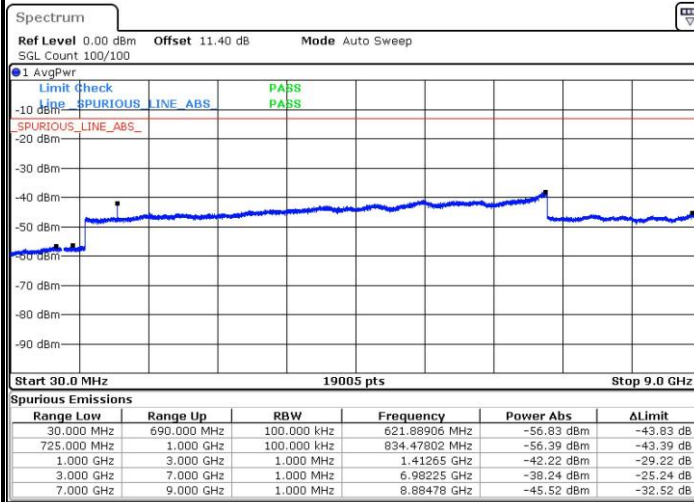




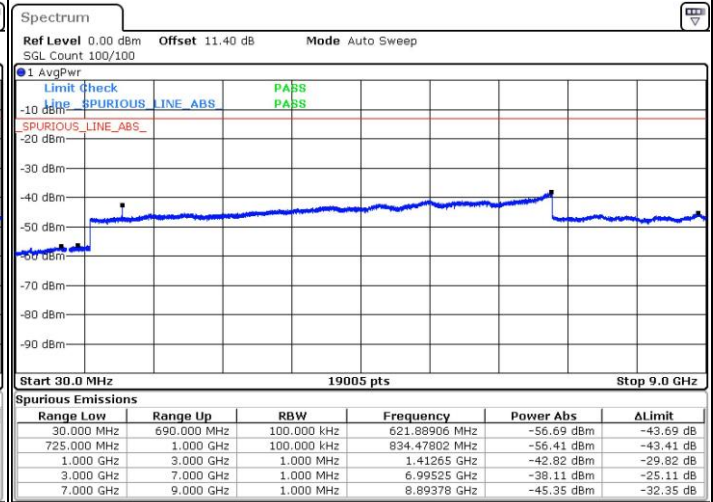
LTE Band 12 / 3MHz

Middle Channel / QPSK



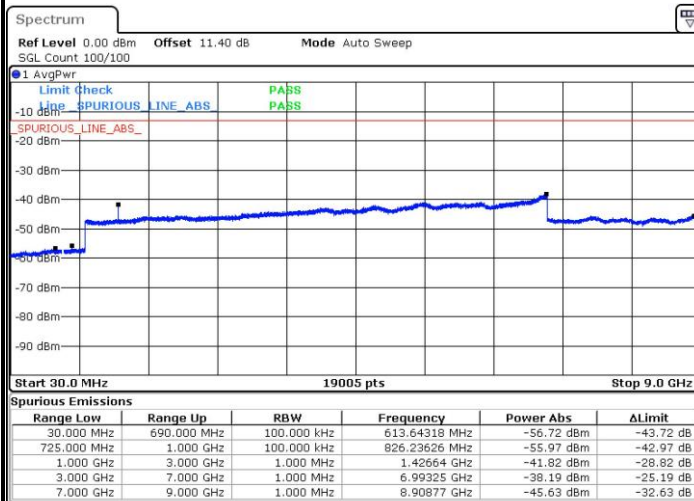
Date: 10.SEP.2018 09:12:19

Middle Channel / 16QAM



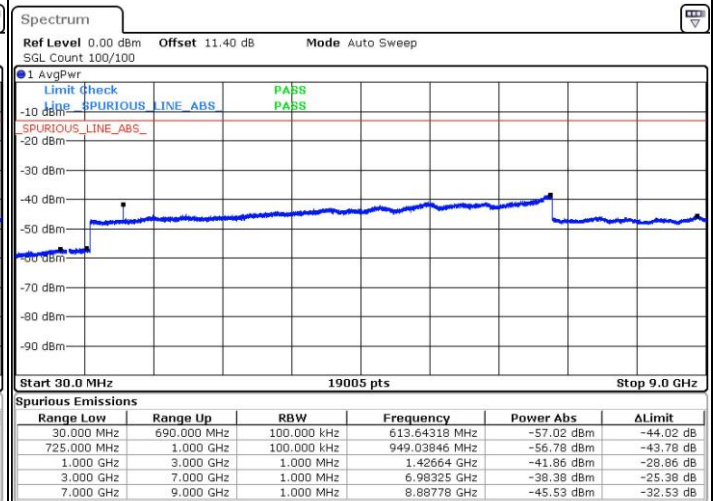
Date: 10.SEP.2018 09:11:24

Highest Channel / QPSK



Date: 10.SEP.2018 09:18:49

Highest Channel / 16QAM

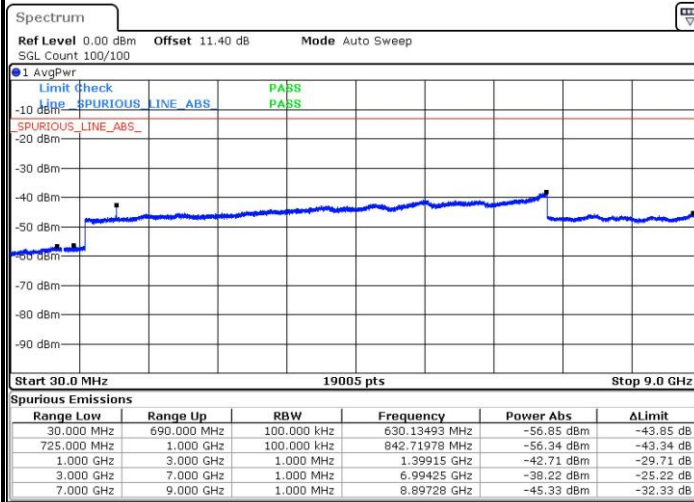


Date: 10.SEP.2018 09:19:43



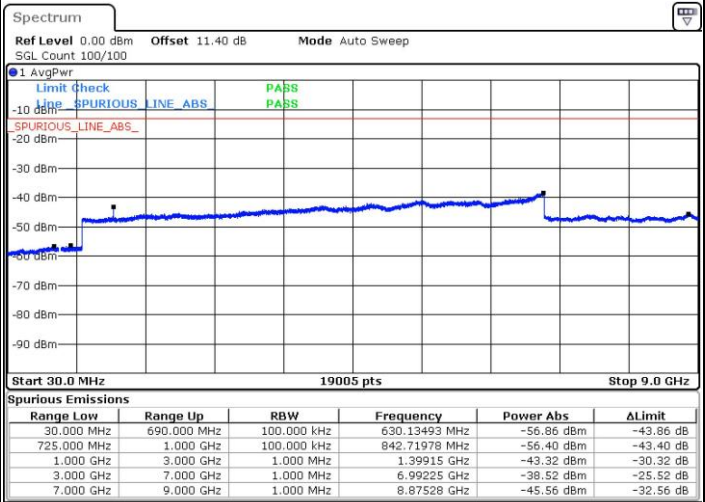
LTE Band 12 / 5MHz

Lowest Channel / QPSK



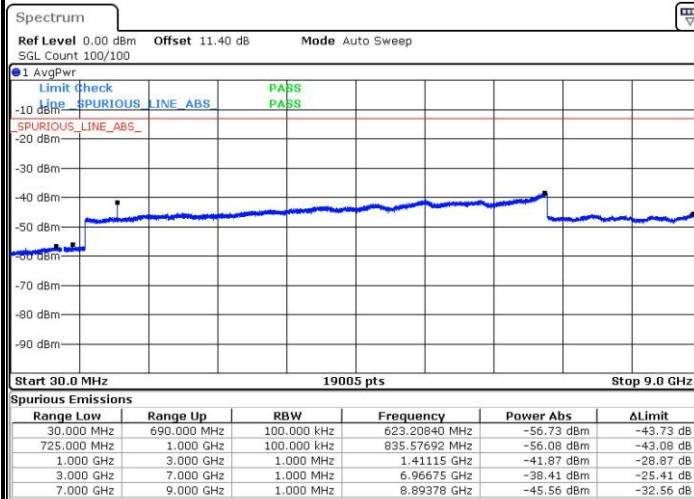
Date: 10.SEP.2018 09:26:12

