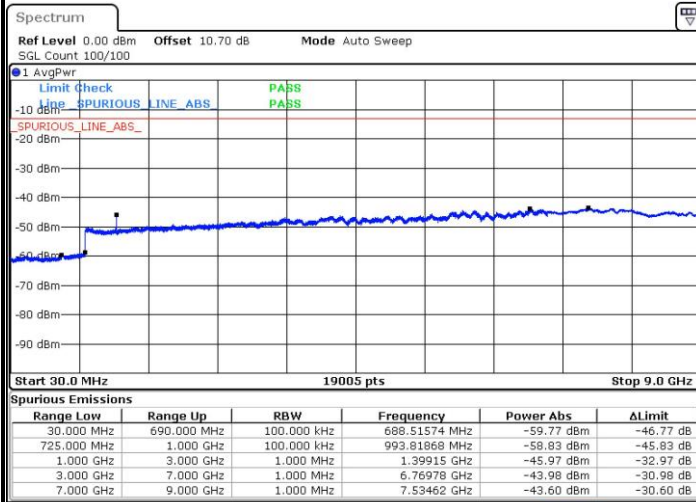




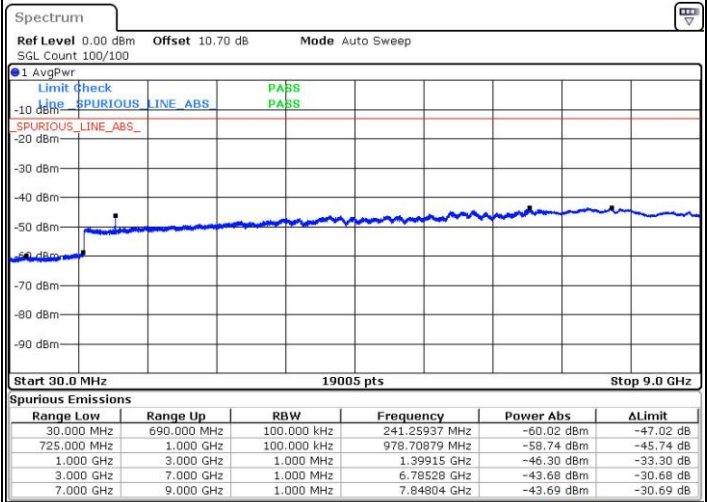
LTE Band 12 / 5MHz

Lowest Channel / QPSK



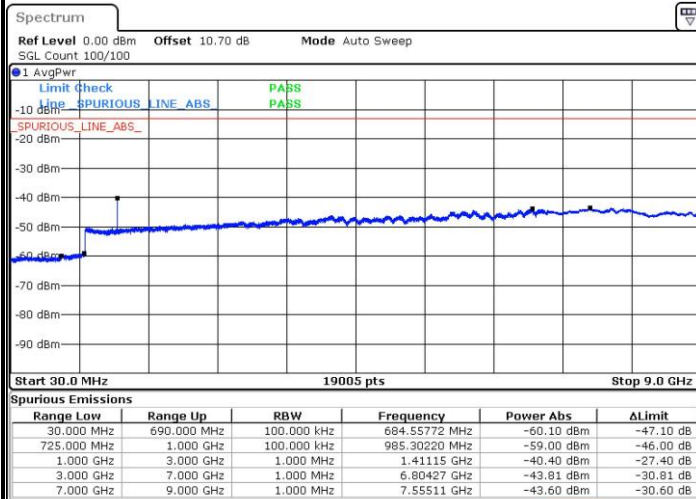
Date: 17.OCT.2018 00:35:23

Lowest Channel / 16QAM



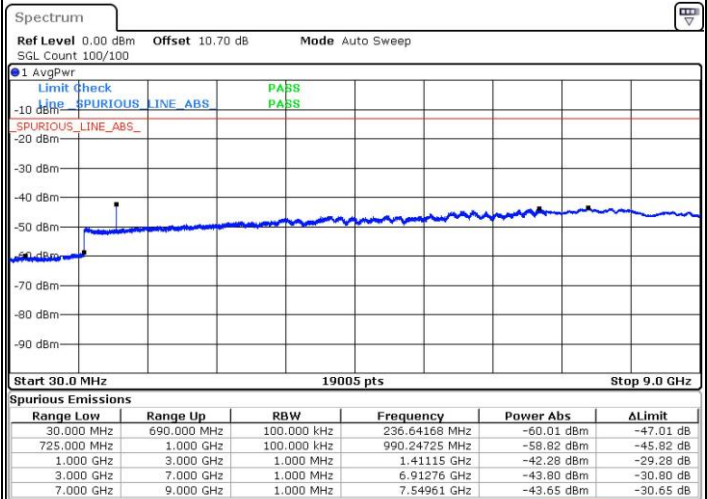
Date: 17.OCT.2018 00:36:14

Middle Channel / QPSK



Date: 17.OCT.2018 00:38:40

Middle Channel / 16QAM

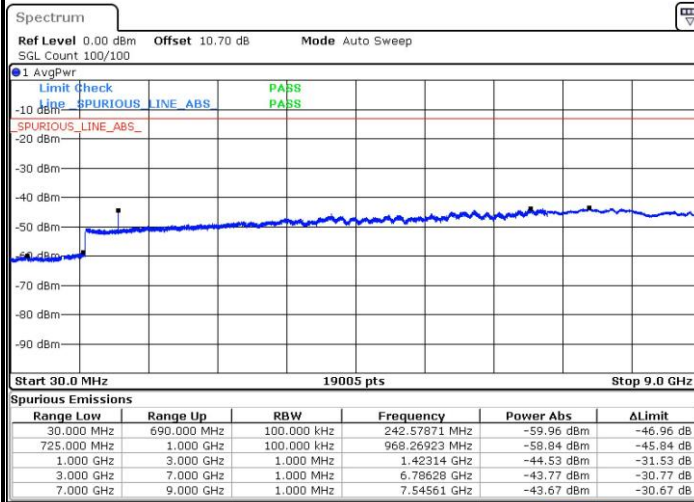


Date: 17.OCT.2018 00:37:49



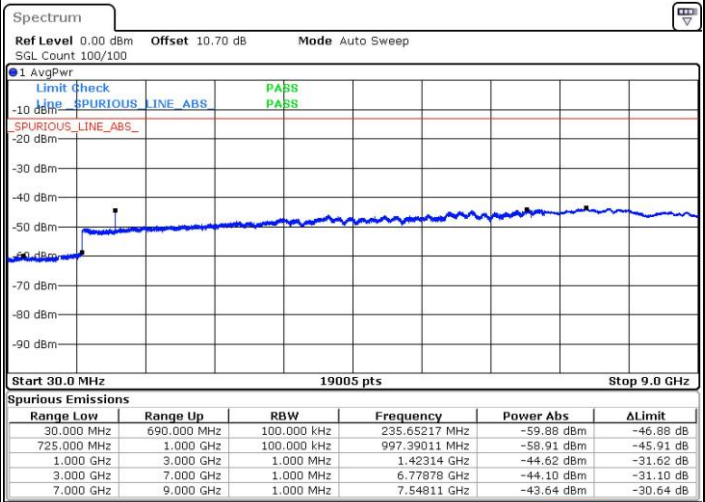
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 17.OCT.2018 00:45:46

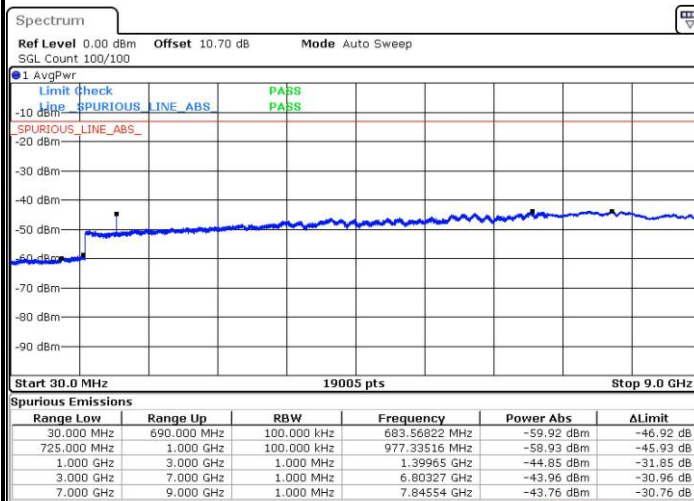
Highest Channel / 16QAM



Date: 17.OCT.2018 00:44:56

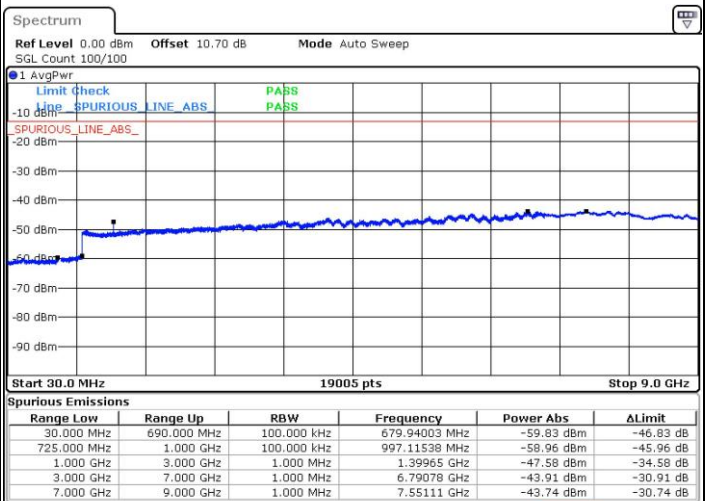
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 17.OCT.2018 01:06:49

