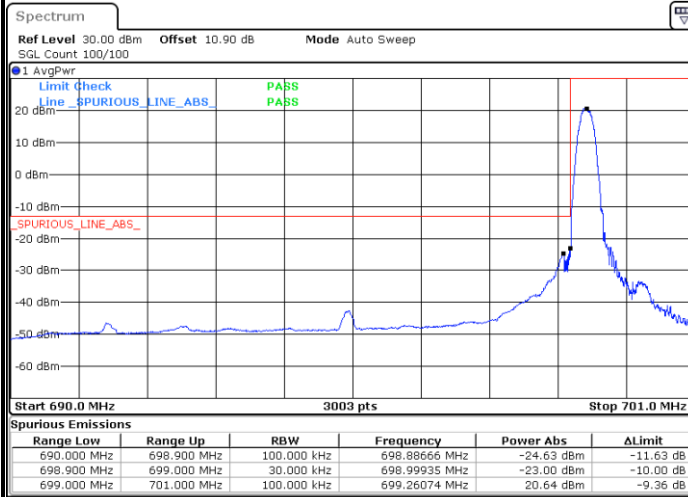




LTE Band 12 / 1.4MHz / 64QAM

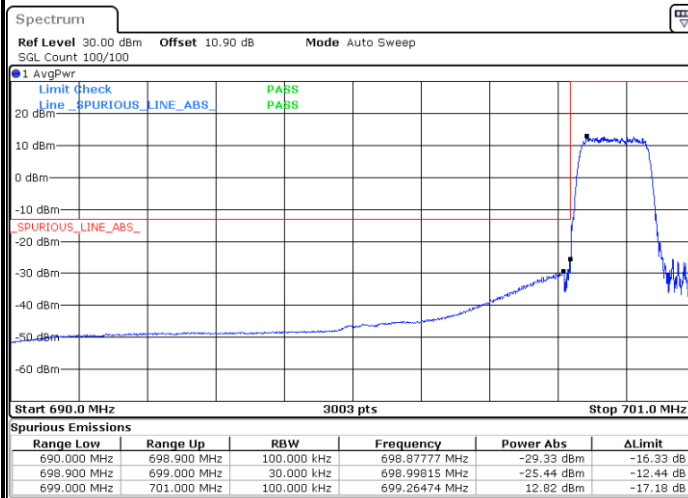
Lowest Band Edge / 1 RB



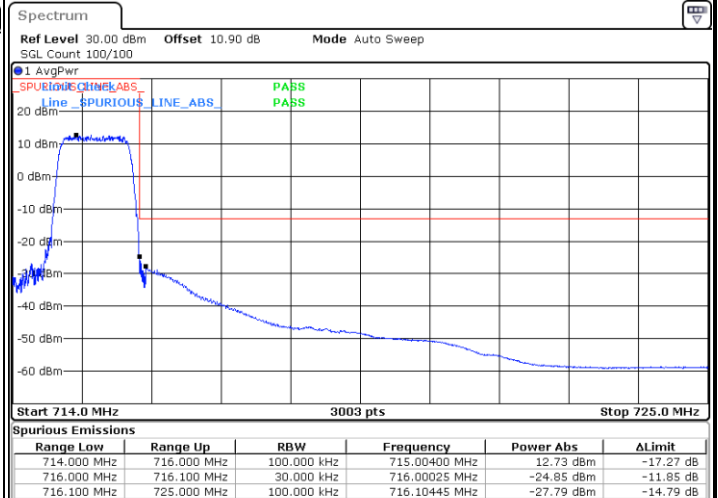
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



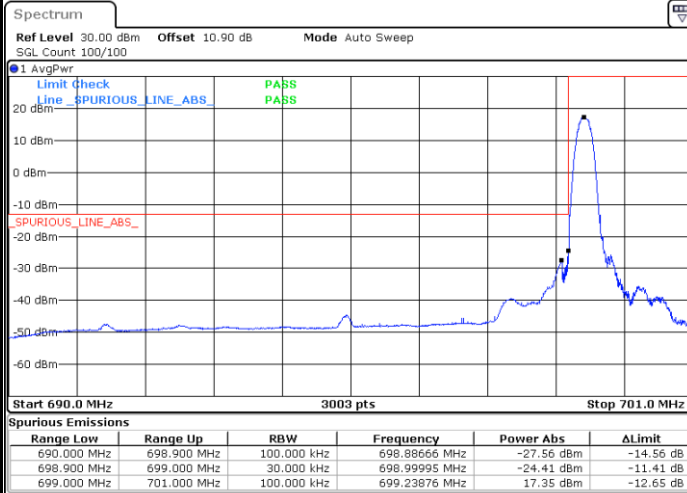
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 256QAM

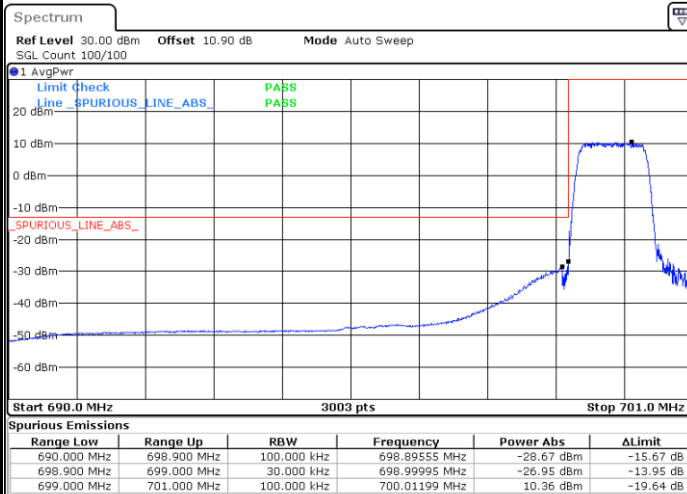
Lowest Band Edge / 1 RB



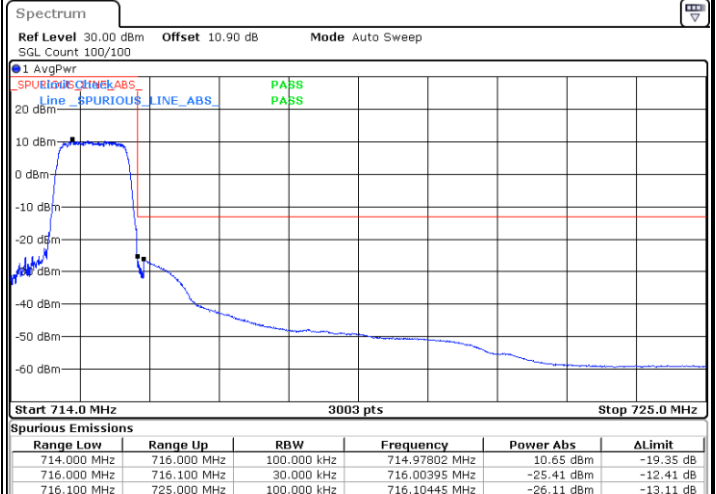
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



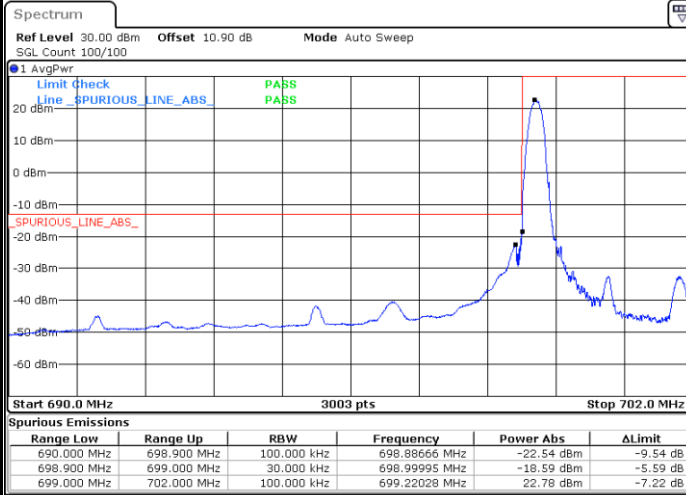
Highest Band Edge / Full RB



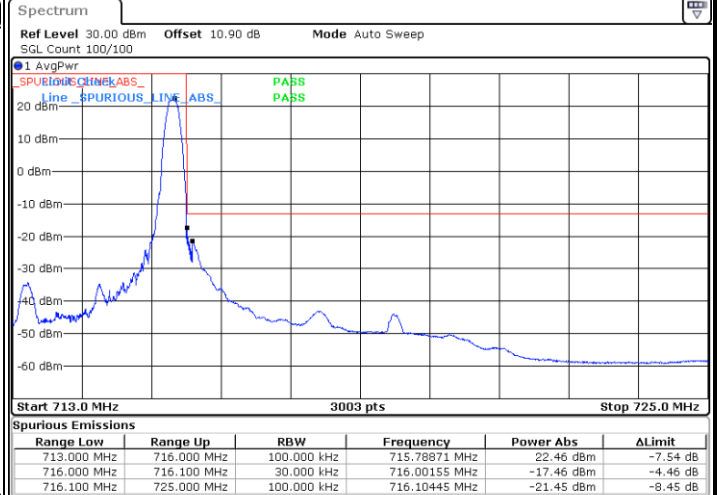


LTE Band 12 / 3MHz / QPSK

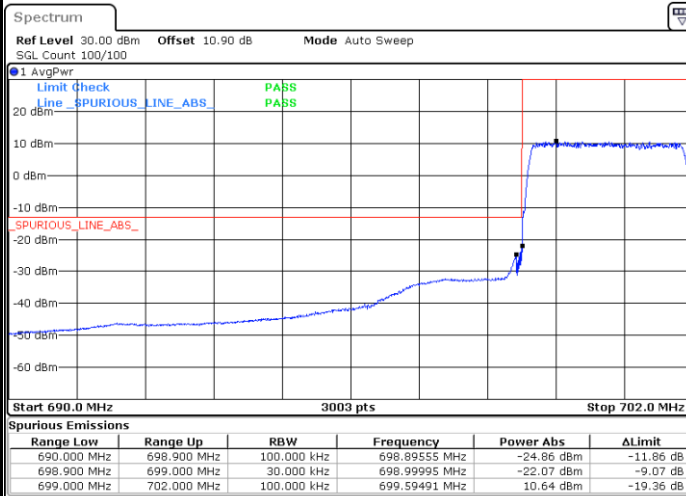
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



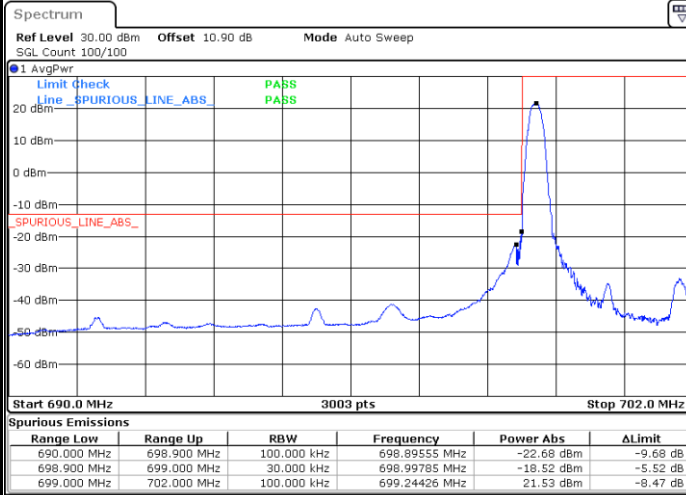
Highest Band Edge / Full RB



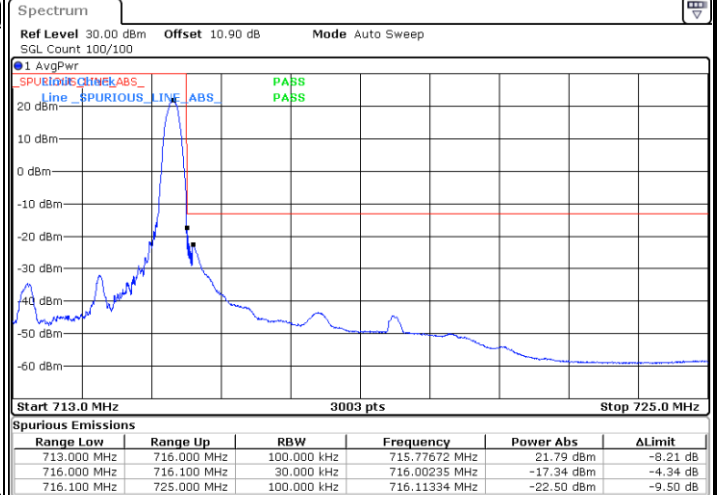


LTE Band 12 / 3MHz / 16QAM

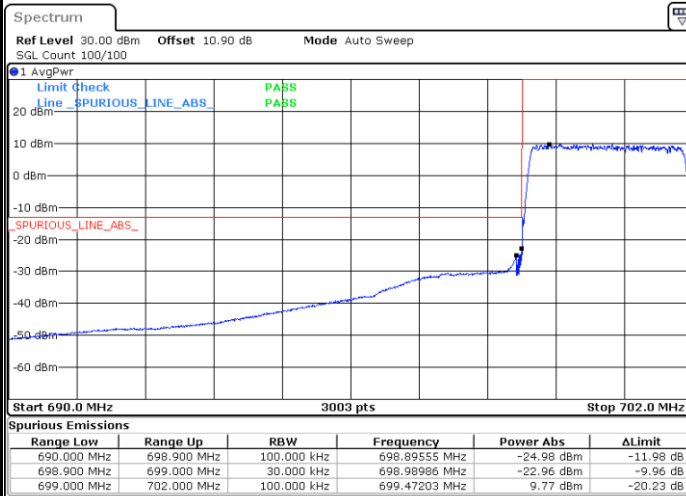
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



