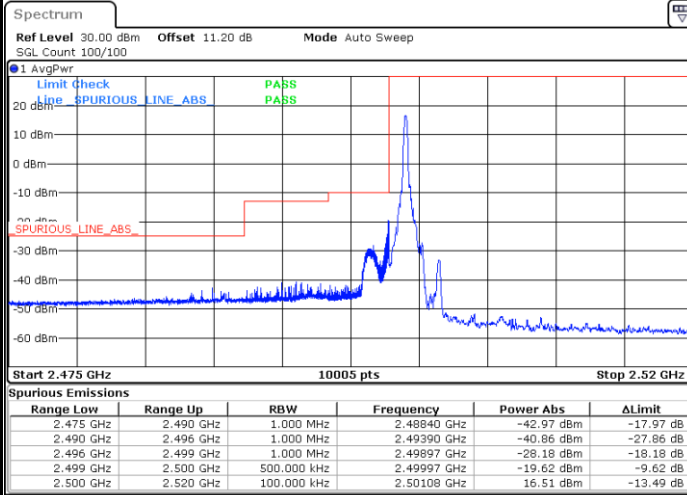




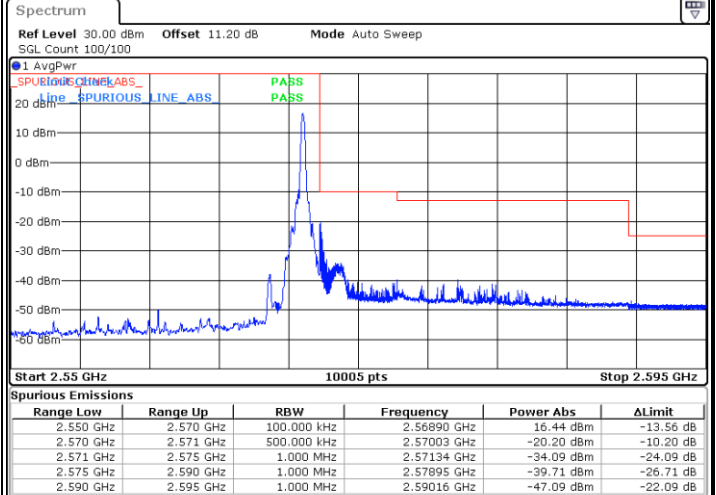
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



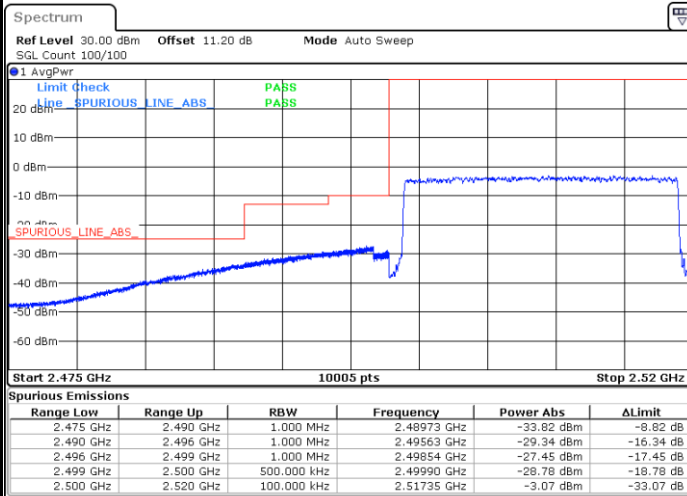
Date: 18.MAY.2021 15:23:49

Highest Band Edge / 1 RB



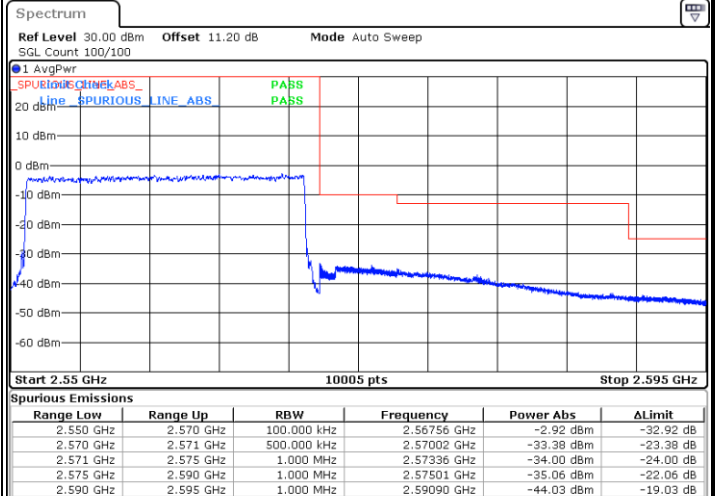
Date: 18.MAY.2021 15:25:26

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:24:16

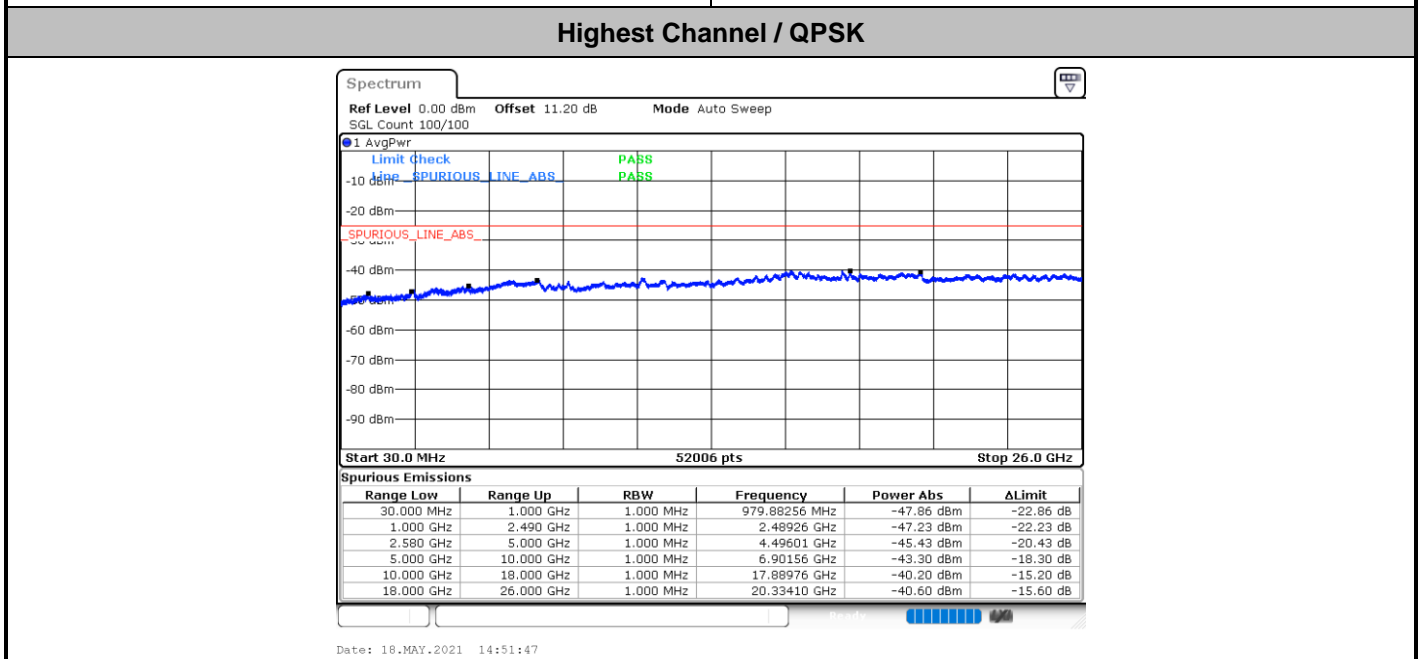
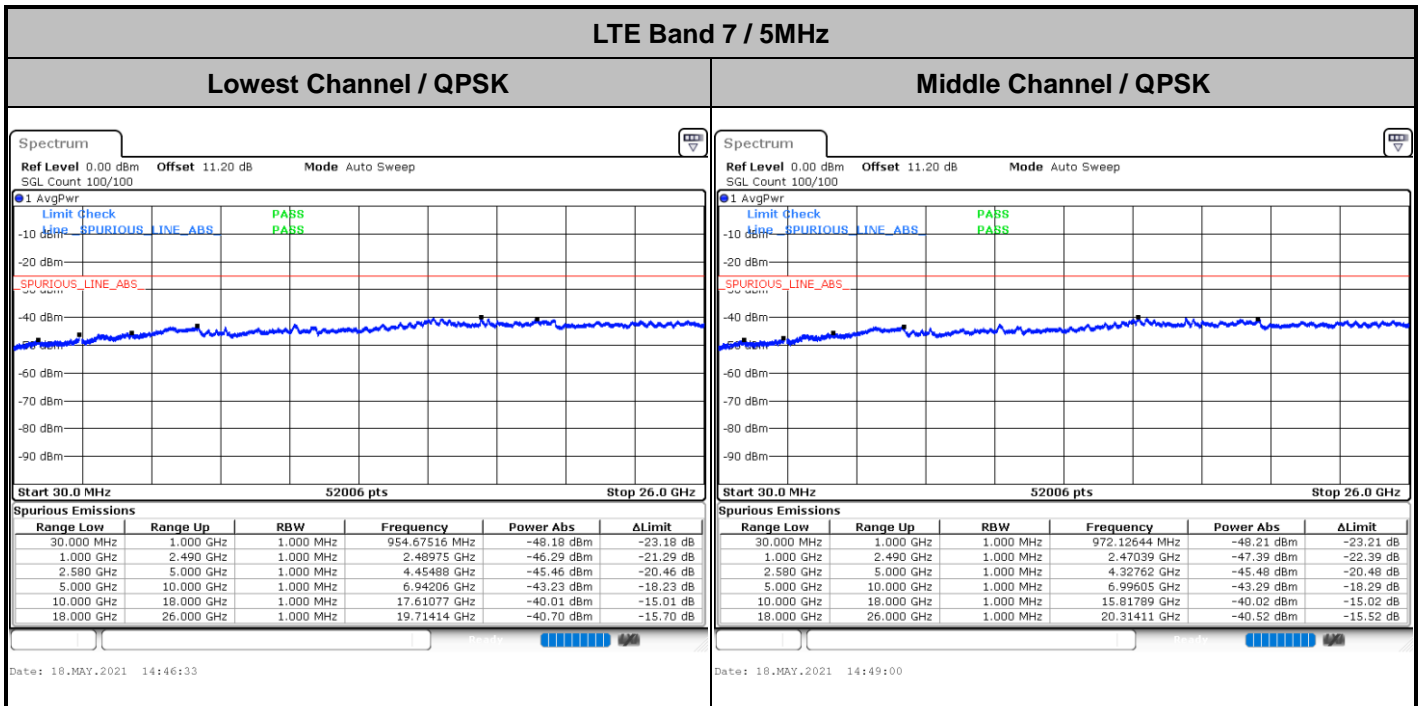
Highest Band Edge / Full RB



Date: 18.MAY.2021 15:25:53



# Conducted Spurious Emission

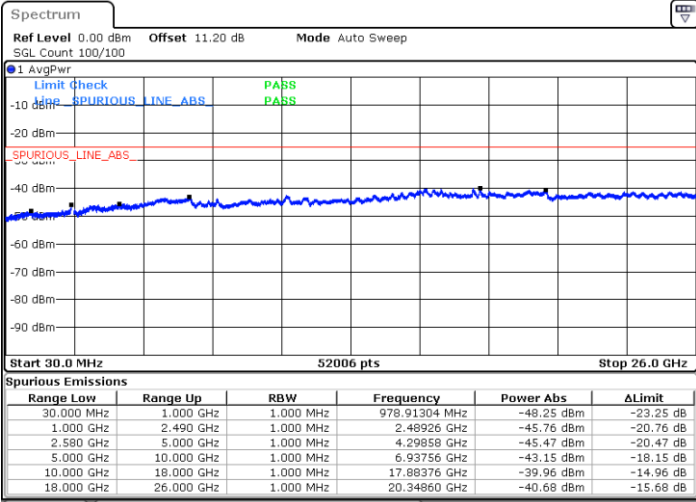




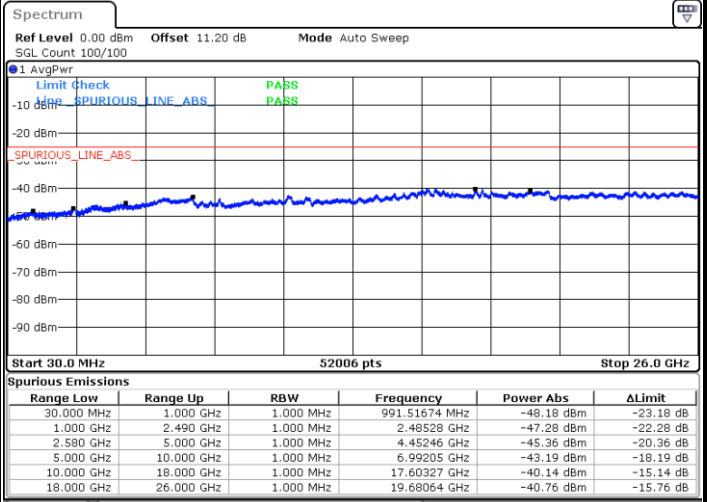
LTE Band 7 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

