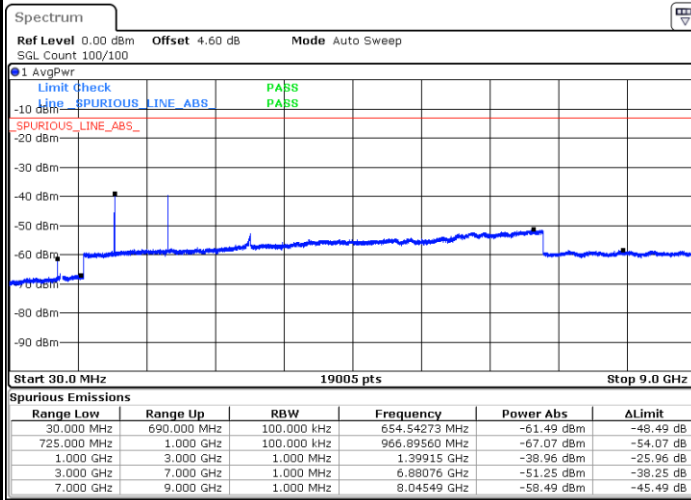




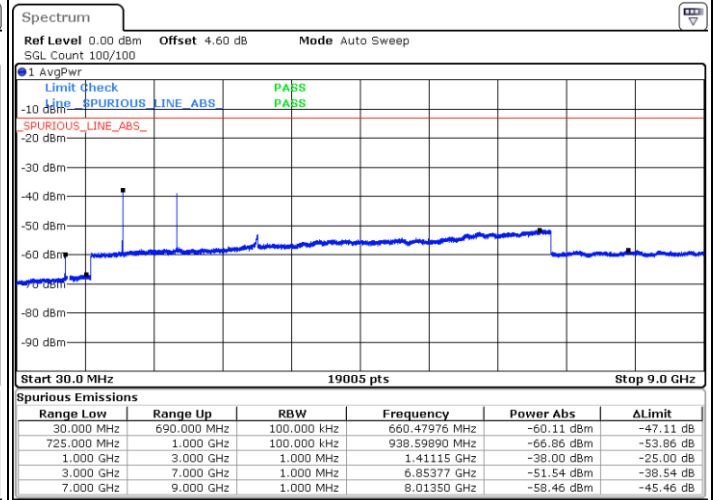
LTE Band 12 / 5MHz

Lowest Channel / QPSK



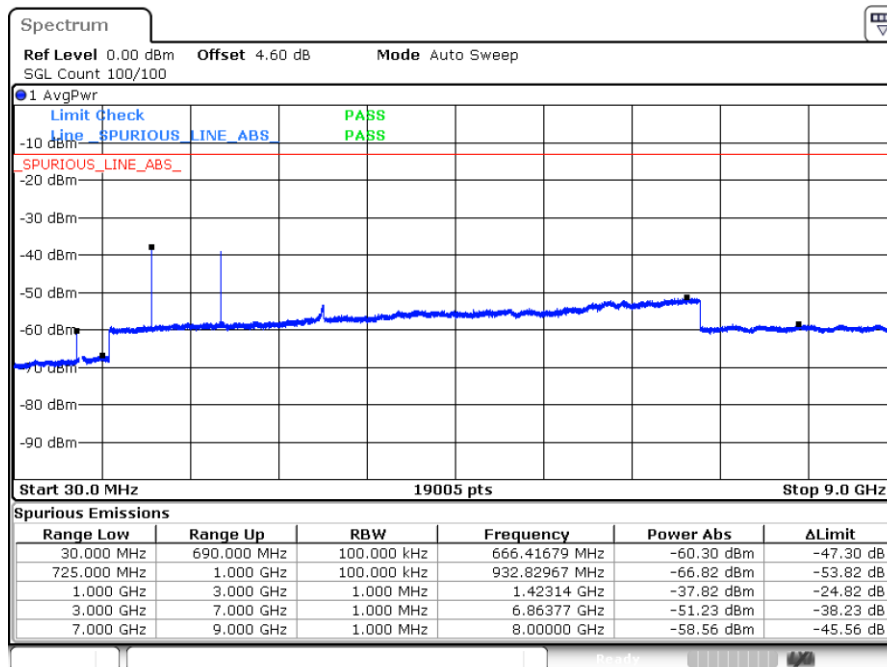
Date: 16.NOV.2024 15:58:09

Middle Channel / QPSK



Date: 16.NOV.2024 16:06:52

Highest Channel / QPSK

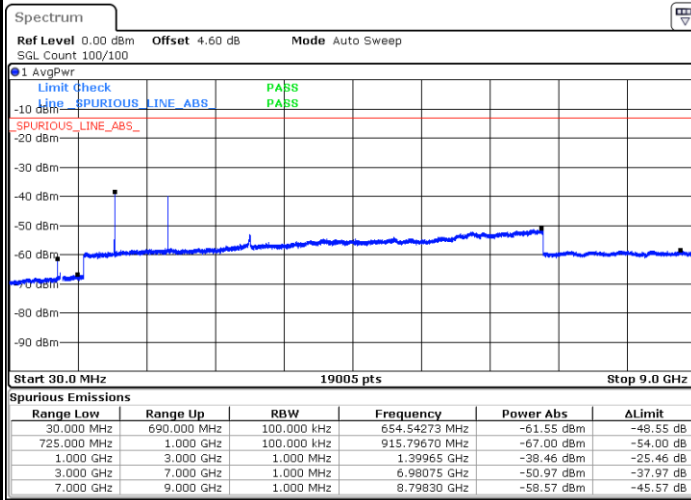


Date: 16.NOV.2024 16:07:35



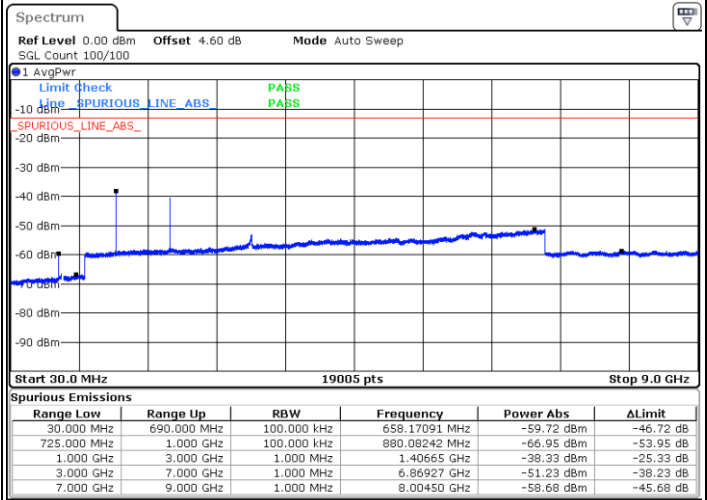
LTE Band 12 / 10MHz

Lowest Channel / QPSK



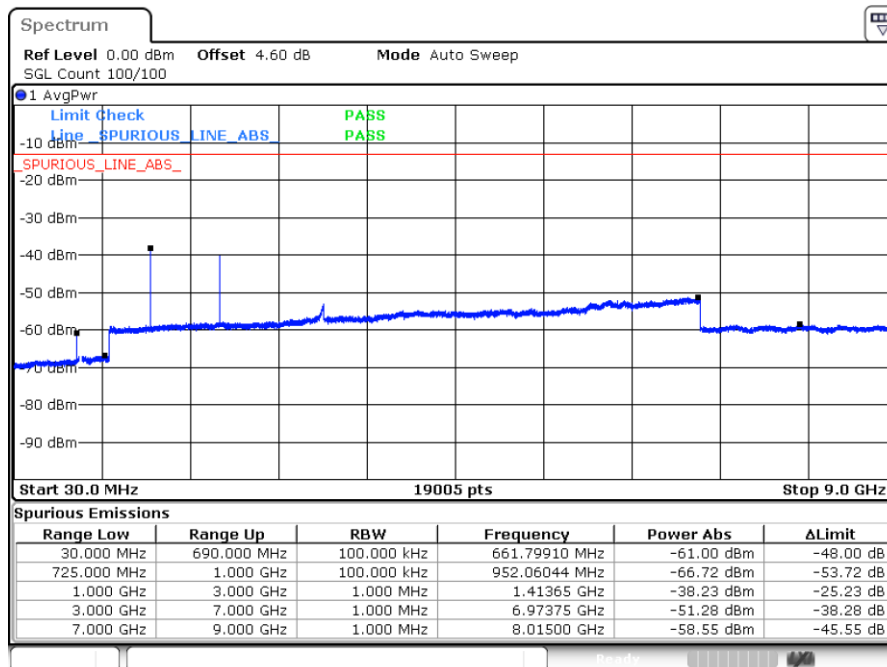
Date: 16.NOV.2024 16:16:19

Middle Channel / QPSK



Date: 16.NOV.2024 17:34:07

Highest Channel / QPSK



Date: 16.NOV.2024 16:25:45

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	0.0026	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0047	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0035	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0036	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0037	

Note:

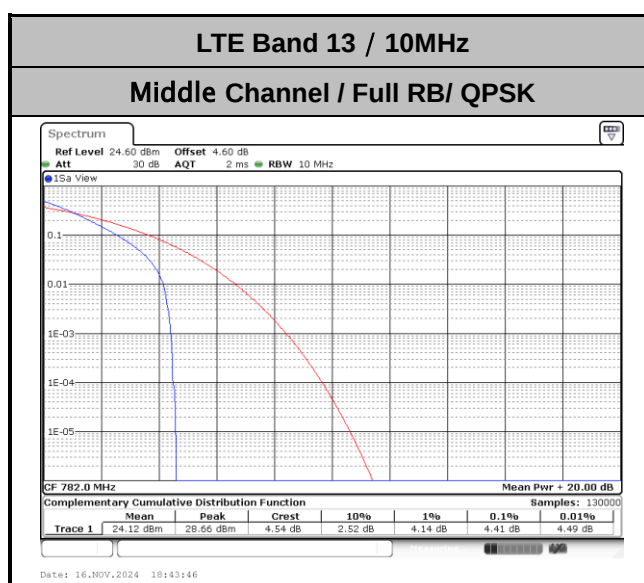
1. Normal Voltage =3.69 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.1 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

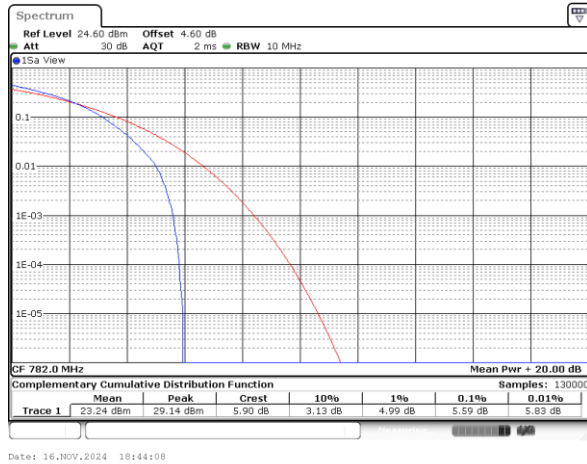
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.41	5.59	6.35	6.61	PASS

