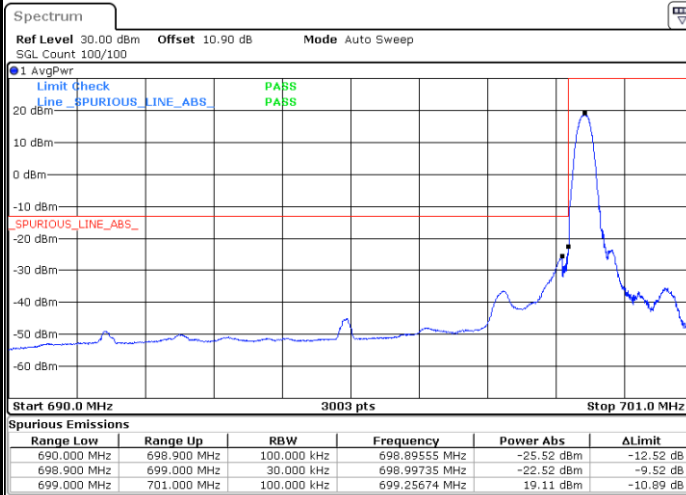




LTE Band 12 / 1.4MHz / 64QAM

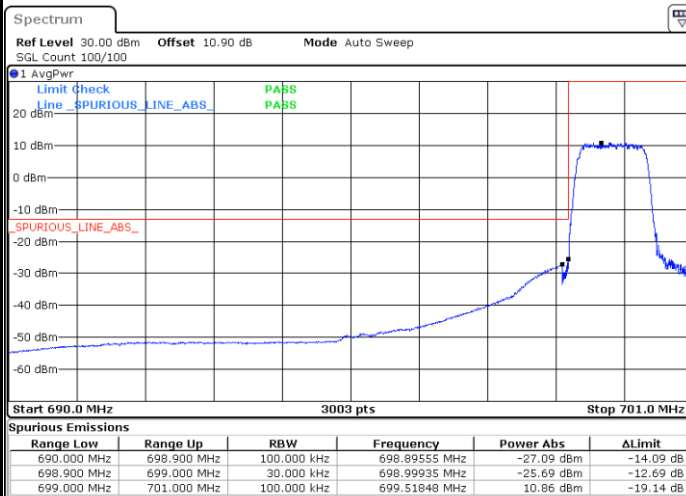
Lowest Band Edge / 1 RB



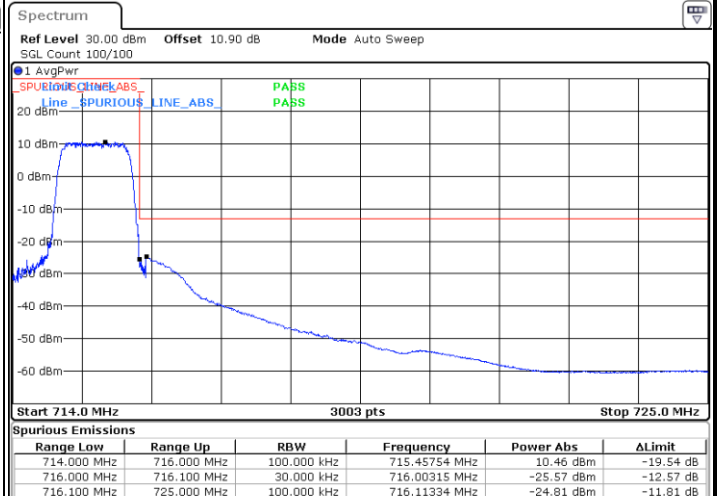
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



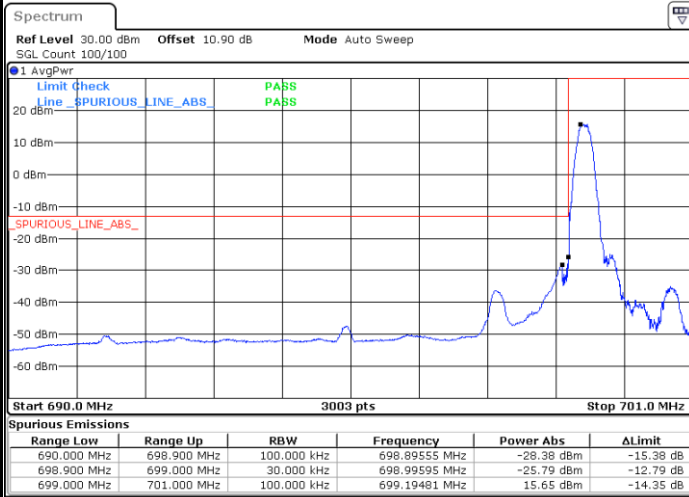
Highest Band Edge / Full RB



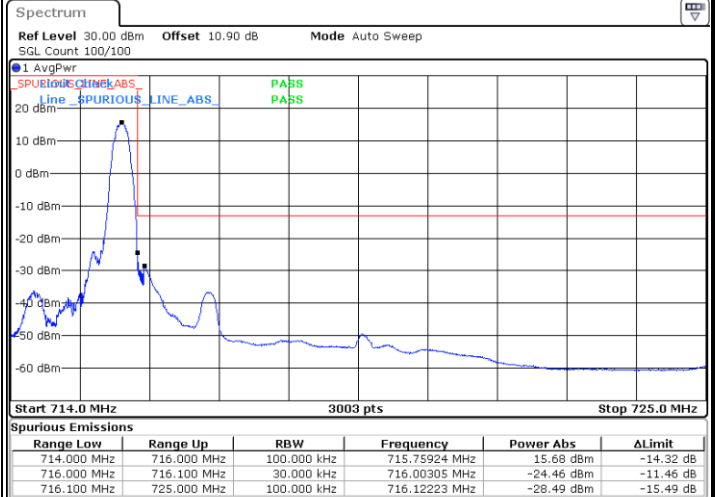


LTE Band 12 / 1.4MHz / 256QAM

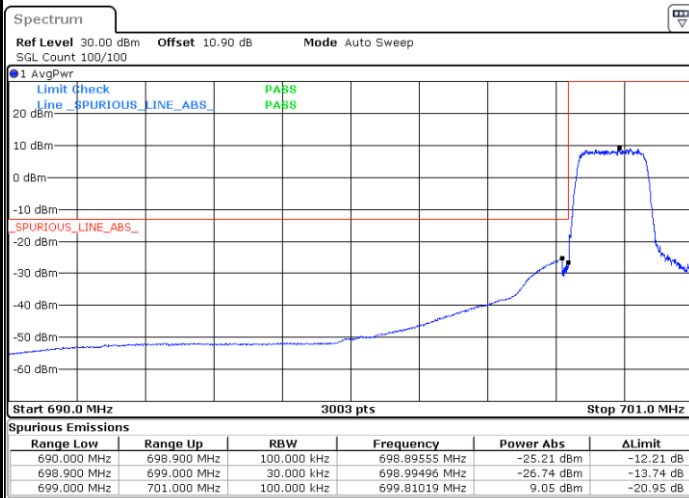
Lowest Band Edge / 1 RB



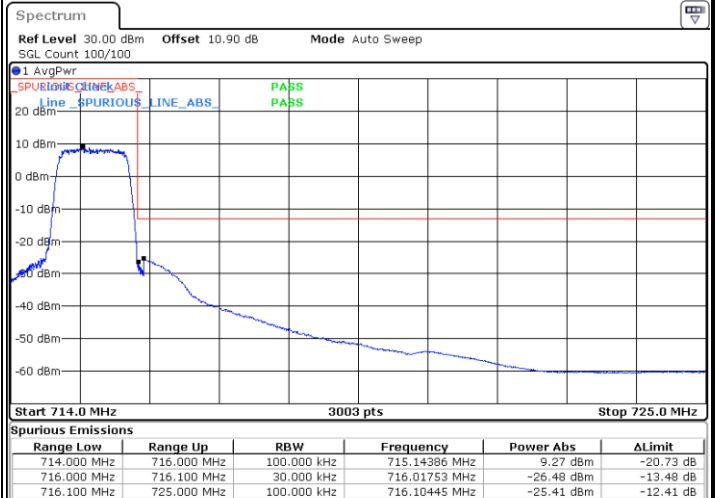
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



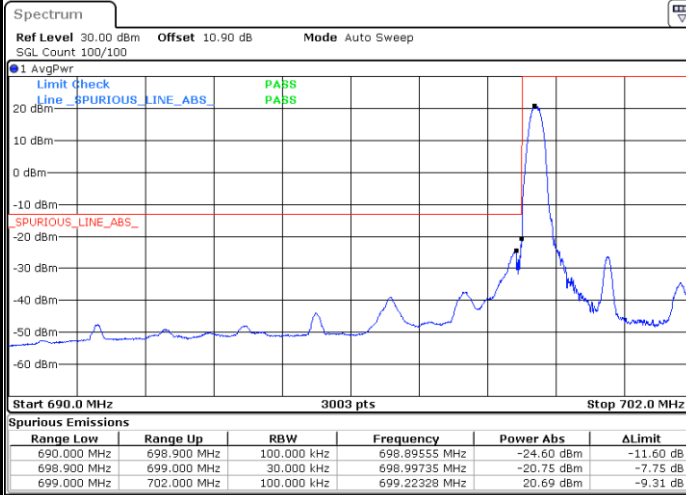
Highest Band Edge / Full RB



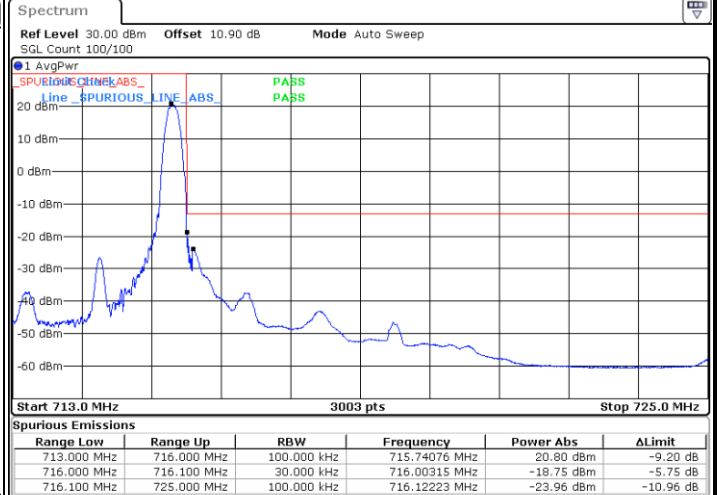


LTE Band 12 / 3MHz / QPSK

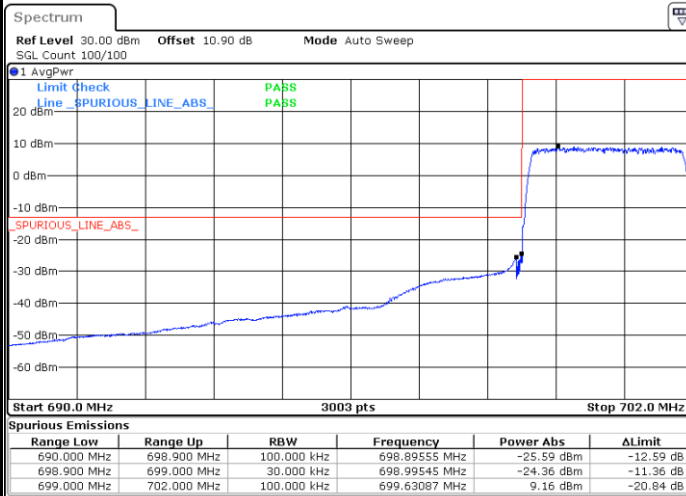
Lowest Band Edge / 1RB



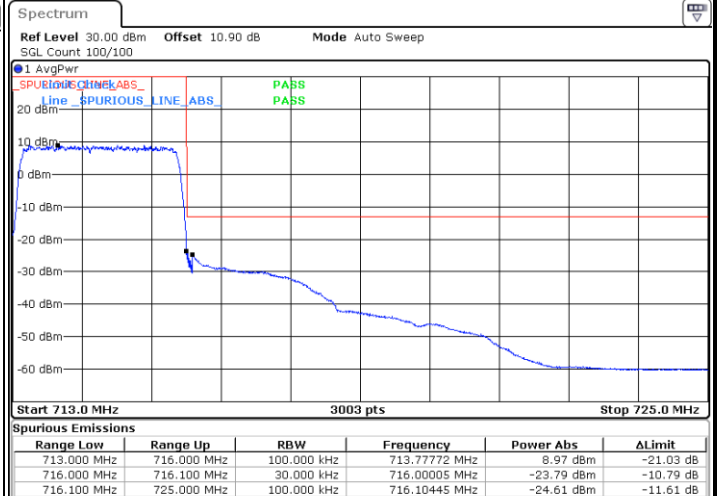
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



