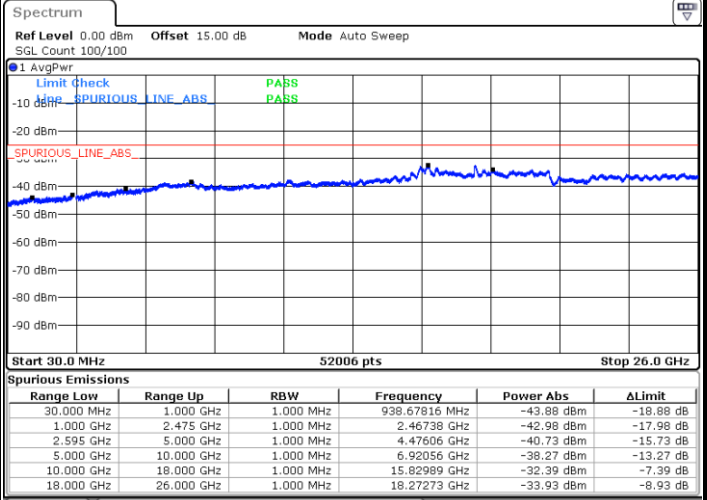
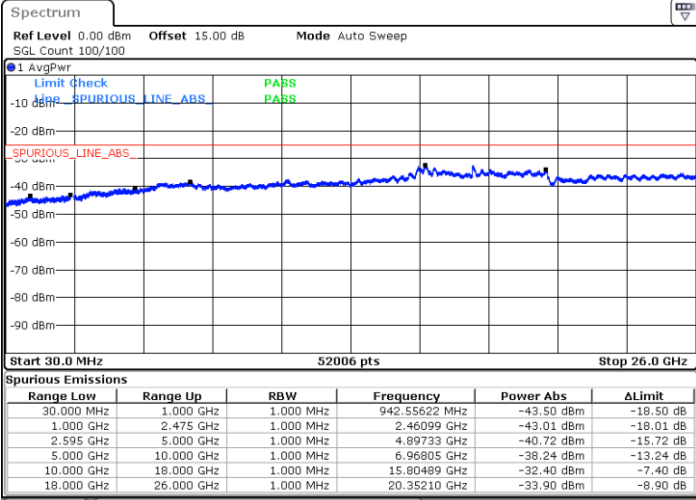




LTE Band 7 / 20MHz

Lowest Channel / QPSK

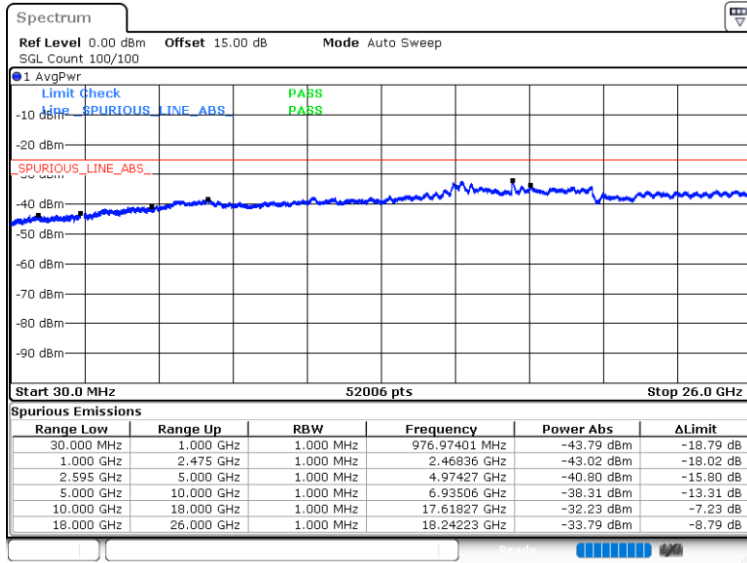
Middle Channel / QPSK



Date: 9.AUG.2023 18:22:05

Date: 9.AUG.2023 18:23:16

Highest Channel / QPSK



Date: 9.AUG.2023 18:33:06



### 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	0.0001	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0068	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0078	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0067	

**Note:**

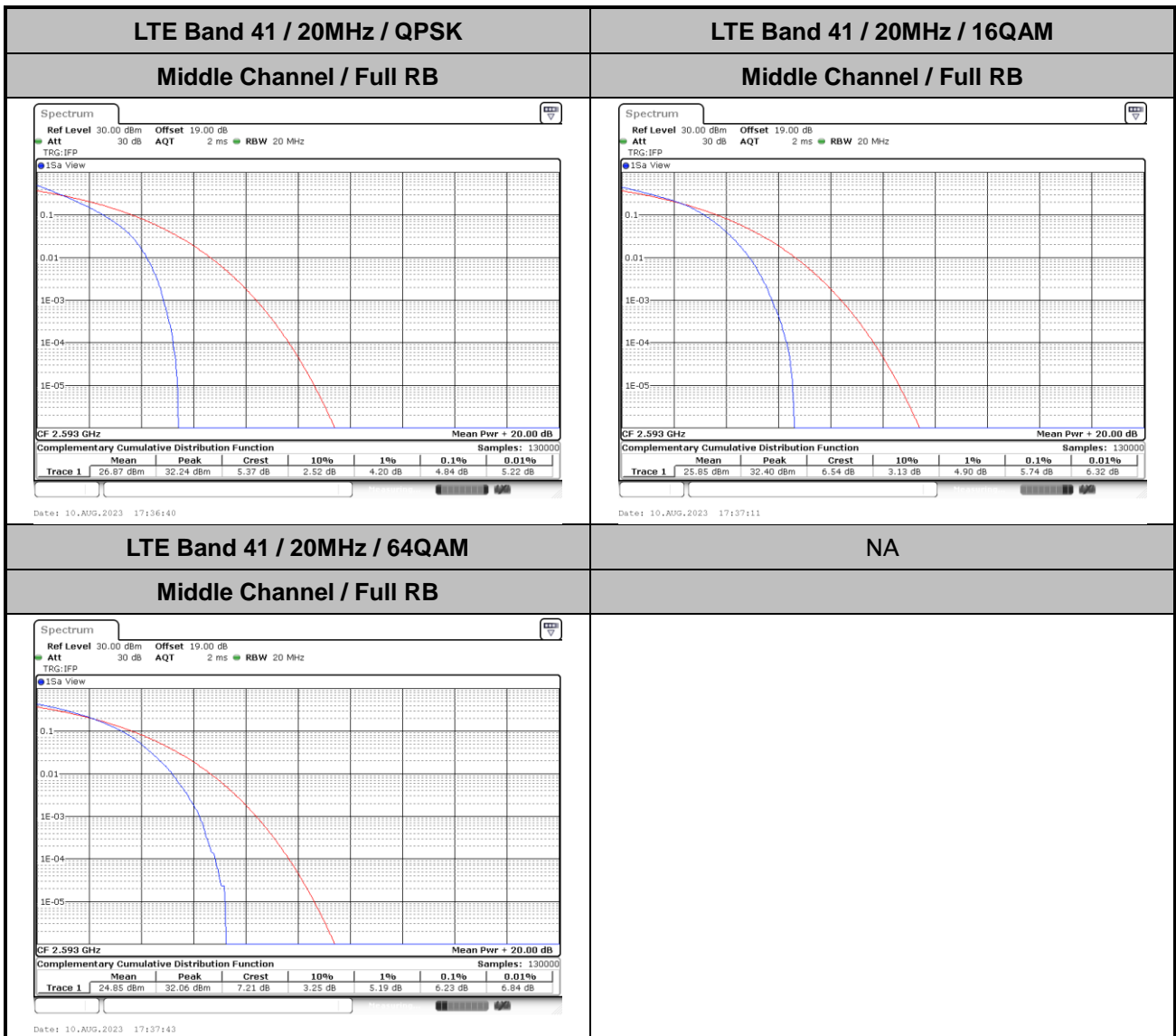
1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 41

## Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.84	5.74	6.23	PASS

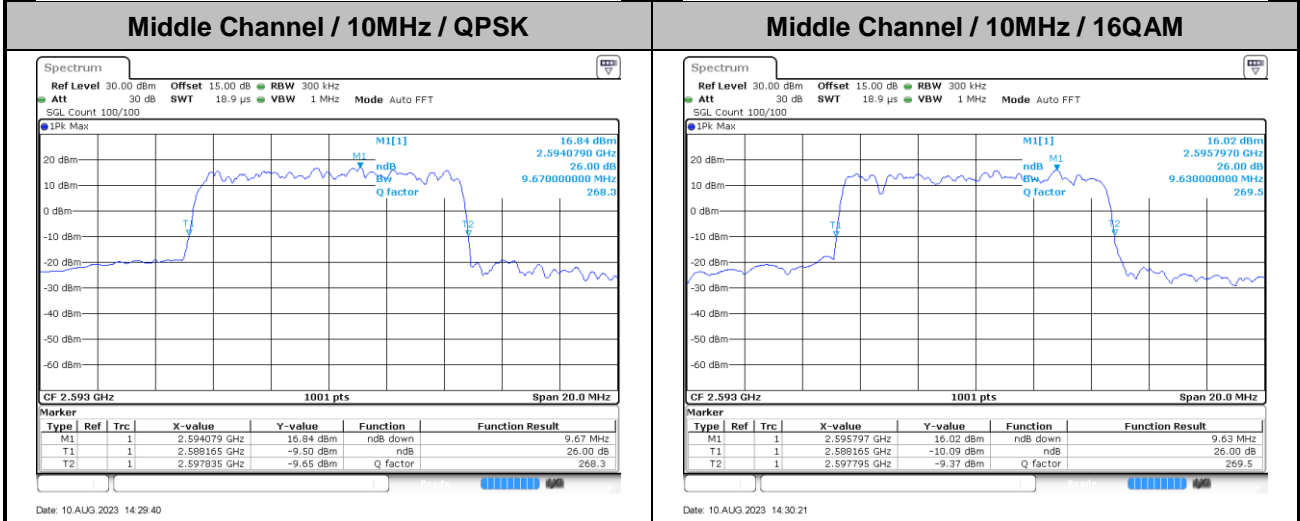
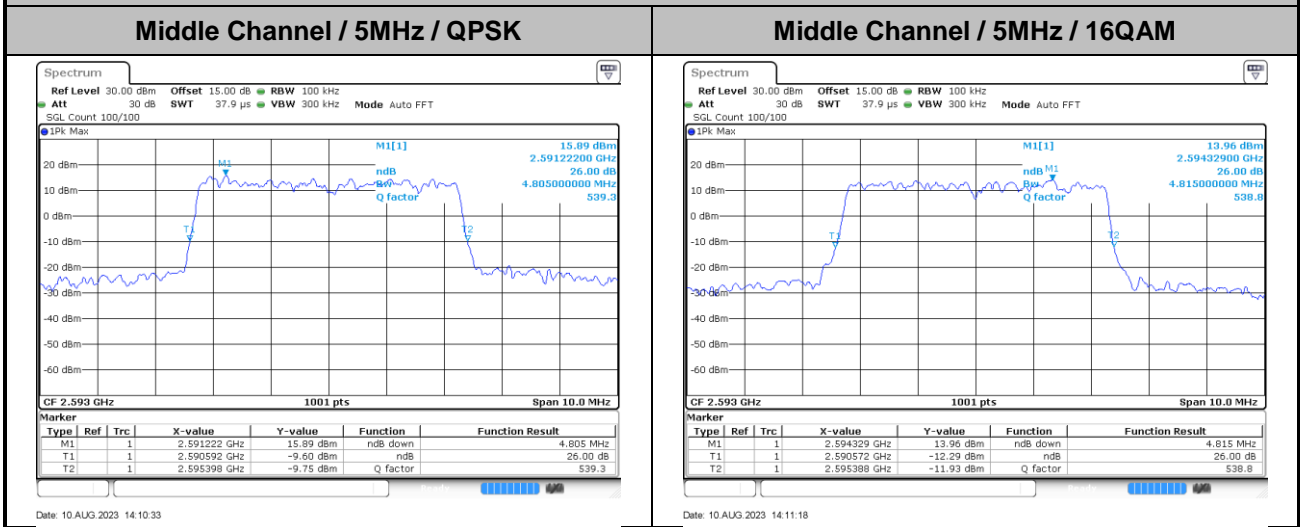




# 26dB Bandwidth

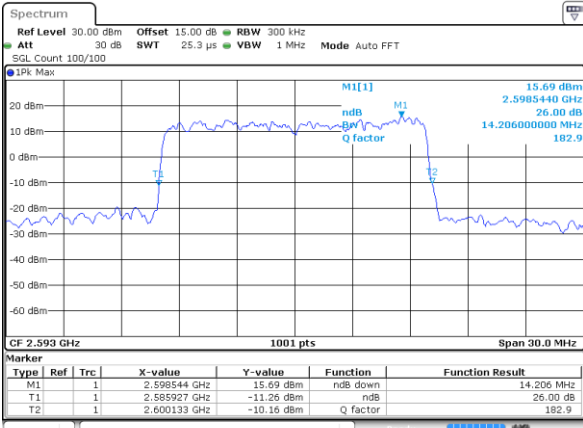
Mode	LTE Band 41 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.81	4.82	9.67	9.63	14.21	14.12	19.18	18.78

## LTE Band 41



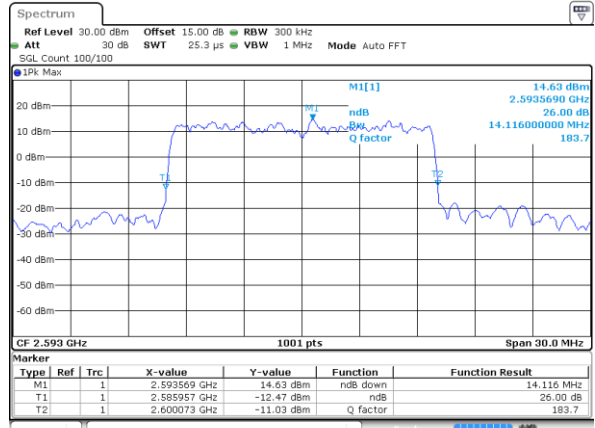


Middle Channel / 15MHz / QPSK



Date: 10 AUG 2023 14:46:18

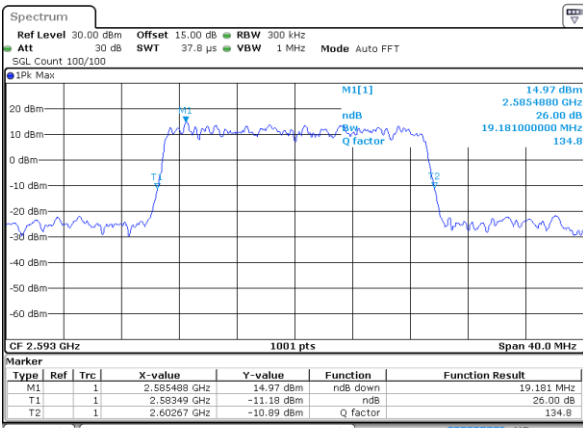
Middle Channel / 15MHz / 16QAM



Date: 10 AUG 2023 14:47:00

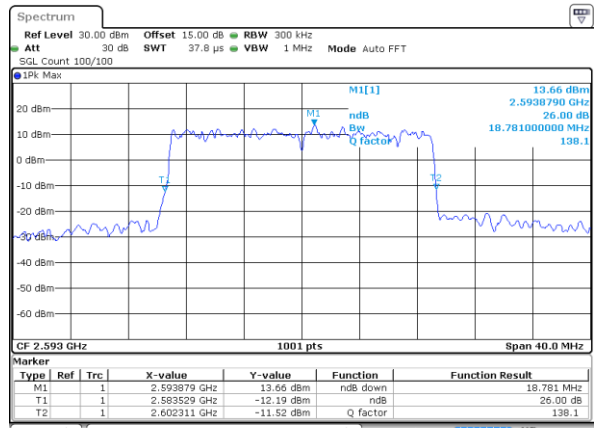
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 10 AUG 2023 15:03:13

