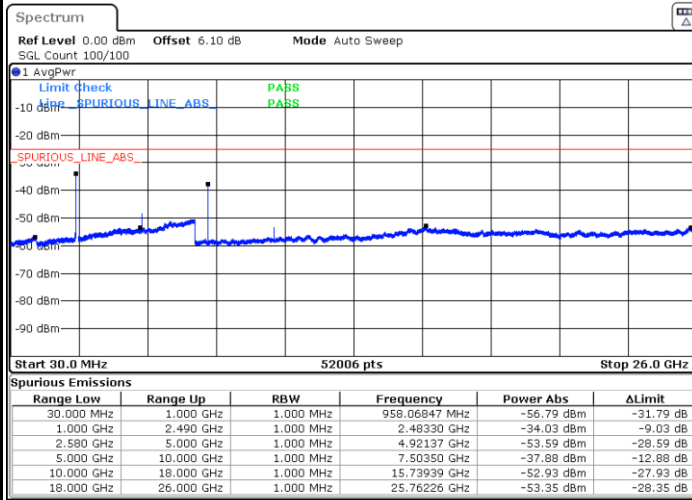




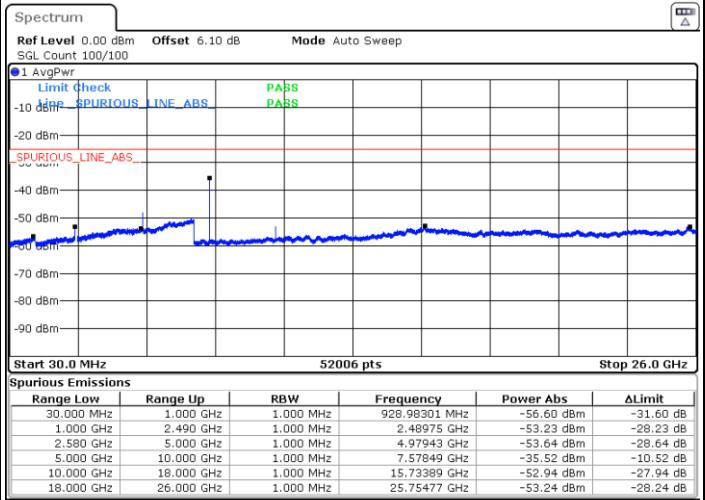
LTE Band 7 / 20MHz

Lowest Channel / QPSK



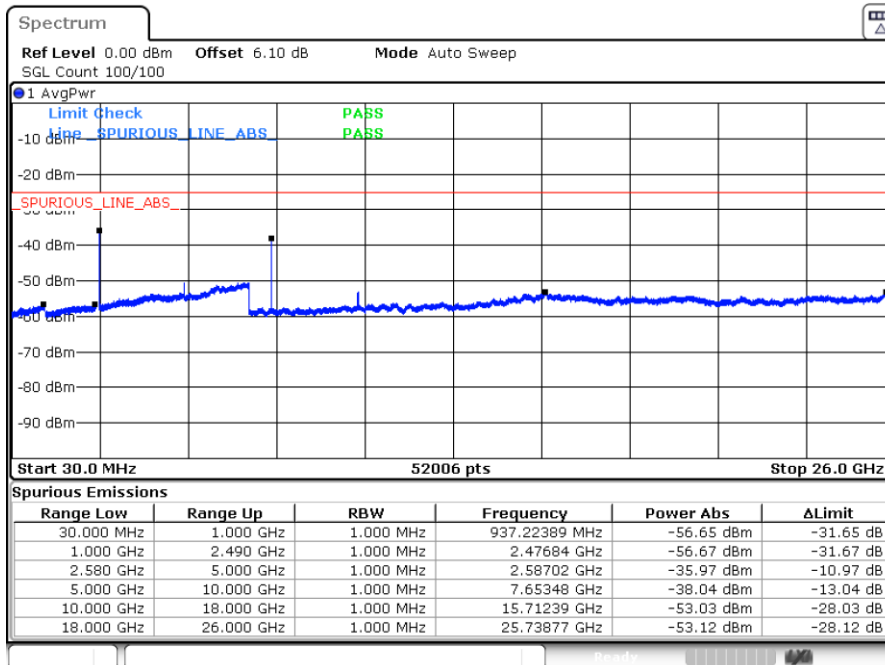
Date: 9.MAR.2025 01:10:13

Middle Channel / QPSK



Date: 9.MAR.2025 01:11:23

Highest Channel / QPSK



Date: 9.MAR.2025 01:12:34

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0035	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0032	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0011	

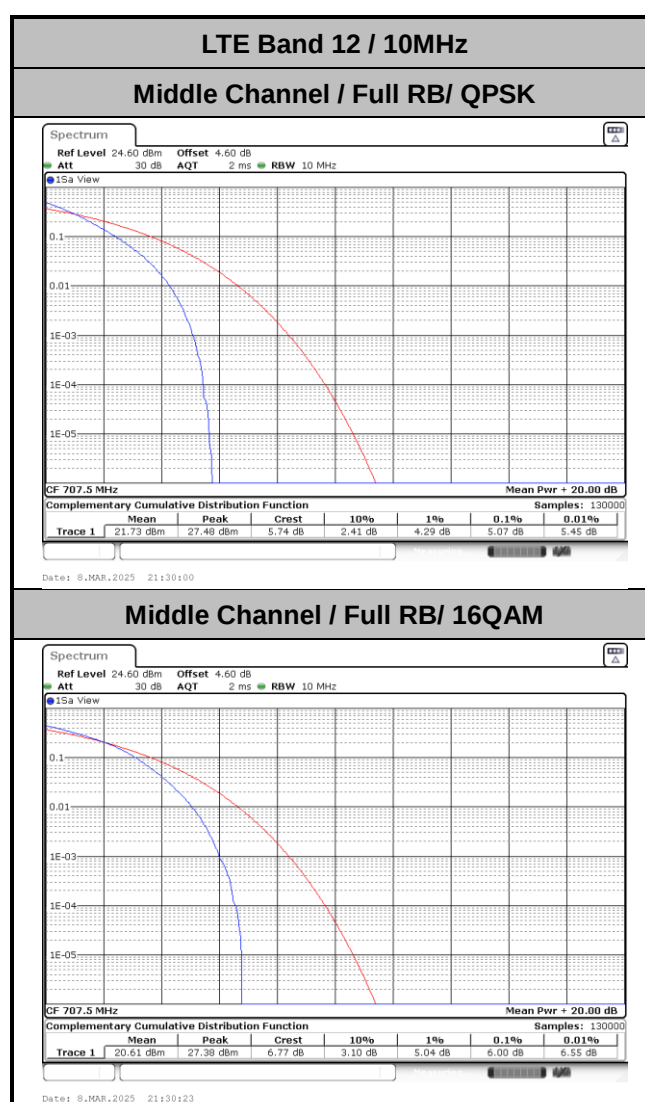
Note:

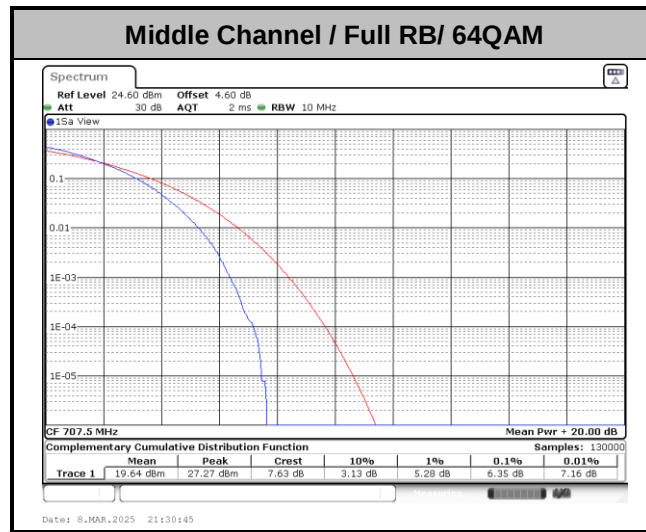
1. Normal Voltage =3.9 V.; Battery End Point (BEP) =3.5 V.; Maximum Voltage =4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 12

Peak-to-Average Ratio

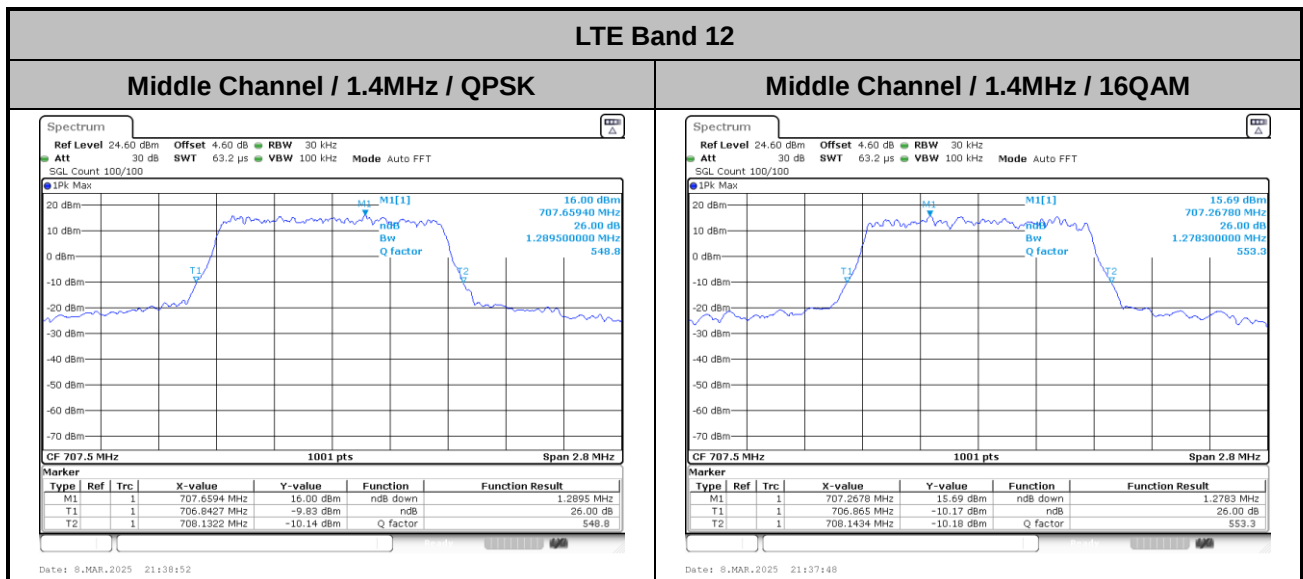
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.07	6.00	6.35	PASS





**26dB Bandwidth**

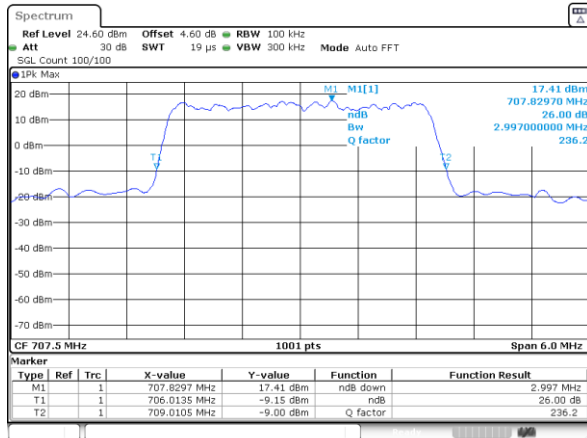
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.29	1.28
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.00	3.02
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.95	4.86
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.61	10.01





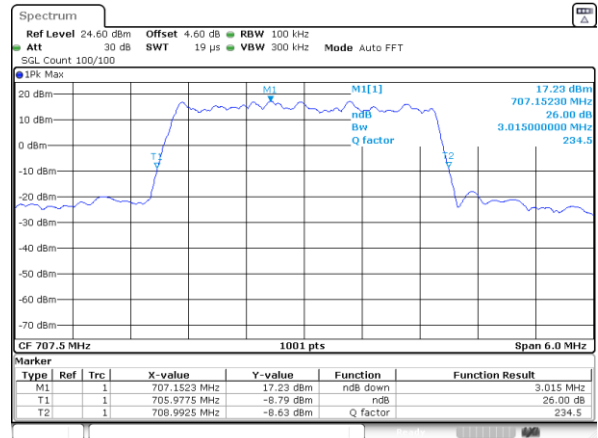
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 8.MAR.2025 21:13:123

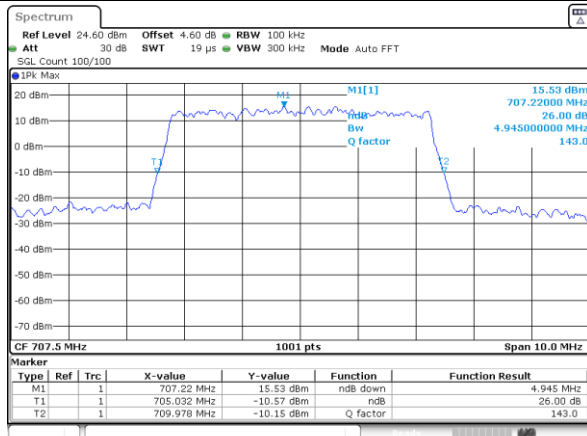
Middle Channel / 3MHz / 16QAM



Date: 8.MAR.2025 21:13:126

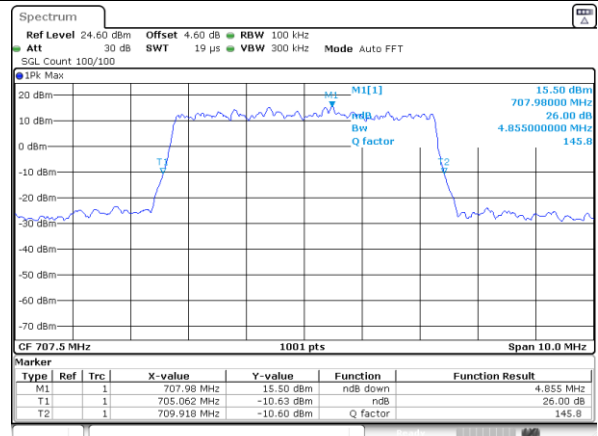
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 8.MAR.2025 21:13:101