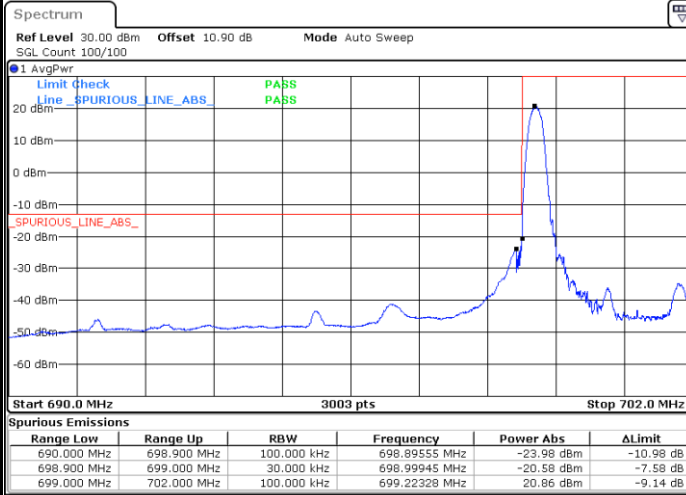
Highest Band Edge / Full RB



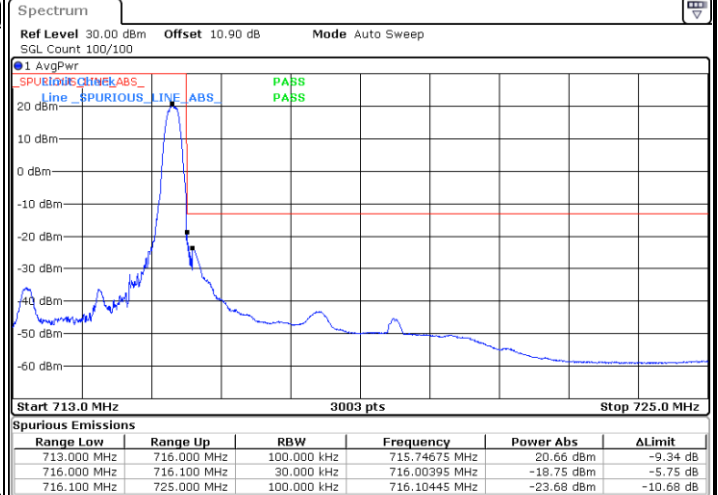


LTE Band 12 / 3MHz / 64QAM

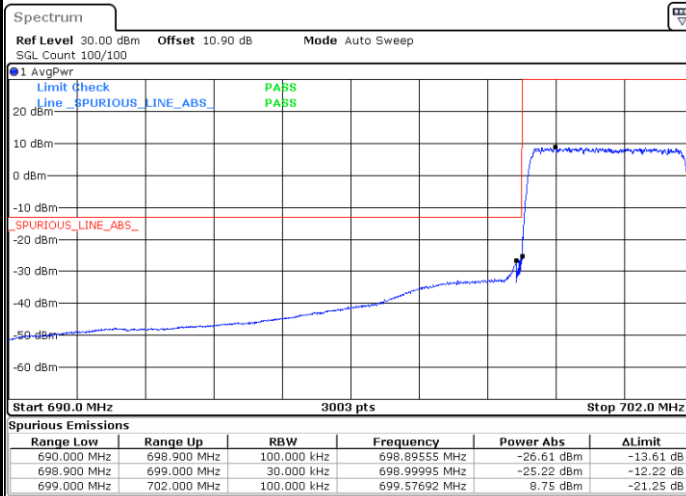
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



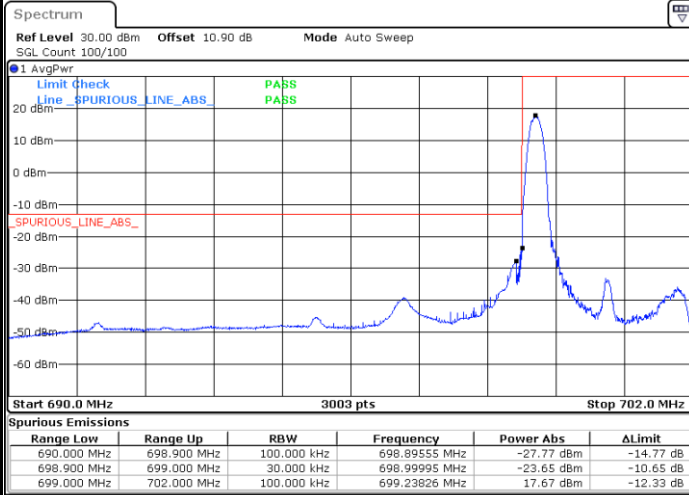
Highest Band Edge / Full RB



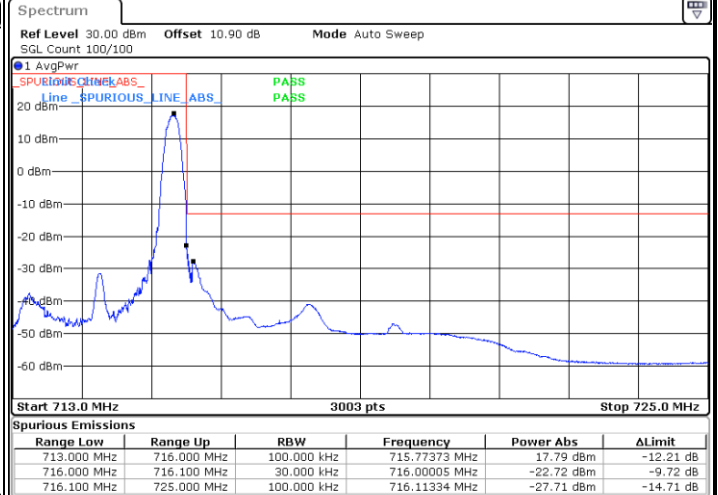


LTE Band 12 / 3MHz / 256QAM

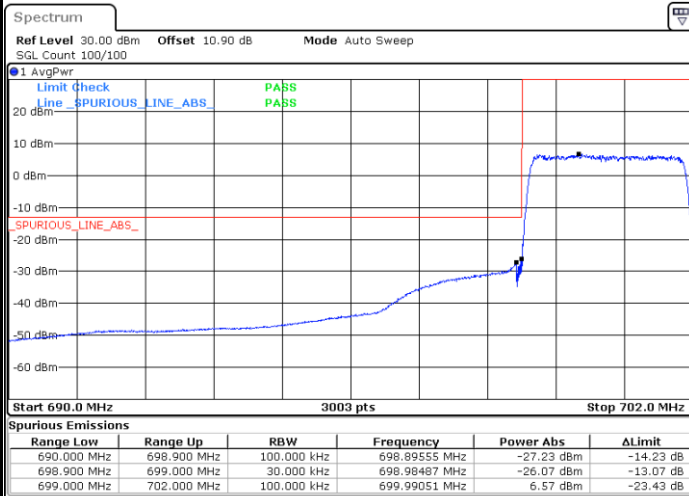
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



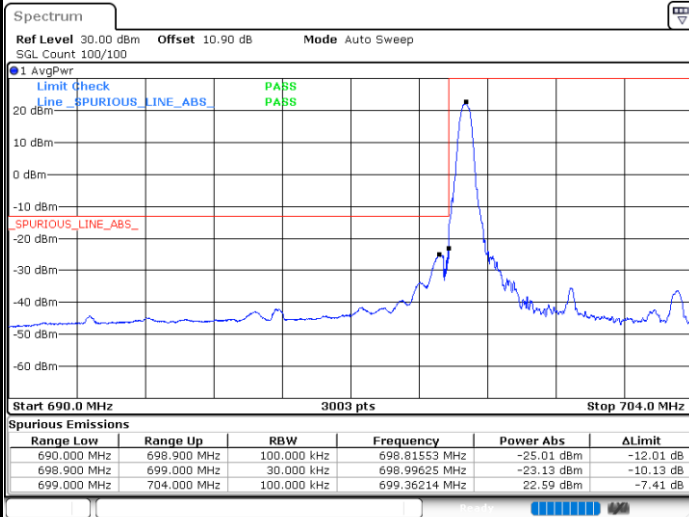
Highest Band Edge / Full RB



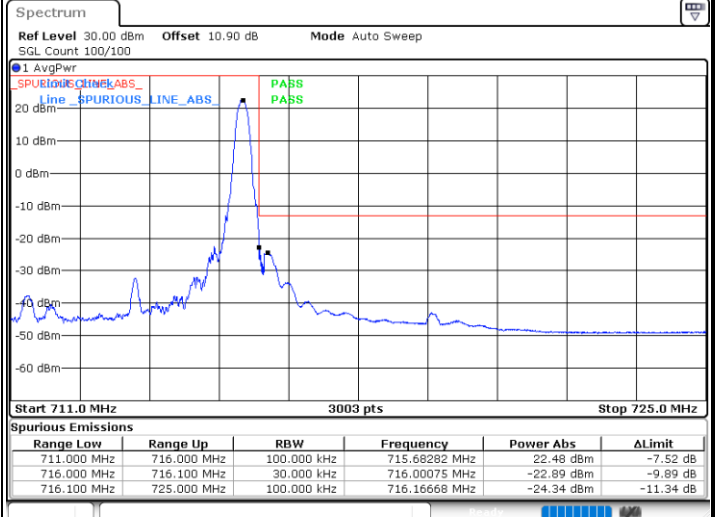


LTE Band 12 / 5MHz / QPSK

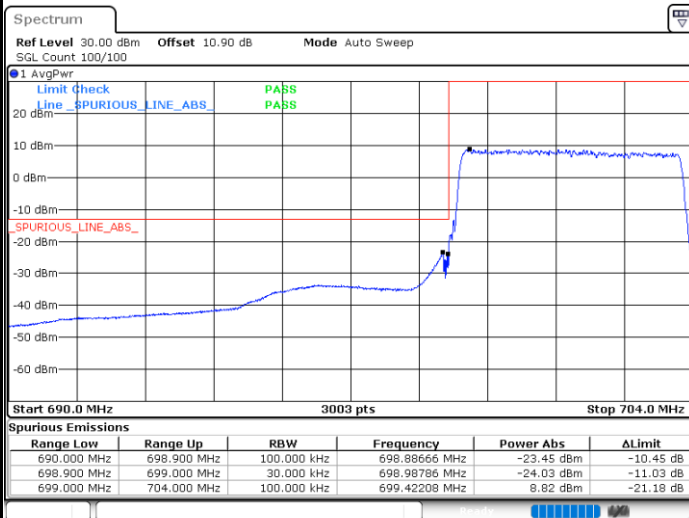
Lowest Band Edge / 1 RB



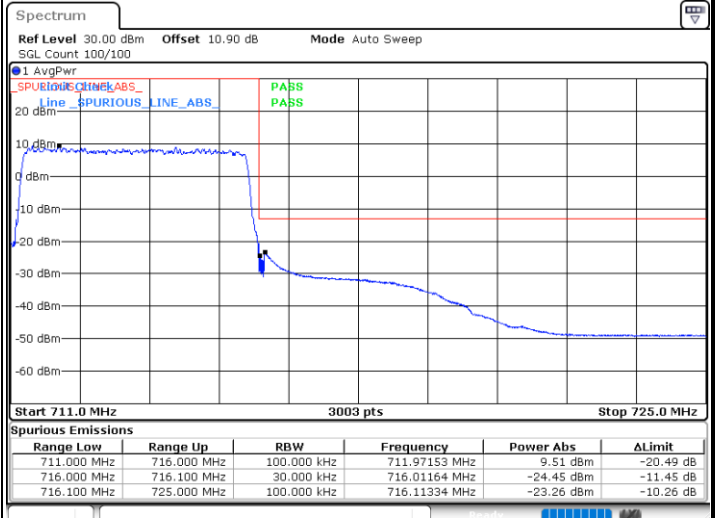
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



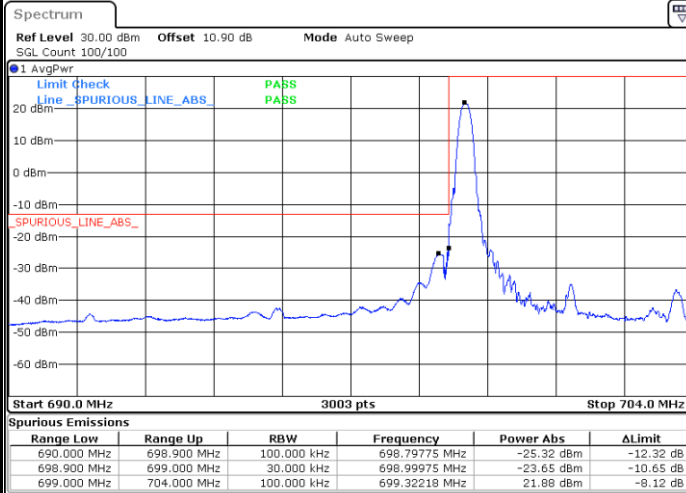
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

