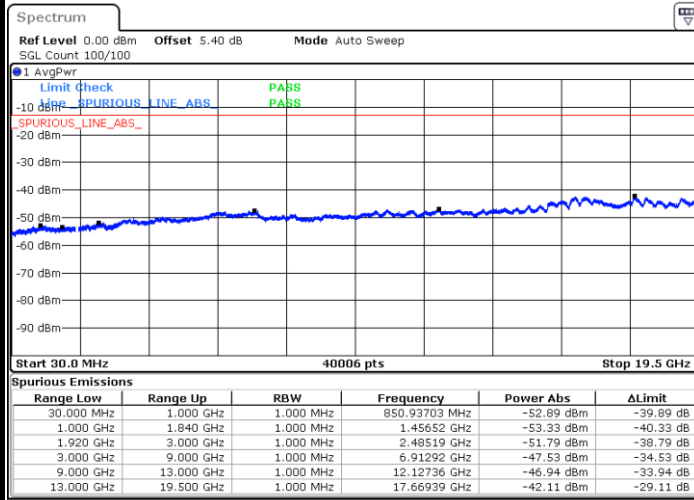




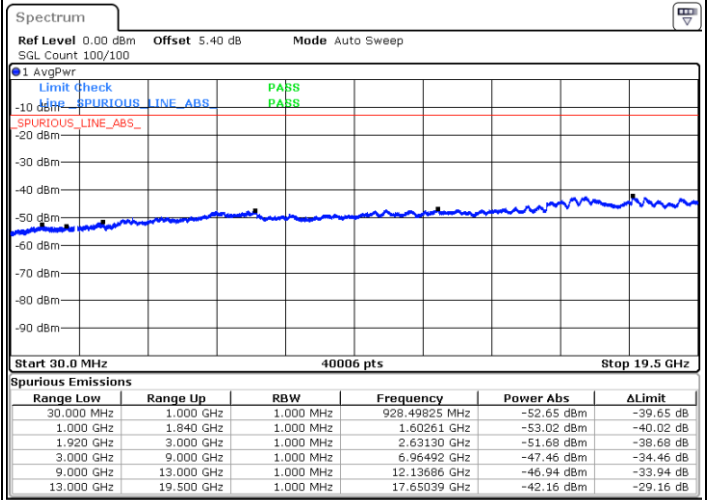
LTE Band 2 / 10MHz

Lowest Channel / QPSK



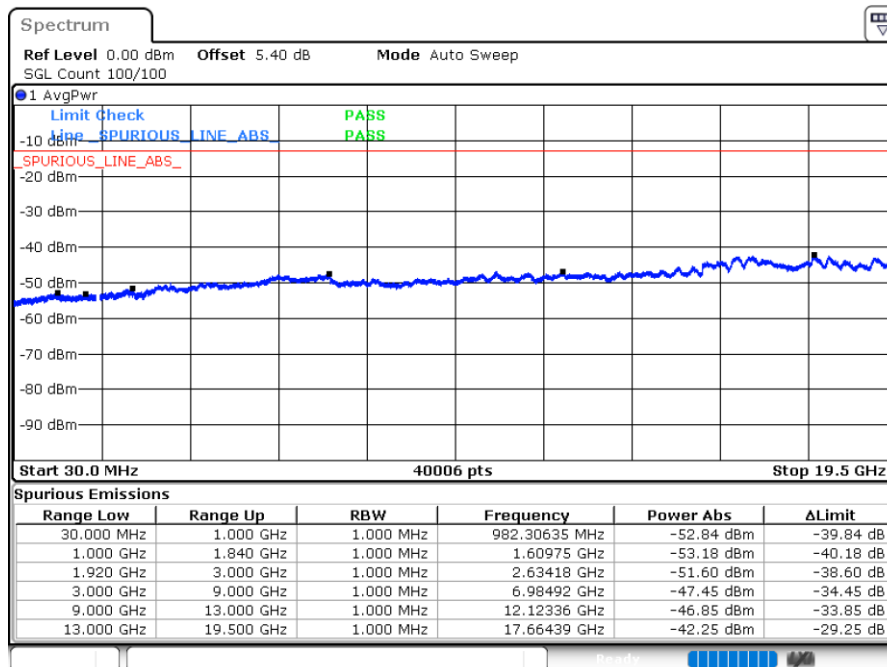
Date: 28.JAN.2022 16:00:27

Middle Channel / QPSK



Date: 28.JAN.2022 16:05:46

Highest Channel / QPSK

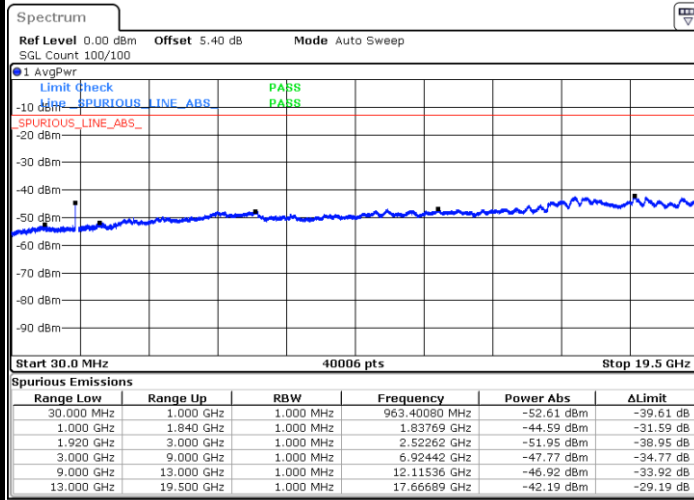


Date: 28.JAN.2022 16:06:45



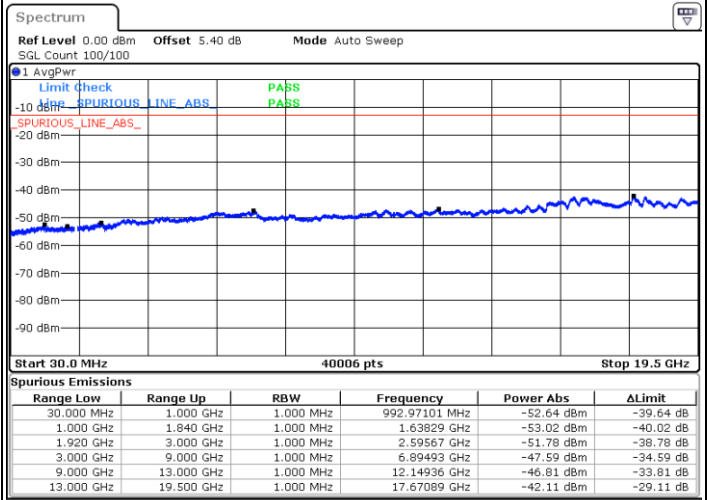
LTE Band 2 / 15MHz

Lowest Channel / QPSK



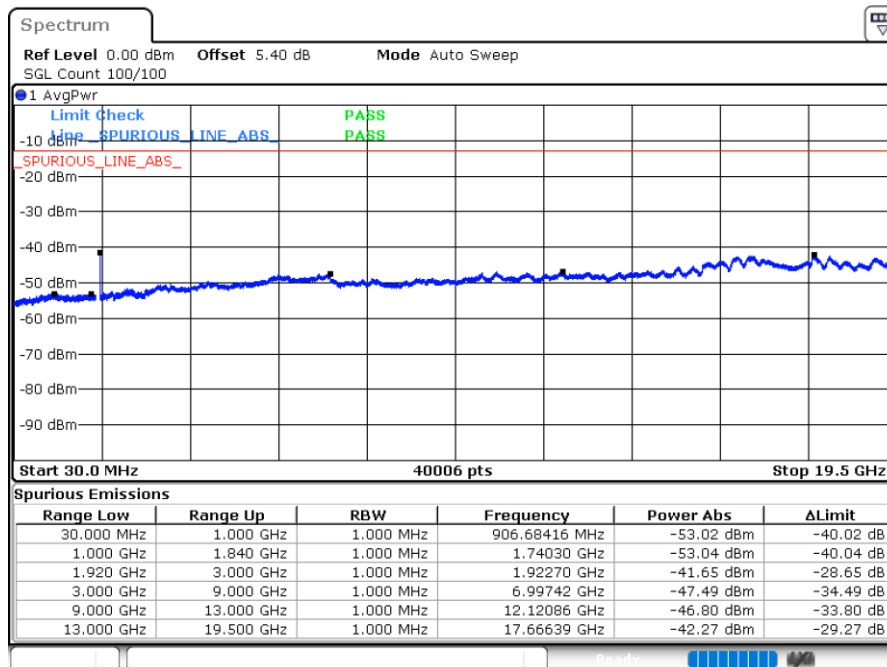
Date: 28.JAN.2022 16:12:14

Middle Channel / QPSK



Date: 28.JAN.2022 16:17:32

Highest Channel / QPSK

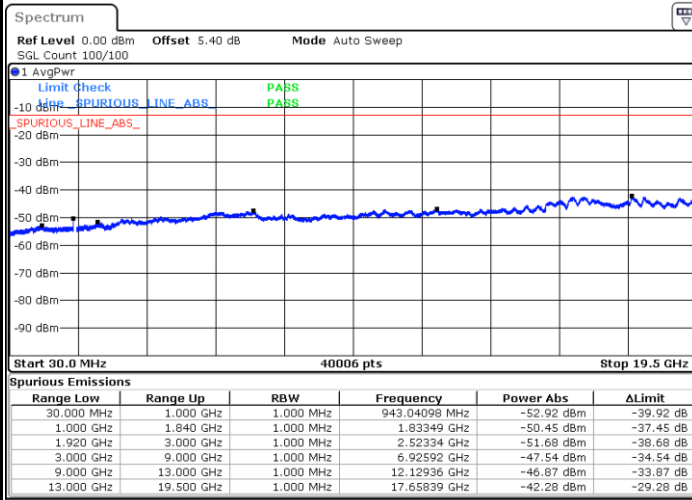


Date: 28.JAN.2022 16:19:08



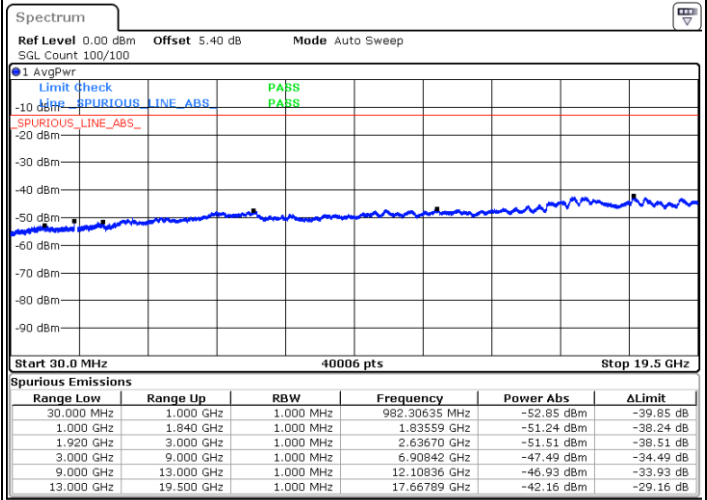
LTE Band 2 / 20MHz

Lowest Channel / QPSK



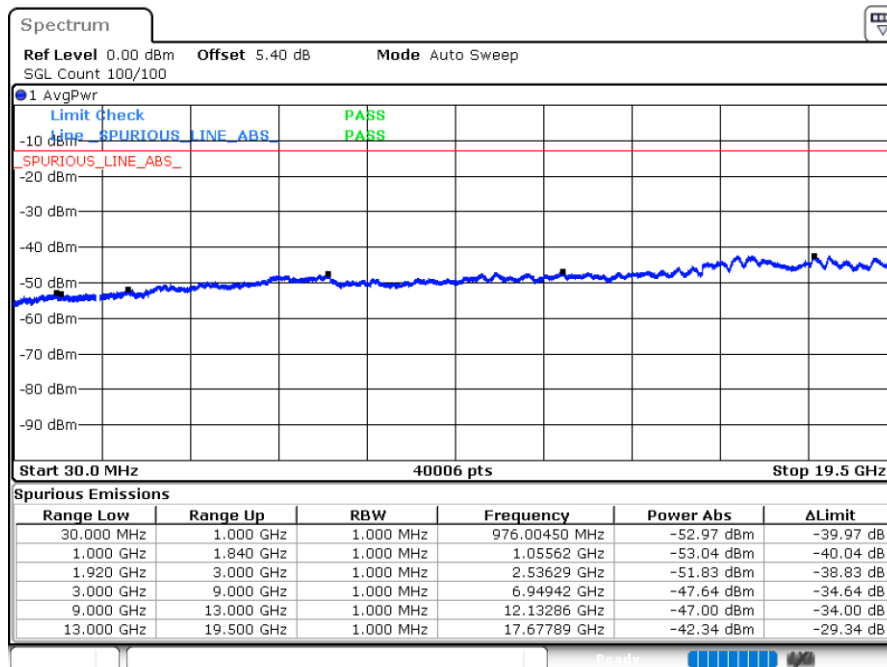
Date: 28.JAN.2022 16:24:36

Middle Channel / QPSK



Date: 28.JAN.2022 16:30:34

Highest Channel / QPSK



Date: 28.JAN.2022 16:31:33

**Frequency Stability**

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0015	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0013	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0011	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0013	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

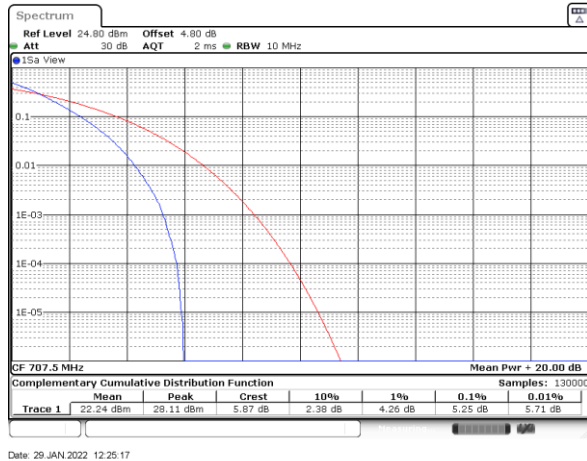
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.25	6.32	5.97	PASS

