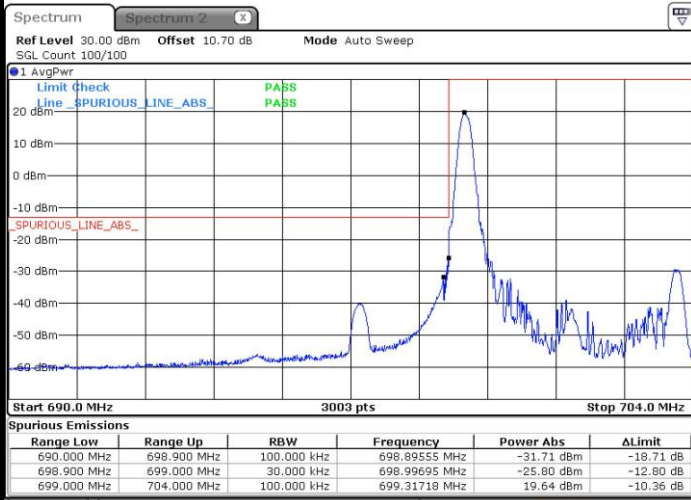




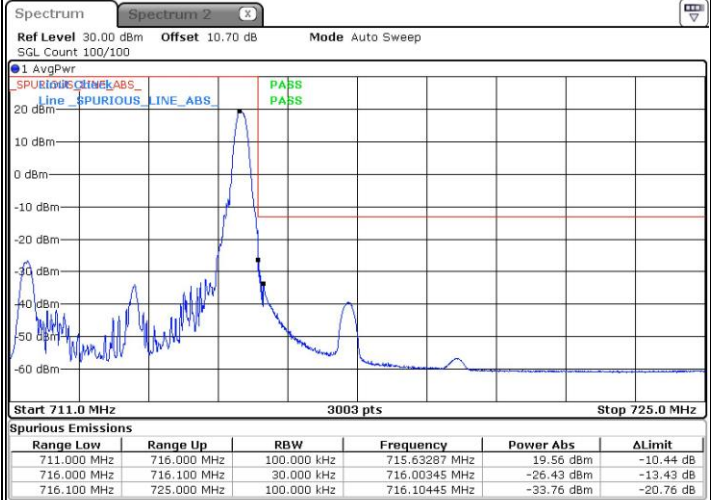
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



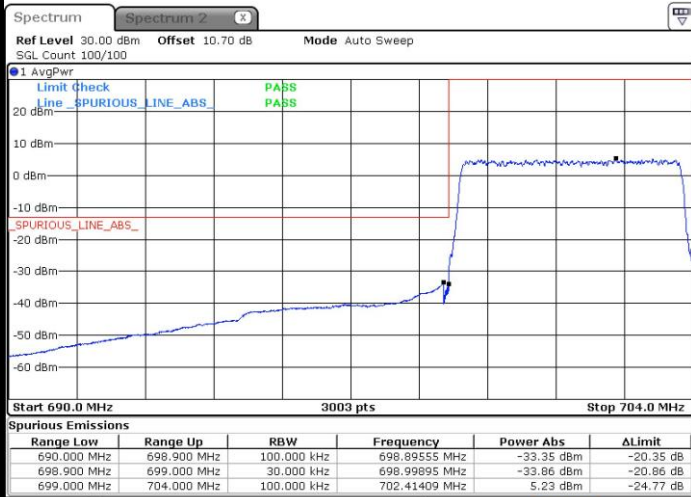
Date: 25 APR 2018 19:44:49

Highest Band Edge / 1 RB



Date: 25 APR 2018 19:55:33

Lowest Band Edge / Full RB



Date: 25 APR 2018 19:43:40

Highest Band Edge / Full RB

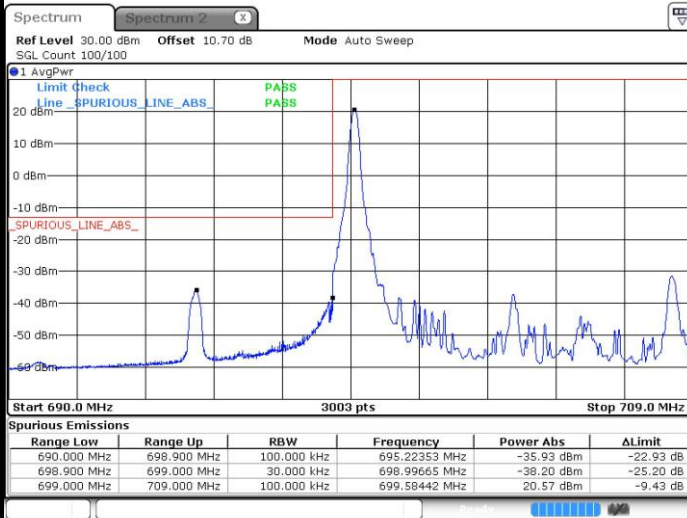


Date: 25 APR 2018 19:53:15



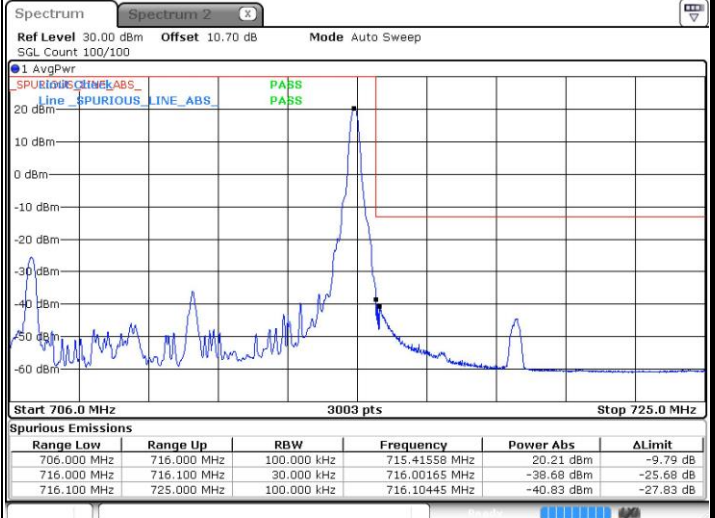
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