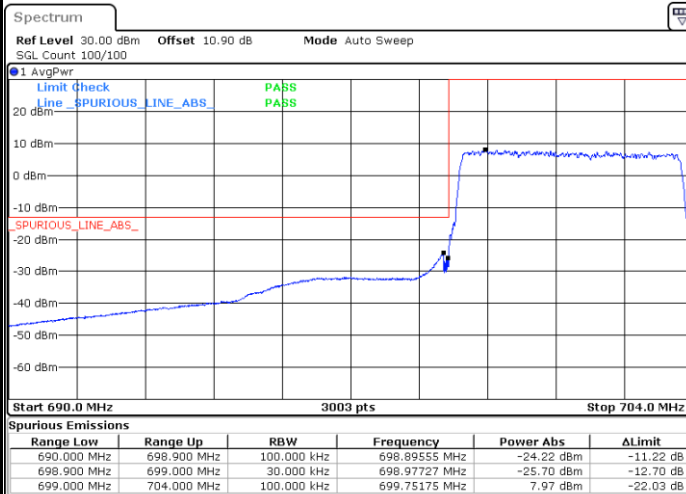
Lowest Band Edge / 1RB



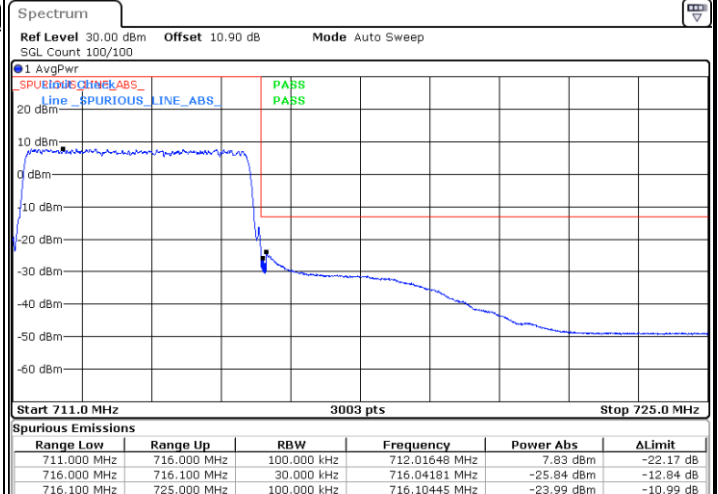
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



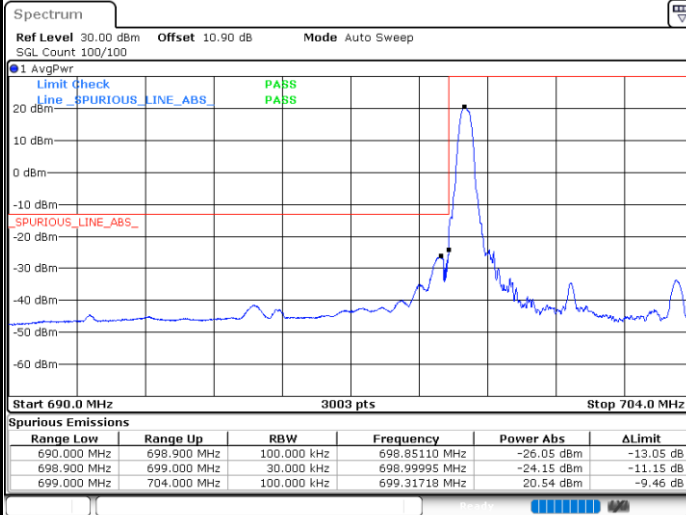
Highest Band Edge / Full RB



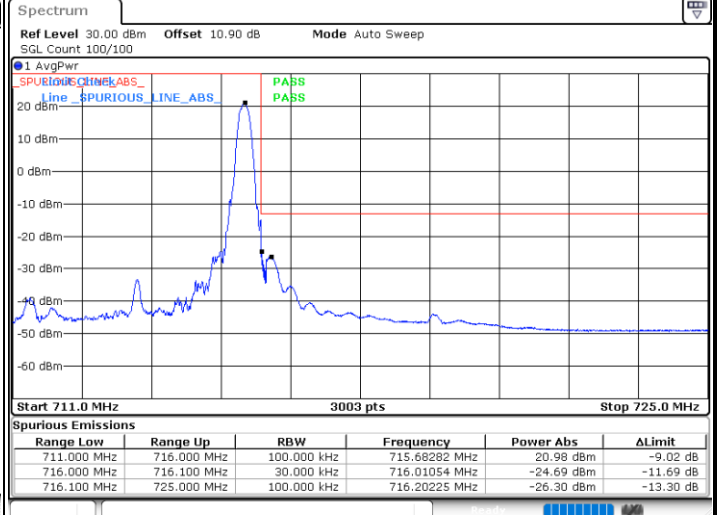


LTE Band 12 / 5MHz / 64QAM

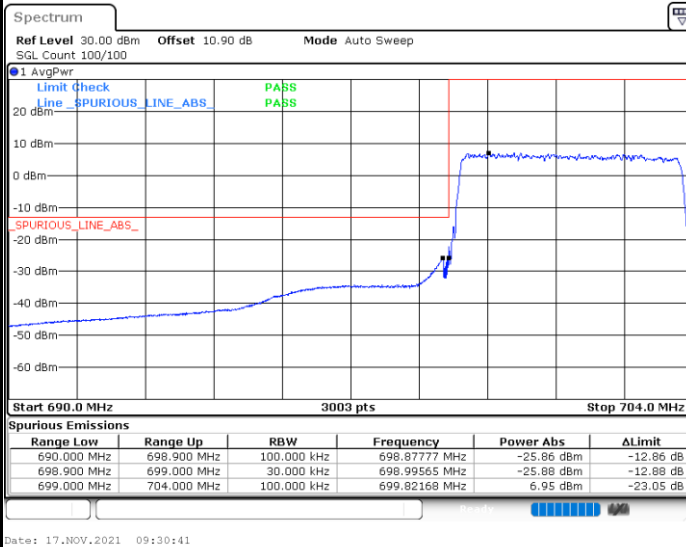
Lowest Band Edge / 1RB



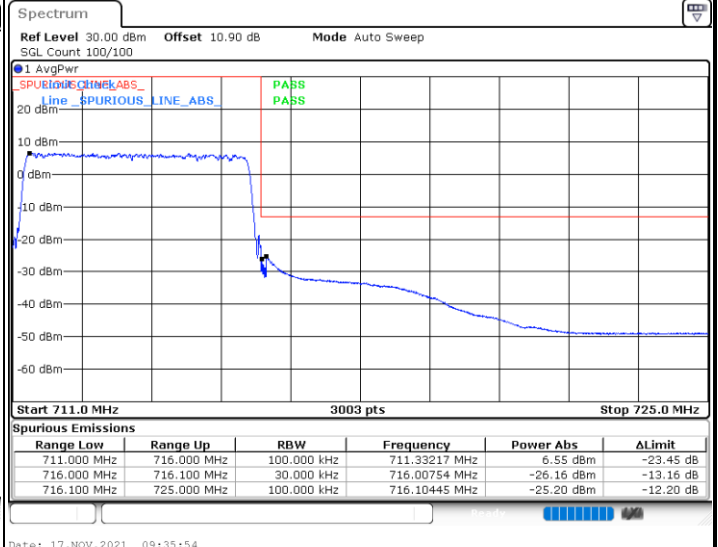
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



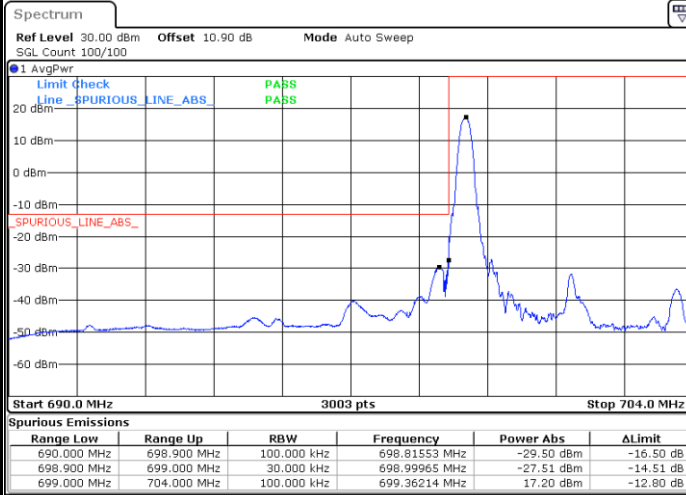
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 256QAM

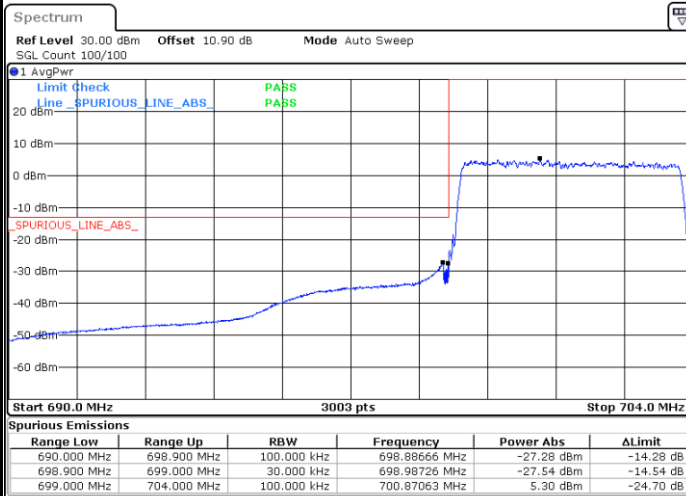
Lowest Band Edge / 1RB



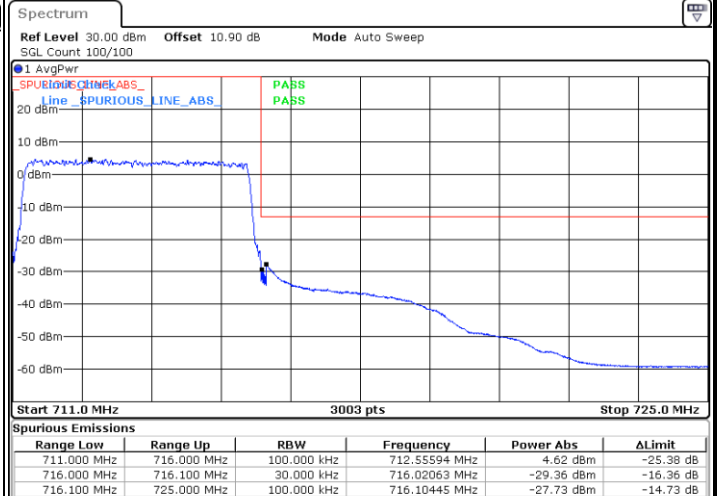
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



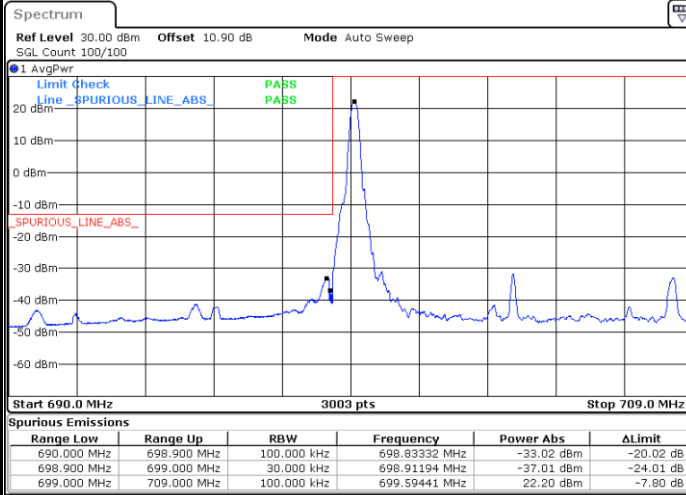
Highest Band Edge / Full RB



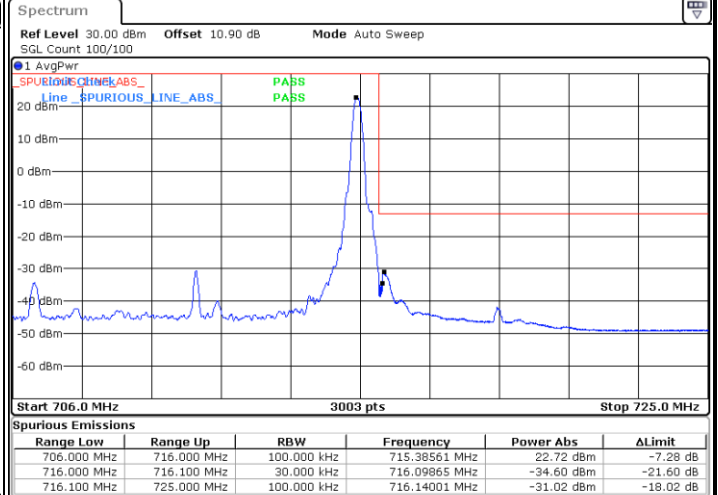


LTE Band 12 / 10MHz / QPSK

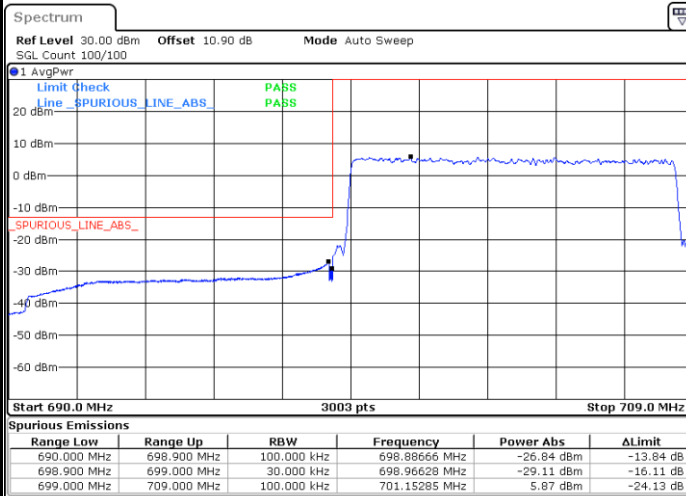
Lowest Band Edge / 1 RB



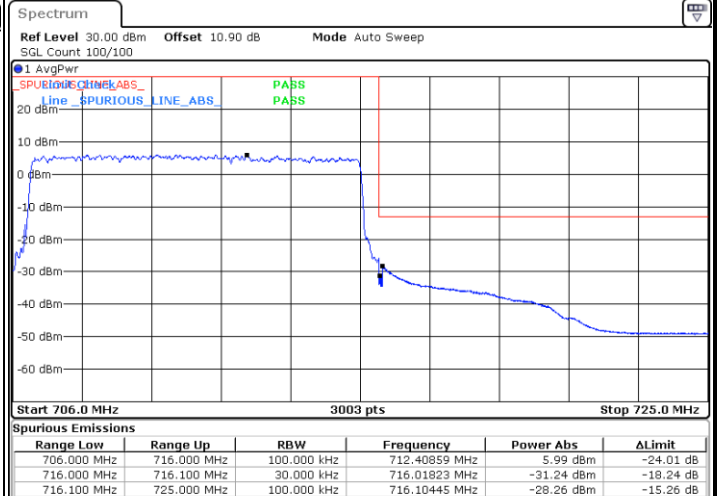
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



