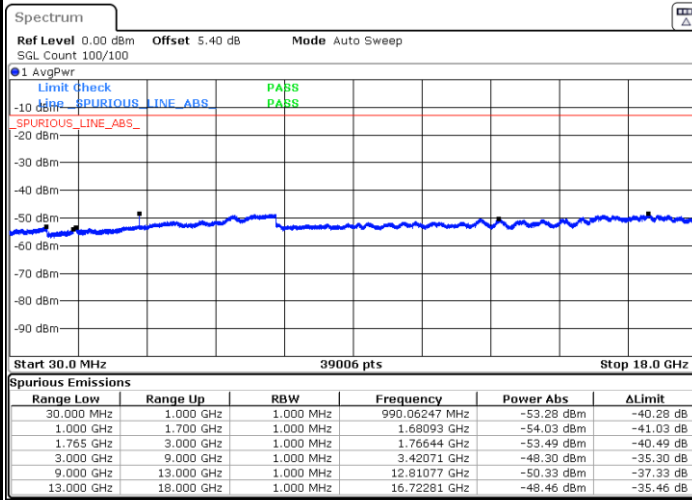




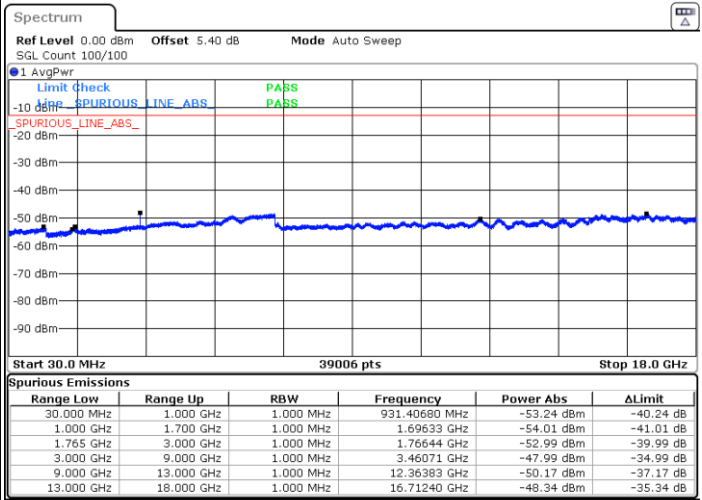
LTE Band 4 / 5MHz

Lowest Channel / QPSK



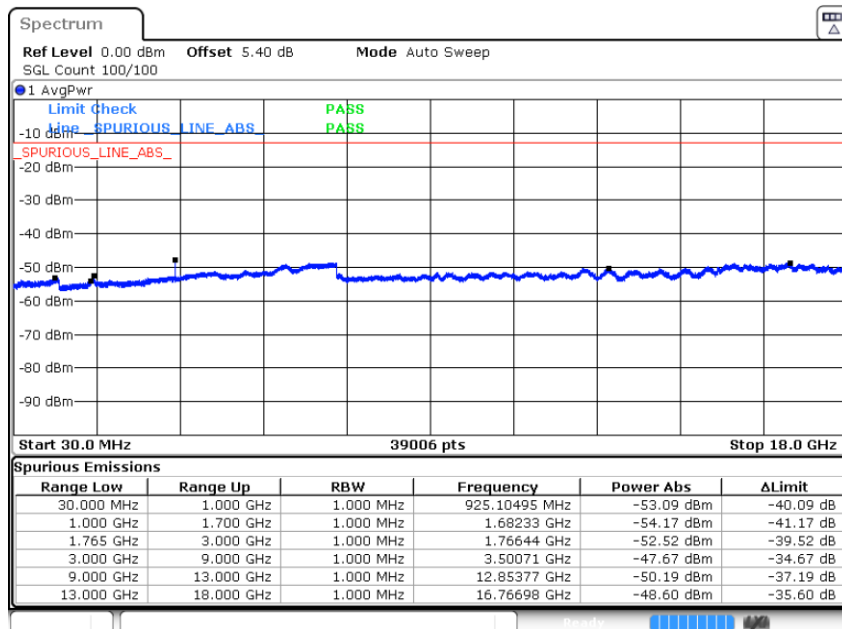
Date: 3.MAR.2022 15:19:35

Middle Channel / QPSK



Date: 3.MAR.2022 15:24:17

Highest Channel / QPSK

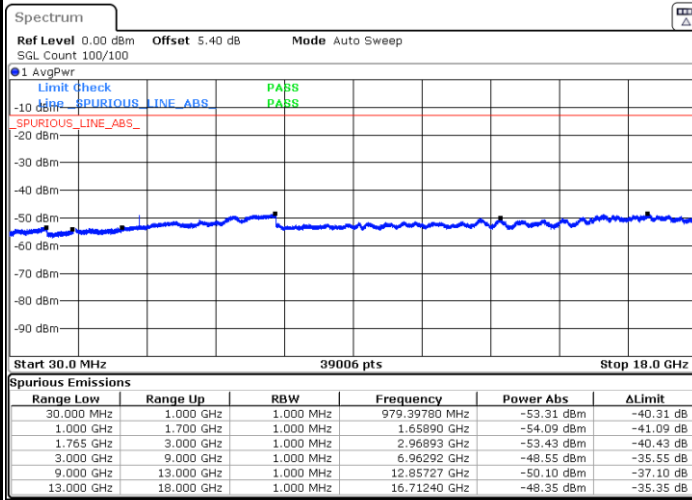


Date: 3.MAR.2022 15:26:07



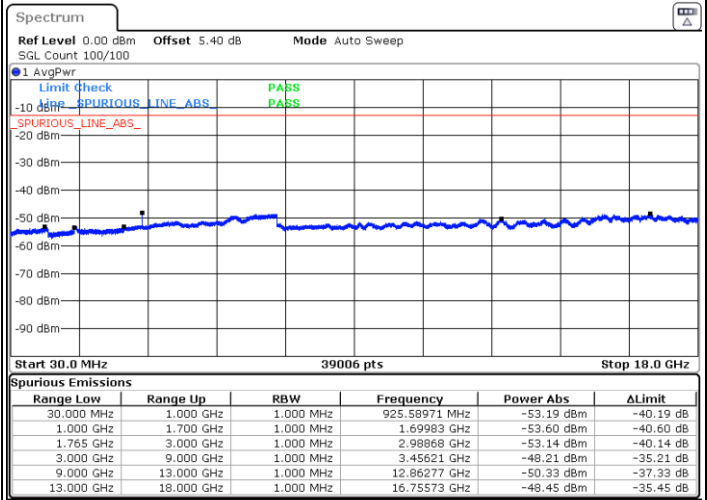
LTE Band 4 / 10MHz

Lowest Channel / QPSK



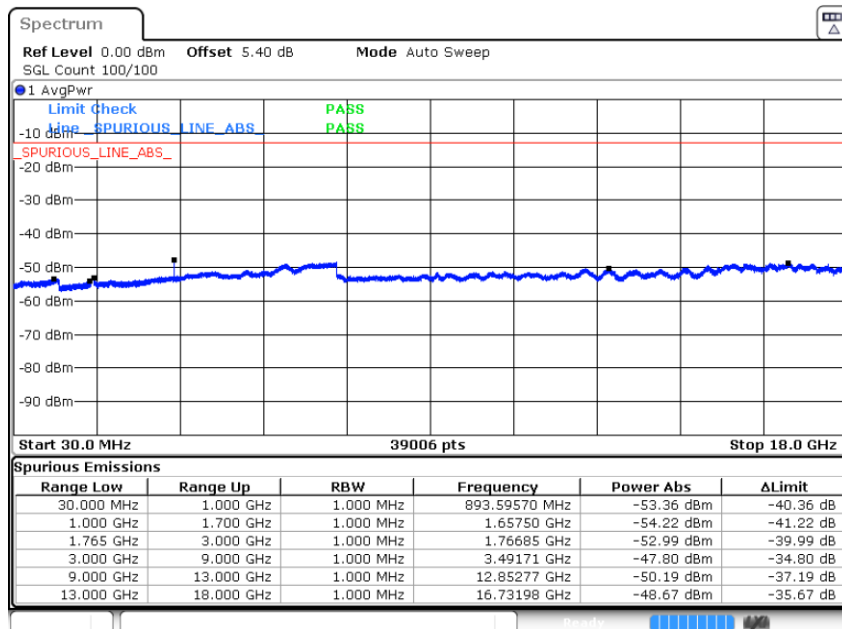
Date: 3.MAR.2022 15:35:59

Middle Channel / QPSK



Date: 3.MAR.2022 15:37:24

Highest Channel / QPSK

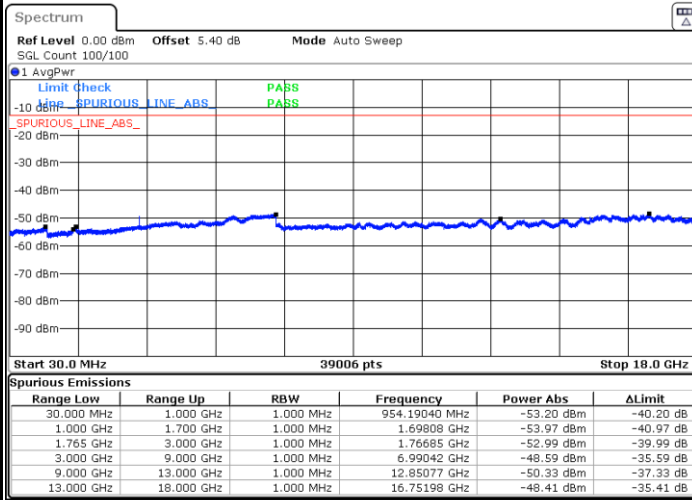


Date: 3.MAR.2022 15:39:02



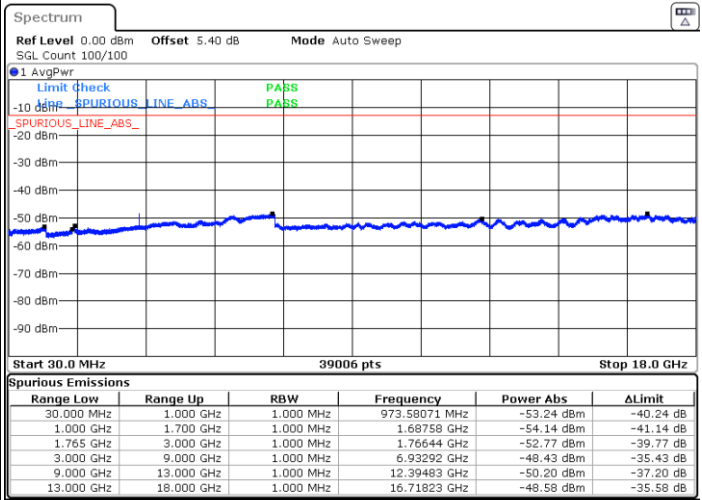
LTE Band 4 / 15MHz

Lowest Channel / QPSK



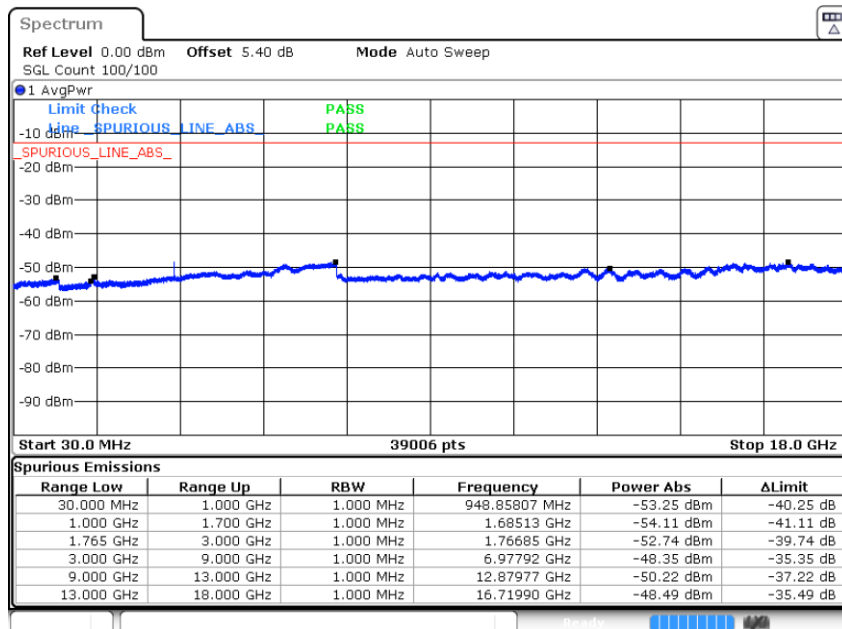
Date: 3.MAR.2022 15:46:47

Middle Channel / QPSK



Date: 3.MAR.2022 15:48:12

Highest Channel / QPSK

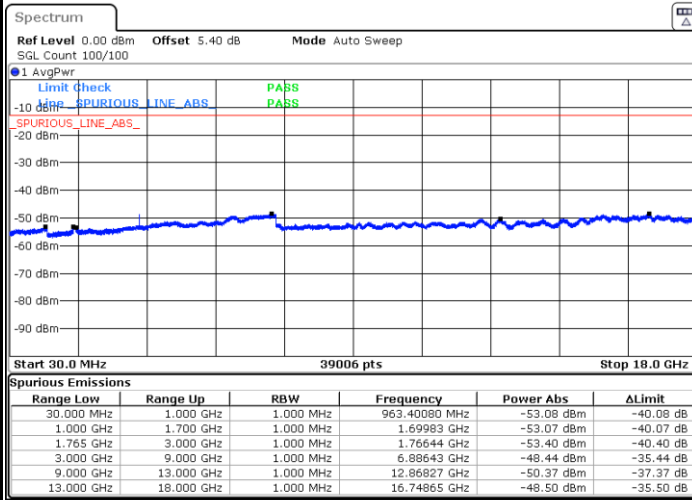


Date: 3.MAR.2022 15:49:40



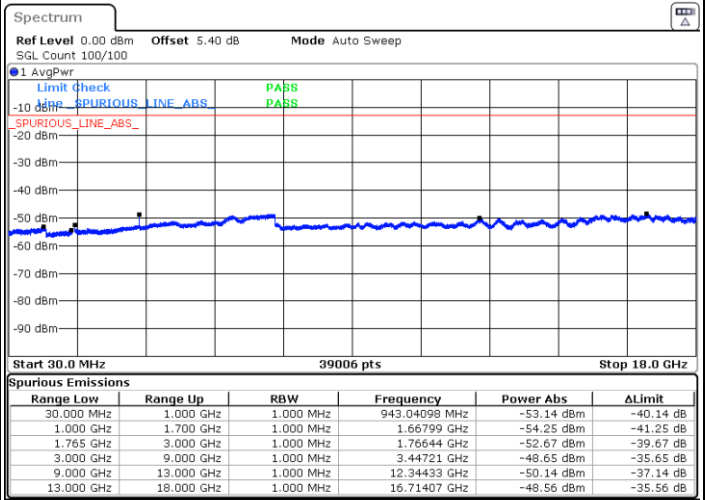
LTE Band 4 / 20MHz

Lowest Channel / QPSK



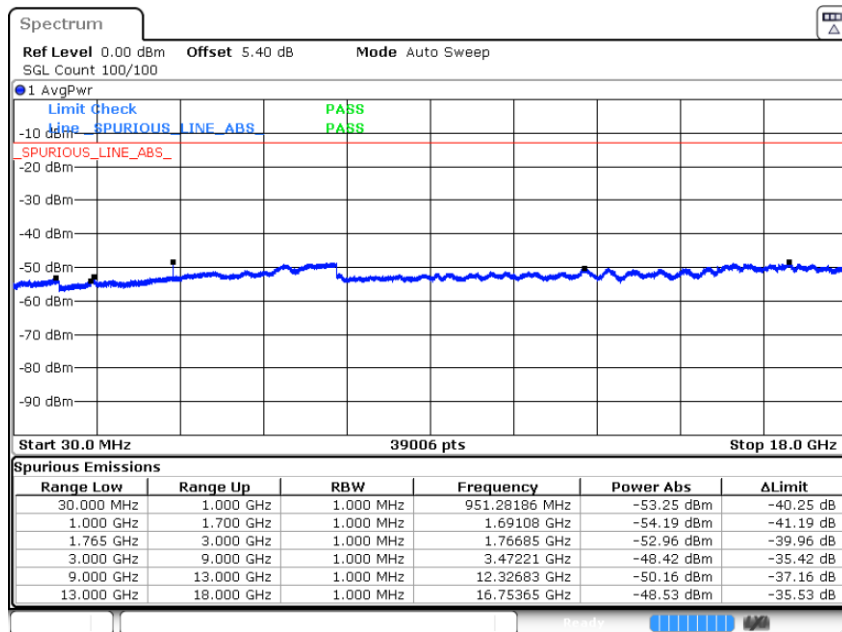
Date: 3.MAR.2022 15:56:39

Middle Channel / QPSK



