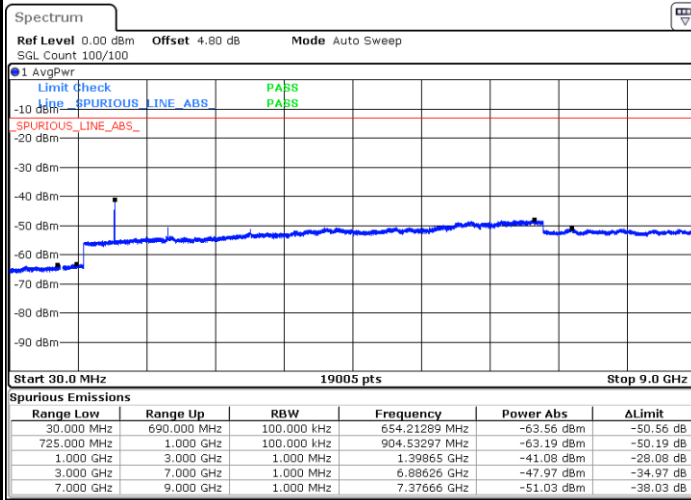




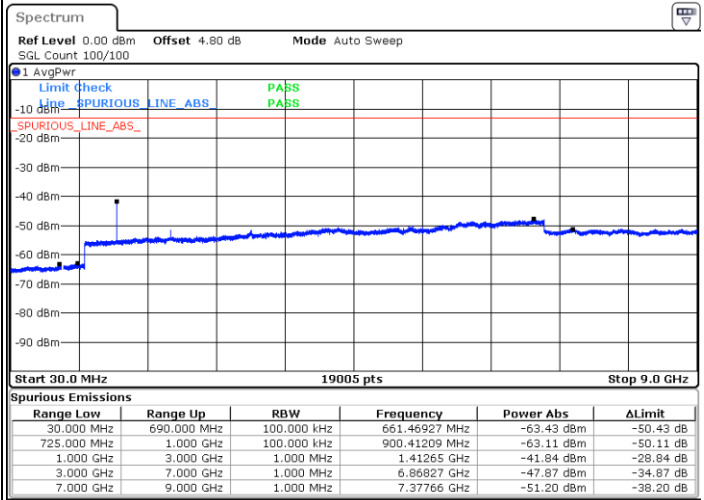
LTE Band 12 / 3MHz

Lowest Channel / QPSK



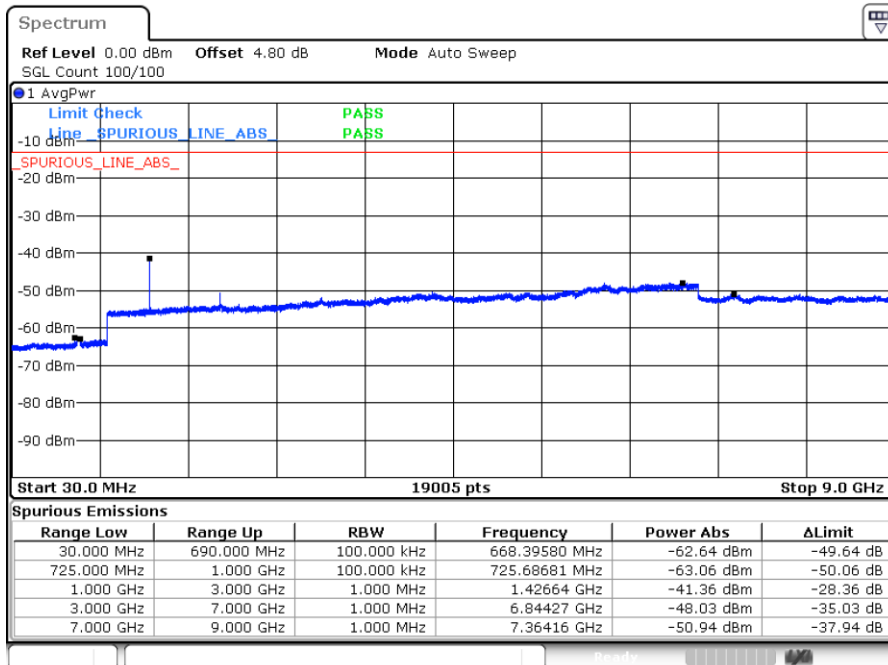
Date: 22.NOV.2024 21:30:44

Middle Channel / QPSK



Date: 22.NOV.2024 21:43:06

Highest Channel / QPSK

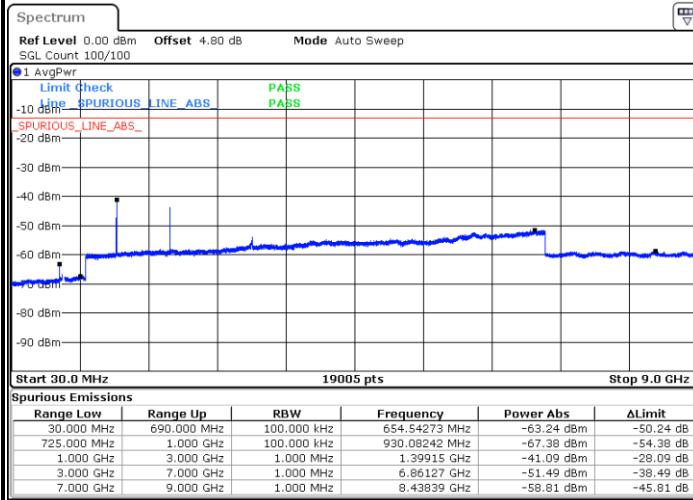


Date: 22.NOV.2024 21:44:28



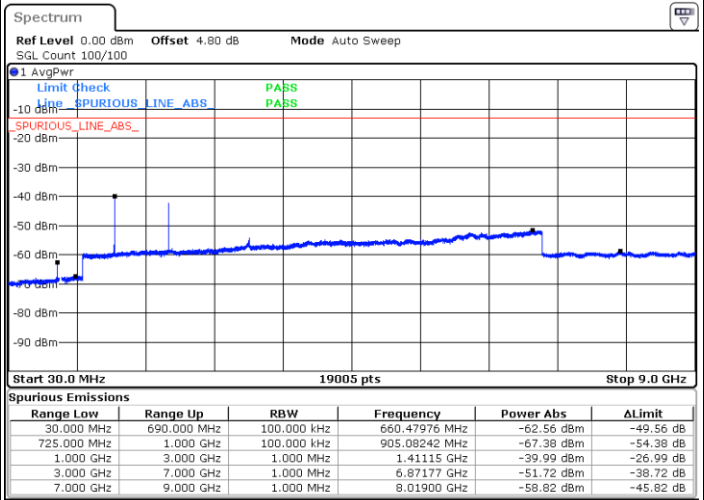
LTE Band 12 / 5MHz

Lowest Channel / QPSK



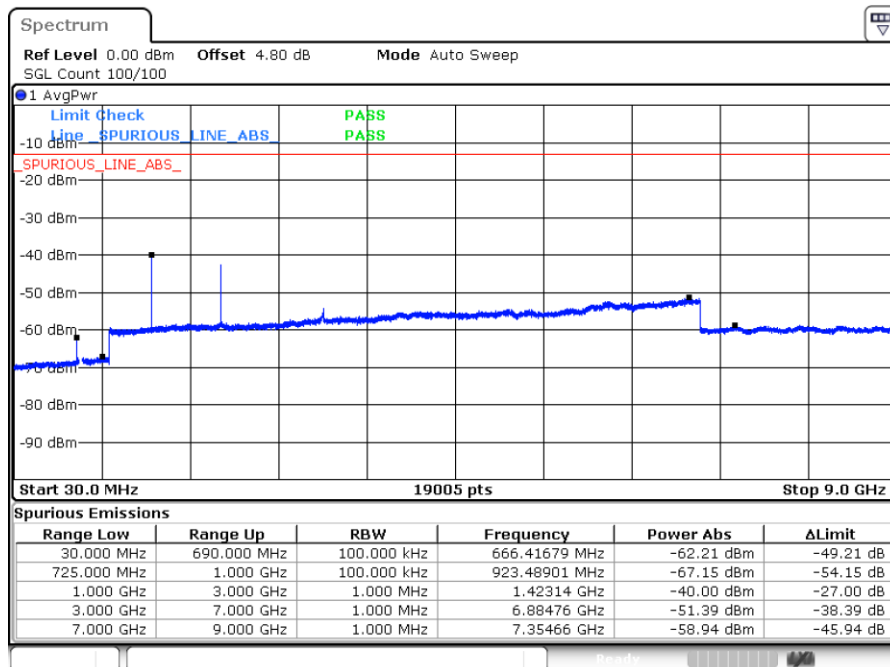
Date: 22.NOV.2024 21:55:57

Middle Channel / QPSK



Date: 22.NOV.2024 22:17:17

Highest Channel / QPSK

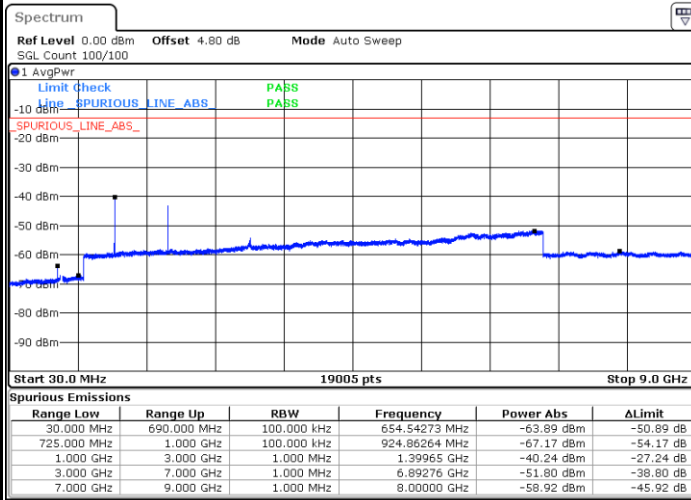


Date: 22.NOV.2024 22:18:39



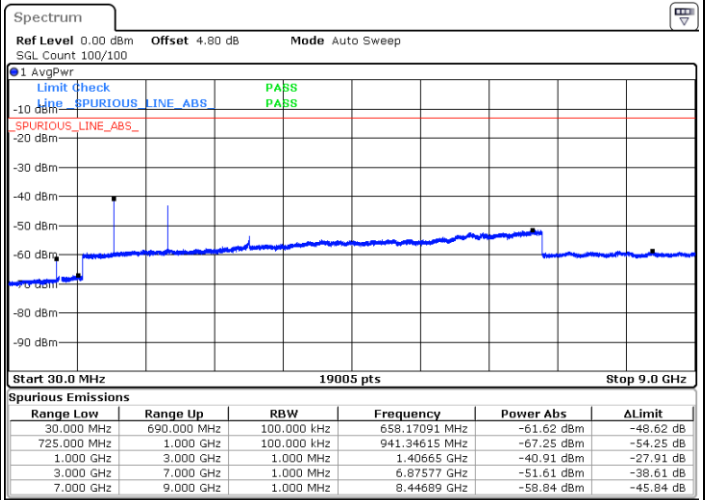
LTE Band 12 / 10MHz

Lowest Channel / QPSK



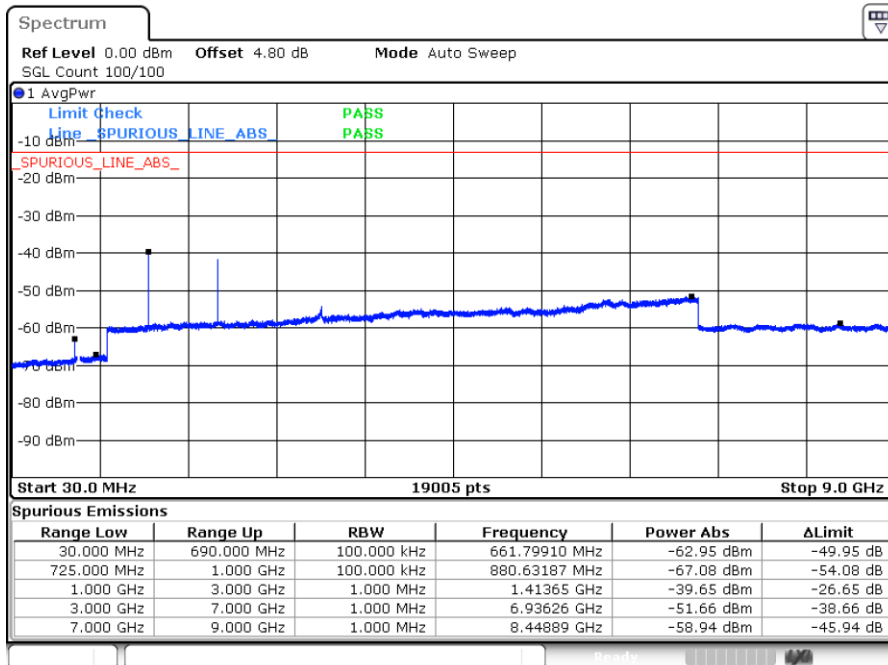
Date: 22.NOV.2024 22:31:14

Middle Channel / QPSK



Date: 22.NOV.2024 22:45:53

Highest Channel / QPSK



Date: 22.NOV.2024 22:47:15

**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	0.0023	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0041	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0044	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

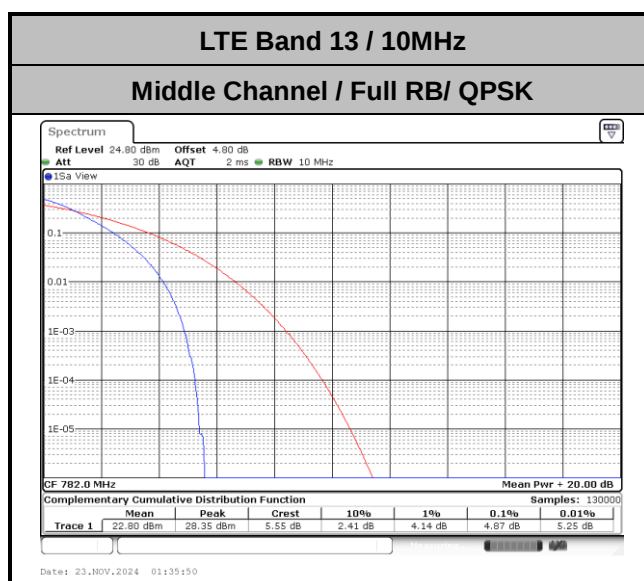
Note:

