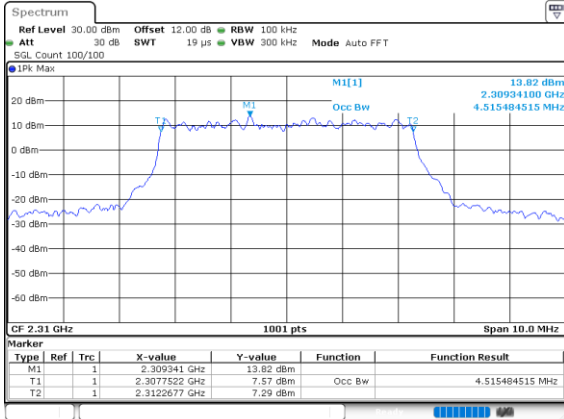




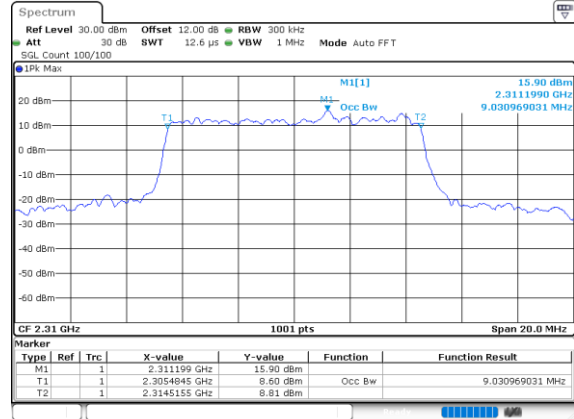
LTE Band 30

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 10.FEB.2023 12:15:58



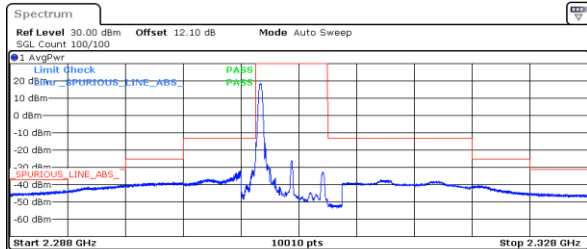
Date: 10.FEB.2023 12:19:56



# Conducted Band Edge

## LTE Band 30 / 5MHz / QPSK

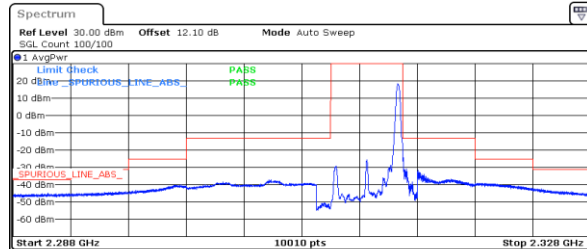
### Lowest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.288 GHz	2.292 GHz	1.000 MHz	2.29199 GHz	-43.35 dBm	-6.35 dB
2.292 GHz	2.296 GHz	1.000 MHz	2.29599 GHz	-40.23 dBm	-9.23 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29990 GHz	-38.59 dBm	-13.59 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30394 GHz	-31.87 dBm	-19.87 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30500 GHz	-25.17 dBm	-12.17 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30536 GHz	18.61 dBm	-11.39 dB
2.310 GHz	2.311 GHz	80.000 kHz	2.31019 GHz	-50.62 dBm	-37.62 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31415 GHz	-37.06 dBm	-24.06 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32063 GHz	-40.18 dBm	-15.18 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32404 GHz	-44.87 dBm	-13.87 dB

Date: 17.APR.2023 12:07:24

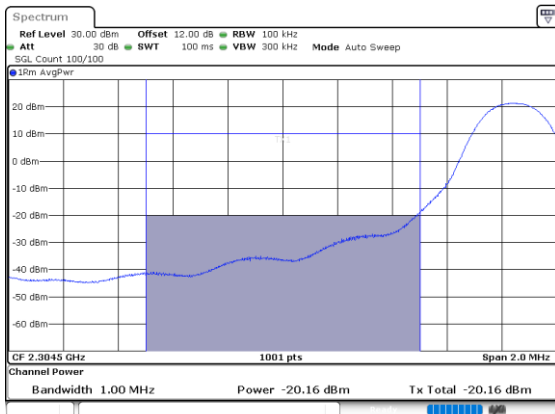
### Highest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.288 GHz	2.292 GHz	1.000 MHz	2.29433 GHz	-44.91 dBm	-7.91 dB
2.292 GHz	2.296 GHz	1.000 MHz	2.29533 GHz	-44.07 dBm	-13.07 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29965 GHz	-40.06 dBm	-15.06 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30570 GHz	-37.25 dBm	-24.25 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.30959 GHz	-50.56 dBm	-37.56 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31464 GHz	18.37 dBm	-11.63 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31502 GHz	-24.57 dBm	-13.57 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31604 GHz	-31.43 dBm	-18.43 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32049 GHz	-39.11 dBm	-14.11 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32415 GHz	-42.34 dBm	-11.34 dB

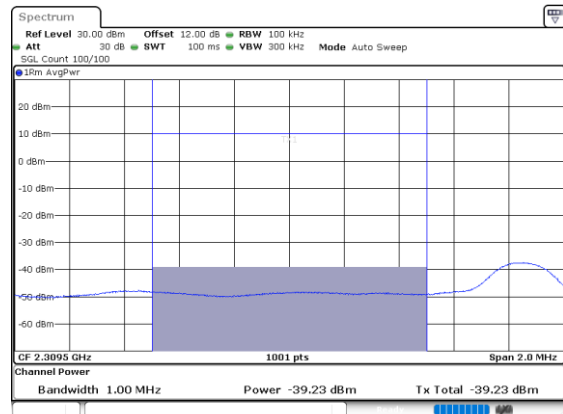
Date: 17.APR.2023 12:15:19

### Lowest Band Edge / 1 RB / Lower zoom in



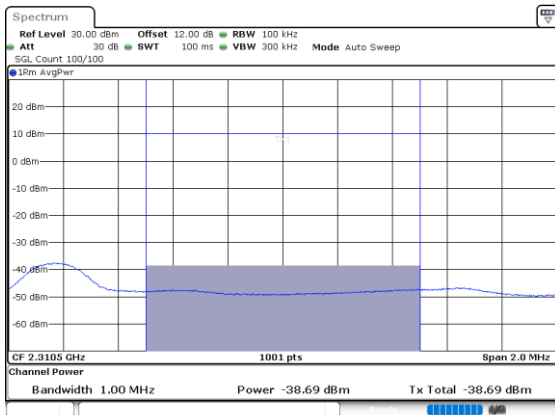
Date: 11.FEB.2023 09:16:59

### Highest Band Edge / 1 RB / Lower zoom in



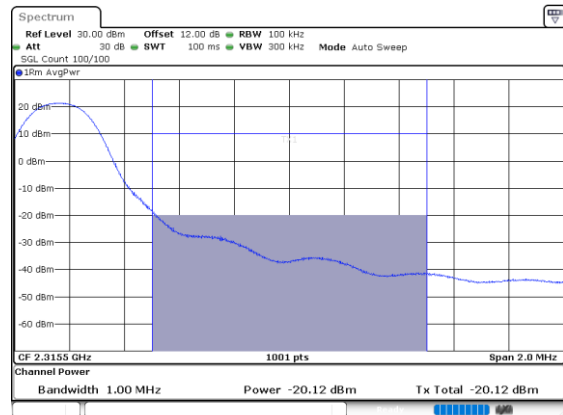
Date: 11.FEB.2023 09:03:39

### Lowest Band Edge / 1 RB / Upper zoom in



Date: 11.FEB.2023 09:17:29

### Highest Band Edge / 1 RB / Upper zoom in

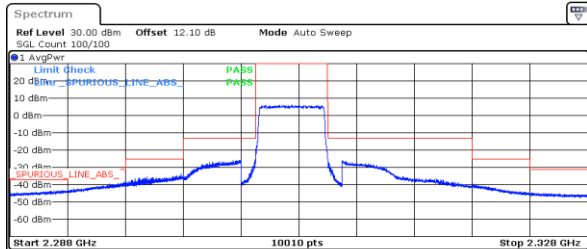


Date: 11.FEB.2023 09:04:07



LTE Band 30 / 5MHz / QPSK

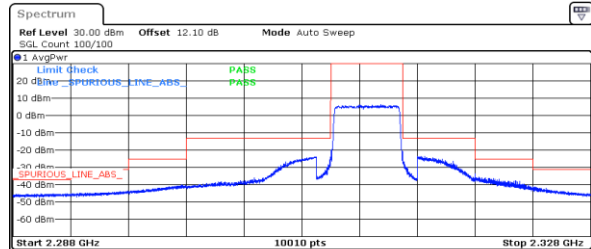
Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.288 GHz	2.292 GHz	1.000 MHz	2.29155 GHz	-43.45 dBm	-6.45 dB
2.292 GHz	2.296 GHz	1.000 MHz	2.29589 GHz	-38.59 dBm	-7.59 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29985 GHz	-33.72 dBm	-8.72 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30400 GHz	-25.82 dBm	-12.82 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30500 GHz	-25.21 dBm	-12.21 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30751 GHz	6.01 dBm	-23.99 dB
2.310 GHz	2.311 GHz	80.000 kHz	2.31000 GHz	-25.22 dBm	-12.22 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31102 GHz	-25.95 dBm	-12.95 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32011 GHz	-39.70 dBm	-14.70 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32420 GHz	-44.80 dBm	-13.80 dB

Date: 17.APR.2023 12:11:21

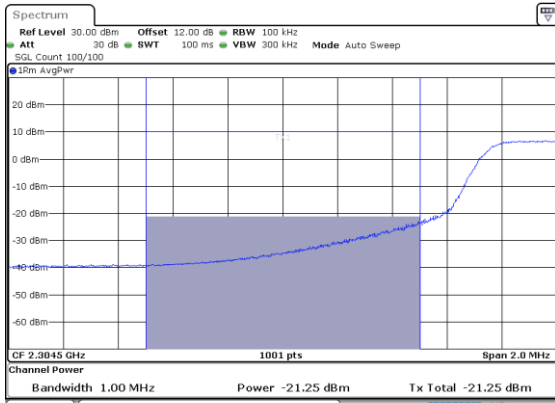
Highest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.288 GHz	2.292 GHz	1.000 MHz	2.29175 GHz	-45.22 dBm	-8.22 dB
2.292 GHz	2.296 GHz	1.000 MHz	2.29595 GHz	-43.43 dBm	-12.43 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29969 GHz	-39.99 dBm	-14.99 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30900 GHz	-23.81 dBm	-10.81 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.31000 GHz	-24.18 dBm	-11.18 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31347 GHz	6.48 dBm	-23.52 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31500 GHz	-26.63 dBm	-13.63 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31601 GHz	-23.44 dBm	-10.44 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32000 GHz	-33.68 dBm	-8.68 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32413 GHz	-41.00 dBm	-10.00 dB

