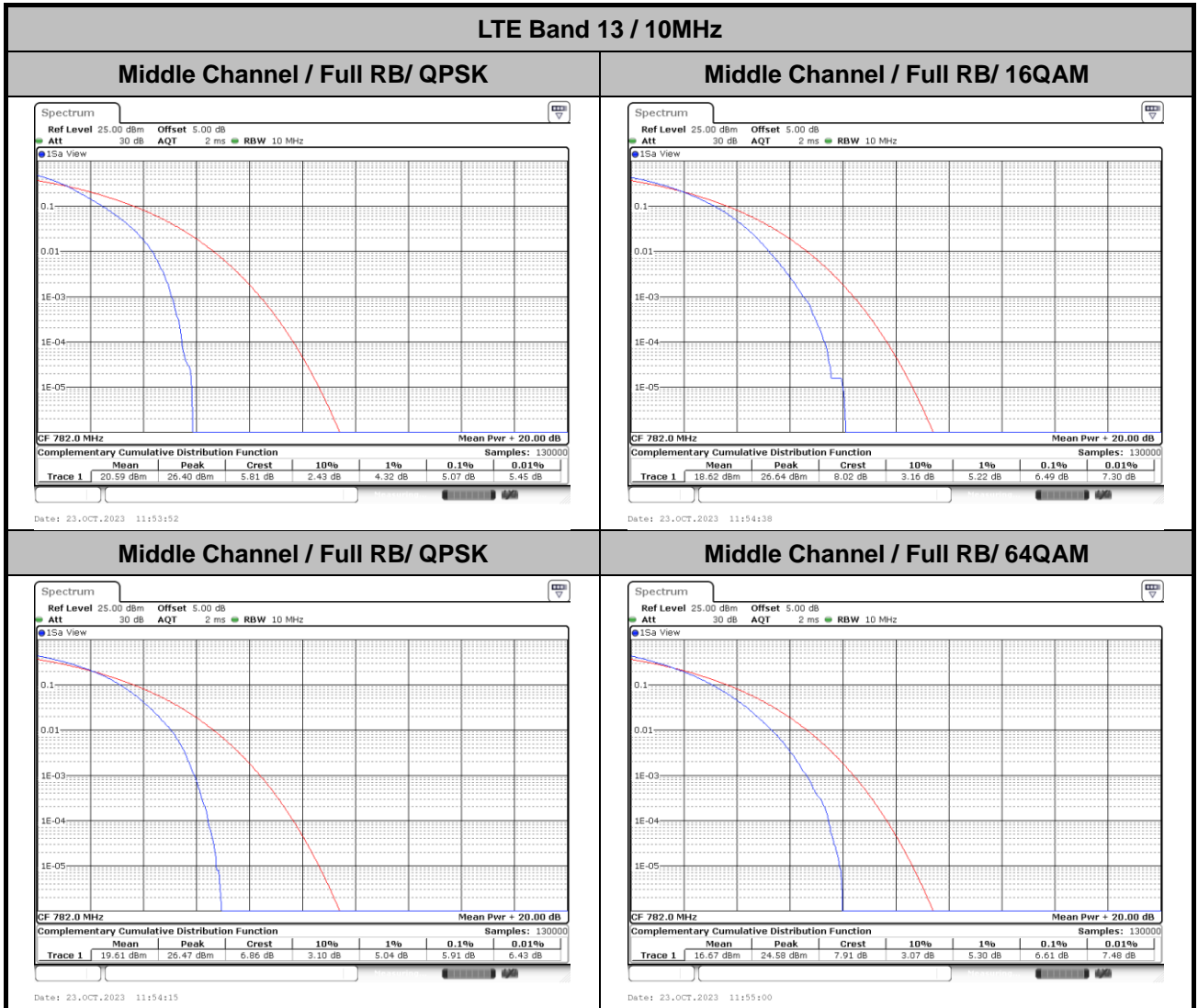




LTE Band 13

Peak-to-Average Ratio

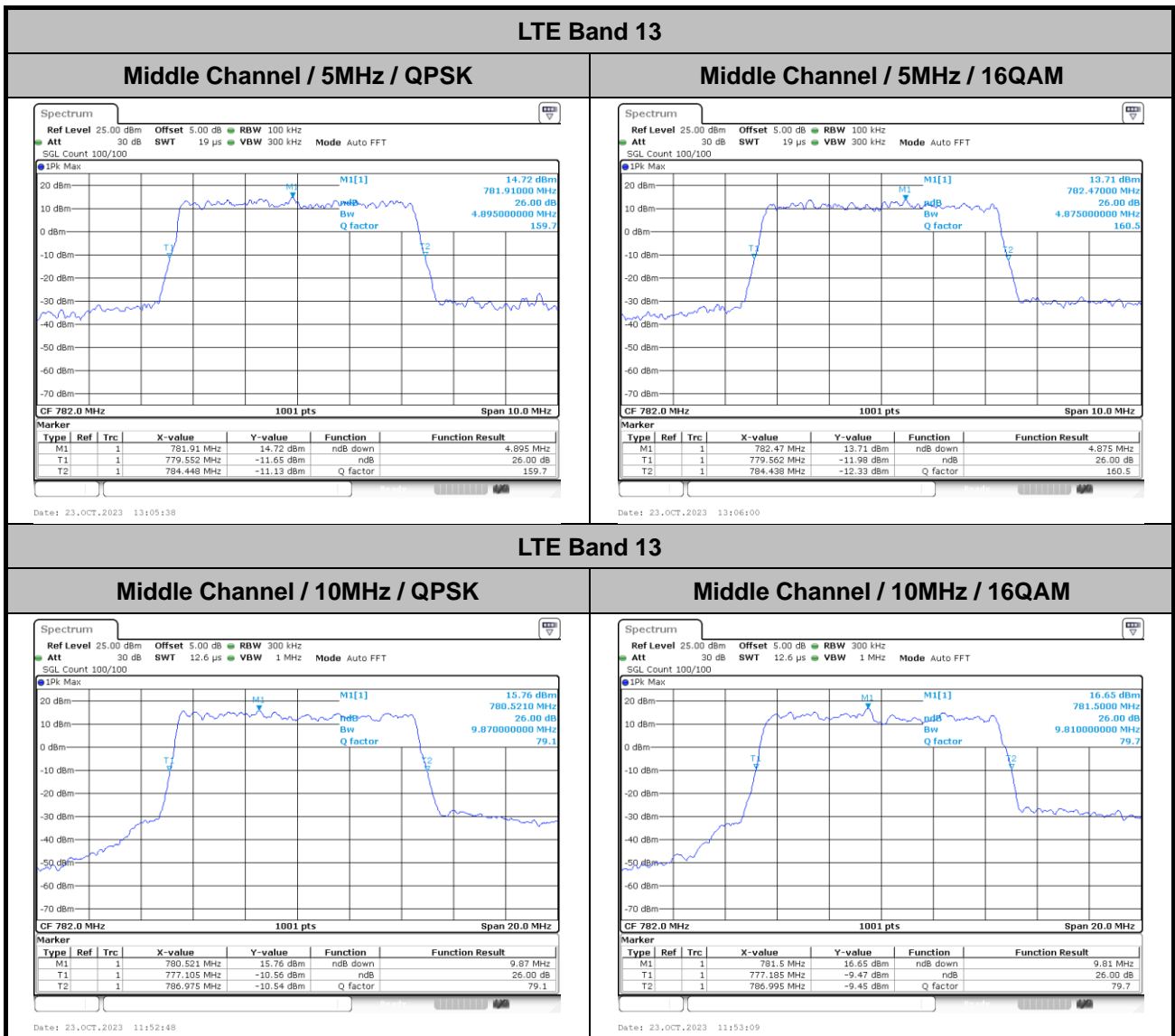
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.07	5.91	6.49	6.61	PASS





26dB Bandwidth

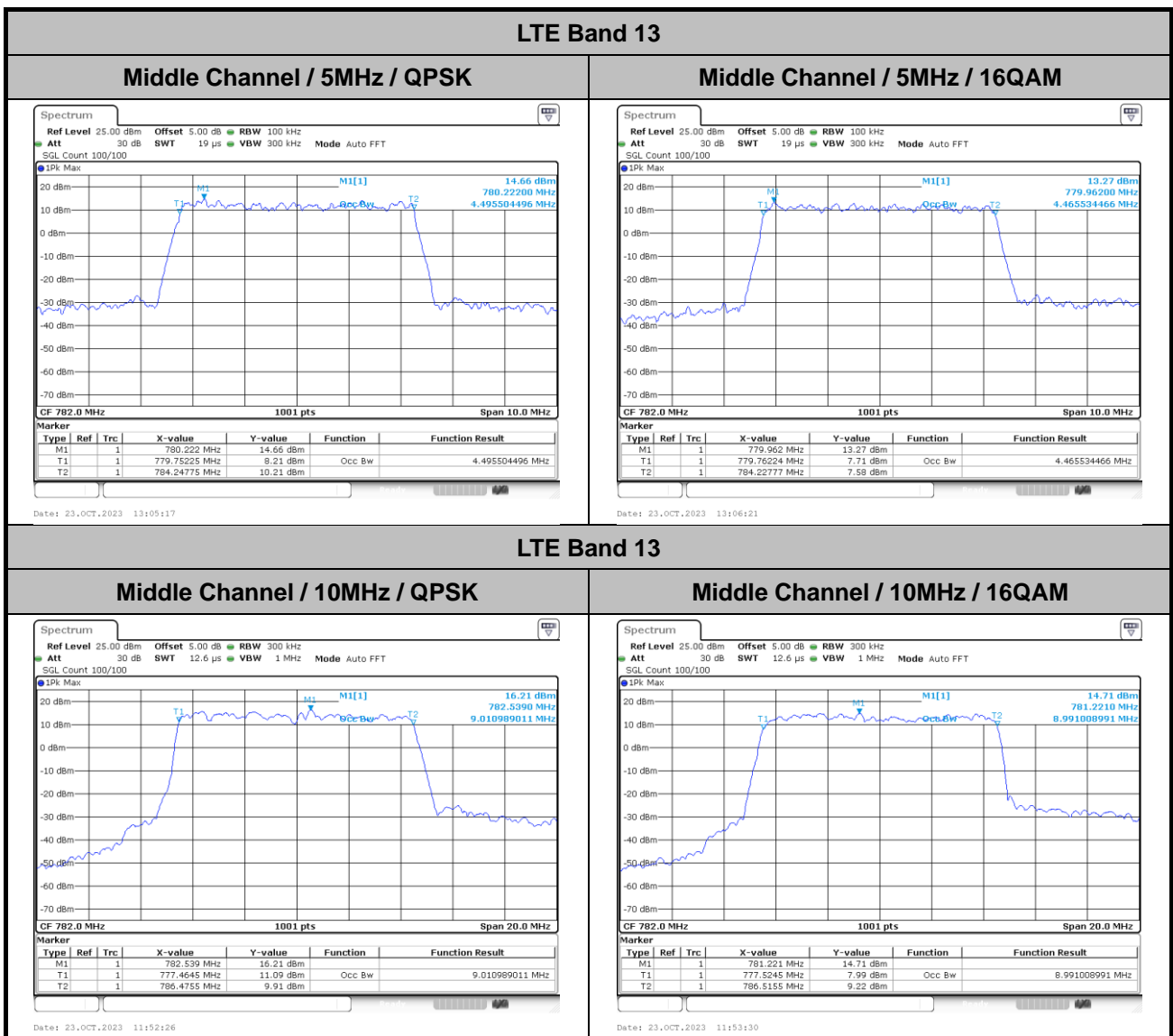
Mode		LTE Band 13 : 26dB BW(MHz)	
BW		5MHz	
Mod.	QPSK		16QAM
Middle CH	4.89		4.88
BW		10MHz	
Mod.	QPSK		16QAM
Middle CH	9.87		9.81





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.47
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	8.99

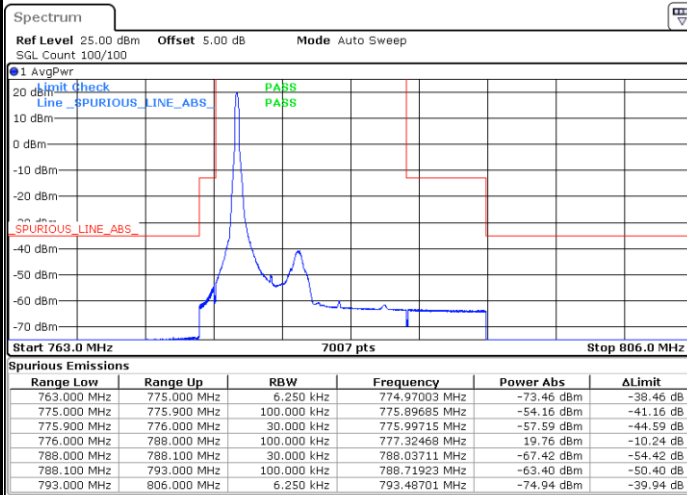




Conducted Band Edge

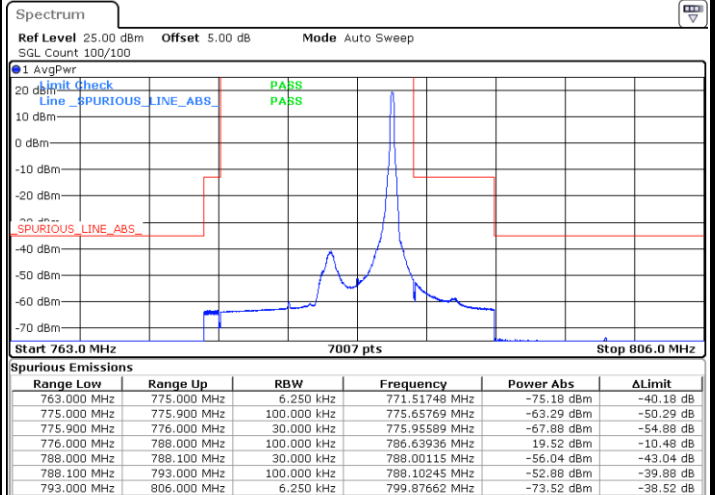
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