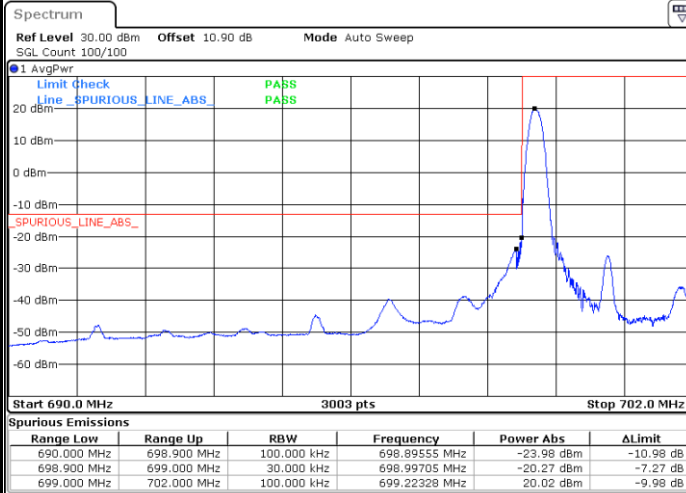
Highest Band Edge / Full RB



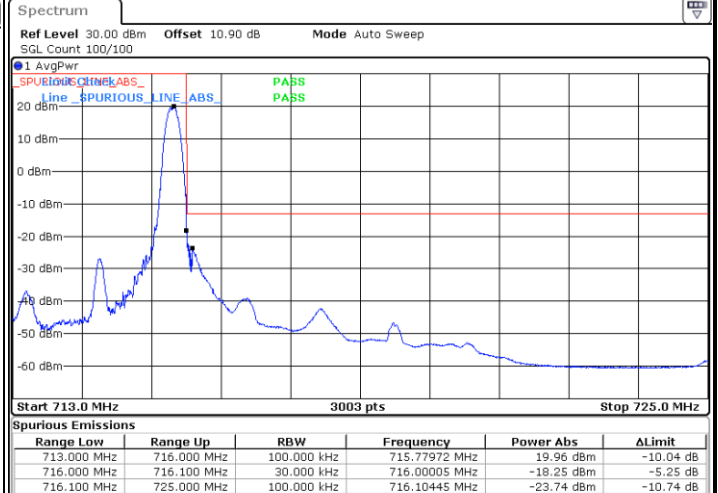


LTE Band 12 / 3MHz / 16QAM

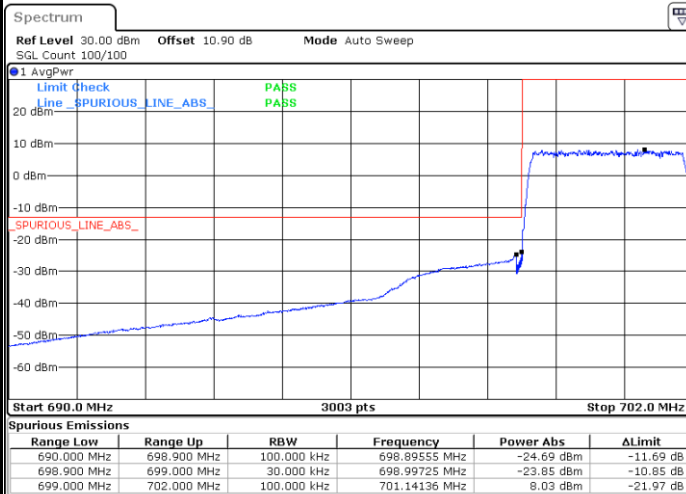
Lowest Band Edge / 1 RB



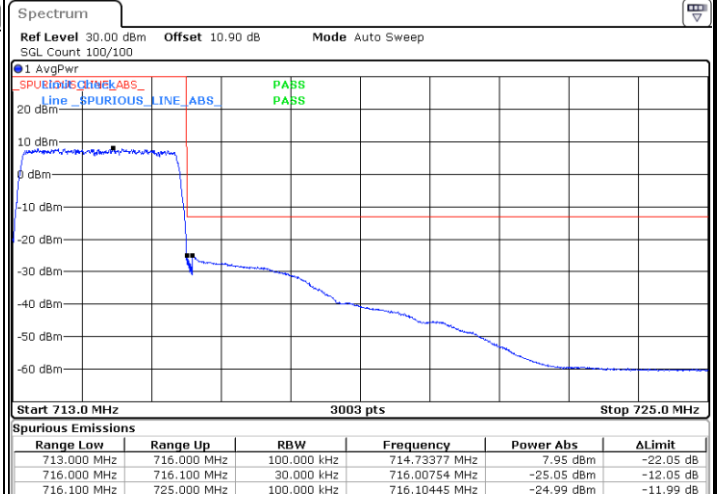
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



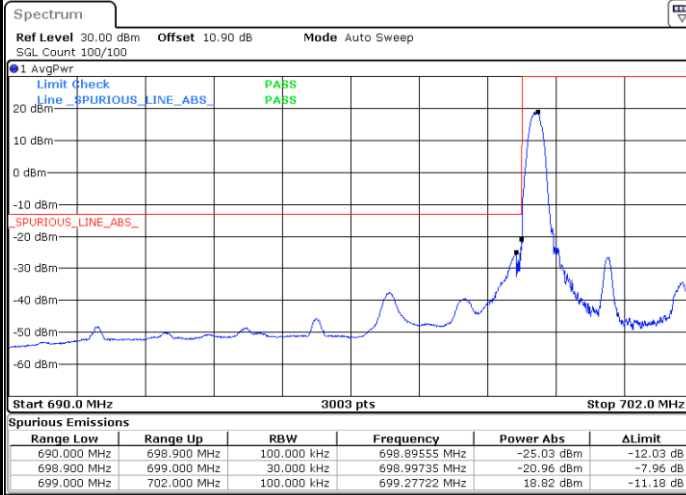
Highest Band Edge / Full RB



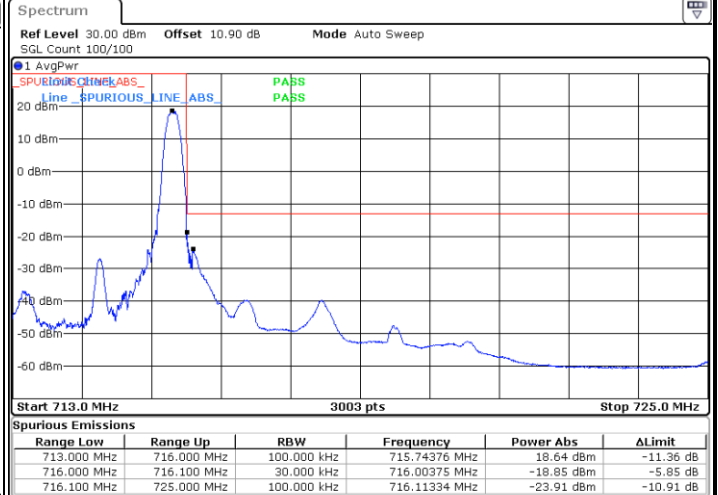


LTE Band 12 / 3MHz / 64QAM

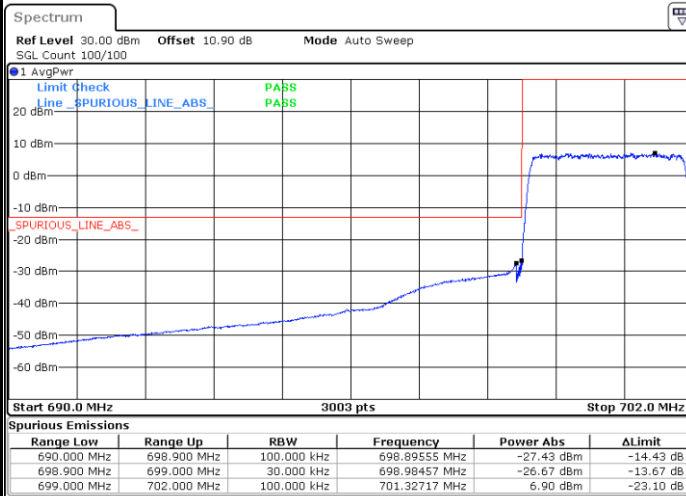
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



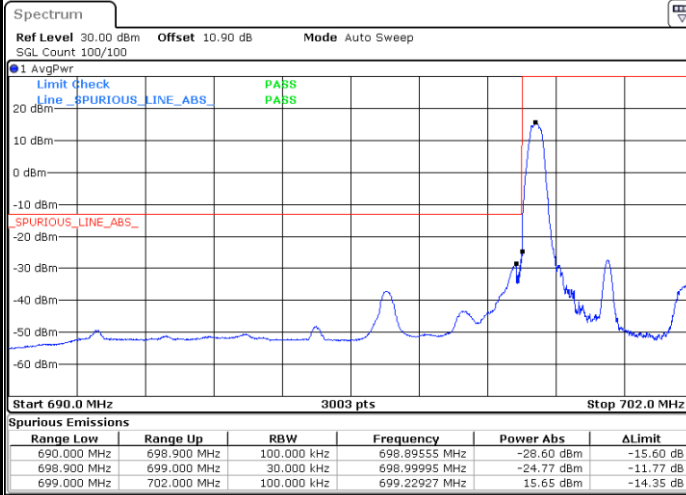
Highest Band Edge / Full RB



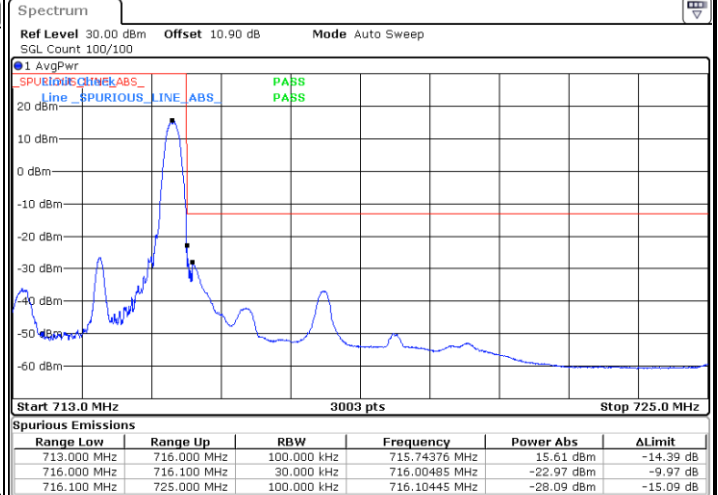


LTE Band 12 / 3MHz / 256QAM

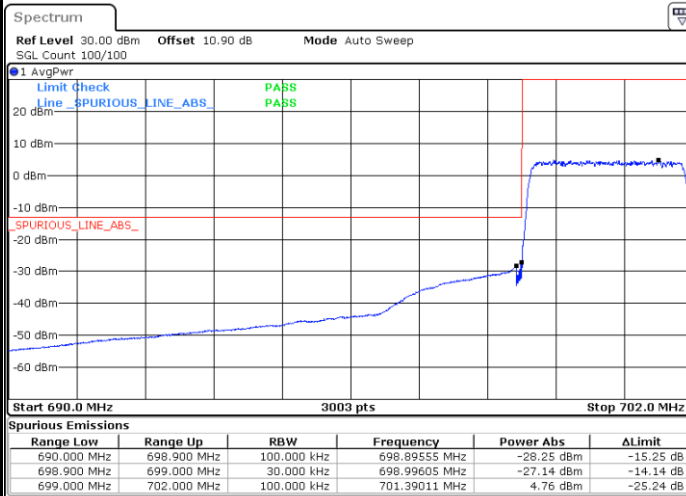
Lowest Band Edge / 1 RB



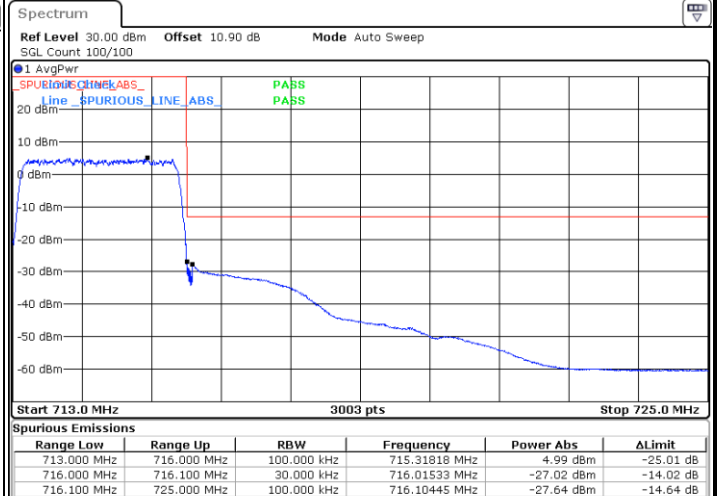
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



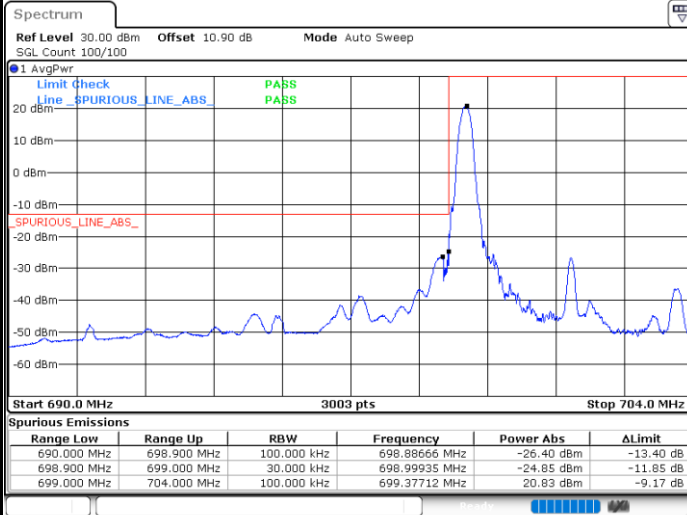
Highest Band Edge / Full RB



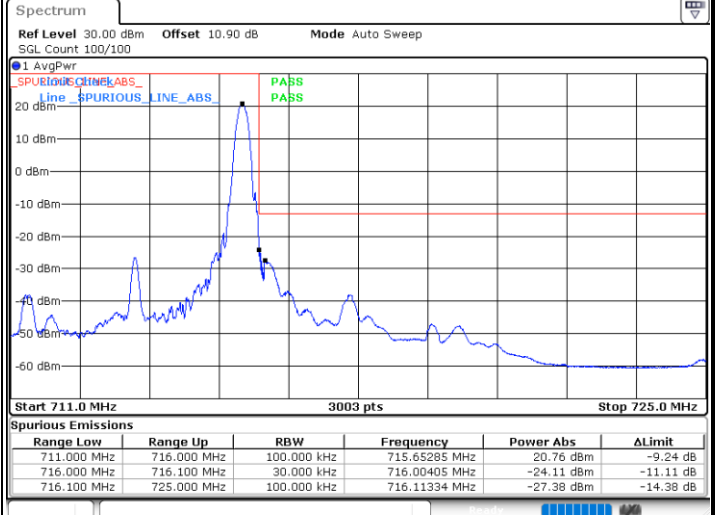


LTE Band 12 / 5MHz / QPSK

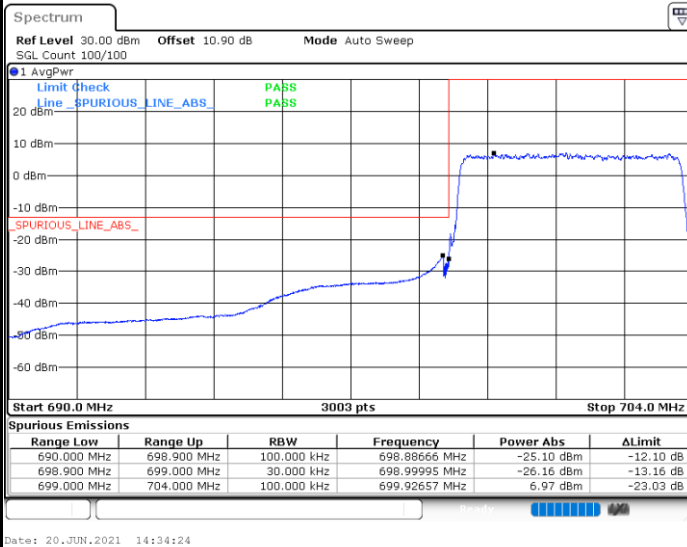
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