1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

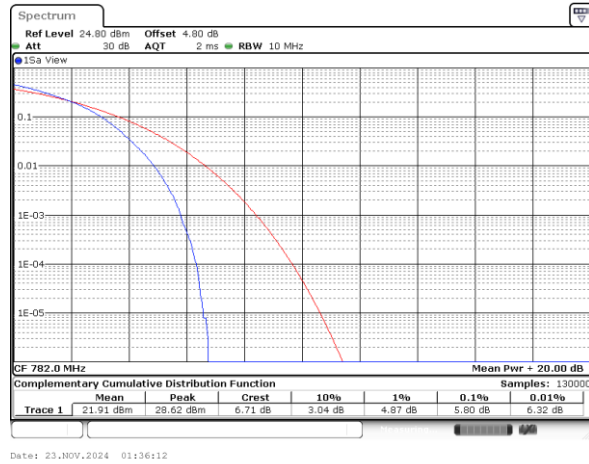
LTE Band 13

Peak-to-Average Ratio

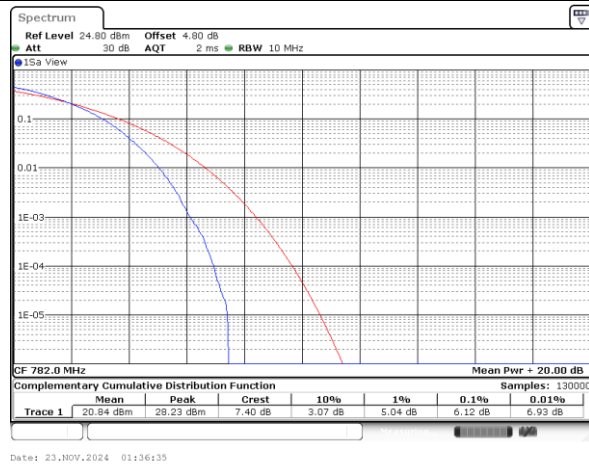
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.87	5.80	6.43	6.12	PASS



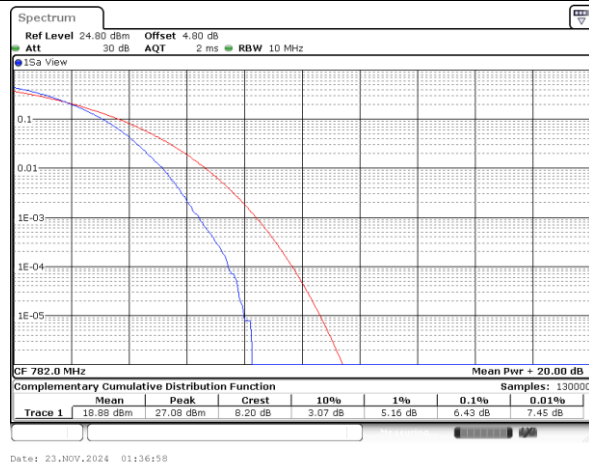
Middle Channel / Full RB/ 16QAM



Middle Channel / Full RB/ 64QAM

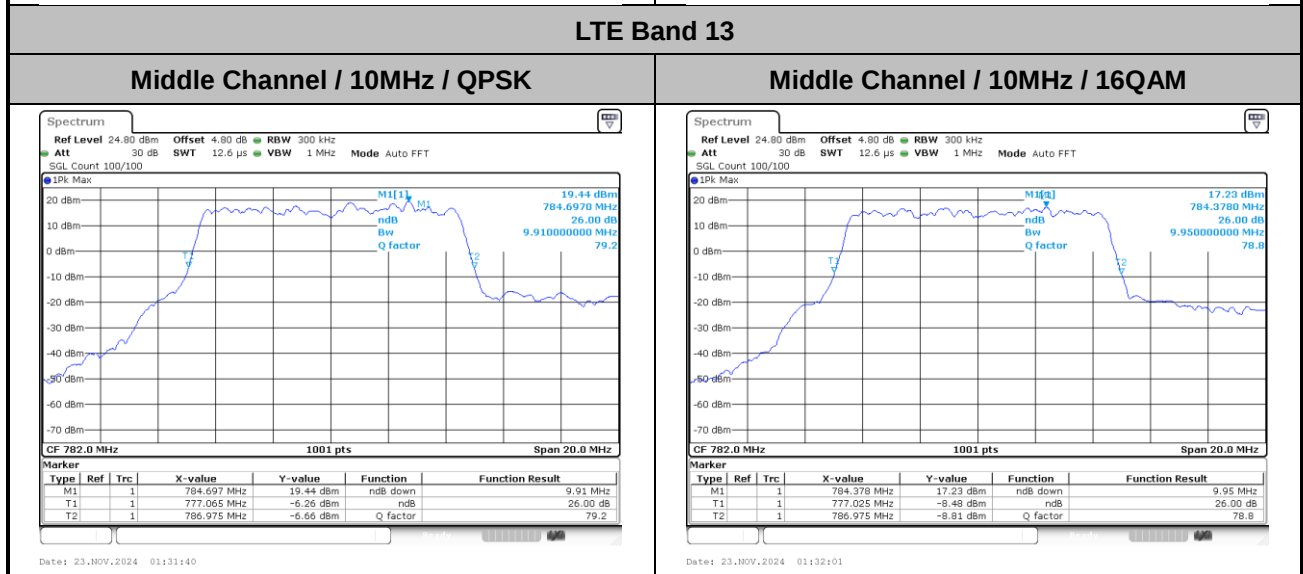
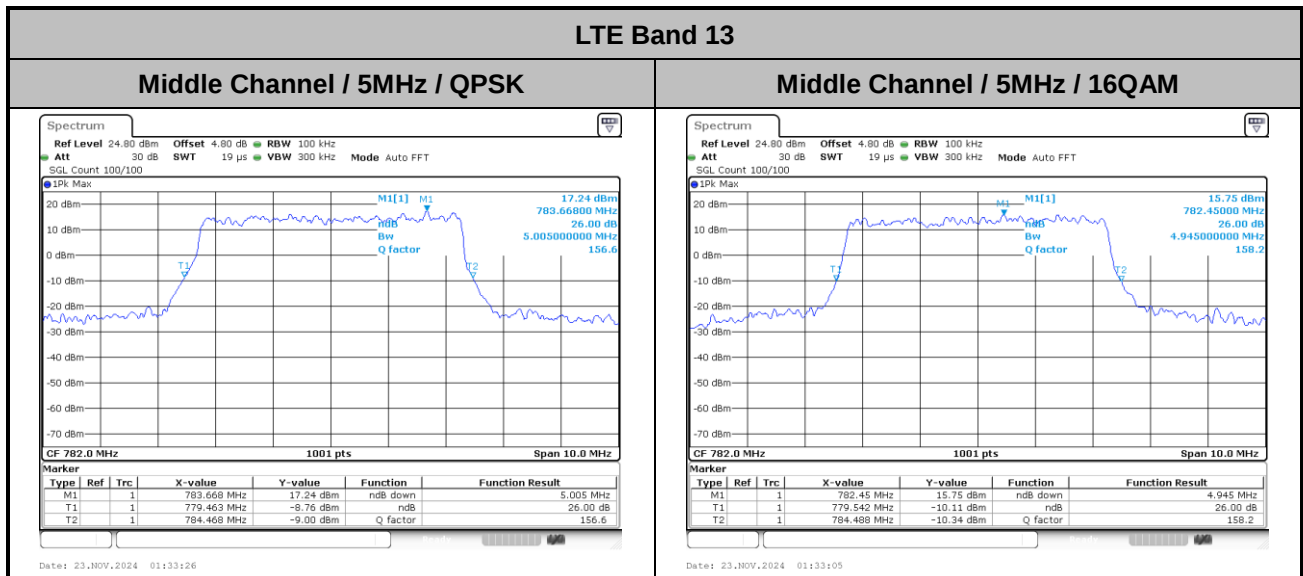


Middle Channel / Full RB/ 256QAM



**26dB Bandwidth**

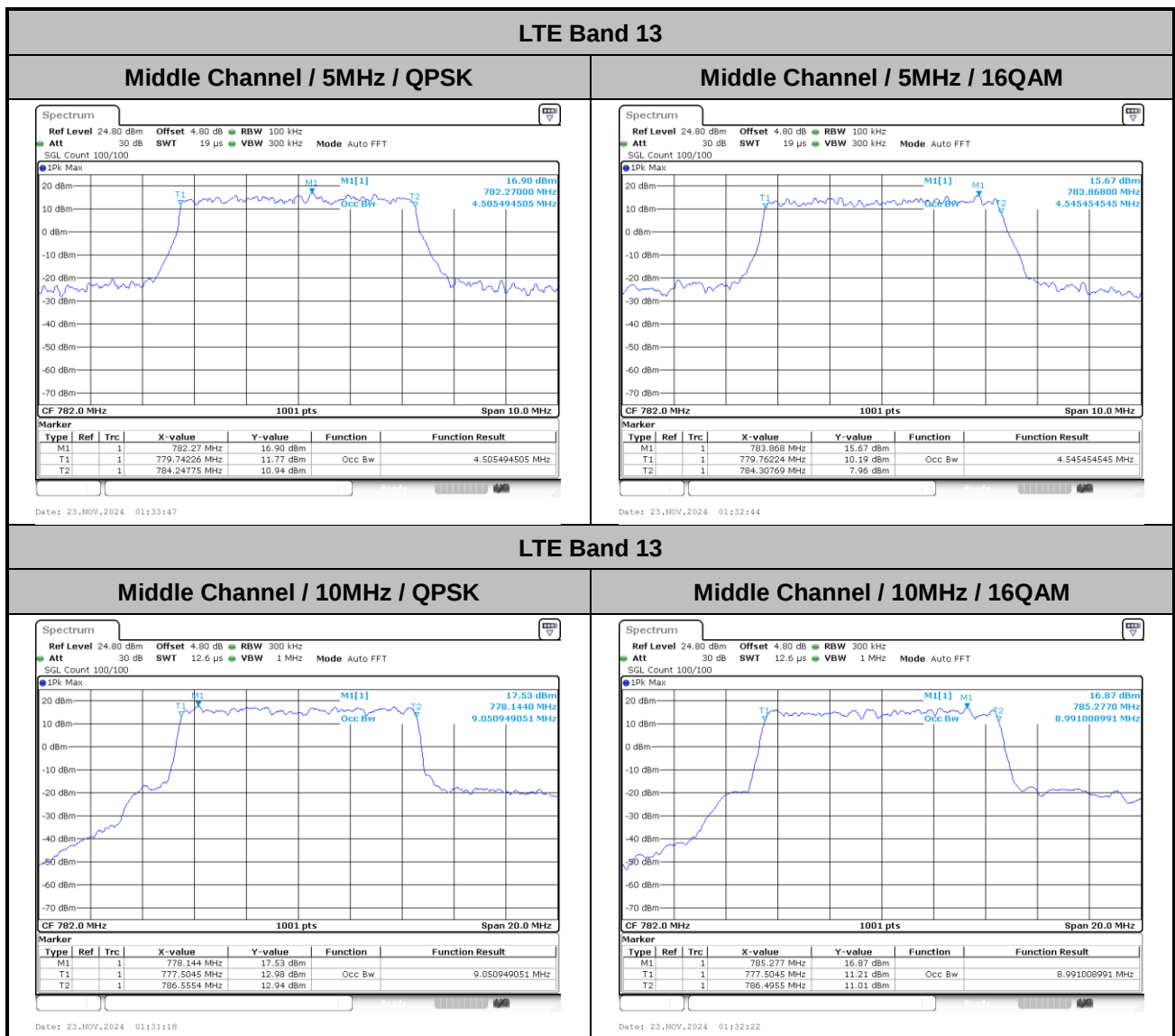
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.01	4.95
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.91	9.95





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.51	4.55
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	8.99

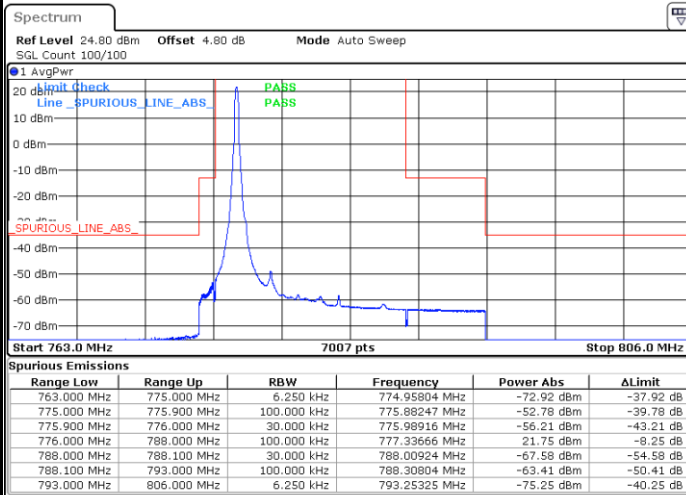




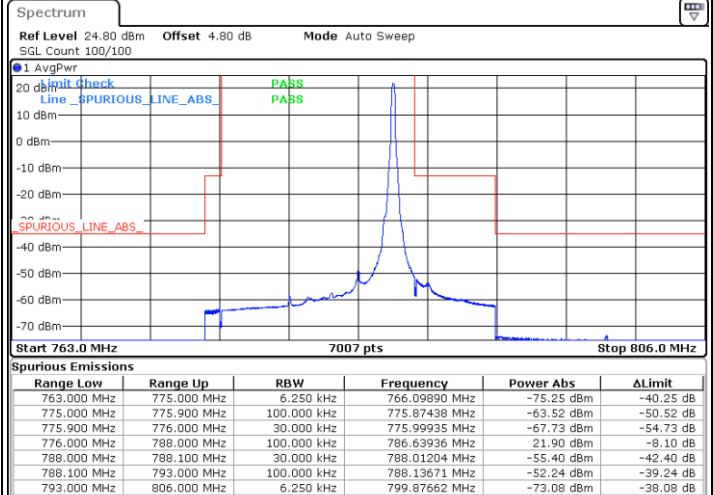
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