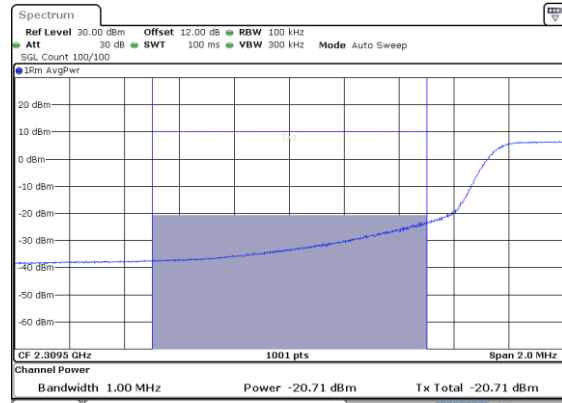
Date: 17.APR.2023 12:19:16

Lowest Band Edge / Full RB / Lower zoom in



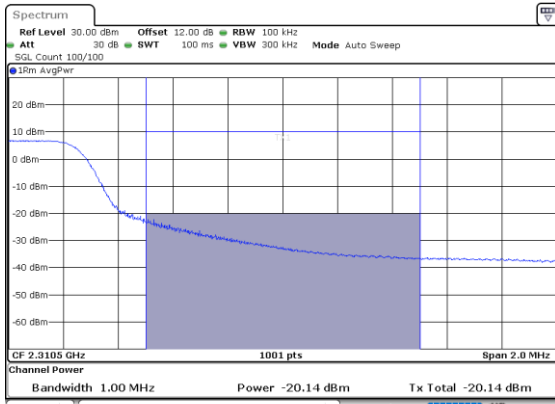
Date: 11.FEB.2023 09:18:18

Highest Band Edge / Full RB / Lower zoom in



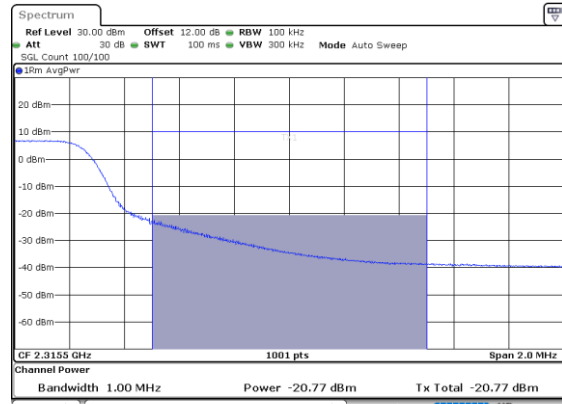
Date: 11.FEB.2023 09:02:53

Lowest Band Edge / Full RB / Upper zoom in



Date: 11.FEB.2023 09:18:43

Highest Band Edge / Full RB / Upper zoom in

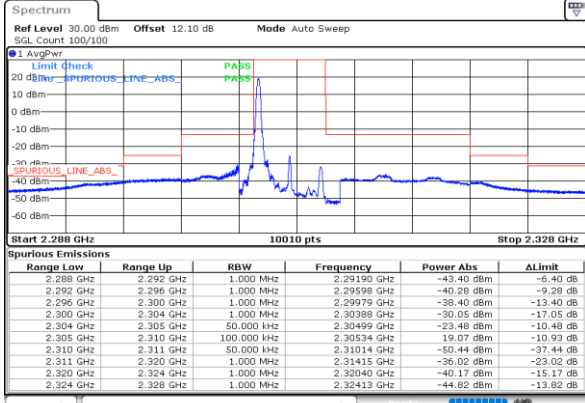


Date: 11.FEB.2023 09:16:31

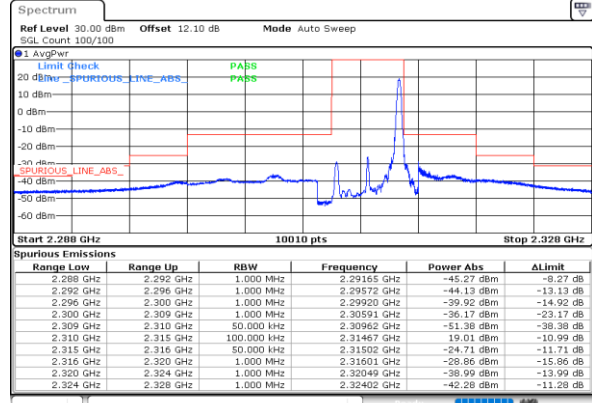


LTE Band 30 / 5MHz / 16QAM

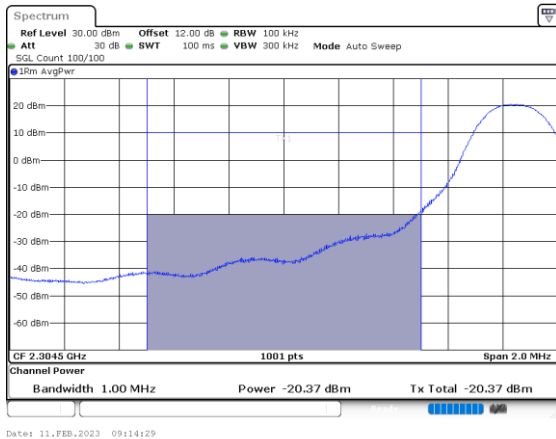
Lowest Band Edge / 1 RB



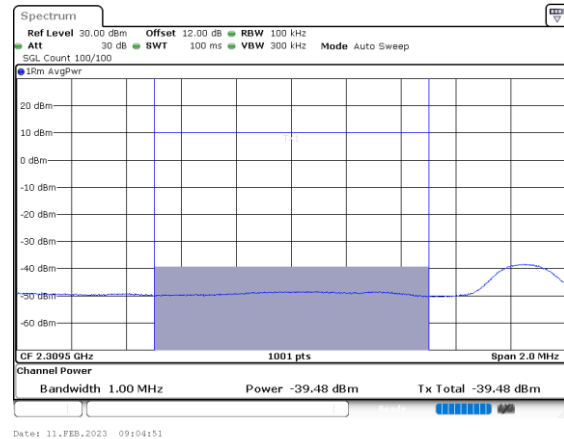
Highest Band Edge / 1 RB



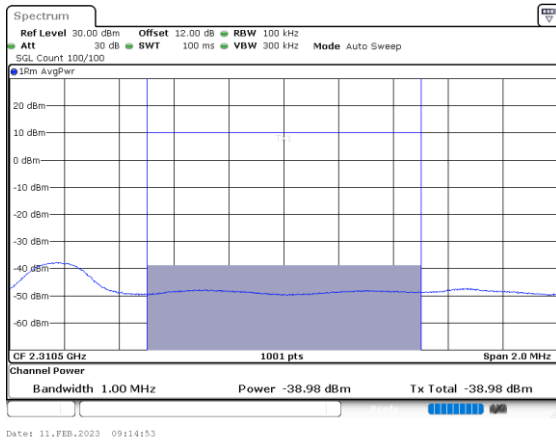
Lowest Band Edge / 1 RB / Lower zoom in



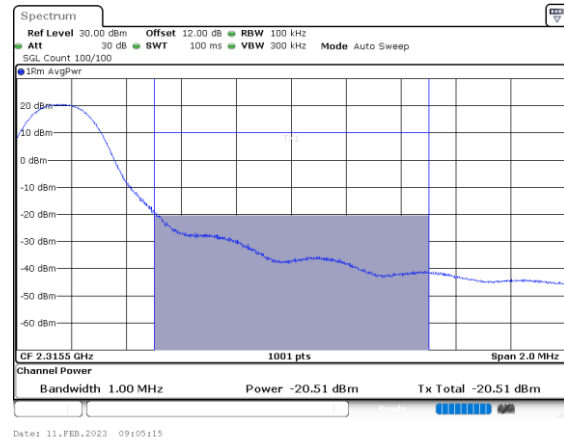
Highest Band Edge / 1 RB / Lower zoom in



Lowest Band Edge / 1 RB / Upper zoom in



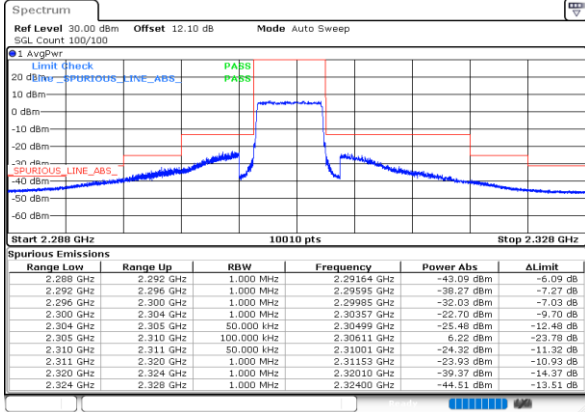
Highest Band Edge / 1 RB / Upper zoom in





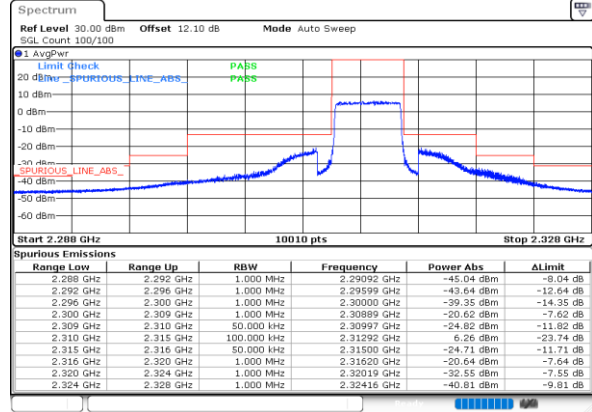
LTE Band 30 / 5MHz / 16QAM

Lowest Band Edge / Full RB



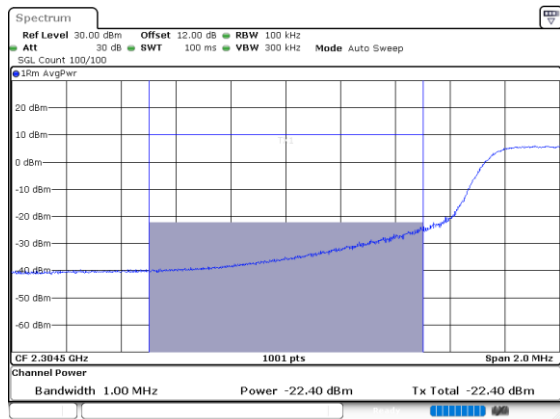
Date: 17.APR.2023 12:11:21

Highest Band Edge / Full RB



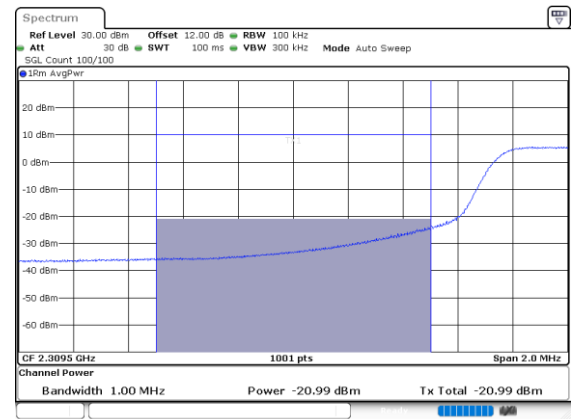
Date: 17.APR.2023 12:20:16

Lowest Band Edge / Full RB / Lower zoom in



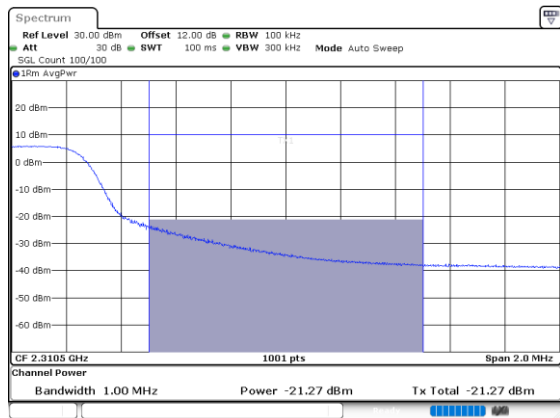
Date: 11.FEB.2023 09:15:36

Highest Band Edge / Full RB / Lower zoom in



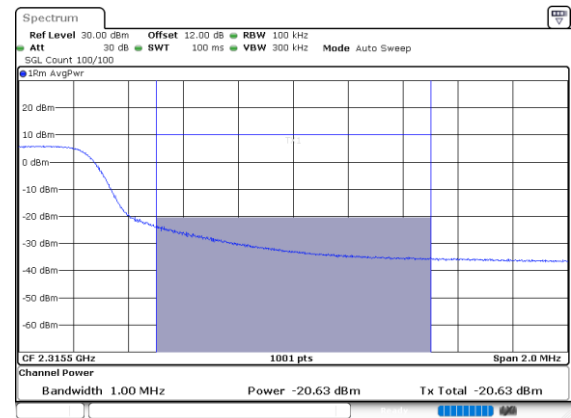
Date: 11.FEB.2023 09:01:47

Lowest Band Edge / Full RB / Upper zoom in



Date: 11.FEB.2023 09:16:03

Highest Band Edge / Full RB / Upper zoom in

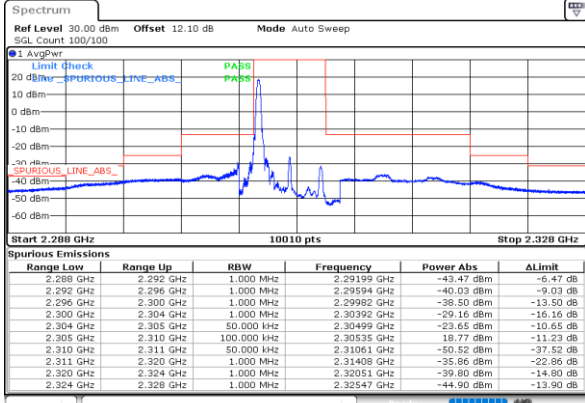


Date: 11.FEB.2023 09:15:14

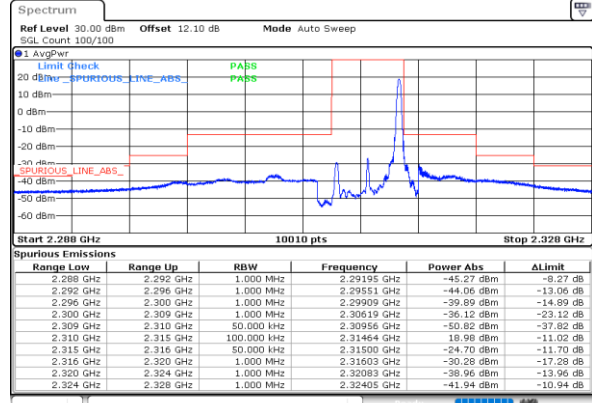


LTE Band 30 / 5MHz / 64QAM

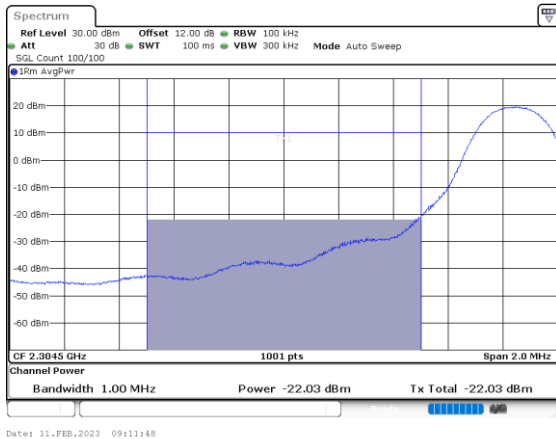
Lowest Band Edge / 1 RB



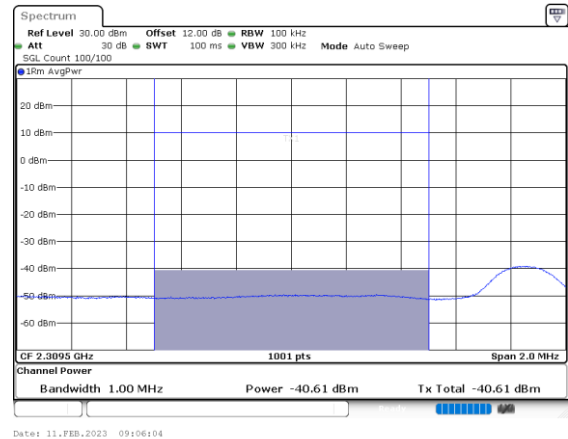
Highest Band Edge / 1 RB



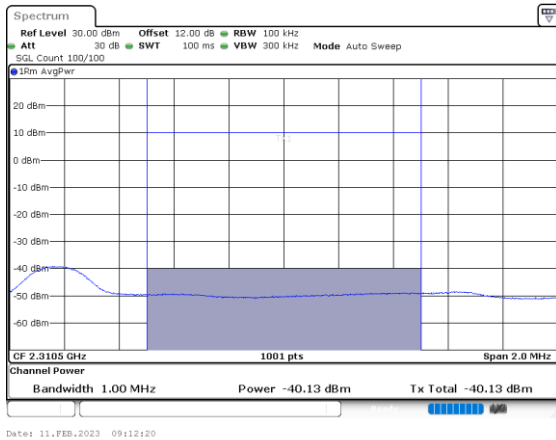
Lowest Band Edge / 1 RB / Lower zoom in



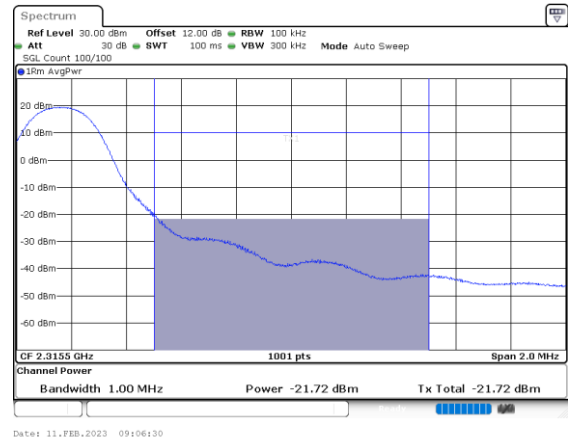
Highest Band Edge / 1 RB / Lower zoom in



Lowest Band Edge / 1 RB / Upper zoom in



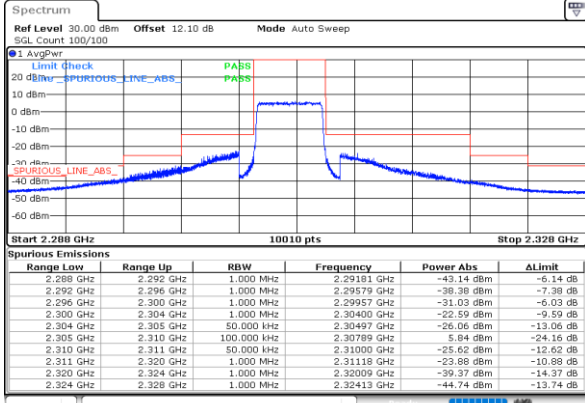
Highest Band Edge / 1 RB / Upper zoom in