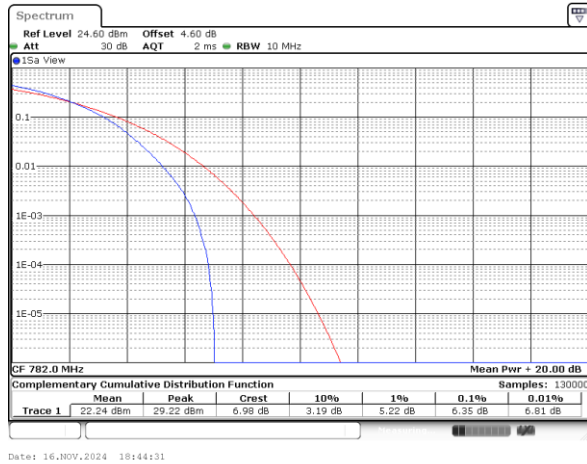




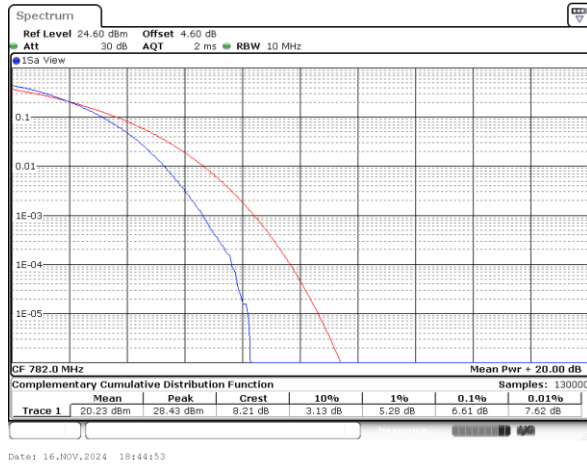
Middle Channel / Full RB/ 16QAM



Middle Channel / Full RB/ 64QAM

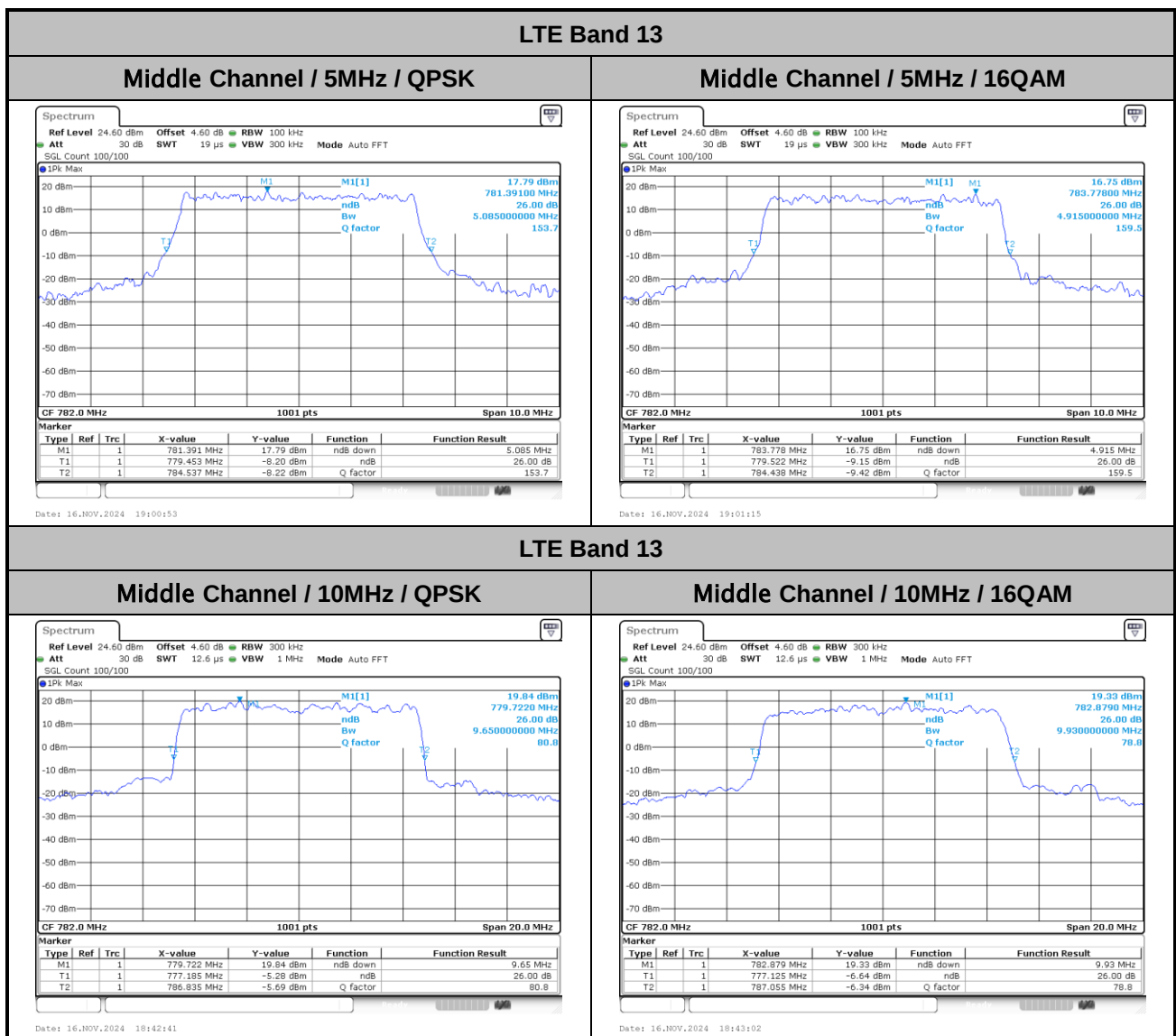


Middle Channel / Full RB/ 256QAM



**26dB Bandwidth**

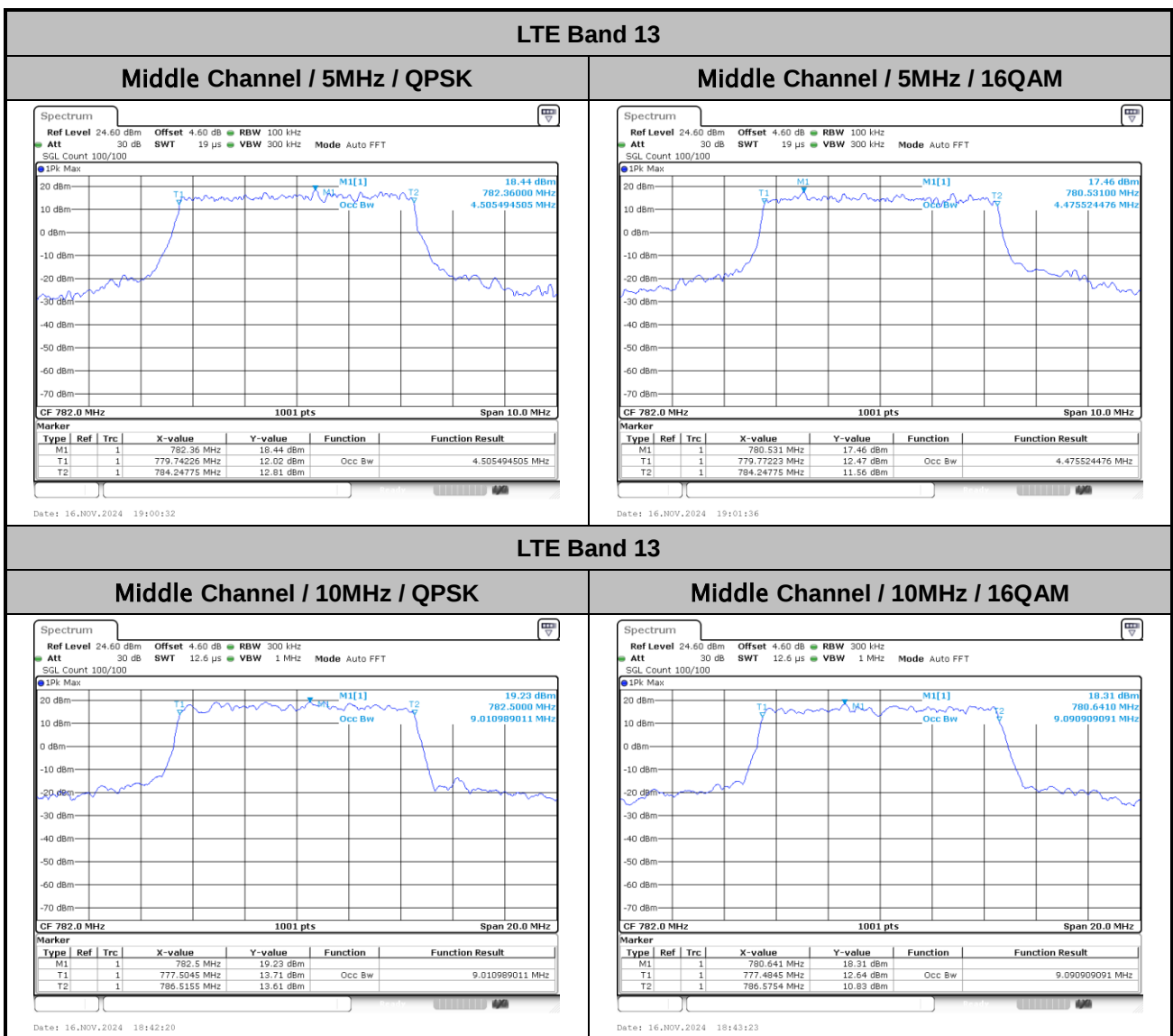
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.09	4.92
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.65	9.93





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.51	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.09

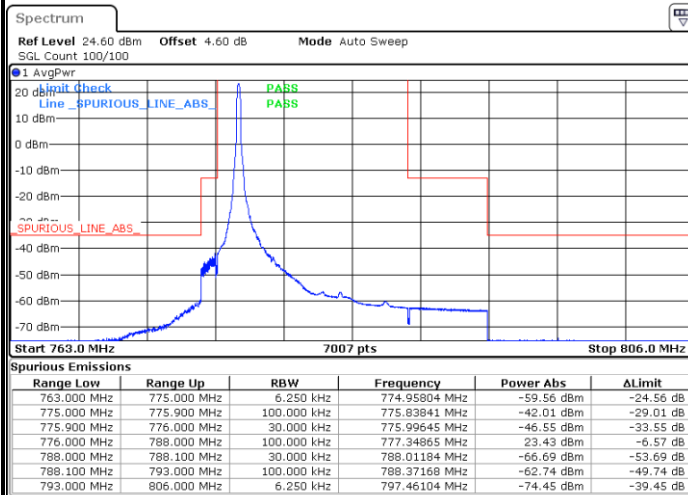




Conducted Band Edge

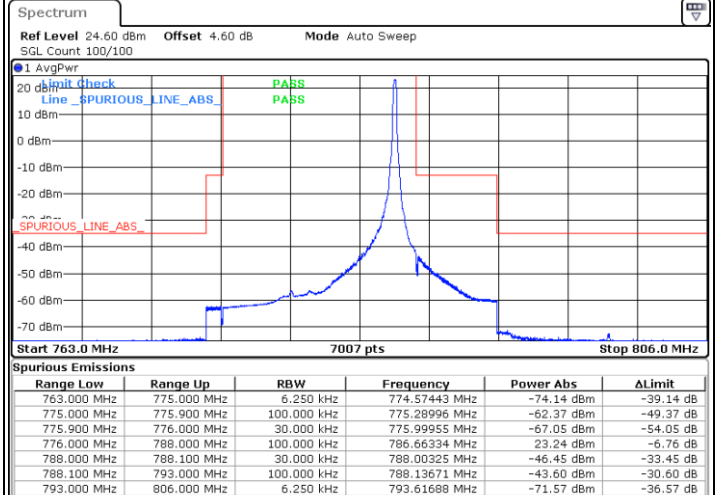
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



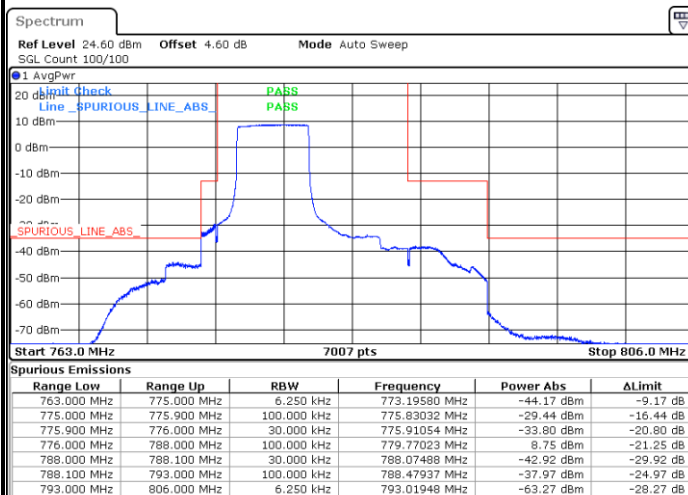
Date: 16.NOV.2024 17:37:25

Highest Band Edge / 1 RB



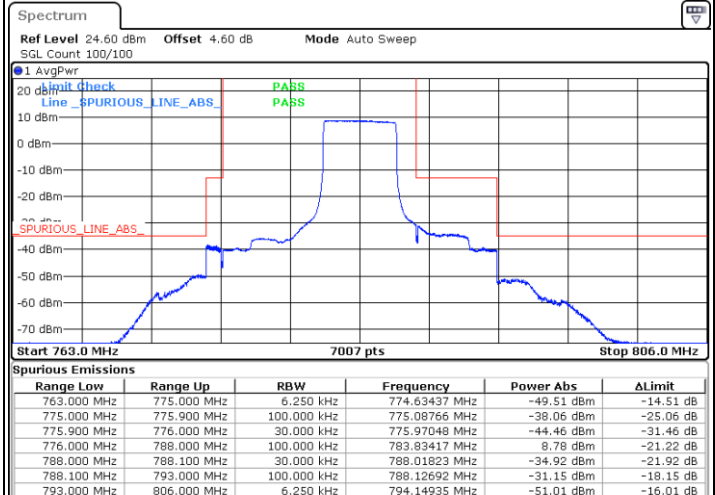
Date: 16.NOV.2024 17:58:06

Lowest Band Edge / Full RB



Date: 16.NOV.2024 17:49:22

Highest Band Edge / Full RB

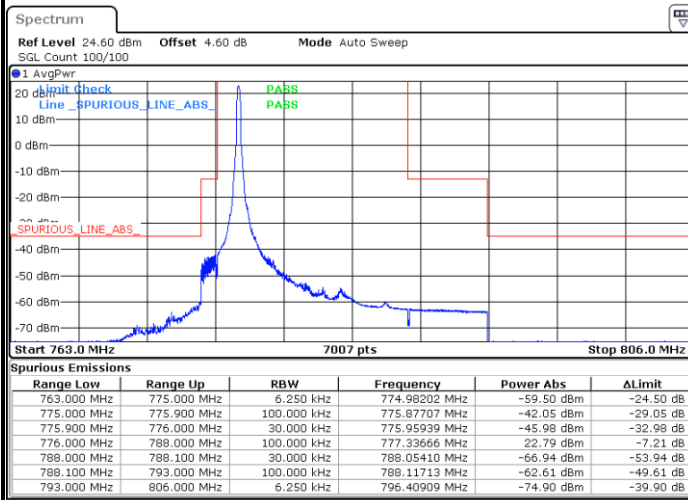


Date: 16.NOV.2024 18:05:28



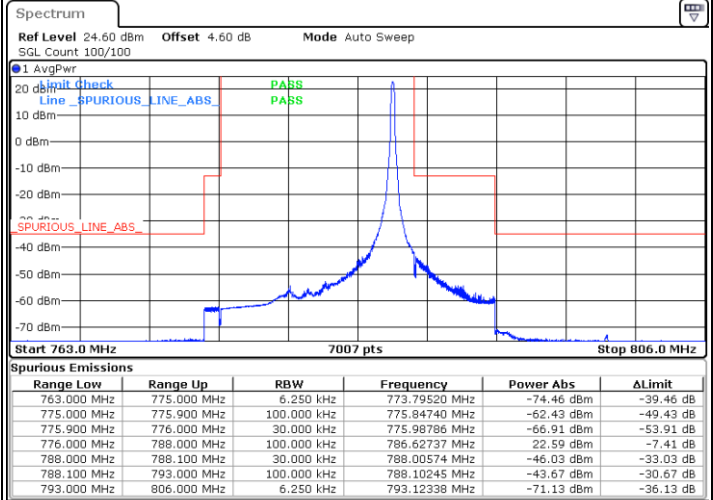
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