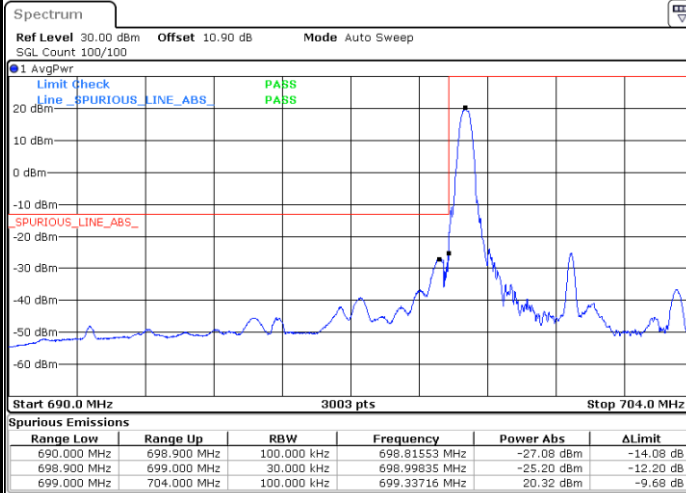
Highest Band Edge / Full RB



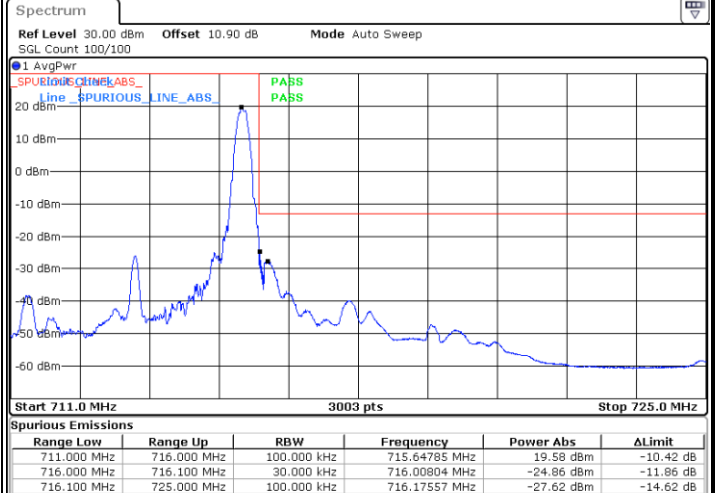


LTE Band 12 / 5MHz / 16QAM

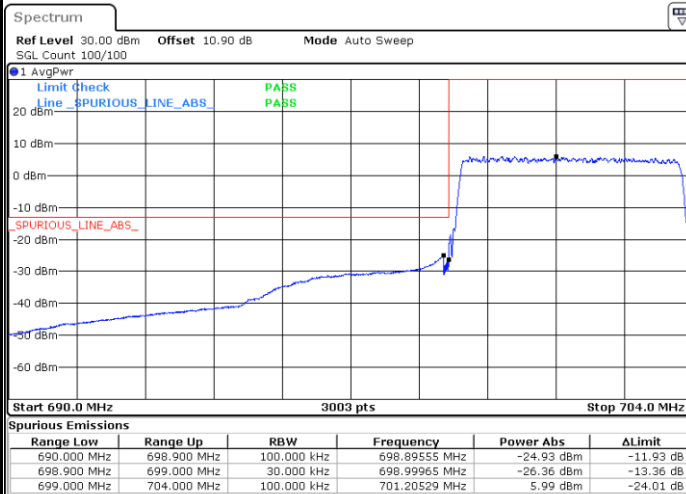
Lowest Band Edge / 1RB



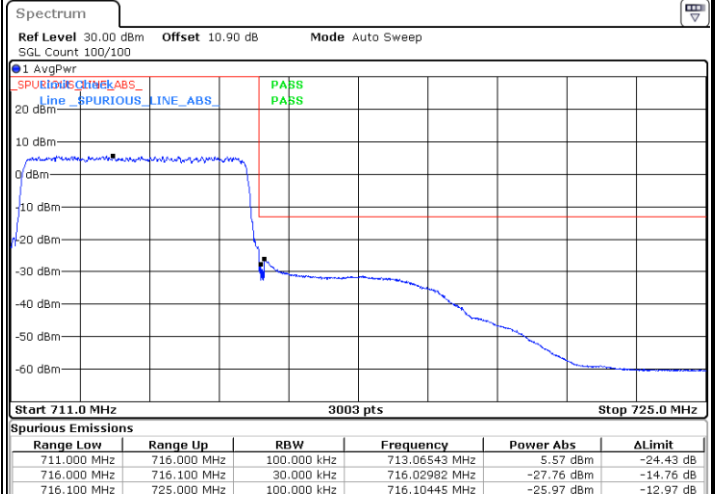
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



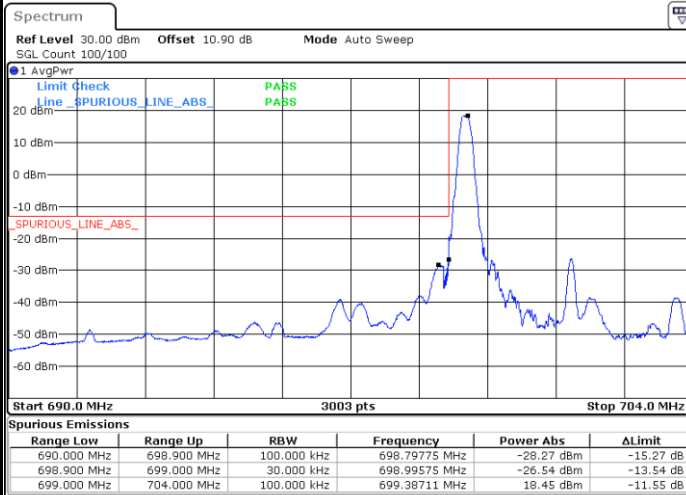
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 64QAM

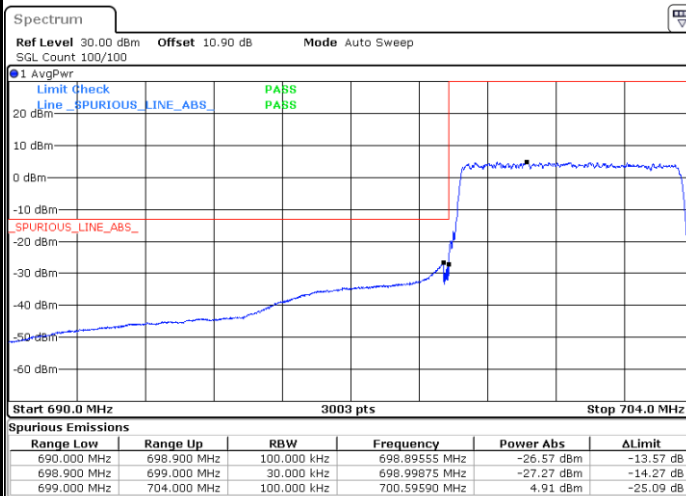
Lowest Band Edge / 1RB



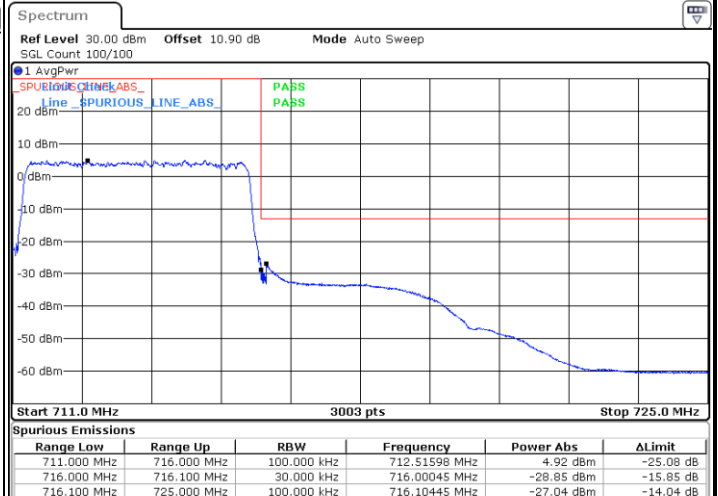
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



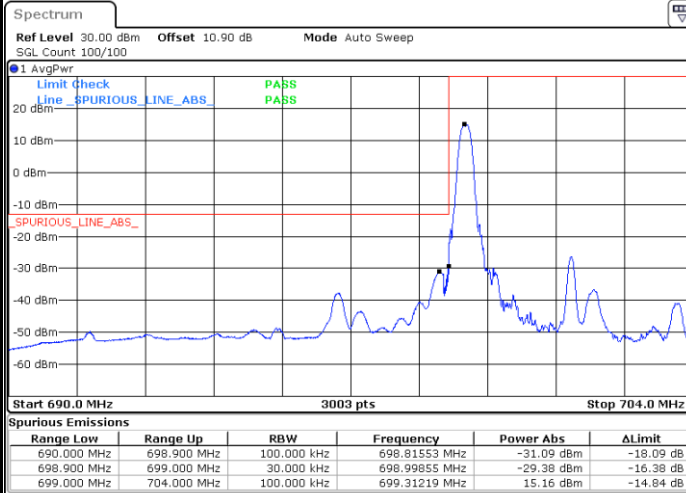
Highest Band Edge / Full RB



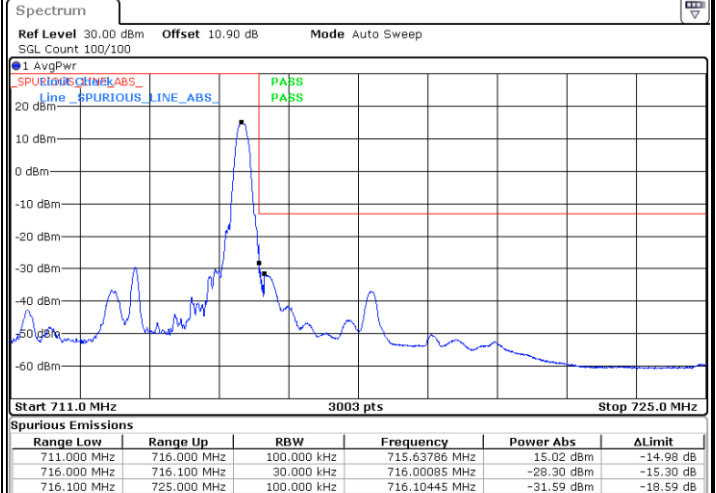


LTE Band 12 / 5MHz / 256QAM

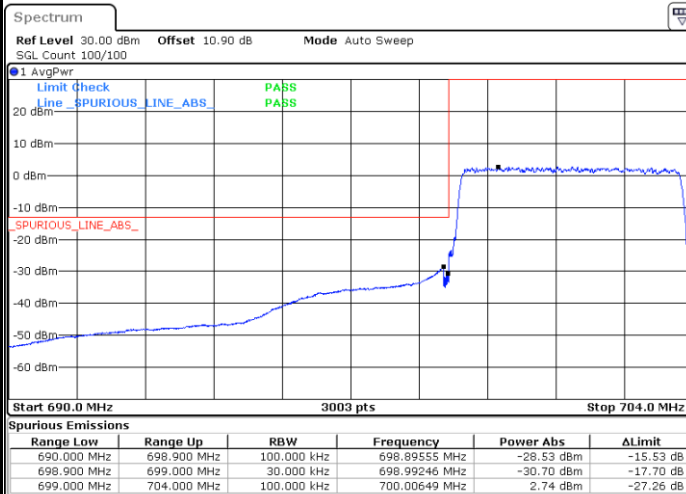
Lowest Band Edge / 1RB



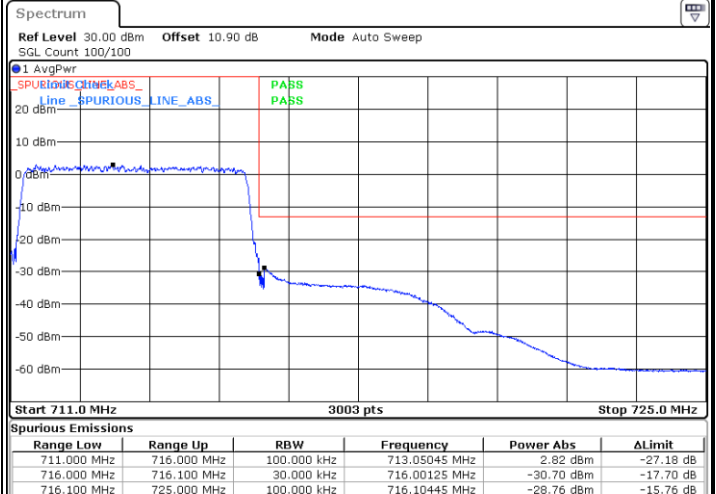
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



