

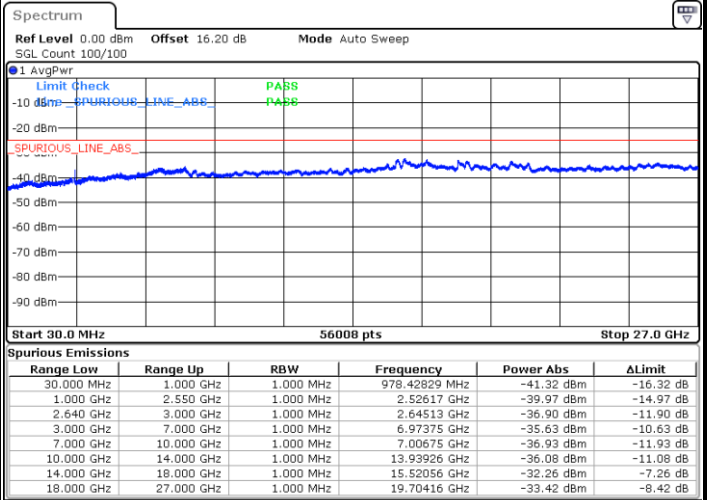
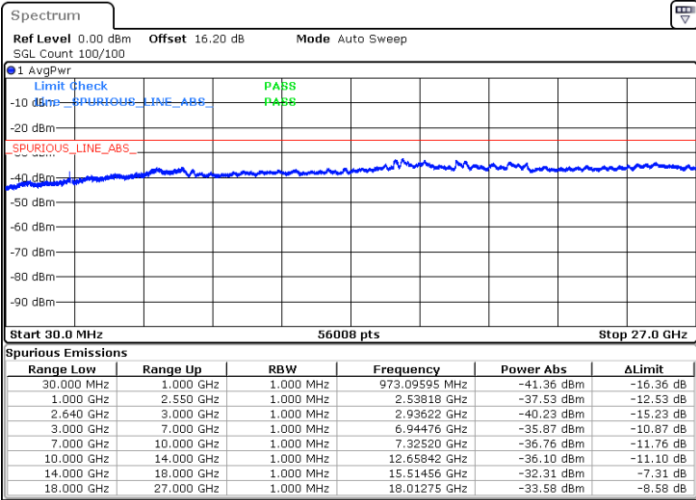


# Conducted Spurious Emission

## LTE Band 38 / 5MHz

### Lowest Channel / QPSK

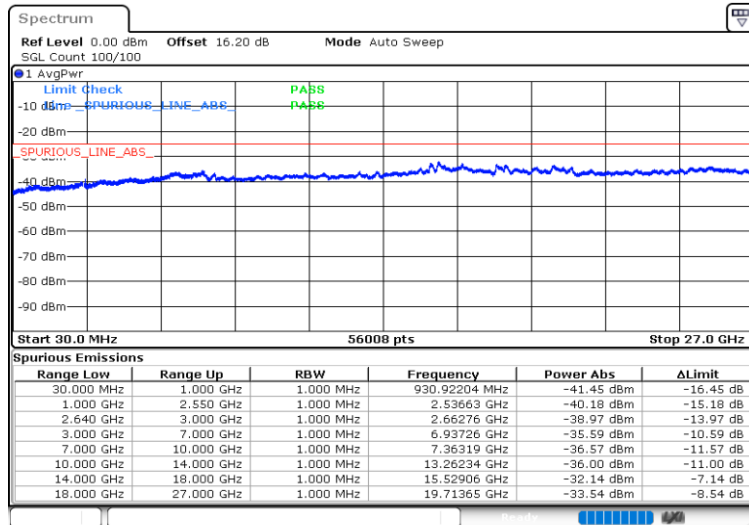
### Middle Channel / QPSK



Date: 27.DEC.2023 11:25:09

Date: 27.DEC.2023 11:26:13

### Highest Channel / QPSK



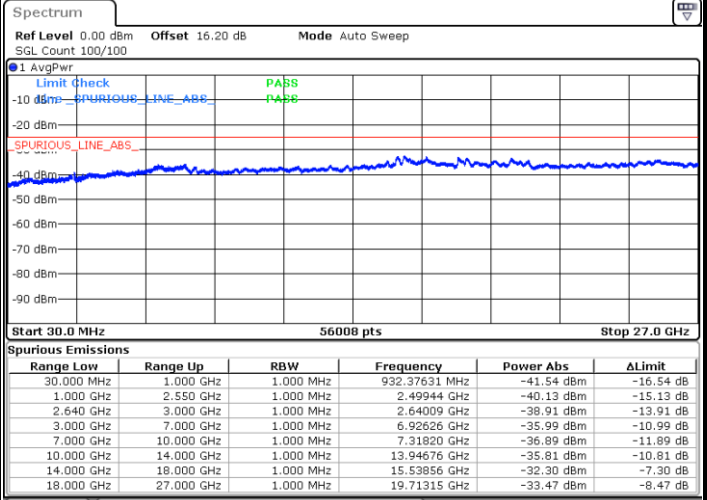
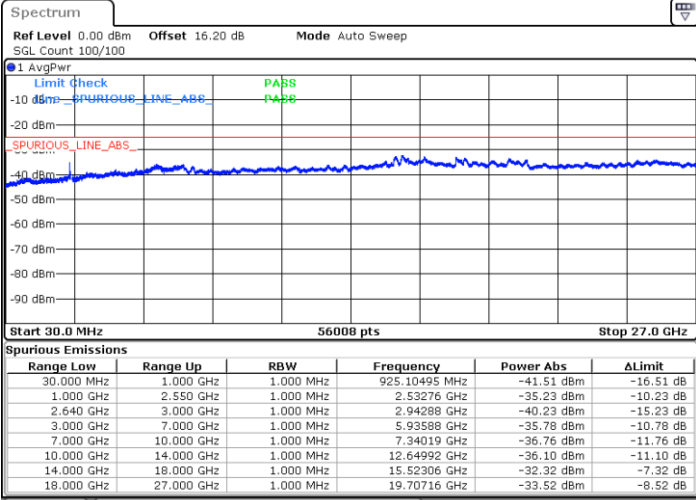
Date: 27.DEC.2023 11:27:17



