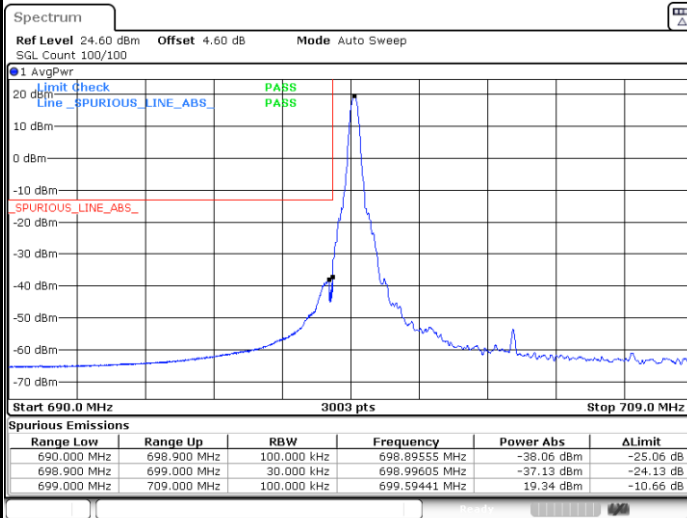


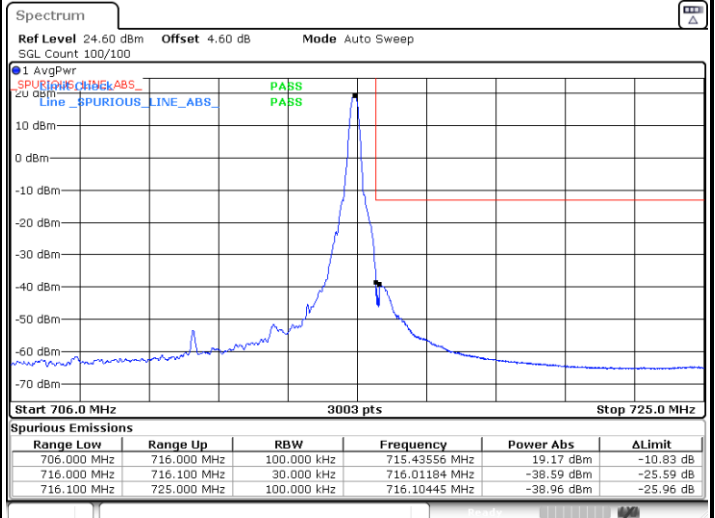


LTE Band 12 / 10MHz / QPSK

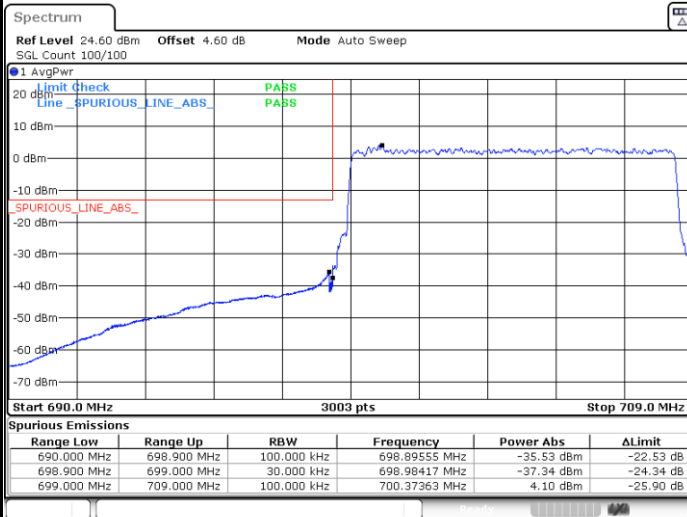
Lowest Band Edge / 1 RB



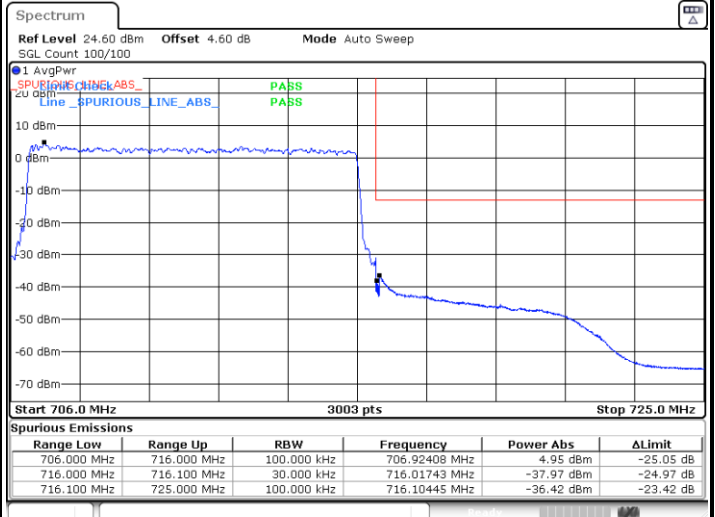
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



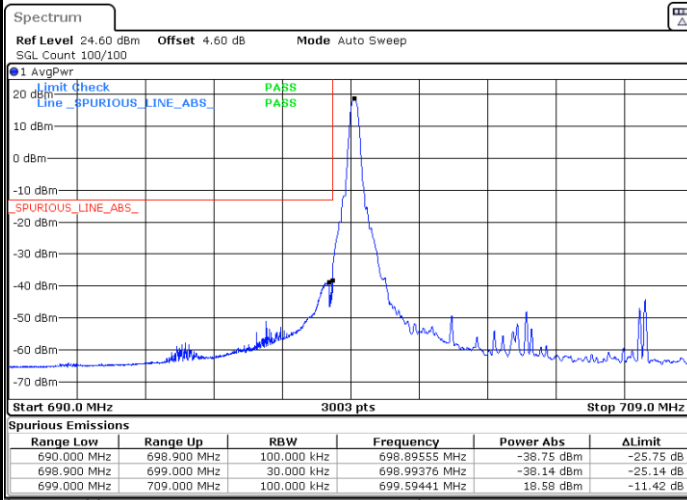
Highest Band Edge / Full RB





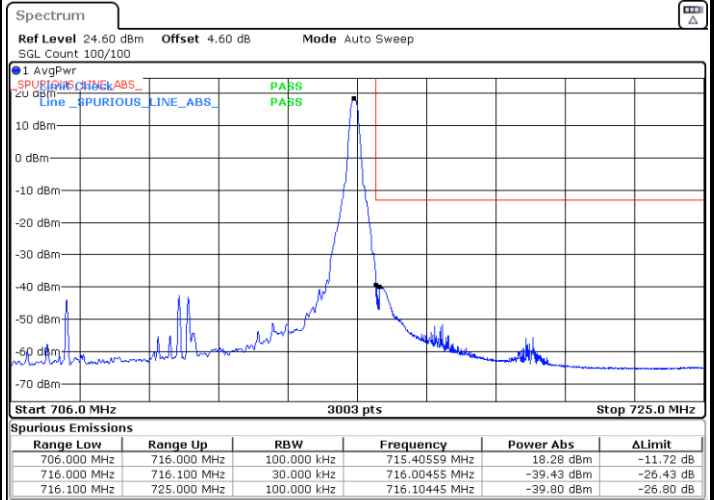
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



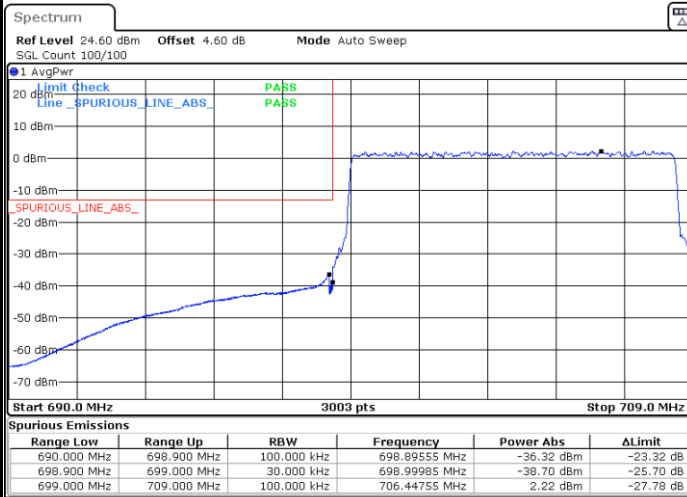
Date: 10.AUG.2023 15:21:15

Highest Band Edge / 1 RB



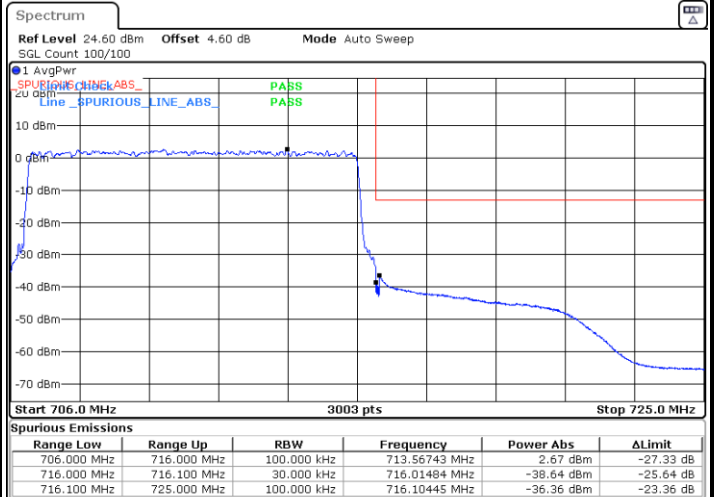
Date: 10.AUG.2023 15:31:26

Lowest Band Edge / Full RB



Date: 10.AUG.2023 15:25:03

Highest Band Edge / Full RB

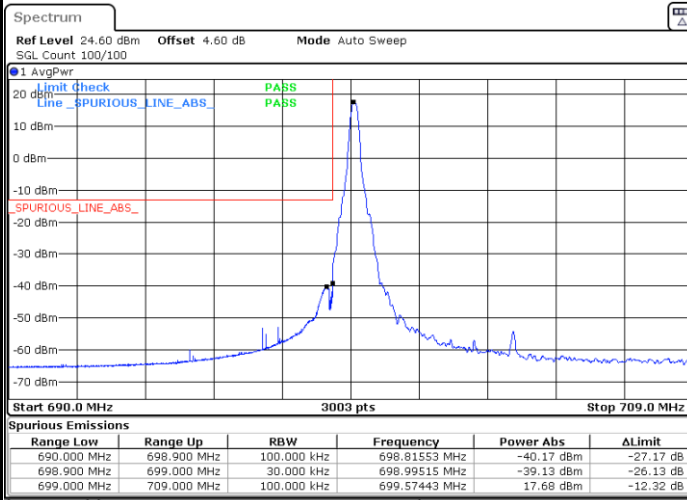


Date: 10.AUG.2023 15:34:58



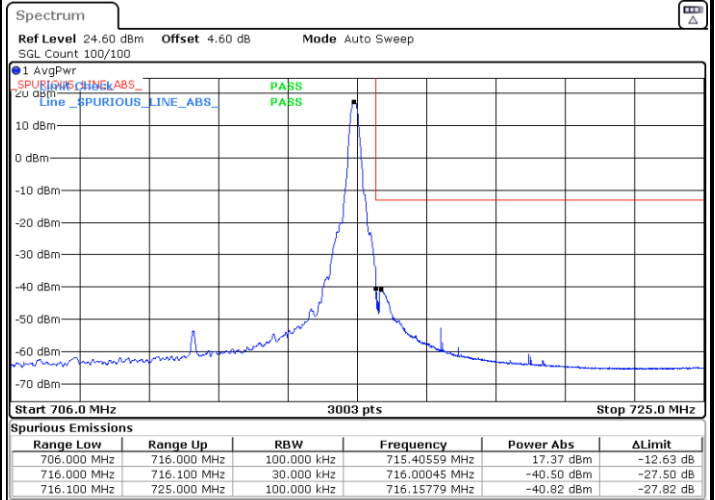
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



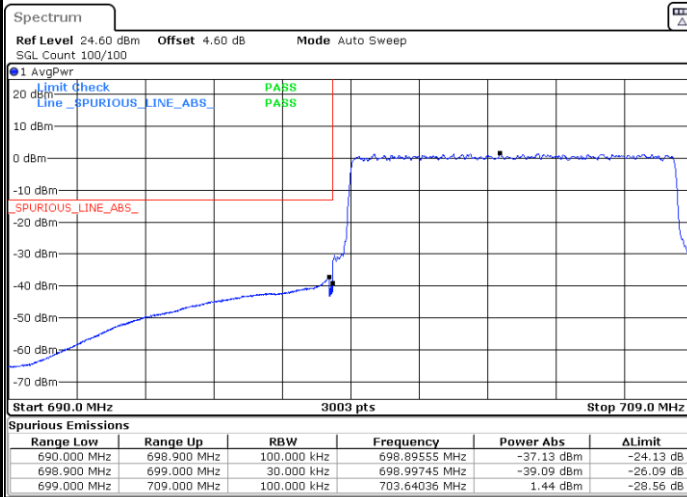
Date: 10.AUG.2023 15:22:08

Highest Band Edge / 1 RB



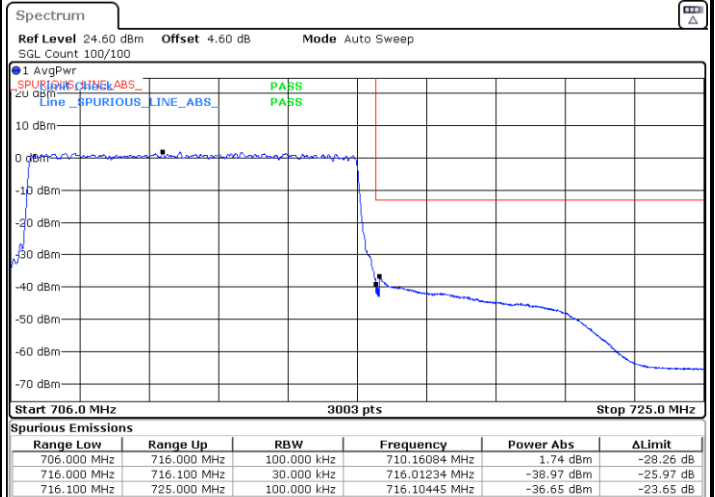
Date: 10.AUG.2023 15:32:19

Lowest Band Edge / Full RB



Date: 10.AUG.2023 15:25:56

Highest Band Edge / Full RB

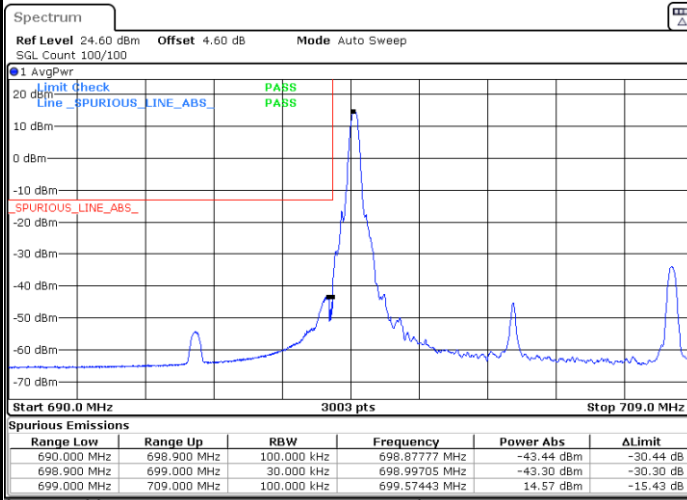


Date: 10.AUG.2023 15:35:51



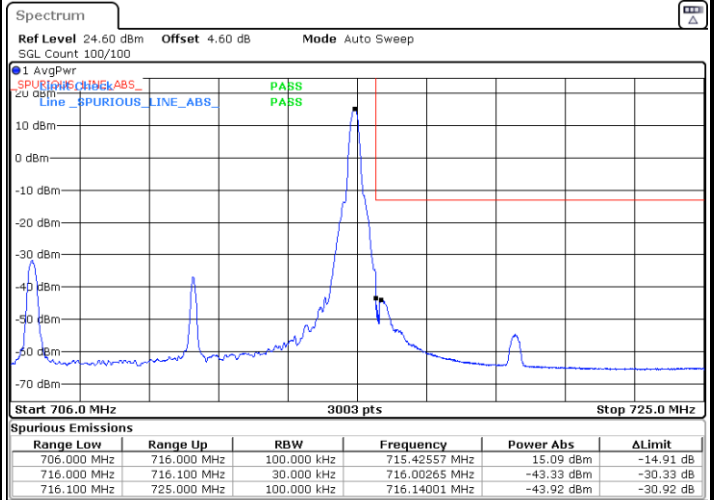
LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



