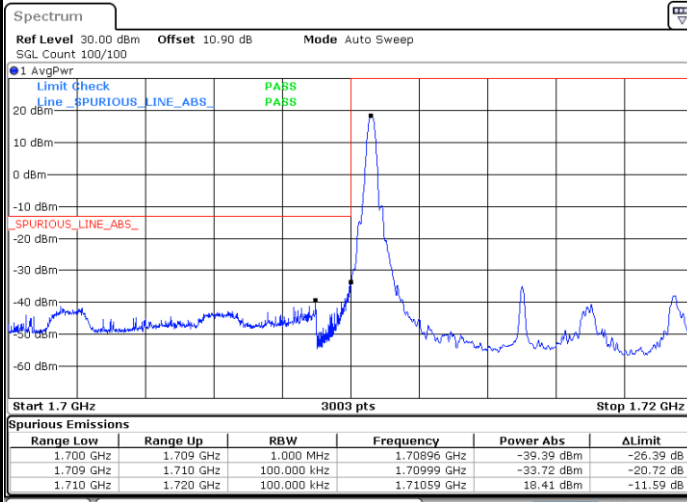




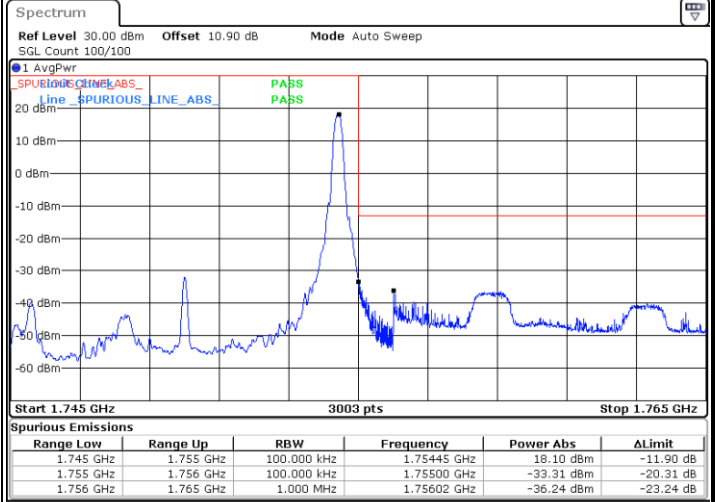
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB



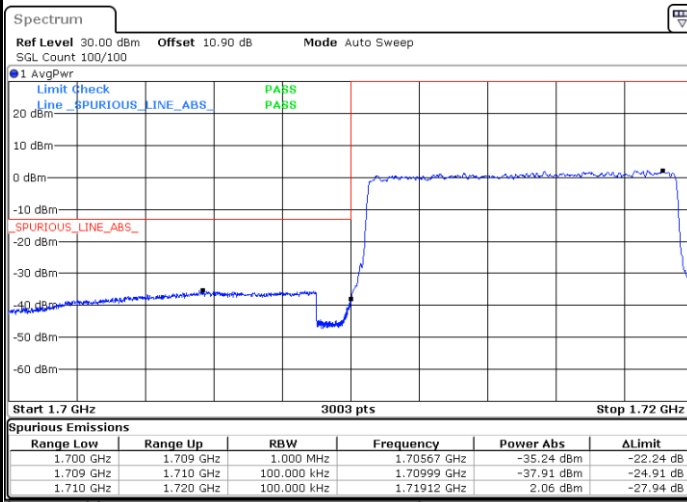
Date: 18.MAY.2021 10:34:31

Highest Band Edge / 1 RB



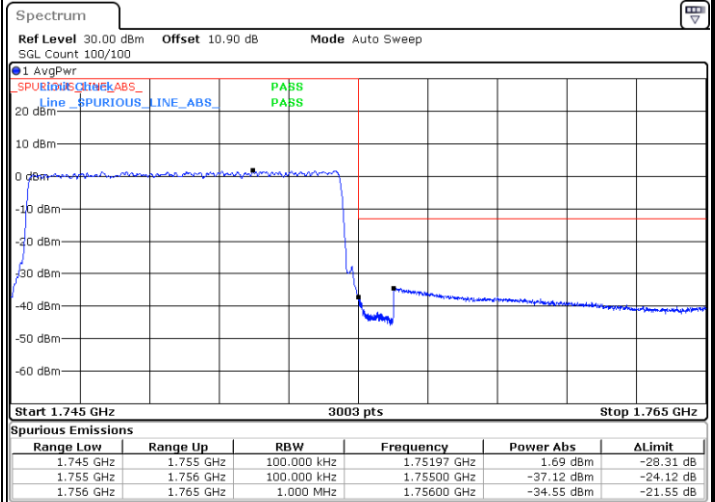
Date: 18.MAY.2021 10:39:32

Lowest Band Edge / Full RB



Date: 18.MAY.2021 10:35:23

Highest Band Edge / Full RB

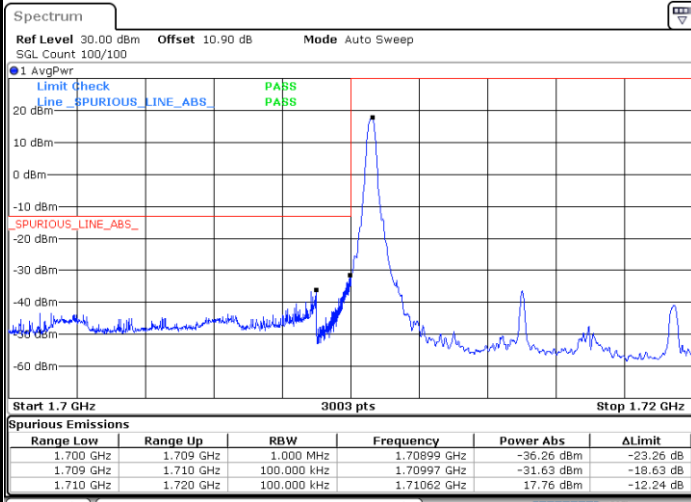


Date: 18.MAY.2021 10:40:23



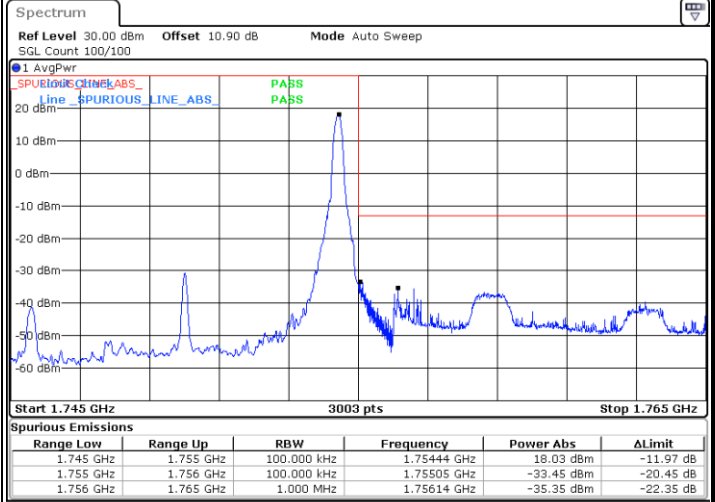
LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



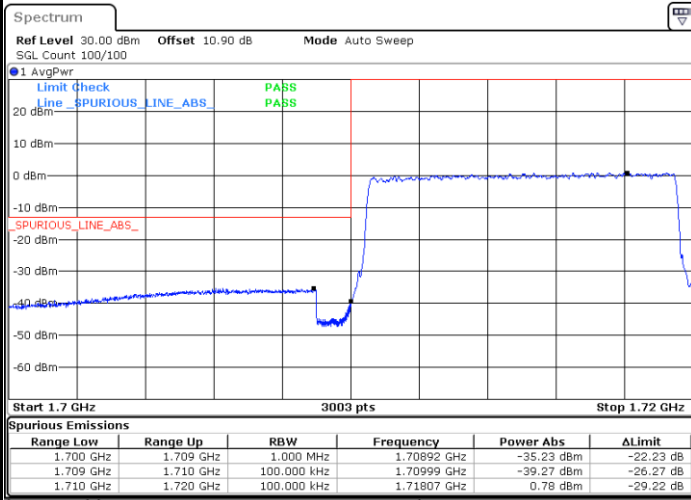
Date: 18.MAY.2021 10:34:57

Highest Band Edge / 1 RB



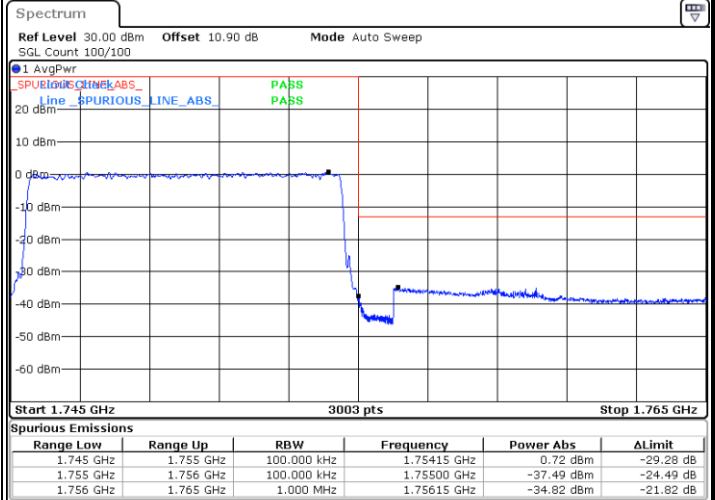
Date: 18.MAY.2021 10:39:58

Lowest Band Edge / Full RB



Date: 18.MAY.2021 10:35:48

Highest Band Edge / Full RB

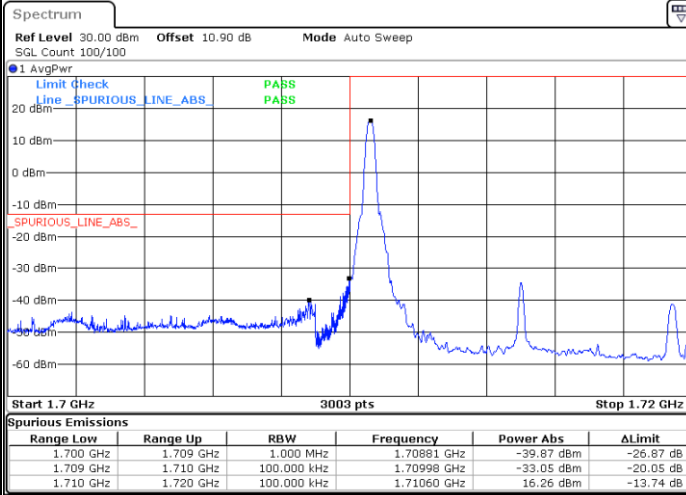


Date: 18.MAY.2021 10:40:49



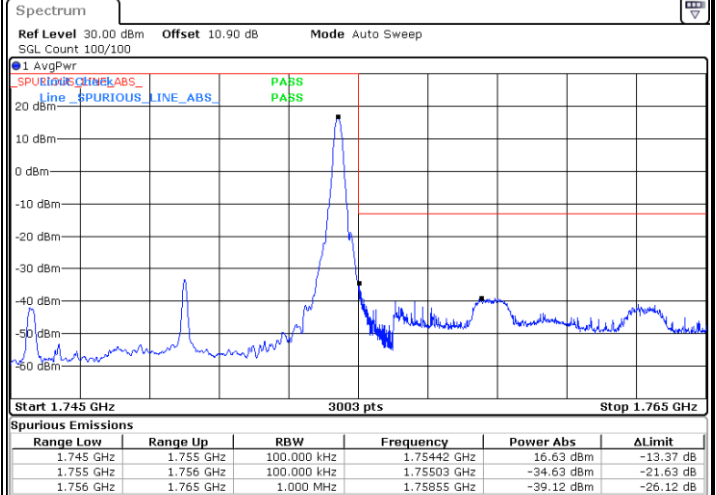
LTE Band 4 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



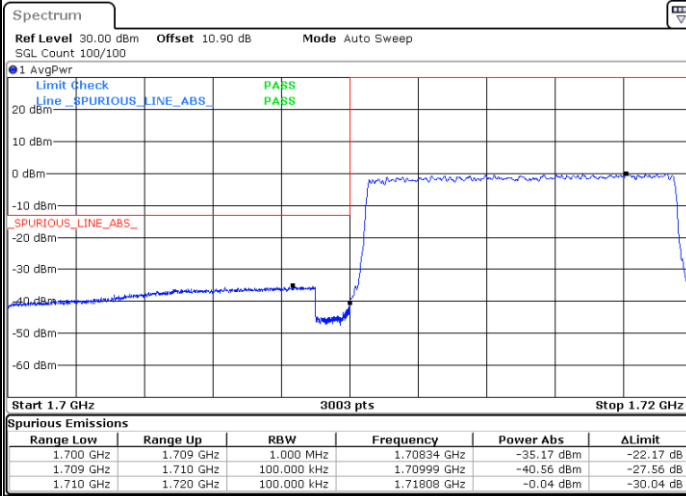
Date: 18.MAY.2021 10:42:10

Highest Band Edge / 1 RB



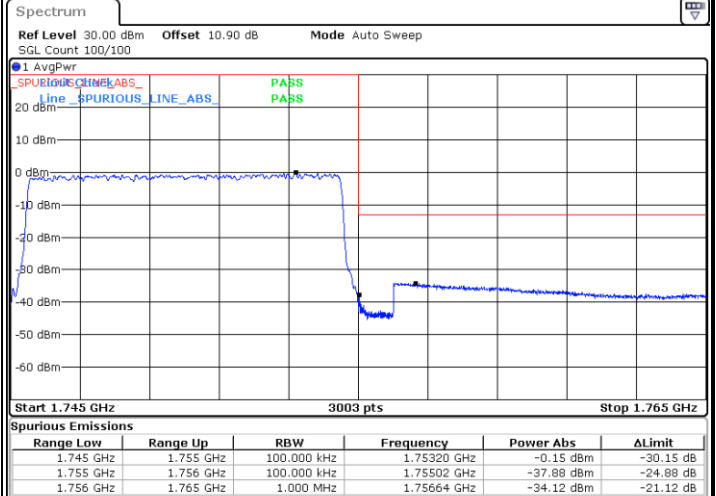
Date: 18.MAY.2021 10:43:45

Lowest Band Edge / Full RB



Date: 18.MAY.2021 10:42:36

Highest Band Edge / Full RB

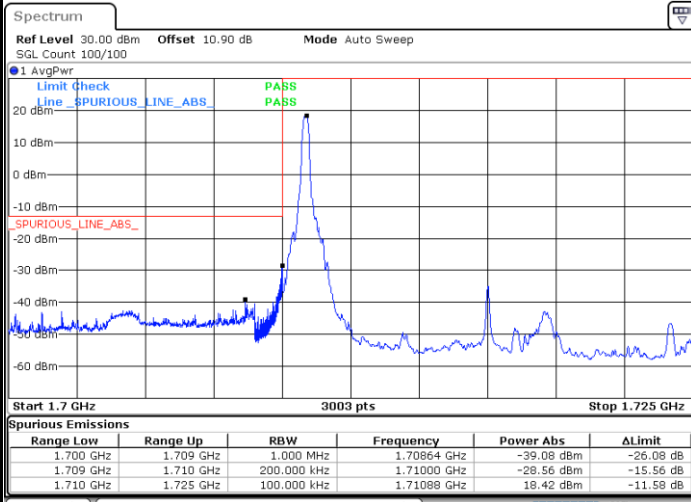


Date: 18.MAY.2021 10:44:11



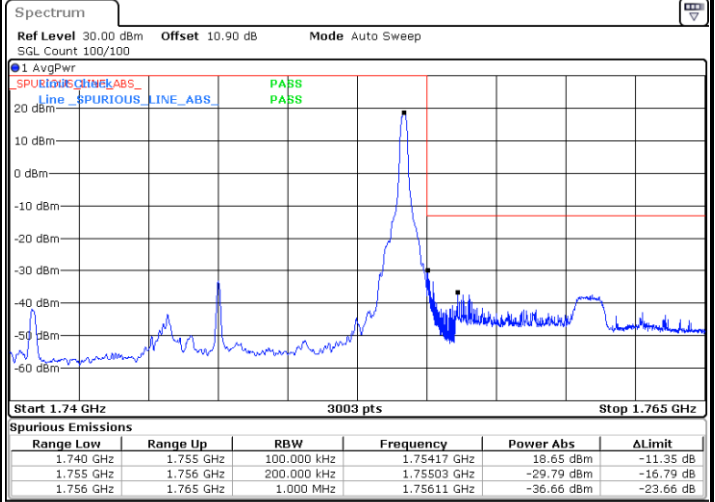
LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / 1 RB



