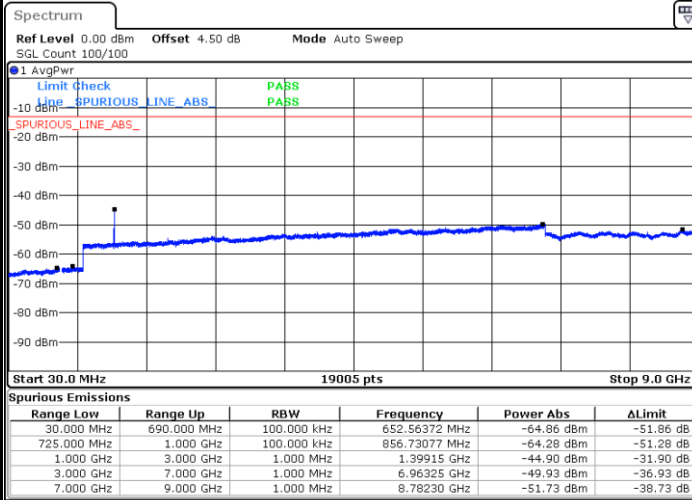




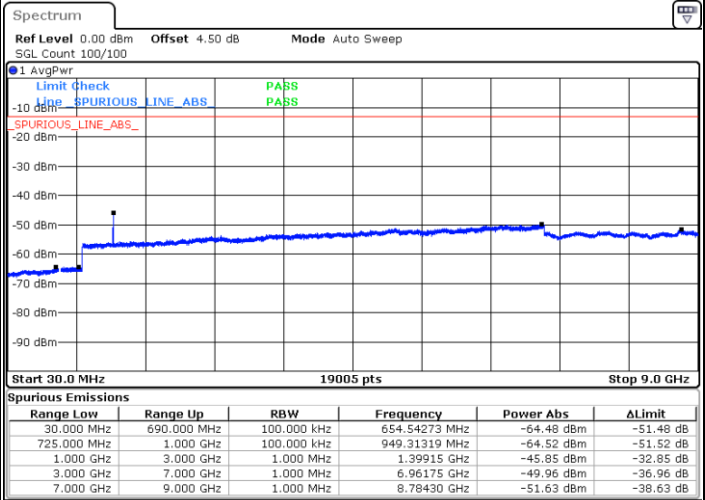
LTE Band 12 / 5MHz

Lowest Channel / QPSK



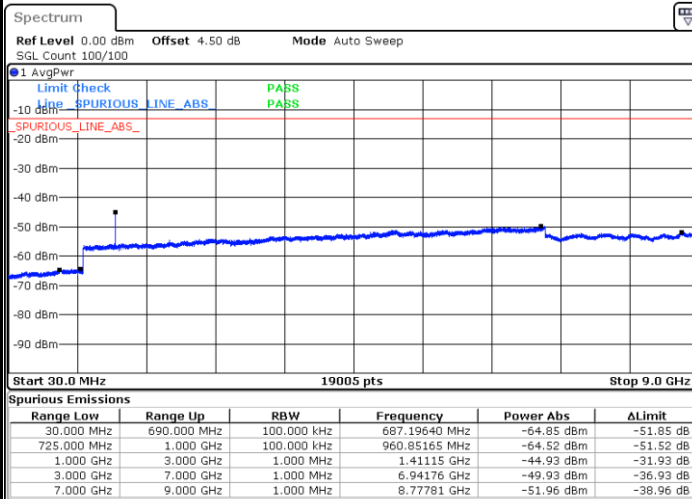
Date: 27 NOV 2020 11:30:18

Lowest Channel / 16QAM



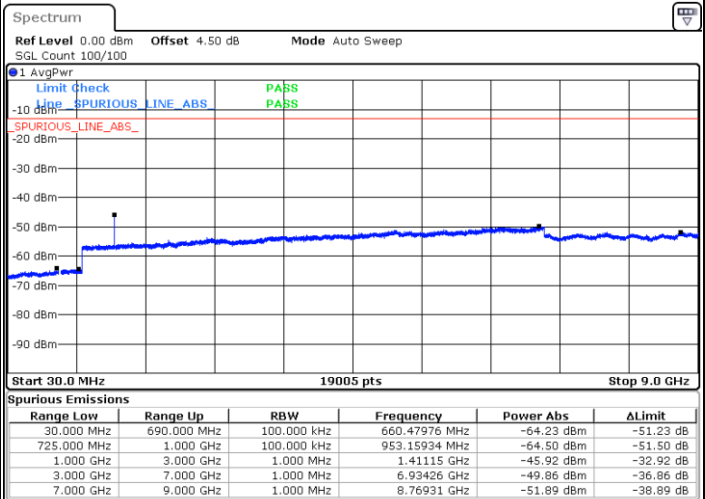
Date: 27 NOV 2020 11:31:12

Middle Channel / QPSK



Date: 27 NOV 2020 11:33:01

Middle Channel / 16QAM

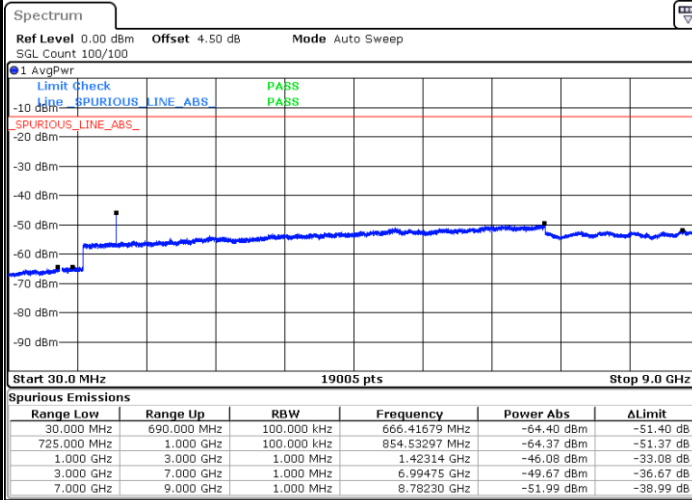


Date: 27 NOV 2020 11:32:06



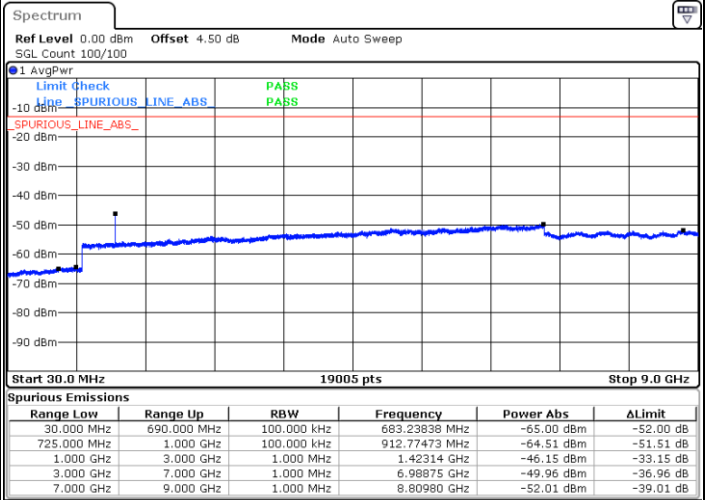
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 27 NOV 2020 11:33:55

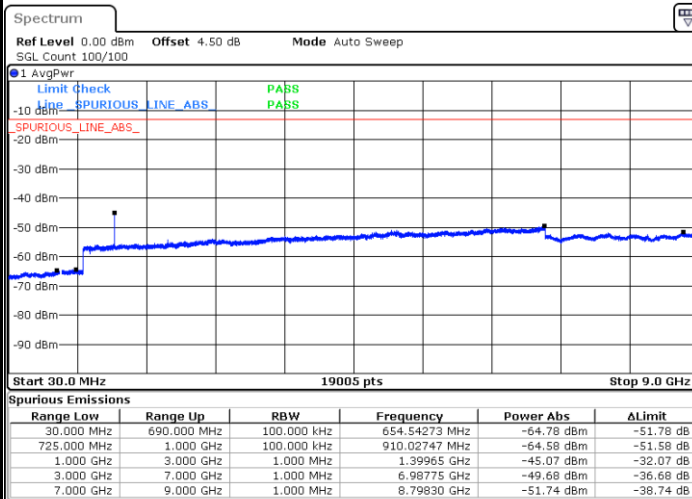
Highest Channel / 16QAM



Date: 27 NOV 2020 11:34:49

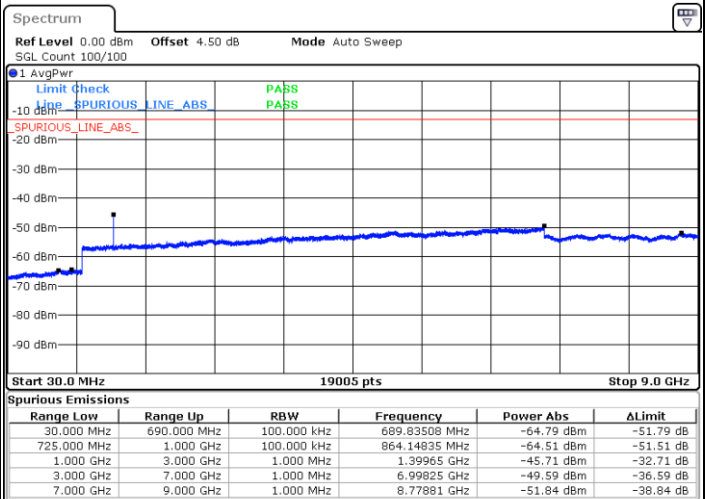
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 27 NOV 2020 11:47:57

