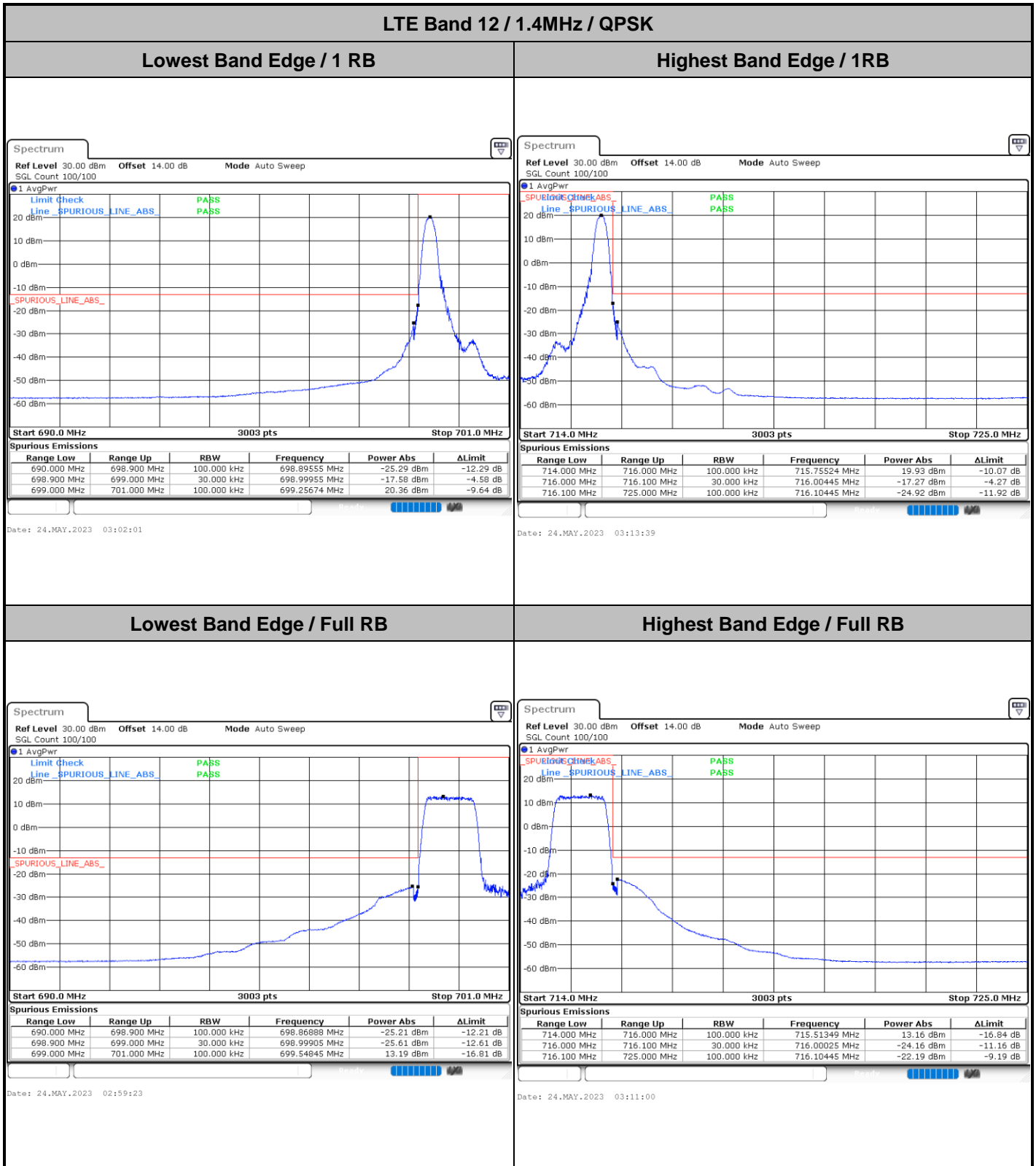




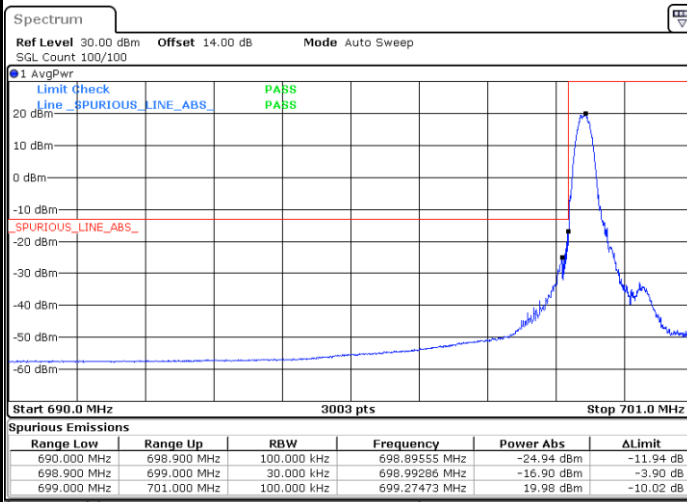
# Conducted Band Edge





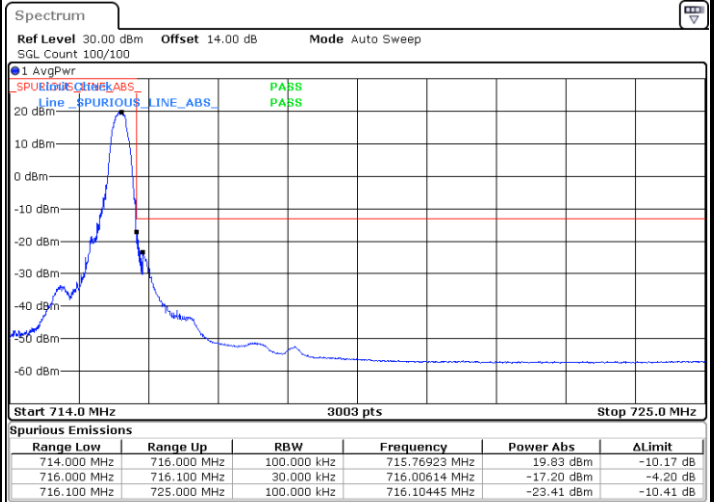
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



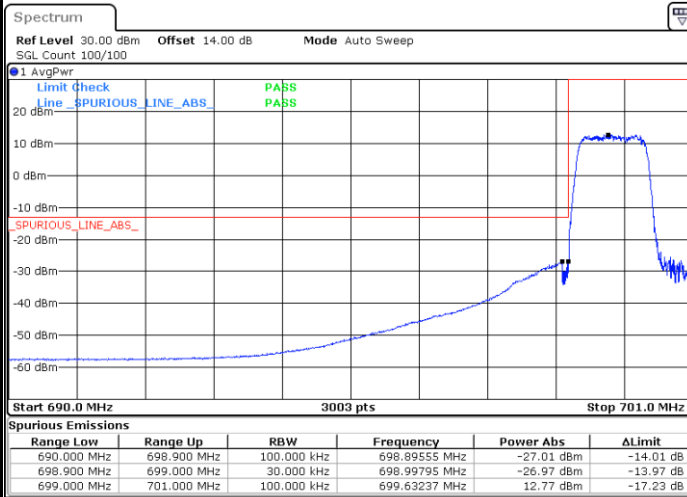
Date: 24.MAY.2023 03:01:09

Highest Band Edge / 1 RB



Date: 24.MAY.2023 03:12:46

Lowest Band Edge / Full RB



Date: 24.MAY.2023 03:00:16

Highest Band Edge / Full RB

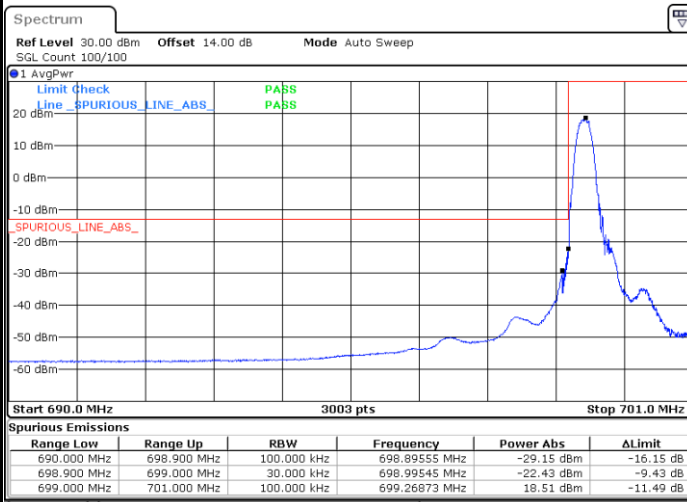


Date: 24.MAY.2023 03:11:53



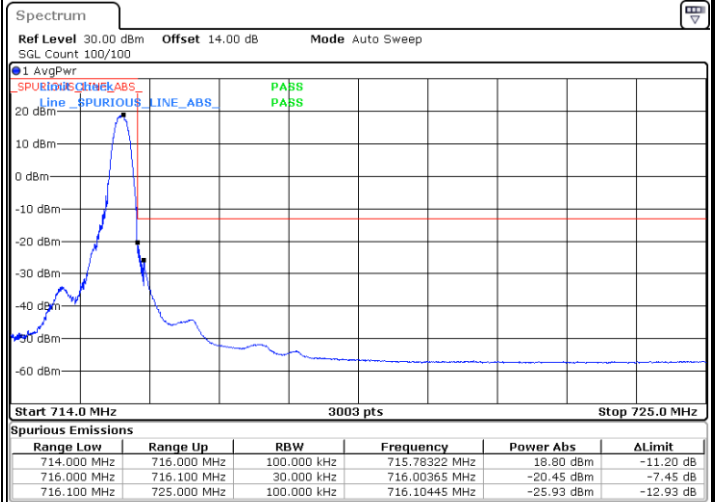
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



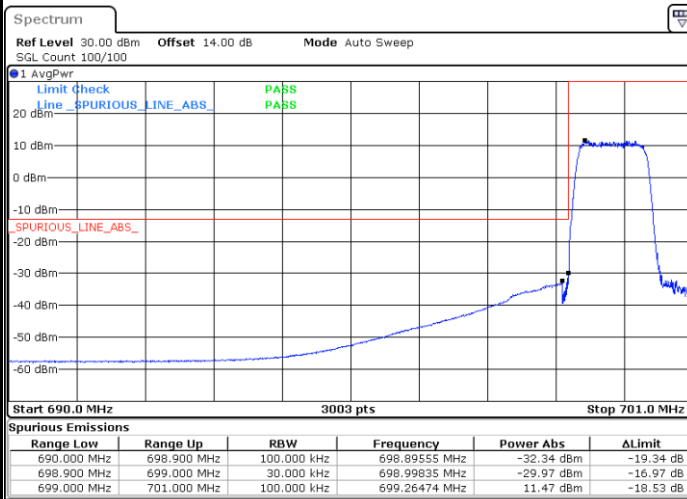
Date: 24.MAY.2023 03:18:40

Highest Band Edge / 1 RB



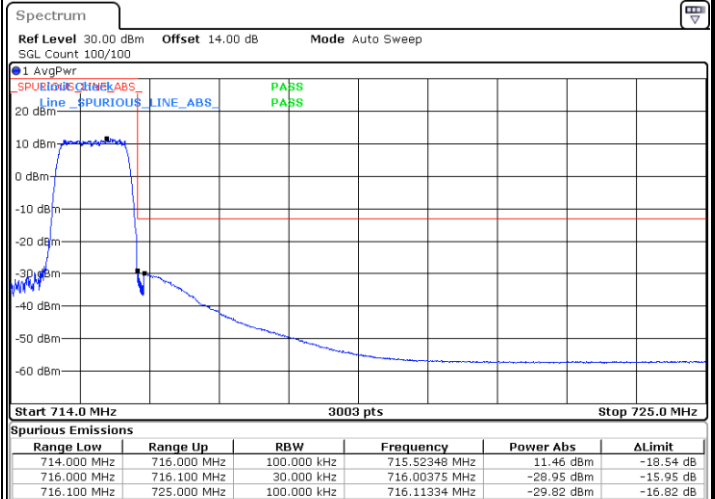
Date: 24.MAY.2023 03:24:10

Lowest Band Edge / Full RB



Date: 24.MAY.2023 03:17:47

Highest Band Edge / Full RB

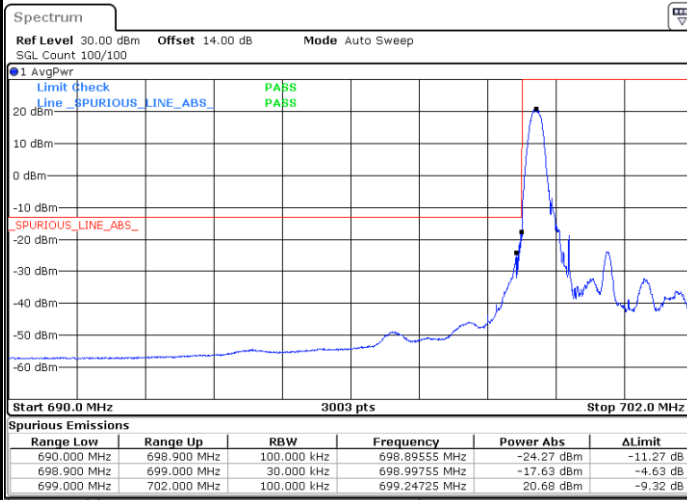


Date: 24.MAY.2023 03:23:17



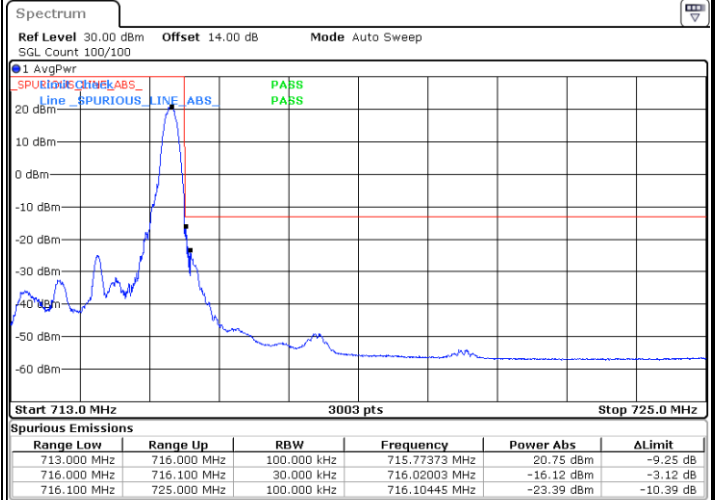
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