Lowest Channel / 16QAM

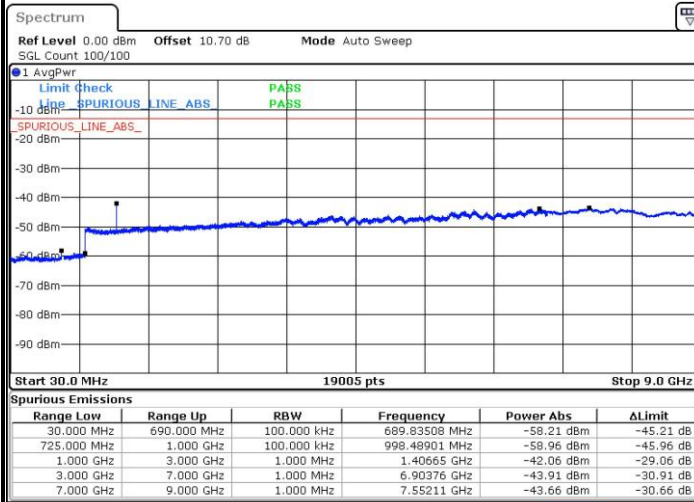


Date: 17.OCT.2018 01:07:39



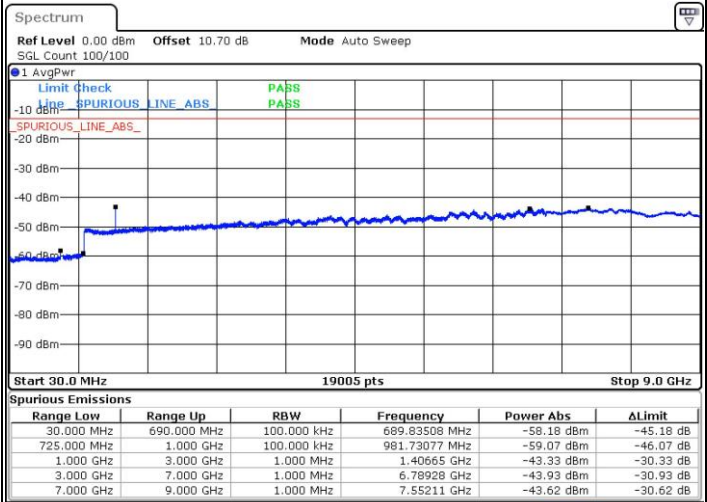
LTE Band 12 / 10MHz

Middle Channel / QPSK



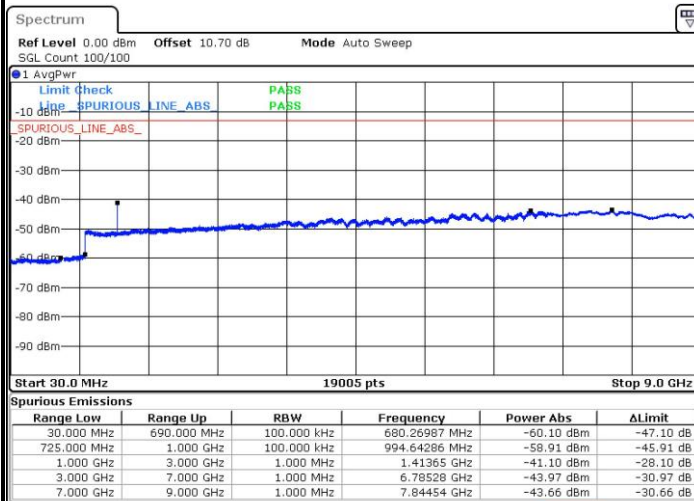
Date: 17.OCT.2018 01:10:04

Middle Channel / 16QAM



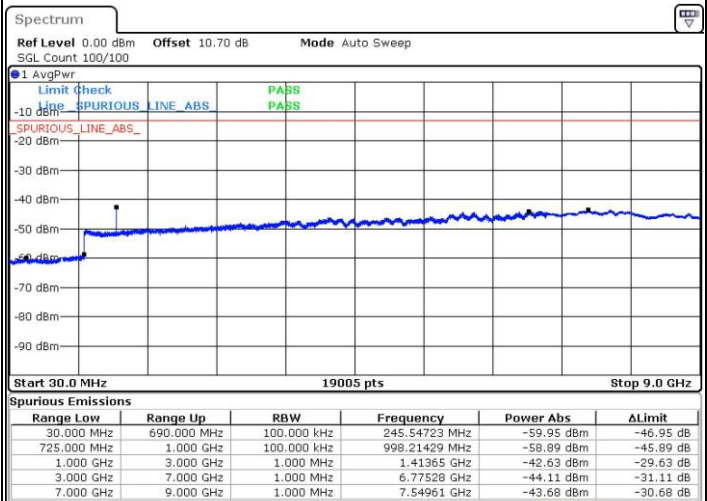
Date: 17.OCT.2018 01:09:14

Highest Channel / QPSK



Date: 17.OCT.2018 01:16:20

Highest Channel / 16QAM

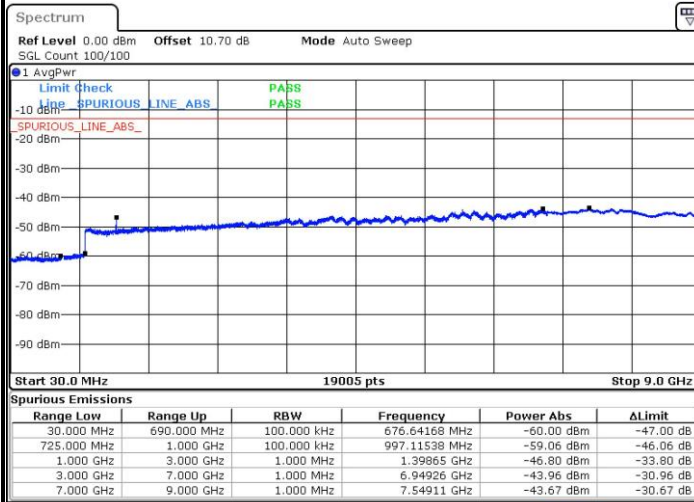


Date: 17.OCT.2018 01:17:10



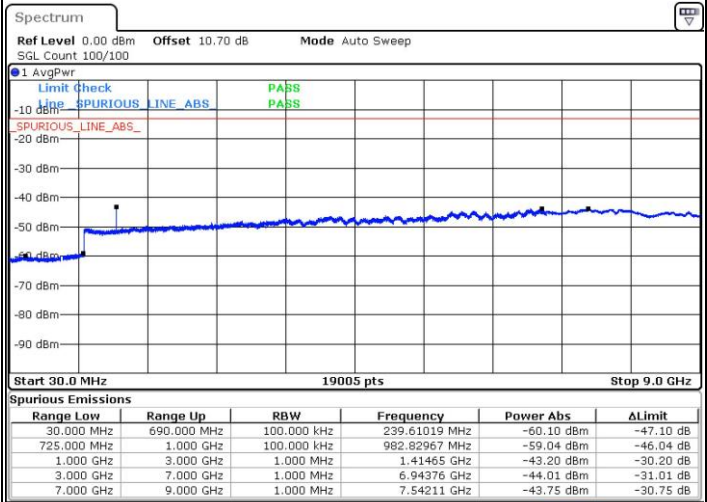
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



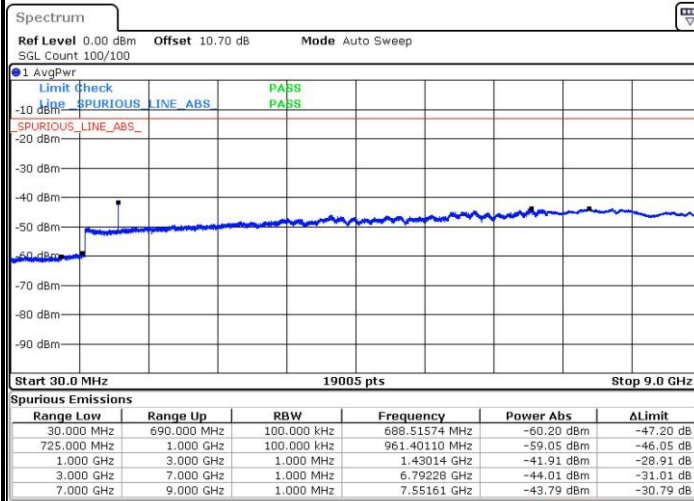
Date: 17.OCT.2018 11:23:19

Middle Channel / 64QAM



Date: 17.OCT.2018 11:24:32

Highest Channel / 64QAM

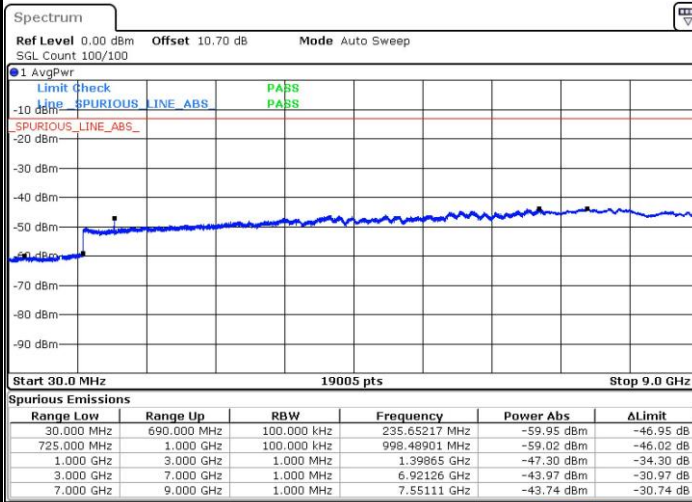


Date: 17.OCT.2018 11:29:04



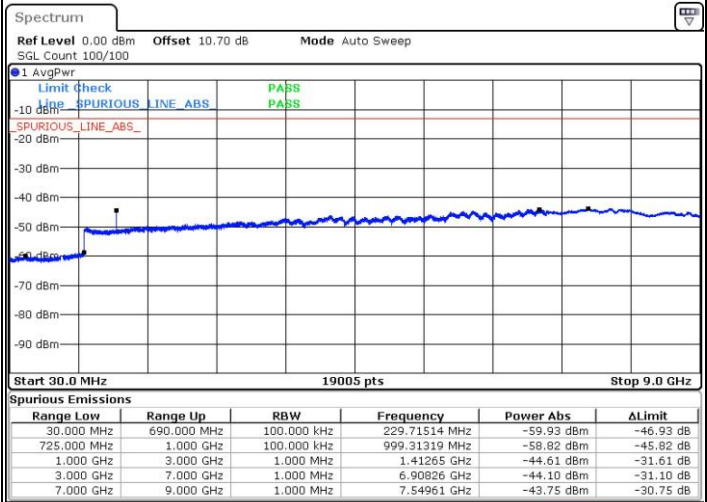
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



