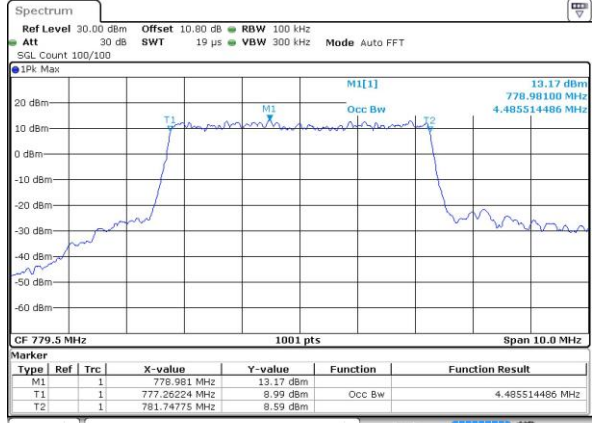
LTE Band 13

Lowest Channel / 5MHz / QPSK



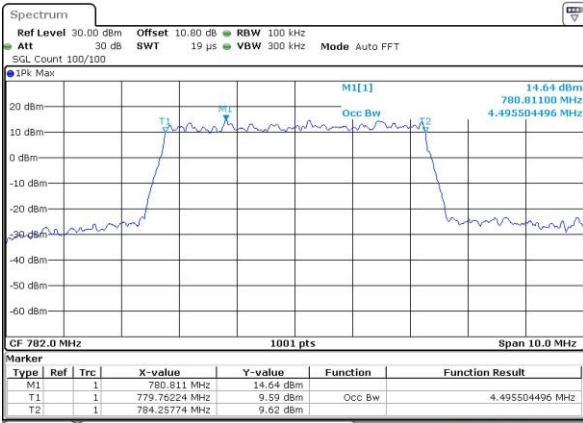
Date: 22 JUN 2017 23:18:33

Lowest Channel / 5MHz / 16QAM



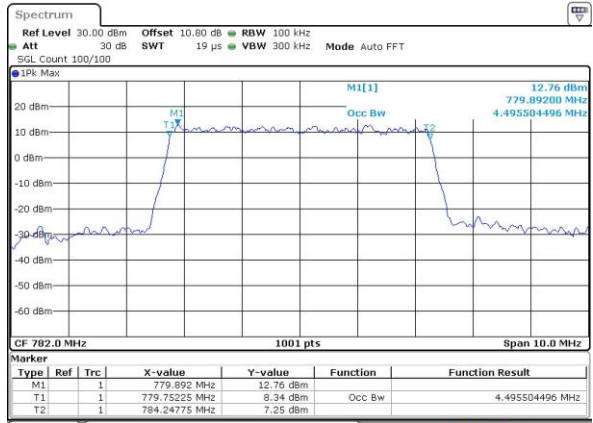
Date: 22 JUN 2017 23:18:44

Middle Channel / 5MHz / QPSK



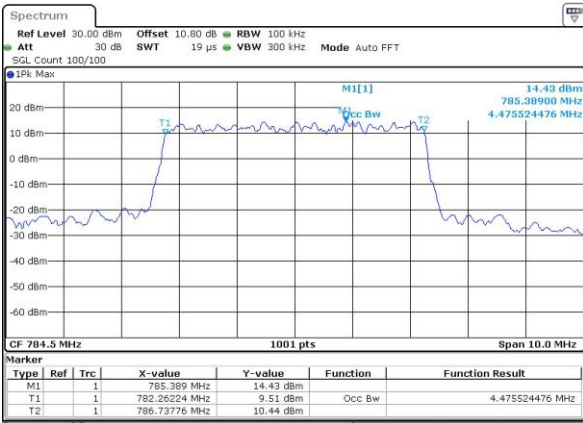
Date: 22 JUN 2017 23:30:43

Middle Channel / 5MHz / 16QAM



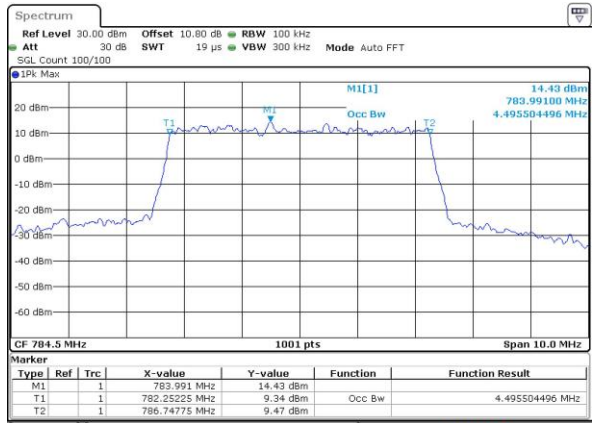
Date: 22 JUN 2017 23:30:32

Highest Channel / 5MHz / QPSK



Date: 22 JUN 2017 23:30:53

Highest Channel / 5MHz / 16QAM



Date: 22 JUN 2017 23:31:03