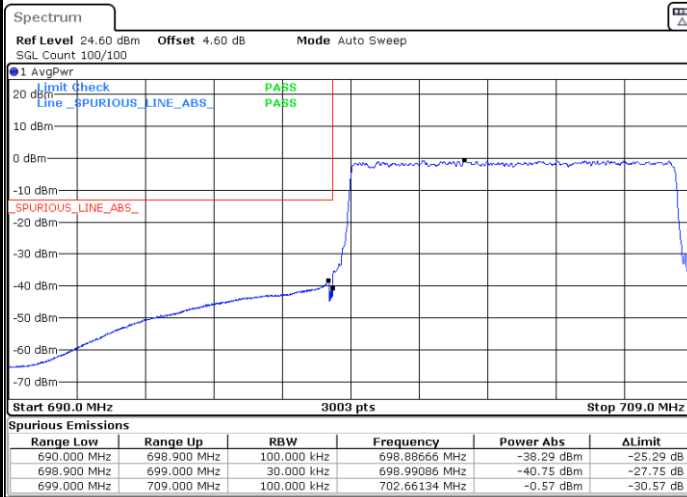
Date: 10.AUG.2023 15:23:01

Highest Band Edge / 1 RB



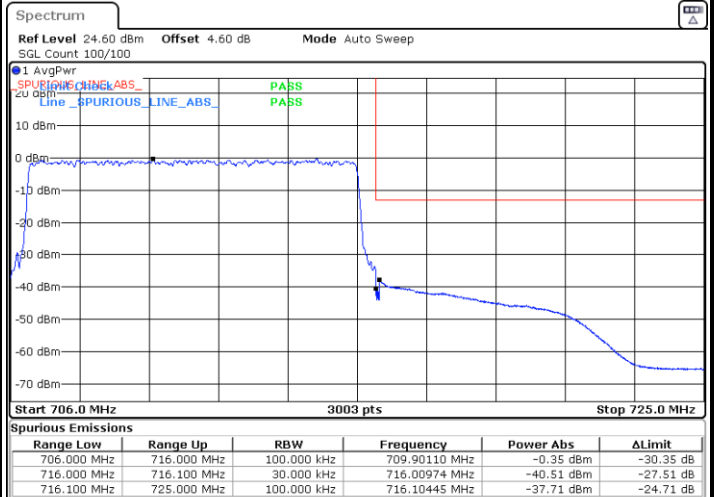
Date: 10.AUG.2023 15:33:12

Lowest Band Edge / Full RB



Date: 10.AUG.2023 15:26:50

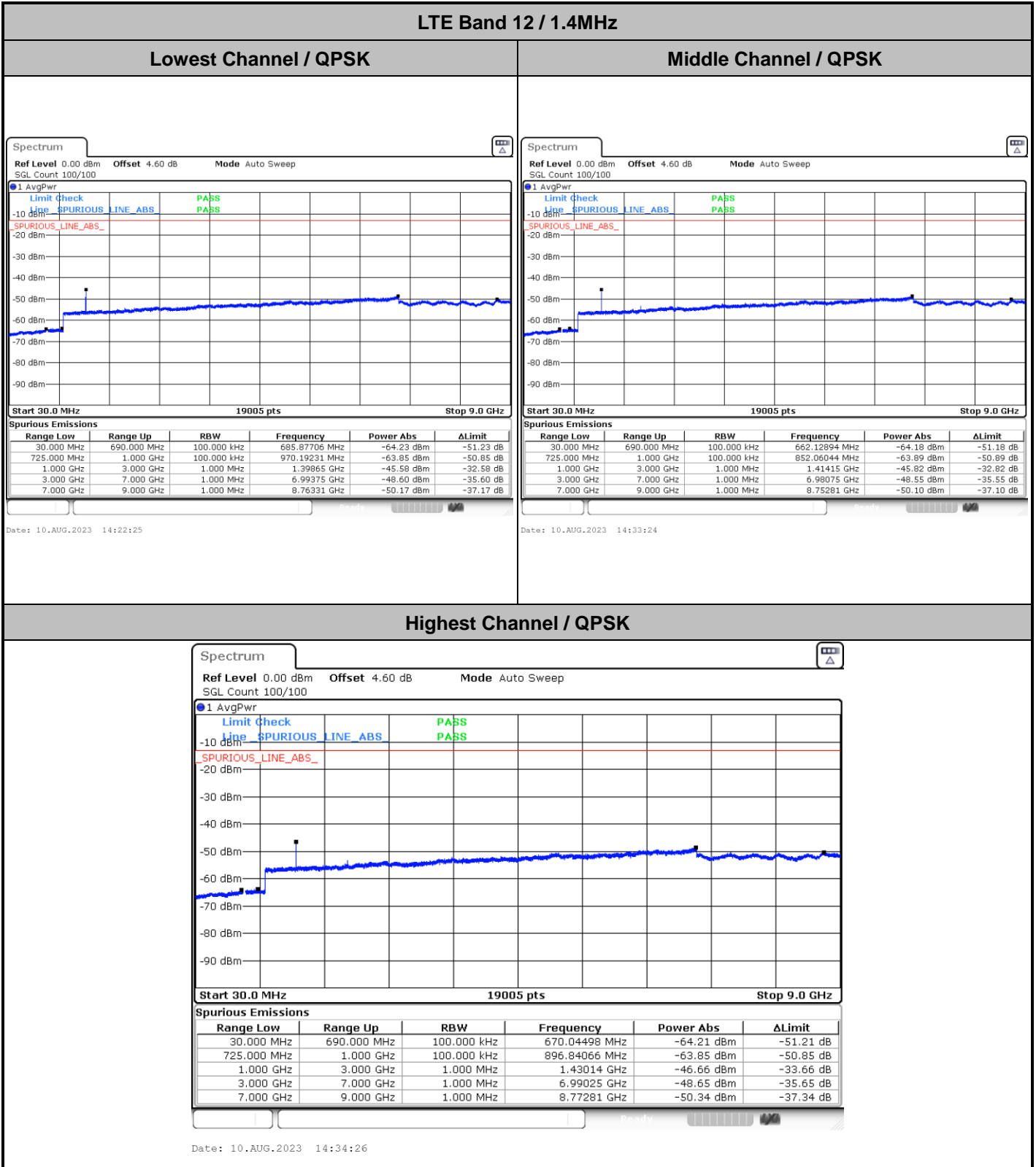
Highest Band Edge / Full RB



Date: 10.AUG.2023 15:36:44



# Conducted Spurious Emission

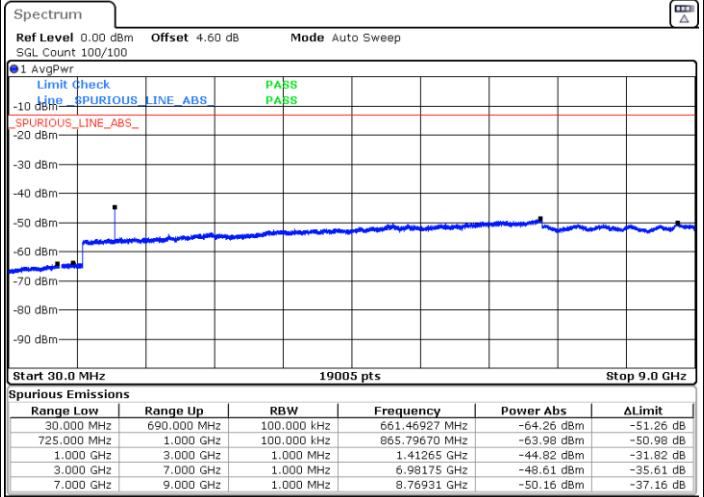
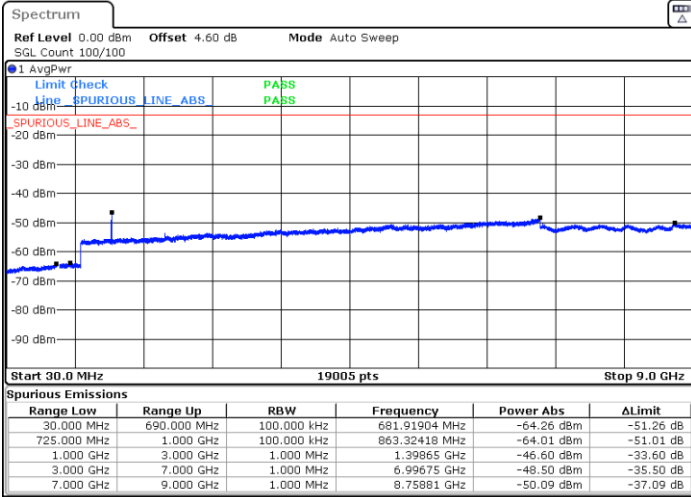




LTE Band 12 / 3MHz

Lowest Channel / QPSK

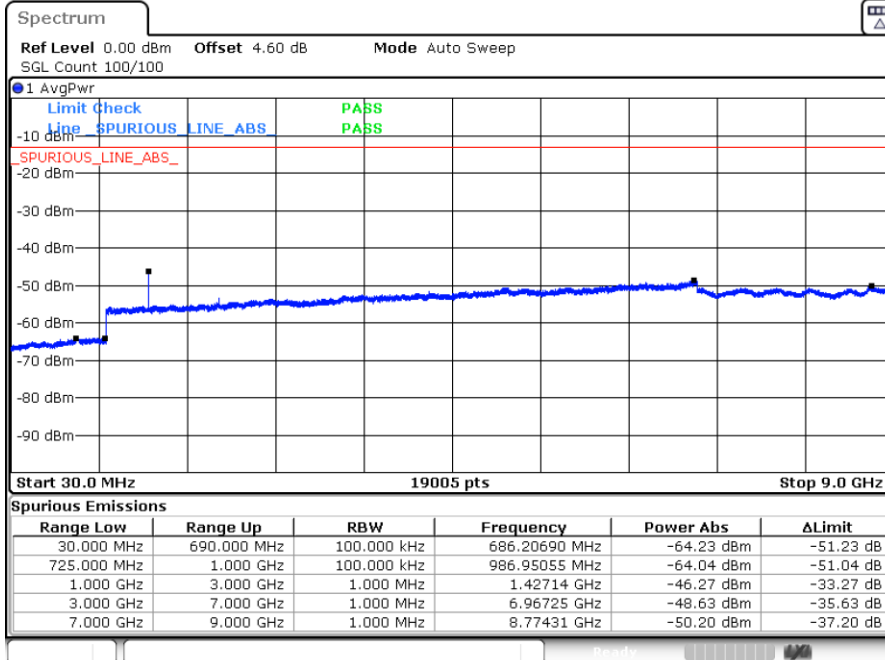
Middle Channel / QPSK



Date: 10.AUG.2023 14:44:25

Date: 10.AUG.2023 14:53:51

Highest Channel / QPSK



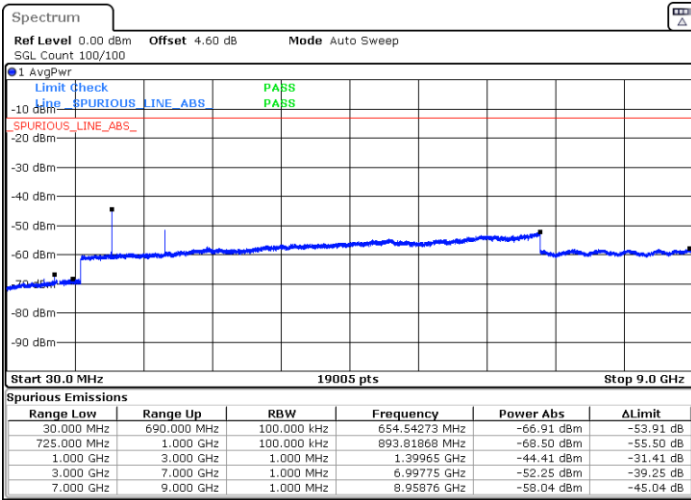
Date: 10.AUG.2023 14:54:42



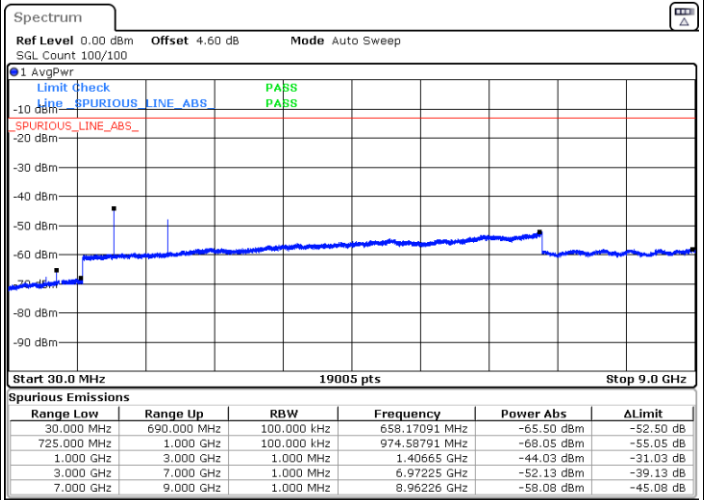
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

