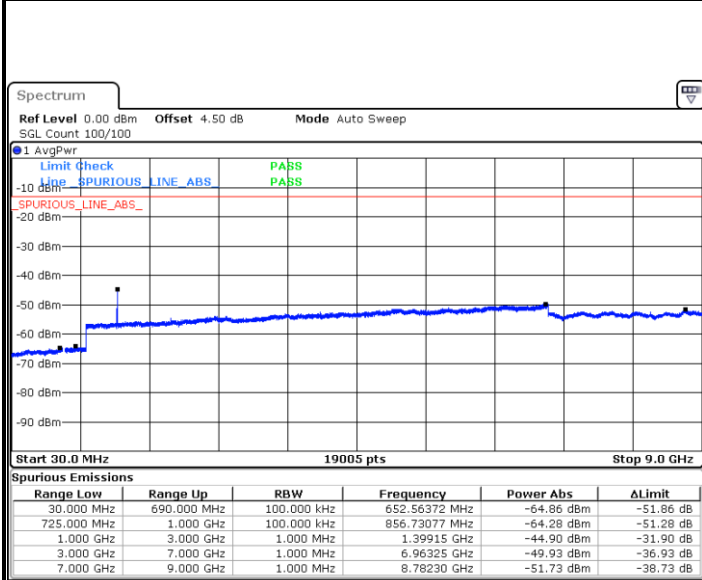




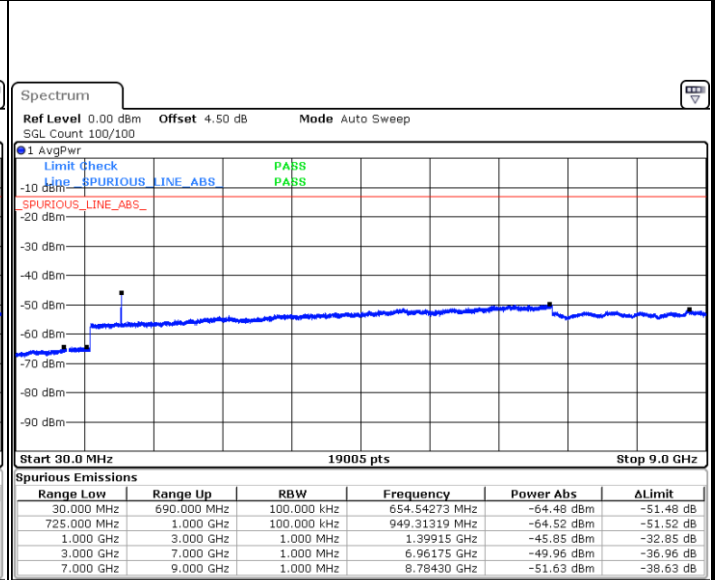
LTE Band 12 / 5MHz

Lowest Channel / QPSK



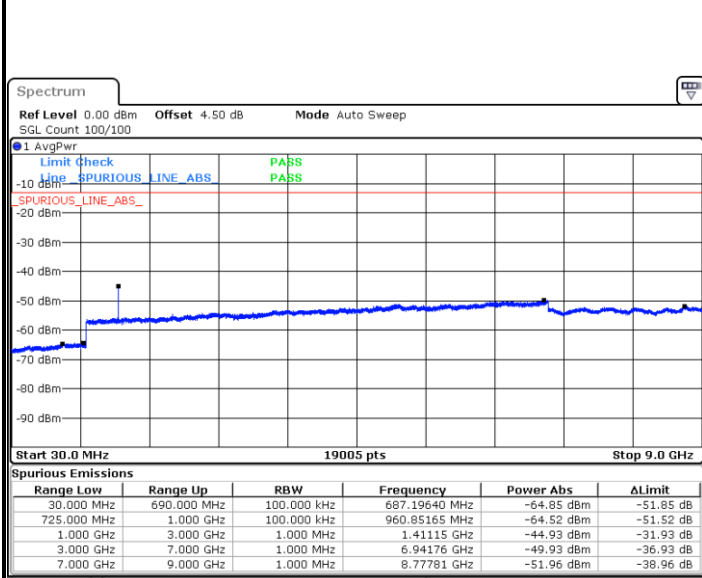
Date: 27.NOV.2020 11:30:18

Lowest Channel / 16QAM



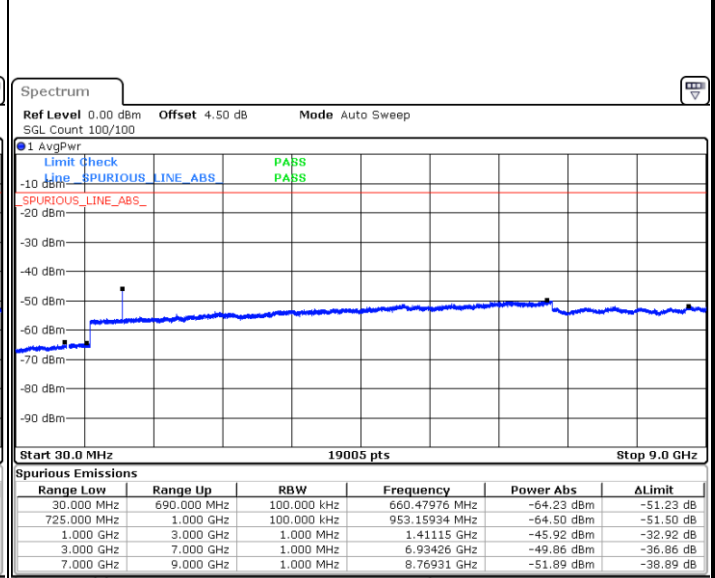
Date: 27.NOV.2020 11:31:12

Middle Channel / QPSK



Date: 27.NOV.2020 11:33:01

Middle Channel / 16QAM



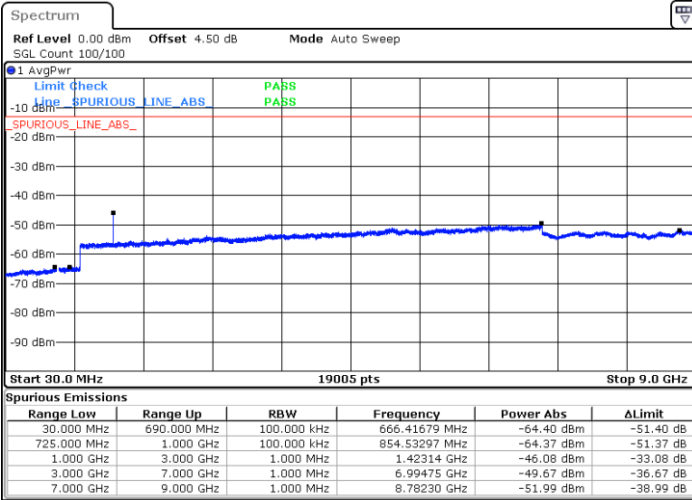
Date: 27.NOV.2020 11:32:06



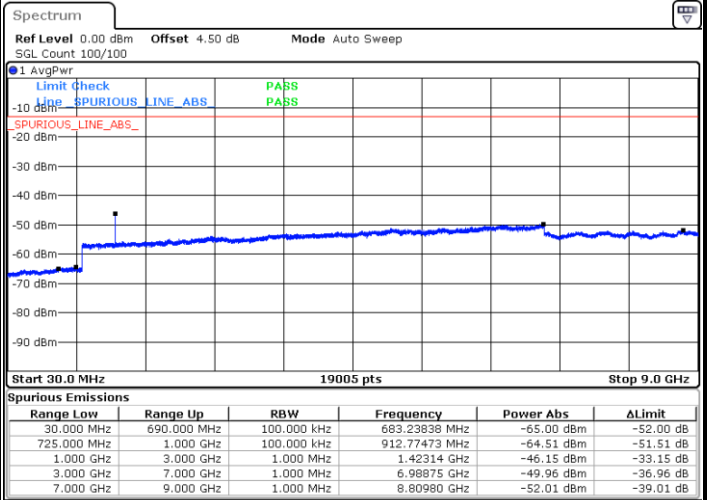
LTE Band 12 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 27.NOV.2020 11:33:55

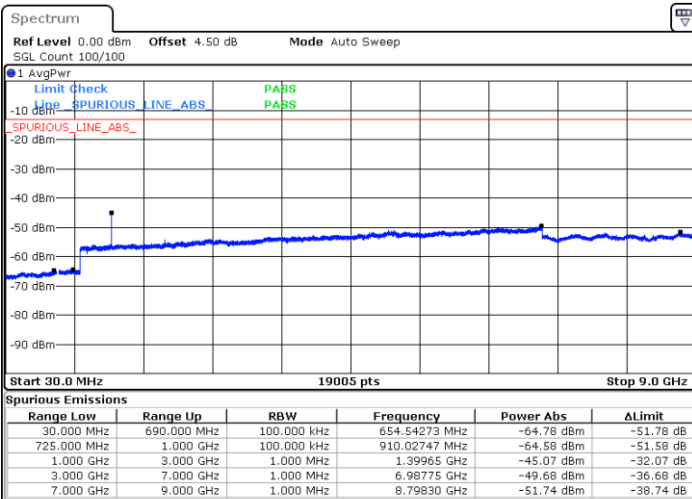


Date: 27.NOV.2020 11:34:49

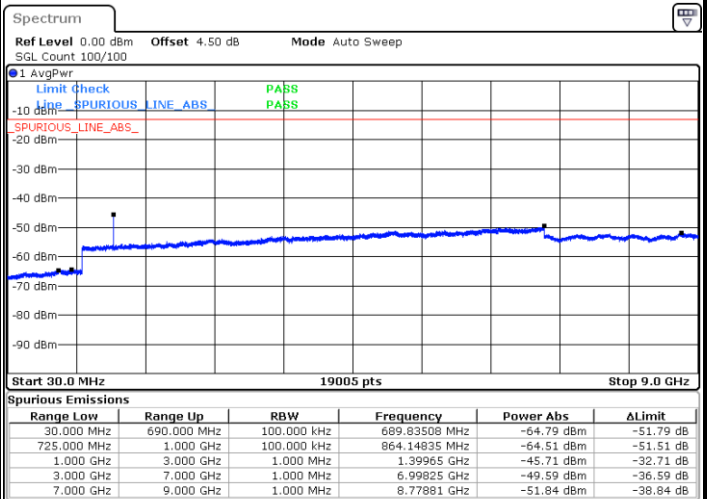
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 27.NOV.2020 11:47:57

