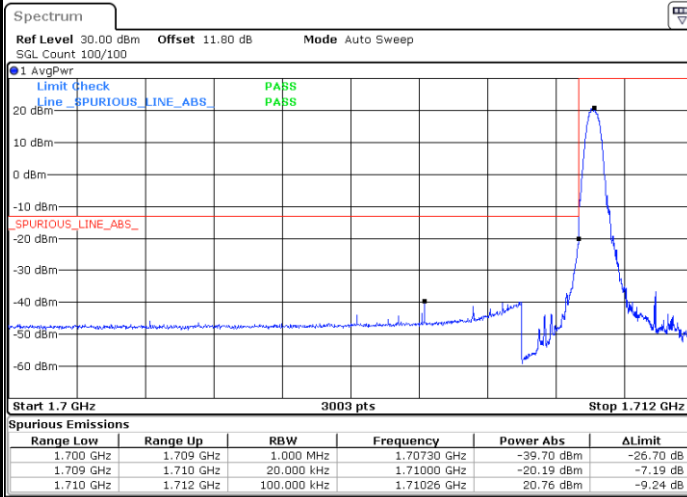




LTE Band 4 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



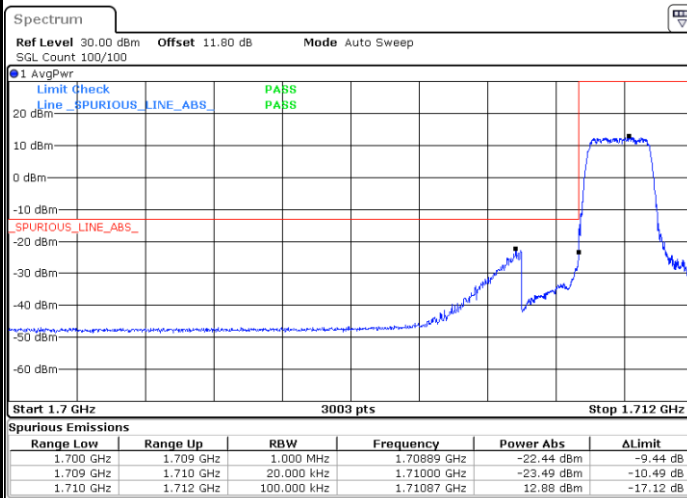
Date: 21.DEC.2023 13:39:33

Highest Band Edge / 1 RB



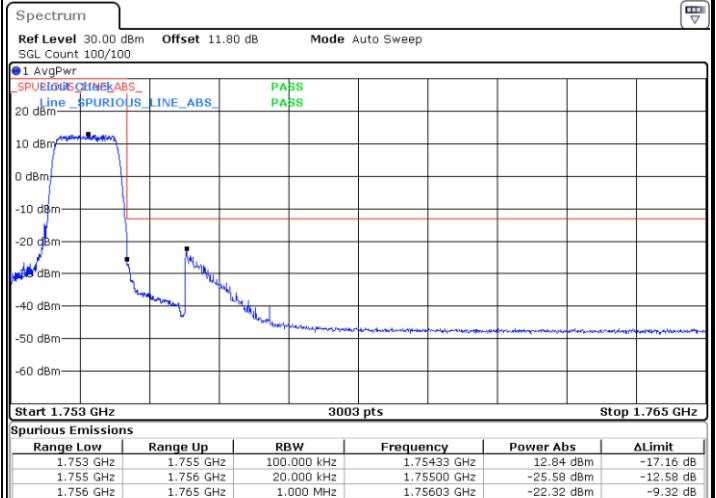
Date: 21.DEC.2023 13:52:12

Lowest Band Edge / Full RB



Date: 21.DEC.2023 13:43:04

Highest Band Edge / Full RB

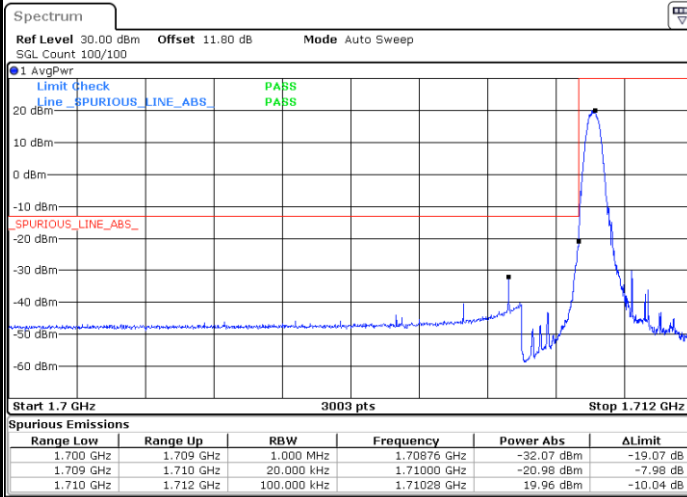


Date: 21.DEC.2023 13:55:43



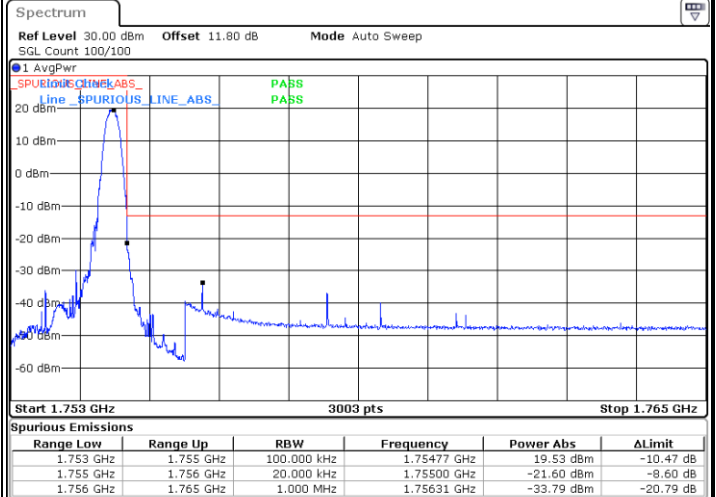
LTE Band 4 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



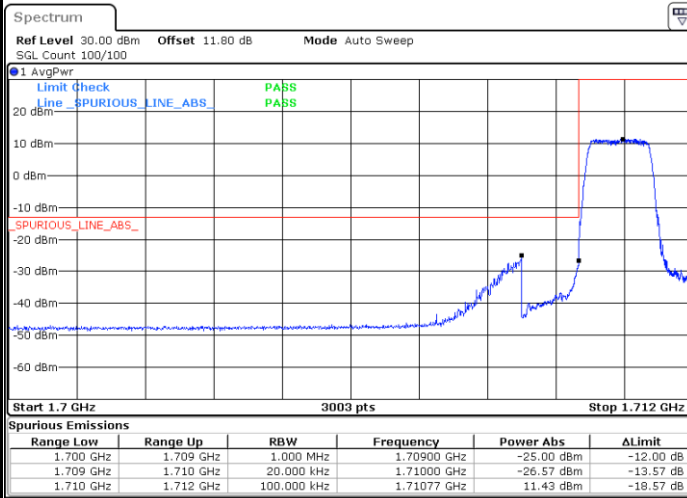
Date: 21.DEC.2023 13:40:25

Highest Band Edge / 1 RB



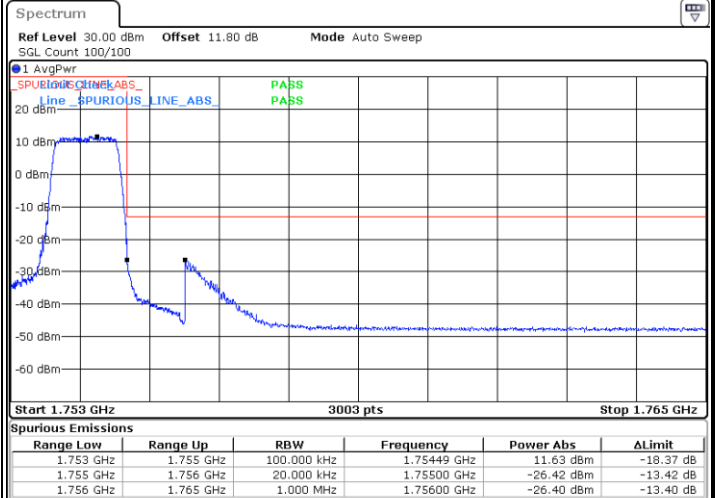
Date: 21.DEC.2023 13:53:04

Lowest Band Edge / Full RB



Date: 21.DEC.2023 13:43:56

Highest Band Edge / Full RB

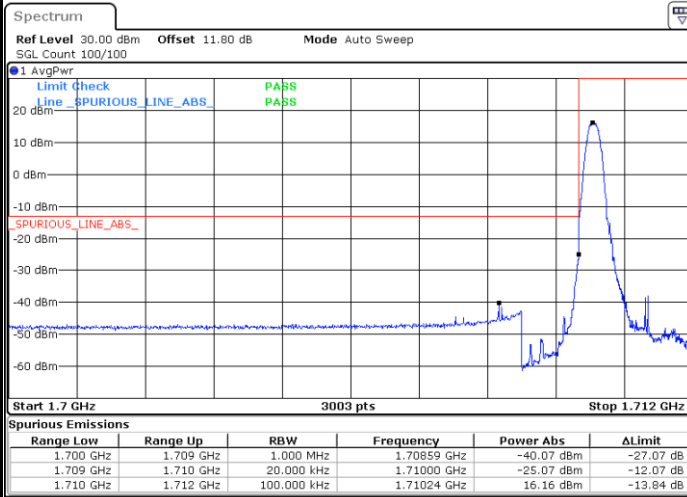


Date: 21.DEC.2023 13:56:35



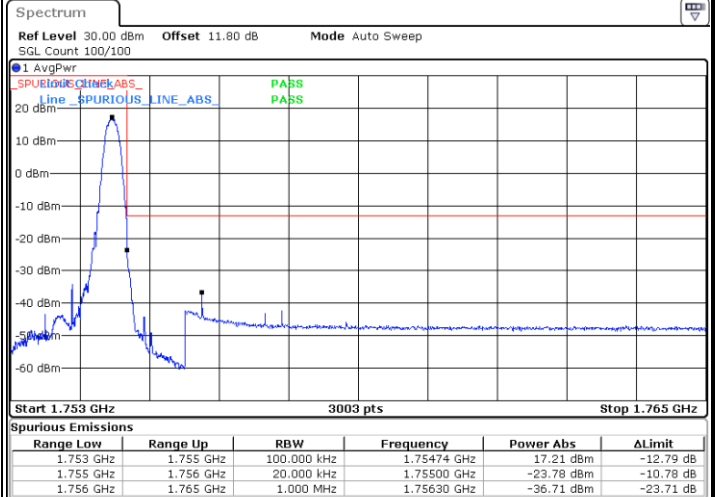
LTE Band 4 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB



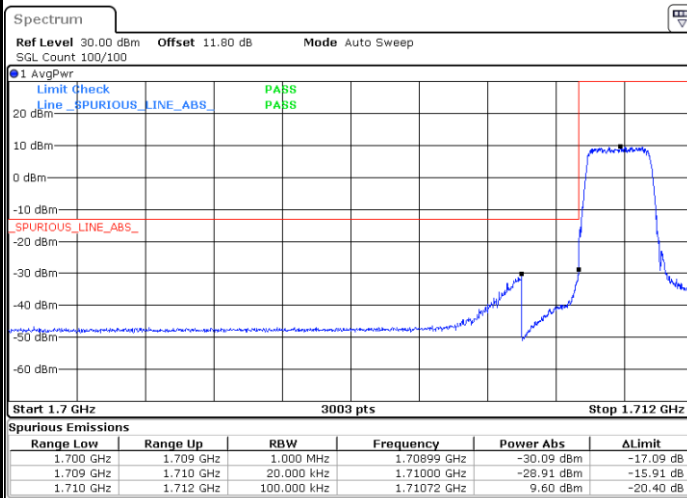
Date: 21.DEC.2023 13:41:17

Highest Band Edge / 1 RB



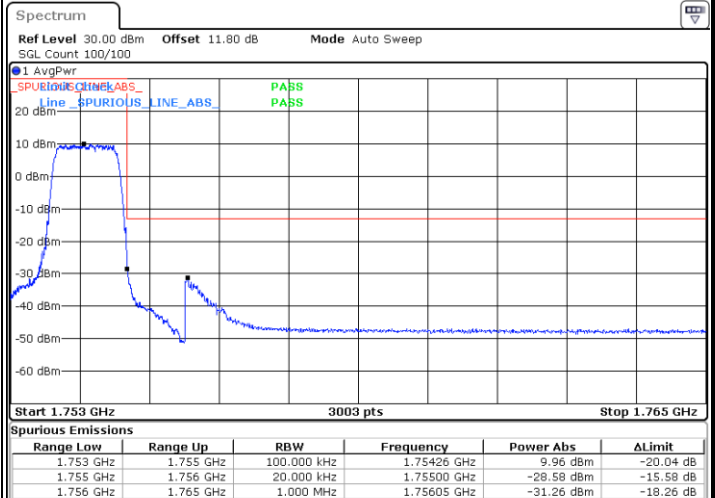
Date: 21.DEC.2023 13:53:56

Lowest Band Edge / Full RB



Date: 21.DEC.2023 13:44:48

Highest Band Edge / Full RB

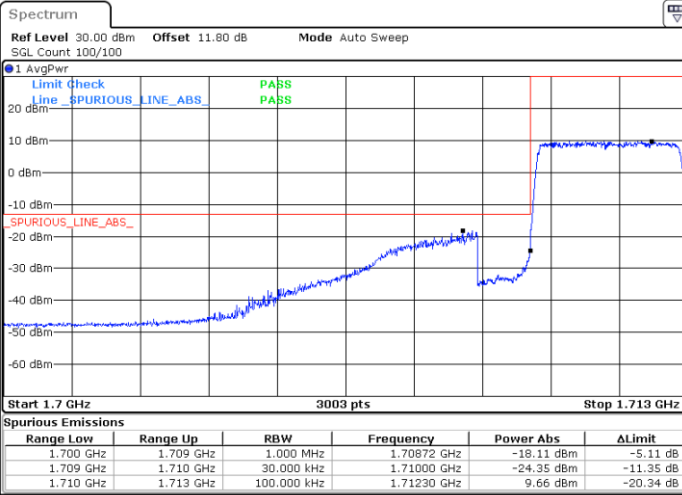


Date: 21.DEC.2023 13:57:27



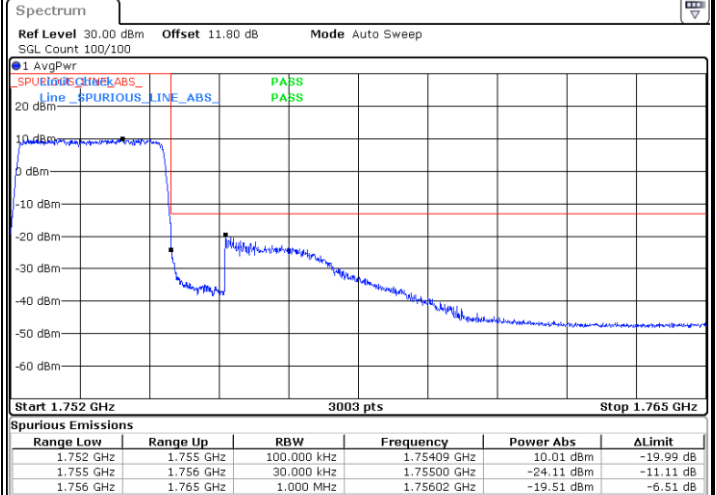
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / Full RB



