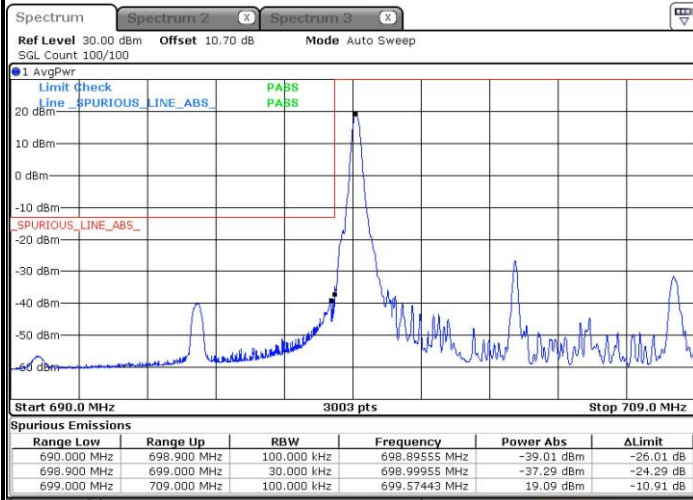




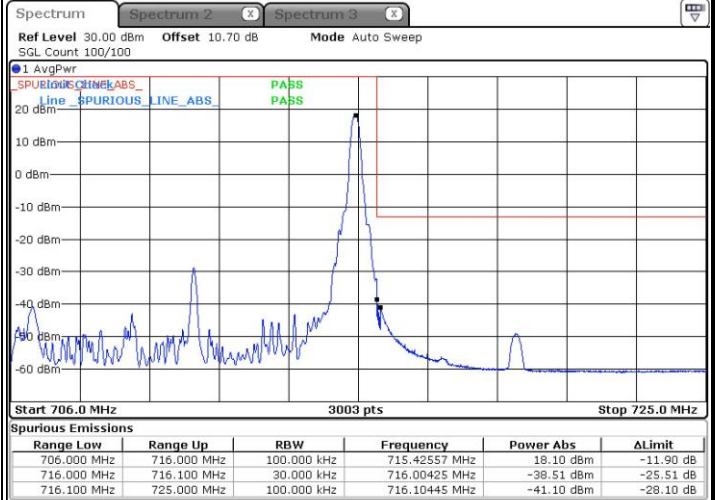
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



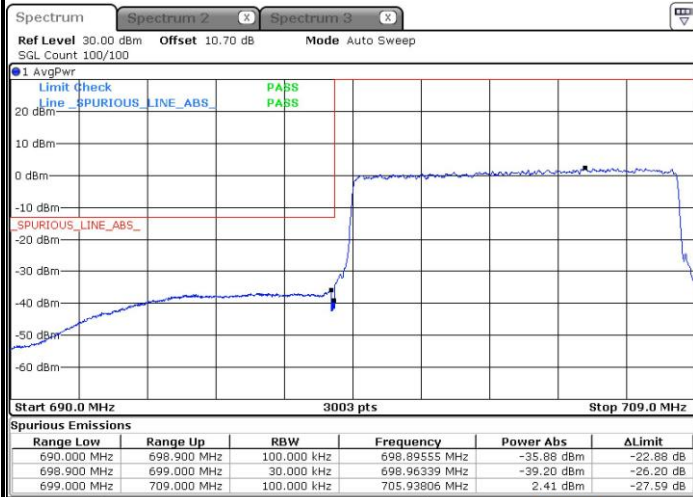
Date: 14.JUL.2018 06:17:38

Highest Band Edge / 1 RB



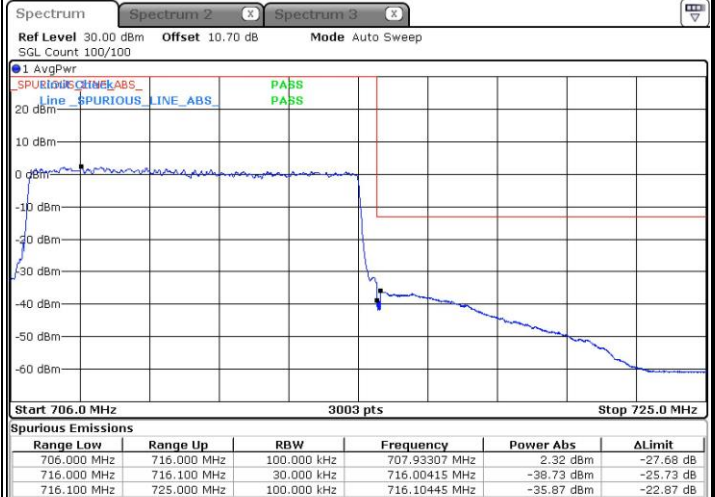
Date: 14.JUL.2018 06:28:31

Lowest Band Edge / Full RB



Date: 14.JUL.2018 06:16:28

Highest Band Edge / Full RB



Date: 14.JUL.2018 06:27:21

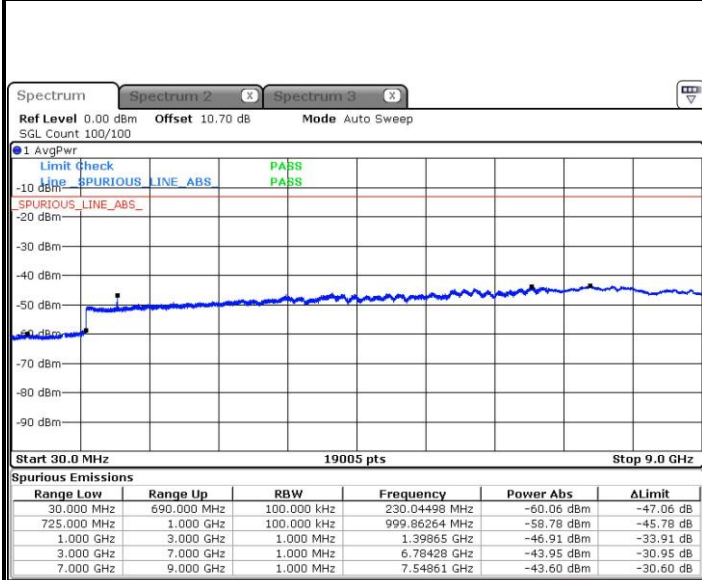


**Conducted Spurious Emission**



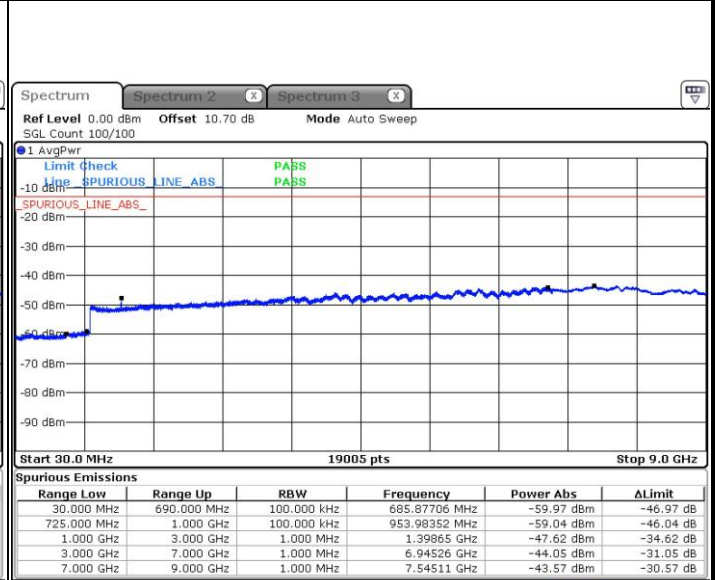
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