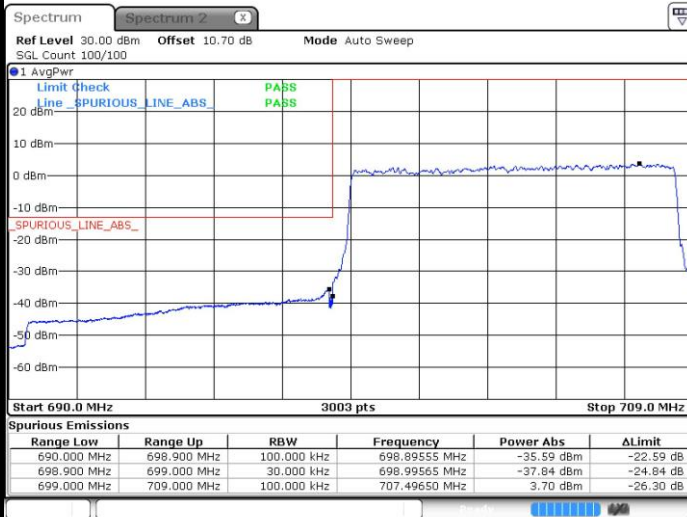
Date: 25 APR 2018 20:02:40

Highest Band Edge / 1 RB



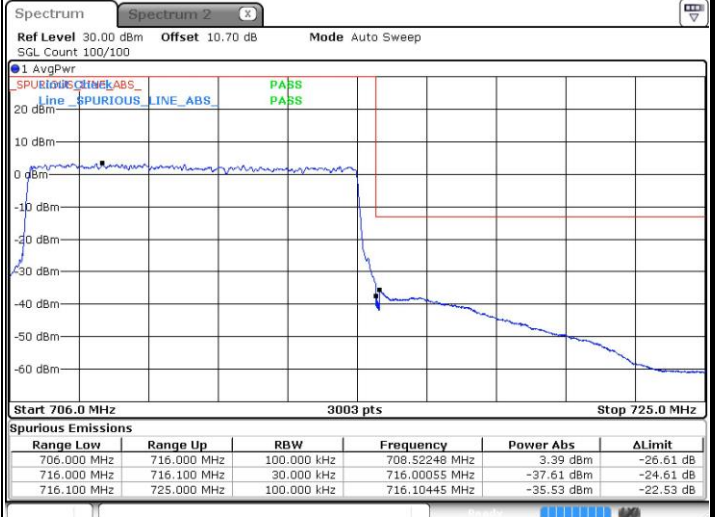
Date: 25 APR 2018 20:12:18

Lowest Band Edge / Full RB



Date: 25 APR 2018 19:59:13

Highest Band Edge / Full RB

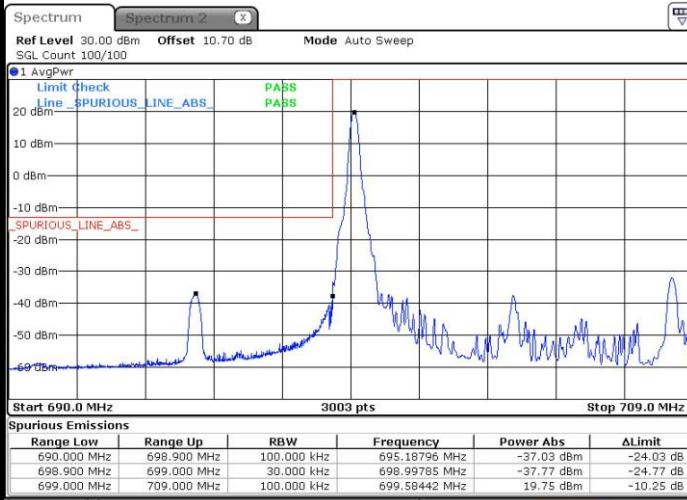


Date: 25 APR 2018 20:08:50



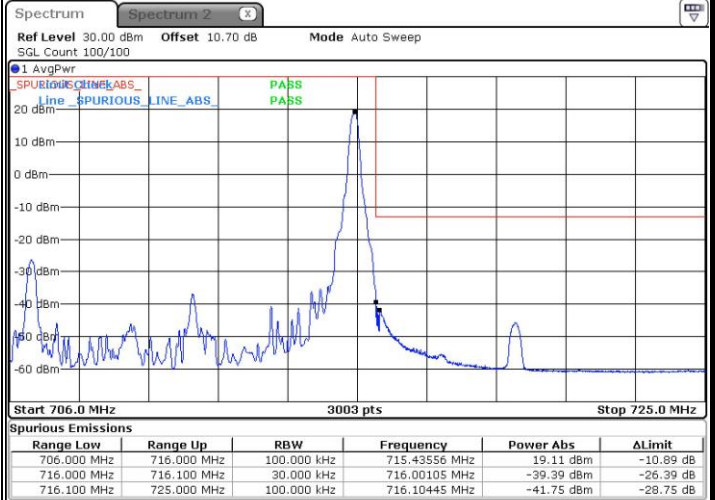
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



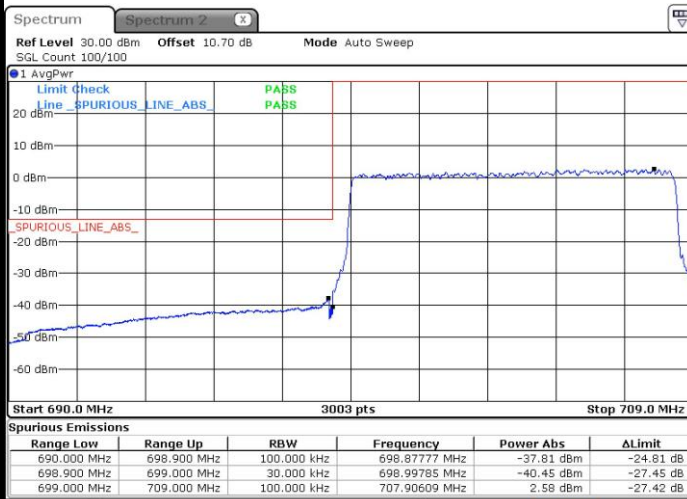
Date: 25 APR 2018 20:01:31

Highest Band Edge / 1 RB



Date: 25 APR 2018 20:11:09

Lowest Band Edge / Full RB



Date: 25 APR 2018 20:00:22

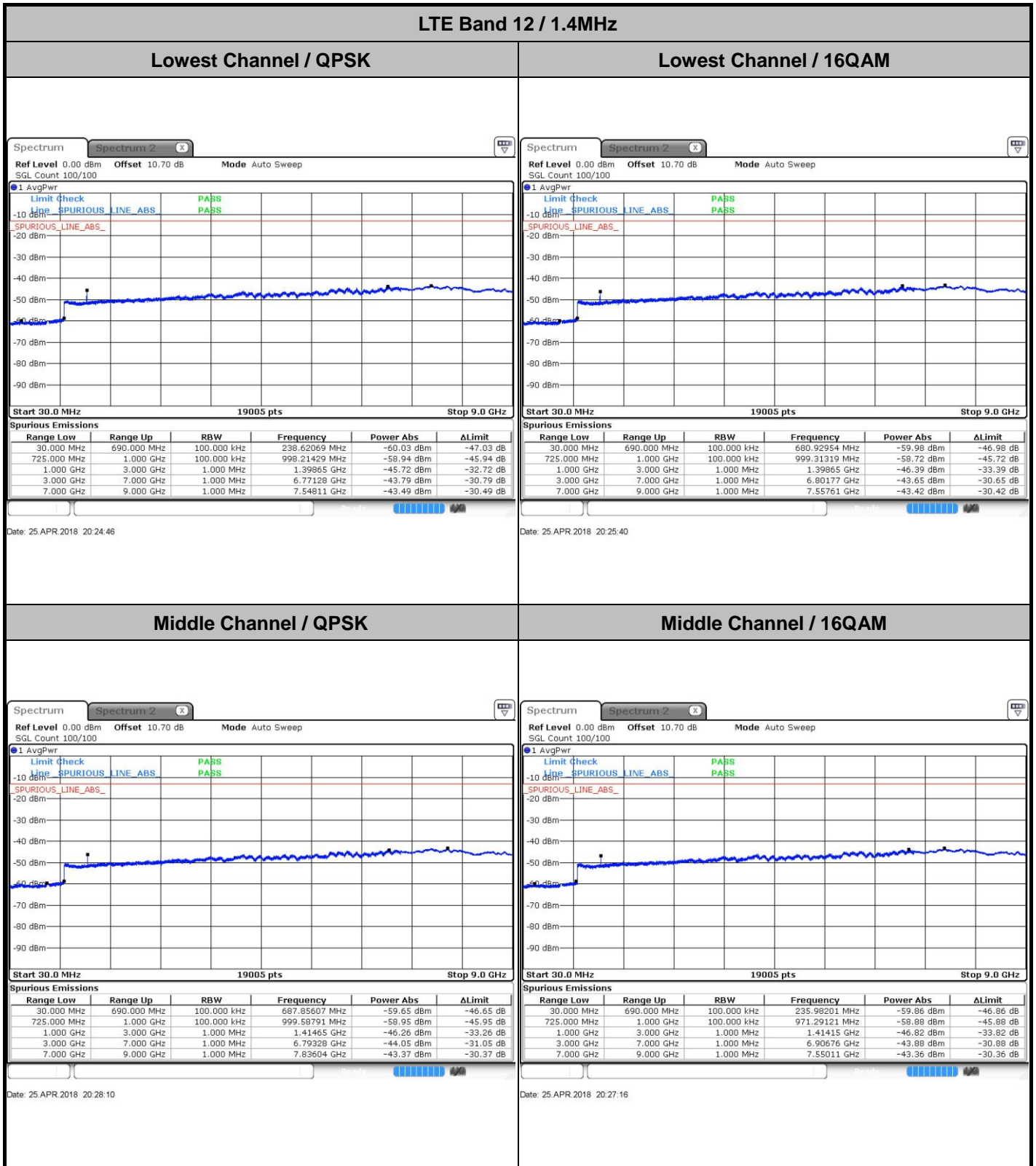
Highest Band Edge / Full RB



Date: 25 APR 2018 20:10:00



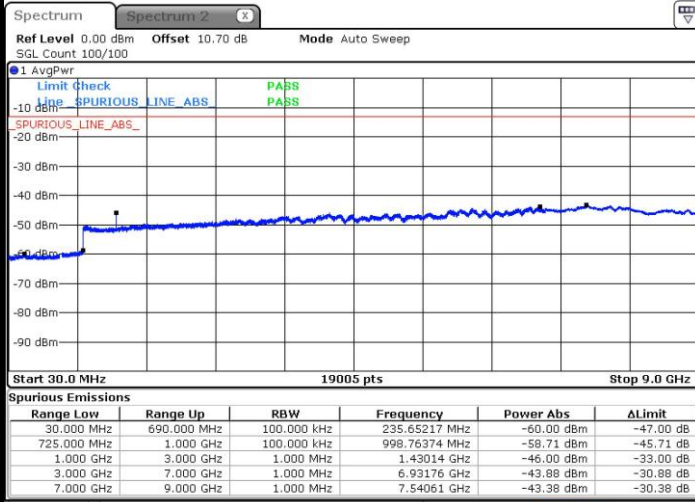
# Conducted Spurious Emission





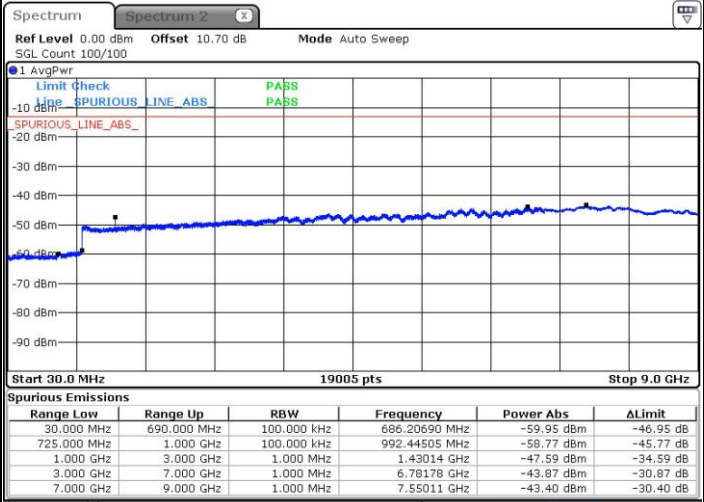
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 25 APR 2018 20:34:23