Date: 21.DEC.2023 14:04:35

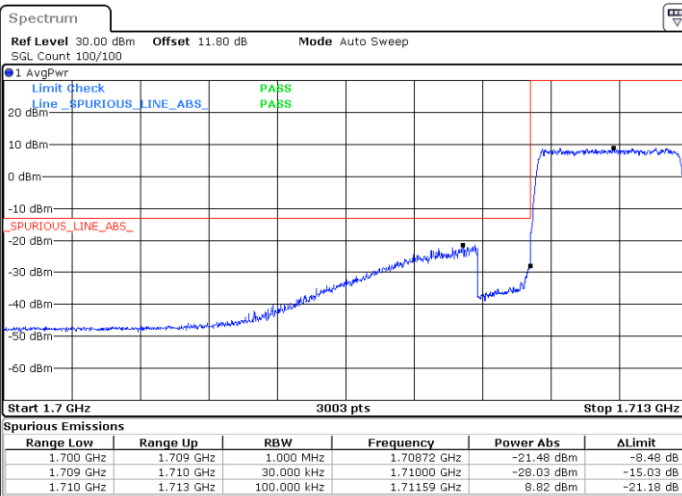
Highest Band Edge / Full RB



Date: 21.DEC.2023 14:22:59

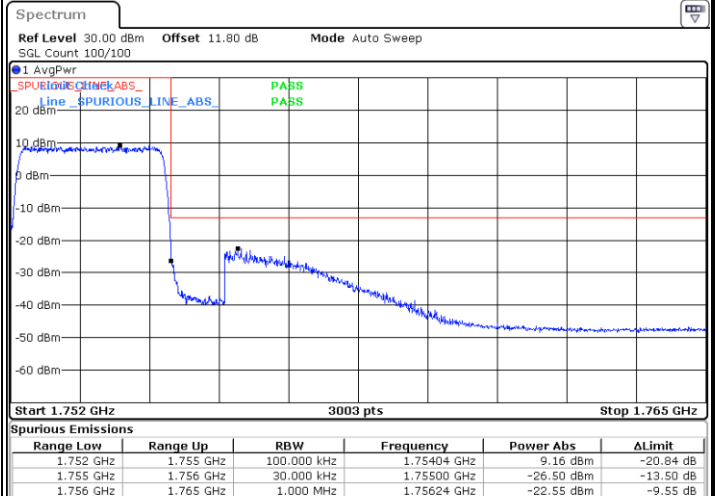
LTE Band 4 / 3MHz / 16QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 14:05:27

Highest Band Edge / Full RB

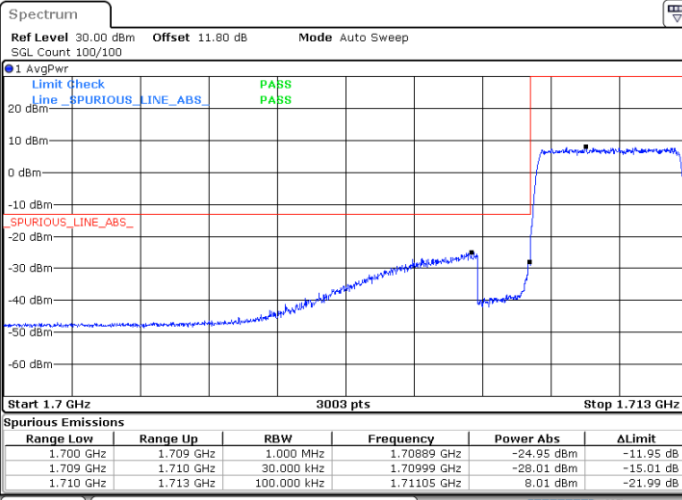


Date: 21.DEC.2023 14:23:51



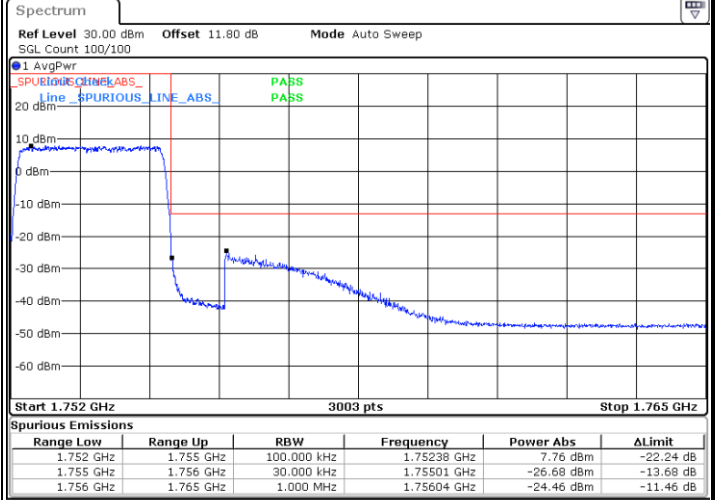
LTE Band 4 / 3MHz / 64QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 14:06:19

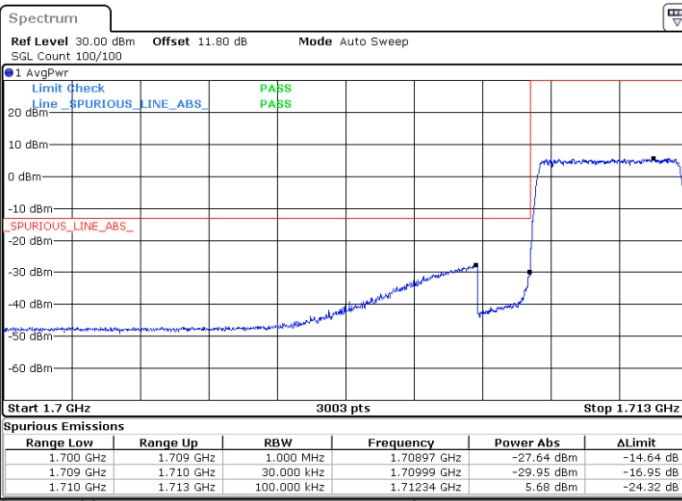
Highest Band Edge / Full RB



Date: 21.DEC.2023 14:24:43

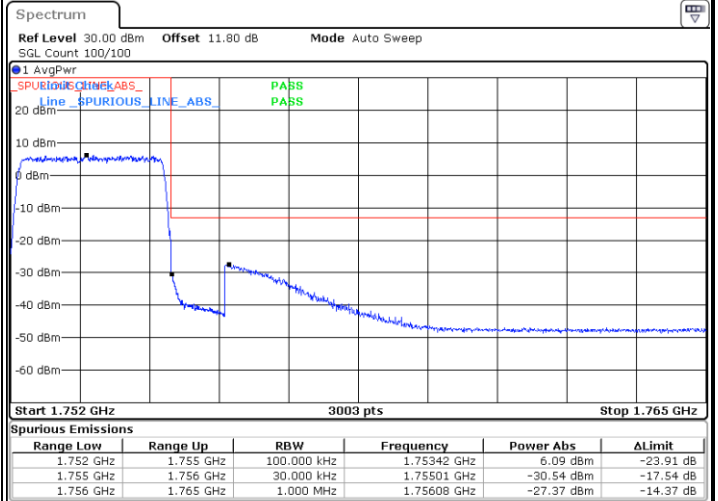
LTE Band 4 / 3MHz / 256QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 14:07:11

Highest Band Edge / Full RB

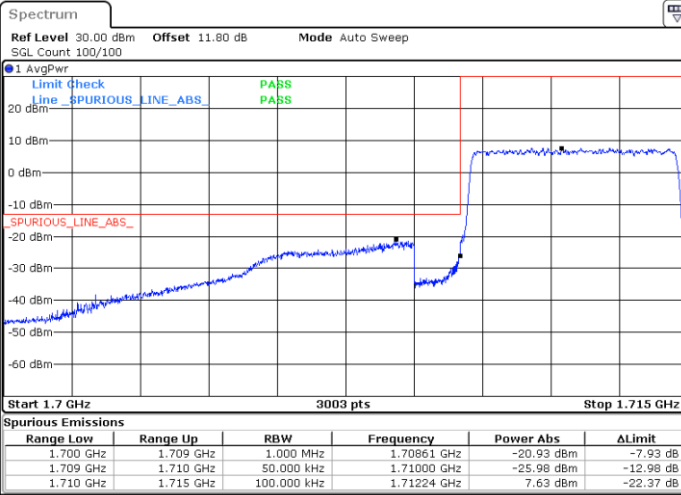


Date: 21.DEC.2023 14:25:35



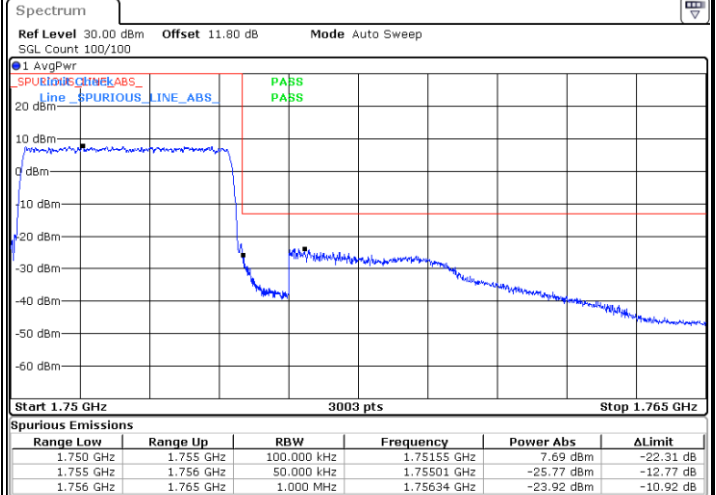
LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / Full RB



Date: 21.DEC.2023 14:42:44

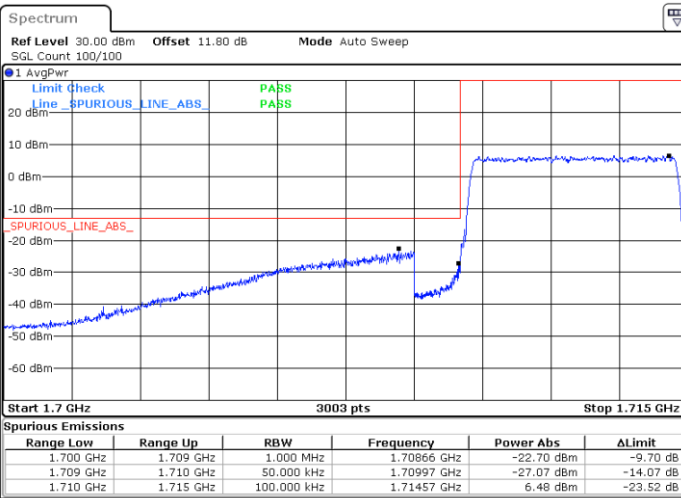
Highest Band Edge / Full RB



Date: 21.DEC.2023 14:55:24

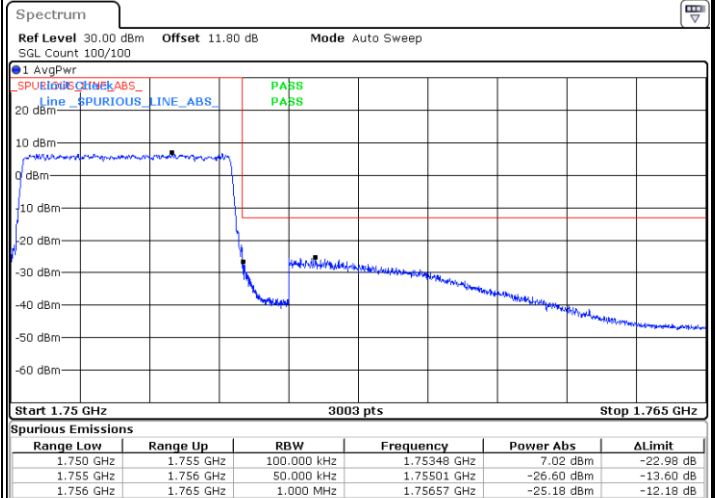
LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 14:43:36

