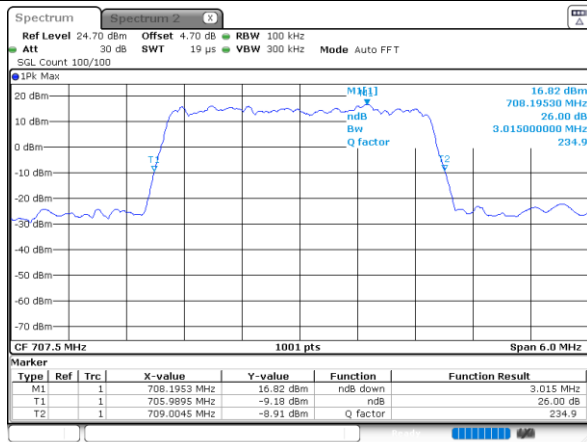




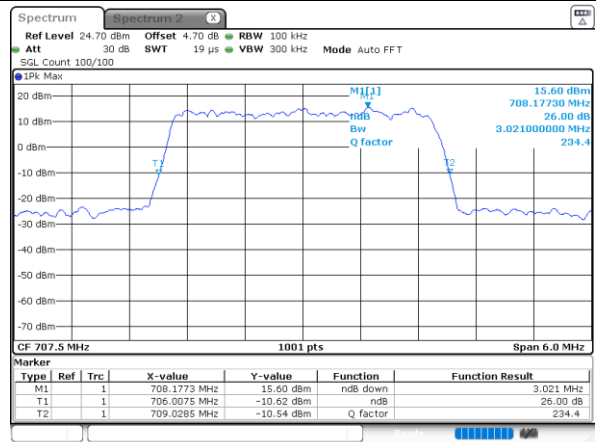
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 22.JAN.2022 13:46:16

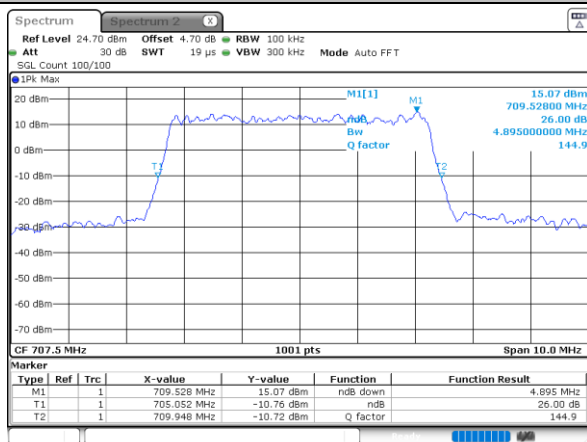
Middle Channel / 3MHz / 16QAM



Date: 22.JAN.2022 13:46:18

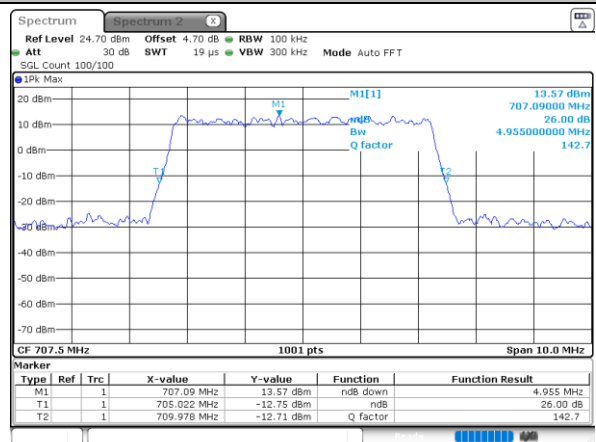
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 22.JAN.2022 13:47:43

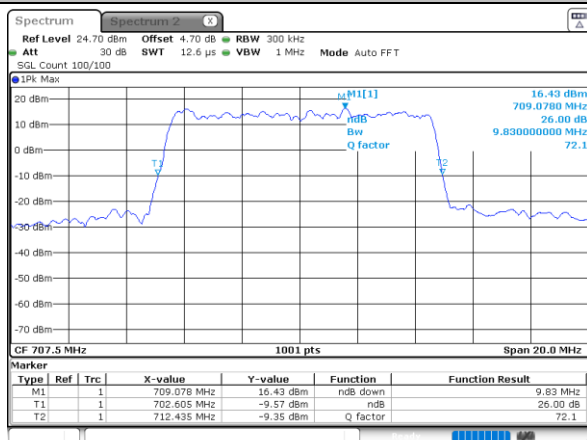
Middle Channel / 5MHz / 16QAM



Date: 22.JAN.2022 13:48:04

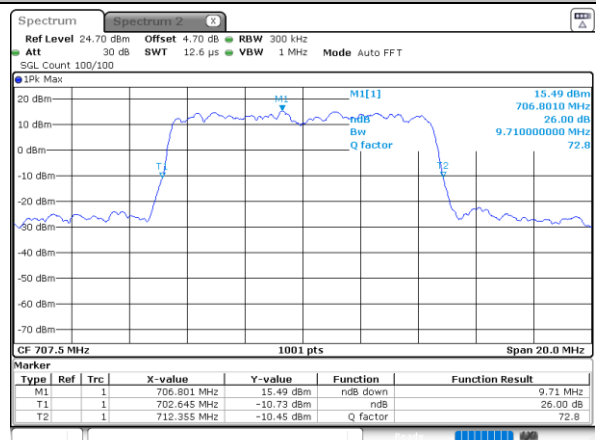
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 22.JAN.2022 13:49:09

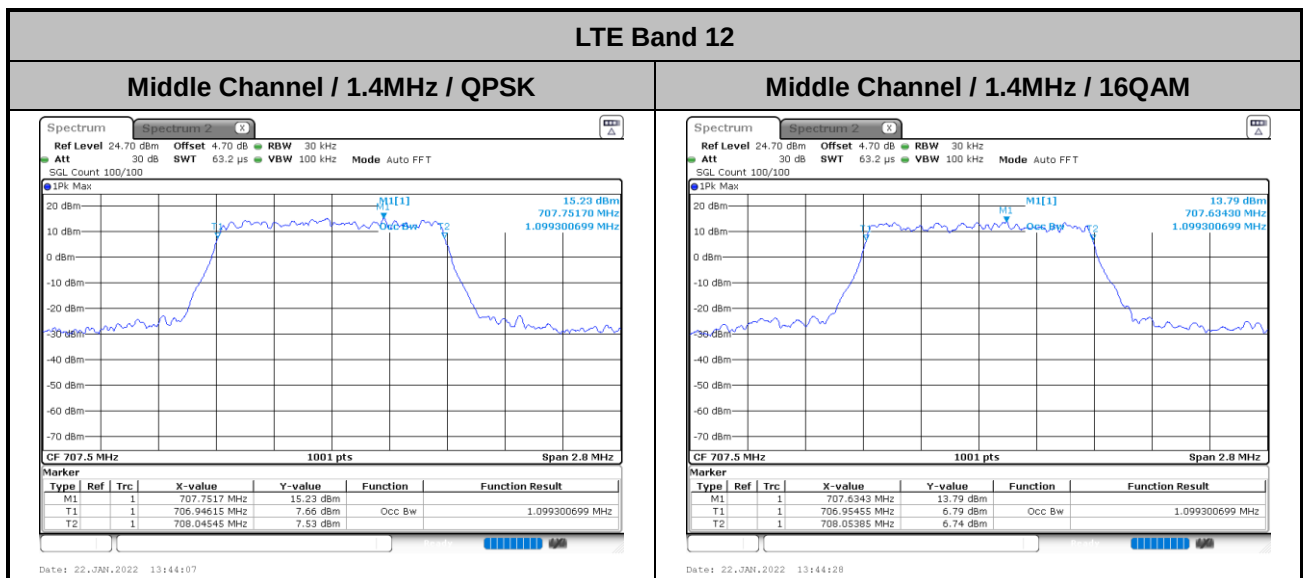
Middle Channel / 10MHz / 16QAM



Date: 22.JAN.2022 13:49:31

Occupied Bandwidth

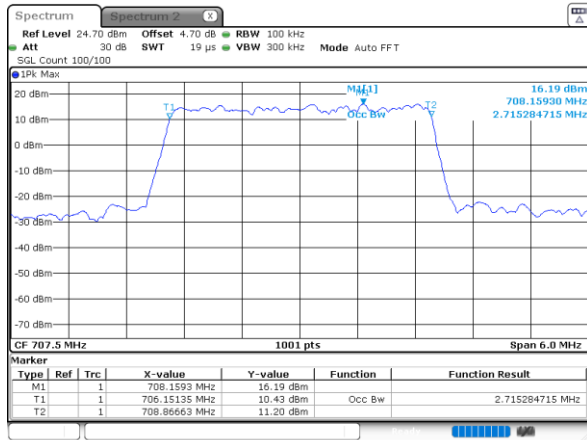
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.10	1.10
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.72	2.71
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.50
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.01



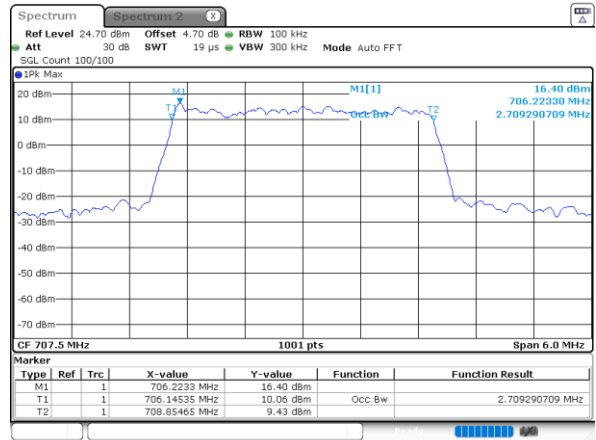


LTE Band 12

Middle Channel / 3MHz / QPSK

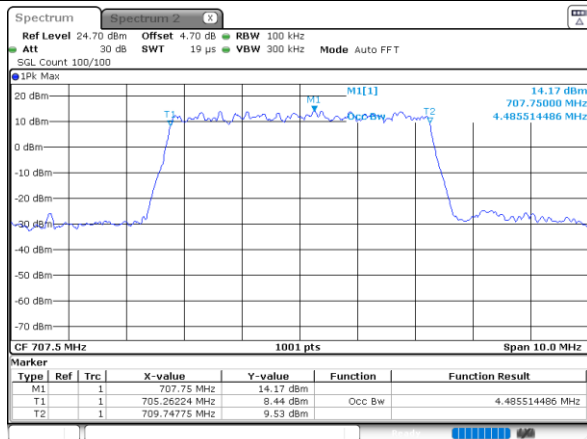


Middle Channel / 3MHz / 16QAM

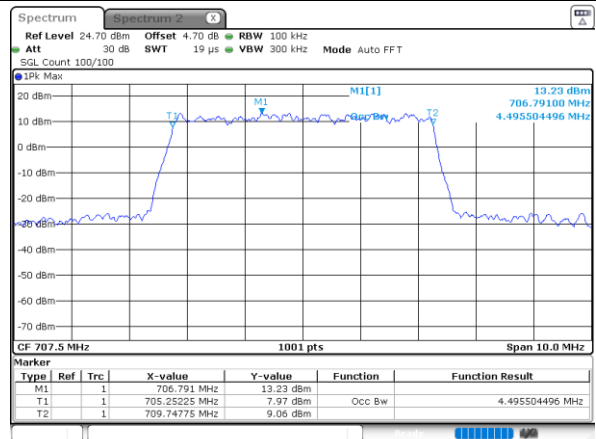


LTE Band 12

Middle Channel / 5MHz / QPSK

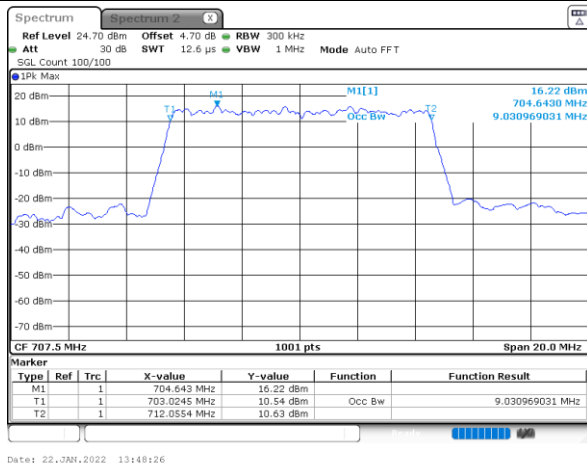


Middle Channel / 5MHz / 16QAM

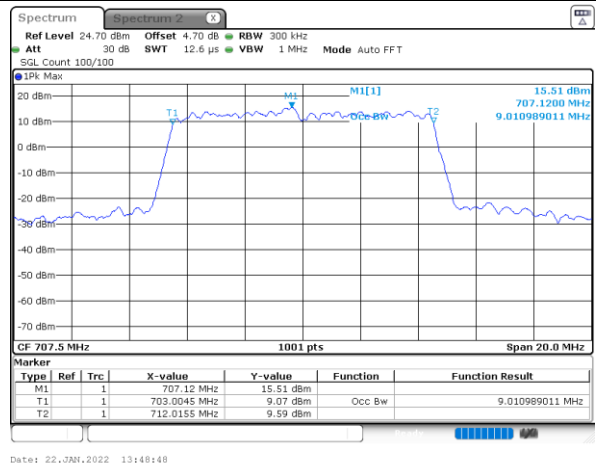


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

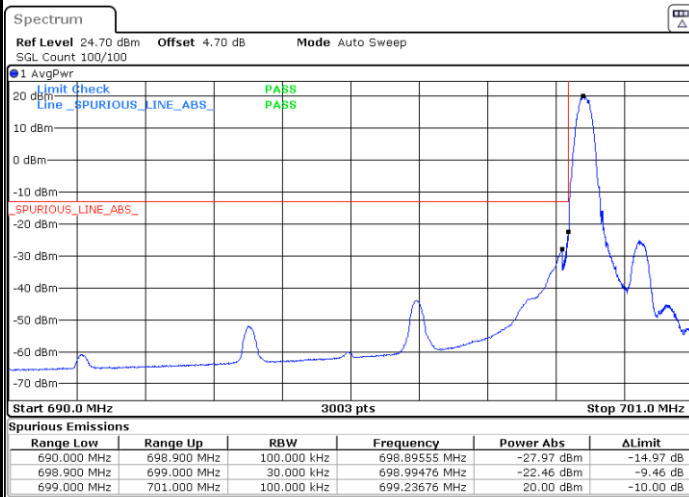




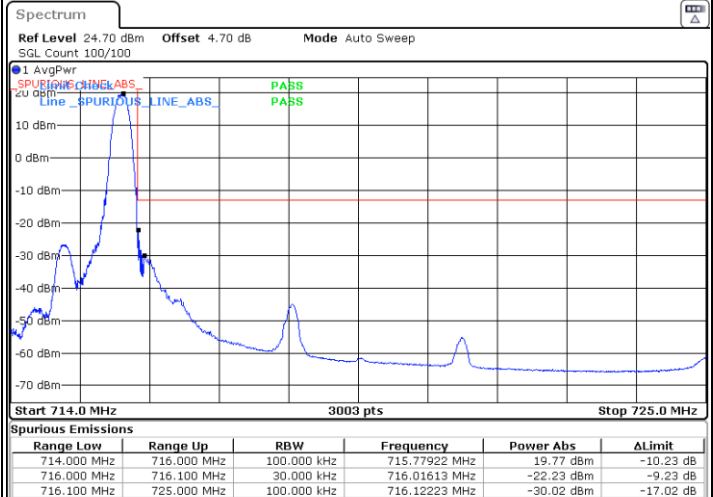
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