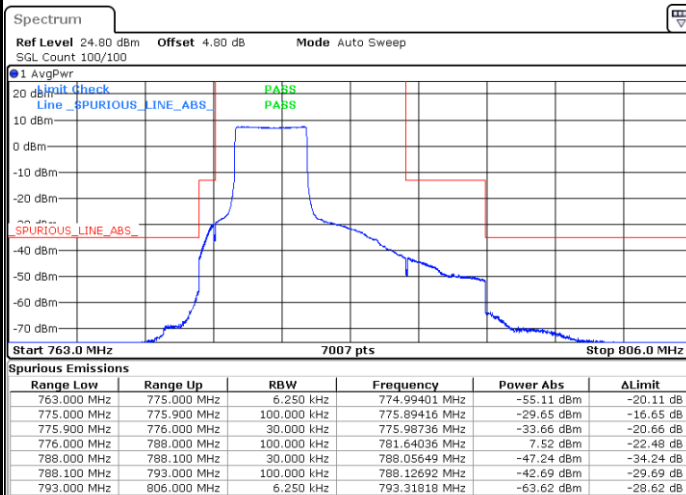
Lowest Band Edge / 1 RB



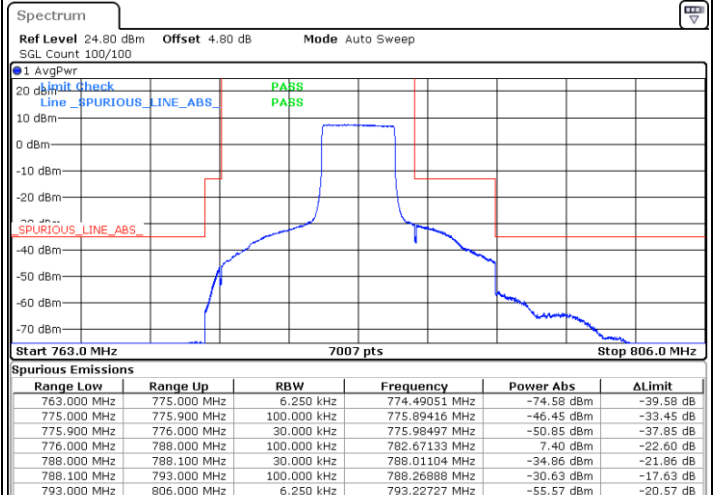
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



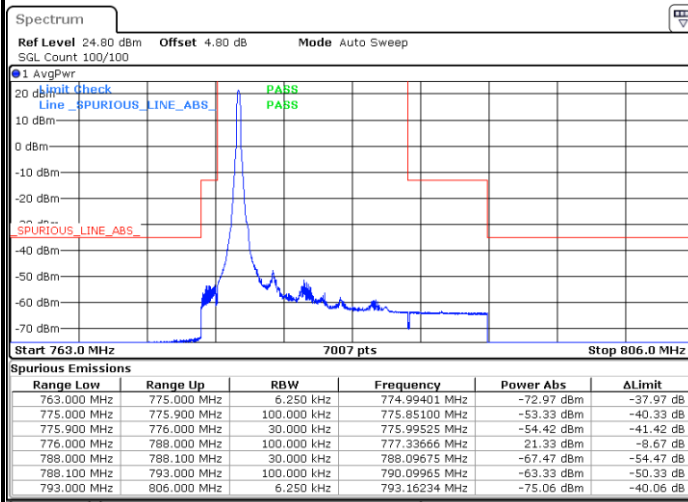
Highest Band Edge / Full RB





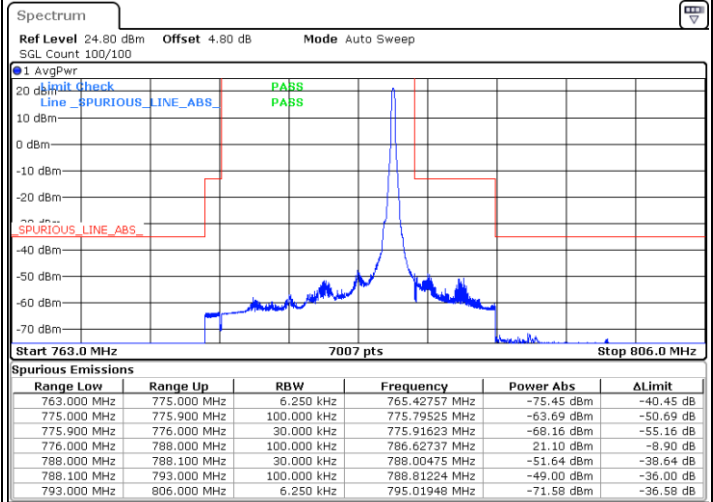
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



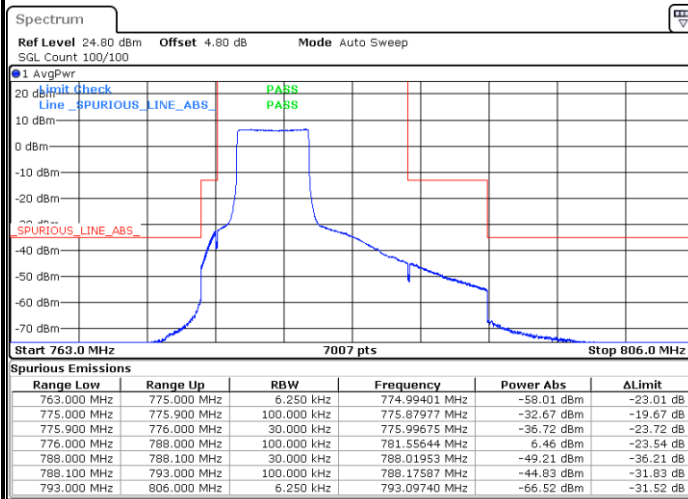
Date: 23.NOV.2024 00:28:29

Highest Band Edge / 1 RB



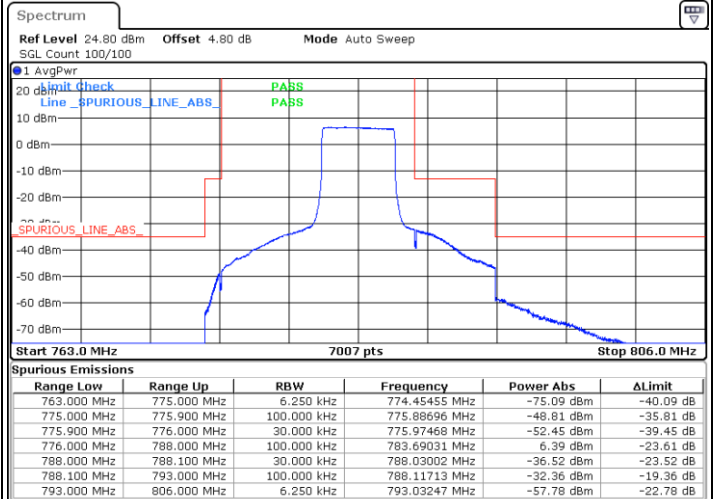
Date: 23.NOV.2024 00:47:59

Lowest Band Edge / Full RB



Date: 23.NOV.2024 00:39:45

Highest Band Edge / Full RB

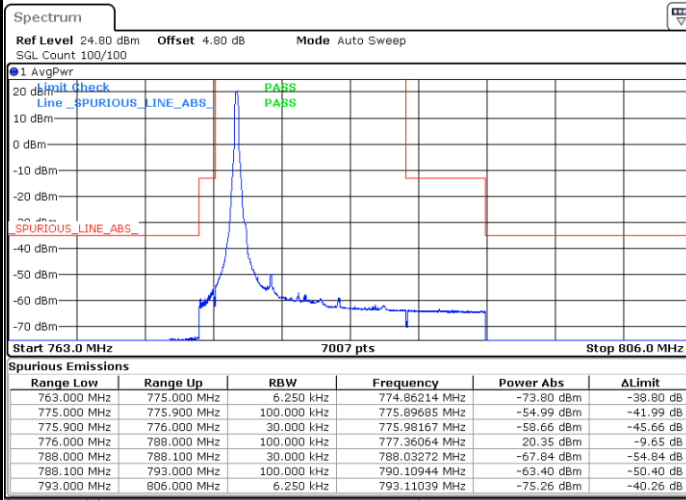


Date: 23.NOV.2024 00:57:14



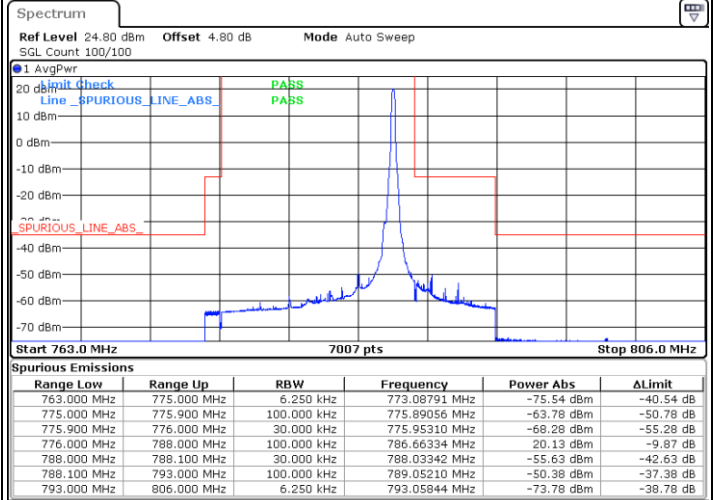
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB



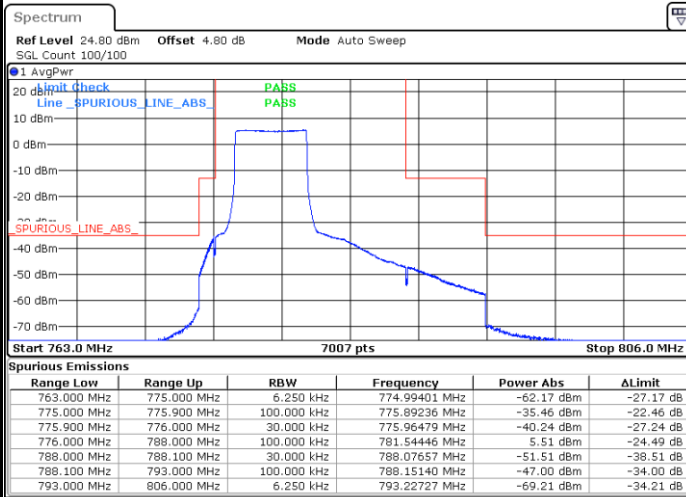
Date: 23.NOV.2024 00:30:38

Highest Band Edge / 1 RB



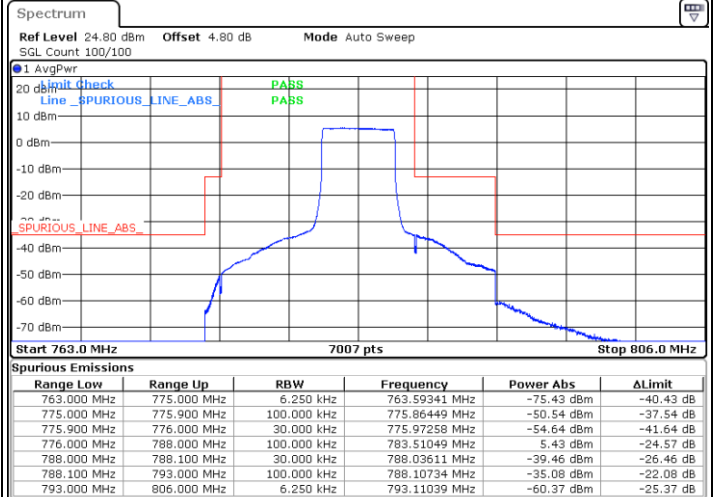
Date: 23.NOV.2024 00:49:50

Lowest Band Edge / Full RB



Date: 23.NOV.2024 00:37:54

Highest Band Edge / Full RB

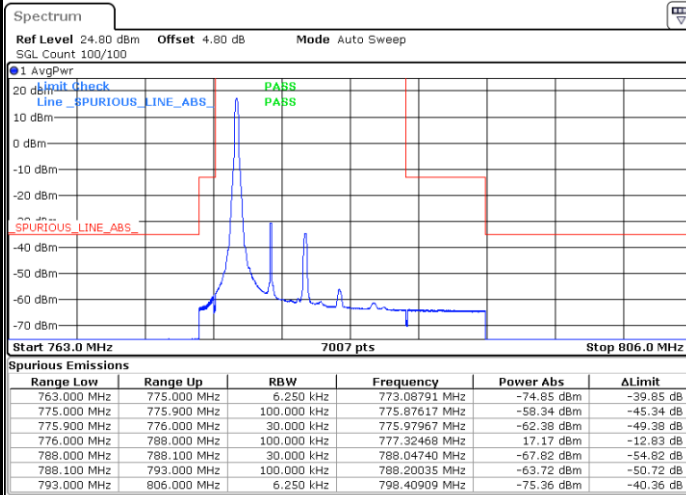


Date: 23.NOV.2024 00:55:23

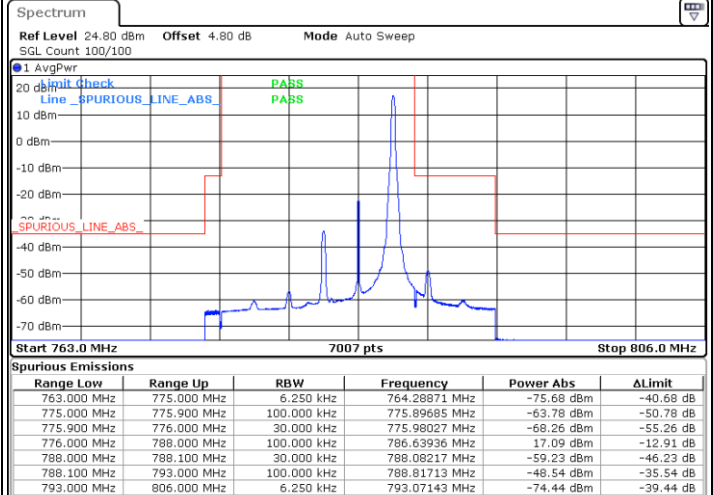


LTE Band 13 / 5MHz / 256QAM

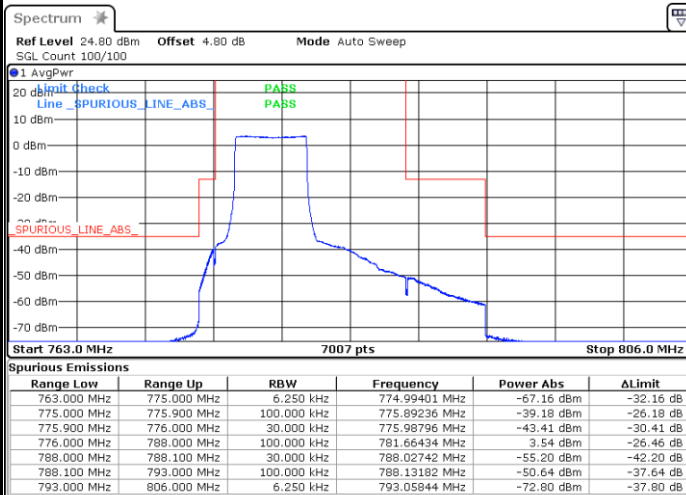
Lowest Band Edge / 1RB



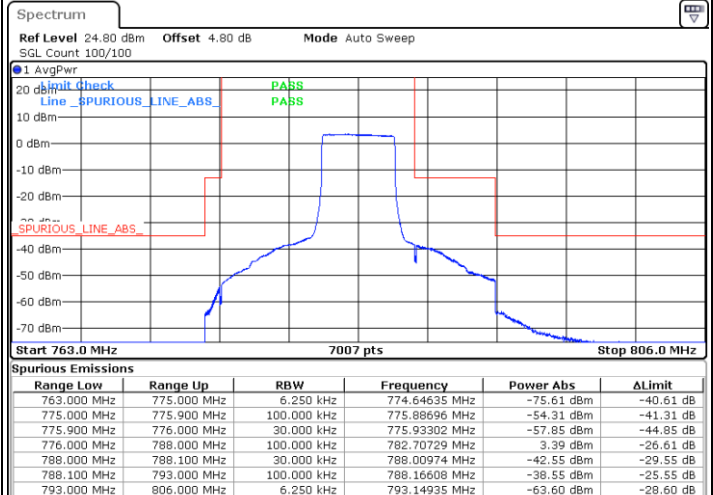
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



