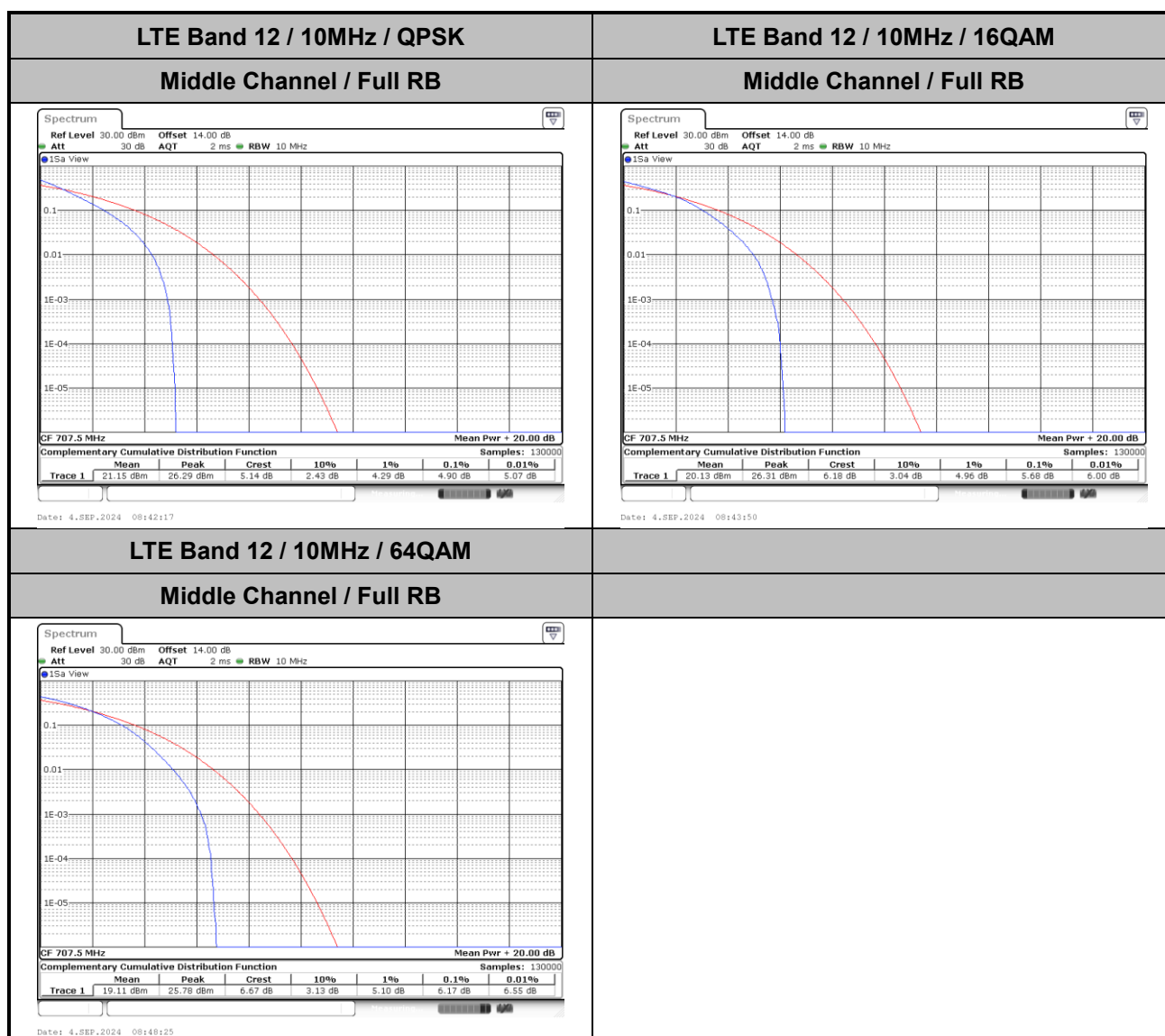




LTE Band 12

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	4.90	5.68	6.17	PASS



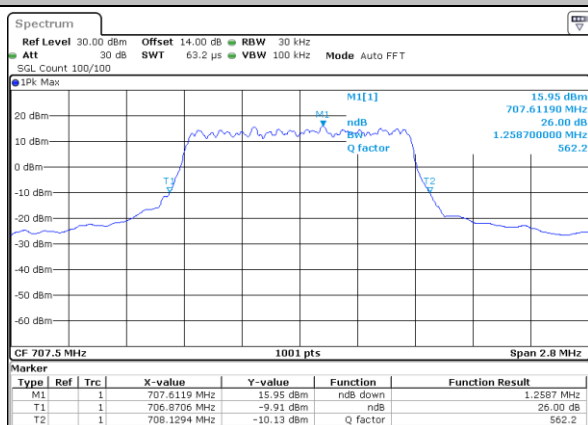


26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.26	1.28	3.00	2.94	4.86	4.85	9.65	9.81

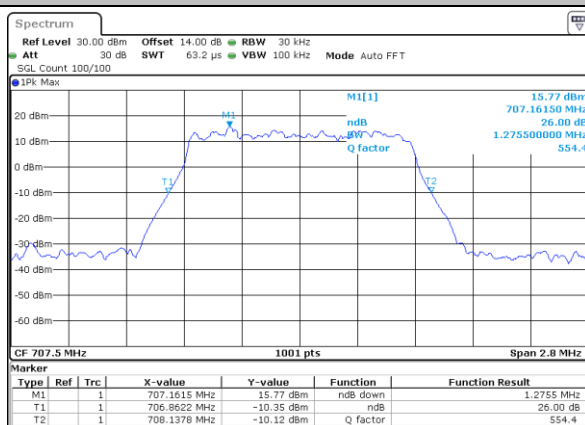
LTE Band 12

Middle Channel / 1.4MHz / QPSK



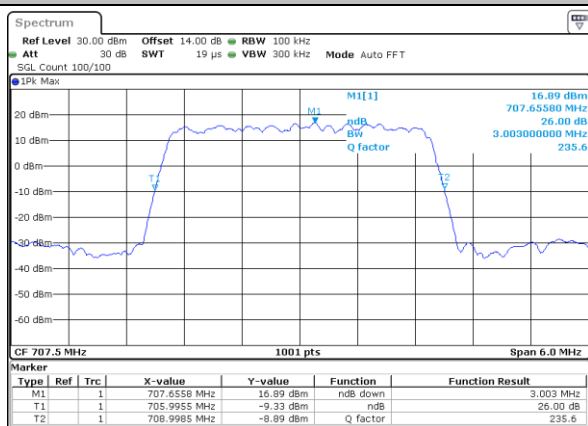
Date: 3.SEP.2024 19:42:27

Middle Channel / 1.4MHz / 16QAM



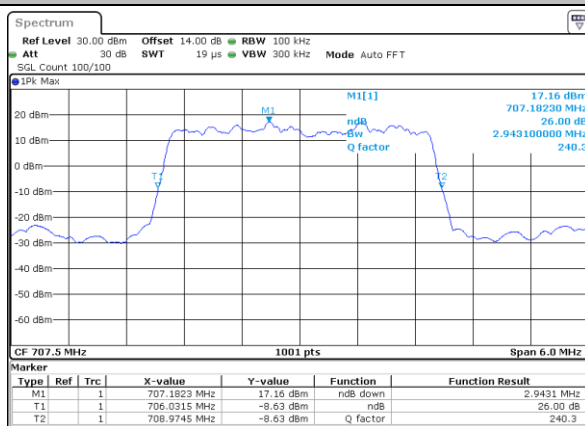
Date: 3.SEP.2024 19:43:09

Middle Channel / 3MHz / QPSK



Date: 3.SEP.2024 20:13:23

Middle Channel / 3MHz / 16QAM

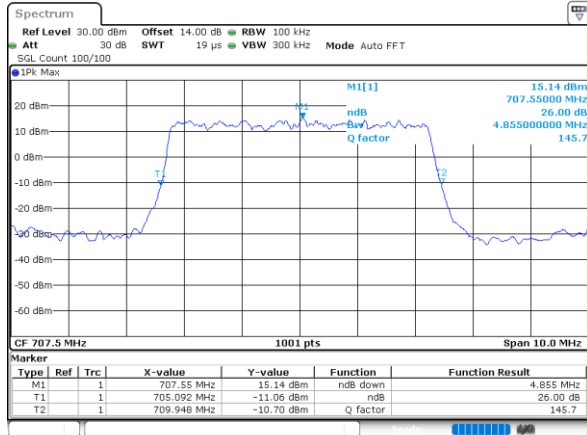


Date: 3.SEP.2024 20:14:05

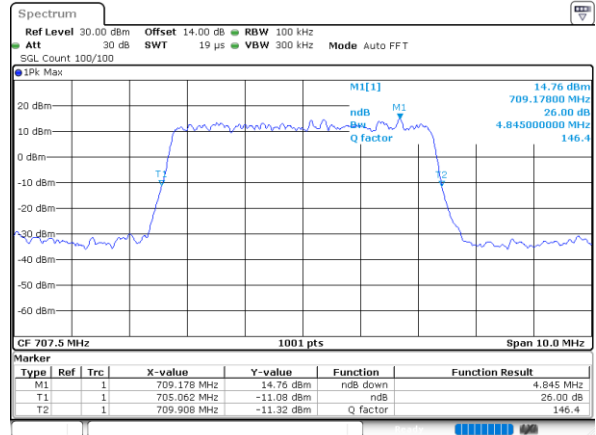


LTE Band 12

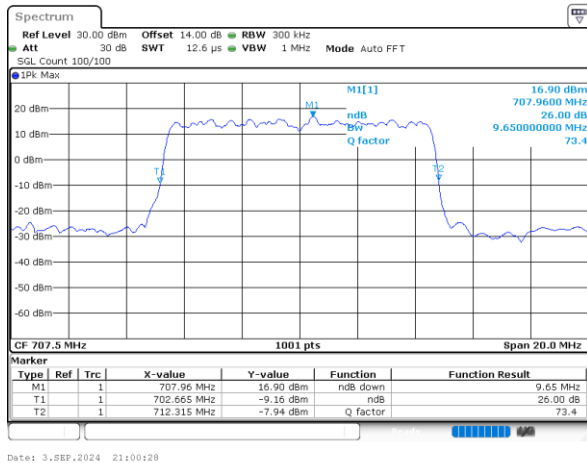
Middle Channel / 5MHz / QPSK



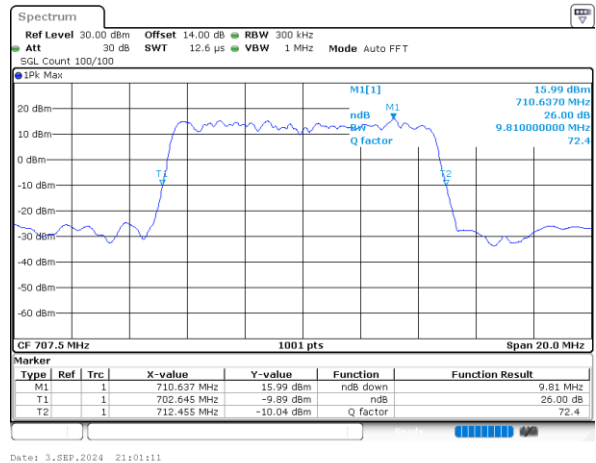
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



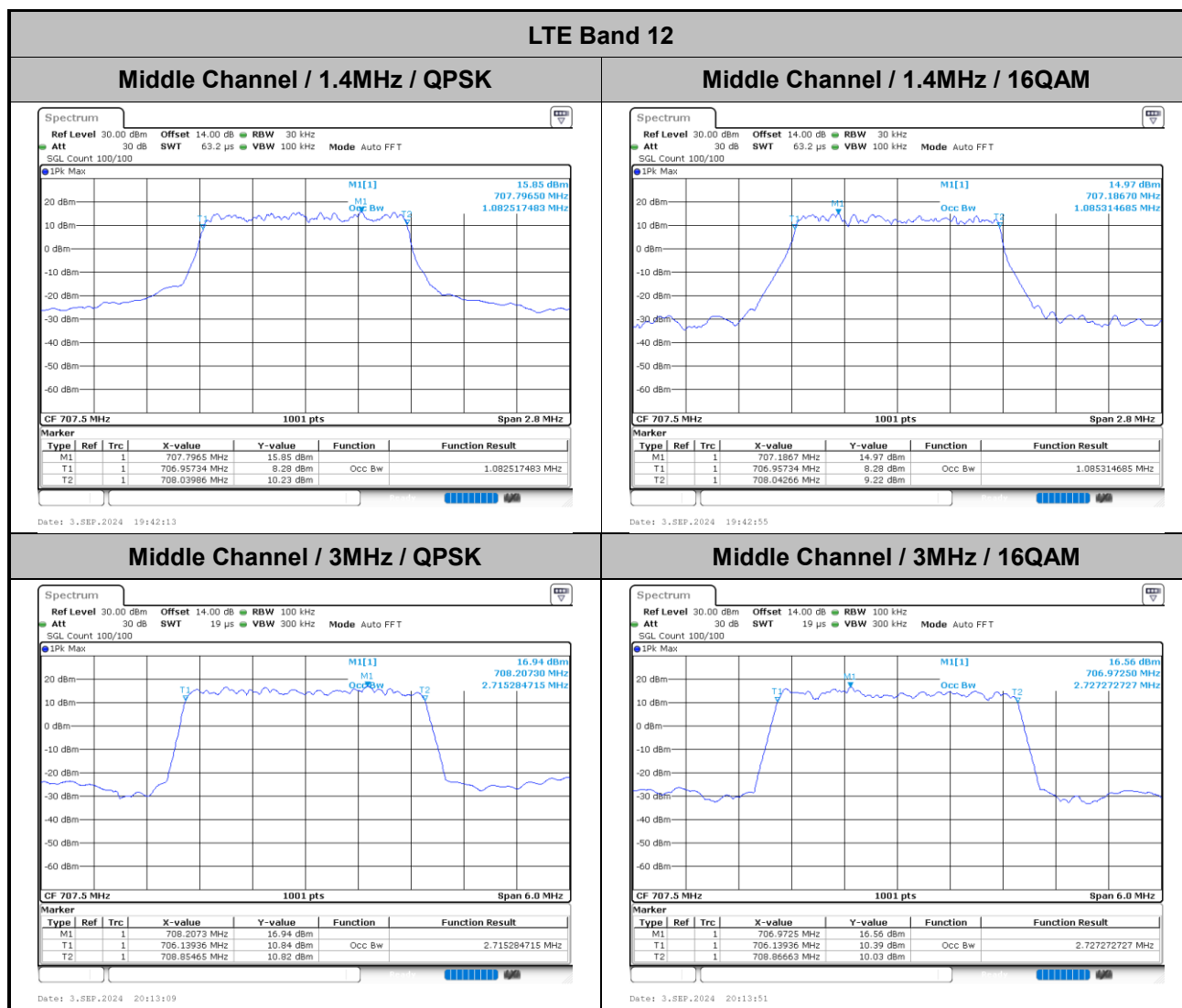
Middle Channel / 10MHz / 16QAM





Occupied Bandwidth

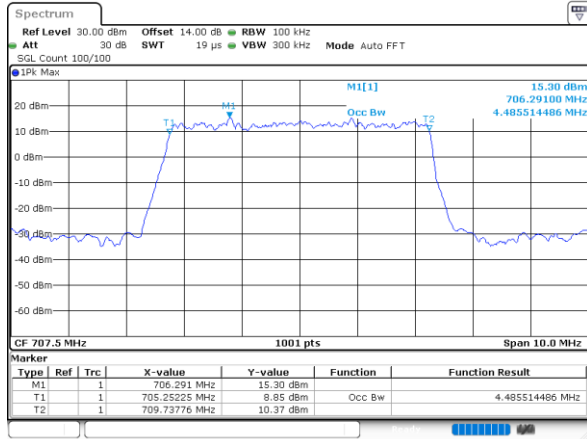
Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.08	1.09	2.72	2.73	4.49	4.51	8.99	9.01



