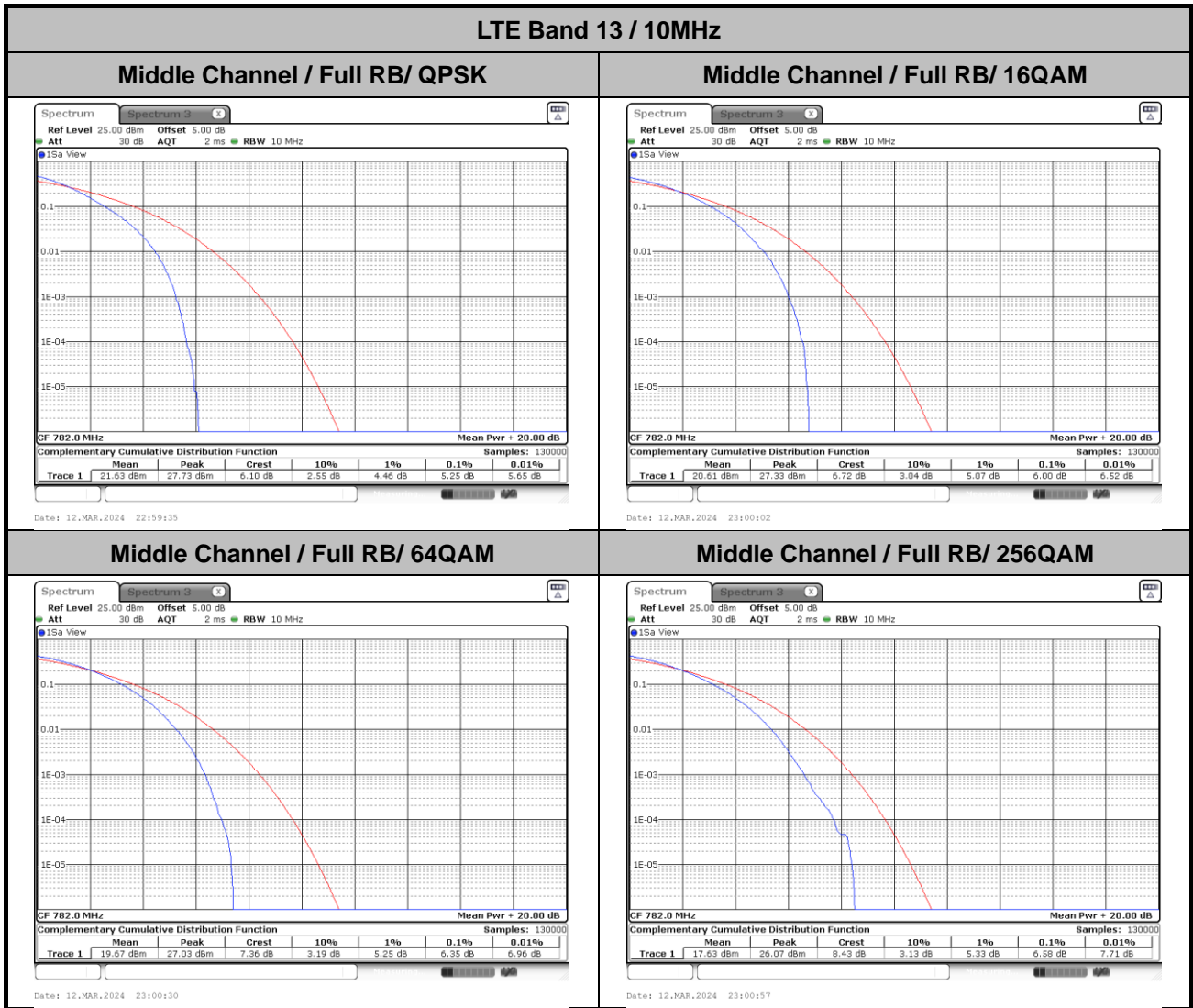




# LTE Band 13

## Peak-to-Average Ratio

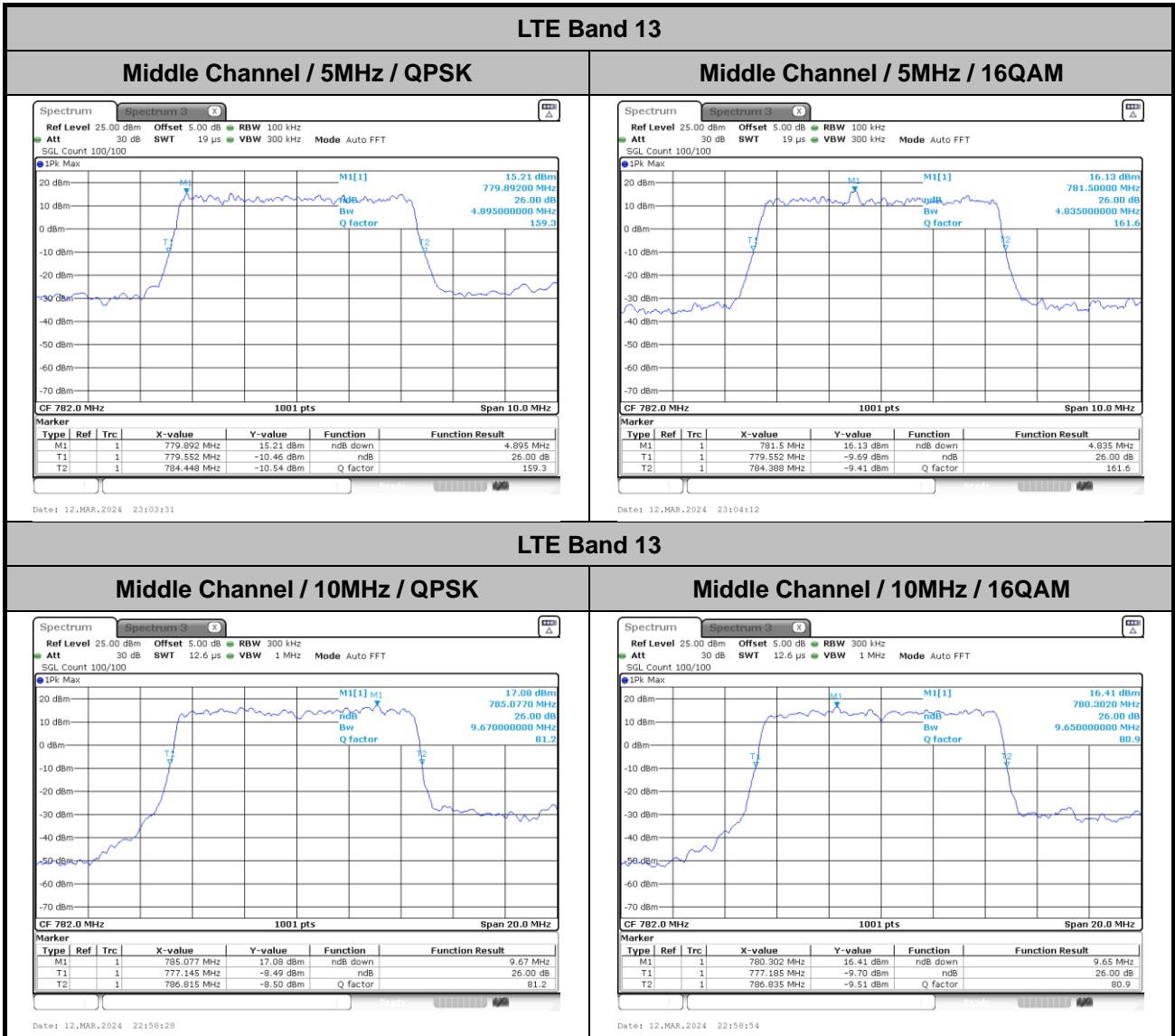
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.25	6.00	6.35	6.58	PASS





## 26dB Bandwidth

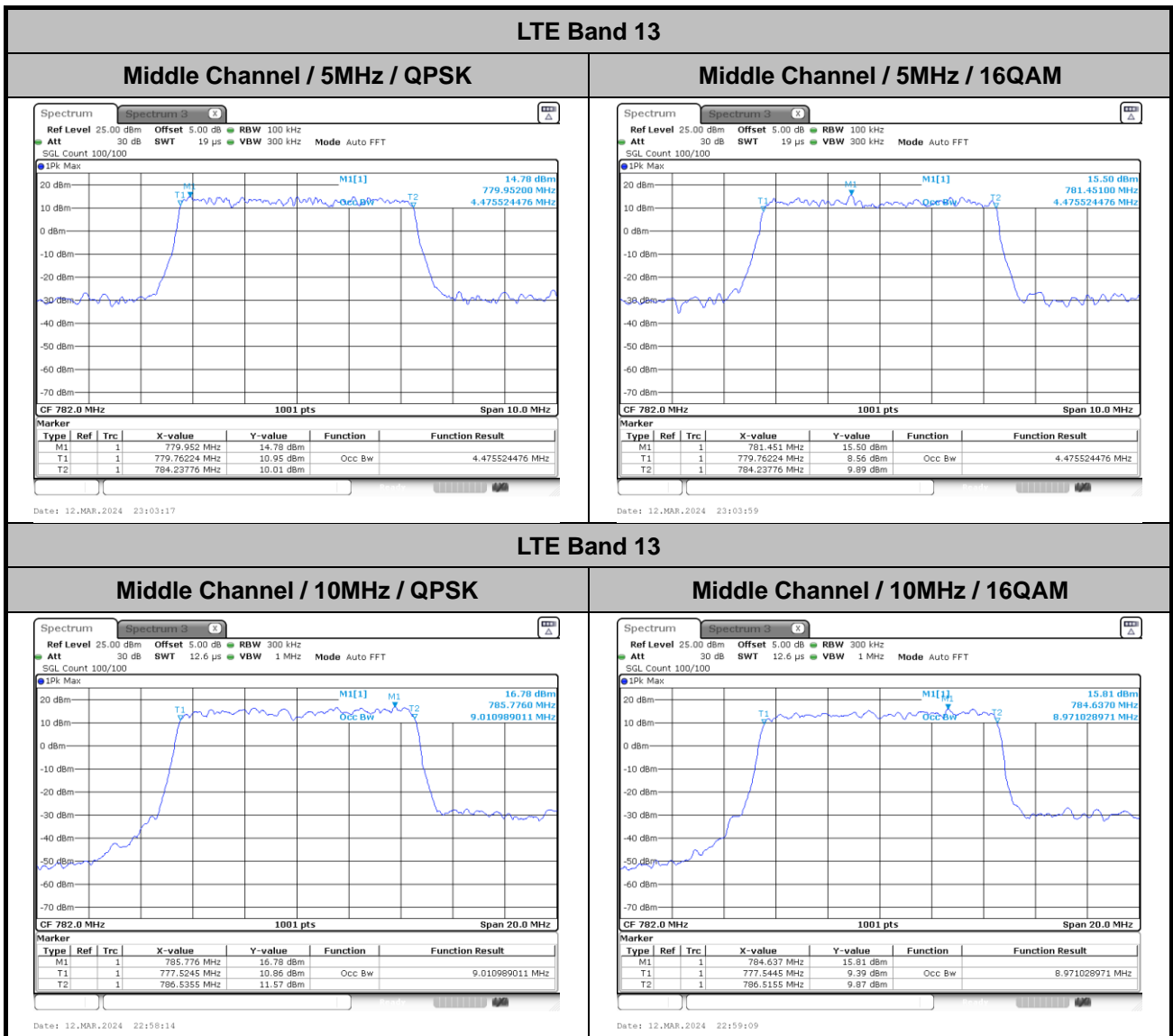
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.90	4.84
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.67	9.65





# Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.48	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	8.97

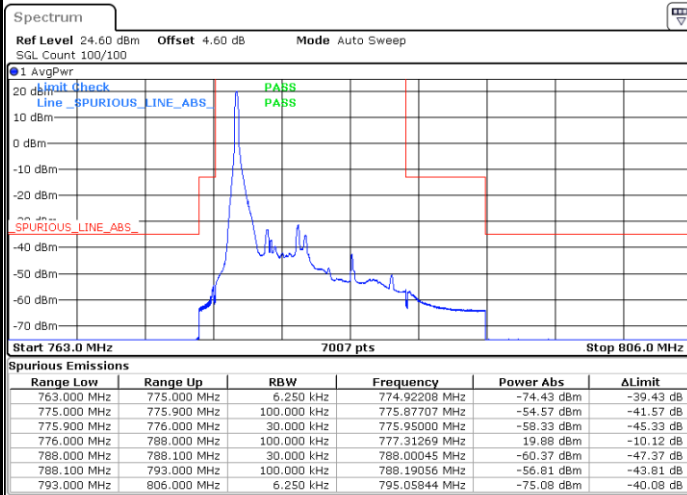




# Conducted Band Edge

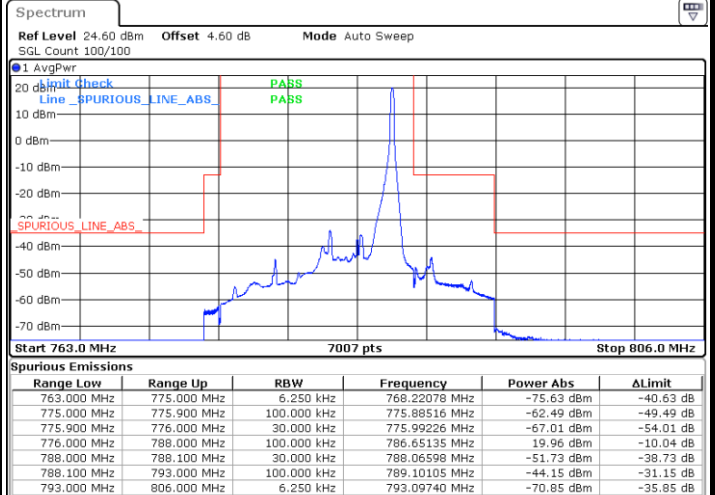
## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