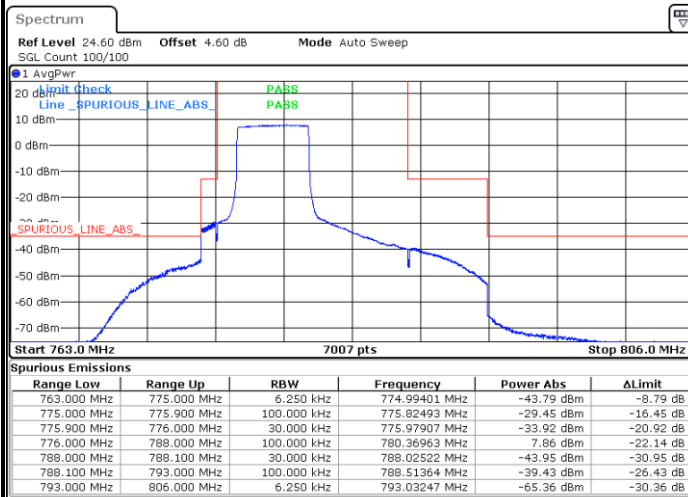
Date: 16.NOV.2024 17:39:15

Highest Band Edge / 1 RB



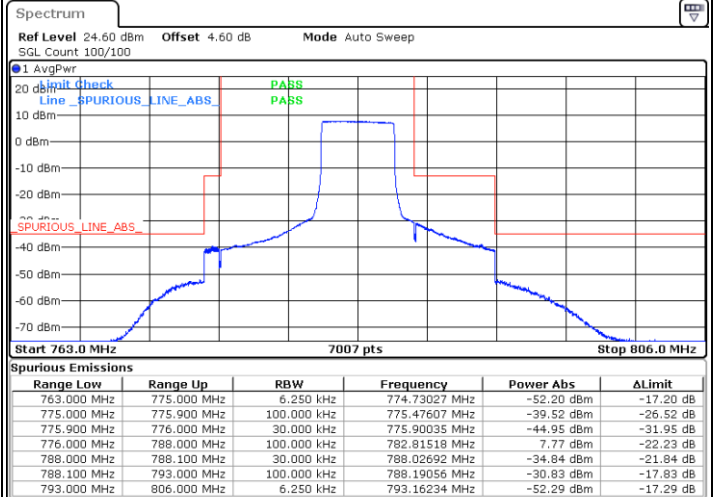
Date: 16.NOV.2024 17:59:56

Lowest Band Edge / Full RB



Date: 16.NOV.2024 17:51:12

Highest Band Edge / Full RB

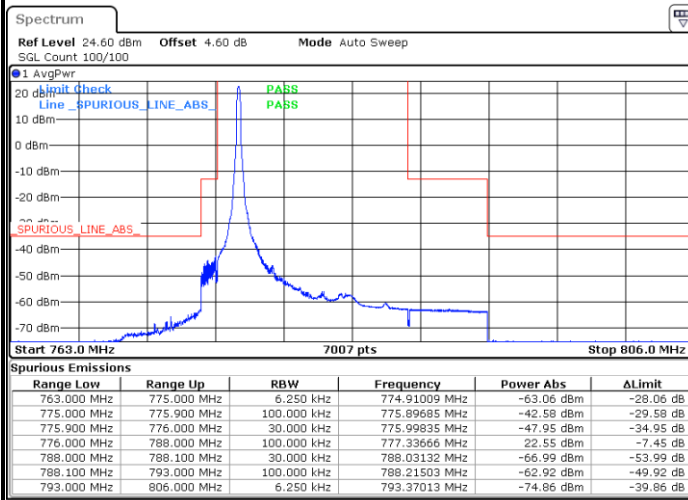


Date: 16.NOV.2024 18:07:18

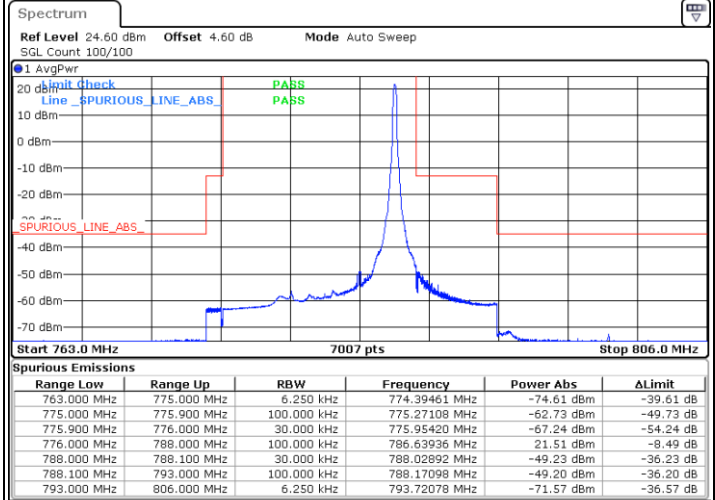


LTE Band 13 / 5MHz / 64QAM

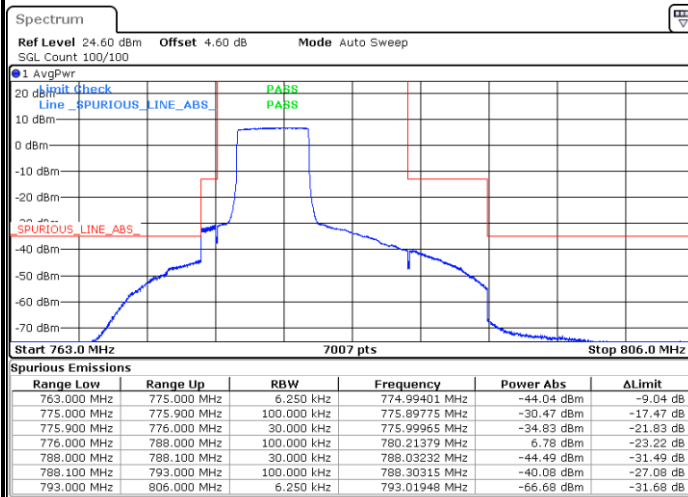
Lowest Band Edge / 1RB



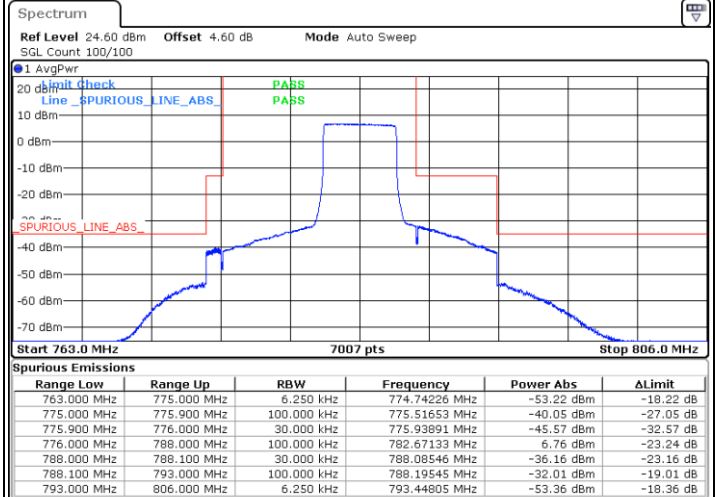
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



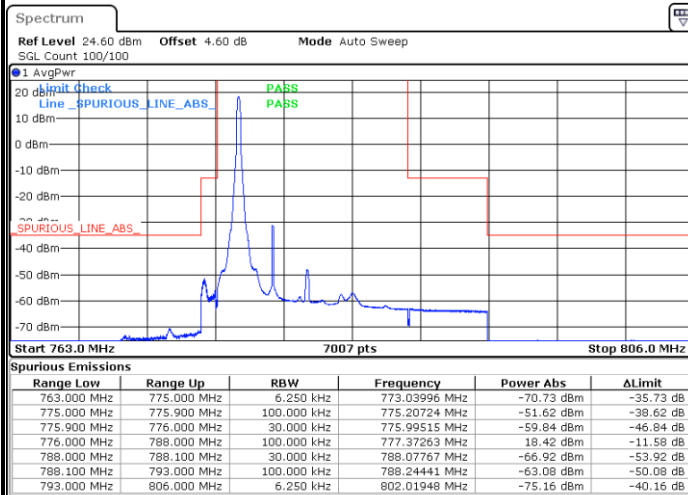
Highest Band Edge / Full RB



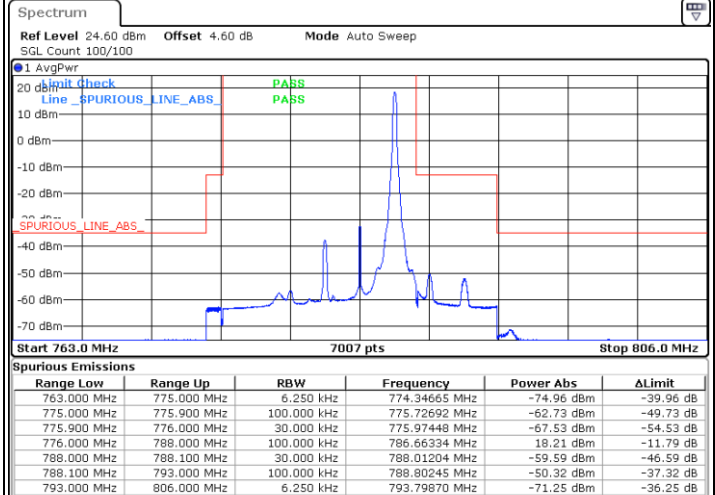


LTE Band 13 / 5MHz / 256QAM

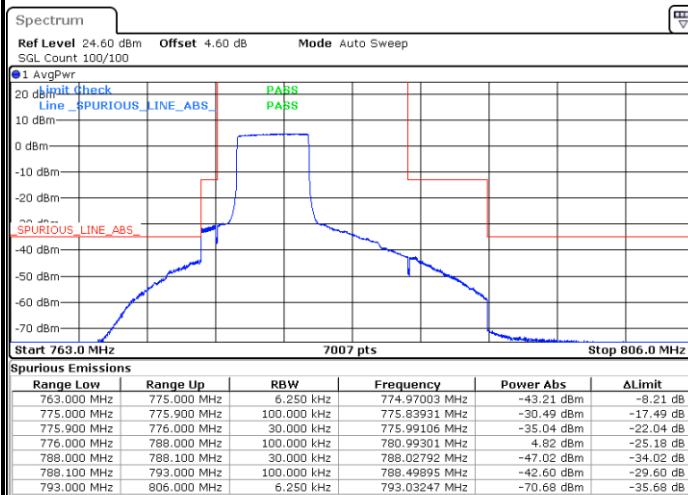
Lowest Band Edge / 1RB



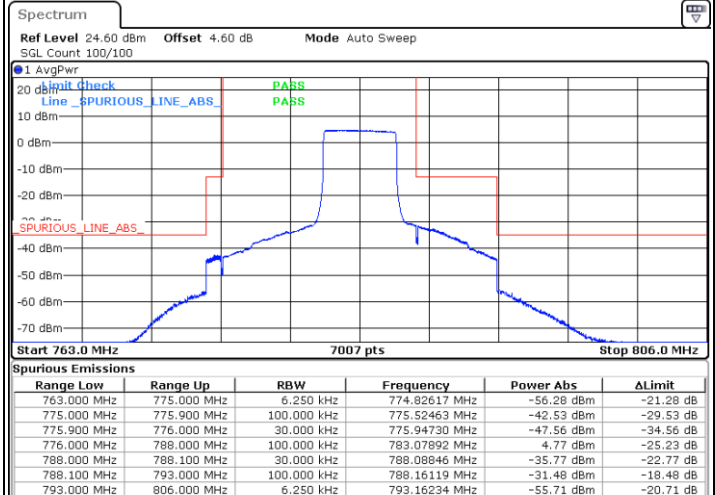
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



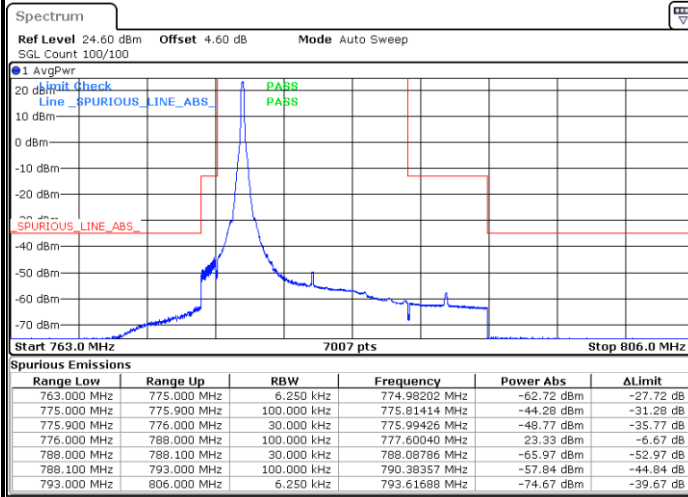
Highest Band Edge / Full RB





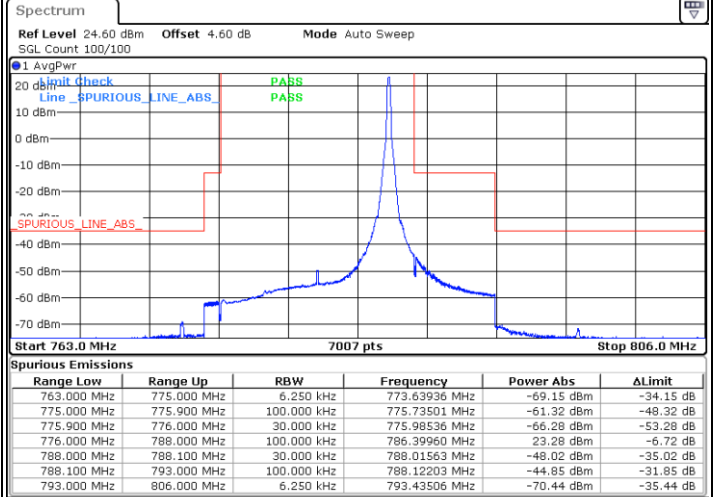
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



