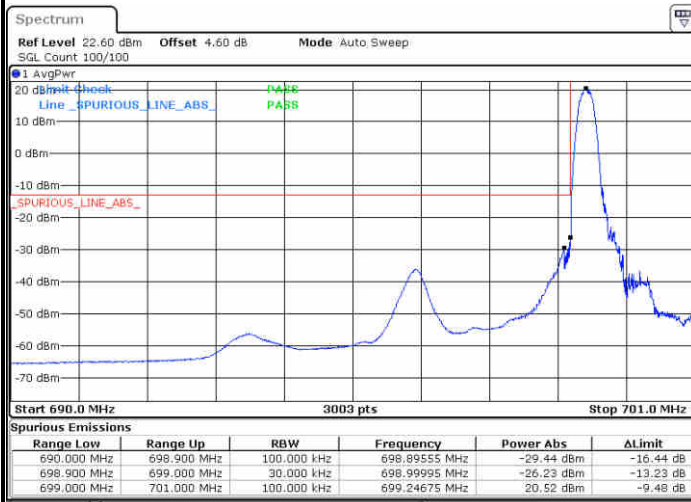




LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

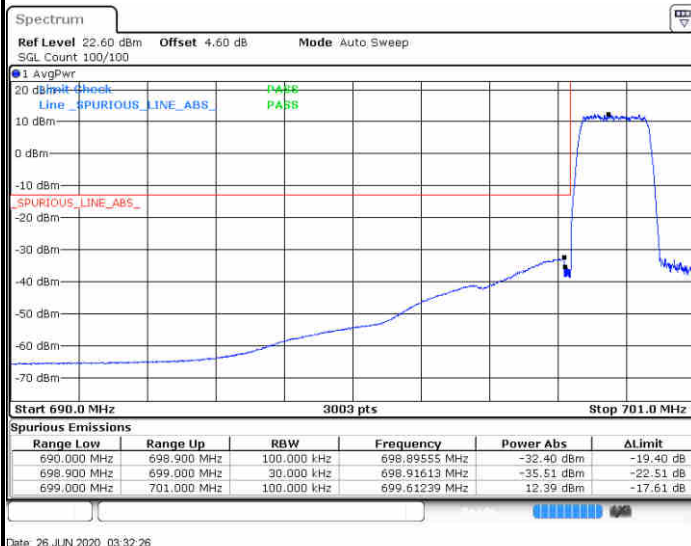
Lowest Band Edge / 1 RB



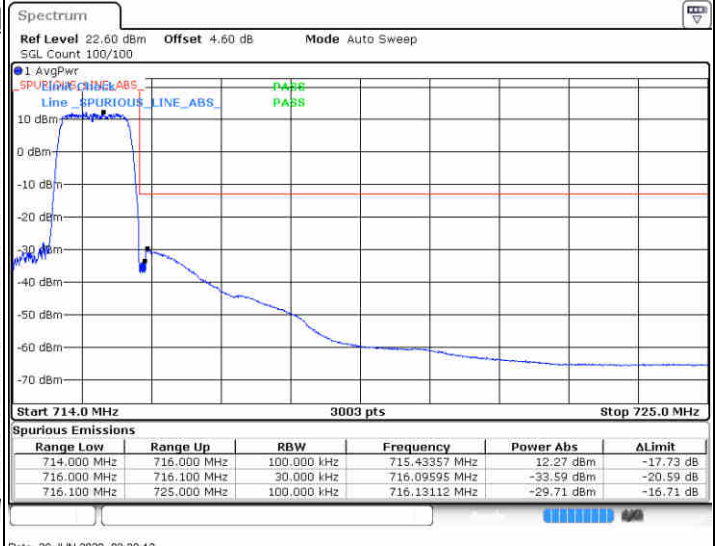
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



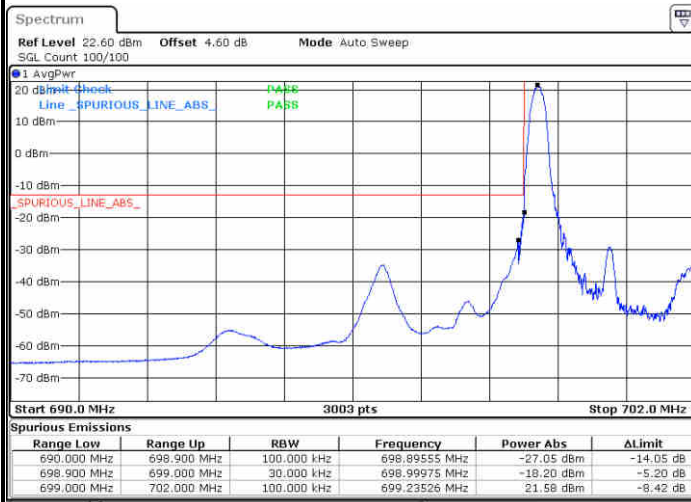
Highest Band Edge / Full RB



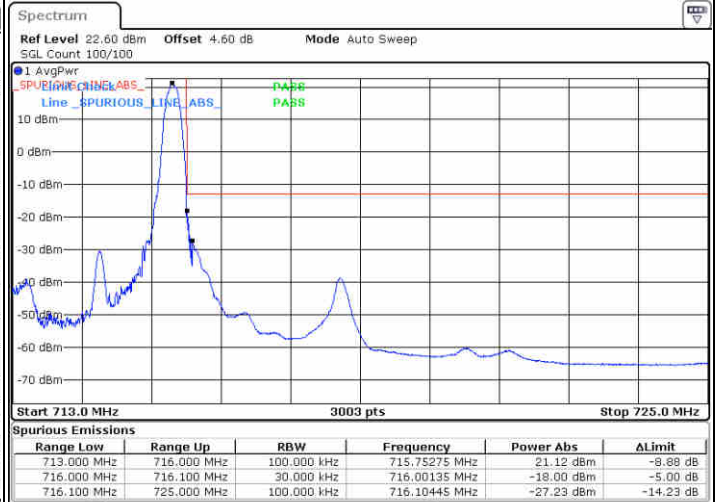


LTE Band 12 / 3MHz / QPSK

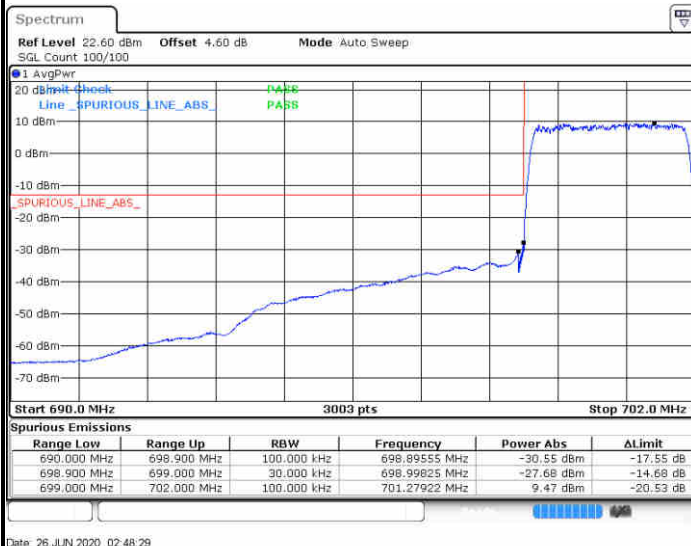
Lowest Band Edge / 1RB



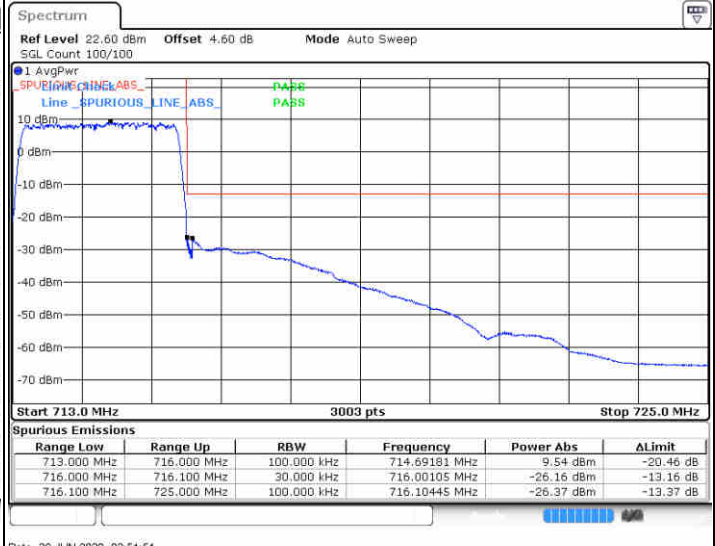
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



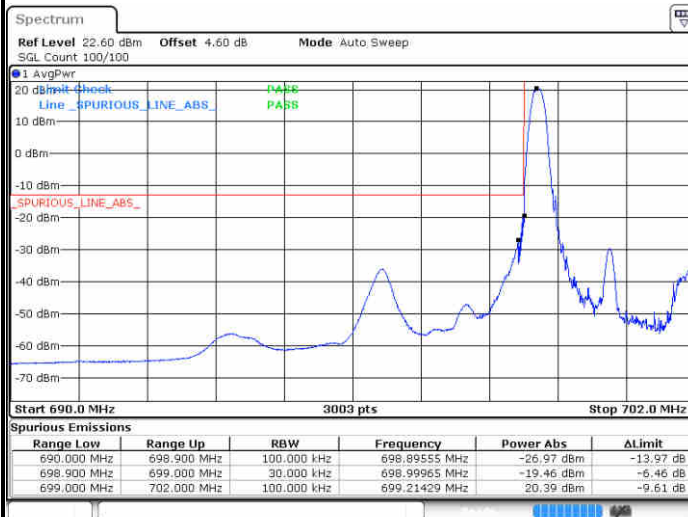
Highest Band Edge / Full RB



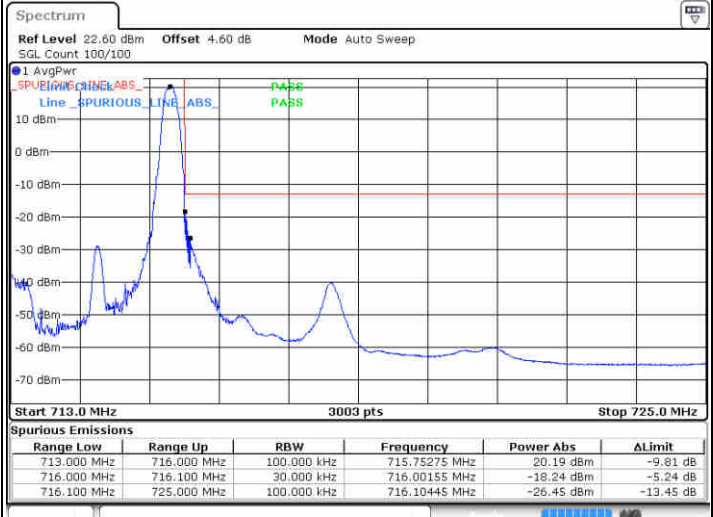


LTE Band 12 / 3MHz / 16QAM

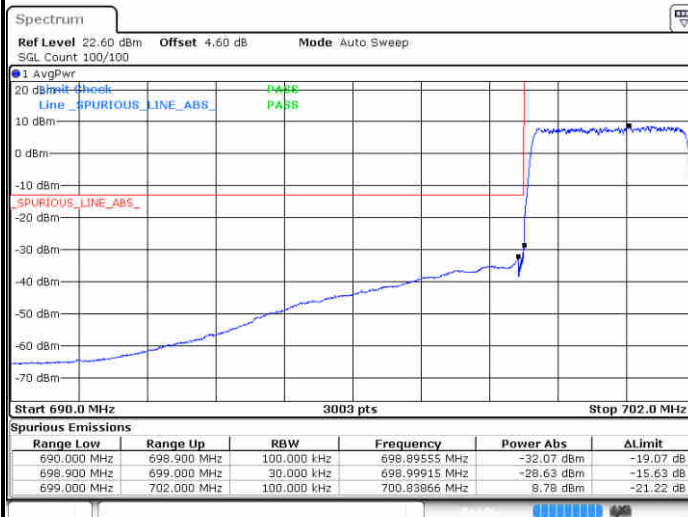
Lowest Band Edge / 1 RB



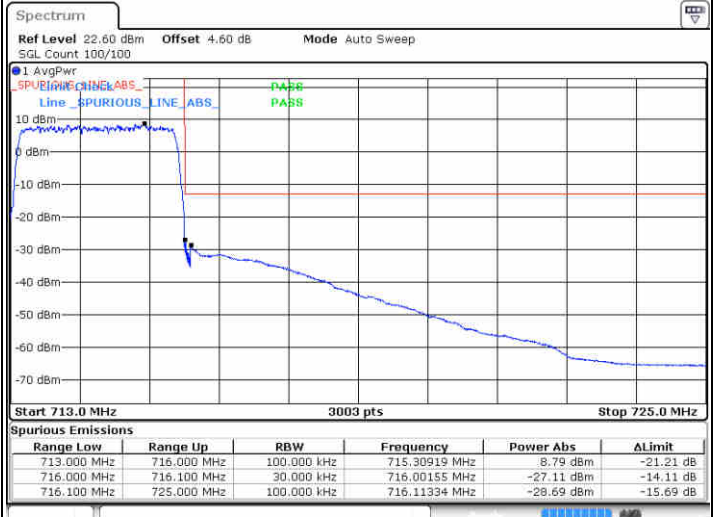
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