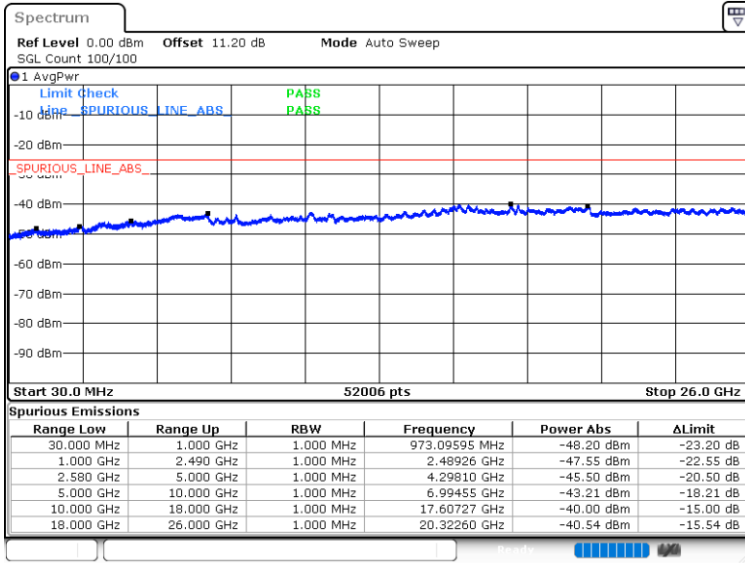


Date: 18.MAY.2021 14:57:04



Date: 18.MAY.2021 14:59:30

Highest Channel / QPSK



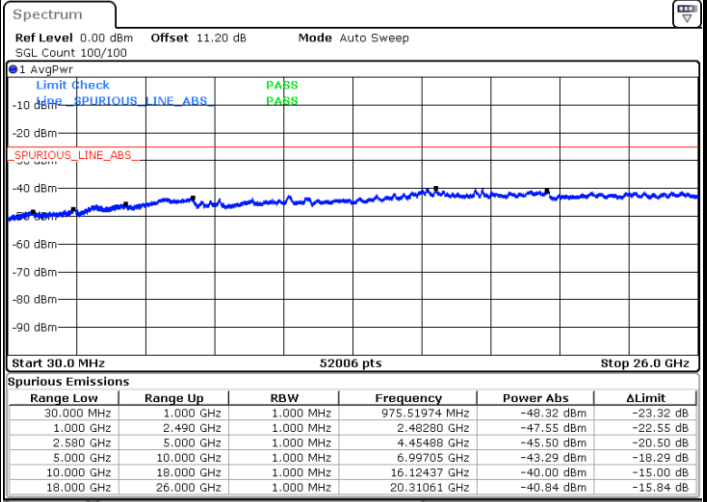
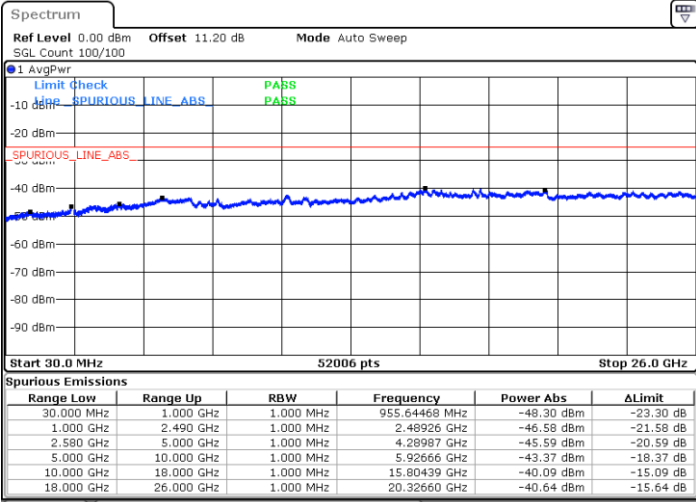
Date: 18.MAY.2021 15:02:16



LTE Band 7 / 15MHz

Lowest Channel / QPSK

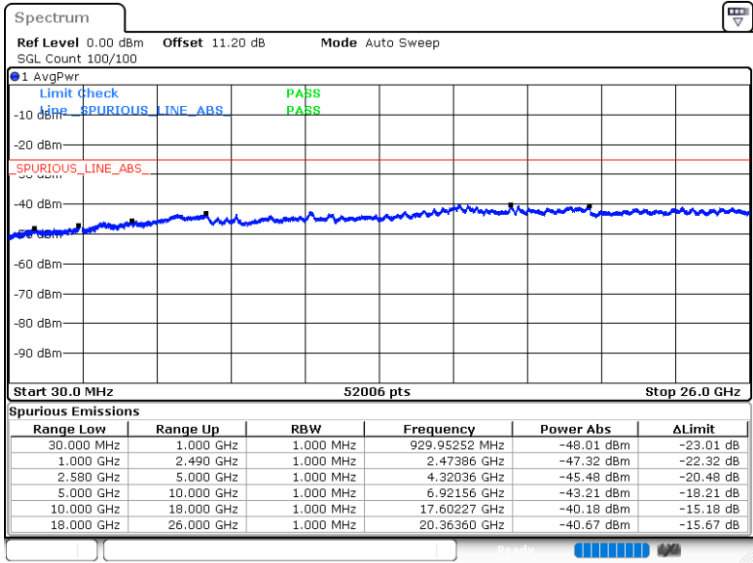
Middle Channel / QPSK



Date: 18.MAY.2021 15:07:36

Date: 18.MAY.2021 15:10:02

Highest Channel / QPSK



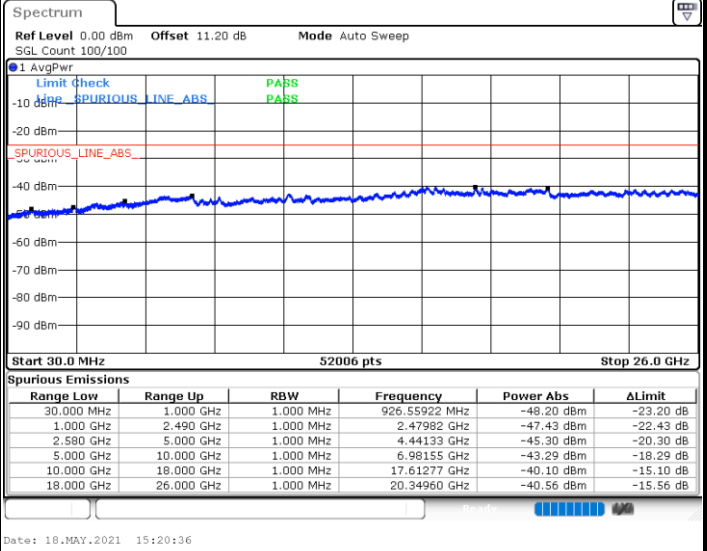
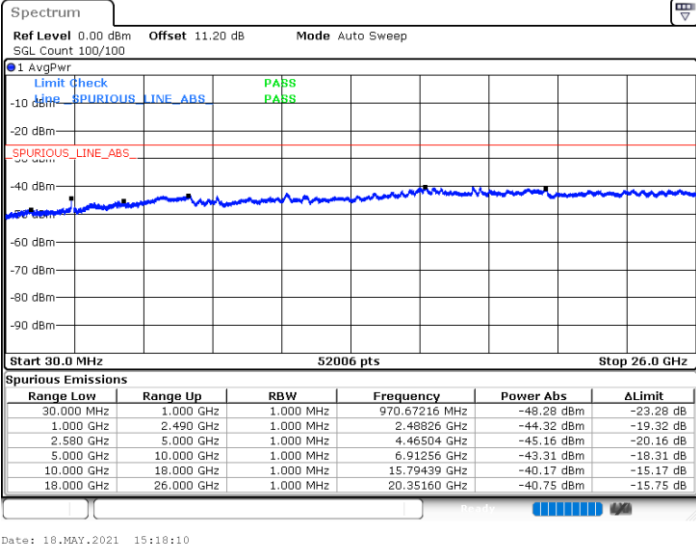
Date: 18.MAY.2021 15:12:49



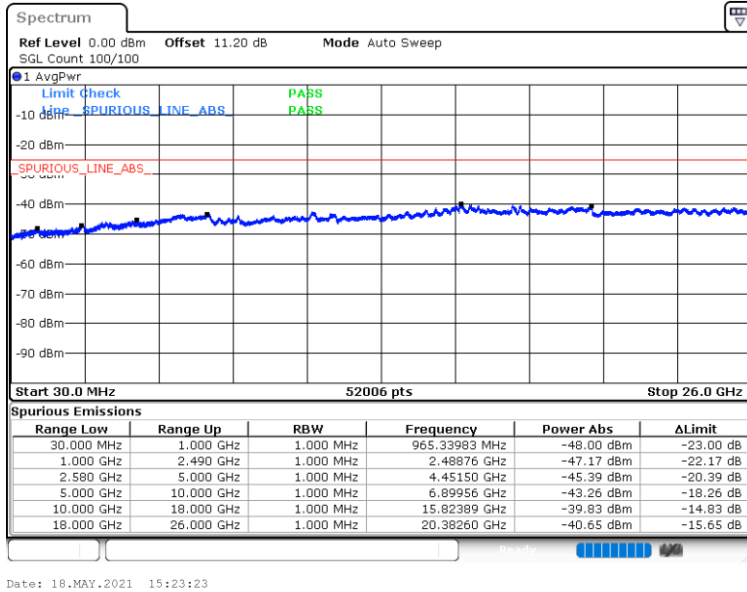
LTE Band 7 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





### Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0014	PASS
40	Normal Voltage	0.0034	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0043	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0055	

**Note:**

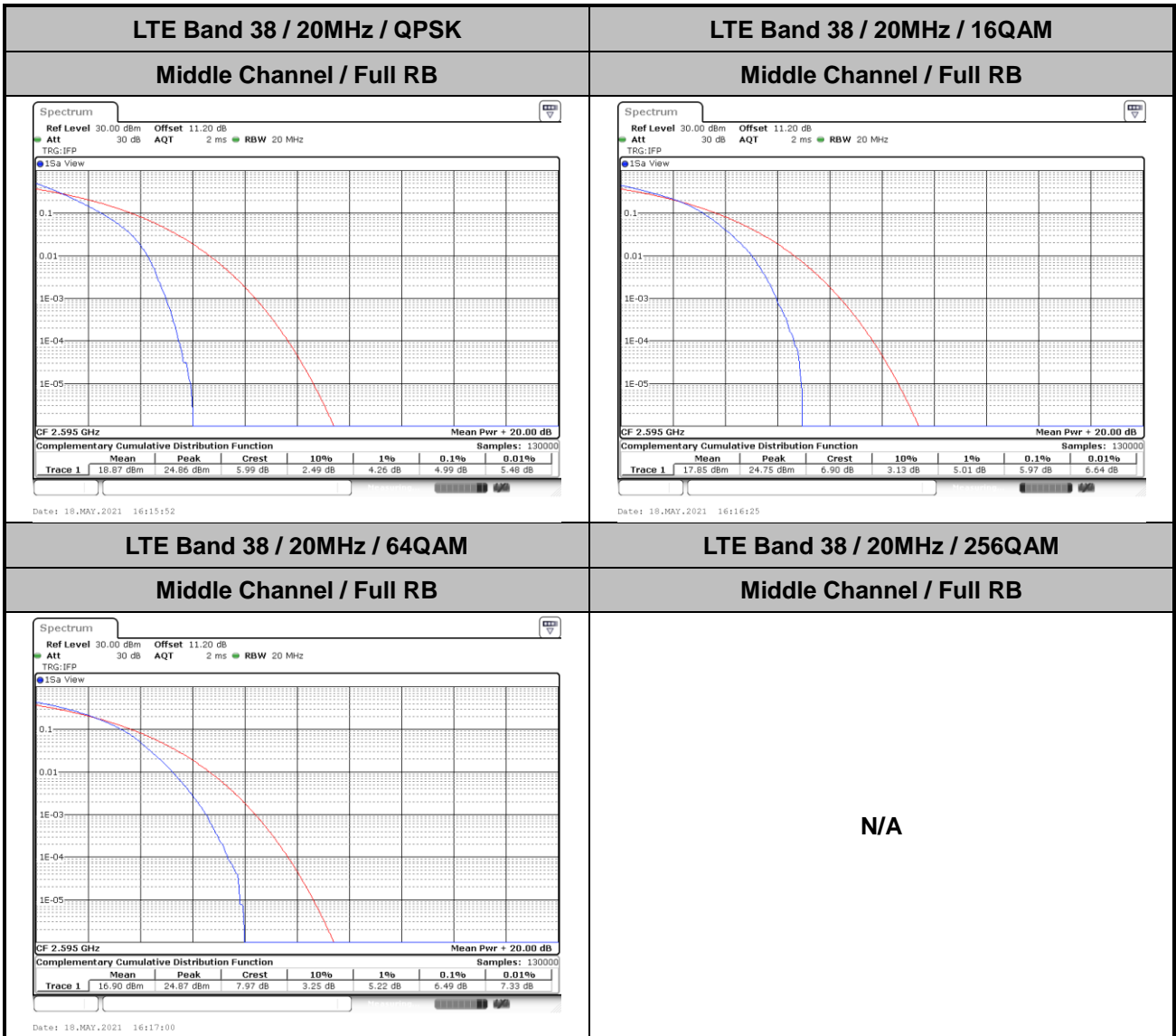
- 1. Normal Voltage =14 V. ; Battery End Point (BEP) =12 V. ; Maximum Voltage =16 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 38

## Peak-to-Average Ratio

Mode	LTE Band 38 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.99	5.97	6.49	-	PASS





**26dB Bandwidth**

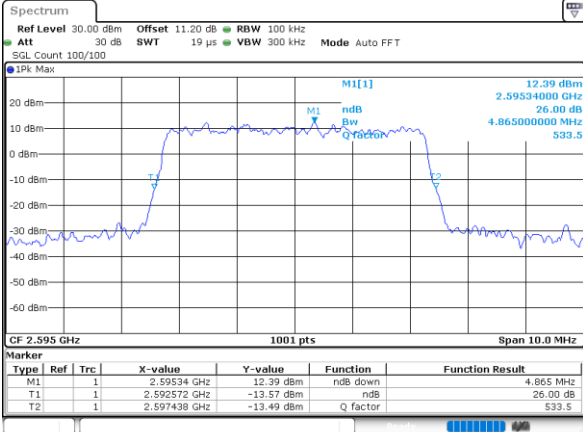
Mode	LTE Band 38 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.87	4.91	9.77	9.67	14.36	14.45	18.66	18.78
Mode	LTE Band 38 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.90	-	9.83	-	14.24	-	19.02	-