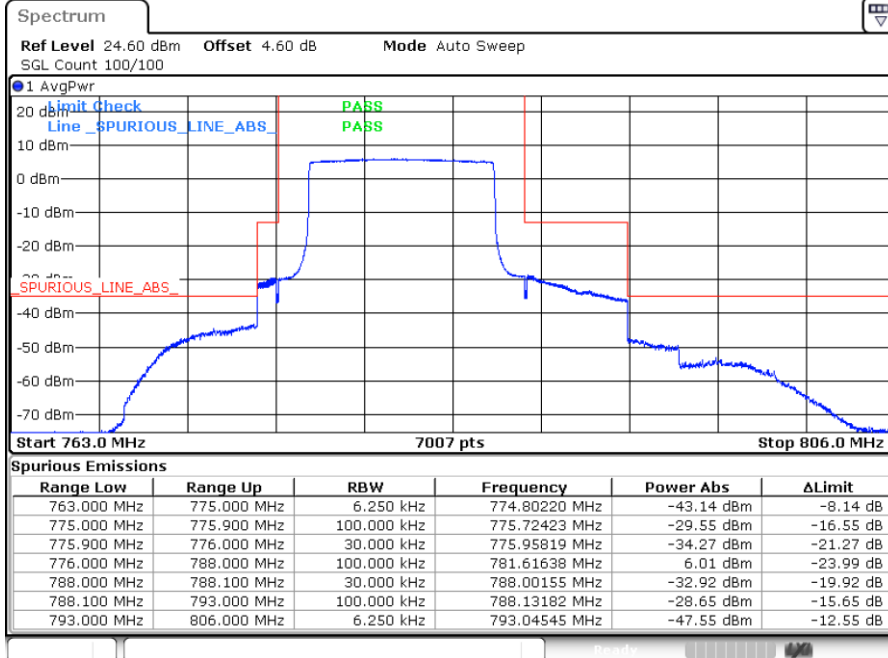
Date: 16.NOV.2024 18:21:52

middle Band Edge / 1 RB



Date: 16.NOV.2024 18:36:29

Middle Band Edge / Full RB

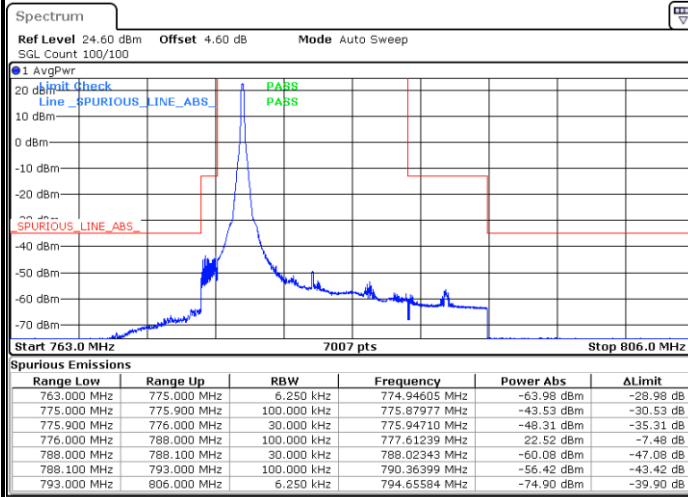


Date: 16.NOV.2024 18:29:10



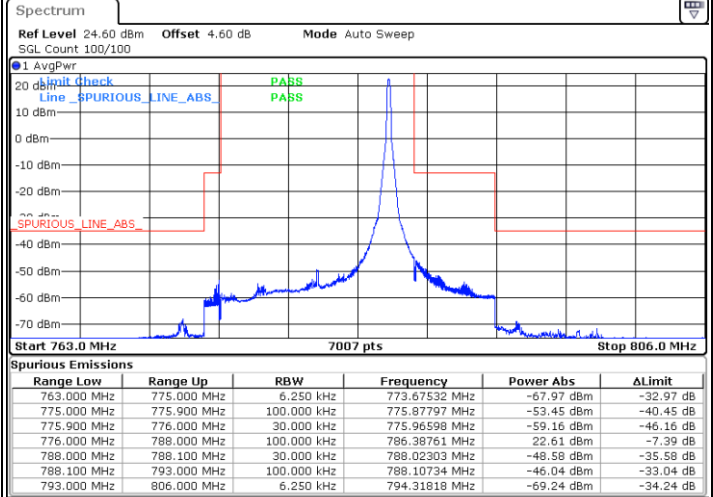
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



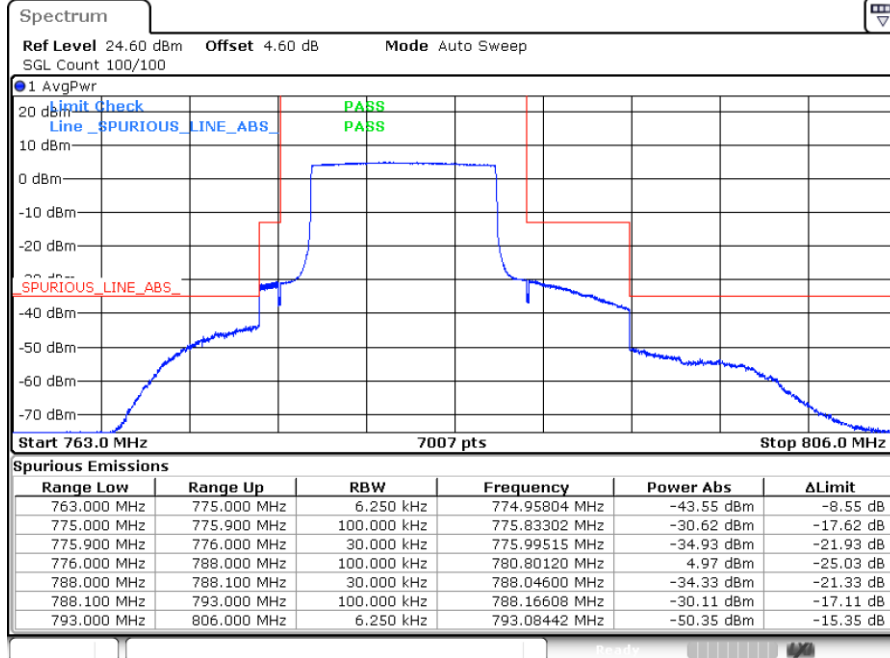
Date: 16.NOV.2024 18:23:41

middle Band Edge / 1 RB



Date: 16.NOV.2024 18:38:19

middle Band Edge / Full RB

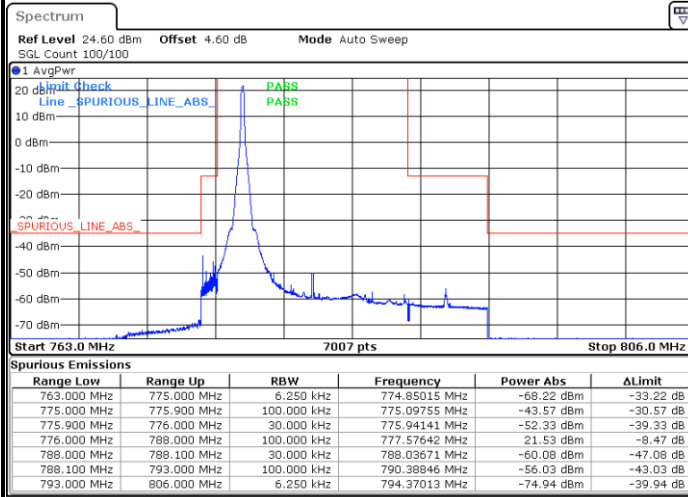


Date: 16.NOV.2024 18:31:00



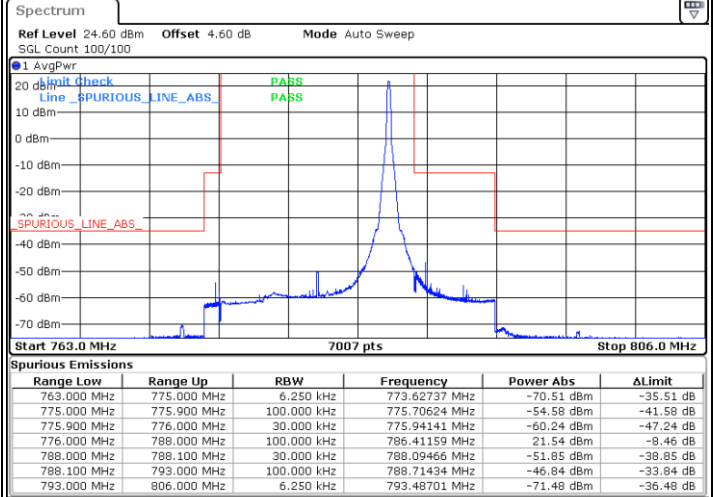
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



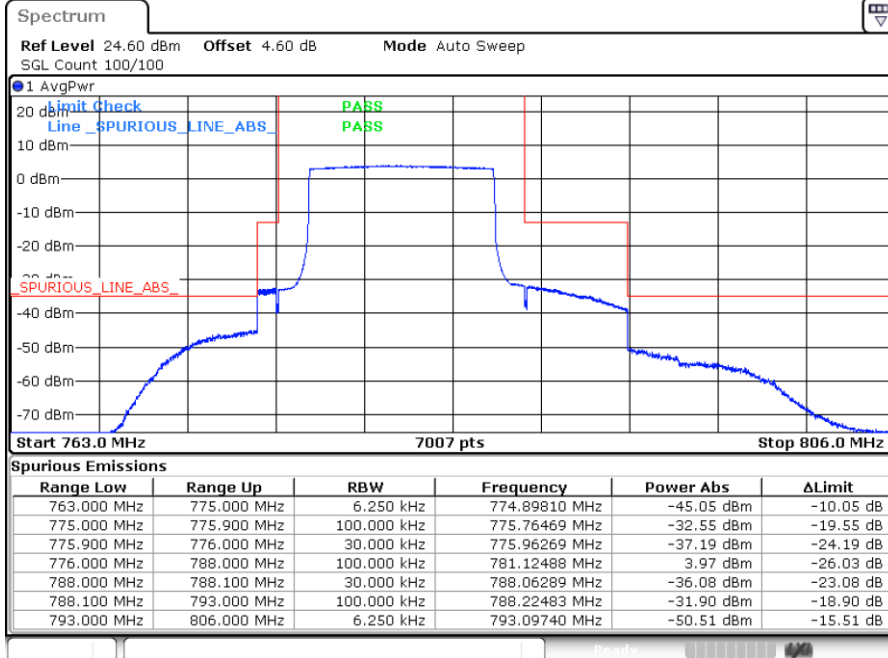
Date: 16.NOV.2024 18:25:31

middle Band Edge / 1 RB



Date: 16.NOV.2024 18:40:09

middle Band Edge / Full RB

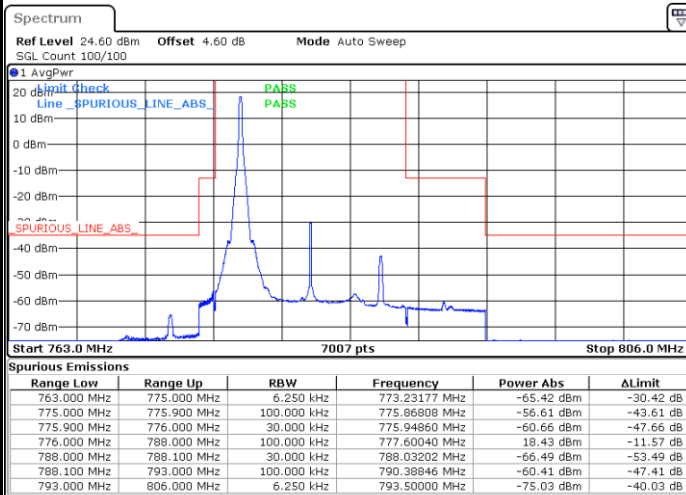


Date: 16.NOV.2024 18:32:50



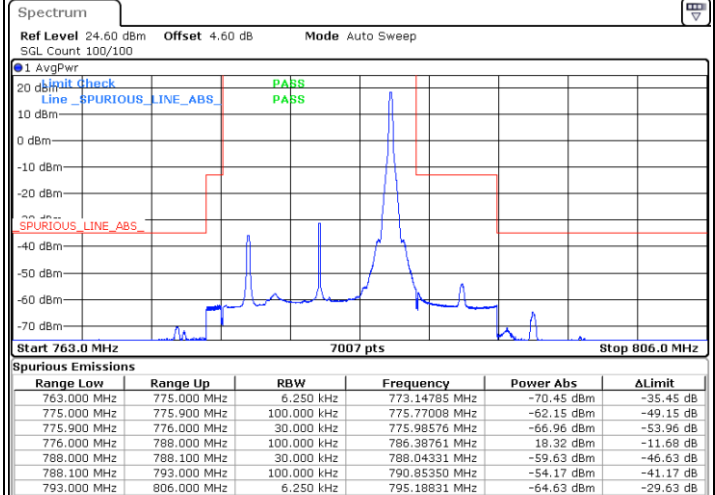
LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB