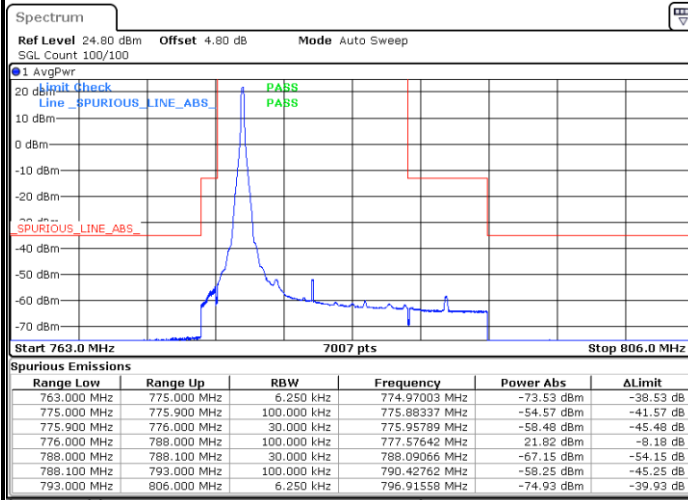
Highest Band Edge / Full RB





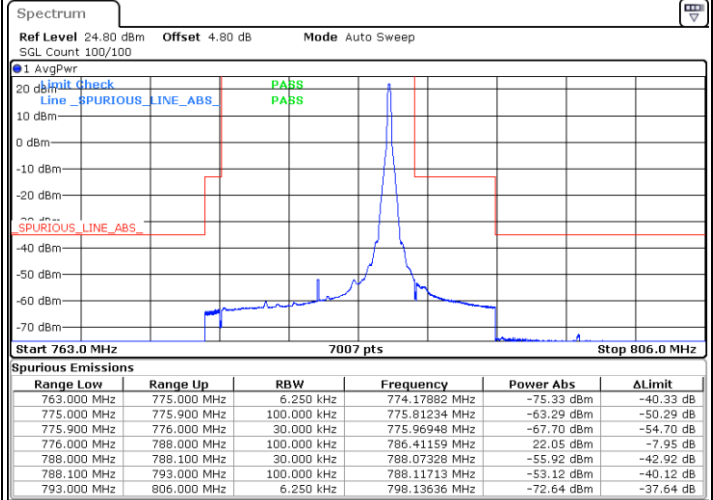
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



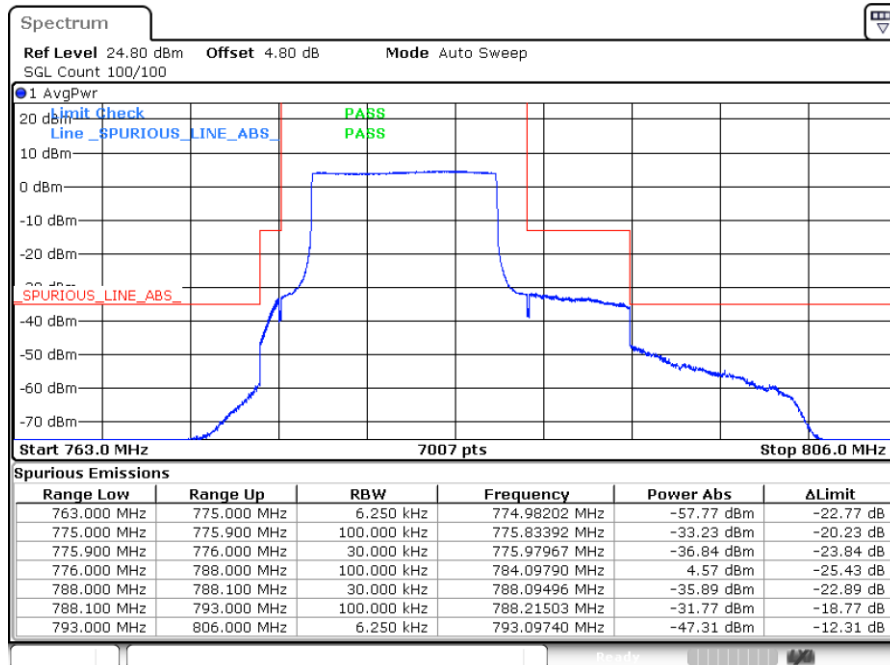
Date: 23.NOV.2024 01:02:16

middle Band Edge / 1 RB



Date: 23.NOV.2024 01:16:53

Middle Band Edge / Full RB

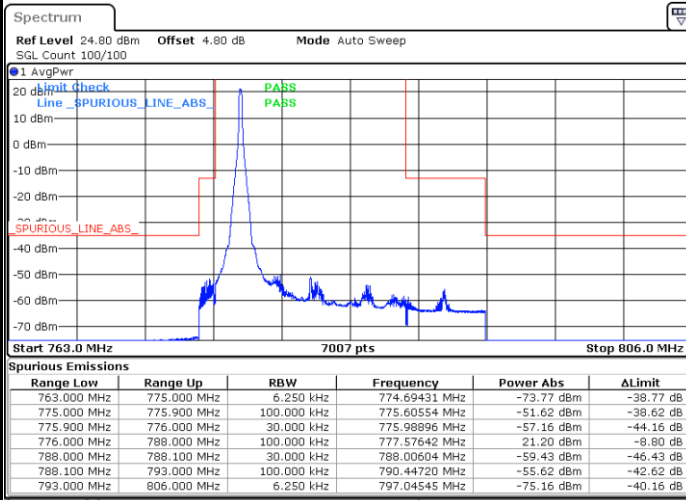


Date: 23.NOV.2024 01:15:03



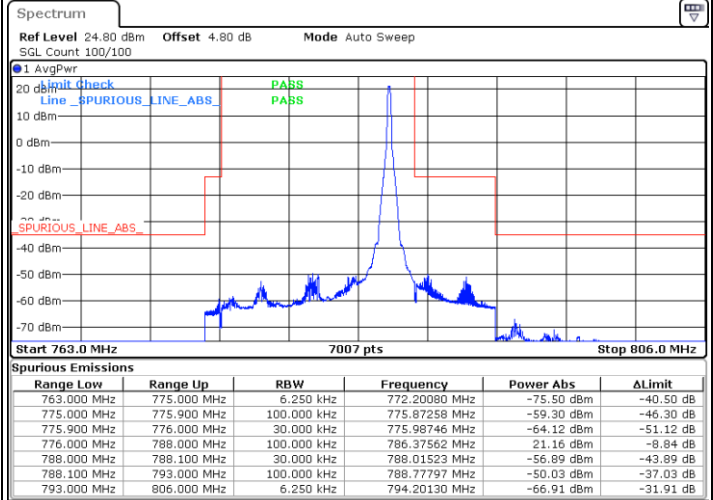
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



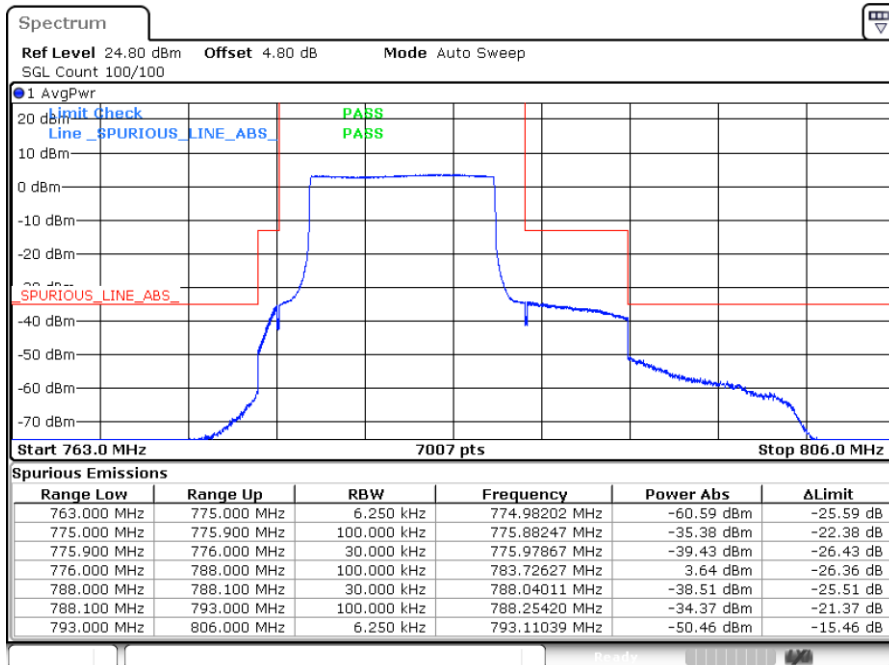
Date: 23.NOV.2024 01:04:06

middle Band Edge / 1 RB



Date: 23.NOV.2024 01:18:57

middle Band Edge / Full RB

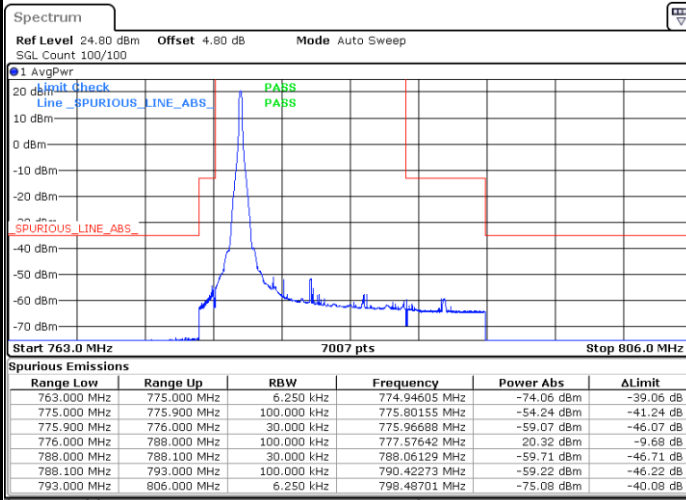


Date: 23.NOV.2024 01:13:14



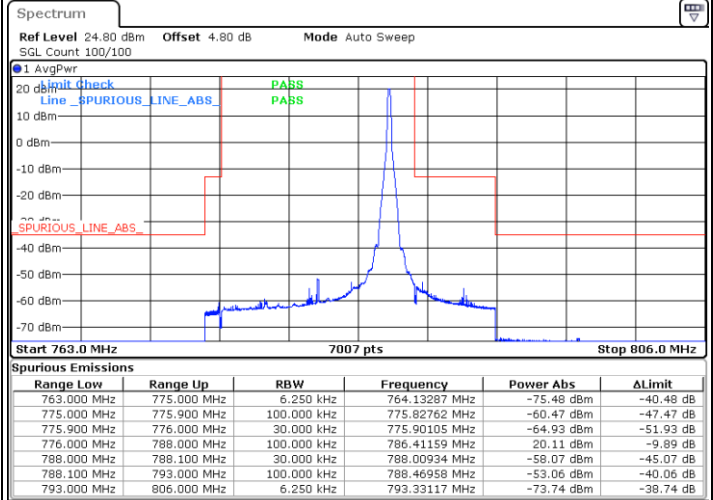
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