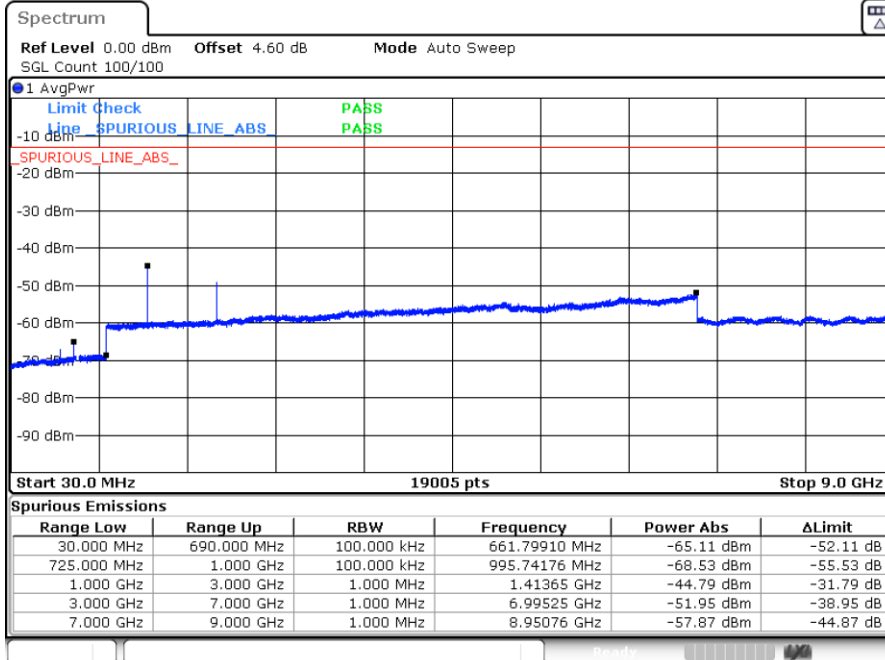


Date: 10.AUG.2023 15:19:29



Date: 10.AUG.2023 15:28:48

Highest Channel / QPSK



Date: 10.AUG.2023 15:29:40



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	0.0025	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0019	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0021	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0031	
20	Normal Voltage	0.0022	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

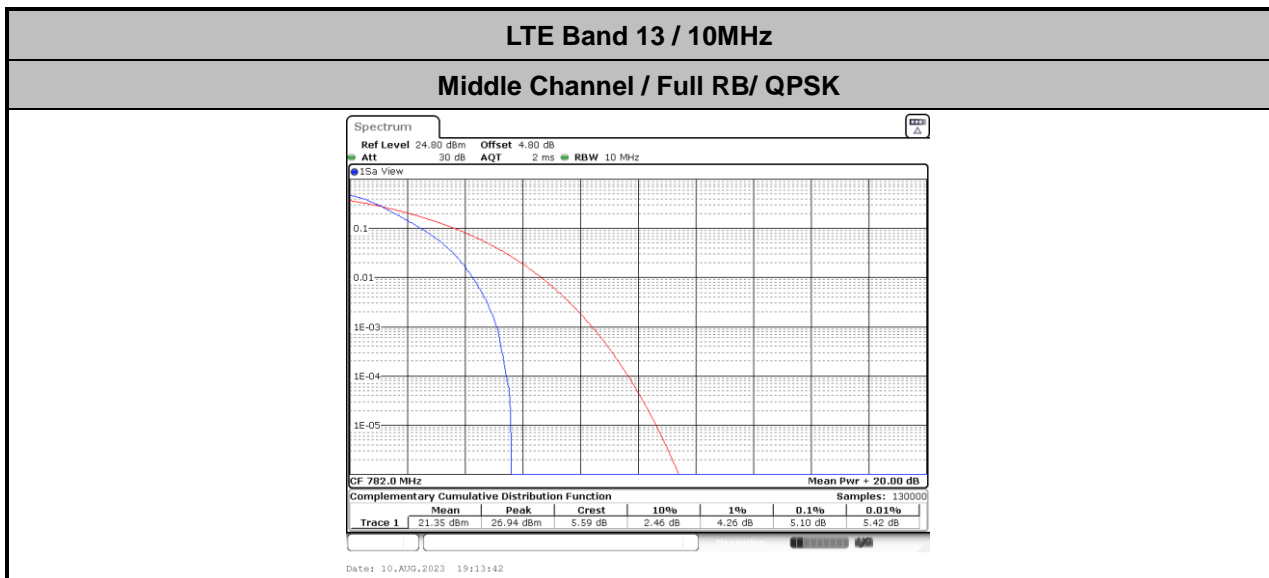




# LTE Band 13

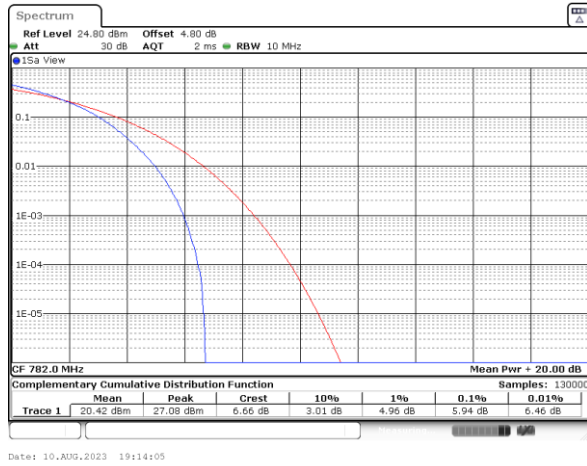
## Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.10	5.94	6.38	6.78	PASS

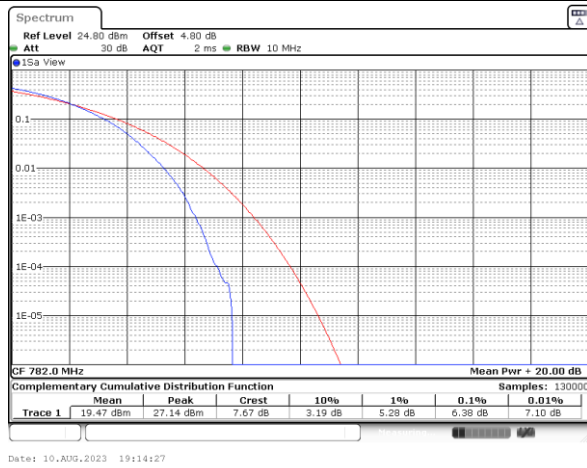




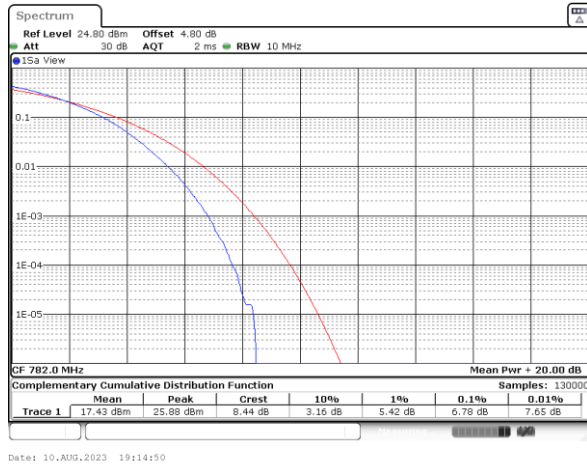
Middle Channel / Full RB/ 16QAM



Middle Channel / Full RB/ 64QAM



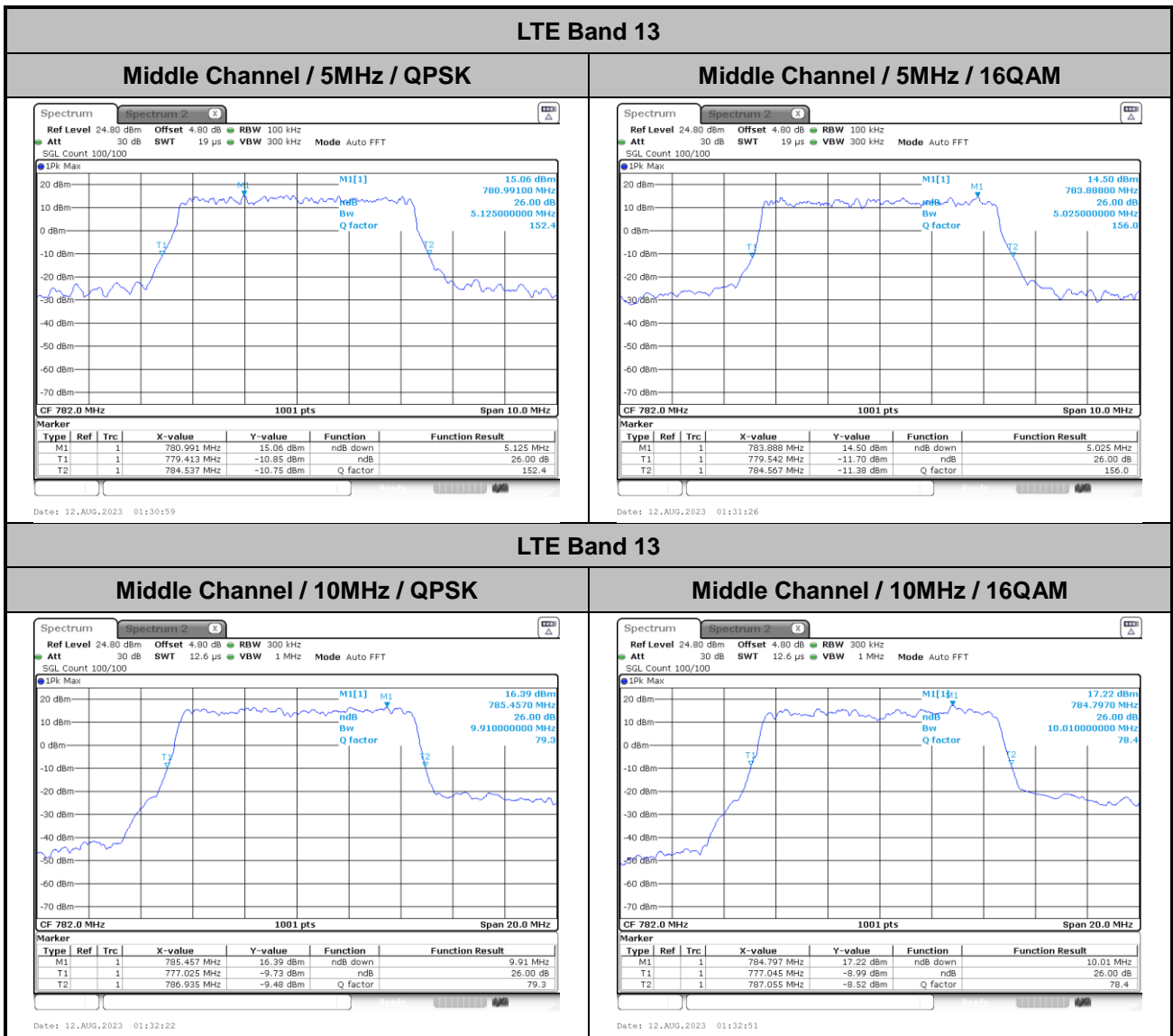
Middle Channel / Full RB/ 256QAM





## 26dB Bandwidth

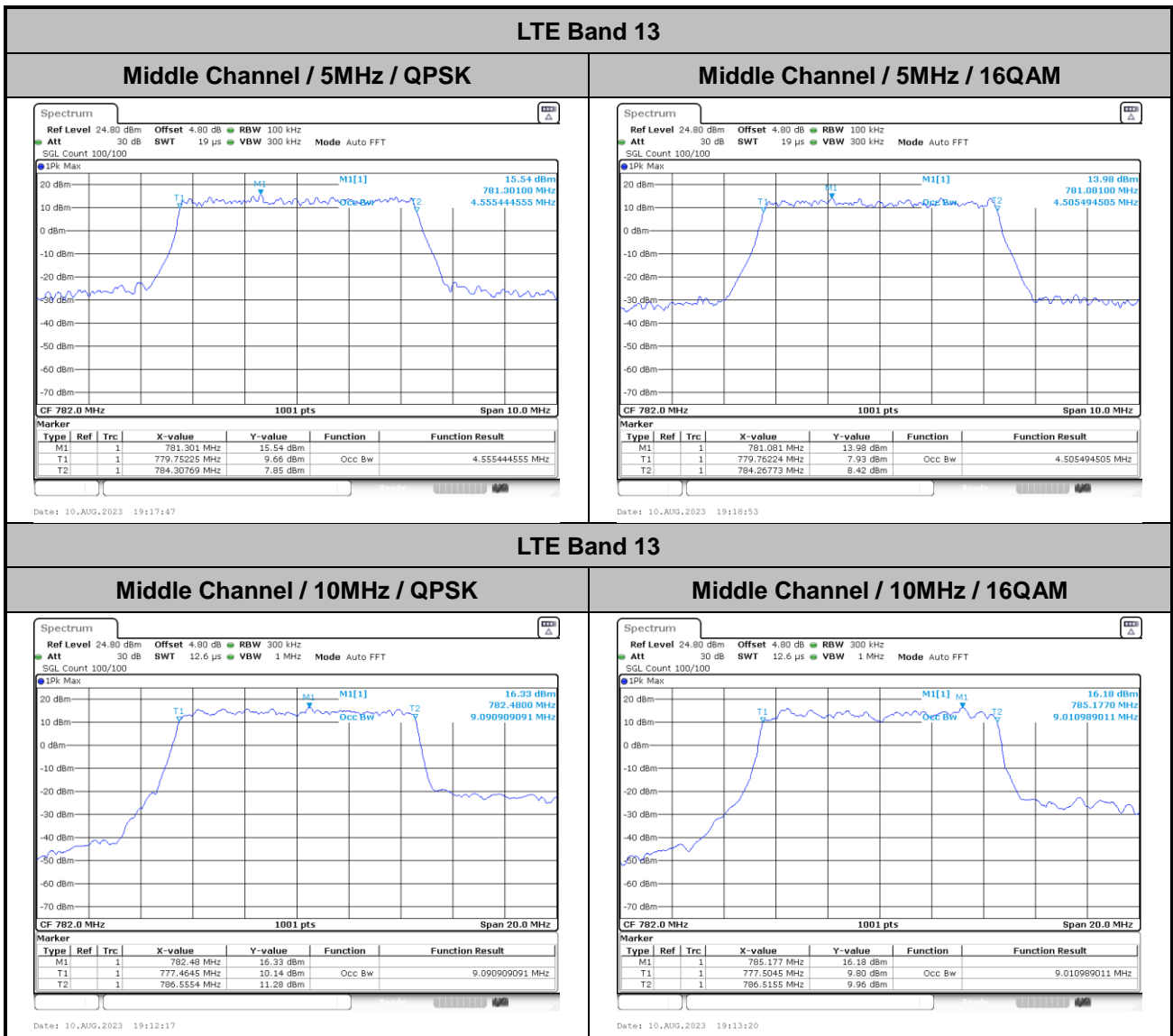
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.13	5.03
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.91	10.01





# Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	<b>4.56</b>	<b>4.51</b>
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	<b>9.09</b>	<b>9.01</b>

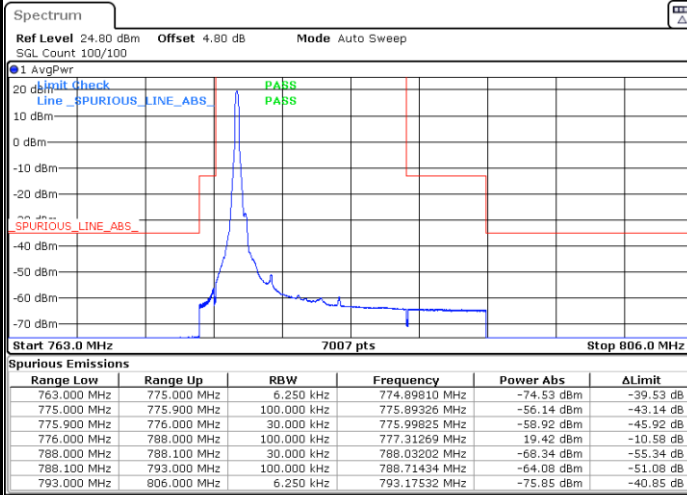




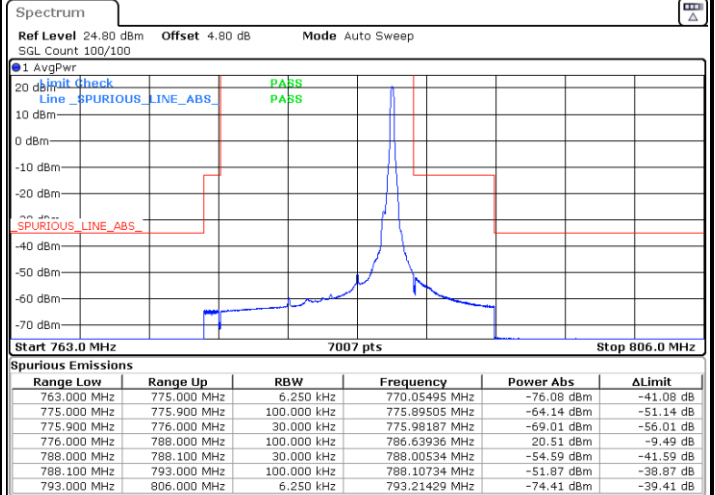
# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

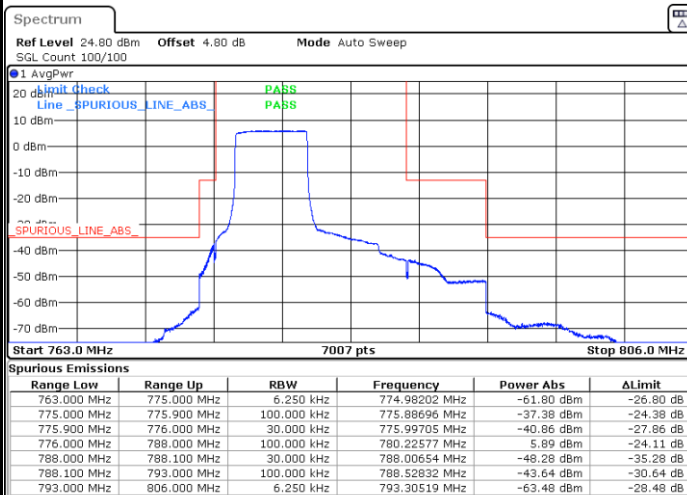
### Lowest Band Edge / 1 RB



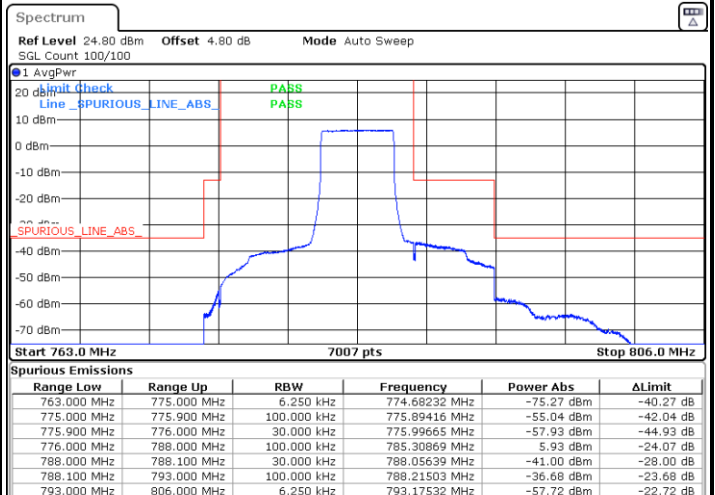
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



### Highest Band Edge / Full RB

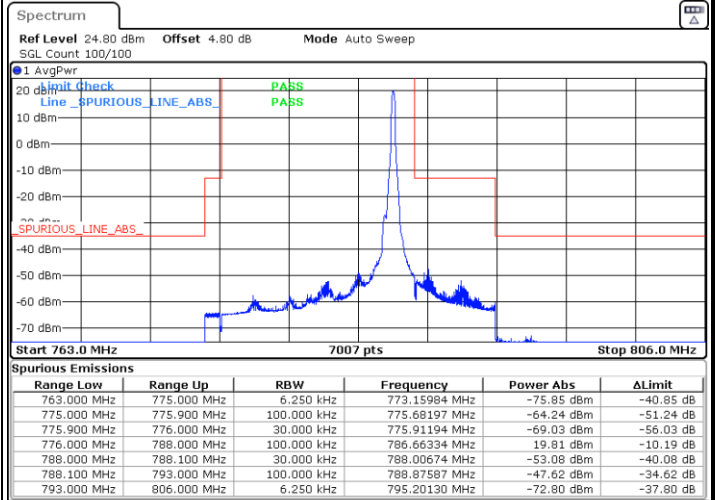
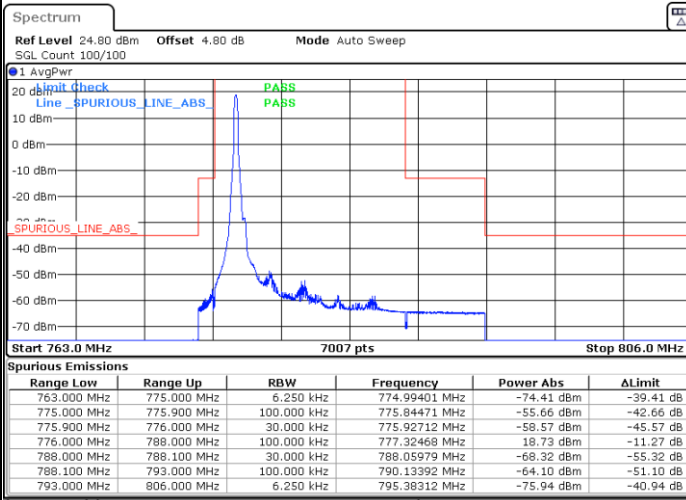




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

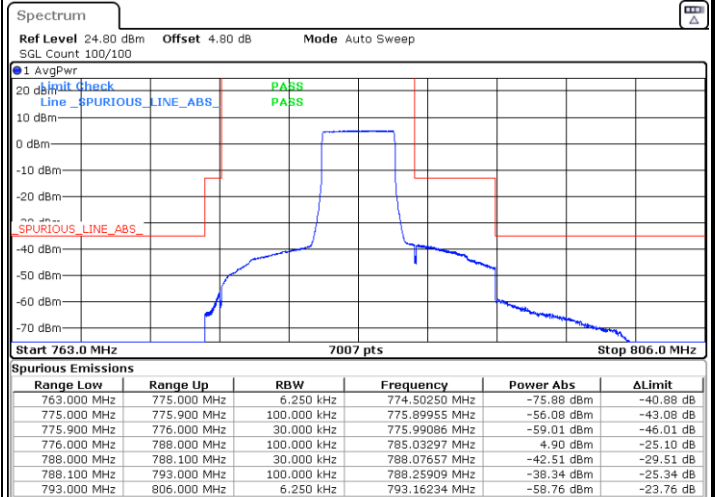
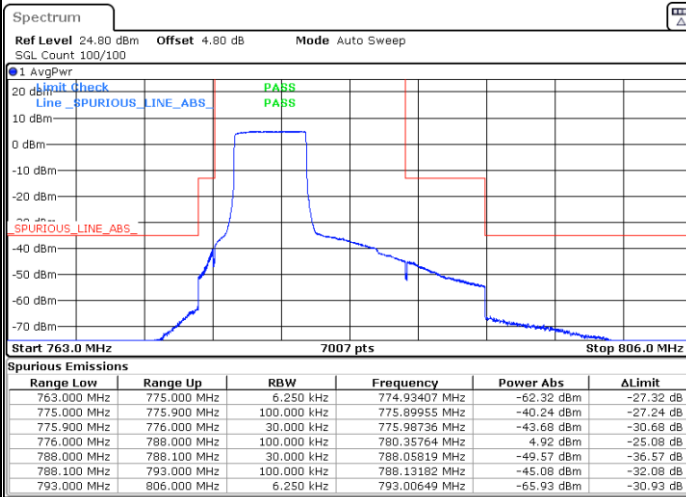


Date: 10.AUG.2023 18:16:18

Date: 10.AUG.2023 18:37:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 10.AUG.2023 18:23:39

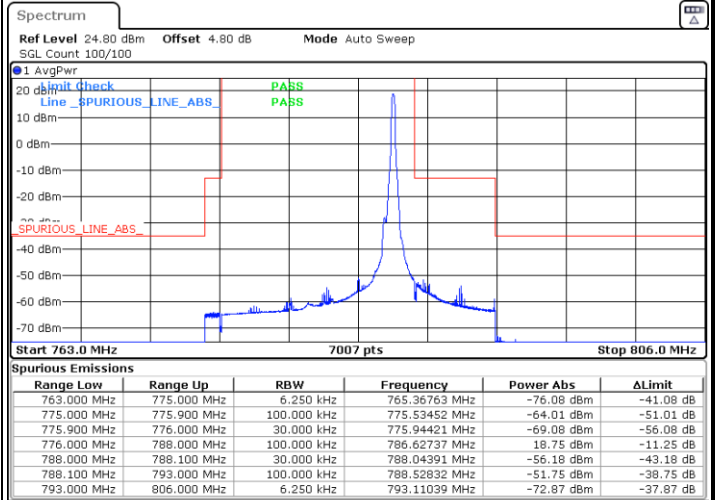
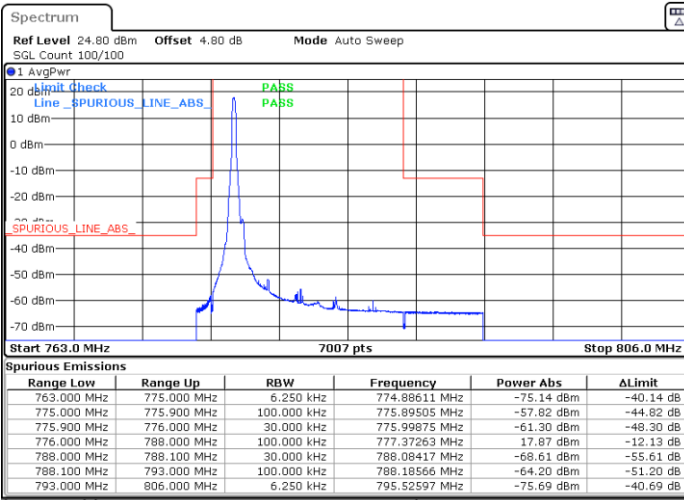
Date: 10.AUG.2023 18:44:37



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

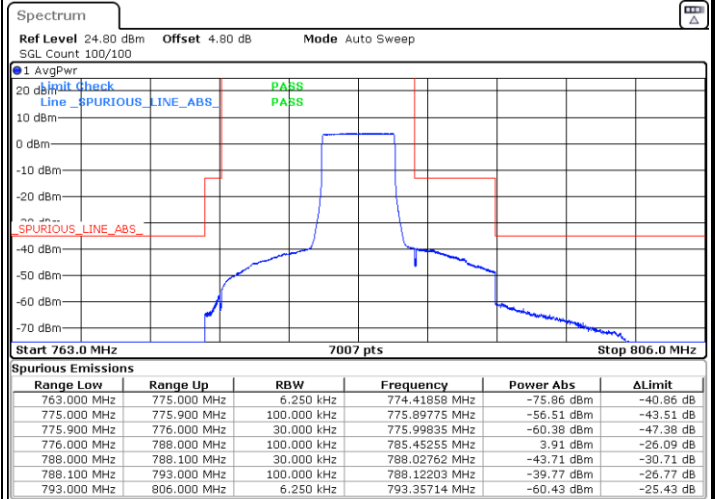
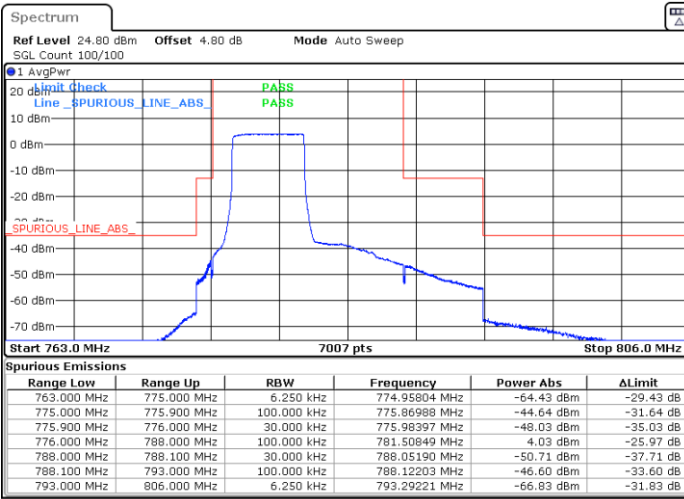