Highest Band Edge / Full RB

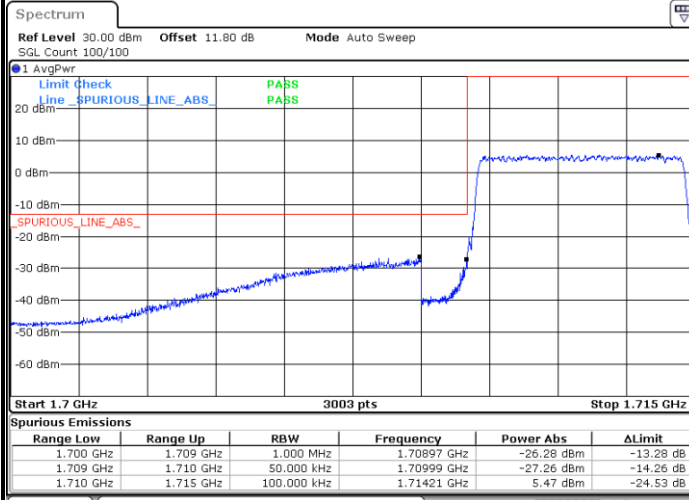


Date: 21.DEC.2023 14:56:16

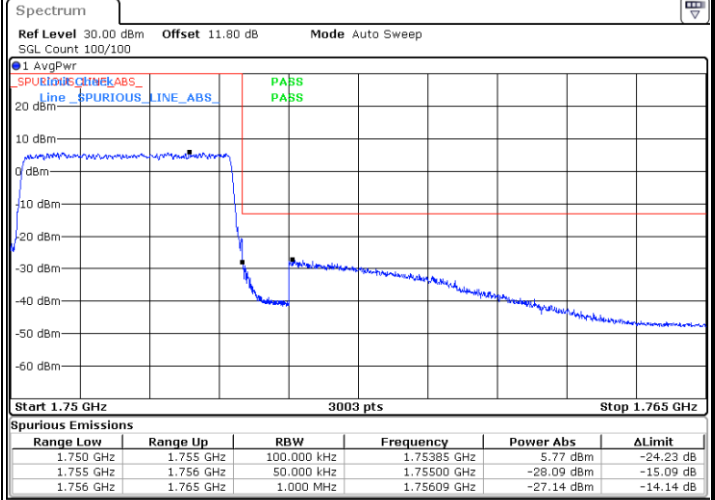


LTE Band 4 / 5MHz / 64QAM

Lowest Band Edge / Full RB

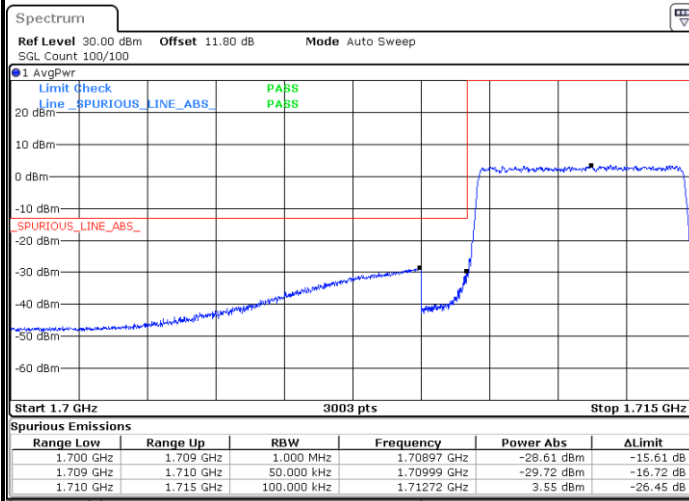


Highest Band Edge / Full RB

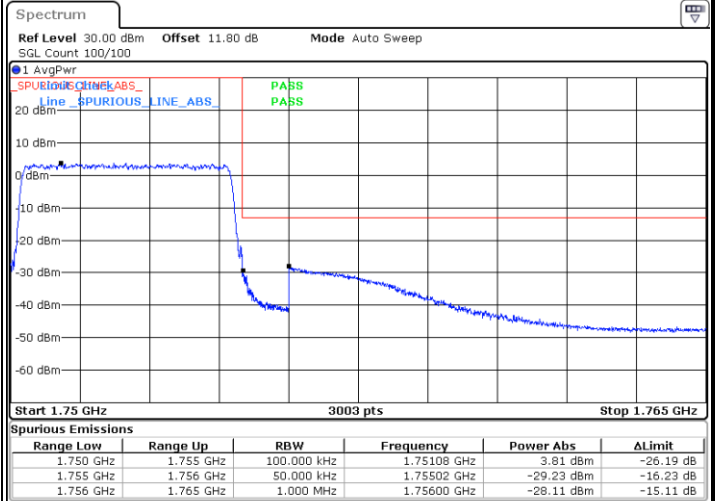


LTE Band 4 / 5MHz / 256QAM

Lowest Band Edge / Full RB



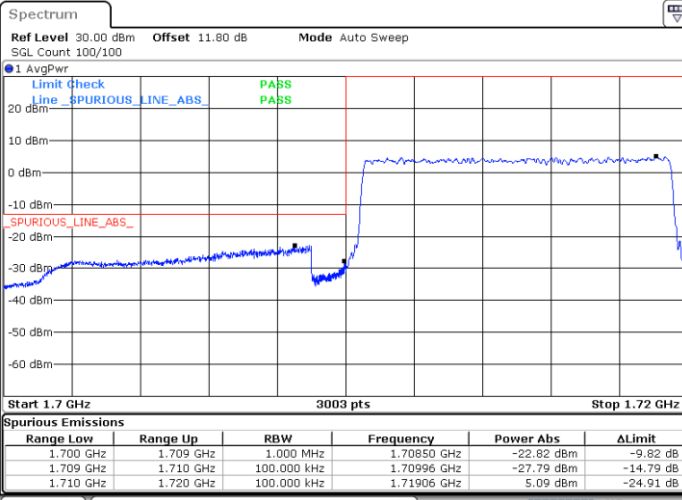
Highest Band Edge / Full RB





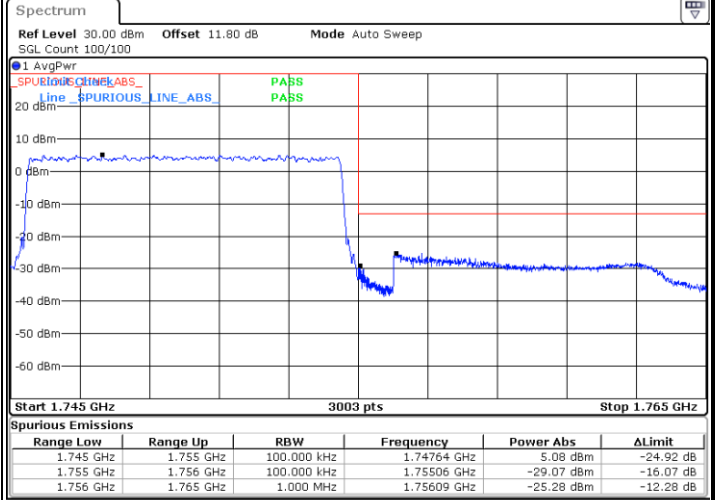
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:05:26

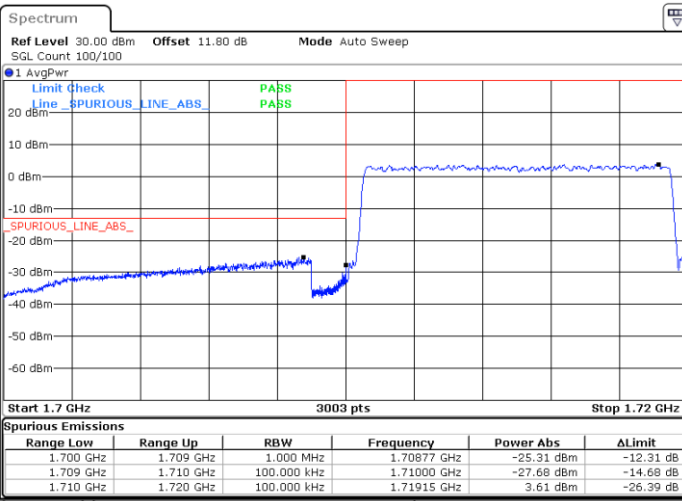
Highest Band Edge / Full RB



Date: 21.DEC.2023 15:18:04

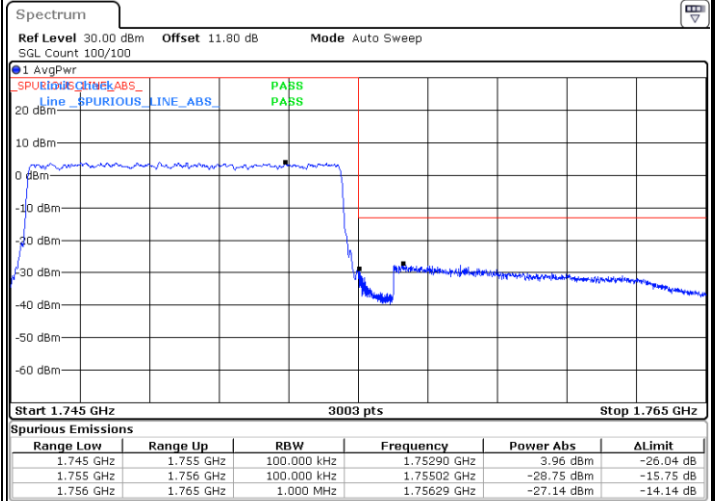
LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:06:18

Highest Band Edge / Full RB



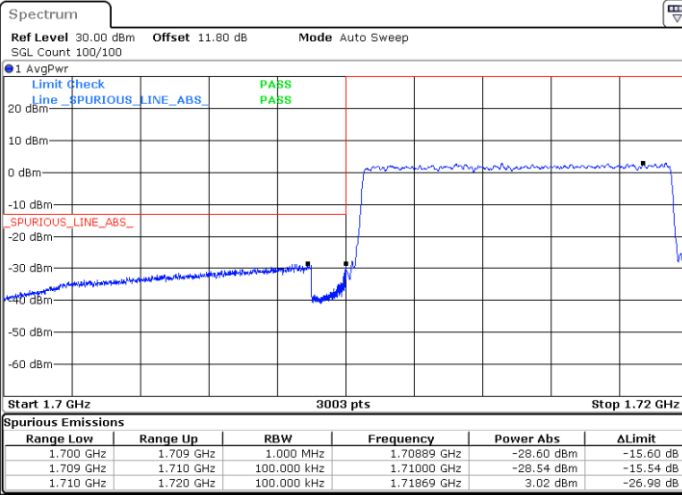
Date: 21.DEC.2023 15:18:56





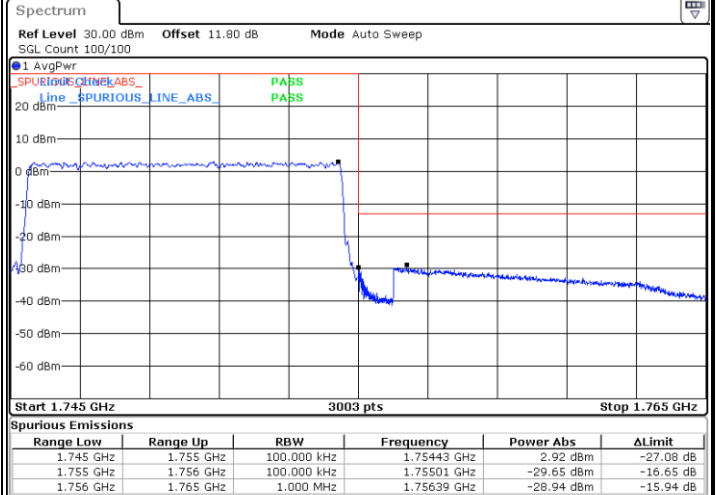
LTE Band 4 / 10MHz / 64QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:07:10

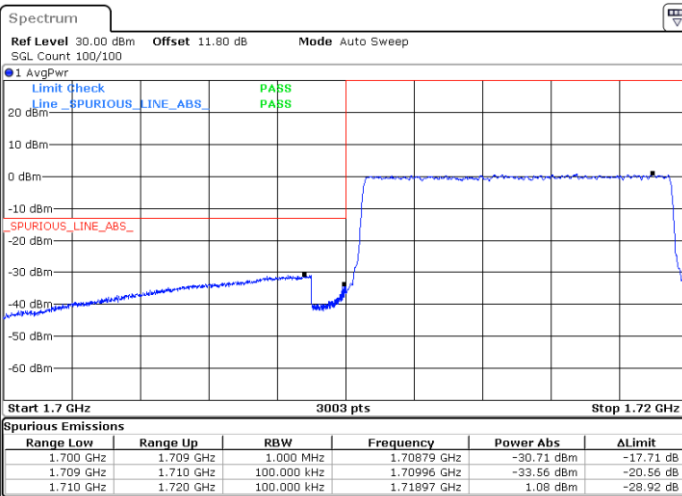
Highest Band Edge / Full RB



Date: 21.DEC.2023 15:19:48

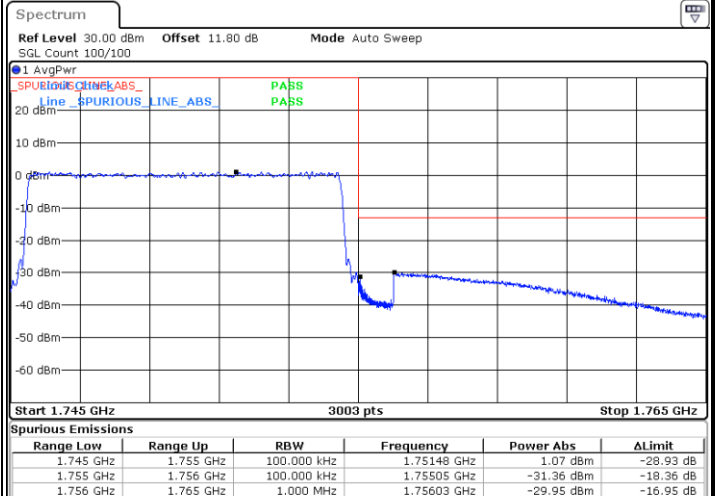
LTE Band 4 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:08:02

Highest Band Edge / Full RB

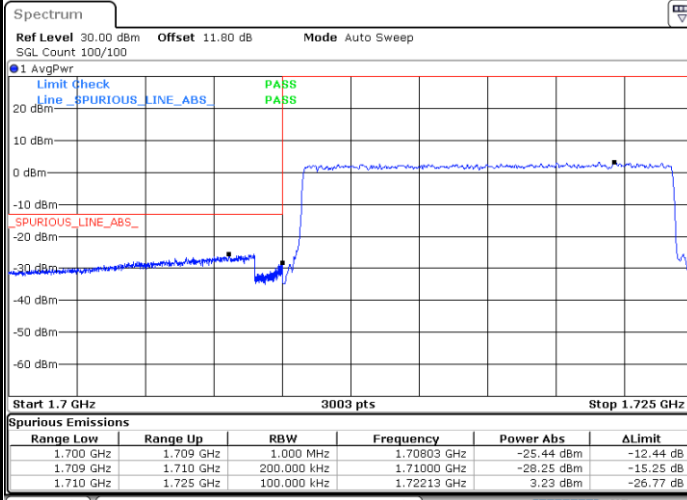


Date: 21.DEC.2023 15:20:40



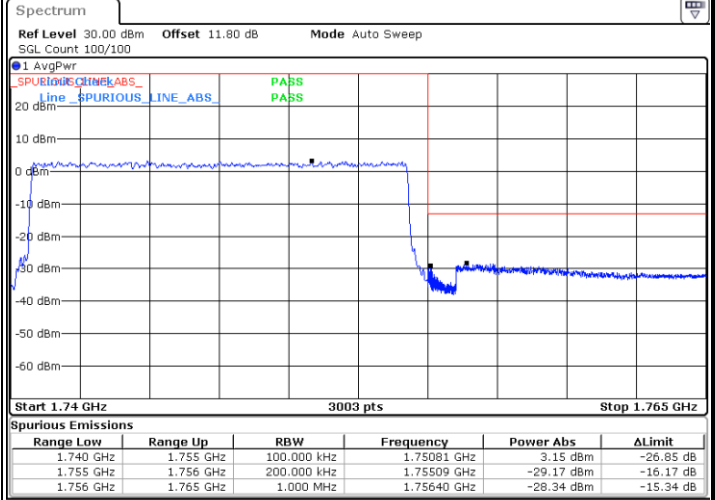
LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:31:43

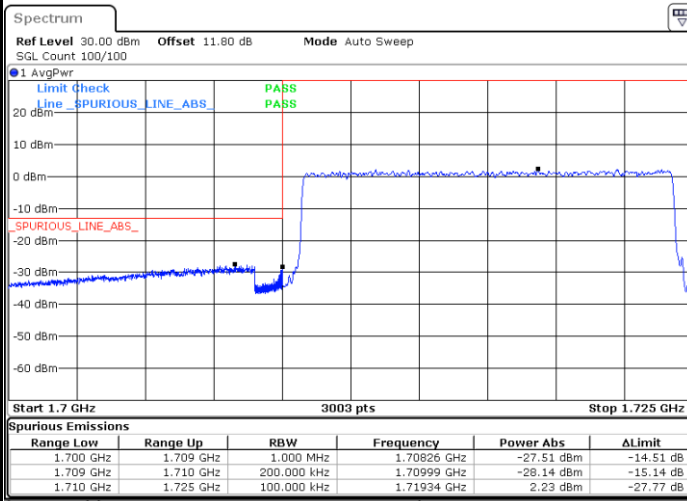
Highest Band Edge / Full RB



Date: 21.DEC.2023 15:44:21

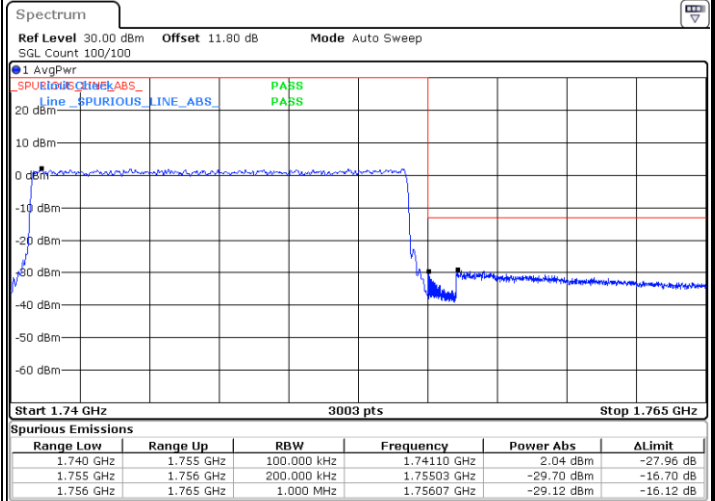
LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:32:35