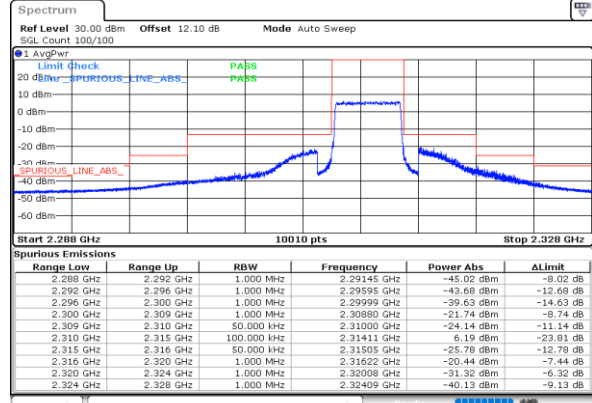


LTE Band 30 / 5MHz / 64QAM

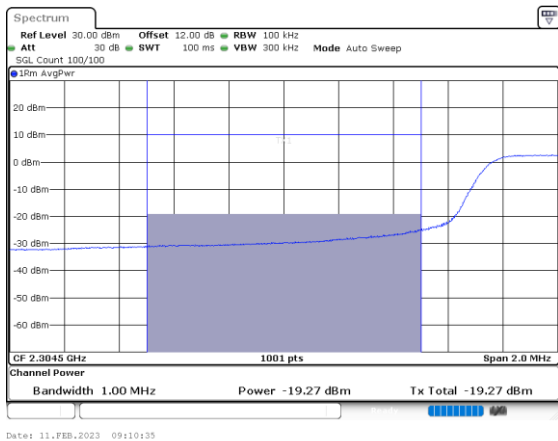
Lowest Band Edge / Full RB



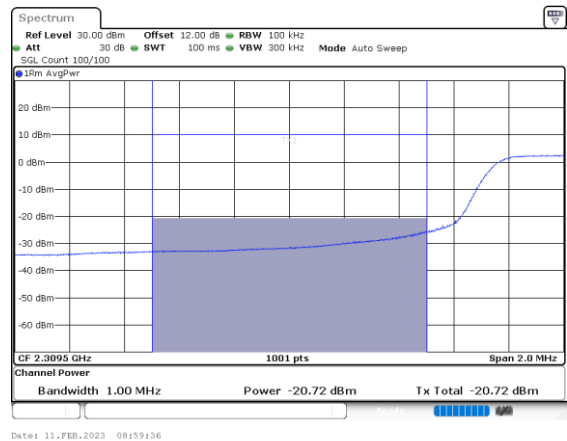
Highest Band Edge / Full RB



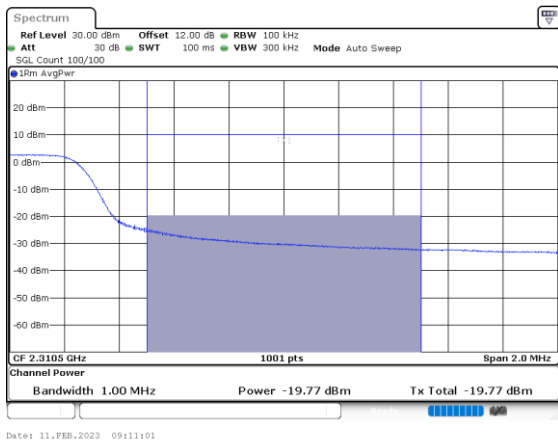
Lowest Band Edge / Full RB / Lower zoom in



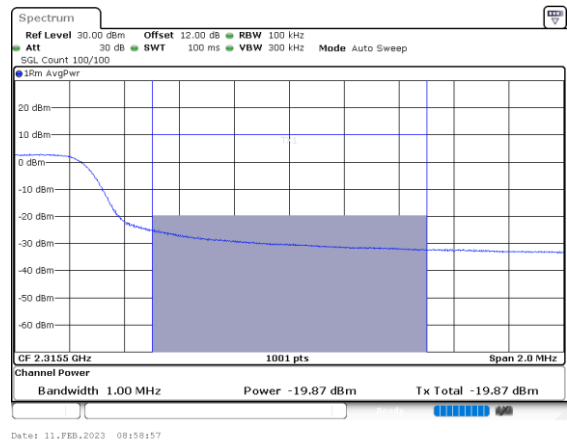
Highest Band Edge / Full RB / Lower zoom in



Lowest Band Edge / Full RB / Upper zoom in



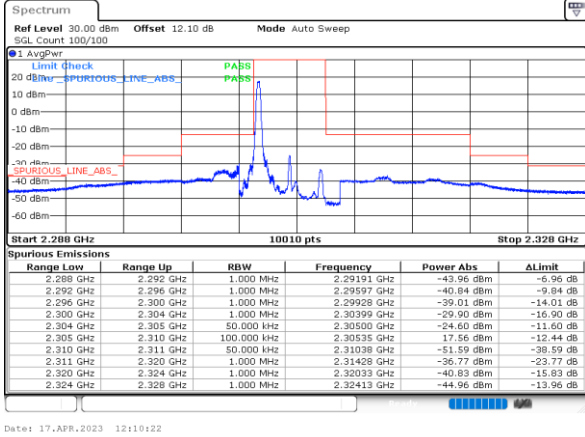
Highest Band Edge / Full RB / Upper zoom in



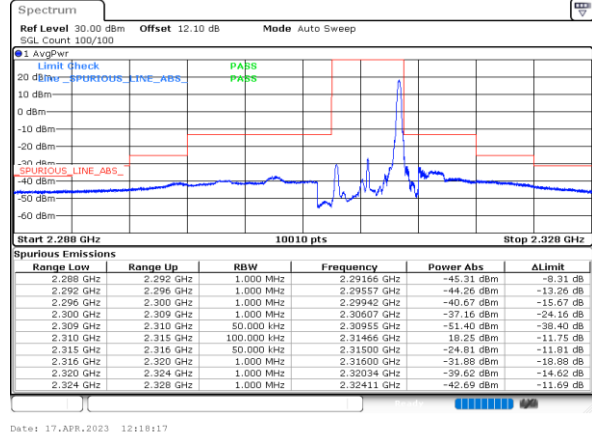


LTE Band 30 / 5MHz / 256QAM

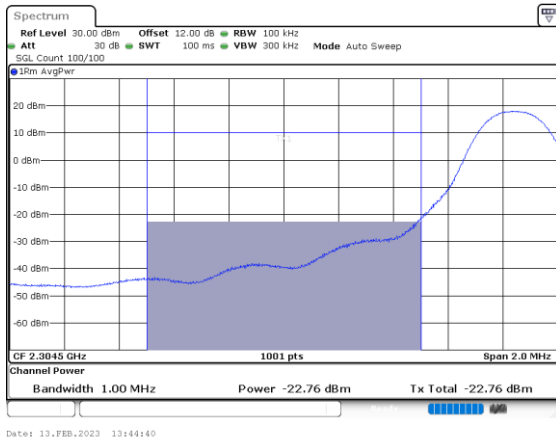
Lowest Band Edge / 1 RB



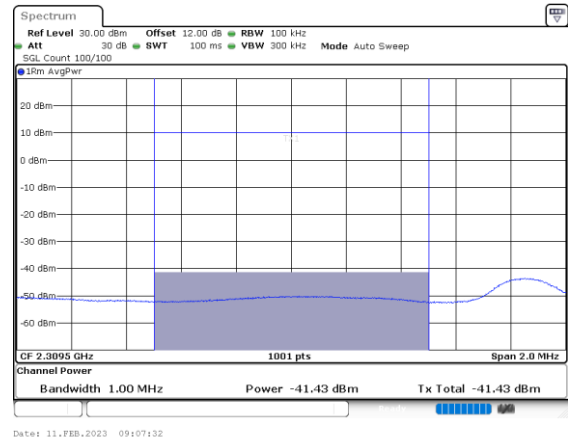
Highest Band Edge / 1 RB



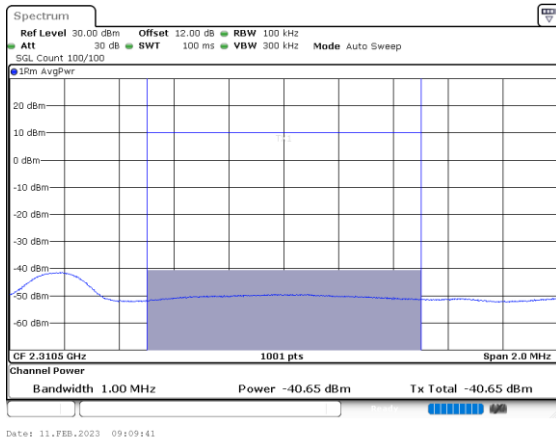
Lowest Band Edge / 1 RB / Lower zoom in



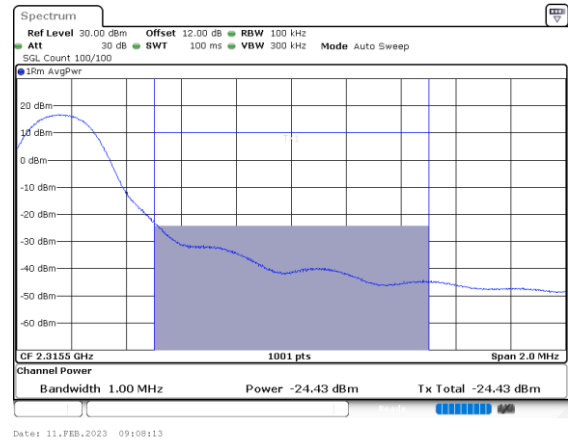
Highest Band Edge / 1 RB / Lower zoom in



