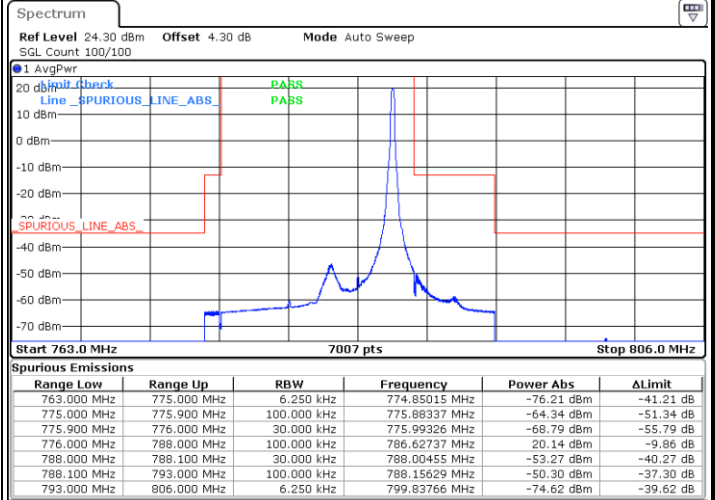
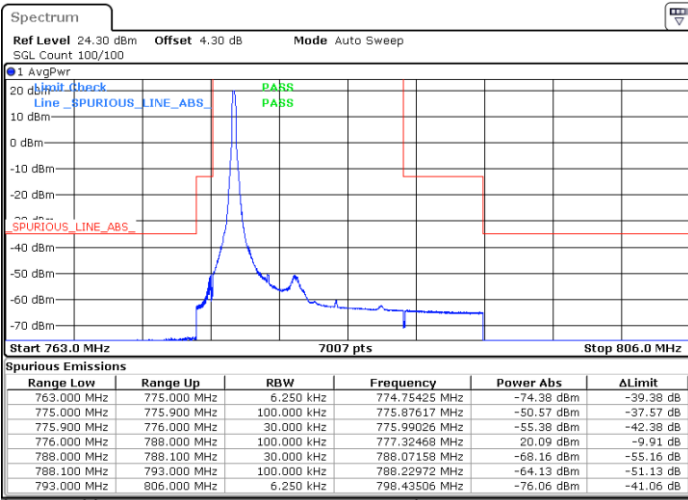




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

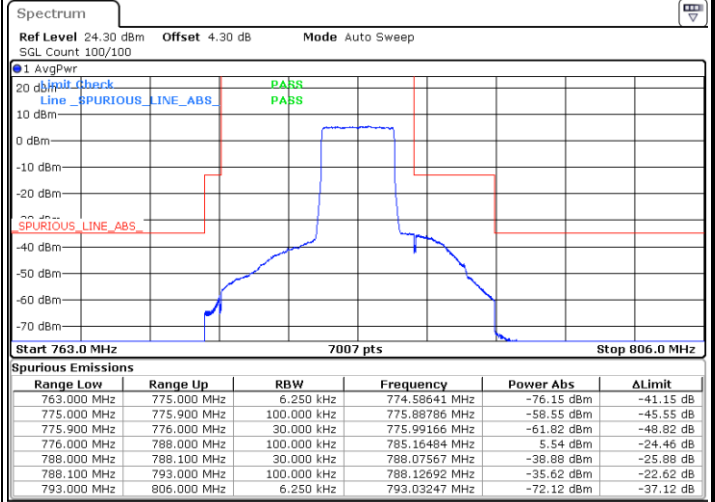
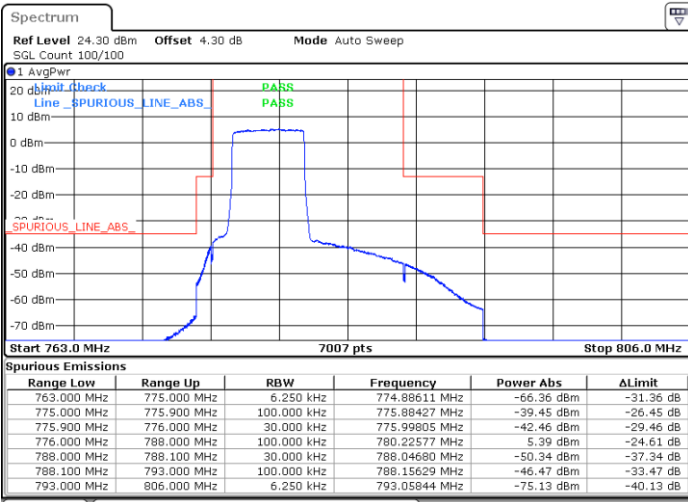


Date: 1.FEB.2024 01:44:49

Date: 1.FEB.2024 02:10:45

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



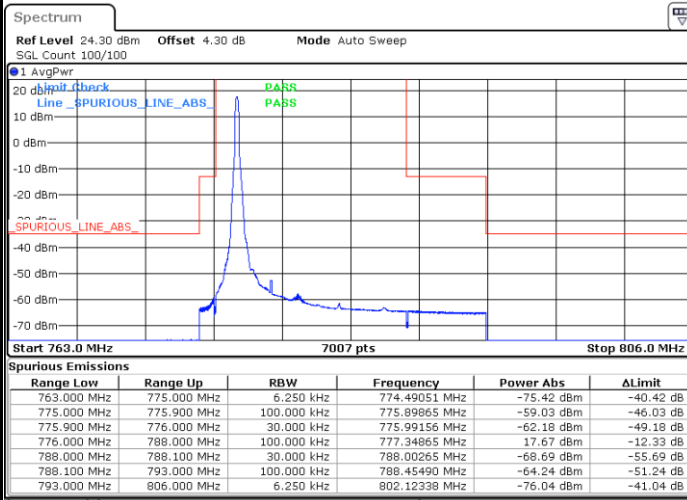
Date: 1.FEB.2024 01:52:11

Date: 1.FEB.2024 02:18:19



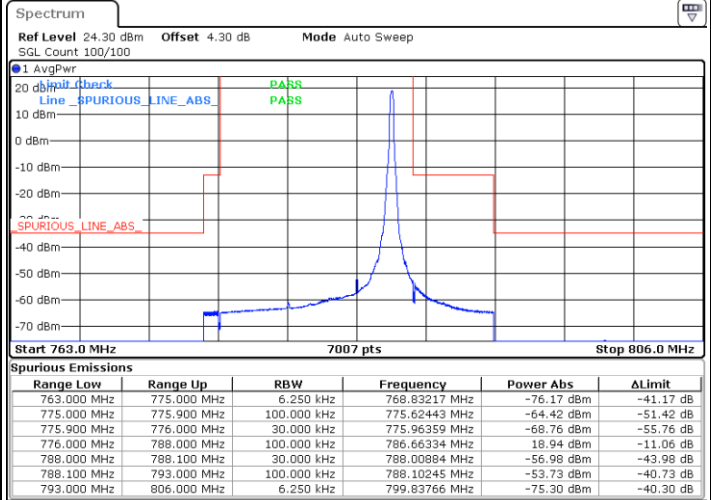
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB



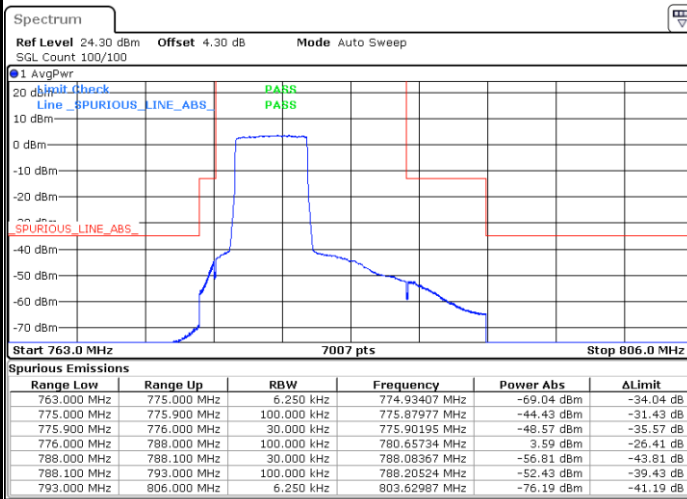
Date: 1.FEB.2024 01:46:40

Highest Band Edge / 1 RB



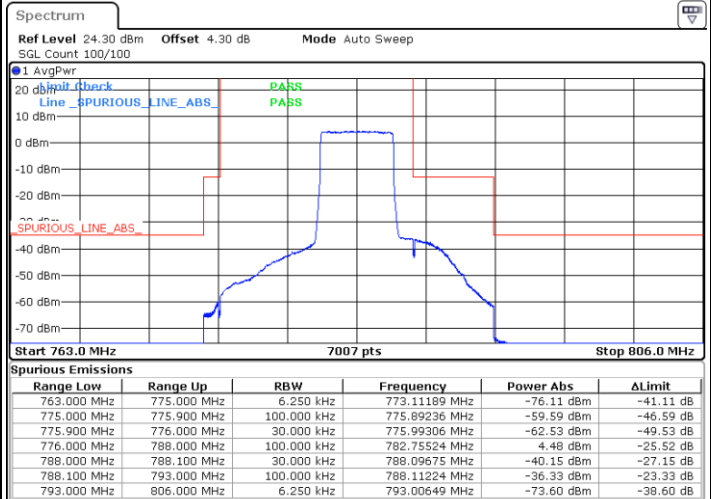
Date: 1.FEB.2024 02:12:36

Lowest Band Edge / Full RB



Date: 1.FEB.2024 01:54:01

Highest Band Edge / Full RB



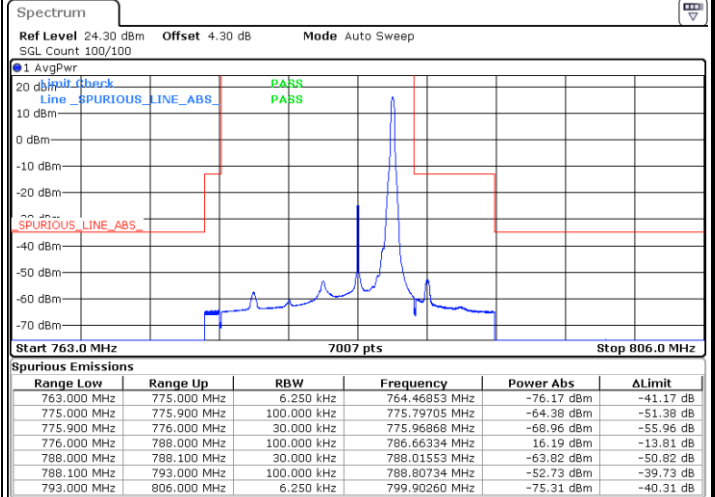
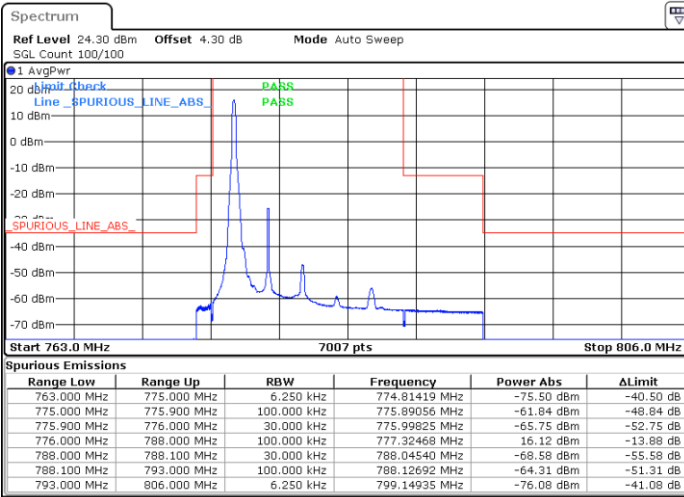
Date: 1.FEB.2024 02:20:10



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

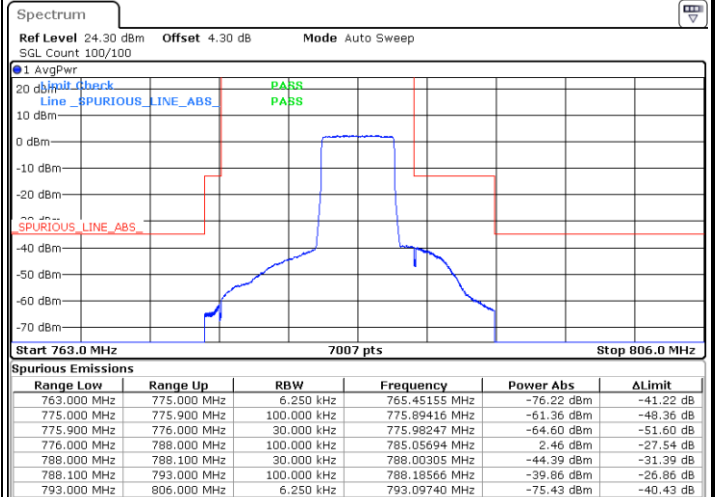
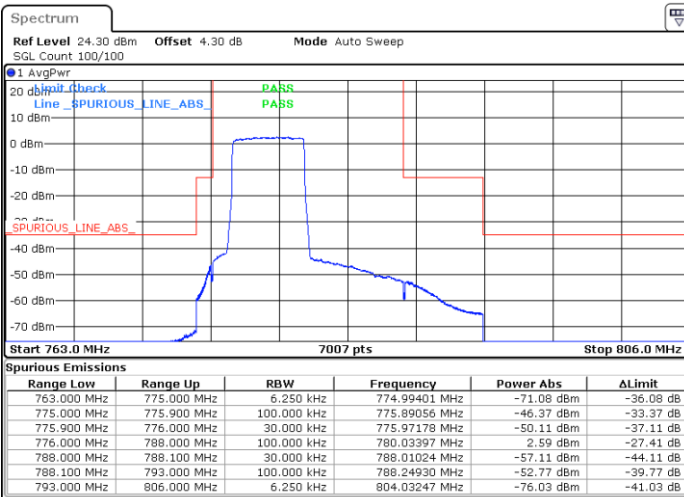


Date: 1.FEB.2024 01:48:30

Date: 1.FEB.2024 02:14:35

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



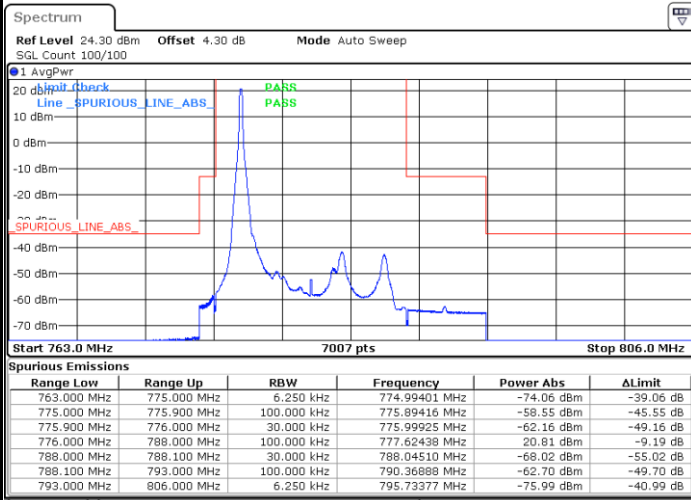
Date: 1.FEB.2024 01:55:51

Date: 1.FEB.2024 02:22:00



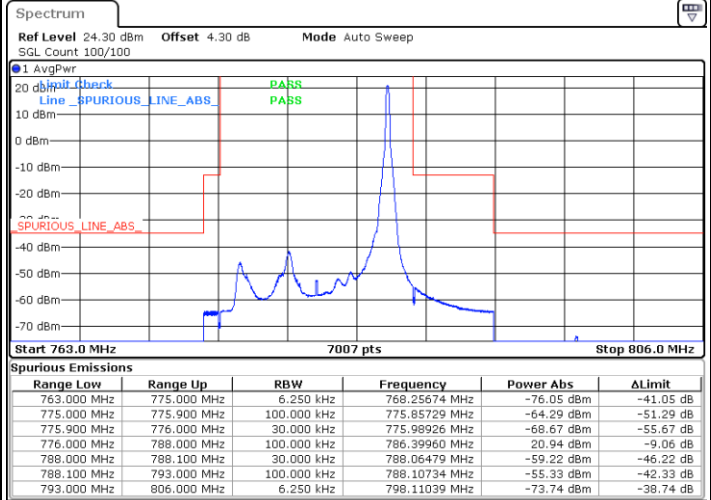
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