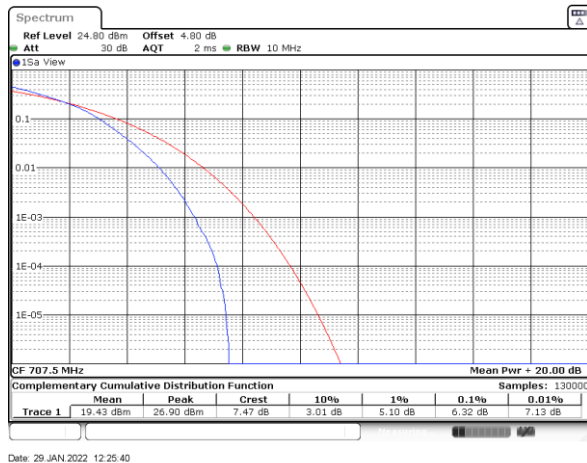


LTE Band 12 / 10MHz

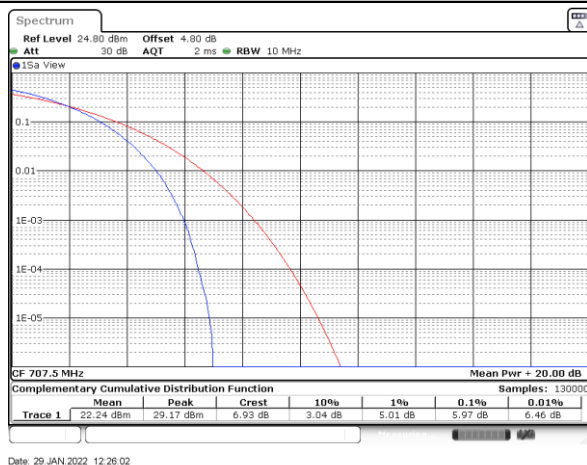
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

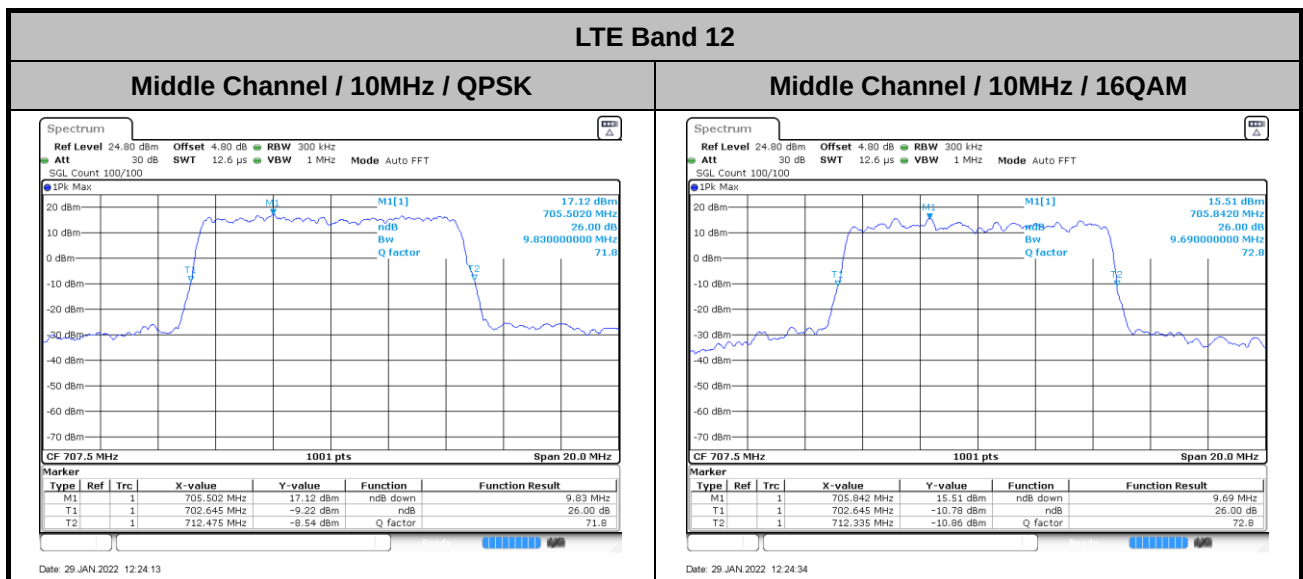


Middle Channel / Full RB/ 64QAM



**26dB Bandwidth**

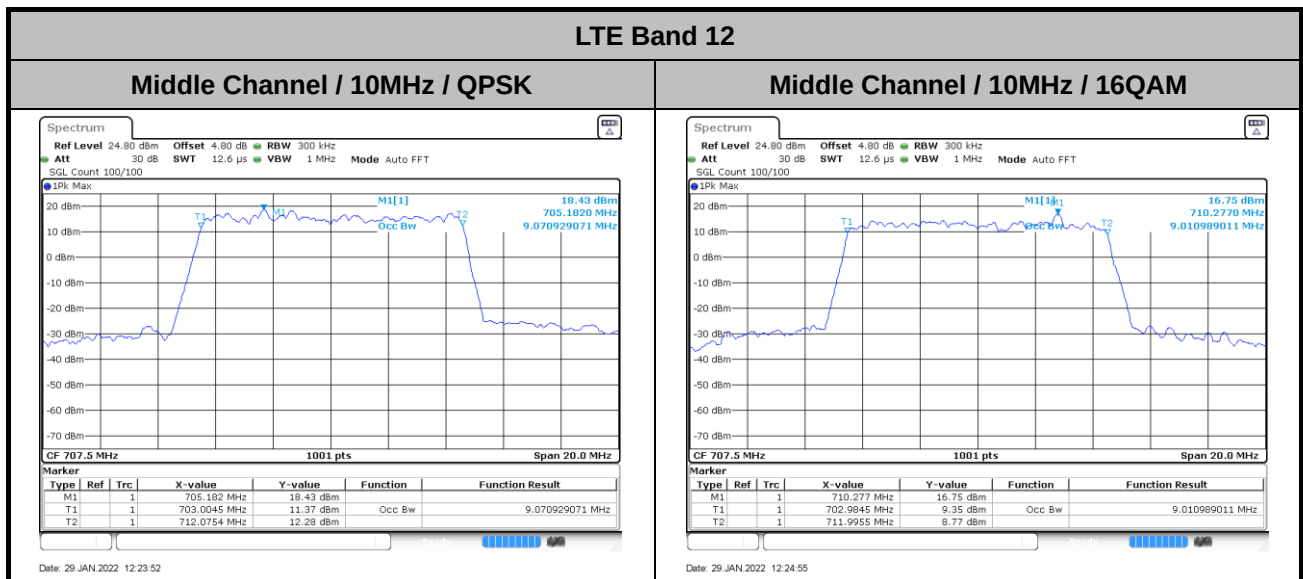
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.83	9.69





Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.07	9.01

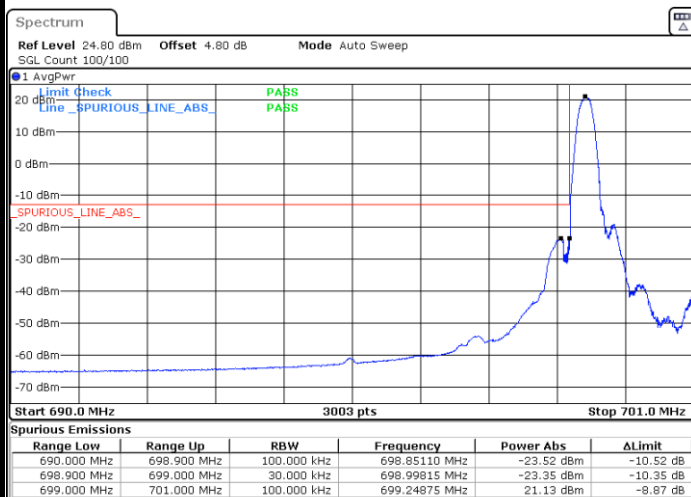




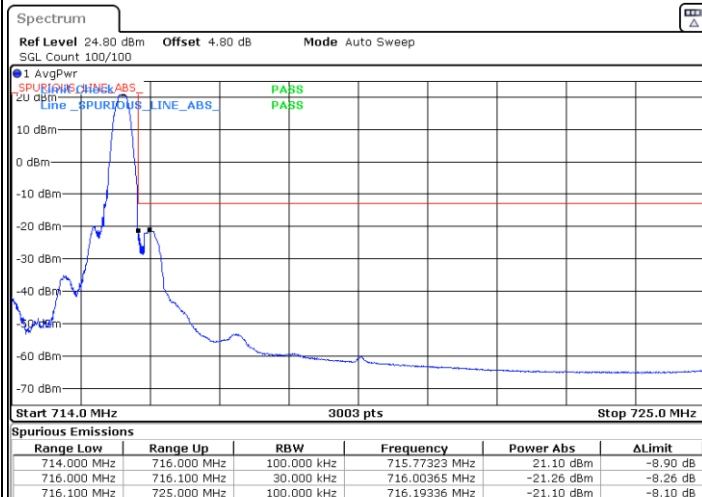
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

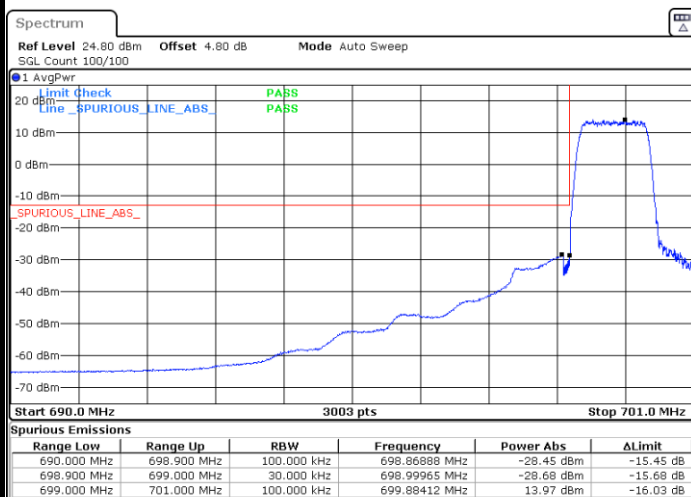
Lowest Band Edge / 1RB



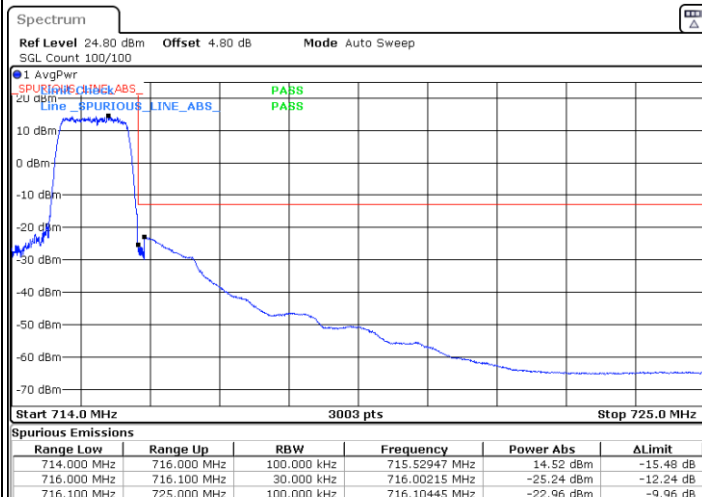
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



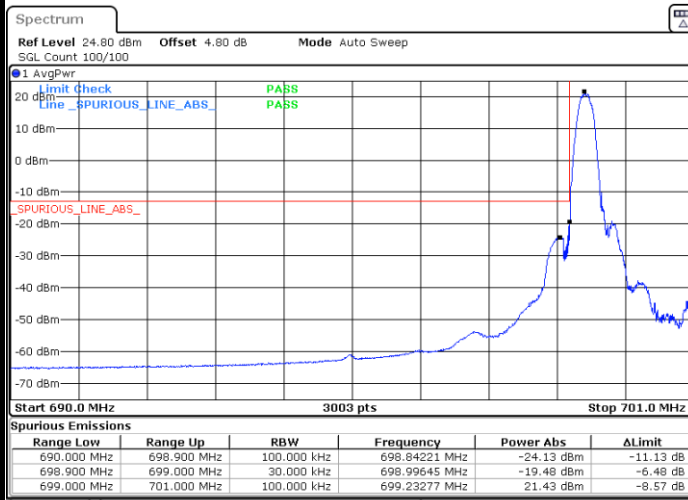
Highest Band Edge / Full RB



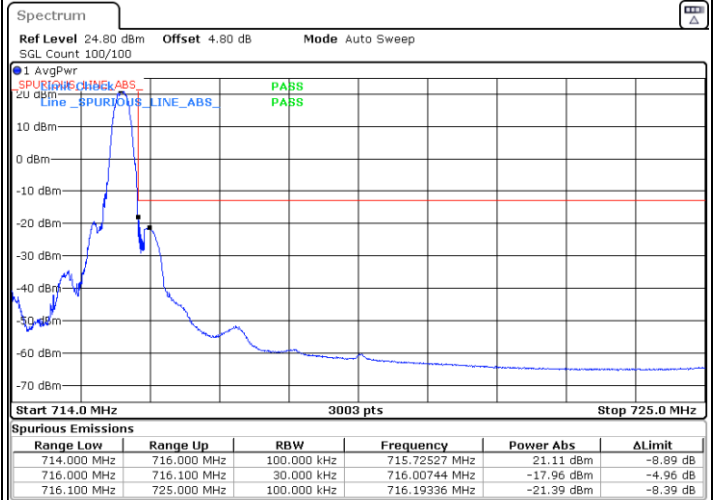


LTE Band 12 / 1.4MHz / 16QAM

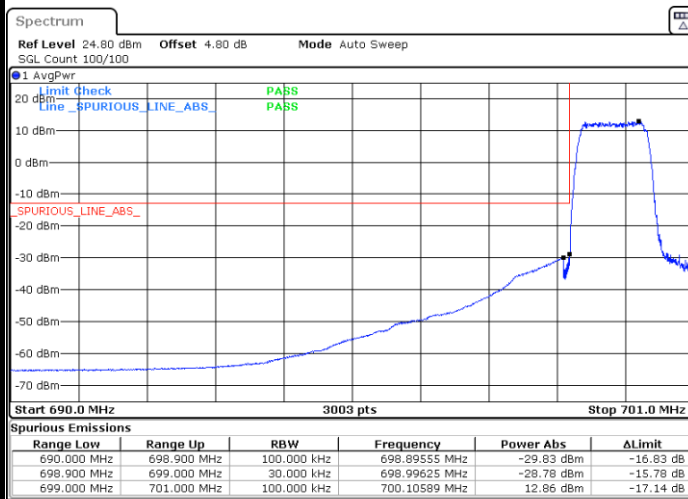
Lowest Band Edge / 1 RB



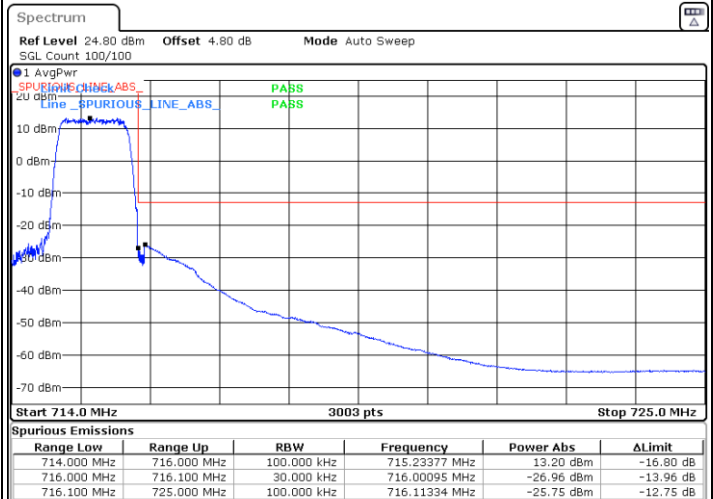
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