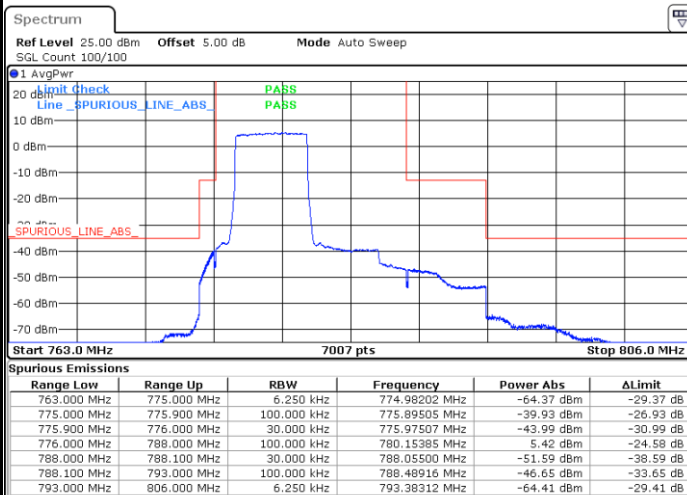
Date: 23.OCT.2023 10:56:54

Highest Band Edge / 1 RB



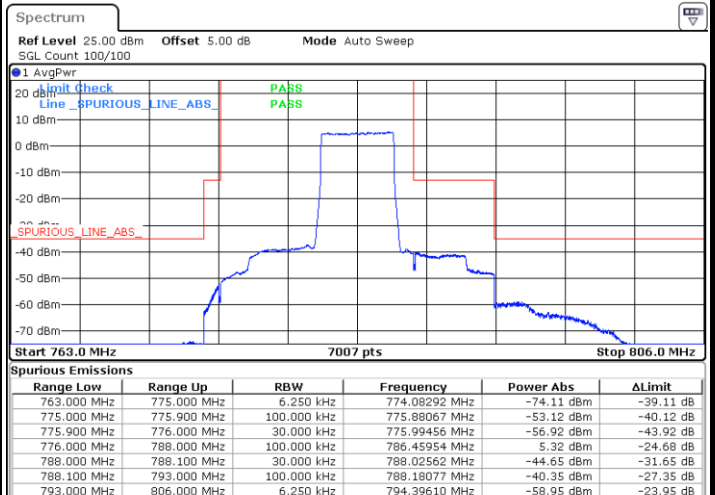
Date: 23.OCT.2023 11:15:43

Lowest Band Edge / Full RB



Date: 23.OCT.2023 11:04:19

Highest Band Edge / Full RB

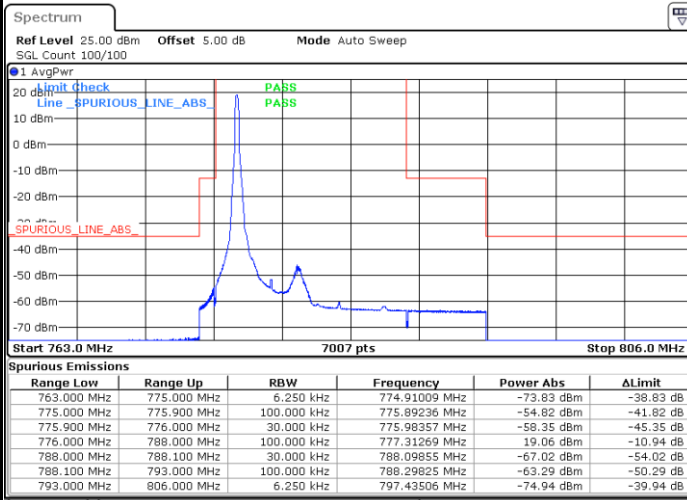


Date: 23.OCT.2023 11:23:07



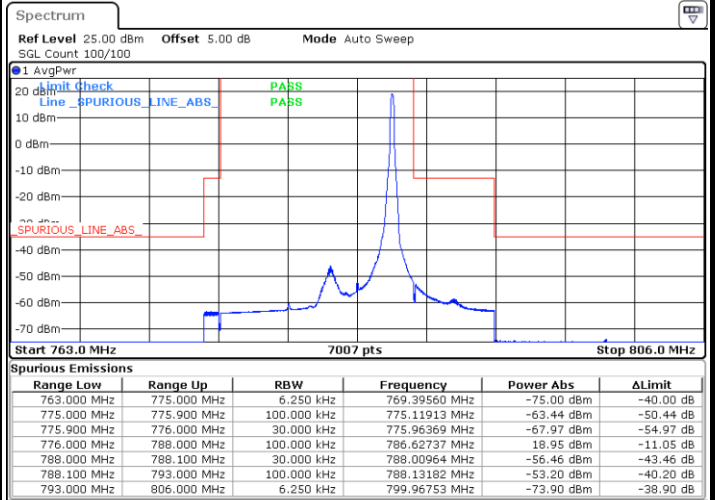
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



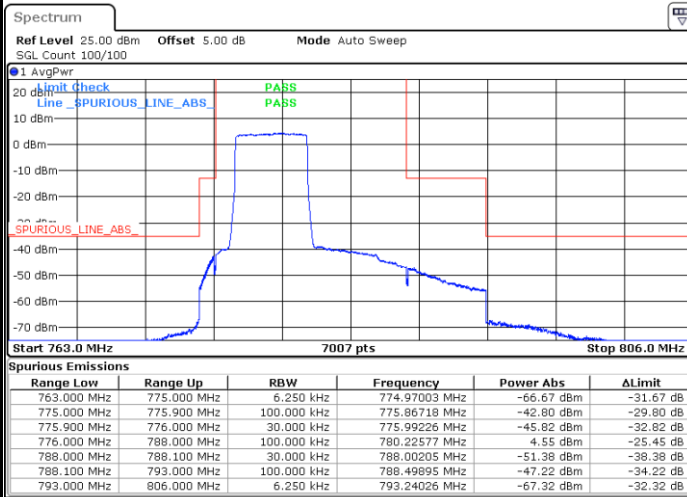
Date: 23.OCT.2023 10:58:45

Highest Band Edge / 1 RB



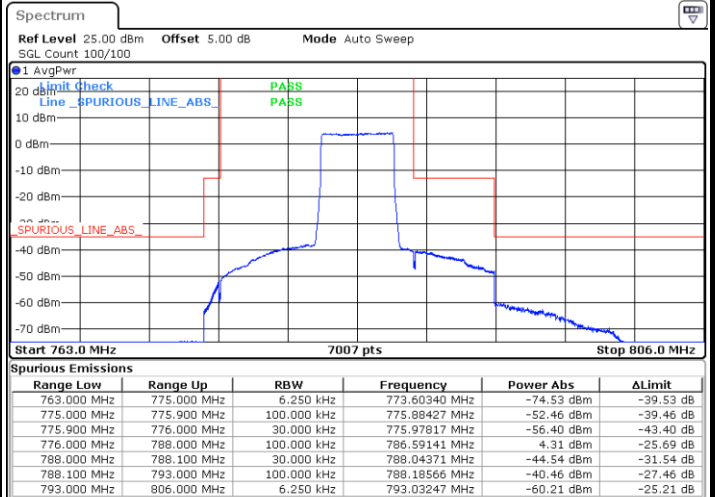
Date: 23.OCT.2023 11:17:34

Lowest Band Edge / Full RB



Date: 23.OCT.2023 11:06:10

Highest Band Edge / Full RB

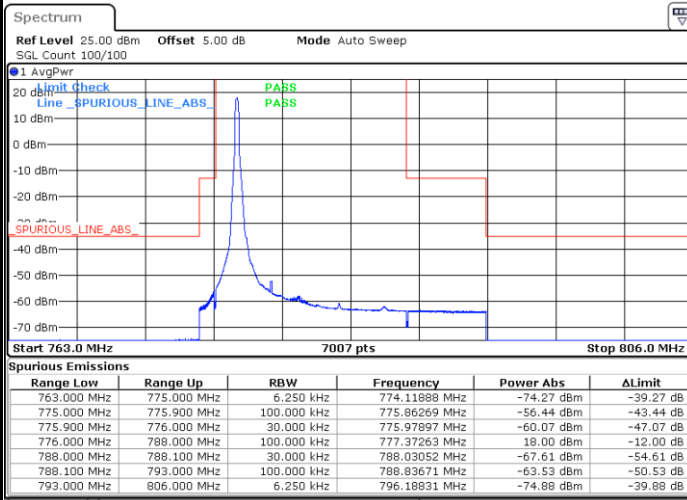


Date: 23.OCT.2023 11:24:58

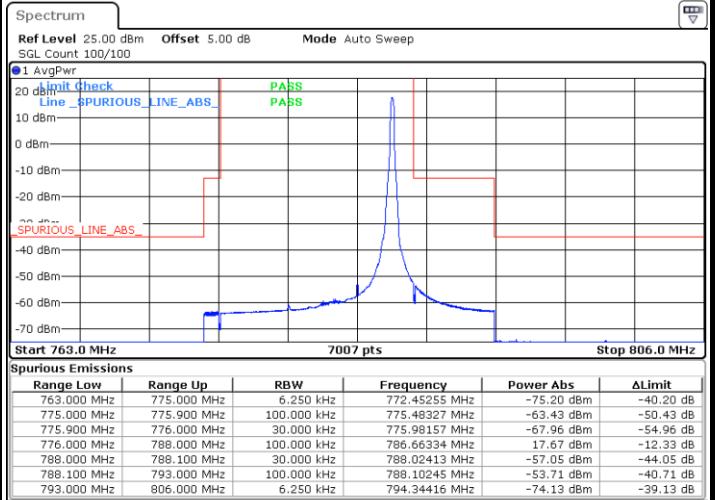


LTE Band 13 / 5MHz / 64QAM

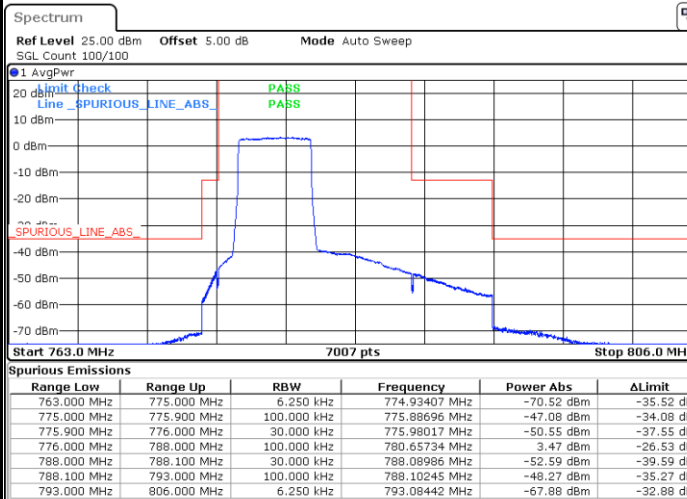
Lowest Band Edge / 1RB



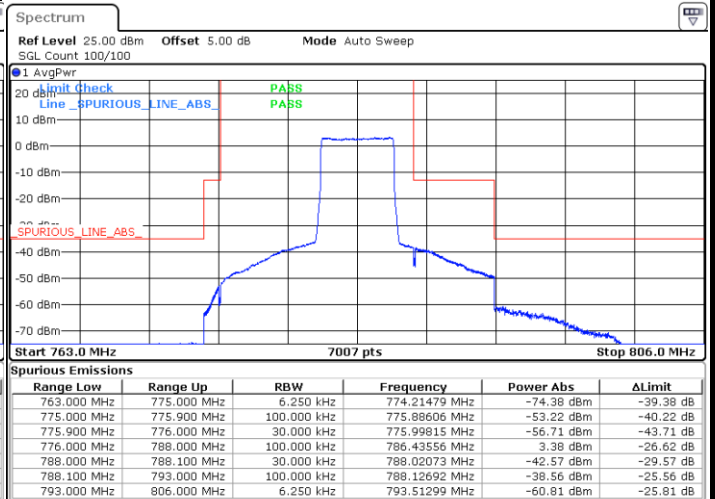
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



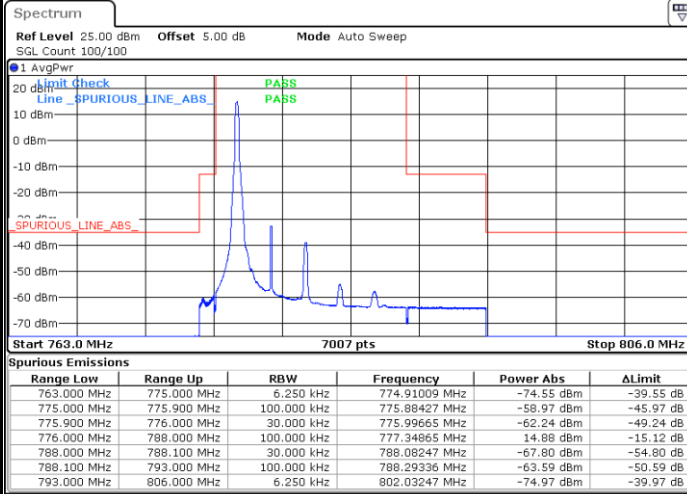
Highest Band Edge / Full RB





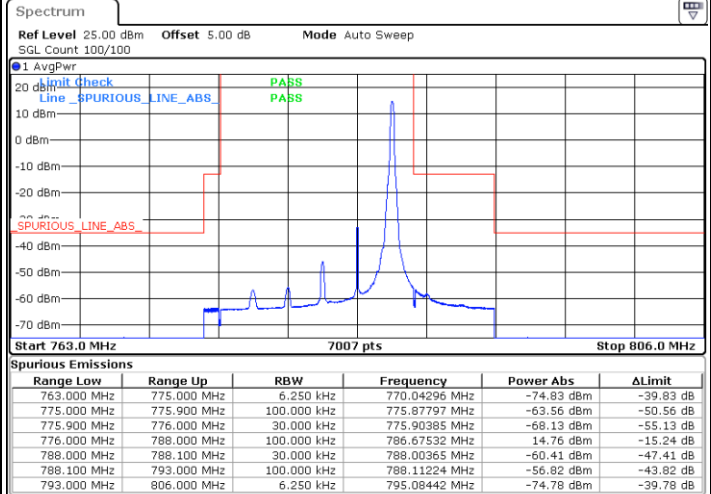
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB



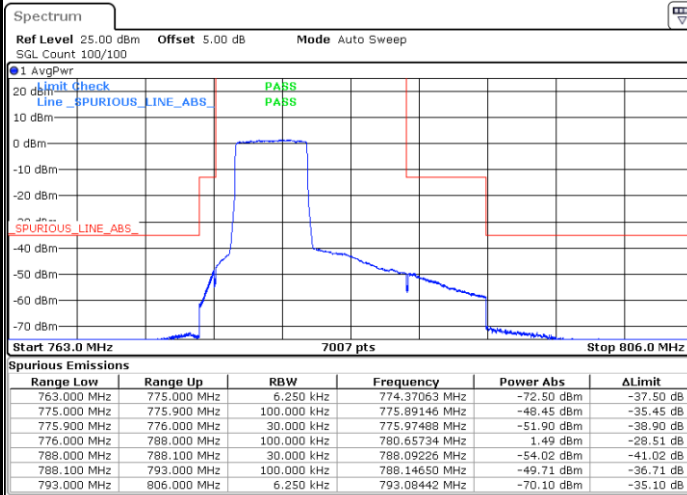
Date: 23.OCT.2023 11:02:28

Highest Band Edge / 1 RB



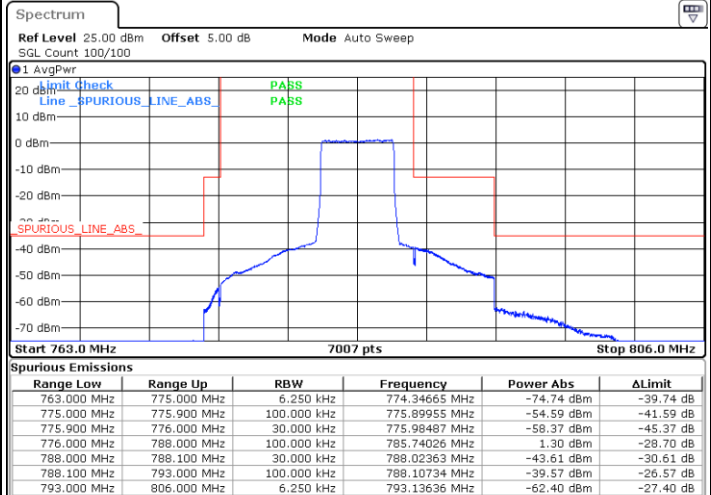
Date: 23.OCT.2023 11:21:16

Lowest Band Edge / Full RB



Date: 23.OCT.2023 11:09:53

Highest Band Edge / Full RB

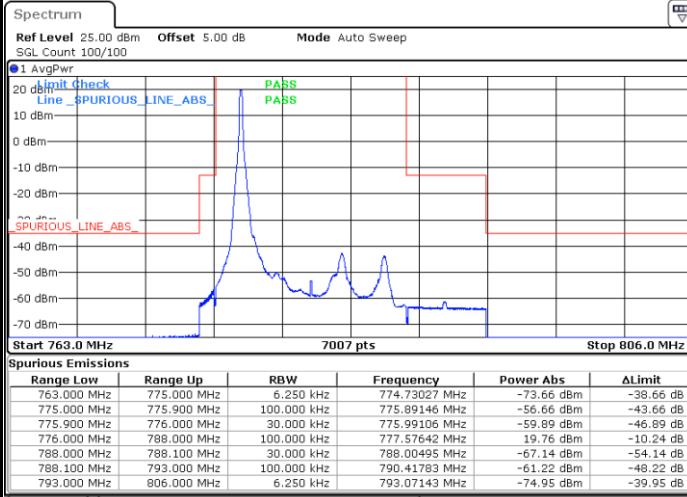


Date: 23.OCT.2023 11:28:40



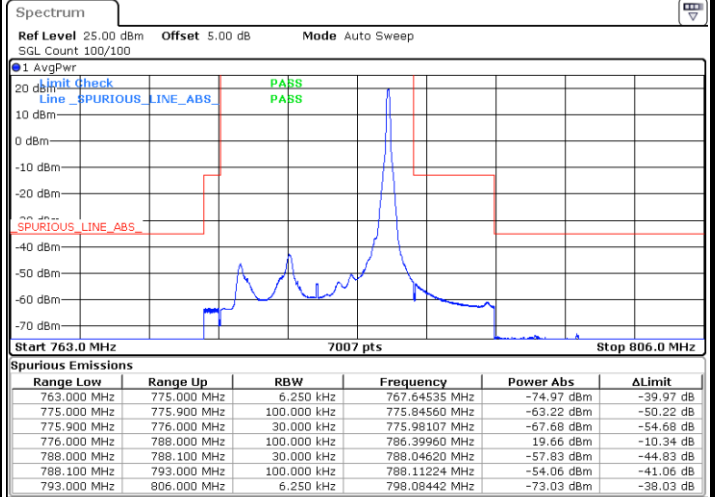
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



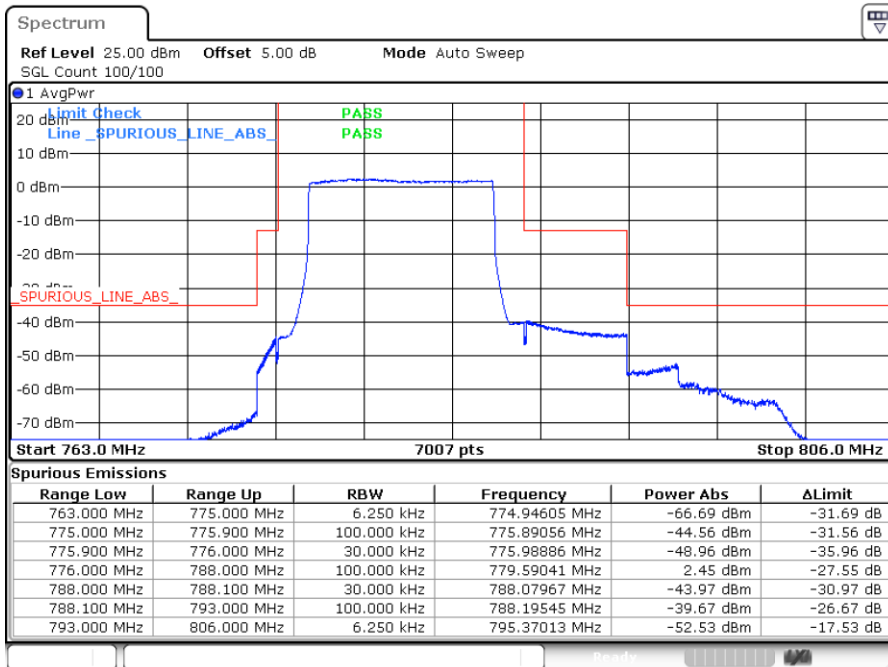
Date: 23.OCT.2023 11:31:55

middle Band Edge / 1 RB



Date: 23.OCT.2023 11:46:35

Middle Band Edge / Full RB

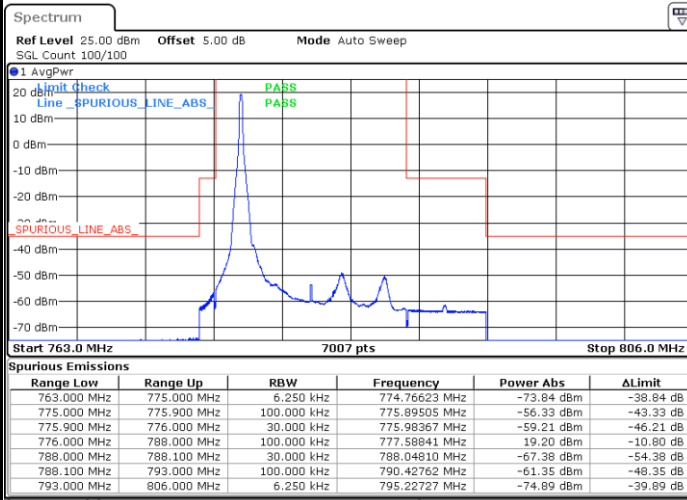


Date: 23.OCT.2023 11:39:15



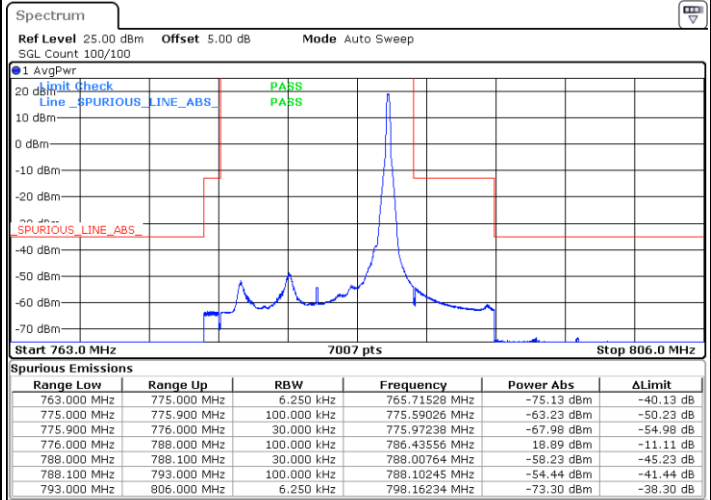
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



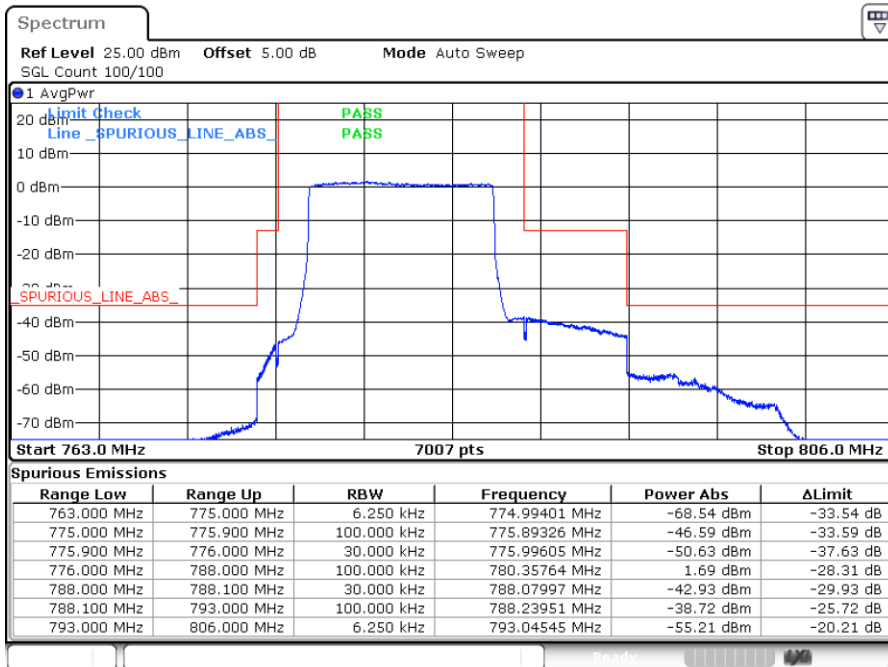
Date: 23.OCT.2023 11:33:45

middle Band Edge / 1 RB



Date: 23.OCT.2023 11:48:25

middle Band Edge / Full RB

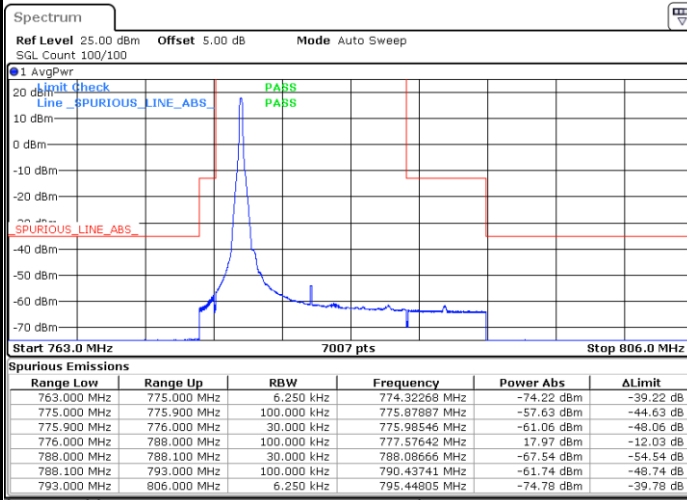


Date: 23.OCT.2023 11:41:05



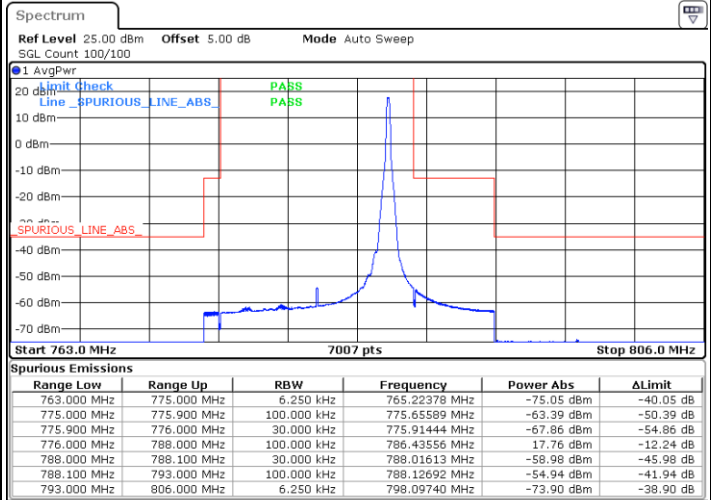
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