Lowest Channel / 16QAM



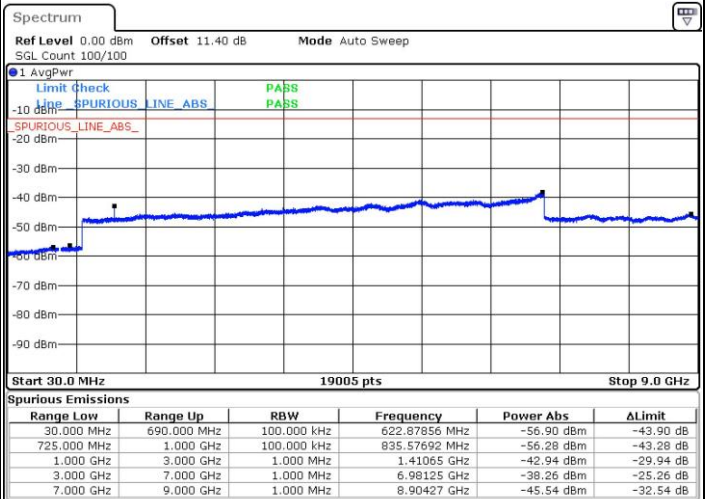
Date: 10.SEP.2018 09:27:07

Middle Channel / QPSK



Date: 10.SEP.2018 09:29:49

Middle Channel / 16QAM

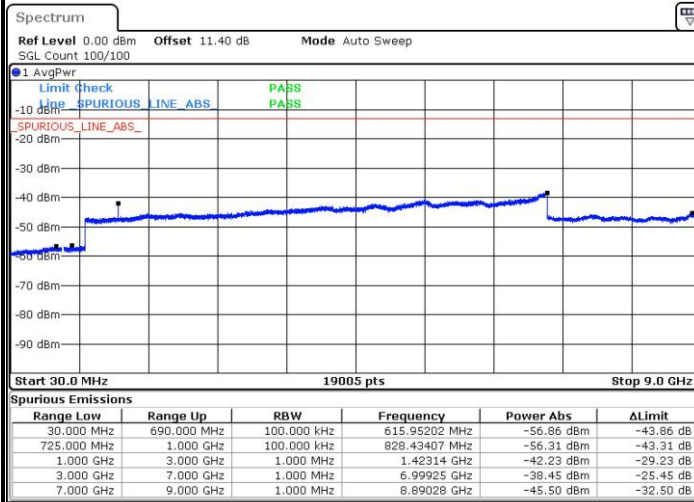


Date: 10.SEP.2018 09:28:54



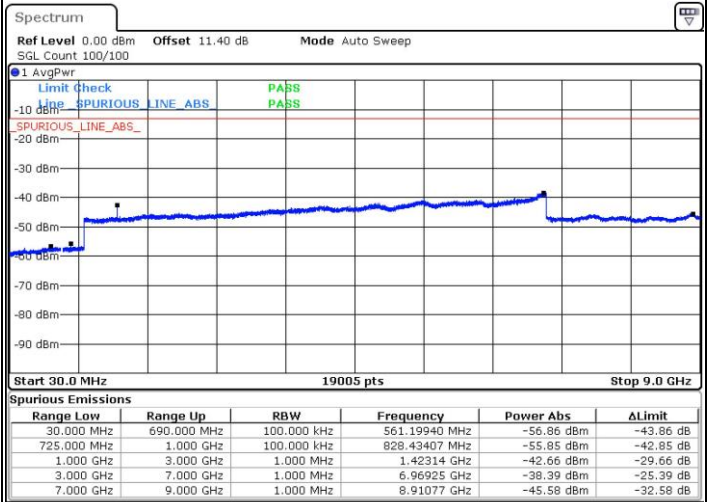
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 10.SEP.2018 09:37:13

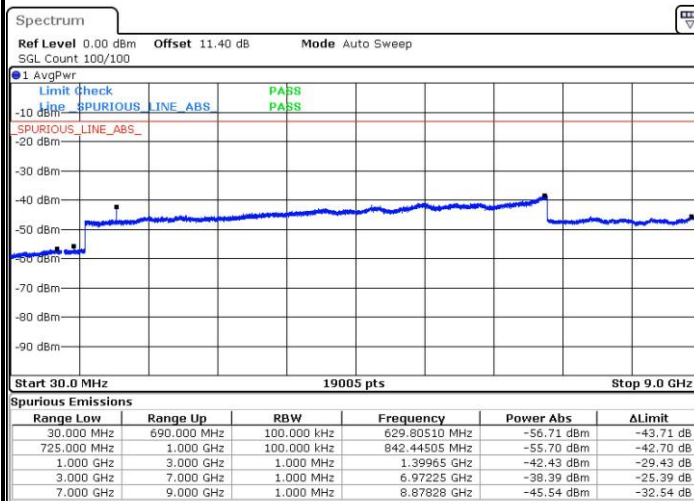
Highest Channel / 16QAM



Date: 10.SEP.2018 09:36:18

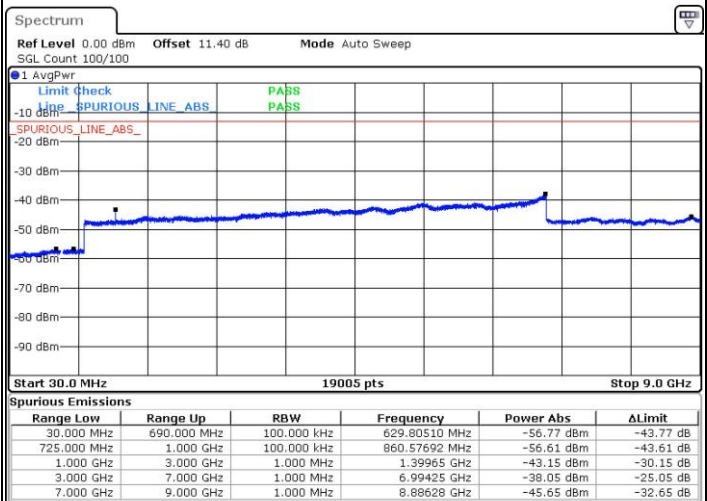
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 10.SEP.2018 09:43:42