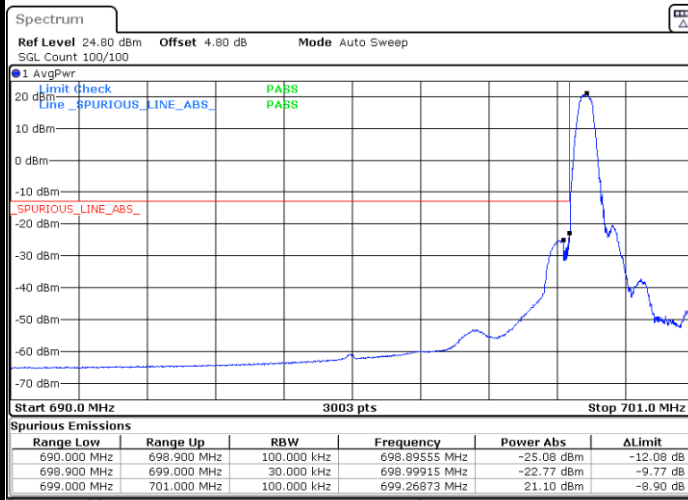
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

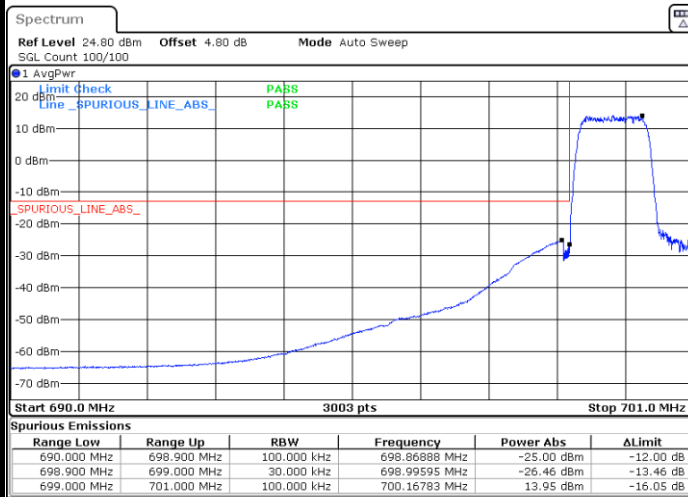
Lowest Band Edge / 1 RB



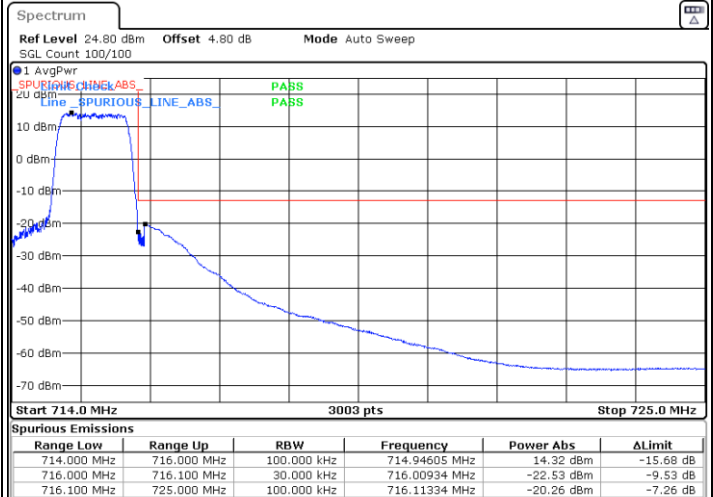
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



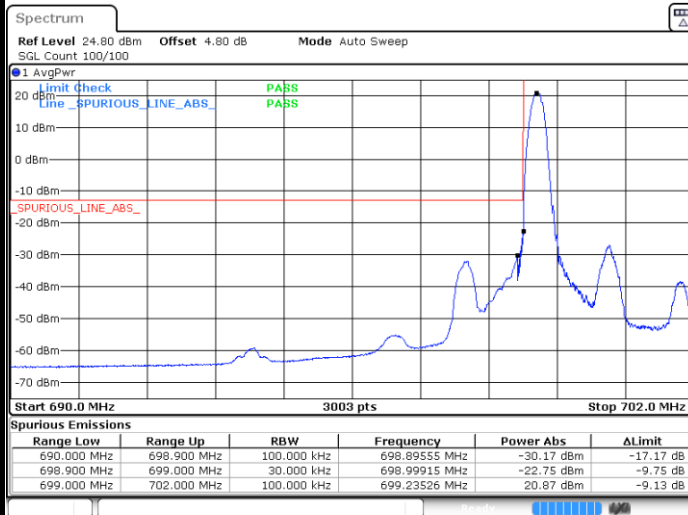
Highest Band Edge / Full RB



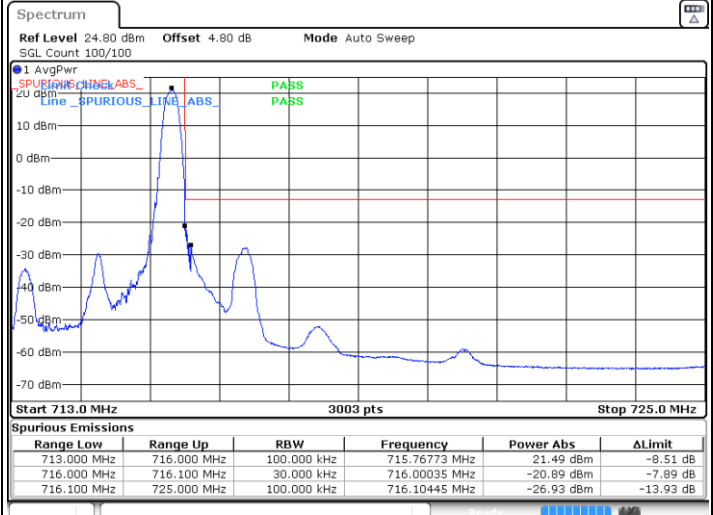


LTE Band 12 / 3MHz / QPSK

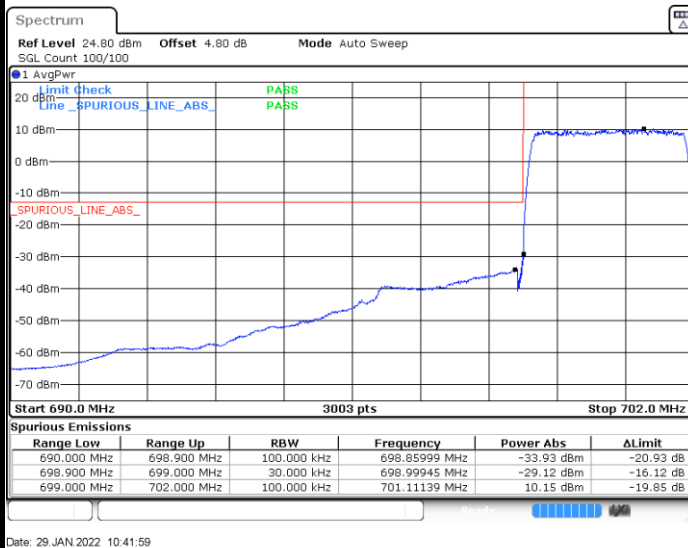
Lowest Band Edge / 1RB



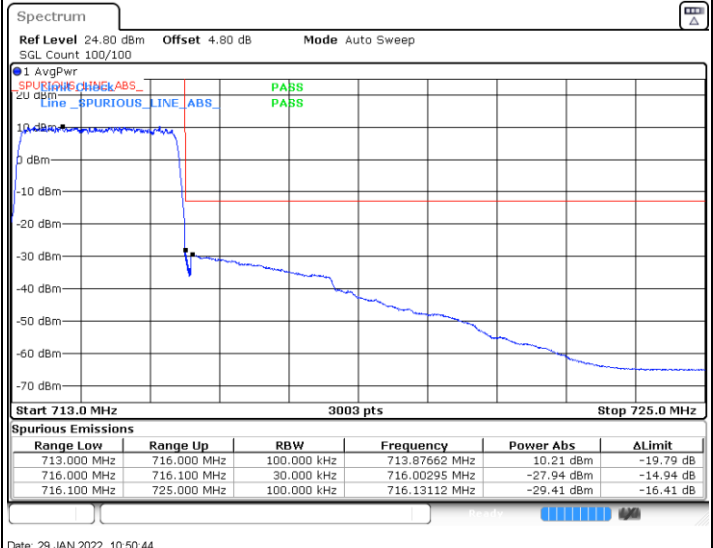
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



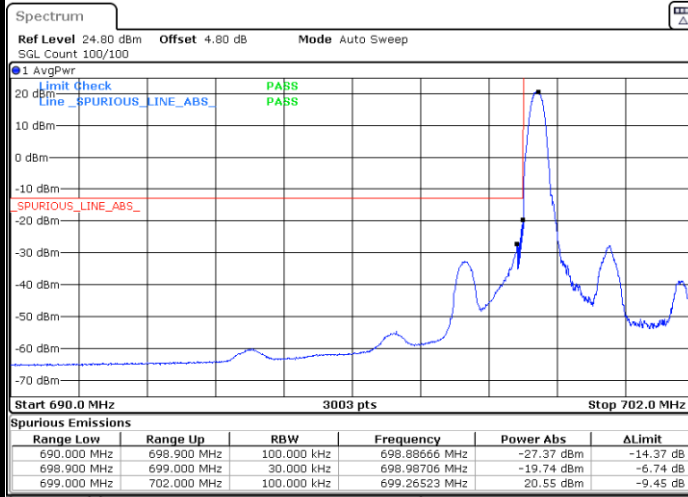
Highest Band Edge / Full RB



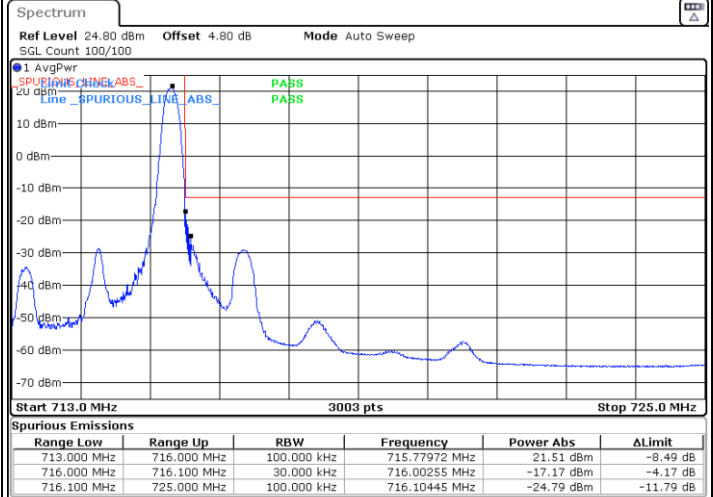


LTE Band 12 / 3MHz / 16QAM

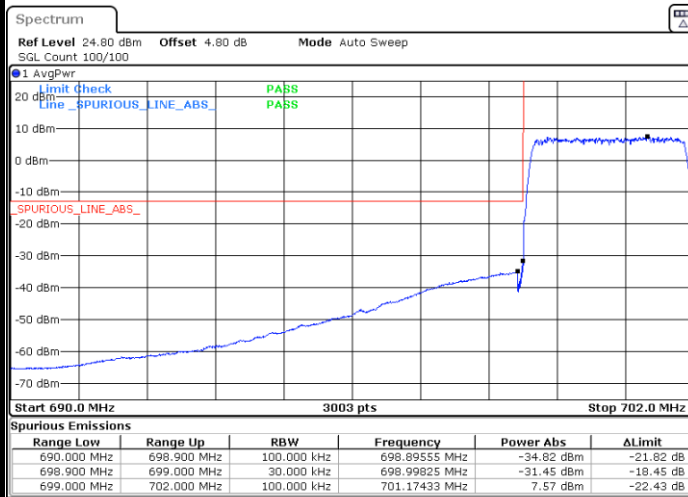
Lowest Band Edge / 1 RB



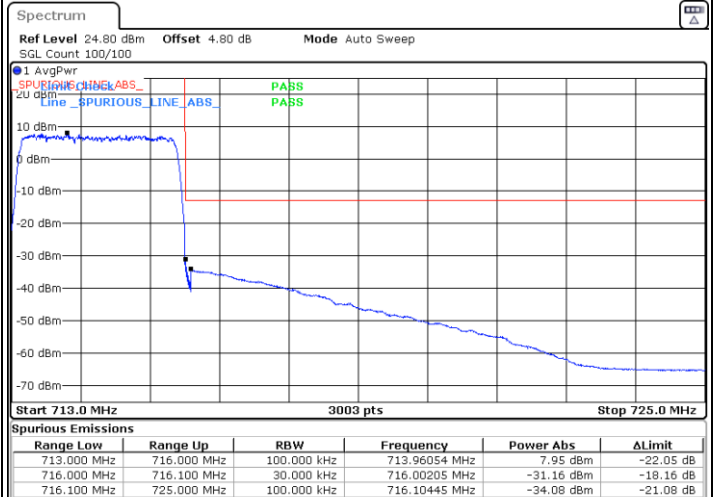
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



