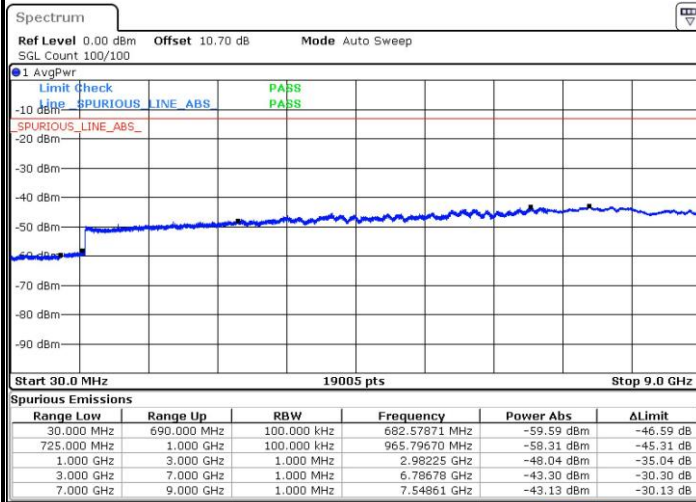




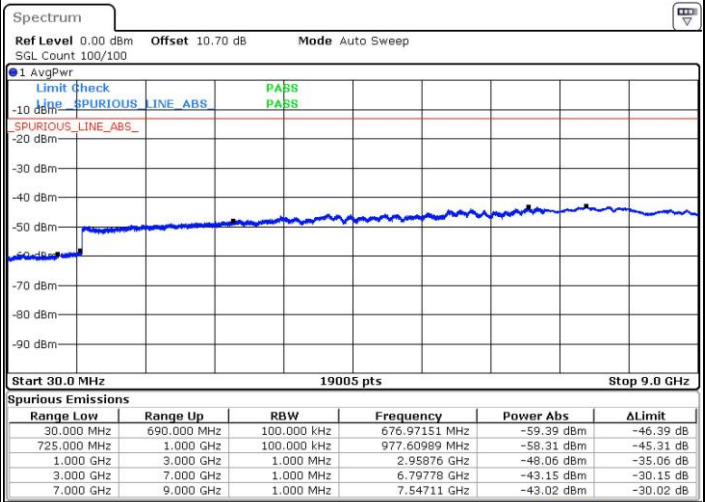
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 5 SEP. 2018 01:54:14

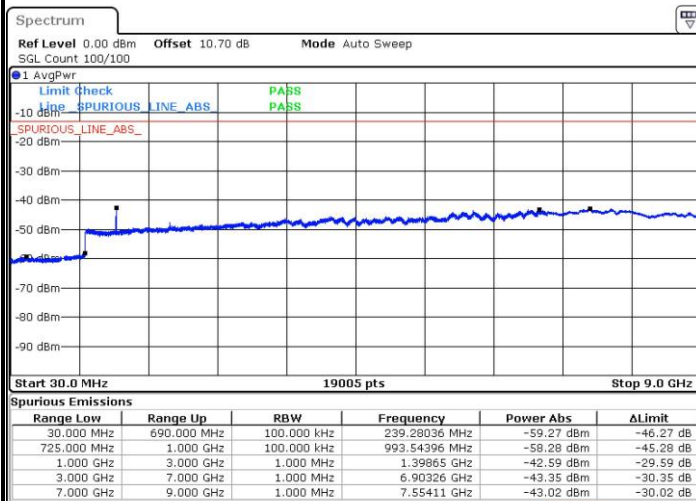
Highest Channel / 16QAM



Date: 5 SEP. 2018 01:55:04

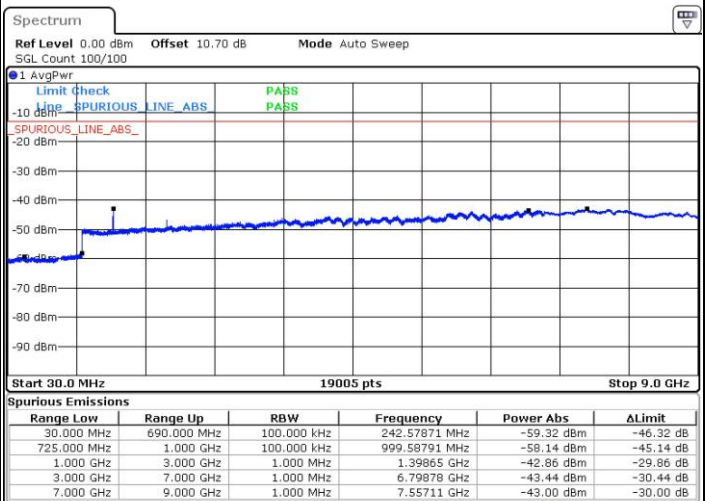
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 4 SEP. 2018 23:23:39

