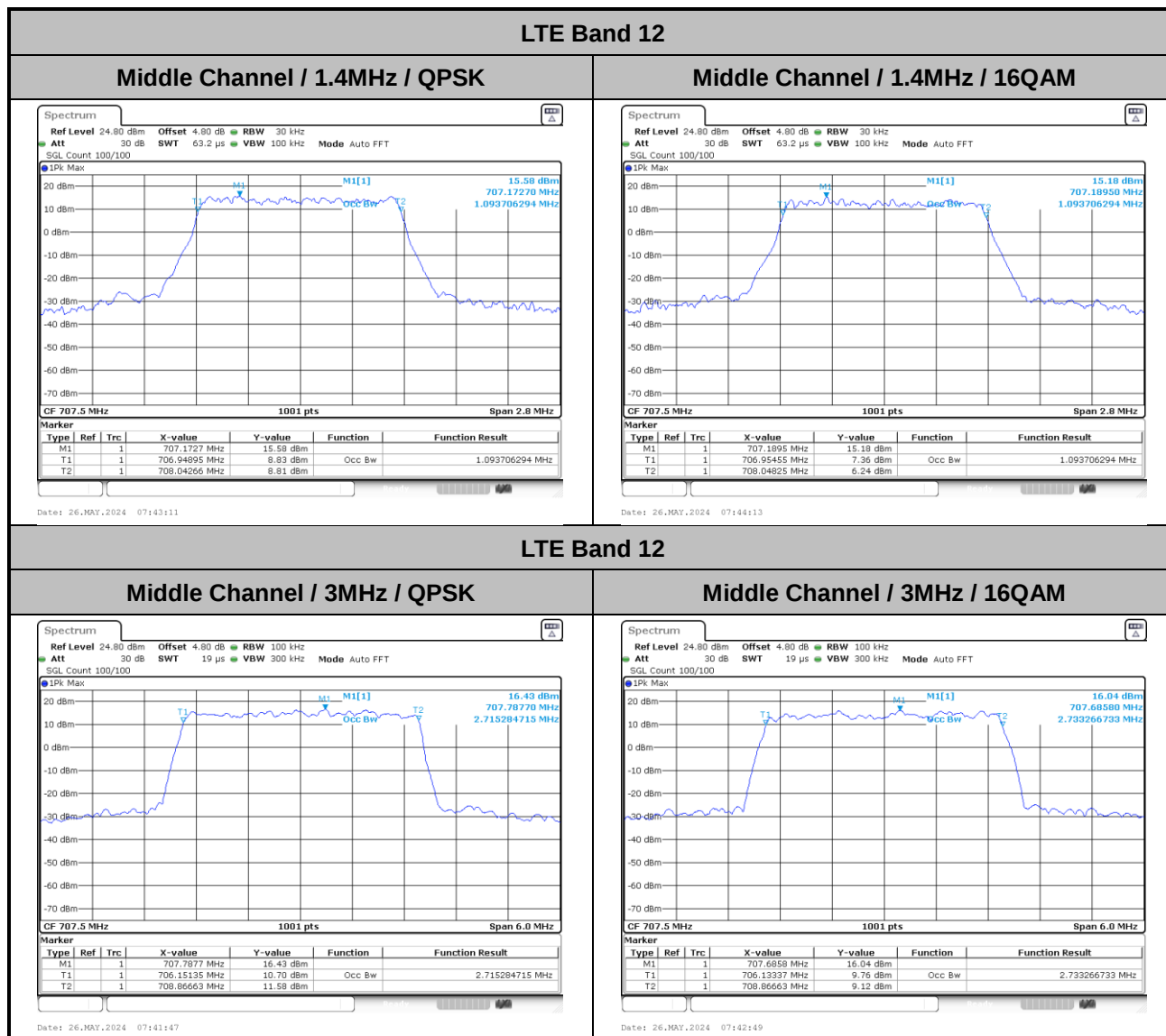




Occupied Bandwidth

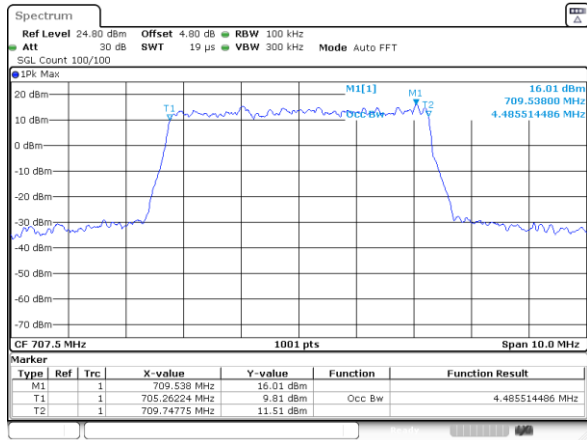
Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.09	2.72	2.73	4.49	4.49	9.03	9.03



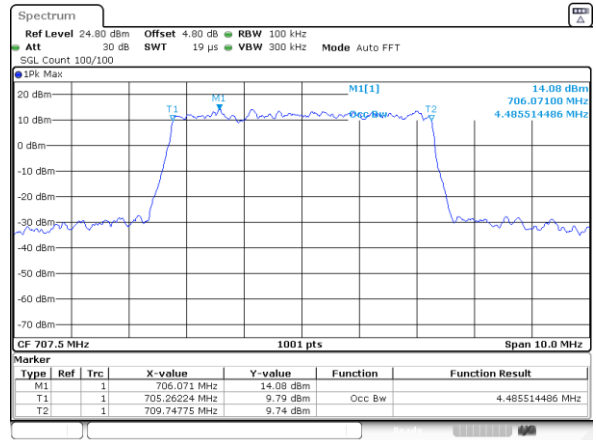


LTE Band 12

Middle Channel / 5MHz / QPSK

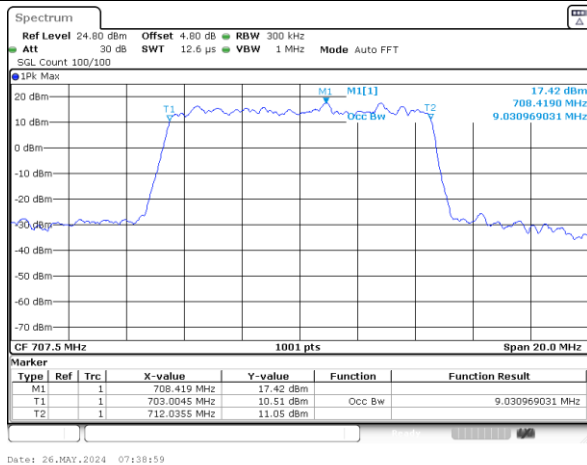


Middle Channel / 5MHz / 16QAM

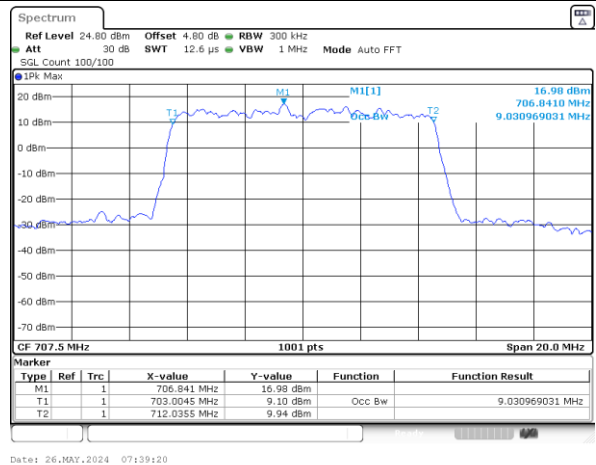


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

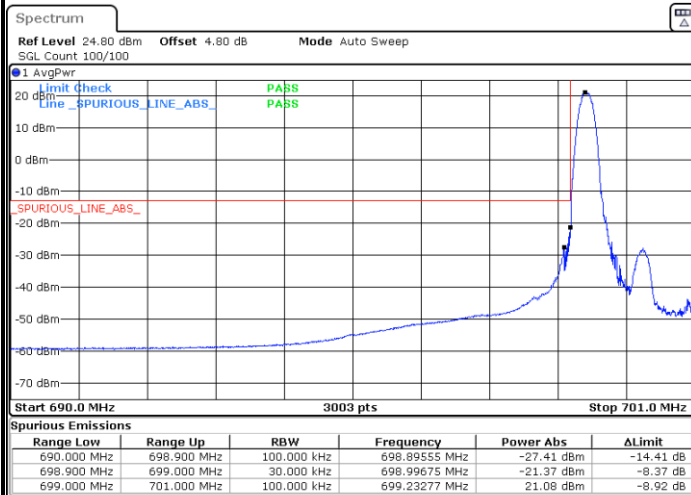




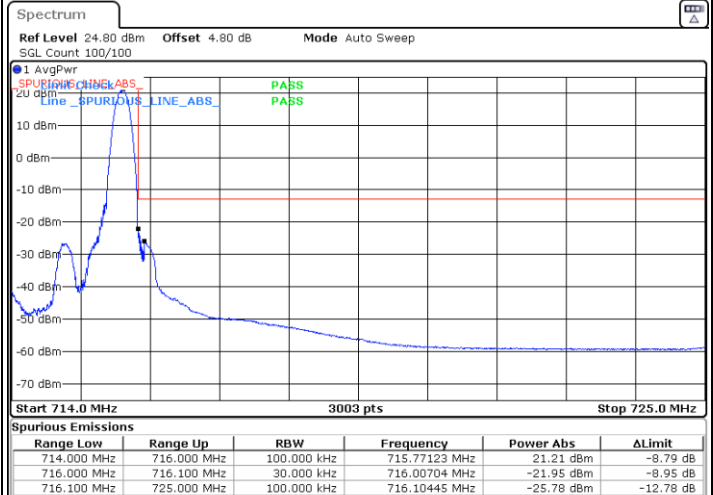
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

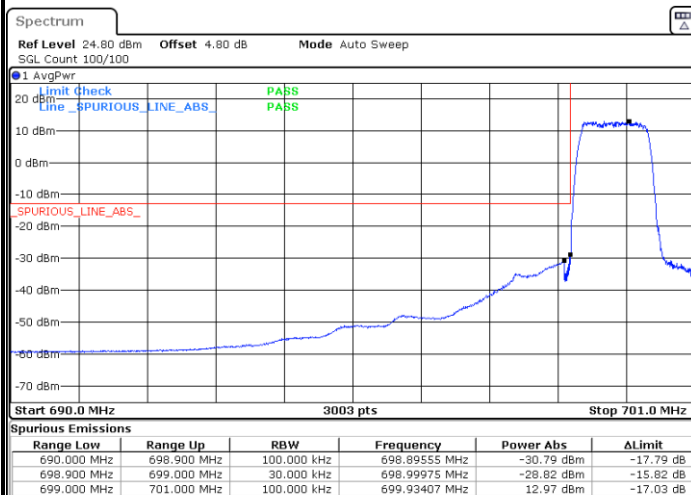
Lowest Band Edge / 1RB



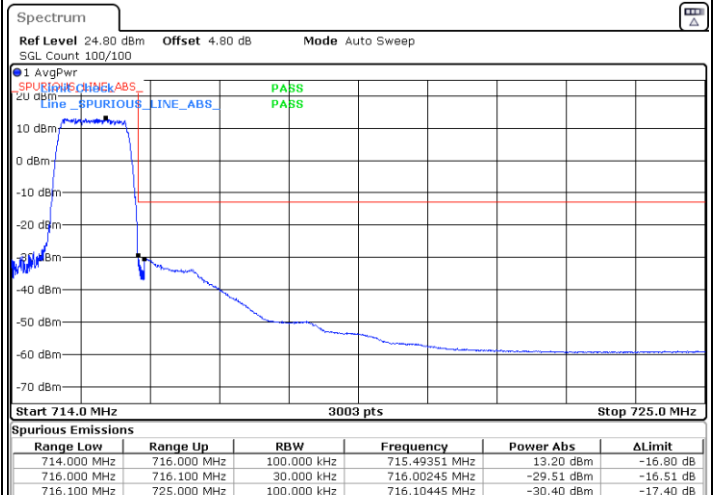
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



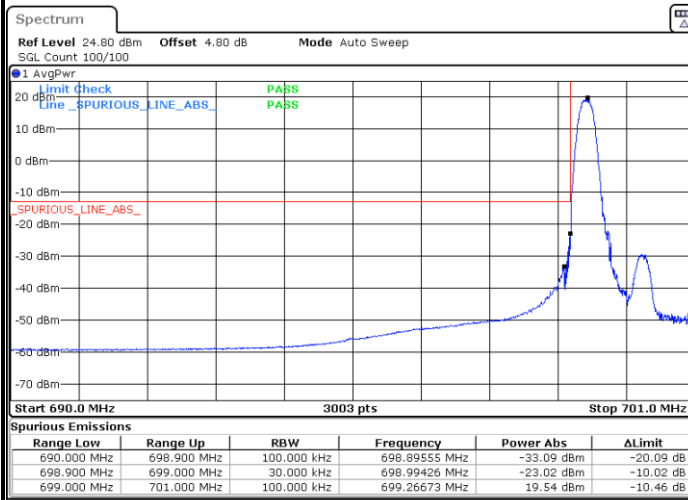
Highest Band Edge / Full RB



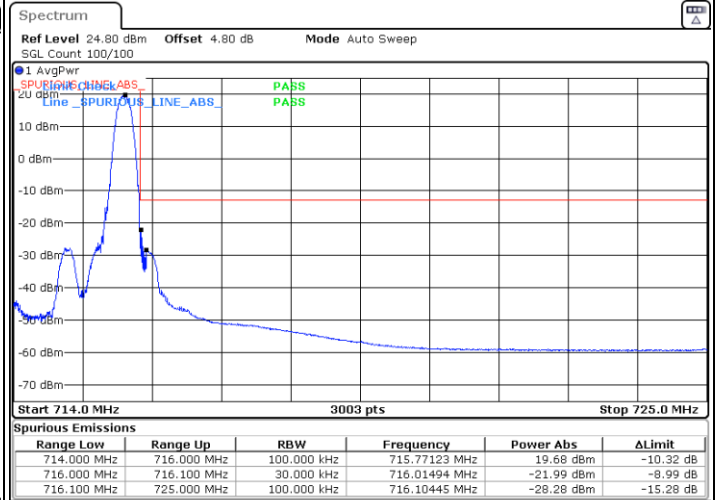


LTE Band 12 / 1.4MHz / 16QAM

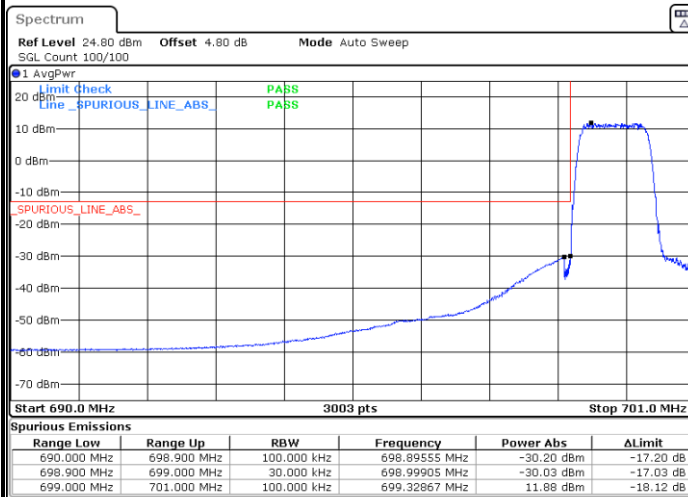
Lowest Band Edge / 1 RB



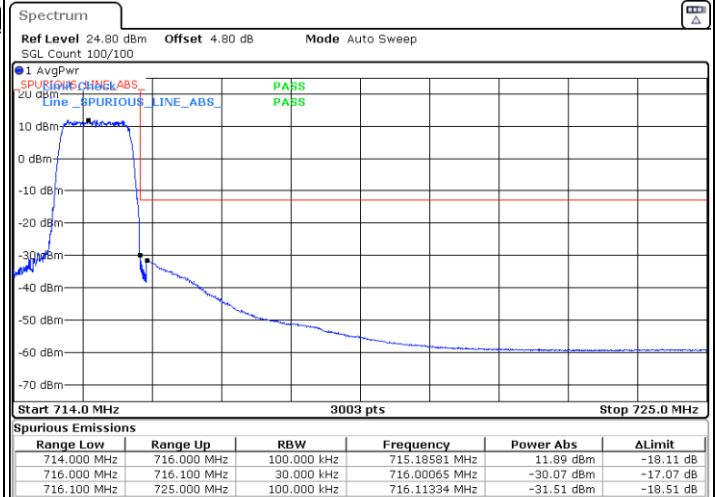
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