Middle Channel / 20MHz / 16QAM

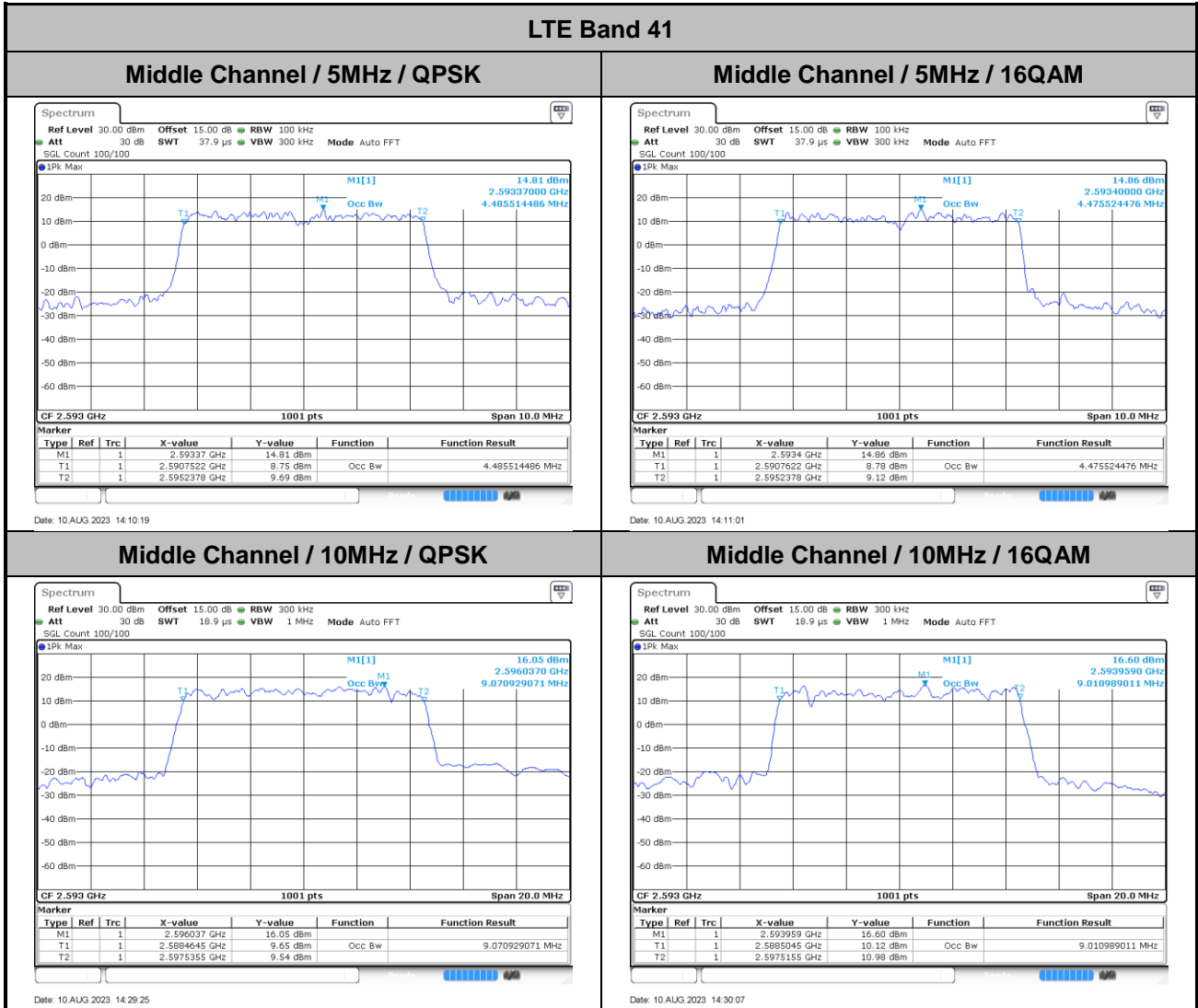


Date: 10 AUG 2023 15:03:55



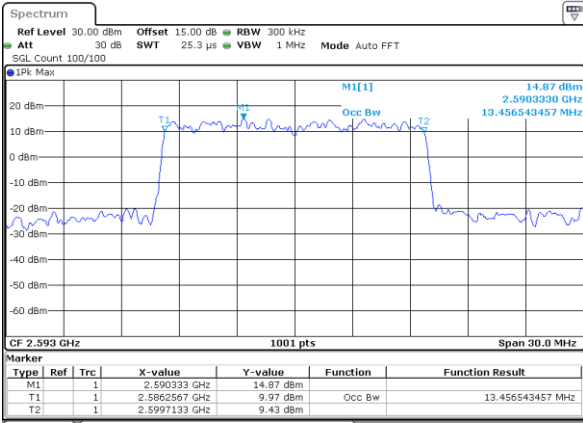
# Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.49	4.48	9.07	9.01	13.46	13.43	17.94	17.82



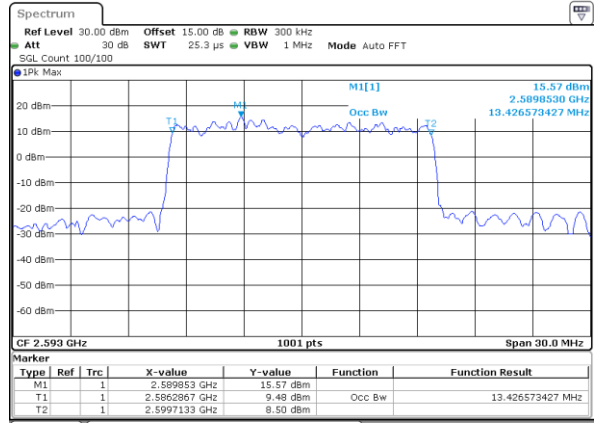


Middle Channel / 15MHz / QPSK



Date: 10 AUG 2023 14:46:04

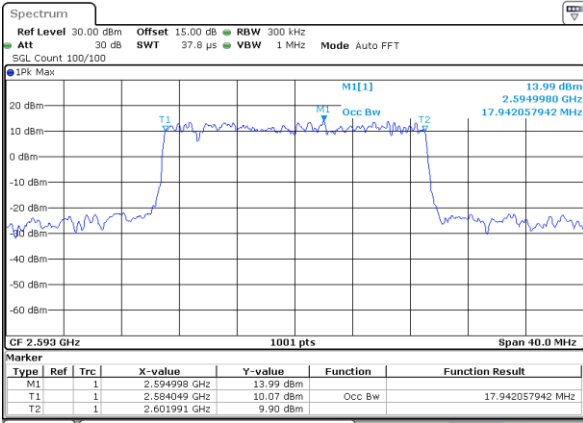
Middle Channel / 15MHz / 16QAM



Date: 10 AUG 2023 14:46:46

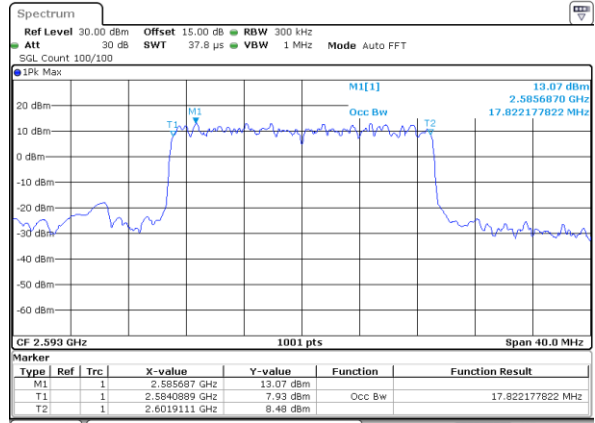
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 10 AUG 2023 15:02:59

Middle Channel / 20MHz / 16QAM



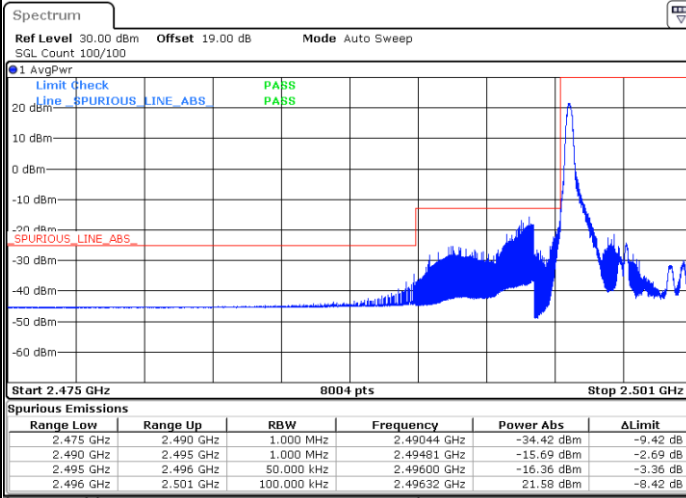
Date: 10 AUG 2023 15:03:41



# Conducted Band Edge

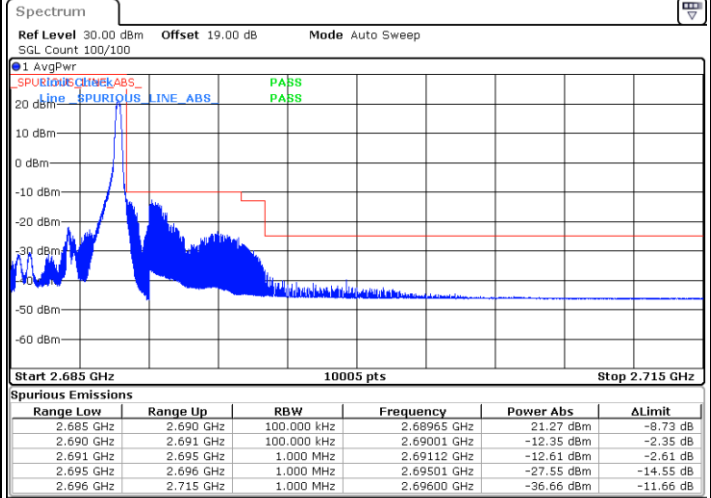
## LTE Band 41 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



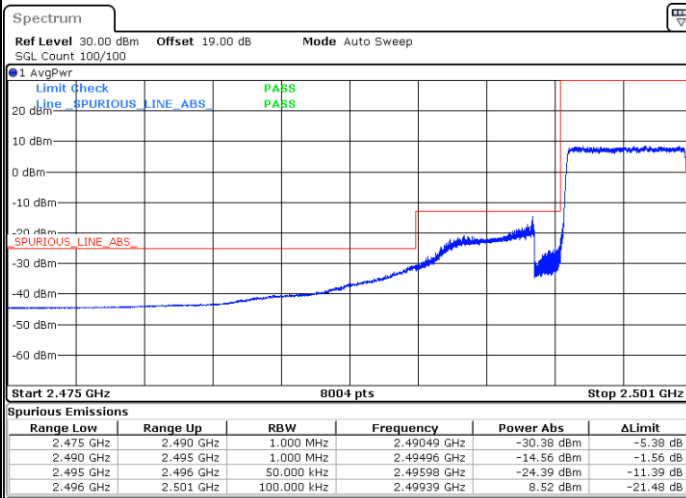
Date: 10.AUG.2023 14:08:53

### Highest Band Edge / 1 RB



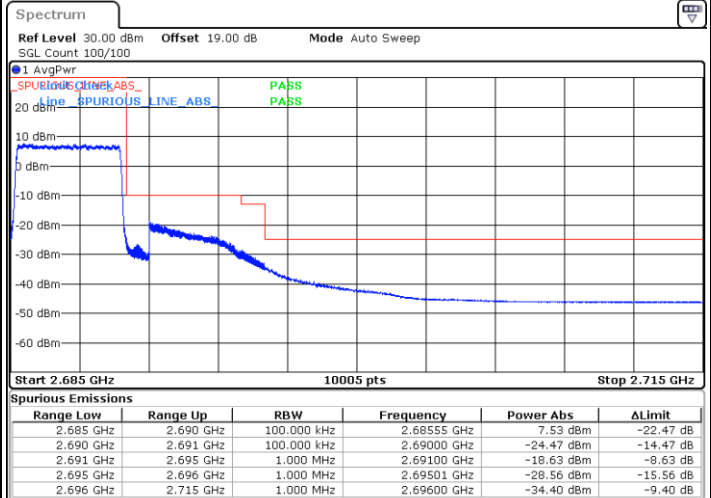
Date: 11.AUG.2023 11:26:45

### Lowest Band Edge / Full RB



Date: 10.AUG.2023 15:50:56

### Highest Band Edge / Full RB



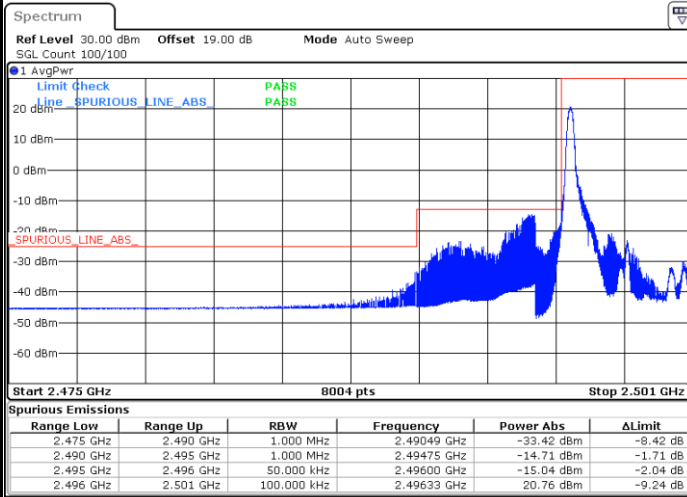
Date: 11.AUG.2023 11:32:27





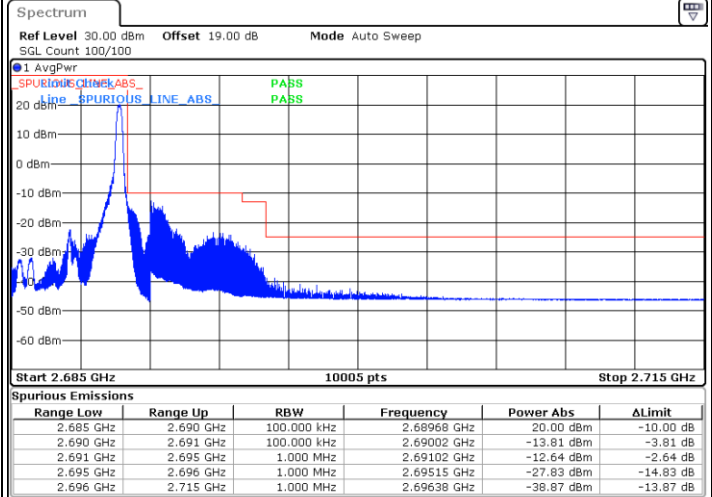
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



