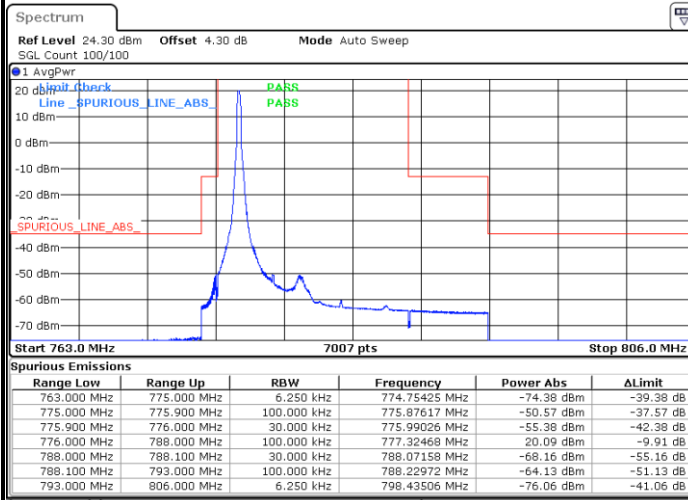


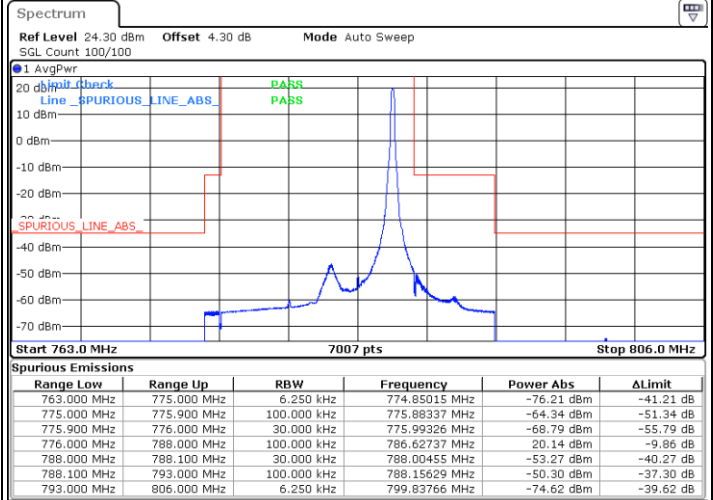


LTE Band 13 / 5MHz / 16QAM

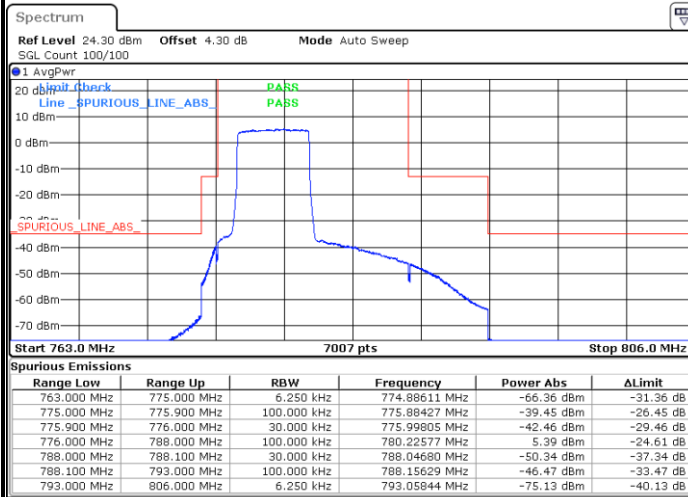
Lowest Band Edge / 1RB



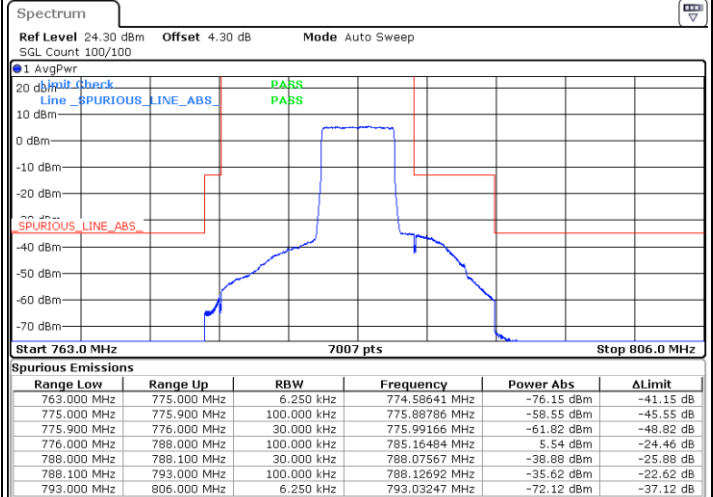
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



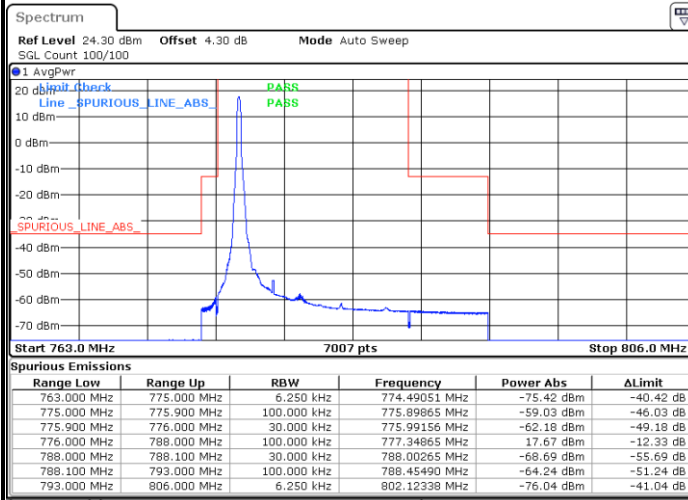
Highest Band Edge / Full RB



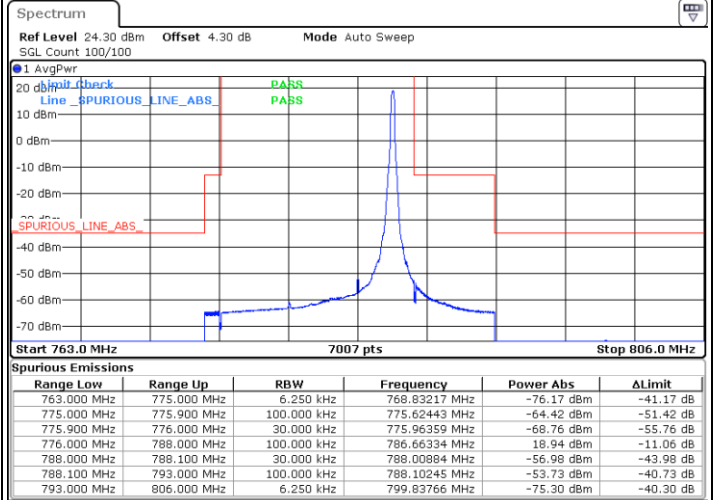


LTE Band 13 / 5MHz / 64QAM

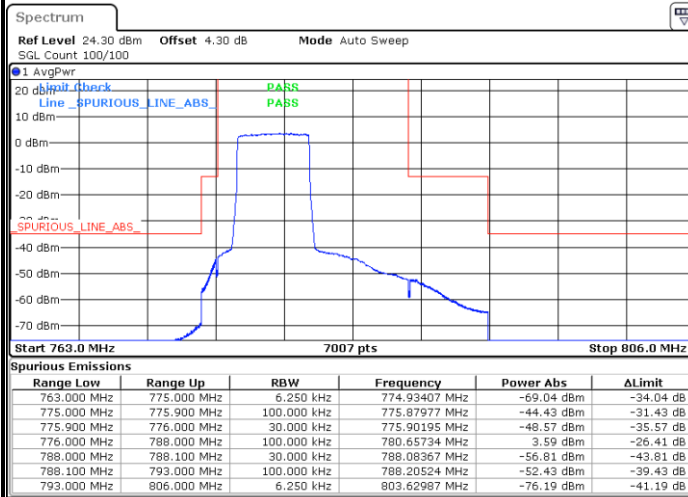
Lowest Band Edge / 1RB



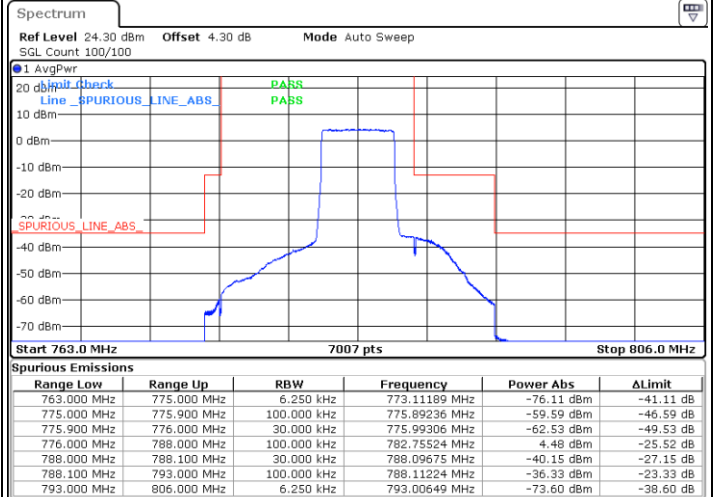
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



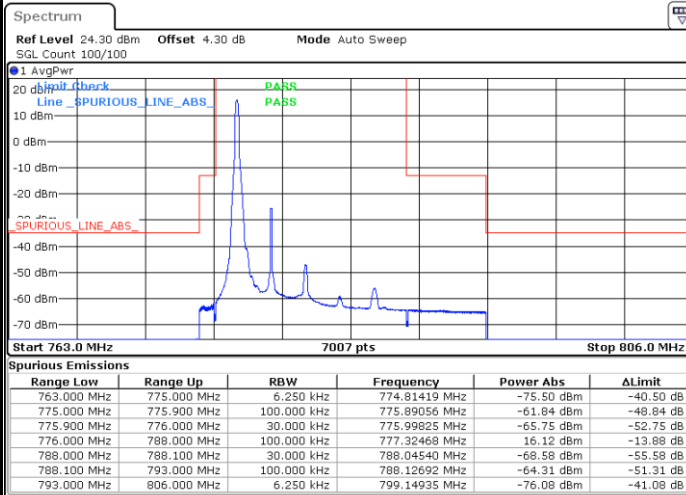
Highest Band Edge / Full RB



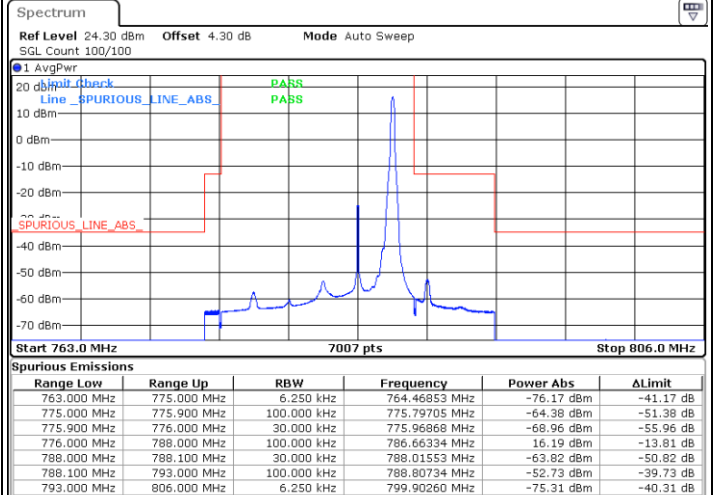


LTE Band 13 / 5MHz / 256QAM

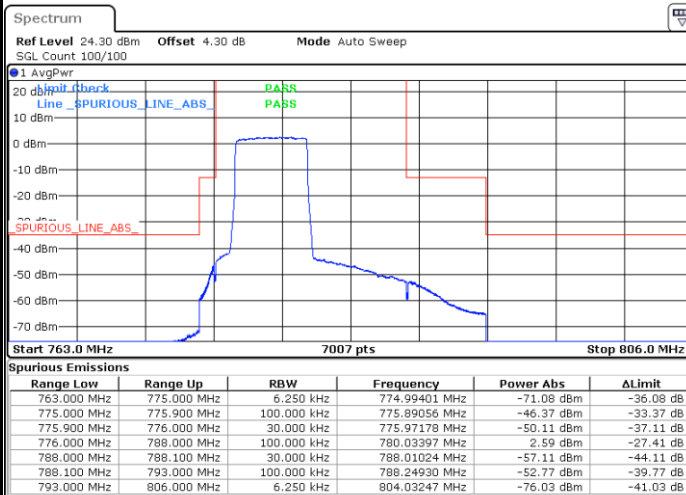
Lowest Band Edge / 1RB



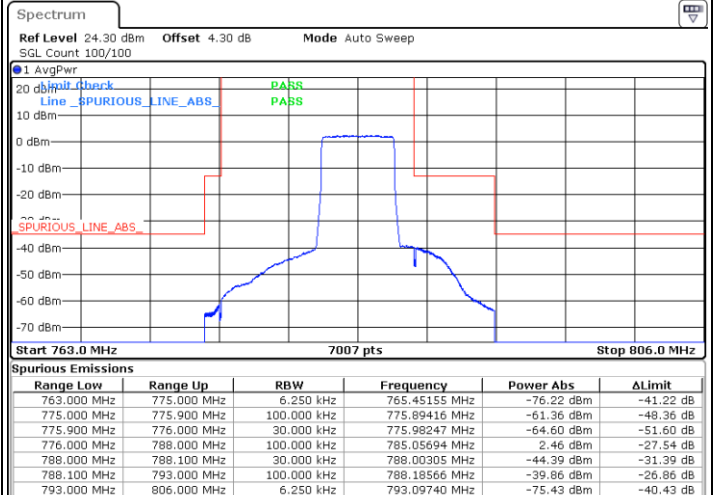
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