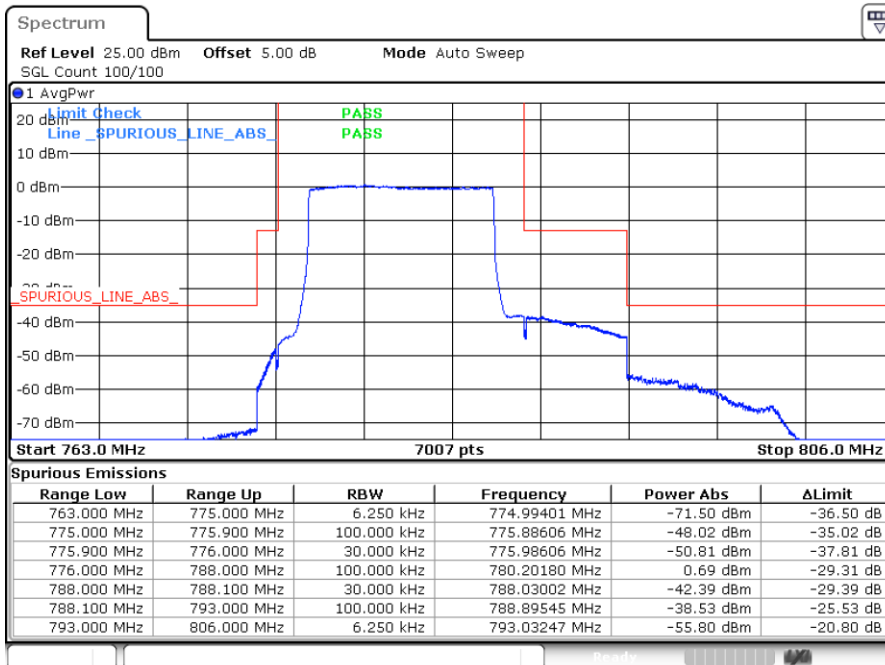
Date: 23.OCT.2023 11:35:35

middle Band Edge / 1 RB



Date: 23.OCT.2023 11:50:15

middle Band Edge / Full RB



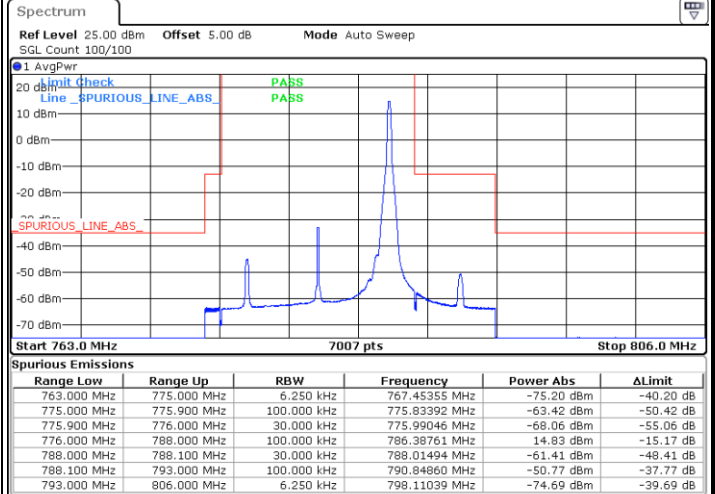
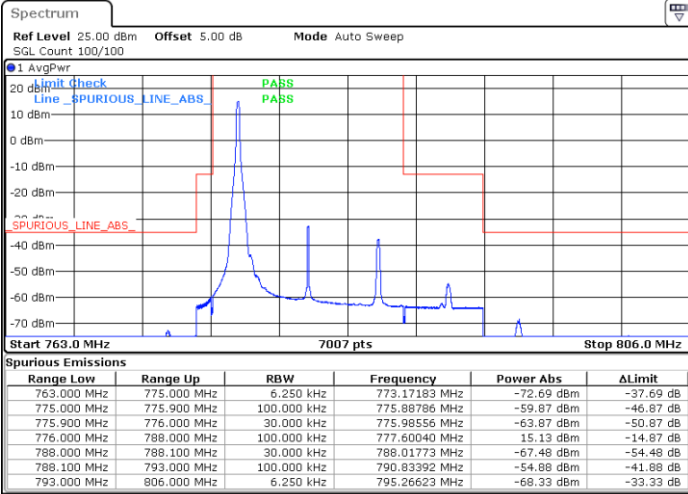
Date: 23.OCT.2023 11:42:55



LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB

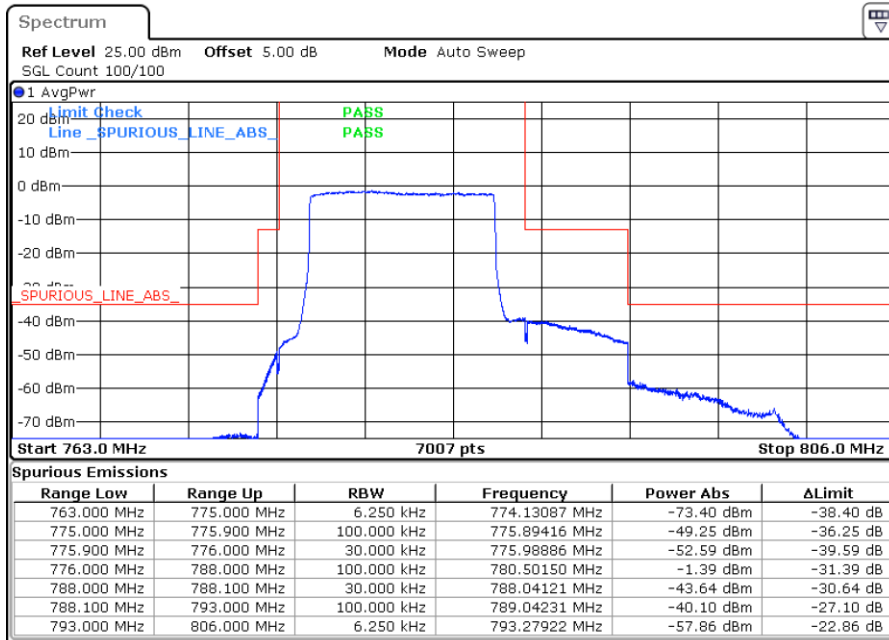
middle Band Edge / 1 RB



Date: 23.OCT.2023 11:37:25

Date: 23.OCT.2023 11:52:05

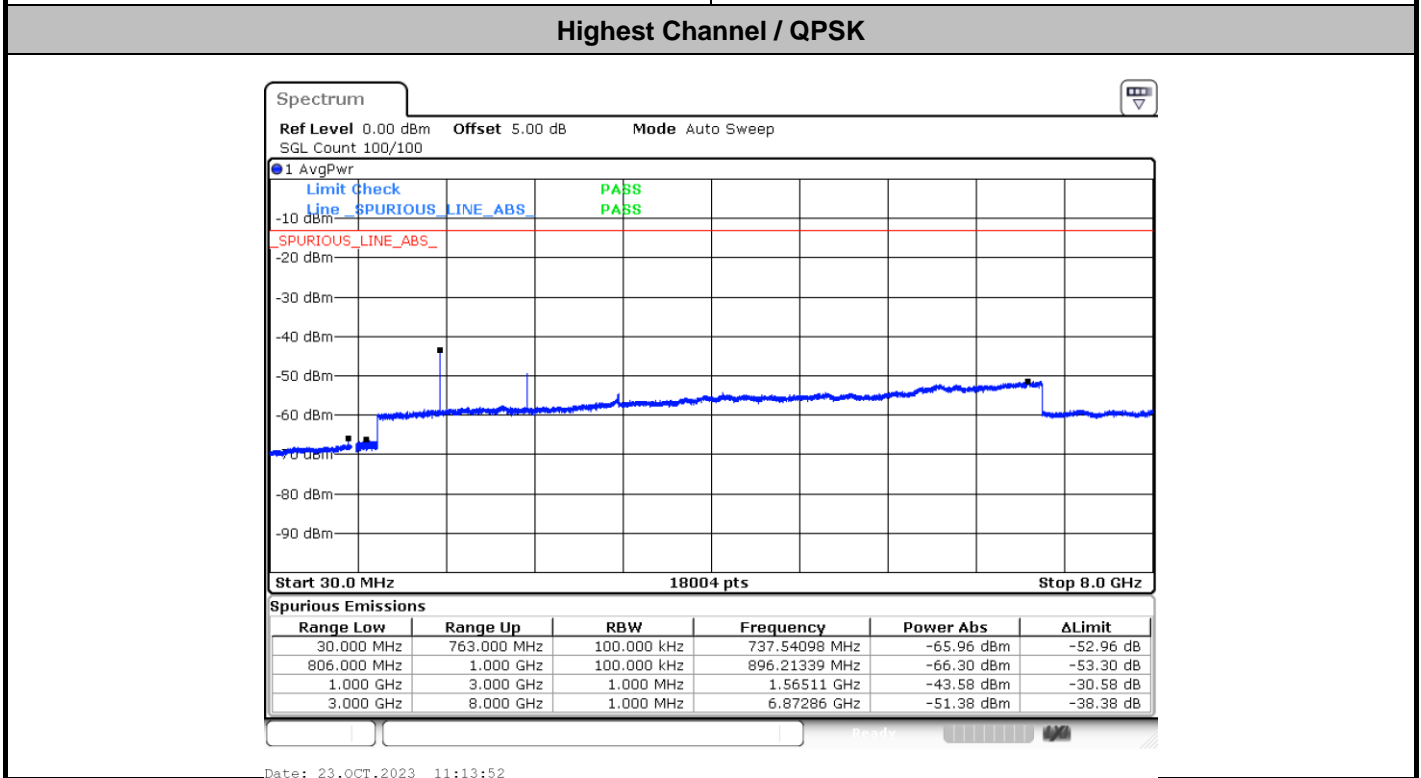
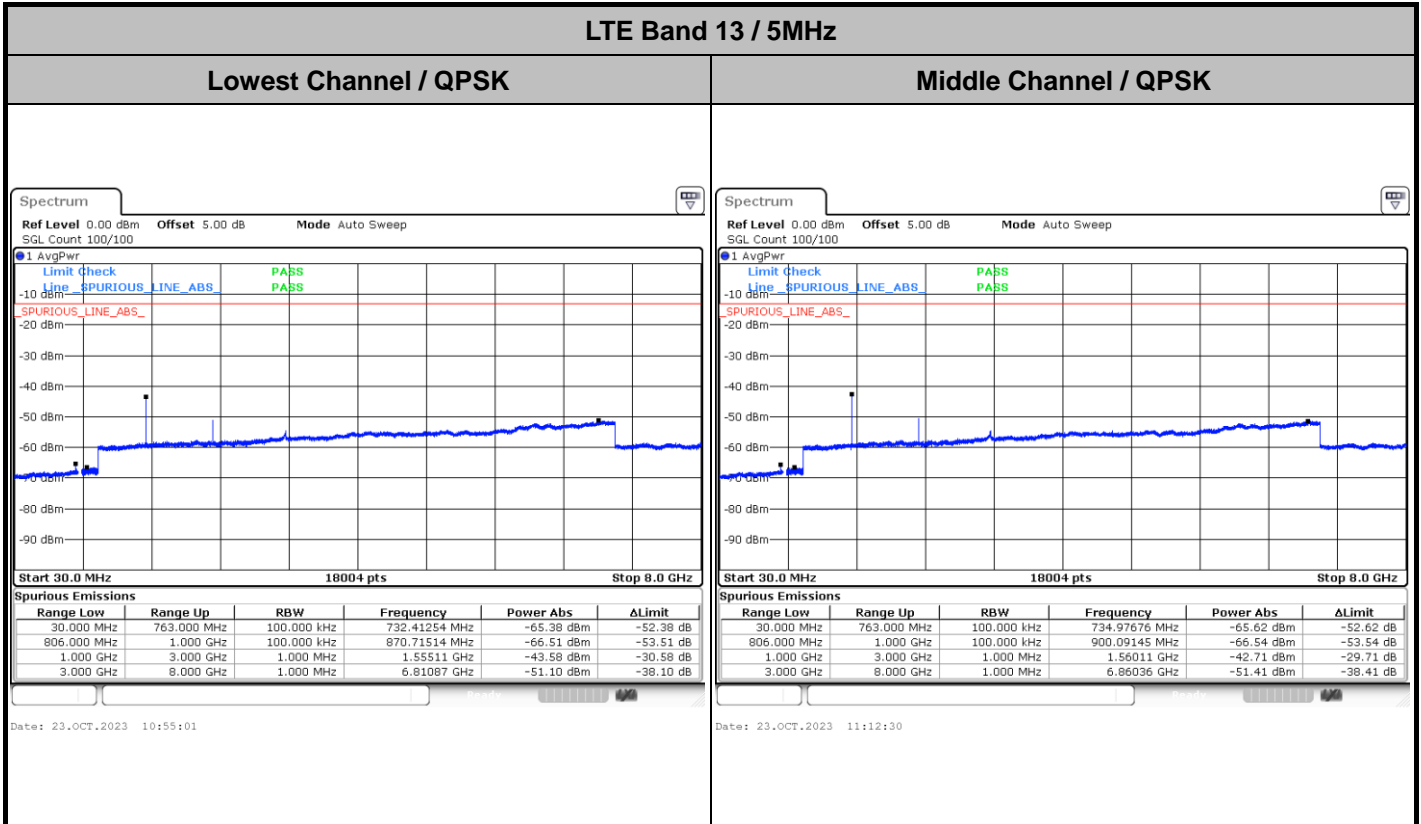
middle Band Edge / Full RB



Date: 23.OCT.2023 11:44:45



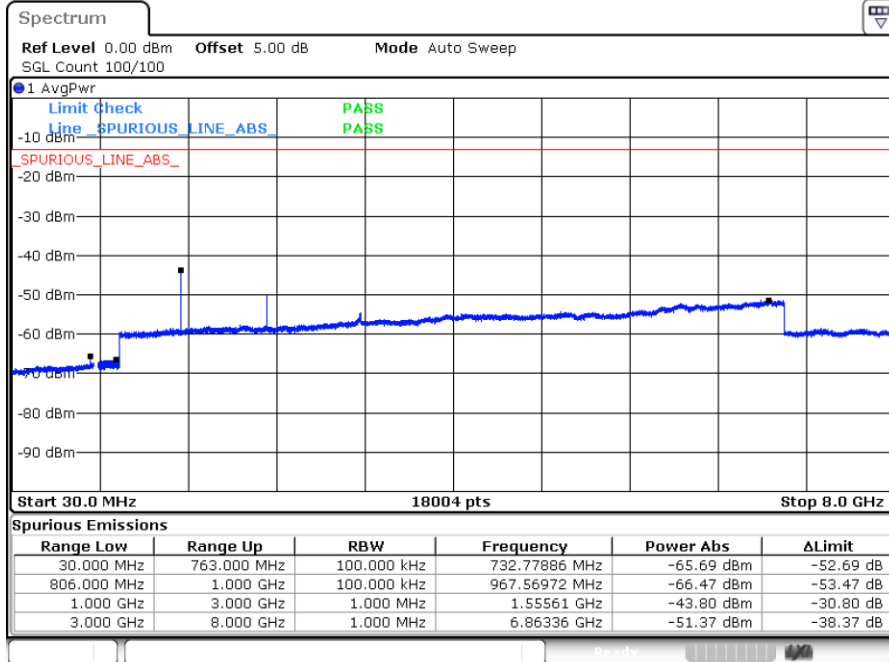
Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 23.OCT.2023 11:30:05



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	0.0005	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0052	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0018	