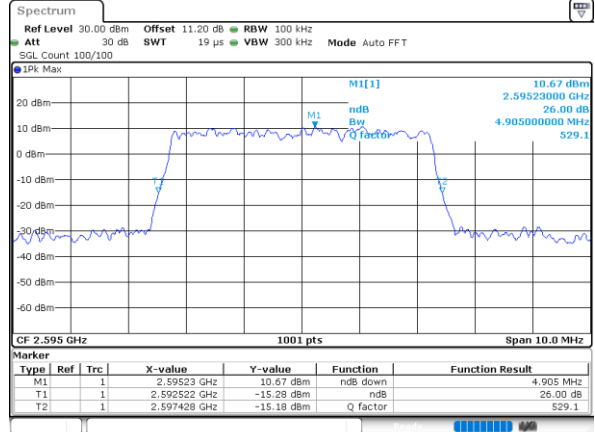
LTE Band 38

Middle Channel / 5MHz / QPSK



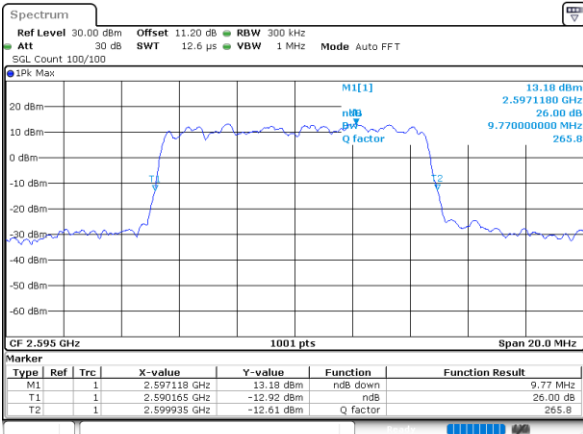
Date: 18\_MAY.2021 16:03:29

Middle Channel / 5MHz / 16QAM



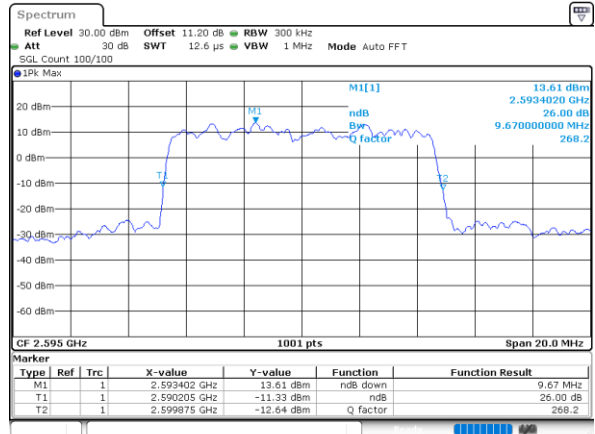
Date: 18\_MAY.2021 16:03:50

Middle Channel / 10MHz / QPSK



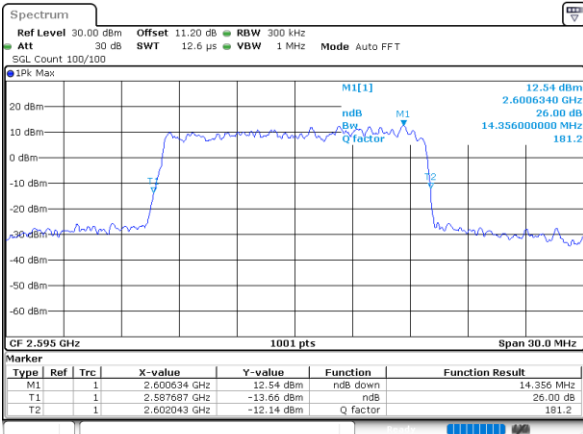
Date: 18\_MAY.2021 16:04:57

Middle Channel / 10MHz / 16QAM



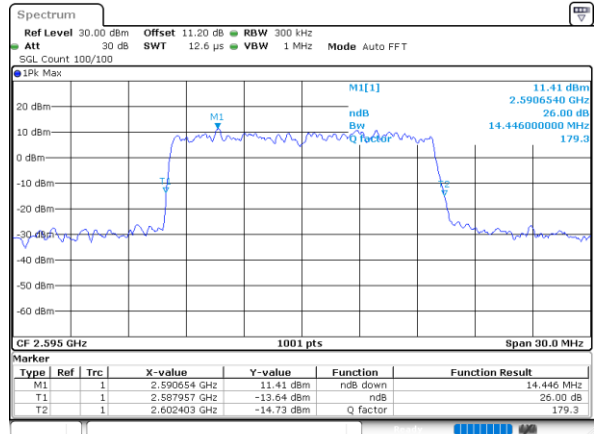
Date: 18\_MAY.2021 16:05:18

Middle Channel / 15MHz / QPSK



Date: 18\_MAY.2021 16:06:24

Middle Channel / 15MHz / 16QAM

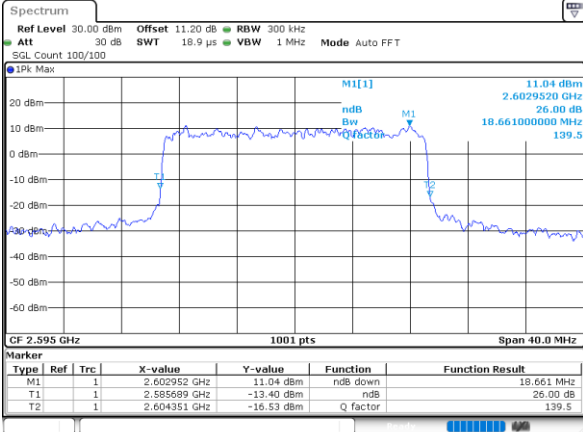


Date: 18\_MAY.2021 16:06:45



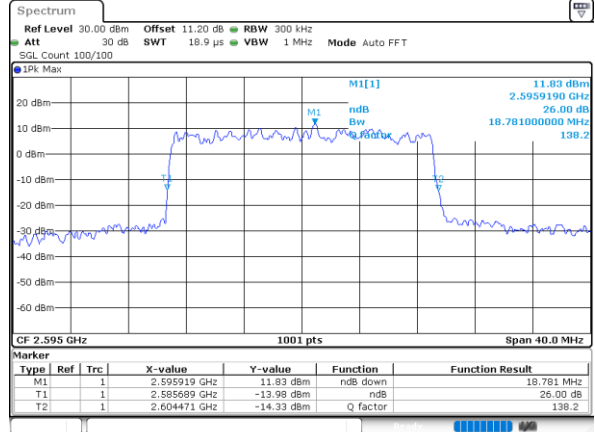
LTE Band 38

Middle Channel / 20MHz / QPSK



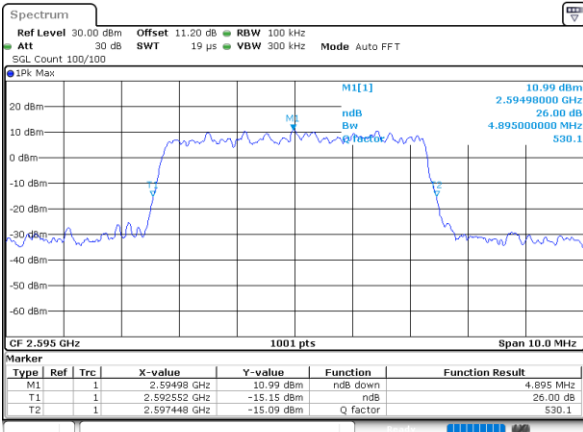
Date: 18.MAY.2021 16:07:51

Middle Channel / 20MHz / 16QAM



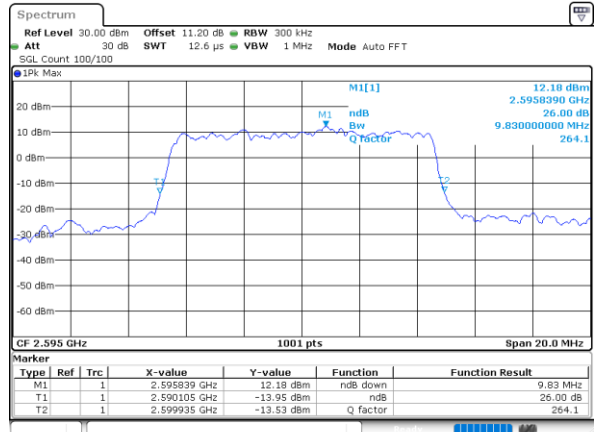
Date: 18.MAY.2021 16:08:13

Middle Channel / 5MHz / 64QAM



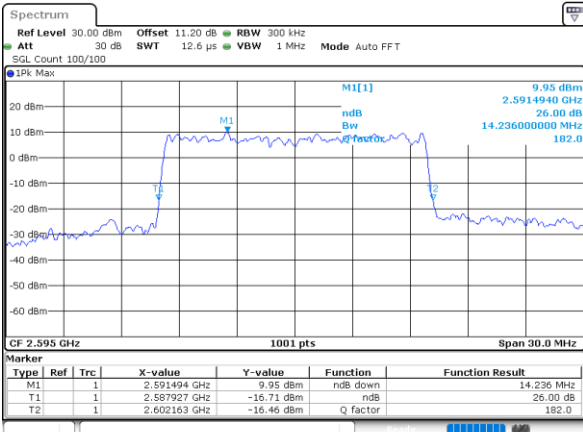
Date: 18.MAY.2021 16:08:57

Middle Channel / 10MHz / 64QAM



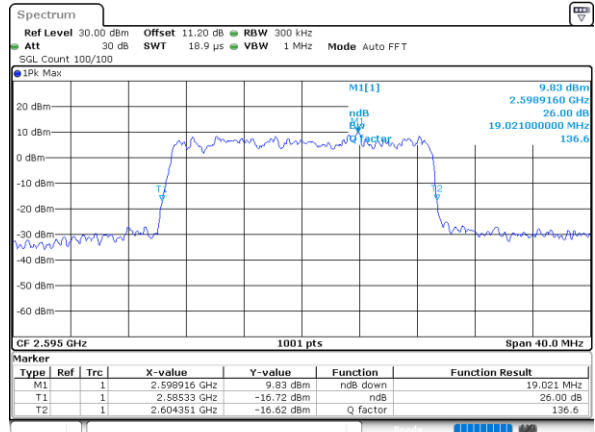
Date: 18.MAY.2021 16:09:40

Middle Channel / 15MHz / 64QAM



Date: 18.MAY.2021 16:10:24

Middle Channel / 20MHz / 64QAM



Date: 18.MAY.2021 16:11:08



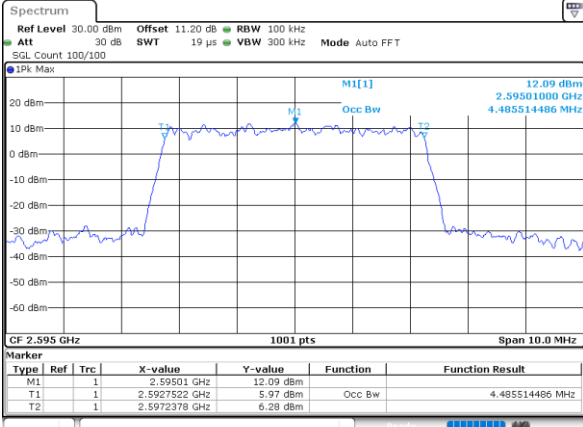
Occupied Bandwidth

Mode	LTE Band 38 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.49	4.49	9.03	8.99	13.46	13.37	17.74	17.90
Mode	LTE Band 38 : 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	-	-	-	-	4.49	-	9.03	-	13.43	-	17.94	-