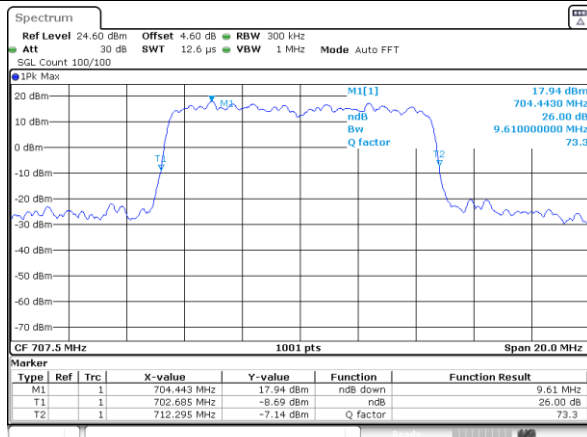
Middle Channel / 5MHz / 16QAM



Date: 8.MAR.2025 21:13:157

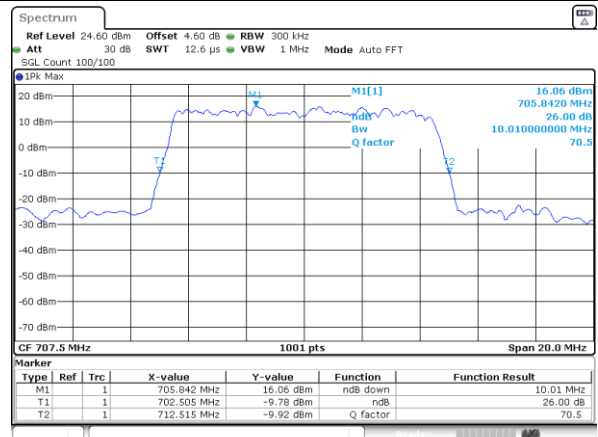
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 8.MAR.2025 21:13:149

Middle Channel / 10MHz / 16QAM

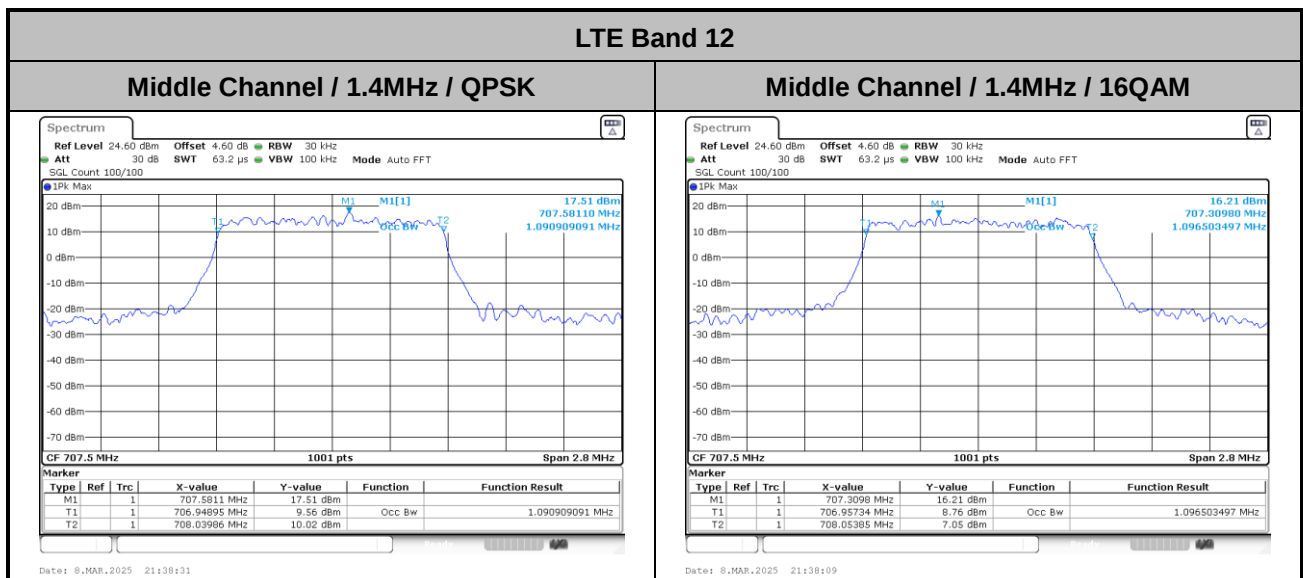


Date: 8.MAR.2025 21:13:210



Occupied Bandwidth

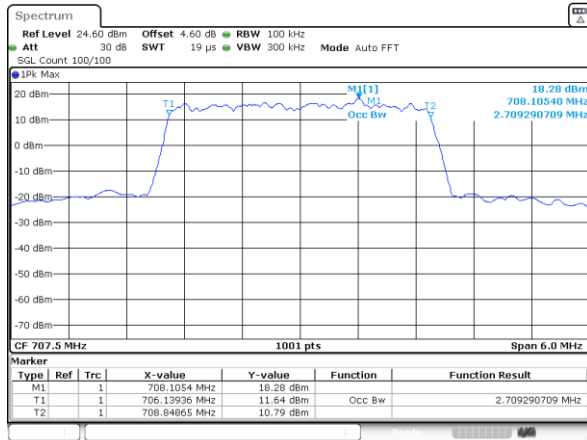
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.10
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.71	2.72
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.93	9.03



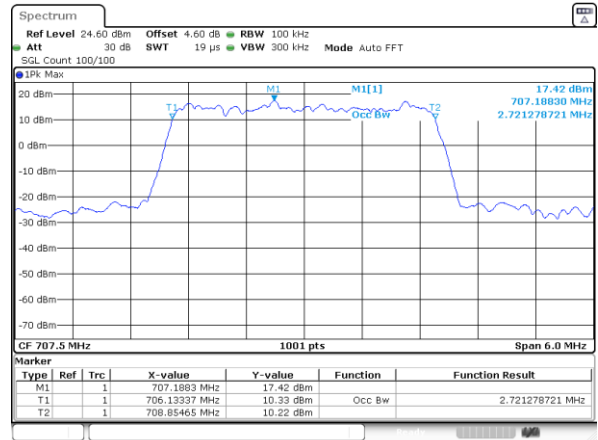


LTE Band 12

Middle Channel / 3MHz / QPSK

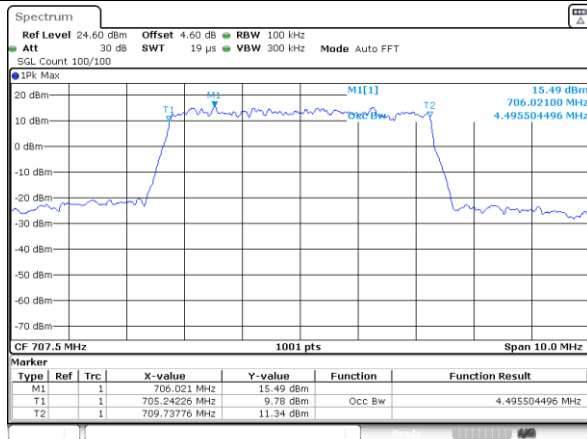


Middle Channel / 3MHz / 16QAM

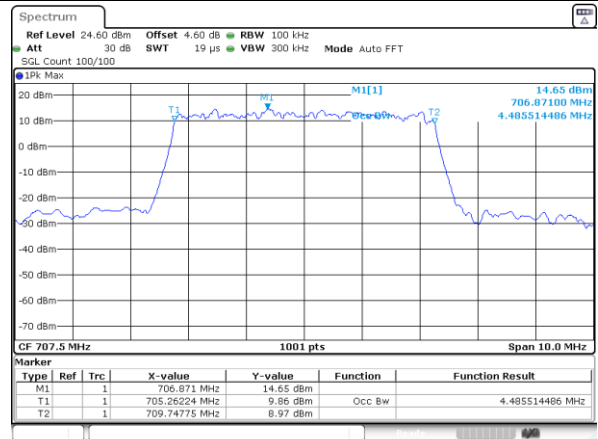


LTE Band 12

Middle Channel / 5MHz / QPSK

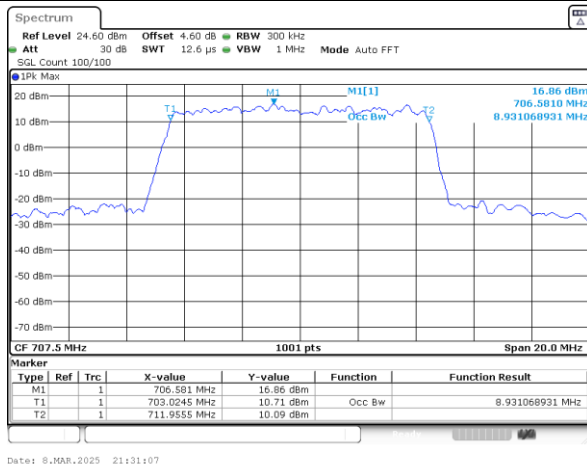


Middle Channel / 5MHz / 16QAM

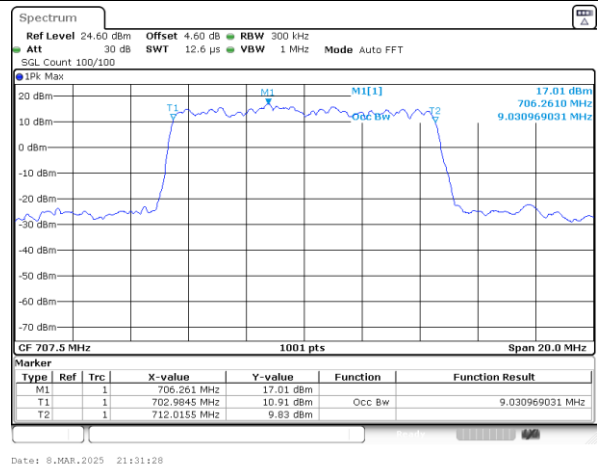


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM





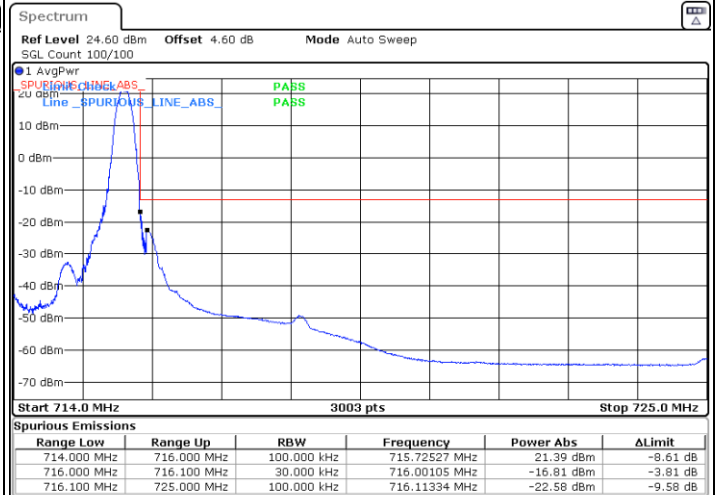
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

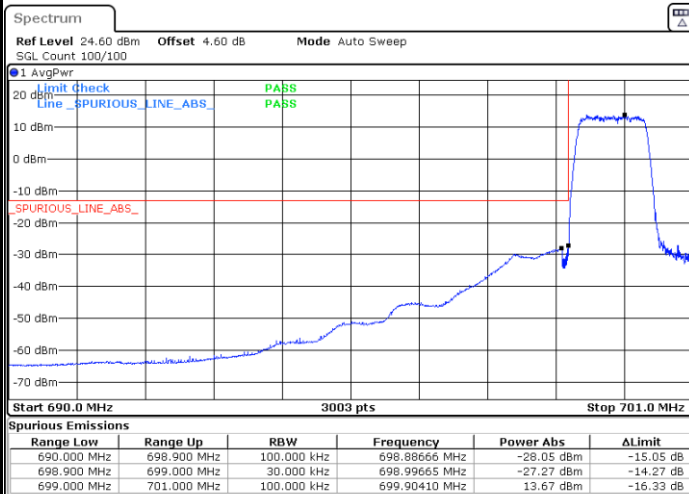
Lowest Band Edge / 1RB



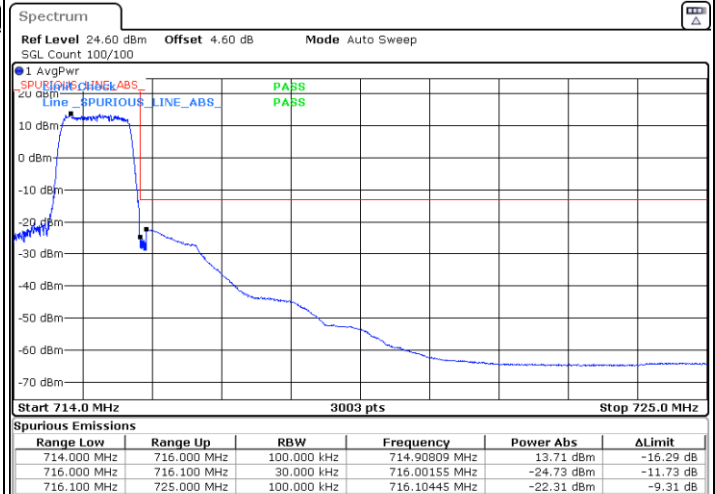
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



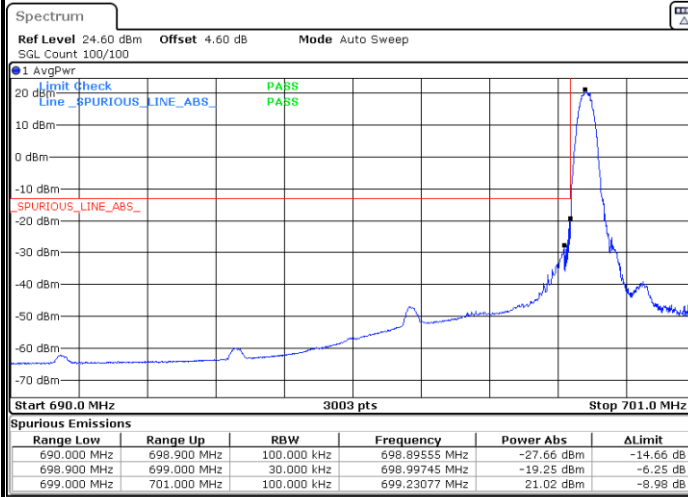
Highest Band Edge / Full RB



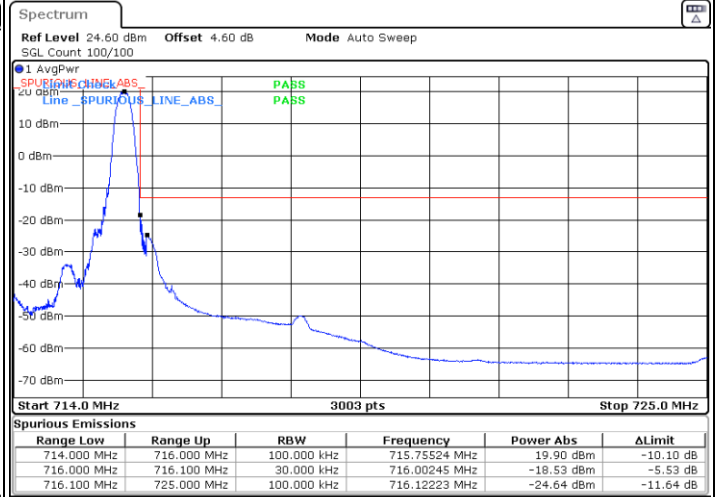


LTE Band 12 / 1.4MHz / 16QAM

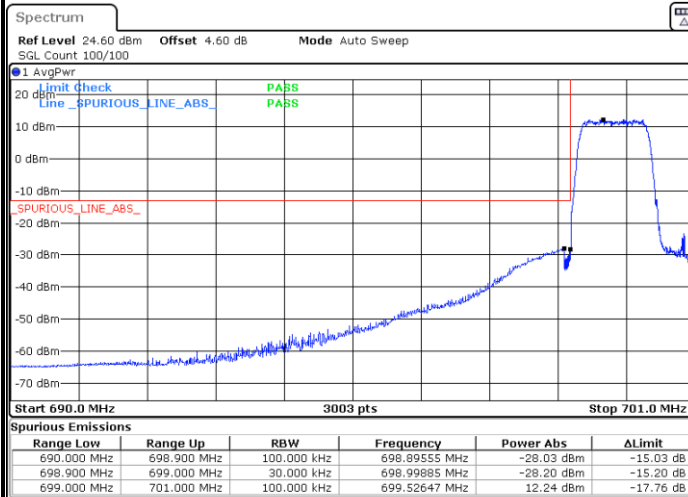
Lowest Band Edge / 1 RB



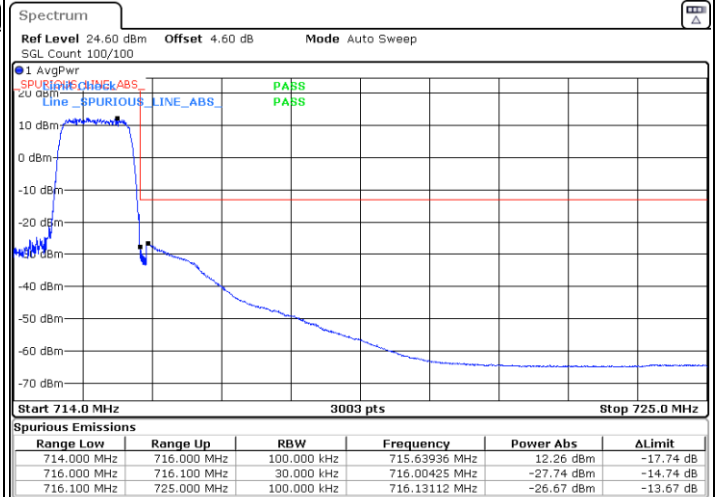
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