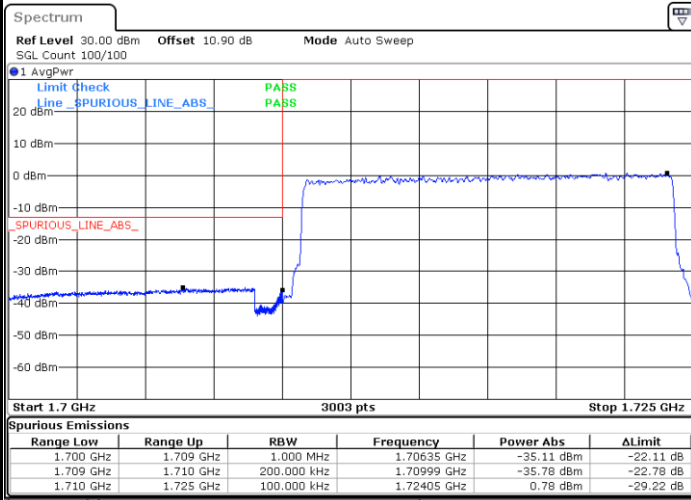
Date: 18.MAY.2021 10:44:37

Highest Band Edge / 1 RB



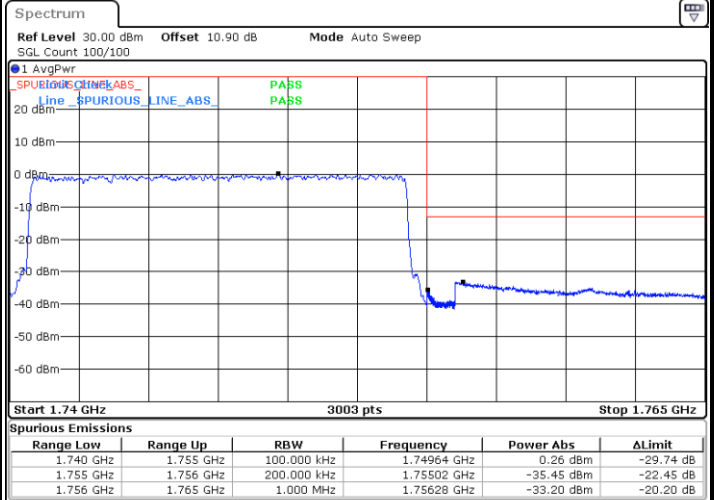
Date: 18.MAY.2021 10:49:39

Lowest Band Edge / Full RB



Date: 18.MAY.2021 10:45:29

Highest Band Edge / Full RB

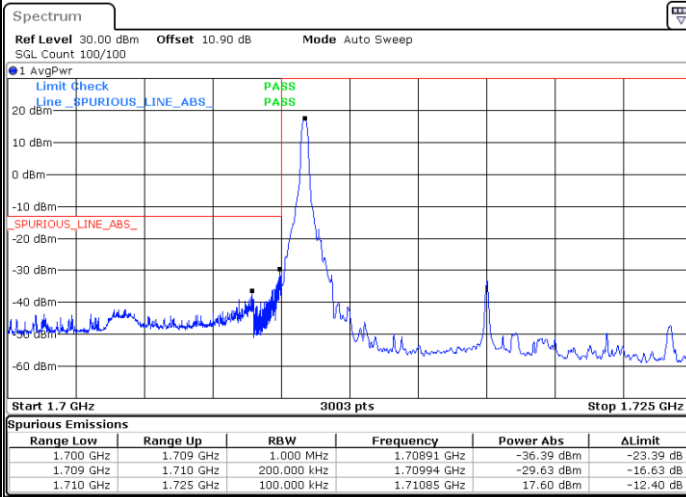


Date: 18.MAY.2021 10:50:30



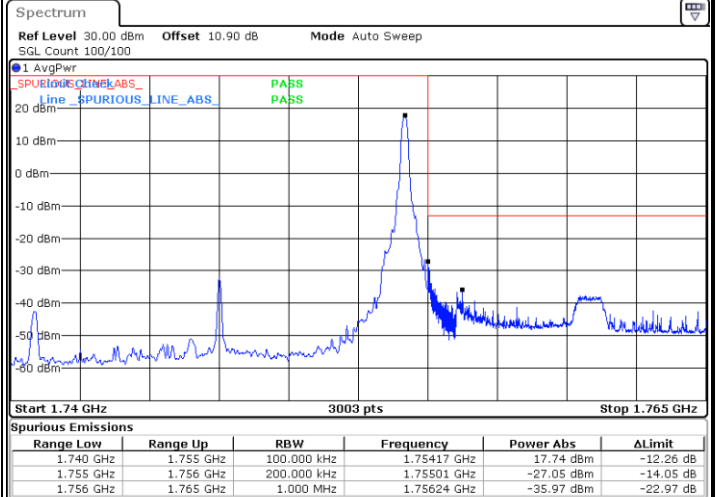
LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



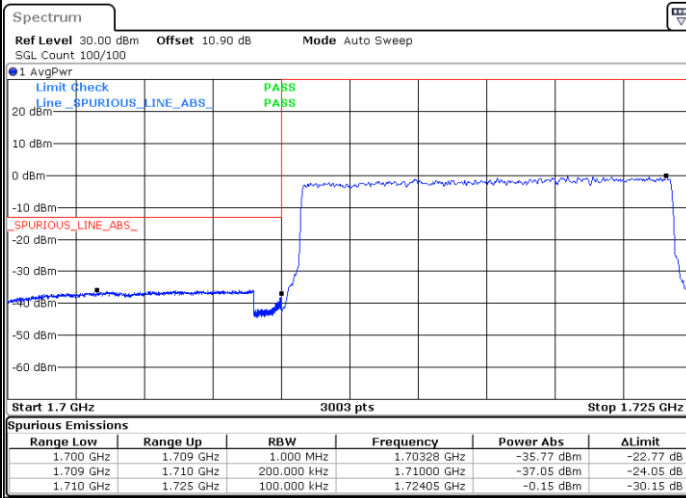
Date: 18.MAY.2021 10:45:03

Highest Band Edge / 1 RB



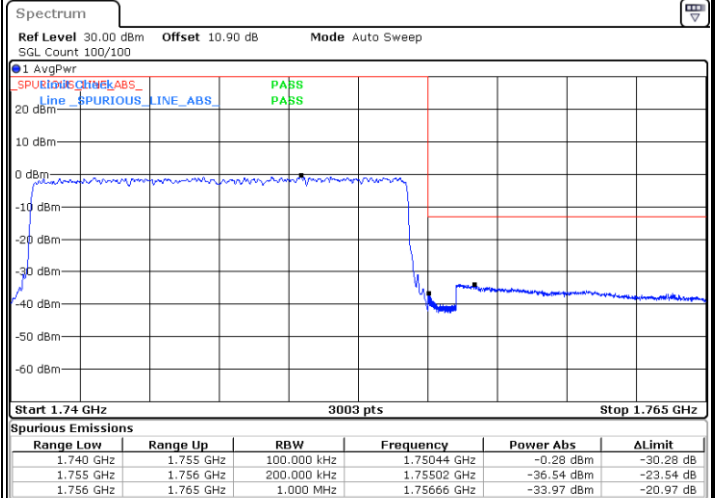
Date: 18.MAY.2021 10:50:05

Lowest Band Edge / Full RB



Date: 18.MAY.2021 10:45:54

Highest Band Edge / Full RB

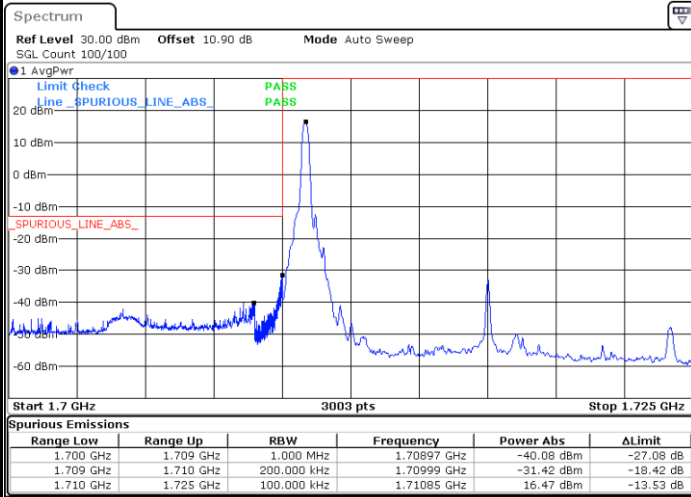


Date: 18.MAY.2021 10:50:56



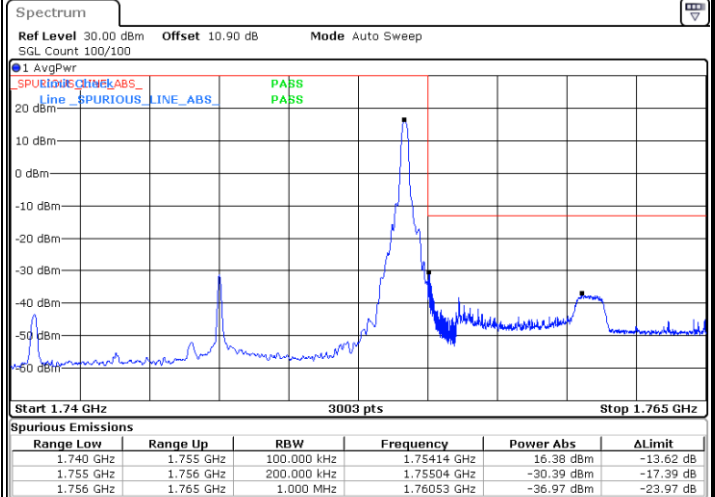
LTE Band 4 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



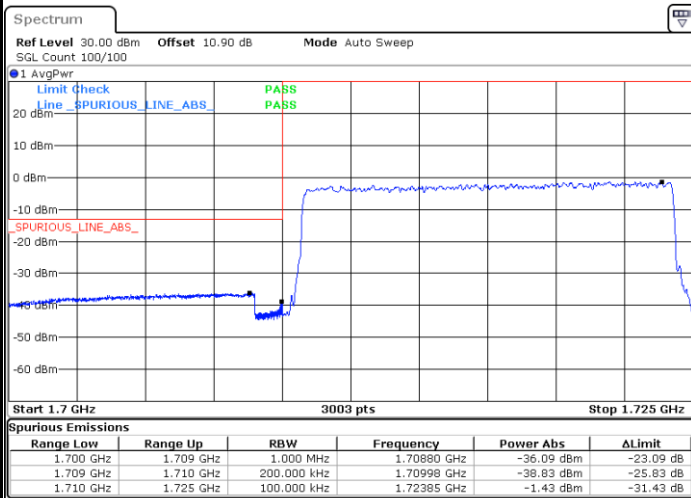
Date: 18.MAY.2021 10:52:18

Highest Band Edge / 1 RB



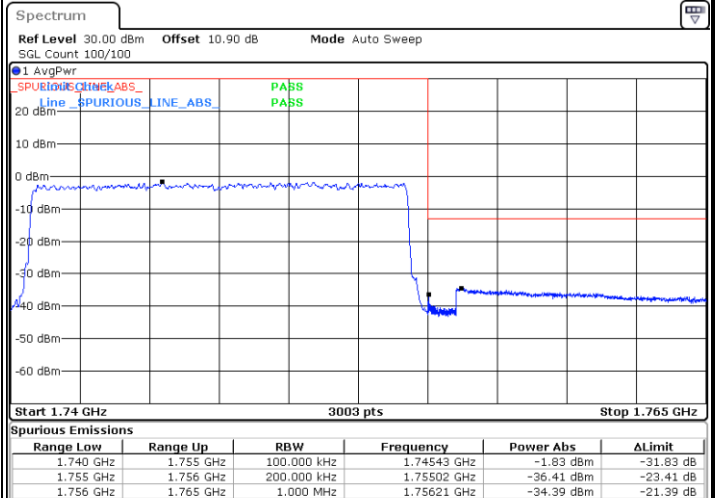
Date: 18.MAY.2021 10:53:52

Lowest Band Edge / Full RB



Date: 18.MAY.2021 10:52:44

Highest Band Edge / Full RB

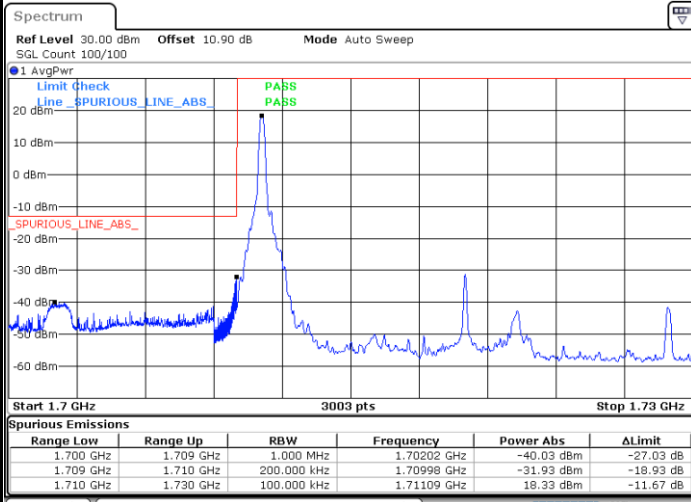


Date: 18.MAY.2021 10:54:18

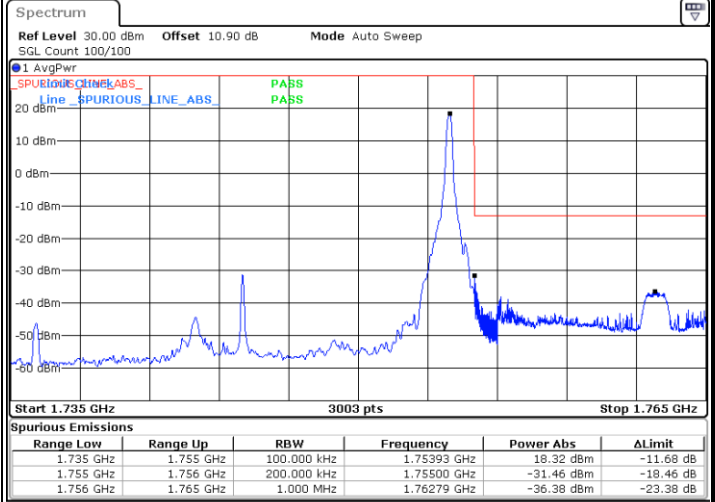


LTE Band 4 / 20MHz / QPSK

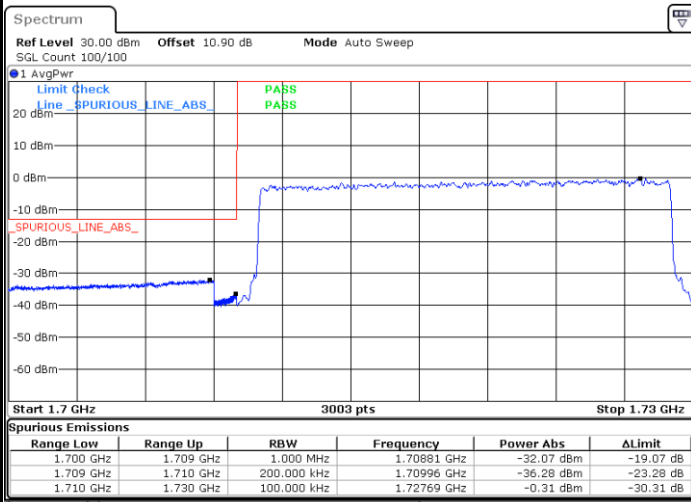
Lowest Band Edge / 1 RB



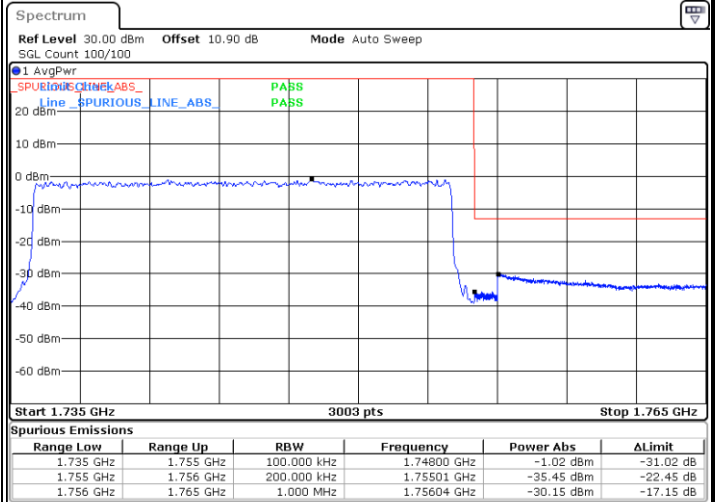
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