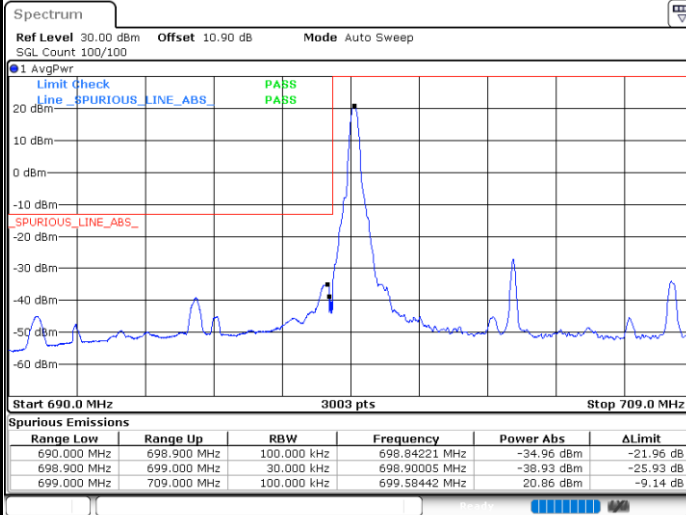
Highest Band Edge / Full RB



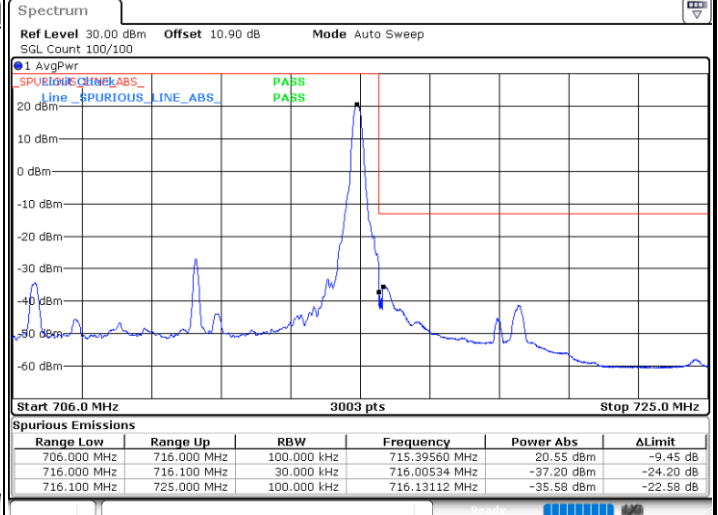


LTE Band 12 / 10MHz / QPSK

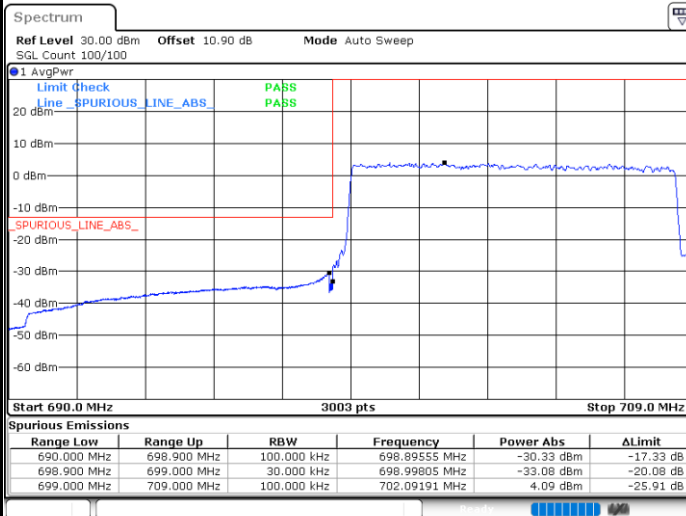
Lowest Band Edge / 1 RB



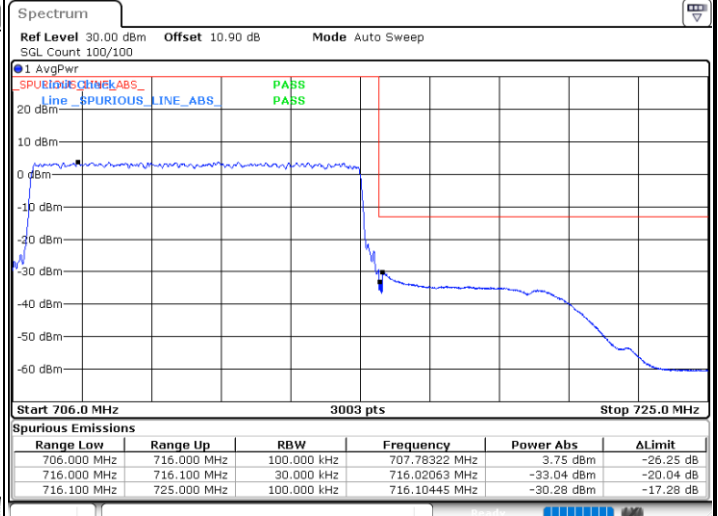
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



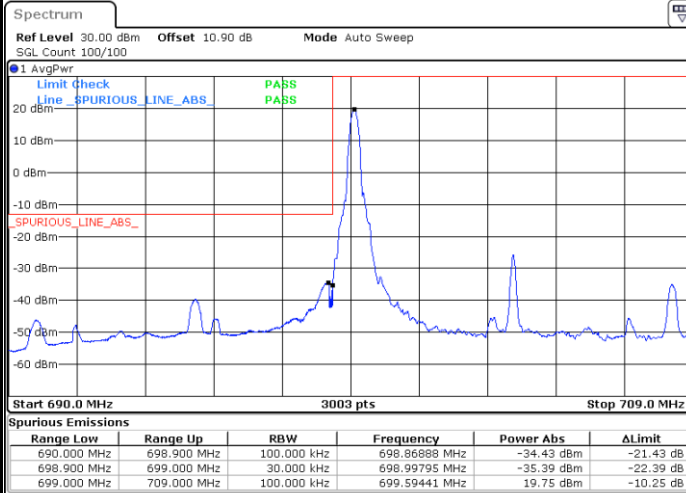
Highest Band Edge / Full RB



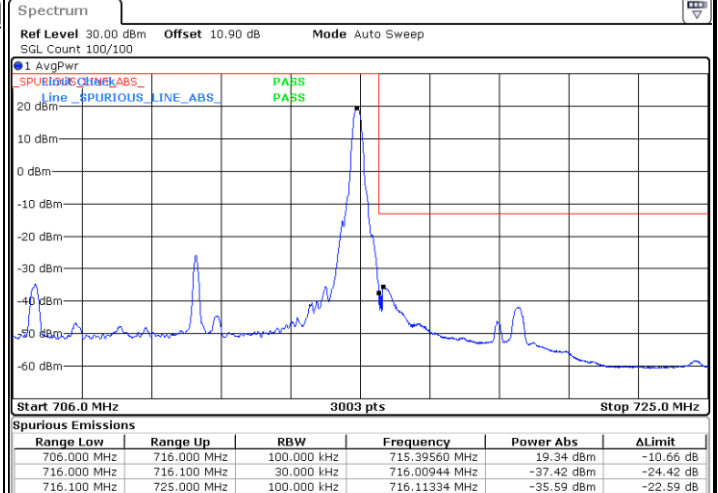


LTE Band 12 / 10MHz / 16QAM

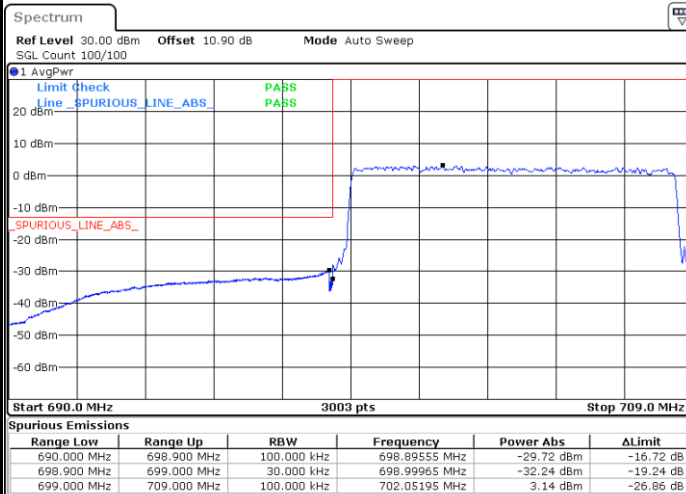
Lowest Band Edge / 1 RB



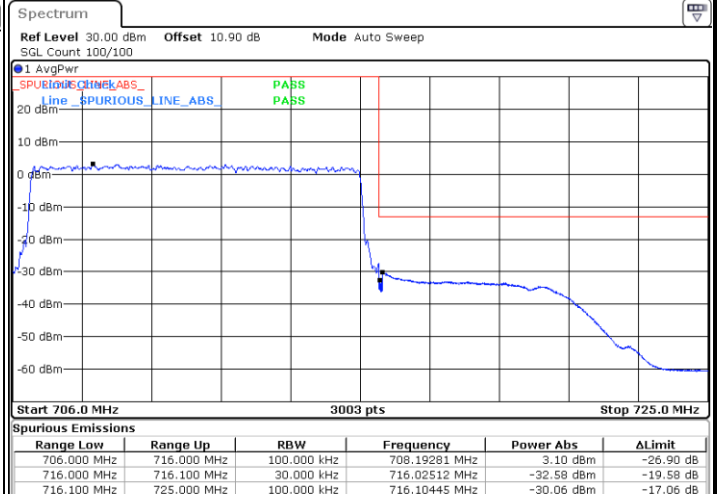
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



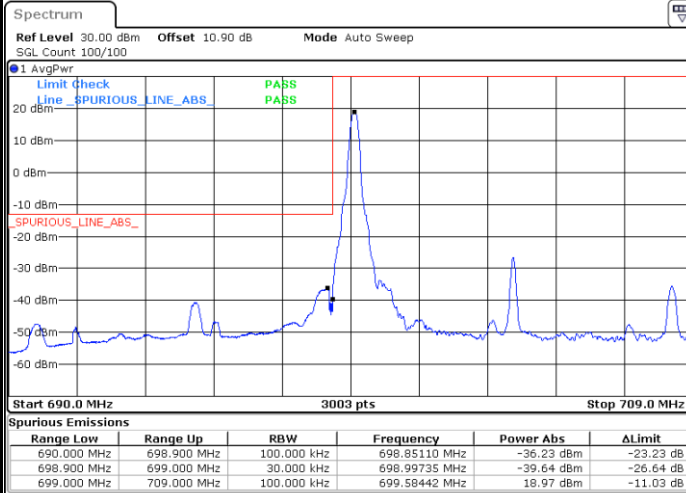
Highest Band Edge / Full RB



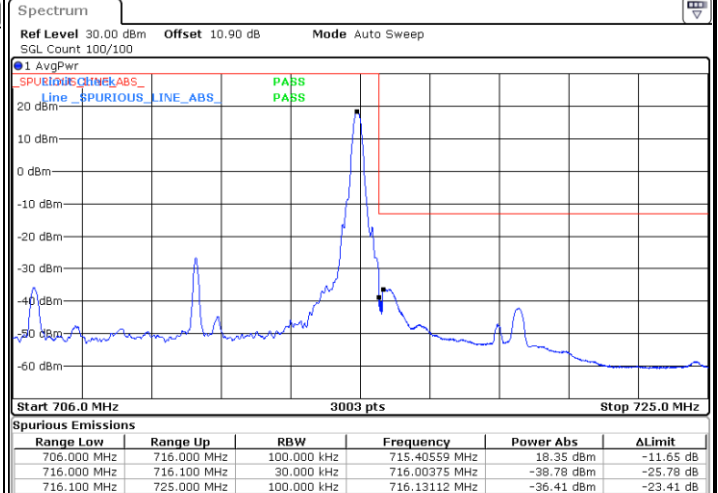


LTE Band 12 / 10MHz / 64QAM

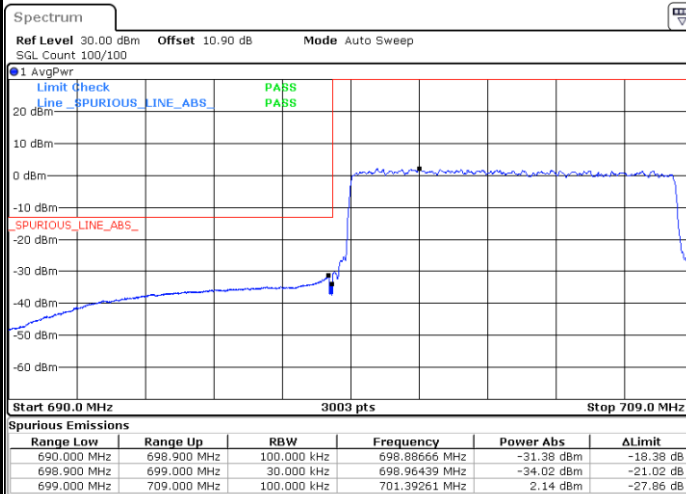
Lowest Band Edge / 1 RB



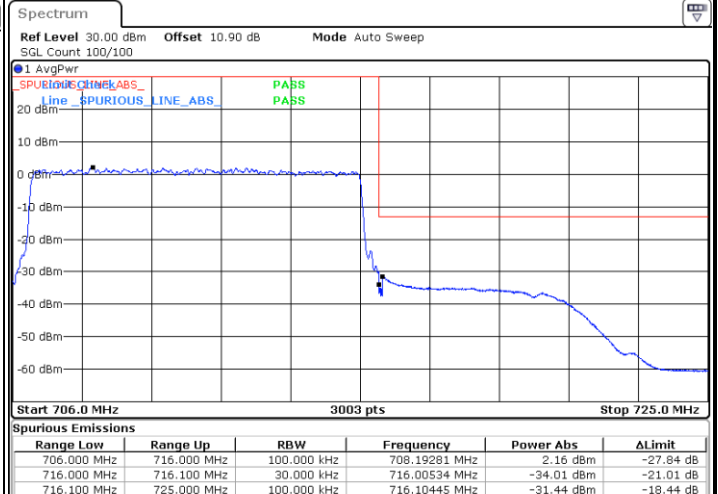
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



