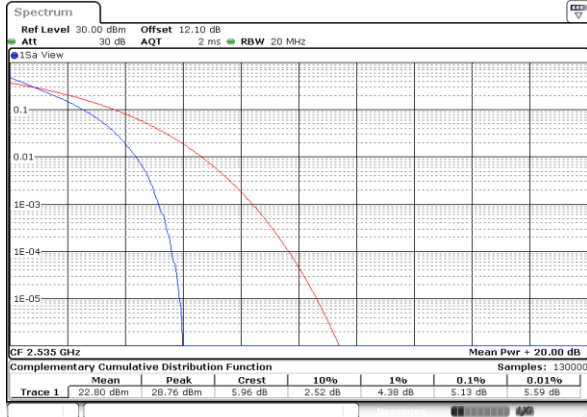




LTE Band 7 / 20MHz / QPSK

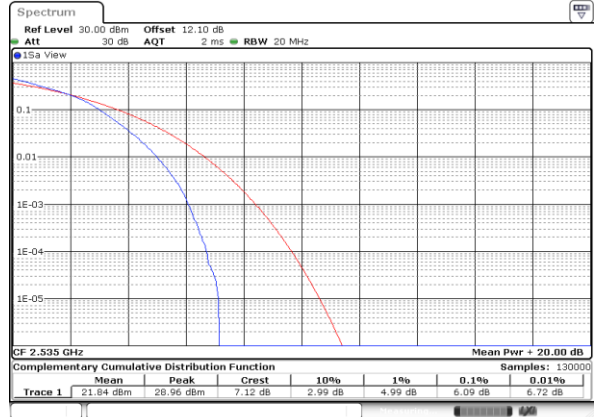
Middle Channel / Full RB



Date: 26.DEC.2023 17:32:25

LTE Band 7 / 20MHz / 16QAM

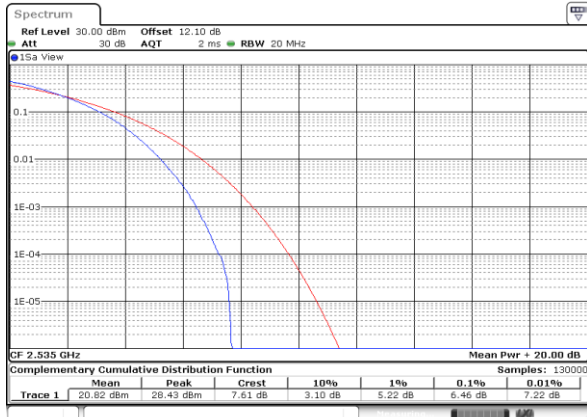
Middle Channel / Full RB



Date: 26.DEC.2023 17:32:01

LTE Band 7 / 20MHz / 64QAM

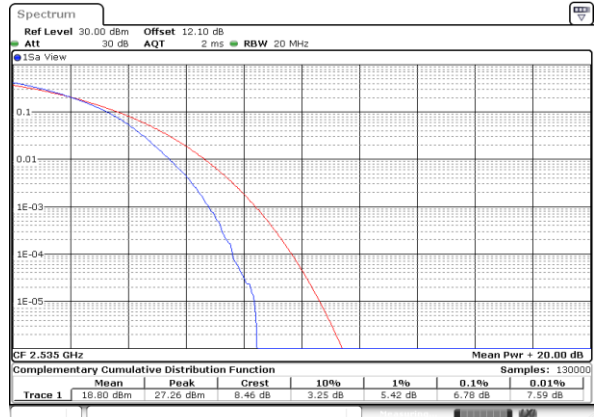
Middle Channel / Full RB



Date: 26.DEC.2023 17:32:49

LTE Band 7 / 20MHz / 256QAM

Middle Channel / Full RB



Date: 27.DEC.2023 10:45:32



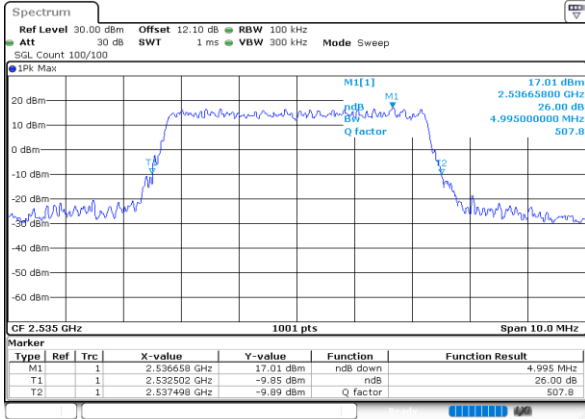
**26dB Bandwidth**

Mode	LTE Band 7 : 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	-	-	-	-	4.99	5.01	9.91	9.78	14.47	14.50	18.98	19.10
Mode	LTE Band 7 : 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	-	-	-	-	5.01	4.98	9.86	9.86	14.29	14.59	18.86	18.98