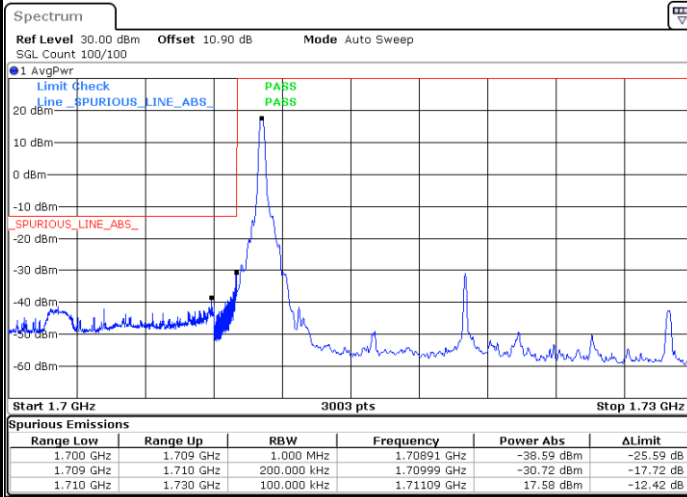
Highest Band Edge / Full RB



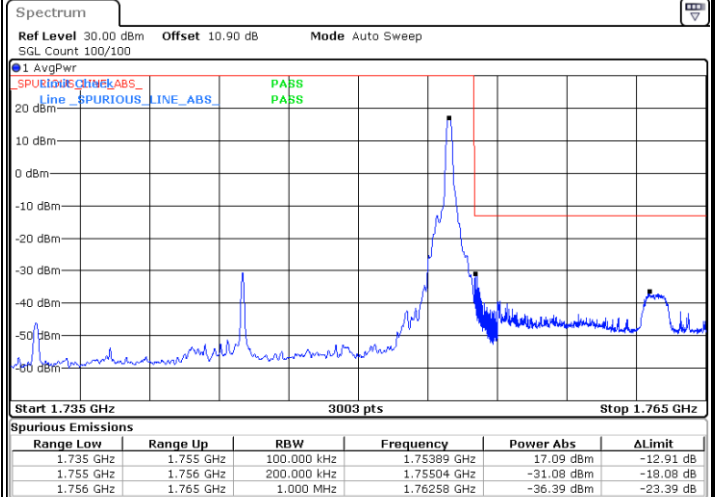


LTE Band 4 / 20MHz / 16QAM

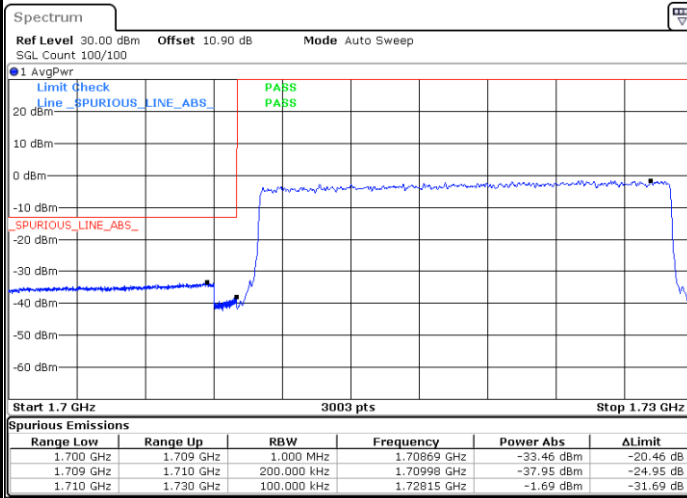
Lowest Band Edge / 1 RB



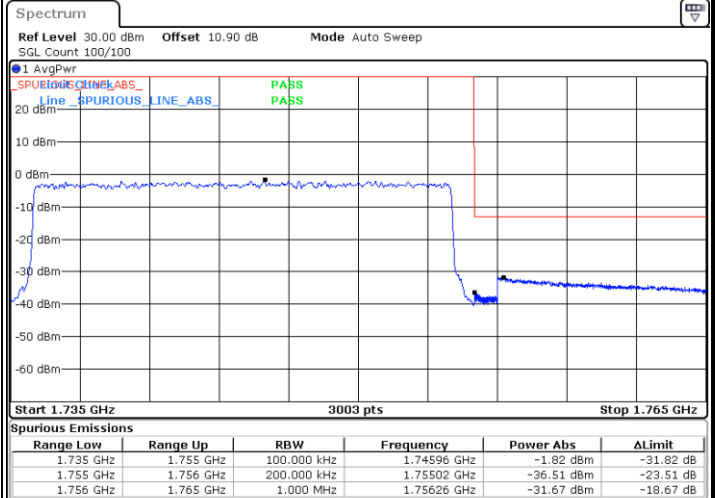
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

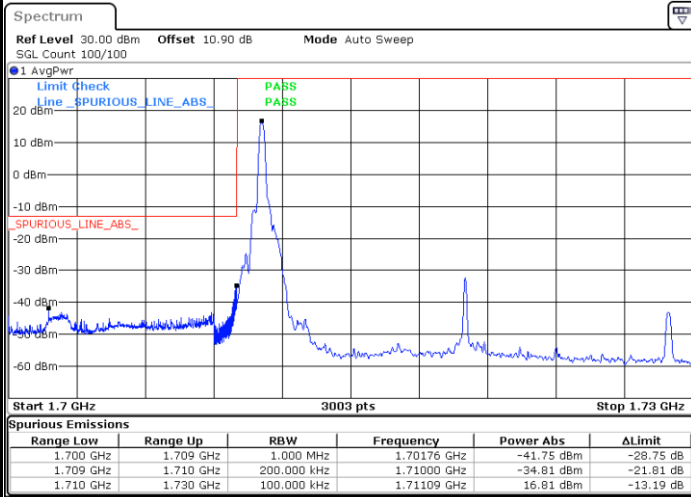






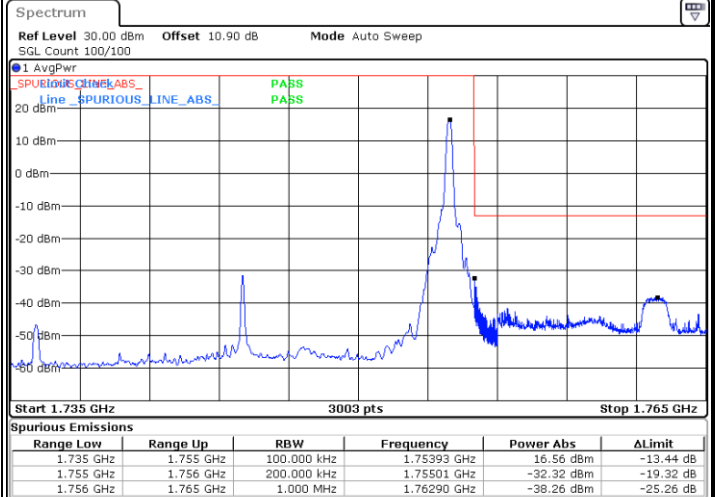
LTE Band 4 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



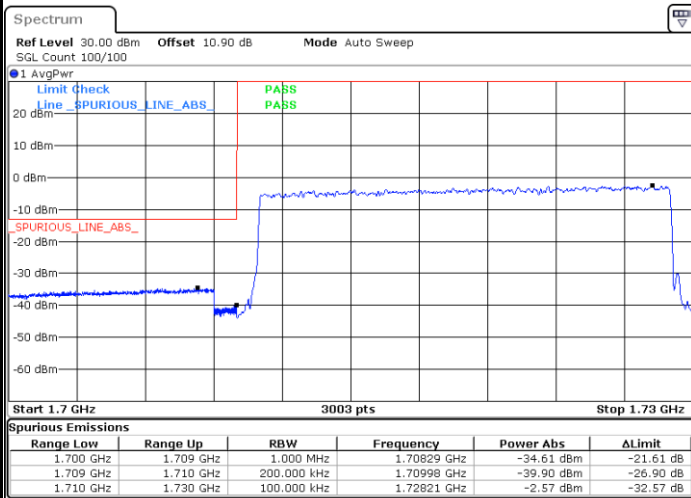
Date: 18.MAY.2021 11:03:41

Highest Band Edge / 1 RB



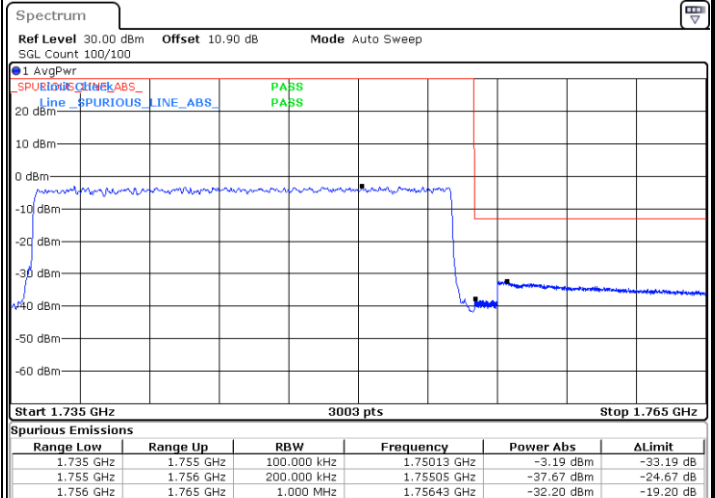
Date: 18.MAY.2021 11:05:16

Lowest Band Edge / Full RB



Date: 18.MAY.2021 11:04:07

Highest Band Edge / Full RB



Date: 18.MAY.2021 11:05:42

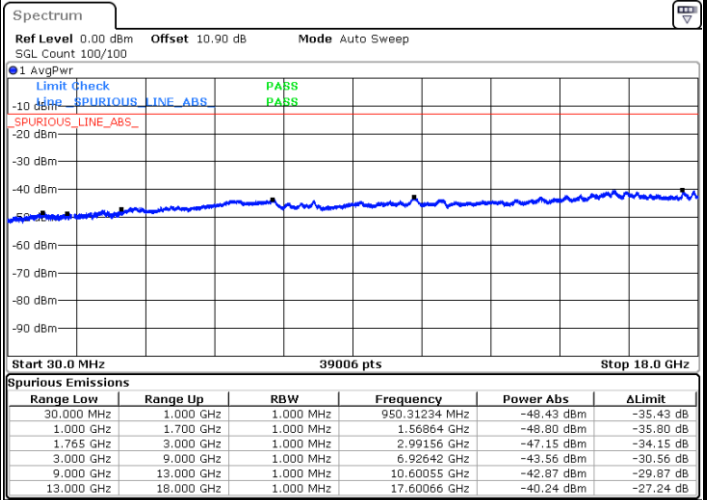
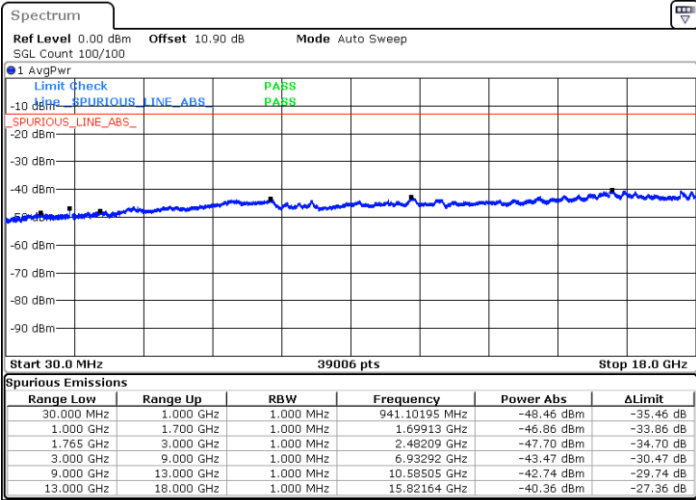