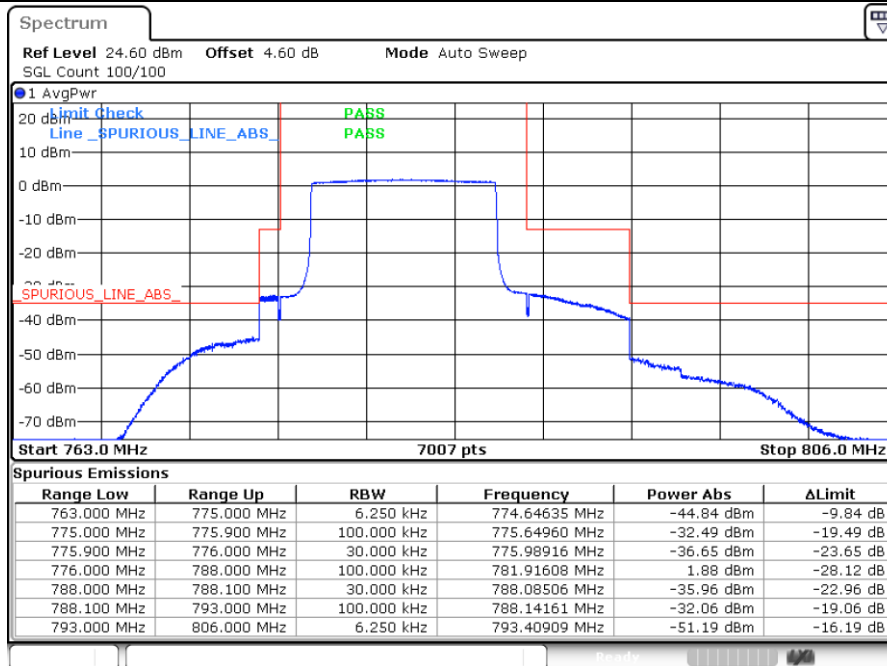
Date: 16.NOV.2024 18:27:20

middle Band Edge / 1 RB



Date: 16.NOV.2024 18:41:59

middle Band Edge / Full RB



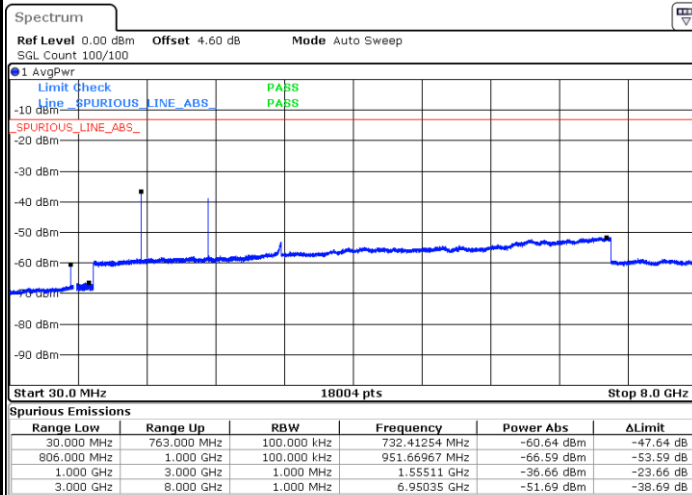
Date: 16.NOV.2024 18:34:39



Conducted Spurious Emission

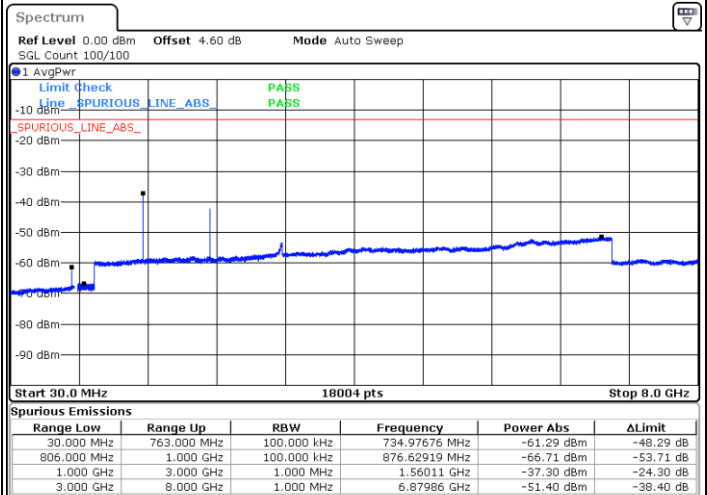
LTE Band 13 / 5MHz

Lowest Channel / QPSK



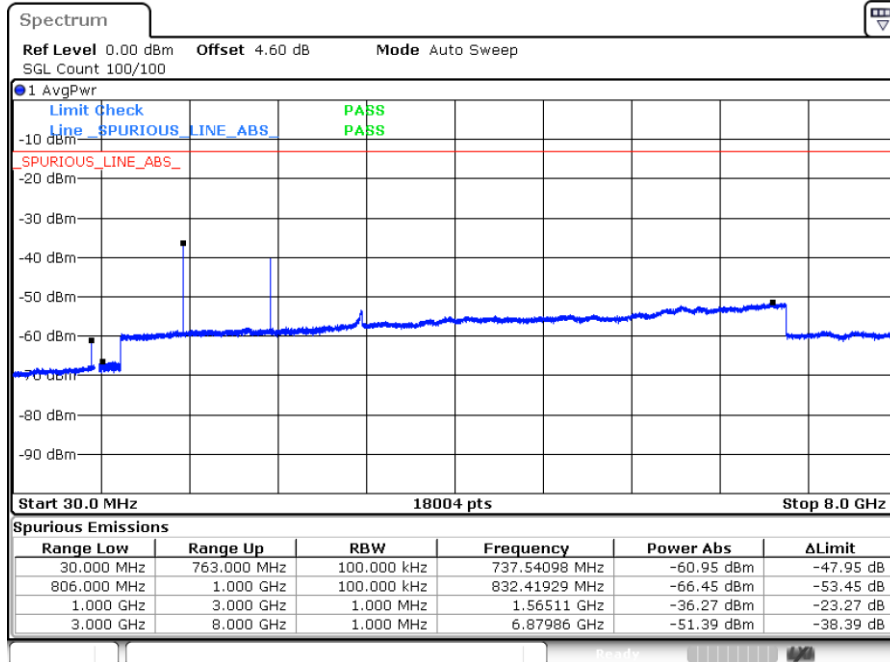
Date: 16.NOV.2024 17:35:35

Middle Channel / QPSK



Date: 16.NOV.2024 17:55:34

Highest Channel / QPSK

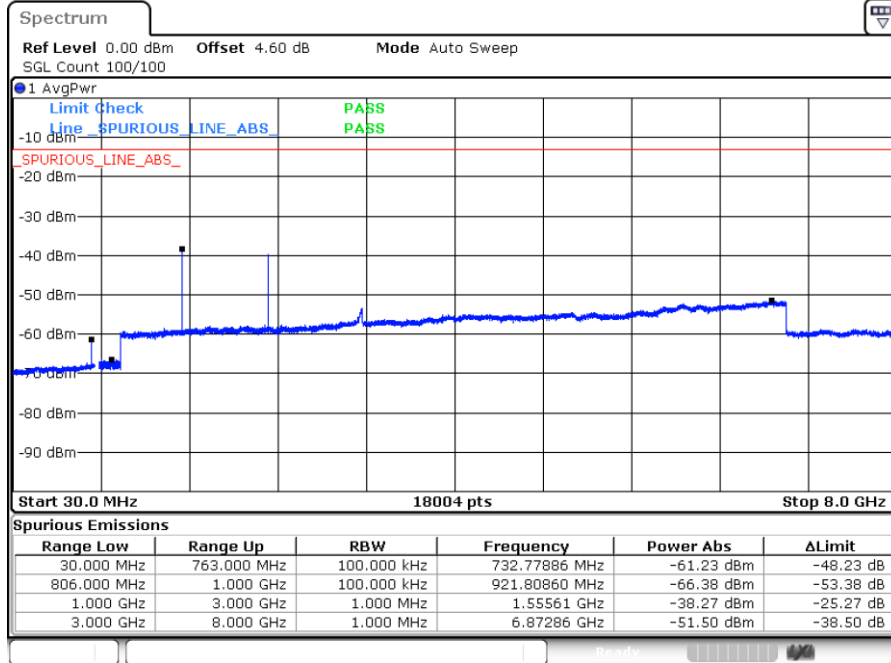


Date: 16.NOV.2024 17:56:15



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 16.NOV.2024 18:20:02

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	0.0012	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0025	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0056	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0034	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0027	

Note:

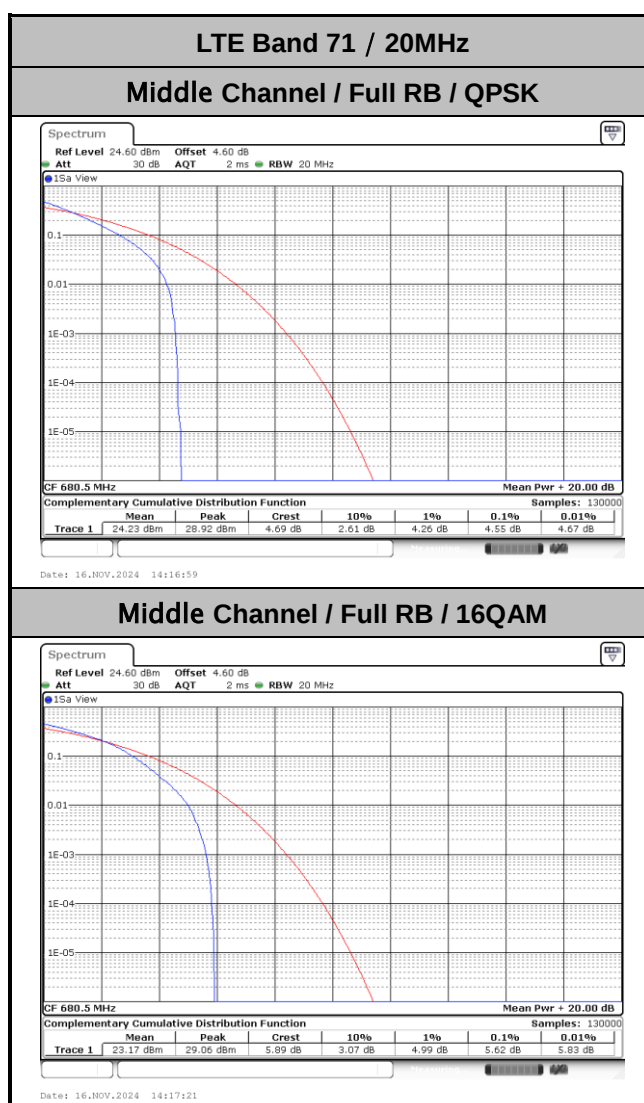
1. Normal Voltage =3.69 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.1 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 71

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	4.55	5.62	6.43	6.81	PASS



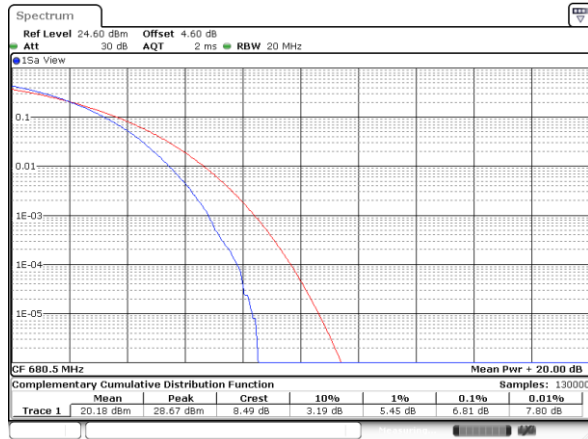


Middle Channel / Full RB / 64QAM



Date: 16.NOV.2024 14:17:44

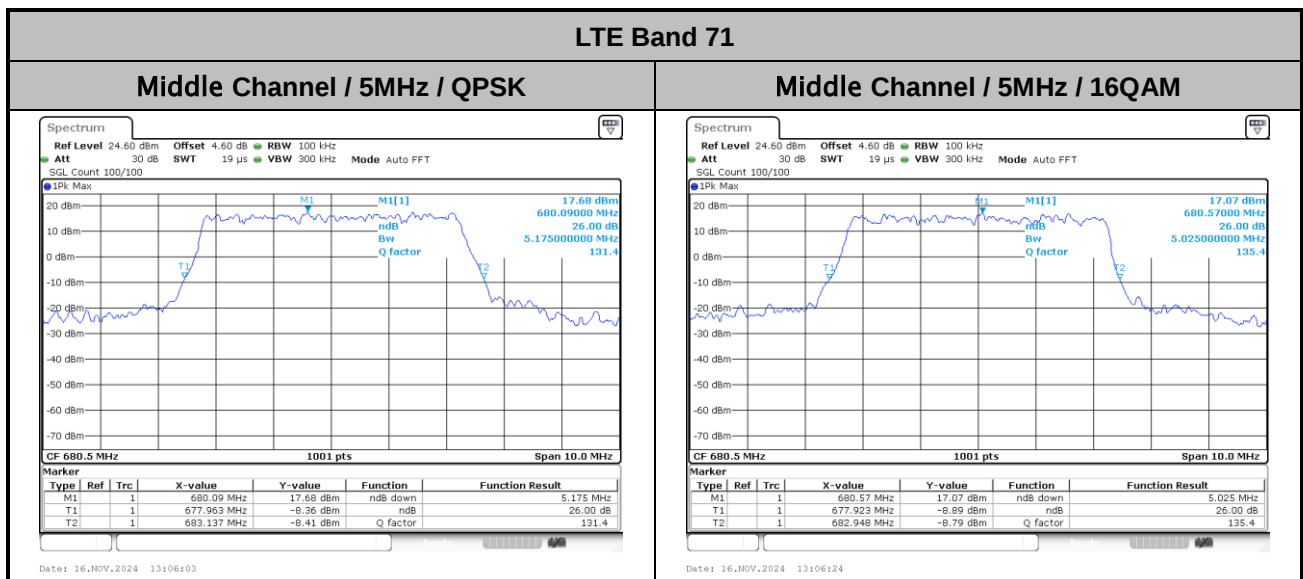
Middle Channel / Full RB / 256QAM



Date: 16.NOV.2024 14:18:06

**26dB Bandwidth**

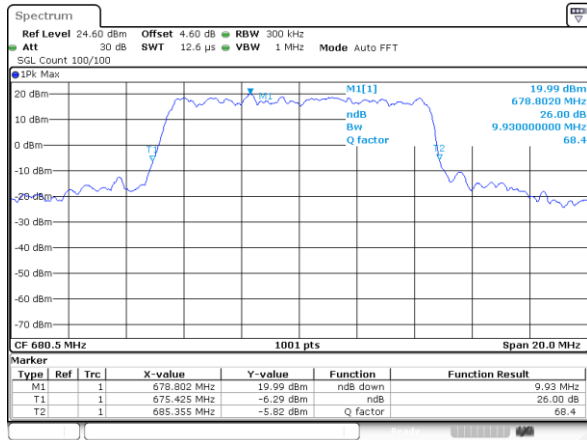
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.18	5.03
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.93	9.97
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.84	14.30
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.54	19.30