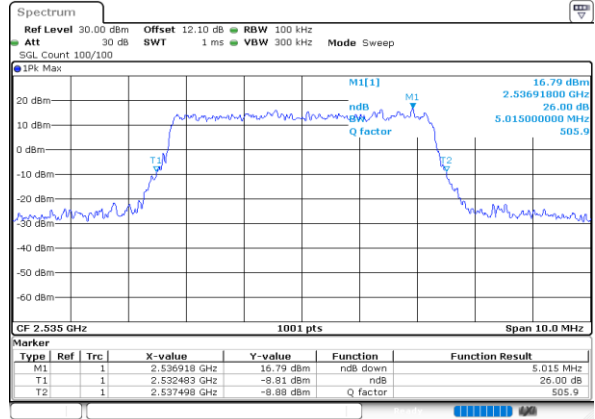
LTE Band 7

Middle Channel / 5MHz / QPSK



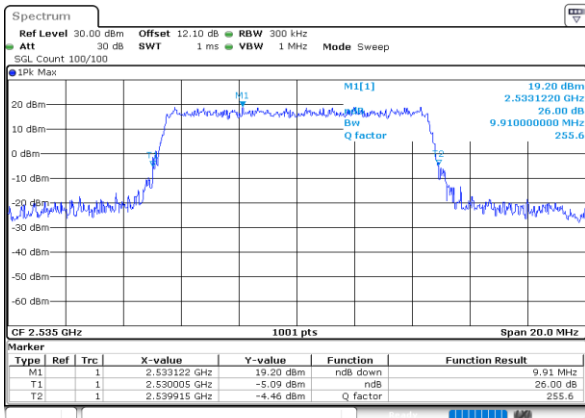
Date: 26.DEC.2023 16:59:07

Middle Channel / 5MHz / 16QAM



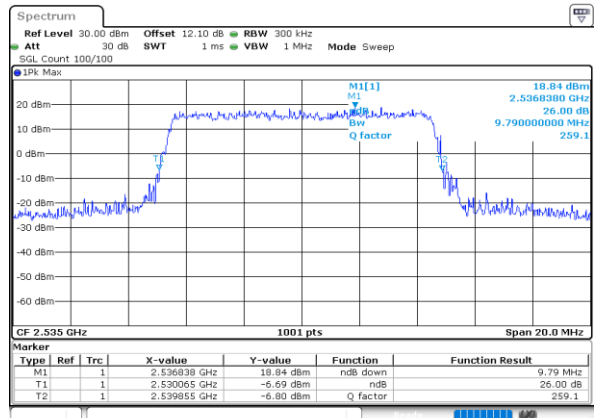
Date: 26.DEC.2023 16:59:29

Middle Channel / 10MHz / QPSK



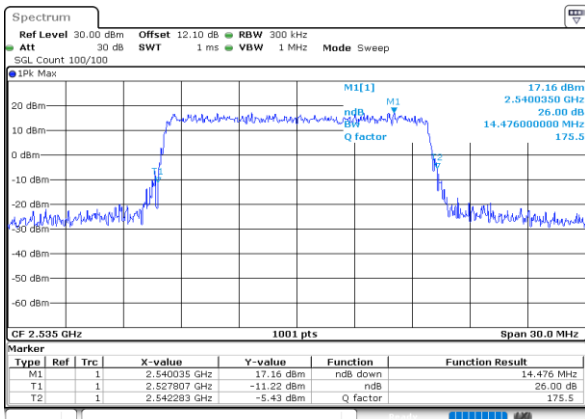
Date: 26.DEC.2023 17:12:09

Middle Channel / 10MHz / 16QAM



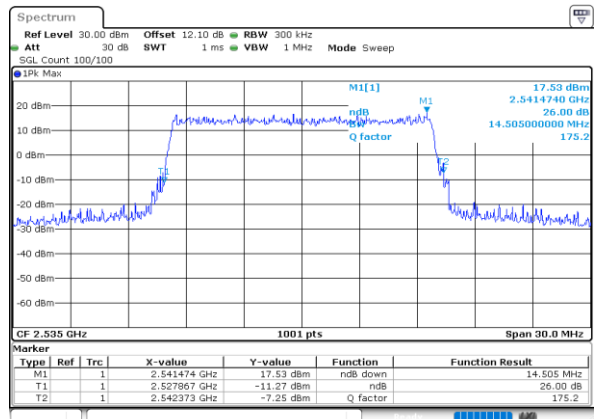
Date: 26.DEC.2023 17:12:31

Middle Channel / 15MHz / QPSK



Date: 26.DEC.2023 17:19:36

Middle Channel / 15MHz / 16QAM

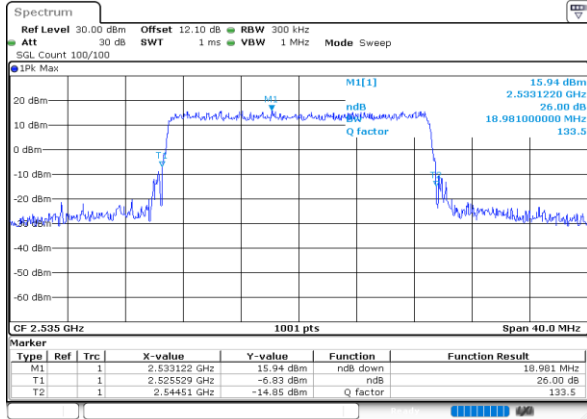


Date: 26.DEC.2023 17:19:58



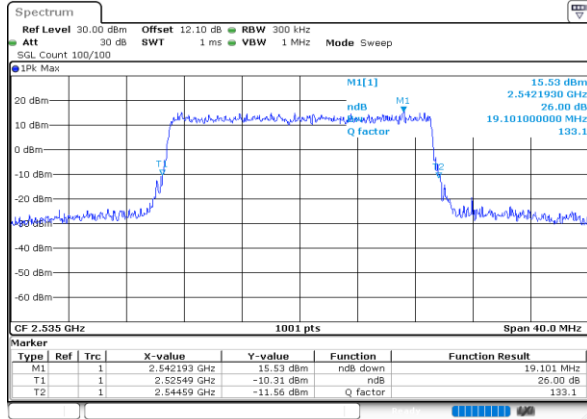
LTE Band 7

Middle Channel / 20MHz / QPSK



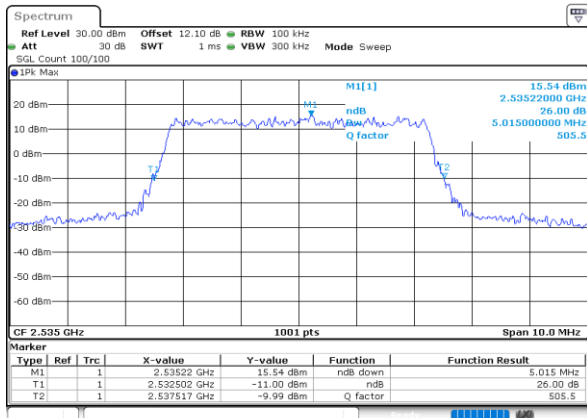
Date: 26.DEC.2023 17:27:03

Middle Channel / 20MHz / 16QAM



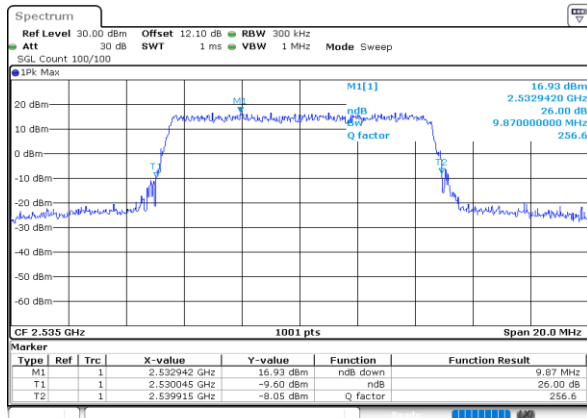
Date: 26.DEC.2023 17:12:125

Middle Channel / 5MHz / 64QAM



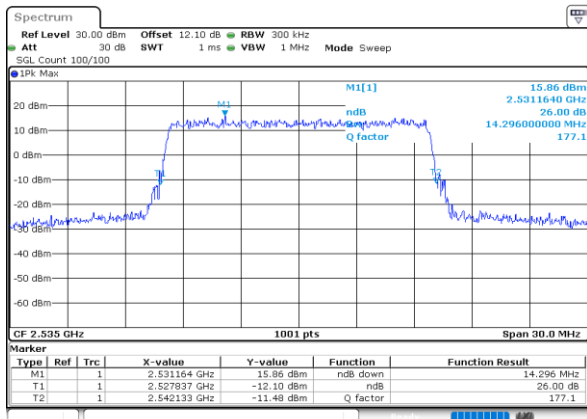
Date: 26.DEC.2023 17:07:33

Middle Channel / 10MHz / 64QAM



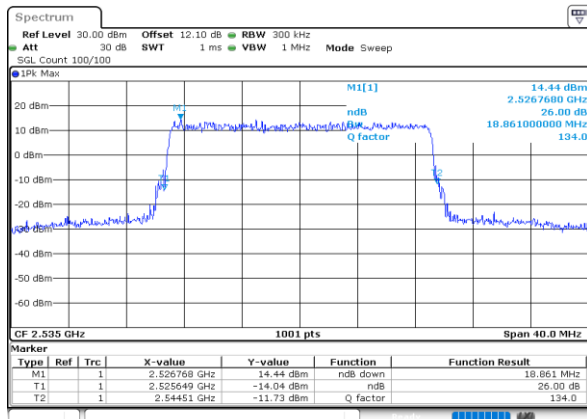
Date: 26.DEC.2023 17:15:52

Middle Channel / 15MHz / 64QAM



Date: 26.DEC.2023 17:23:19

Middle Channel / 20MHz / 64QAM

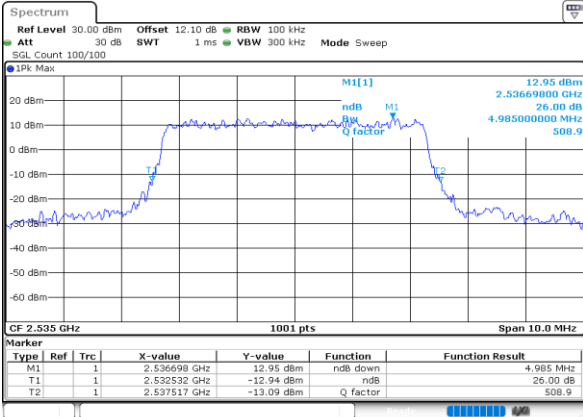


Date: 26.DEC.2023 17:13:046



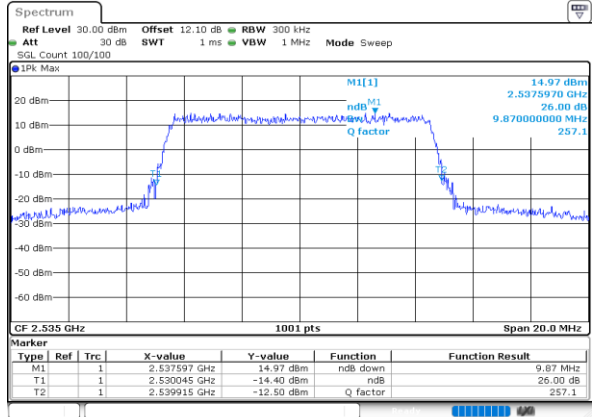
LTE Band 7

Middle Channel / 5MHz / 256QAM



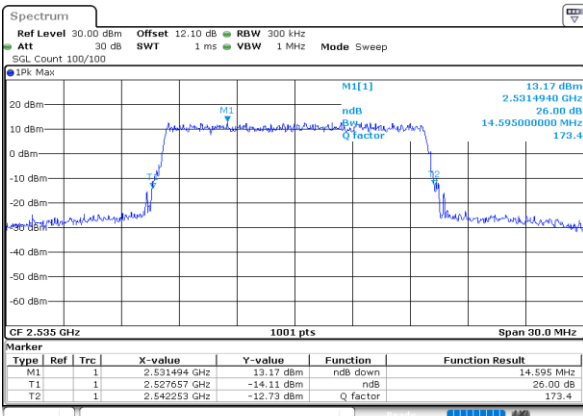
Date: 26.DEC.2023 17:38:22

Middle Channel / 10MHz / 256QAM



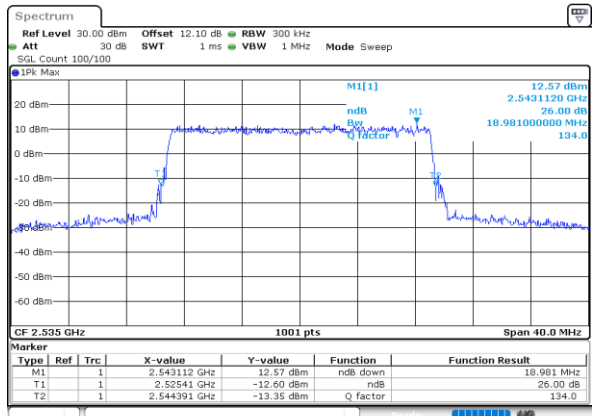
Date: 26.DEC.2023 17:45:39

Middle Channel / 15MHz / 256QAM



Date: 26.DEC.2023 17:51:47

Middle Channel / 20MHz / 256QAM



Date: 27.DEC.2023 10:42:18



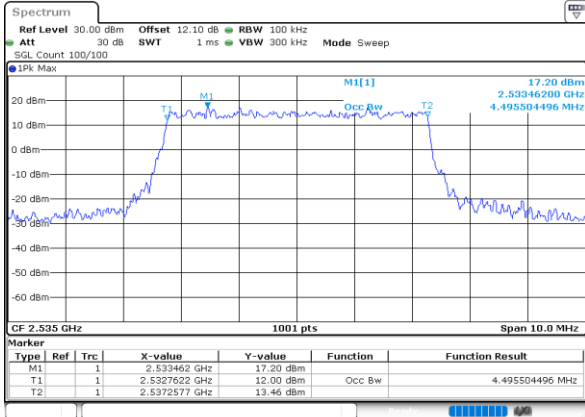
**Occupied Bandwidth**

Mode	LTE Band 7 : 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	-	-	-	-	4.49	4.50	9.05	9.05	13.48	13.48	17.94	17.98
Mode	LTE Band 7 : 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	4.49	9.03	9.05	13.48	13.45	17.98	17.94