Lowest Channel / 16QAM

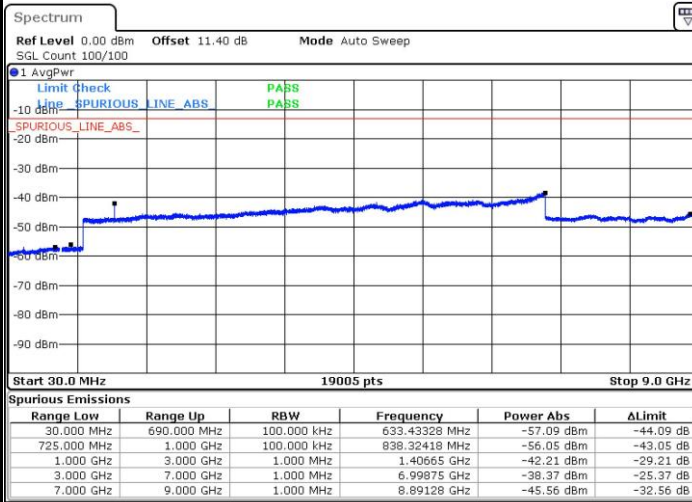


Date: 10.SEP.2018 09:44:37



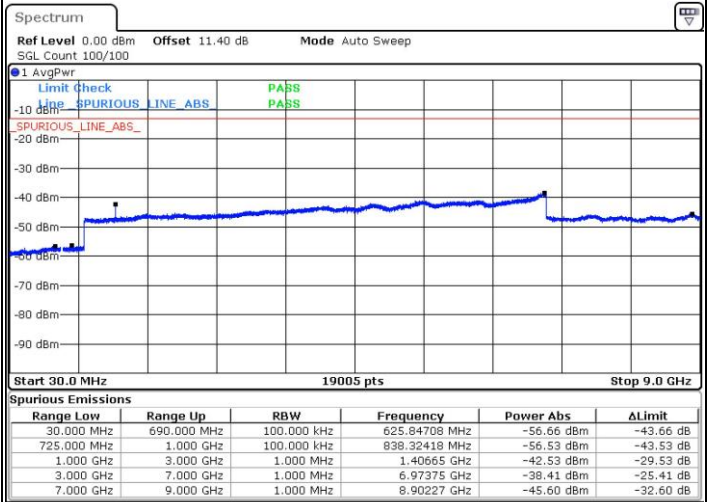
LTE Band 12 / 10MHz

Middle Channel / QPSK



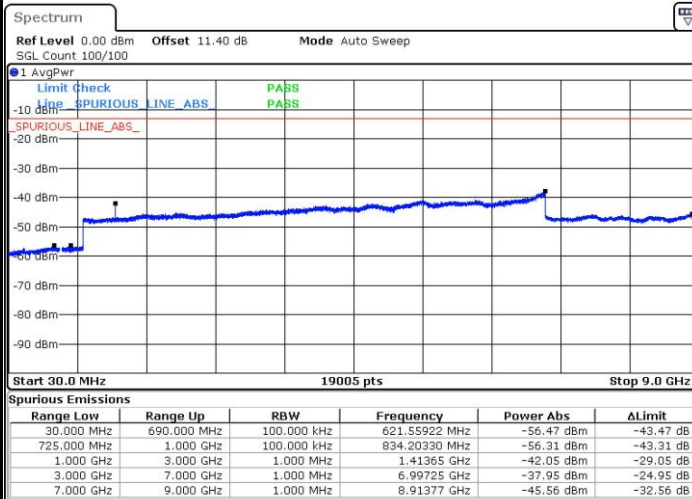
Date: 10.SEP.2018 09:47:18

Middle Channel / 16QAM



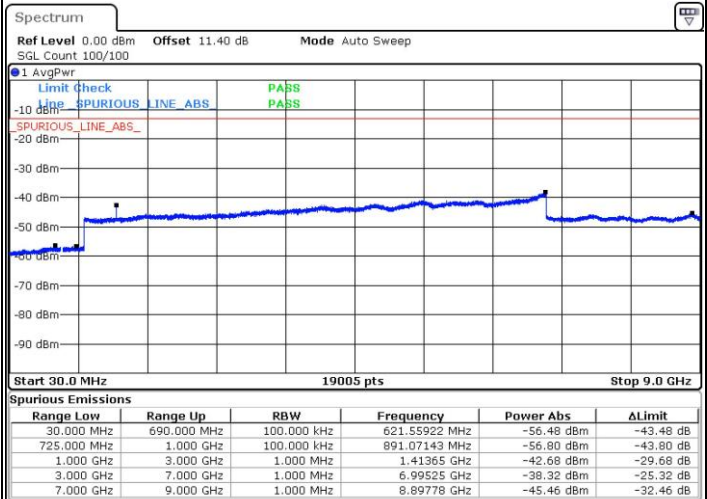
Date: 10.SEP.2018 09:46:23

Highest Channel / QPSK



Date: 10.SEP.2018 09:53:47

Highest Channel / 16QAM

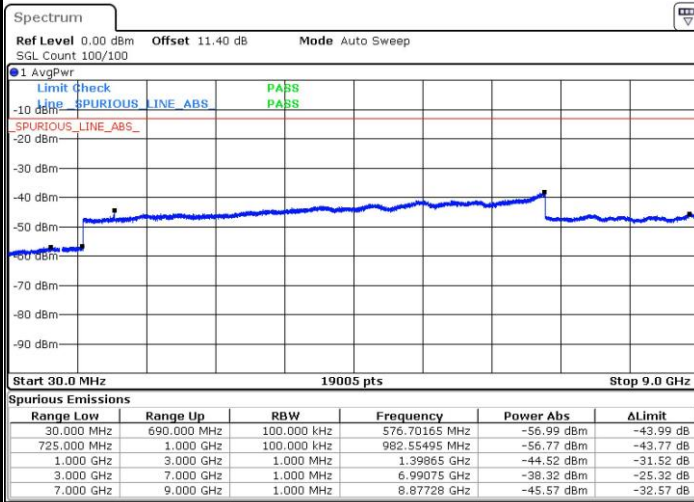


Date: 10.SEP.2018 09:54:43



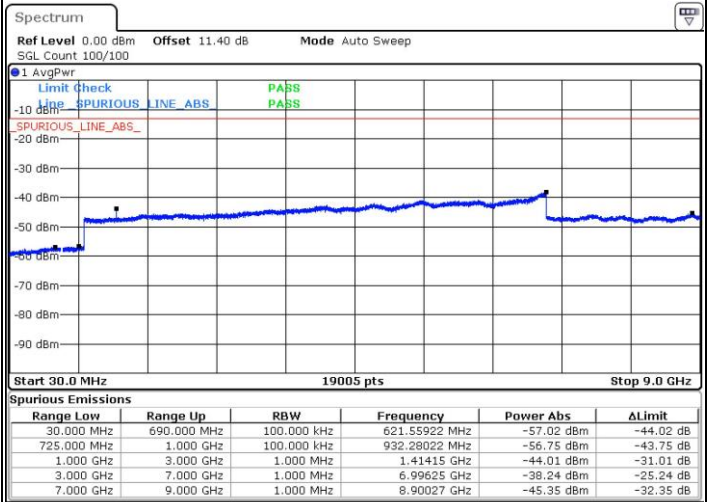
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



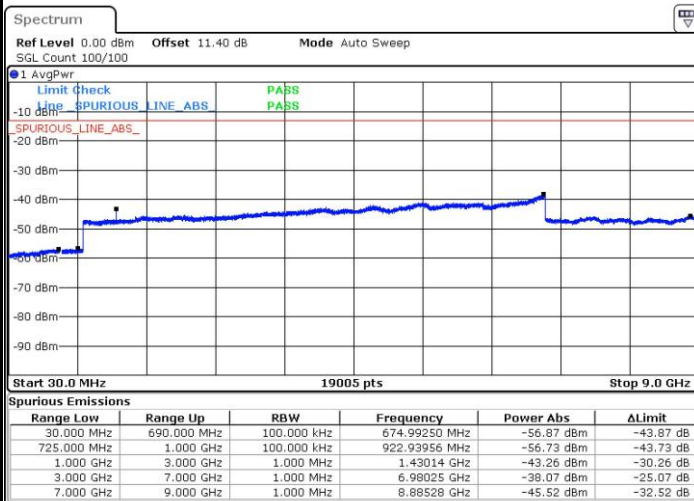
Date: 10.SEP.2018 15:42:11

Middle Channel / 64QAM



Date: 10.SEP.2018 15:43:52

Highest Channel / 64QAM

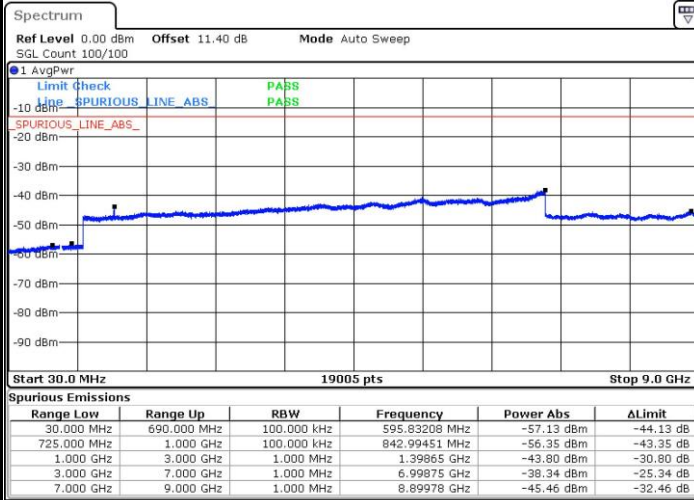


Date: 10.SEP.2018 15:47:54



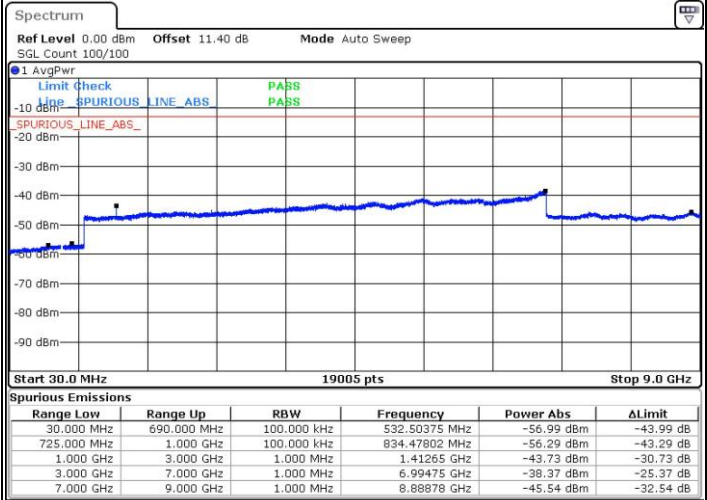
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



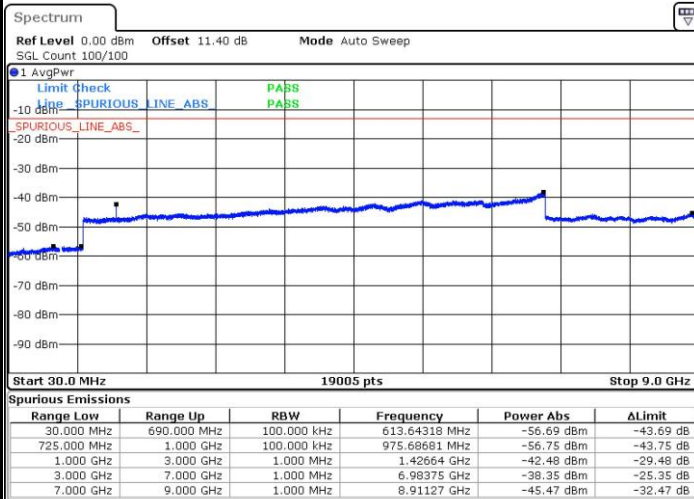
Date: 10.SEP.2018 10:44:52

Middle Channel / 64QAM



Date: 10.SEP.2018 10:46:32

Highest Channel / 64QAM

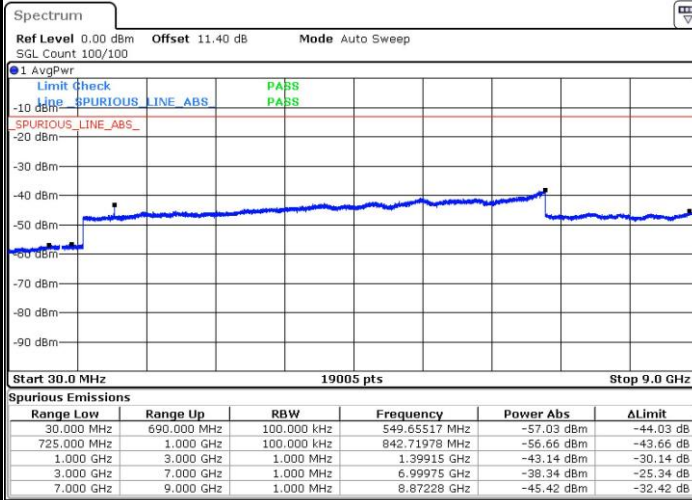


Date: 10.SEP.2018 10:50:34



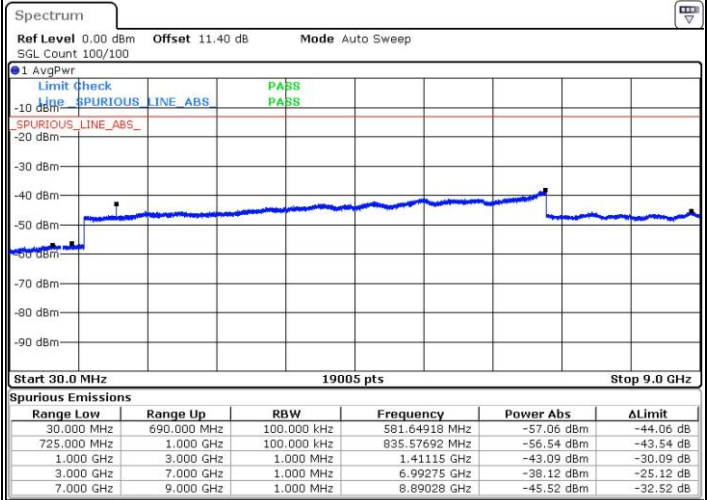
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