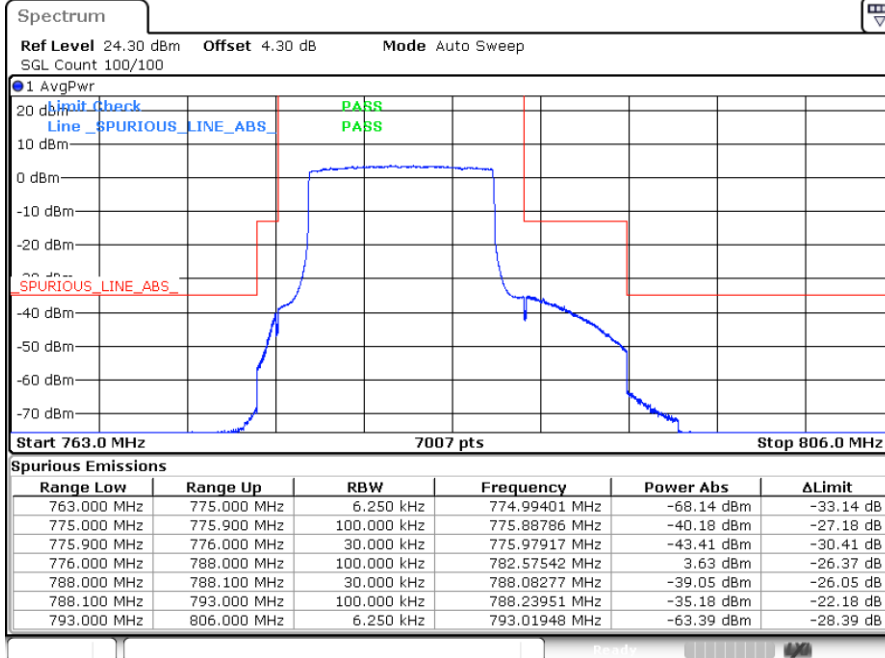
Date: 1.FEB.2024 02:29:03

middle Band Edge / 1 RB



Date: 1.FEB.2024 02:49:05

Middle Band Edge / Full RB

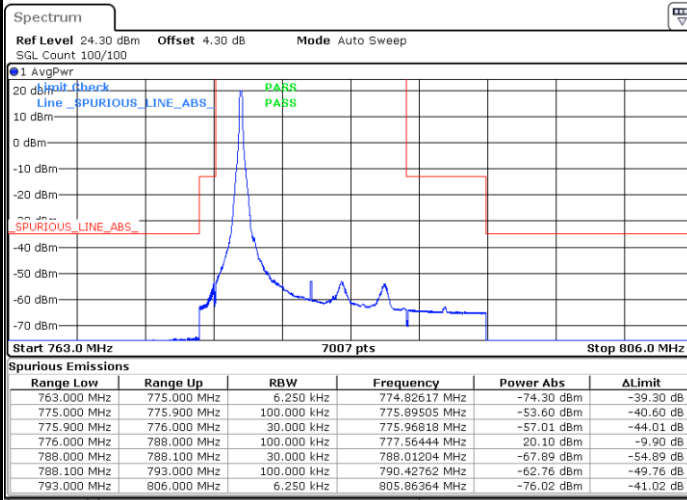


Date: 1.FEB.2024 02:41:45



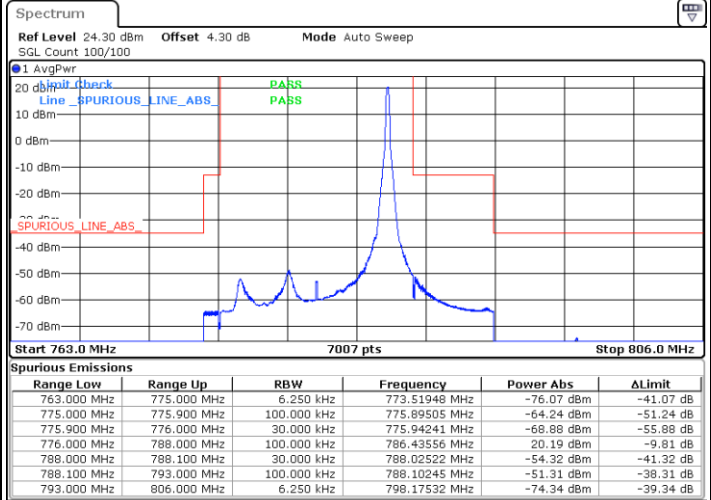
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



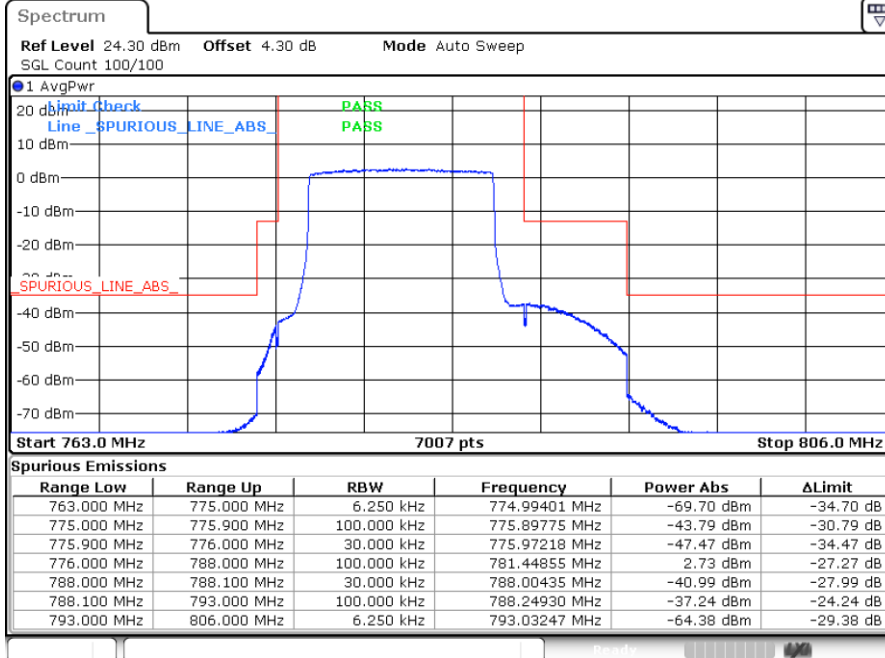
Date: 1.FEB.2024 02:30:53

middle Band Edge / 1 RB



Date: 1.FEB.2024 02:50:54

middle Band Edge / Full RB

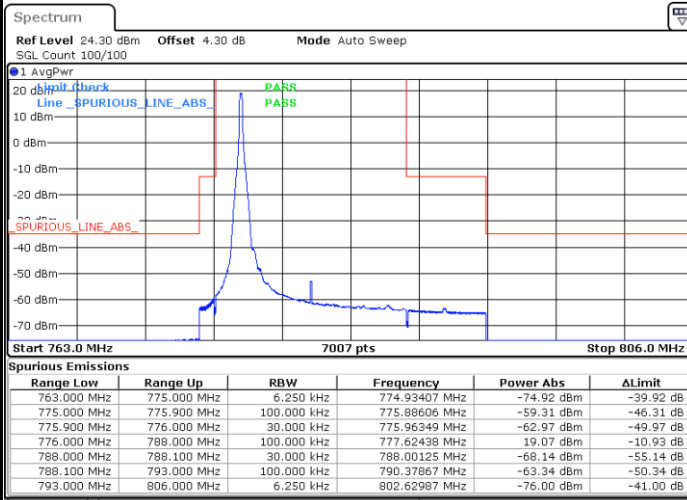


Date: 1.FEB.2024 02:43:35



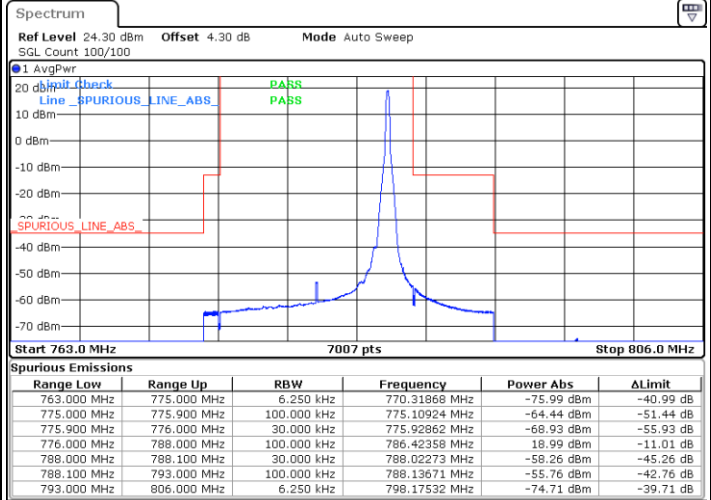
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



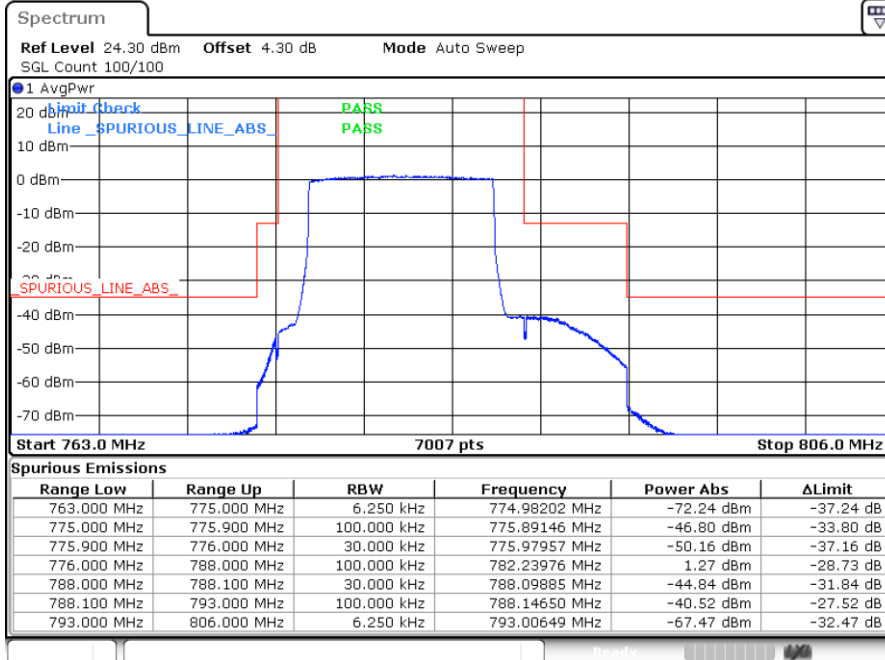
Date: 1.FEB.2024 02:37:05

middle Band Edge / 1 RB



Date: 1.FEB.2024 02:52:44

middle Band Edge / Full RB



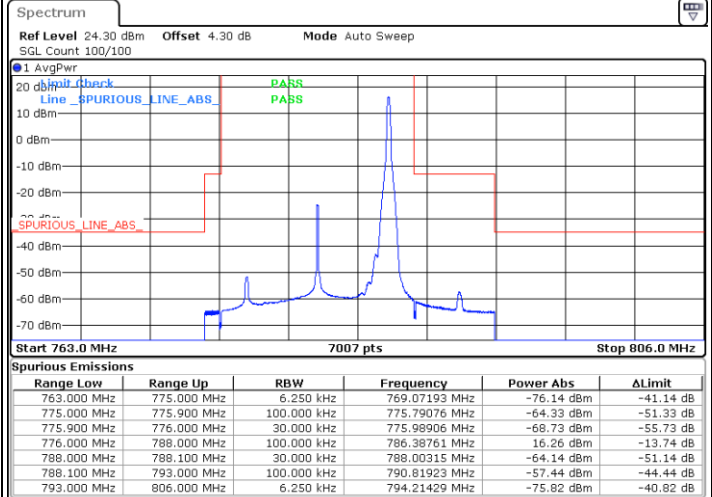
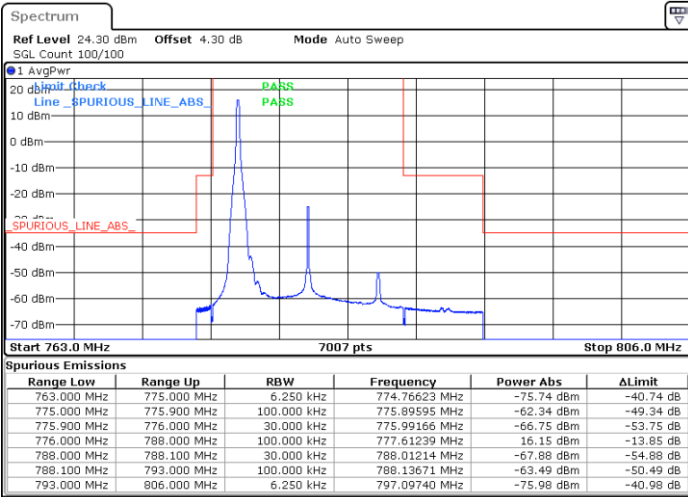
Date: 1.FEB.2024 02:45:25



LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB

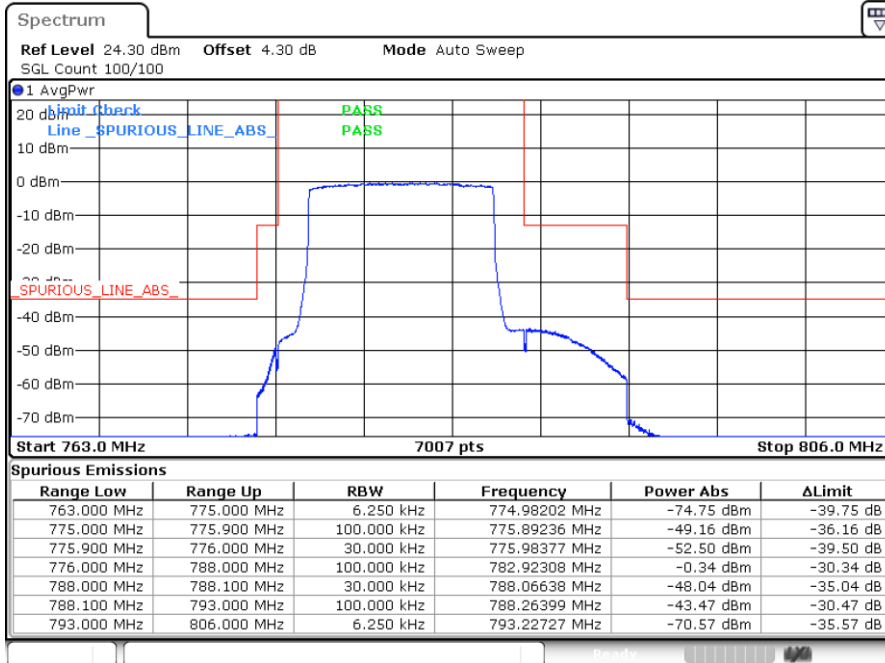
middle Band Edge / 1 RB



Date: 1.FEB.2024 02:38:45

Date: 1.FEB.2024 02:54:34

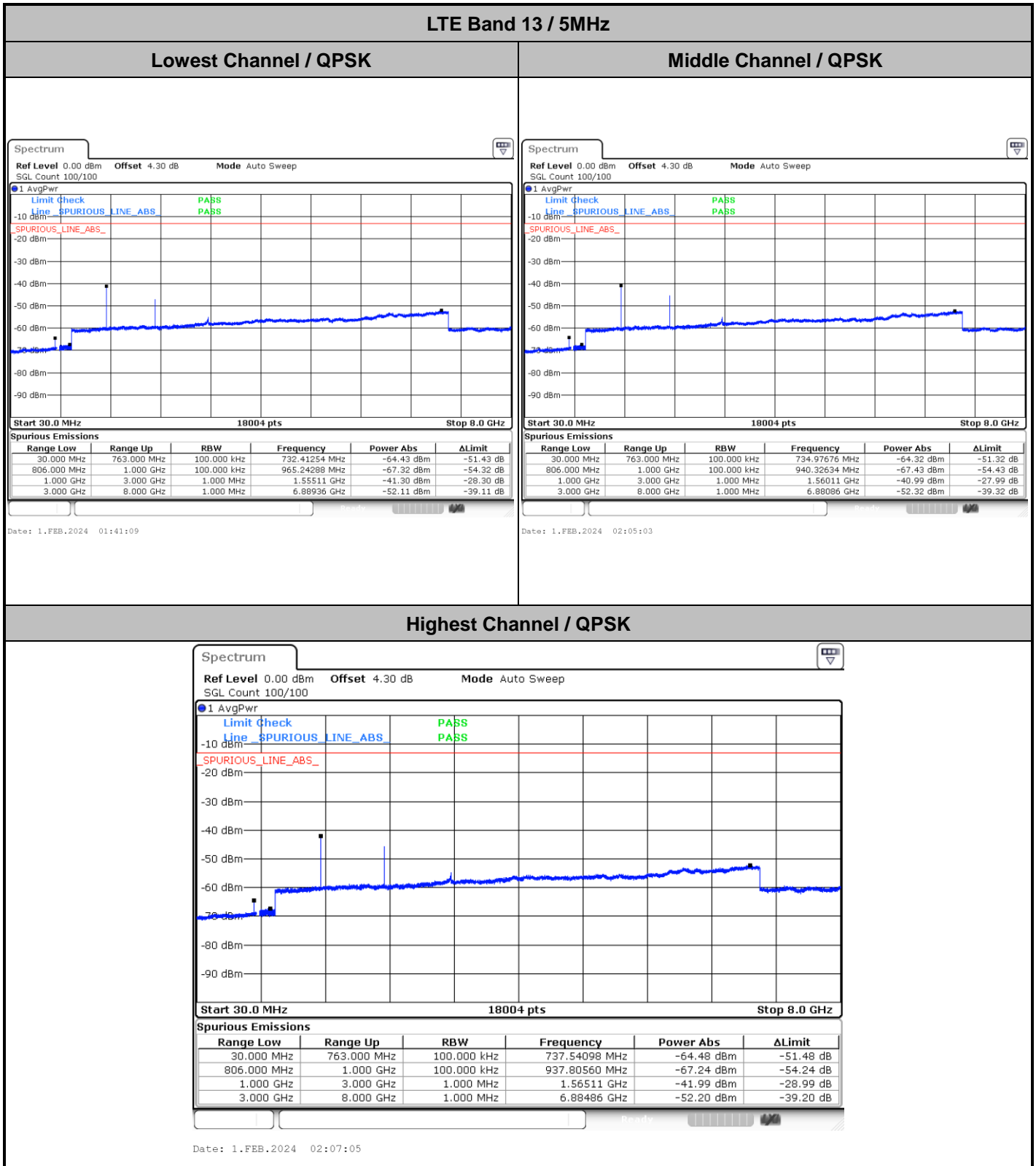
middle Band Edge / Full RB



Date: 1.FEB.2024 02:47:15



# Conducted Spurious Emission

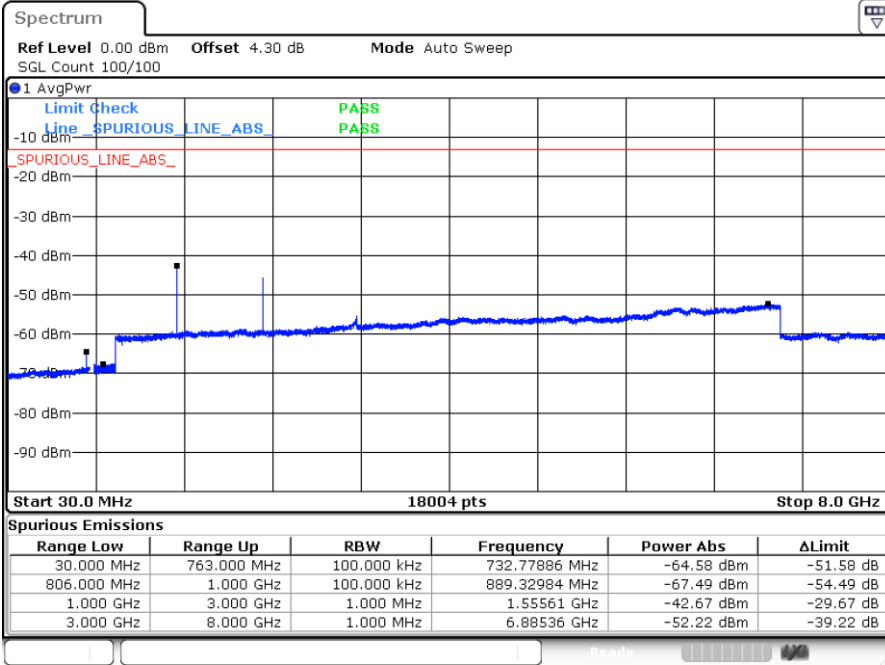






LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 1.FEB.2024 02:27:14



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	0.0025	PASS
40	Normal Voltage	0.0046	
30	Normal Voltage	0.0053	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0034	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0009	
20	Minimum Voltage	0.0027	

Note:

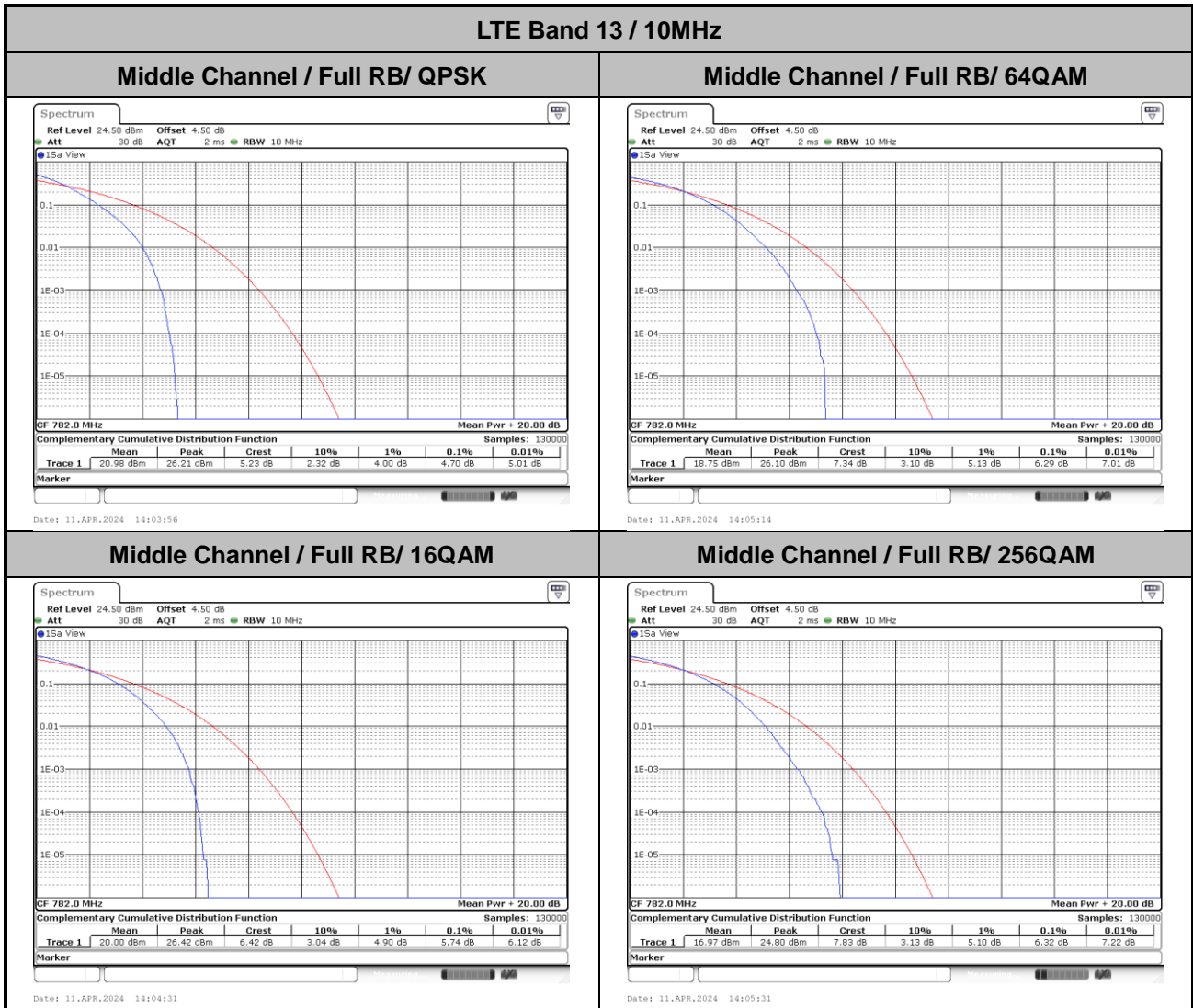
1. Normal Voltage =3.8 V. ; Minimum Voltage =3.3 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 13 (other PA)

## Peak-to-Average Ratio

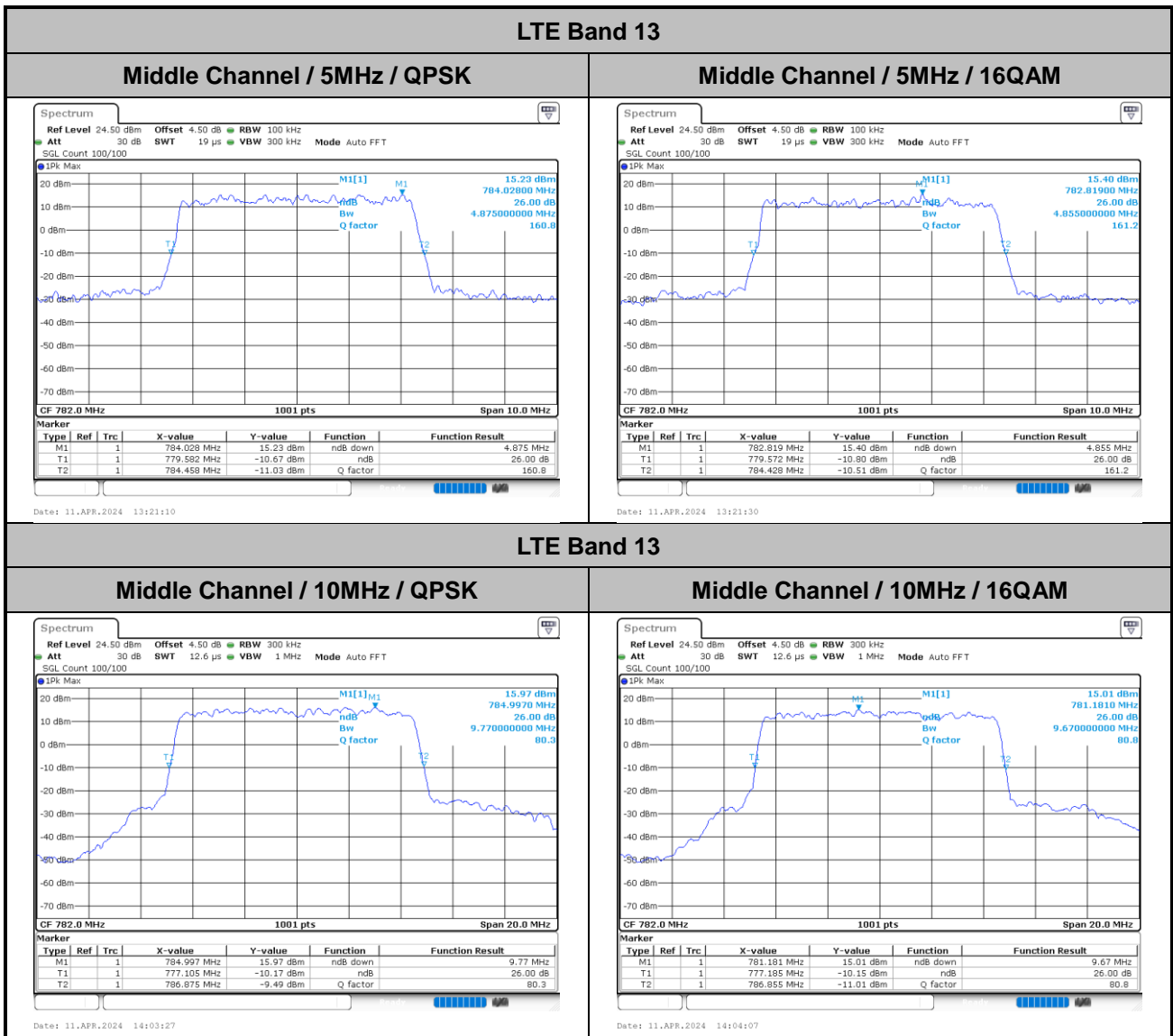
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.70	5.74	6.29	6.32	PASS