LTE Band 38 / 10MHz

Lowest Channel / QPSK

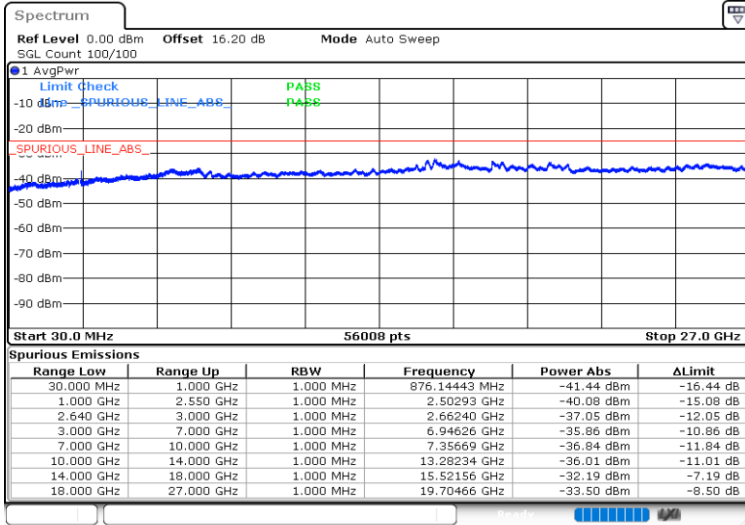
Middle Channel / QPSK



Date: 27.DEC.2023 12:16:45

Date: 27.DEC.2023 12:17:49

Highest Channel / QPSK



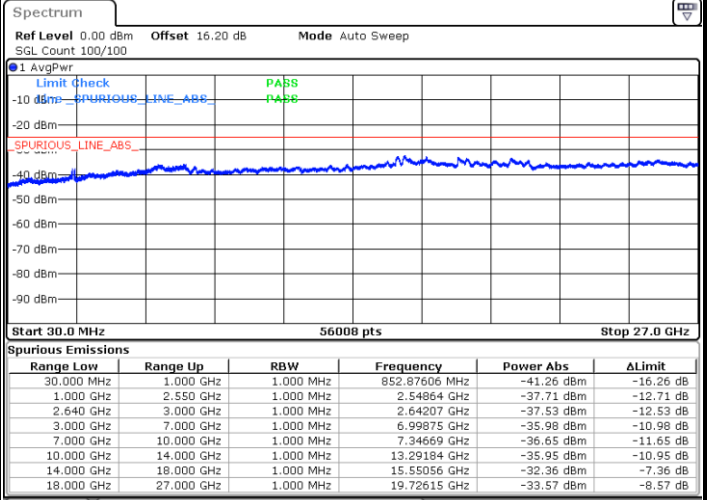
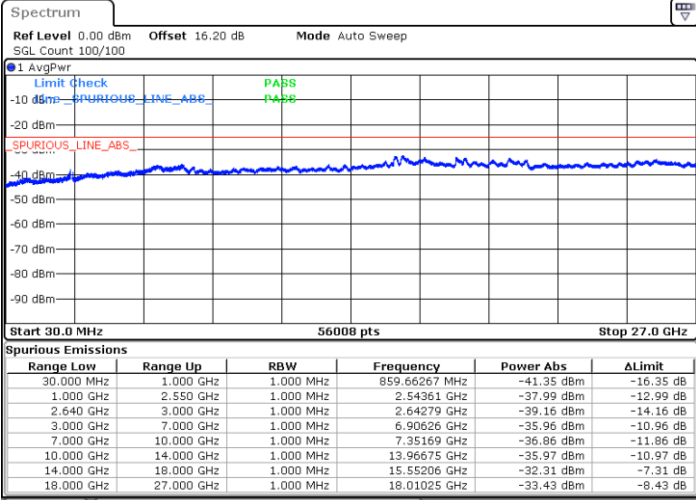
Date: 27.DEC.2023 12:18:53



LTE Band 38 / 15MHz

Lowest Channel / QPSK

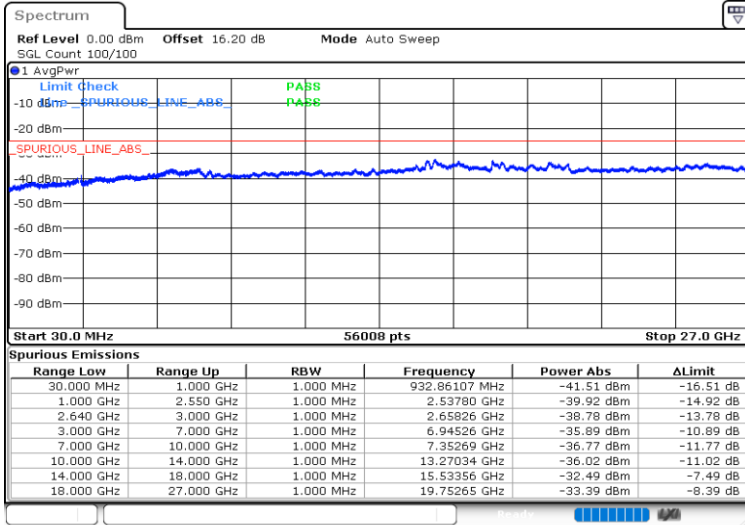
Middle Channel / QPSK



Date: 27.DEC.2023 12:19:57

Date: 27.DEC.2023 12:21:01

Highest Channel / QPSK



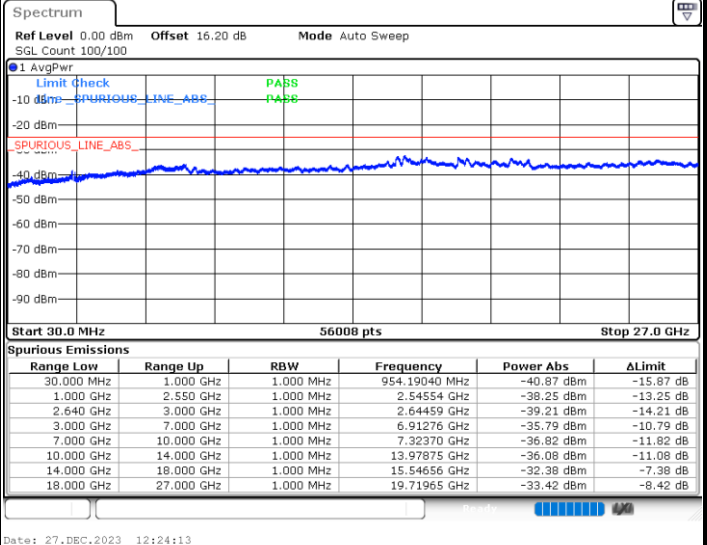
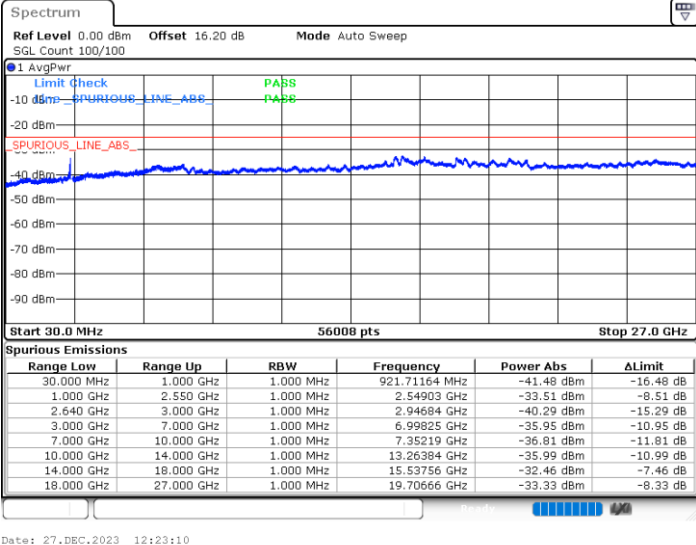
Date: 27.DEC.2023 12:22:05



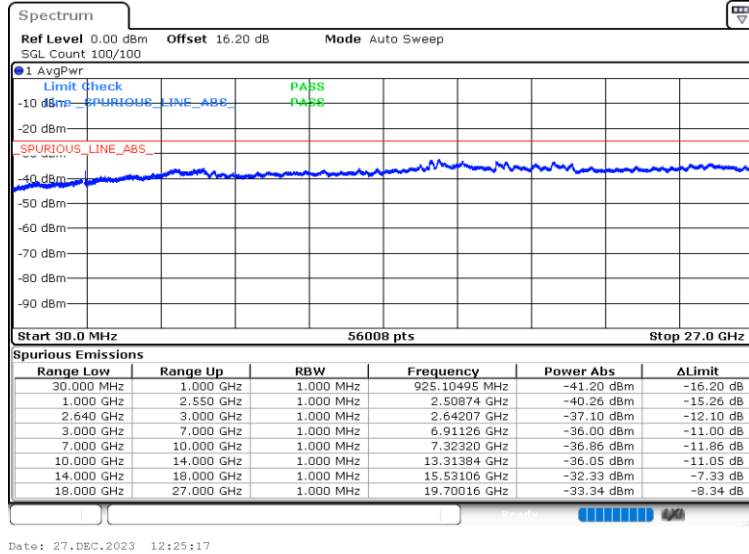
LTE Band 38 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





**Frequency Stability**

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0043	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0042	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0043	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0039	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

**Note:**

1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 38C

### 26dB Bandwidth

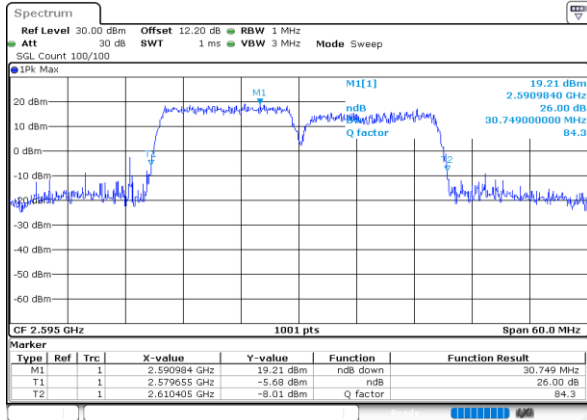
Mode	LTE Band 38C : 26dB BW(MHz)			
	QPSK	16QAM	64QAM	256QAM
BW	15MHz+15MHz	15MHz+15MHz	15MHz+15MHz	15MHz+15MHz
Middle CH	30.74	30.56	30.56	30.74
BW	20MHz+20MHz	20MHz+20MHz	20MHz+20MHz	20MHz+20MHz
Middle CH	40.03	40.20	39.96	39.88