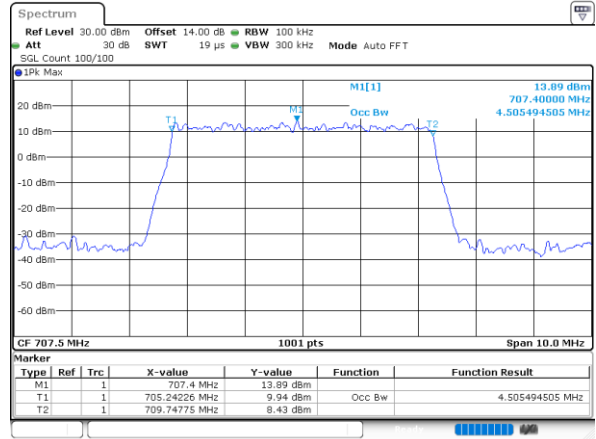


LTE Band 12

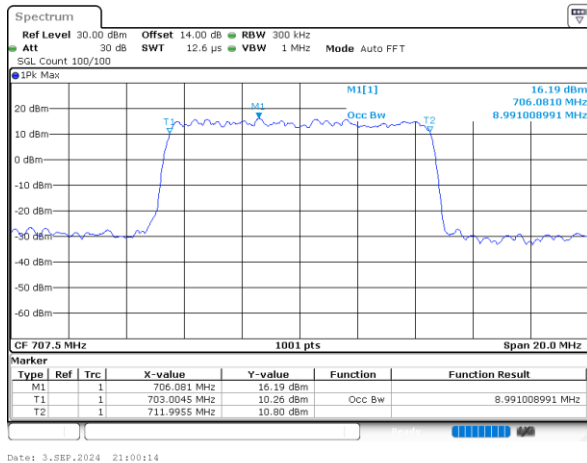
Middle Channel / 5MHz / QPSK



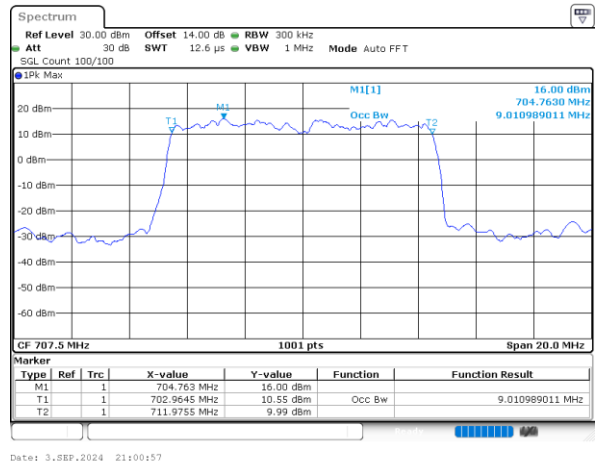
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

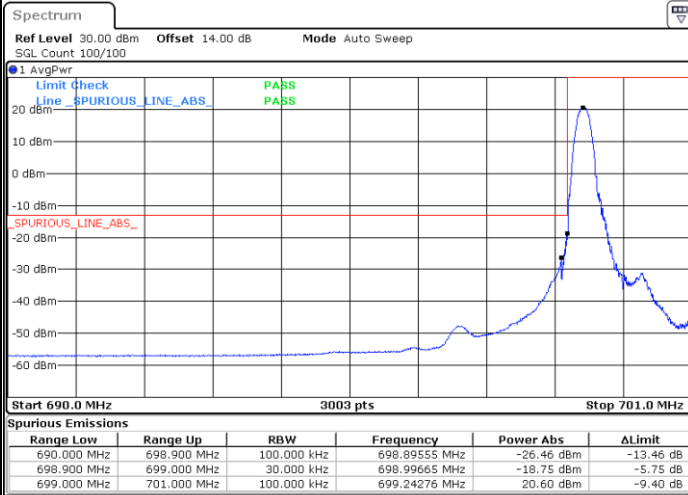




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

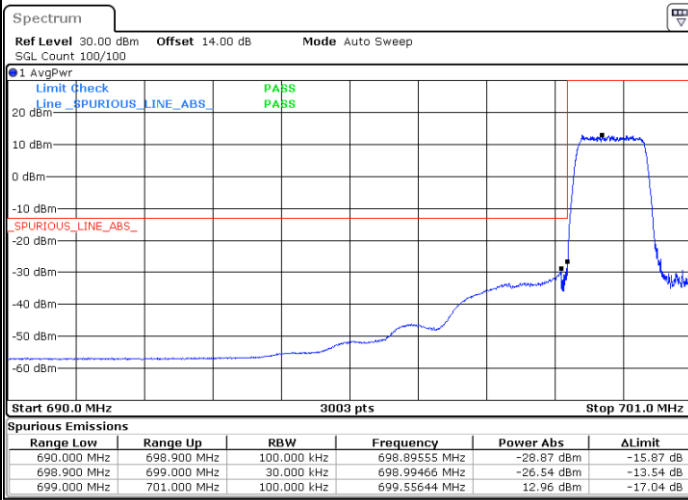
Lowest Band Edge / 1RB



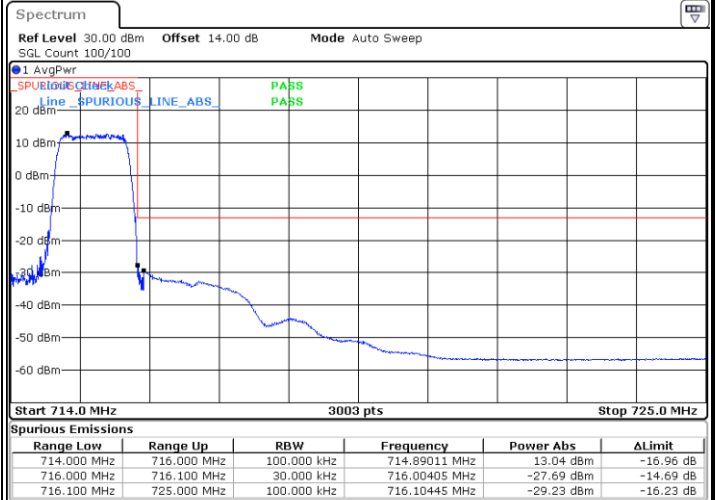
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



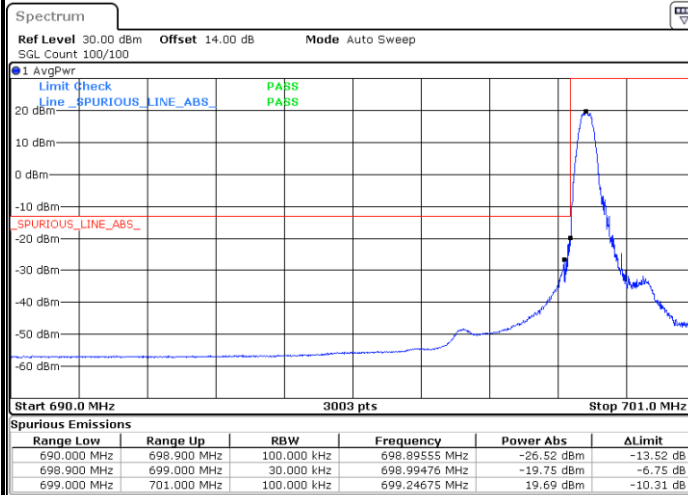
Highest Band Edge / Full RB



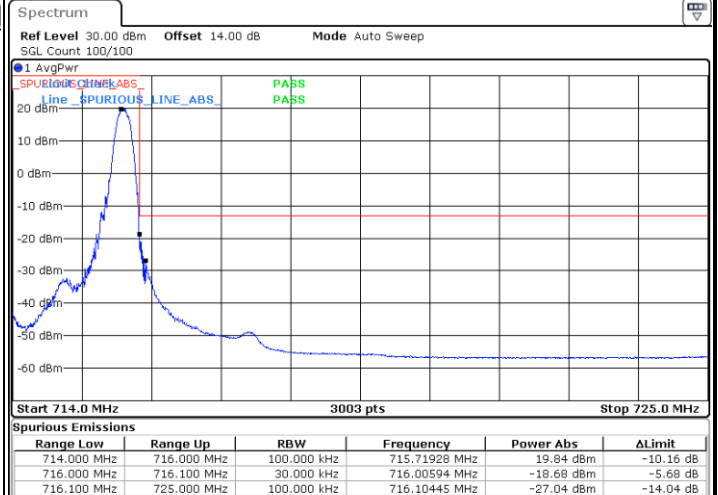


LTE Band 12 / 1.4MHz / 16QAM

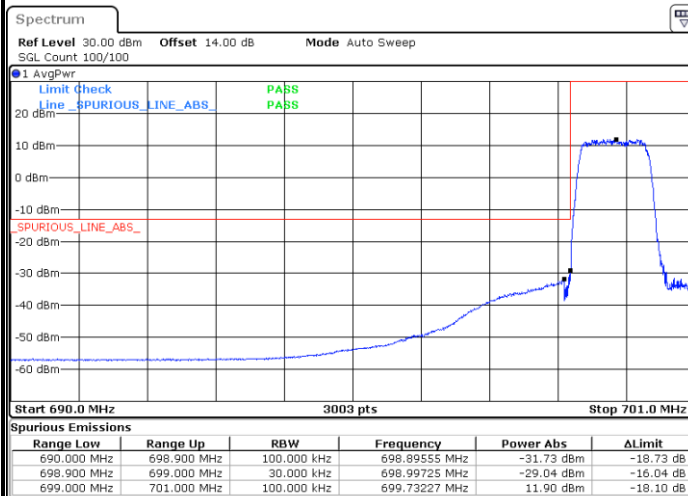
Lowest Band Edge / 1 RB



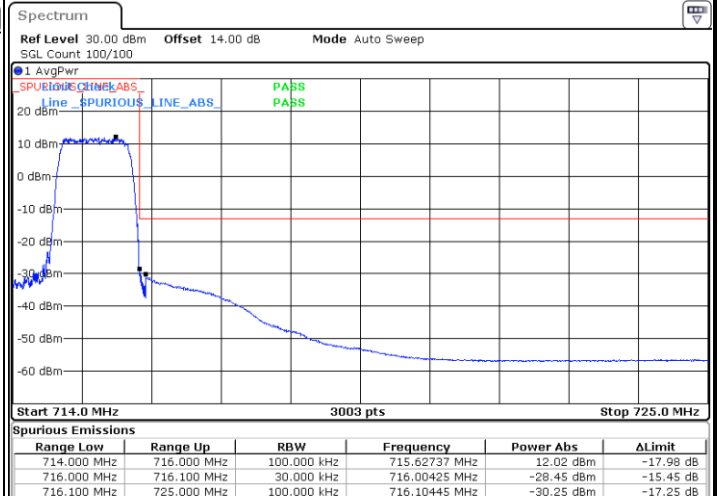
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