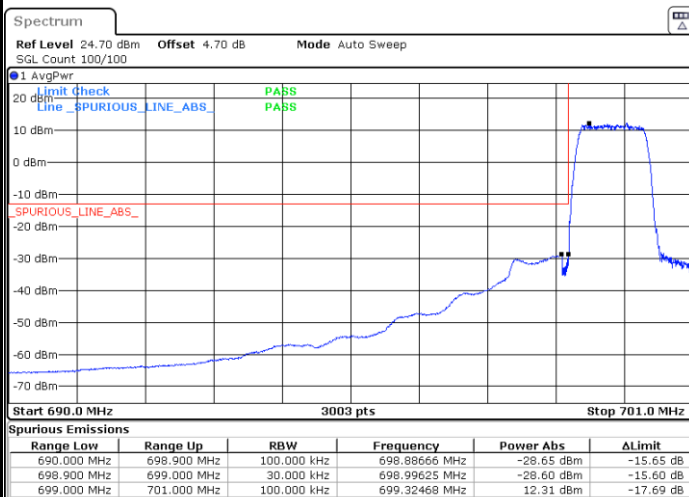
Lowest Band Edge / 1RB



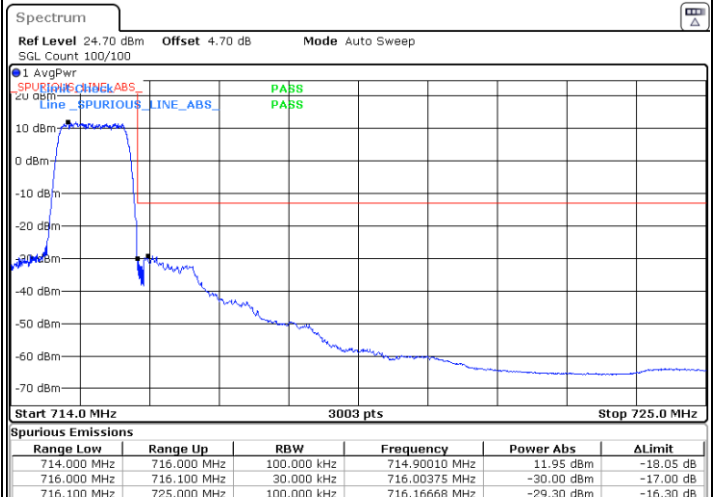
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



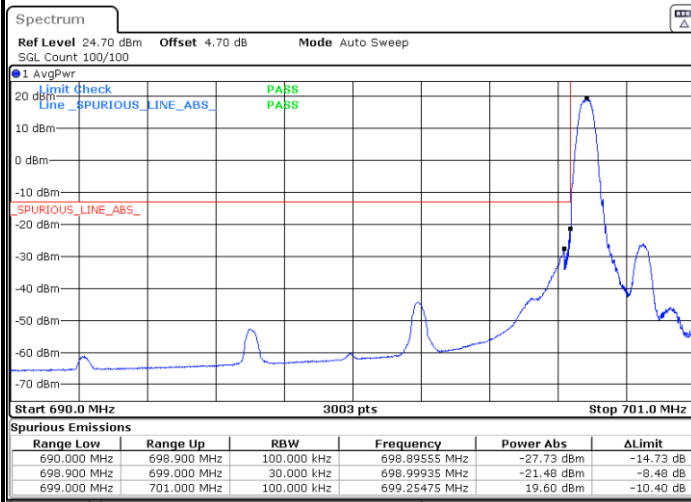
Highest Band Edge / Full RB



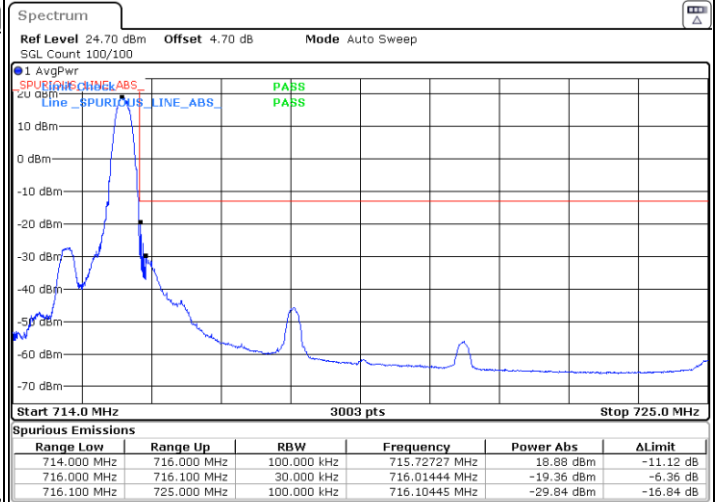


LTE Band 12 / 1.4MHz / 16QAM

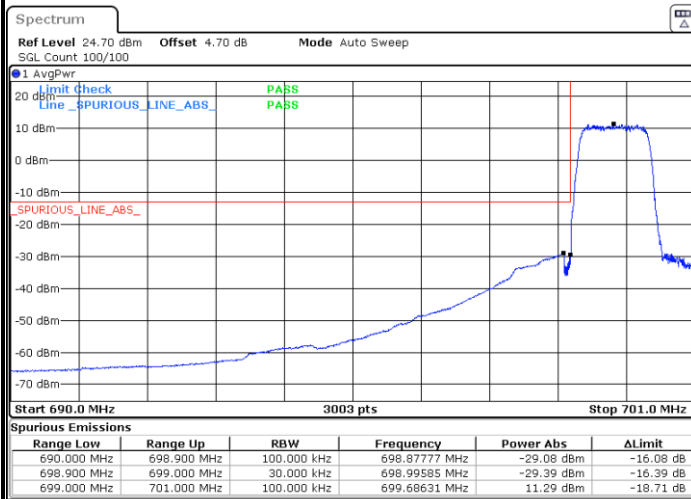
Lowest Band Edge / 1 RB



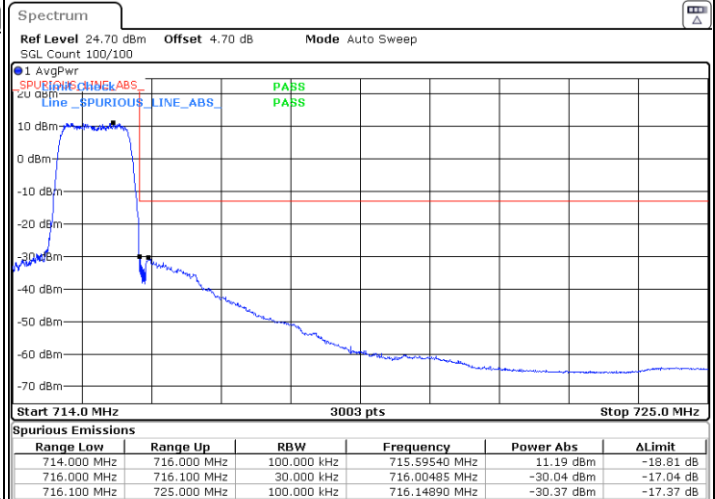
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



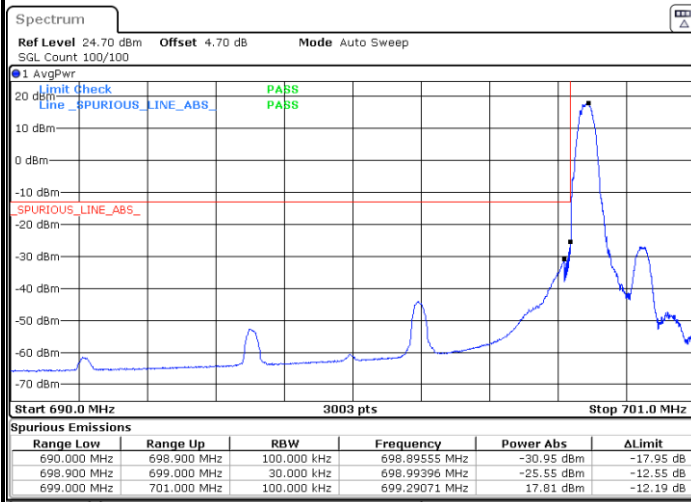
Highest Band Edge / Full RB



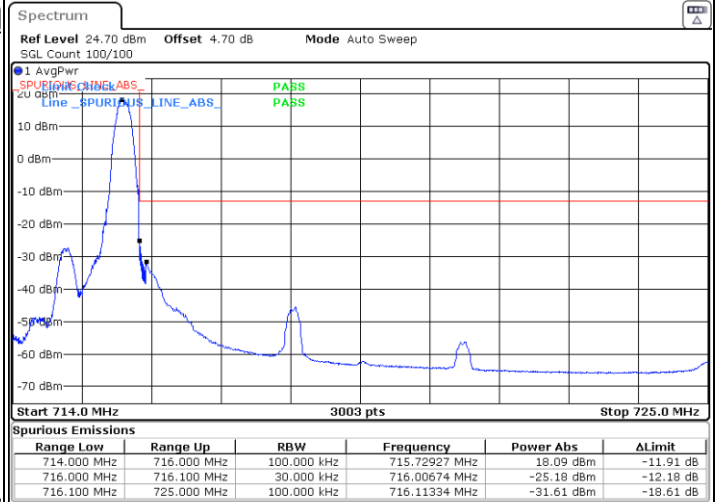


LTE Band 12 / 1.4MHz / 64QAM

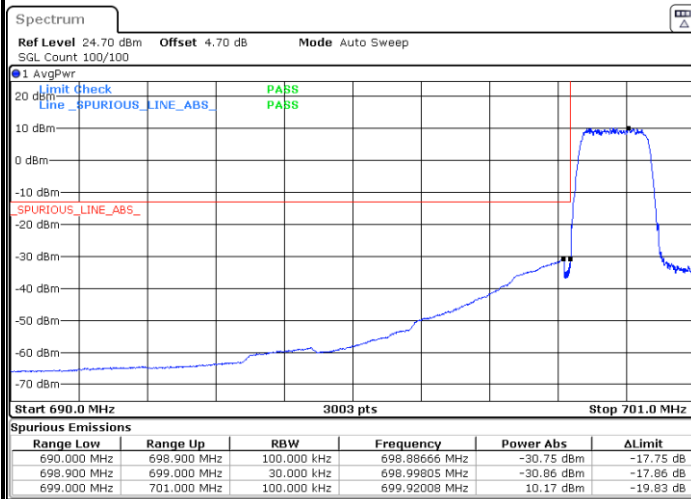
Lowest Band Edge / 1 RB



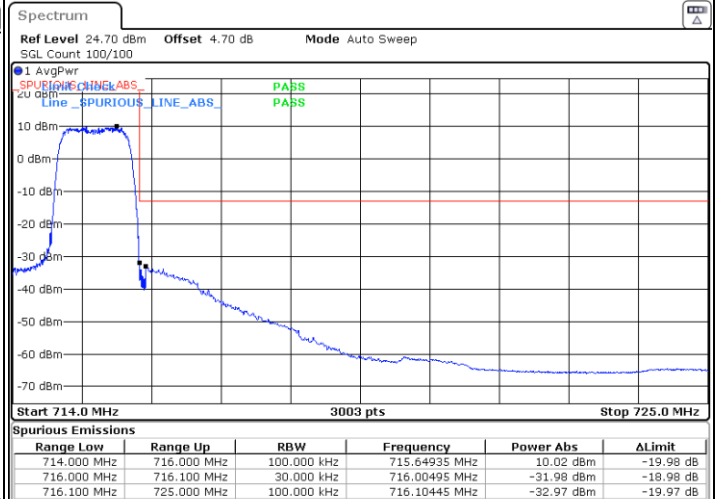
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



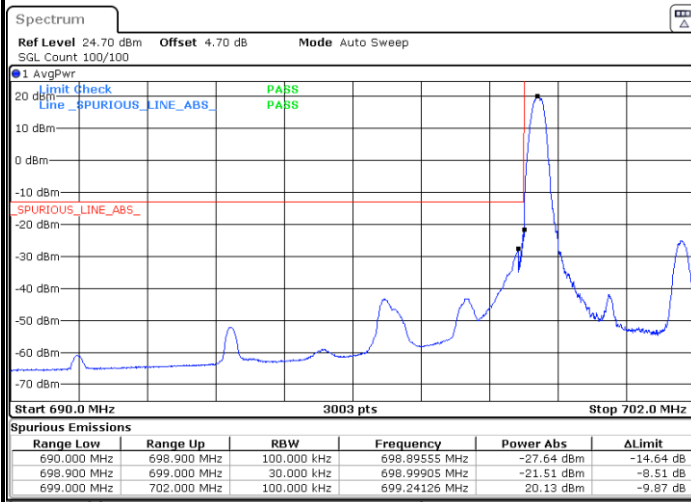
Highest Band Edge / Full RB



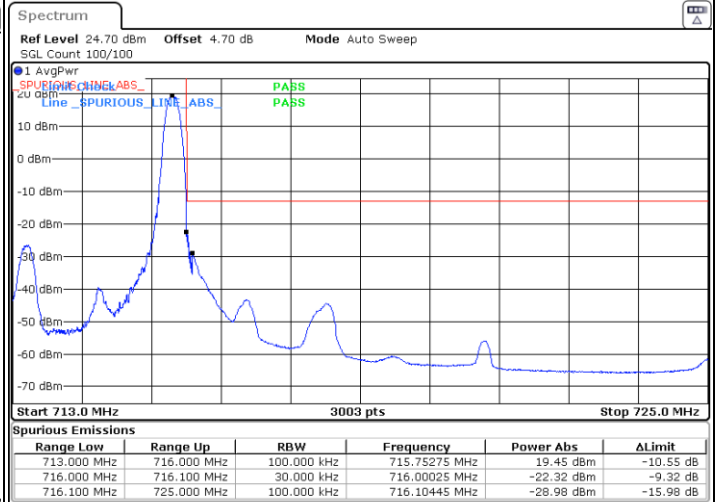


LTE Band 12 / 3MHz / QPSK

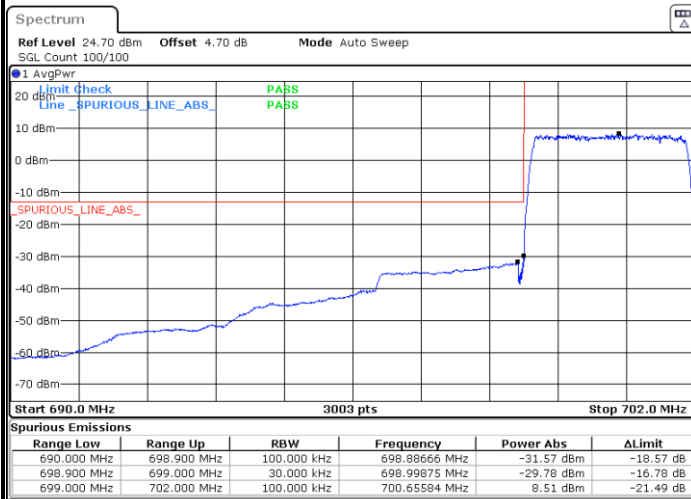
Lowest Band Edge / 1RB



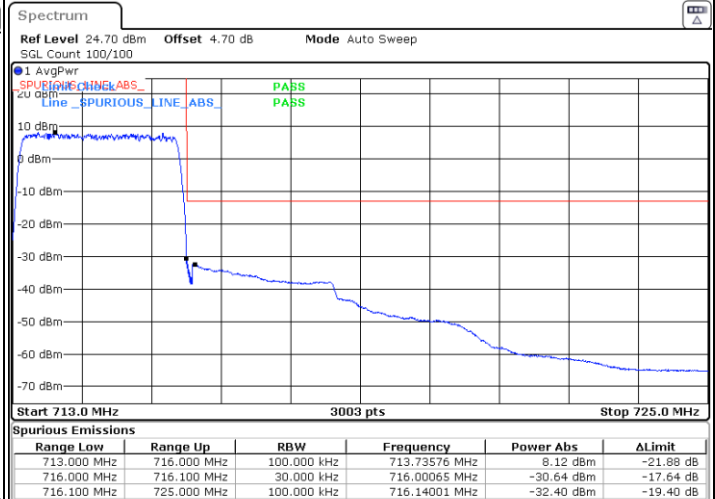
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