LTE Band 38C

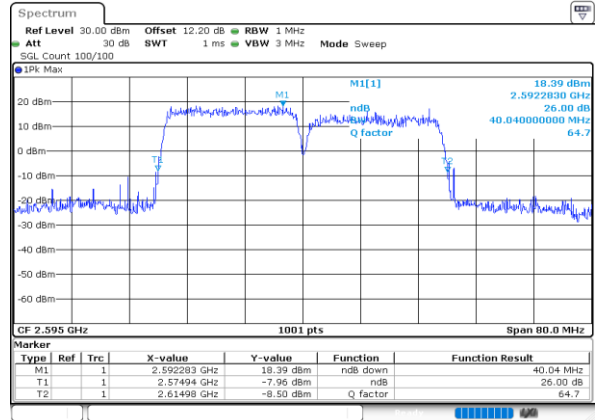
QPSK

Middle Channel / 15MHz+15MHz



Date: 28 DEC 2023 02:04:19

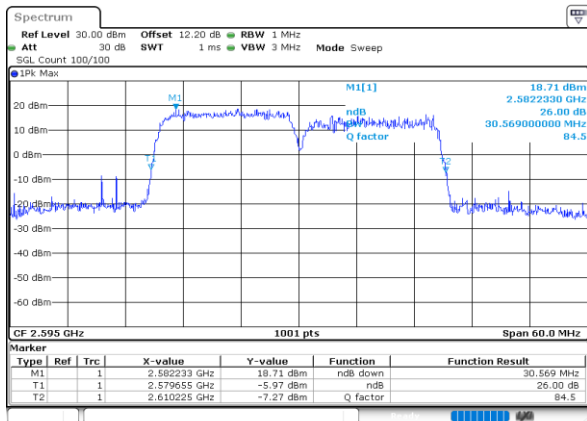
Middle Channel / 20MHz+20MHz



Date: 28 DEC 2023 02:15:12

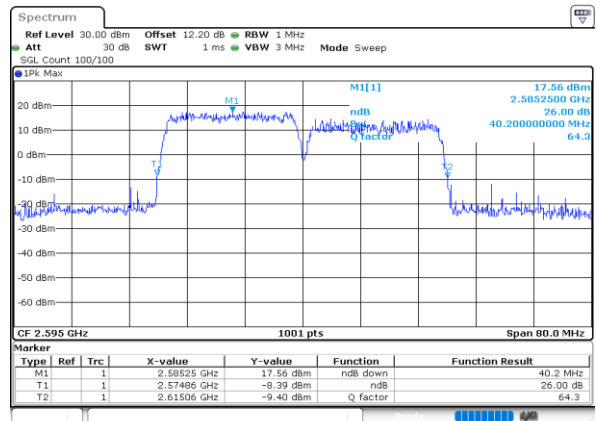
16QAM

Middle Channel / 15MHz+15MHz



Date: 28 DEC 2023 02:03:54

Middle Channel / 20MHz+20MHz



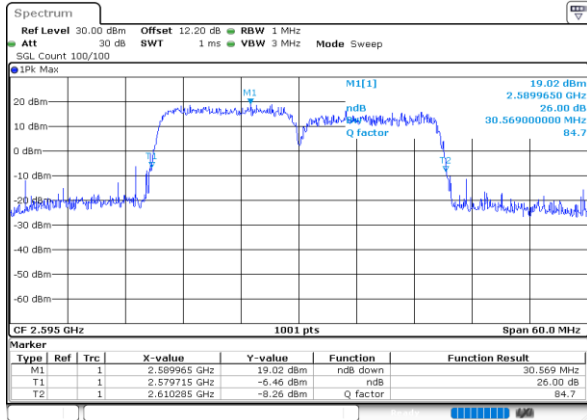
Date: 28 DEC 2023 02:14:46



LTE Band 38C

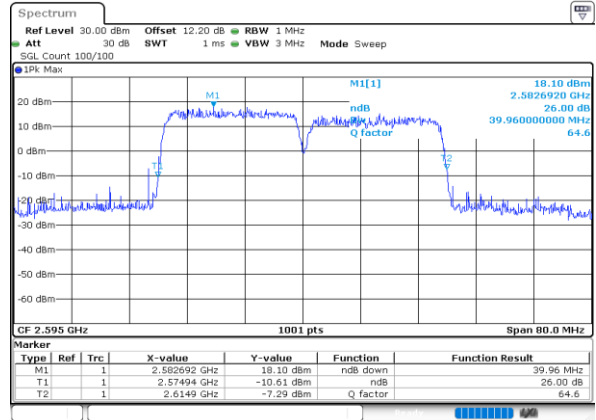
64QAM

Middle Channel / 15MHz+15MHz



Date: 28 DEC 2023 02:03:29

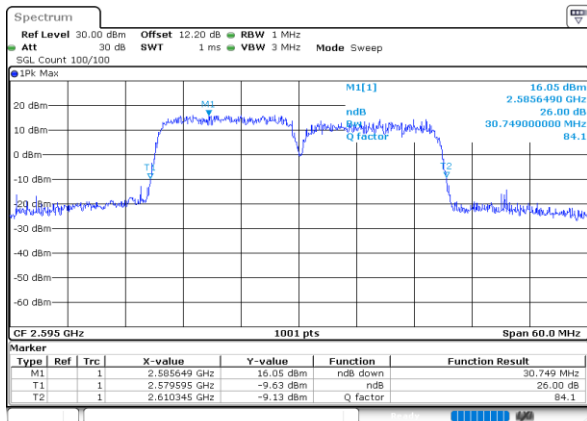
Middle Channel / 20MHz+20MHz



Date: 28 DEC 2023 02:14:21

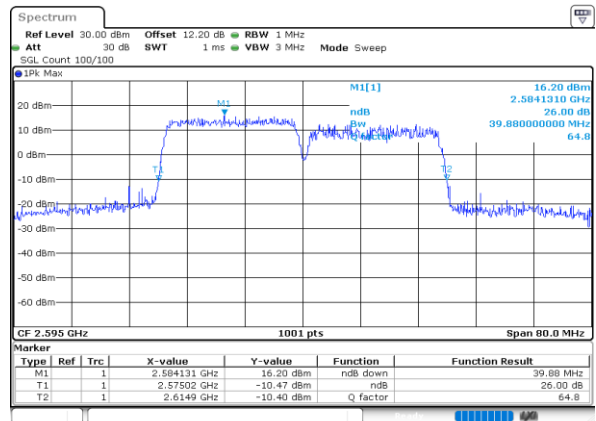
256QAM

Middle Channel / 15MHz+15MHz



Date: 28 DEC 2023 02:03:03

Middle Channel / 20MHz+20MHz



Date: 28 DEC 2023 02:13:56





### Occupied Bandwidth

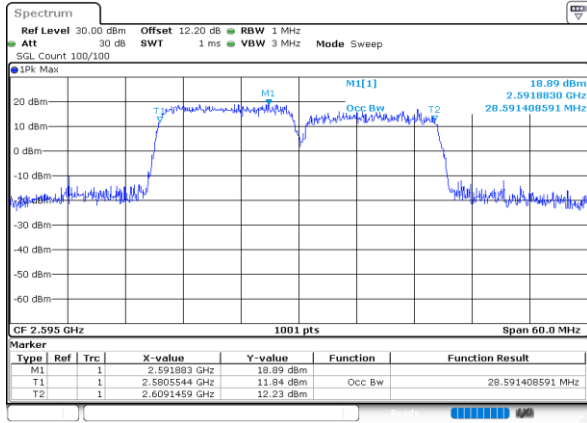
Mode	LTE Band 38C : 99%OBW(MHz)			
	QPSK	16QAM	64QAM	256QAM
BW	15MHz+15MHz	15MHz+15MHz	15MHz+15MHz	15MHz+15MHz
Middle CH	28.59	28.59	28.59	28.59
BW	20MHz+20MHz	20MHz+20MHz	20MHz+20MHz	20MHz+20MHz
Middle CH	37.56	37.64	37.64	37.80