Note:

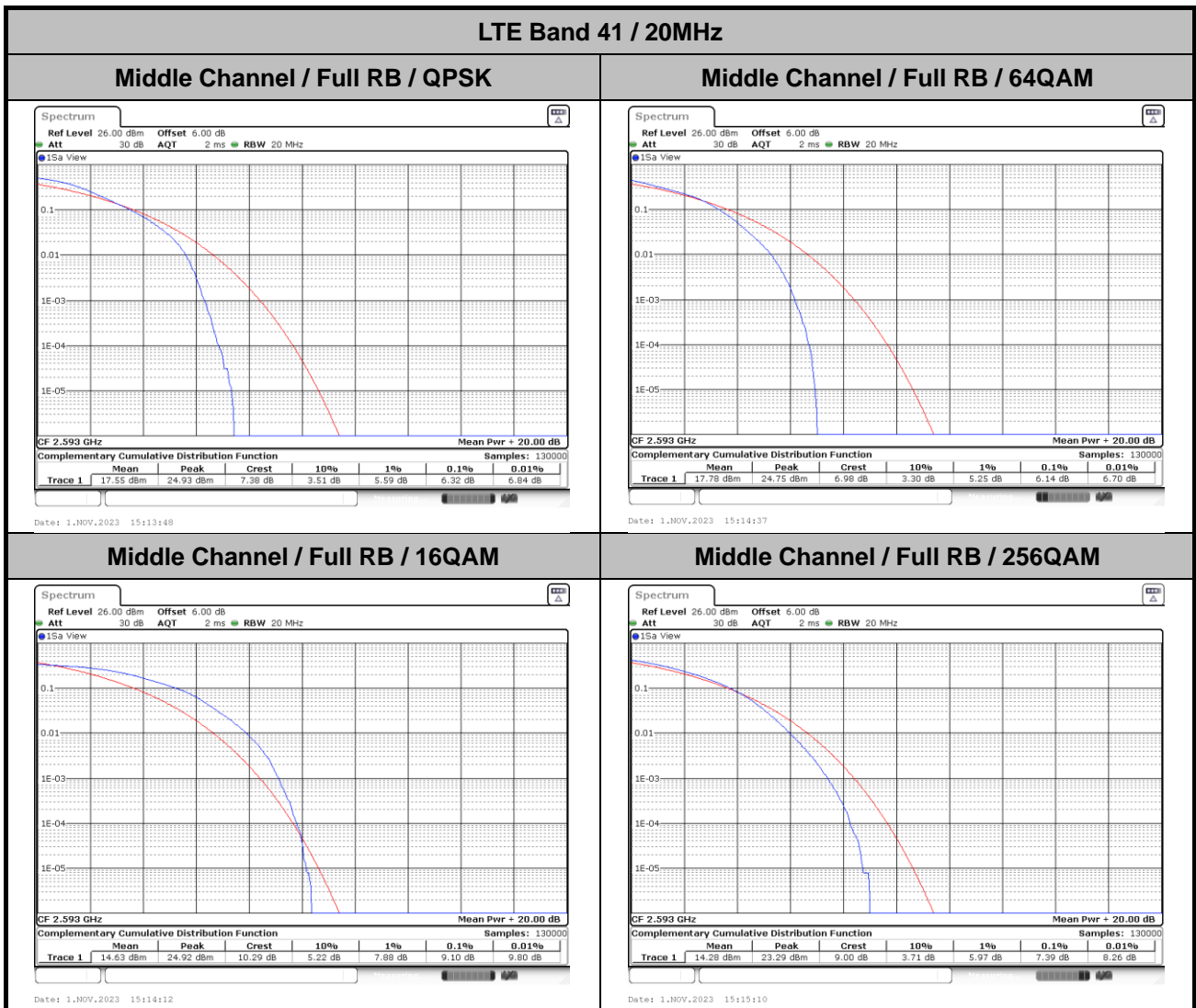
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

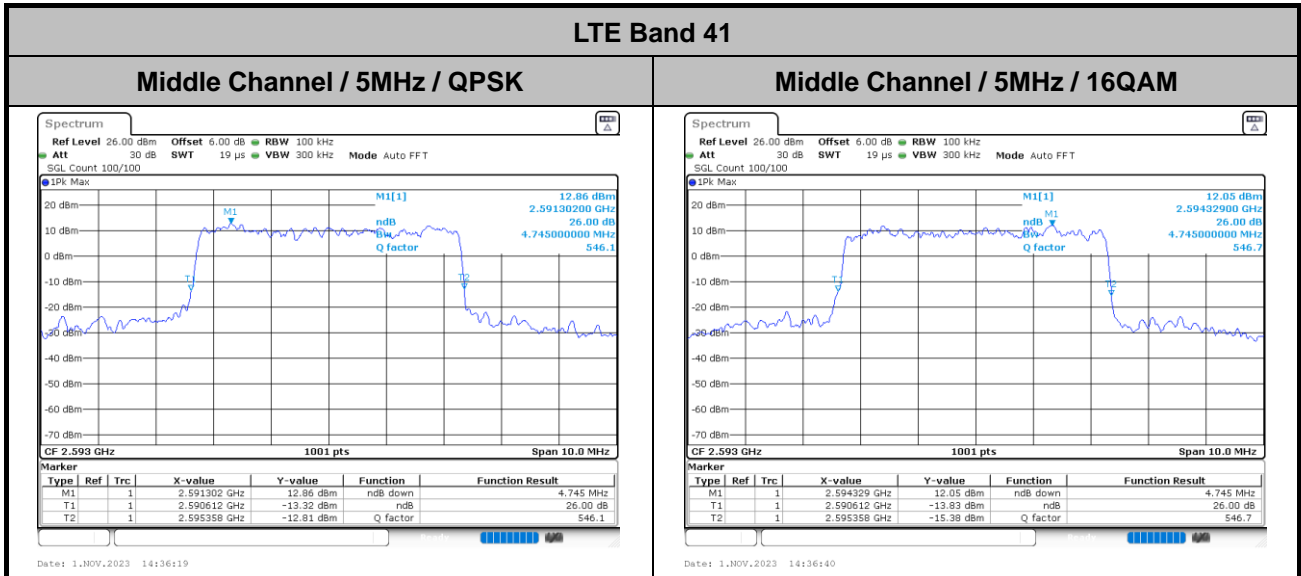
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	6.32	9.10	6.14	7.39	PASS





26dB Bandwidth

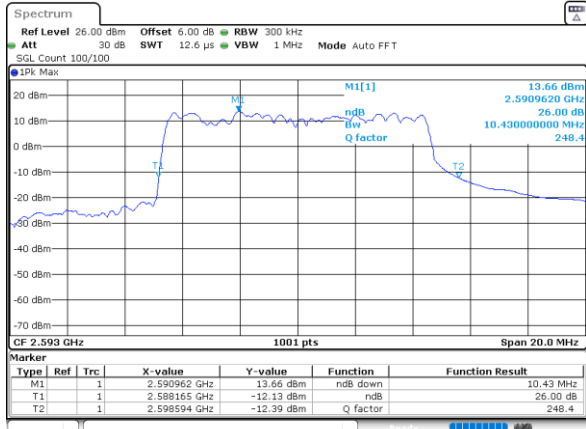
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.75	4.75
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	10.43	9.91
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.27	14.36
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.90	18.62



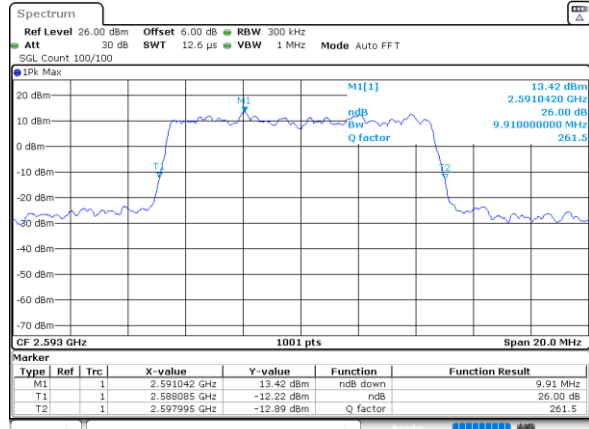


LTE Band 41

Middle Channel / 10MHz / QPSK

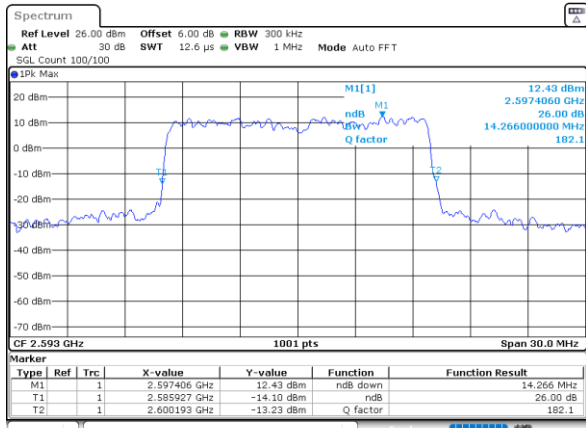


Middle Channel / 10MHz / 16QAM

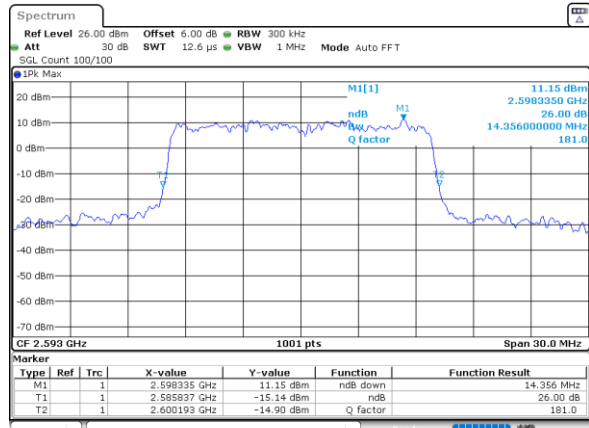


LTE Band 41

Middle Channel / 15MHz / QPSK

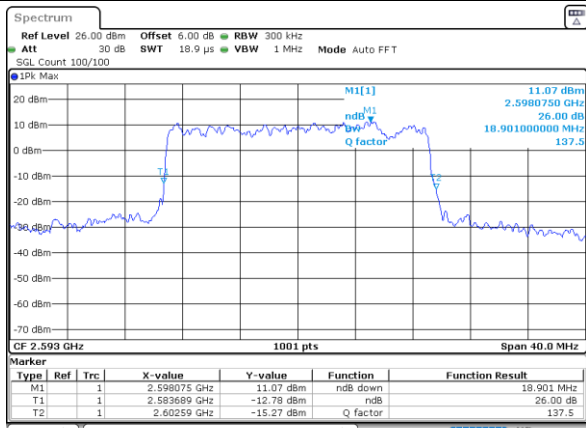


Middle Channel / 15MHz / 16QAM

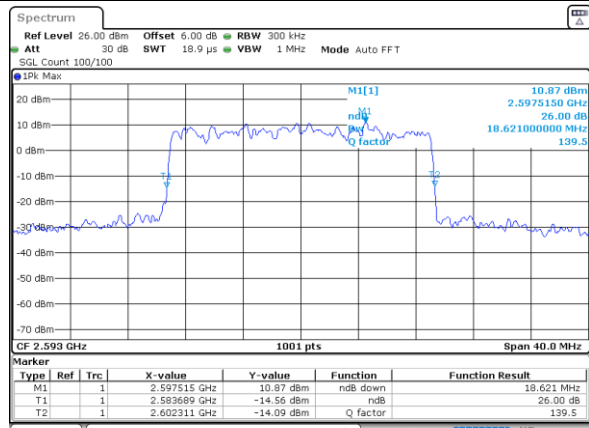


LTE Band 41

Middle Channel / 20MHz / QPSK



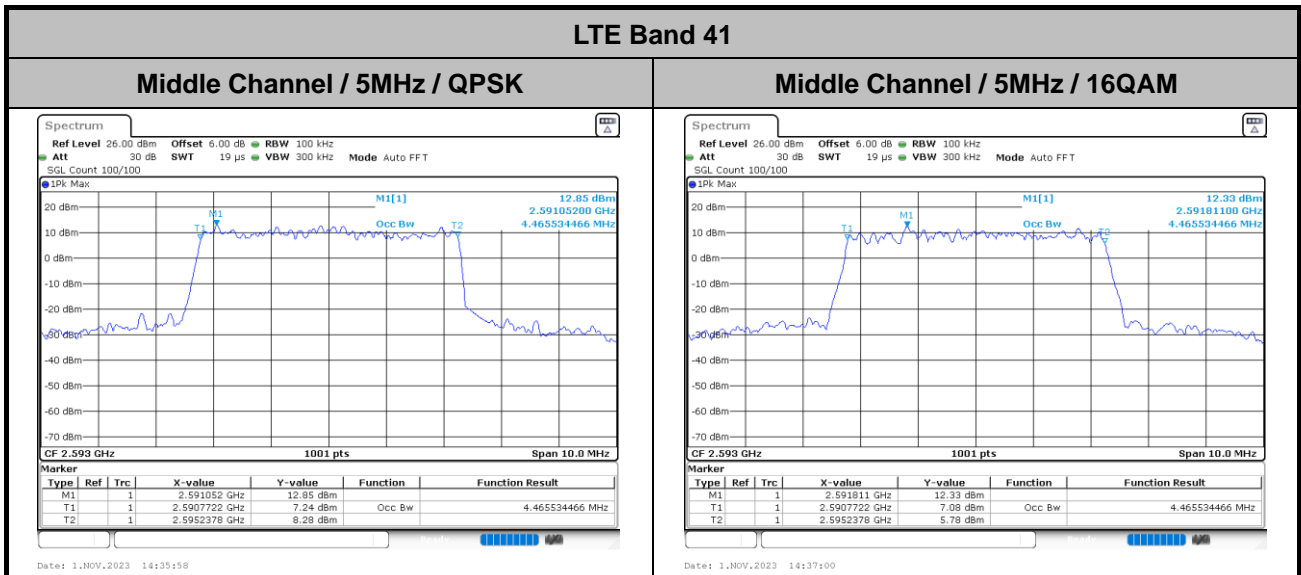
Middle Channel / 20MHz / 16QAM





Occupied Bandwidth

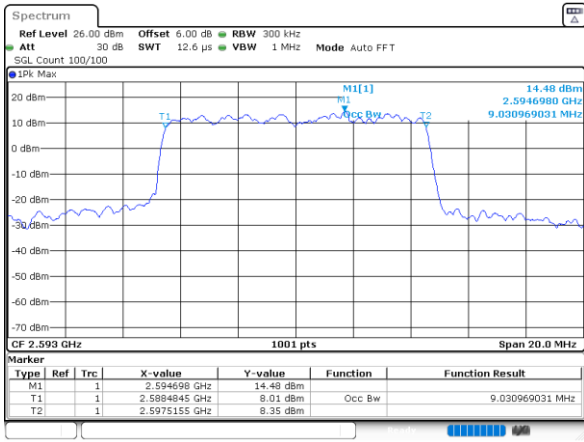
Mode	LTE Band 41 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.47	4.47
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.03
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.49	13.40
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	17.90