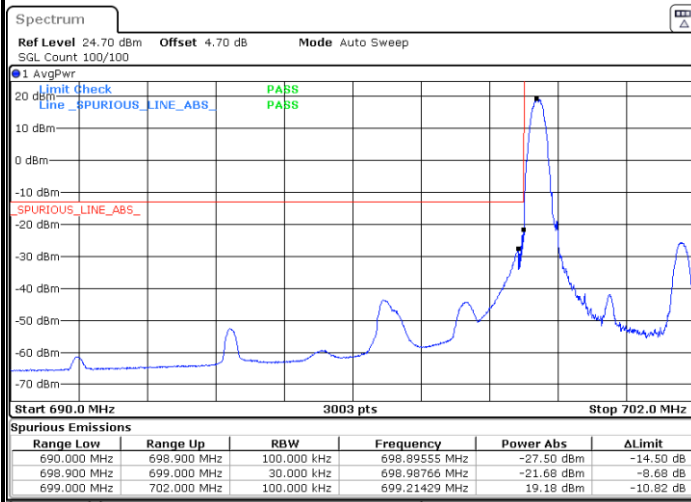
Highest Band Edge / Full RB



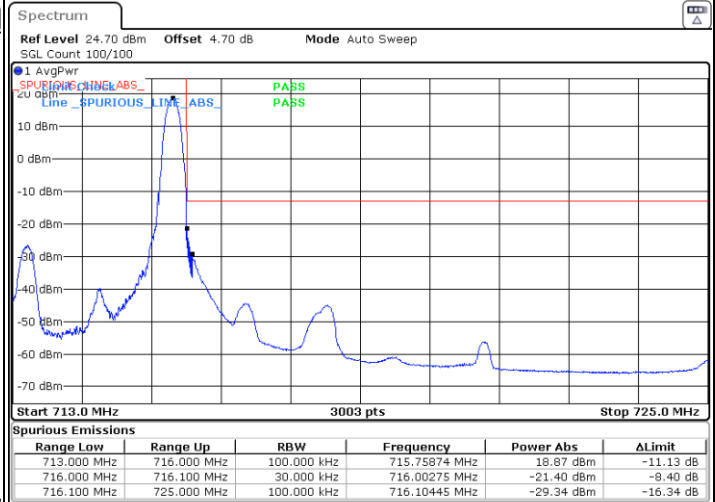


LTE Band 12 / 3MHz / 16QAM

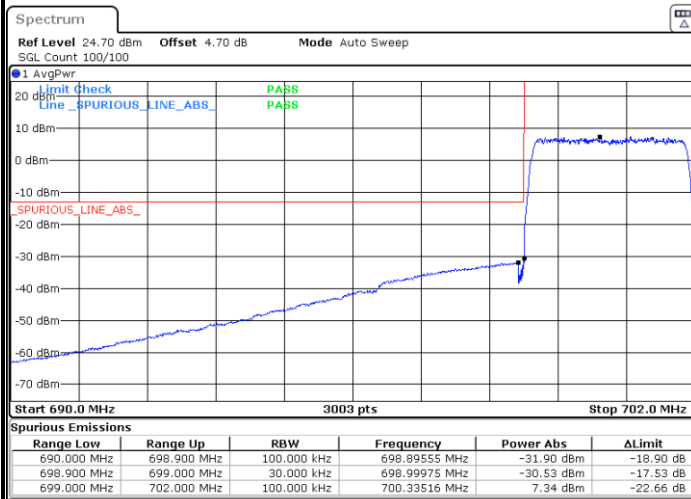
Lowest Band Edge / 1 RB



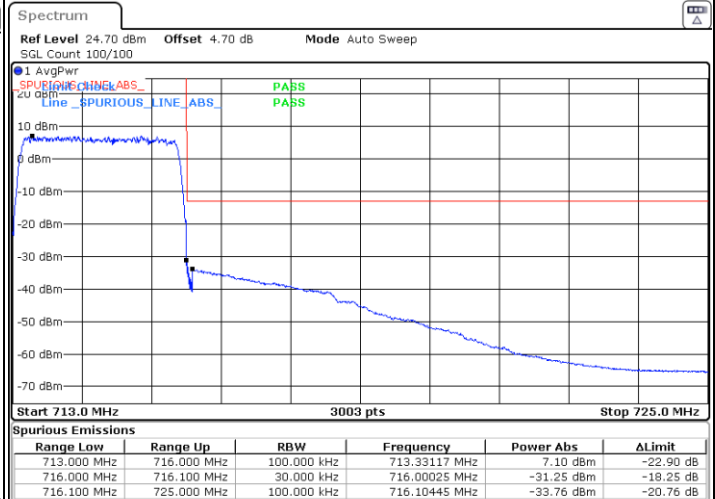
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



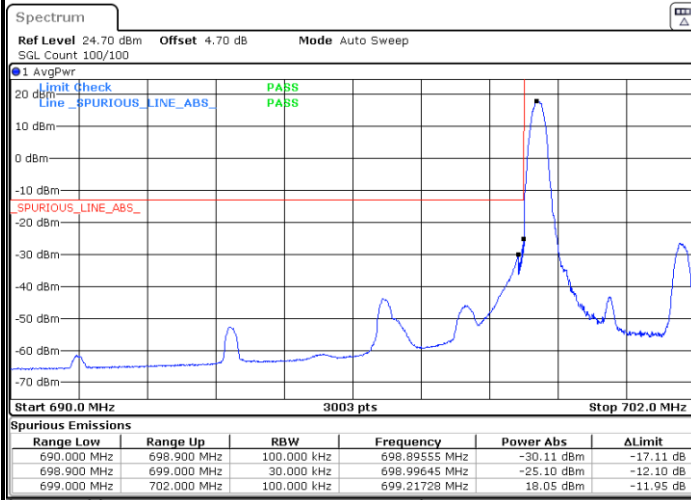
Highest Band Edge / Full RB



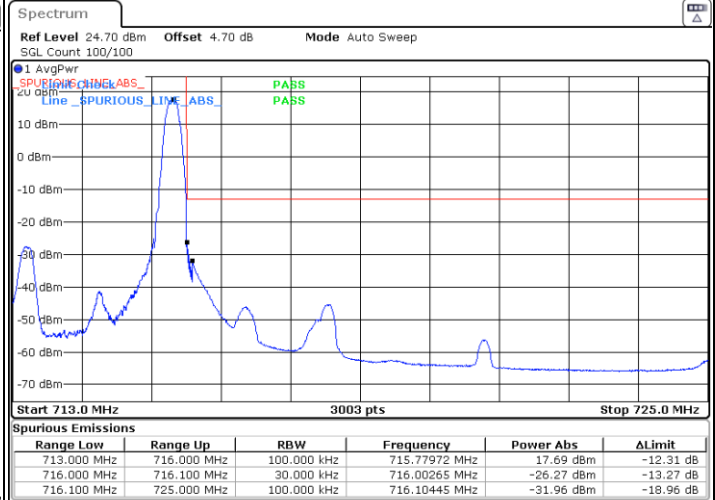


LTE Band 12 / 3MHz / 64QAM

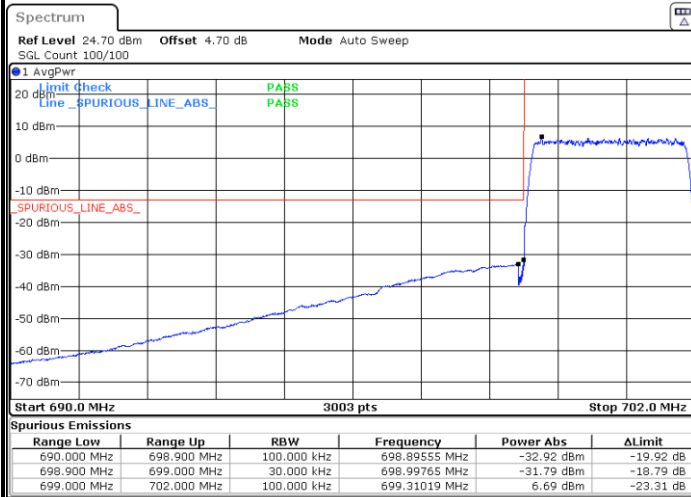
Lowest Band Edge / 1 RB



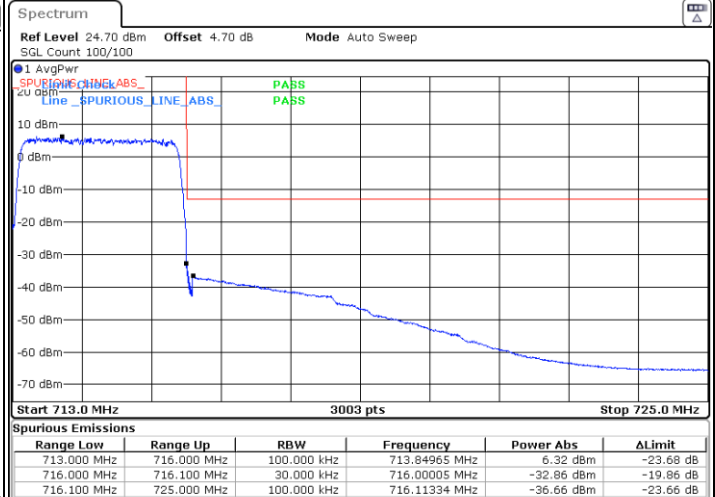
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



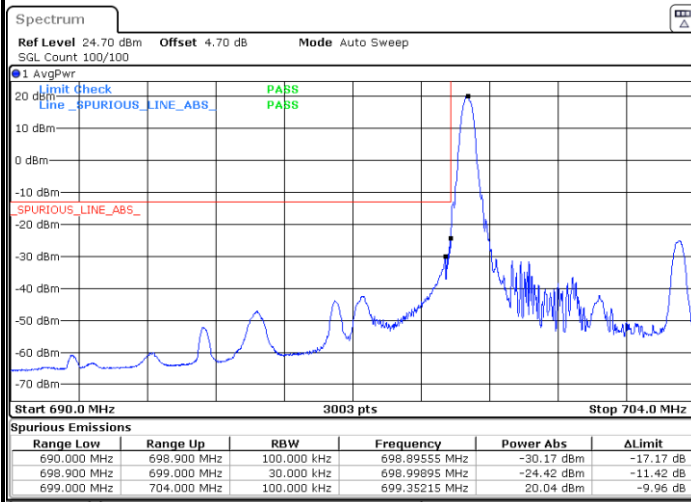
Highest Band Edge / Full RB



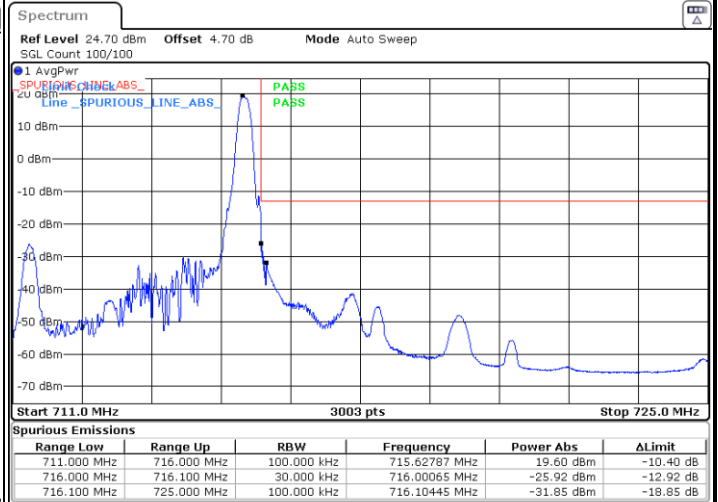


LTE Band 12 / 5MHz / QPSK

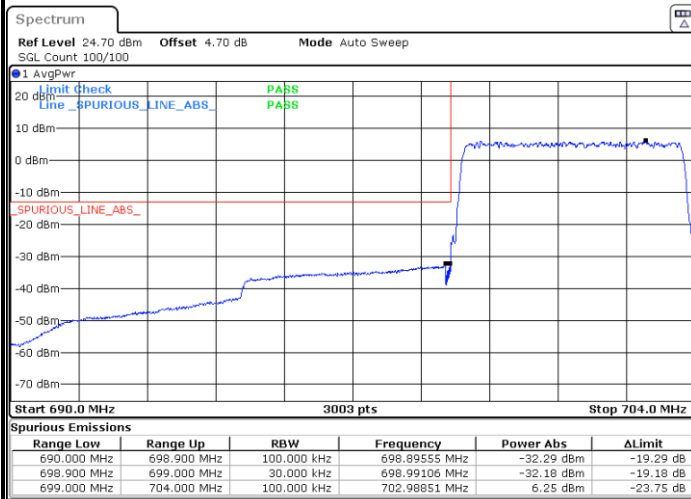
Lowest Band Edge / 1 RB



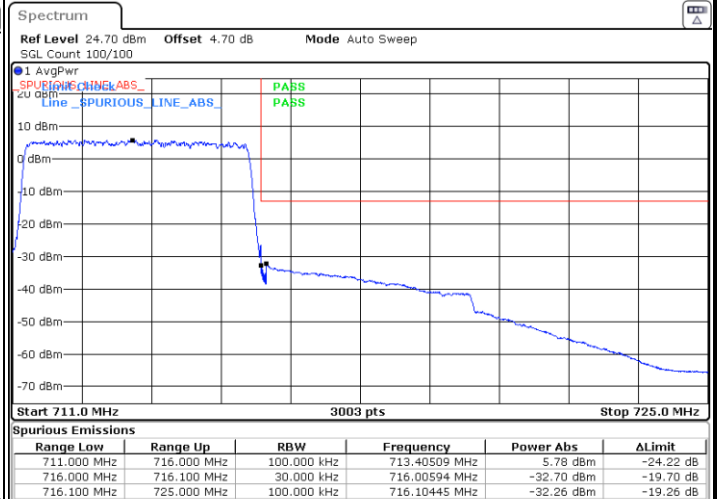
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