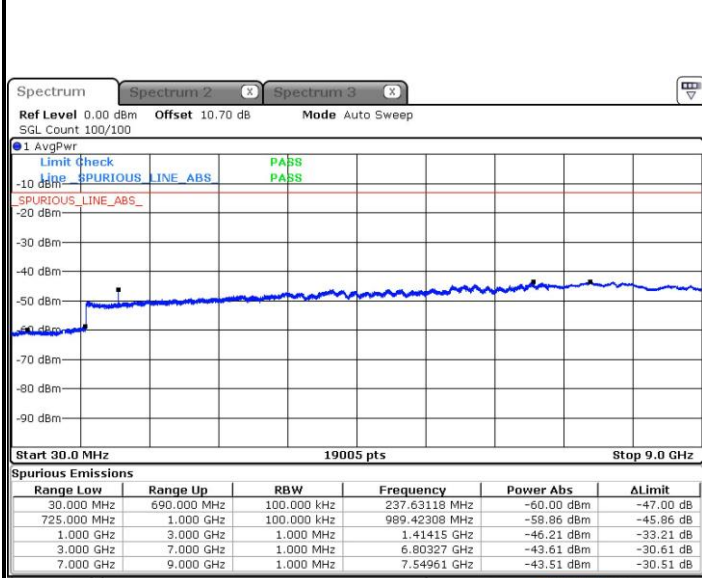
Date: 14.JUL.2018 06:38:39

Lowest Channel / 16QAM



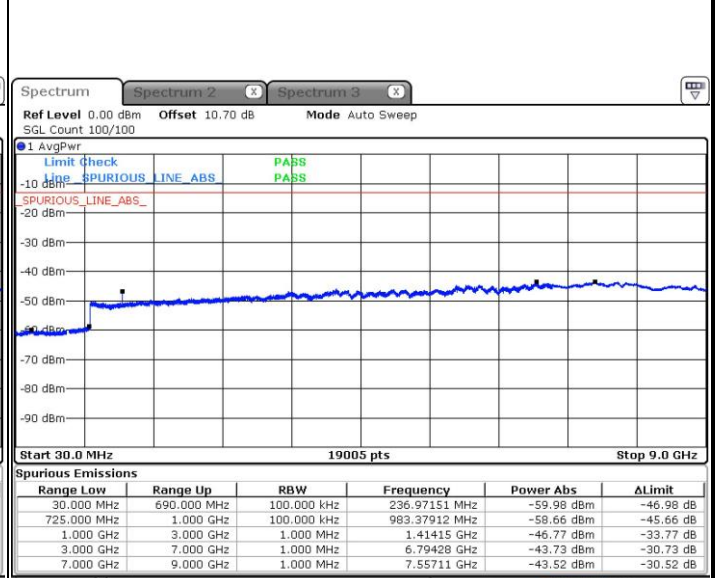
Date: 14.JUL.2018 06:39:49

Middle Channel / QPSK



Date: 14.JUL.2018 06:42:56

Middle Channel / 16QAM

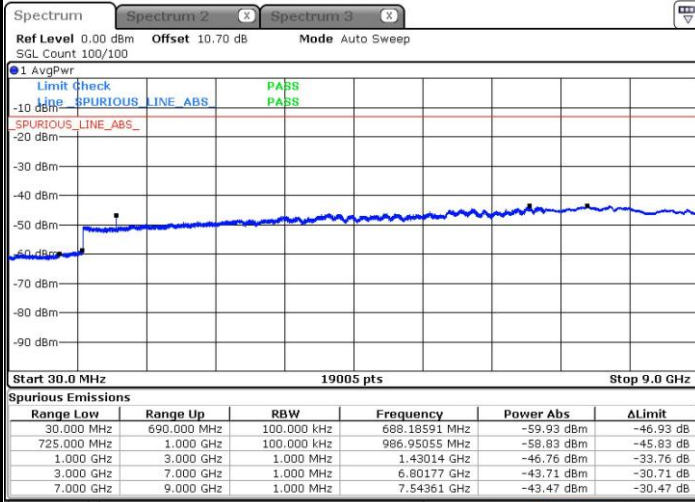


Date: 14.JUL.2018 06:41:45



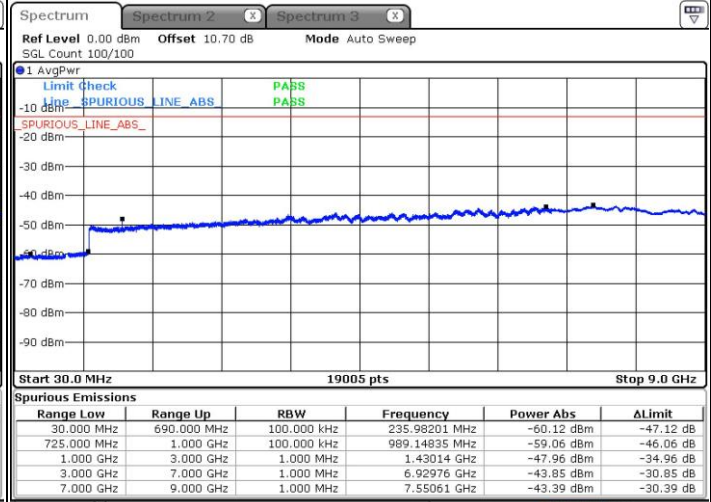
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 14 JUL 2018 06:49:52

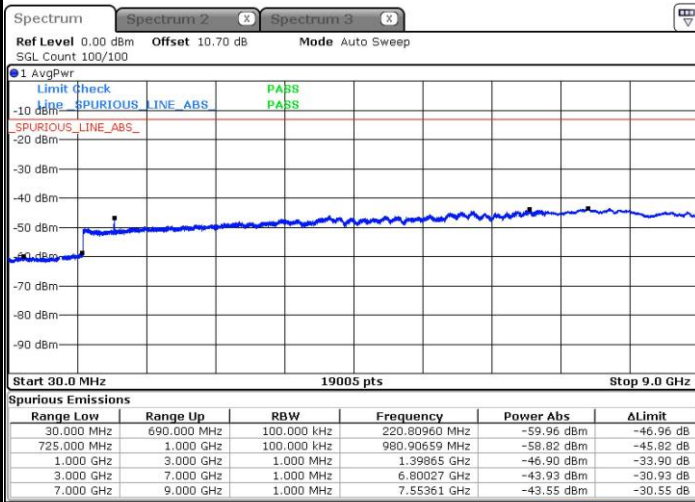
Highest Channel / 16QAM



Date: 14 JUL 2018 06:51:03

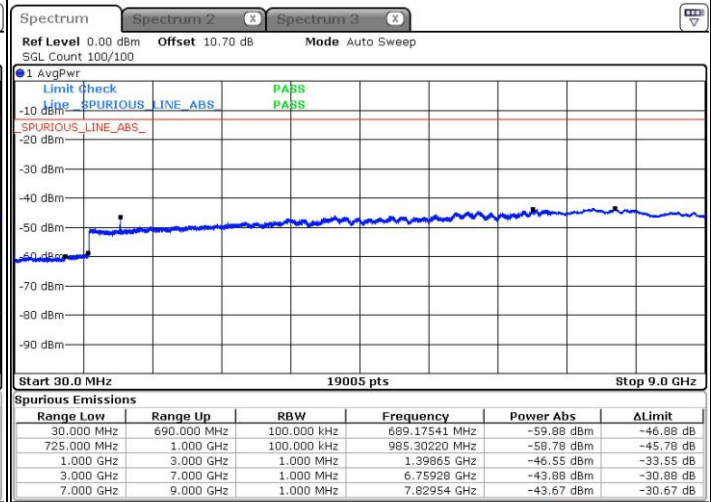
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 14 JUL 2018 05:42:40

Lowest Channel / 16QAM



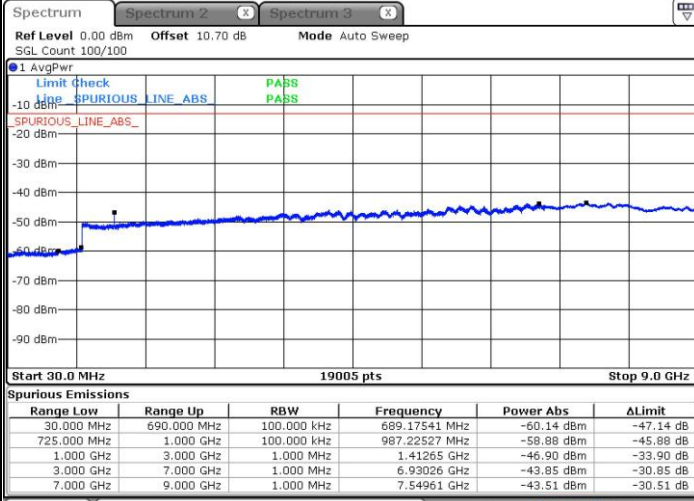
Date: 14 JUL 2018 05:43:50



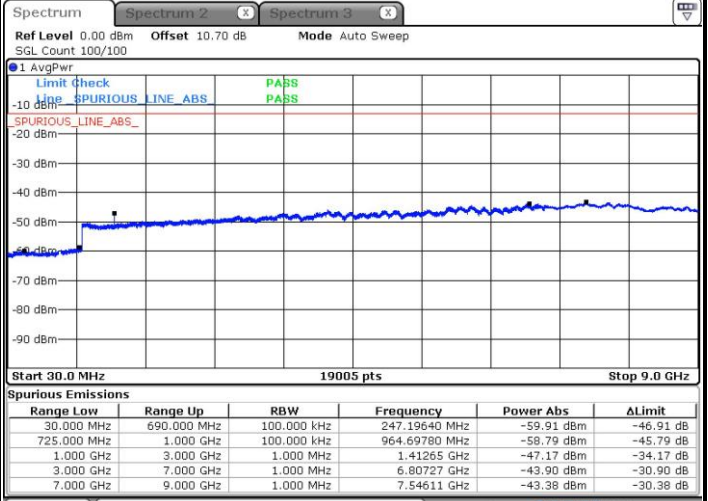
LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM



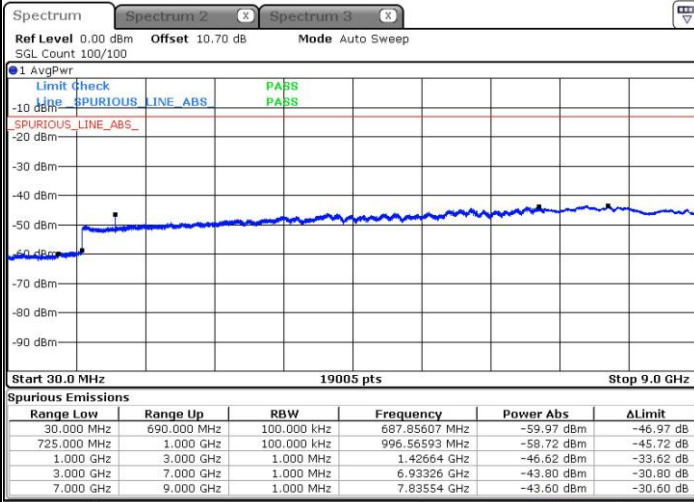
Date: 14.JUL.2018 05:46:57



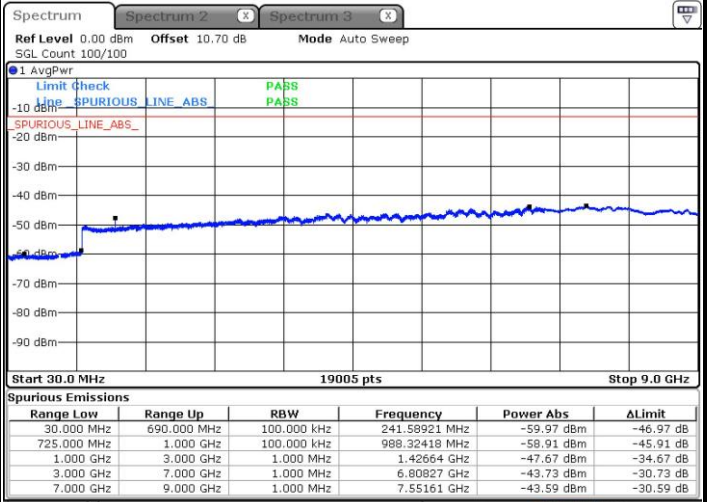
Date: 14.JUL.2018 05:45:46

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 14.JUL.2018 05:53:33



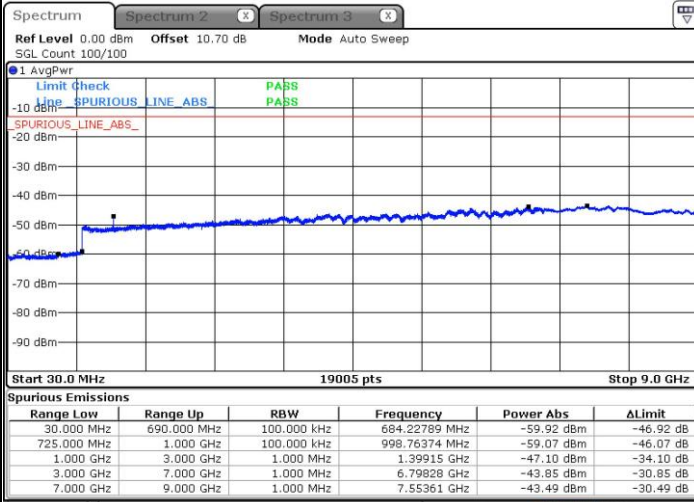
Date: 14.JUL.2018 05:54:43



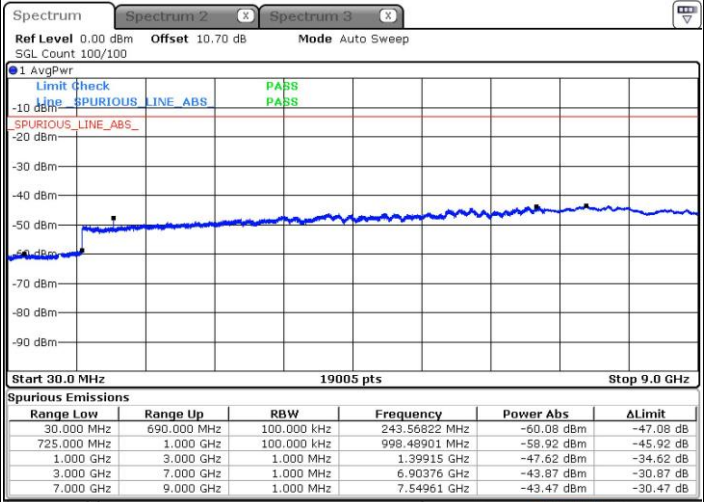
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



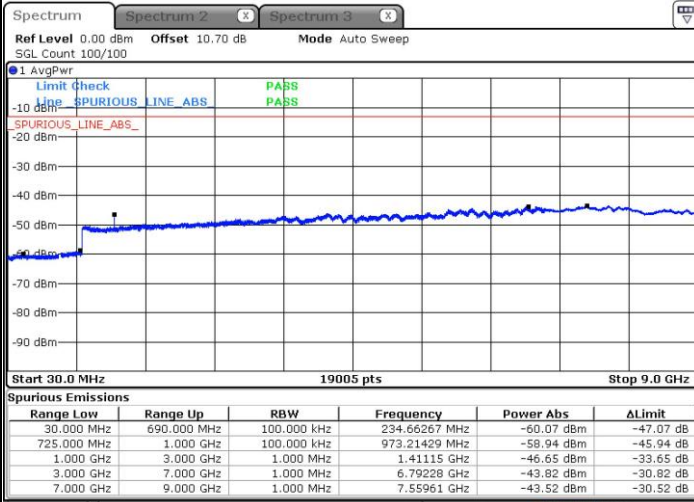
Date: 14.JUL.2018 06:01:20



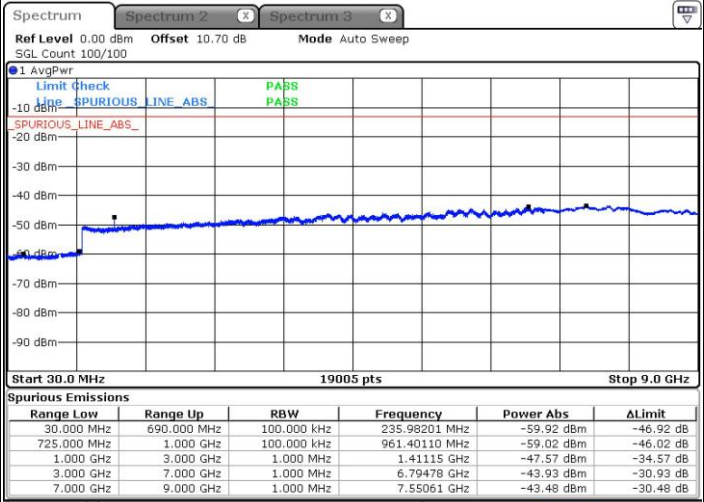
Date: 14.JUL.2018 06:02:30

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 14.JUL.2018 06:05:36

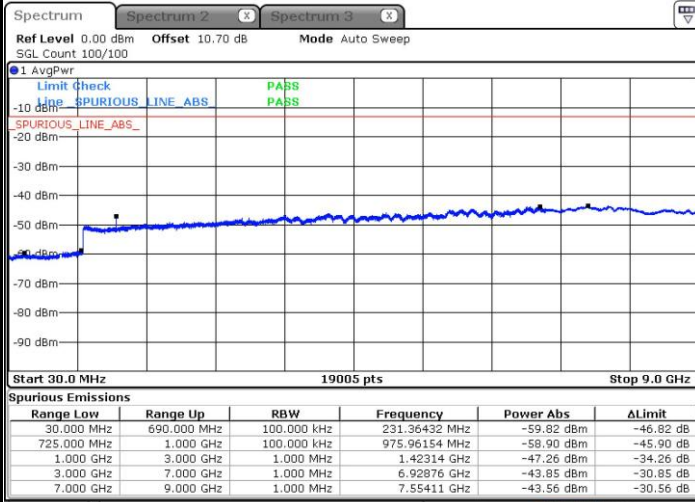


Date: 14.JUL.2018 06:04:26



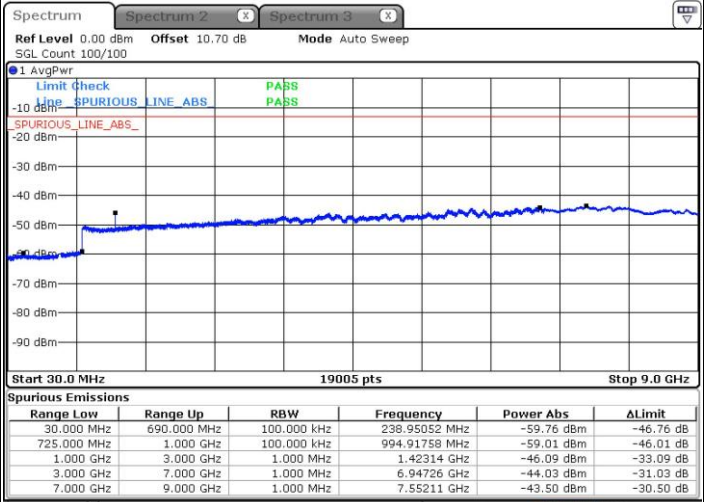
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 14 JUL 2018 06:13:22

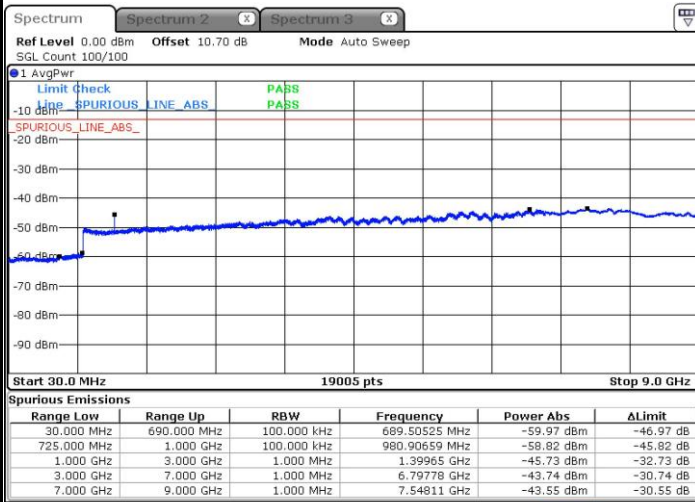
Highest Channel / 16QAM



Date: 14 JUL 2018 06:12:12

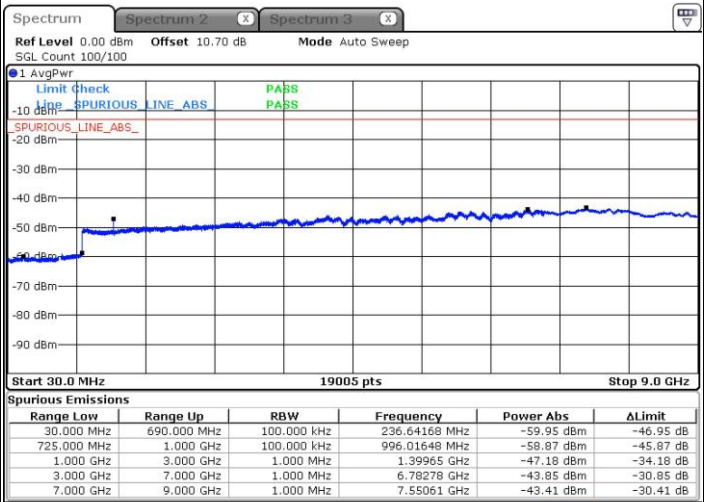
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 14 JUL 2018 06:19:59