Highest Band Edge / Full RB

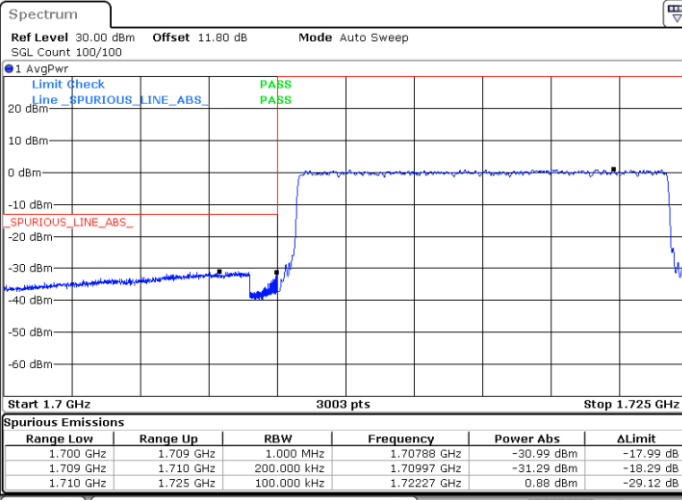


Date: 21.DEC.2023 15:45:13



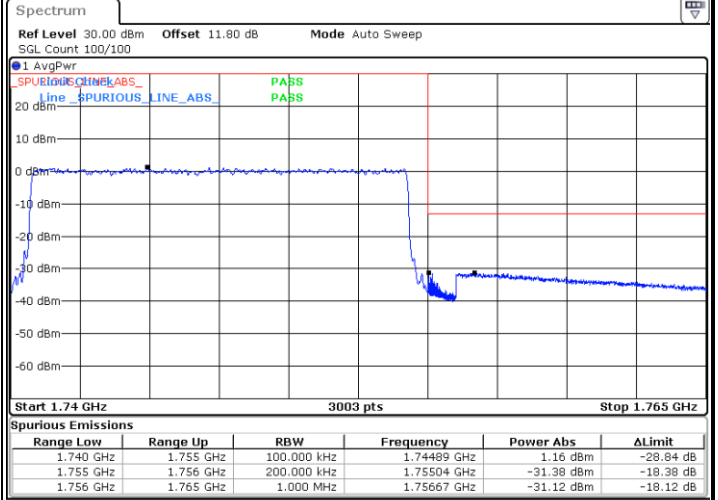
LTE Band 4 / 15MHz / 64QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:33:27

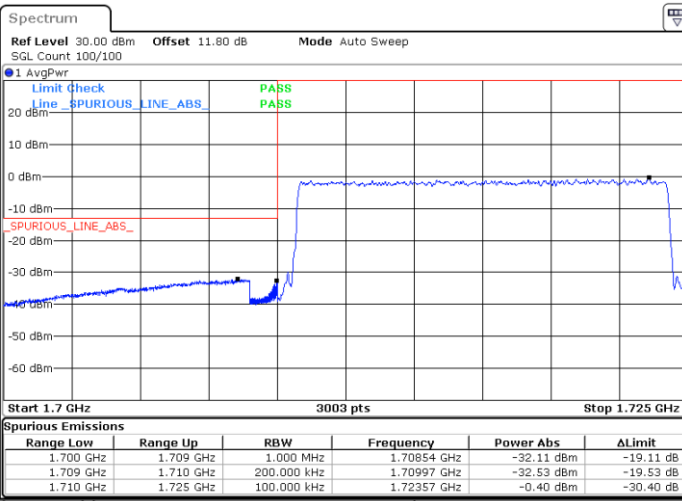
Highest Band Edge / Full RB



Date: 21.DEC.2023 15:46:05

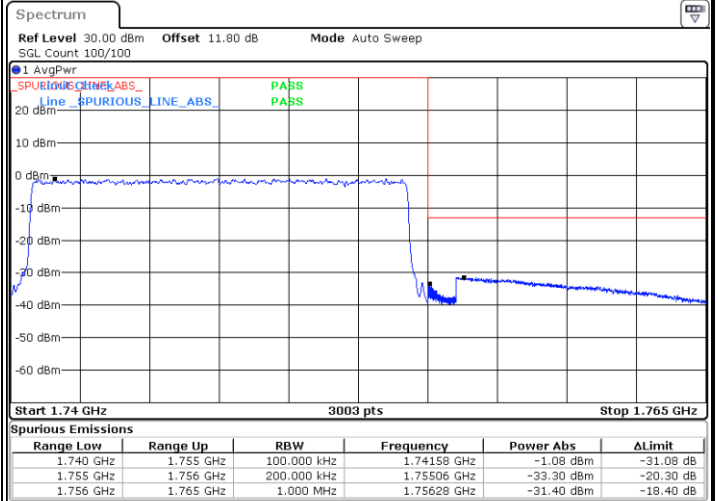
LTE Band 4 / 15MHz / 256QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 15:34:19

Highest Band Edge / Full RB

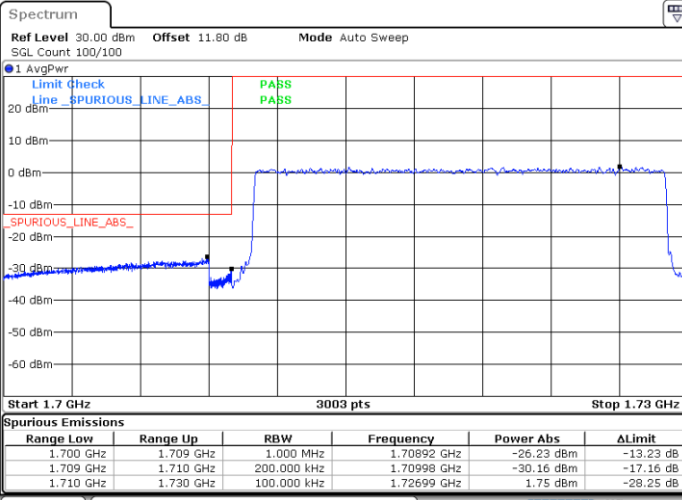


Date: 21.DEC.2023 15:46:57



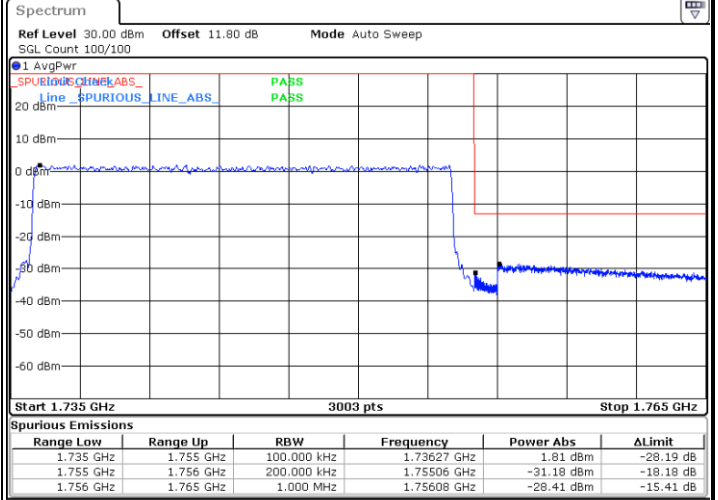
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / Full RB



Date: 21.DEC.2023 16:00:49

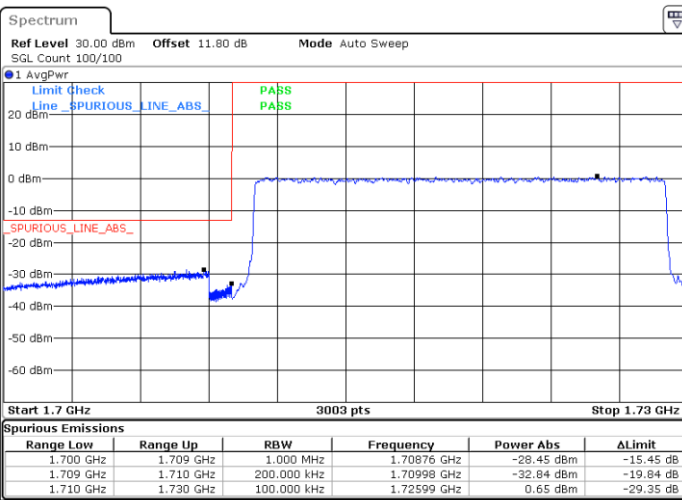
Highest Band Edge / Full RB



Date: 21.DEC.2023 16:13:27

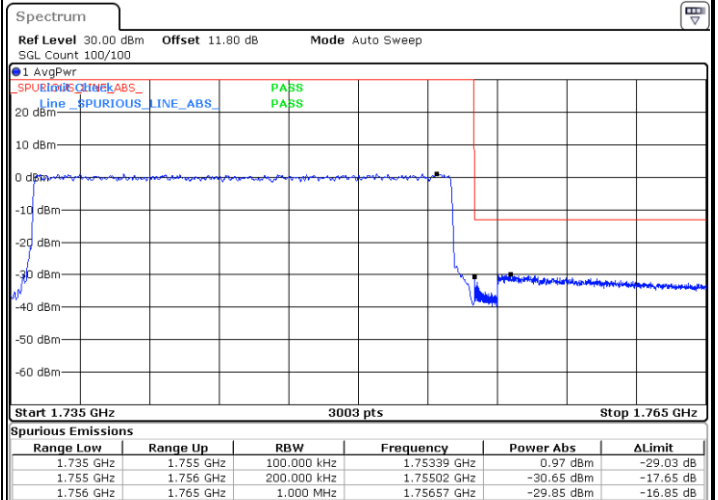
LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 16:01:41

Highest Band Edge / Full RB

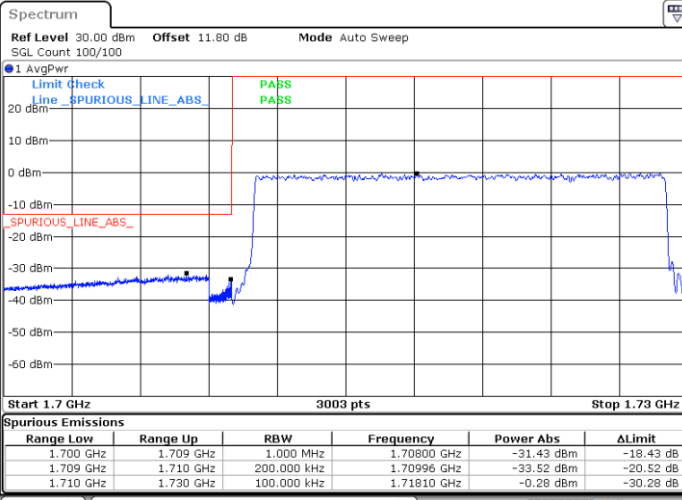


Date: 21.DEC.2023 16:14:19



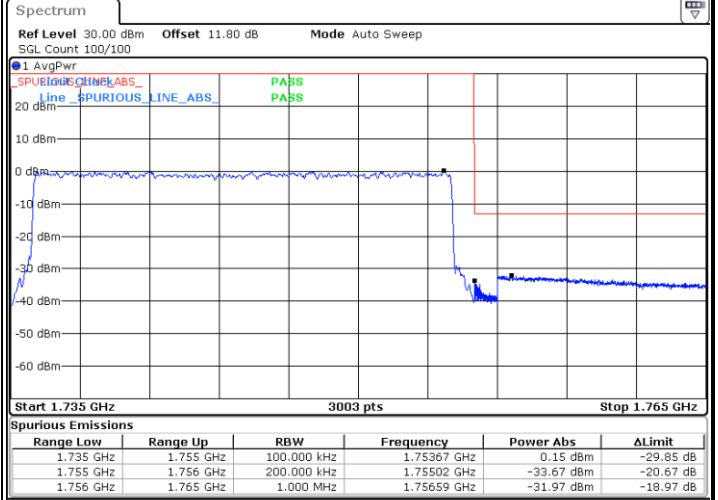
LTE Band 4 / 20MHz / 64QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 16:02:33

