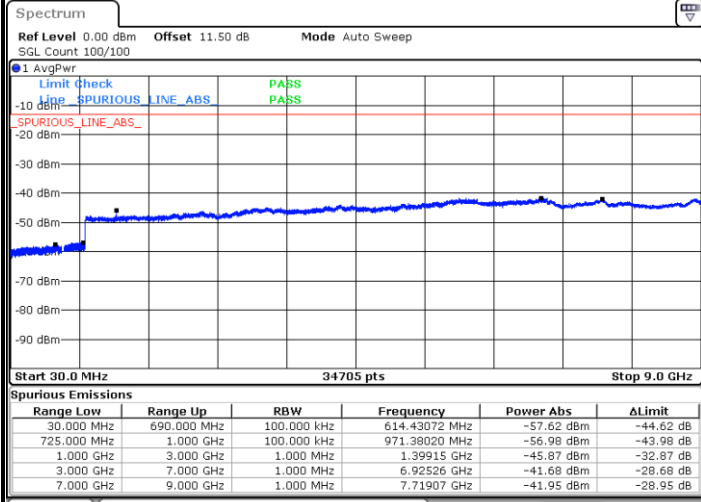




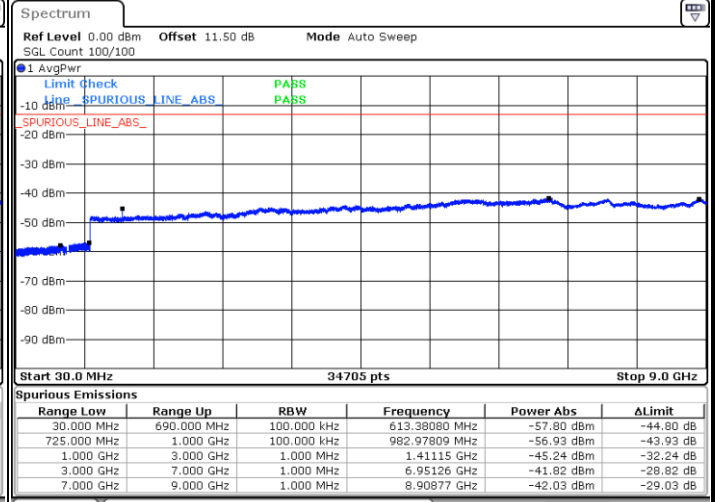
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

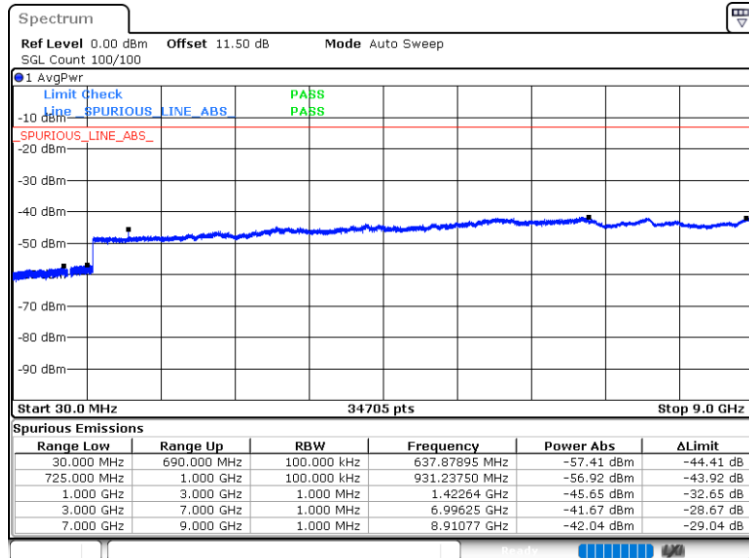


Date: 20.FEB.2024 15:07:05



Date: 20.FEB.2024 15:08:21

Highest Channel / QPSK



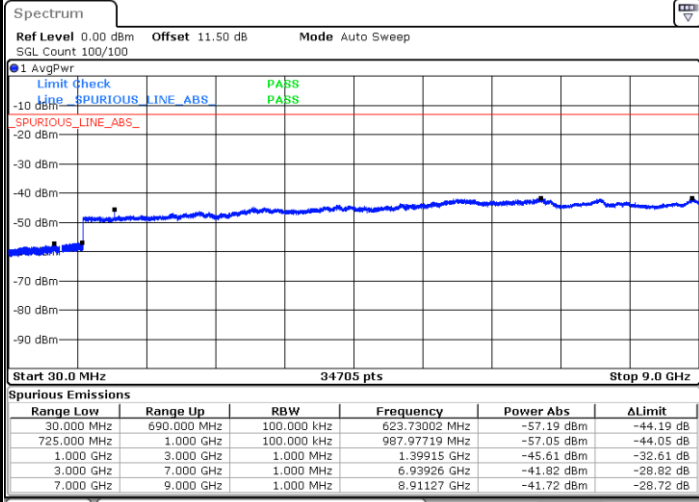
Date: 20.FEB.2024 15:09:38



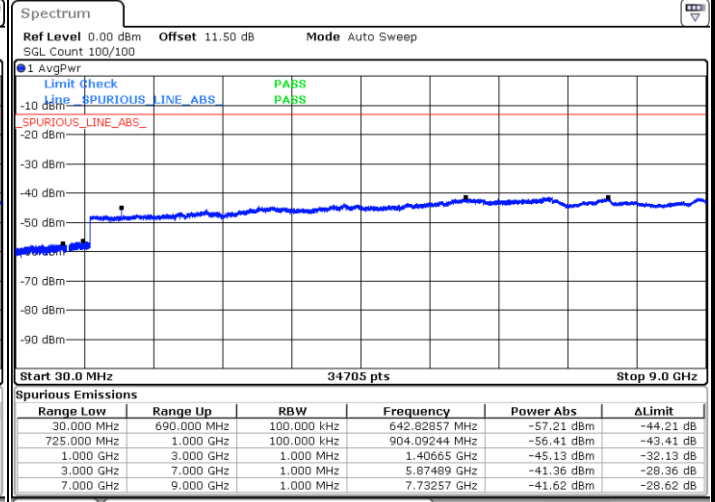
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

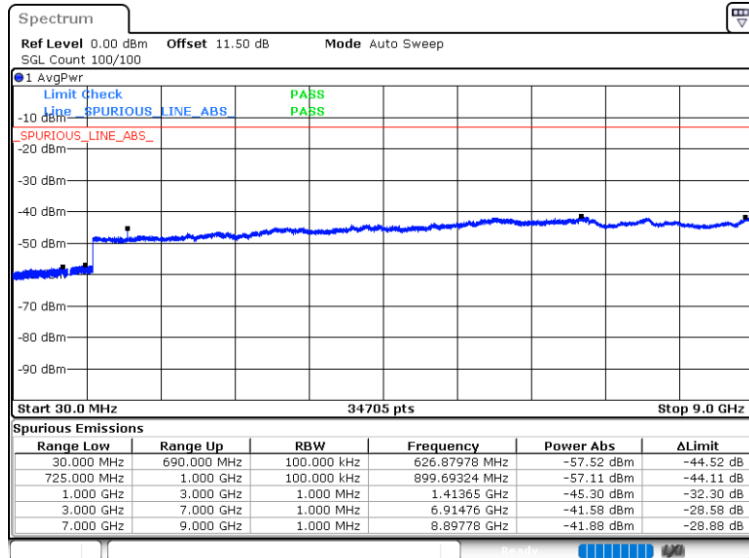


Date: 20.FEB.2024 15:10:59



Date: 23.FEB.2024 14:10:27

Highest Channel / QPSK



Date: 20.FEB.2024 15:13:32



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0153	PASS
40	Normal Voltage	0.0194	
30	Normal Voltage	0.0201	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0191	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0163	
-20	Normal Voltage	0.0085	
20	Maximum Voltage	0.0153	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0182	

Note:

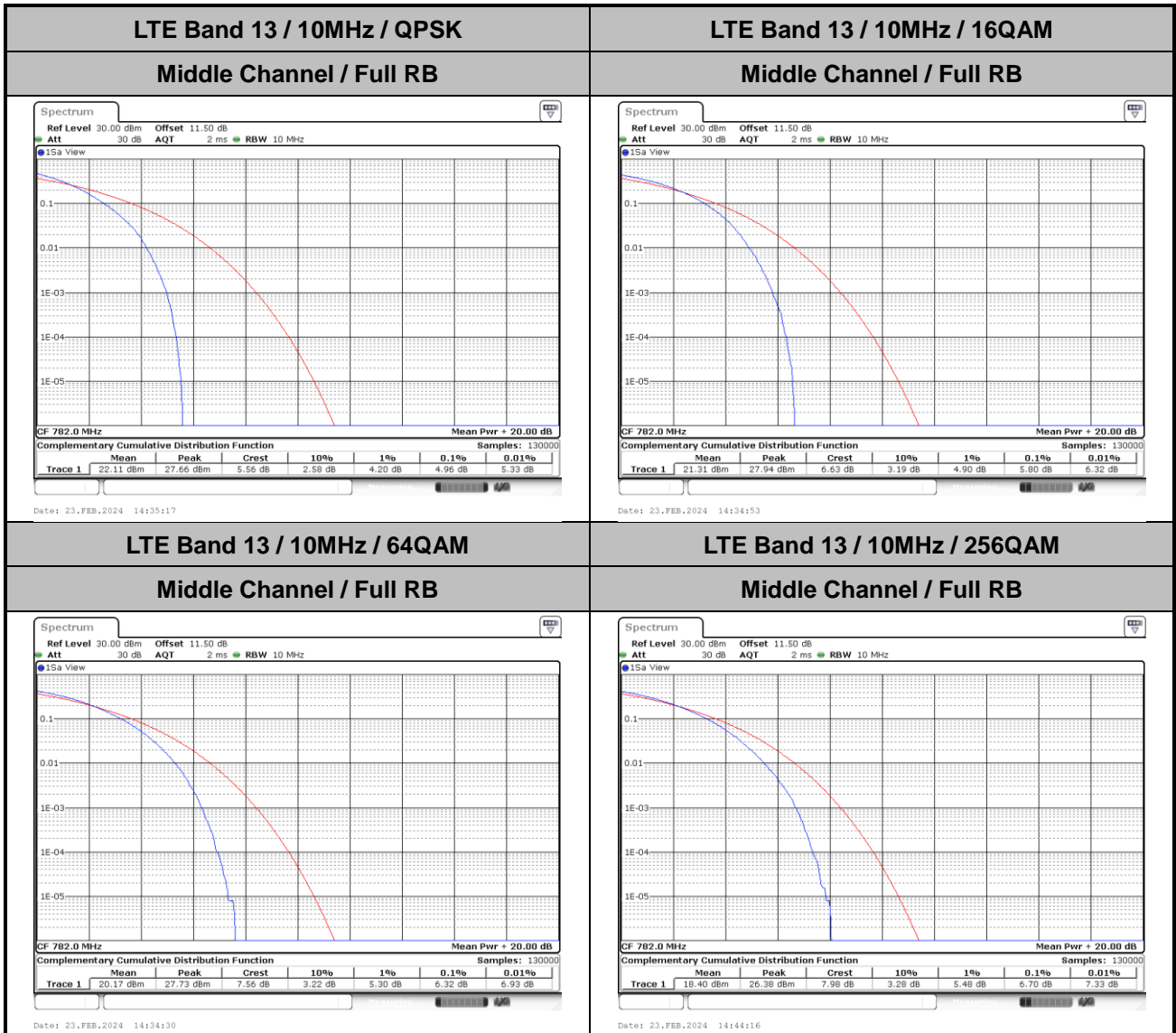
1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 13

## Peak-to-Average Ratio

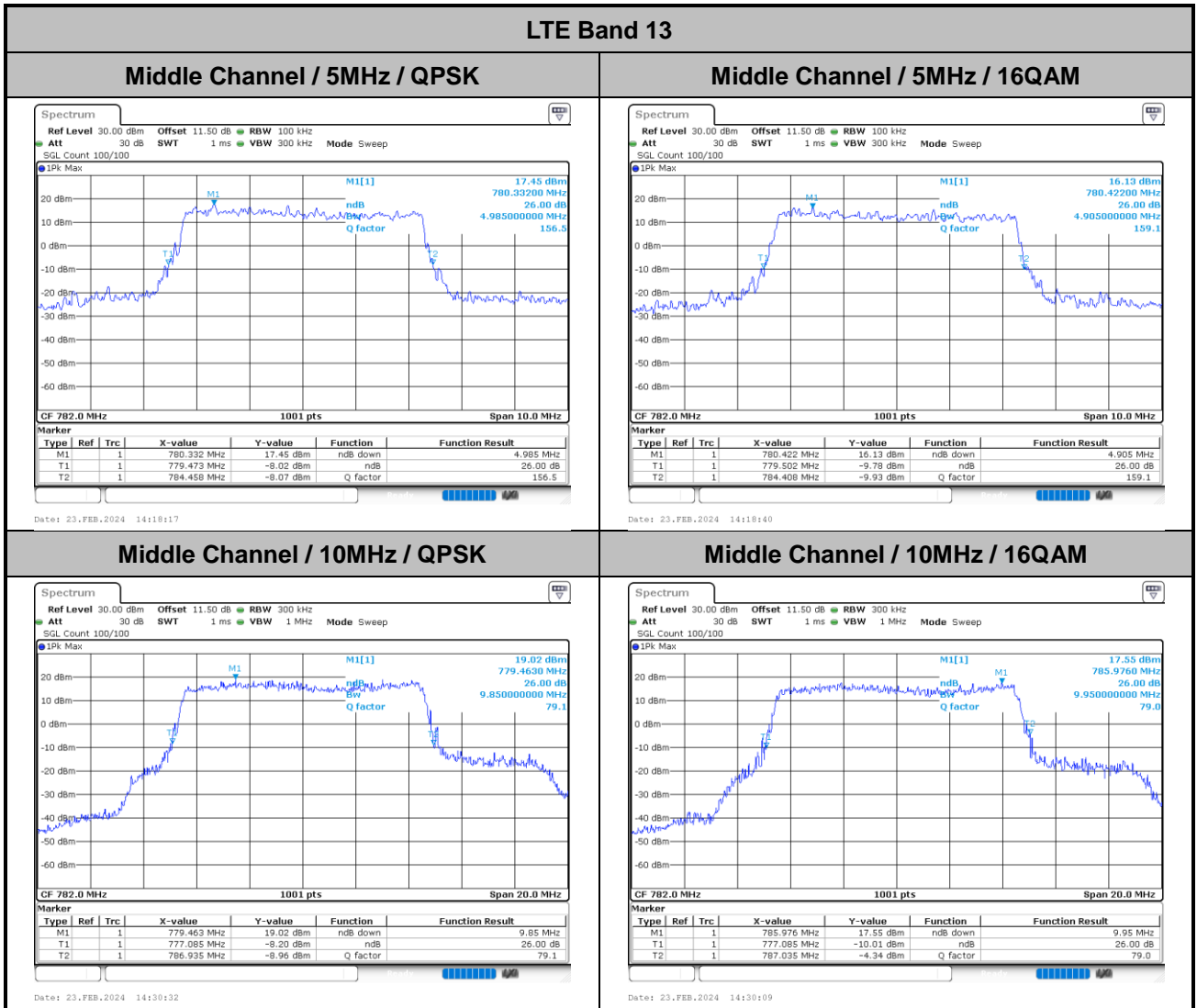
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.96	5.80	6.32	6.70	PASS