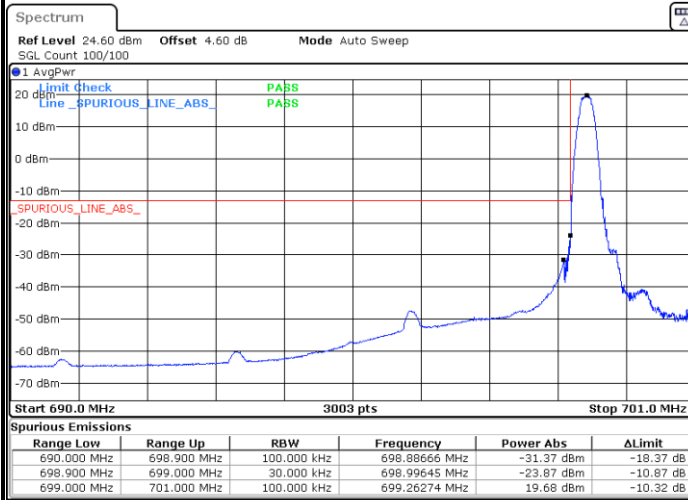
Highest Band Edge / Full RB



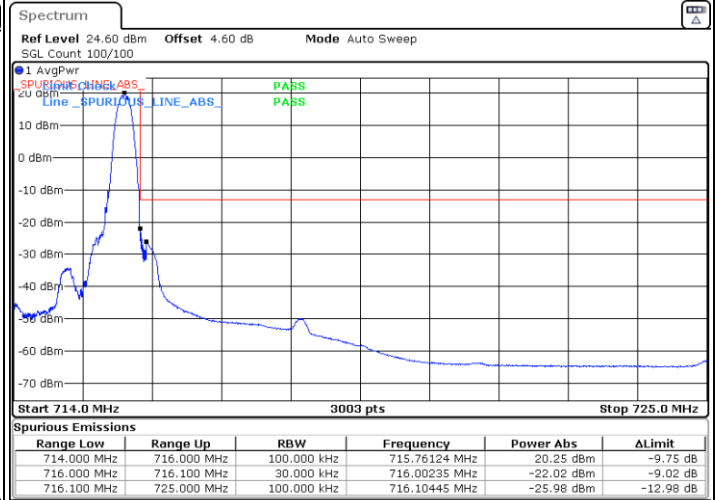


LTE Band 12 / 1.4MHz / 64QAM

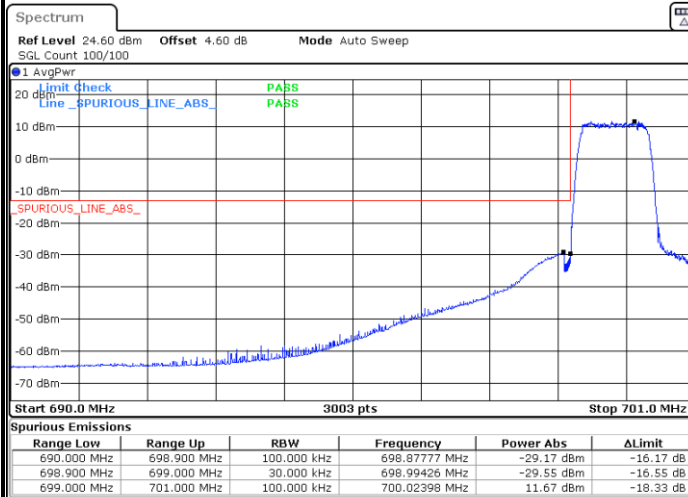
Lowest Band Edge / 1 RB



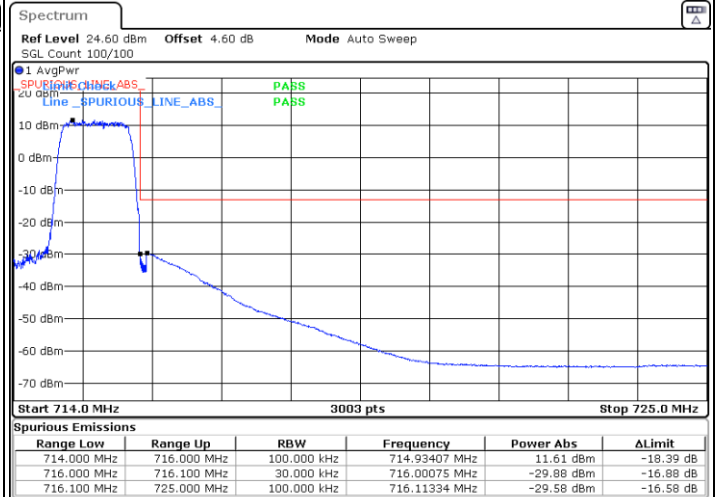
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



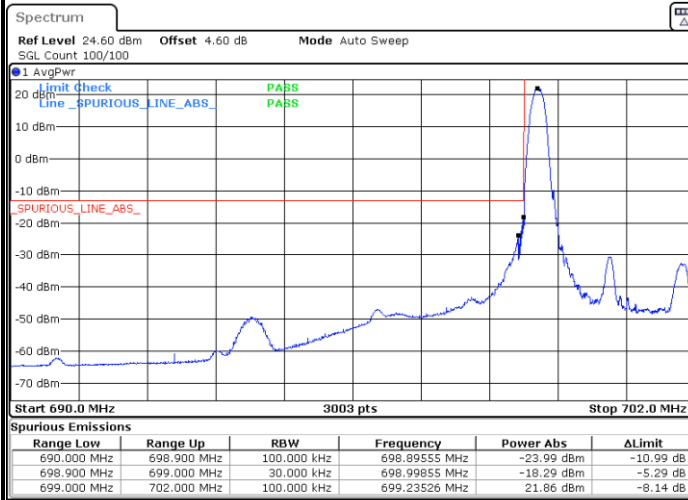
Highest Band Edge / Full RB



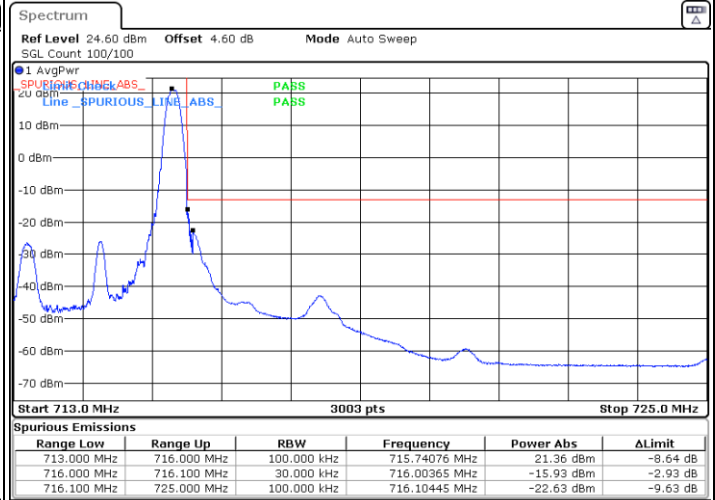


LTE Band 12 / 3MHz / QPSK

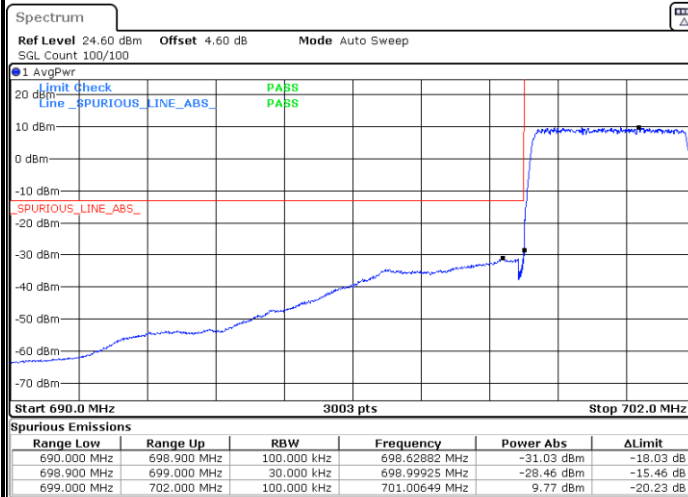
Lowest Band Edge / 1RB



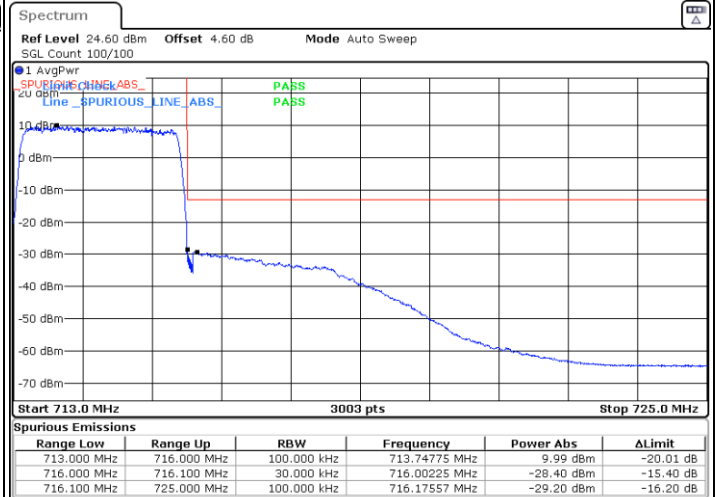
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



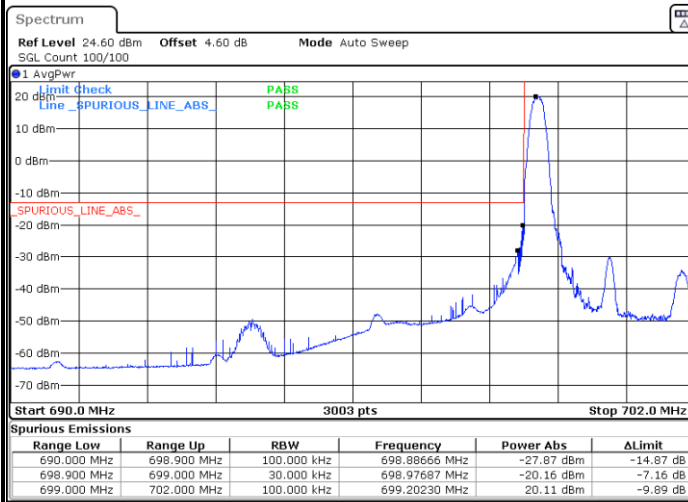
Highest Band Edge / Full RB



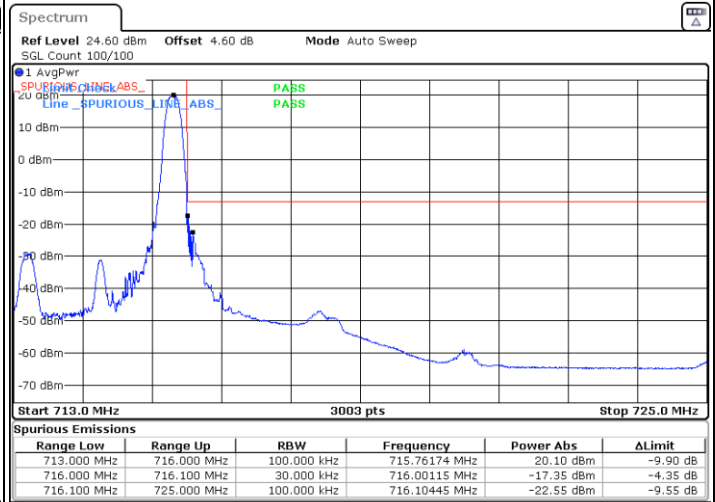


LTE Band 12 / 3MHz / 16QAM

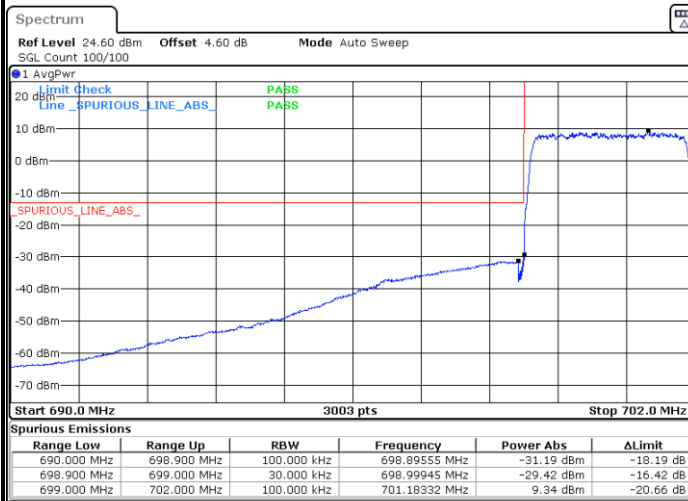
Lowest Band Edge / 1 RB



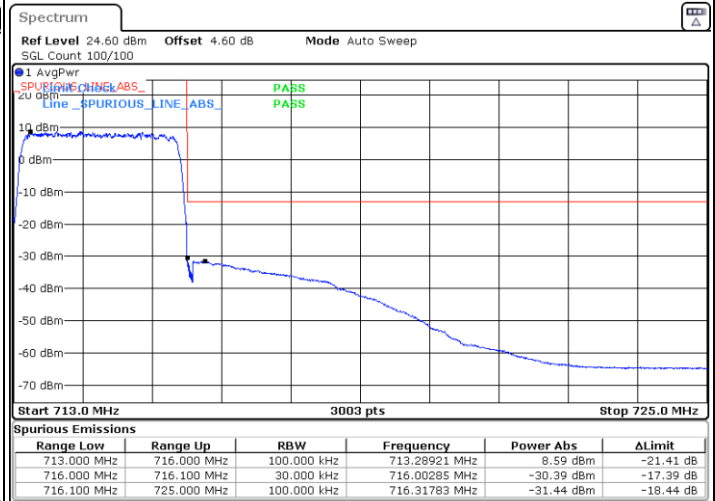
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