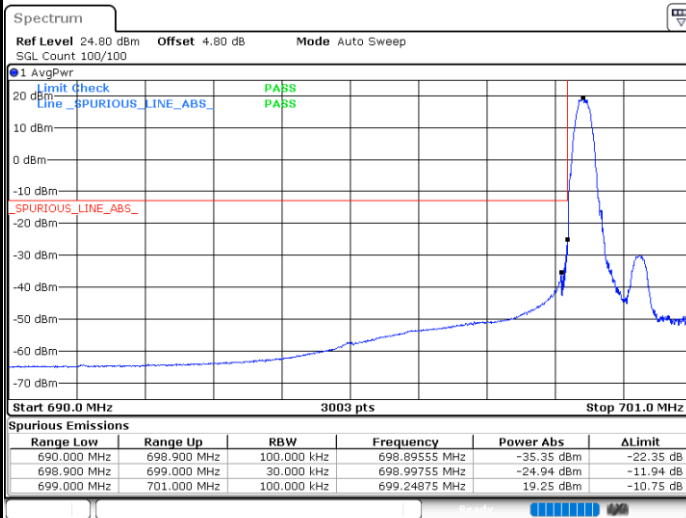
Highest Band Edge / Full RB



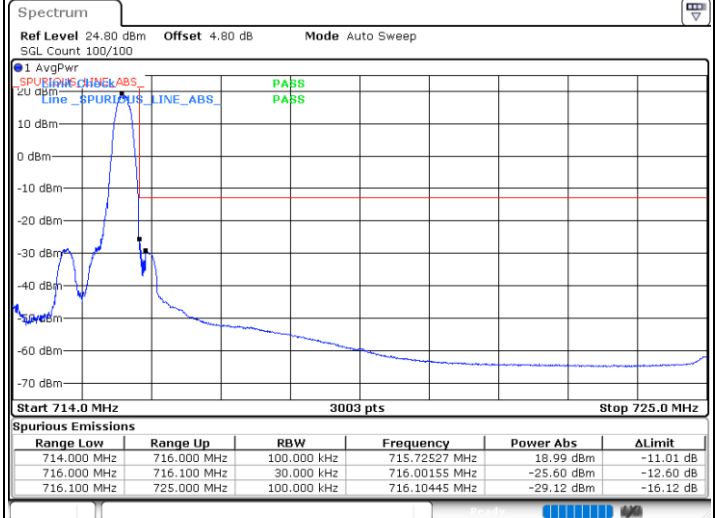


LTE Band 12 / 1.4MHz / 64QAM

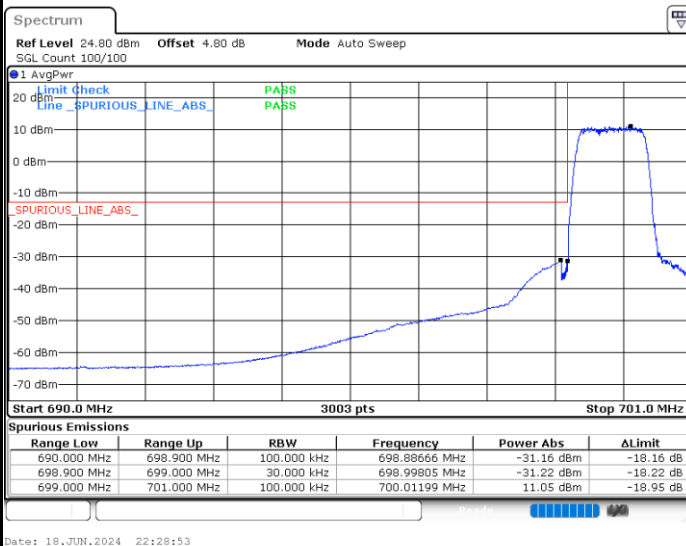
Lowest Band Edge / 1 RB



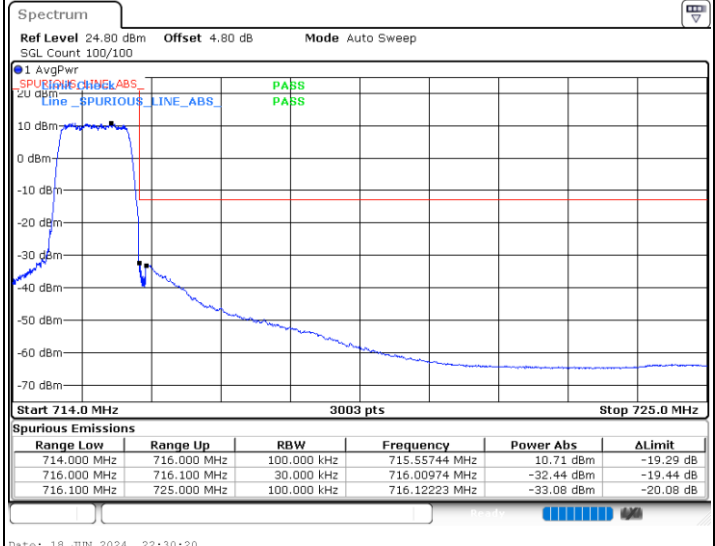
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



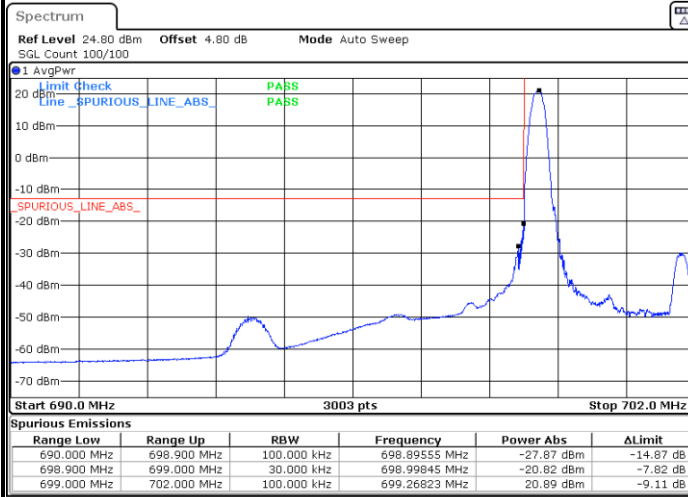
Highest Band Edge / Full RB



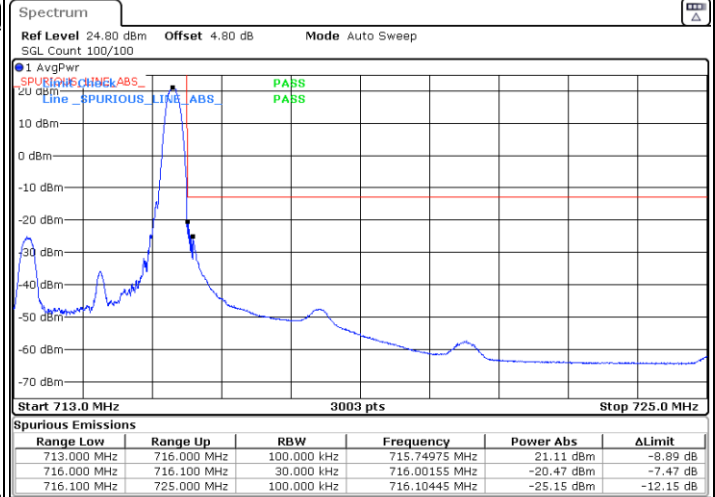


LTE Band 12 / 3MHz / QPSK

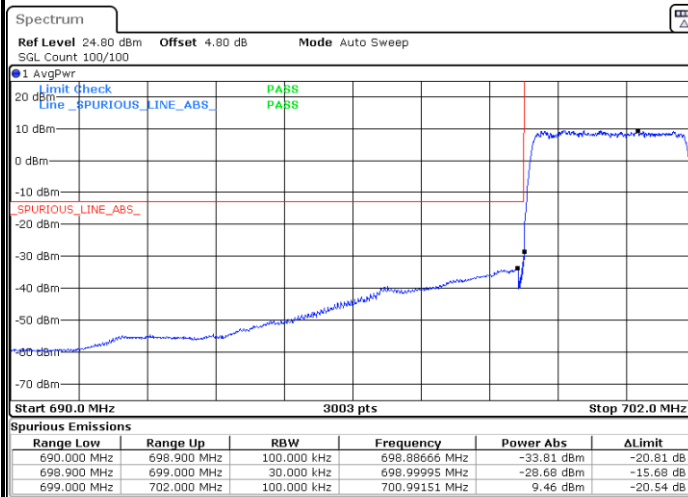
Lowest Band Edge / 1RB



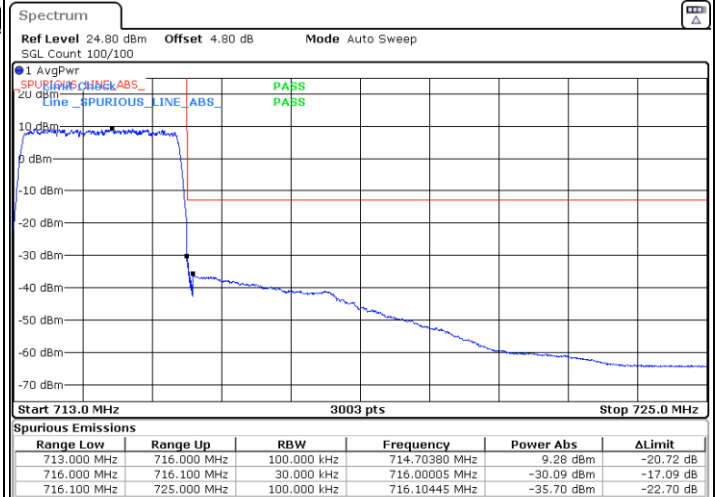
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



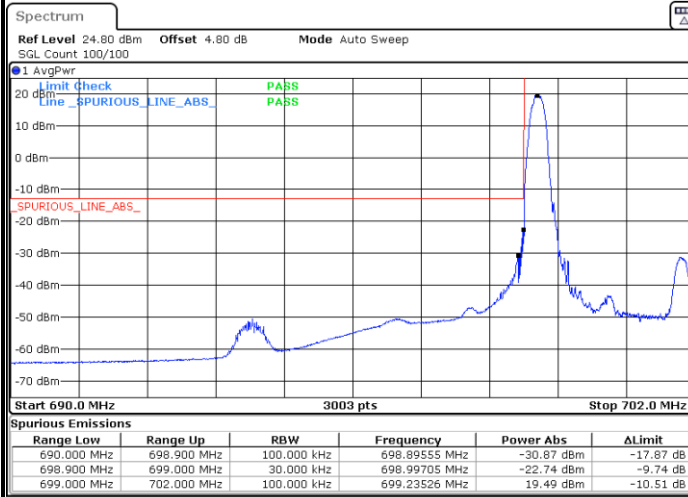
Highest Band Edge / Full RB



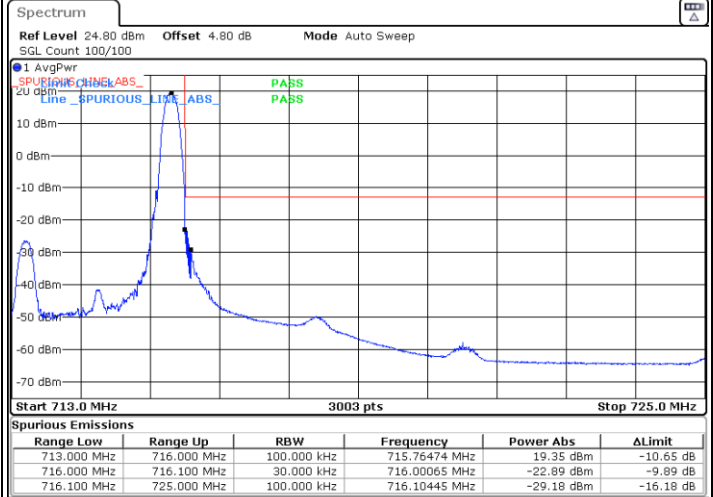


LTE Band 12 / 3MHz / 16QAM

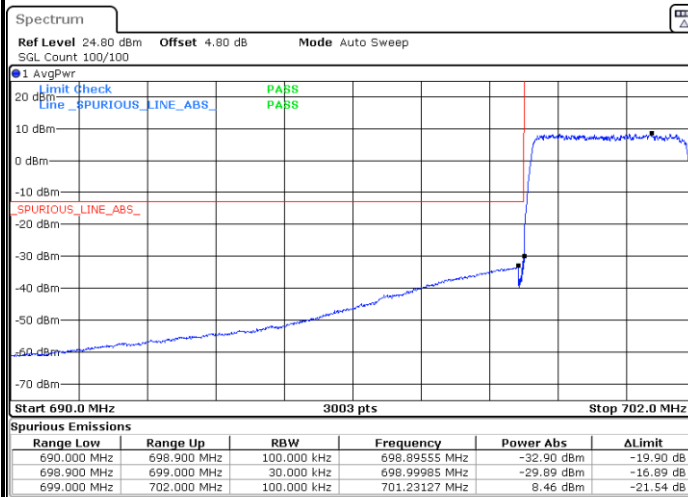
Lowest Band Edge / 1 RB



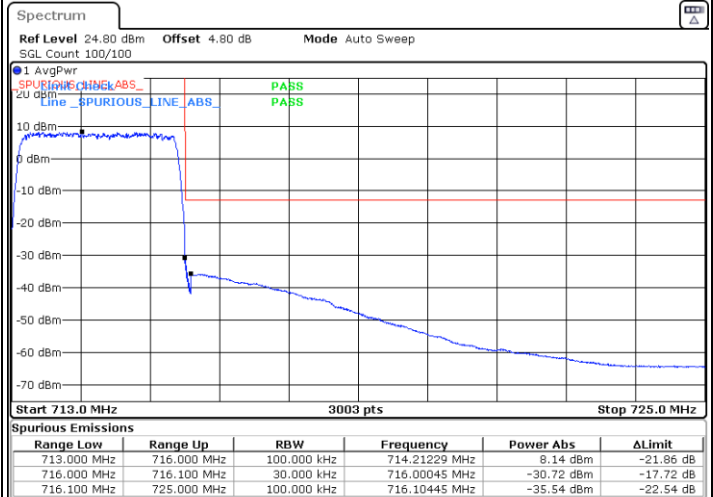
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