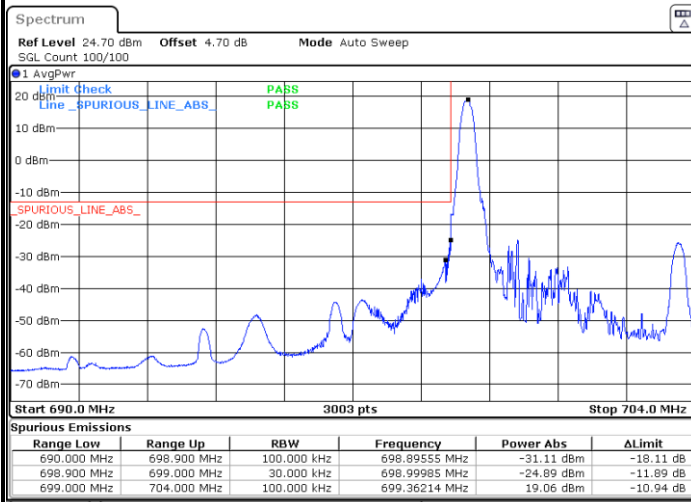
Highest Band Edge / Full RB



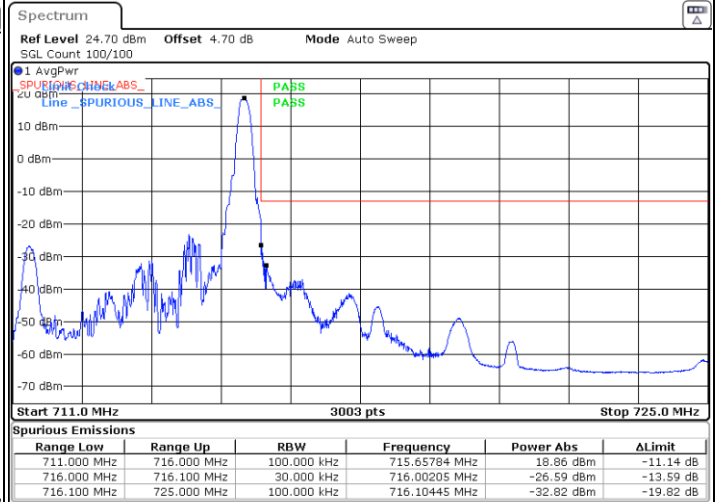


LTE Band 12 / 5MHz / 16QAM

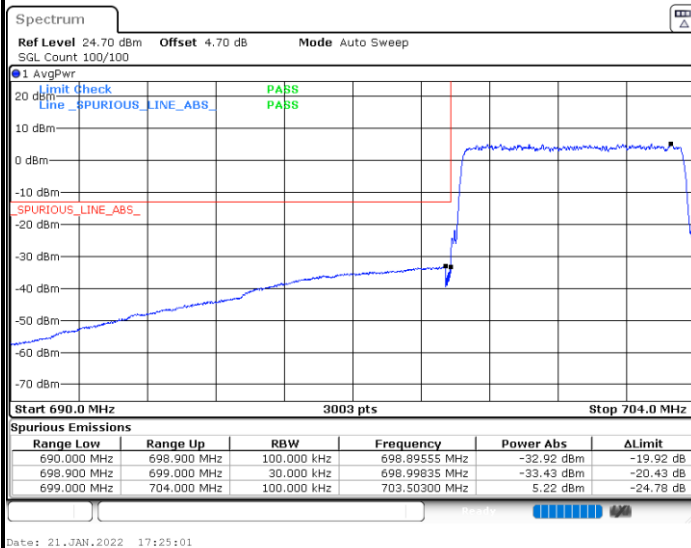
Lowest Band Edge / 1RB



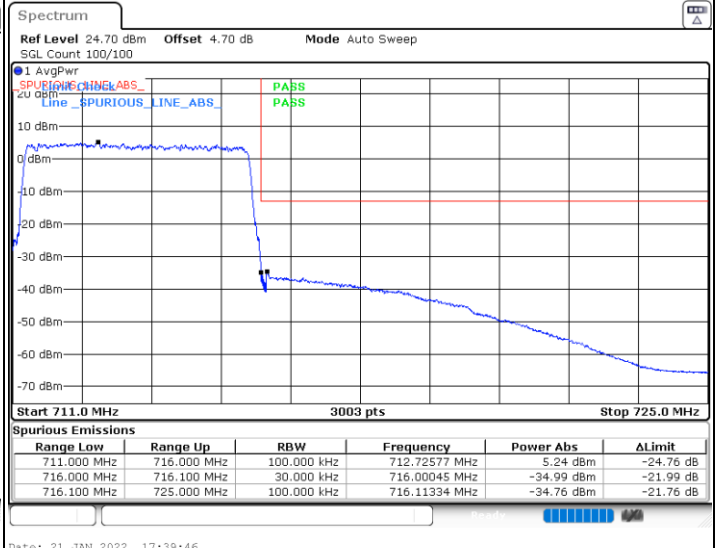
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



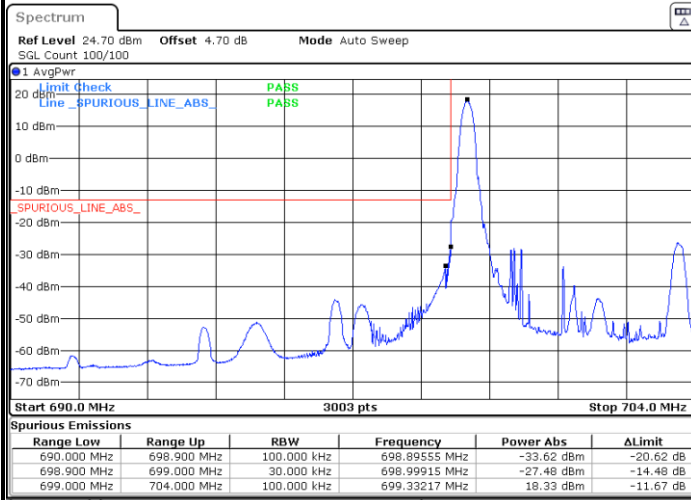
Highest Band Edge / Full RB



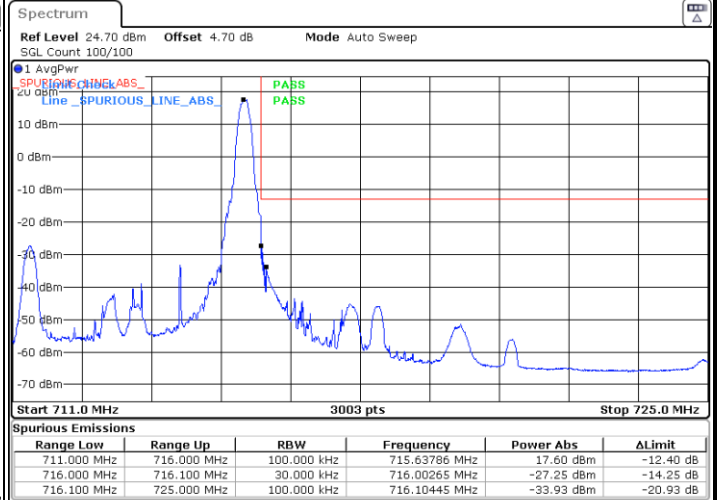


LTE Band 12 / 5MHz / 64QAM

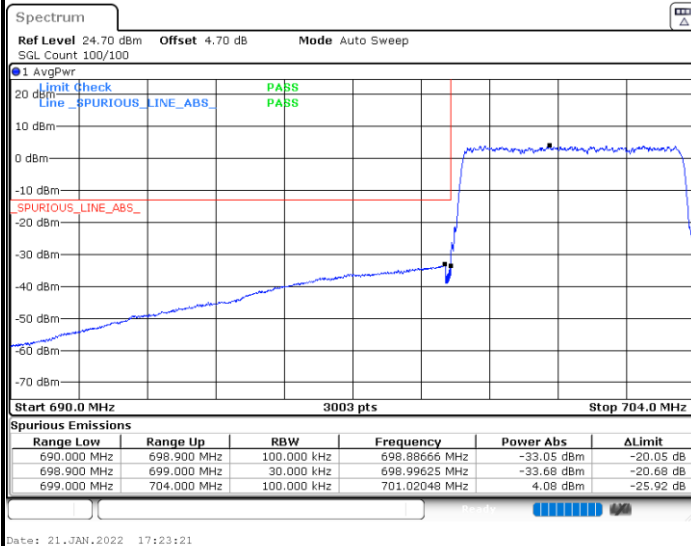
Lowest Band Edge / 1RB



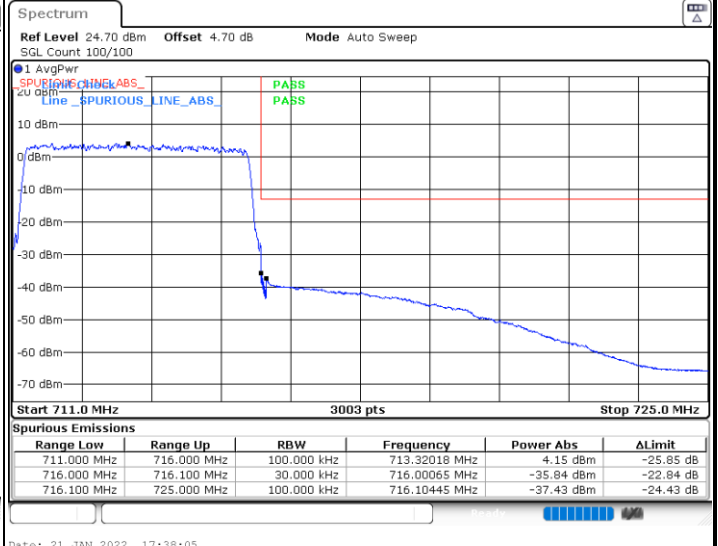
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



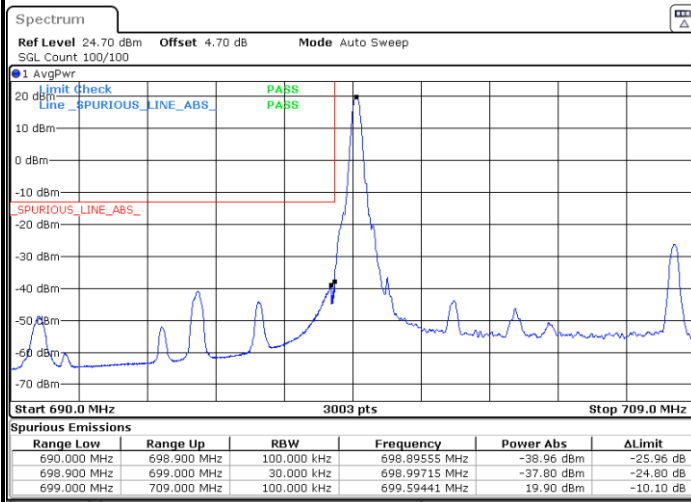
Highest Band Edge / Full RB



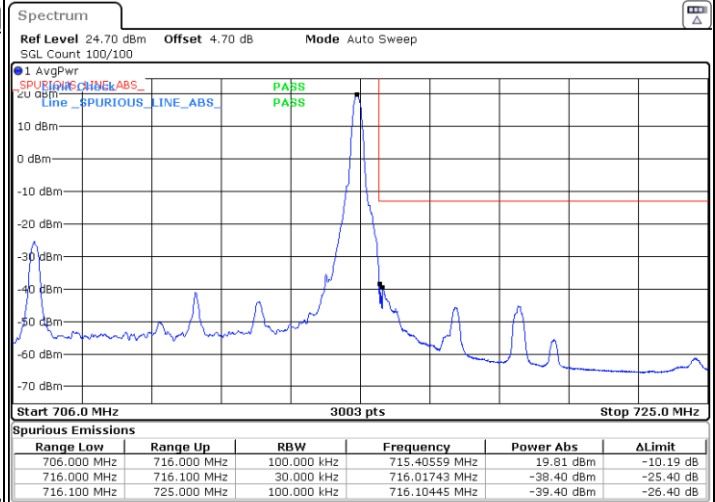


LTE Band 12 / 10MHz / QPSK

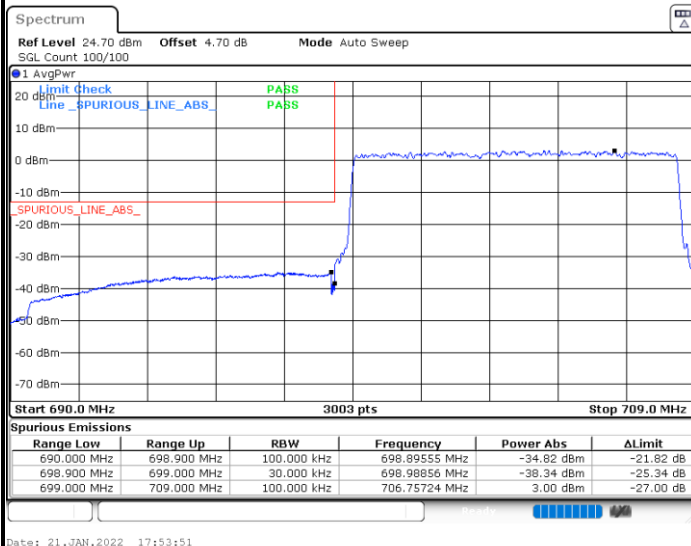
Lowest Band Edge / 1 RB



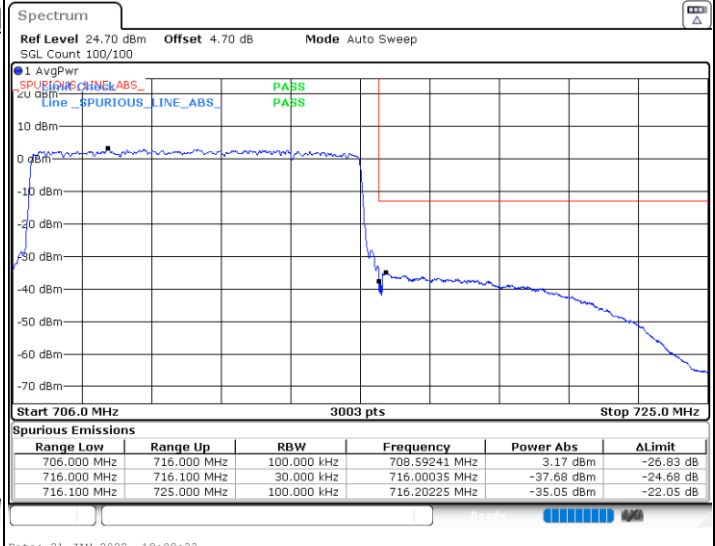
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