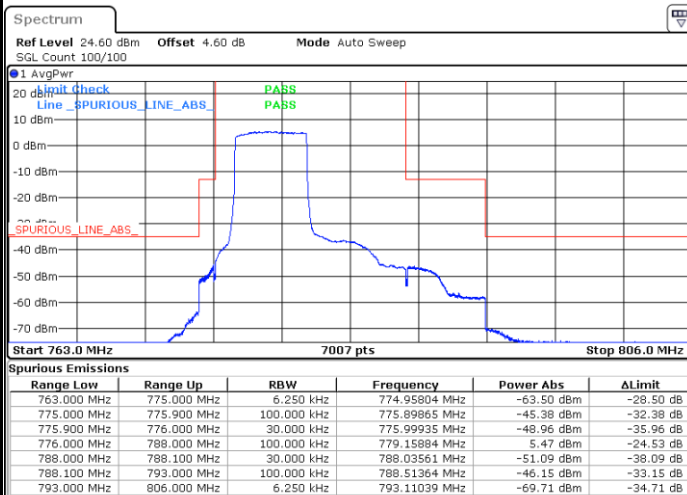
Date: 8.APR.2024 15:51:54

### Highest Band Edge / 1 RB



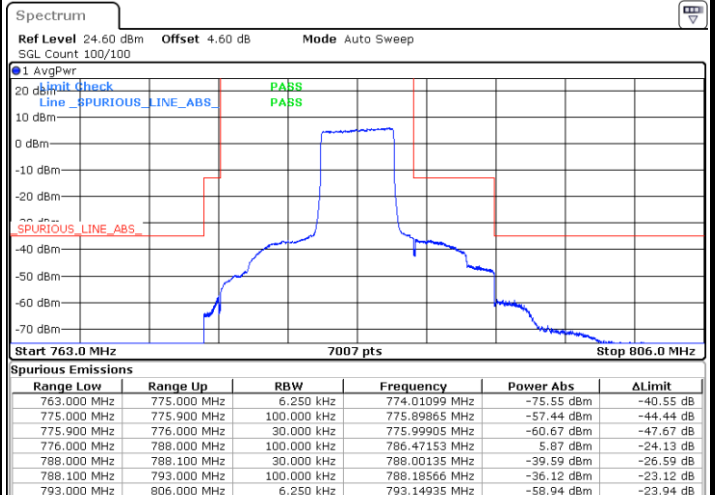
Date: 8.APR.2024 16:12:34

### Lowest Band Edge / Full RB



Date: 8.APR.2024 15:59:16

### Highest Band Edge / Full RB



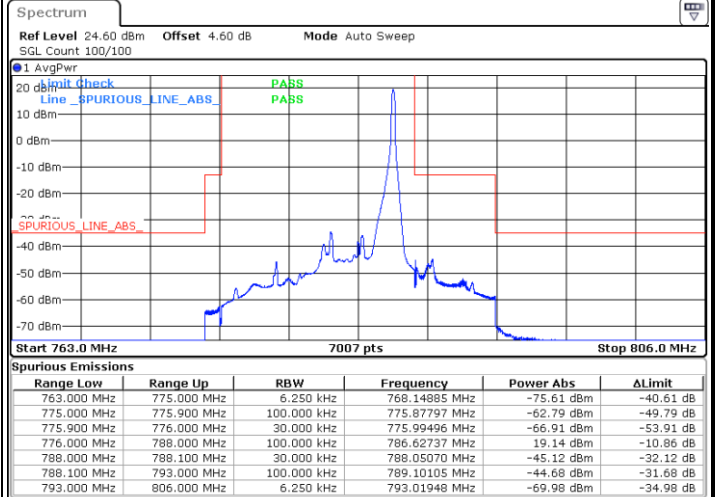
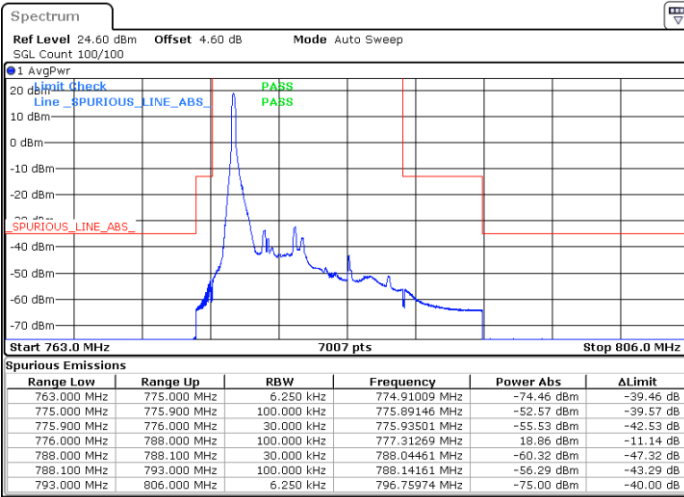
Date: 8.APR.2024 16:19:56



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

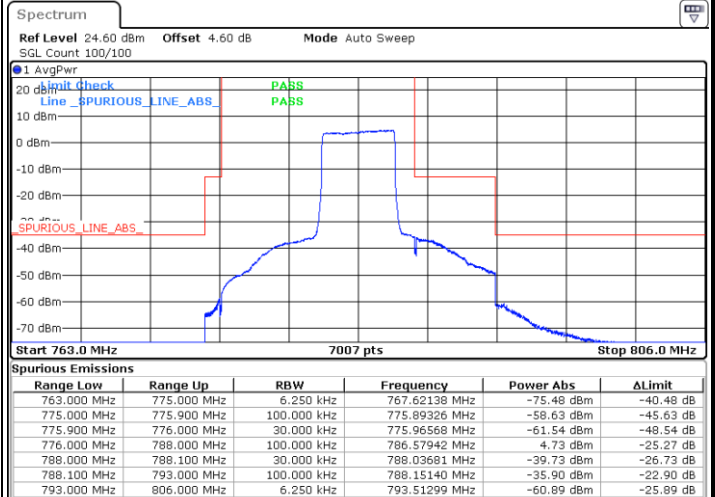
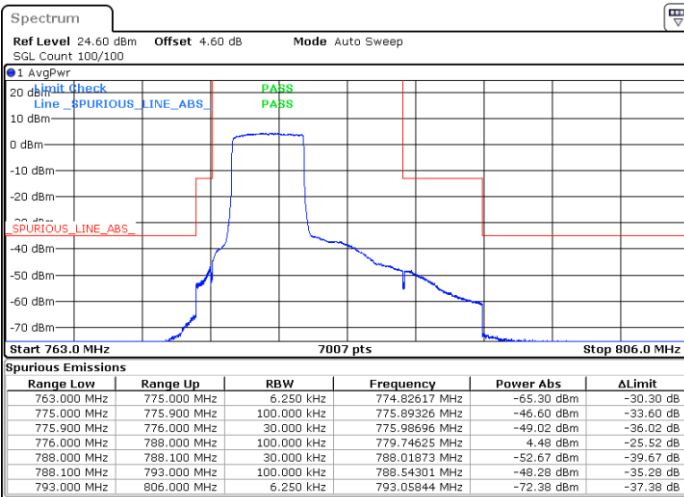


Date: 8.APR.2024 15:53:46

Date: 8.APR.2024 16:14:27

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



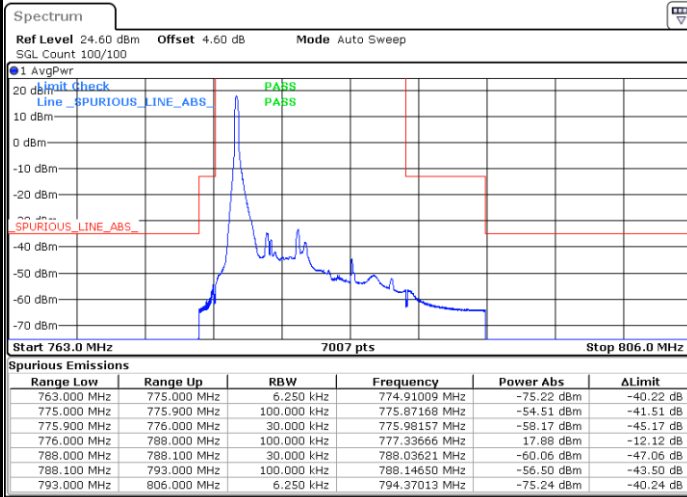
Date: 8.APR.2024 16:01:05

Date: 8.APR.2024 16:21:46

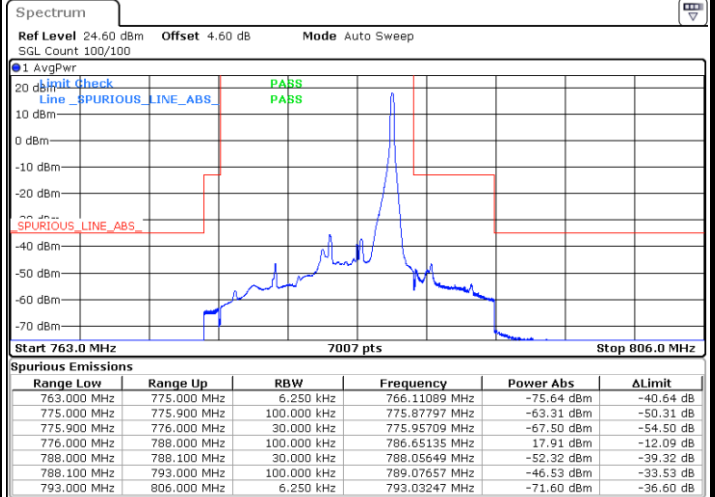


LTE Band 13 / 5MHz / 64QAM

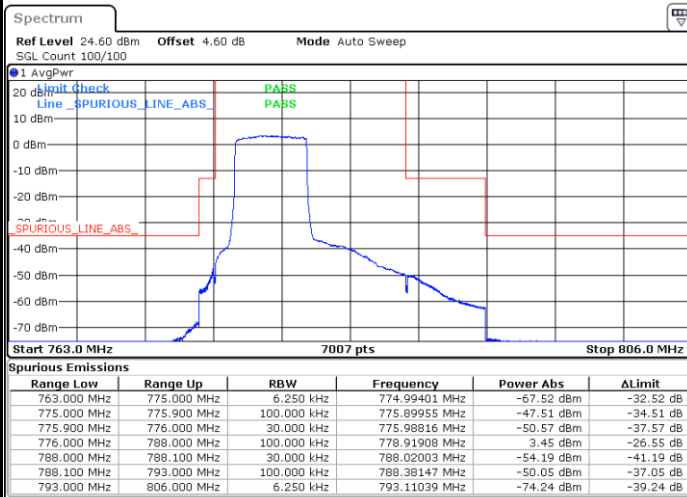
Lowest Band Edge / 1RB



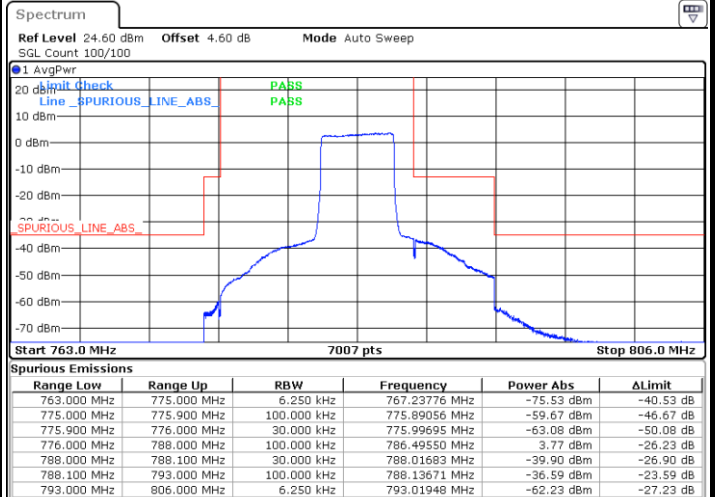
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



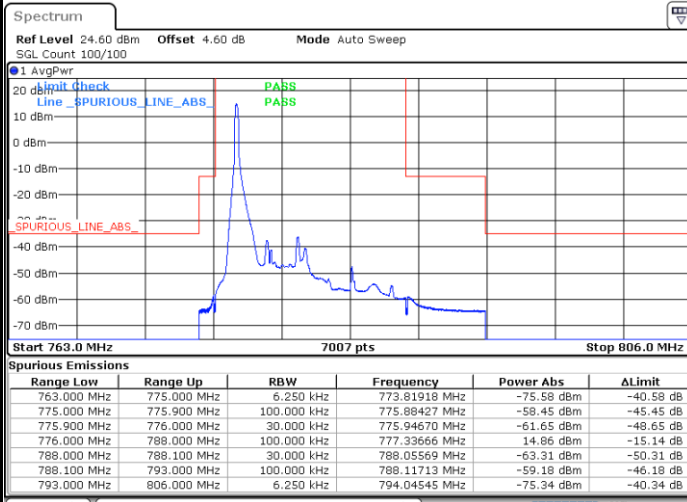
Highest Band Edge / Full RB





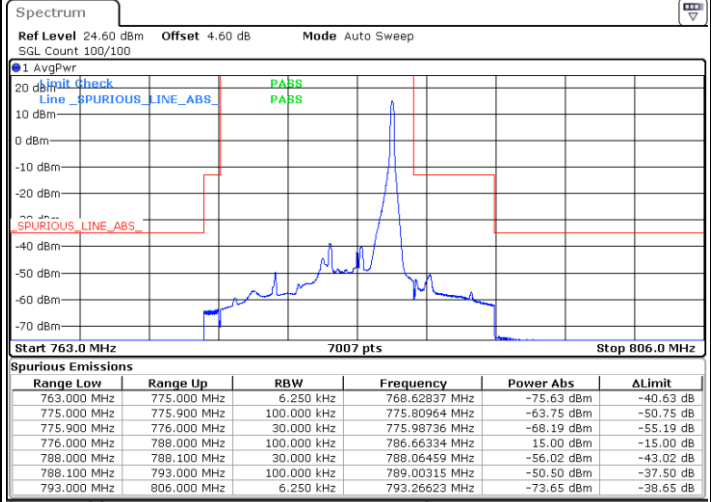
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB