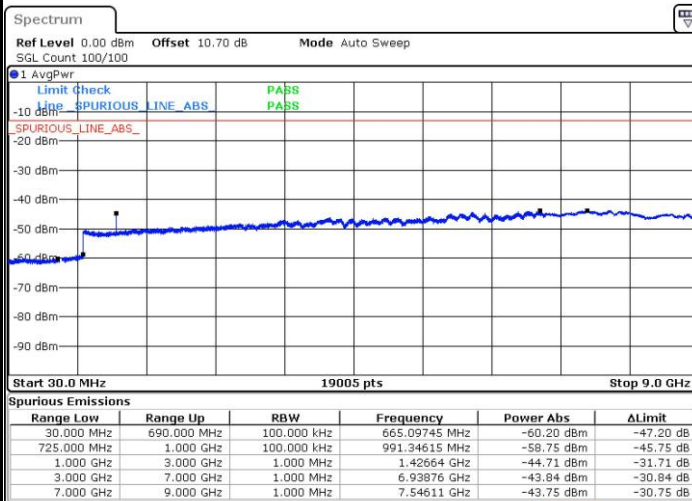
Date: 17.OCT.2018 01:37:21

Middle Channel / 64QAM



Date: 17.OCT.2018 01:38:34

Highest Channel / 64QAM

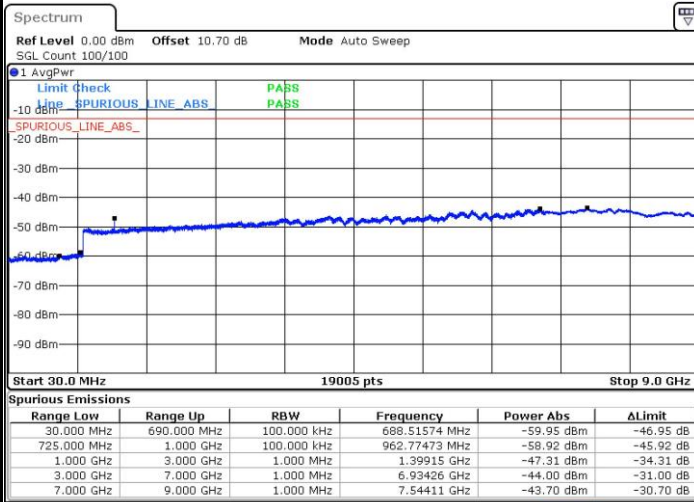


Date: 17.OCT.2018 01:42:06



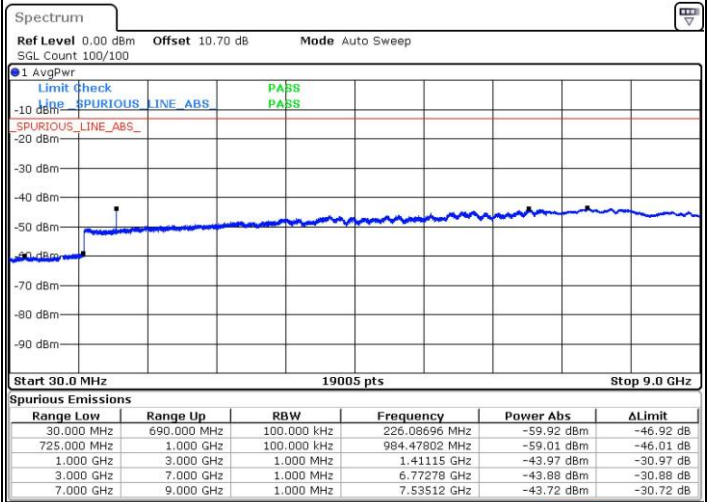
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



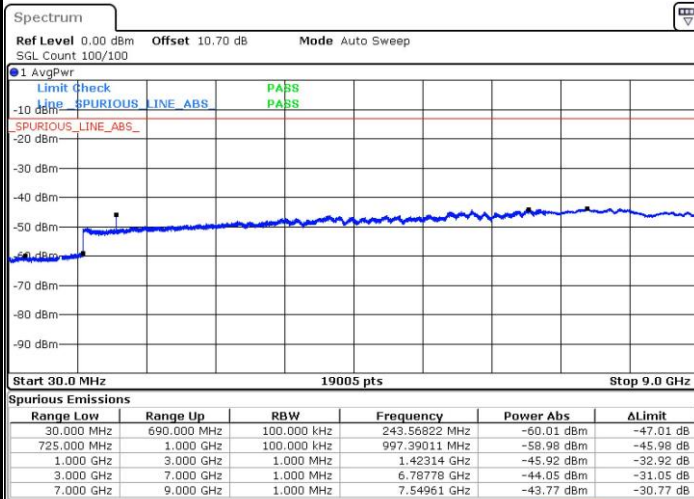
Date: 17.OCT.2018 01:45:39

Middle Channel / 64QAM



Date: 17.OCT.2018 01:46:52

Highest Channel / 64QAM

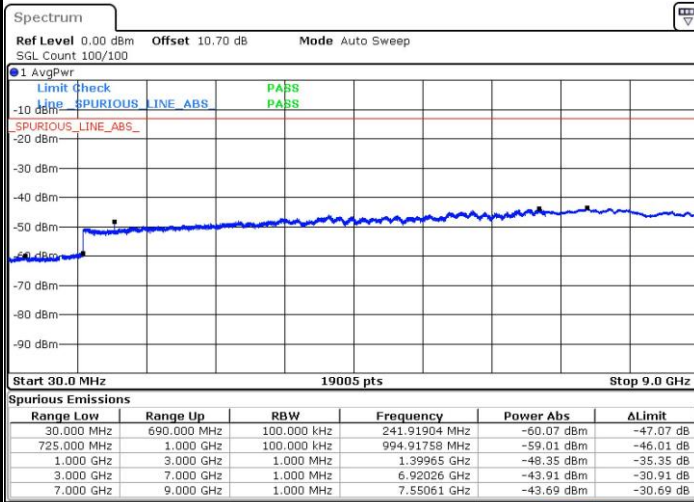


Date: 17.OCT.2018 01:50:25



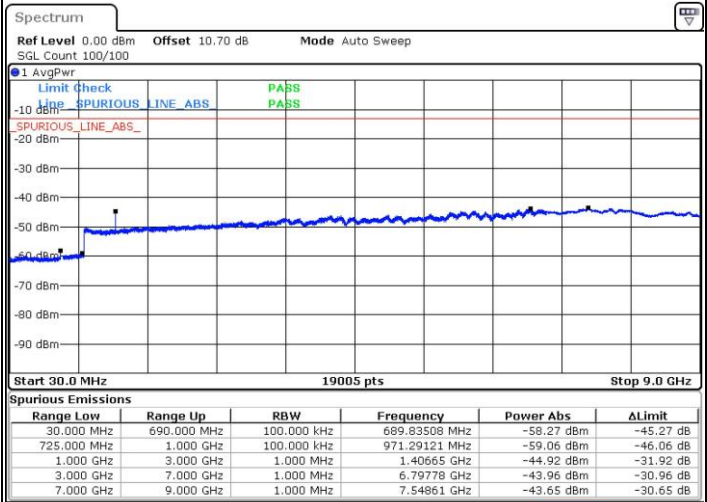
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



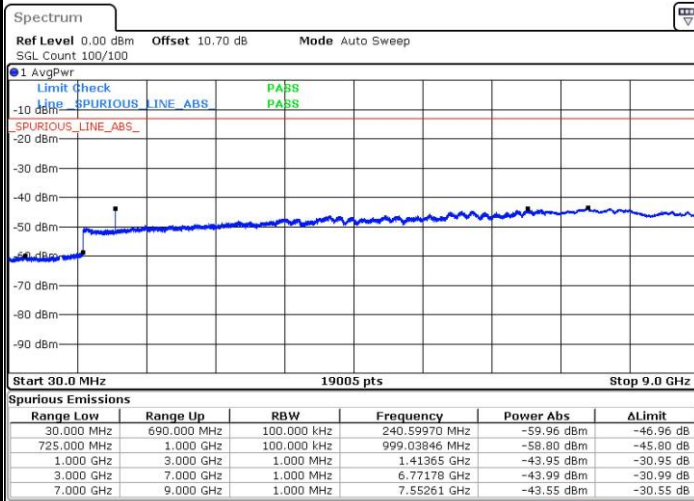
Date: 17.OCT.2018 01:53:58

Middle Channel / 64QAM



Date: 17.OCT.2018 01:55:11

Highest Channel / 64QAM



Date: 17.OCT.2018 01:58:44

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	0.0099	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0107	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0136	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0114	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0140	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0124	

Note:

1. Normal Voltage =3.8 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.

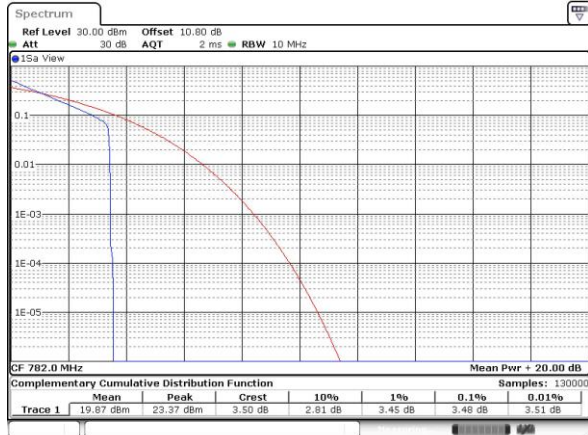
LTE Band 13

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	3.48	4.64	4.29	5.8	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	5.13	6.32	-	-	
Highest CH	-	-	-	-	

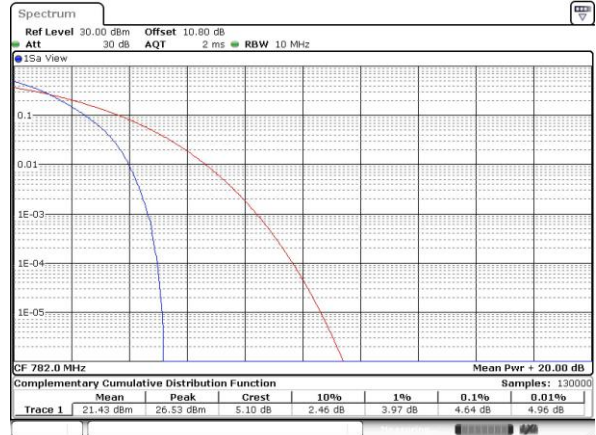
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 17.OCT.2018 14:47:25

Middle Channel / Full RB



Date: 17.OCT.2018 14:47:36

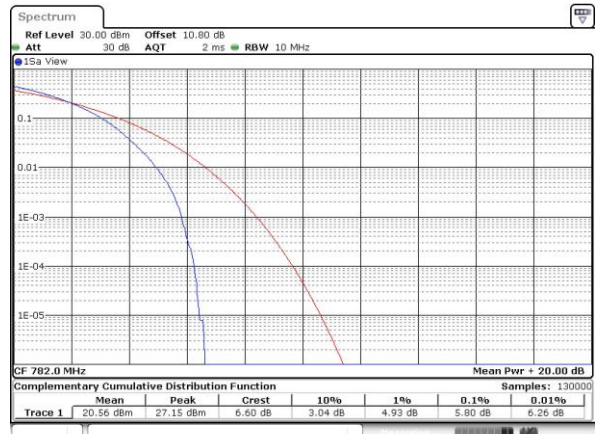
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 17.OCT.2018 14:46:40