Date: 3.MAR.2022 15:58:05

Highest Channel / QPSK



Date: 3.MAR.2022 15:59:33

**Frequency Stability**

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0027	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0084	
20	Battery End Point	0.0003	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

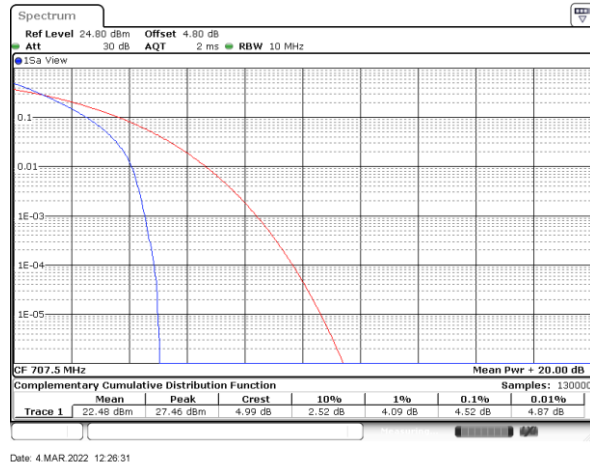
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.52	5.25	6.23	PASS

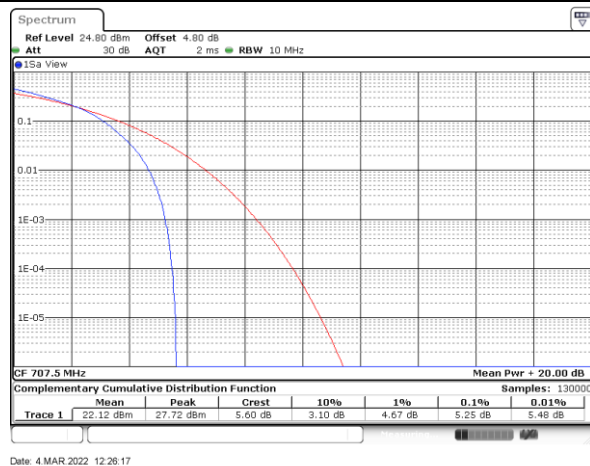


LTE Band 12 / 10MHz

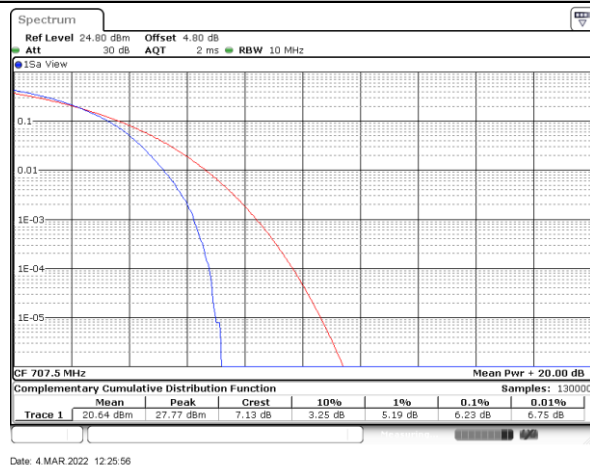
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

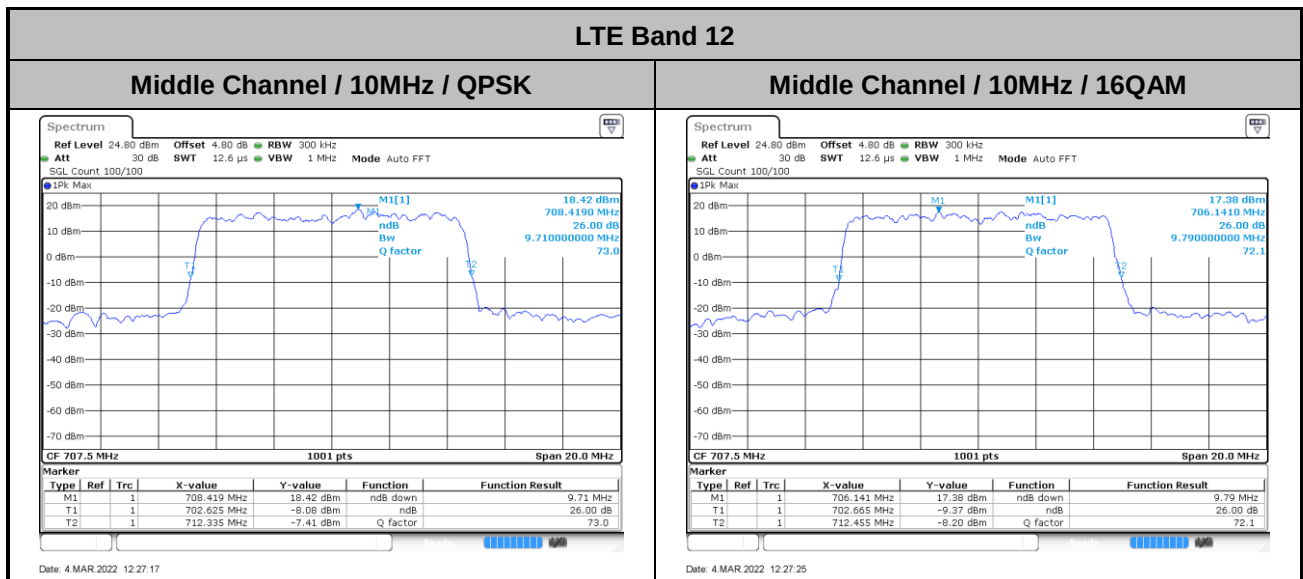


Middle Channel / Full RB/ 64QAM



**26dB Bandwidth**

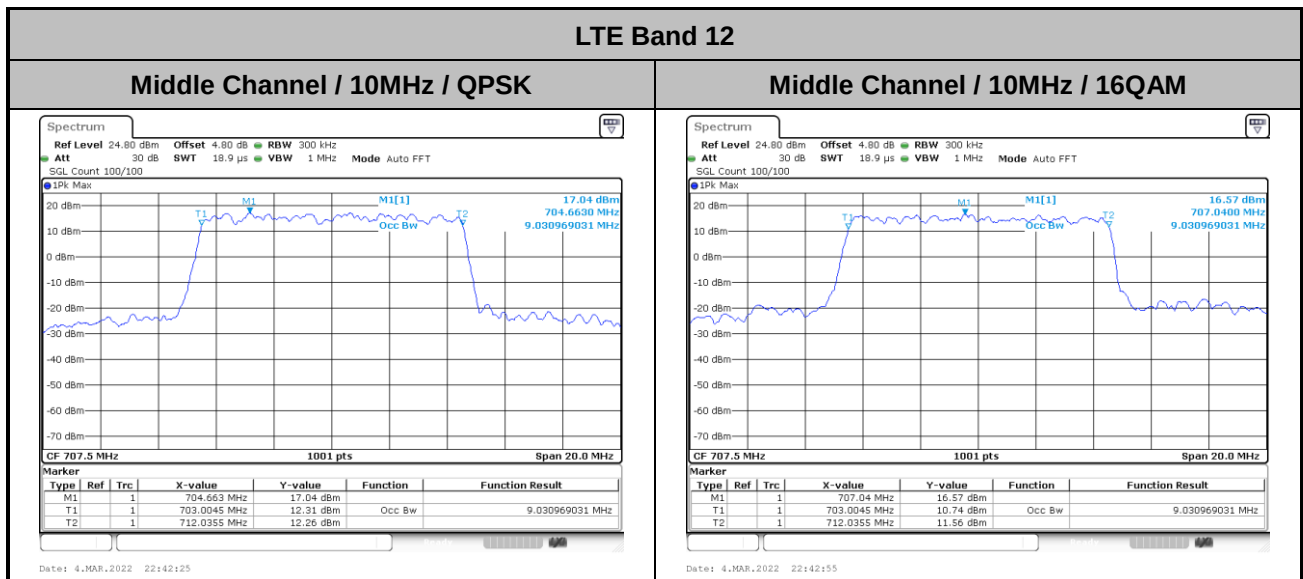
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.71	9.79





Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.03

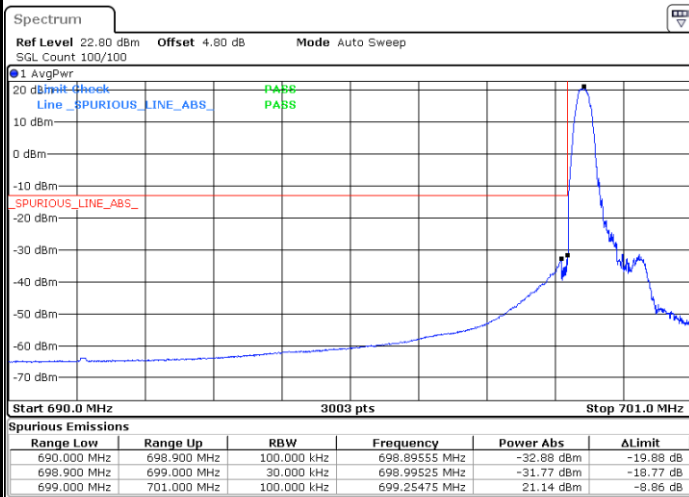




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

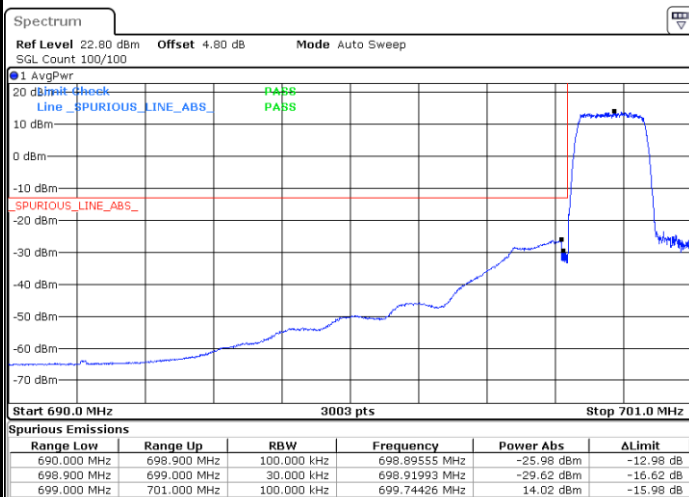
Lowest Band Edge / 1RB



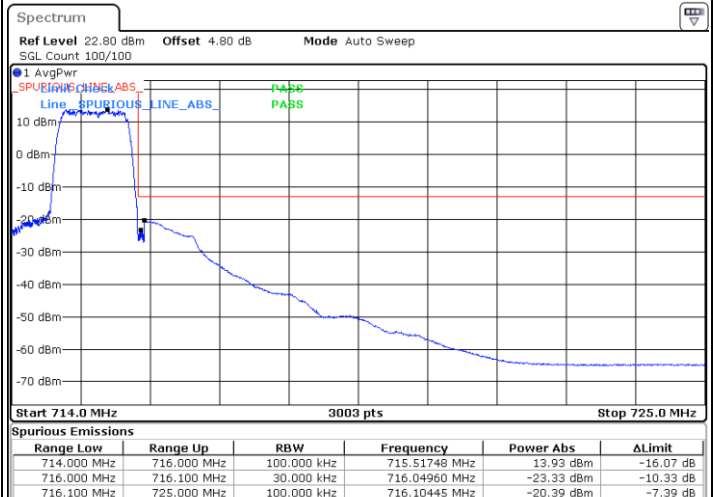
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