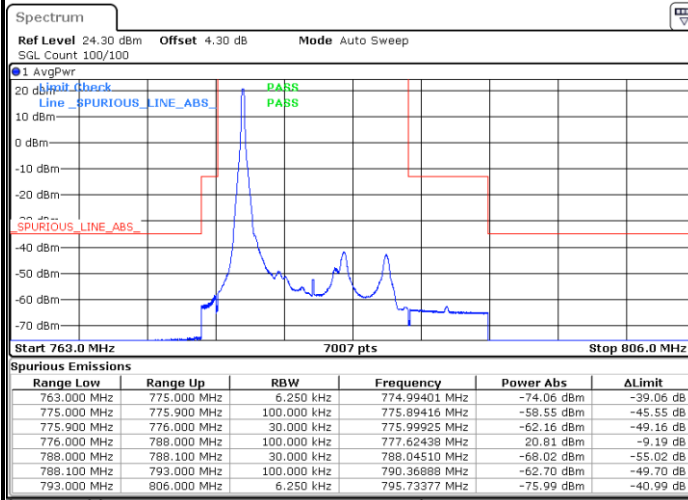
Highest Band Edge / Full RB



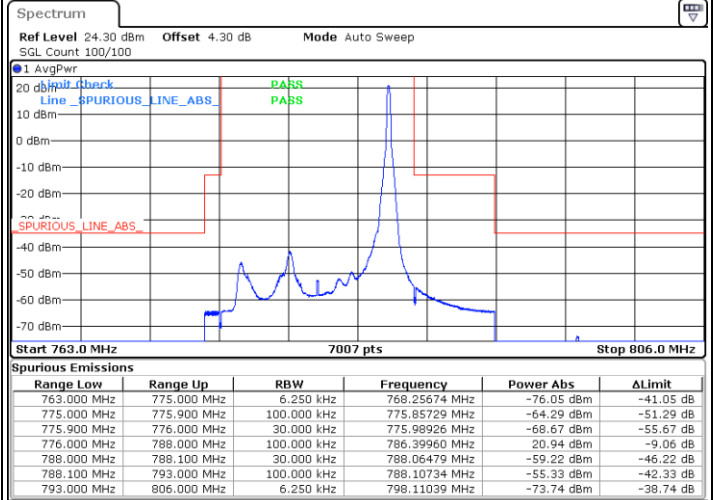


LTE Band 13 / 10MHz / QPSK

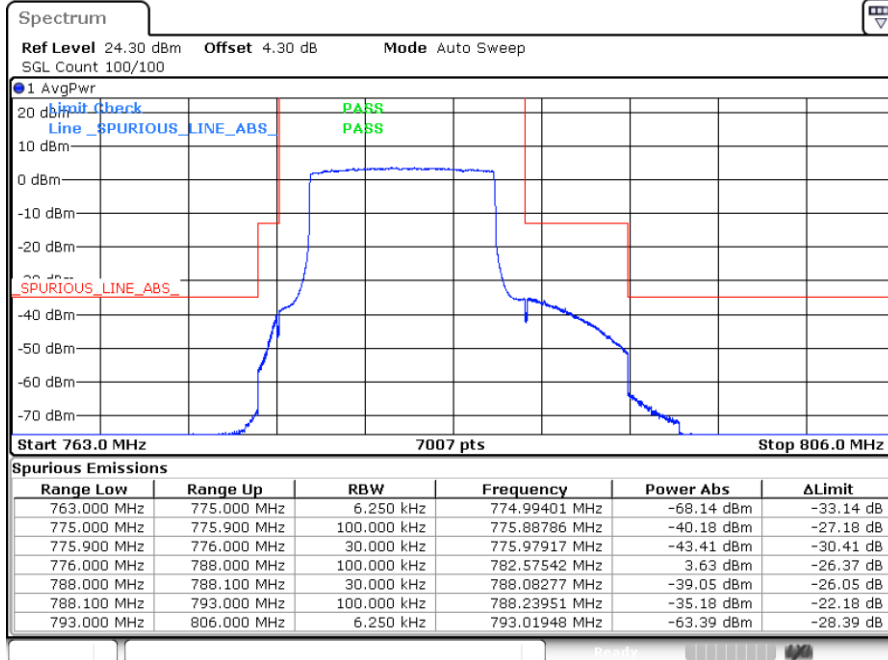
middle Band Edge / 1 RB



middle Band Edge / 1 RB



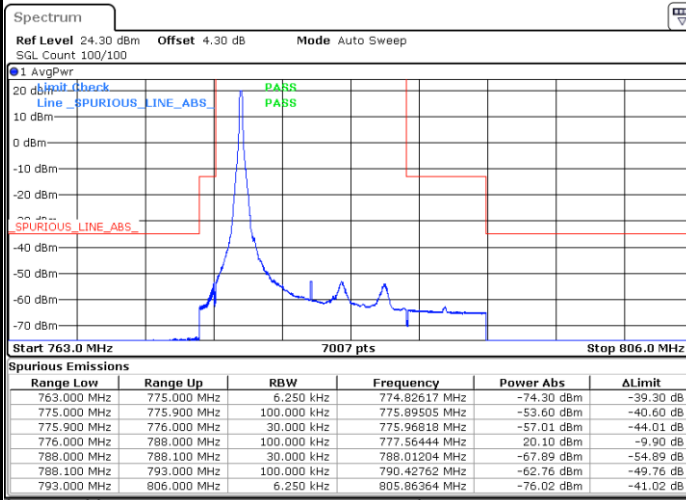
Middle Band Edge / Full RB



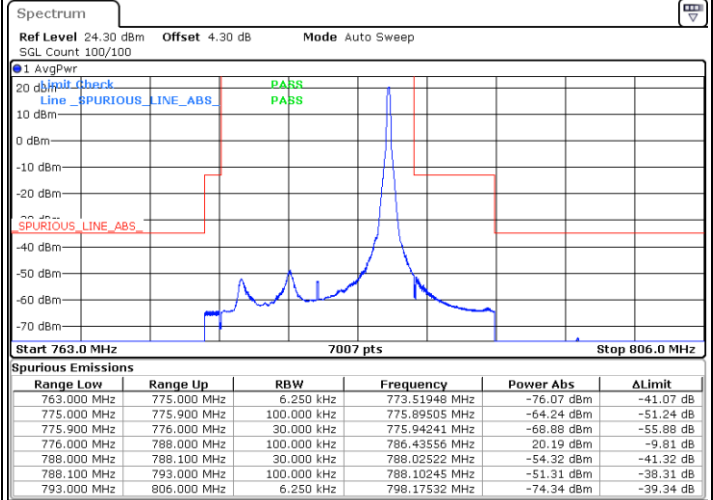


LTE Band 13 / 10MHz / 16QAM

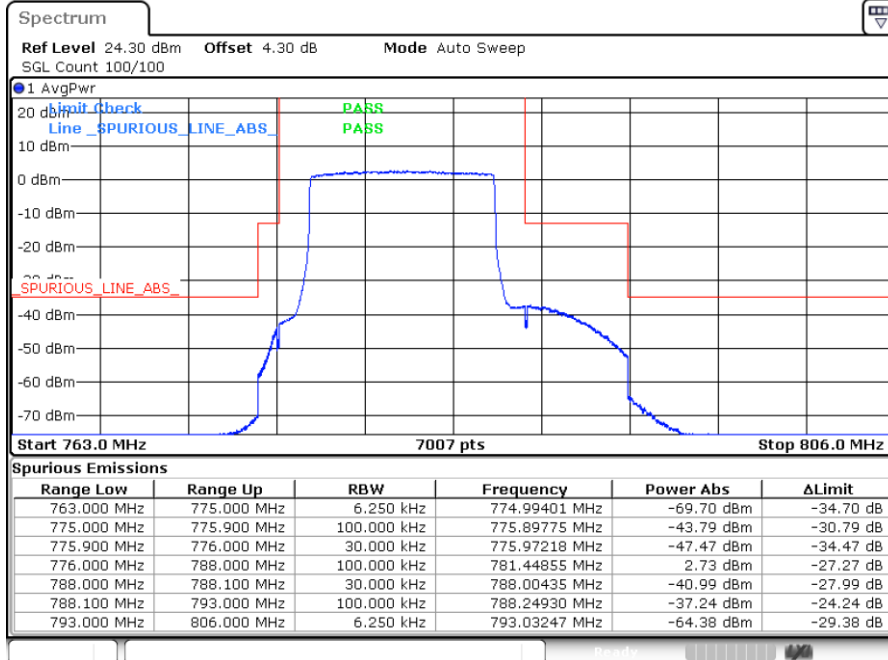
middle Band Edge / 1 RB



middle Band Edge / 1 RB



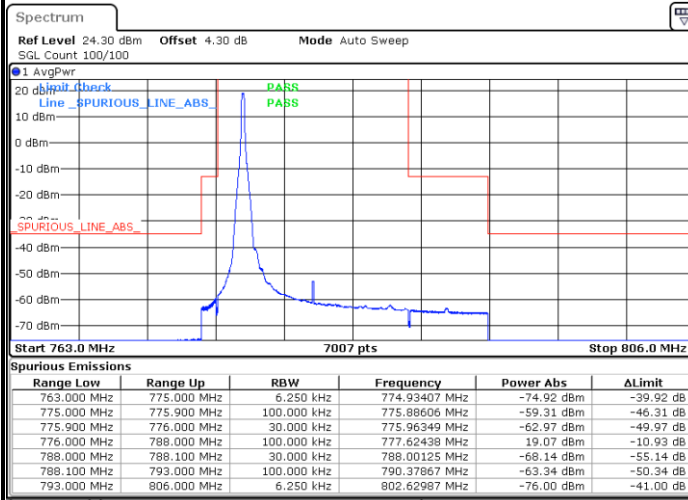
middle Band Edge / Full RB





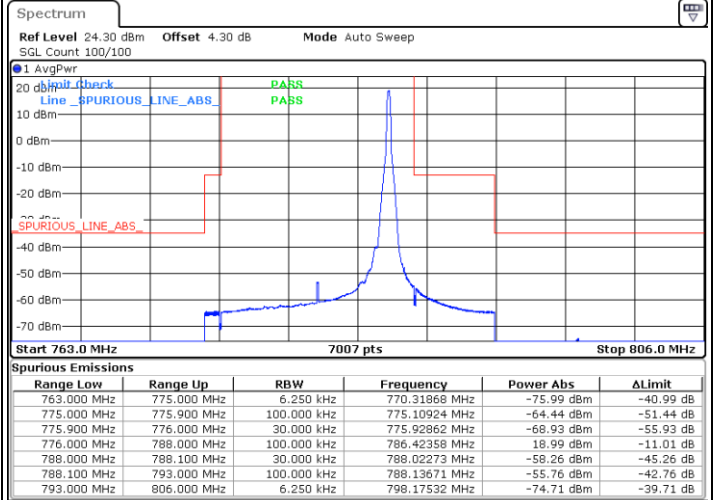
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



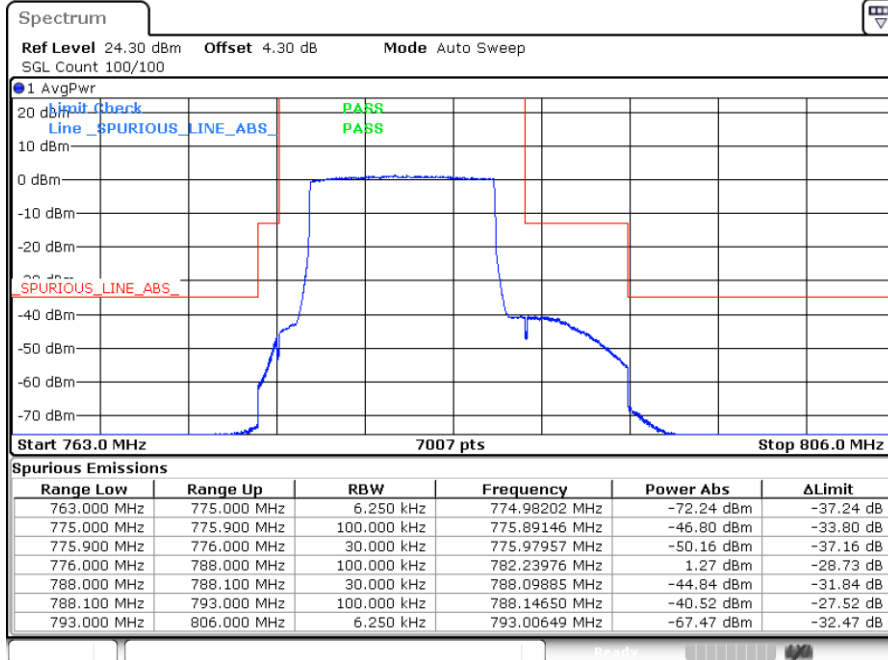
Date: 1.FEB.2024 02:37:05

middle Band Edge / 1 RB



Date: 1.FEB.2024 02:52:44

middle Band Edge / Full RB

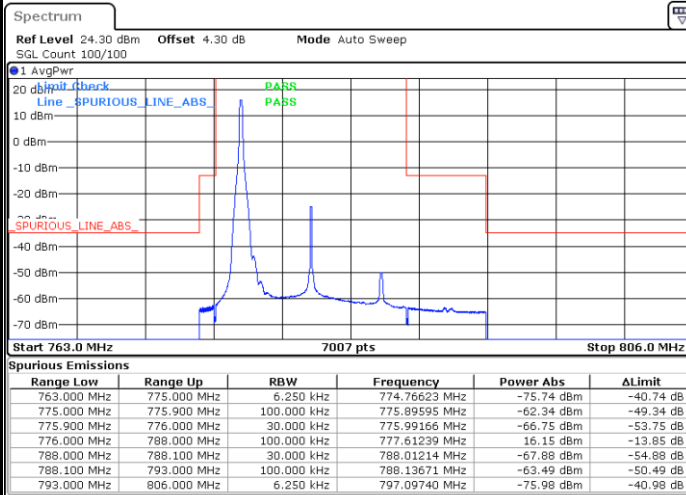


Date: 1.FEB.2024 02:45:25



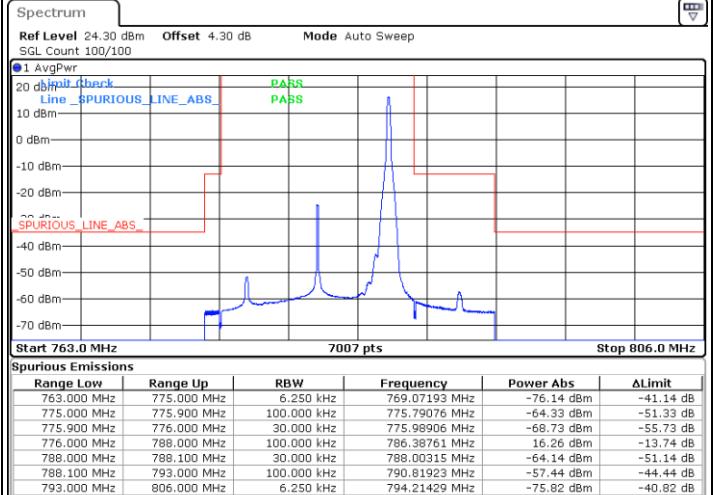
LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB



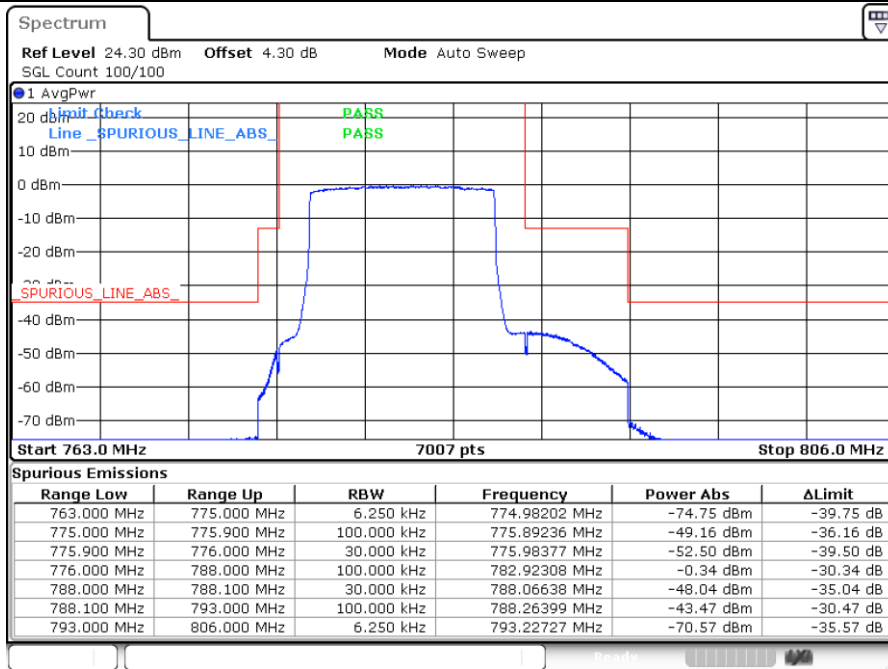
Date: 1.FEB.2024 02:38:45

middle Band Edge / 1 RB



Date: 1.FEB.2024 02:54:34

middle Band Edge / Full RB



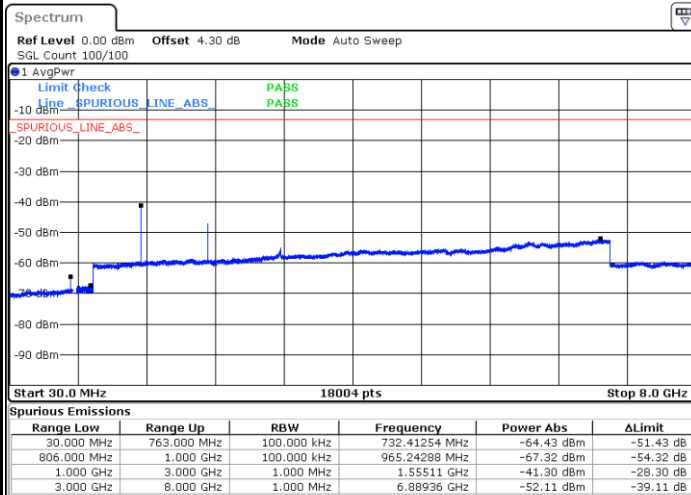
Date: 1.FEB.2024 02:47:15



Conducted Spurious Emission

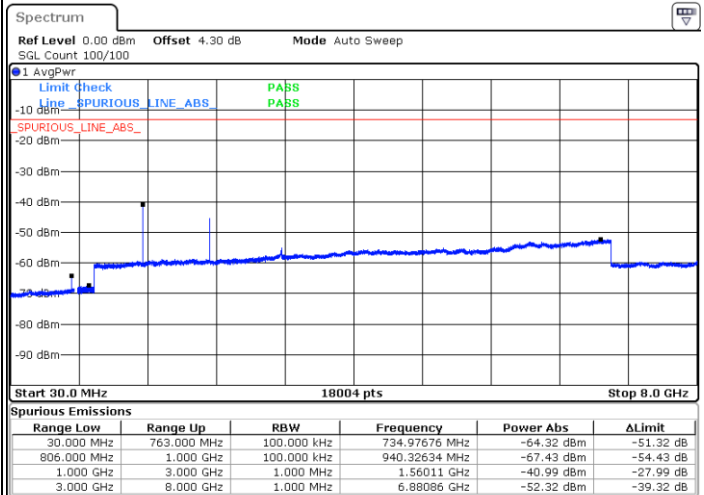
LTE Band 13 / 5MHz

Lowest Channel / QPSK



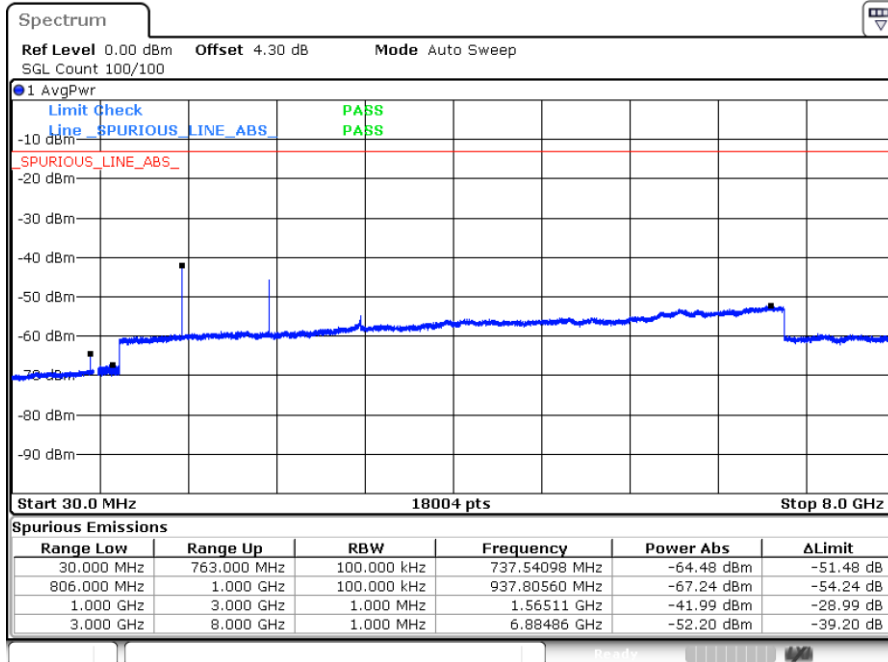
Date: 1.FEB.2024 01:41:09

Middle Channel / QPSK



Date: 1.FEB.2024 02:05:03

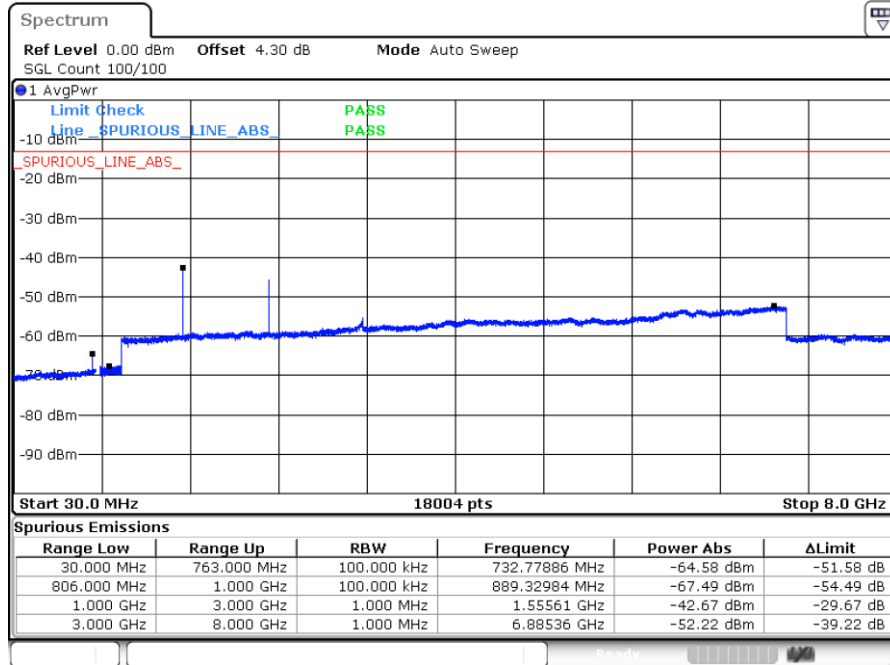
Highest Channel / QPSK



Date: 1.FEB.2024 02:07:05

LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 1.FEB.2024 02:27:14

**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	0.0025	PASS
40	Normal Voltage	0.0046	
30	Normal Voltage	0.0053	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0034	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0009	
20	Minimum Voltage	0.0027	

Note:

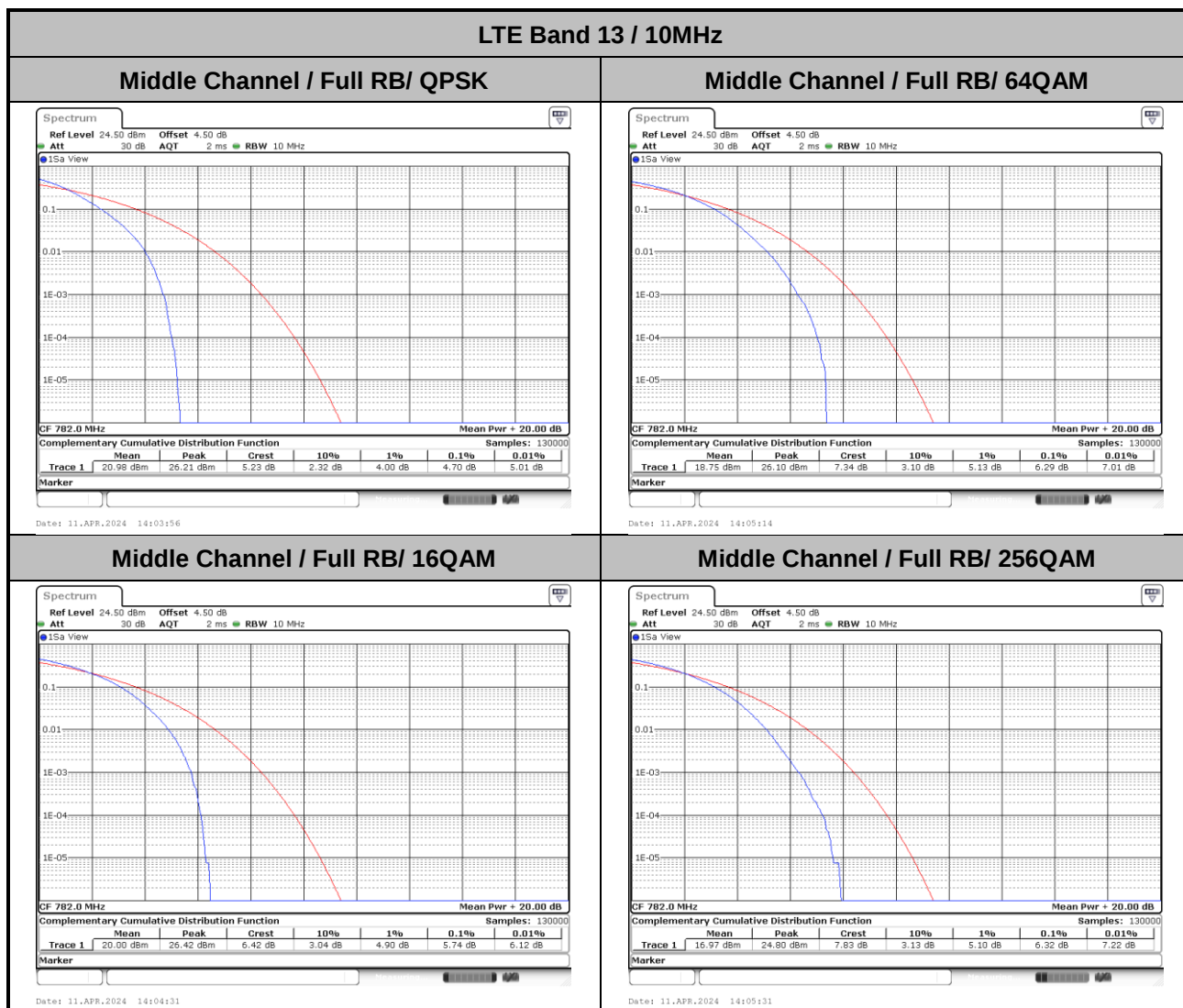
1. Normal Voltage =3.8 V. ; Minimum Voltage =3.3 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13 (other PA)