Lowest Channel / 16QAM

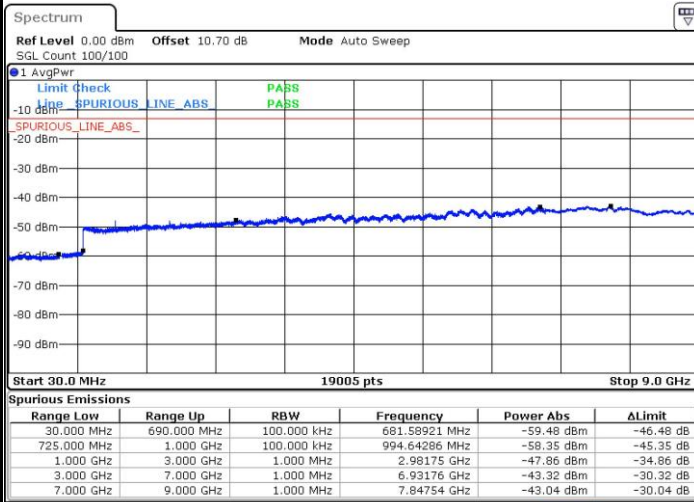


Date: 4 SEP. 2018 23:24:29



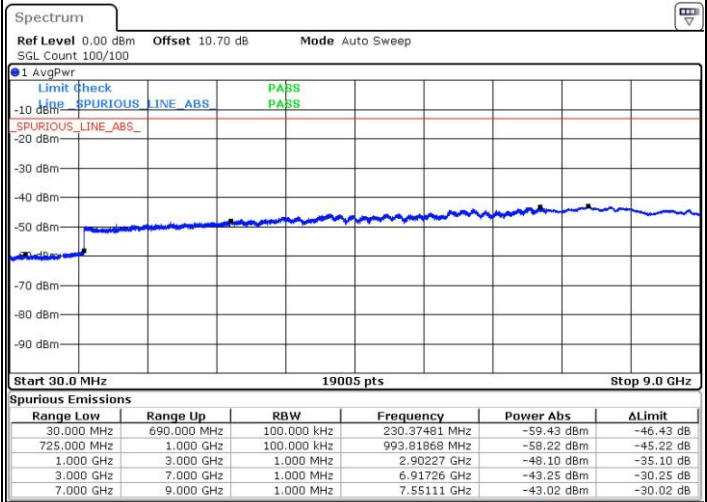
LTE Band 12 / 3MHz

Middle Channel / QPSK



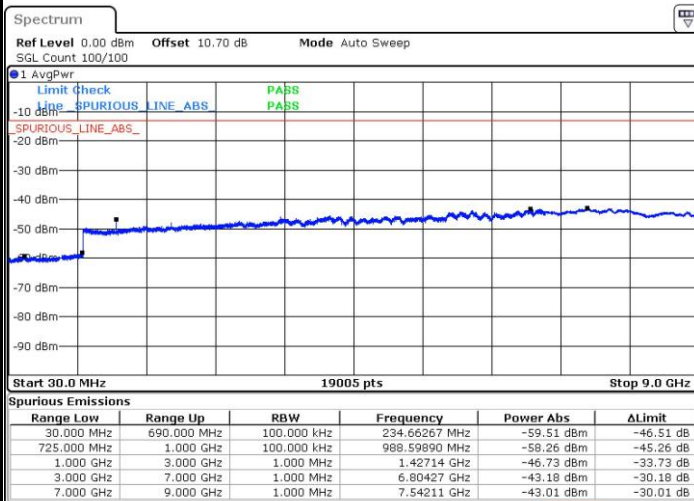
Date: 4 SEP. 2018 23:26:55

Middle Channel / 16QAM



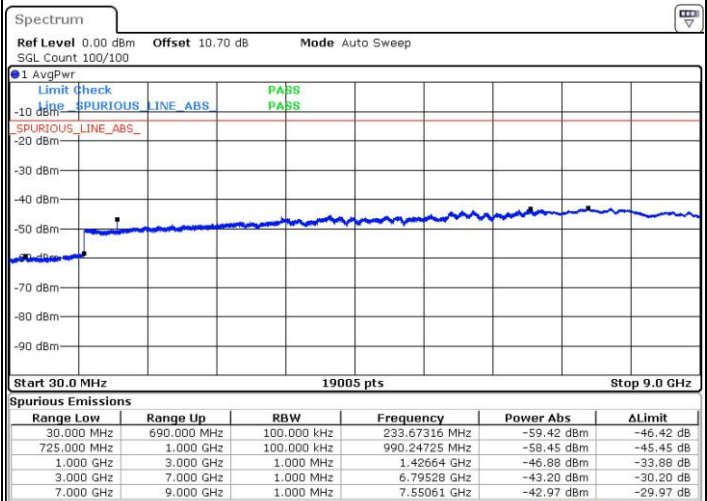
Date: 4 SEP. 2018 23:26:05

Highest Channel / QPSK



Date: 4 SEP. 2018 23:33:12

Highest Channel / 16QAM

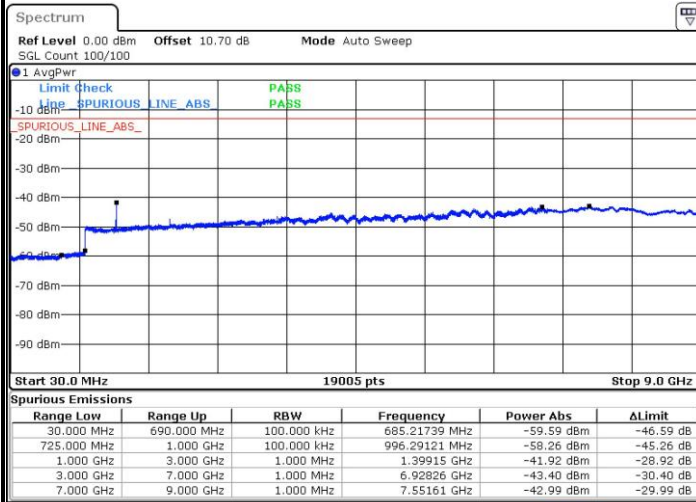


Date: 4 SEP. 2018 23:34:02



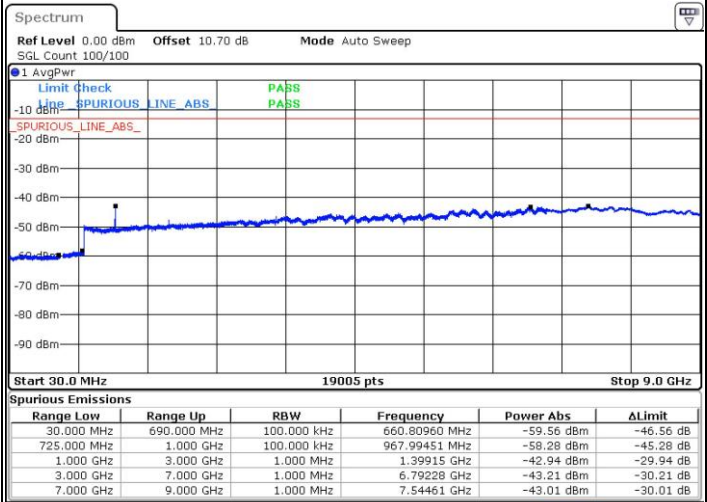
LTE Band 12 / 5MHz

Lowest Channel / QPSK



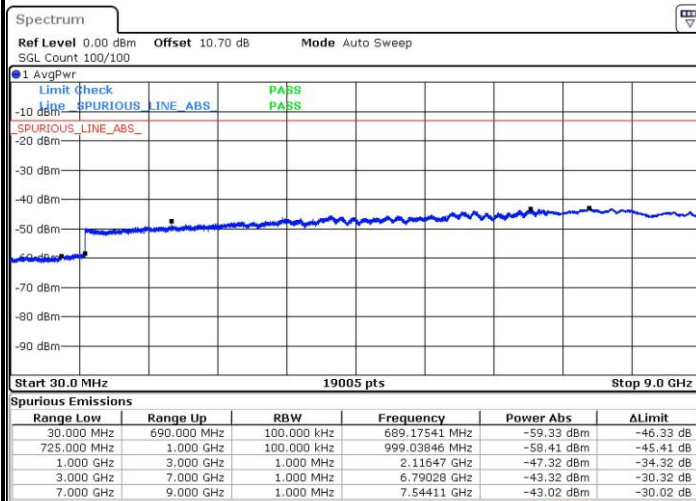
Date: 4 SEP. 2018 23:40:18

Lowest Channel / 16QAM



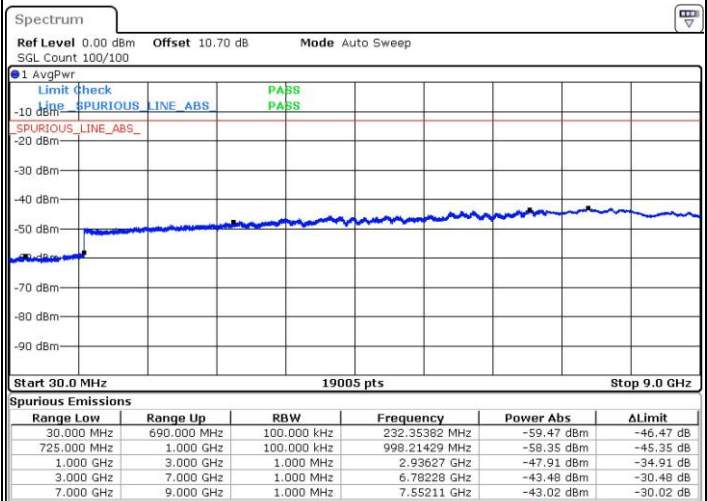
Date: 4 SEP. 2018 23:41:08

Middle Channel / QPSK



Date: 4 SEP. 2018 23:43:34

Middle Channel / 16QAM

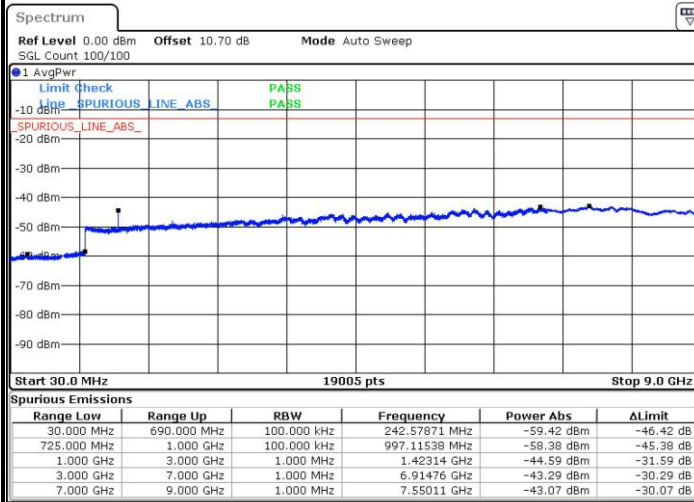


Date: 4 SEP. 2018 23:42:44



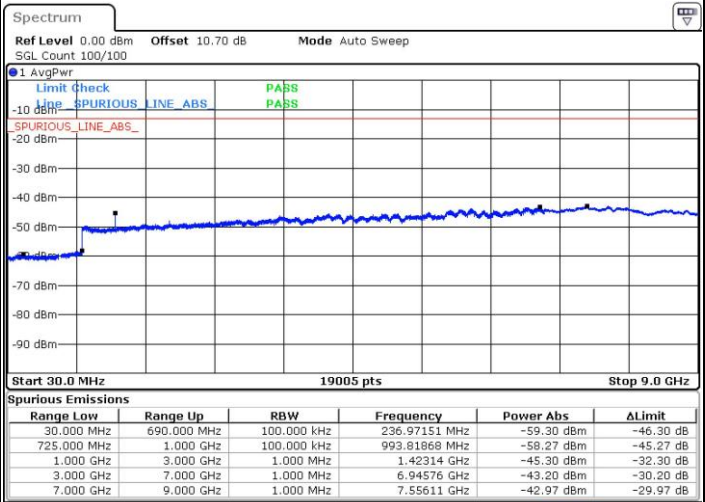
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 4 SEP. 2018 23:50:39

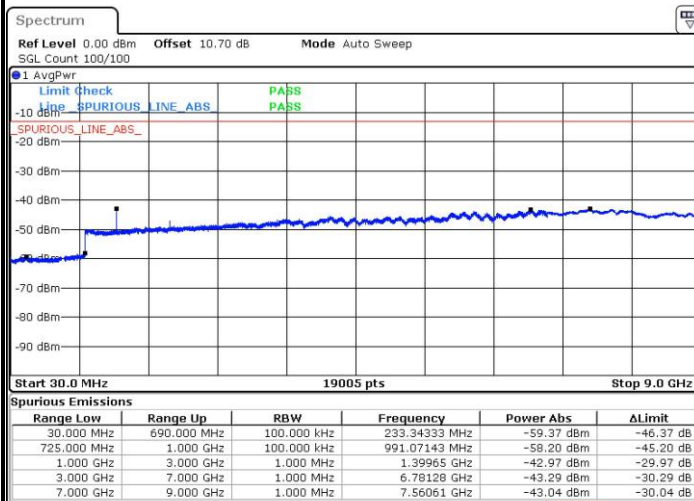
Highest Channel / 16QAM



Date: 4 SEP. 2018 23:49:49

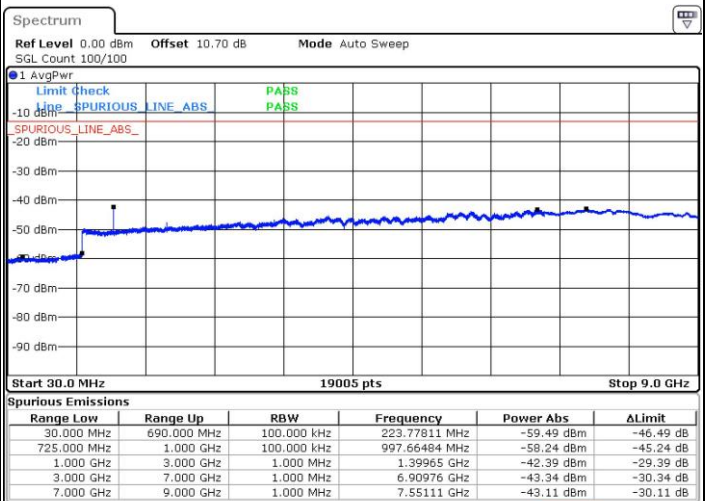
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 4 SEP. 2018 23:56:55