Lowest Band Edge / 1 RB / Upper zoom in



Highest Band Edge / 1 RB / Upper zoom in

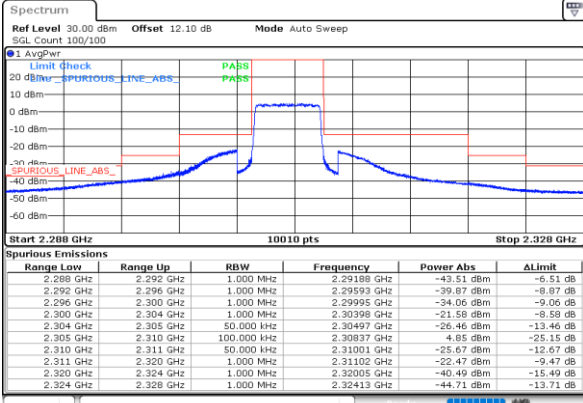






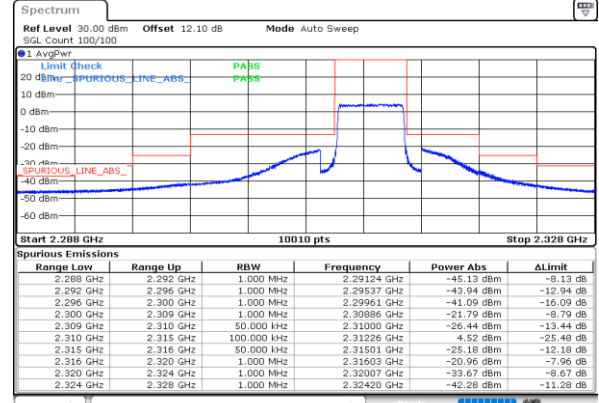
LTE Band 30 / 5MHz / 256QAM

Lowest Band Edge / Full RB



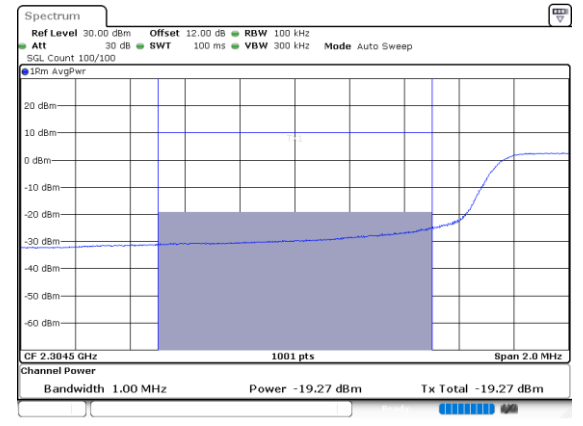
Date: 17.APR.2023 12:14:19

Highest Band Edge / Full RB



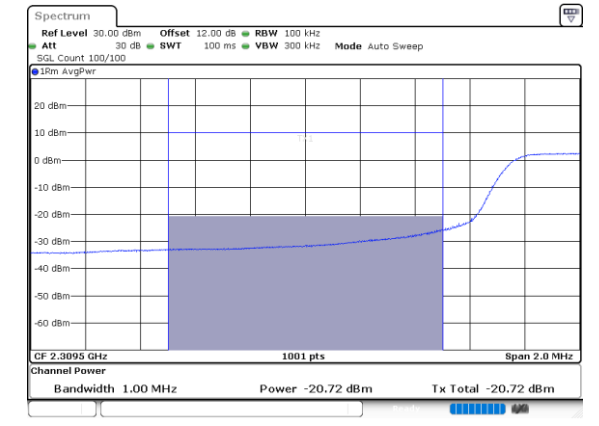
Date: 17.APR.2023 12:12:14

Lowest Band Edge / Full RB / Lower zoom in



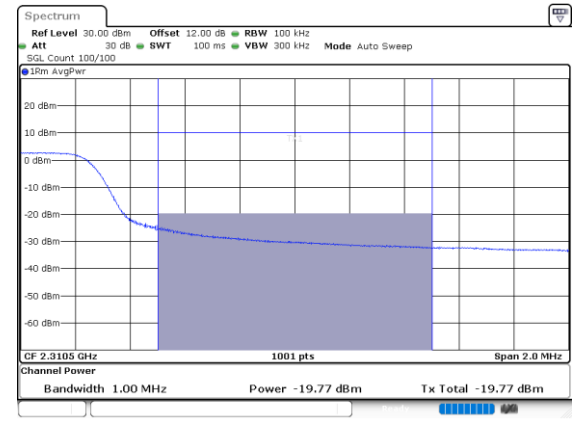
Date: 11.FEB.2023 09:10:35

Highest Band Edge / Full RB / Lower zoom in



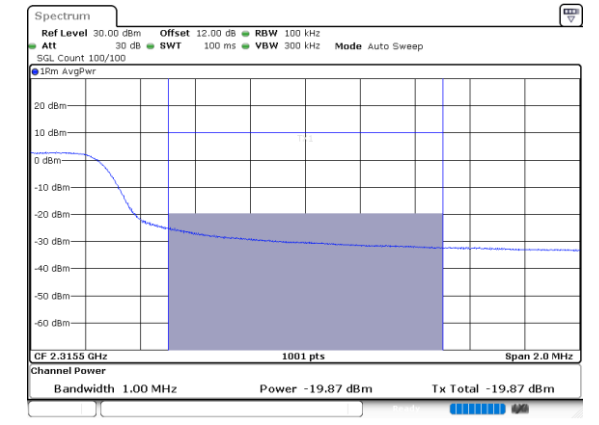
Date: 11.FEB.2023 08:59:36

Lowest Band Edge / Full RB / Upper zoom in



Date: 11.FEB.2023 09:11:01

Highest Band Edge / Full RB / Upper zoom in

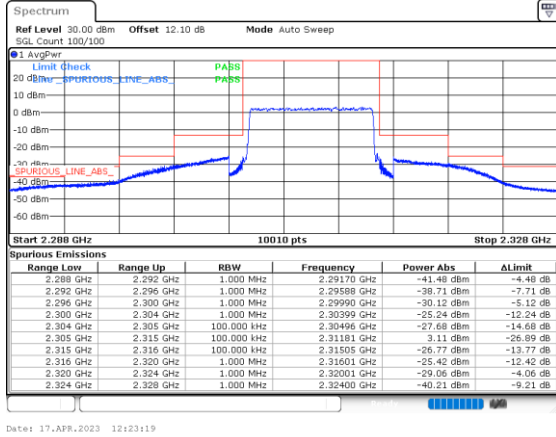


Date: 11.FEB.2023 08:58:57



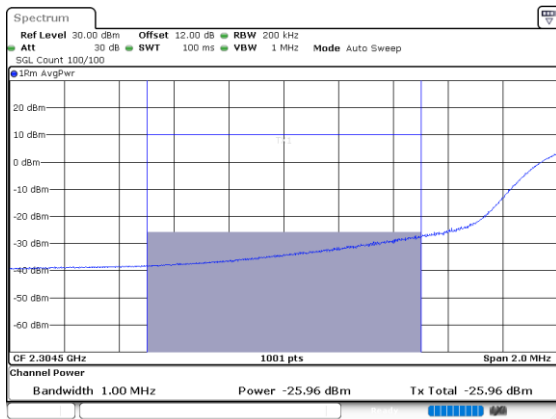
LTE Band 30 / 10MHz / QPSK

Middle Band Edge / Full RB



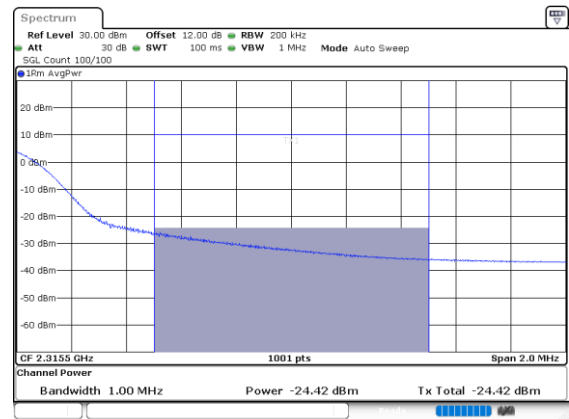
Date: 17.APR.2023 12:23:19

Middle Band Edge / Full RB / Lower zoom in



Date: 11.FEB.2023 08:42:49

Middle Band Edge / Full RB / Upper zoom in

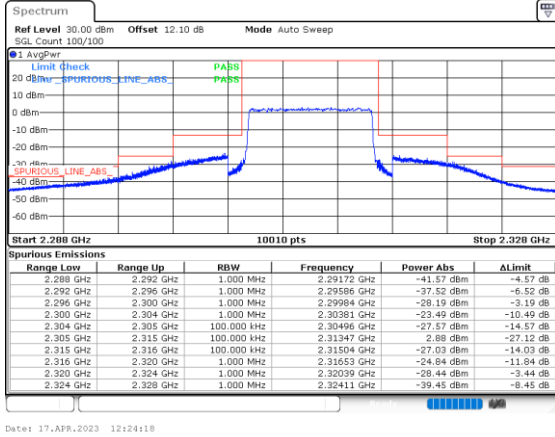


Date: 11.FEB.2023 08:43:59

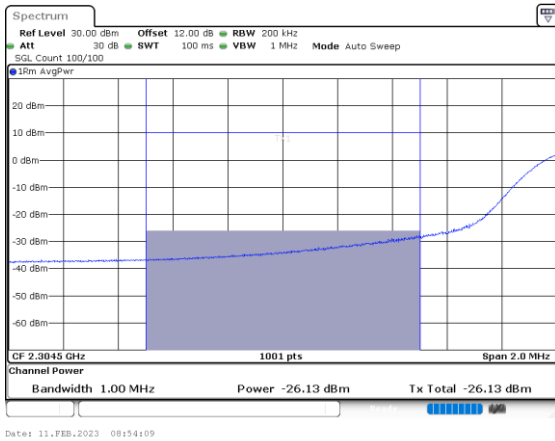


LTE Band 30 / 10MHz / 16QAM

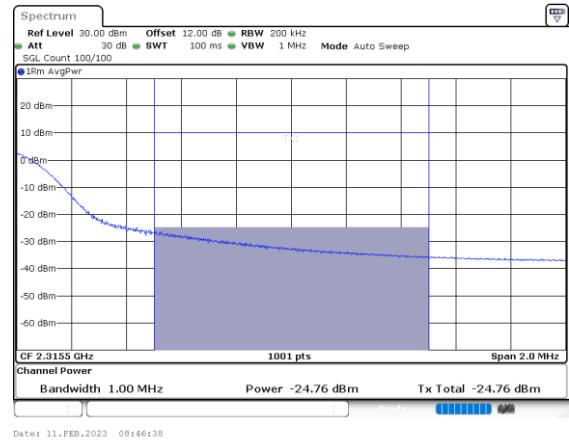
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



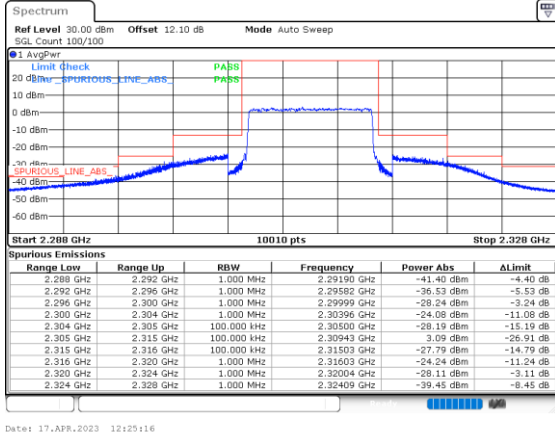
Middle Band Edge / Full RB / Upper zoom in





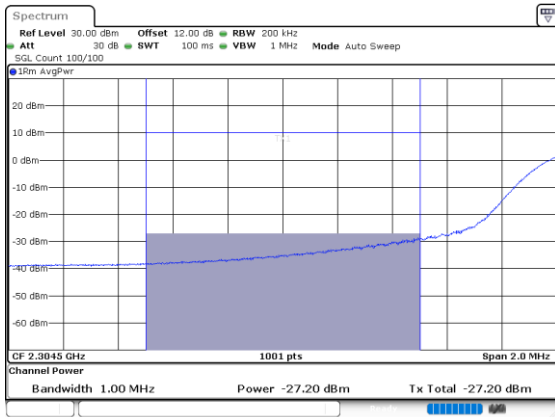
LTE Band 30 / 10MHz / 64QAM

Middle Band Edge / Full RB



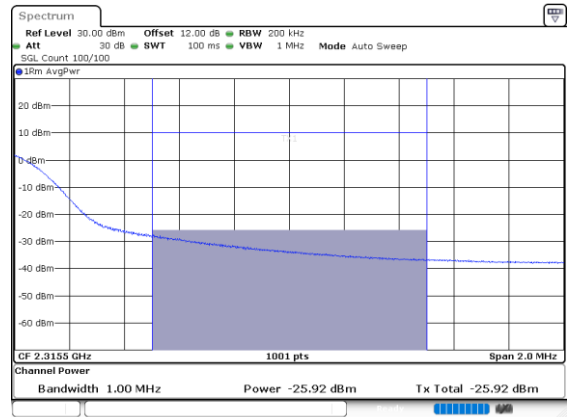
Date: 17.APR.2023 12:25:16

Middle Band Edge / Full RB / Lower zoom in



Date: 11.FEB.2023 08:53:11

Middle Band Edge / Full RB / Upper zoom in

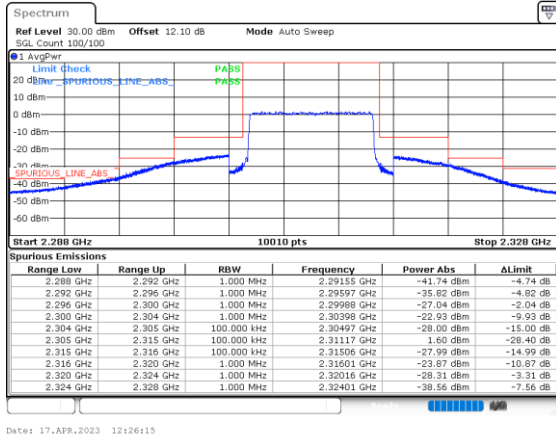


Date: 11.FEB.2023 08:48:05



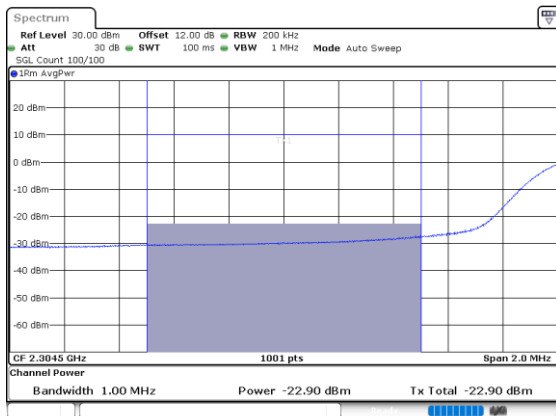
LTE Band 30 / 10MHz / 256QAM

Middle Band Edge / Full RB



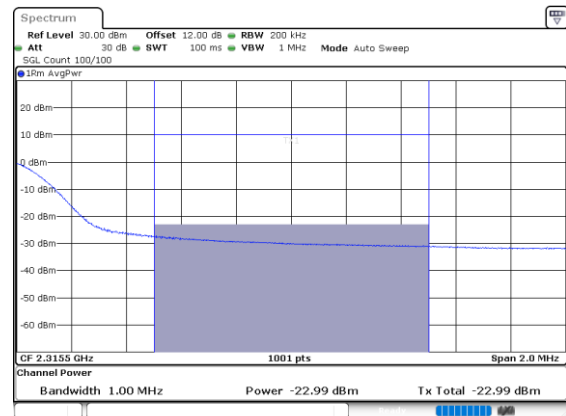
Date: 17.APR.2023 12:26:15

Middle Band Edge / Full RB / Lower zoom in



Date: 11.FEB.2023 08:52:17

Middle Band Edge / Full RB / Upper zoom in



Date: 11.FEB.2023 08:50:50

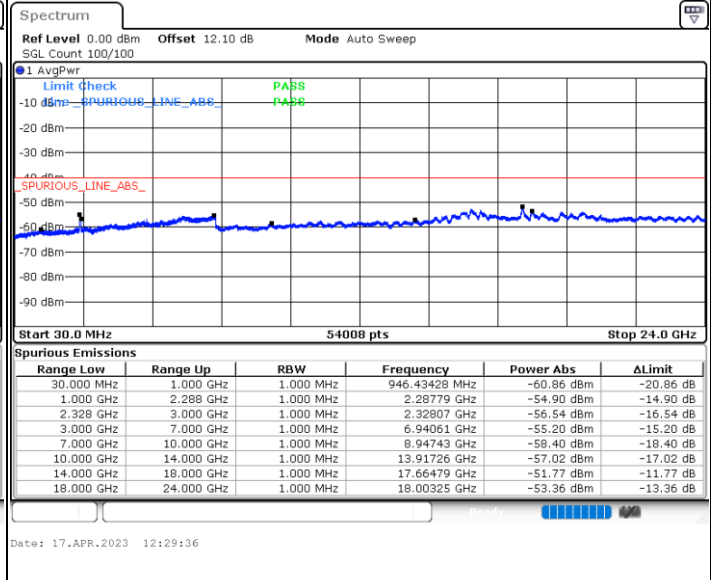
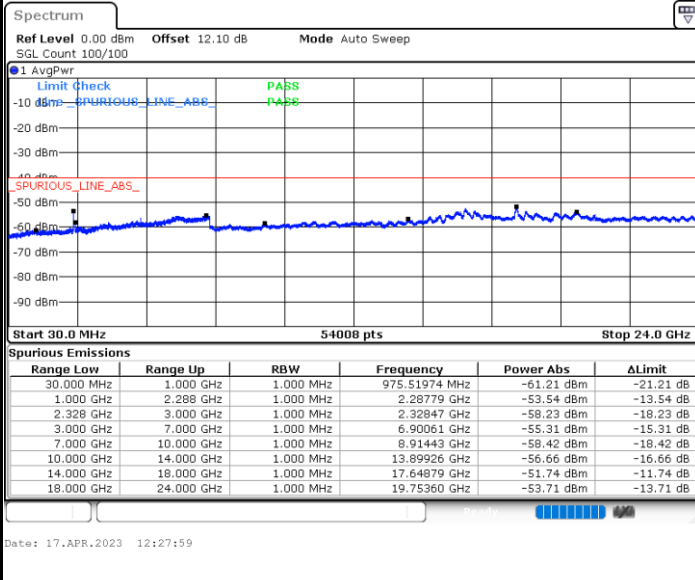


# Conducted Spurious Emission

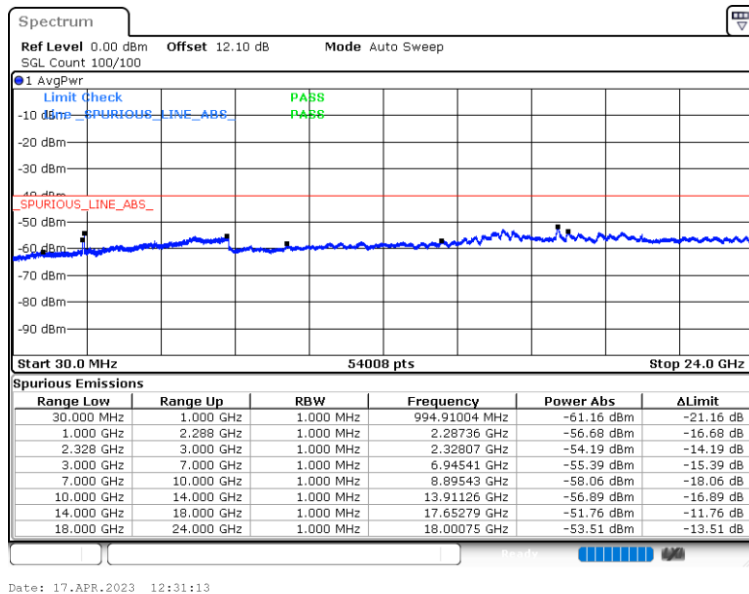
## LTE Band 30 / 5MHz

### Lowest Channel / QPSK

### Middle Channel / QPSK



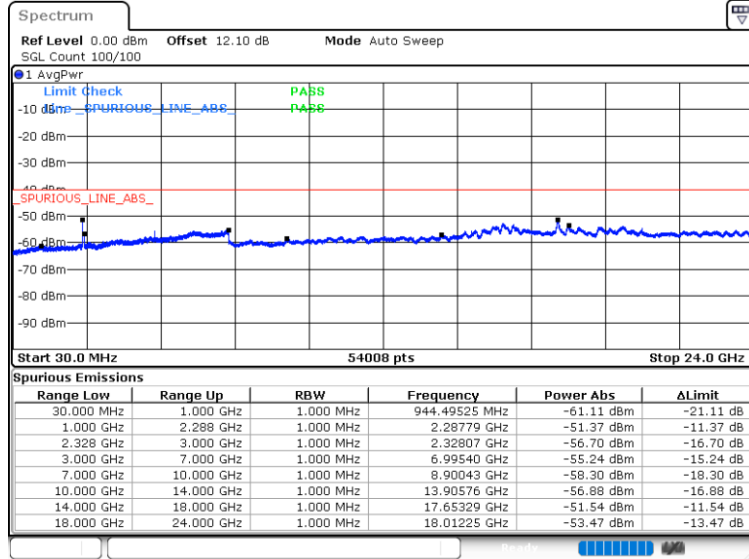
### Highest Channel / QPSK





LTE Band 30 / 10MHz

Middle Channel / QPSK



Date: 17.APR.2023 12:32:56



### Frequency Stability

Test Conditions		LTE Band 30 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0035	PASS
40	Normal Voltage	0.0050	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0035	
-30	Normal Voltage	0.0038	
20	Maximum Voltage	0.0066	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0040	