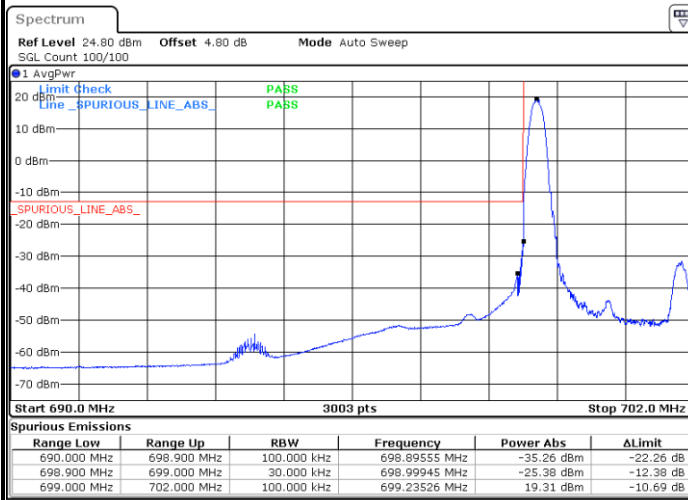
Highest Band Edge / Full RB



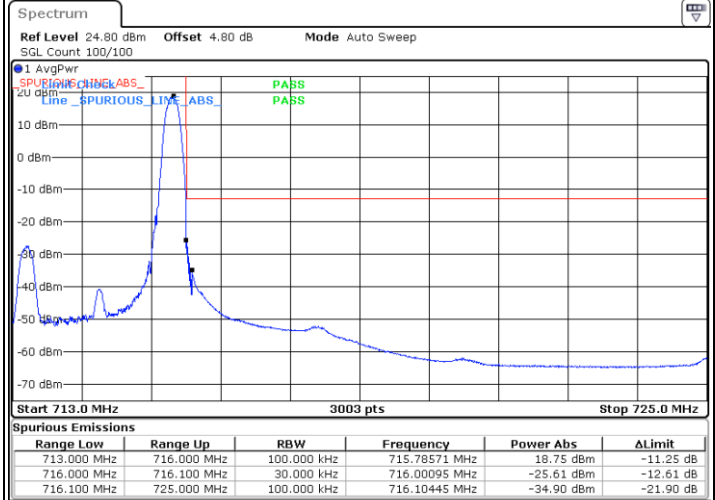


LTE Band 12 / 3MHz / 64QAM

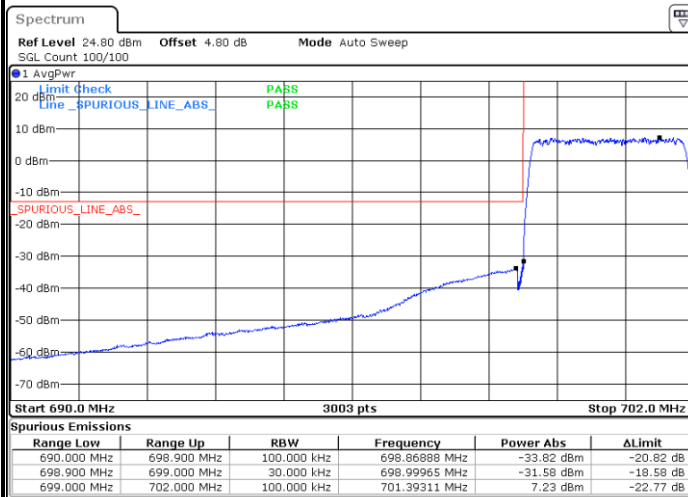
Lowest Band Edge / 1 RB



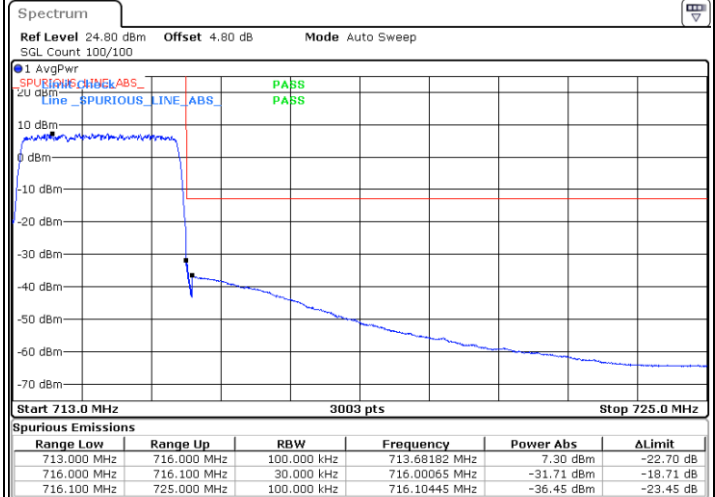
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



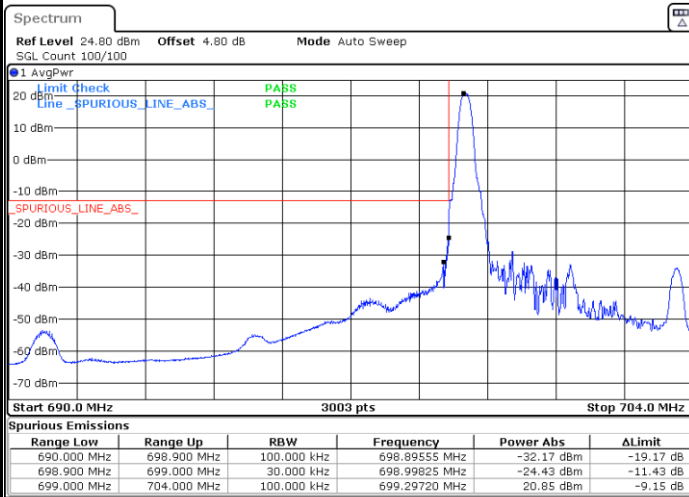
Highest Band Edge / Full RB



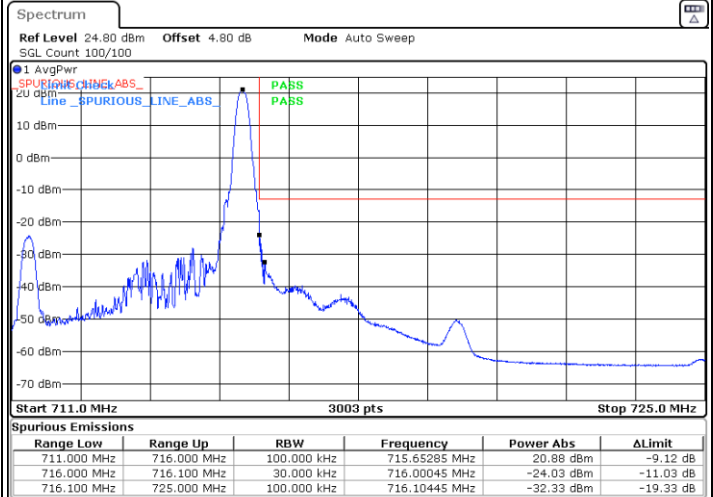


LTE Band 12 / 5MHz / QPSK

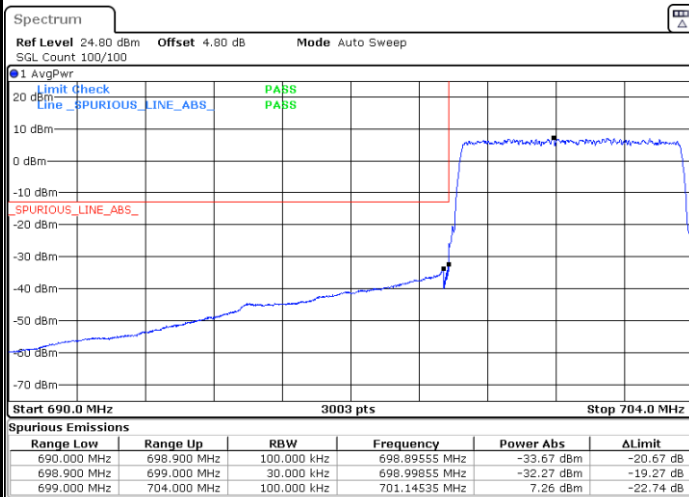
Lowest Band Edge / 1 RB



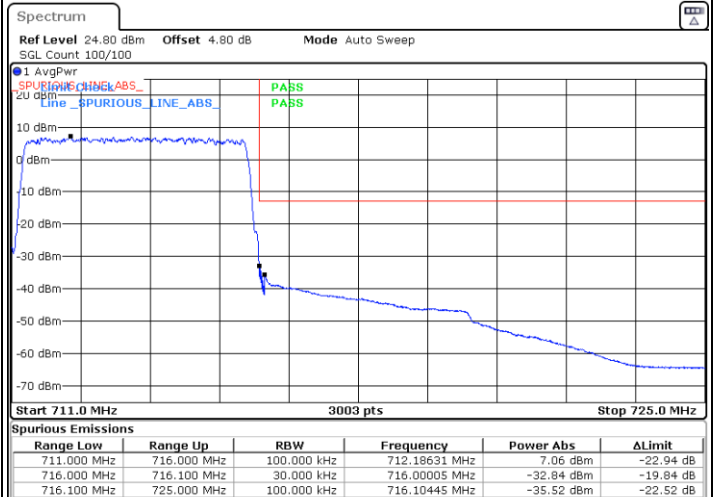
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



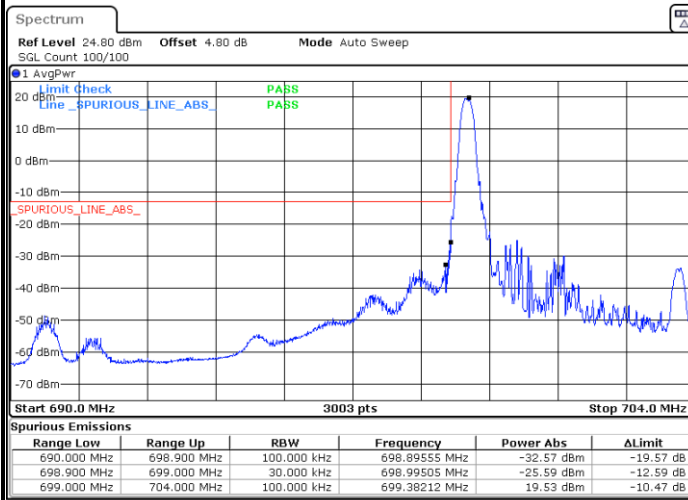
Highest Band Edge / Full RB



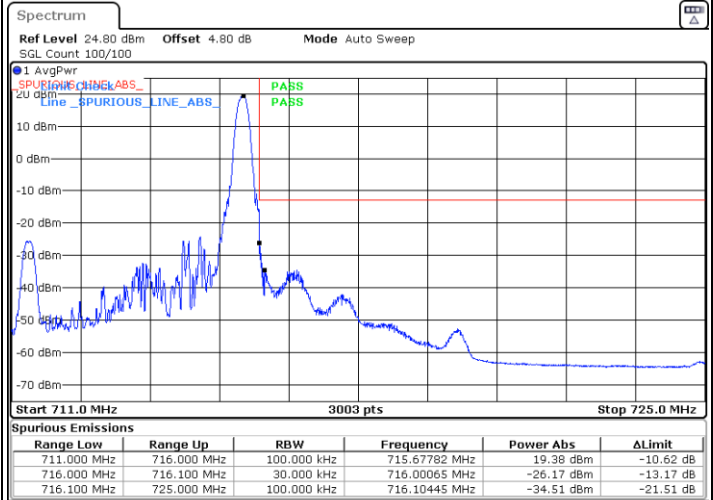


LTE Band 12 / 5MHz / 16QAM

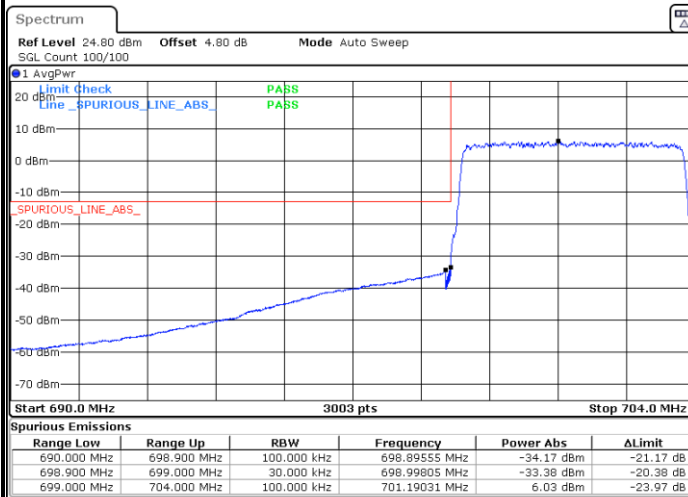
Lowest Band Edge / 1RB



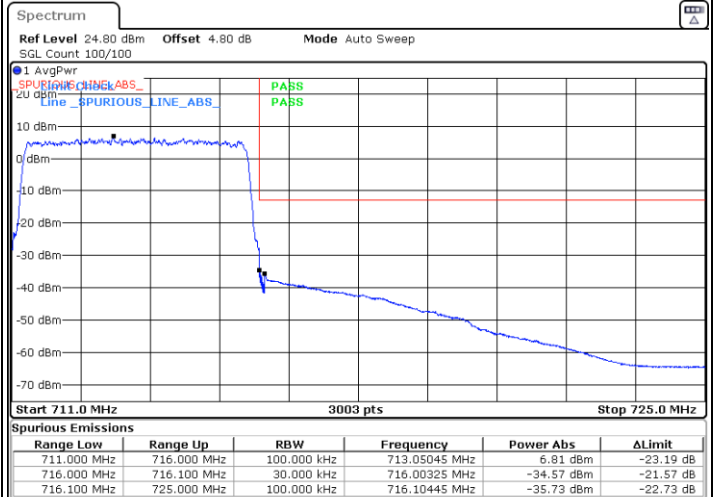
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