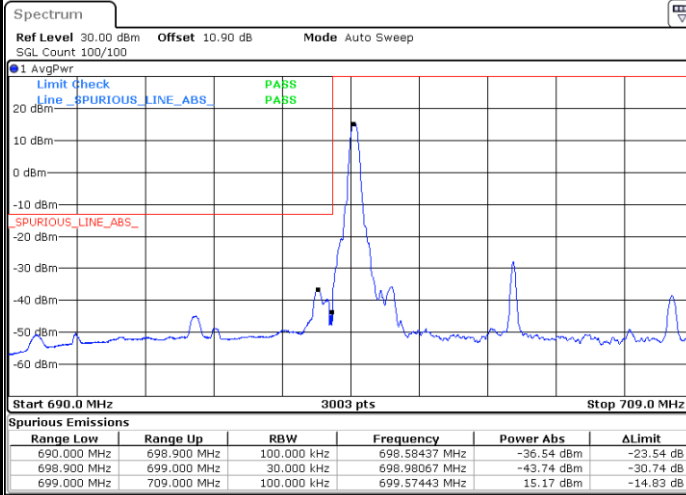
Highest Band Edge / Full RB



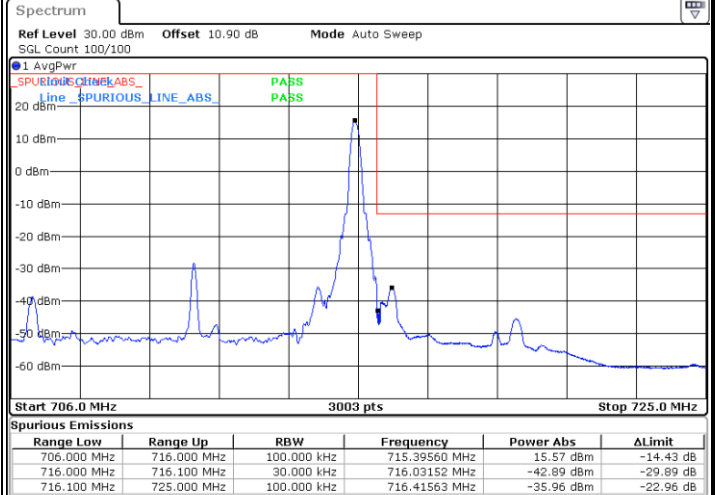


LTE Band 12 / 10MHz / 256QAM

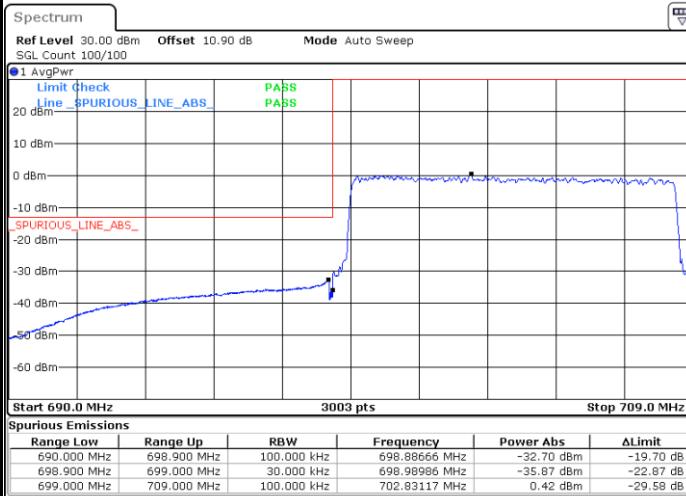
Lowest Band Edge / 1 RB



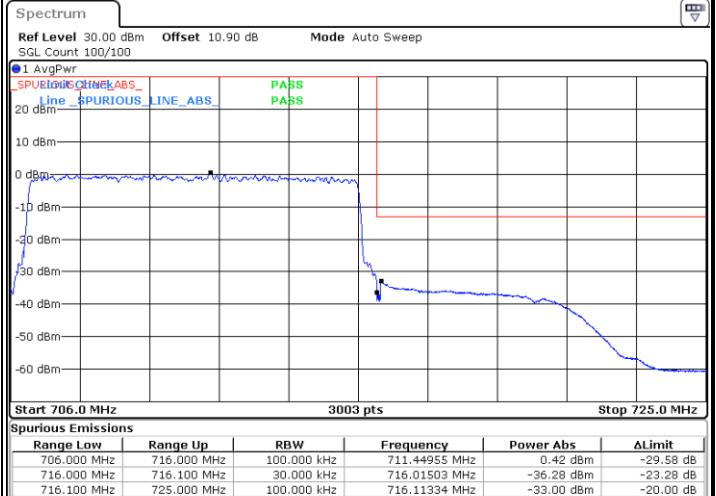
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

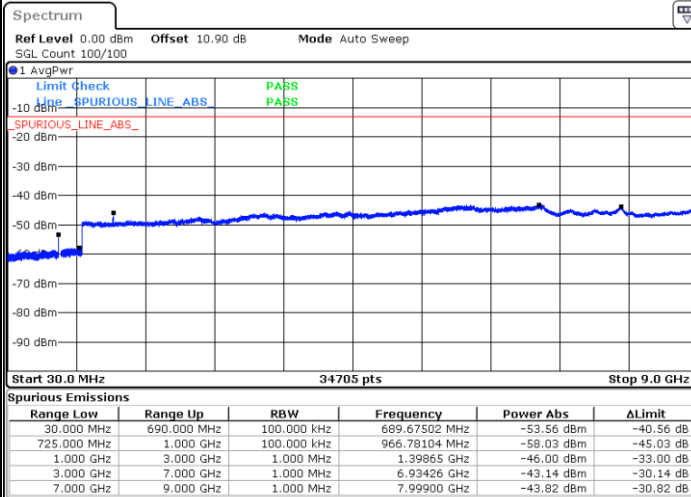




Conducted Spurious Emission

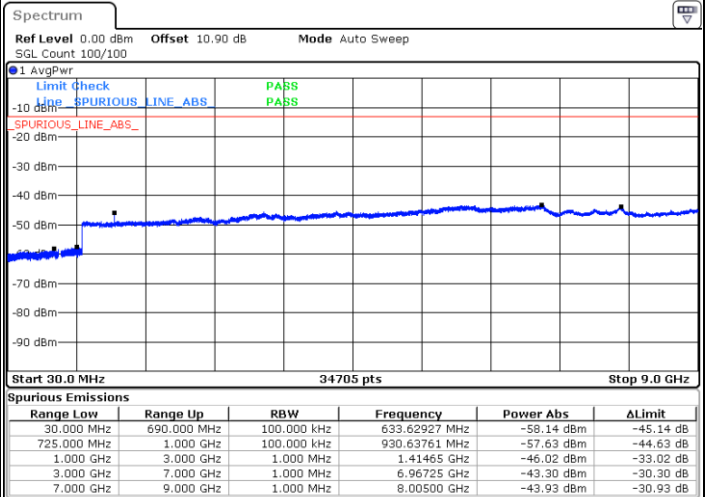
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