# Conducted Spurious Emission

## LTE Band 4 / 1.4MHz

### Lowest Channel / QPSK

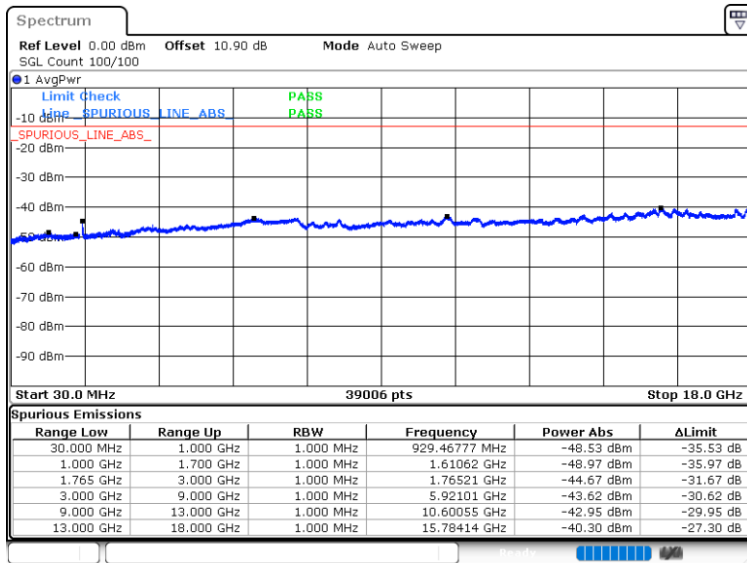
### Middle Channel / QPSK



Date: 18.MAY.2021 10:06:23

Date: 18.MAY.2021 10:08:46

### Highest Channel / QPSK



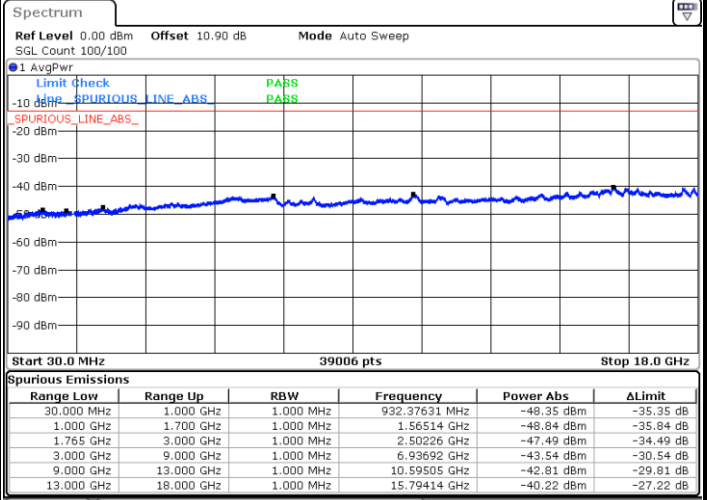
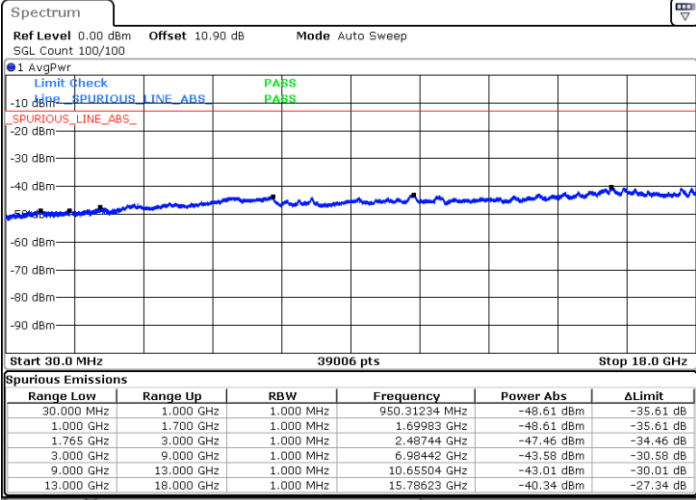
Date: 18.MAY.2021 10:11:24



LTE Band 4 / 3MHz

Lowest Channel / QPSK

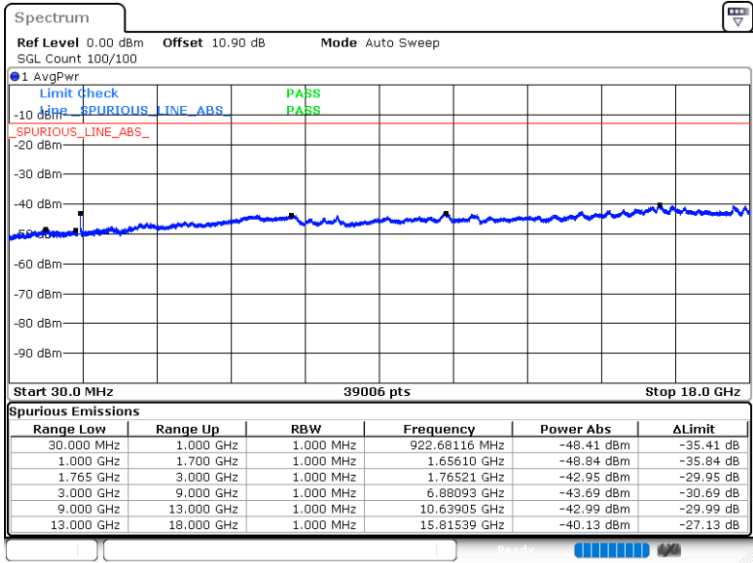
Middle Channel / QPSK



Date: 18.MAY.2021 10:16:30

Date: 18.MAY.2021 10:18:53

Highest Channel / QPSK



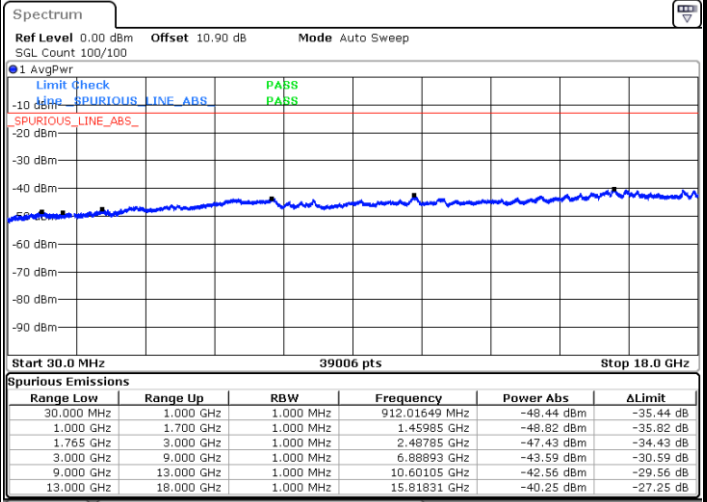
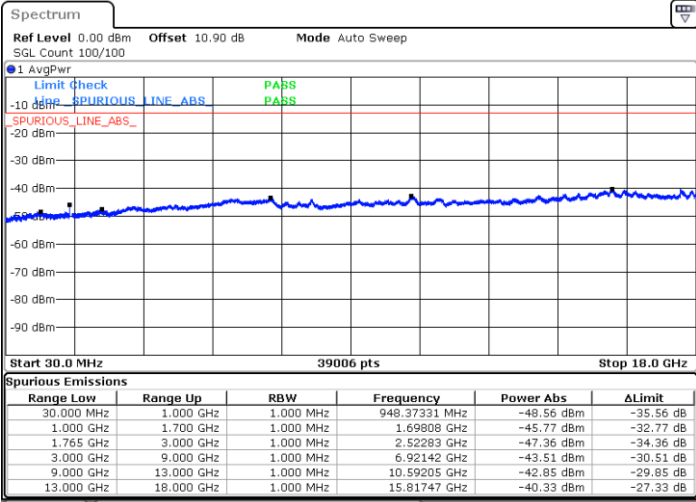
Date: 18.MAY.2021 10:21:31



LTE Band 4 / 5MHz

Lowest Channel / QPSK

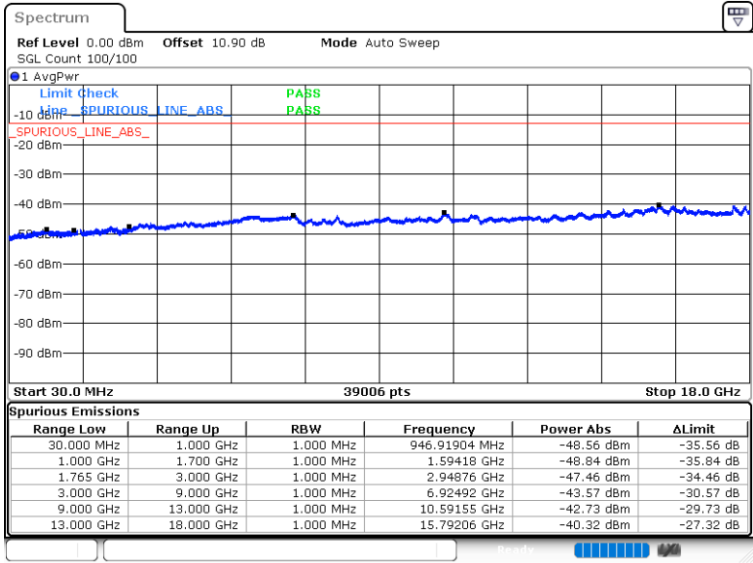
Middle Channel / QPSK



Date: 18.MAY.2021 10:29:03

Date: 18.MAY.2021 10:31:25

Highest Channel / QPSK



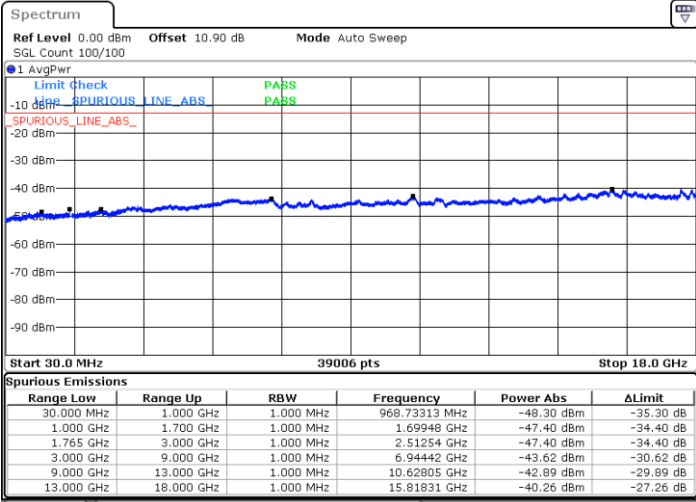
Date: 18.MAY.2021 10:34:04



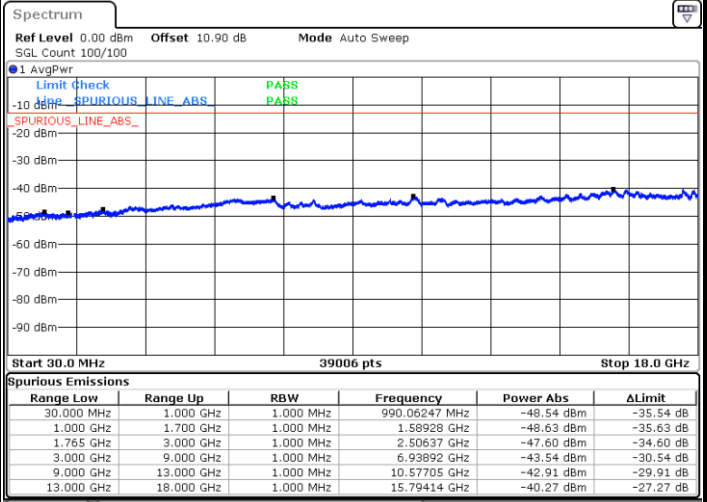
LTE Band 4 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

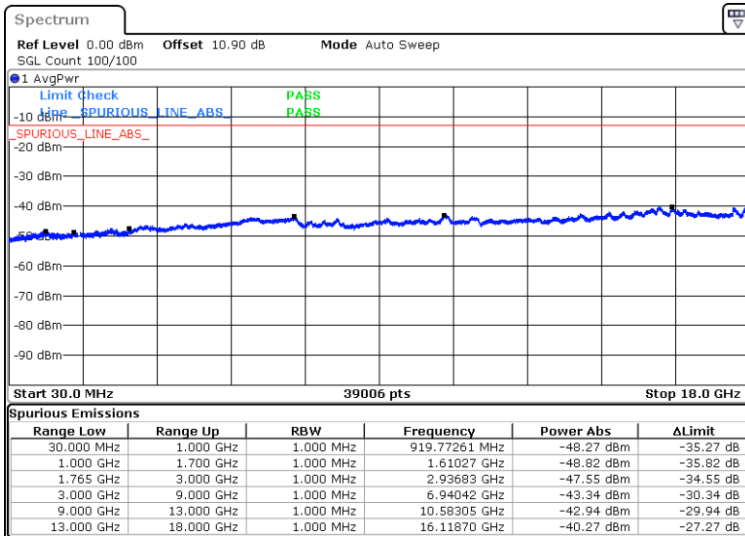


Date: 18.MAY.2021 10:36:44



Date: 18.MAY.2021 10:39:06

Highest Channel / QPSK



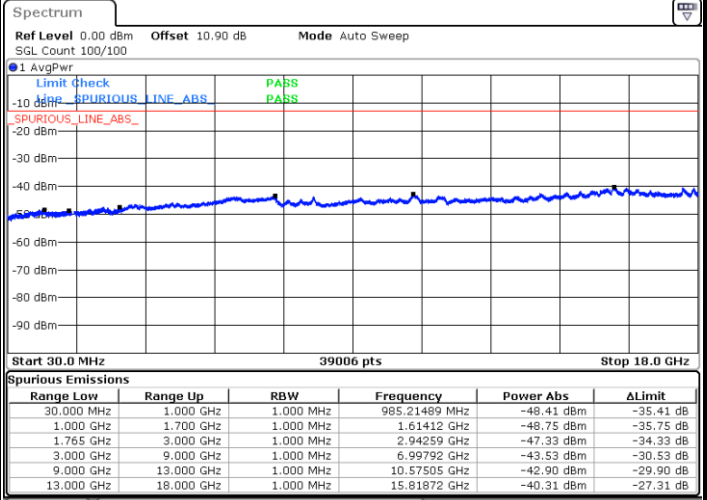
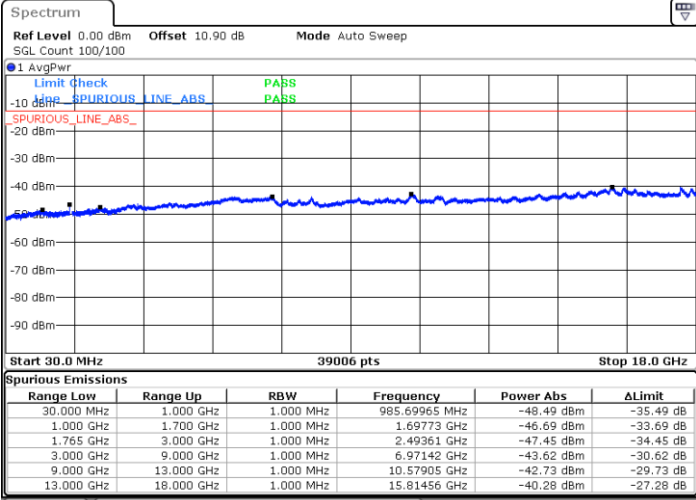
Date: 18.MAY.2021 10:41:44