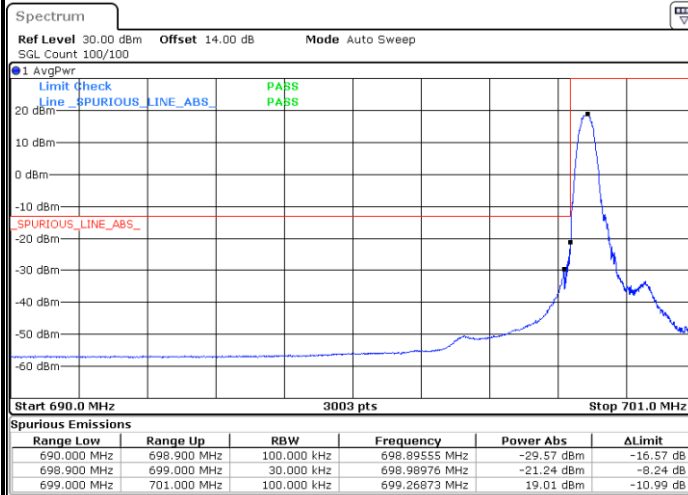
Highest Band Edge / Full RB



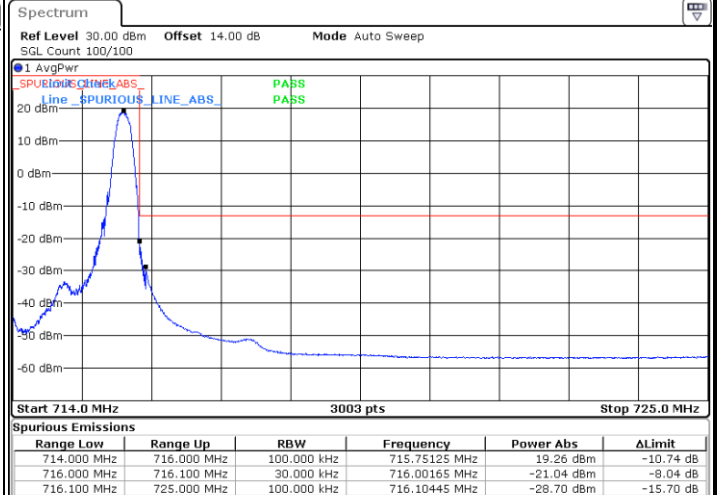


LTE Band 12 / 1.4MHz / 64QAM

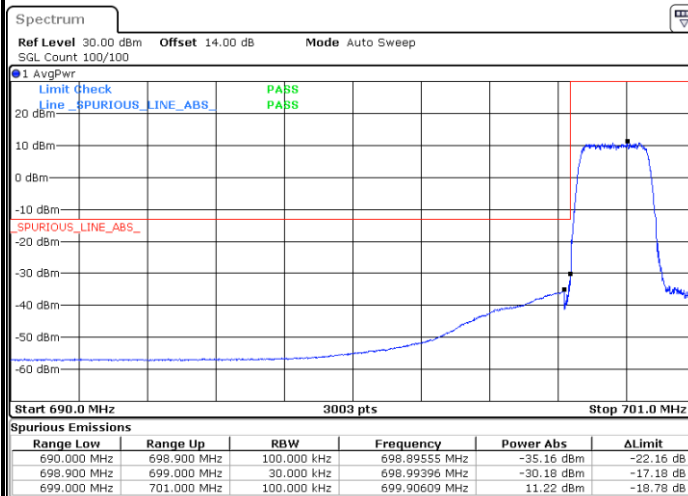
Lowest Band Edge / 1 RB



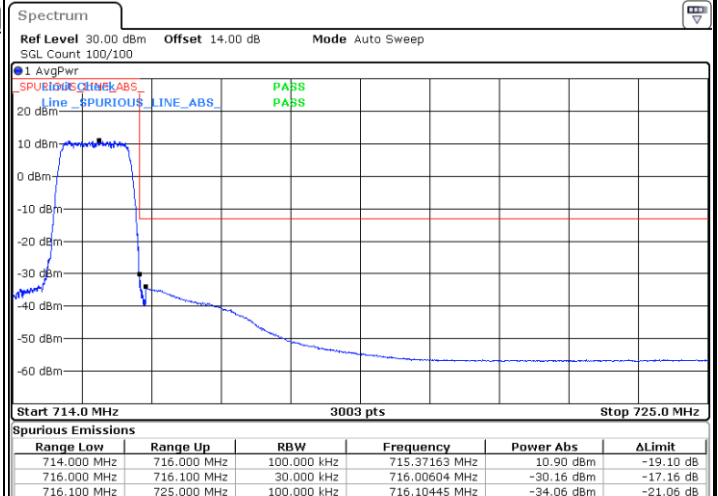
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



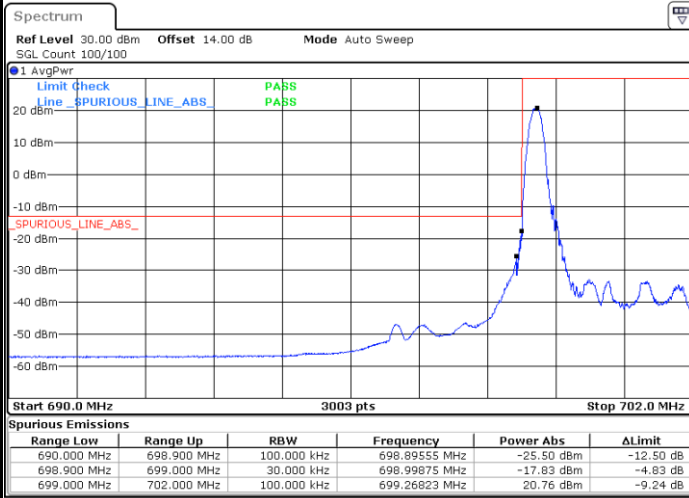
Highest Band Edge / Full RB



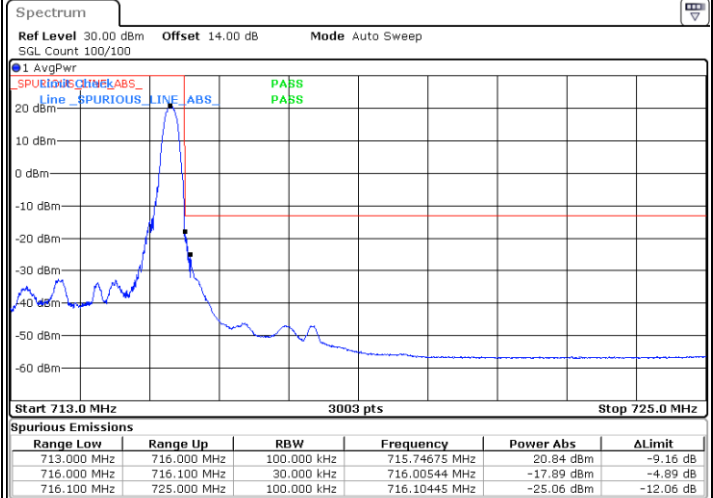


LTE Band 12 / 3MHz / QPSK

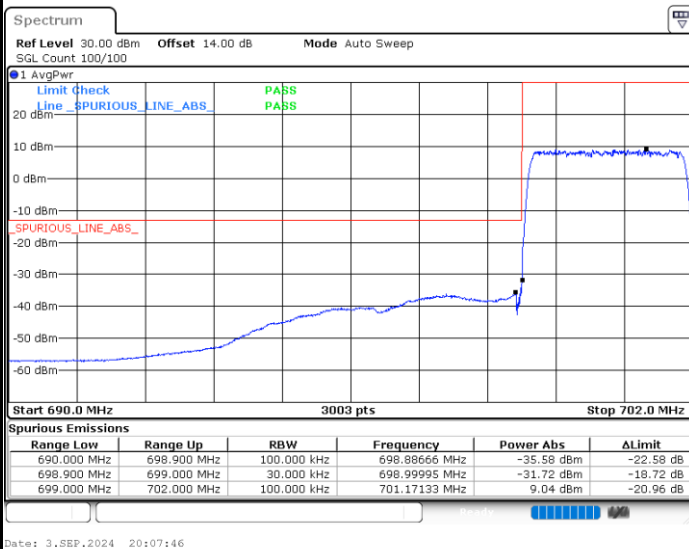
Lowest Band Edge / 1RB



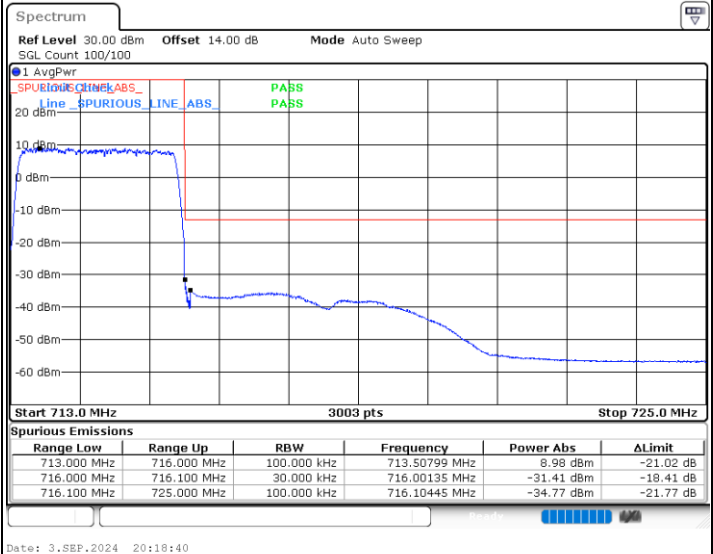
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



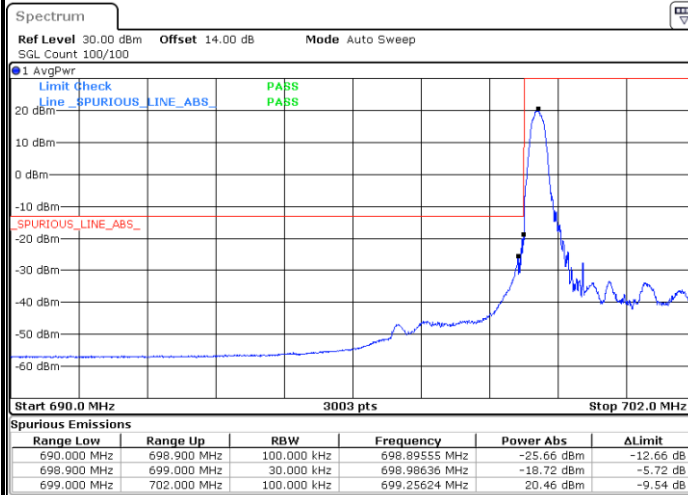
Highest Band Edge / Full RB



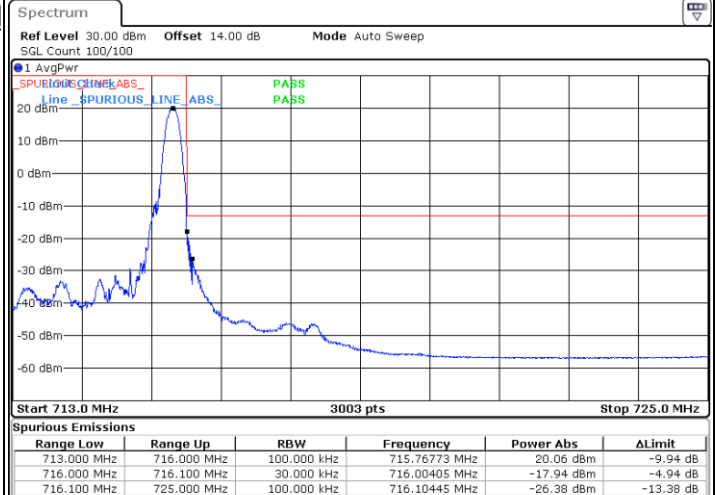


LTE Band 12 / 3MHz / 16QAM

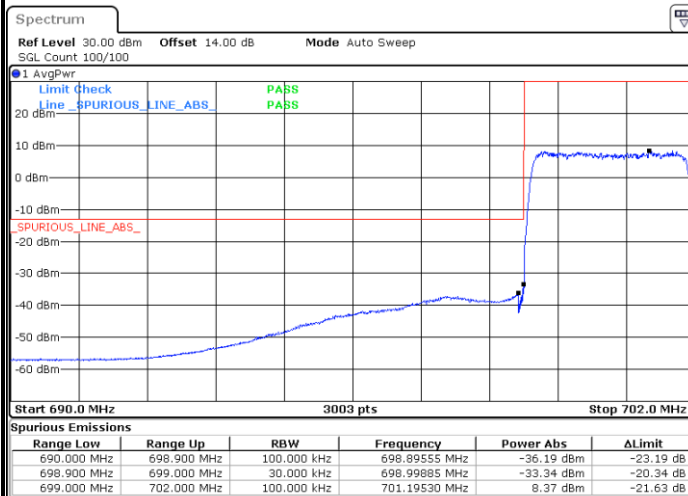
Lowest Band Edge / 1 RB



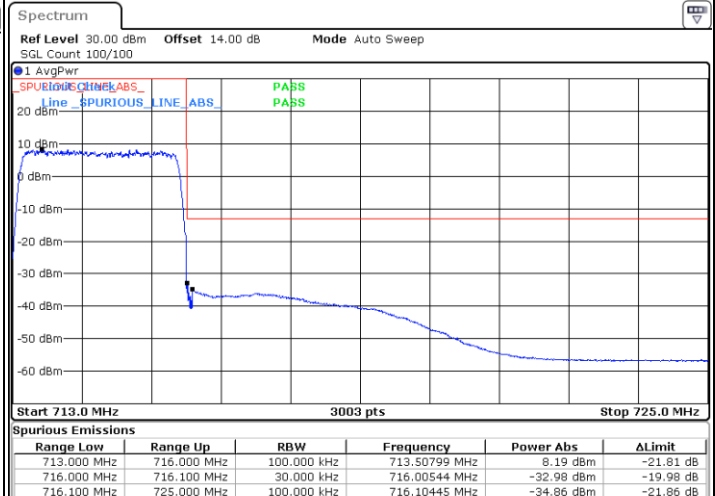
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