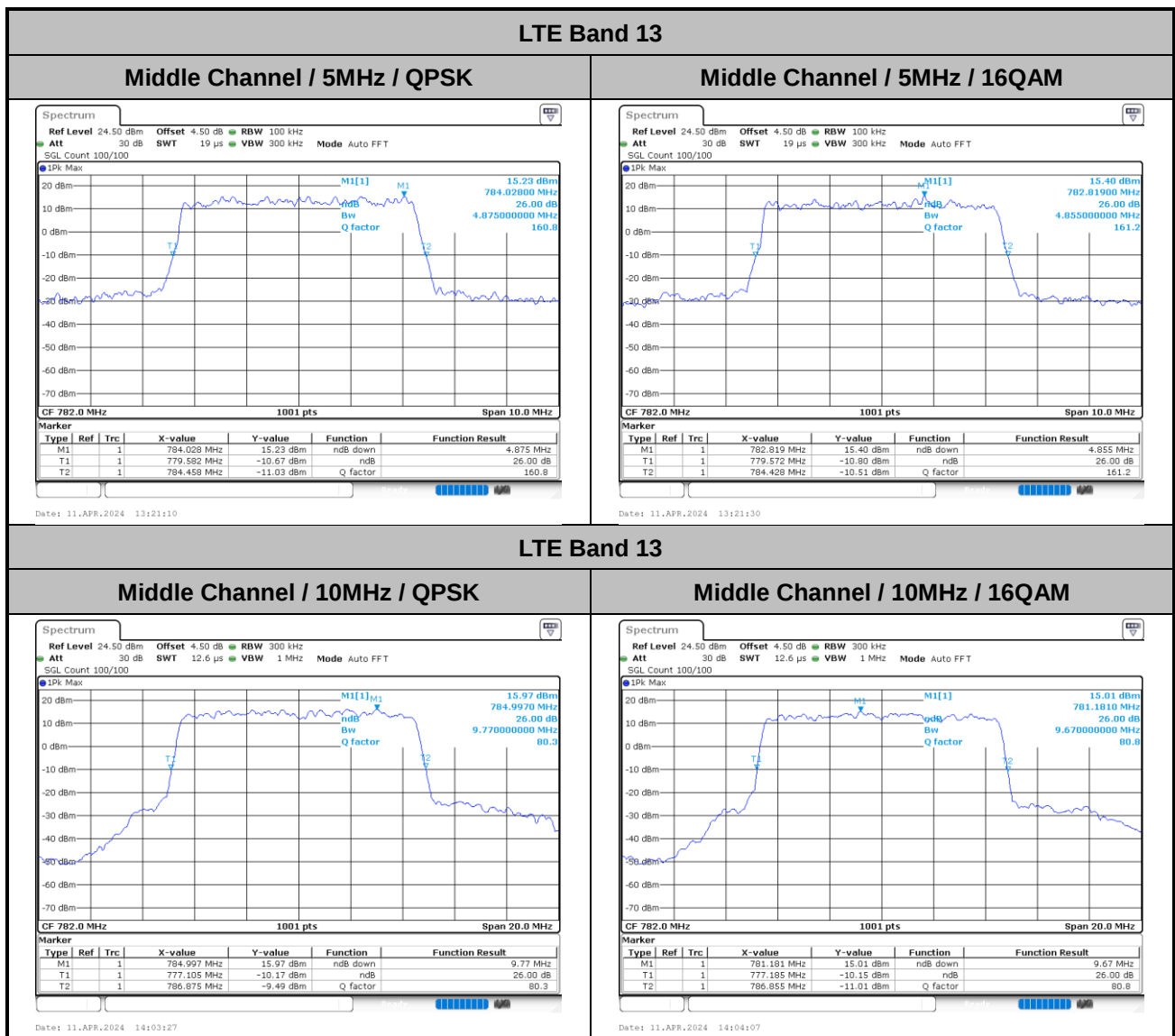
Peak-to-Average Ratio

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	4.70	5.74	6.29	6.32	PASS



**26dB Bandwidth**

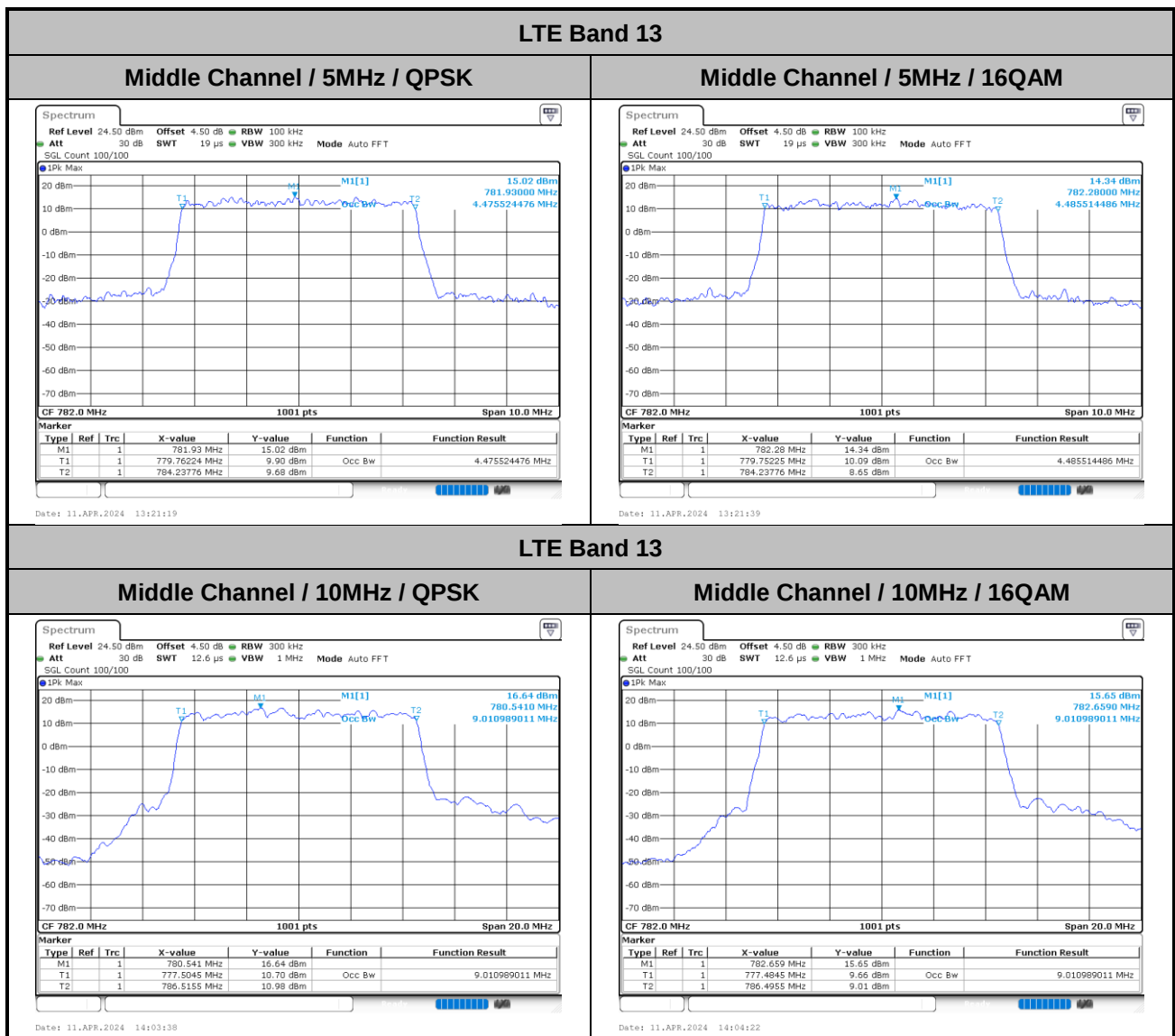
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.88	4.86
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.77	9.67





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.48	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01

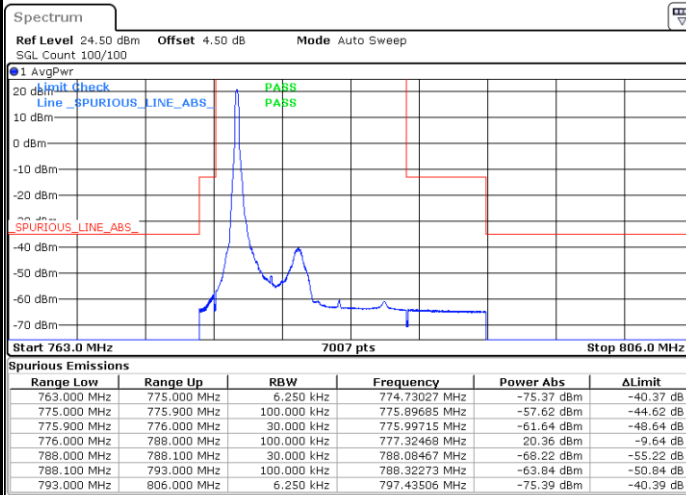




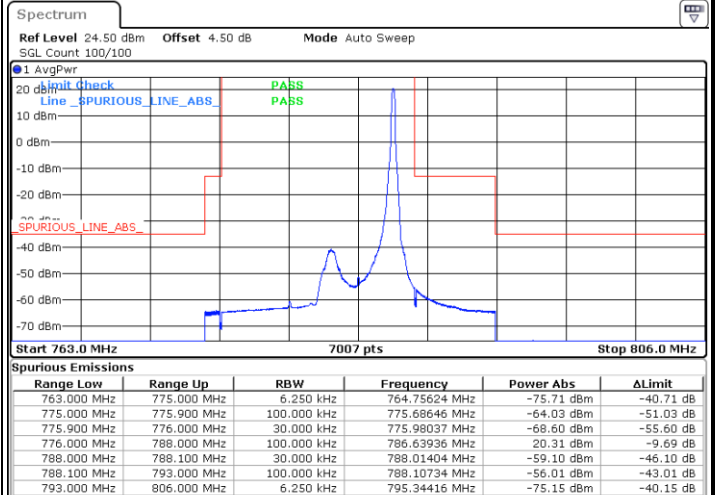
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

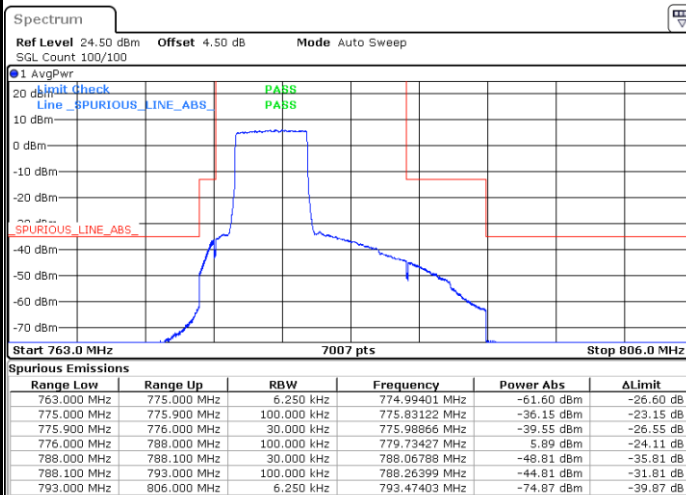
Lowest Band Edge / 1 RB



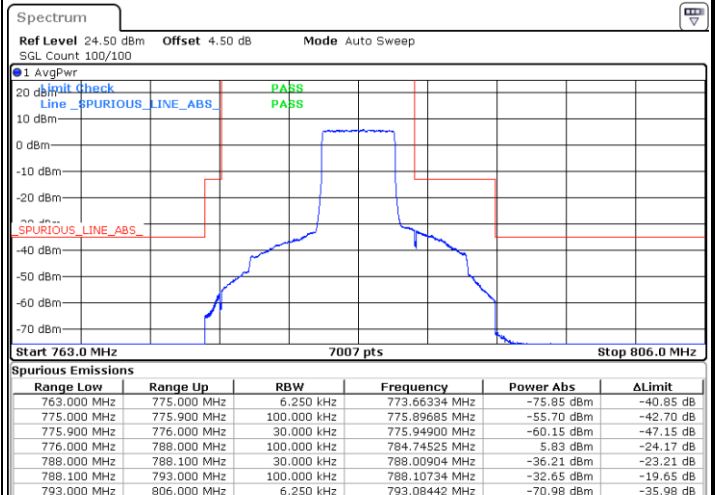
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



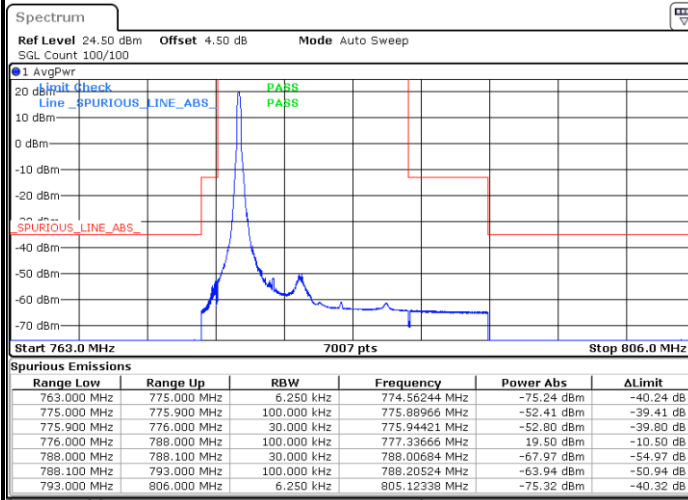
Highest Band Edge / Full RB



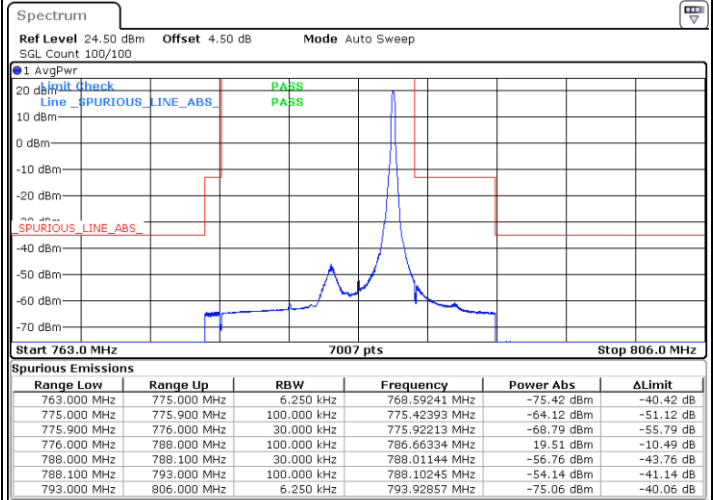


LTE Band 13 / 5MHz / 16QAM

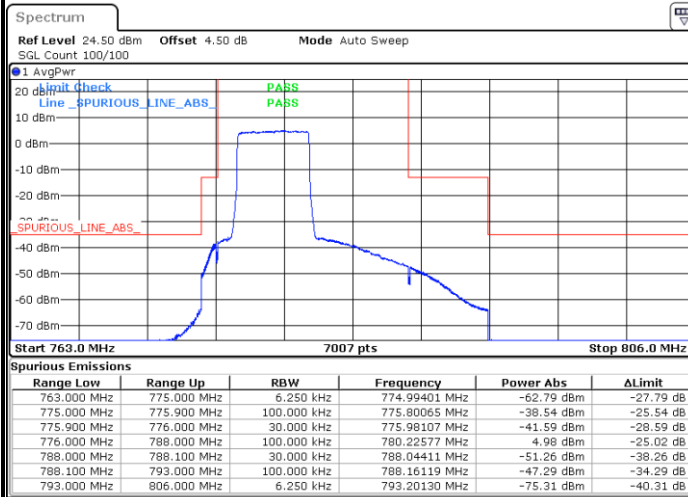
Lowest Band Edge / 1RB



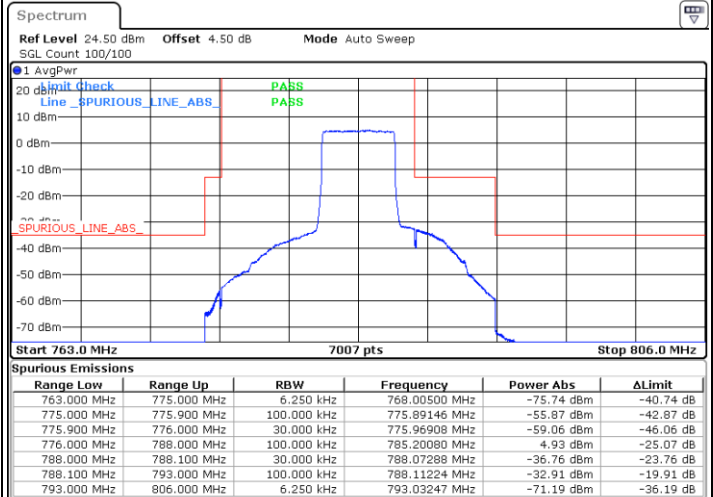
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