LTE Band 4 / 15MHz

Lowest Channel / QPSK

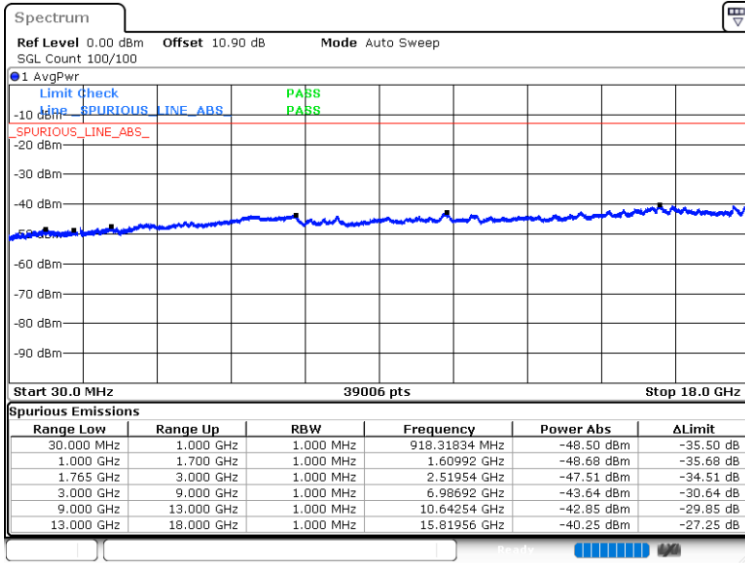
Middle Channel / QPSK



Date: 18.MAY.2021 10:46:50

Date: 18.MAY.2021 10:49:13

Highest Channel / QPSK



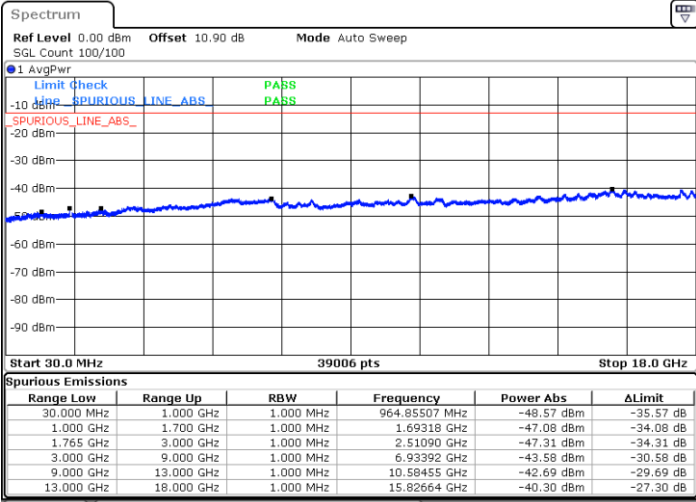
Date: 18.MAY.2021 10:51:52



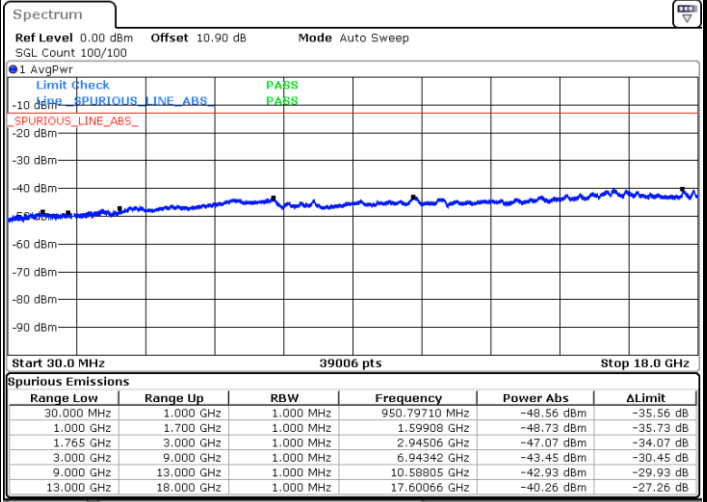
LTE Band 4 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

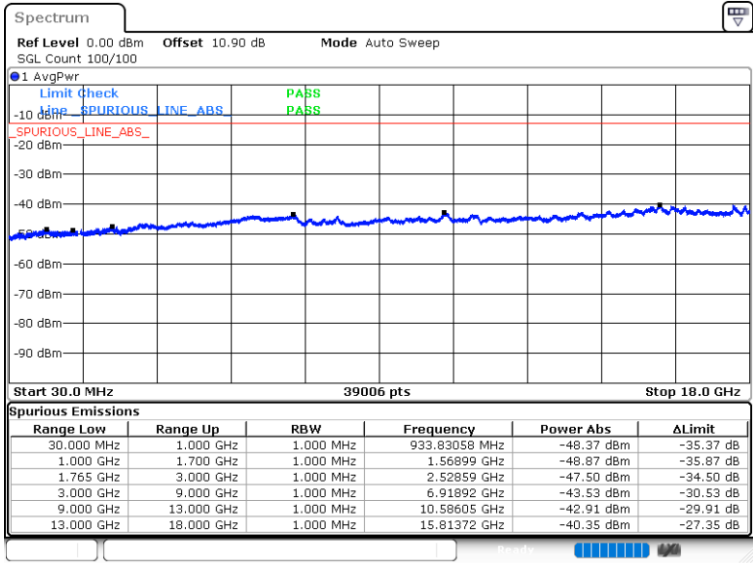


Date: 18.MAY.2021 10:56:57



Date: 18.MAY.2021 10:59:20

Highest Channel / QPSK



Date: 18.MAY.2021 11:01:59



### 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	0.0130	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0095	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0123	
-30	Normal Voltage	0.0140	
20	Maximum Voltage	0.0128	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0023	

**Note:**

- 1. Normal Voltage =14 V. ; Battery End Point (BEP) =12 V. ; Maximum Voltage =16 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.

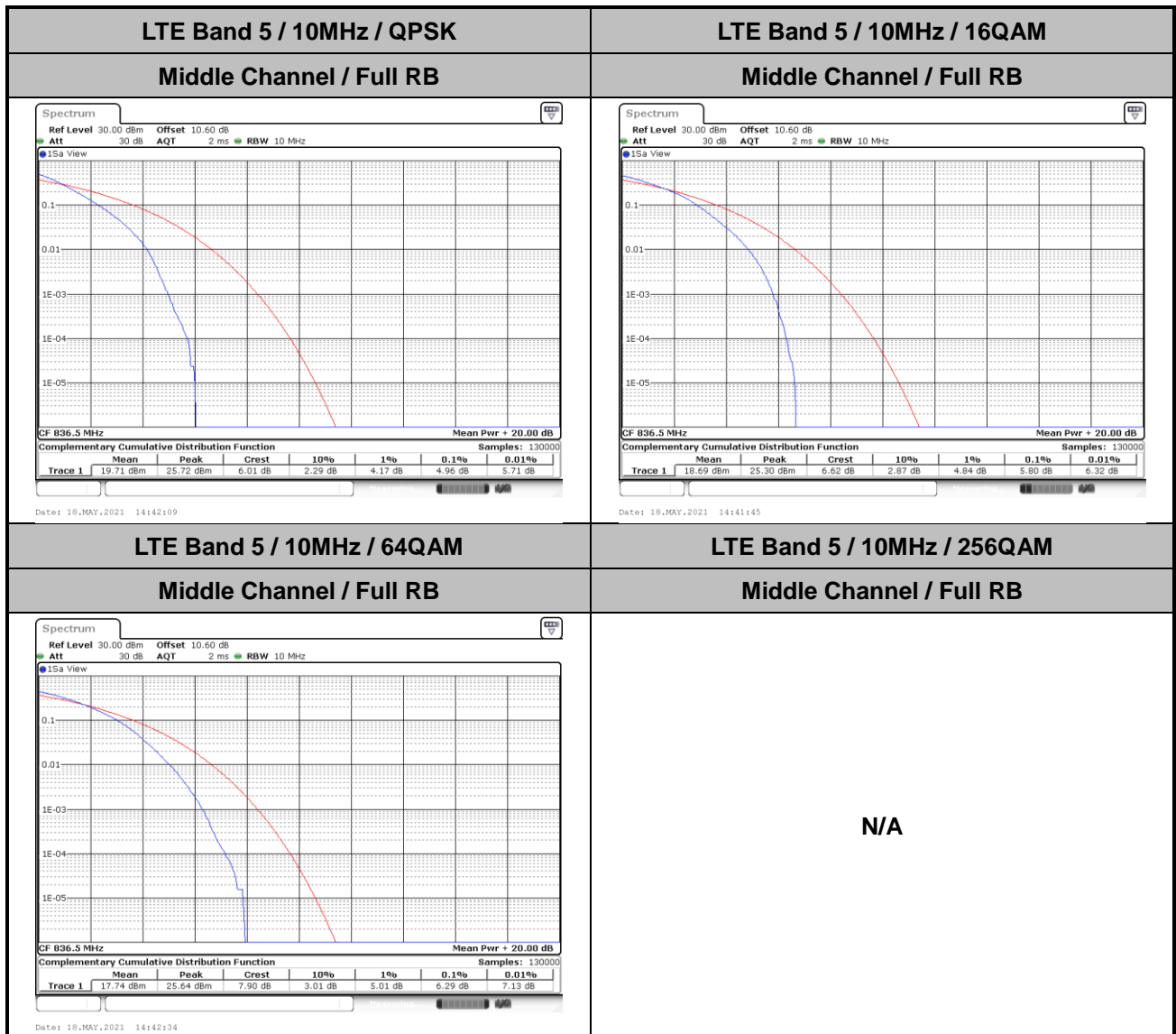




# LTE Band 5

## 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	4.96	5.80	6.29	-	PASS





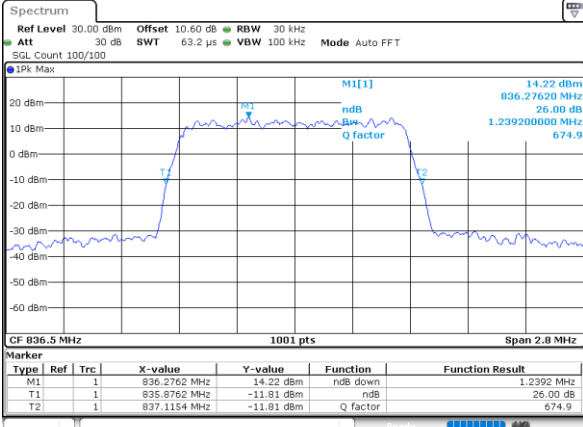
**26dB Bandwidth**

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	1.24	1.23	3.03	2.97	4.86	4.87	9.91	9.77	-	-	-	-
Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.23	-	3.03	-	4.94	-	9.79	-	-	-	-	-



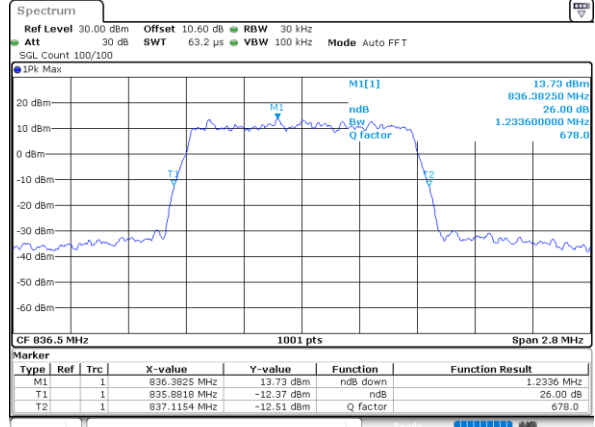
LTE Band 5

Middle Channel / 1.4MHz / QPSK



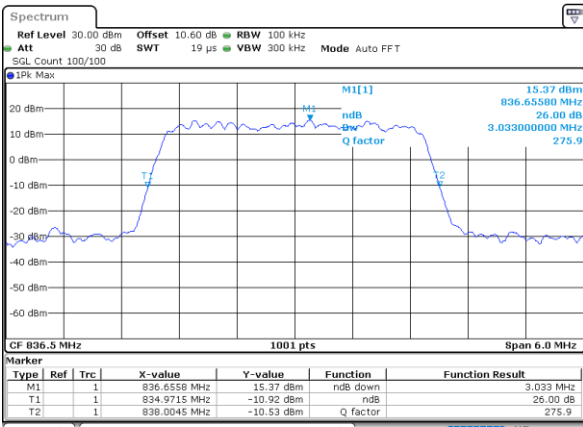
Date: 18.MAY.2021 11:17:39

Middle Channel / 1.4MHz / 16QAM



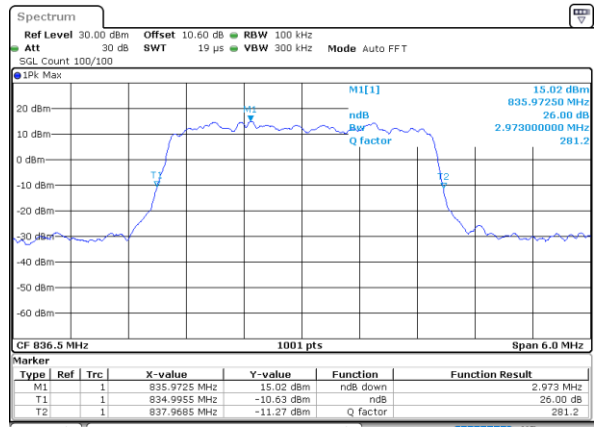
Date: 18.MAY.2021 11:18:00

Middle Channel / 3MHz / QPSK



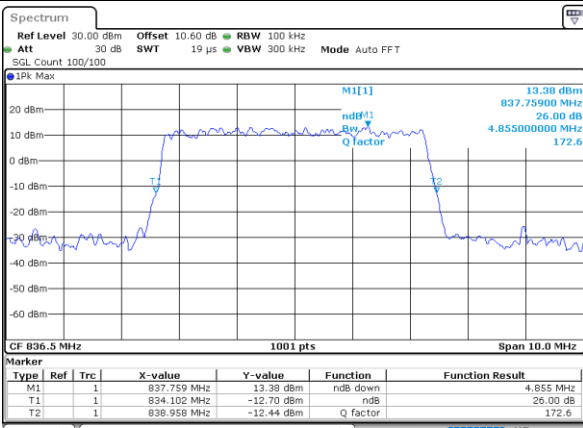
Date: 18.MAY.2021 11:43:49

Middle Channel / 3MHz / 16QAM



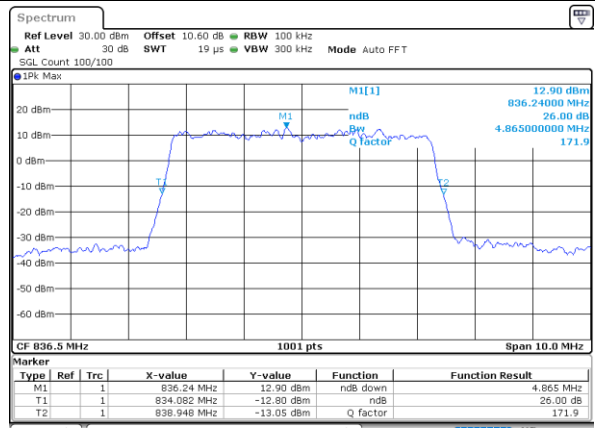
Date: 18.MAY.2021 11:44:10

Middle Channel / 5MHz / QPSK



Date: 18.MAY.2021 13:58:05

Middle Channel / 5MHz / 16QAM

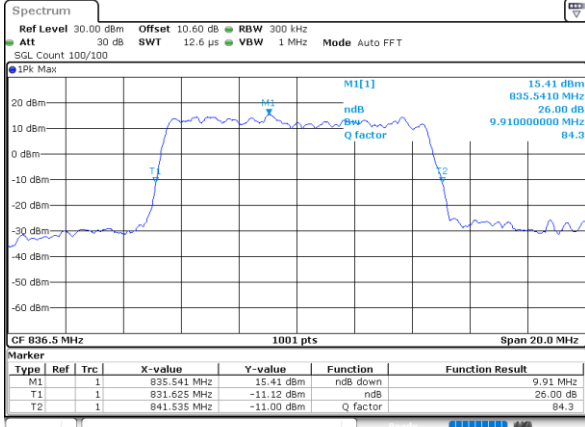


Date: 18.MAY.2021 13:58:26



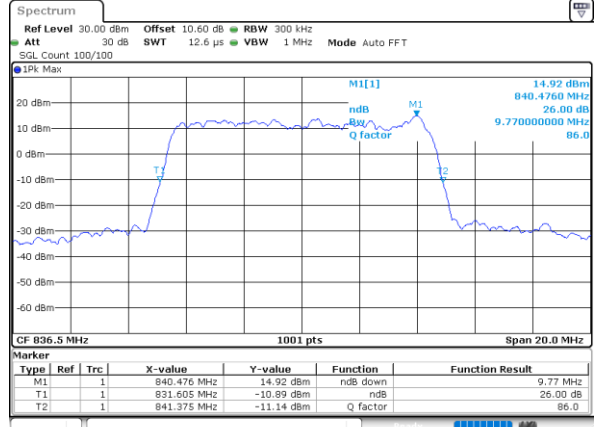
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 18.MAY.2021 14:24:17