Date: 10.AUG.2023 18:18:08

Date: 10.AUG.2023 18:39:06

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 10.AUG.2023 18:25:29

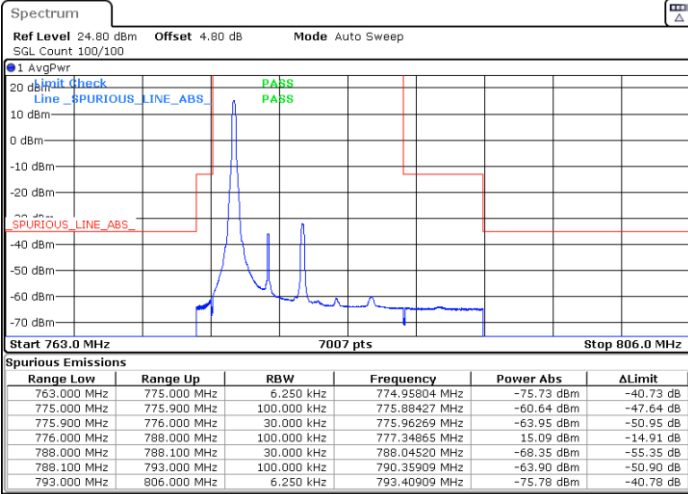
Date: 10.AUG.2023 18:46:27



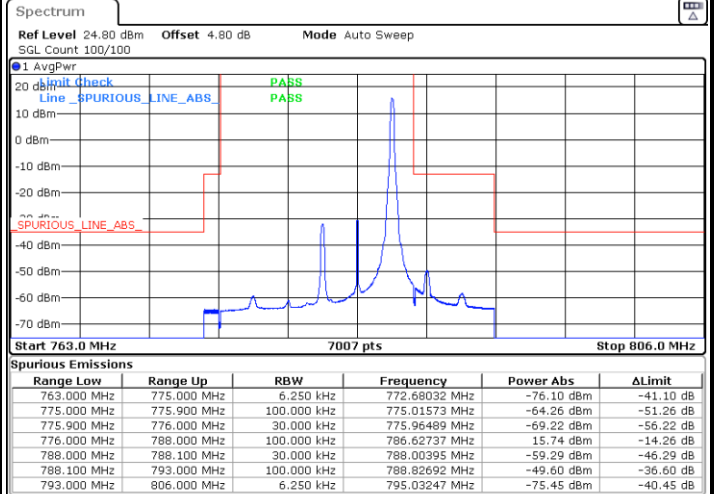
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



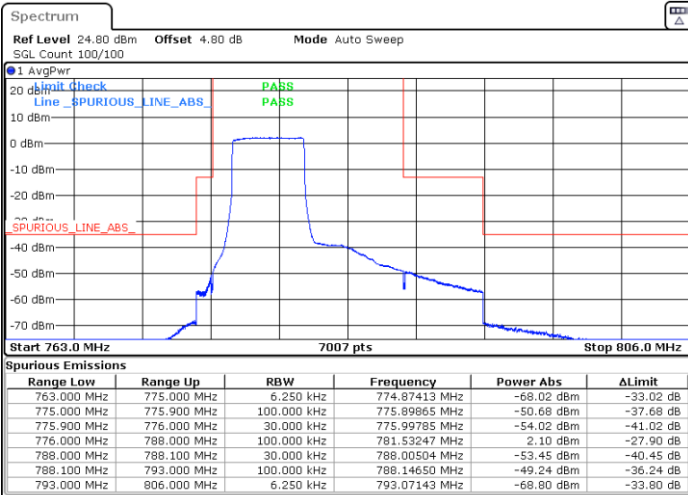
Date: 10.AUG.2023 18:19:58



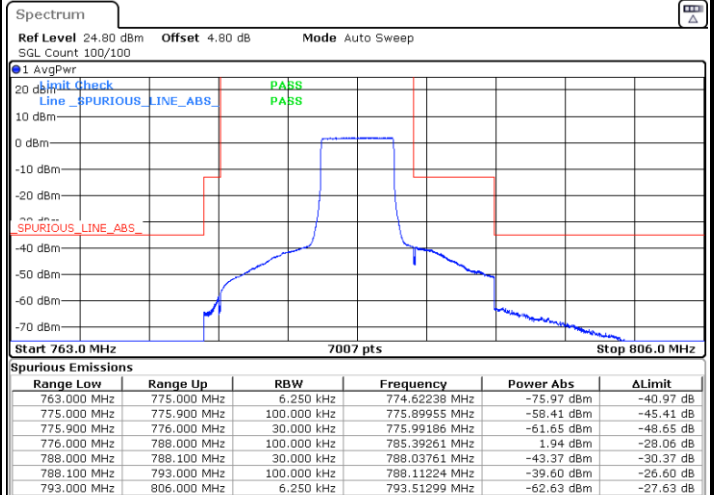
Date: 10.AUG.2023 18:40:56

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 10.AUG.2023 18:27:19



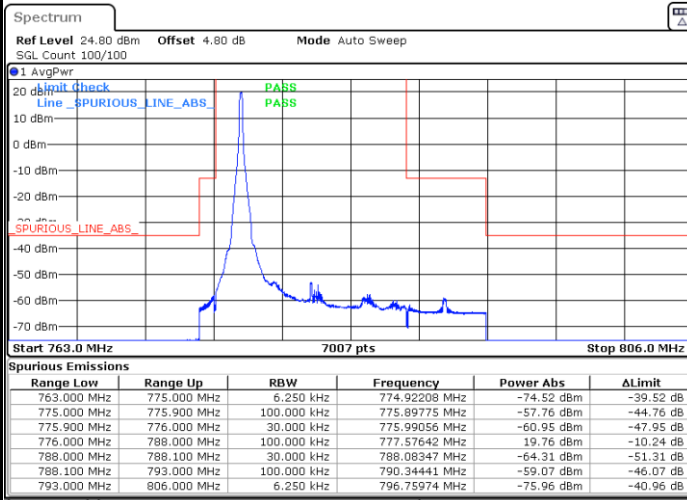
Date: 10.AUG.2023 18:48:17





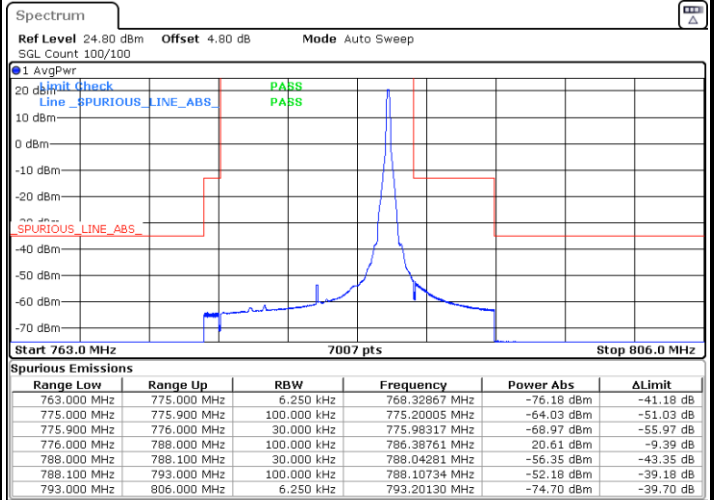
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



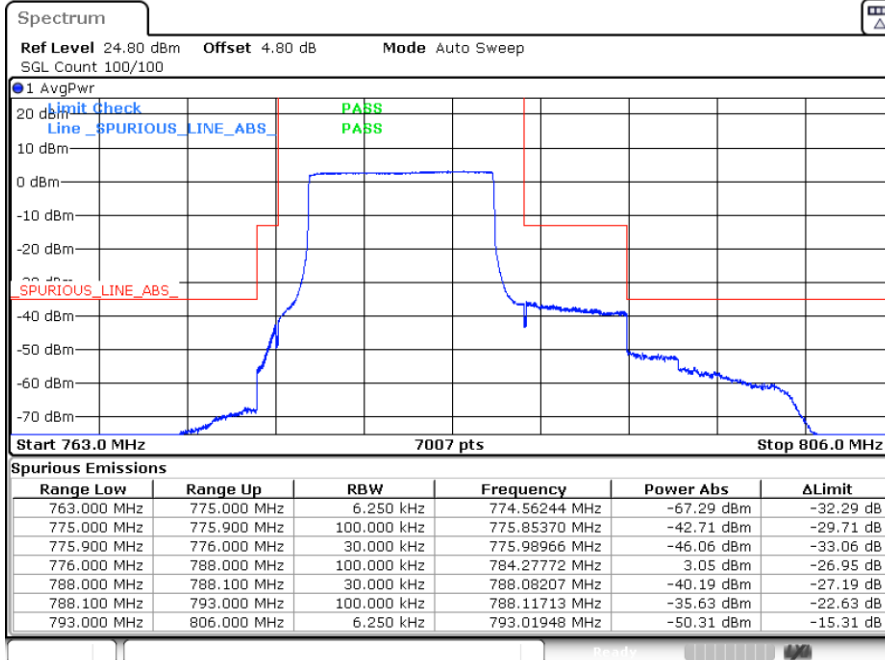
Date: 10.AUG.2023 18:51:56

middle Band Edge / 1 RB



Date: 10.AUG.2023 19:06:29

Middle Band Edge / Full RB

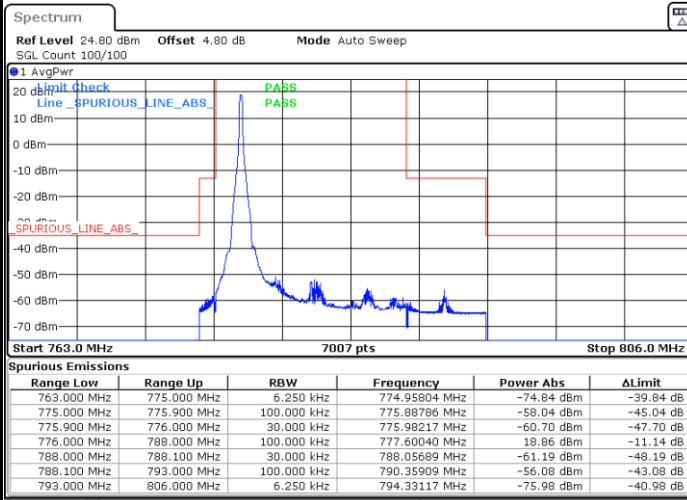


Date: 10.AUG.2023 18:59:12



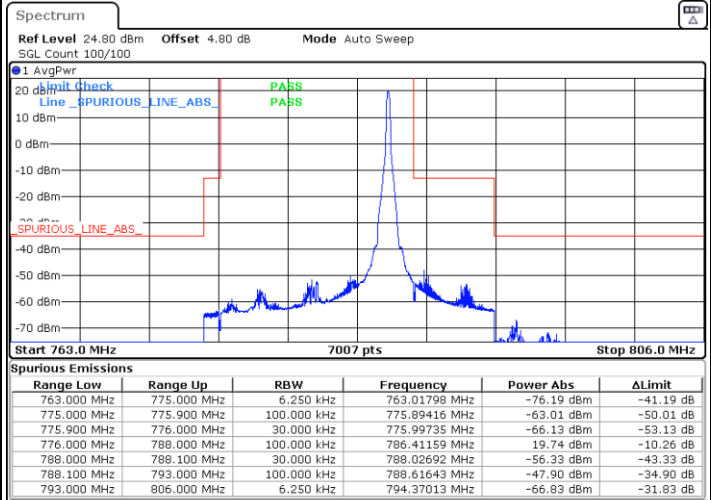
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



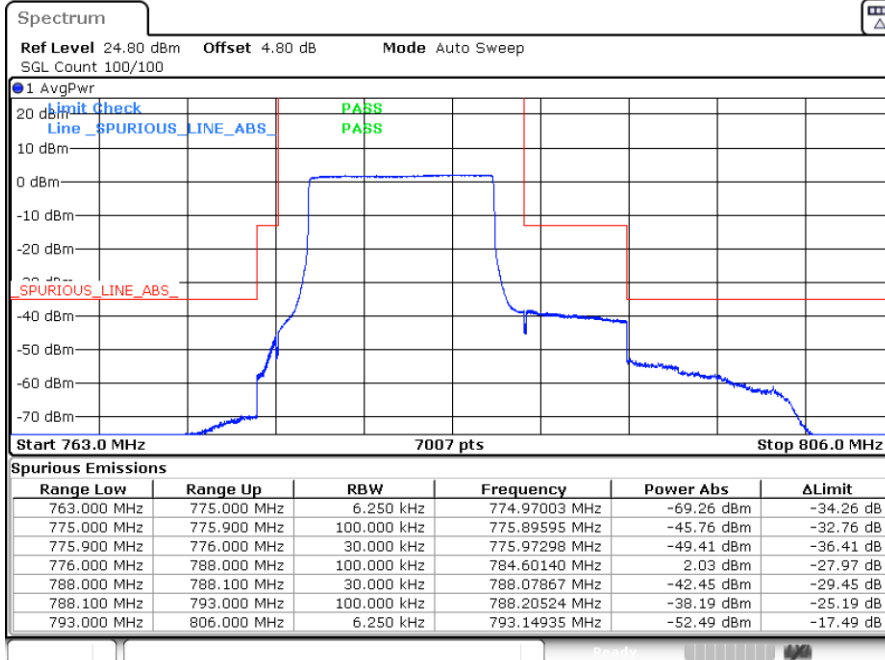
Date: 10.AUG.2023 18:53:45

middle Band Edge / 1 RB



Date: 10.AUG.2023 19:08:18

middle Band Edge / Full RB

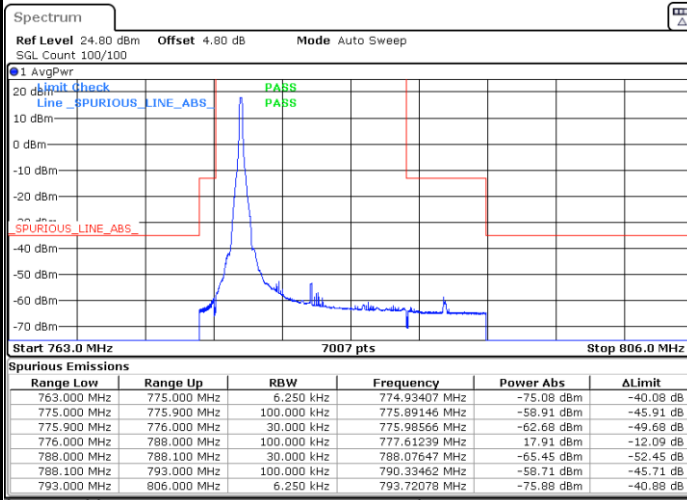


Date: 10.AUG.2023 19:01:01



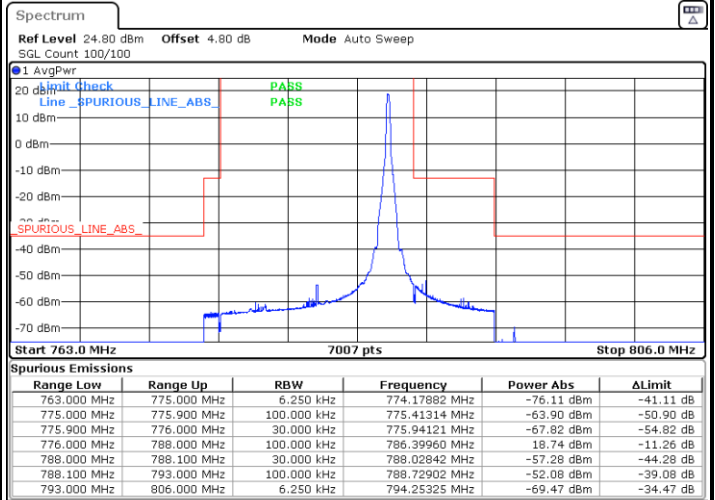
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