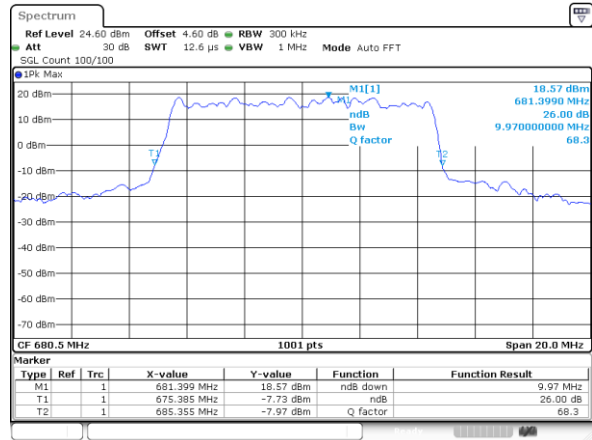


LTE Band 71

Middle Channel / 10MHz / QPSK

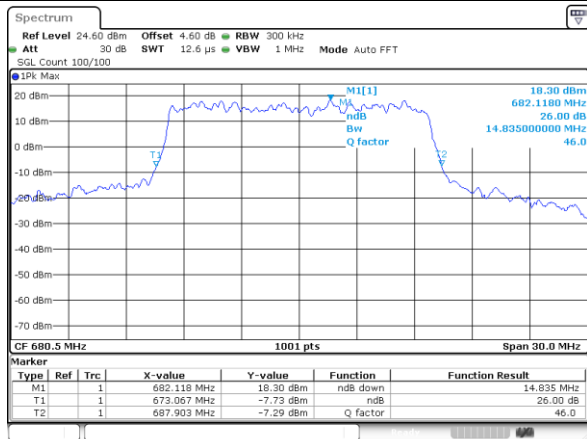


Middle Channel / 10MHz / 16QAM

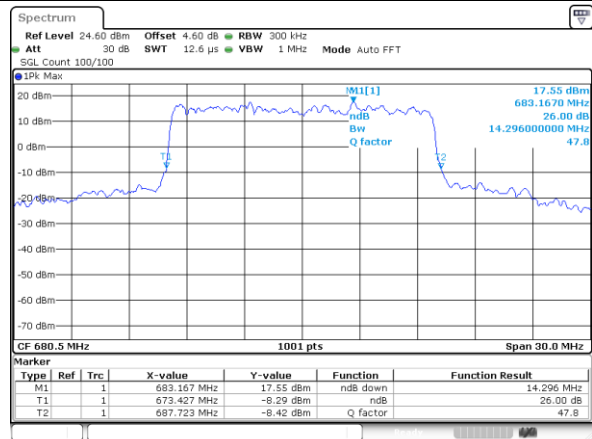


LTE Band 71

Middle Channel / 15MHz / QPSK

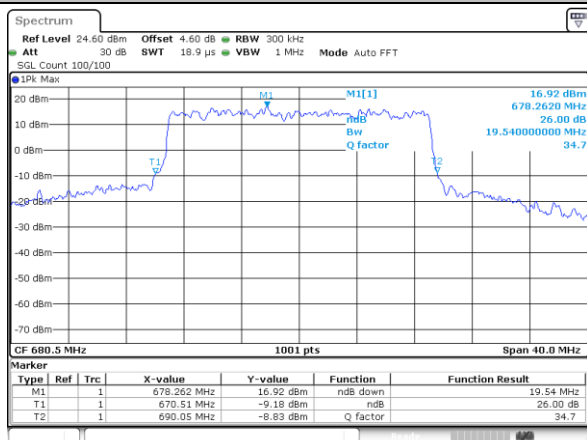


Middle Channel / 15MHz / 16QAM

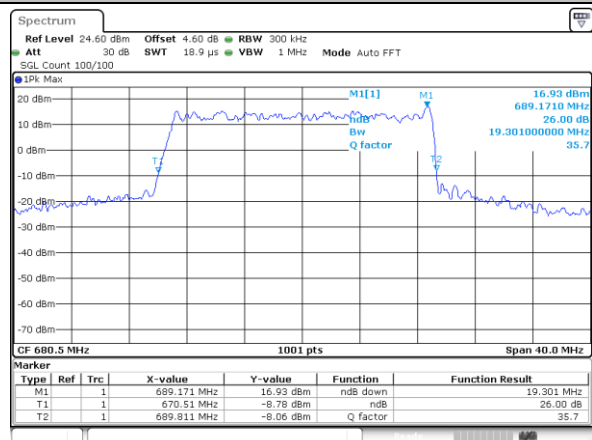


LTE Band 71

Middle Channel / 20MHz / QPSK



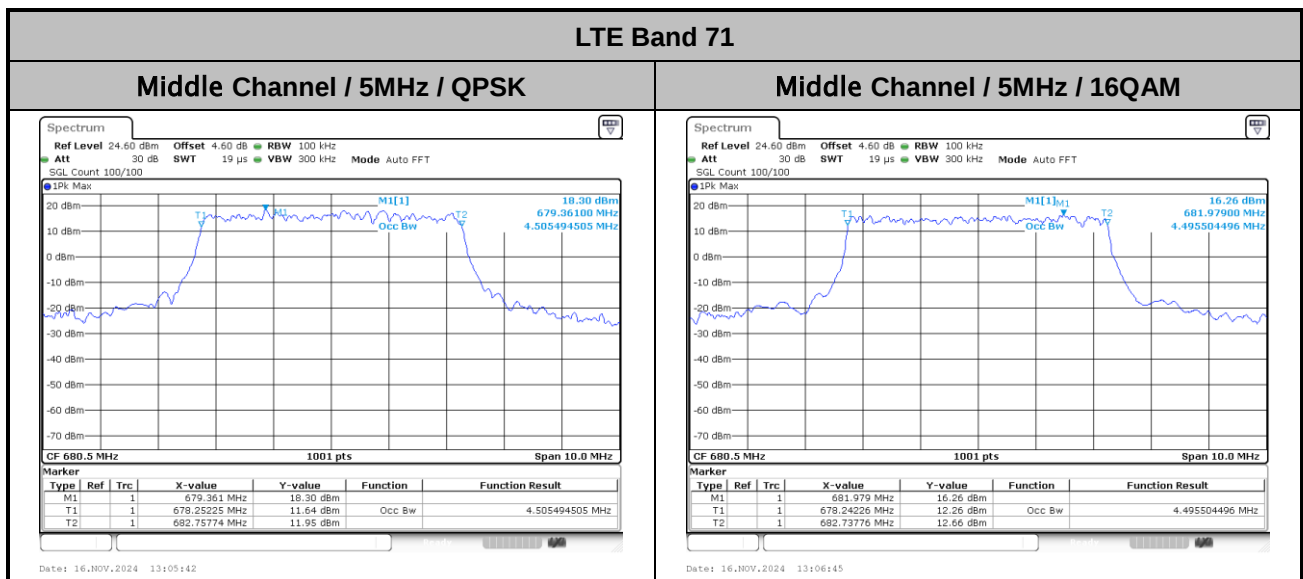
Middle Channel / 20MHz / 16QAM





Occupied Bandwidth

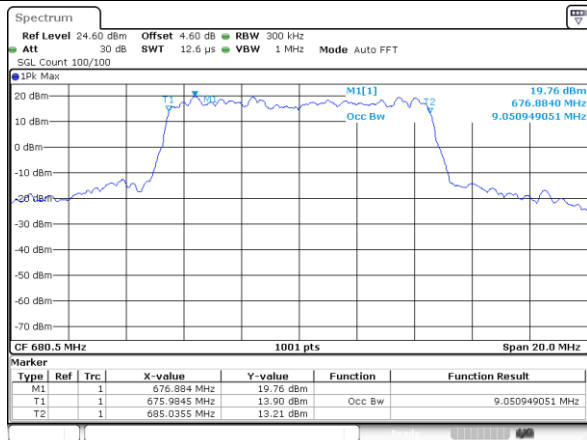
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.51	4.50
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	9.03
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.49	13.46
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.90





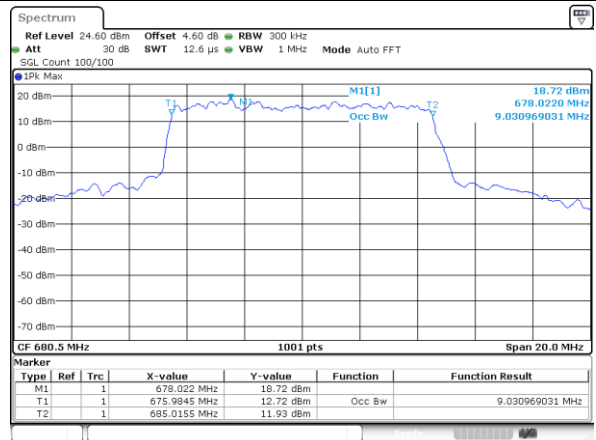
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 16.NOV.2024 13:25:54

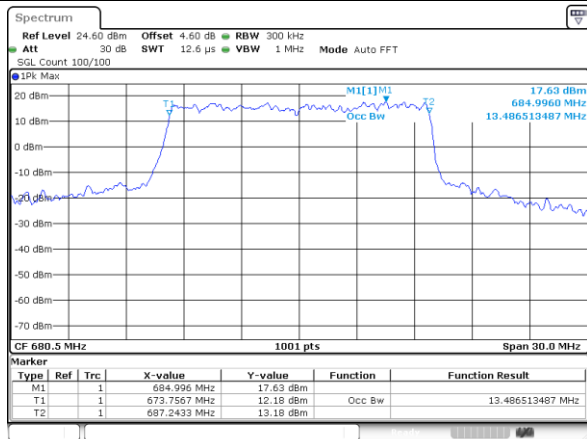
Middle Channel / 10MHz / 16QAM



Date: 16.NOV.2024 13:26:58

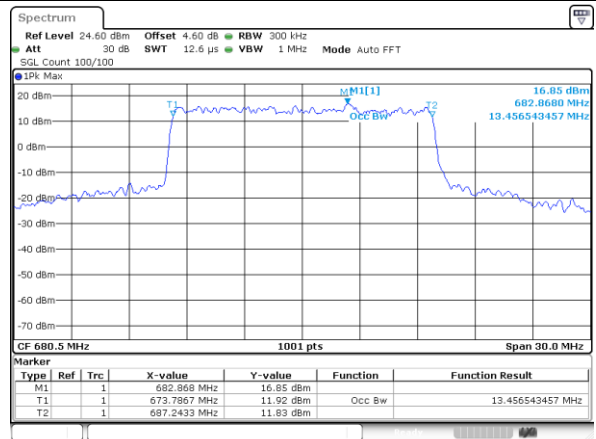
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 16.NOV.2024 13:46:12

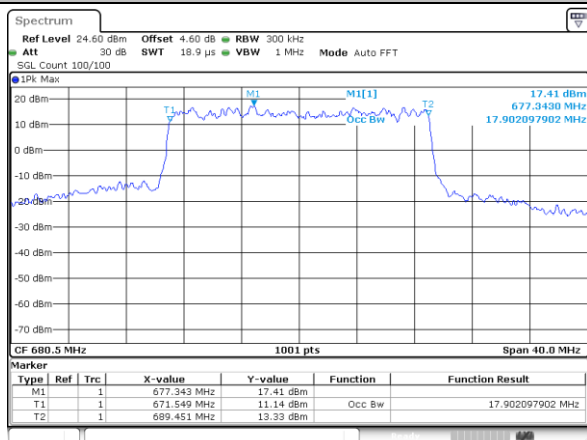
Middle Channel / 15MHz / 16QAM



Date: 16.NOV.2024 13:47:16

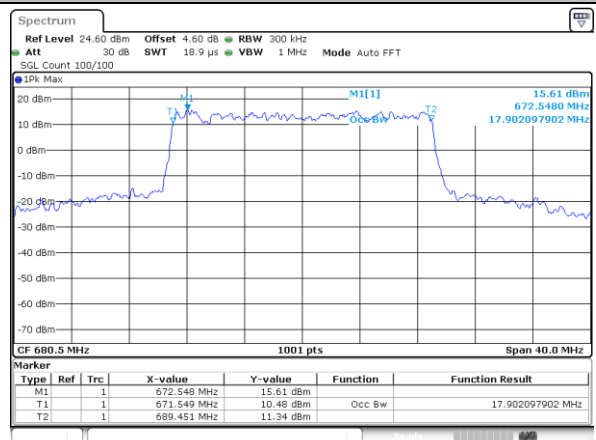
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 16.NOV.2024 14:06:27