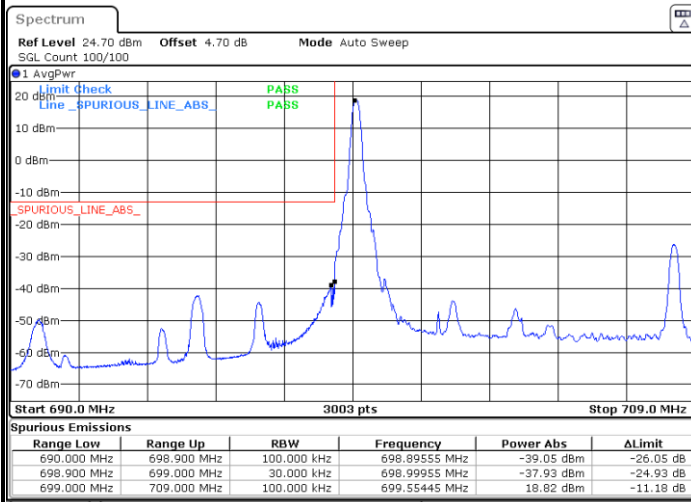
Highest Band Edge / Full RB



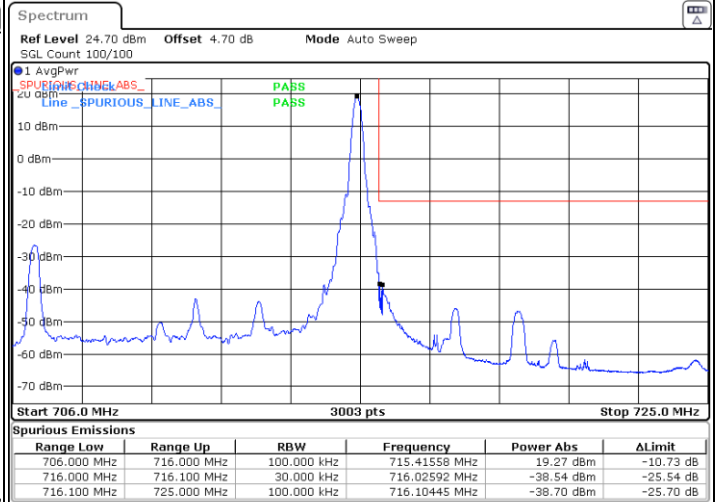


LTE Band 12 / 10MHz / 16QAM

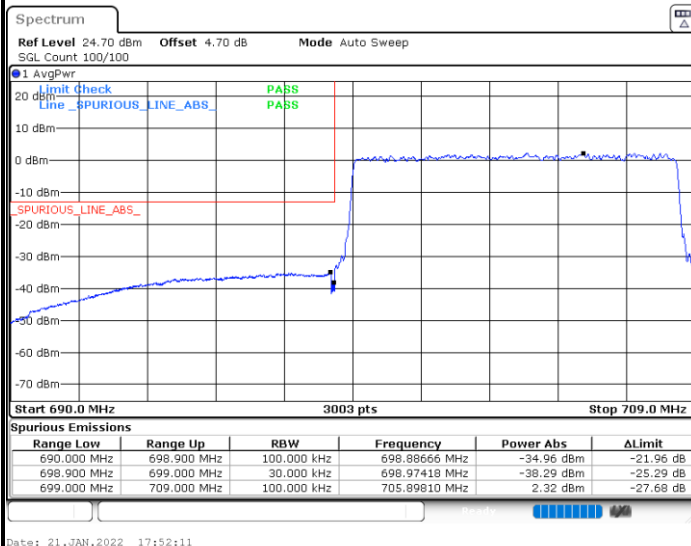
Lowest Band Edge / 1 RB



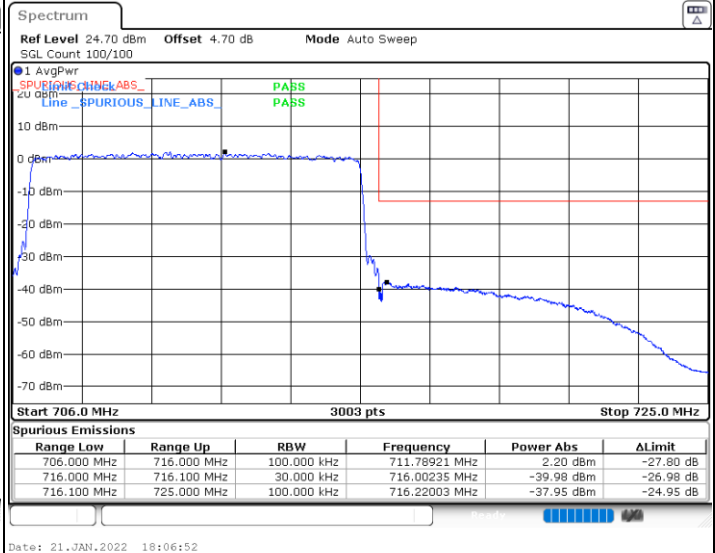
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



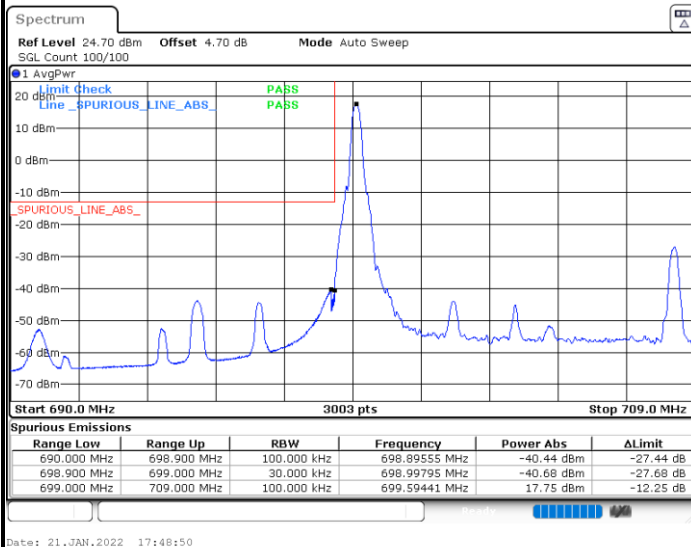
Highest Band Edge / Full RB



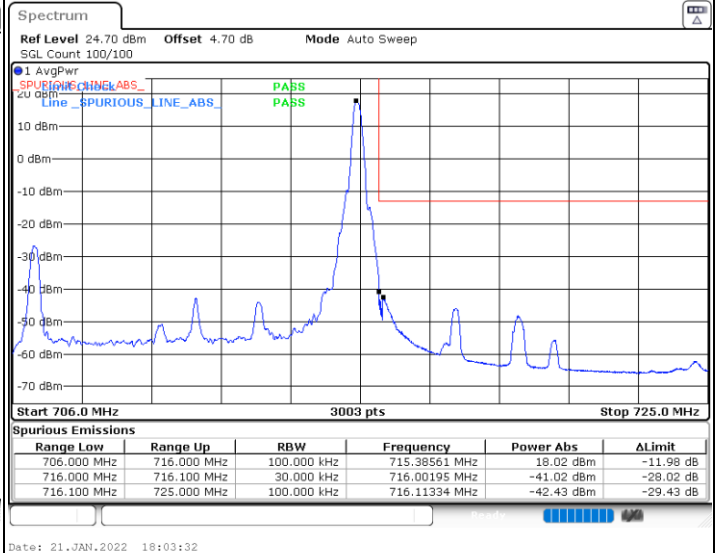


LTE Band 12 / 10MHz / 64QAM

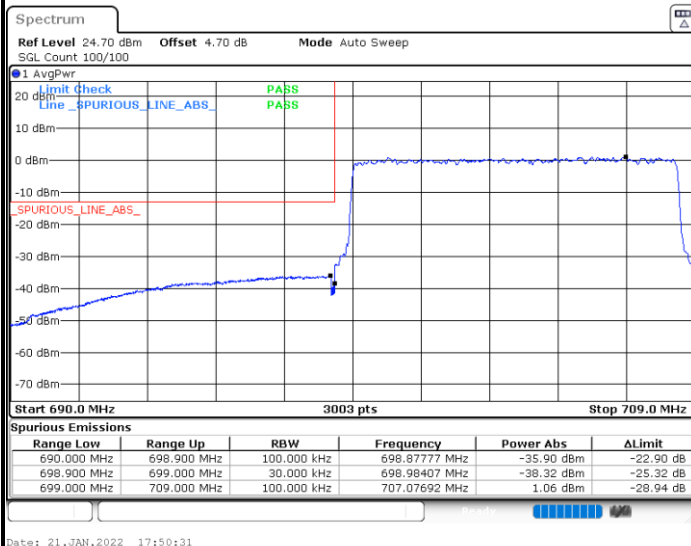
Lowest Band Edge / 1 RB



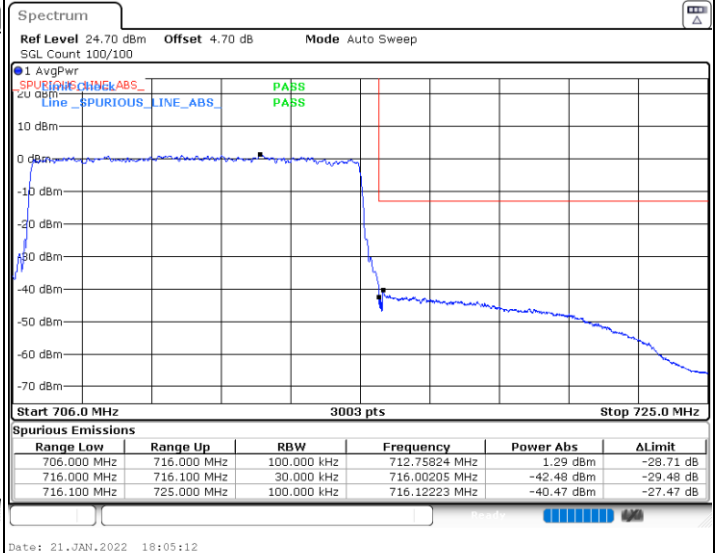
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

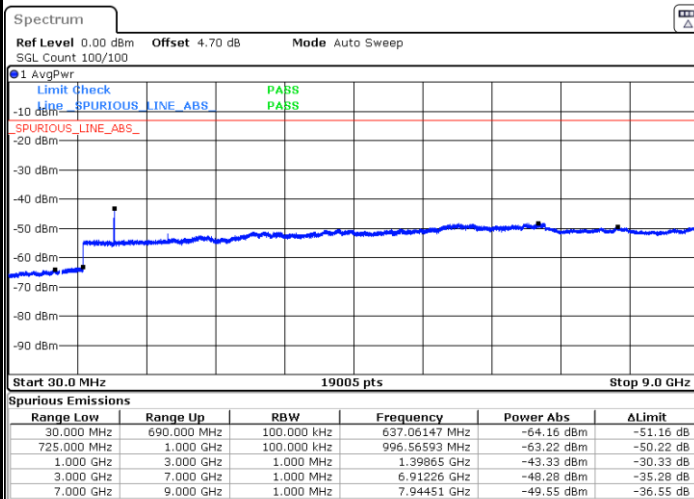




Conducted Spurious Emission

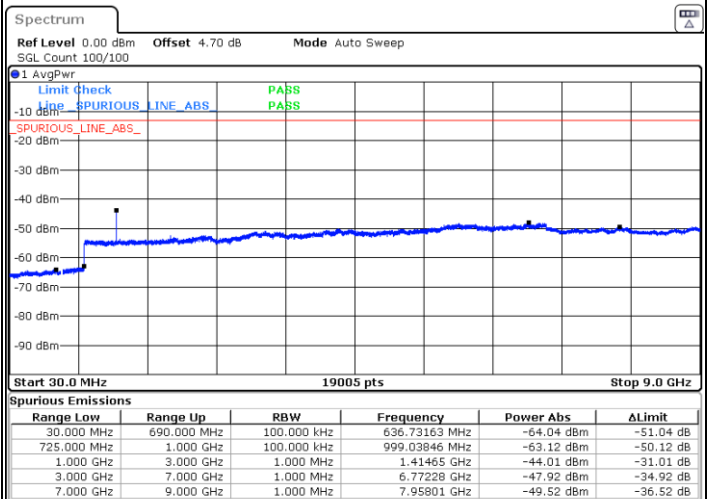
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