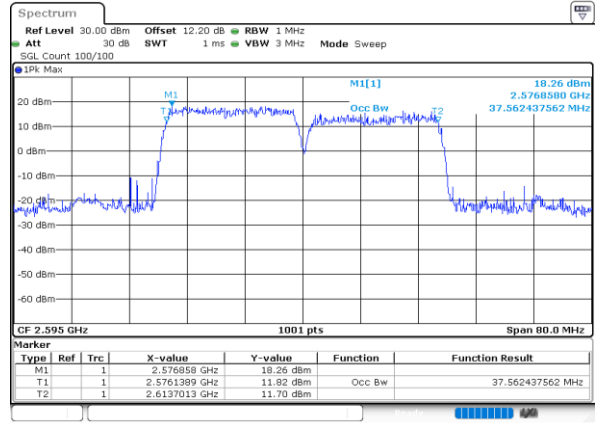
LTE Band 38C

QPSK

Middle Channel / 15MHz+15MHz

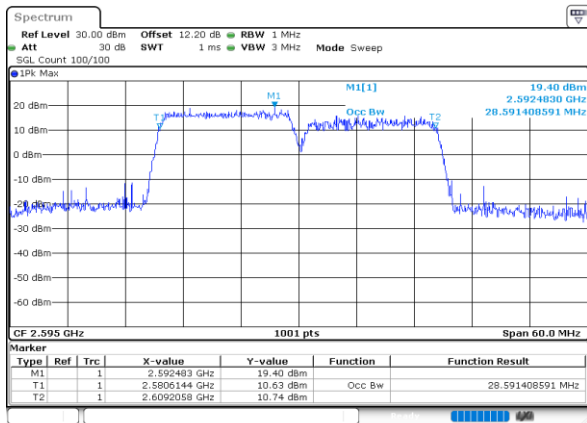


Middle Channel / 20MHz+20MHz

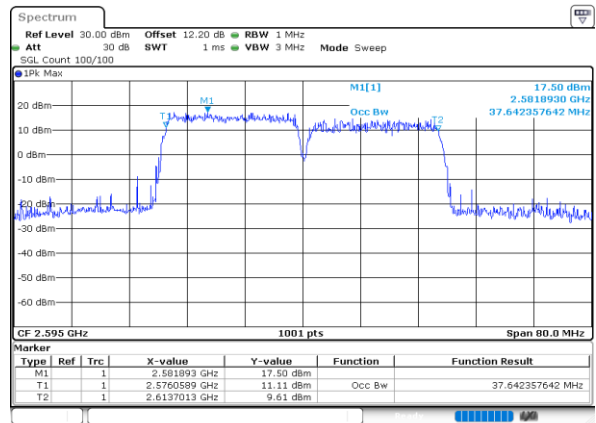


16QAM

Middle Channel / 15MHz+15MHz



Middle Channel / 20MHz+20MHz

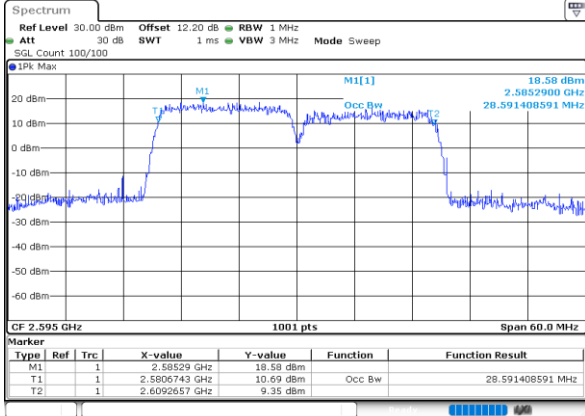




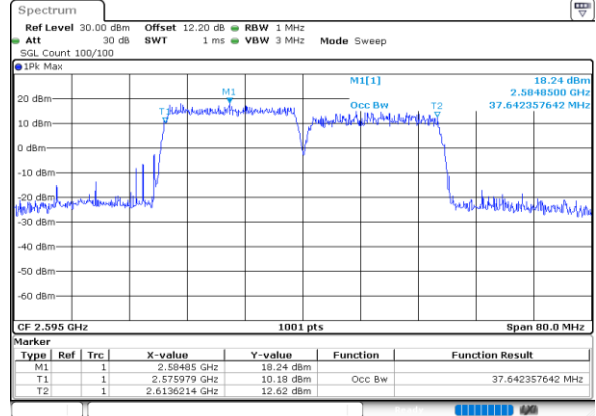
LTE Band 38C

64QAM

Middle Channel / 15MHz+15MHz

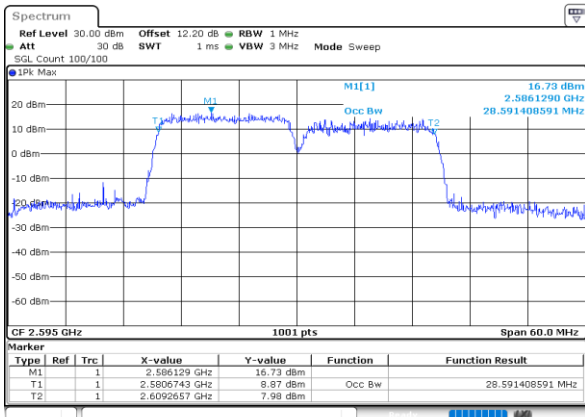


Middle Channel / 20MHz+20MHz

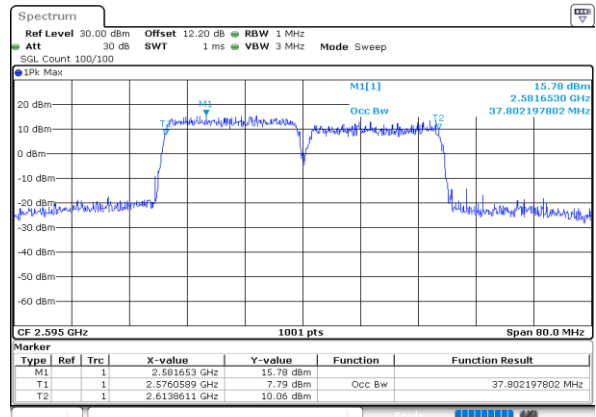


256QAM

Middle Channel / 15MHz+15MHz



Middle Channel / 20MHz+20MHz



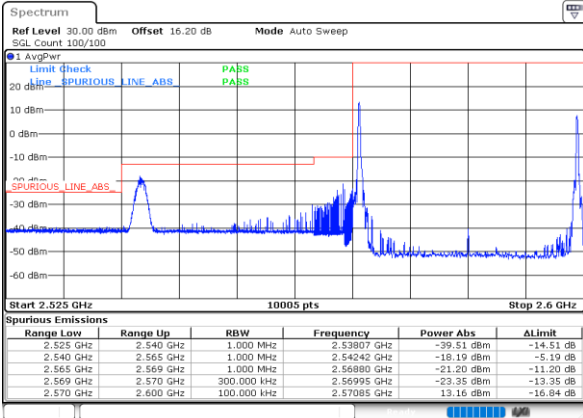


# Conducted Band Edge

## LTE Band 38C / 15MHz+15MHz

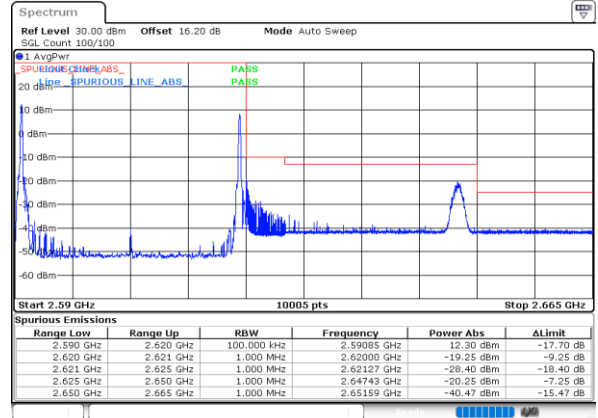
### QPSK

#### Lowest Band Edge / 1RB0 and 1RB74



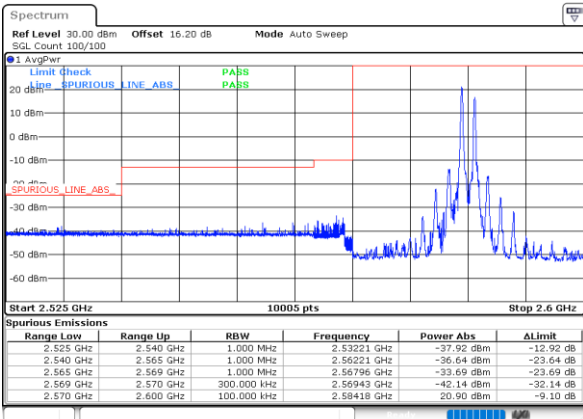
Date: 28 DEC. 2023 01:14:00

#### Highest Band Edge / 1RB0 and 1RB74



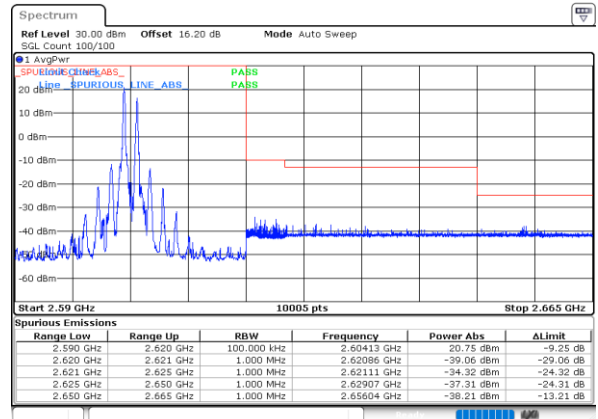