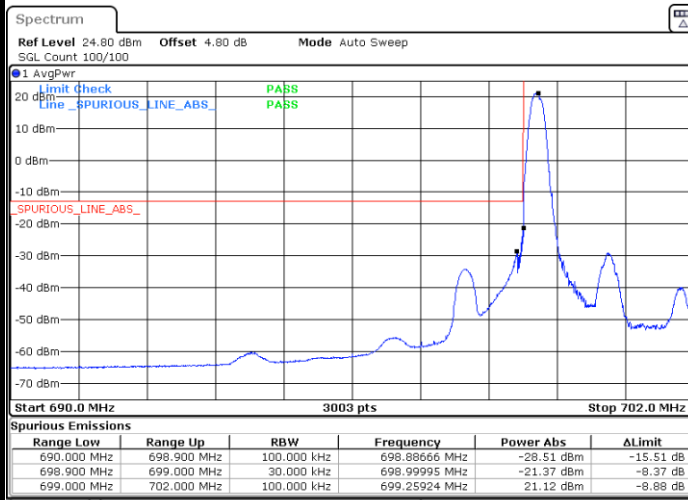
Highest Band Edge / Full RB



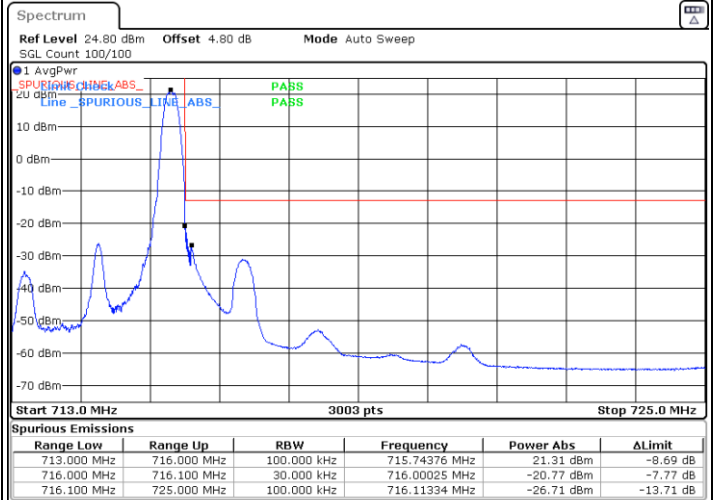


LTE Band 12 / 3MHz / 64QAM

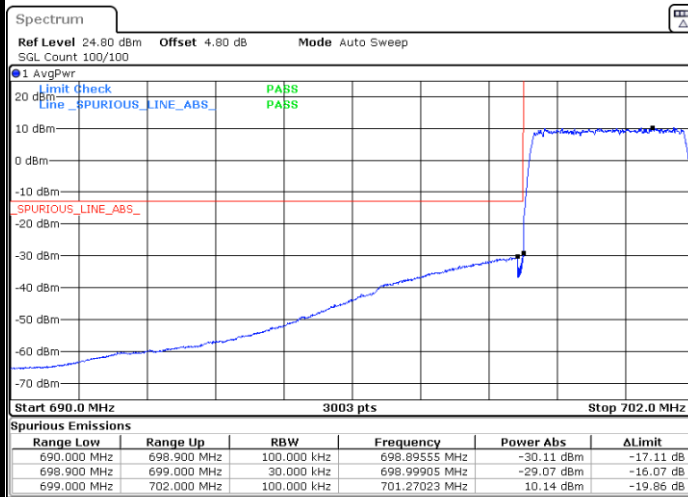
Lowest Band Edge / 1 RB



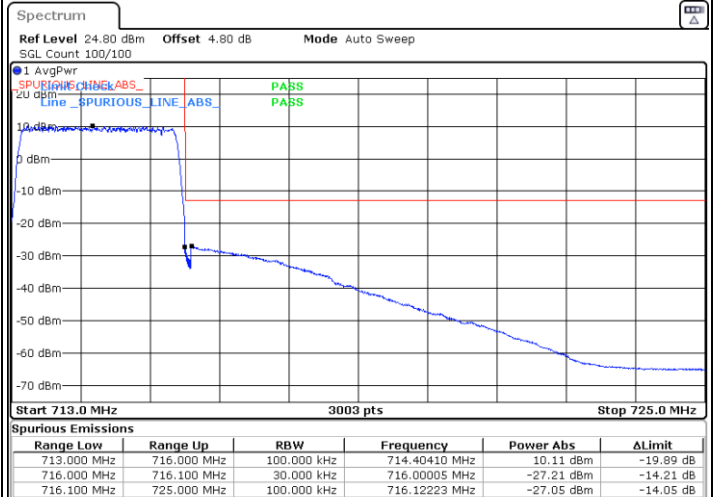
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



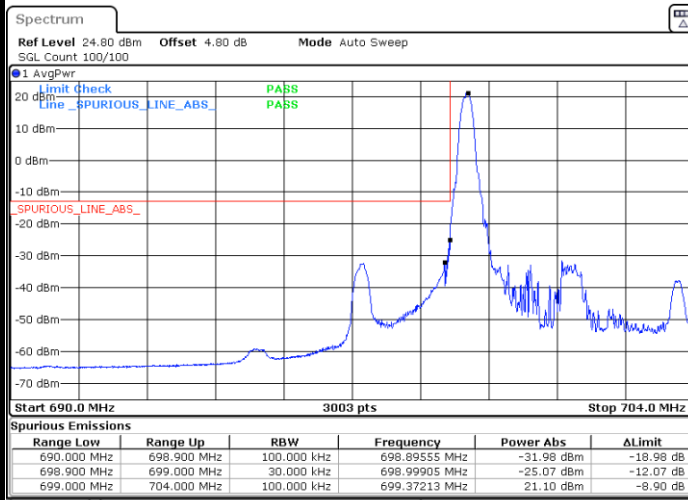
Highest Band Edge / Full RB



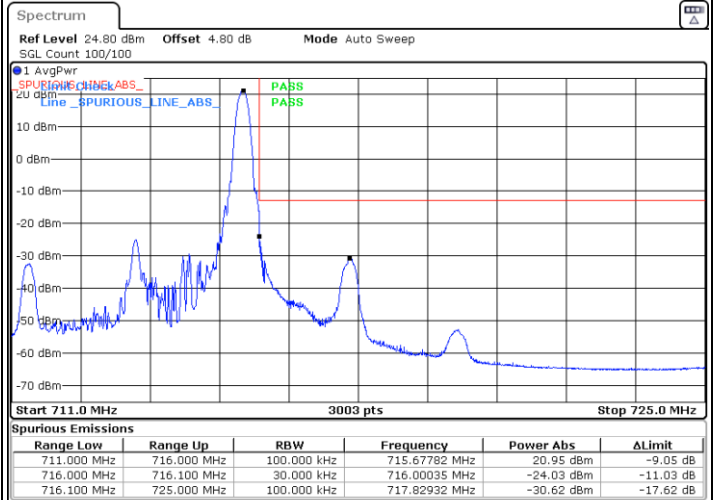


LTE Band 12 / 5MHz / QPSK

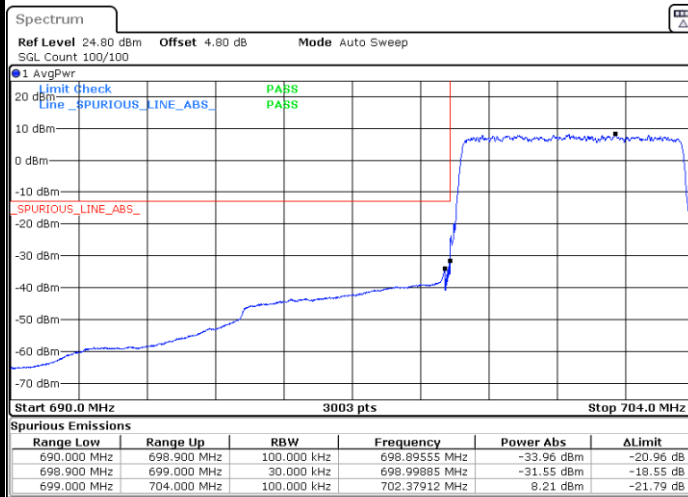
Lowest Band Edge / 1 RB



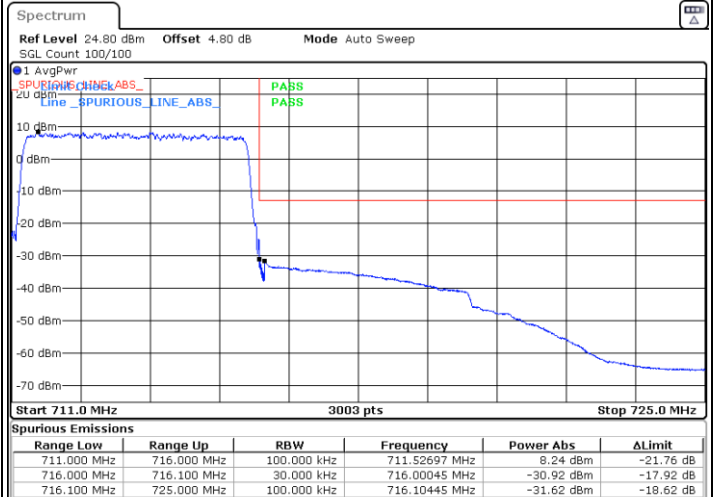
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



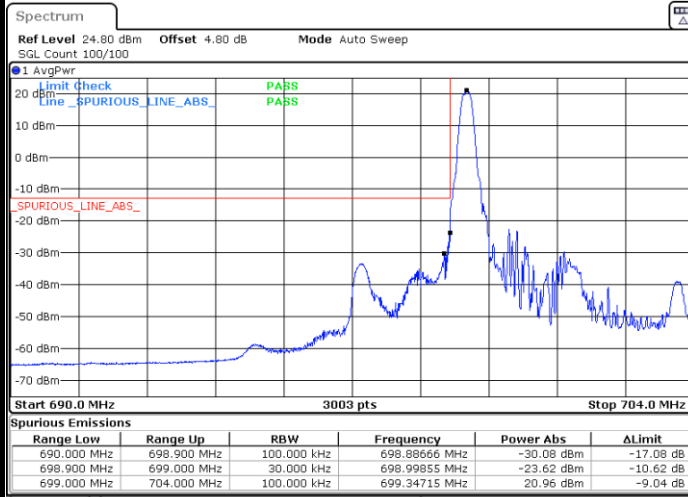
Highest Band Edge / Full RB



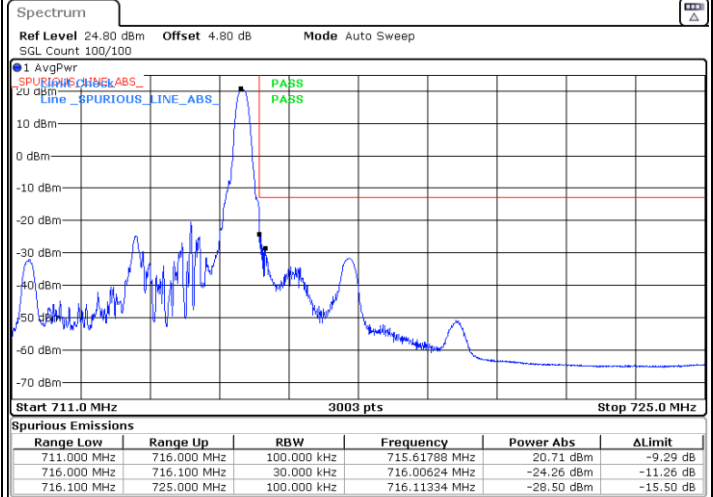


LTE Band 12 / 5MHz / 16QAM

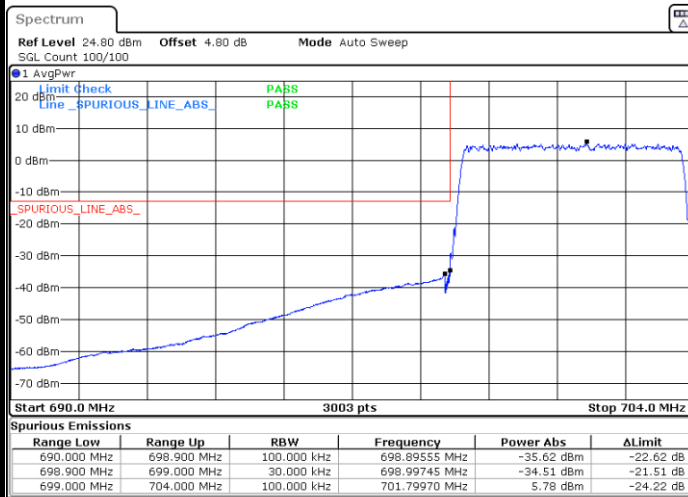
Lowest Band Edge / 1RB



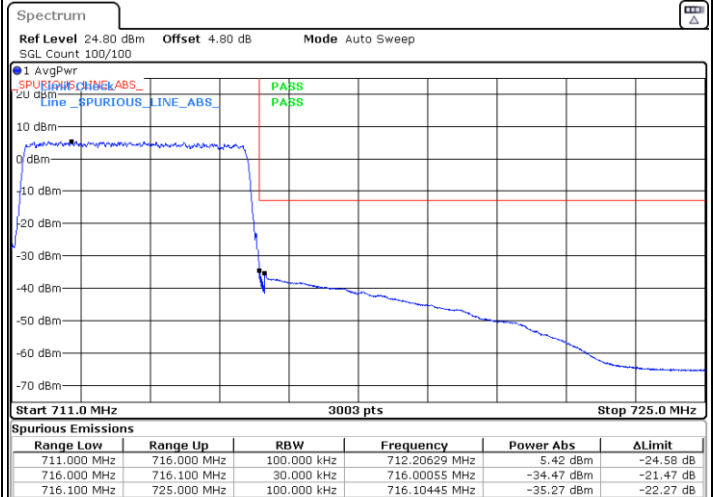
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



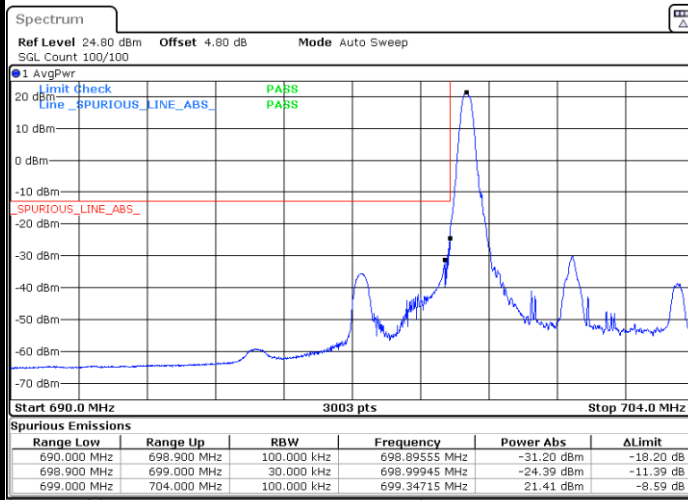
Highest Band Edge / Full RB



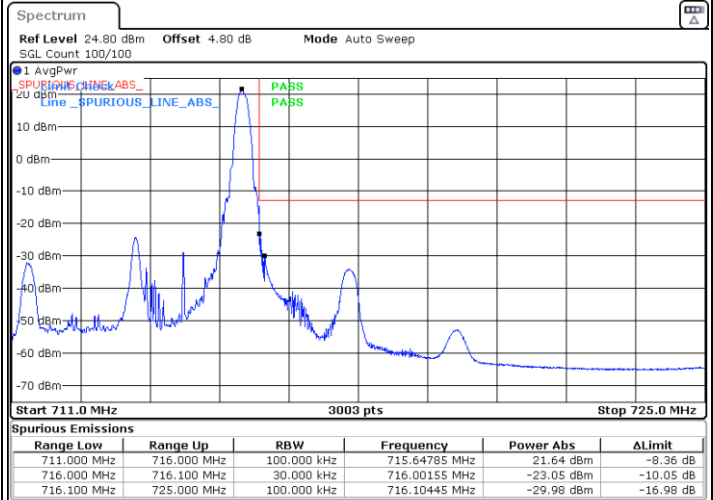


LTE Band 12 / 5MHz / 64QAM

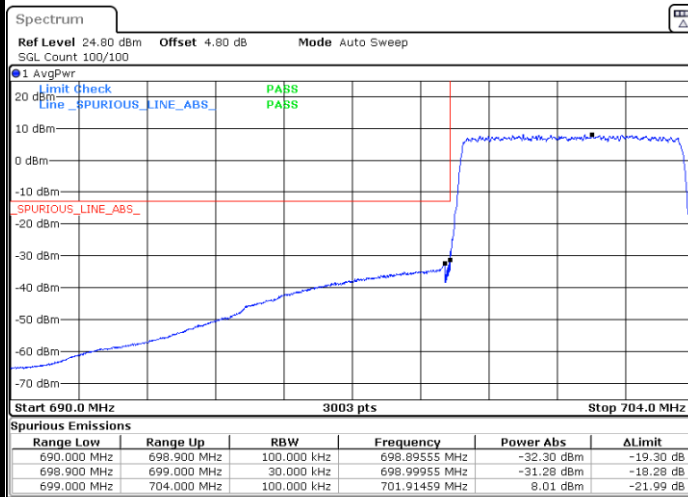
Lowest Band Edge / 1RB



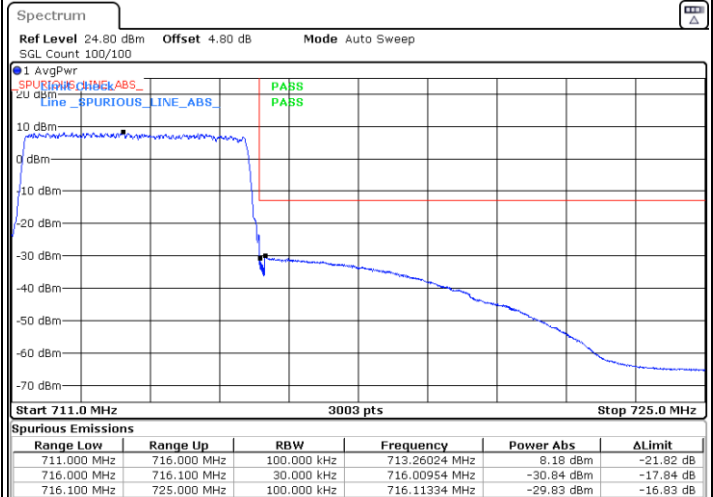
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