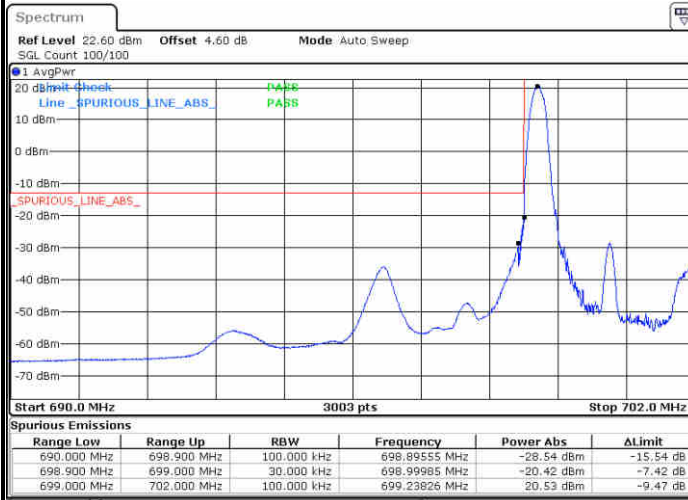
Highest Band Edge / Full RB



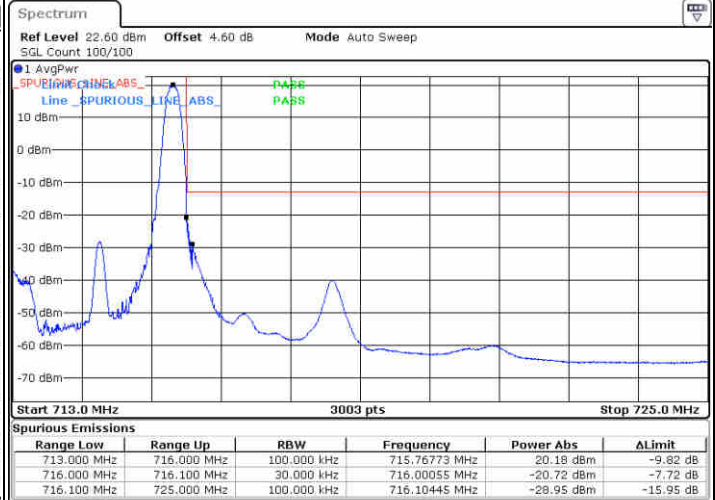


LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



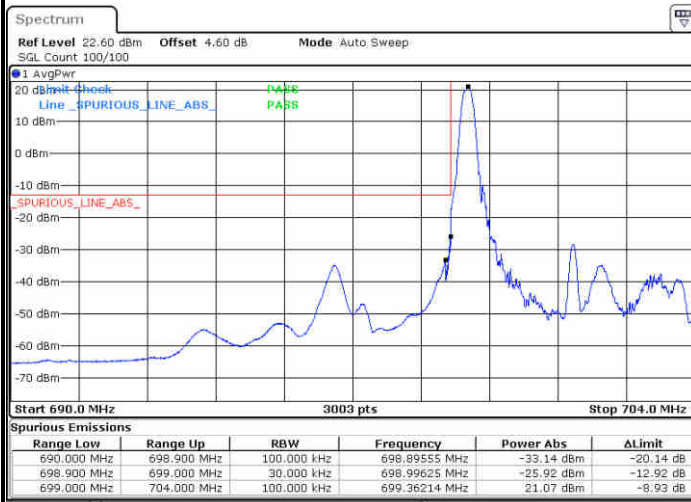
Highest Band Edge / Full RB



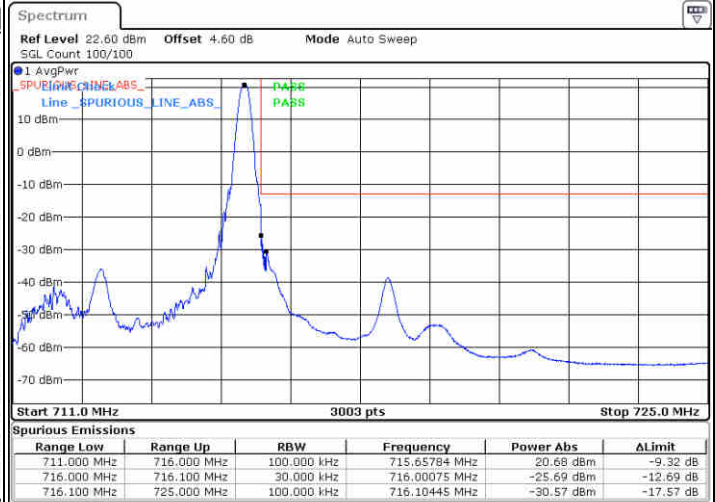


LTE Band 12 / 5MHz / QPSK

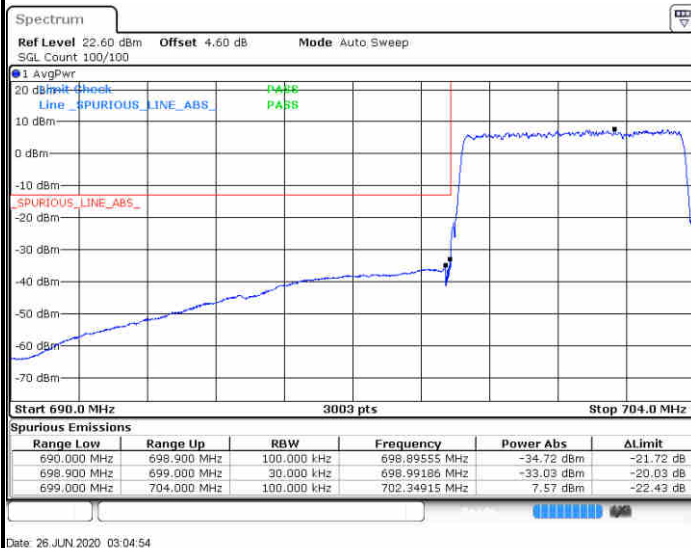
Lowest Band Edge / 1 RB



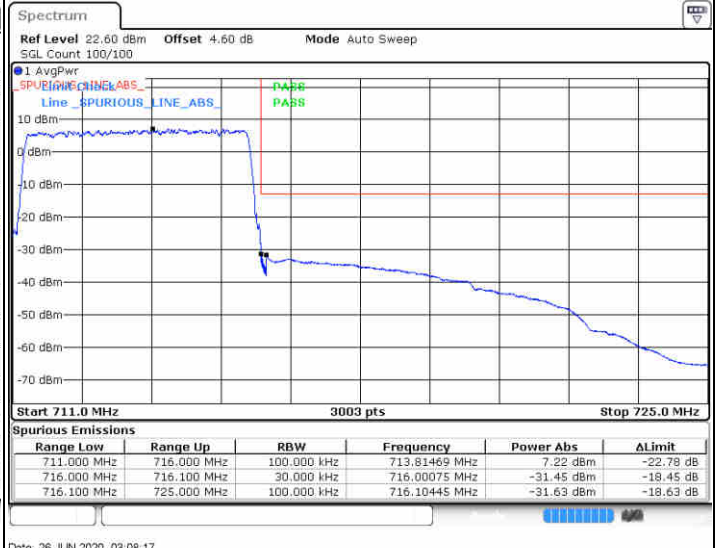
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



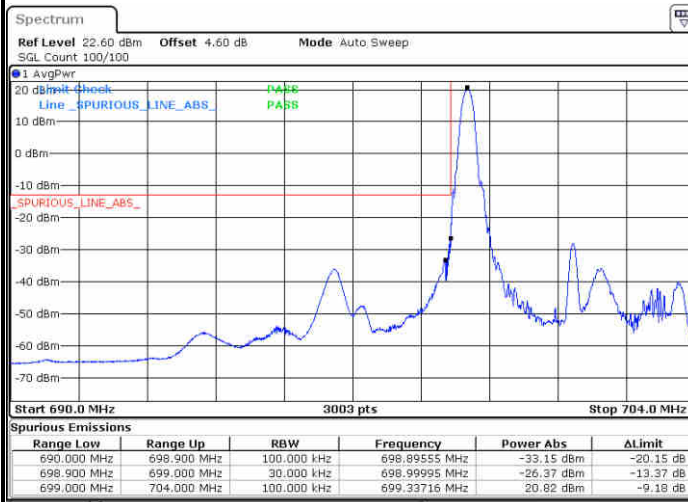
Highest Band Edge / Full RB



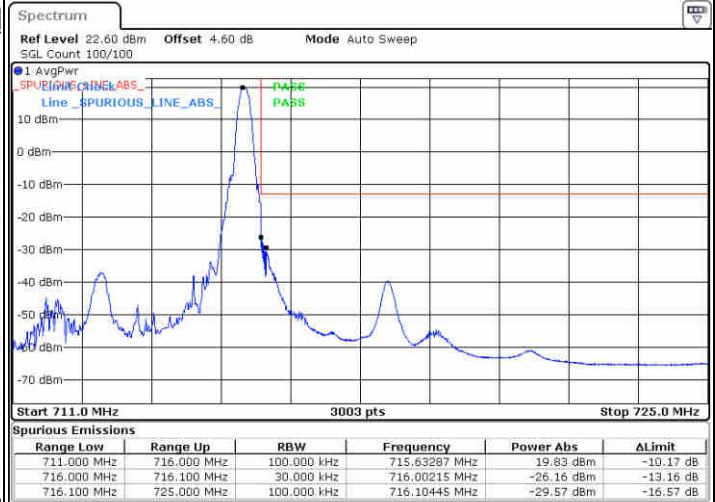


LTE Band 12 / 5MHz / 16QAM

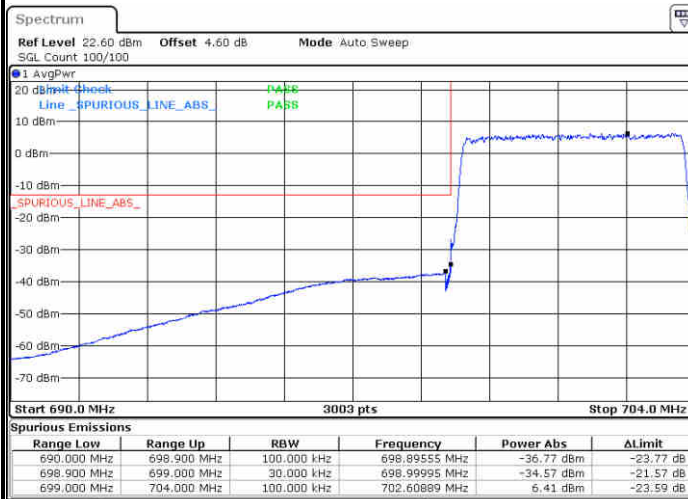
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



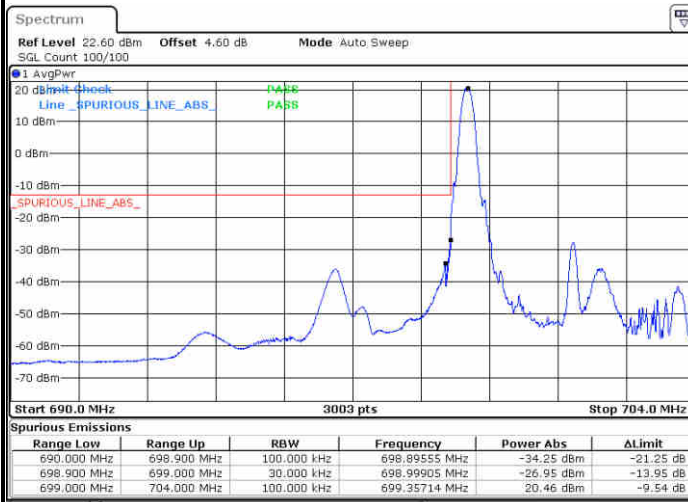
Highest Band Edge / Full RB



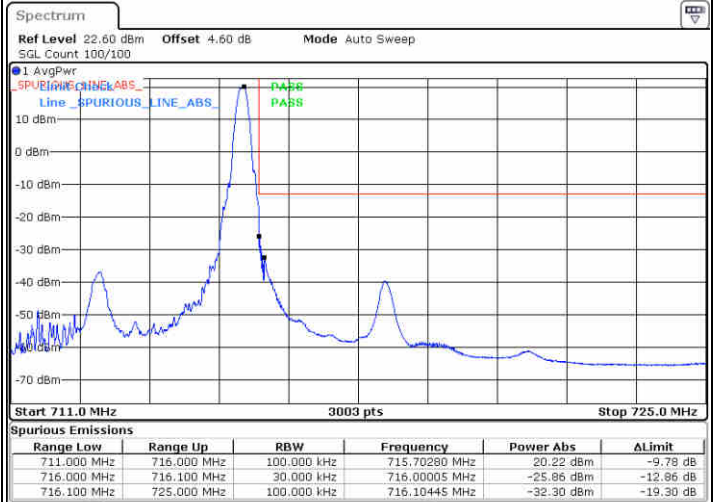


LTE Band 12 / 5MHz / 64QAM

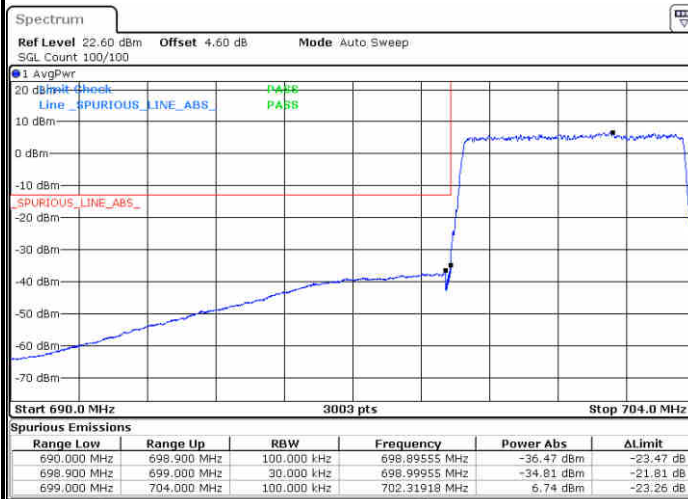
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



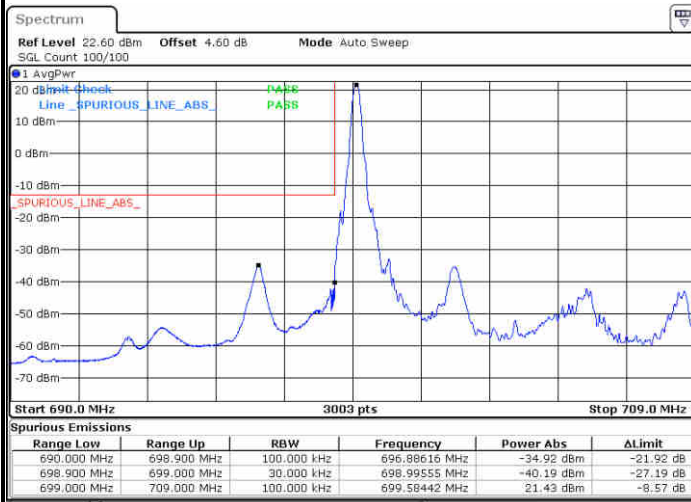
Highest Band Edge / Full RB



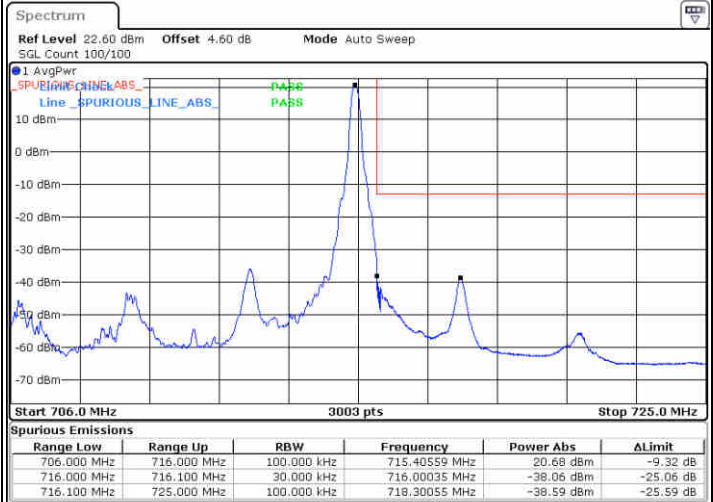


LTE Band 12 / 10MHz / QPSK

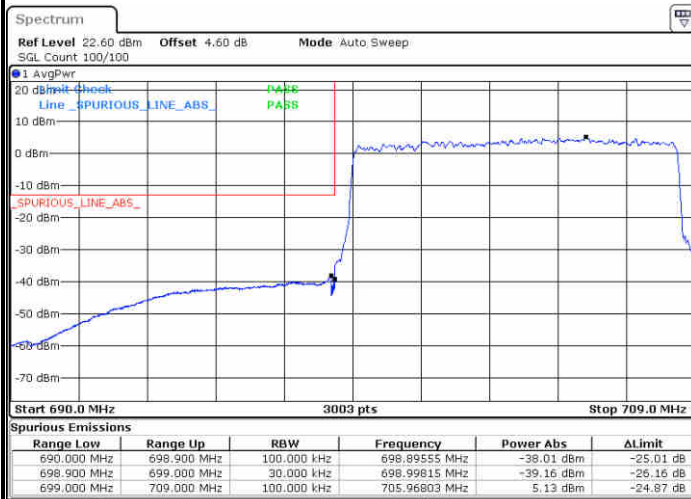
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