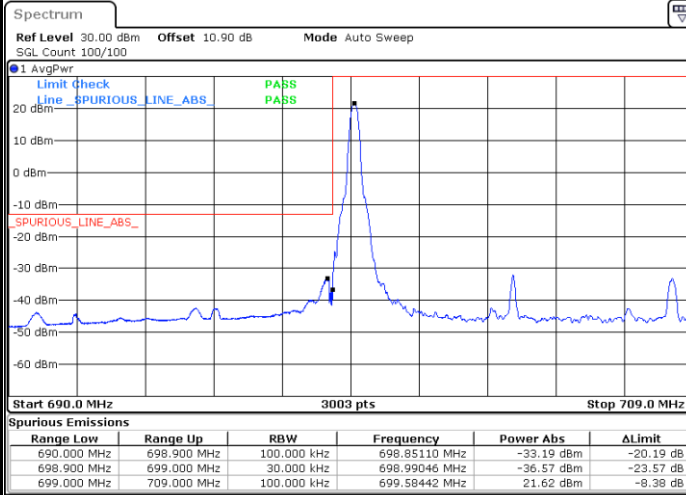
Highest Band Edge / Full RB



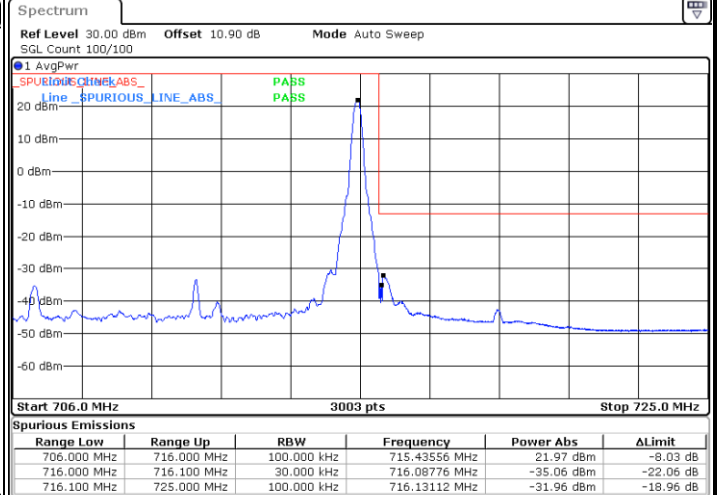


LTE Band 12 / 10MHz / 16QAM

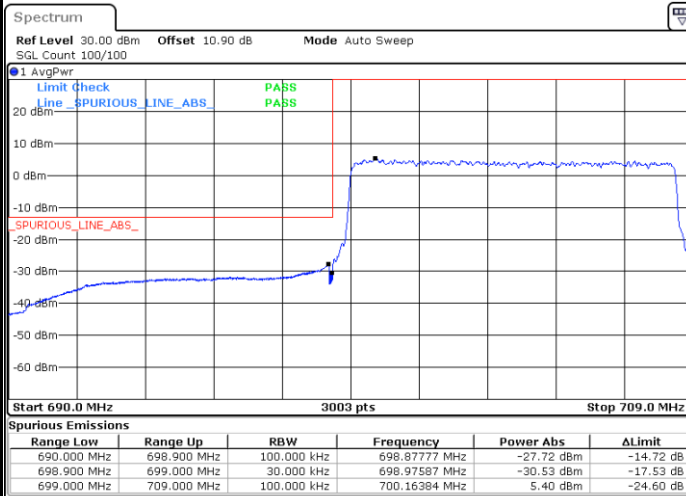
Lowest Band Edge / 1 RB



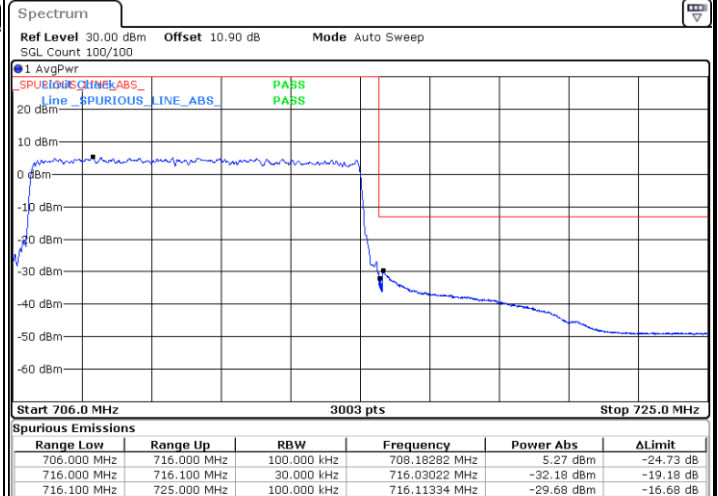
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



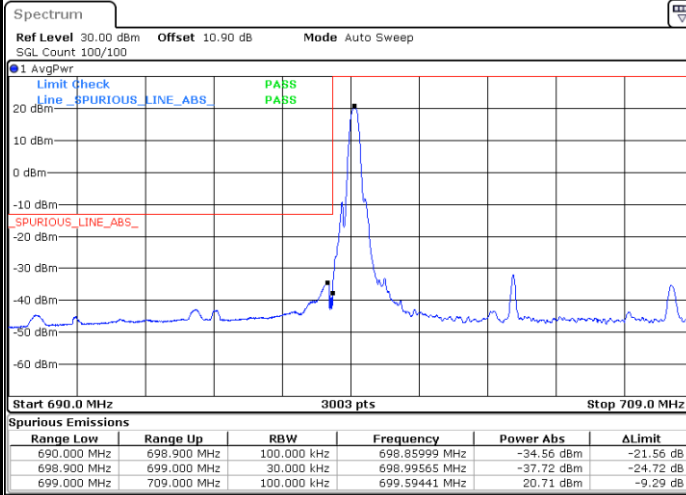
Highest Band Edge / Full RB



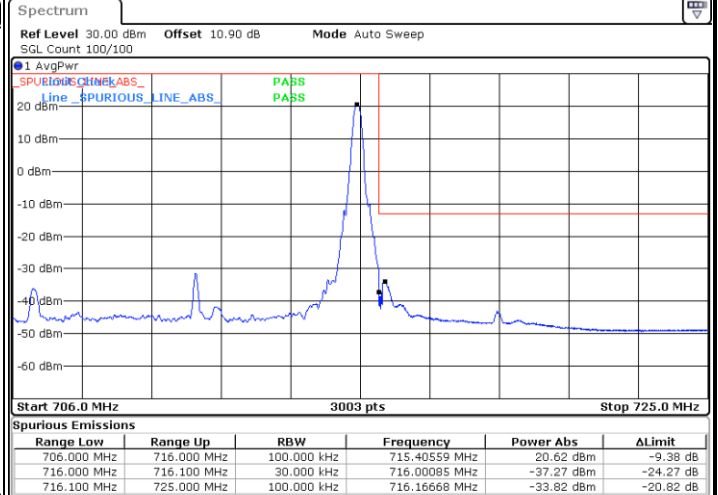


LTE Band 12 / 10MHz / 64QAM

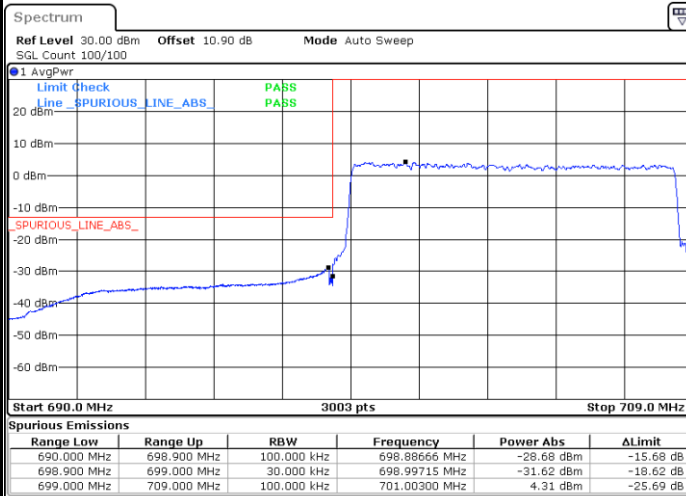
Lowest Band Edge / 1 RB



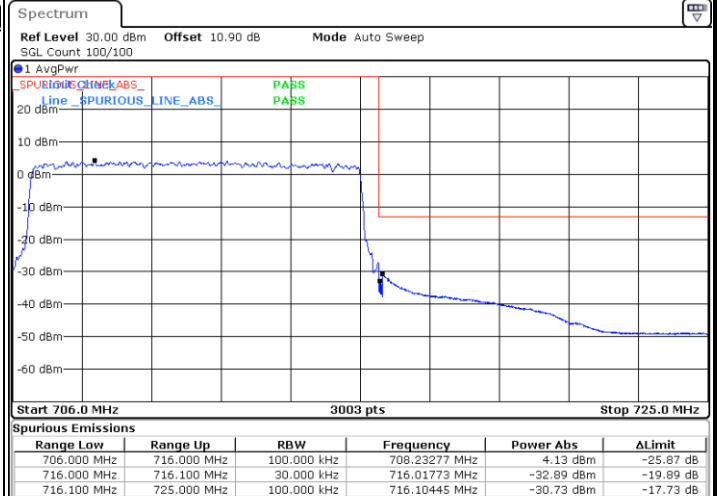
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



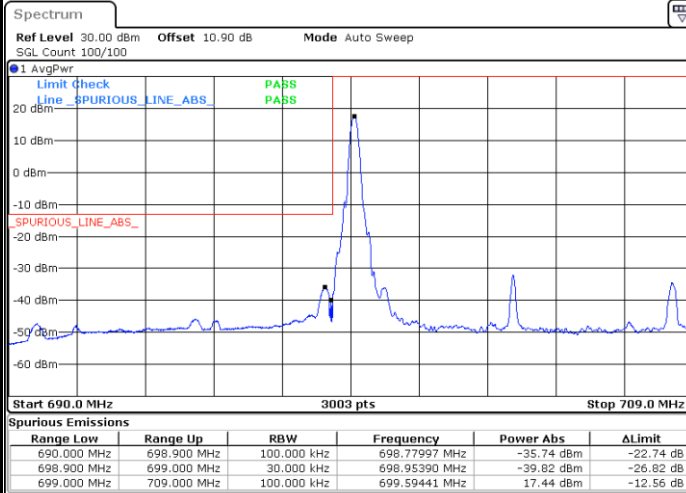
Highest Band Edge / Full RB



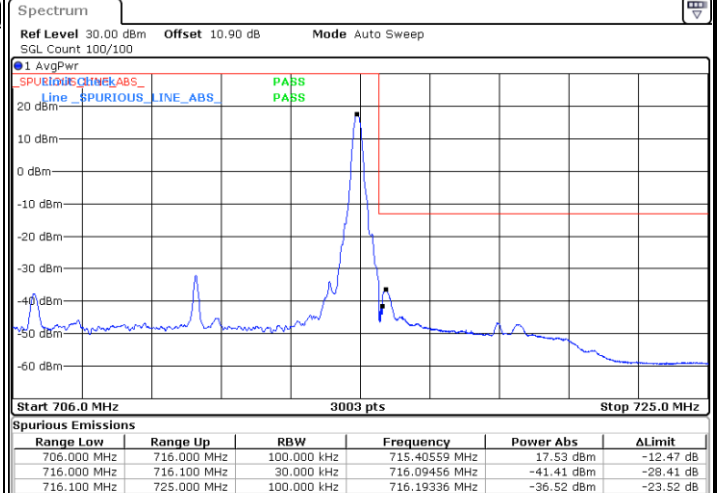


LTE Band 12 / 10MHz / 256QAM

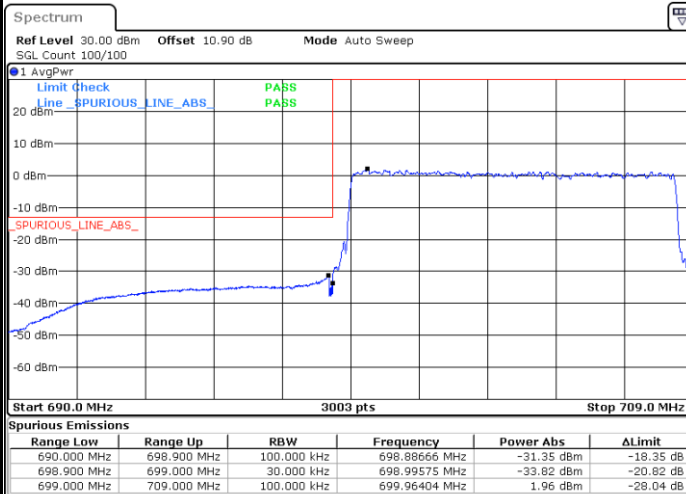
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