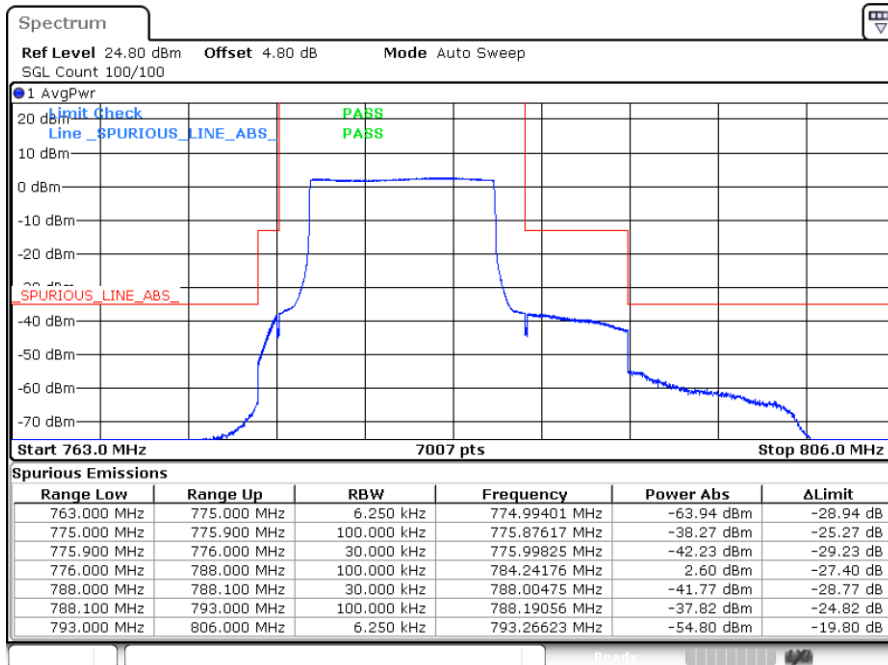
Date: 23.NOV.2024 01:05:55

middle Band Edge / 1 RB



Date: 23.NOV.2024 01:20:47

middle Band Edge / Full RB

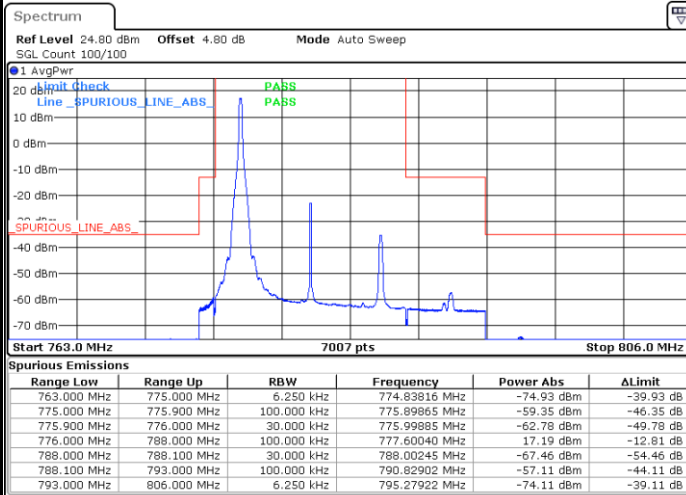


Date: 23.NOV.2024 01:11:24

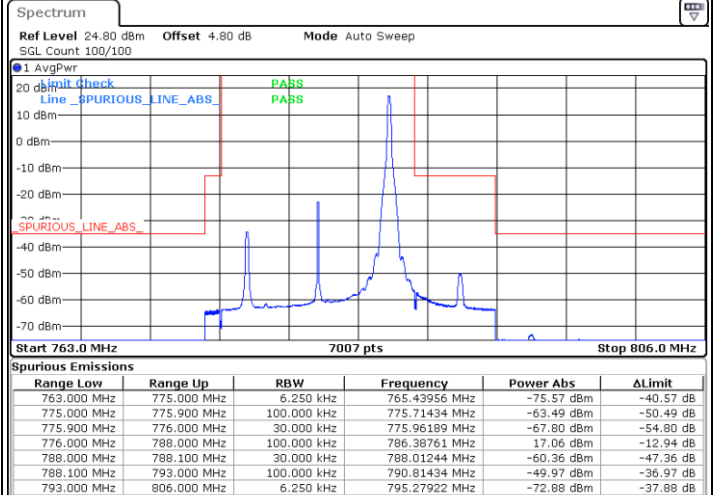


LTE Band 13 / 10MHz / 256QAM

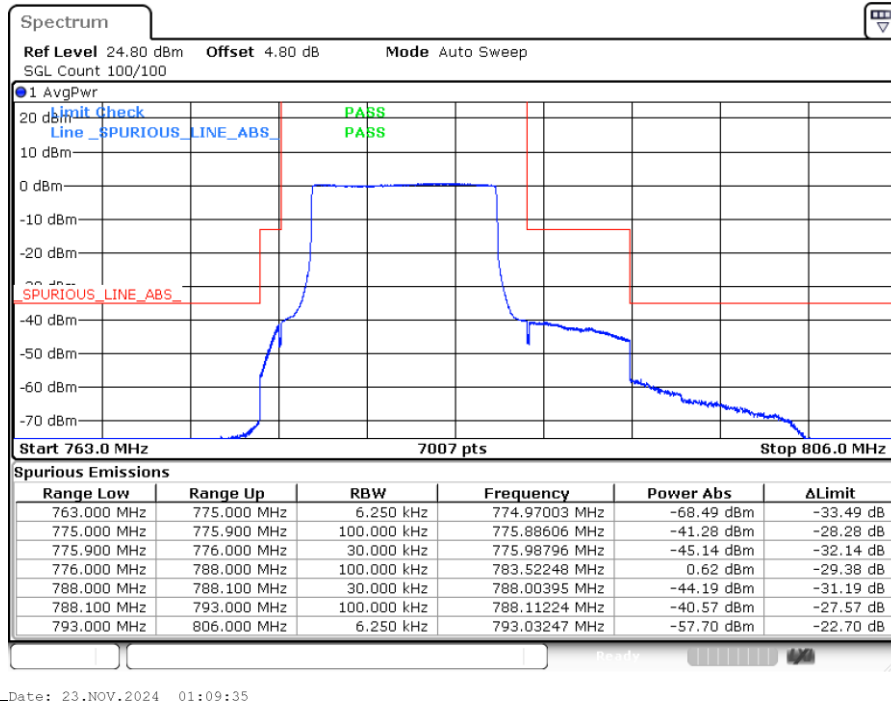
middle Band Edge / 1 RB



middle Band Edge / 1 RB



middle Band Edge / Full RB

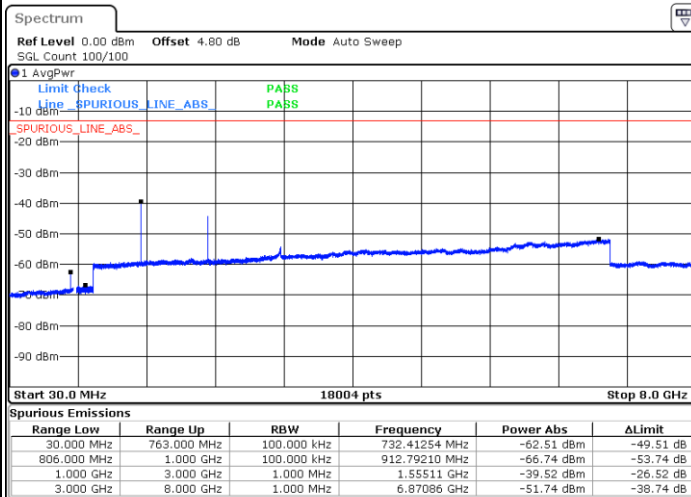




Conducted Spurious Emission

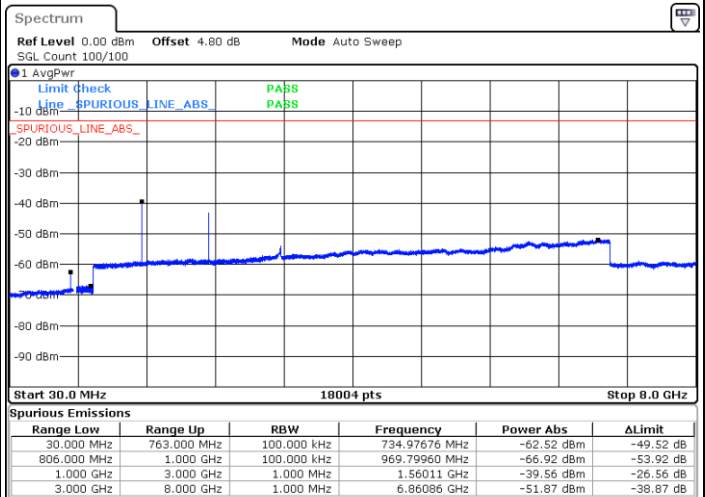
LTE Band 13 / 5MHz

Lowest Channel / QPSK



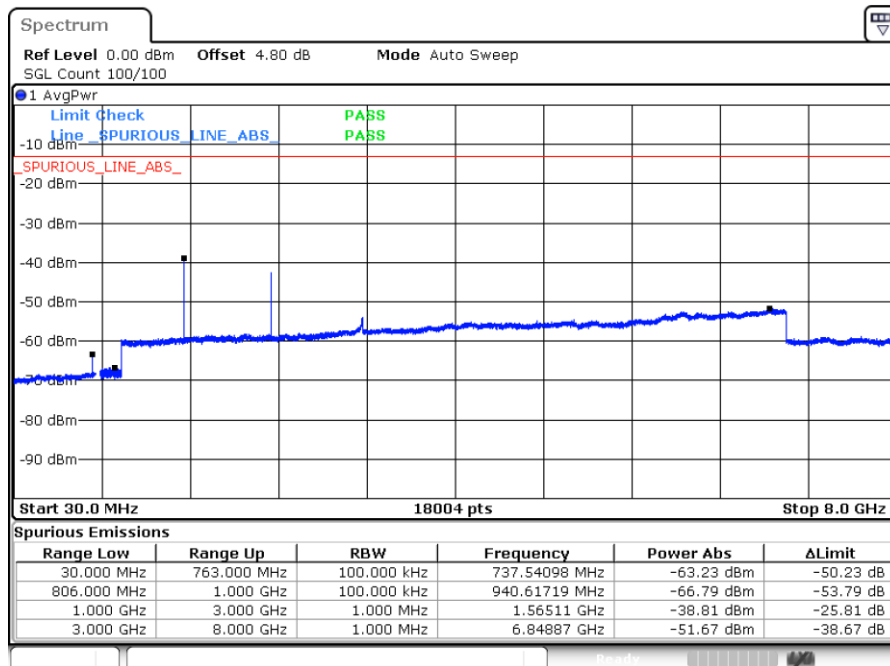
Date: 23.NOV.2024 00:24:47

Middle Channel / QPSK



Date: 23.NOV.2024 00:42:57

Highest Channel / QPSK

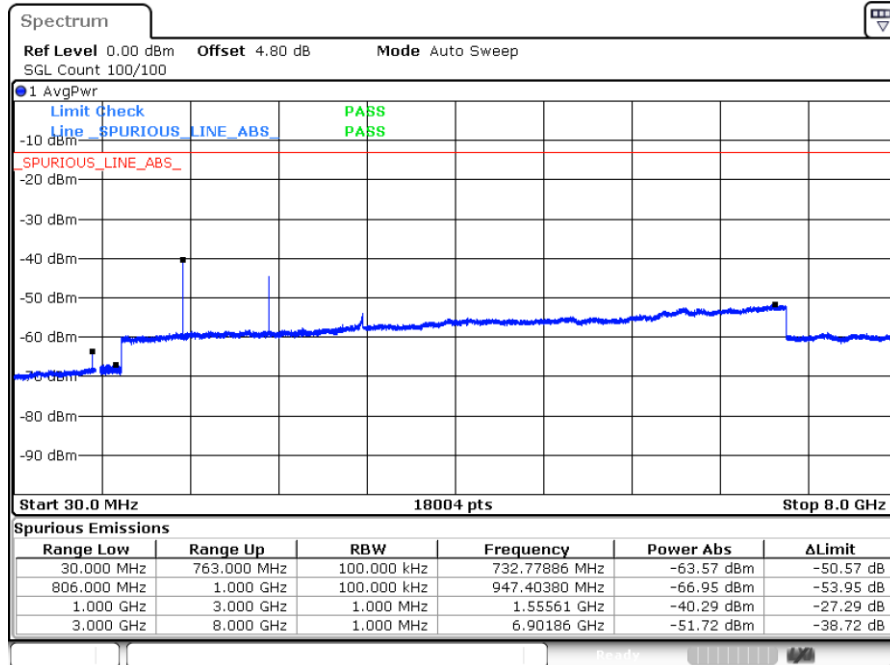


Date: 23.NOV.2024 00:44:19



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 23.NOV.2024 01:00:26

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	0.0022	PASS
40	Normal Voltage	0.0044	
30	Normal Voltage	0.0045	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0033	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0036	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0014	

Note:

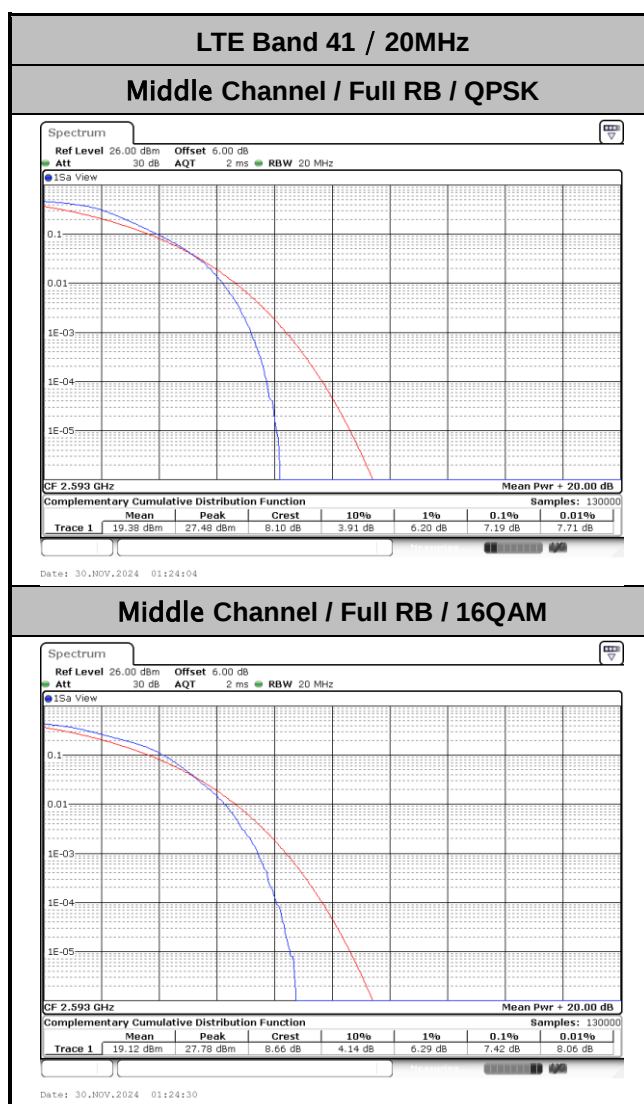
1. Normal Voltage =4.0 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