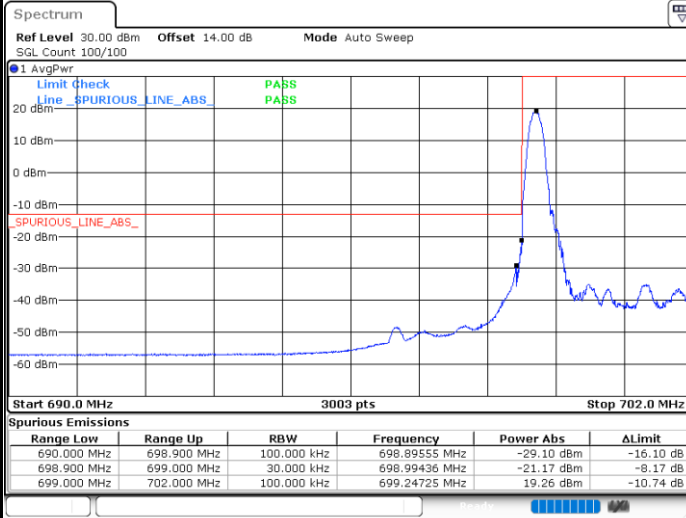
Highest Band Edge / Full RB



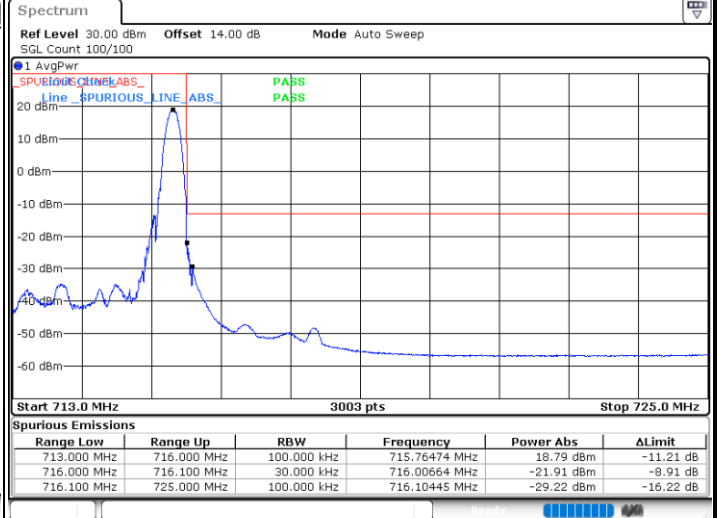


LTE Band 12 / 3MHz / 64QAM

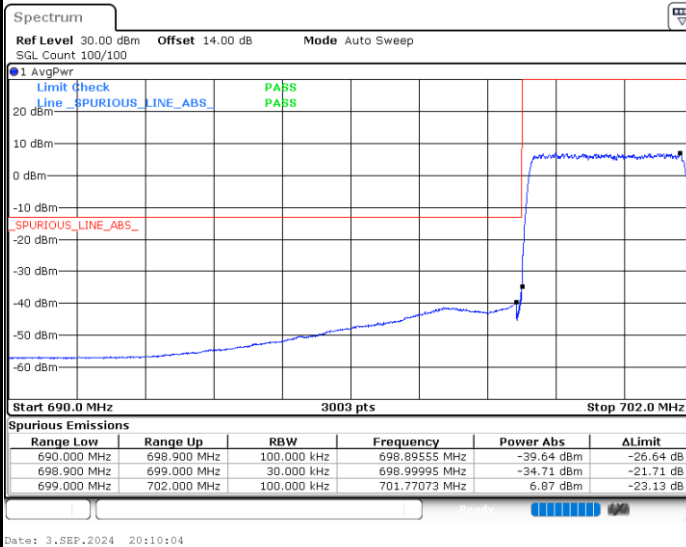
Lowest Band Edge / 1 RB



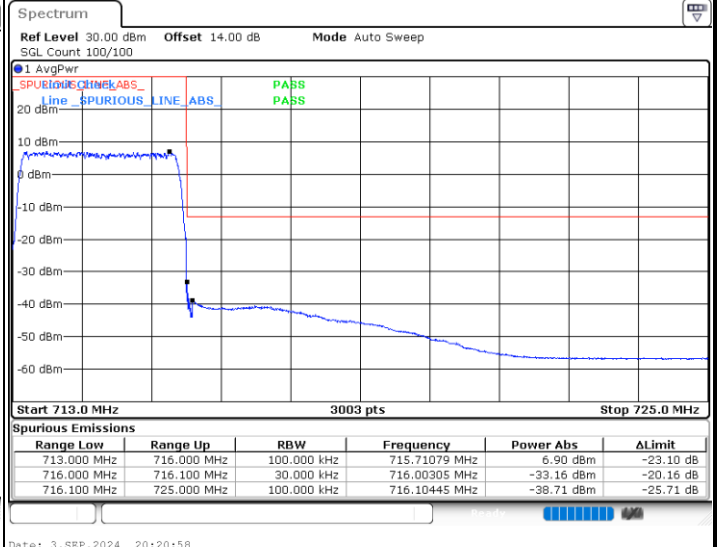
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



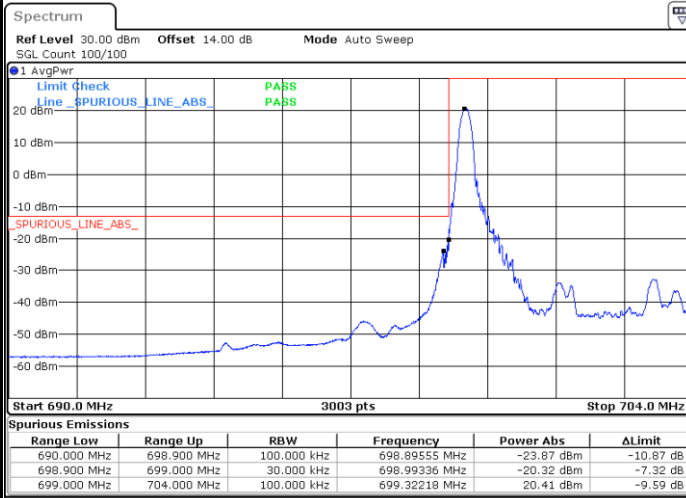
Highest Band Edge / Full RB



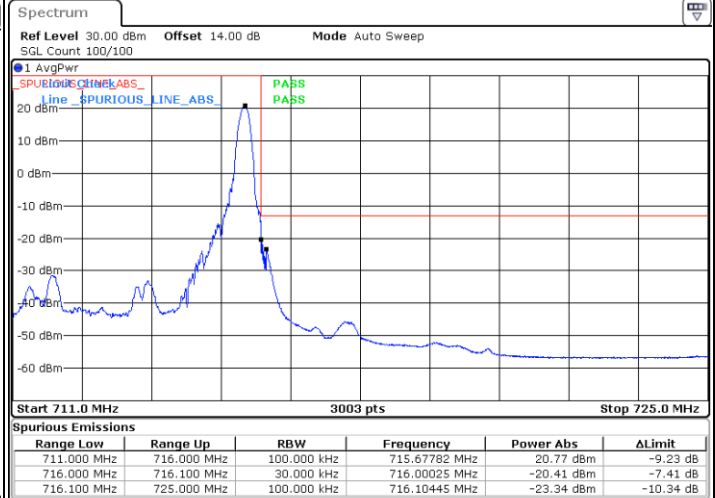


LTE Band 12 / 5MHz / QPSK

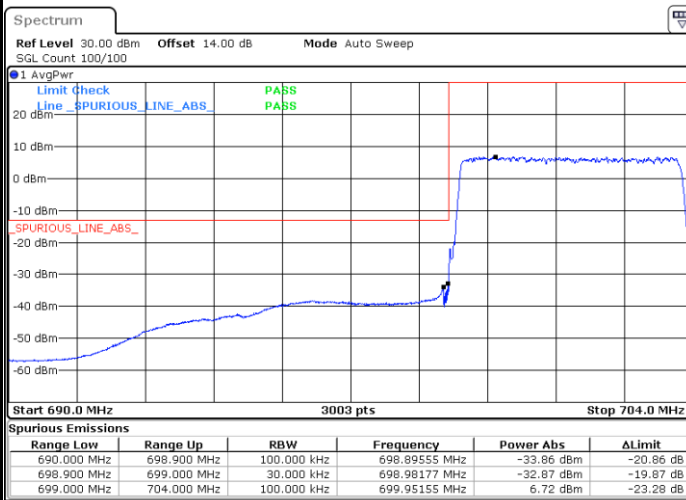
Lowest Band Edge / 1RB



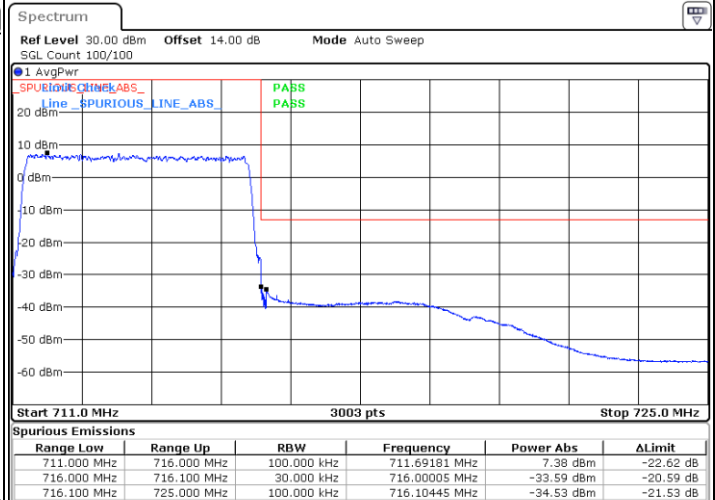
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



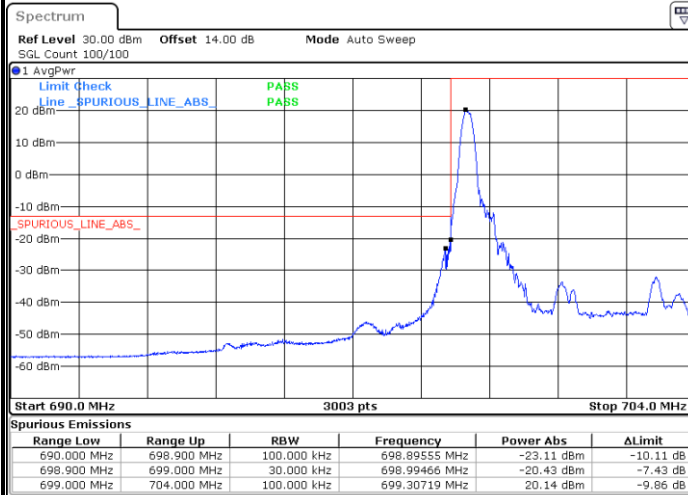
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

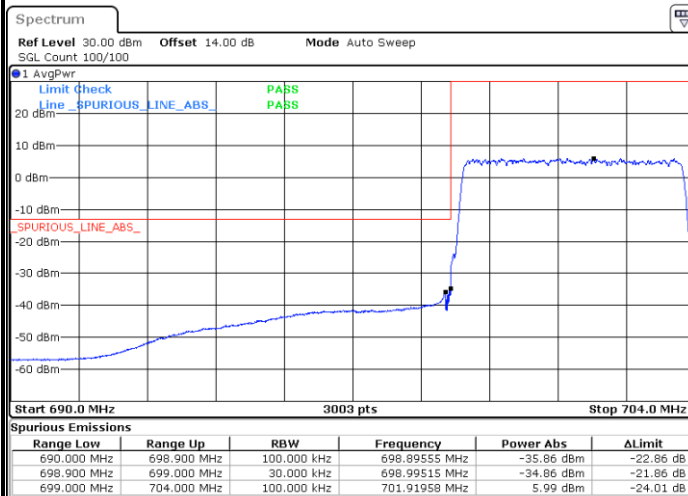
Lowest Band Edge / 1 RB



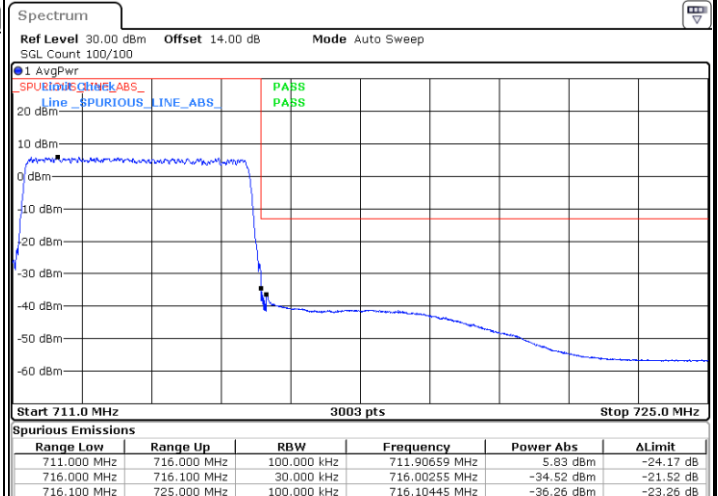
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



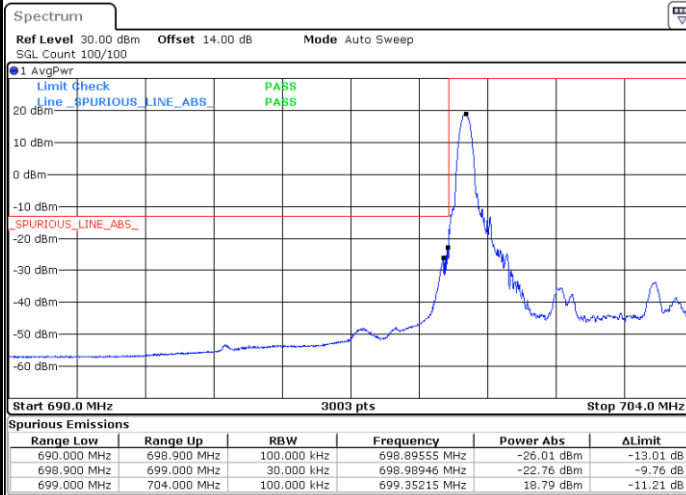
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 64QAM

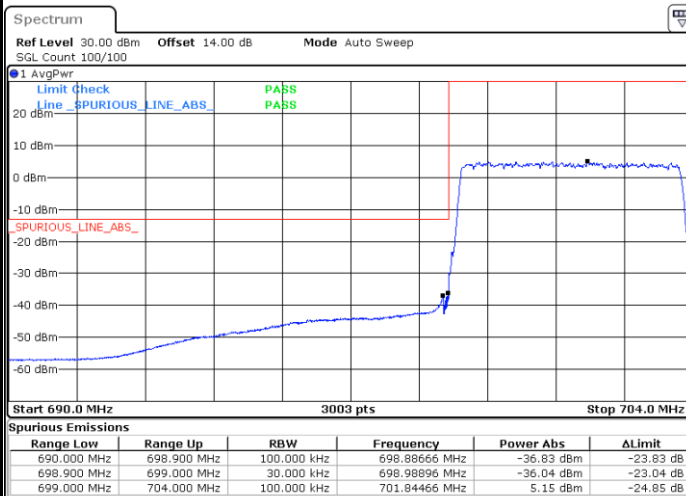
Lowest Band Edge / 1 RB



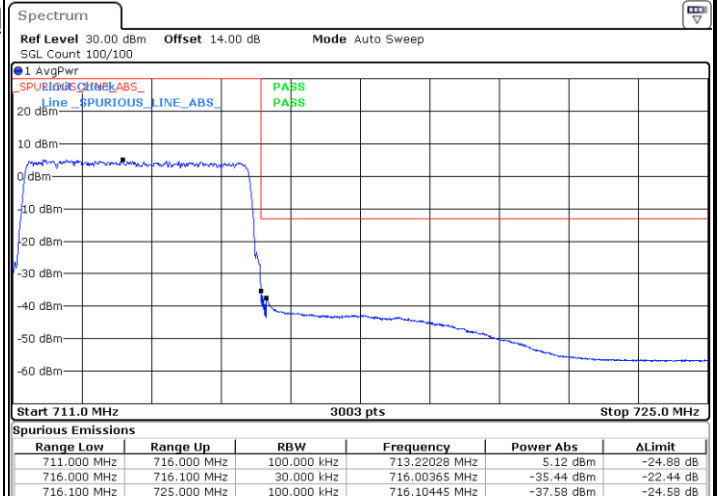
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