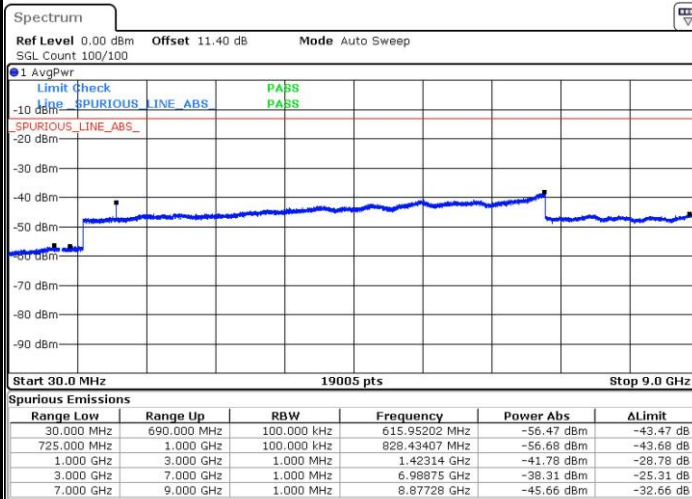
Date: 10.SEP.2018 15:18:47

Middle Channel / 64QAM



Date: 10.SEP.2018 15:20:28

Highest Channel / 64QAM

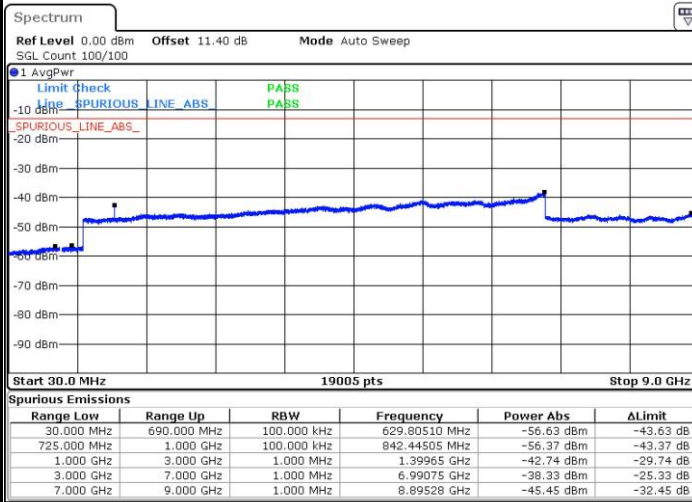


Date: 10.SEP.2018 15:24:30



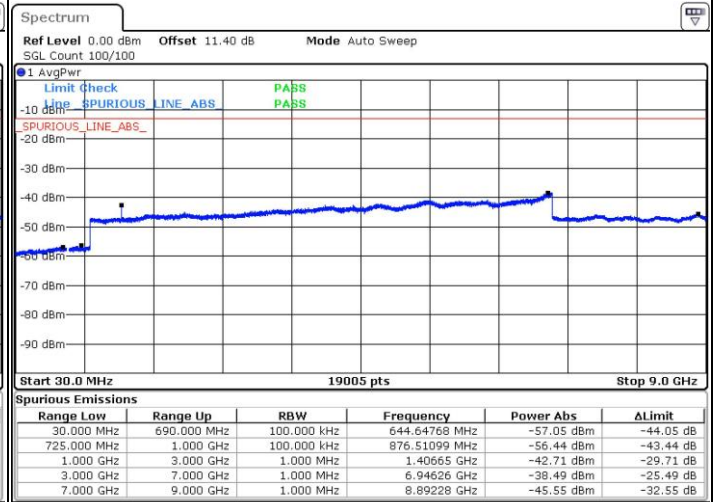
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



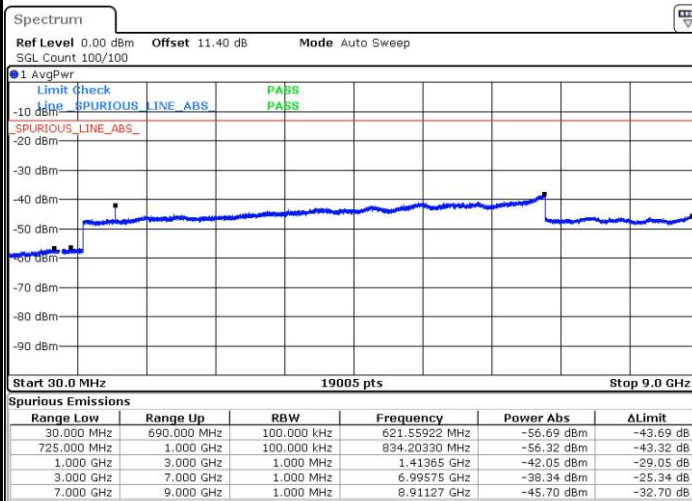
Date: 10.SEP.2018 15:28:32

Middle Channel / 64QAM



Date: 10.SEP.2018 15:30:13

Highest Channel / 64QAM



Date: 10.SEP.2018 15:34:15

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	0.0098	PASS
40	Normal Voltage	0.0133	
30	Normal Voltage	0.0038	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0117	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0030	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0031	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.5V. ; Maximum Voltage =4.4V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 13

Peak-to-Average Ratio

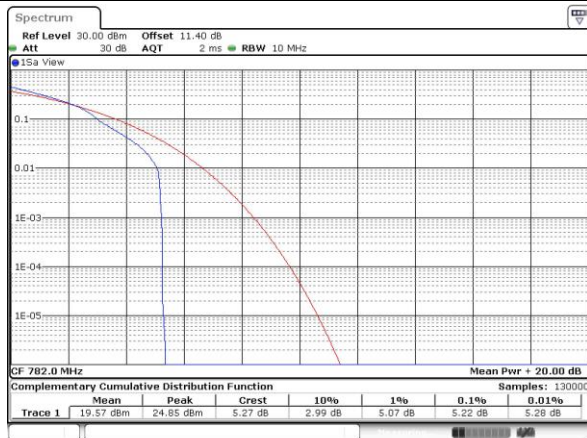
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.48	4.58	5.22	5.94	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.17	6.52	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB


Date: 13.SEP.2018 18:17:54

Middle Channel / Full RB


Date: 13.SEP.2018 18:18:26

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB


Date: 13.SEP.2018 18:17:28

Middle Channel / Full RB


Date: 13.SEP.2018 18:17:41

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB


Date: 13.SEP.2018 18:17:02

Middle Channel / Full RB


Date: 13.SEP.2018 18:17:15

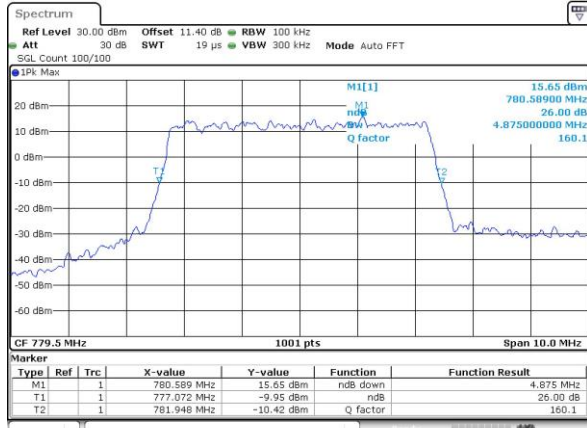
**26dB Bandwidth**

Mode	LTE Band 13 : 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	-	-	-	-	4.88	4.93	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.90	9.91	9.81	-	-	-	-
Highest CH	-	-	-	-	4.94	4.81	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.94	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	-	9.79	-	-	-	-	-
Highest CH	-	-	-	-	4.89	-	-	-	-	-	-	-

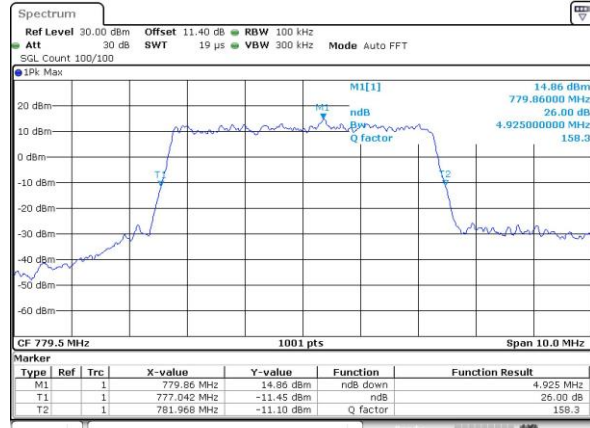


LTE Band 13

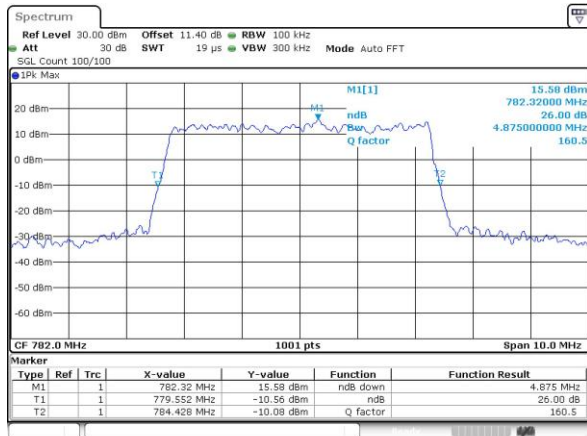
Lowest Channel / 5MHz / QPSK



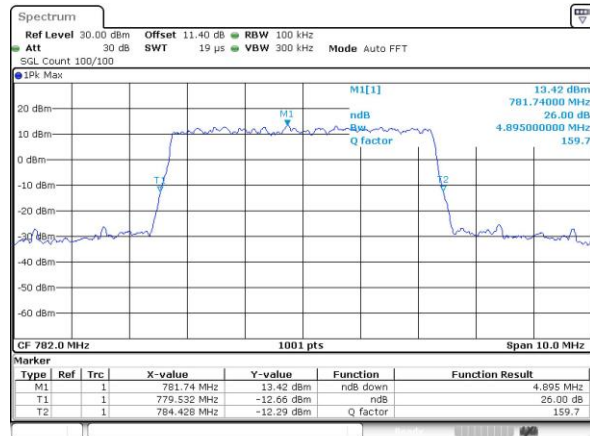
Lowest Channel / 5MHz / 16QAM



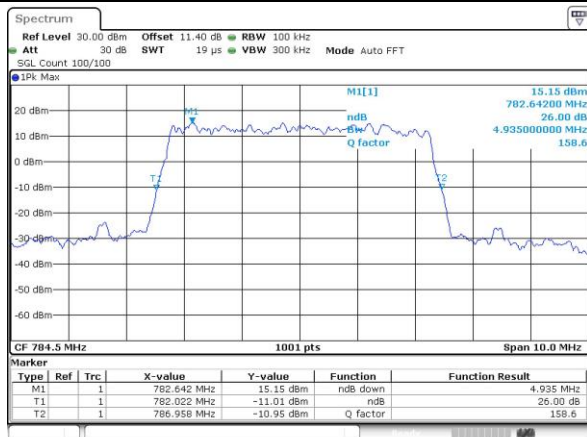
Middle Channel / 5MHz / QPSK



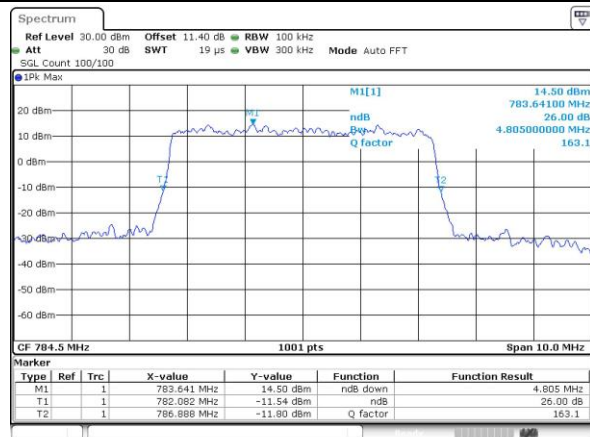
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