Date: 28 DEC. 2023 00:56:02

#### Lowest Band Edge / 1RB74 and 1RB0



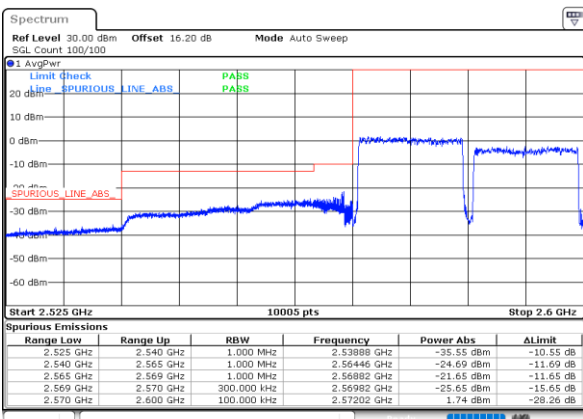
Date: 28 DEC. 2023 01:18:19

#### Highest Band Edge / 1RB74 and 1RB0



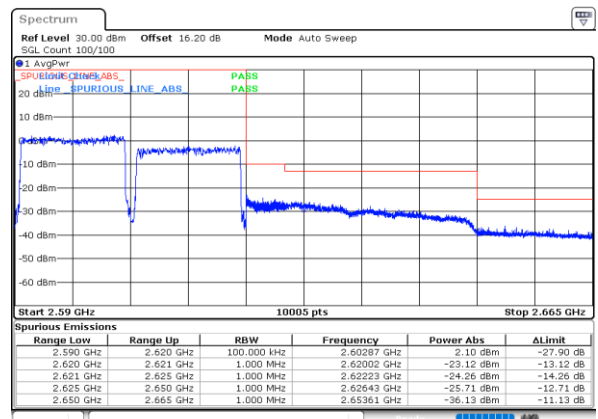
Date: 28 DEC. 2023 01:00:21

#### Lowest Band Edge / Full RB



Date: 28 DEC. 2023 01:09:40

#### Highest Band Edge / Full RB



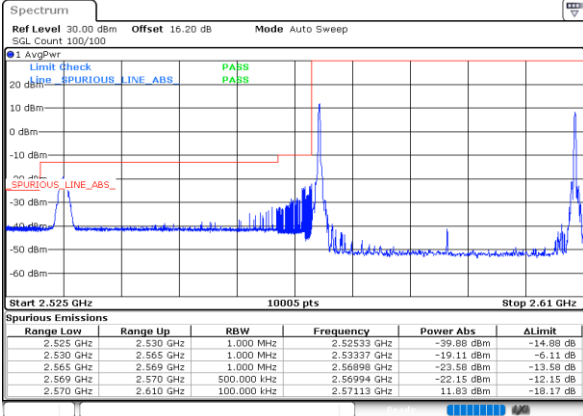
Date: 28 DEC. 2023 00:51:40



LTE Band 38C / 20MHz+20MHz

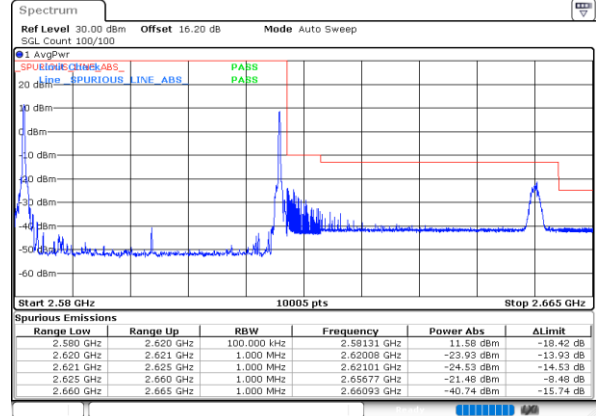
QPSK

Lowest Band Edge / 1RB0 and 1RB99



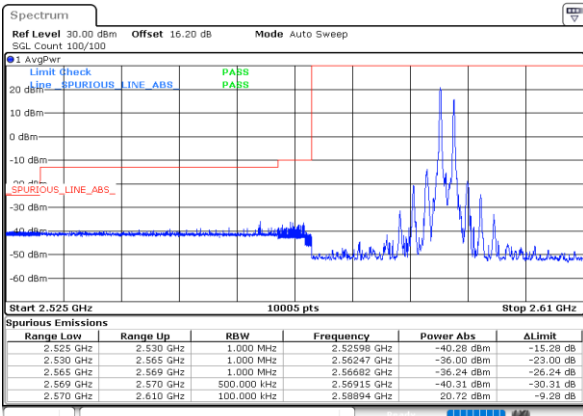
Date: 28. DEC. 2023 01:47:25

Highest Band Edge / 1RB0 and 1RB99



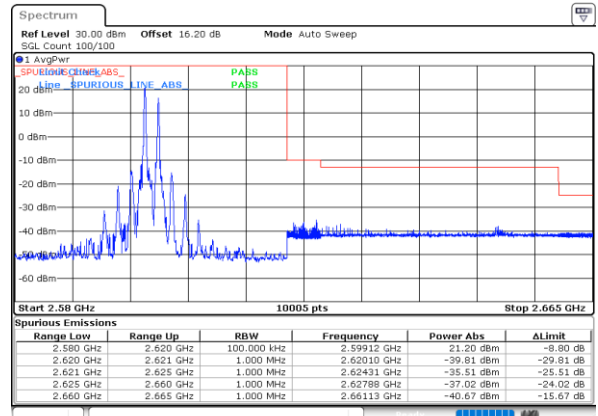
Date: 28. DEC. 2023 01:29:27

Lowest Band Edge / 1RB99 and 1RB0



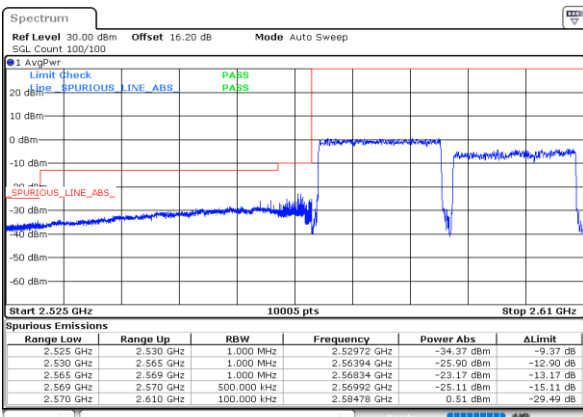
Date: 28. DEC. 2023 01:51:44

Highest Band Edge / 1RB99 and 1RB0