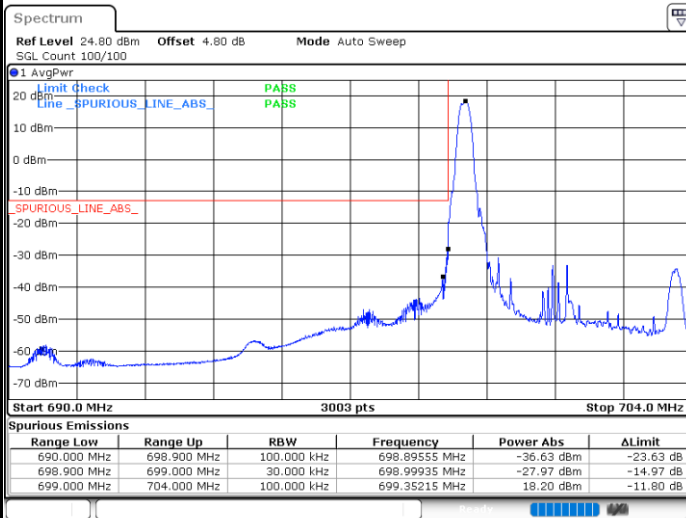
Highest Band Edge / Full RB



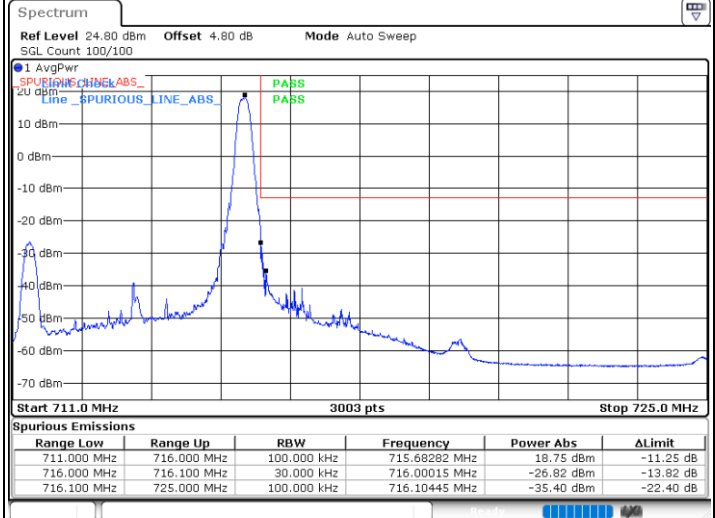


LTE Band 12 / 5MHz / 64QAM

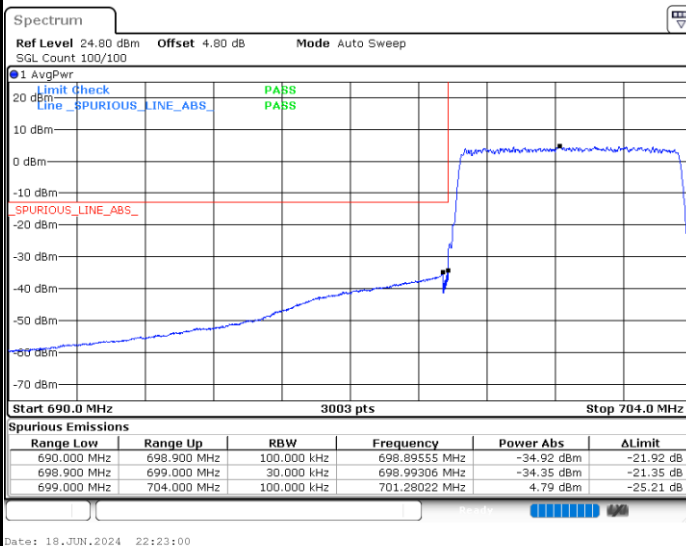
Lowest Band Edge / 1RB



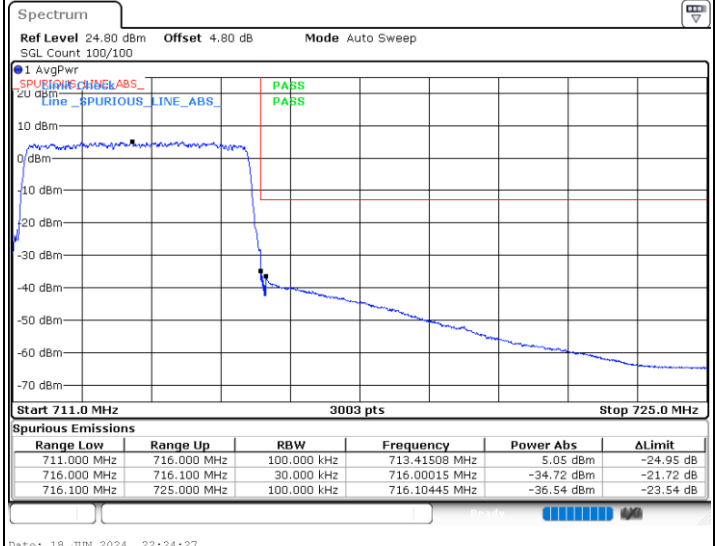
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



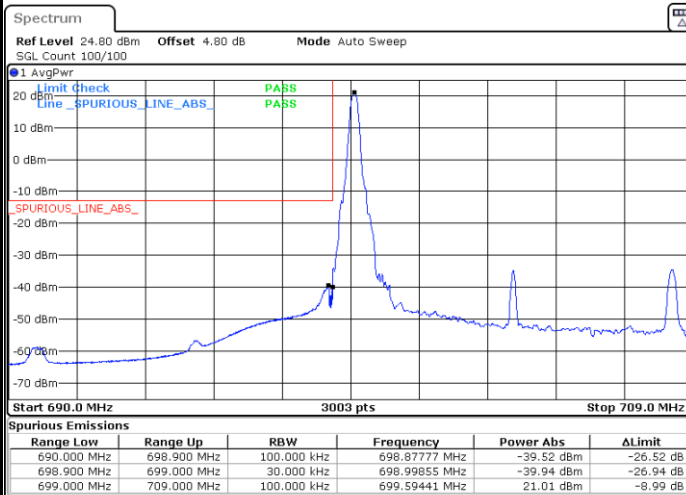
Highest Band Edge / Full RB



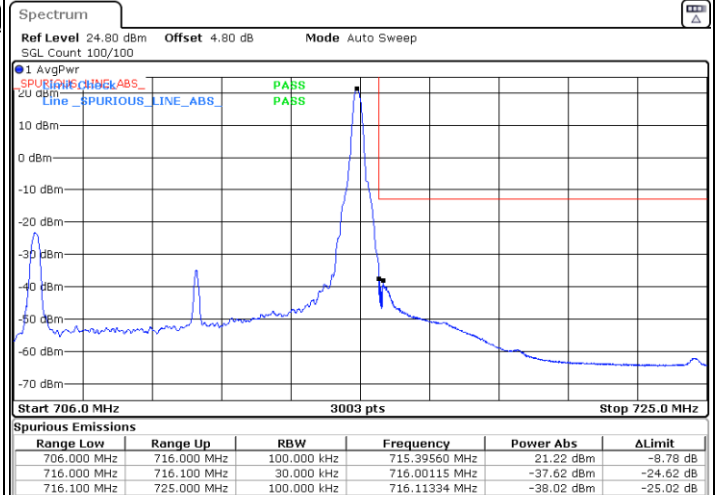


LTE Band 12 / 10MHz / QPSK

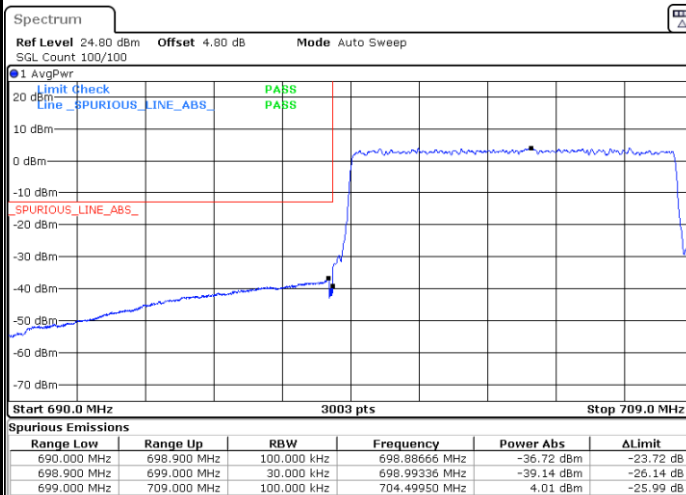
Lowest Band Edge / 1 RB



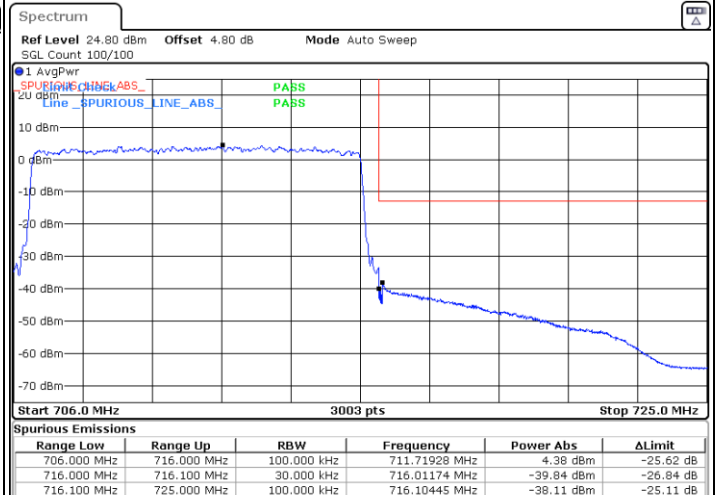
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



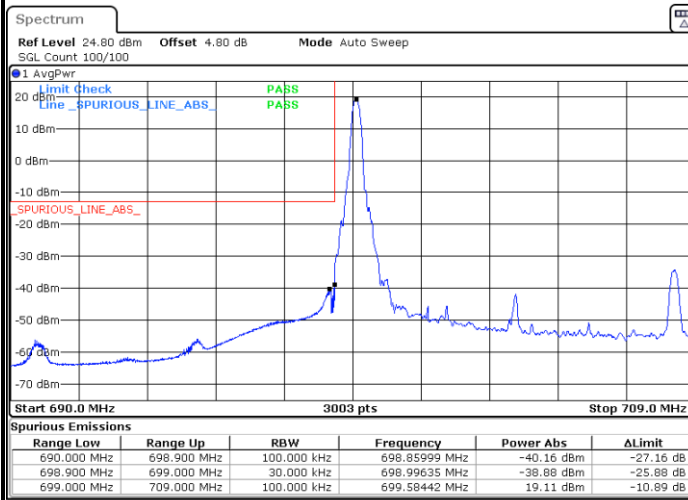
Highest Band Edge / Full RB



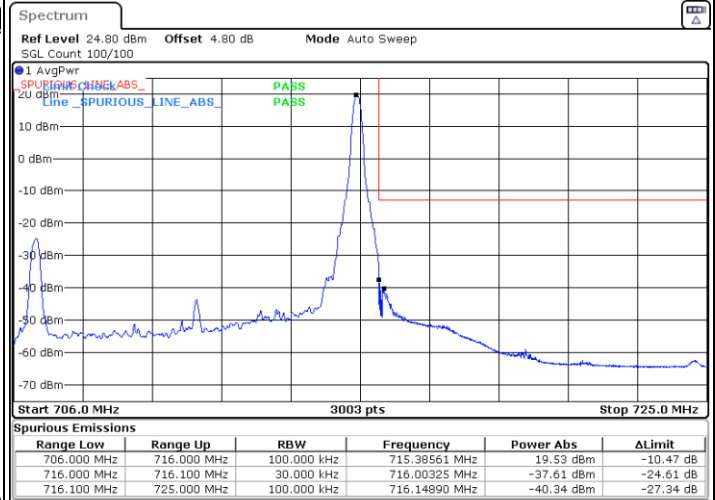


LTE Band 12 / 10MHz / 16QAM

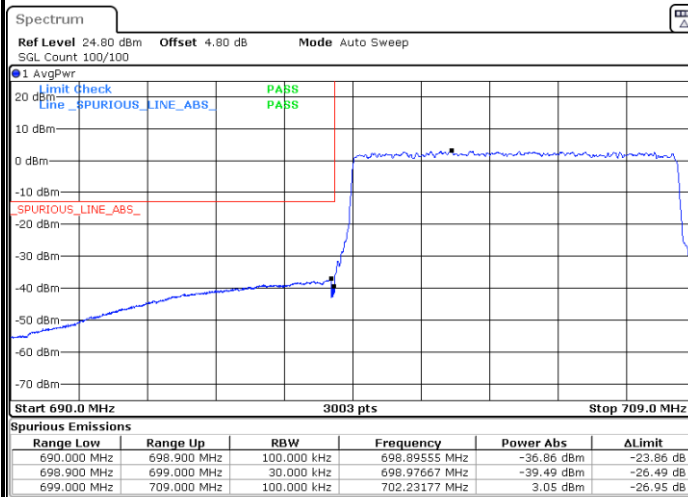
Lowest Band Edge / 1 RB



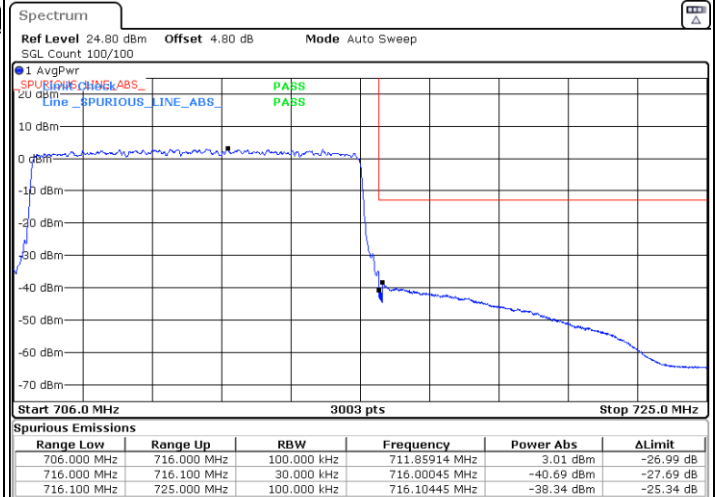
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



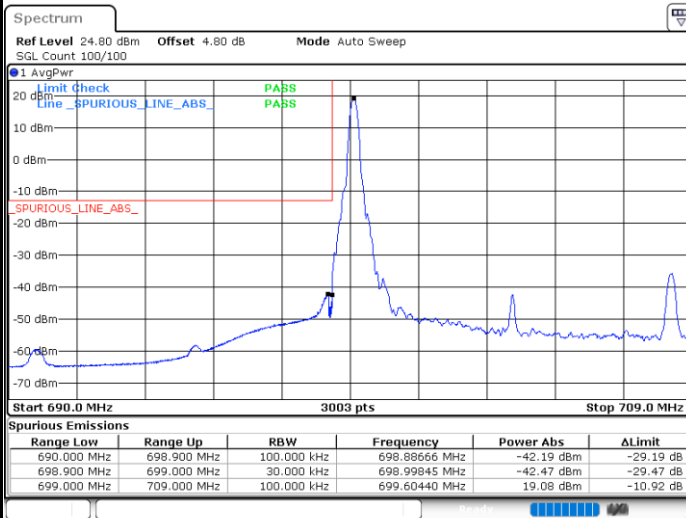
Highest Band Edge / Full RB



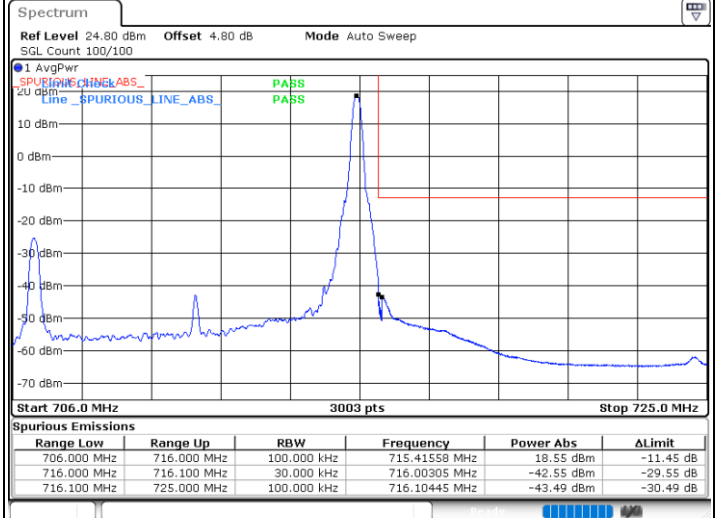


LTE Band 12 / 10MHz / 64QAM

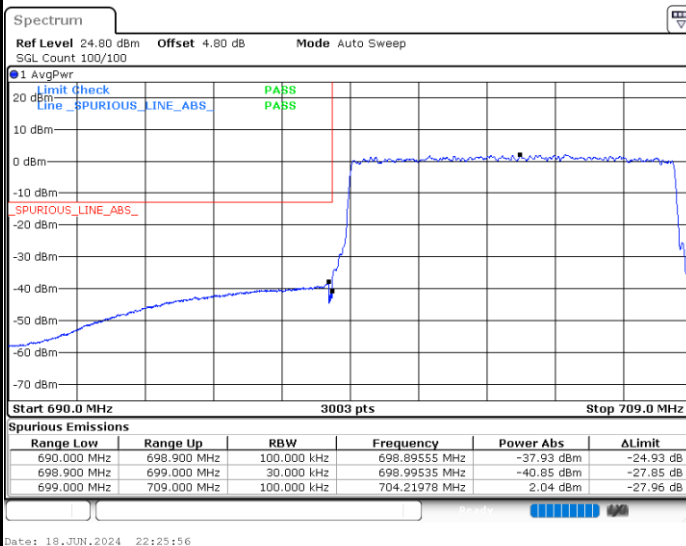
Lowest Band Edge / 1 RB



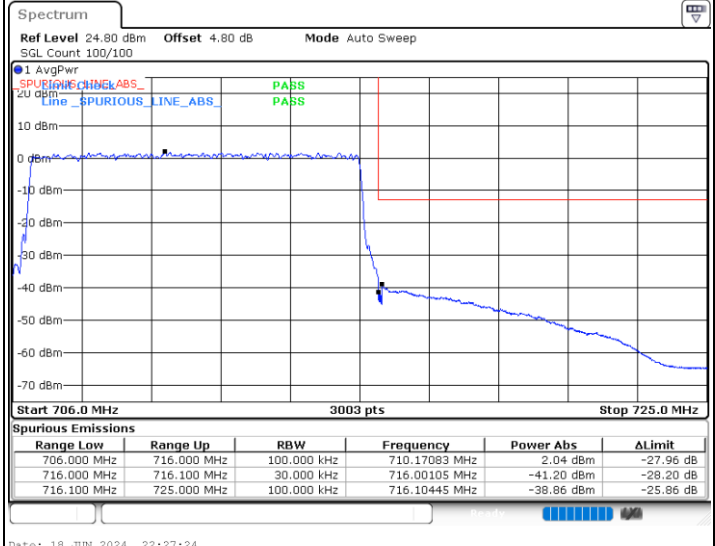
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