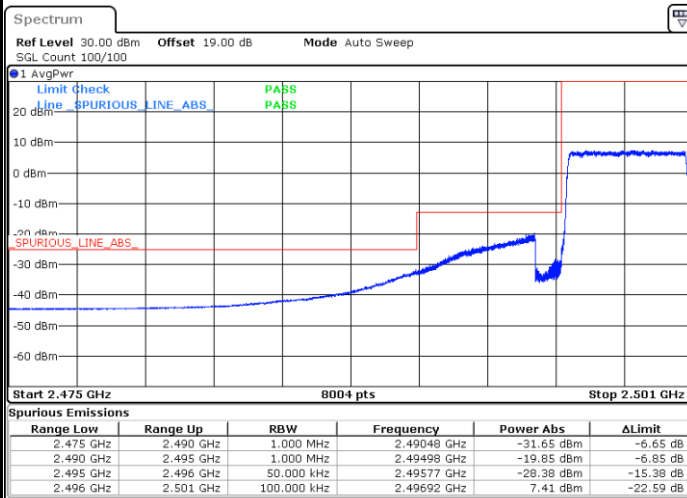
Date: 10.AUG.2023 14:09:50

Highest Band Edge / 1 RB



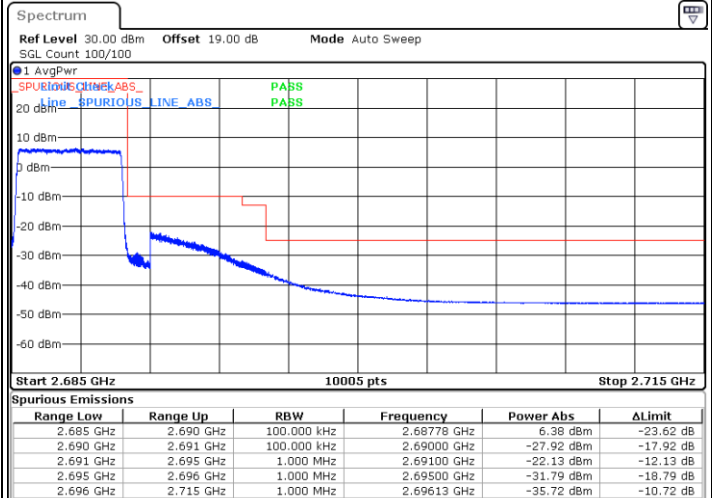
Date: 11.AUG.2023 11:27:54

Lowest Band Edge / Full RB



Date: 10.AUG.2023 15:49:57

Highest Band Edge / Full RB

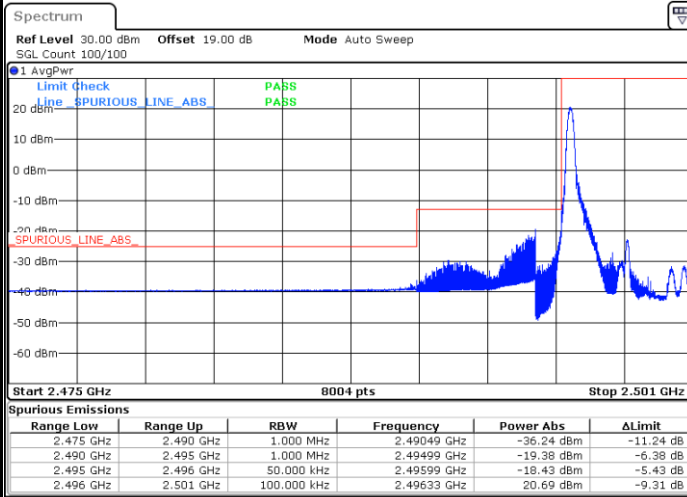


Date: 11.AUG.2023 11:31:19



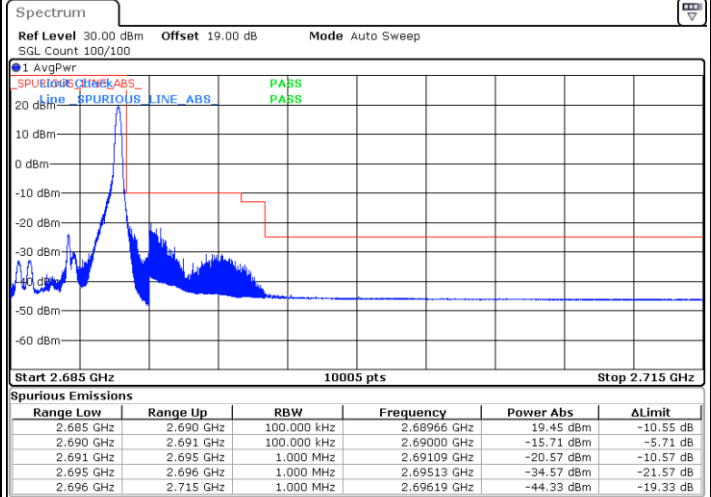
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



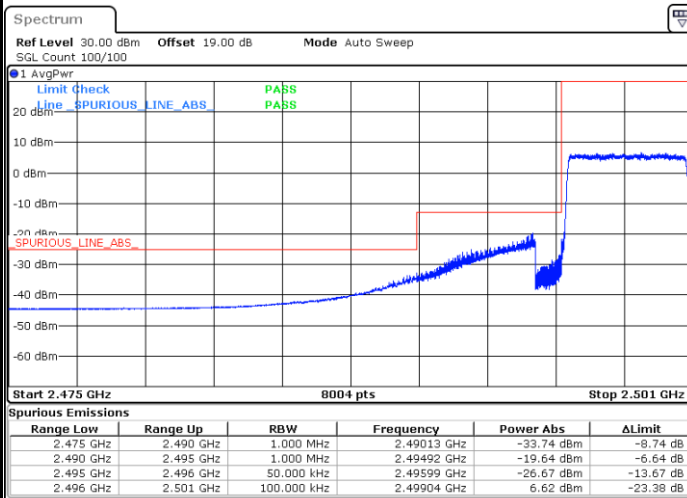
Date: 10.AUG.2023 15:47:58

Highest Band Edge / 1 RB



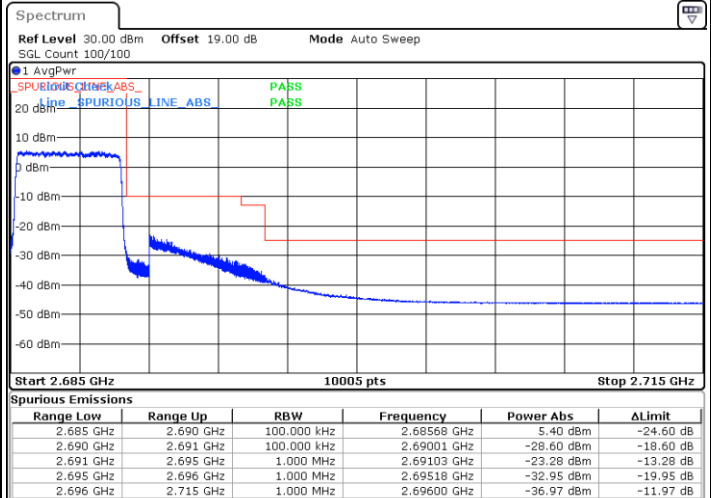
Date: 11.AUG.2023 11:29:02

Lowest Band Edge / Full RB



Date: 10.AUG.2023 15:48:58

Highest Band Edge / Full RB

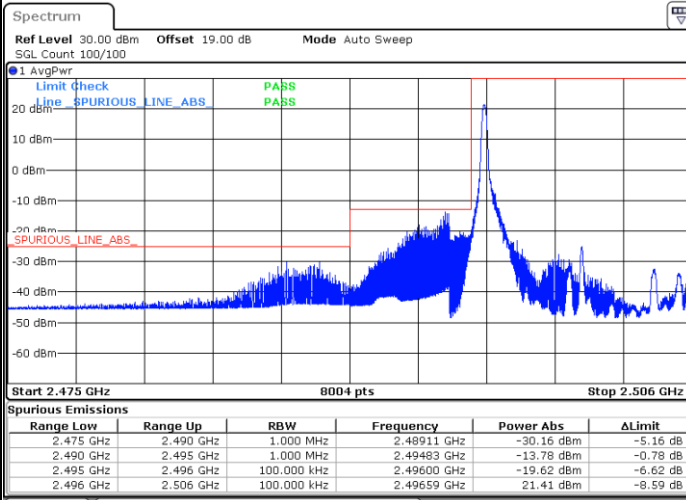


Date: 11.AUG.2023 11:30:10



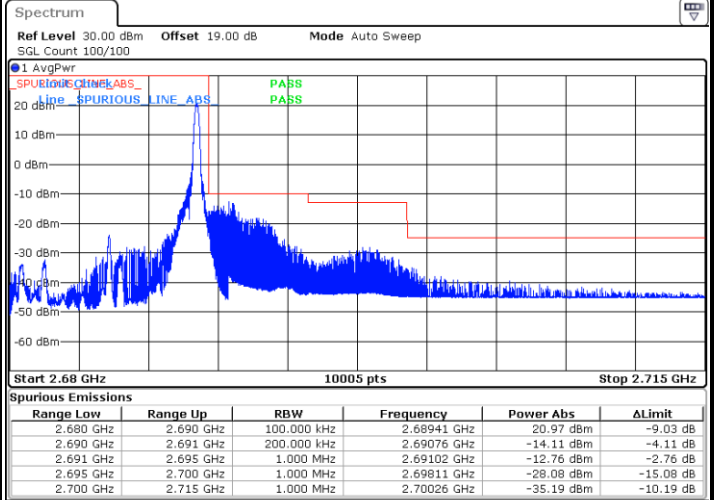
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



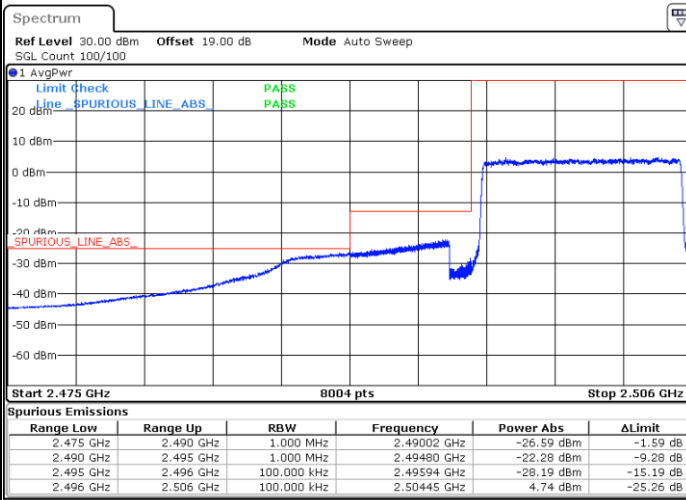
Date: 10 AUG. 2023 14:22:19

Highest Band Edge / 1 RB



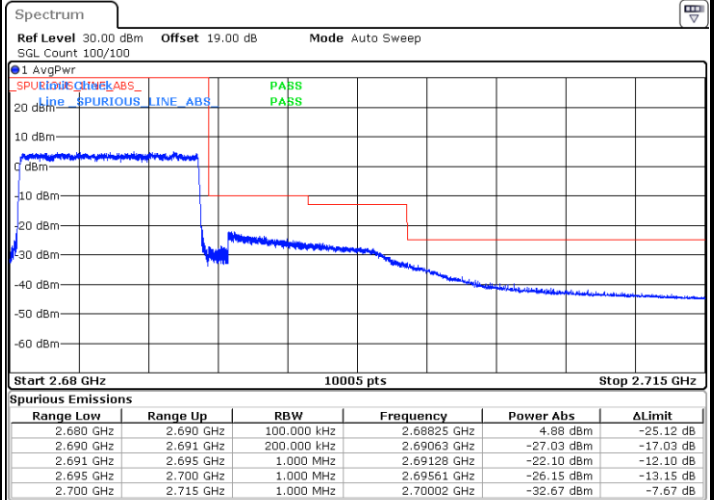
Date: 10 AUG. 2023 14:31:13

Lowest Band Edge / Full RB



Date: 10 AUG. 2023 14:26:43

Highest Band Edge / Full RB

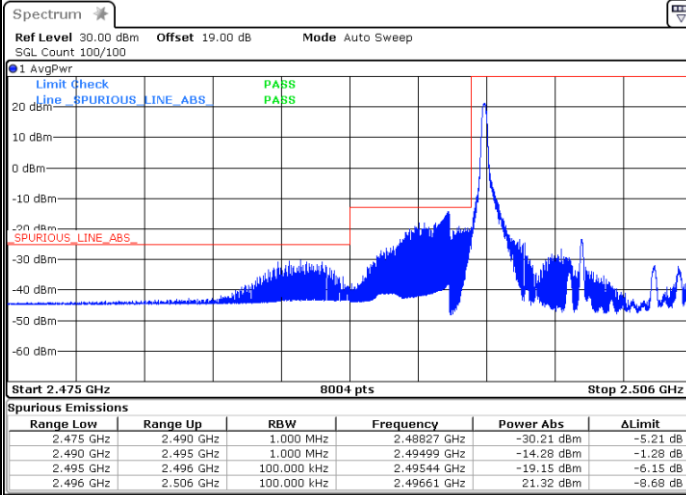


Date: 10 AUG. 2023 14:35:37



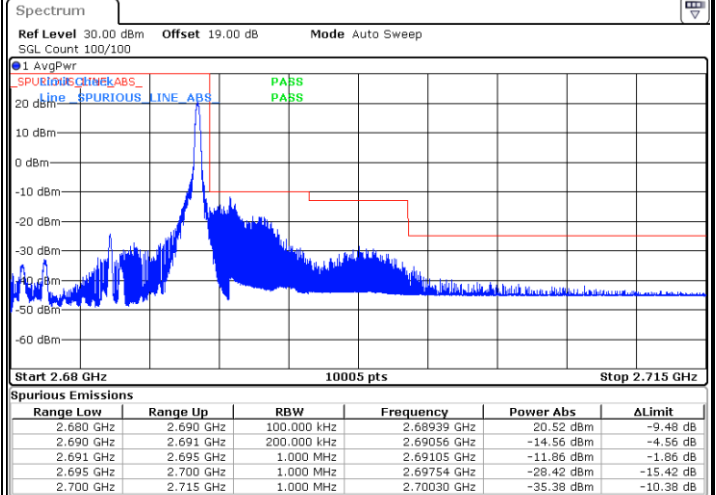
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1RB