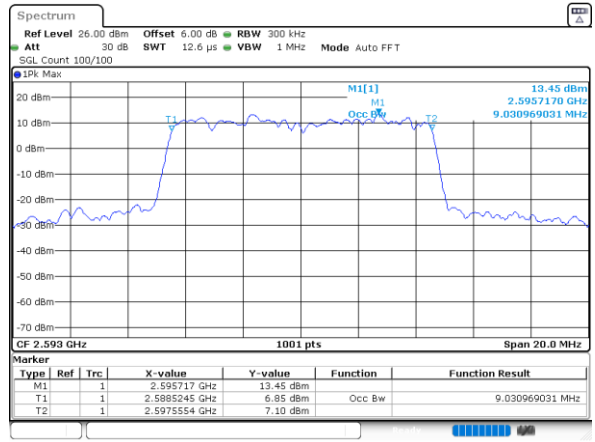
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 1.NOV.2023 14:38:24

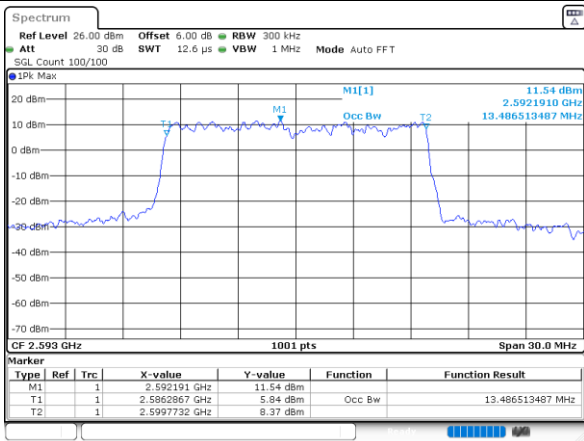
Middle Channel / 10MHz / 16QAM



Date: 1.NOV.2023 14:37:22

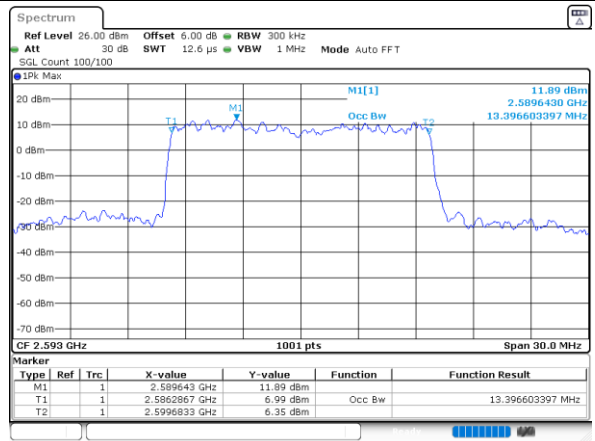
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 1.NOV.2023 14:38:46

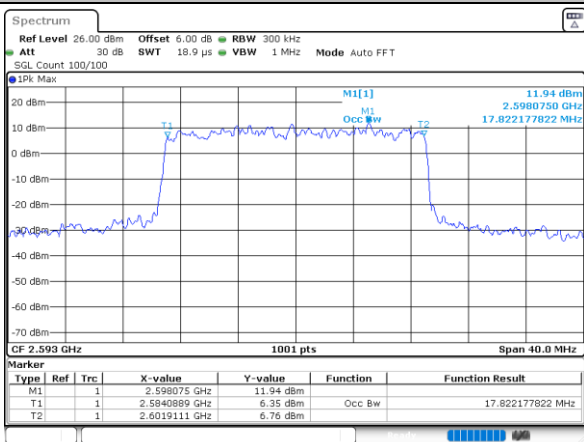
Middle Channel / 15MHz / 16QAM



Date: 1.NOV.2023 14:39:48

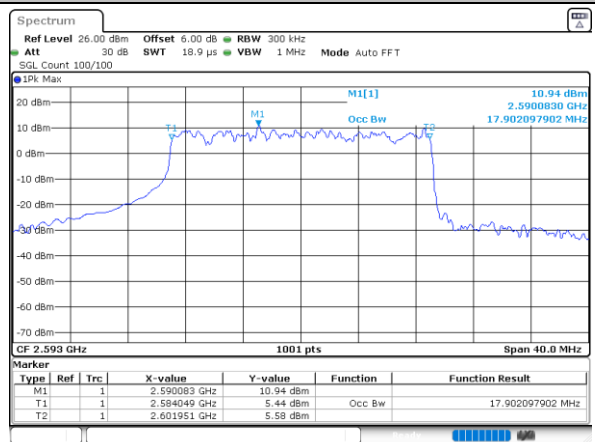
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 1.NOV.2023 14:41:13

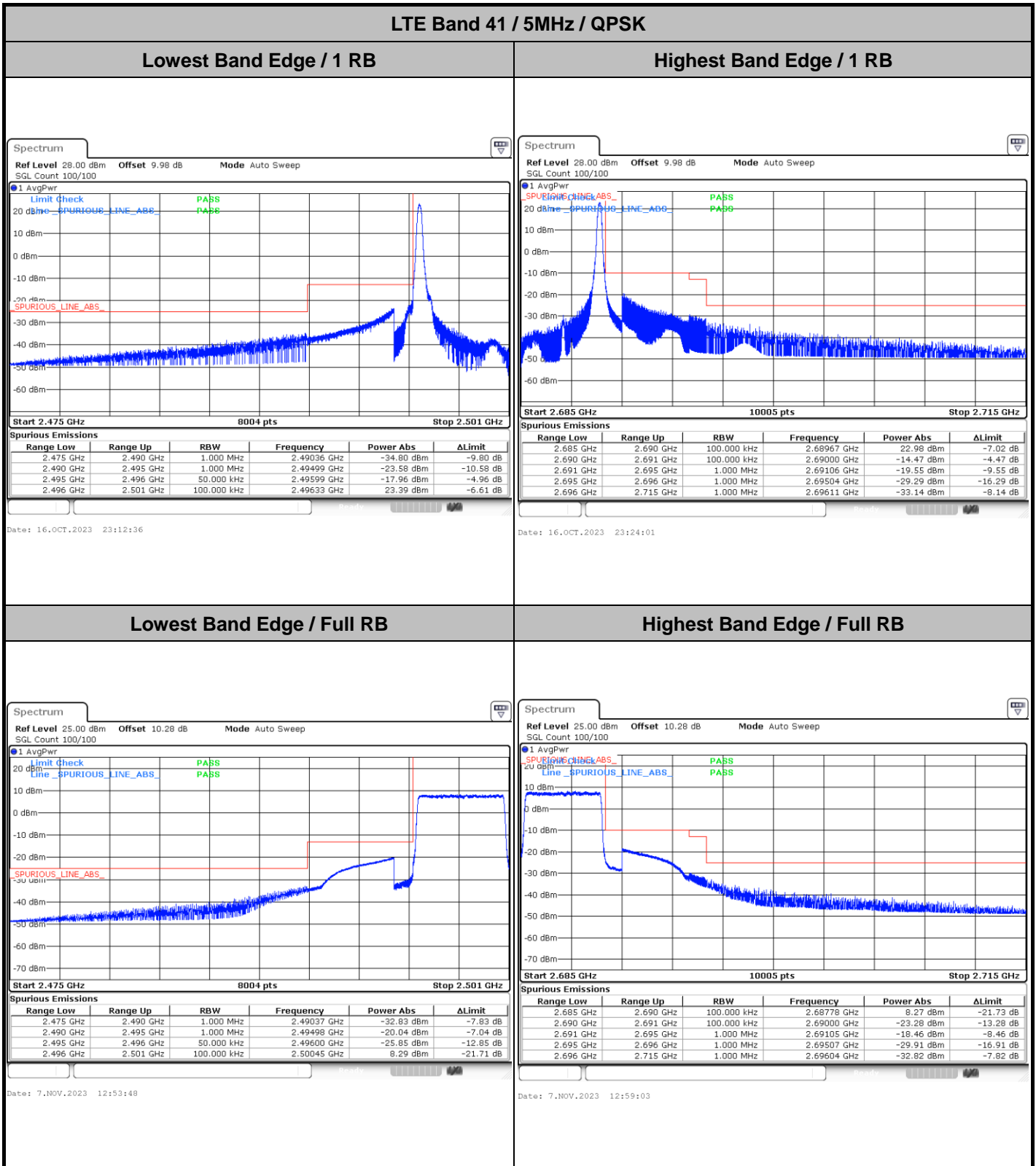
Middle Channel / 20MHz / 16QAM



Date: 1.NOV.2023 14:40:10



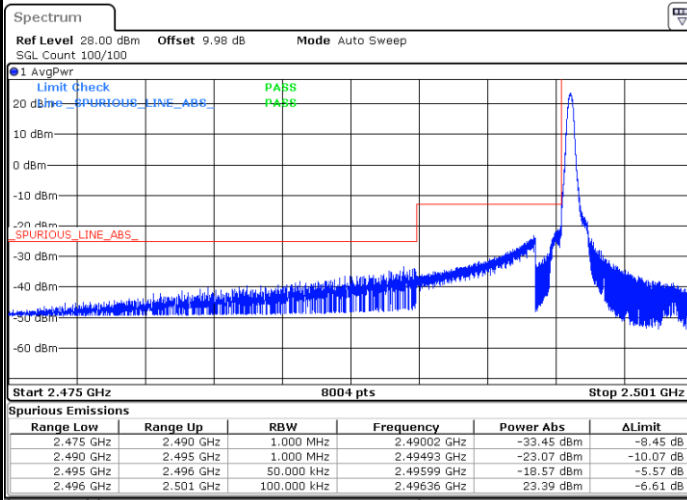
Conducted Band Edge





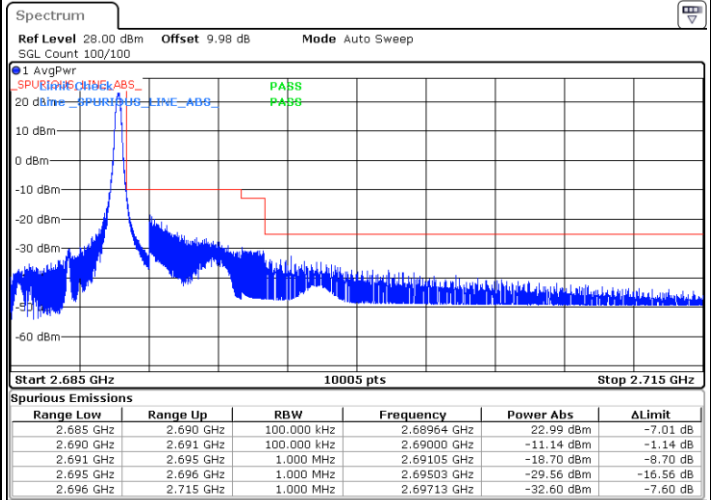
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



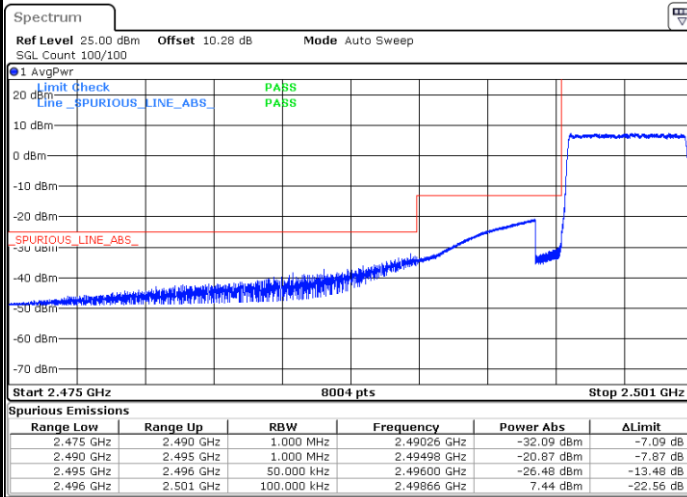
Date: 16.OCT.2023 23:14:31

Highest Band Edge / 1 RB



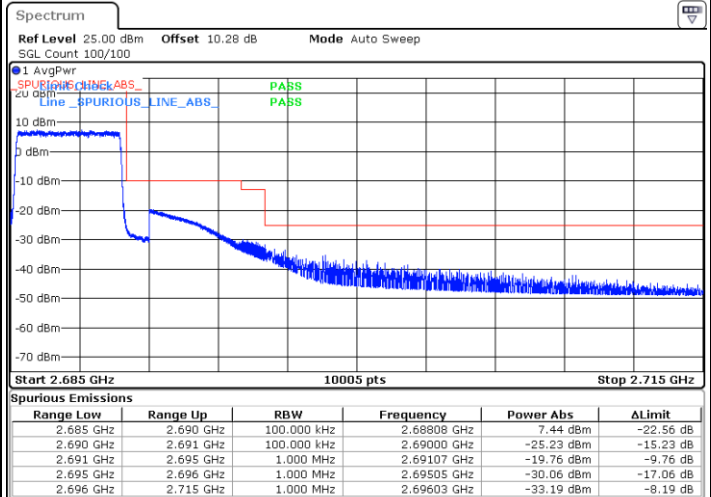
Date: 16.OCT.2023 23:25:54

Lowest Band Edge / Full RB



Date: 7.NOV.2023 12:55:35

Highest Band Edge / Full RB

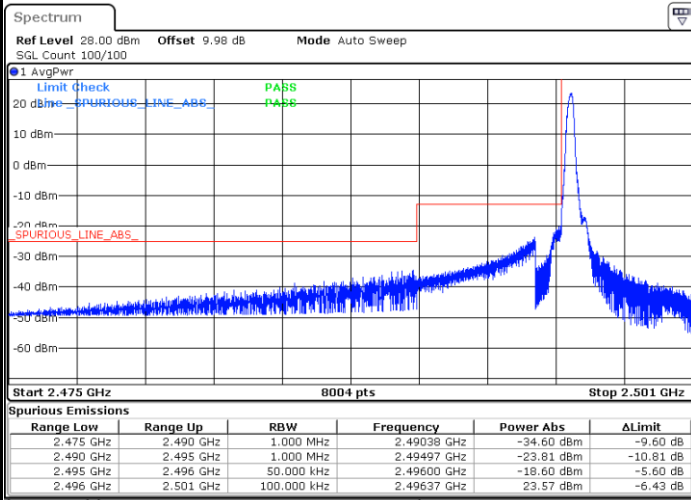


Date: 7.NOV.2023 13:00:44



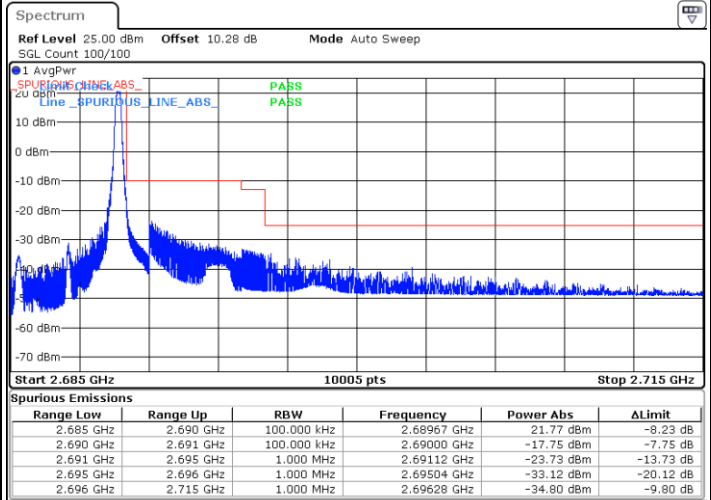
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