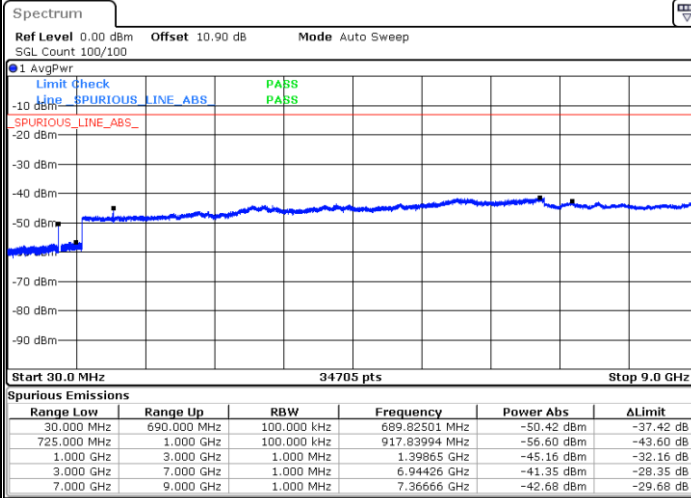




Conducted Spurious Emission

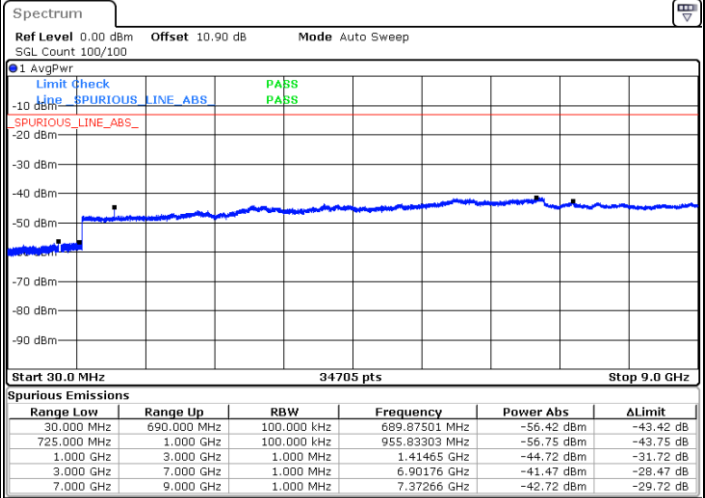
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