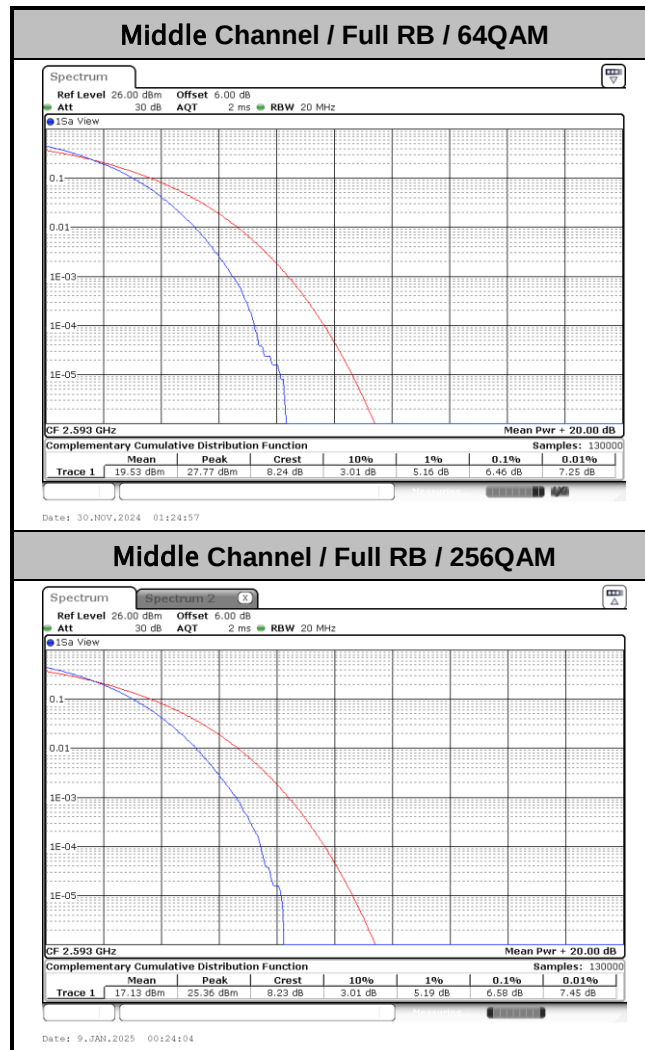


LTE Band 41

Peak-to-Average Ratio

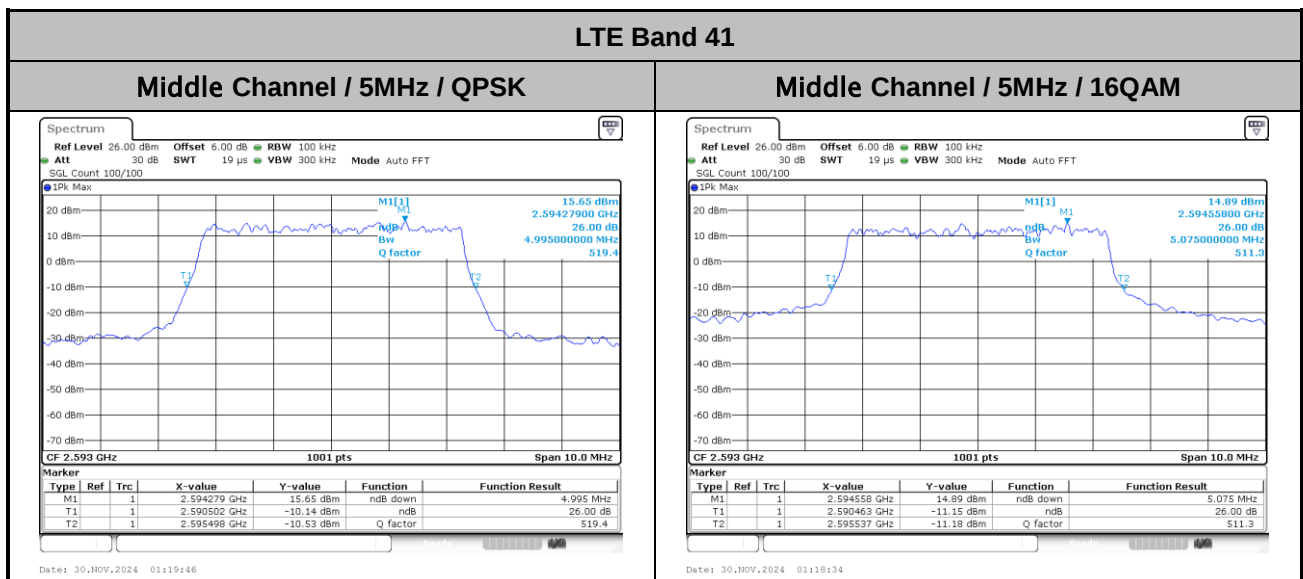
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	7.19	7.42	6.46	6.58	PASS





**26dB Bandwidth**

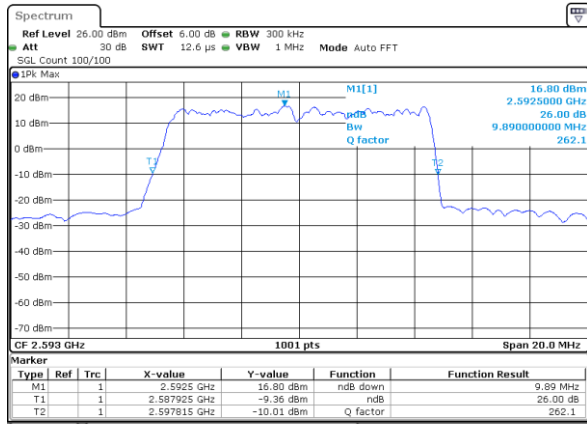
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.00	5.08
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.89	9.69
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.39	14.24
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.82	18.94





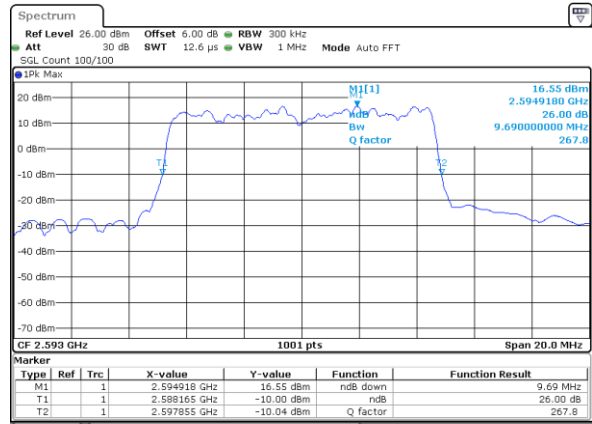
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 30.NOV.2024 01:16:56

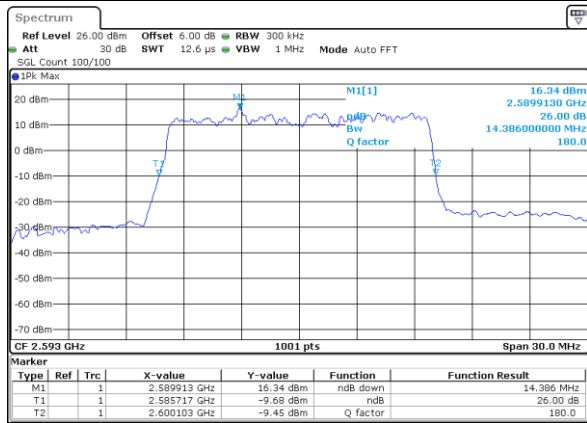
Middle Channel / 10MHz / 16QAM



Date: 30.NOV.2024 01:18:09

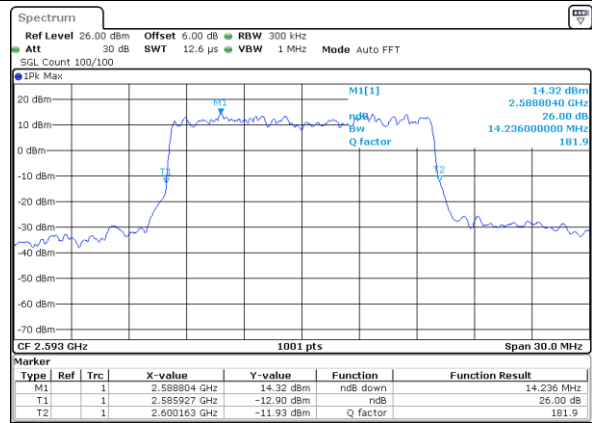
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 30.NOV.2024 01:16:32

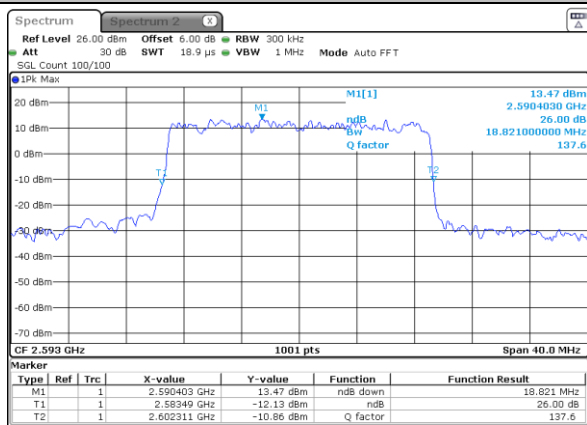
Middle Channel / 15MHz / 16QAM



Date: 30.NOV.2024 01:15:20

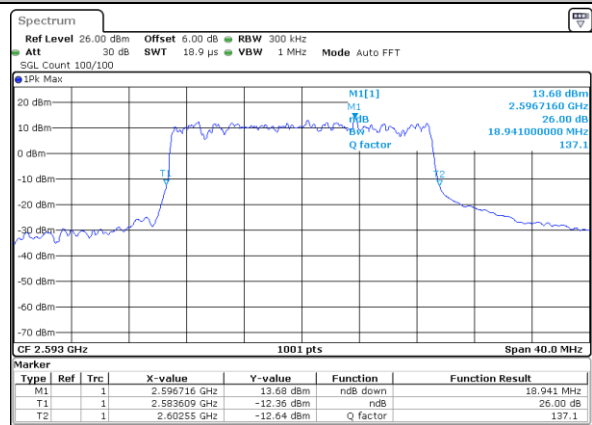
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 9.JAN.2025 00:25:28

Middle Channel / 20MHz / 16QAM

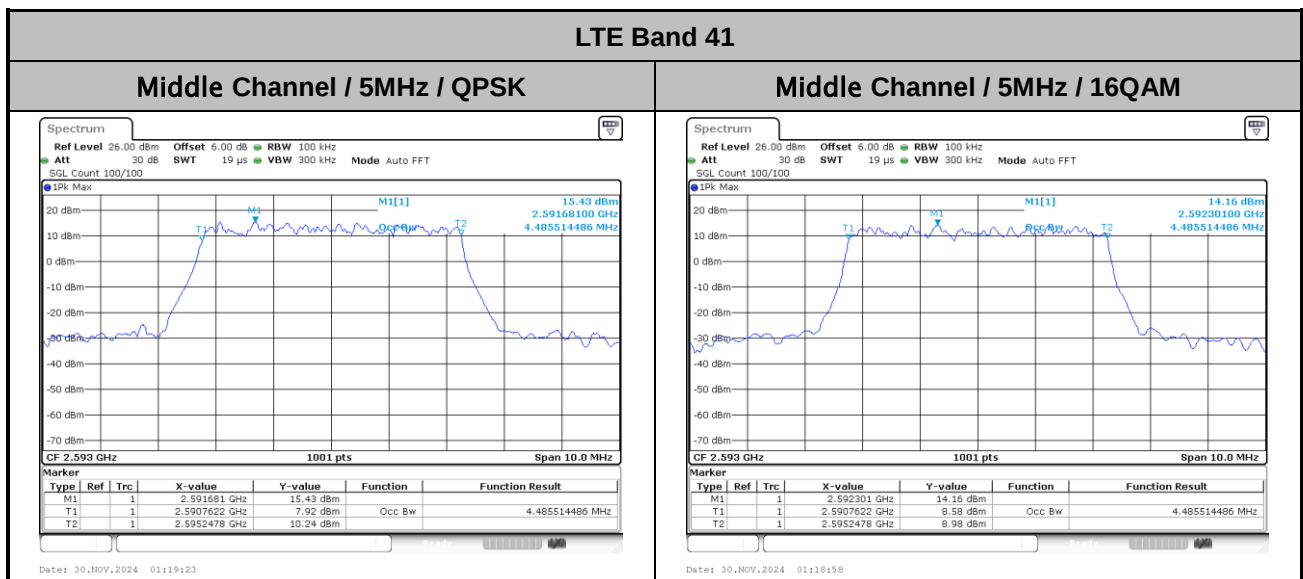


Date: 30.NOV.2024 01:22:57



Occupied Bandwidth

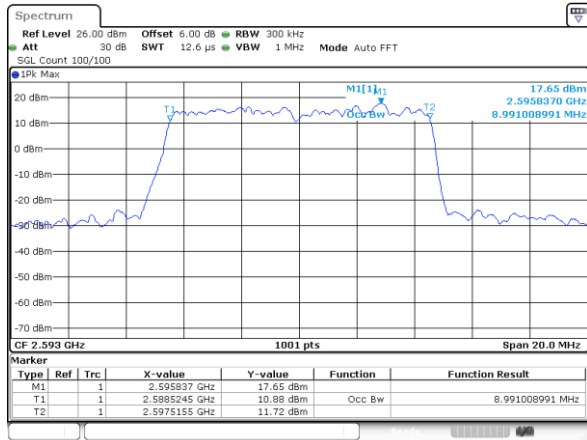
Mode	LTE Band 41 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.99	9.01
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.37
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.90