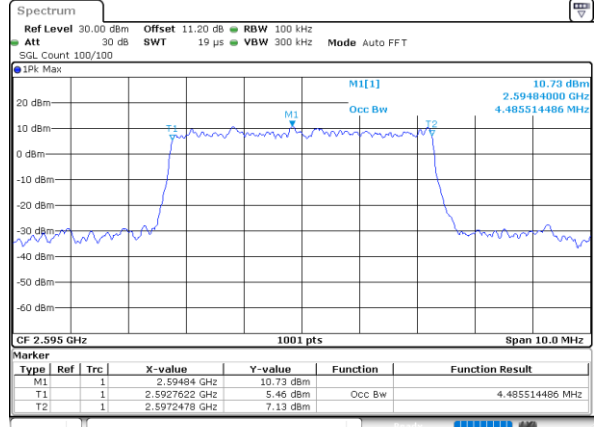
LTE Band 38

Middle Channel / 5MHz / QPSK



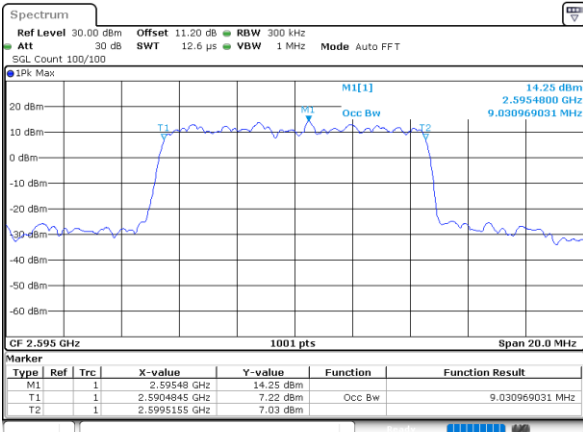
Date: 18\_MAY.2021 16:02:44

Middle Channel / 5MHz / 16QAM



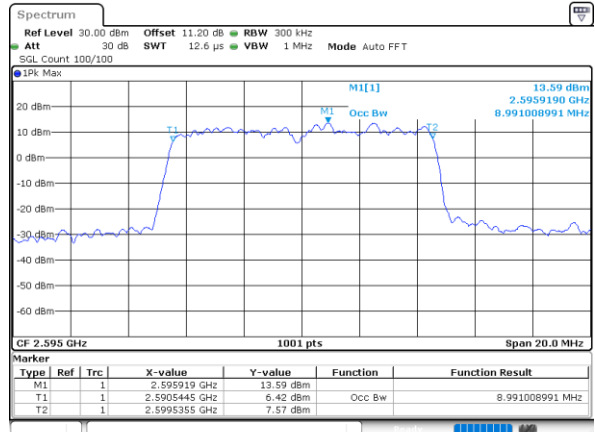
Date: 18\_MAY.2021 16:03:07

Middle Channel / 10MHz / QPSK



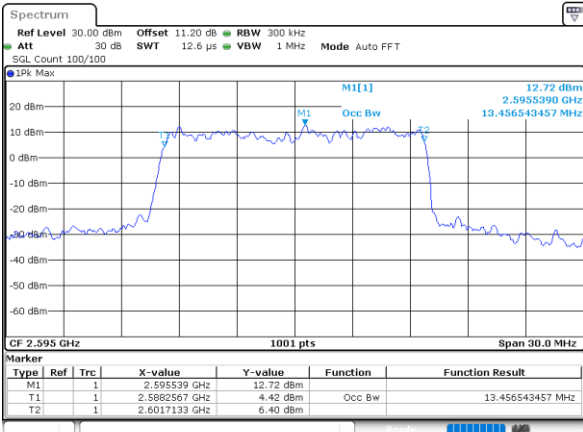
Date: 18\_MAY.2021 16:04:12

Middle Channel / 10MHz / 16QAM



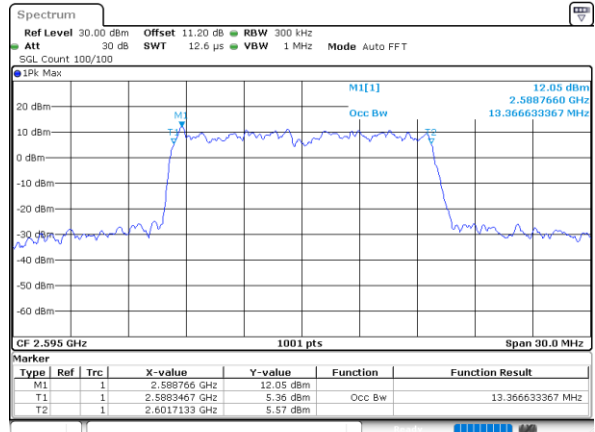
Date: 18\_MAY.2021 16:04:34

Middle Channel / 15MHz / QPSK



Date: 18\_MAY.2021 16:05:39

Middle Channel / 15MHz / 16QAM

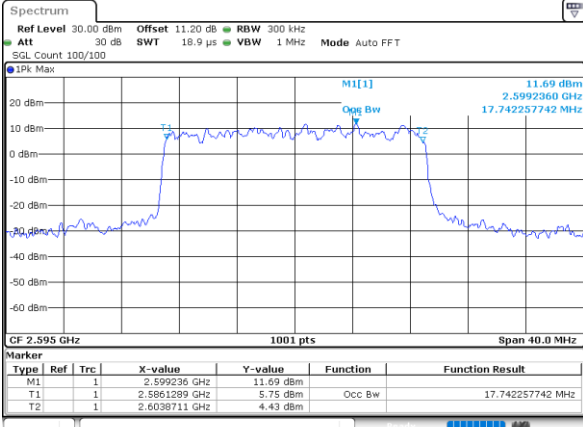


Date: 18\_MAY.2021 16:06:02

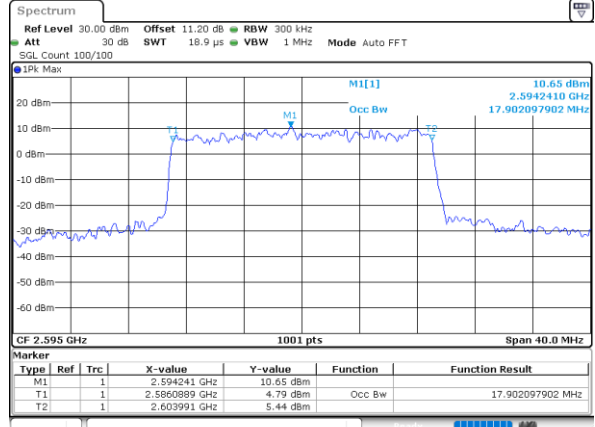


LTE Band 38

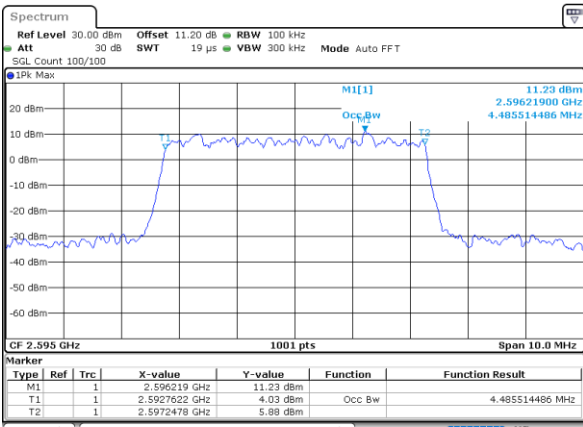
Middle Channel / 20MHz / QPSK



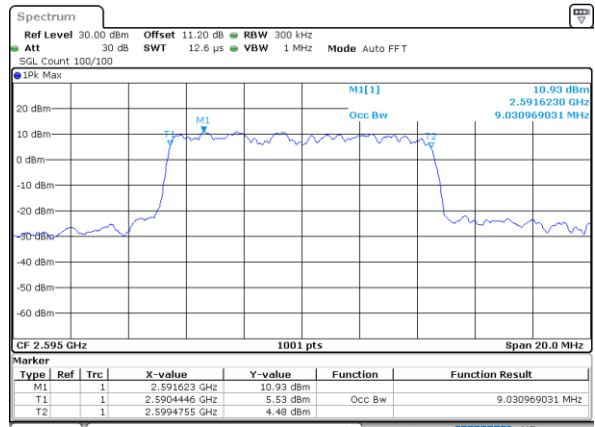
Middle Channel / 20MHz / 16QAM



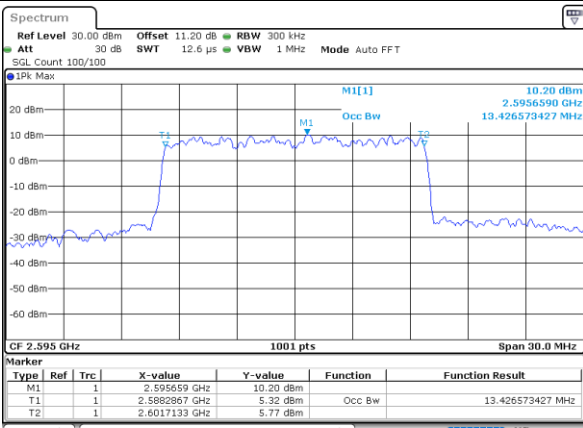
Middle Channel / 5MHz / 64QAM



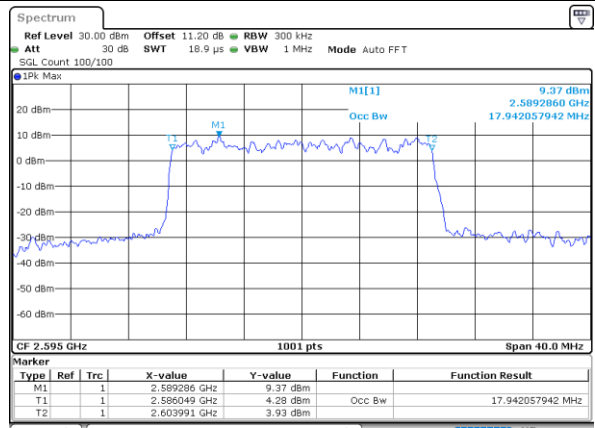
Middle Channel / 10MHz / 64QAM



Middle Channel / 15MHz / 64QAM



Middle Channel / 20MHz / 64QAM

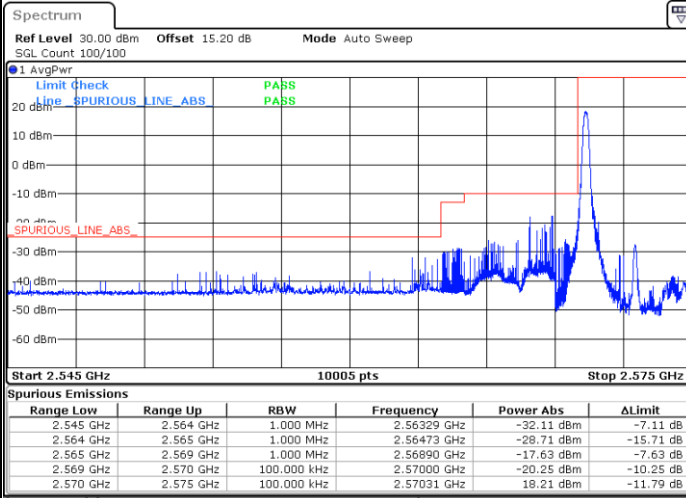




# Conducted Band Edge

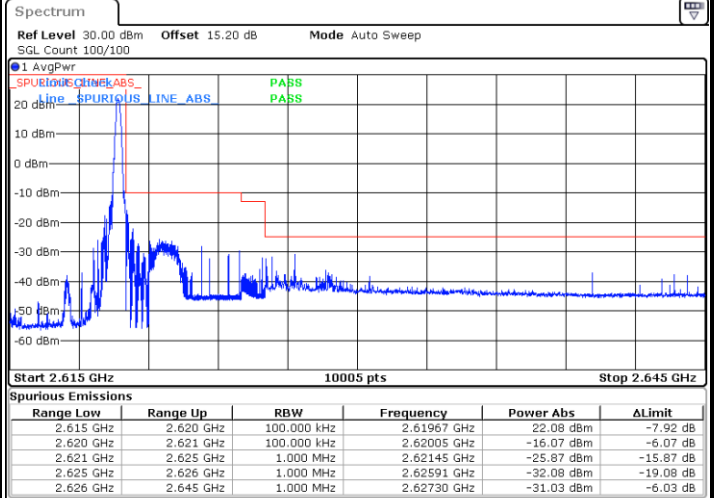
## LTE Band 38 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



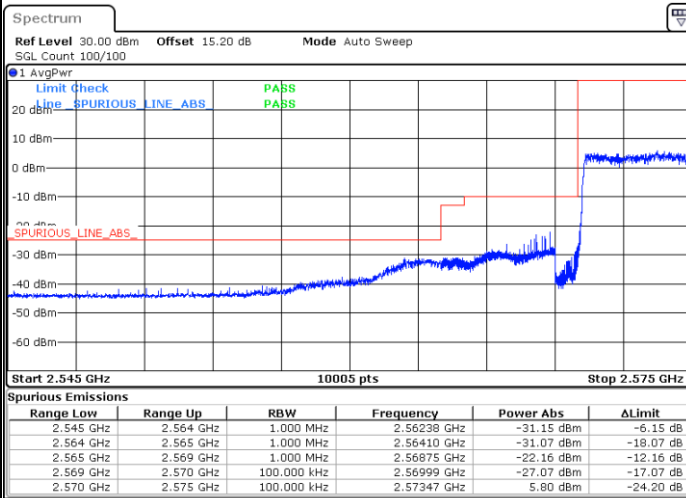
Date: 18.MAY.2021 15:28:40

### Highest Band Edge / 1 RB



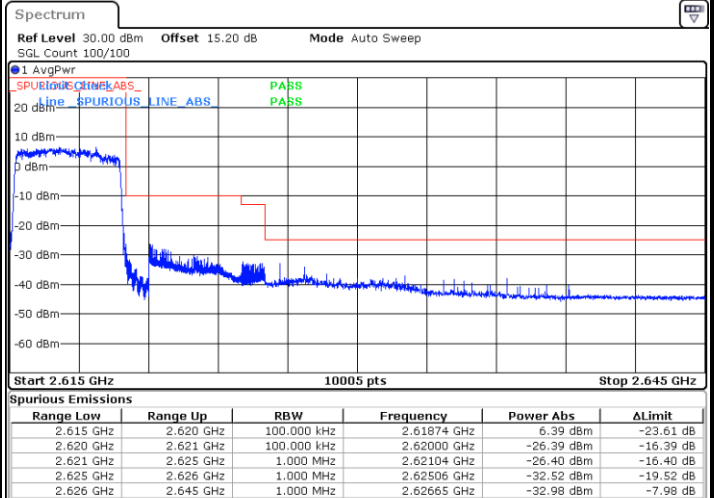
Date: 18.MAY.2021 15:31:20

### Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:29:34

### Highest Band Edge / Full RB

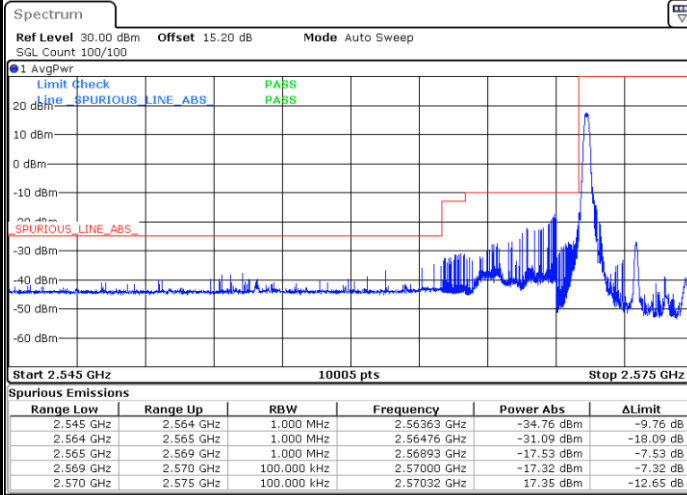


Date: 18.MAY.2021 15:30:27



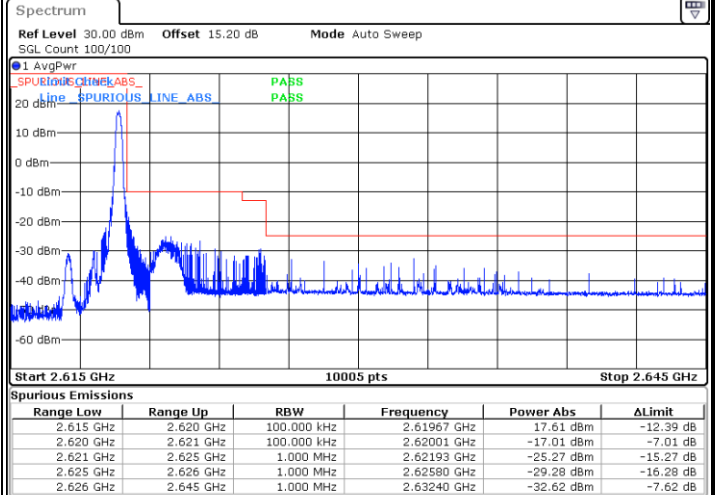
LTE Band 38 / 5MHz / 16QAM

Lowest Band Edge / 1RB



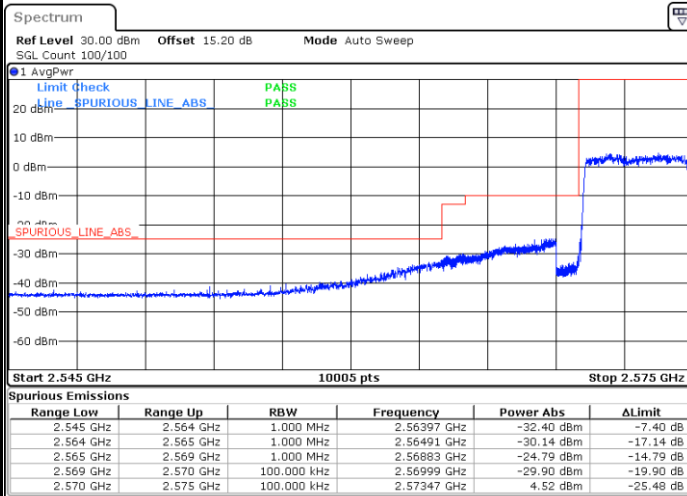
Date: 18.MAY.2021 15:29:07

Highest Band Edge / 1 RB



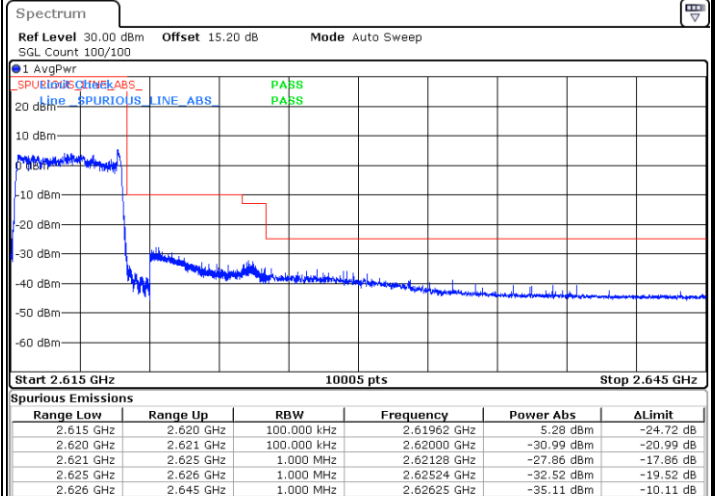
Date: 18.MAY.2021 15:31:47

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:30:00

Highest Band Edge / Full RB



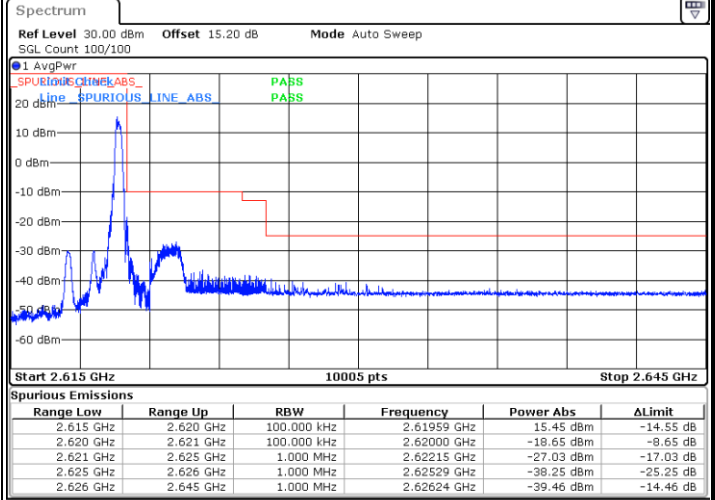
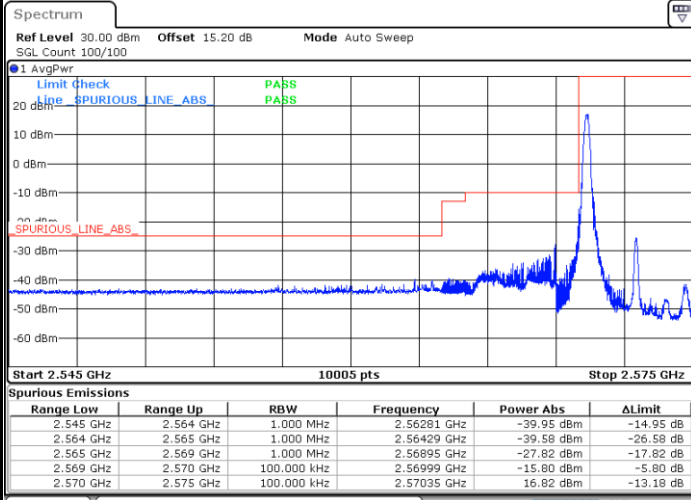
Date: 18.MAY.2021 15:30:54