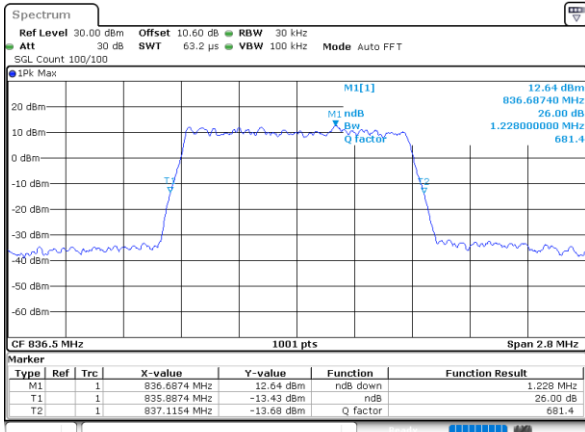
Middle Channel / 10MHz / 16QAM



Date: 18.MAY.2021 14:24:38

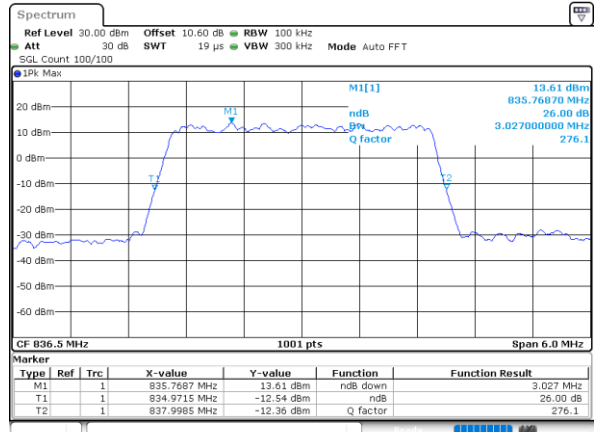
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



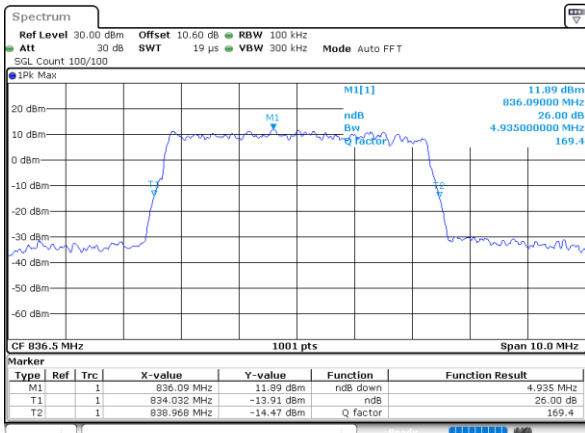
Date: 18.MAY.2021 11:31:01

Middle Channel / 3MHz / 64QAM



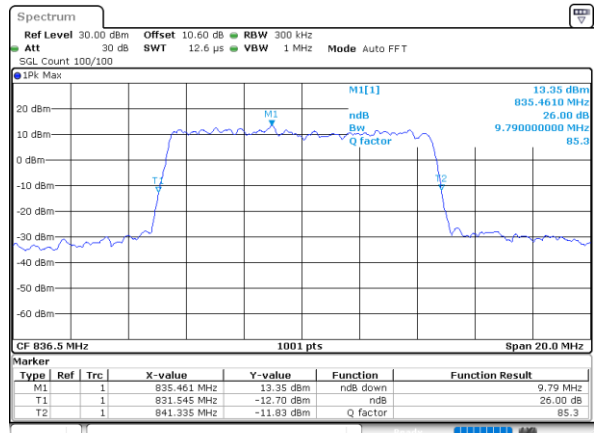
Date: 18.MAY.2021 13:45:16

Middle Channel / 5MHz / 64QAM



Date: 18.MAY.2021 14:11:28

Middle Channel / 10MHz / 64QAM



Date: 18.MAY.2021 14:37:40



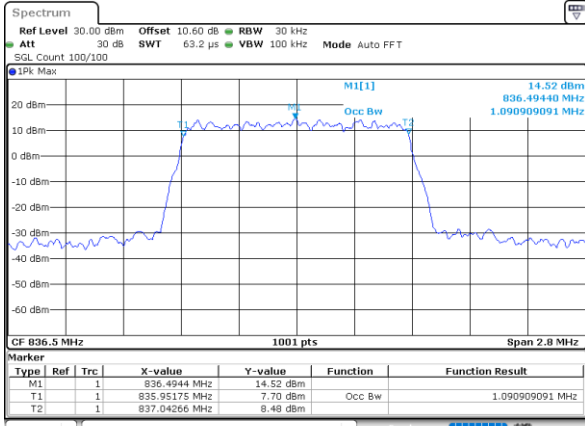
Occupied Bandwidth

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	1.09	2.71	2.72	4.50	4.48	9.09	8.99	-	-	-	-
Mode	LTE Band 5 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.09	-	2.72	-	4.50	-	9.03	-	-	-	-	-

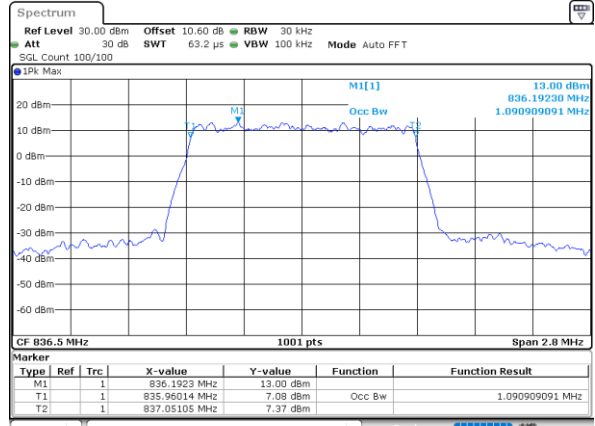


LTE Band 5

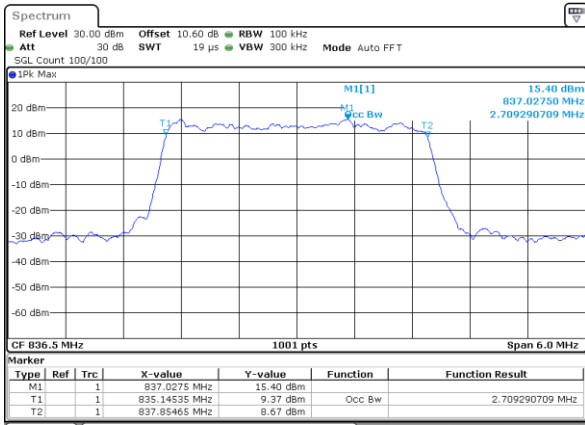
Middle Channel / 1.4MHz / QPSK



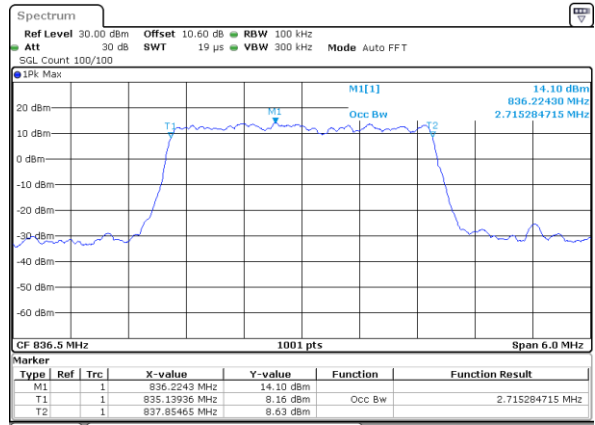
Middle Channel / 1.4MHz / 16QAM



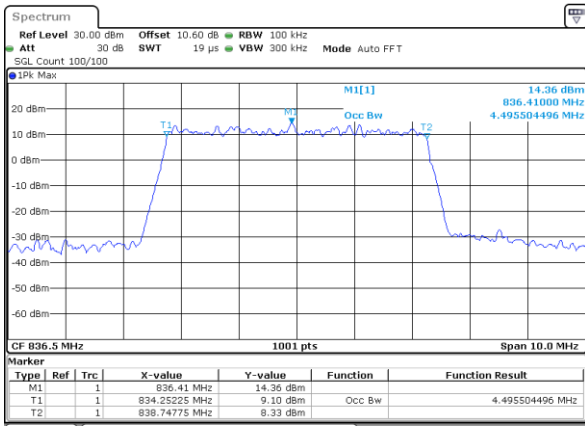
Middle Channel / 3MHz / QPSK



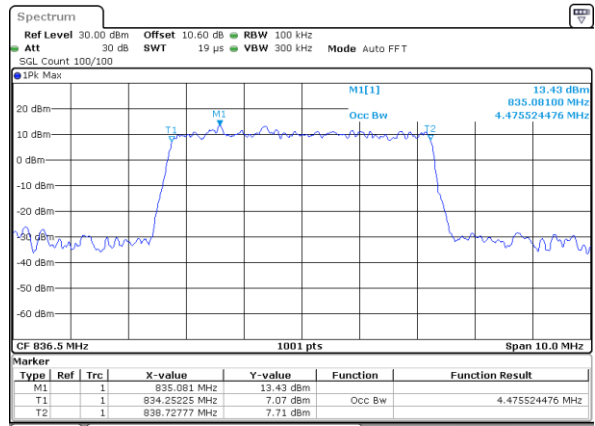
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



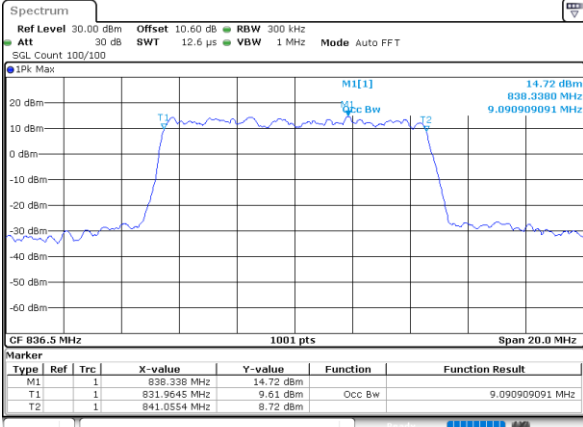
Middle Channel / 5MHz / 16QAM





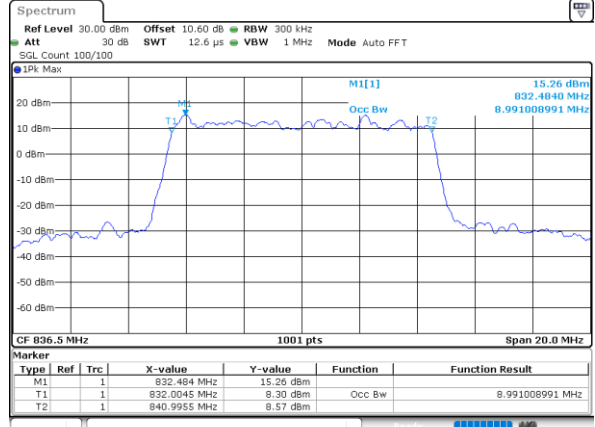
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 18\_MAY.2021 14:23:32