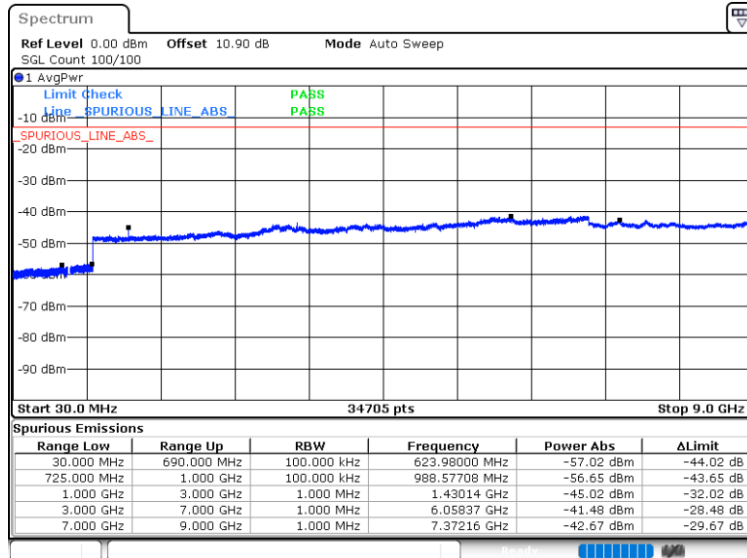
Date: 17.NOV.2021 09:04:40

Middle Channel / QPSK



Date: 17.NOV.2021 09:06:39

Highest Channel / QPSK

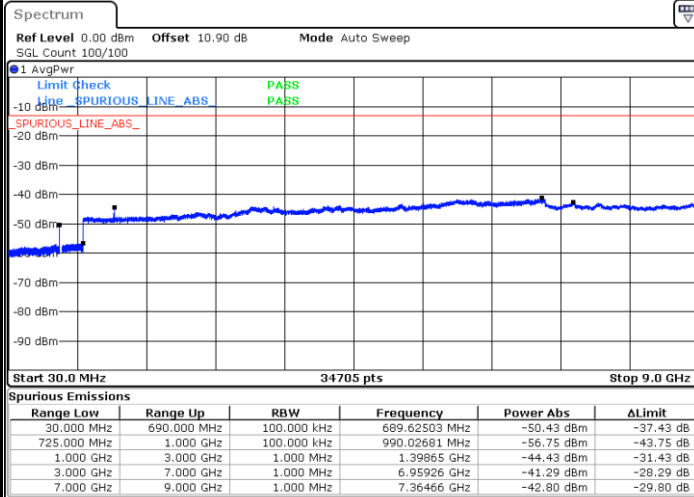


Date: 17.NOV.2021 09:09:56



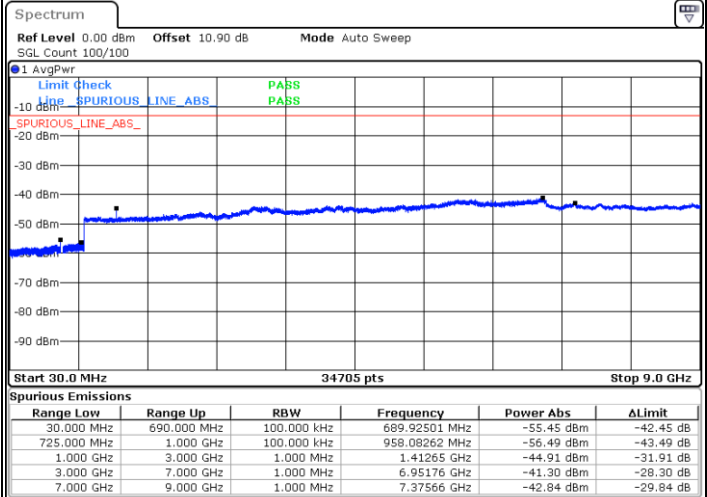
LTE Band 12 / 3MHz

Lowest Channel / QPSK



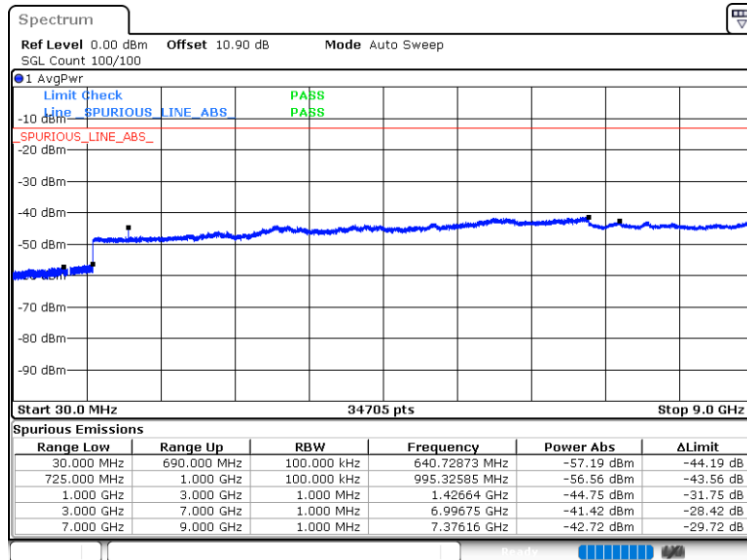
Date: 17.NOV.2021 09:20:45

Middle Channel / QPSK



Date: 17.NOV.2021 09:22:44

Highest Channel / QPSK

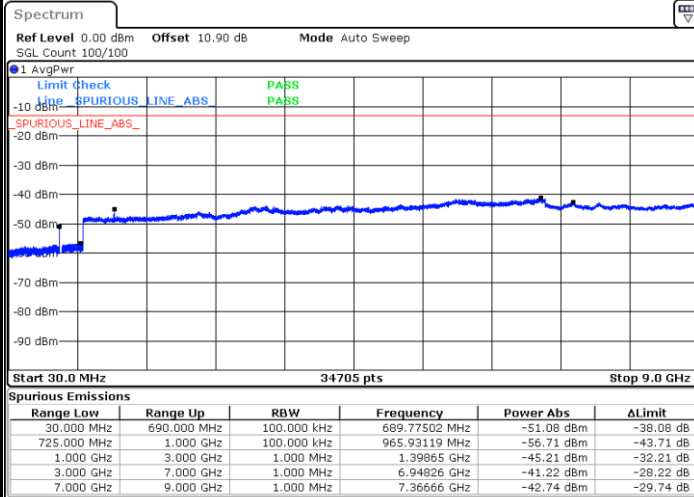


Date: 17.NOV.2021 09:26:02



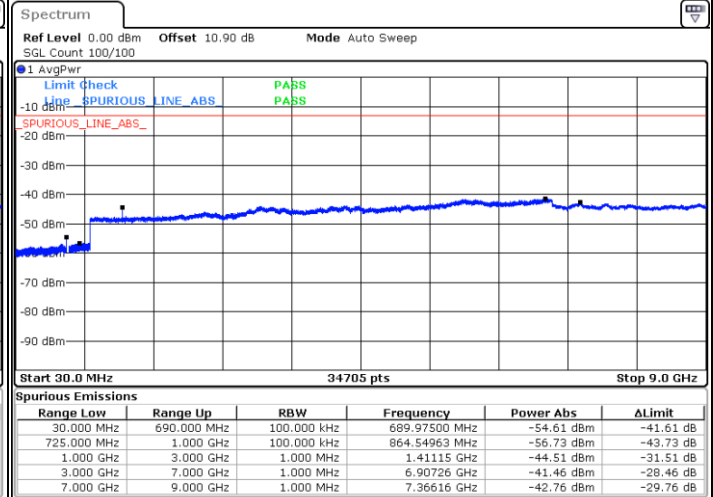
LTE Band 12 / 5MHz

Lowest Channel / QPSK



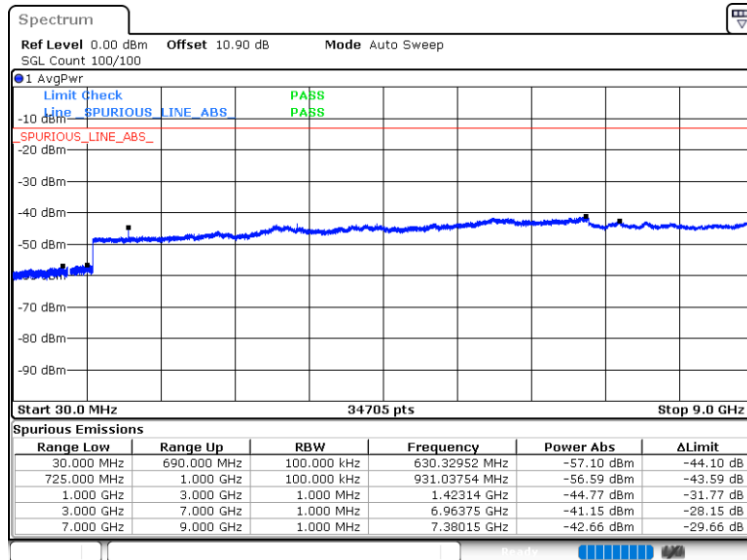
Date: 17.NOV.2021 09:39:55

Middle Channel / QPSK



Date: 17.NOV.2021 09:41:53

Highest Channel / QPSK

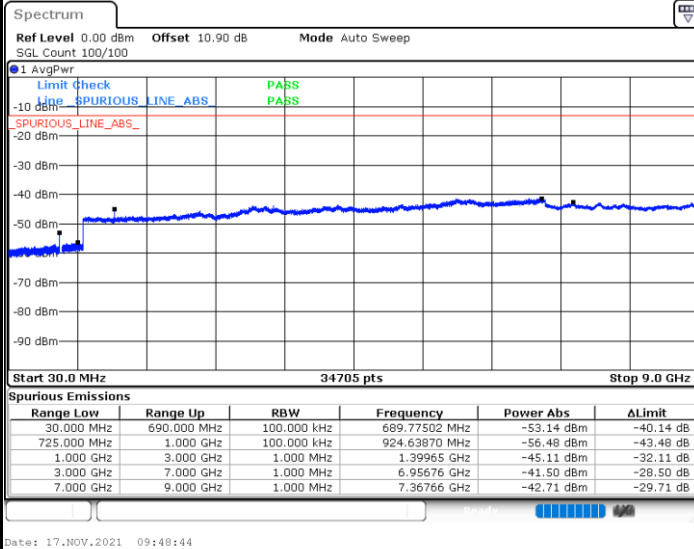


Date: 17.NOV.2021 09:45:12

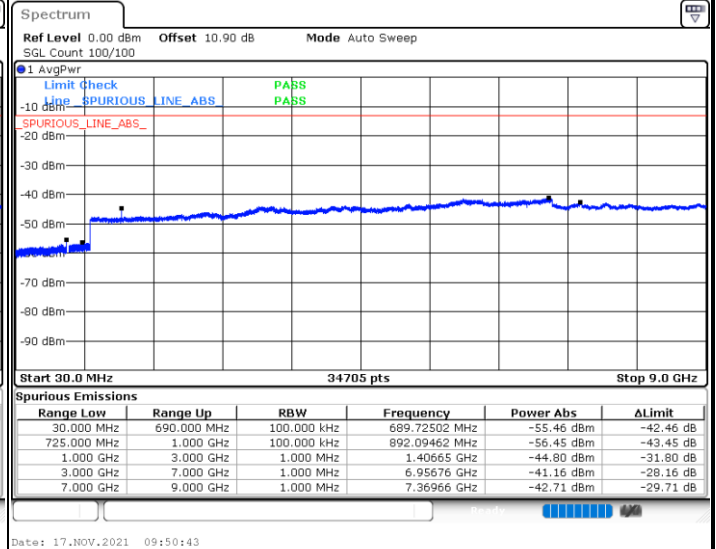


LTE Band 12 / 10MHz

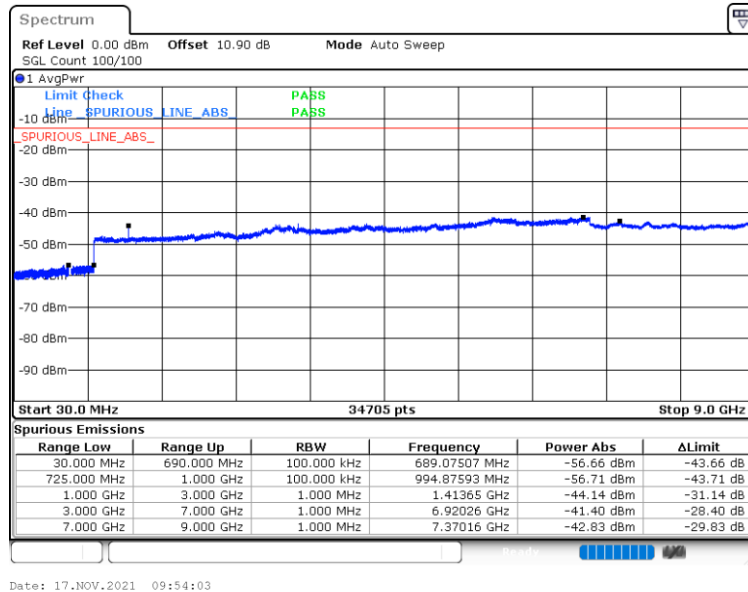
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK



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	0.0085	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0044	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0049	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0055	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0086	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Note:

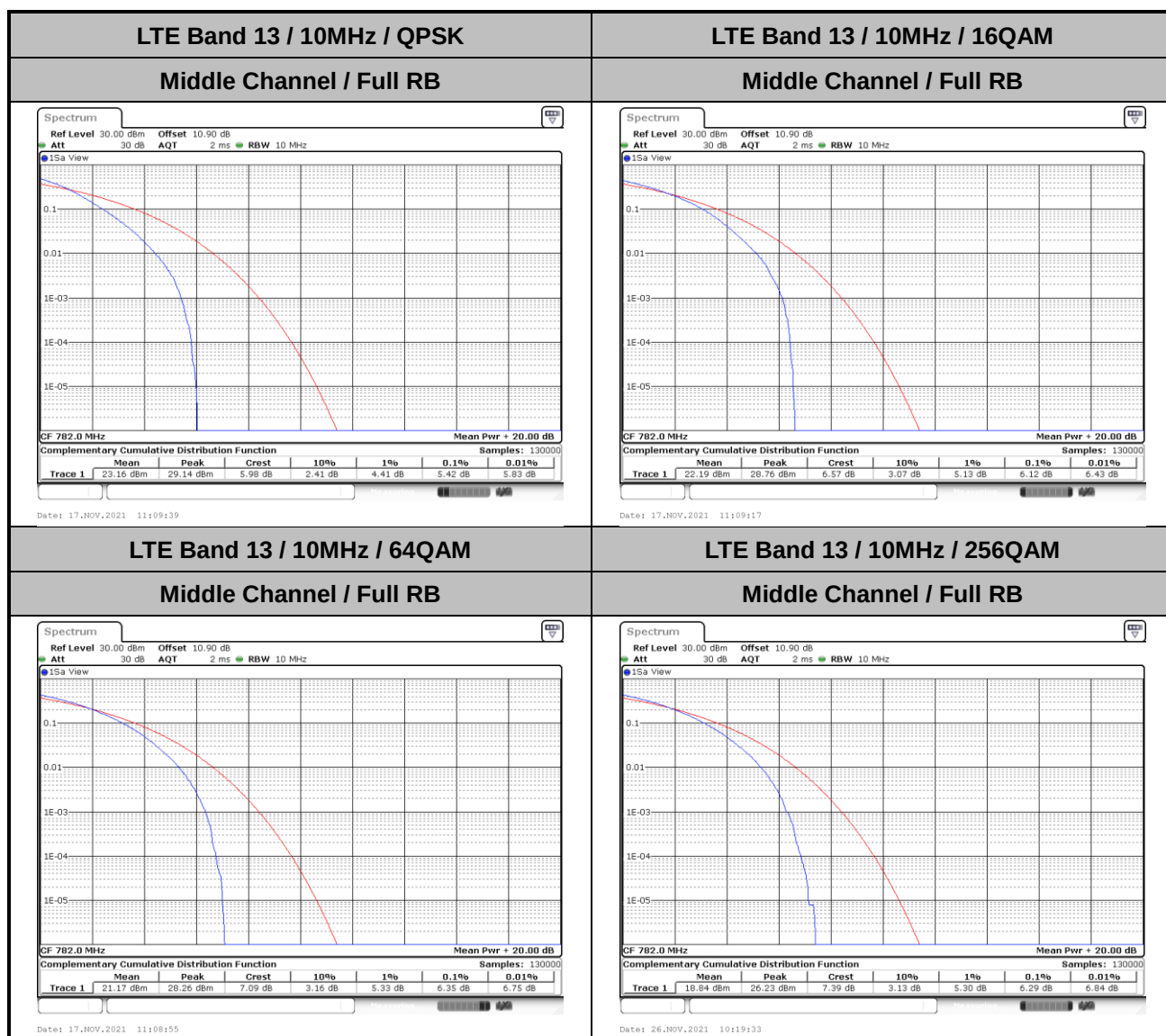
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.42	6.12	6.35	6.29	PASS



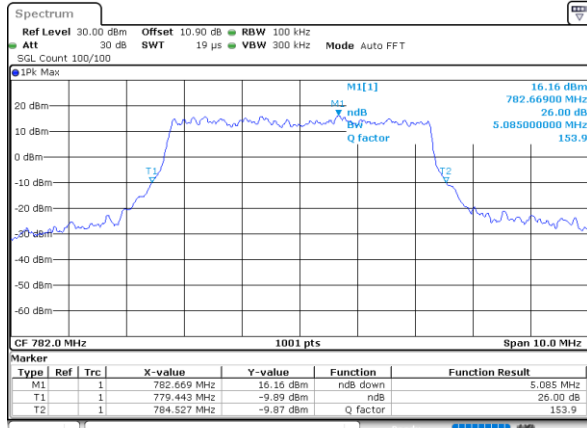
**26dB Bandwidth**

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
Middle CH	-	-	-	-	5.09	5.20	10.13	9.97	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	5.05	5.11	9.83	9.87	-	-	-	-



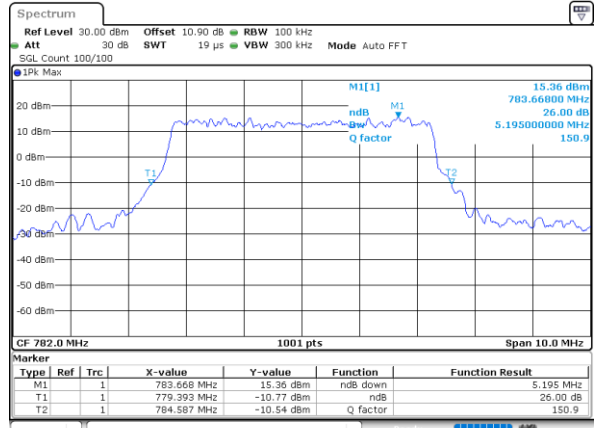
LTE Band 13

Middle Channel / 5MHz / QPSK



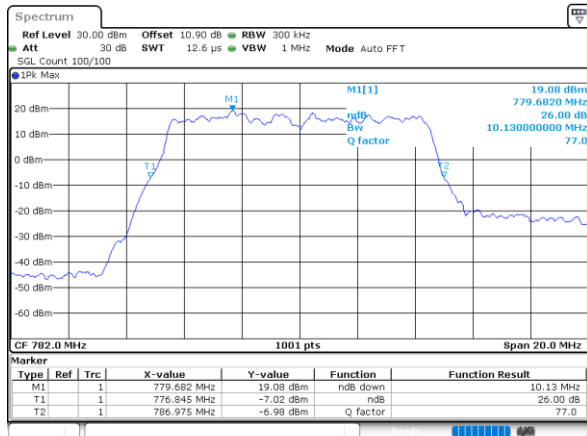
Date: 17.NOV.2021 10:10:21

Middle Channel / 5MHz / 16QAM



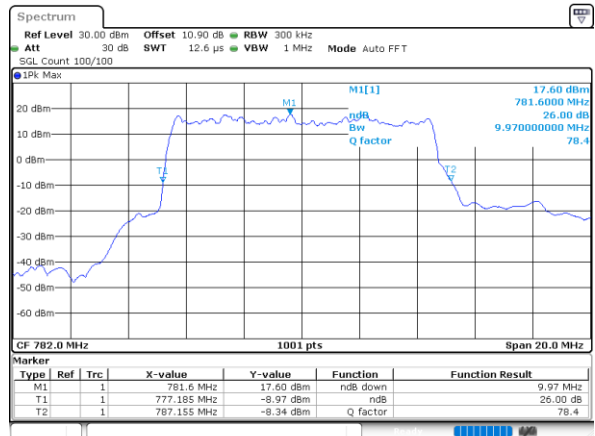
Date: 17.NOV.2021 10:10:42

Middle Channel / 10MHz / QPSK



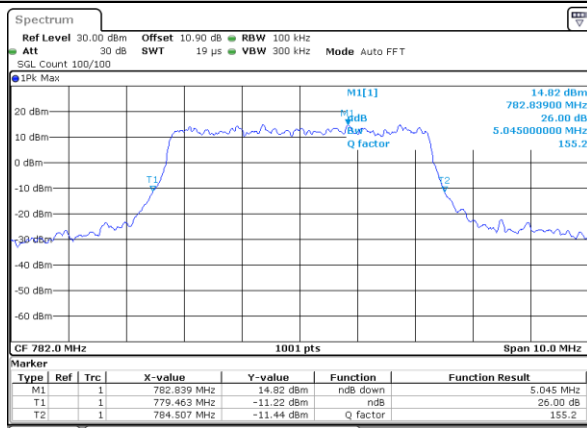
Date: 17.NOV.2021 10:56:48

Middle Channel / 10MHz / 16QAM



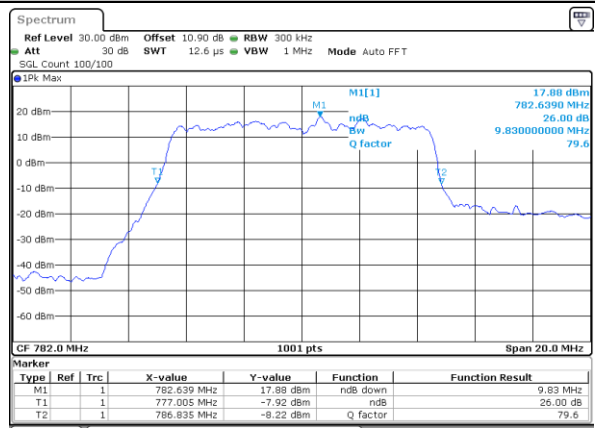
Date: 17.NOV.2021 10:50:27

Middle Channel / 5MHz / 64QAM



Date: 17.NOV.2021 10:23:23

Middle Channel / 10MHz / 64QAM

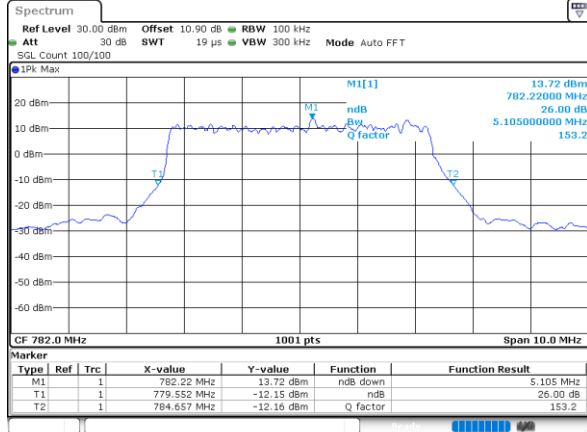


Date: 17.NOV.2021 11:03:03



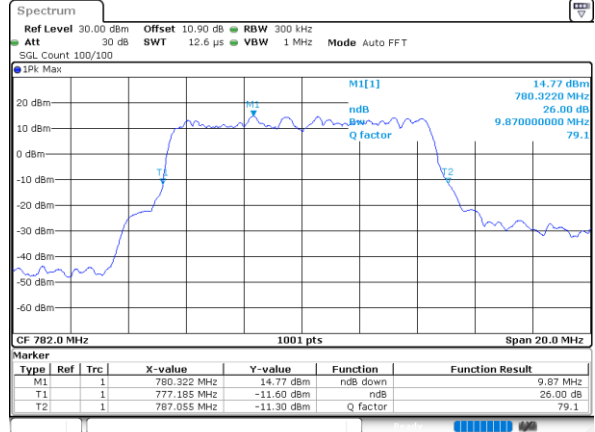
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 26,NOV,2021 10:15:40