LTE Band 38 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

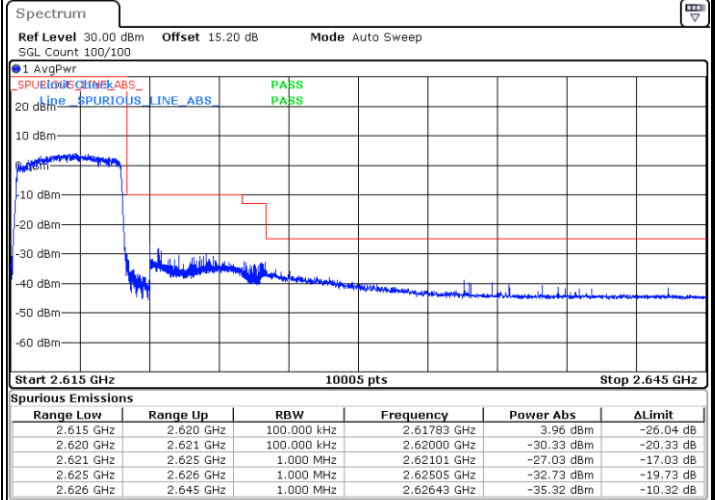
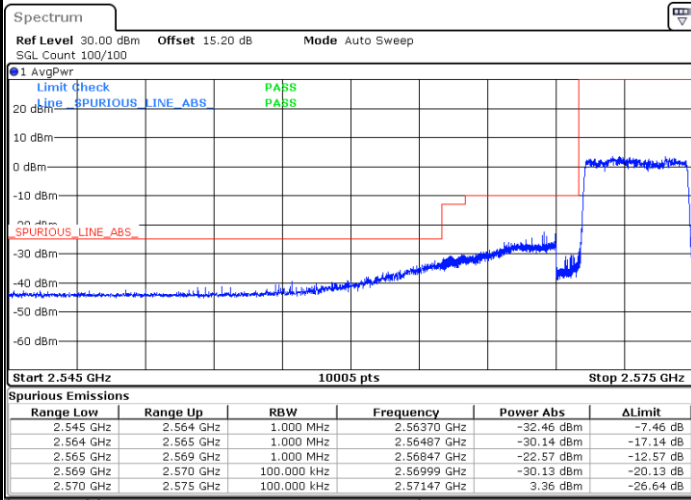


Date: 18.MAY.2021 15:32:14

Date: 18.MAY.2021 15:33:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 18.MAY.2021 15:32:40

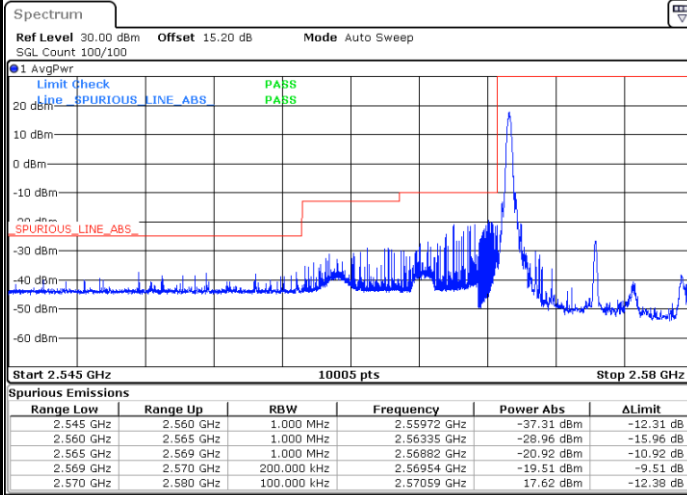
Date: 18.MAY.2021 15:33:07





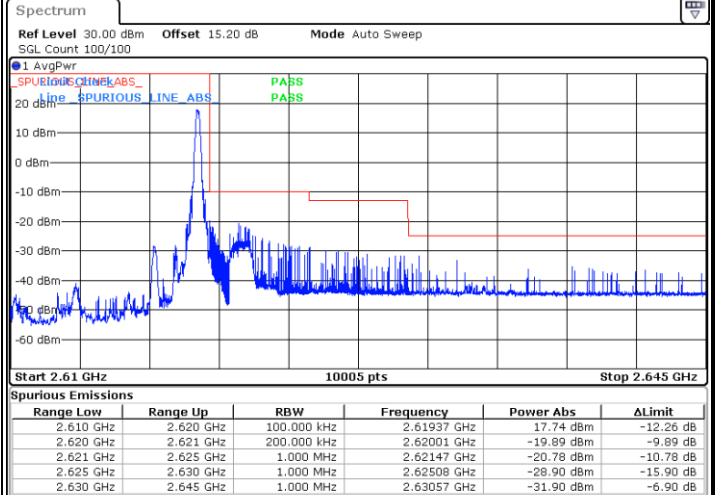
LTE Band 38 / 10MHz / QPSK

Lowest Band Edge / 1 RB



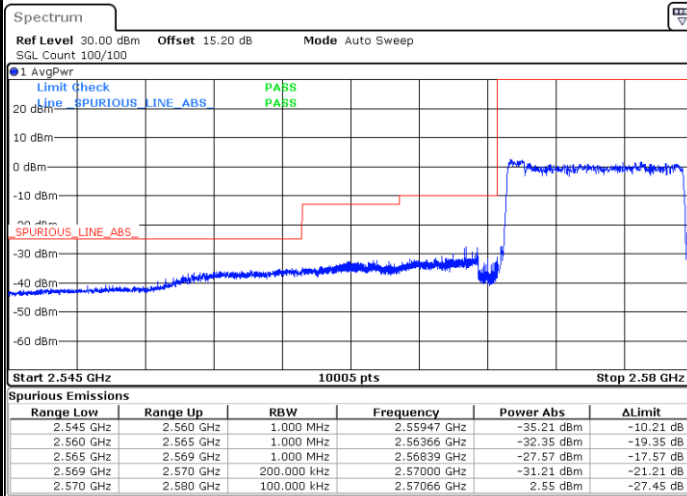
Date: 18.MAY.2021 15:35:47

Highest Band Edge / 1 RB



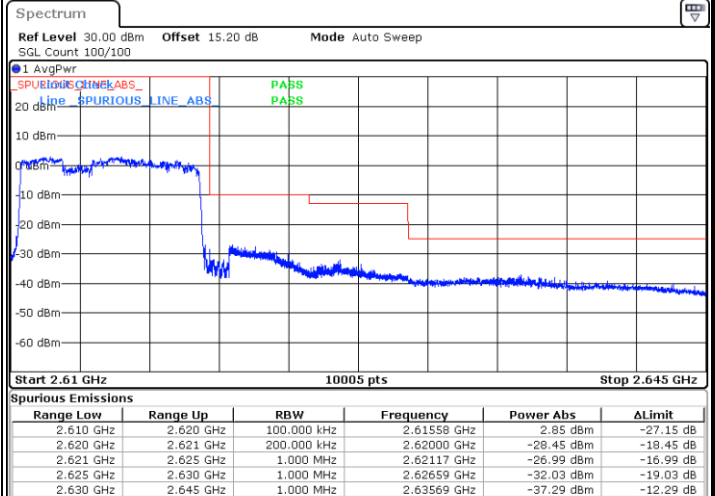
Date: 18.MAY.2021 15:38:27

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:36:40

Highest Band Edge / Full RB

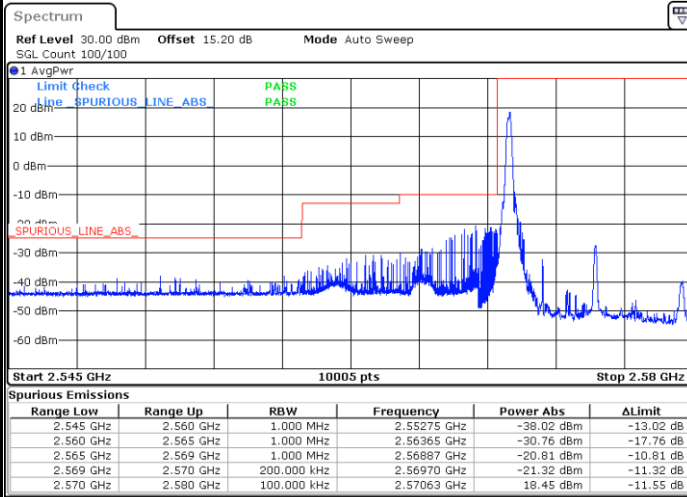


Date: 18.MAY.2021 15:37:34



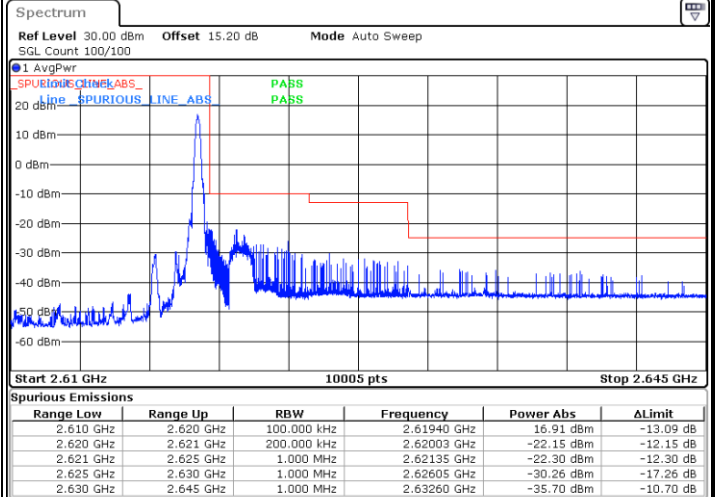
LTE Band 38 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



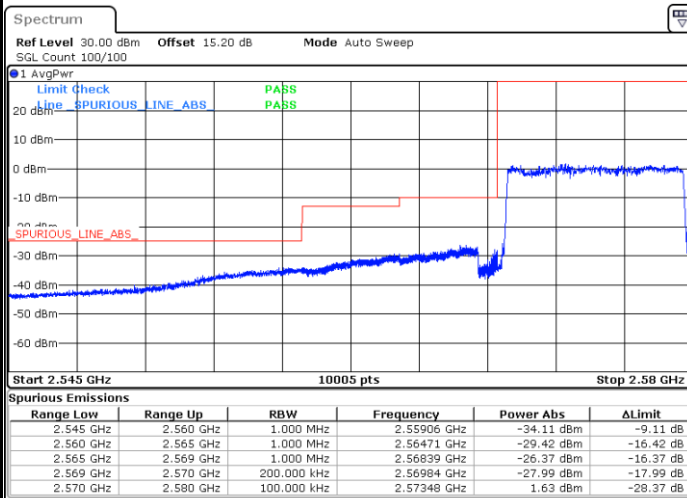
Date: 18.MAY.2021 15:36:14

Highest Band Edge / 1 RB



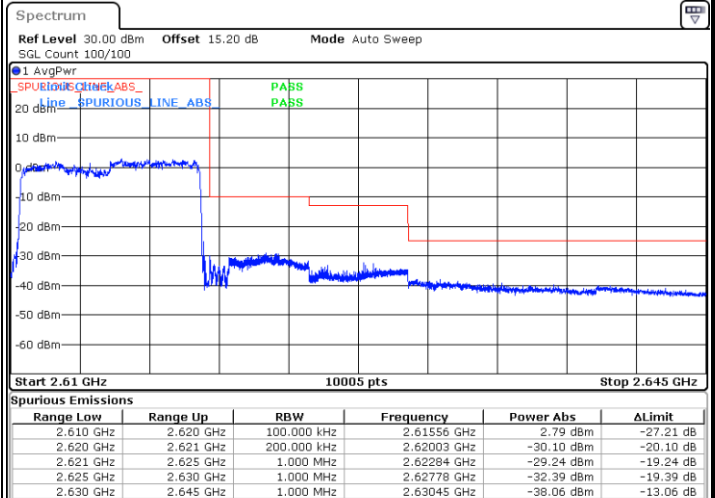
Date: 18.MAY.2021 15:38:54

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:37:07

Highest Band Edge / Full RB

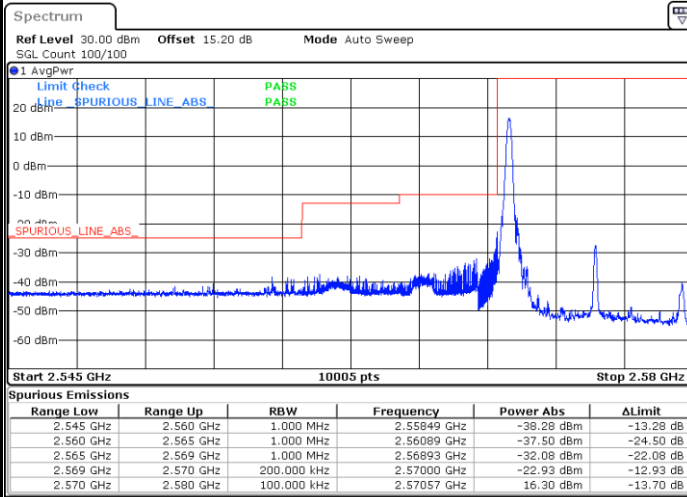


Date: 18.MAY.2021 15:38:00



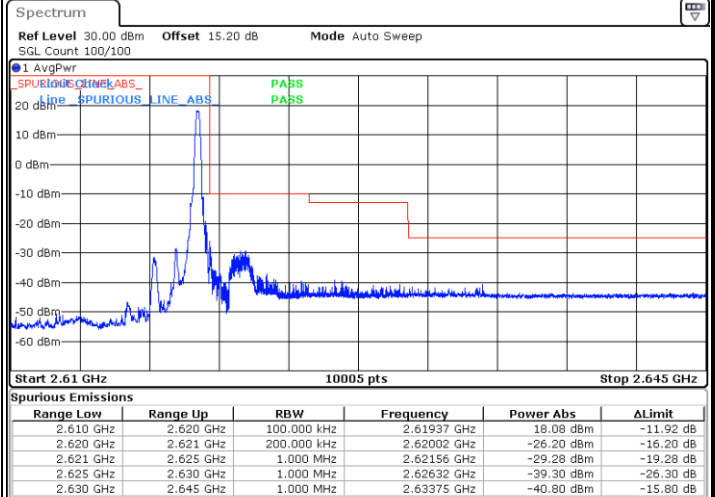
LTE Band 38 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