**Note:**

1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

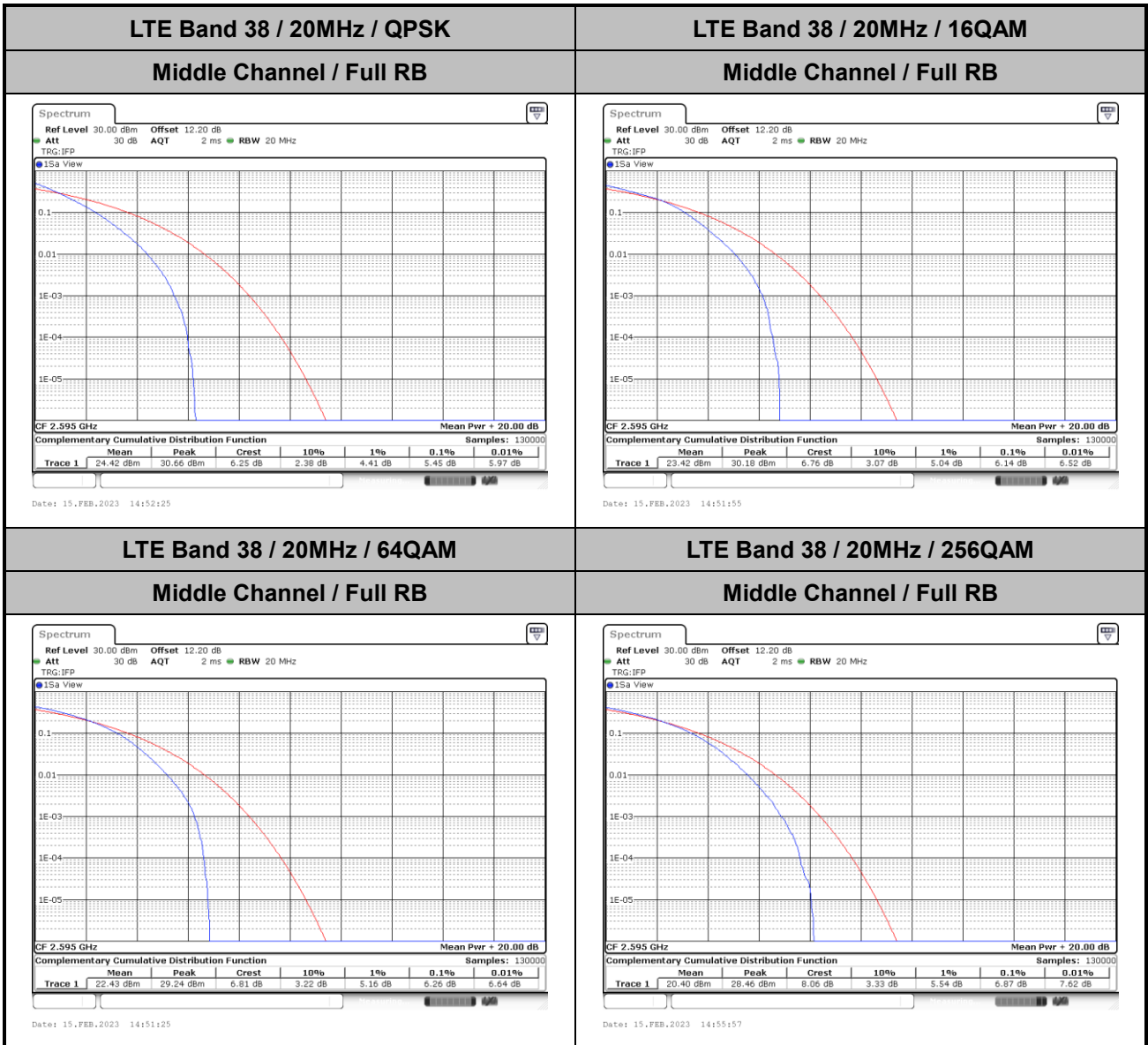




# LTE Band 38

## 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	5.45	6.14	6.26	6.87	<b>PASS</b>





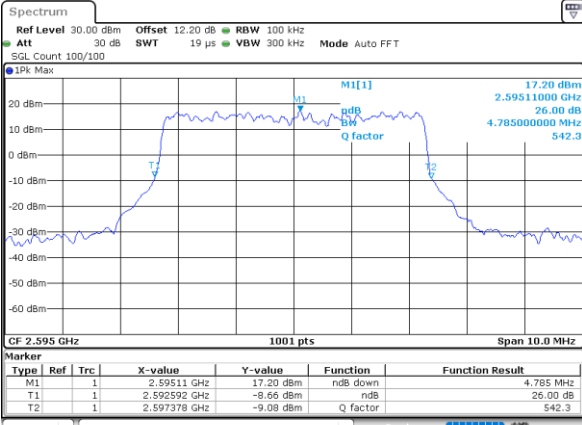
**26dB Bandwidth**

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	-	-	-	-	4.79	4.75	9.67	10.43	14.69	14.54	18.98	19.18
Mode	LTE Band 38 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	5.43	4.88	9.95	10.03	14.66	14.36	18.78	18.74