Lowest Channel / 16QAM



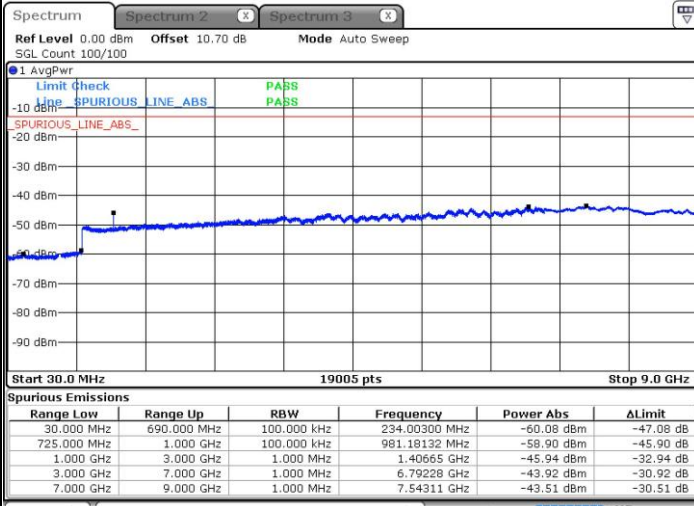
Date: 14 JUL 2018 06:21:09



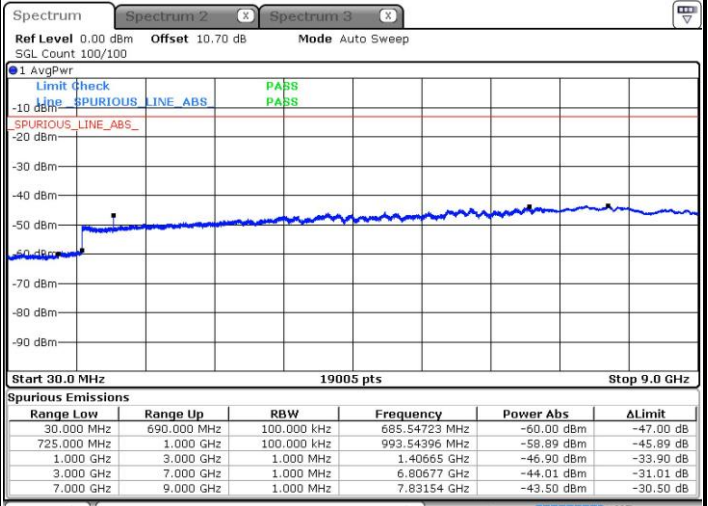
LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



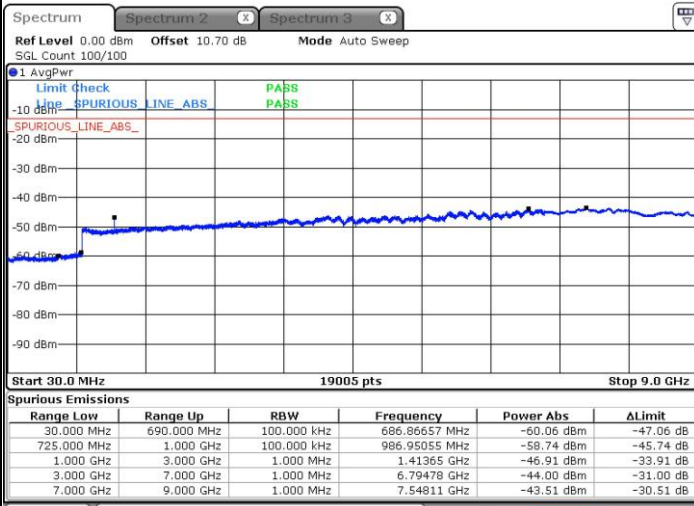
Date: 14.JUL.2018 06:24:16



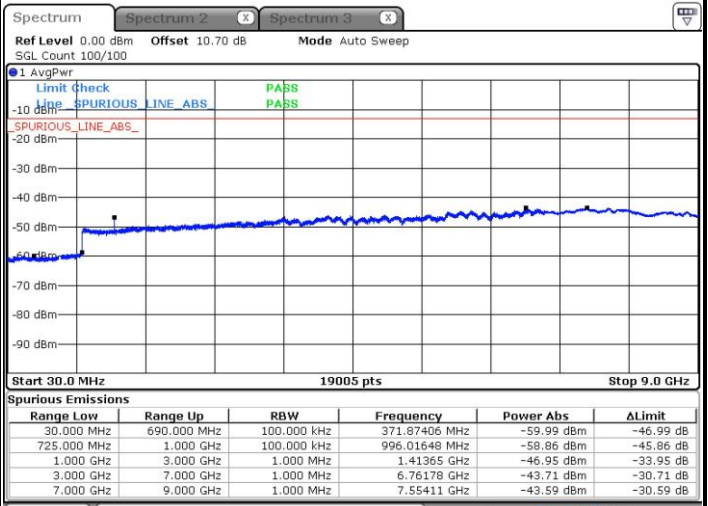
Date: 14.JUL.2018 06:23:05

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 14.JUL.2018 06:30:52



Date: 14.JUL.2018 06:32:03





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	0.0127	PASS
40	Normal Voltage	0.0042	
30	Normal Voltage	0.0154	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0226	
-10	Normal Voltage	0.0096	
-20	Normal Voltage	0.0143	
-30	Normal Voltage	0.0038	
20	Maximum Voltage	0.0044	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0126	

Note:

1. Normal Voltage =54 V. ; Battery End Point (BEP) =44 V. ; Maximum Voltage =57 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 13

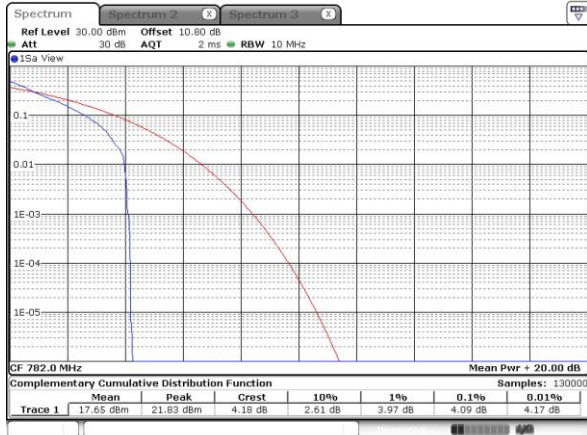
### Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.09	5.01	4.72	5.86	
Highest CH	-	-	-	-	



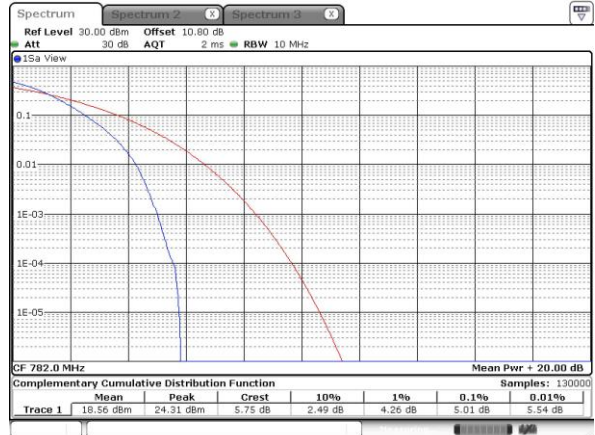
LTE Band 13 / 10MHz / QPSK

Middle Channel/ 1RB



Date: 14.JUL.2018 07:45:51

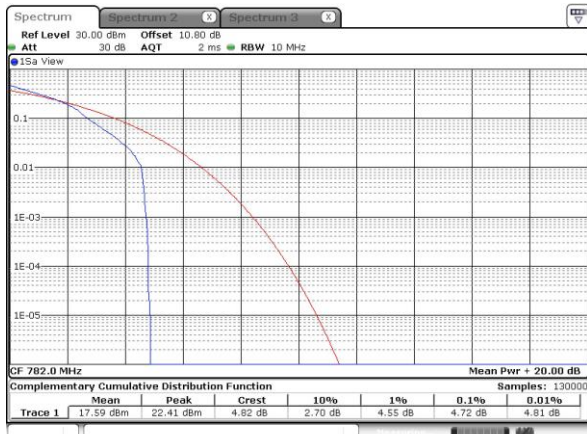
Middle Channel / Full RB



Date: 14.JUL.2018 07:46:01

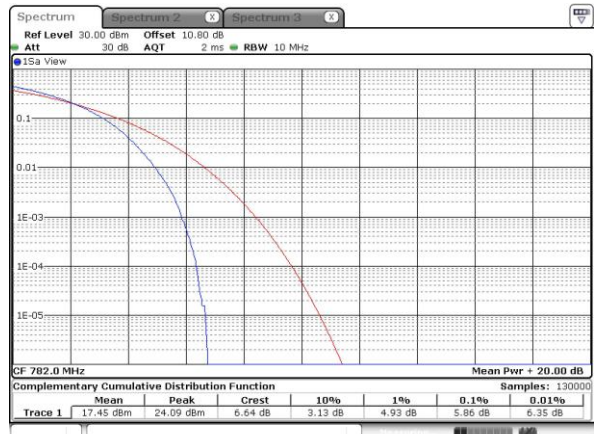
LTE Band 13 / 10MHz / 16QAM

Middle Channel/ 1RB



Date: 14.JUL.2018 07:45:29

Middle Channel / Full RB



Date: 14.JUL.2018 07:45:40



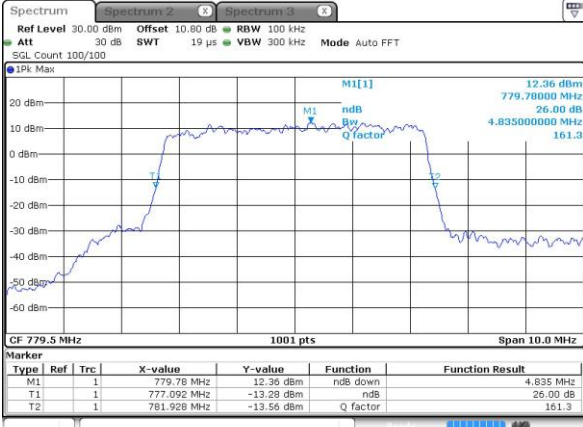
**26dB Bandwidth**

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	-	-	-	-	4.835	4.835	-	-	-	-	-	-
Middle CH	-	-	-	-	4.955	4.875	9.77	9.75	-	-	-	-
Highest CH	-	-	-	-	4.875	4.875	-	-	-	-	-	-