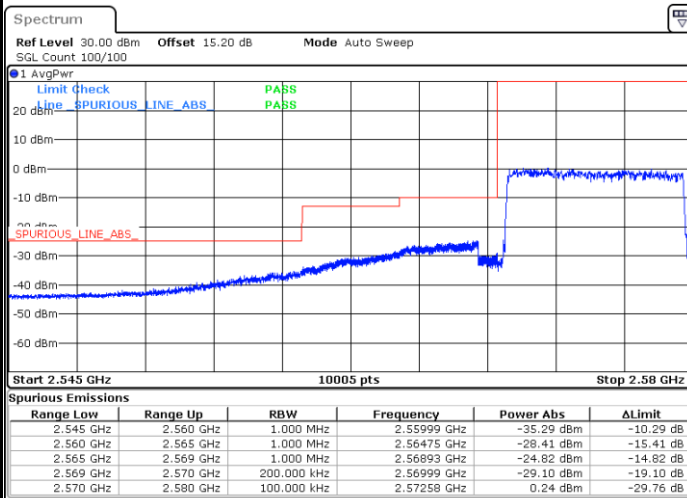
Date: 18.MAY.2021 15:34:01

Highest Band Edge / 1 RB



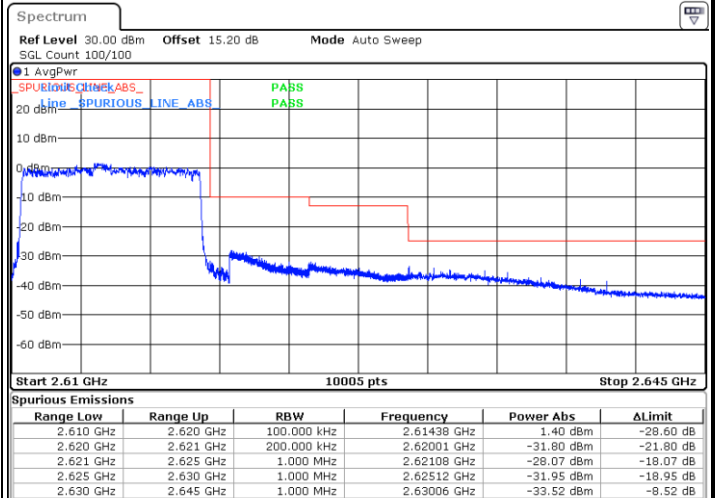
Date: 18.MAY.2021 15:35:20

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:34:27

Highest Band Edge / Full RB

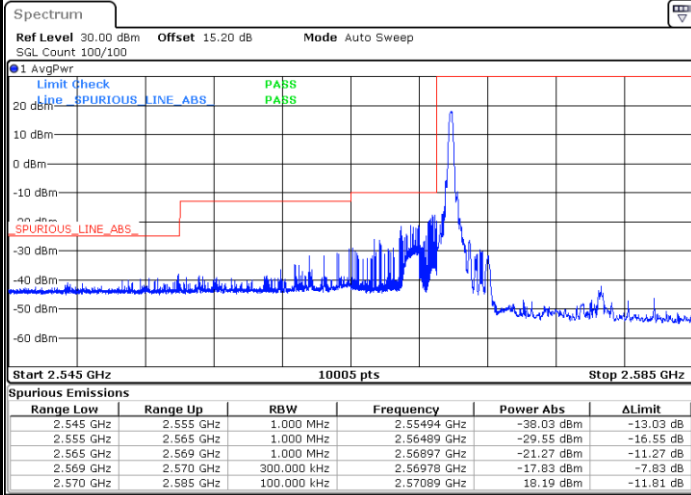


Date: 18.MAY.2021 18:55:37



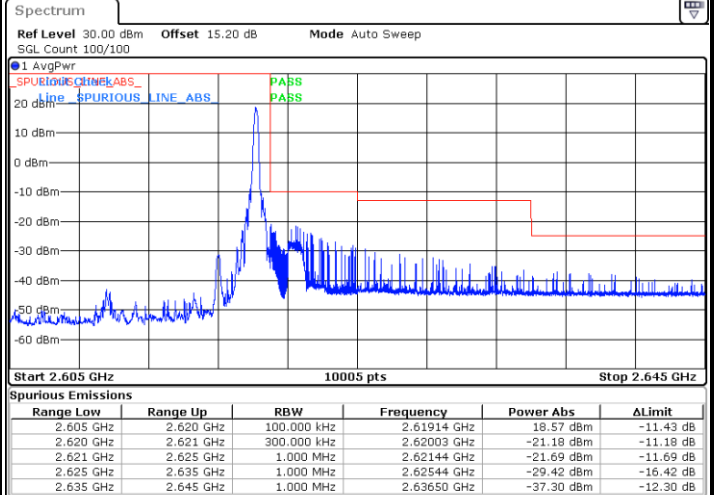
LTE Band 38 / 15MHz / QPSK

Lowest Band Edge / 1 RB



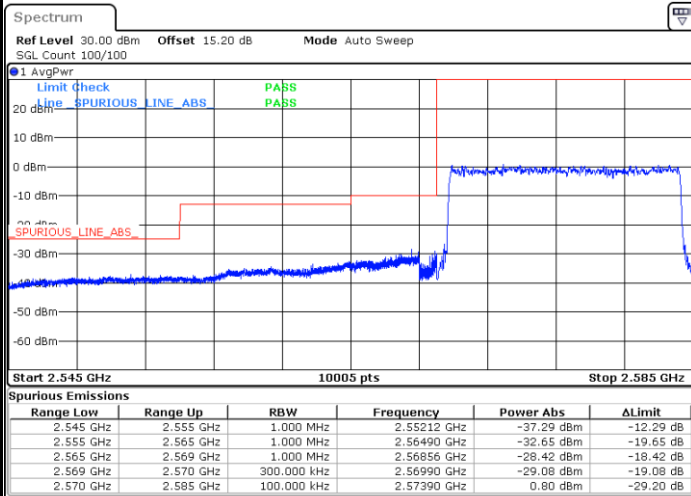
Date: 18.MAY.2021 15:39:21

Highest Band Edge / 1 RB



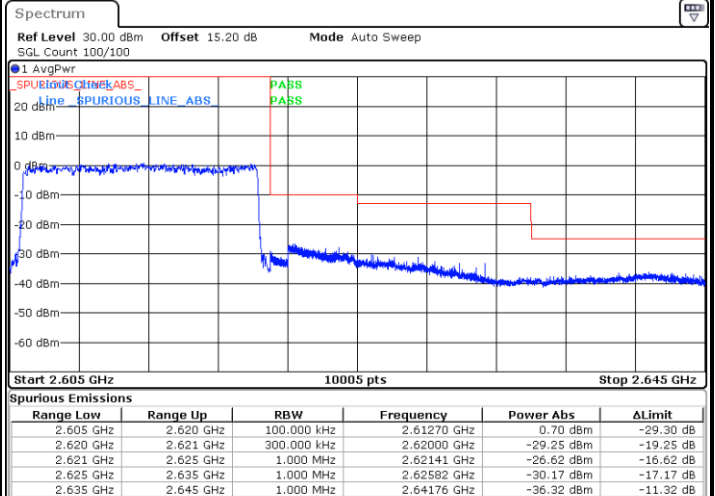
Date: 18.MAY.2021 15:42:02

Lowest Band Edge / Full RB



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

Highest Band Edge / Full RB

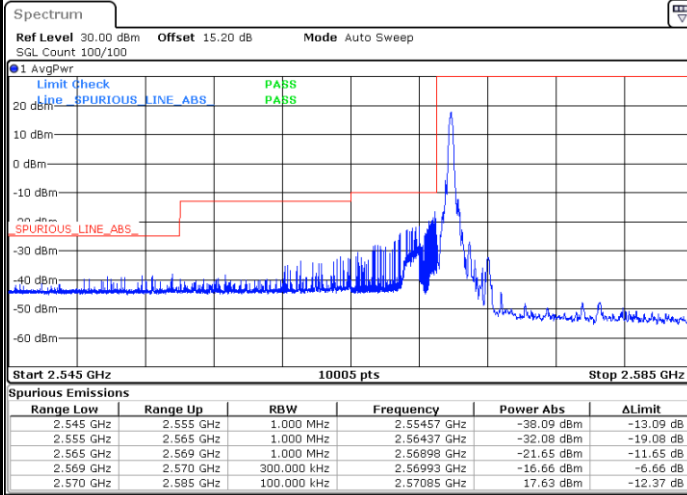


Date: 18.MAY.2021 15:41:08



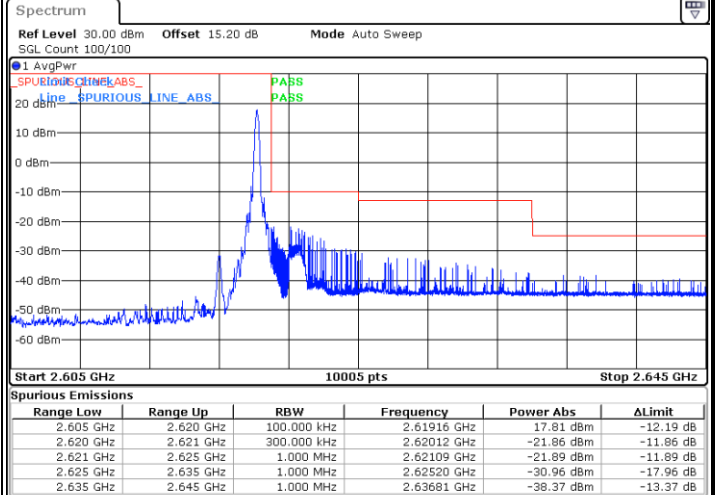
LTE Band 38 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



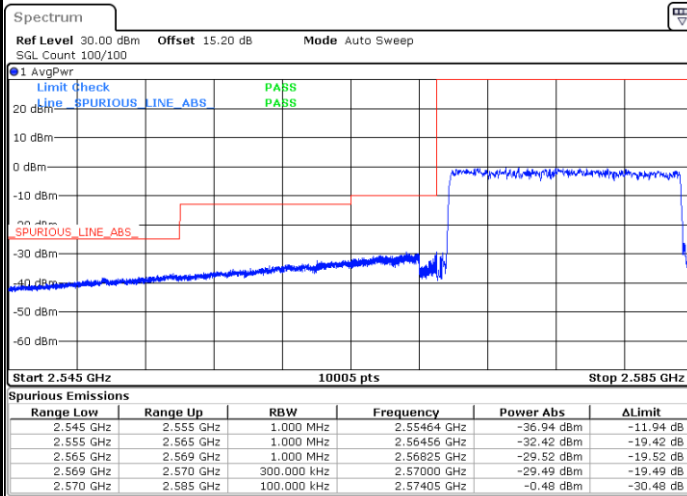
Date: 18.MAY.2021 15:39:48

Highest Band Edge / 1 RB



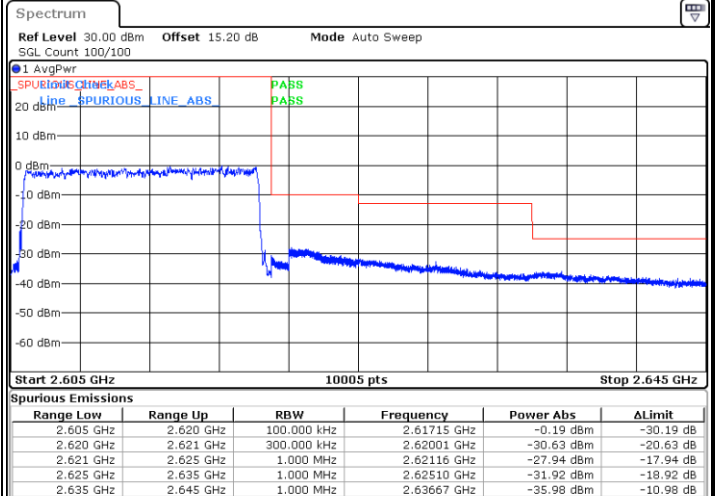
Date: 18.MAY.2021 15:42:29

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:40:41

Highest Band Edge / Full RB

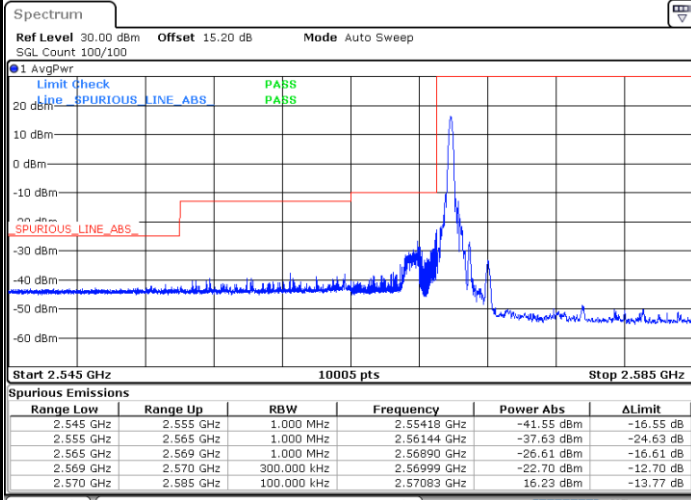


Date: 18.MAY.2021 15:41:35



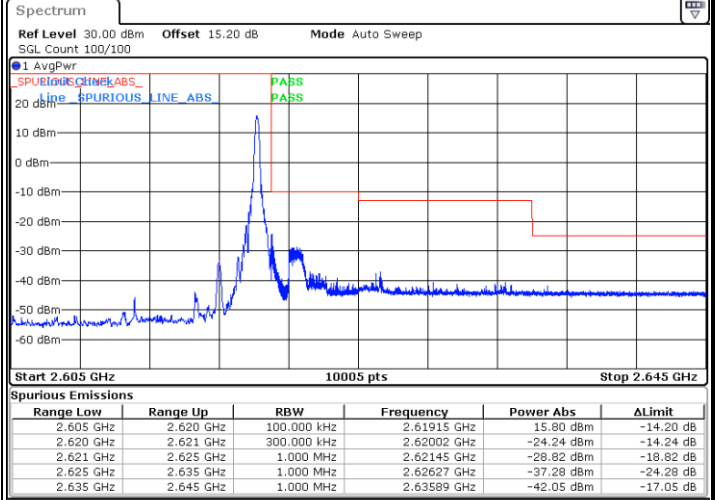
LTE Band 38 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