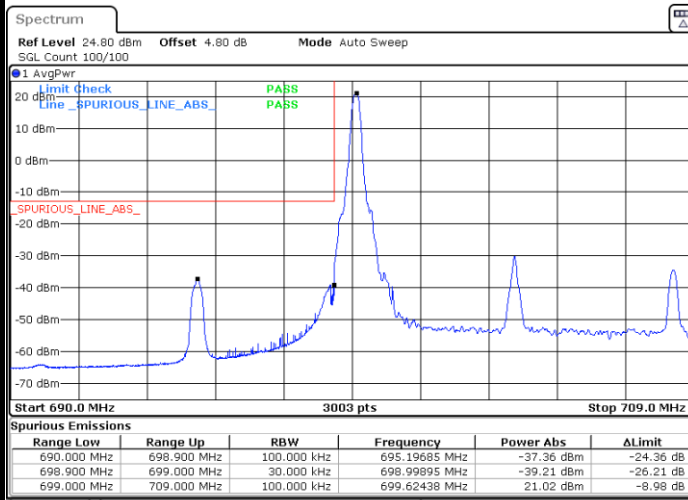
Highest Band Edge / Full RB



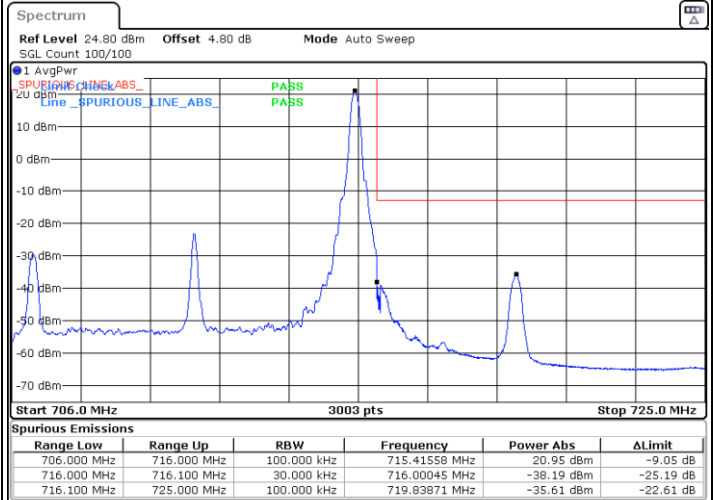


LTE Band 12 / 10MHz / QPSK

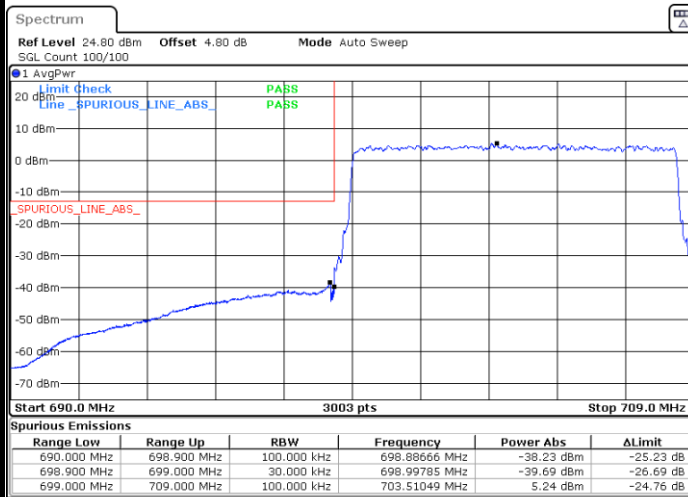
Lowest Band Edge / 1 RB



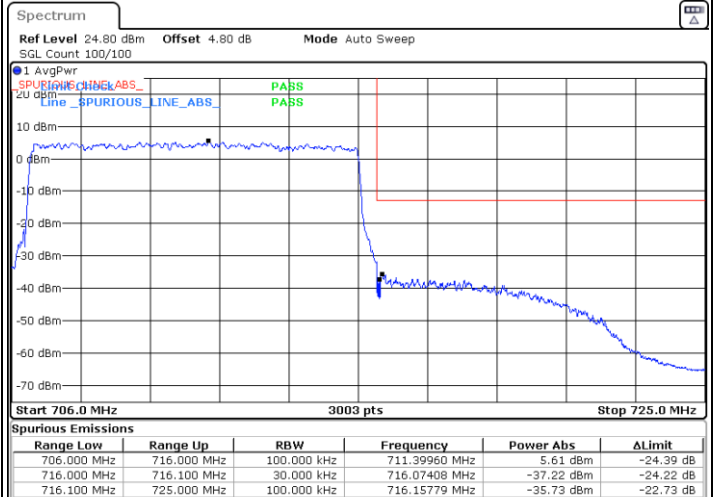
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



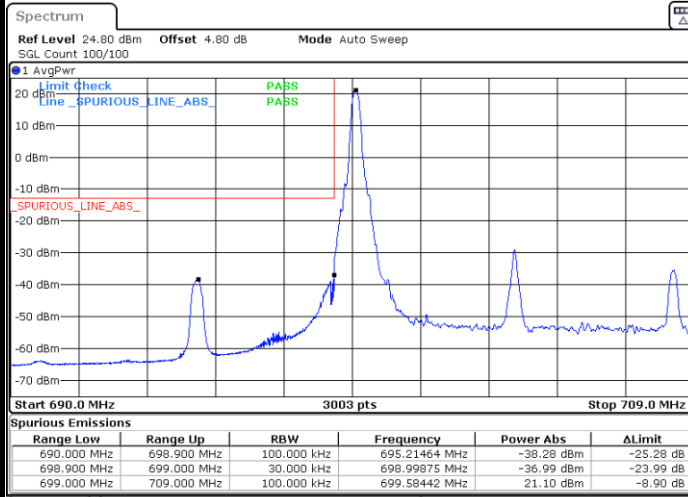
Highest Band Edge / Full RB



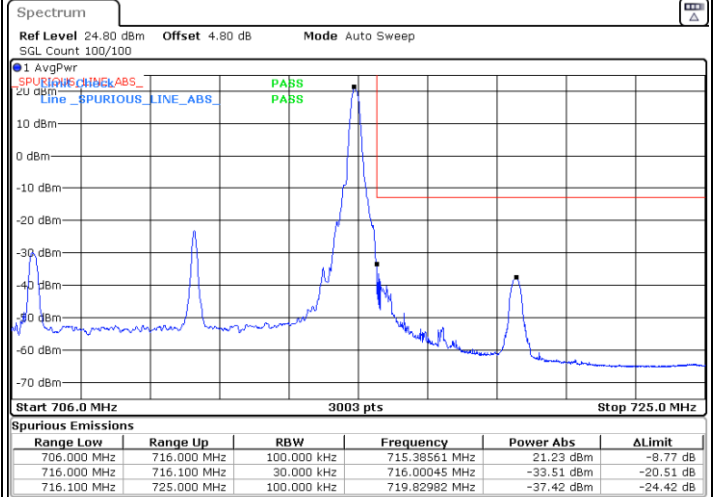


LTE Band 12 / 10MHz / 16QAM

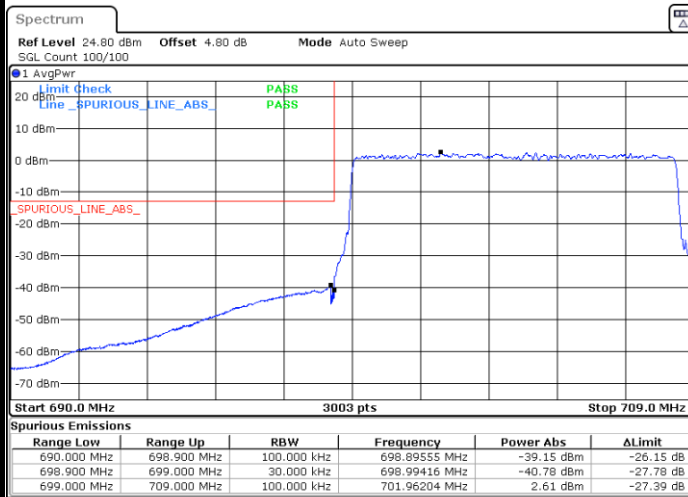
Lowest Band Edge / 1 RB



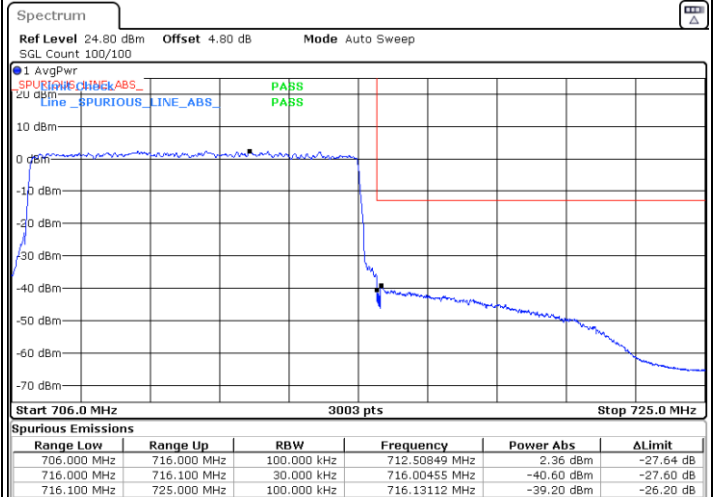
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



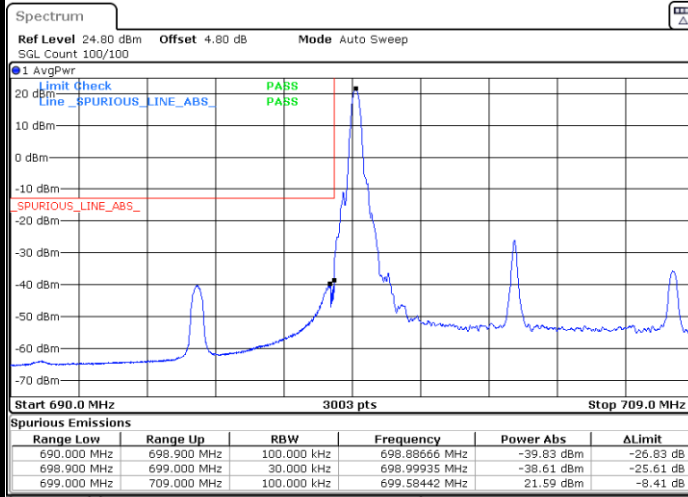
Highest Band Edge / Full RB



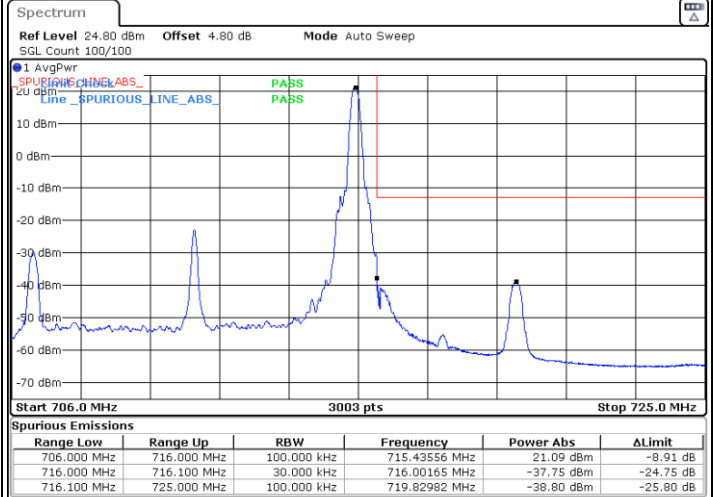


LTE Band 12 / 10MHz / 64QAM

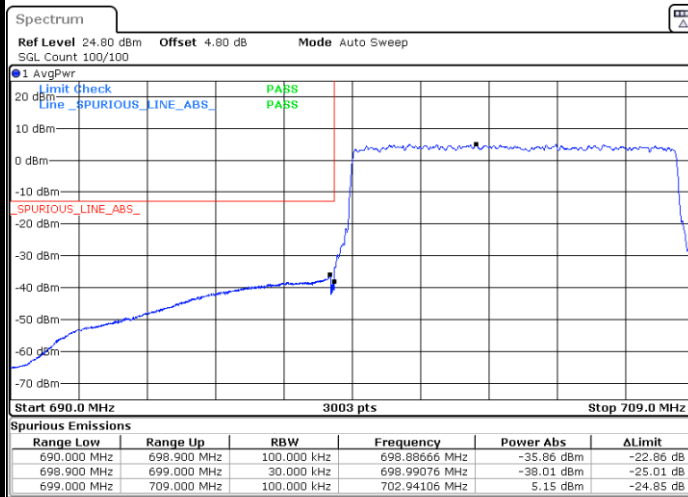
Lowest Band Edge / 1 RB



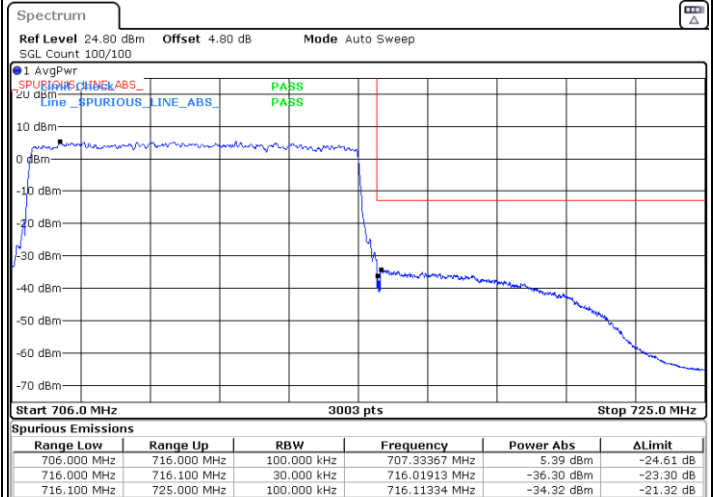
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