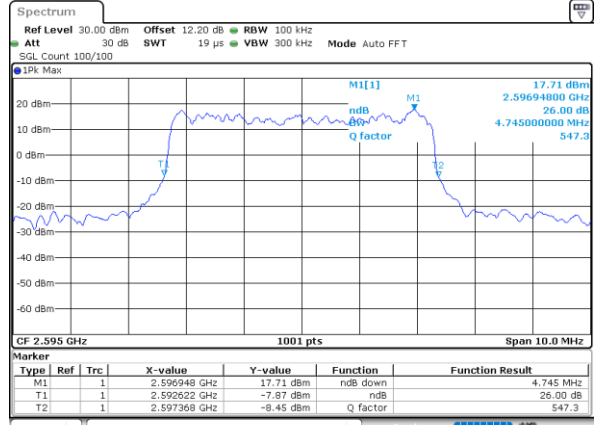
LTE Band 38

Middle Channel / 5MHz / QPSK



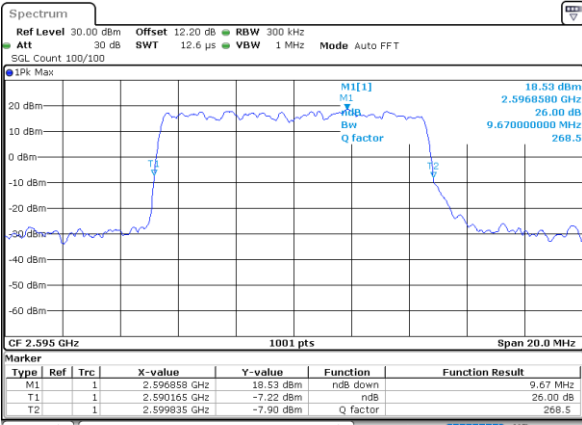
Date: 15.FEB.2023 14:41:18

Middle Channel / 5MHz / 16QAM



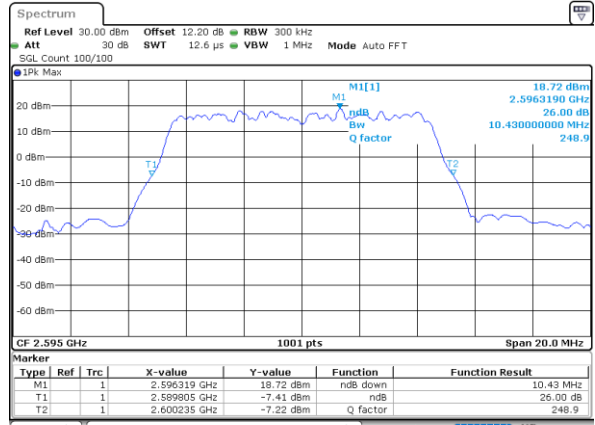
Date: 15.FEB.2023 14:41:47

Middle Channel / 10MHz / QPSK



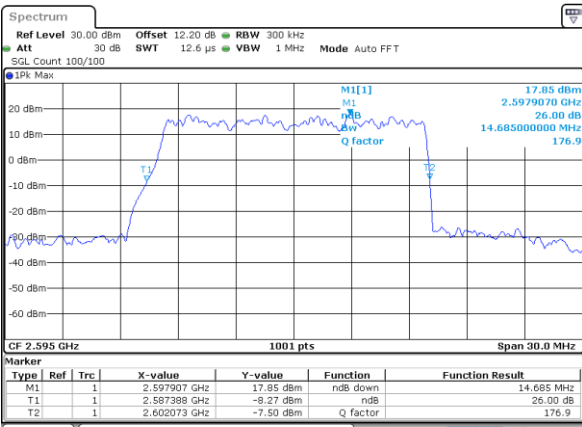
Date: 15.FEB.2023 14:43:19

Middle Channel / 10MHz / 16QAM



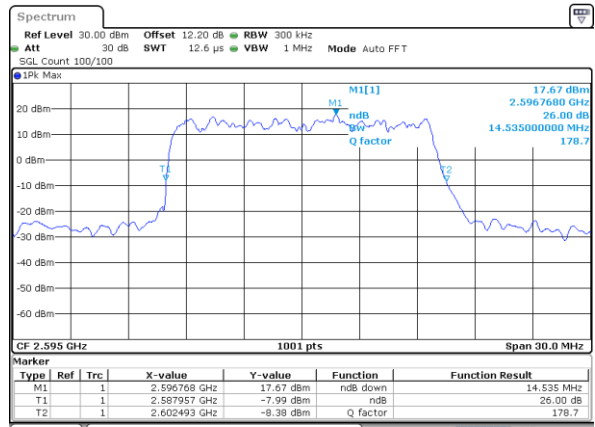
Date: 15.FEB.2023 14:43:48

Middle Channel / 15MHz / QPSK



Date: 15.FEB.2023 14:45:22

Middle Channel / 15MHz / 16QAM

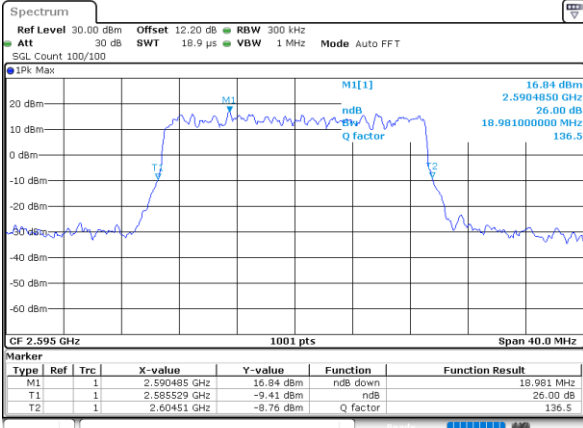


Date: 15.FEB.2023 14:45:51



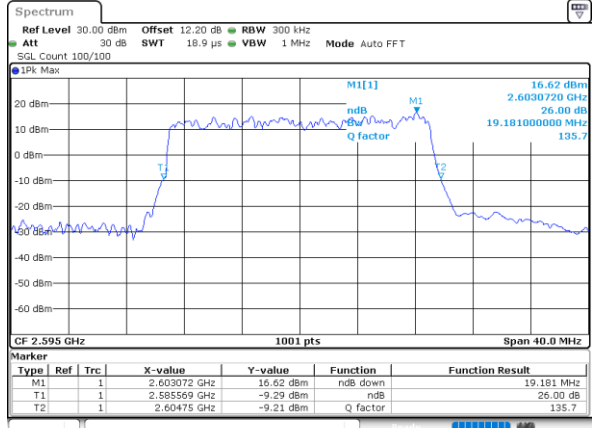
LTE Band 38

Middle Channel / 20MHz / QPSK



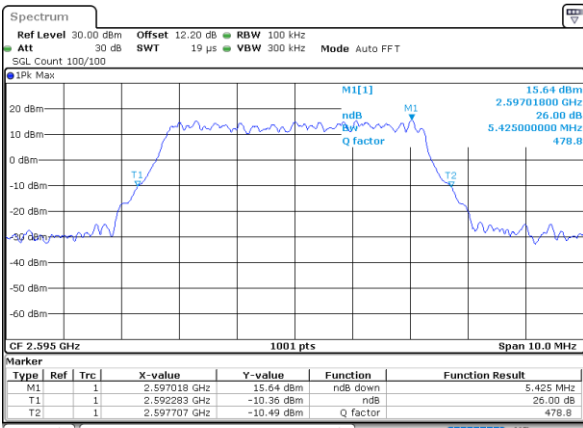
Date: 15.FEB.2023 14:47:22

Middle Channel / 20MHz / 16QAM



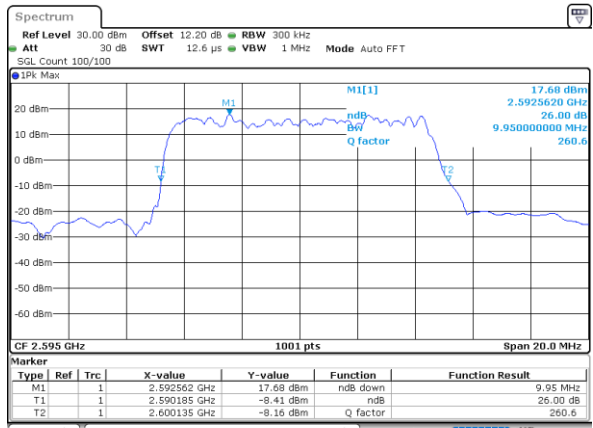
Date: 15.FEB.2023 14:47:51

Middle Channel / 5MHz / 64QAM



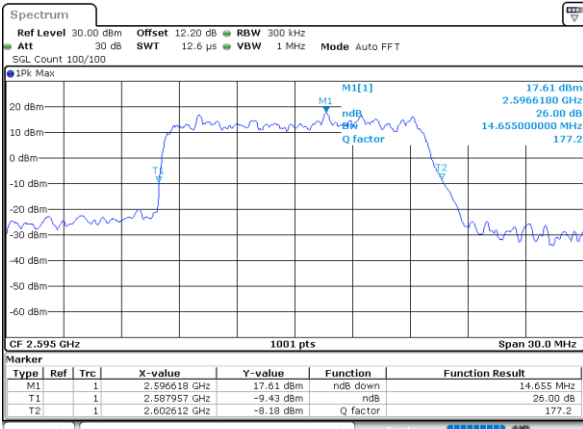
Date: 15.FEB.2023 14:48:41

Middle Channel / 10MHz / 64QAM



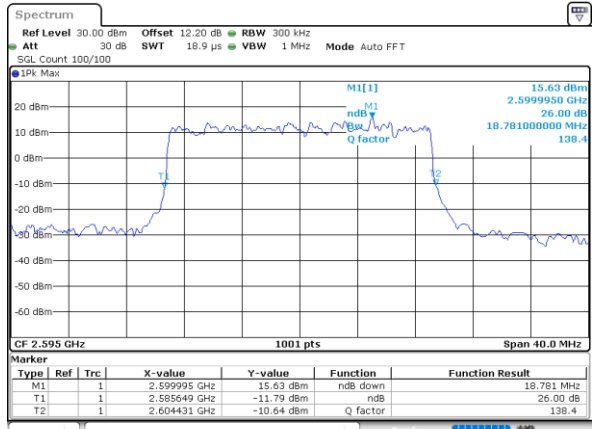
Date: 15.FEB.2023 14:49:30

Middle Channel / 15MHz / 64QAM



Date: 15.FEB.2023 14:50:21

Middle Channel / 20MHz / 64QAM

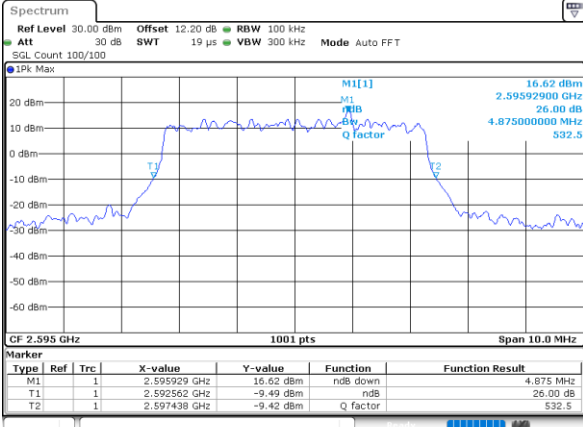


Date: 15.FEB.2023 14:51:10



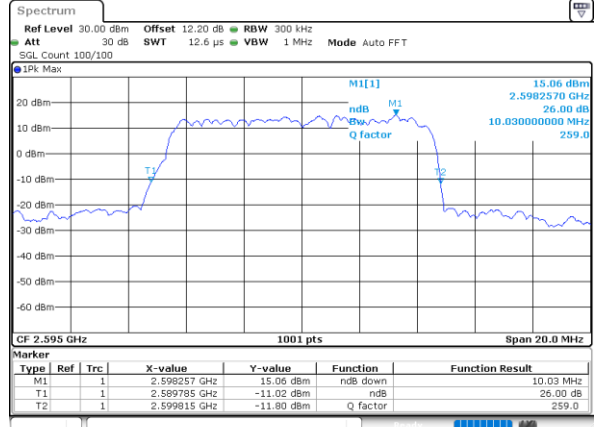
LTE Band 38

Middle Channel / 5MHz / 256QAM



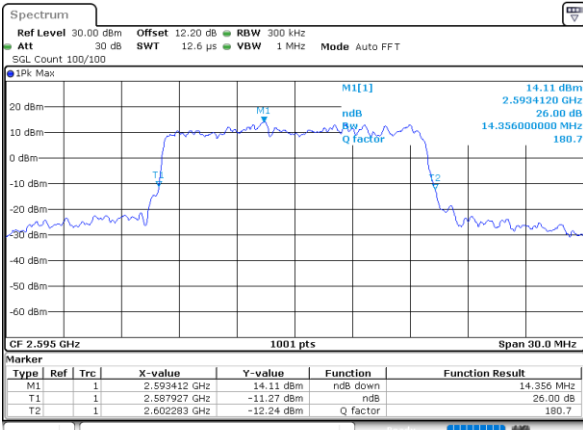
Date: 15.FEB.2023 14:53:14

Middle Channel / 10MHz / 256QAM



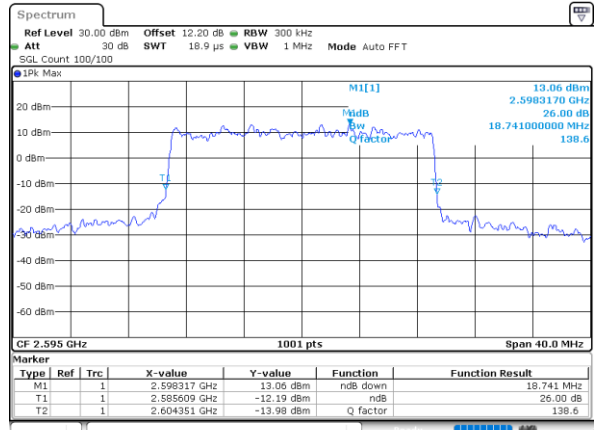
Date: 15.FEB.2023 14:54:03

Middle Channel / 15MHz / 256QAM



Date: 15.FEB.2023 14:54:51

Middle Channel / 20MHz / 256QAM



Date: 15.FEB.2023 14:55:42



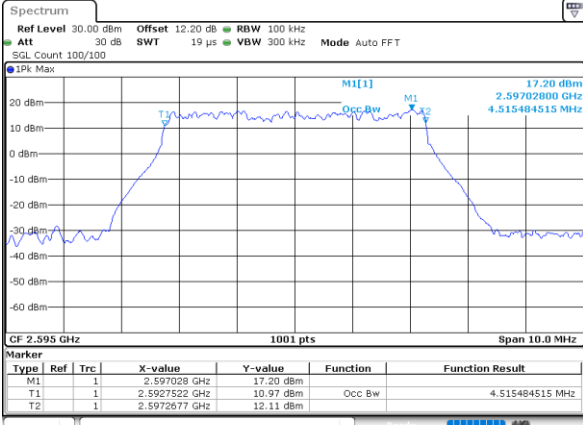
**Occupied Bandwidth**

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	-	-	-	-	4.52	4.51	8.97	9.01	13.46	13.40	17.90	17.90
Mode	LTE Band 38 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.52	4.46	9.01	9.05	13.52	13.49	17.94	17.90