**26dB Bandwidth**

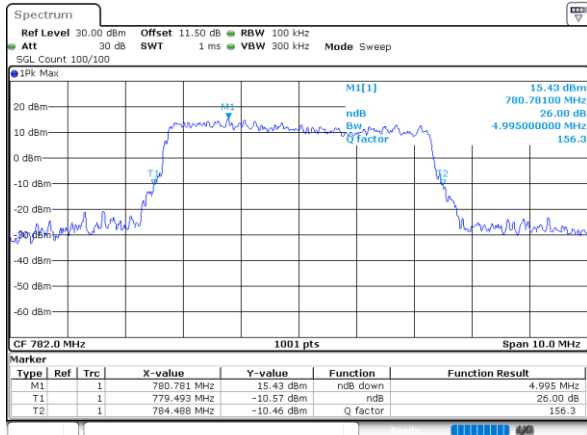
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.98	4.90	9.84	9.94	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.99	4.94	9.86	9.91	-	-	-	-





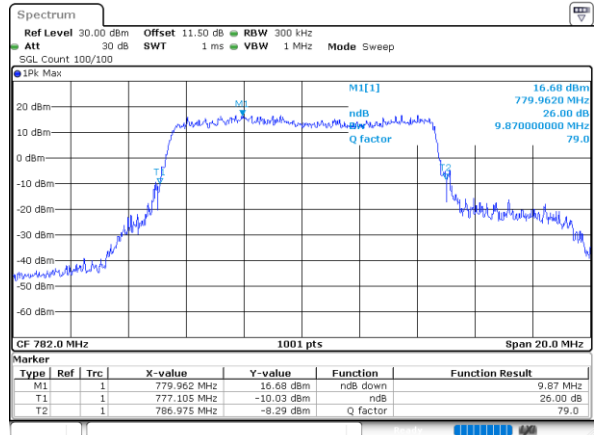
LTE Band 13

Middle Channel / 5MHz / 64QAM



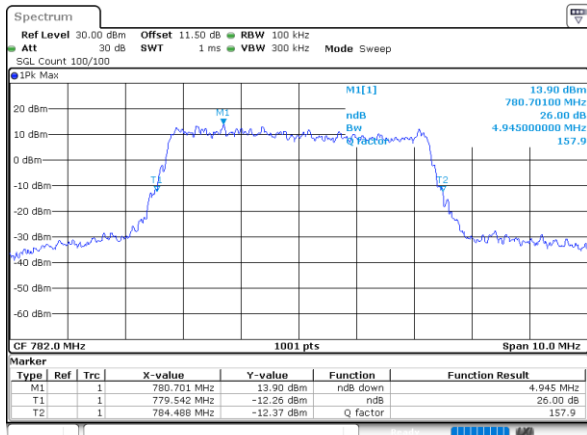
Date: 23.FEB.2024 14:26:43

Middle Channel / 10MHz / 64QAM



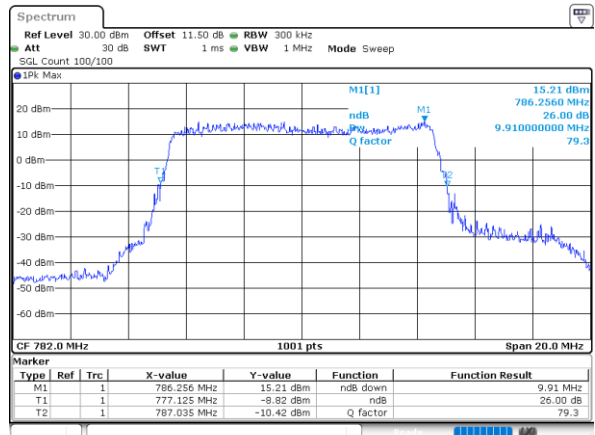
Date: 23.FEB.2024 14:33:10

Middle Channel / 5MHz / 256QAM



Date: 23.FEB.2024 14:37:59

Middle Channel / 10MHz / 256QAM

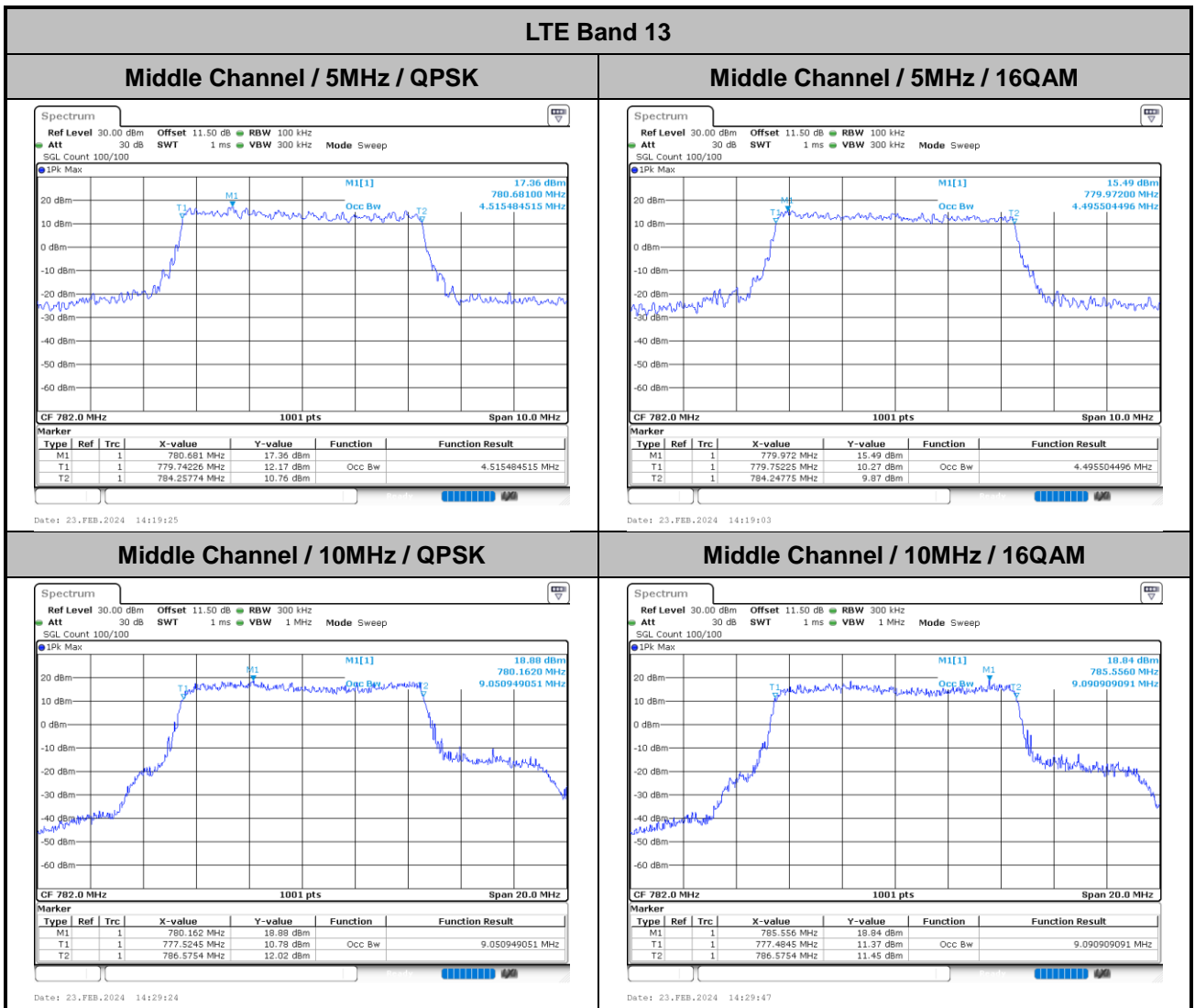


Date: 23.FEB.2024 14:42:03



# Occupied Bandwidth

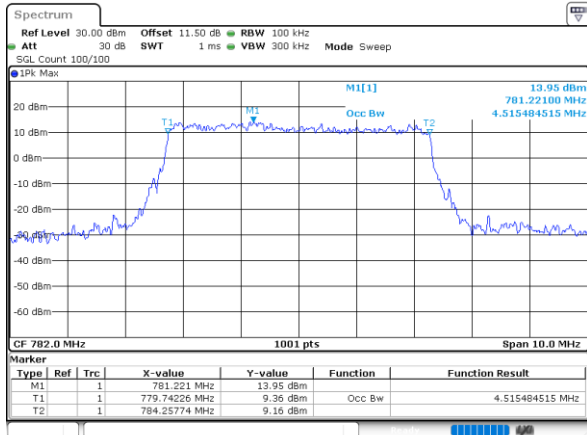
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.51	4.49	9.05	9.09	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.51	4.49	9.09	9.05	-	-	-	-





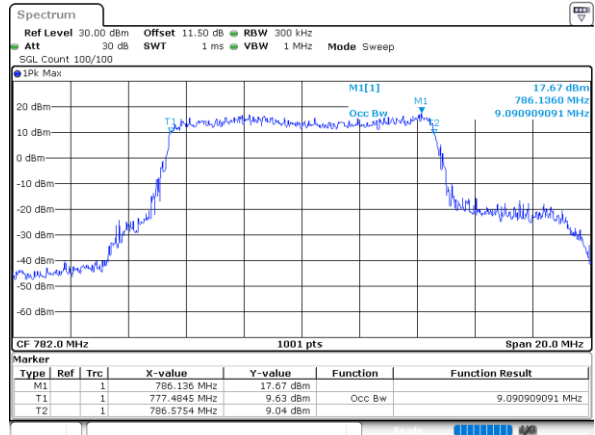
LTE Band 13

Middle Channel / 5MHz / 64QAM



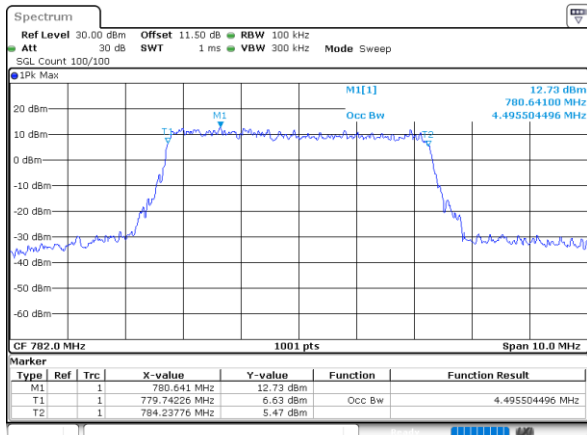
Date: 23.FEB.2024 14:27:05

Middle Channel / 10MHz / 64QAM



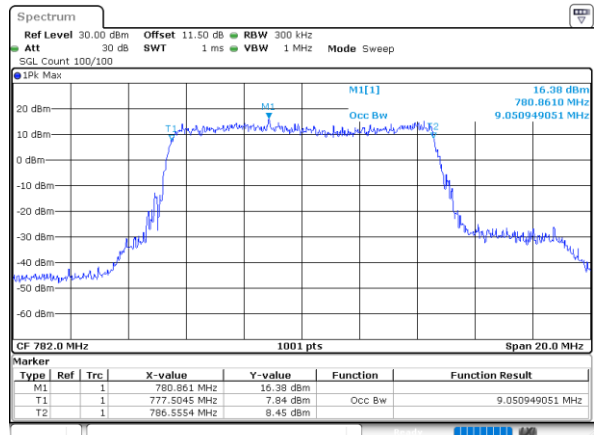
Date: 23.FEB.2024 14:32:47

Middle Channel / 5MHz / 256QAM



Date: 23.FEB.2024 14:38:22

Middle Channel / 10MHz / 256QAM



Date: 23.FEB.2024 14:41:40

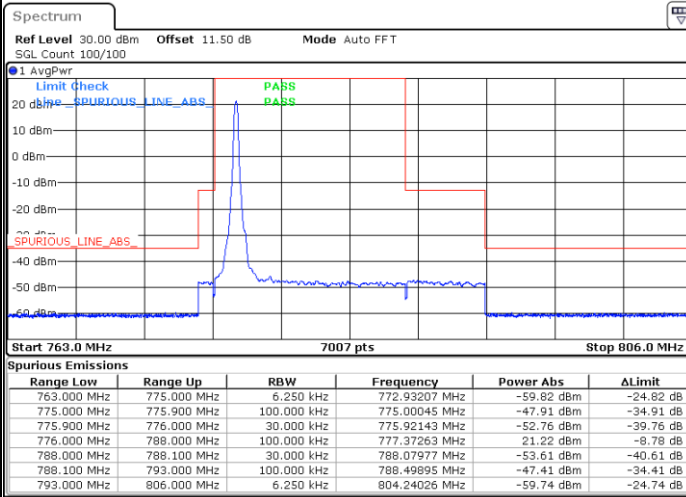




# Conducted Band Edge

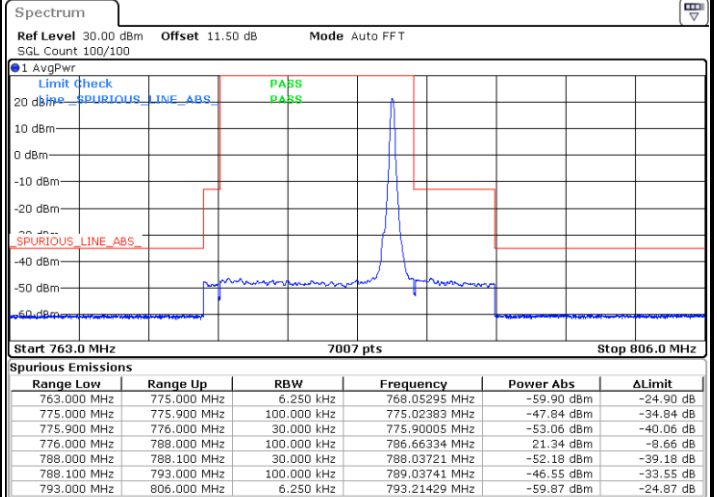
## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