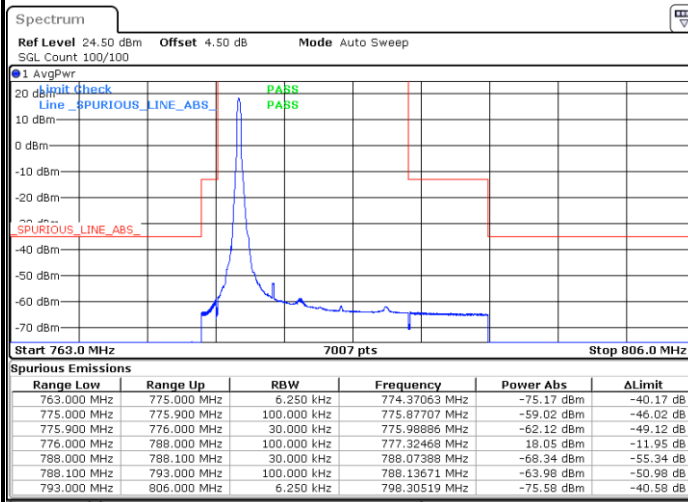
Highest Band Edge / Full RB



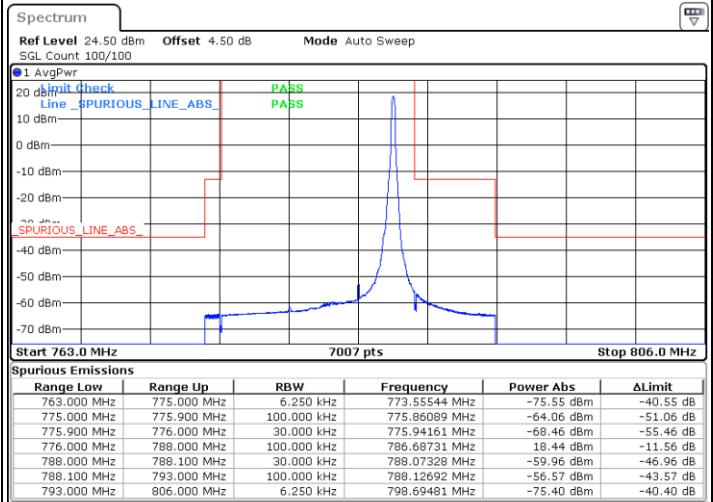


LTE Band 13 / 5MHz / 64QAM

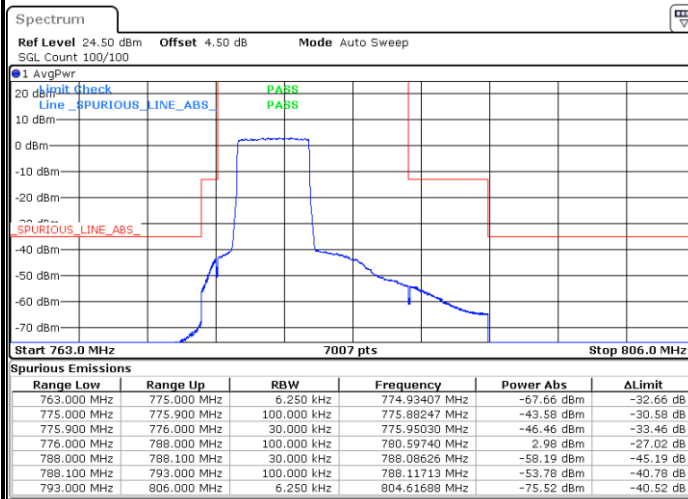
Lowest Band Edge / 1RB



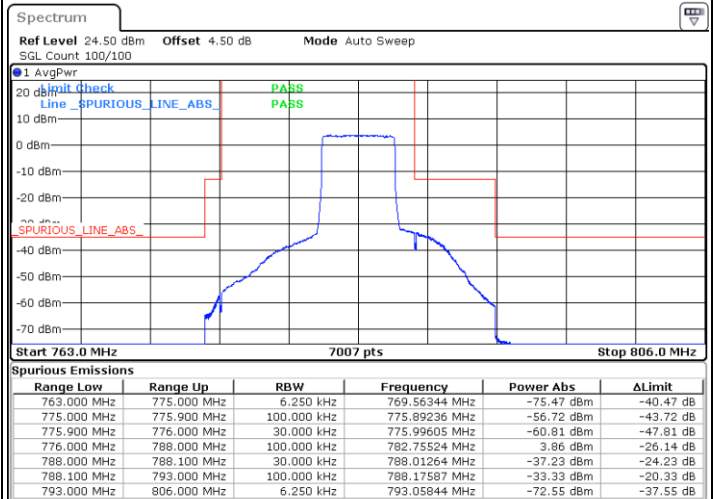
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



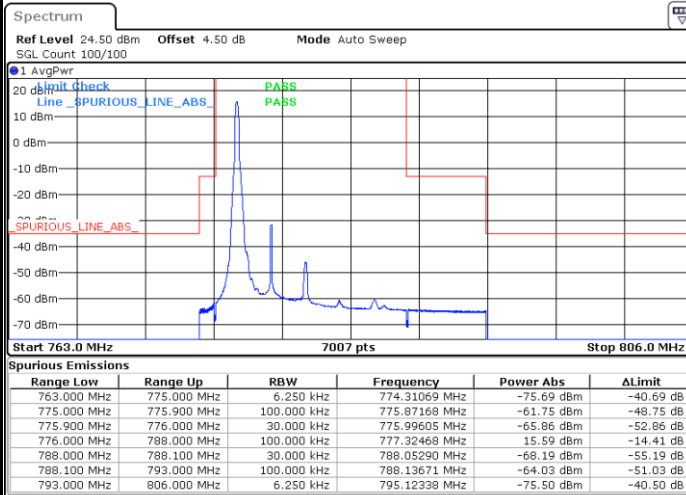
Highest Band Edge / Full RB



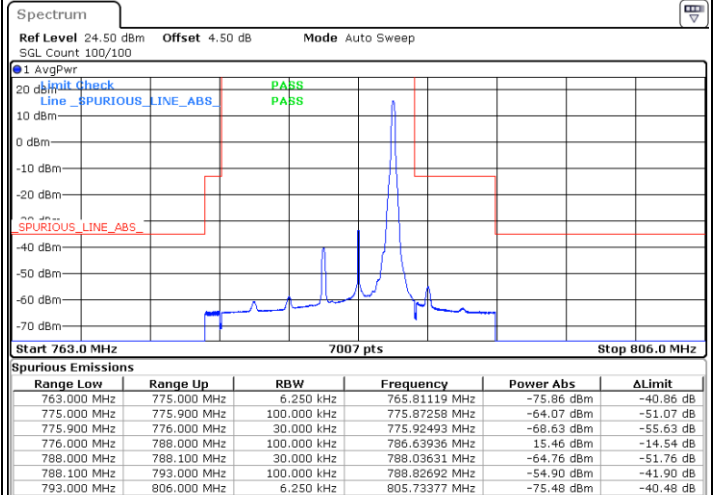


LTE Band 13 / 5MHz / 256QAM

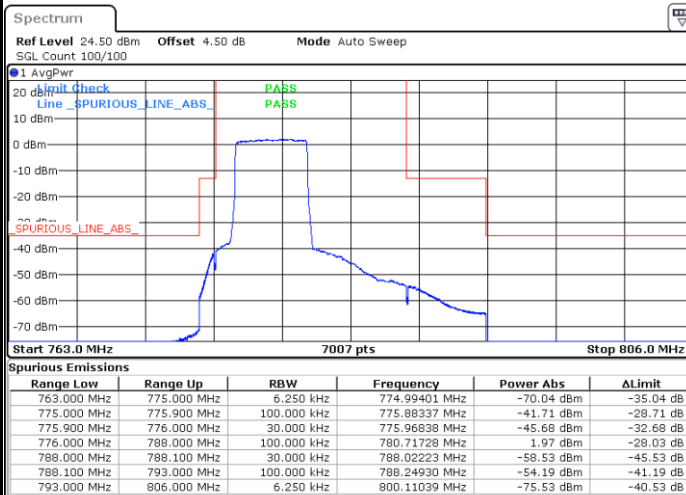
Lowest Band Edge / 1RB



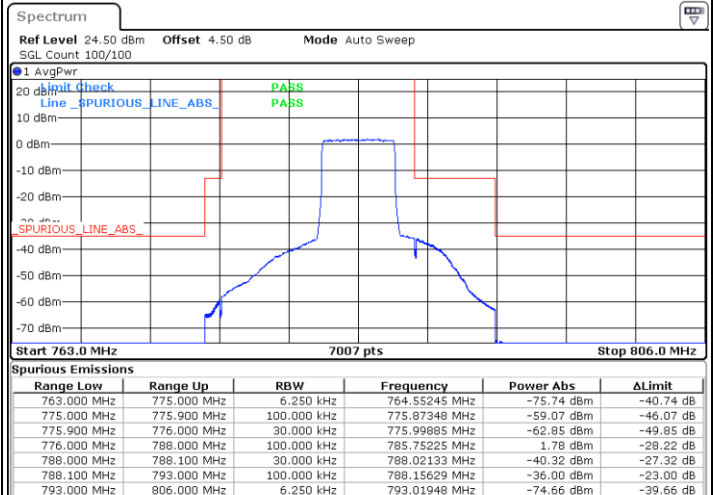
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



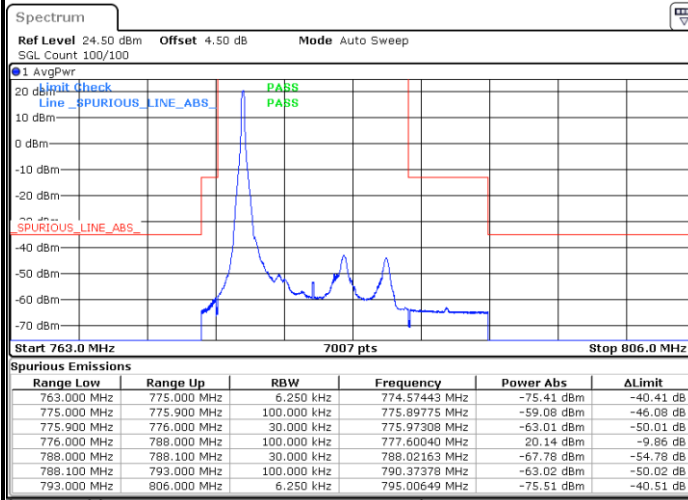
Highest Band Edge / Full RB





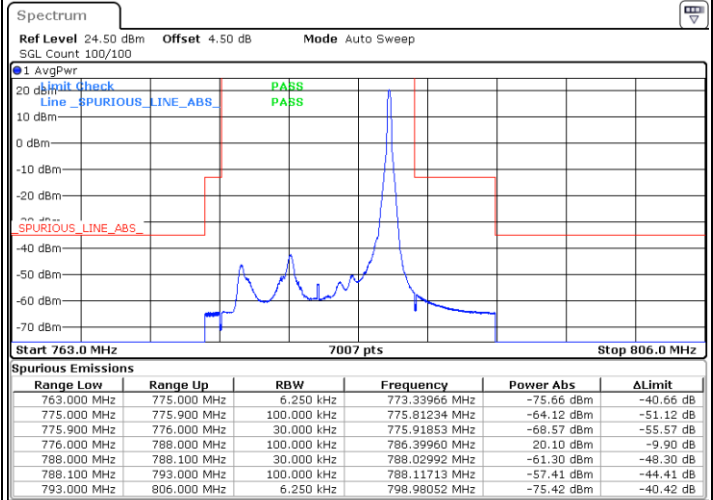
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



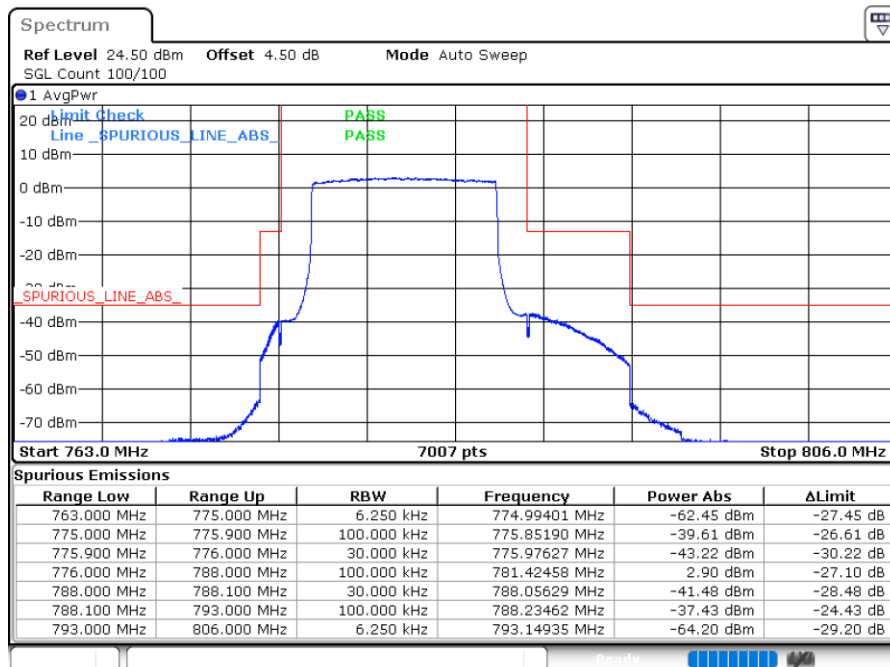
Date: 11.APR.2024 13:39:34

middle Band Edge / 1 RB



Date: 11.APR.2024 13:53:19

Middle Band Edge / Full RB

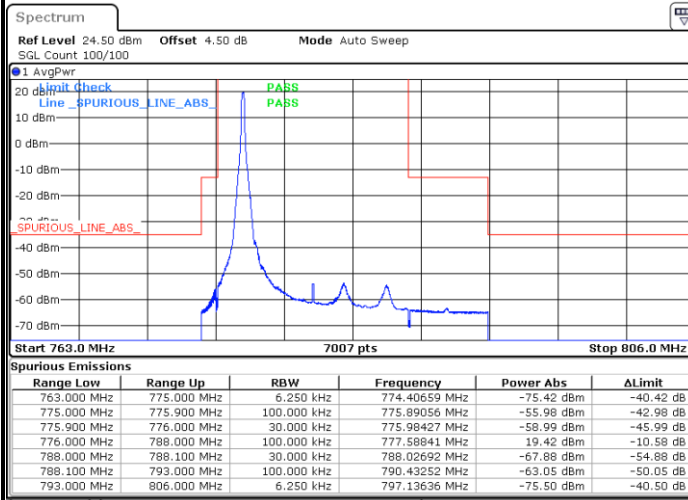


Date: 11.APR.2024 13:56:23



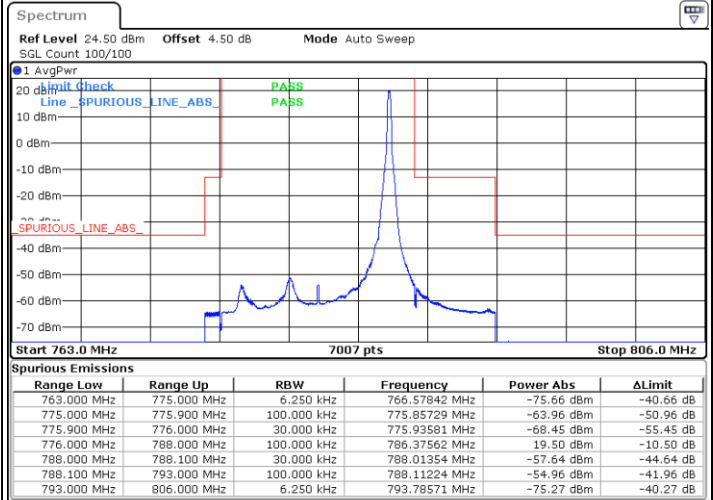
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