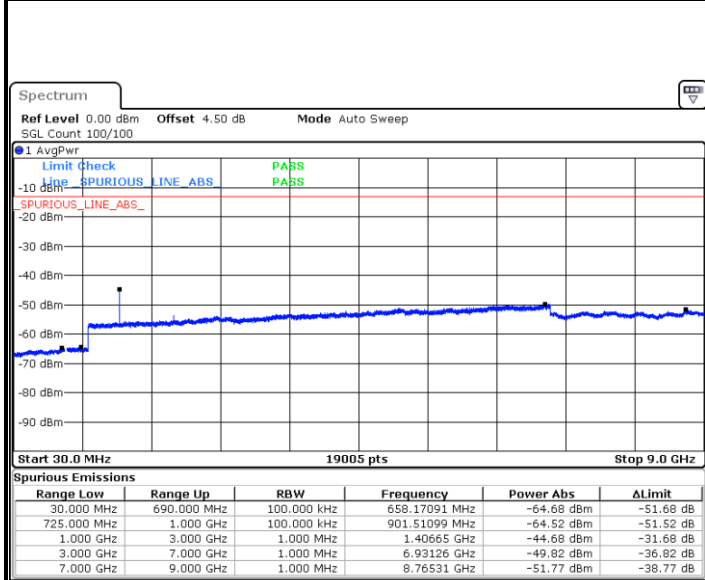


Date: 27.NOV.2020 11:48:52



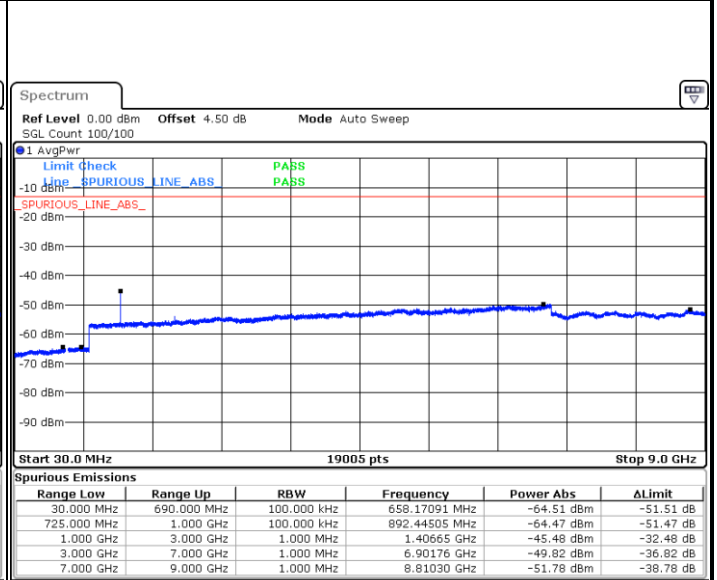
LTE Band 12 / 10MHz

Middle Channel / QPSK



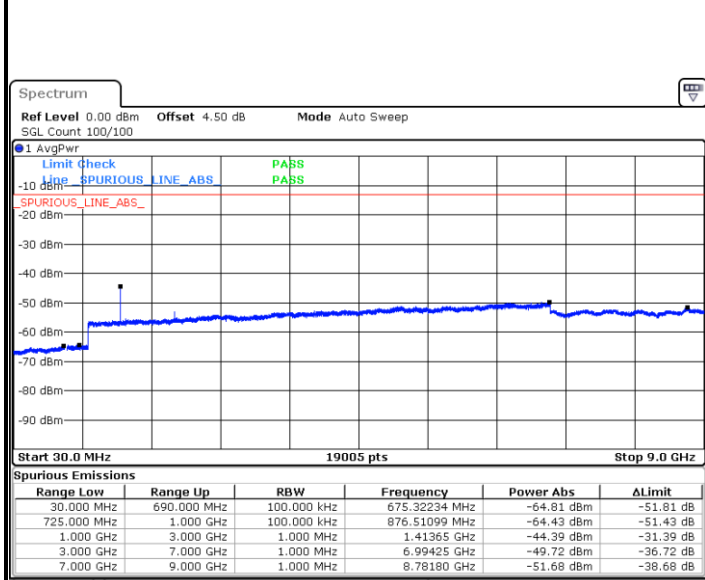
Date: 27.NOV.2020 11:50:40

Middle Channel / 16QAM



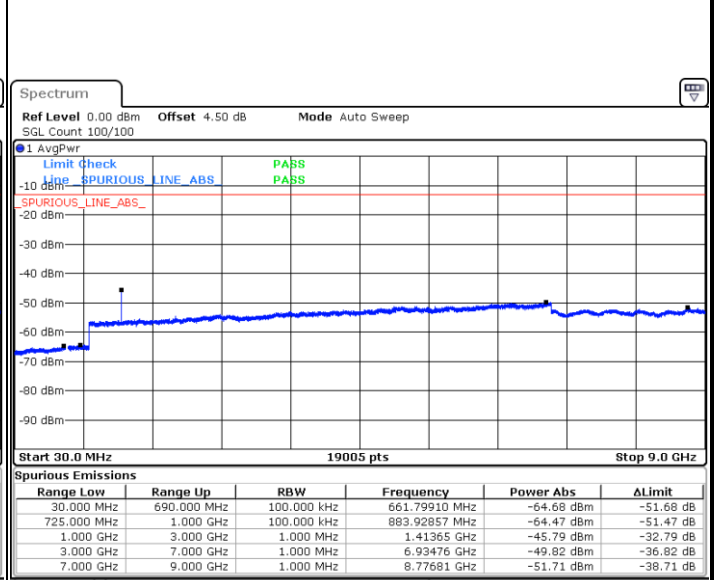
Date: 27.NOV.2020 11:49:46

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:

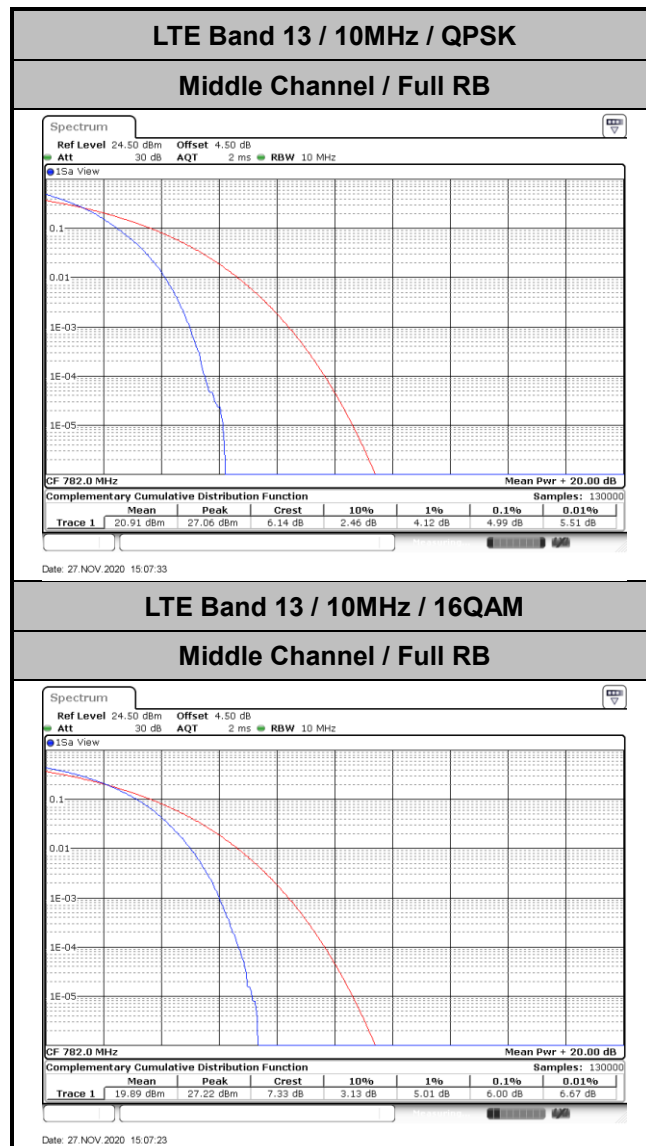
1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

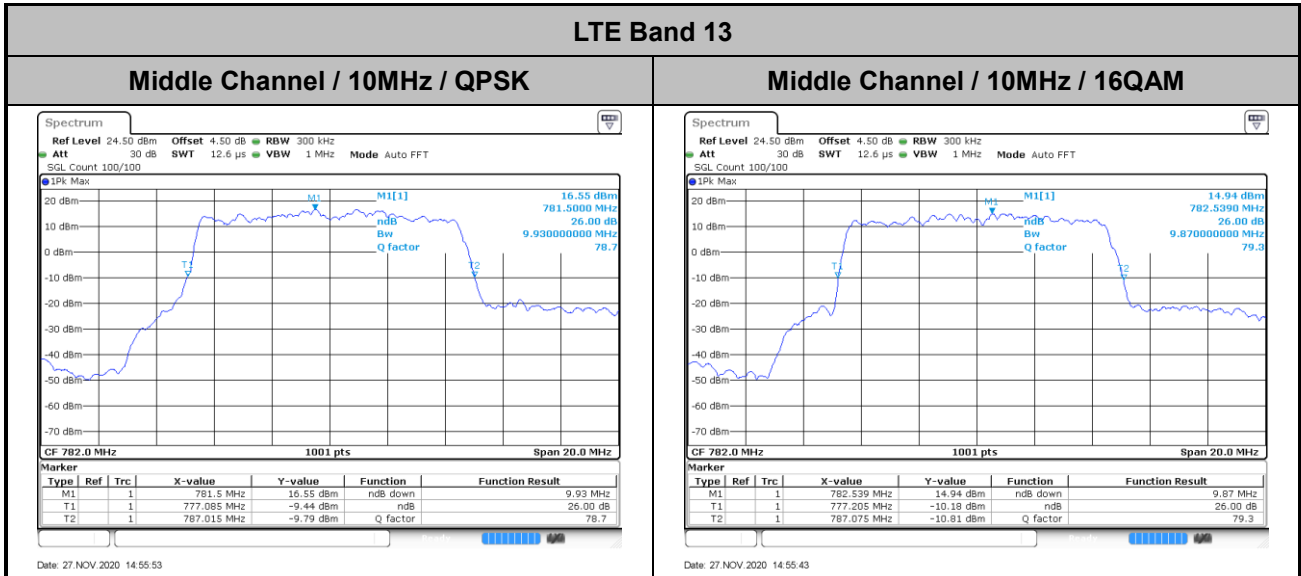
Mode	LTE Band 13 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.99	6.00	PASS





26dB Bandwidth

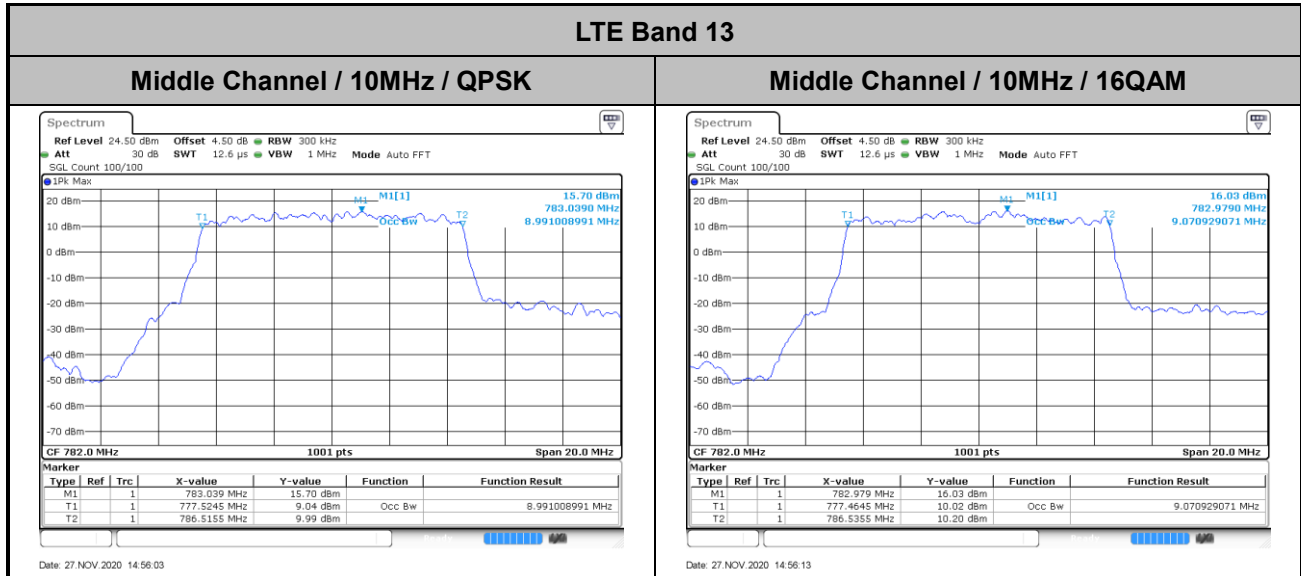
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.93	9.87