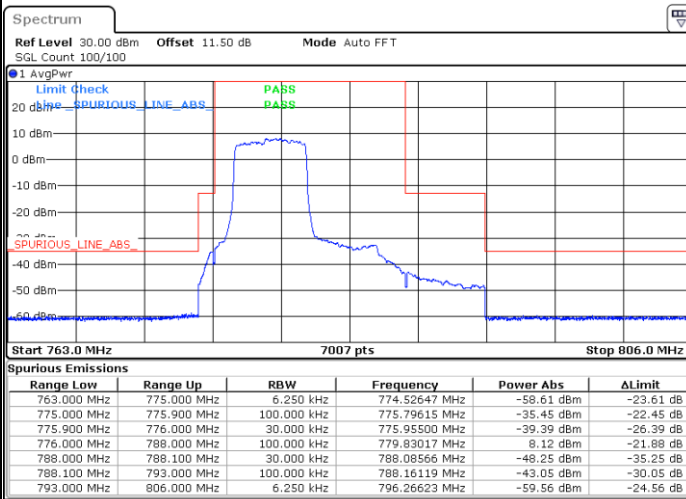
Date: 23.FEB.2024 14:15:31

### Highest Band Edge / 1 RB



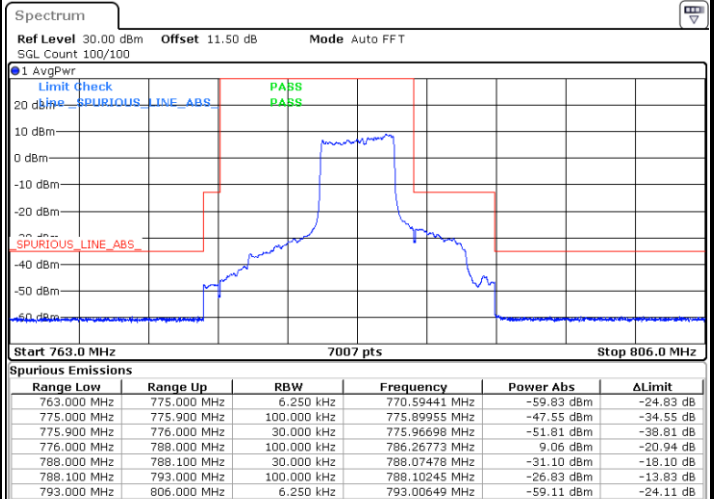
Date: 23.FEB.2024 14:23:14

### Lowest Band Edge / Full RB



Date: 23.FEB.2024 14:12:38

### Highest Band Edge / Full RB

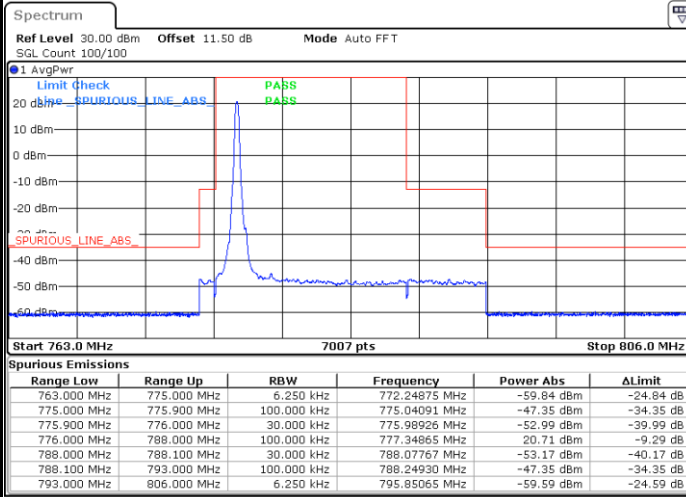


Date: 23.FEB.2024 14:20:22



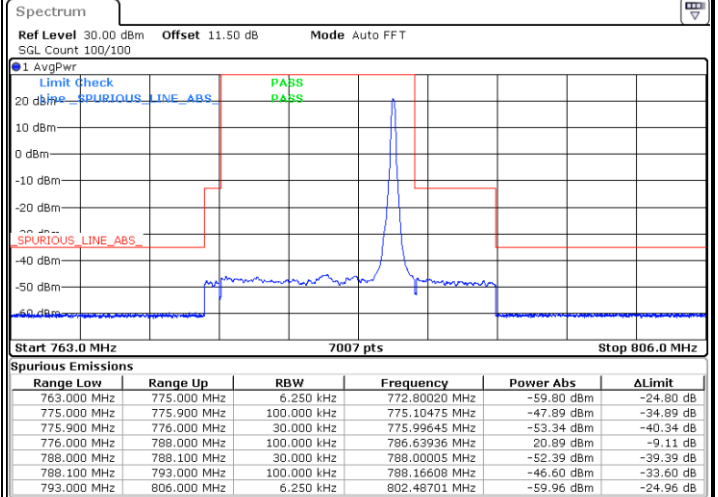
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



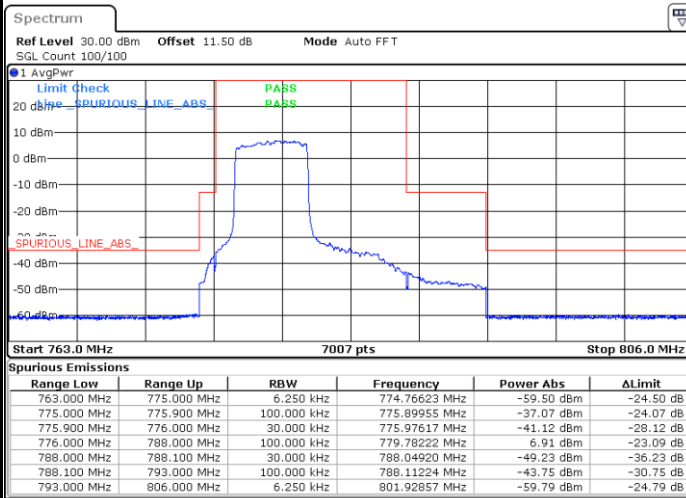
Date: 23.FEB.2024 14:14:34

Highest Band Edge / 1 RB



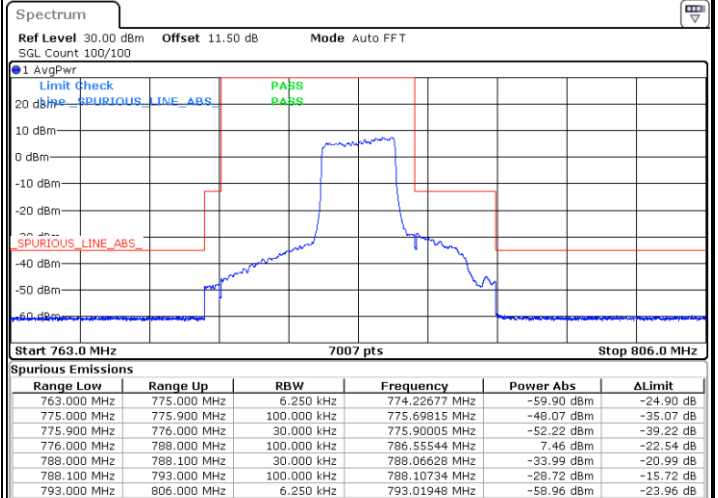
Date: 23.FEB.2024 14:22:16

Lowest Band Edge / Full RB



Date: 23.FEB.2024 14:13:36

Highest Band Edge / Full RB



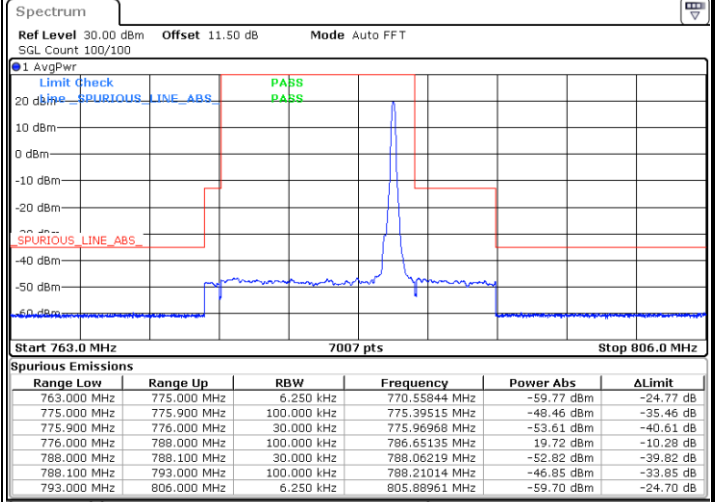
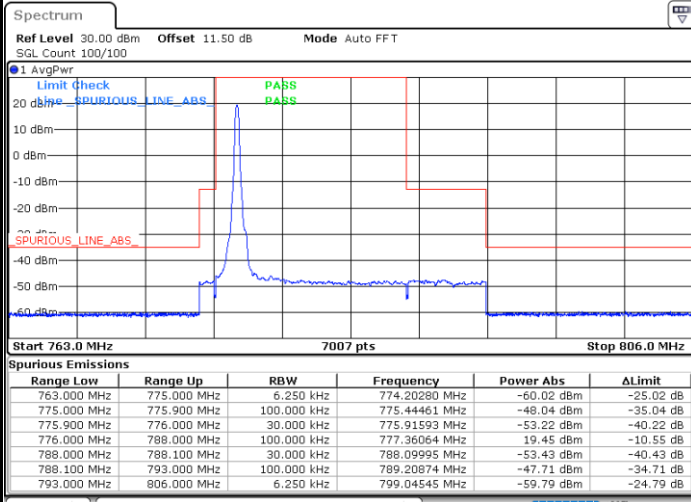
Date: 23.FEB.2024 14:21:19



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

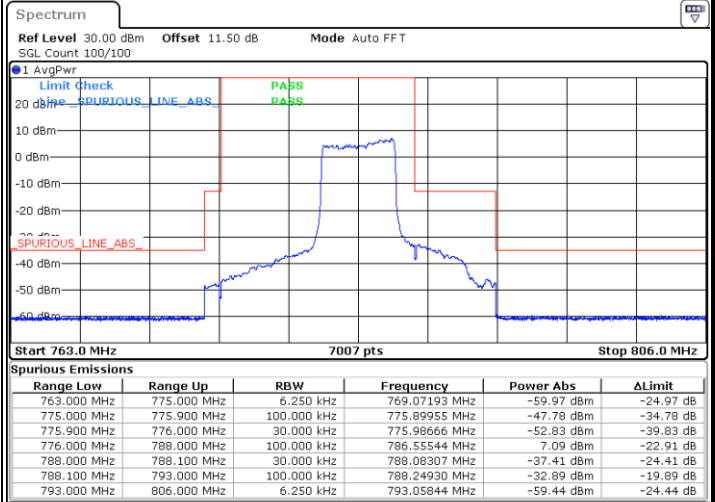
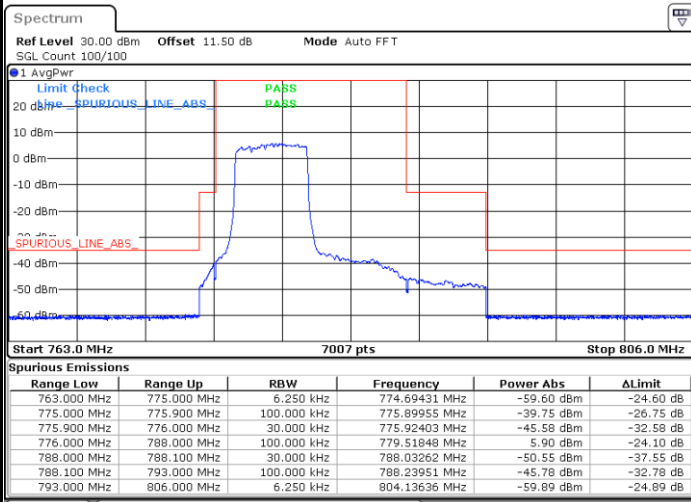


Date: 23.FEB.2024 14:26:19

Date: 23.FEB.2024 14:28:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.FEB.2024 14:25:22