Middle Channel / 10MHz / 256QAM



Date: 26,NOV,2021 10:18:52

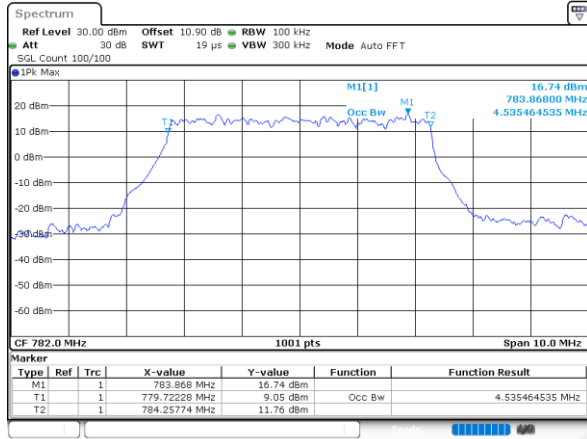
**Occupied Bandwidth**

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
Middle CH	-	-	-	-	4.54	4.53	9.07	8.99	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.51	4.50	9.05	9.05	-	-	-	-

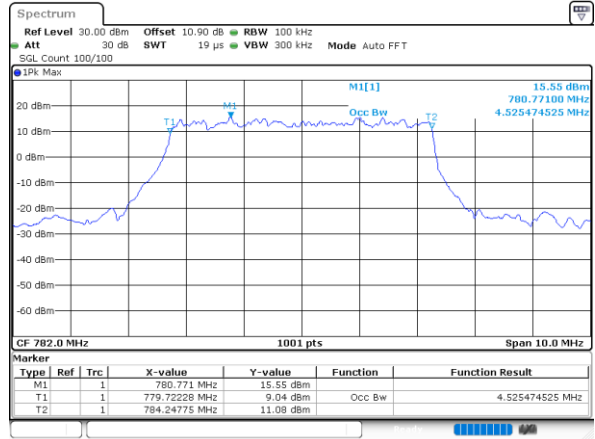


LTE Band 13

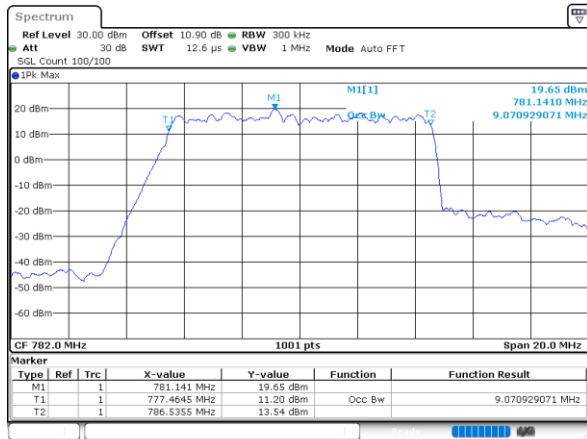
Middle Channel / 5MHz / QPSK



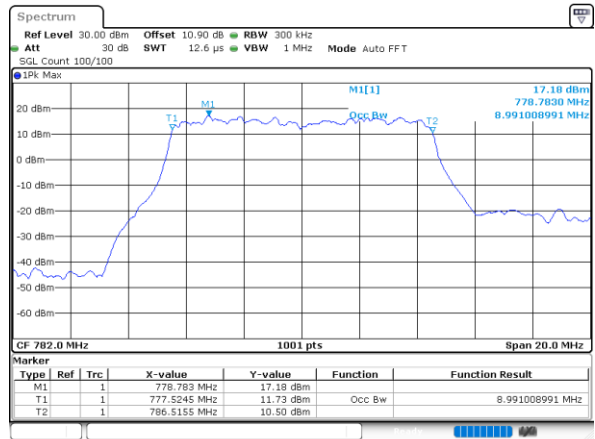
Middle Channel / 5MHz / 16QAM



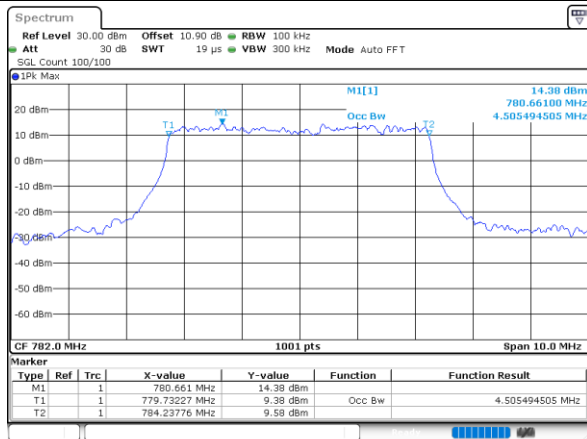
Middle Channel / 10MHz / QPSK



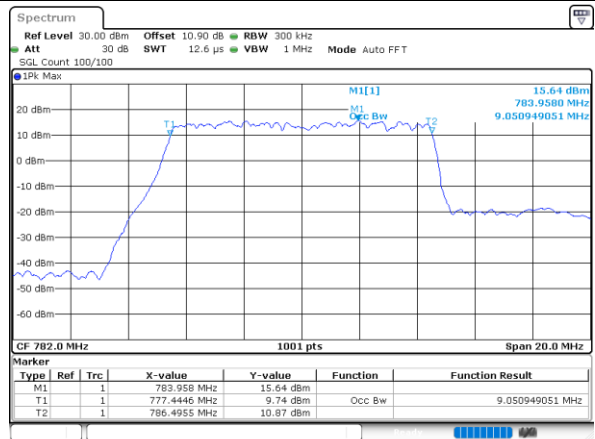
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



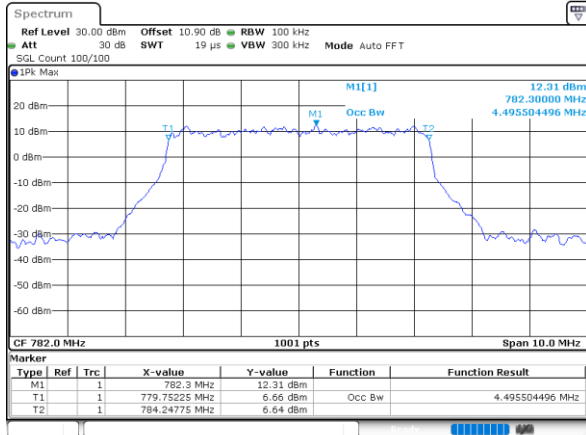
Middle Channel / 10MHz / 64QAM





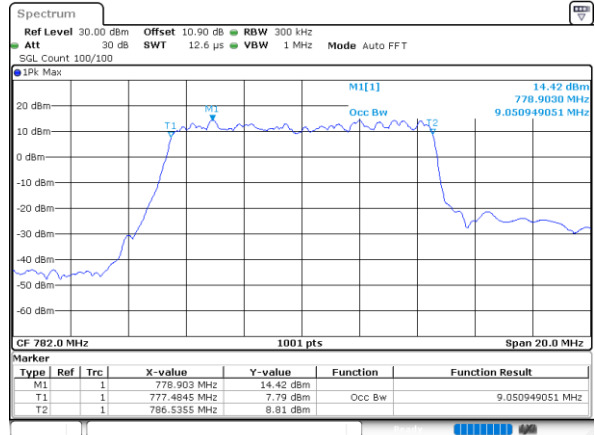
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 26,NOV,2021 10:15:39

Middle Channel / 10MHz / 256QAM



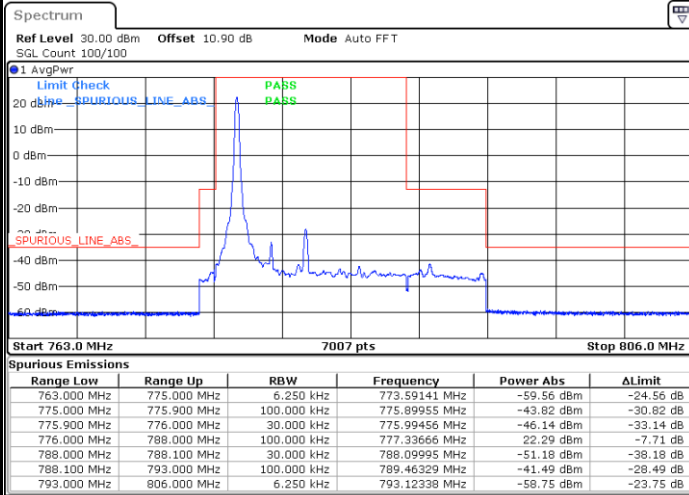
Date: 26,NOV,2021 10:18:43



Conducted Band Edge

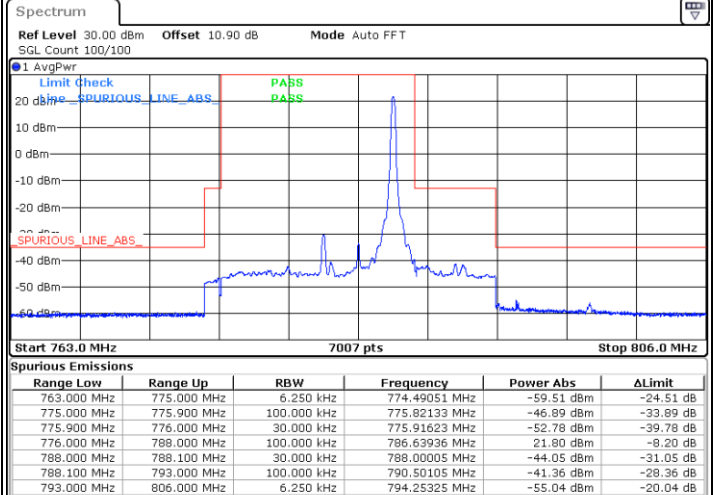
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



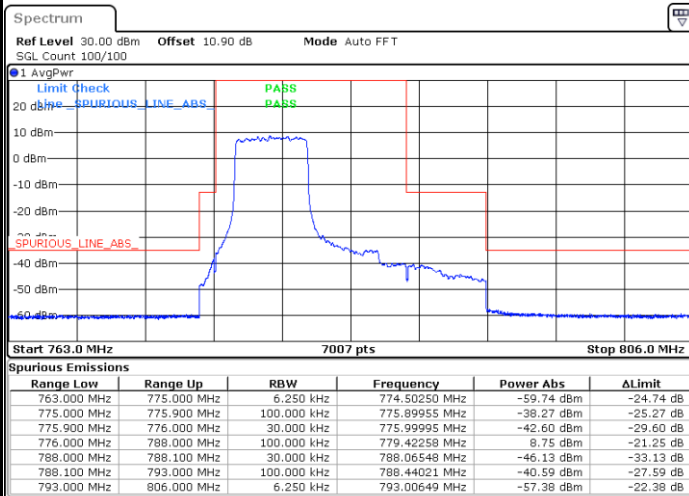
Date: 17.NOV.2021 10:08:51

Highest Band Edge / 1 RB



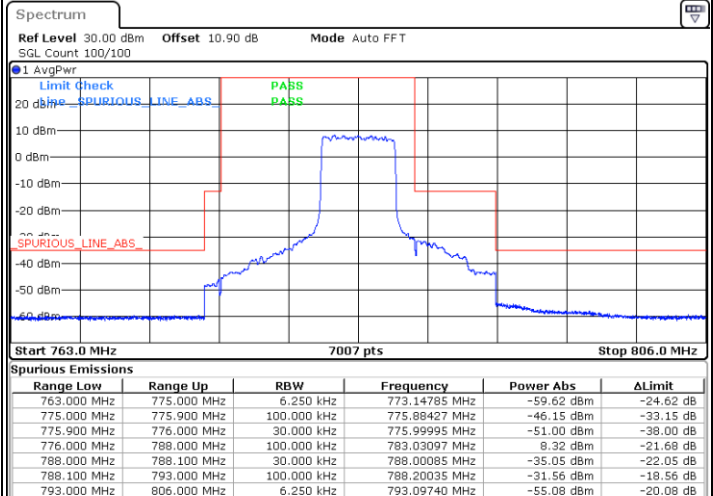
Date: 17.NOV.2021 10:18:46

Lowest Band Edge / Full RB



Date: 17.NOV.2021 10:03:19

Highest Band Edge / Full RB

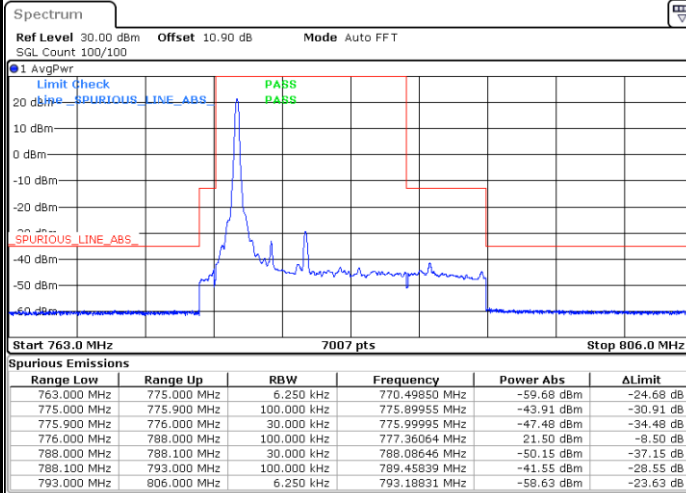


Date: 17.NOV.2021 10:13:14



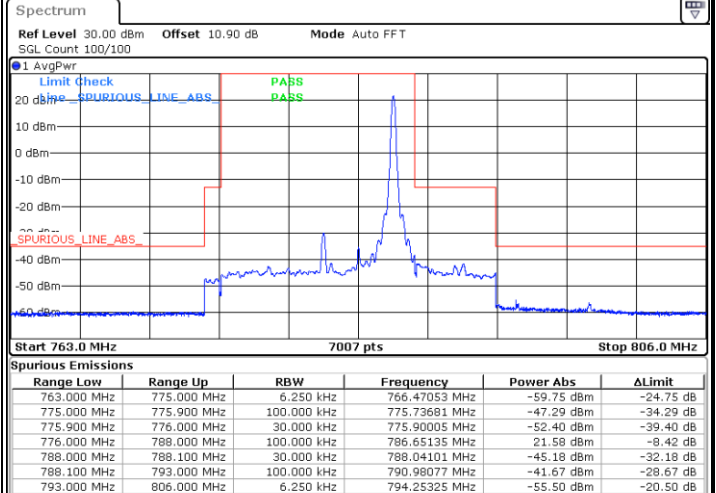
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