Occupied Bandwidth

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

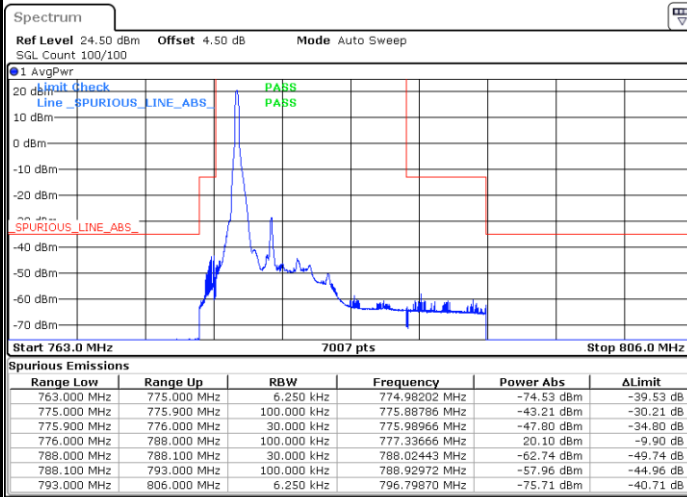




Conducted Band Edge

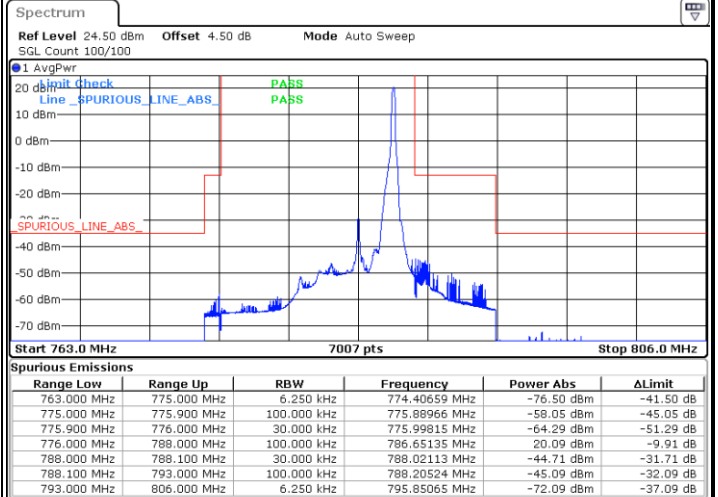
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



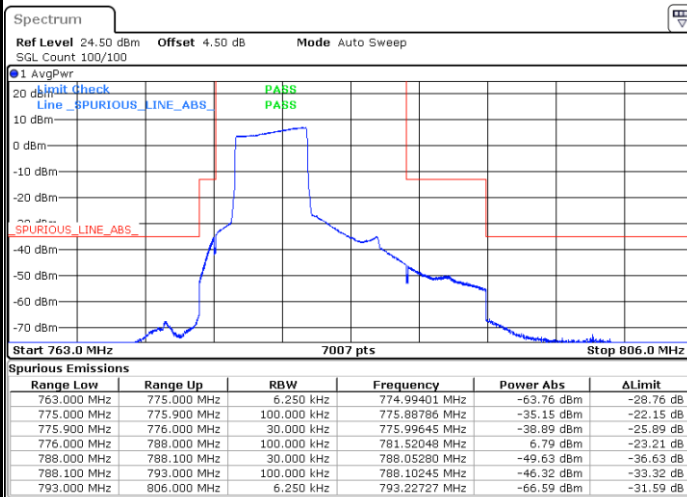
Date: 27.NOV.2020 14:35:26

Highest Band Edge / 1 RB



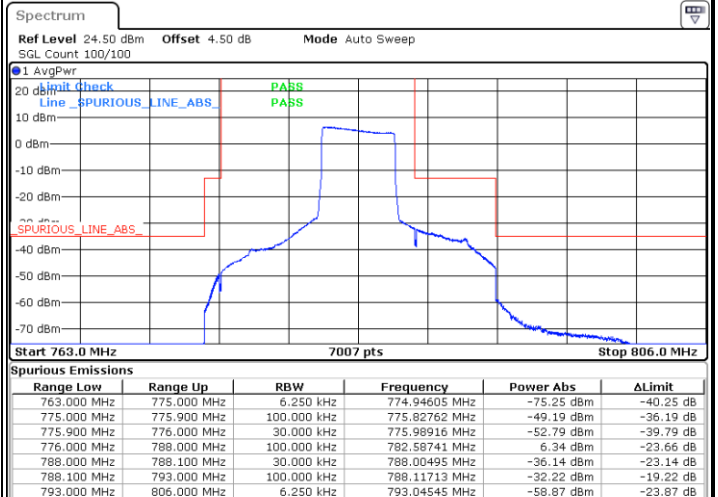
Date: 27.NOV.2020 14:46:52

Lowest Band Edge / Full RB



Date: 27.NOV.2020 14:33:49

Highest Band Edge / Full RB



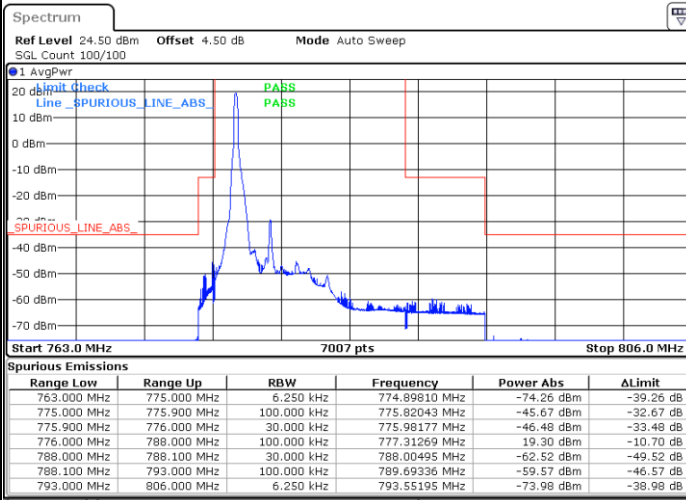
Date: 27.NOV.2020 14:45:15



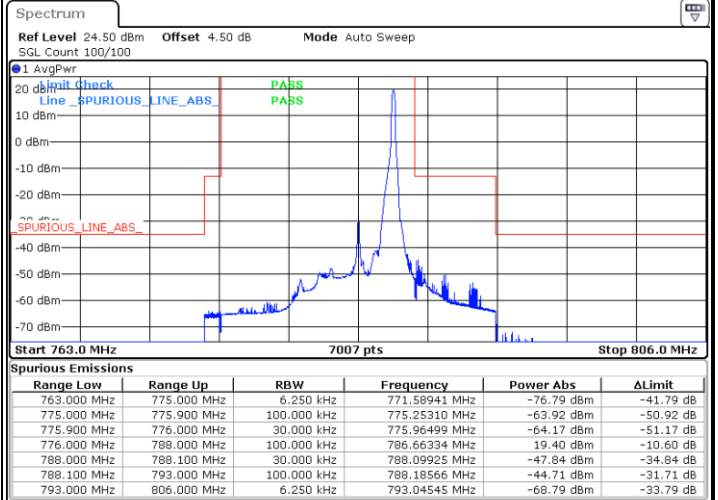
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



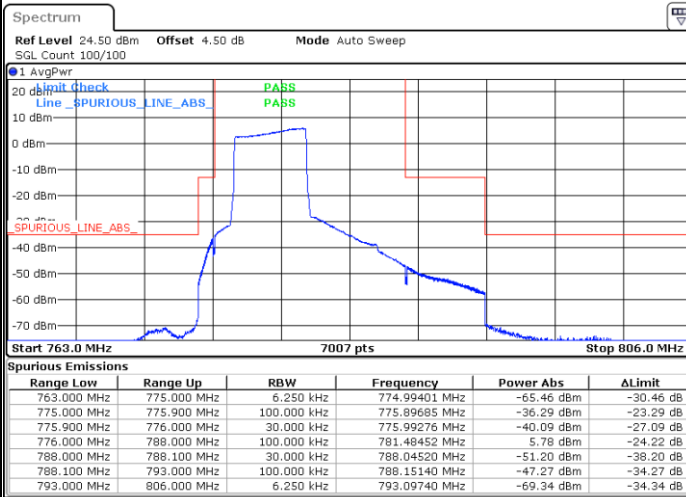
Date: 27.NOV.2020 14:37:04



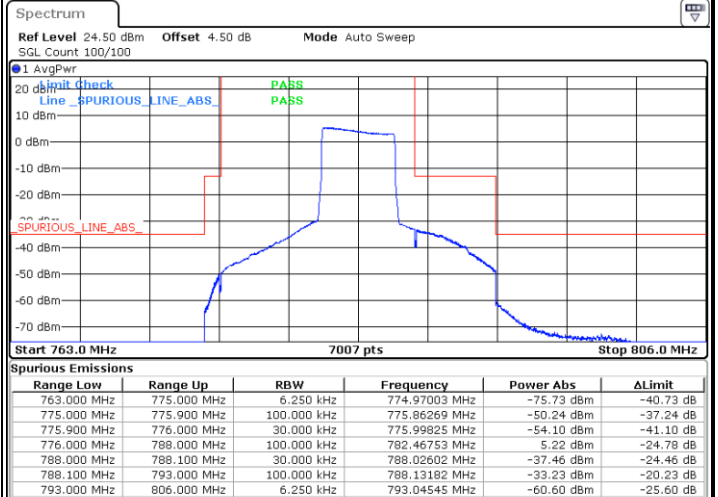
Date: 27.NOV.2020 14:48:30

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.NOV.2020 14:32:11



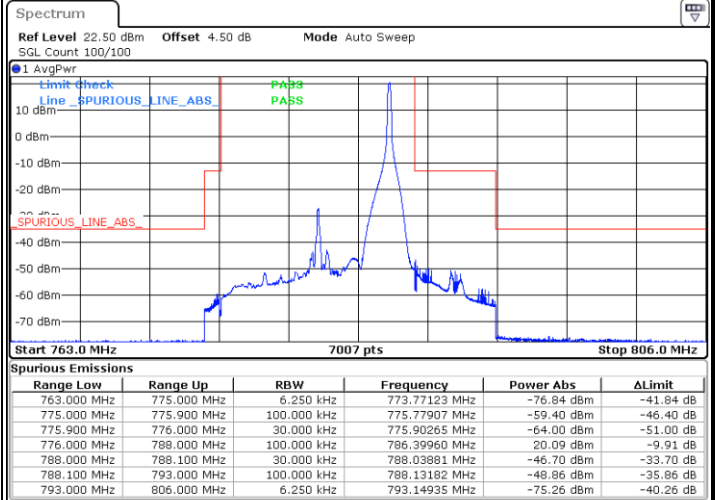
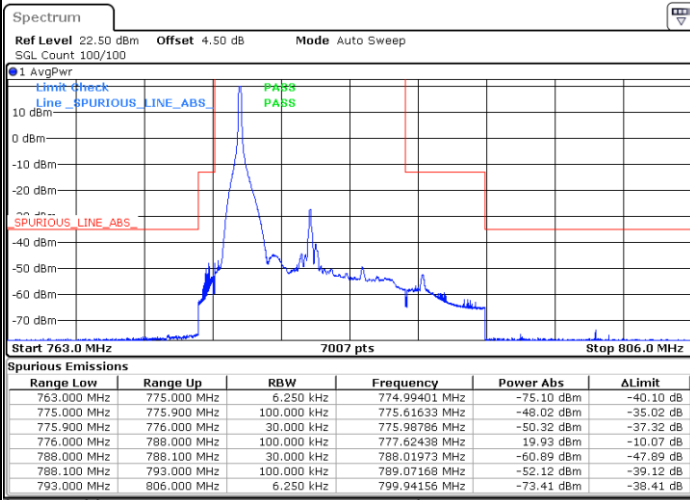
Date: 27.NOV.2020 14:43:37