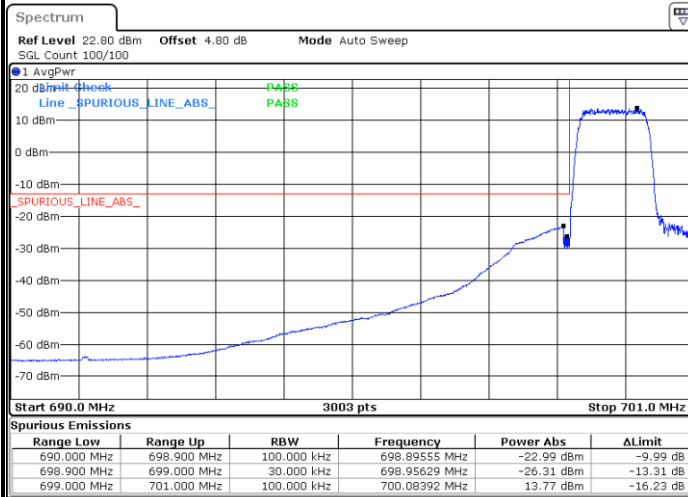
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



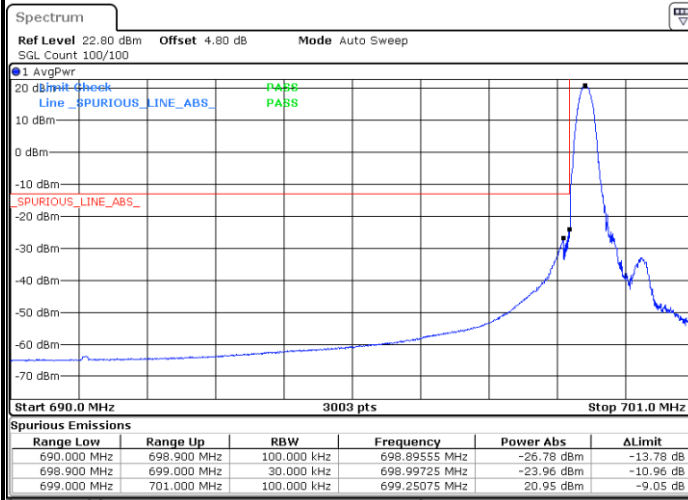
Highest Band Edge / Full RB



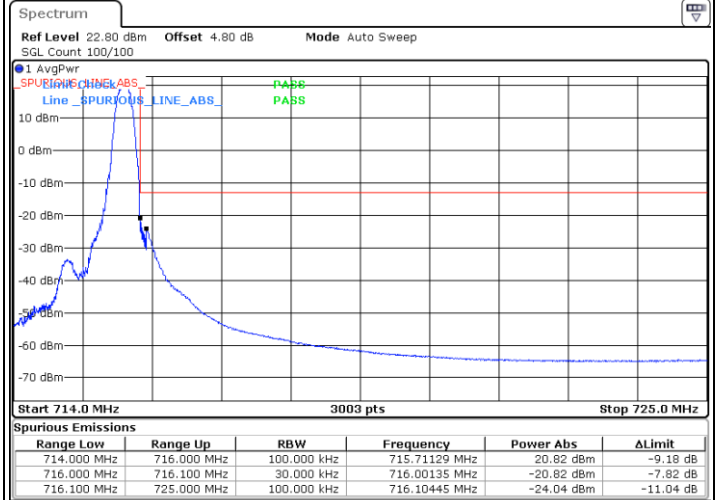


LTE Band 12 / 1.4MHz / 64QAM

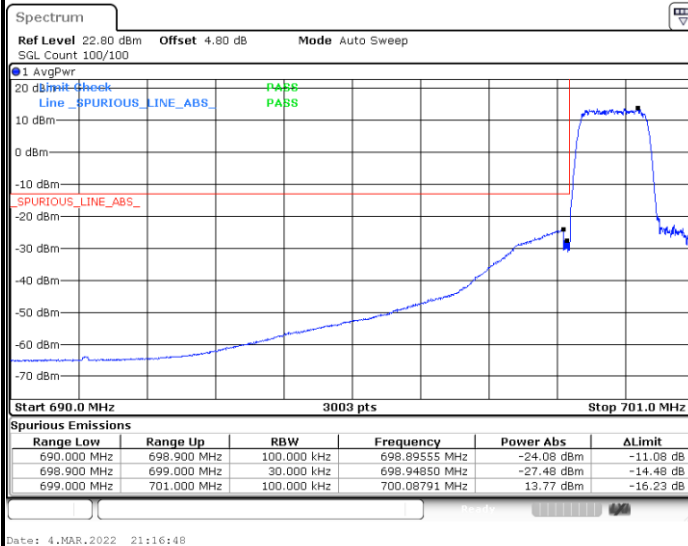
Lowest Band Edge / 1 RB



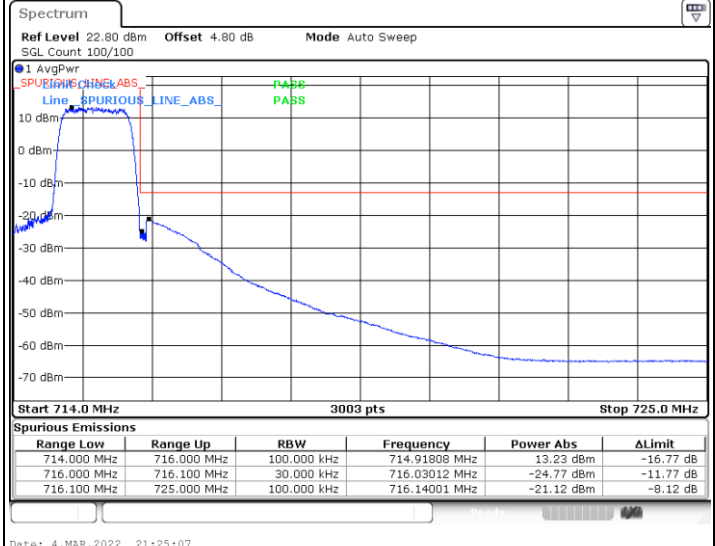
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



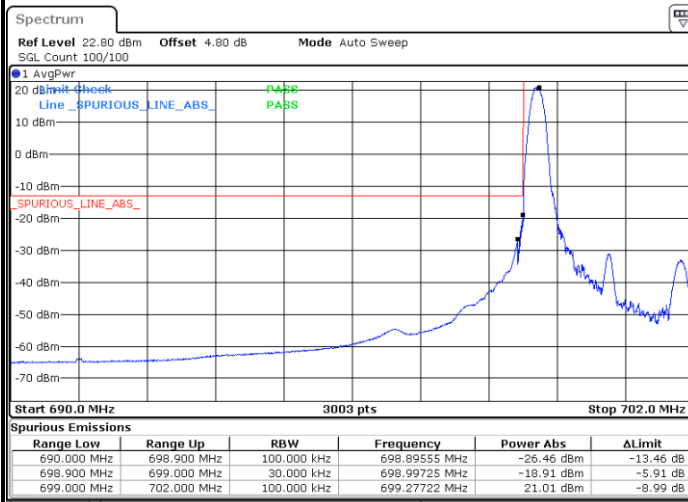
Highest Band Edge / Full RB



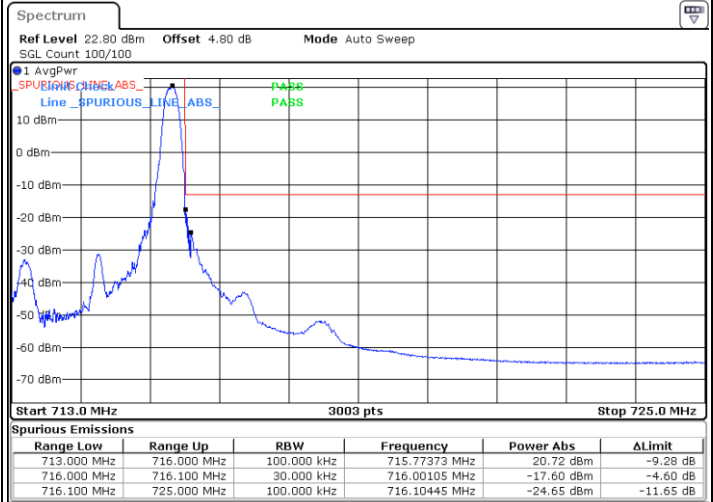


LTE Band 12 / 3MHz / QPSK

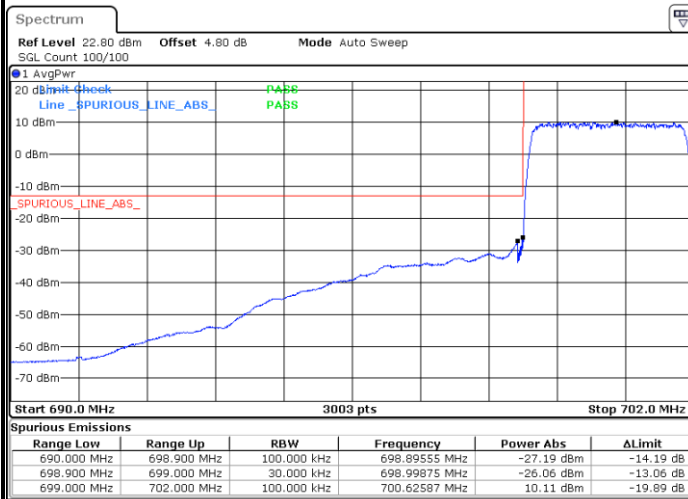
Lowest Band Edge / 1RB



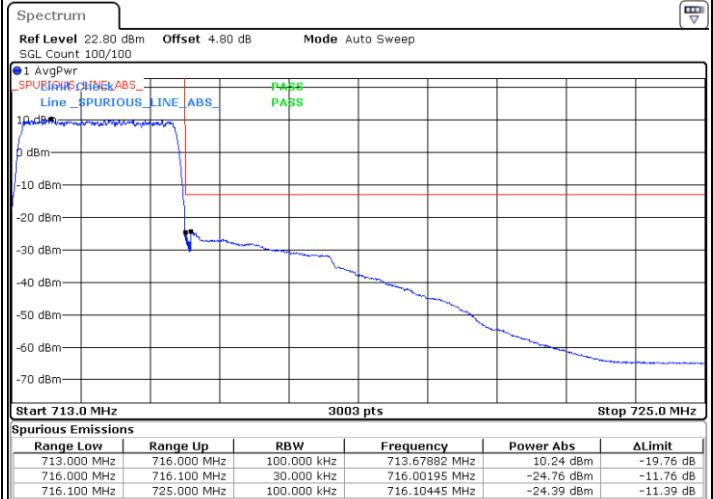
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