## 26dB Bandwidth

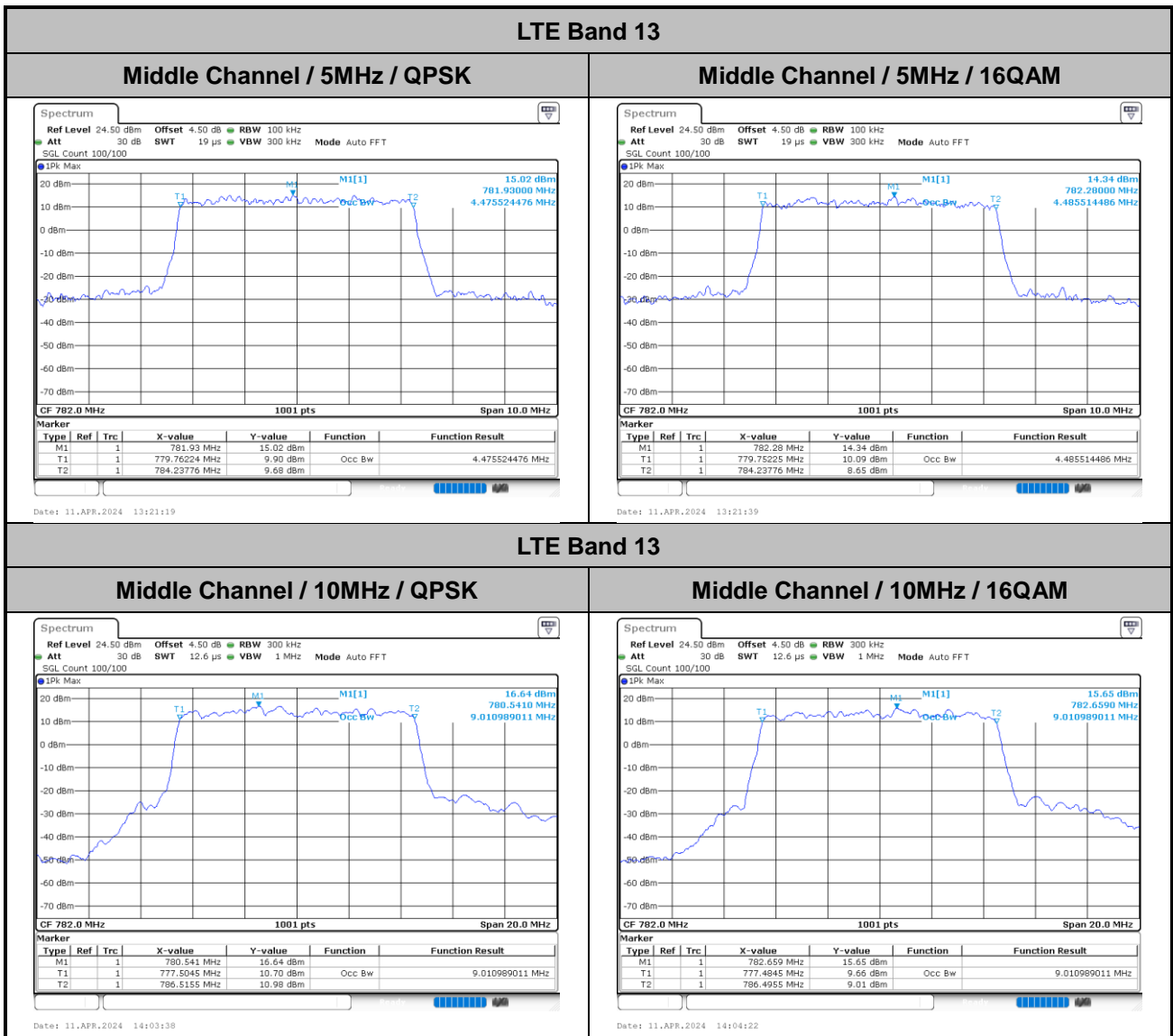
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.88	4.86
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.77	9.67





# 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>	4.48	4.49
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.01	9.01

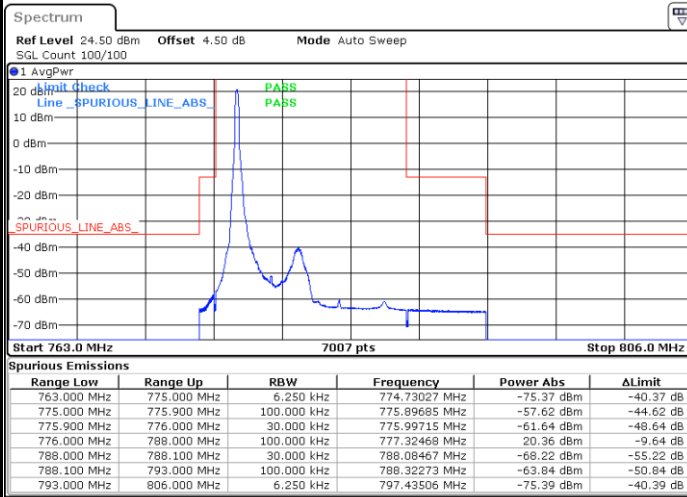




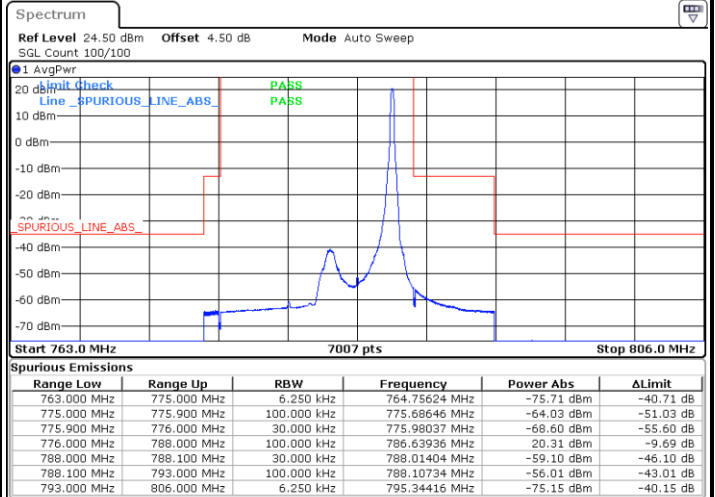
# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

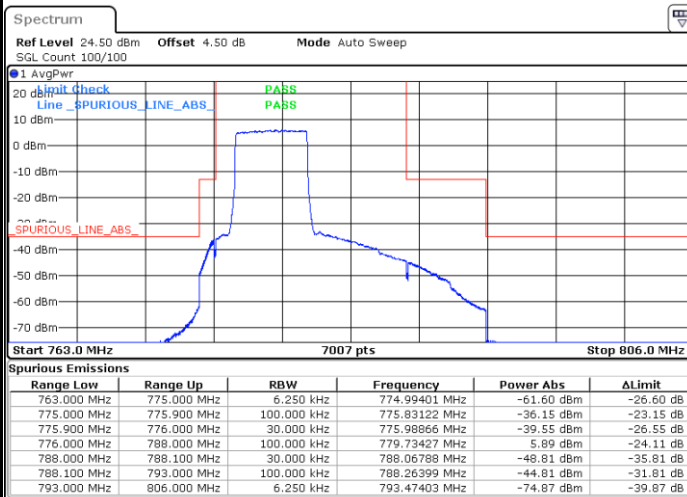
### Lowest Band Edge / 1 RB



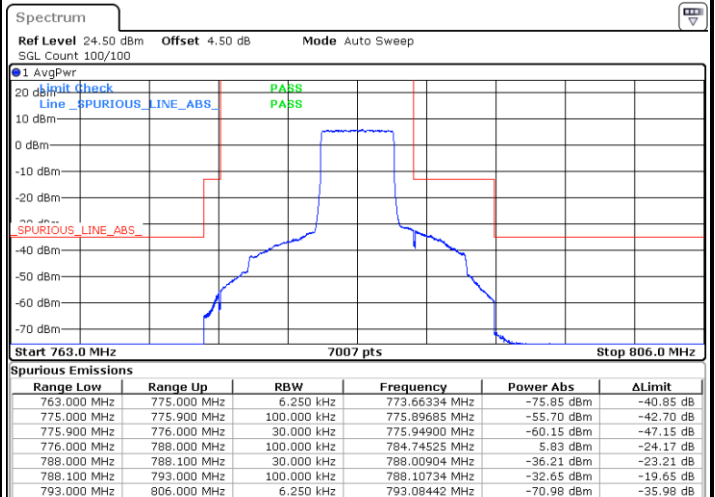
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



### Highest Band Edge / Full RB

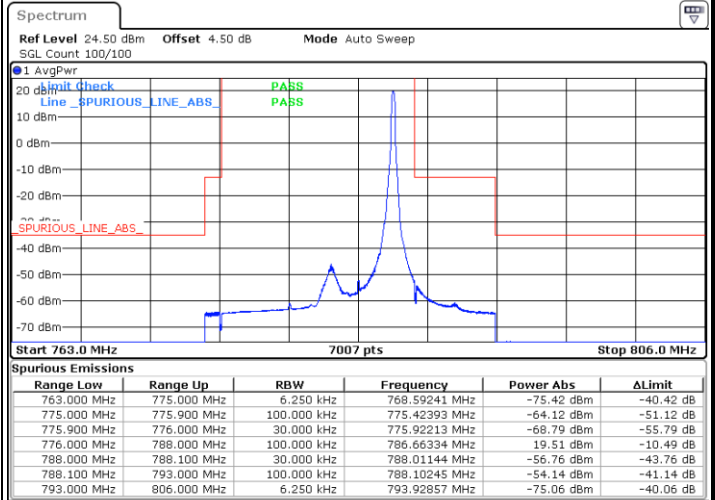
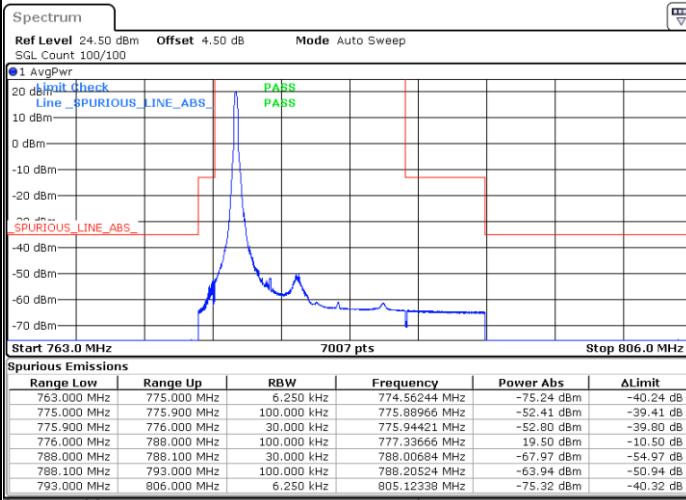




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

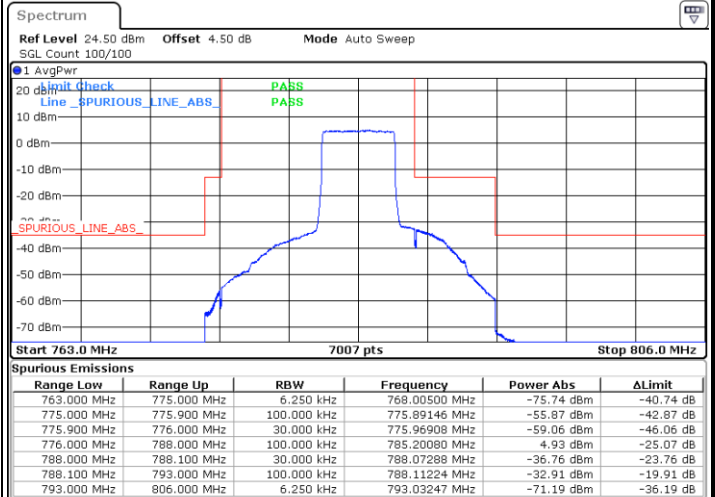
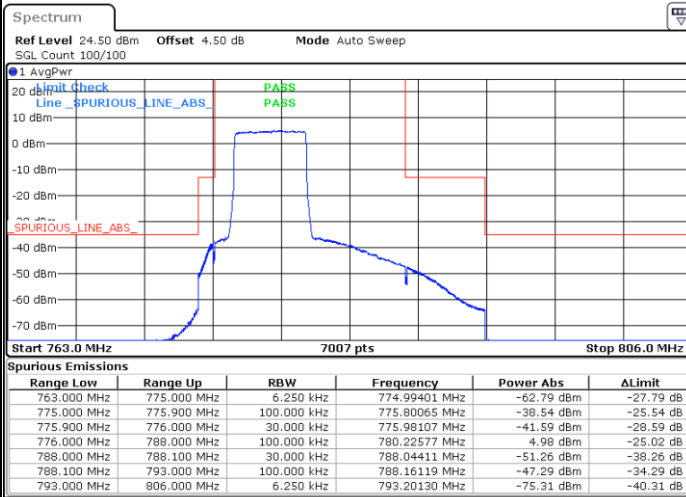


Date: 11.APR.2024 13:13:14

Date: 11.APR.2024 13:26:53

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.APR.2024 13:19:20

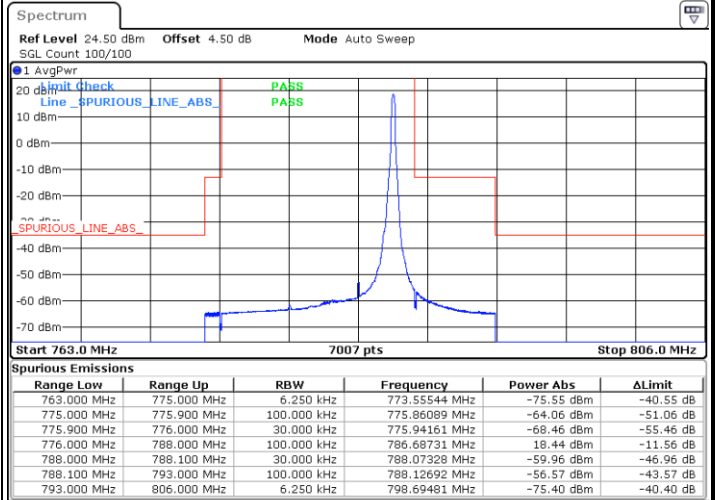
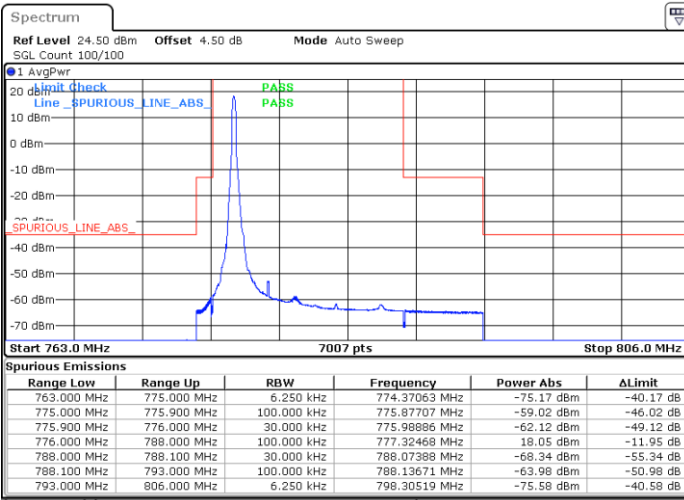
Date: 11.APR.2024 13:33:19