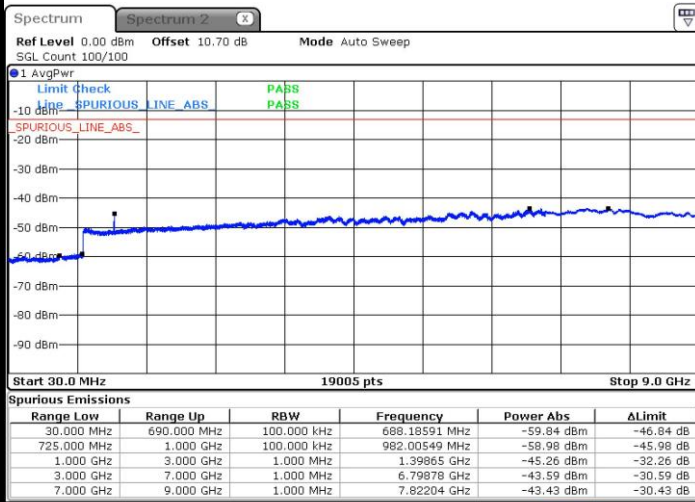
Highest Channel / 16QAM



Date: 25 APR 2018 20:35:18

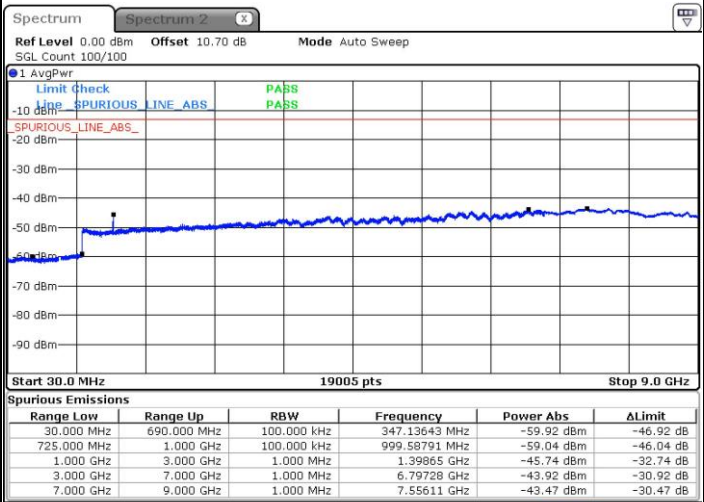
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 25 APR 2018 19:30:11

Lowest Channel / 16QAM



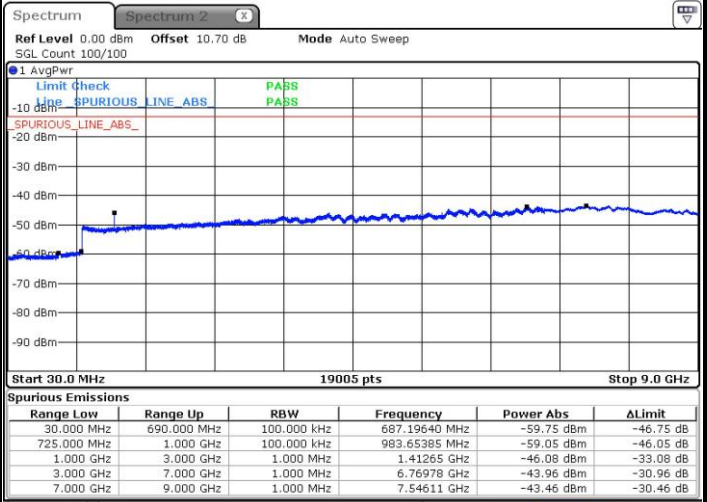
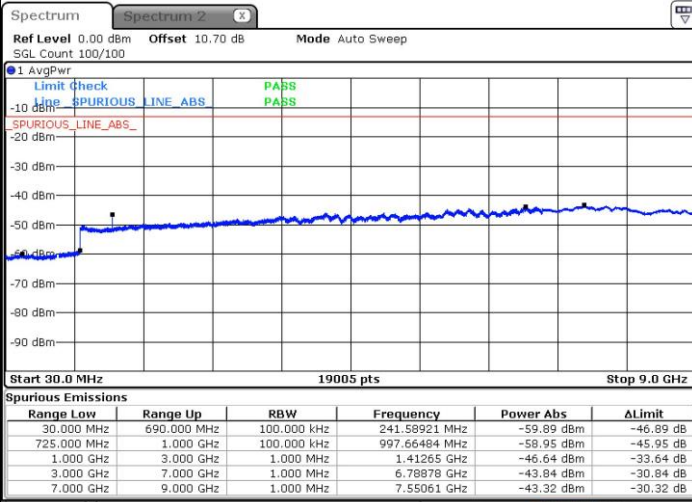
Date: 25 APR 2018 19:31:05



LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

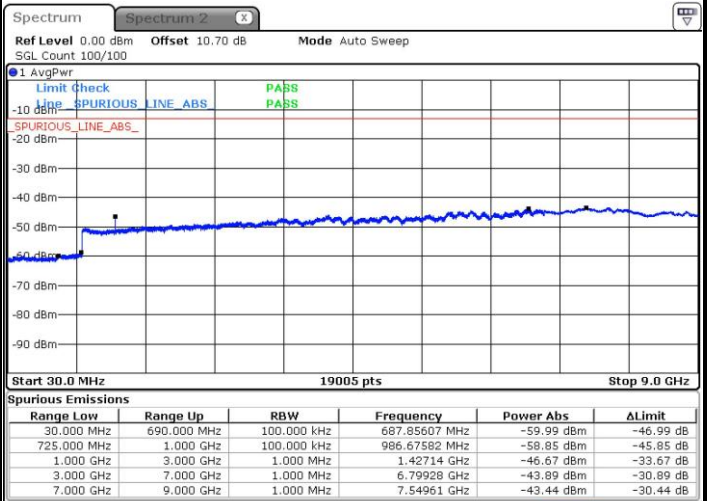
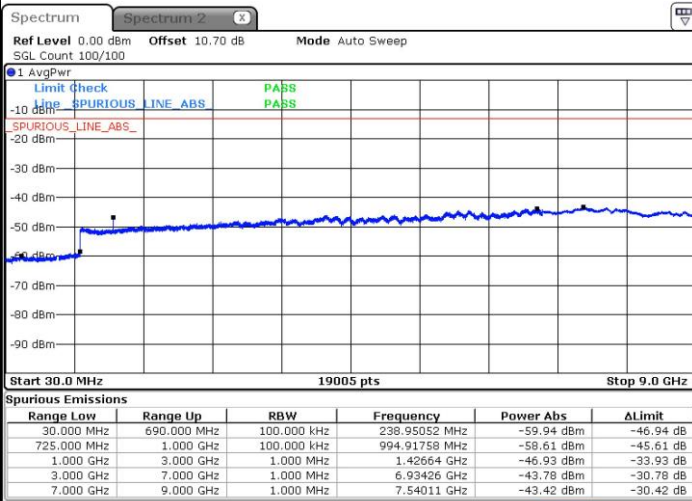