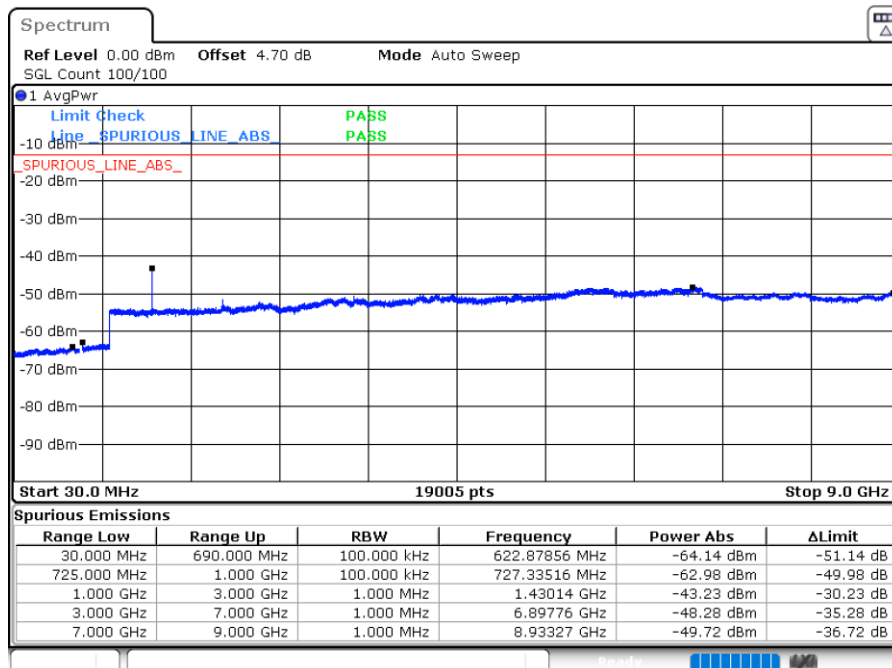
Date: 21.JAN.2022 16:22:14

Middle Channel / QPSK



Date: 21.JAN.2022 16:34:41

Highest Channel / QPSK

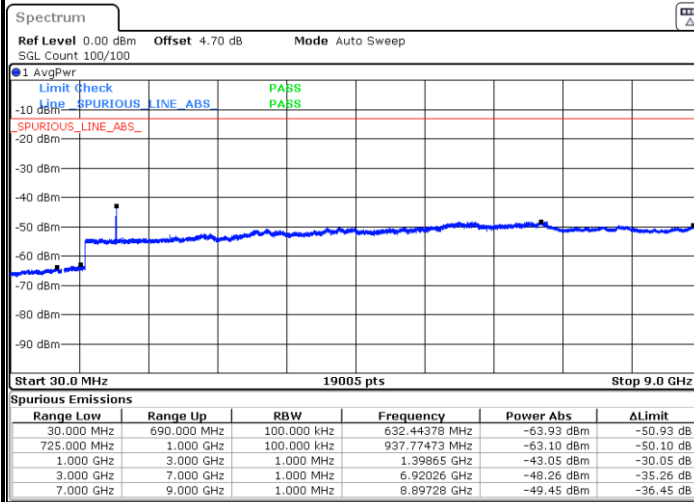


Date: 21.JAN.2022 16:37:02



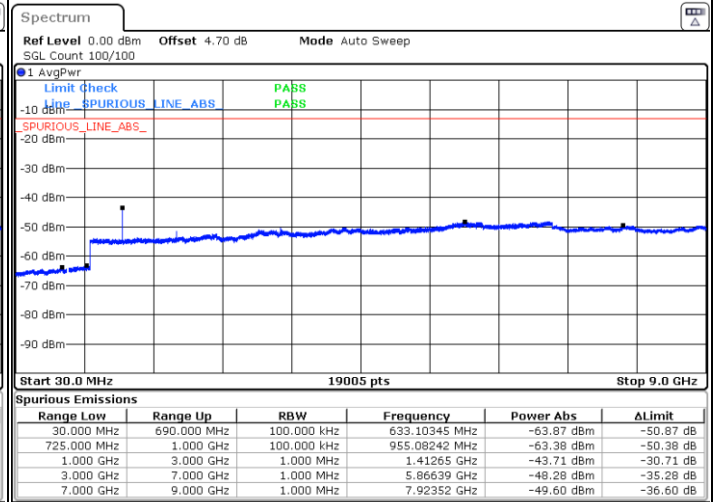
LTE Band 12 / 3MHz

Lowest Channel / QPSK



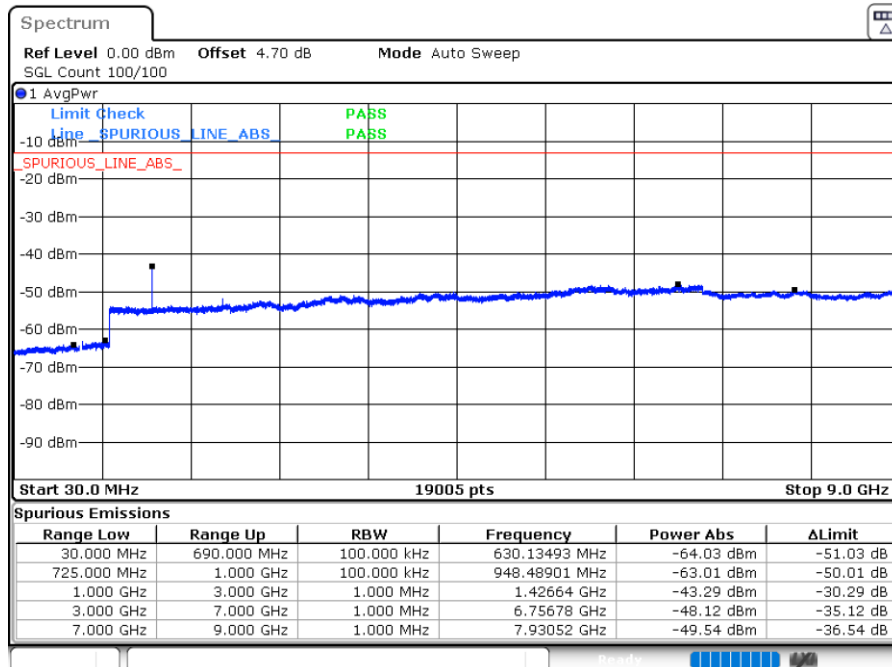
Date: 21.JAN.2022 16:49:25

Middle Channel / QPSK



Date: 21.JAN.2022 17:01:50

Highest Channel / QPSK

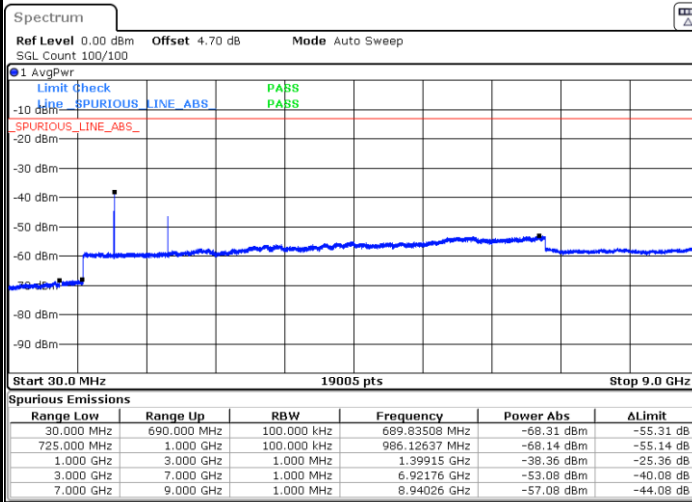


Date: 21.JAN.2022 17:04:11



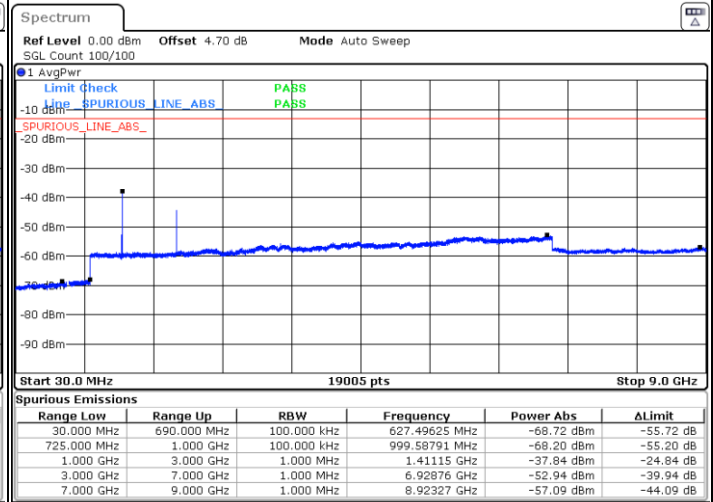
LTE Band 12 / 5MHz

Lowest Channel / QPSK



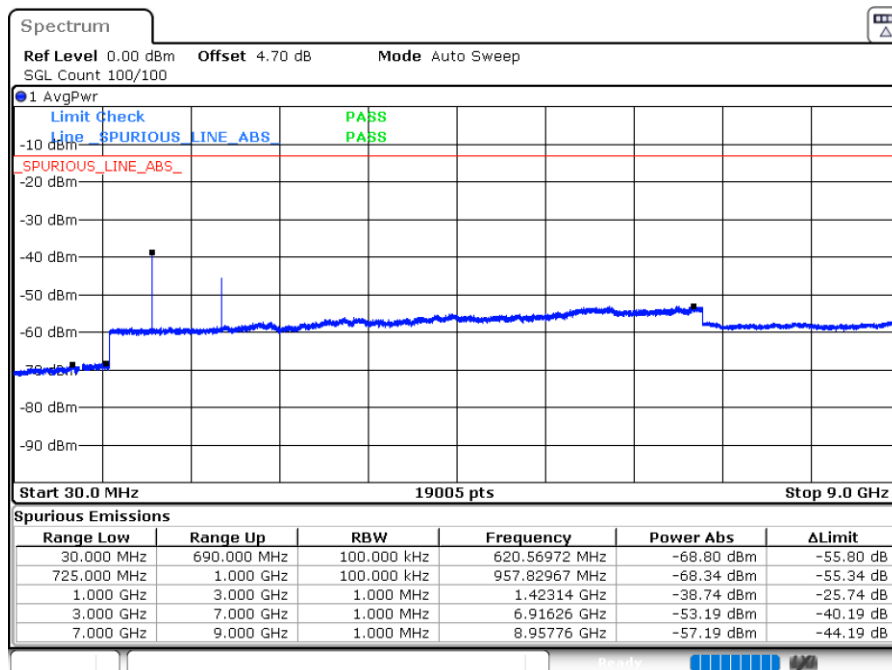
Date: 21.JAN.2022 17:16:37

Middle Channel / QPSK



Date: 21.JAN.2022 17:29:01

Highest Channel / QPSK

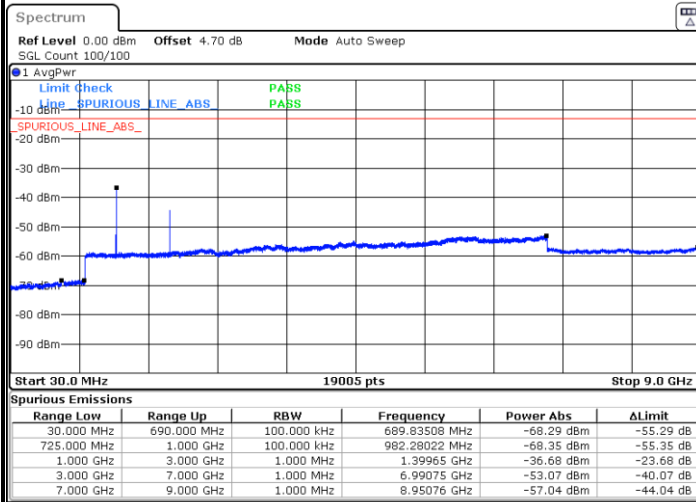


Date: 21.JAN.2022 17:31:23



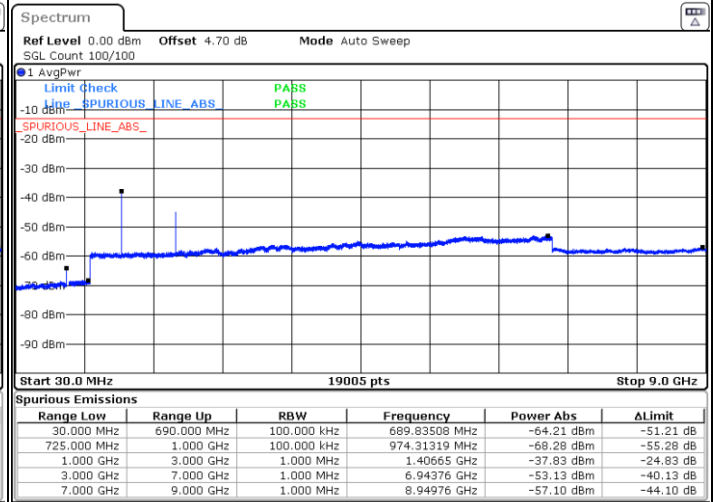
LTE Band 12 / 10MHz

Lowest Channel / QPSK



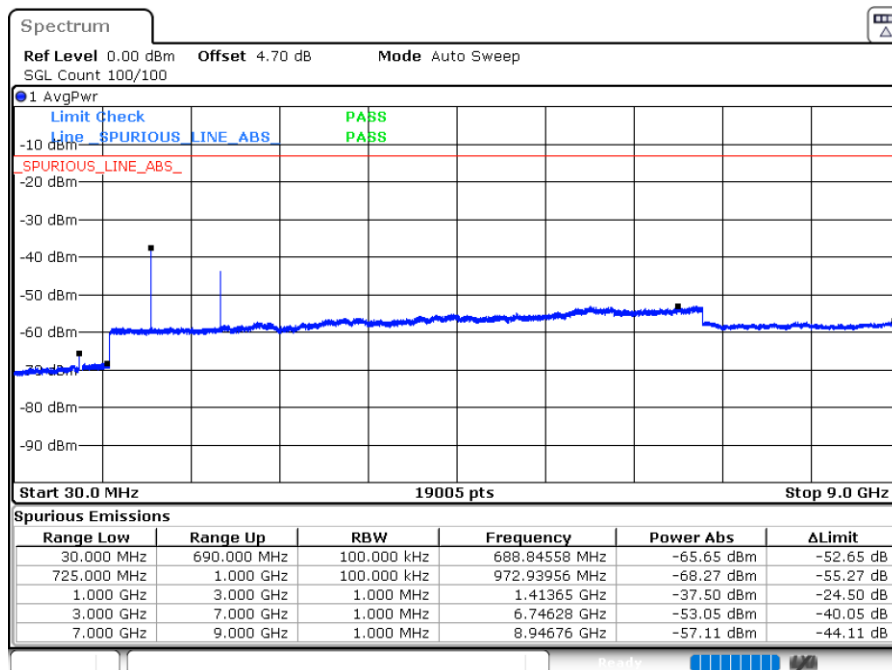
Date: 21.JAN.2022 17:43:48

Middle Channel / QPSK



Date: 21.JAN.2022 17:56:12

Highest Channel / QPSK



Date: 21.JAN.2022 17:58:32

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	0.0021	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

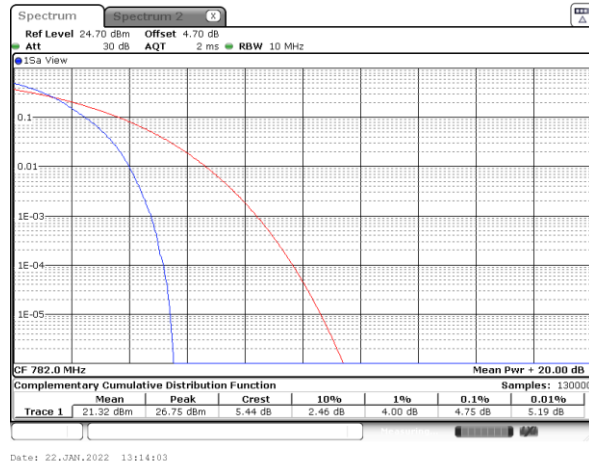
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.75	5.91	6.23	PASS

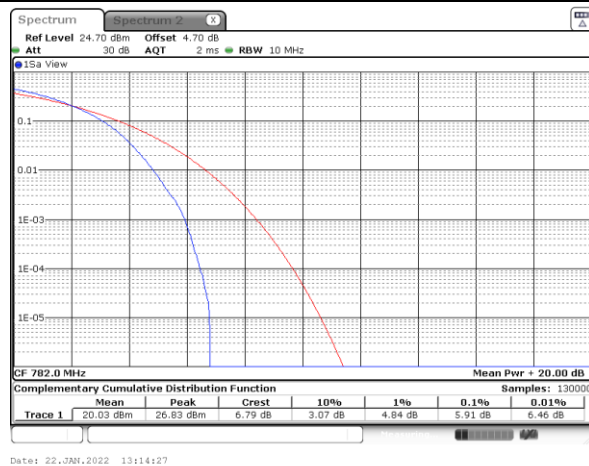


LTE Band 13 / 10MHz

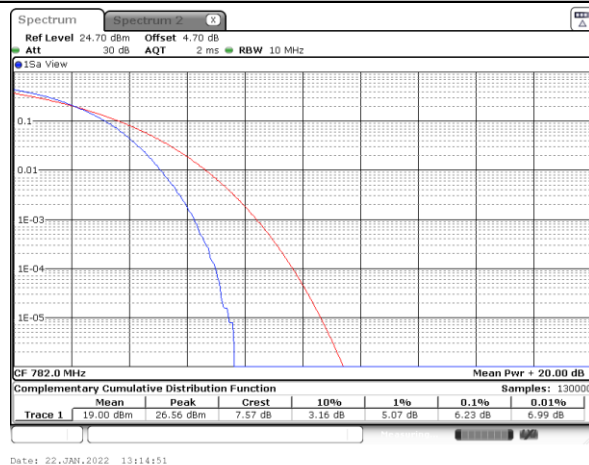
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

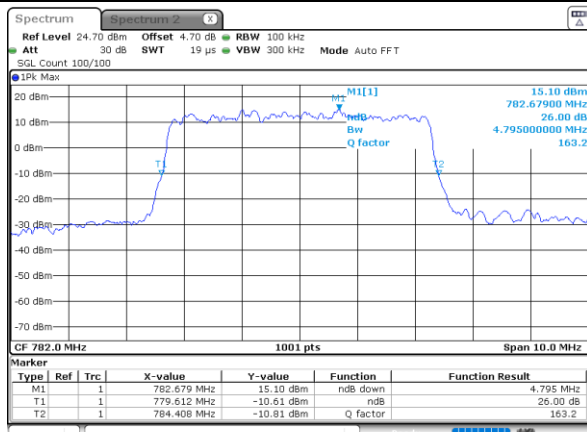


Middle Channel / Full RB/ 64QAM

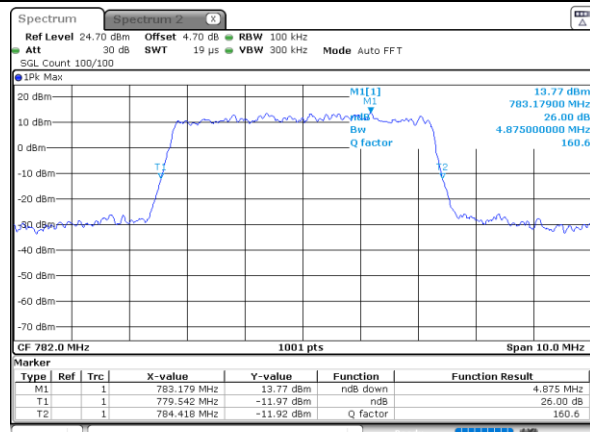


**26dB Bandwidth**

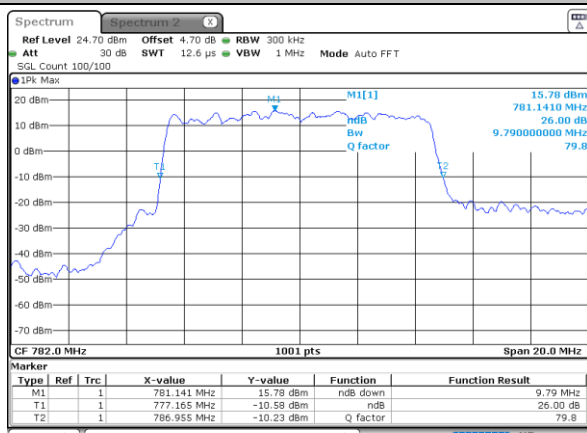
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.80	4.88
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.79	9.93