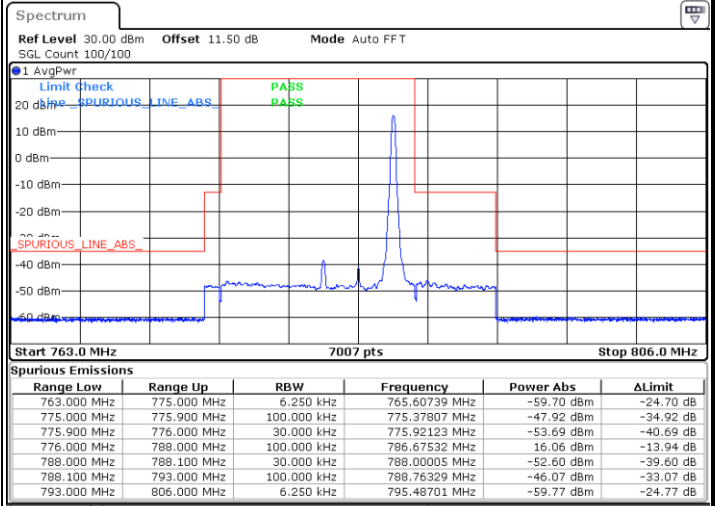
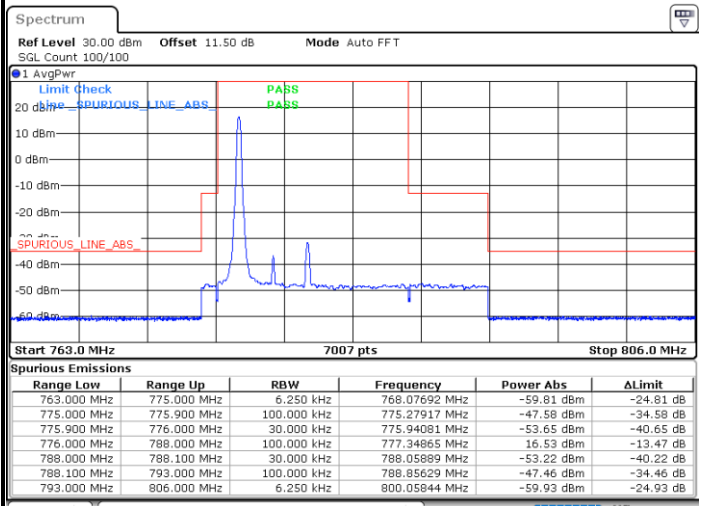
Date: 23.FEB.2024 14:28:02



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

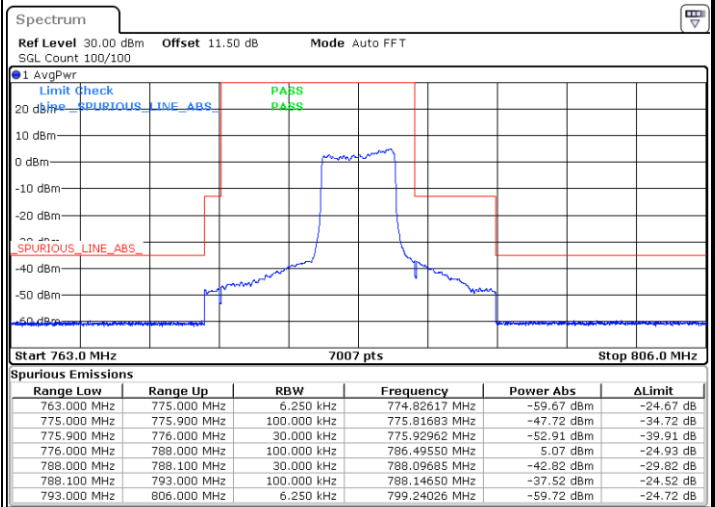
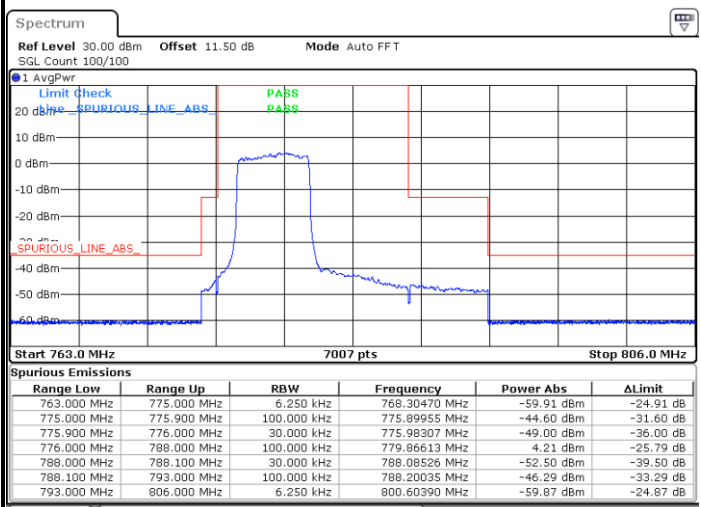


Date: 23.FEB.2024 14:37:15

Date: 23.FEB.2024 14:41:12

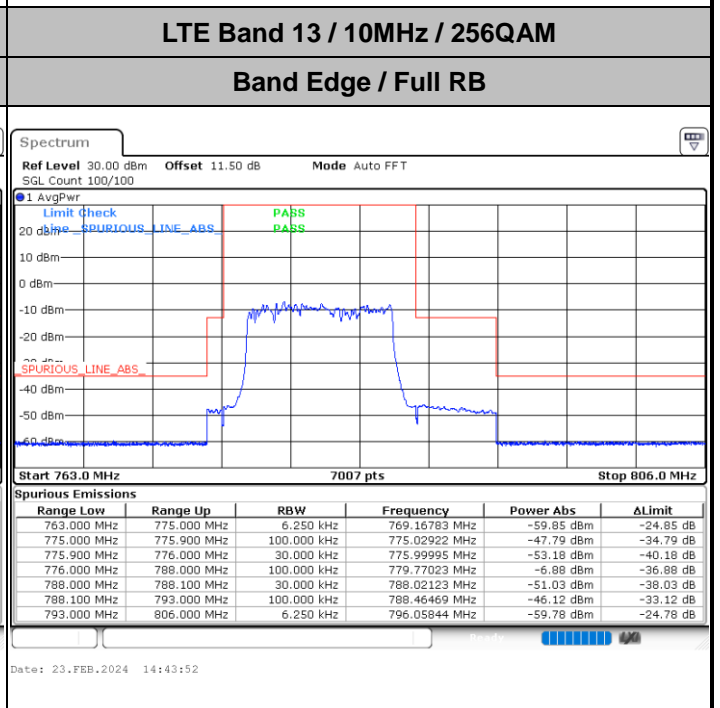
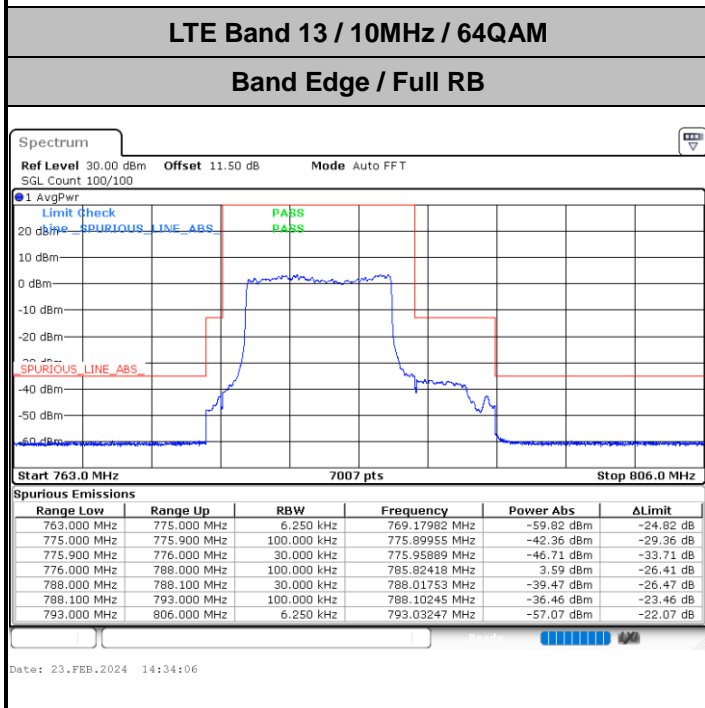
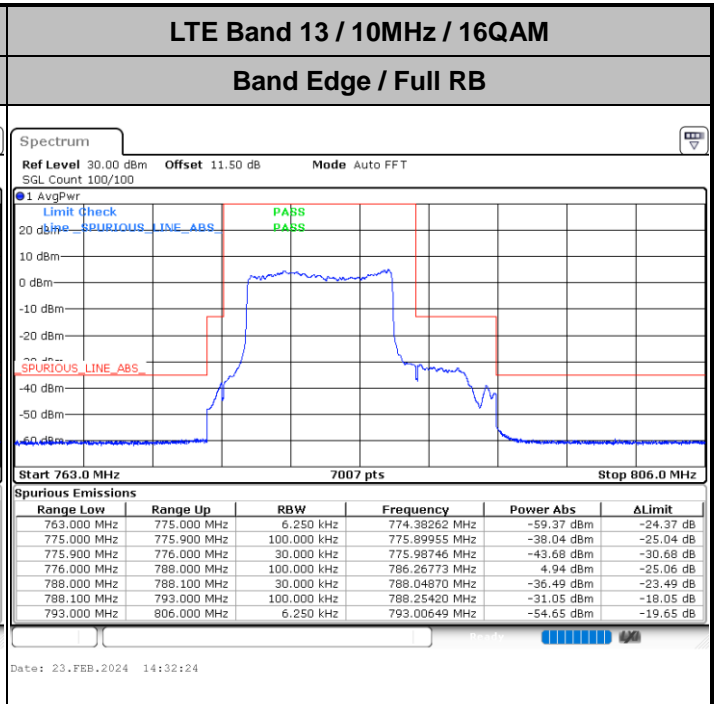
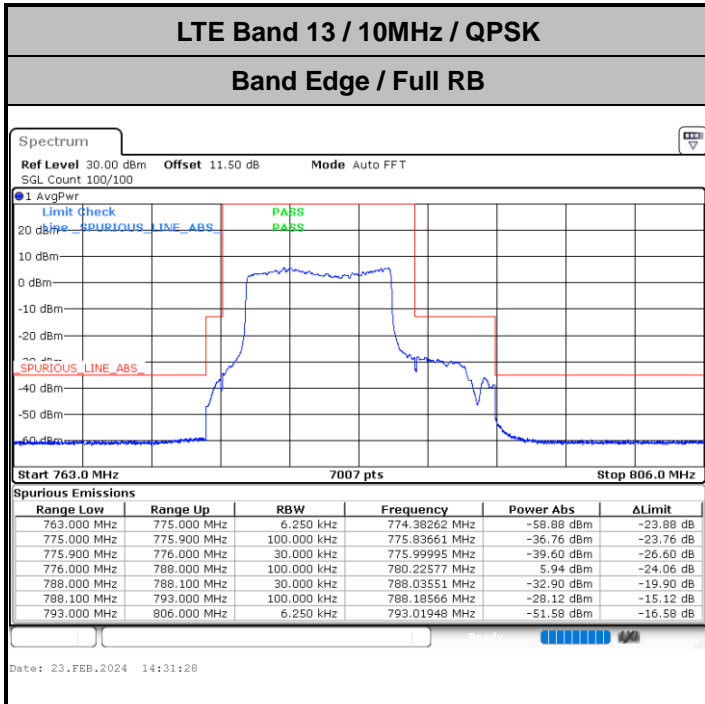
Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.FEB.2024 14:36:15

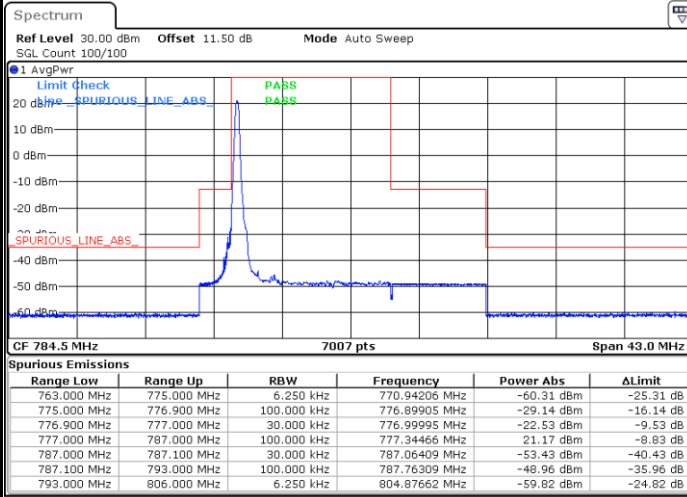
Date: 23.FEB.2024 14:40:12





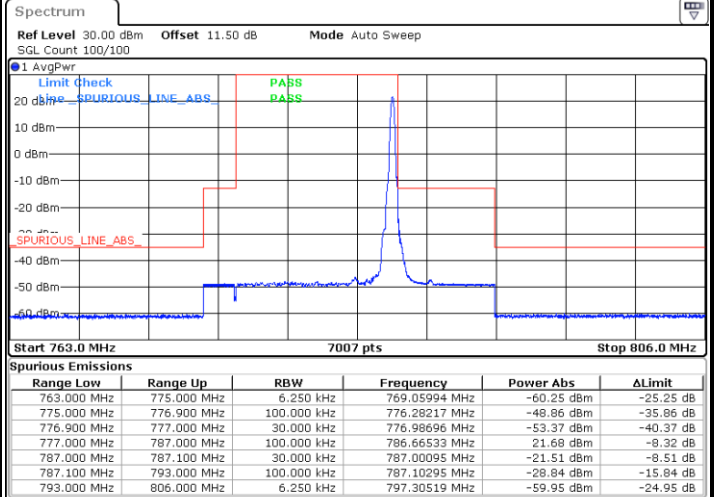
IC LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



