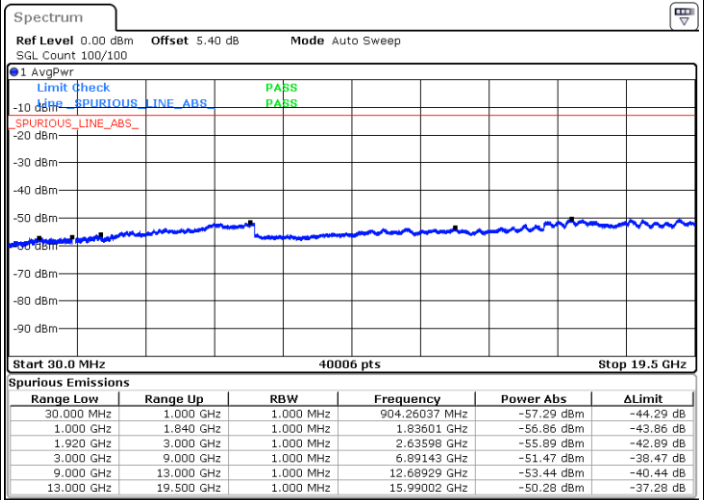
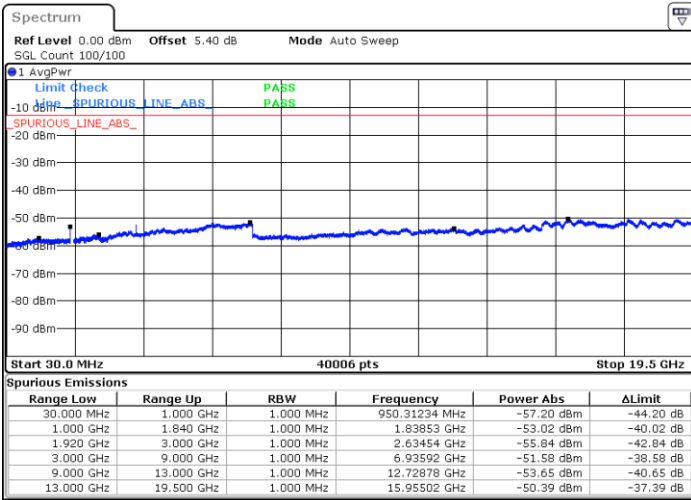




LTE Band 2 / 20MHz

Lowest Channel / QPSK

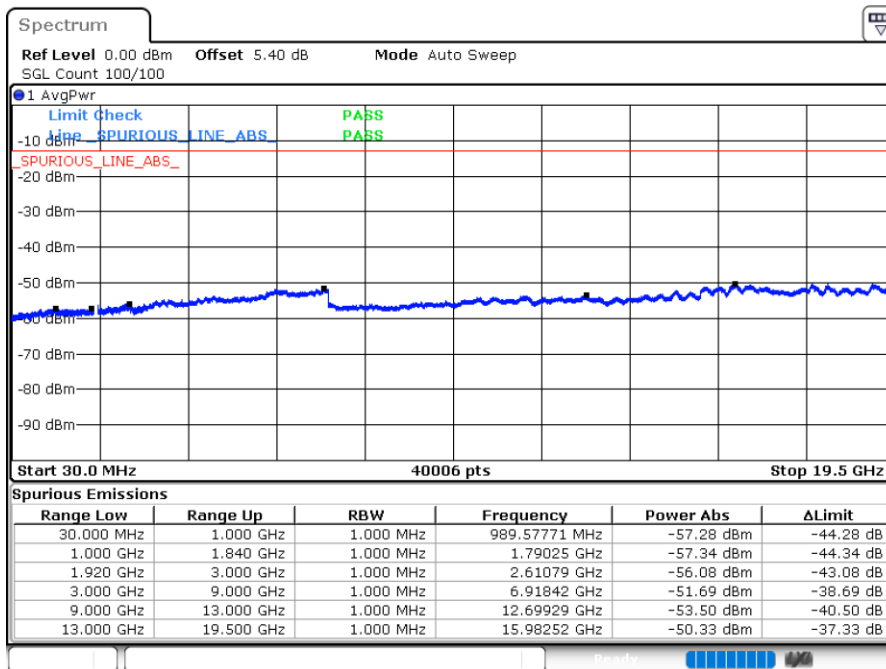
Middle Channel / QPSK



Date: 27.SEP.2023 20:00:46

Date: 27.SEP.2023 20:02:07

Highest Channel / QPSK



Date: 27.SEP.2023 20:03:28



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0037	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0012	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0013	
20	Battery End Point	0.0026	

Note:

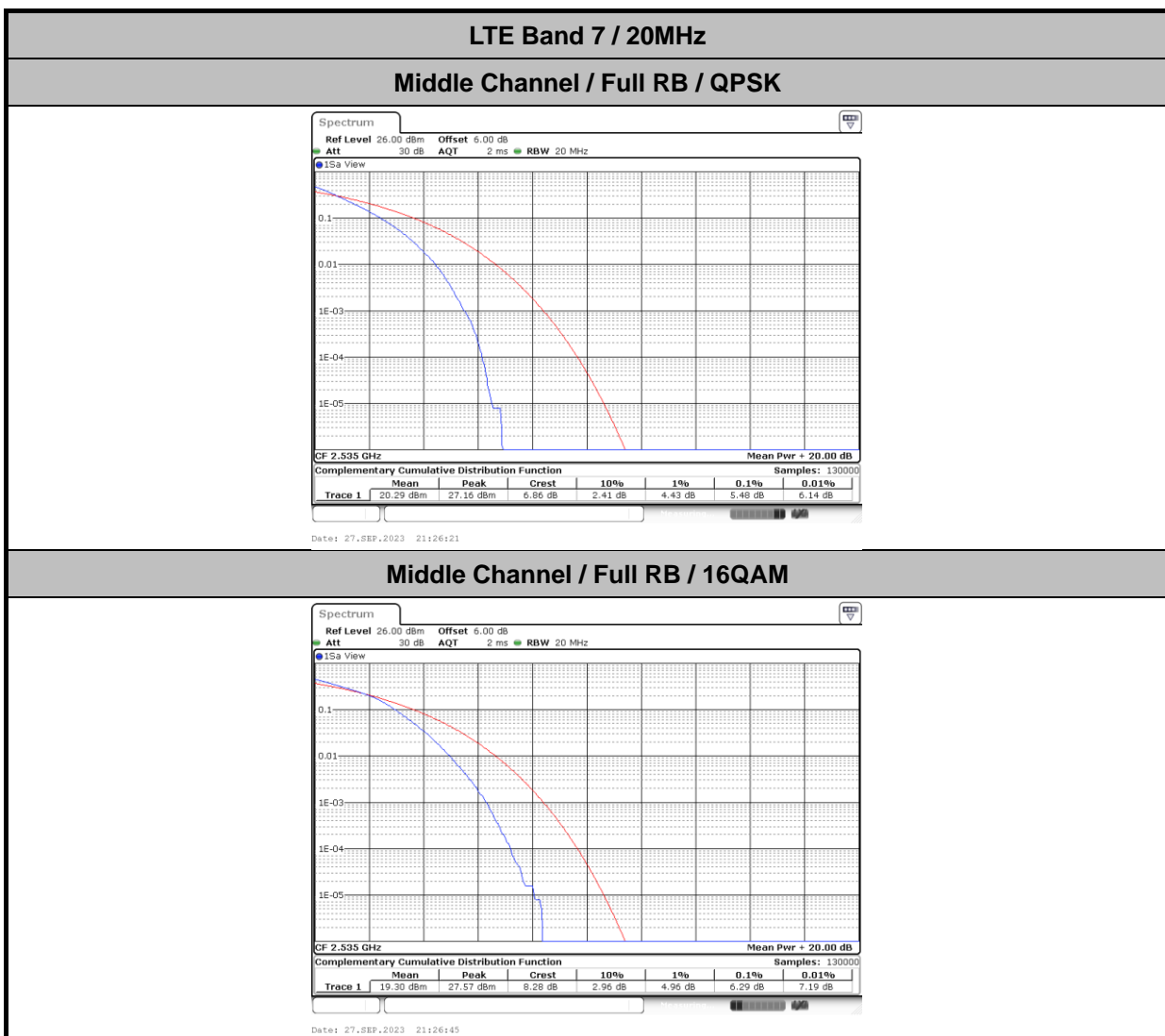
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 7

## Peak-to-Average Ratio

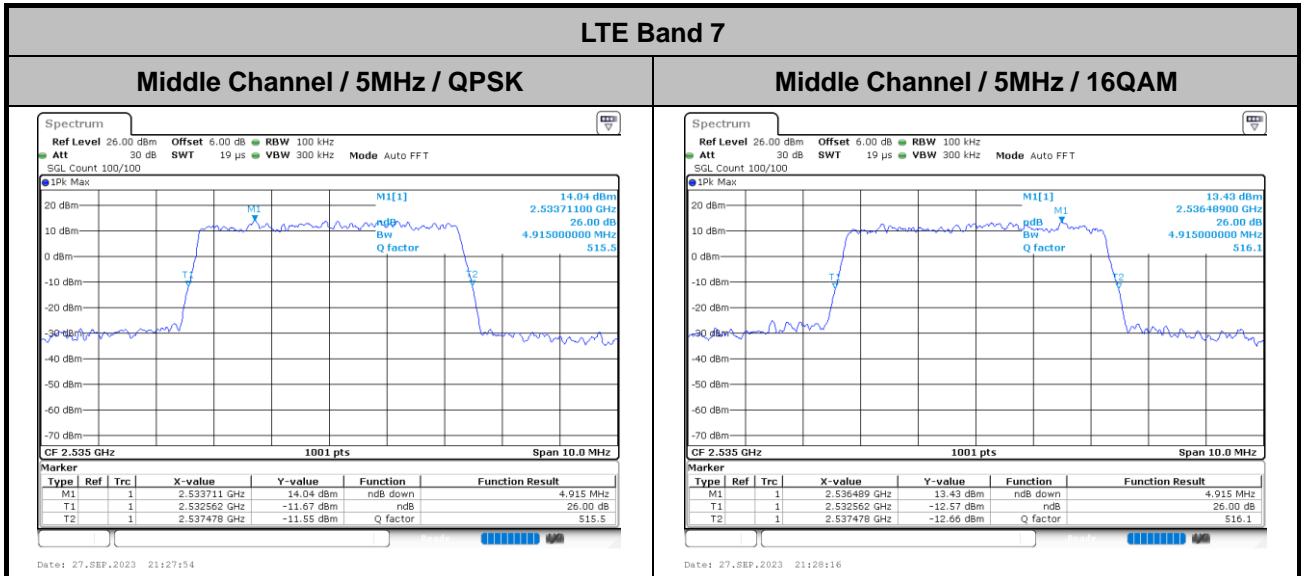
Mode	LTE Band 7 / 20MHz				
Mod.	QPSK	16QAM	-	-	Limit: 13dB
RB Size	Full RB	Full RB	-	-	Result
Middle CH	5.48	6.29	-	-	PASS





## 26dB Bandwidth

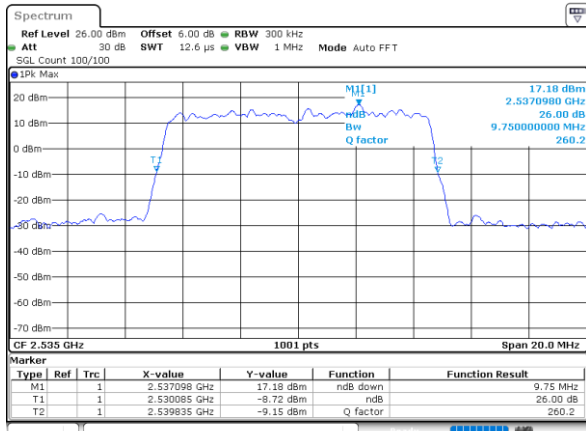
Mode	LTE Band 7 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.92	4.92
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.75	9.99
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.18	14.45
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.54	19.06





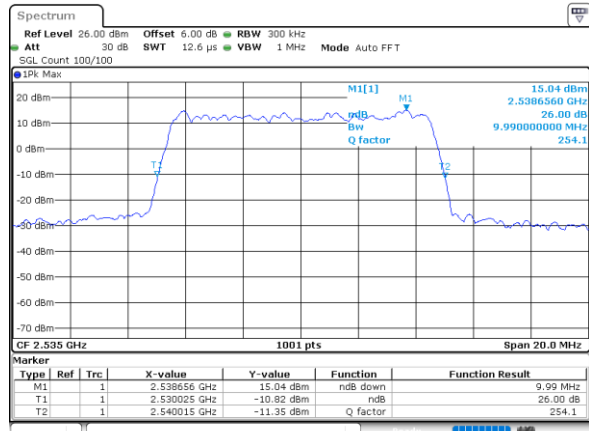
LTE Band 7

Middle Channel / 10MHz / QPSK



Date: 27\_SEP.2023 21:29:23

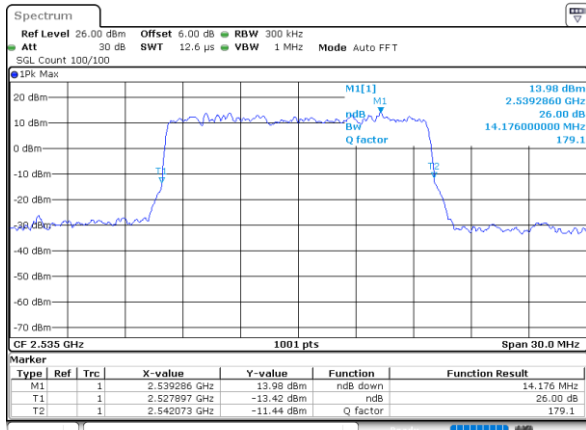
Middle Channel / 10MHz / 16QAM



Date: 27\_SEP.2023 21:29:46

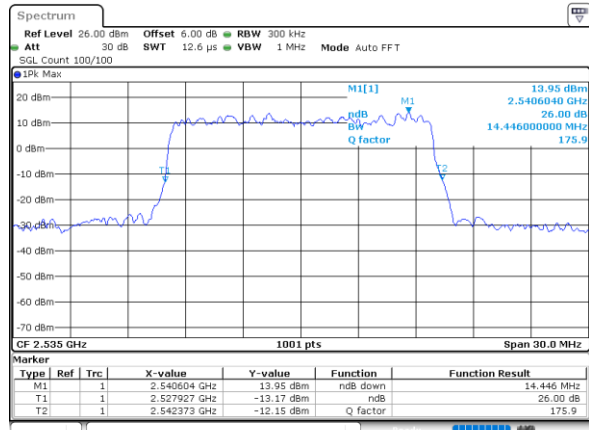
LTE Band 7

Middle Channel / 15MHz / QPSK



Date: 27\_SEP.2023 21:30:52

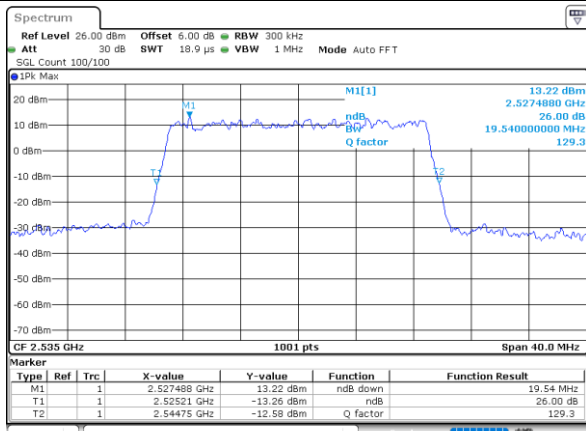
Middle Channel / 15MHz / 16QAM



Date: 27\_SEP.2023 21:31:15

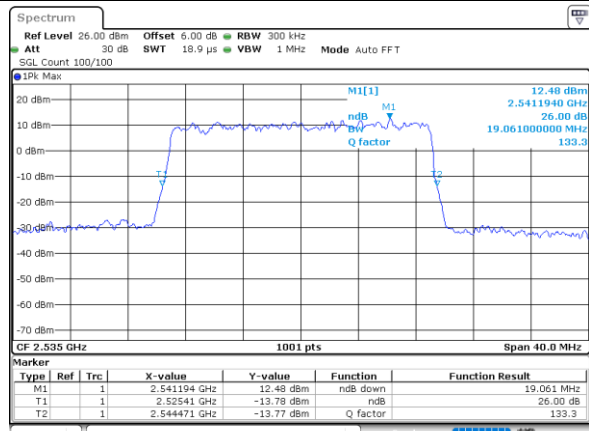
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 27\_SEP.2023 21:24:52