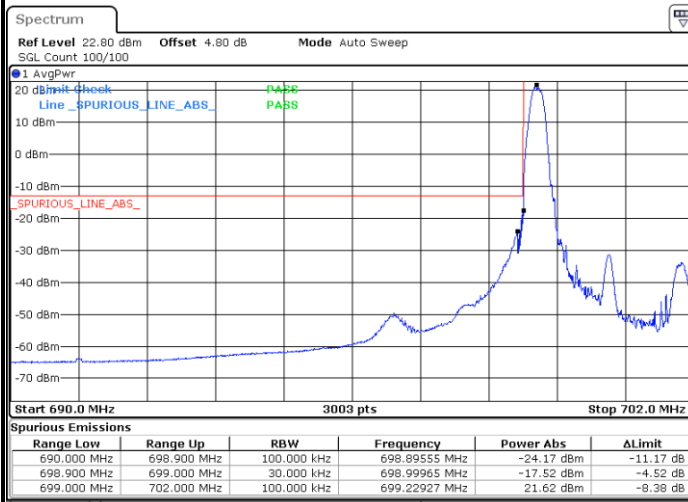
Highest Band Edge / Full RB



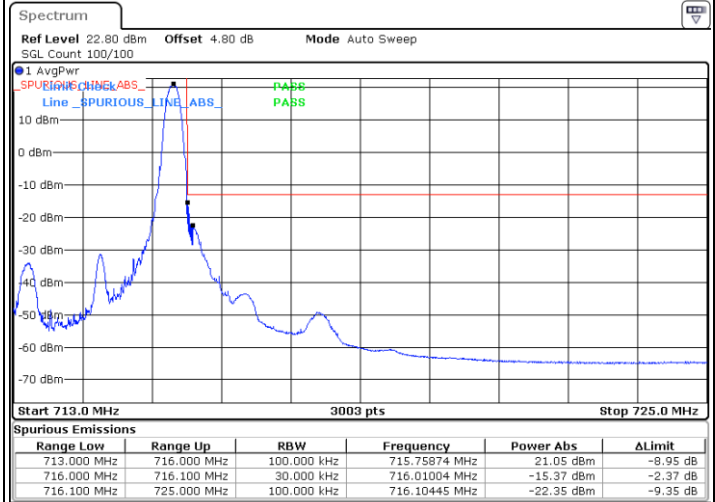


LTE Band 12 / 3MHz / 16QAM

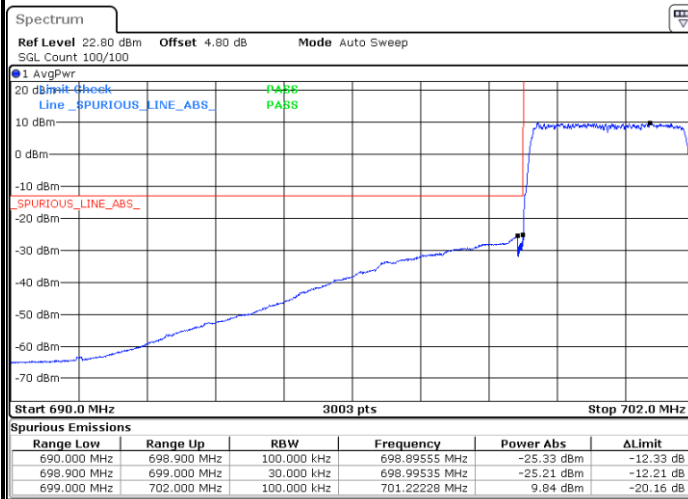
Lowest Band Edge / 1 RB



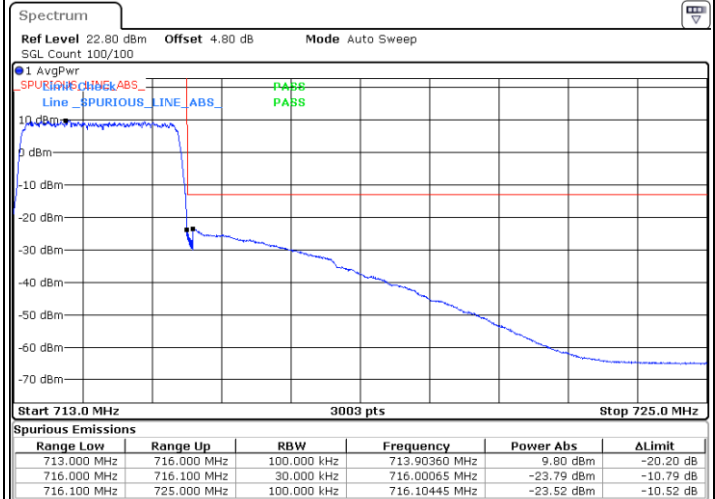
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



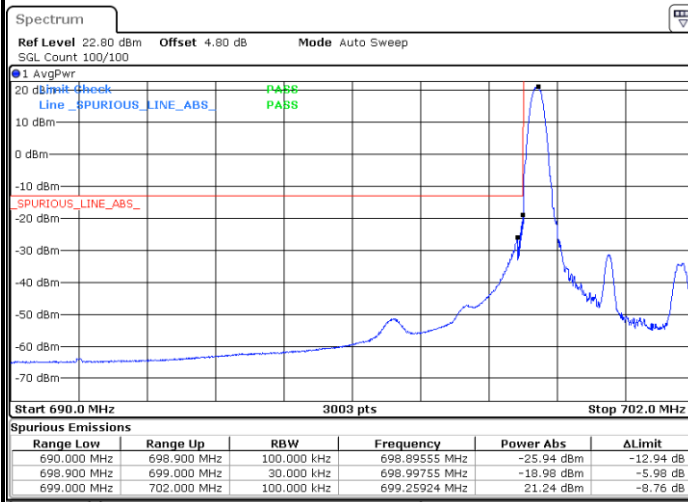
Highest Band Edge / Full RB



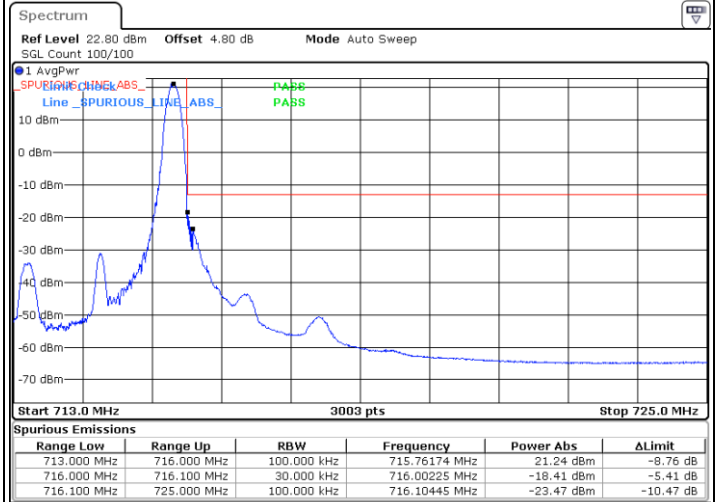


LTE Band 12 / 3MHz / 64QAM

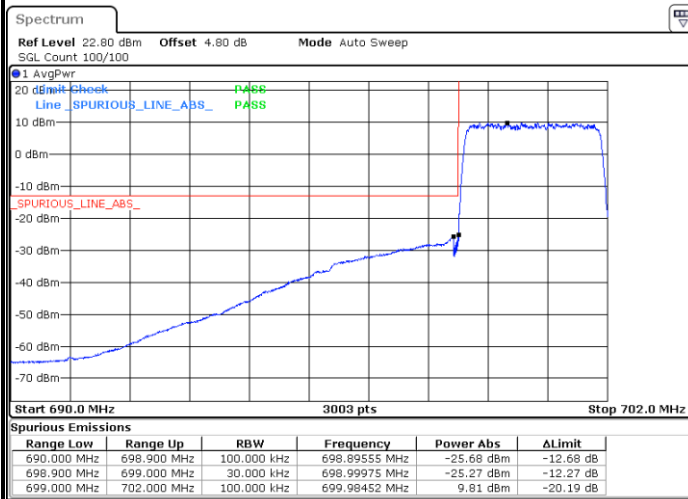
Lowest Band Edge / 1 RB



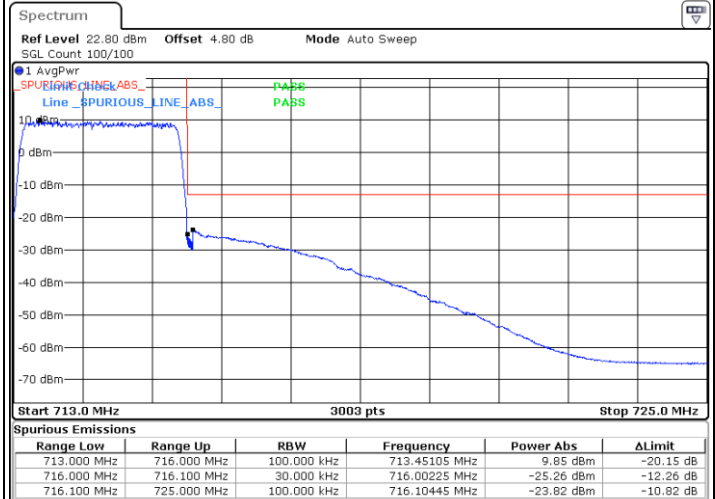
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



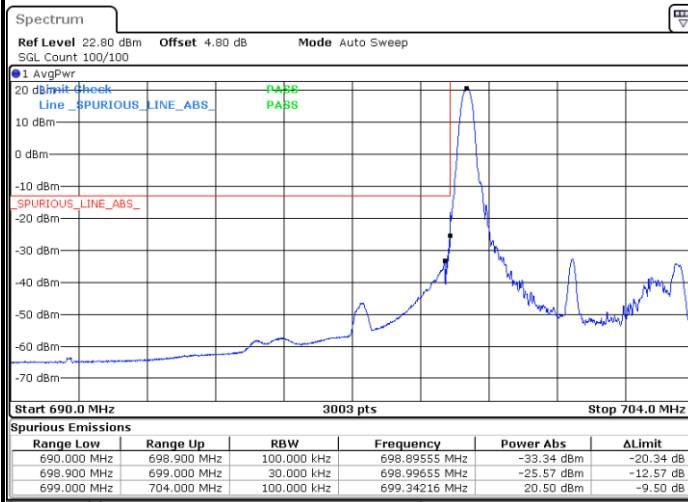
Highest Band Edge / Full RB



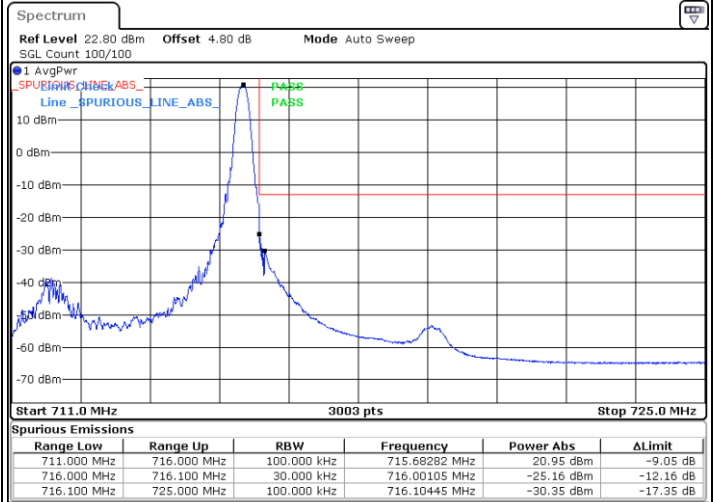


LTE Band 12 / 5MHz / QPSK

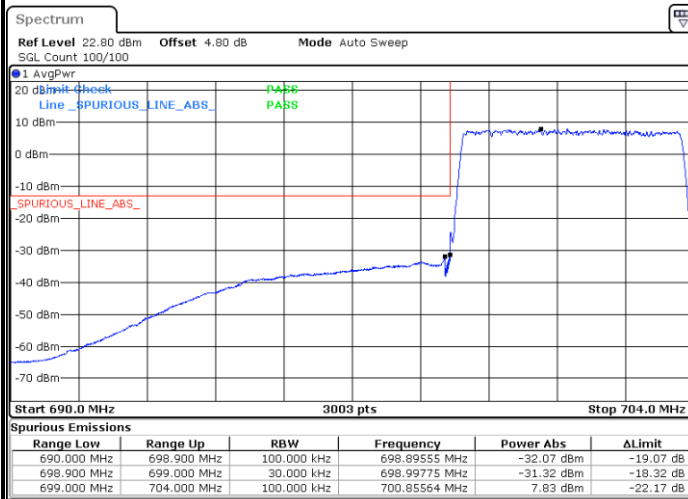
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