Lowest Channel / 16QAM

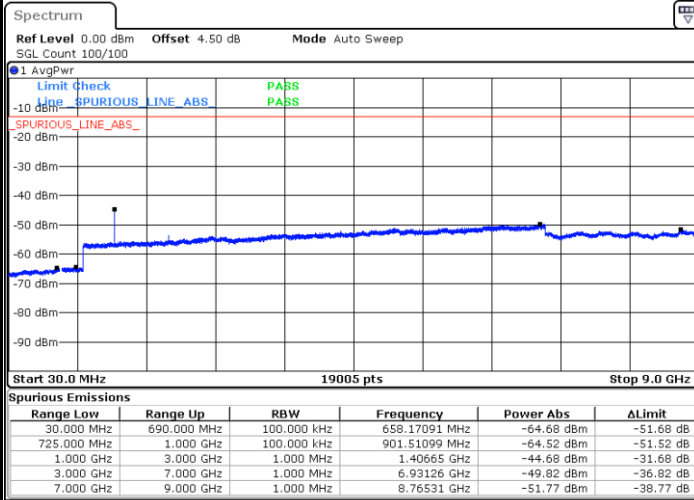


Date: 27 NOV 2020 11:48:52



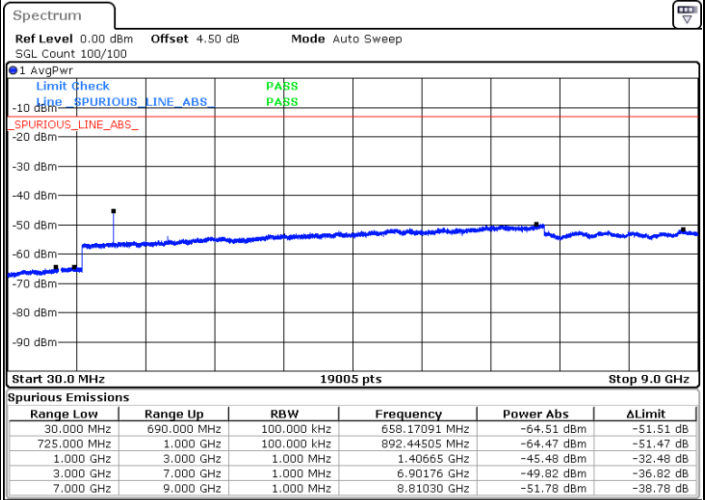
LTE Band 12 / 10MHz

Middle Channel / QPSK



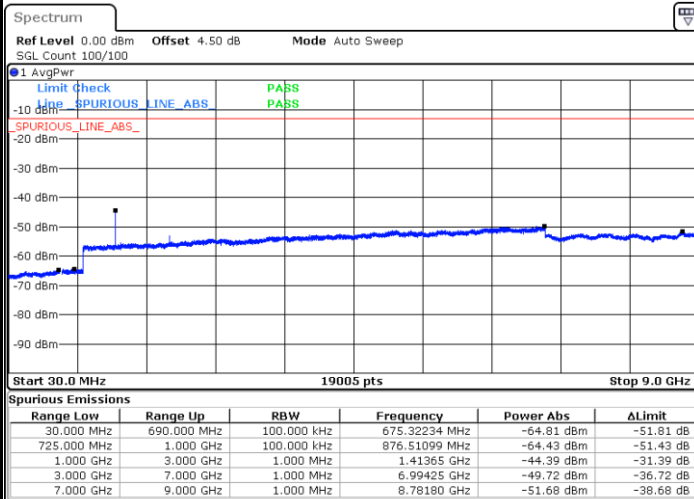
Date: 27 NOV 2020 11:50:40

Middle Channel / 16QAM



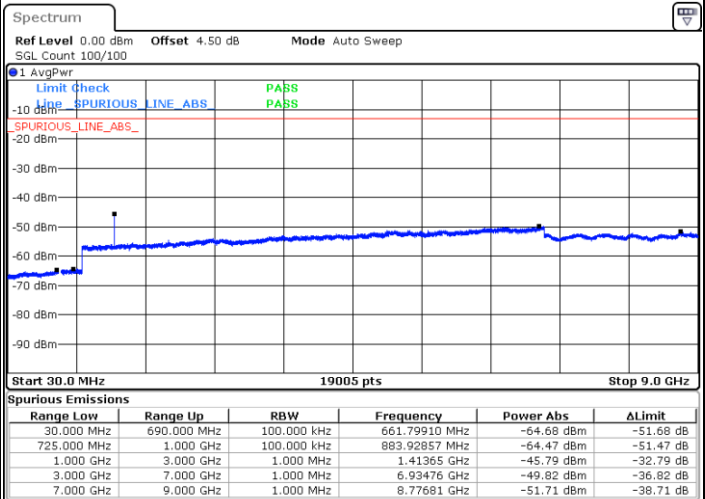
Date: 27 NOV 2020 11:49:46

Highest Channel / QPSK



Date: 27 NOV 2020 11:51:34

Highest Channel / 16QAM



Date: 27 NOV 2020 11:52:29

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	0.0020	PASS
40	Normal Voltage	0.0022	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0019	
20	Battery End Point	0.0005	

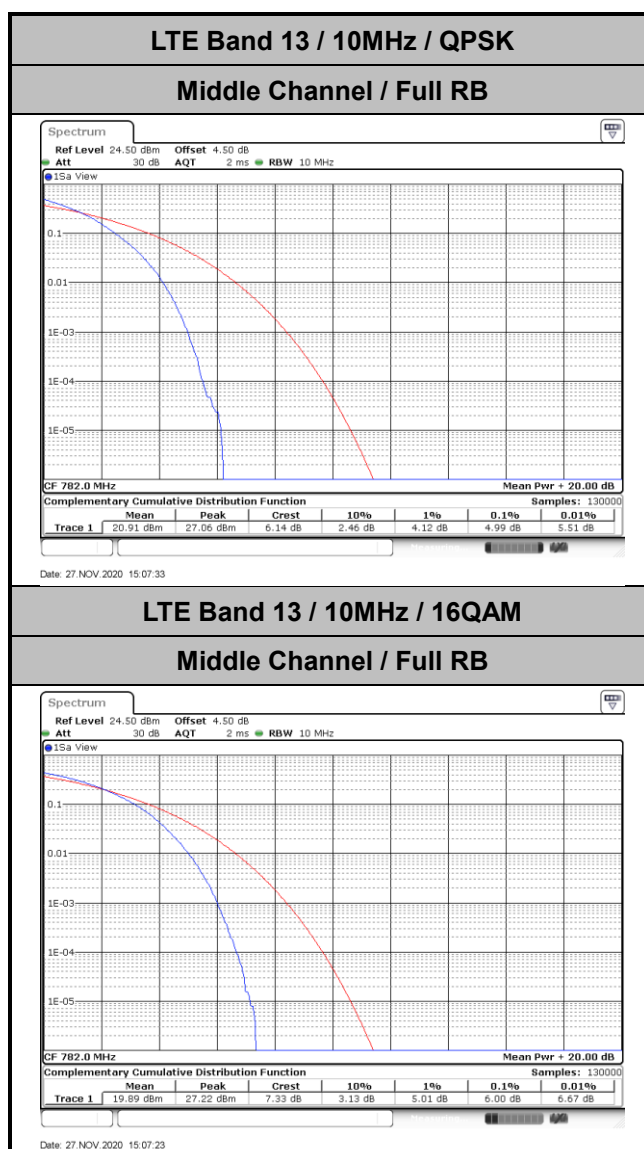
Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 13

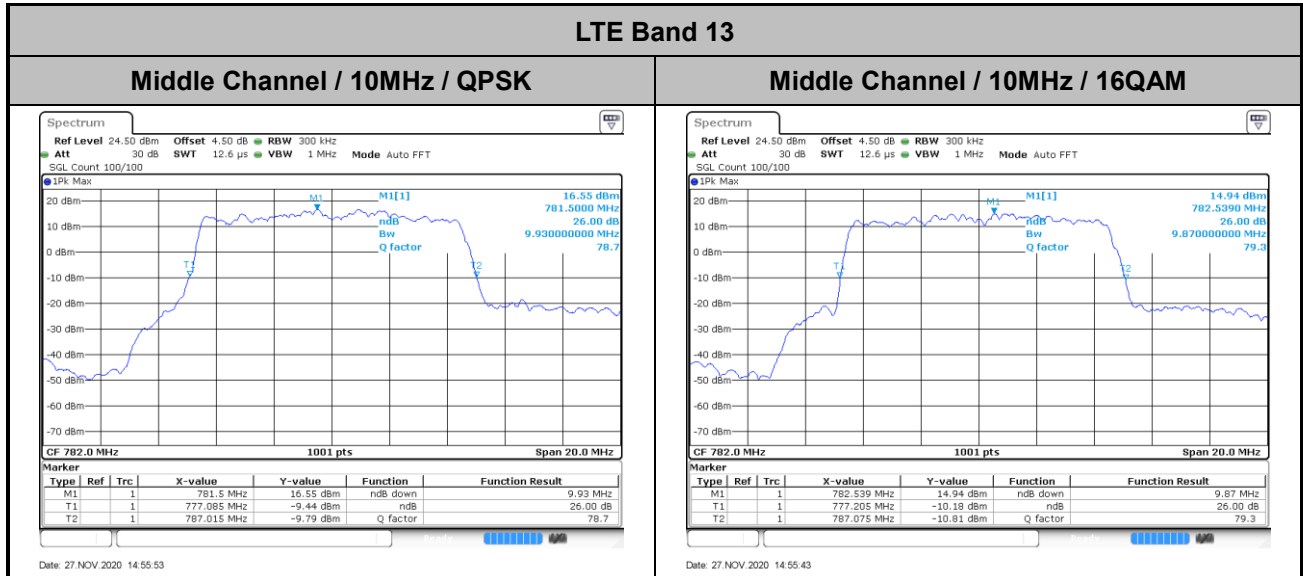
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.99	6.00	PASS



**26dB Bandwidth**

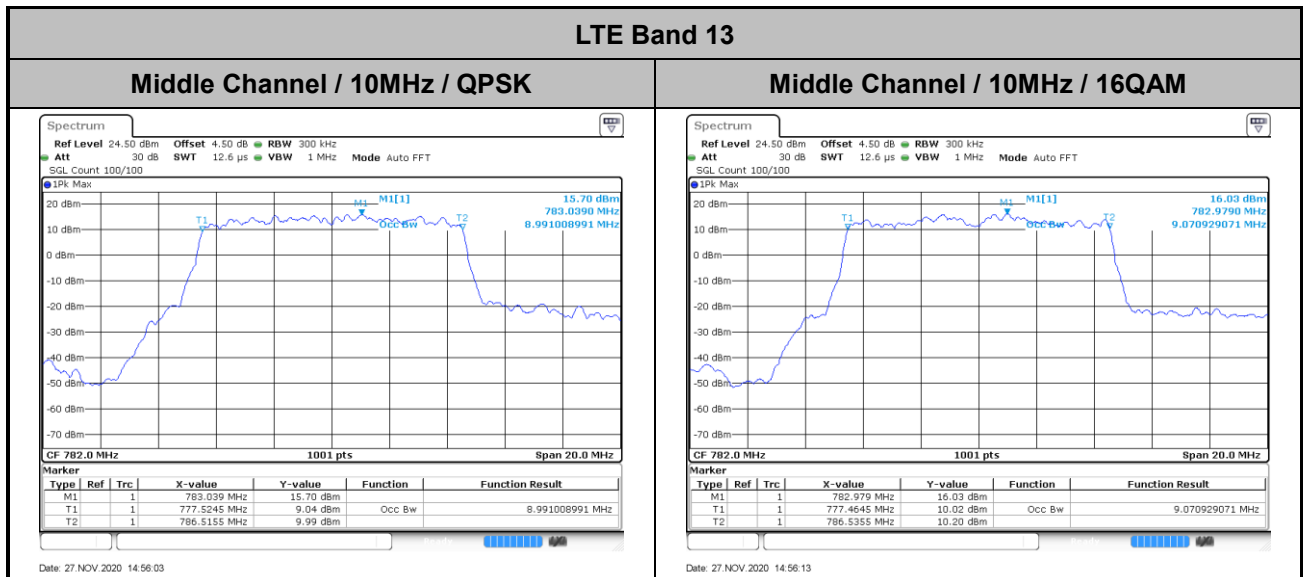
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.93	9.87





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.99	9.07

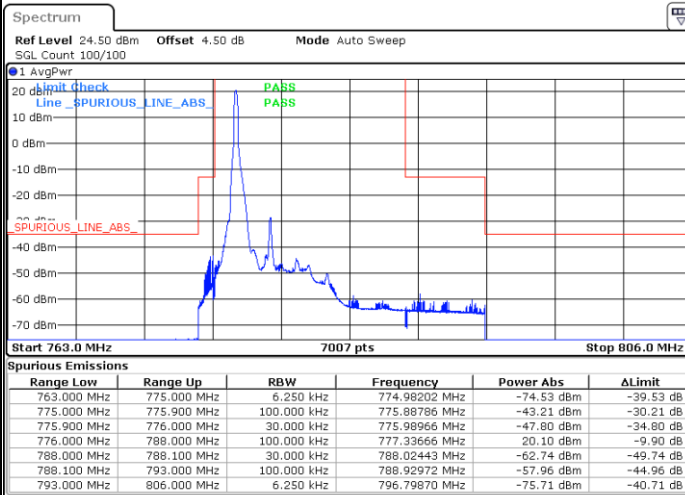




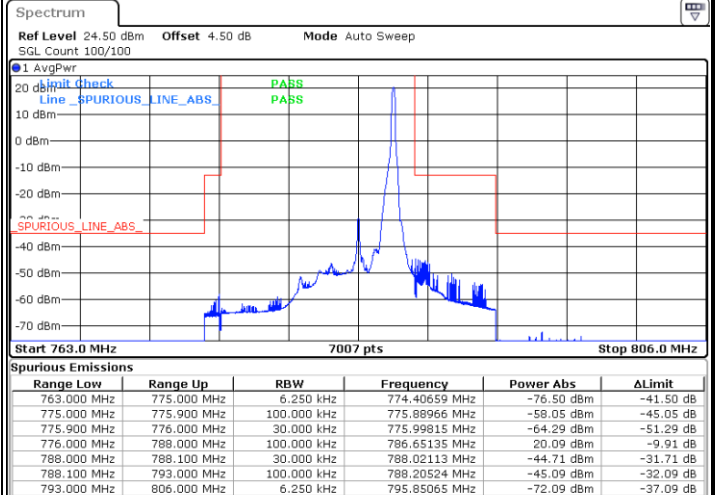
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