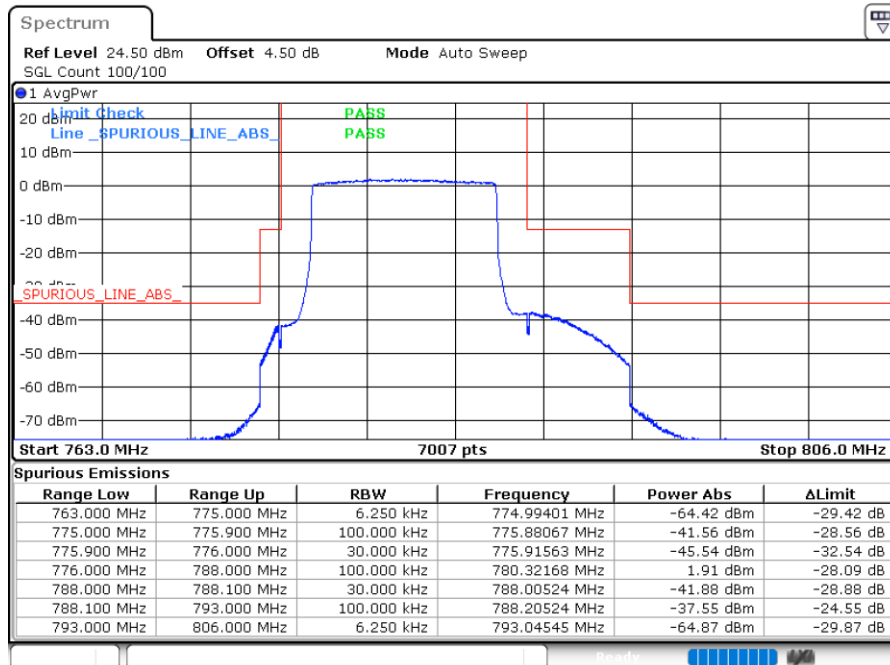
Date: 11.APR.2024 13:41:39

middle Band Edge / 1 RB



Date: 11.APR.2024 13:51:03

middle Band Edge / Full RB

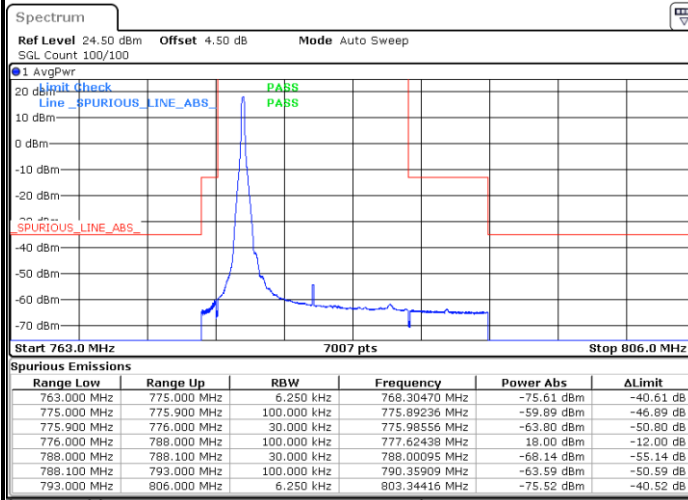


Date: 11.APR.2024 13:58:29



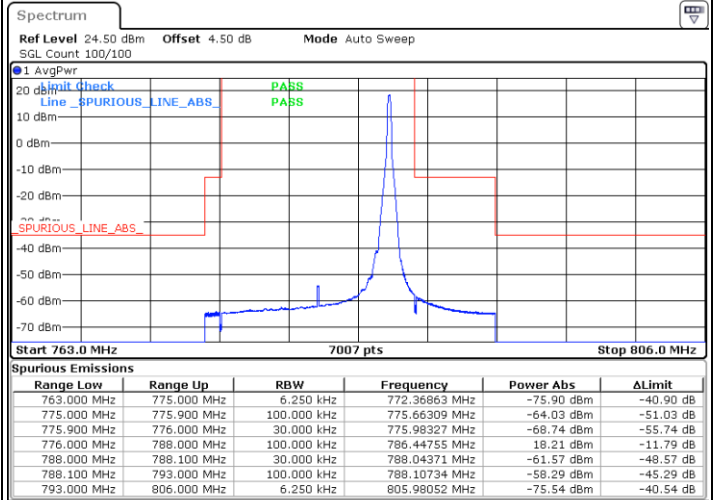
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



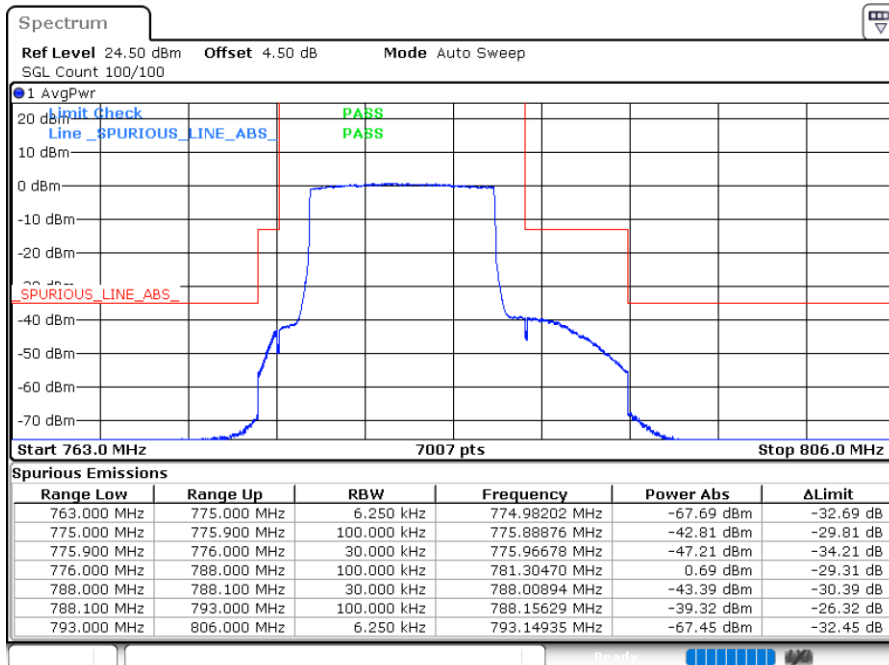
Date: 11.APR.2024 13:42:52

middle Band Edge / 1 RB



Date: 11.APR.2024 13:48:09

middle Band Edge / Full RB

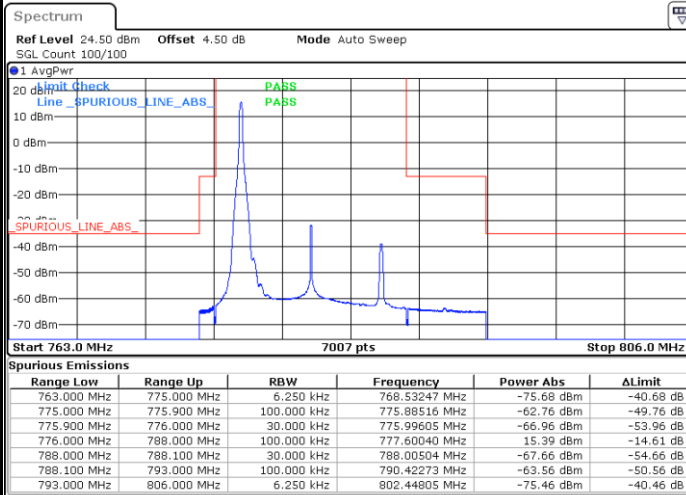


Date: 11.APR.2024 14:01:30



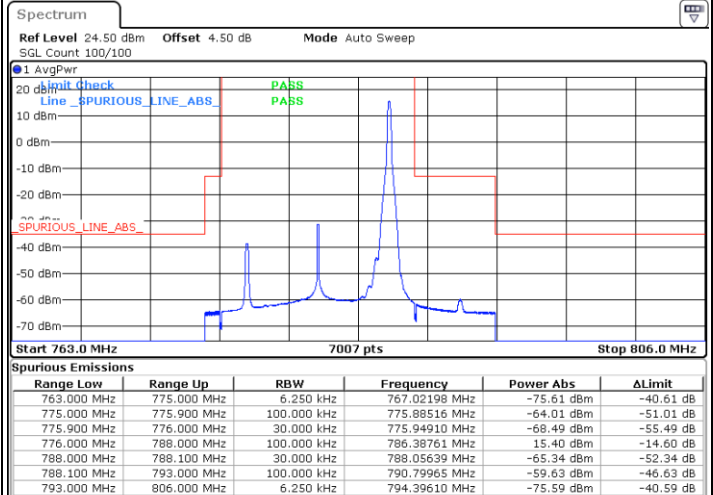
LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB



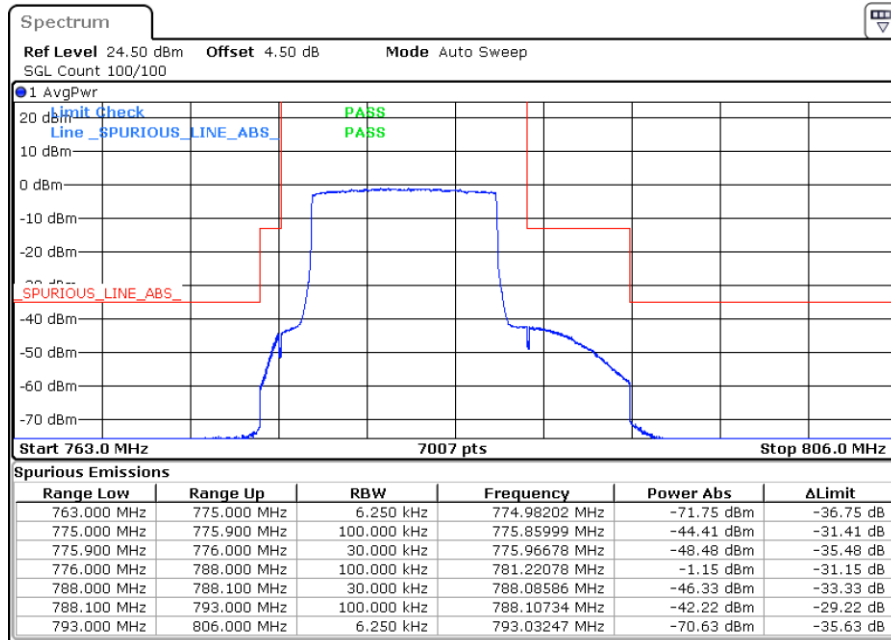
Date: 11.APR.2024 13:44:55

middle Band Edge / 1 RB



Date: 11.APR.2024 13:46:45

middle Band Edge / Full RB



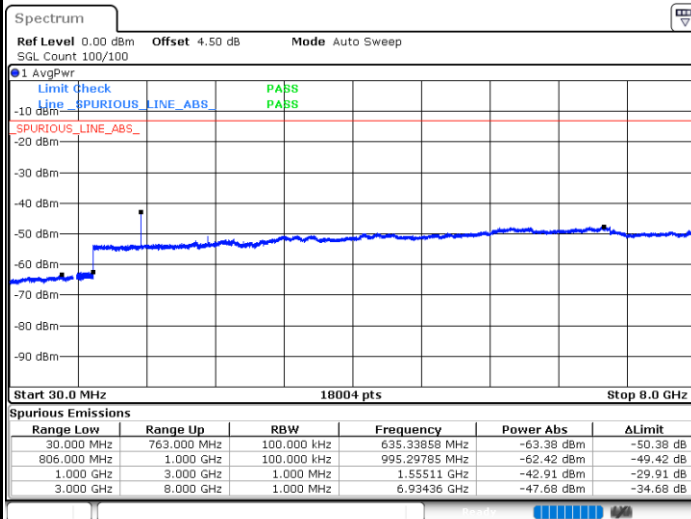
Date: 11.APR.2024 14:02:47



Conducted Spurious Emission

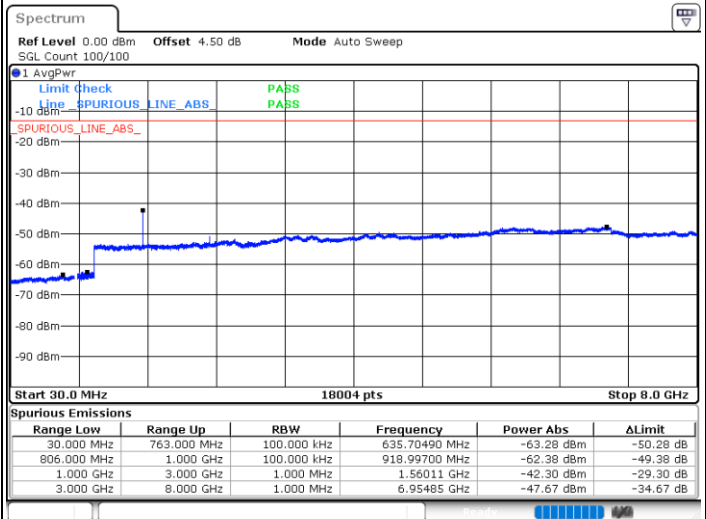
LTE Band 13 / 5MHz

Lowest Channel / QPSK



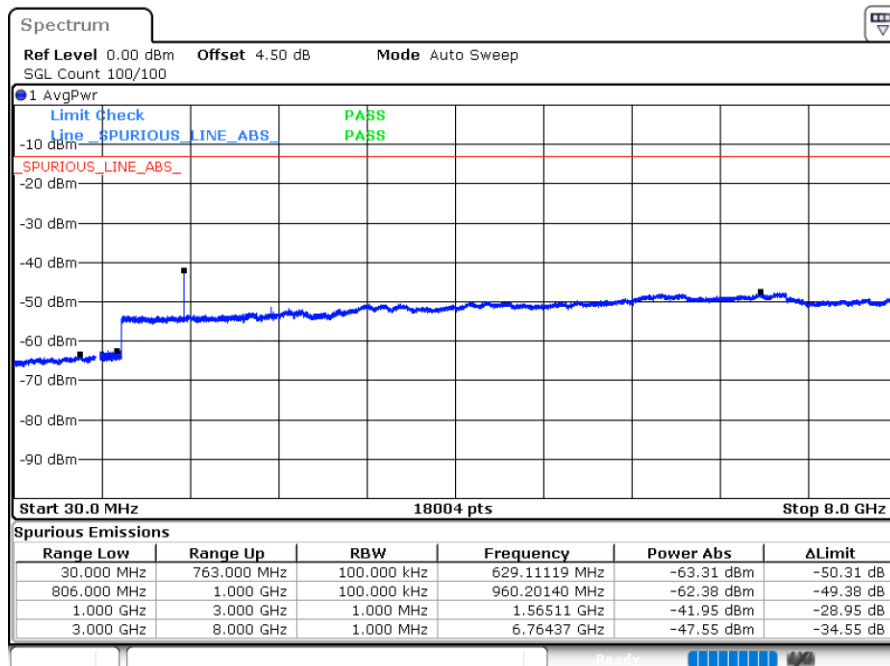
Date: 11.APR.2024 13:10:49

Middle Channel / QPSK



Date: 11.APR.2024 13:22:38

Highest Channel / QPSK

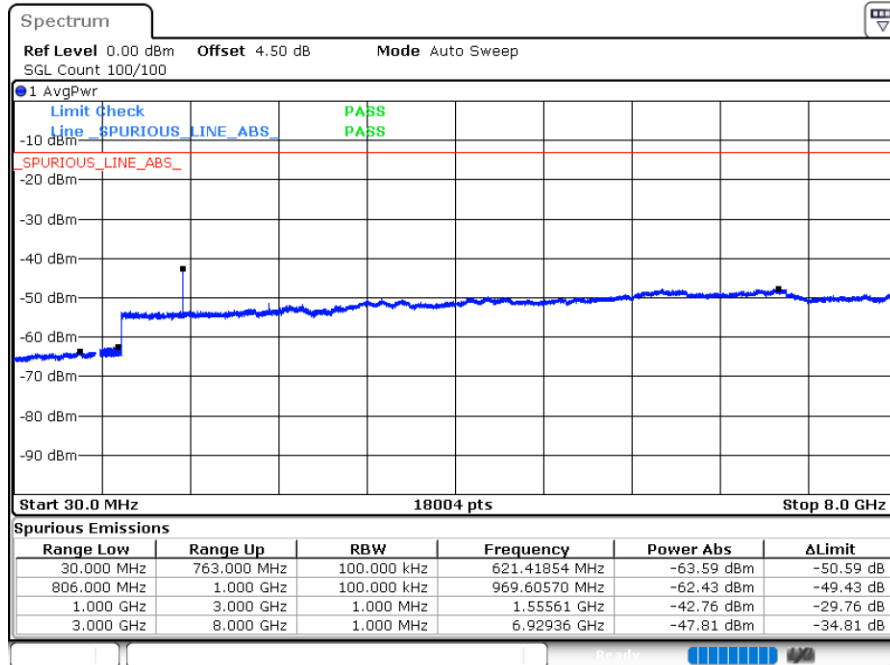


Date: 11.APR.2024 13:23:46



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 11.APR.2024 13:38:04

**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	0.0021	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0053	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0066	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0057	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0061	
20	Battery End Point	0.0054	