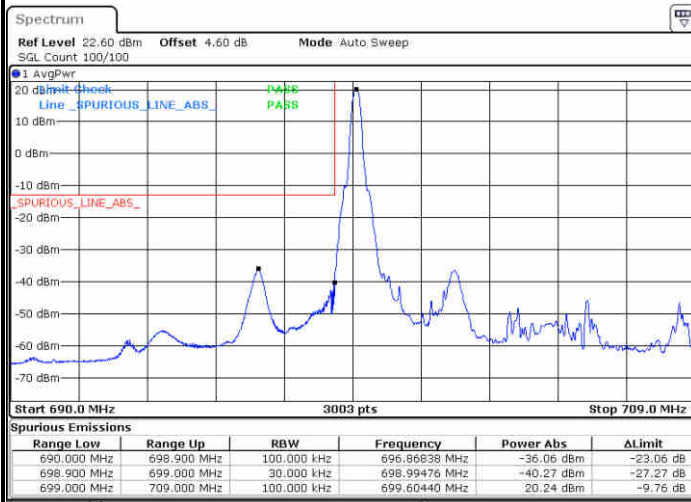
Highest Band Edge / Full RB



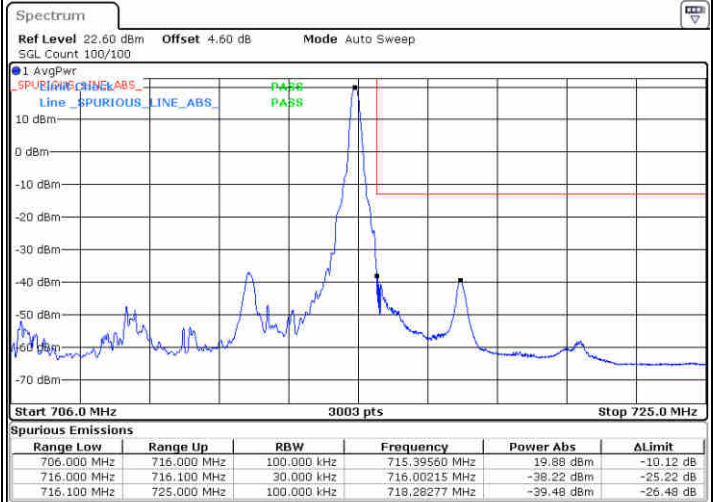


LTE Band 12 / 10MHz / 16QAM

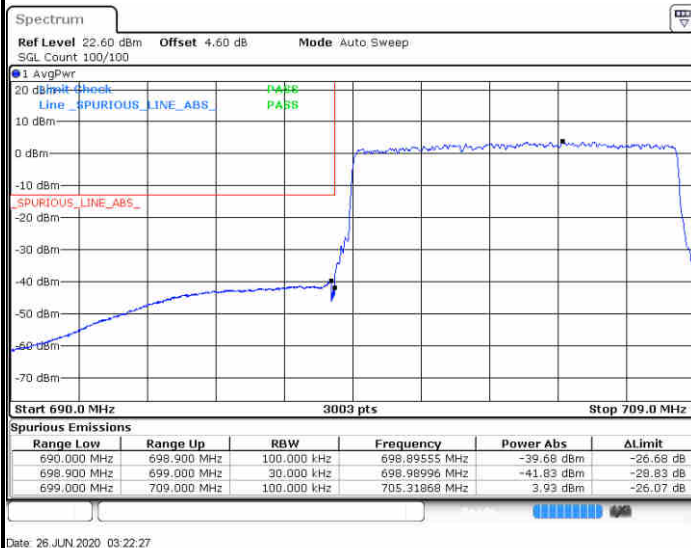
Lowest Band Edge / 1 RB



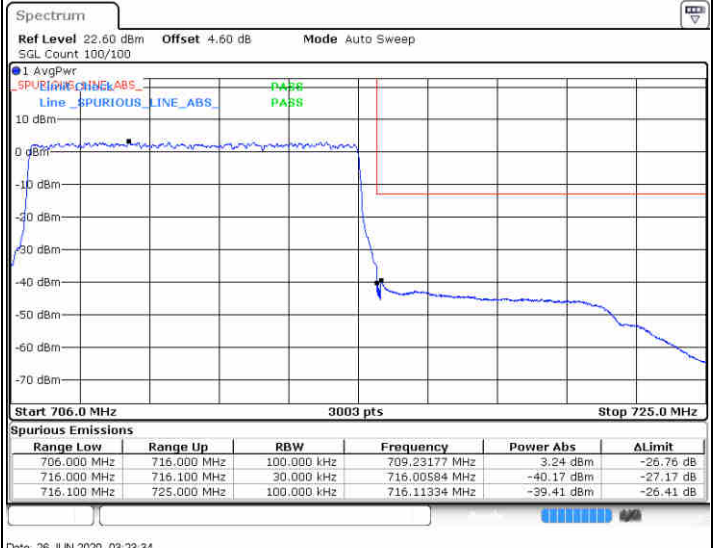
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



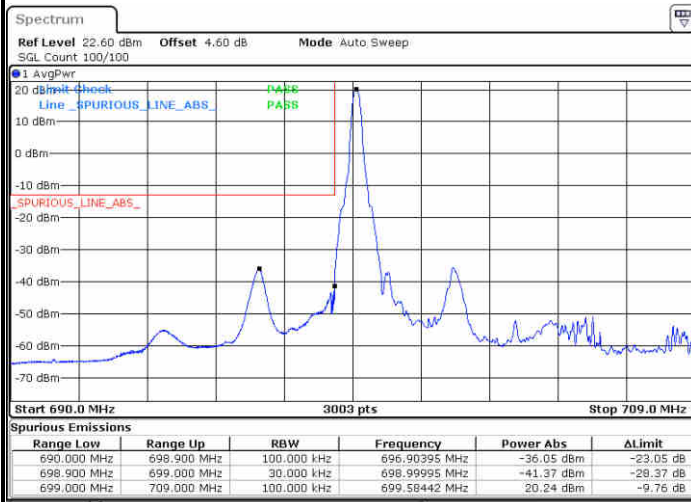
Highest Band Edge / Full RB



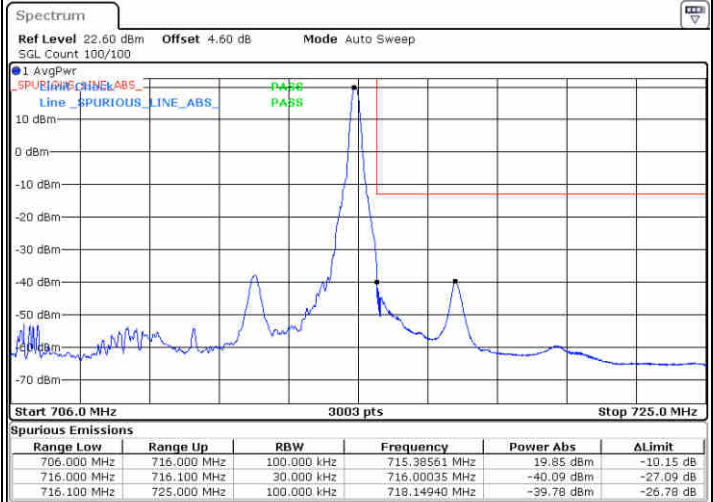


LTE Band 12 / 10MHz / 64QAM

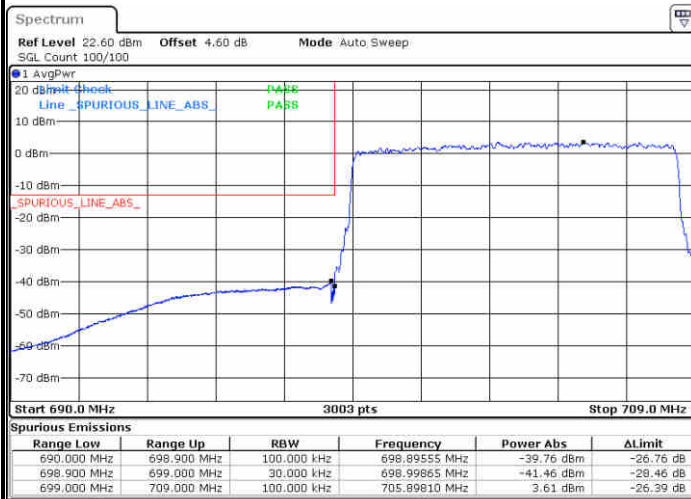
Lowest Band Edge / 1 RB



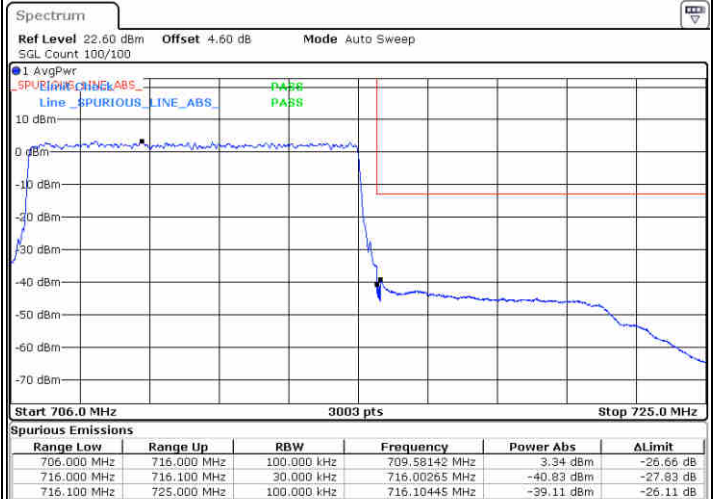
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



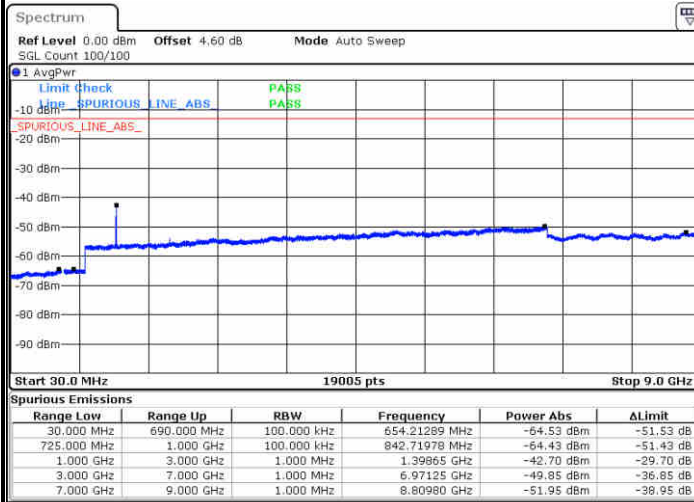


Conducted Spurious Emission



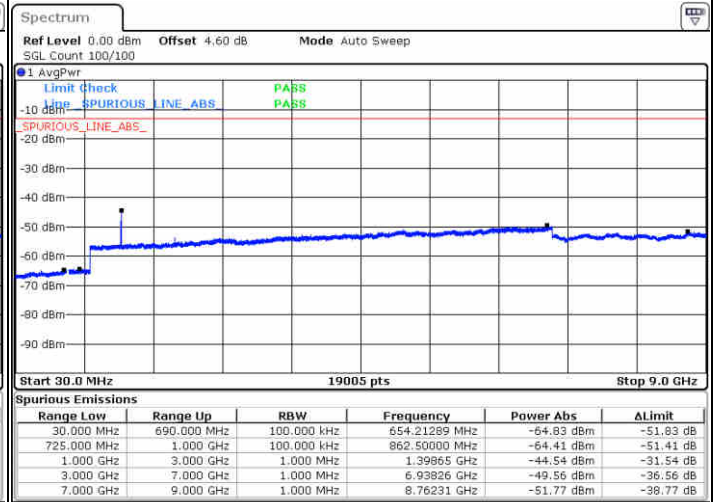
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



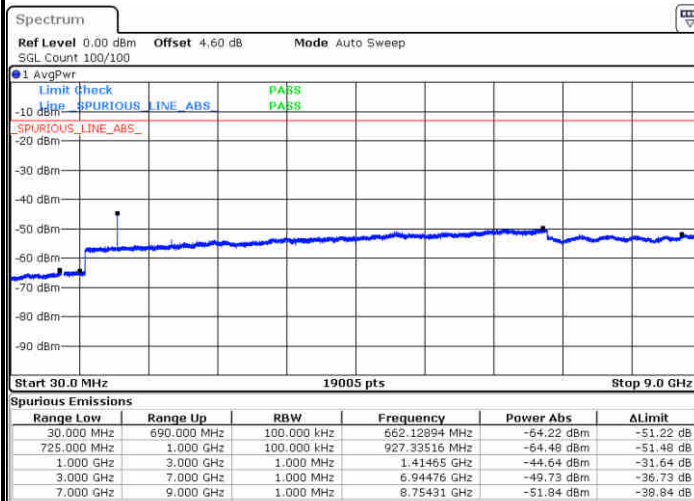
Date: 26 JUN 2020 02:20:43

Lowest Channel / 16QAM



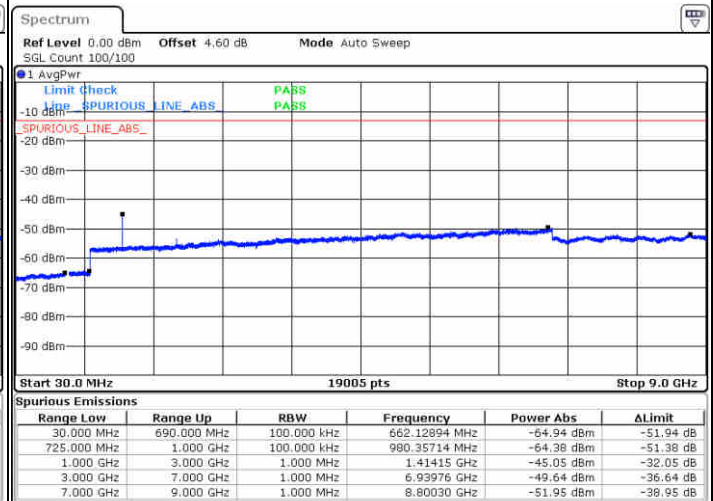
Date: 26 JUN 2020 02:25:03

Middle Channel / QPSK



Date: 26 JUN 2020 02:26:52

Middle Channel / 16QAM

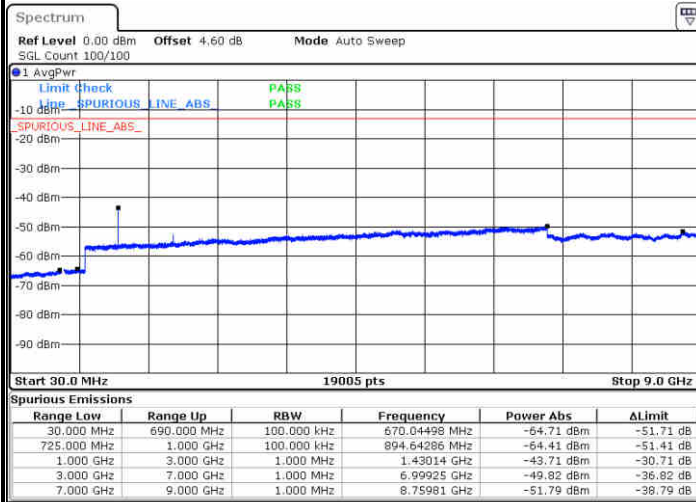


Date: 26 JUN 2020 02:25:58



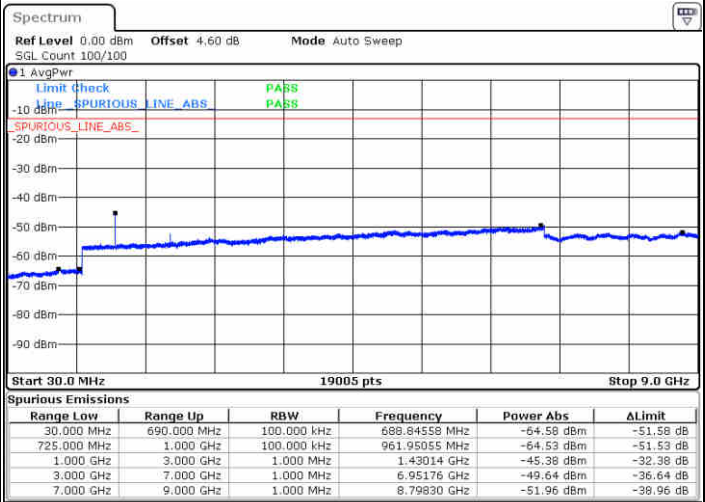
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 26 JUN 2020 02:27:46