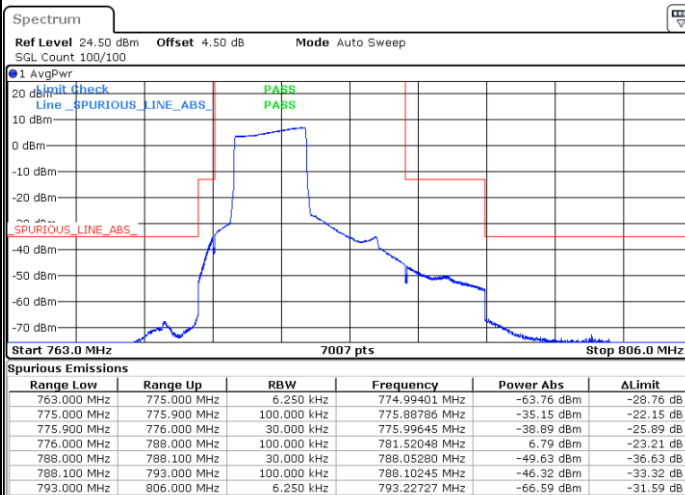
Lowest Band Edge / 1 RB



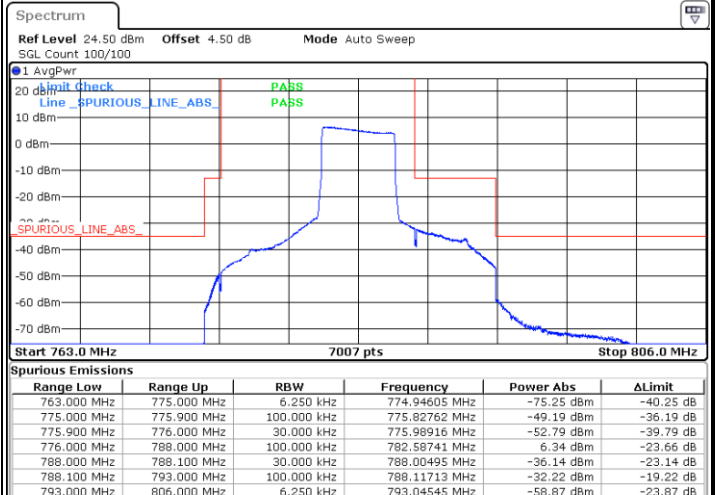
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



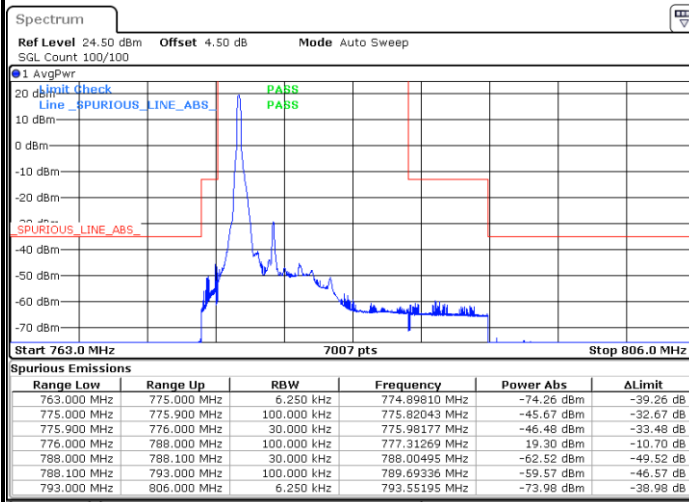
Highest Band Edge / Full RB



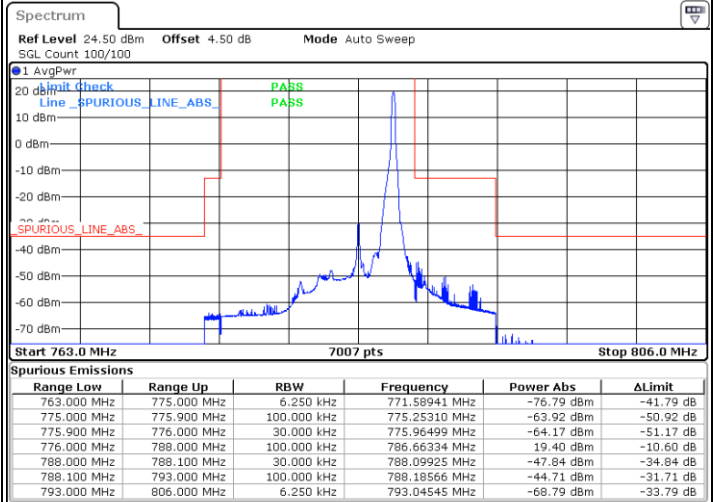


LTE Band 13 / 5MHz / 16QAM

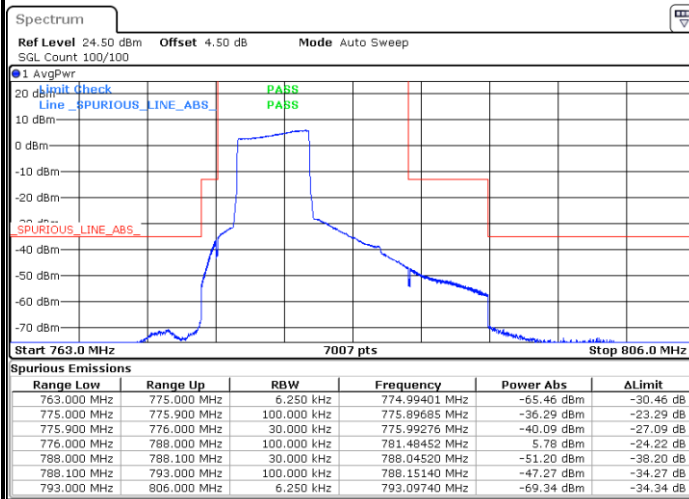
Lowest Band Edge / 1 RB



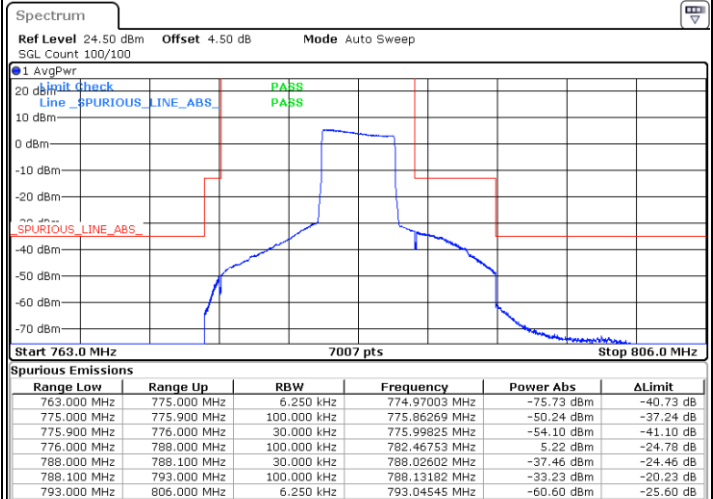
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



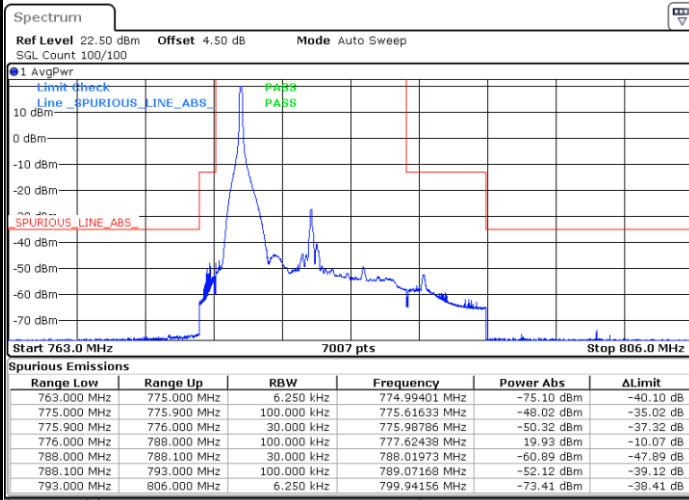
Highest Band Edge / Full RB





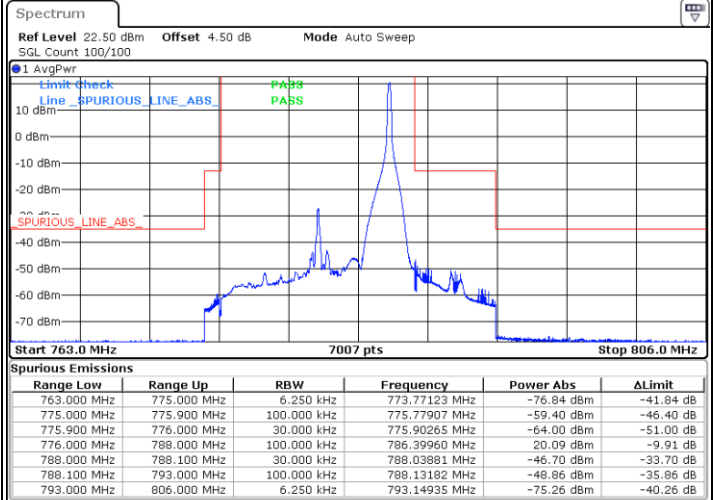
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