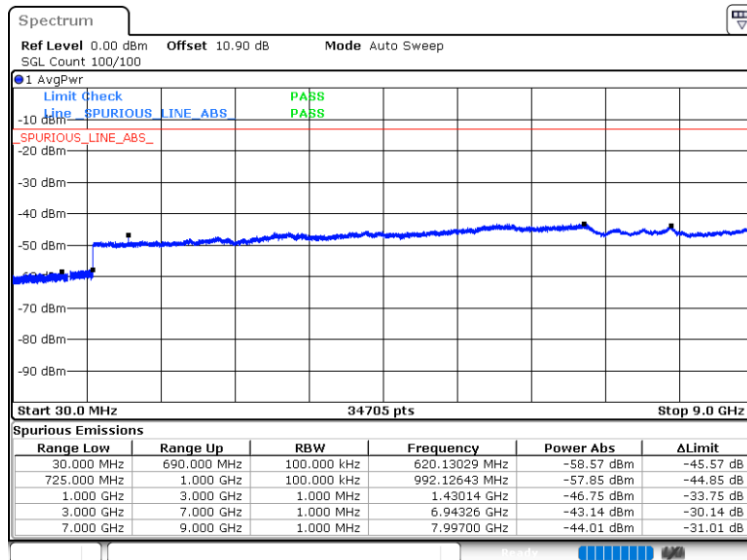
Date: 20.JUN.2021 14:06:55

Middle Channel / QPSK



Date: 20.JUN.2021 14:08:58

Highest Channel / QPSK

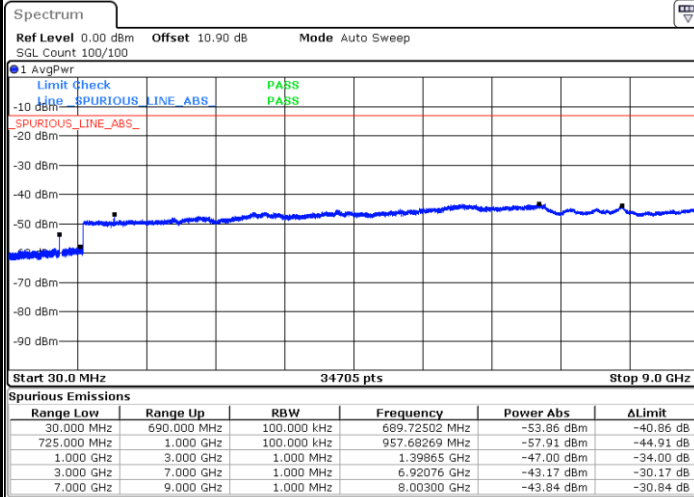


Date: 20.JUN.2021 14:12:18



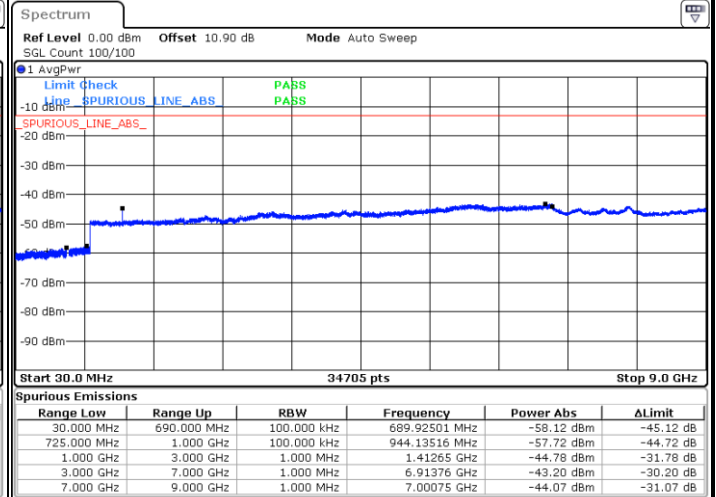
LTE Band 12 / 3MHz

Lowest Channel / QPSK



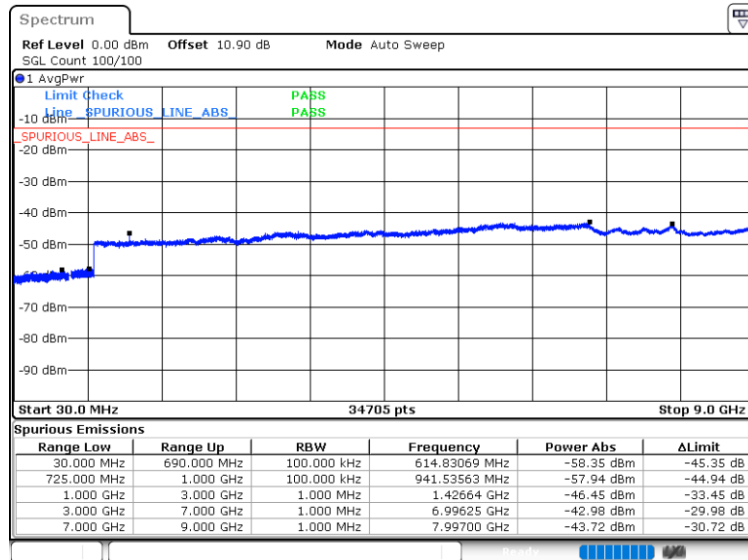
Date: 20.JUN.2021 14:20:25

Middle Channel / QPSK



Date: 20.JUN.2021 14:22:28

Highest Channel / QPSK

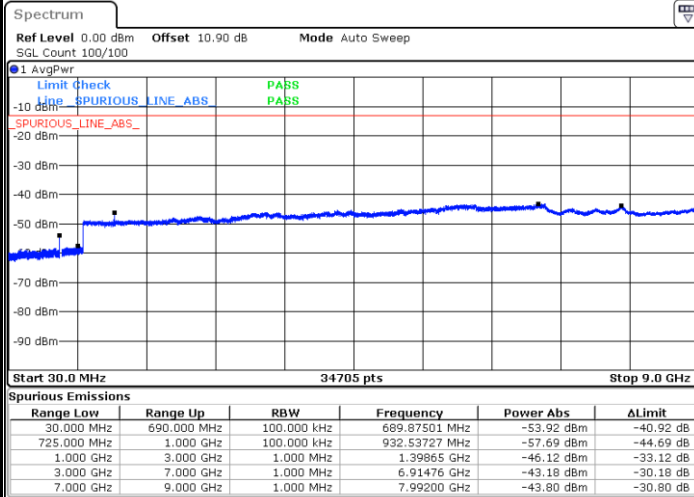


Date: 20.JUN.2021 14:25:48



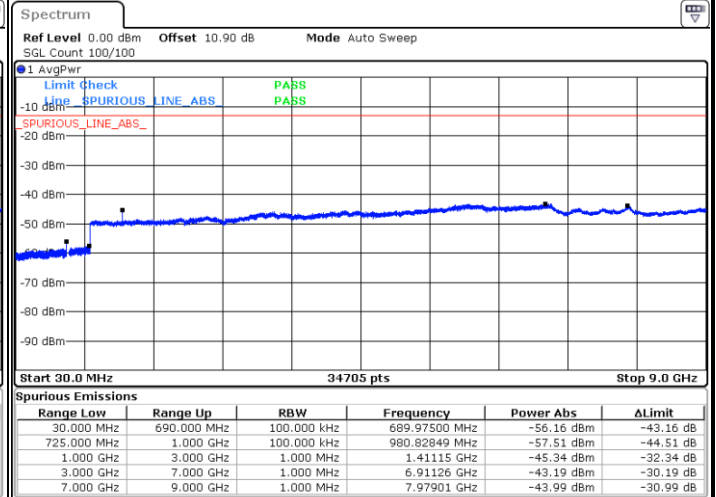
LTE Band 12 / 5MHz

Lowest Channel / QPSK



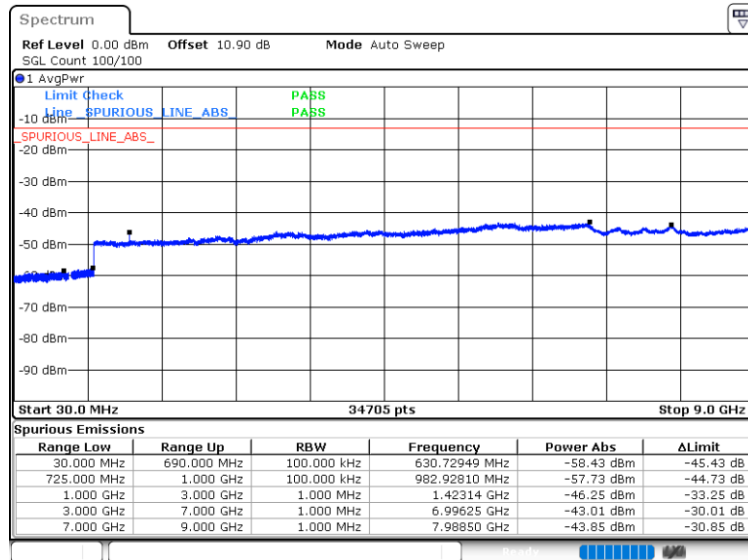
Date: 20.JUN.2021 14:37:03

Middle Channel / QPSK



Date: 20.JUN.2021 14:39:06

Highest Channel / QPSK

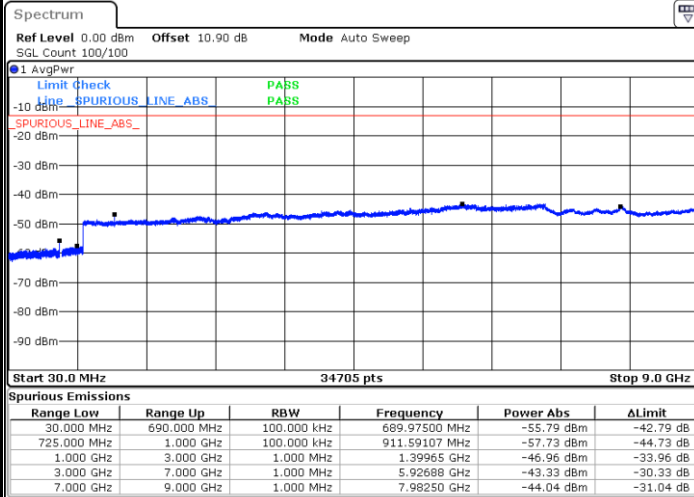


Date: 20.JUN.2021 14:42:26



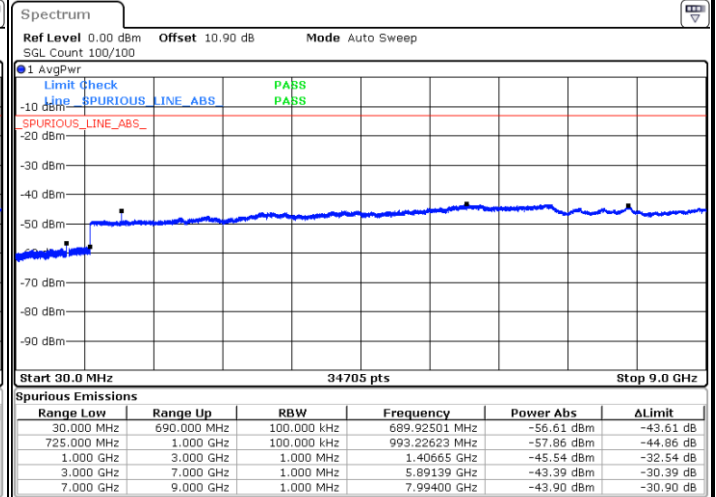
LTE Band 12 / 10MHz

Lowest Channel / QPSK



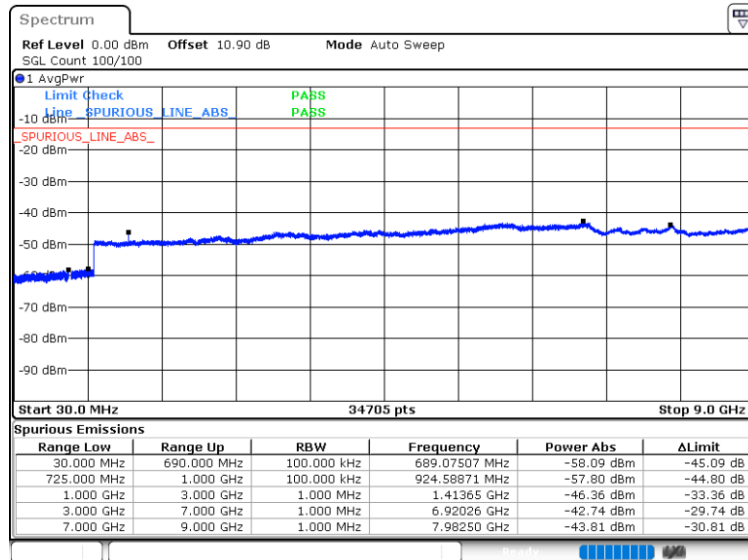
Date: 20.JUN.2021 14:46:38

Middle Channel / QPSK



Date: 20.JUN.2021 14:48:41

Highest Channel / QPSK



Date: 20.JUN.2021 14:52:03

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	0.0001	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0100	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0153	
-20	Normal Voltage	0.0174	
-30	Normal Voltage	0.0049	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0175	
20	Battery End Point	0.0033	

Note:

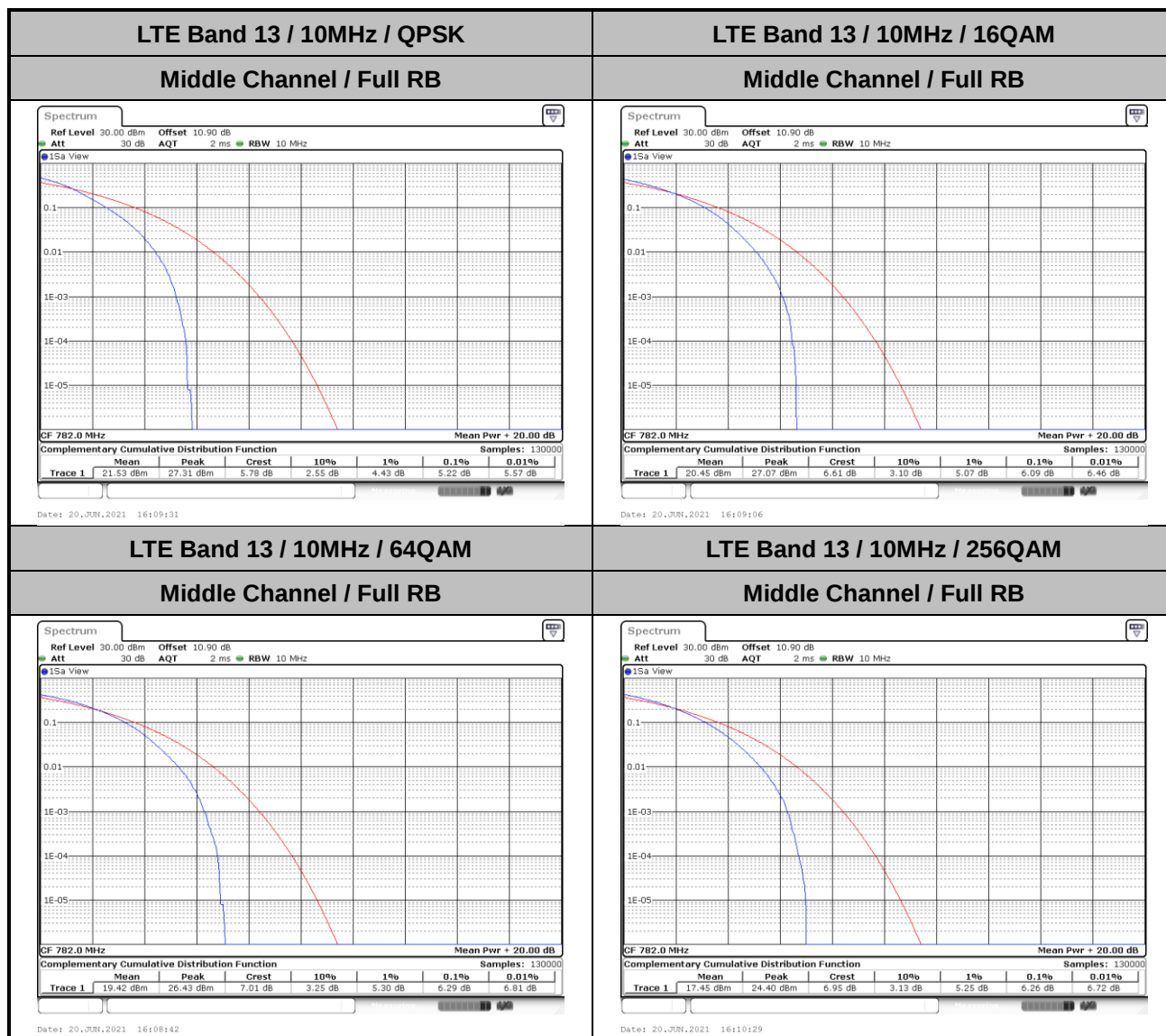
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.60 V. ; Maximum Voltage =4.45 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	5.22	6.09	6.29	6.26	PASS



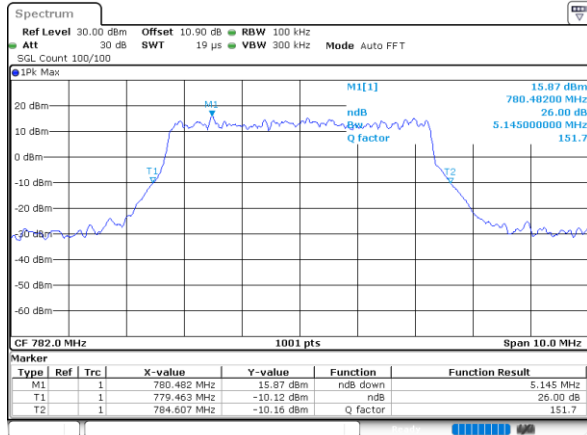
**26dB Bandwidth**

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	-	-	-	-	5.15	5.09	10.13	10.03	-	-	-	-
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	-	-	-	-	5.30	5.20	9.93	9.99	-	-	-	-



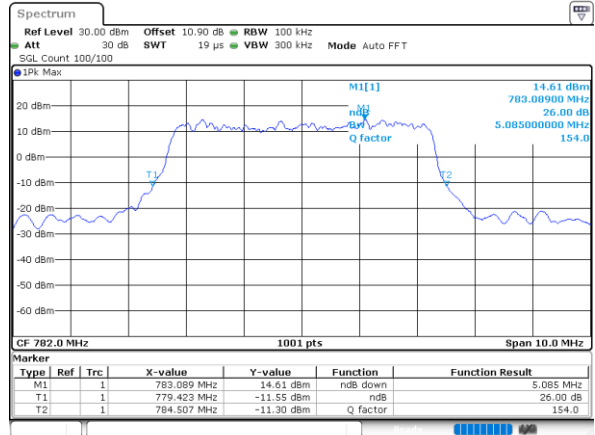
LTE Band 13

Middle Channel / 5MHz / QPSK



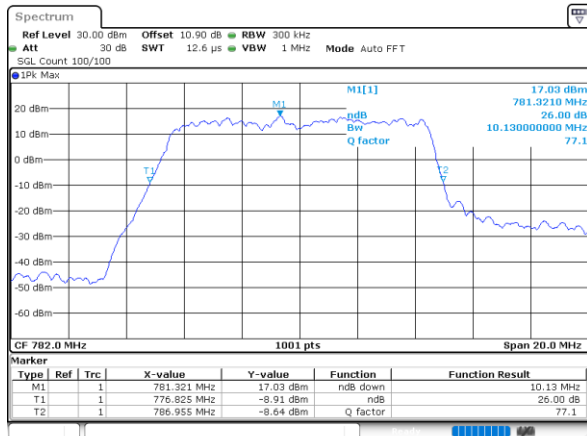
Date: 20 JUN 2021 15:30:17

Middle Channel / 5MHz / 16QAM



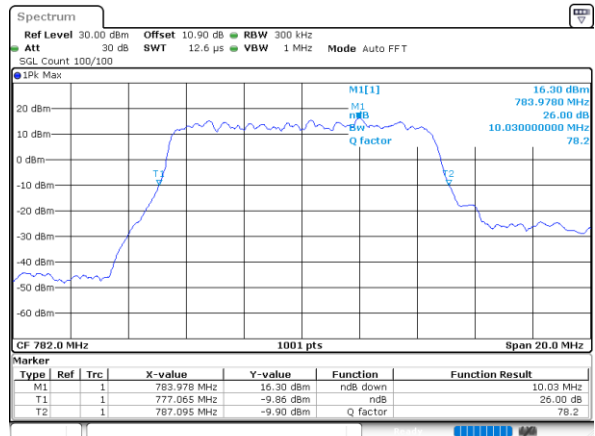
Date: 20 JUN 2021 15:30:38

Middle Channel / 10MHz / QPSK



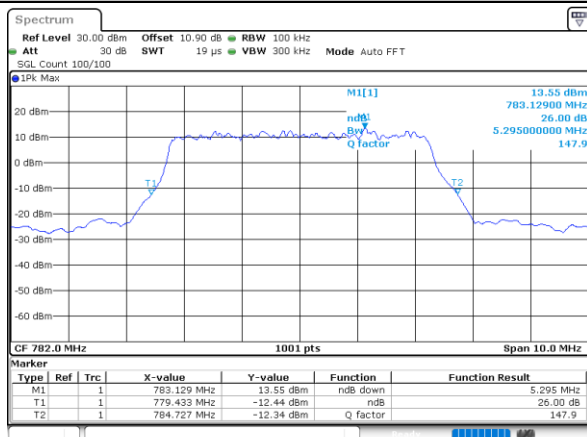
Date: 20 JUN 2021 15:50:28

Middle Channel / 10MHz / 16QAM



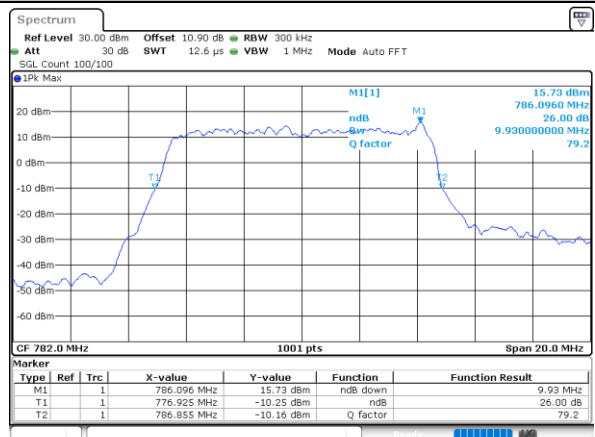
Date: 20 JUN 2021 15:50:07

Middle Channel / 5MHz / 64QAM



Date: 20 JUN 2021 15:44:29

Middle Channel / 10MHz / 64QAM

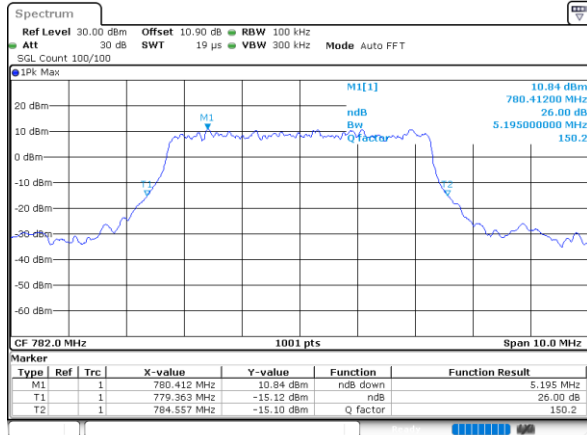


Date: 20 JUN 2021 16:02:49



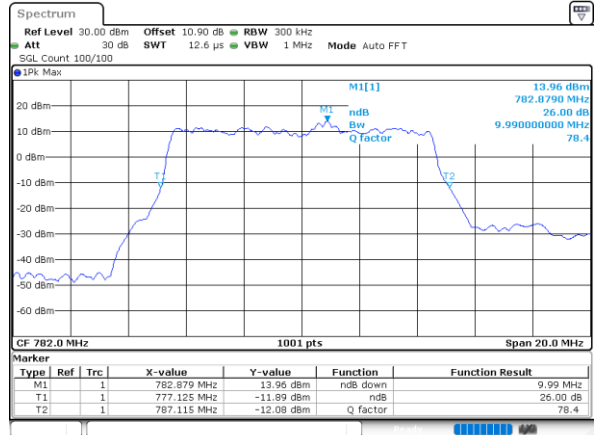
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 20 JUN 2021 16:12:34