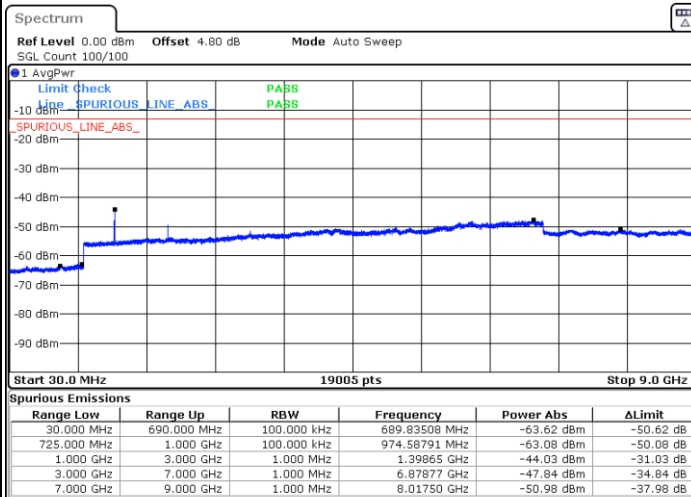




Conducted Spurious Emission

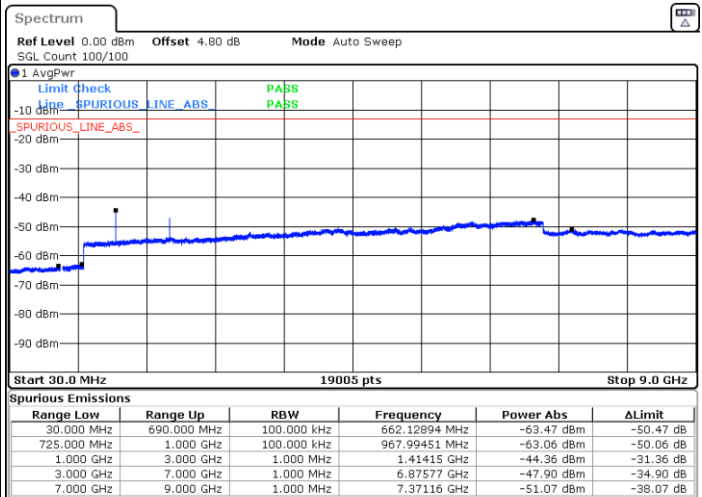
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



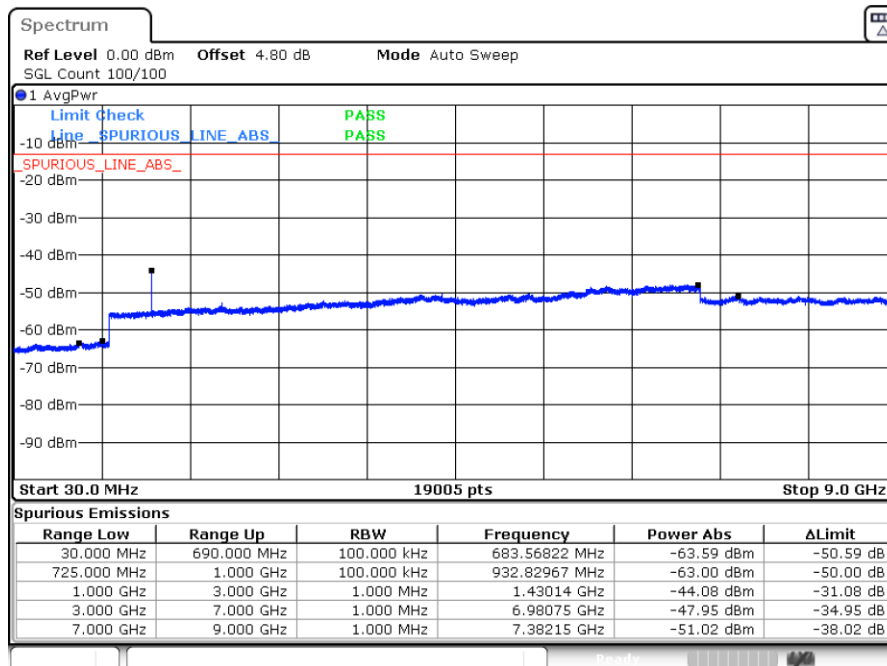
Date: 26.MAY.2024 06:59:52

Middle Channel / QPSK



Date: 26.MAY.2024 07:04:17

Highest Channel / QPSK



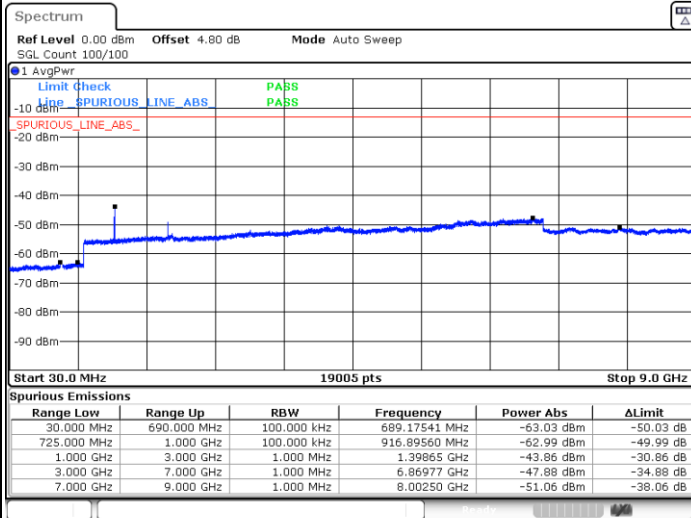
Date: 26.MAY.2024 07:05:19



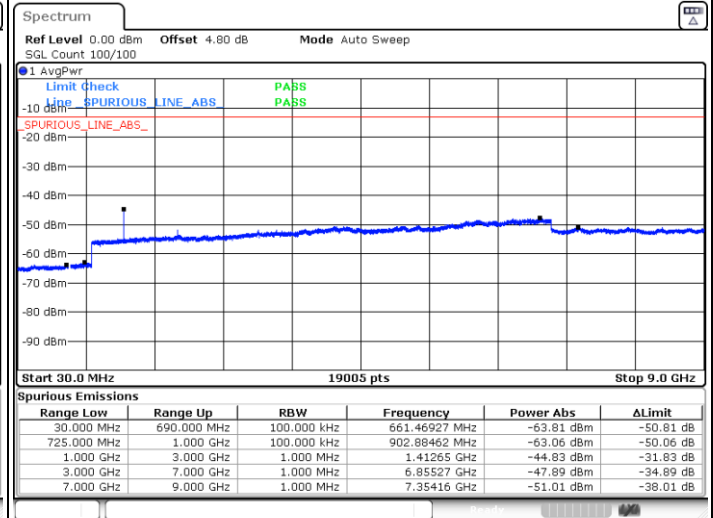
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