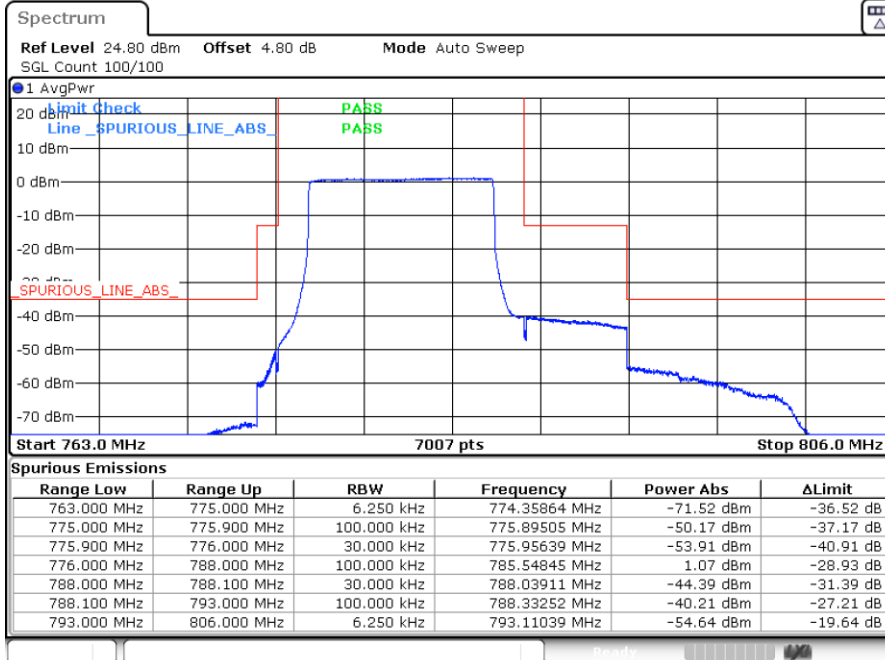
Date: 10.AUG.2023 18:55:34

middle Band Edge / 1 RB



Date: 10.AUG.2023 19:10:07

middle Band Edge / Full RB

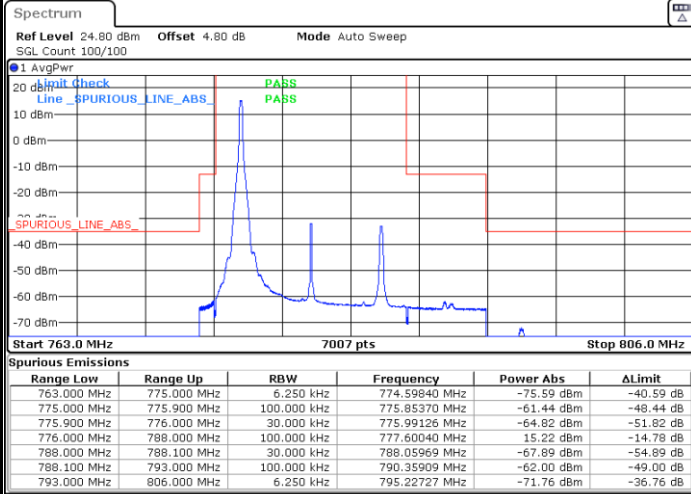


Date: 10.AUG.2023 19:02:50



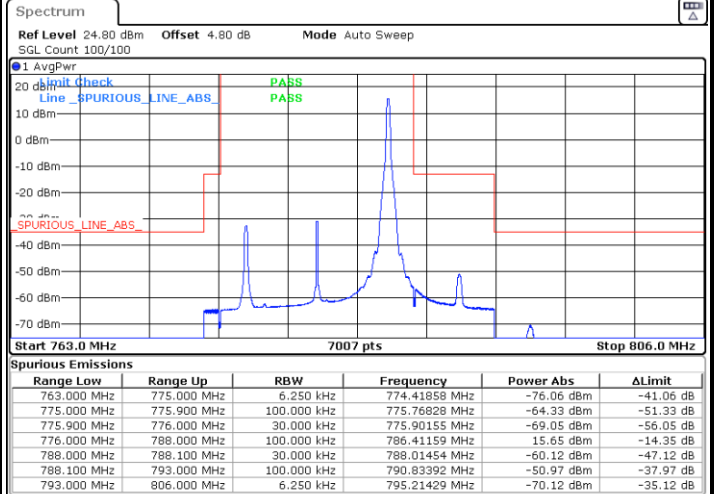
LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB



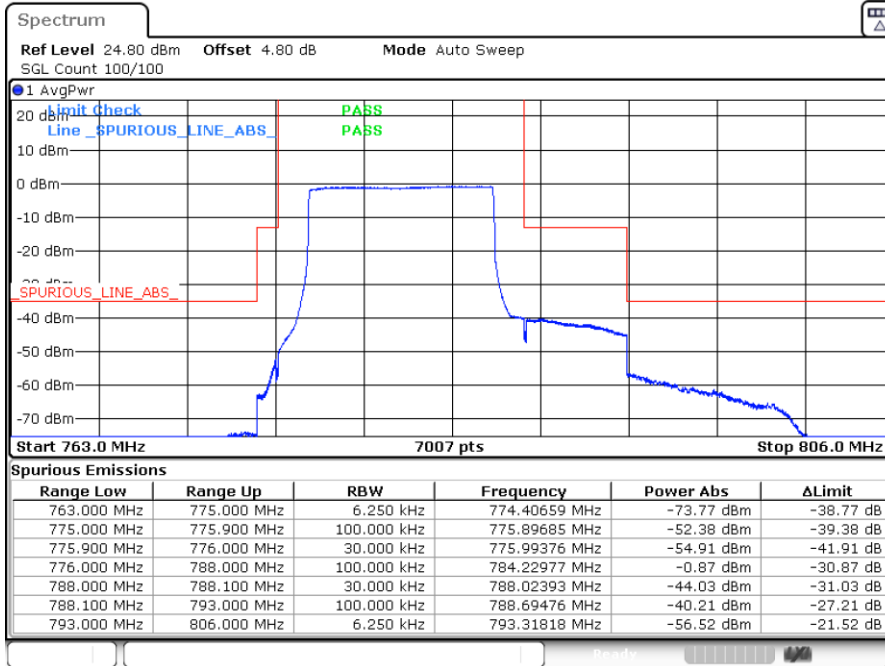
Date: 10.AUG.2023 18:57:23

middle Band Edge / 1 RB



Date: 10.AUG.2023 19:11:56

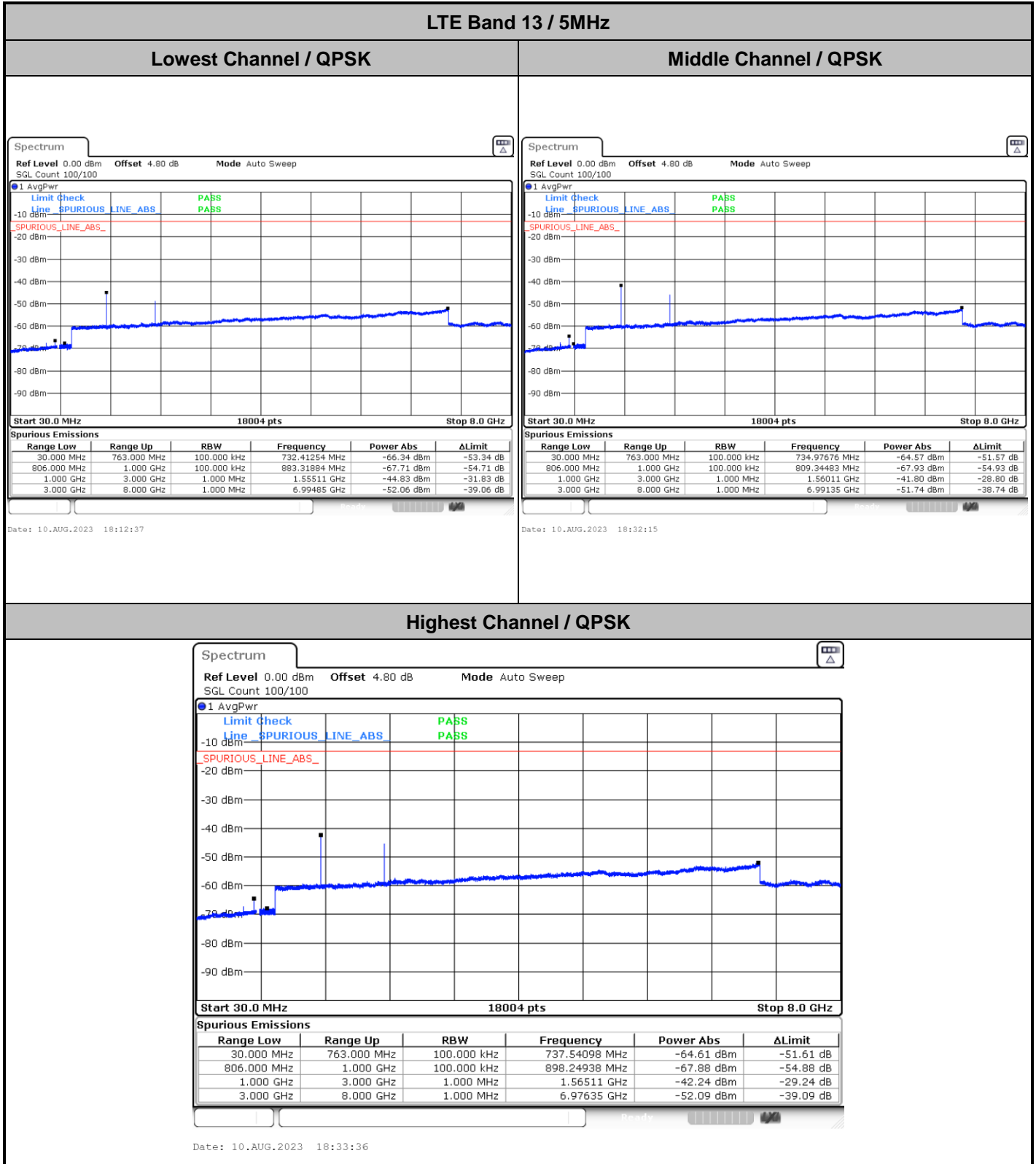
middle Band Edge / Full RB



Date: 10.AUG.2023 19:04:39



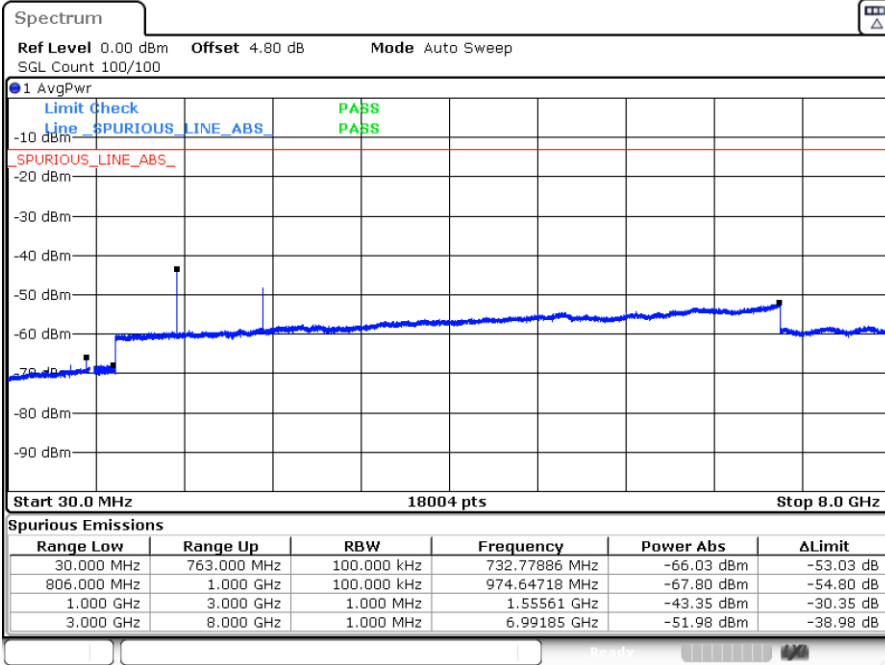
# Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 10.AUG.2023 18:50:06



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	0.0029	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0048	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0014	
-30	Normal Voltage	0.0037	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0022	

Note:

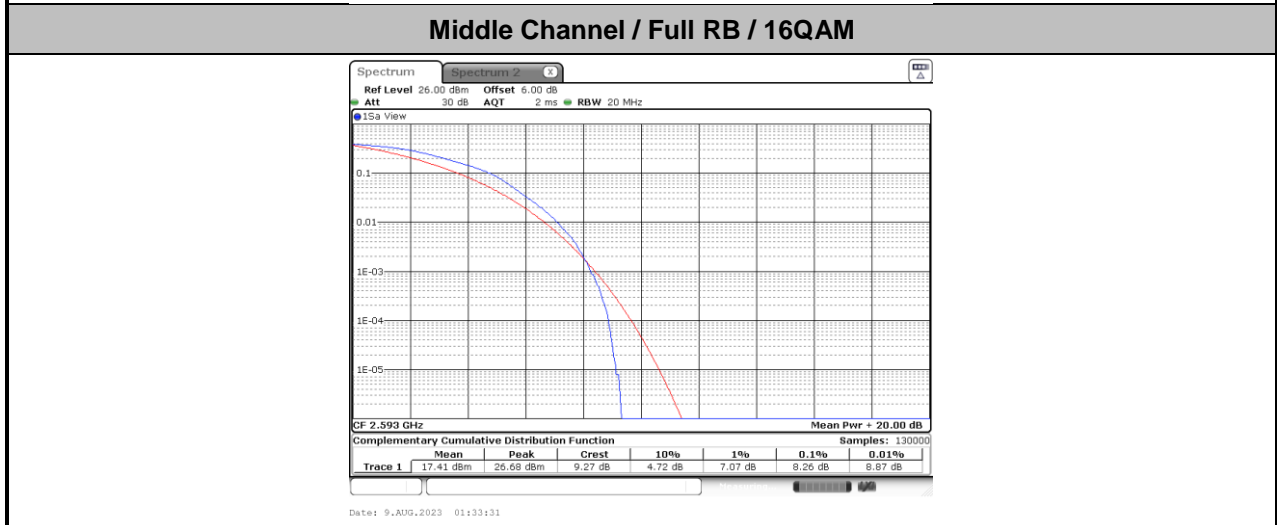
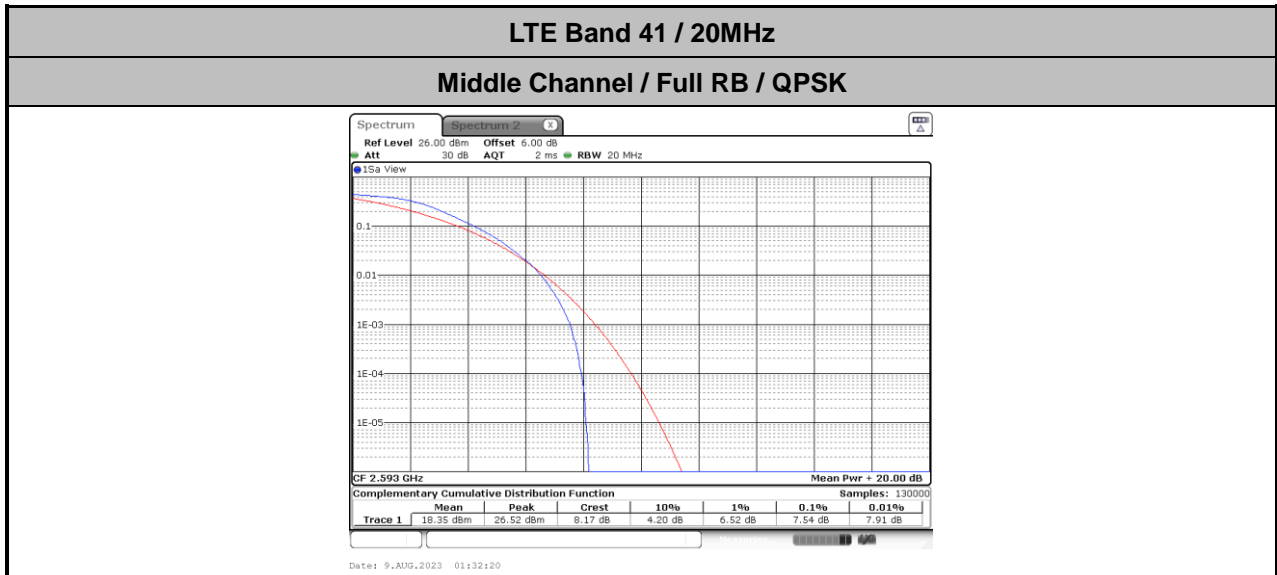
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 41