Lowest Channel / 16QAM

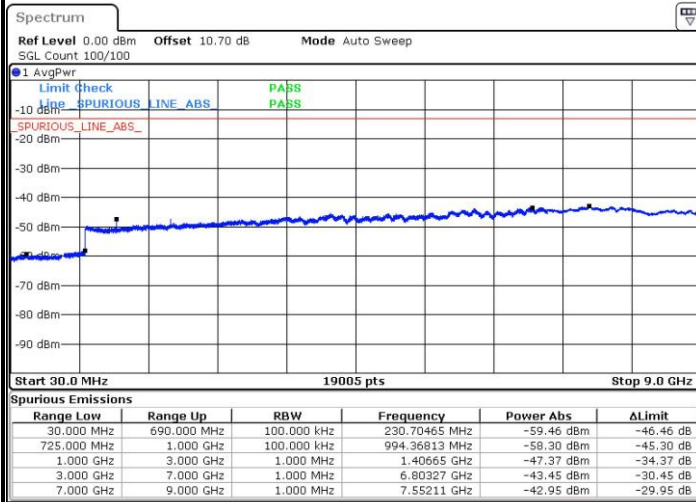


Date: 4 SEP. 2018 23:57:45



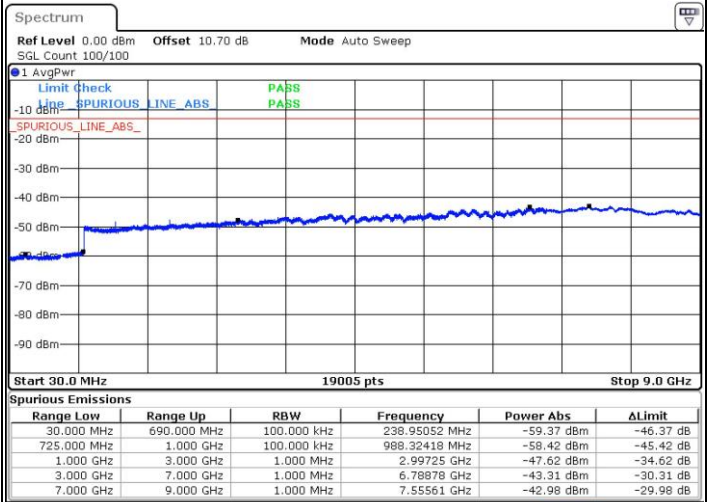
LTE Band 12 / 10MHz

Middle Channel / QPSK



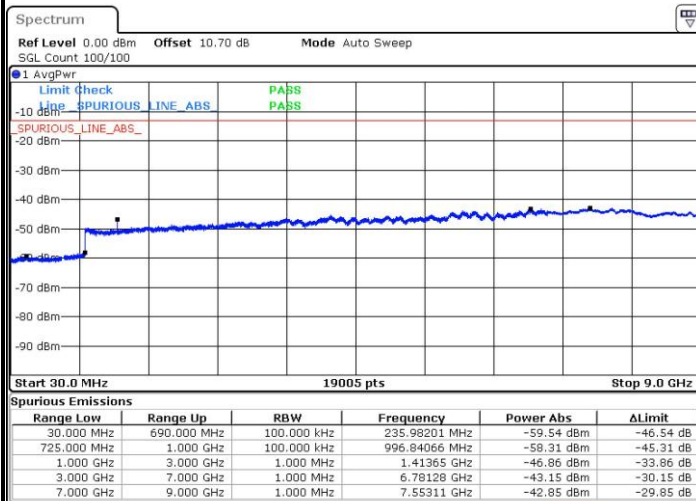
Date: 5.SEP.2018 00:00:11

Middle Channel / 16QAM



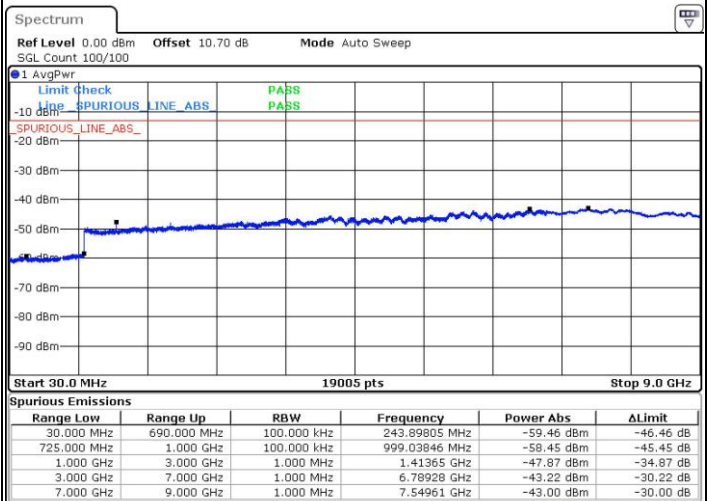
Date: 4.SEP.2018 23:59:21

Highest Channel / QPSK



Date: 5.SEP.2018 00:14:21

Highest Channel / 16QAM

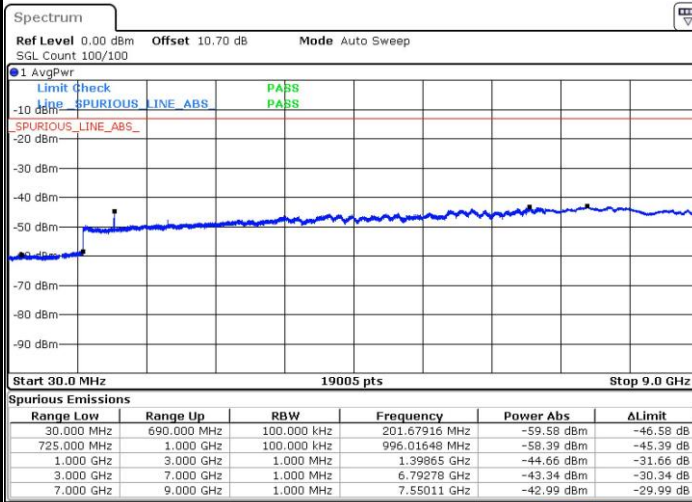


Date: 5.SEP.2018 00:15:12



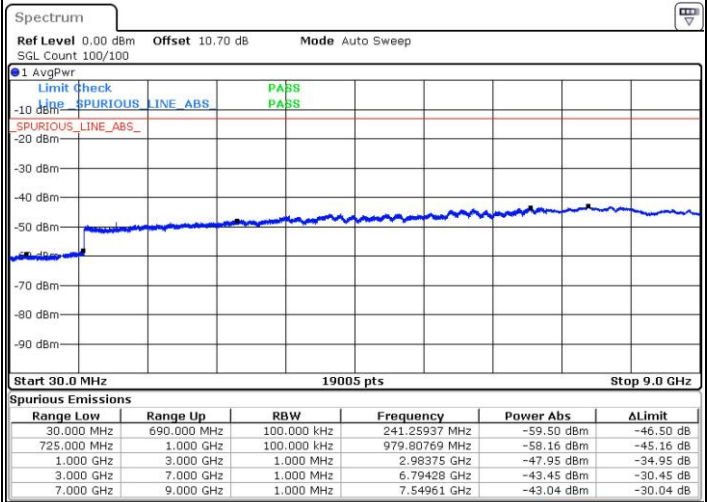
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



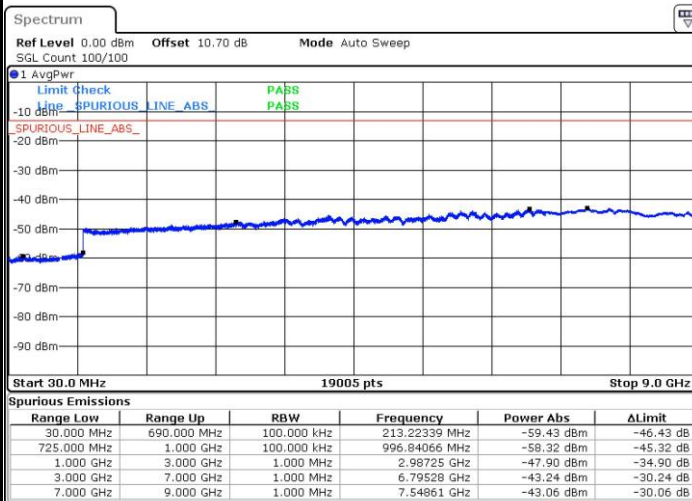
Date: 5.SEP.2018 01:33:39

Middle Channel / 64QAM



Date: 5.SEP.2018 01:34:52

Highest Channel / 64QAM

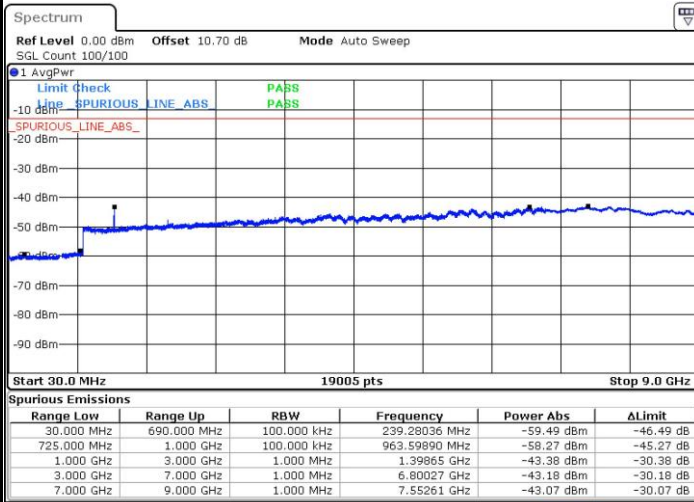


Date: 5.SEP.2018 01:38:25



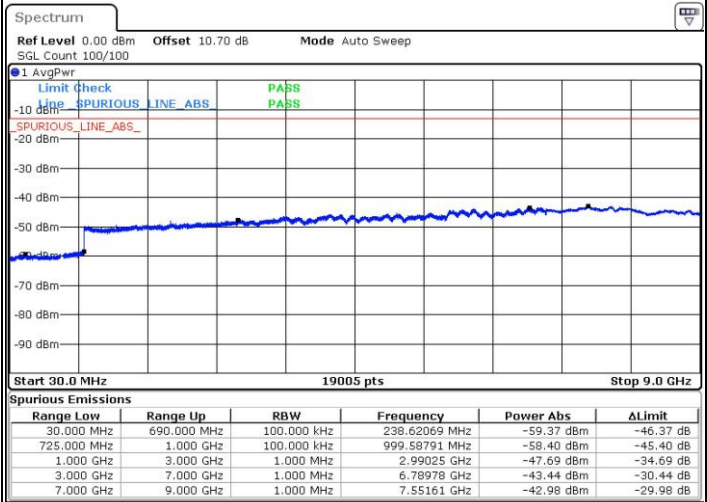
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