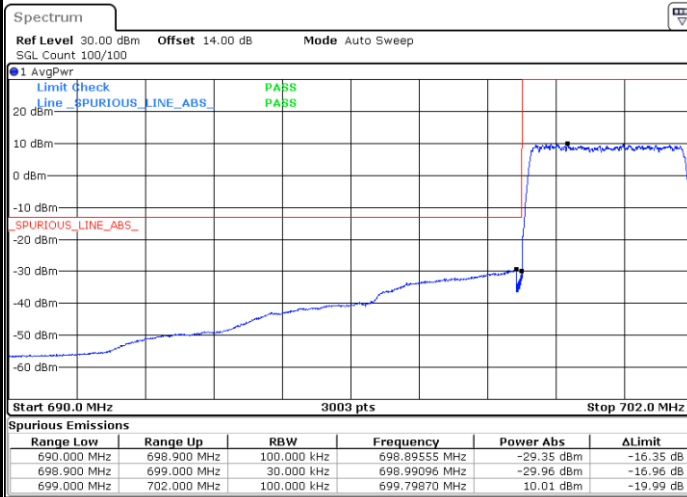
Date: 24.MAY.2023 10:39:28

Highest Band Edge / 1 RB



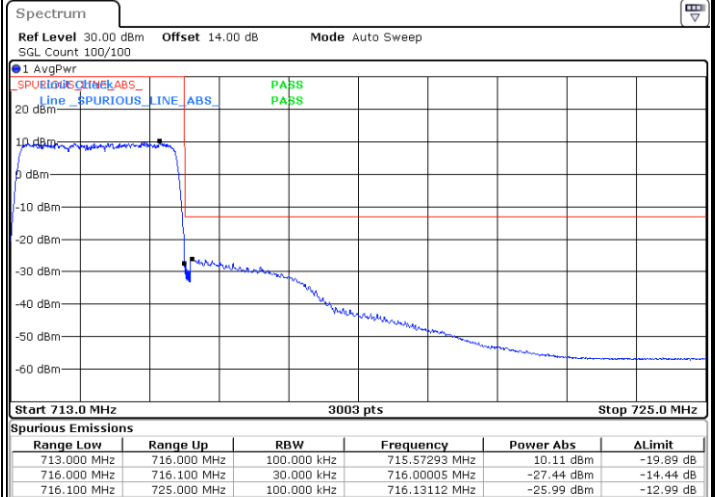
Date: 24.MAY.2023 10:51:02

Lowest Band Edge / Full RB



Date: 24.MAY.2023 10:36:49

Highest Band Edge / Full RB

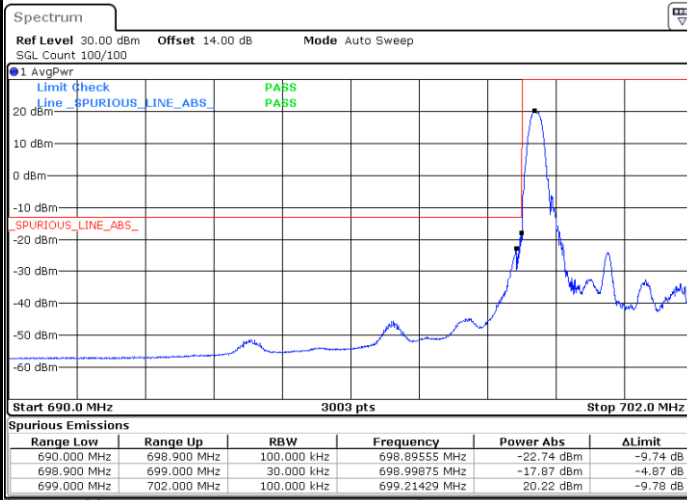


Date: 24.MAY.2023 10:48:24



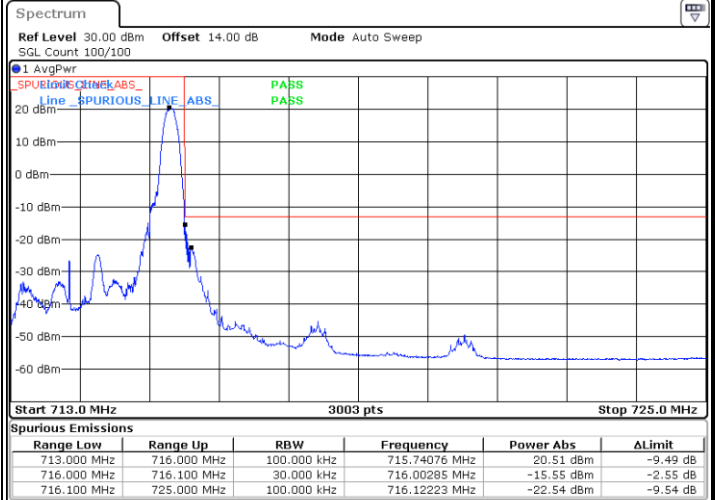
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



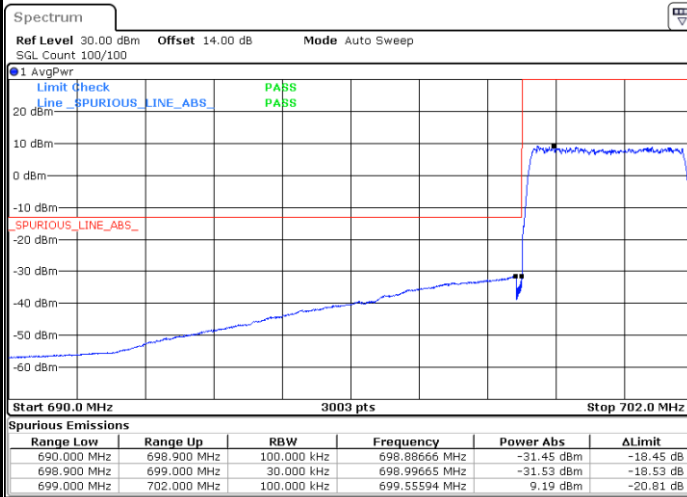
Date: 24.MAY.2023 10:38:35

Highest Band Edge / 1 RB



Date: 24.MAY.2023 10:50:10

Lowest Band Edge / Full RB



Date: 24.MAY.2023 10:37:42

Highest Band Edge / Full RB

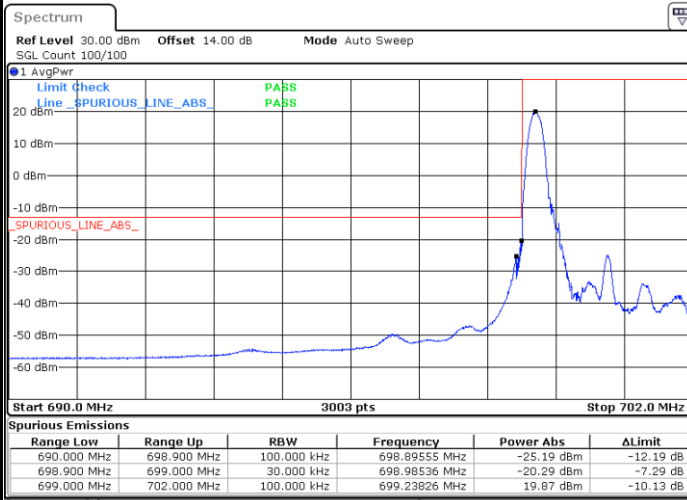


Date: 24.MAY.2023 10:49:17



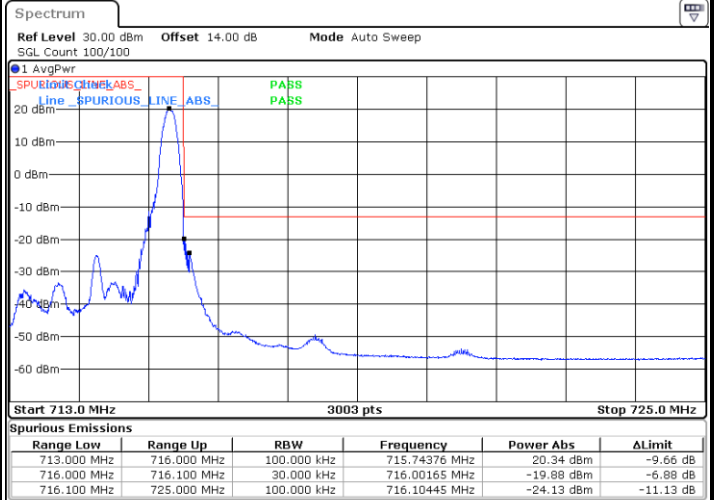
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



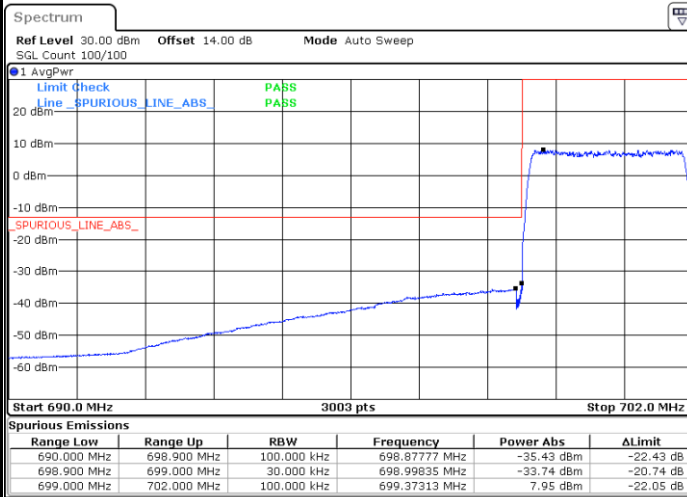
Date: 24.MAY.2023 10:56:03

Highest Band Edge / 1 RB



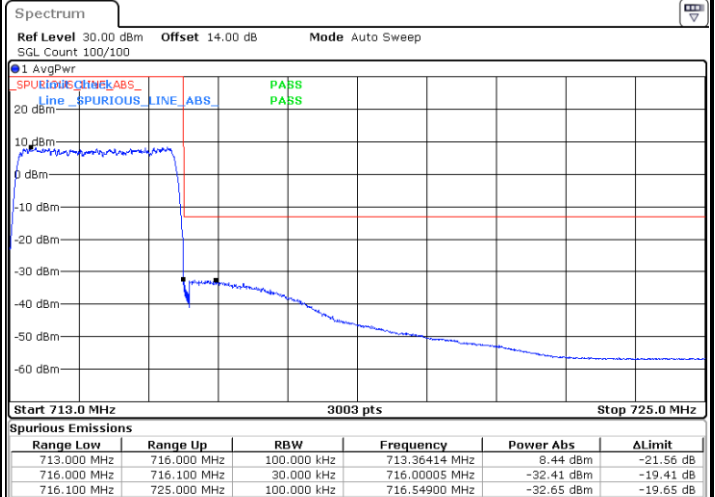
Date: 24.MAY.2023 11:01:31

Lowest Band Edge / Full RB



Date: 24.MAY.2023 10:55:10

Highest Band Edge / Full RB

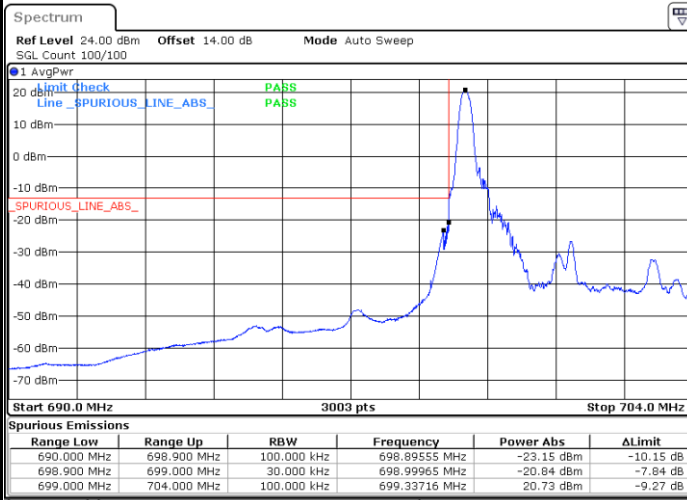


Date: 24.MAY.2023 11:00:39



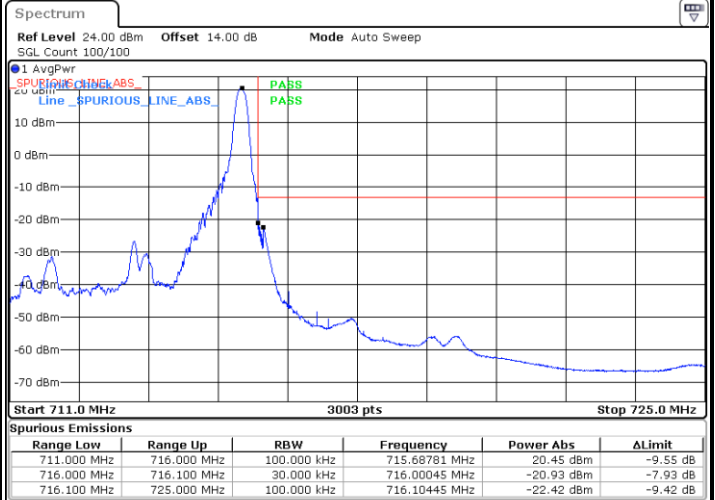
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