## Peak-to-Average Ratio

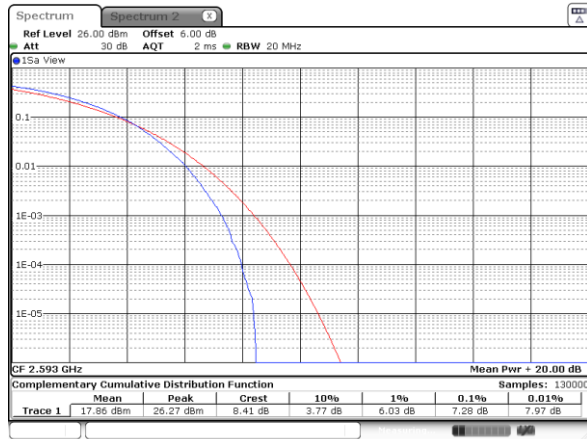
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	7.54	8.26	7.28	6.67	PASS





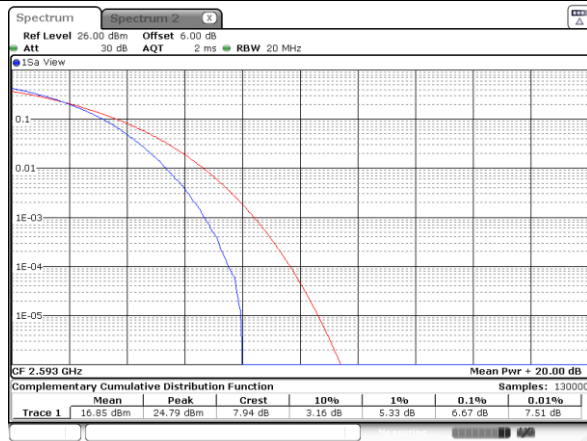


Middle Channel / Full RB / 64QAM



Date: 9\_AUG\_2023 01:30:18

Middle Channel / Full RB / 256QAM

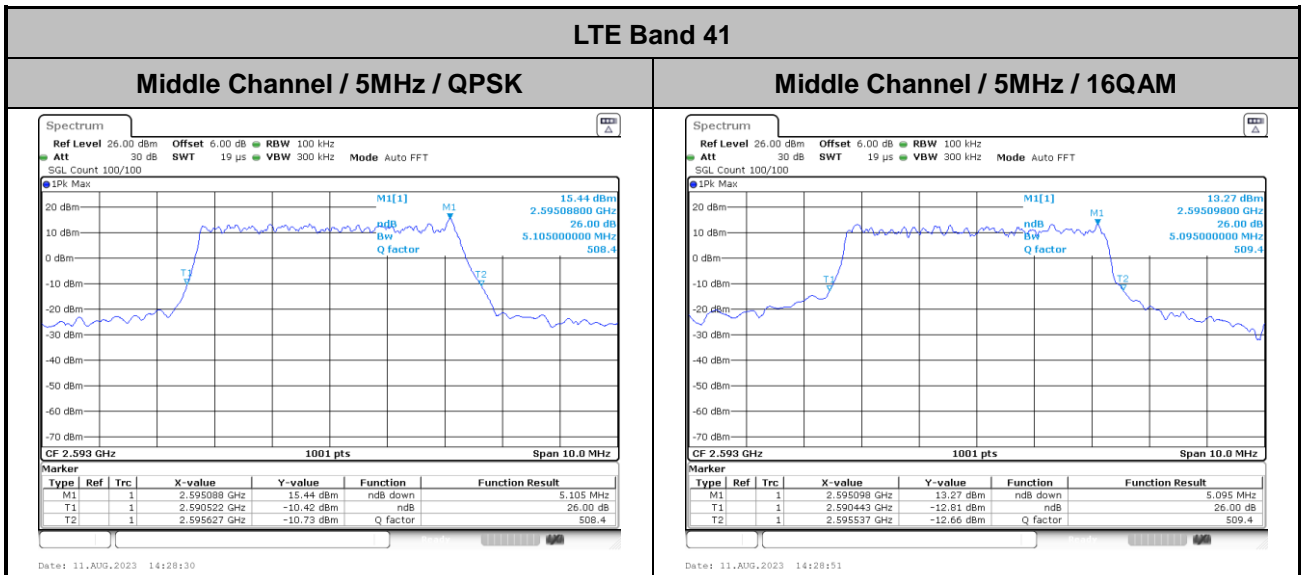


Date: 9\_AUG\_2023 01:34:01



## 26dB Bandwidth

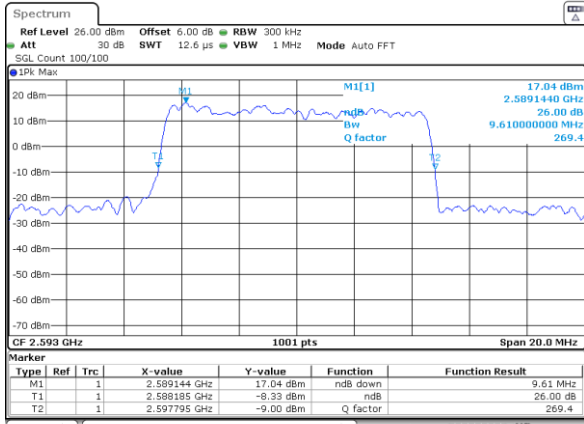
Mode	LTE Band 41 : 26dB BW(MHz)	
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	5.11	5.10
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.61	10.09
<b>BW</b>	<b>15MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	14.30	14.36
<b>BW</b>	<b>20MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	19.18	18.98





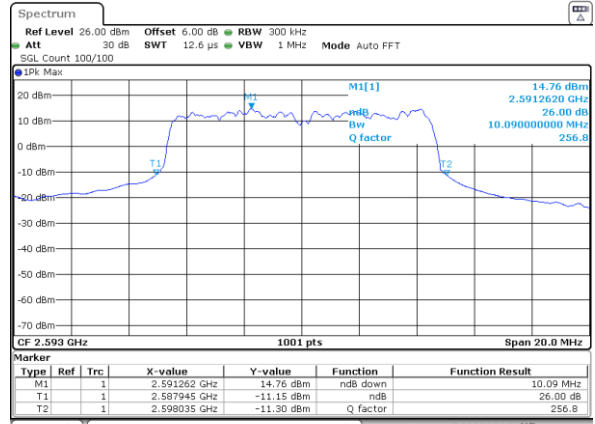
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 11.AUG.2023 14:29:13

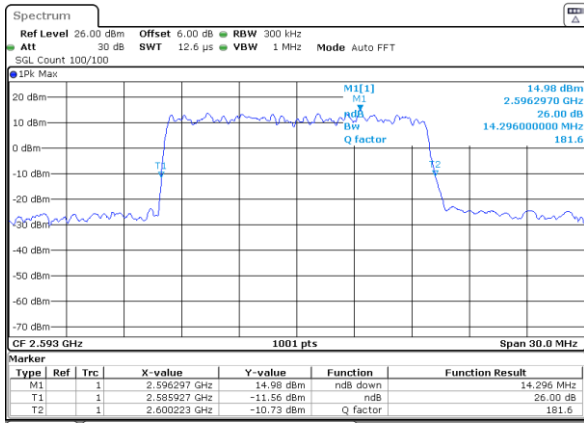
Middle Channel / 10MHz / 16QAM



Date: 11.AUG.2023 14:29:34

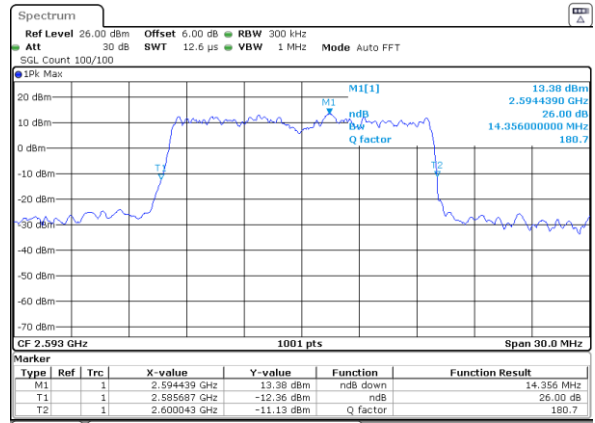
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 11.AUG.2023 14:29:55

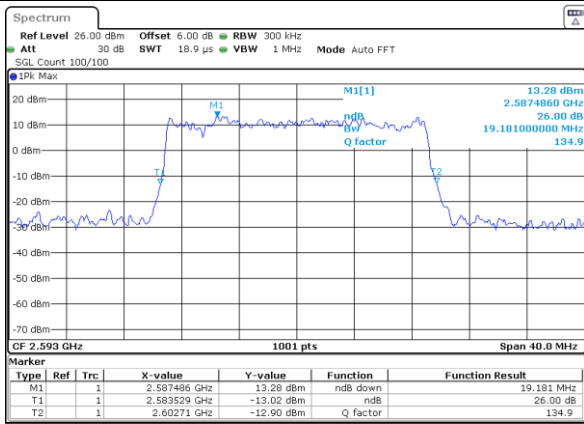
Middle Channel / 15MHz / 16QAM



Date: 11.AUG.2023 14:30:16

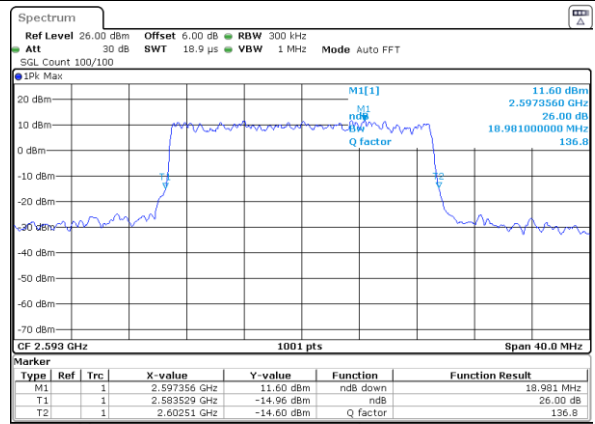
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 11.AUG.2023 14:30:38

Middle Channel / 20MHz / 16QAM

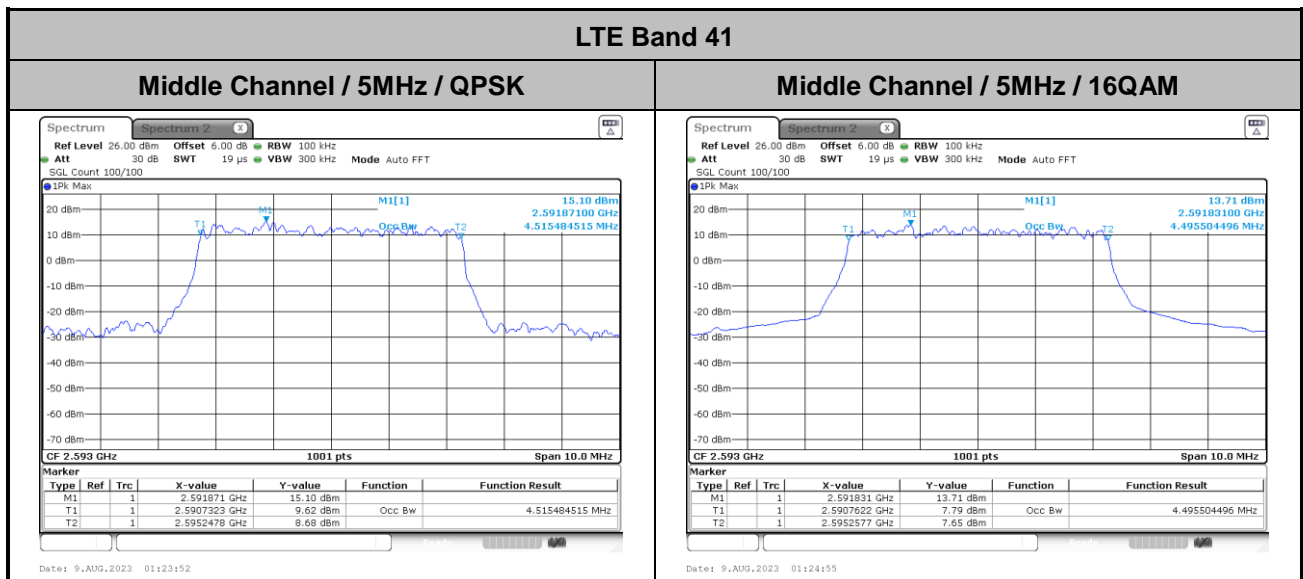


Date: 11.AUG.2023 14:30:59



## Occupied Bandwidth

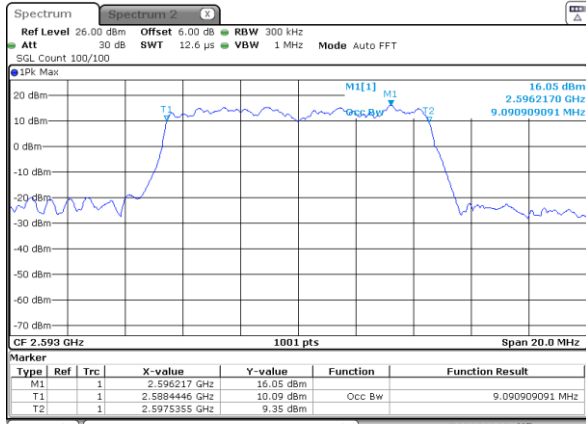
Mode	LTE Band 41 : 99%OBW(MHz)	
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	4.52	4.50
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.09	9.07
<b>BW</b>	<b>15MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	13.43	13.40
<b>BW</b>	<b>20MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	17.90	17.94