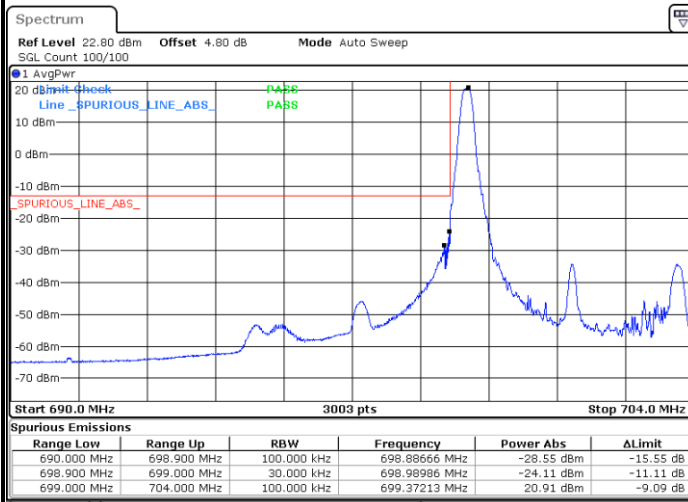
Highest Band Edge / Full RB



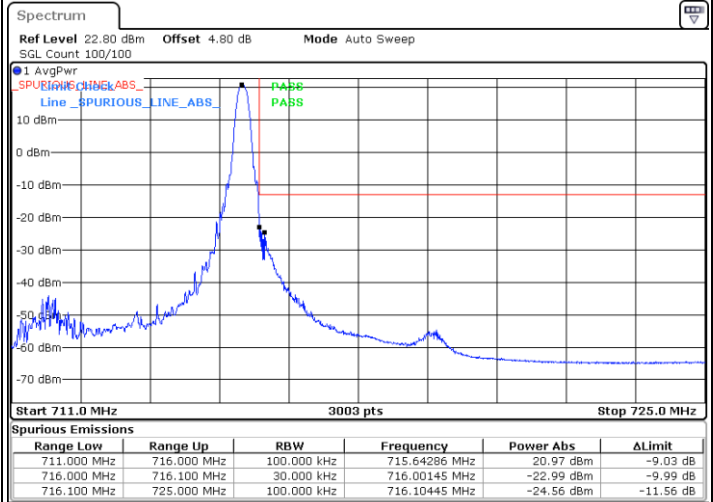


LTE Band 12 / 5MHz / 16QAM

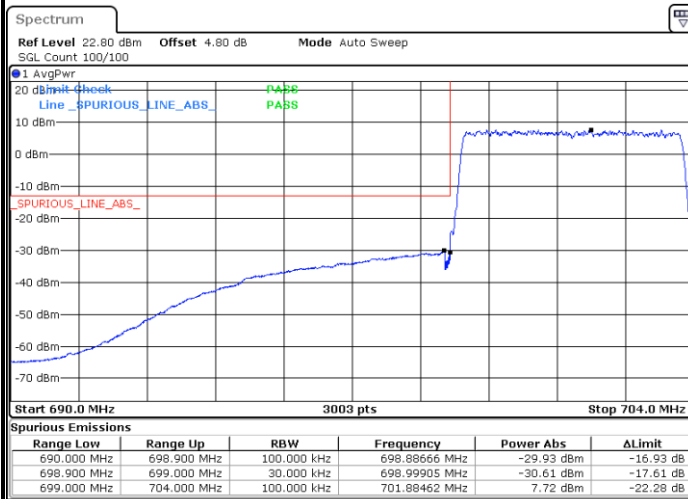
Lowest Band Edge / 1RB



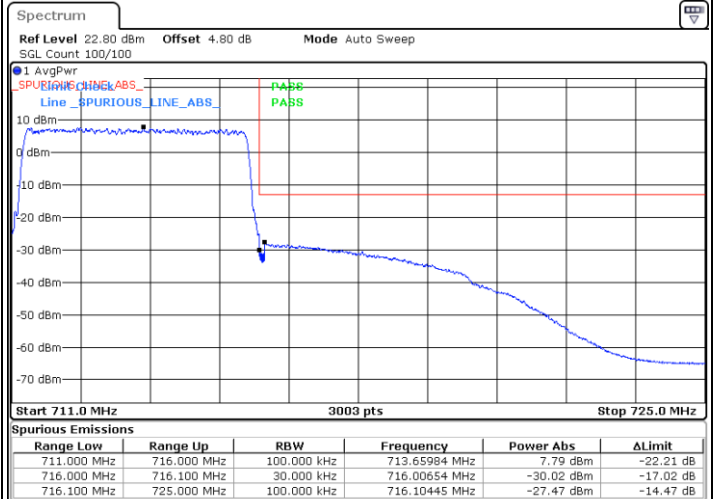
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



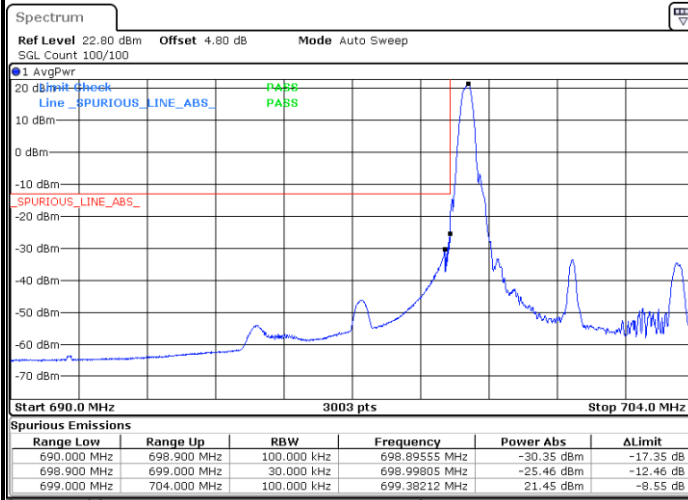
Highest Band Edge / Full RB



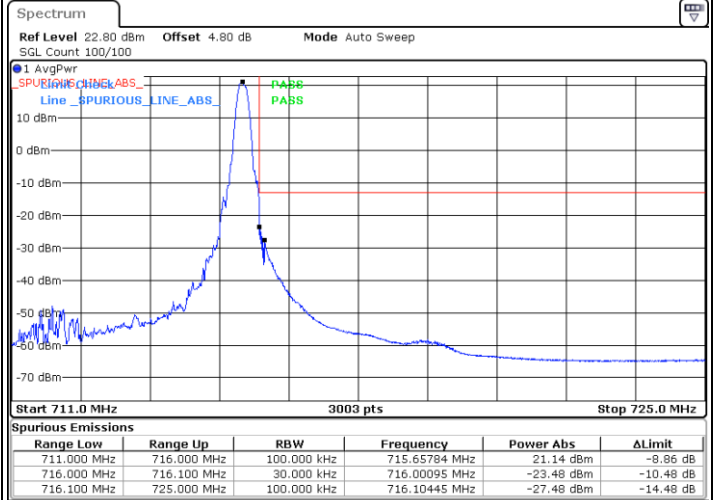


LTE Band 12 / 5MHz / 64QAM

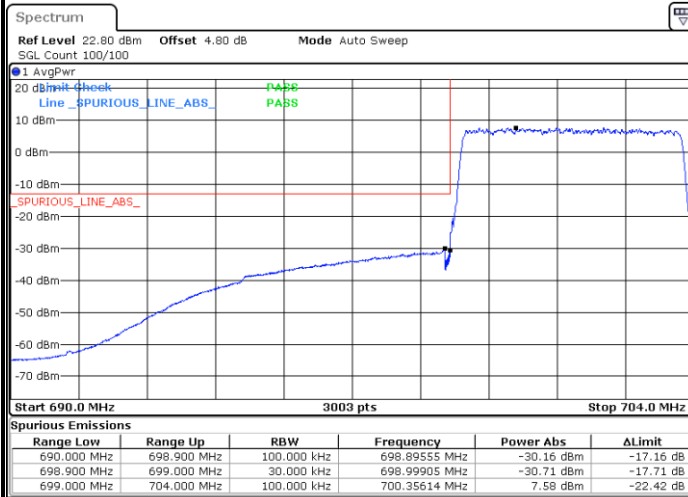
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



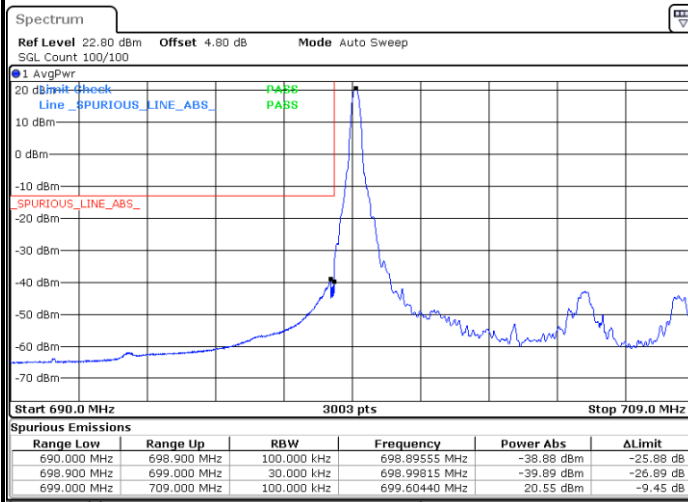
Highest Band Edge / Full RB



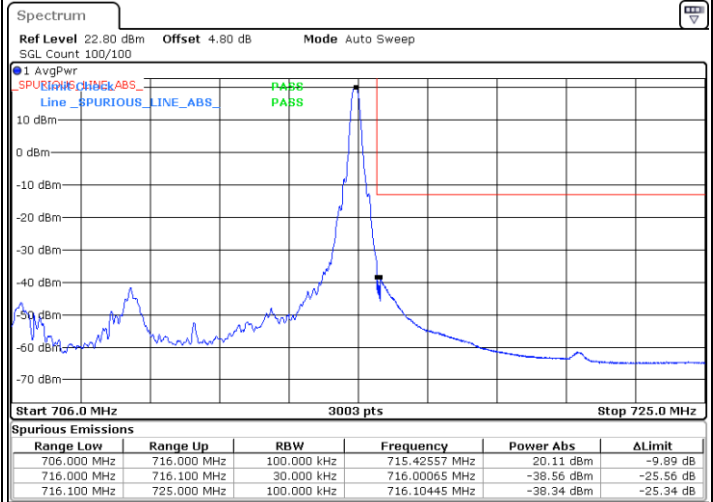


LTE Band 12 / 10MHz / QPSK

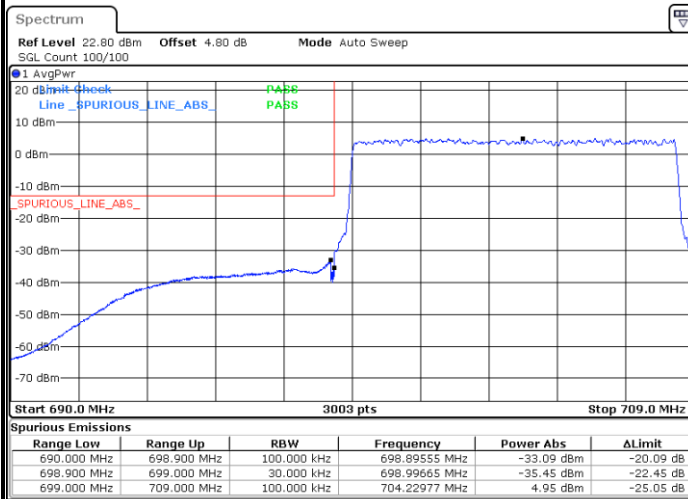
Lowest Band Edge / 1 RB



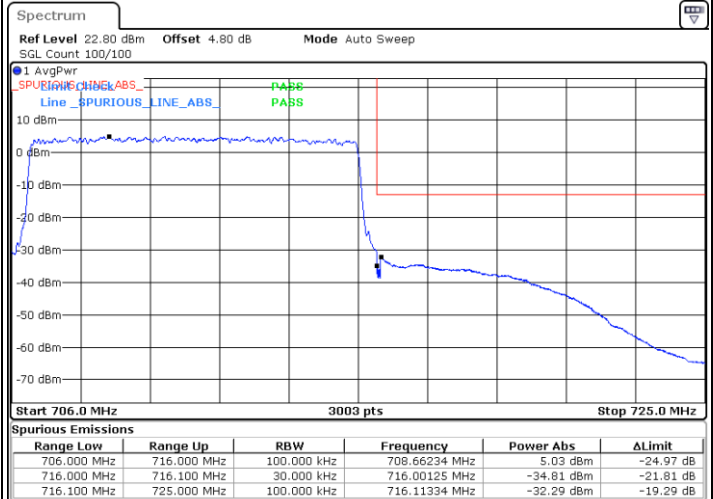
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