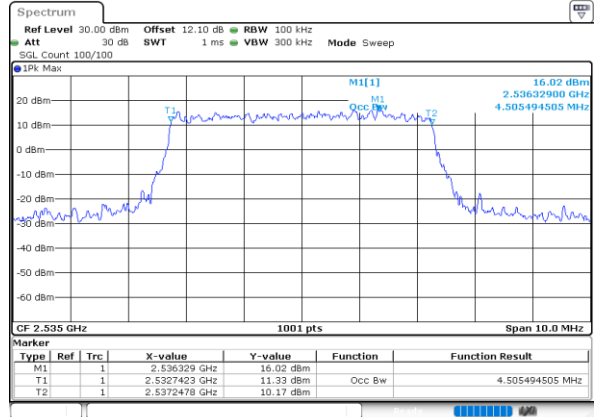
LTE Band 7

Middle Channel / 5MHz / QPSK



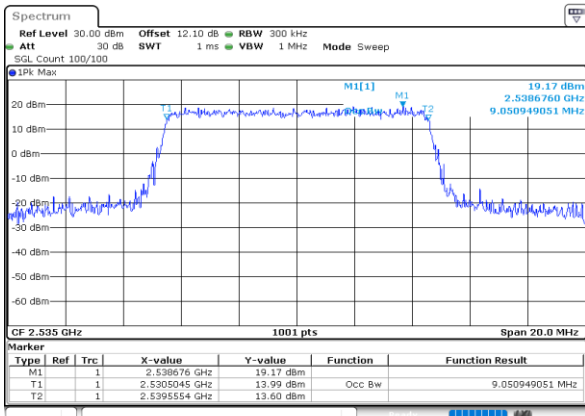
Date: 26.DEC.2023 16:58:22

Middle Channel / 5MHz / 16QAM



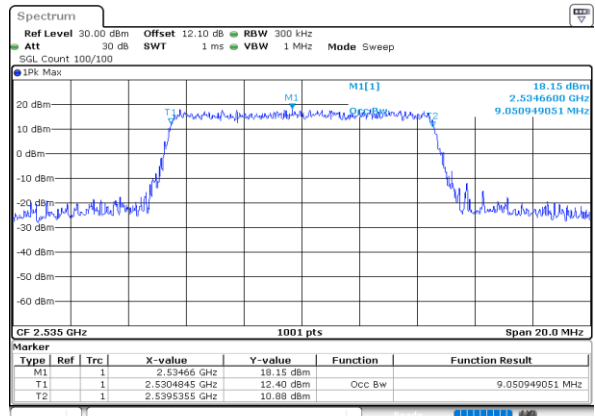
Date: 26.DEC.2023 16:58:44

Middle Channel / 10MHz / QPSK



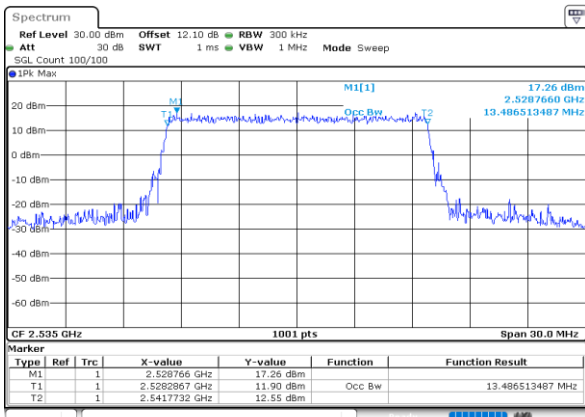
Date: 26.DEC.2023 17:11:24

Middle Channel / 10MHz / 16QAM



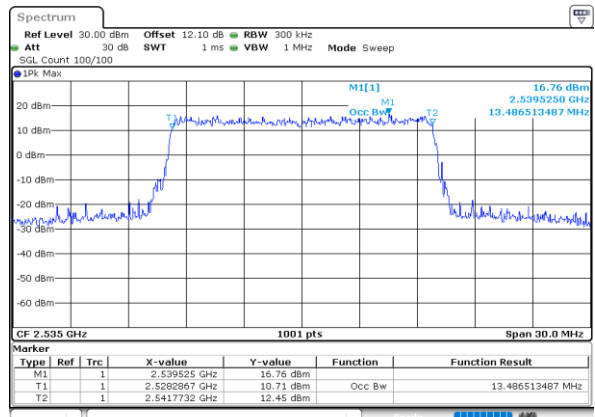
Date: 26.DEC.2023 17:11:47

Middle Channel / 15MHz / QPSK



Date: 26.DEC.2023 17:18:51

Middle Channel / 15MHz / 16QAM

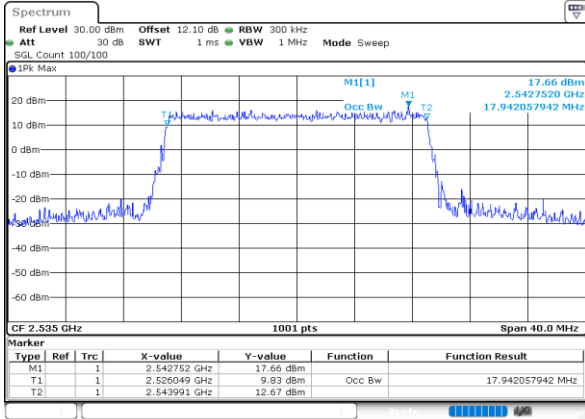


Date: 26.DEC.2023 17:19:14



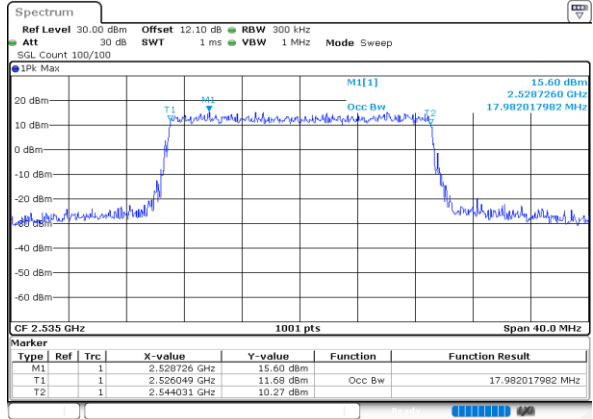
LTE Band 7

Middle Channel / 20MHz / QPSK



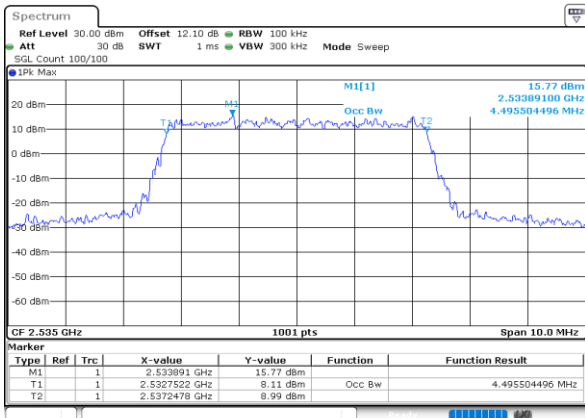
Date: 26.DEC.2023 17:26:18

Middle Channel / 20MHz / 16QAM



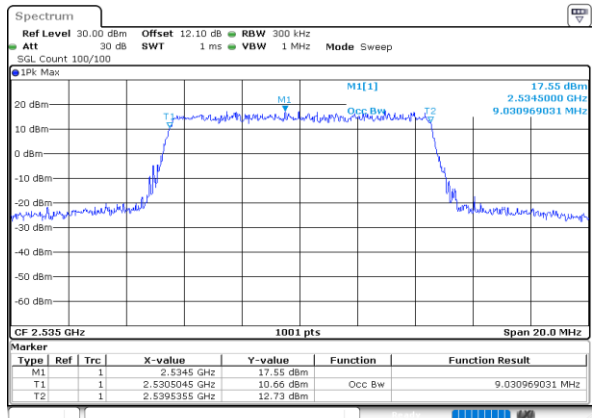
Date: 26.DEC.2023 17:26:40

Middle Channel / 5MHz / 64QAM



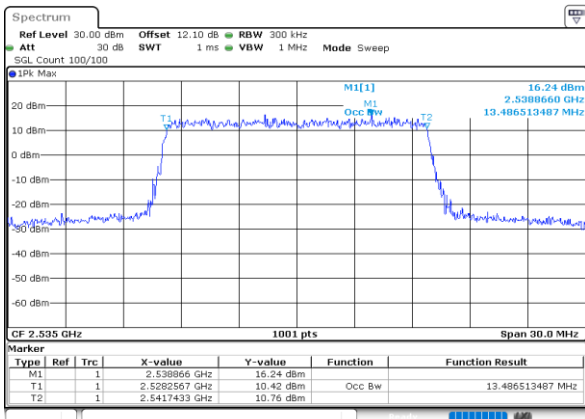
Date: 26.DEC.2023 17:07:10

Middle Channel / 10MHz / 64QAM



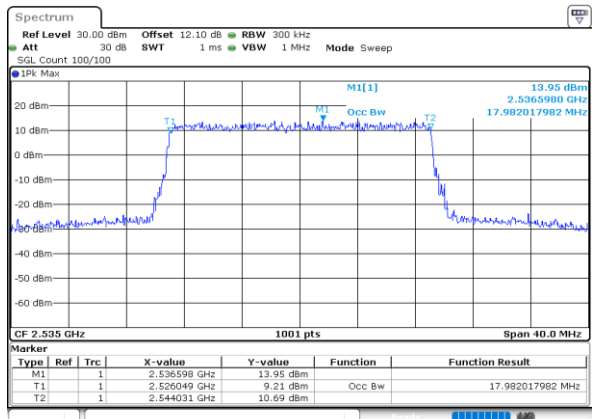
Date: 26.DEC.2023 17:15:30

Middle Channel / 15MHz / 64QAM



Date: 26.DEC.2023 17:22:57

Middle Channel / 20MHz / 64QAM



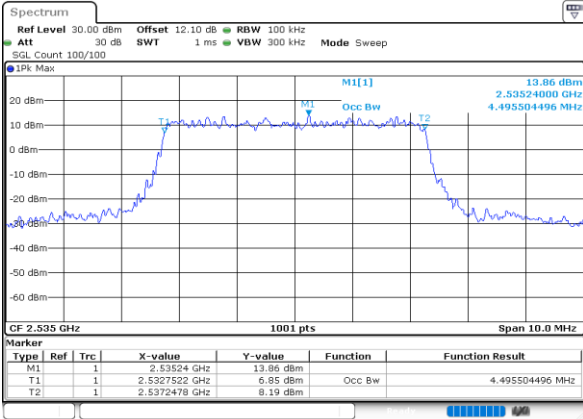
Date: 26.DEC.2023 17:30:24





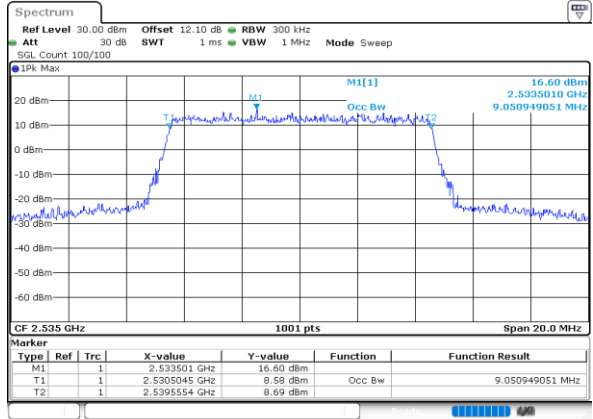
LTE Band 7

Middle Channel / 5MHz / 256QAM



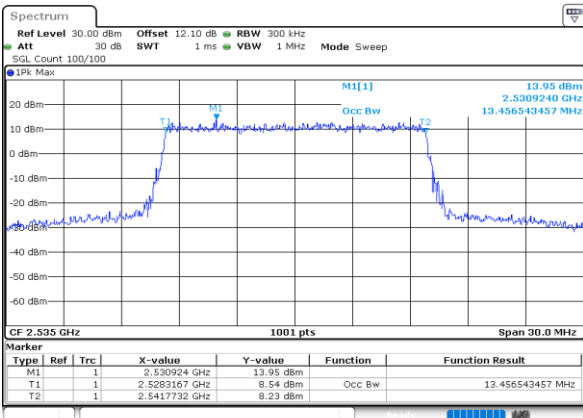
Date: 26.DEC.2023 17:38:00

Middle Channel / 10MHz / 256QAM



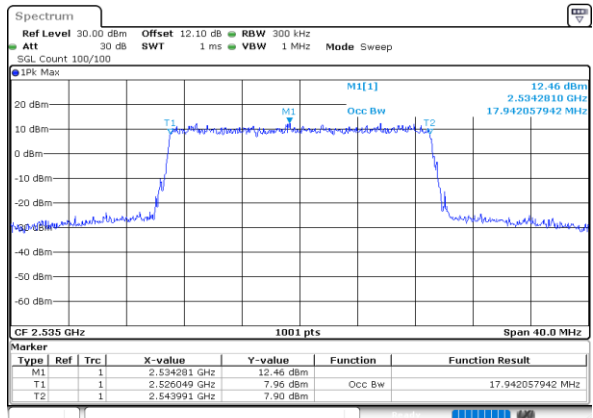
Date: 26.DEC.2023 17:45:17

Middle Channel / 15MHz / 256QAM



Date: 26.DEC.2023 17:51:24

Middle Channel / 20MHz / 256QAM



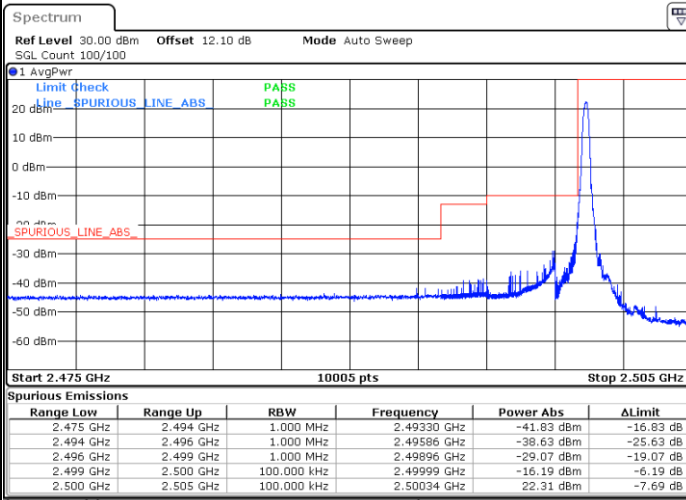
Date: 27.DEC.2023 10:41:55



# Conducted Band Edge

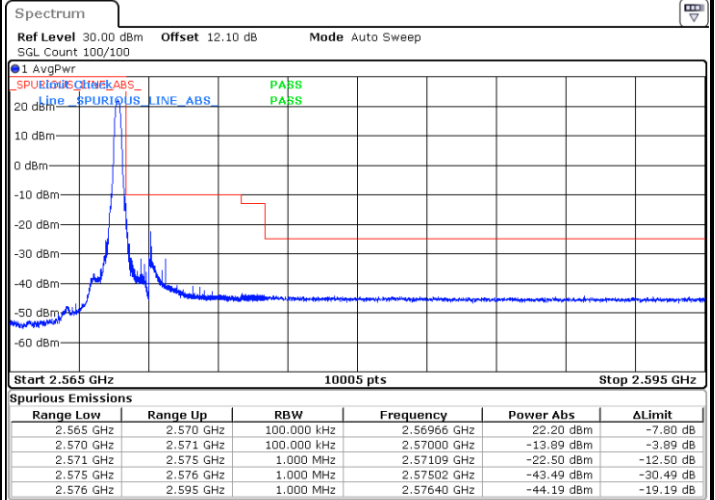
## LTE Band 7 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



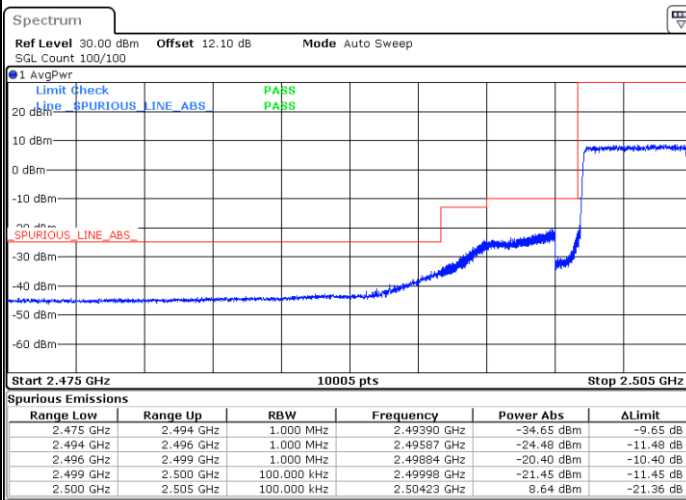
Date: 26.DEC.2023 16:54:18

### Highest Band Edge / 1 RB



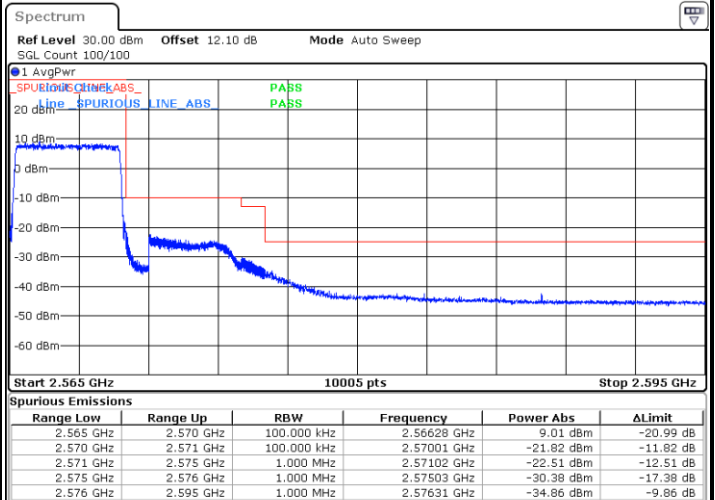
Date: 26.DEC.2023 17:01:23

### Lowest Band Edge / Full RB



Date: 26.DEC.2023 16:56:03

### Highest Band Edge / Full RB

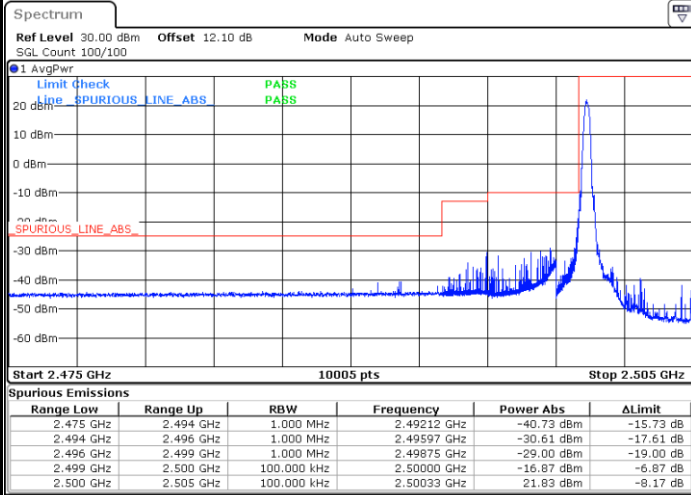


Date: 26.DEC.2023 17:03:07



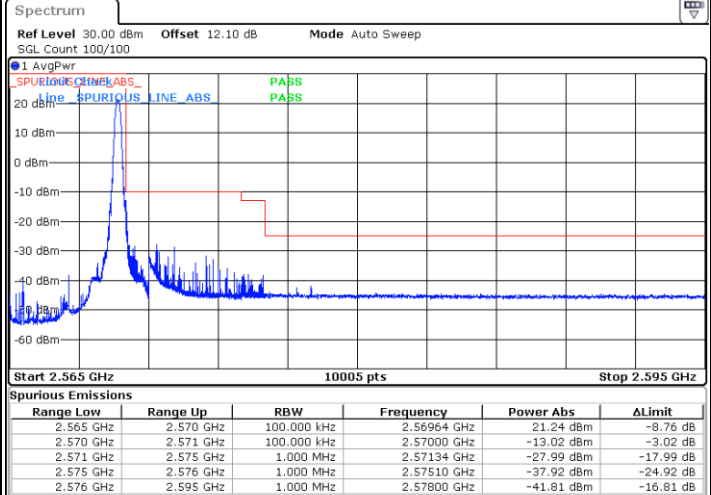
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



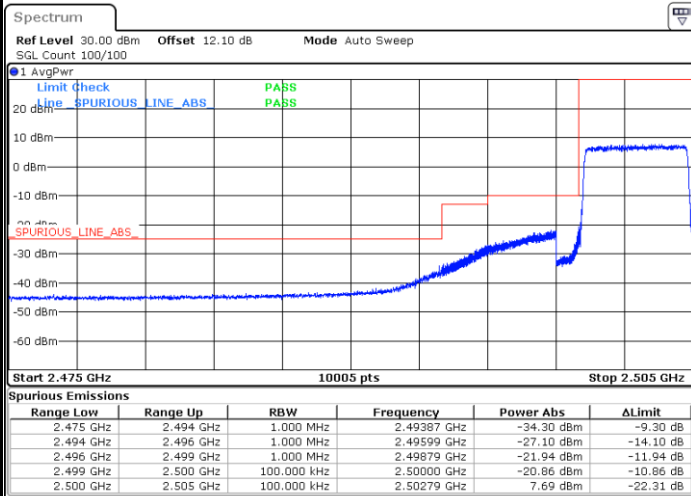
Date: 26.DEC.2023 16:55:10

Highest Band Edge / 1 RB



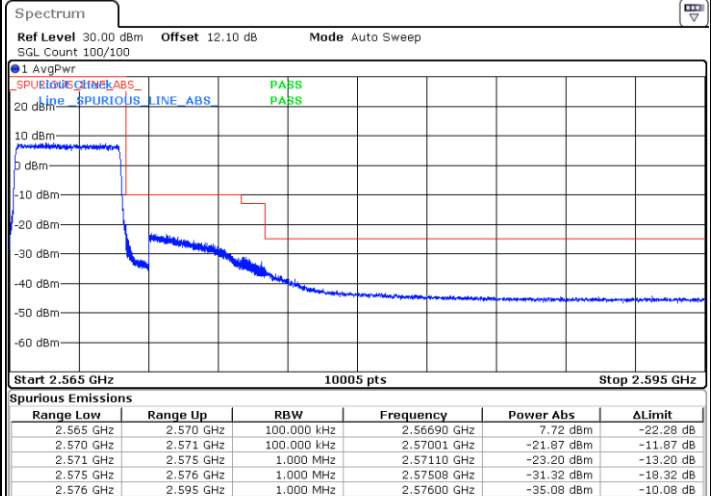
Date: 26.DEC.2023 17:02:15

Lowest Band Edge / Full RB



Date: 26.DEC.2023 16:56:55

Highest Band Edge / Full RB

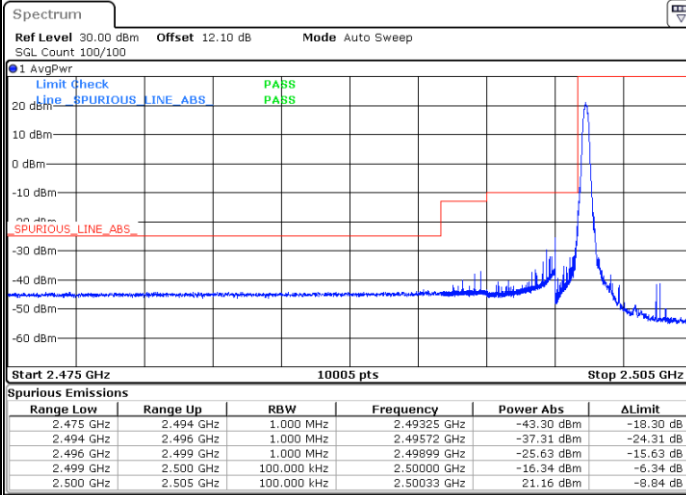


Date: 26.DEC.2023 17:03:59



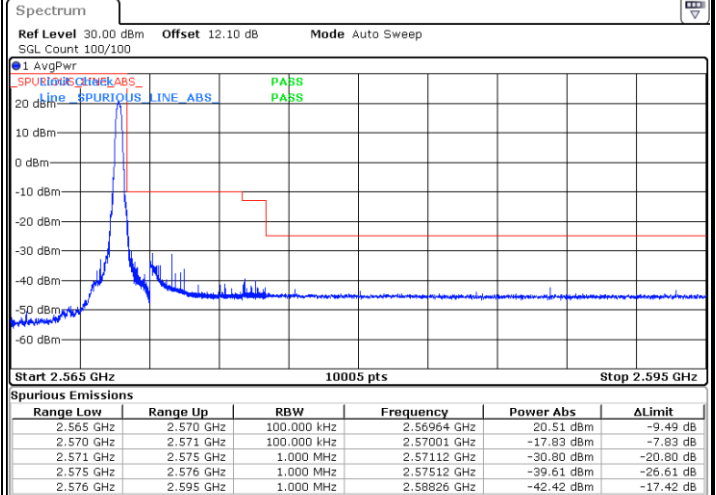
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