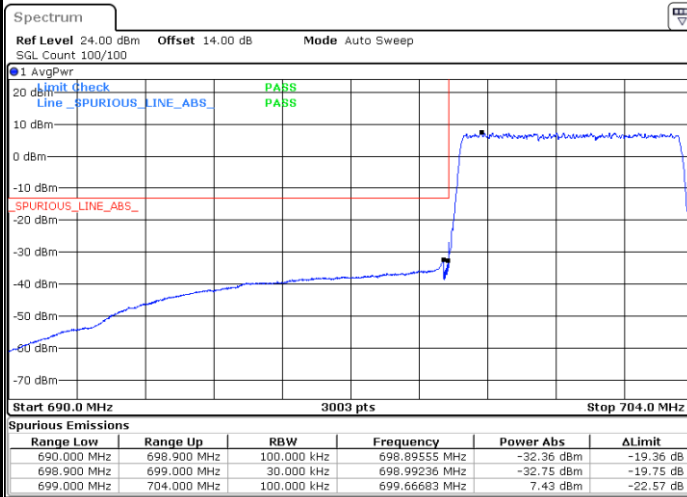
Date: 24.MAY.2023 11:16:51

Highest Band Edge / 1 RB



Date: 24.MAY.2023 11:27:33

Lowest Band Edge / Full RB



Date: 24.MAY.2023 11:14:13

Highest Band Edge / Full RB

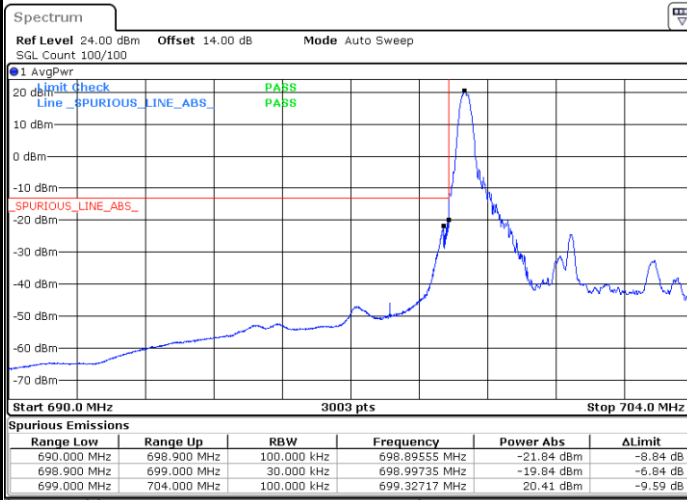


Date: 24.MAY.2023 11:25:47



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



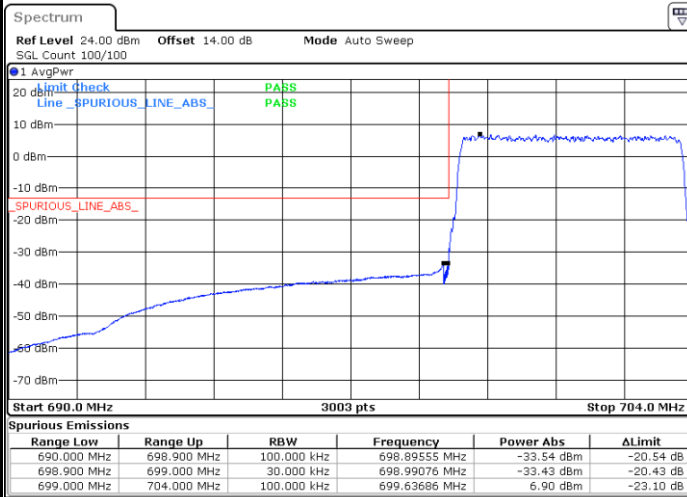
Date: 24.MAY.2023 11:15:58

Highest Band Edge / 1 RB



Date: 24.MAY.2023 11:28:26

Lowest Band Edge / Full RB



Date: 24.MAY.2023 11:15:06

Highest Band Edge / Full RB



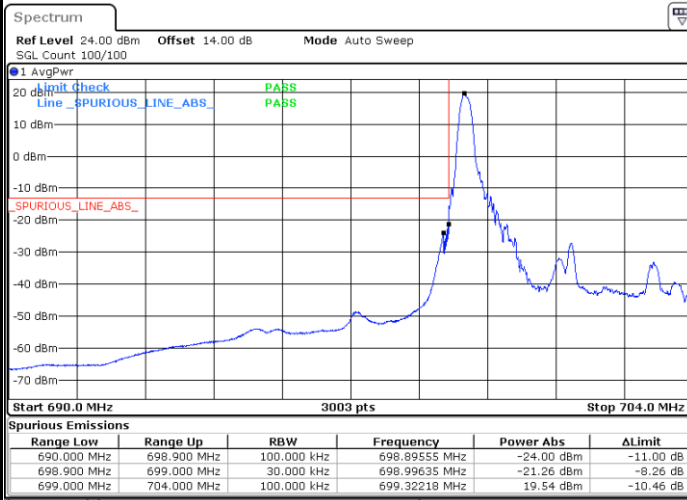
Date: 24.MAY.2023 11:26:40





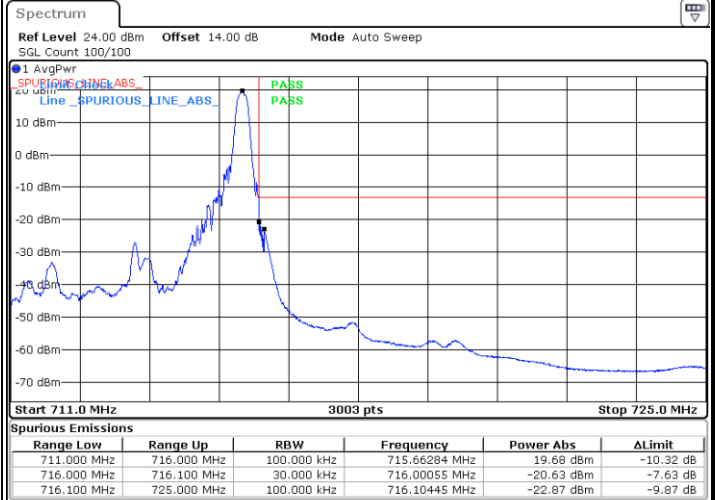
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



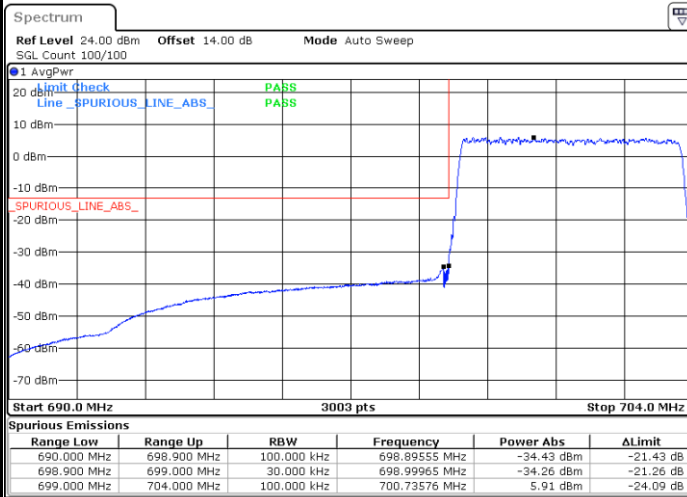
Date: 24.MAY.2023 11:05:10

Highest Band Edge / 1 RB



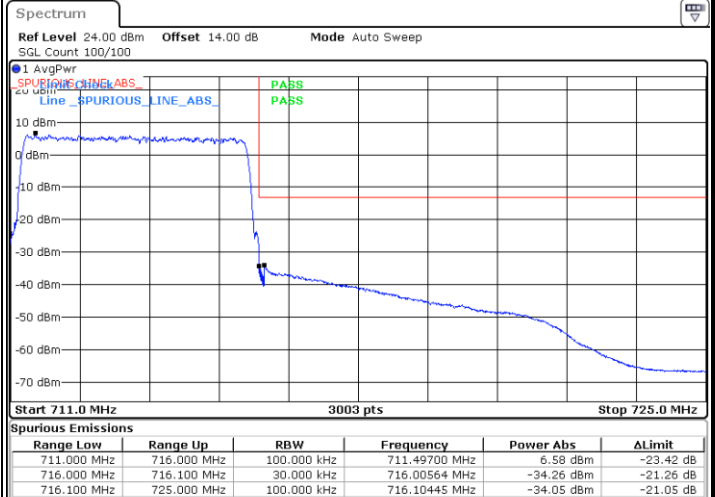
Date: 24.MAY.2023 11:10:39

Lowest Band Edge / Full RB



Date: 24.MAY.2023 11:04:17

Highest Band Edge / Full RB

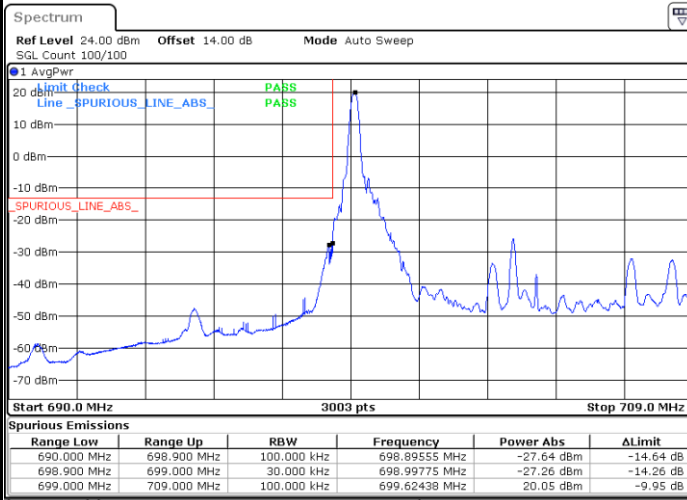


Date: 24.MAY.2023 11:09:46



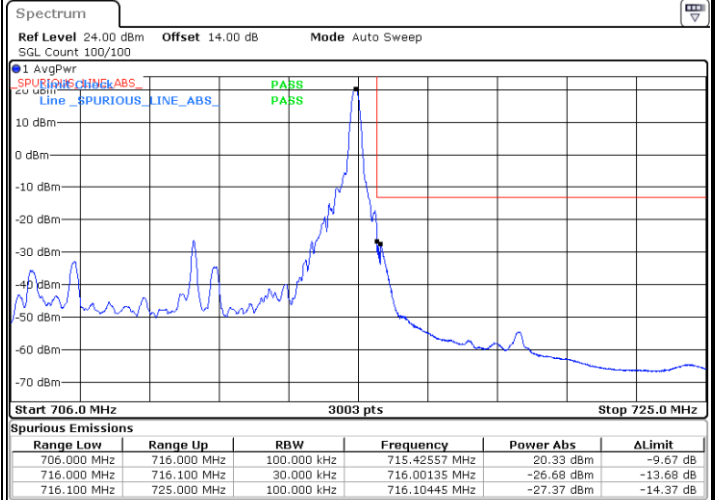
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



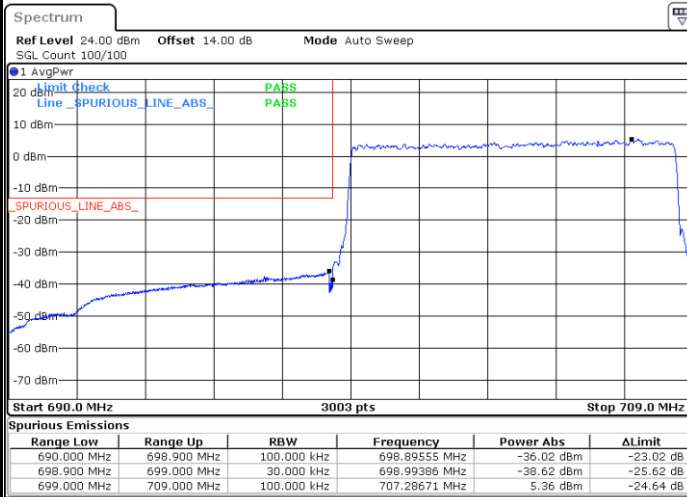
Date: 24.MAY.2023 11:36:01

Highest Band Edge / 1 RB



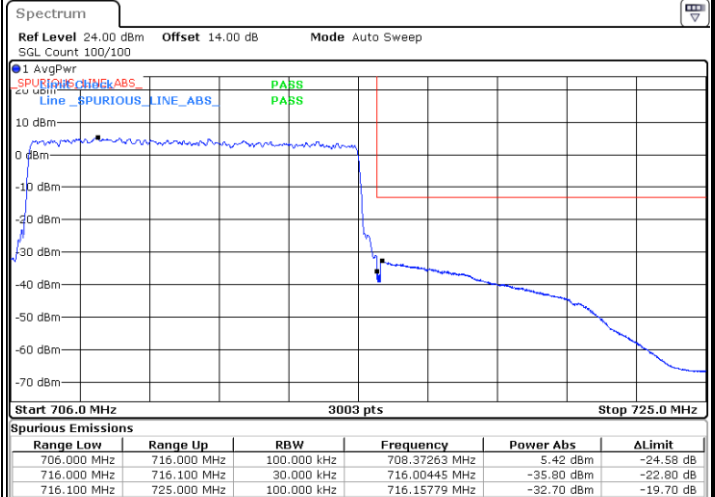
Date: 24.MAY.2023 11:47:36

Lowest Band Edge / Full RB



Date: 24.MAY.2023 11:33:23

Highest Band Edge / Full RB

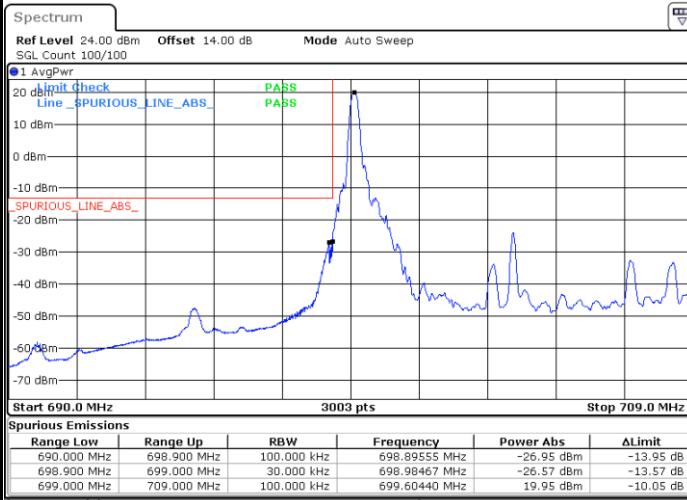


Date: 24.MAY.2023 11:44:58



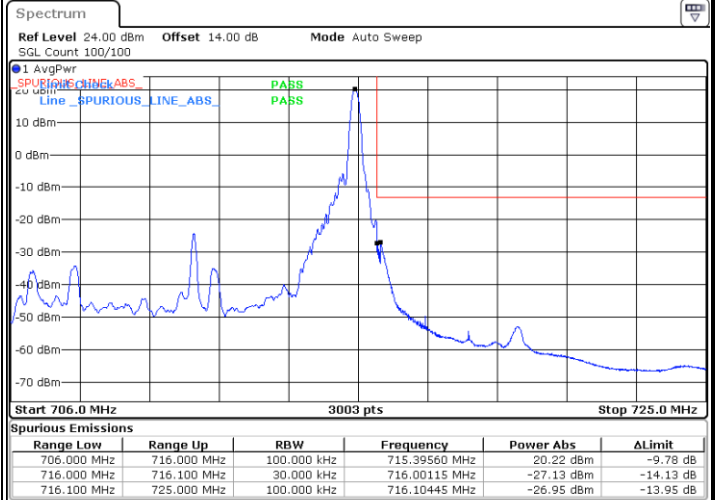
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