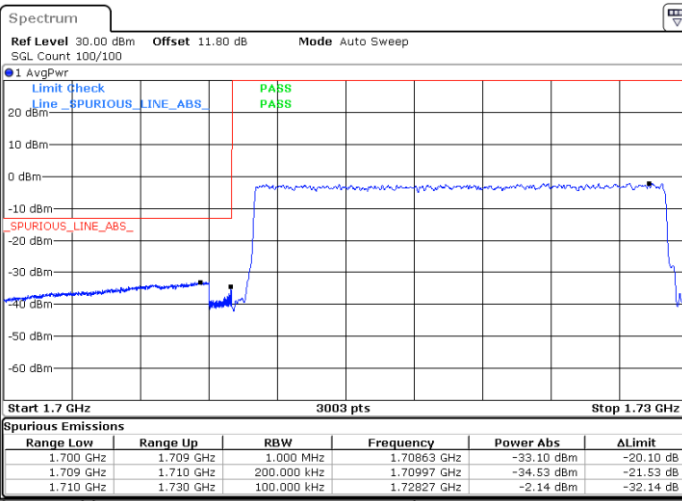
Highest Band Edge / Full RB



Date: 21.DEC.2023 16:15:11

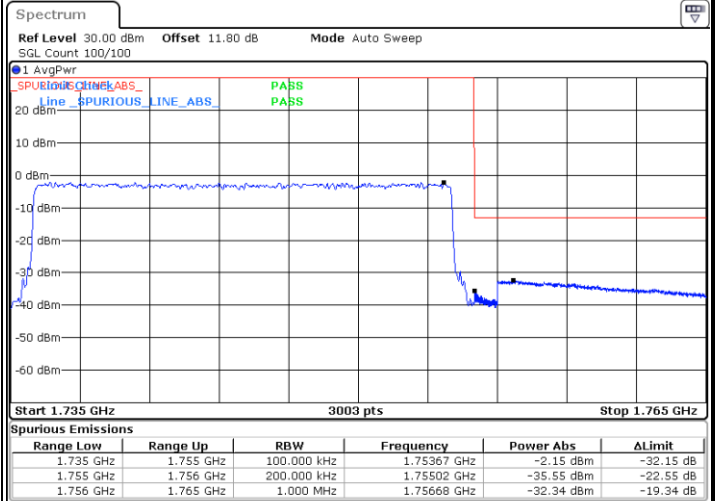
LTE Band 4 / 20MHz / 256QAM

Lowest Band Edge / Full RB



Date: 21.DEC.2023 16:03:25

Highest Band Edge / Full RB



Date: 21.DEC.2023 16:16:03

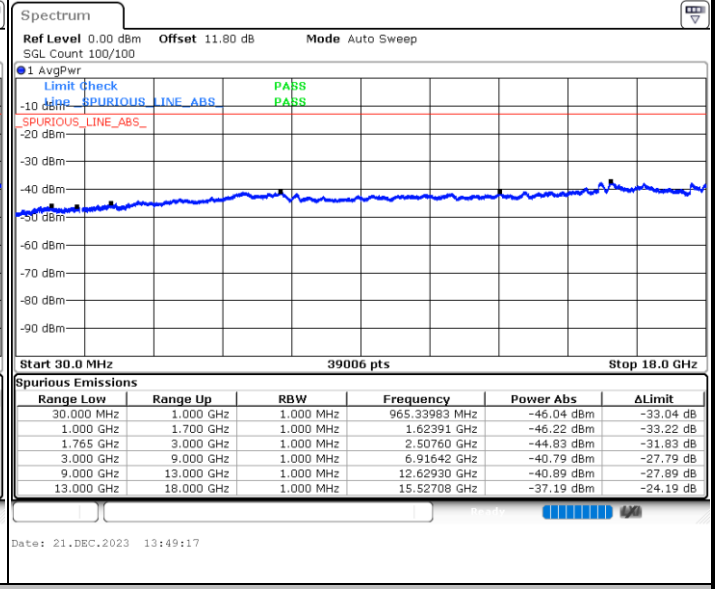
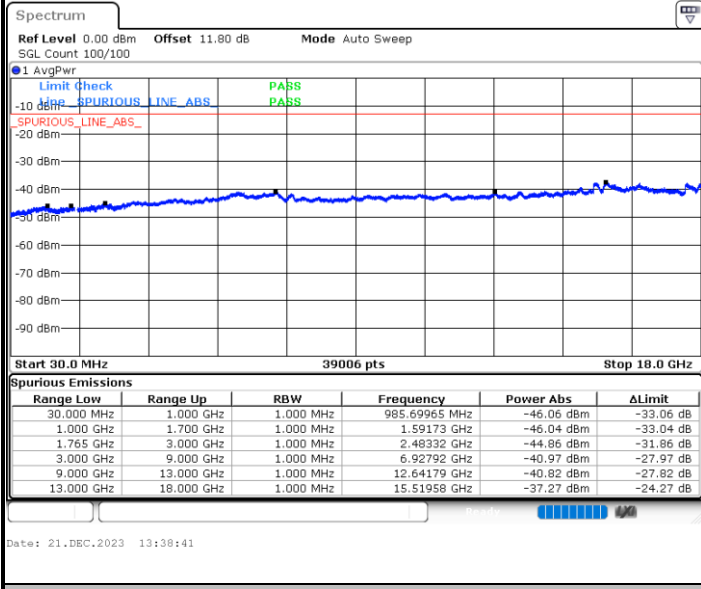


# Conducted Spurious Emission

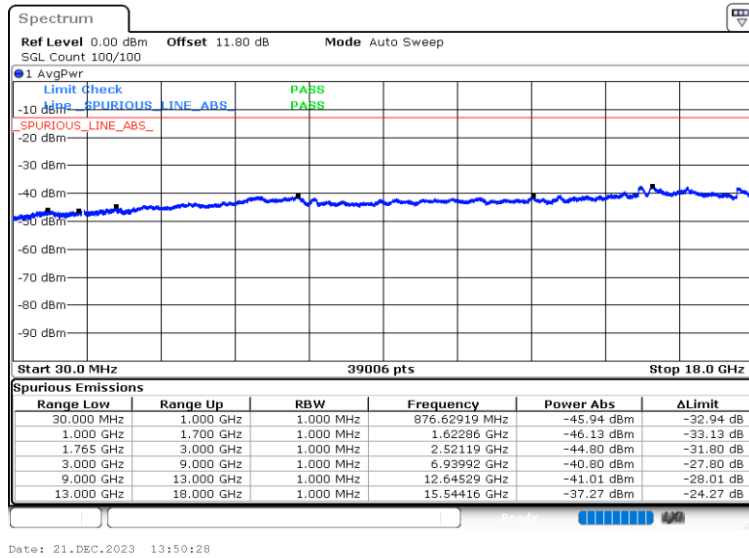
## LTE Band 4 / 1.4MHz

### Lowest Channel / QPSK

### Middle Channel / QPSK



### Highest Channel / QPSK

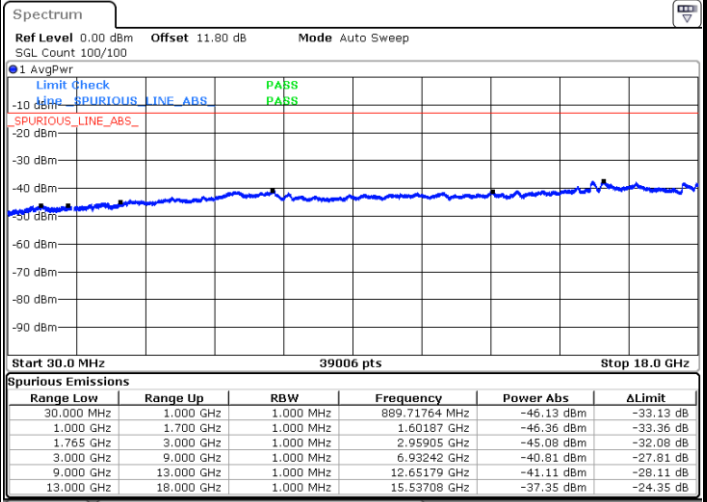
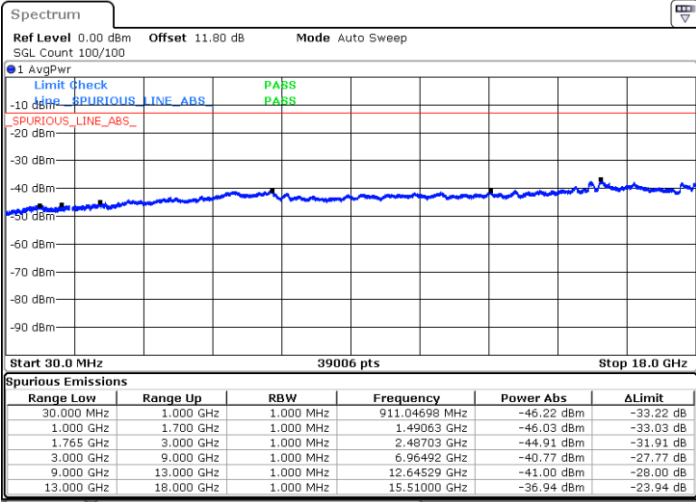




LTE Band 4 / 3MHz

Lowest Channel / QPSK

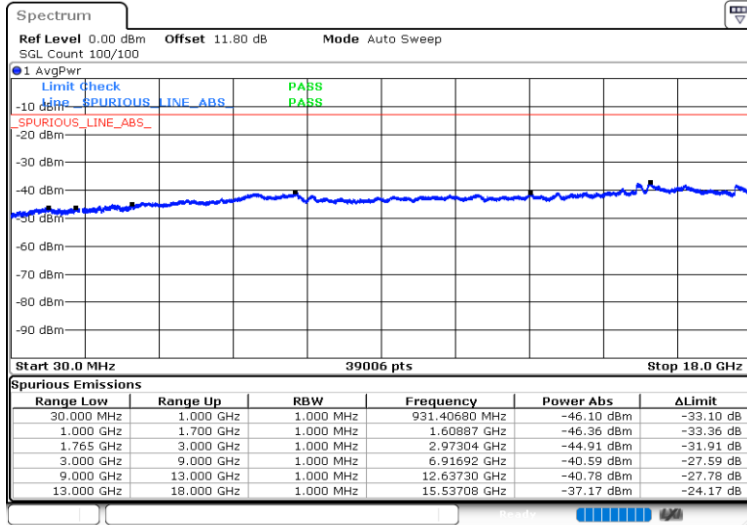
Middle Channel / QPSK



Date: 21.DEC.2023 14:01:05

Date: 21.DEC.2023 14:11:41

Highest Channel / QPSK



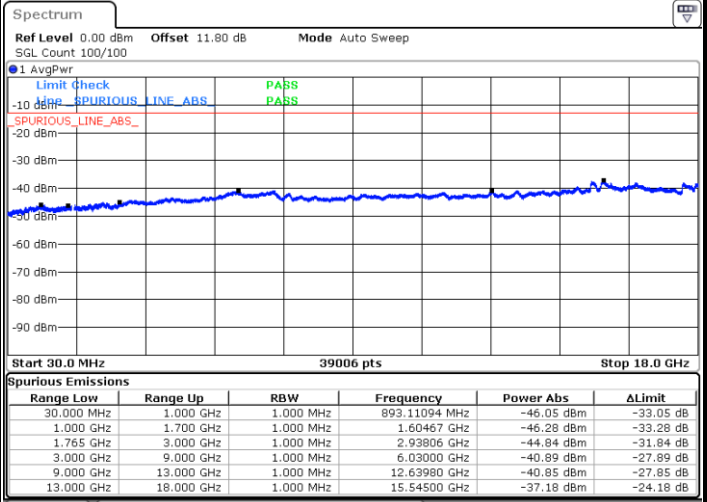
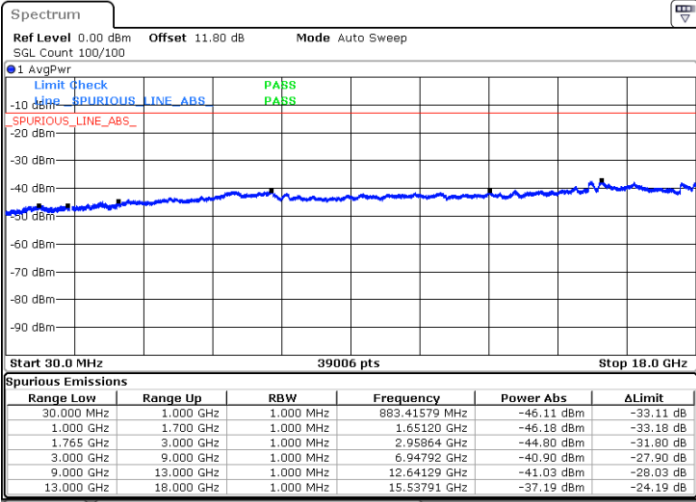
Date: 21.DEC.2023 14:12:52



LTE Band 4 / 5MHz

Lowest Channel / QPSK

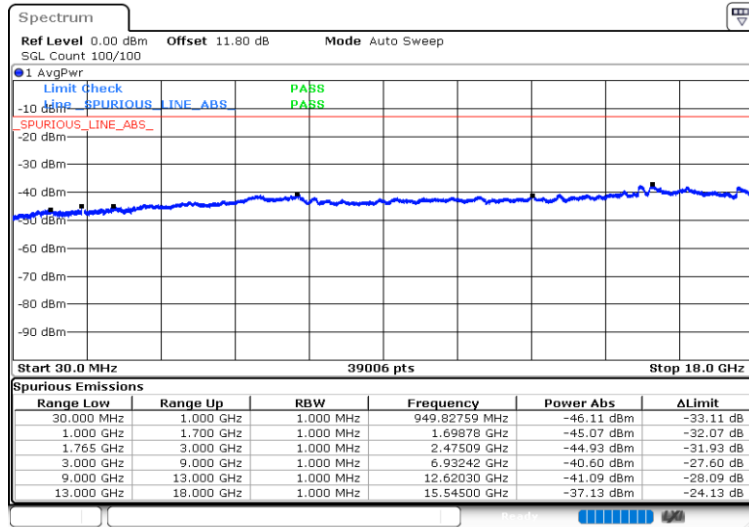
Middle Channel / QPSK



Date: 21.DEC.2023 14:39:11

Date: 21.DEC.2023 14:49:51

Highest Channel / QPSK



Date: 21.DEC.2023 14:51:02

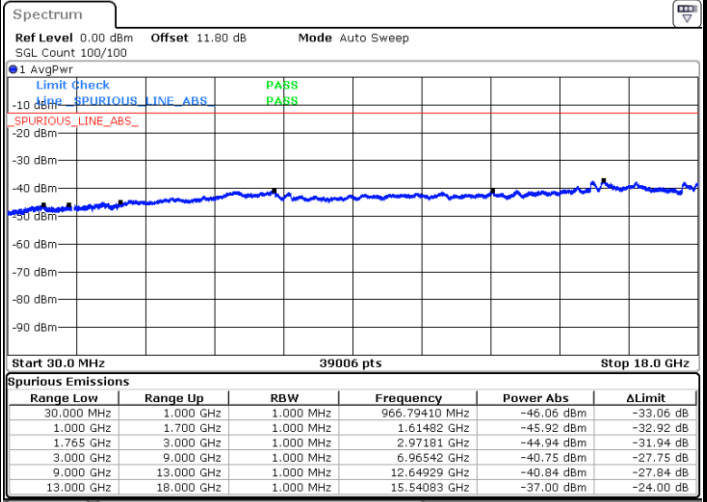
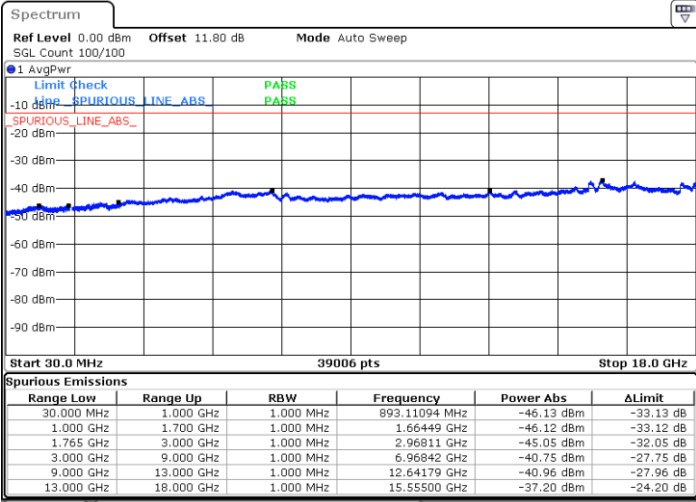