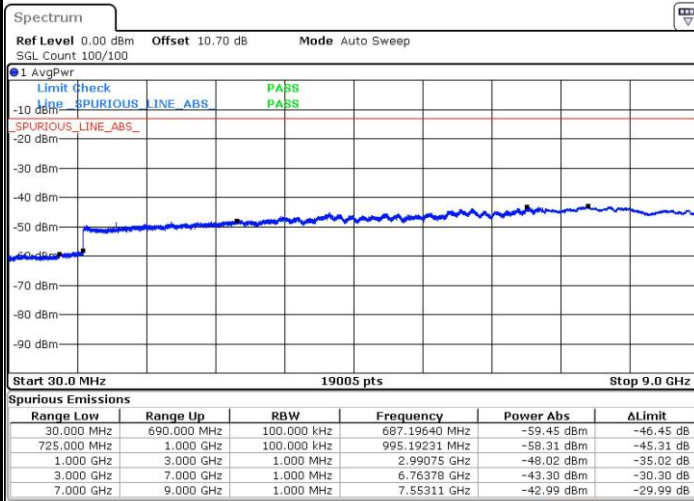
Date: 5.SEP.2018 01:08:40

Middle Channel / 64QAM



Date: 5.SEP.2018 01:09:53

Highest Channel / 64QAM

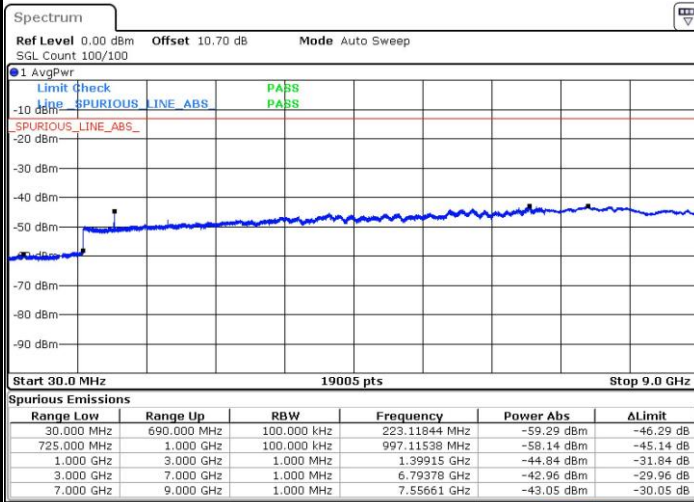


Date: 5.SEP.2018 01:13:26



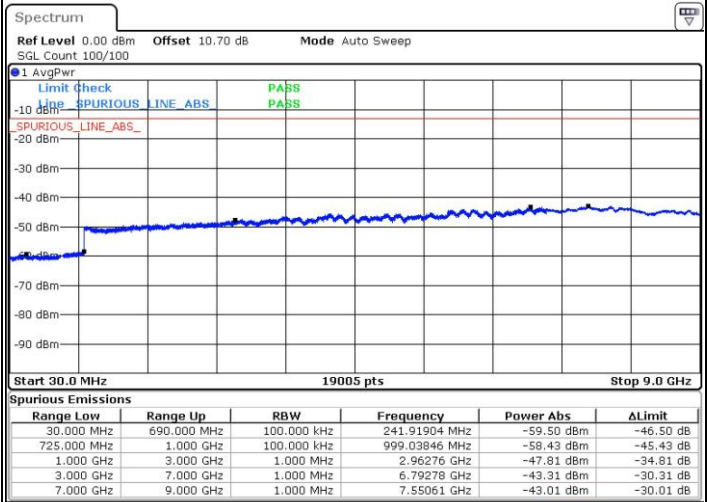
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



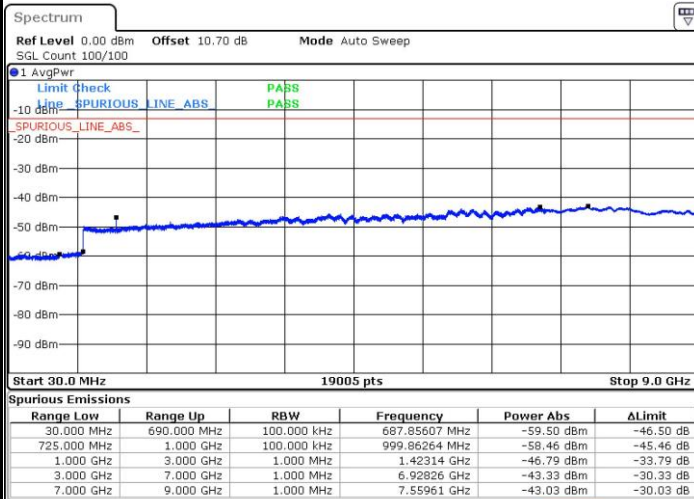
Date: 5.SEP.2018 01:16:59

Middle Channel / 64QAM



Date: 5.SEP.2018 01:18:12

Highest Channel / 64QAM

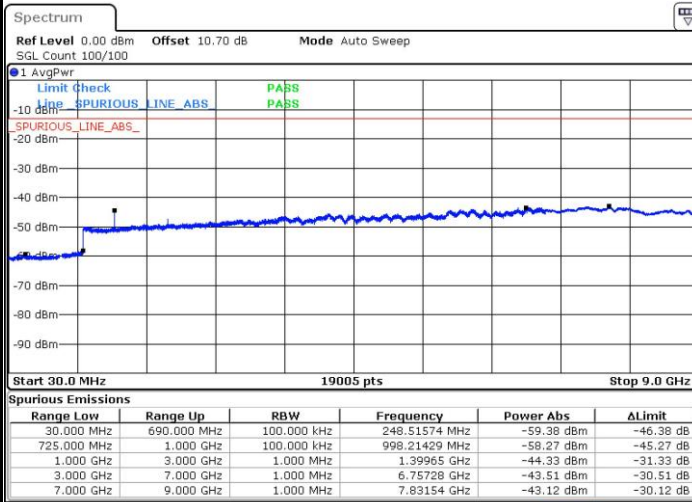


Date: 5.SEP.2018 01:21:46



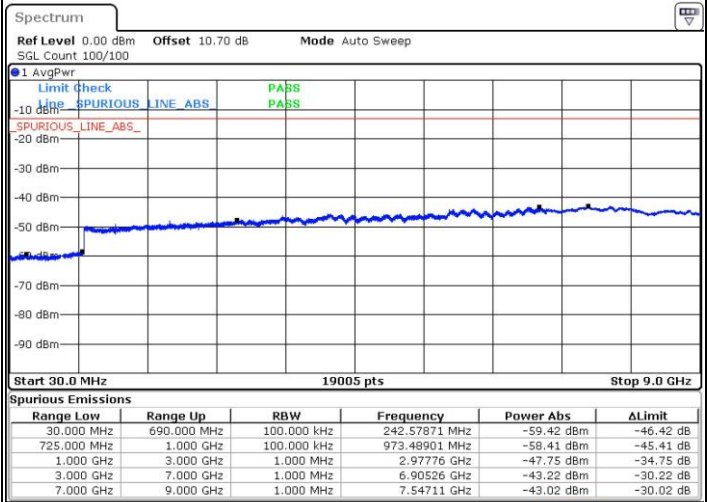
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



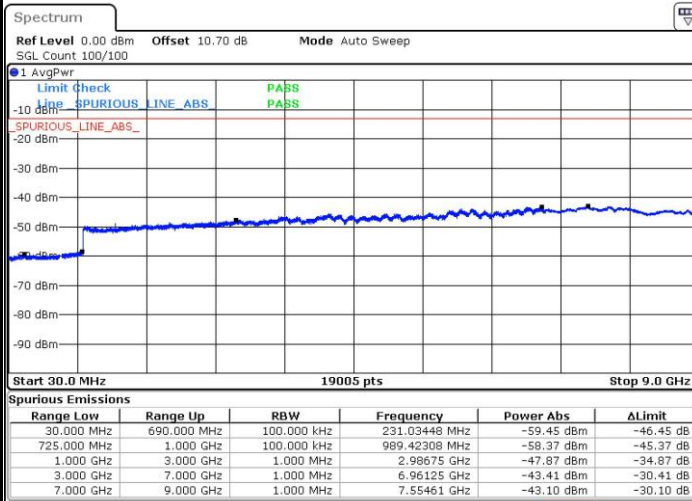
Date: 5.SEP.2018 01:25:19

Middle Channel / 64QAM



Date: 5.SEP.2018 01:26:32

Highest Channel / 64QAM



Date: 5.SEP.2018 01:30:05

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	0.0011	PASS
40	Normal Voltage	0.0030	
30	Normal Voltage	0.0028	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0107	
0	Normal Voltage	0.0098	
-10	Normal Voltage	0.0079	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0089	
20	Maximum Voltage	0.0093	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
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	4.49	5.10	5.39	6.06	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.38	6.41	-	-	
Highest CH	-	-	-	-	