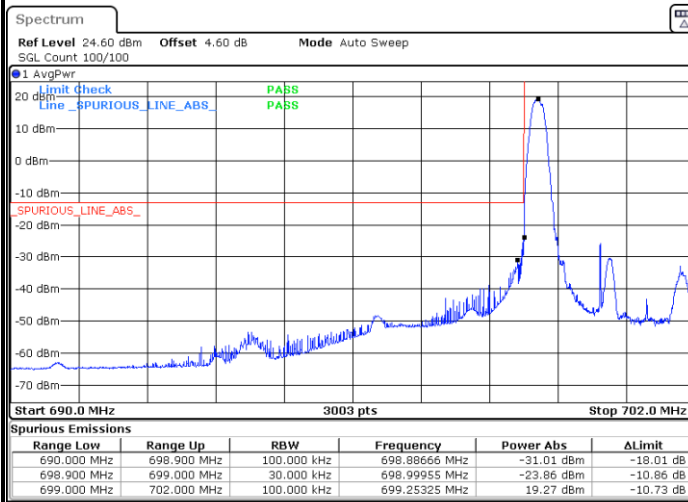
Highest Band Edge / Full RB



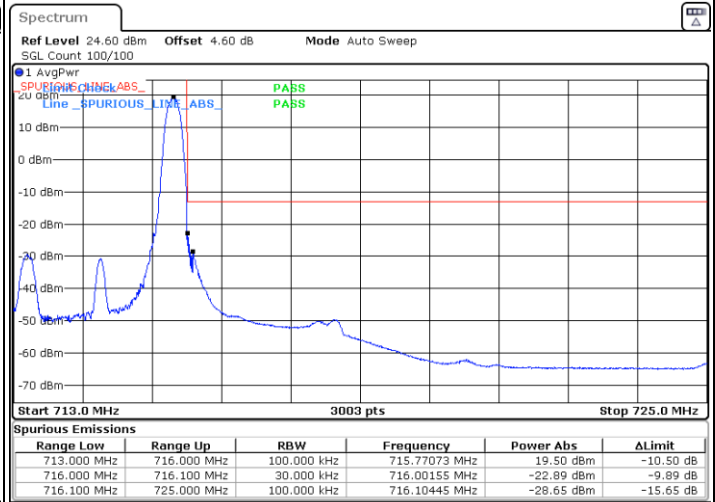


LTE Band 12 / 3MHz / 64QAM

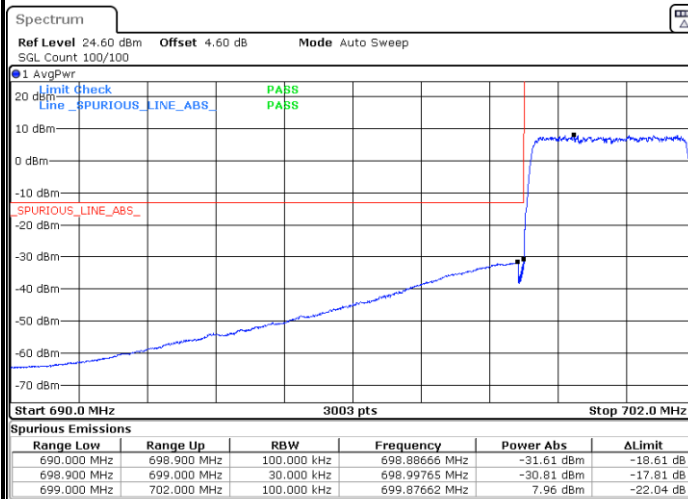
Lowest Band Edge / 1 RB



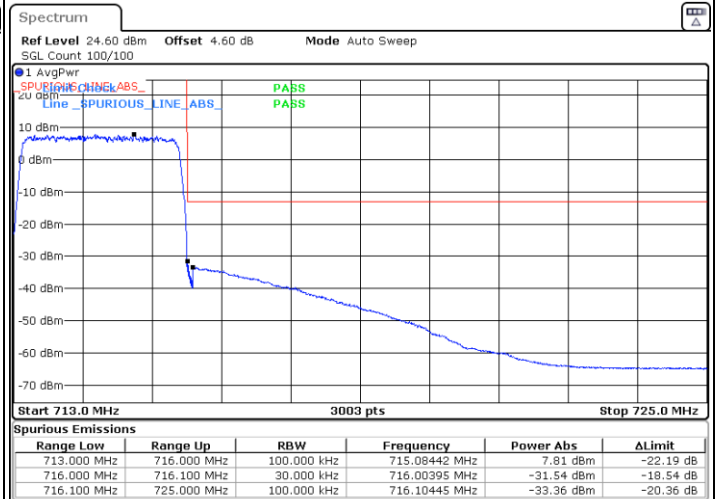
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



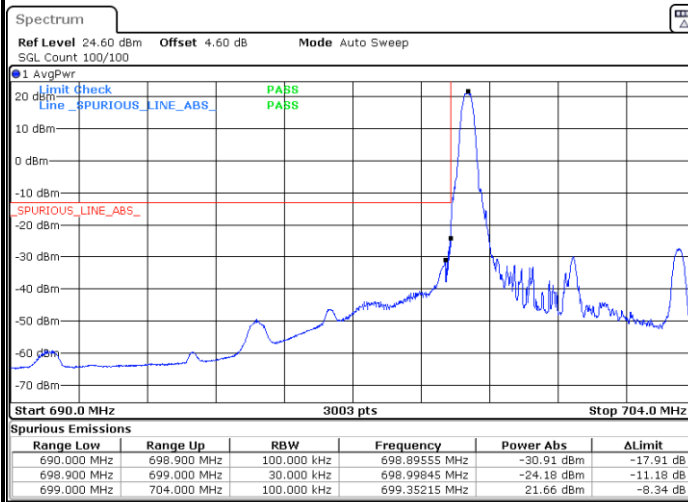
Highest Band Edge / Full RB



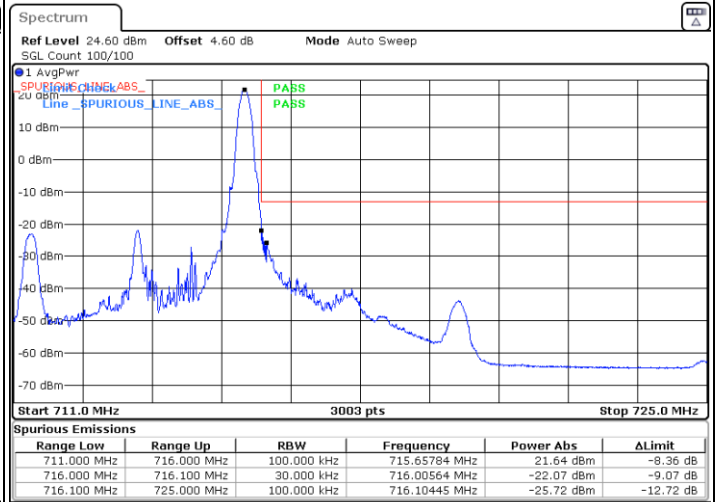


LTE Band 12 / 5MHz / QPSK

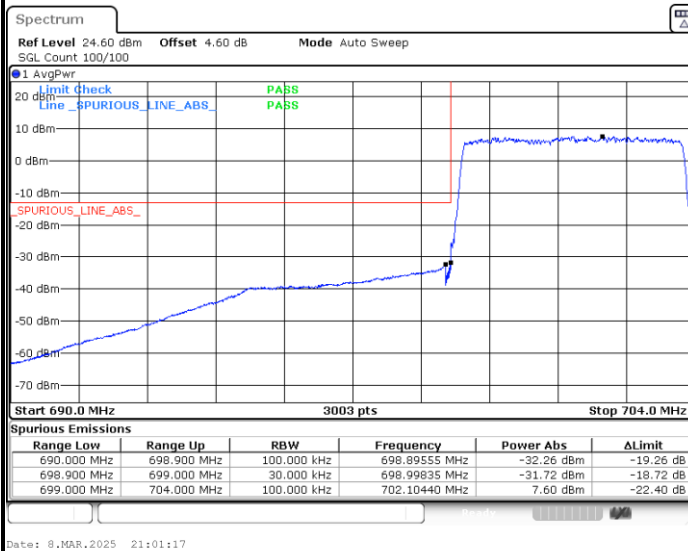
Lowest Band Edge / 1 RB



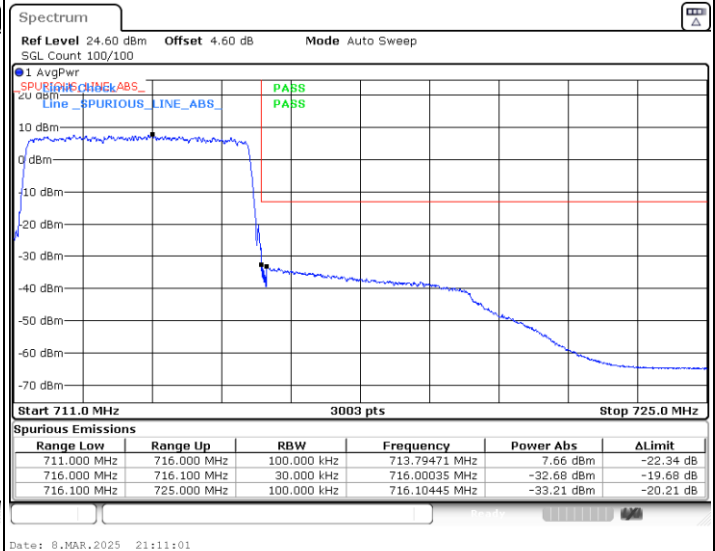
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



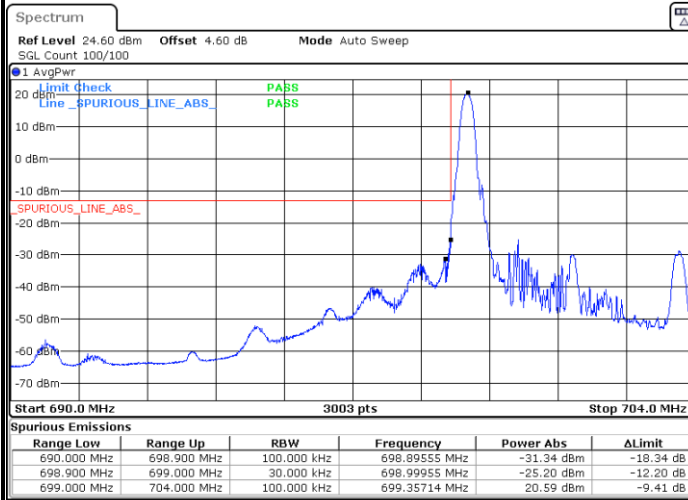
Highest Band Edge / Full RB



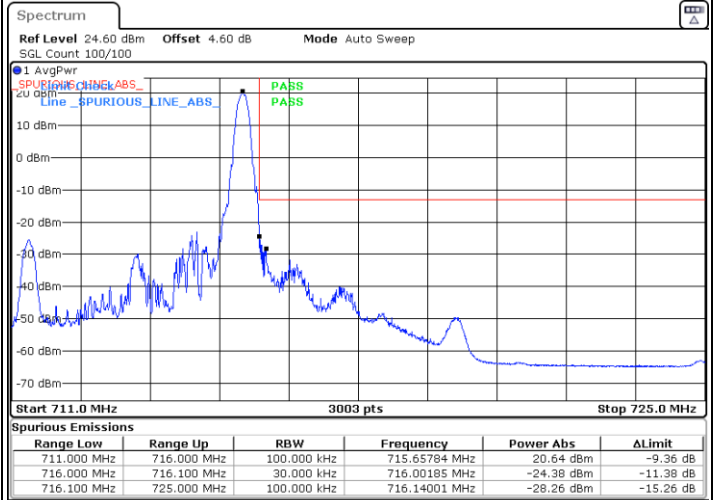


LTE Band 12 / 5MHz / 16QAM

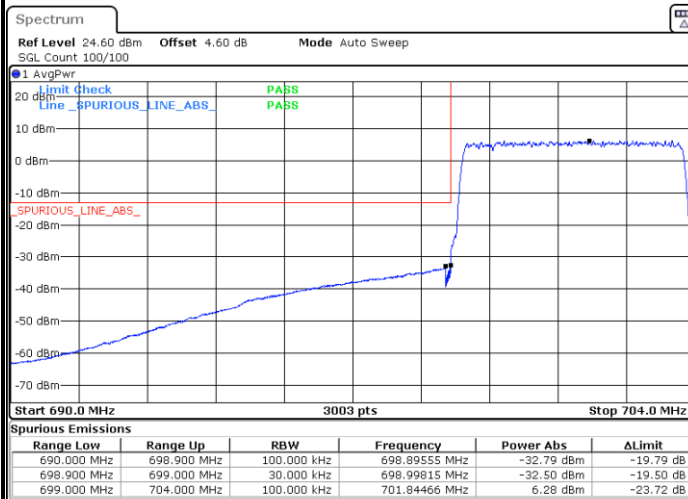
Lowest Band Edge / 1RB



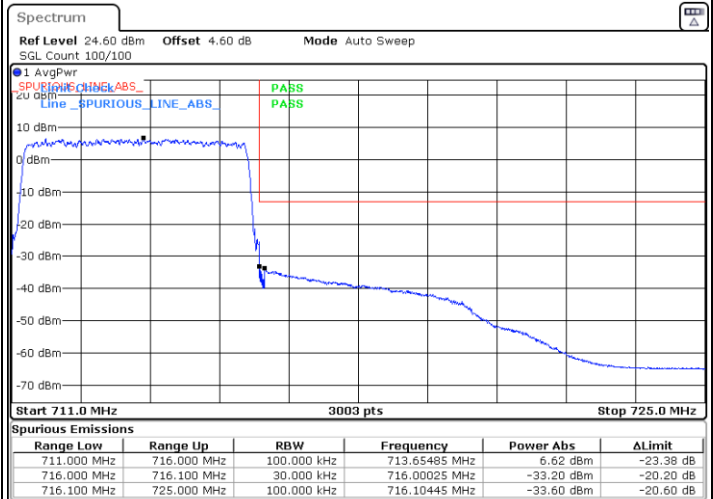
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