Date: 25 APR 2018 19:33:35

Date: 25 APR 2018 19:32:41

Highest Channel / QPSK

Highest Channel / 16QAM



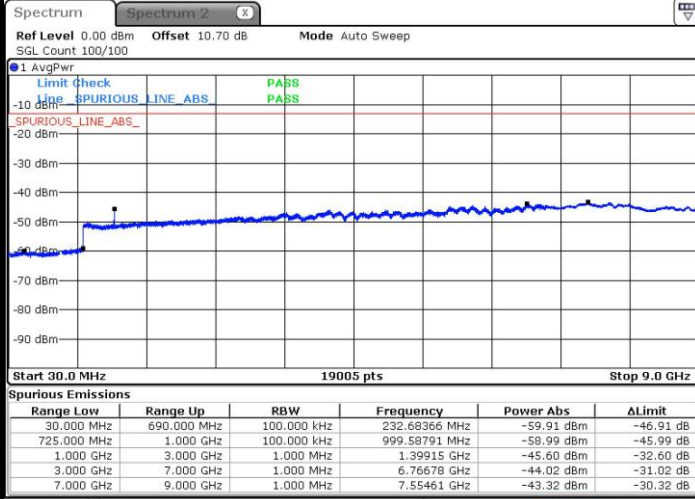
Date: 25 APR 2018 19:39:47

Date: 25 APR 2018 19:40:41



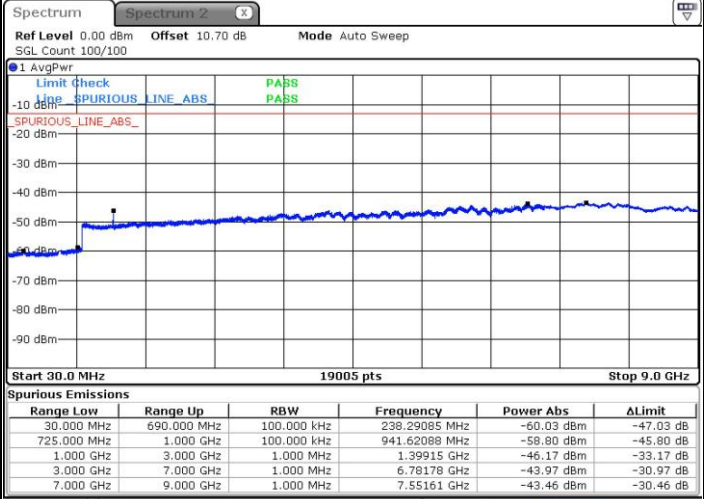
LTE Band 12 / 5MHz

Lowest Channel / QPSK



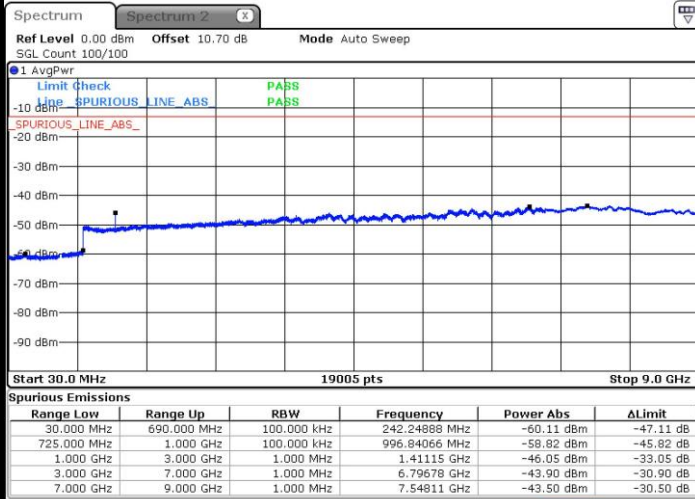
Date: 25 APR 2018 19:46:53

Lowest Channel / 16QAM



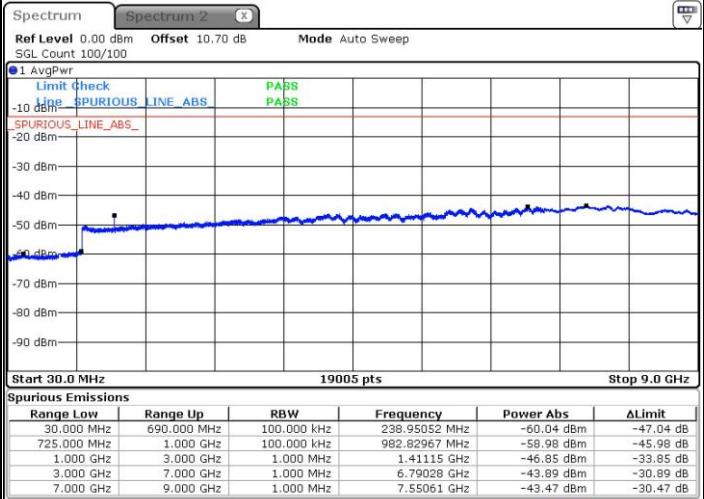
Date: 25 APR 2018 19:47:47

Middle Channel / QPSK



Date: 25 APR 2018 19:50:16

Middle Channel / 16QAM

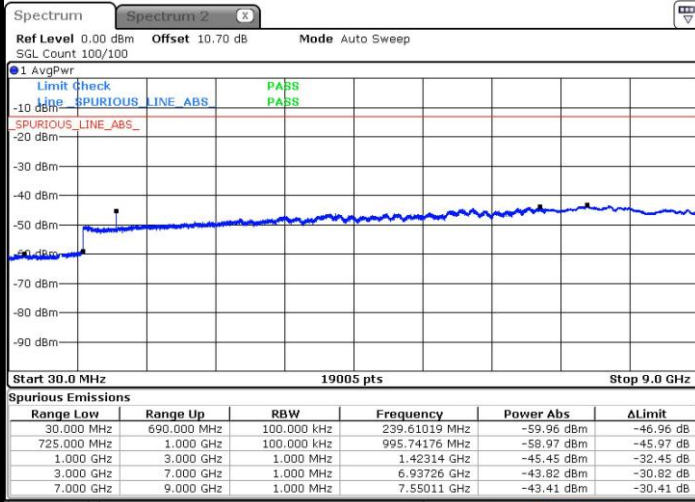


Date: 25 APR 2018 19:49:22



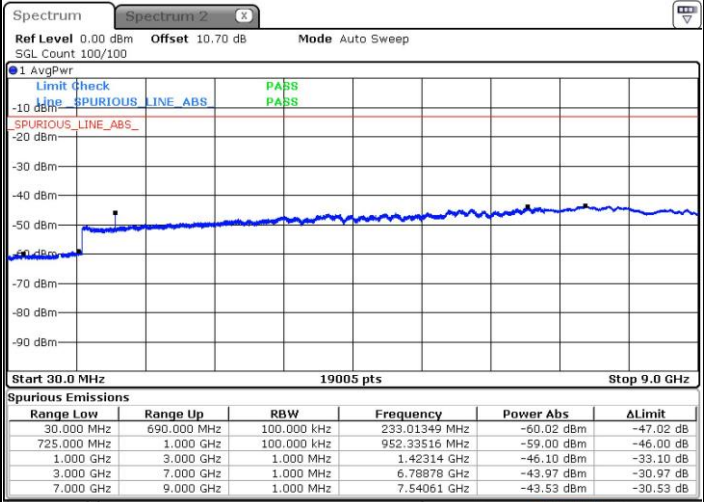
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 25 APR 2018 19:57:22

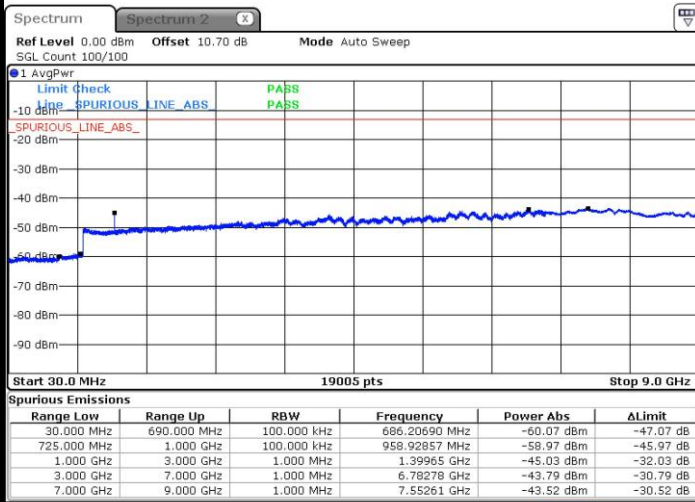
Highest Channel / 16QAM



Date: 25 APR 2018 19:56:28

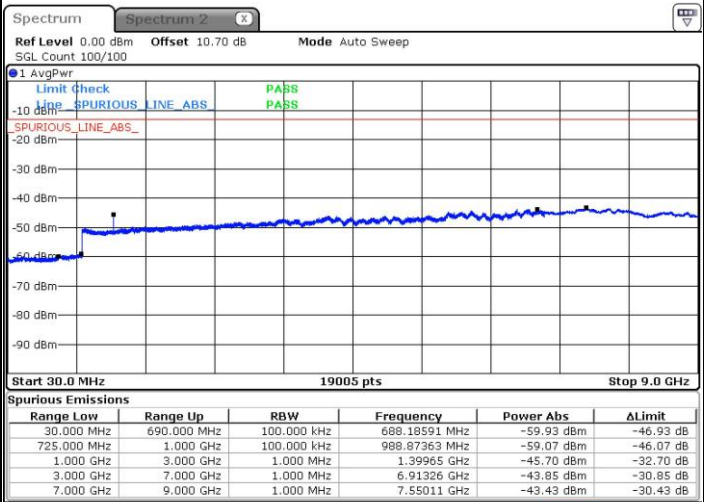
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 25 APR 2018 20:03:35