Middle Channel / 10MHz / 256QAM



Date: 20 JUN 2021 16:10:17

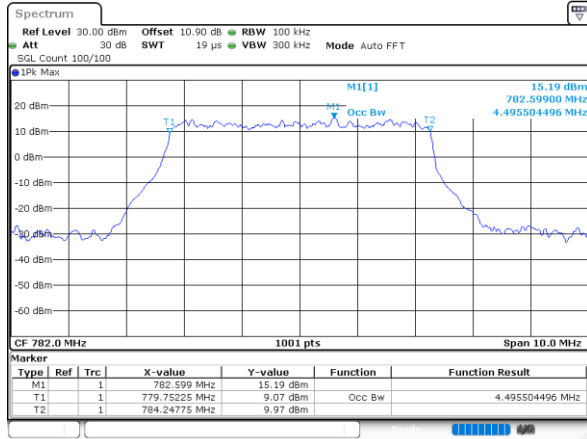
**Occupied Bandwidth**

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	-	-	-	-	4.50	4.51	9.03	8.97	-	-	-	-
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	4.52	9.05	9.09	-	-	-	-

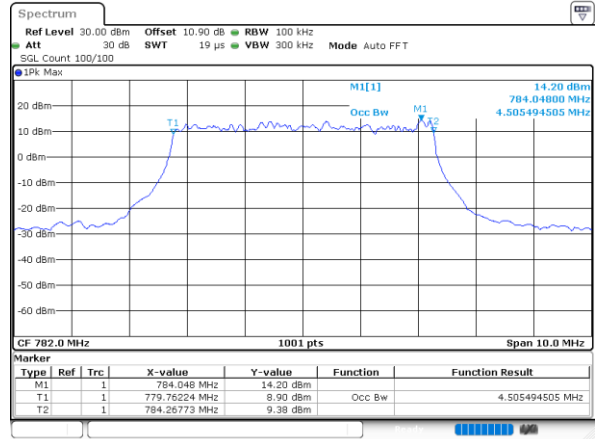


LTE Band 13

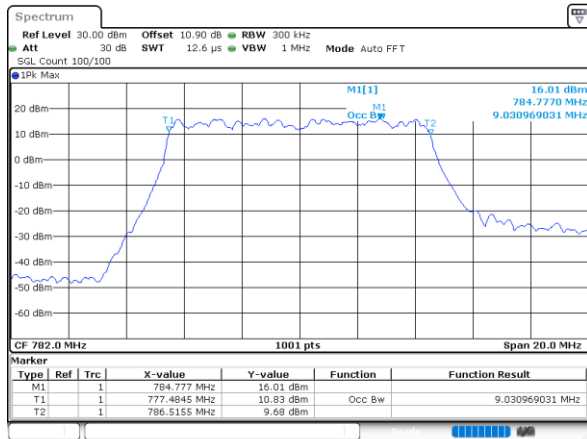
Middle Channel / 5MHz / QPSK



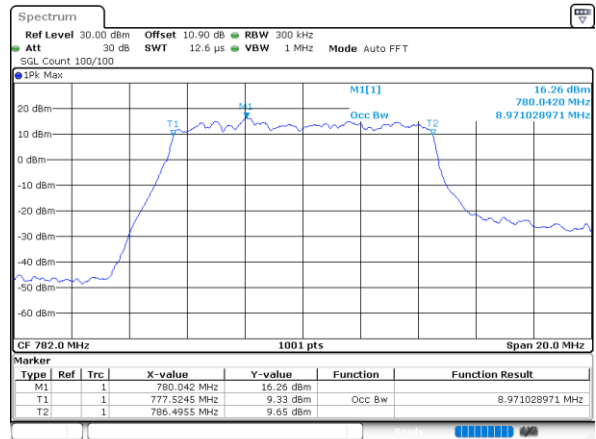
Middle Channel / 5MHz / 16QAM



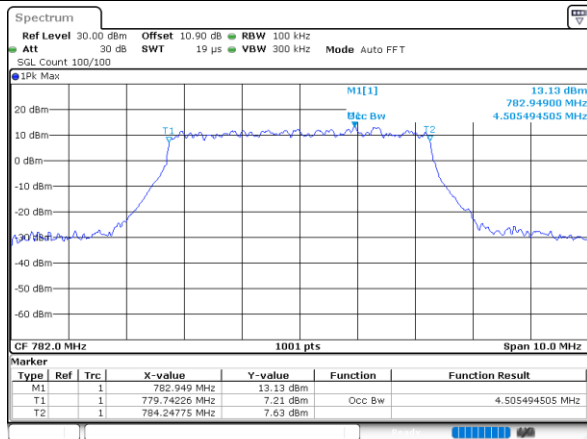
Middle Channel / 10MHz / QPSK



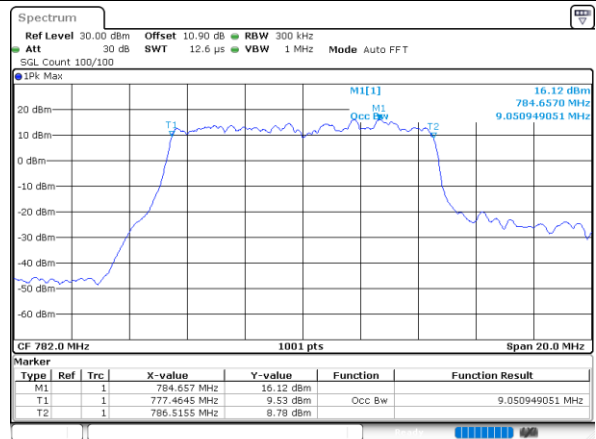
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



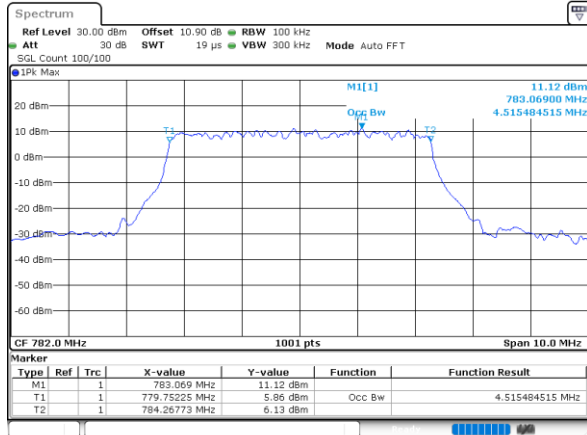
Middle Channel / 10MHz / 64QAM





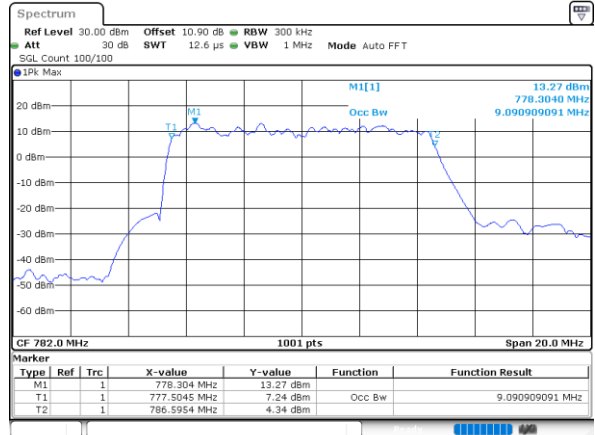
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 20 JUN 2021 16:12:21

Middle Channel / 10MHz / 256QAM



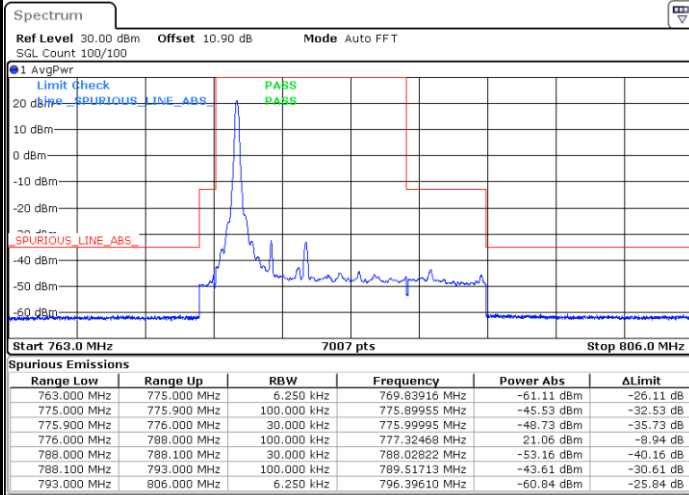
Date: 20 JUN 2021 16:10:08



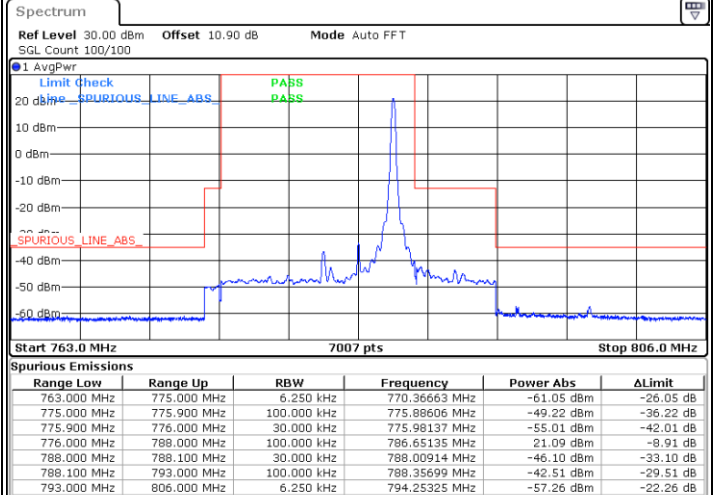
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

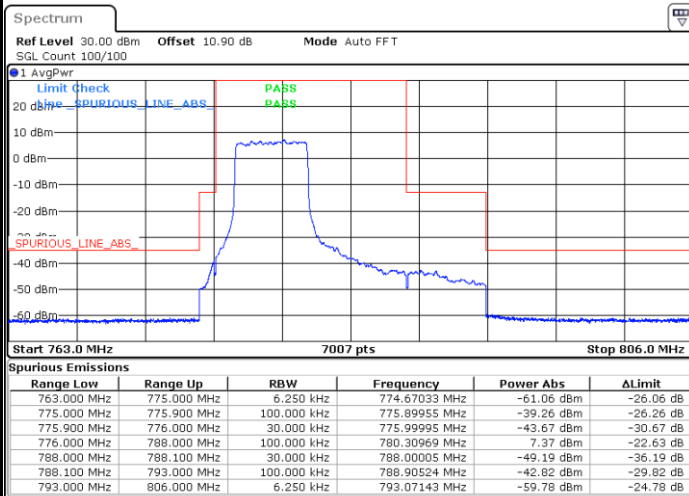
Lowest Band Edge / 1 RB



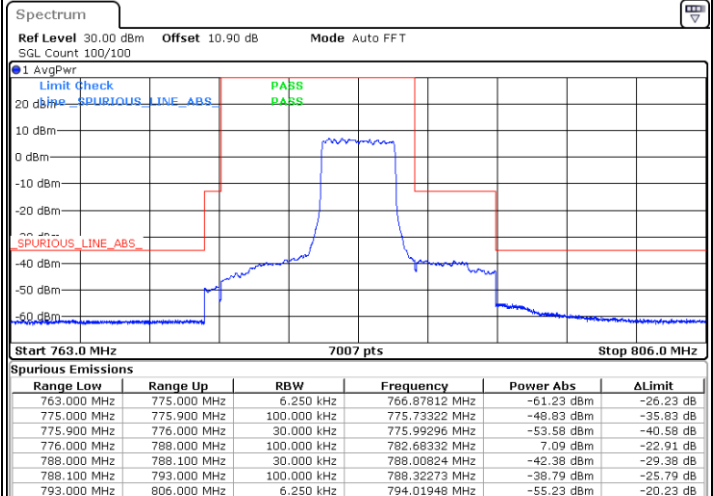
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