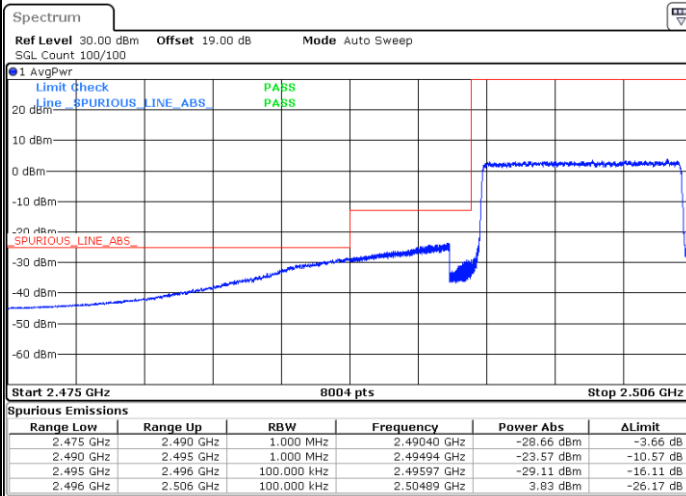
Date: 10.AUG.2023 17:42:01

Highest Band Edge / 1 RB



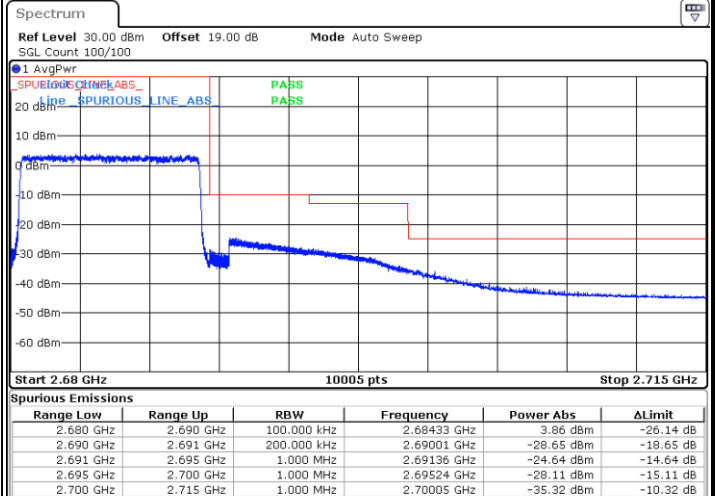
Date: 10.AUG.2023 14:32:06

Lowest Band Edge / Full RB



Date: 10.AUG.2023 14:25:50

Highest Band Edge / Full RB

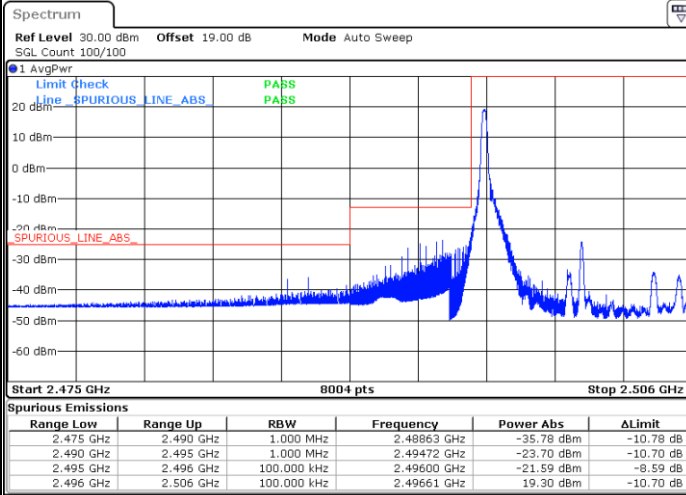


Date: 10.AUG.2023 14:34:44



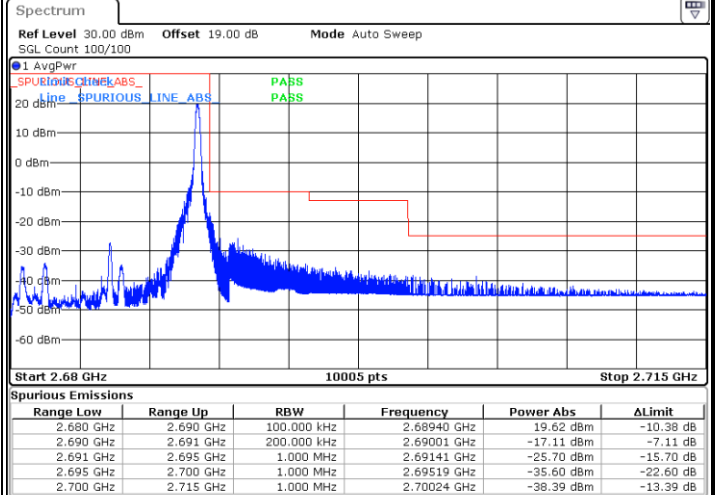
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1RB



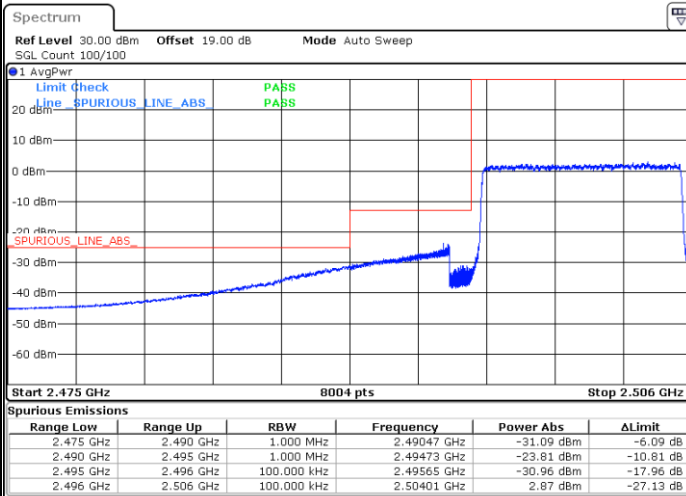
Date: 10 AUG 2023 14:24:04

Highest Band Edge / 1 RB



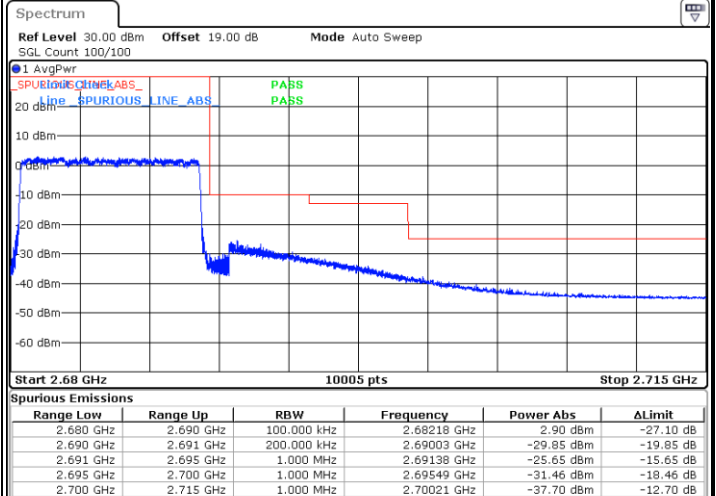
Date: 10 AUG 2023 14:32:59

Lowest Band Edge / Full RB



Date: 10 AUG 2023 14:24:57

Highest Band Edge / Full RB

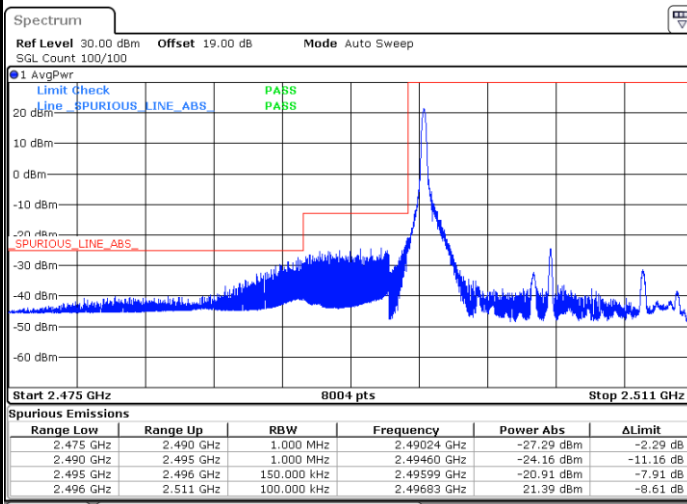


Date: 10 AUG 2023 14:33:51



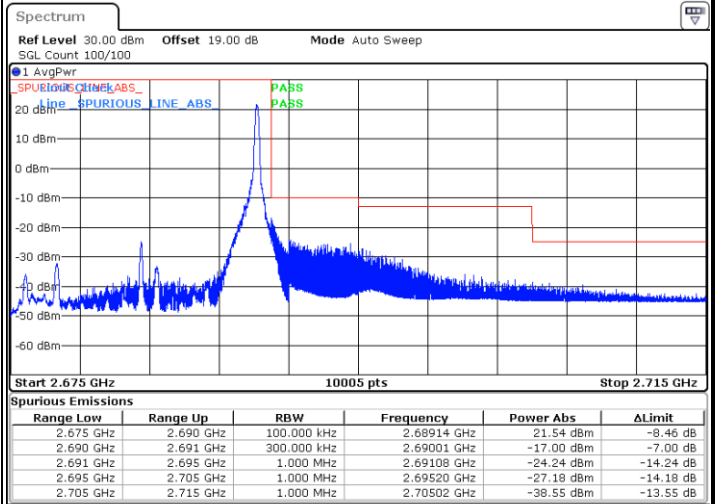
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



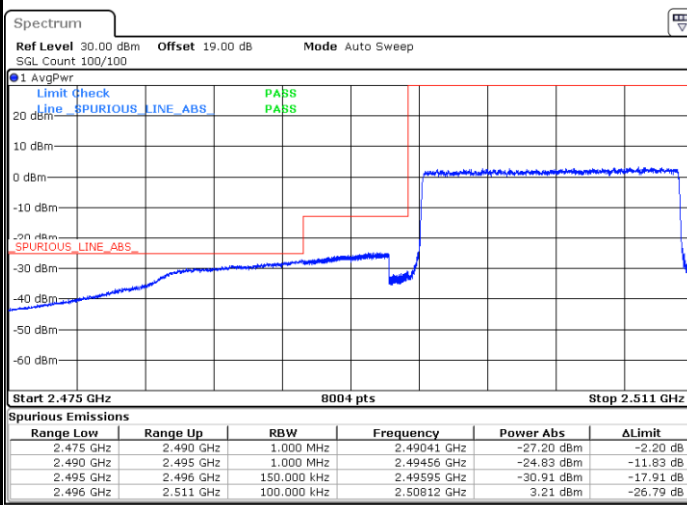
Date: 10 AUG. 2023 14:38:57

Highest Band Edge / 1 RB



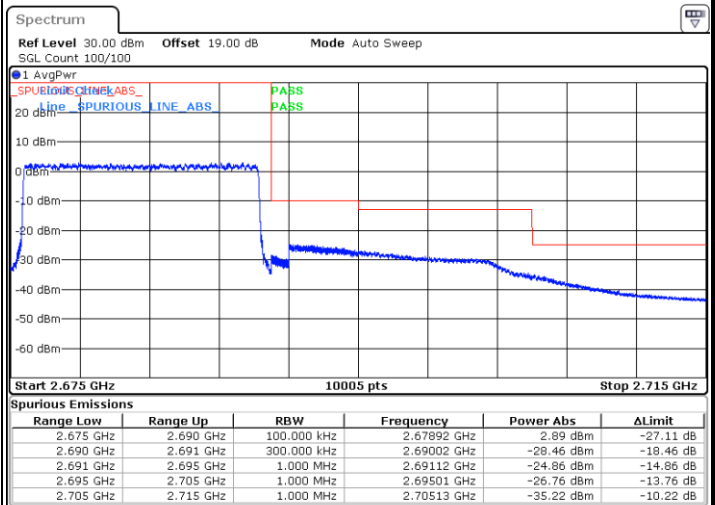
Date: 10 AUG. 2023 14:47:55

Lowest Band Edge / Full RB



Date: 10 AUG. 2023 14:43:21

Highest Band Edge / Full RB

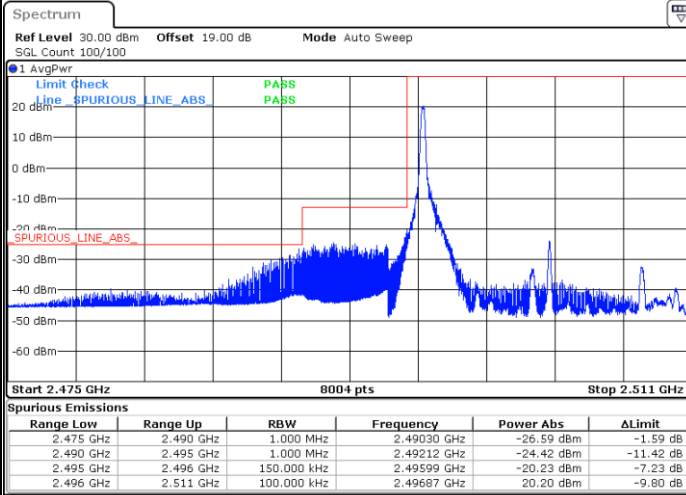


Date: 10 AUG. 2023 14:52:34



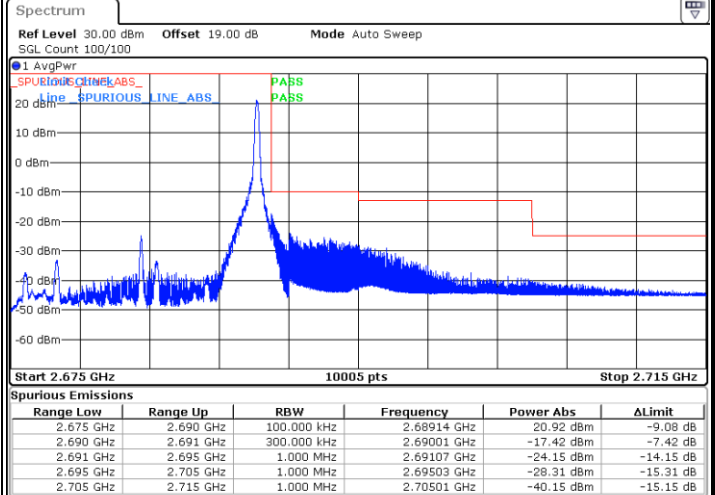
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1RB