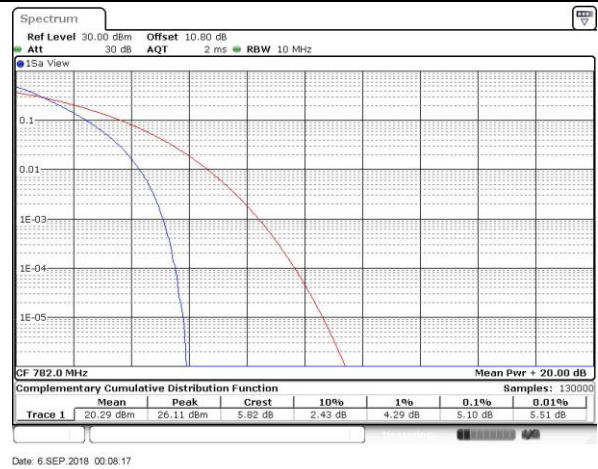


LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB

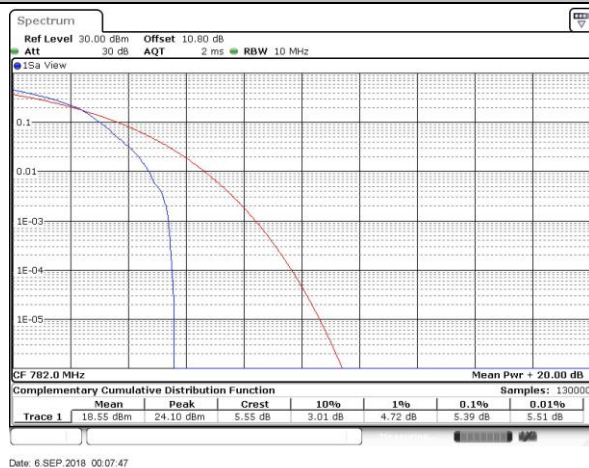


Middle Channel / Full RB



LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB

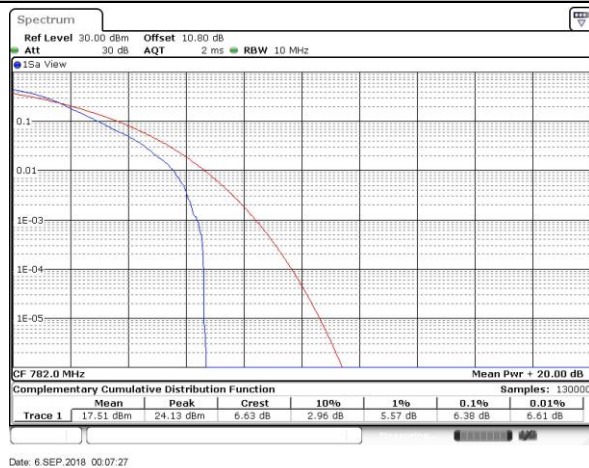


Middle Channel / Full RB

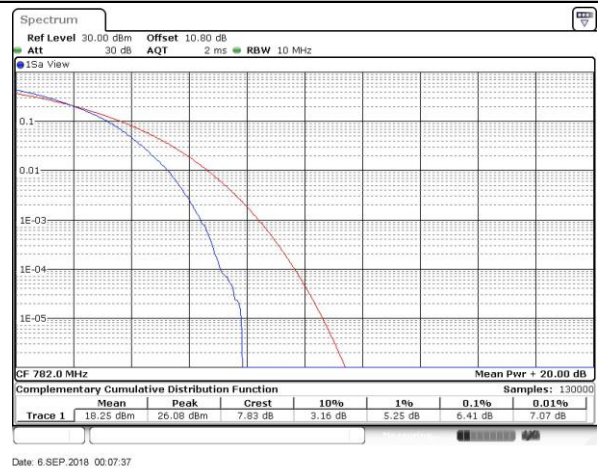


LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Middle Channel / Full RB



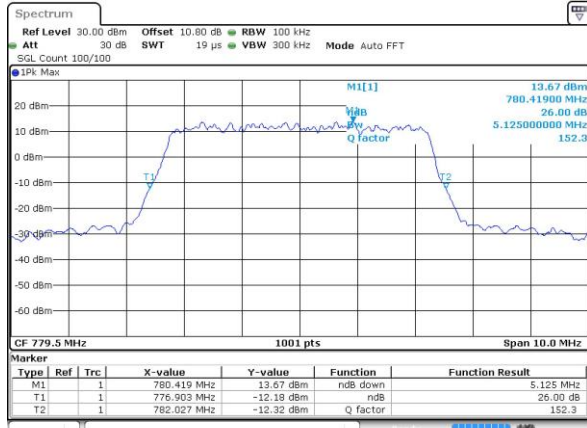
**26dB Bandwidth**

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	-	-	-	-	5.13	5.08	-	-	-	-	-	-
Middle CH	-	-	-	-	5.07	5.01	10.11	9.93	-	-	-	-
Highest CH	-	-	-	-	5.18	5.10	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.98	-	-	-	-	-	-	-
Middle CH	-	-	-	-	5.08	-	9.87	-	-	-	-	-
Highest CH	-	-	-	-	5.06	-	-	-	-	-	-	-