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

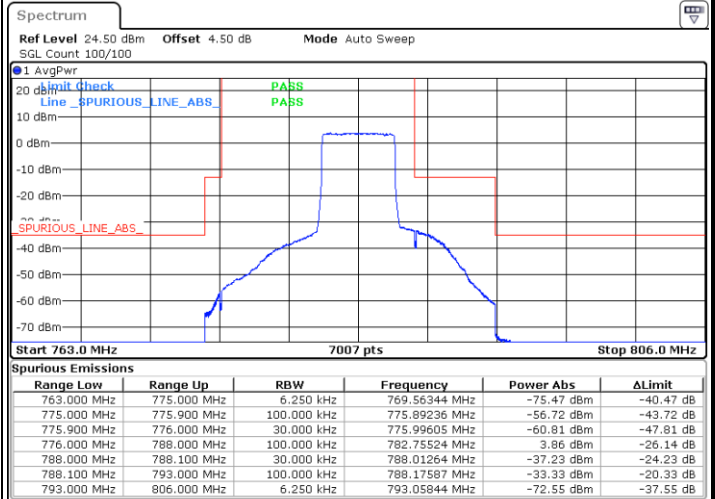
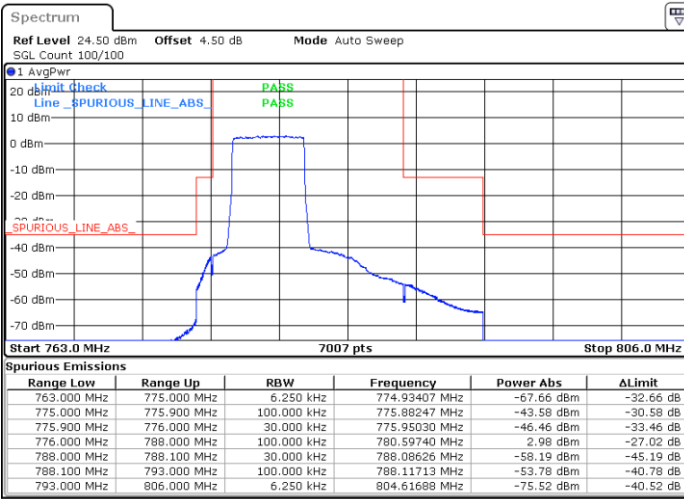


Date: 11.APR.2024 13:14:24

Date: 11.APR.2024 13:28:06

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.APR.2024 13:18:08

Date: 11.APR.2024 13:32:05

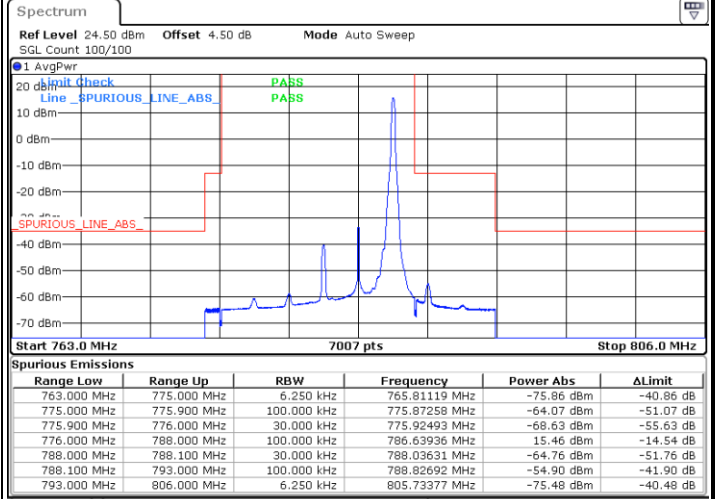
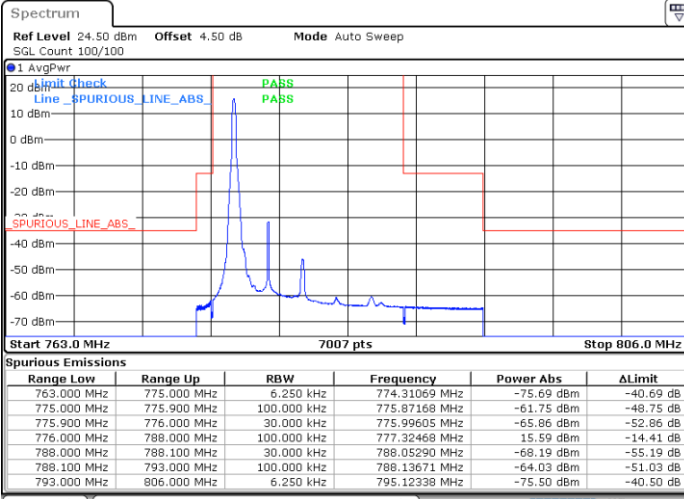




LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

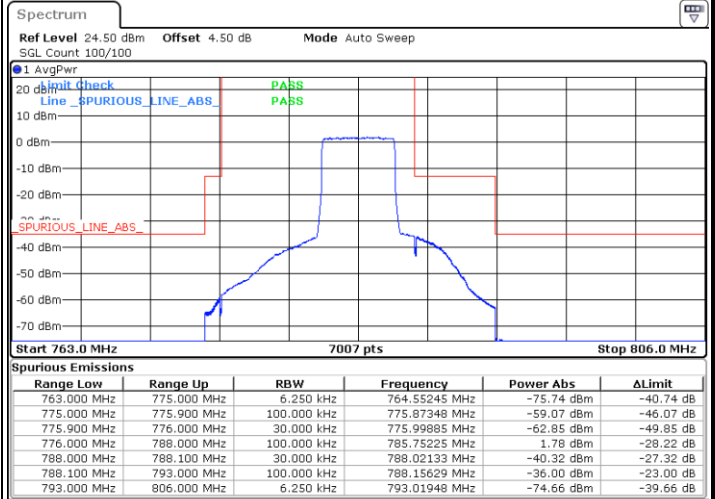
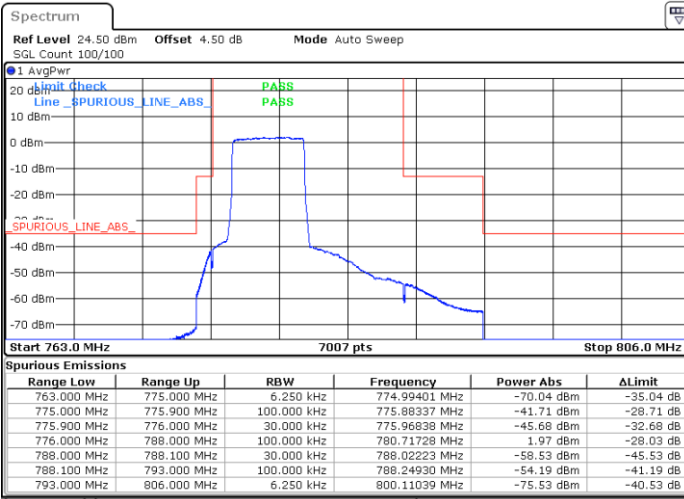


Date: 11.APR.2024 13:15:31

Date: 11.APR.2024 13:29:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.APR.2024 13:16:59

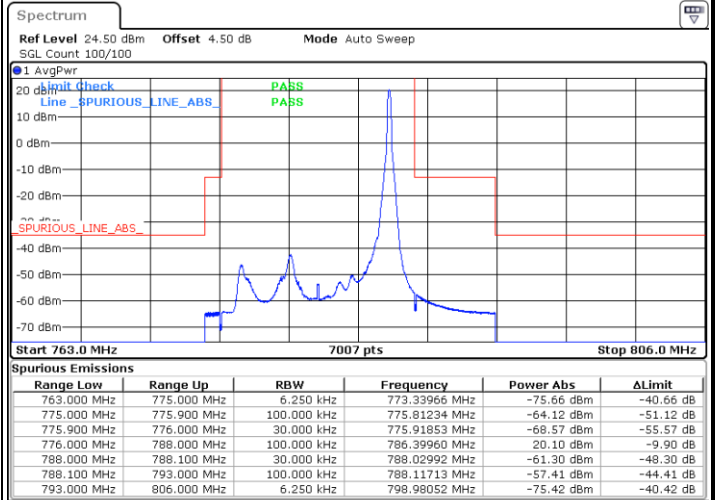
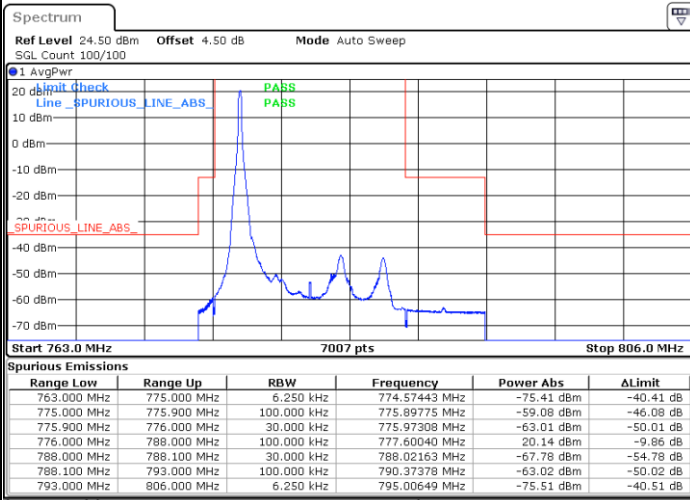
Date: 11.APR.2024 13:30:25



LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB

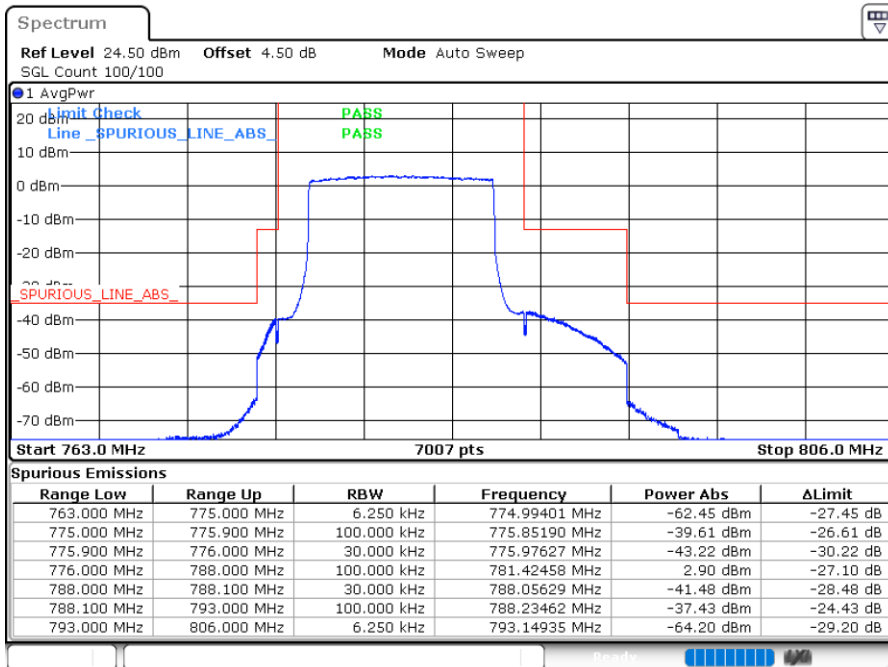
middle Band Edge / 1 RB



Date: 11.APR.2024 13:39:34

Date: 11.APR.2024 13:53:19

Middle Band Edge / Full RB

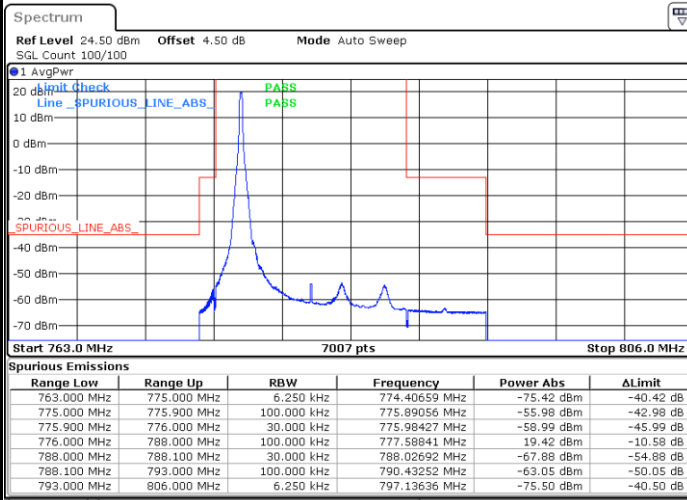


Date: 11.APR.2024 13:56:23



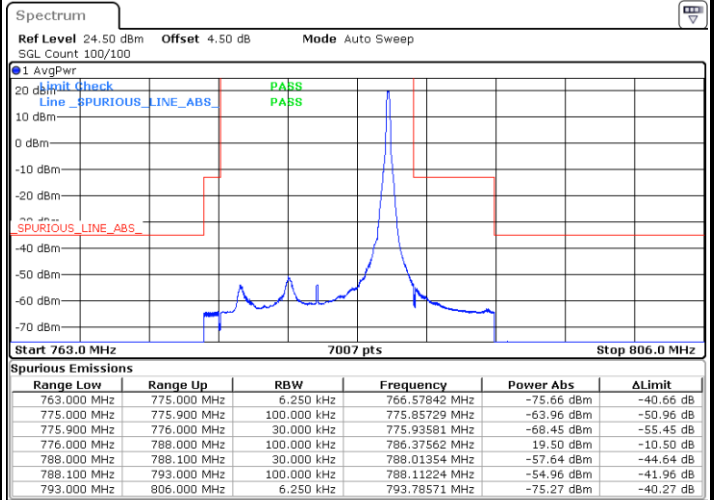
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



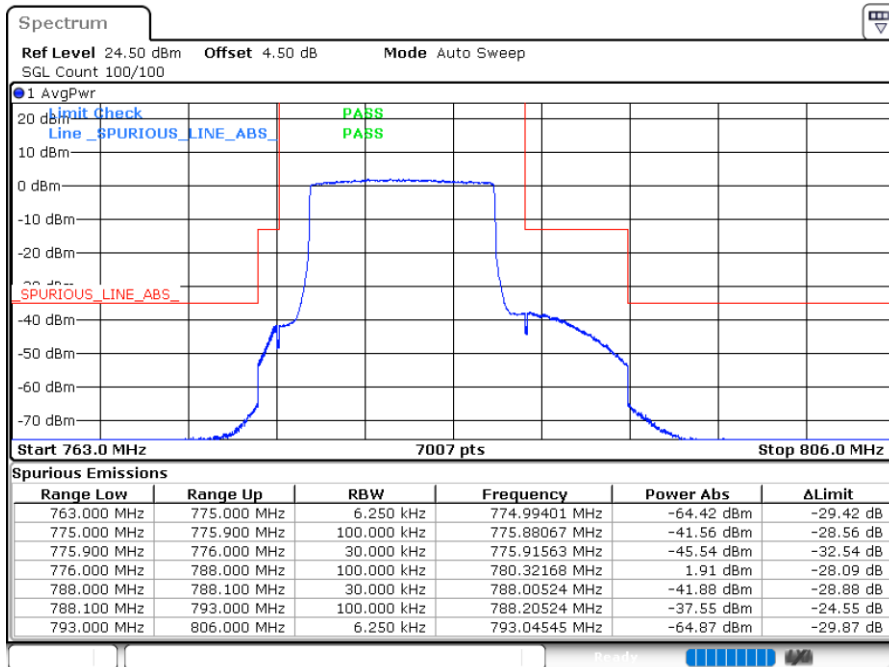
Date: 11.APR.2024 13:41:39

middle Band Edge / 1 RB



Date: 11.APR.2024 13:51:03

middle Band Edge / Full RB

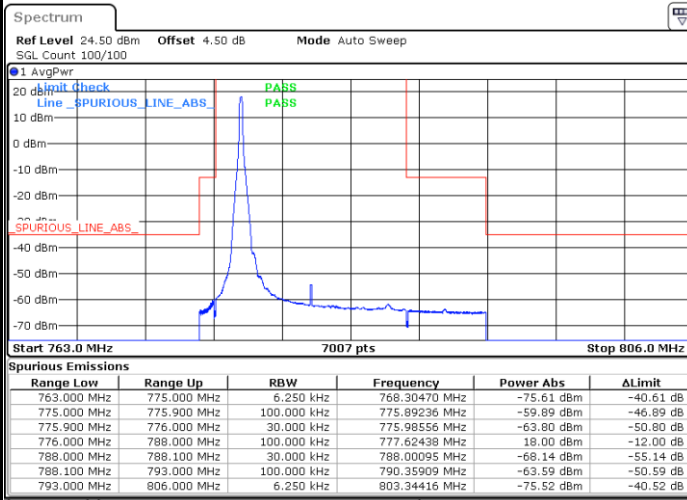


Date: 11.APR.2024 13:58:29



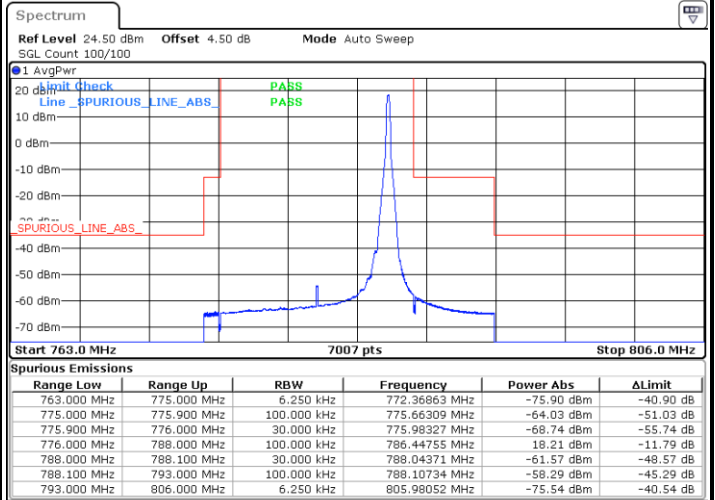
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