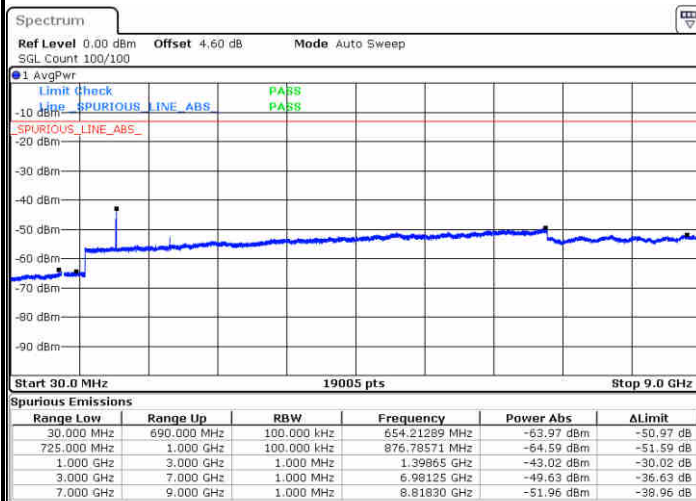
Highest Channel / 16QAM



Date: 26 JUN 2020 02:28:41

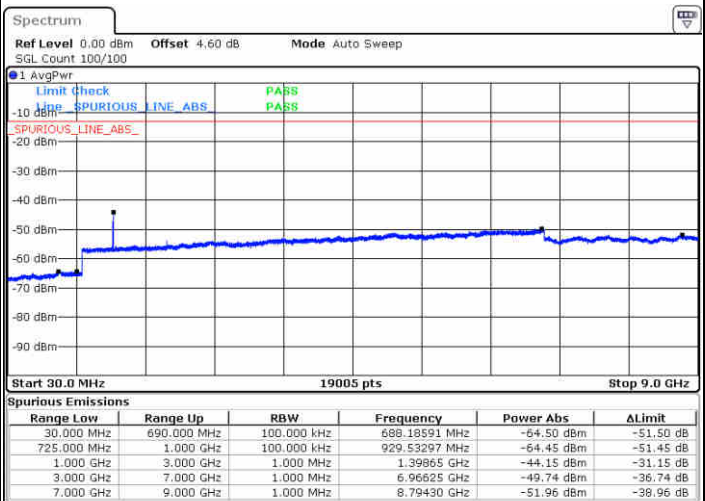
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 26 JUN 2020 02:40:35

Lowest Channel / 16QAM

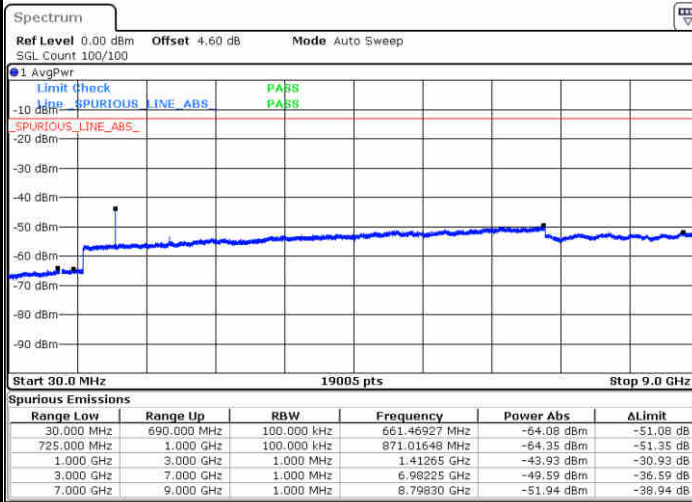


Date: 26 JUN 2020 02:41:29



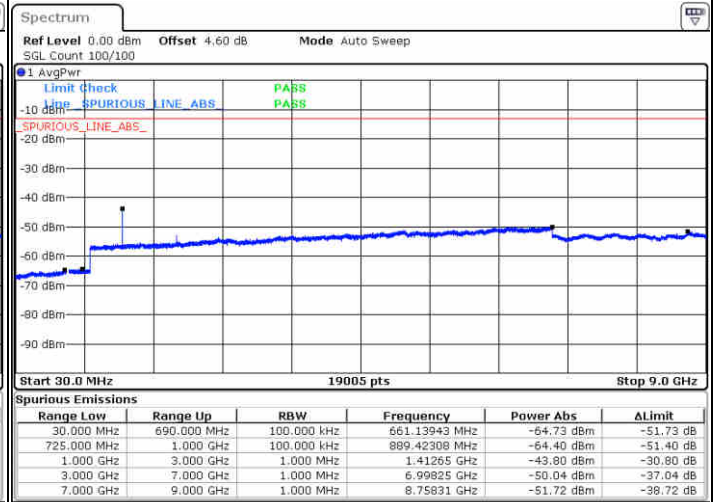
LTE Band 12 / 3MHz

Middle Channel / QPSK



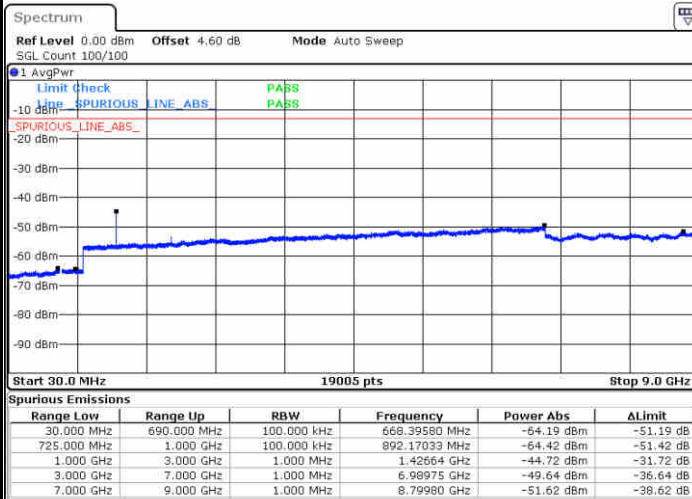
Date: 26 JUN 2020 02:43:17

Middle Channel / 16QAM



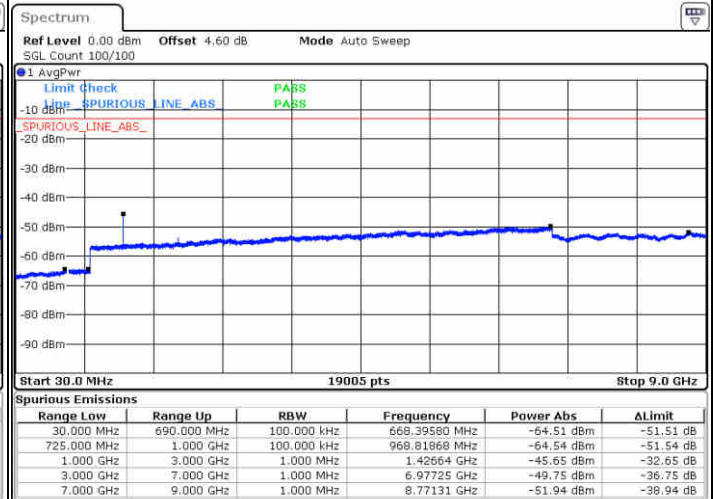
Date: 26 JUN 2020 02:42:23

Highest Channel / QPSK



Date: 26 JUN 2020 02:44:12

Highest Channel / 16QAM

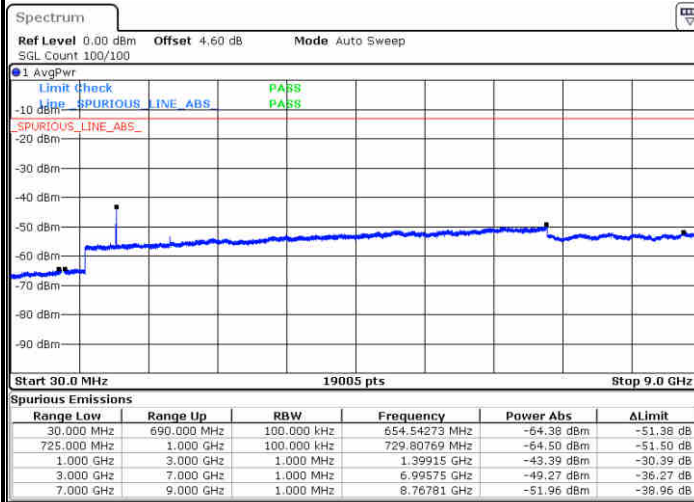


Date: 26 JUN 2020 02:45:06



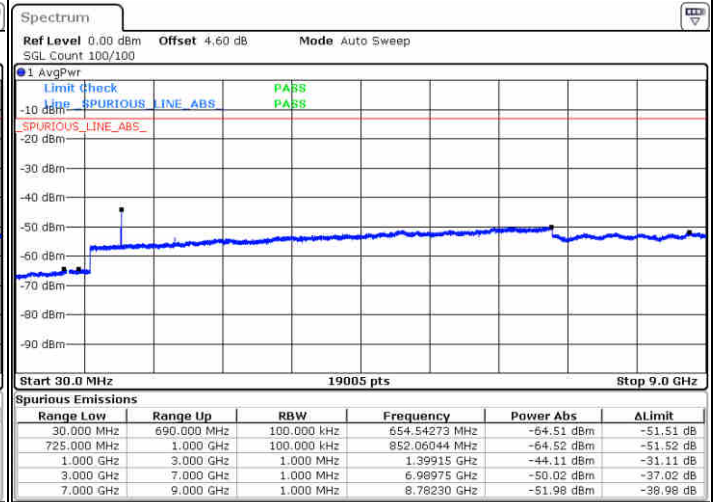
LTE Band 12 / 5MHz

Lowest Channel / QPSK



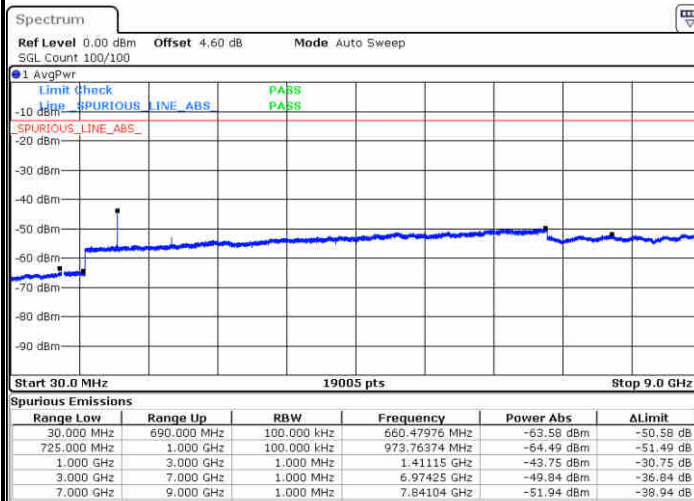
Date: 26 JUN 2020 02:57:00

Lowest Channel / 16QAM



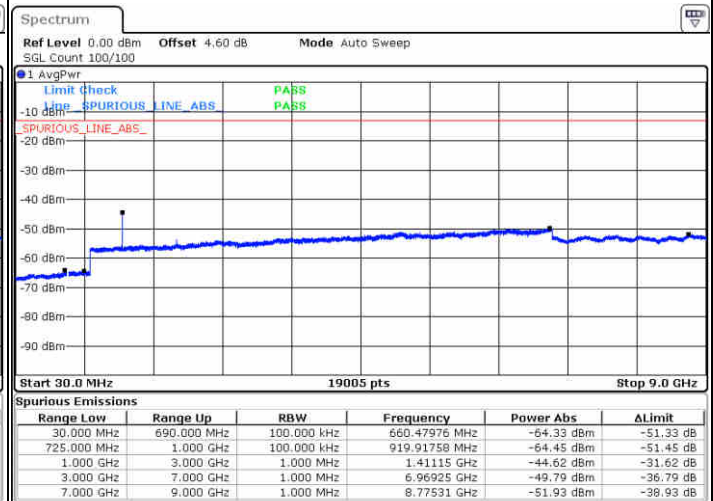
Date: 26 JUN 2020 02:57:54

Middle Channel / QPSK



Date: 26 JUN 2020 02:59:43

Middle Channel / 16QAM

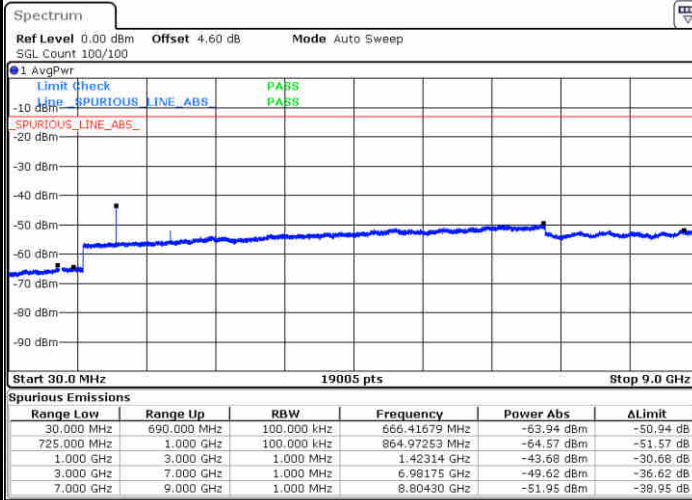


Date: 26 JUN 2020 02:58:48



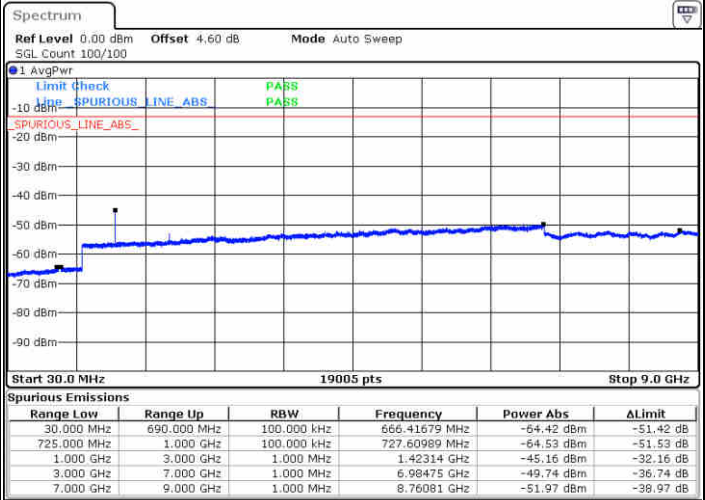
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 26 JUN 2020 03:00:37

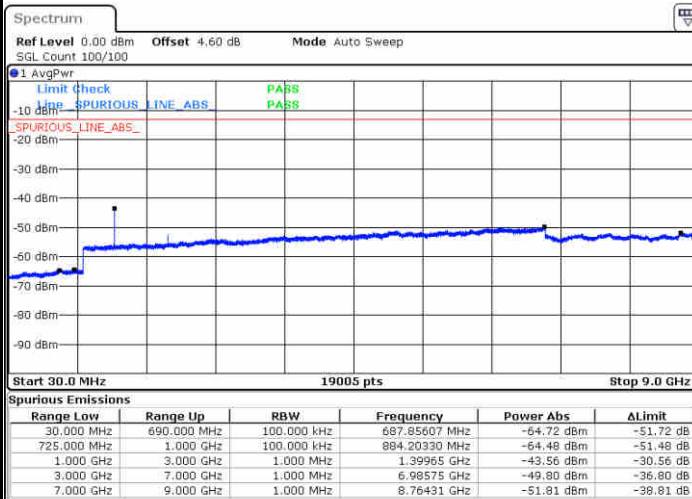
Highest Channel / 16QAM



Date: 26 JUN 2020 03:01:31

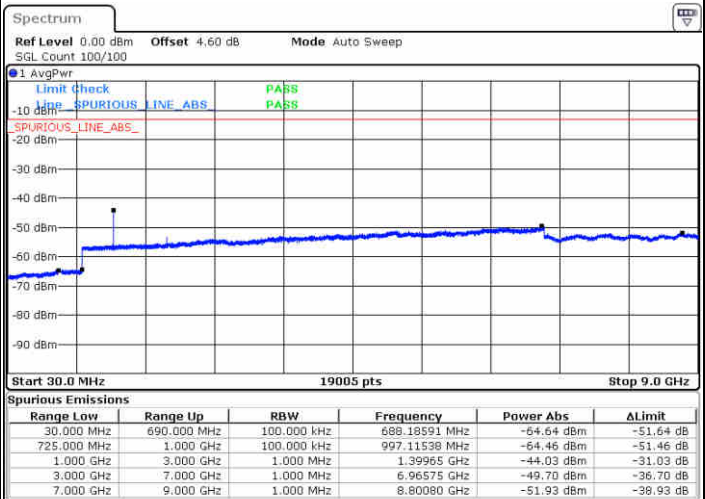
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 26 JUN 2020 03:13:25