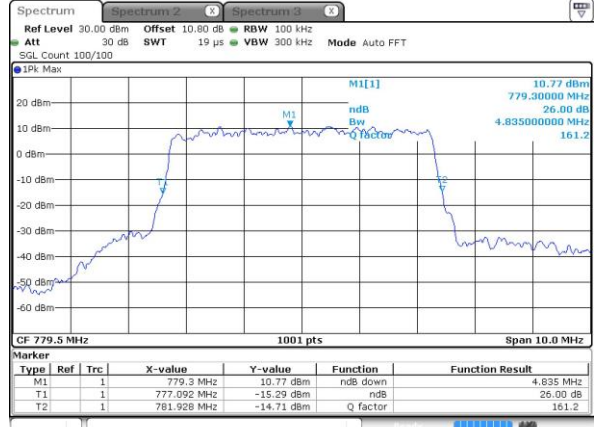
LTE Band 13

Lowest Channel / 5MHz / QPSK



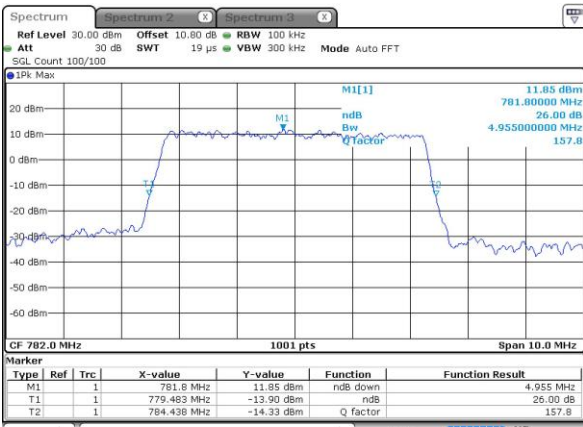
Date: 14.JUL.2018 07:04:20

Lowest Channel / 5MHz / 16QAM



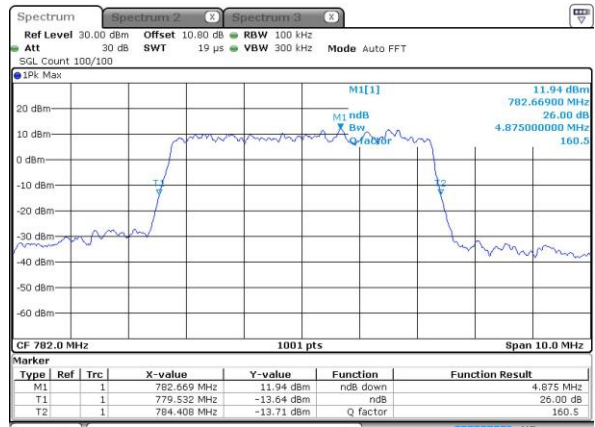
Date: 14.JUL.2018 07:04:08

Middle Channel / 5MHz / QPSK



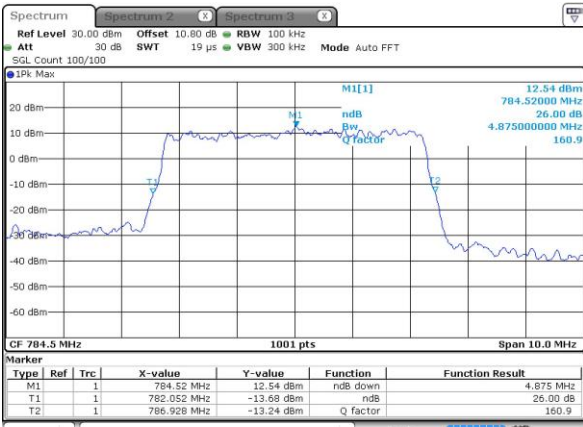
Date: 14.JUL.2018 07:15:22

Middle Channel / 5MHz / 16QAM



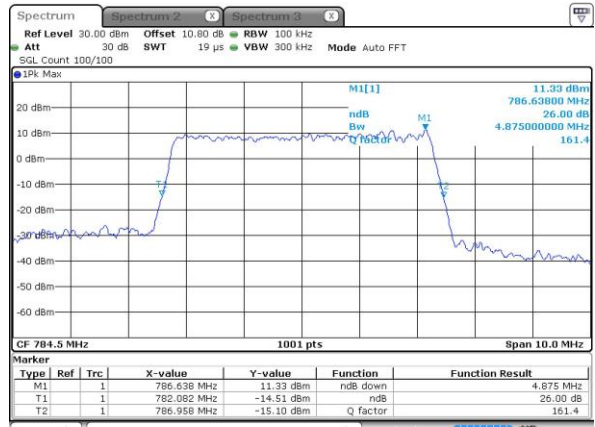
Date: 14.JUL.2018 07:16:03

Highest Channel / 5MHz / QPSK



Date: 14.JUL.2018 07:17:12

Highest Channel / 5MHz / 16QAM

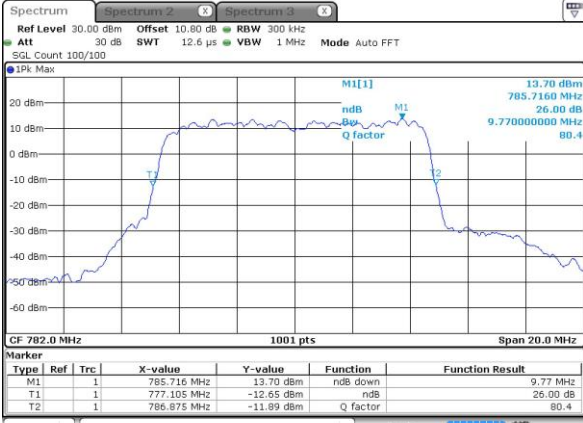


Date: 14.JUL.2018 07:17:01



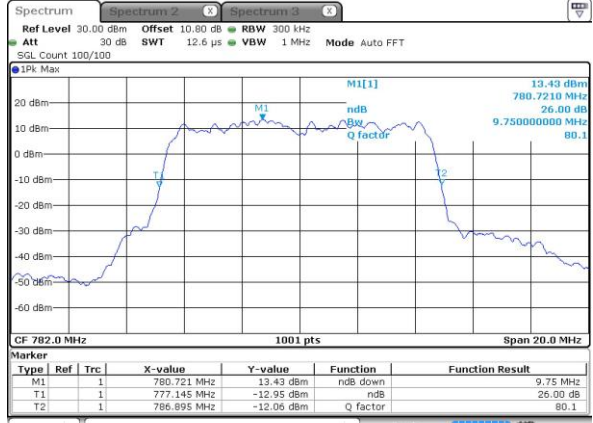
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 14 JUL 2016 07:26:59

Middle Channel / 10MHz / 16QAM



Date: 14 JUL 2016 07:26:47



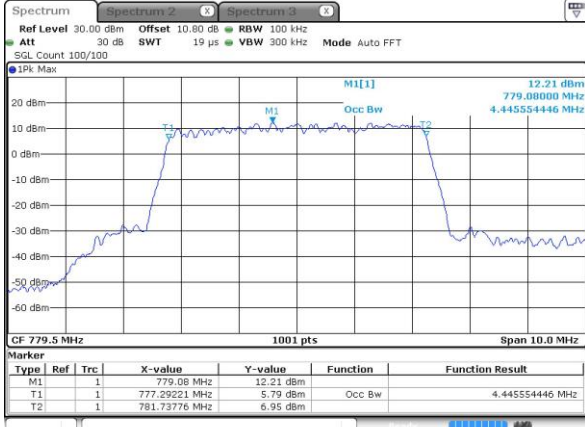
**Occupied Bandwidth**

Mode	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.45	4.46	-	-	-	-	-	-
Middle CH	-	-	-	-	4.5	4.49	9.03	8.93	-	-	-	-
Highest CH	-	-	-	-	4.5	4.48	-	-	-	-	-	-