Lowest Channel / 16QAM



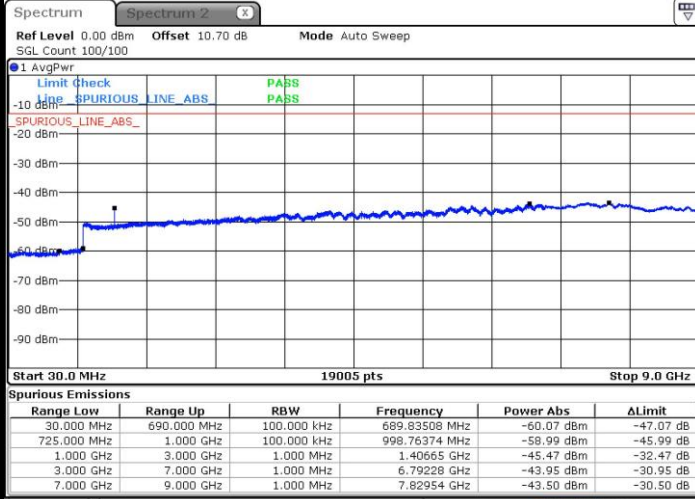
Date: 25 APR 2018 20:04:29





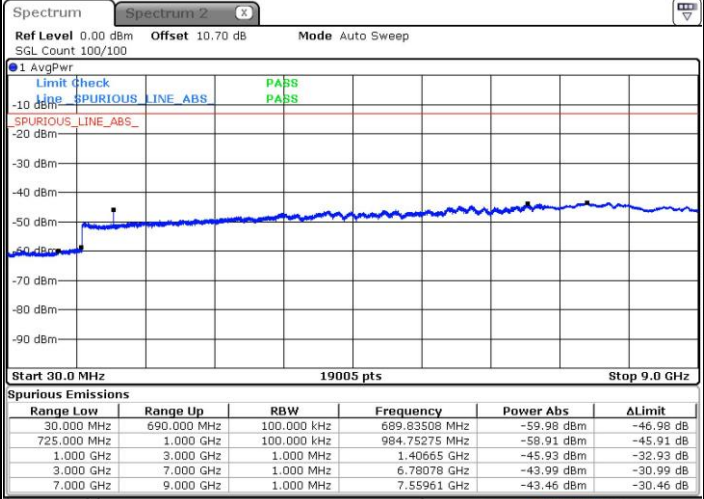
LTE Band 12 / 10MHz

Middle Channel / QPSK



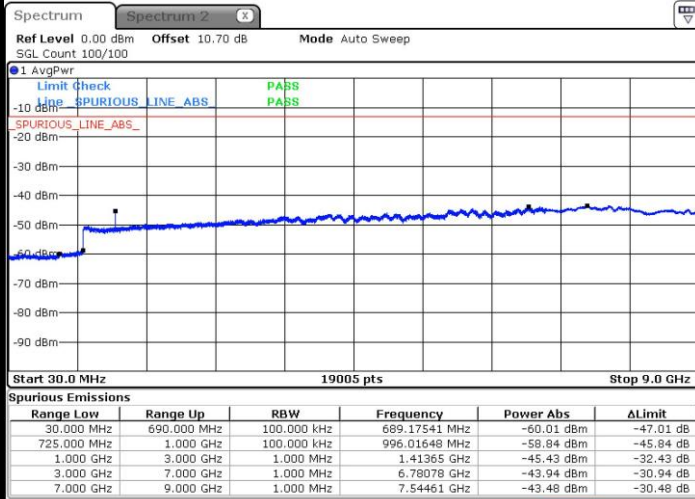
Date: 25 APR 2018 20:07:00

Middle Channel / 16QAM



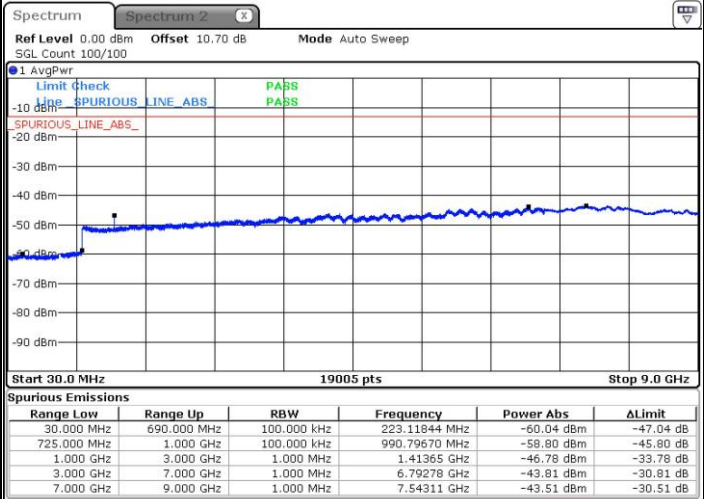
Date: 25 APR 2018 20:06:05

Highest Channel / QPSK



Date: 25 APR 2018 20:13:13

Highest Channel / 16QAM



Date: 25 APR 2018 20:14:07



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	0.0001	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0020	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0049	
20	Maximum Voltage	0.0045	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =12 V. ; Battery End Point (BEP) =11.4 V. ; Maximum Voltage =12.60 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	3.33	4.75	3.97	5.8	
Highest CH	-	-	-	-	



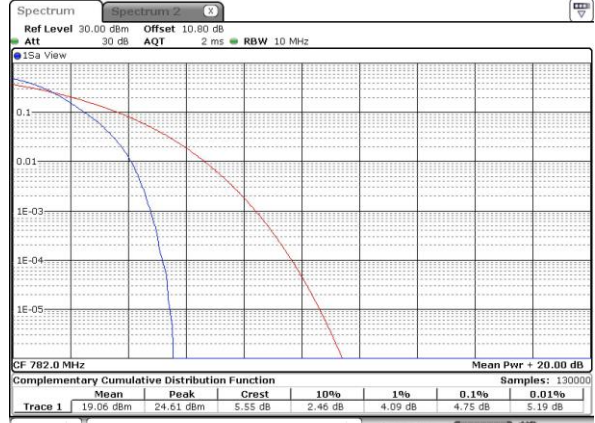
LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB



Date: 25 APR 2018 18:39:59

Middle Channel / Full RB



Date: 25 APR 2018 18:40:09

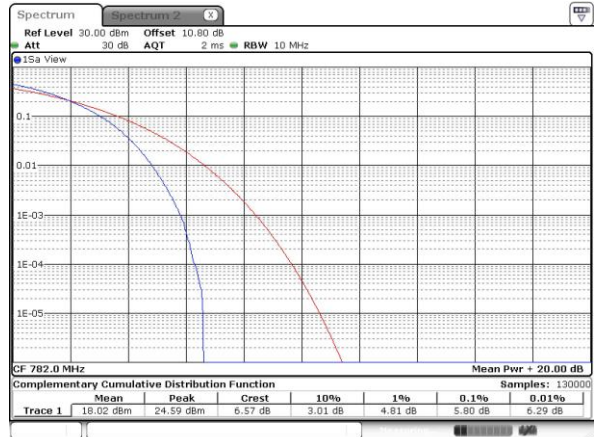
LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Date: 25 APR 2018 18:39:36

Middle Channel / Full RB



Date: 25 APR 2018 18:39:48



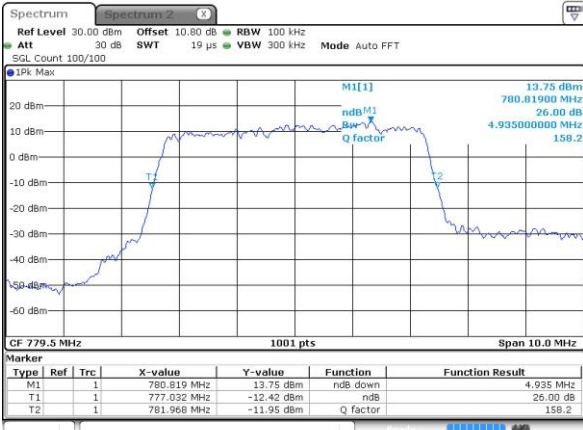
**26dB Bandwidth**

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	-	-	-	-	4.94	4.85	-	-	-	-	-	-
Middle CH	-	-	-	-	4.89	4.92	9.83	9.61	-	-	-	-
Highest CH	-	-	-	-	4.93	4.83	-	-	-	-	-	-