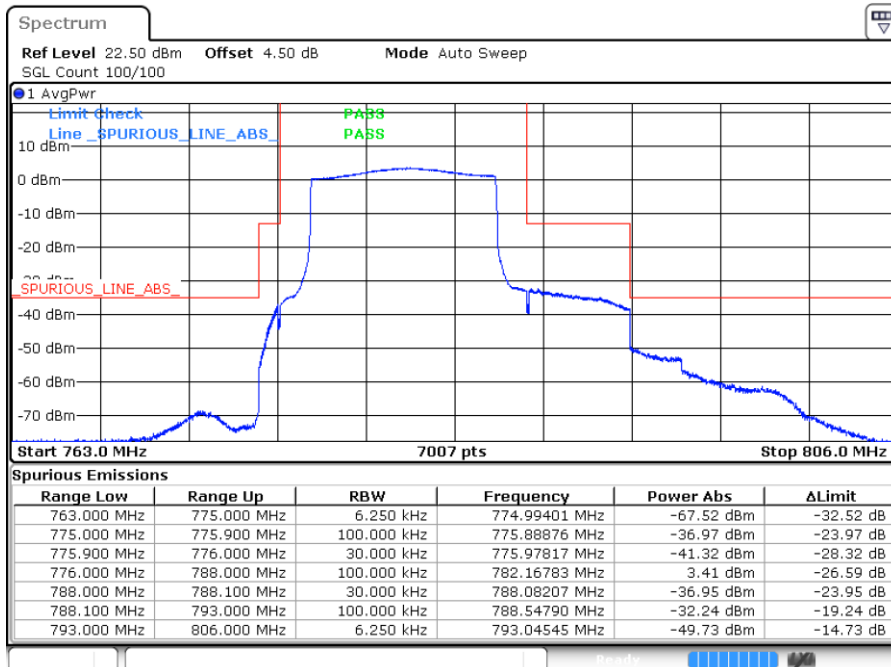
Date: 27 NOV 2020 14:59:28

Highest Band Edge / 1 RB



Date: 27 NOV 2020 15:05:58

Band Edge / Full RB

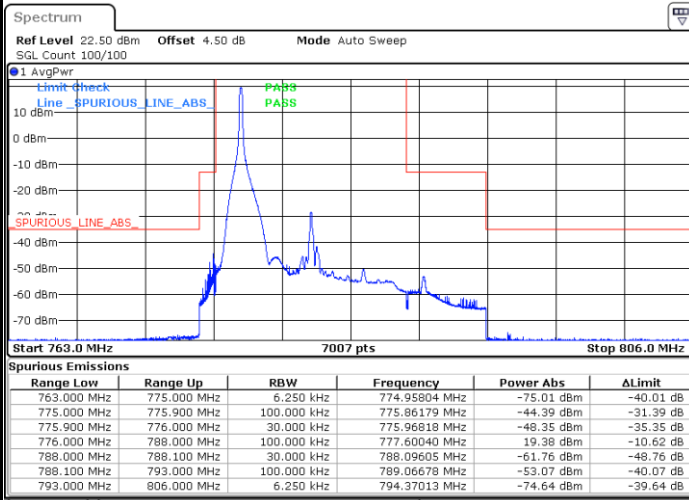


Date: 27 NOV 2020 15:01:06



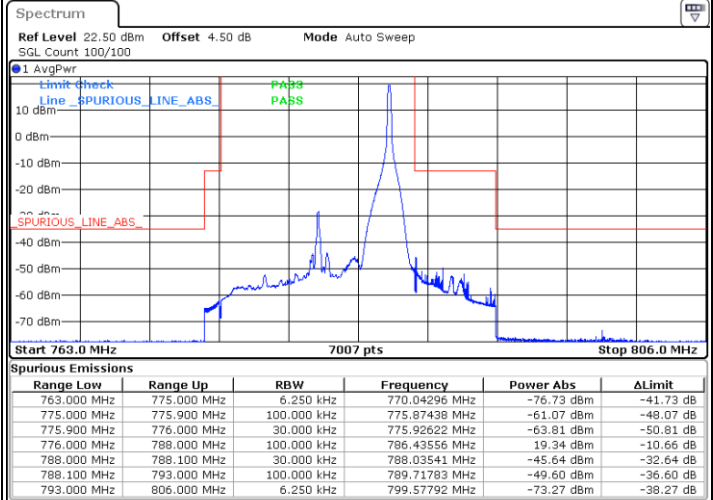
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



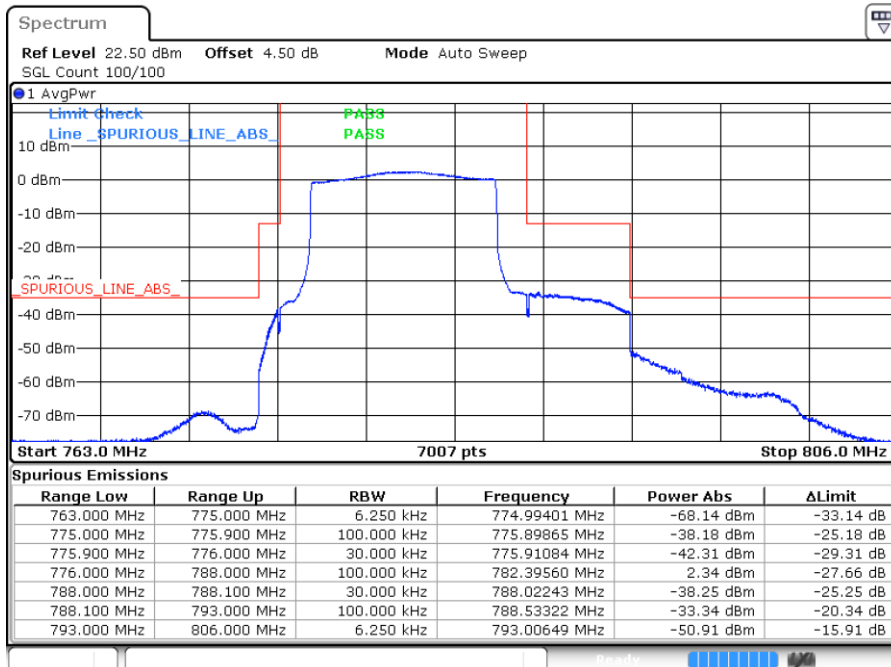
Date: 27 NOV 2020 14:57:51

Highest Band Edge / 1 RB



Date: 27 NOV 2020 15:04:21

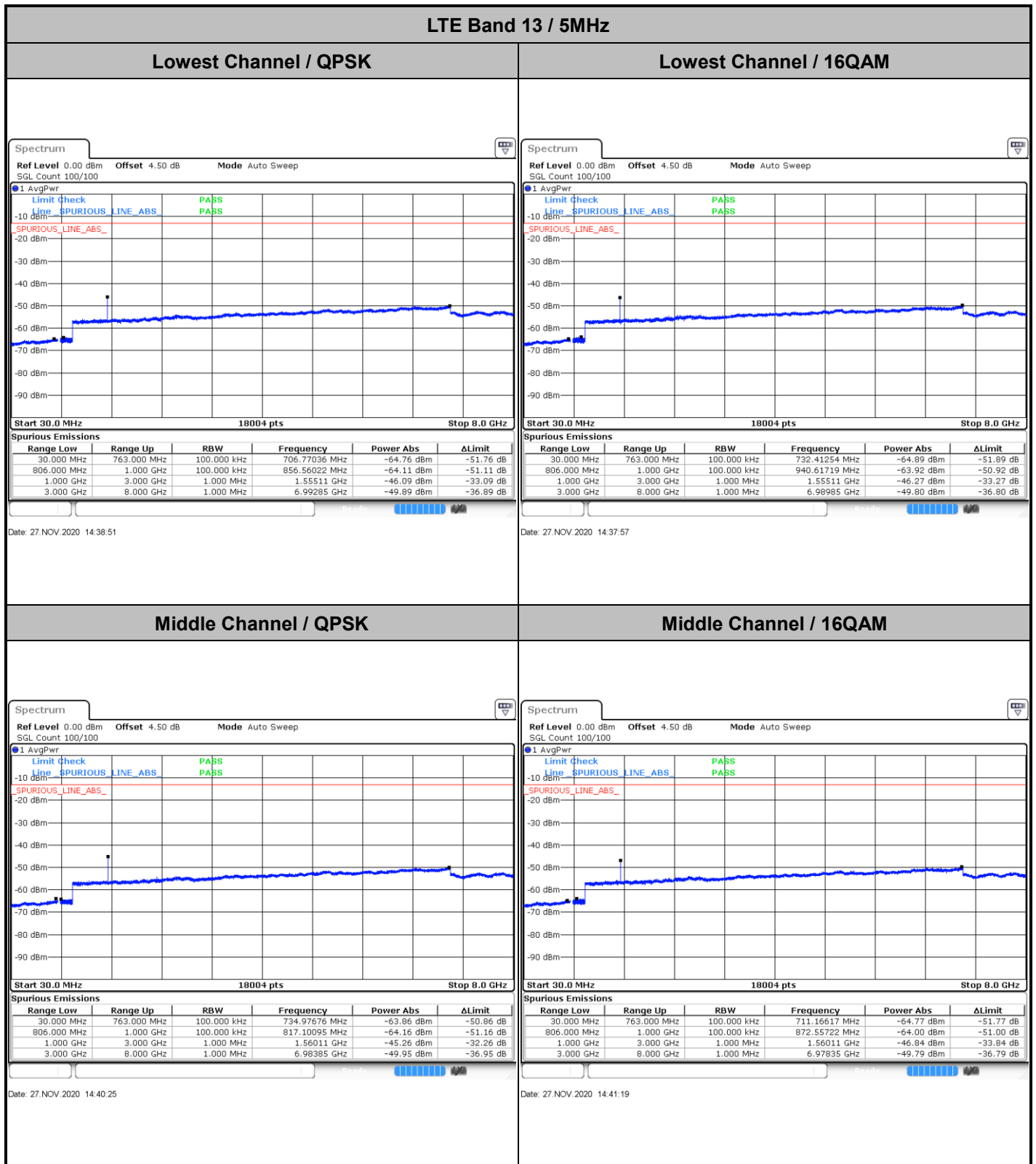
Band Edge / Full RB



Date: 27 NOV 2020 15:02:43



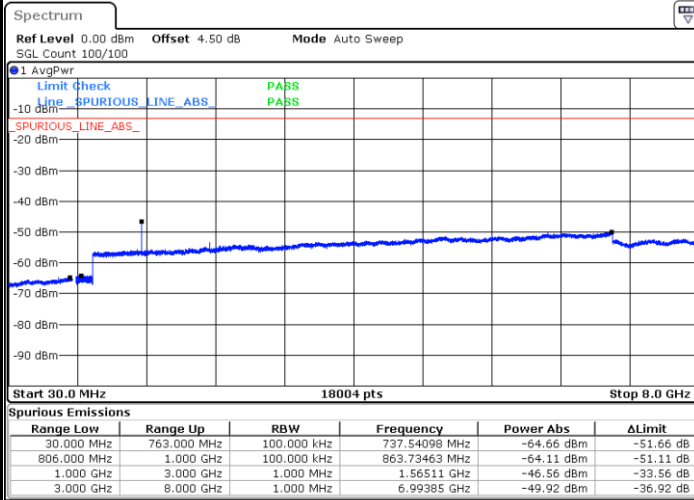
Conducted Spurious Emission





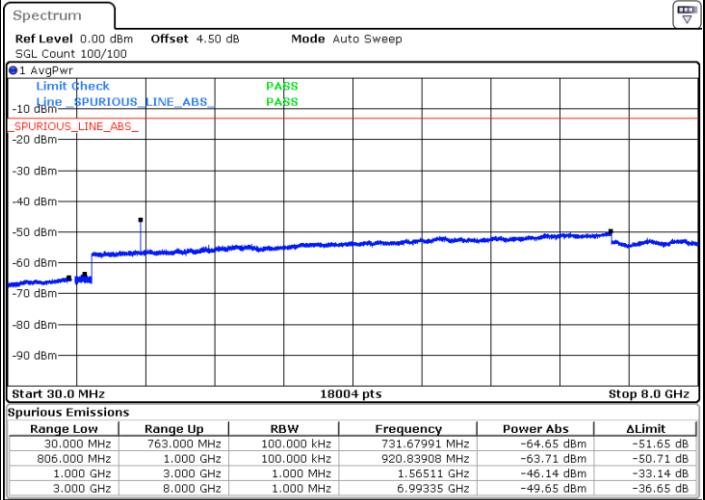
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 27 NOV 2020 14:50:17