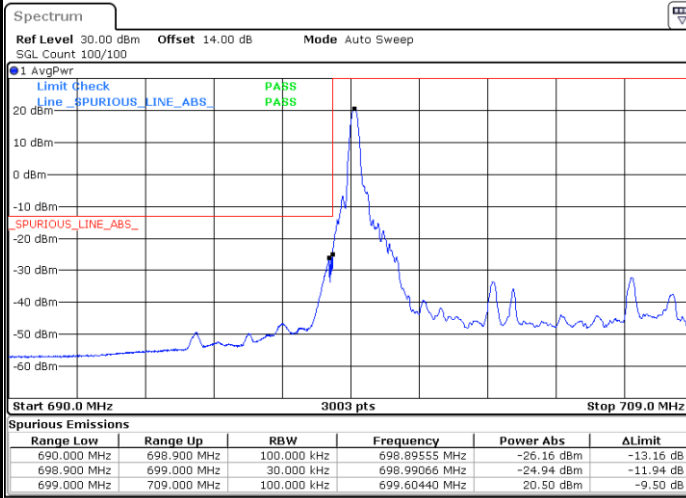
Highest Band Edge / Full RB



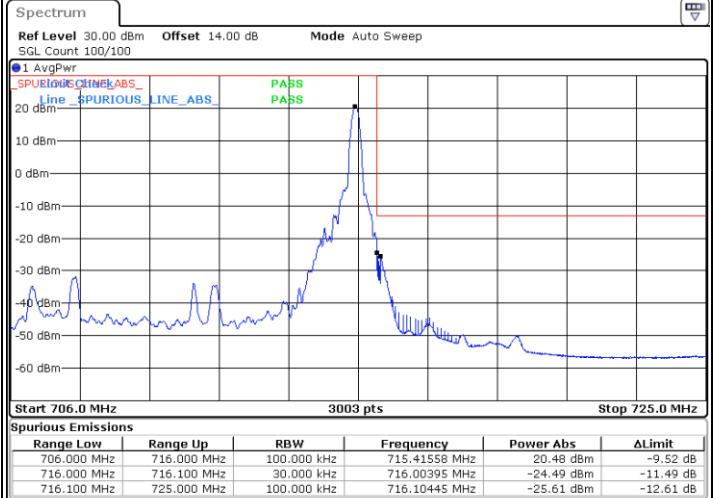


LTE Band 12 / 10MHz / QPSK

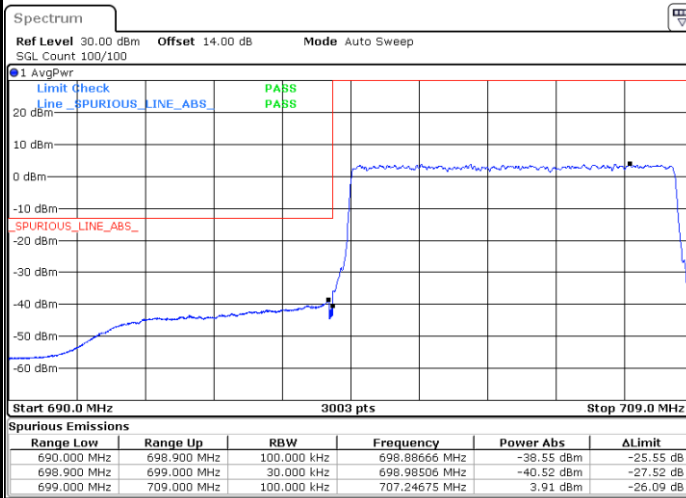
Lowest Band Edge / 1RB



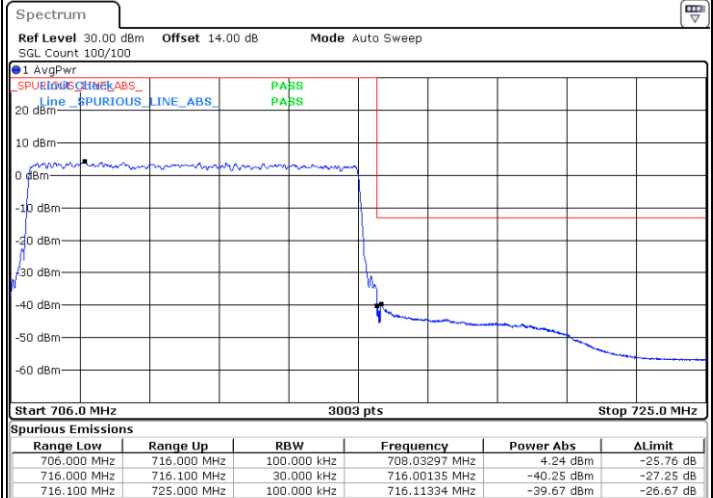
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



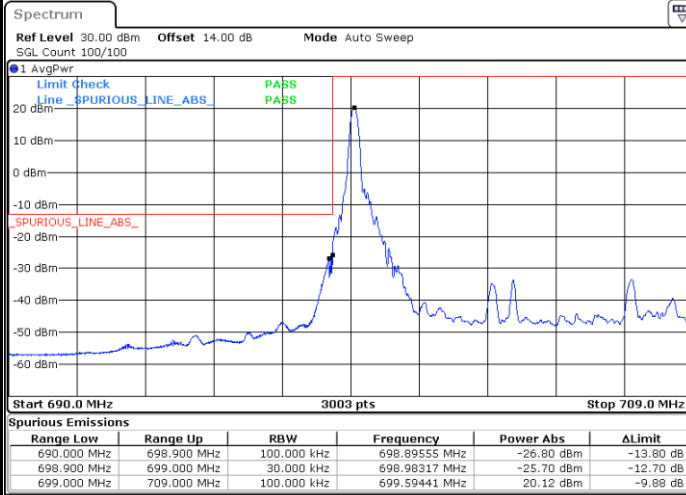
Highest Band Edge / Full RB



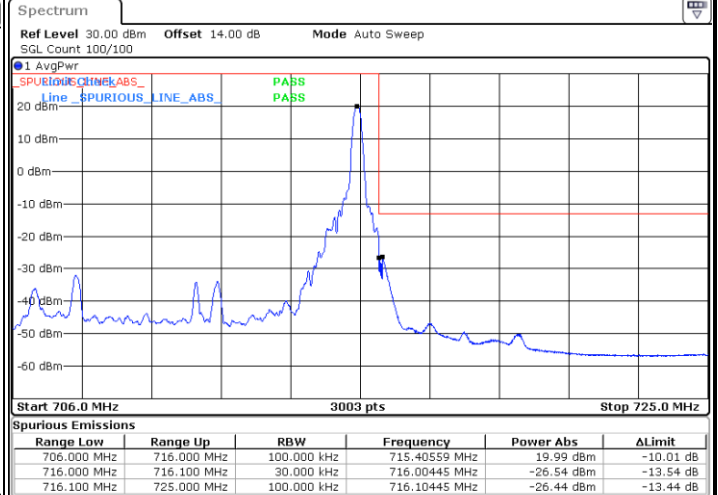


LTE Band 12 / 10MHz / 16QAM

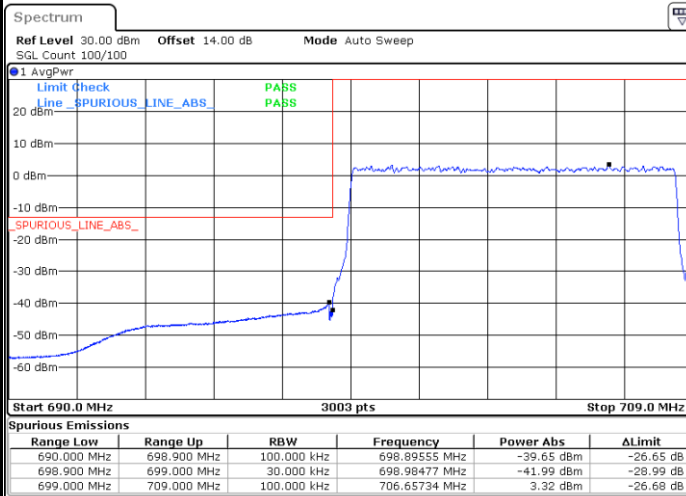
Lowest Band Edge / 1 RB



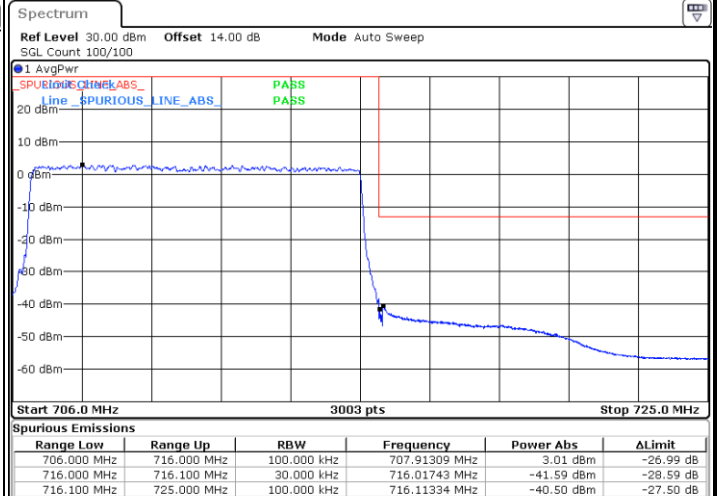
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



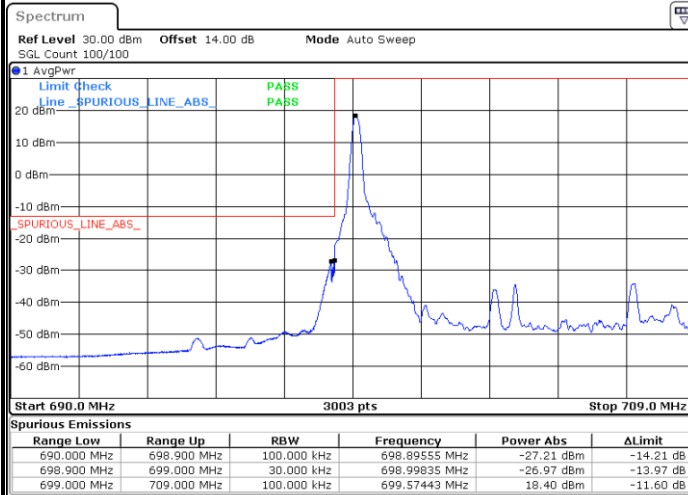
Highest Band Edge / Full RB



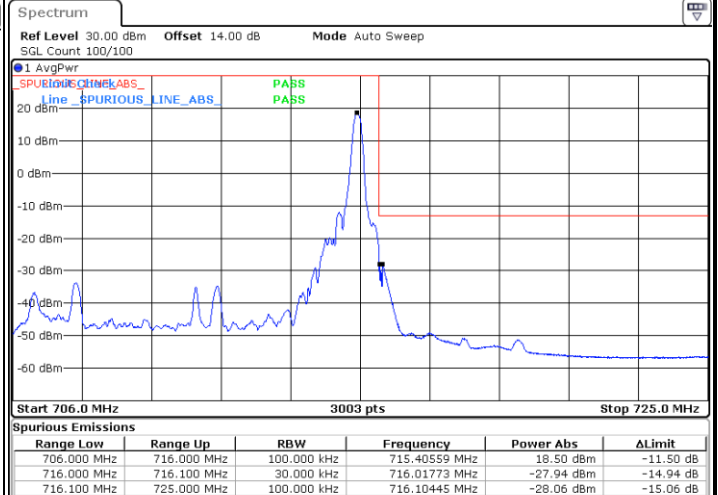


LTE Band 12 / 10MHz / 64QAM

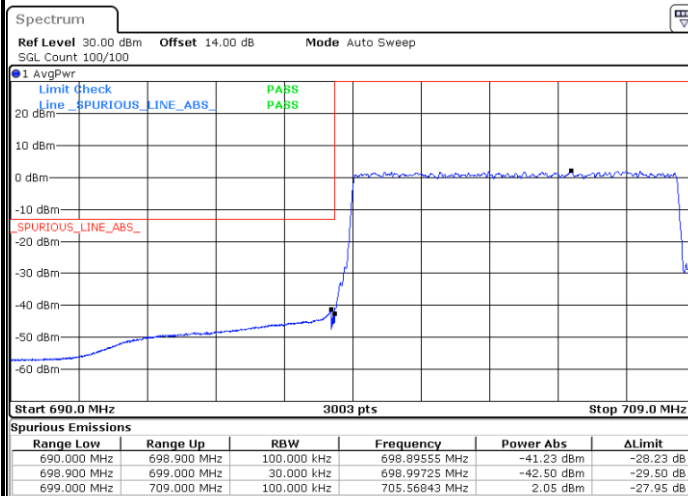
Lowest Band Edge / 1 RB



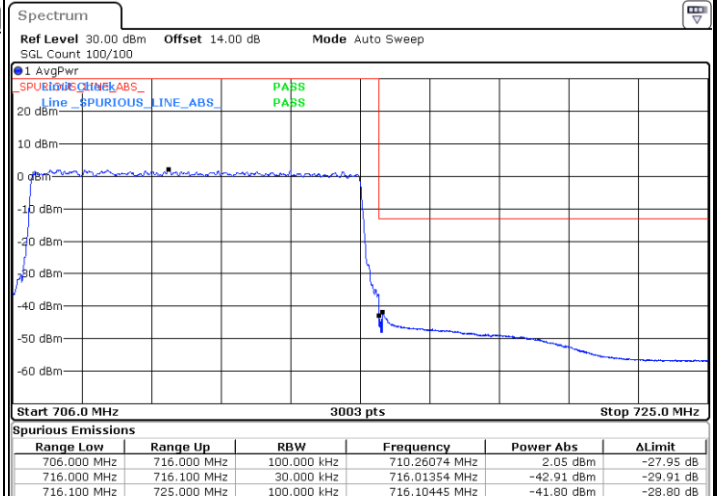
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

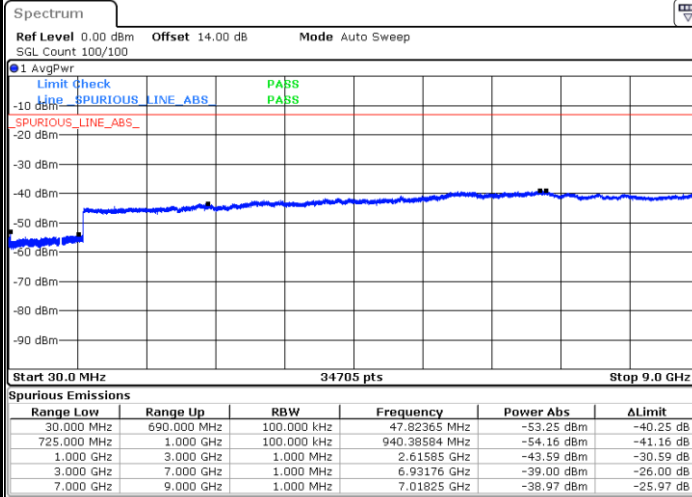




Conducted Spurious Emission

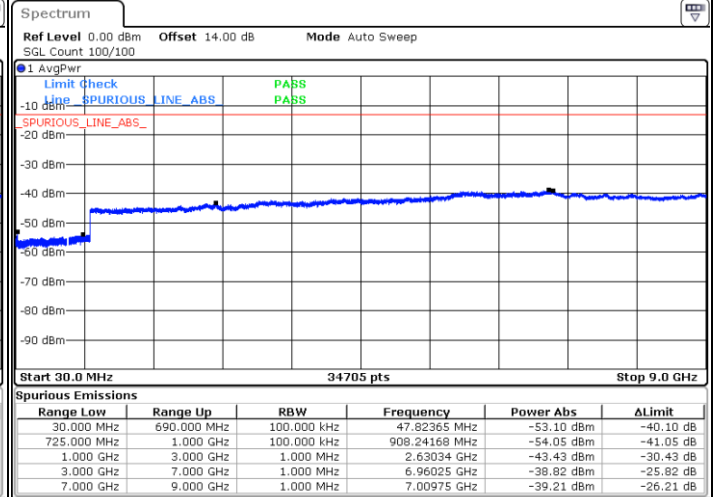
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