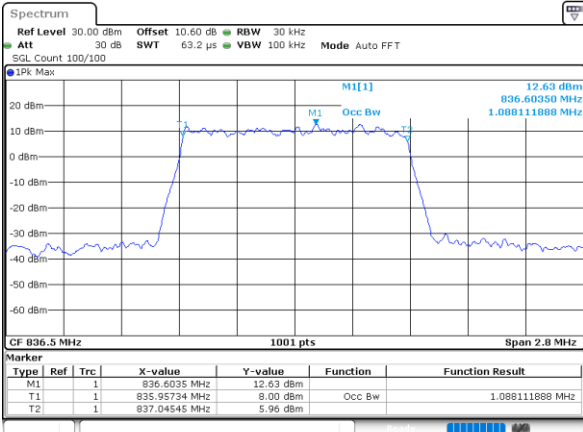
Middle Channel / 10MHz / 16QAM



Date: 18\_MAY.2021 14:23:55

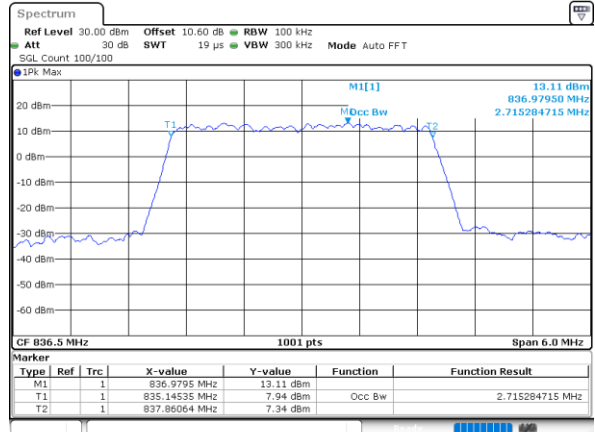
LTE Band 5

Middle Channel / 1.4MHz / 64QAM



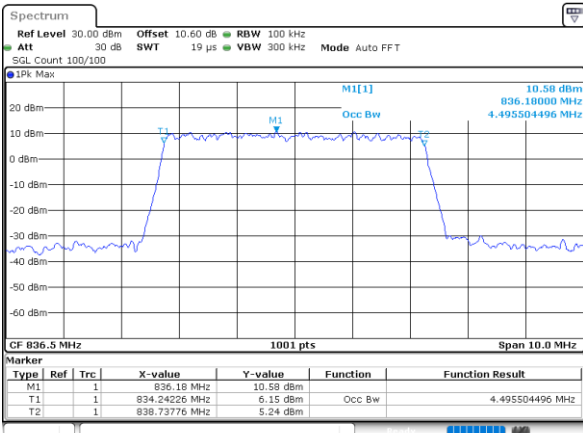
Date: 18\_MAY.2021 11:30:38

Middle Channel / 3MHz / 64QAM



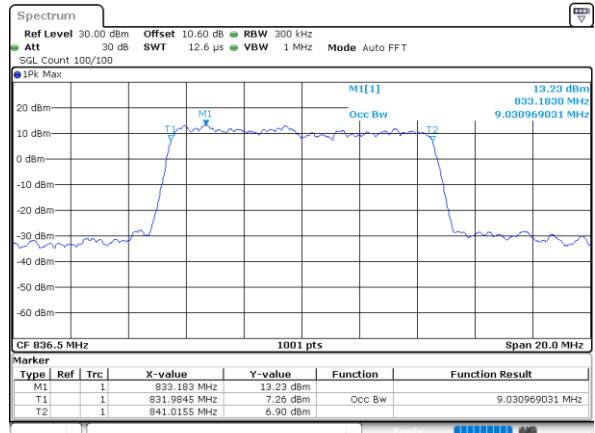
Date: 18\_MAY.2021 13:44:53

Middle Channel / 5MHz / 64QAM



Date: 18\_MAY.2021 14:11:05

Middle Channel / 10MHz / 64QAM



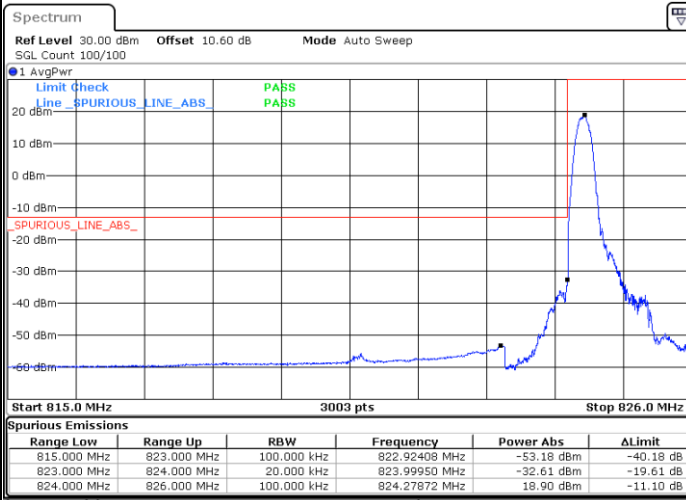
Date: 18\_MAY.2021 14:37:17



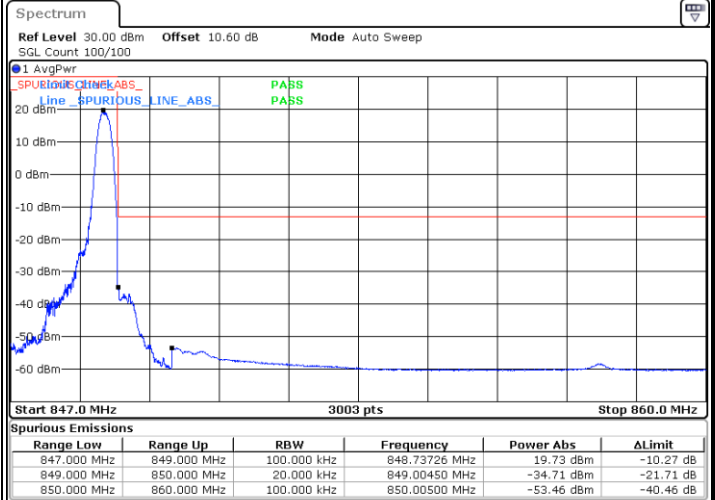
# Conducted Band Edge

## LTE Band 5 / 1.4MHz / QPSK

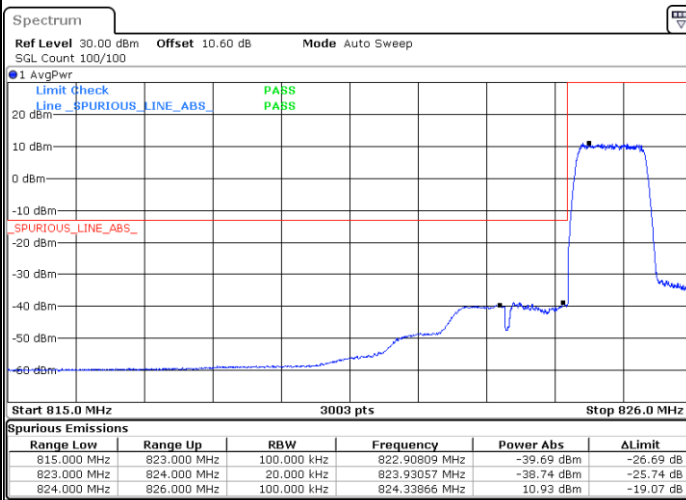
### Lowest Band Edge / 1RB



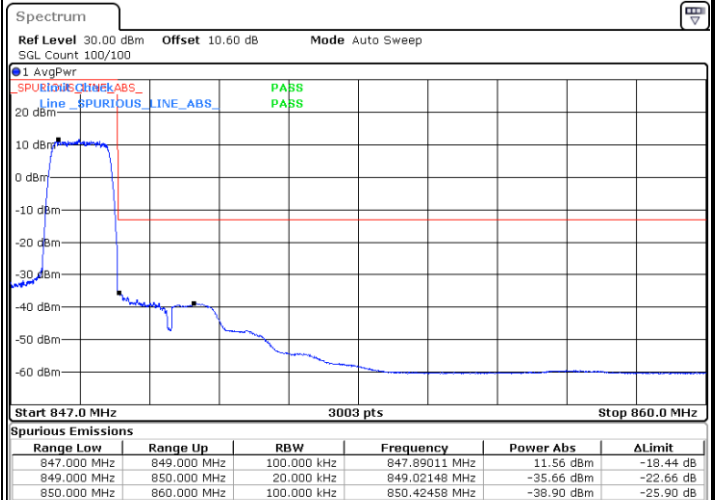
### Highest Band Edge / 1RB



### Lowest Band Edge / Full RB



### Highest Band Edge / Full RB

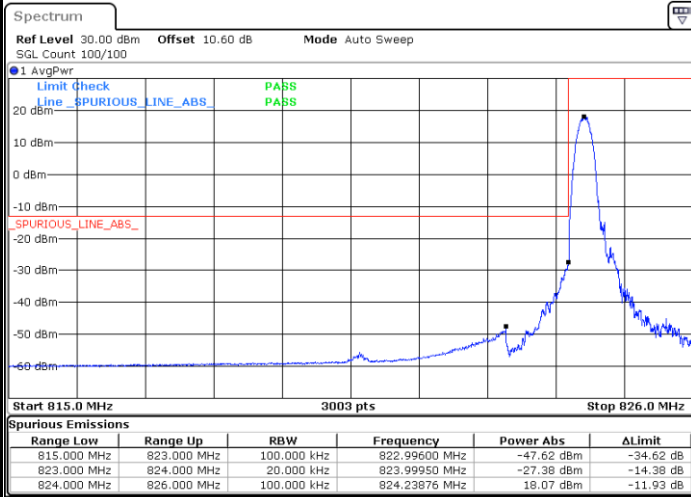






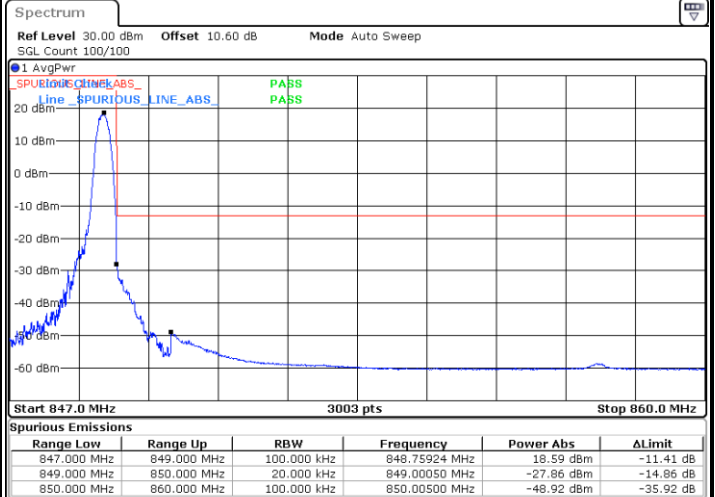
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



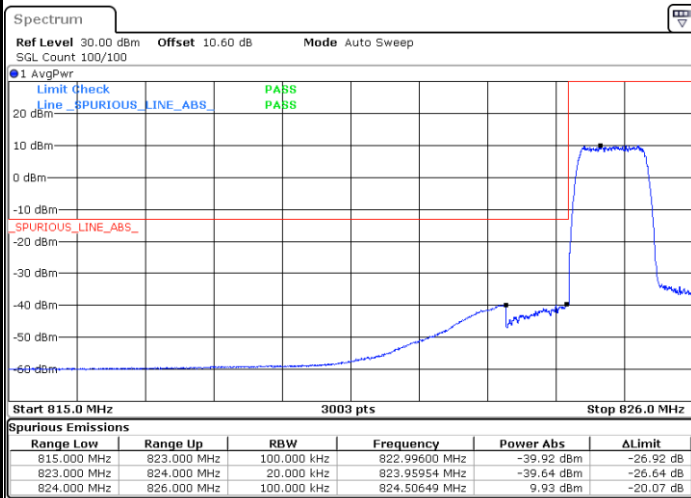
Date: 18.MAY.2021 11:12:14

Highest Band Edge / 1 RB



Date: 18.MAY.2021 11:25:58

Lowest Band Edge / Full RB



Date: 18.MAY.2021 11:15:55

Highest Band Edge / Full RB

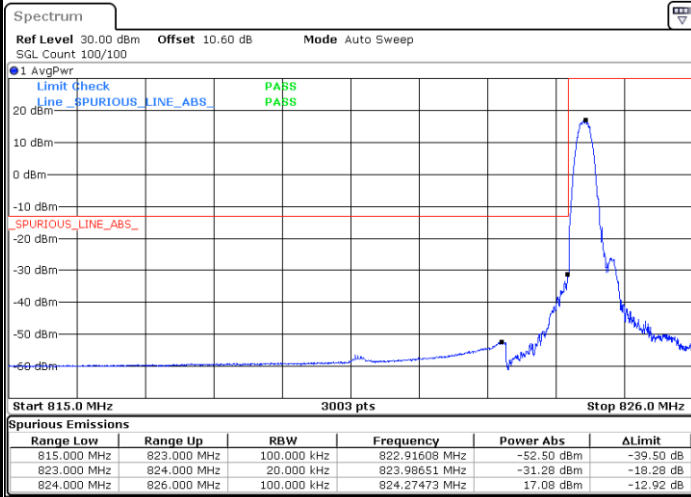


Date: 18.MAY.2021 11:22:17

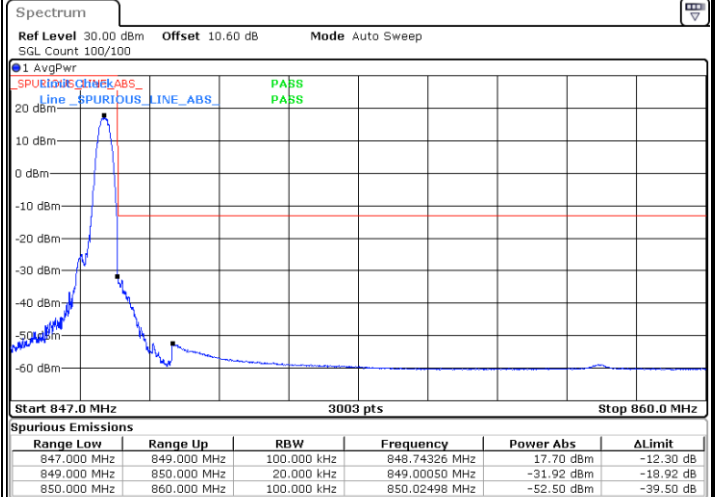


LTE Band 5 / 1.4MHz / 64QAM

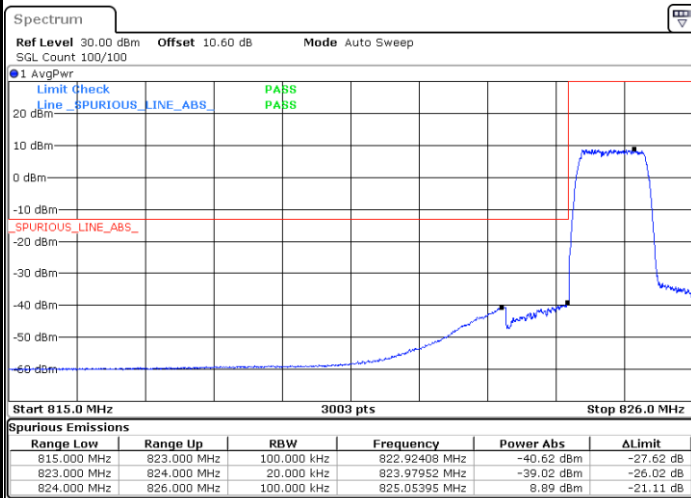
Lowest Band Edge / 1 RB



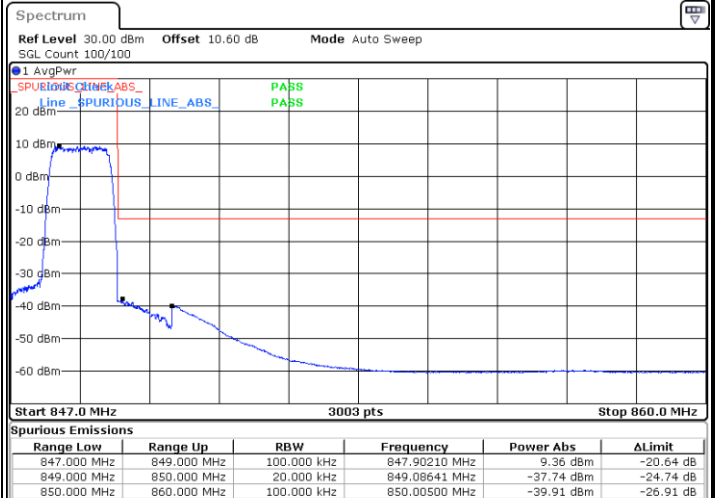
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



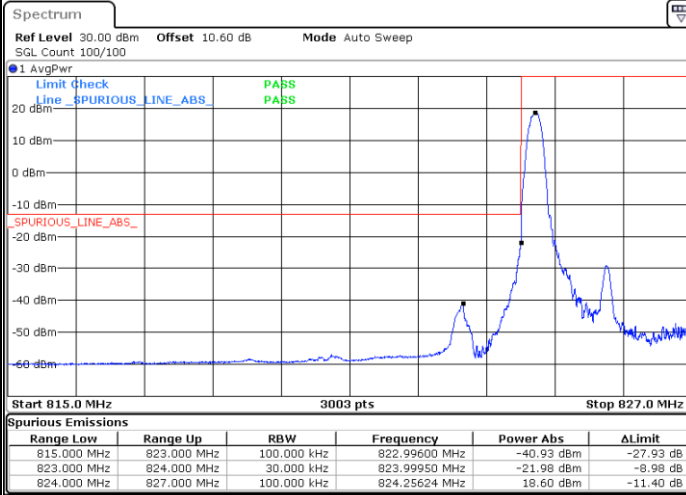
Highest Band Edge / Full RB





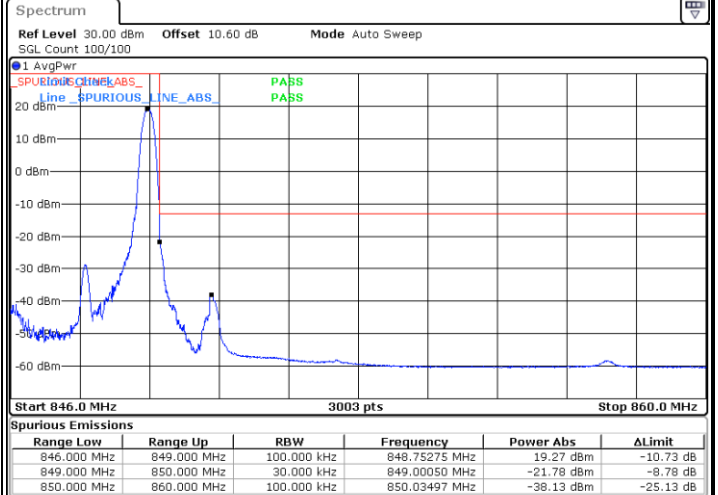
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