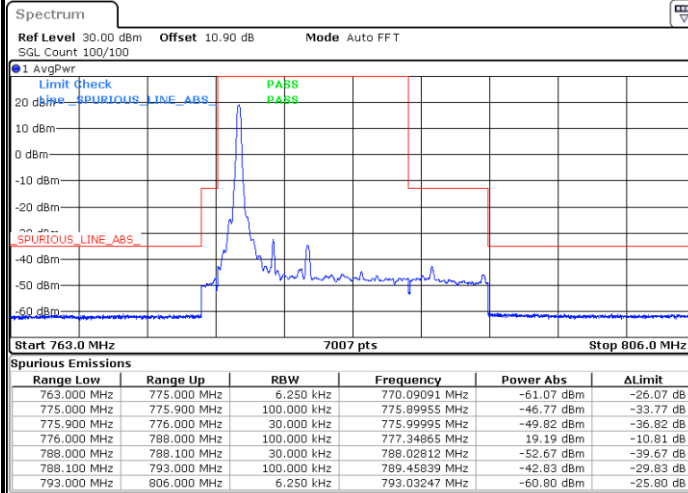
Highest Band Edge / Full RB





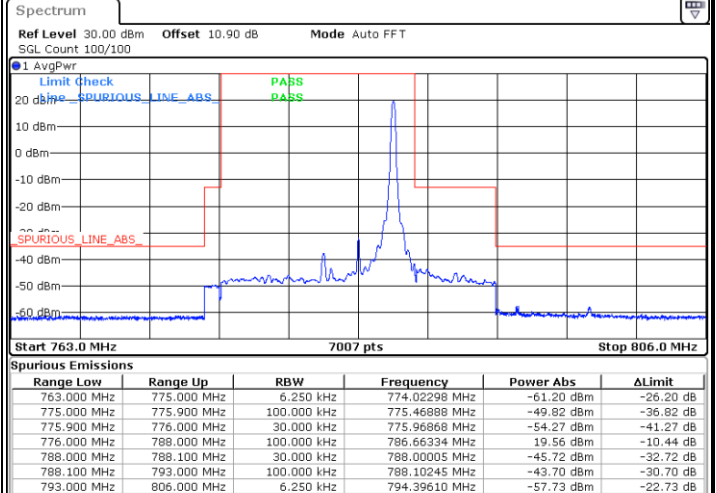
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



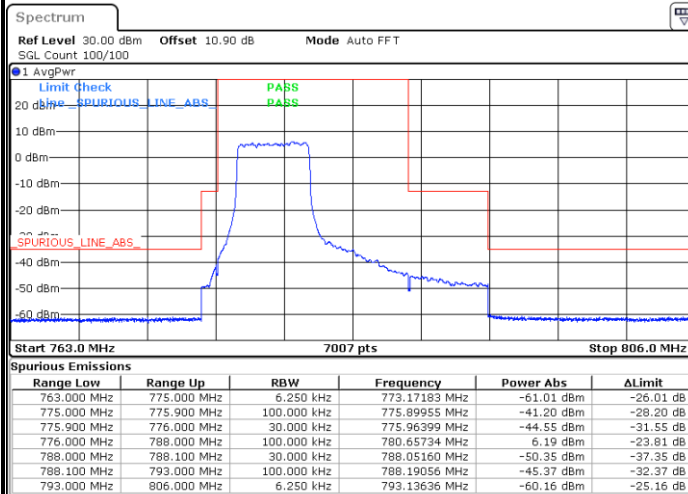
Date: 20.JUN.2021 15:26:52

Highest Band Edge / 1 RB



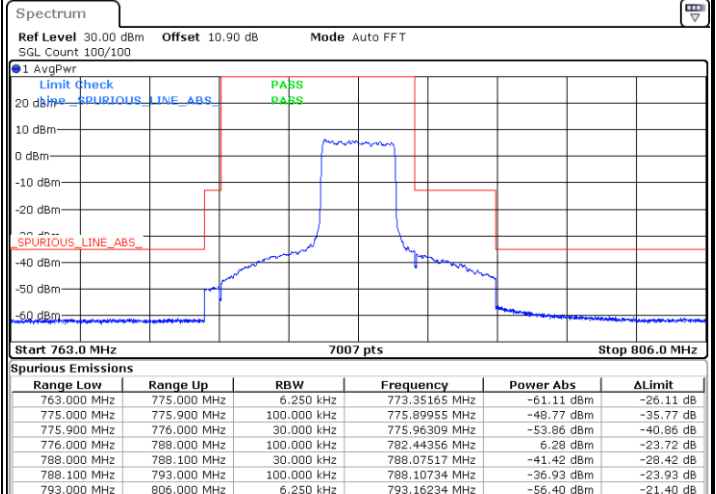
Date: 20.JUN.2021 15:37:59

Lowest Band Edge / Full RB



Date: 20.JUN.2021 15:25:01

Highest Band Edge / Full RB

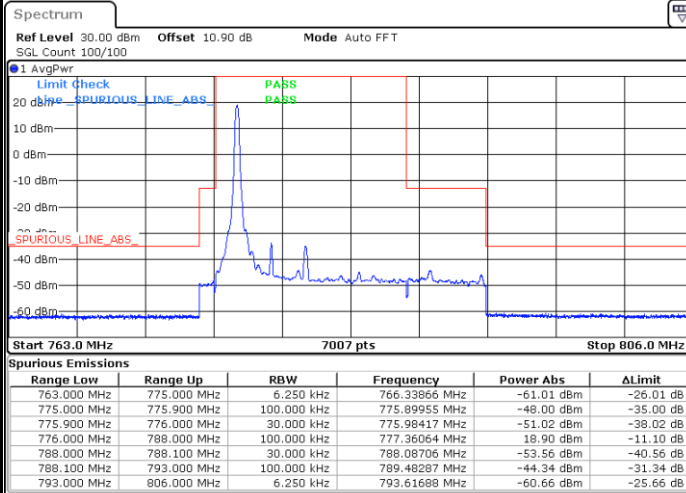


Date: 20.JUN.2021 15:36:07



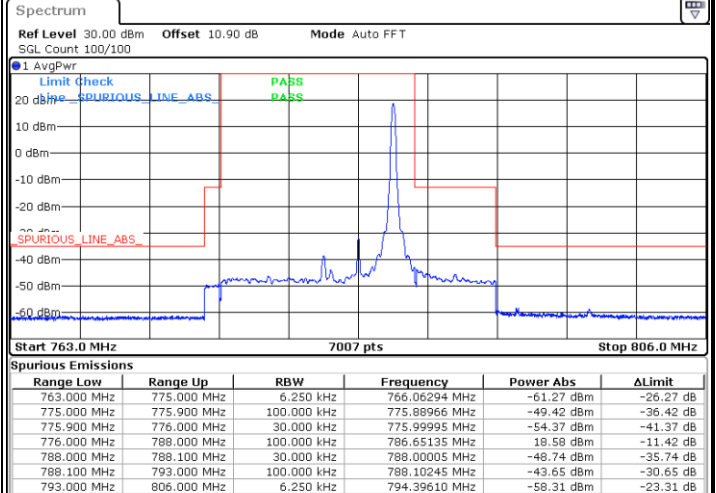
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



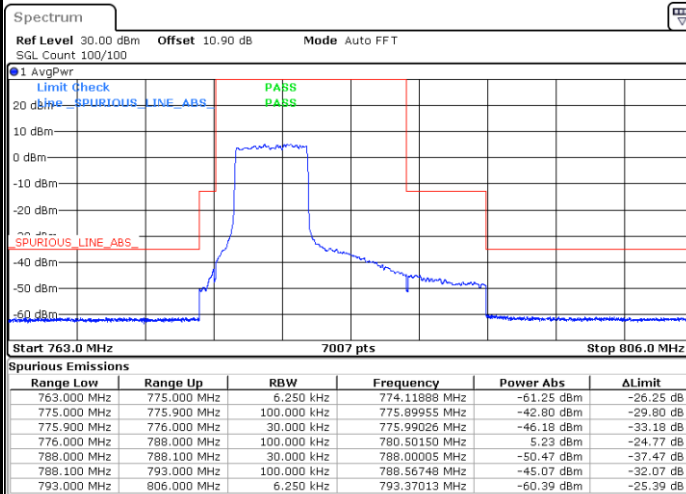
Date: 20.JUN.2021 15:44:07

Highest Band Edge / 1 RB



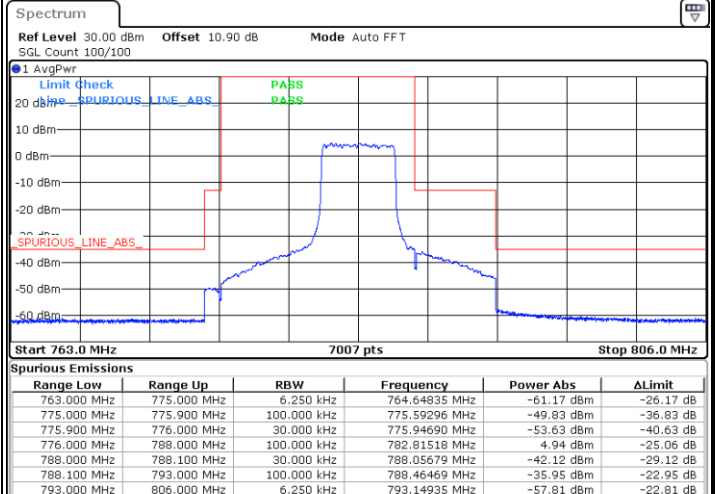
Date: 20.JUN.2021 15:48:34

Lowest Band Edge / Full RB



Date: 20.JUN.2021 15:42:16

Highest Band Edge / Full RB

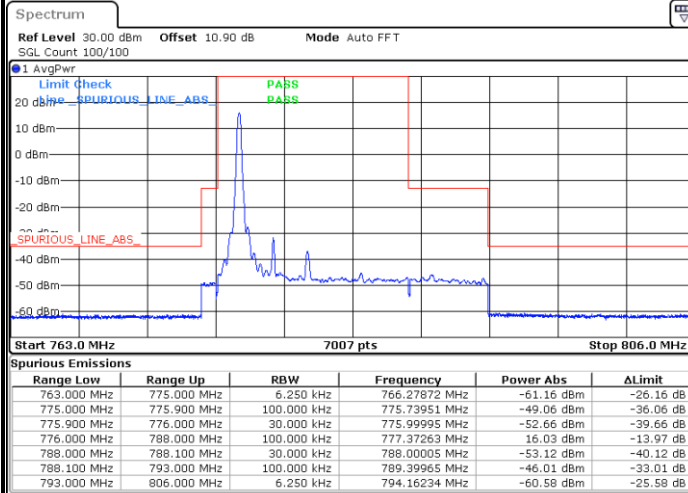


Date: 20.JUN.2021 15:46:42



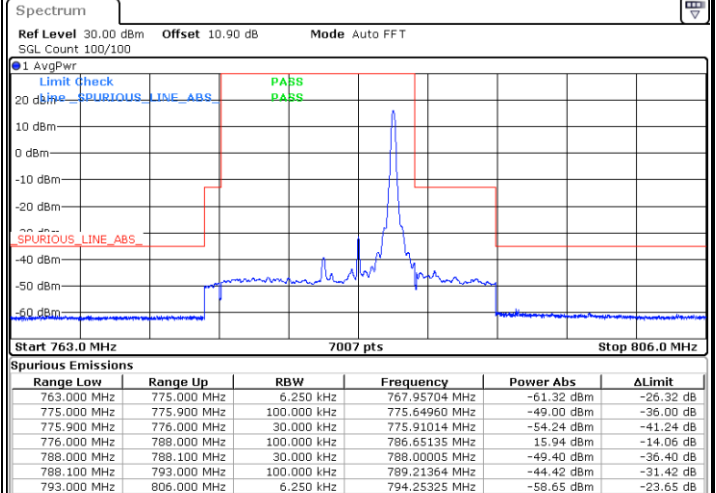
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



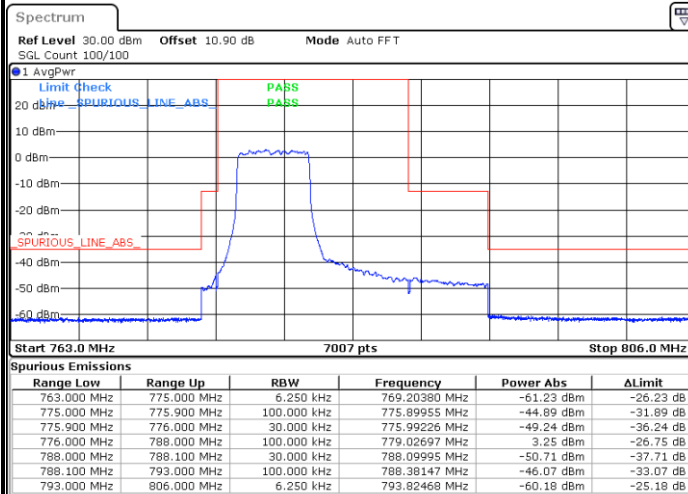
Date: 20.JUN.2021 16:13:18

Highest Band Edge / 1 RB



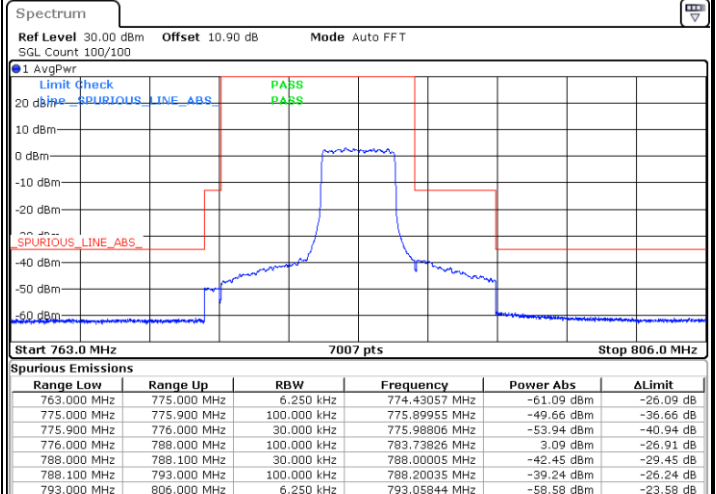
Date: 20.JUN.2021 16:14:10

Lowest Band Edge / Full RB



Date: 20.JUN.2021 16:13:02

Highest Band Edge / Full RB



Date: 20.JUN.2021 16:13:49