Note:

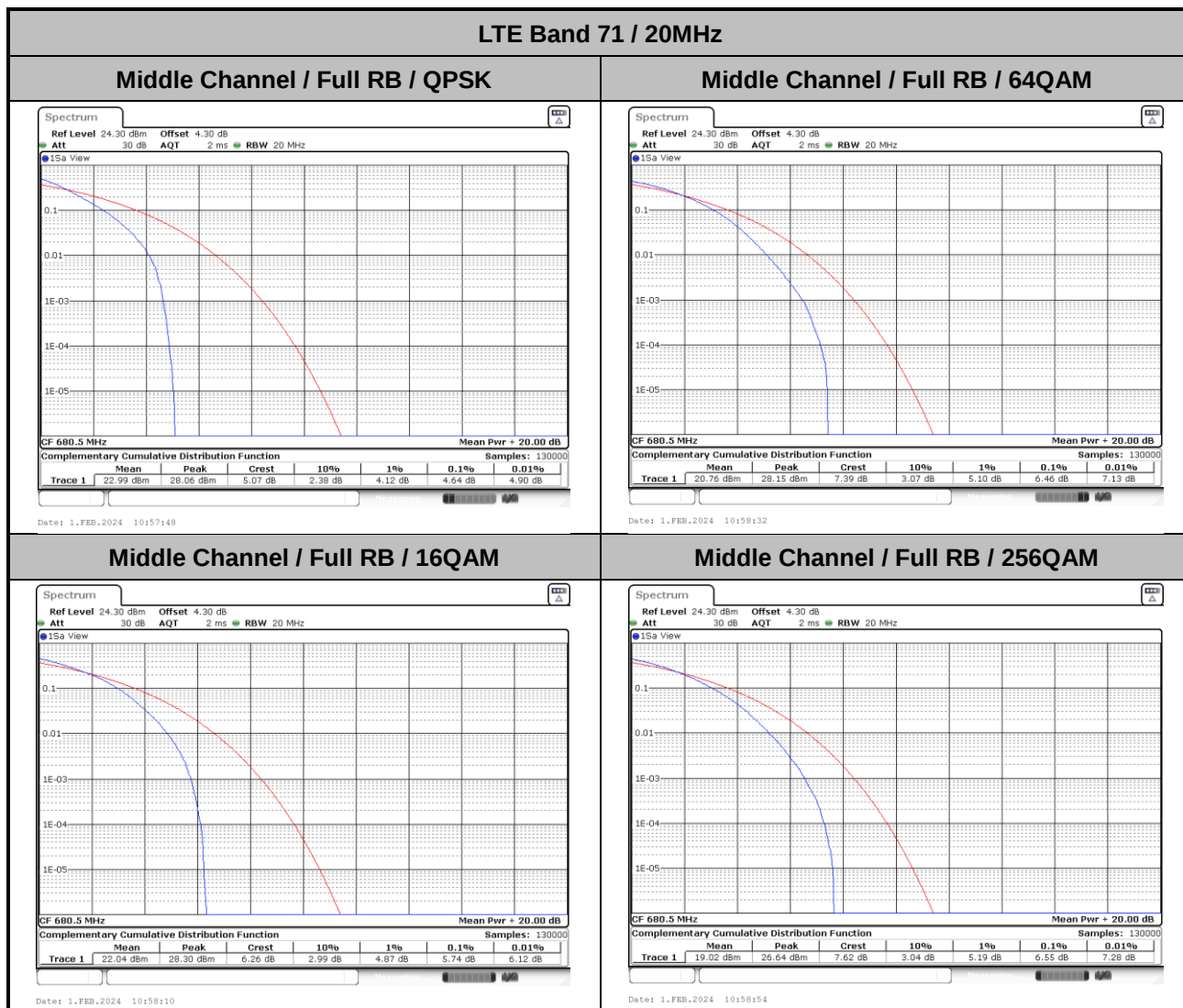
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 71 (Main PA)

Peak-to-Average Ratio

Mode	LTE Band 71 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.64	5.74	6.46	6.55	PASS



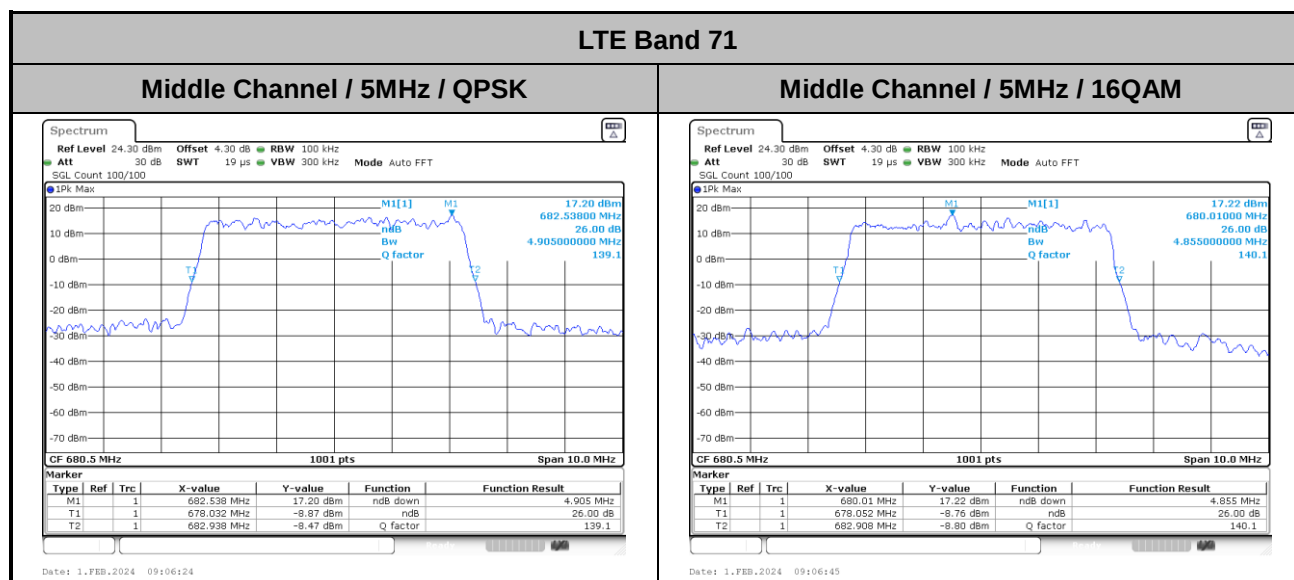
**26dB Bandwidth**

Mode	LTE Band 71 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.91	4.86

Mode	LTE Band 71 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.67	9.85

Mode	LTE Band 71 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.48	14.39

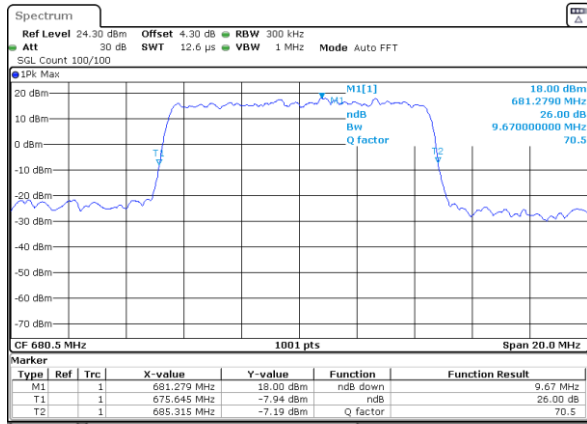
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.70	18.74





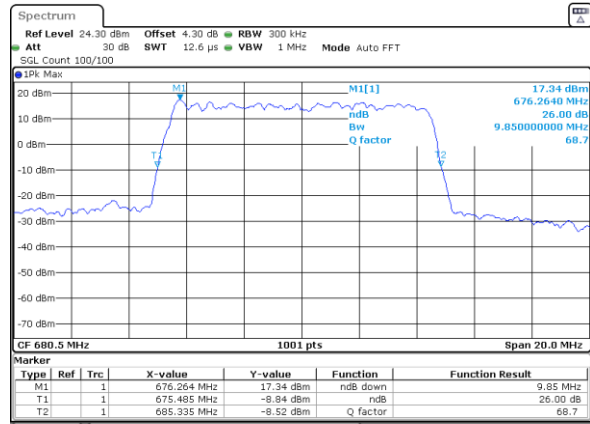
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 1.FEB.2024 09:39:57

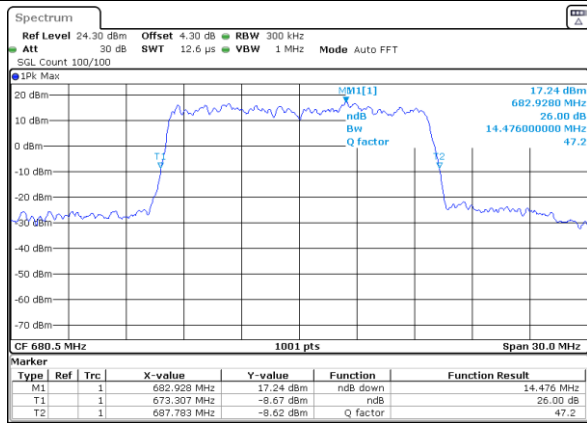
Middle Channel / 10MHz / 16QAM



Date: 1.FEB.2024 09:40:17

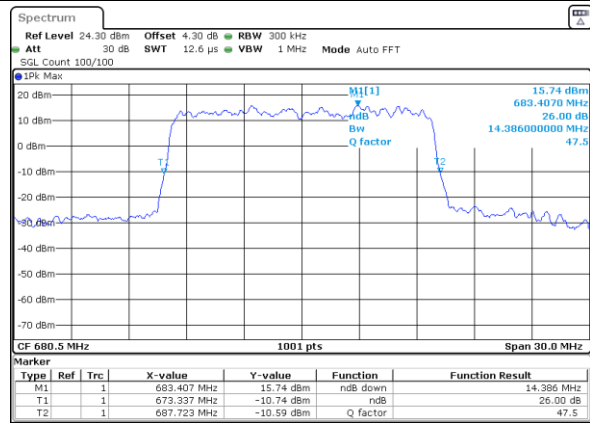
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 1.FEB.2024 10:12:05

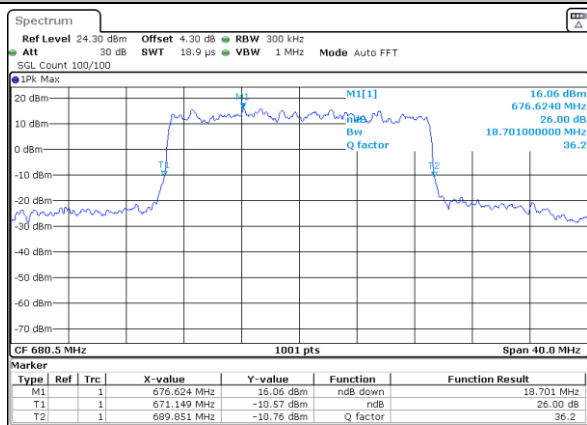
Middle Channel / 15MHz / 16QAM



Date: 1.FEB.2024 10:12:26

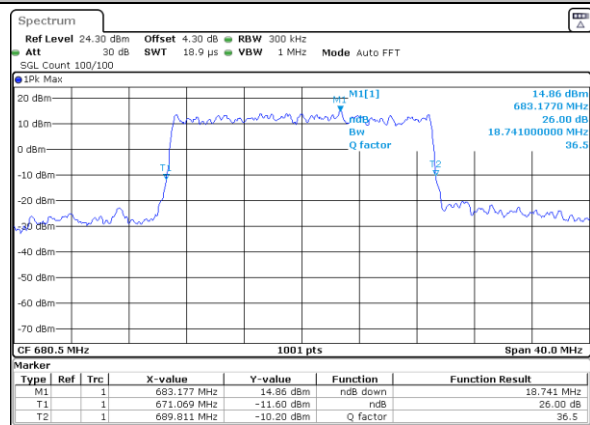
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 1.FEB.2024 10:43:58