Middle Channel / 20MHz / 16QAM

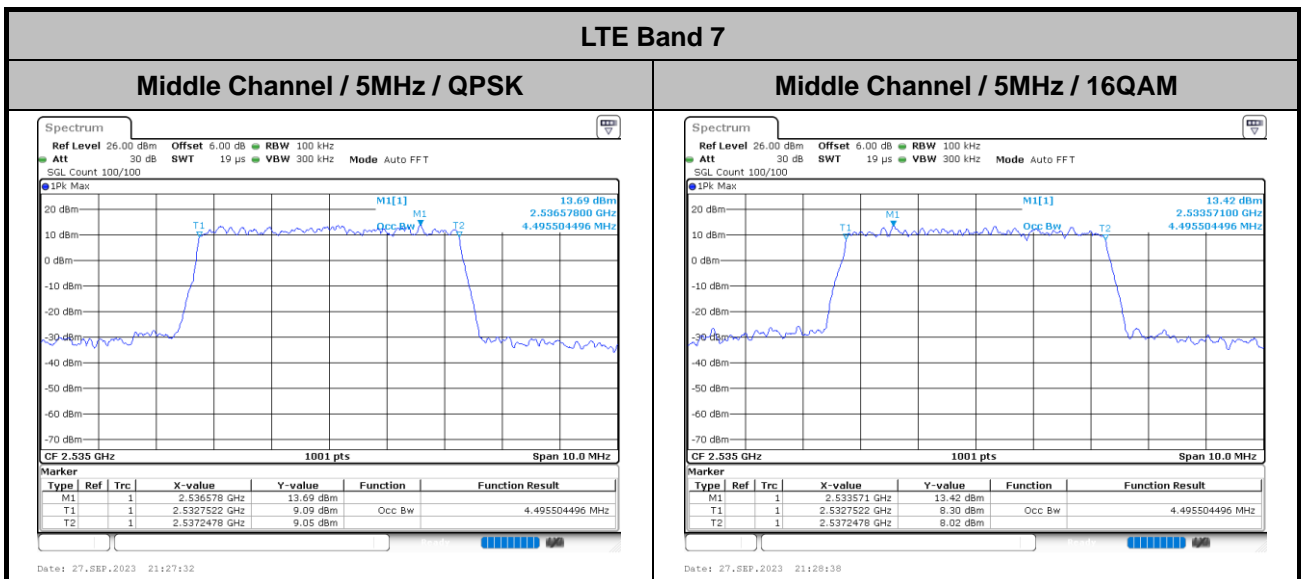


Date: 27\_SEP.2023 21:25:58



## Occupied Bandwidth

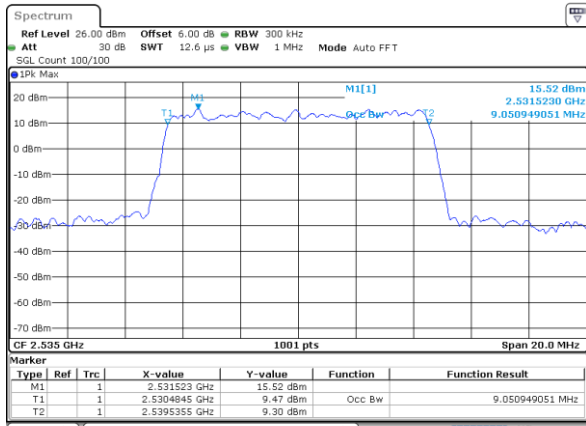
Mode	LTE Band 7 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.50
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	9.05
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.46	13.46
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.82





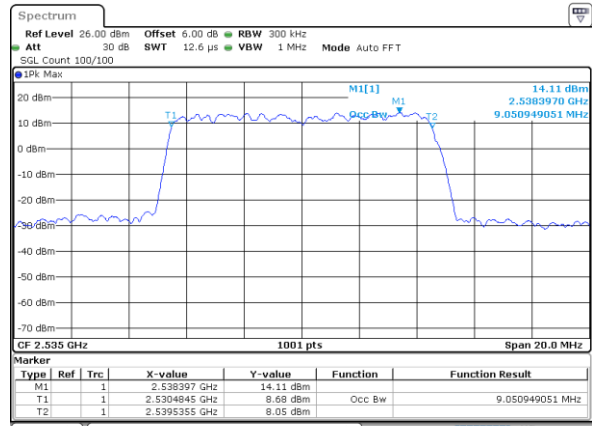
LTE Band 7

Middle Channel / 10MHz / QPSK



Date: 27\_SEP.2023 21:29:01

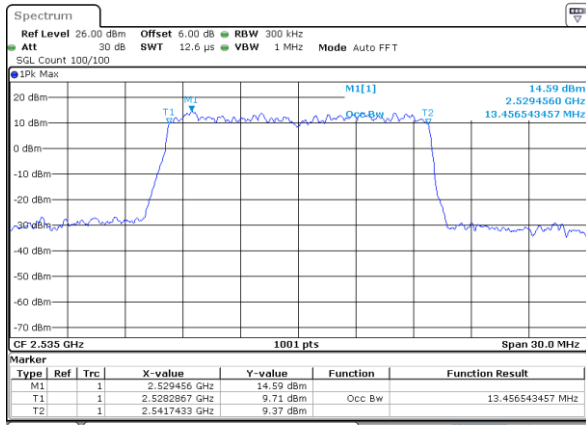
Middle Channel / 10MHz / 16QAM



Date: 27\_SEP.2023 21:30:08

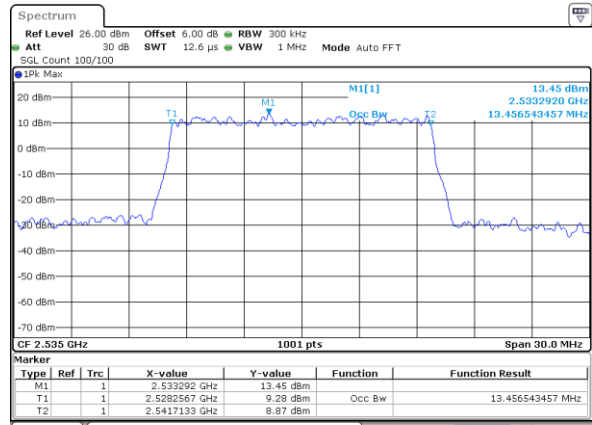
LTE Band 7

Middle Channel / 15MHz / QPSK



Date: 27\_SEP.2023 21:30:50

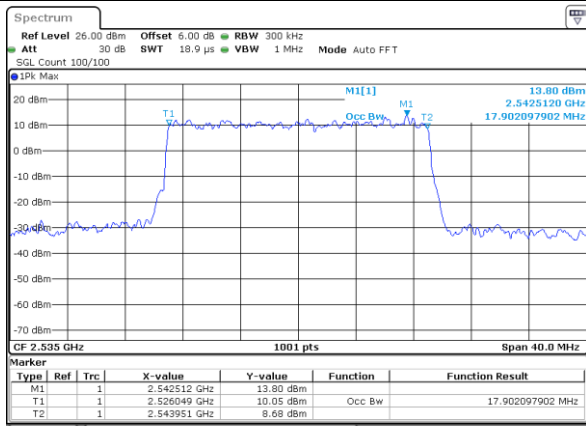
Middle Channel / 15MHz / 16QAM



Date: 27\_SEP.2023 21:31:17

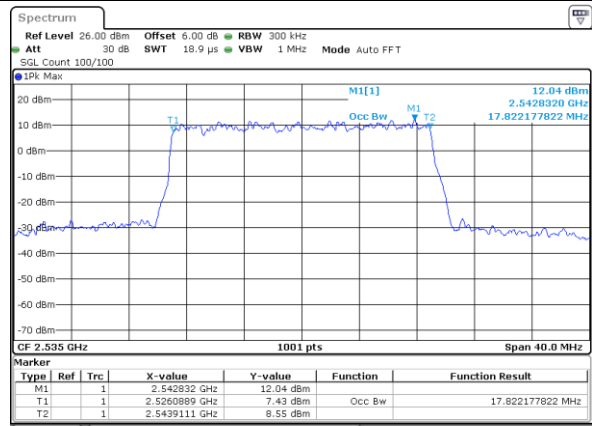
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 27\_SEP.2023 21:25:14

Middle Channel / 20MHz / 16QAM



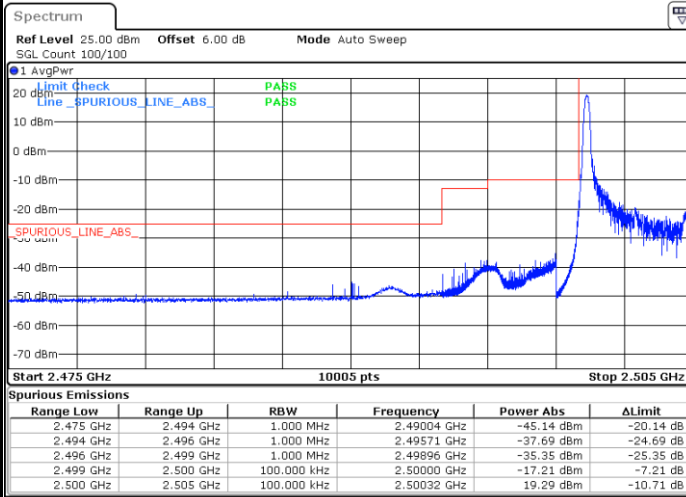
Date: 27\_SEP.2023 21:25:16



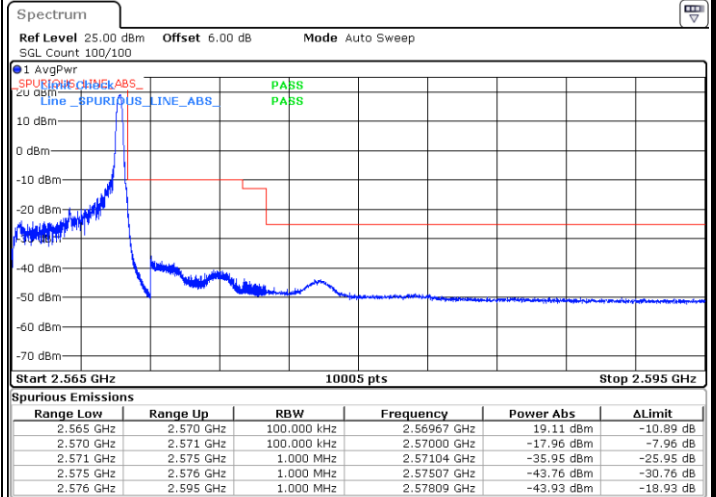
# Conducted Band Edge

## LTE Band 7 / 5MHz / QPSK

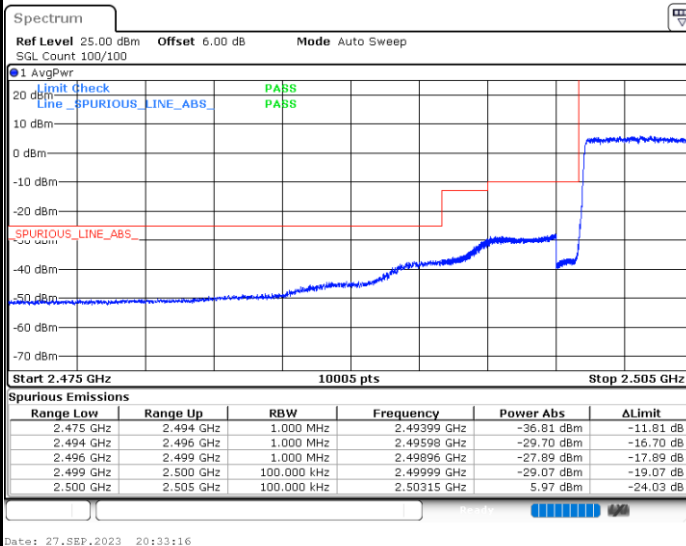
### Lowest Band Edge / 1 RB



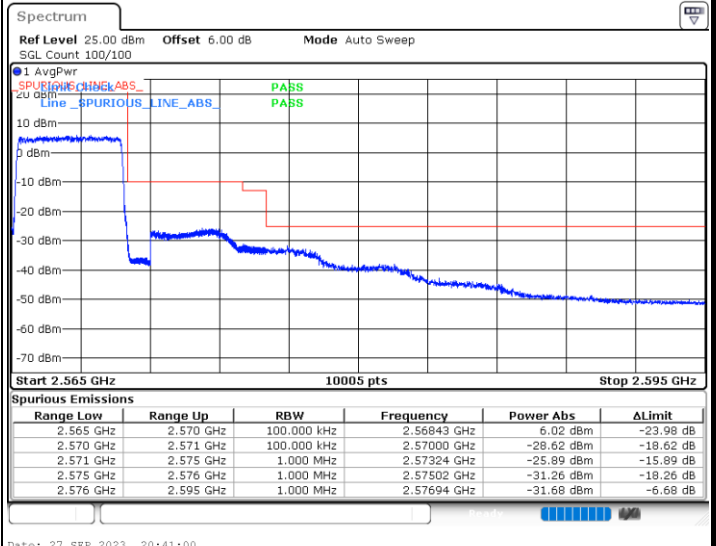
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