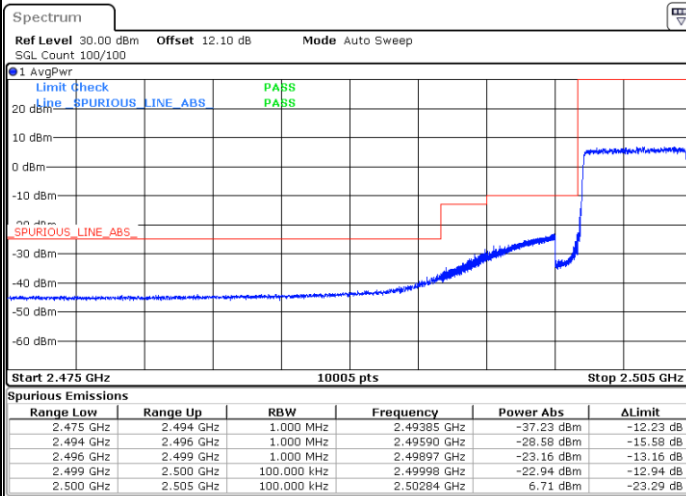
Date: 26.DEC.2023 17:05:55

Highest Band Edge / 1 RB



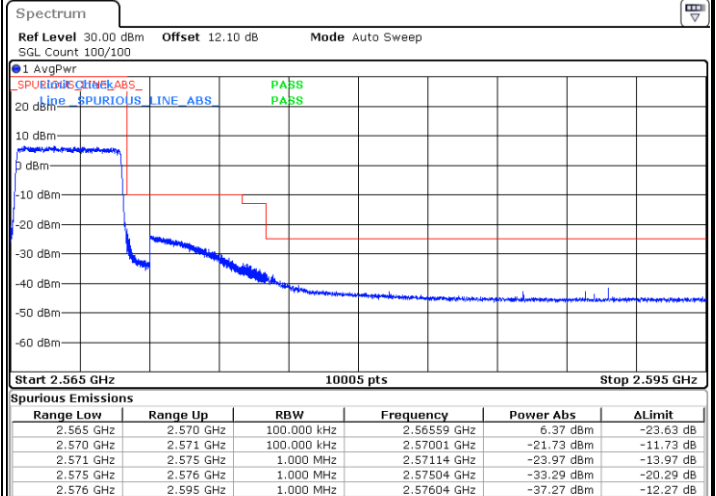
Date: 26.DEC.2023 17:08:24

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:06:47

Highest Band Edge / Full RB

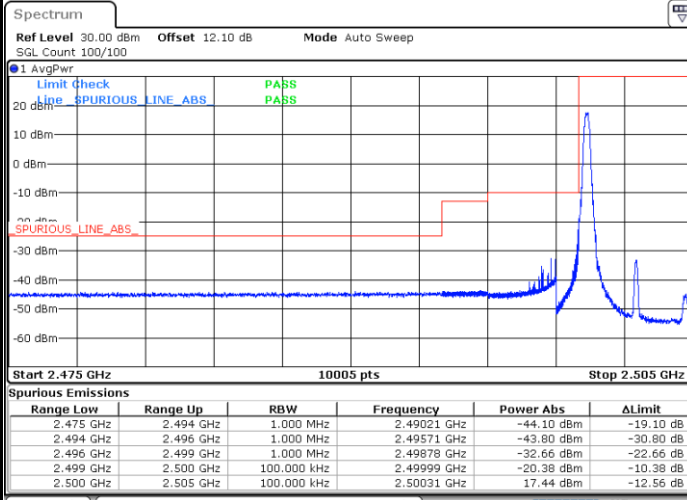


Date: 26.DEC.2023 17:09:16



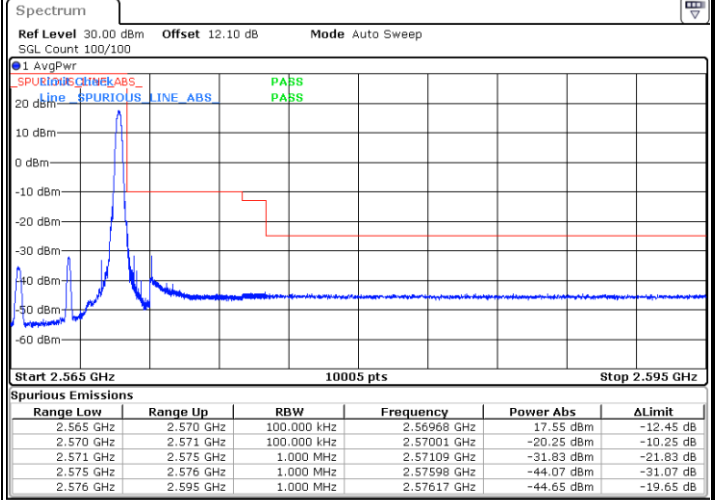
LTE Band 7 / 5MHz / 256QAM

Lowest Band Edge / 1RB



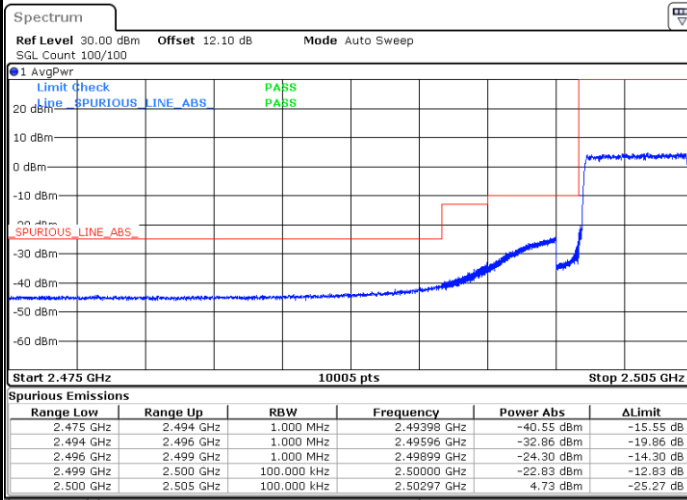
Date: 26.DEC.2023 17:33:40

Highest Band Edge / 1 RB



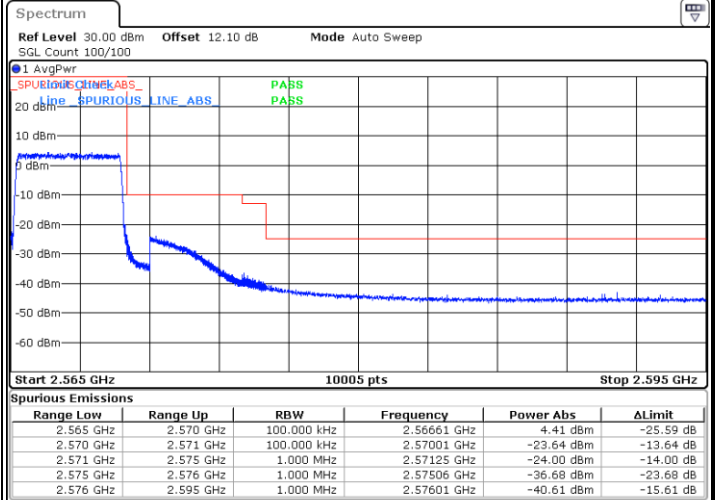
Date: 26.DEC.2023 17:40:32

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:35:46

Highest Band Edge / Full RB

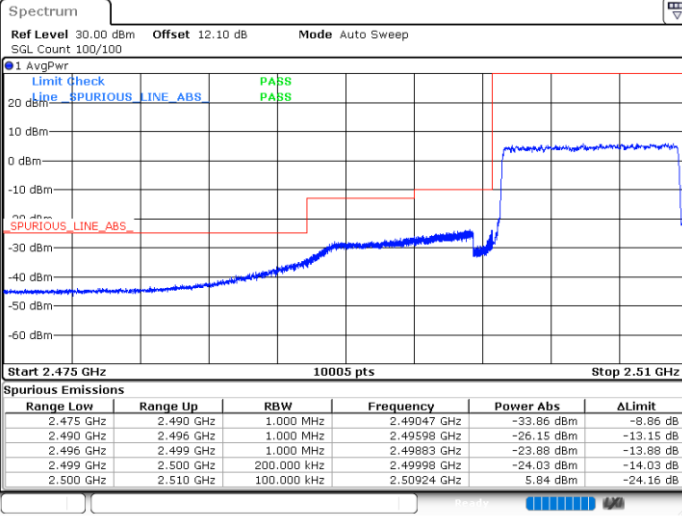


Date: 26.DEC.2023 17:41:27



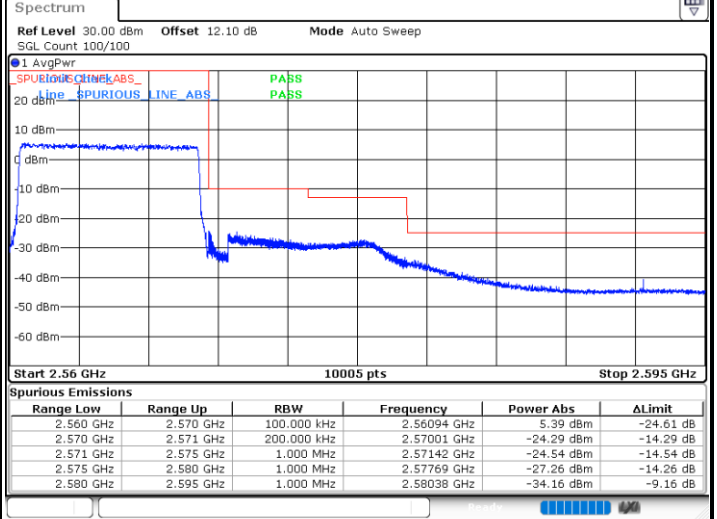
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:10:09

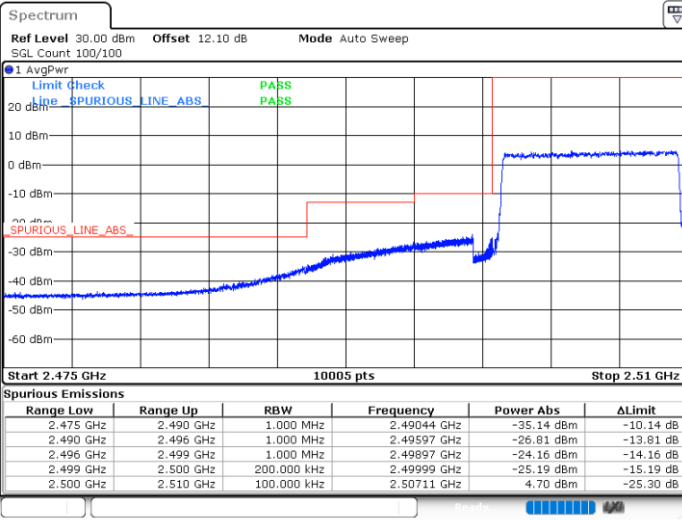
Highest Band Edge / Full RB



Date: 26.DEC.2023 17:13:23

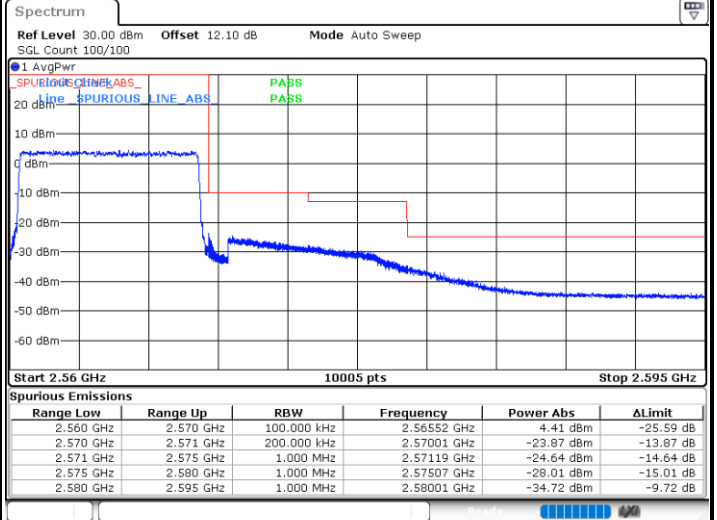
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:11:01