Lowest Channel / 16QAM

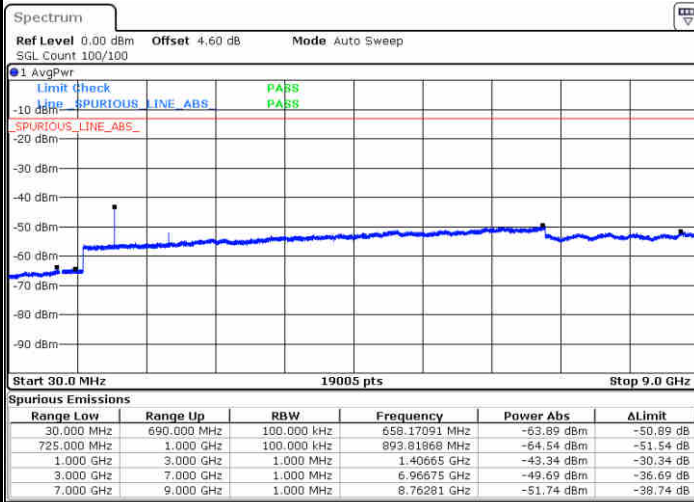


Date: 26 JUN 2020 03:14:19



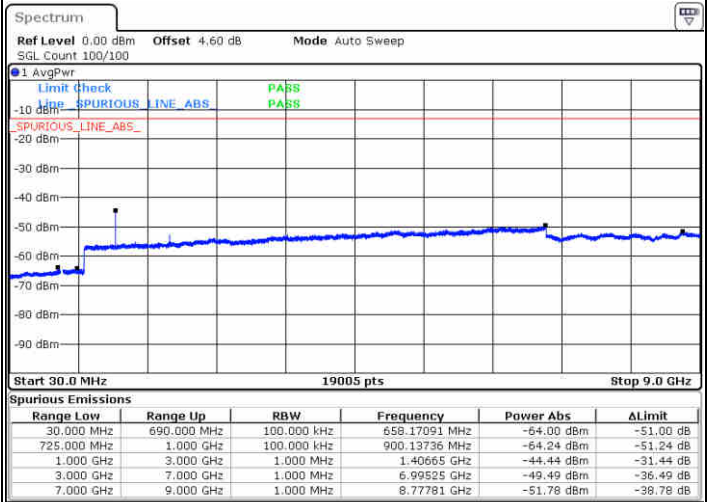
LTE Band 12 / 10MHz

Middle Channel / QPSK



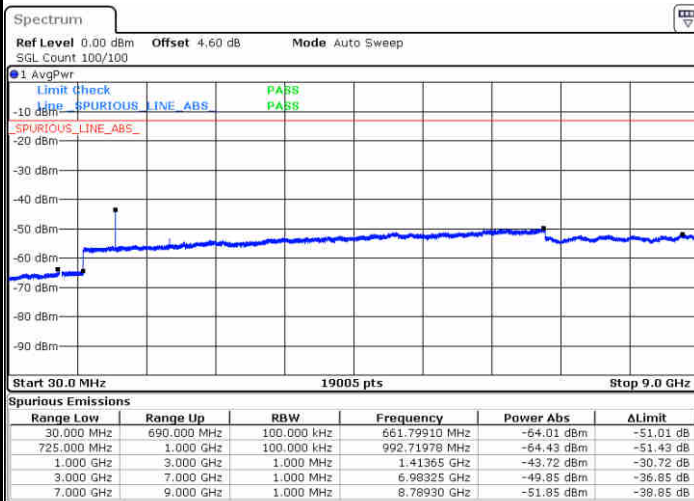
Date: 26 JUN 2020 03:16:08

Middle Channel / 16QAM



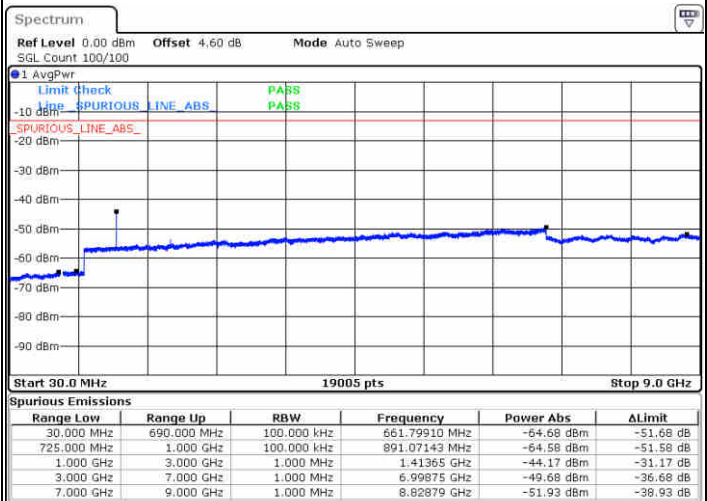
Date: 26 JUN 2020 03:15:14

Highest Channel / QPSK



Date: 26 JUN 2020 03:17:02

Highest Channel / 16QAM

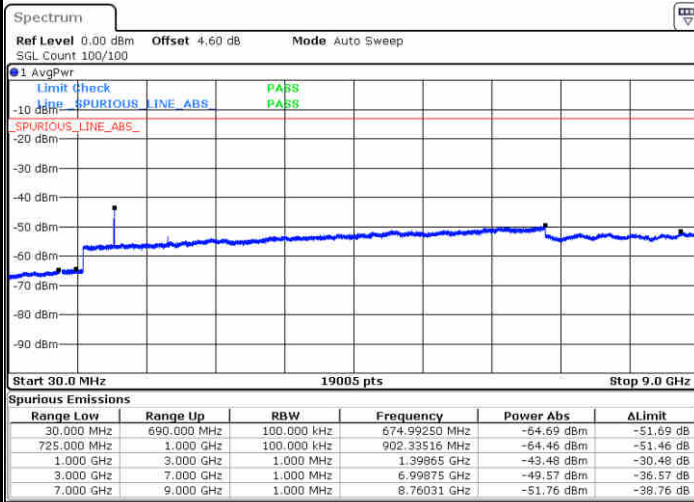


Date: 26 JUN 2020 03:17:57



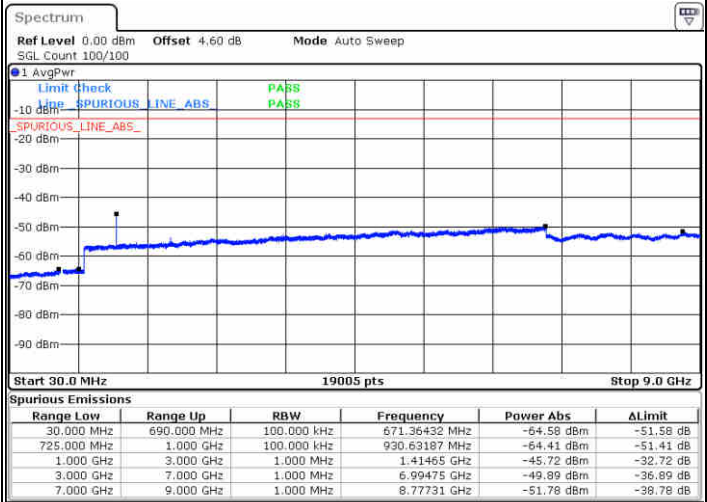
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



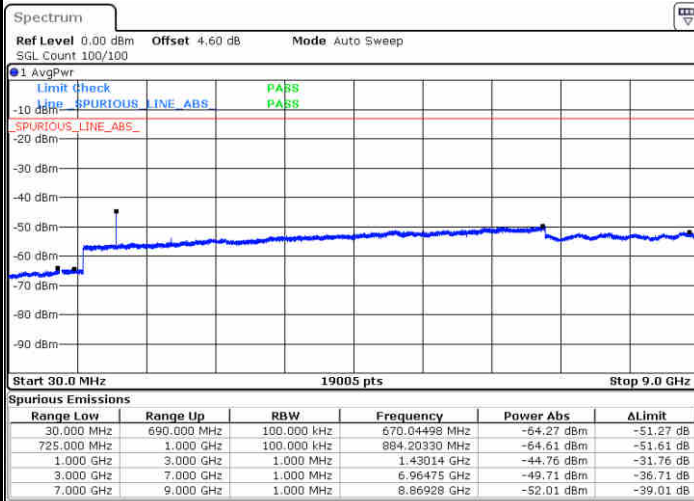
Date: 26 JUN 2020 03:33:20

Middle Channel / 64QAM



Date: 26 JUN 2020 03:34:14

Highest Channel / 64QAM

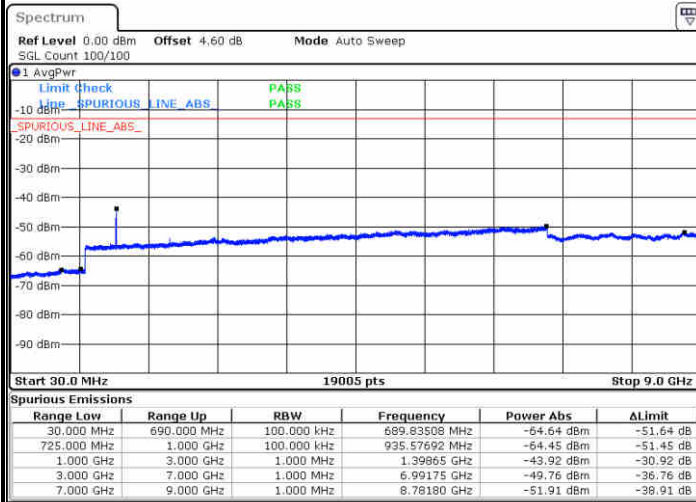


Date: 26 JUN 2020 03:35:08



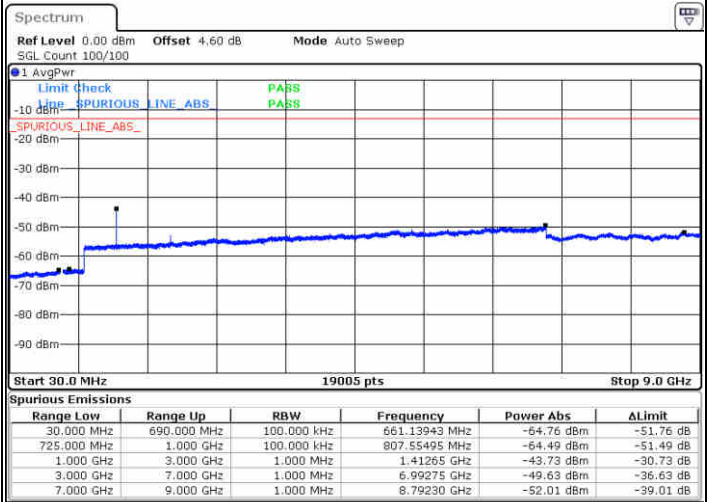
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



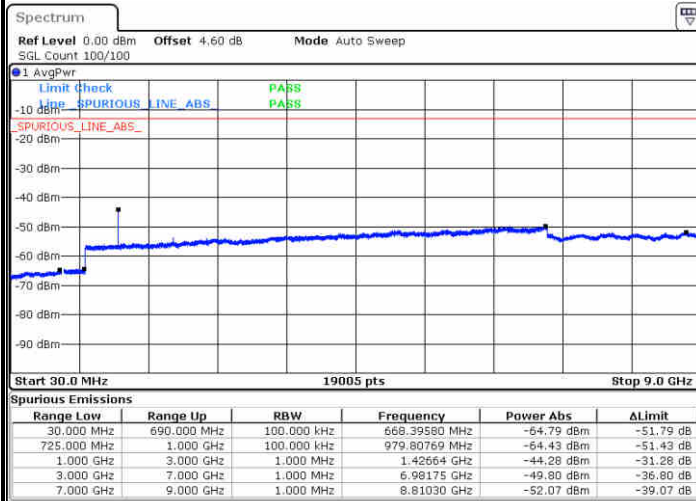
Date: 26 JUN 2020 03:36:03

Middle Channel / 64QAM



Date: 26 JUN 2020 03:36:57

Highest Channel / 64QAM

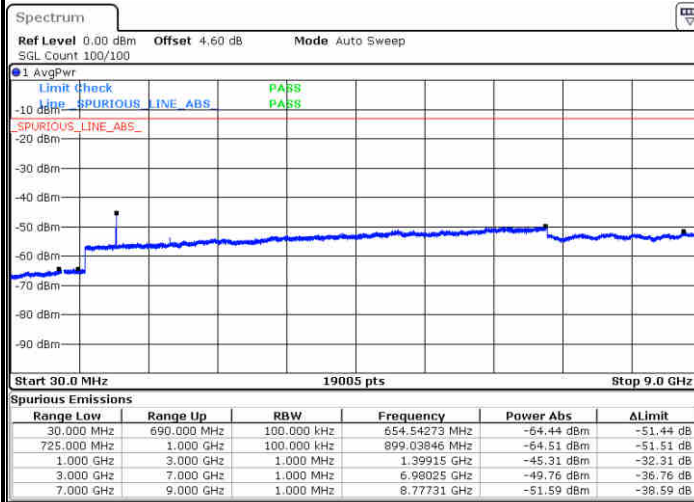


Date: 26 JUN 2020 03:37:51



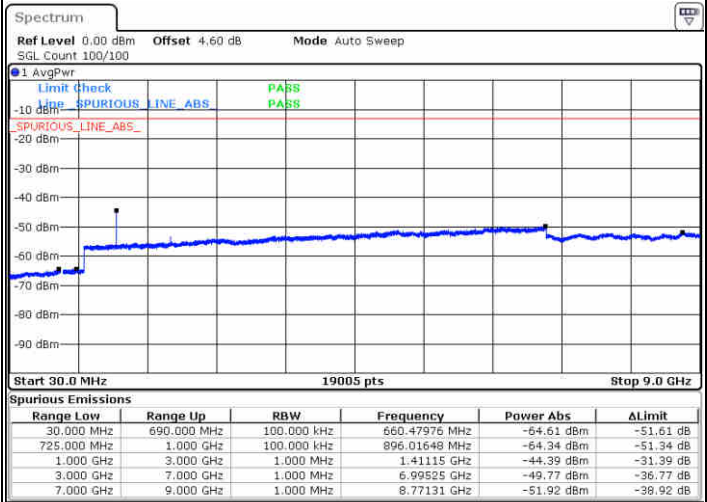
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



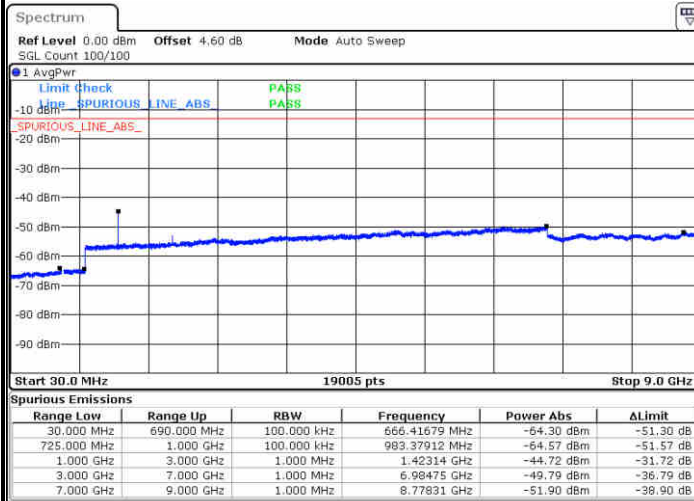
Date: 26 JUN 2020 03:49:45

Middle Channel / 64QAM



Date: 26 JUN 2020 03:50:39

Highest Channel / 64QAM

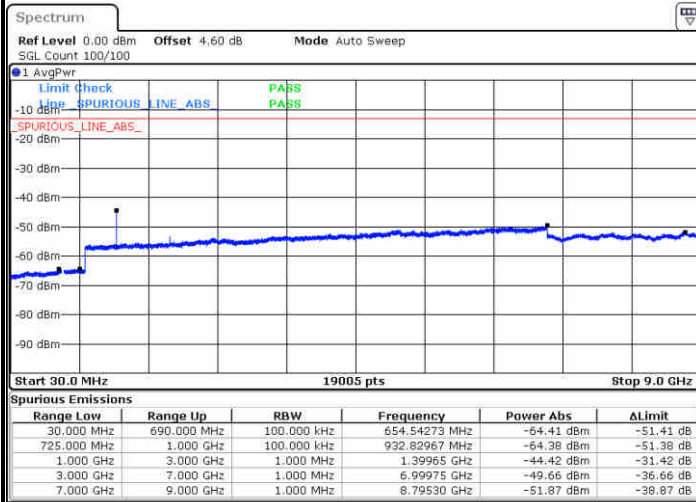


Date: 26 JUN 2020 03:51:33



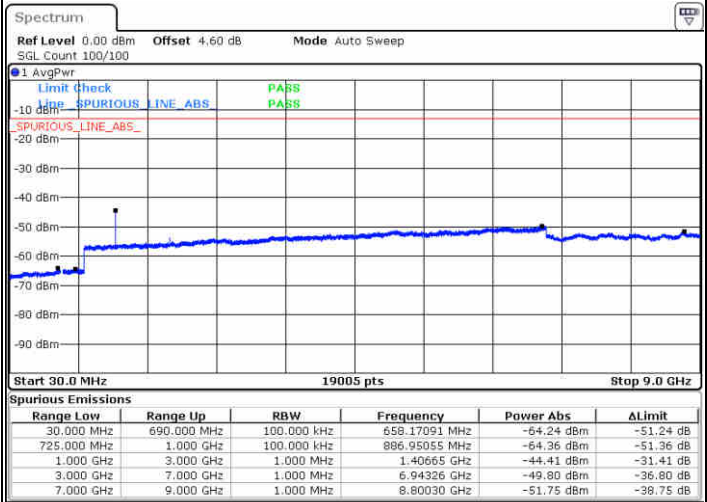
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