LTE Band 4 / 10MHz

Lowest Channel / QPSK

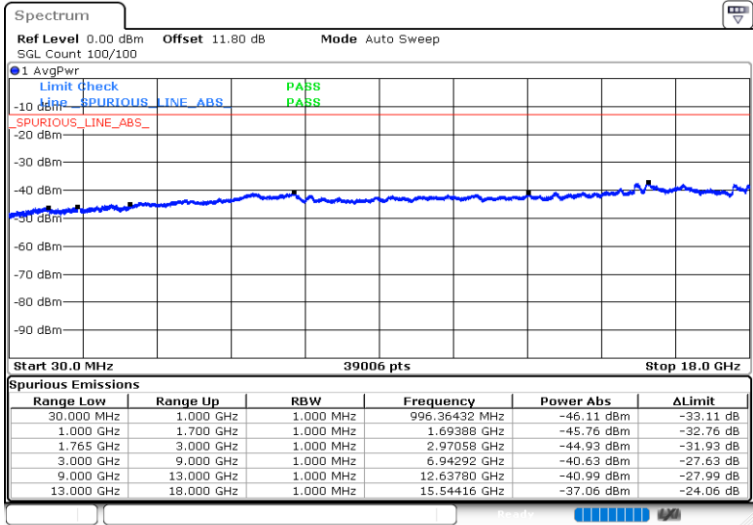
Middle Channel / QPSK



Date: 21.DEC.2023 15:01:55

Date: 21.DEC.2023 15:12:30

Highest Channel / QPSK



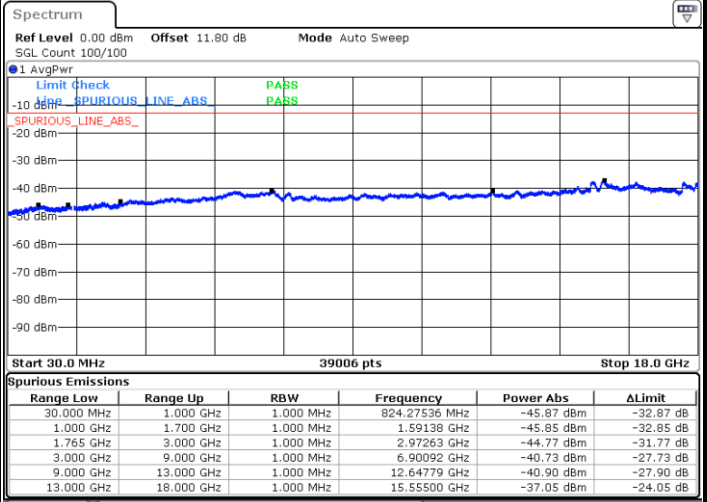
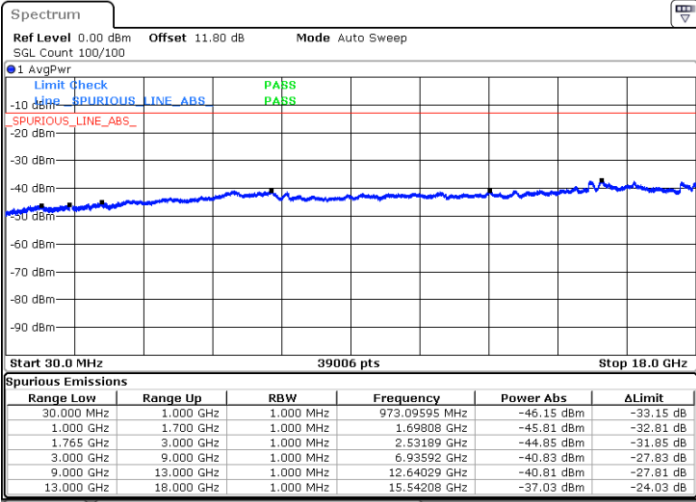
Date: 21.DEC.2023 15:13:41



LTE Band 4 / 15MHz

Lowest Channel / QPSK

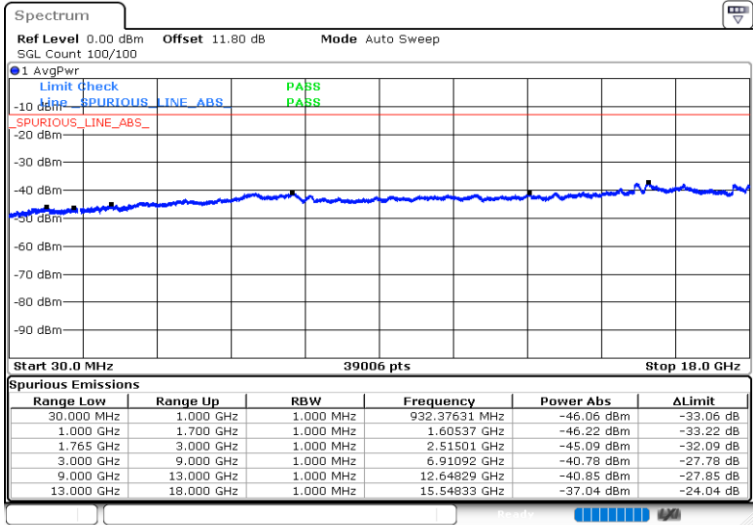
Middle Channel / QPSK



Date: 21.DEC.2023 15:24:32

Date: 21.DEC.2023 15:38:47

Highest Channel / QPSK



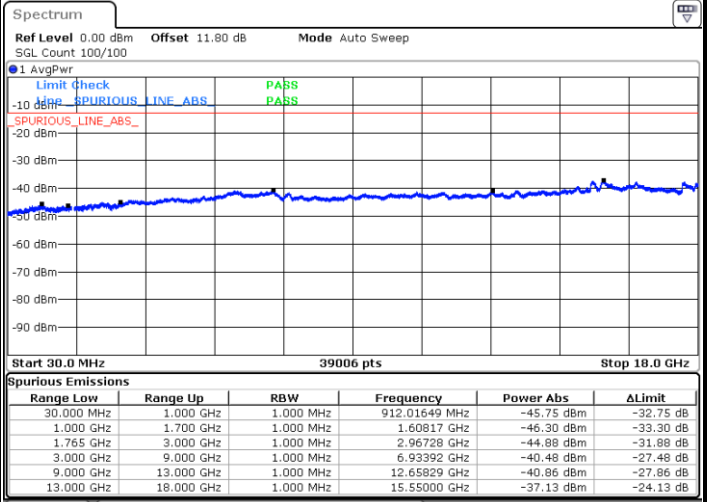
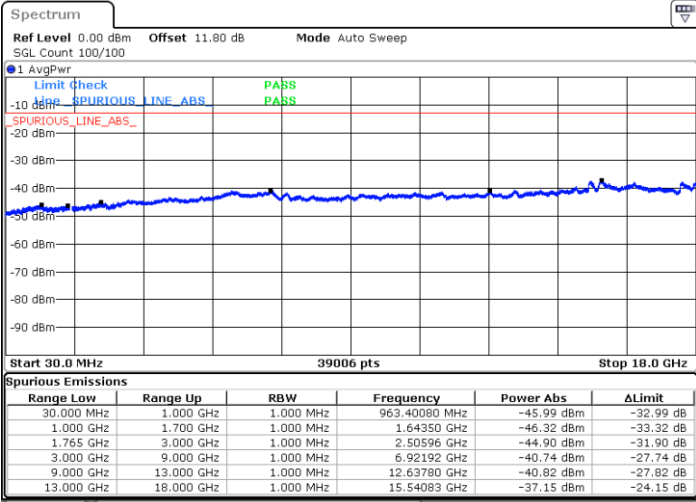
Date: 21.DEC.2023 15:39:58



LTE Band 4 / 20MHz

Lowest Channel / QPSK

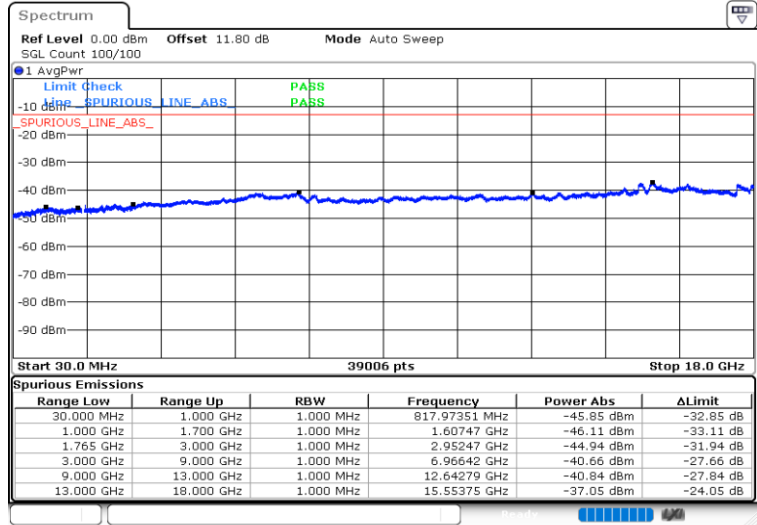
Middle Channel / QPSK



Date: 21.DEC.2023 15:55:06

Date: 21.DEC.2023 16:07:54

Highest Channel / QPSK



Date: 21.DEC.2023 16:09:04



### Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0064	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0056	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0064	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0059	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0091	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0053	

**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 5

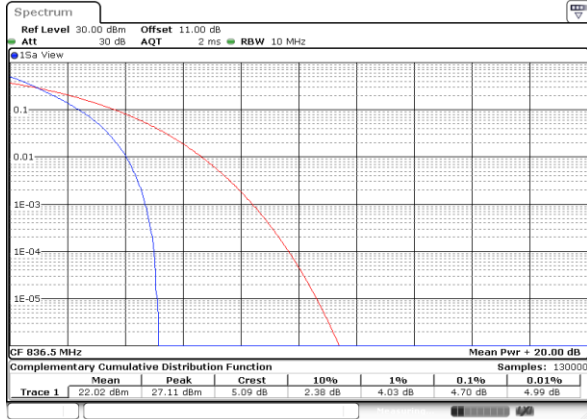
### Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.70	5.57	6.17	6.64	PASS



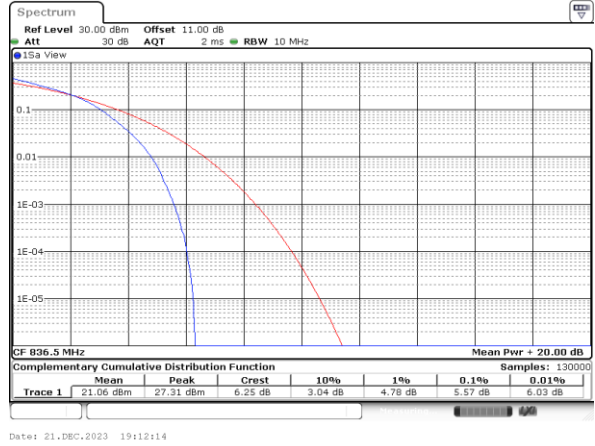
LTE Band 5 / 10MHz / QPSK

Middle Channel / Full RB



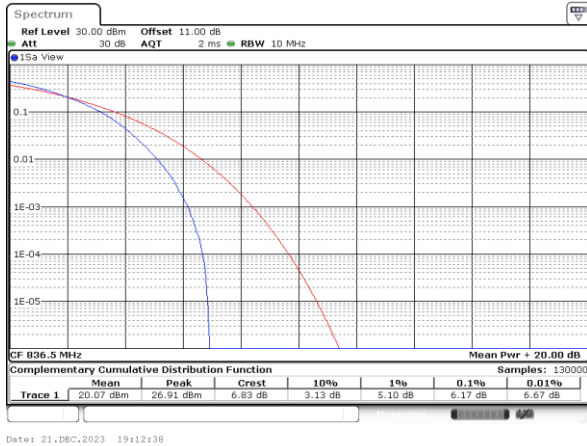
LTE Band 5 / 10MHz / 16QAM

Middle Channel / Full RB



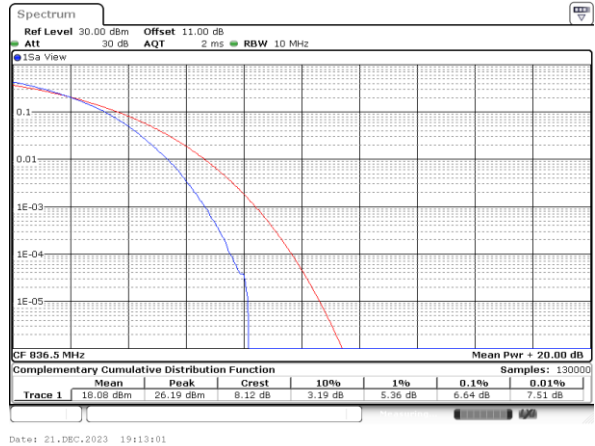
LTE Band 5 / 10MHz / 64QAM

Middle Channel / Full RB



LTE Band 5 / 10MHz / 256QAM

Middle Channel / Full RB





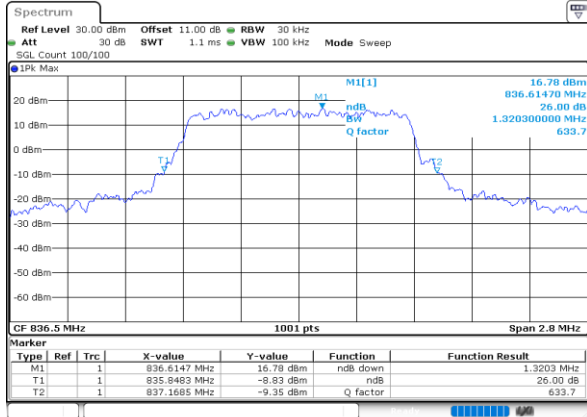
**26dB Bandwidth**

Mode	LTE Band 5 : 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	1.32	1.31	3.05	3.02	4.93	4.90	9.99	9.97	-	-	-	-
Mode	LTE Band 5 : 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	1.29	1.29	3.06	3.06	5.08	4.93	9.84	9.86	-	-	-	-