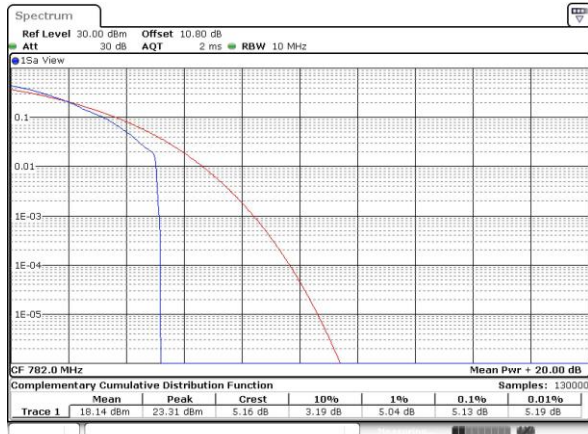
Middle Channel / Full RB



Date: 17.OCT.2018 14:46:54

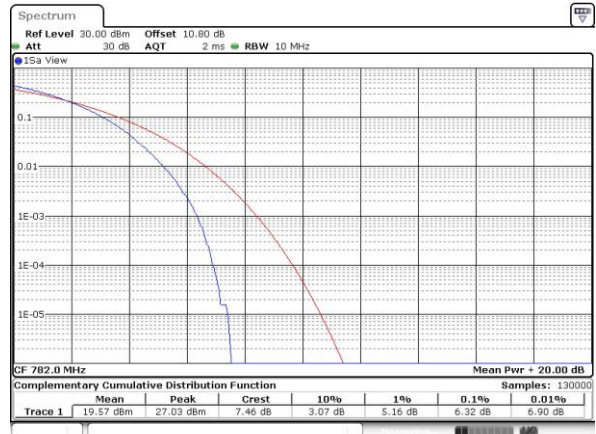
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 17.OCT.2018 14:46:16

Middle Channel / Full RB



Date: 17.OCT.2018 14:46:28

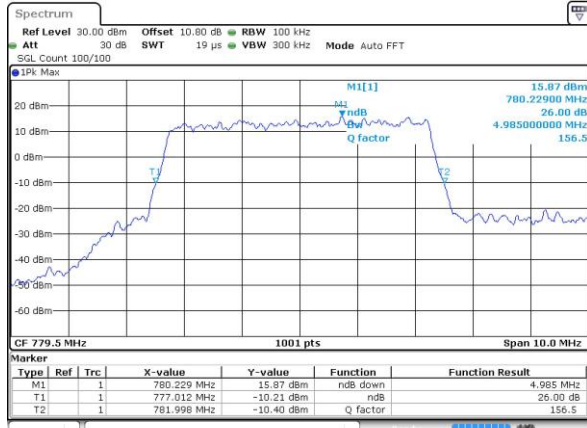
**26dB Bandwidth**

Mode BW Mod.	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.99	4.92	-	-	-	-	-	-
Middle CH	-	-	-	-	4.90	4.87	9.91	9.85	-	-	-	-
Highest CH	-	-	-	-	4.97	4.94	-	-	-	-	-	-
Mode BW Mod.	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.89	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.84	-	9.79	-	-	-	-	-
Highest CH	-	-	-	-	4.90	-	-	-	-	-	-	-



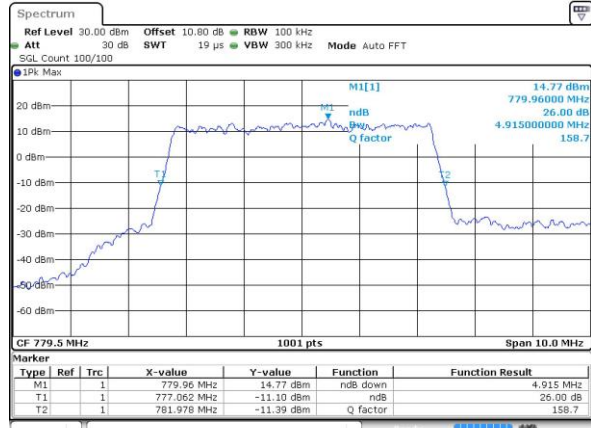
LTE Band 13

Lowest Channel / 5MHz / QPSK



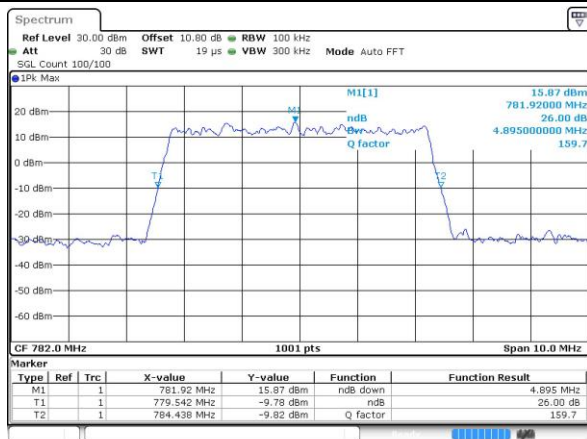
Date: 17.OCT.2018 13:48:13

Lowest Channel / 5MHz / 16QAM



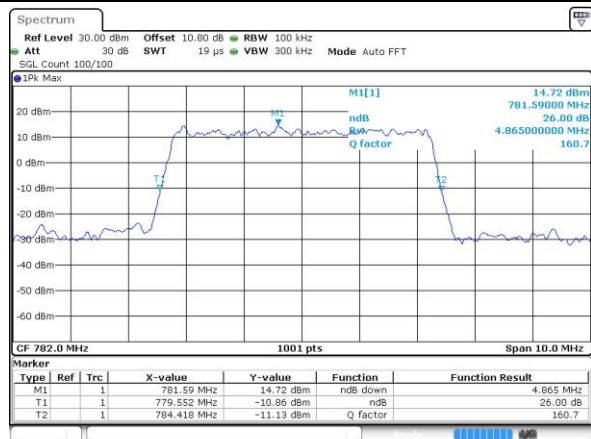
Date: 17.OCT.2018 13:48:02

Middle Channel / 5MHz / QPSK



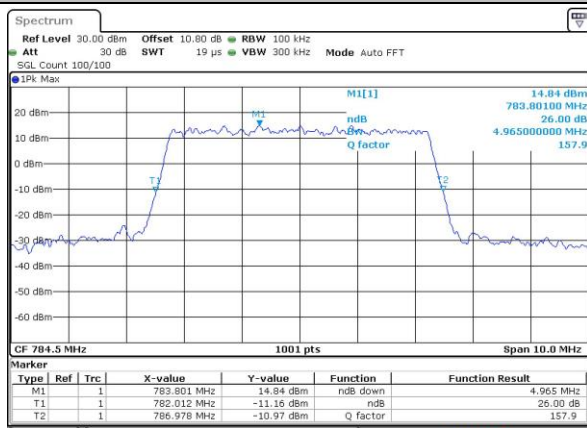
Date: 17.OCT.2018 13:57:45

Middle Channel / 5MHz / 16QAM



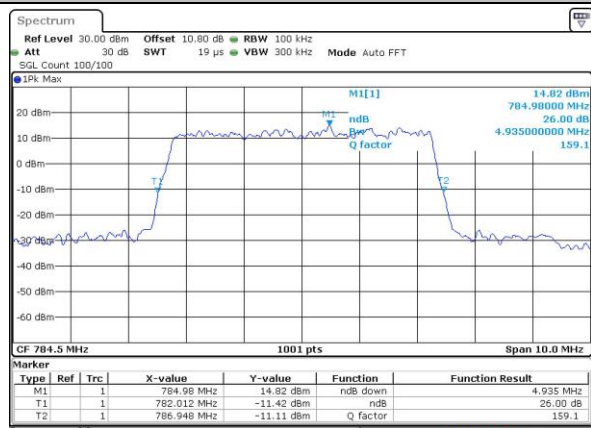
Date: 17.OCT.2018 13:57:57

Highest Channel / 5MHz / QPSK



Date: 17.OCT.2018 13:59:05

Highest Channel / 5MHz / 16QAM

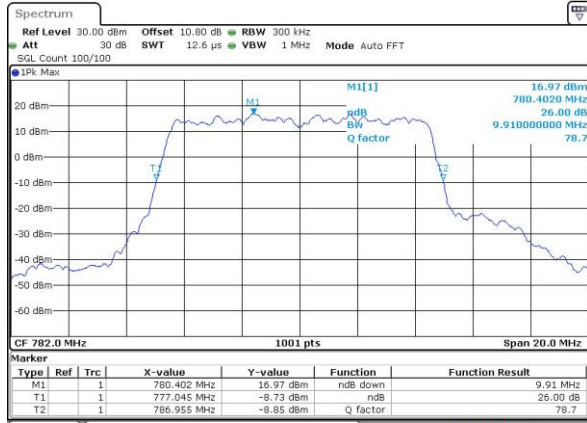


Date: 17.OCT.2018 13:58:54



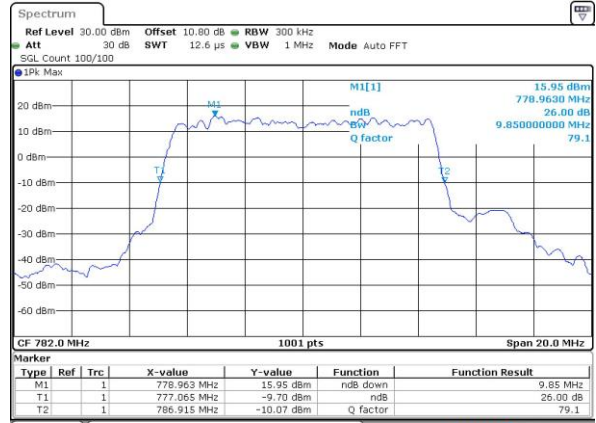
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 17.OCT.2018 14:28:13