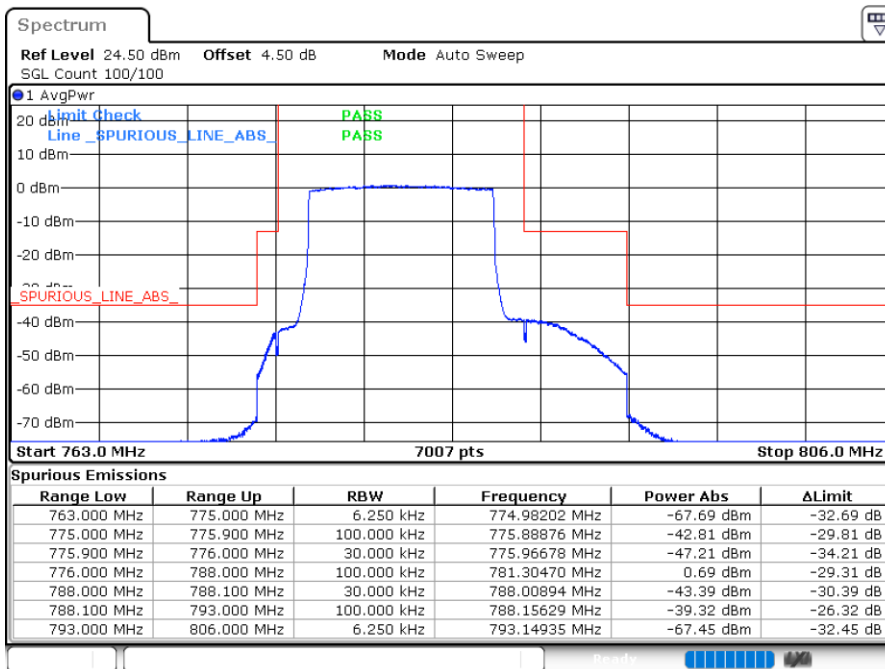
Date: 11.APR.2024 13:42:52

middle Band Edge / 1 RB



Date: 11.APR.2024 13:48:09

middle Band Edge / Full RB



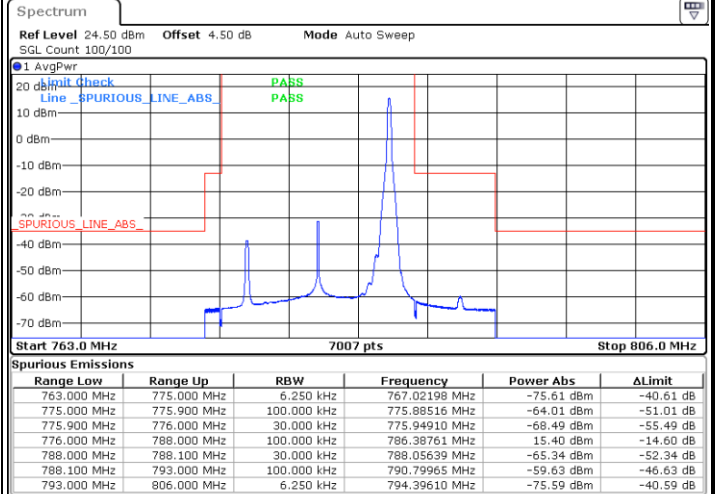
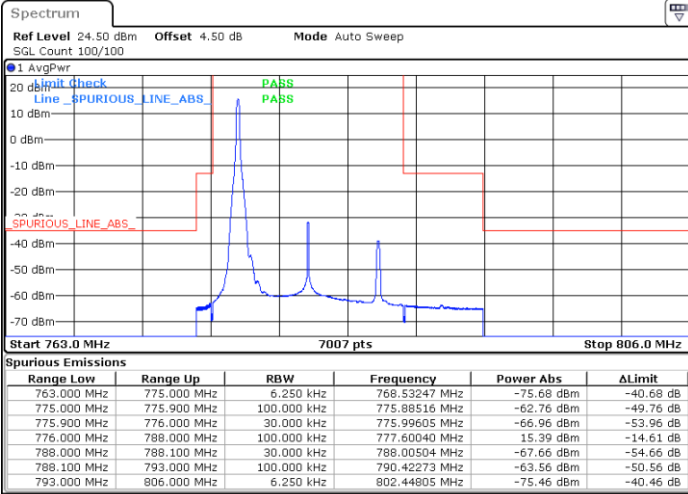
Date: 11.APR.2024 14:01:30



LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB

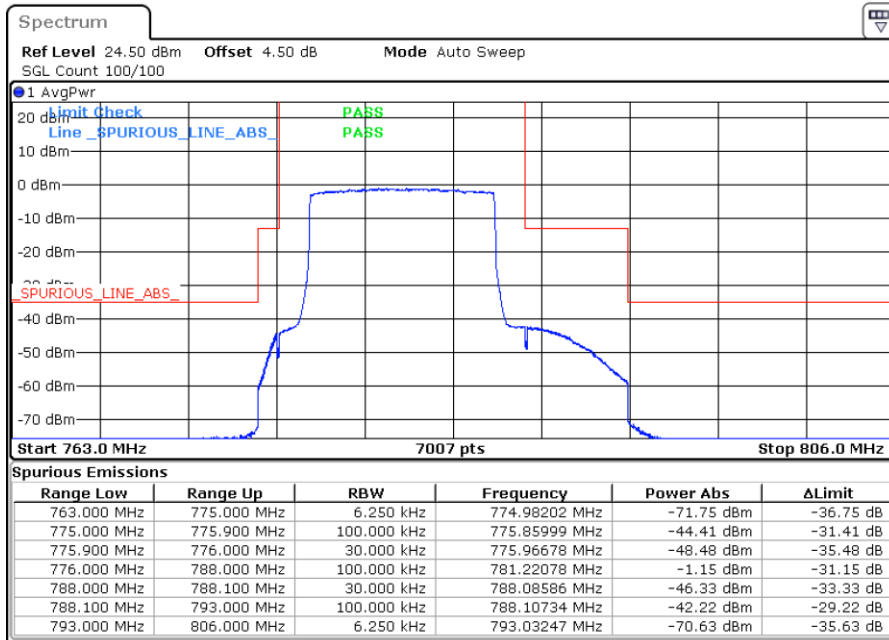
middle Band Edge / 1 RB



Date: 11.APR.2024 13:44:55

Date: 11.APR.2024 13:46:45

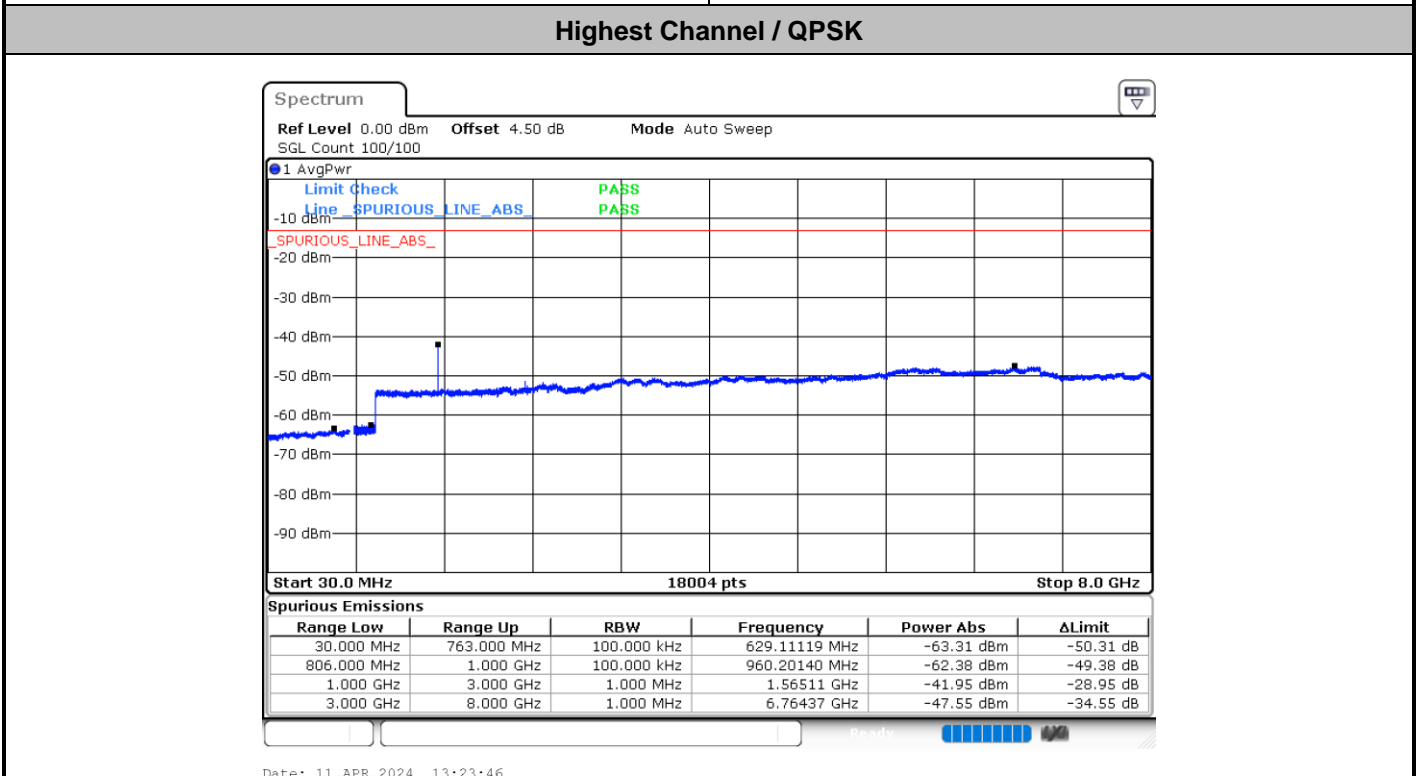
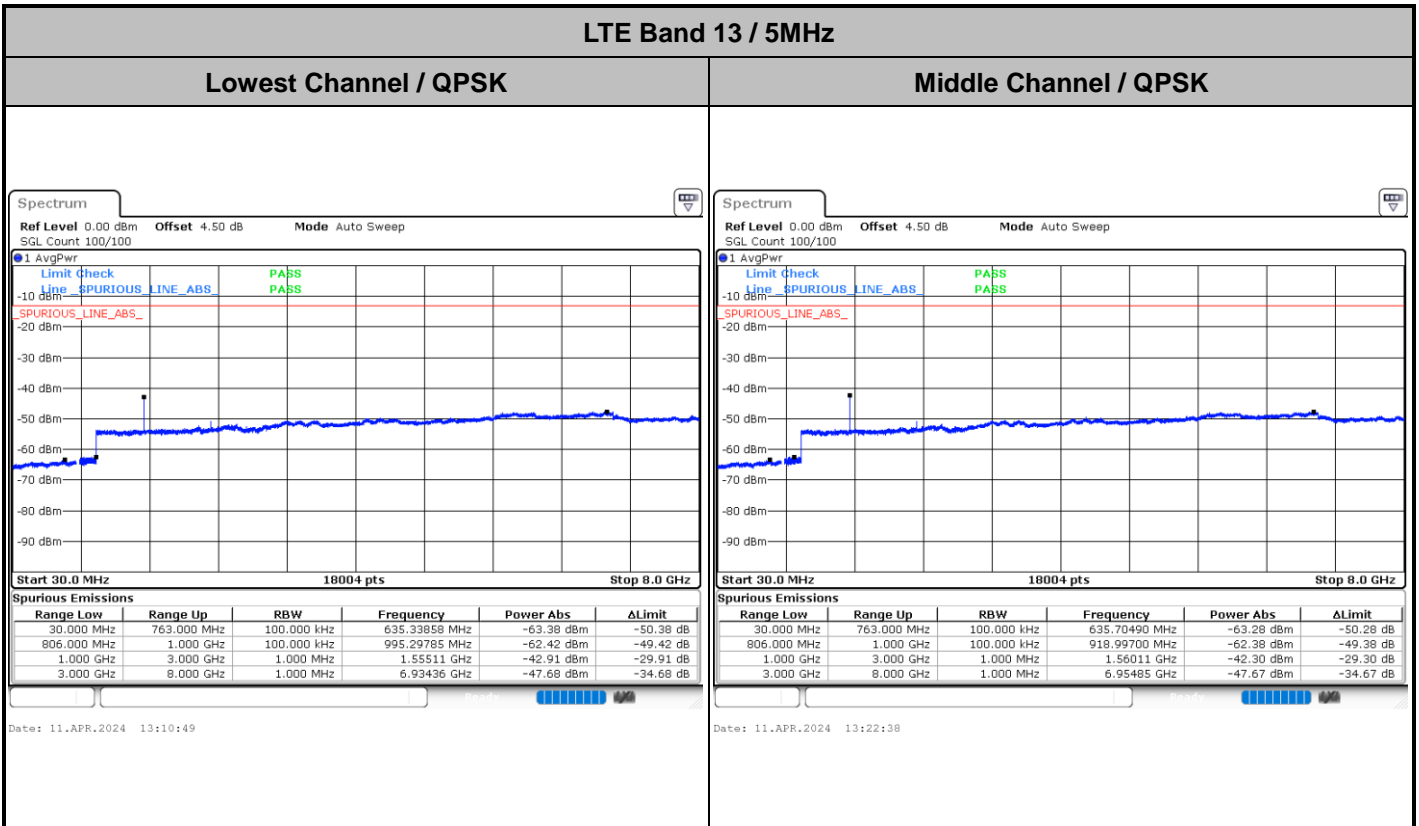
middle Band Edge / Full RB