### Highest Band Edge / Full RB

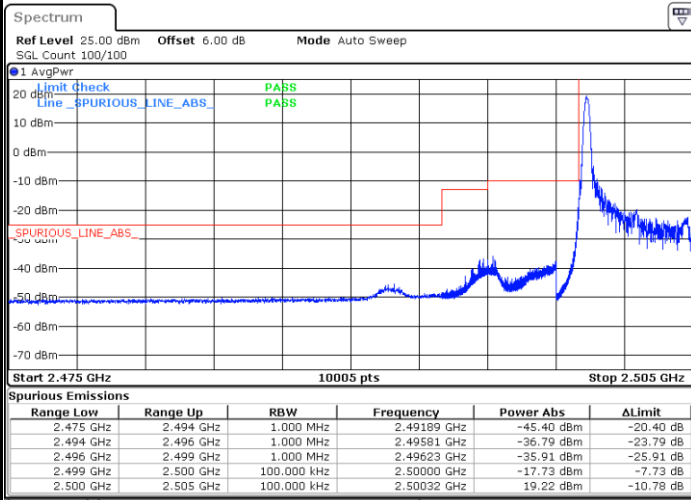






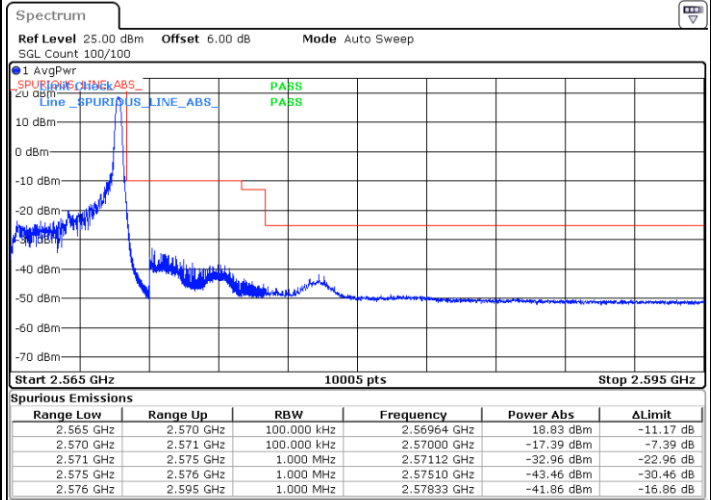
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



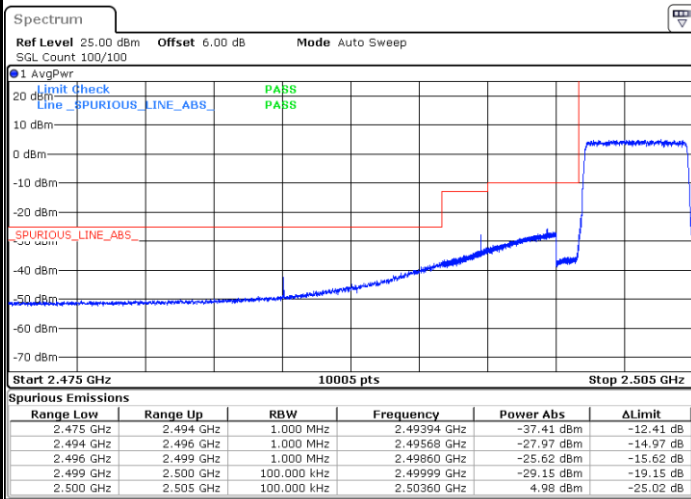
Date: 27.SEP.2023 20:29:51

Highest Band Edge / 1 RB



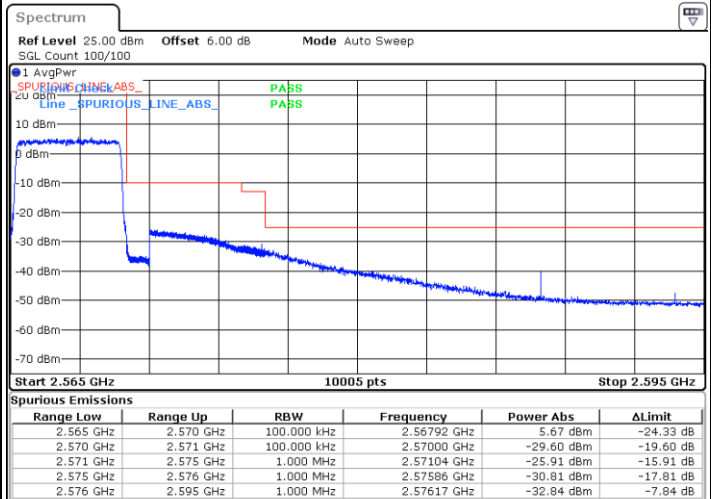
Date: 27.SEP.2023 20:37:37

Lowest Band Edge / Full RB



Date: 27.SEP.2023 20:32:25

Highest Band Edge / Full RB

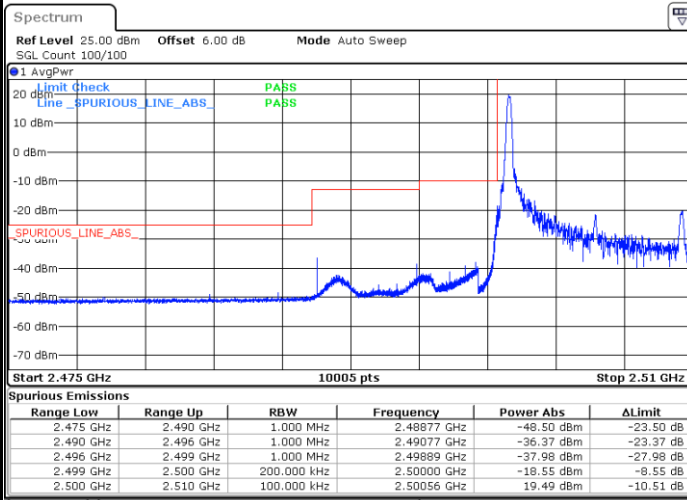


Date: 27.SEP.2023 20:40:09



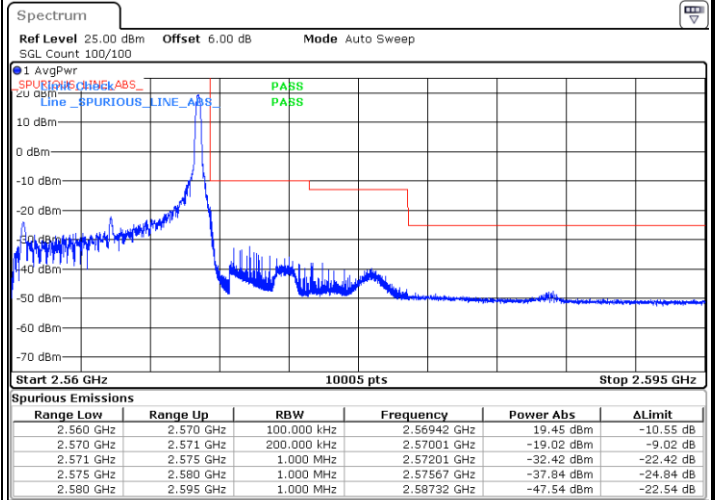
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



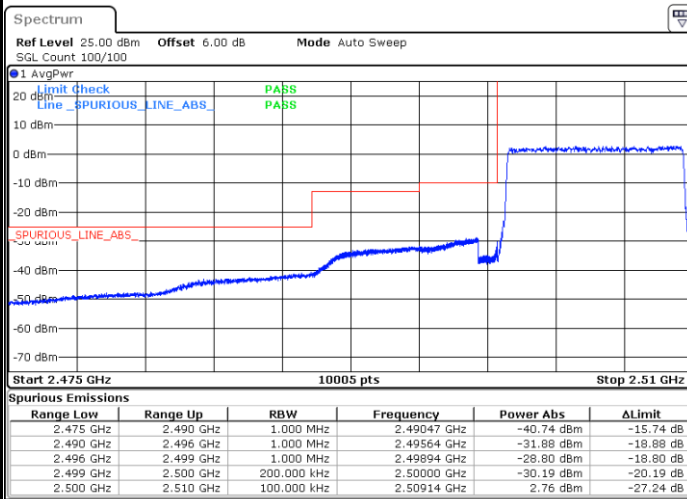
Date: 27.SEP.2023 20:43:13

Highest Band Edge / 1 RB



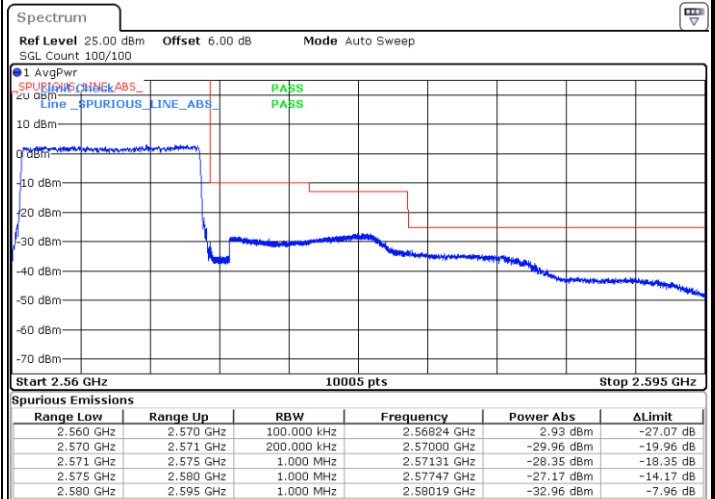
Date: 27.SEP.2023 20:50:58

Lowest Band Edge / Full RB



Date: 27.SEP.2023 20:47:27

Highest Band Edge / Full RB



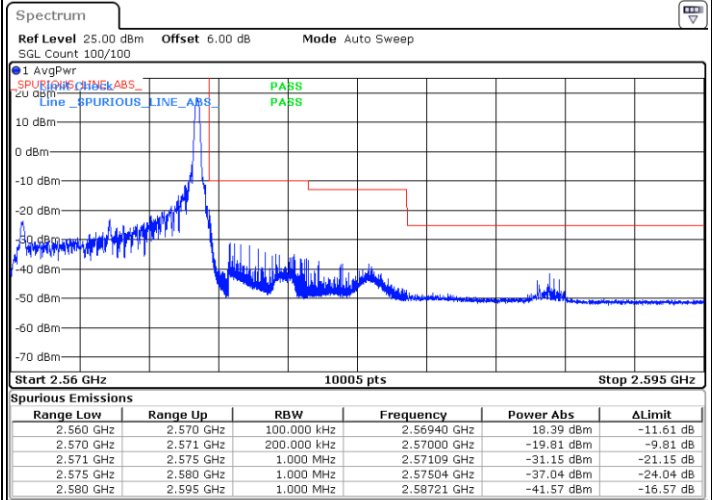
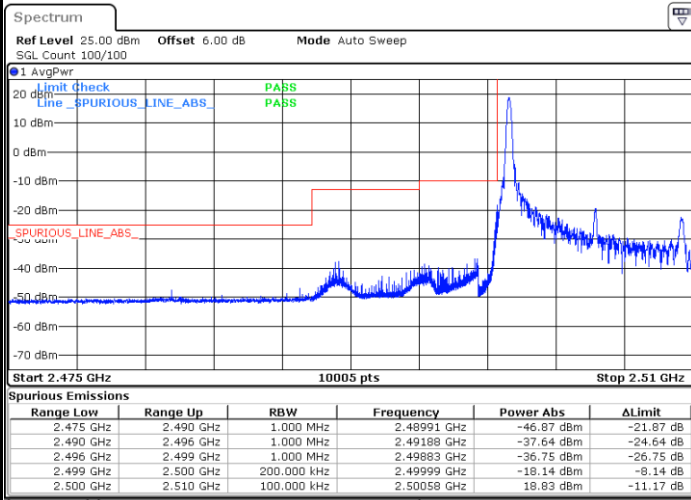
Date: 27.SEP.2023 20:55:57



LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

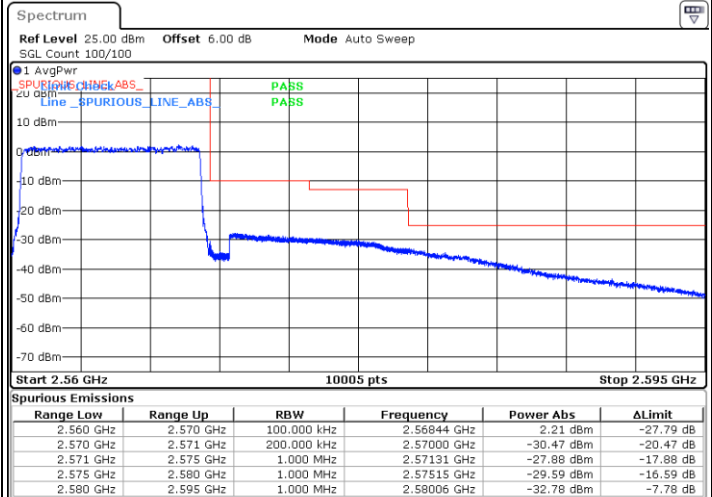
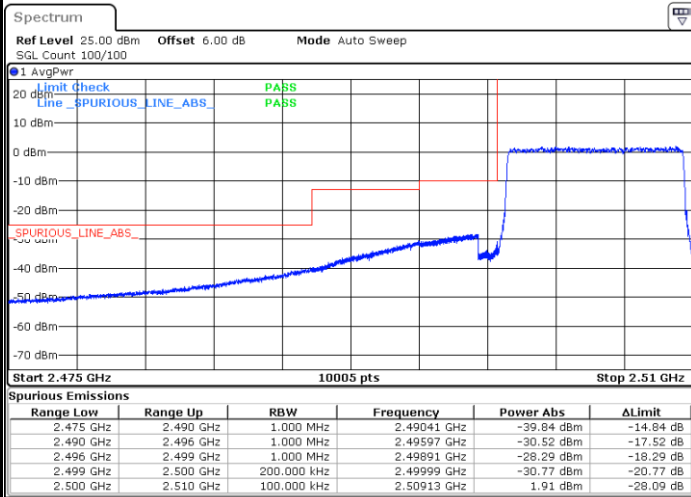


Date: 27\_SEP.2023 20:44:03

Date: 27\_SEP.2023 20:52:33

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



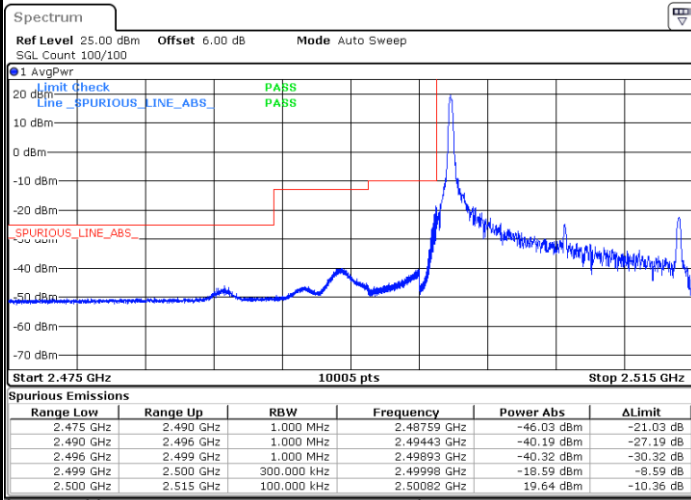
Date: 27\_SEP.2023 20:46:36

Date: 27\_SEP.2023 20:55:06



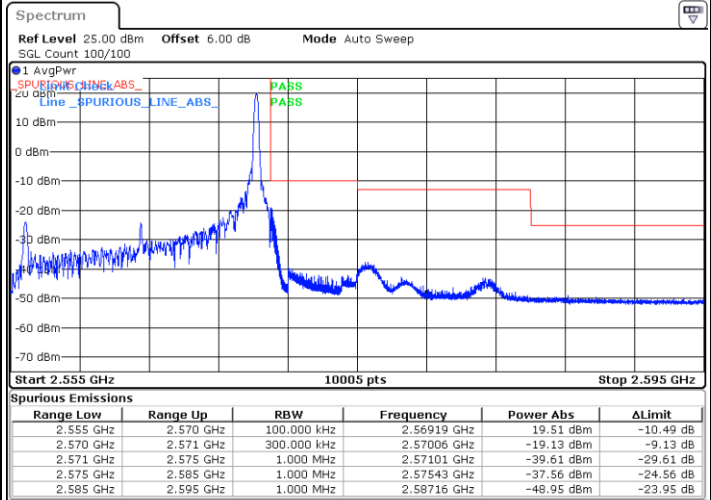
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