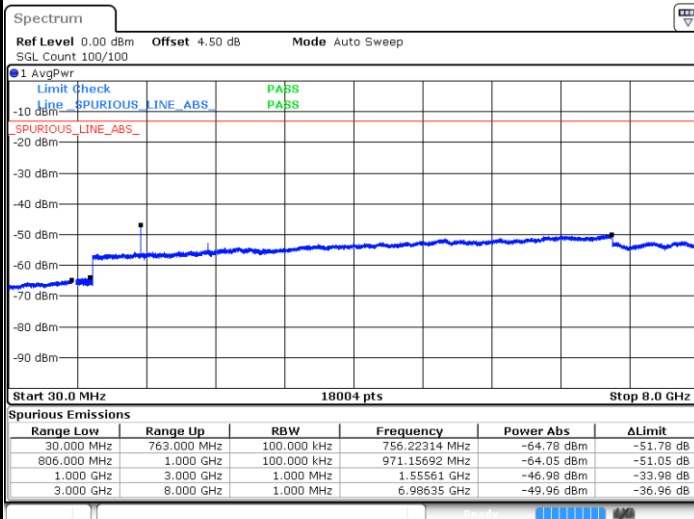
Highest Channel / 16QAM



Date: 27 NOV 2020 14:49:23

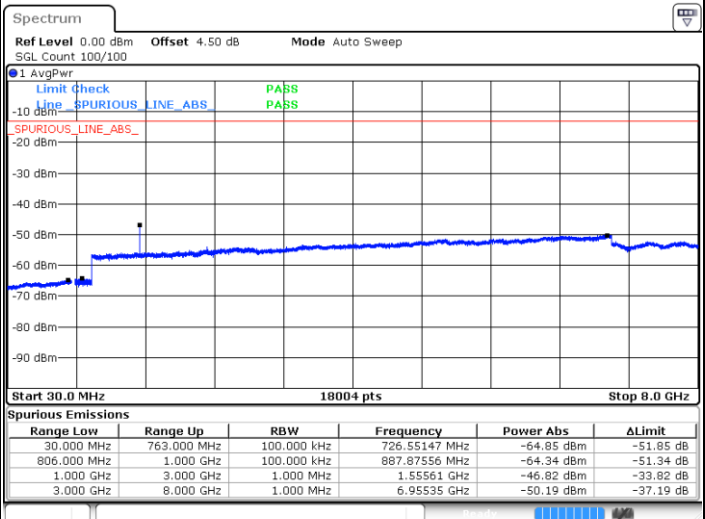
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 27 NOV 2020 14:54:39

Middle Channel / 16QAM



Date: 27 NOV 2020 14:55:33

**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	0.0008	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0032	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0065	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0052	
-30	Normal Voltage	0.0043	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0102	

Note:

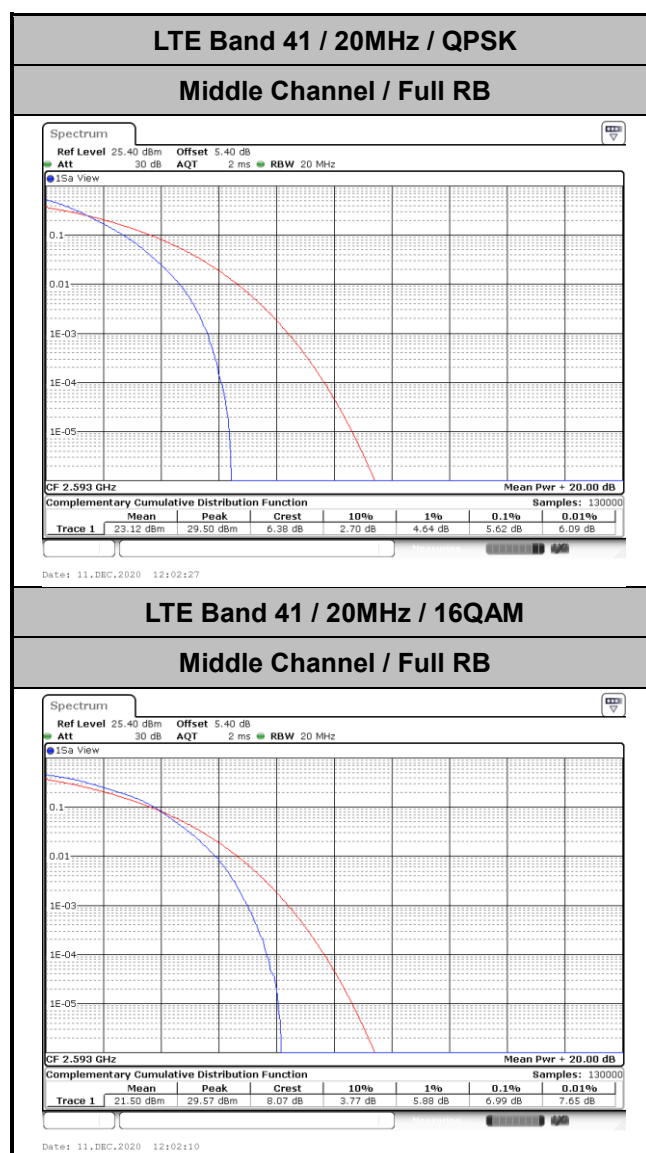
1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41 HPUE

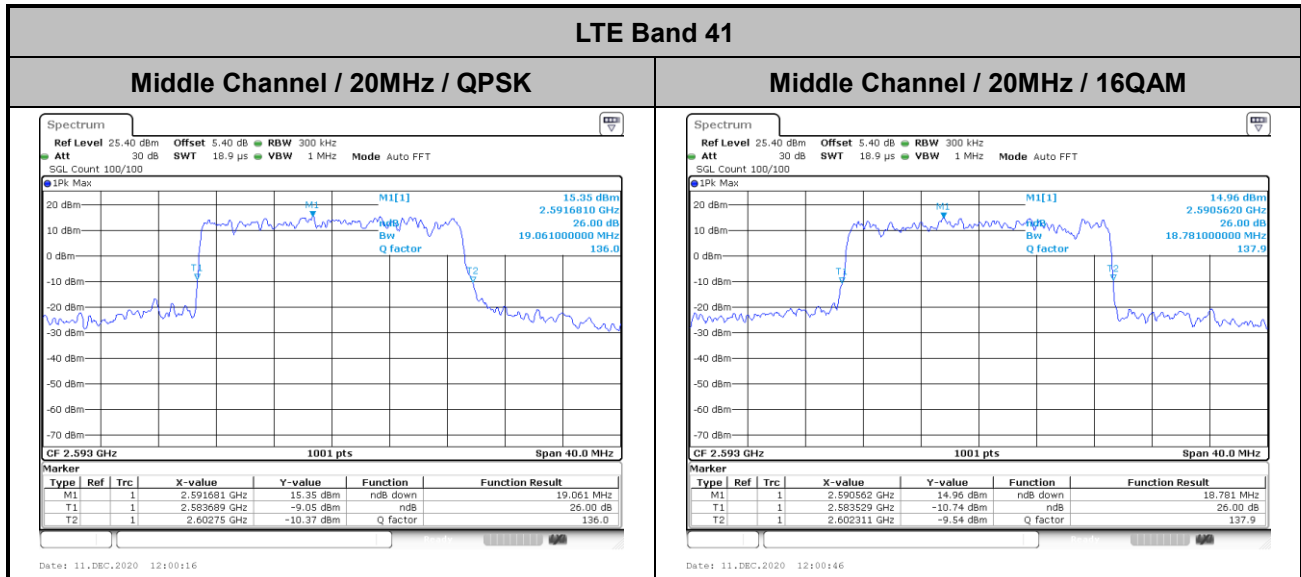
Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.62	6.99	



**26dB Bandwidth**

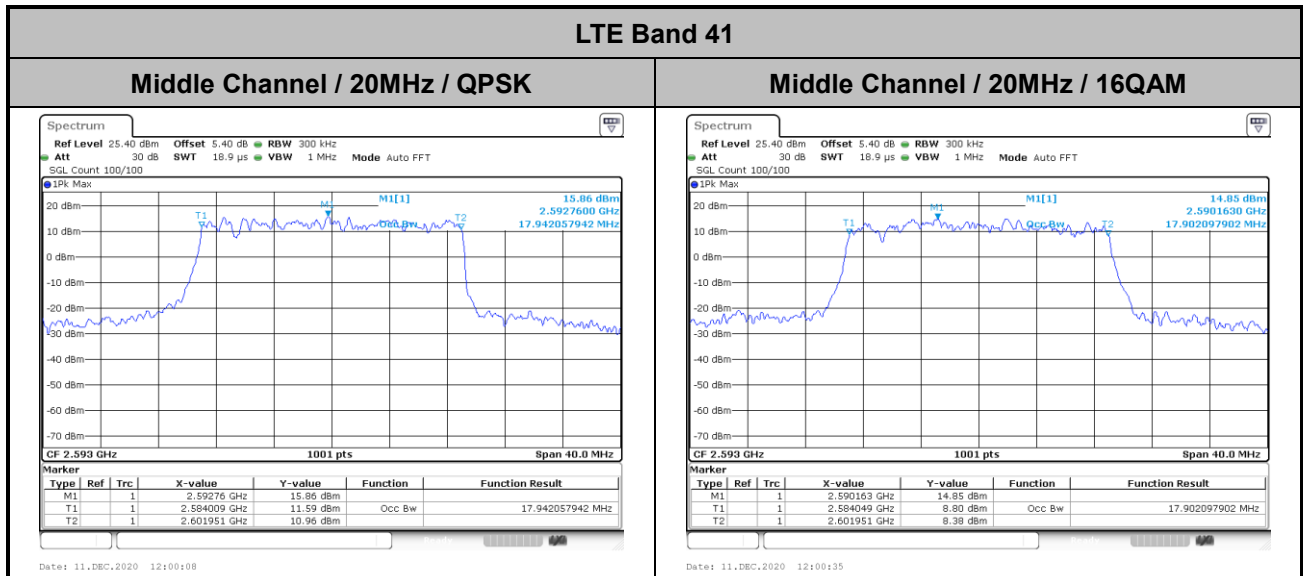
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.061	18.781





Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.94	17.90

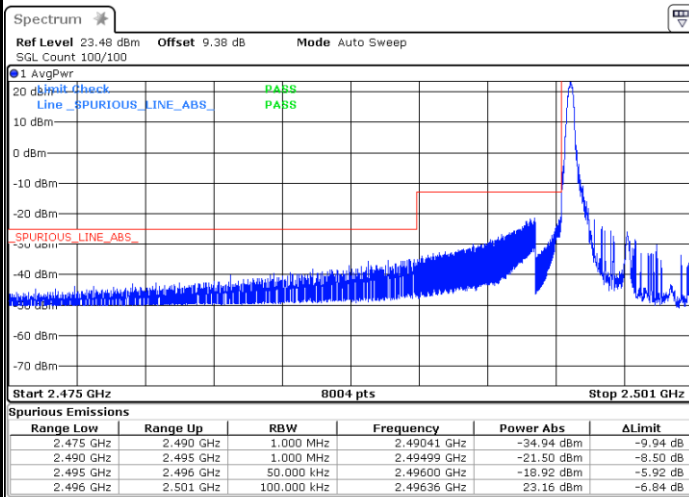




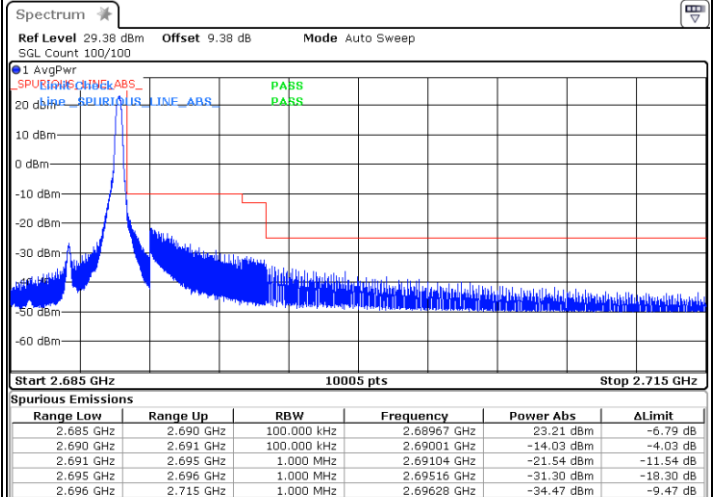
Conducted Band Edge

LTE Band 41 / 5MHz / QPSK

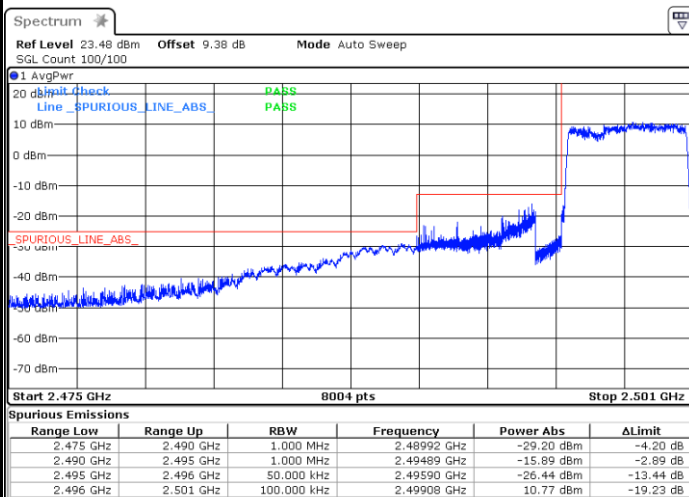
Lowest Band Edge / 1 RB



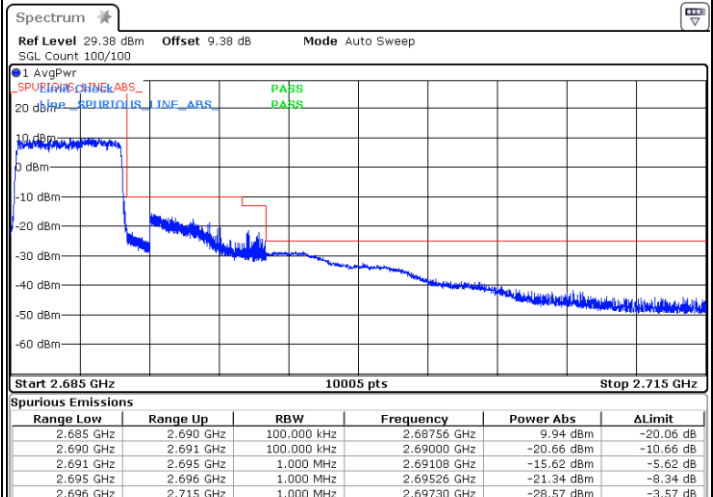
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



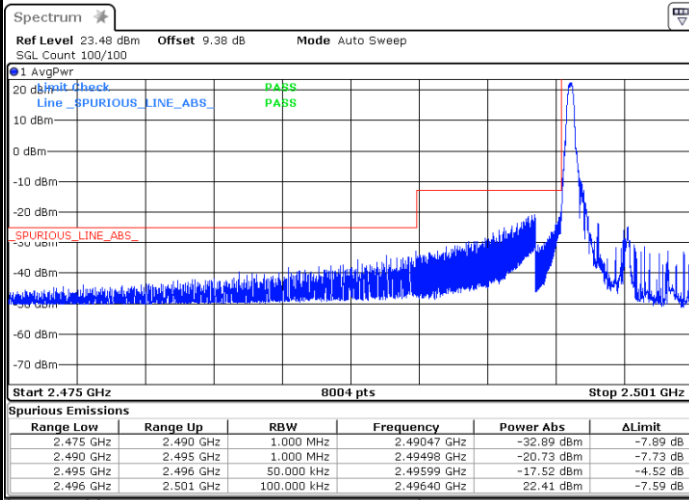
Highest Band Edge / Full RB



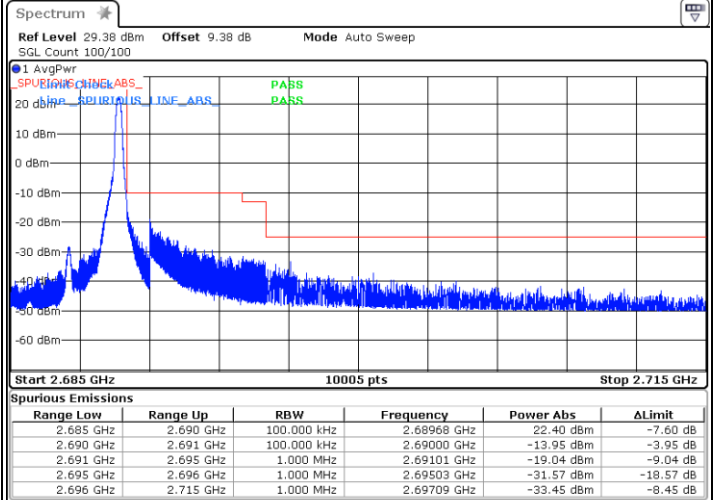


LTE Band 41 / 5MHz / 16QAM

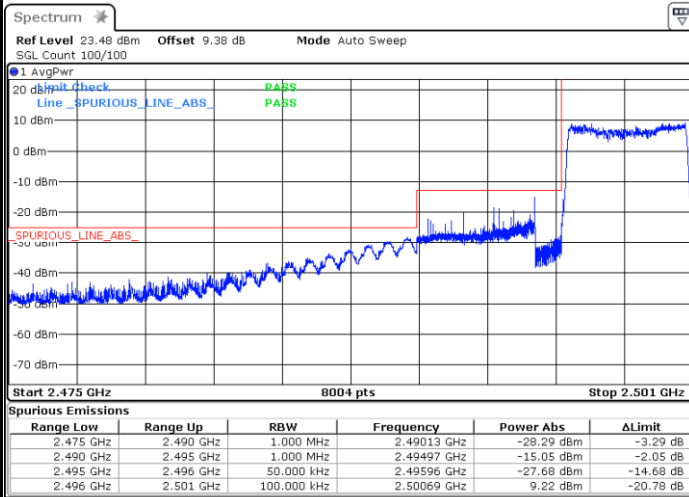
Lowest Band Edge / 1RB



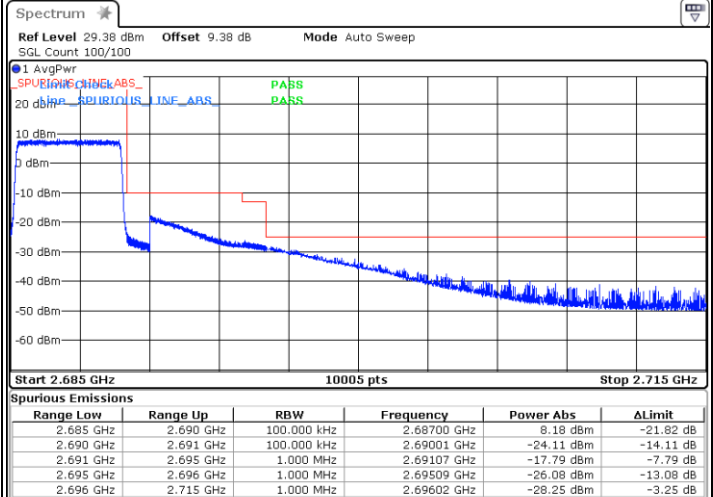
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



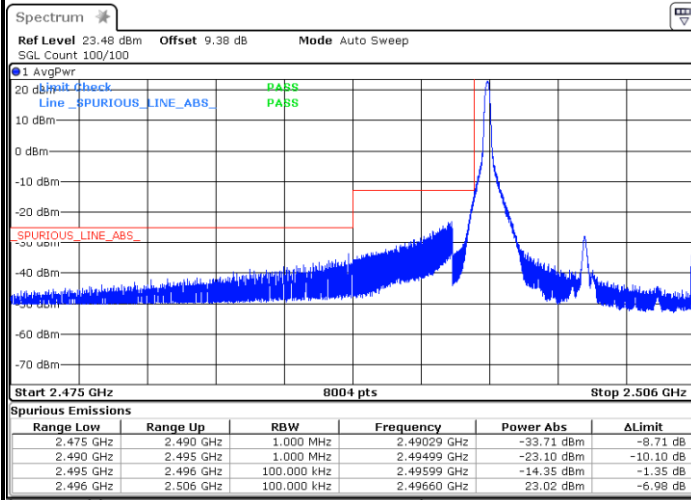
Highest Band Edge / Full RB



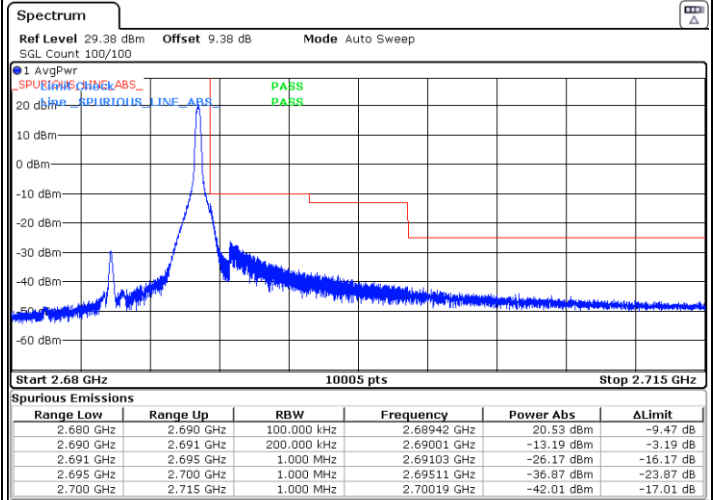


LTE Band 41 / 10MHz / QPSK

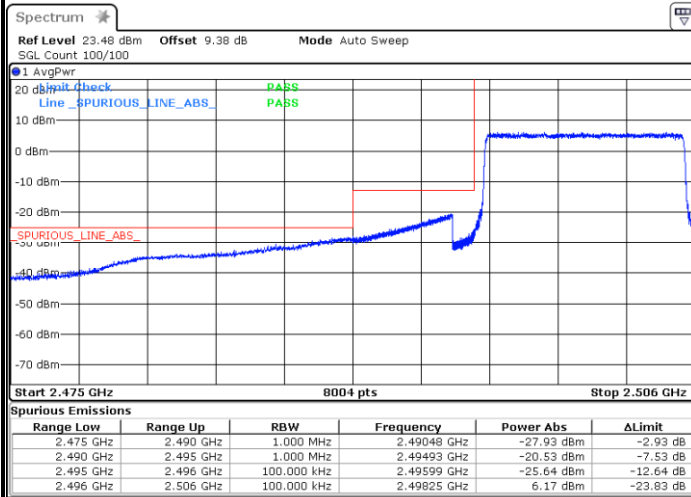
Lowest Band Edge / 1 RB



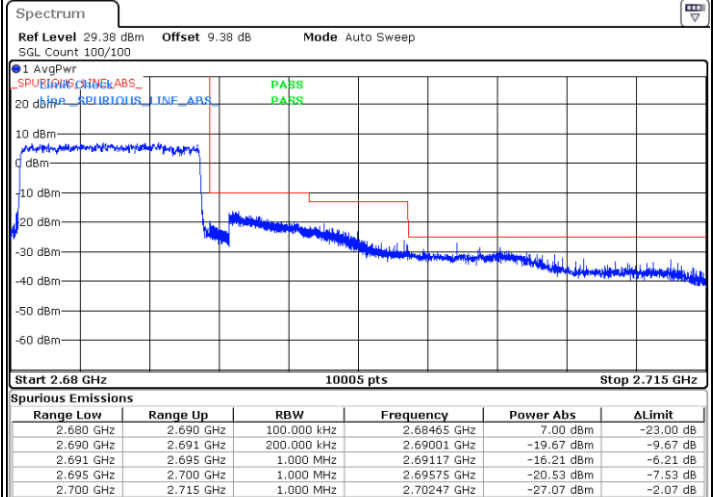
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