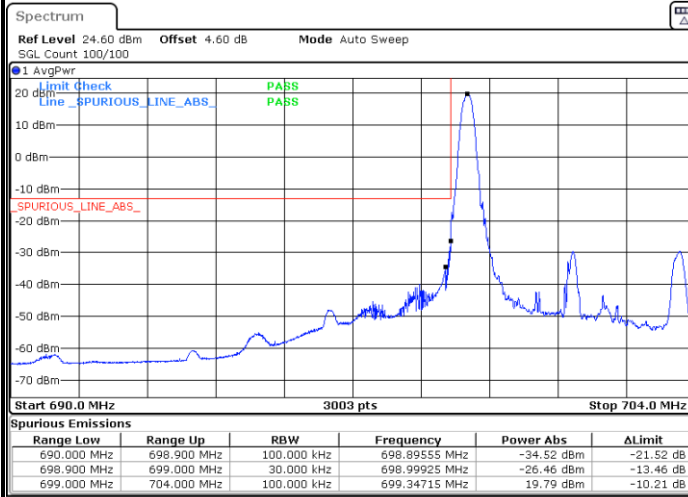
Highest Band Edge / Full RB



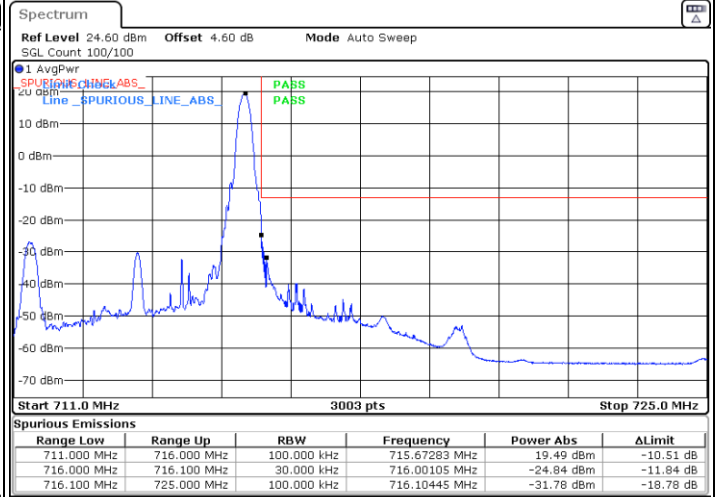


LTE Band 12 / 5MHz / 64QAM

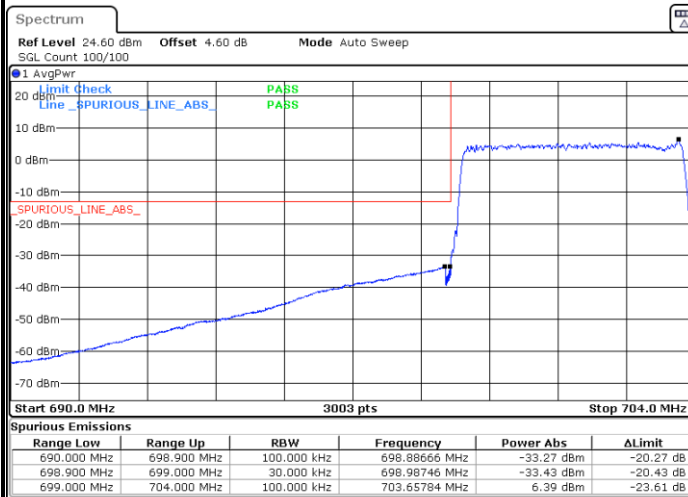
Lowest Band Edge / 1RB



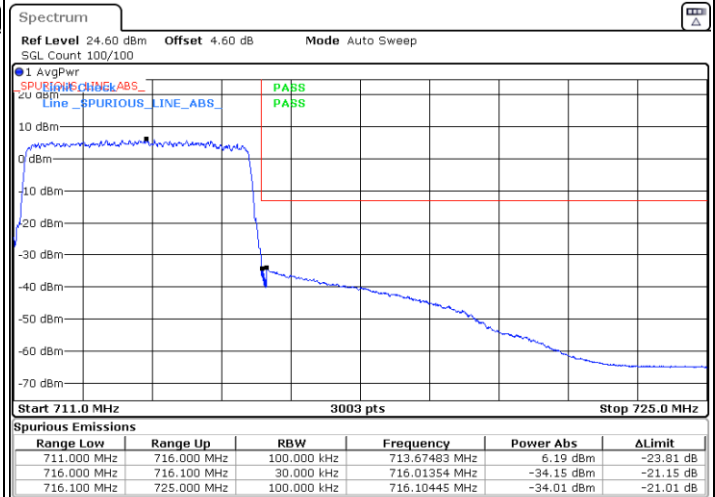
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



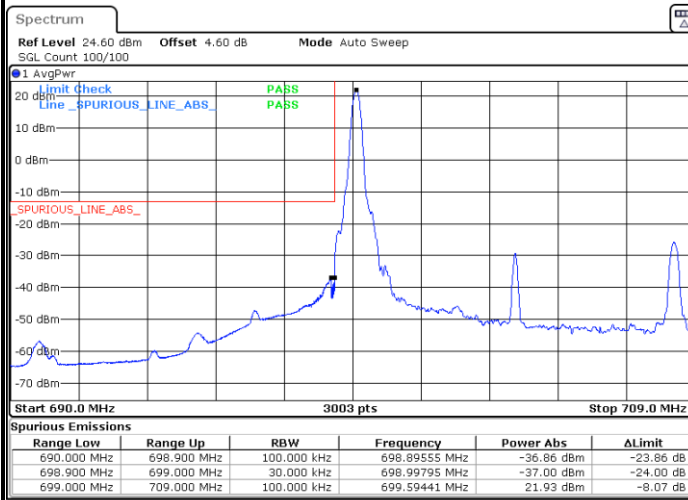
Highest Band Edge / Full RB



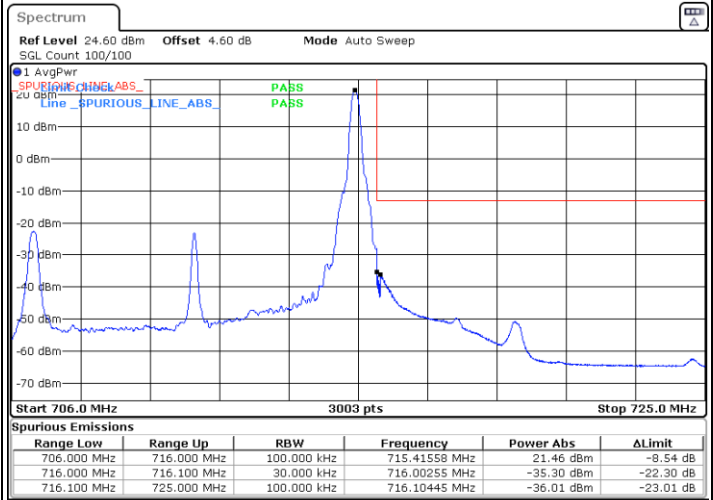


LTE Band 12 / 10MHz / QPSK

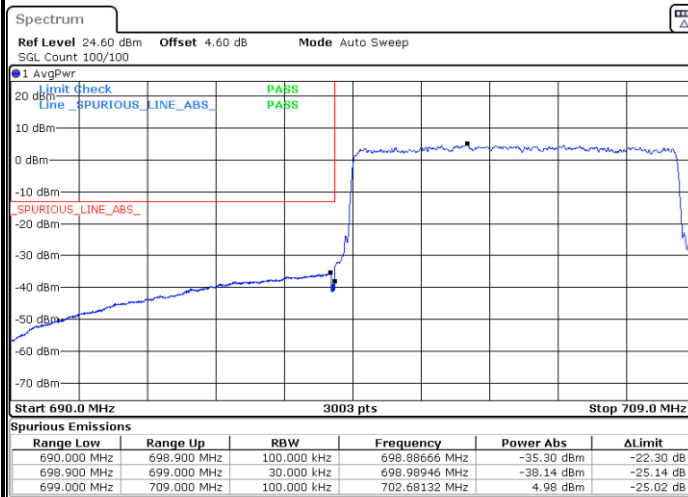
Lowest Band Edge / 1 RB



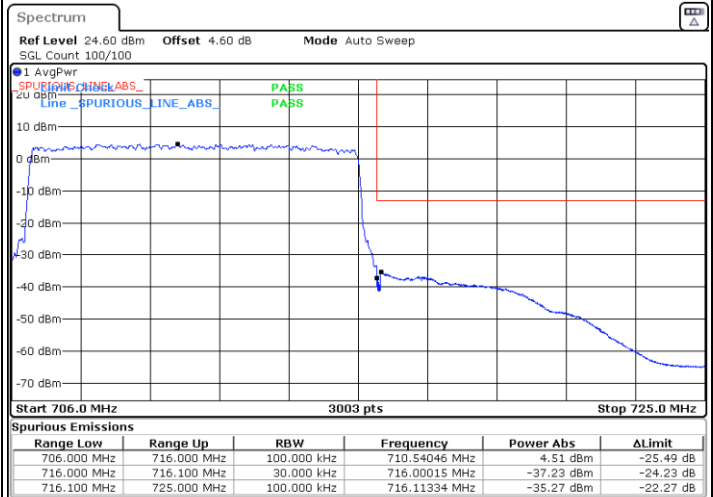
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



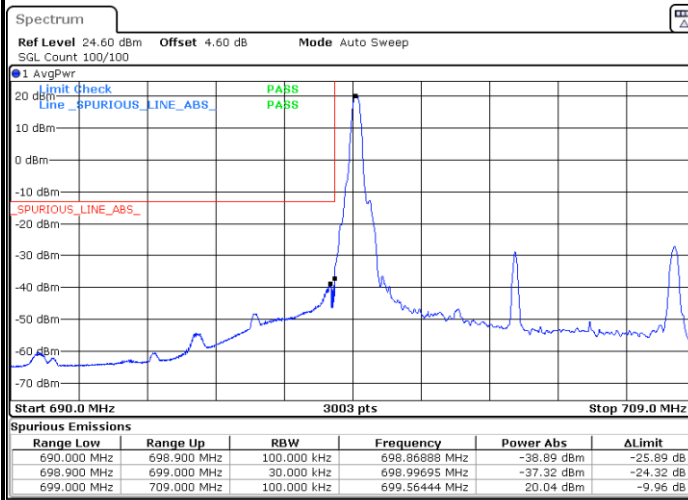
Highest Band Edge / Full RB



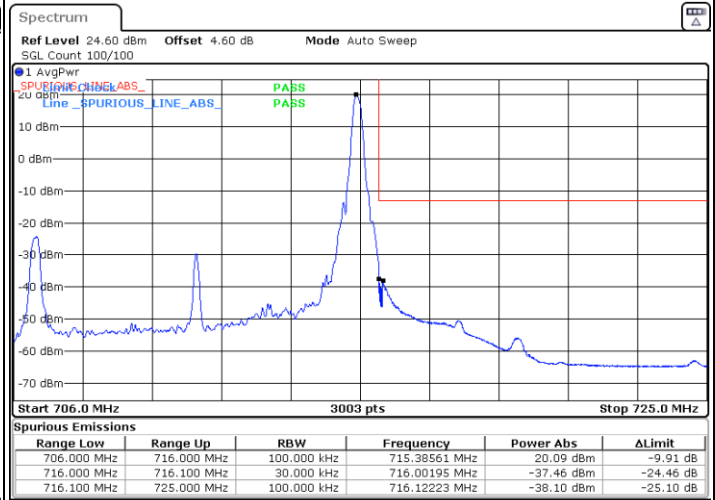


LTE Band 12 / 10MHz / 16QAM

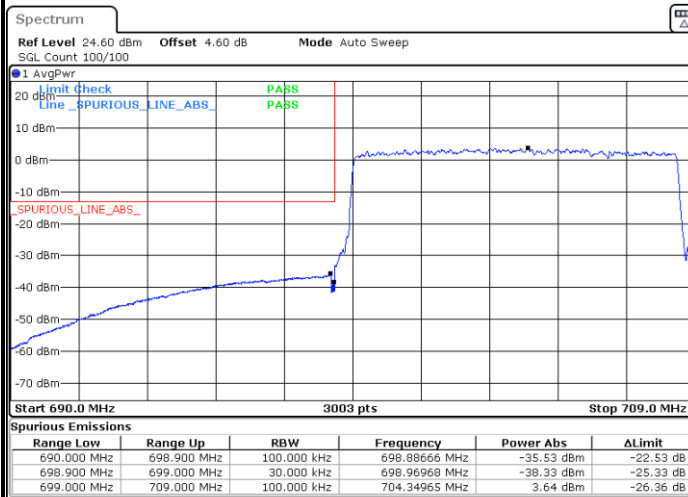
Lowest Band Edge / 1 RB



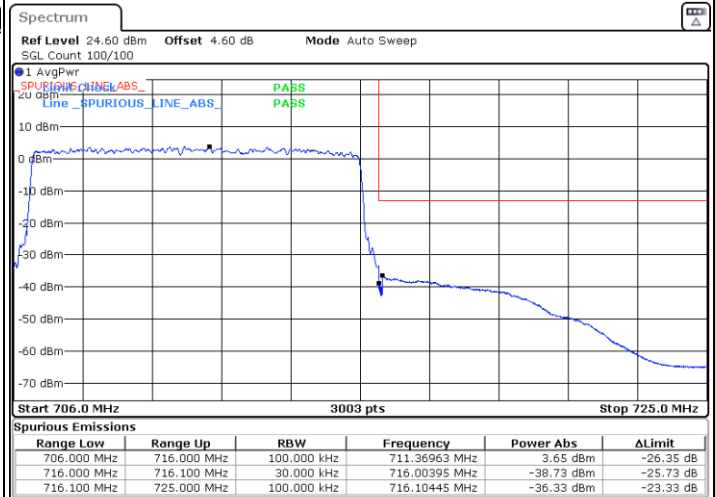
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