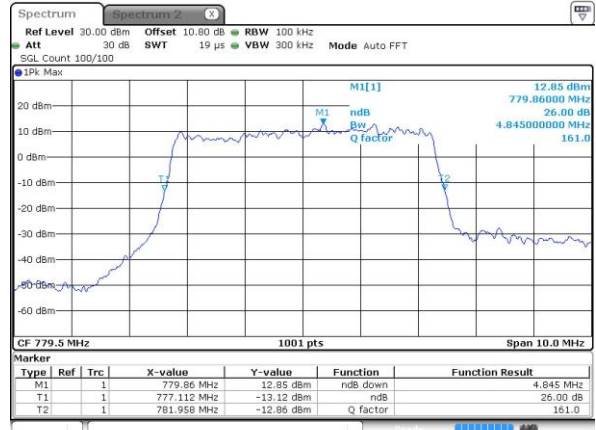
LTE Band 13

Lowest Channel / 5MHz / QPSK



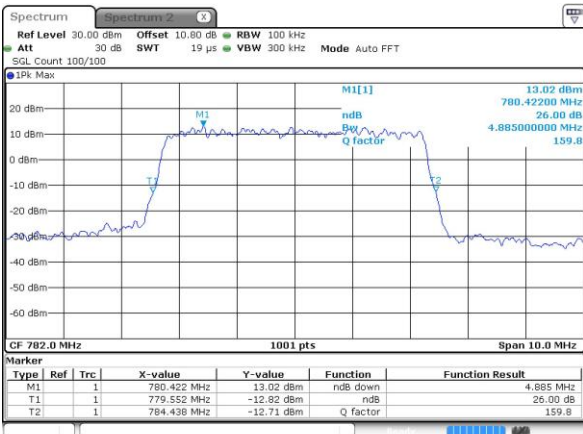
Date: 25 APR 2018 17:02:51

Lowest Channel / 5MHz / 16QAM



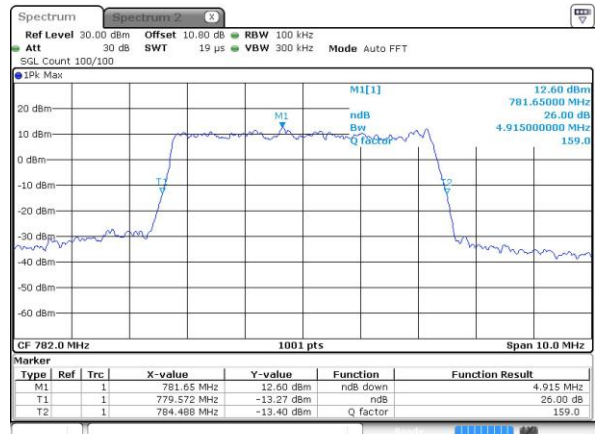
Date: 25 APR 2018 17:02:41

Middle Channel / 5MHz / QPSK



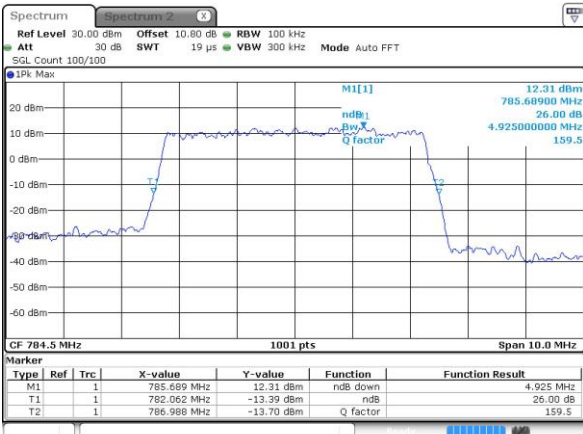
Date: 25 APR 2018 18:07:14

Middle Channel / 5MHz / 16QAM



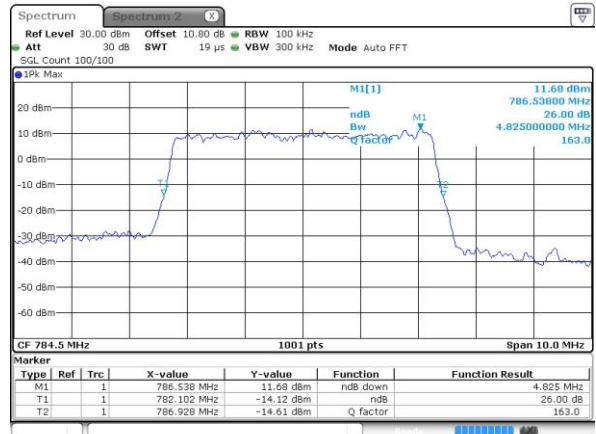
Date: 25 APR 2018 18:07:25

Highest Channel / 5MHz / QPSK



Date: 25 APR 2018 18:08:27

Highest Channel / 5MHz / 16QAM

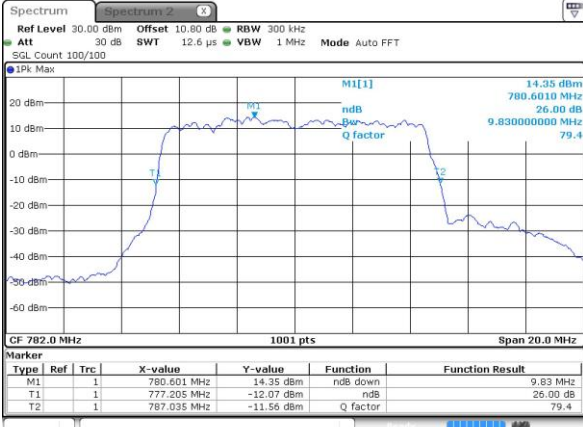


Date: 25 APR 2018 18:08:17



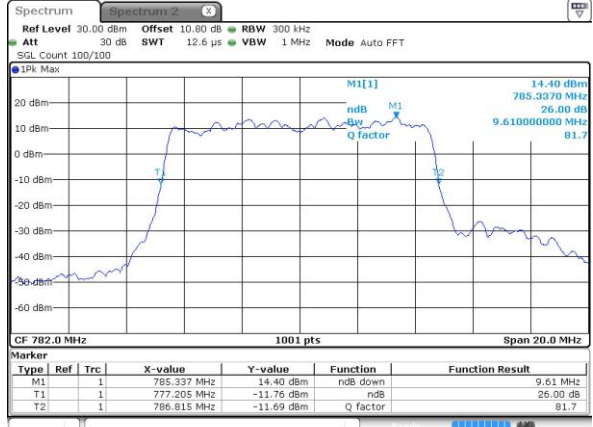
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 25 APR 2018 18:17:35

Middle Channel / 10MHz / 16QAM



Date: 25 APR 2018 18:17:24



## Occupied Bandwidth

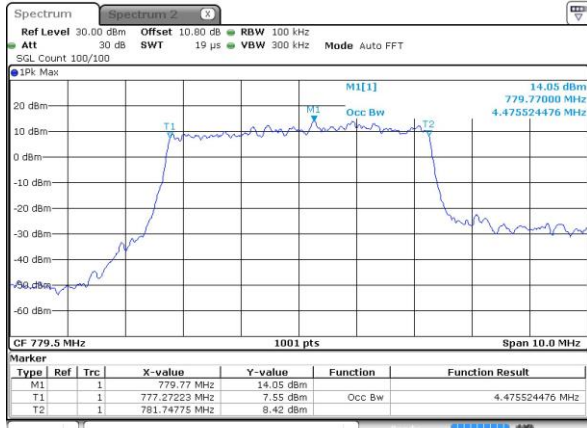
Mode	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.48	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.49	8.95	9.01	-	-	-	-
Highest CH	-	-	-	-	4.5	4.49	-	-	-	-	-	-





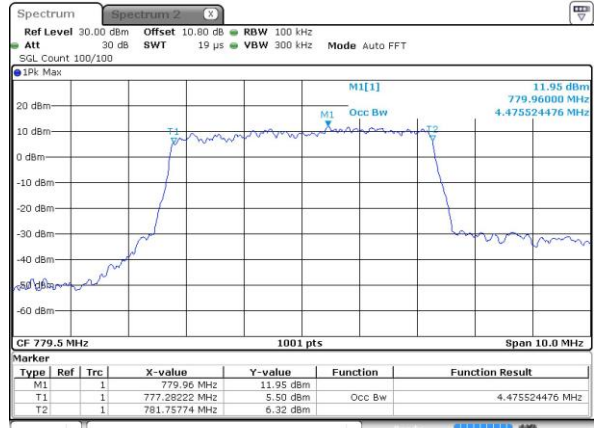
LTE Band 13

Lowest Channel / 5MHz / QPSK



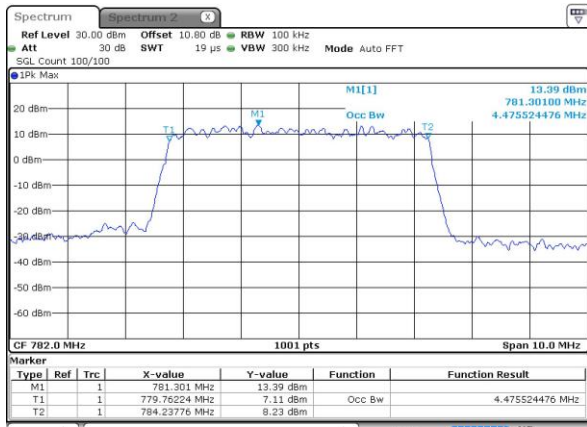
Date: 25 APR 2018 17:02:20

Lowest Channel / 5MHz / 16QAM



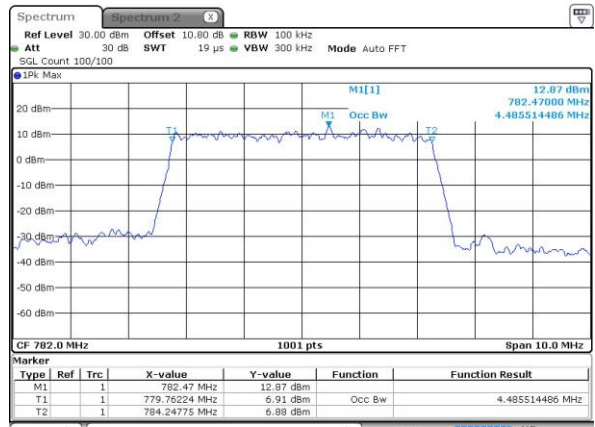
Date: 25 APR 2018 17:02:31

Middle Channel / 5MHz / QPSK



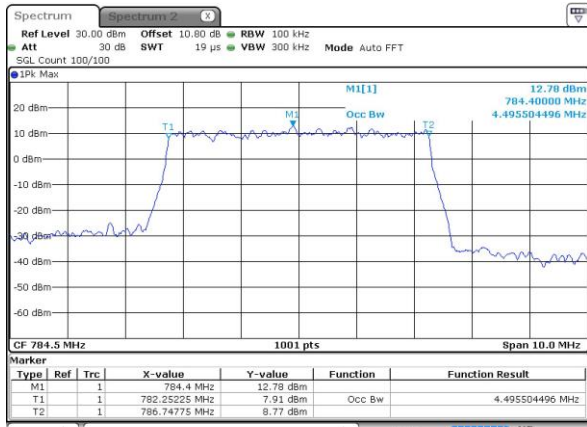
Date: 25 APR 2018 18:07:46

Middle Channel / 5MHz / 16QAM



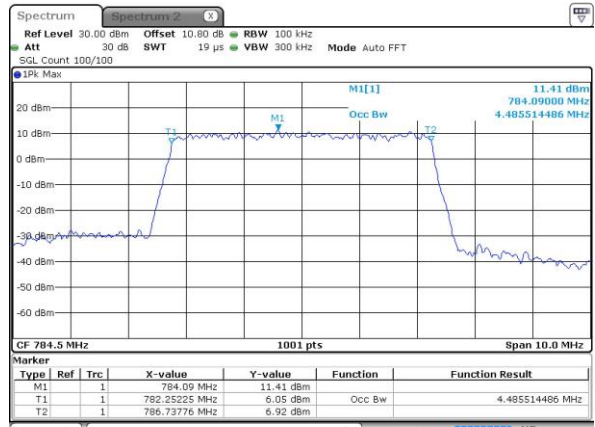
Date: 25 APR 2018 18:07:35

Highest Channel / 5MHz / QPSK



Date: 25 APR 2018 18:07:56

Highest Channel / 5MHz / 16QAM

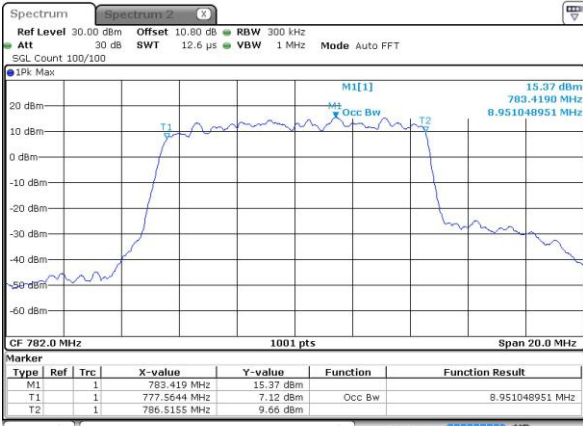


Date: 25 APR 2018 18:08:06



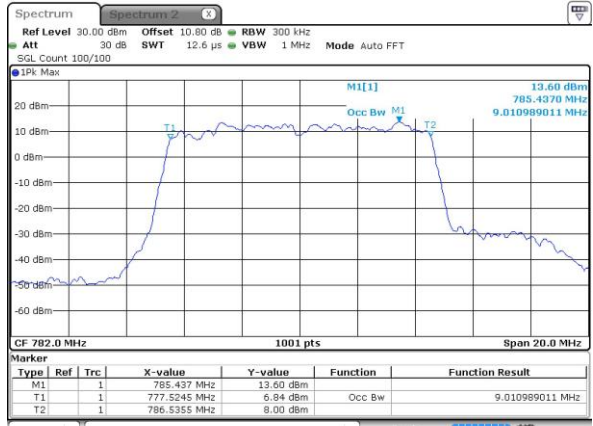
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 25 APR 2018 18:17:03