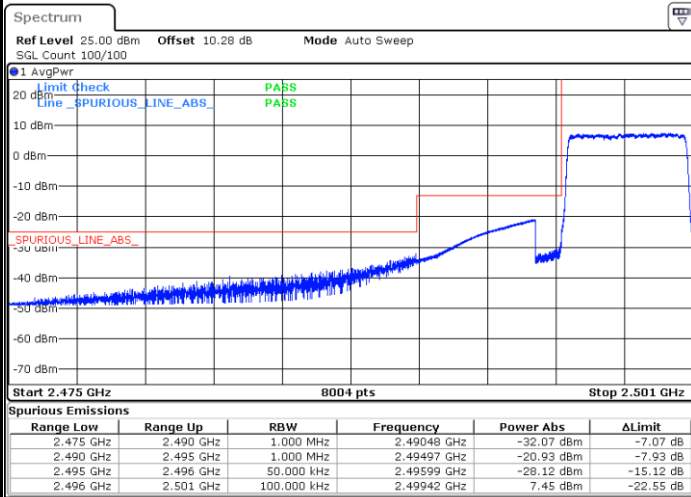
Date: 16.OCT.2023 23:16:25

Highest Band Edge / 1 RB



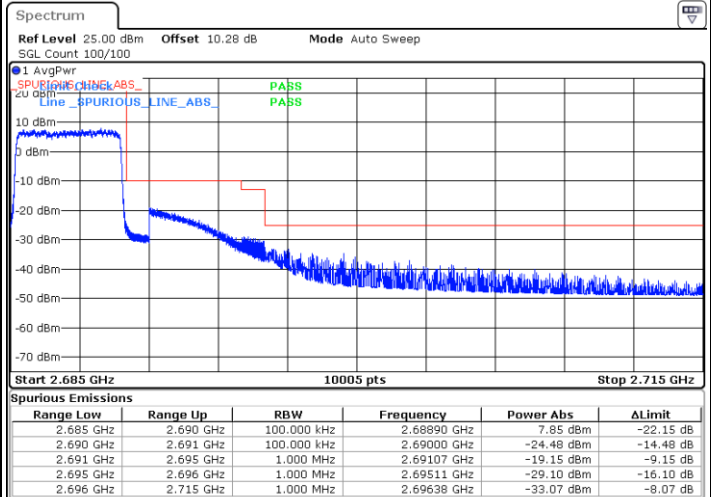
Date: 7.NOV.2023 13:04:06

Lowest Band Edge / Full RB



Date: 7.NOV.2023 12:57:22

Highest Band Edge / Full RB

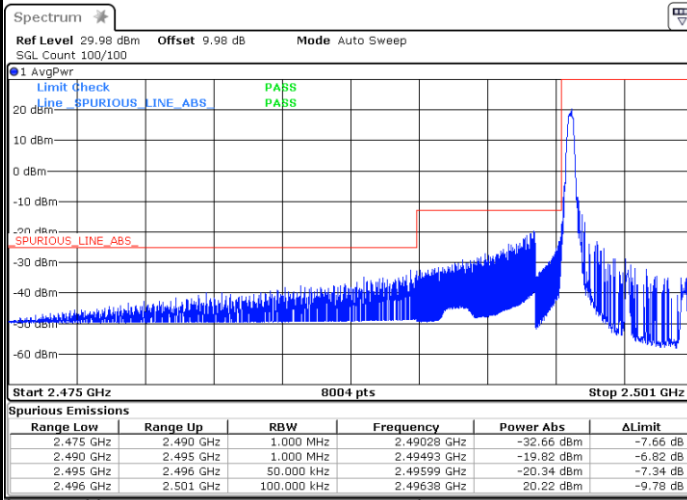


Date: 7.NOV.2023 13:02:25



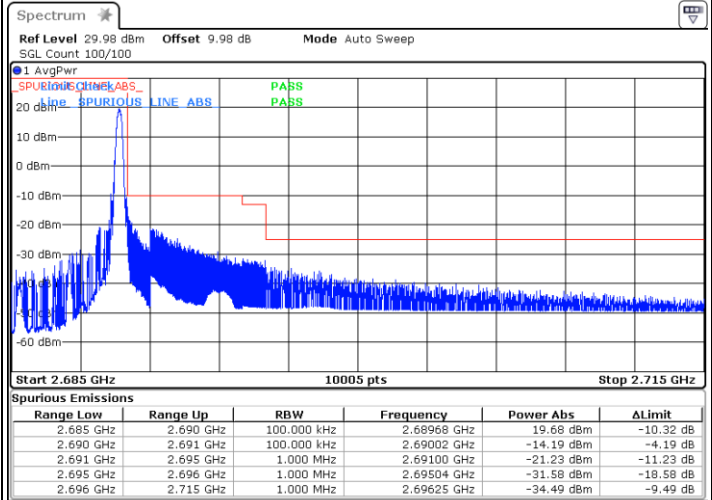
LTE Band 41 / 5MHz / 256QAM

Lowest Band Edge / 1RB



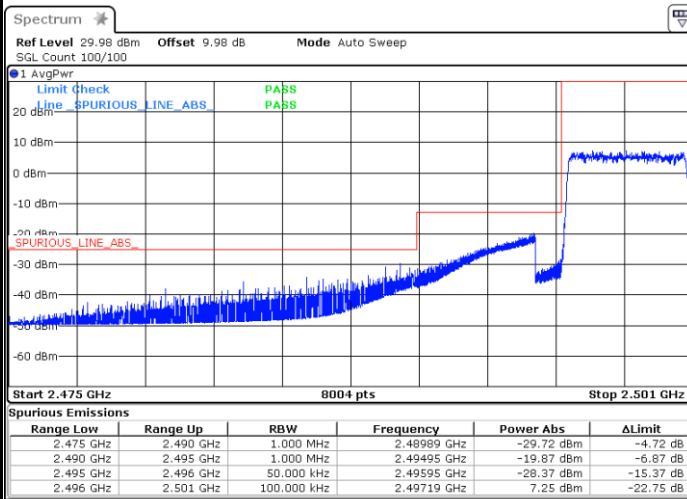
Date: 25.OCT.2023 15:04:33

Highest Band Edge / 1 RB



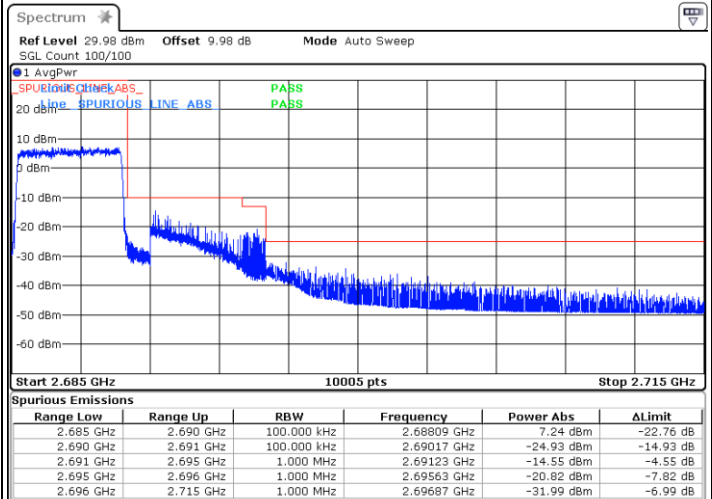
Date: 25.OCT.2023 15:07:59

Lowest Band Edge / Full RB



Date: 25.OCT.2023 15:05:50

Highest Band Edge / Full RB

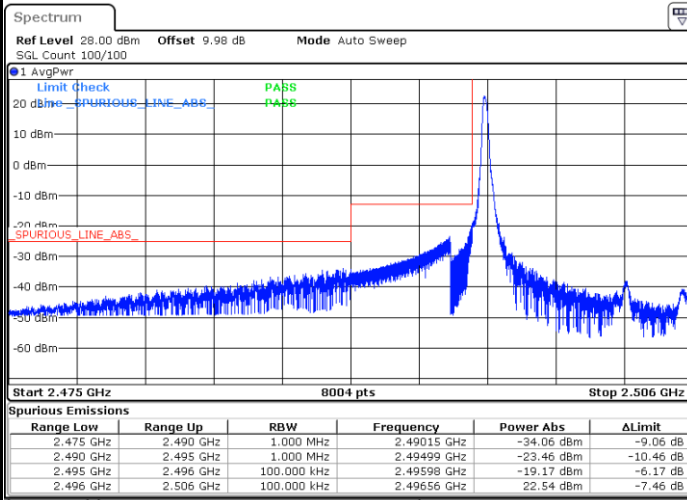


Date: 25.OCT.2023 15:06:47



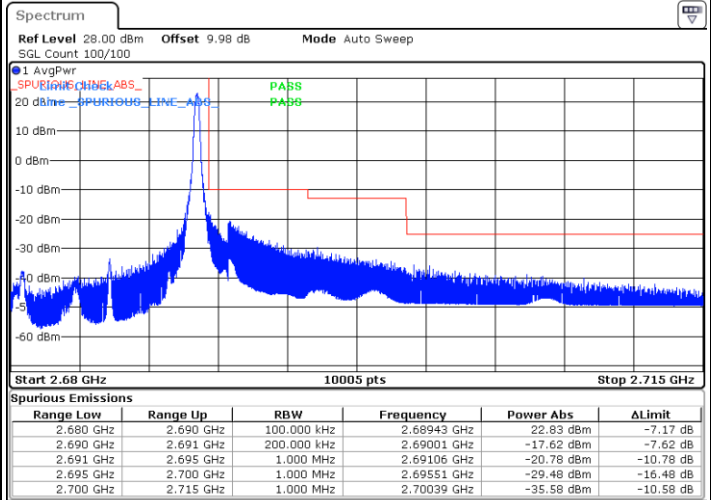
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