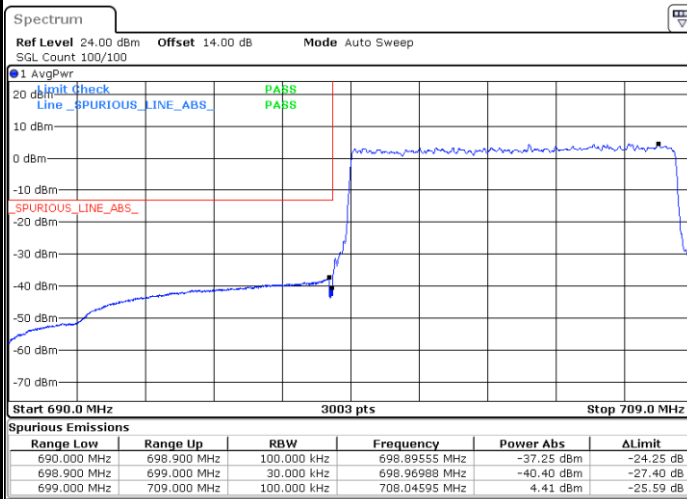
Date: 24.MAY.2023 11:35:08

Highest Band Edge / 1 RB



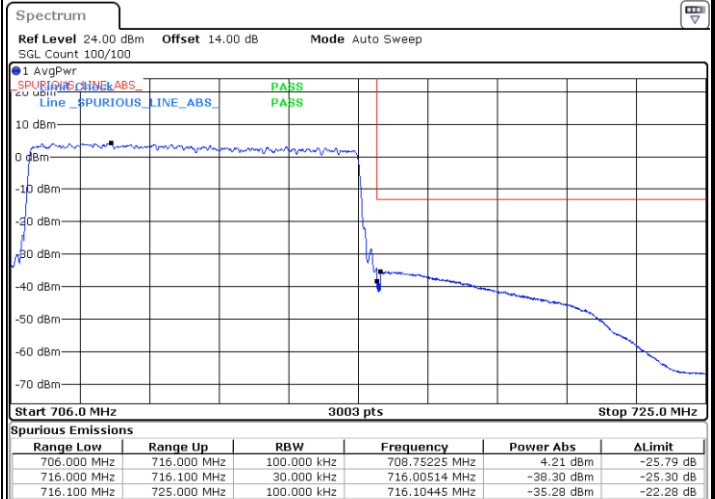
Date: 24.MAY.2023 11:46:44

Lowest Band Edge / Full RB



Date: 24.MAY.2023 11:34:16

Highest Band Edge / Full RB

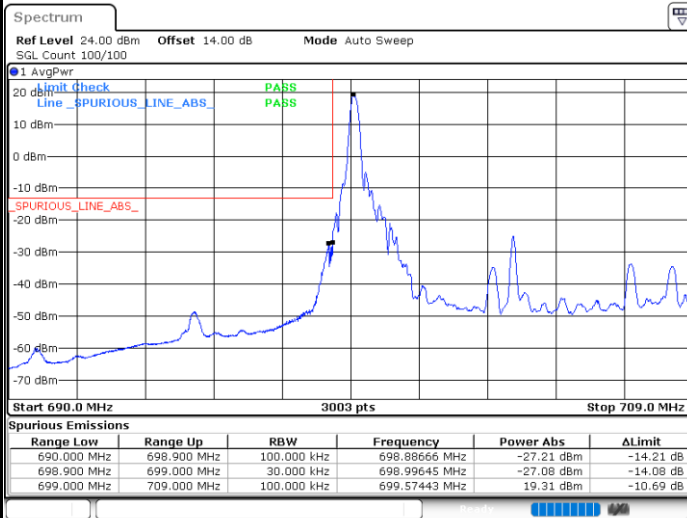


Date: 24.MAY.2023 11:45:51



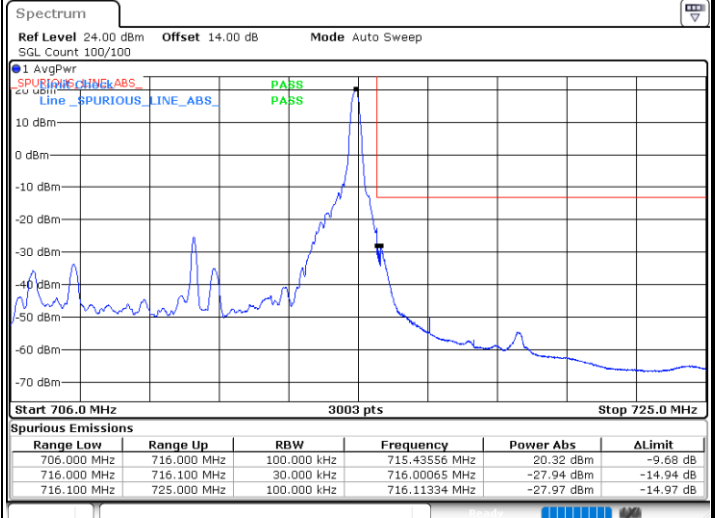
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