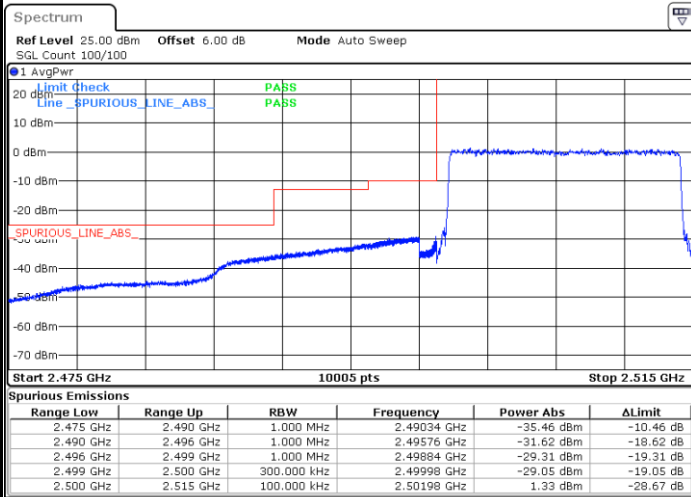
Date: 27.SEP.2023 20:58:10

Highest Band Edge / 1 RB



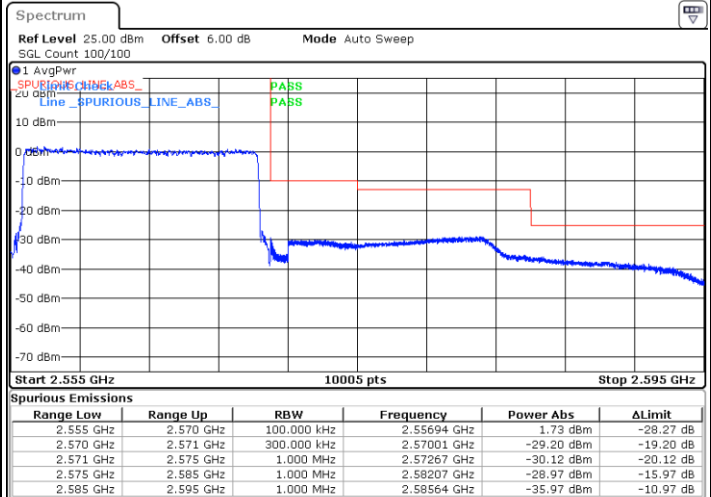
Date: 27.SEP.2023 21:05:59

Lowest Band Edge / Full RB



Date: 27.SEP.2023 21:02:26

Highest Band Edge / Full RB

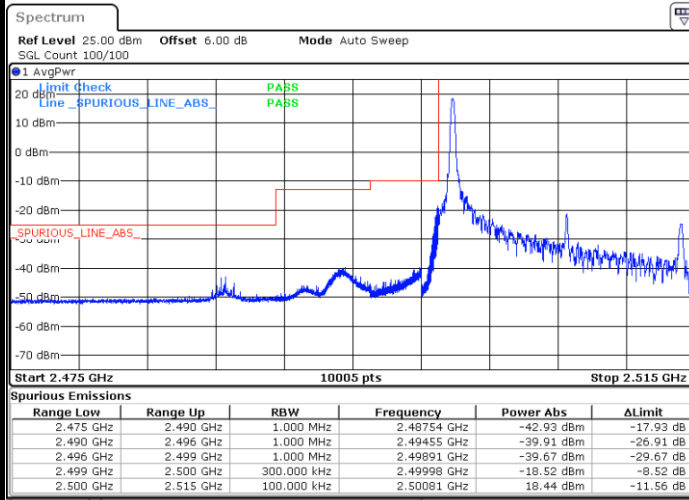


Date: 27.SEP.2023 21:10:14



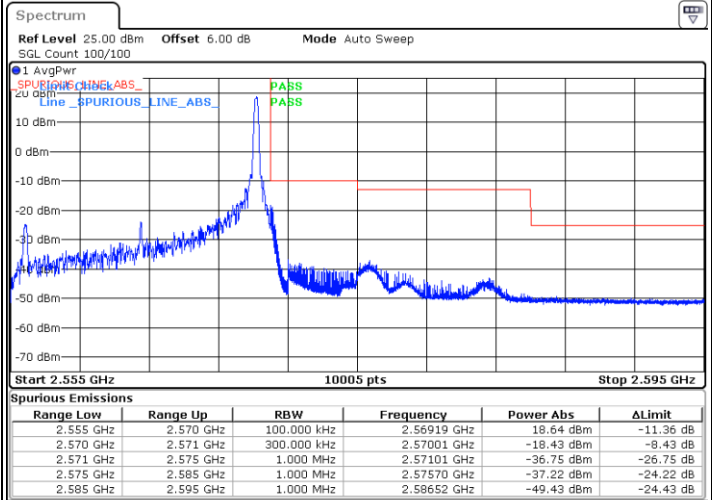
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



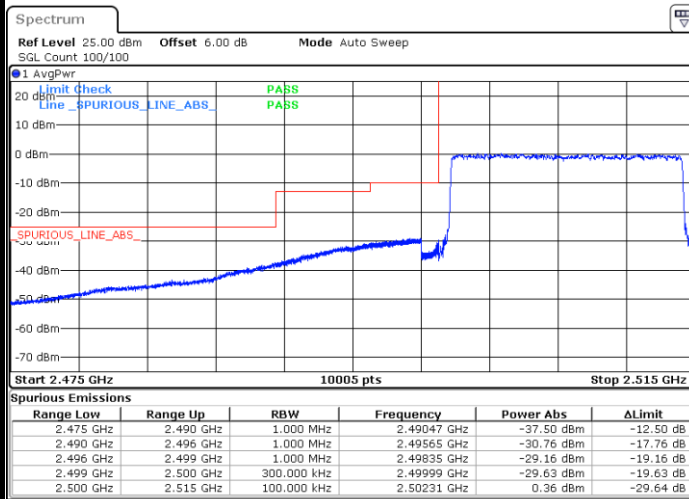
Date: 27.SEP.2023 20:59:01

Highest Band Edge / 1 RB



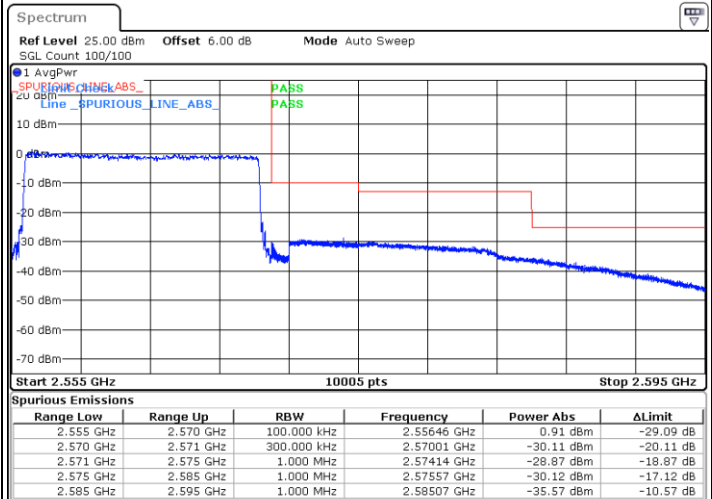
Date: 27.SEP.2023 21:06:50

Lowest Band Edge / Full RB



Date: 27.SEP.2023 21:01:35

Highest Band Edge / Full RB



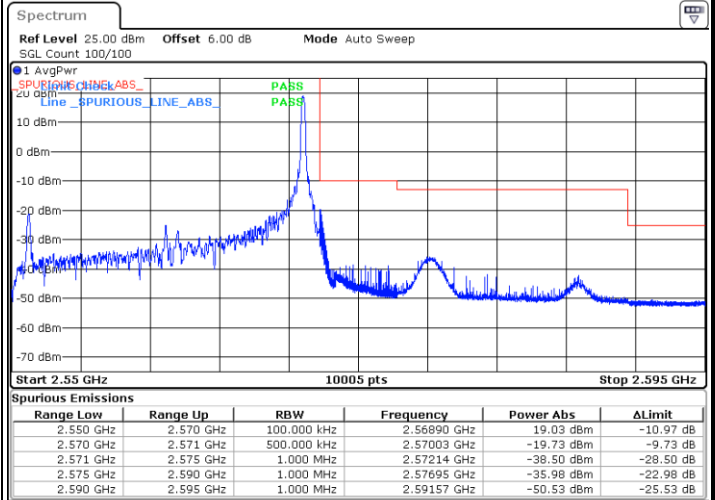
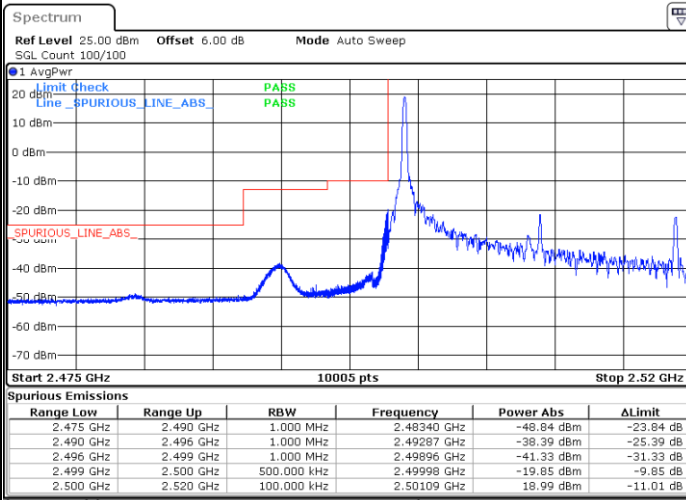
Date: 27.SEP.2023 21:09:24



LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

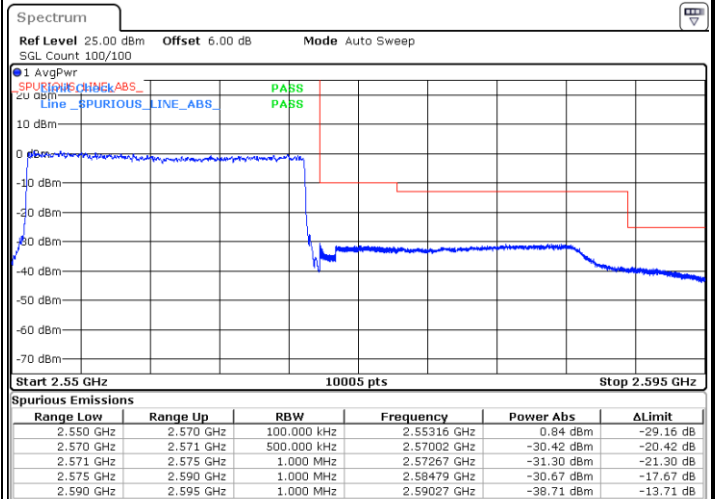
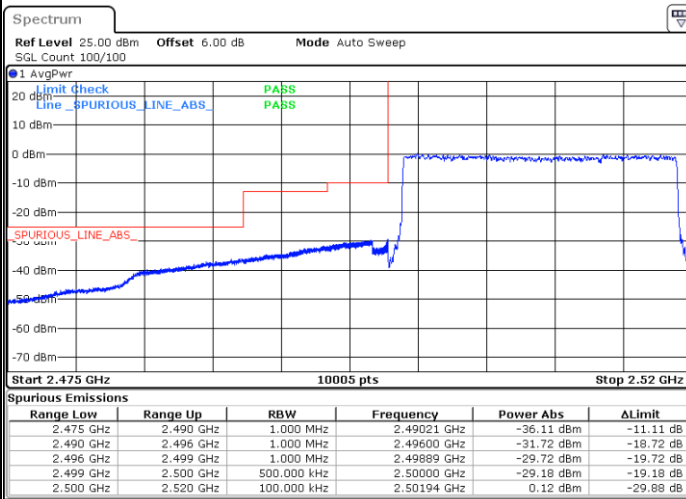


Date: 27.SEP.2023 21:12:27

Date: 27.SEP.2023 21:20:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



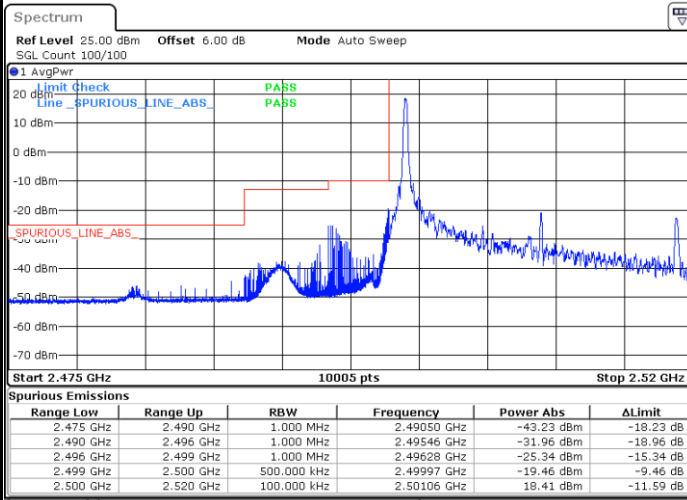
Date: 27.SEP.2023 21:16:44

Date: 27.SEP.2023 21:24:30



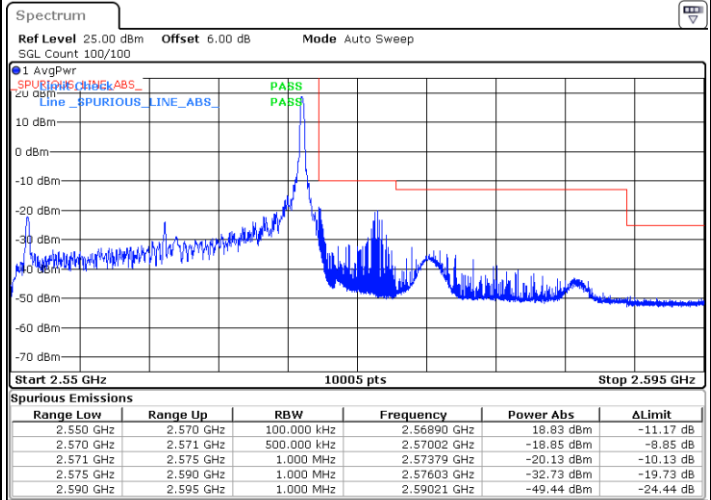
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