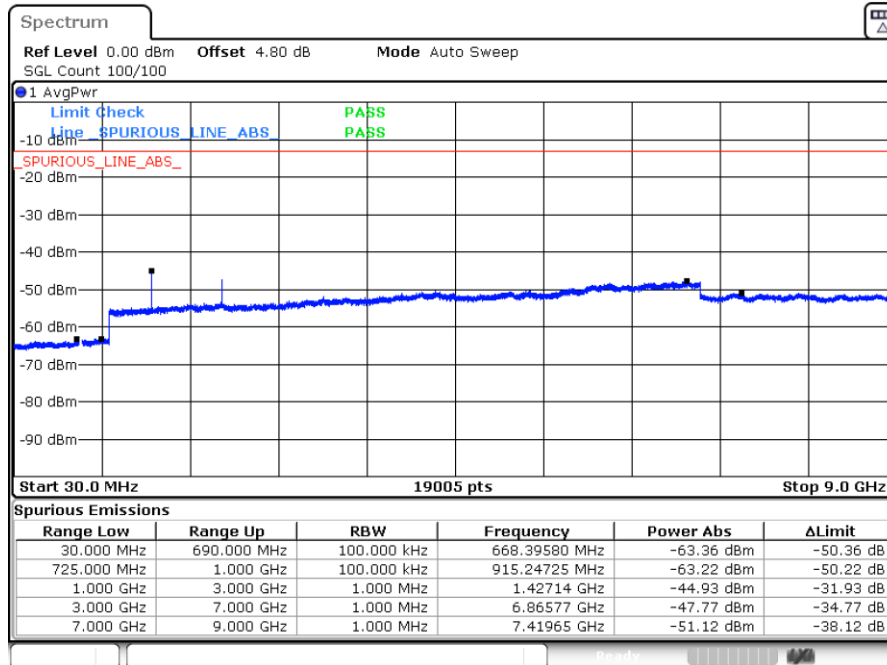


Date: 26.MAY.2024 07:09:41



Date: 26.MAY.2024 07:14:02

Highest Channel / QPSK

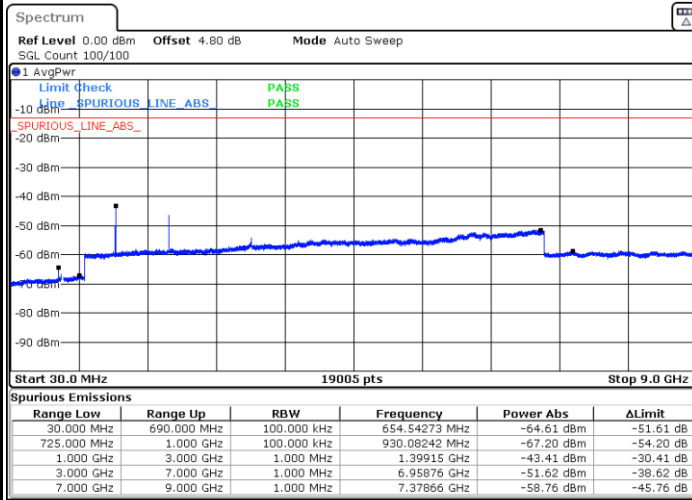


Date: 26.MAY.2024 07:15:04



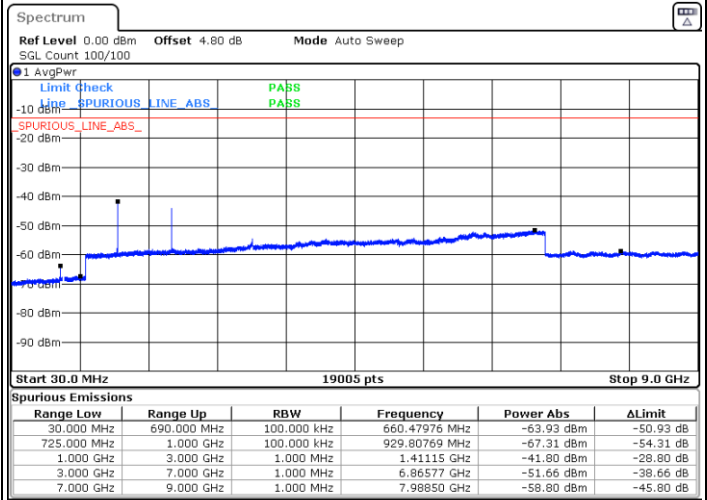
LTE Band 12 / 5MHz

Lowest Channel / QPSK



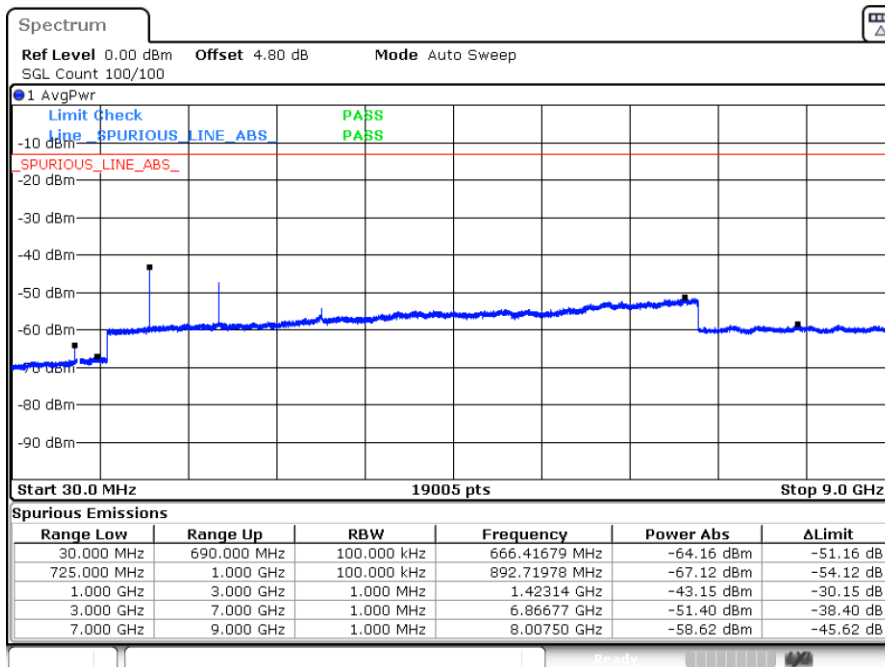
Date: 26.MAY.2024 07:19:26

Middle Channel / QPSK



Date: 26.MAY.2024 07:23:47

Highest Channel / QPSK

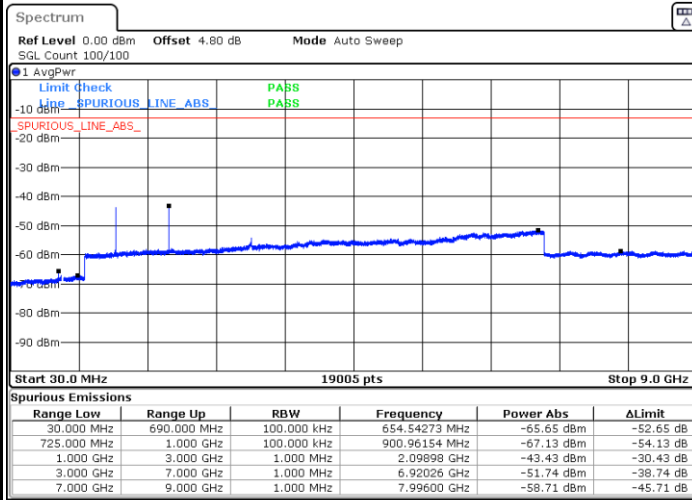


Date: 26.MAY.2024 07:24:49



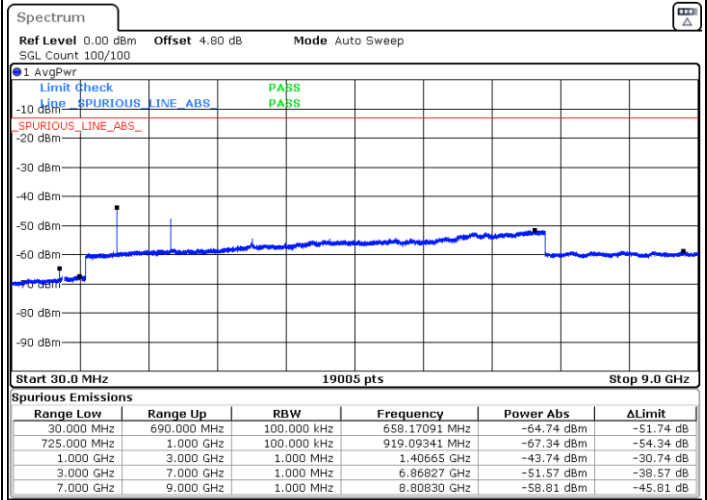
LTE Band 12 / 10MHz

Lowest Channel / QPSK



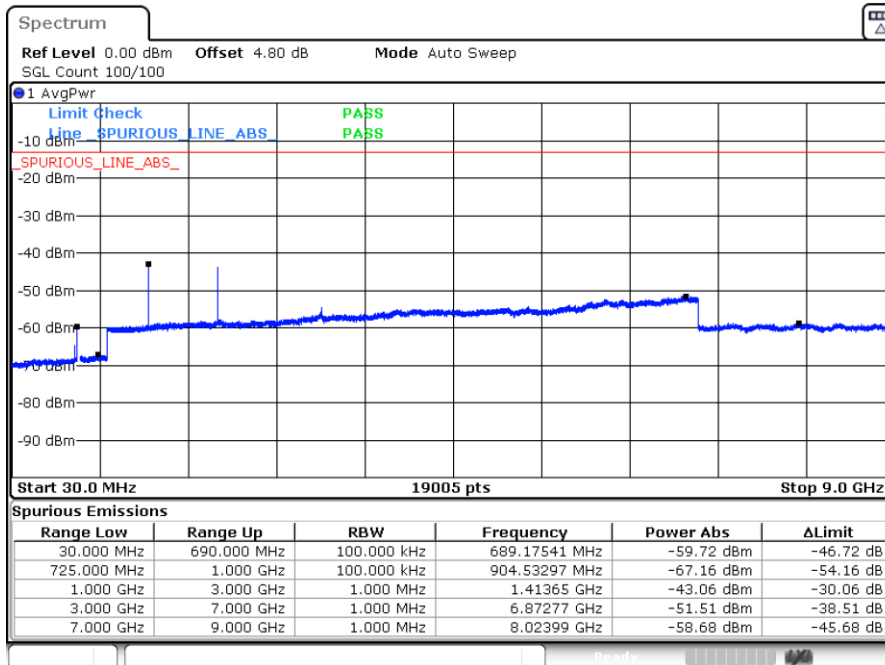
Date: 26.MAY.2024 07:29:11

Middle Channel / QPSK



Date: 26.MAY.2024 07:33:32

Highest Channel / QPSK



Date: 26.MAY.2024 07:34:34

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	0.0006	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0085	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0099	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0071	
-30	Normal Voltage	0.0061	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0002	

Note:

1. Normal Voltage =7.2 V. ; Battery End Point (BEP) =6.6 V. ; Maximum Voltage =8.26 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



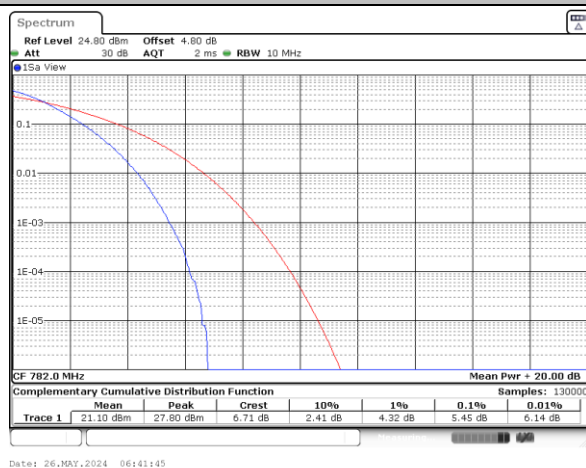
LTE Band 13

Peak-to-Average Ratio

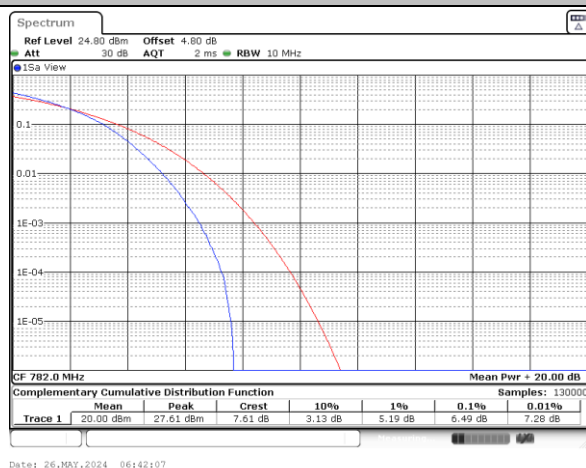
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.45	6.49	6.55	PASS

LTE Band 13 / 10MHz

Middle Channel / Full RB/ QPSK

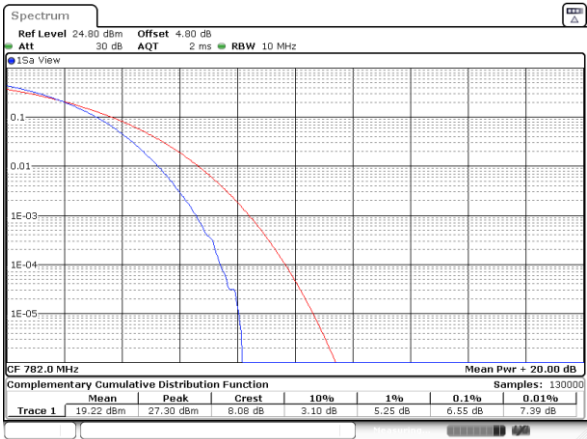


Middle Channel / Full RB/ 16QAM





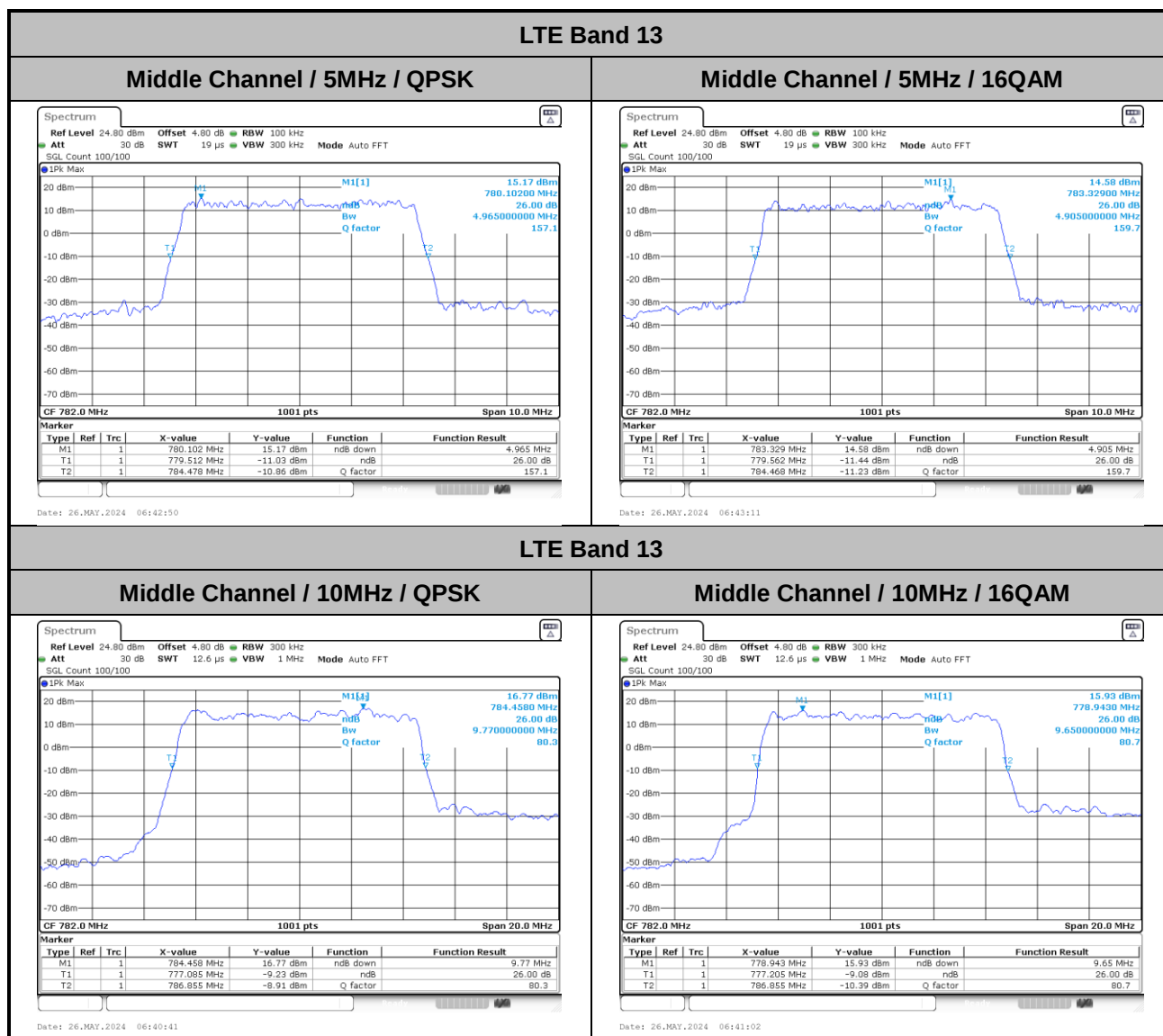
Middle Channel / Full RB/ 64QAM



Date: 19 JUN 2024 04:30:37

**26dB Bandwidth**

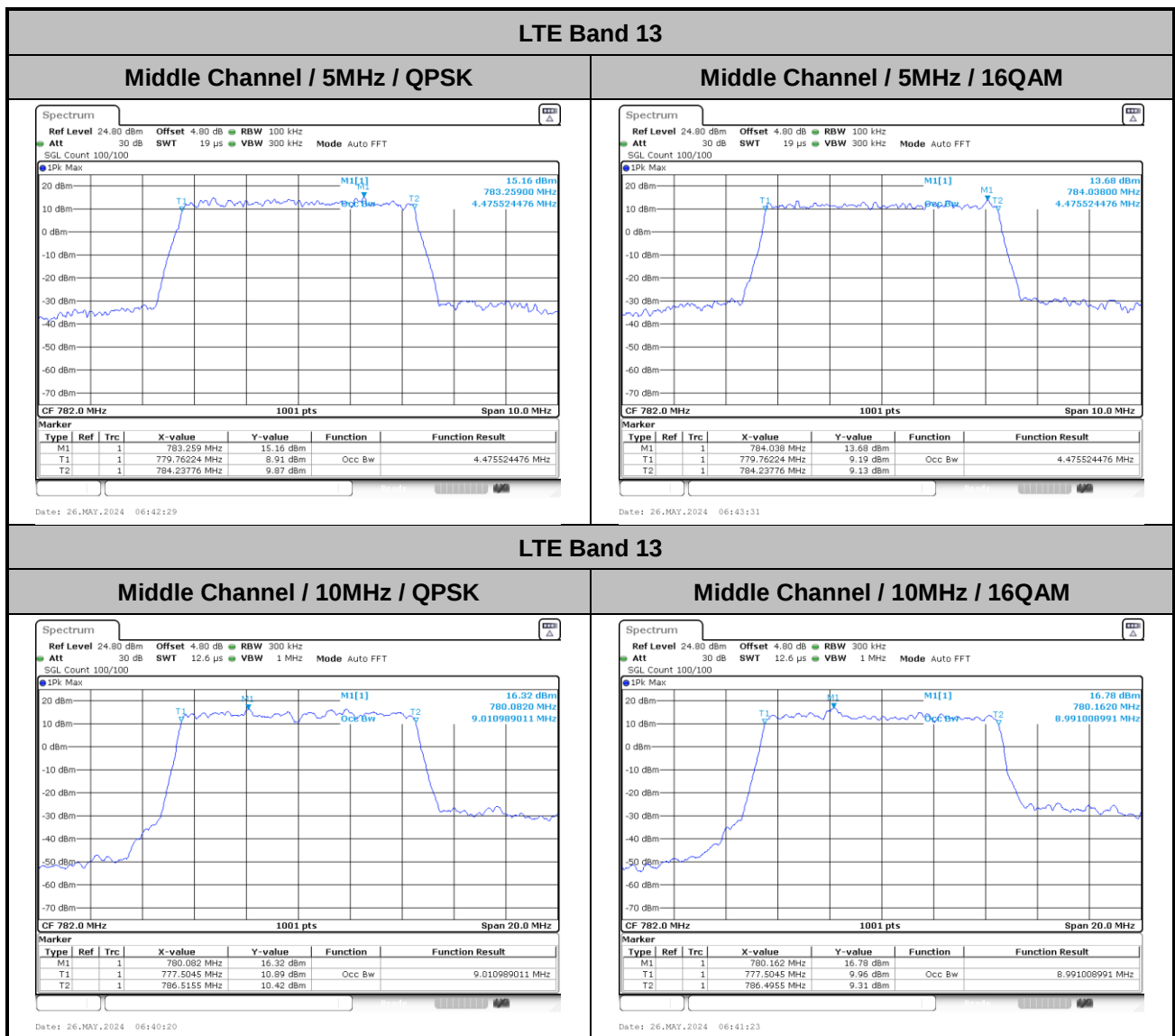
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.97	4.91
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.77	9.65





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.48	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	8.99

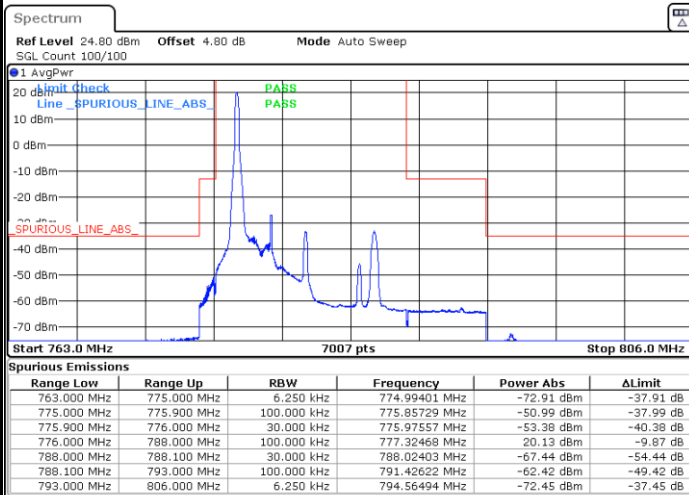




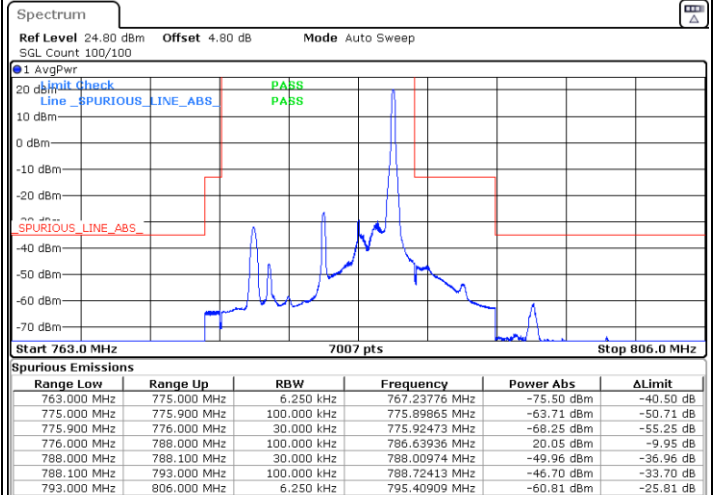
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