Middle Channel / 20MHz / 16QAM



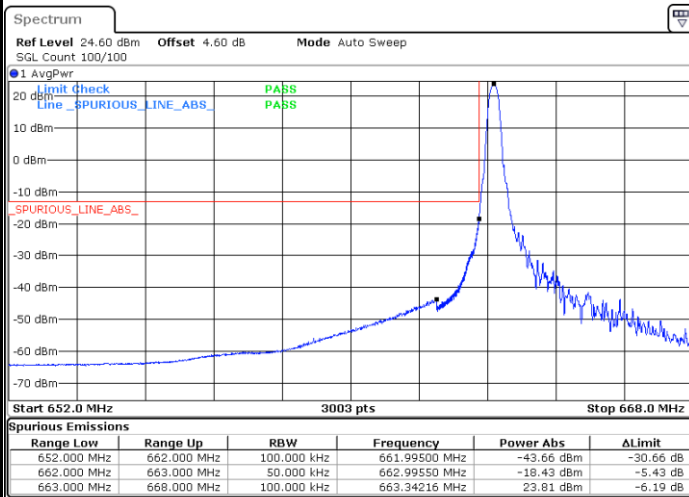
Date: 16.NOV.2024 14:07:30



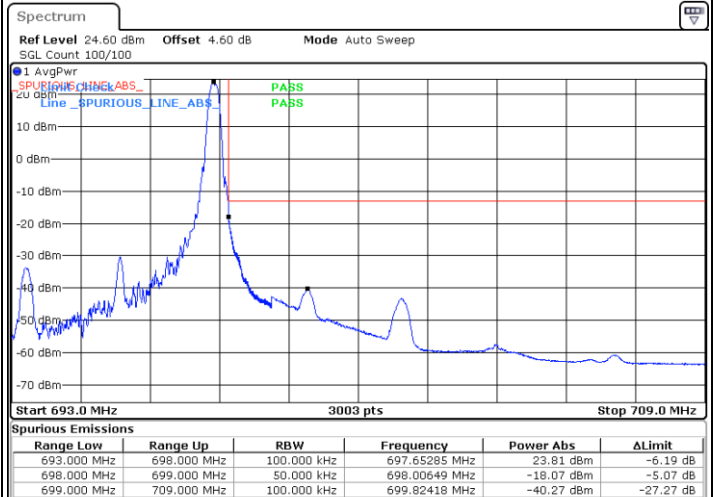
Conducted Band Edge

LTE Band 71 / 5MHz / QPSK

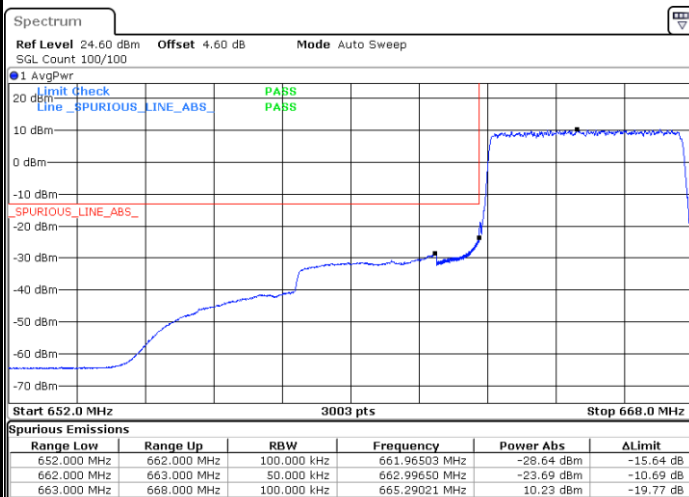
Lowest Band Edge / 1 RB



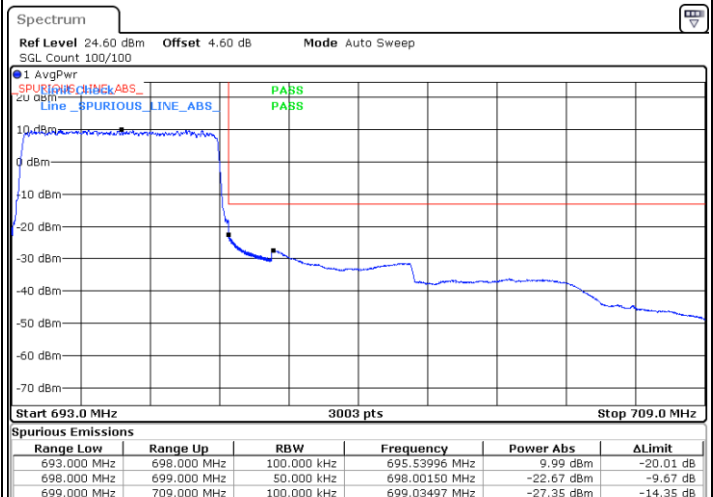
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



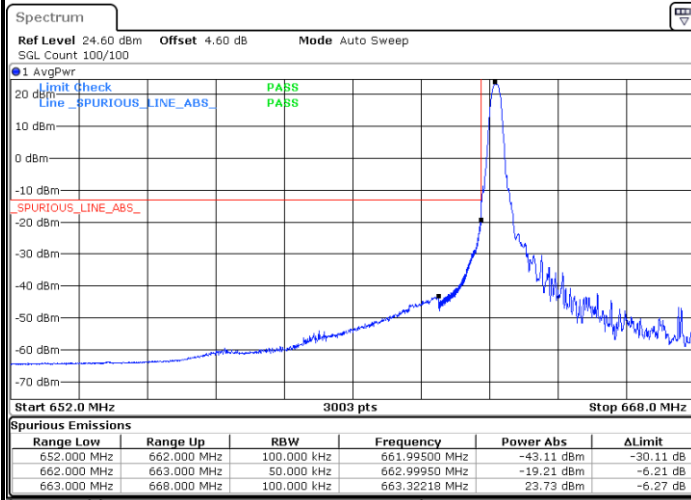
Highest Band Edge / Full RB



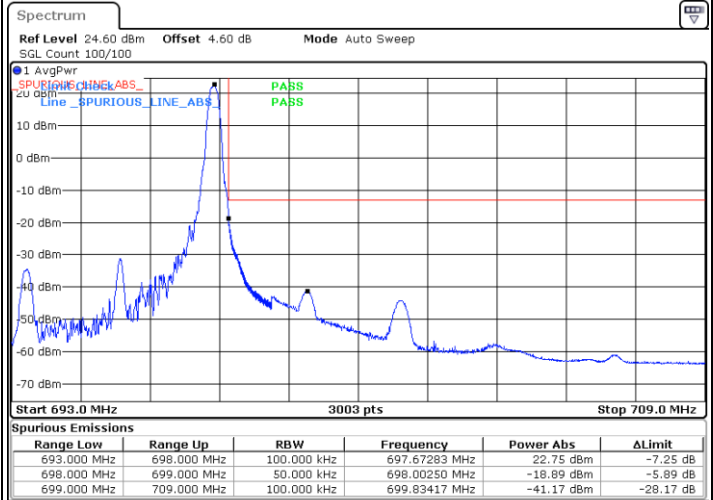


LTE Band 71 / 5MHz / 16QAM

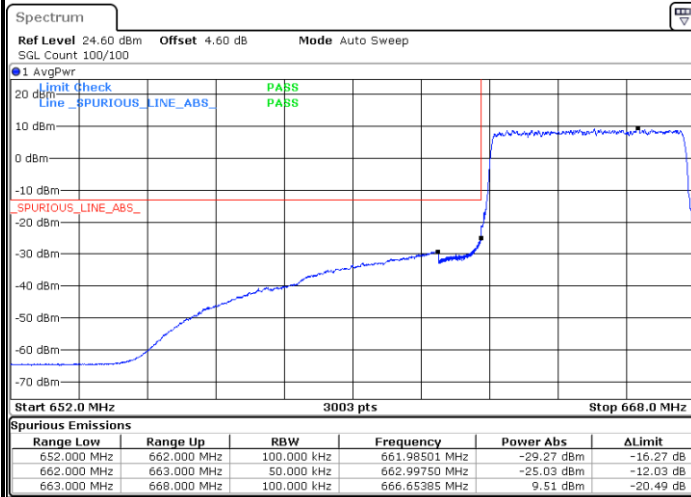
Lowest Band Edge / 1 RB



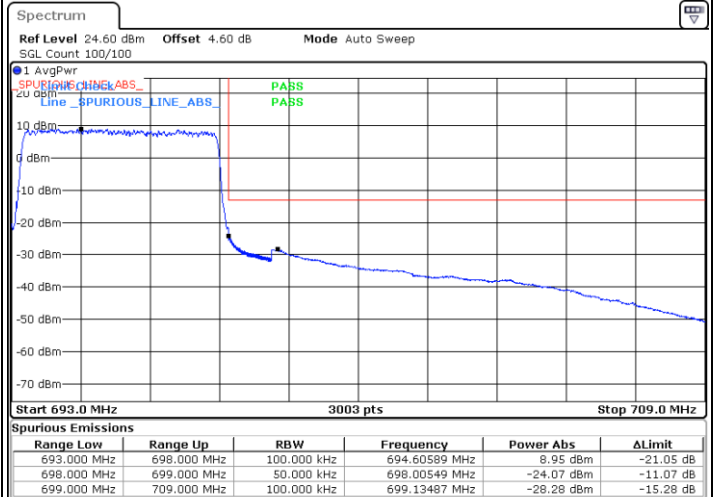
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



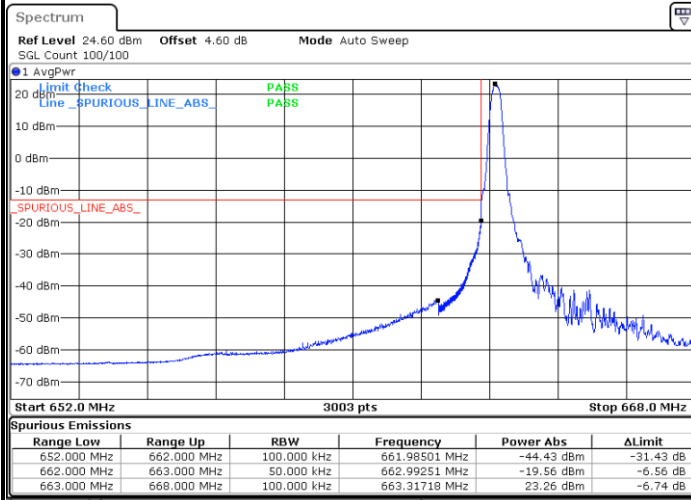
Highest Band Edge / Full RB



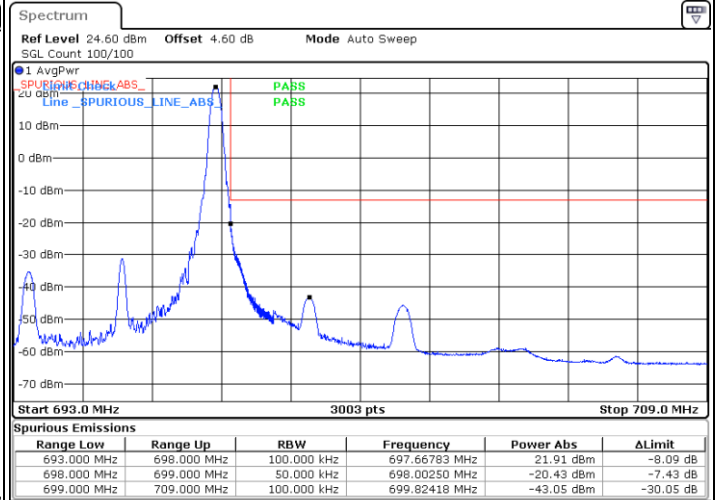


LTE Band 71 / 5MHz / 64QAM

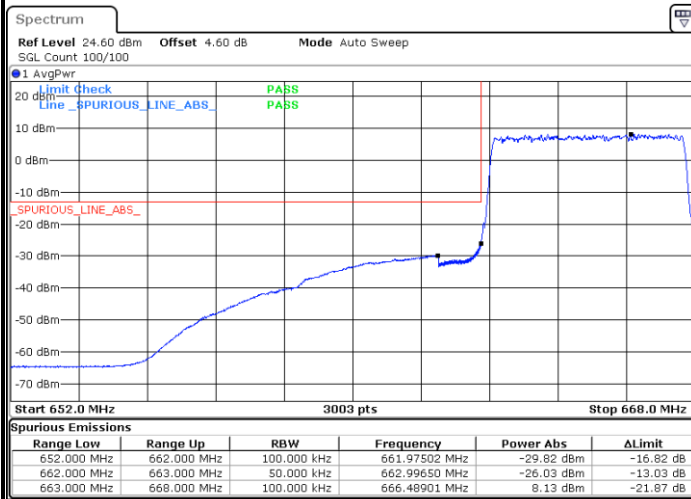
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



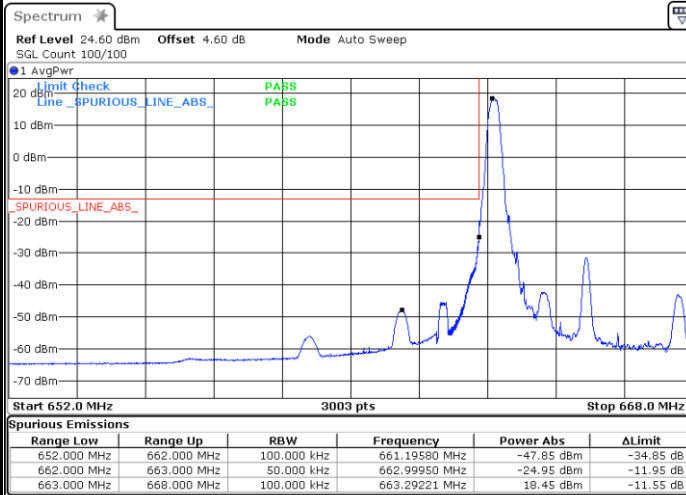
Highest Band Edge / Full RB



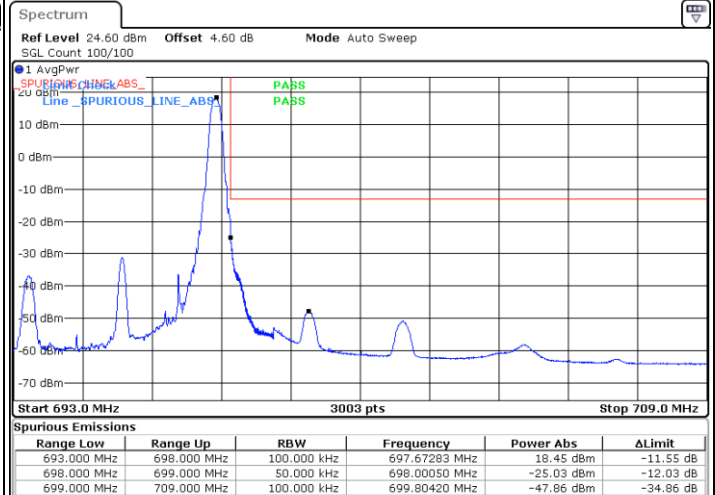


LTE Band 71 / 5MHz / 256QAM

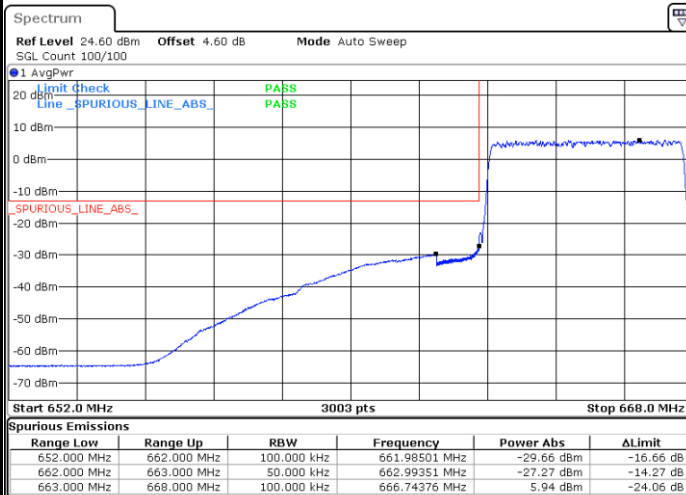
Lowest Band Edge / 1RB



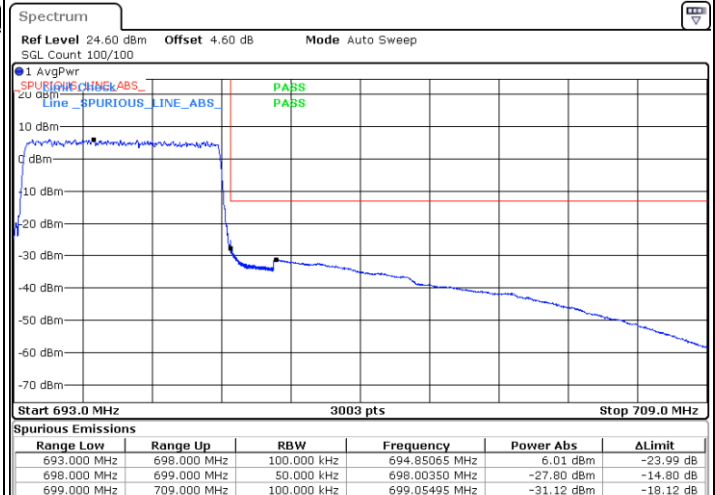
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