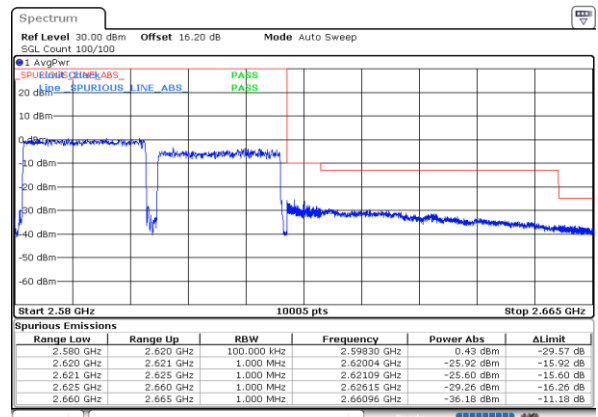
Date: 28. DEC. 2023 01:33:46

Lowest Band Edge / Full RB



Date: 28. DEC. 2023 01:43:06

Highest Band Edge / Full RB



Date: 28. DEC. 2023 01:25:08

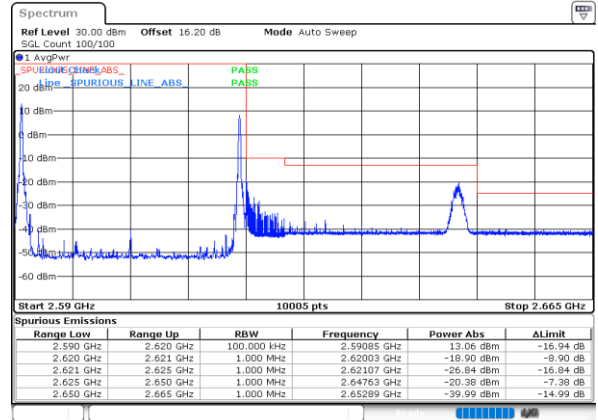
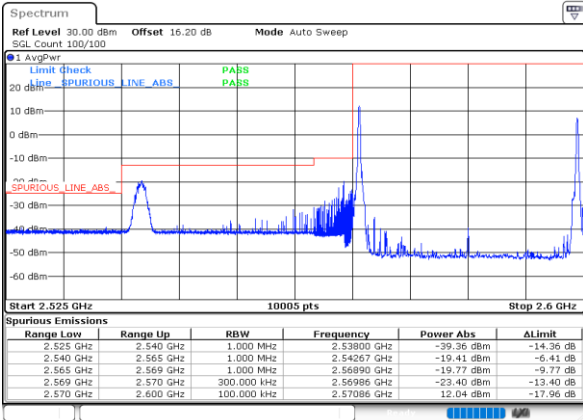


LTE Band 38C / 15MHz+15MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB74

Highest Band Edge / 1RB0 and 1RB74

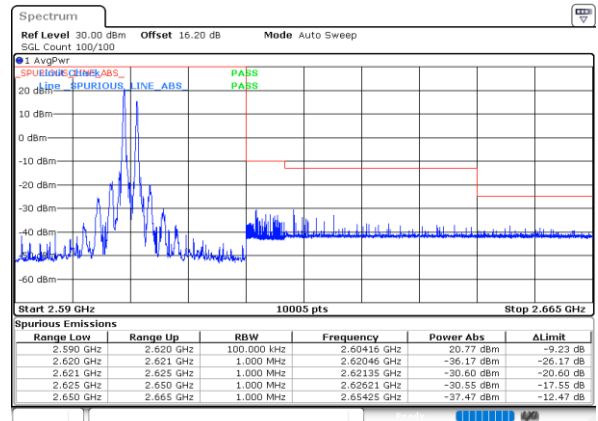
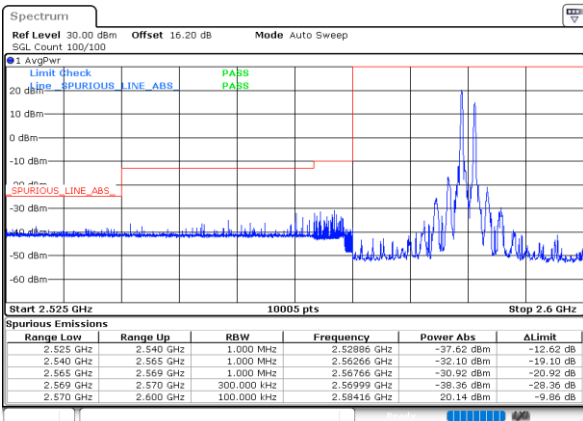


Date: 28. DEC. 2023 01:15:04

Date: 28. DEC. 2023 00:57:07

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

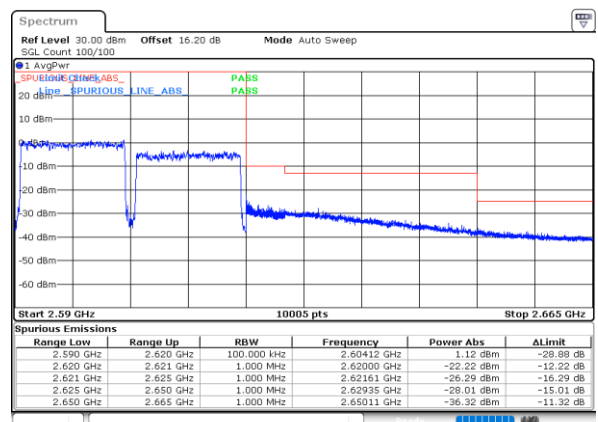
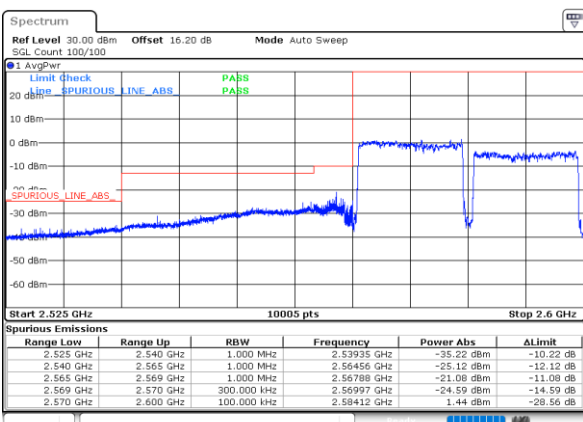


Date: 28. DEC. 2023 01:19:23

Date: 28. DEC. 2023 01:01:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28. DEC. 2023 01:10:45

Date: 28. DEC. 2023 00:52:47

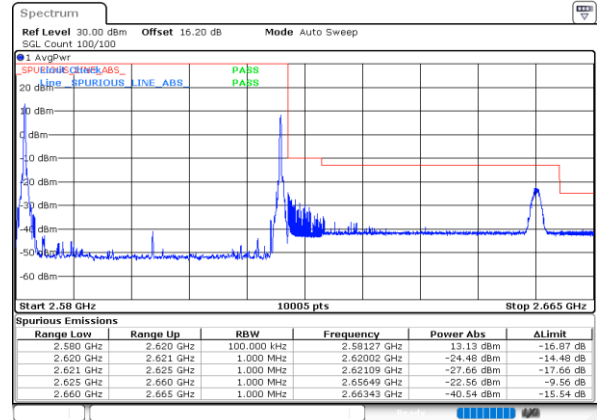
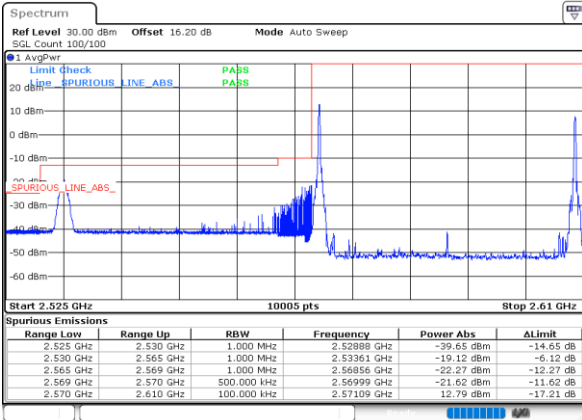