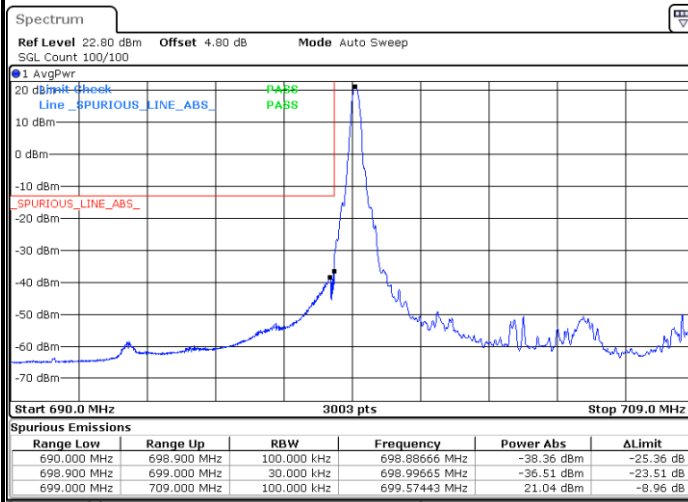
Highest Band Edge / Full RB



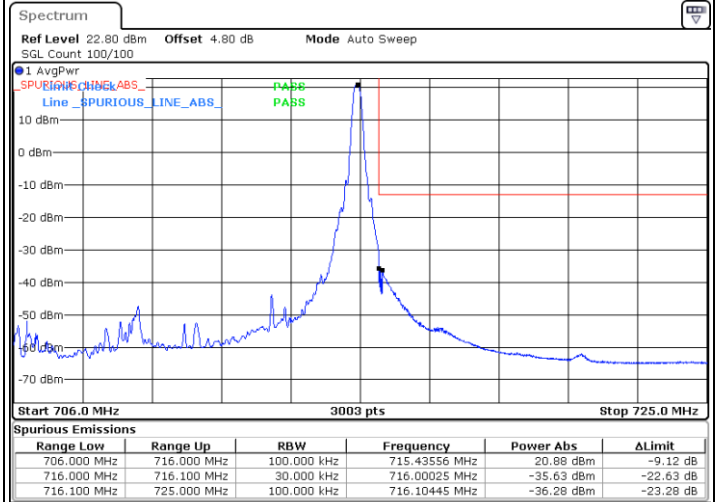


LTE Band 12 / 10MHz / 16QAM

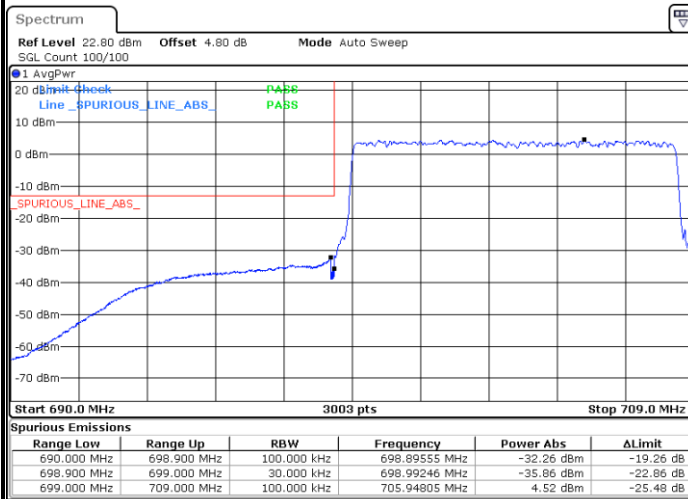
Lowest Band Edge / 1 RB



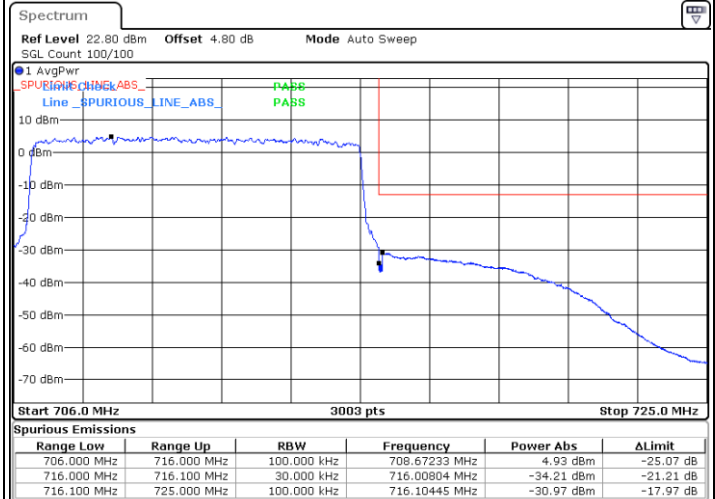
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



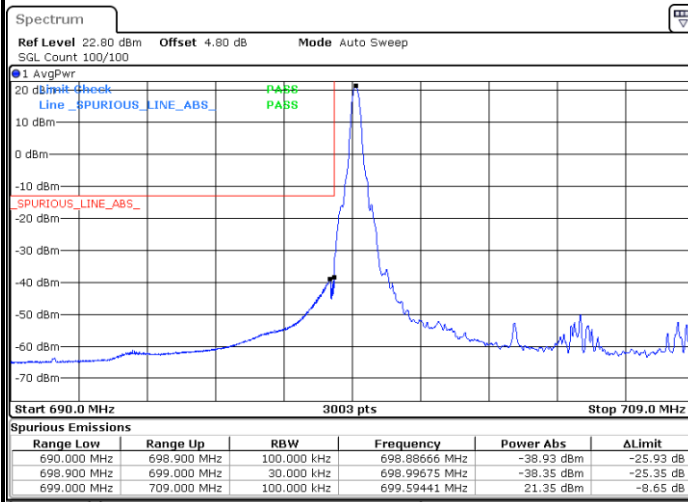
Highest Band Edge / Full RB



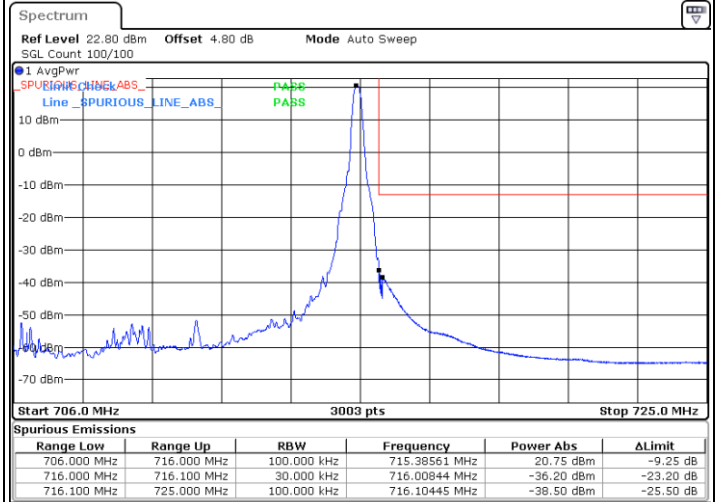


LTE Band 12 / 10MHz / 64QAM

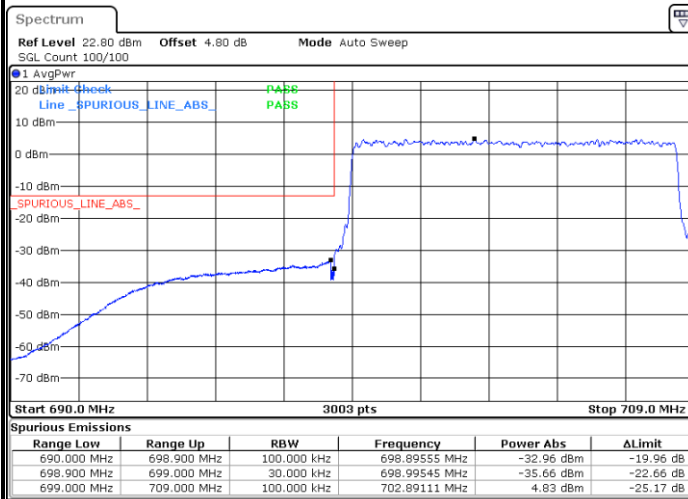
Lowest Band Edge / 1 RB



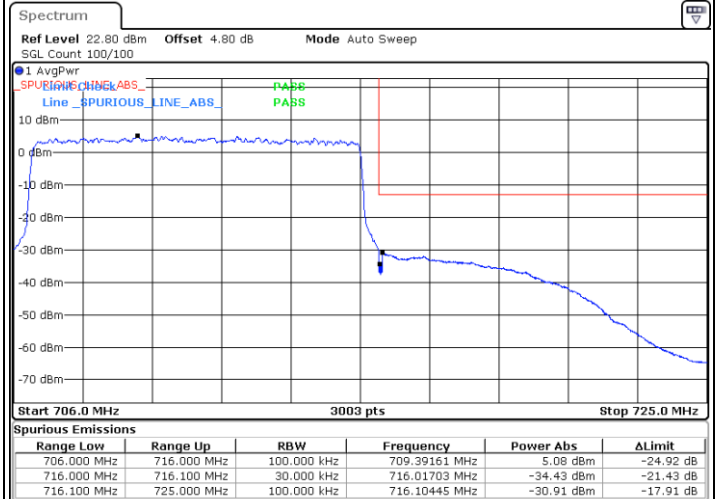
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

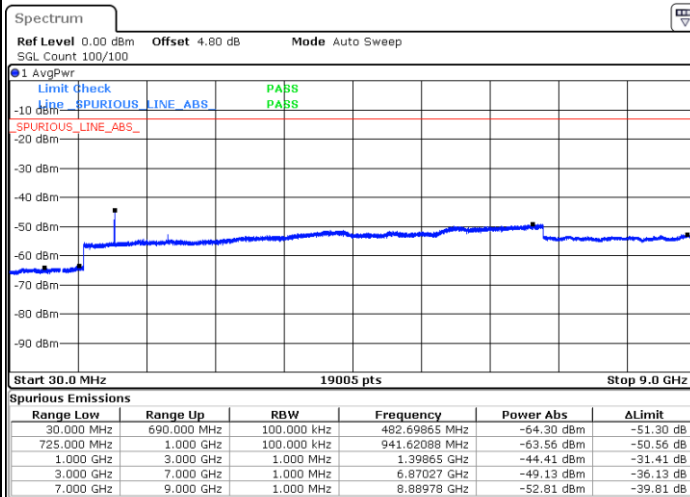




Conducted Spurious Emission

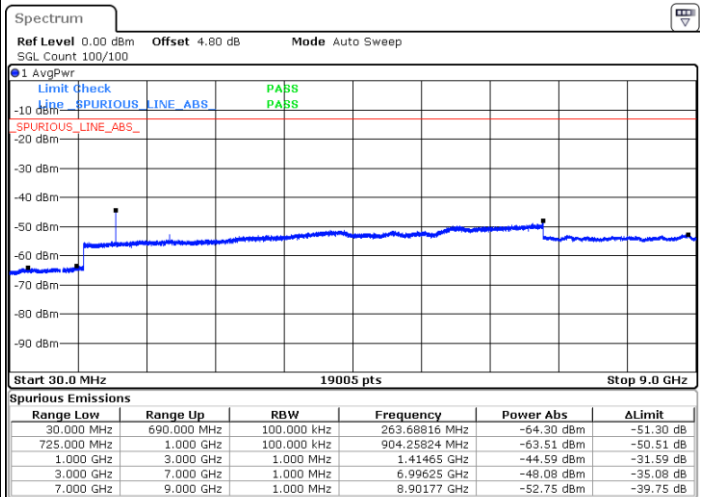
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