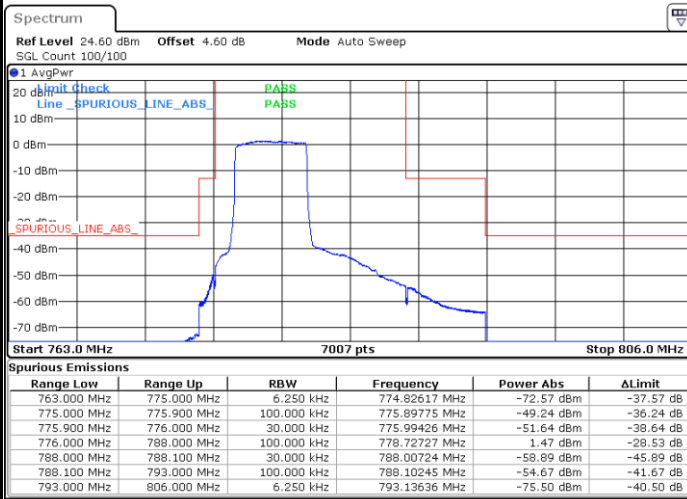
Date: 8.APR.2024 15:57:26

Highest Band Edge / 1 RB



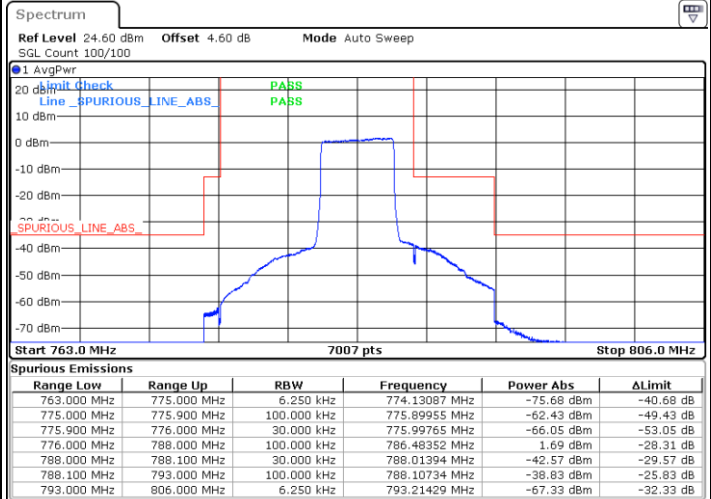
Date: 8.APR.2024 16:18:06

Lowest Band Edge / Full RB



Date: 8.APR.2024 16:04:45

Highest Band Edge / Full RB



Date: 8.APR.2024 16:25:26

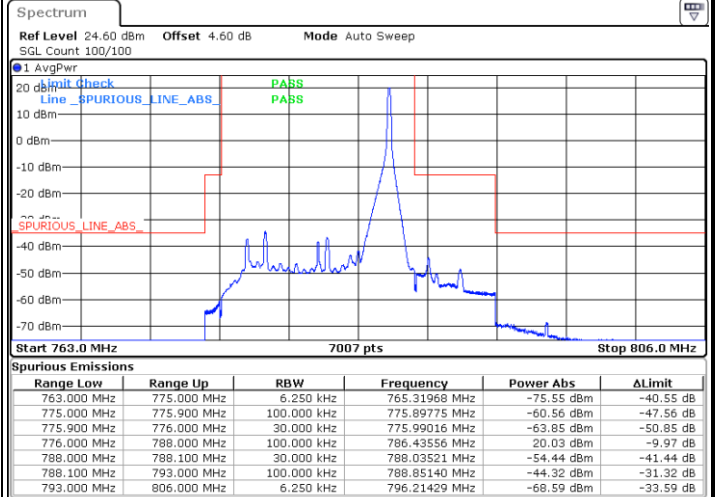
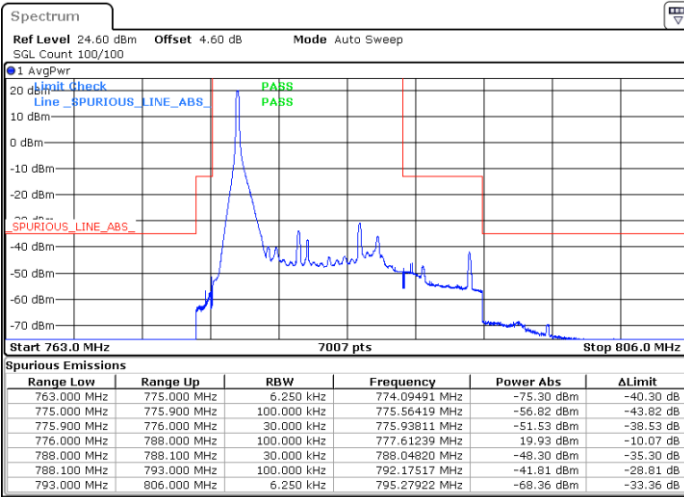




LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB

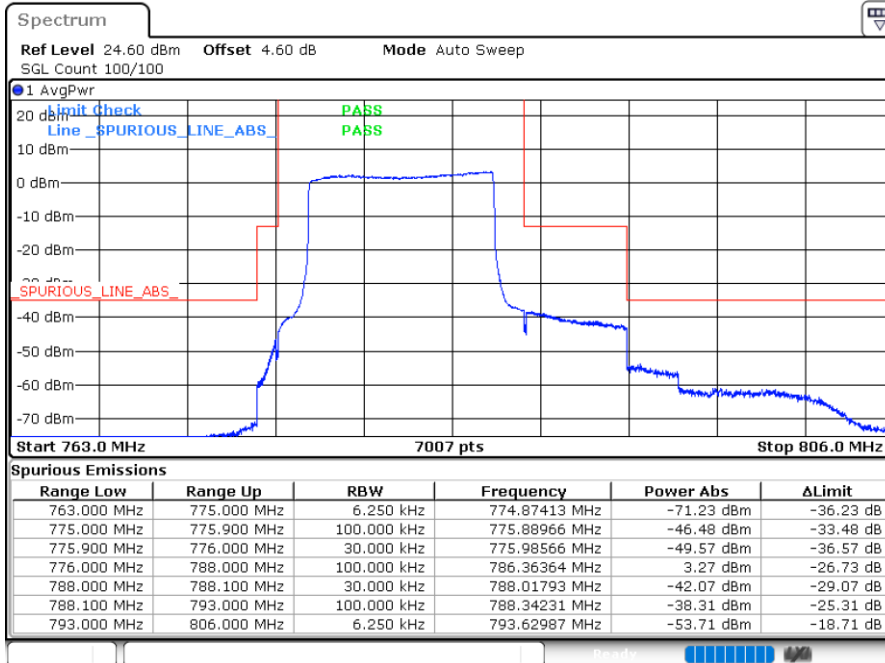
middle Band Edge / 1 RB



Date: 8.APR.2024 16:33:06

Date: 8.APR.2024 16:47:39

Middle Band Edge / Full RB



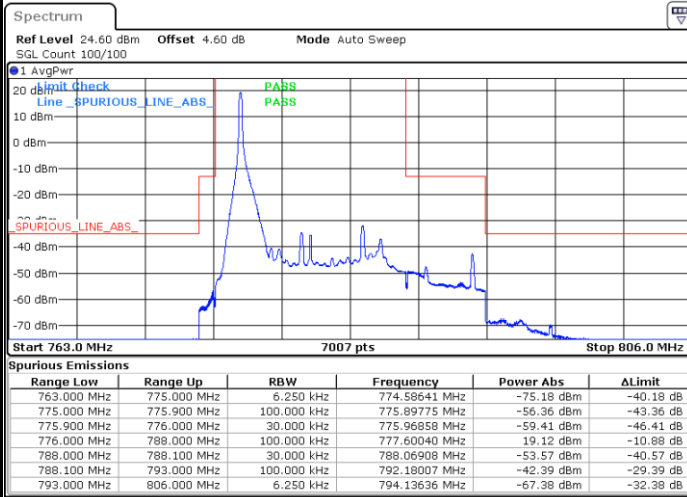
Date: 8.APR.2024 16:40:23





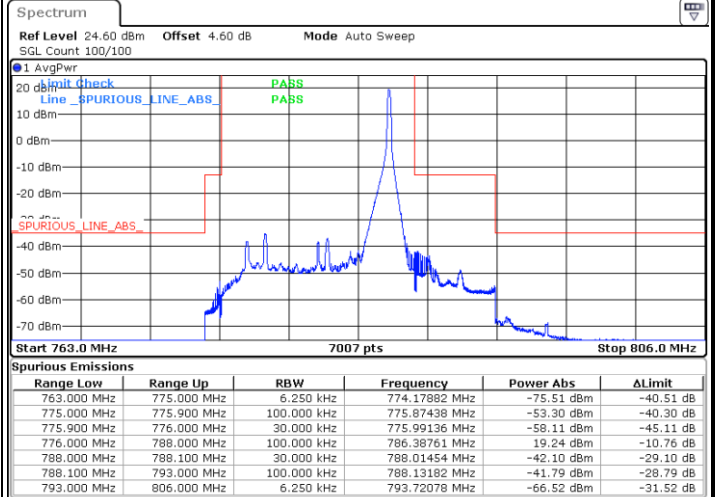
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



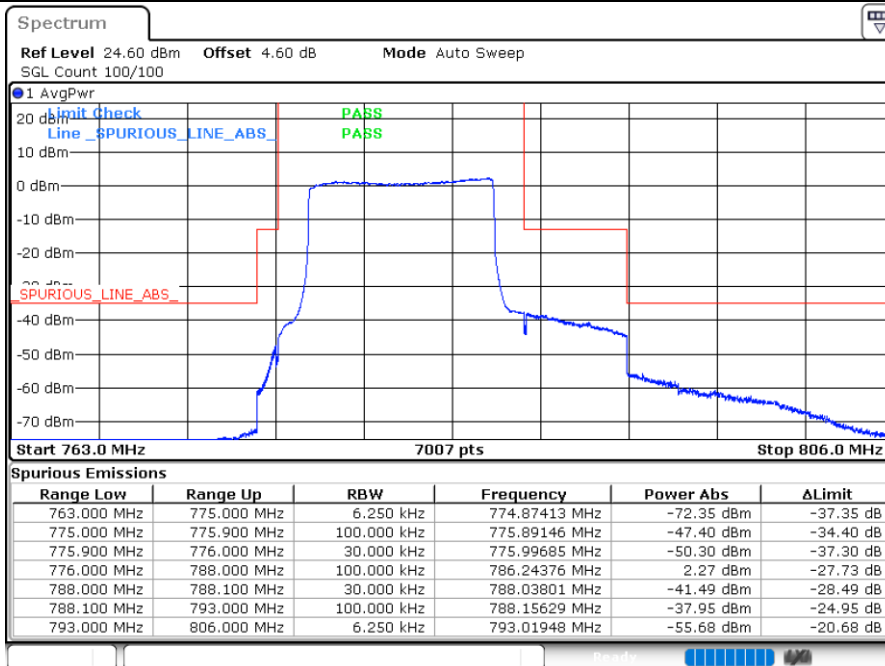
Date: 8.APR.2024 16:34:55

middle Band Edge / 1 RB



Date: 8.APR.2024 16:49:28

middle Band Edge / Full RB

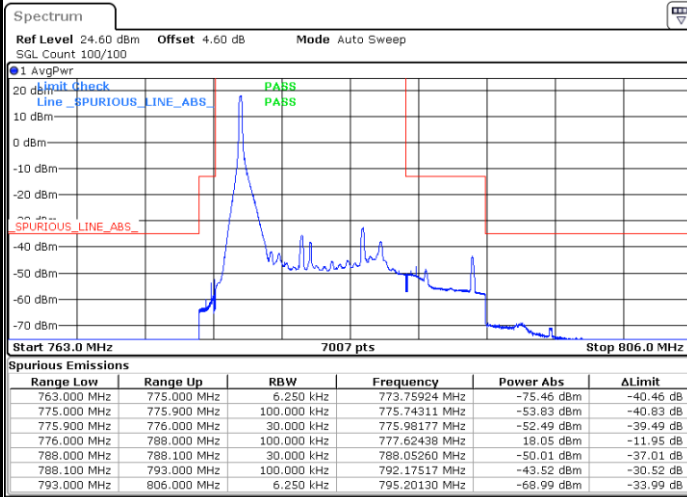


Date: 8.APR.2024 16:42:12



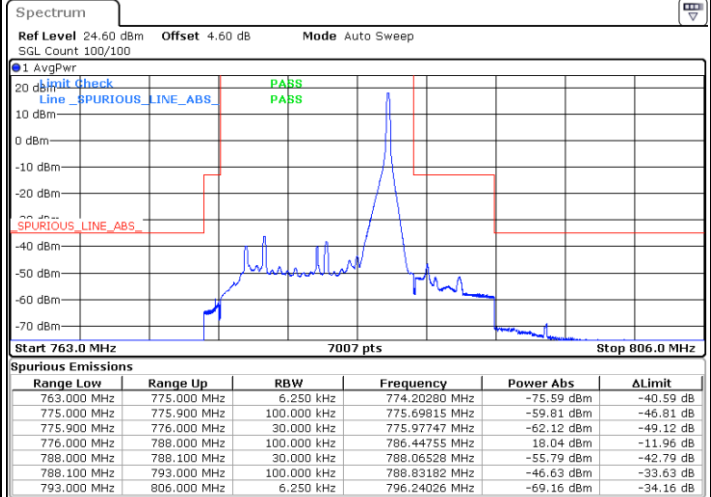
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