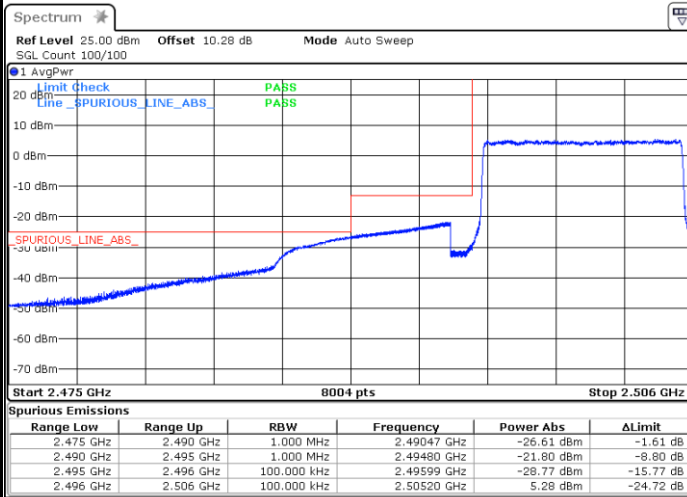
Date: 16.OCT.2023 23:35:21

Highest Band Edge / 1 RB



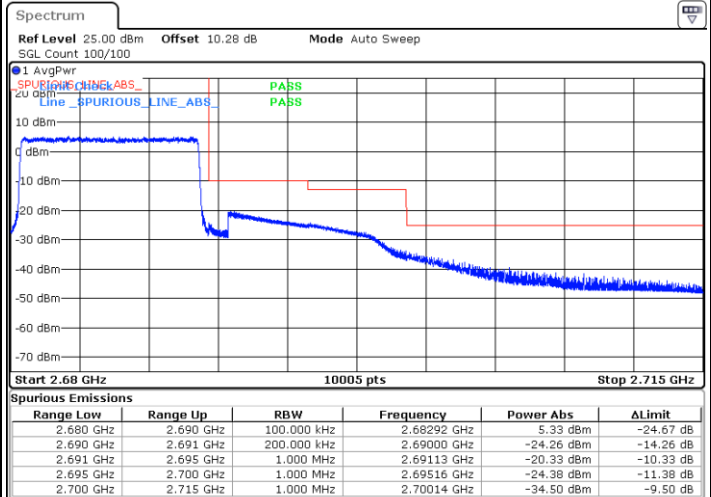
Date: 16.OCT.2023 23:46:48

Lowest Band Edge / Full RB



Date: 7.NOV.2023 13:30:16

Highest Band Edge / Full RB

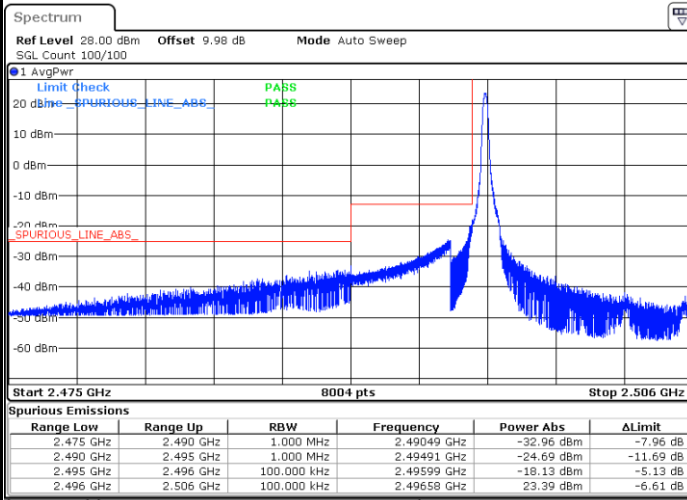


Date: 7.NOV.2023 13:10:58



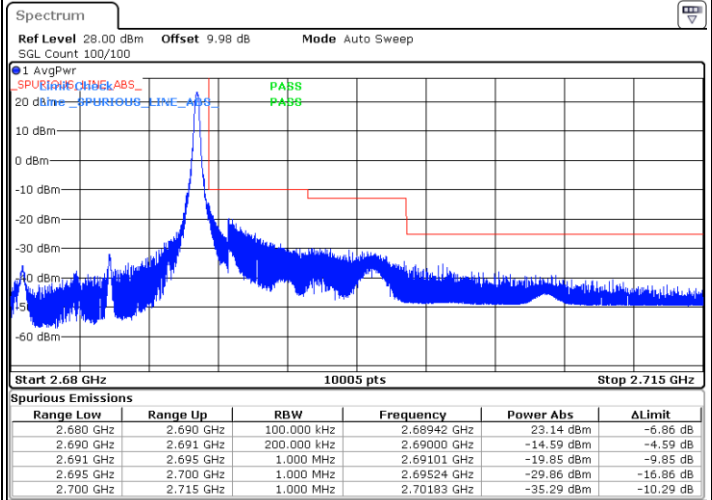
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



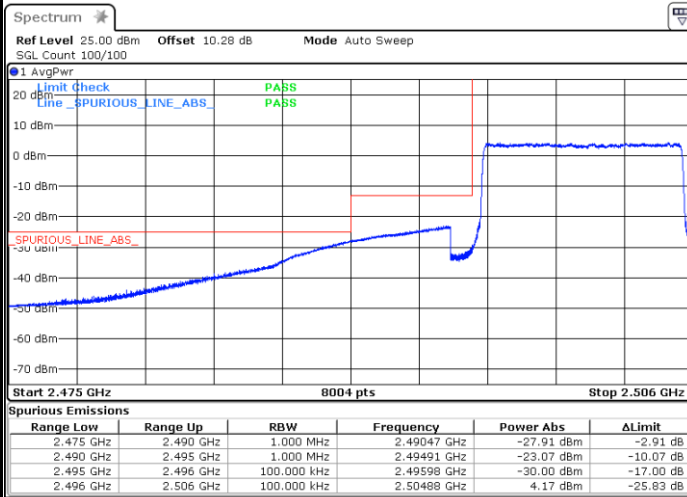
Date: 16.OCT.2023 23:37:16

Highest Band Edge / 1 RB



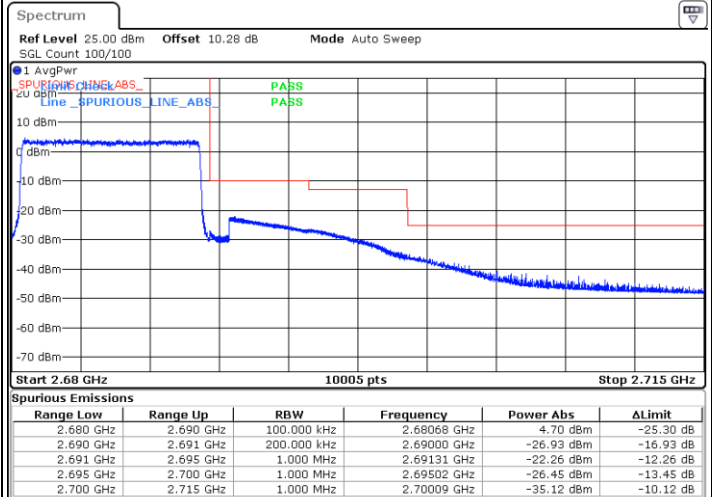
Date: 16.OCT.2023 23:48:41

Lowest Band Edge / Full RB



Date: 7.NOV.2023 13:07:35

Highest Band Edge / Full RB

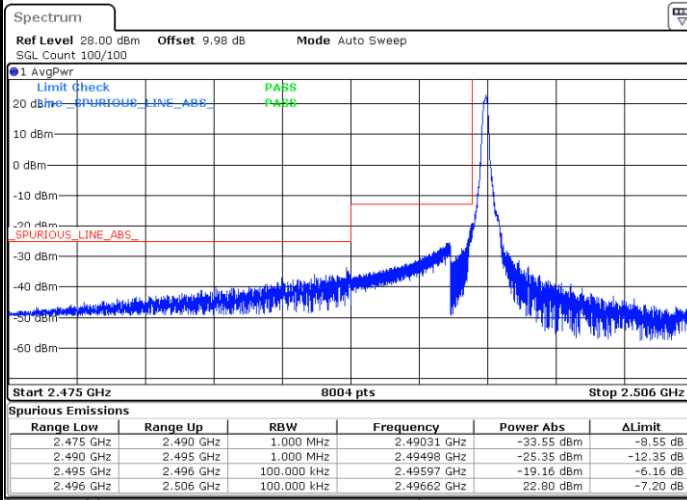


Date: 7.NOV.2023 13:12:38



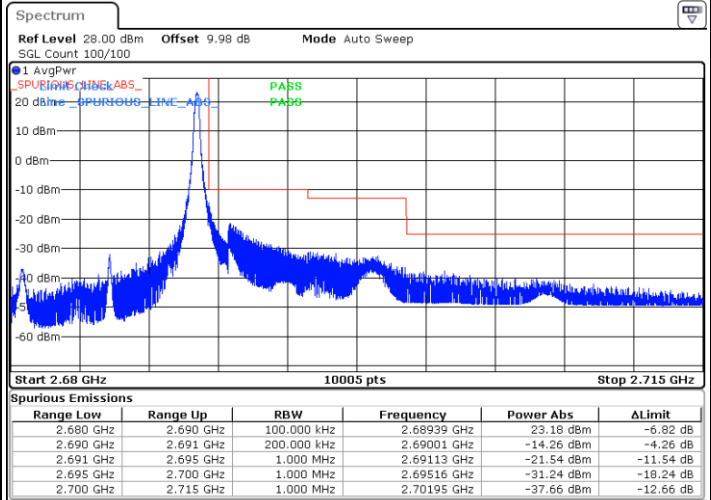
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



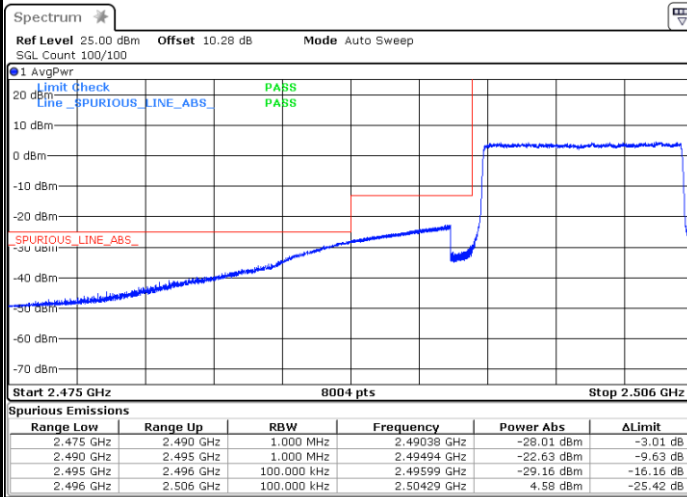
Date: 16.OCT.2023 23:39:12

Highest Band Edge / 1 RB



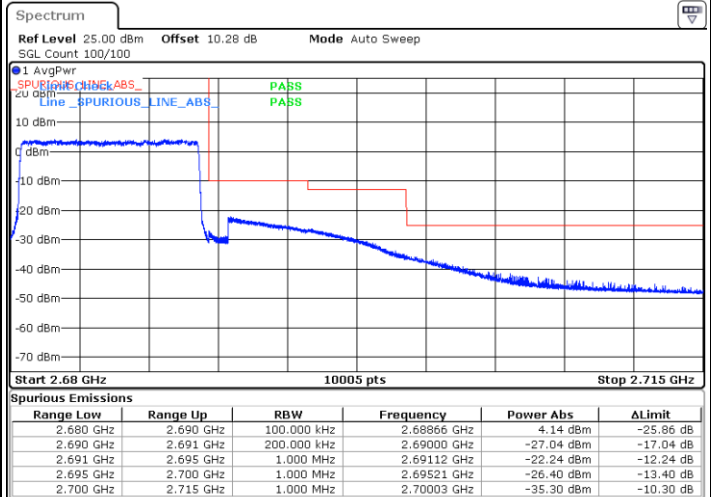
Date: 16.OCT.2023 23:50:33

Lowest Band Edge / Full RB



Date: 7.NOV.2023 13:09:17

Highest Band Edge / Full RB

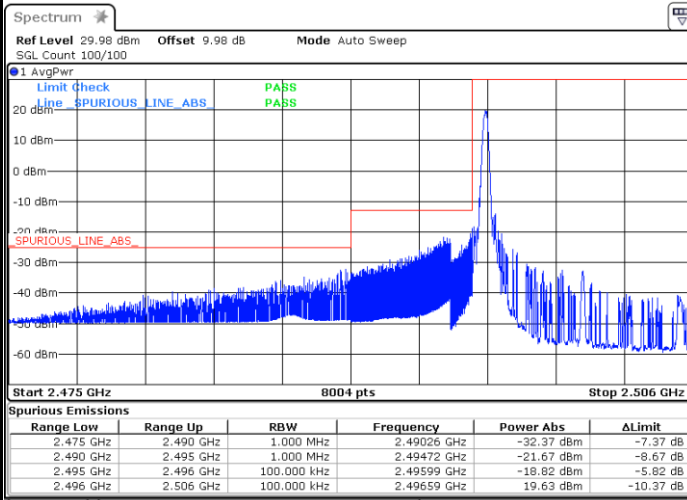


Date: 7.NOV.2023 13:14:18



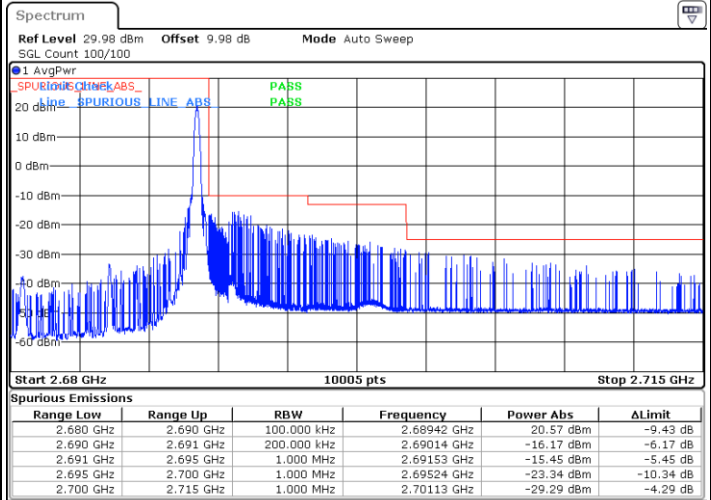
LTE Band 41 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



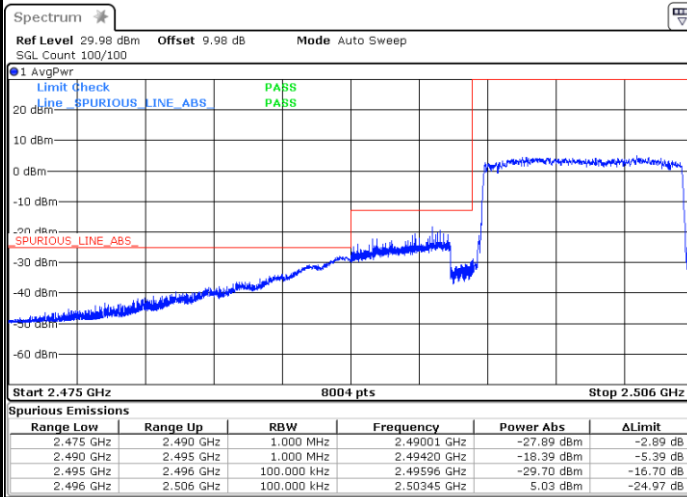
Date: 25.OCT.2023 15:11:04

Highest Band Edge / 1 RB



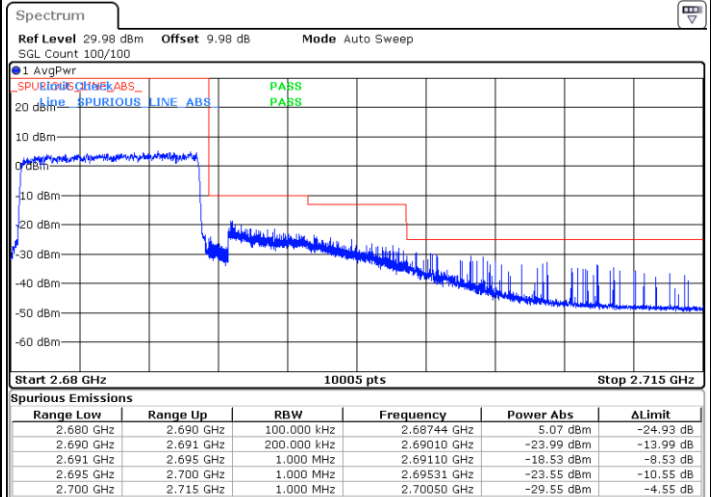
Date: 25.OCT.2023 15:12:21

Lowest Band Edge / Full RB



Date: 25.OCT.2023 15:09:35

Highest Band Edge / Full RB



Date: 25.OCT.2023 15:11:40