Highest Band Edge / Full RB

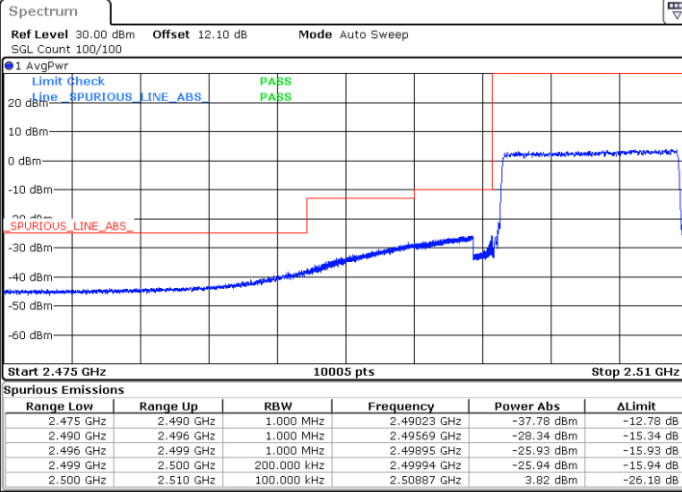


Date: 26.DEC.2023 17:14:15



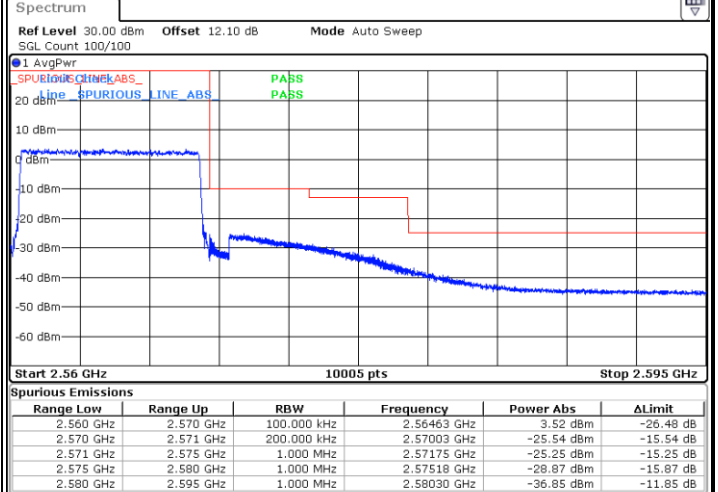
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:15:07

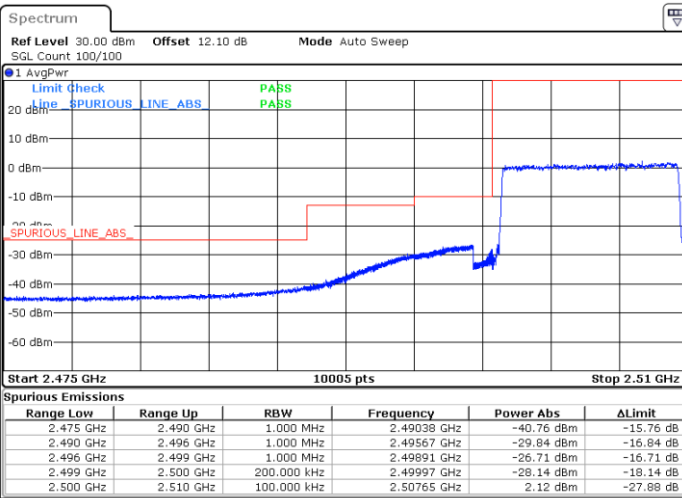
Highest Band Edge / Full RB



Date: 26.DEC.2023 17:16:43

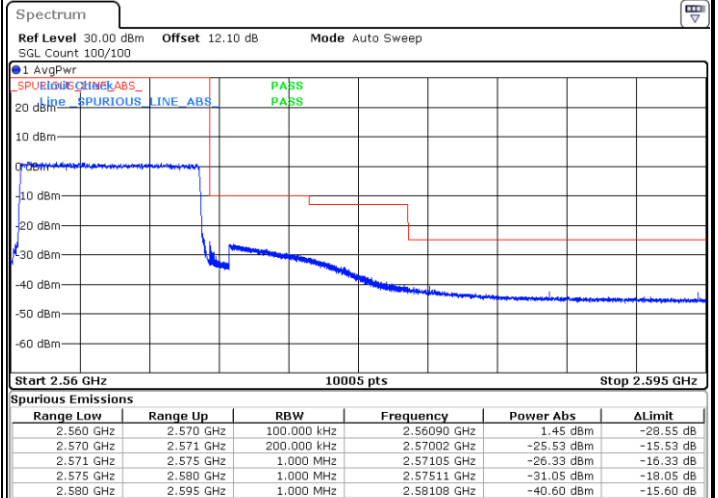
LTE Band 7 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:43:42

Highest Band Edge / Full RB

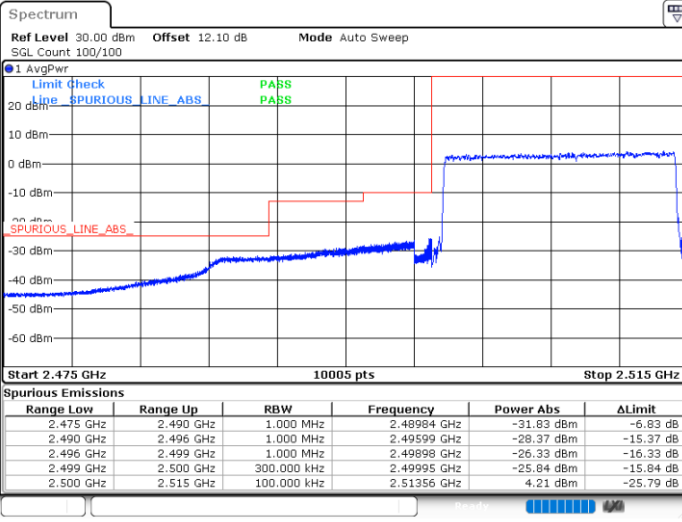


Date: 26.DEC.2023 17:47:54



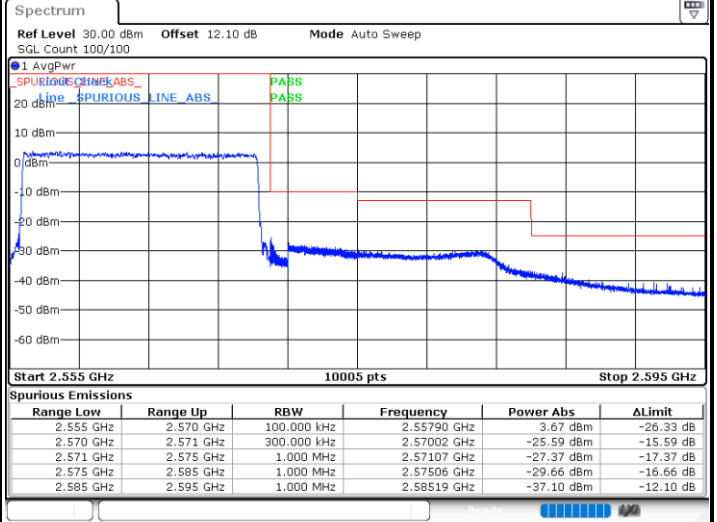
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:17:36

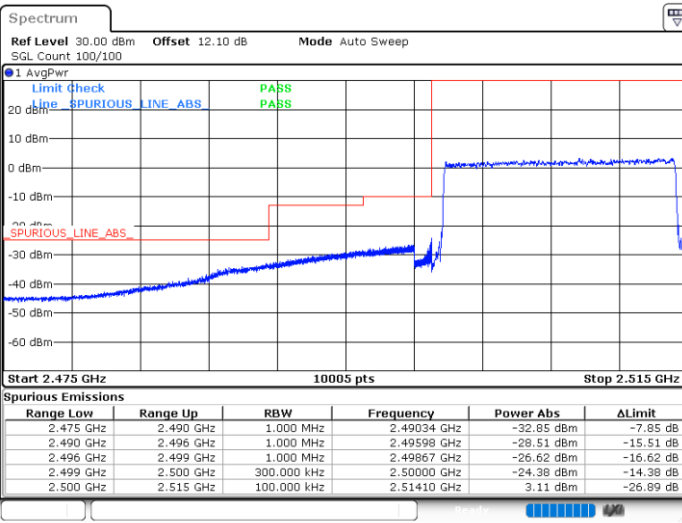
Highest Band Edge / Full RB



Date: 26.DEC.2023 17:20:50

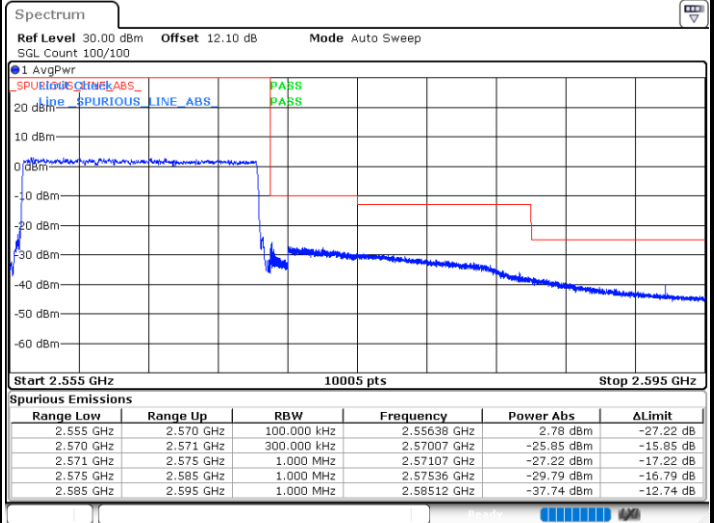
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:18:28

Highest Band Edge / Full RB



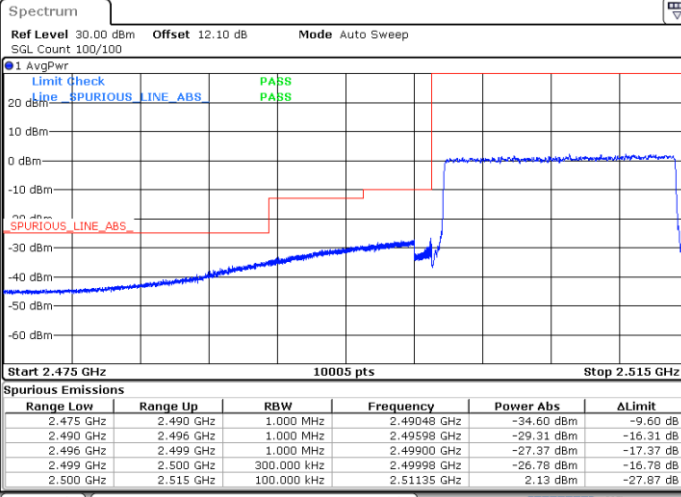
Date: 26.DEC.2023 17:21:42





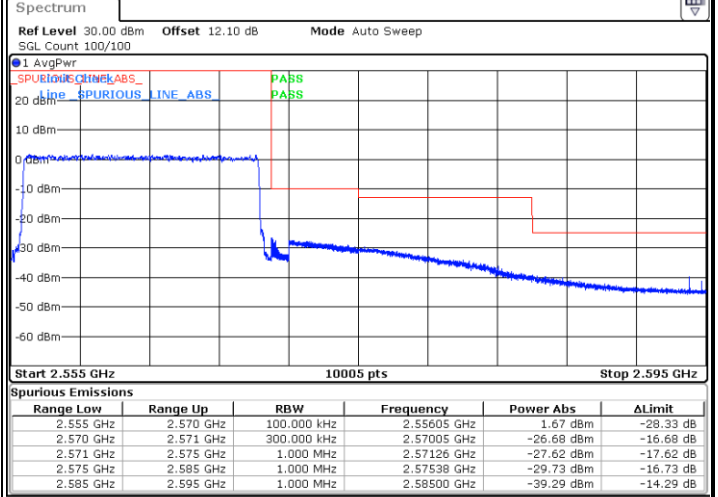
LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:22:34

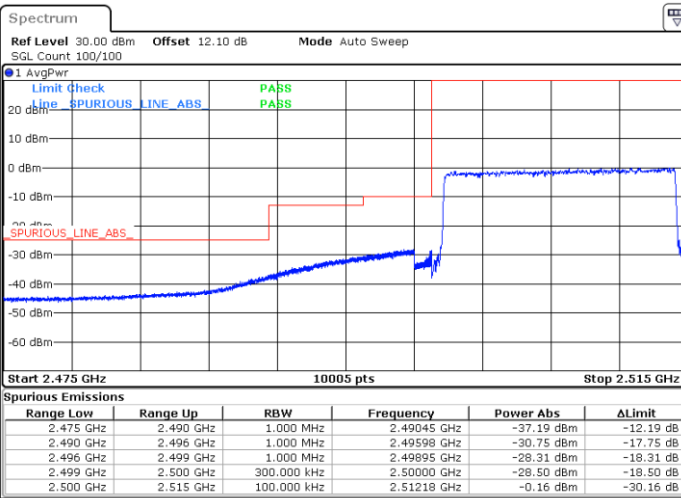
Highest Band Edge / Full RB



Date: 26.DEC.2023 17:24:10

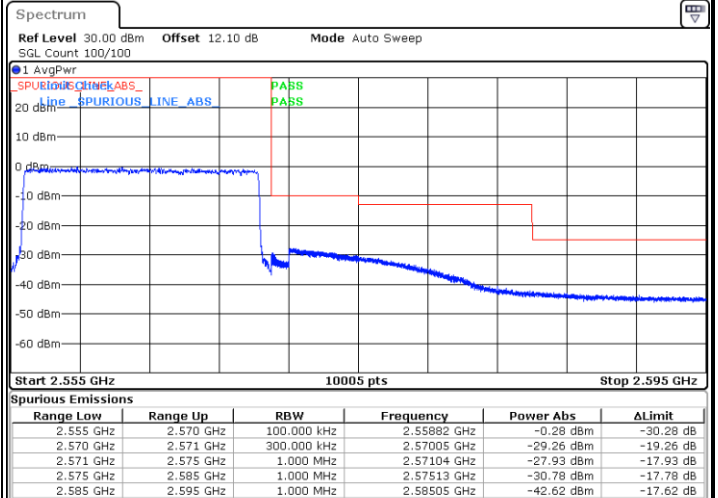
LTE Band 7 / 15MHz / 256QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:49:57