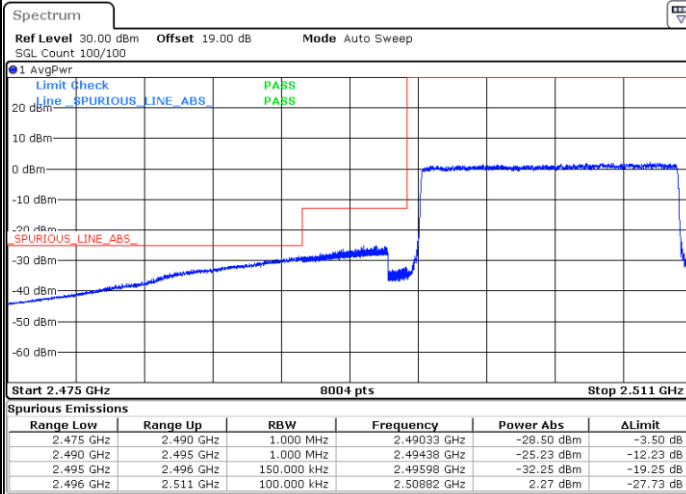
Date: 10 AUG.2023 14:39:49

Highest Band Edge / 1 RB



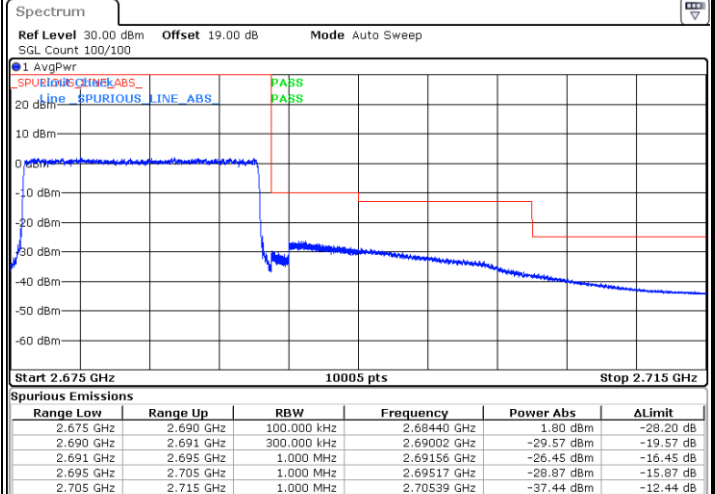
Date: 10 AUG.2023 14:48:51

Lowest Band Edge / Full RB



Date: 10 AUG.2023 14:42:28

Highest Band Edge / Full RB



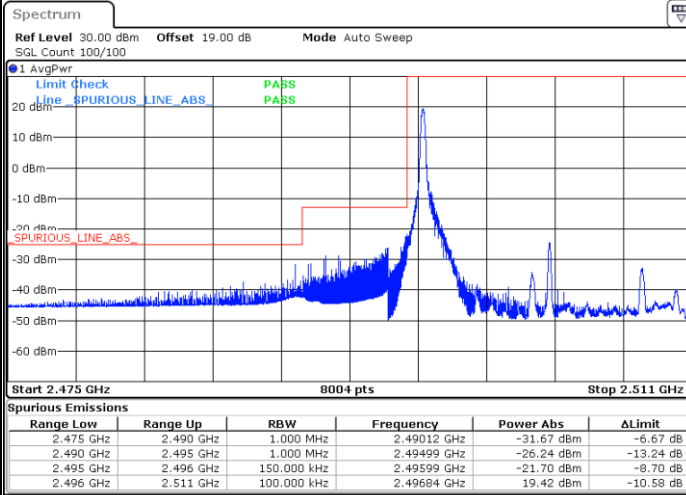
Date: 10 AUG.2023 14:51:38





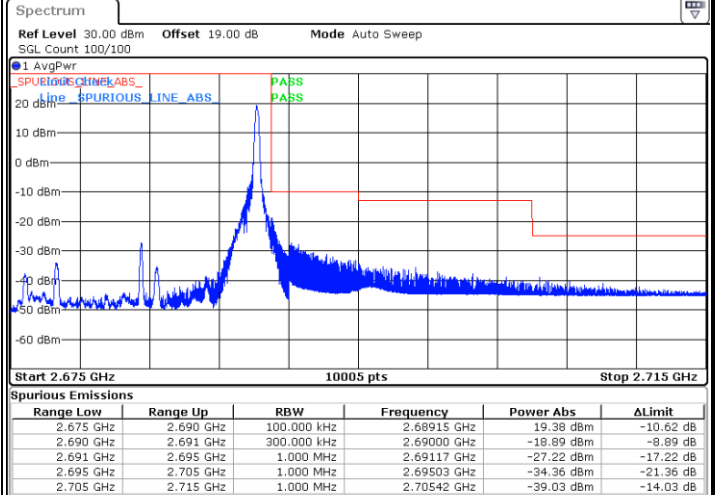
LTE Band 41 / 15MHz / 64QAM

Lowest Band Edge / 1RB



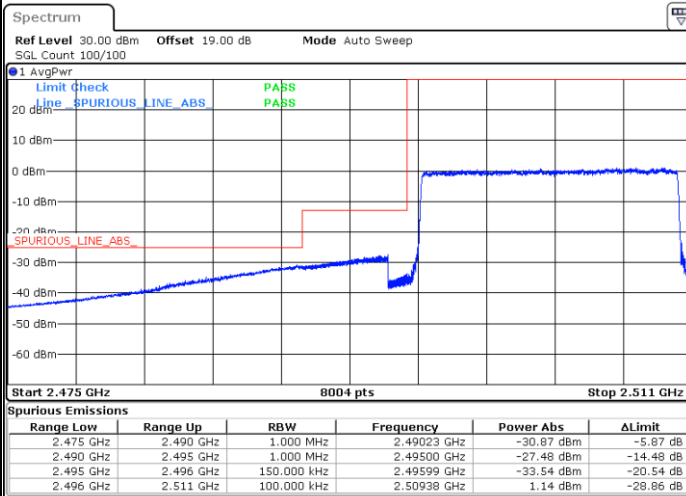
Date: 10 AUG 2023 14:40:42

Highest Band Edge / 1 RB



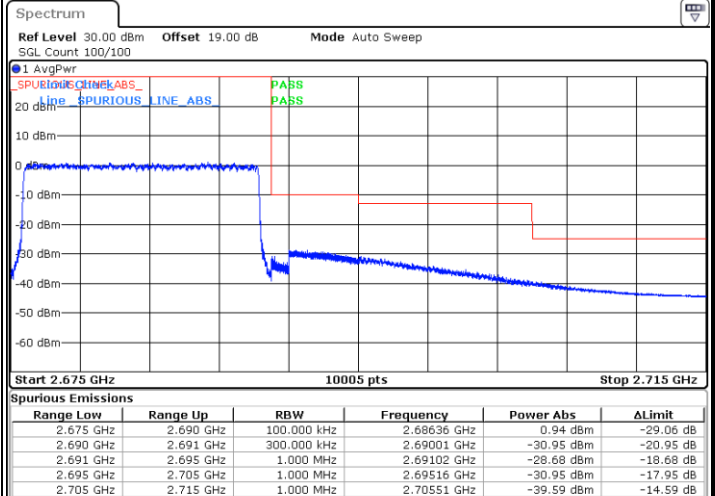
Date: 10 AUG 2023 14:48:47

Lowest Band Edge / Full RB



Date: 10 AUG 2023 14:41:35

Highest Band Edge / Full RB



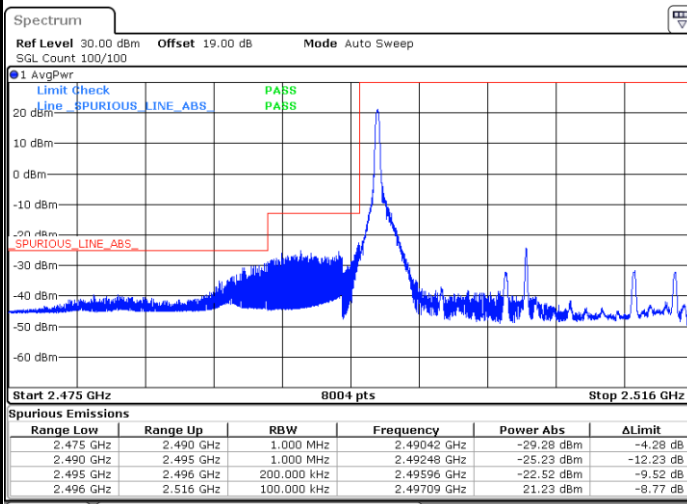
Date: 10 AUG 2023 14:50:43





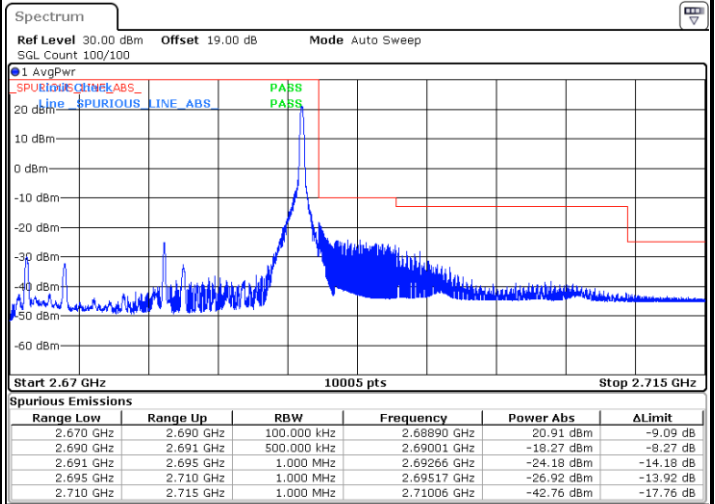
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