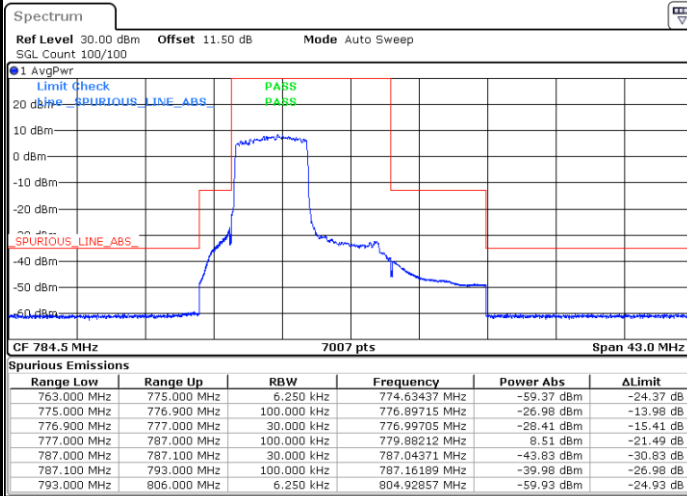
Date: 1.MAR.2024 18:55:53

Highest Band Edge / 1 RB



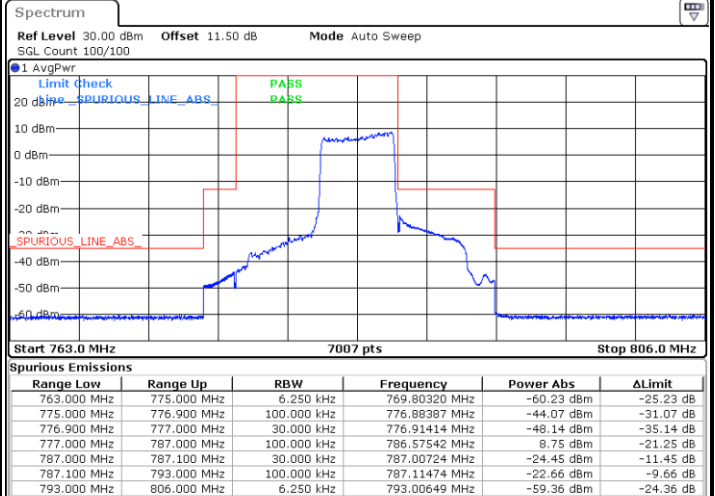
Date: 1.MAR.2024 18:59:17

Lowest Band Edge / Full RB



Date: 1.MAR.2024 18:53:20

Highest Band Edge / Full RB



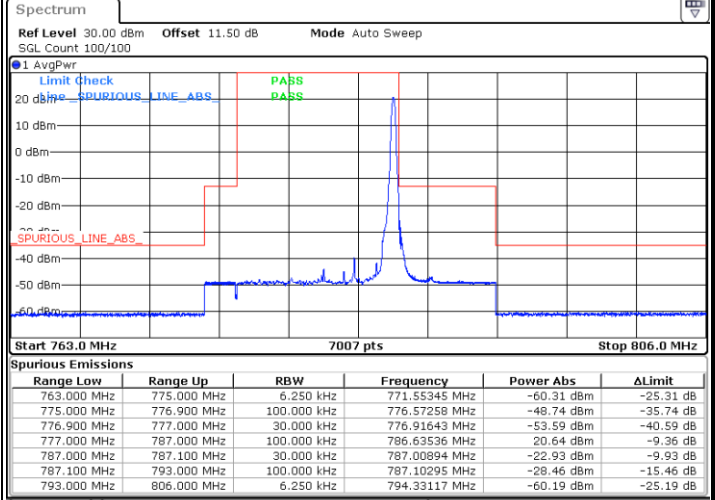
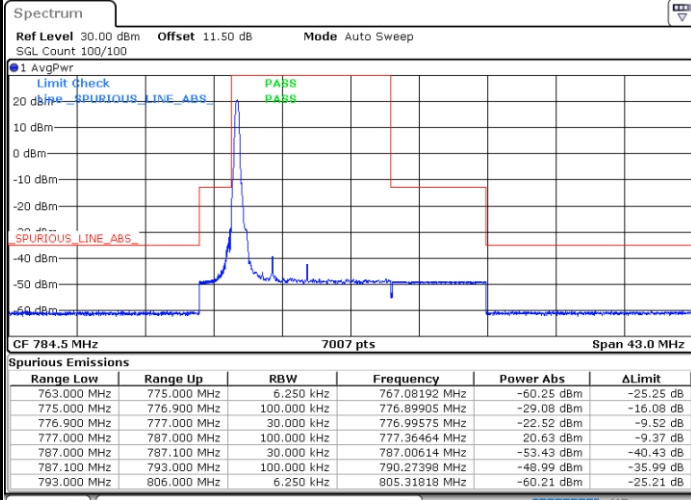
Date: 1.MAR.2024 18:56:44



IC LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

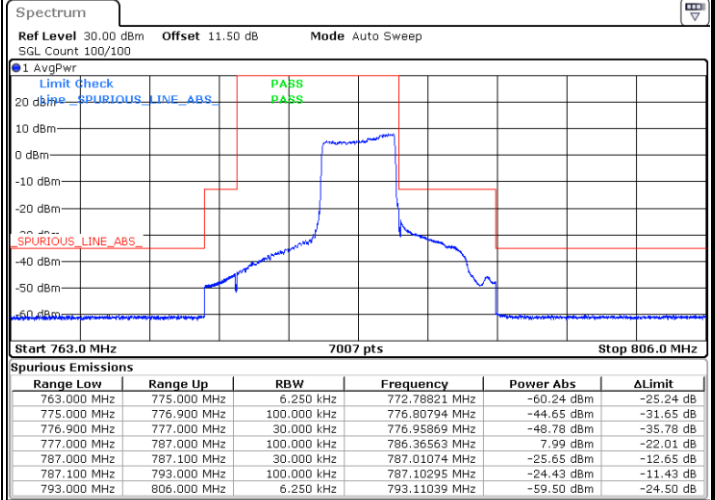
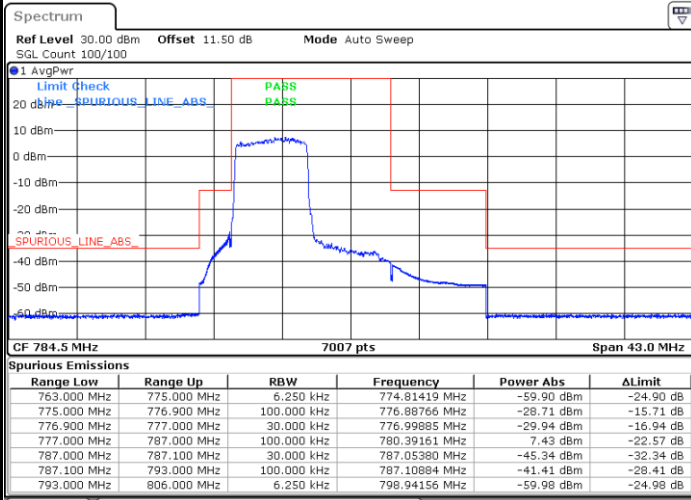


Date: 1.MAR.2024 18:55:02

Date: 1.MAR.2024 18:58:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



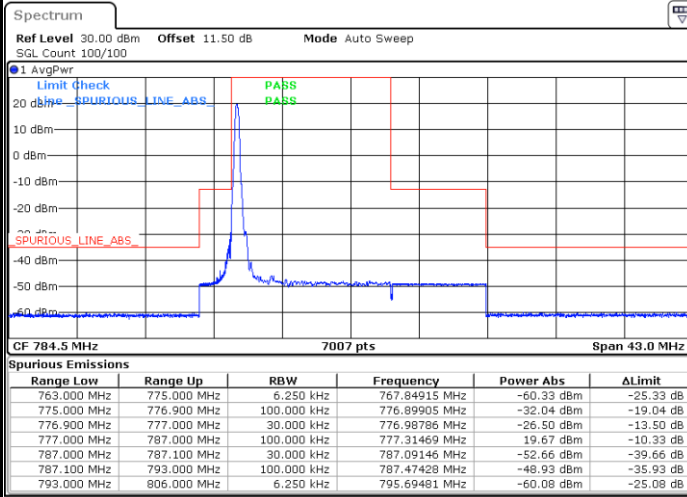
Date: 1.MAR.2024 18:54:11

Date: 1.MAR.2024 18:57:35



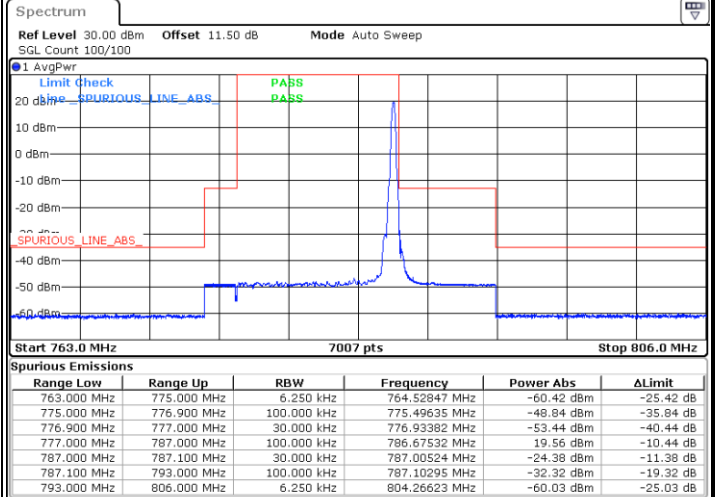
IC LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



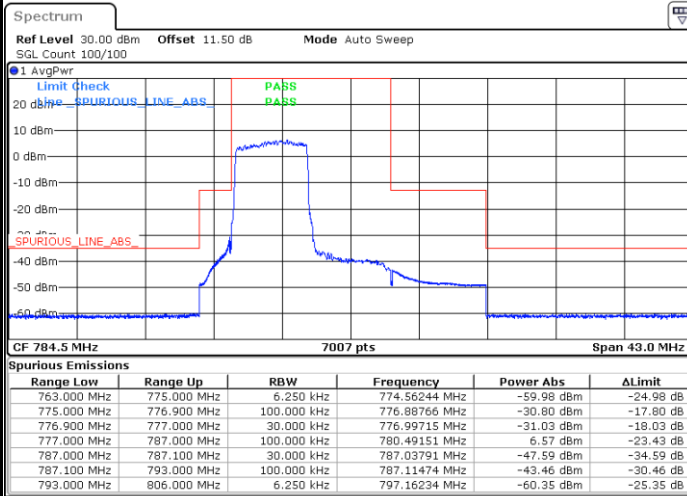
Date: 1.MAR.2024 19:01:00

Highest Band Edge / 1 RB



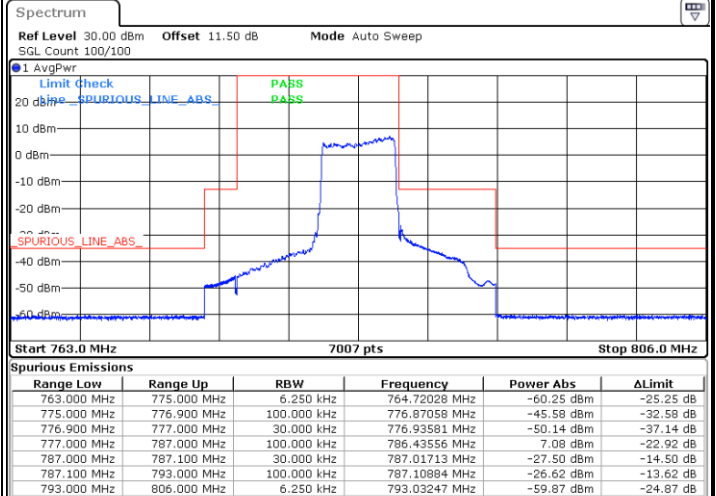
Date: 1.MAR.2024 19:02:42

Lowest Band Edge / Full RB



Date: 1.MAR.2024 19:00:09

Highest Band Edge / Full RB



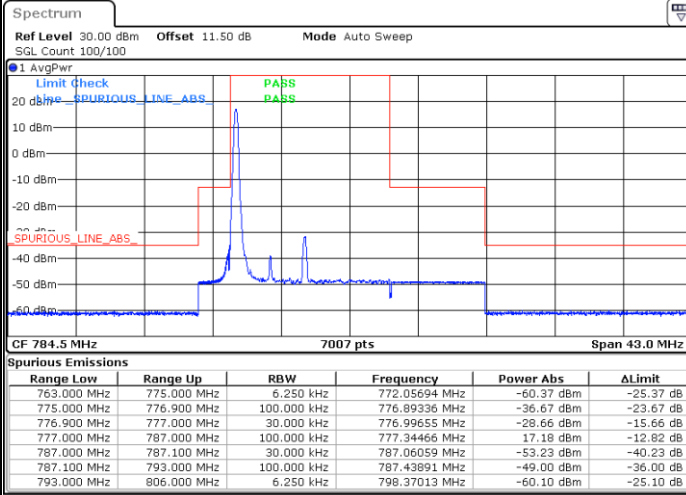
Date: 1.MAR.2024 19:01:51





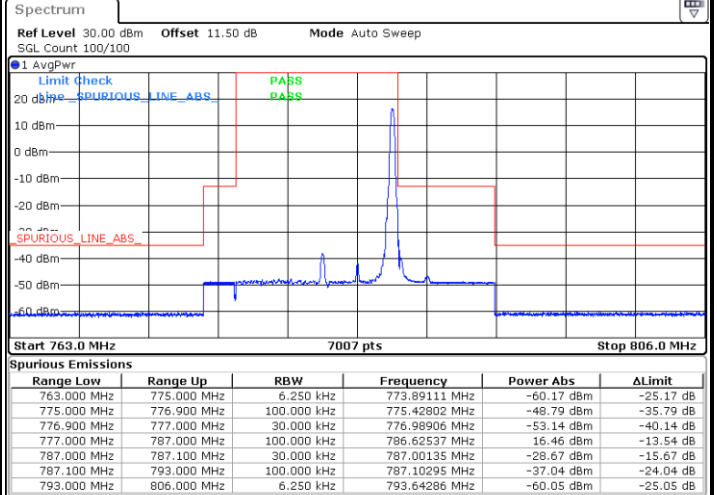
IC LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