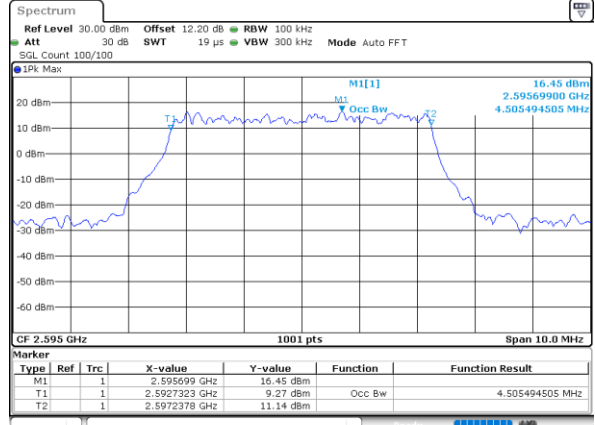
LTE Band 38

Middle Channel / 5MHz / QPSK



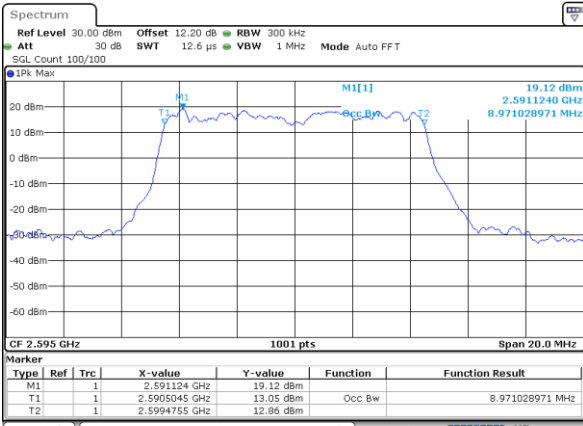
Date: 15.FEB.2023 14:29:41

Middle Channel / 5MHz / 16QAM



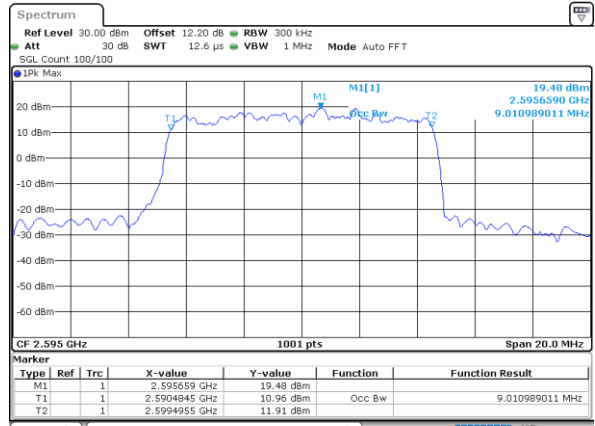
Date: 15.FEB.2023 14:30:10

Middle Channel / 10MHz / QPSK



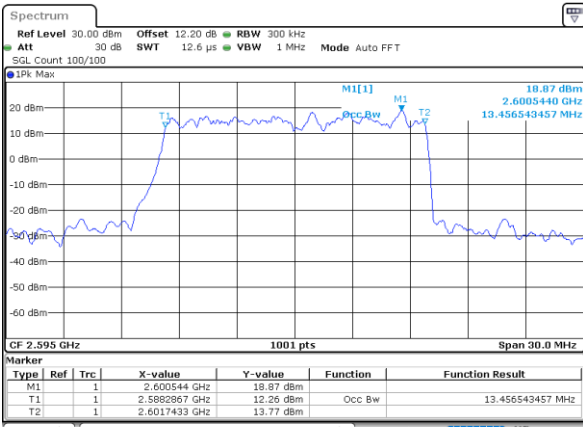
Date: 15.FEB.2023 14:42:21

Middle Channel / 10MHz / 16QAM



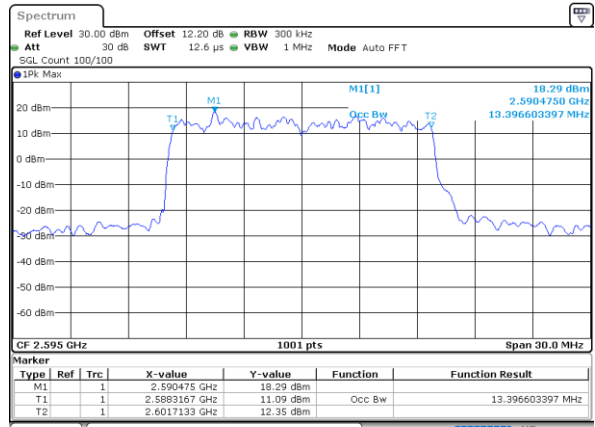
Date: 15.FEB.2023 14:42:50

Middle Channel / 15MHz / QPSK



Date: 15.FEB.2023 14:44:23

Middle Channel / 15MHz / 16QAM

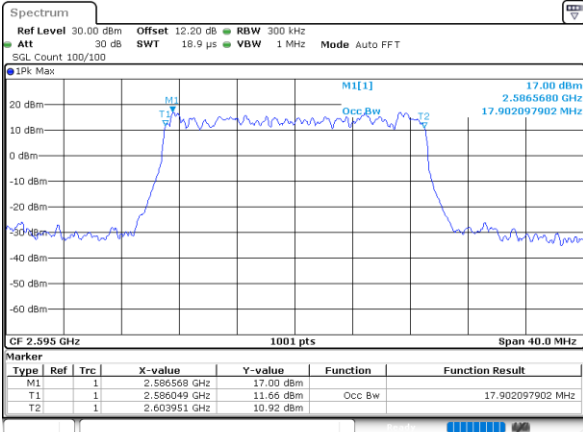


Date: 15.FEB.2023 14:44:52



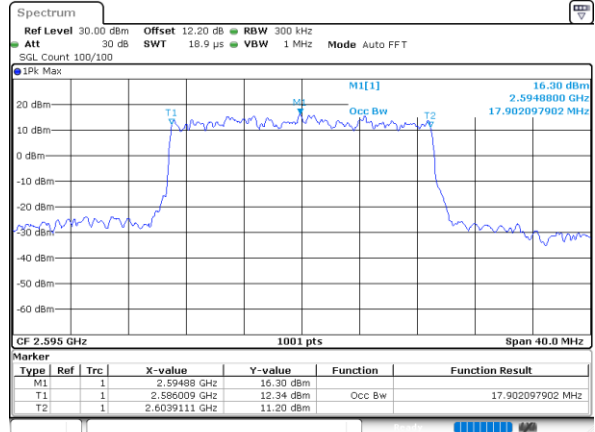
LTE Band 38

Middle Channel / 20MHz / QPSK



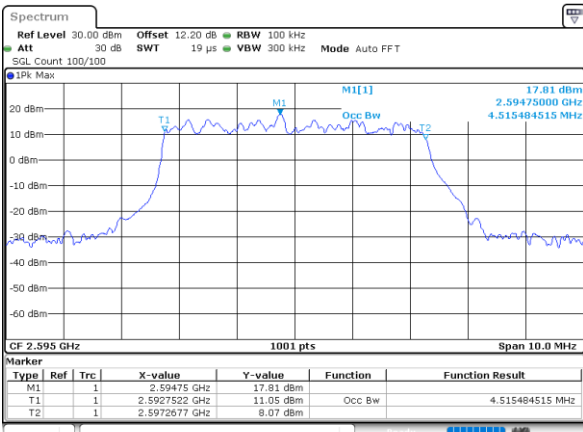
Date: 15.FEB.2023 14:46:25

Middle Channel / 20MHz / 16QAM



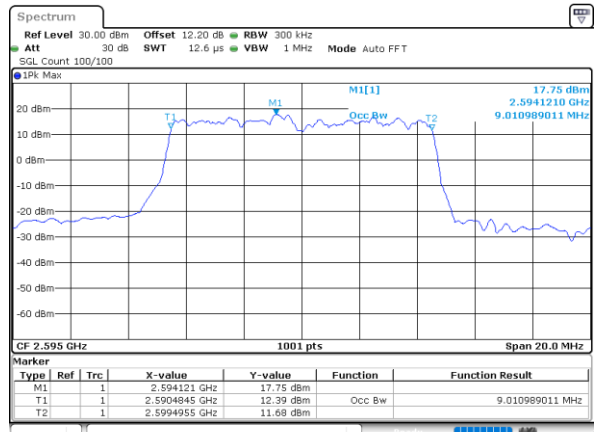
Date: 15.FEB.2023 14:46:54

Middle Channel / 5MHz / 64QAM



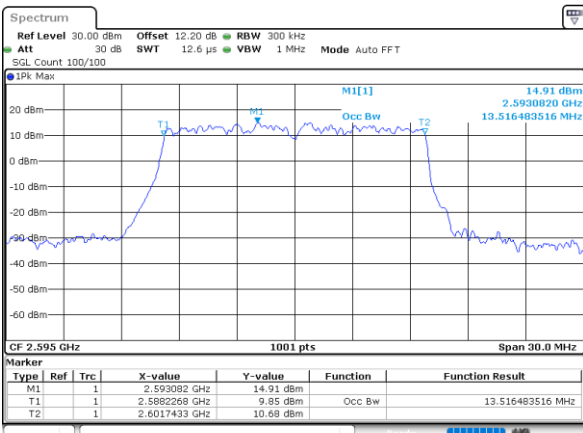
Date: 15.FEB.2023 14:48:27

Middle Channel / 10MHz / 64QAM



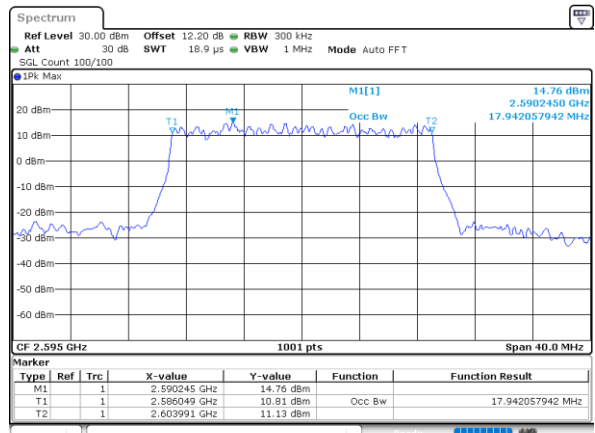
Date: 15.FEB.2023 14:49:16

Middle Channel / 15MHz / 64QAM



Date: 15.FEB.2023 14:50:06

Middle Channel / 20MHz / 64QAM



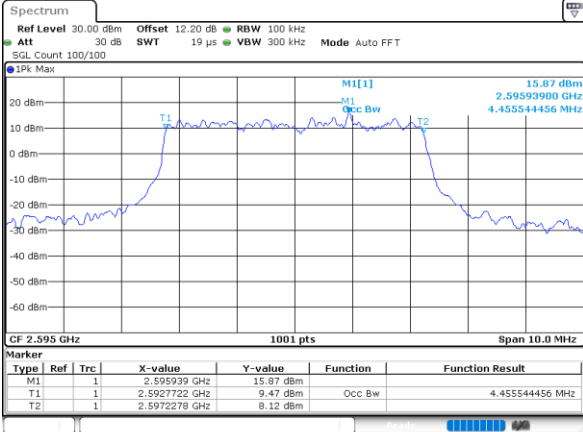
Date: 15.FEB.2023 14:50:56





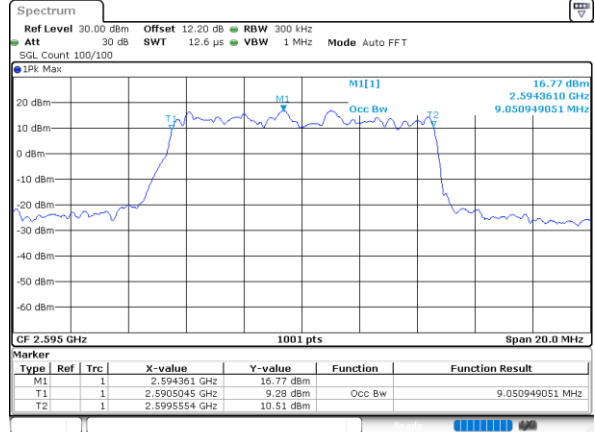
LTE Band 38

Middle Channel / 5MHz / 256QAM



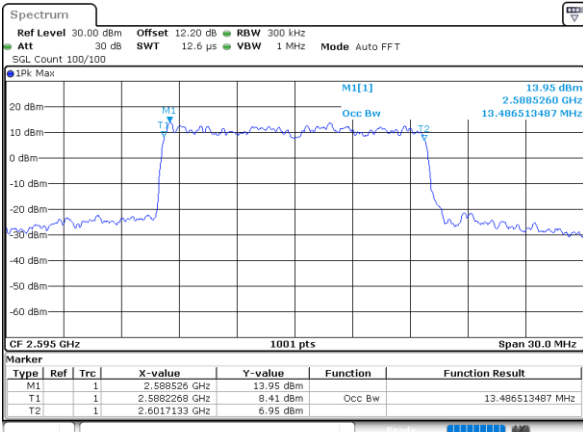
Date: 15.FEB.2023 14:53:00

Middle Channel / 10MHz / 256QAM



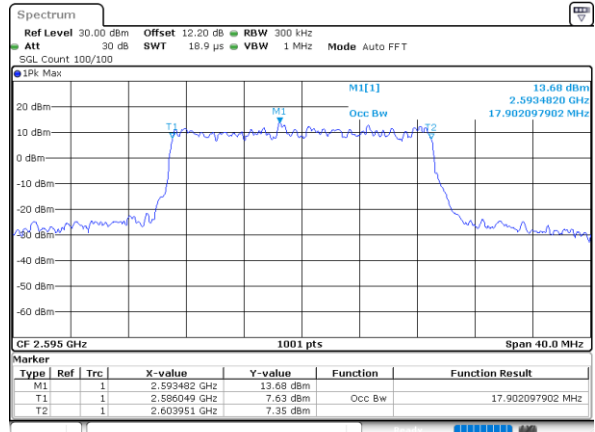
Date: 15.FEB.2023 14:53:49

Middle Channel / 15MHz / 256QAM



Date: 15.FEB.2023 14:54:37

Middle Channel / 20MHz / 256QAM



Date: 15.FEB.2023 14:55:28

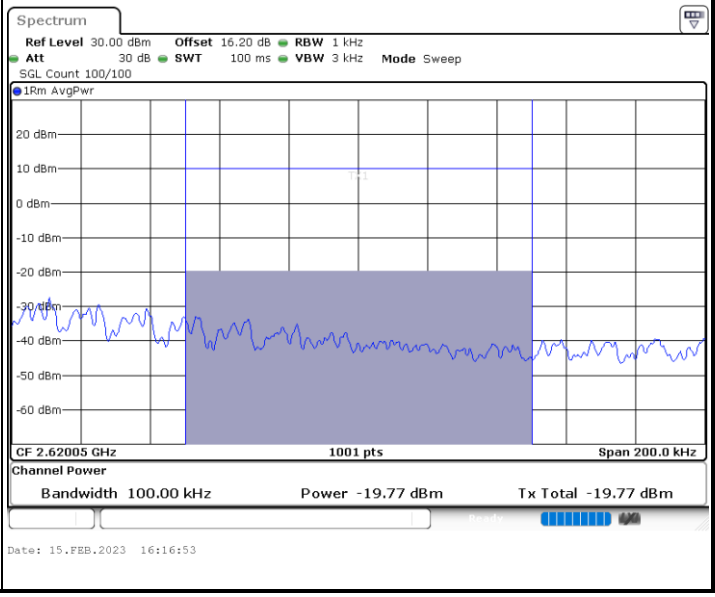
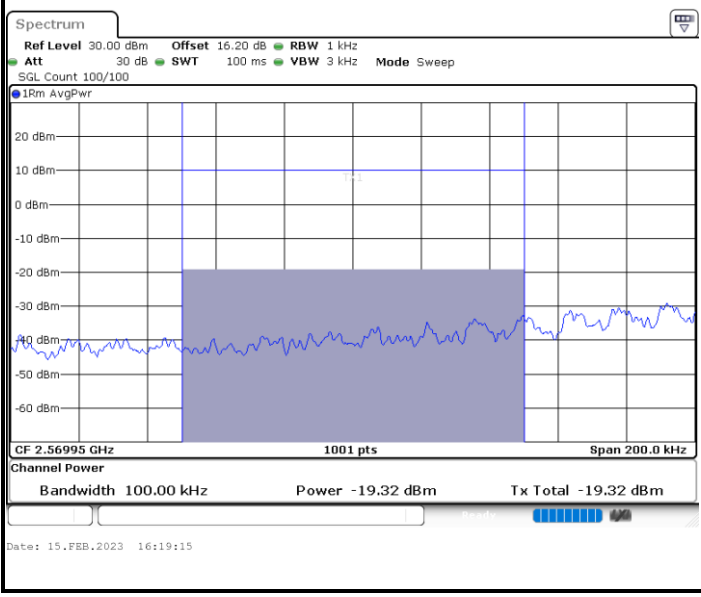
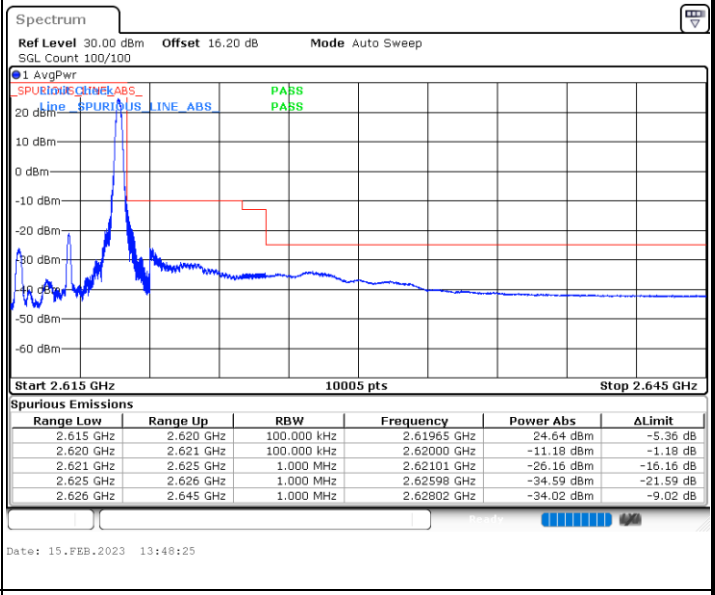
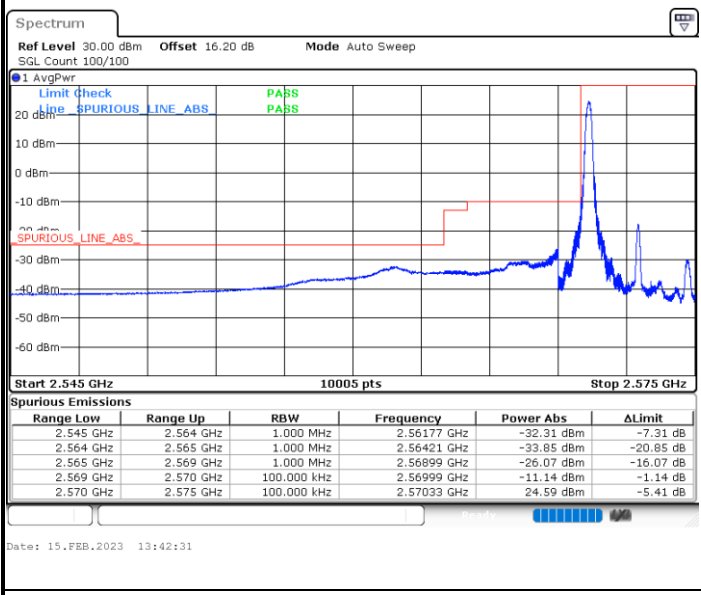