Middle Channel / 10MHz / 16QAM

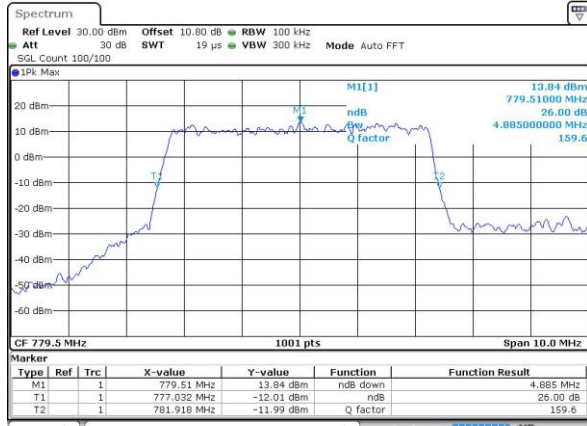


Date: 17.OCT.2018 14:28:02



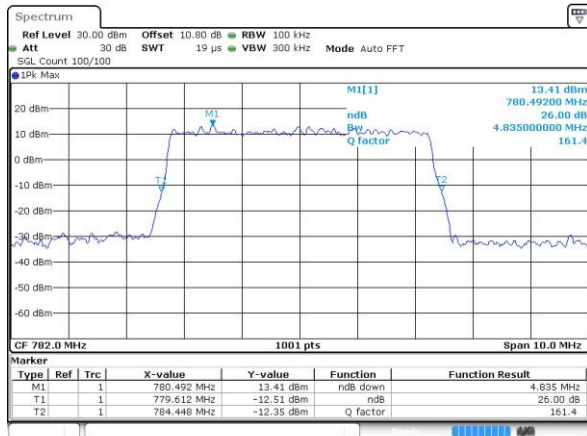
LTE Band 13

Lowest Channel / 5MHz / 64QAM



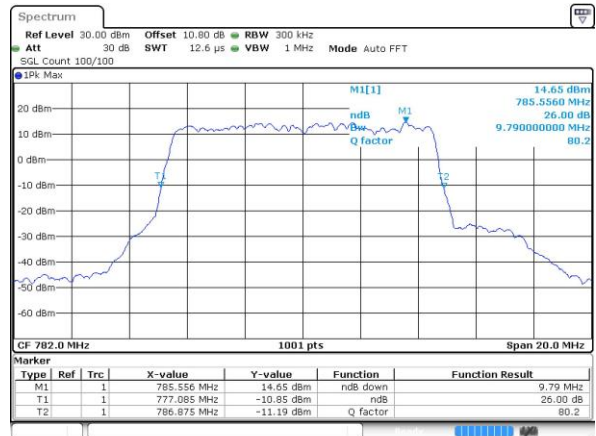
Date: 17.OCT.2018 14:16:00

Middle Channel / 5MHz / 64QAM



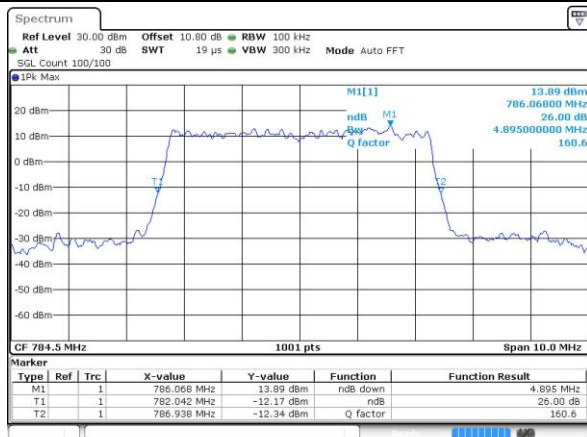
Date: 17.OCT.2018 14:20:53

Middle Channel / 10MHz / 64QAM



Date: 17.OCT.2018 14:37:58

Highest Channel / 5MHz / 64QAM



Date: 17.OCT.2018 14:21:27

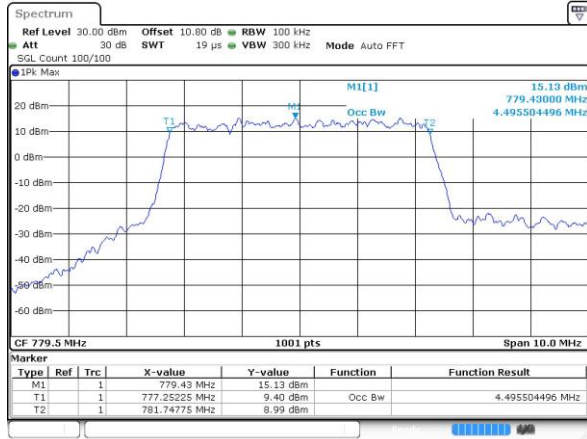
**Occupied Bandwidth**

Mode BW Mod.	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.5	4.52	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	4.5	8.97	9.05	-	-	-	-
Highest CH	-	-	-	-	4.5	4.5	-	-	-	-	-	-
Mode BW Mod.	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-

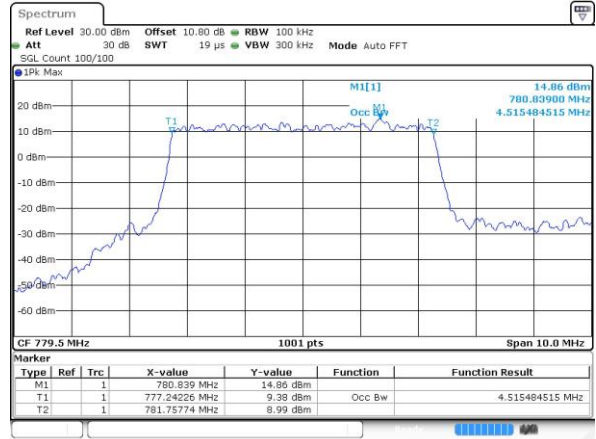


LTE Band 13

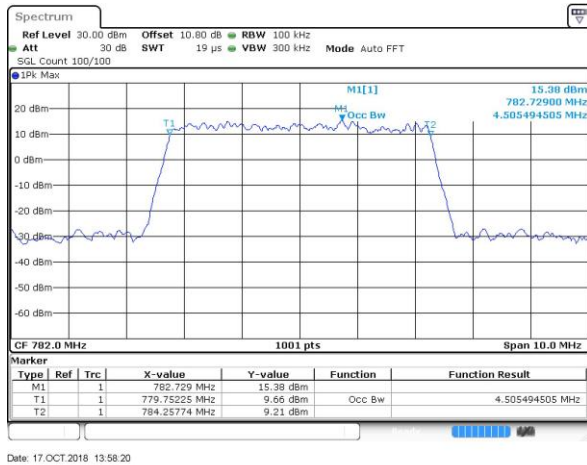
Lowest Channel / 5MHz / QPSK



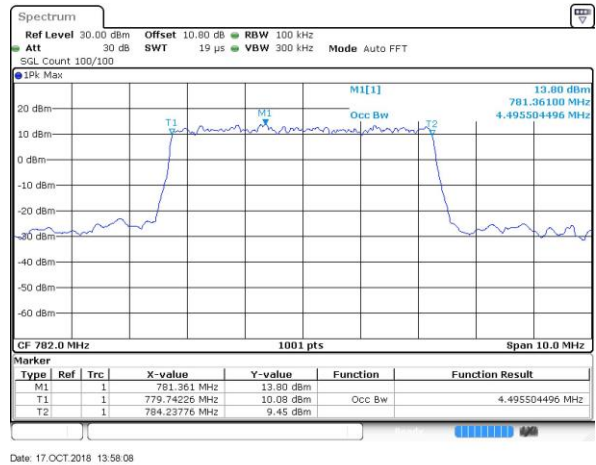
Lowest Channel / 5MHz / 16QAM



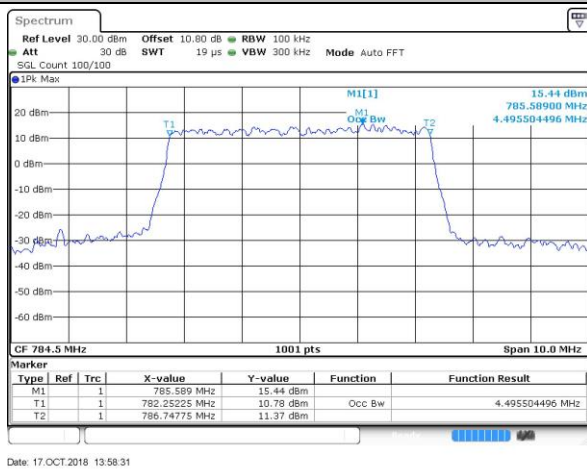
Middle Channel / 5MHz / QPSK



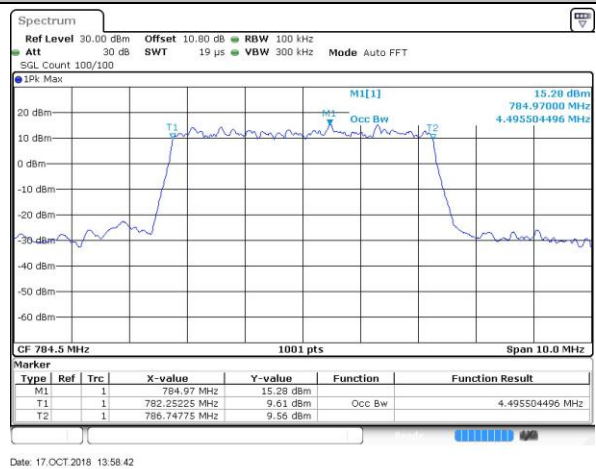
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