Date: 11.APR.2024 14:02:47



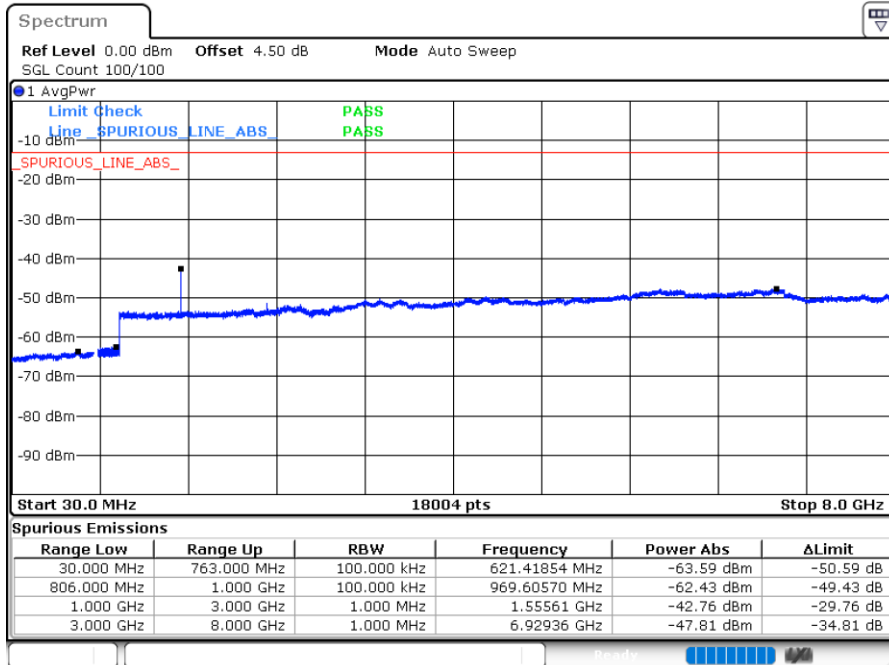
# Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 11.APR.2024 13:38:04



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	0.0021	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0053	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0066	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0057	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0061	
20	Battery End Point	0.0054	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.3 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

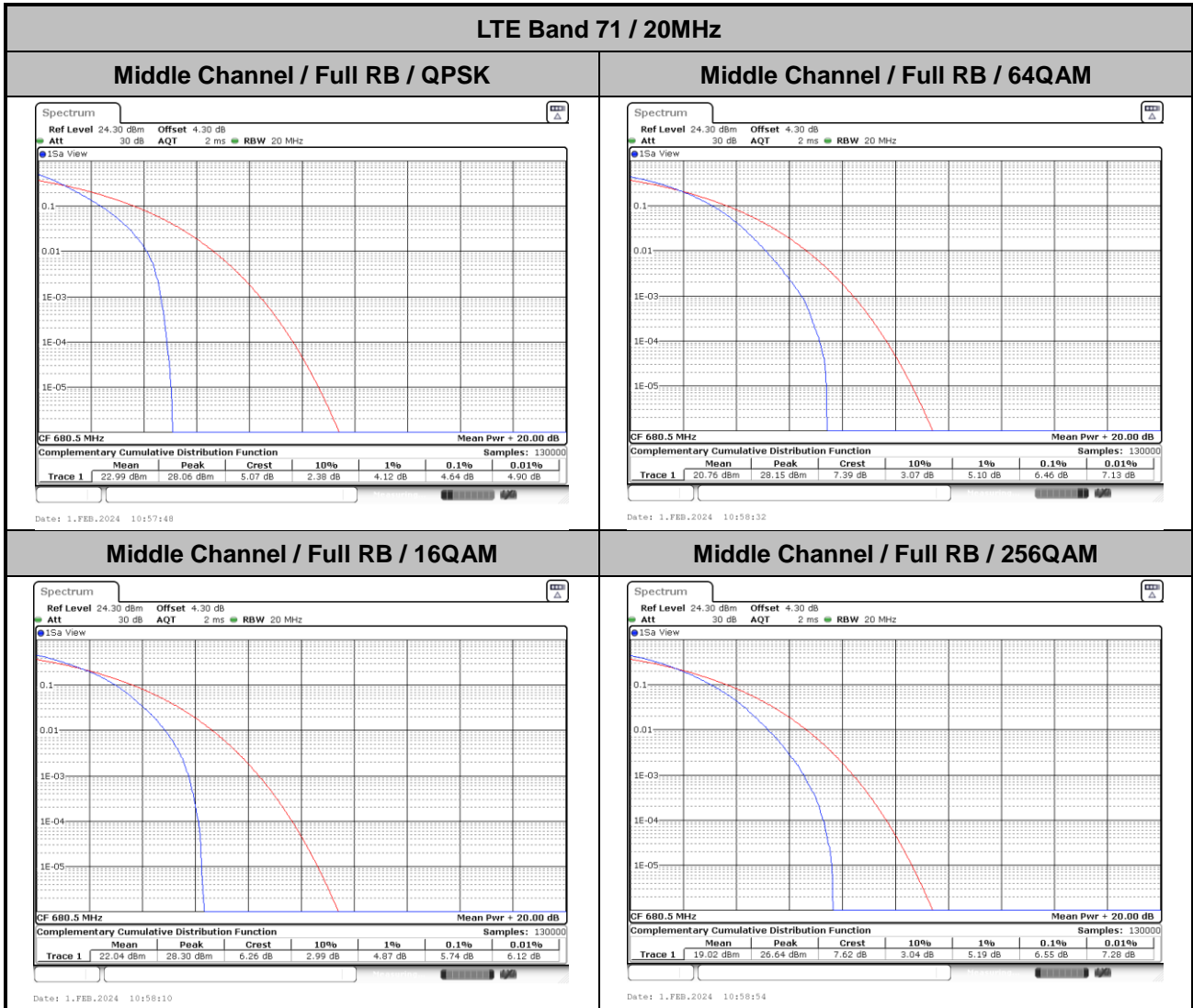




# LTE Band 71 (Main PA)

## Peak-to-Average Ratio

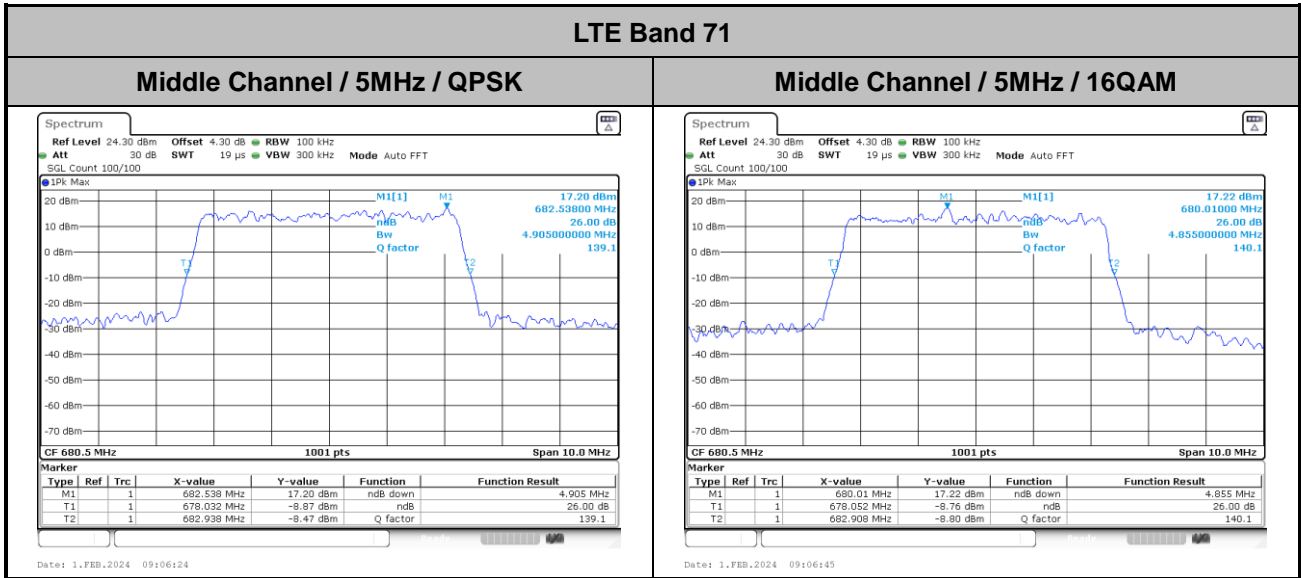
Mode	LTE Band 71 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.64	5.74	6.46	6.55	PASS





## 26dB Bandwidth

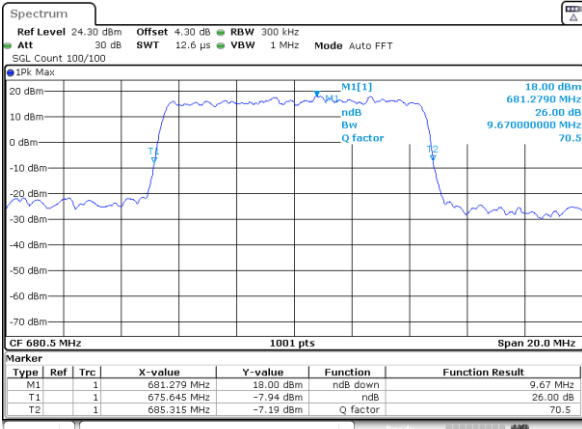
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.91	4.86
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.67	9.85
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.48	14.39
Mode	LTE Band 71 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.70	18.74





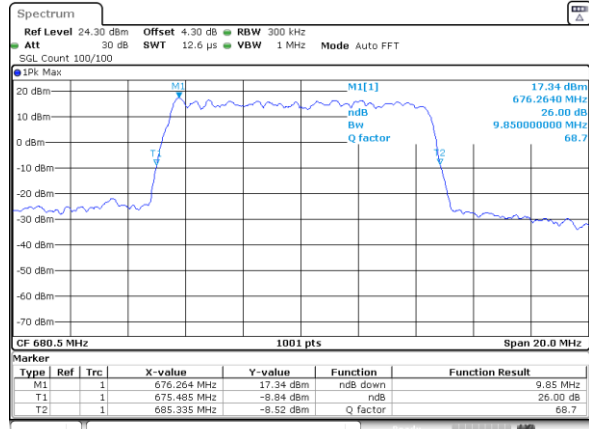
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 1.FEB.2024 09:39:57

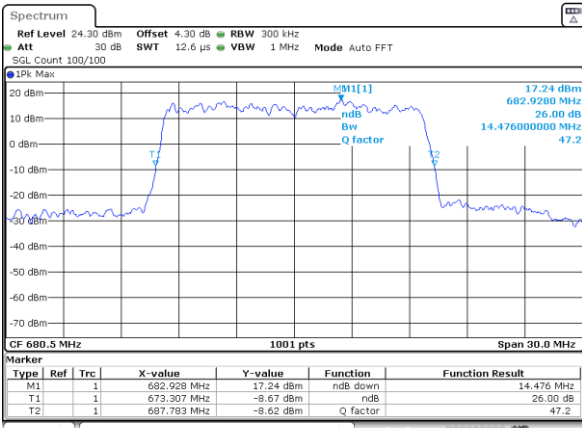
Middle Channel / 10MHz / 16QAM



Date: 1.FEB.2024 09:40:17

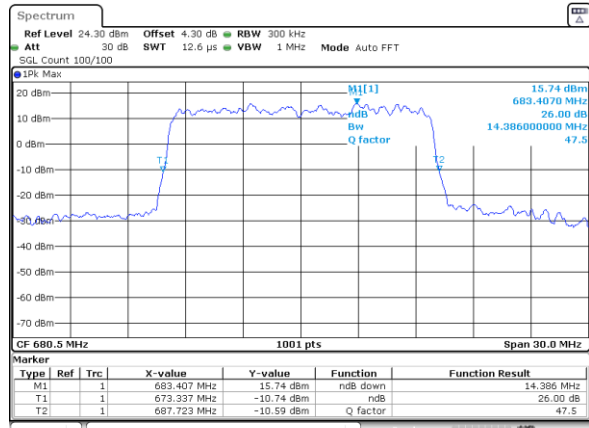
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 1.FEB.2024 10:12:05

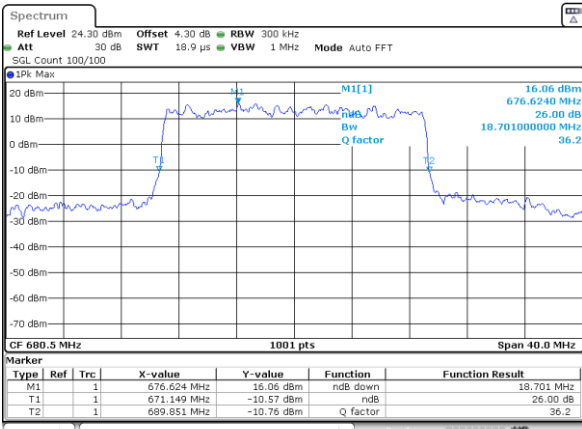
Middle Channel / 15MHz / 16QAM



Date: 1.FEB.2024 10:12:26

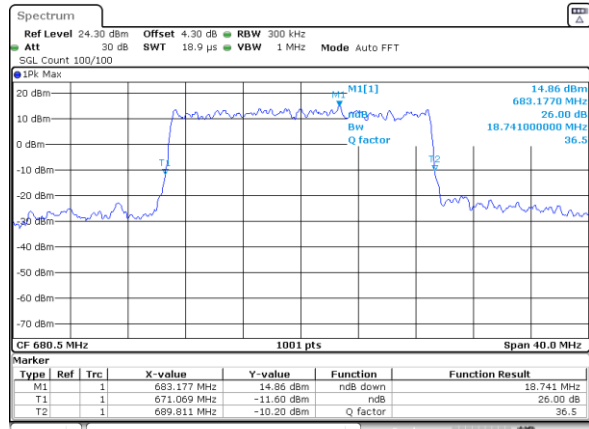
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 1.FEB.2024 10:43:58