LTE Band 13**Middle Channel / 5MHz / QPSK**

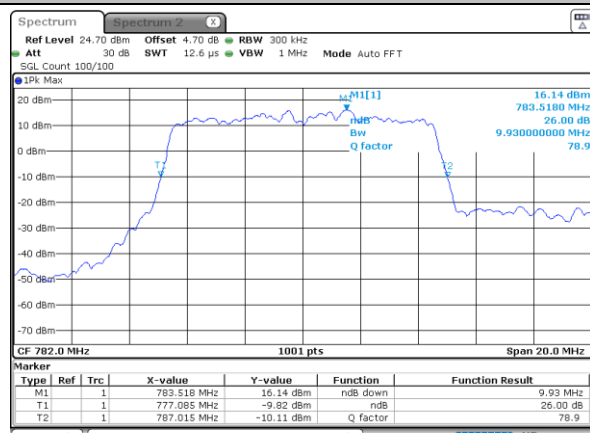
Date: 22,JAN,2022 13:20:14

Middle Channel / 5MHz / 16QAM

Date: 22,JAN,2022 13:20:55

LTE Band 13**Middle Channel / 10MHz / QPSK**

Date: 22,JAN,2022 13:22:30

Middle Channel / 10MHz / 16QAM

Date: 22,JAN,2022 13:21:48

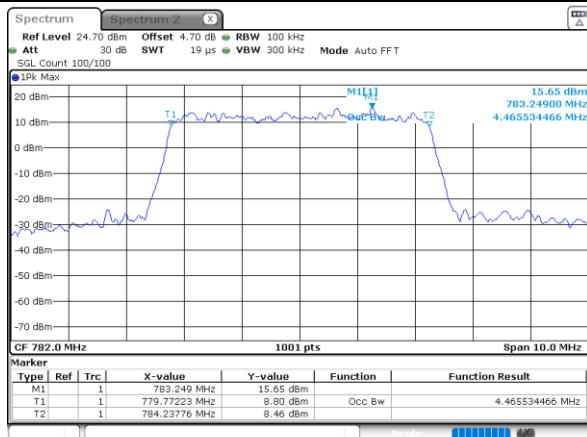


Occupied Bandwidth

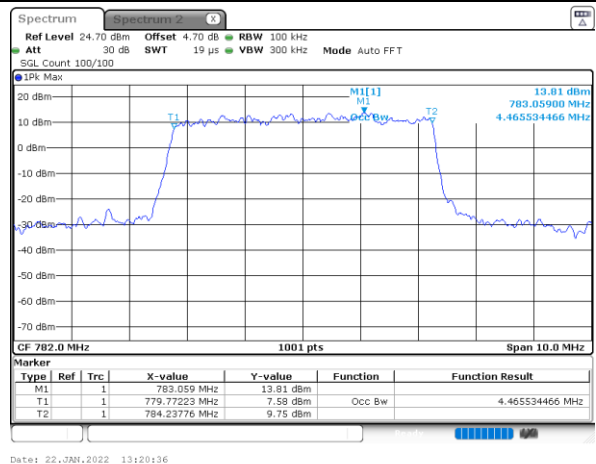
Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.47	4.47
Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.97	8.97

LTE Band 13

Middle Channel / 5MHz / QPSK

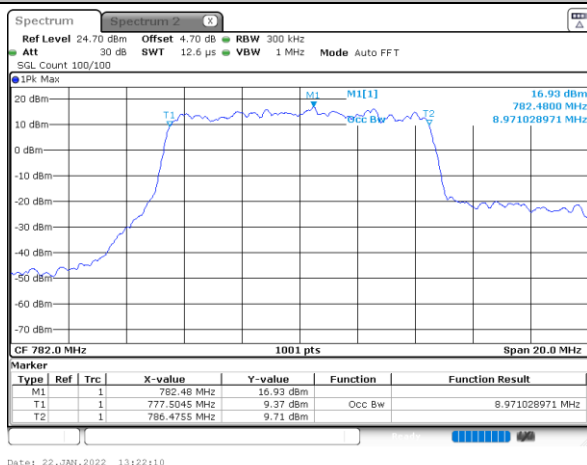


Middle Channel / 5MHz / 16QAM

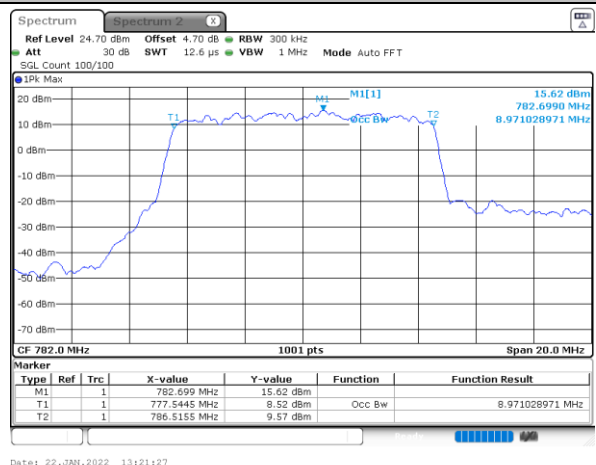


LTE Band 13

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

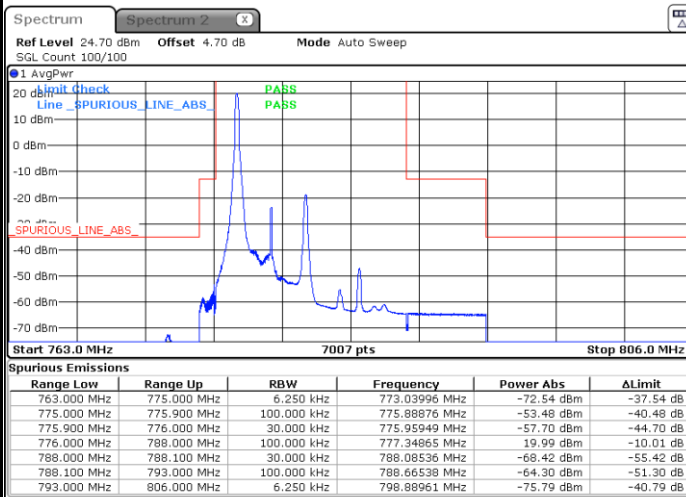




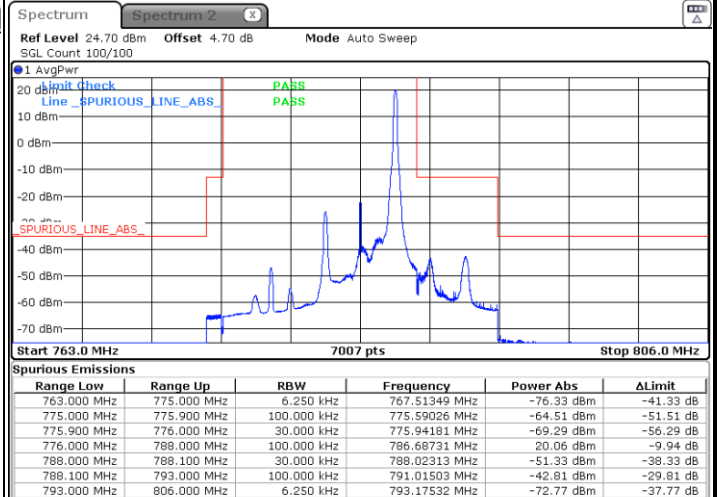
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

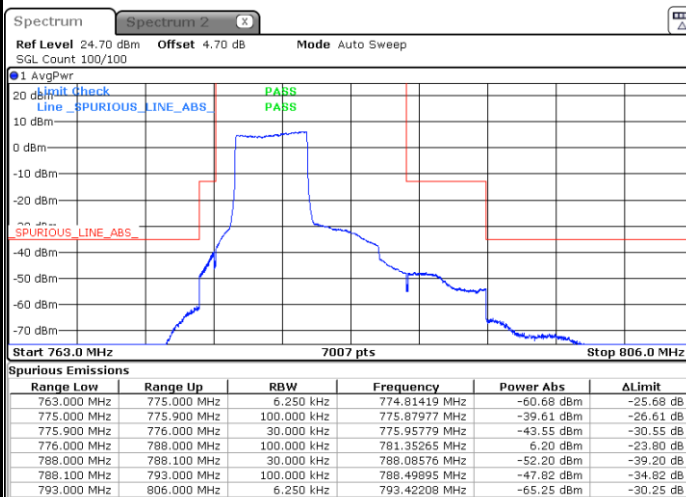
Lowest Band Edge / 1 RB



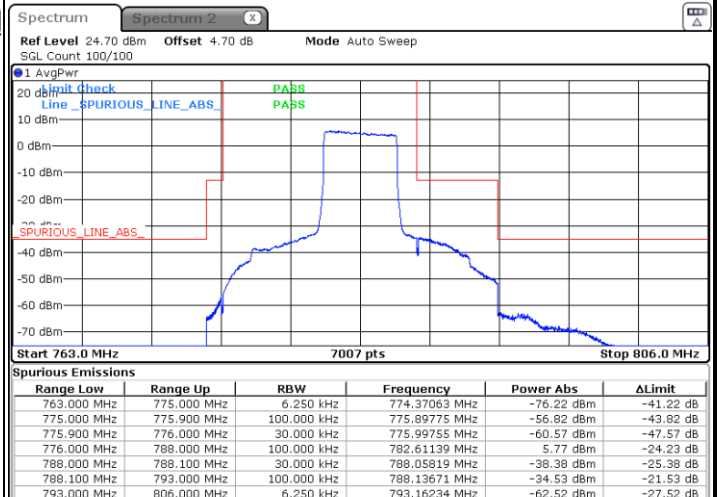
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



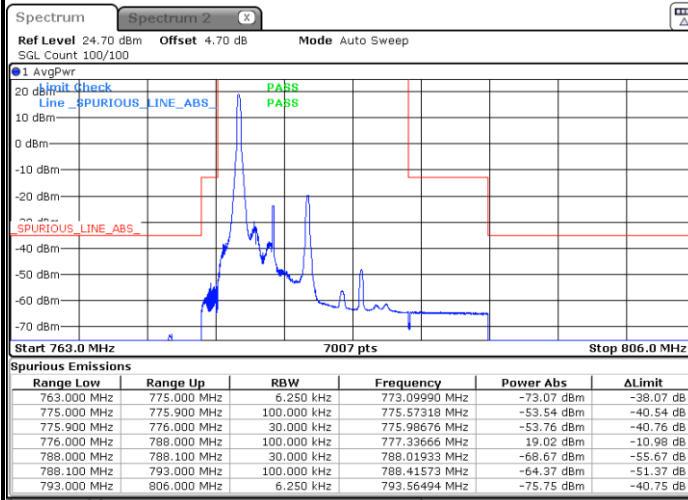
Highest Band Edge / Full RB



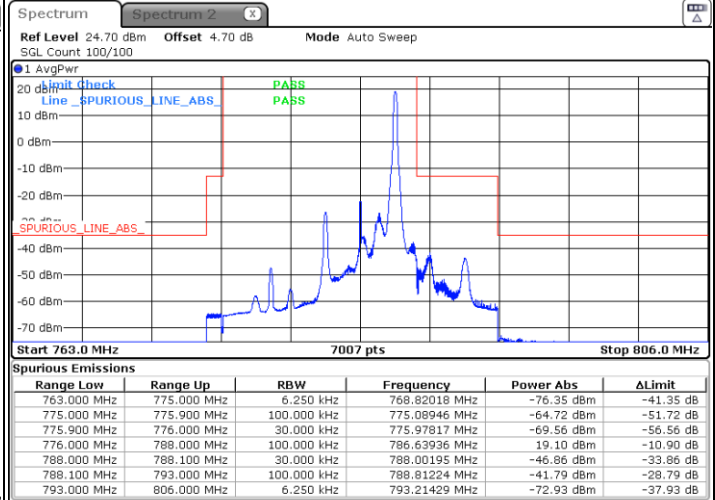


LTE Band 13 / 5MHz / 16QAM

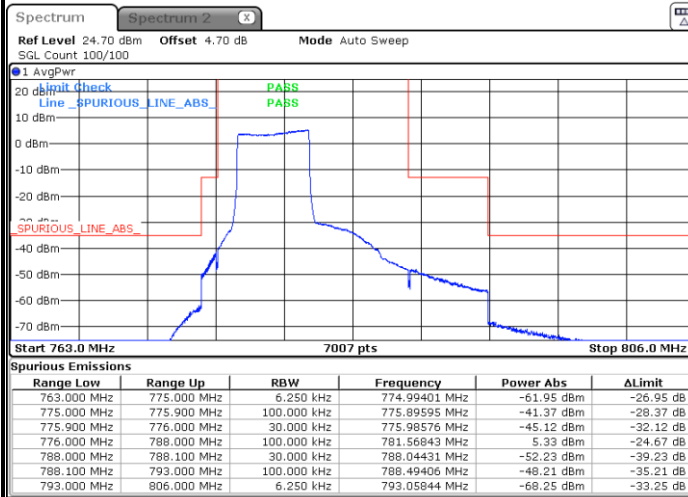
Lowest Band Edge / 1RB



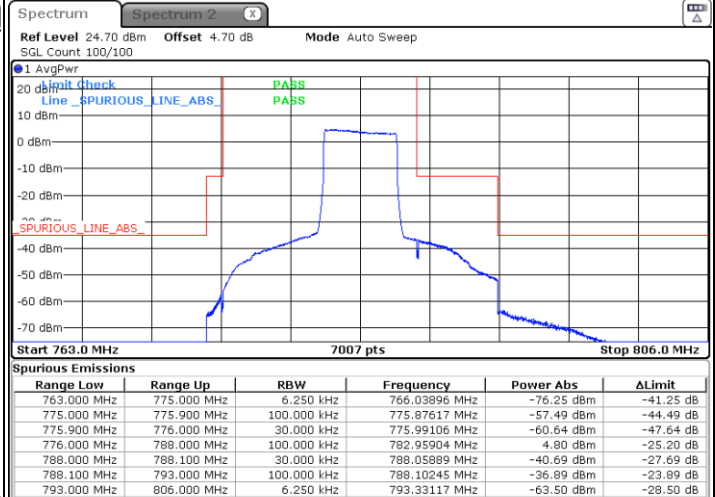
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