Highest Band Edge / Full RB

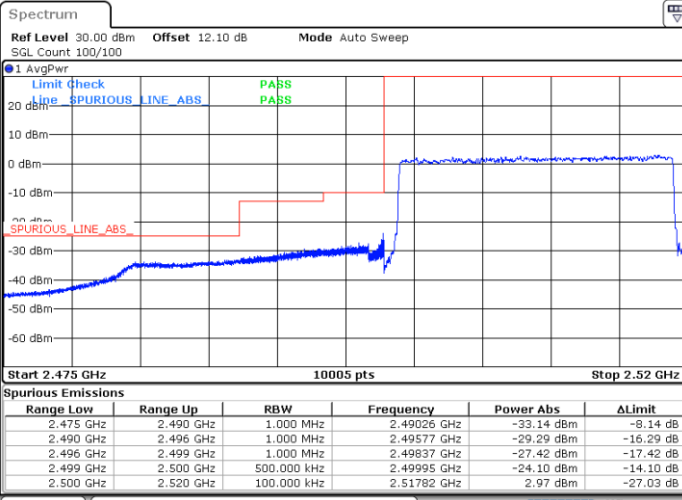


Date: 27.DEC.2023 10:38:59



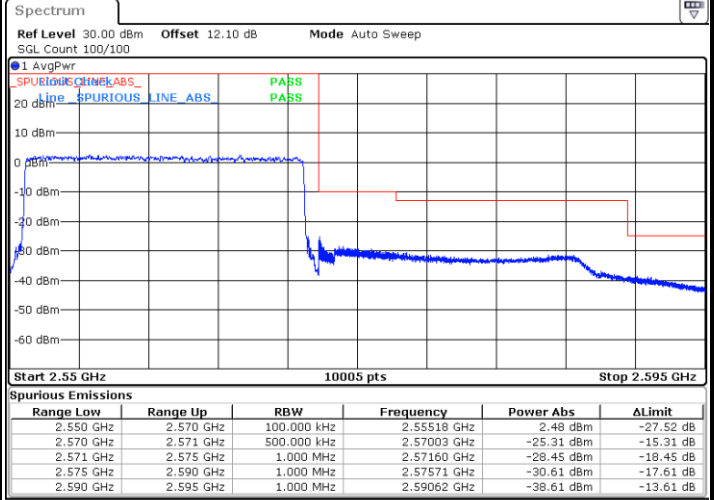
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:25:03

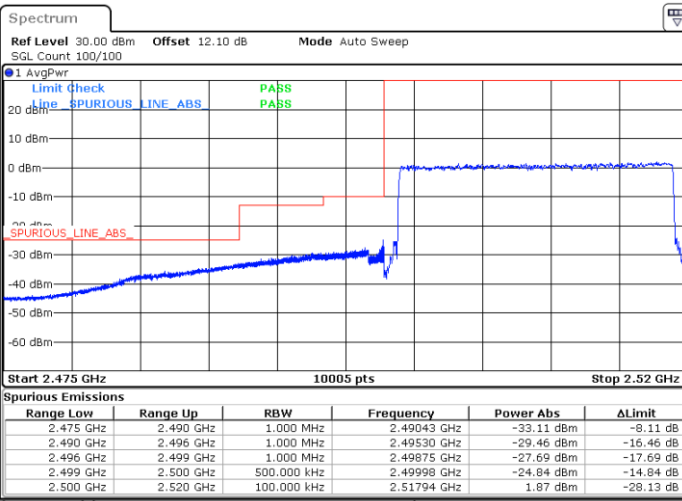
Highest Band Edge / Full RB



Date: 26.DEC.2023 17:29:08

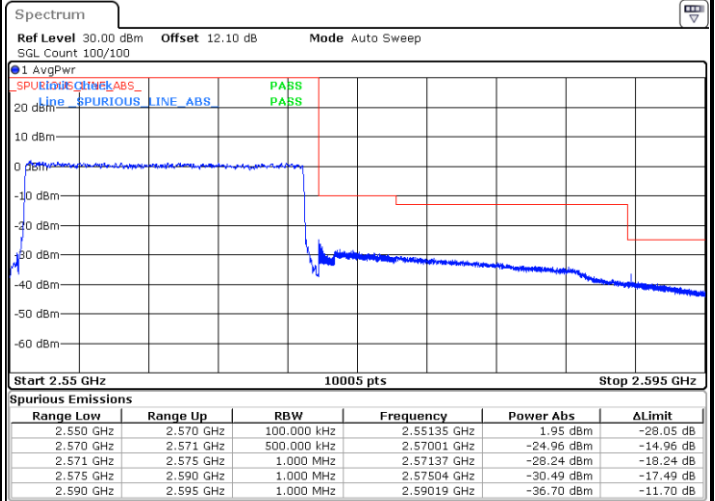
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:25:55

Highest Band Edge / Full RB

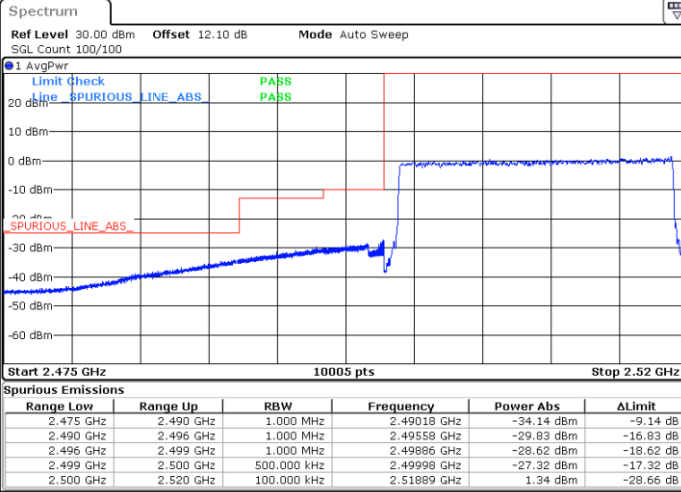


Date: 26.DEC.2023 17:28:16



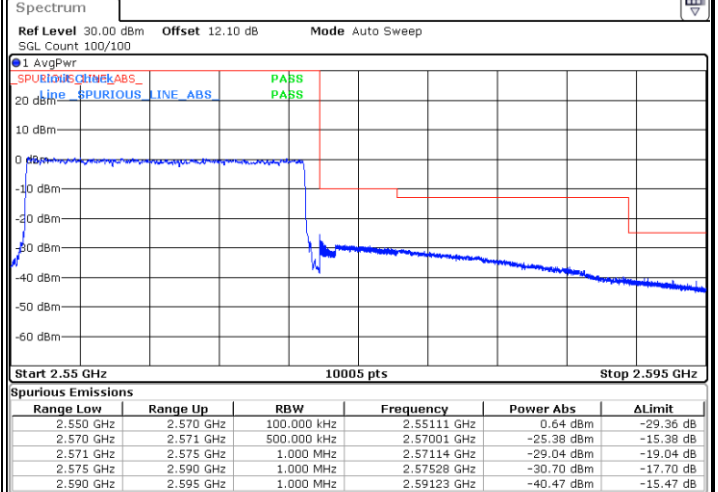
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / Full RB



Date: 26.DEC.2023 17:30:01

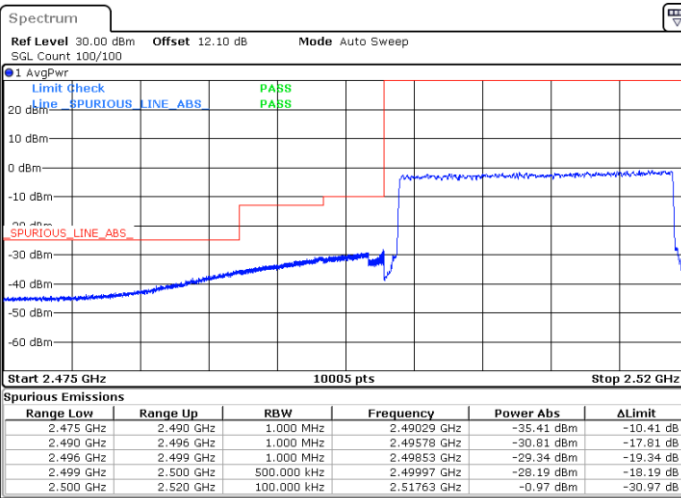
Highest Band Edge / Full RB



Date: 26.DEC.2023 17:31:37

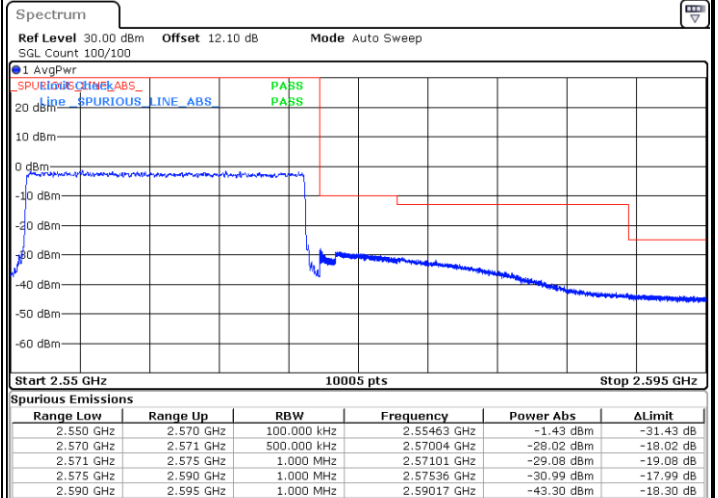
LTE Band 7 / 20MHz / 256QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 10:41:15

Highest Band Edge / Full RB



Date: 27.DEC.2023 10:44:23

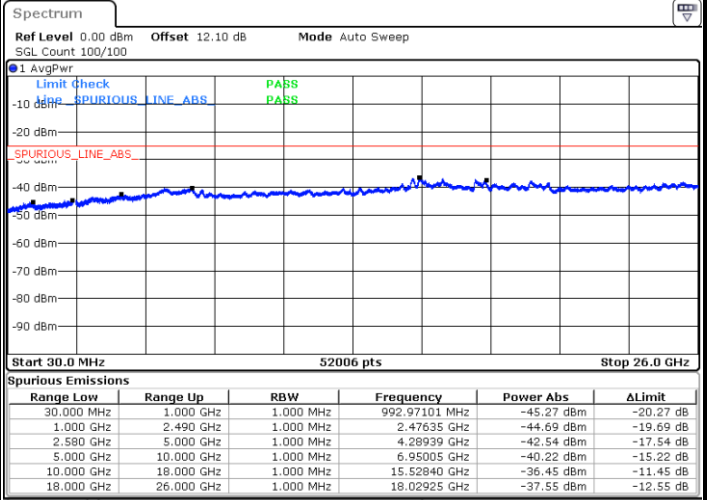
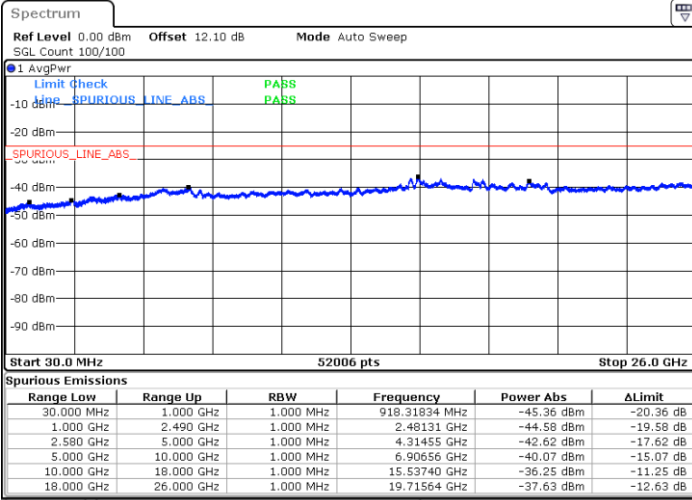


# Conducted Spurious Emission

## LTE Band 7 / 5MHz

### Lowest Channel / QPSK

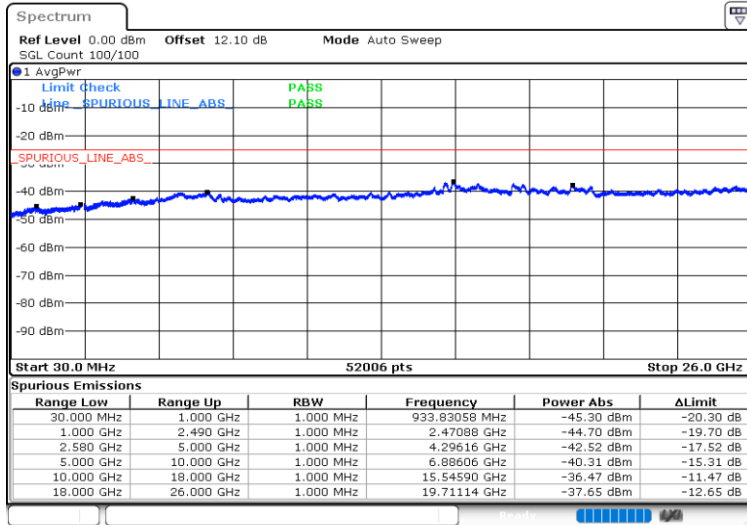
### Middle Channel / QPSK



Date: 26.DEC.2023 16:57:59

Date: 26.DEC.2023 17:00:32

### Highest Channel / QPSK



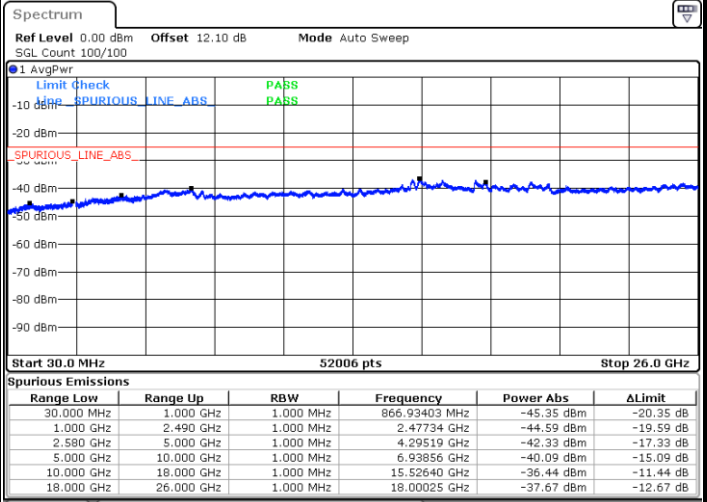
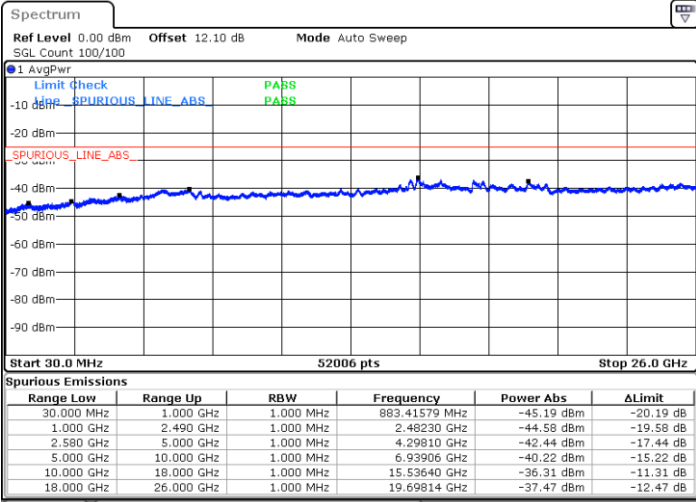
Date: 26.DEC.2023 17:05:03