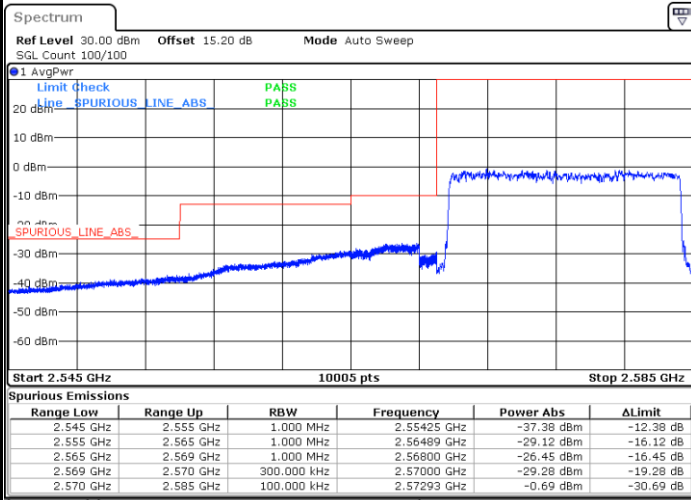
Date: 18.MAY.2021 15:42:56

Highest Band Edge / 1 RB



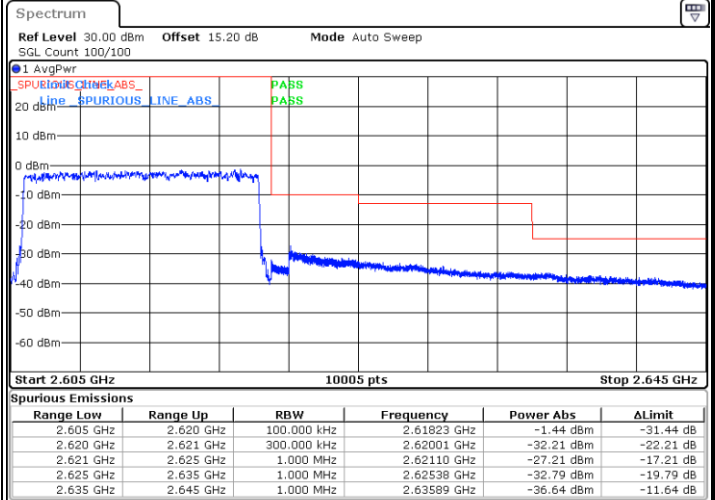
Date: 18.MAY.2021 15:44:16

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:43:23

Highest Band Edge / Full RB

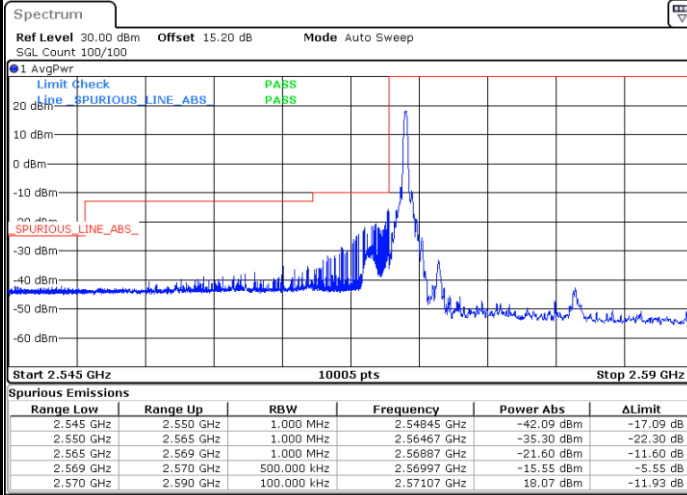


Date: 18.MAY.2021 15:43:50



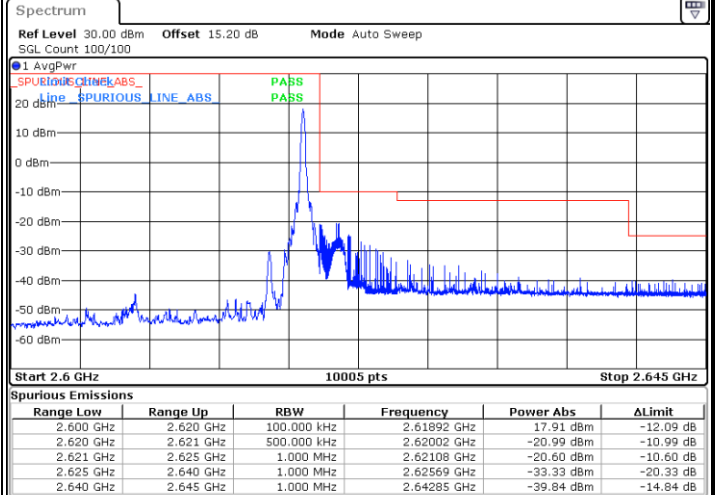
LTE Band 38 / 20MHz / QPSK

Lowest Band Edge / 1 RB



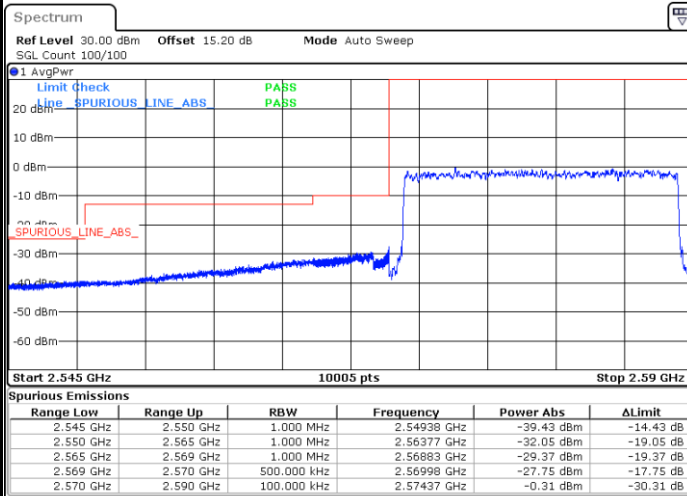
Date: 18.MAY.2021 15:44:44

Highest Band Edge / 1 RB



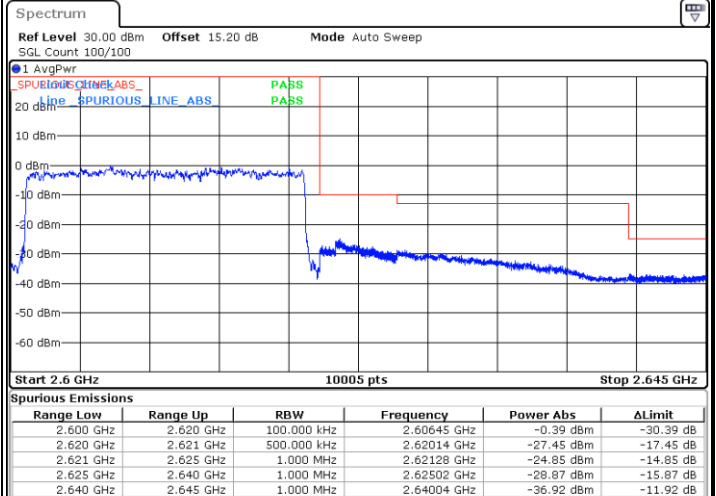
Date: 18.MAY.2021 15:47:24

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:45:36

Highest Band Edge / Full RB



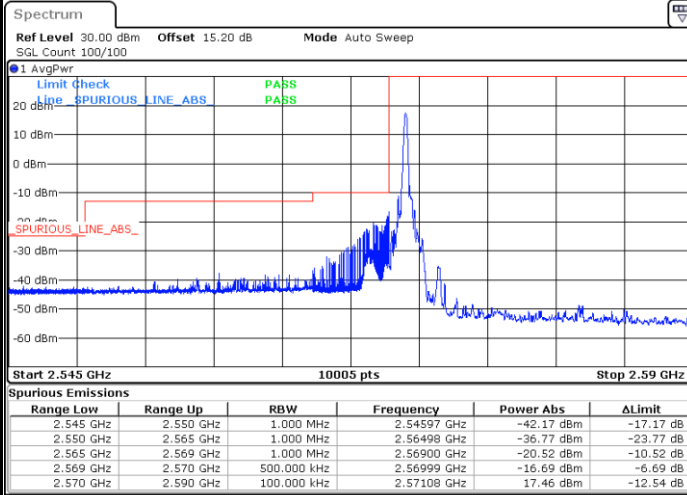
Date: 18.MAY.2021 15:46:30





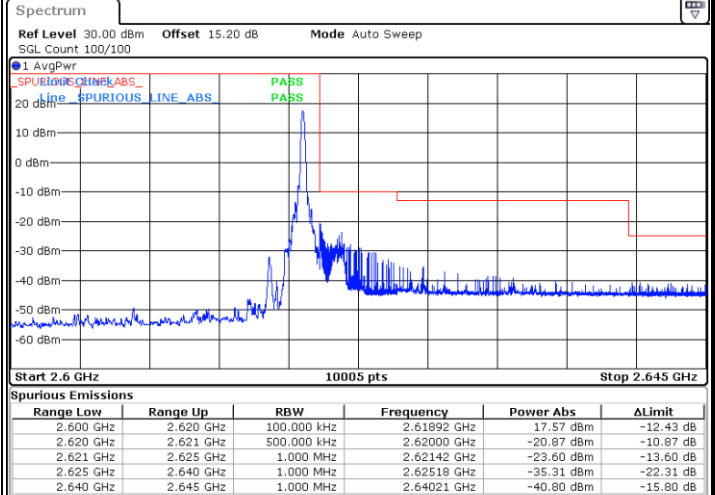
LTE Band 38 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



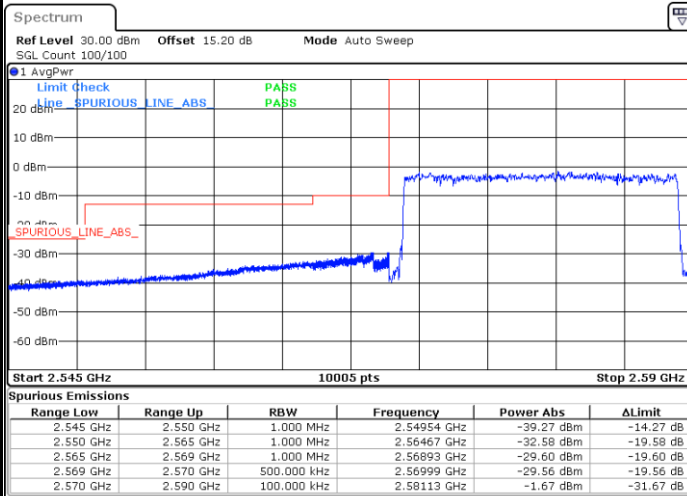
Date: 18.MAY.2021 15:45:09

Highest Band Edge / 1 RB



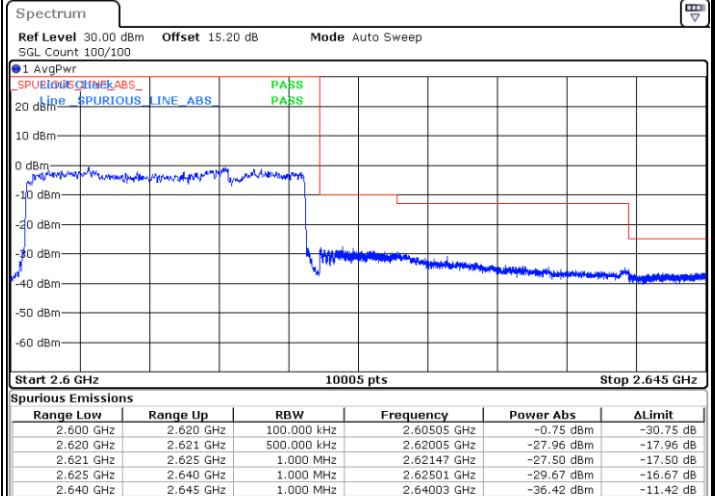
Date: 18.MAY.2021 15:47:51

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:46:03

Highest Band Edge / Full RB



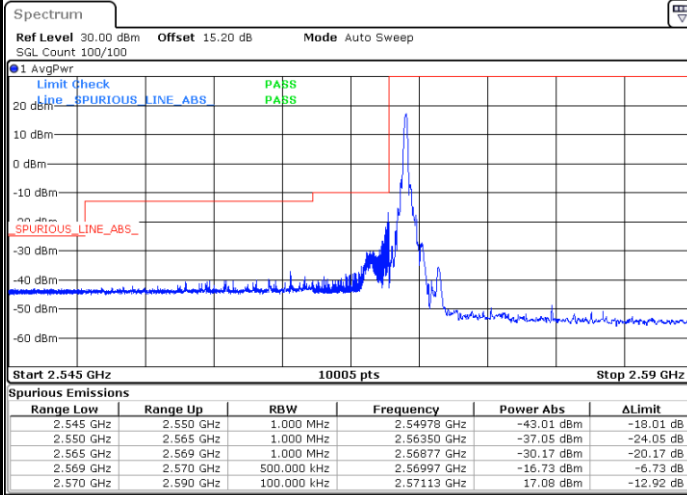
Date: 18.MAY.2021 15:46:57





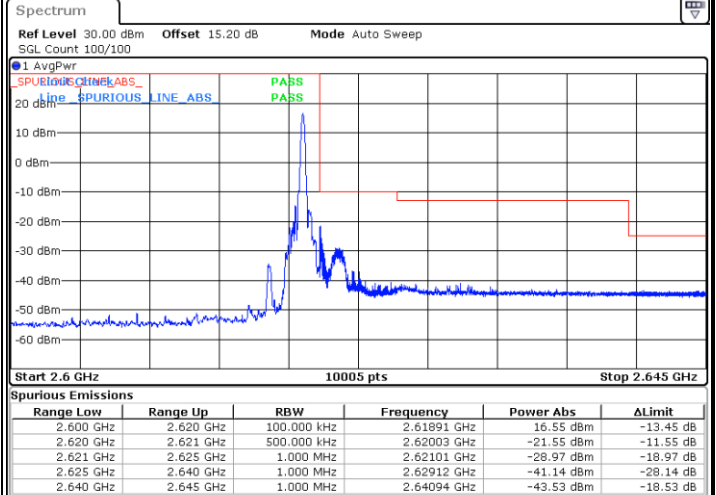
LTE Band 38 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