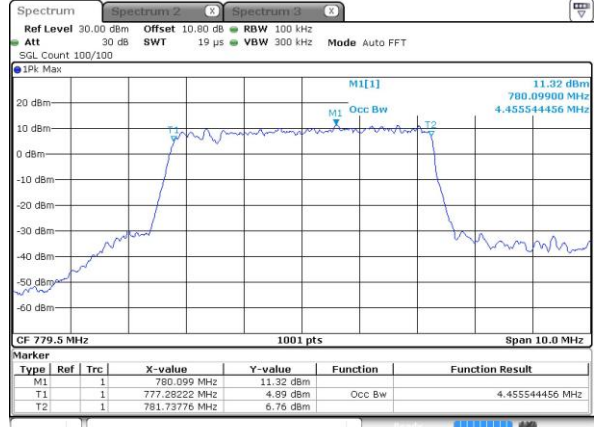
LTE Band 13

Lowest Channel / 5MHz / QPSK



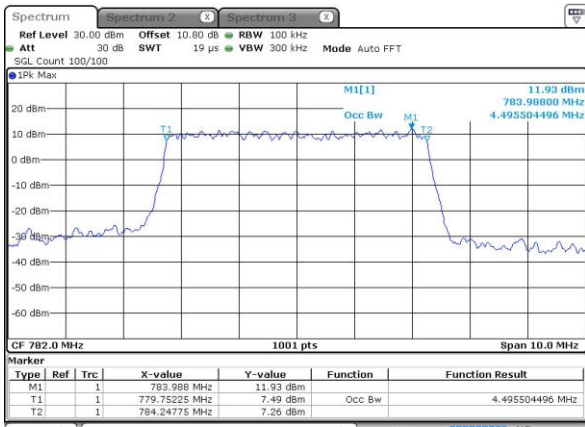
Date: 14.JUL.2018 07:03:45

Lowest Channel / 5MHz / 16QAM



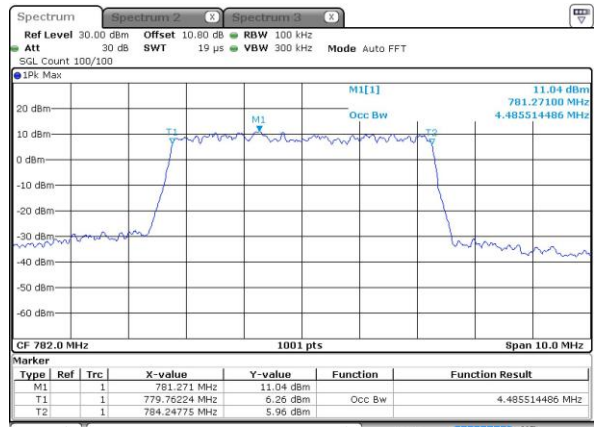
Date: 14.JUL.2018 07:03:57

Middle Channel / 5MHz / QPSK



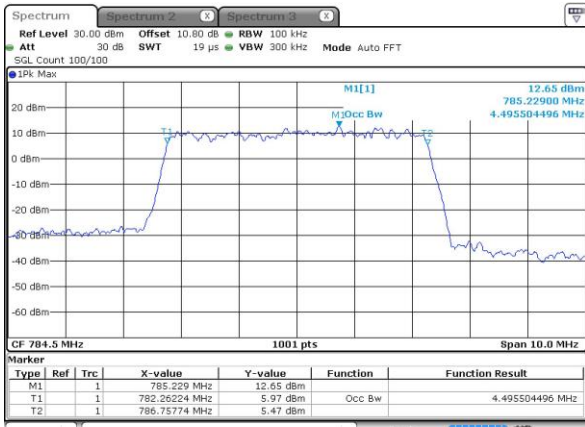
Date: 14.JUL.2018 07:16:26

Middle Channel / 5MHz / 16QAM



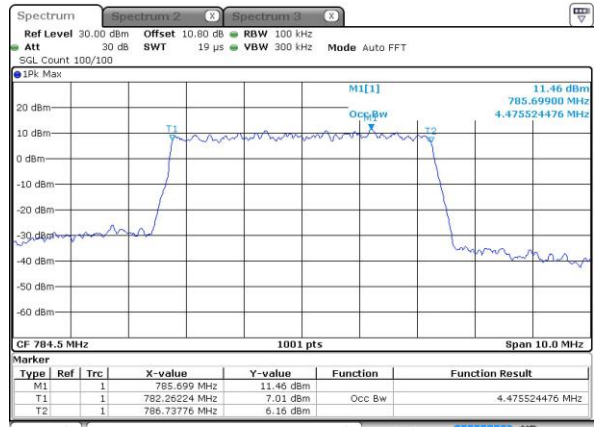
Date: 14.JUL.2018 07:16:15

Highest Channel / 5MHz / QPSK



Date: 14.JUL.2018 07:16:38

Highest Channel / 5MHz / 16QAM



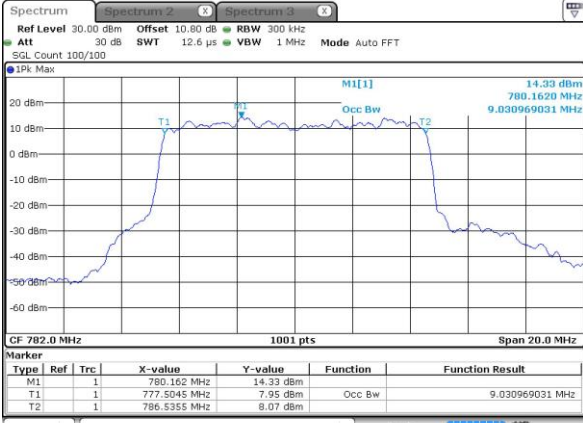
Date: 14.JUL.2018 07:16:49





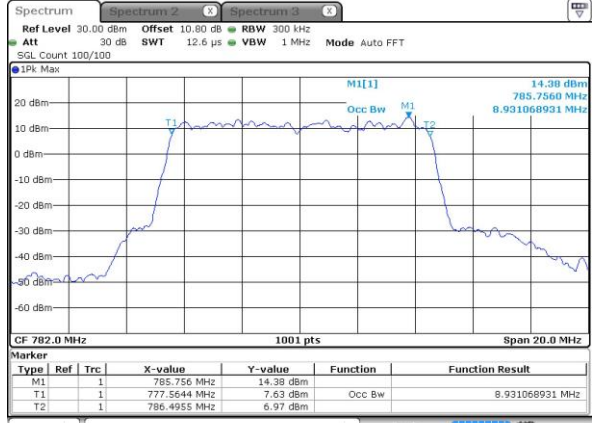
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 14.JUL.2016 07:26:24

Middle Channel / 10MHz / 16QAM



Date: 14.JUL.2016 07:26:36

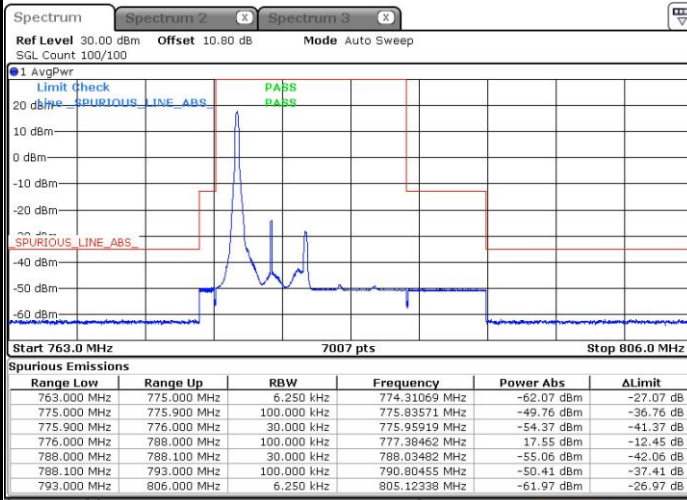


**Conducted Band Edge**



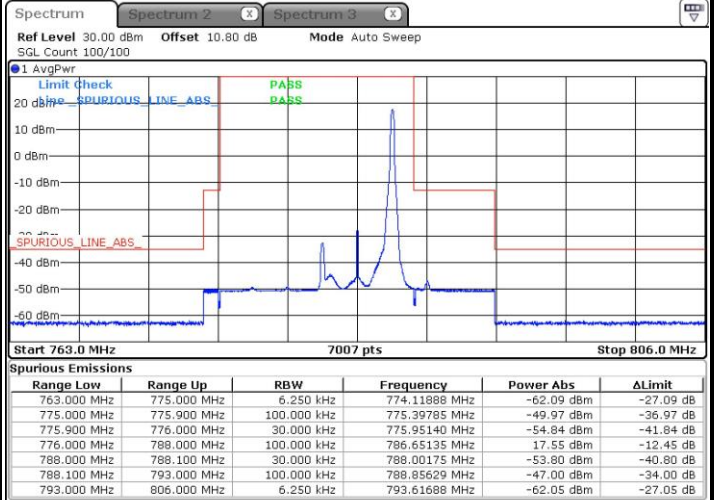
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