Middle Channel / 10MHz / 16QAM



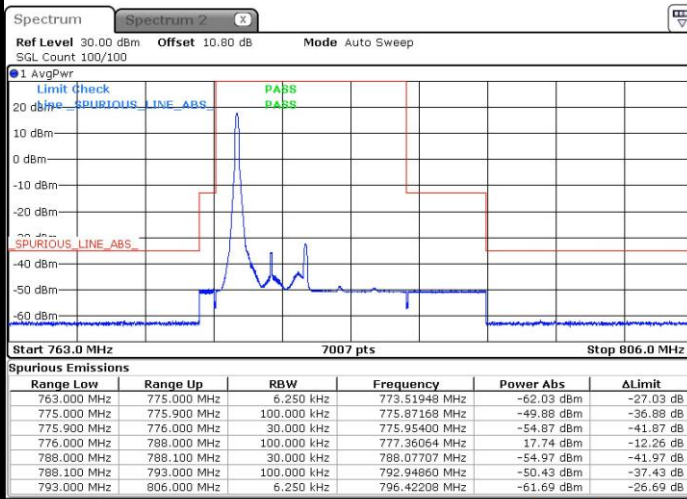
Date: 25 APR 2018 18:17:14



# Conducted Band Edge

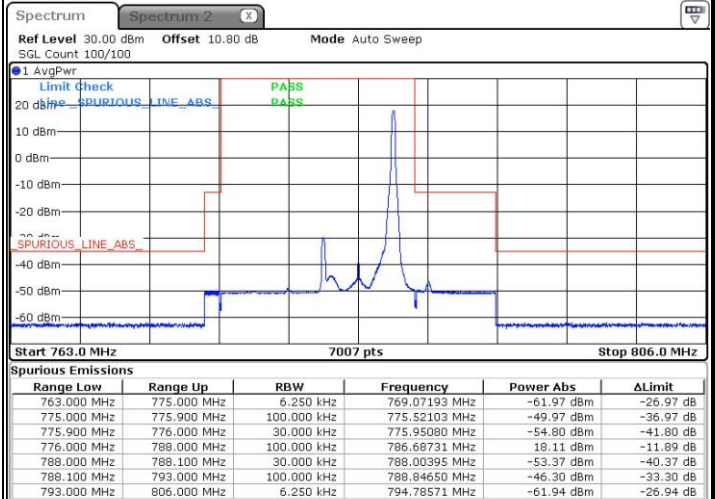
## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



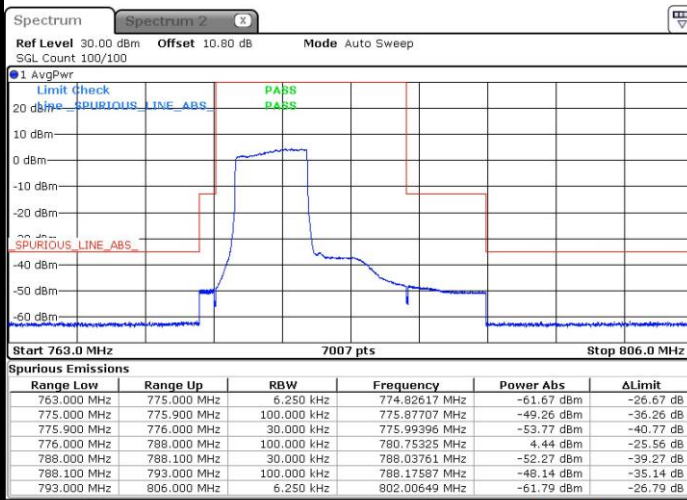
Date: 25 APR 2018 18:03:27

### Highest Band Edge / 1 RB



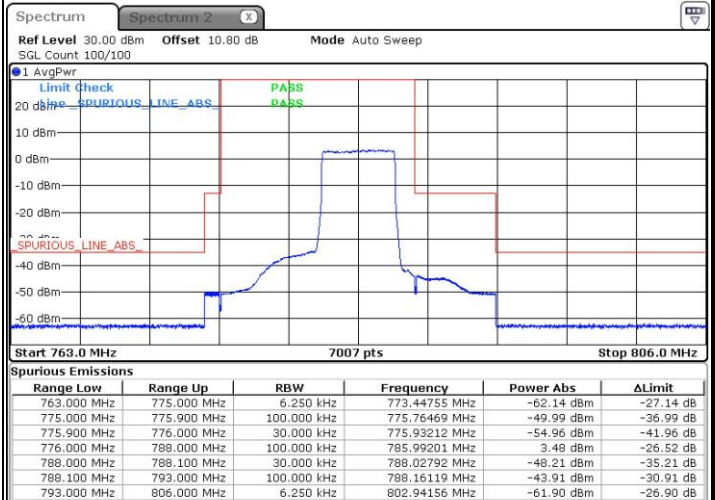
Date: 25 APR 2018 18:15:04

### Lowest Band Edge / Full RB



Date: 25 APR 2018 17:04:30

### Highest Band Edge / Full RB



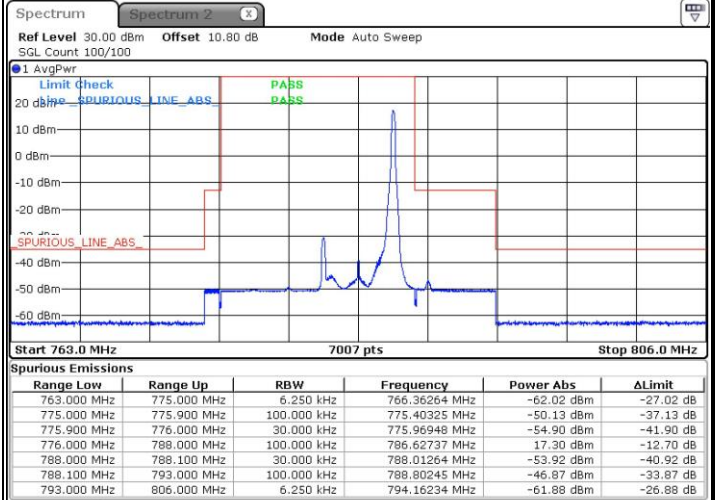
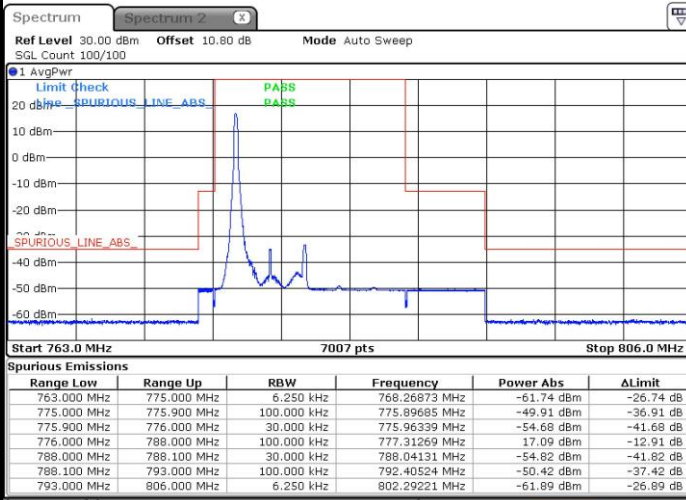
Date: 25 APR 2018 18:10:06



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

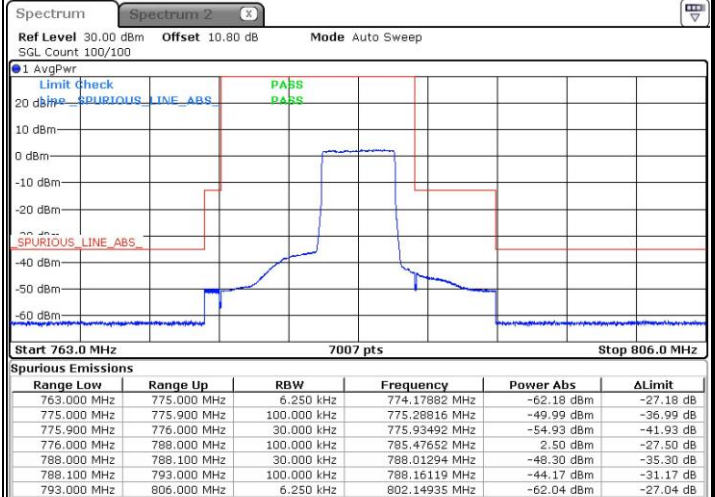
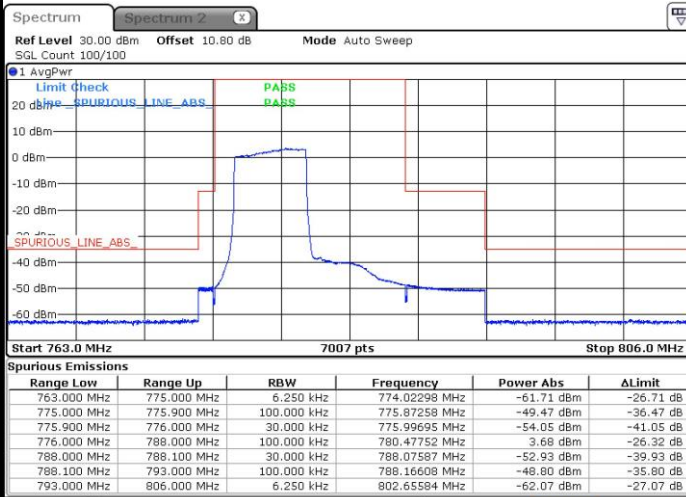