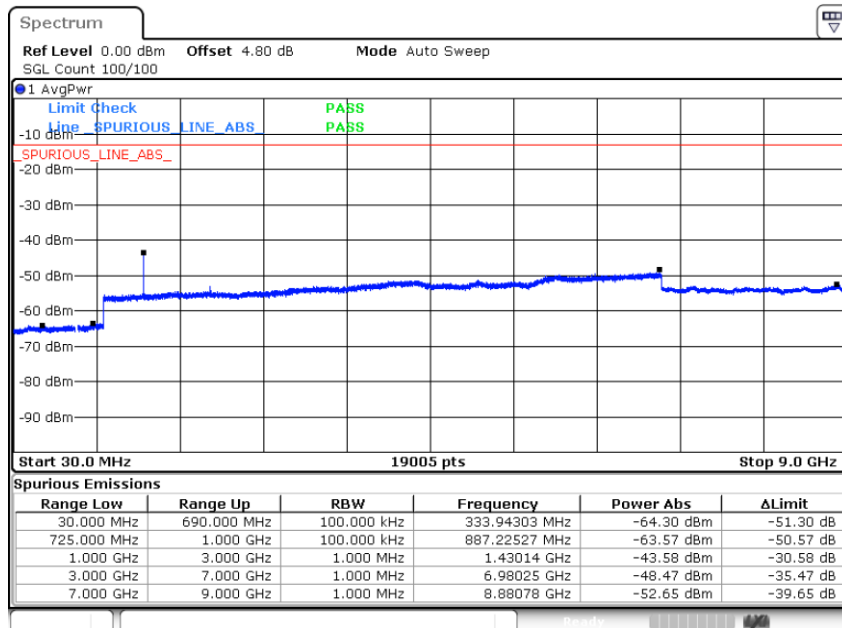
Date: 4.MAR.2022 21:12:14

Middle Channel / QPSK



Date: 4.MAR.2022 21:20:10

Highest Channel / QPSK

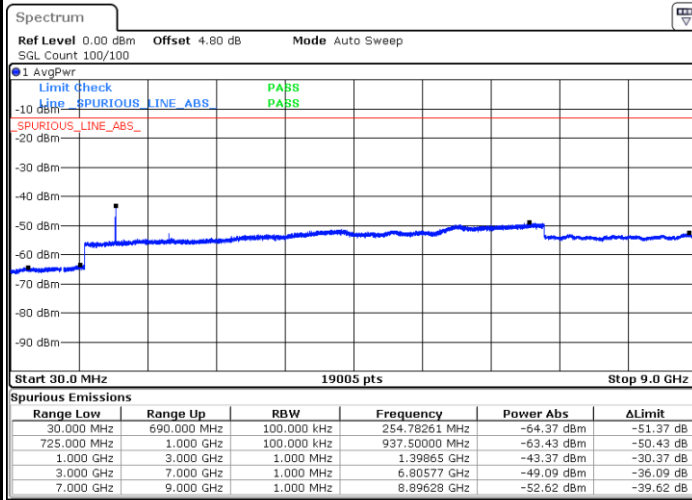


Date: 4.MAR.2022 21:21:19



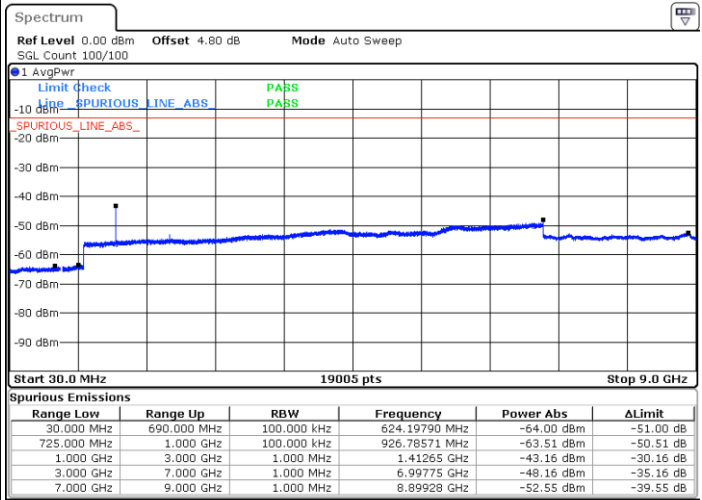
LTE Band 12 / 3MHz

Lowest Channel / QPSK



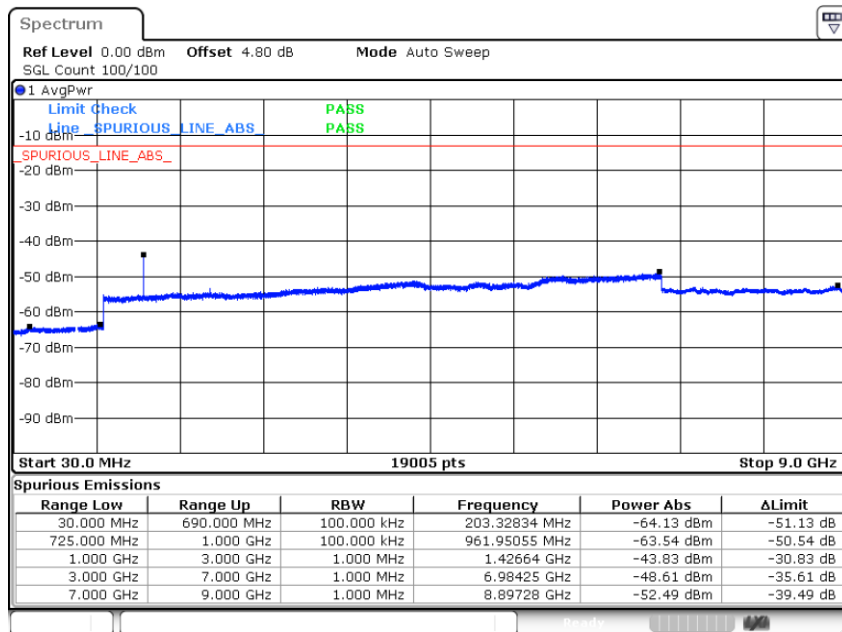
Date: 4.MAR.2022 21:46:41

Middle Channel / QPSK



Date: 4.MAR.2022 21:53:59

Highest Channel / QPSK

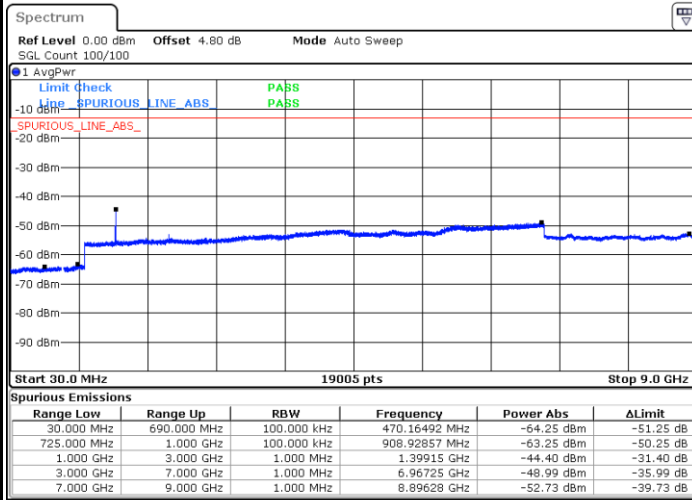


Date: 4.MAR.2022 21:54:57



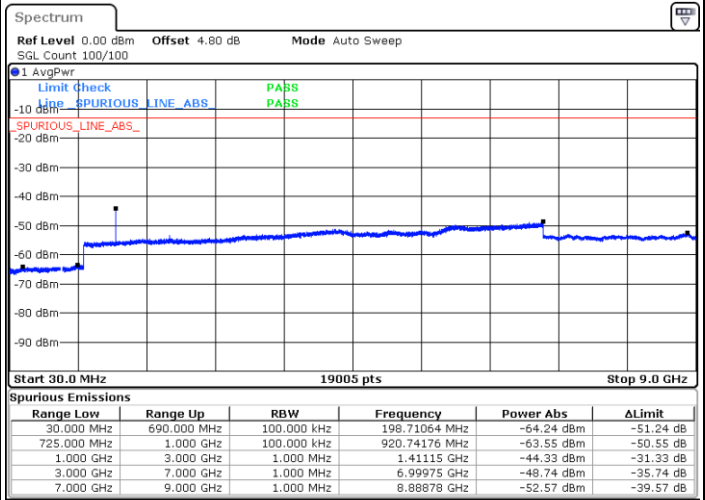
LTE Band 12 / 5MHz

Lowest Channel / QPSK



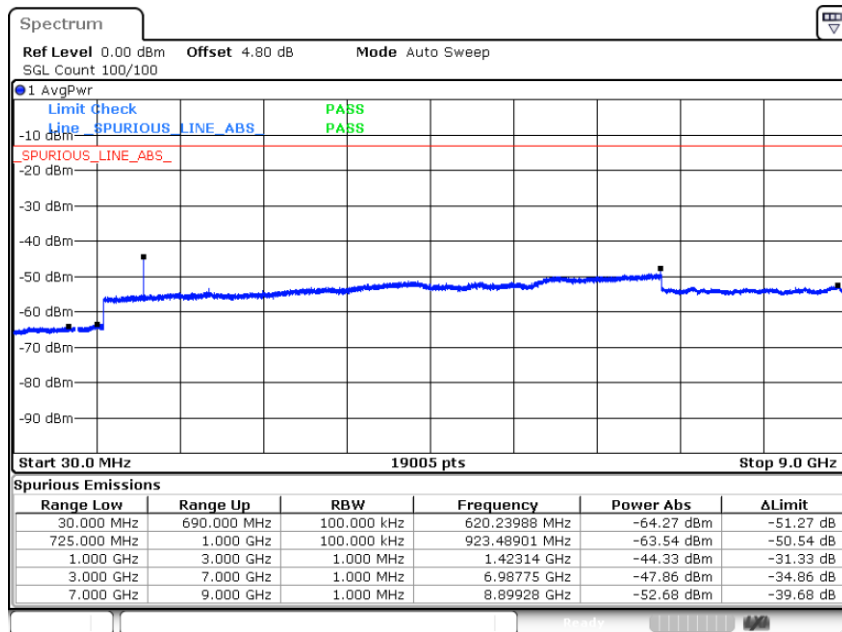
Date: 4.MAR.2022 22:03:59

Middle Channel / QPSK



Date: 4.MAR.2022 22:14:49

Highest Channel / QPSK

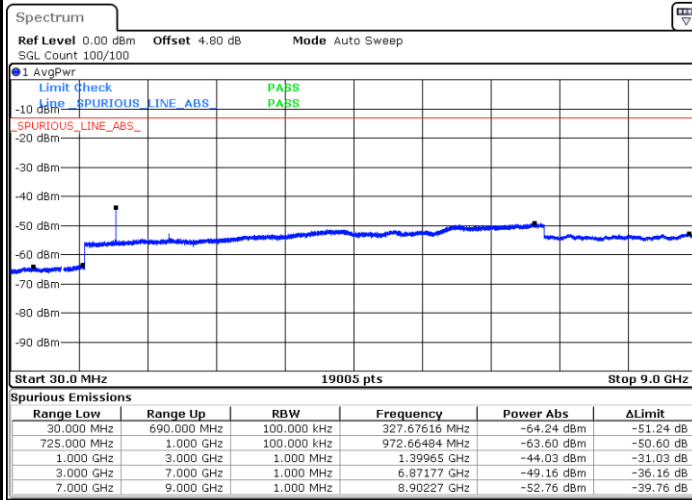


Date: 4.MAR.2022 22:15:52



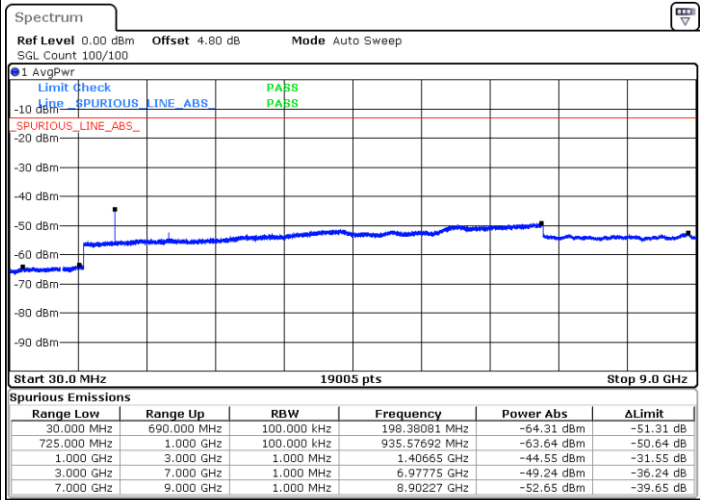
LTE Band 12 / 10MHz

Lowest Channel / QPSK



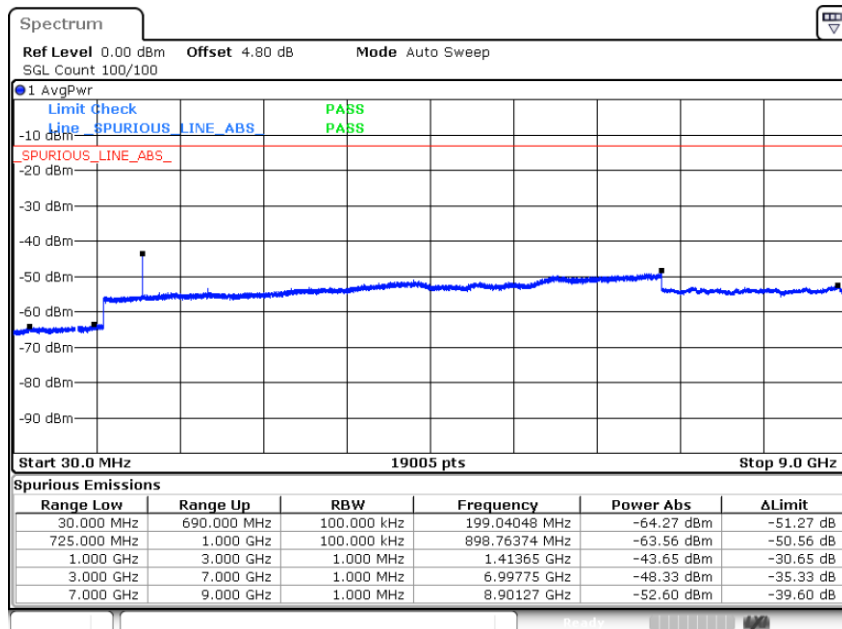
Date: 4.MAR.2022 22:28:43

Middle Channel / QPSK



Date: 4.MAR.2022 22:41:59

Highest Channel / QPSK



Date: 4.MAR.2022 22:48:01

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Within Band
		Frequency Offset (Δf) (Hz)	Result
50	Normal Voltage	0.0015	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

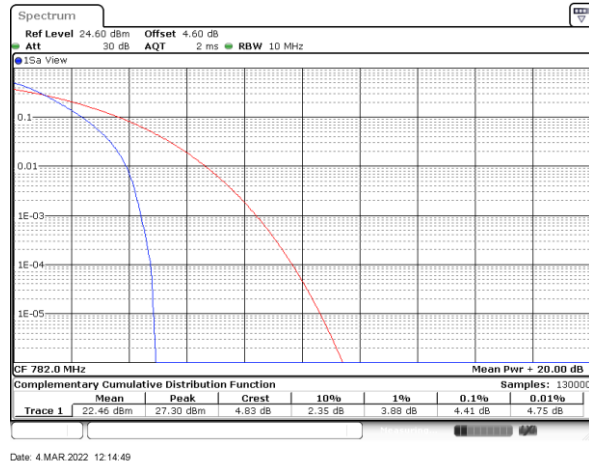
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	-	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	-	Result
Middle CH	4.41	5.16	5.94	-	PASS

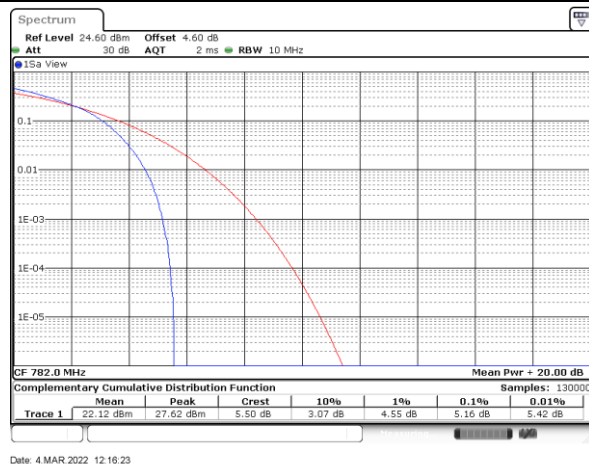


LTE Band 13 / 10MHz

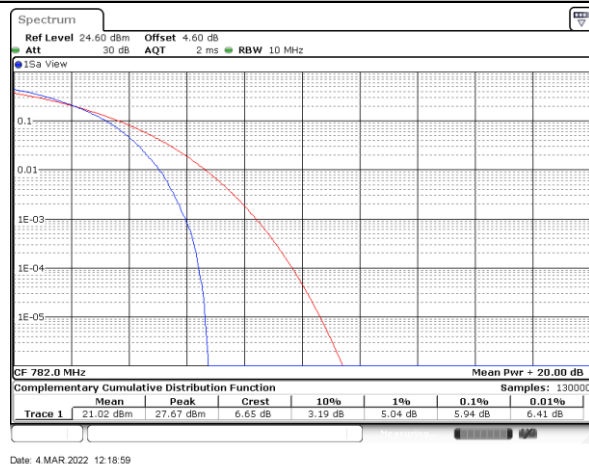
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