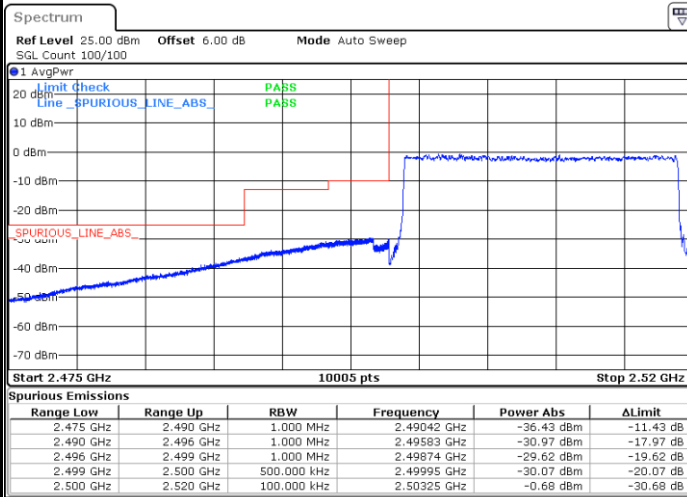
Date: 27.SEP.2023 21:13:18

Highest Band Edge / 1 RB



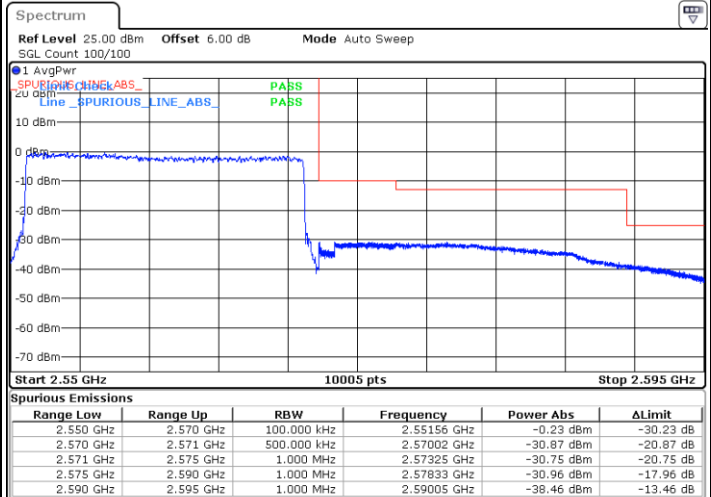
Date: 27.SEP.2023 21:21:07

Lowest Band Edge / Full RB



Date: 27.SEP.2023 21:15:53

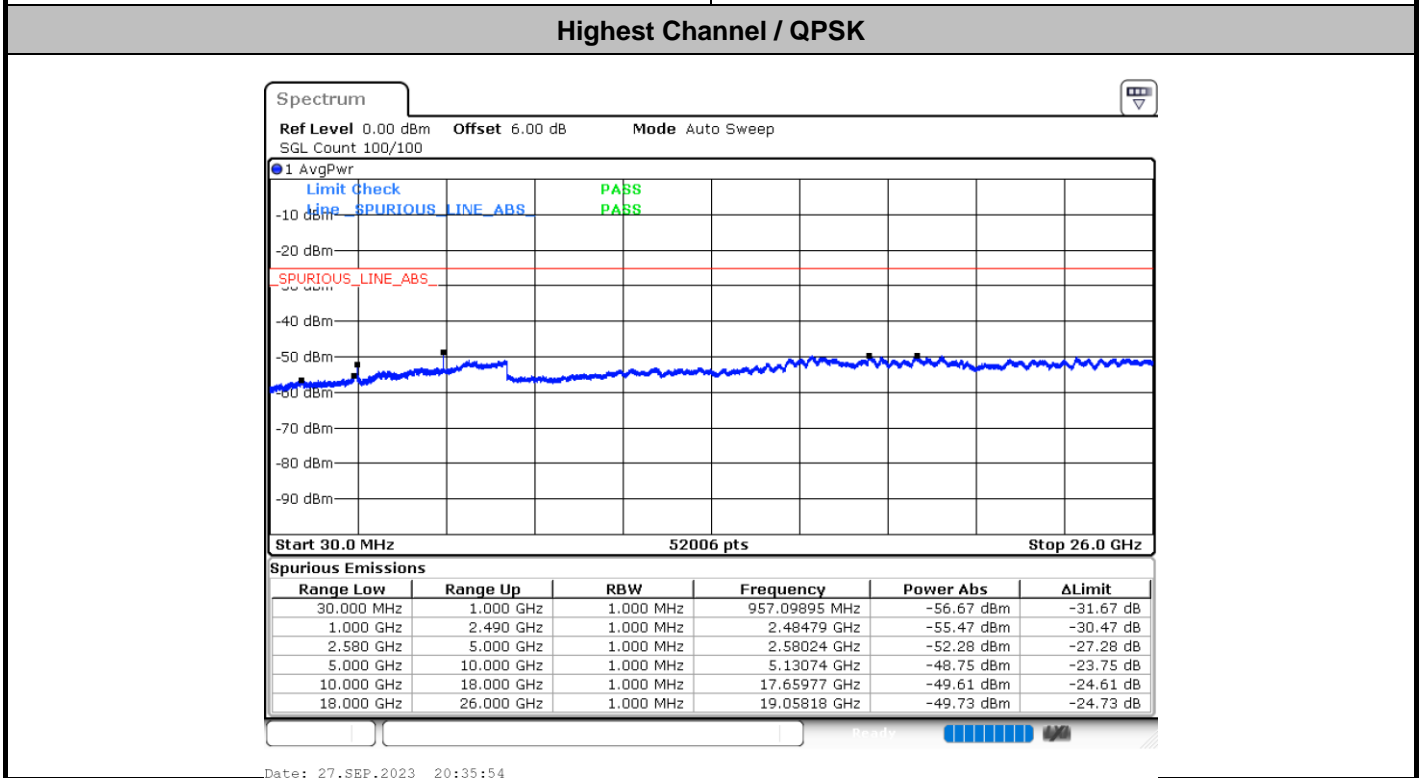
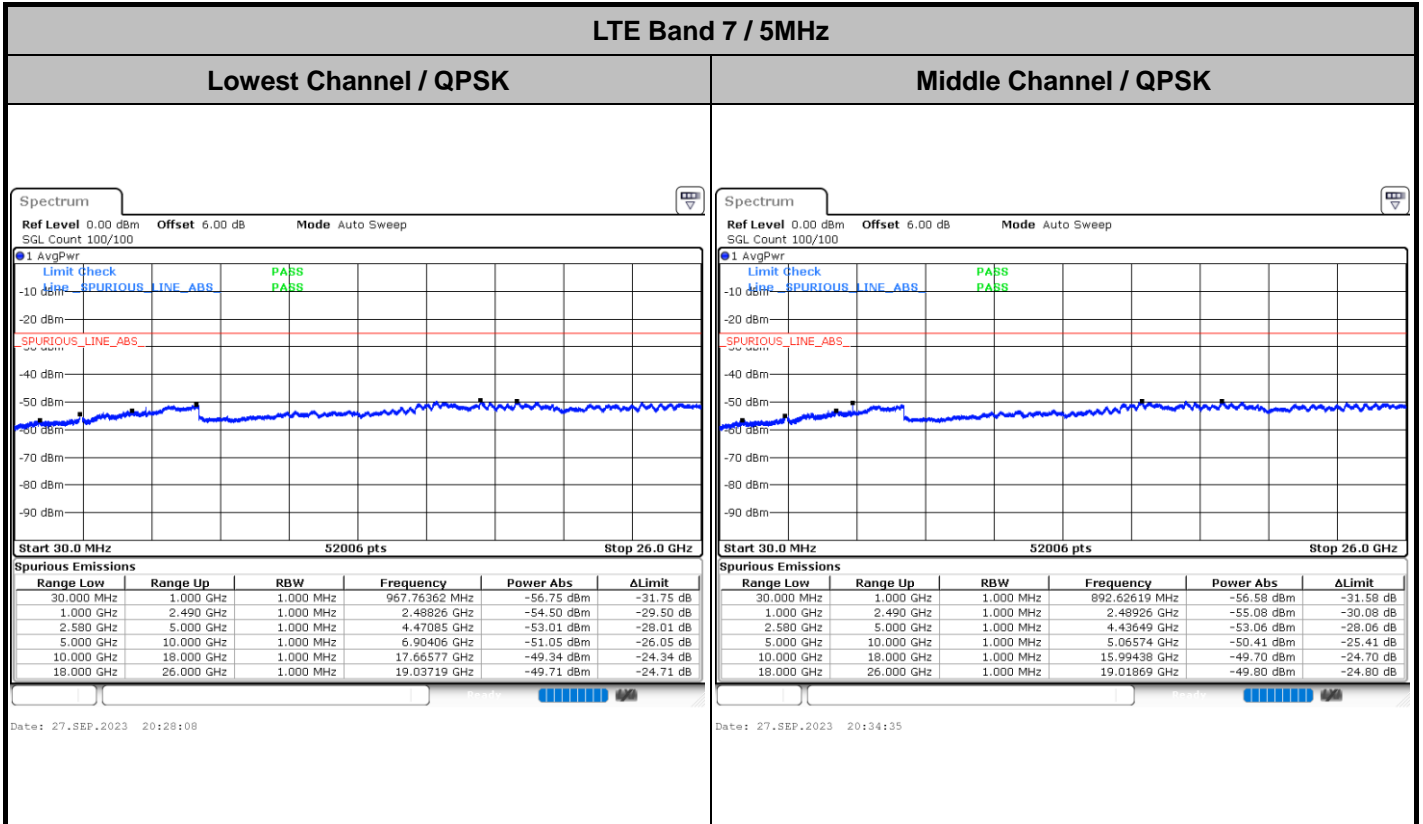
Highest Band Edge / Full RB



Date: 27.SEP.2023 21:23:39



# Conducted Spurious Emission



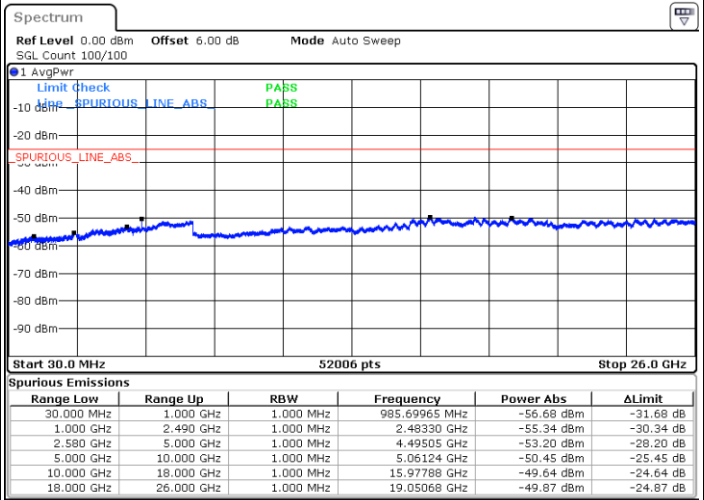
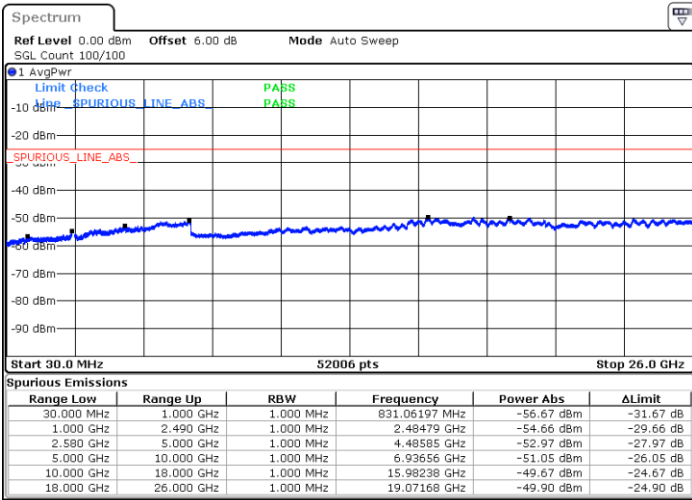




LTE Band 7 / 10MHz

Lowest Channel / QPSK

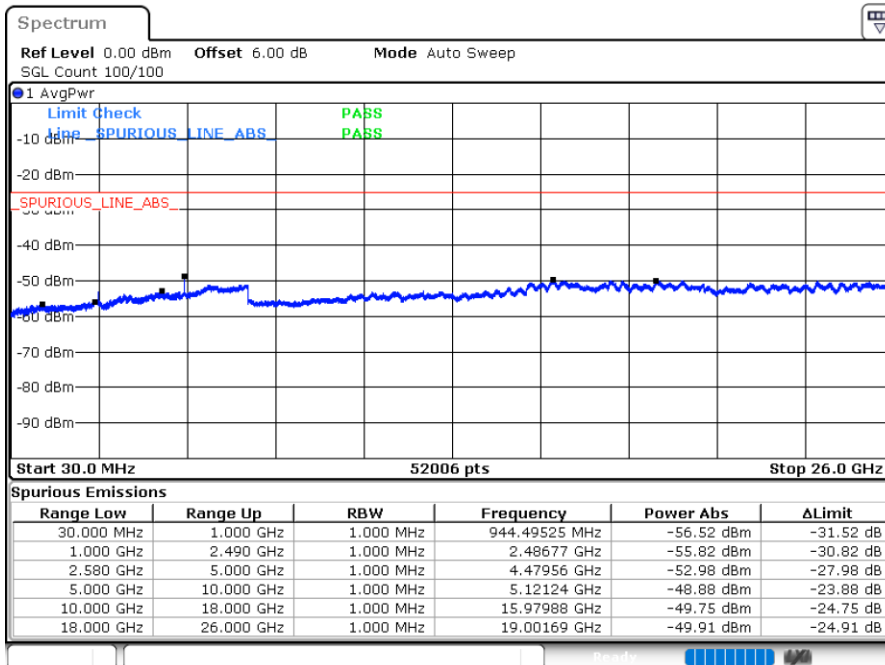
Middle Channel / QPSK



Date: 27.SEP.2023 20:42:21

Date: 27.SEP.2023 20:48:46

Highest Channel / QPSK



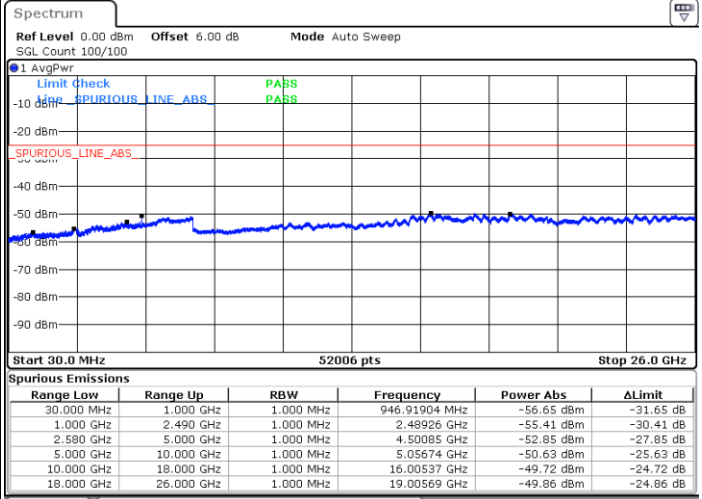
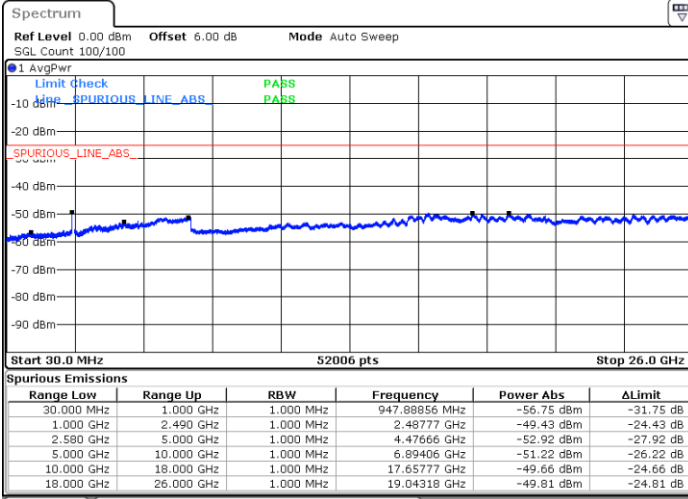
Date: 27.SEP.2023 20:50:06