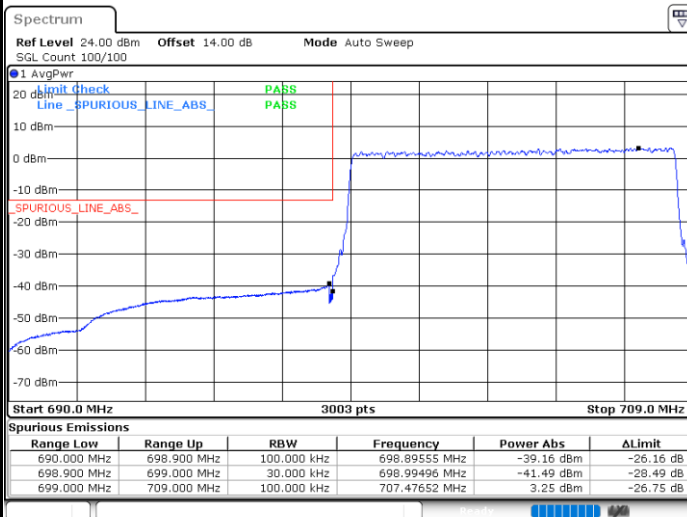
Date: 24.MAY.2023 11:52:38

Highest Band Edge / 1 RB



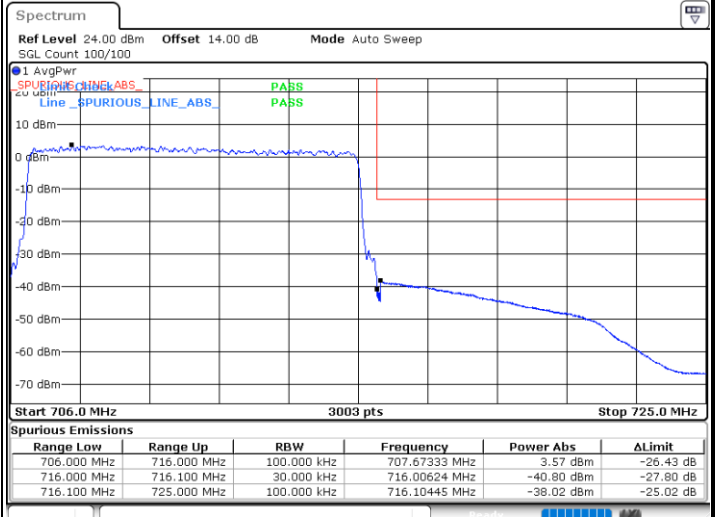
Date: 24.MAY.2023 11:58:07

Lowest Band Edge / Full RB



Date: 24.MAY.2023 11:51:45

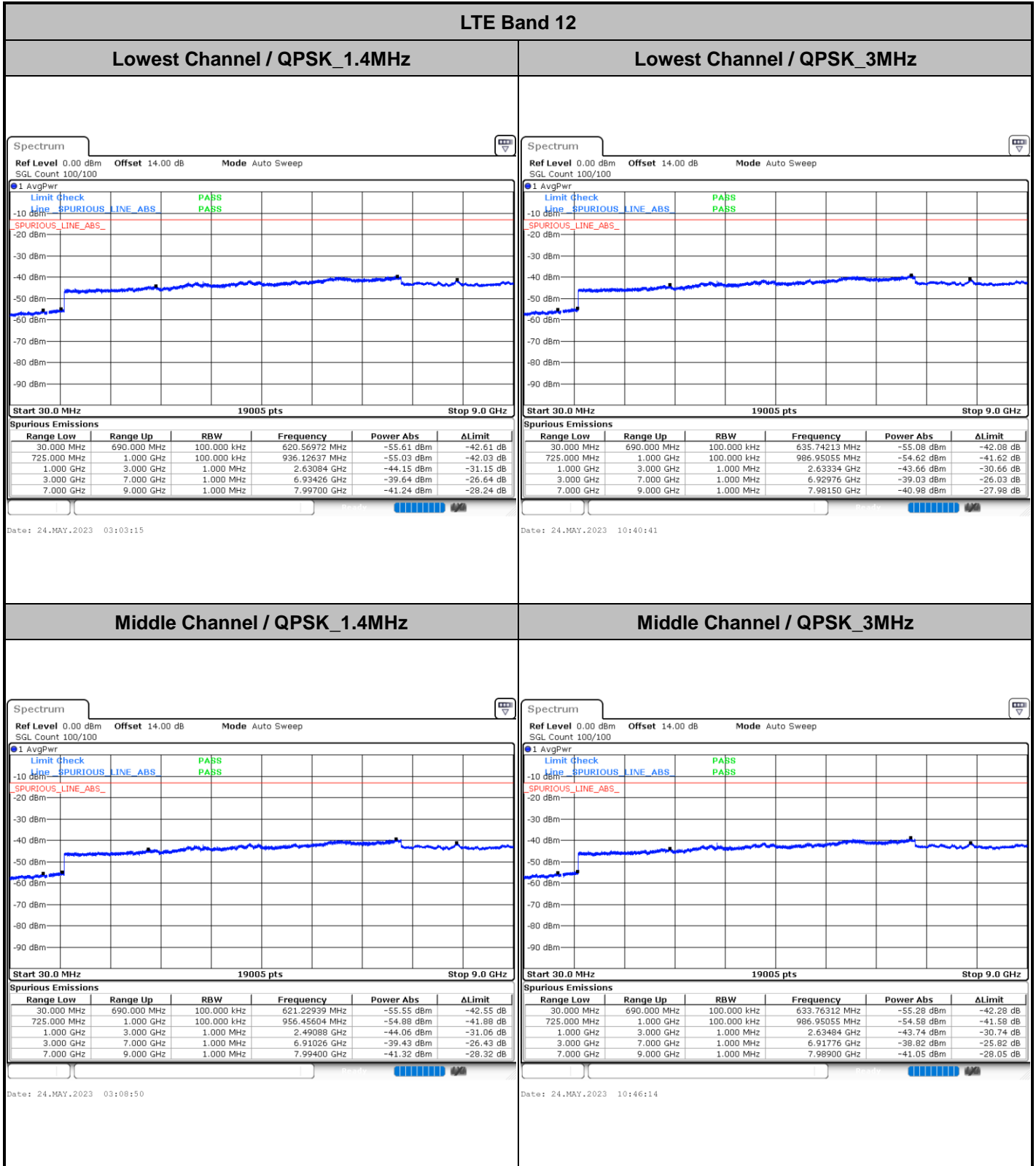
Highest Band Edge / Full RB

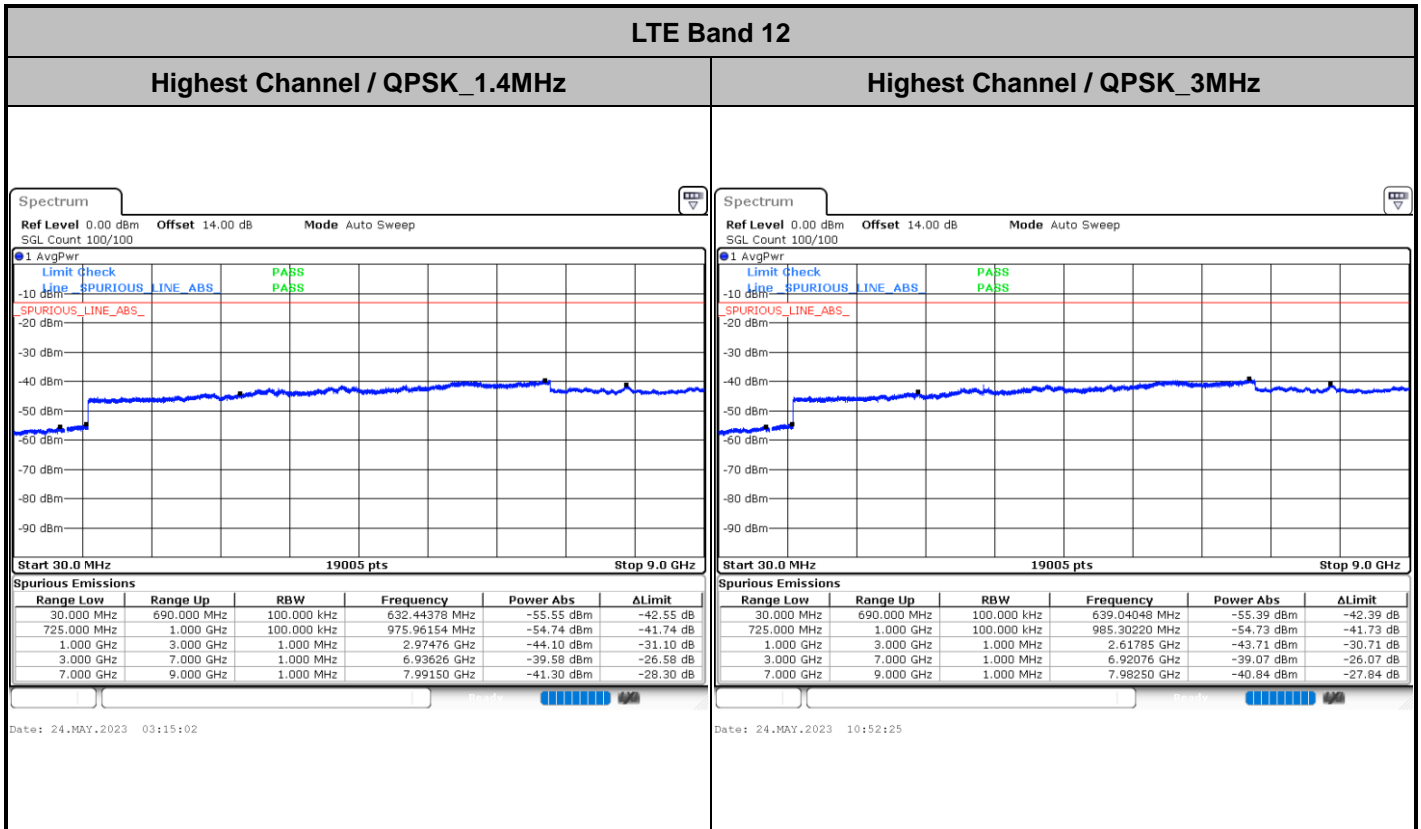


Date: 24.MAY.2023 11:57:14



# Conducted Spurious Emission



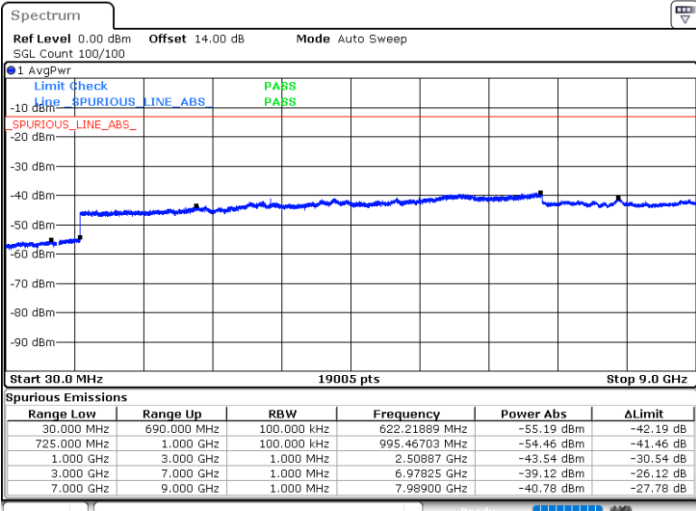




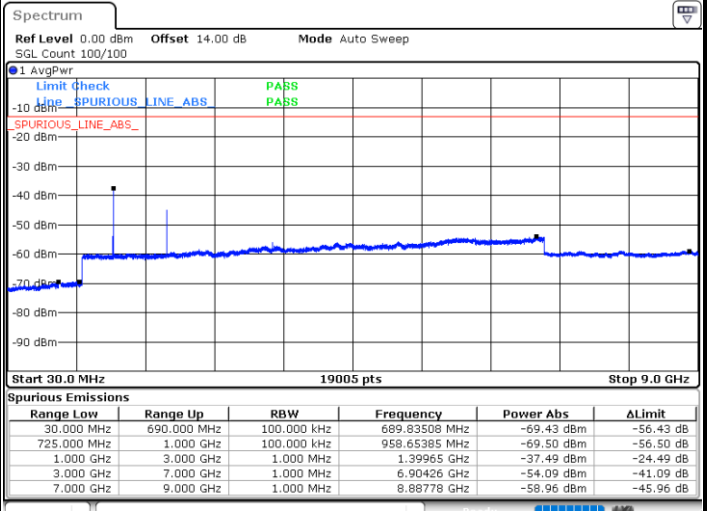
LTE Band 12

Lowest Channel / QPSK\_5MHz

Lowest Channel / QPSK\_10MHz



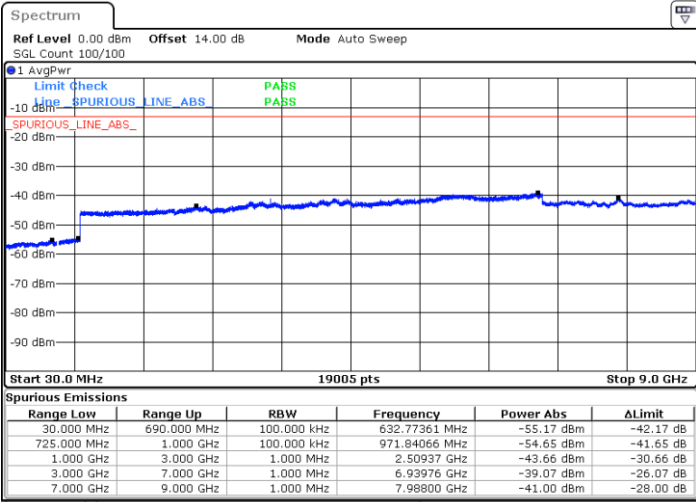
Date: 24.MAY.2023 11:18:04



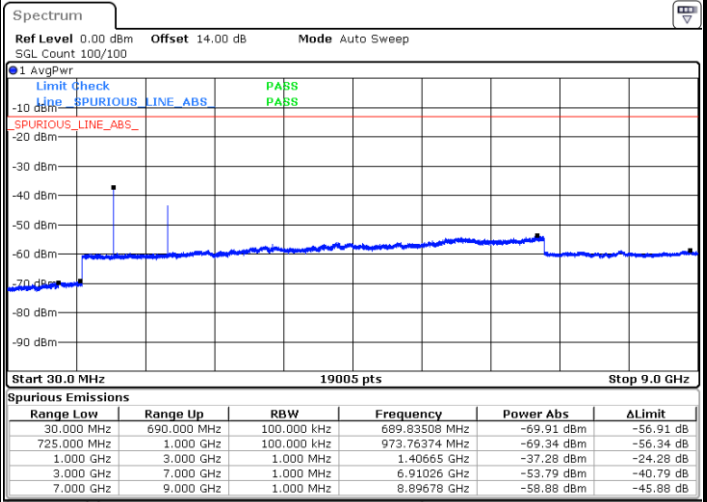
Date: 24.MAY.2023 11:37:14

Middle Channel / QPSK\_5MHz

Middle Channel / QPSK\_10MHz



Date: 24.MAY.2023 11:23:37



Date: 24.MAY.2023 11:42:47







### Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0028	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0014	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

**Note:**

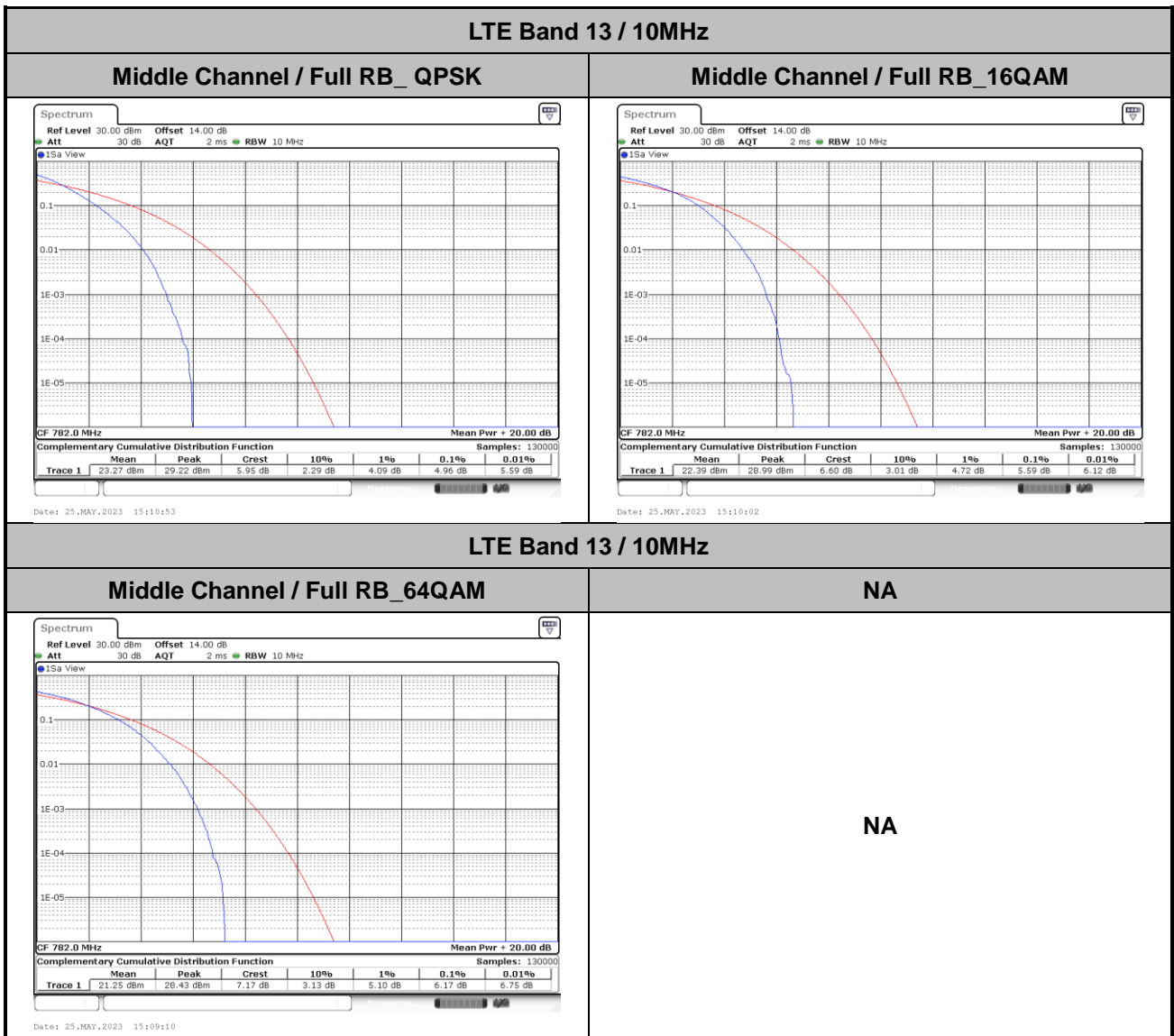
1. Normal Voltage =3.88 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.47 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 13

## Peak-to-Average Ratio

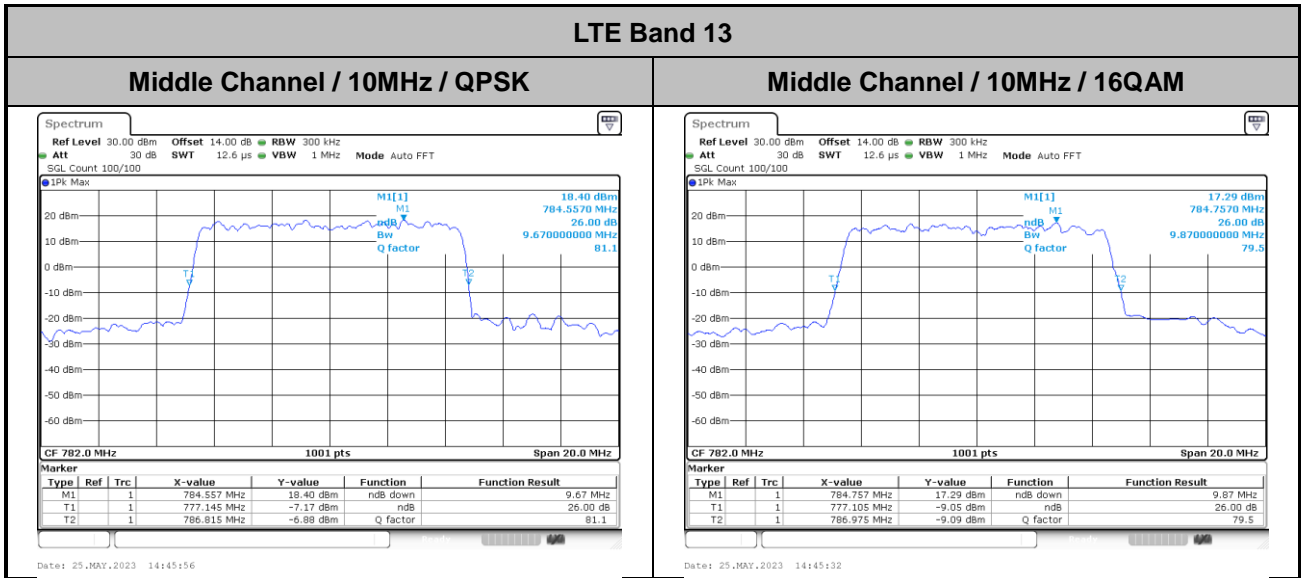
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.96	5.59	6.17	PASS