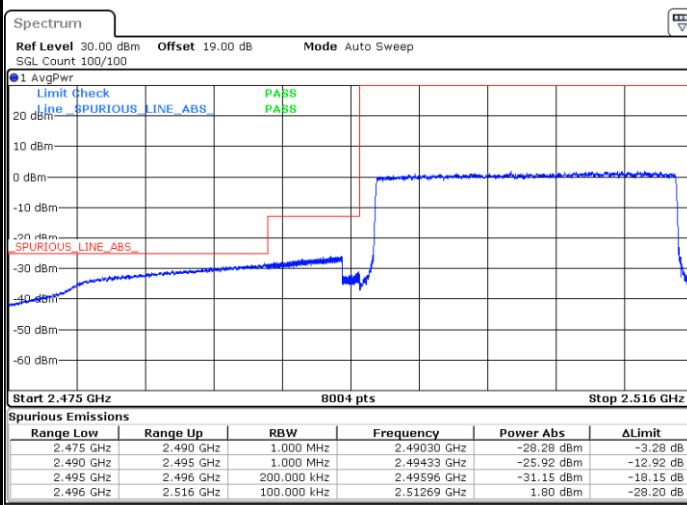
Date: 10 AUG. 2023 14:55:52

Highest Band Edge / 1 RB



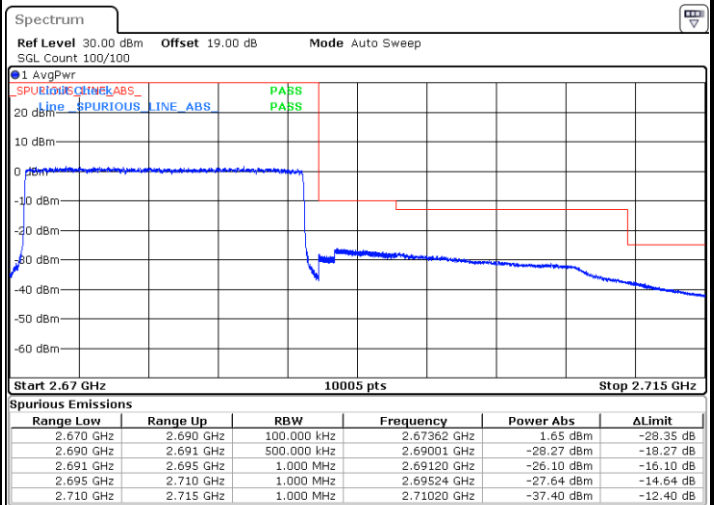
Date: 10 AUG. 2023 15:06:17

Lowest Band Edge / Full RB



Date: 10 AUG. 2023 15:00:16

Highest Band Edge / Full RB

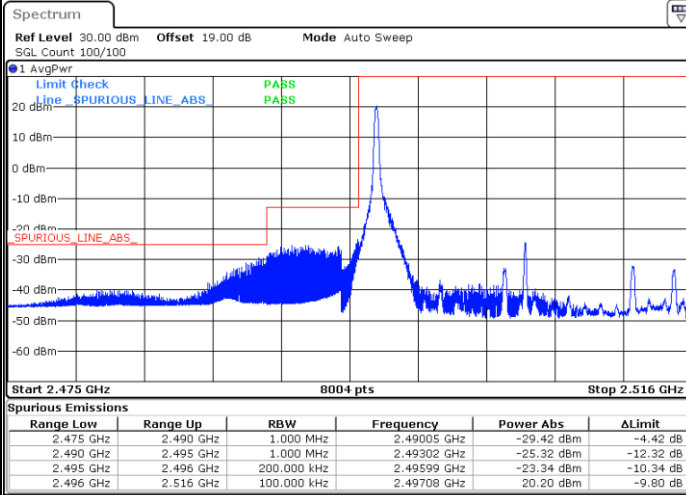


Date: 10 AUG. 2023 15:10:57



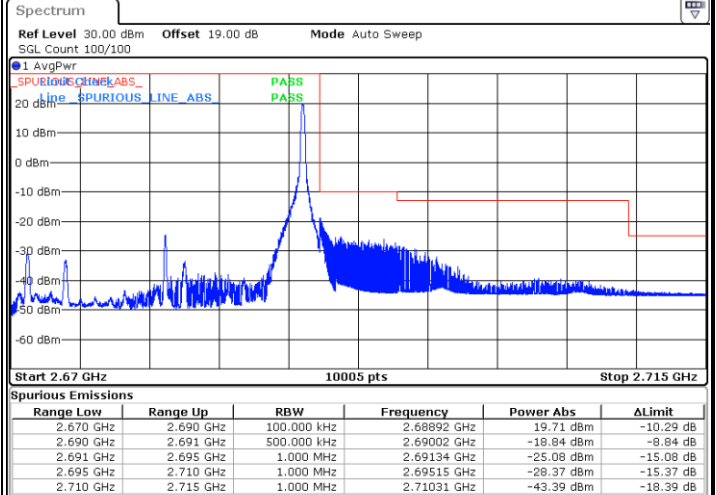
LTE Band 41 / 20MHz / 16QAM

Lowest Band Edge / 1RB



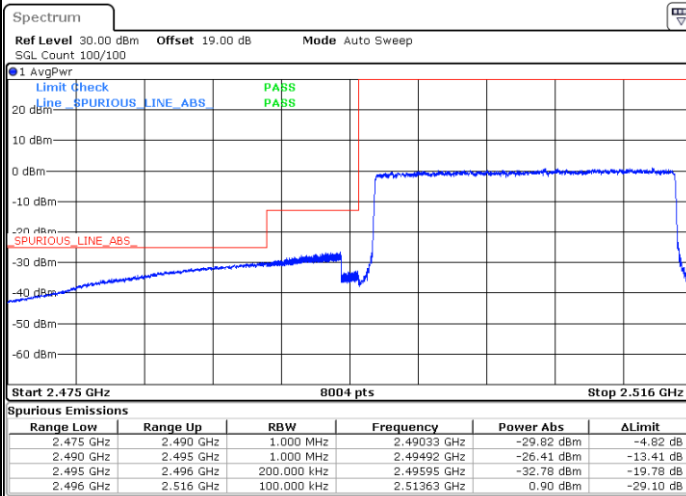
Date: 10 AUG.2023 14:56:45

Highest Band Edge / 1 RB



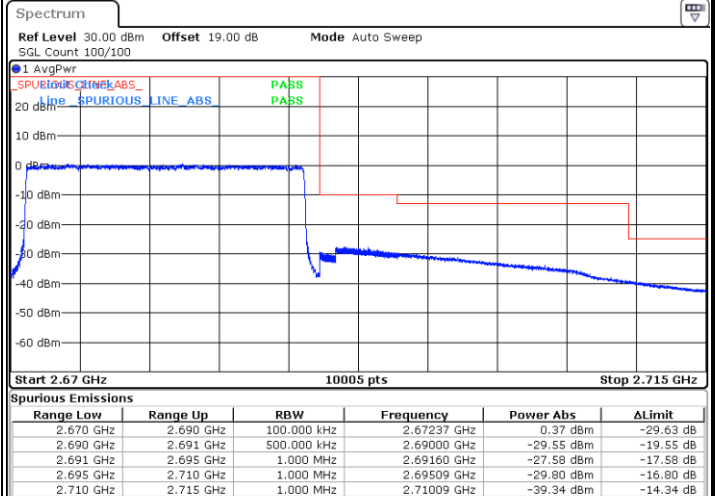
Date: 10 AUG.2023 15:07:13

Lowest Band Edge / Full RB



Date: 10 AUG.2023 14:59:24

Highest Band Edge / Full RB

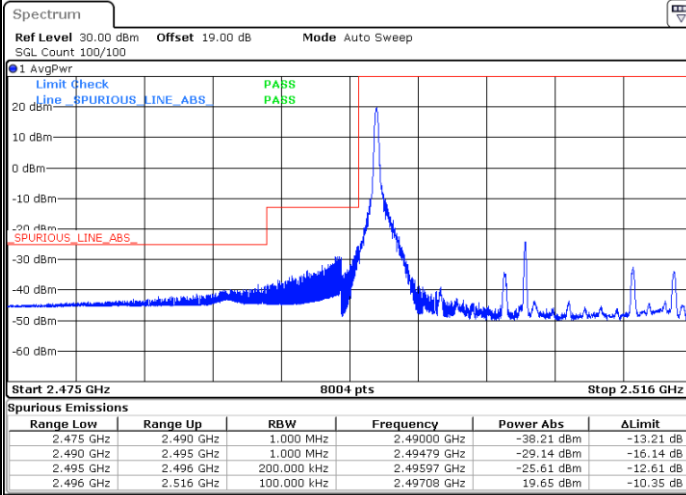


Date: 10 AUG.2023 15:10:00



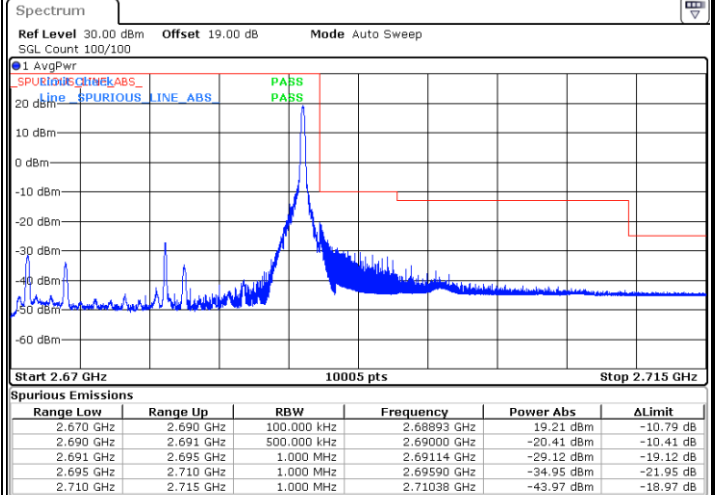
LTE Band 41 / 20MHz / 64QAM

Lowest Band Edge / 1RB



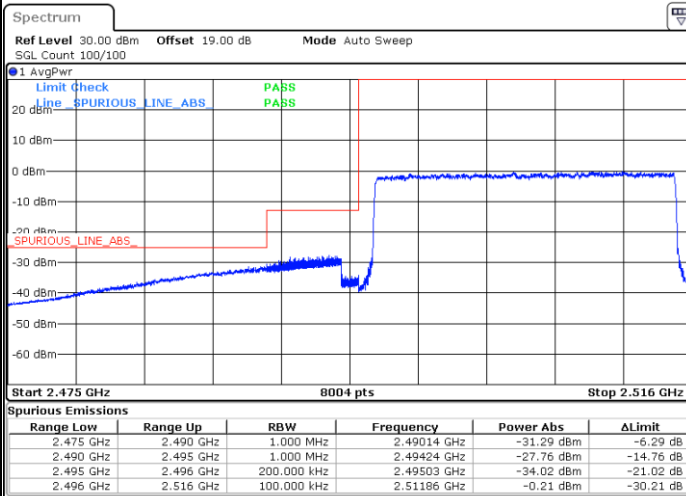
Date: 10 AUG.2023 14:57:38

Highest Band Edge / 1 RB



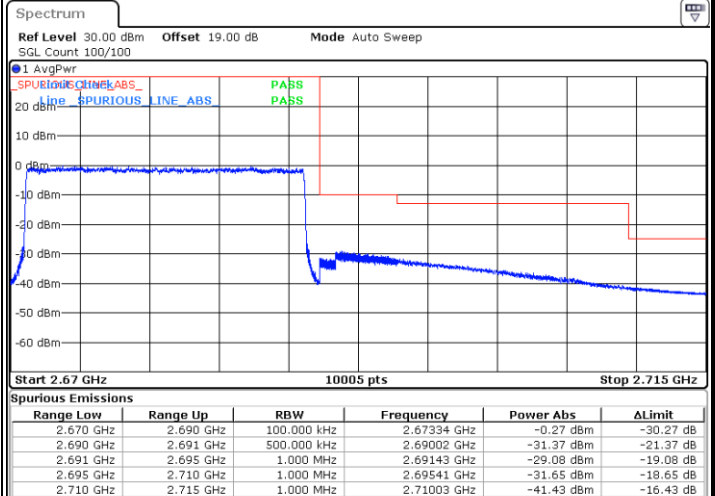
Date: 10 AUG.2023 15:08:09

Lowest Band Edge / Full RB



Date: 10 AUG.2023 14:58:31

Highest Band Edge / Full RB



Date: 10 AUG.2023 15:09:05

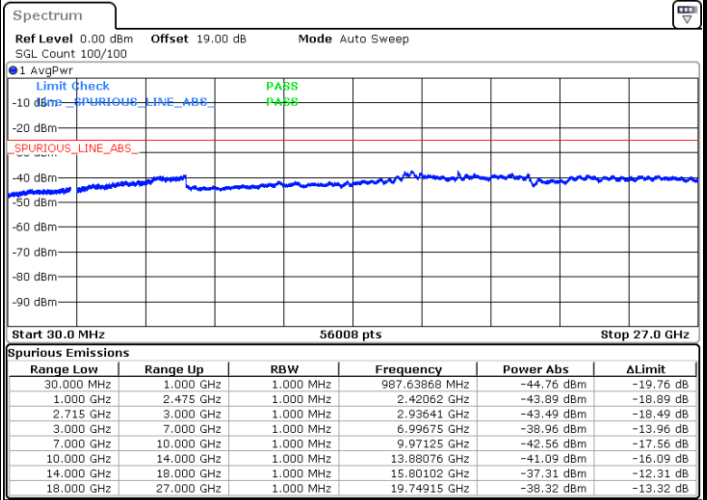
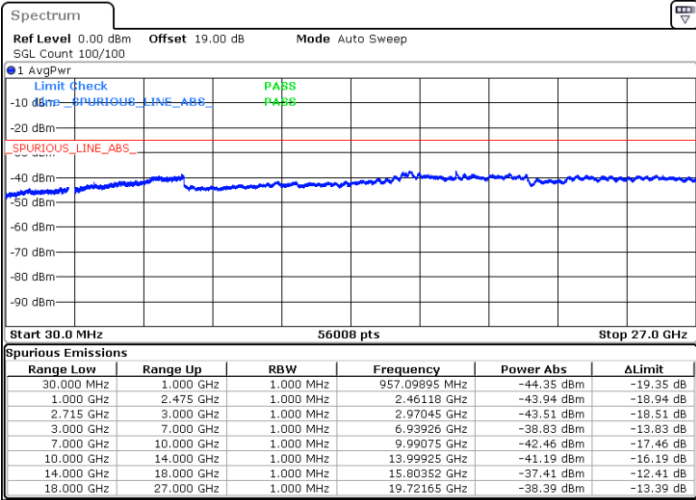


# Conducted Spurious Emission

## LTE Band 41 / 5MHz

### Lowest Channel / QPSK

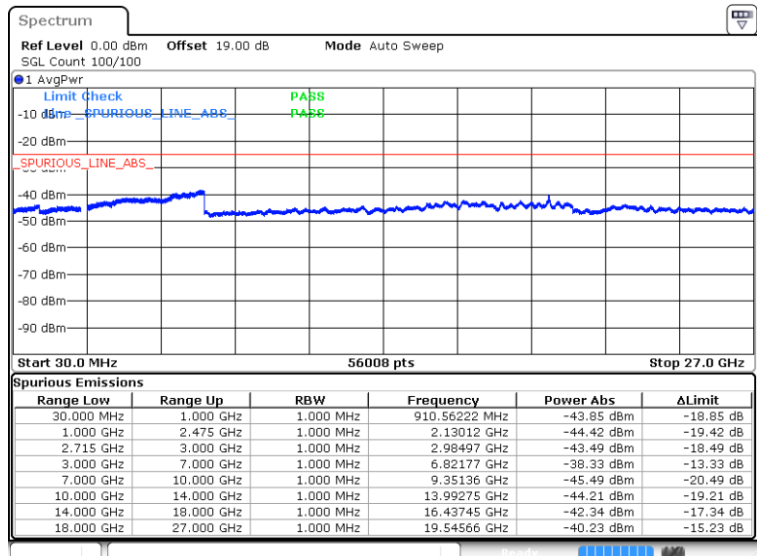
### Middle Channel / QPSK



Date: 10.AUG.2023 15:52:09

Date: 10.AUG.2023 15:53:22

### Highest Channel / QPSK



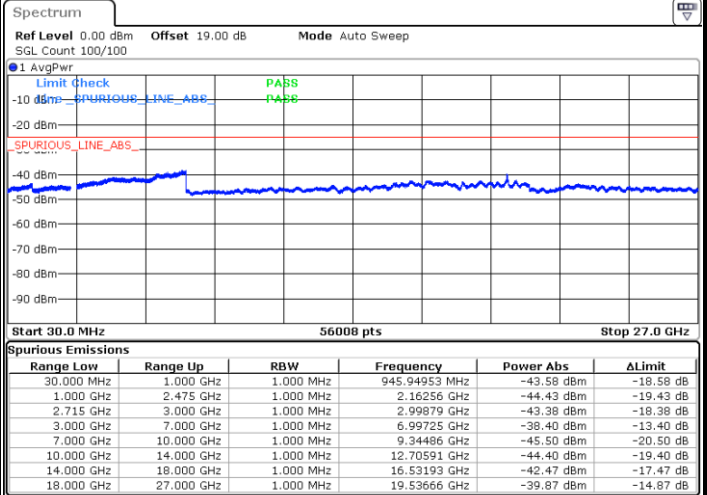
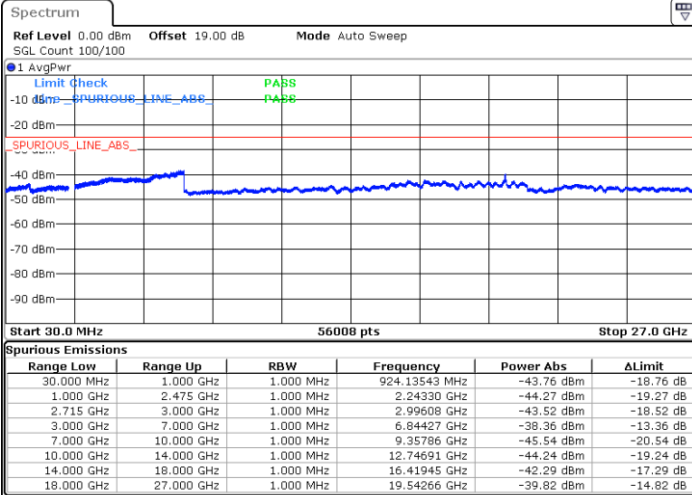
Date: 10.AUG.2023 14:19:29