LTE Band 7 / 15MHz

Lowest Channel / QPSK

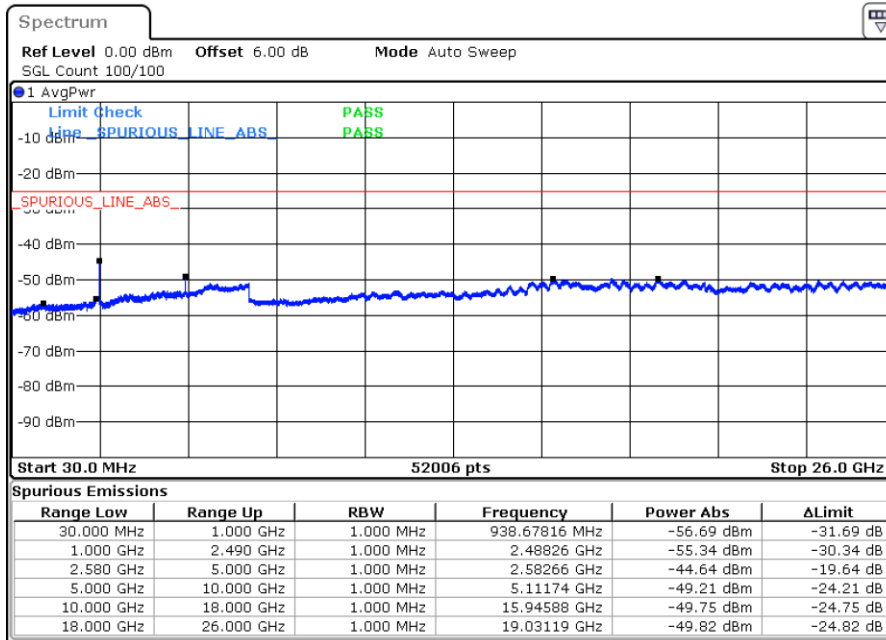
Middle Channel / QPSK



Date: 27.SEP.2023 20:57:18

Date: 27.SEP.2023 21:03:46

Highest Channel / QPSK



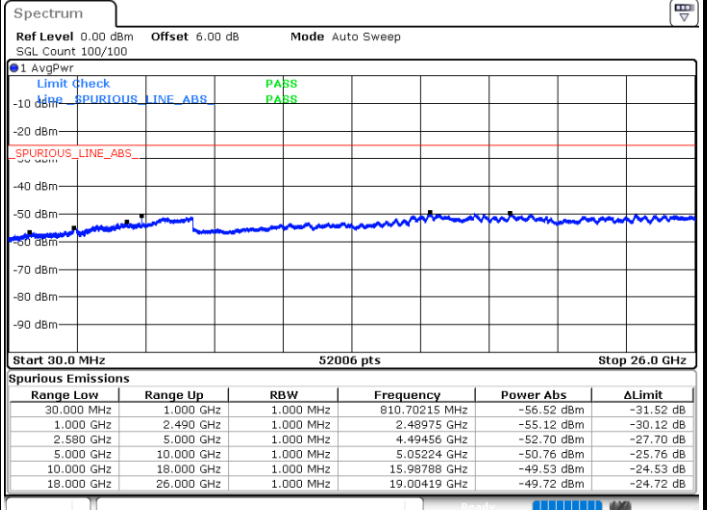
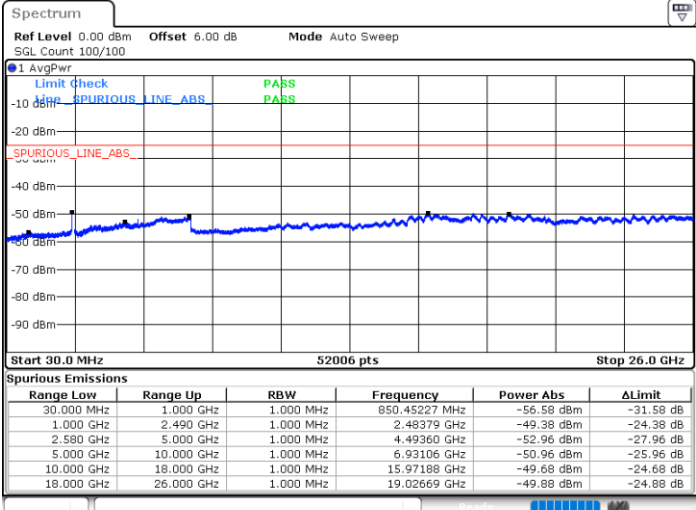
Date: 27.SEP.2023 21:05:07



LTE Band 7 / 20MHz

Lowest Channel / QPSK

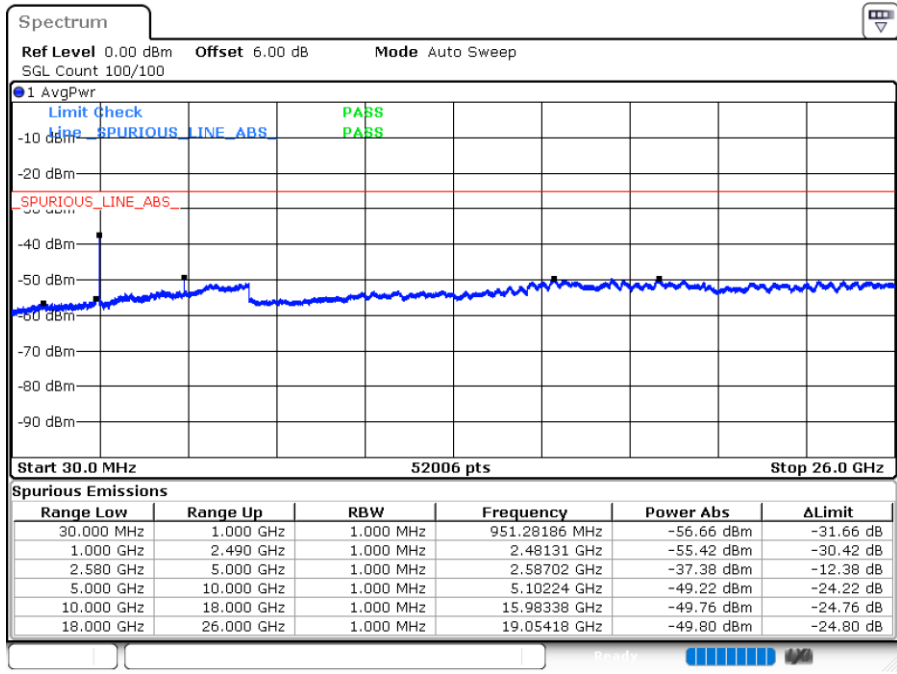
Middle Channel / QPSK



Date: 27.SEP.2023 21:11:35

Date: 27.SEP.2023 21:18:03

Highest Channel / QPSK



Date: 27.SEP.2023 21:19:24



### Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0022	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0017	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0036	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0032	
20	Maximum Voltage	0.0028	
20	Normal Voltage	0.0008	
20	Battery End Point	0.0035	

**Note:**

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



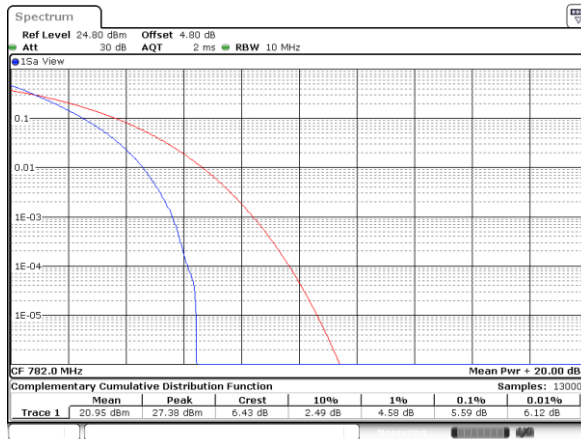
# LTE Band 13

## Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	-	-	Limit: 13dB
RB Size	Full RB	Full RB	-	-	Result
Middle CH	5.59	6.38	-	-	PASS

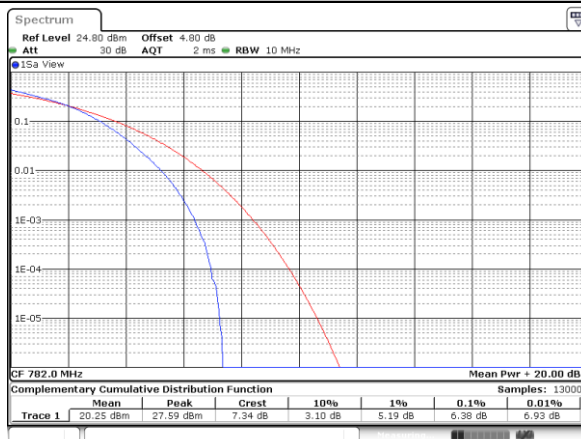
### LTE Band 13 / 10MHz

#### Middle Channel / Full RB/ QPSK



Date: 27.SEP.2023 22:41:04

#### Middle Channel / Full RB/ 16QAM

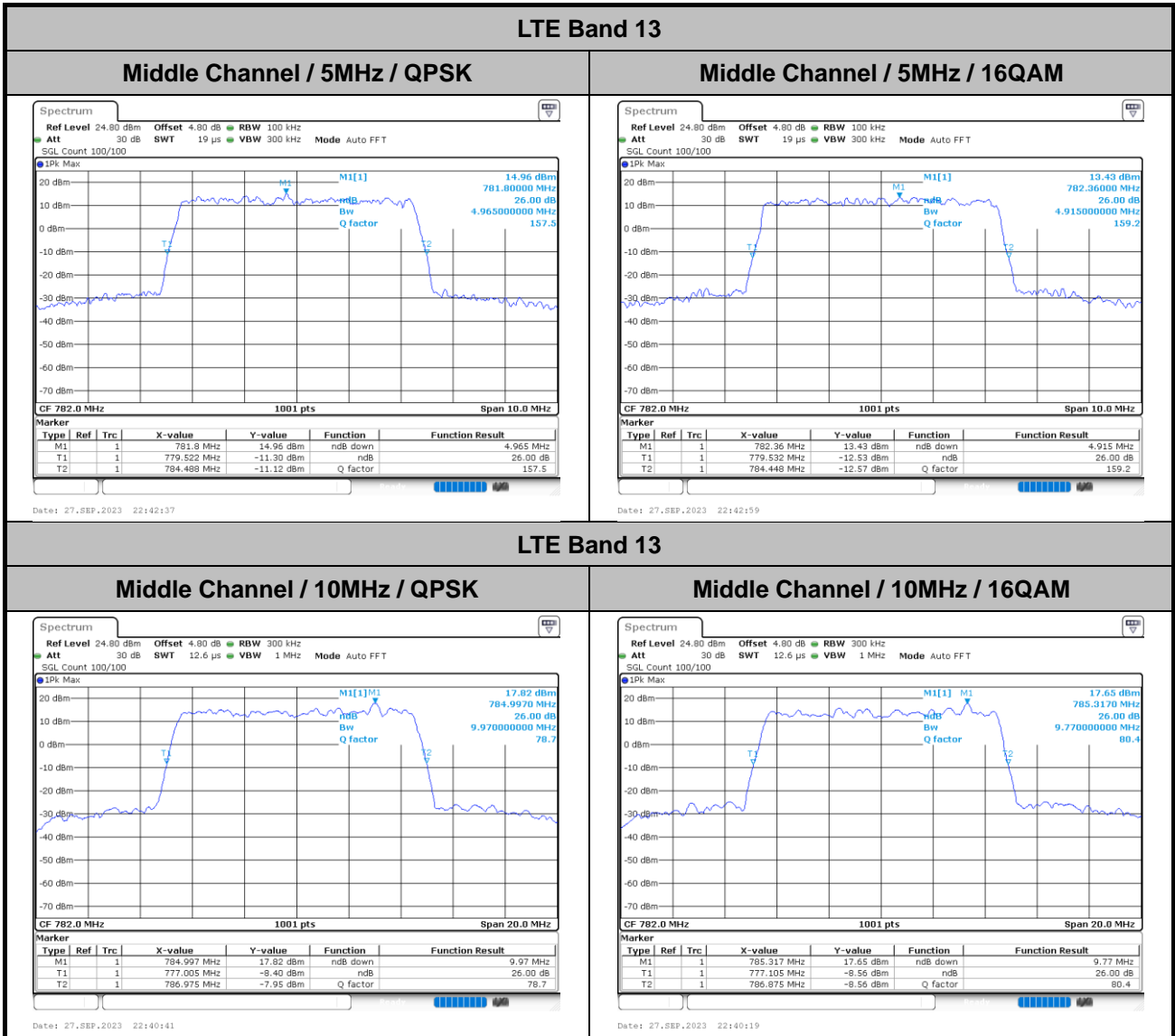


Date: 27.SEP.2023 22:41:28



## 26dB Bandwidth

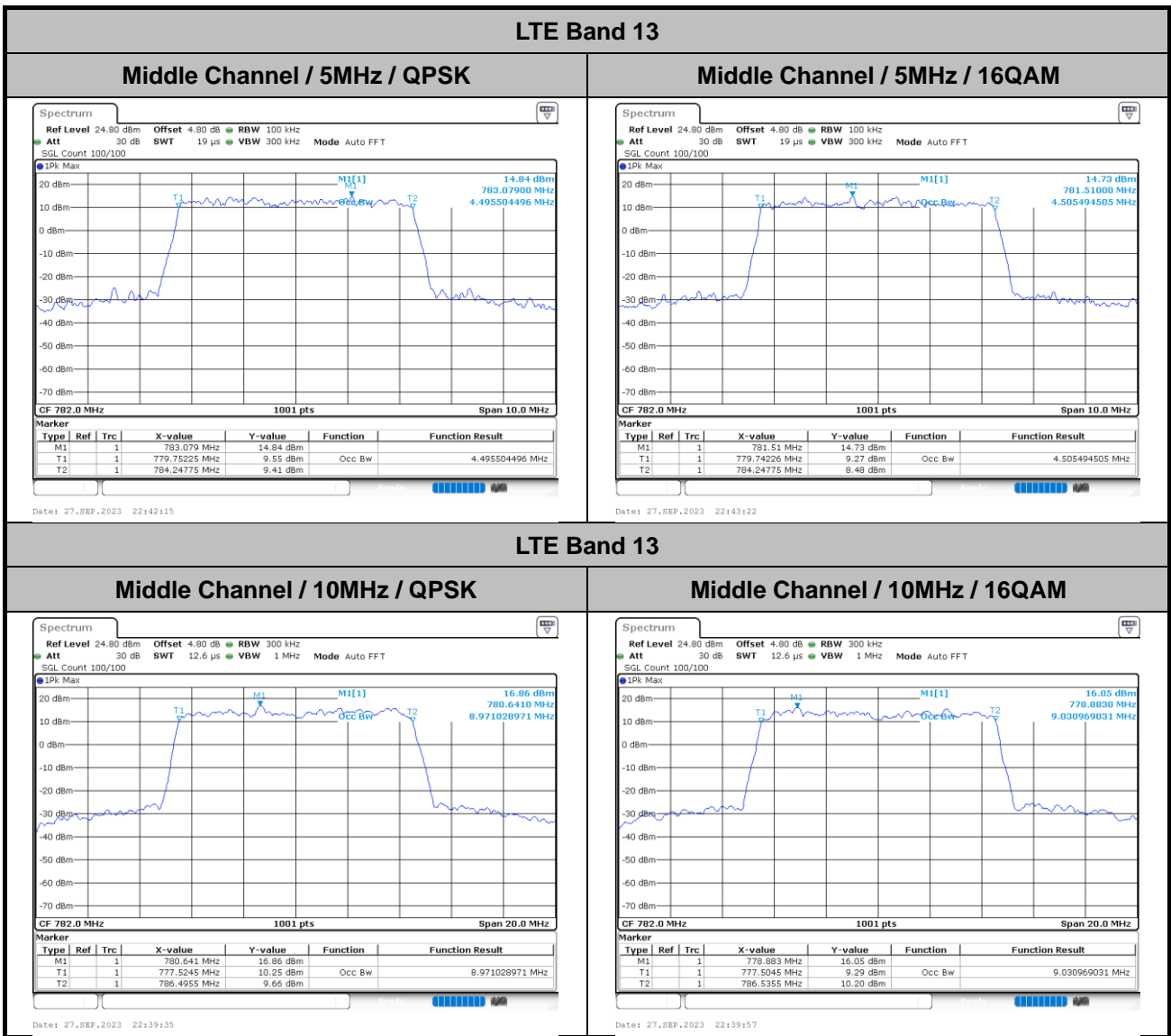
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.97	4.92
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.97	9.77





# Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.51
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.97	9.03



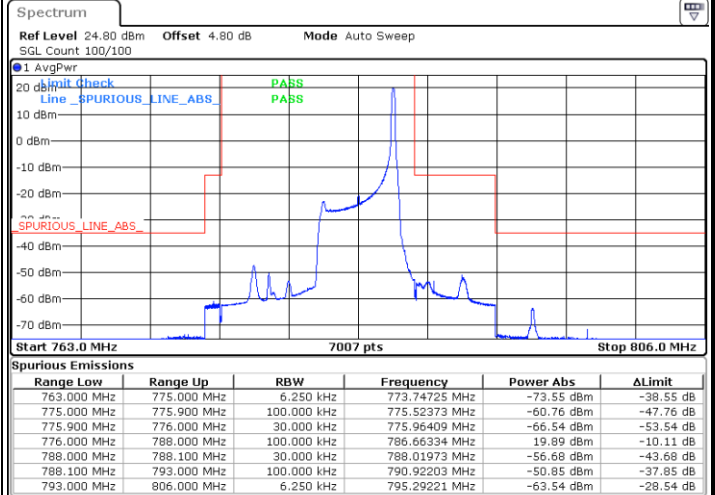
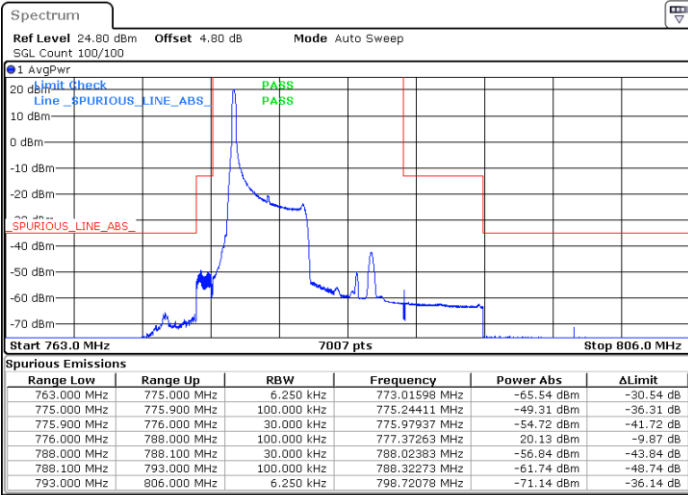


# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB

### Highest Band Edge / 1 RB

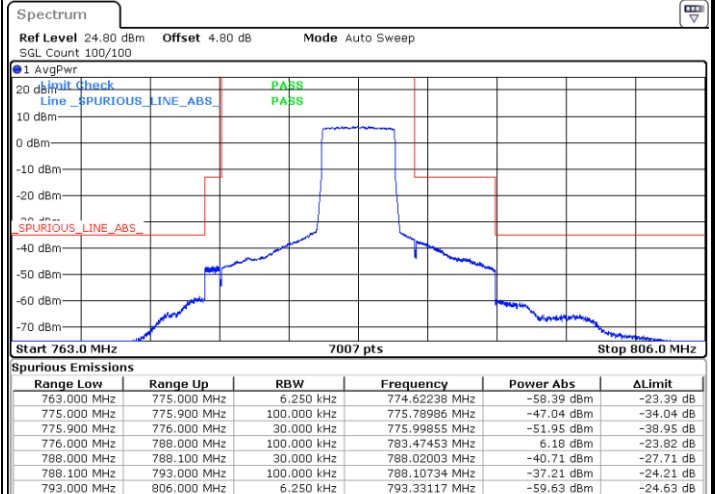
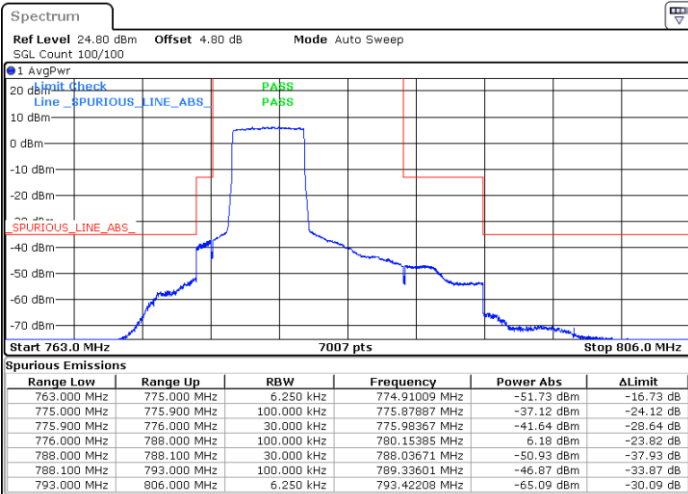


Date: 27\_SEP.2023 21:58:28

Date: 27\_SEP.2023 22:12:11

### Lowest Band Edge / Full RB

### Highest Band Edge / Full RB



Date: 27\_SEP.2023 22:07:41

Date: 27\_SEP.2023 22:21:24

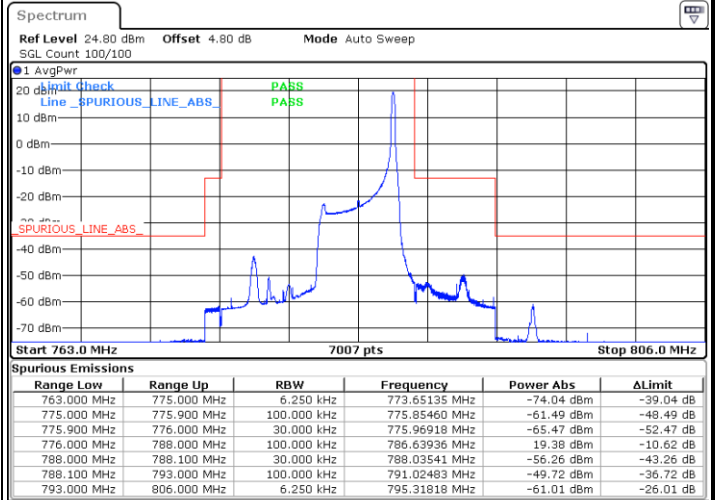
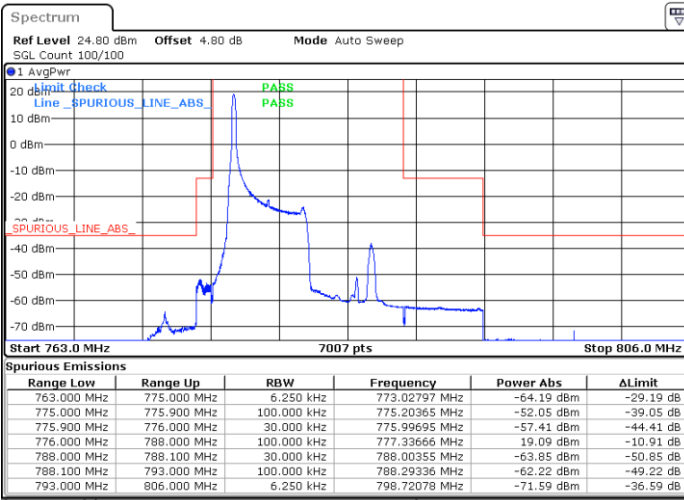




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

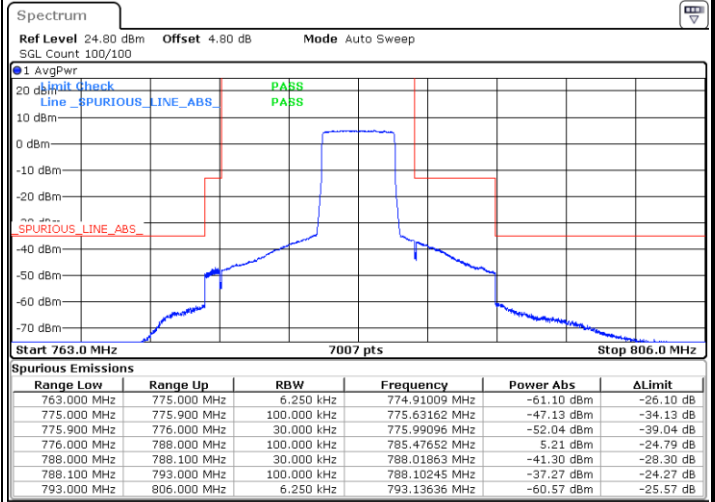
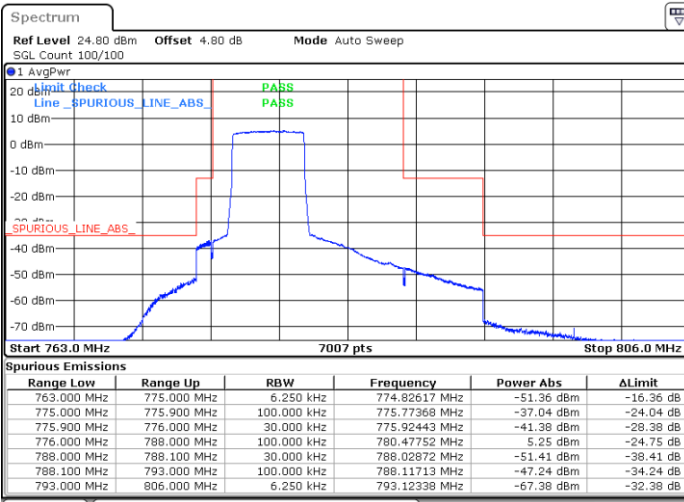


Date: 27.SEP.2023 22:00:19

Date: 27.SEP.2023 22:14:02

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



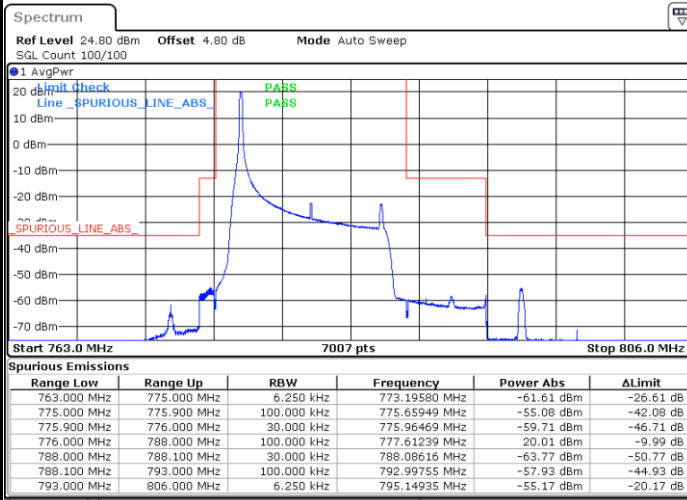
Date: 27.SEP.2023 22:05:50

Date: 27.SEP.2023 22:19:33



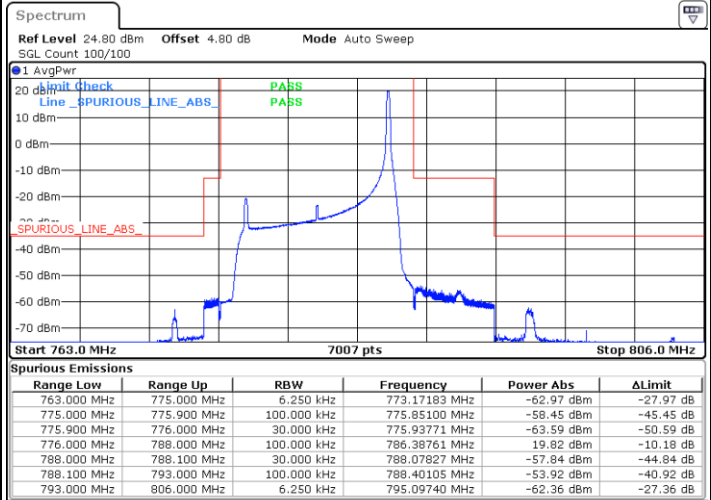
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