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

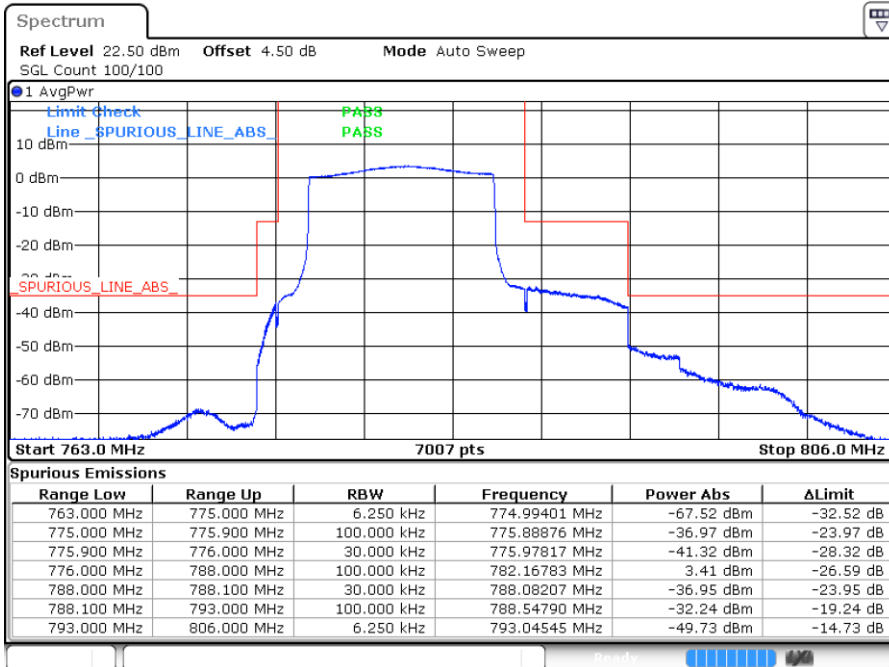
Highest Band Edge / 1 RB



Date: 27.NOV.2020 14:59:28

Date: 27.NOV.2020 15:05:58

Band Edge / Full RB

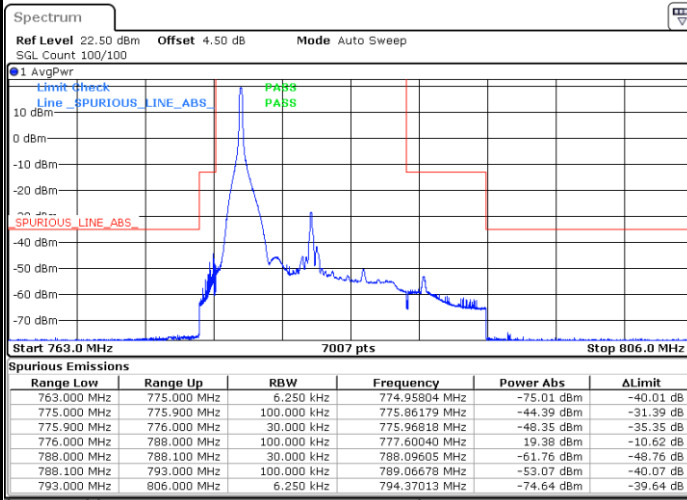


Date: 27.NOV.2020 15:01:06



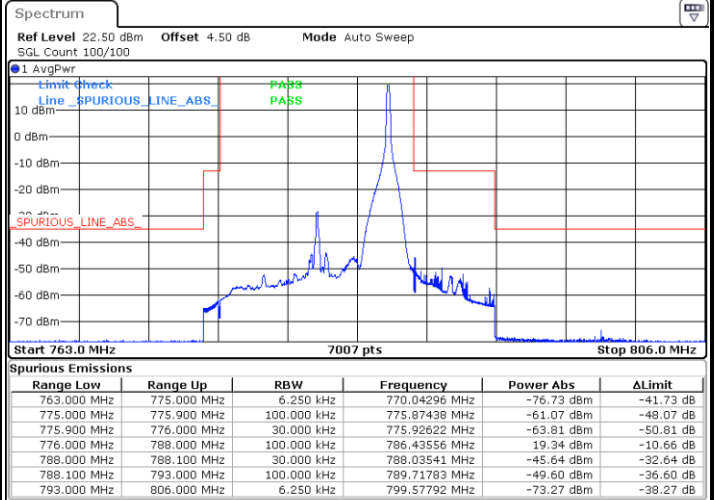
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



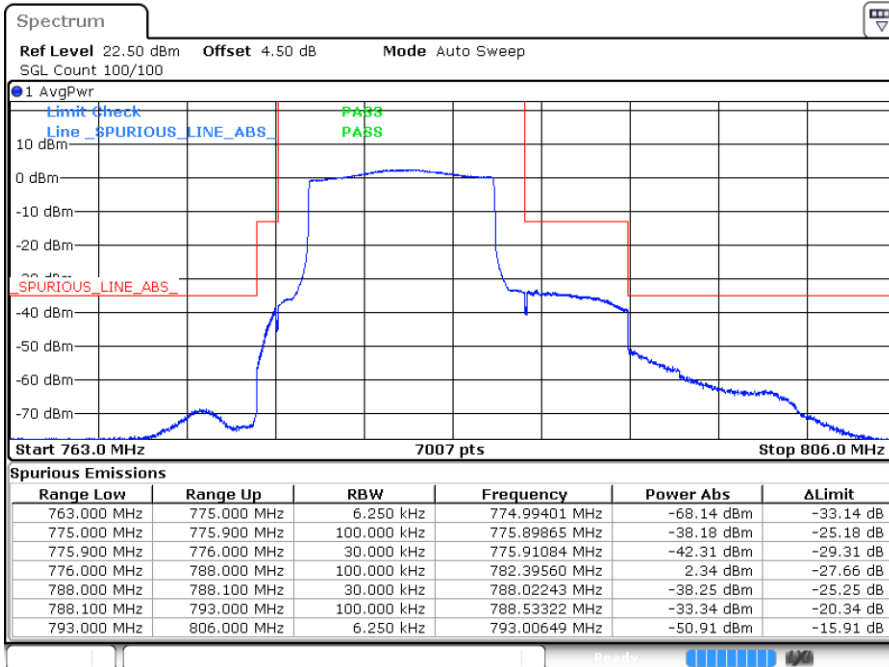
Date: 27.NOV.2020 14:57:51

Highest Band Edge / 1 RB



Date: 27.NOV.2020 15:04:21

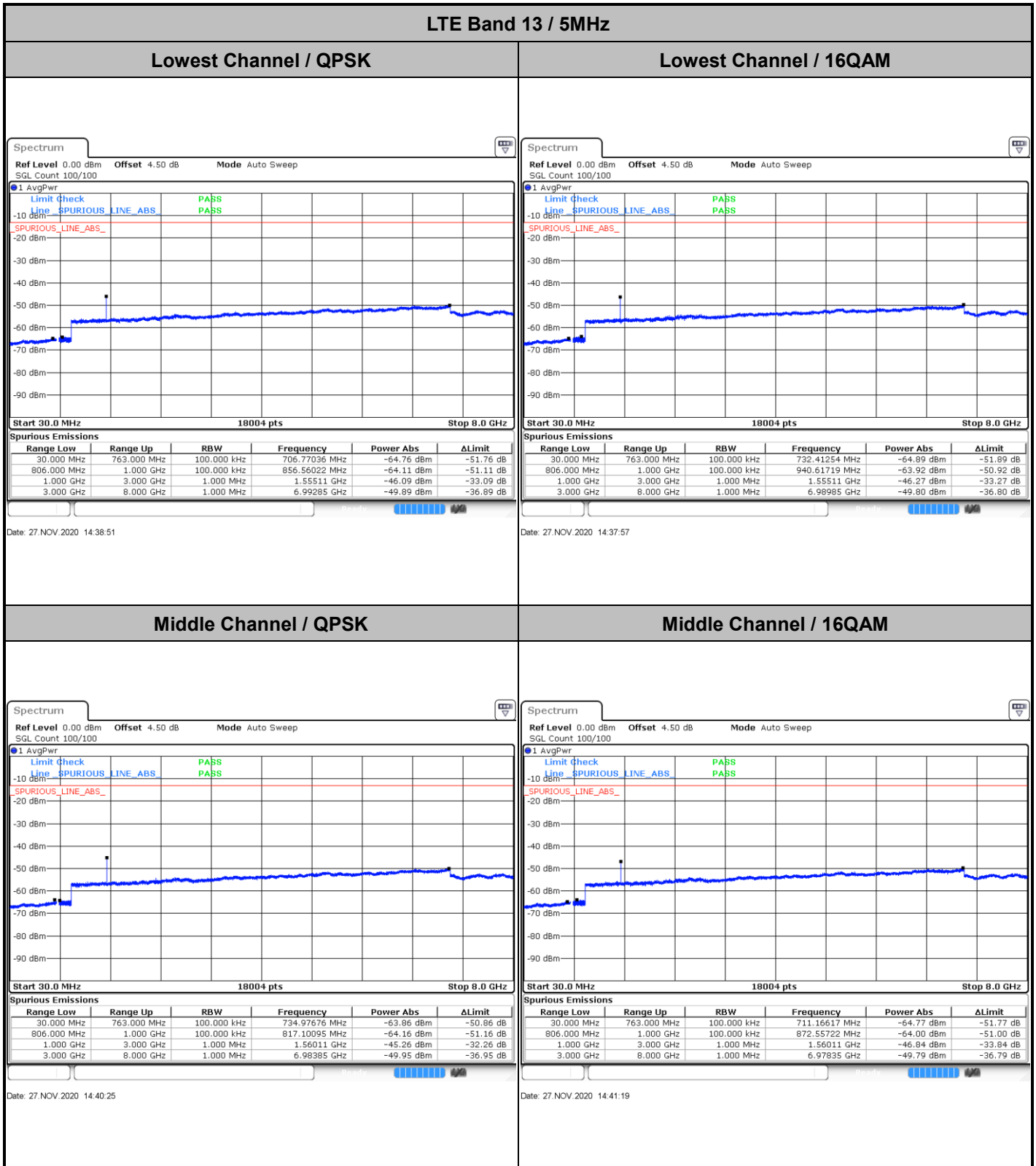
Band Edge / Full RB



Date: 27.NOV.2020 15:02:43



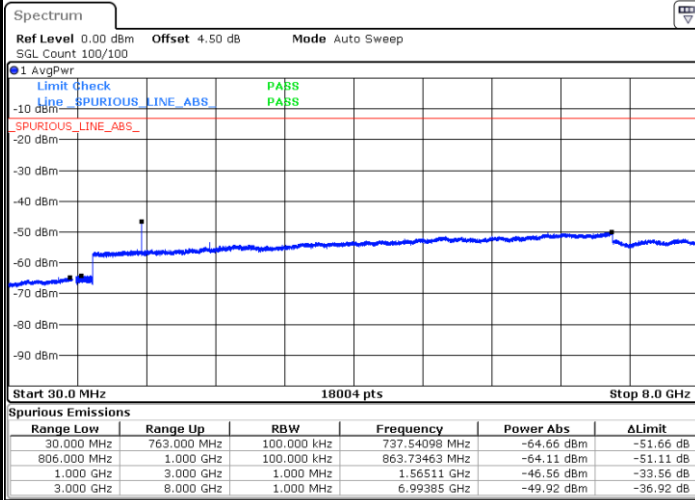
Conducted Spurious Emission





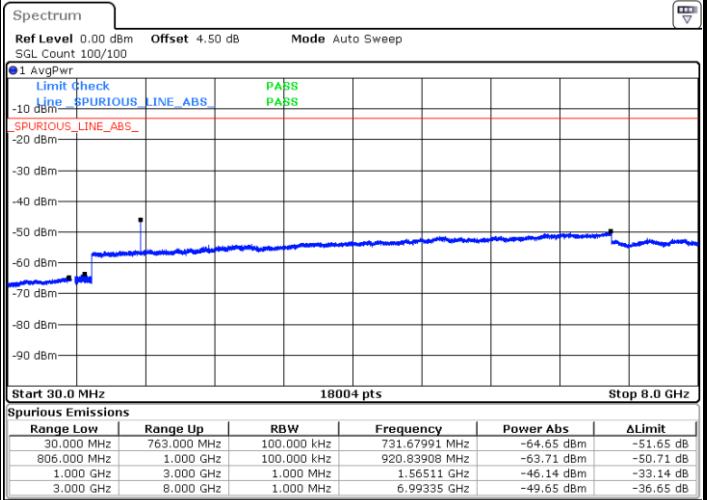
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 27.NOV.2020 14:50:17