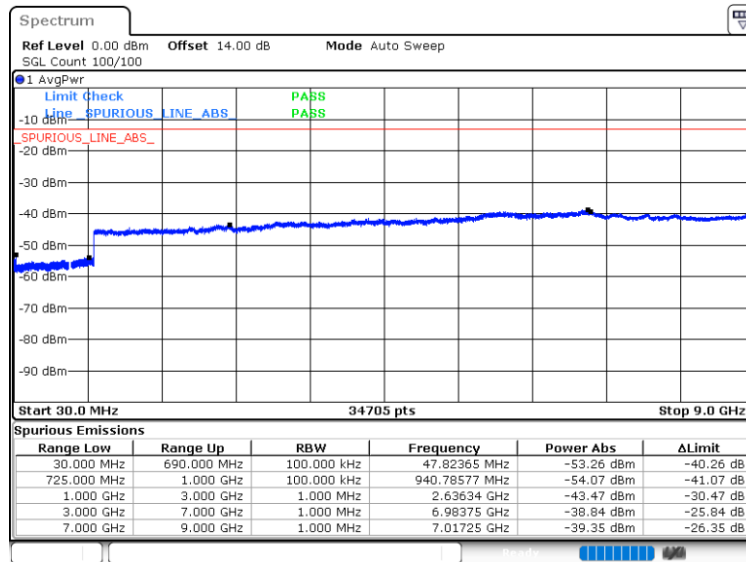
Date: 3.SEP.2024 19:40:26

Middle Channel / QPSK



Date: 3.SEP.2024 19:41:44

Highest Channel / QPSK

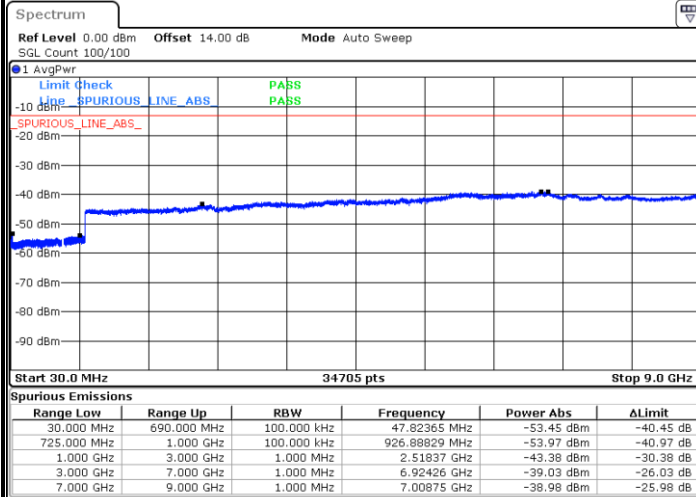


Date: 3.SEP.2024 19:51:20



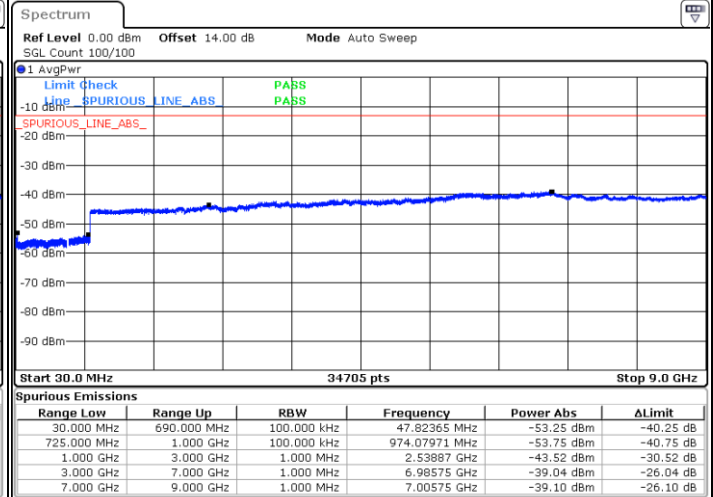
LTE Band 12 / 3MHz

Lowest Channel / QPSK



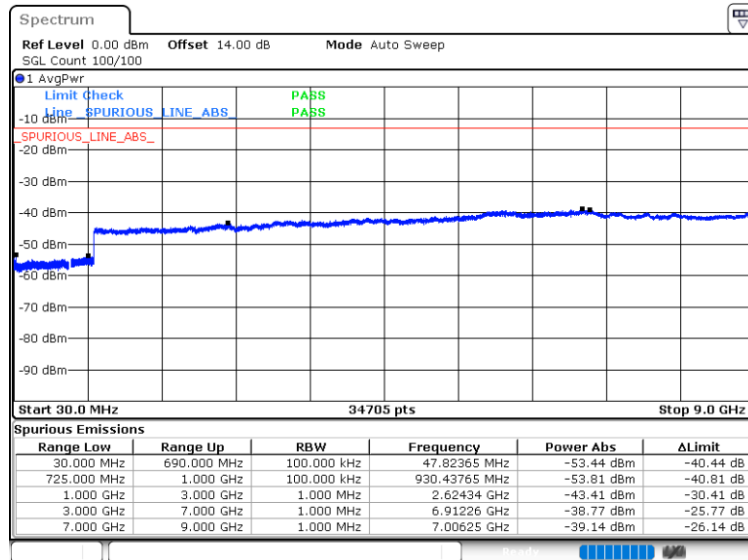
Date: 3.SEP.2024 20:11:22

Middle Channel / QPSK



Date: 3.SEP.2024 20:12:40

Highest Channel / QPSK

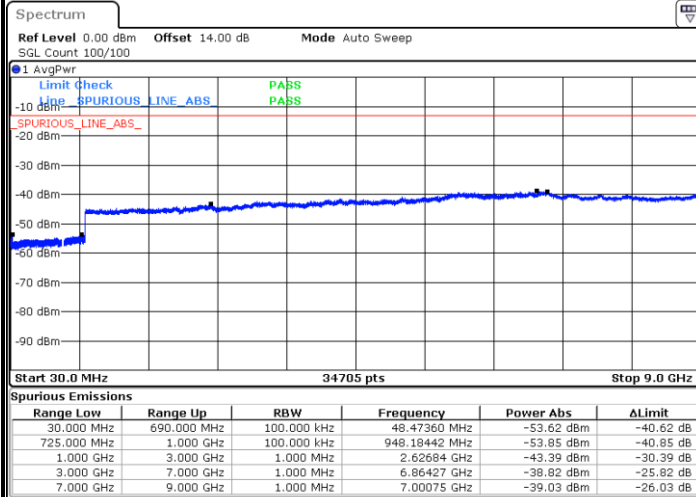


Date: 3.SEP.2024 20:22:16



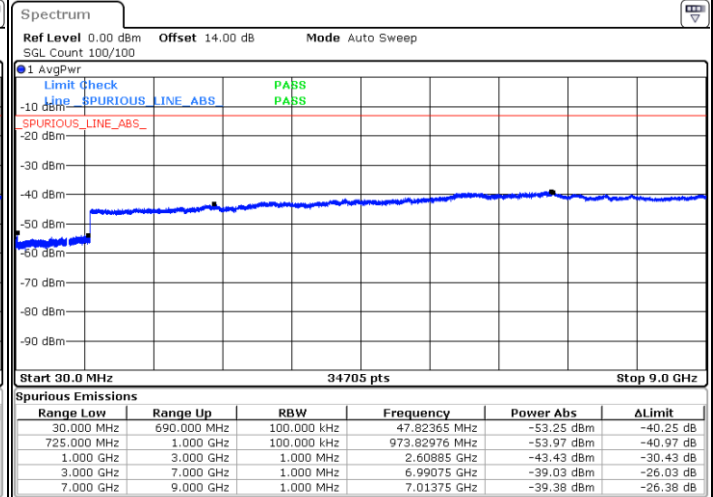
LTE Band 12 / 5MHz

Lowest Channel / QPSK



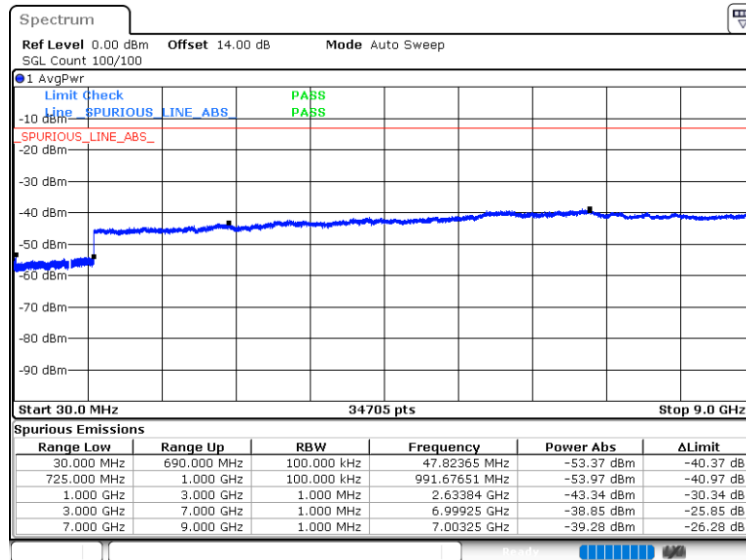
Date: 3.SEP.2024 20:35:44

Middle Channel / QPSK



Date: 3.SEP.2024 20:37:02

Highest Channel / QPSK

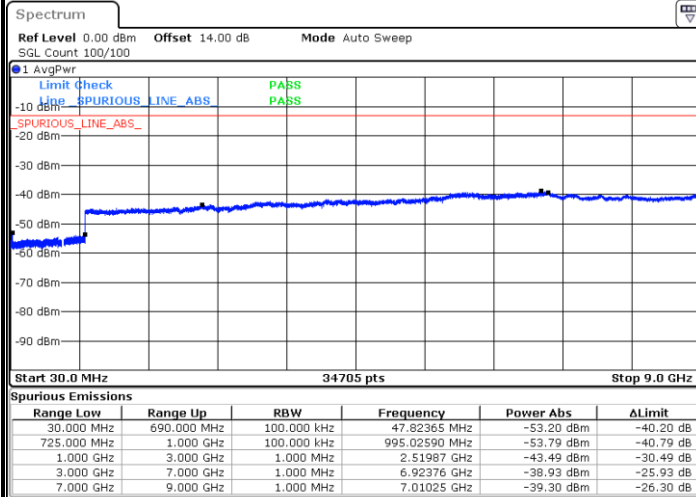


Date: 3.SEP.2024 20:46:39



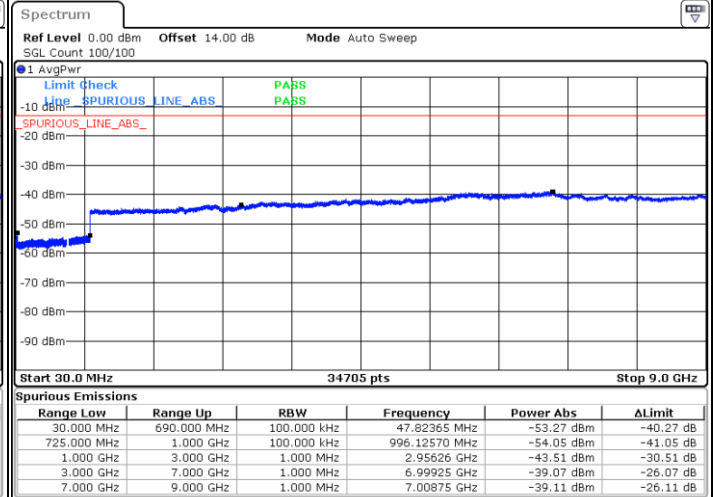
LTE Band 12 / 10MHz

Lowest Channel / QPSK



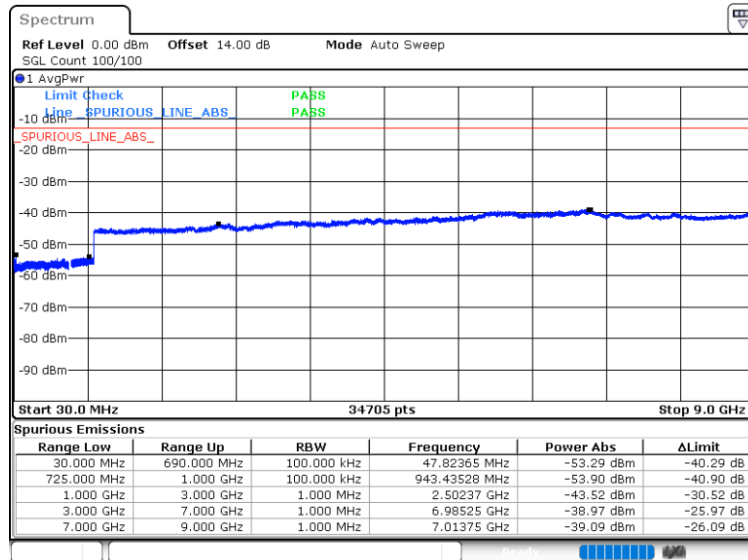