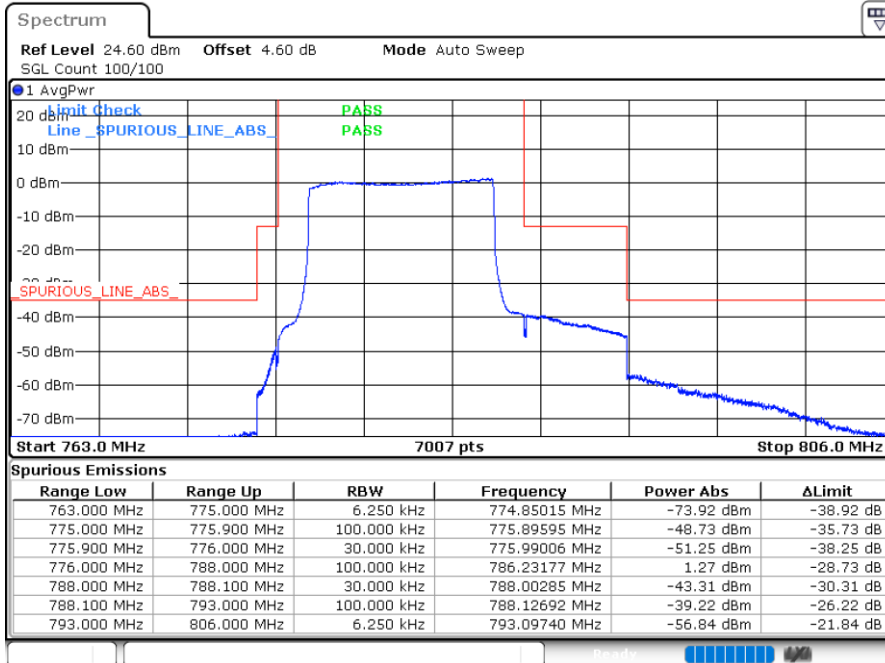
Date: 8.APR.2024 16:36:44

middle Band Edge / 1 RB



Date: 8.APR.2024 16:51:17

middle Band Edge / Full RB



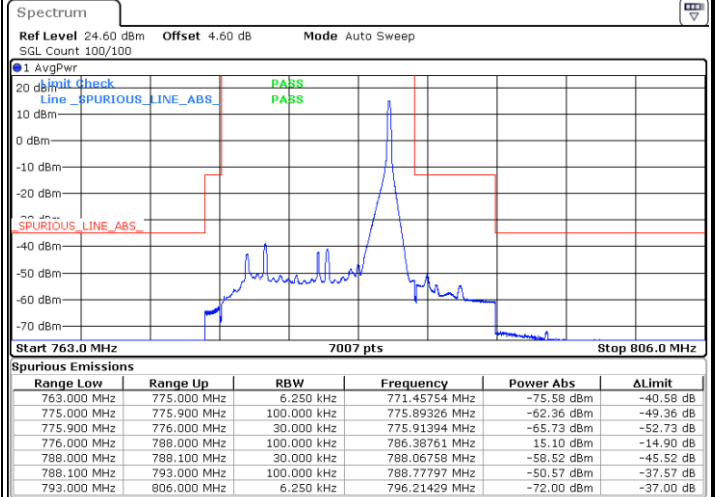
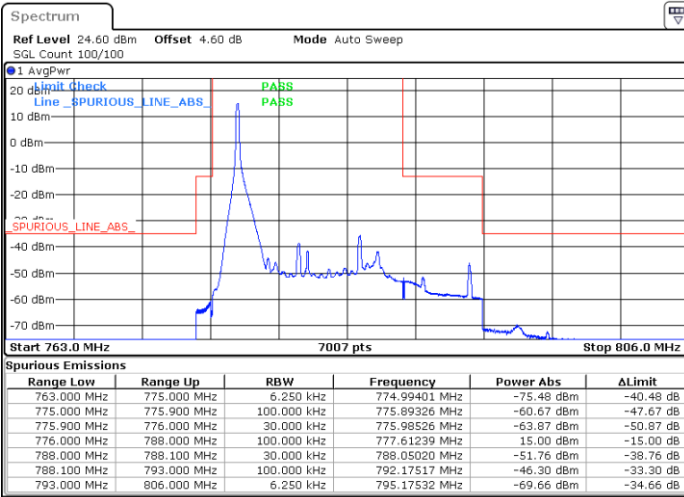
Date: 8.APR.2024 16:44:01



LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB

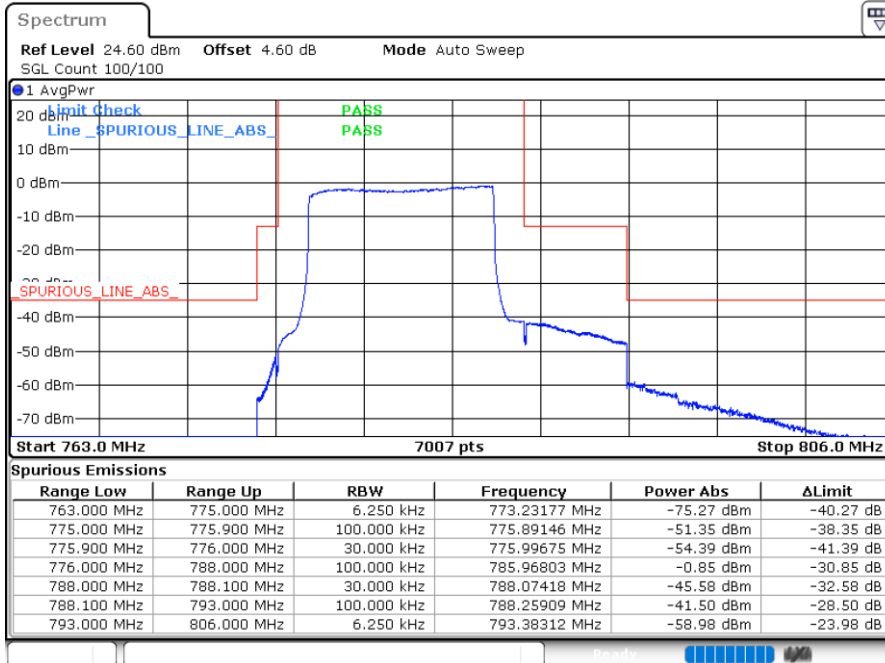
middle Band Edge / 1 RB



Date: 8.APR.2024 16:38:33

Date: 8.APR.2024 16:53:07

middle Band Edge / Full RB



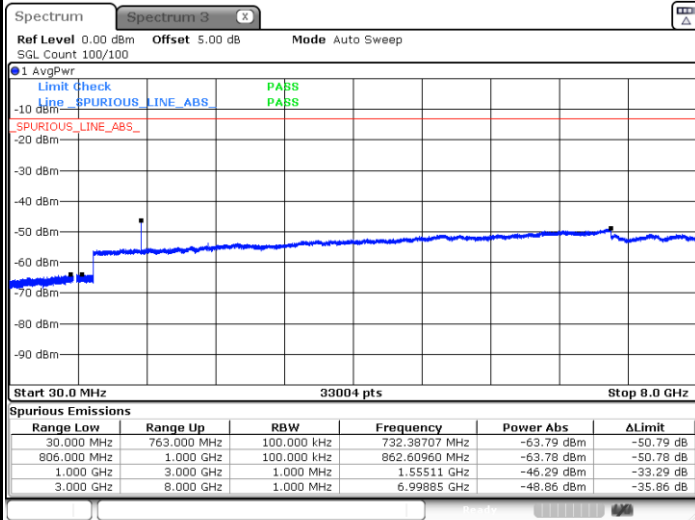
Date: 8.APR.2024 16:45:50



# Conducted Spurious Emission

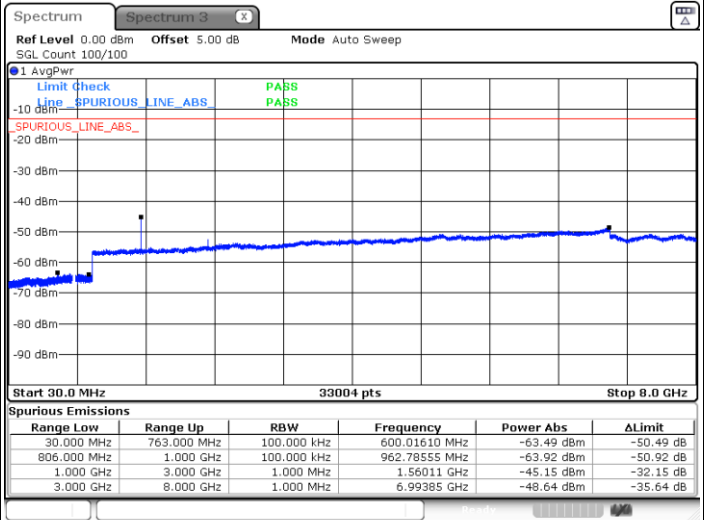
## LTE Band 13 / 5MHz

### Lowest Channel / QPSK



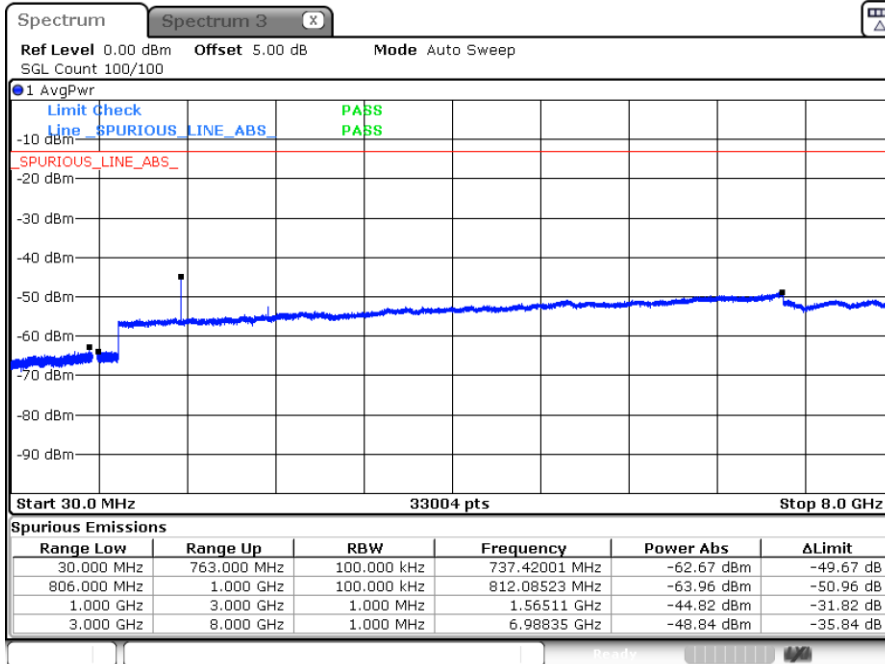
Date: 12.MAR.2024 21:20:02

### Middle Channel / QPSK



Date: 12.MAR.2024 21:32:06

### Highest Channel / QPSK

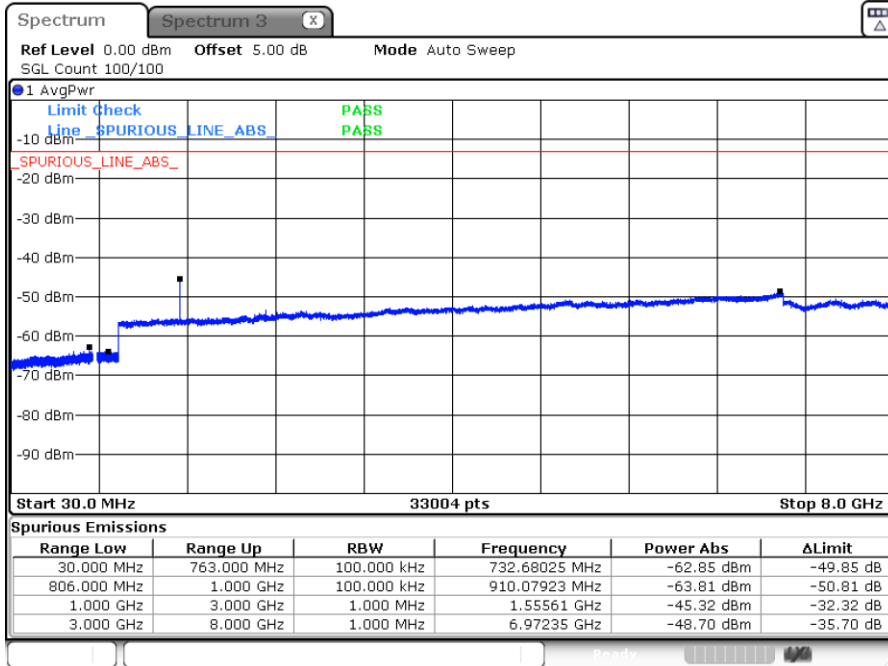


Date: 12.MAR.2024 21:33:18



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 12.MAR.2024 21:47:04



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:

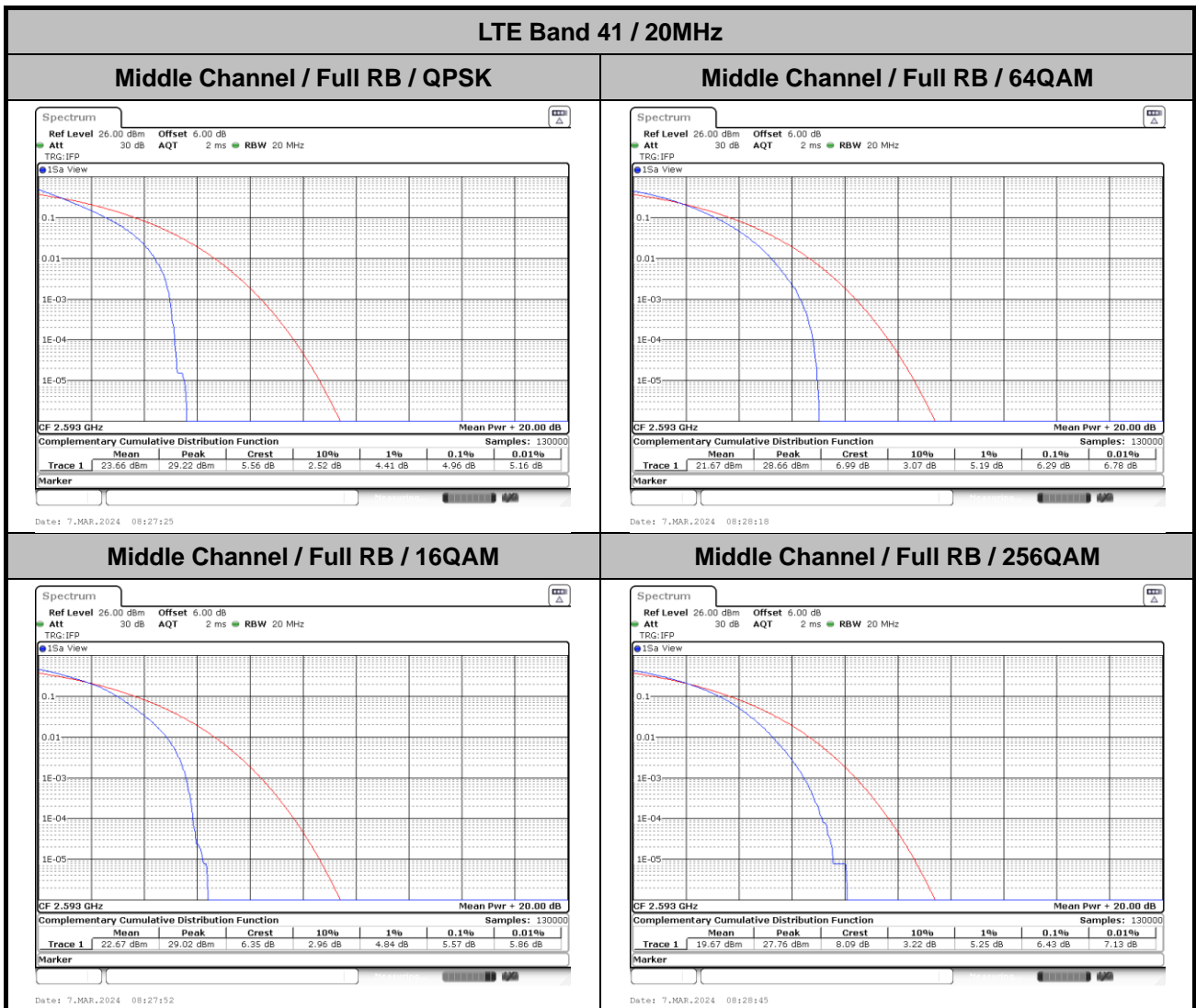
1. Normal Voltage =3.88 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.48 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# 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	4.96	5.57	6.29	6.43	PASS

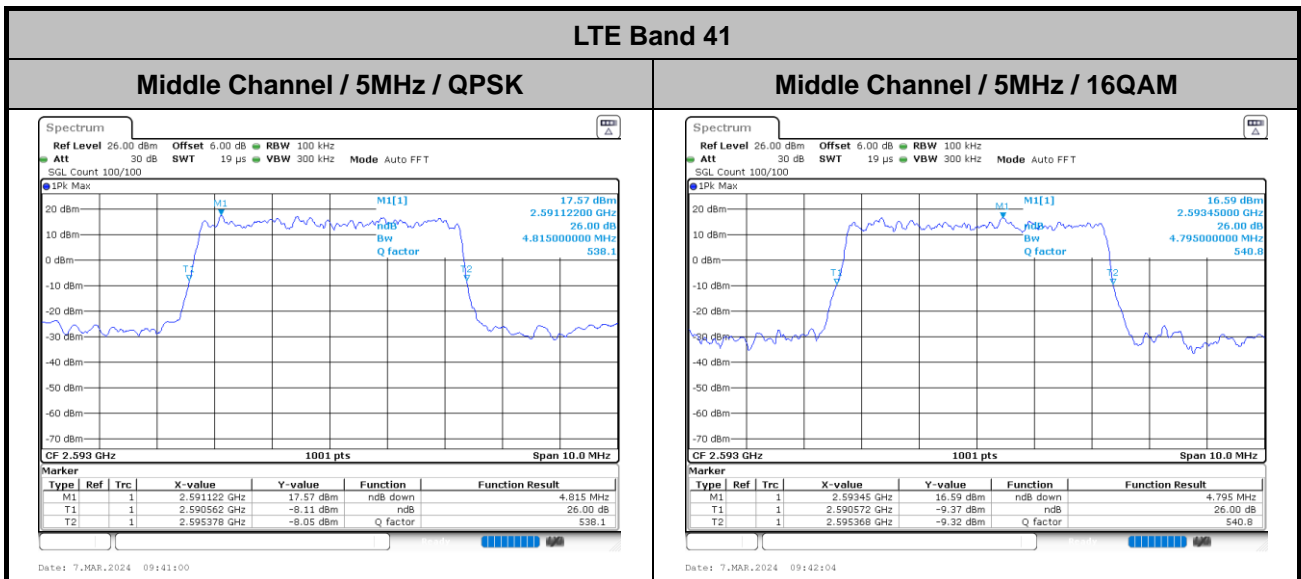






**26dB Bandwidth**

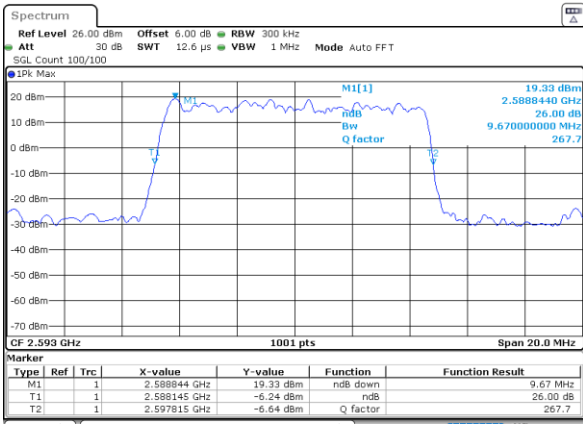
Mode	LTE Band 41 : 26dB BW(MHz)	
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	4.82	4.80
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.67	9.79
<b>BW</b>	<b>15MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	14.12	14.15
<b>BW</b>	<b>20MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	19.06	18.78





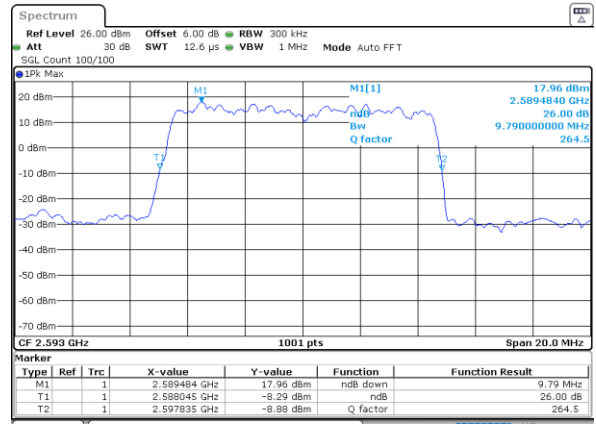
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 7.MAR.2024 09:23:05

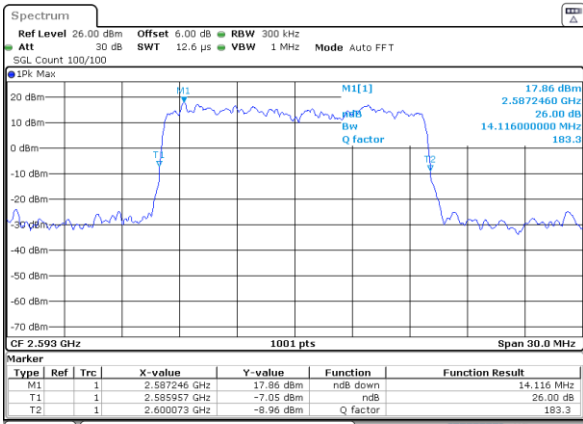
Middle Channel / 10MHz / 16QAM



Date: 7.MAR.2024 09:25:02

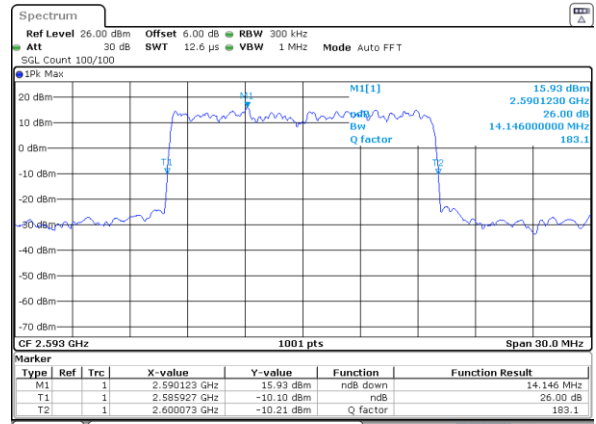
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 7.MAR.2024 09:10:33

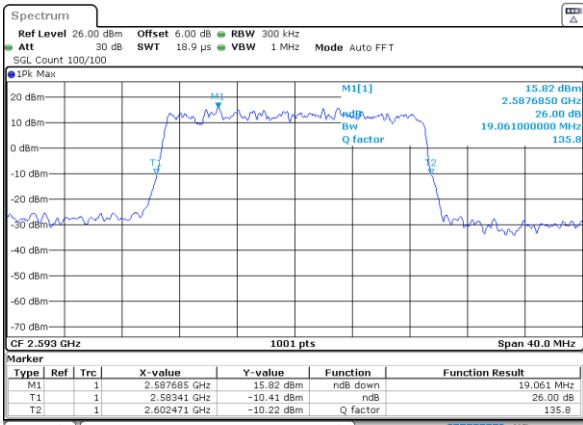
Middle Channel / 15MHz / 16QAM



Date: 7.MAR.2024 09:12:24

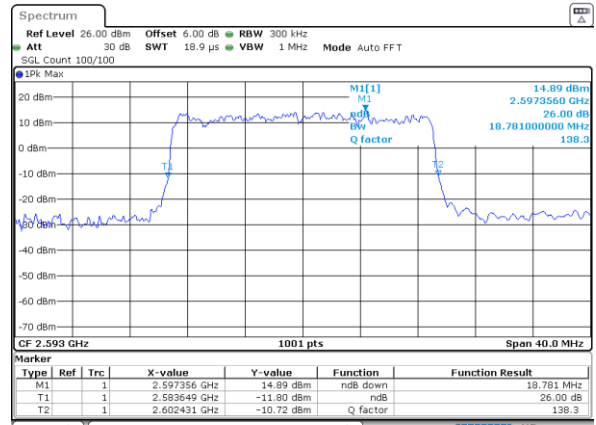
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 7.MAR.2024 08:25:20

Middle Channel / 20MHz / 16QAM

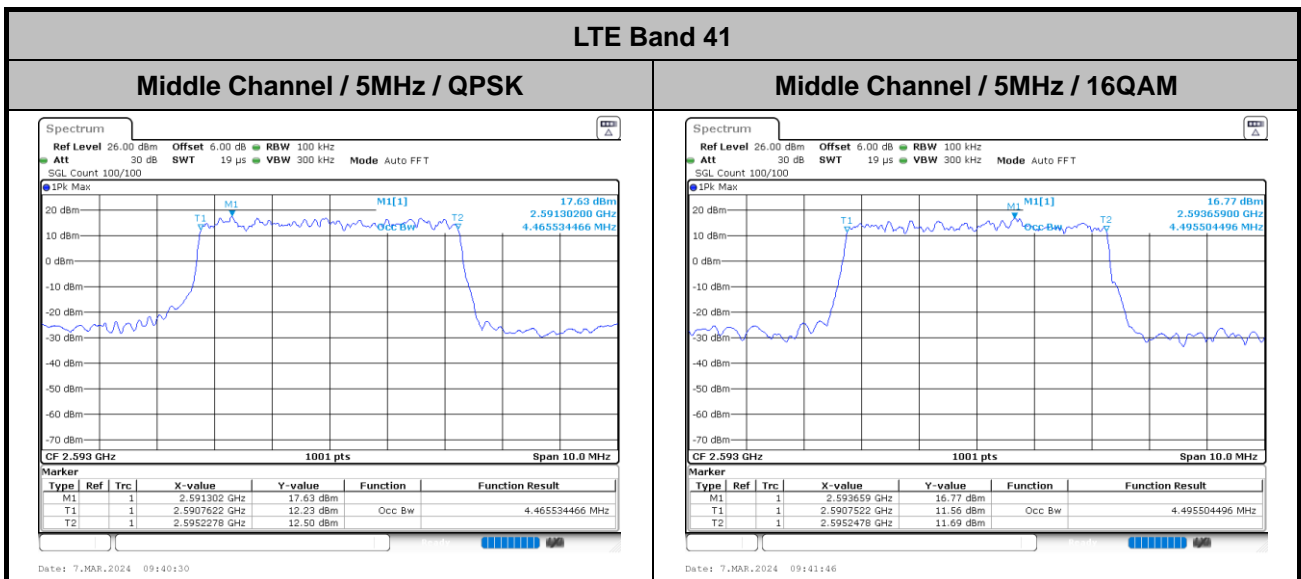


Date: 7.MAR.2024 08:26:58



# Occupied Bandwidth

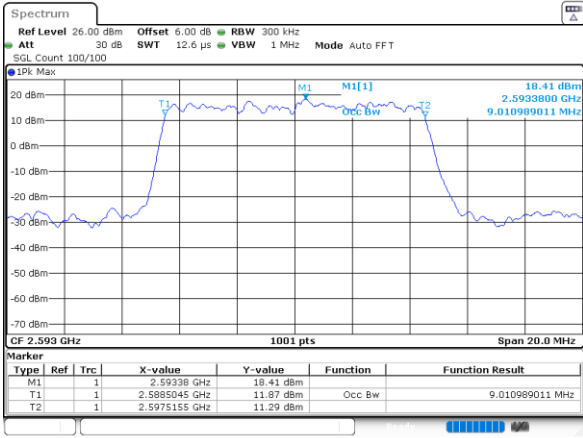
Mode	LTE Band 41 : 99%OBW(MHz)	
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	4.47	4.50
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.01	9.09
<b>BW</b>	<b>15MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	13.49	13.46
<b>BW</b>	<b>20MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	17.82	17.78