LTE Band 7 / 10MHz

Lowest Channel / QPSK

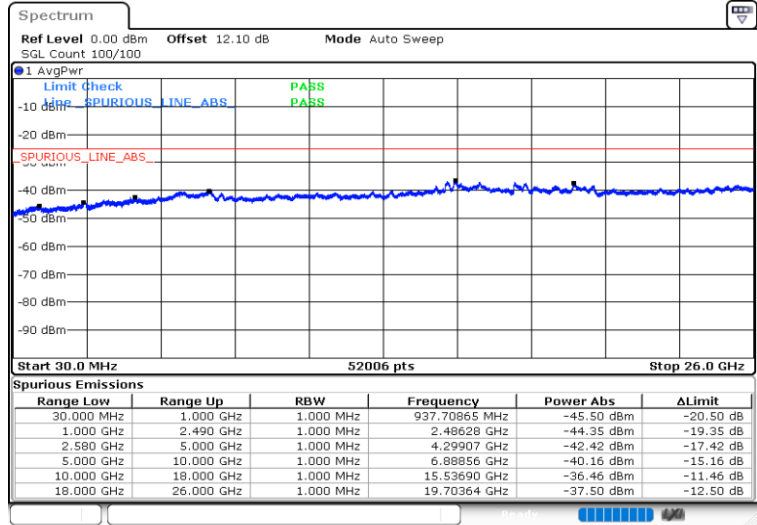
Middle Channel / QPSK



Date: 27.DEC.2023 10:46:36

Date: 27.DEC.2023 10:47:39

Highest Channel / QPSK



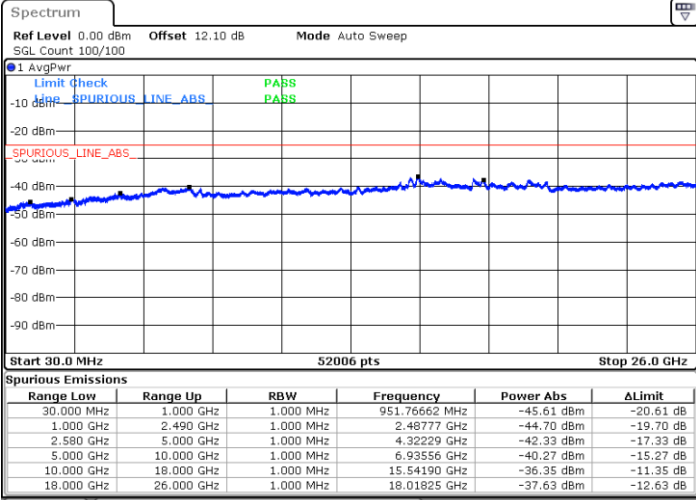
Date: 27.DEC.2023 10:48:43



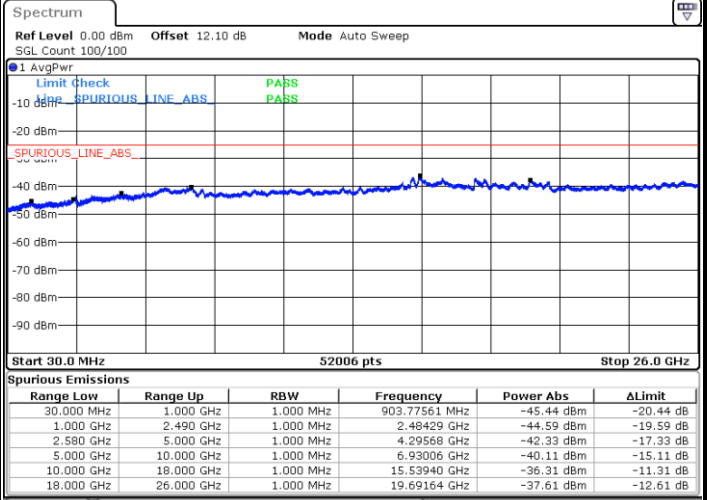
LTE Band 7 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

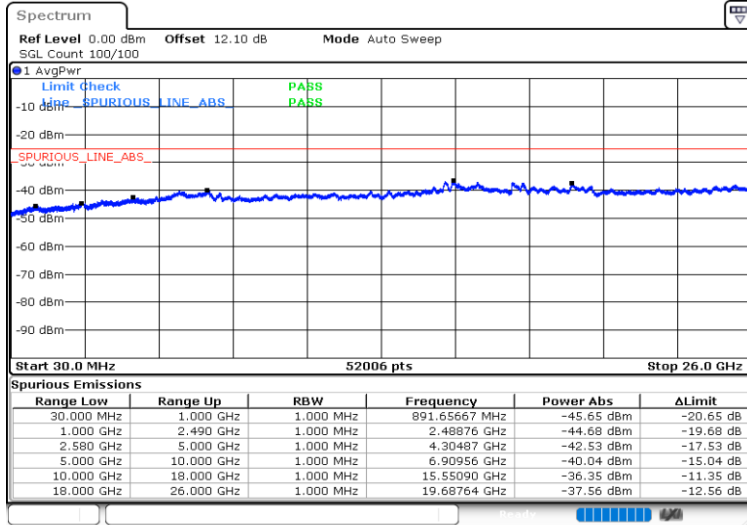


Date: 27.DEC.2023 10:49:47



Date: 27.DEC.2023 10:50:50

Highest Channel / QPSK



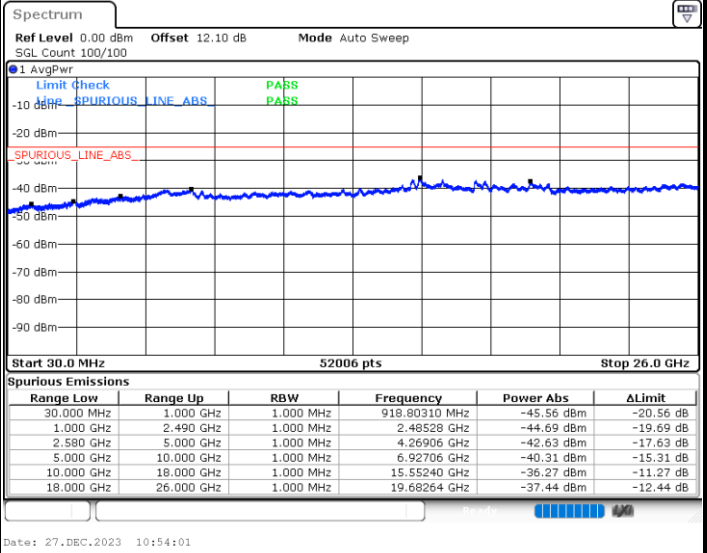
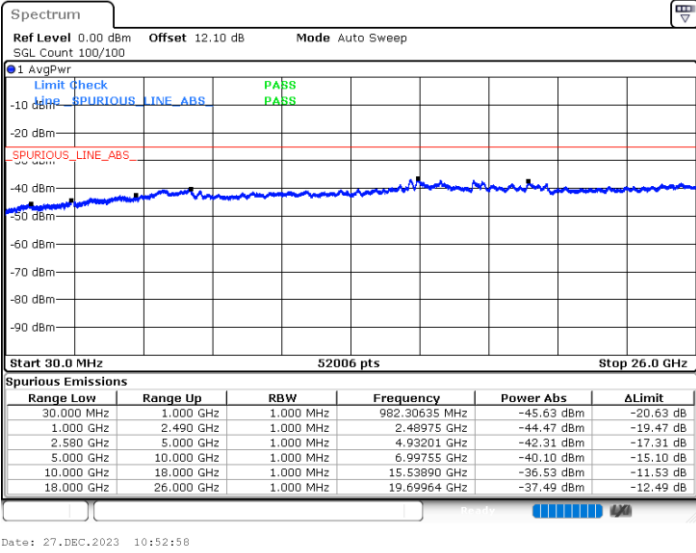
Date: 27.DEC.2023 10:51:54



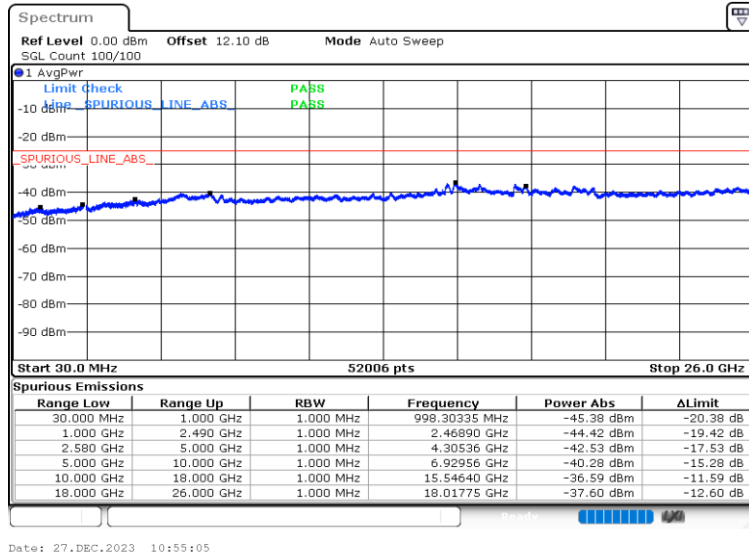
LTE Band 7 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





### 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	0.0007	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0046	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0050	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0043	
20	Normal Voltage	0.0007	
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 7C

## 26dB Bandwidth

Mode	LTE Band 7C : 26dB BW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	30.21	25.52	30.74	34.89
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	30.21	35.10	40.03	

Mode	LTE Band 7C : 26dB BW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	29.96	25.57	30.80	34.96
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	30.26	35.03	40.03	

Mode	LTE Band 7C : 26dB BW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	30.03	25.47	30.56	34.89
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	30.14	34.96	39.96	

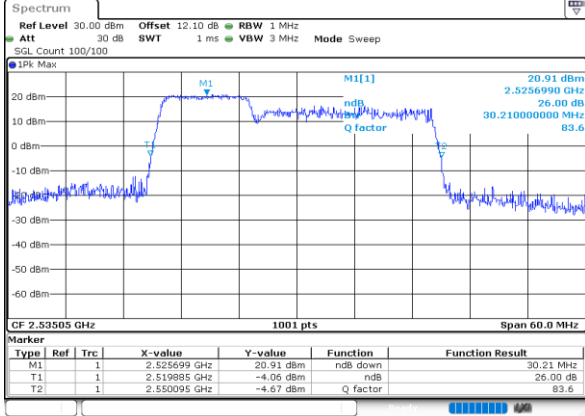
Mode	LTE Band 7C : 26dB BW(MHz)			
256QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	29.91	25.47	30.68	34.89
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	30.03	35.10	39.79	