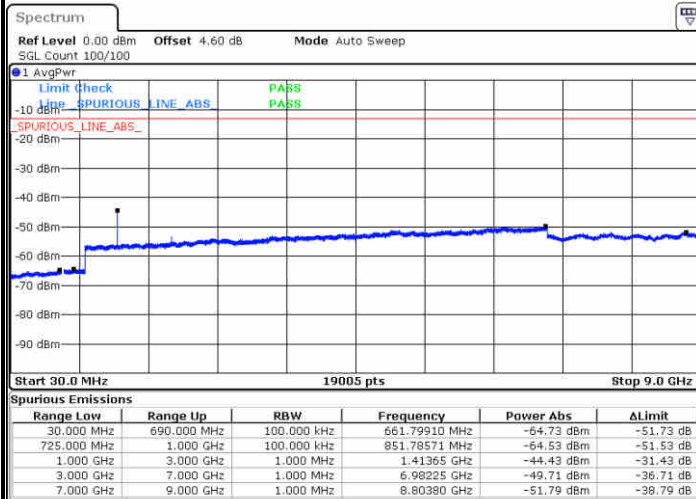
Date: 26 JUN 2020 03:52:27

Middle Channel / 64QAM



Date: 26 JUN 2020 03:53:22

Highest Channel / 64QAM



Date: 26 JUN 2020 03:54:16

**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	0.0022	PASS
40	Normal Voltage	0.0038	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0026	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0019	
20	Maximum Voltage	0.0038	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0044	

Note:

1. Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

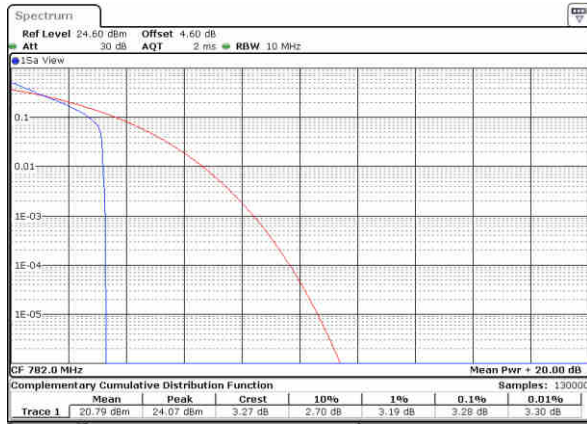
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.28	4.84	4.29	5.91	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.43	5.83	-	-	
Highest CH	-	-	-	-	



LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 26 JUN 2020 04:44:05

Middle Channel / Full RB



Date: 26 JUN 2020 04:44:33

LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 26 JUN 2020 04:44:14

Middle Channel / Full RB



Date: 26 JUN 2020 04:44:23

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 26 JUN 2020 05:13:18

Middle Channel / Full RB



Date: 26 JUN 2020 05:13:30

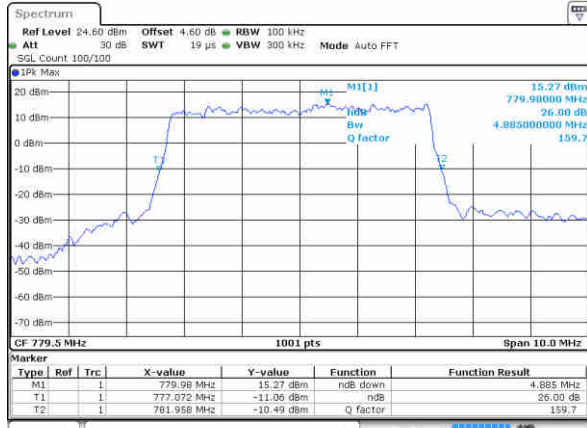
**26dB Bandwidth**

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	-	-	-	-	4.89	4.86	-	-	-	-	-	-
Middle CH	-	-	-	-	4.77	4.85	9.79	9.77	-	-	-	-
Highest CH	-	-	-	-	4.88	4.87	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.84	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.84	-	9.77	-	-	-	-	-
Highest CH	-	-	-	-	4.95	-	-	-	-	-	-	-

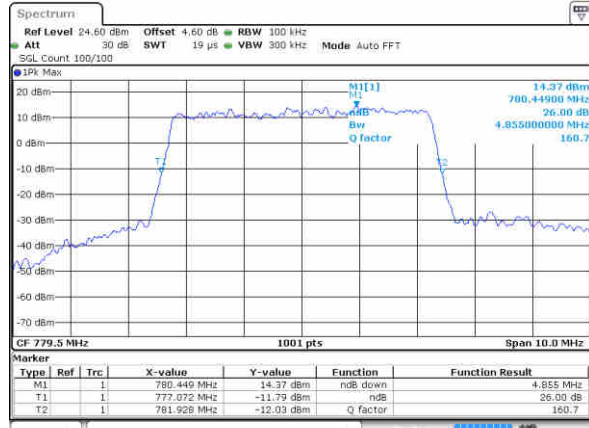


LTE Band 13

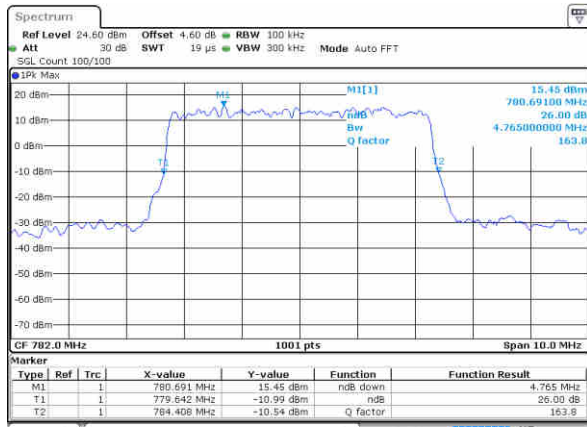
Lowest Channel / 5MHz / QPSK



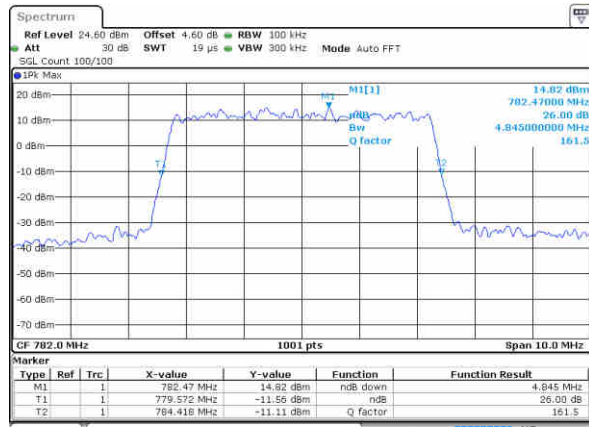
Lowest Channel / 5MHz / 16QAM



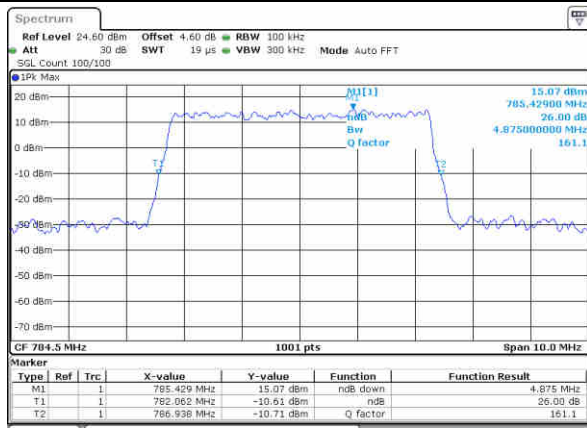
Middle Channel / 5MHz / QPSK



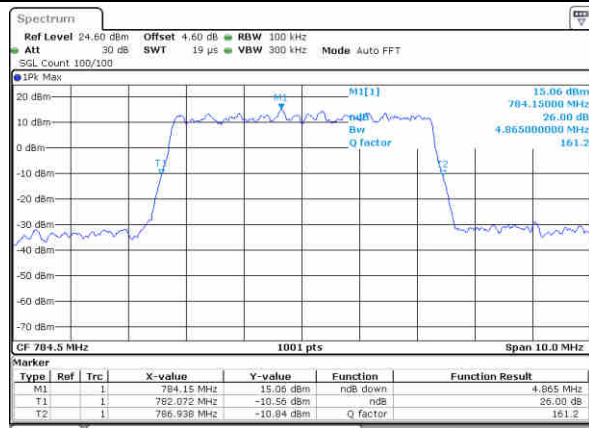
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



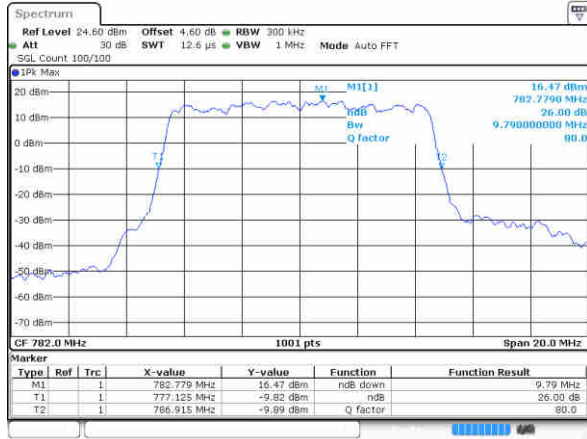
Highest Channel / 5MHz / 16QAM



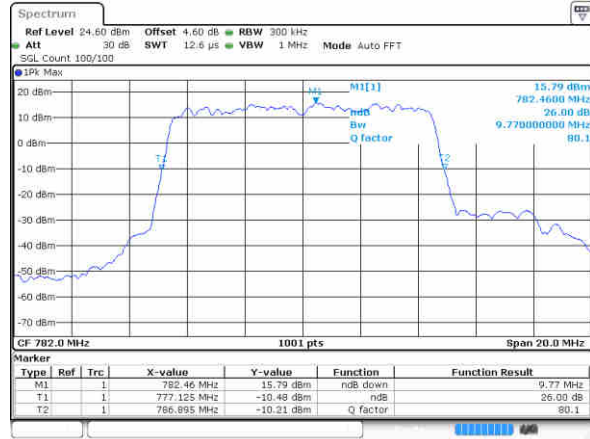


LTE Band 13

Middle Channel / 10MHz / QPSK



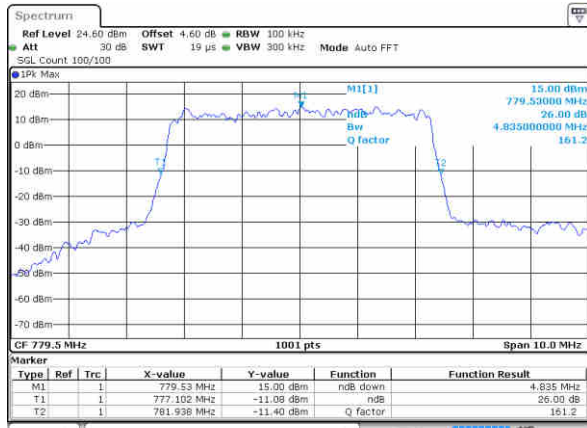
Middle Channel / 10MHz / 16QAM





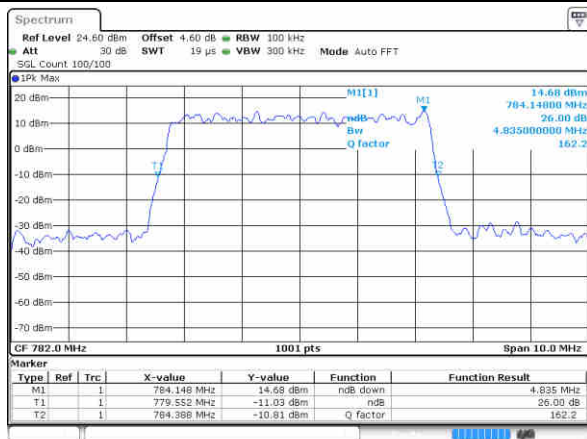
LTE Band 13

Lowest Channel / 5MHz / 64QAM



Date: 26 JUN 2020 04:45:13

Middle Channel / 5MHz / 64QAM



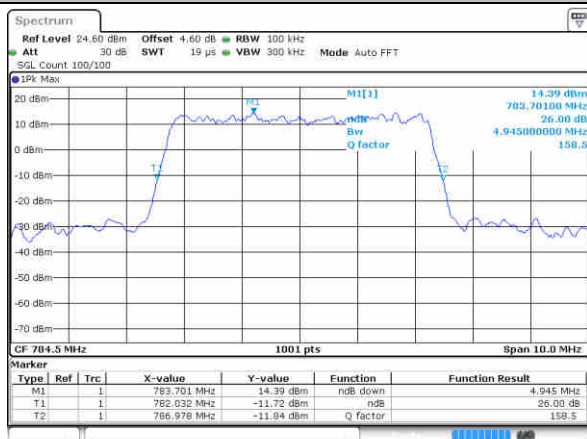
Date: 26 JUN 2020 04:45:23

Middle Channel / 10MHz / 64QAM



Date: 26 JUN 2020 04:55:06

Highest Channel / 5MHz / 64QAM



Date: 26 JUN 2020 04:45:33

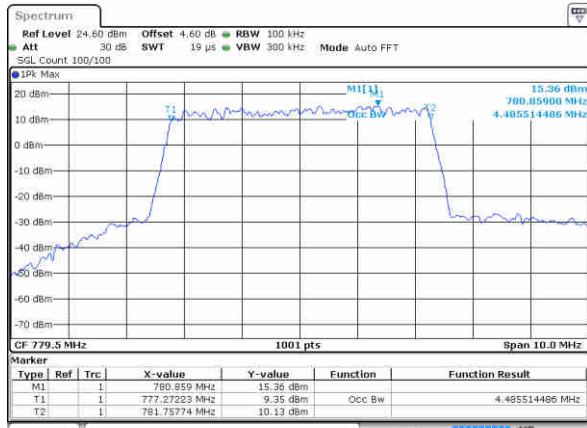
**Occupied Bandwidth**

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	-	-	-	-	4.49	4.50	-	-	-	-	-	-
Middle CH	-	-	-	-	4.47	4.50	8.99	8.97	-	-	-	-
Highest CH	-	-	-	-	4.48	4.50	-	-	-	-	-	-
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	-	-	-	-	4.50	-	8.99	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-