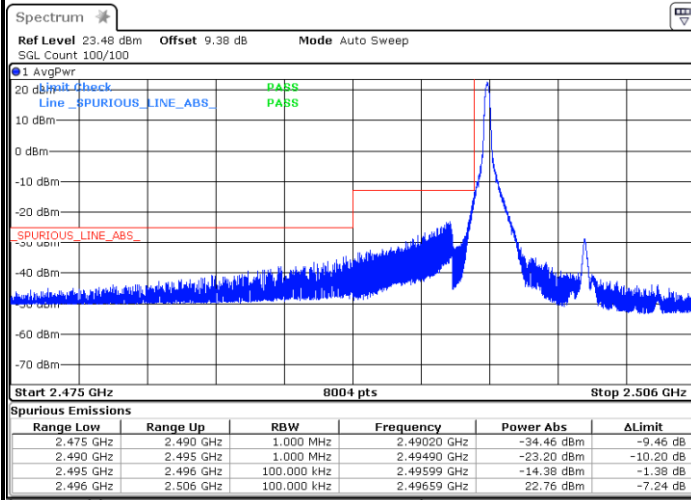
Highest Band Edge / Full RB





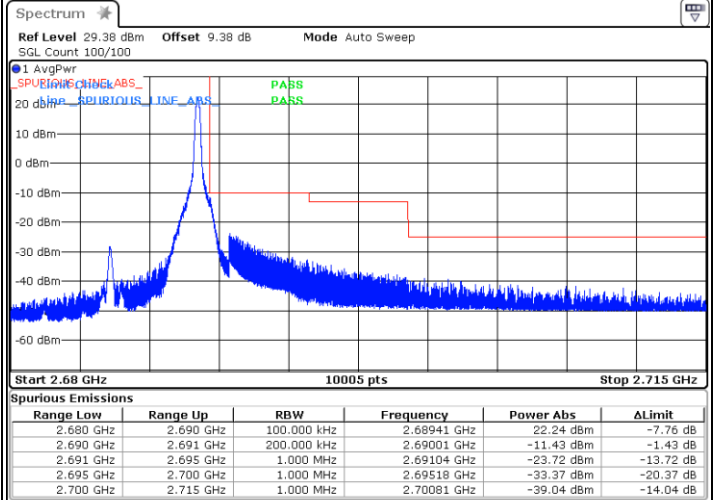
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



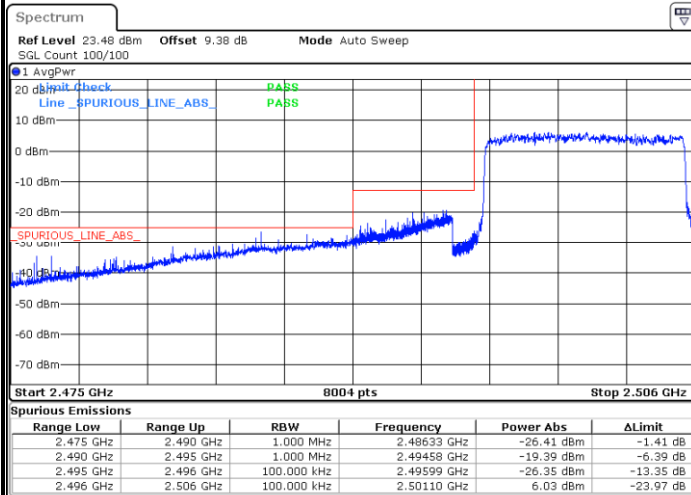
Date: 11.DEC.2020 10:24:19

Highest Band Edge / 1 RB



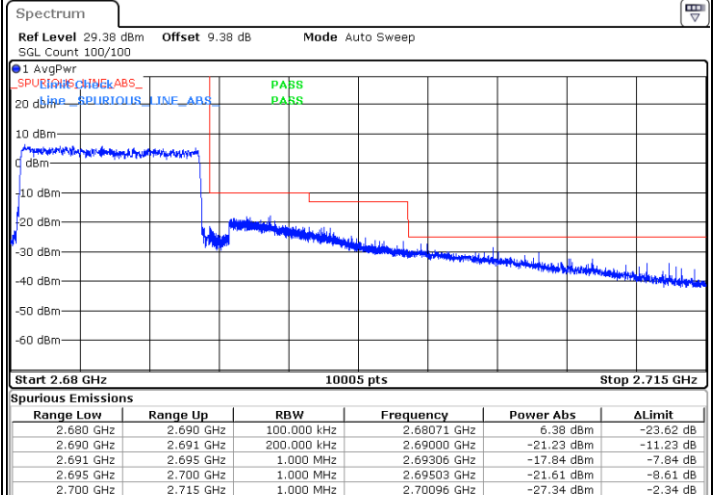
Date: 11.DEC.2020 10:32:14

Lowest Band Edge / Full RB



Date: 11.DEC.2020 10:24:55

Highest Band Edge / Full RB

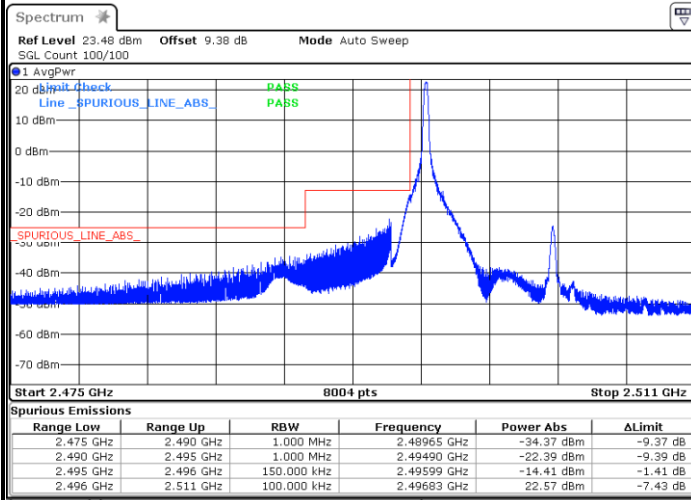


Date: 11.DEC.2020 10:27:22

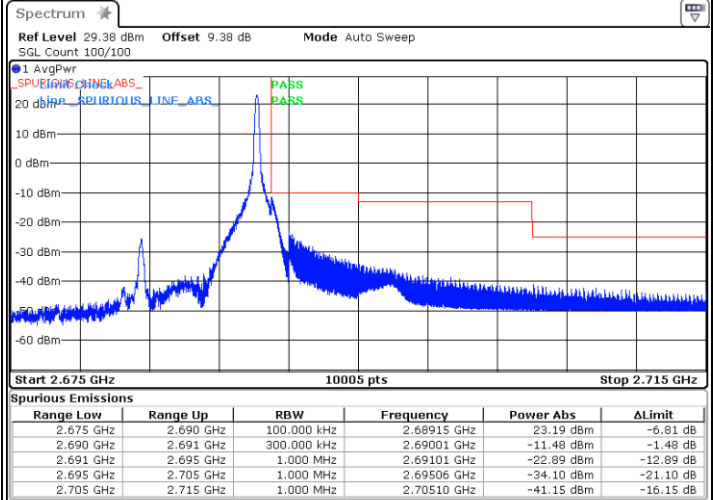


LTE Band 41 / 15MHz / QPSK

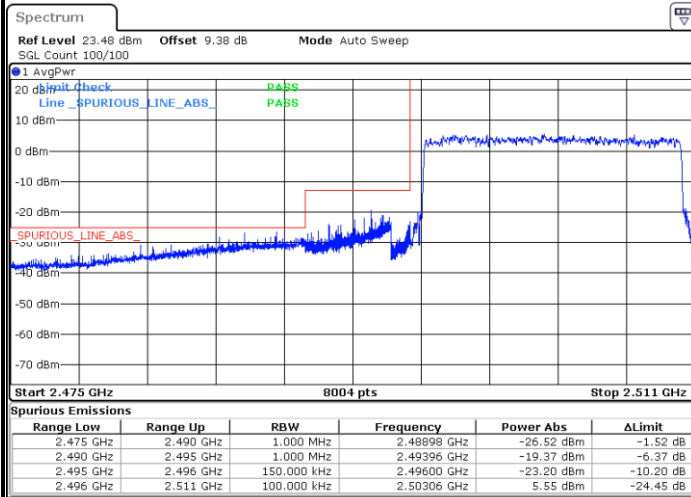
Lowest Band Edge / 1 RB



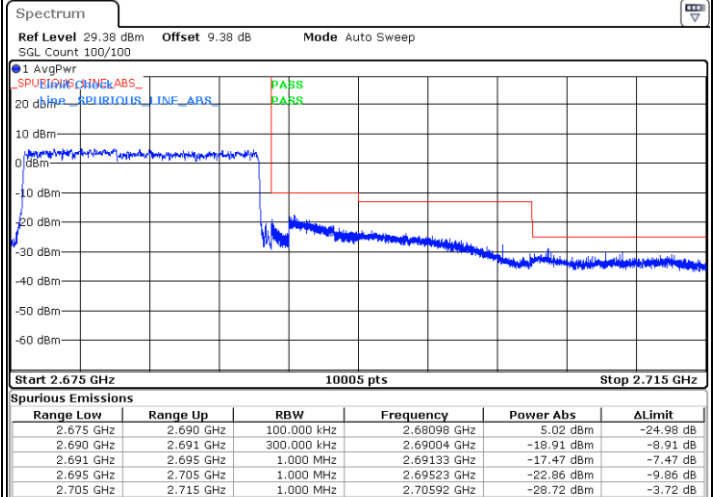
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