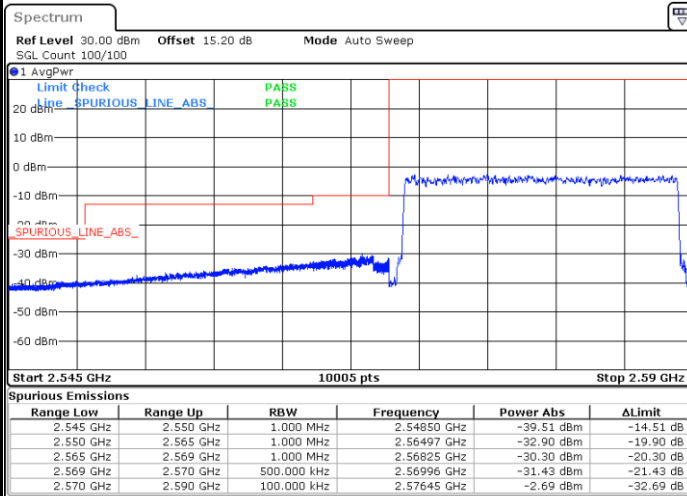
Date: 18.MAY.2021 15:48:17

Highest Band Edge / 1 RB



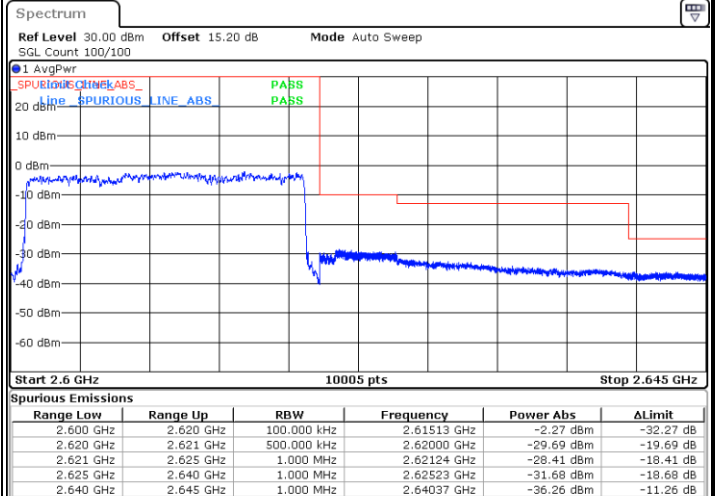
Date: 18.MAY.2021 15:49:38

Lowest Band Edge / Full RB



Date: 18.MAY.2021 15:48:44

Highest Band Edge / Full RB



Date: 18.MAY.2021 15:49:11

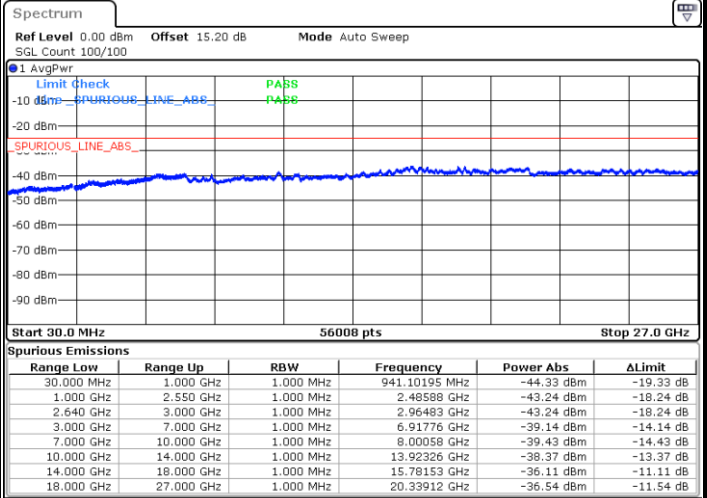
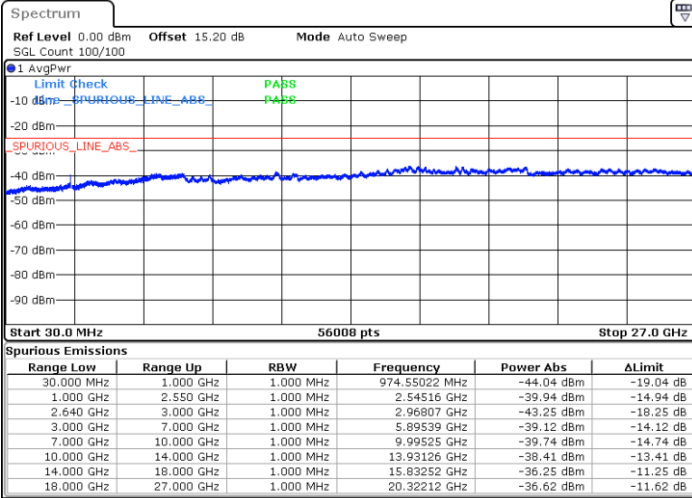


# Conducted Spurious Emission

## LTE Band 38 / 5MHz

### Lowest Channel / QPSK

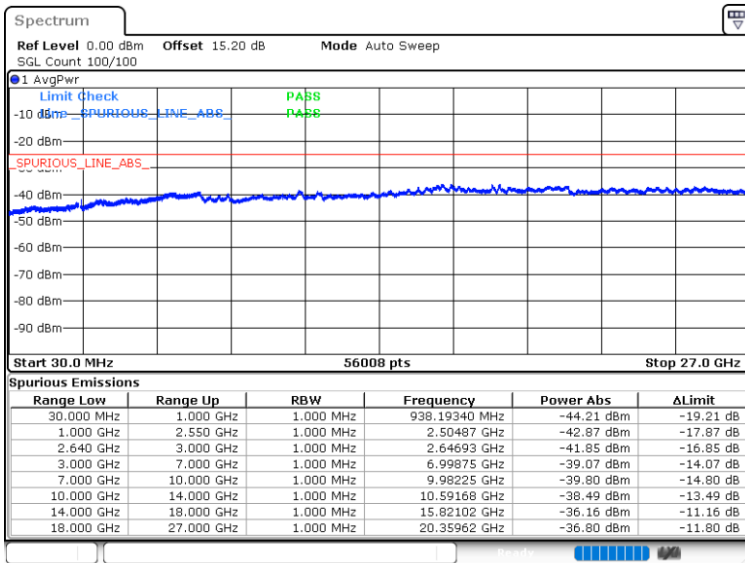
### Middle Channel / QPSK



Date: 18.MAY.2021 15:50:41

Date: 18.MAY.2021 15:51:42

### Highest Channel / QPSK



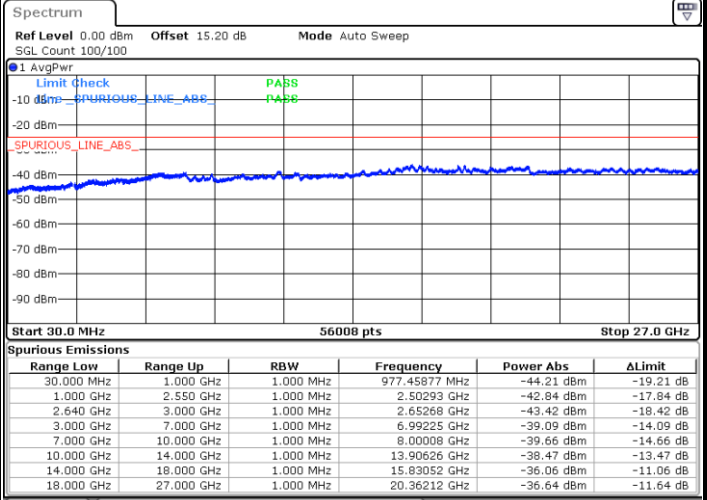
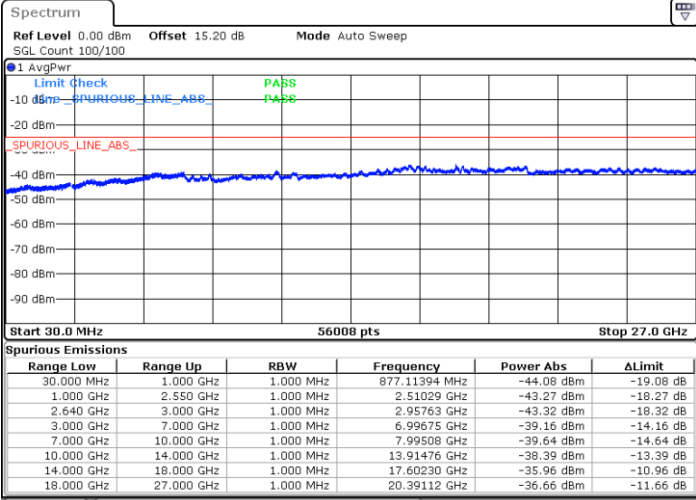
Date: 18.MAY.2021 15:52:43



LTE Band 38 / 10MHz

Lowest Channel / QPSK

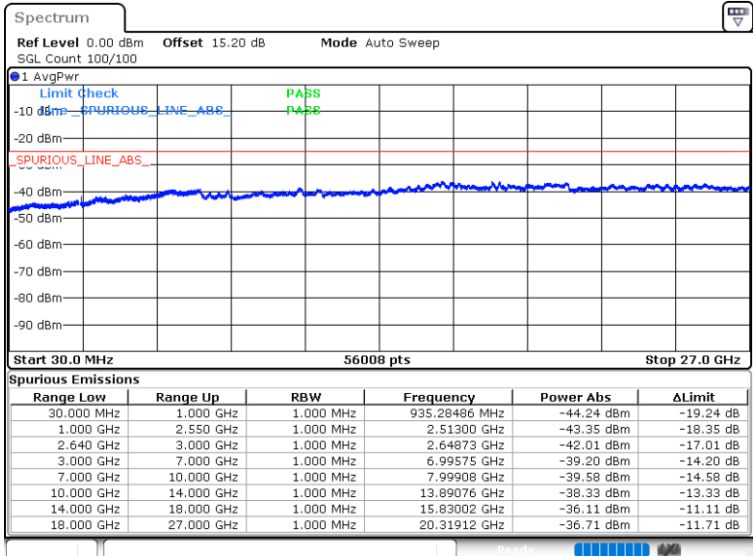
Middle Channel / QPSK



Date: 18.MAY.2021 15:53:44

Date: 18.MAY.2021 15:54:45

Highest Channel / QPSK



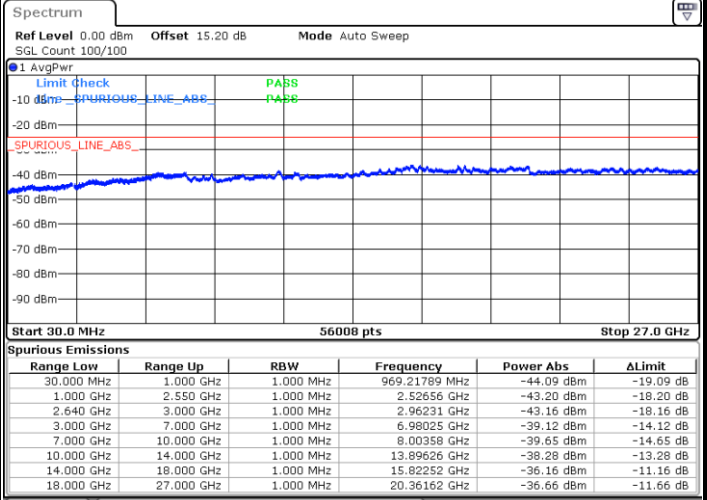
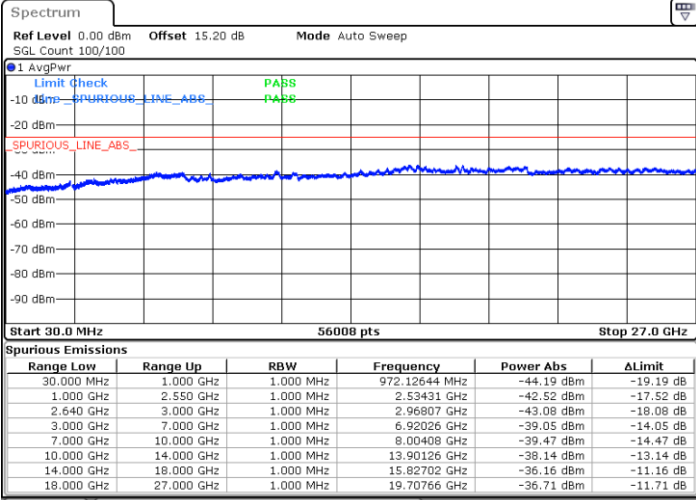
Date: 18.MAY.2021 15:55:46



LTE Band 38 / 15MHz

Lowest Channel / QPSK

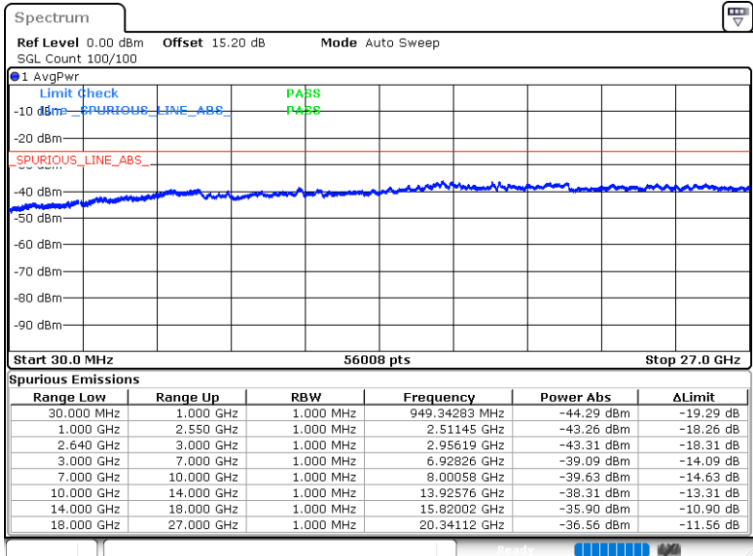
Middle Channel / QPSK



Date: 18.MAY.2021 15:56:48

Date: 18.MAY.2021 15:57:49

Highest Channel / QPSK



Date: 18.MAY.2021 15:58:50