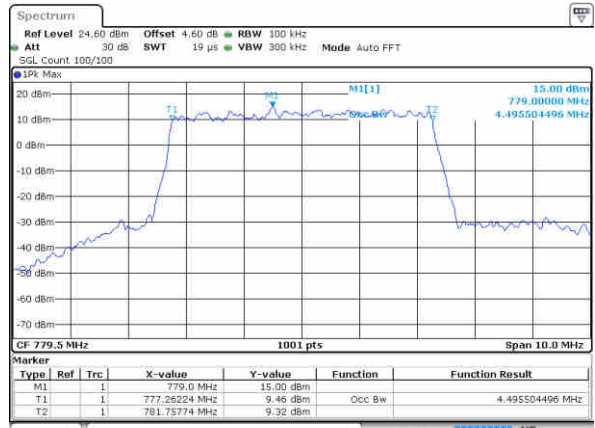
LTE Band 13

Lowest Channel / 5MHz / QPSK



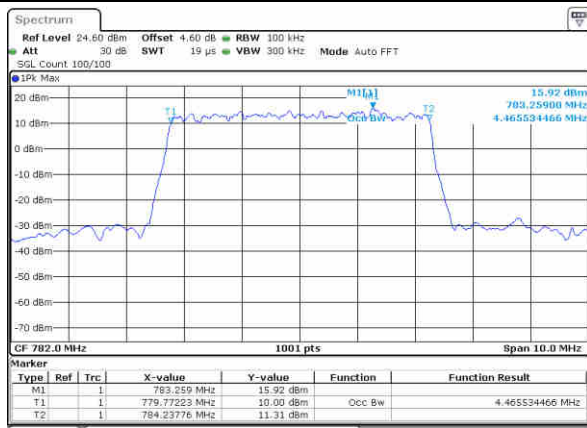
Date: 26 JUN 2020 04:11:17

Lowest Channel / 5MHz / 16QAM



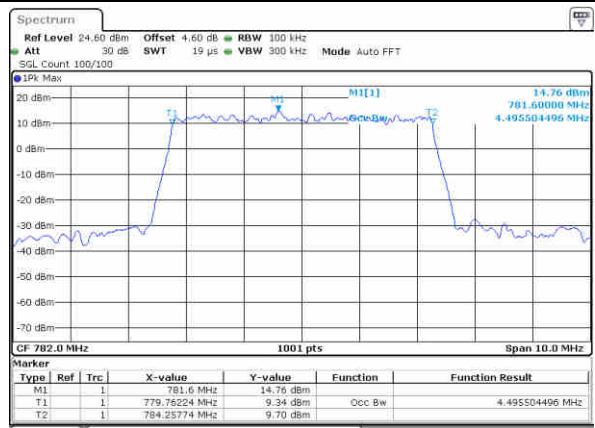
Date: 26 JUN 2020 04:11:07

Middle Channel / 5MHz / QPSK



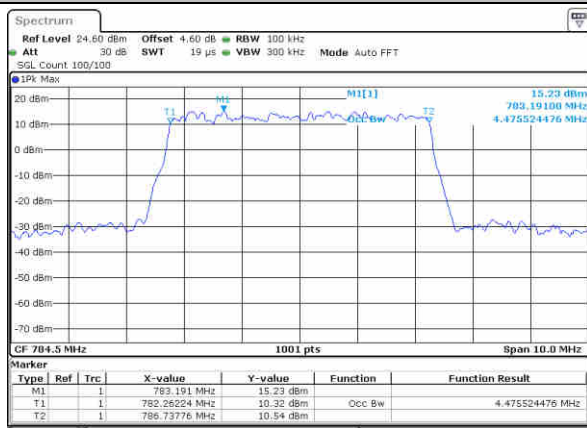
Date: 26 JUN 2020 04:20:48

Middle Channel / 5MHz / 16QAM



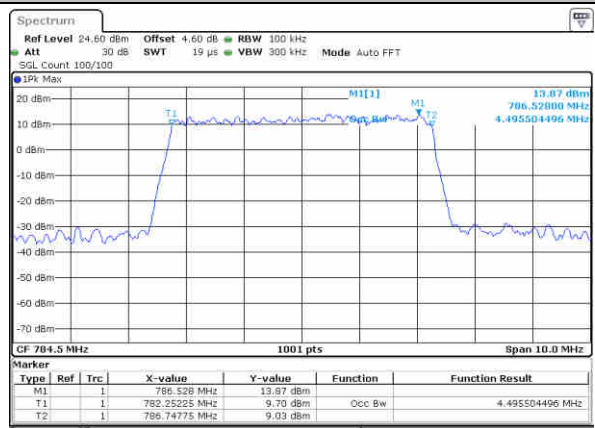
Date: 26 JUN 2020 04:20:56

Highest Channel / 5MHz / QPSK



Date: 26 JUN 2020 04:23:14

Highest Channel / 5MHz / 16QAM

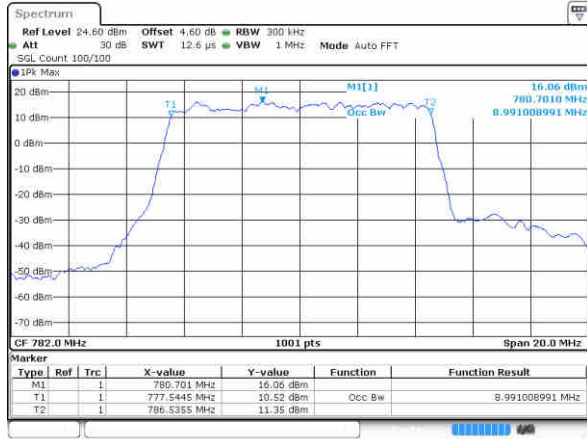


Date: 26 JUN 2020 04:23:24

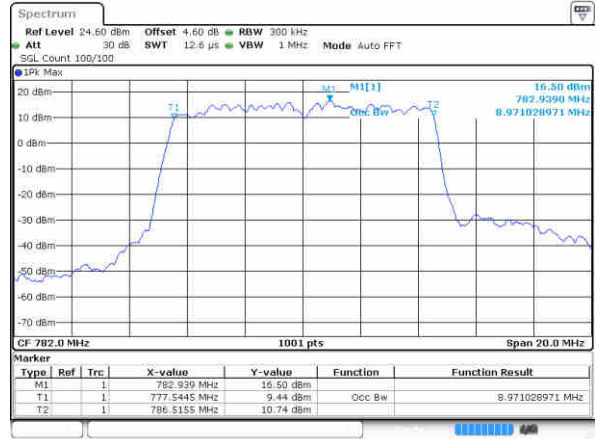


LTE Band 13

Middle Channel / 10MHz / QPSK



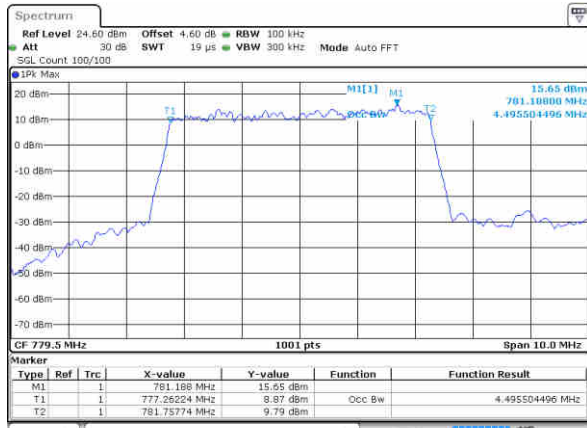
Middle Channel / 10MHz / 16QAM



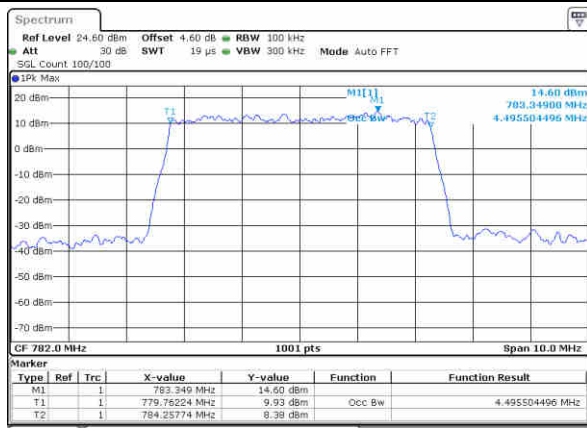


LTE Band 13

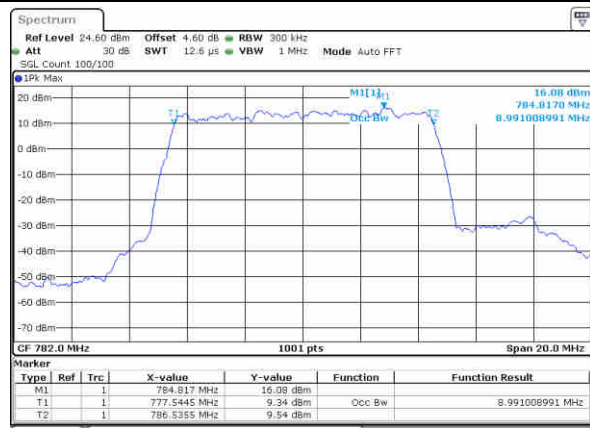
Lowest Channel / 5MHz / 64QAM



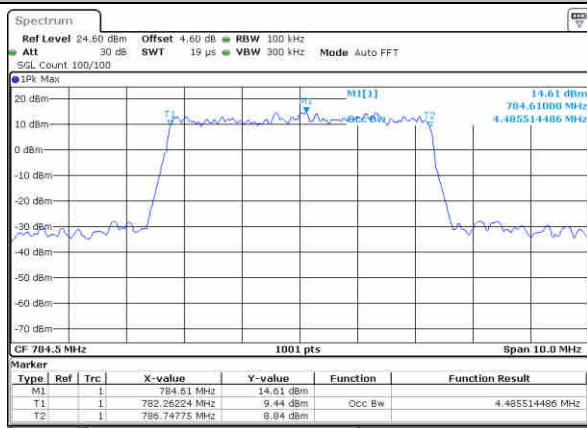
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



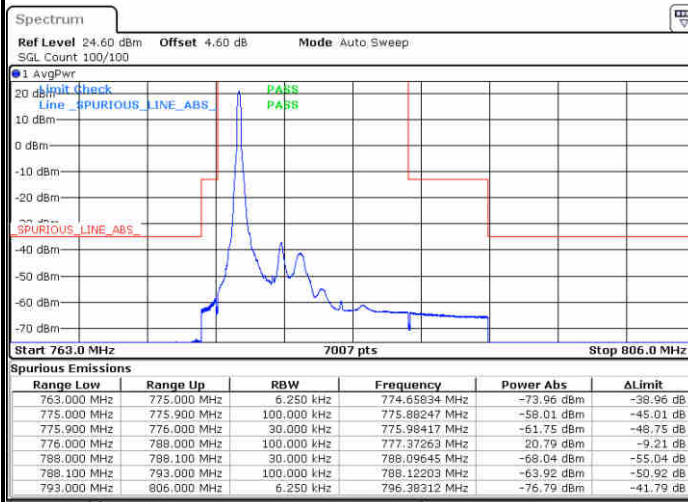


Conducted Band Edge



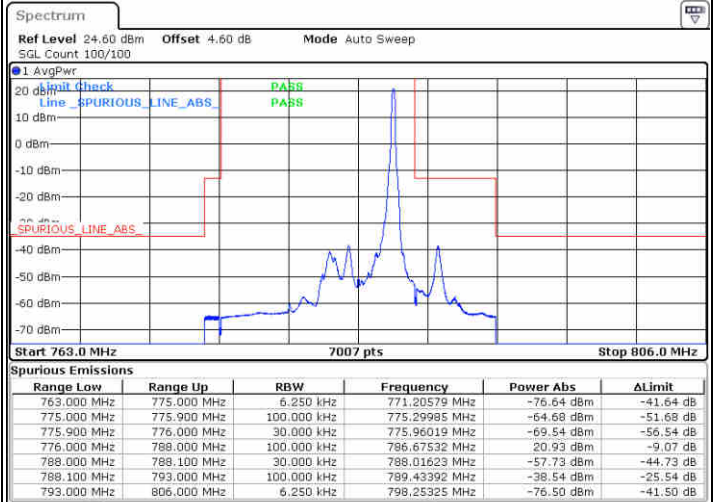
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