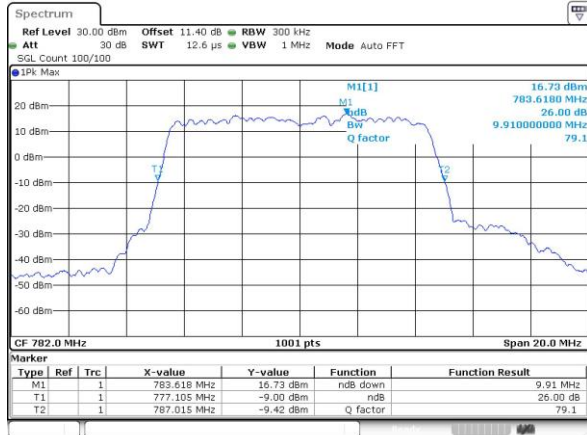
Highest Channel / 5MHz / 16QAM





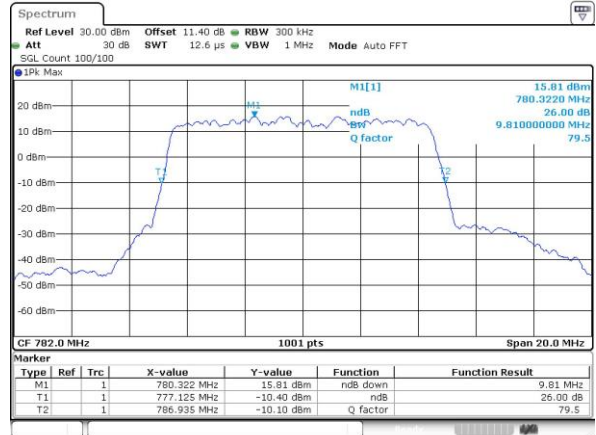
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 13,SEP,2018 17:57:08

Middle Channel / 10MHz / 16QAM

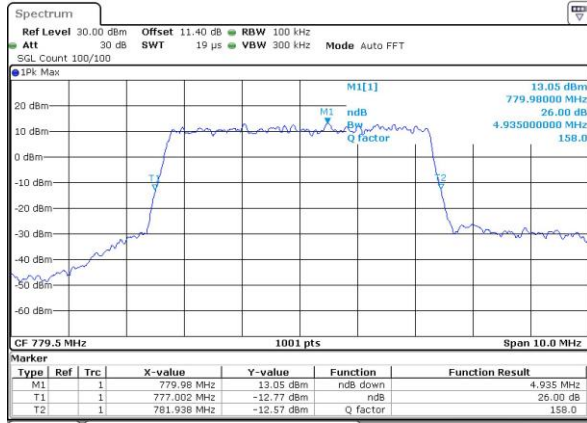


Date: 13,SEP,2018 17:56:55

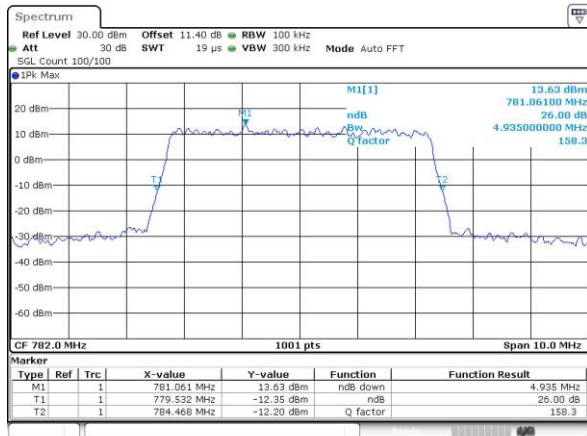


LTE Band 13

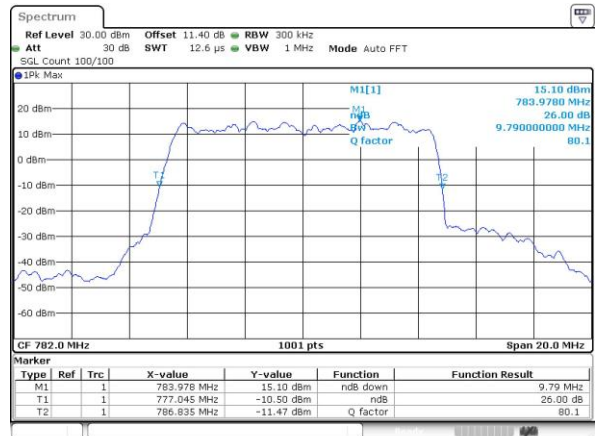
Lowest Channel / 5MHz / 64QAM



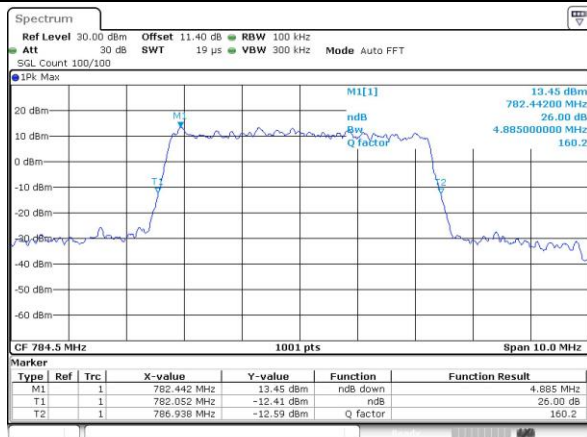
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



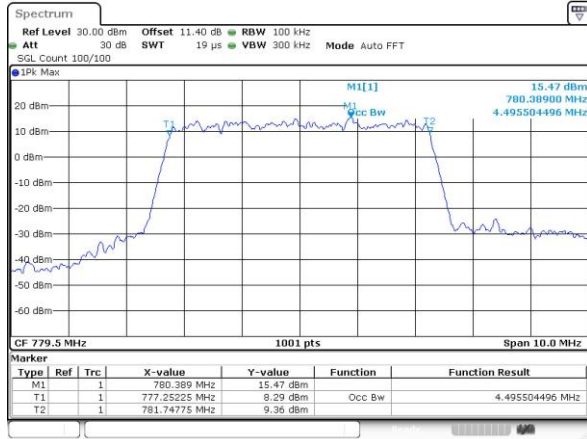
**Occupied Bandwidth**

Mode	LTE Band 13 : 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	-	-	-	-	4.5	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.48	8.93	8.99	-	-	-	-
Highest CH	-	-	-	-	4.51	4.5	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-