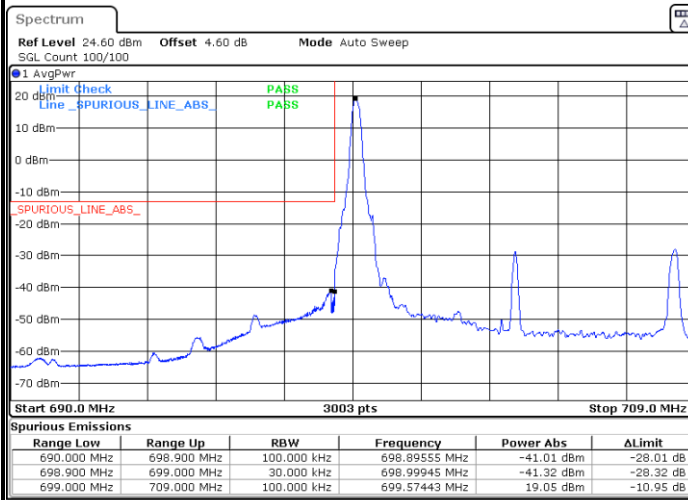
Highest Band Edge / Full RB



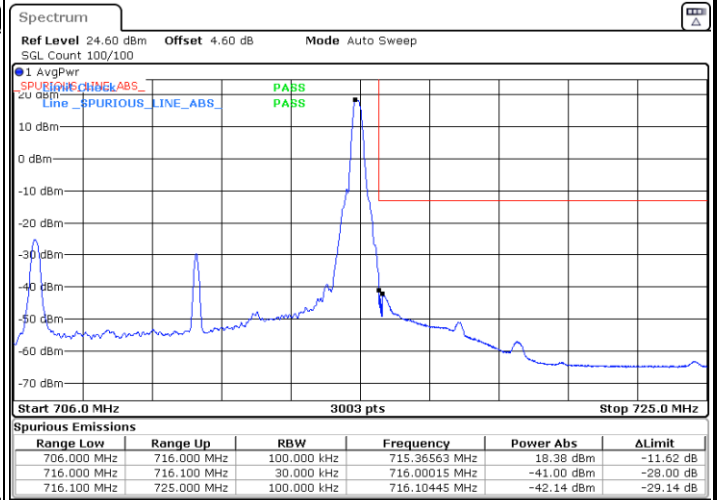


LTE Band 12 / 10MHz / 64QAM

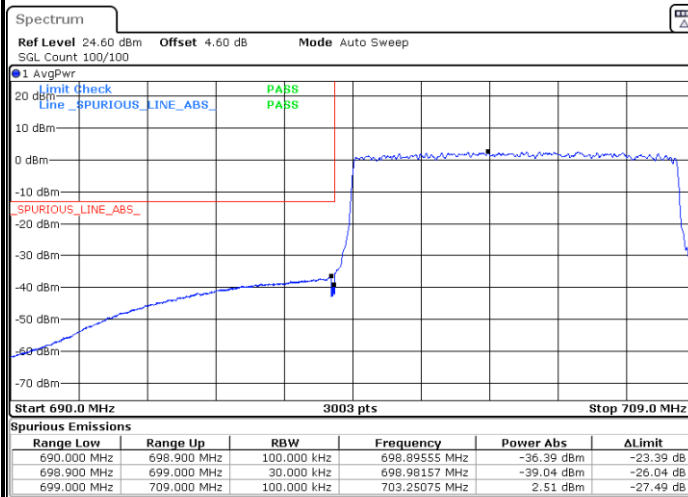
Lowest Band Edge / 1 RB



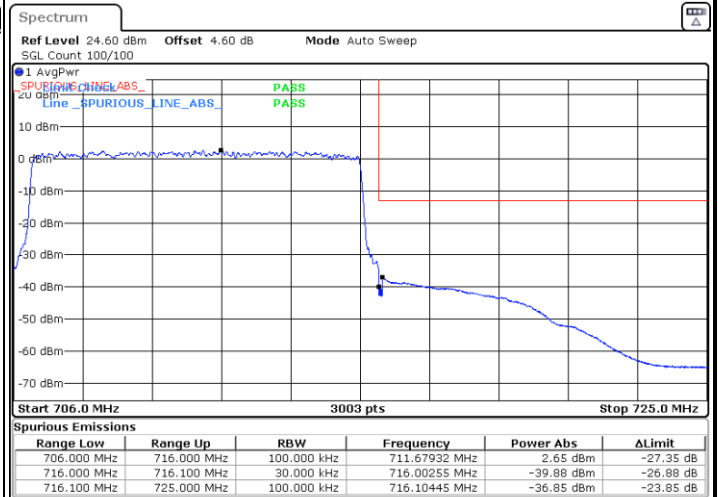
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

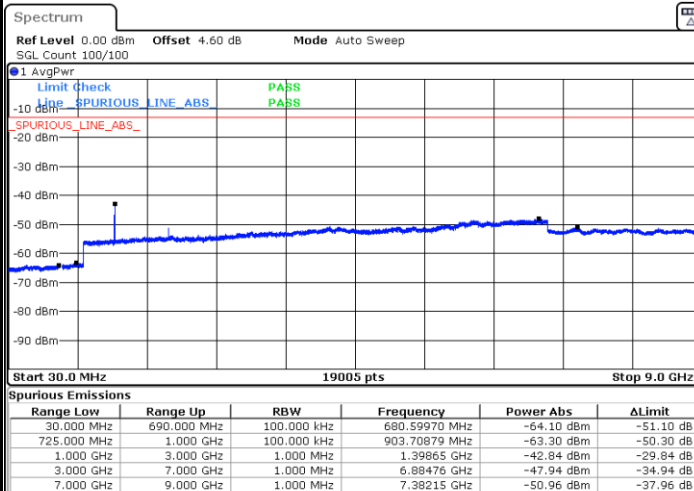




Conducted Spurious Emission

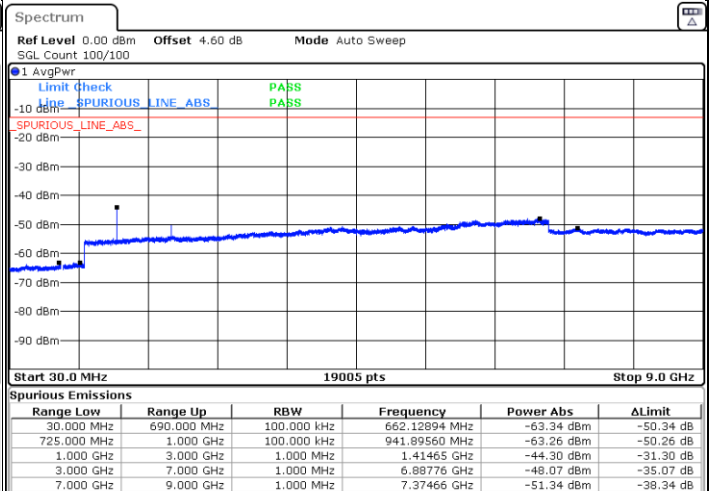
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