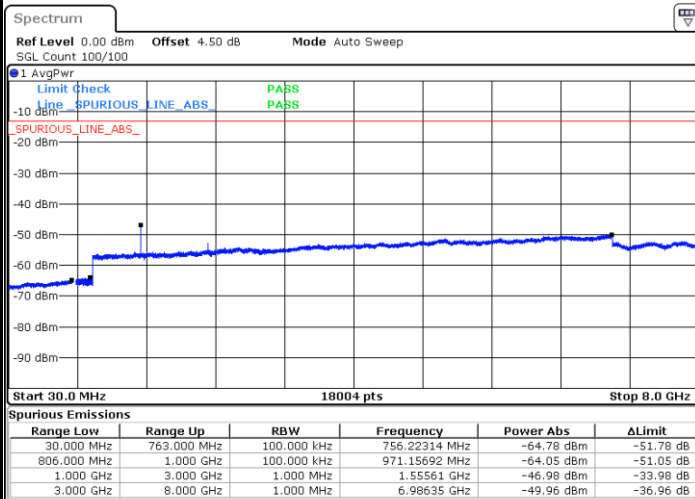
Highest Channel / 16QAM



Date: 27.NOV.2020 14:49:23

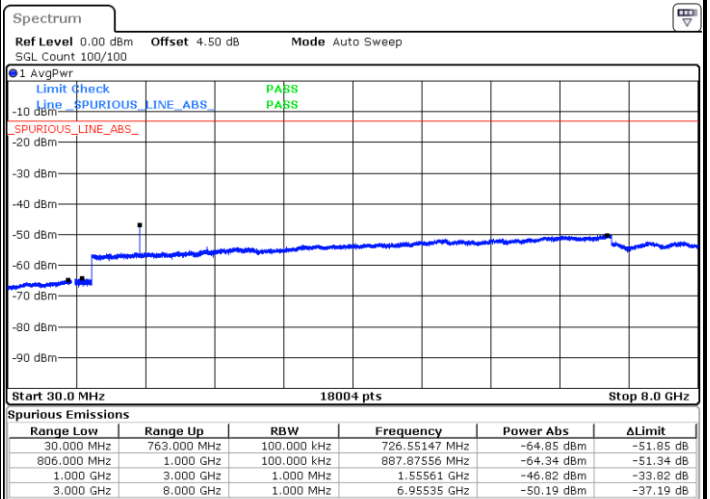
LTE Band 13 / 10MHz

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:

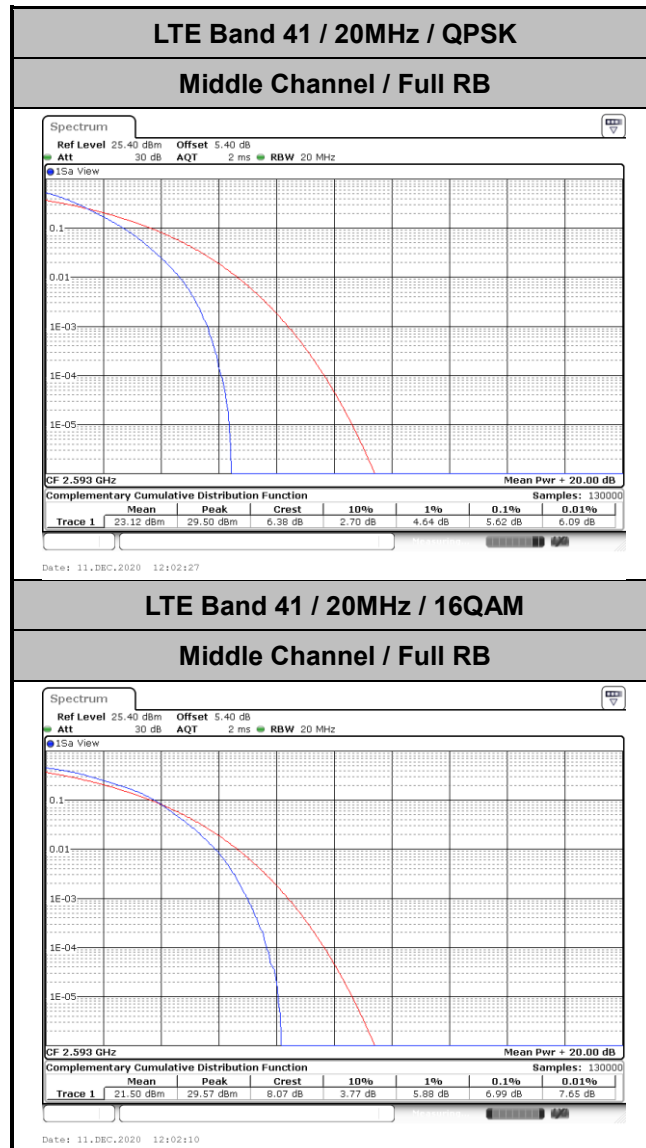
1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41 HPUE

Peak-to-Average Ratio

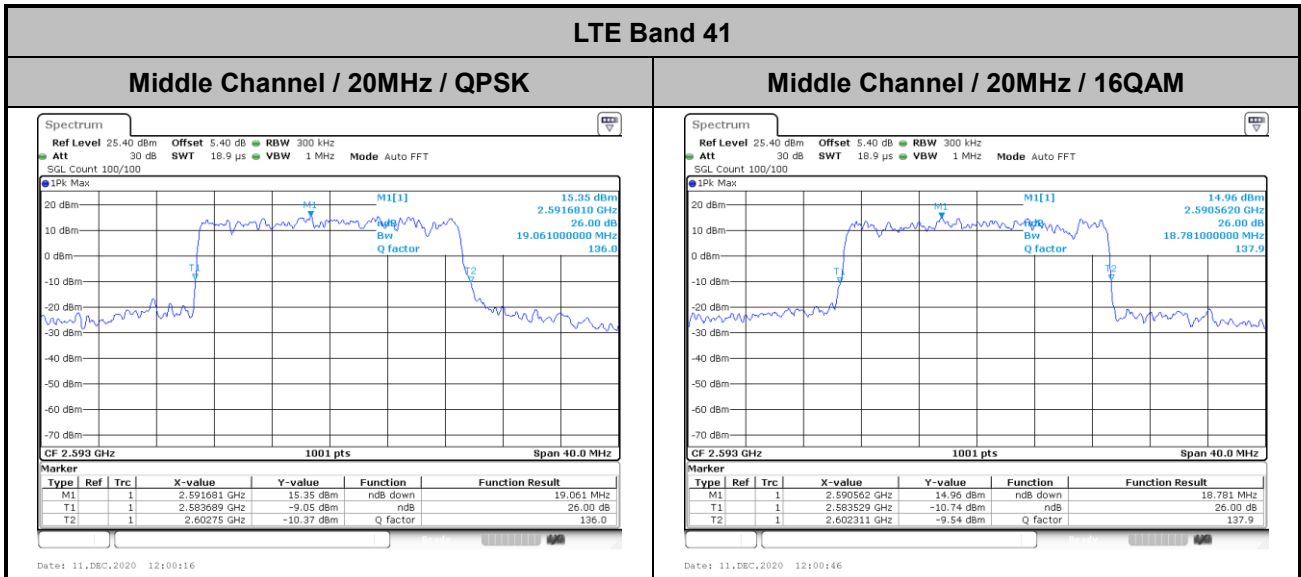
Mode	LTE Band 41 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.62	6.99	





26dB Bandwidth

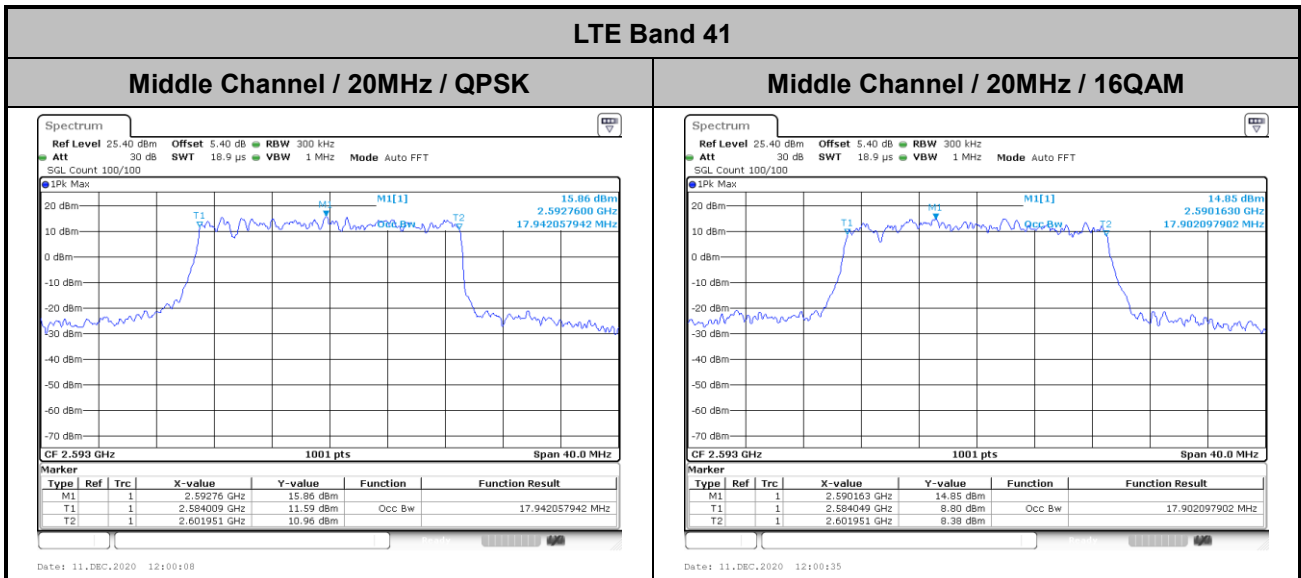
Mode	LTE Band 41 : 26dB BW(MHz)		
BW	20MHz		
Mod.	QPSK	16QAM	
Middle CH	19.061	18.781	