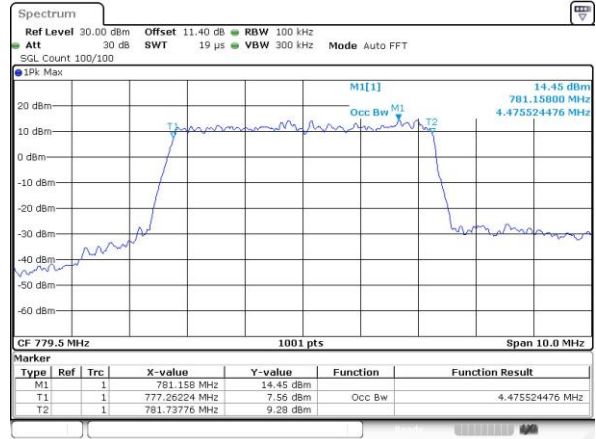


LTE Band 13

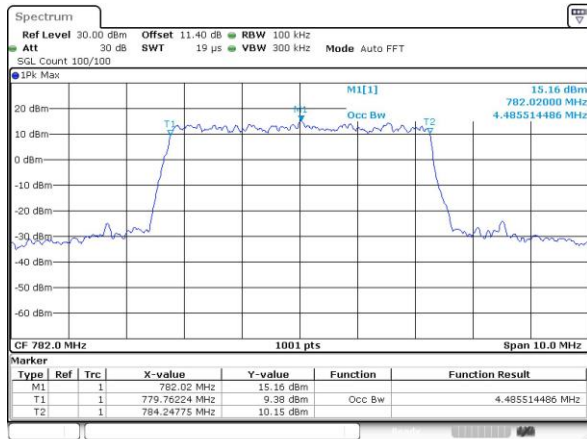
Lowest Channel / 5MHz / QPSK



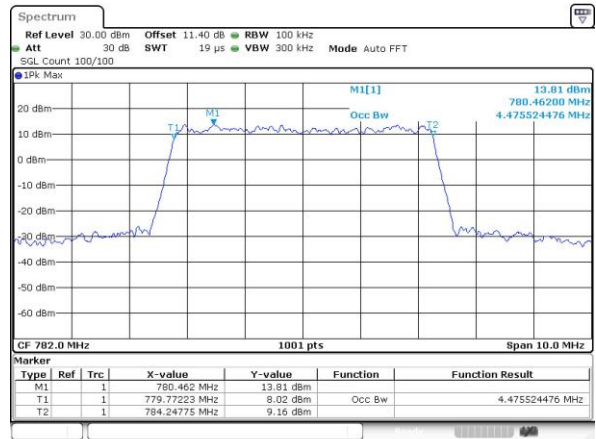
Lowest Channel / 5MHz / 16QAM



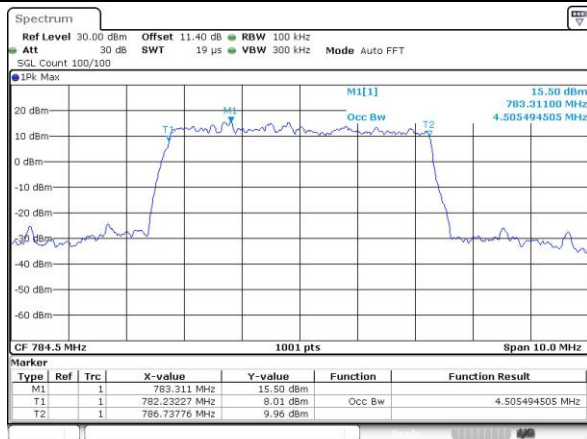
Middle Channel / 5MHz / QPSK



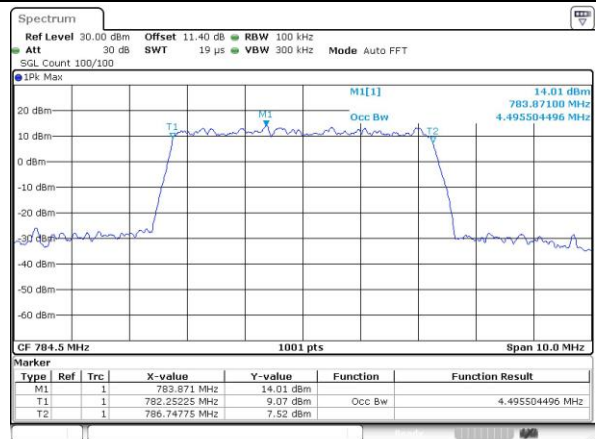
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



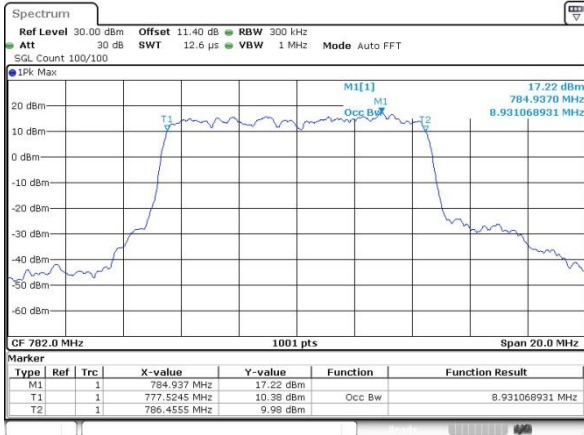
Highest Channel / 5MHz / 16QAM





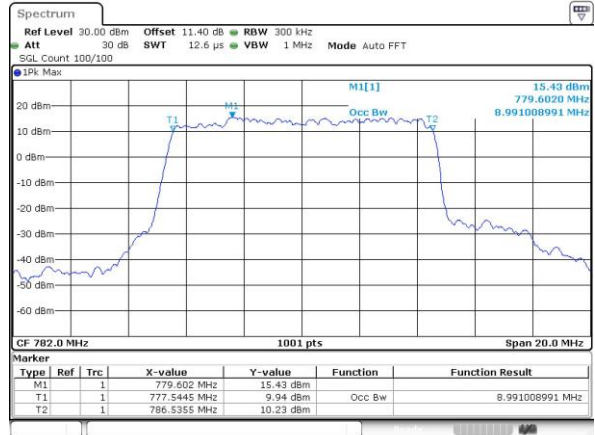
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 26.SEP.2018 16:37:16

Middle Channel / 10MHz / 16QAM

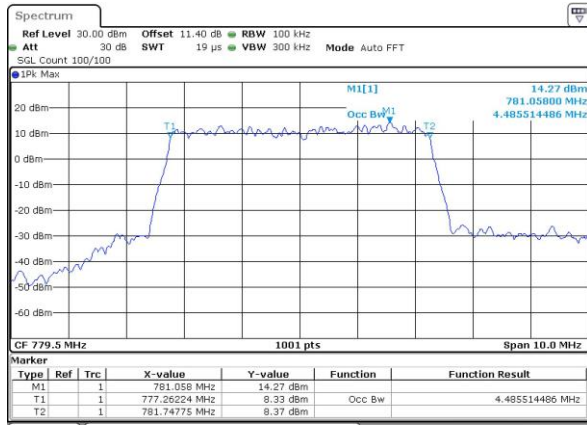


Date: 13.SEP.2018 17:56:42

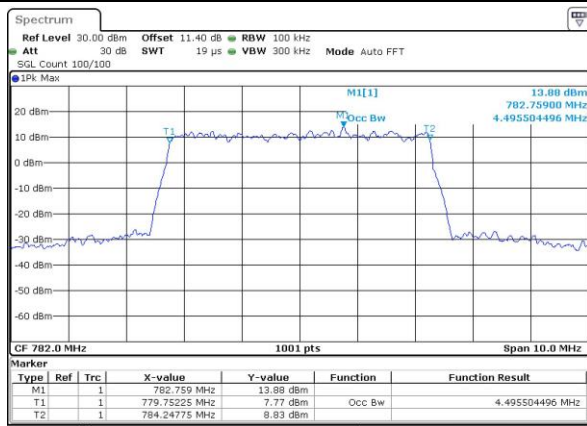


LTE Band 13

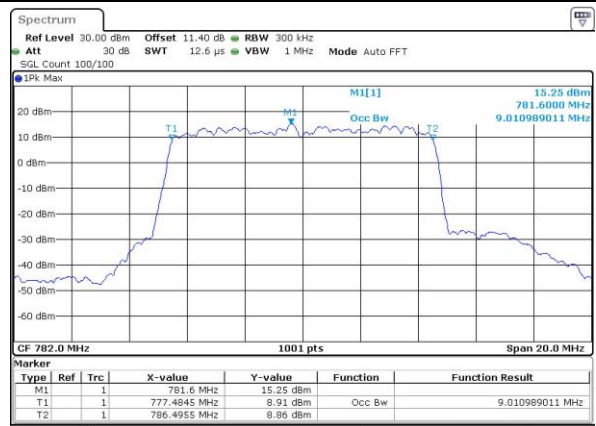
Lowest Channel / 5MHz / 64QAM



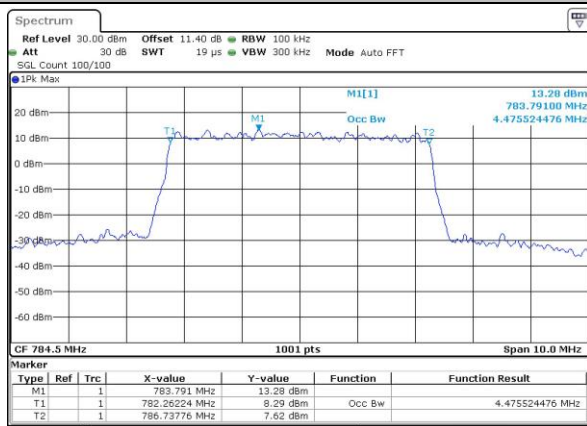
Middle Channel / 5MHz / 64QAM

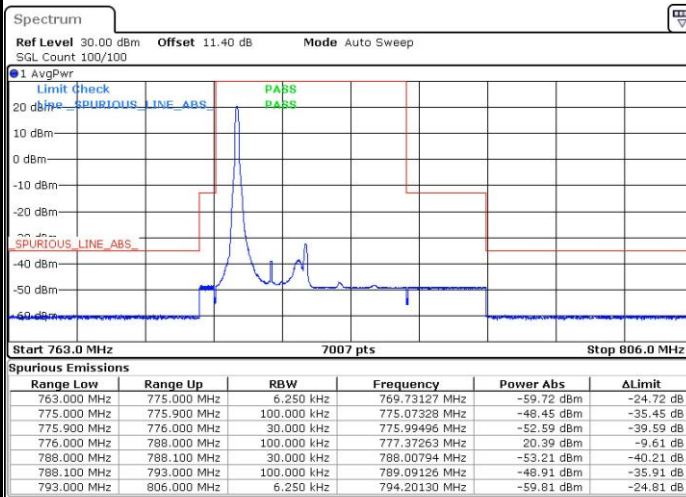
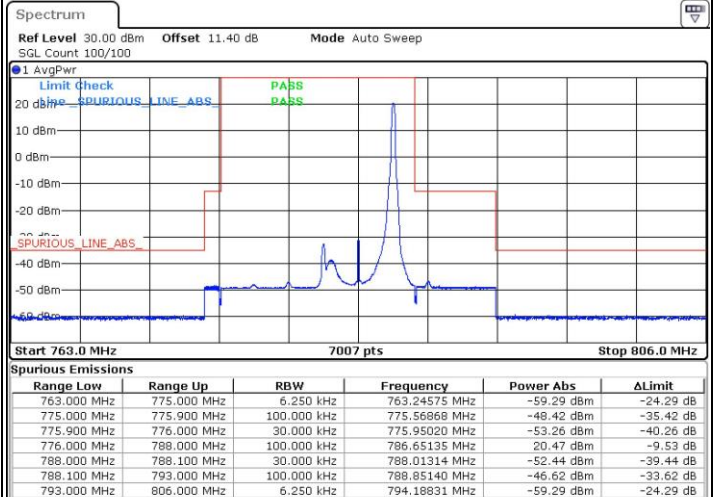
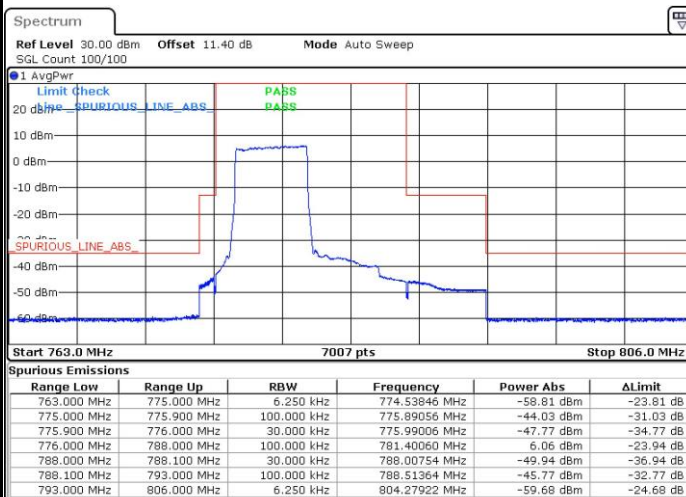
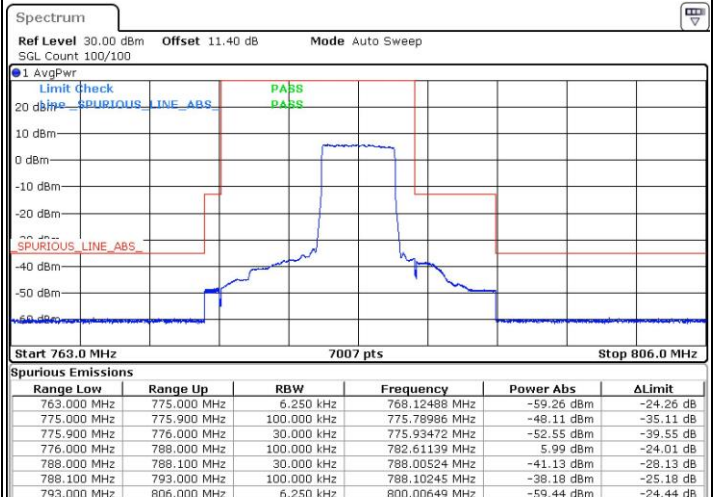