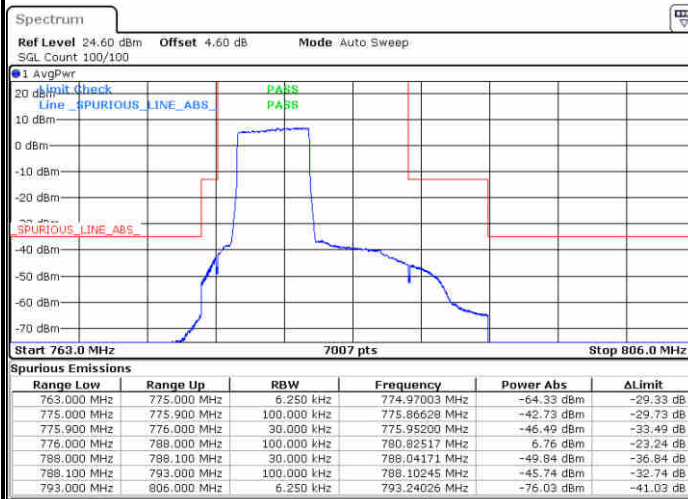
Date: 26 JUN 2020 04:16:50

Highest Band Edge / 1 RB



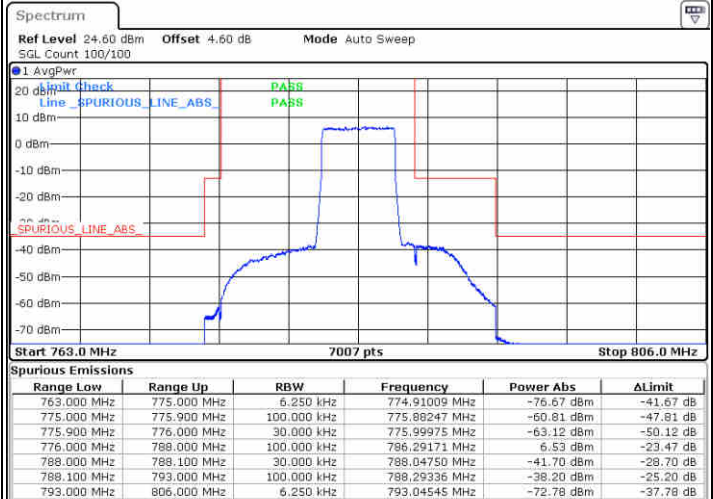
Date: 26 JUN 2020 04:28:17

Lowest Band Edge / Full RB



Date: 26 JUN 2020 04:15:13

Highest Band Edge / Full RB

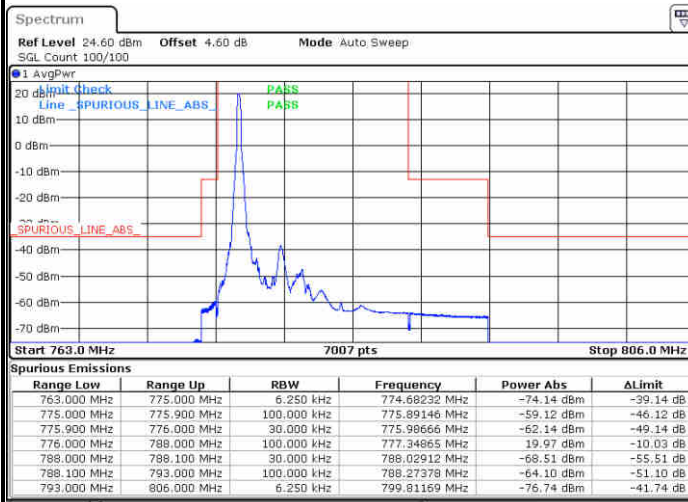


Date: 26 JUN 2020 04:26:40

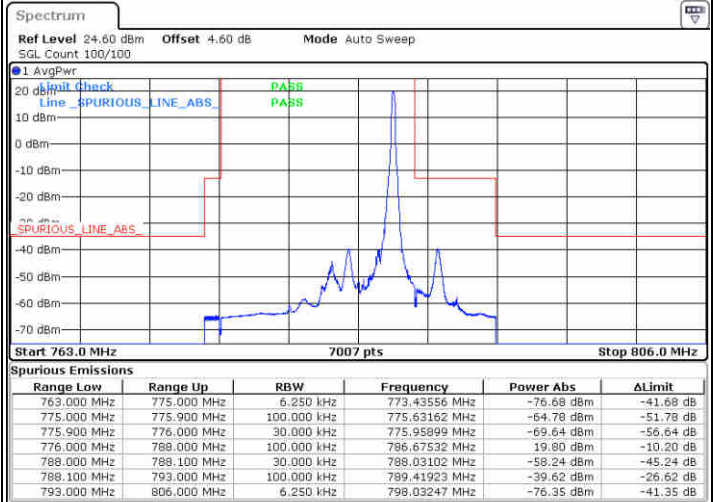


LTE Band 13 / 5MHz / 16QAM

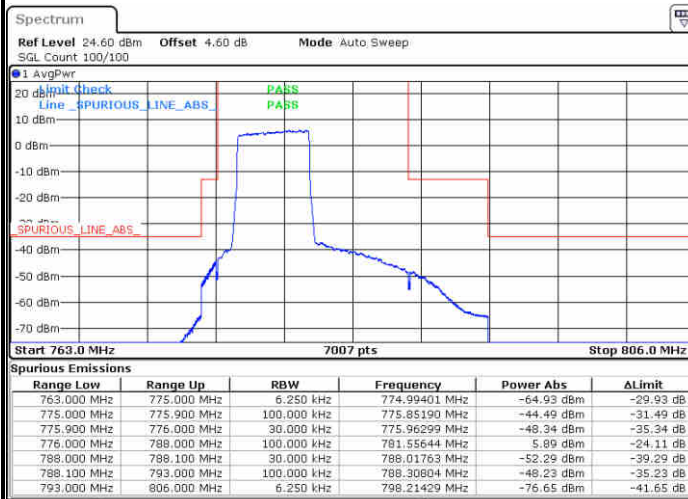
Lowest Band Edge / 1 RB



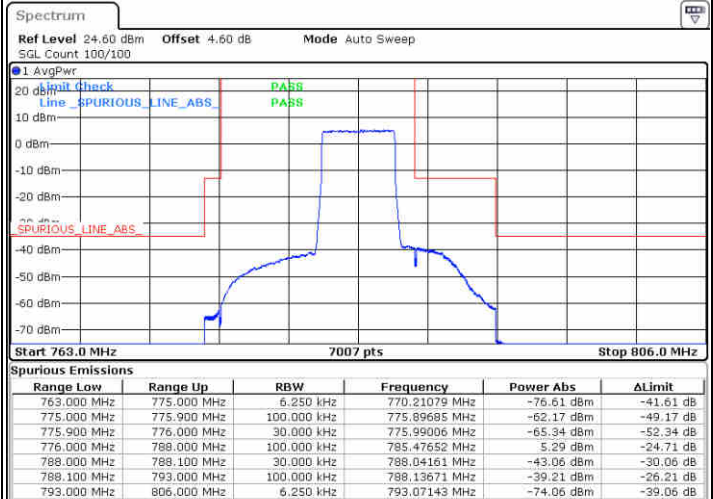
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



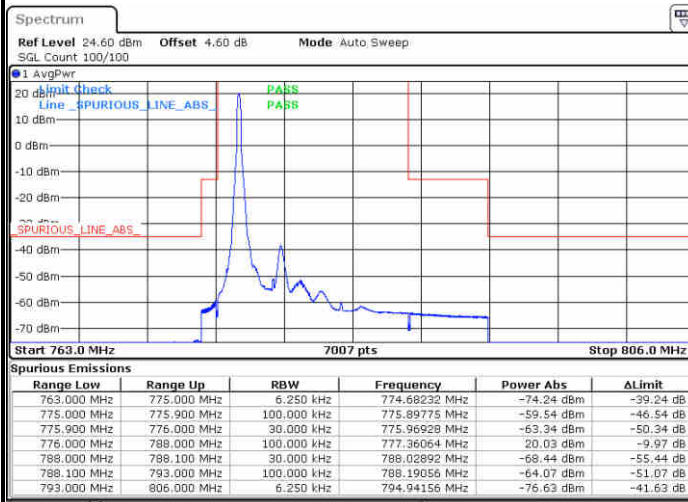
Highest Band Edge / Full RB





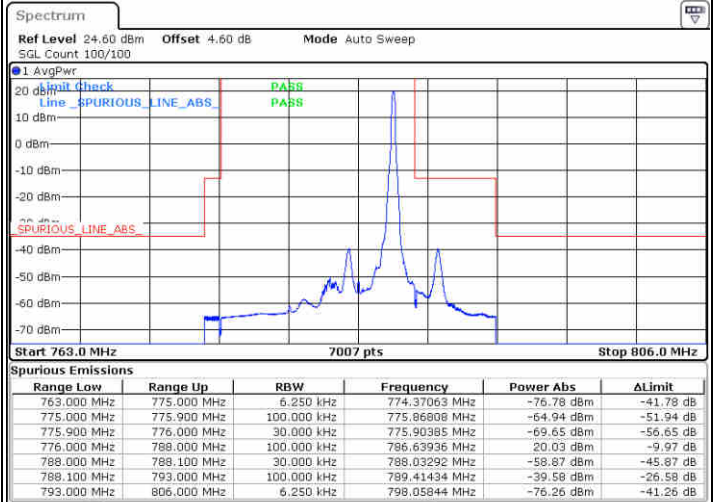
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



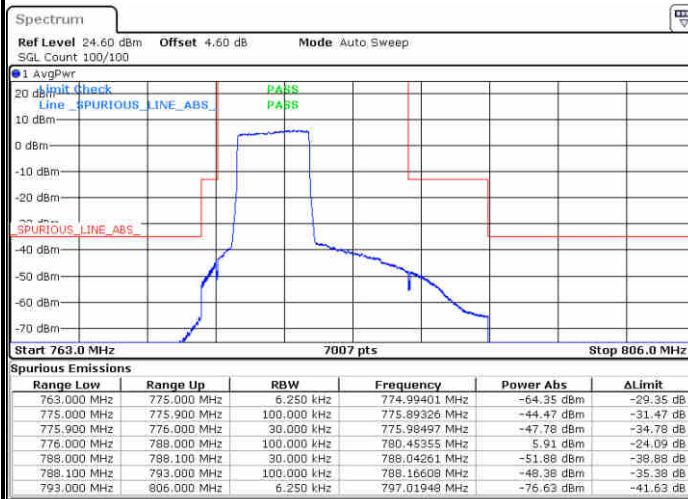
Date: 26 JUN 2020 04:47:11

Highest Band Edge / 1 RB



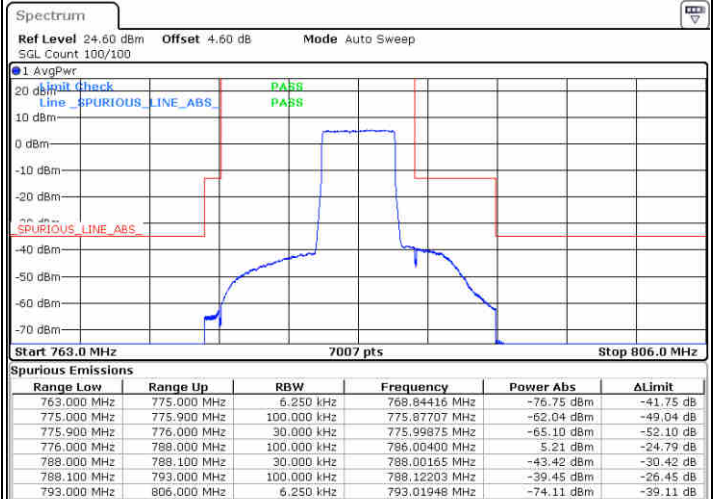
Date: 26 JUN 2020 04:52:04

Lowest Band Edge / Full RB



Date: 26 JUN 2020 04:48:48

Highest Band Edge / Full RB

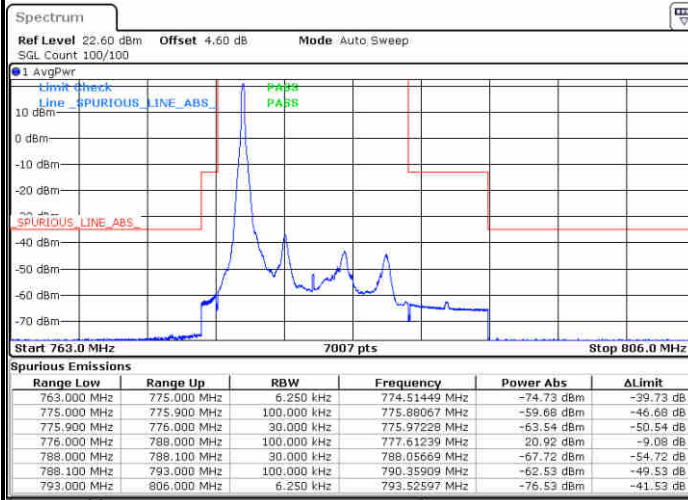


Date: 26 JUN 2020 04:50:26



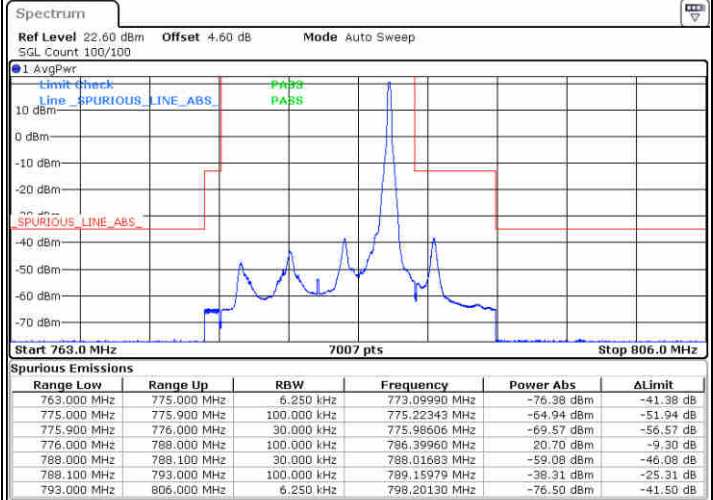
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



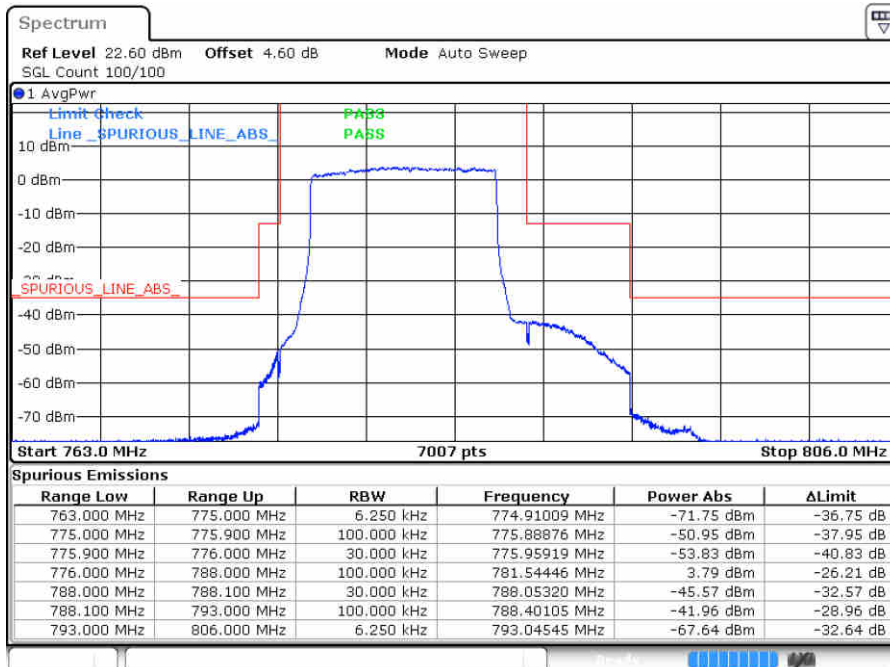
Date: 26 JUN 2020 04:37:27

Highest Band Edge / 1 RB



Date: 26 JUN 2020 04:43:57

Band Edge / Full RB

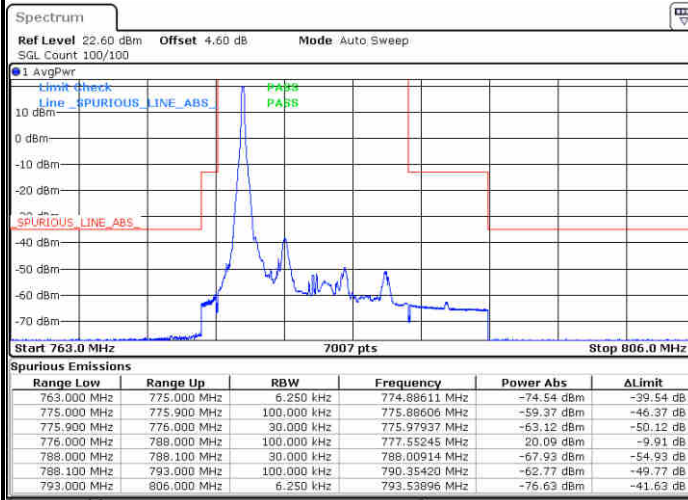


Date: 26 JUN 2020 04:39:04



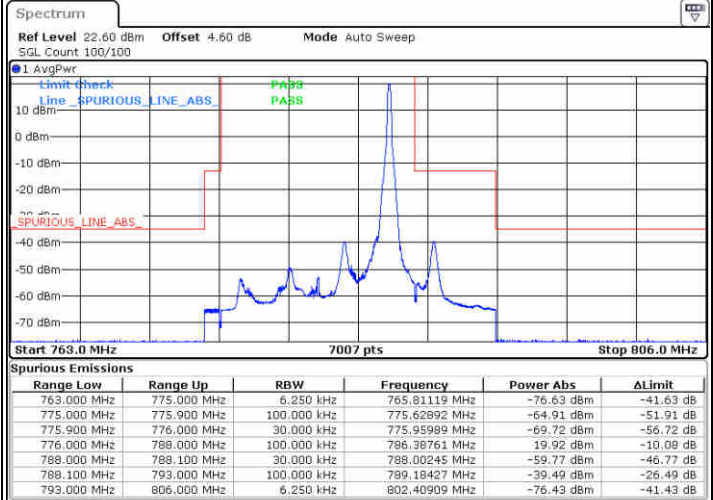
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



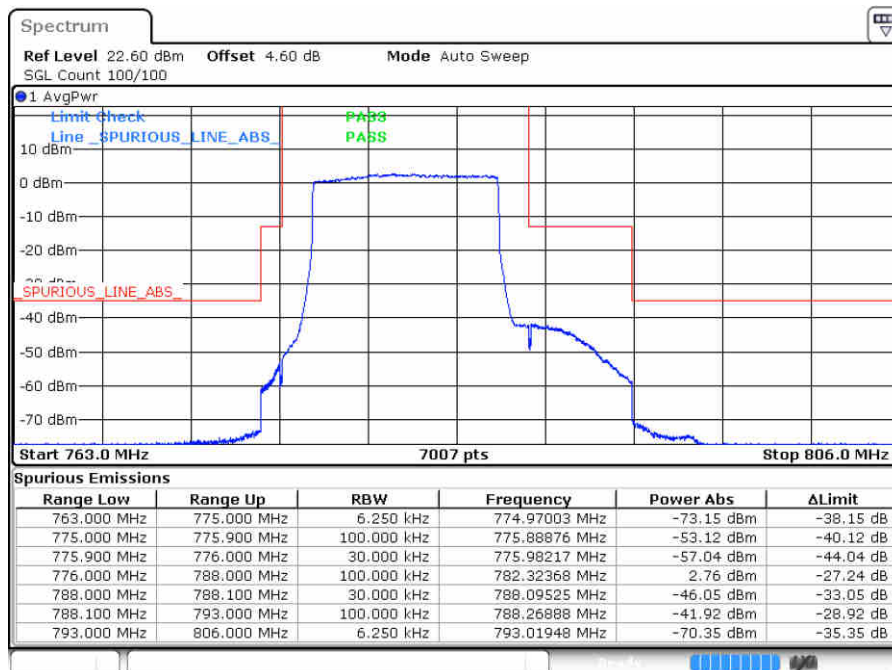
Date: 26 JUN 2020 04:35:49

Highest Band Edge / 1 RB



Date: 26 JUN 2020 04:42:19

Band Edge / Full RB



Date: 26 JUN 2020 04:40:42