## 26dB Bandwidth

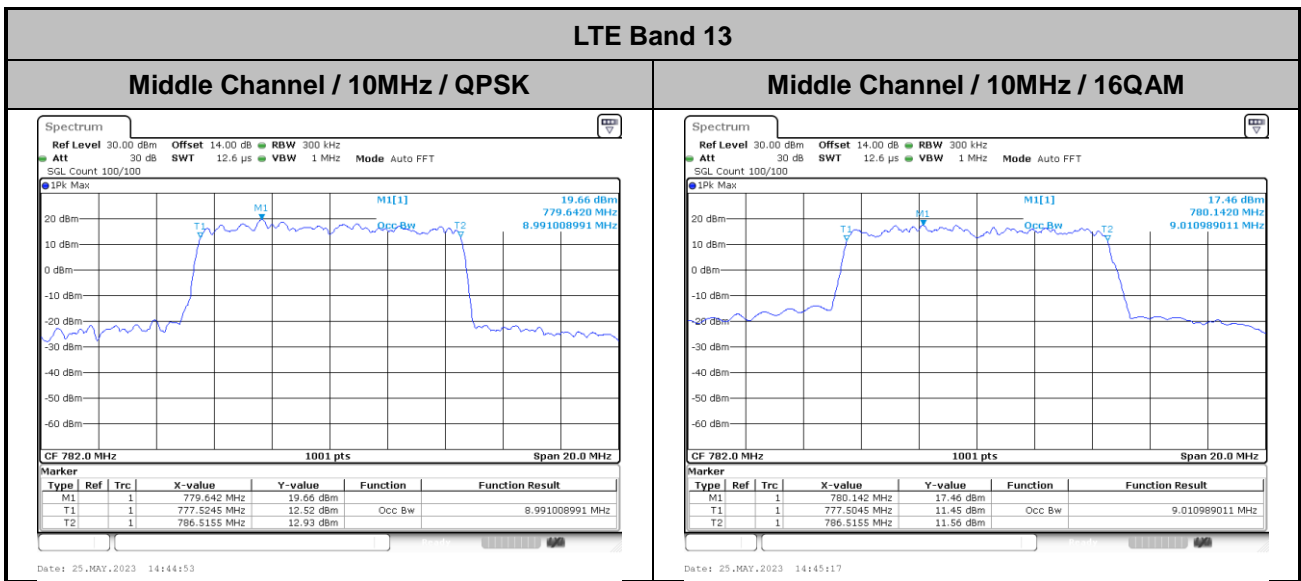
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.67	9.87





# Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.99	9.01

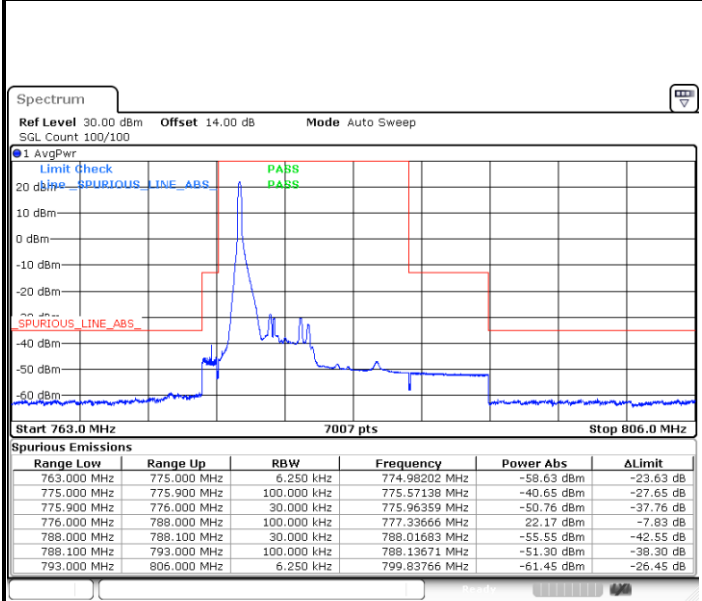




# Conducted Band Edge

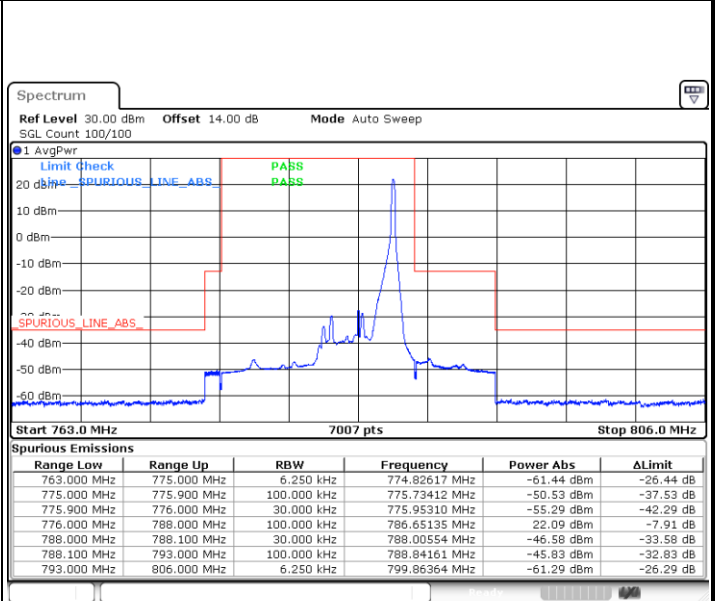
## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



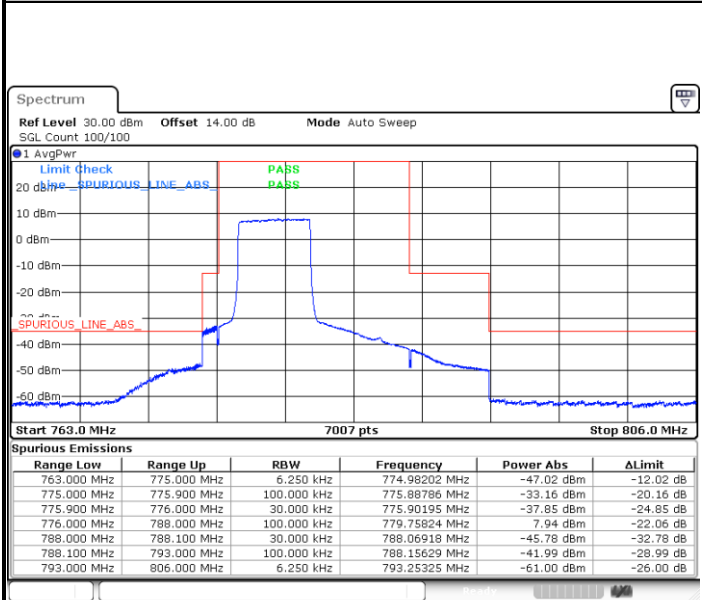
Date: 25.MAY.2023 14:09:29

### Highest Band Edge / 1 RB



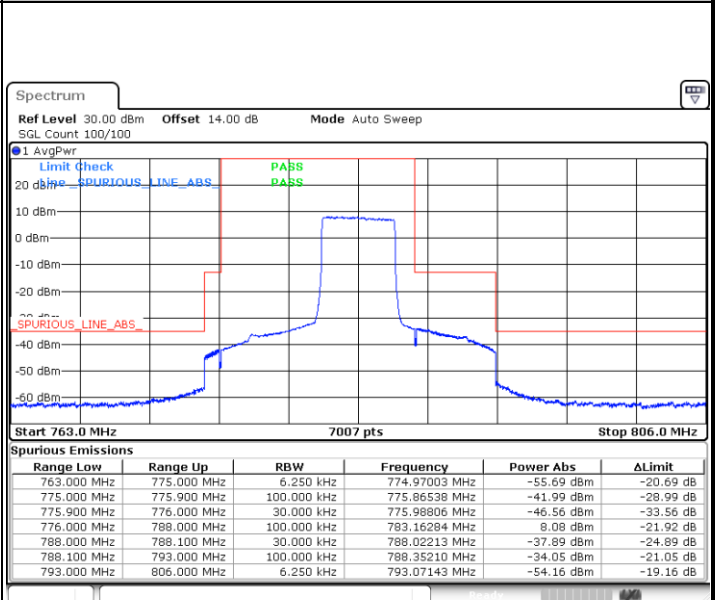
Date: 25.MAY.2023 14:26:40

### Lowest Band Edge / Full RB



Date: 25.MAY.2023 14:03:46

### Highest Band Edge / Full RB



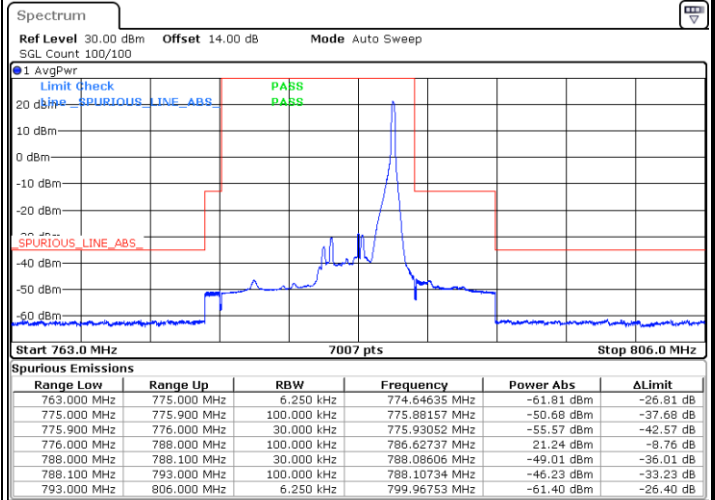
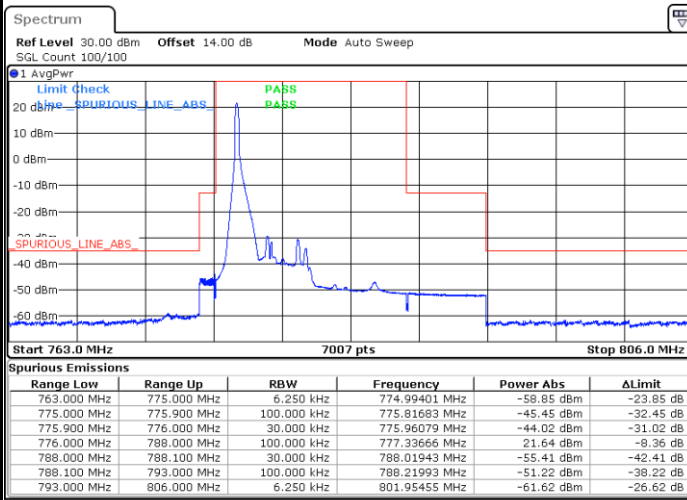
Date: 25.MAY.2023 14:20:58



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

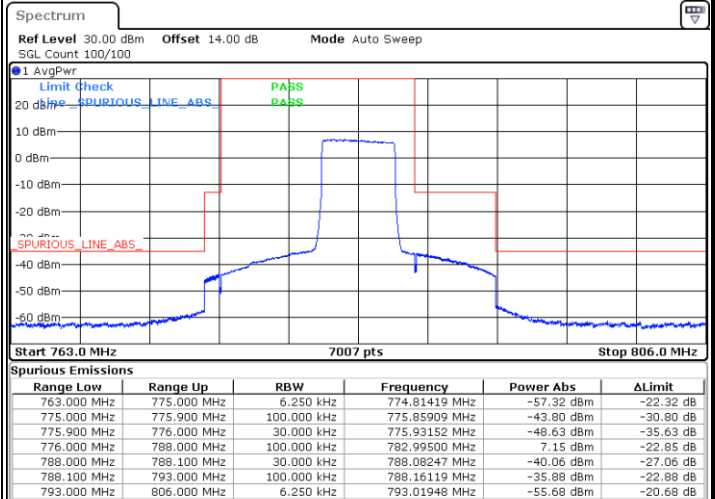
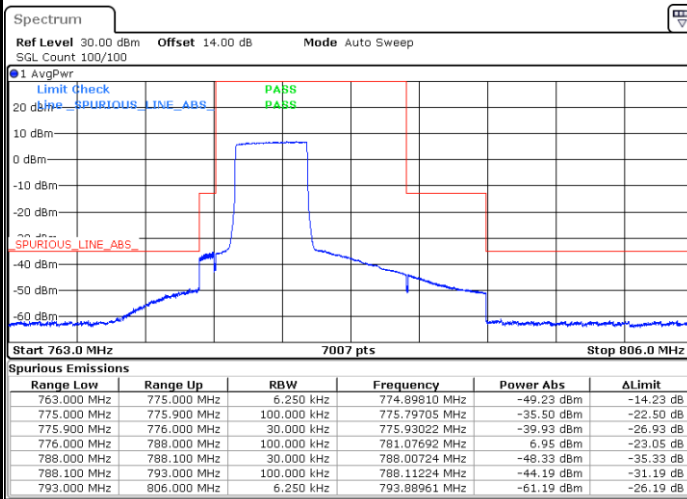


Date: 25.MAY.2023 14:07:35

Date: 25.MAY.2023 14:24:46

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 25.MAY.2023 14:05:40

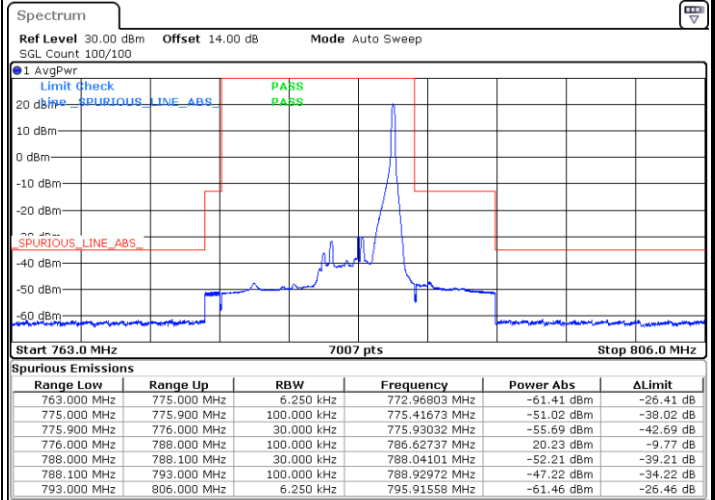
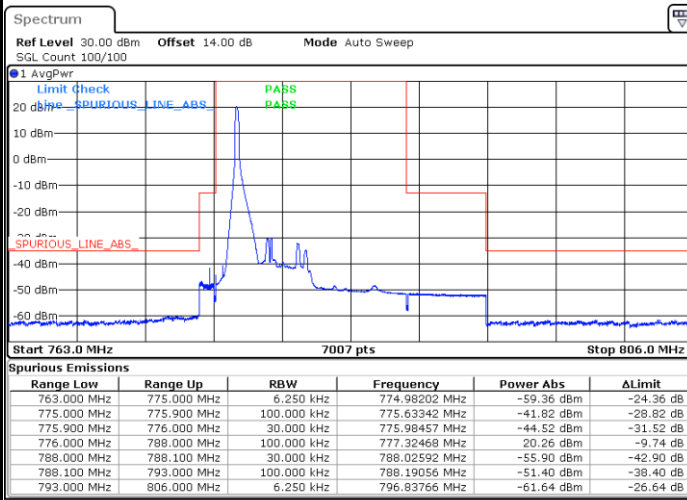
Date: 25.MAY.2023 14:22:52