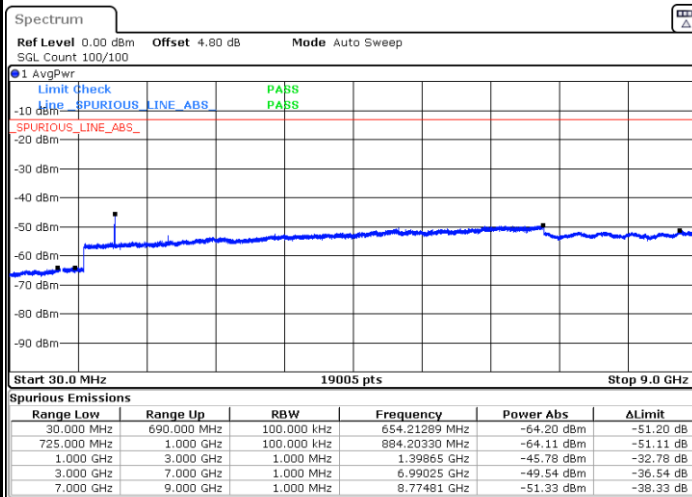




Conducted Spurious Emission

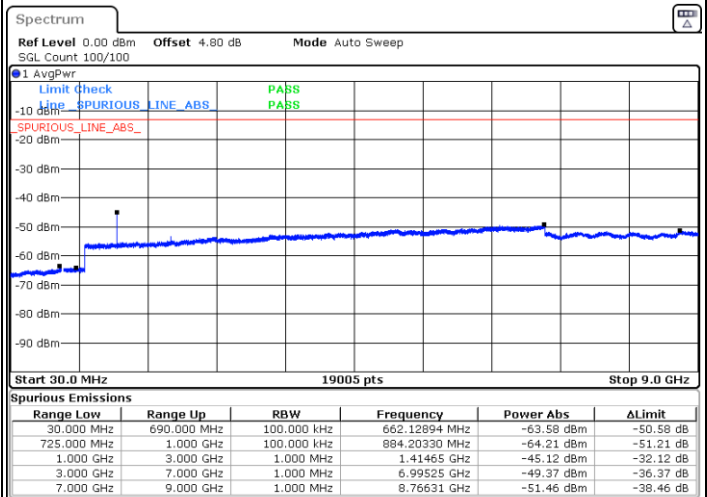
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