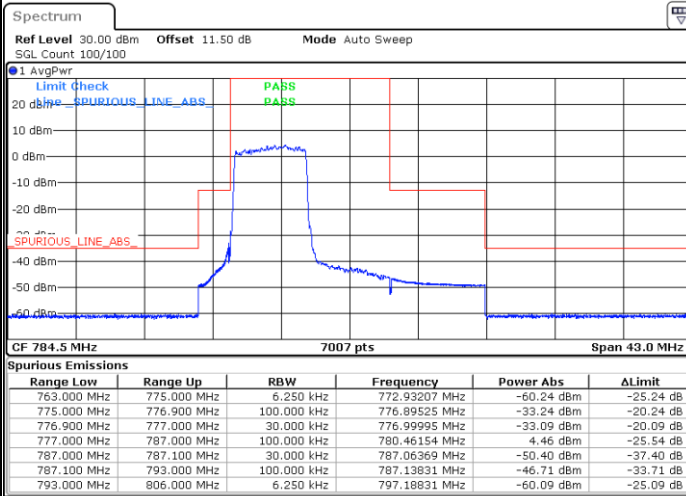
Date: 1.MAR.2024 19:08:04

Highest Band Edge / 1 RB



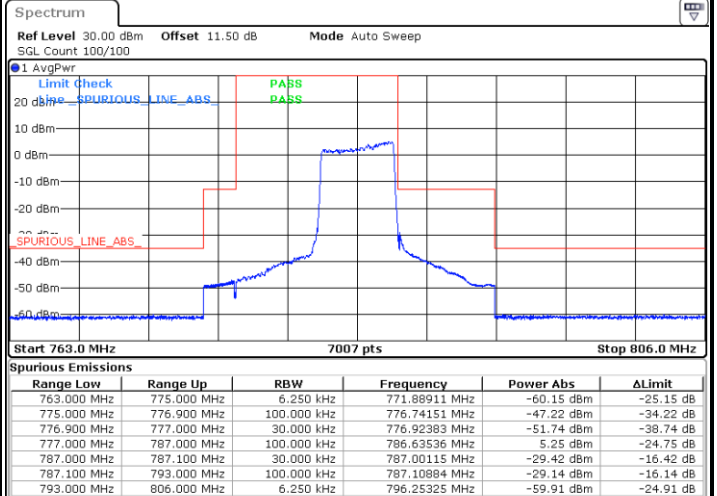
Date: 1.MAR.2024 19:09:52

Lowest Band Edge / Full RB

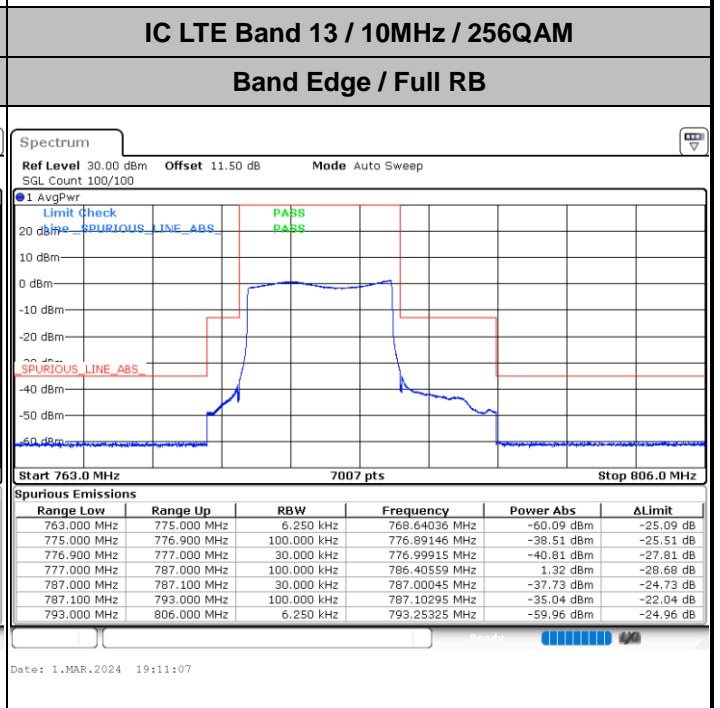
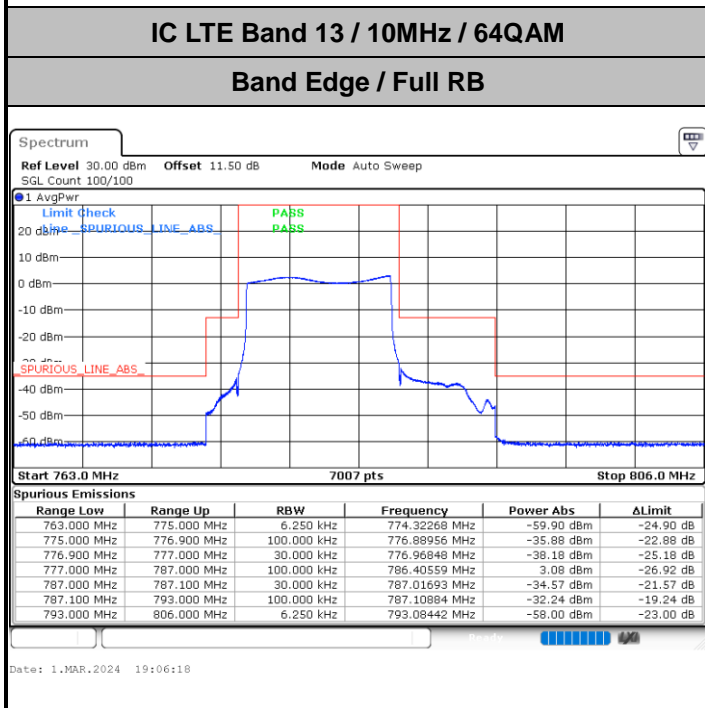
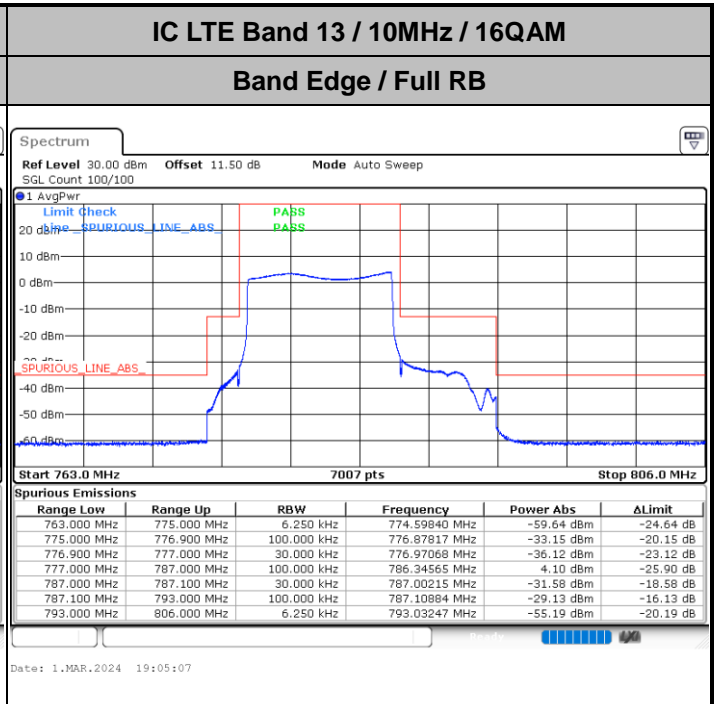
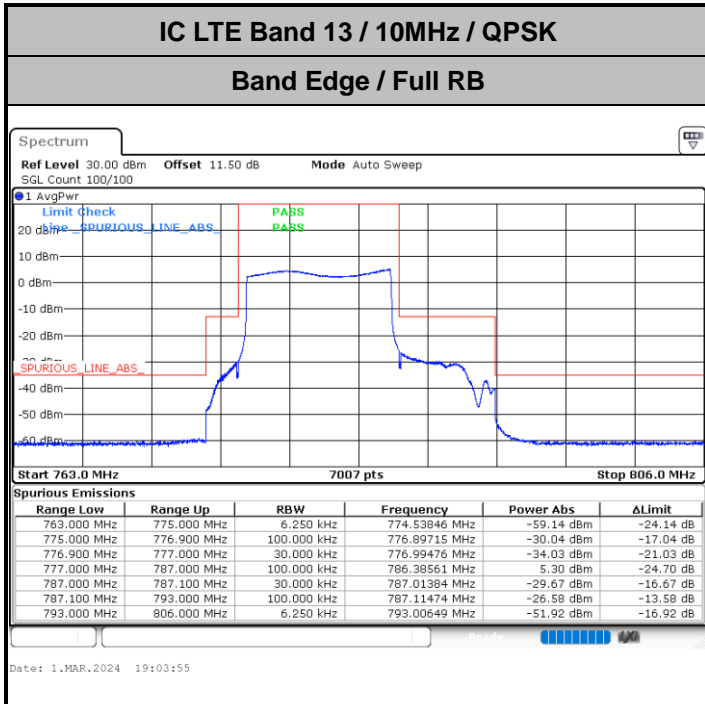


Date: 1.MAR.2024 19:07:10

Highest Band Edge / Full RB

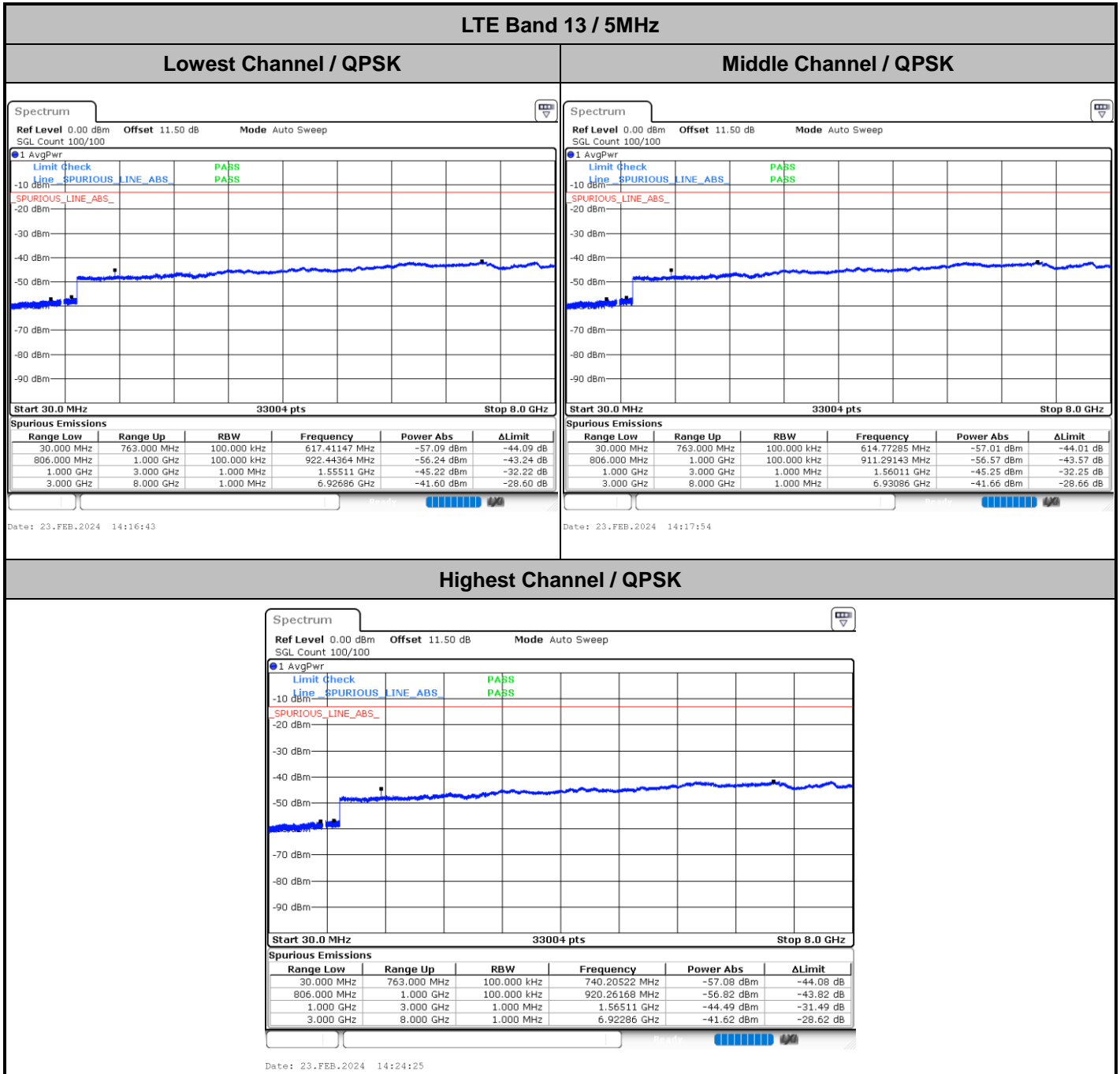


Date: 1.MAR.2024 19:08:58





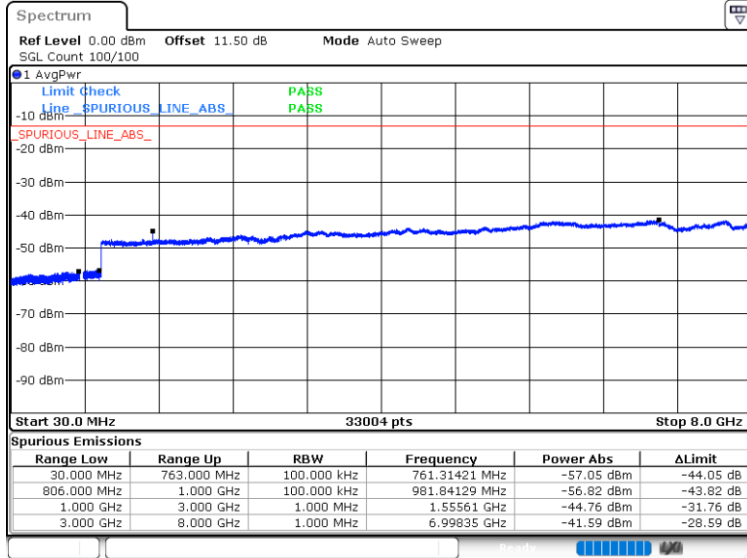
# Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 23.FEB.2024 14:45:27



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	0.0162	PASS
40	Normal Voltage	0.0148	
30	Normal Voltage	0.0022	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0156	
0	Normal Voltage	0.0069	
-10	Normal Voltage	0.0070	
-20	Normal Voltage	0.0079	
20	Maximum Voltage	0.0060	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0049	

Note:

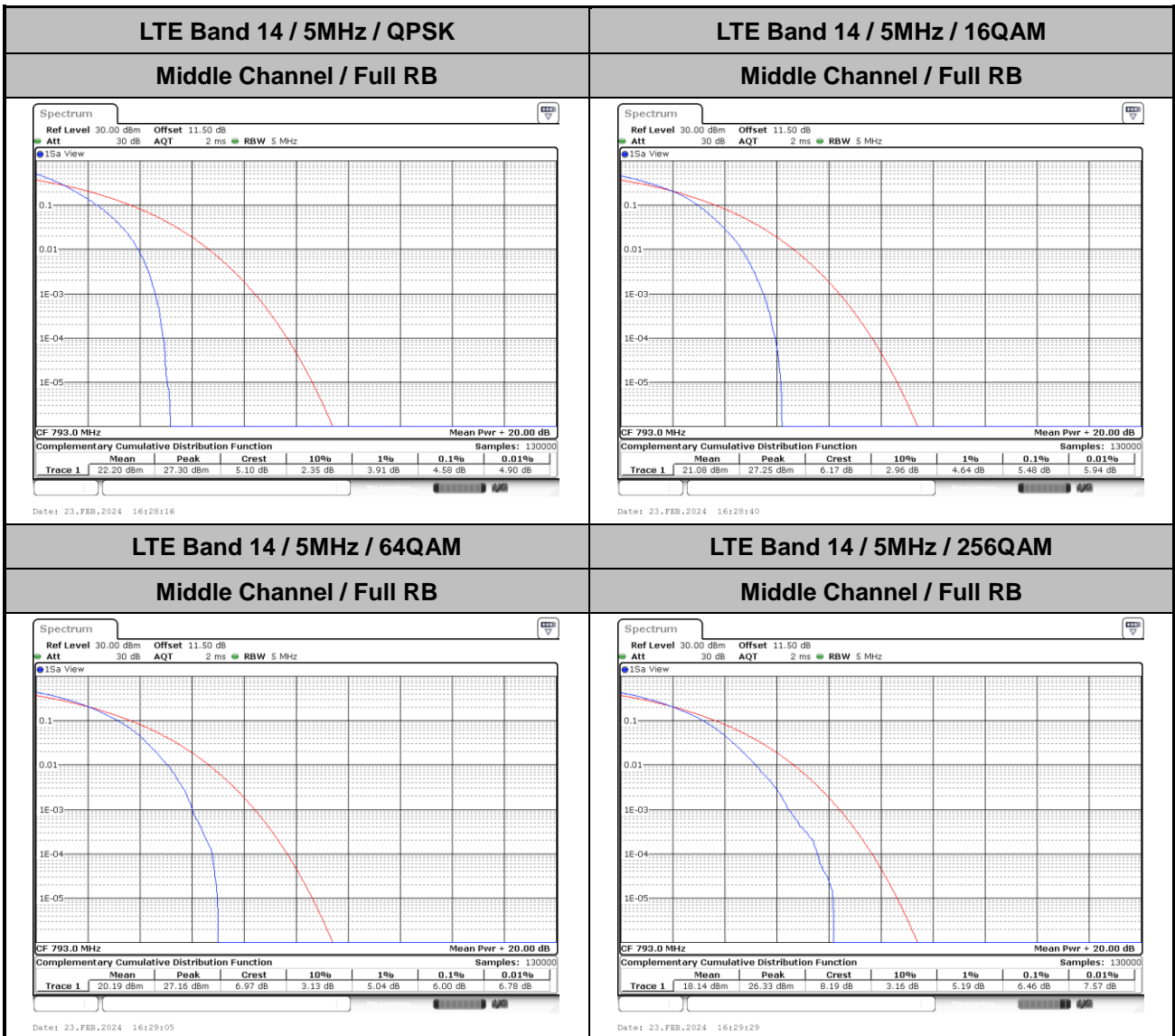
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 14

## Peak-to-Average Ratio

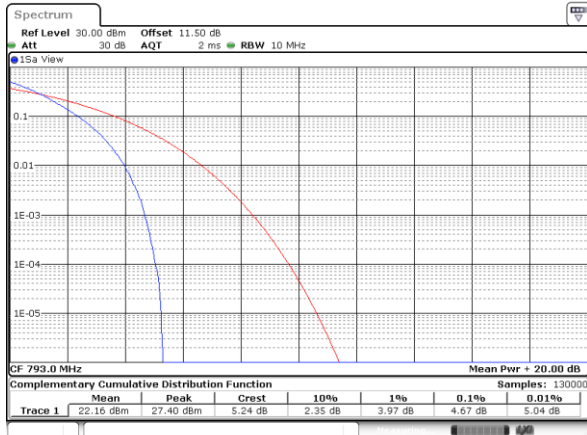
Mode	LTE Band 14 / 5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.58	5.48	6.00	6.46	PASS
Mode	LTE Band 14 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.67	5.59	6.00	6.49	PASS





LTE Band 14 / 10MHz / QPSK

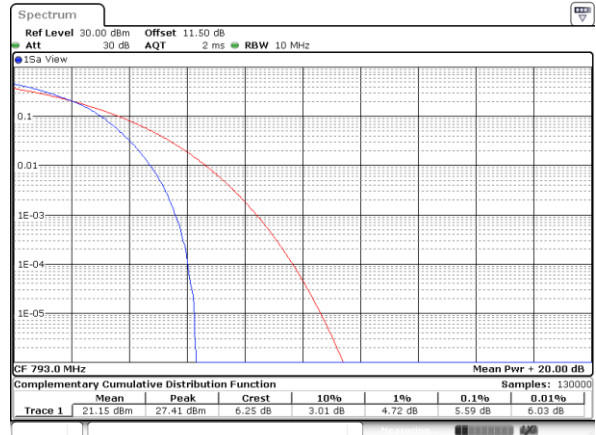
Middle Channel / Full RB



Date: 23.FEB.2024 16:17:24

LTE Band 14 / 10MHz / 16QAM

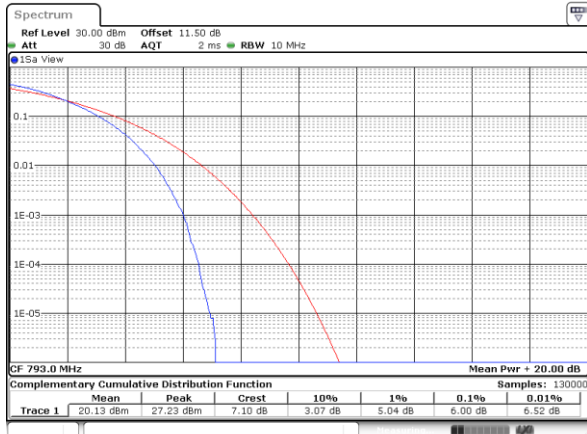
Middle Channel / Full RB



Date: 23.FEB.2024 16:17:48

LTE Band 14 / 10MHz / 64QAM

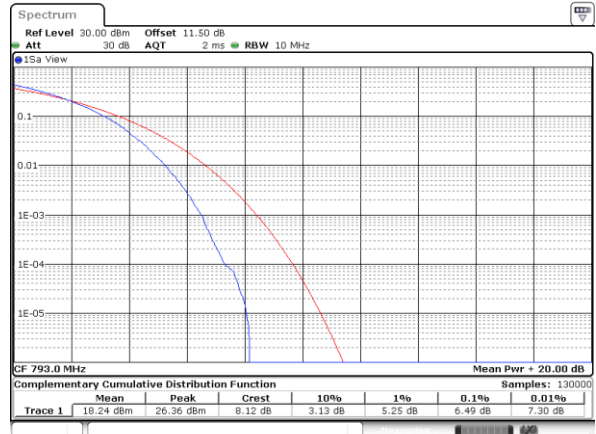
Middle Channel / Full RB



Date: 23.FEB.2024 16:23:12

LTE Band 14 / 10MHz / 256QAM

Middle Channel / Full RB

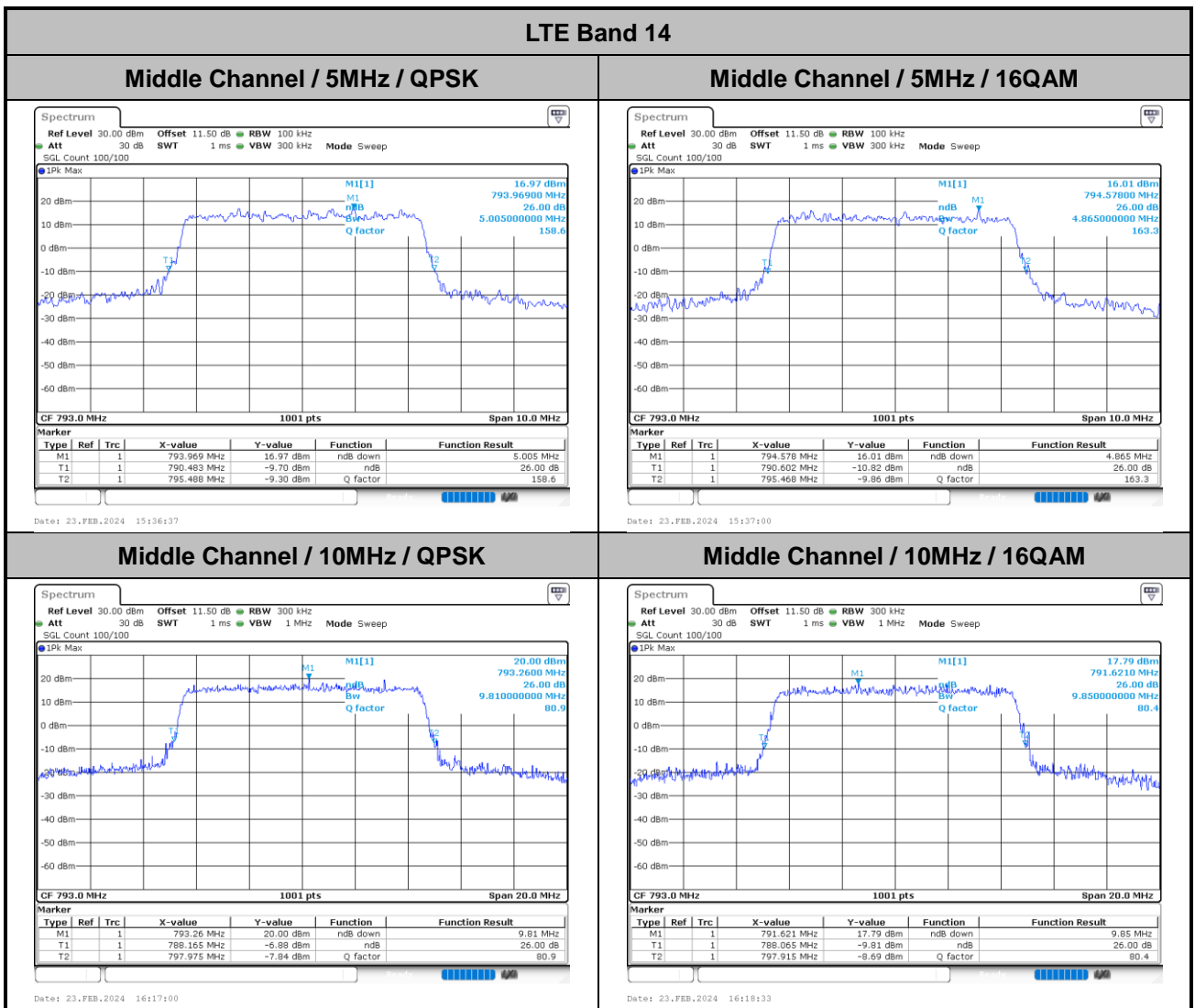


Date: 23.FEB.2024 16:23:58



**26dB Bandwidth**

Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	5.00	4.86	9.81	9.84	-	-	-	-
Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.89	4.98	9.91	10.00	-	-	-	-