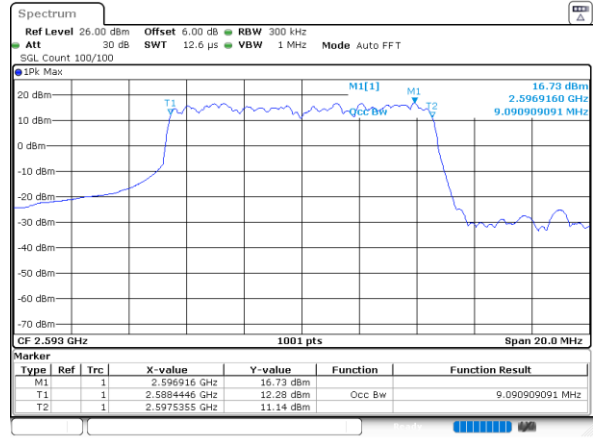
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 7.MAR.2024 09:22:138

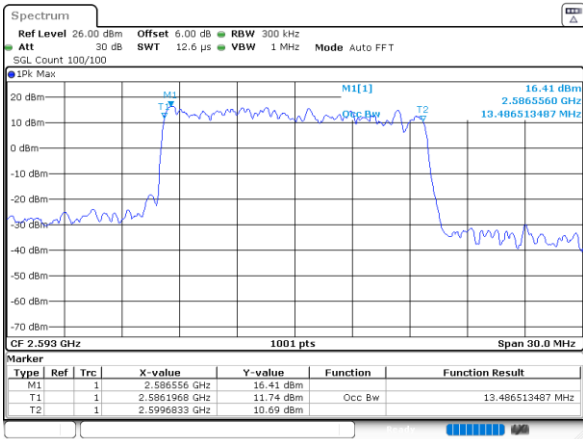
Middle Channel / 10MHz / 16QAM



Date: 7.MAR.2024 09:23:42

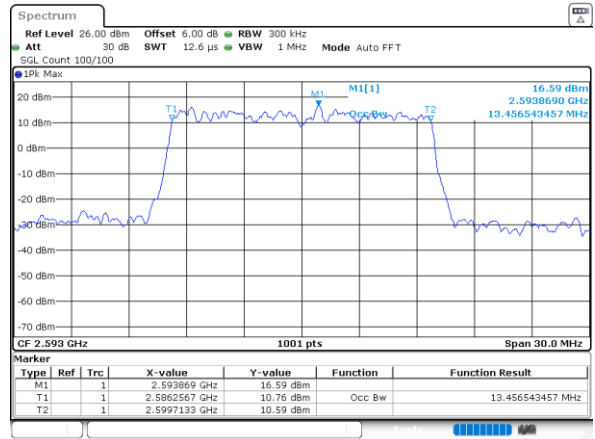
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 7.MAR.2024 09:10:914

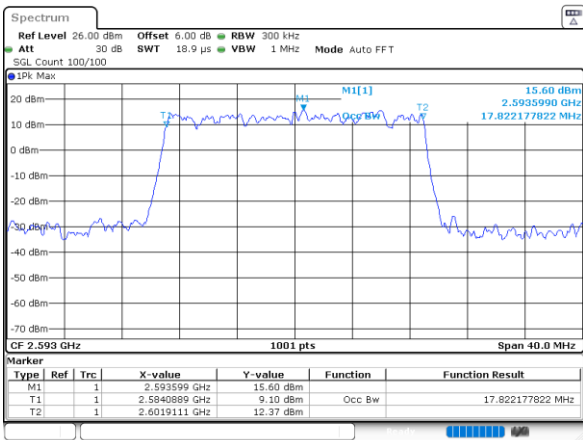
Middle Channel / 15MHz / 16QAM



Date: 7.MAR.2024 09:11:28

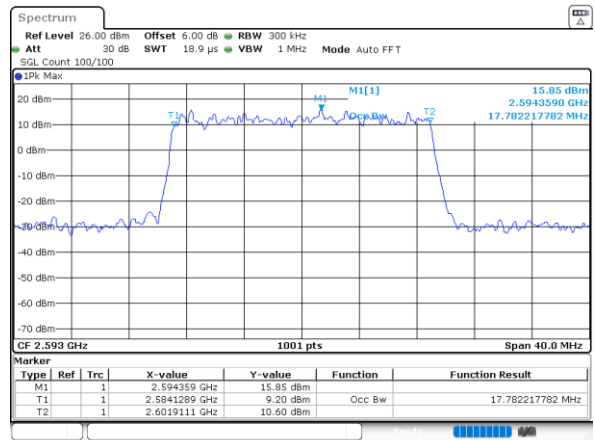
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 7.MAR.2024 08:26:119

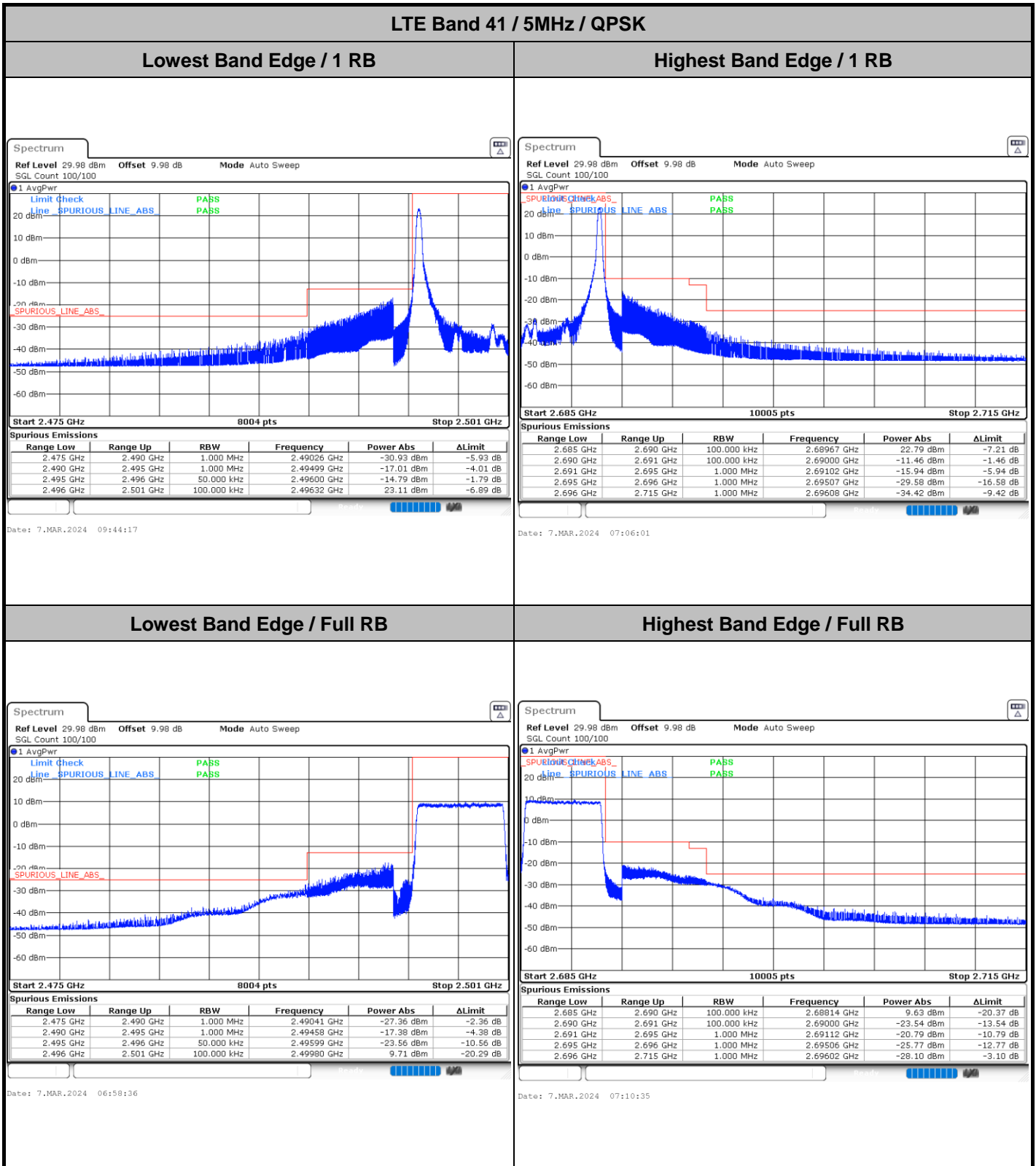
Middle Channel / 20MHz / 16QAM



Date: 7.MAR.2024 08:26:44



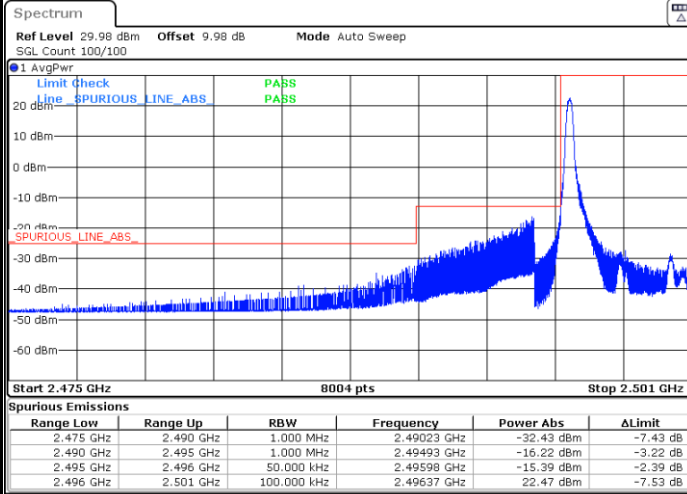
# Conducted Band Edge





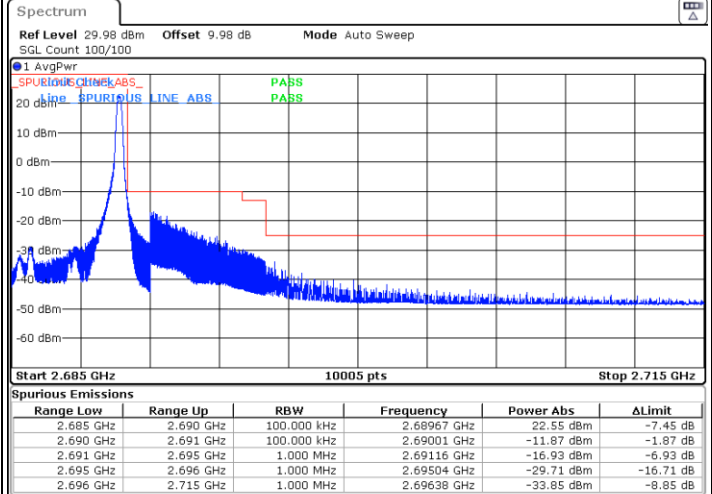
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



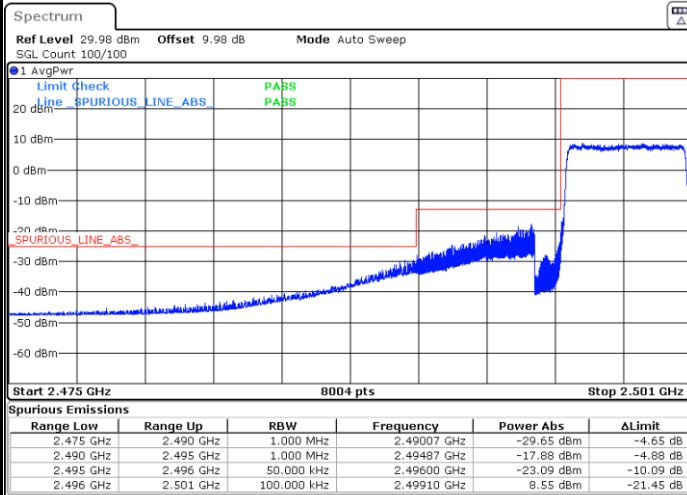
Date: 7.MAR.2024 06:55:12

Highest Band Edge / 1 RB



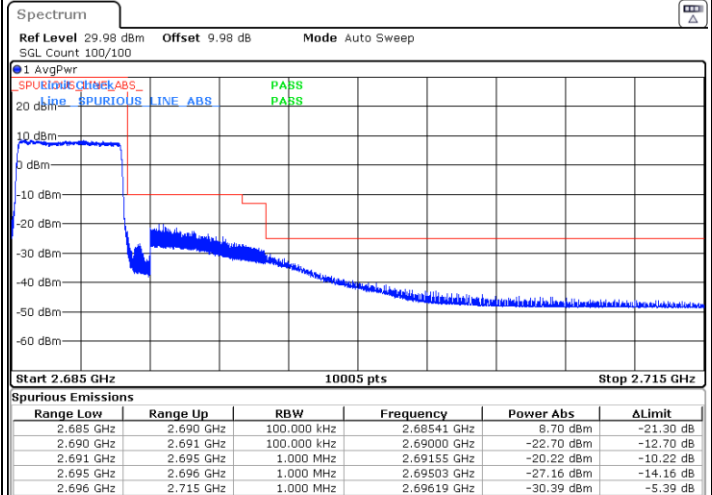
Date: 7.MAR.2024 07:07:12

Lowest Band Edge / Full RB



Date: 7.MAR.2024 06:59:45

Highest Band Edge / Full RB

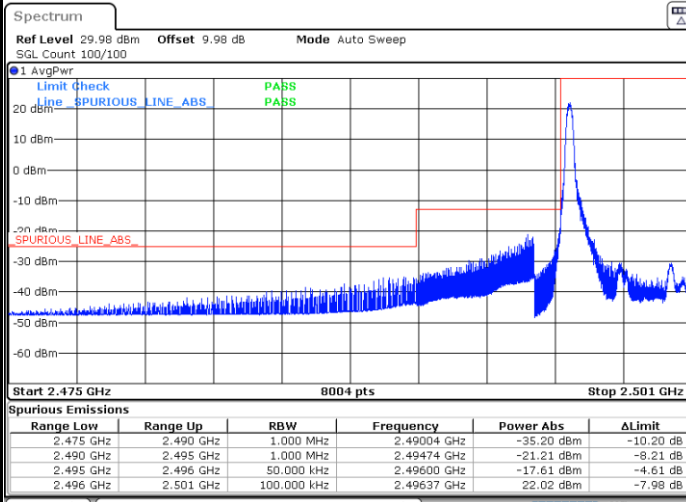


Date: 7.MAR.2024 07:11:43



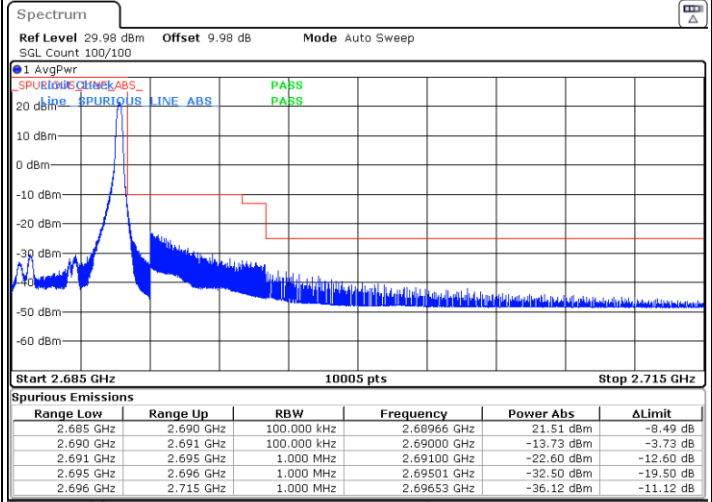
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