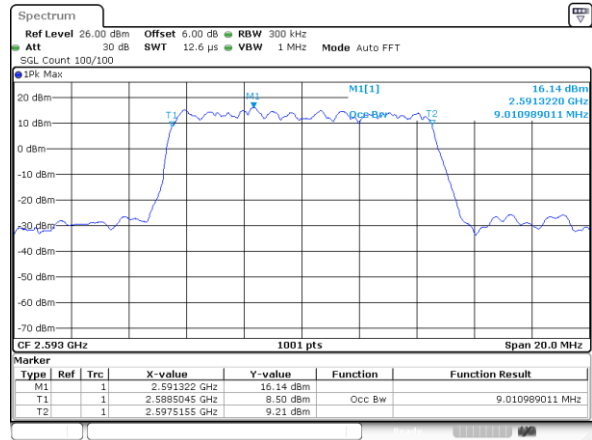


LTE Band 41

Middle Channel / 10MHz / QPSK

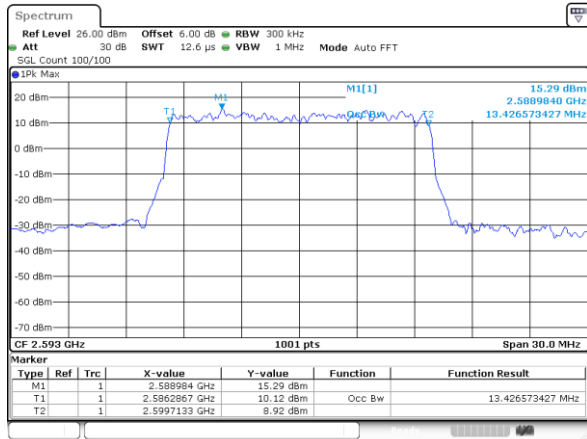


Middle Channel / 10MHz / 16QAM

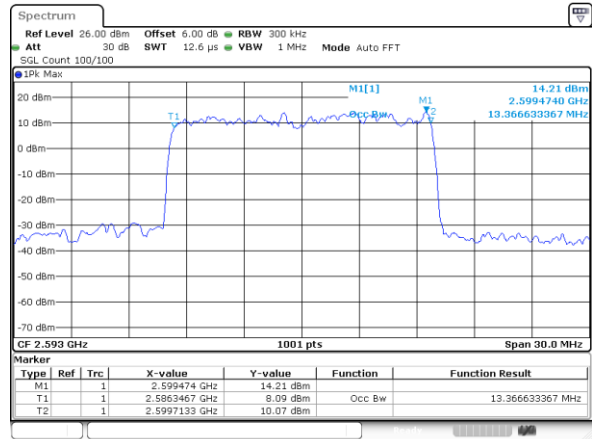


LTE Band 41

Middle Channel / 15MHz / QPSK

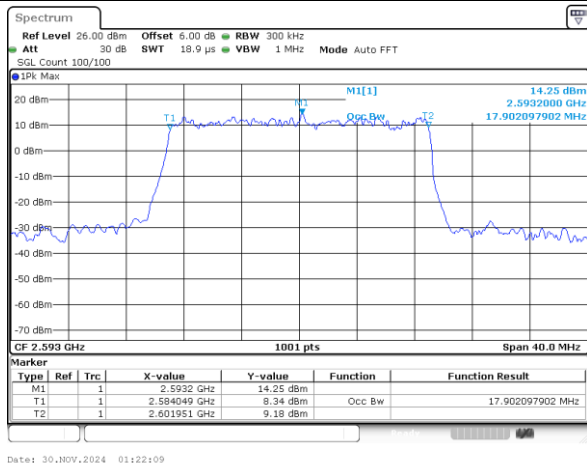


Middle Channel / 15MHz / 16QAM

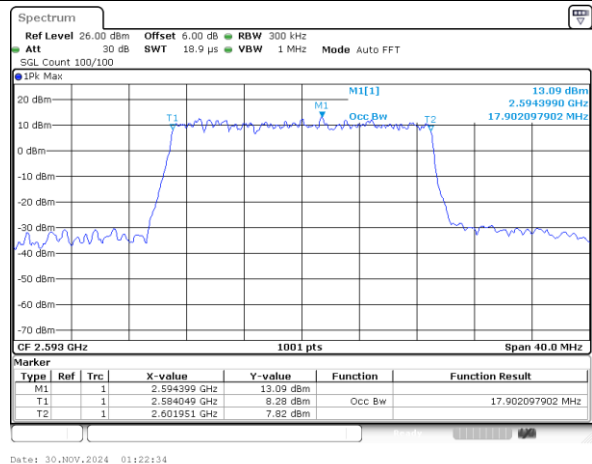


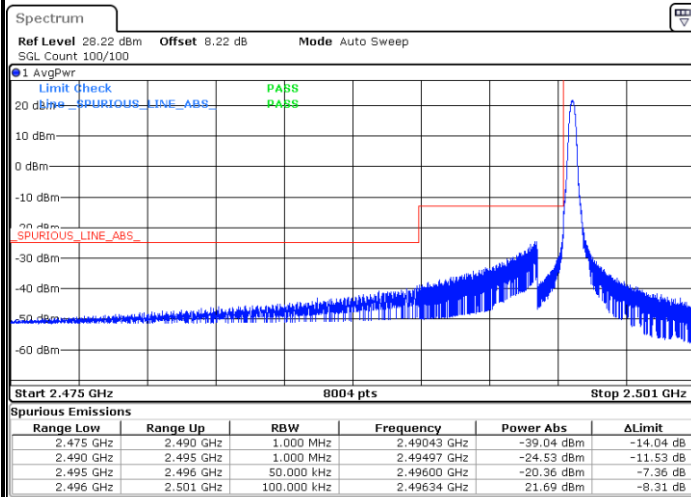
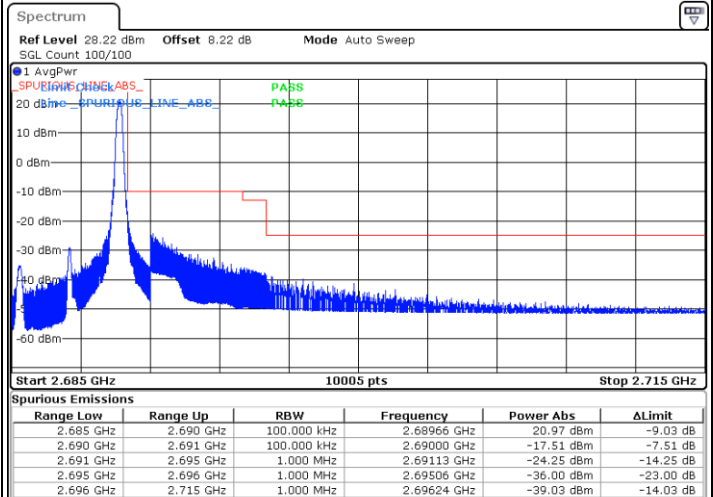
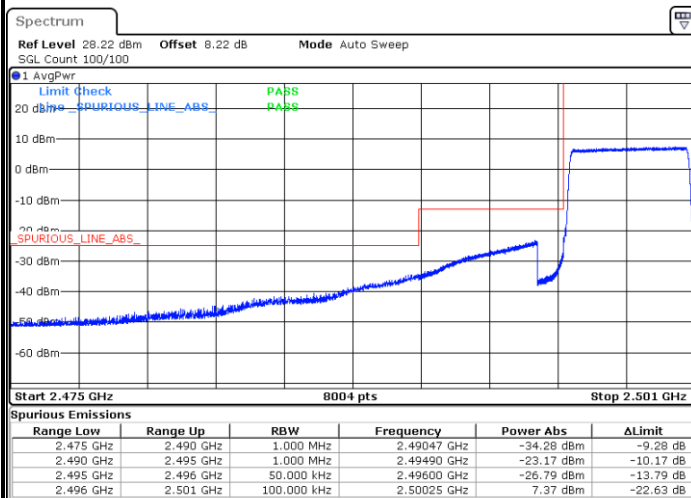
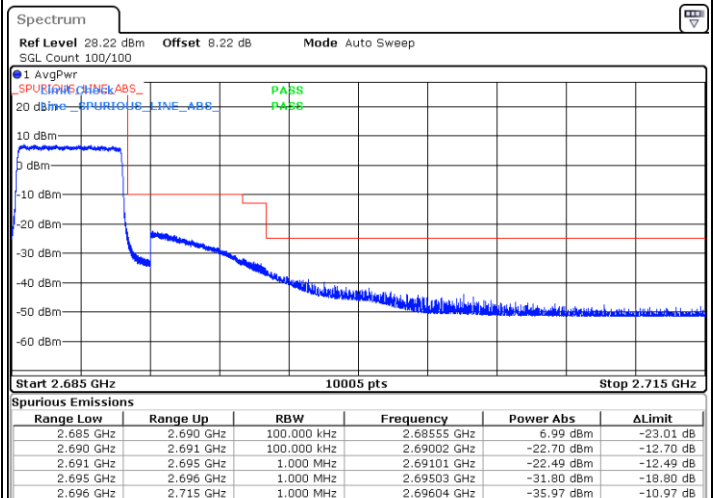
LTE Band 41

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

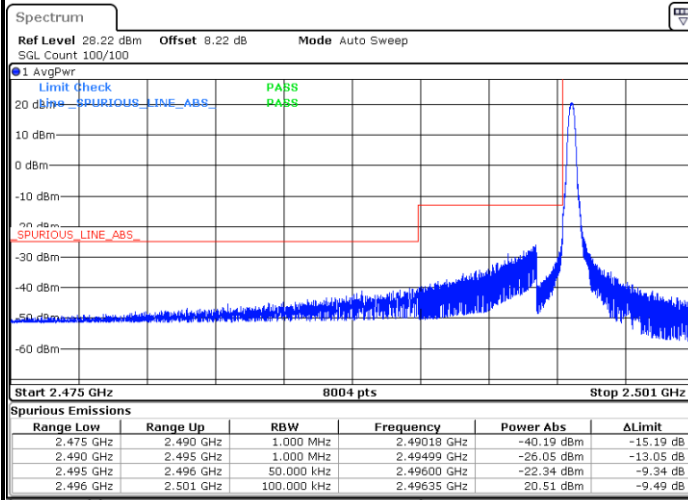


**Conducted Band Edge****LTE Band 41 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**



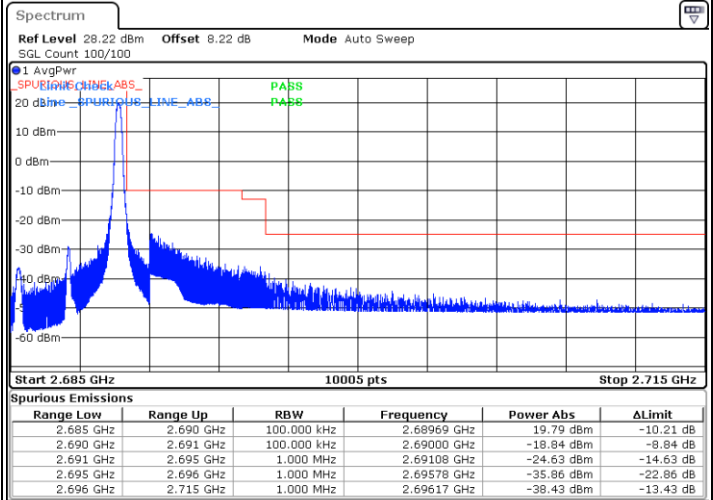
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



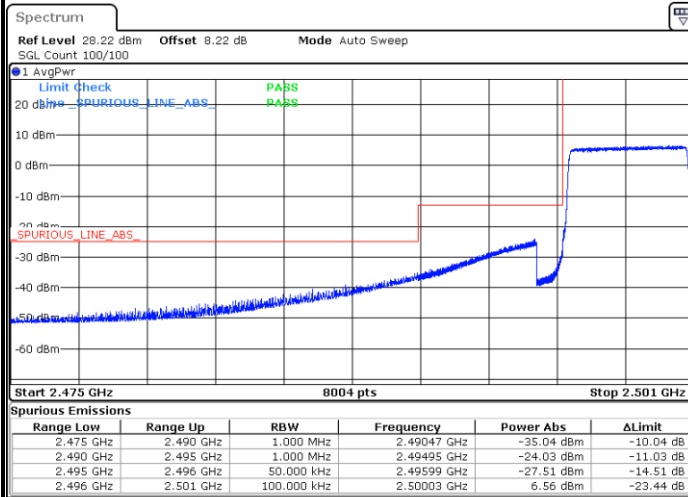
Date: 29.NOV.2024 22:29:05

Highest Band Edge / 1 RB



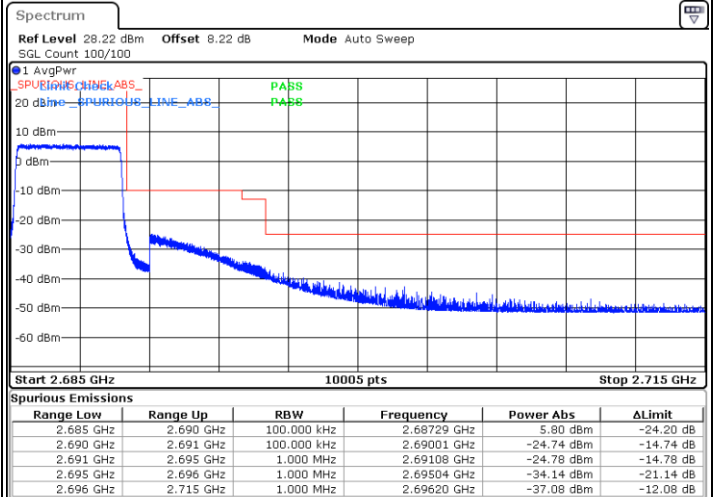
Date: 29.NOV.2024 22:44:31

Lowest Band Edge / Full RB



Date: 29.NOV.2024 22:35:25

Highest Band Edge / Full RB

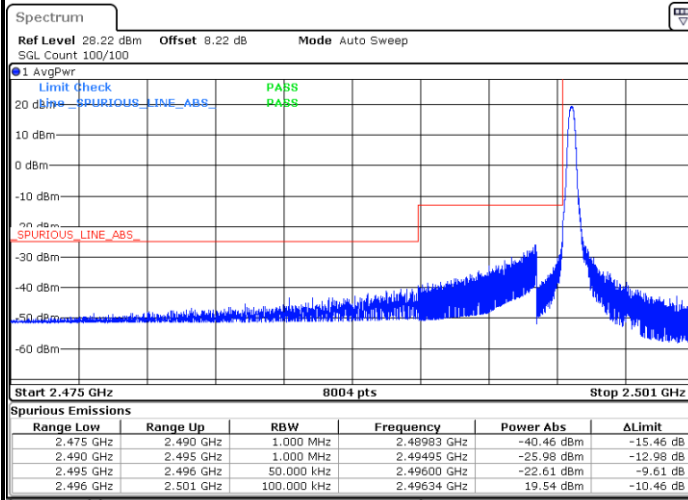


Date: 29.NOV.2024 22:50:47

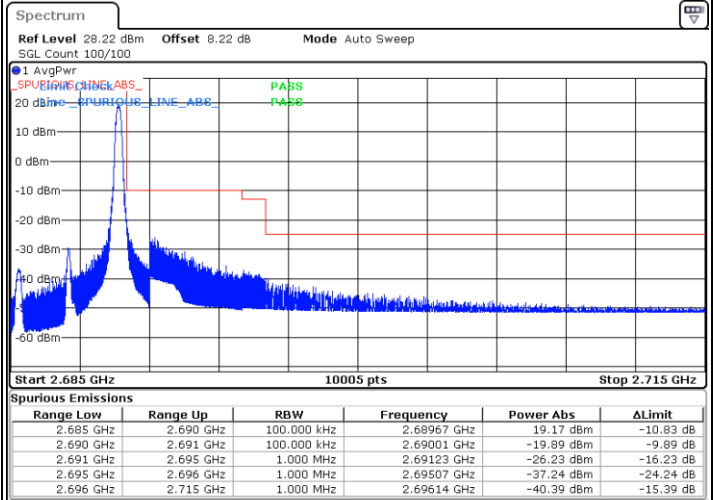


LTE Band 41 / 5MHz / 64QAM

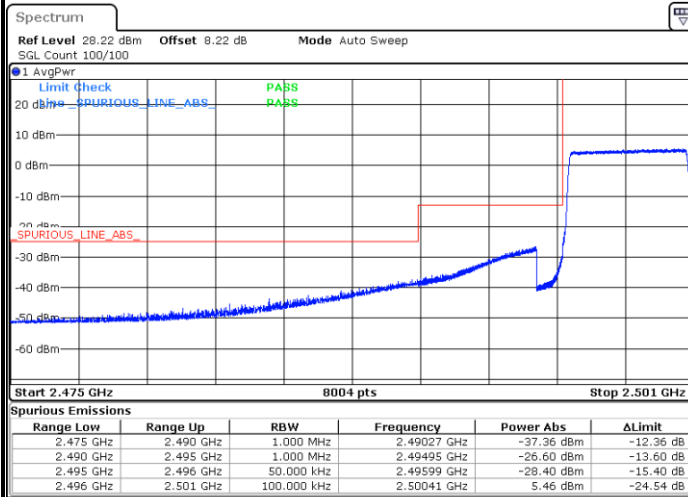
Lowest Band Edge / 1RB



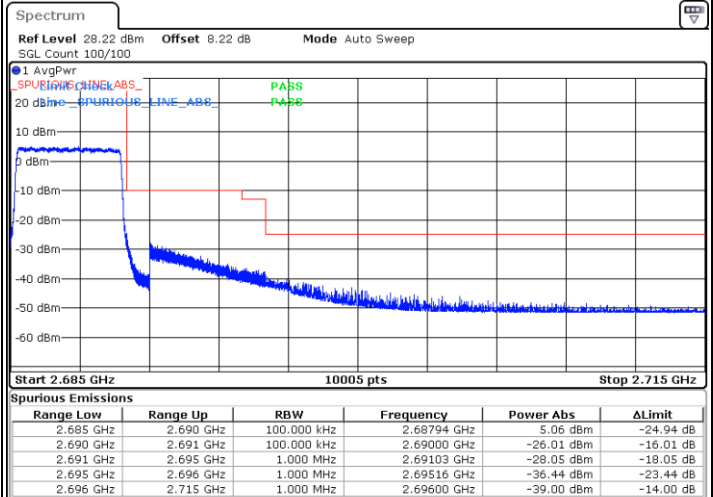
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