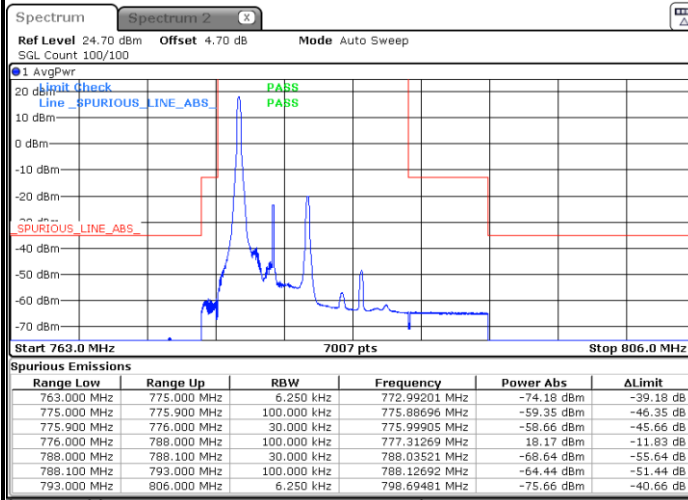
Highest Band Edge / Full RB



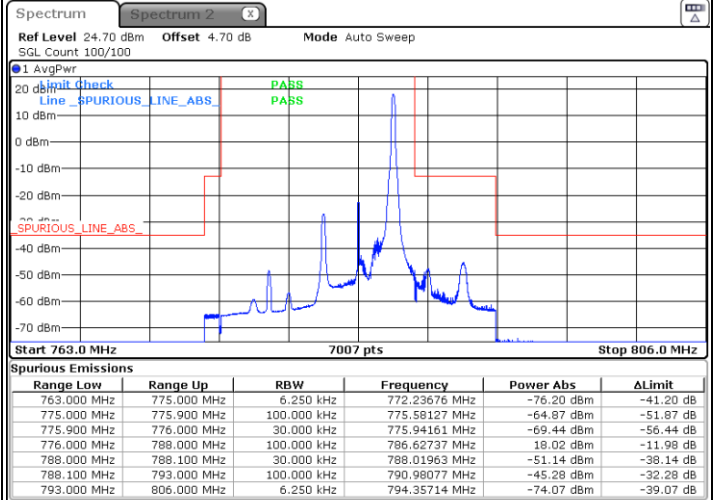


LTE Band 13 / 5MHz / 64QAM

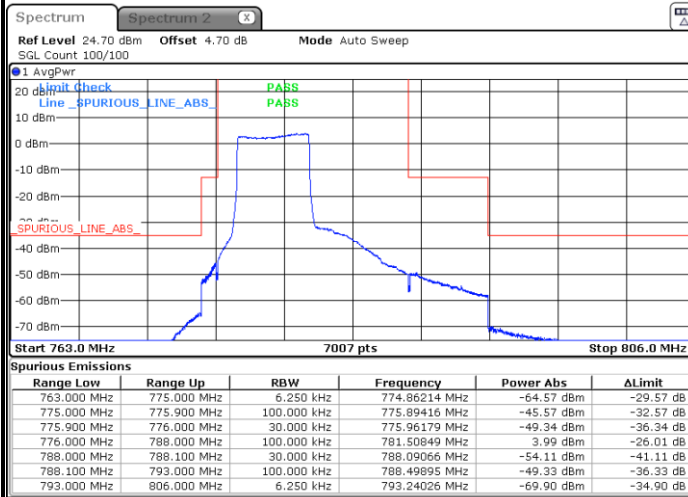
Lowest Band Edge / 1RB



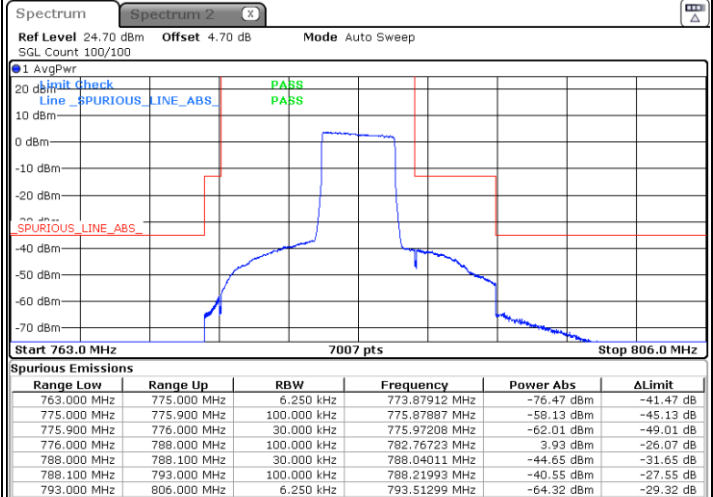
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



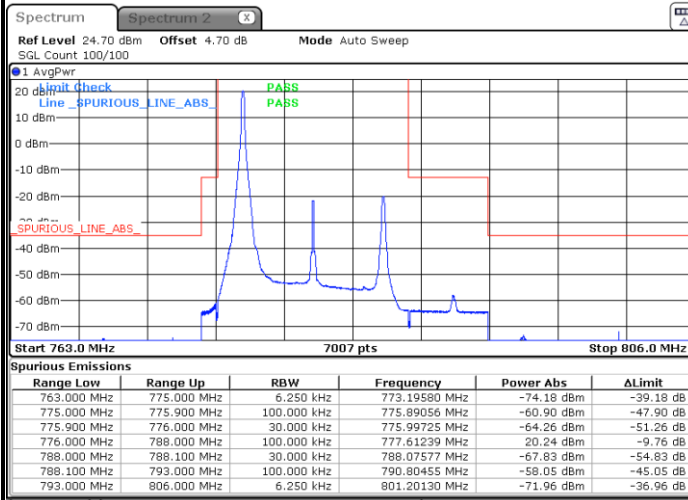
Highest Band Edge / Full RB



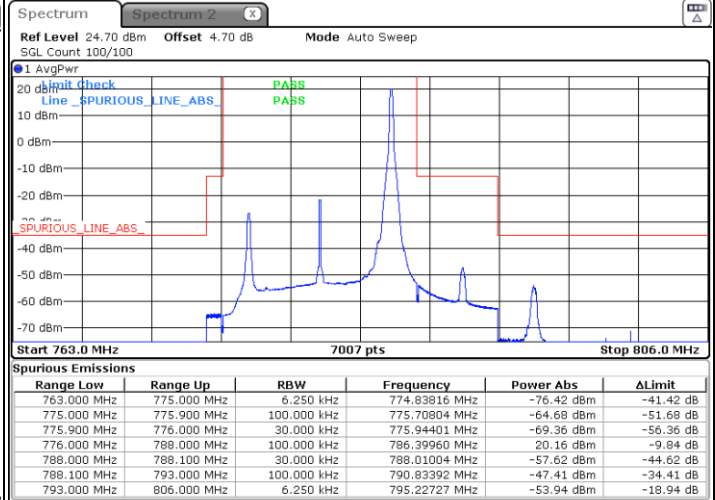


LTE Band 13 / 10MHz / QPSK

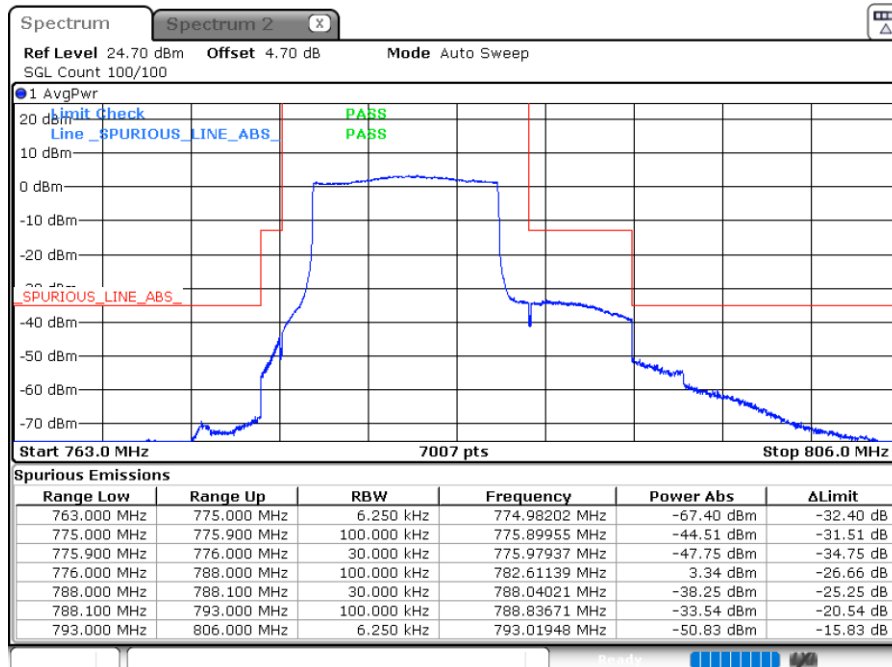
middle Band Edge / 1 RB



middle Band Edge / 1 RB



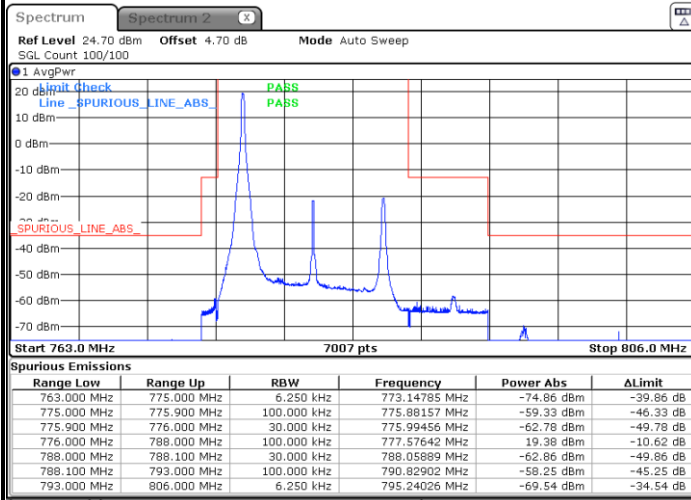
Middle Band Edge / Full RB





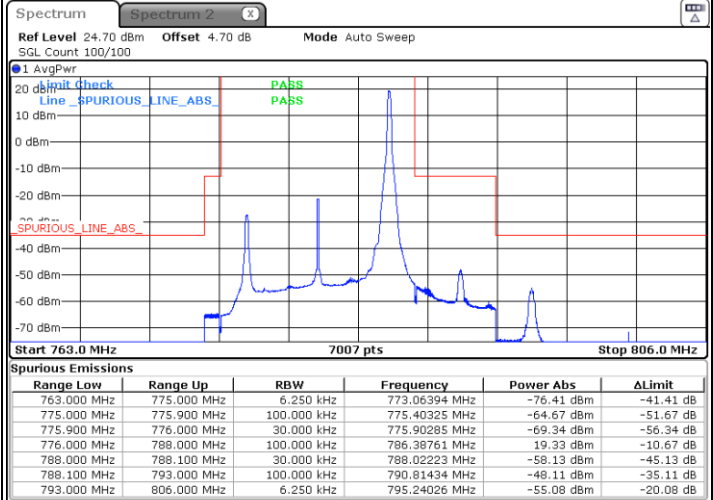
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



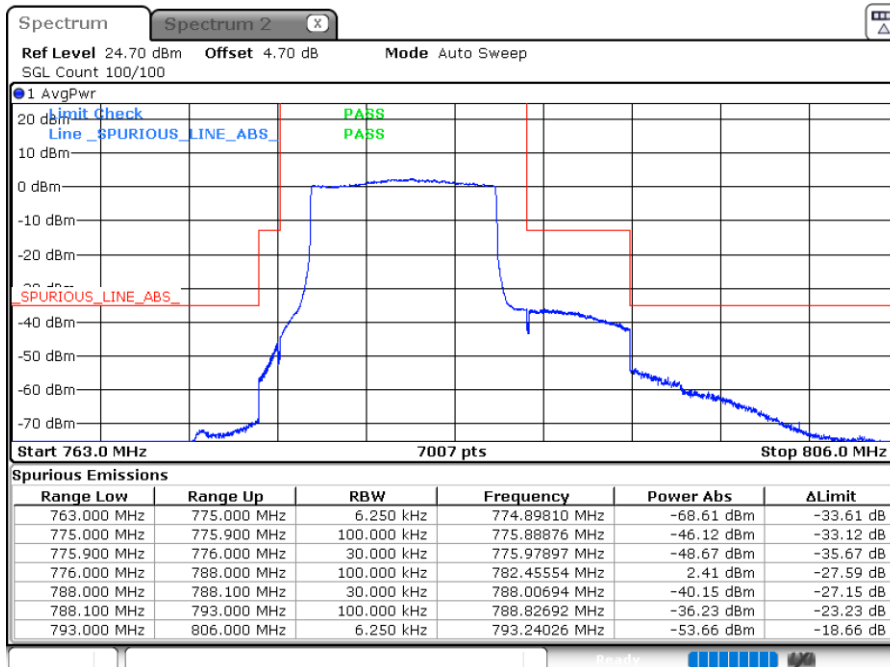
Date: 22.JAN.2022 12:59:12

middle Band Edge / 1 RB



Date: 22.JAN.2022 13:10:22

middle Band Edge / Full RB

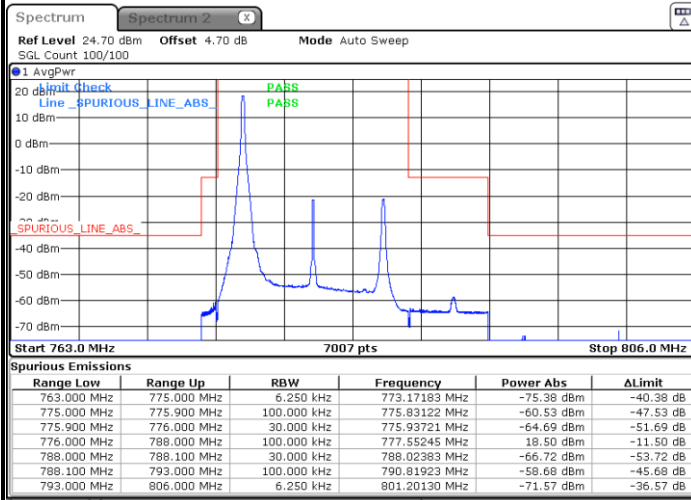


Date: 22.JAN.2022 13:04:47

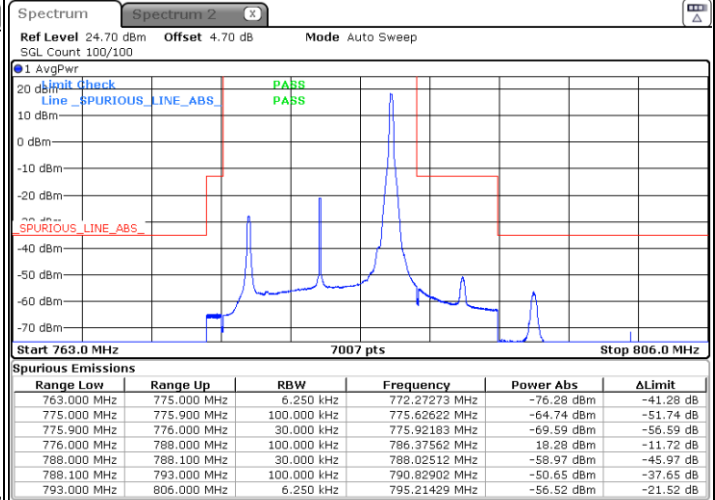


LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



middle Band Edge / 1 RB



middle Band Edge / Full RB