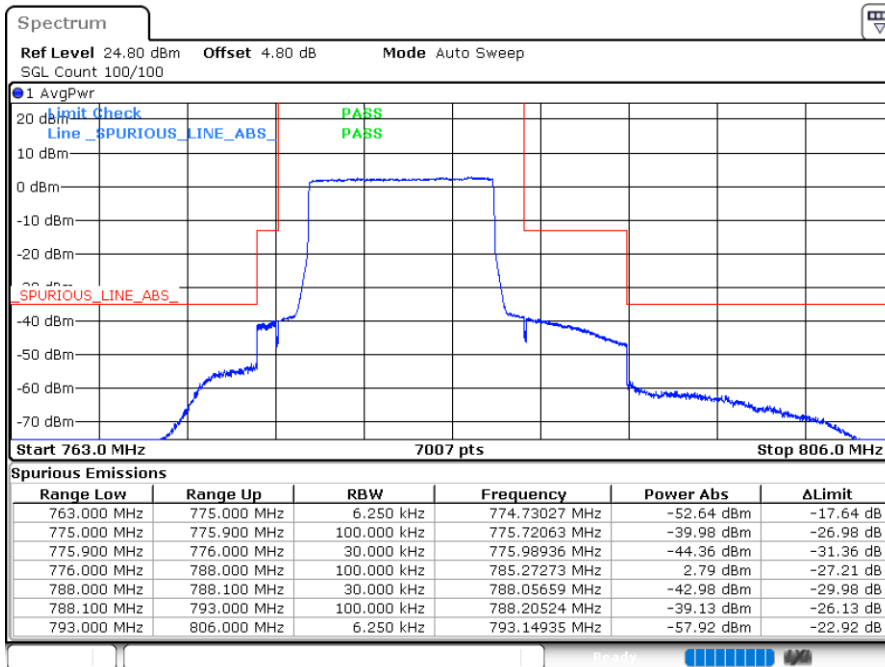
Date: 27\_SEP.2023 22:24:34

middle Band Edge / 1 RB



Date: 27\_SEP.2023 22:33:44

Middle Band Edge / Full RB

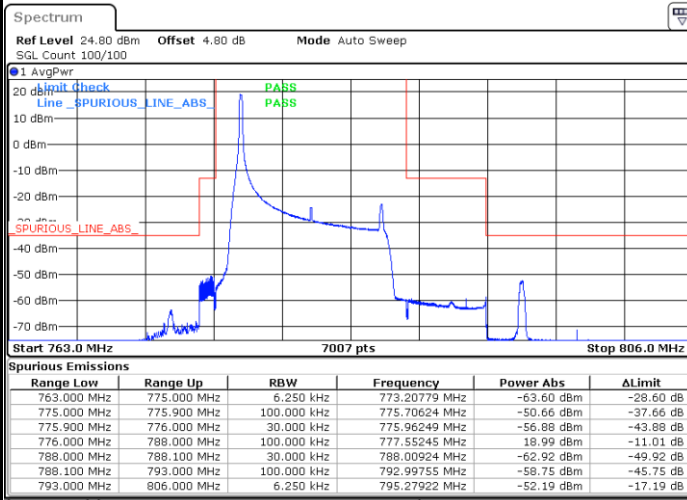


Date: 27\_SEP.2023 22:35:33



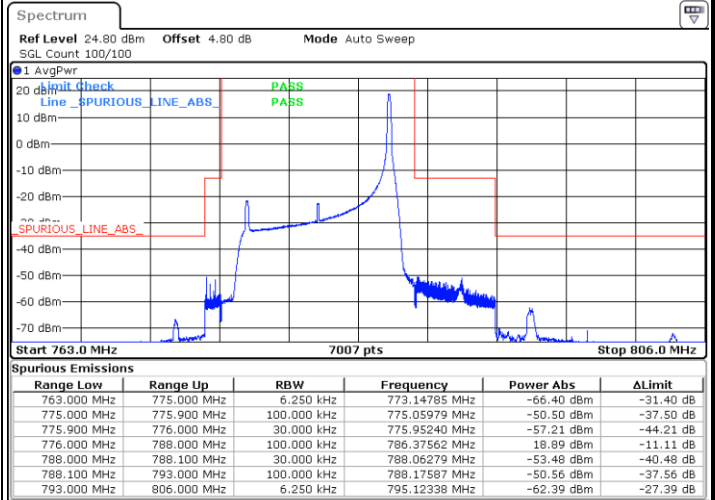
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



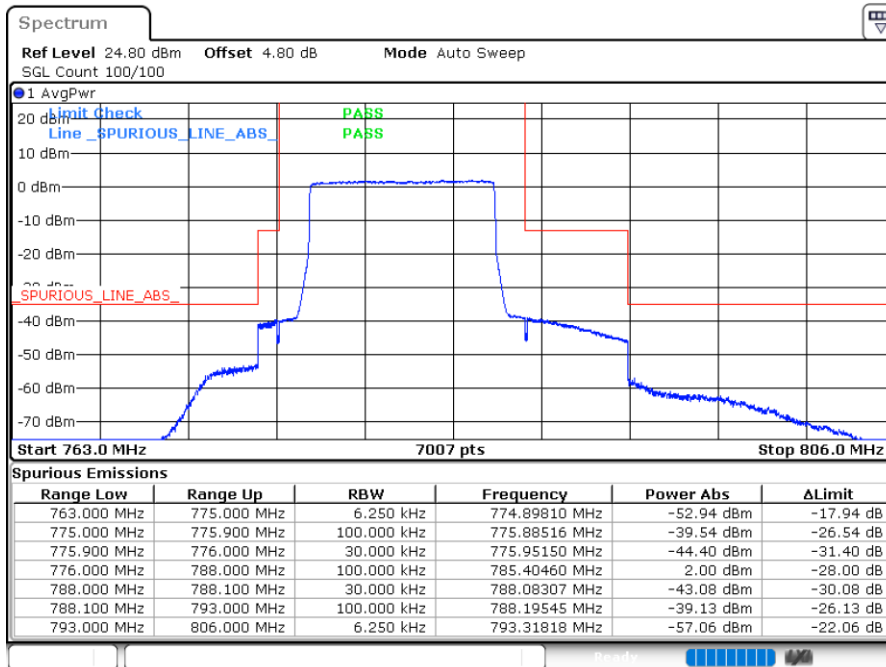
Date: 27\_SEP.2023 22:26:24

middle Band Edge / 1 RB



Date: 27\_SEP.2023 22:31:54

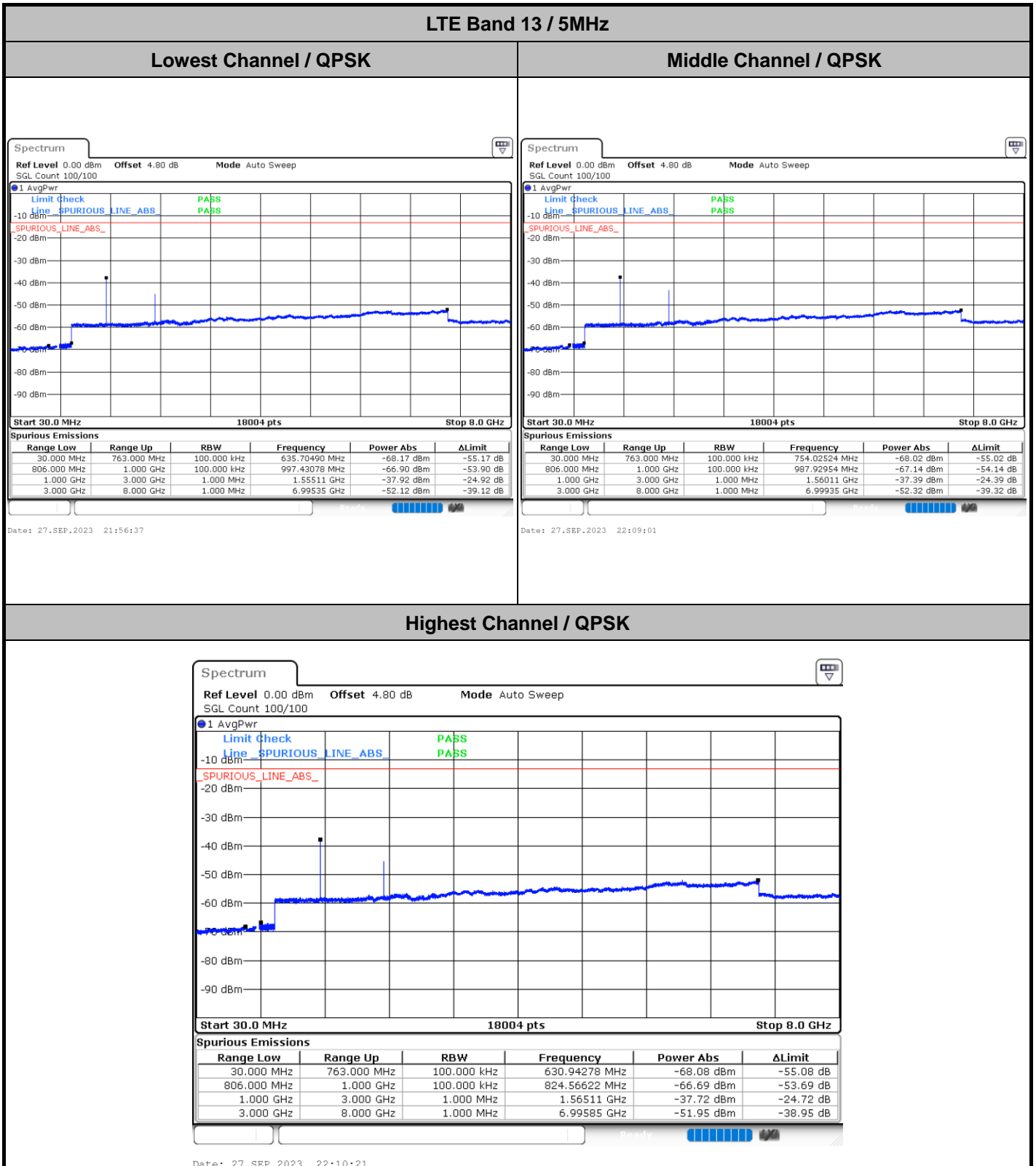
middle Band Edge / Full RB



Date: 27\_SEP.2023 22:37:23



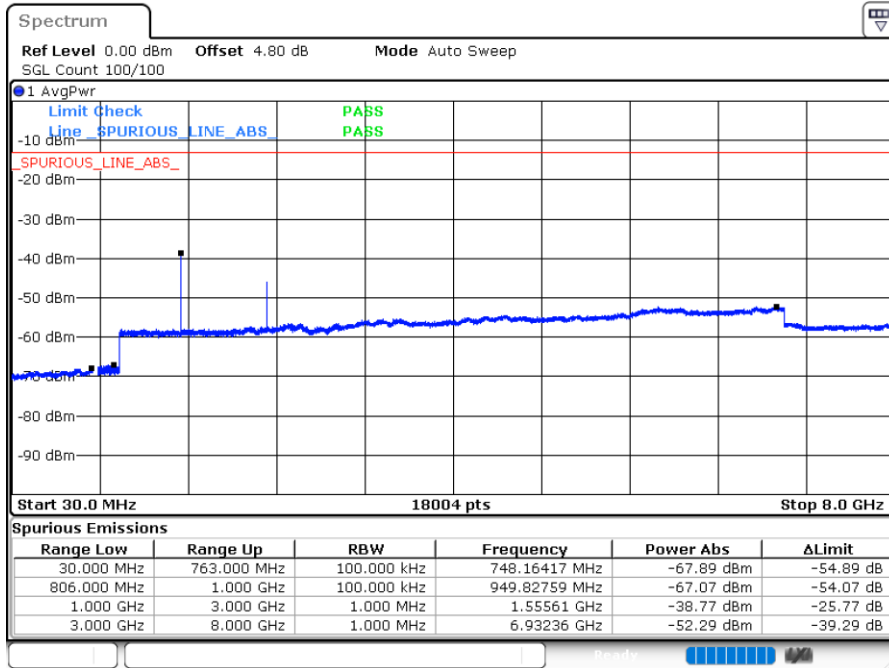
# Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 27, SEP, 2023 22:22:44



### 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:**

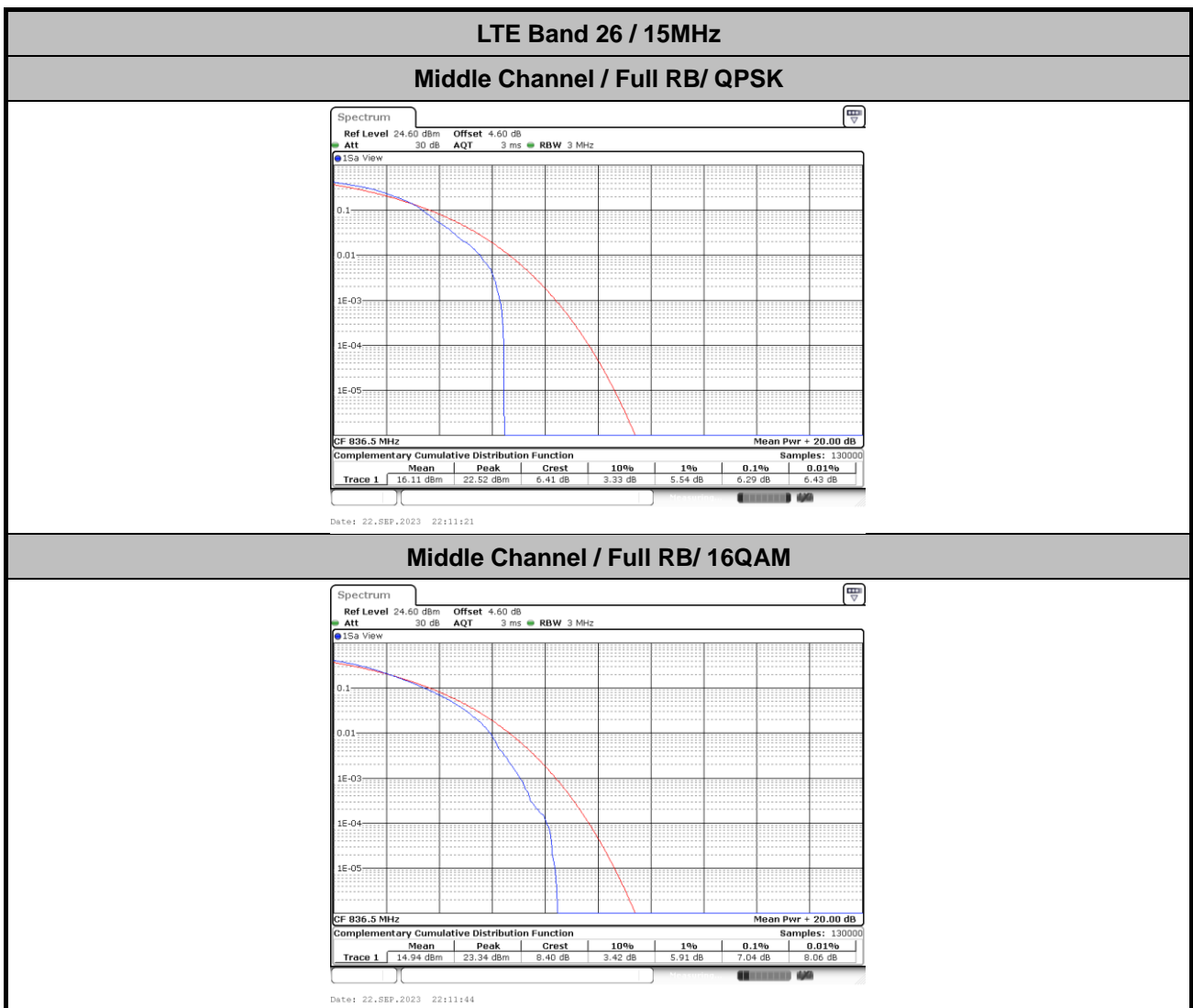
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 26

## Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz			
Mod.	QPSK	16QAM	-	Limit: 13dB
RB Size	Full RB	Full RB	-	Result
Middle CH	6.29	7.04	-	PASS





## 26dB Bandwidth

Mode	LTE Band 26 : 26dB BW(MHz)	
BW	1.4 MHz	
Mod.	QPSK	16QAM
Middle CH	1.24	1.24
BW	3 MHz	
Mod.	QPSK	16QAM
Middle CH	3.05	3.09
BW	5 MHz	
Mod.	QPSK	16QAM
Middle CH	4.88	4.92
BW	10 MHz	
Mod.	QPSK	16QAM
Middle CH	9.95	9.99
BW	15 MHz	
Mod.	QPSK	16QAM
Middle CH	14.42	14.48