LTE Band 41 / 10MHz

Lowest Channel / QPSK

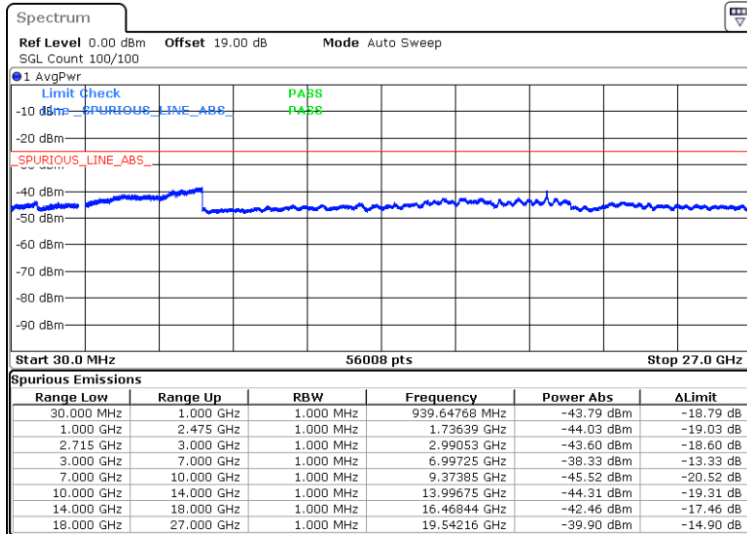
Middle Channel / QPSK



Date: 10 AUG 2023 14:27:50

Date: 10 AUG 2023 14:28:57

Highest Channel / QPSK



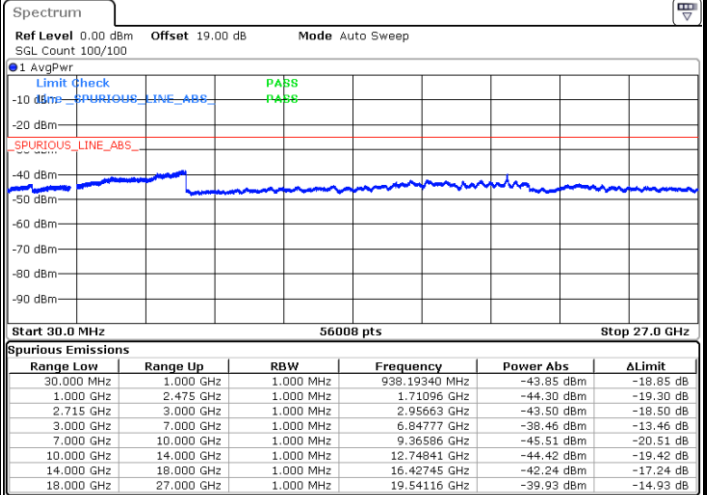
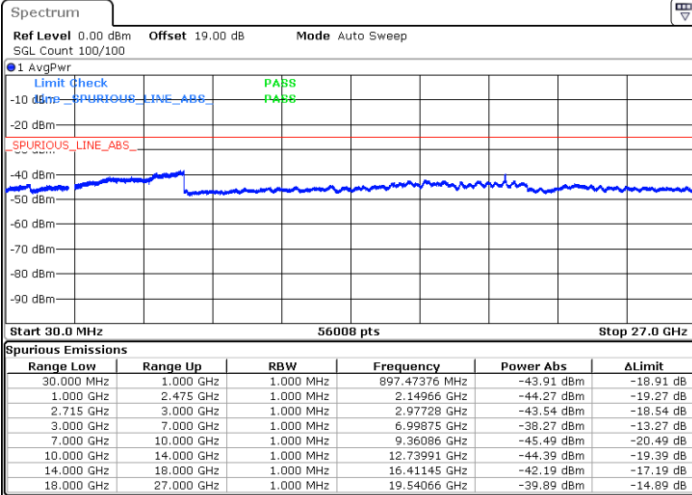
Date: 10 AUG 2023 14:36:44



LTE Band 41 / 15MHz

Lowest Channel / QPSK

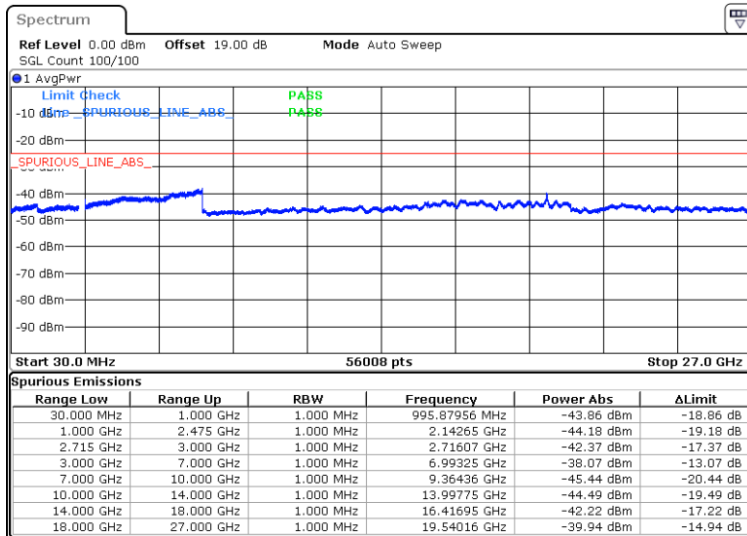
Middle Channel / QPSK



Date: 10 AUG 2023 14:44:29

Date: 10 AUG 2023 14:45:36

Highest Channel / QPSK



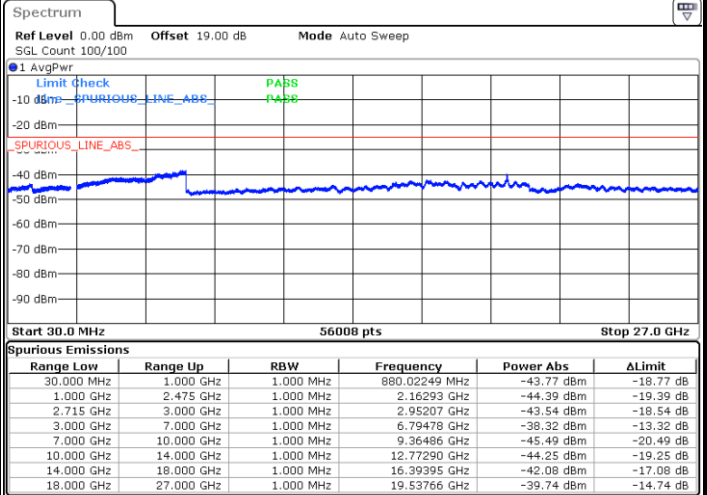
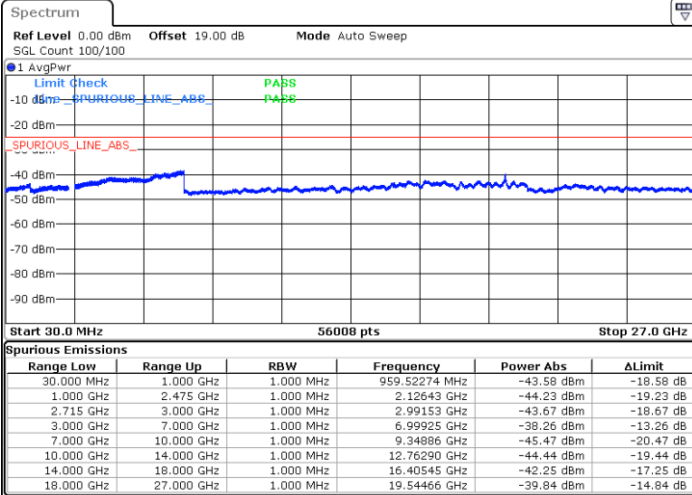
Date: 10 AUG 2023 14:53:41



LTE Band 41 / 20MHz

Lowest Channel / QPSK

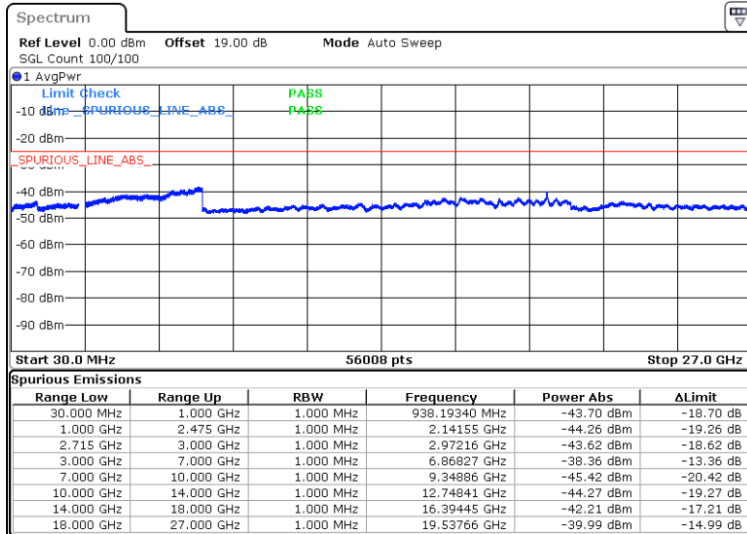
Middle Channel / QPSK



Date: 10 AUG 2023 15:01:24

Date: 10 AUG 2023 15:02:31

Highest Channel / QPSK



Date: 10 AUG 2023 15:12:04



### Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0085	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0085	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0089	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0080	

**Note:**

1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.





## LTE Band CA\_7C

### 26dB Bandwidth

Mode	LTE Band 7C : 26dB BW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	29.97	25.18	30.63	34.76
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	-
Middle CH	30.03	34.90	39.72	-

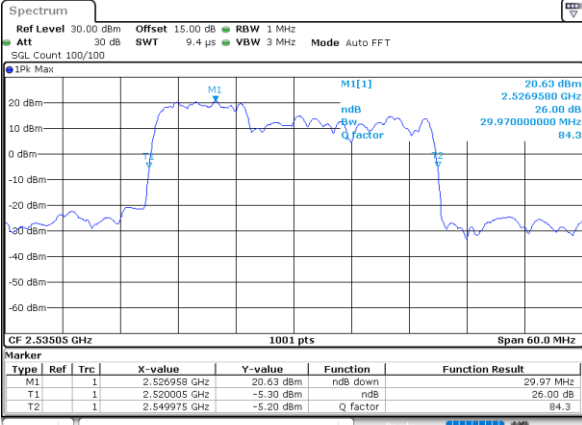
Mode	LTE Band 7C : 26dB BW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	29.73	25.13	30.45	34.69
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	-
Middle CH	29.91	34.83	39.72	-