LTE Band 38C / 20MHz+20MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB9

Highest Band Edge / 1RB0 and 1RB9

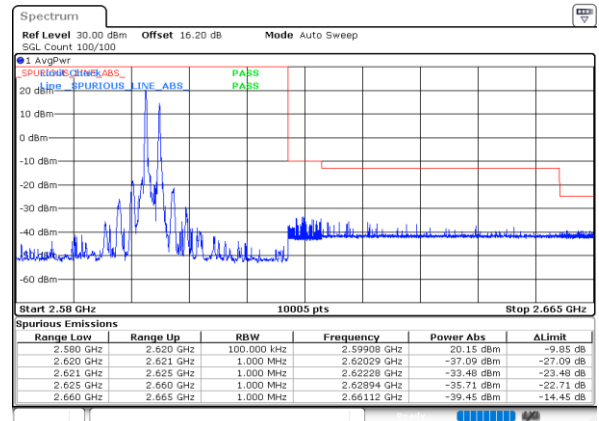
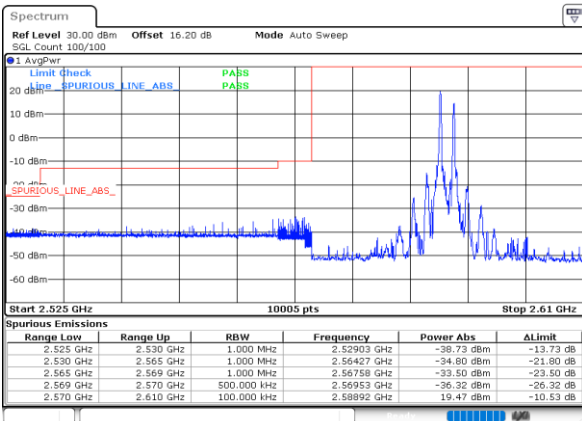


Date: 28, DEC, 2023 01:48:30

Date: 28, DEC, 2023 01:30:31

Lowest Band Edge / 1RB99 and 1RB0

Highest Band Edge / 1RB99 and 1RB0

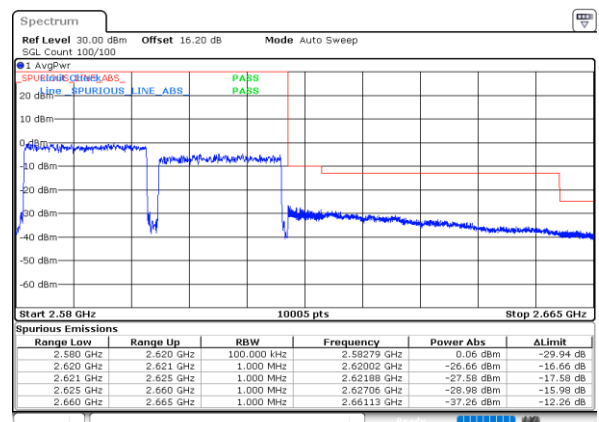
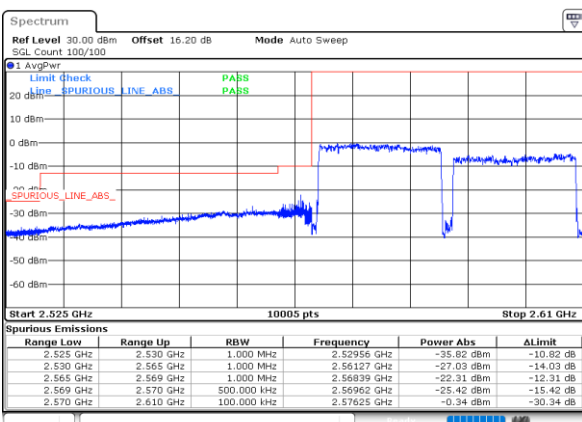


Date: 28, DEC, 2023 01:52:48

Date: 28, DEC, 2023 01:34:51

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28, DEC, 2023 01:44:10

Date: 28, DEC, 2023 01:26:13

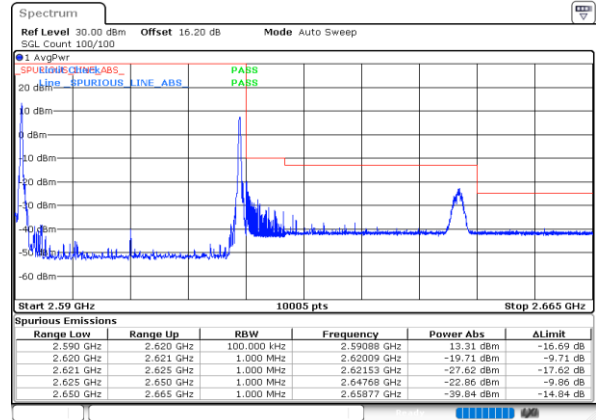
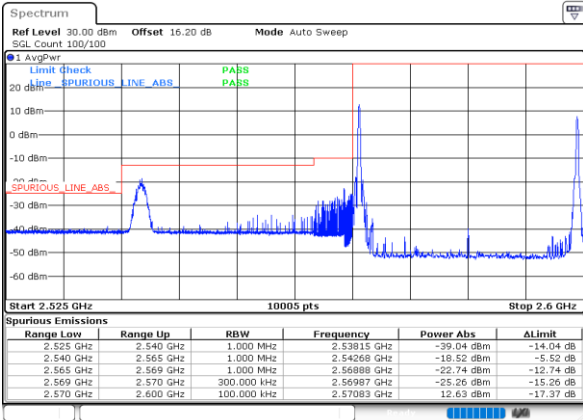


LTE Band 38C / 15MHz+15MHz

64QAM

Lowest Band Edge / 1RB0 and 1RB74

Highest Band Edge / 1RB0 and 1RB74

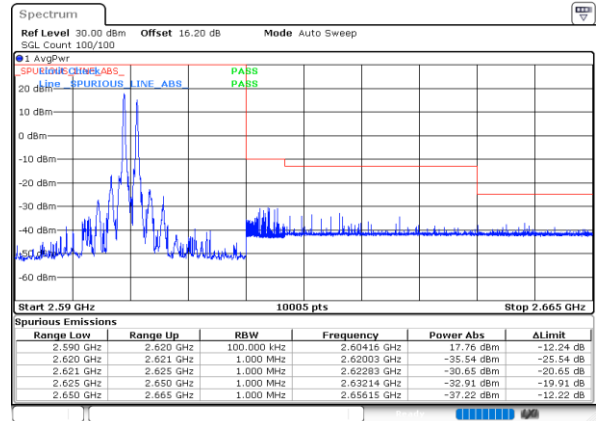
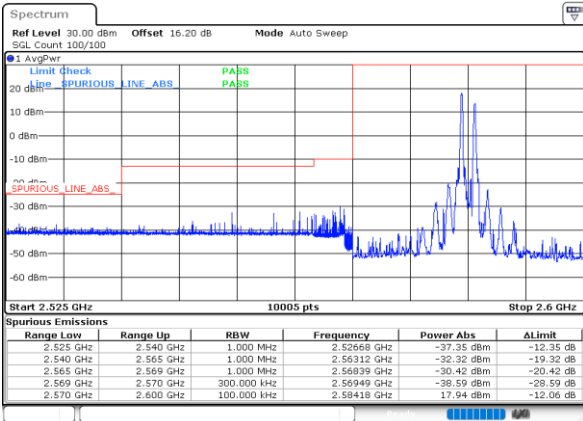


Date: 28. DEC. 2023 01:16:09

Date: 28. DEC. 2023 00:58:11

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

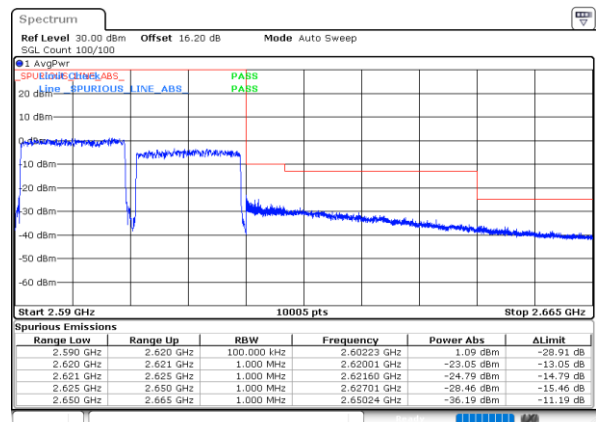
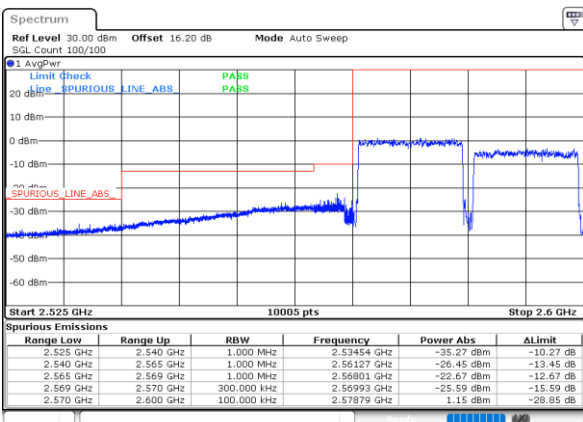