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

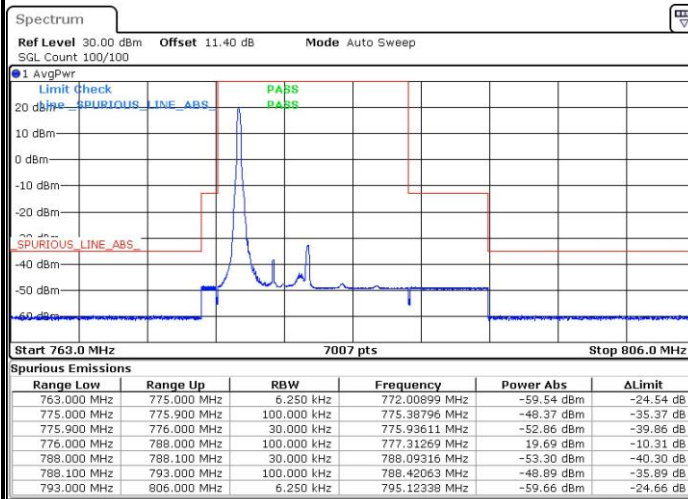


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



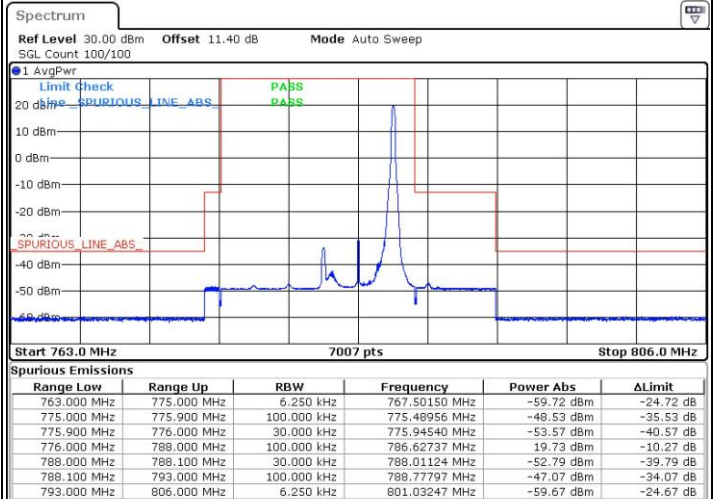
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



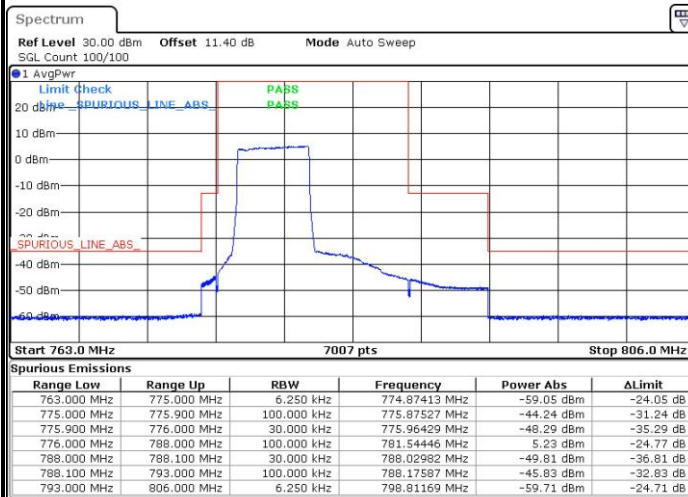
Date: 13.SEP.2018 09:41:25

Highest Band Edge / 1 RB



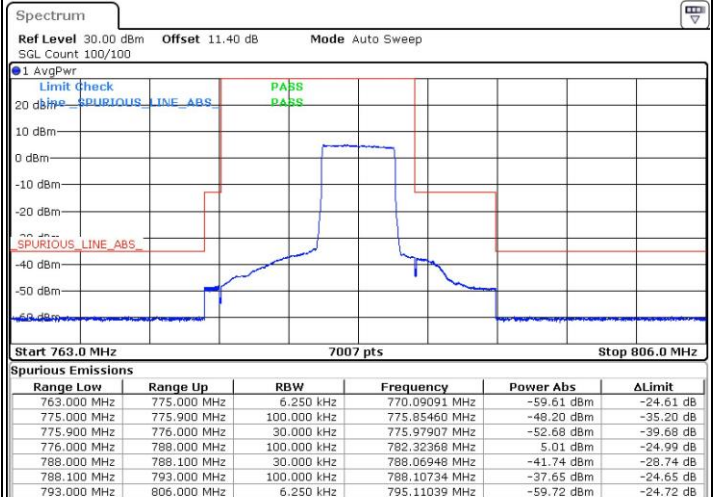
Date: 13.SEP.2018 18:36:03

Lowest Band Edge / Full RB



Date: 13.SEP.2018 09:39:44

Highest Band Edge / Full RB

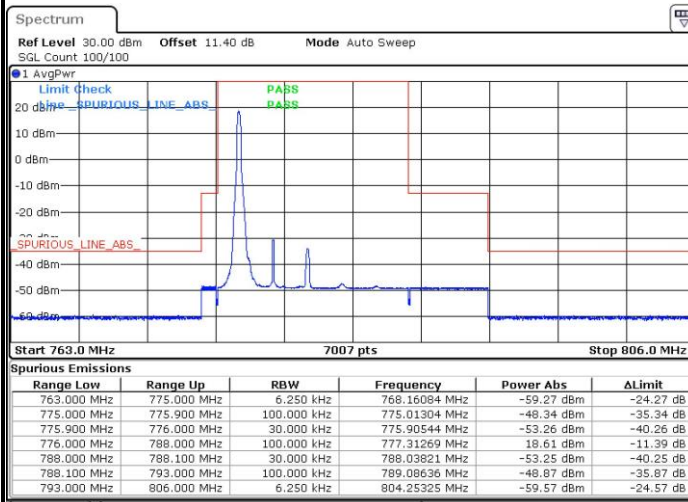


Date: 13.SEP.2018 18:37:30



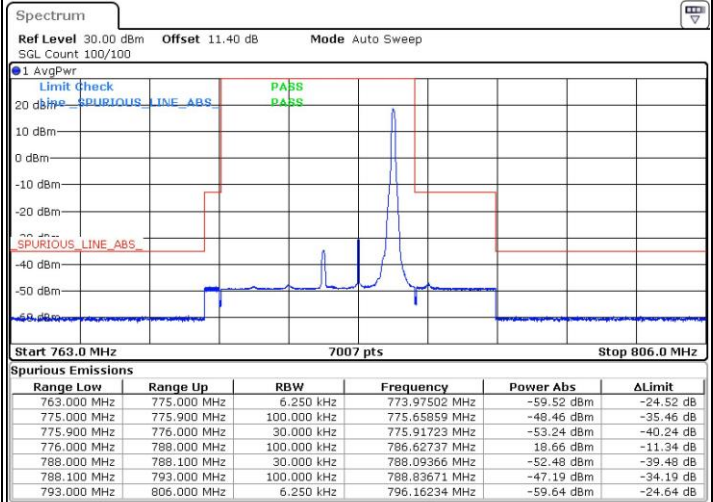
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