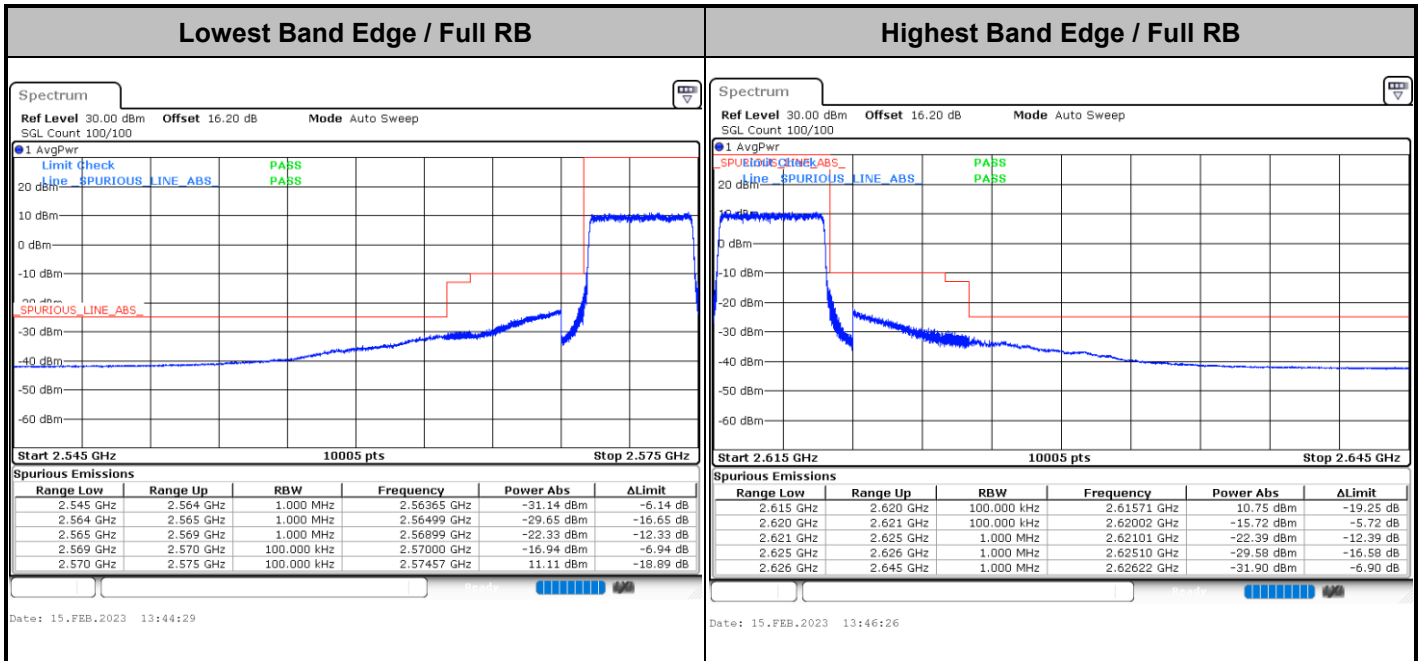
# Conducted Band Edge

## LTE Band 38 / 5MHz / QPSK

### Lowest Band Edge / 1 RB

### Highest Band Edge / 1 RB

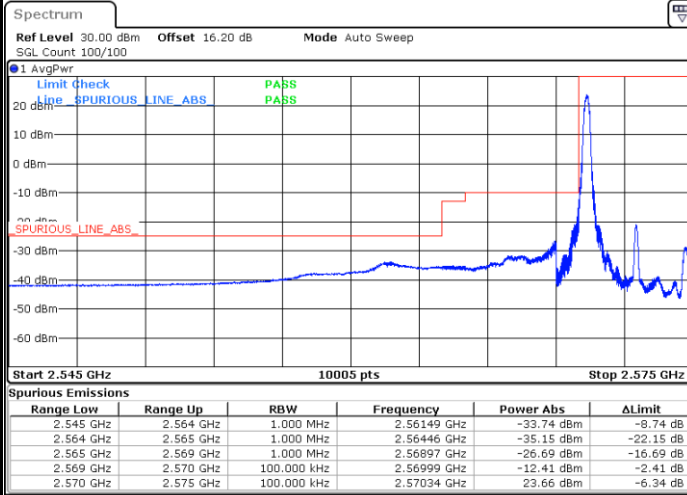






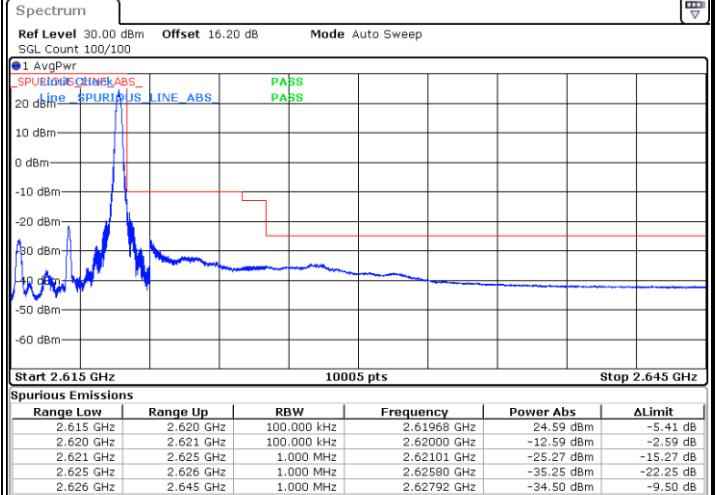
LTE Band 38 / 5MHz / 16QAM

Lowest Band Edge / 1RB



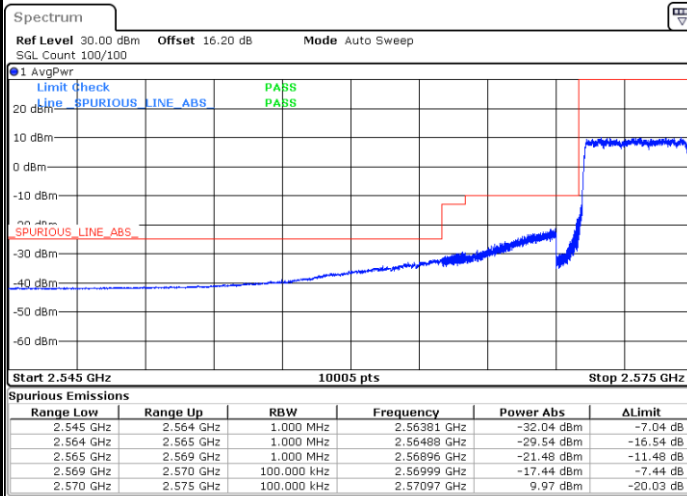
Date: 15.FEB.2023 13:43:29

Highest Band Edge / 1 RB



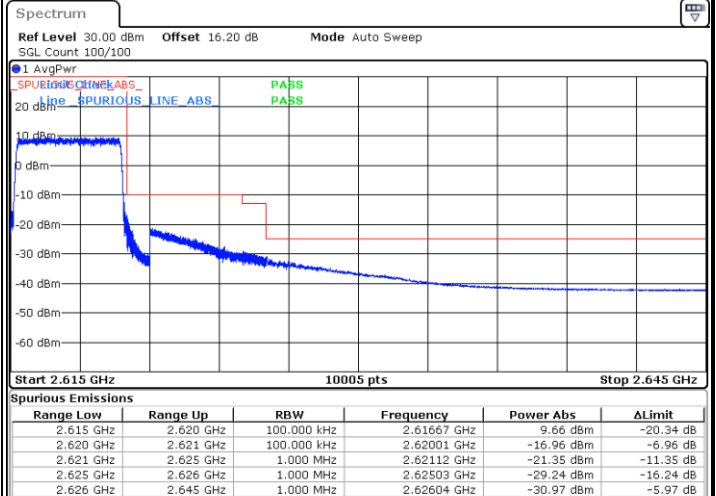
Date: 15.FEB.2023 13:49:24

Lowest Band Edge / Full RB



Date: 15.FEB.2023 13:45:28

Highest Band Edge / Full RB

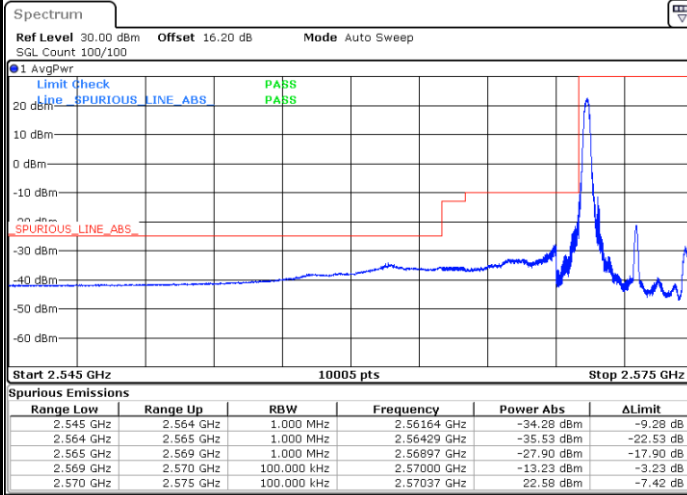


Date: 15.FEB.2023 13:47:25



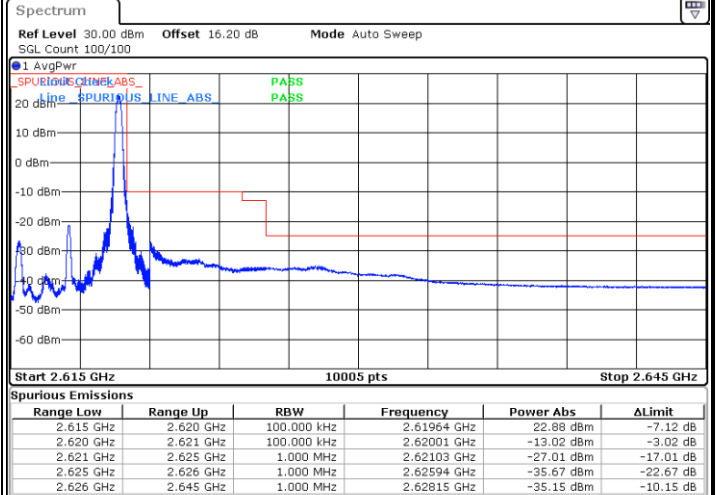
LTE Band 38 / 5MHz / 64QAM

Lowest Band Edge / 1RB



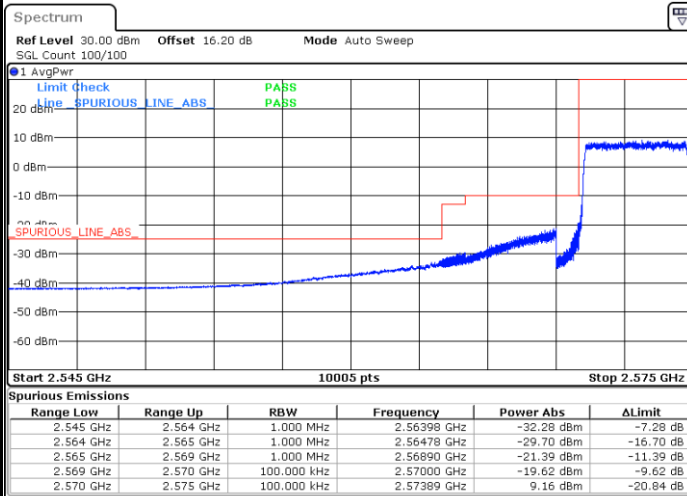
Date: 15.FEB.2023 13:50:23

Highest Band Edge / 1 RB



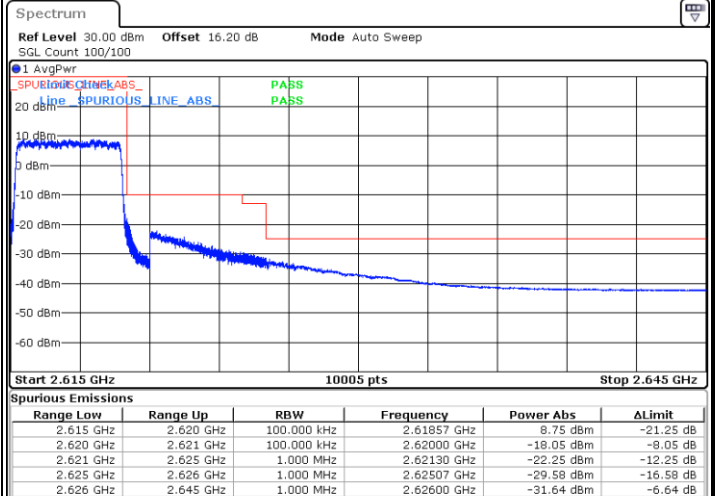
Date: 15.FEB.2023 13:53:18

Lowest Band Edge / Full RB



Date: 15.FEB.2023 13:51:21

Highest Band Edge / Full RB

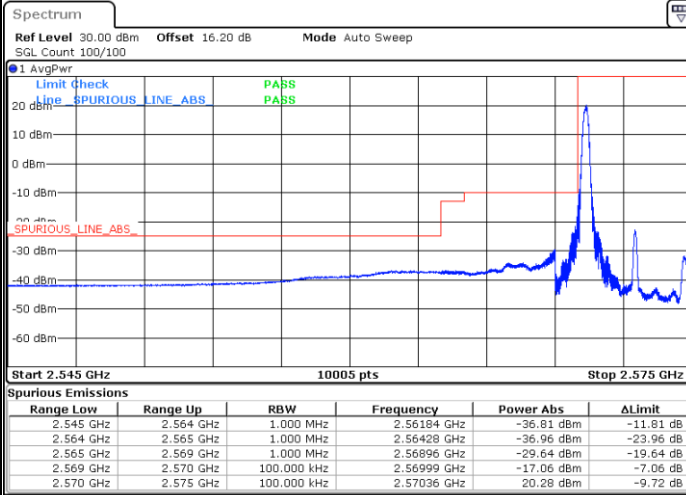


Date: 15.FEB.2023 13:52:20



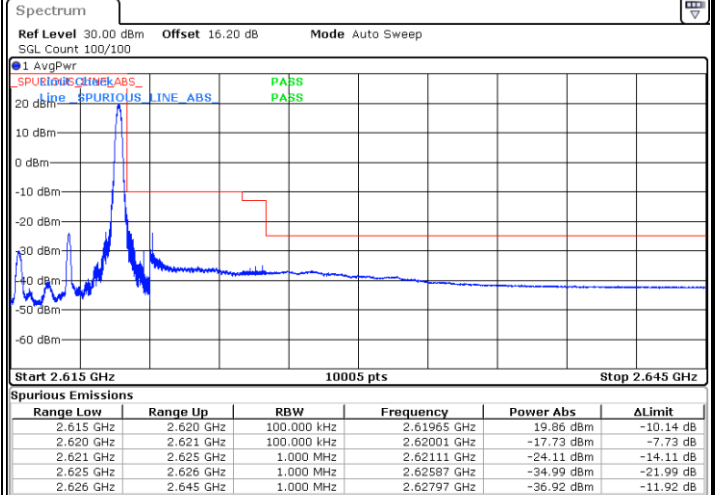
LTE Band 38 / 5MHz / 256QAM

Lowest Band Edge / 1RB



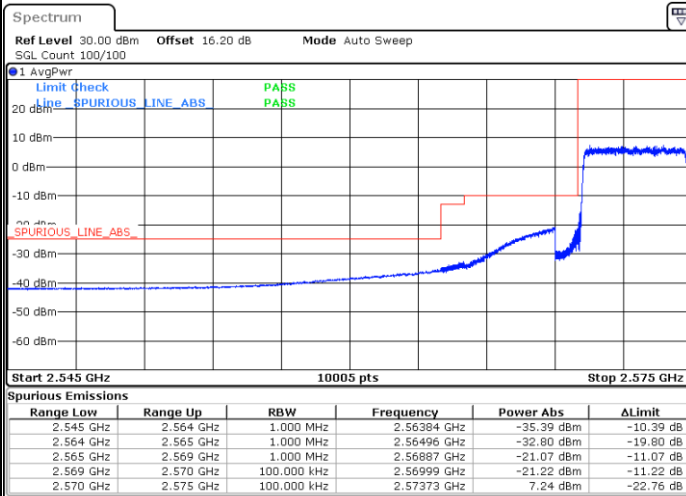
Date: 15.FEB.2023 14:20:03

Highest Band Edge / 1 RB



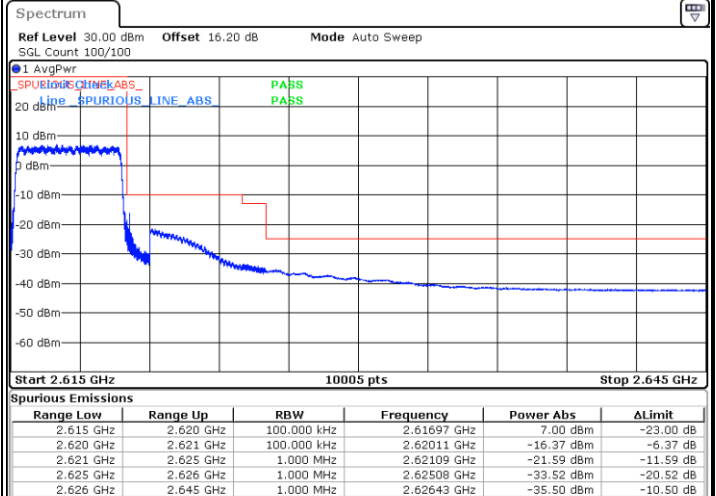
Date: 15.FEB.2023 14:22:59

Lowest Band Edge / Full RB



Date: 15.FEB.2023 14:21:02

Highest Band Edge / Full RB



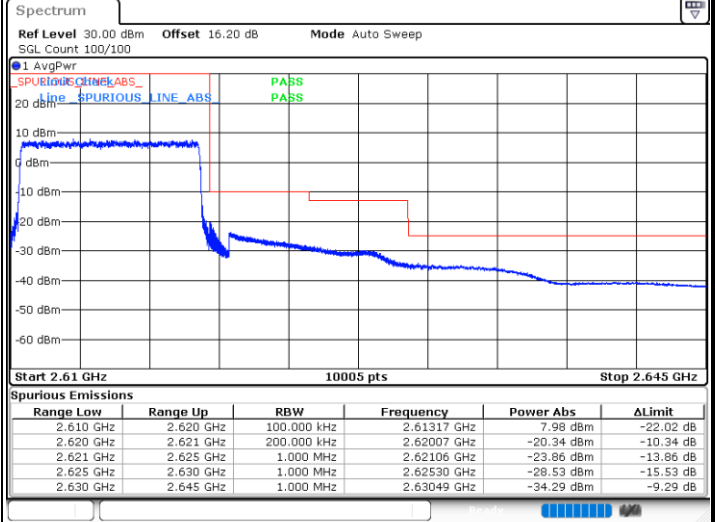
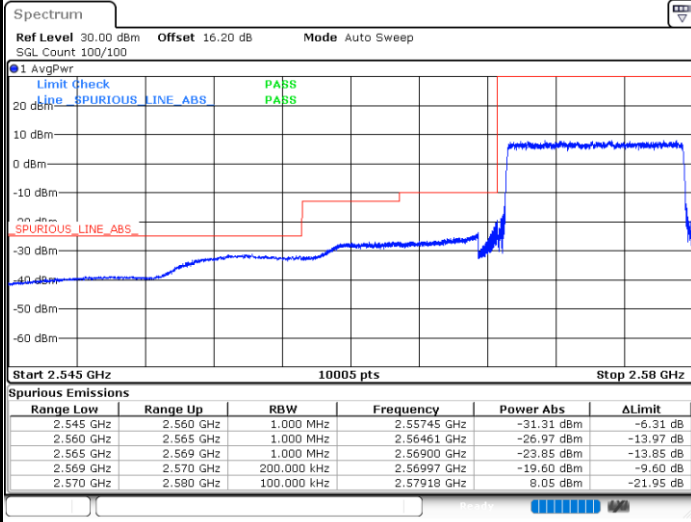
Date: 15.FEB.2023 14:22:01



LTE Band 38 / 10MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



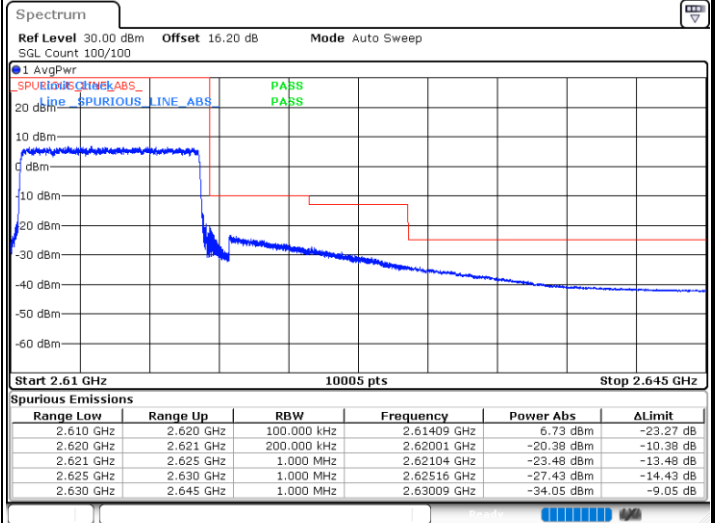
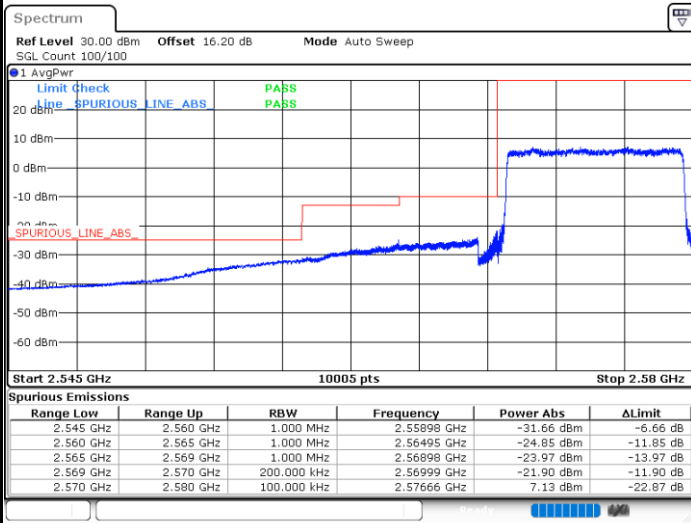
Date: 15.FEB.2023 13:58:14

Date: 15.FEB.2023 14:00:12

LTE Band 38 / 10MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2023 13:59:14

Date: 15.FEB.2023 14:01:11