LTE Band 7C

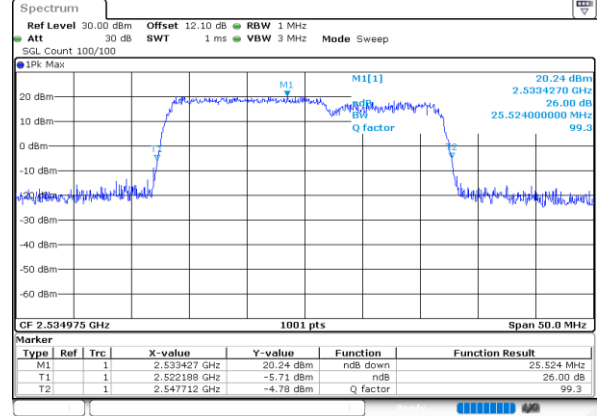
QPSK

Middle Channel / 10MHz+20MHz



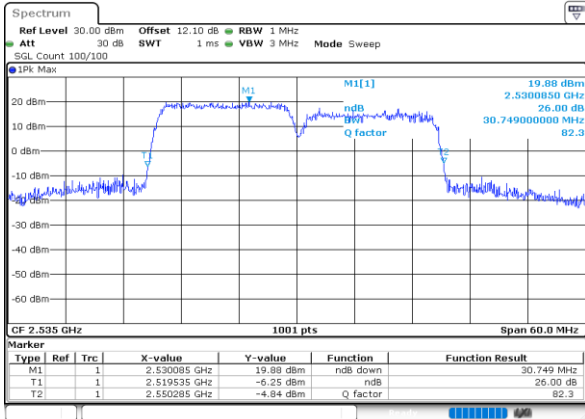
Date: 28. DEC. 2023 02:59:40

Middle Channel / 15MHz+10MHz



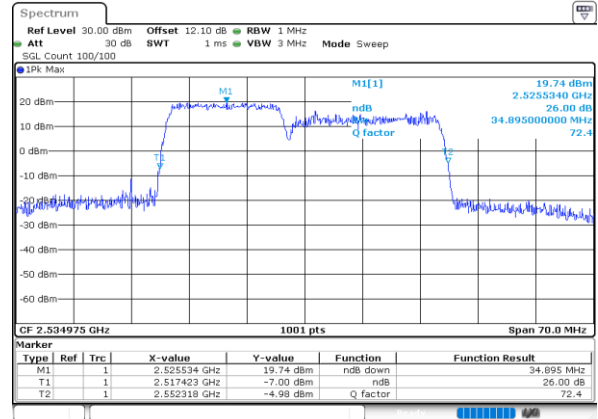
Date: 28. DEC. 2023 07:01:48

Middle Channel / 15MHz+15MHz



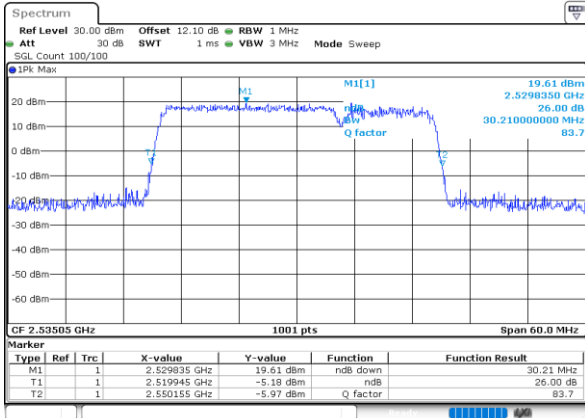
Date: 28. DEC. 2023 04:19:07

Middle Channel / 15MHz+20MHz



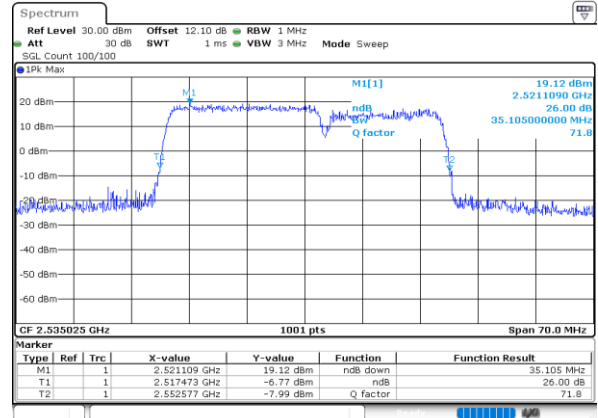
Date: 28. DEC. 2023 05:02:42

Middle Channel / 20MHz+10MHz



Date: 28. DEC. 2023 03:39:22

Middle Channel / 20MHz+15MHz



Date: 28. DEC. 2023 05:42:23

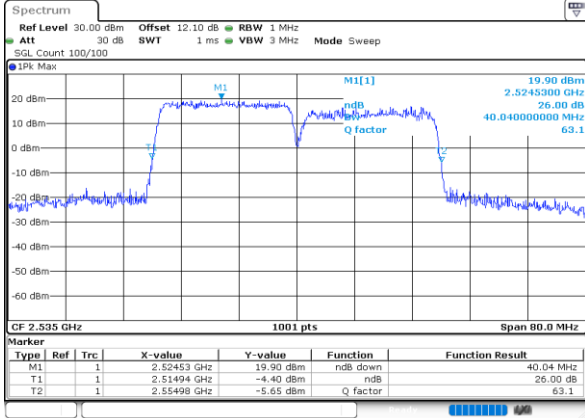


LTE Band 7C

QPSK

Middle Channel / 20MHz+20MHz

N/A

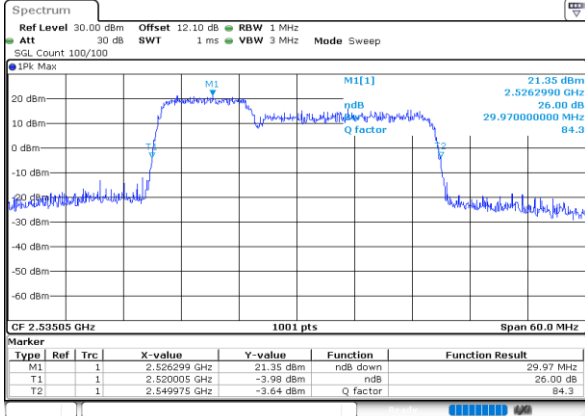




LTE Band 7C

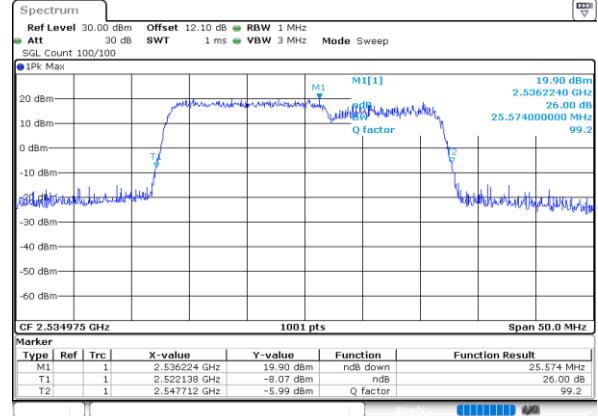
16QAM

Middle Channel / 10MHz+20MHz



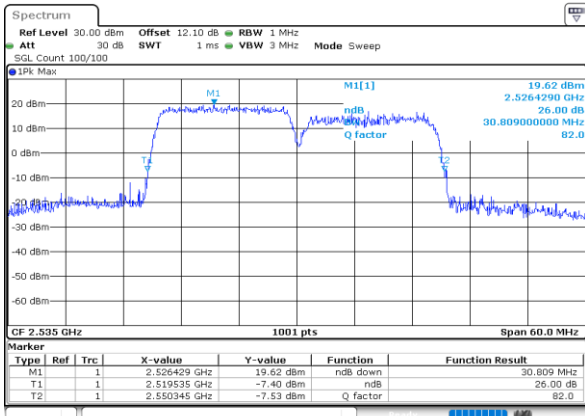
Date: 28 DEC 2023 02:59:15

Middle Channel / 15MHz+10MHz



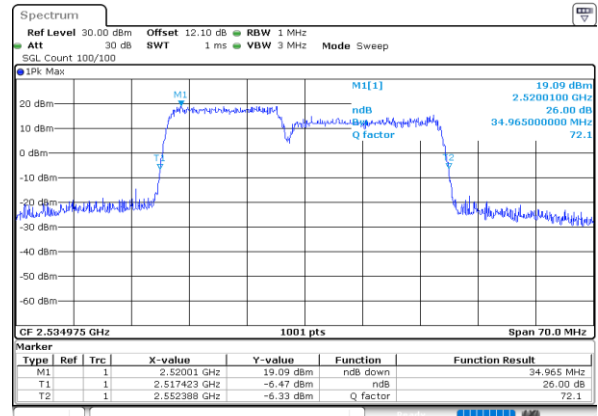
Date: 28 DEC 2023 07:10:23

Middle Channel / 15MHz+15MHz



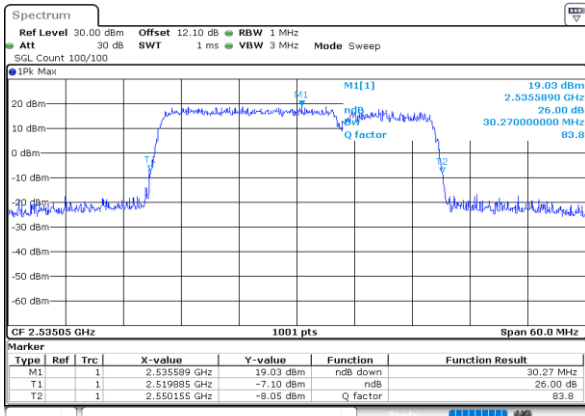
Date: 28 DEC 2023 04:18:42

Middle Channel / 15MHz+20MHz



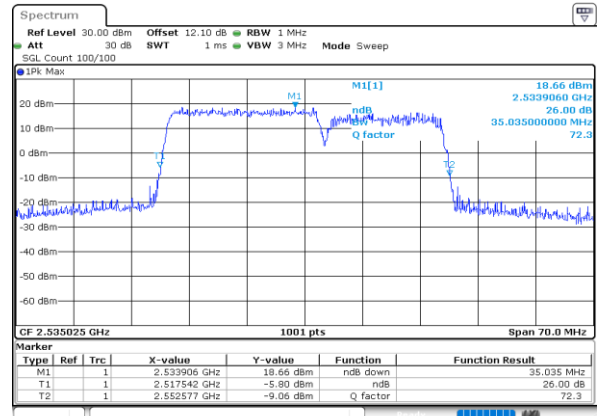
Date: 28 DEC 2023 05:10:17

Middle Channel / 20MHz+10MHz



Date: 28 DEC 2023 03:38:57

Middle Channel / 20MHz+15MHz



Date: 28 DEC 2023 05:14:57

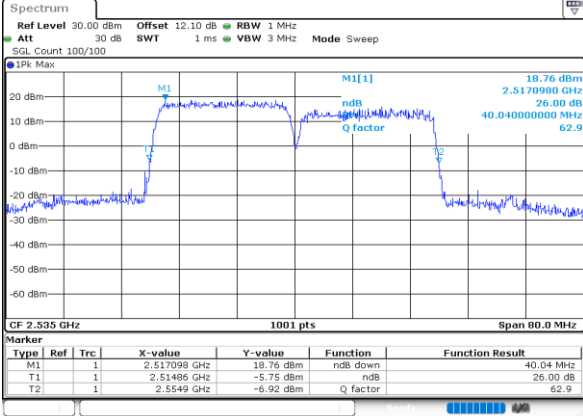


LTE Band 7C

16QAM

Middle Channel / 20MHz+20MHz

N/A



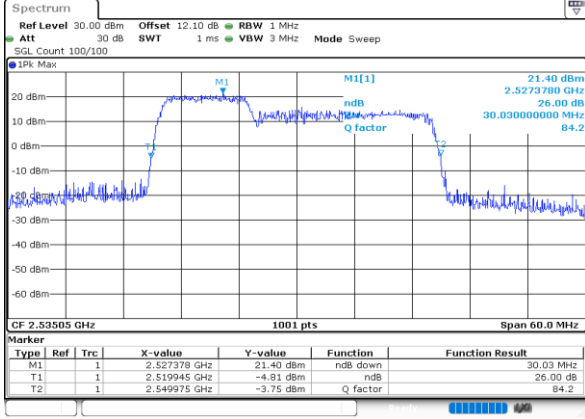
Date: 28. DEC. 2023 06:21:38



LTE Band 7C

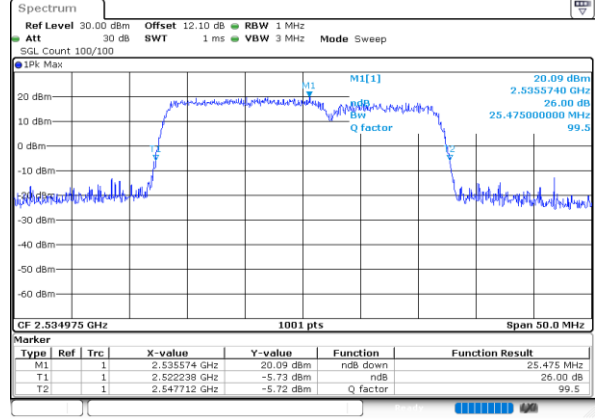
64QAM

Middle Channel / 10MHz+20MHz



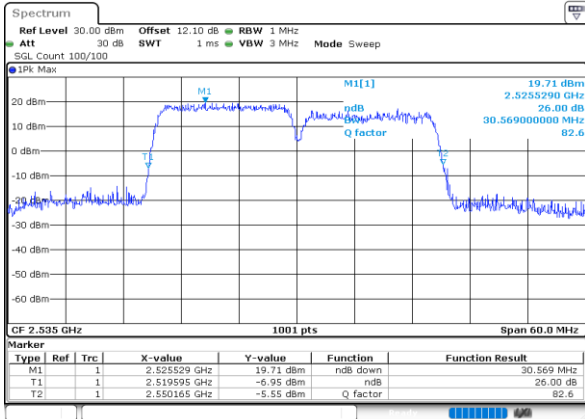
Date: 28 DEC 2023 02:58:50

Middle Channel / 15MHz+10MHz



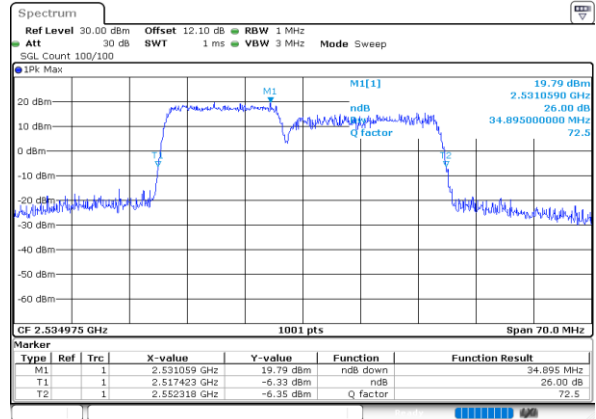
Date: 28 DEC 2023 07:00:59

Middle Channel / 15MHz+15MHz



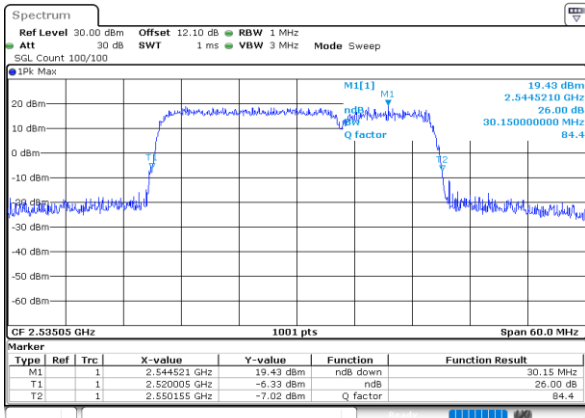
Date: 28 DEC 2023 04:18:16

Middle Channel / 15MHz+20MHz



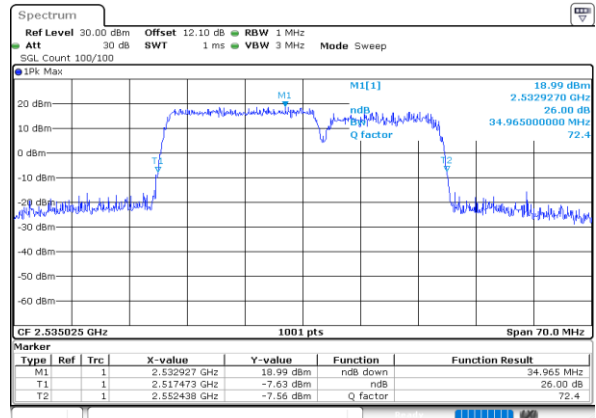
Date: 28 DEC 2023 05:01:52

Middle Channel / 20MHz+10MHz



Date: 28 DEC 2023 03:38:32

Middle Channel / 20MHz+15MHz



Date: 28 DEC 2023 05:41:32

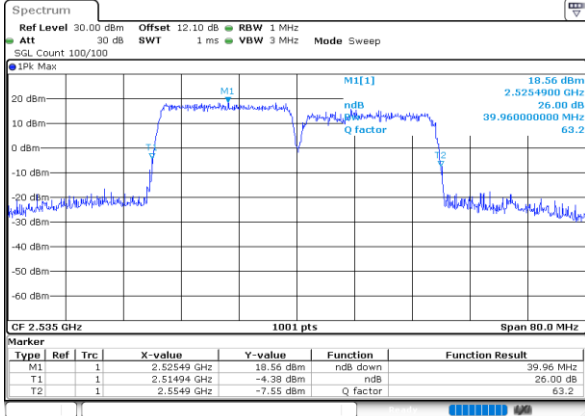


LTE Band 7C

64QAM

Middle Channel / 20MHz+20MHz

N/A



Date: 28. DEC. 2023 06:21:13