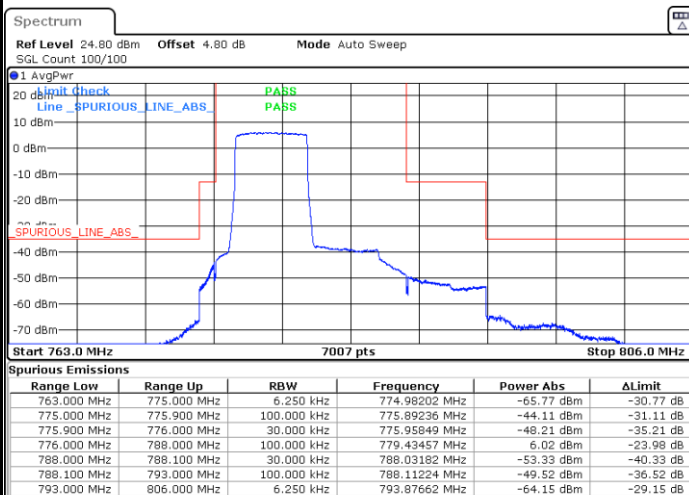
Lowest Band Edge / 1 RB



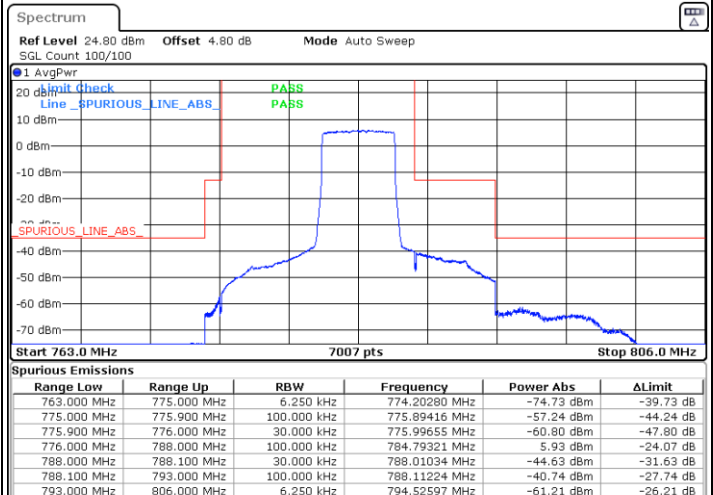
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



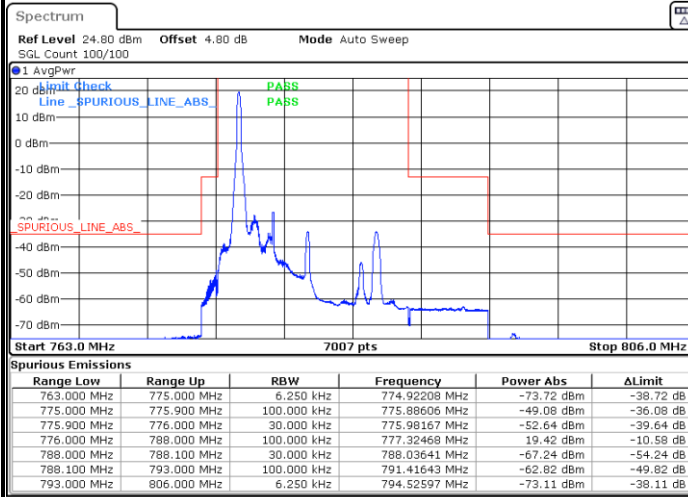
Highest Band Edge / Full RB





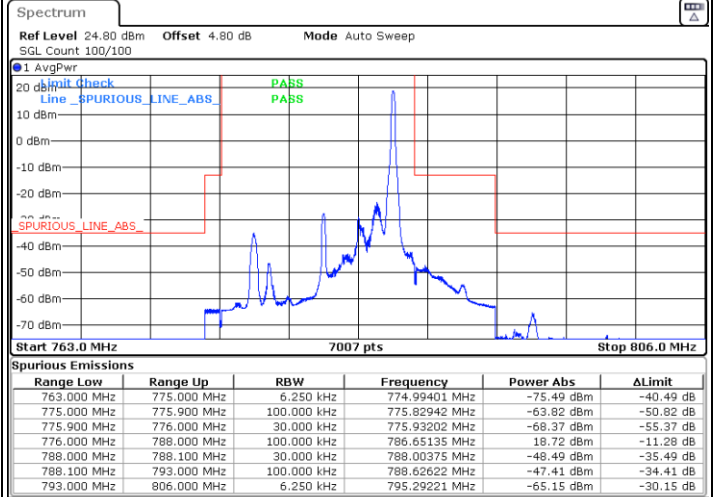
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



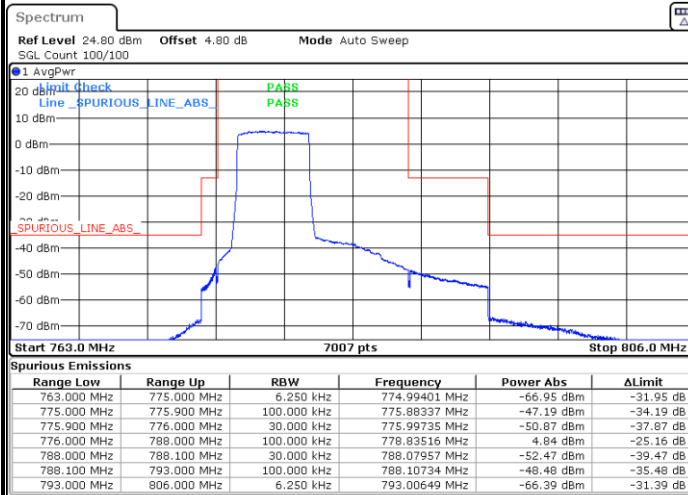
Date: 26.MAY.2024 06:13:45

Highest Band Edge / 1 RB



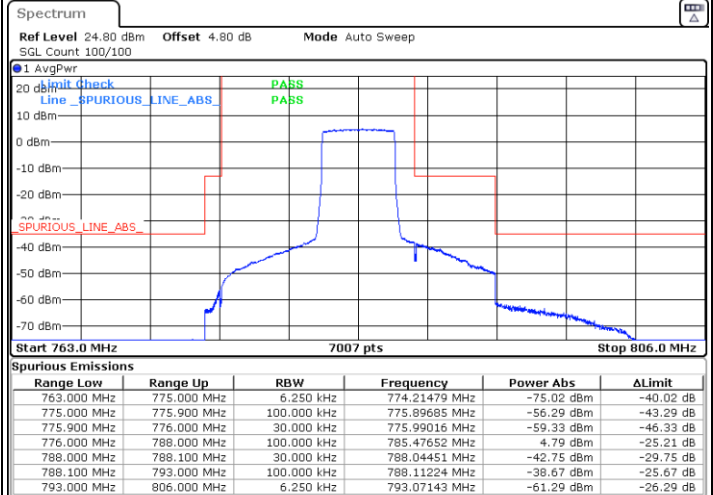
Date: 26.MAY.2024 06:23:50

Lowest Band Edge / Full RB



Date: 26.MAY.2024 06:17:26

Highest Band Edge / Full RB

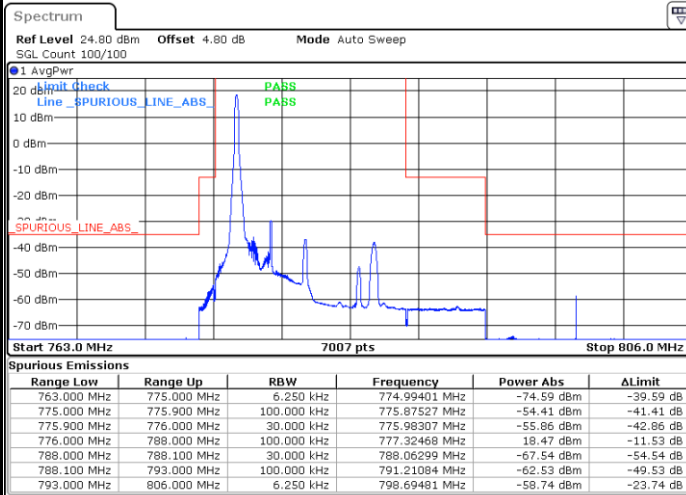


Date: 26.MAY.2024 06:27:38

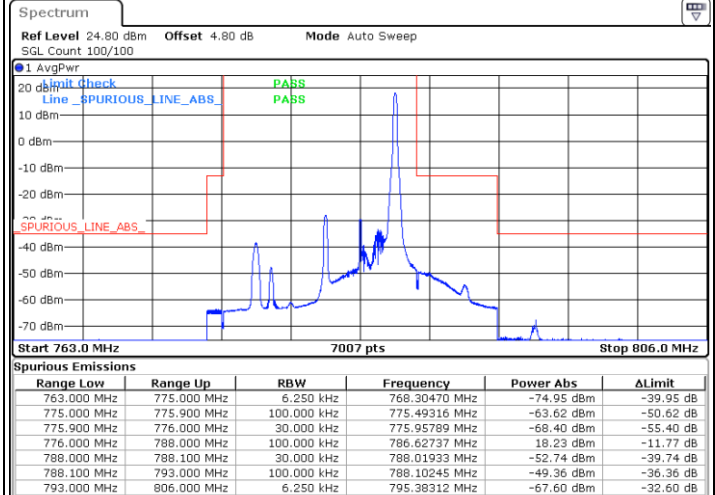


LTE Band 13 / 5MHz / 64QAM

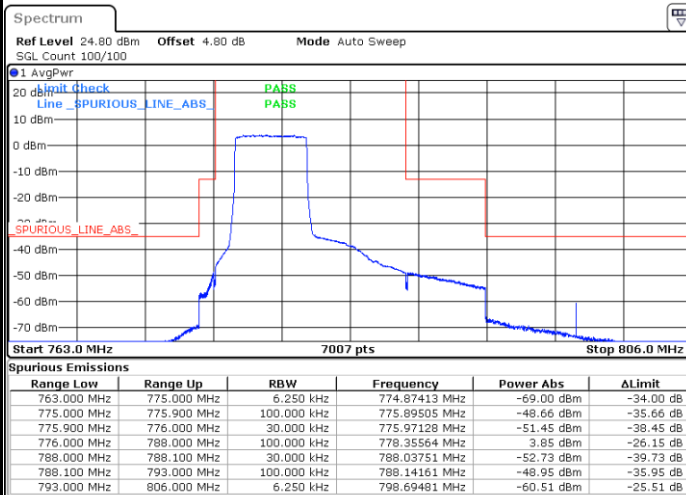
Lowest Band Edge / 1RB



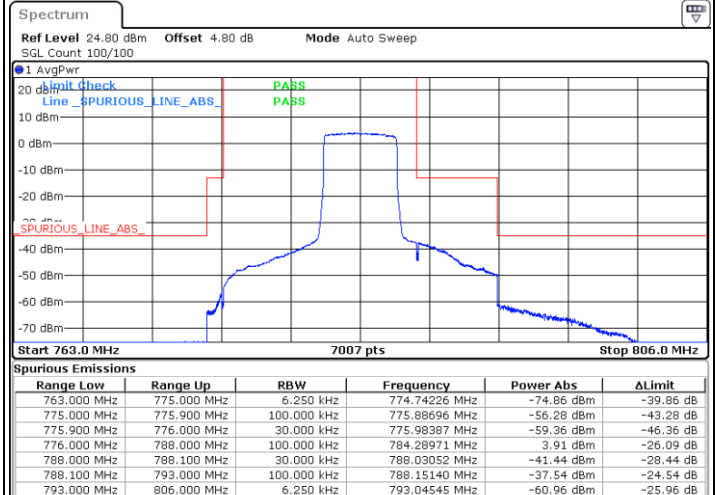
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



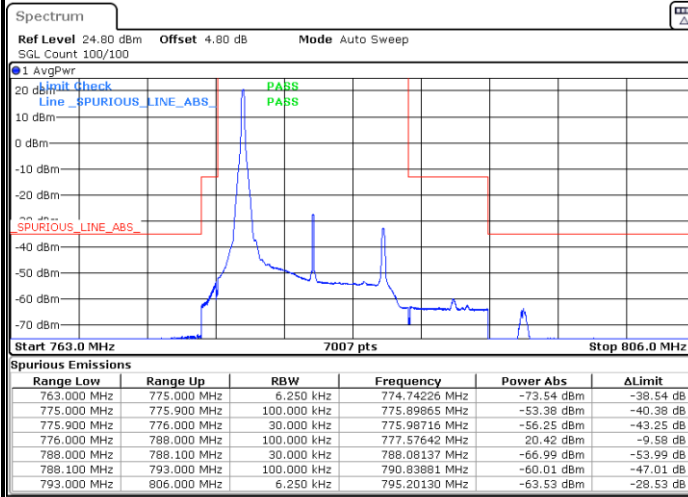
Highest Band Edge / Full RB





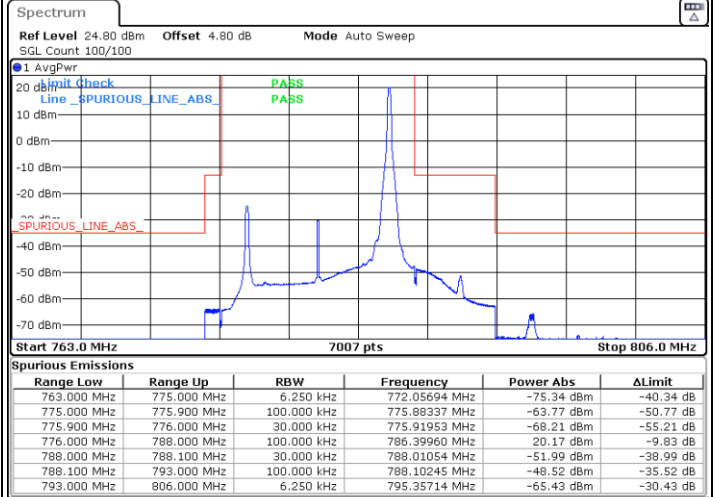
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