Date: 3.SEP.2024 20:58:28

Middle Channel / QPSK



Date: 3.SEP.2024 20:59:45

Highest Channel / QPSK



Date: 3.SEP.2024 21:09:22

**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	0.0007	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

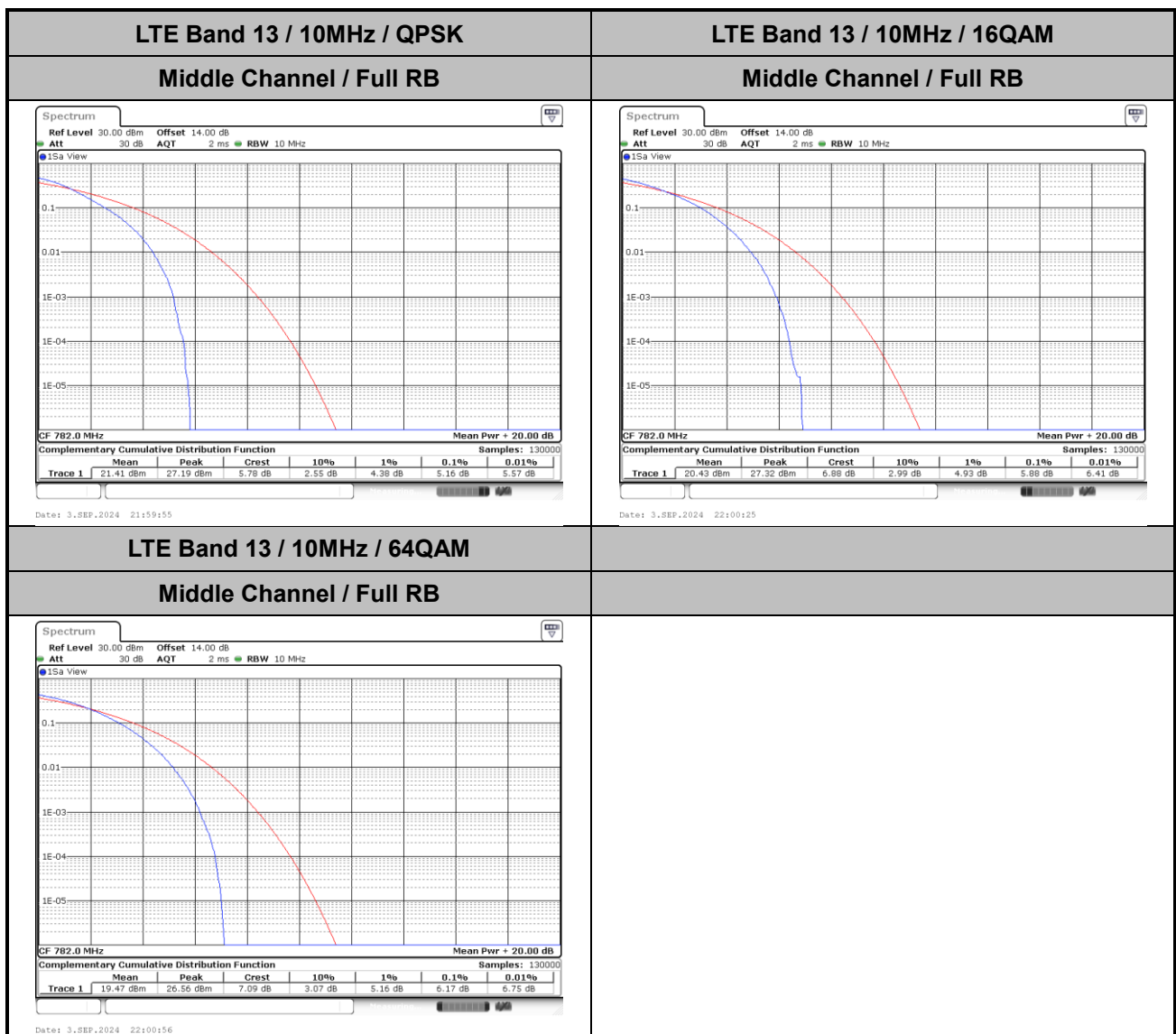
Note:

1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.45 V. ; Maximum Voltage = 4.50 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 13

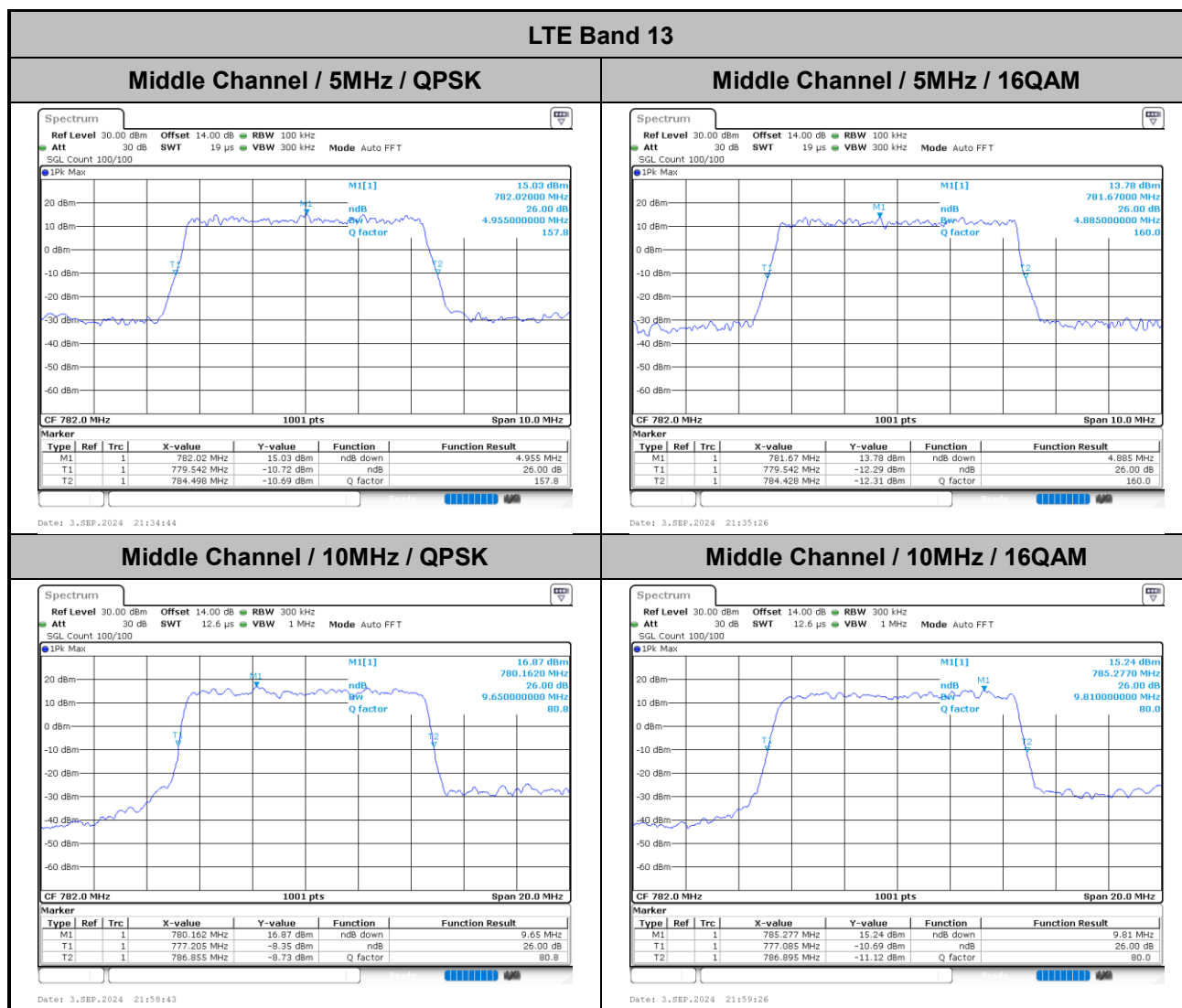
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	5.88	6.17	PASS



**26dB Bandwidth**

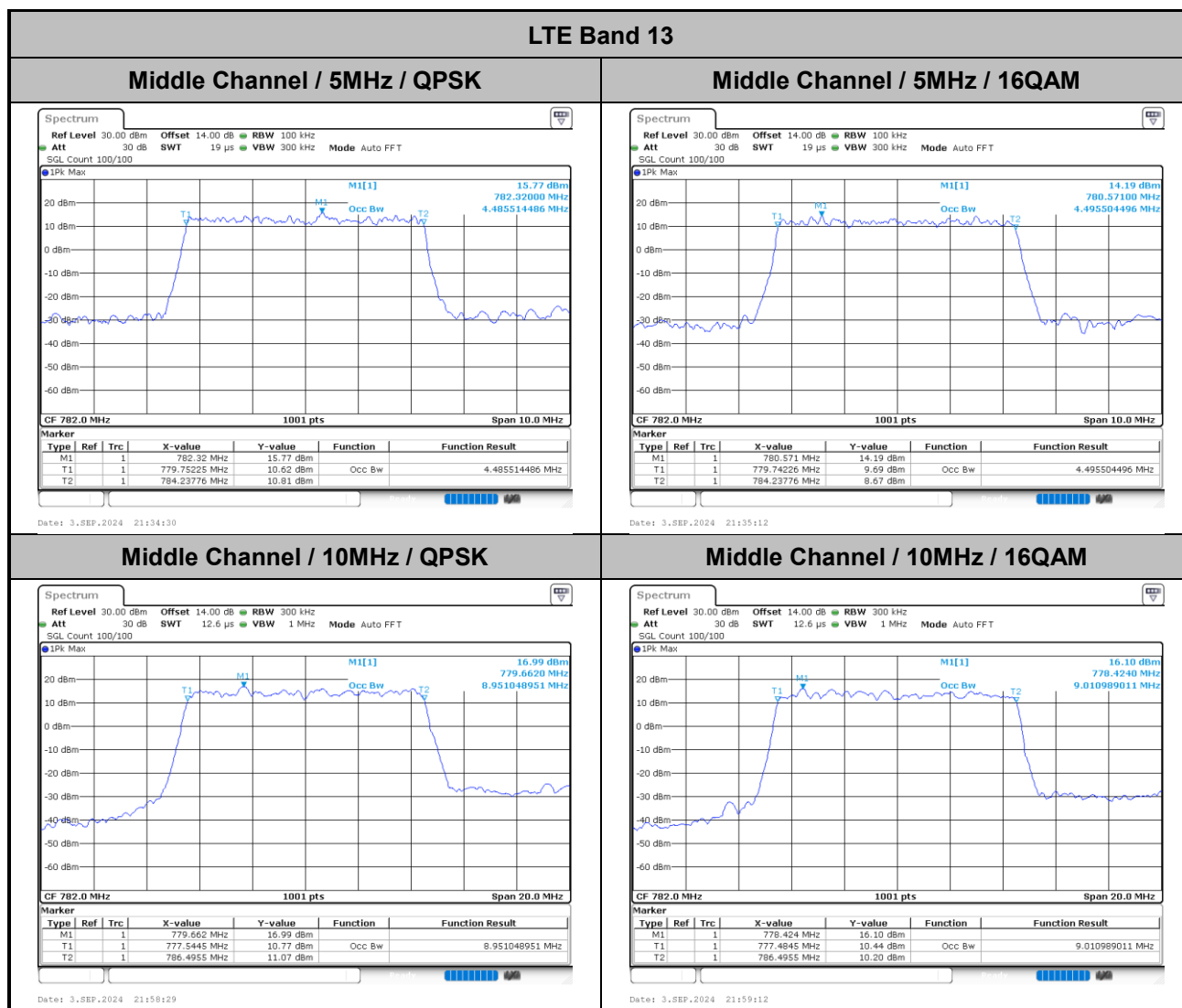
Mode	LTE Band 13 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.96	4.89	9.65	9.81





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.50	8.95	9.01

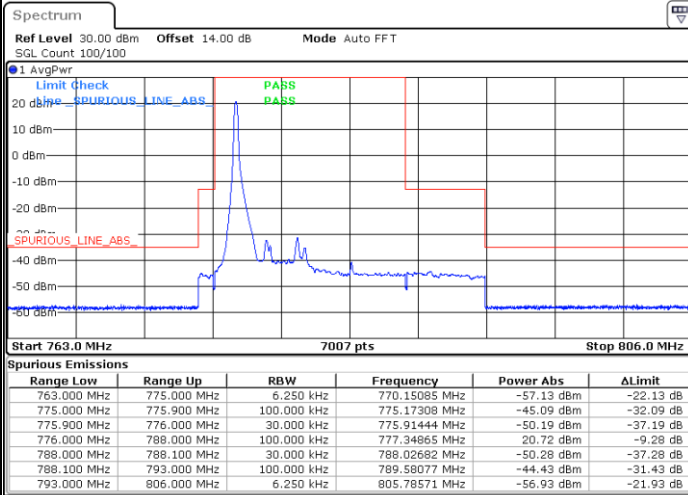




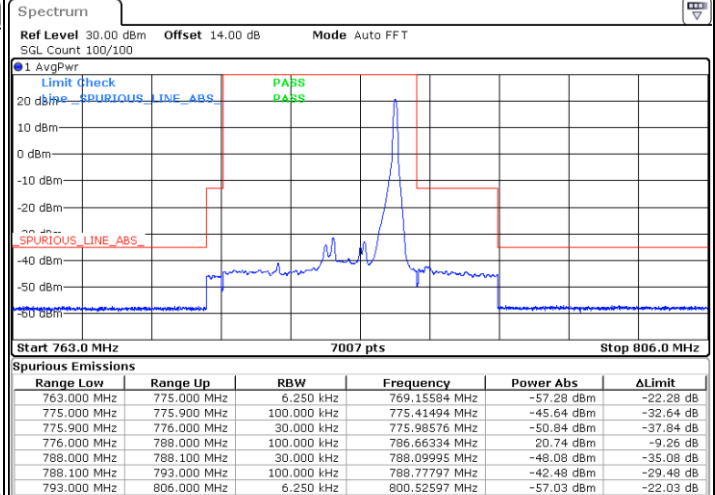
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