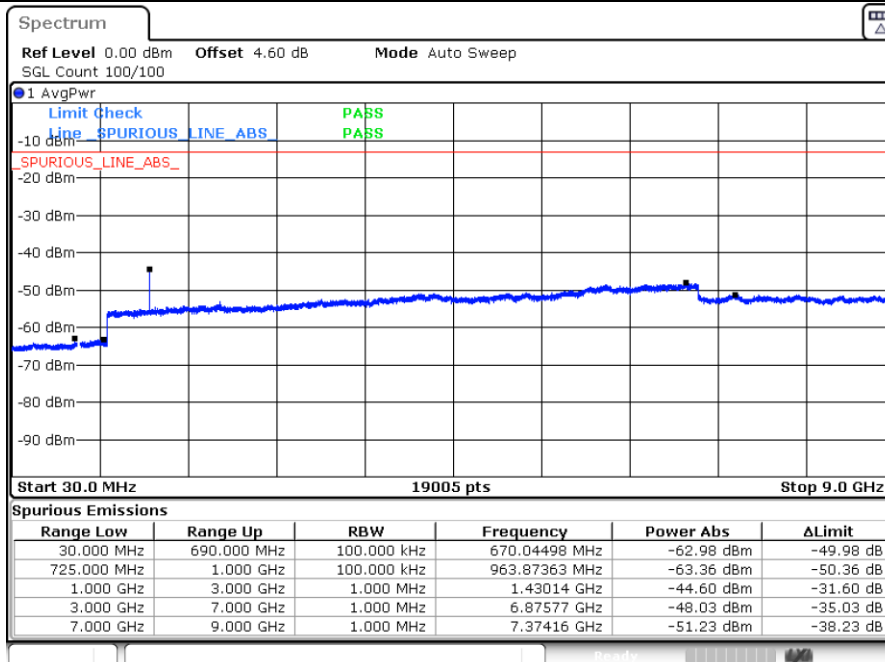
Date: 8.MAR.2025 20:13:01

Middle Channel / QPSK



Date: 8.MAR.2025 20:23:24

Highest Channel / QPSK

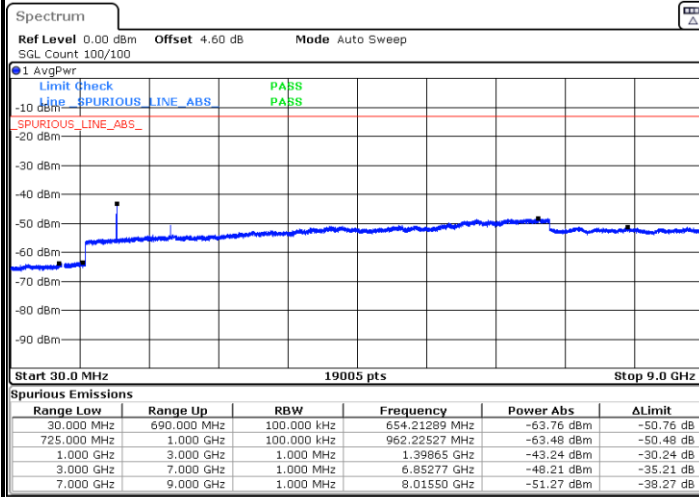


Date: 8.MAR.2025 20:24:15



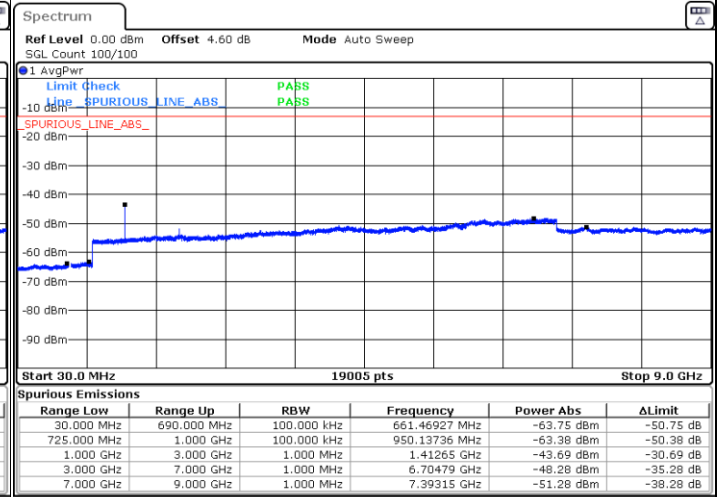
LTE Band 12 / 3MHz

Lowest Channel / QPSK



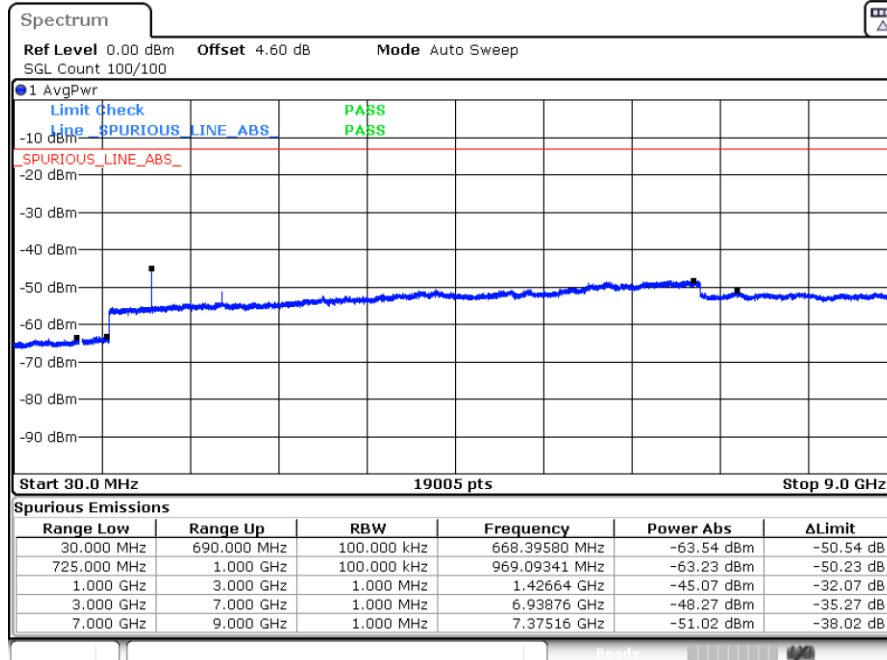
Date: 8.MAR.2025 20:34:38

Middle Channel / QPSK



Date: 8.MAR.2025 20:43:31

Highest Channel / QPSK

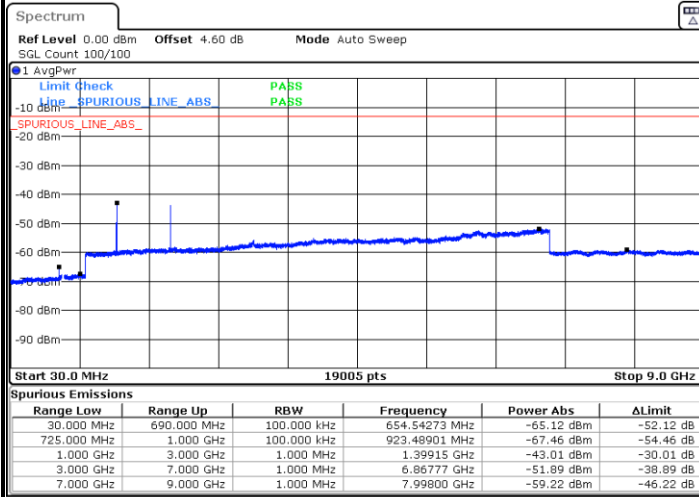


Date: 8.MAR.2025 20:44:23



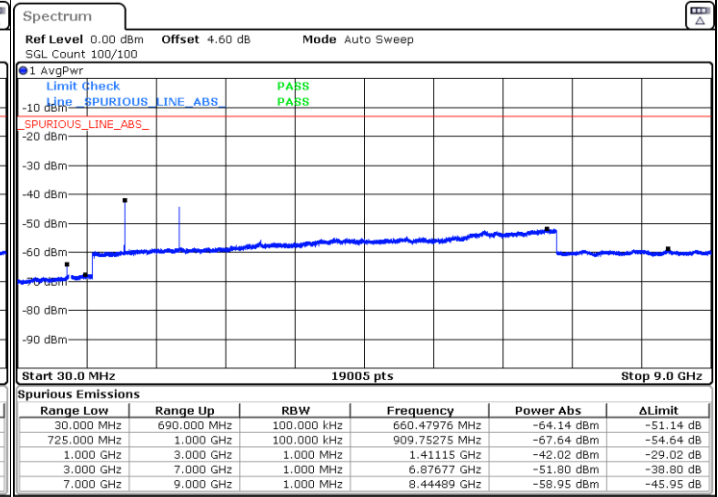
LTE Band 12 / 5MHz

Lowest Channel / QPSK



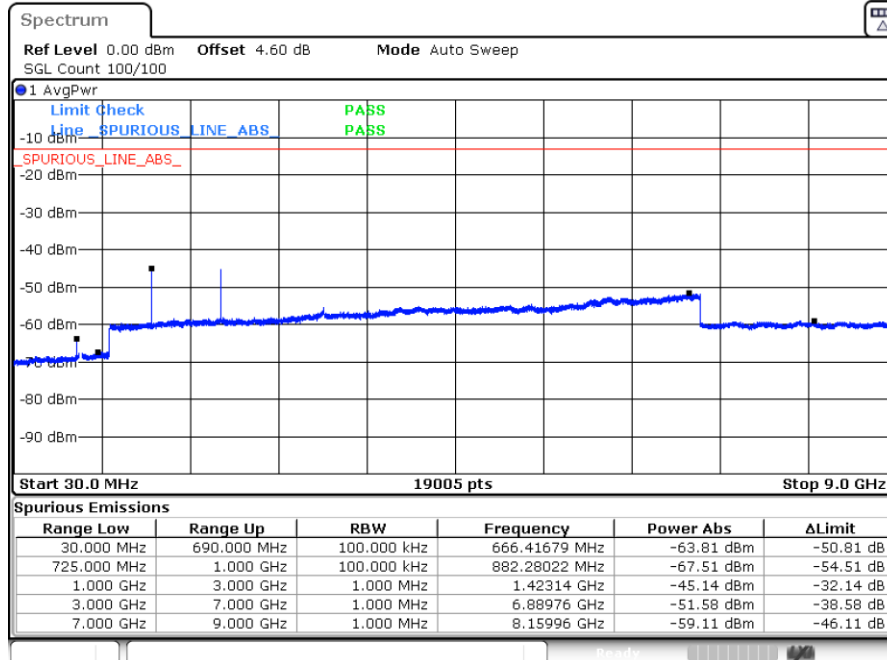
Date: 8.MAR.2025 20:53:16

Middle Channel / QPSK



Date: 8.MAR.2025 21:02:09

Highest Channel / QPSK

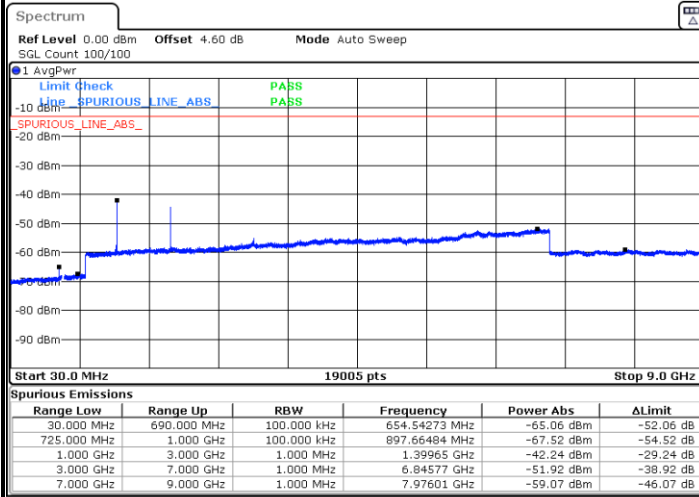


Date: 8.MAR.2025 21:03:00



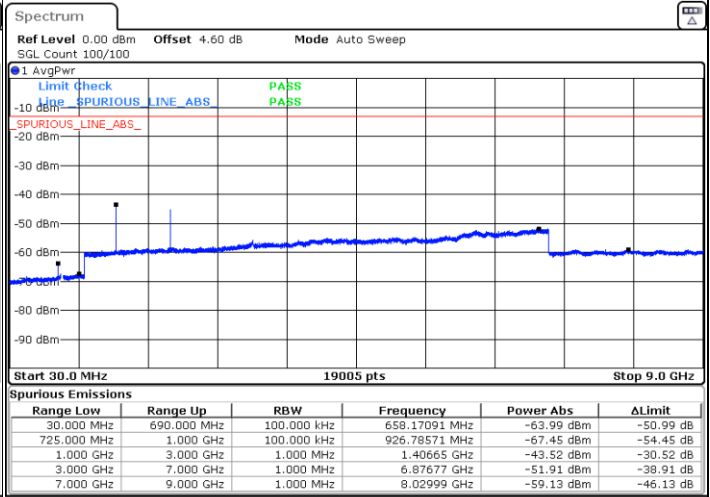
LTE Band 12 / 10MHz

Lowest Channel / QPSK



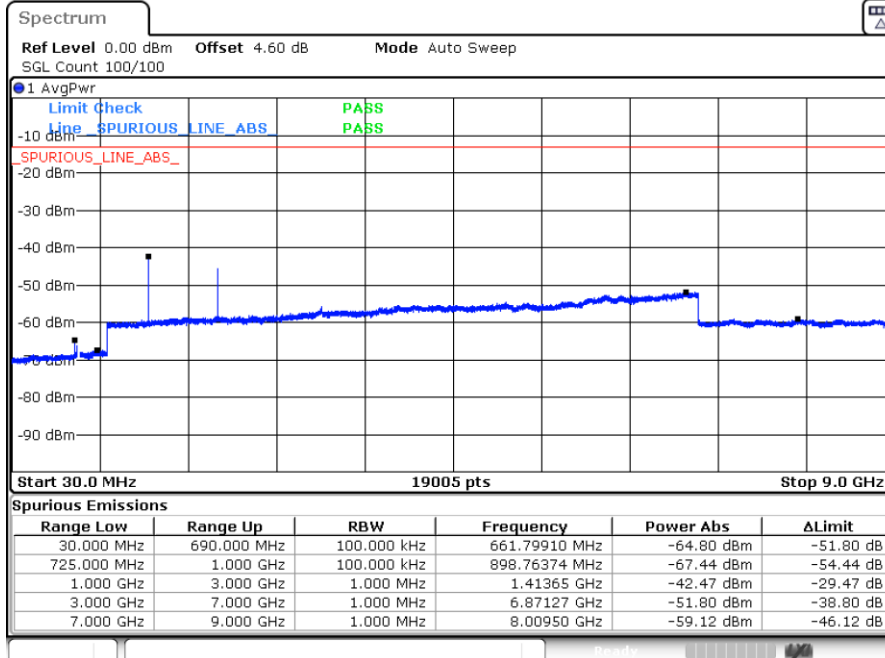
Date: 8.MAR.2025 21:11:54

Middle Channel / QPSK



Date: 8.MAR.2025 21:20:46

Highest Channel / QPSK



Date: 8.MAR.2025 21:21:38

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	0.0024	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0028	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0041	
0	Normal Voltage	0.0026	
-10	Normal Voltage	0.0039	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0013	

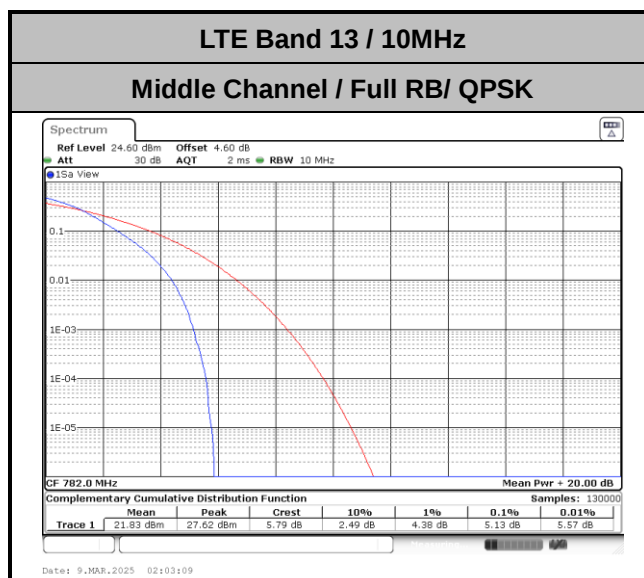
Note:

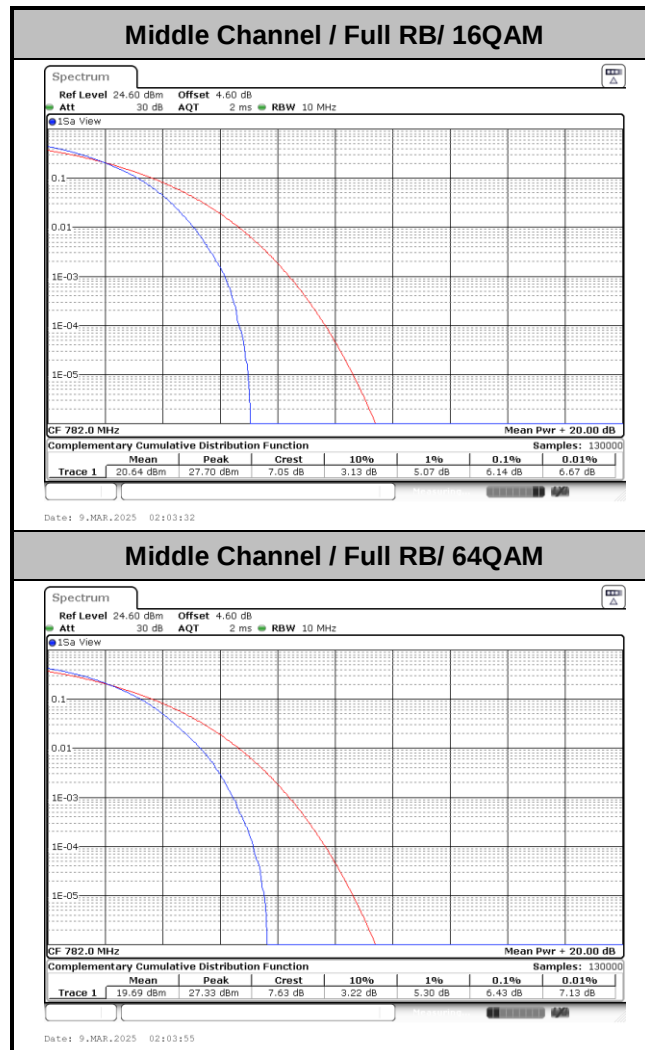
1. Normal Voltage =3.9 V.; Battery End Point (BEP) =3.5 V.; Maximum Voltage =4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 13

Peak-to-Average Ratio

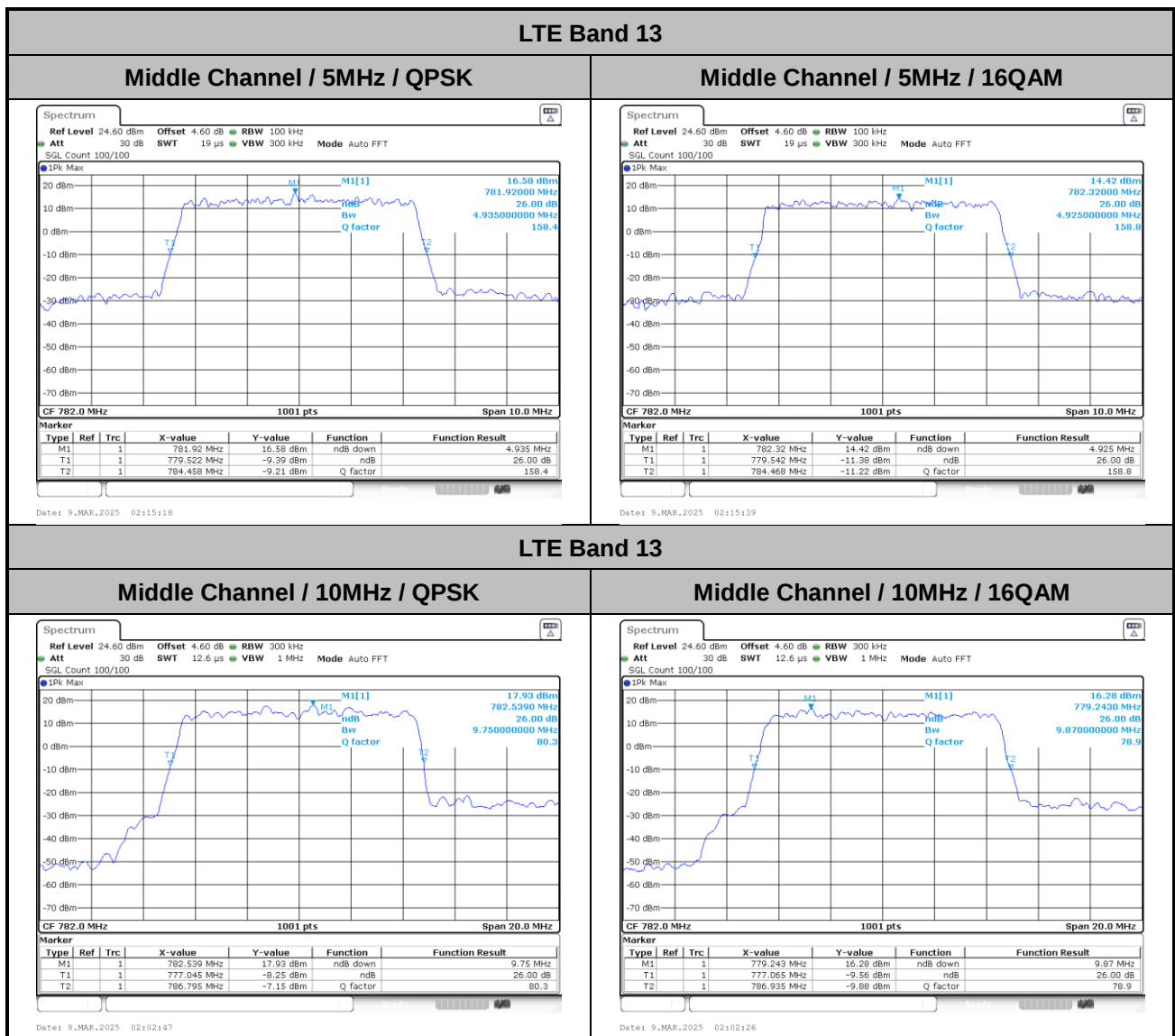
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.13	6.14	6.43	PASS