Middle Channel / 20MHz / 16QAM

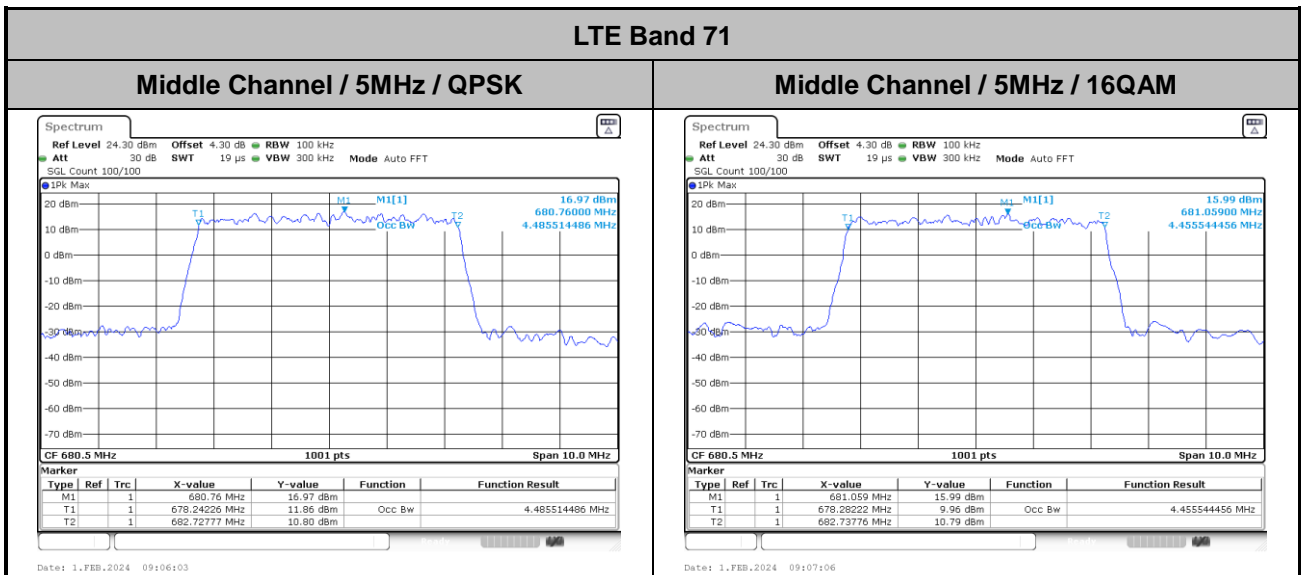


Date: 1.FEB.2024 10:44:19



## Occupied Bandwidth

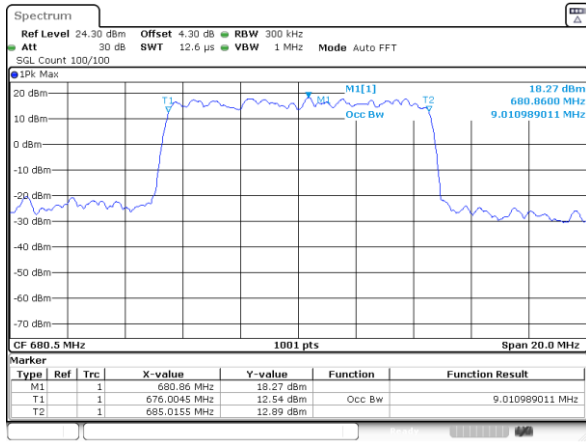
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.46
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	8.99
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.49
Mode	LTE Band 71 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	17.86





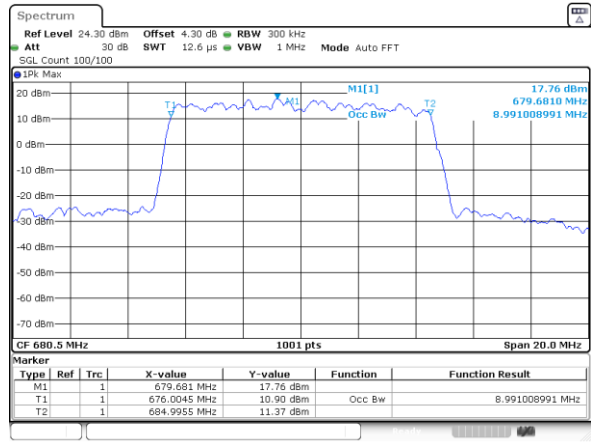
LTE Band 71

Middle Channel / 10MHz / QPSK



Date: 1.FEB.2024 09:39:36

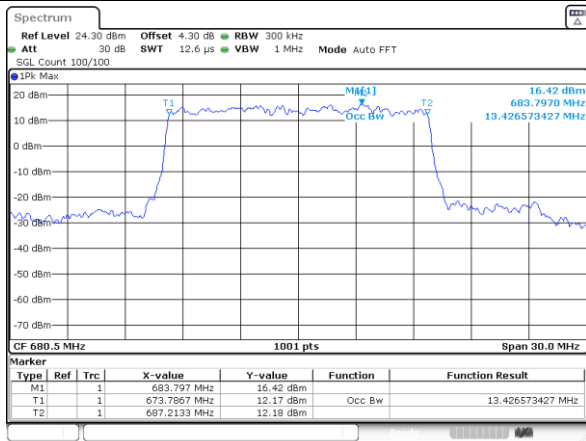
Middle Channel / 10MHz / 16QAM



Date: 1.FEB.2024 09:40:38

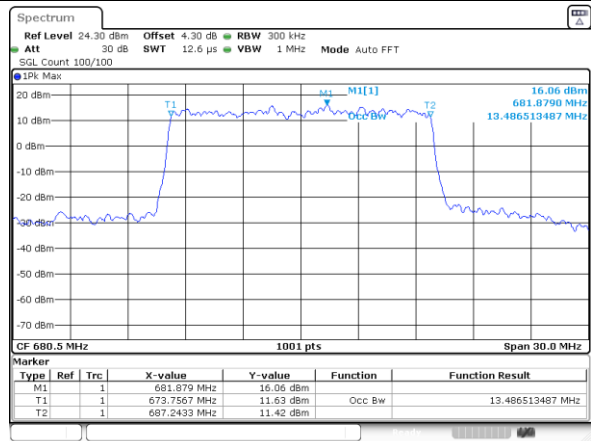
LTE Band 71

Middle Channel / 15MHz / QPSK



Date: 1.FEB.2024 10:11:45

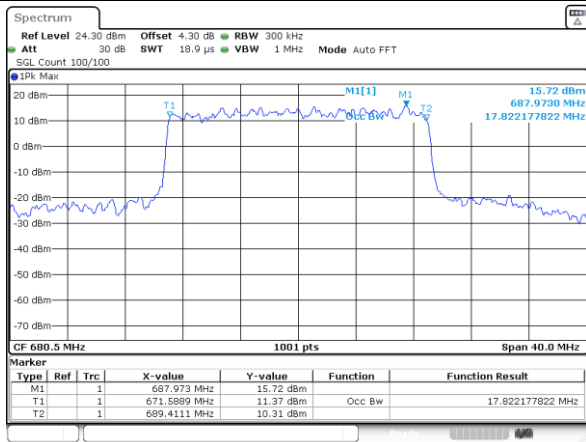
Middle Channel / 15MHz / 16QAM



Date: 1.FEB.2024 10:12:47

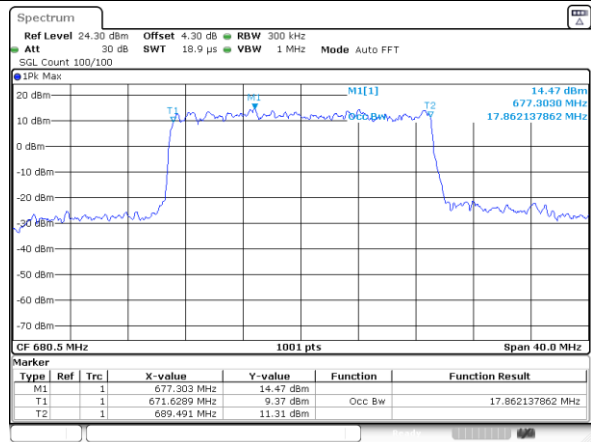
LTE Band 71

Middle Channel / 20MHz / QPSK



Date: 1.FEB.2024 10:43:37

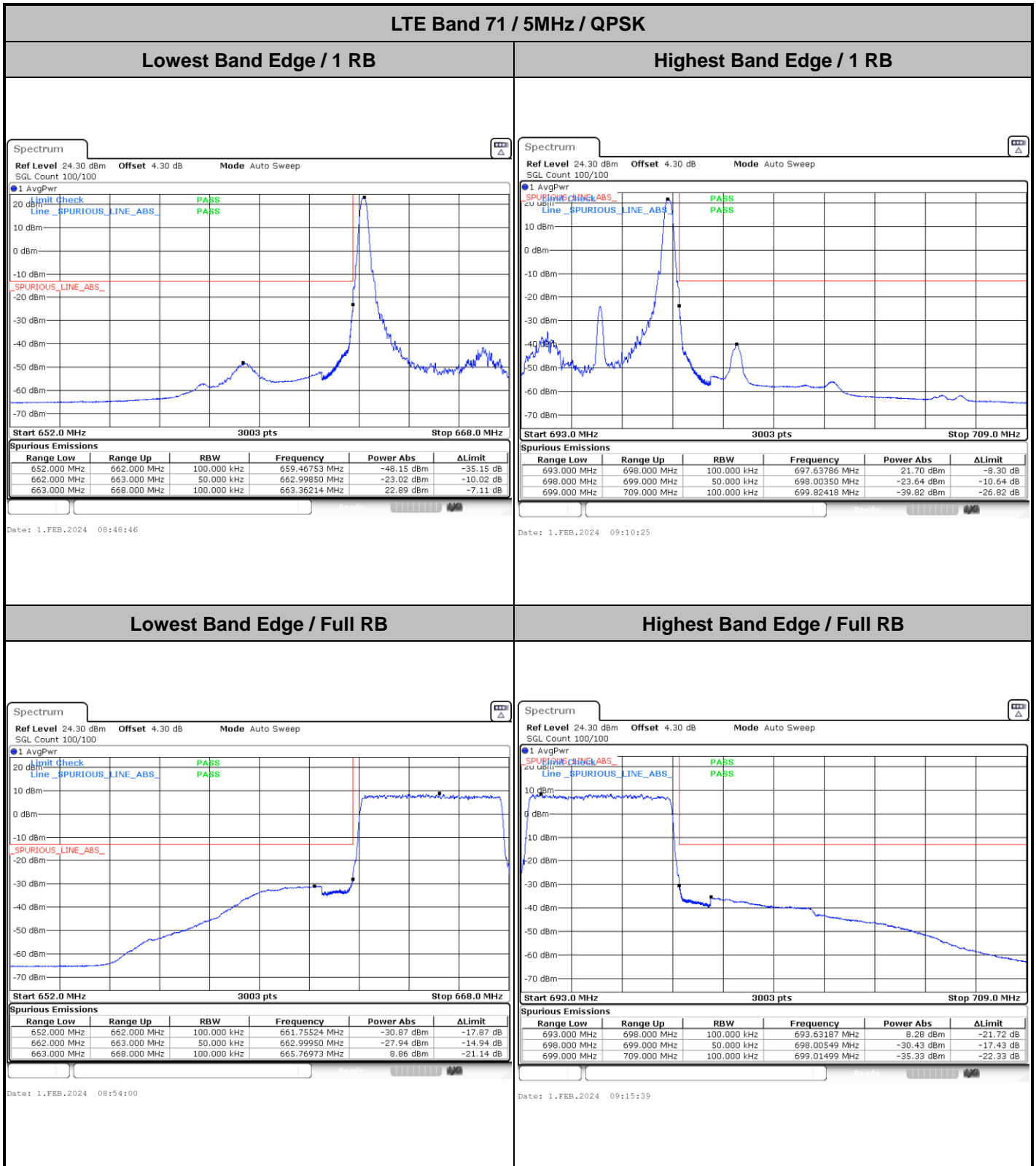
Middle Channel / 20MHz / 16QAM



Date: 1.FEB.2024 10:44:40



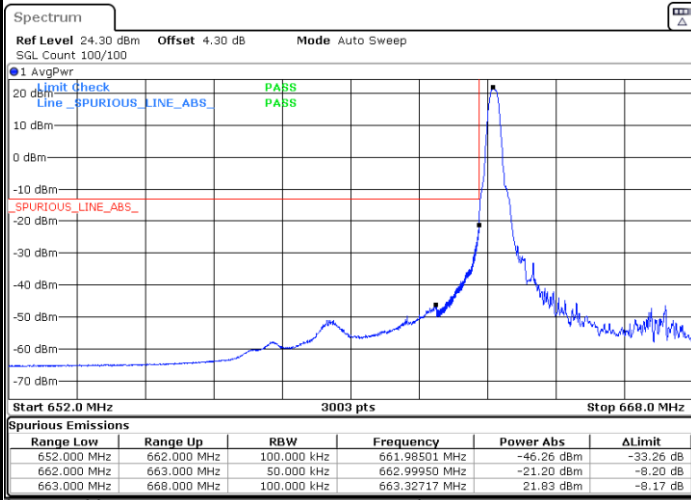
# Conducted Band Edge





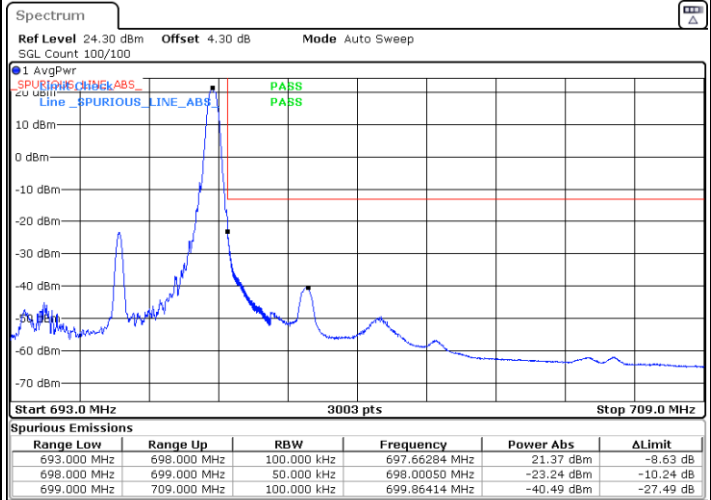
LTE Band 71 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



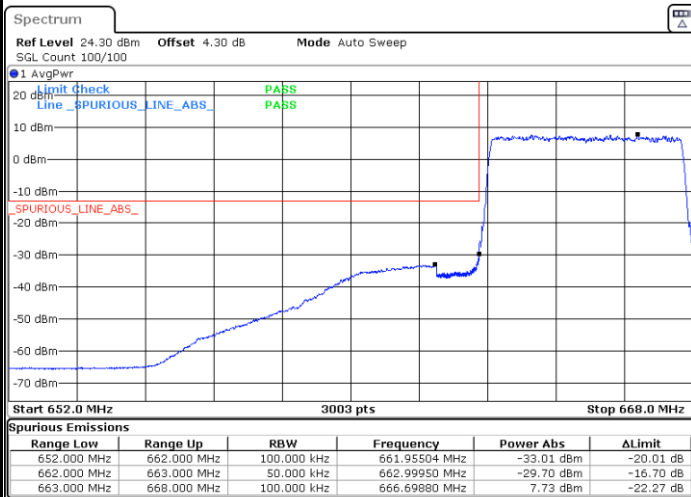
Date: 1.FEB.2024 08:50:04

Highest Band Edge / 1 RB



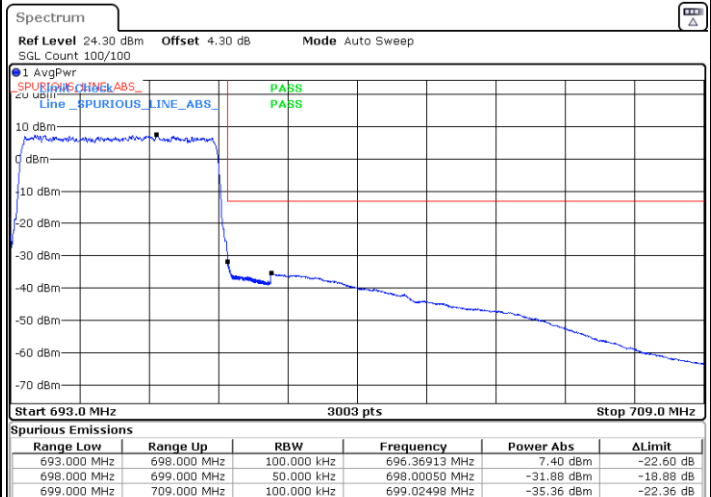
Date: 1.FEB.2024 09:11:43

Lowest Band Edge / Full RB



Date: 1.FEB.2024 08:55:18

Highest Band Edge / Full RB



Date: 1.FEB.2024 09:16:57