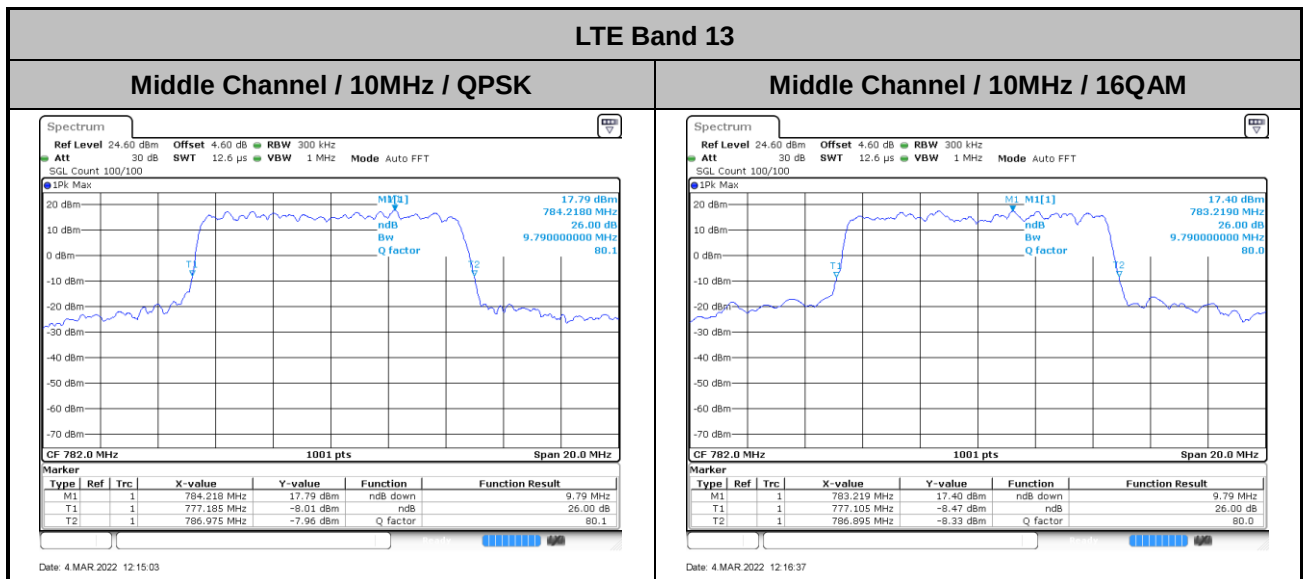


Middle Channel / Full RB/ 64QAM



**26dB Bandwidth**

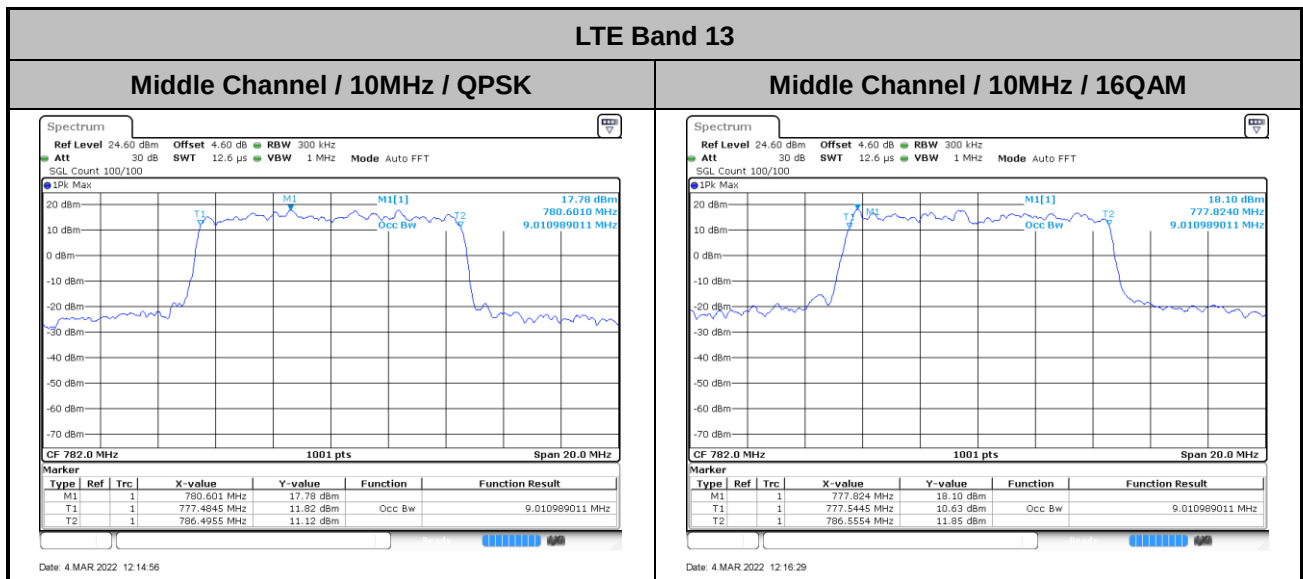
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.79	9.79





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01

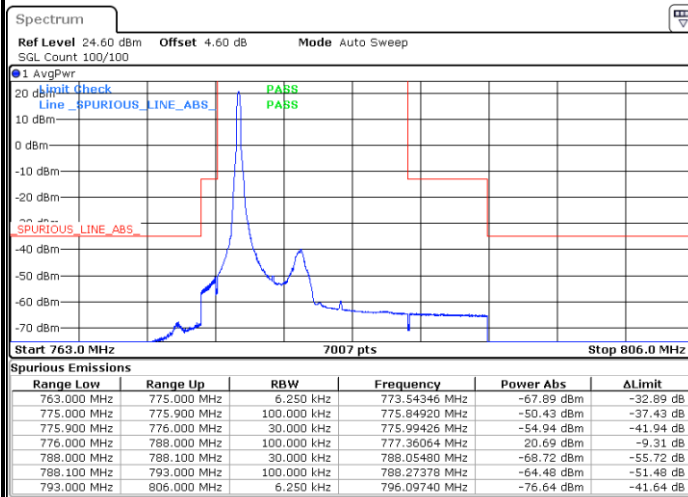




Conducted Band Edge

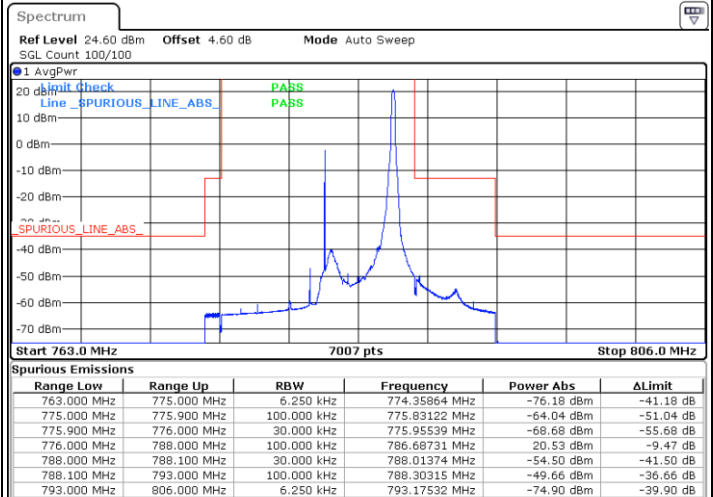
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



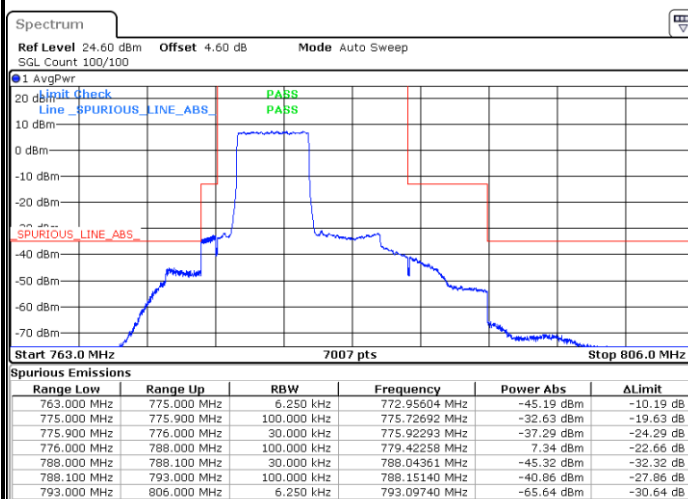
Date: 4 MAR 2022 11:38:27

Highest Band Edge / 1 RB



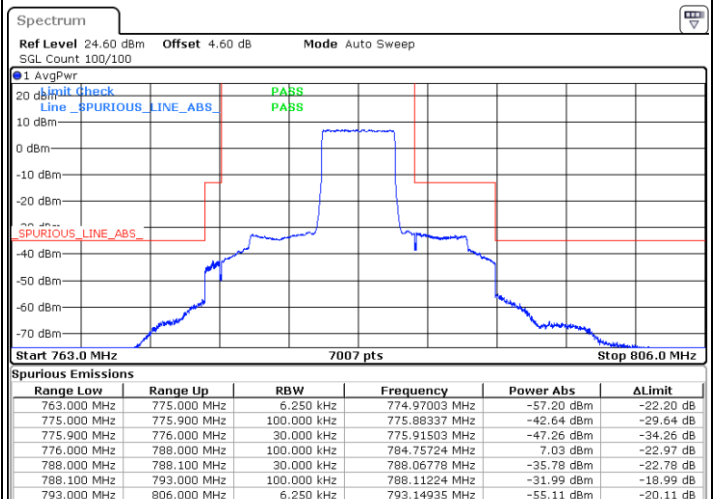
Date: 4 MAR 2022 12:03:37

Lowest Band Edge / Full RB



Date: 4 MAR 2022 11:55:54

Highest Band Edge / Full RB

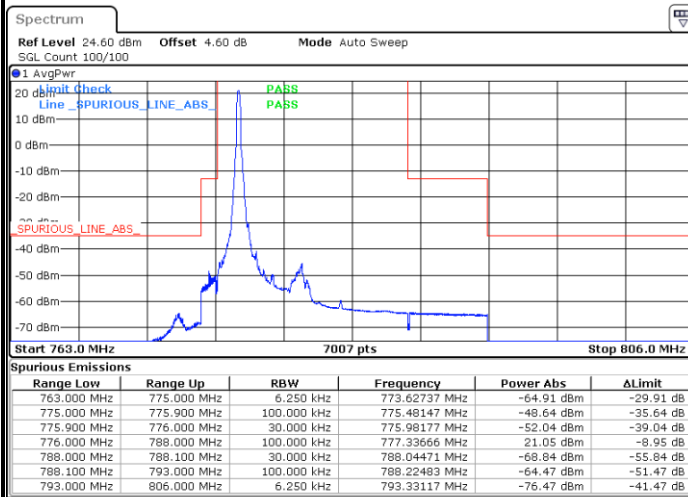


Date: 4 MAR 2022 11:57:30

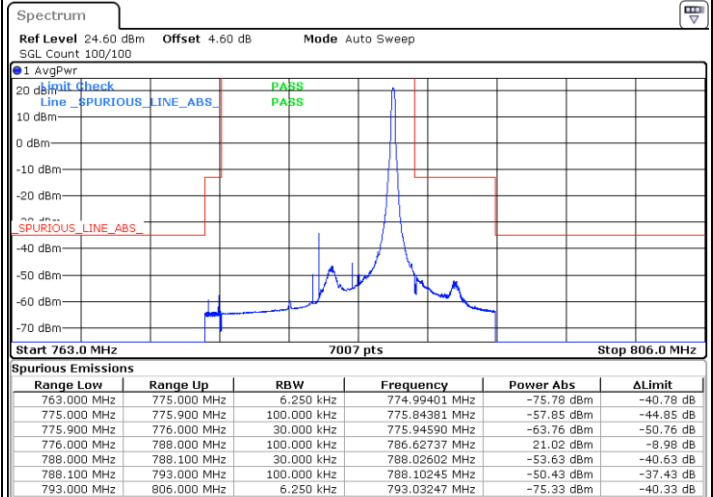


LTE Band 13 / 5MHz / 16QAM

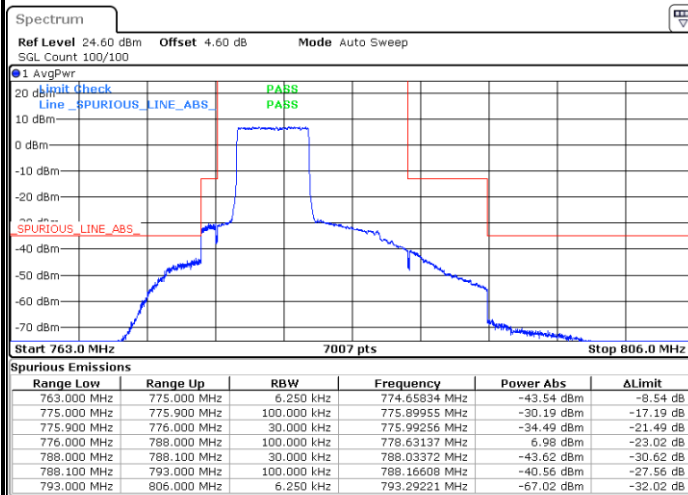
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