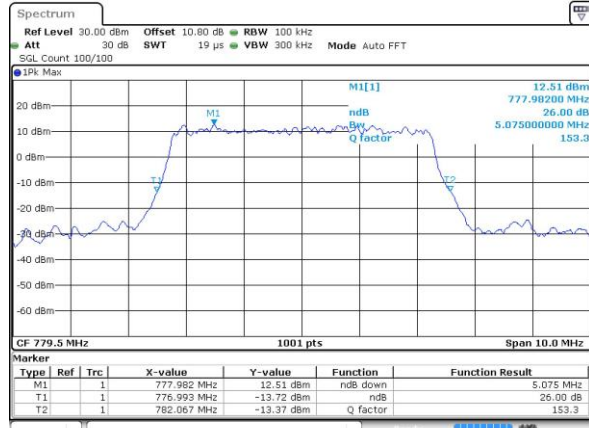
LTE Band 13

Lowest Channel / 5MHz / QPSK



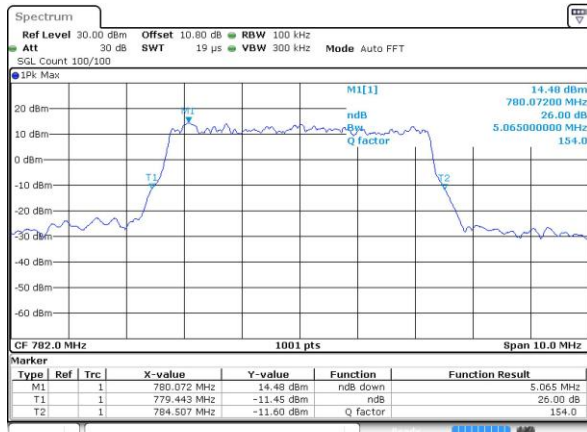
Date: 5 SEP 2018 23:16:36

Lowest Channel / 5MHz / 16QAM



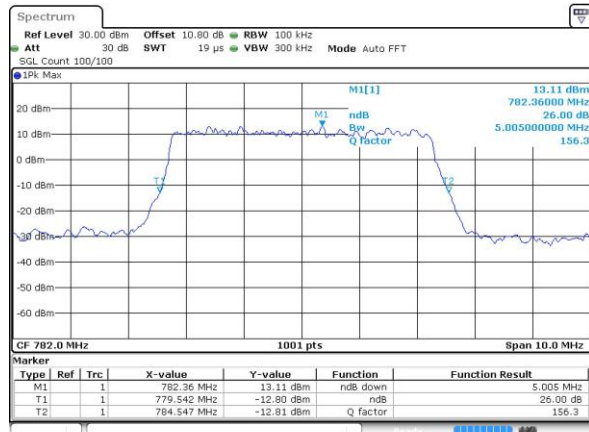
Date: 5 SEP 2018 23:16:24

Middle Channel / 5MHz / QPSK



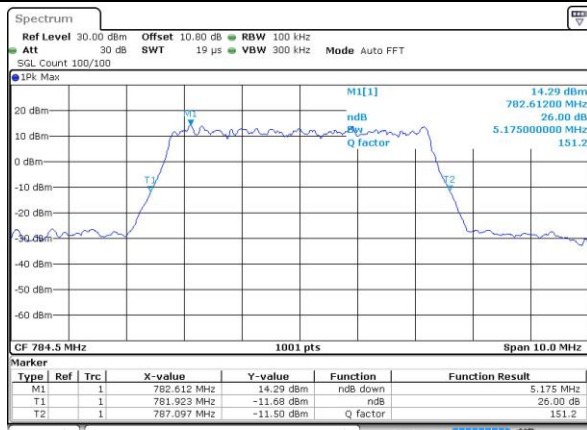
Date: 5 SEP 2018 23:26:48

Middle Channel / 5MHz / 16QAM



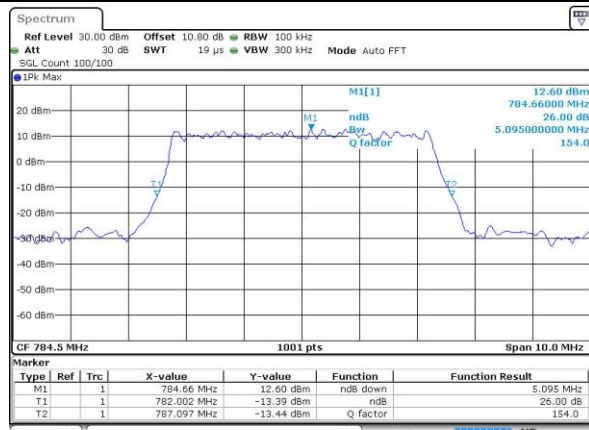
Date: 5 SEP 2018 23:27:00

Highest Channel / 5MHz / QPSK



Date: 5 SEP 2018 23:28:08

Highest Channel / 5MHz / 16QAM

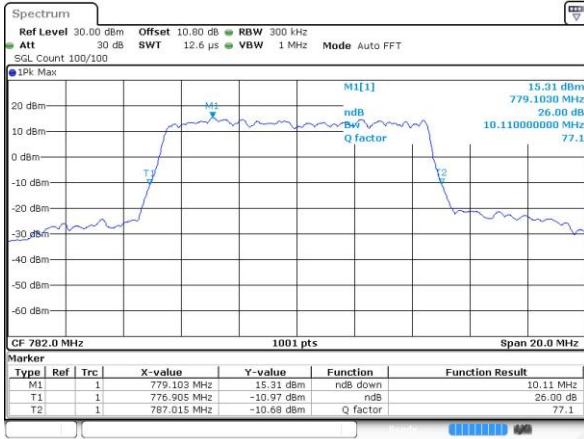


Date: 5 SEP 2018 23:27:57

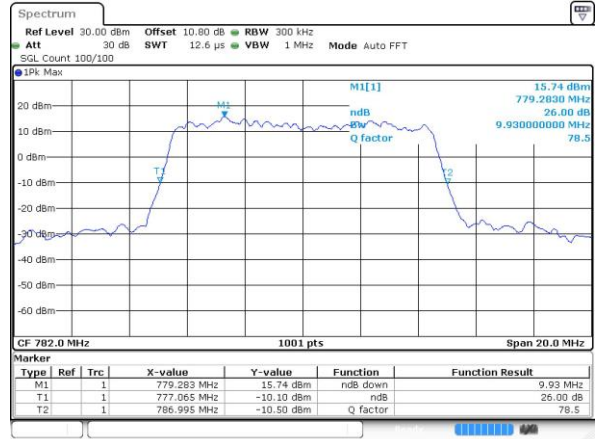


LTE Band 13

Middle Channel / 10MHz / QPSK



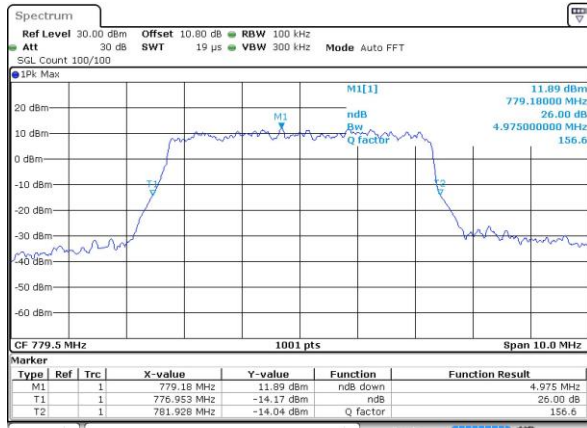
Middle Channel / 10MHz / 16QAM



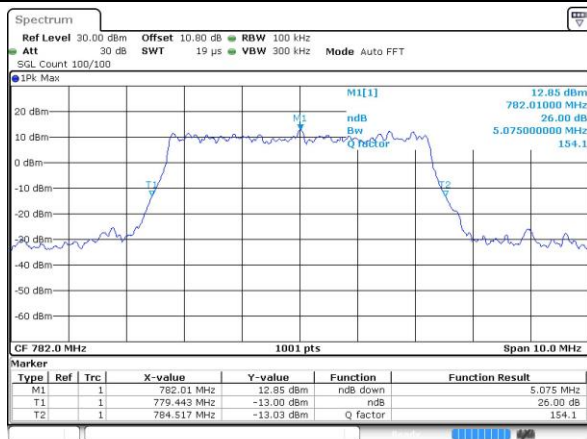


LTE Band 13

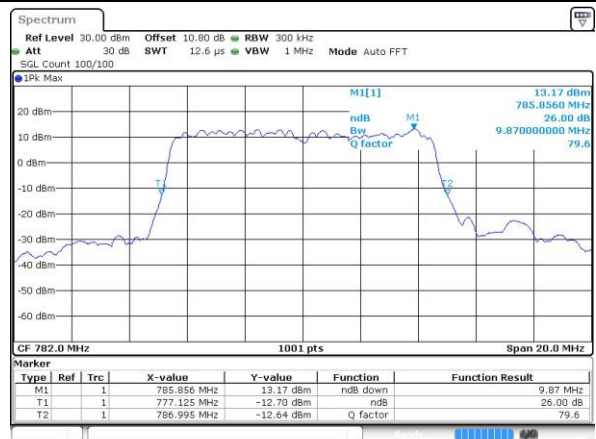
Lowest Channel / 5MHz / 64QAM



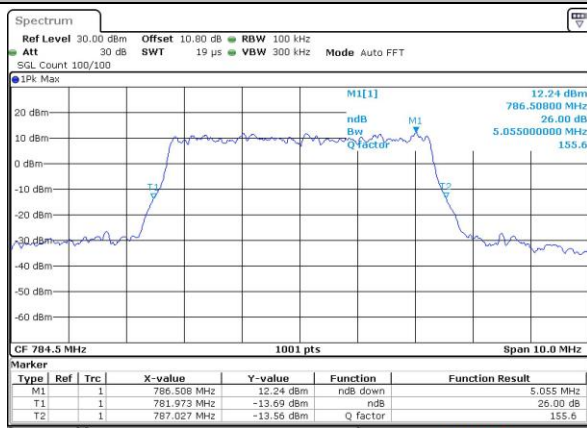
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



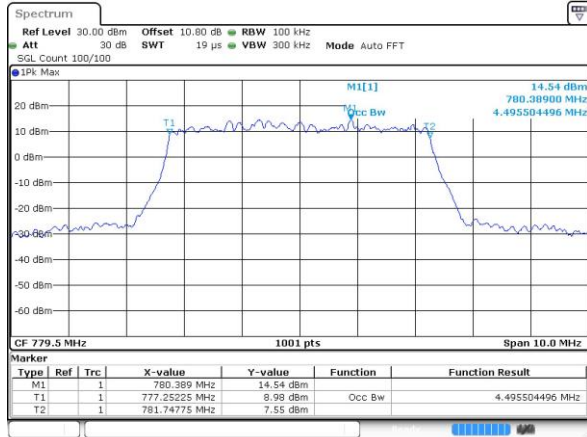
**Occupied Bandwidth**

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	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	4.5	9.07	9.01	-	-	-	-
Highest CH	-	-	-	-	4.5	4.51	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.52	-	-	-	-	-	-	-