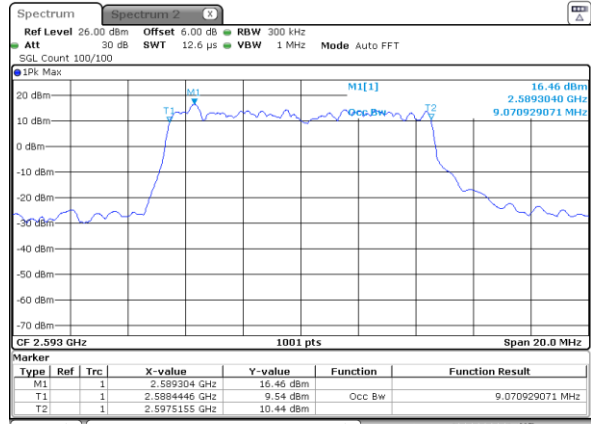
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 9.AUG.2023 01:25:17

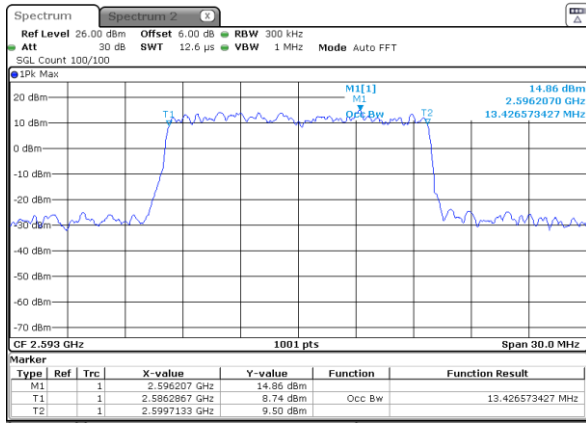
Middle Channel / 10MHz / 16QAM



Date: 9.AUG.2023 01:26:21

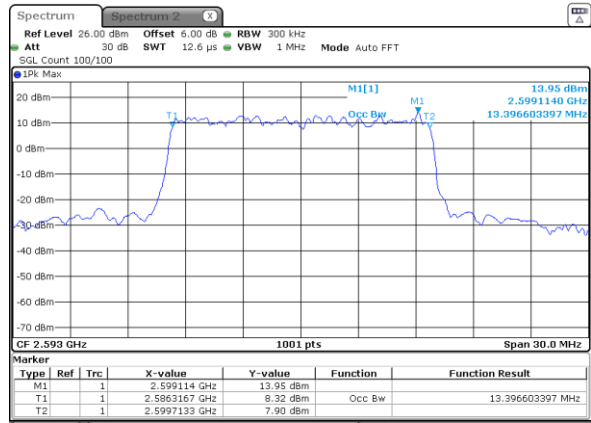
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 9.AUG.2023 01:26:42

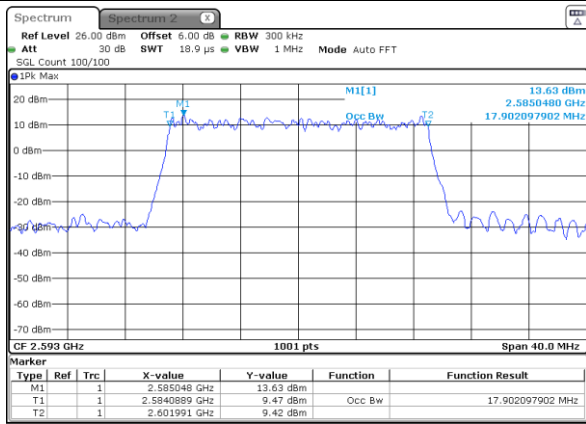
Middle Channel / 15MHz / 16QAM



Date: 9.AUG.2023 01:27:46

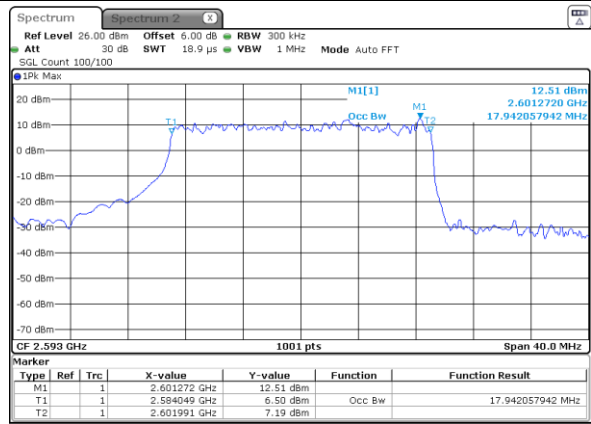
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 9.AUG.2023 01:28:07

Middle Channel / 20MHz / 16QAM



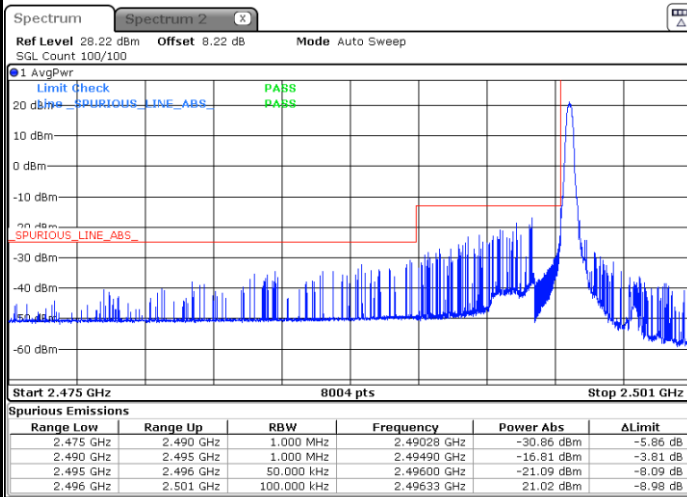
Date: 9.AUG.2023 01:29:11



# Conducted Band Edge

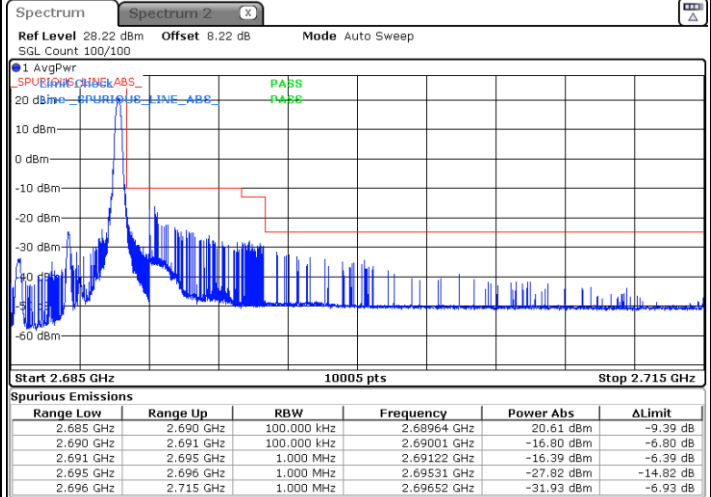
## LTE Band 41 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



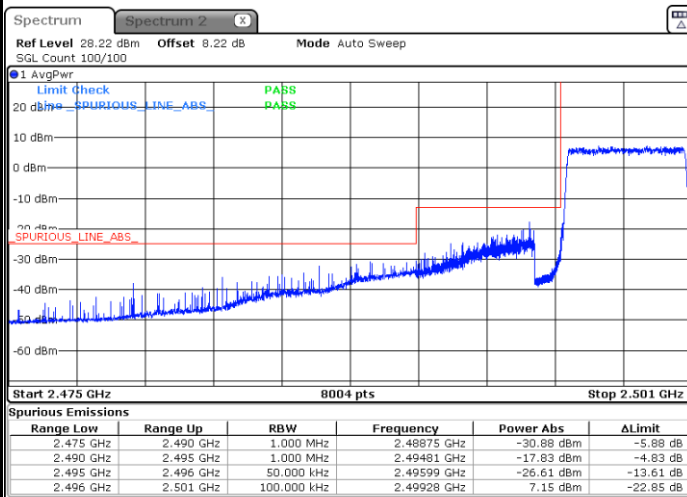
Date: 8.AUG.2023 23:22:15

### Highest Band Edge / 1 RB



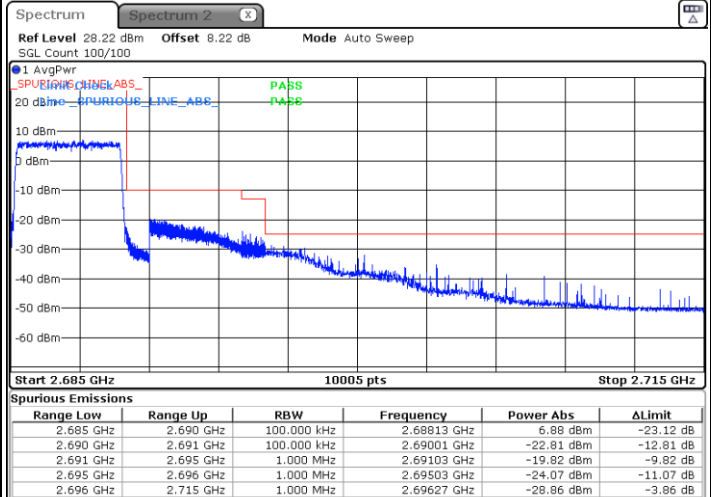
Date: 8.AUG.2023 23:37:51

### Lowest Band Edge / Full RB



Date: 8.AUG.2023 23:32:05

### Highest Band Edge / Full RB

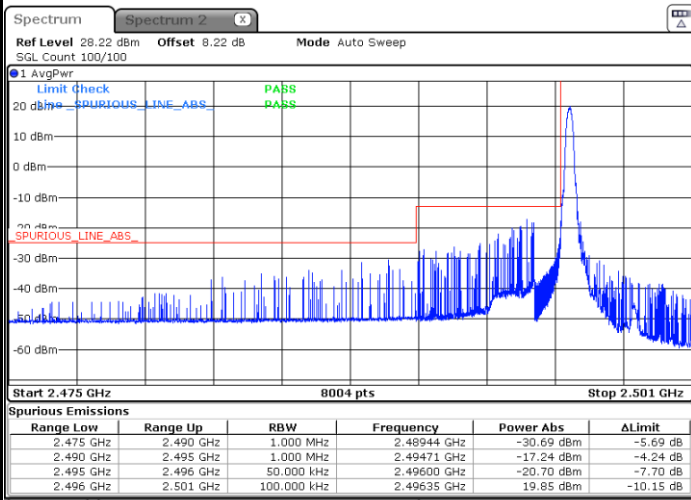


Date: 8.AUG.2023 23:40:49



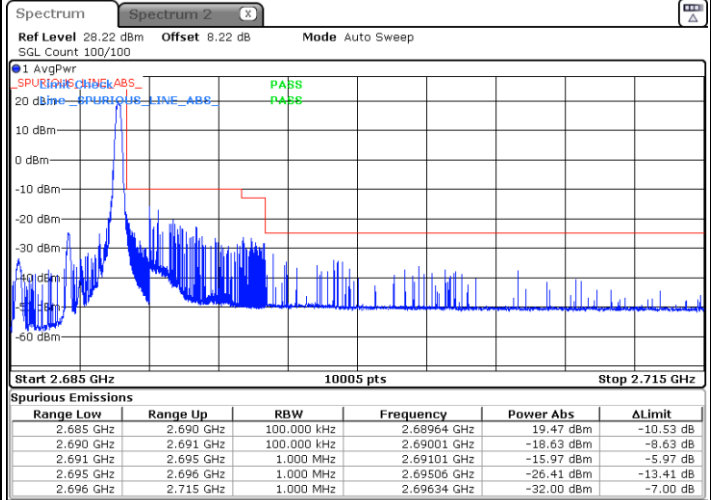
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



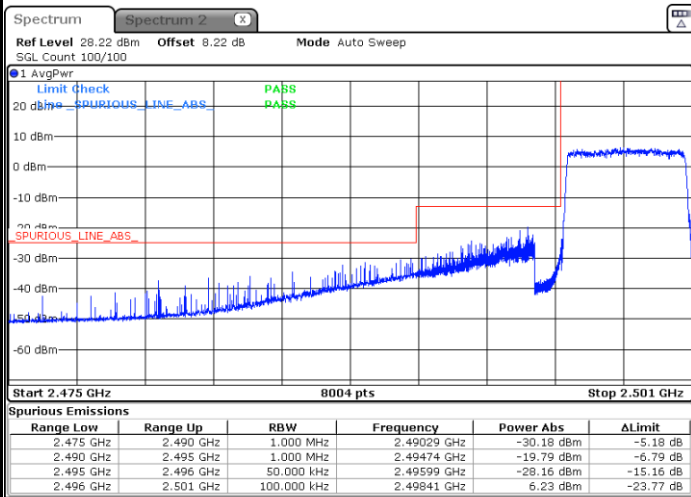
Date: 8.AUG.2023 23:23:17

Highest Band Edge / 1 RB



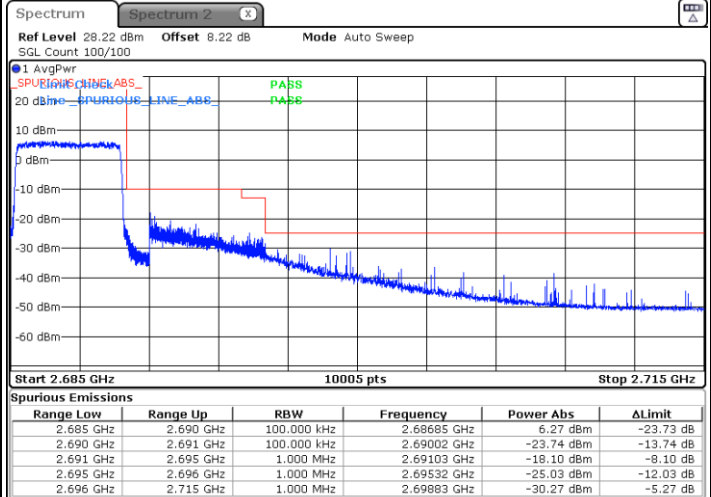
Date: 8.AUG.2023 23:38:35

Lowest Band Edge / Full RB



Date: 8.AUG.2023 23:34:24

Highest Band Edge / Full RB



Date: 8.AUG.2023 23:43:06