Middle Channel / 20MHz / 16QAM



Date: 1.FEB.2024 10:44:19



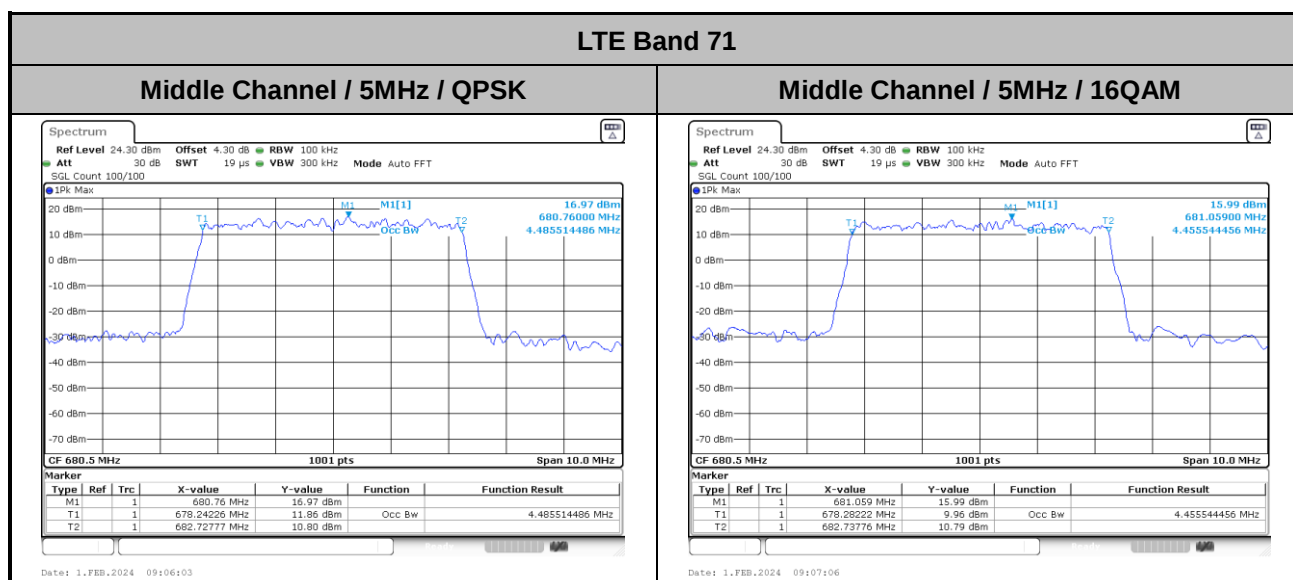
Occupied Bandwidth

Mode	LTE Band 71 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.46

Mode	LTE Band 71 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	8.99

Mode	LTE Band 71 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.49

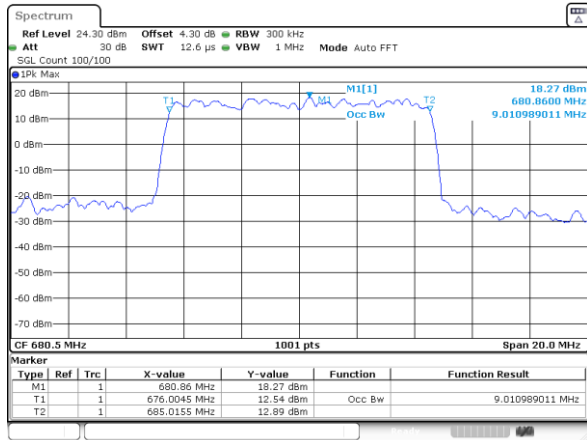
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	17.86





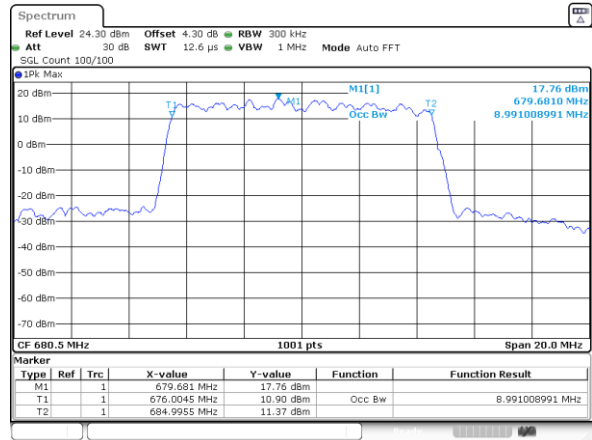
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 1.FEB.2024 09:39:36

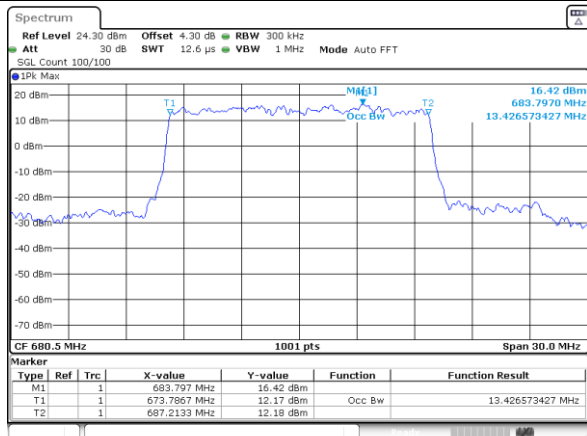
Middle Channel / 10MHz / 16QAM



Date: 1.FEB.2024 09:40:38

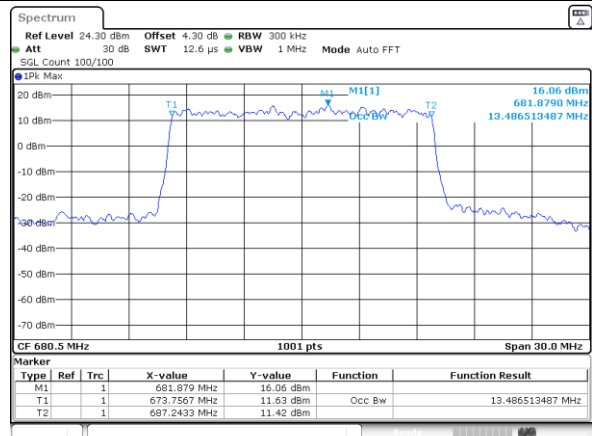
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 1.FEB.2024 10:11:45

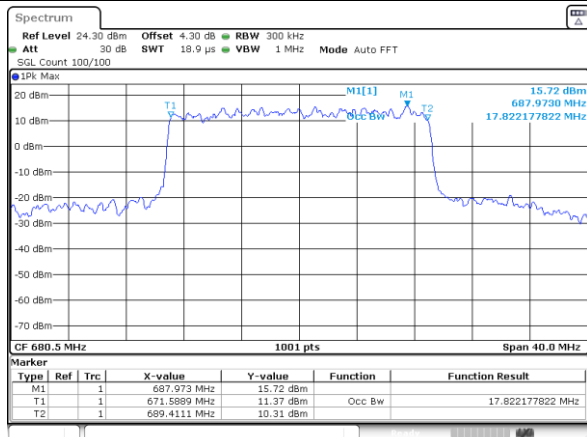
Middle Channel / 15MHz / 16QAM



Date: 1.FEB.2024 10:12:47

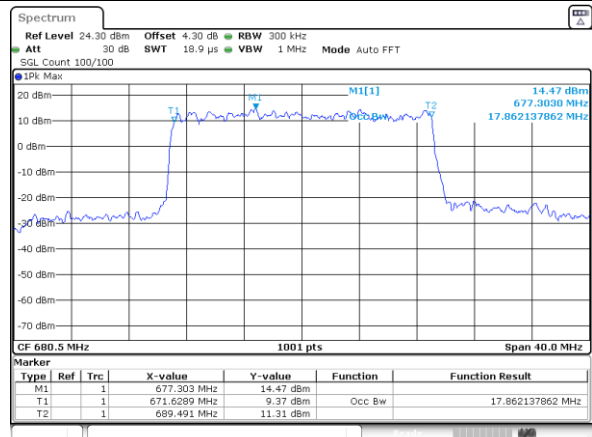
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 1.FEB.2024 10:43:37

Middle Channel / 20MHz / 16QAM



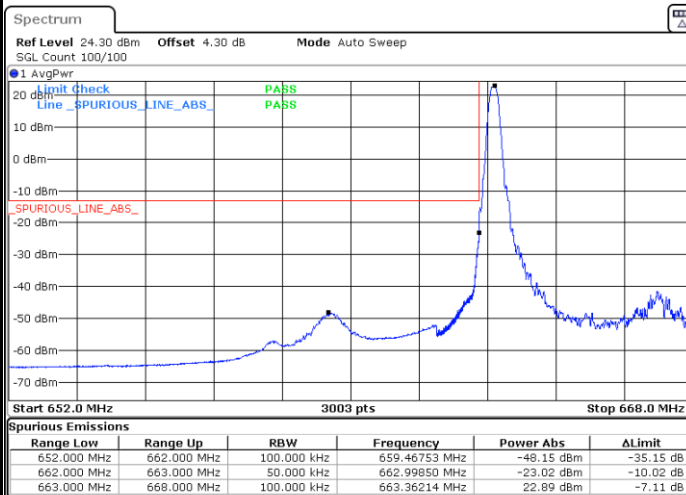
Date: 1.FEB.2024 10:44:40



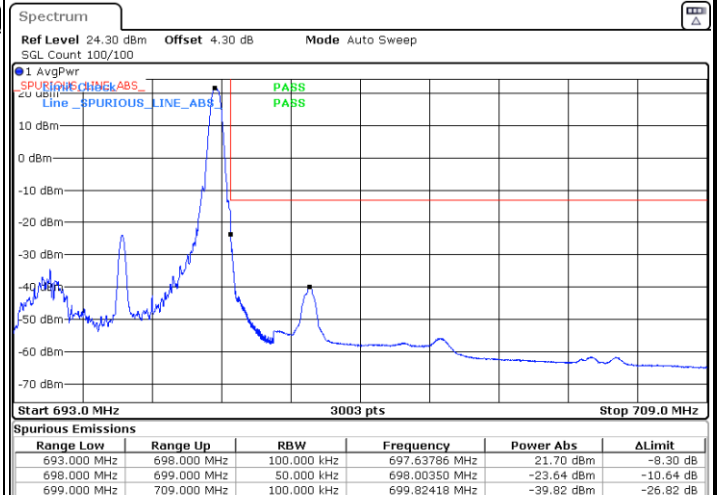
Conducted Band Edge

LTE Band 71 / 5MHz / QPSK

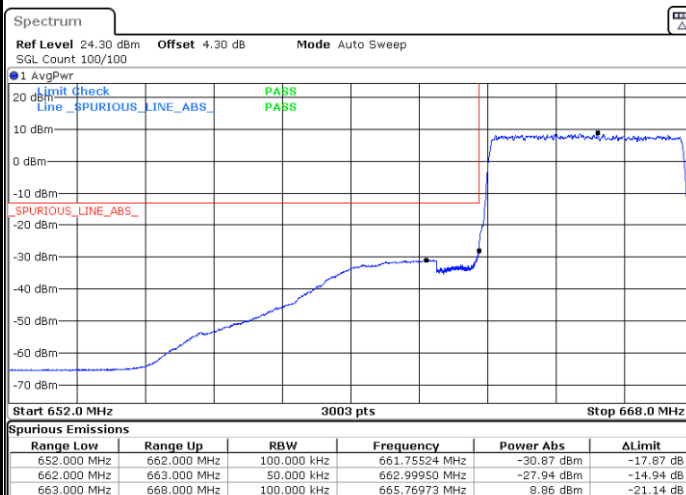
Lowest Band Edge / 1 RB



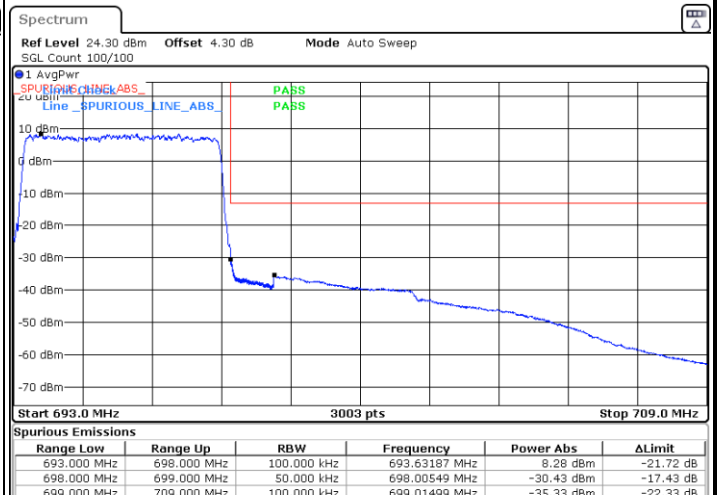
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



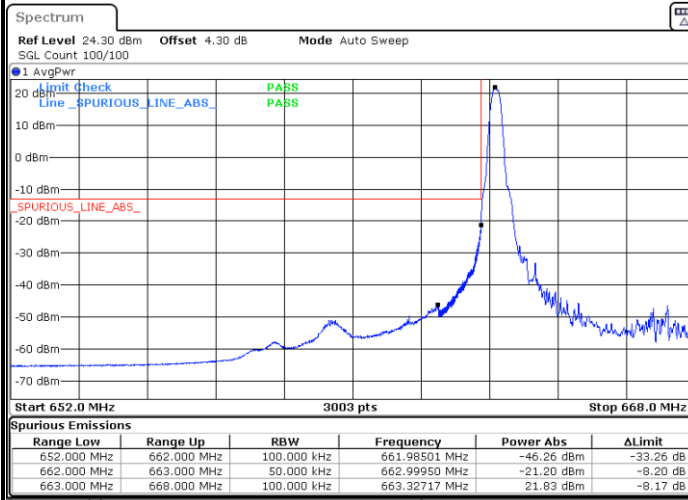
Highest Band Edge / Full RB



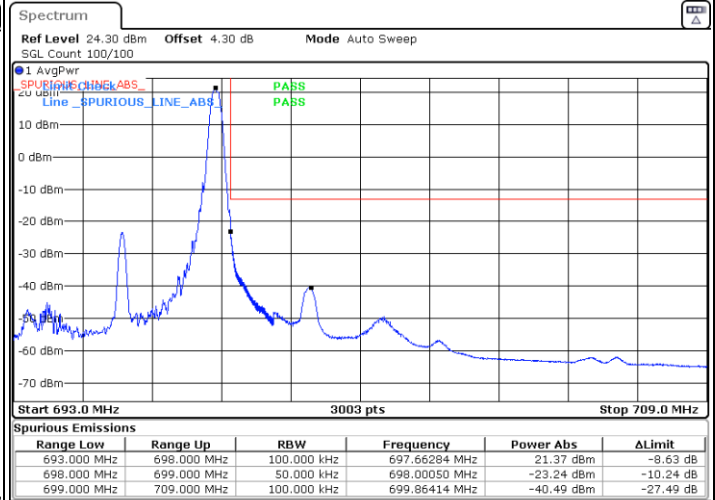


LTE Band 71 / 5MHz / 16QAM

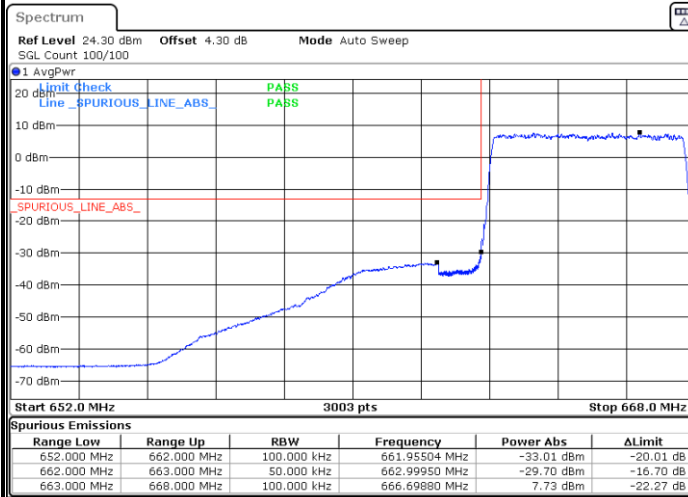
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