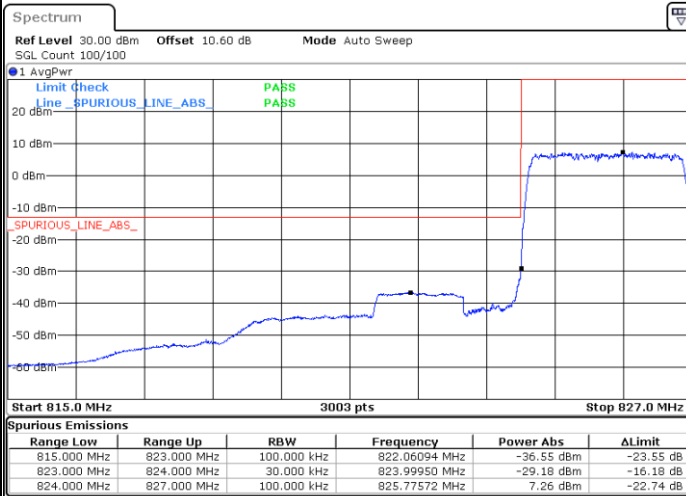
Date: 18.MAY.2021 11:36:34

Highest Band Edge / 1 RB



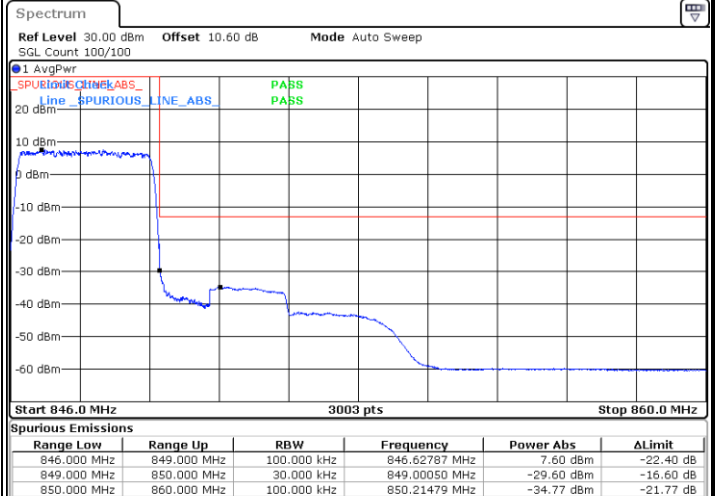
Date: 18.MAY.2021 11:46:36

Lowest Band Edge / Full RB



Date: 18.MAY.2021 11:40:15

Highest Band Edge / Full RB

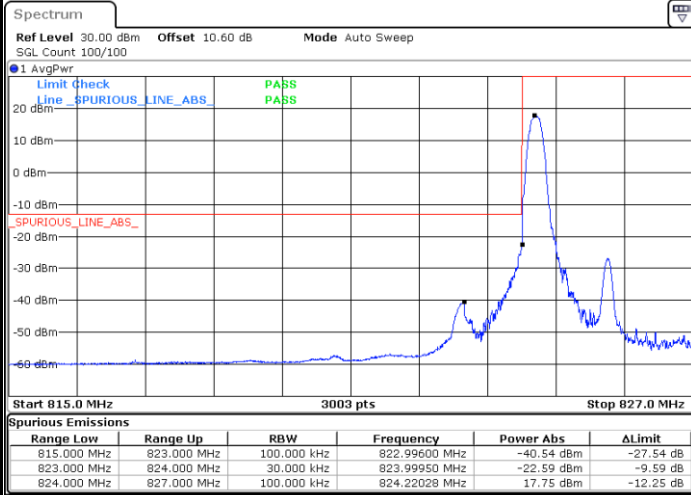


Date: 18.MAY.2021 11:50:18



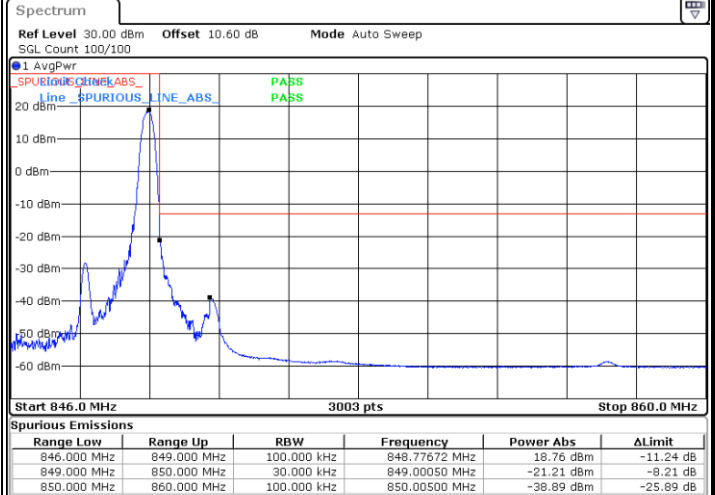
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



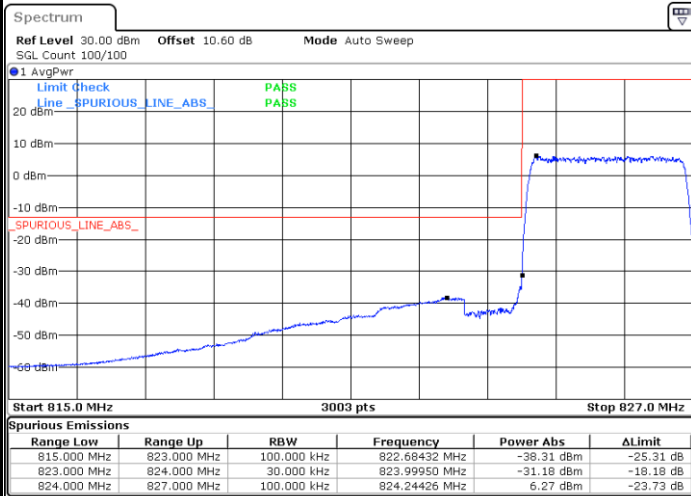
Date: 18.MAY.2021 11:38:24

Highest Band Edge / 1 RB



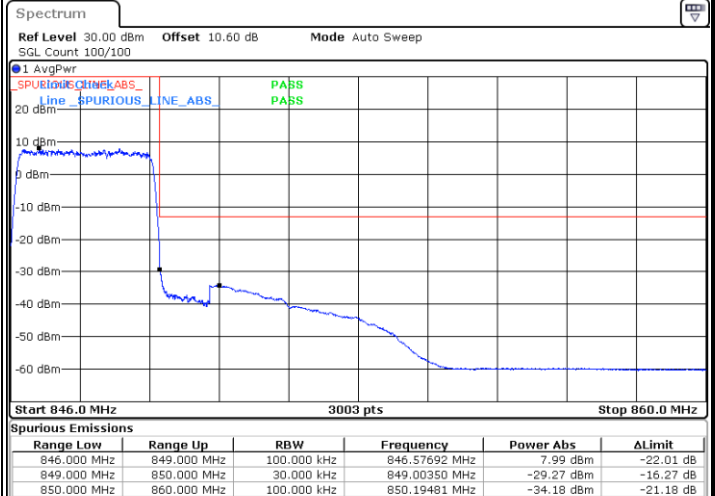
Date: 18.MAY.2021 11:48:27

Lowest Band Edge / Full RB



Date: 18.MAY.2021 11:42:06

Highest Band Edge / Full RB

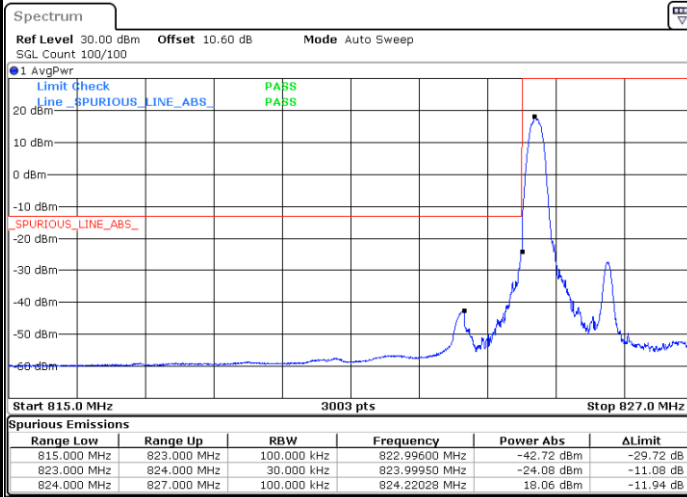


Date: 18.MAY.2021 13:40:13



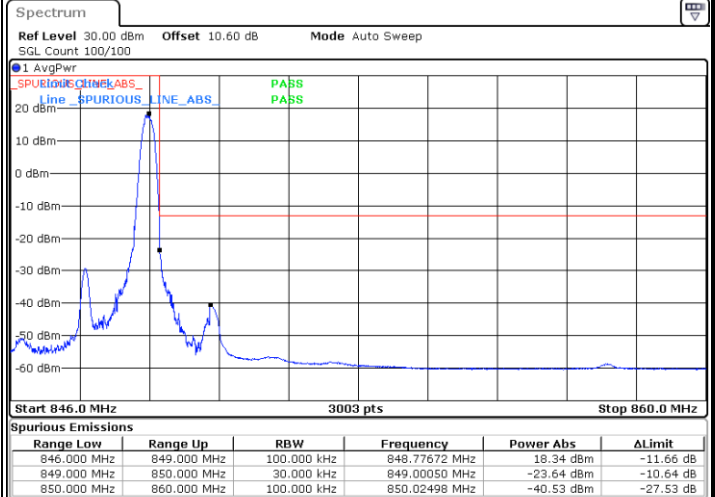
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



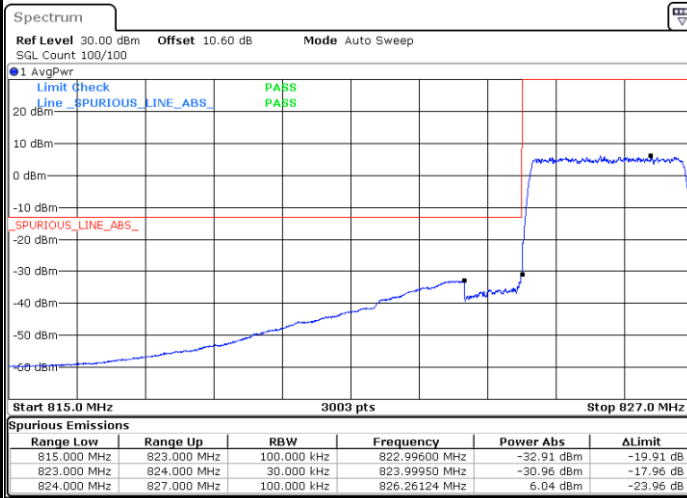
Date: 18.MAY.2021 13:42:40

Highest Band Edge / 1 RB



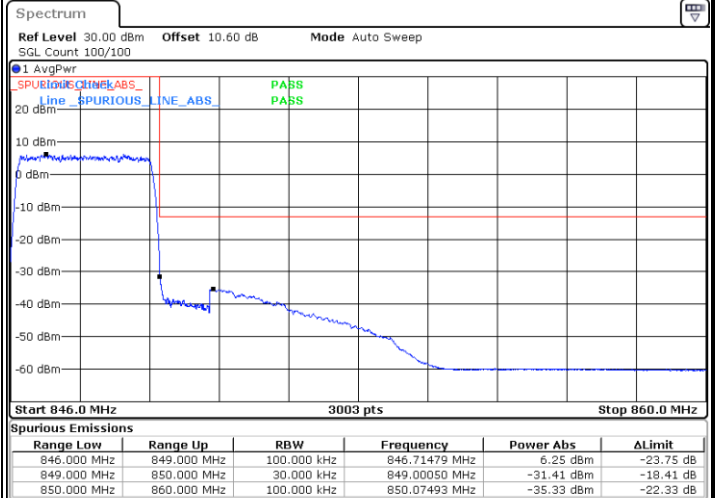
Date: 18.MAY.2021 13:47:06

Lowest Band Edge / Full RB



Date: 18.MAY.2021 13:44:31

Highest Band Edge / Full RB

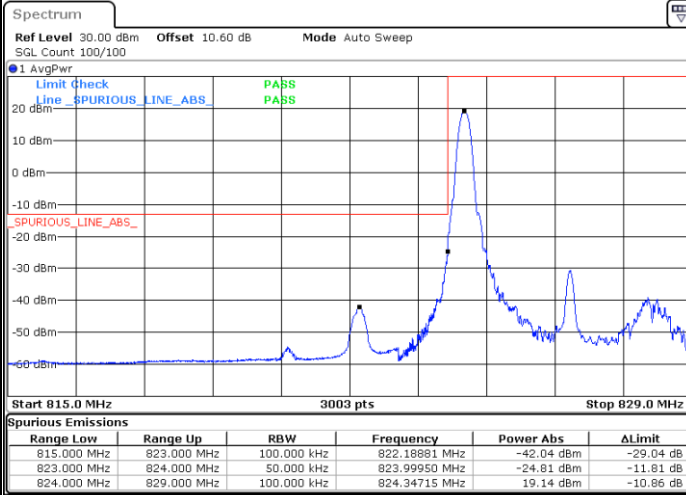


Date: 18.MAY.2021 13:48:57



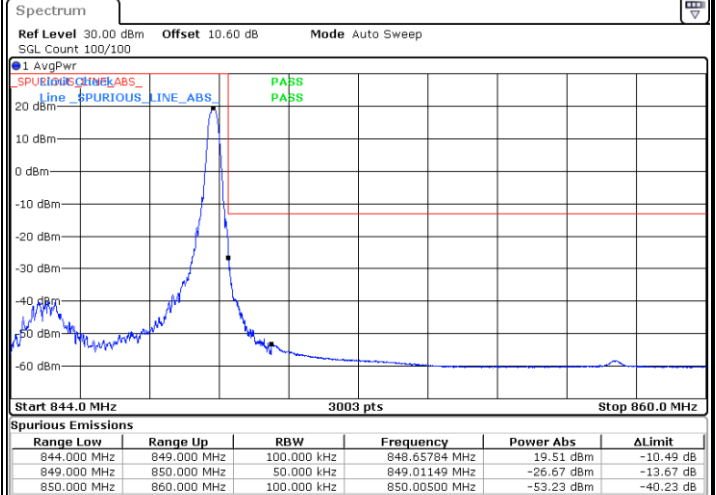
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



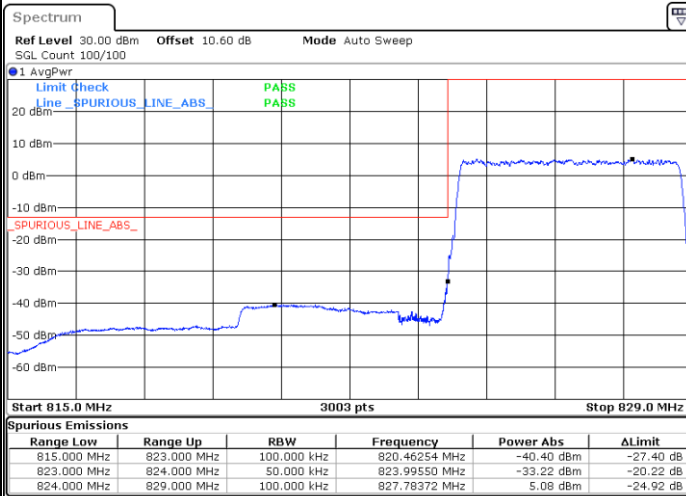
Date: 18.MAY.2021 13:50:49

Highest Band Edge / 1 RB



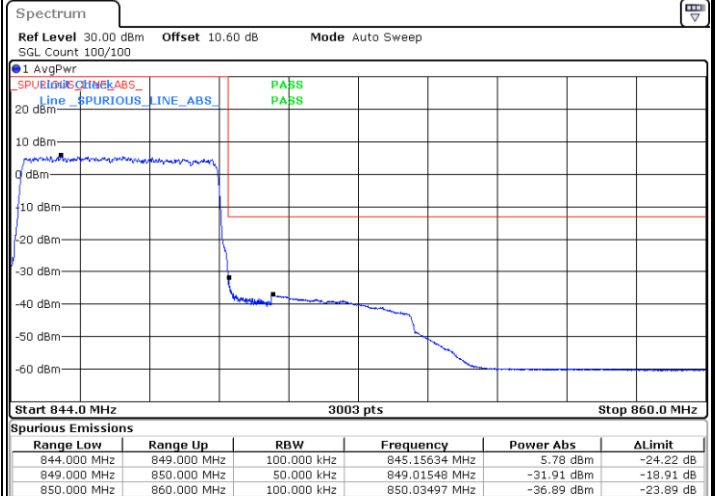
Date: 18.MAY.2021 14:00:51

Lowest Band Edge / Full RB



Date: 18.MAY.2021 13:54:32

Highest Band Edge / Full RB



Date: 18.MAY.2021 14:04:34