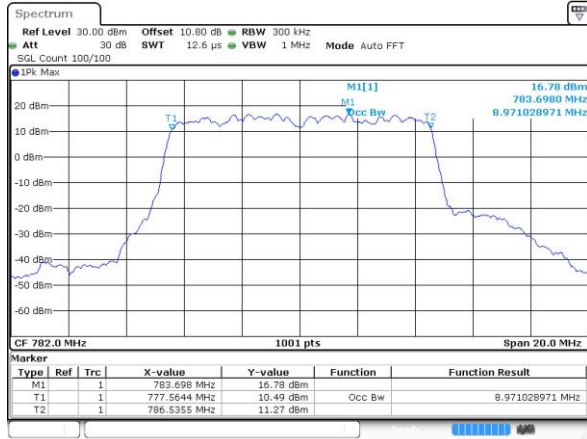
Highest Channel / 5MHz / 16QAM



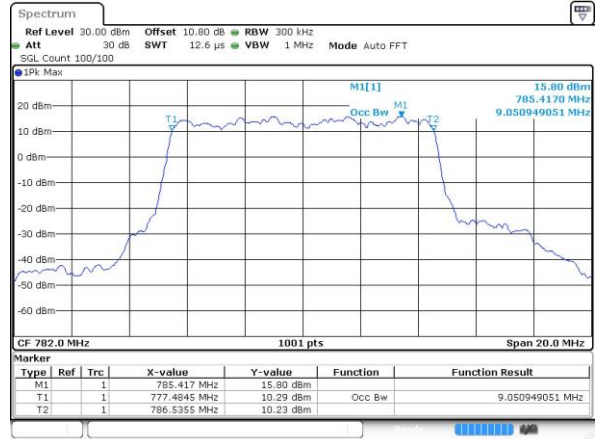


LTE Band 13

Middle Channel / 10MHz / QPSK



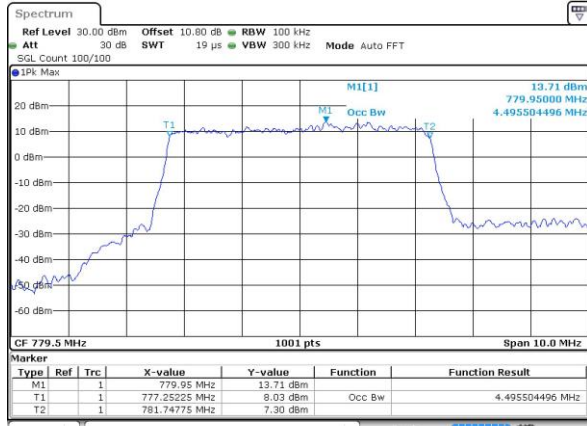
Middle Channel / 10MHz / 16QAM





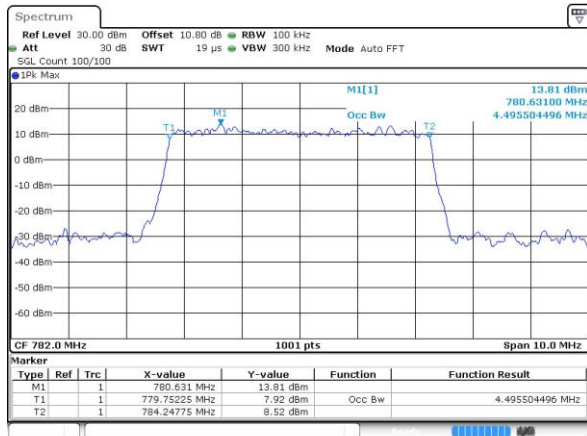
LTE Band 13

Lowest Channel / 5MHz / 64QAM



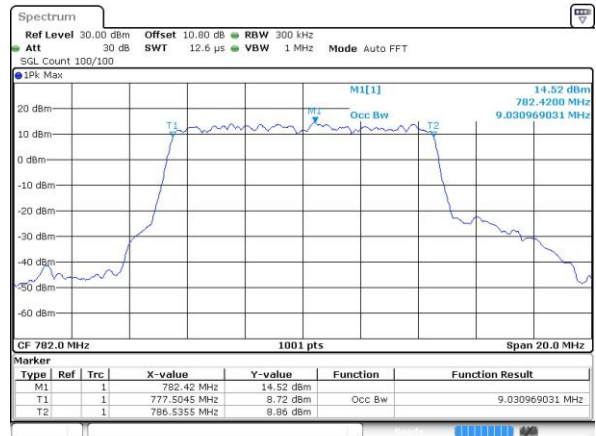
Date: 17.OCT.2018 14:15:49

Middle Channel / 5MHz / 64QAM



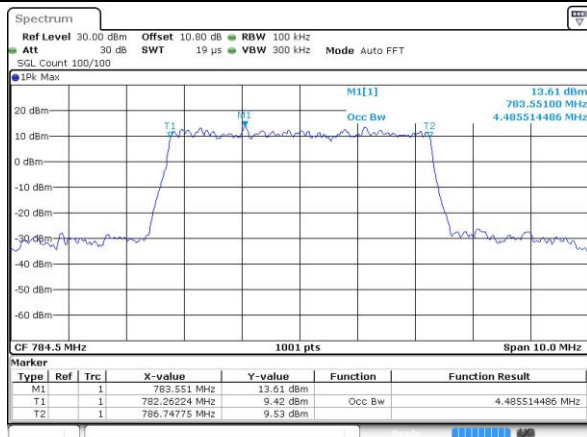
Date: 17.OCT.2018 14:21:04

Middle Channel / 10MHz / 64QAM

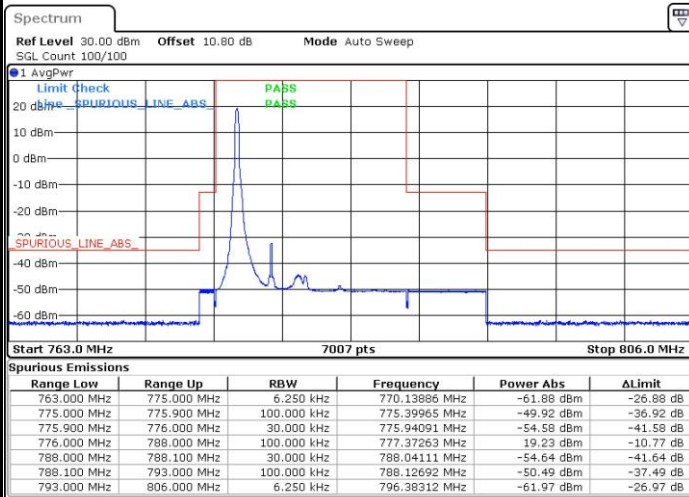


Date: 17.OCT.2018 14:37:46

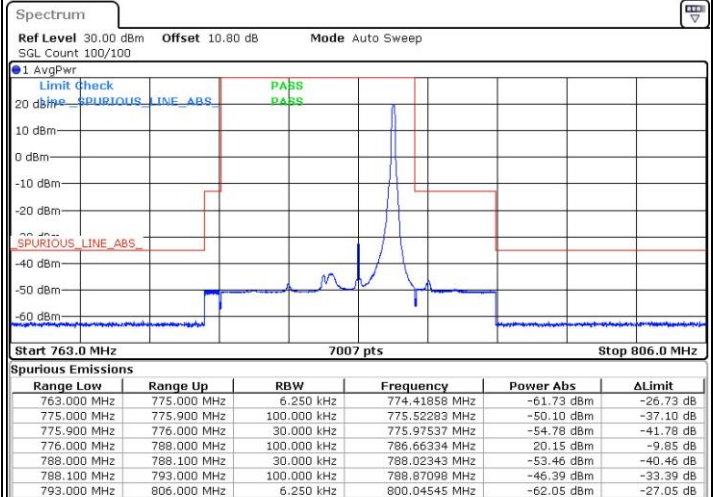
Highest Channel / 5MHz / 64QAM



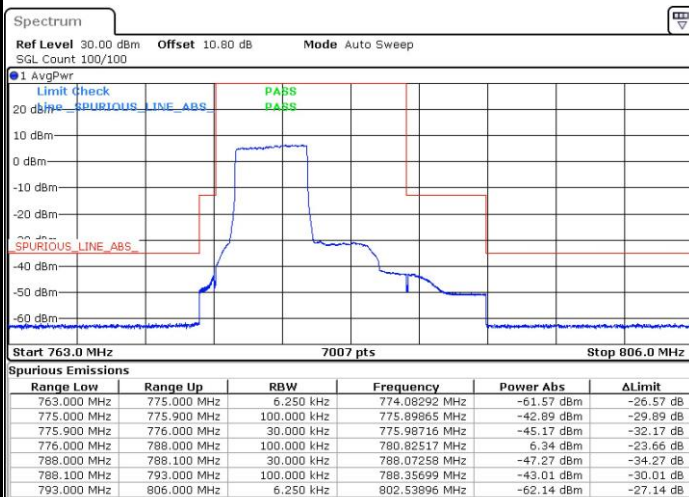
Date: 17.OCT.2018 14:21:16

**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB**

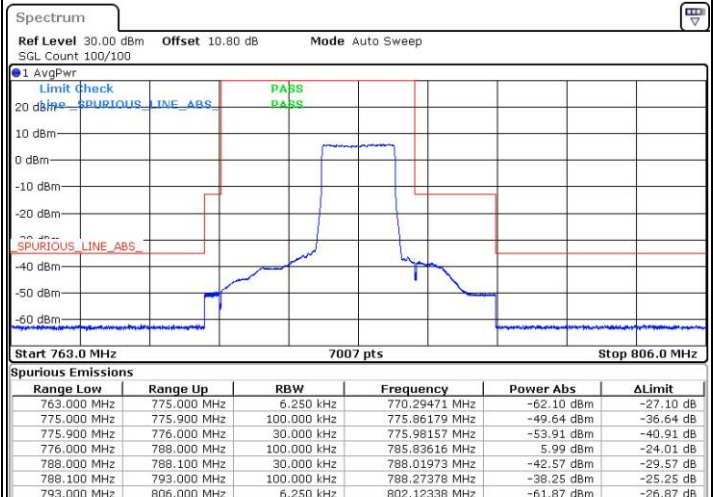
Date: 17.OCT.2018 14:07:36

Highest Band Edge / 1 RB

Date: 17.OCT.2018 14:14:17

Lowest Band Edge / Full RB