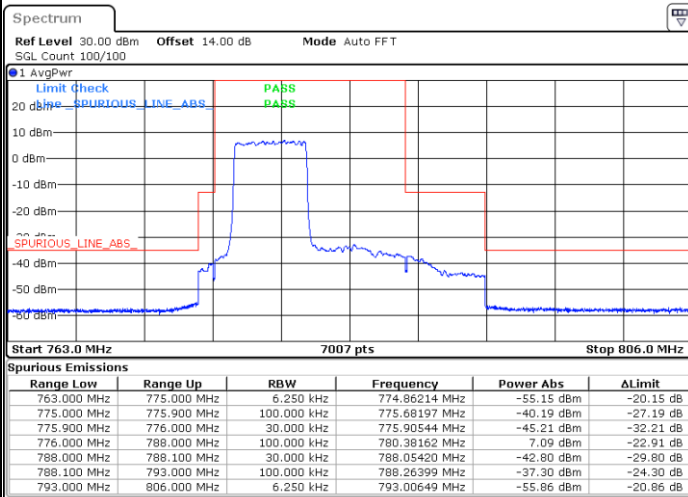
Lowest Band Edge / 1 RB



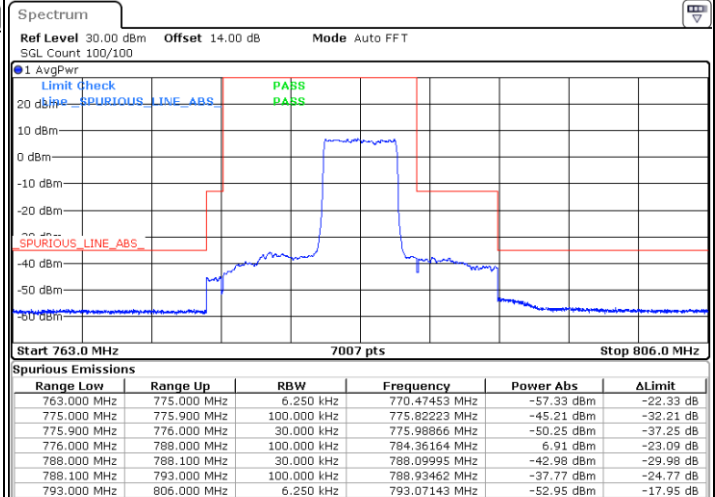
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



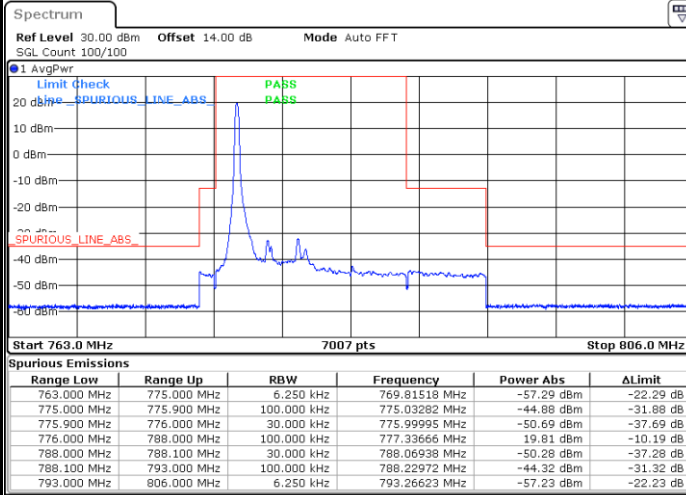
Highest Band Edge / Full RB





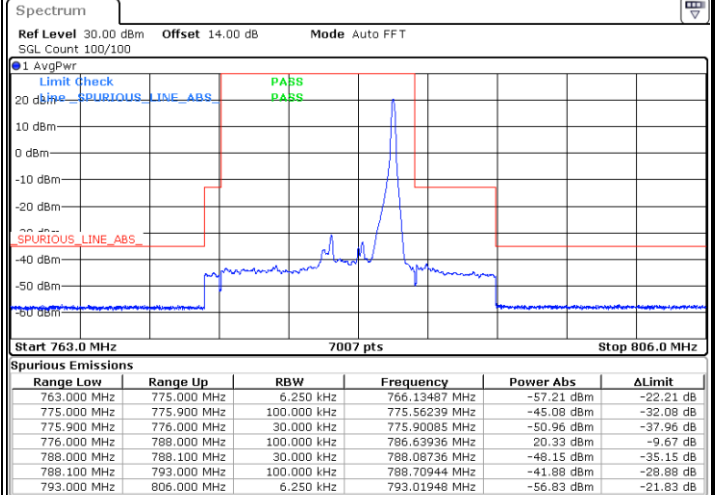
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



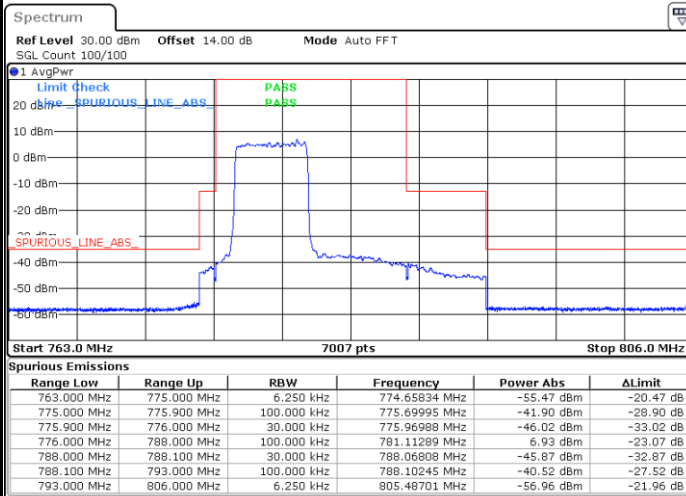
Date: 3.SEP.2024 21:26:49

Highest Band Edge / 1 RB



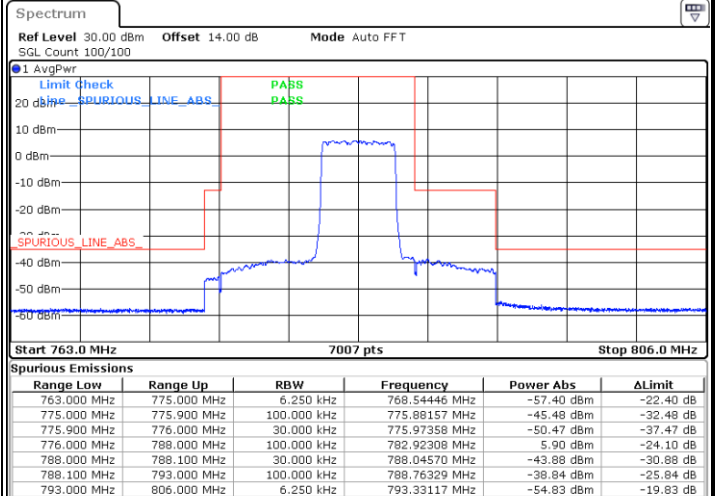
Date: 3.SEP.2024 21:37:44

Lowest Band Edge / Full RB



Date: 3.SEP.2024 21:30:15

Highest Band Edge / Full RB

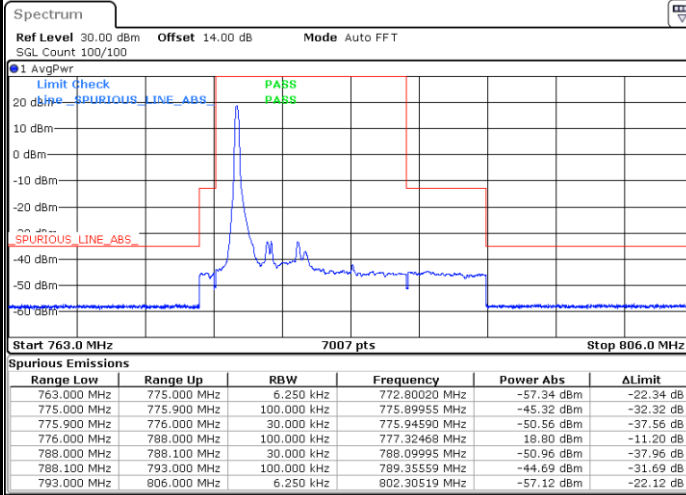


Date: 3.SEP.2024 21:41:11



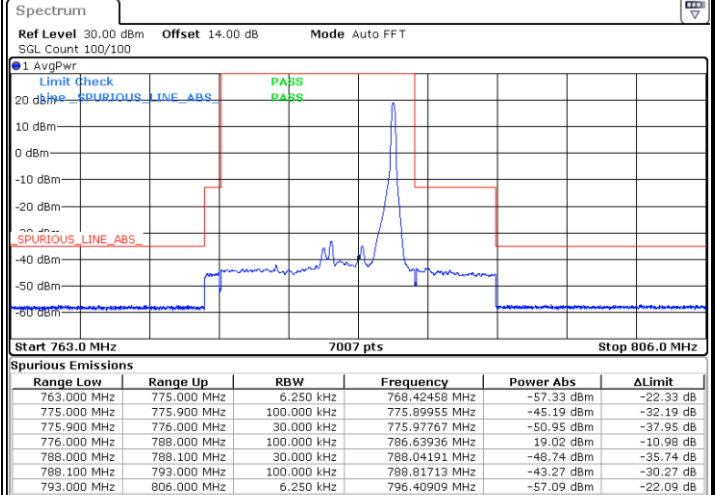
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



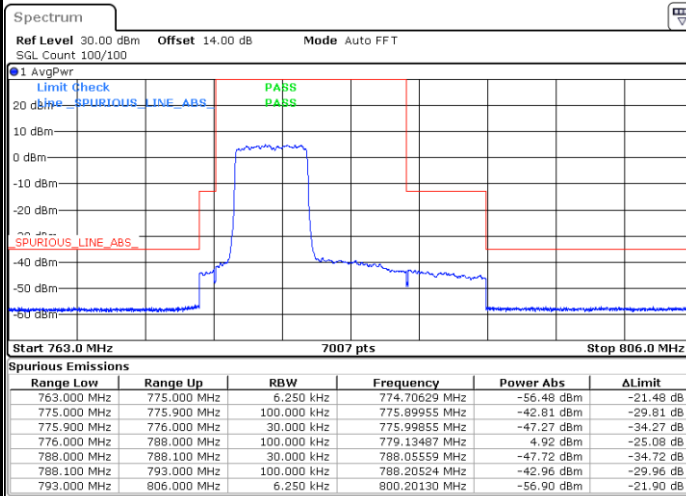
Date: 3.SEP.2024 21:27:57

Highest Band Edge / 1 RB



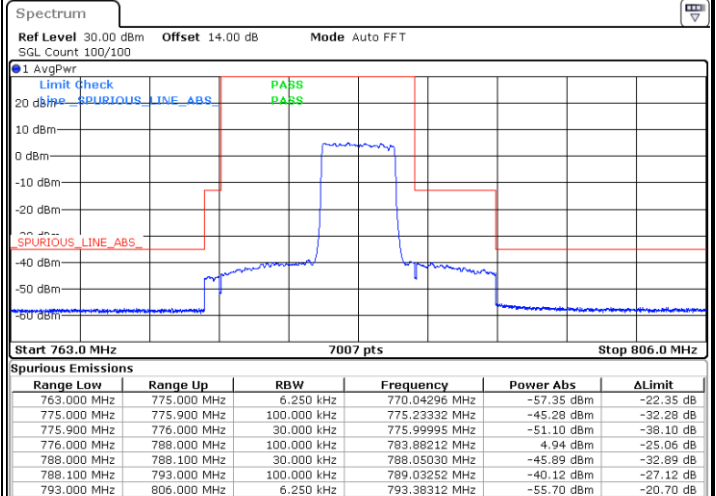
Date: 3.SEP.2024 21:38:52

Lowest Band Edge / Full RB



Date: 3.SEP.2024 21:31:25

Highest Band Edge / Full RB

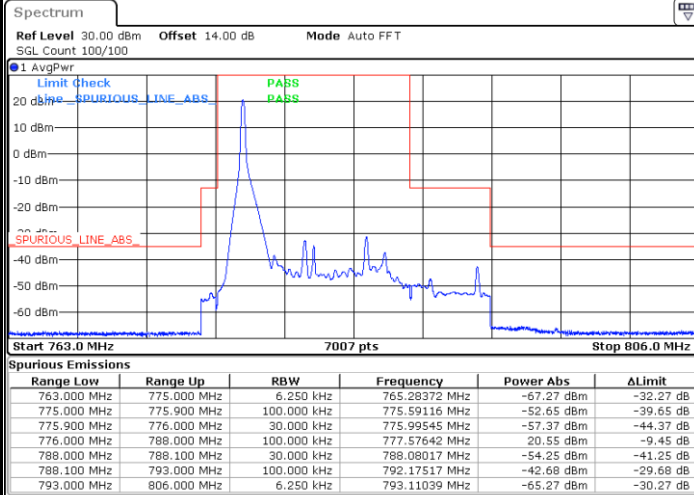


Date: 3.SEP.2024 21:42:19



LTE Band 13 / 10MHz / QPSK

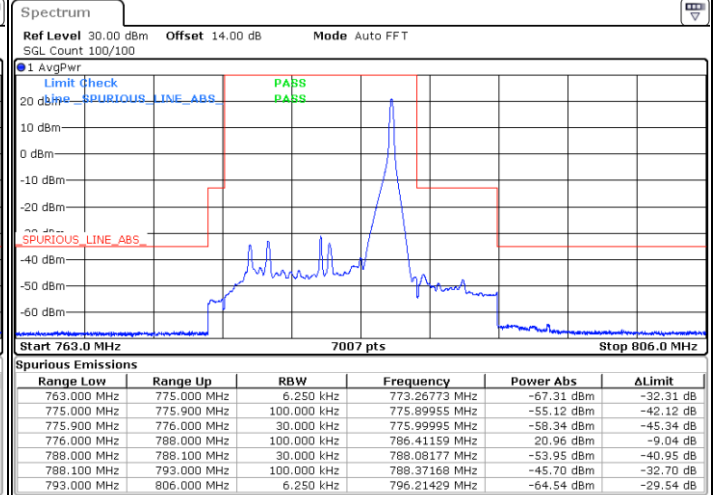
Band Edge / 1 RB



Date: 3.SEP.2024 21:47:34

LTE Band 13 / 10MHz / QPSK

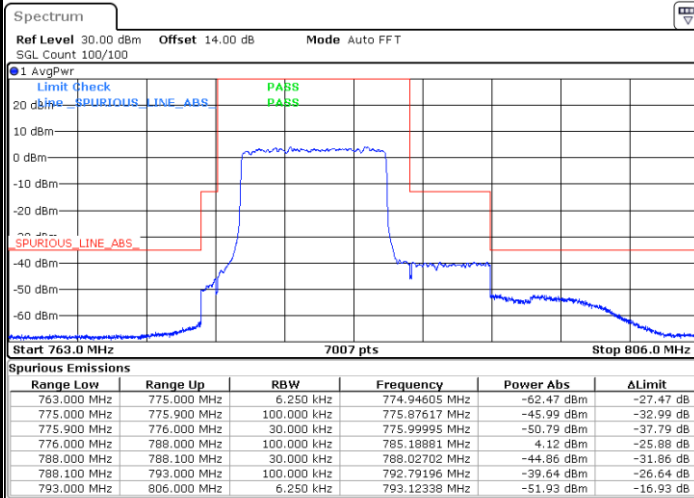
Band Edge / 1 RB



Date: 3.SEP.2024 21:51:00

LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB



Date: 3.SEP.2024 21:54:25