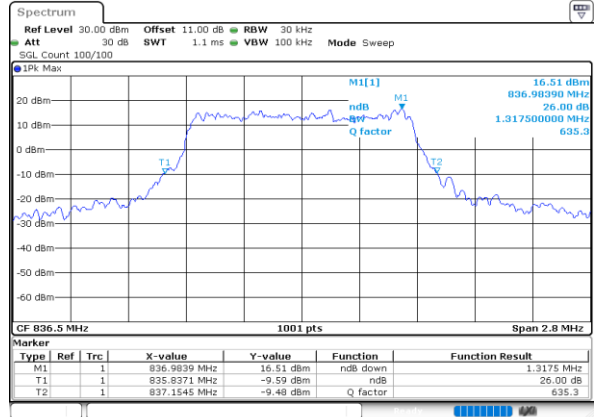
LTE Band 5

Middle Channel / 1.4MHz / QPSK



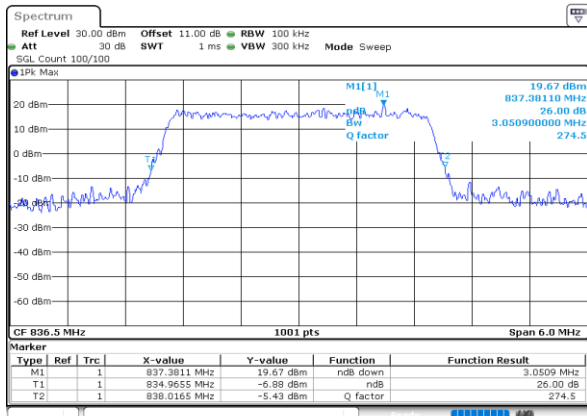
Date: 21.DEC.2023 16:30:56

Middle Channel / 1.4MHz / 16QAM



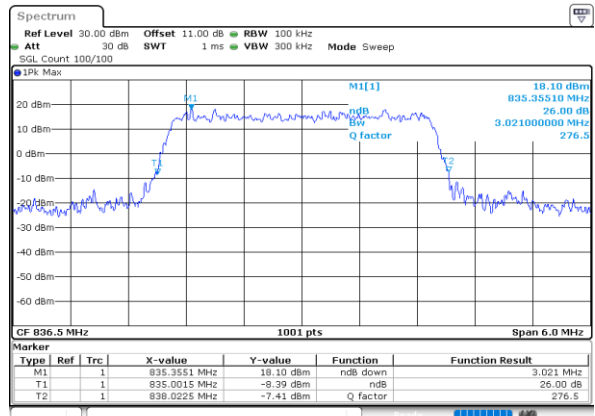
Date: 21.DEC.2023 16:31:18

Middle Channel / 3MHz / QPSK



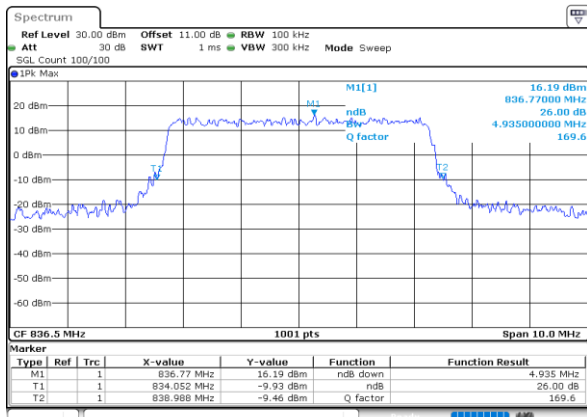
Date: 21.DEC.2023 17:05:40

Middle Channel / 3MHz / 16QAM



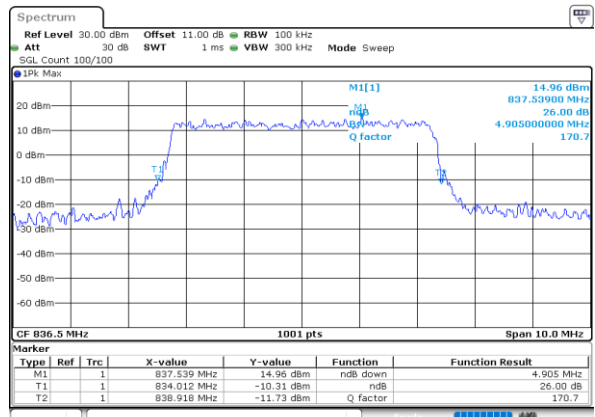
Date: 21.DEC.2023 17:06:03

Middle Channel / 5MHz / QPSK



Date: 21.DEC.2023 17:26:57

Middle Channel / 5MHz / 16QAM



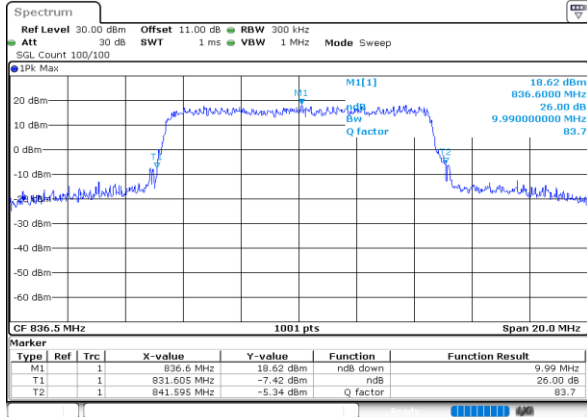
Date: 21.DEC.2023 17:27:20





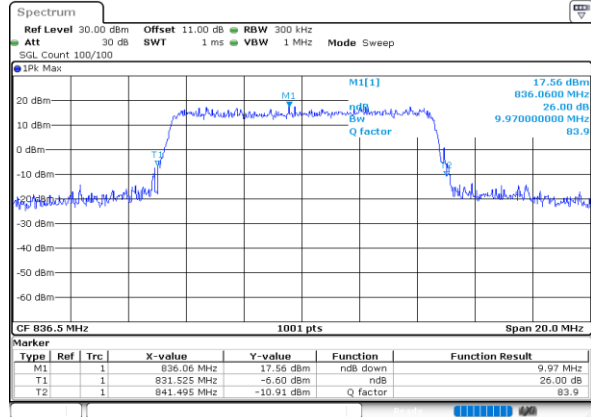
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 21. DEC. 2023 18:41:18

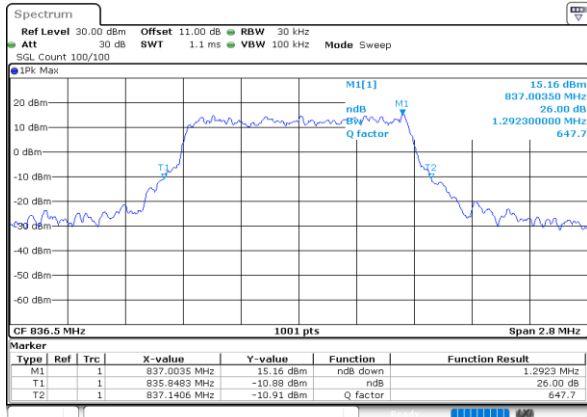
Middle Channel / 10MHz / 16QAM



Date: 21. DEC. 2023 18:41:40

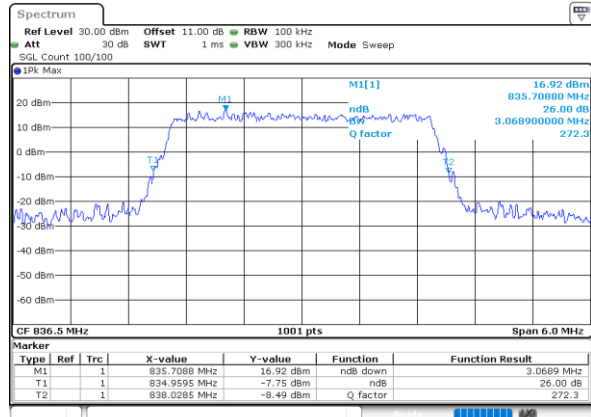
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



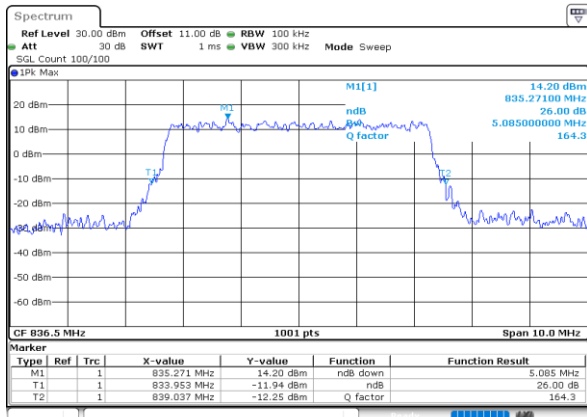
Date: 21. DEC. 2023 16:32:26

Middle Channel / 3MHz / 64QAM



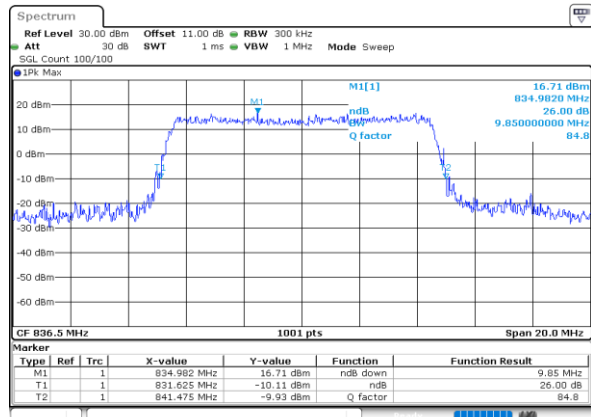
Date: 21. DEC. 2023 17:07:10

Middle Channel / 5MHz / 64QAM



Date: 21. DEC. 2023 17:28:28

Middle Channel / 10MHz / 64QAM

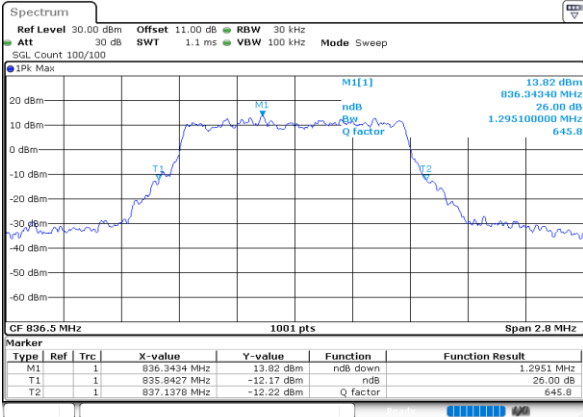


Date: 21. DEC. 2023 18:42:47



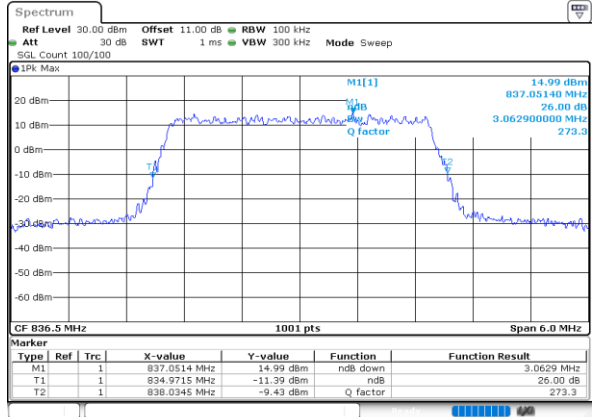
LTE Band 5

Middle Channel / 1.4MHz / 256QAM



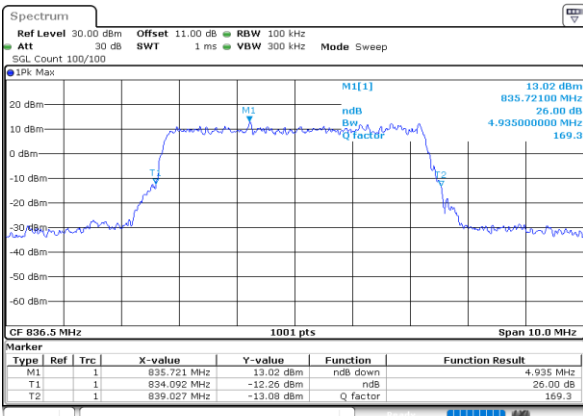
Date: 21.DEC.2023 16:32:48

Middle Channel / 3MHz / 256QAM



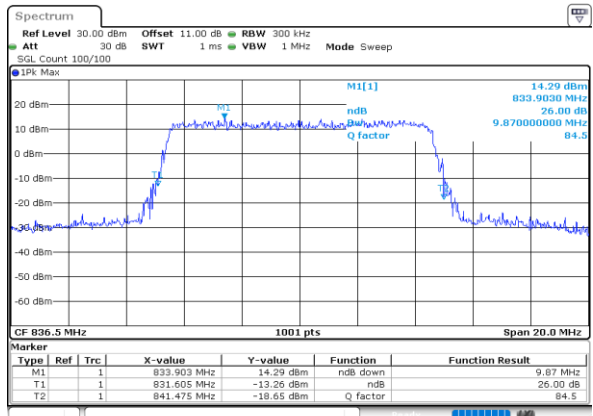
Date: 21.DEC.2023 17:07:33

Middle Channel / 5MHz / 256QAM



Date: 21.DEC.2023 17:28:50

Middle Channel / 10MHz / 256QAM



Date: 21.DEC.2023 18:43:09



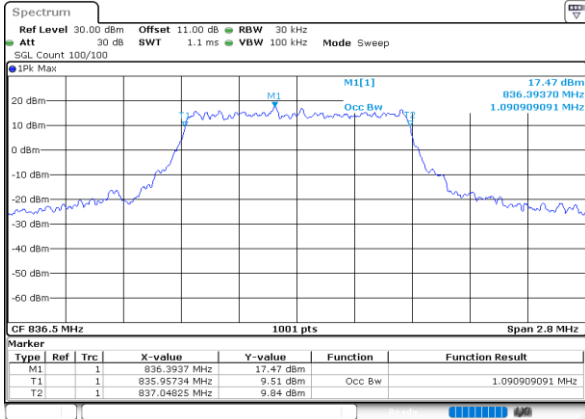
**Occupied Bandwidth**

Mode	LTE Band 5 : 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	1.09	1.10	2.74	2.73	4.49	4.50	9.05	9.07	-	-	-	-
Mode	LTE Band 5 : 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	1.09	1.10	2.74	2.73	4.50	4.50	9.05	9.07	-	-	-	-