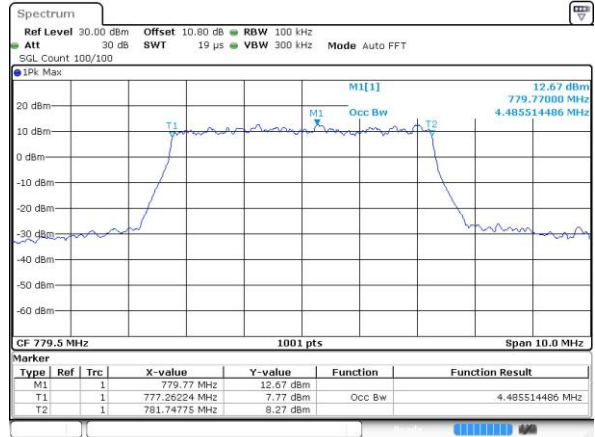
LTE Band 13

Lowest Channel / 5MHz / QPSK



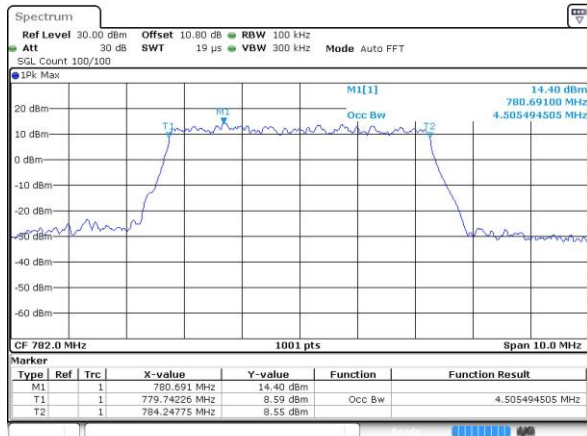
Date: 5 SEP 2018 23:16:01

Lowest Channel / 5MHz / 16QAM



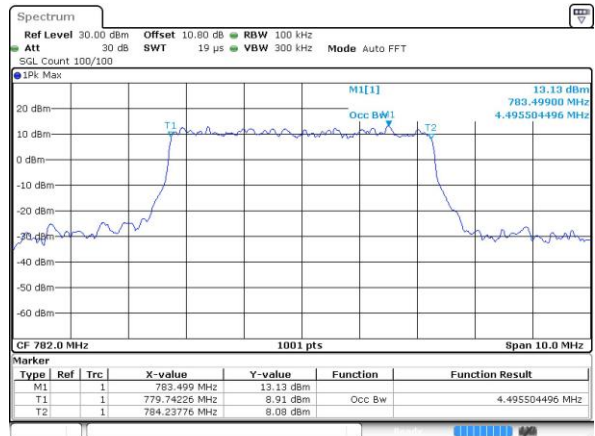
Date: 5 SEP 2018 23:16:13

Middle Channel / 5MHz / QPSK



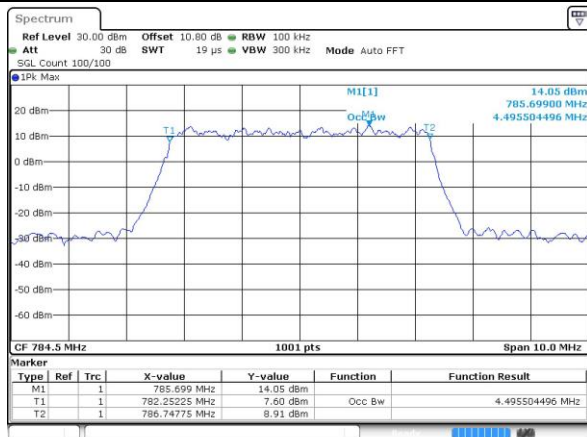
Date: 5 SEP 2018 23:27:23

Middle Channel / 5MHz / 16QAM



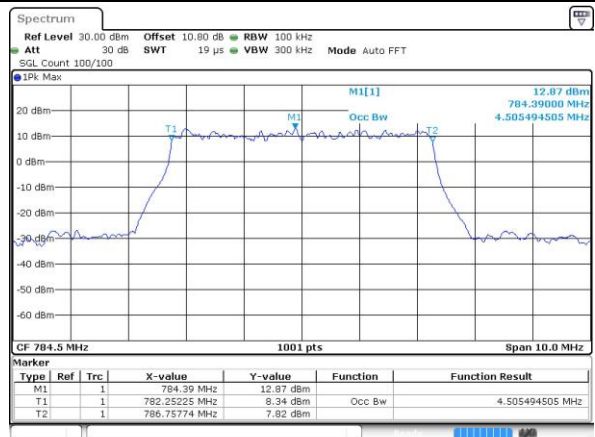
Date: 5 SEP 2018 23:27:11

Highest Channel / 5MHz / QPSK



Date: 5 SEP 2018 23:27:34

Highest Channel / 5MHz / 16QAM

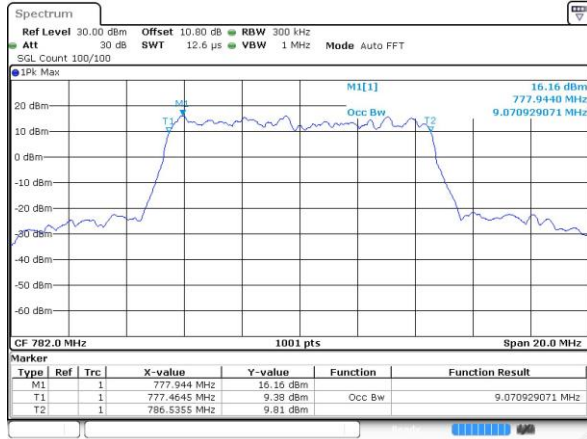


Date: 5 SEP 2018 23:27:45

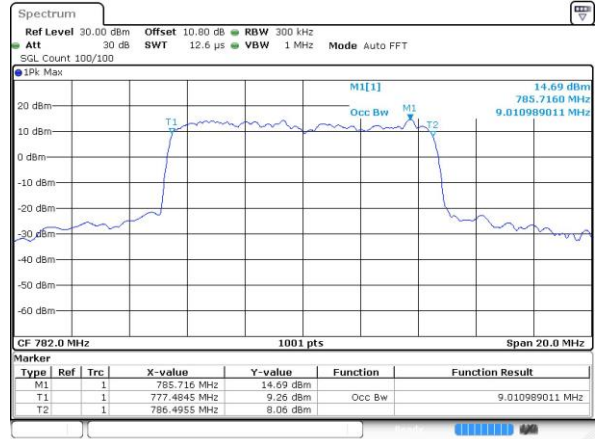


LTE Band 13

Middle Channel / 10MHz / QPSK



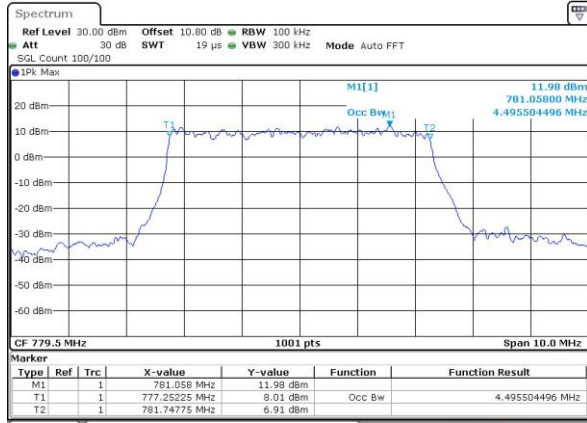
Middle Channel / 10MHz / 16QAM





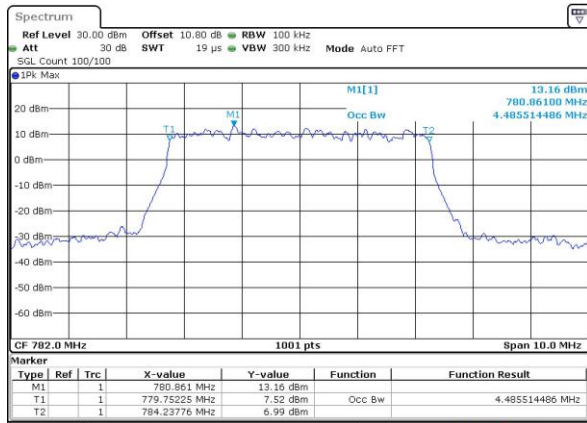
LTE Band 13

Lowest Channel / 5MHz / 64QAM



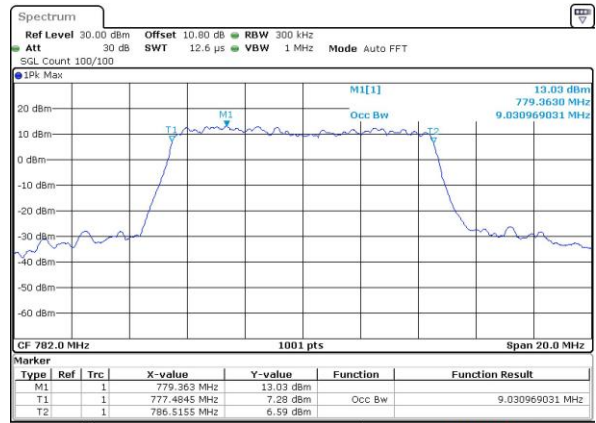
Date: 5 SEP 2018 23:36:40

Middle Channel / 5MHz / 64QAM



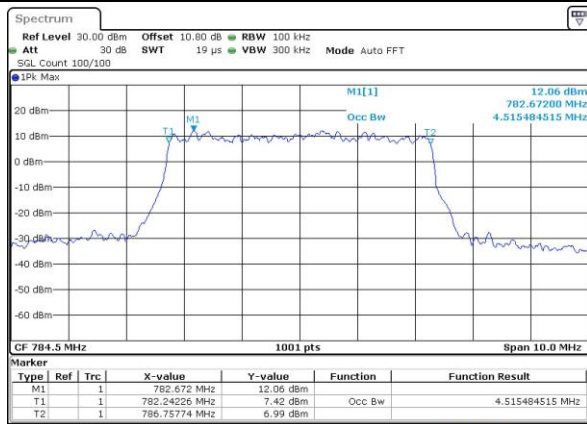
Date: 5 SEP 2018 23:42:15

Middle Channel / 10MHz / 64QAM

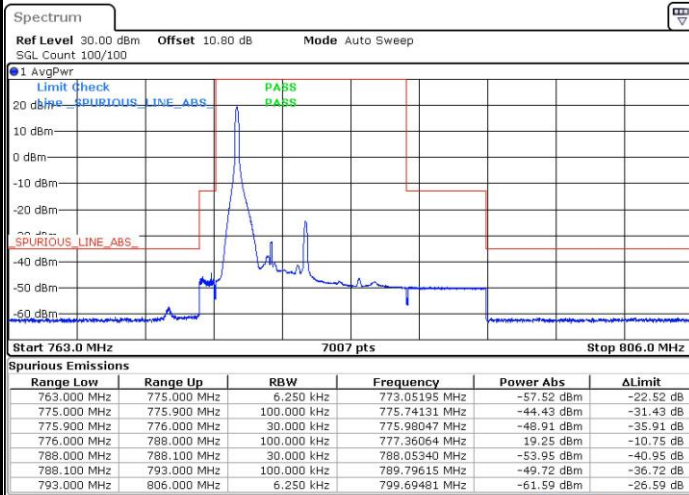
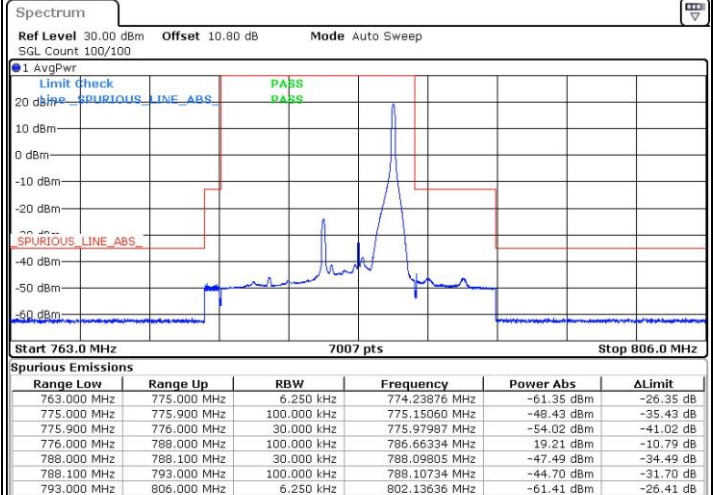
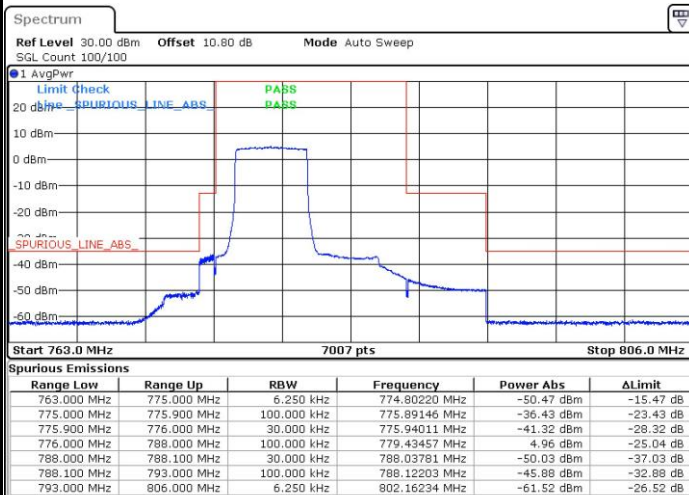
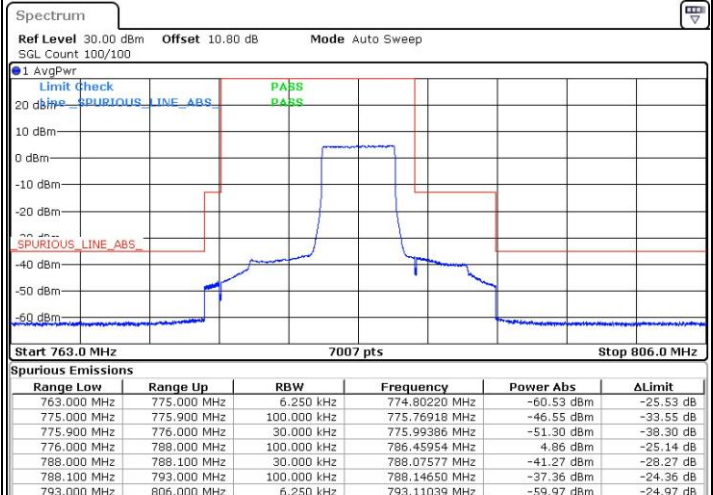


Date: 5 SEP 2018 23:59:27

Highest Channel / 5MHz / 64QAM



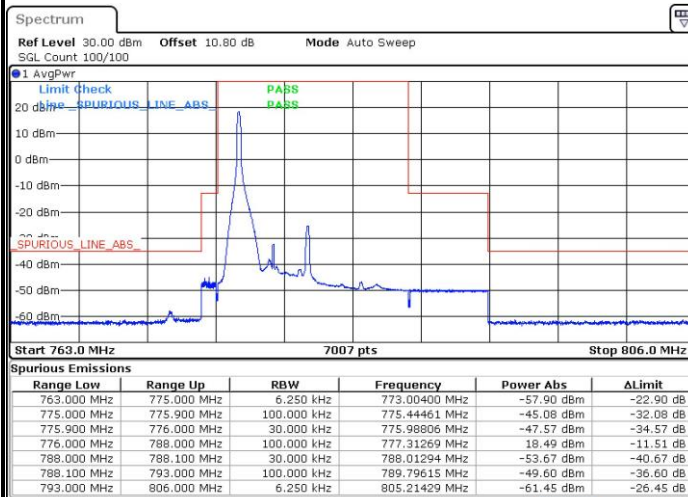
Date: 5 SEP 2018 23:42:26

**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**

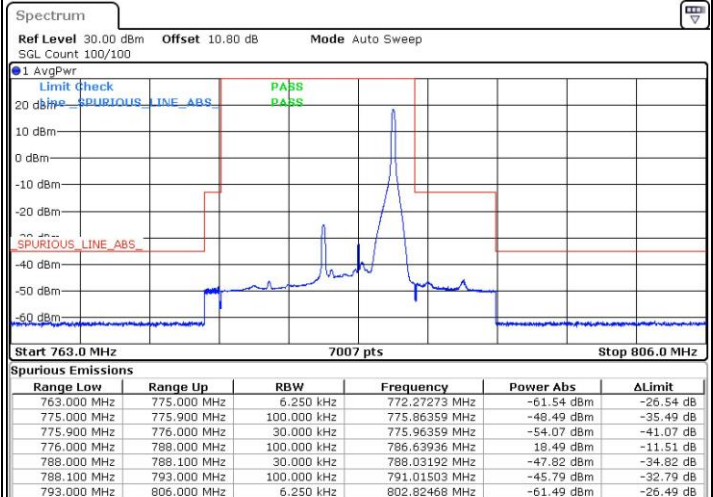


LTE Band 13 / 5MHz / 16QAM

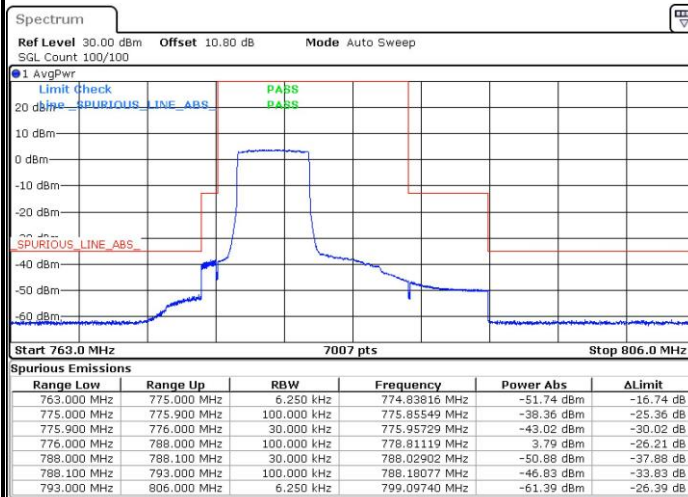
Lowest Band Edge / 1 RB



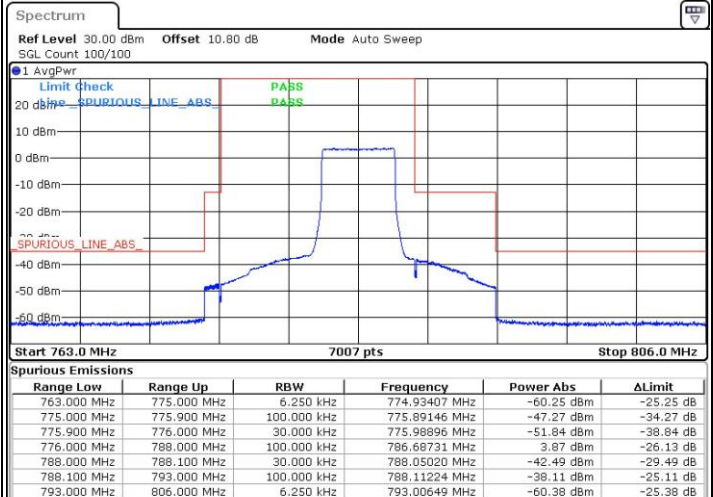
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