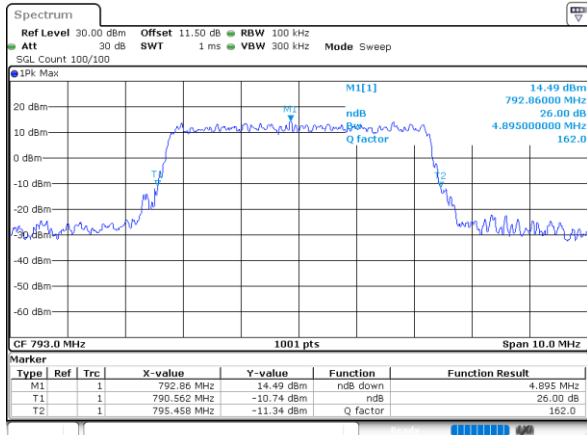






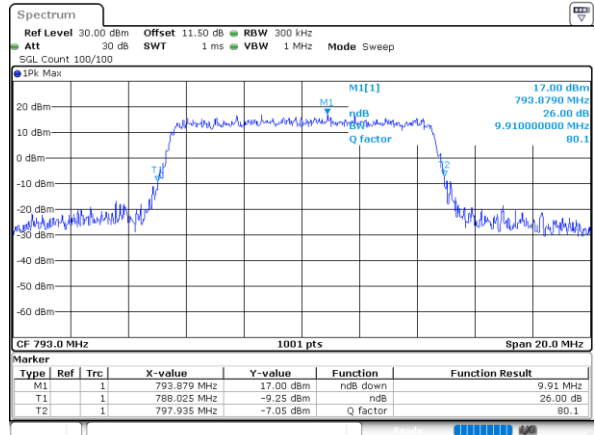
LTE Band 14

Middle Channel / 5MHz / 64QAM



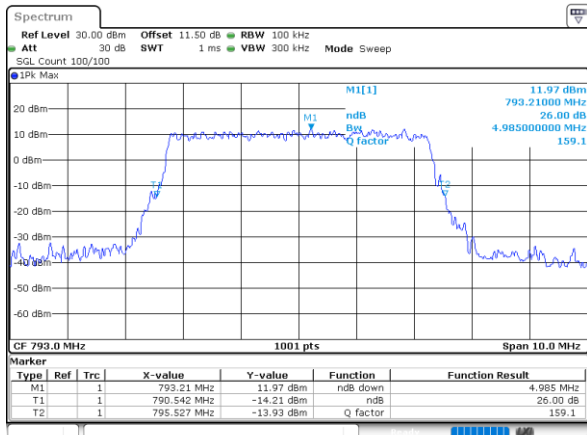
Date: 23.FEB.2024 15:38:08

Middle Channel / 10MHz / 64QAM



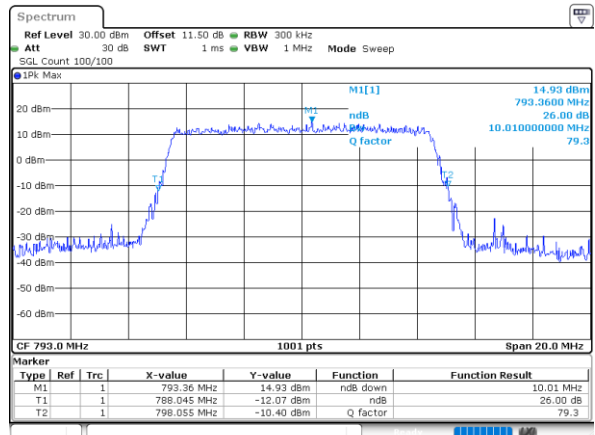
Date: 23.FEB.2024 16:23:34

Middle Channel / 5MHz / 256QAM



Date: 23.FEB.2024 15:38:52

Middle Channel / 10MHz / 256QAM

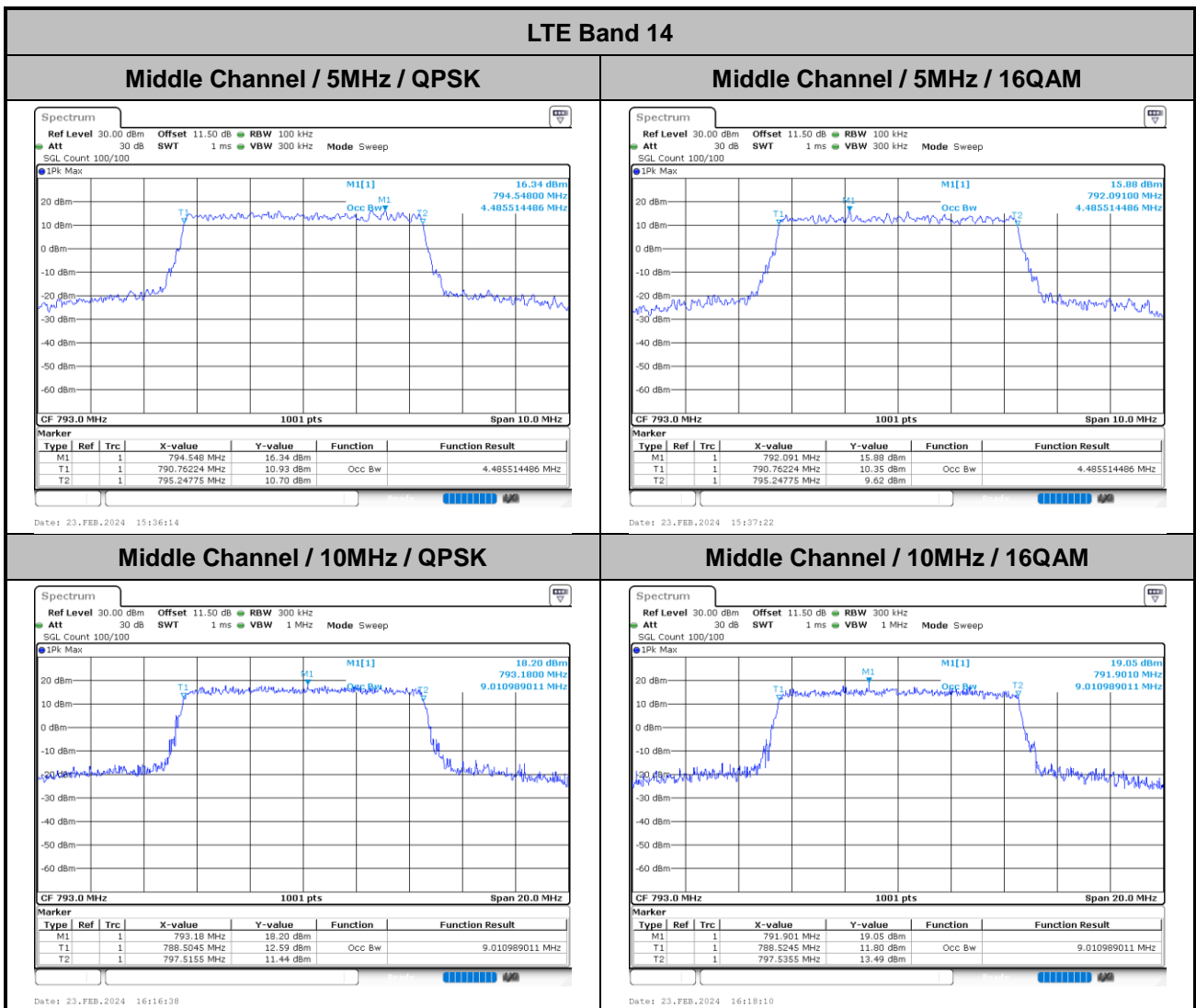


Date: 23.FEB.2024 16:24:43



# Occupied Bandwidth

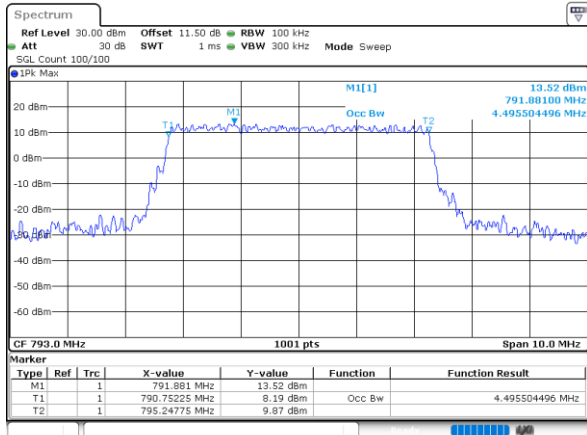
Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.48	9.01	9.01	-	-	-	-
Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.49	4.47	8.97	9.01	-	-	-	-





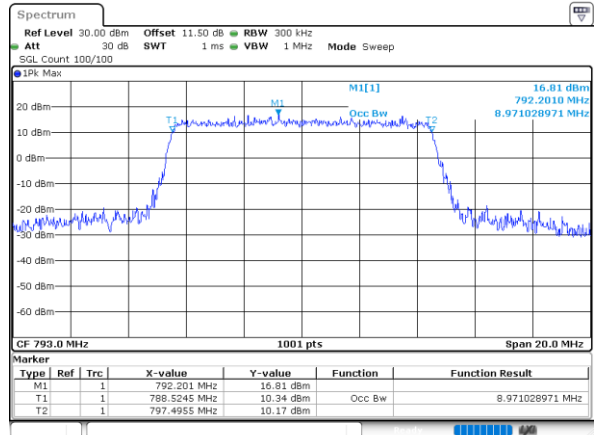
LTE Band 14

Middle Channel / 5MHz / 64QAM



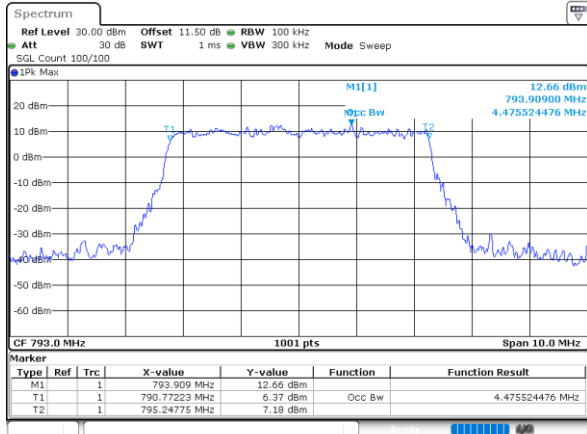
Date: 23.FEB.2024 15:37:45

Middle Channel / 10MHz / 64QAM



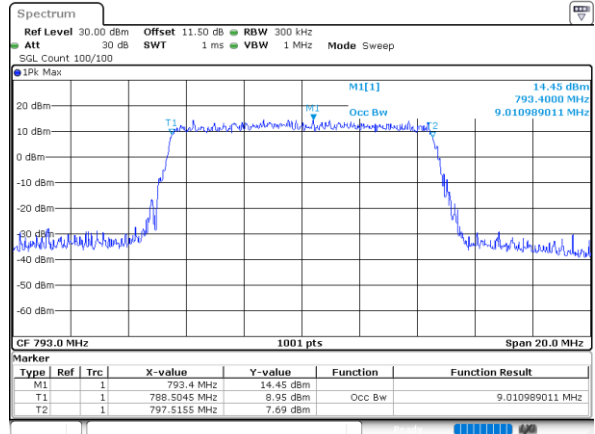
Date: 23.FEB.2024 16:22:48

Middle Channel / 5MHz / 256QAM



Date: 23.FEB.2024 15:38:55

Middle Channel / 10MHz / 256QAM



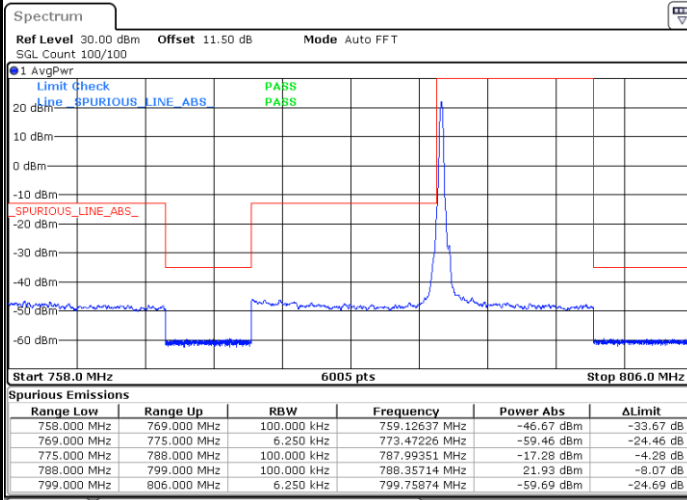
Date: 23.FEB.2024 16:24:21



# Conducted Band Edge

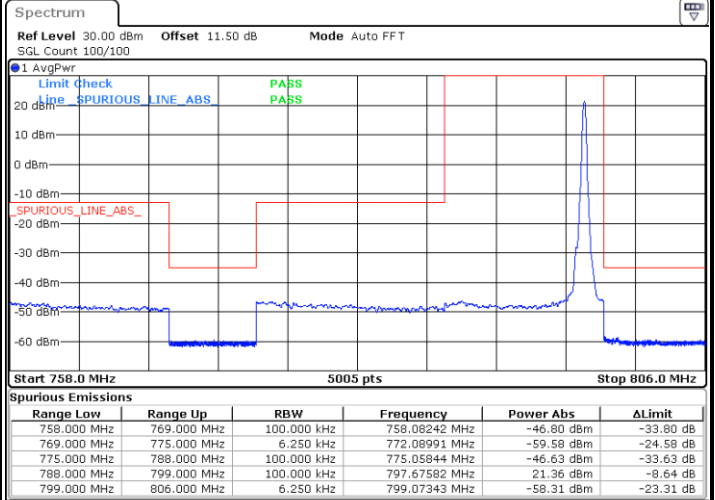
## LTE Band 14 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



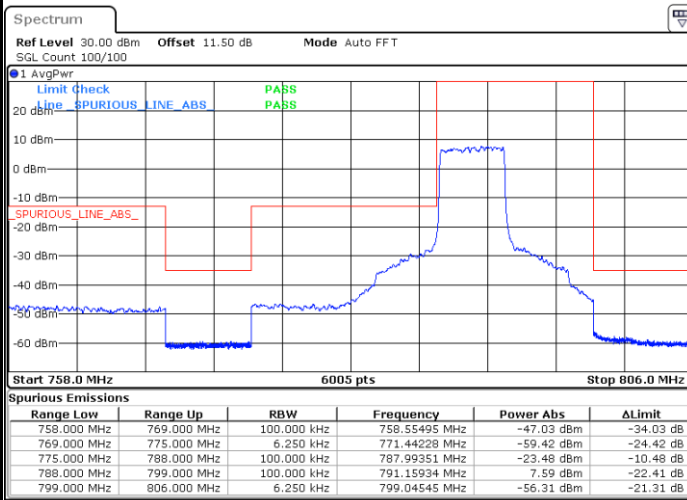
Date: 23.FEB.2024 14:47:24

### Highest Band Edge / 1 RB



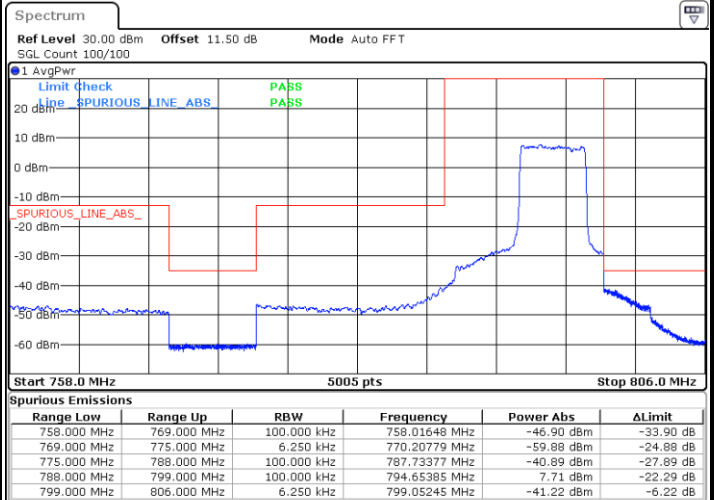
Date: 23.FEB.2024 15:54:29

### Lowest Band Edge / Full RB



Date: 23.FEB.2024 14:46:26

### Highest Band Edge / Full RB



Date: 23.FEB.2024 15:55:27