Occupied Bandwidth

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

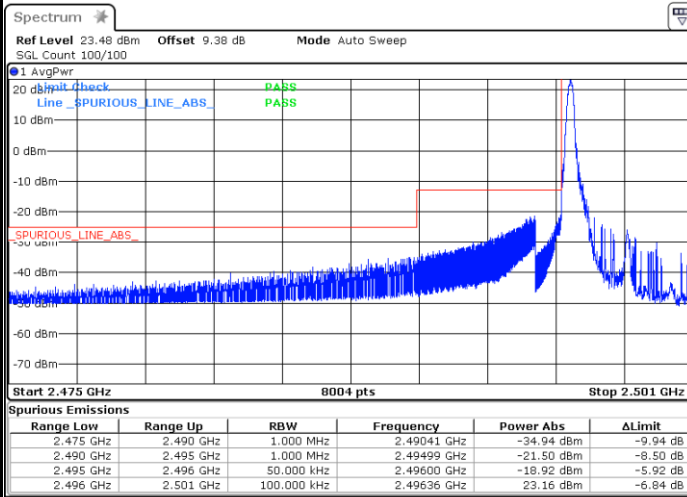




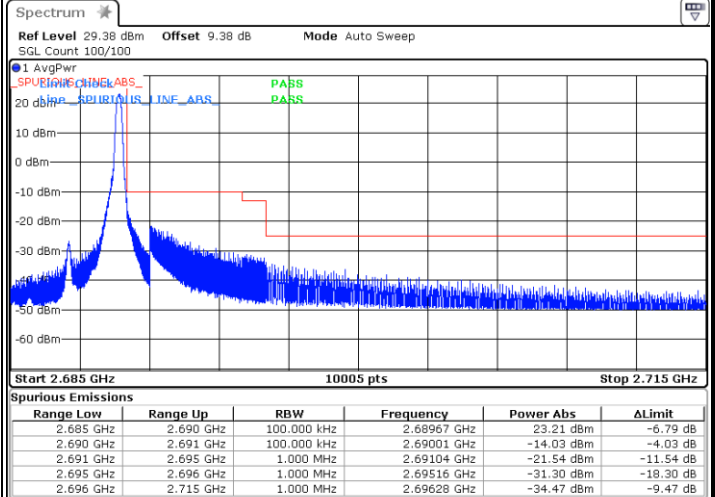
Conducted Band Edge

LTE Band 41 / 5MHz / QPSK

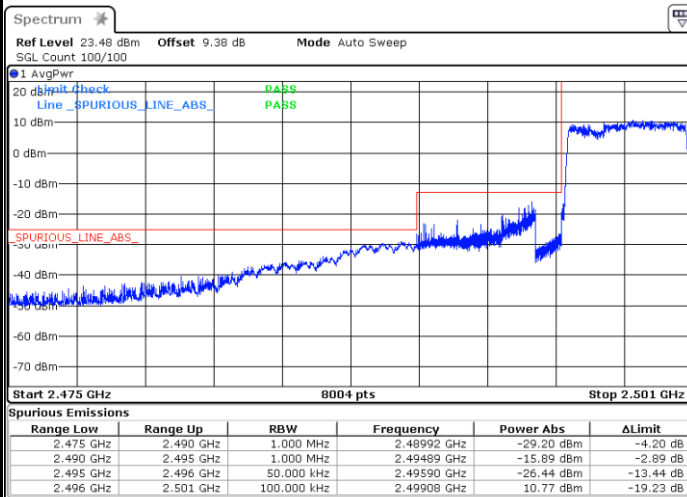
Lowest Band Edge / 1 RB



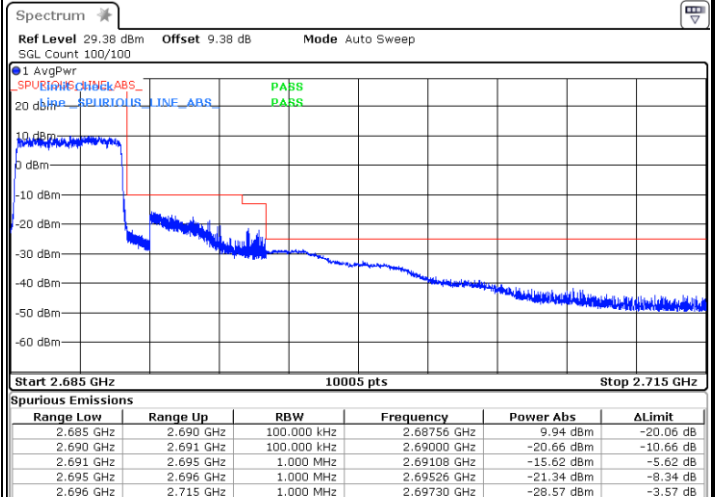
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



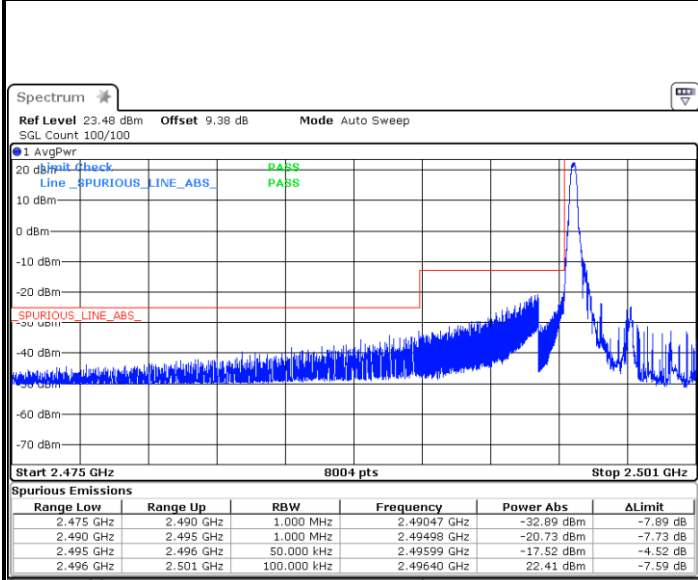
Highest Band Edge / Full RB





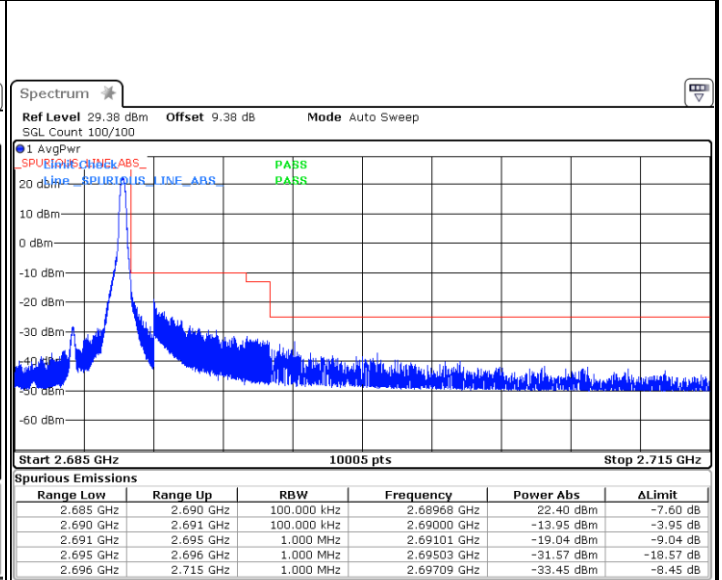
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



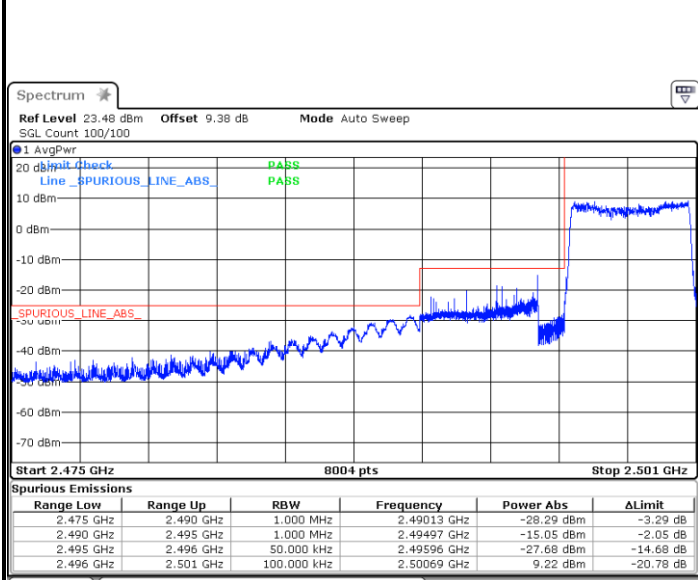
Date: 11.DEC.2020 09:51:46

Highest Band Edge / 1 RB



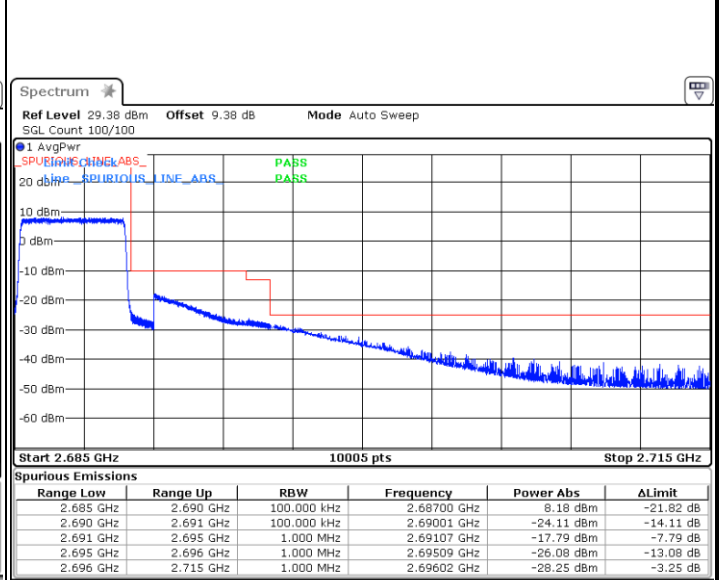
Date: 11.DEC.2020 10:08:07

Lowest Band Edge / Full RB



Date: 11.DEC.2020 09:58:16

Highest Band Edge / Full RB

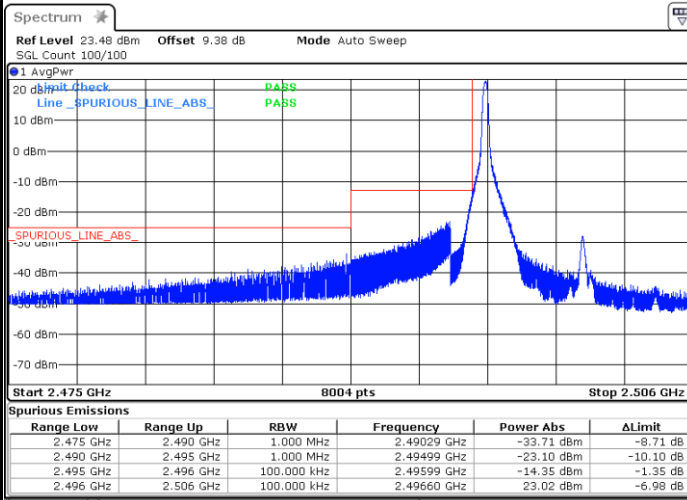


Date: 11.DEC.2020 10:12:26



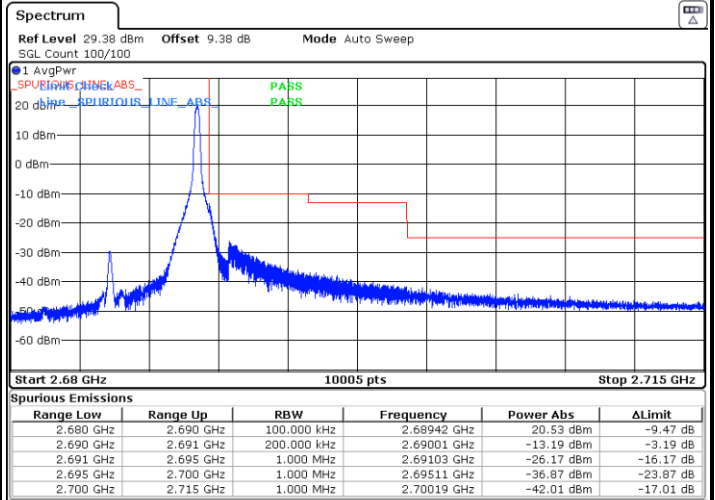
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