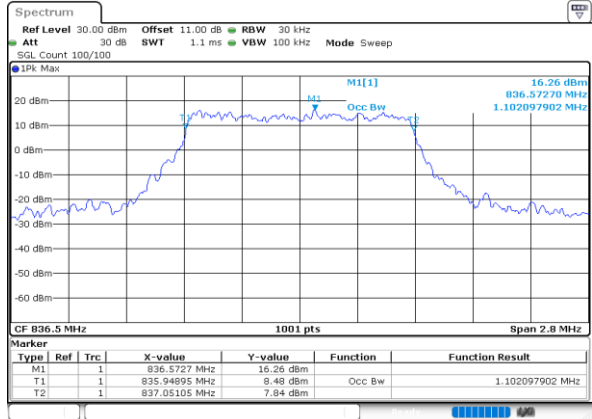
LTE Band 5

Middle Channel / 1.4MHz / QPSK



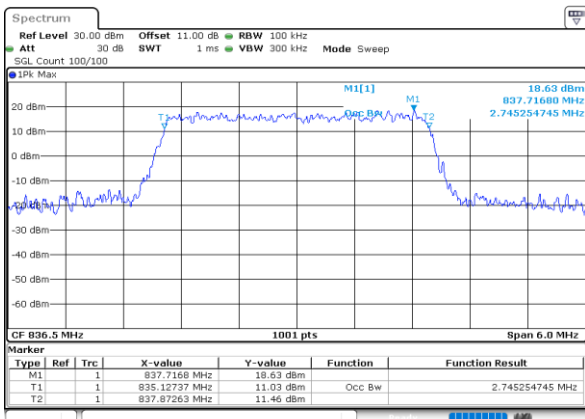
Date: 21.DEC.2023 16:30:33

Middle Channel / 1.4MHz / 16QAM



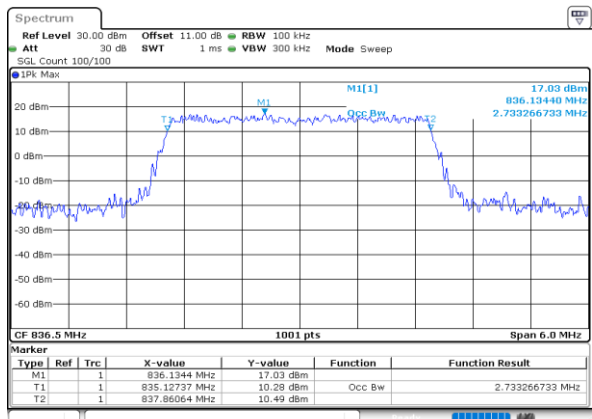
Date: 21.DEC.2023 16:31:41

Middle Channel / 3MHz / QPSK



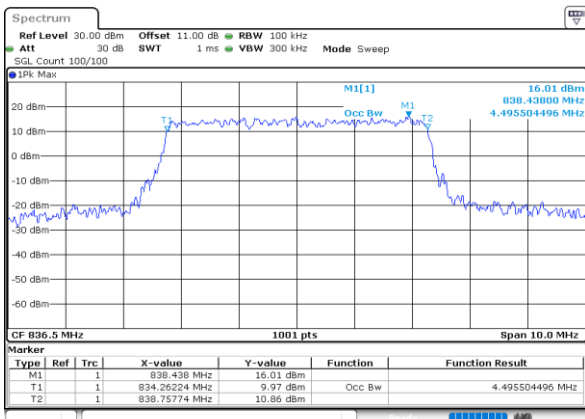
Date: 21.DEC.2023 17:05:19

Middle Channel / 3MHz / 16QAM



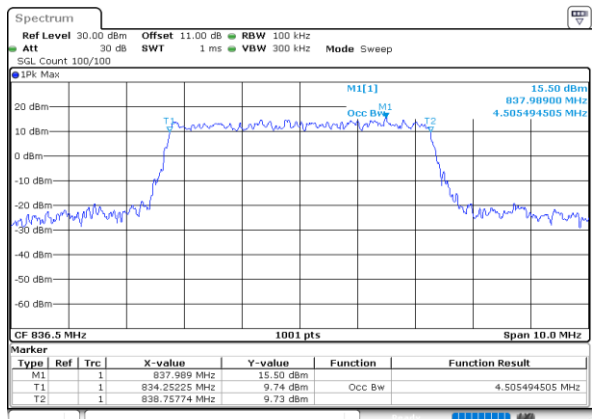
Date: 21.DEC.2023 17:06:25

Middle Channel / 5MHz / QPSK



Date: 21.DEC.2023 17:26:35

Middle Channel / 5MHz / 16QAM

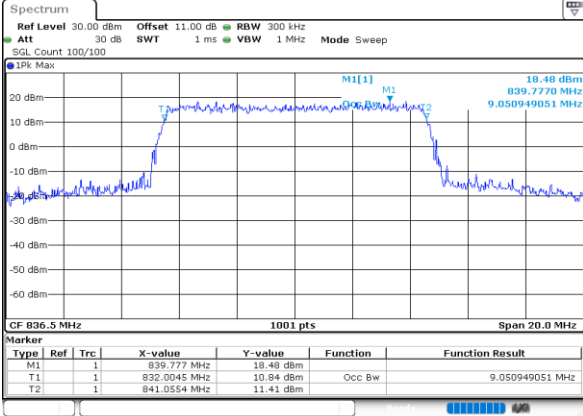


Date: 21.DEC.2023 17:27:42



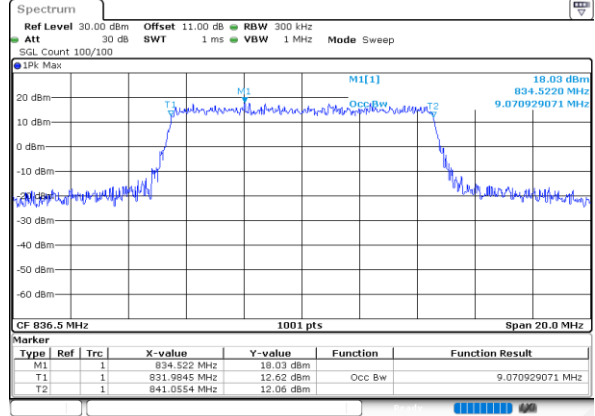
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 21.DEC.2023 18:40:55

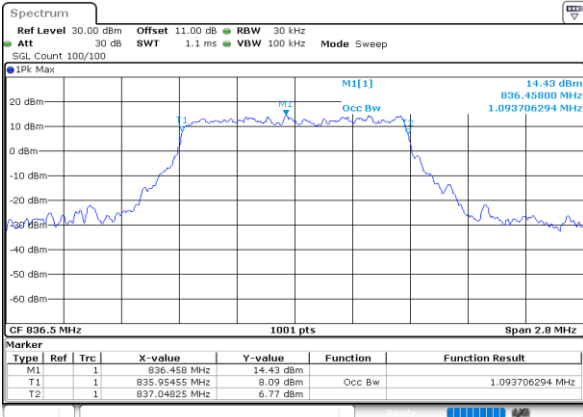
Middle Channel / 10MHz / 16QAM



Date: 21.DEC.2023 18:42:02

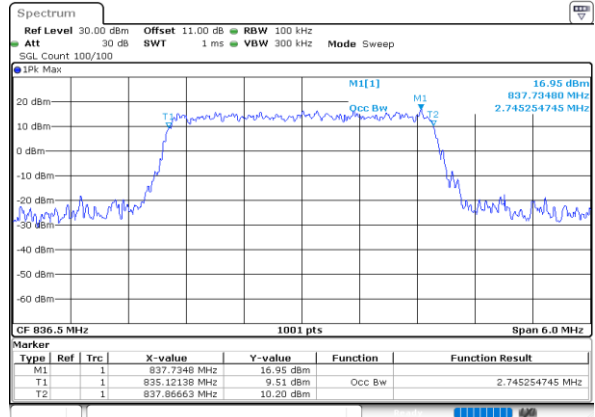
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



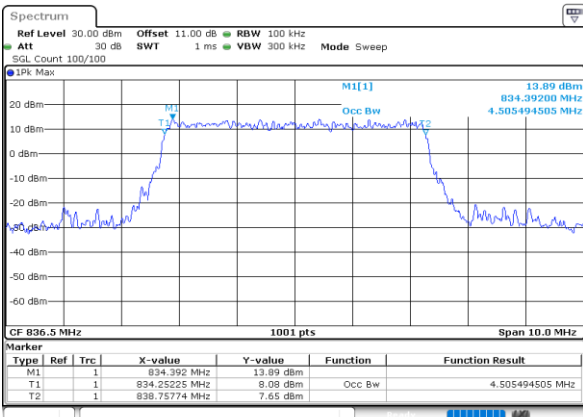
Date: 21.DEC.2023 16:32:03

Middle Channel / 3MHz / 64QAM



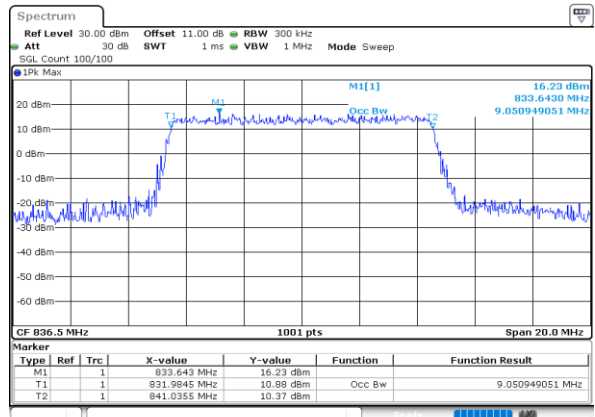
Date: 21.DEC.2023 17:06:48

Middle Channel / 5MHz / 64QAM



Date: 21.DEC.2023 17:28:05

Middle Channel / 10MHz / 64QAM

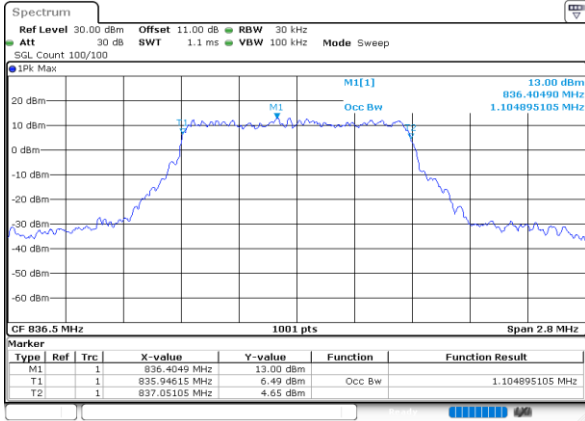


Date: 21.DEC.2023 18:42:25



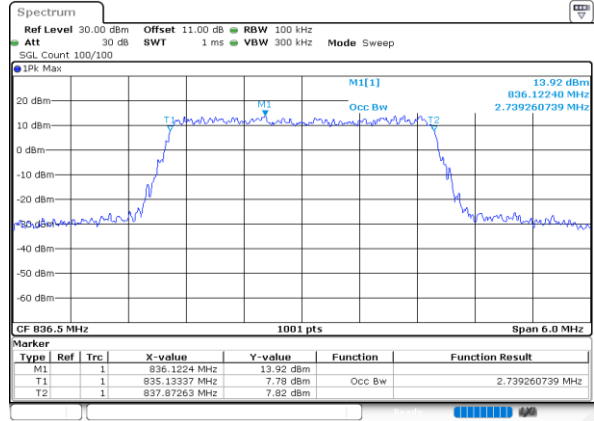
LTE Band 5

Middle Channel / 1.4MHz / 256QAM



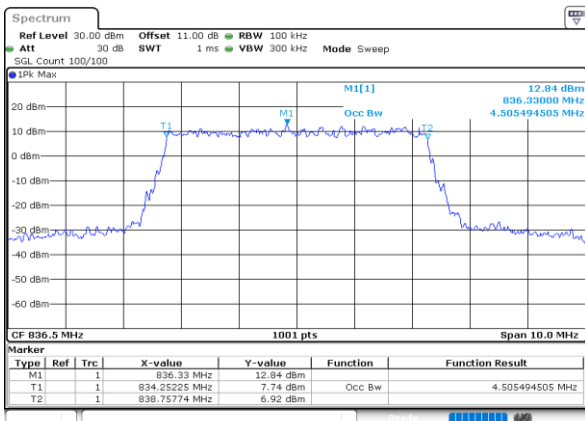
Date: 21.DEC.2023 16:33:11

Middle Channel / 3MHz / 256QAM



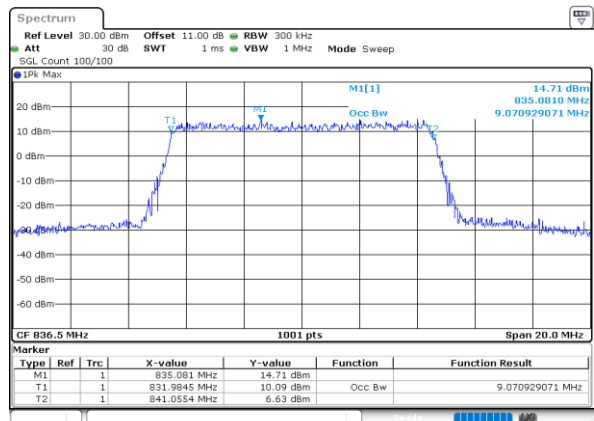
Date: 21.DEC.2023 17:07:55

Middle Channel / 5MHz / 256QAM



Date: 21.DEC.2023 17:29:13

Middle Channel / 10MHz / 256QAM



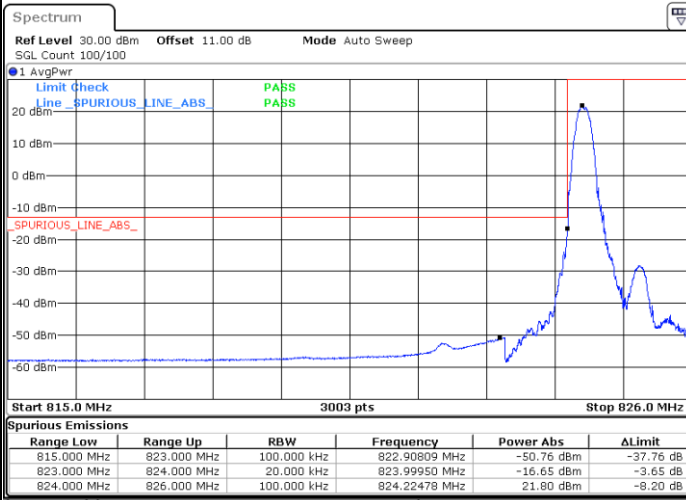
Date: 21.DEC.2023 18:43:32



# Conducted Band Edge

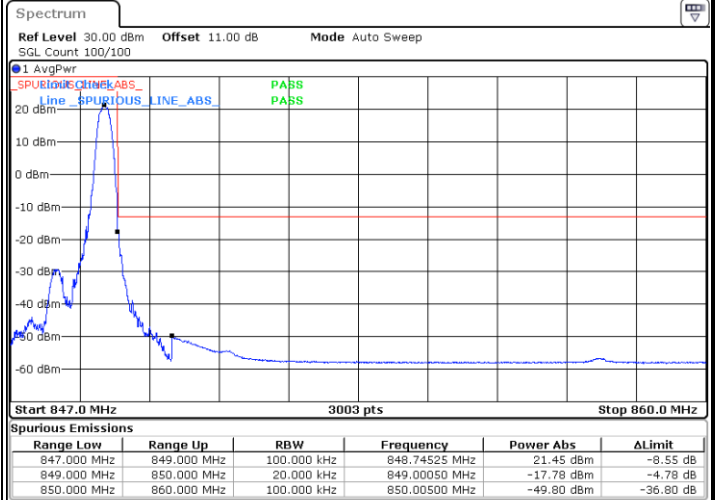
## LTE Band 5 / 1.4MHz / QPSK

### Lowest Band Edge / 1RB



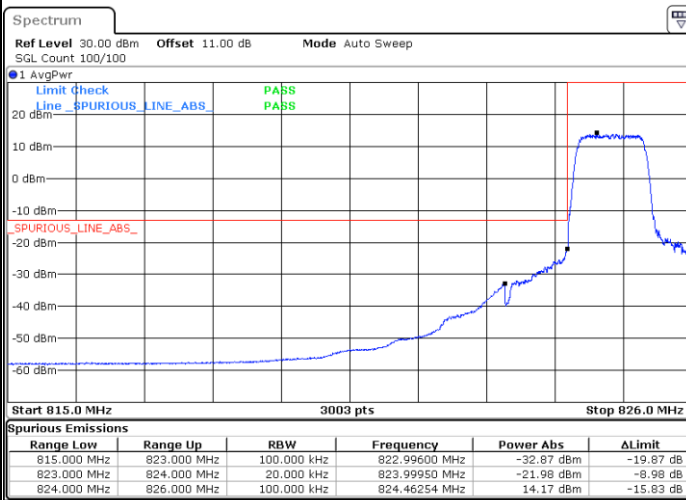
Date: 21.DEC.2023 16:22:34

### Highest Band Edge / 1RB



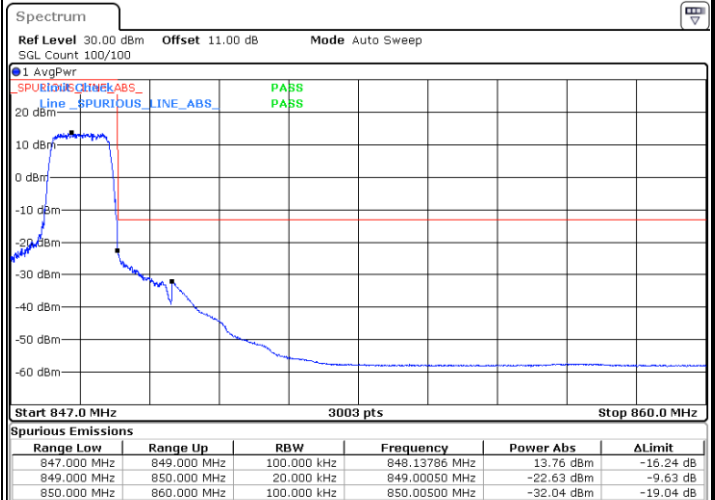
Date: 21.DEC.2023 16:36:24

### Lowest Band Edge / Full RB



Date: 21.DEC.2023 16:27:16

### Highest Band Edge / Full RB



Date: 21.DEC.2023 16:44:15