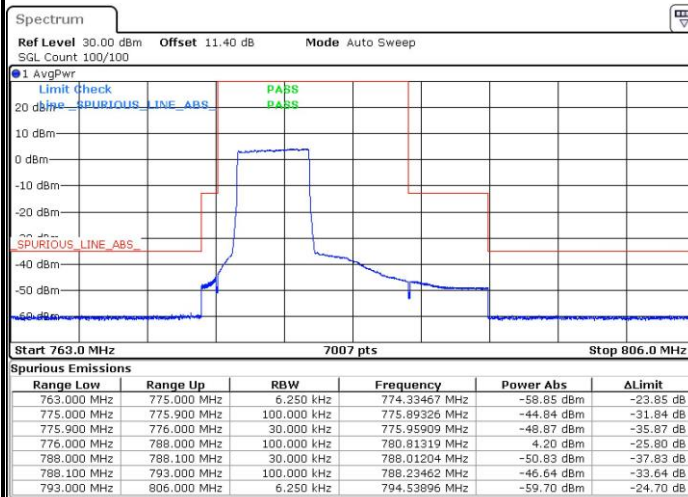
Date: 13.SEP.2018 18:23:07

Highest Band Edge / 1 RB



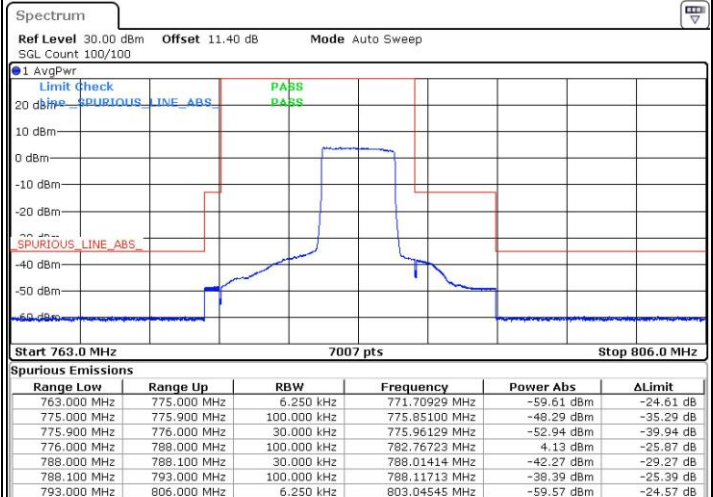
Date: 13.SEP.2018 18:29:48

Lowest Band Edge / Full RB



Date: 13.SEP.2018 18:21:25

Highest Band Edge / Full RB

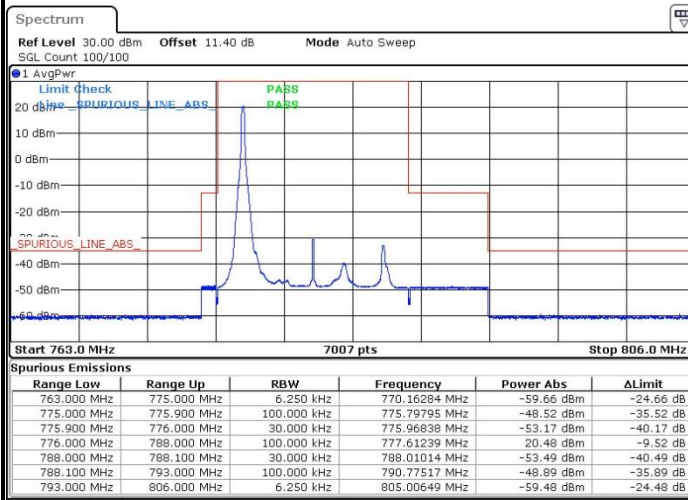


Date: 13.SEP.2018 18:28:07



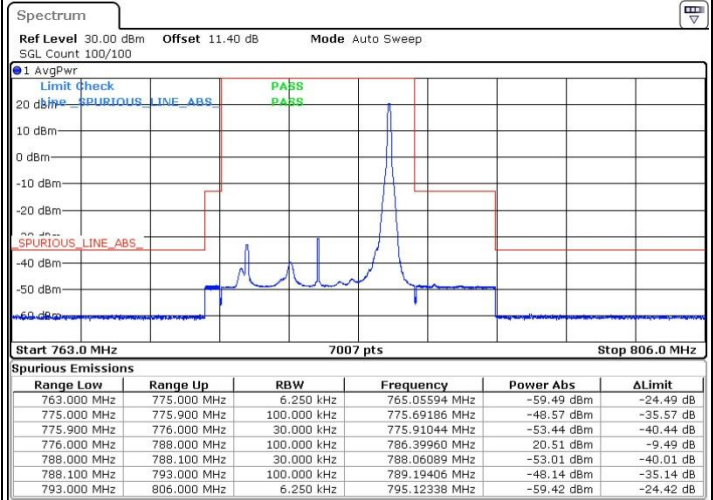
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



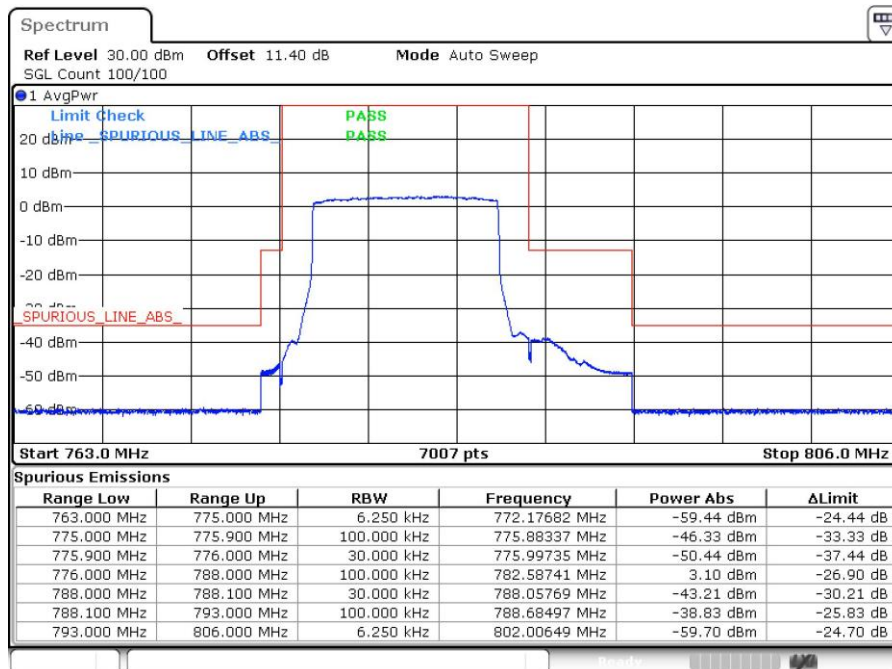
Date: 13.SEP.2018 18:03:51

Highest Band Edge / 1 RB



Date: 13.SEP.2018 18:05:32

Band Edge / Full RB

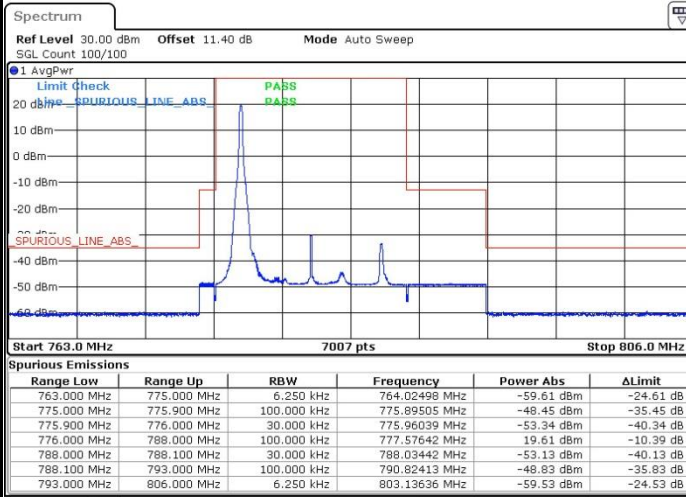


Date: 13.SEP.2018 17:58:49



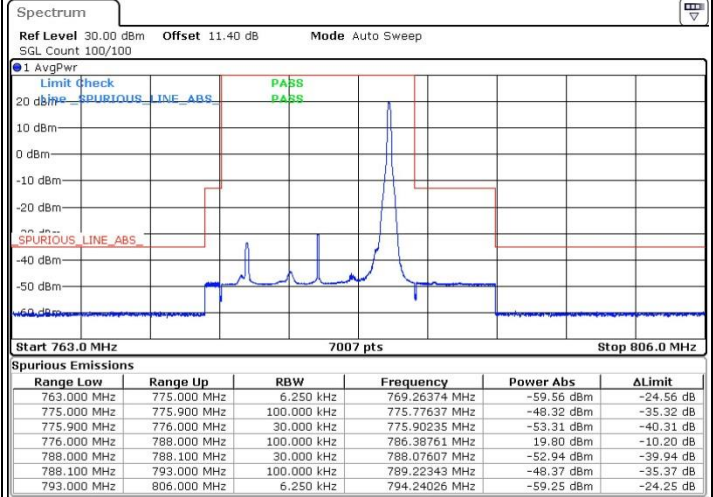
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



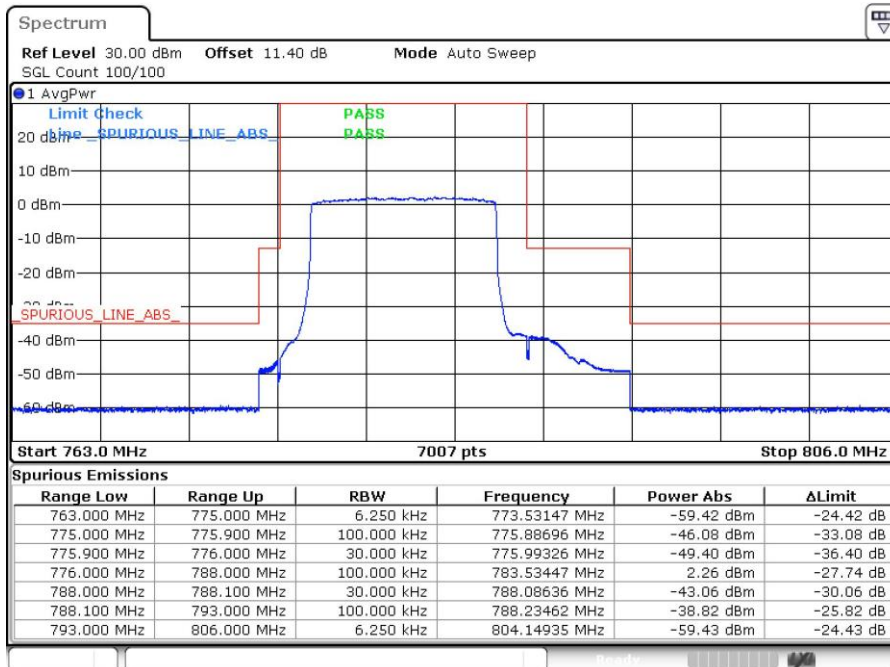
Date: 13.SEP.2018 18:02:10

Highest Band Edge / 1 RB



Date: 13.SEP.2018 18:07:12

Band Edge / Full RB



Date: 13.SEP.2018 18:00:29