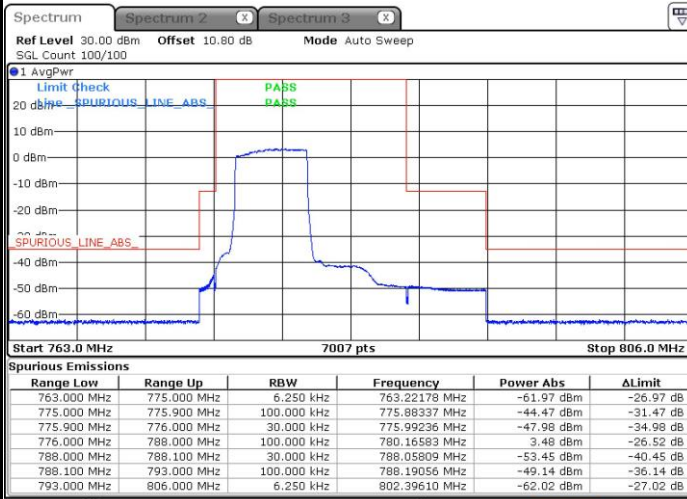
Date: 14 JUL 2018 07:11:00

Highest Band Edge / 1 RB



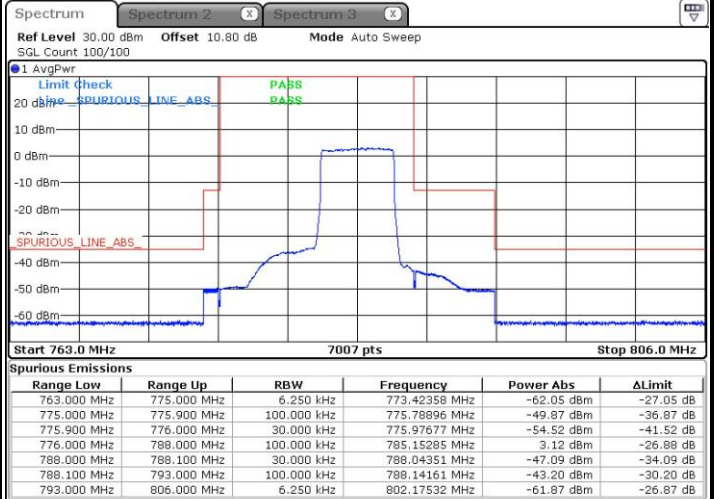
Date: 14 JUL 2018 07:23:53

Lowest Band Edge / Full RB



Date: 14 JUL 2018 07:05:59

Highest Band Edge / Full RB

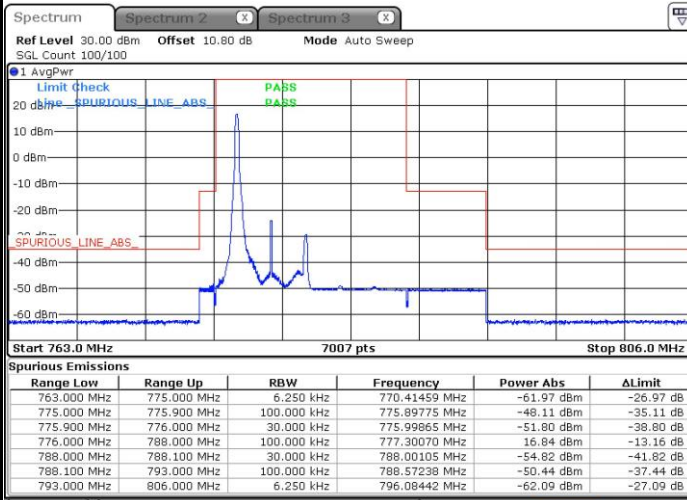


Date: 14 JUL 2018 07:18:52



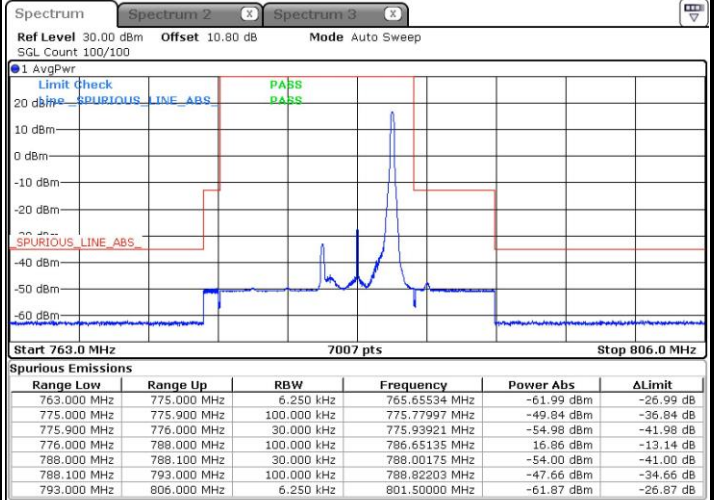
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



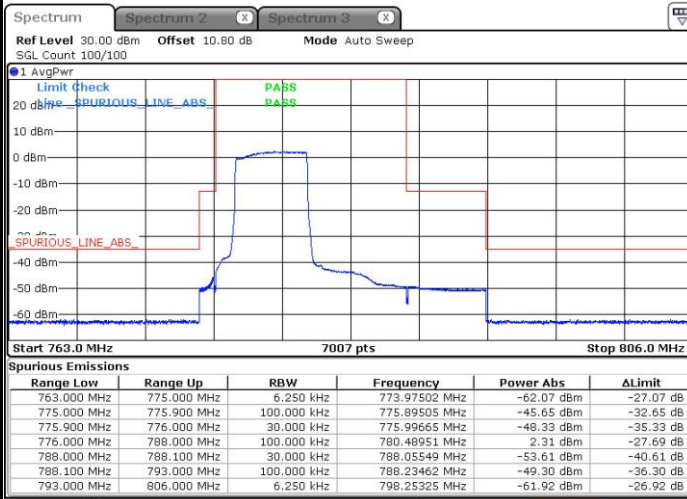
Date: 14 JUL 2018 07:09:20

Highest Band Edge / 1 RB



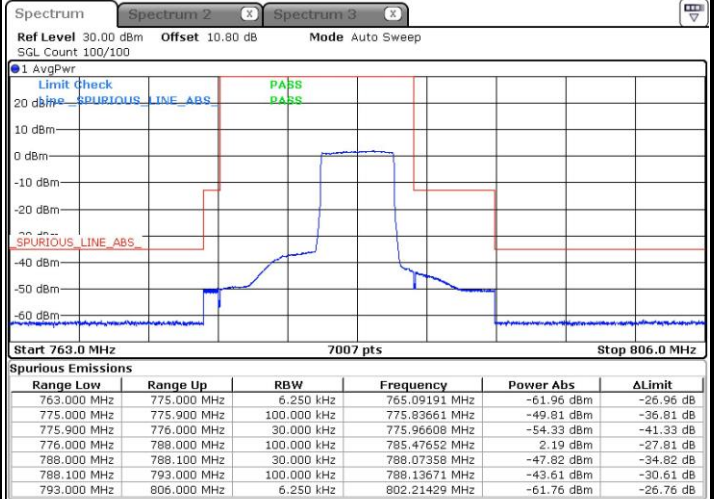
Date: 14 JUL 2018 07:22:12

Lowest Band Edge / Full RB



Date: 14 JUL 2018 07:07:40

Highest Band Edge / Full RB

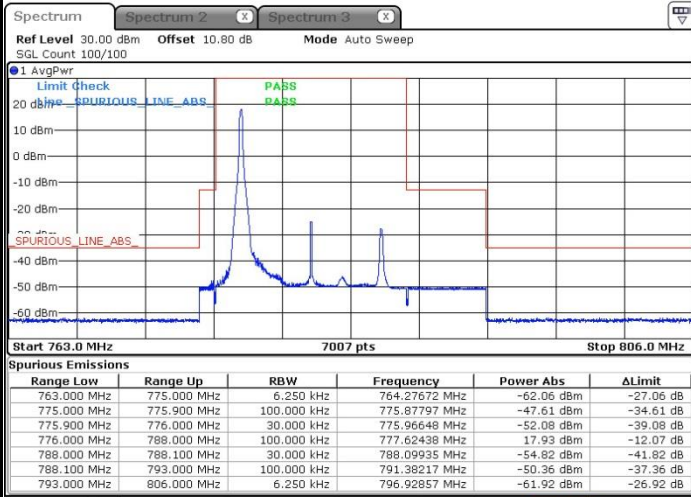


Date: 14 JUL 2018 07:20:32



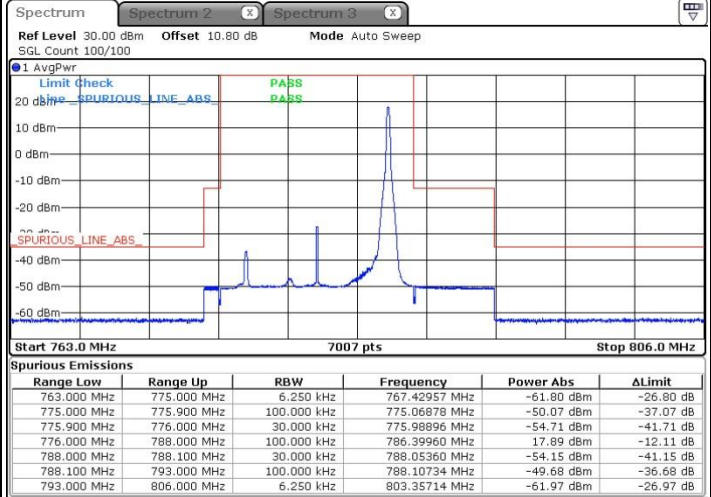
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