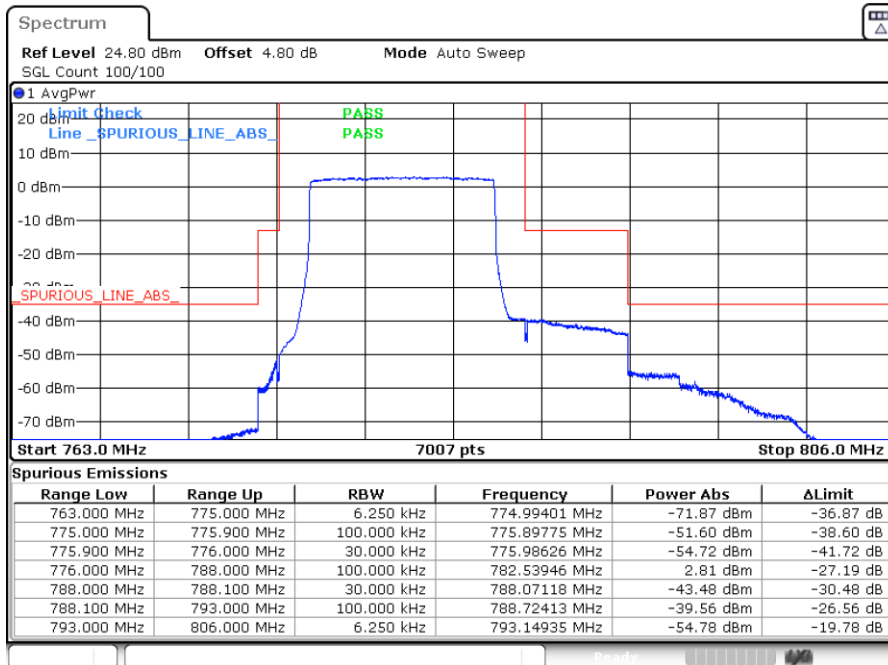
Date: 26.MAY.2024 06:30:50

middle Band Edge / 1 RB



Date: 26.MAY.2024 06:38:09

Middle Band Edge / Full RB

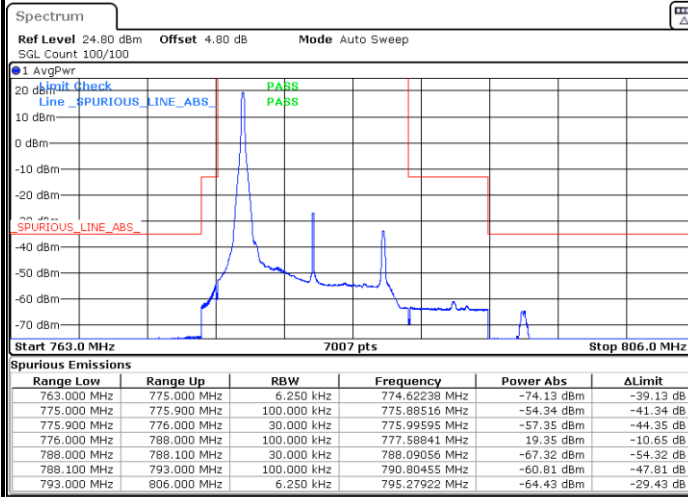


Date: 26.MAY.2024 06:34:30



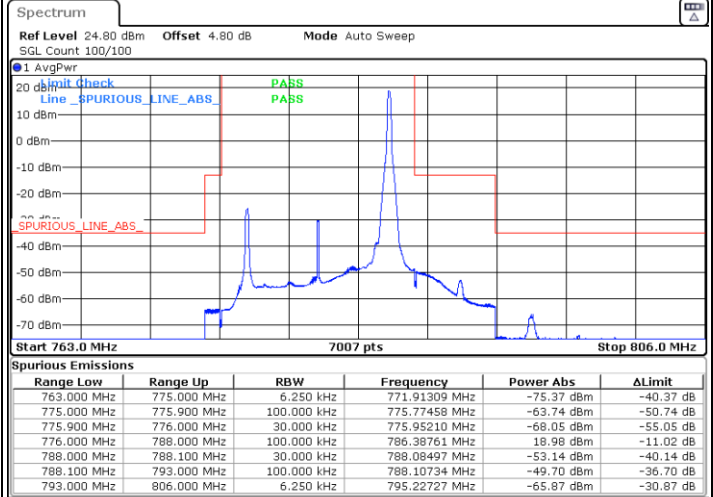
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



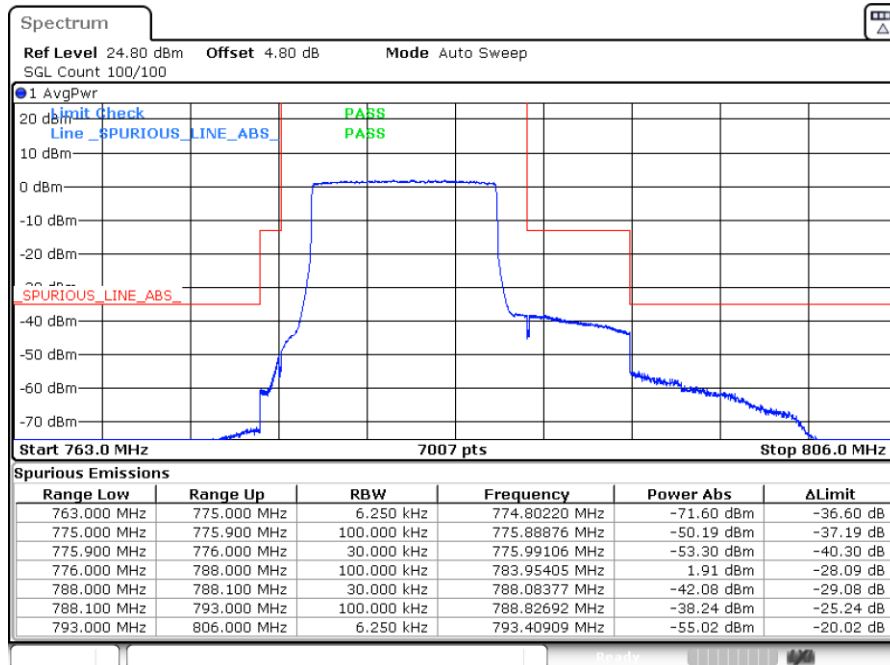
Date: 26.MAY.2024 06:32:40

middle Band Edge / 1 RB



Date: 26.MAY.2024 06:39:59

middle Band Edge / Full RB

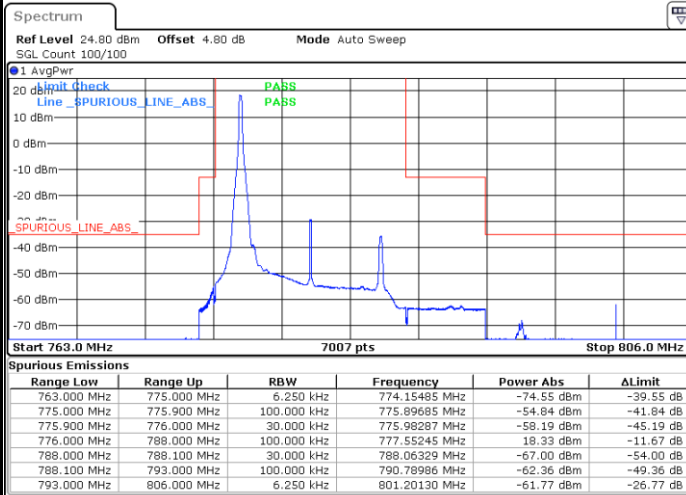


Date: 26.MAY.2024 06:36:19

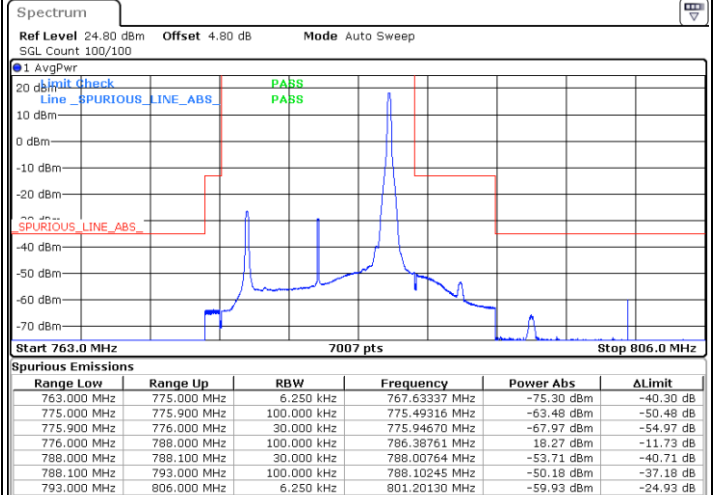


LTE Band 13 / 10MHz / 64QAM

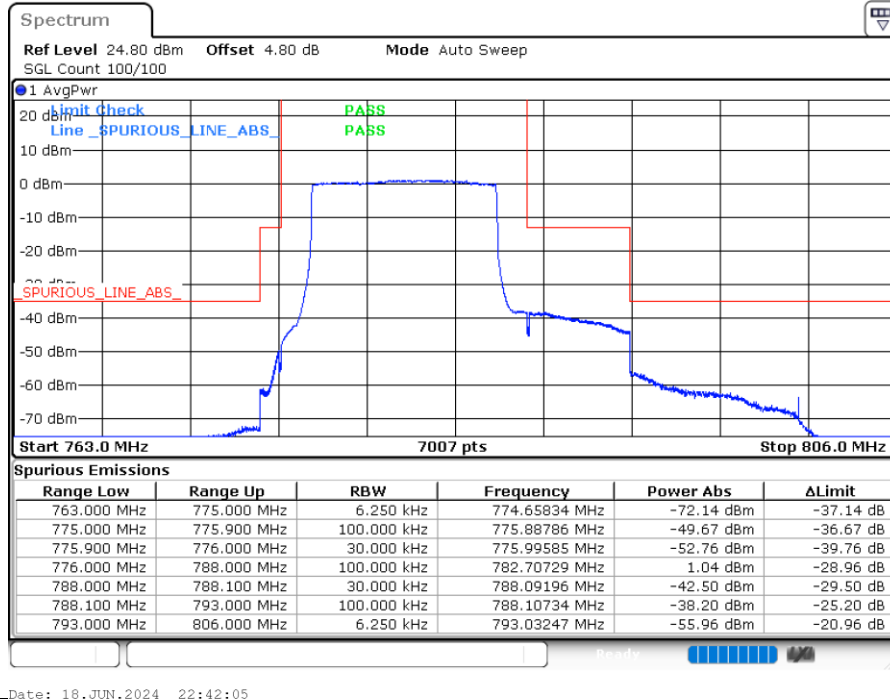
middle Band Edge / 1 RB



middle Band Edge / 1 RB



middle Band Edge / Full RB

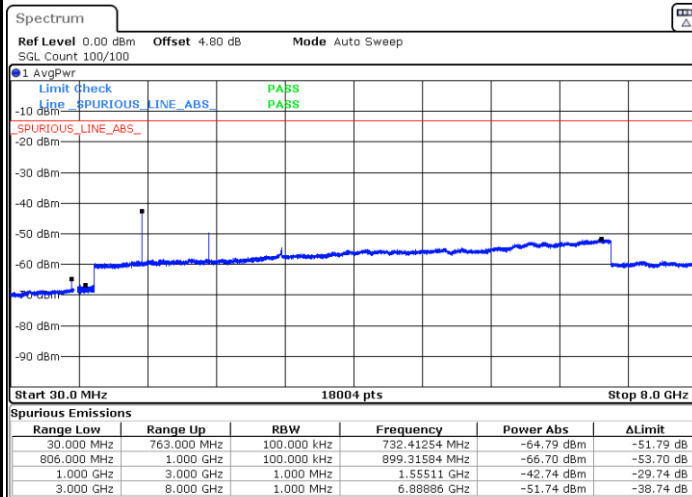




Conducted Spurious Emission

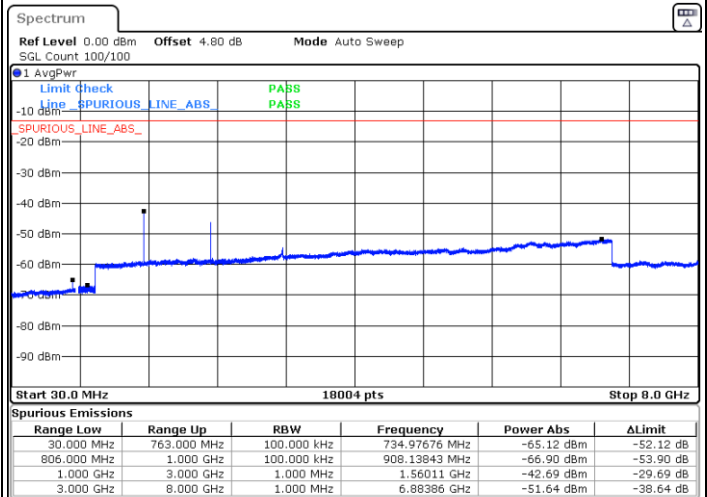
LTE Band 13 / 5MHz

Lowest Channel / QPSK



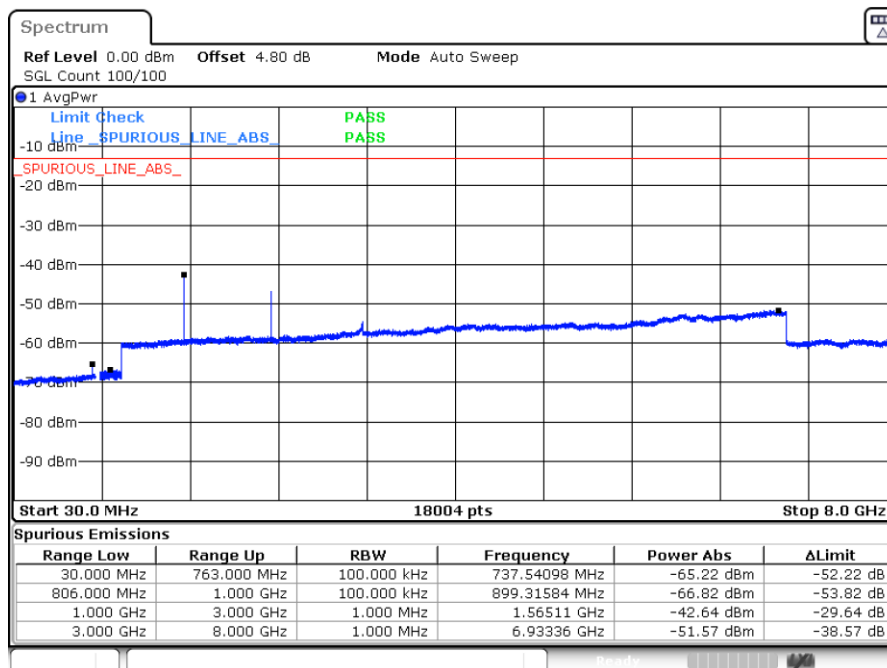
Date: 26.MAY.2024 06:10:05

Middle Channel / QPSK



Date: 26.MAY.2024 06:18:48

Highest Channel / QPSK

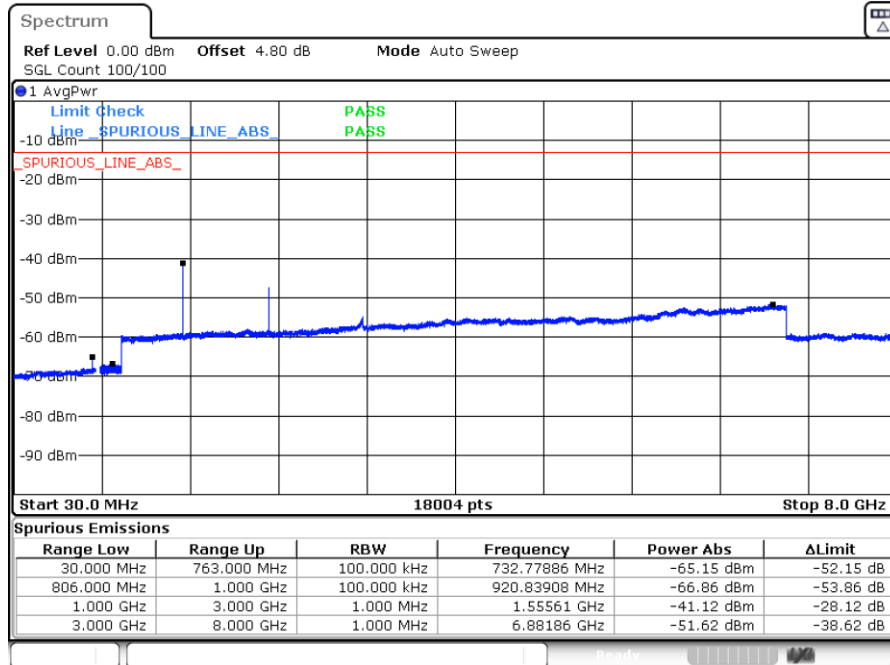


Date: 26.MAY.2024 06:20:10



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 26.MAY.2024 06:29:00

**Frequency Stability**

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0245	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0252	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0211	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0264	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =7.2 V. ; Battery End Point (BEP) =6.6 V. ; Maximum Voltage =8.26 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.