Date: 17.OCT.2018 14:02:35

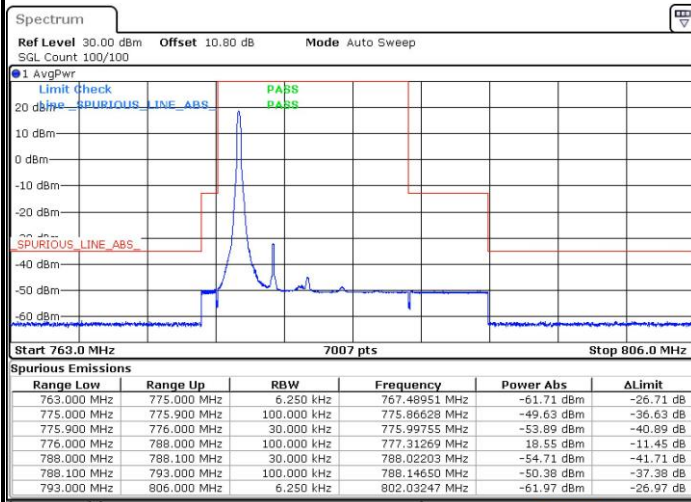
Highest Band Edge / Full RB

Date: 17.OCT.2018 14:09:16

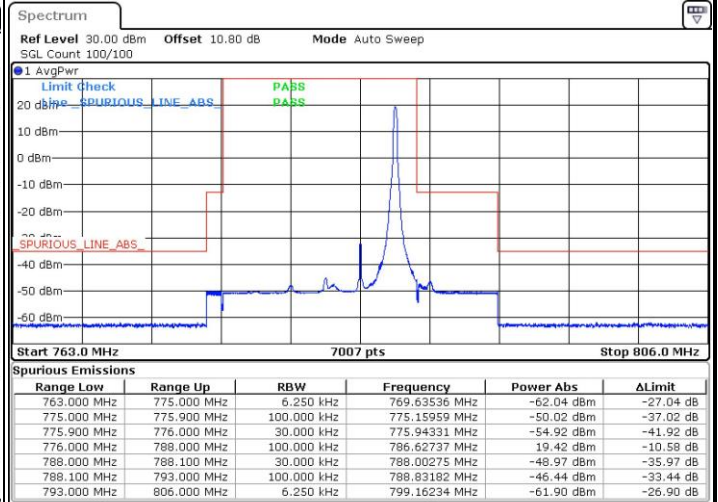


LTE Band 13 / 5MHz / 16QAM

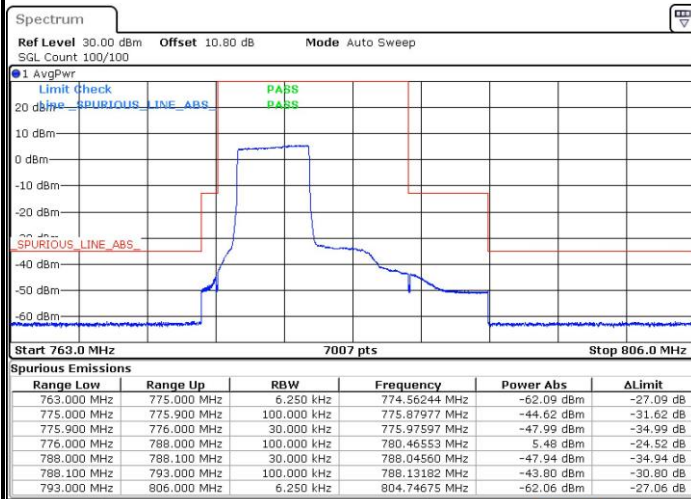
Lowest Band Edge / 1 RB



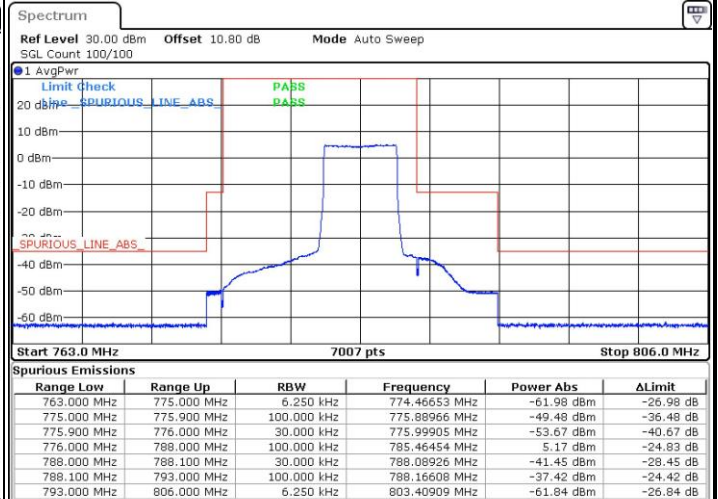
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



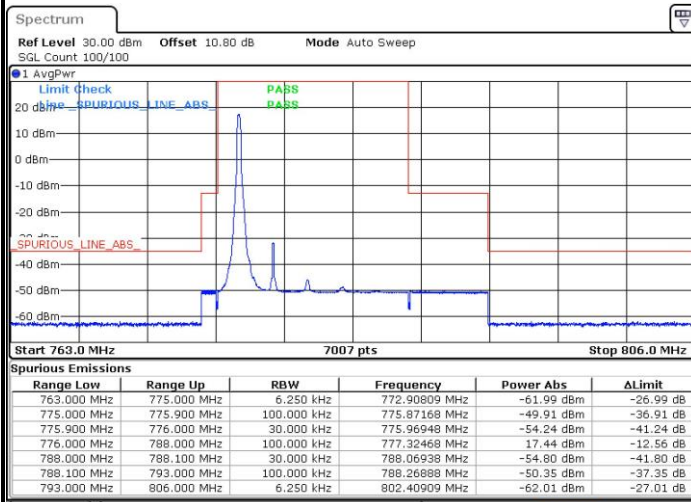
Highest Band Edge / Full RB





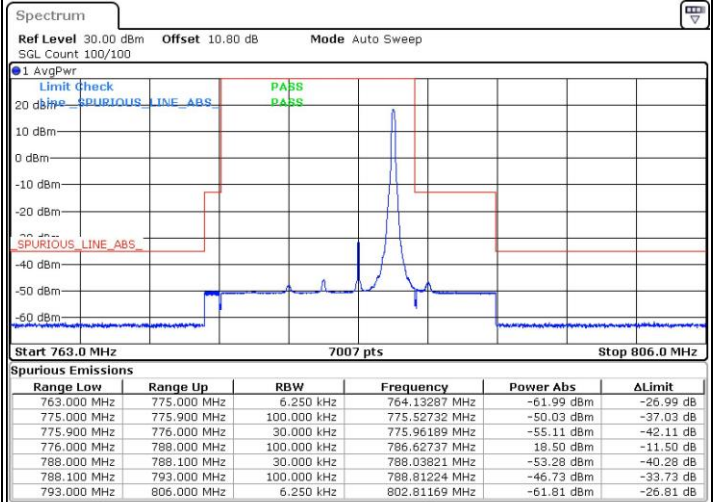
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



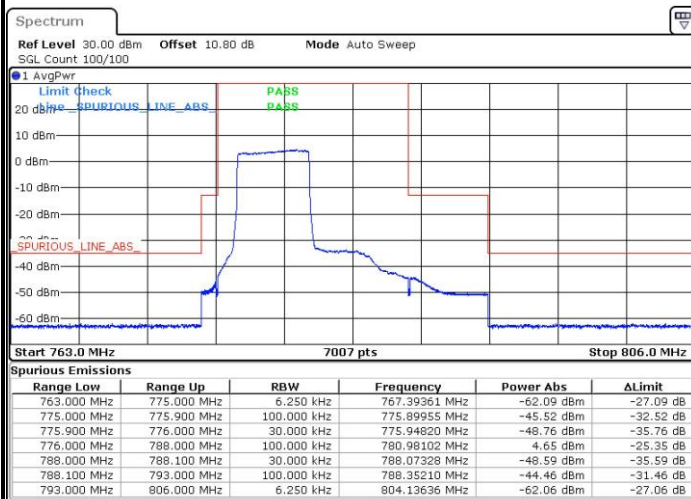
Date: 17.OCT.2018 14:19:20

Highest Band Edge / 1 RB



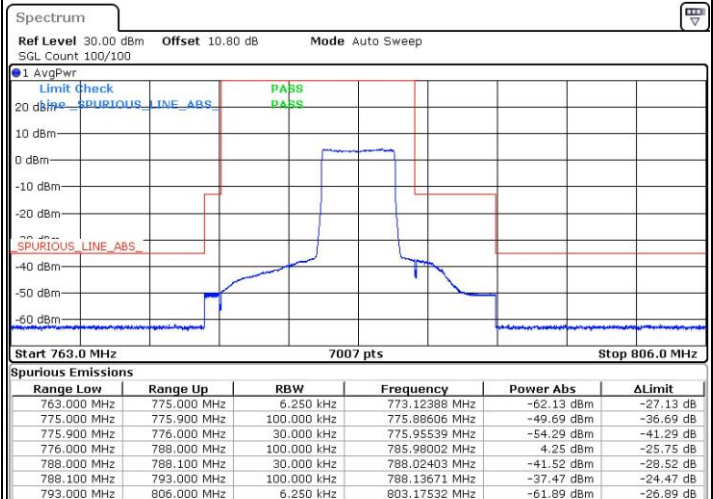
Date: 17.OCT.2018 14:24:47

Lowest Band Edge / Full RB



Date: 17.OCT.2018 14:17:40

Highest Band Edge / Full RB

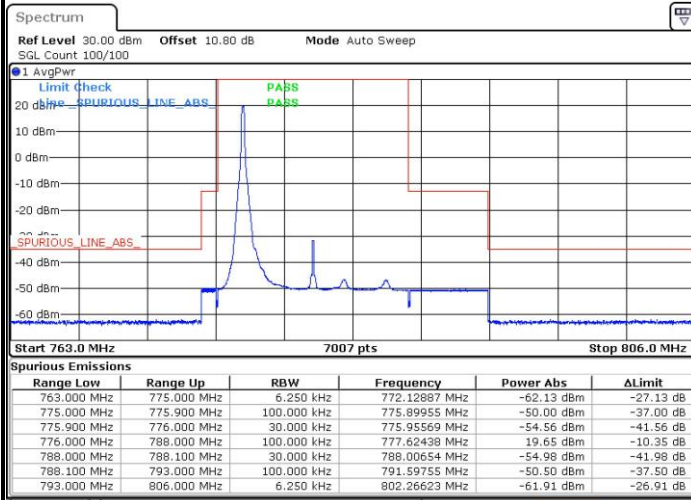


Date: 17.OCT.2018 14:23:07



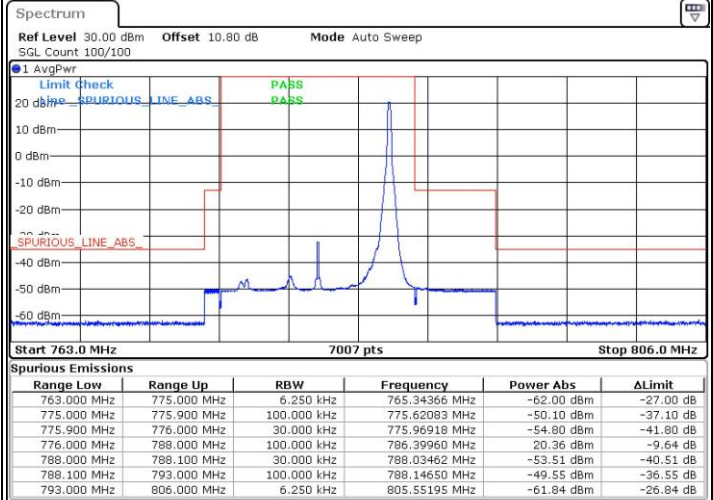
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