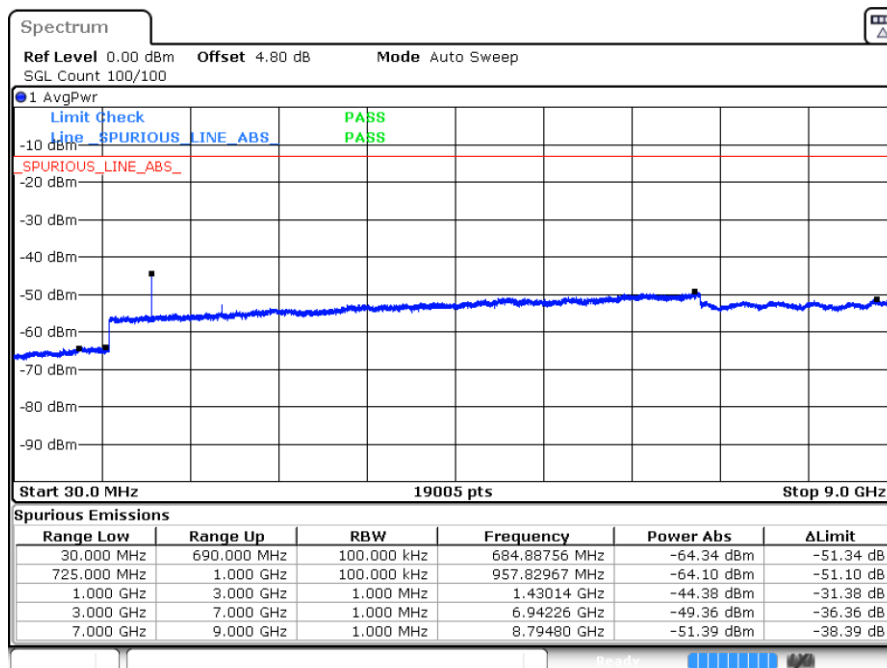
Date: 29 JAN 2022 10:31:54

Middle Channel / QPSK



Date: 29 JAN 2022 10:33:35

Highest Channel / QPSK

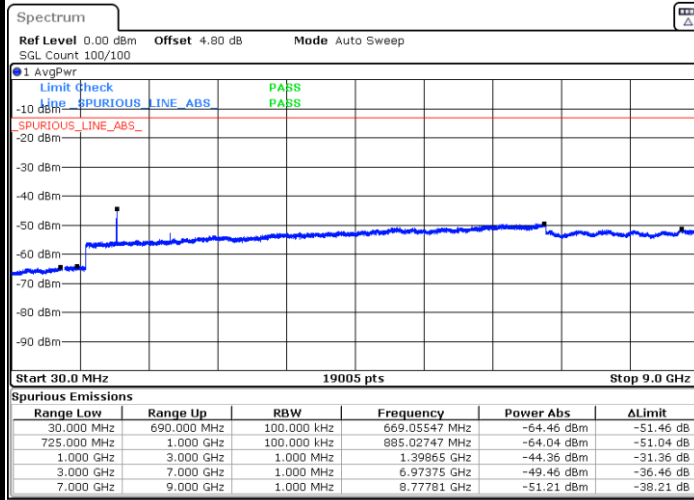


Date: 29 JAN 2022 10:40:37



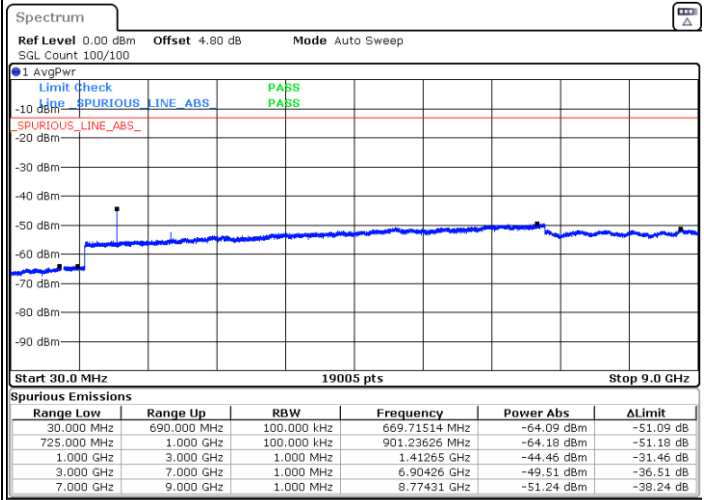
LTE Band 12 / 3MHz

Lowest Channel / QPSK



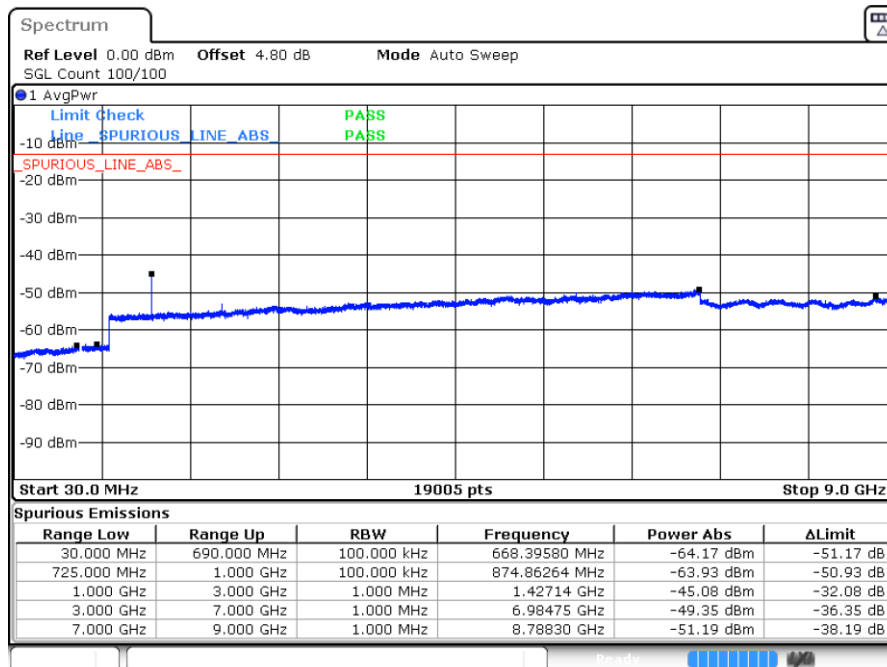
Date: 29 JAN 2022 10:47:43

Middle Channel / QPSK



Date: 29 JAN 2022 10:49:24

Highest Channel / QPSK

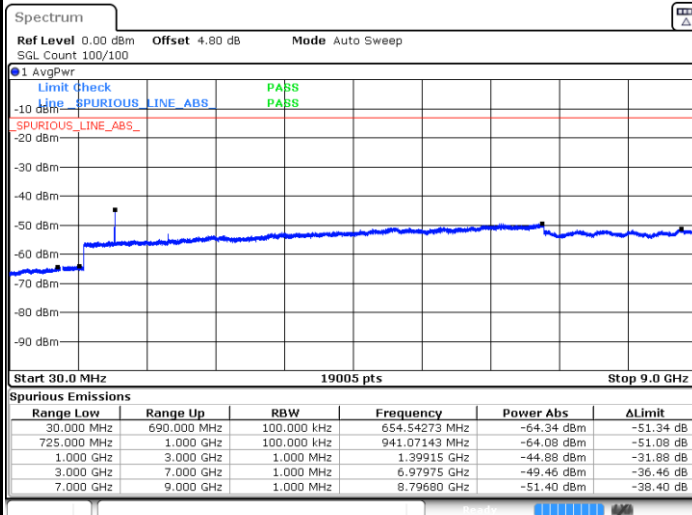


Date: 29 JAN 2022 10:56:26



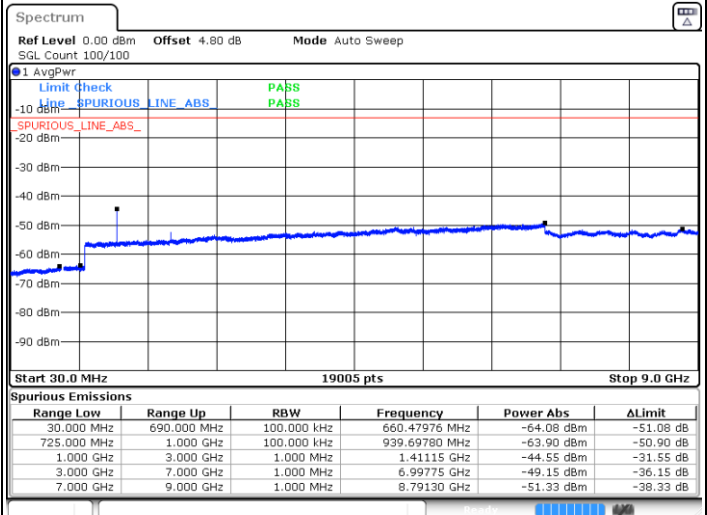
LTE Band 12 / 5MHz

Lowest Channel / QPSK



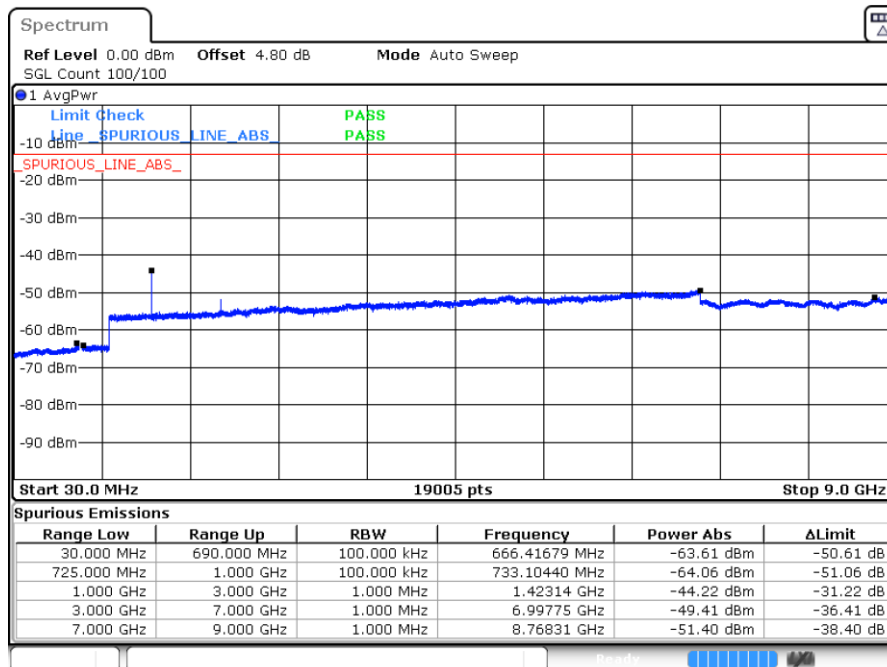
Date: 29 JAN 2022 11:03:29

Middle Channel / QPSK



Date: 29 JAN 2022 11:05:10

Highest Channel / QPSK

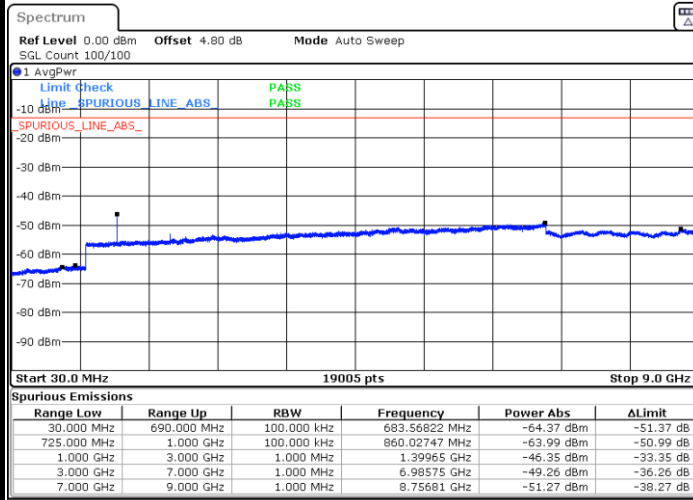


Date: 29 JAN 2022 11:12:12



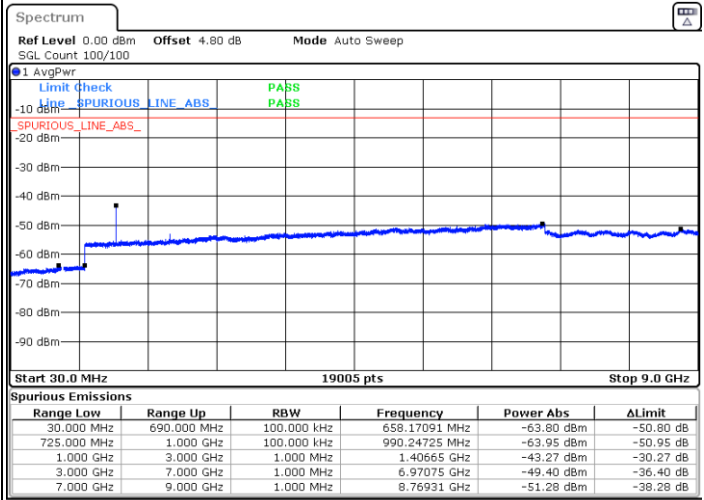
LTE Band 12 / 10MHz

Lowest Channel / QPSK



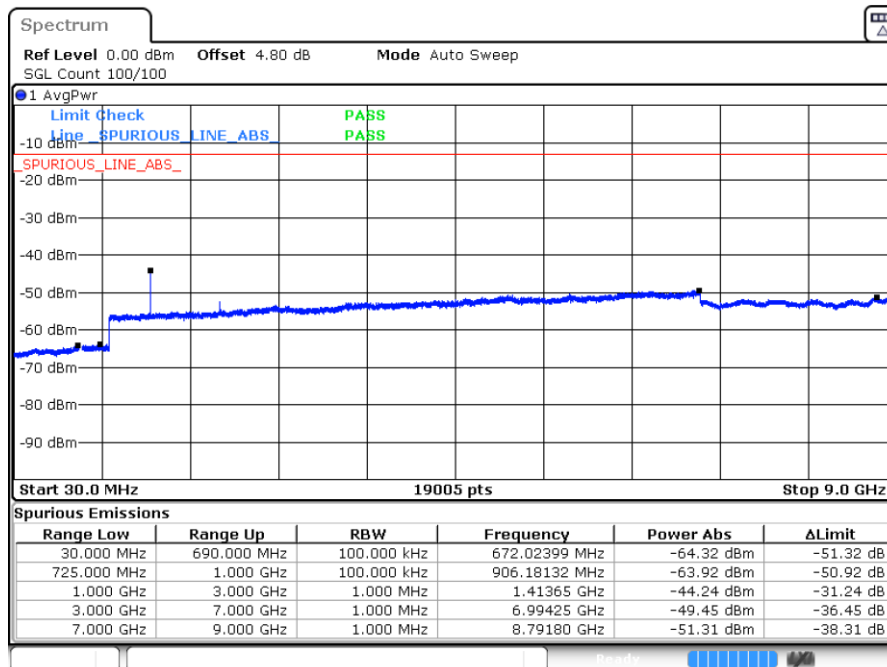
Date: 29 JAN 2022 11:17:55

Middle Channel / QPSK



Date: 29 JAN 2022 11:19:36

Highest Channel / QPSK



Date: 29 JAN 2022 11:25:17

**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	0.0012	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0001	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.000	
20	Normal Voltage	0.0021	
20	Battery End Point	0.0010	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.45V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

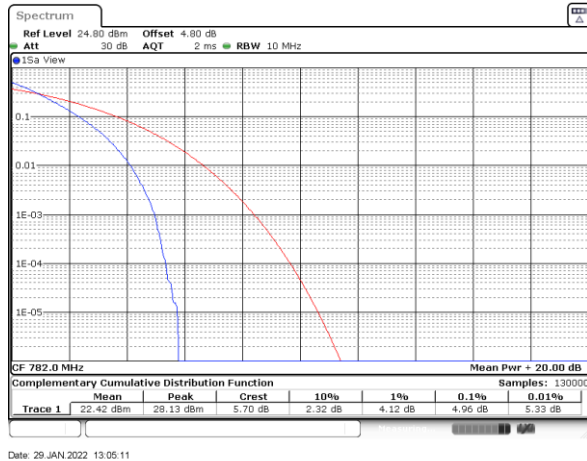
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.96	6.17	5.45	PASS

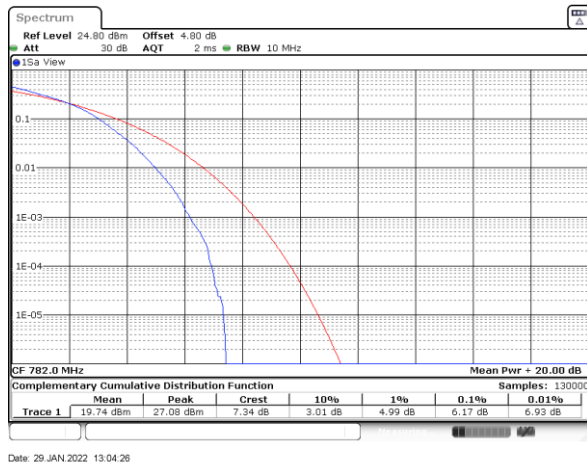


LTE Band 13 / 10MHz

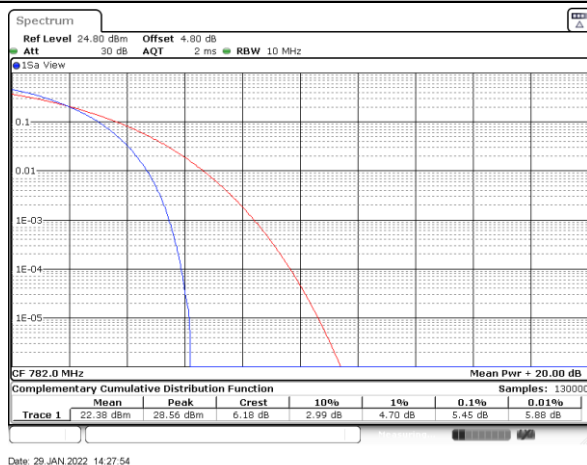
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

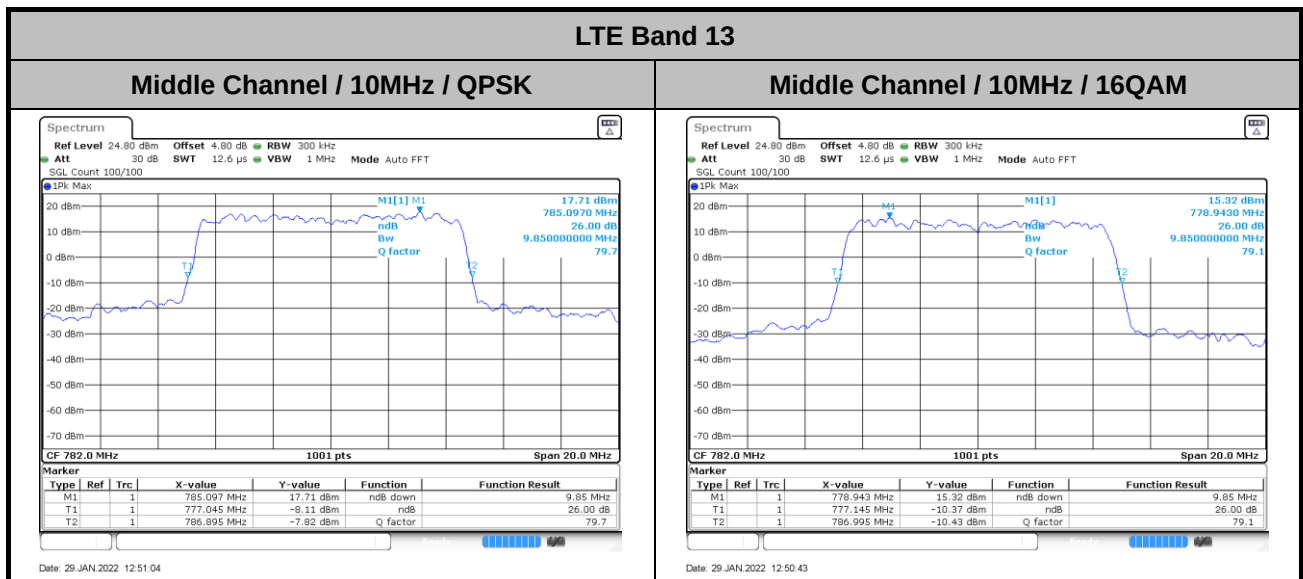


Middle Channel / Full RB/ 64QAM



**26dB Bandwidth**

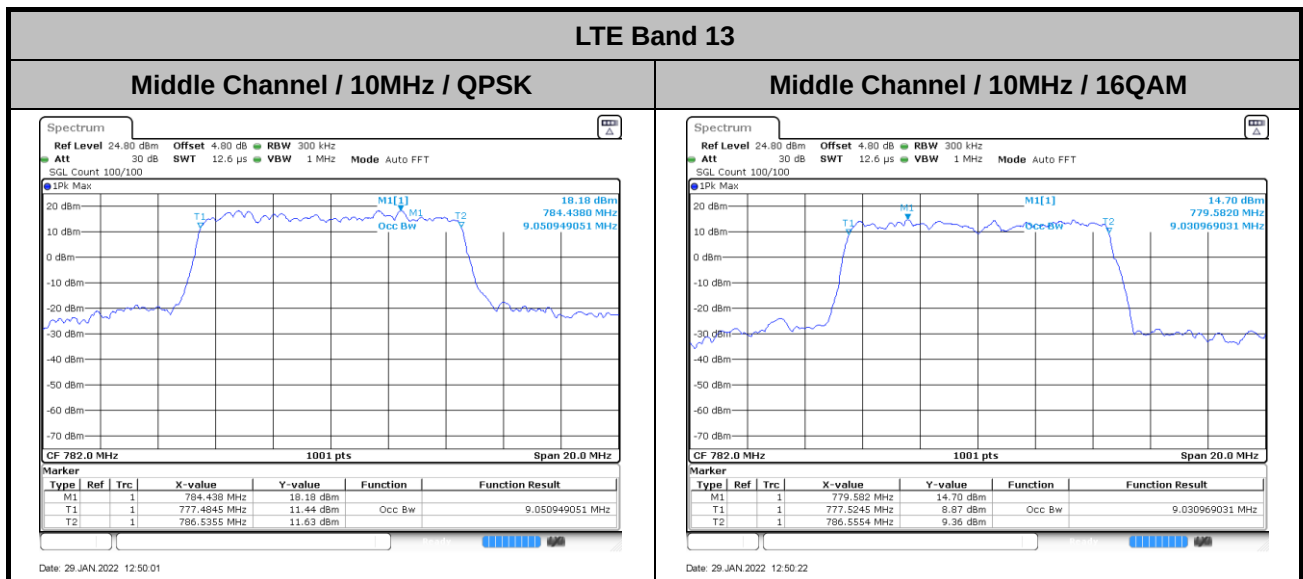
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.85	9.85





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	9.03

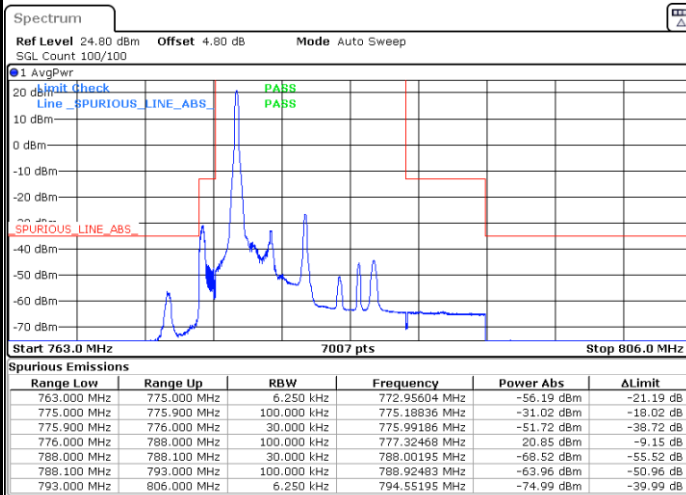




Conducted Band Edge

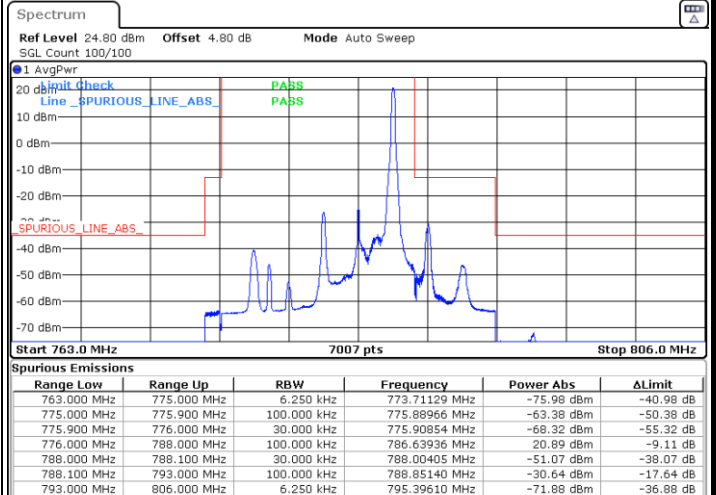
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