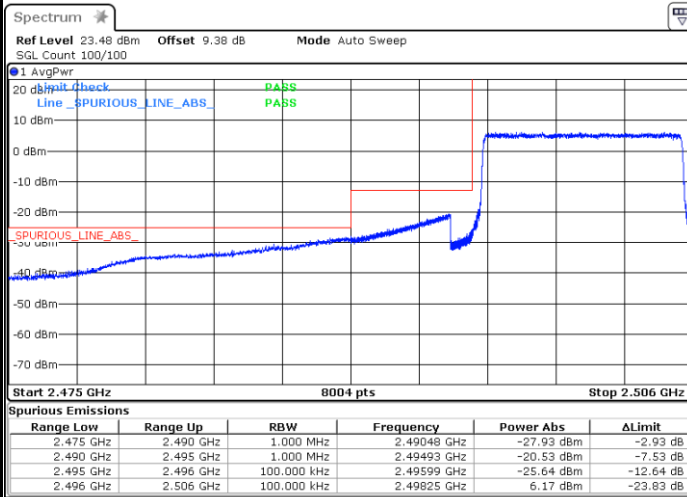
Date: 11.DEC.2020 10:22:57

Highest Band Edge / 1 RB



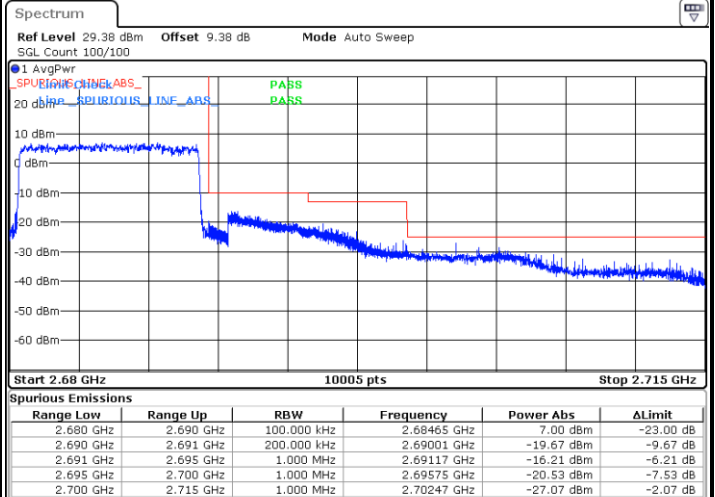
Date: 2.FEB.2021 13:35:49

Lowest Band Edge / Full RB



Date: 11.DEC.2020 10:26:07

Highest Band Edge / Full RB

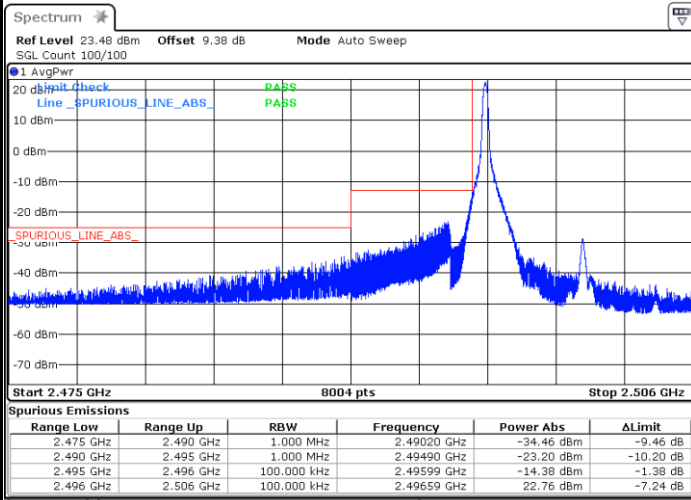


Date: 11.DEC.2020 10:27:02



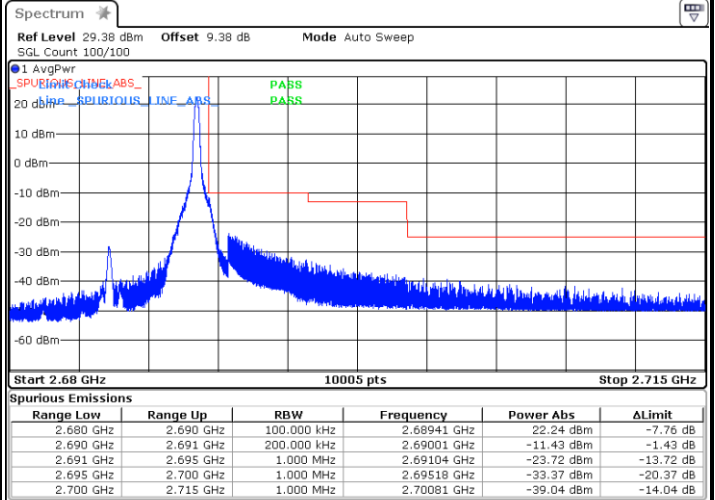
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



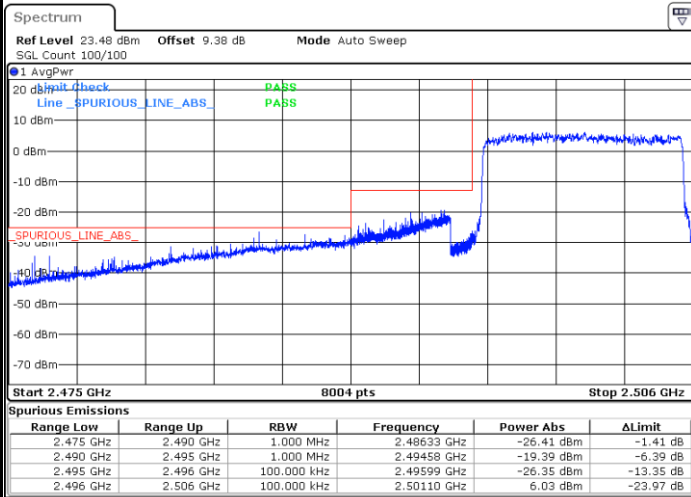
Date: 11.DEC.2020 10:24:19

Highest Band Edge / 1 RB



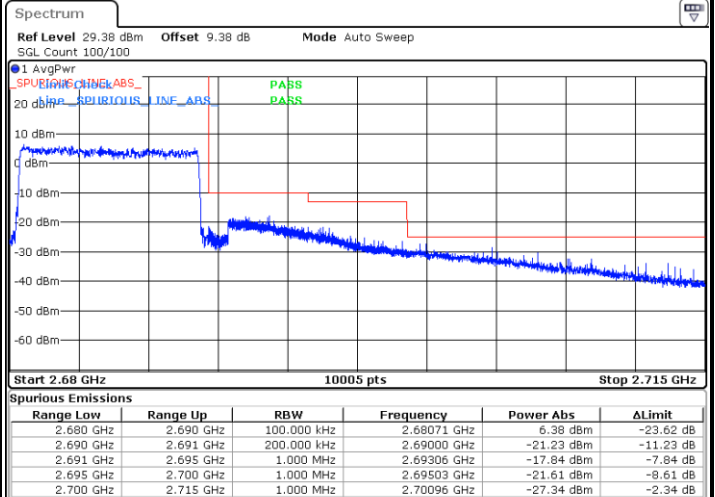
Date: 11.DEC.2020 10:32:14

Lowest Band Edge / Full RB



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

Highest Band Edge / Full RB

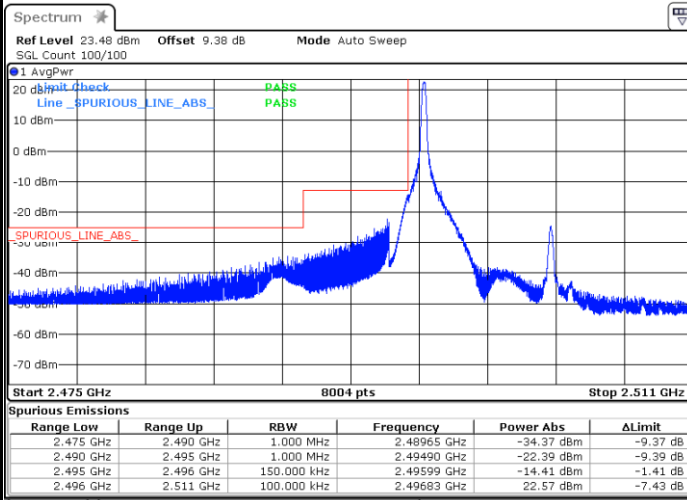


Date: 11.DEC.2020 10:27:22



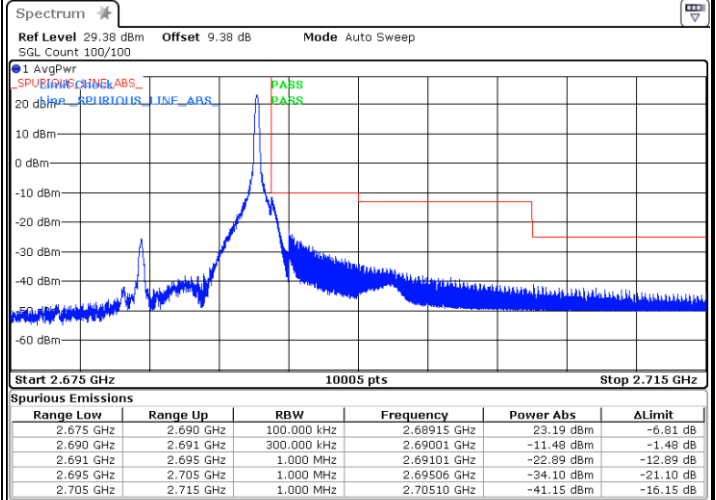
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



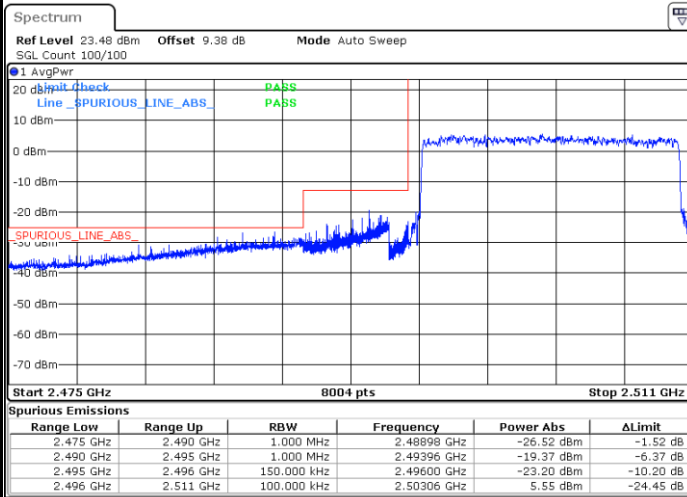
Date: 11.DEC.2020 11:16:06

Highest Band Edge / 1 RB



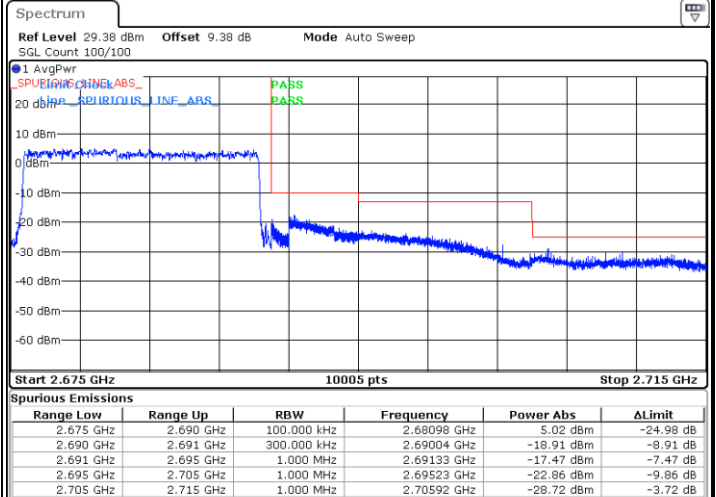
Date: 11.DEC.2020 11:25:15

Lowest Band Edge / Full RB



Date: 11.DEC.2020 11:20:15

Highest Band Edge / Full RB

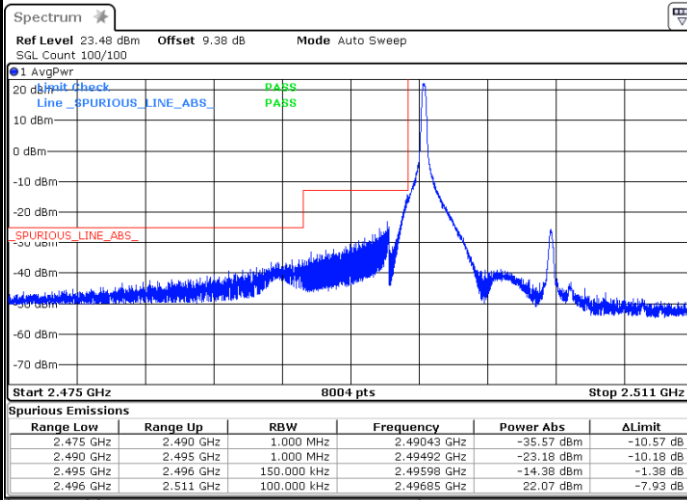


Date: 11.DEC.2020 11:20:59



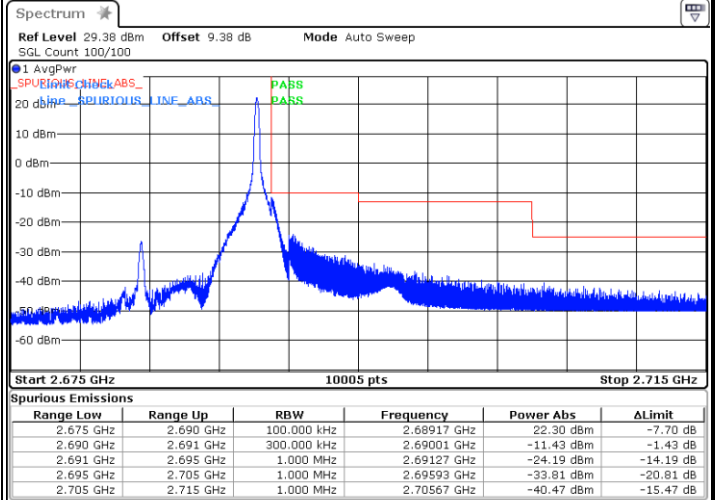
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