Date: 25 APR 2018 18:01:47

Date: 25 APR 2018 18:13:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



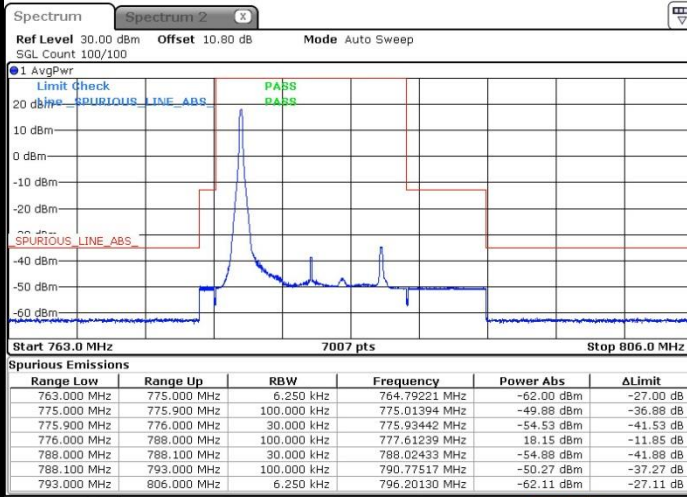
Date: 25 APR 2018 17:06:09

Date: 25 APR 2018 18:11:45



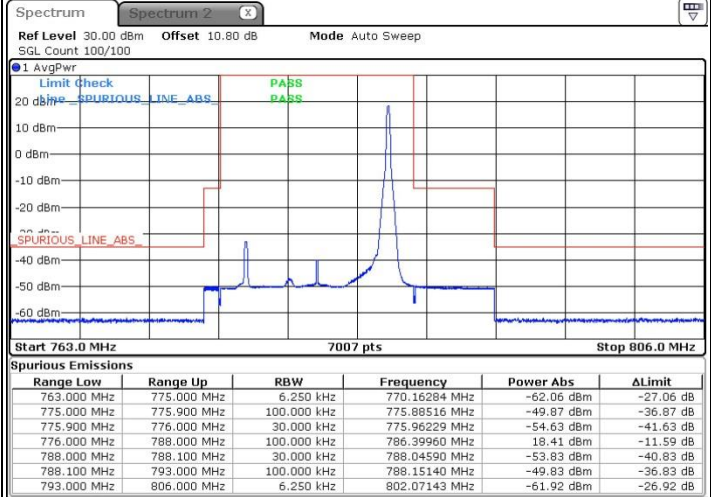
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



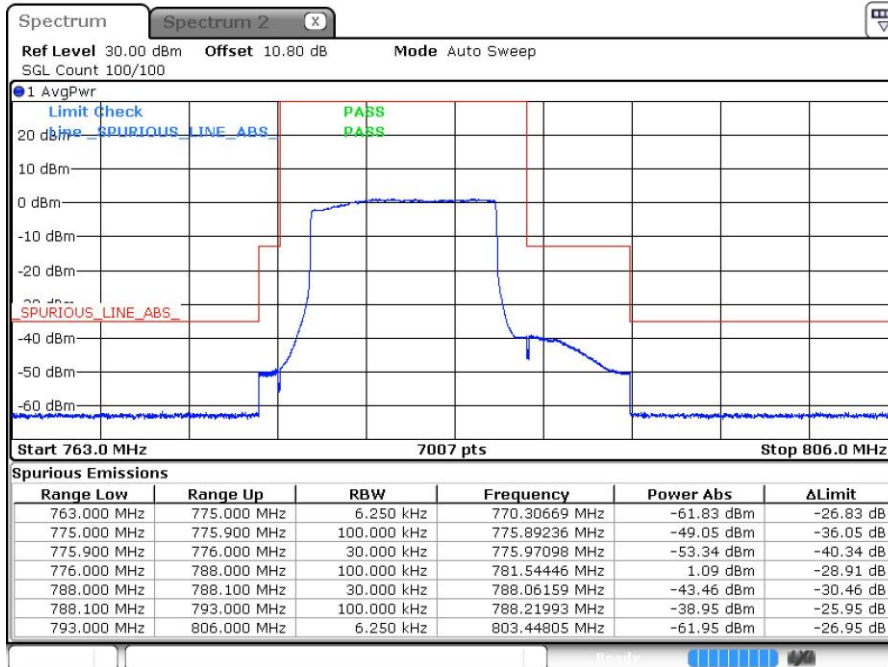
Date: 25 APR 2018 18:24:12

Highest Band Edge / 1 RB



Date: 25 APR 2018 18:25:51

Band Edge / Full RB

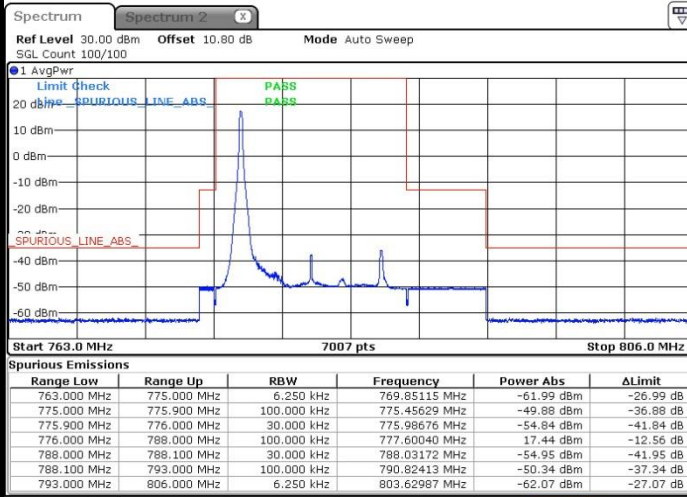


Date: 25 APR 2018 18:19:13



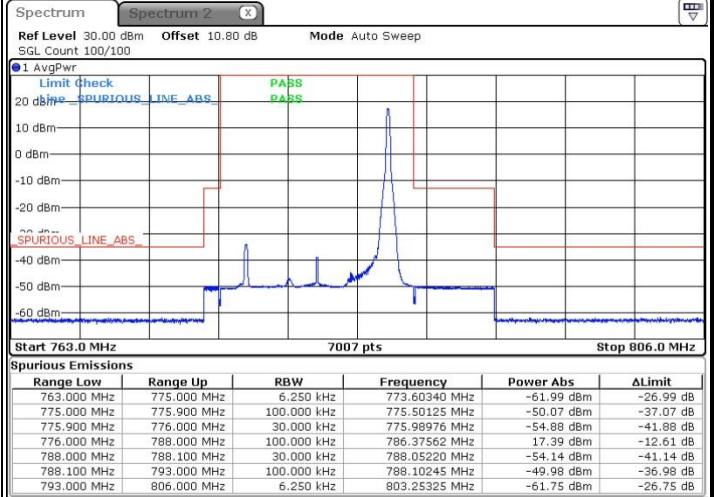
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



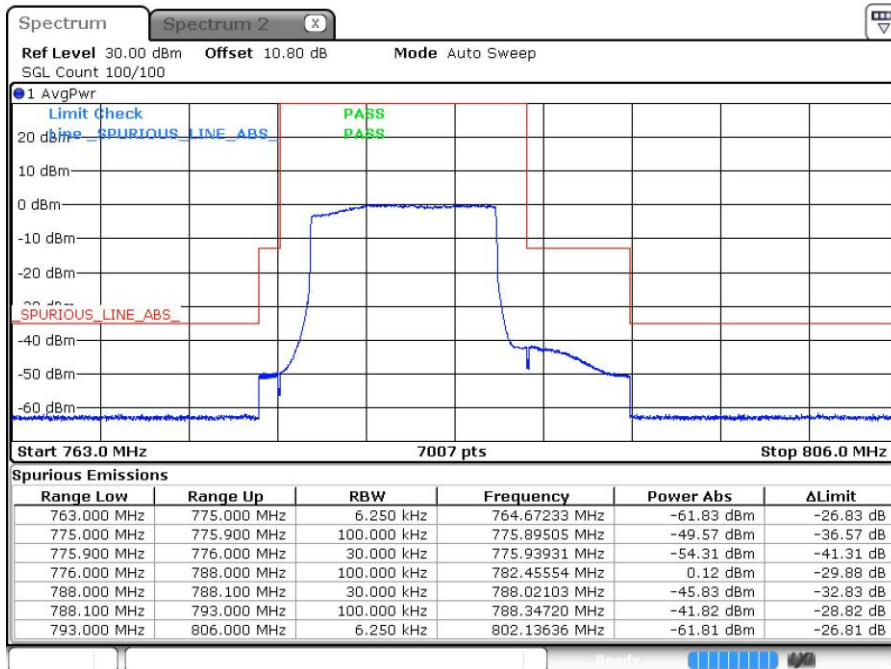
Date: 25 APR 2018 18:22:32

Highest Band Edge / 1 RB



Date: 25 APR 2018 18:27:30

Band Edge / Full RB



Date: 25 APR 2018 18:20:53