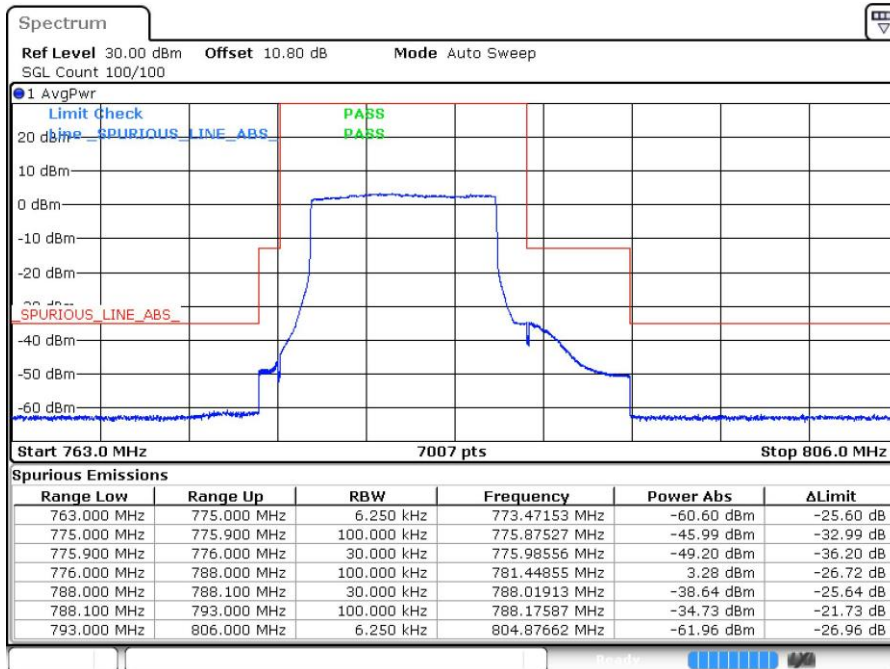
Date: 17.OCT.2018 14:32:54

Highest Band Edge / 1 RB



Date: 17.OCT.2018 14:34:34

Band Edge / Full RB

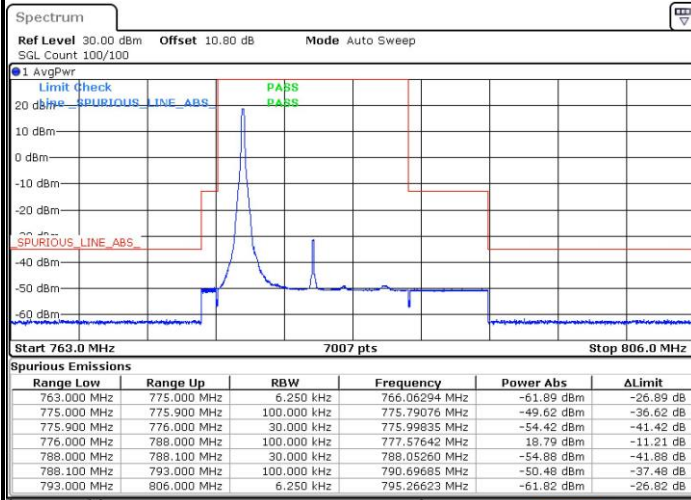


Date: 17.OCT.2018 14:27:53



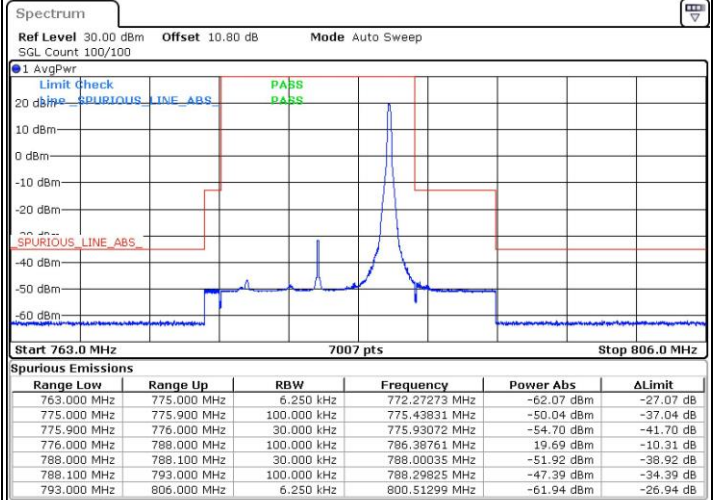
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



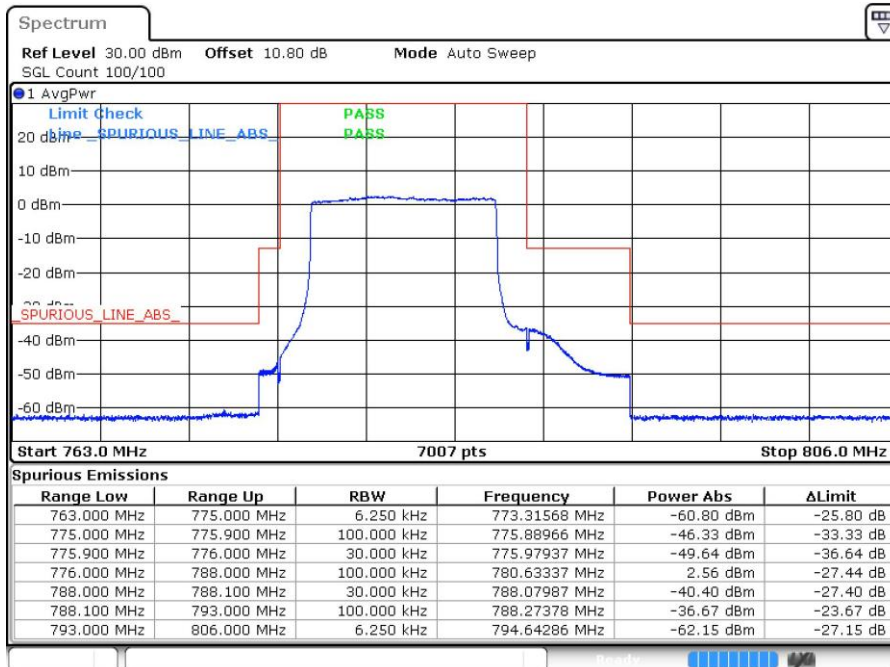
Date: 17.OCT.2018 14:31:14

Highest Band Edge / 1 RB



Date: 17.OCT.2018 14:36:14

Band Edge / Full RB

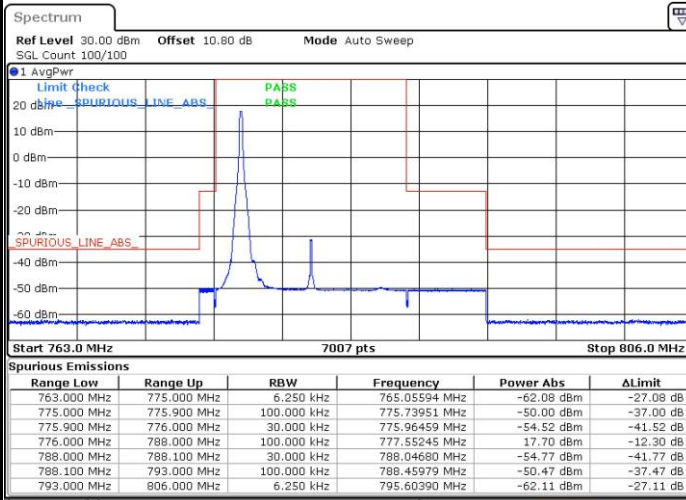


Date: 17.OCT.2018 14:29:33



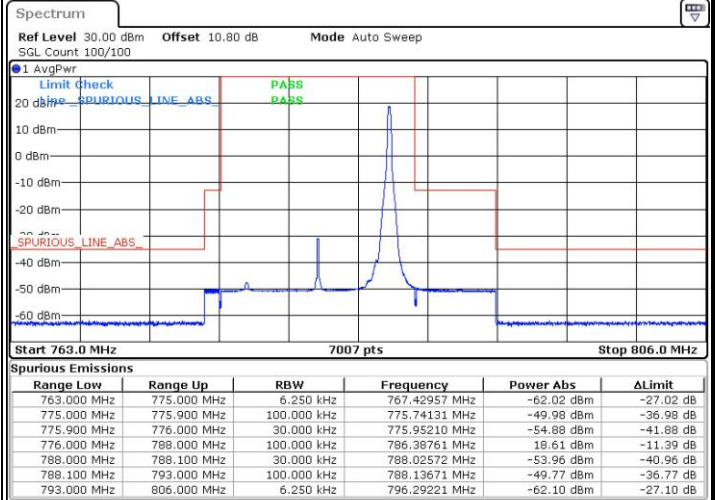
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



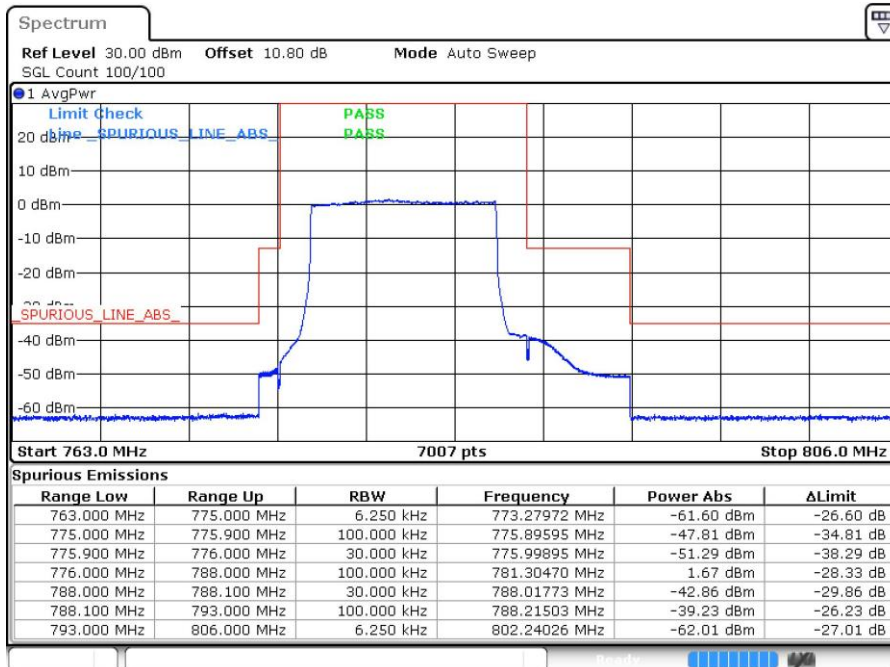
Date: 17.OCT.2018 14:41:18

Highest Band Edge / 1 RB



Date: 17.OCT.2018 14:42:58

Band Edge / Full RB



Date: 17.OCT.2018 14:39:37