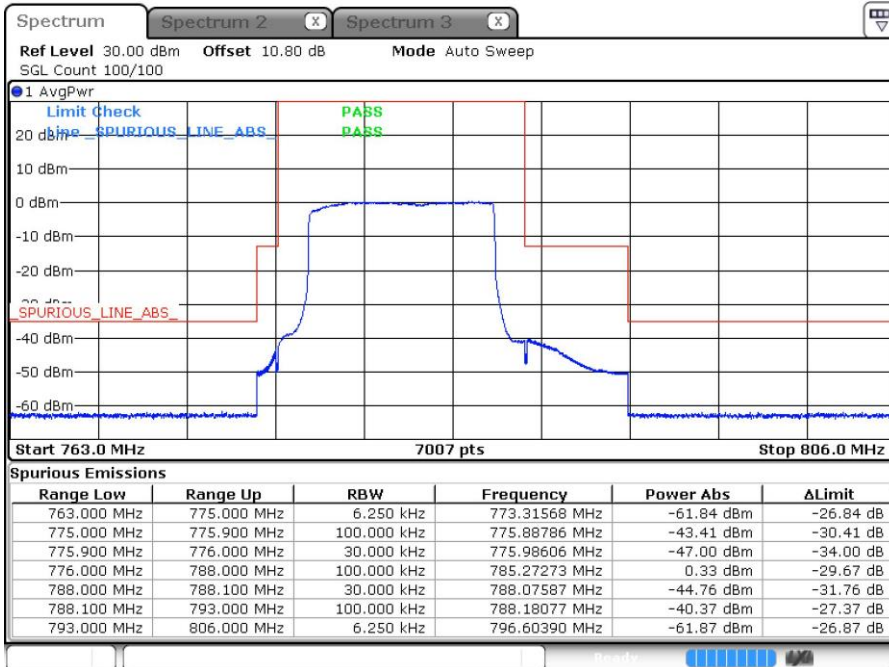
Date: 14 JUL 2018 07:33:39

Highest Band Edge / 1 RB



Date: 14 JUL 2018 07:35:20

Band Edge / Full RB

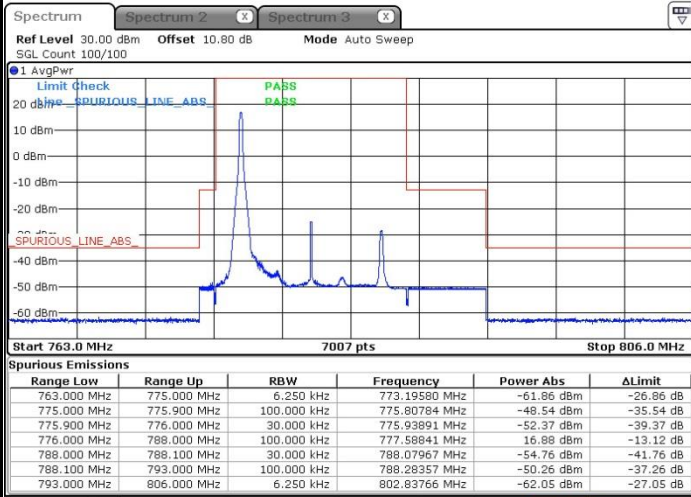


Date: 14 JUL 2018 07:28:38



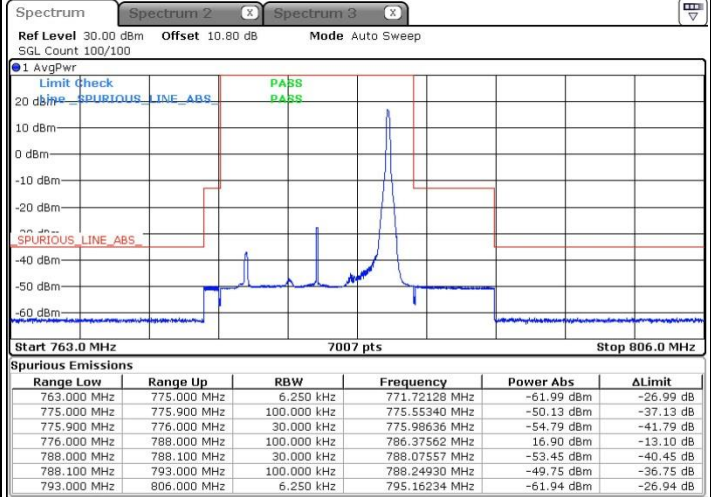
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



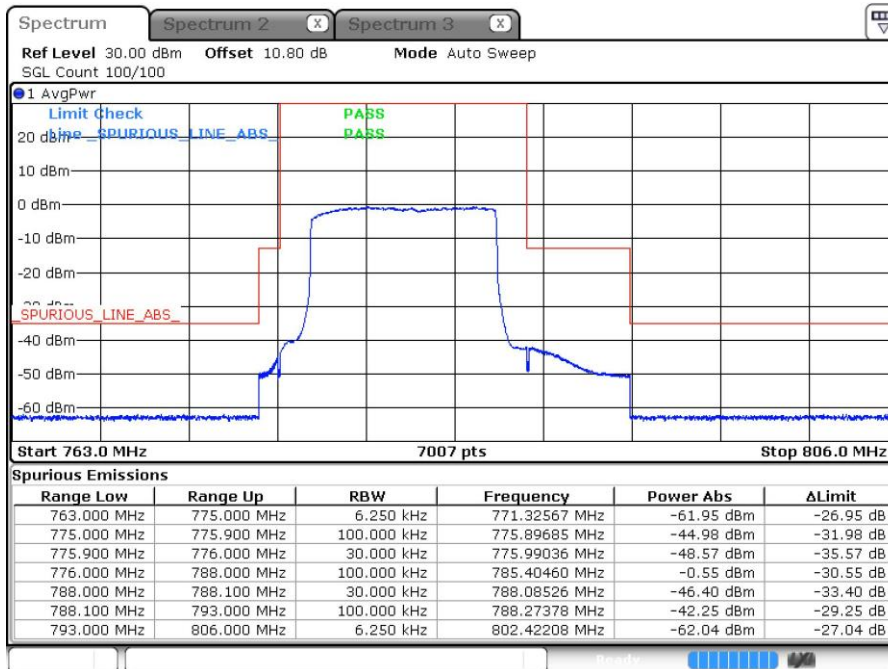
Date: 14 JUL 2018 07:31:59

Highest Band Edge / 1 RB



Date: 14 JUL 2018 07:37:00

Band Edge / Full RB



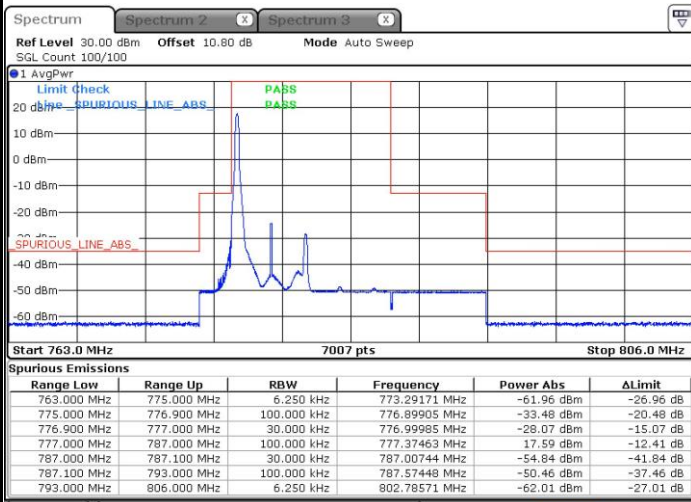
Date: 14 JUL 2018 07:30:19



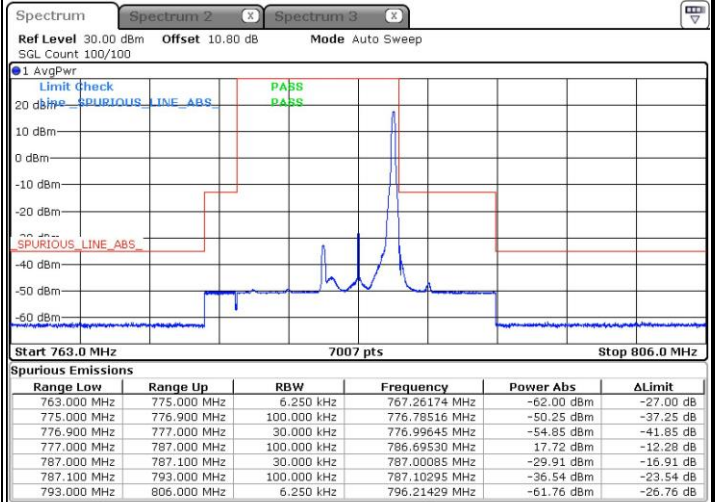
IC LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



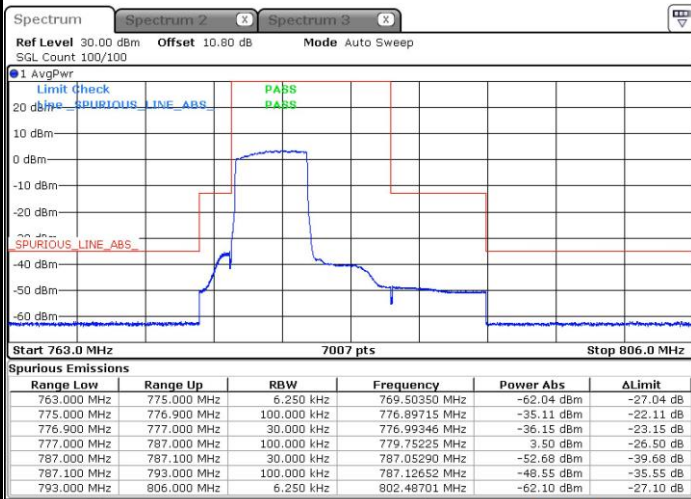
Date: 14 JUL 2018 07:53:02



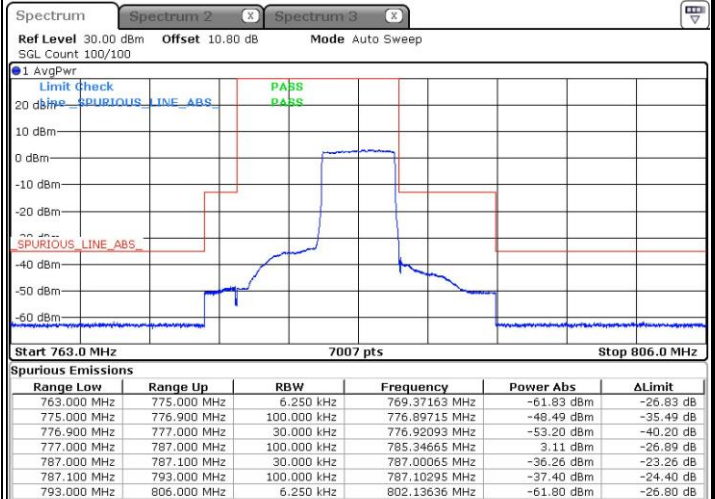
Date: 14 JUL 2018 07:59:43

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14 JUL 2018 07:48:01



Date: 14 JUL 2018 07:54:42