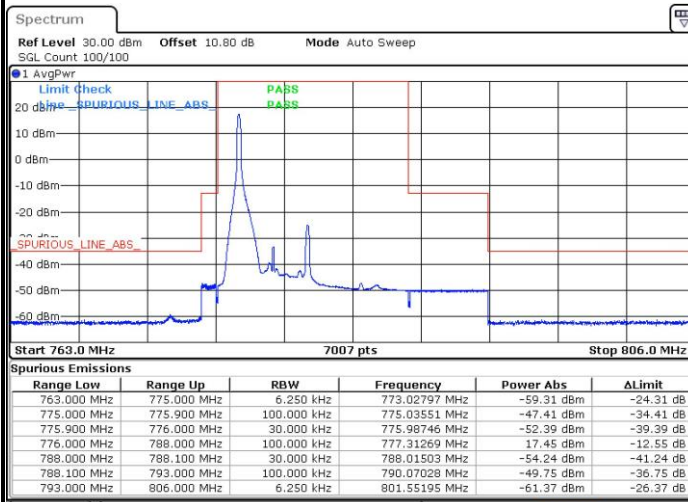
Highest Band Edge / Full RB



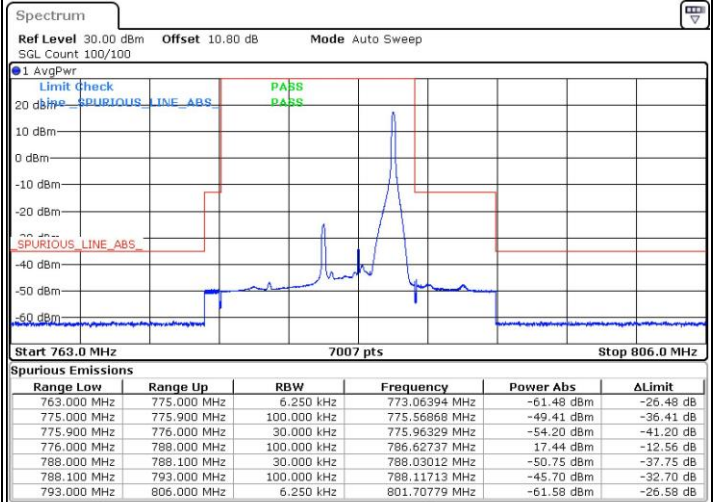


LTE Band 13 / 5MHz / 64QAM

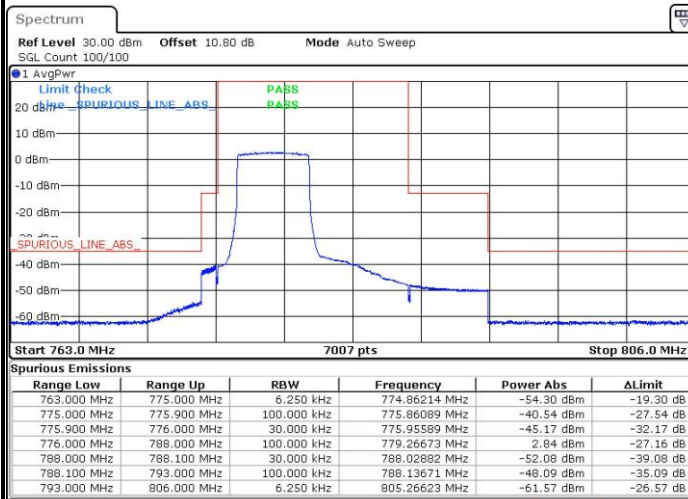
Lowest Band Edge / 1 RB



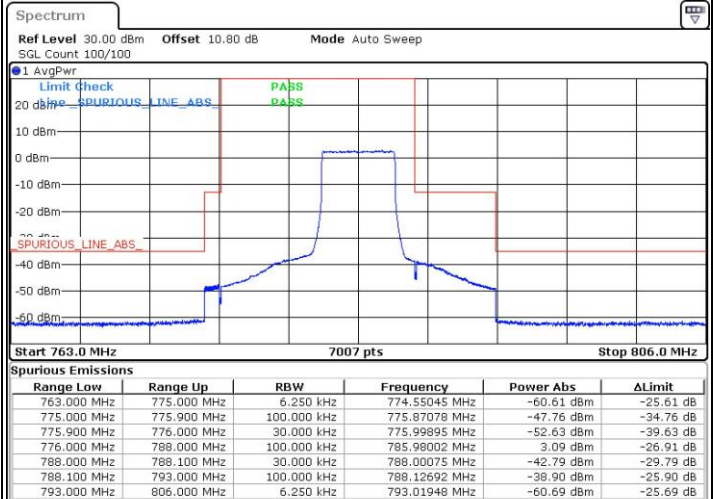
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



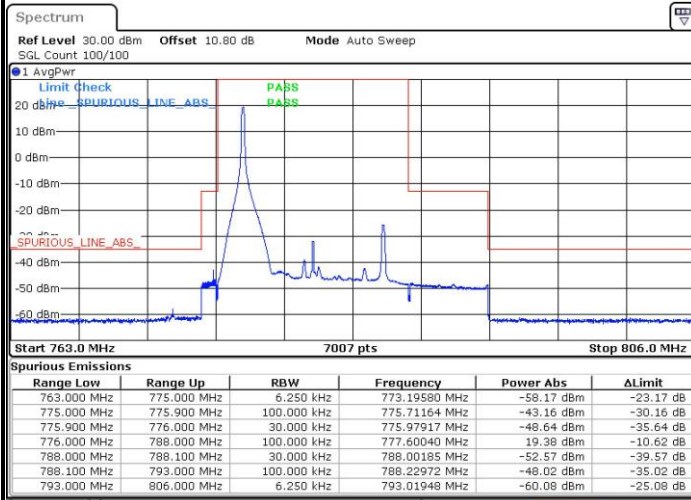
Highest Band Edge / Full RB





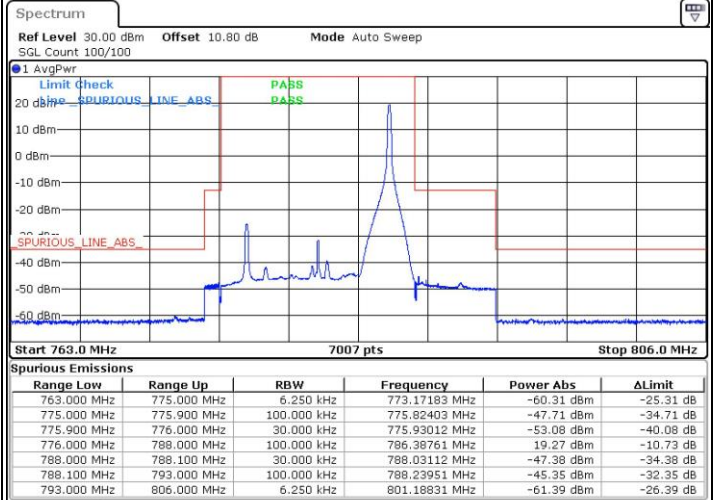
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



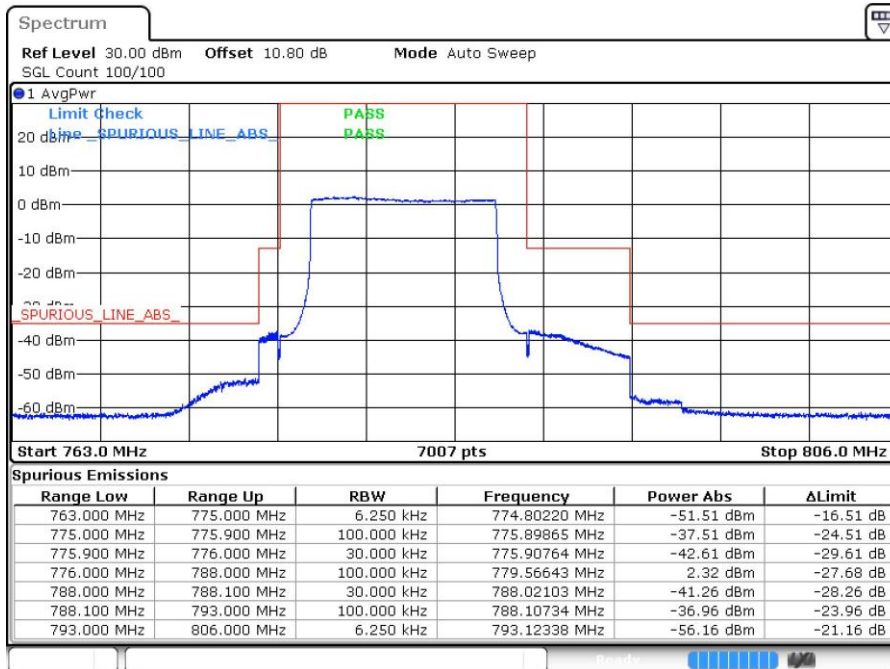
Date: 5 SEP 2018 23:54:14

Highest Band Edge / 1 RB



Date: 5 SEP 2018 23:55:55

Band Edge / Full RB



Date: 5 SEP 2018 23:49:14