LTE Band 7C

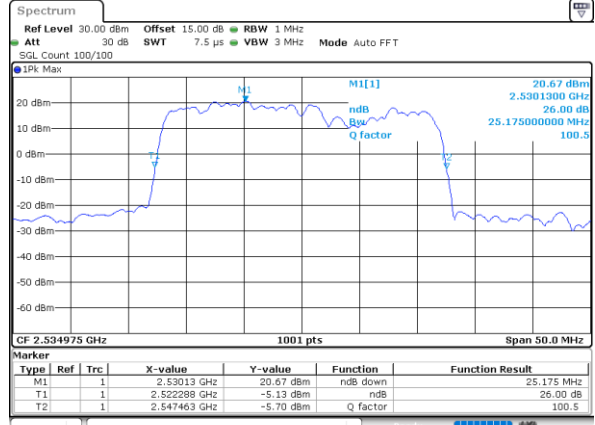
QPSK

Middle Channel / 10MHz+20MHz



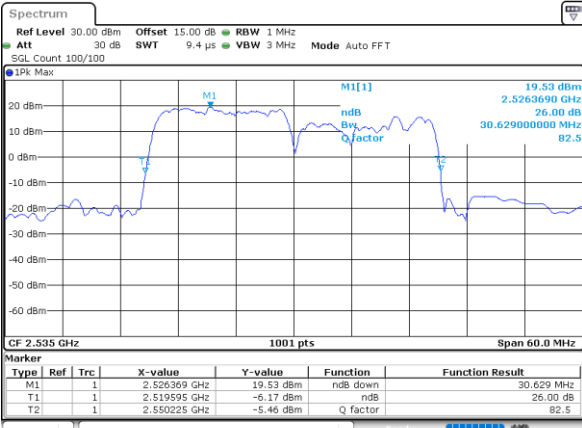
Date: 10\_AUG.2023 10:59:09

Middle Channel / 15MHz+10MHz



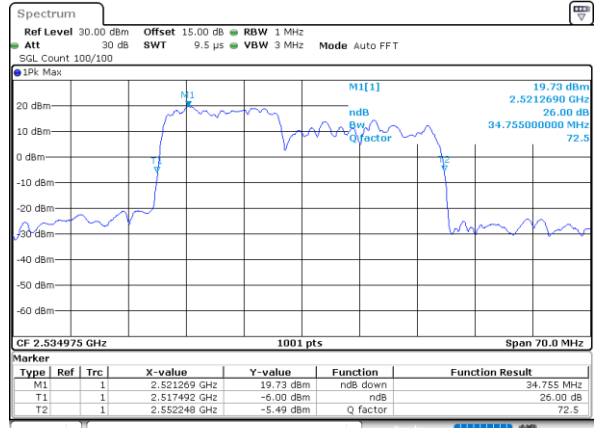
Date: 10\_AUG.2023 15:11:28

Middle Channel / 15MHz+15MHz



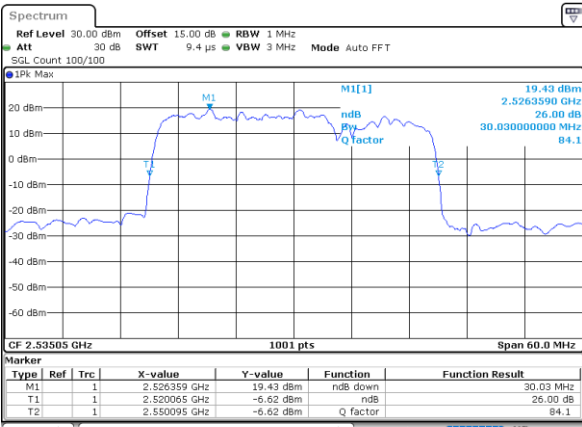
Date: 10\_AUG.2023 11:56:47

Middle Channel / 15MHz+20MHz



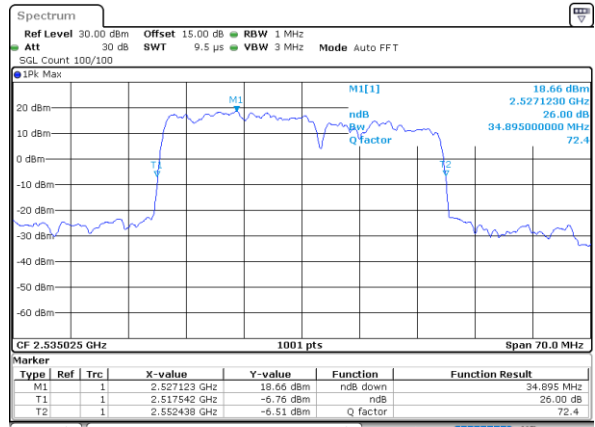
Date: 10\_AUG.2023 12:28:21

Middle Channel / 20MHz+10MHz



Date: 10\_AUG.2023 11:28:33

Middle Channel / 20MHz+15MHz



Date: 10\_AUG.2023 13:01:53

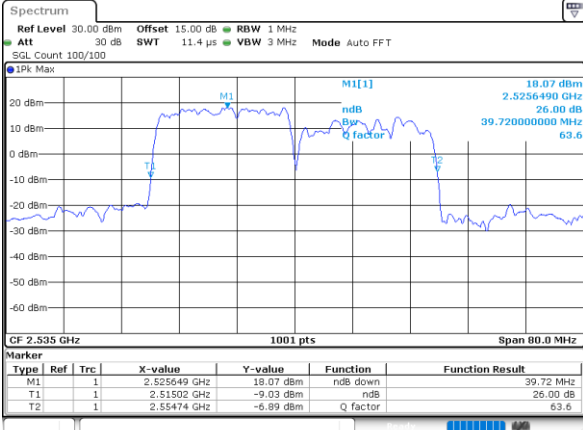


LTE Band 7C

QPSK

Middle Channel / 20MHz+20MHz

N/A



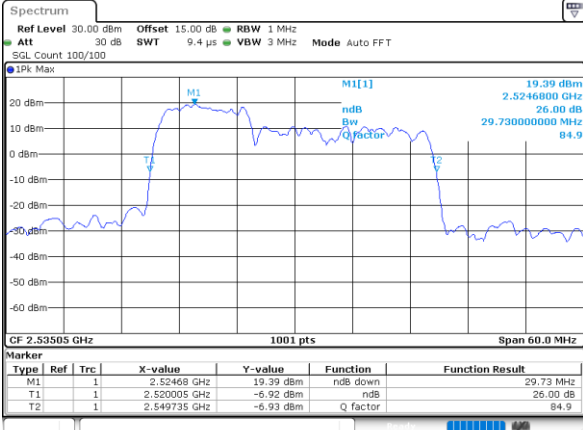
Date: 10\_AUG\_2023 13:32:25



LTE Band 7C

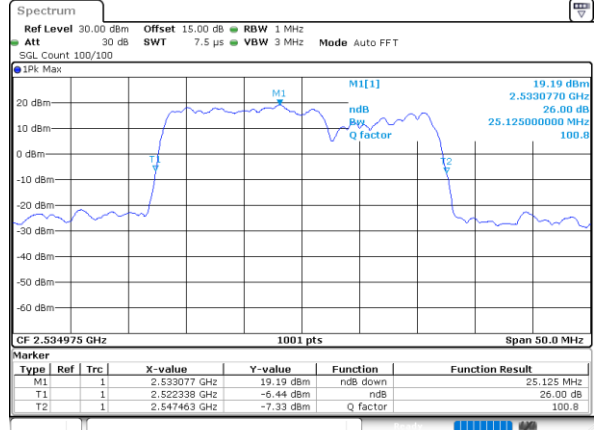
16QAM

Middle Channel / 10MHz+20MHz



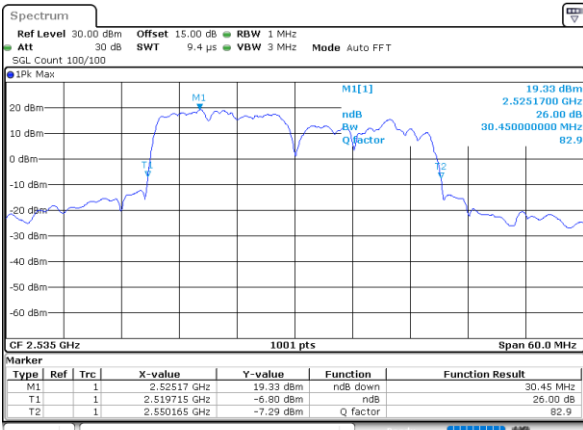
Date: 10\_AUG.2023 10:59:46

Middle Channel / 15MHz+10MHz



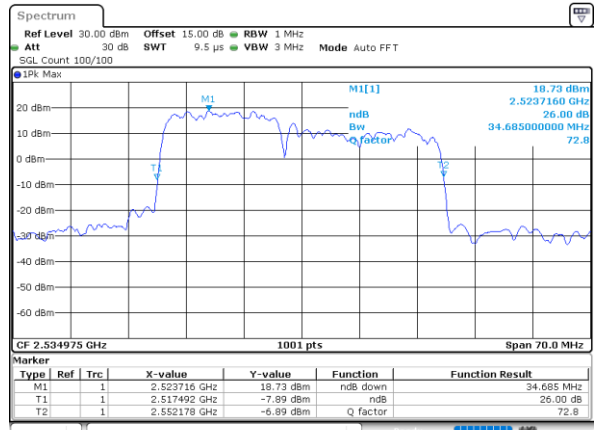
Date: 10\_AUG.2023 15:12:05

Middle Channel / 15MHz+15MHz



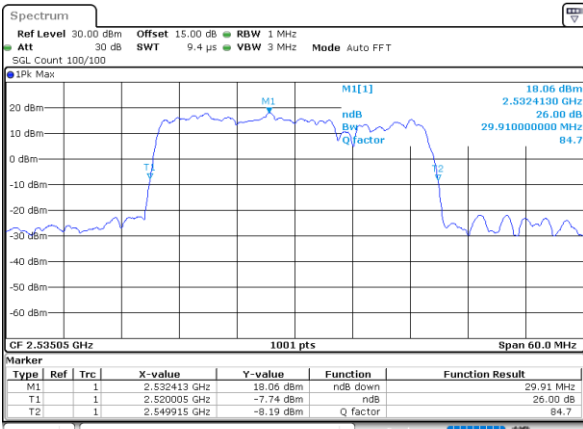
Date: 10\_AUG.2023 11:57:22

Middle Channel / 15MHz+20MHz



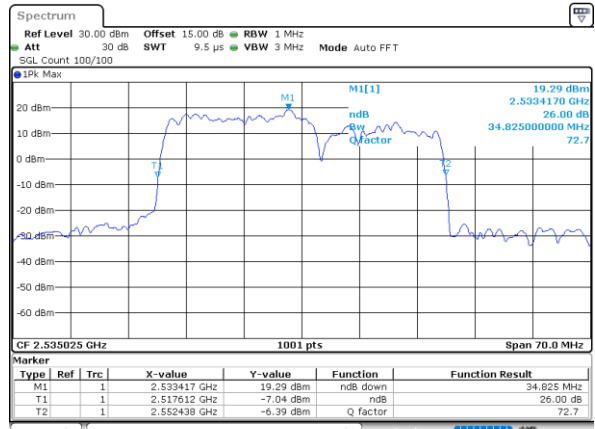
Date: 10\_AUG.2023 12:28:58

Middle Channel / 20MHz+10MHz



Date: 10\_AUG.2023 11:29:10

Middle Channel / 20MHz+15MHz



Date: 10\_AUG.2023 13:02:30

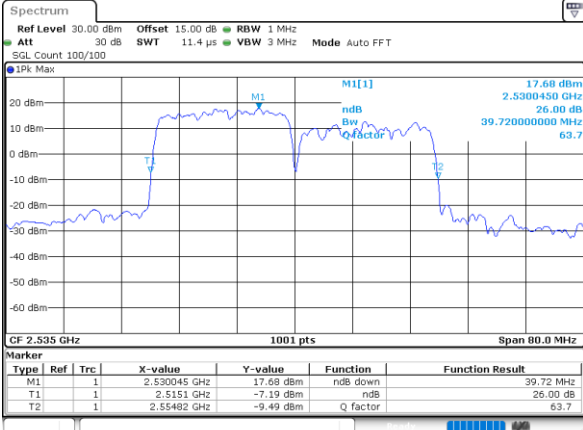


LTE Band 7C

16QAM

Middle Channel / 20MHz+20MHz

N/A



Date: 10\_AUG\_2023 13:33:00



### Occupied Bandwidth

Mode	LTE Band 7C : 99%OBW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	28.05	23.38	28.41	32.87
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	-
Middle CH	28.29	32.94	37.32	-

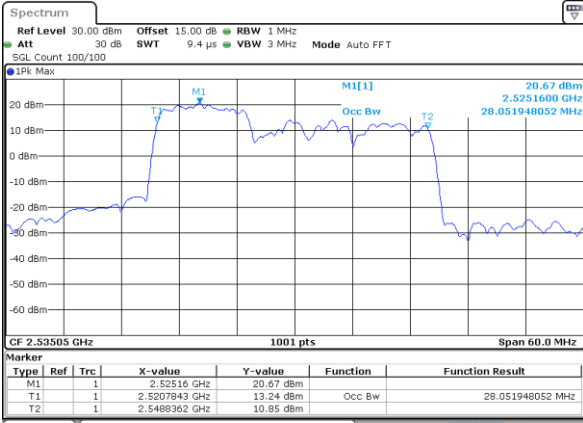
Mode	LTE Band 7C : 99%OBW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	28.23	23.33	28.35	32.59
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	-
Middle CH	27.81	32.45	37.64	-



LTE Band 7C

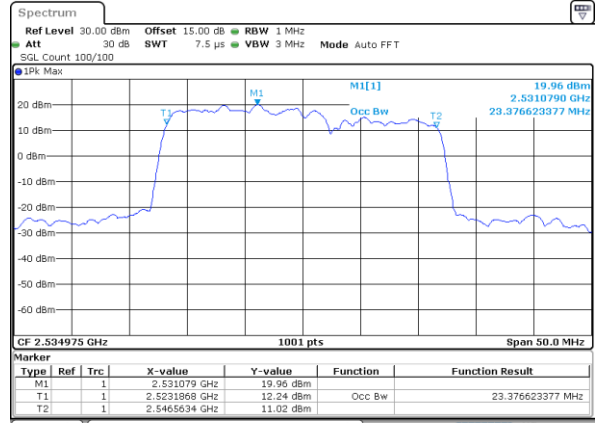
QPSK

Middle Channel / 10MHz+20MHz



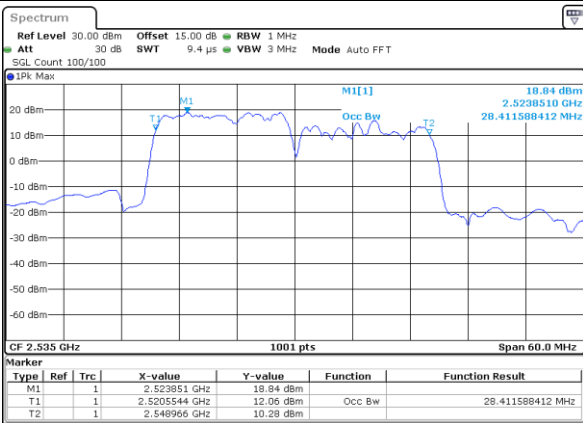
Date: 10\_AUG.2023 10:58:32

Middle Channel / 15MHz+10MHz



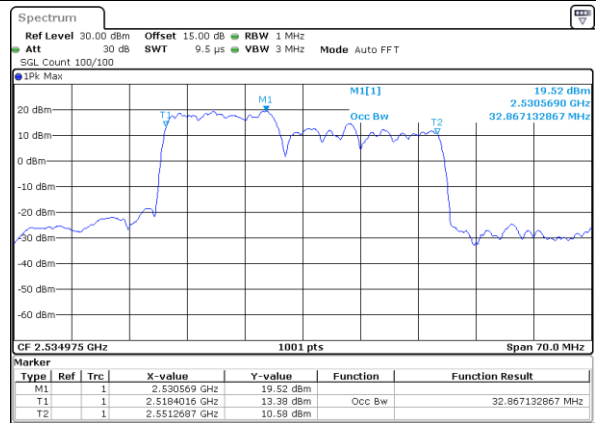
Date: 10\_AUG.2023 15:10:51

Middle Channel / 15MHz+15MHz



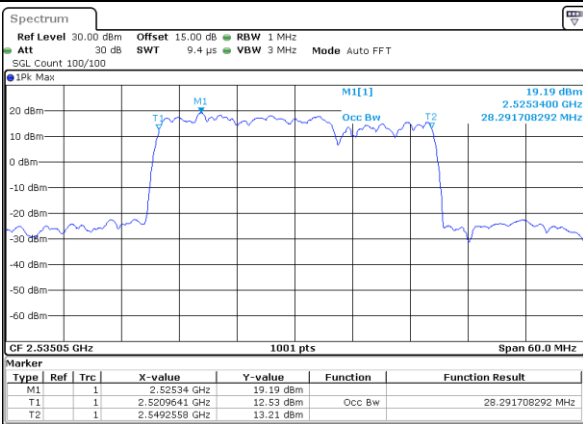
Date: 10\_AUG.2023 11:56:12

Middle Channel / 15MHz+20MHz



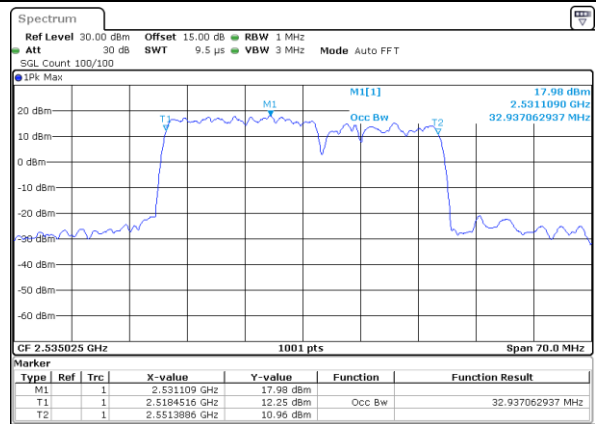
Date: 10\_AUG.2023 12:24:40

Middle Channel / 20MHz+10MHz



Date: 10\_AUG.2023 11:27:55

Middle Channel / 20MHz+15MHz



Date: 10\_AUG.2023 13:01:16

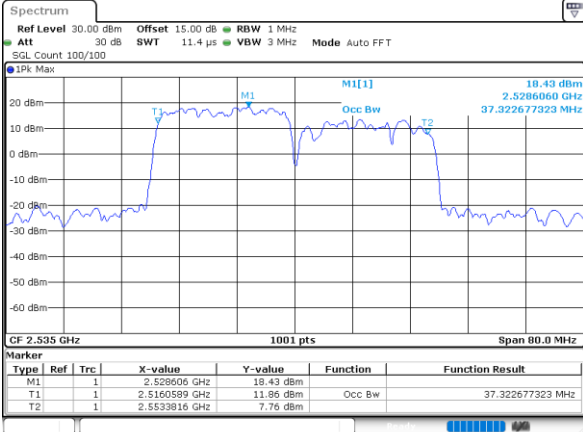


LTE Band 7C

QPSK

Middle Channel / 20MHz+20MHz

N/A



Date: 10\_AUG.2023 13:31:50