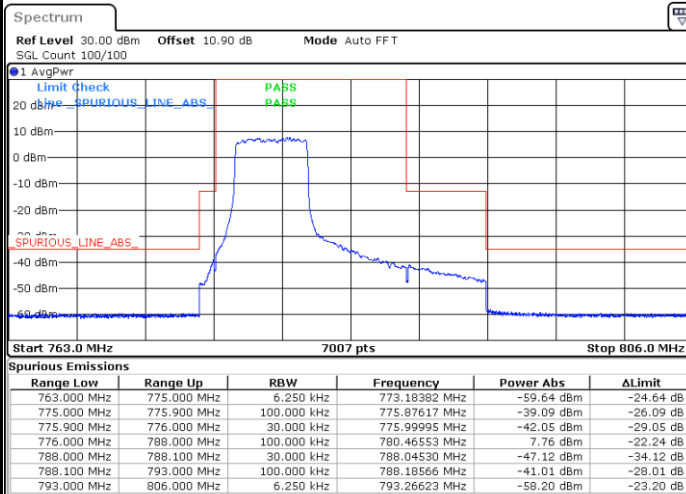
Date: 17.NOV.2021 10:07:01

Highest Band Edge / 1 RB



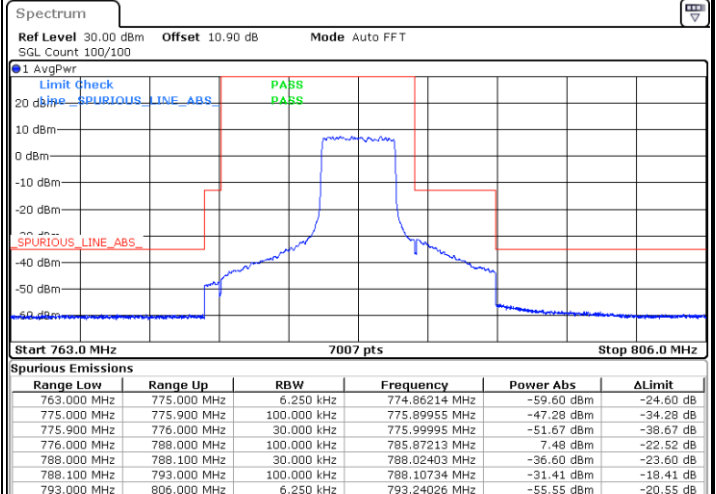
Date: 17.NOV.2021 10:16:55

Lowest Band Edge / Full RB



Date: 17.NOV.2021 10:05:10

Highest Band Edge / Full RB

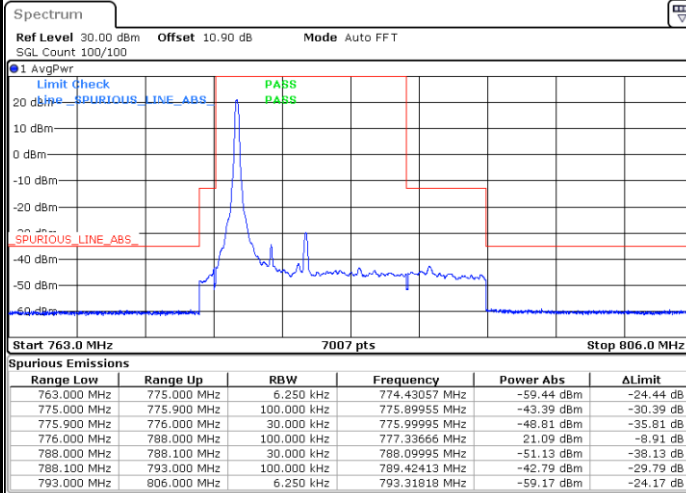


Date: 17.NOV.2021 10:15:04



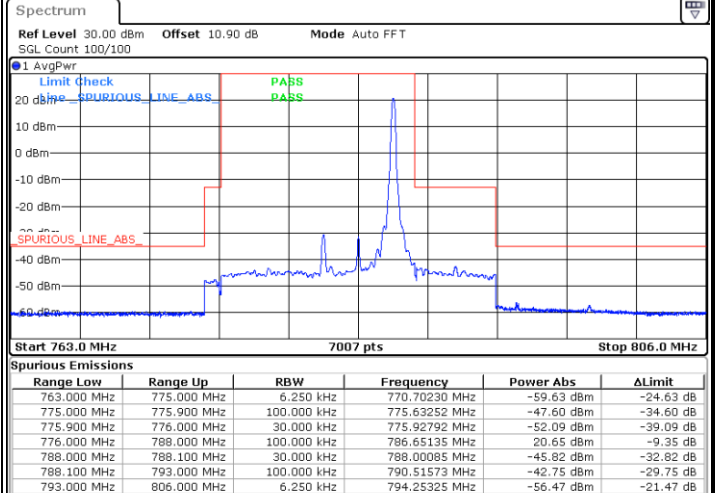
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



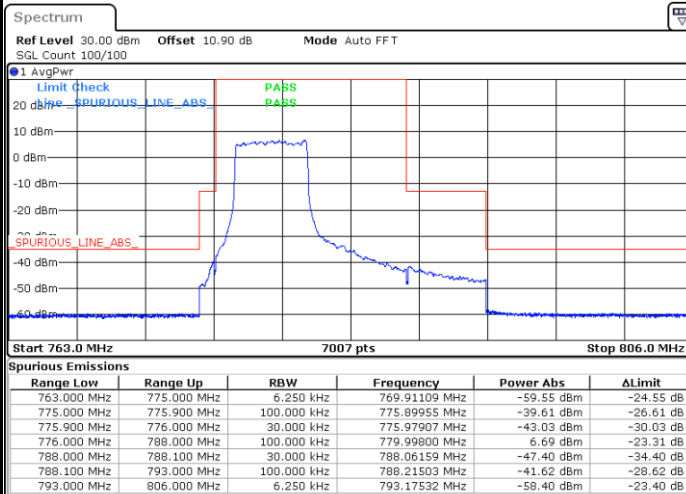
Date: 17.NOV.2021 10:23:02

Highest Band Edge / 1 RB



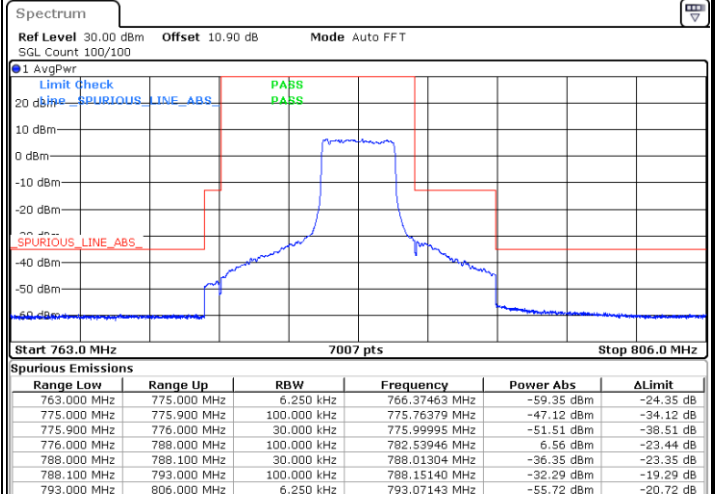
Date: 17.NOV.2021 10:27:24

Lowest Band Edge / Full RB



Date: 17.NOV.2021 10:21:11

Highest Band Edge / Full RB

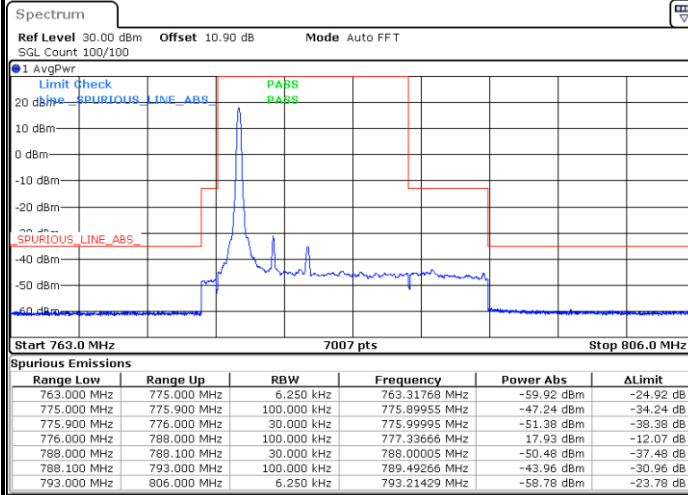


Date: 17.NOV.2021 10:25:34



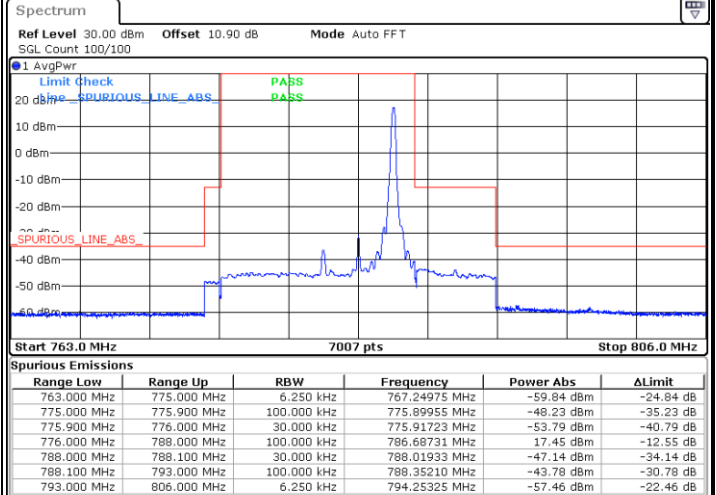
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



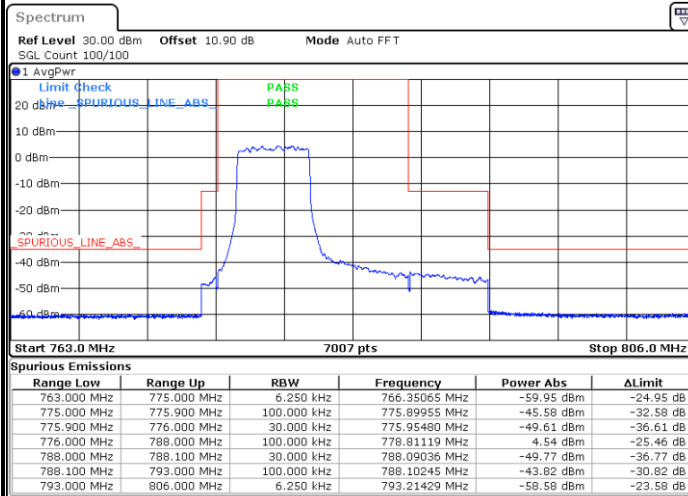
Date: 26.NOV.2021 10:16:40

Highest Band Edge / 1 RB



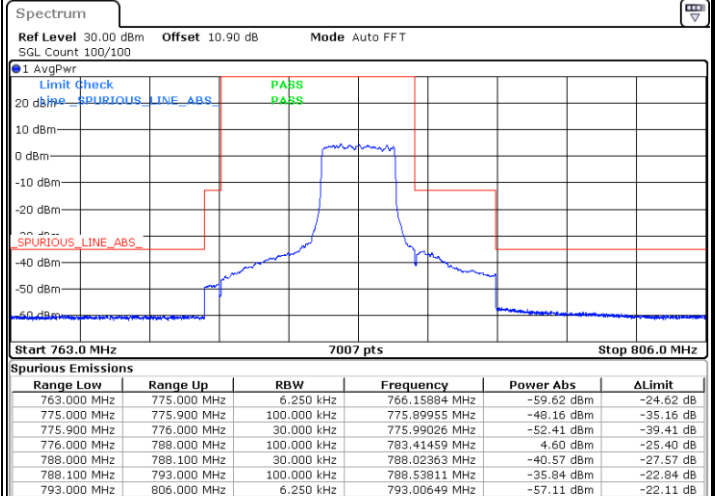
Date: 26.NOV.2021 10:17:07

Lowest Band Edge / Full RB



Date: 26.NOV.2021 10:16:21

Highest Band Edge / Full RB



Date: 26.NOV.2021 10:17:36