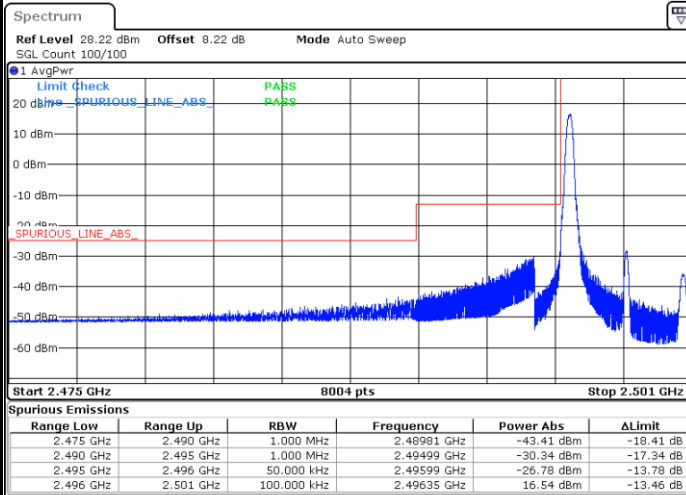
Highest Band Edge / Full RB



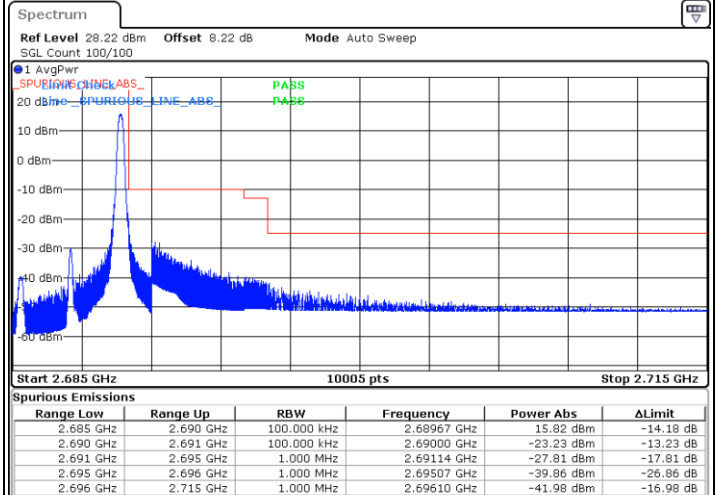


LTE Band 41 / 5MHz / 256QAM

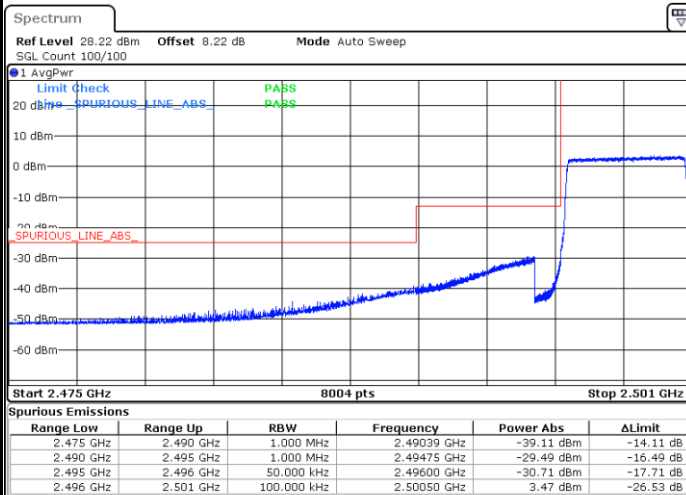
Lowest Band Edge / 1RB



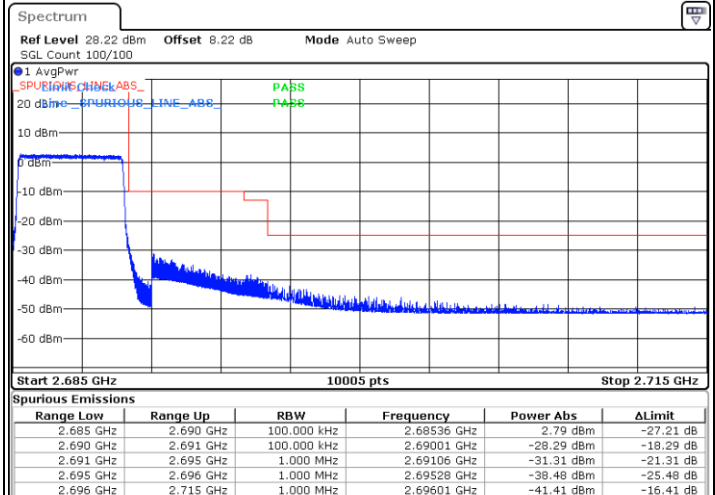
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



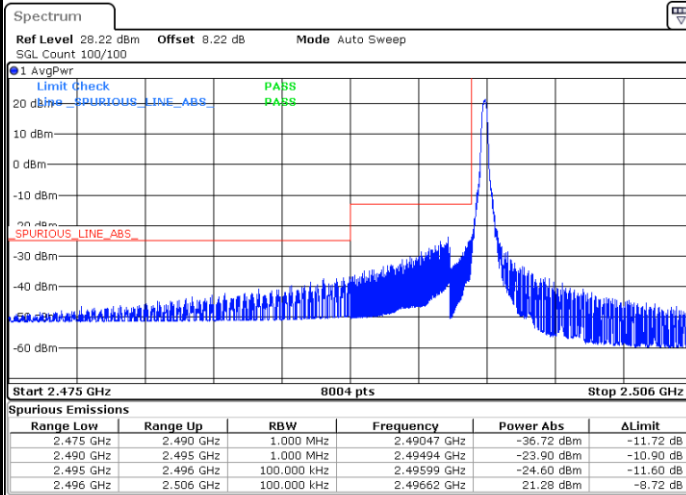
Highest Band Edge / Full RB



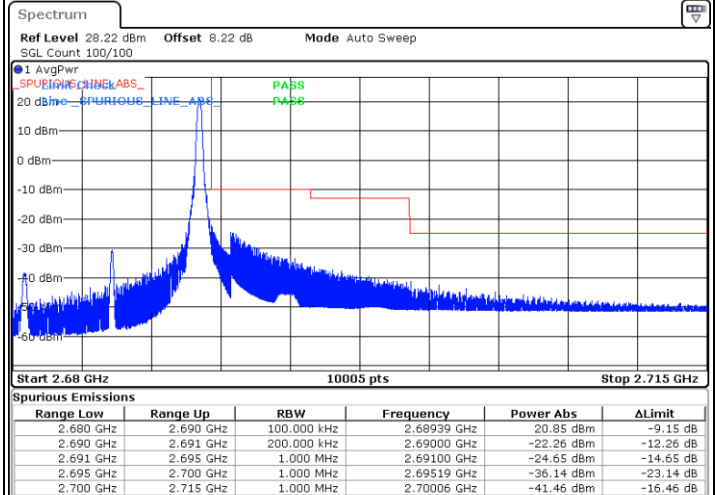


LTE Band 41 / 10MHz / QPSK

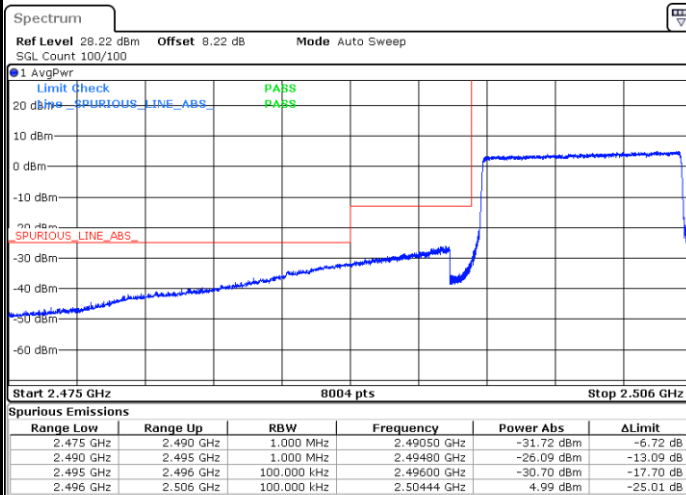
Lowest Band Edge / 1 RB



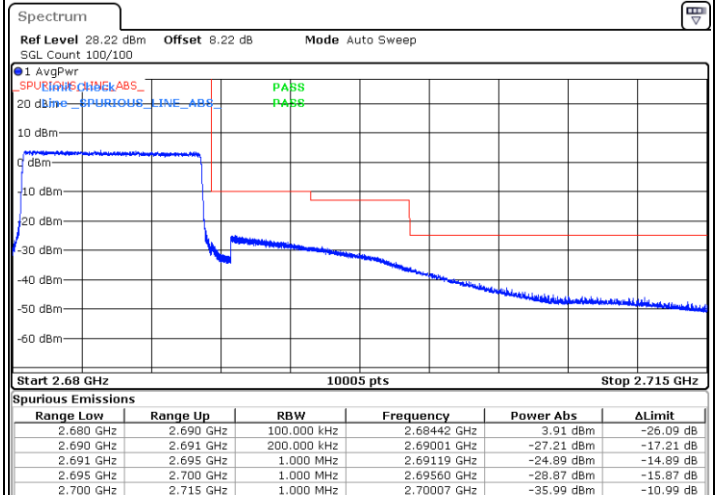
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



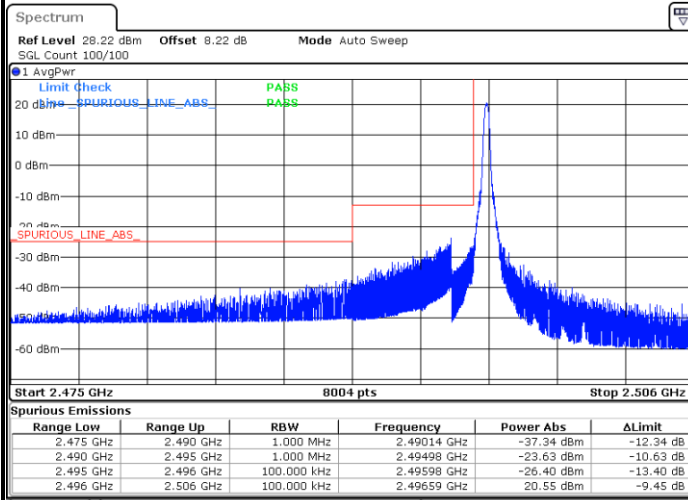
Highest Band Edge / Full RB



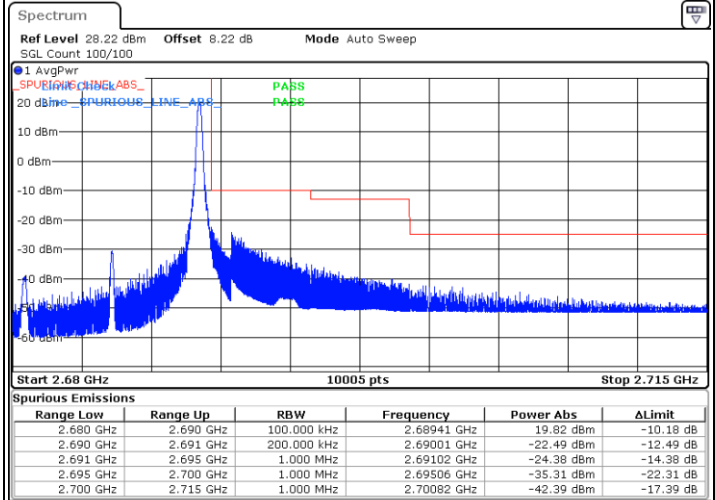


LTE Band 41 / 10MHz / 16QAM

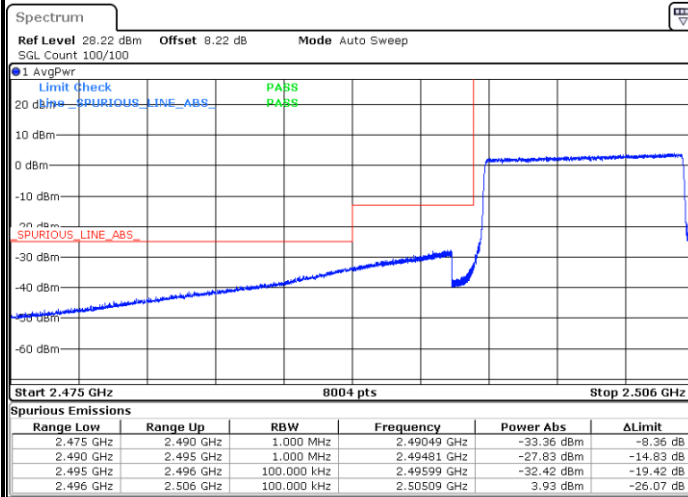
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