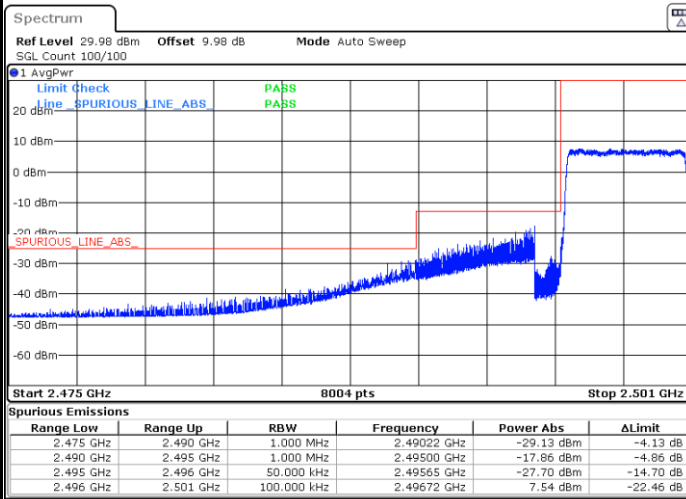
Date: 7.MAR.2024 06:56:20

Highest Band Edge / 1 RB



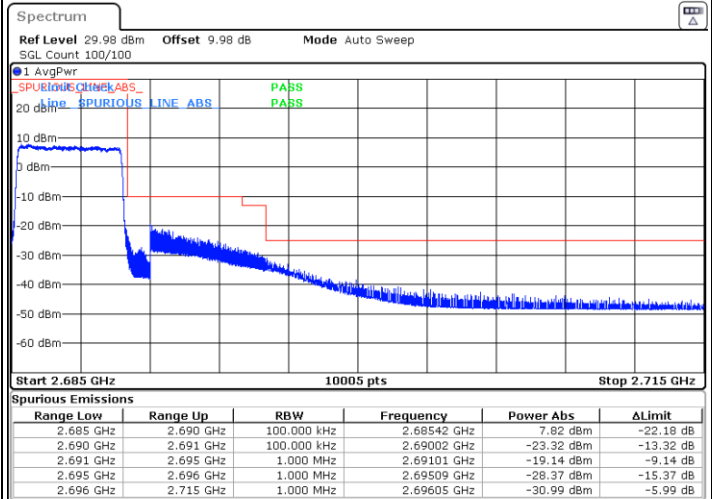
Date: 7.MAR.2024 07:08:19

Lowest Band Edge / Full RB



Date: 7.MAR.2024 07:00:53

Highest Band Edge / Full RB



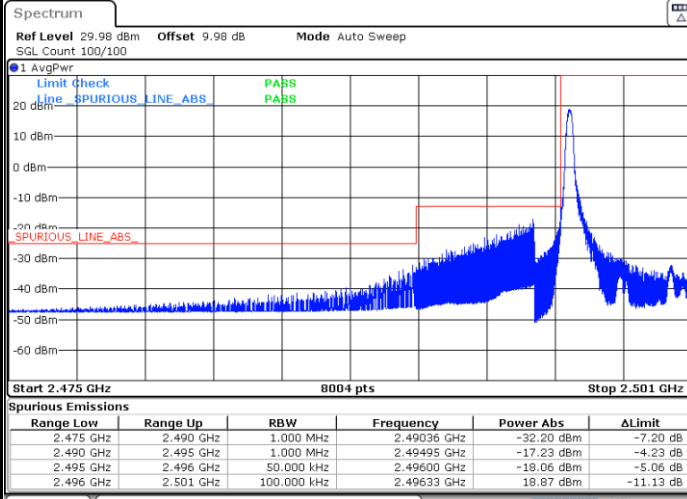
Date: 7.MAR.2024 07:12:51





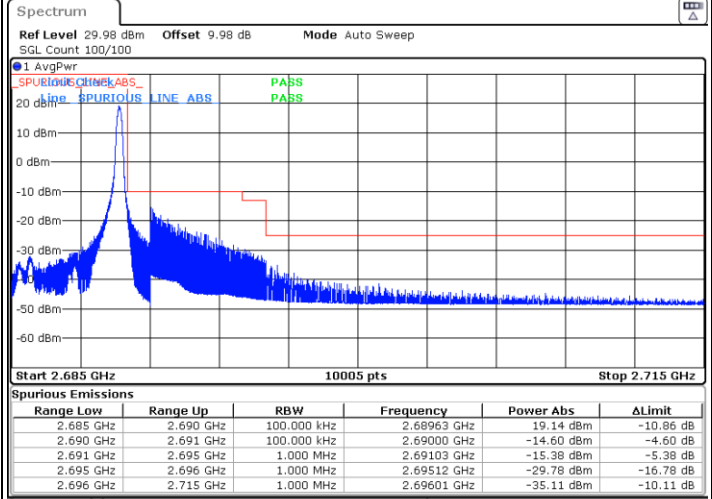
LTE Band 41 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



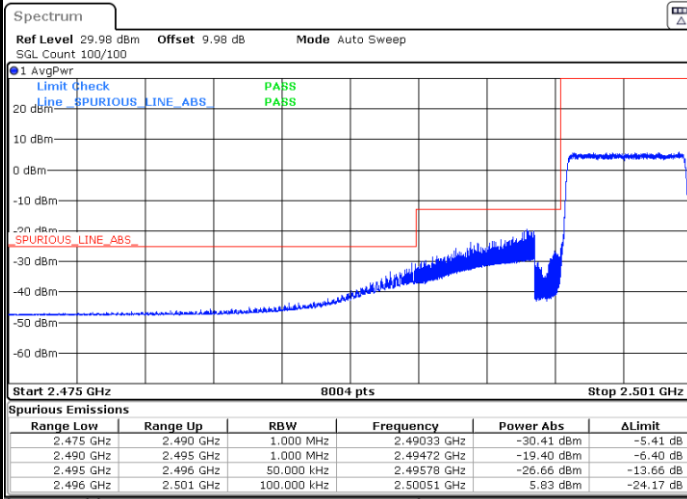
Date: 7.MAR.2024 06:57:28

Highest Band Edge / 1 RB



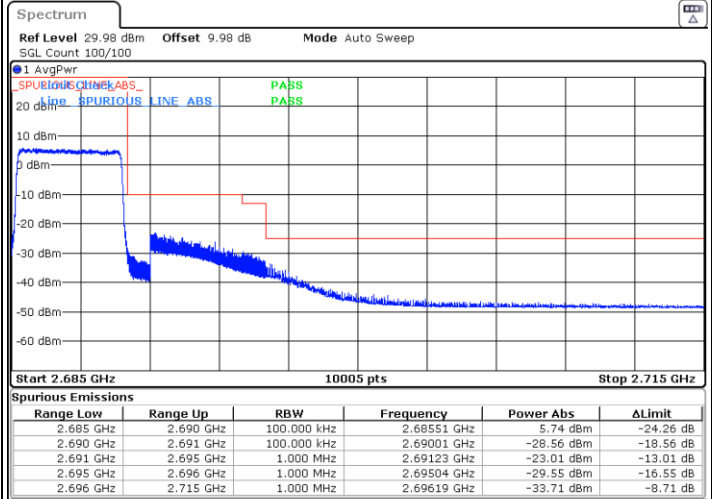
Date: 7.MAR.2024 07:09:27

Lowest Band Edge / Full RB



Date: 7.MAR.2024 07:02:01

Highest Band Edge / Full RB

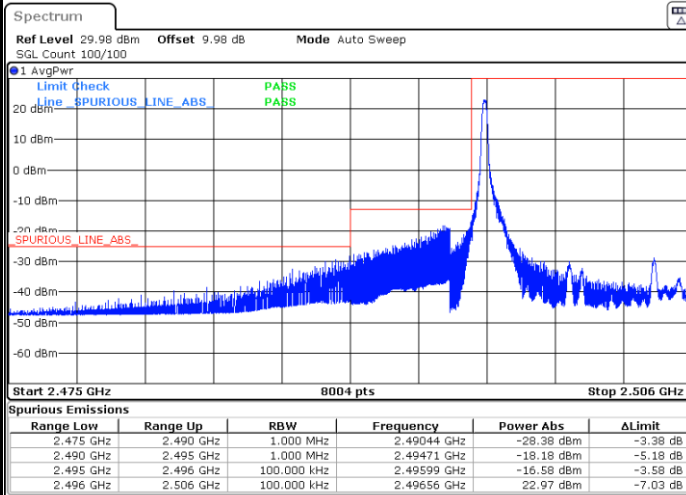


Date: 7.MAR.2024 07:13:58



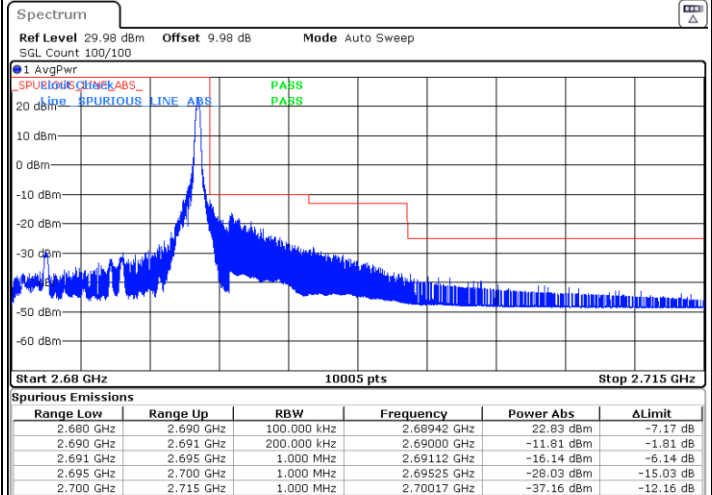
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



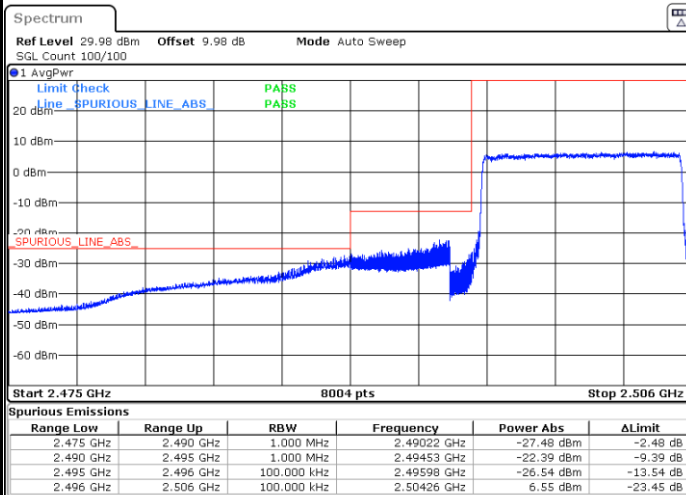
Date: 7.MAR.2024 07:17:03

Highest Band Edge / 1 RB



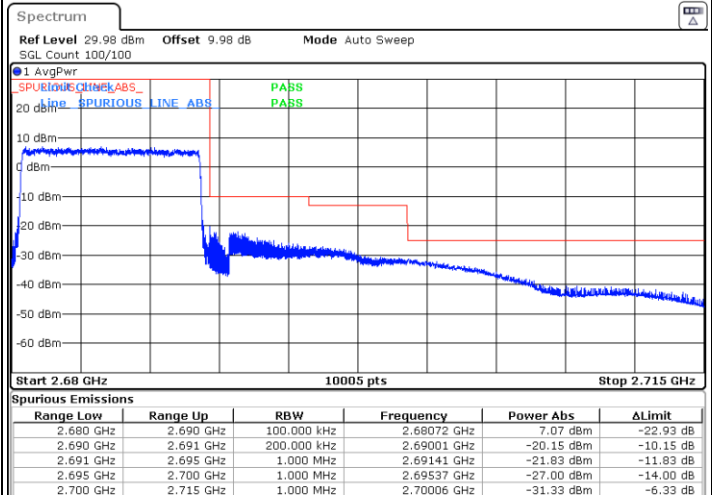
Date: 7.MAR.2024 07:30:11

Lowest Band Edge / Full RB



Date: 7.MAR.2024 07:21:38

Highest Band Edge / Full RB

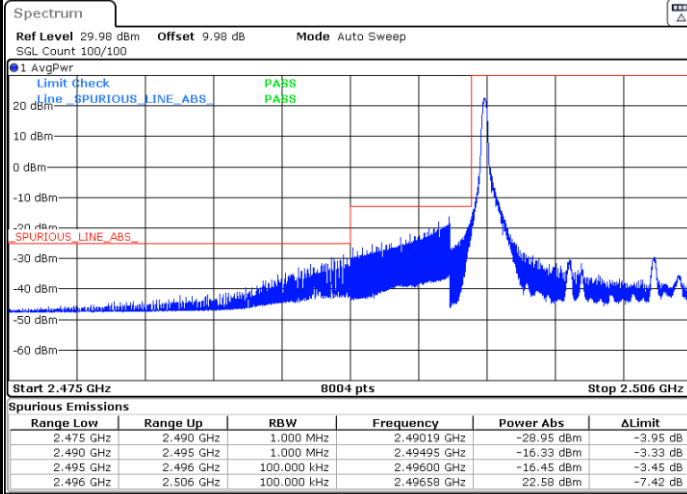


Date: 7.MAR.2024 07:34:49



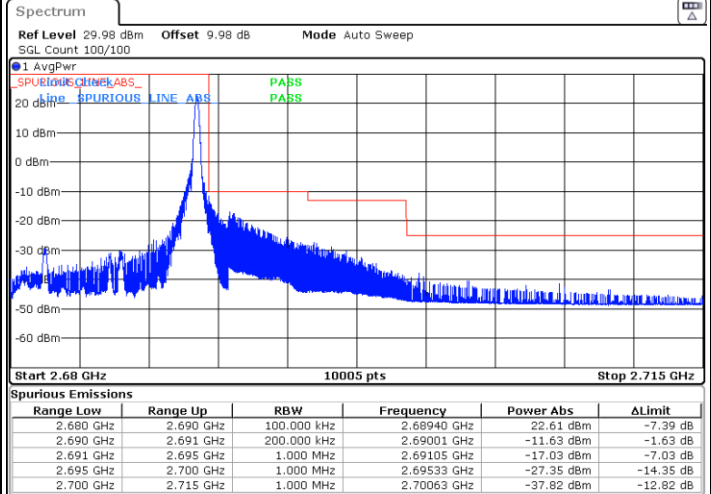
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