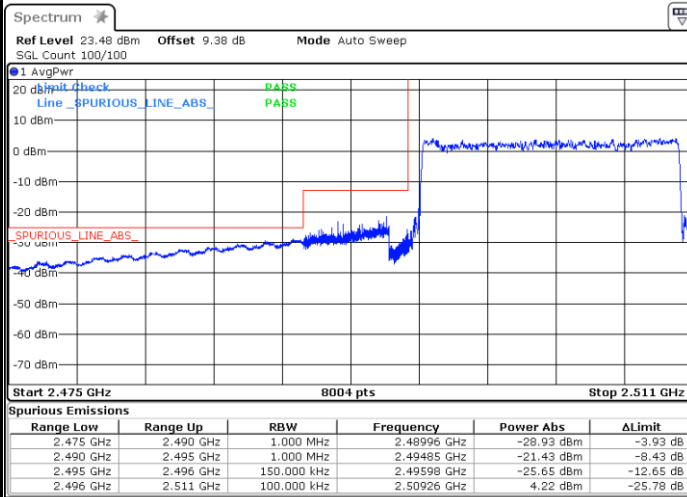
Date: 11.DEC.2020 11:18:52

Highest Band Edge / 1 RB



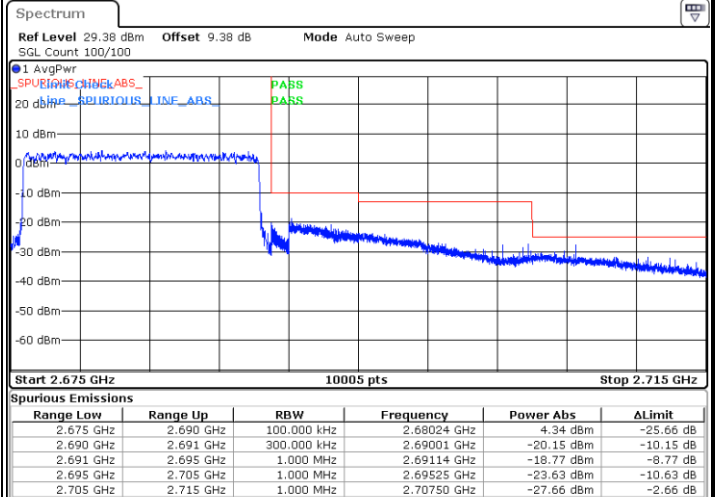
Date: 11.DEC.2020 11:23:21

Lowest Band Edge / Full RB



Date: 11.DEC.2020 11:19:53

Highest Band Edge / Full RB

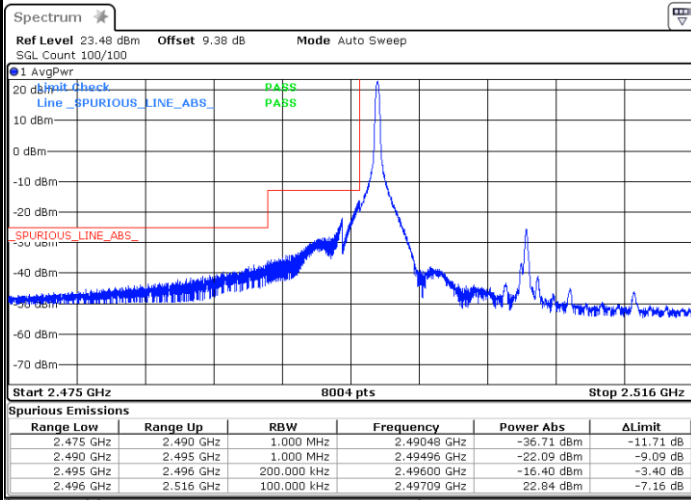


Date: 11.DEC.2020 11:21:20



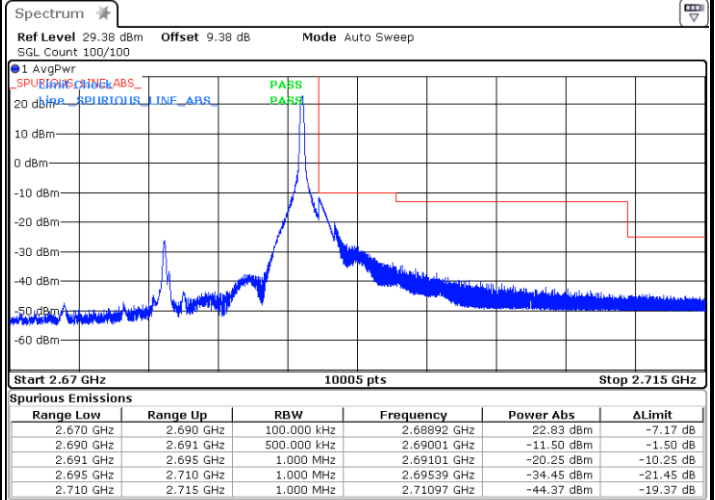
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



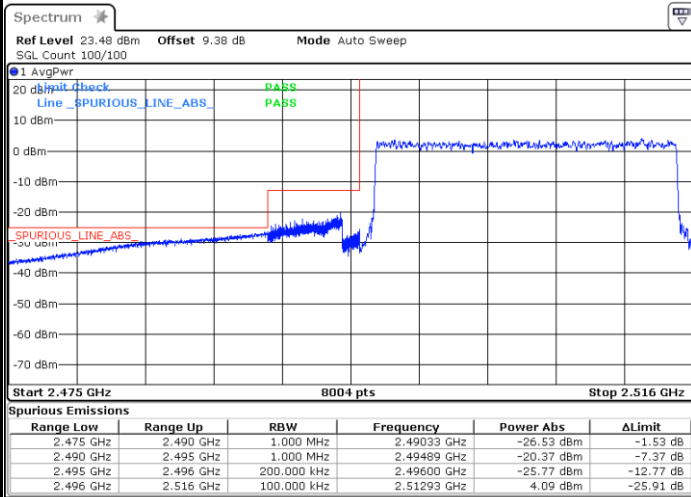
Date: 11.DEC.2020 11:47:31

Highest Band Edge / 1 RB



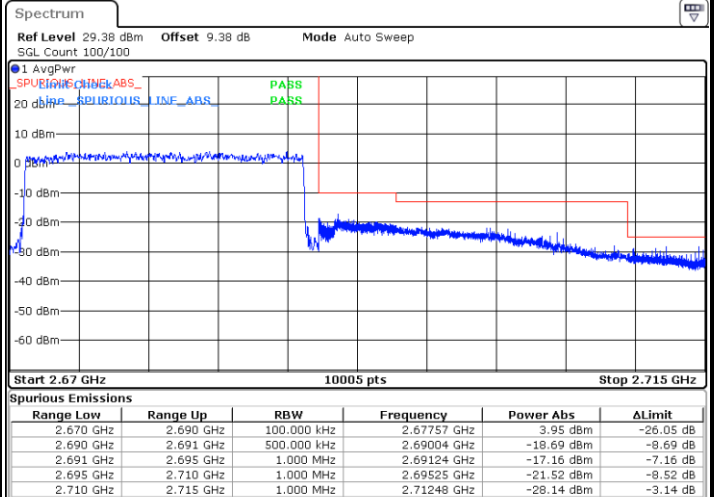
Date: 11.DEC.2020 11:40:20

Lowest Band Edge / Full RB



Date: 11.DEC.2020 11:52:25

Highest Band Edge / Full RB

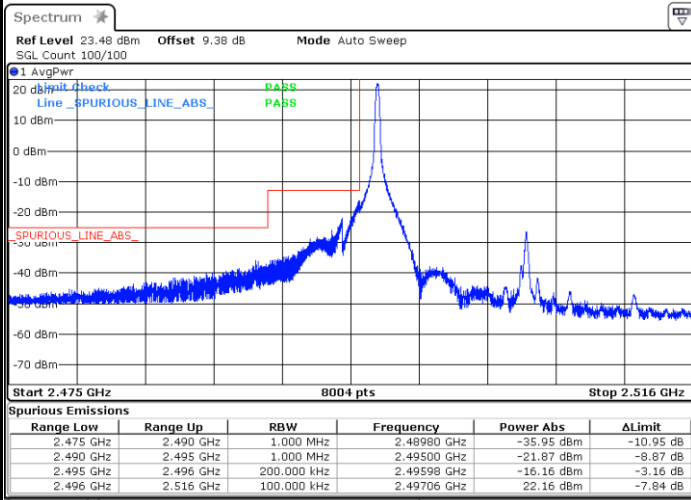


Date: 11.DEC.2020 11:45:02



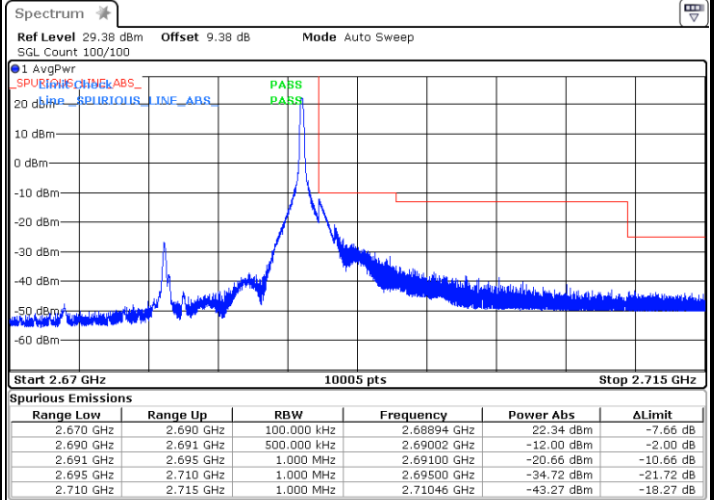
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



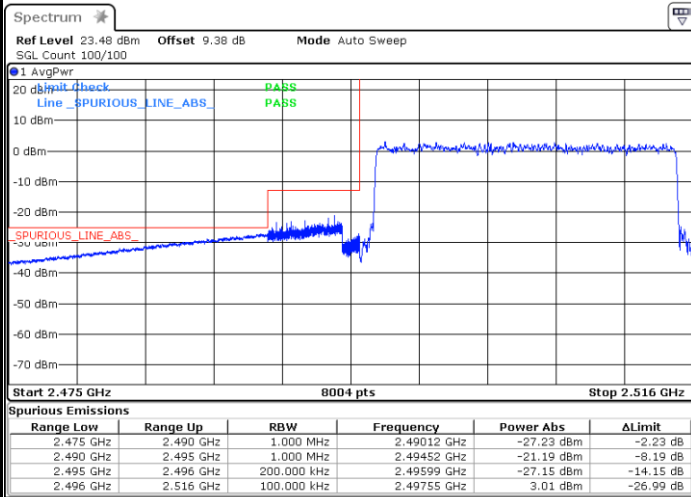
Date: 11.DEC.2020 11:50:23

Highest Band Edge / 1 RB



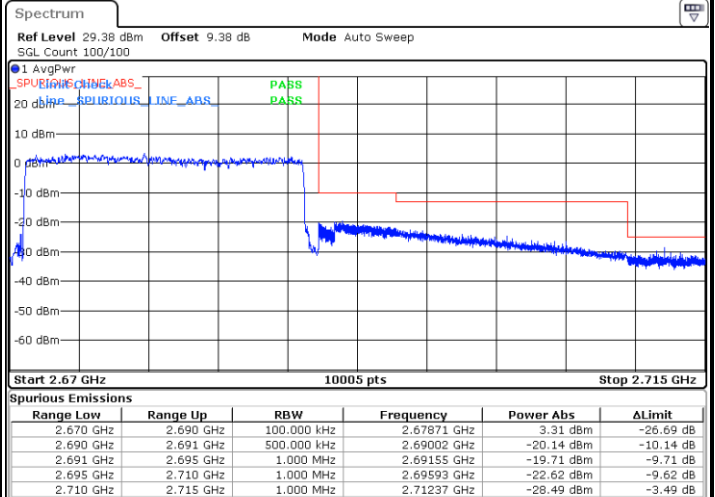
Date: 11.DEC.2020 11:43:44

Lowest Band Edge / Full RB



Date: 11.DEC.2020 11:51:40

Highest Band Edge / Full RB



Date: 11.DEC.2020 11:44:42