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

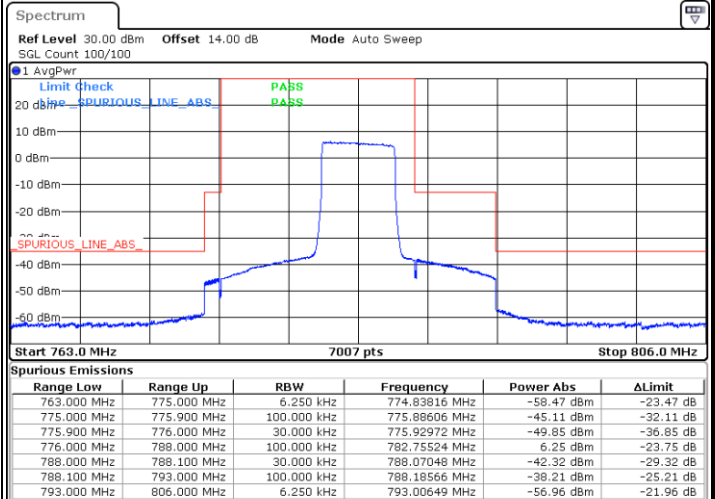
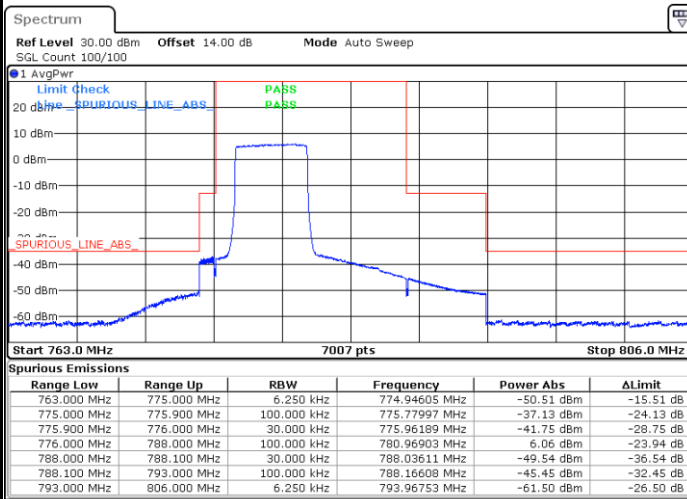


Date: 25.MAY.2023 14:34:28

Date: 25.MAY.2023 14:42:43

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 25.MAY.2023 14:32:33

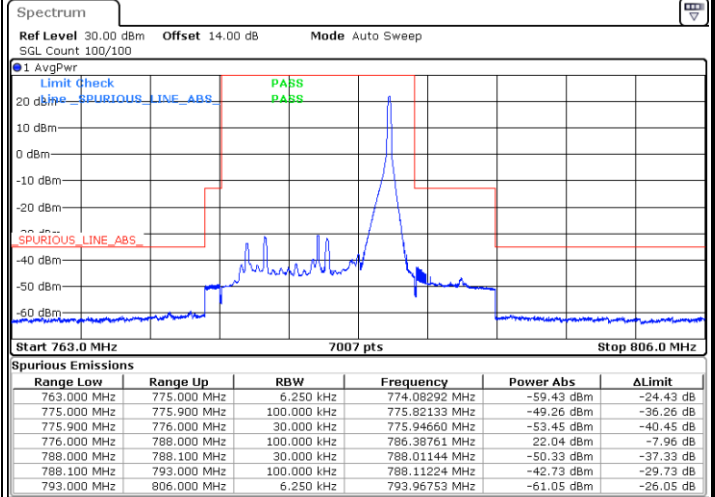
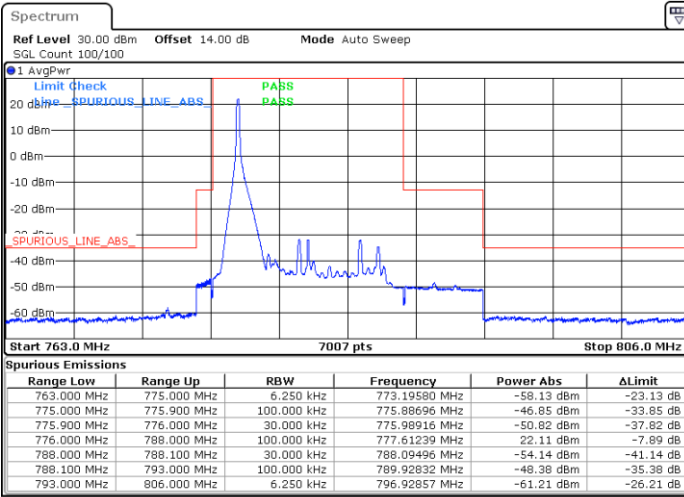
Date: 25.MAY.2023 14:40:49



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

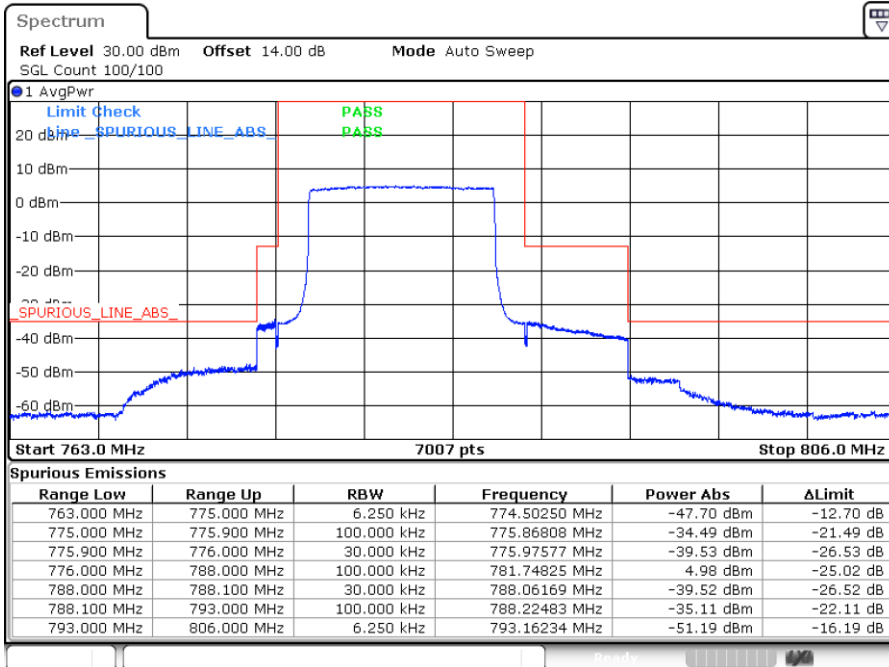
Highest Band Edge / 1 RB



Date: 25.MAY.2023 14:53:19

Date: 25.MAY.2023 14:55:12

Band Edge / Full RB



Date: 25.MAY.2023 14:47:39

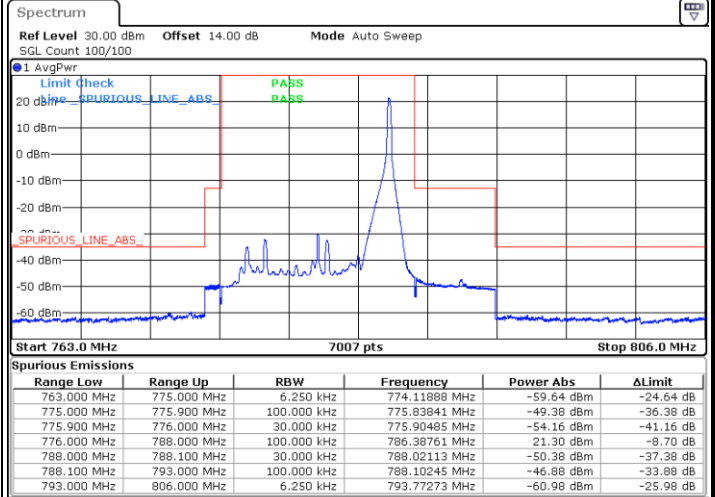
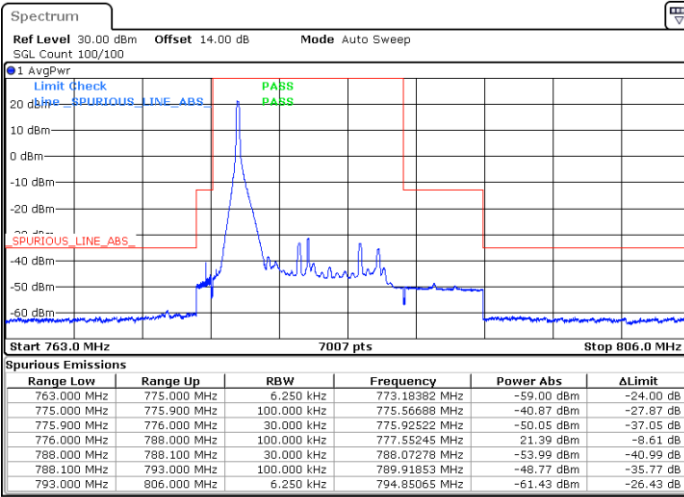




LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

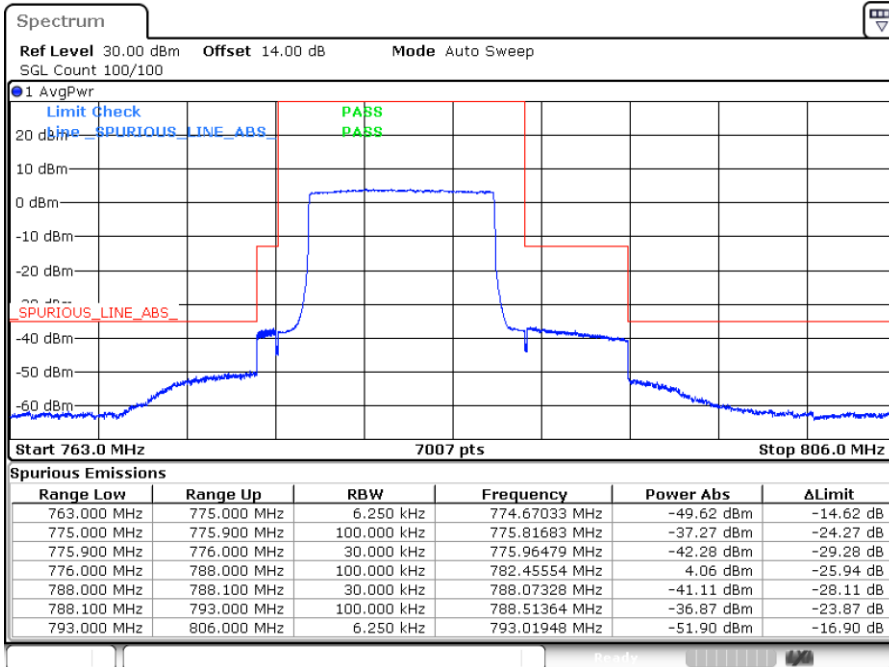
Highest Band Edge / 1 RB



Date: 25.MAY.2023 14:51:26

Date: 25.MAY.2023 14:57:05

Band Edge / Full RB



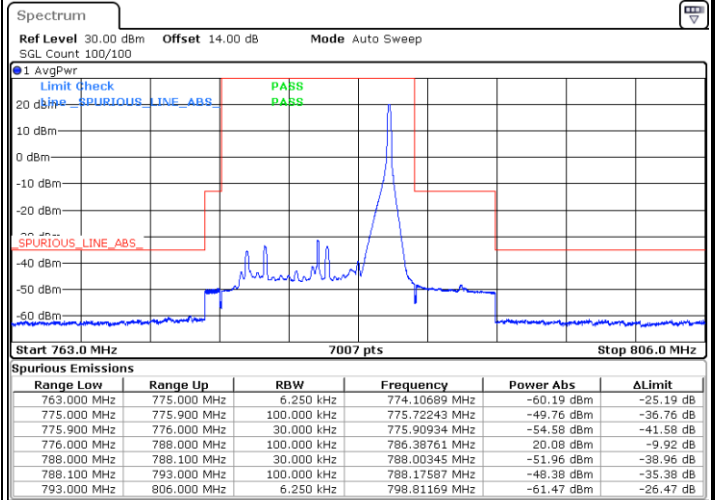
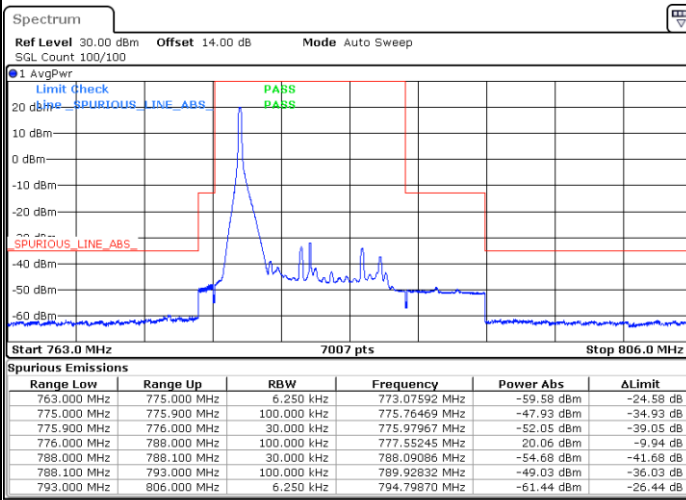
Date: 25.MAY.2023 14:49:32



LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

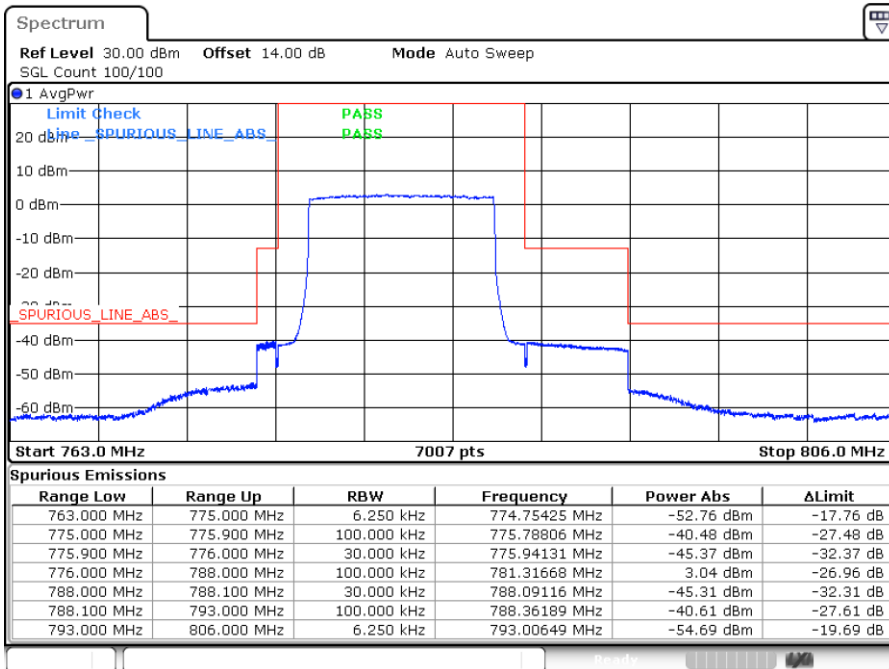
Highest Band Edge / 1 RB



Date: 25.MAY.2023 15:04:51

Date: 25.MAY.2023 15:06:44

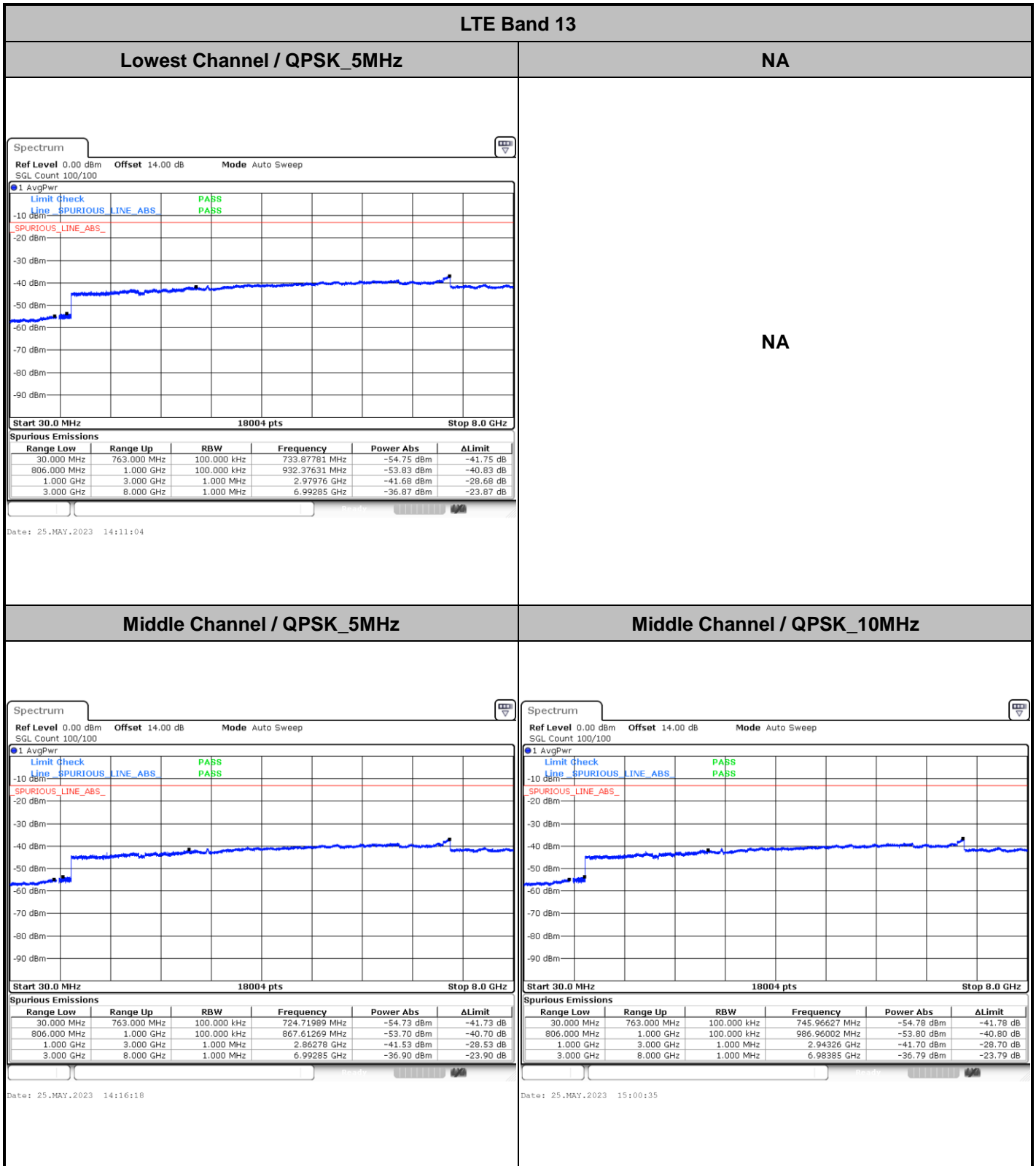
Band Edge / Full RB



Date: 25.MAY.2023 15:02:57



# Conducted Spurious Emission

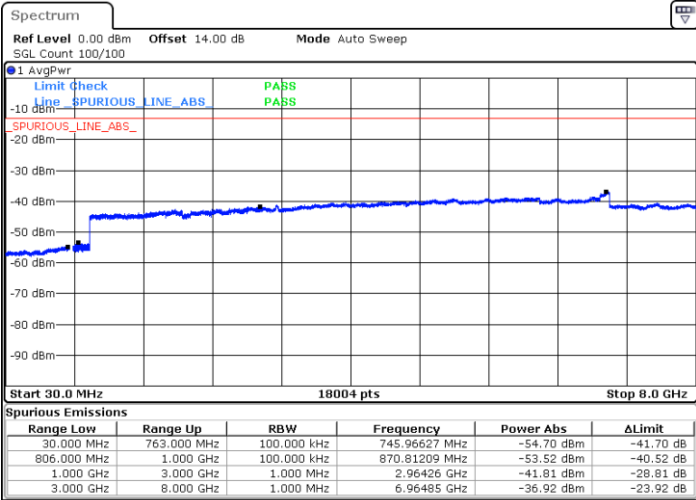




LTE Band 13 / 5MHz

Highest Channel / \_5MHz

NA



NA

Date: 25.MAY.2023 14:28:25



### Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0114	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0101	

**Note:**

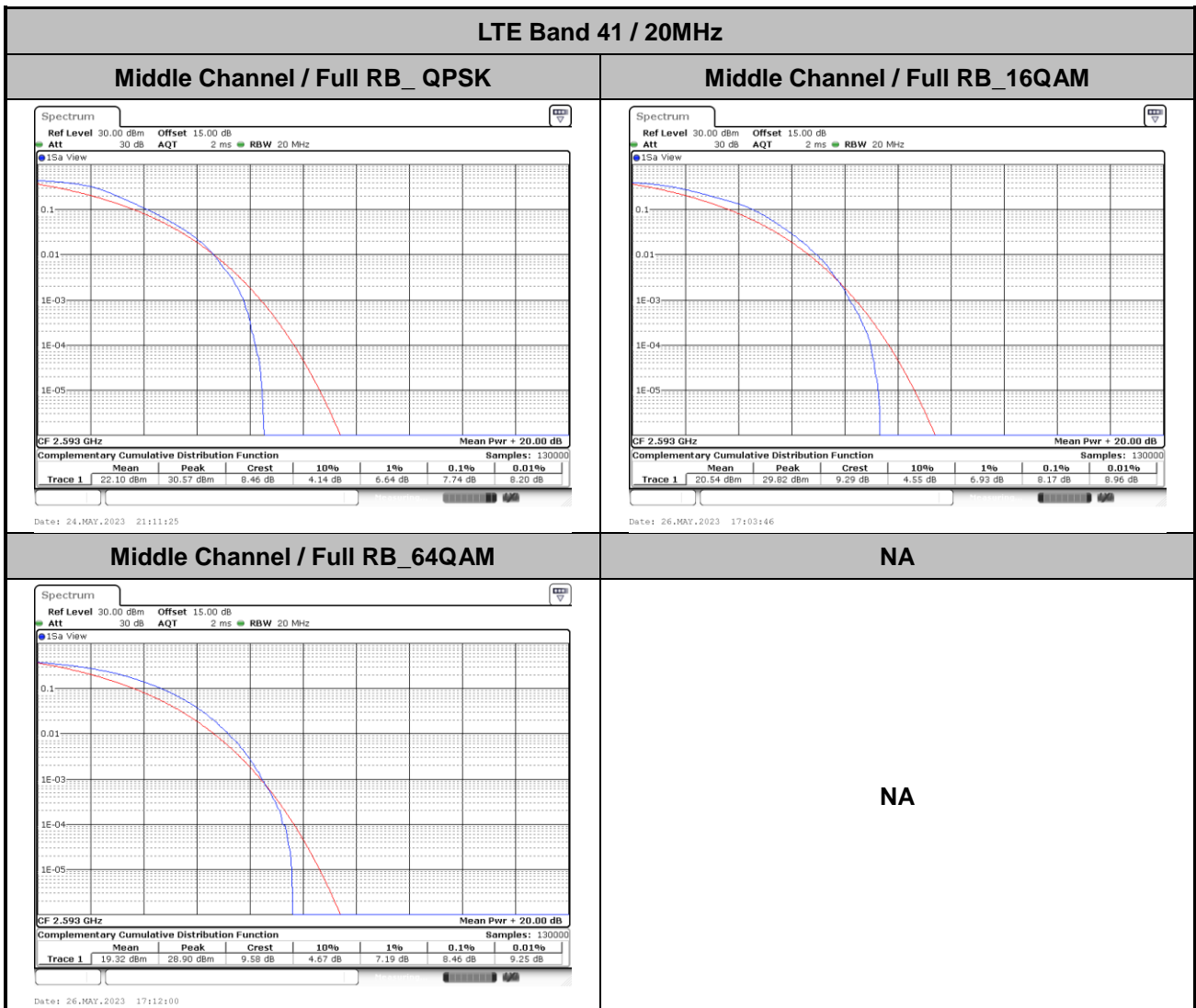
1. Normal Voltage =3.88 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.47 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 41

## Peak-to-Average Ratio

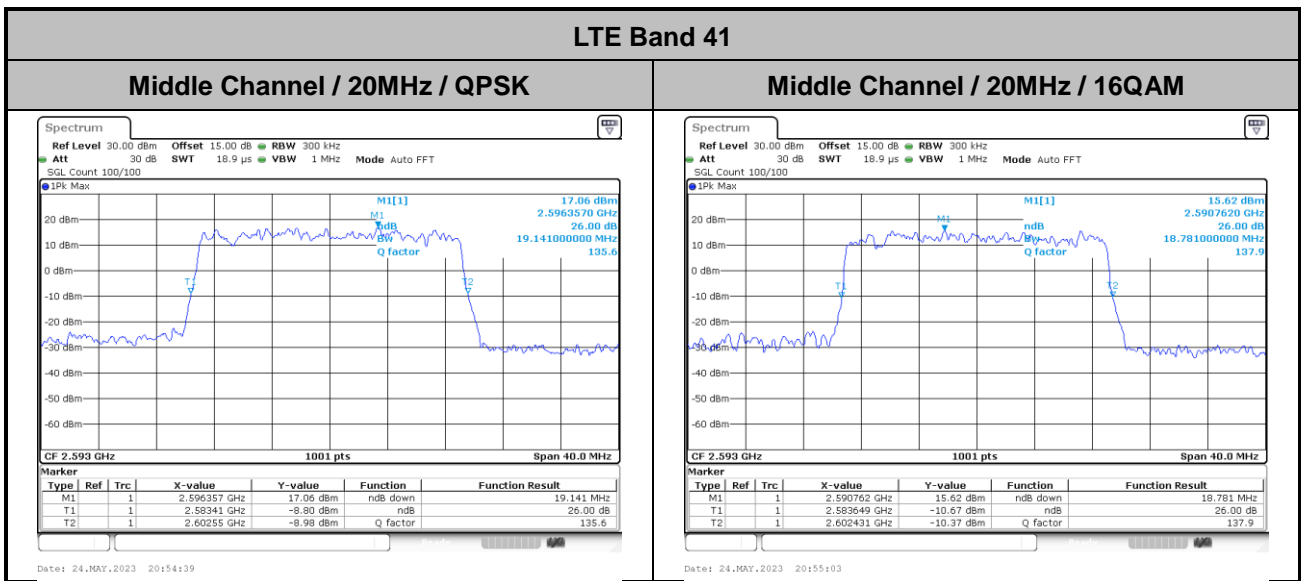
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	7.74	8.17	8.46	PASS





## 26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.14	18.78





# Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.86