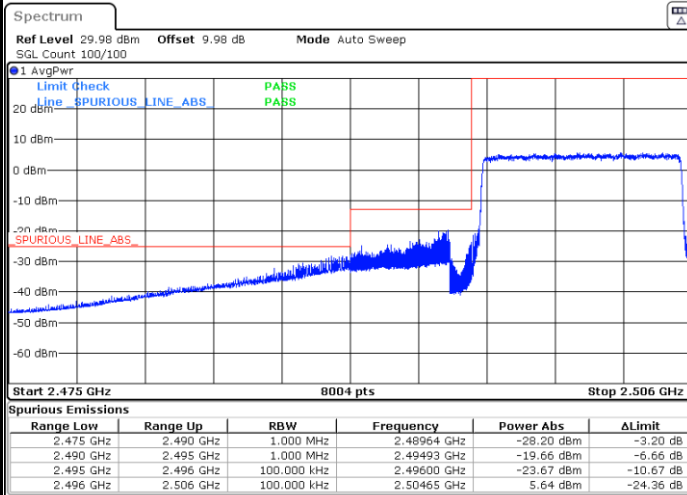
Date: 7.MAR.2024 07:18:13

Highest Band Edge / 1 RB



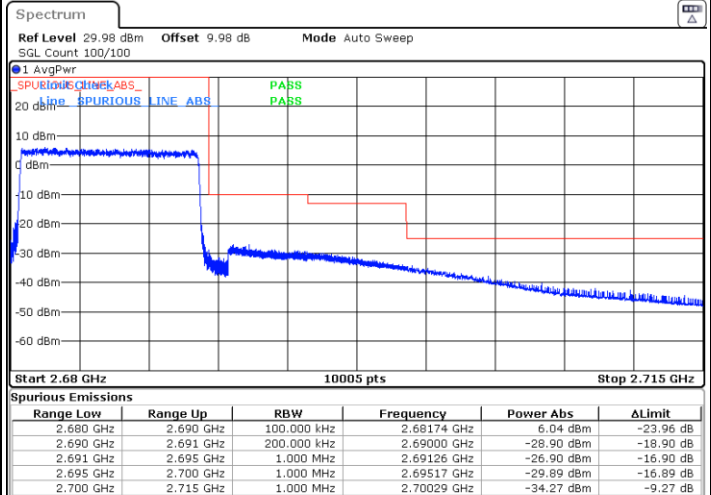
Date: 7.MAR.2024 07:31:22

Lowest Band Edge / Full RB



Date: 7.MAR.2024 07:22:46

Highest Band Edge / Full RB

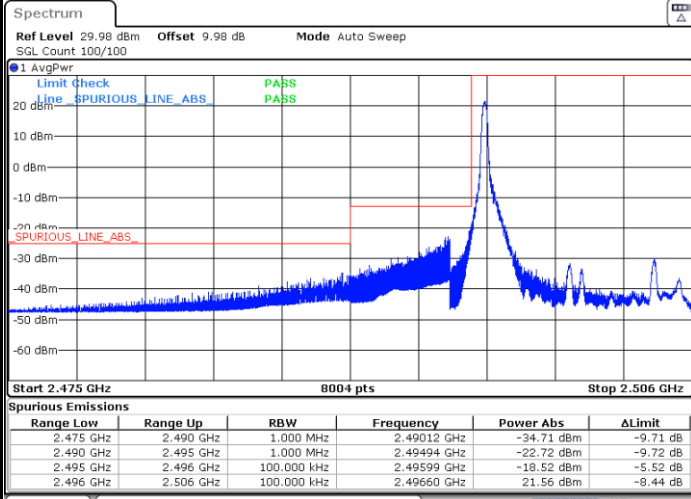


Date: 7.MAR.2024 07:35:57



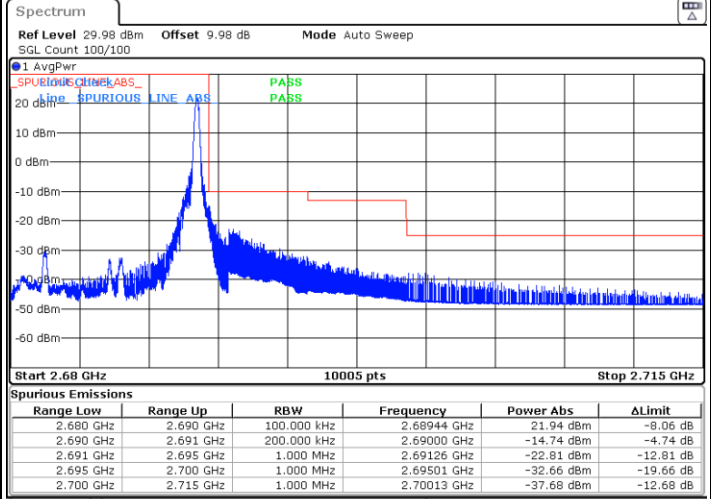
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



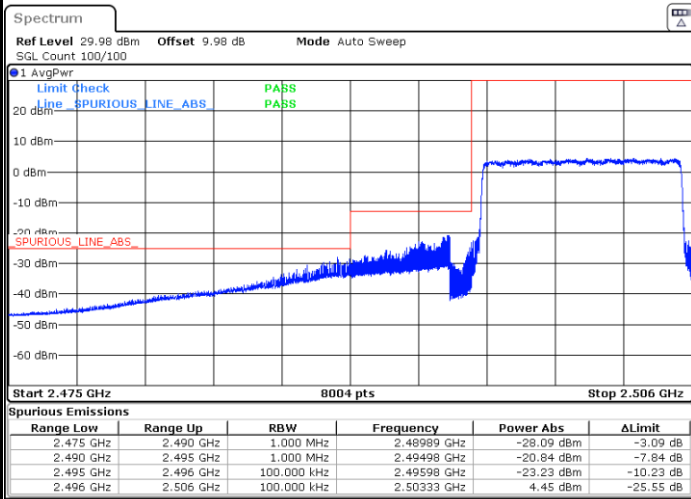
Date: 7.MAR.2024 07:19:21

Highest Band Edge / 1 RB



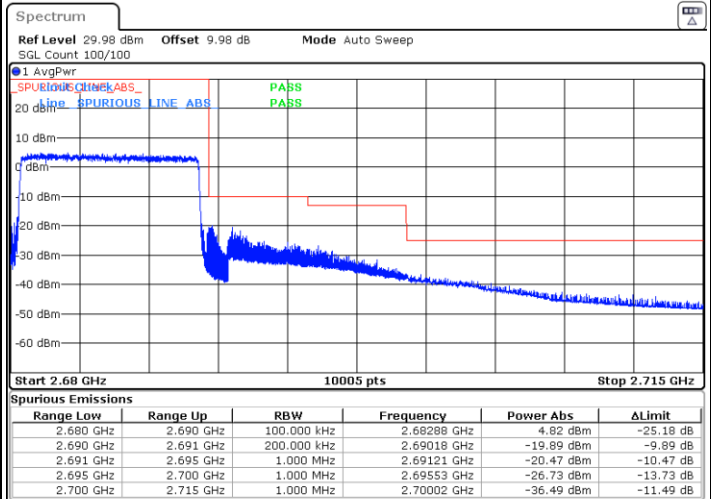
Date: 7.MAR.2024 07:32:33

Lowest Band Edge / Full RB



Date: 7.MAR.2024 07:23:54

Highest Band Edge / Full RB



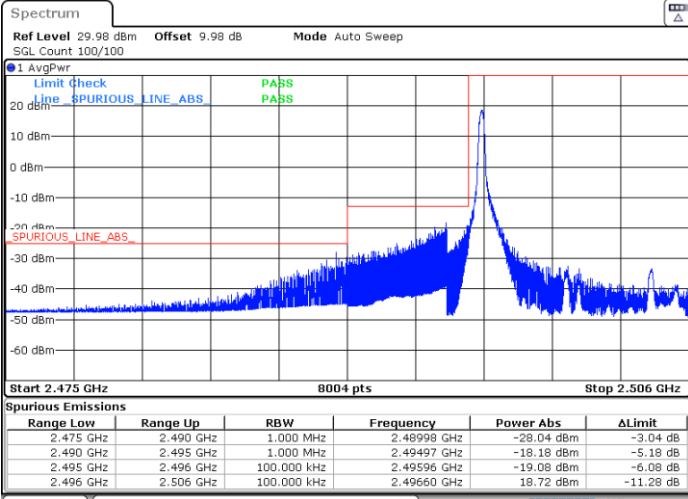
Date: 7.MAR.2024 07:37:04



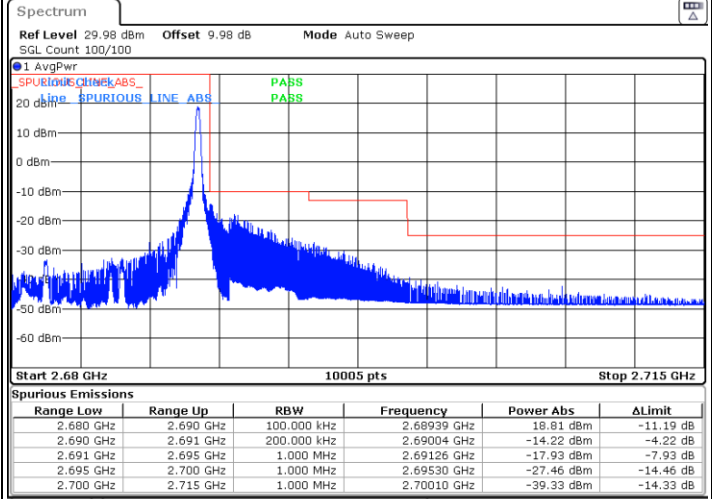
LTE Band 41 / 10MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



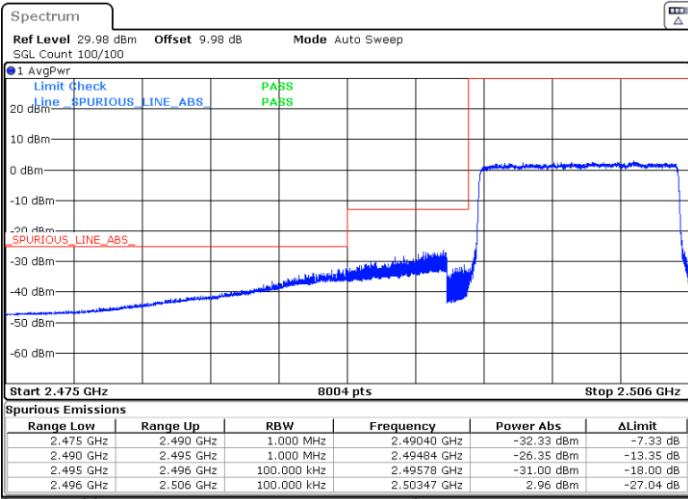
Date: 7.MAR.2024 07:20:29



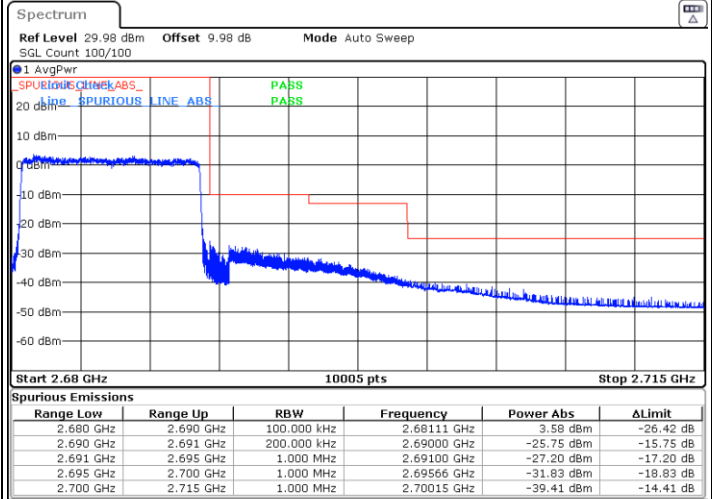
Date: 7.MAR.2024 07:33:41

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 7.MAR.2024 07:25:01



Date: 7.MAR.2024 07:38:12