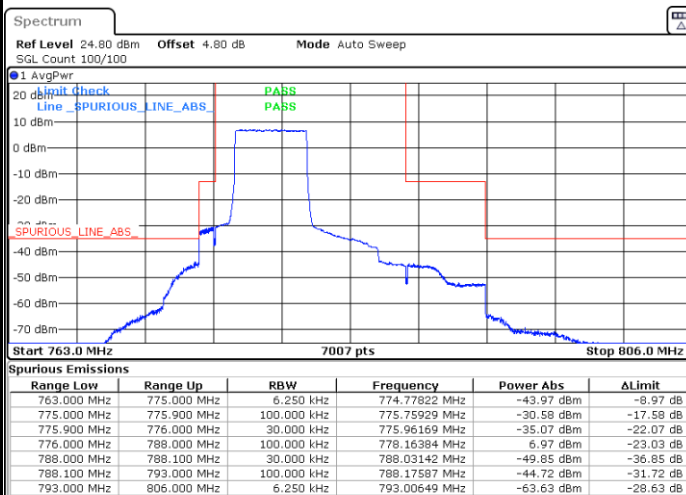
Date: 29 JAN 2022 12:37:15

Highest Band Edge / 1 RB



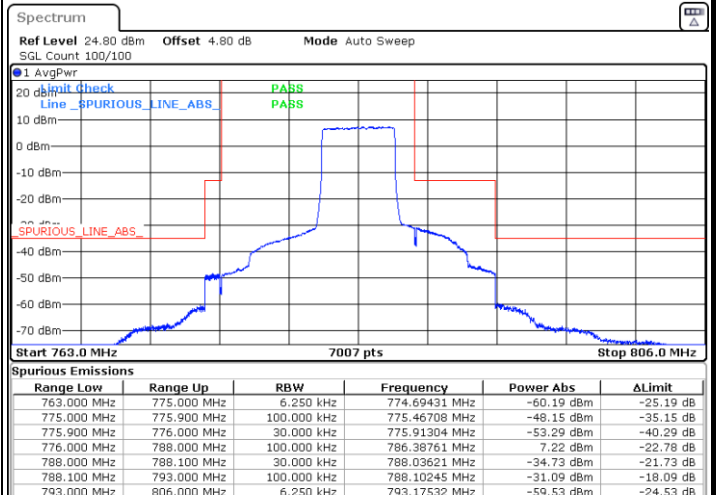
Date: 29 JAN 2022 12:47:58

Lowest Band Edge / Full RB



Date: 29 JAN 2022 12:31:44

Highest Band Edge / Full RB

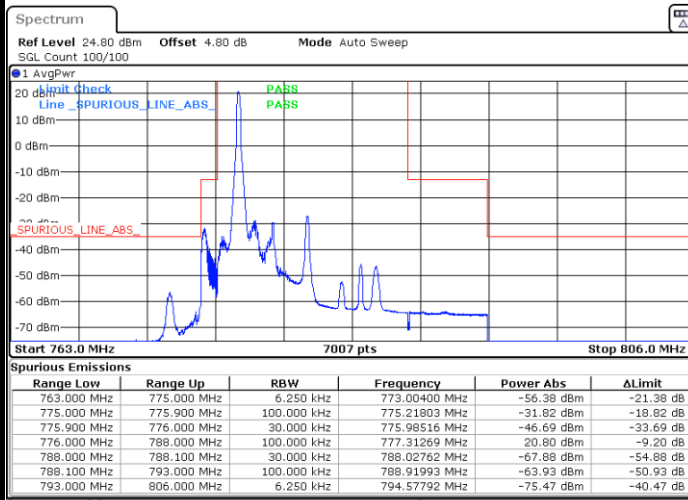


Date: 29 JAN 2022 12:42:26

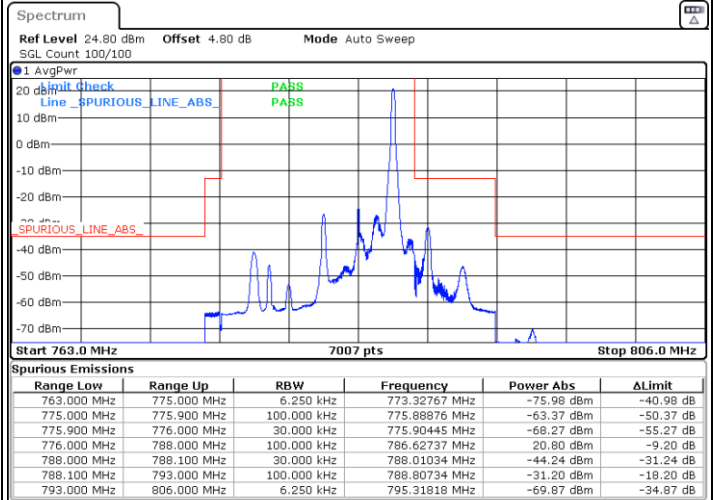


LTE Band 13 / 5MHz / 16QAM

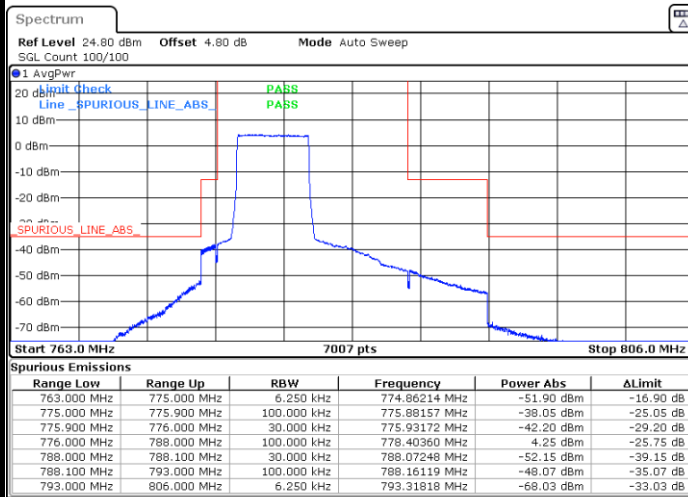
Lowest Band Edge / 1RB



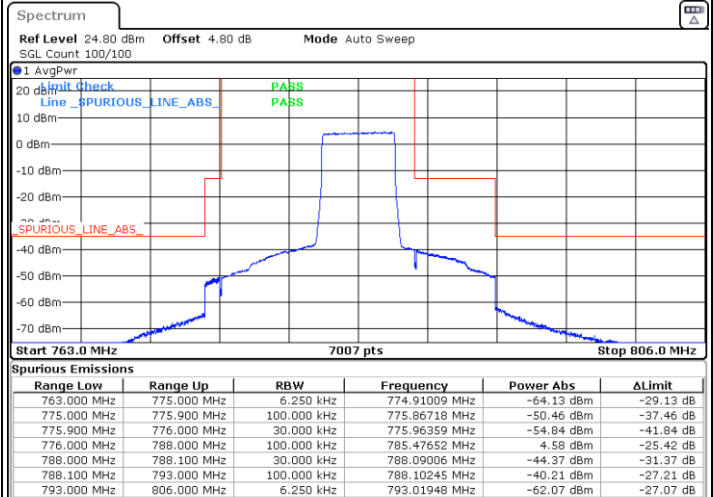
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



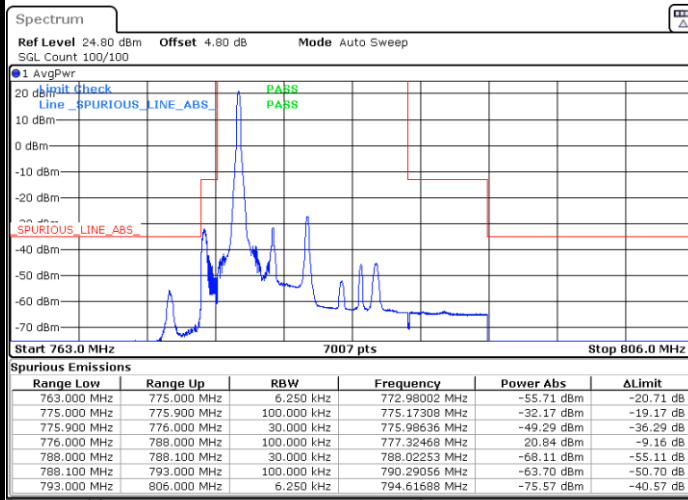
Highest Band Edge / Full RB



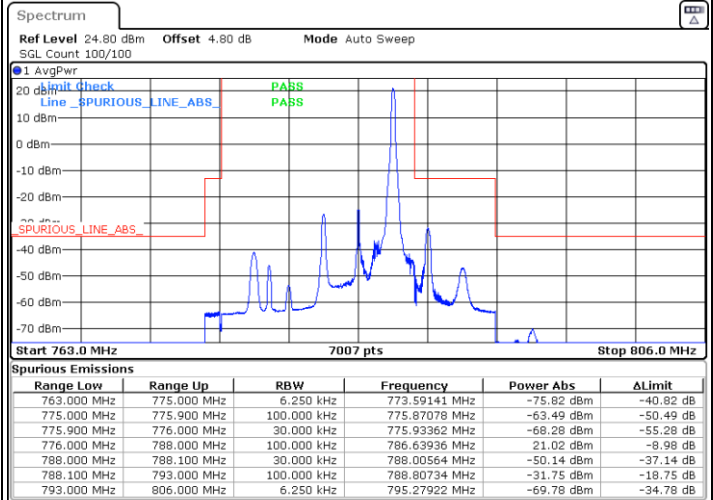


LTE Band 13 / 5MHz / 64QAM

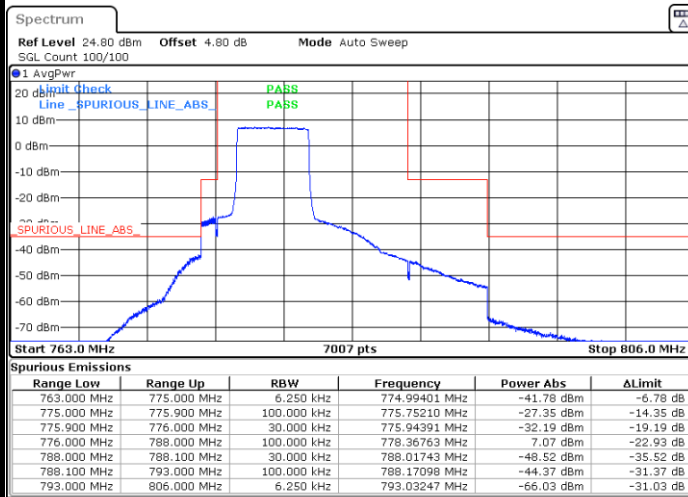
Lowest Band Edge / 1RB



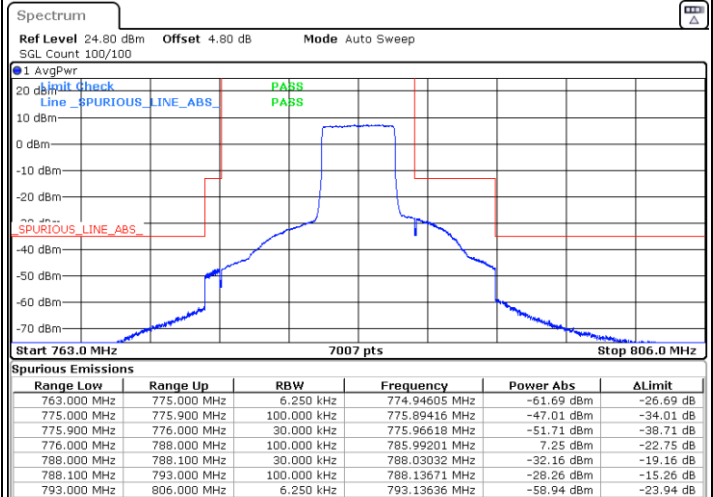
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



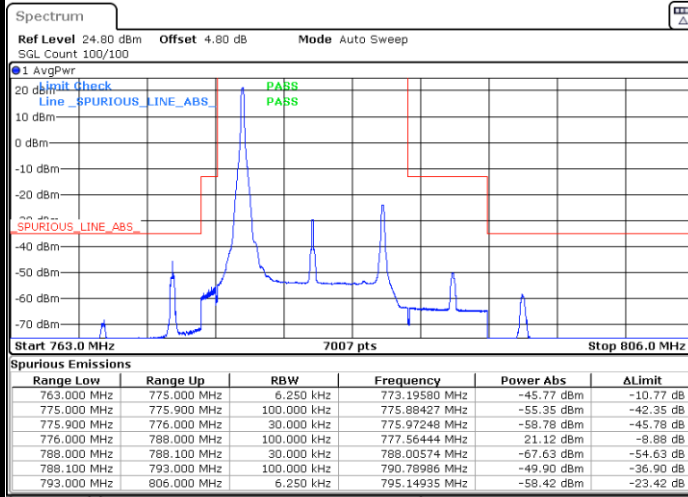
Highest Band Edge / Full RB





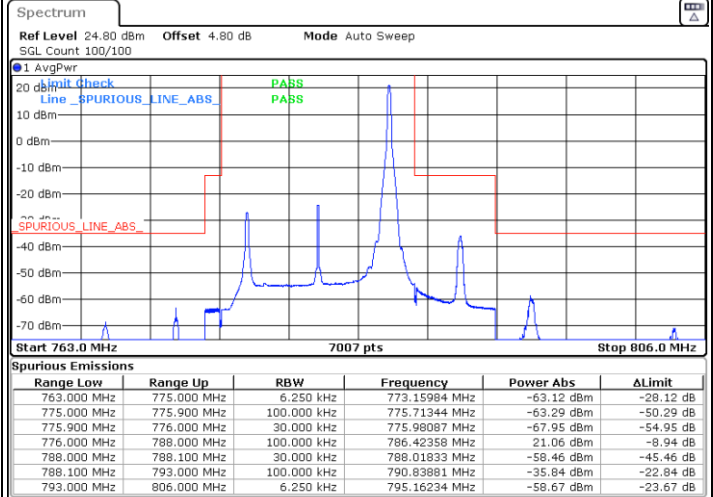
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



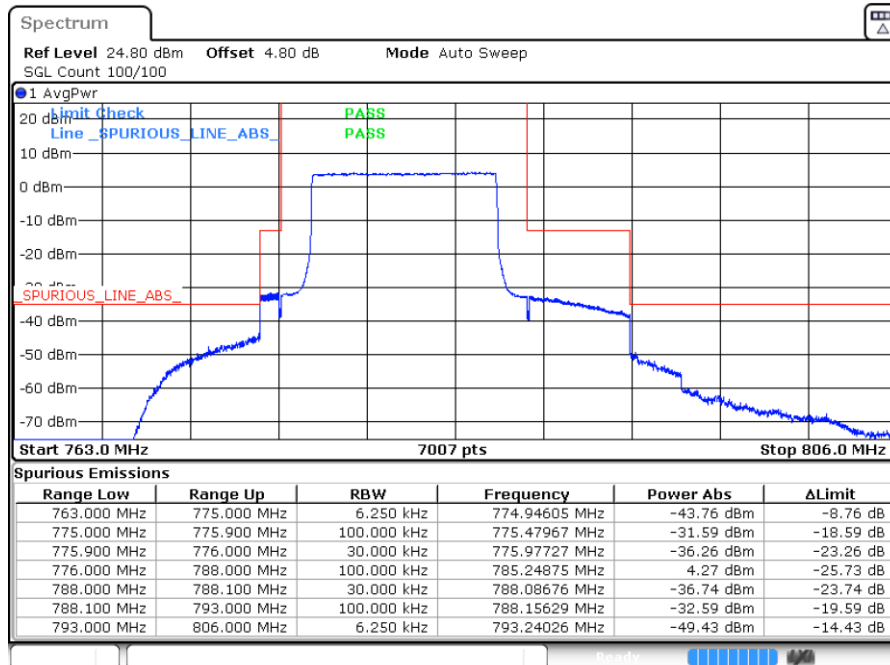
Date: 29 JAN 2022 12:58:22

middle Band Edge / 1 RB



Date: 29 JAN 2022 13:00:12

Middle Band Edge / Full RB



Date: 29 JAN 2022 12:52:53