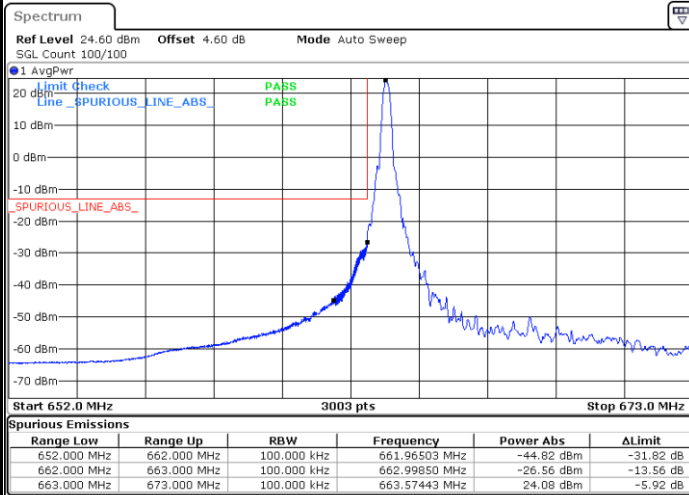
Highest Band Edge / Full RB



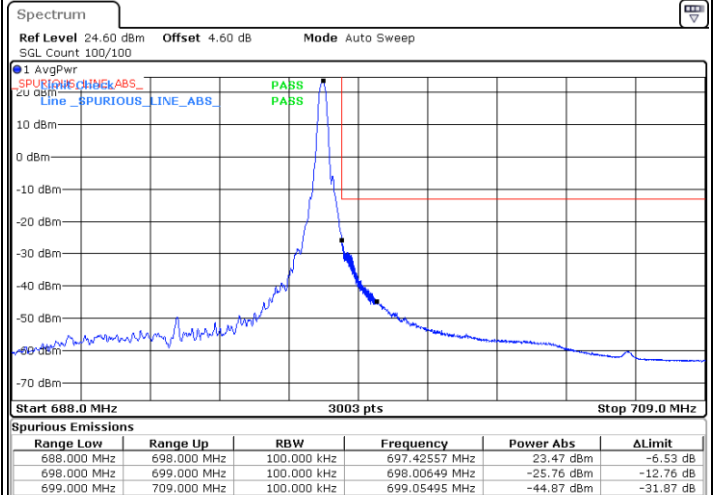


LTE Band 71 / 10MHz / QPSK

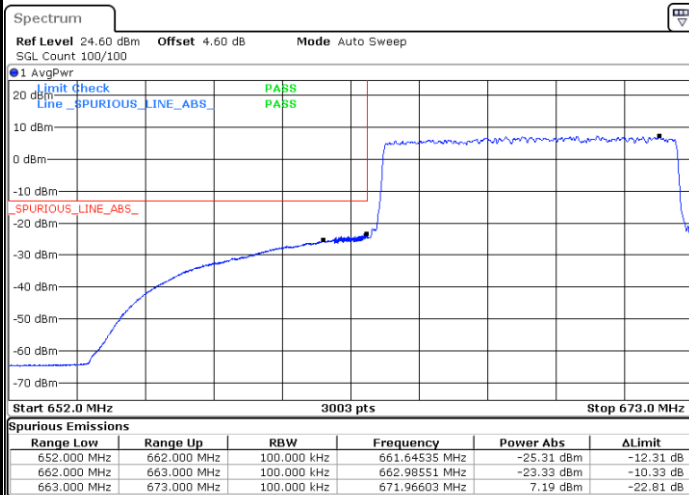
Lowest Band Edge / 1 RB



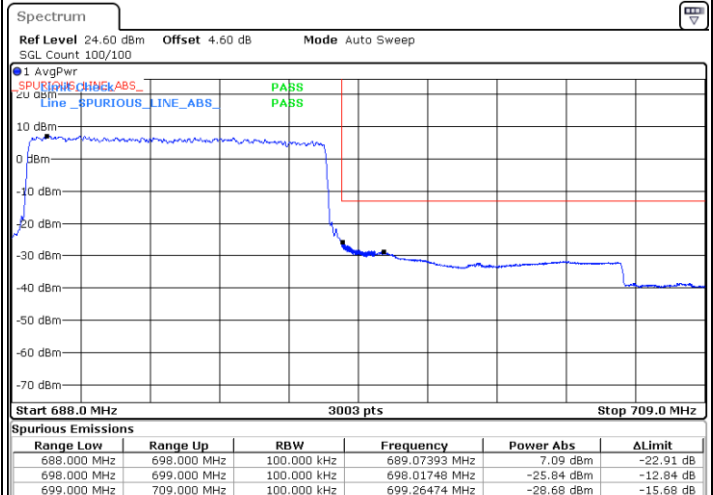
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



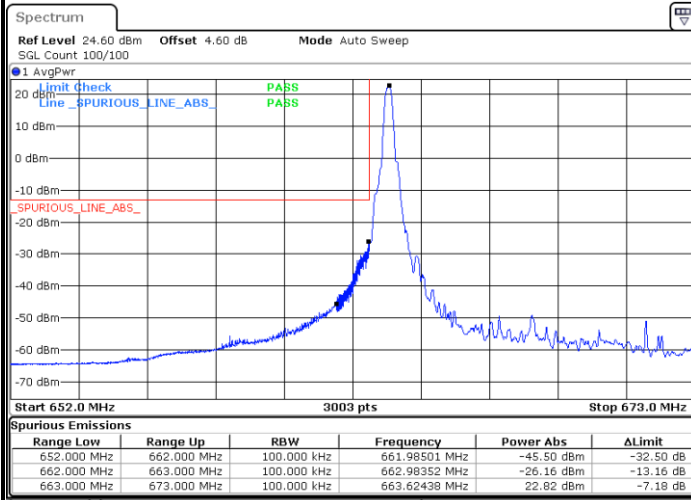
Highest Band Edge / Full RB



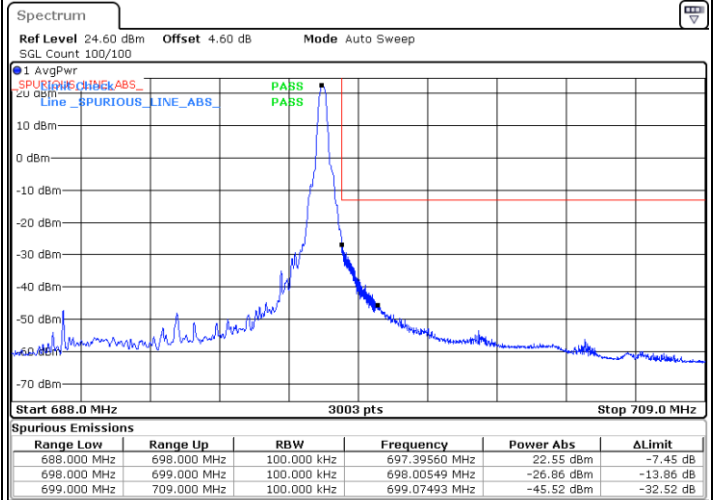


LTE Band 71 / 10MHz / 16QAM

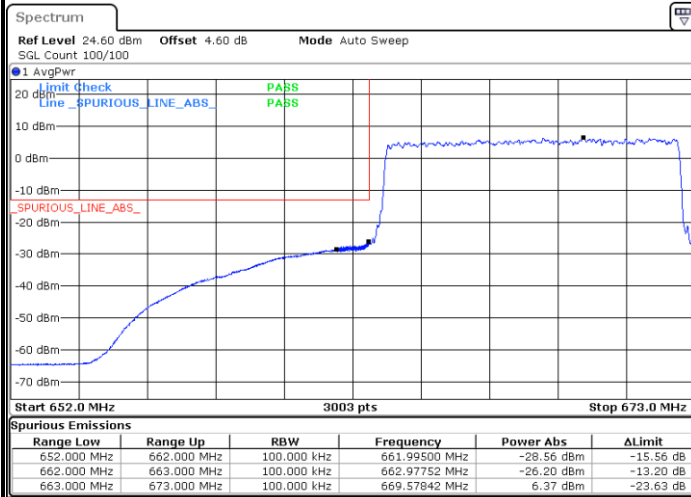
Lowest Band Edge / 1 RB



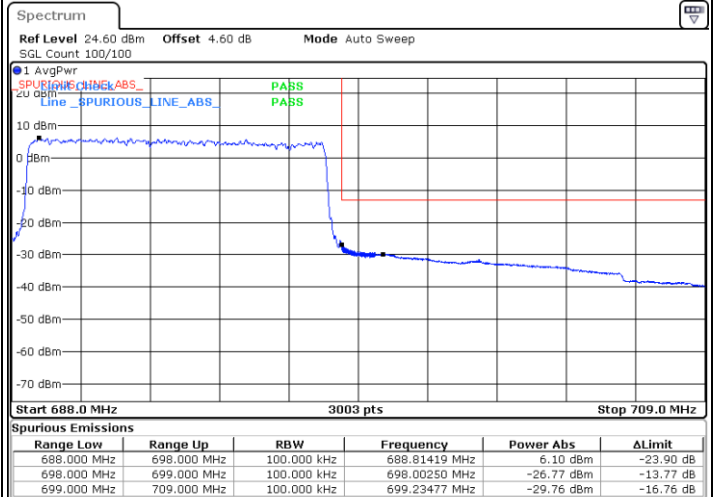
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



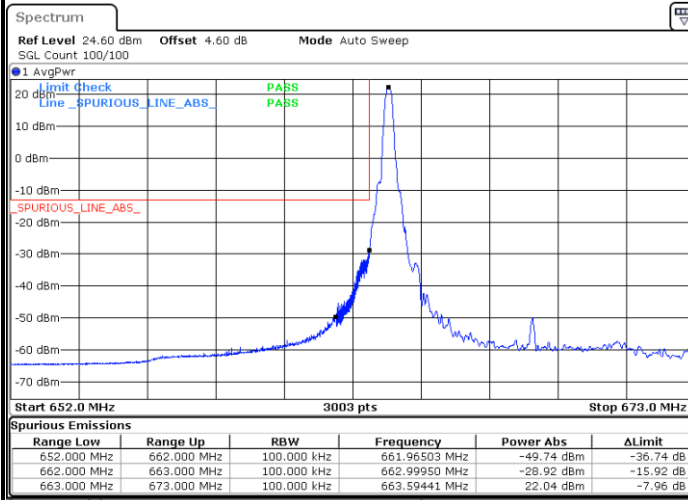
Highest Band Edge / Full RB



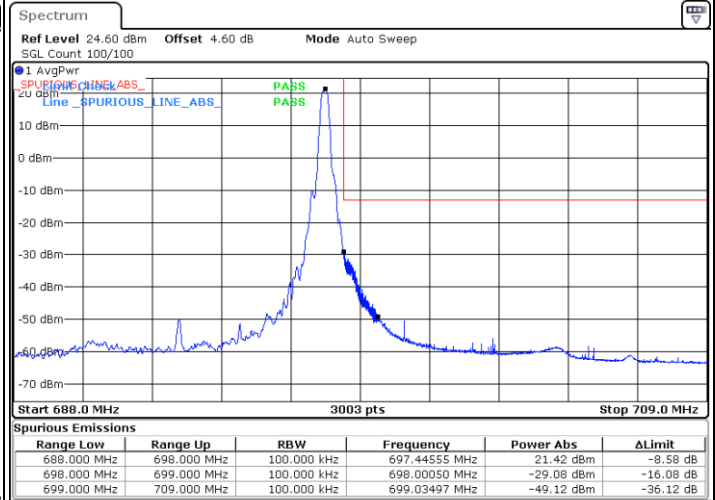


LTE Band 71 / 10MHz / 64QAM

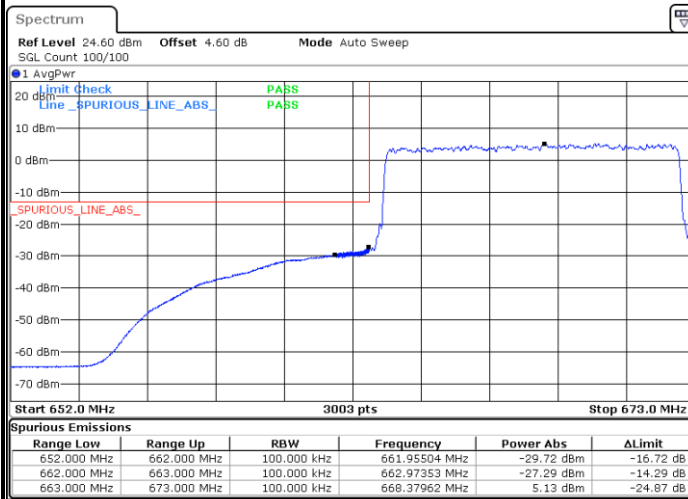
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