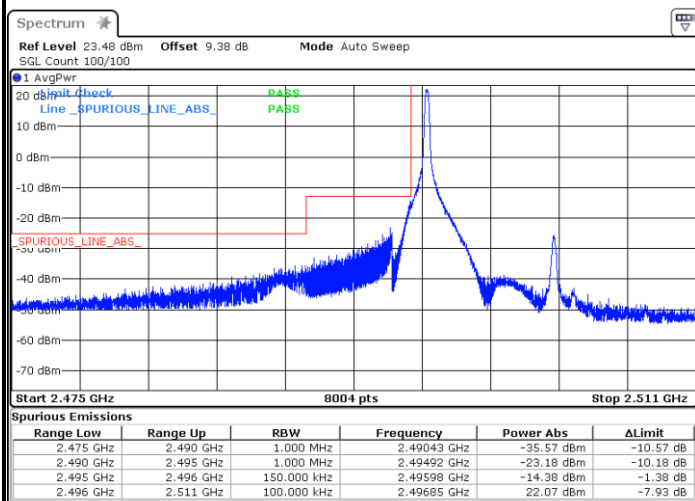
Highest Band Edge / Full RB



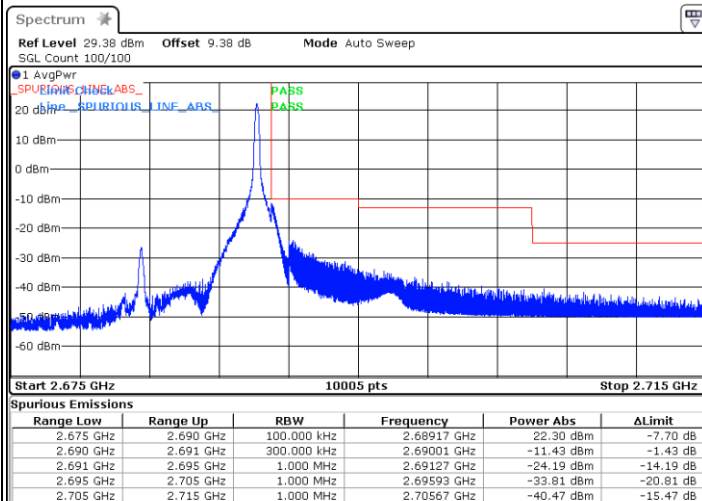


LTE Band 41 / 15MHz / 16QAM

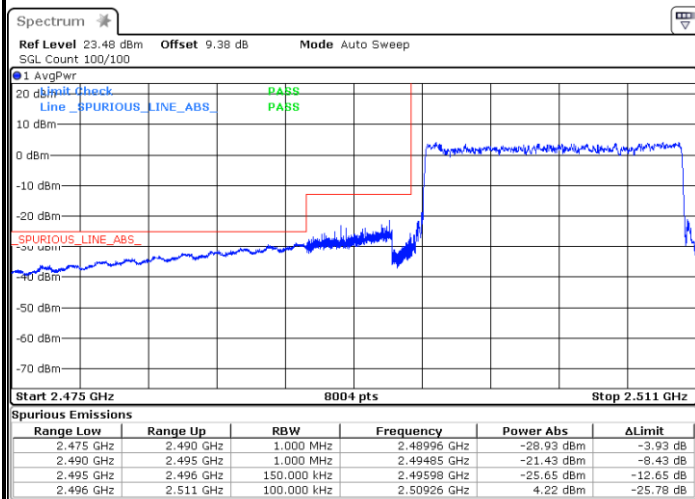
Lowest Band Edge / 1 RB



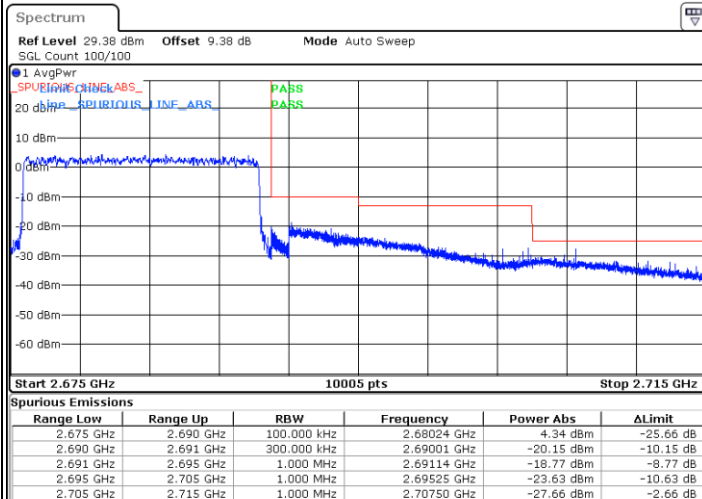
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



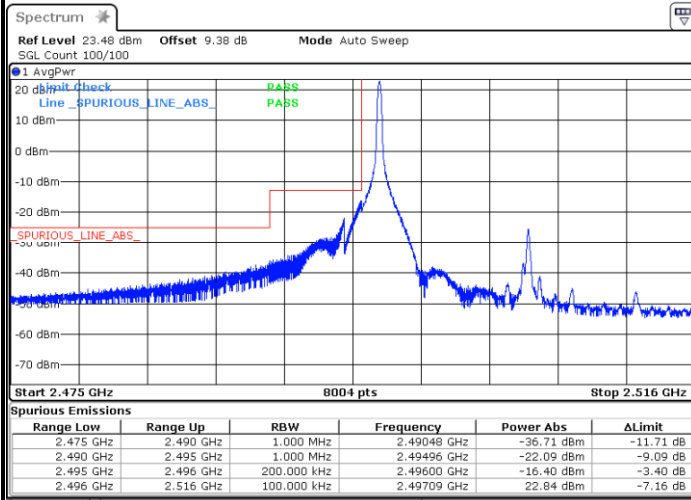
Highest Band Edge / Full RB



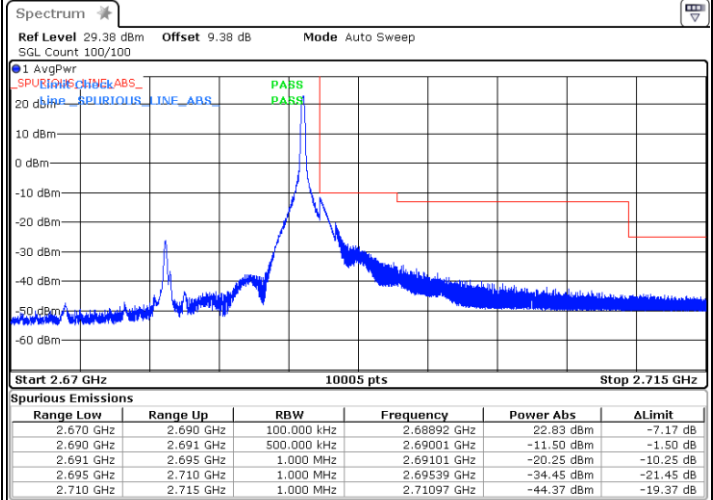


LTE Band 41 / 20MHz / QPSK

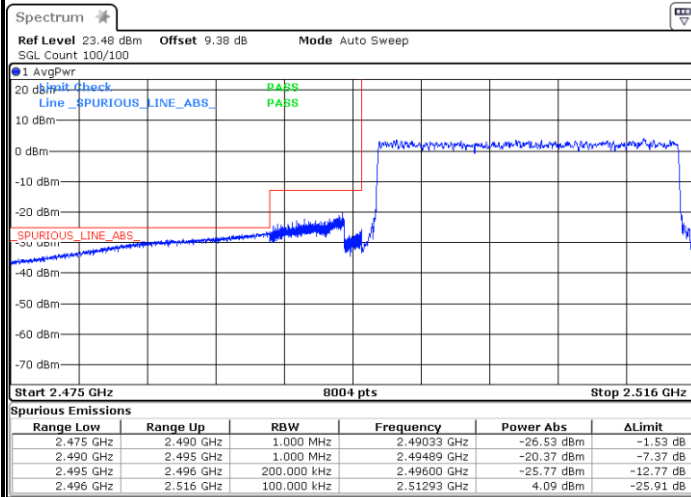
Lowest Band Edge / 1 RB



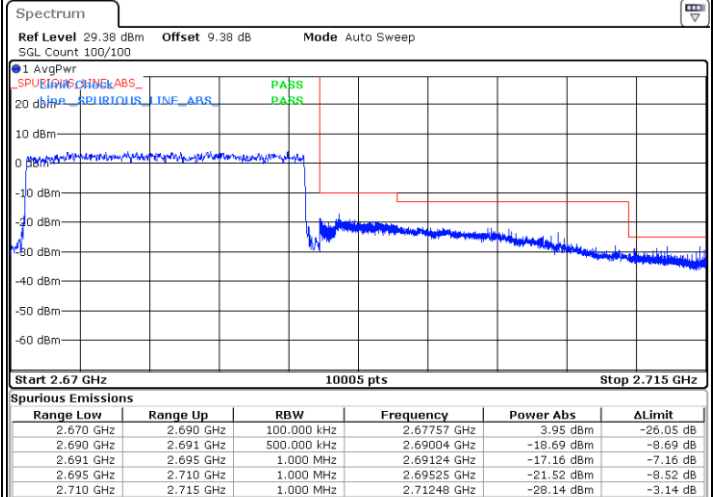
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



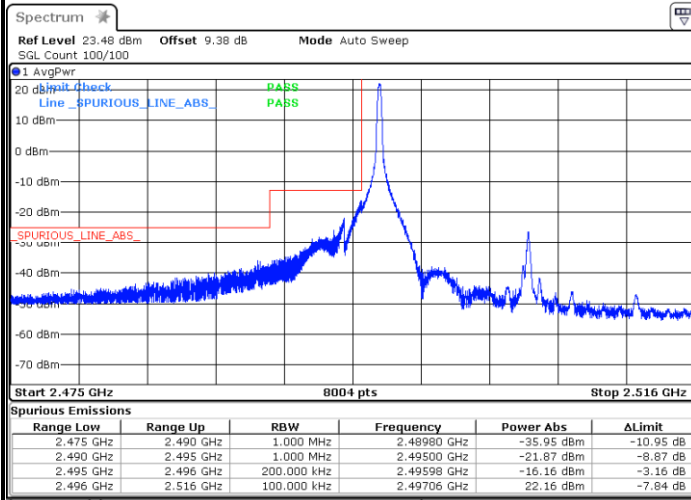
Highest Band Edge / Full RB



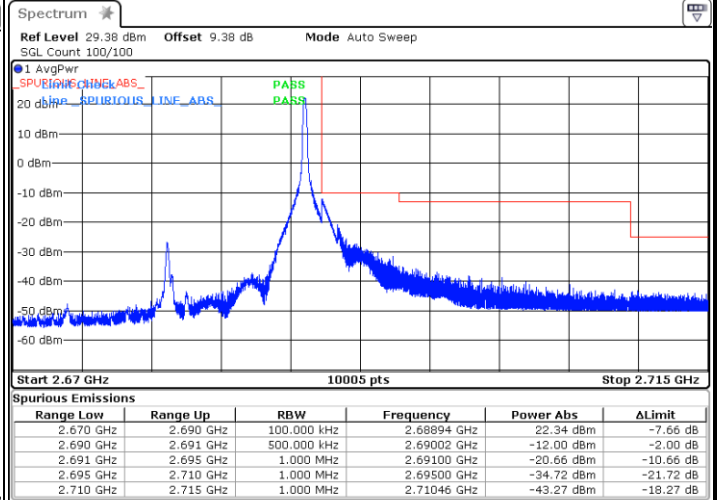


LTE Band 41 / 20MHz / 16QAM

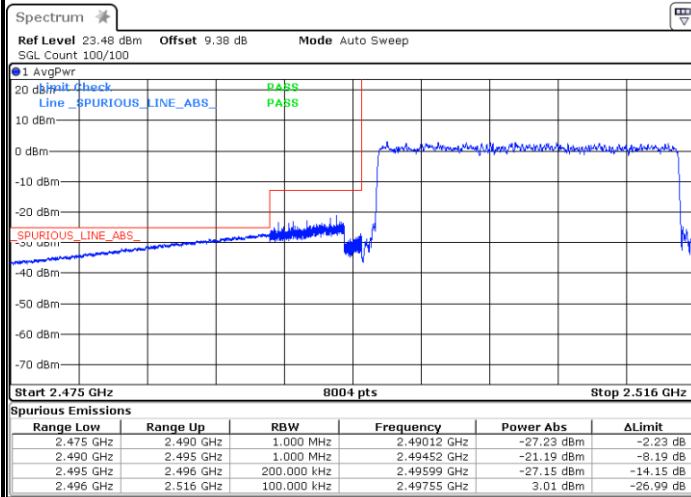
Lowest Band Edge / 1 RB



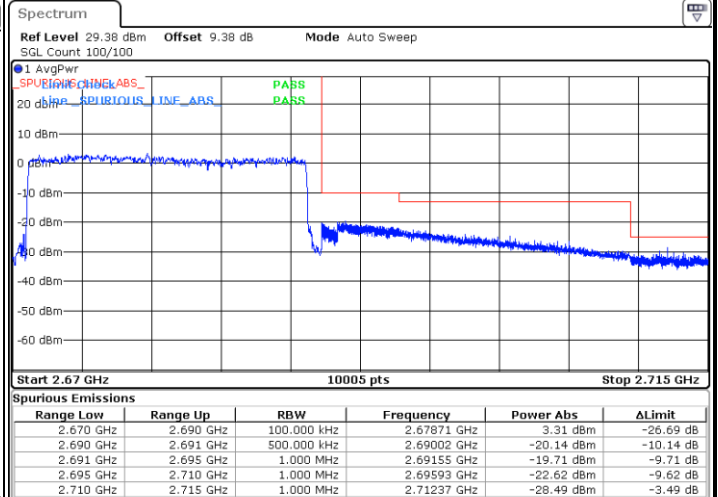
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





Conducted Spurious Emission