**26dB Bandwidth**

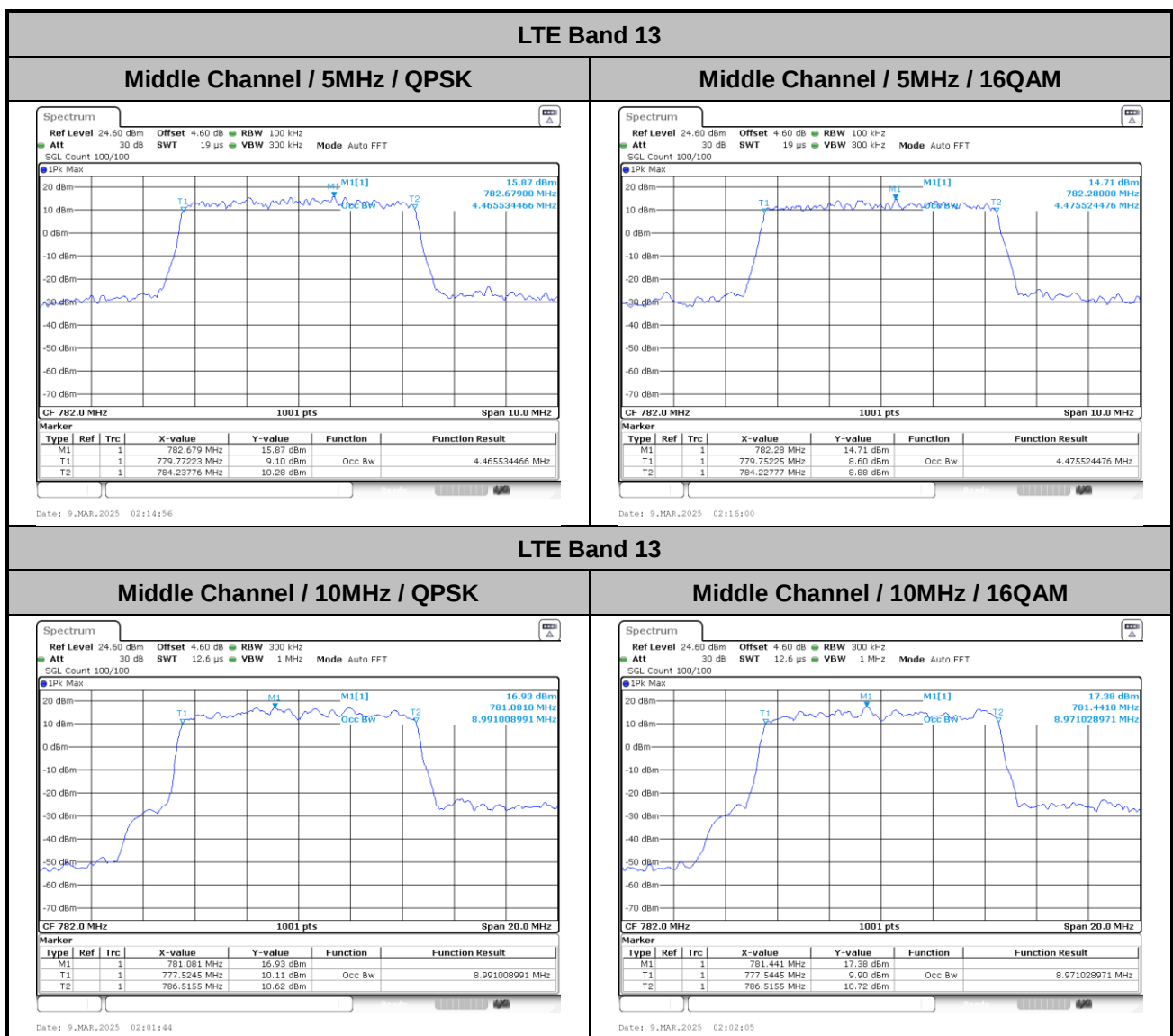
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.94	4.93
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.75	9.87





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.47	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.99	8.97

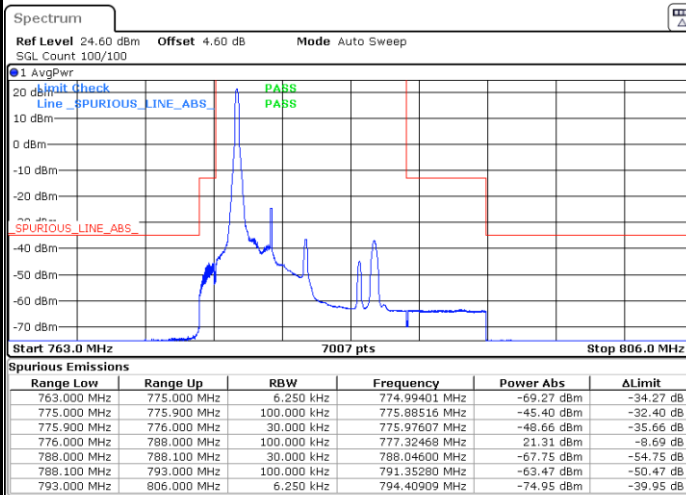




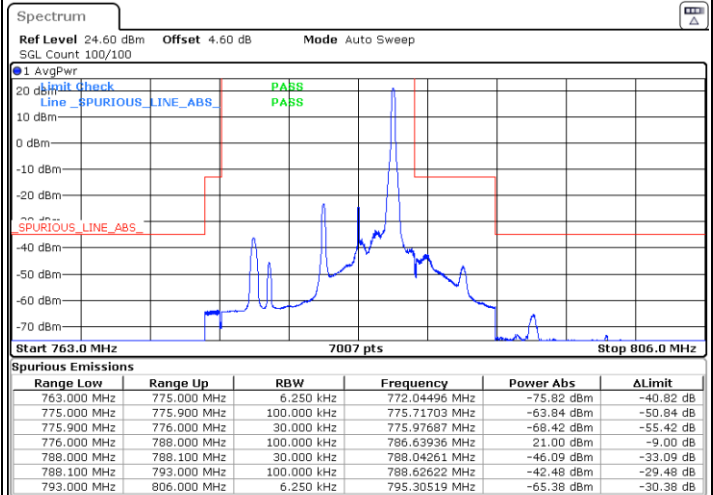
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

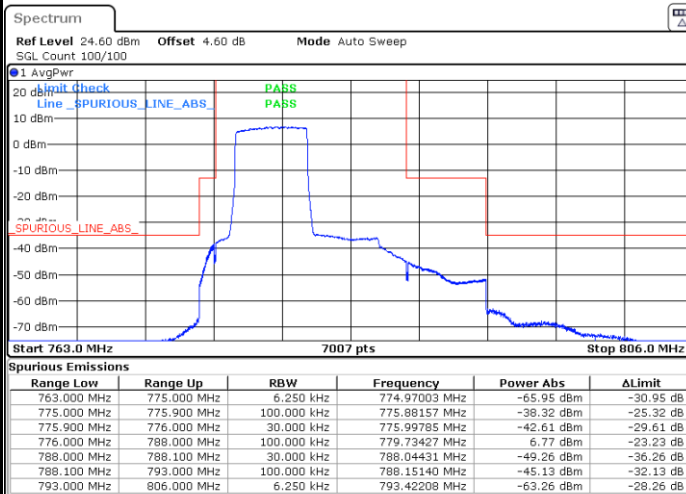
Lowest Band Edge / 1 RB



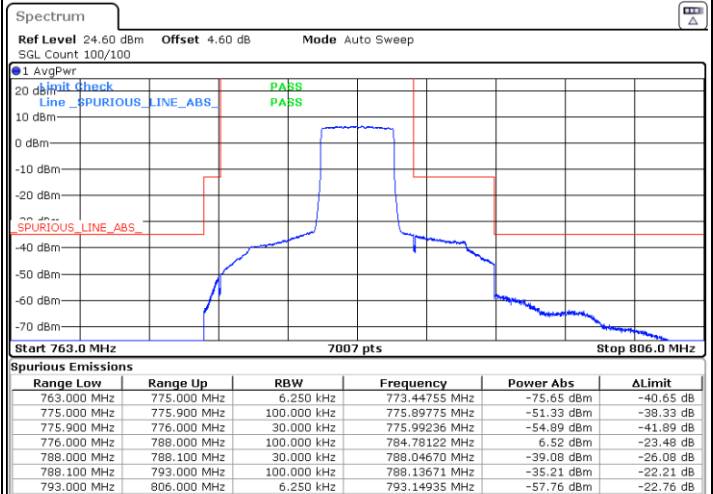
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



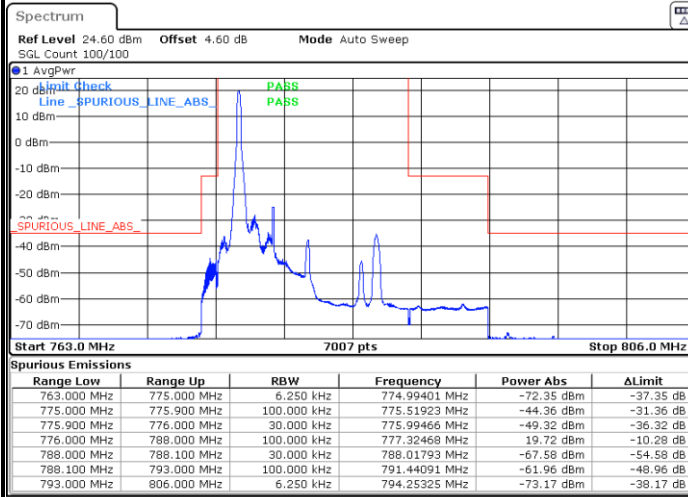
Highest Band Edge / Full RB





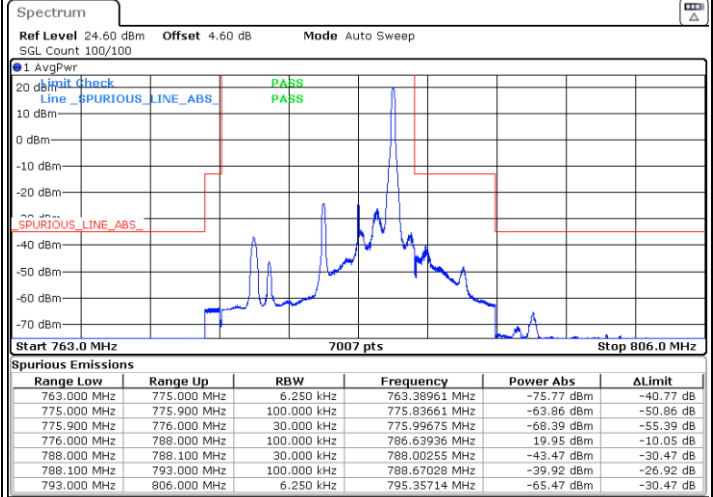
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



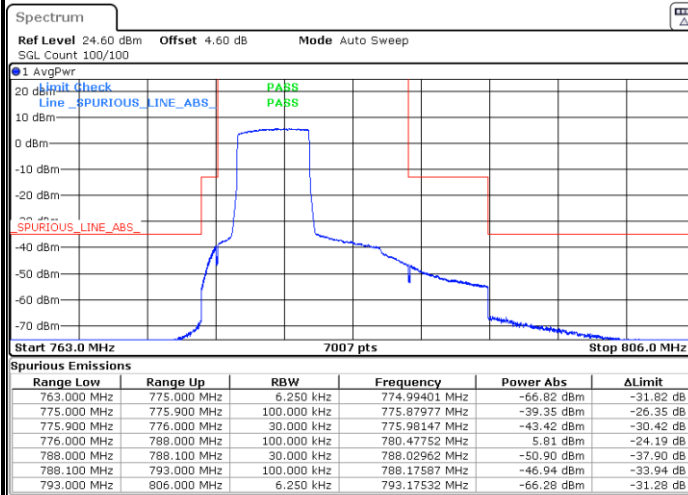
Date: 9.MAR.2025 01:22:47

Highest Band Edge / 1 RB



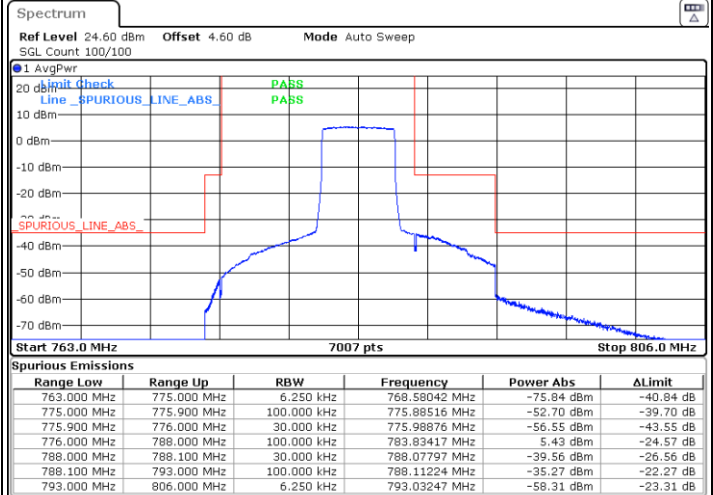
Date: 9.MAR.2025 01:36:18

Lowest Band Edge / Full RB



Date: 9.MAR.2025 01:28:21

Highest Band Edge / Full RB

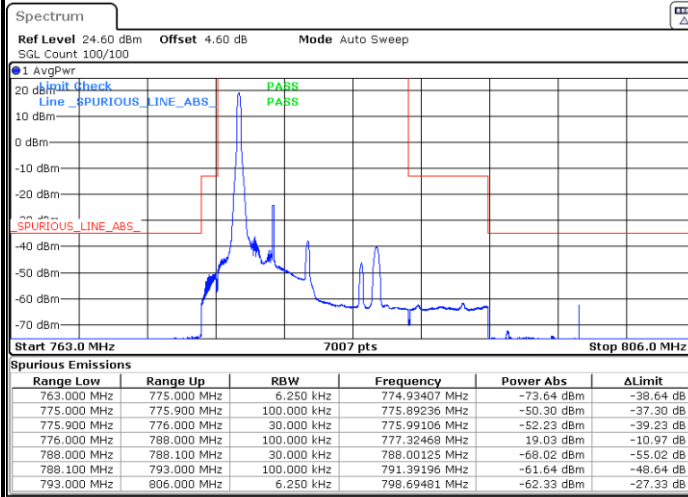


Date: 9.MAR.2025 01:41:49

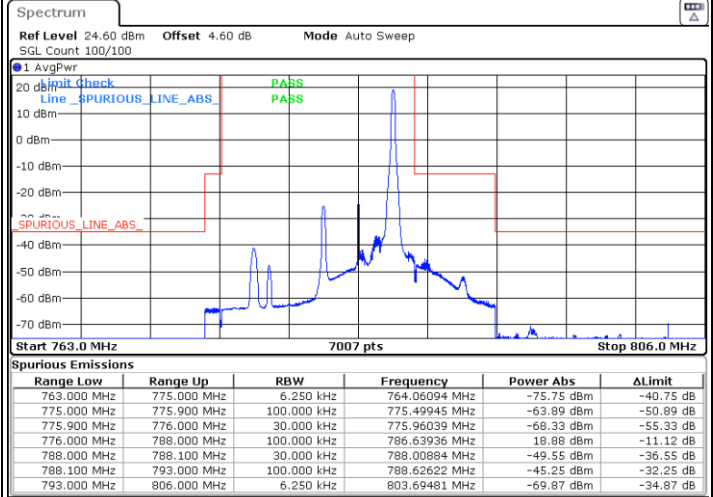


LTE Band 13 / 5MHz / 64QAM

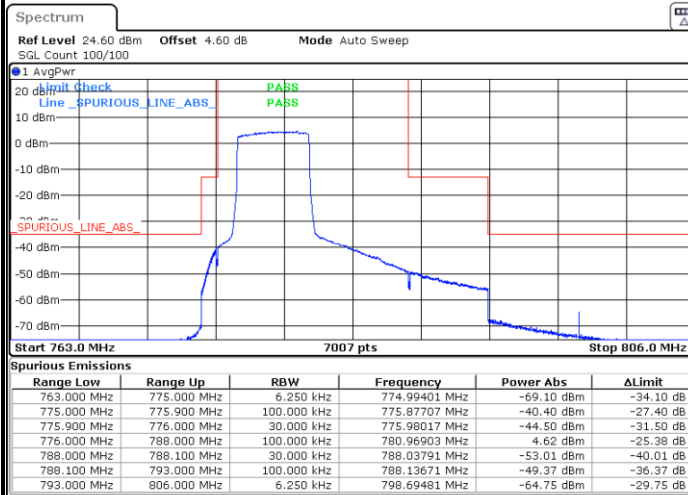
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