Date: 28. DEC. 2023 01:20:28

Date: 28. DEC. 2023 01:02:29

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28. DEC. 2023 01:11:49

Date: 28. DEC. 2023 00:53:52

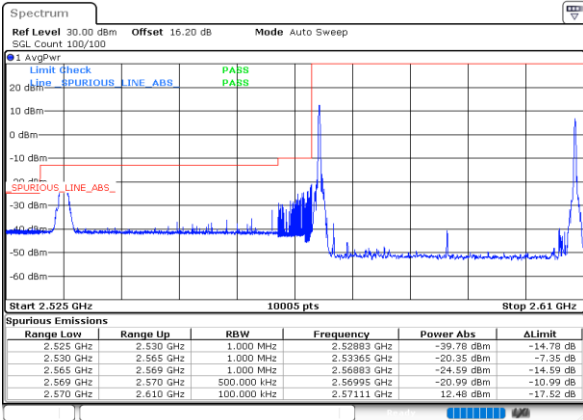




LTE Band 38C / 20MHz+20MHz

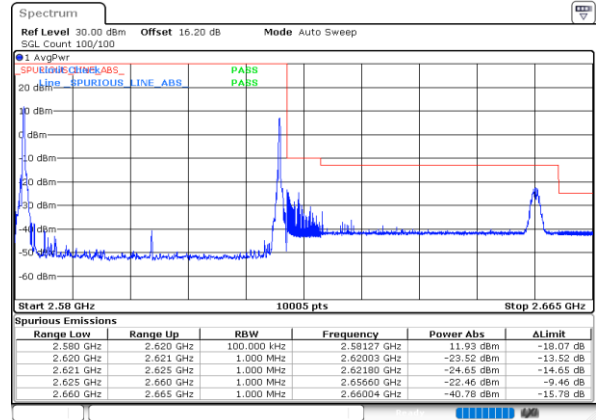
64QAM

Lowest Band Edge / 1RB0 and 1RB9



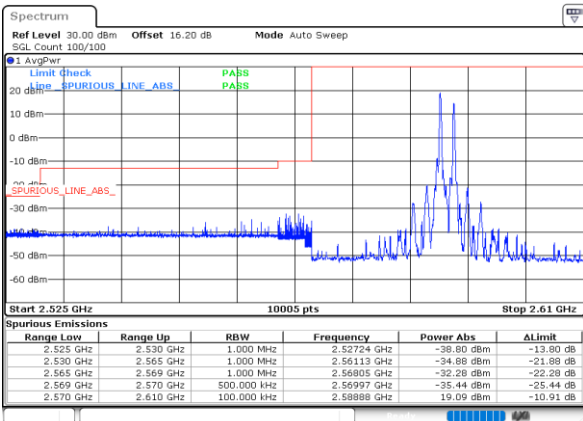
Date: 28. DEC. 2023 01:49:34

Highest Band Edge / 1RB0 and 1RB9



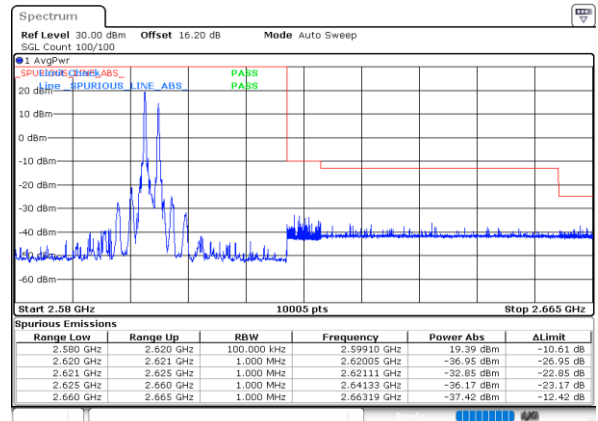
Date: 28. DEC. 2023 01:31:36

Lowest Band Edge / 1RB99 and 1RB0



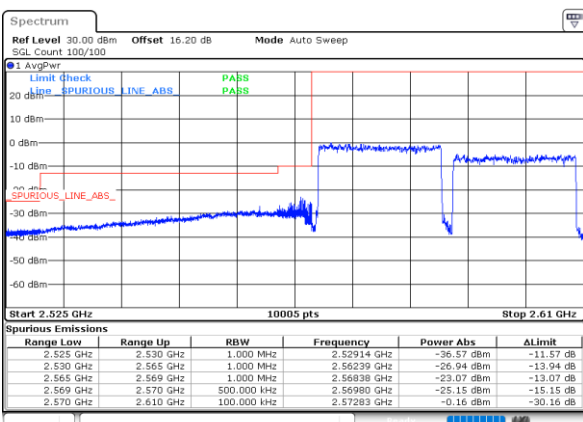
Date: 28. DEC. 2023 01:53:53

Highest Band Edge / 1RB99 and 1RB0



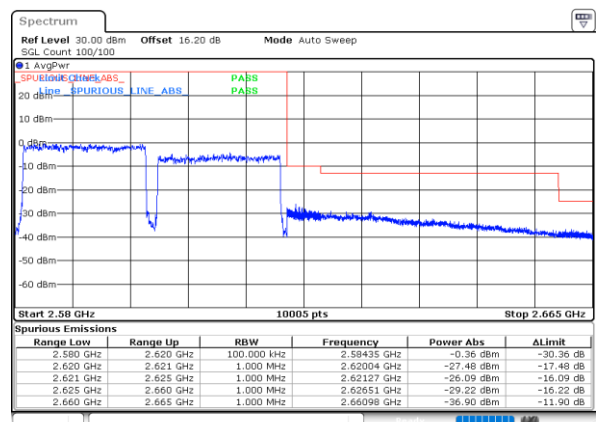
Date: 28. DEC. 2023 01:35:55

Lowest Band Edge / Full RB



Date: 28. DEC. 2023 01:45:15

Highest Band Edge / Full RB



Date: 28. DEC. 2023 01:27:17

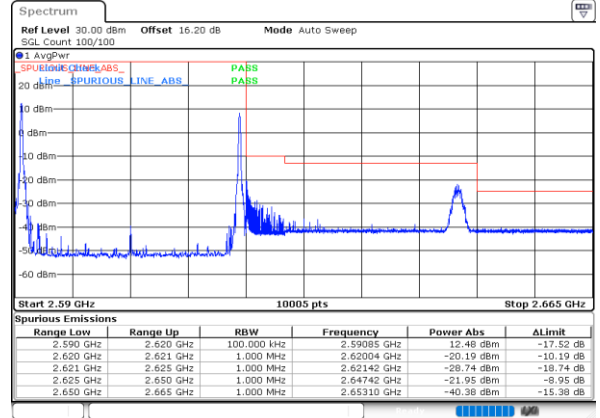
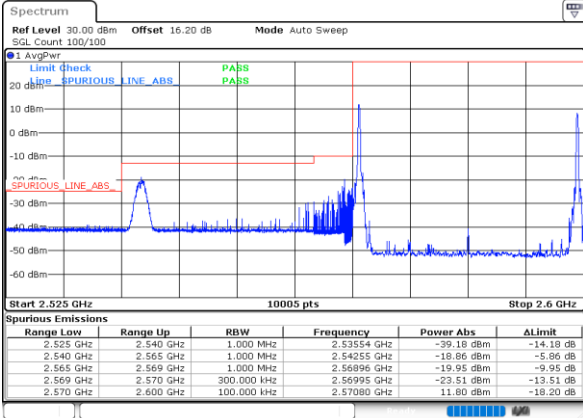


LTE Band 38C / 15MHz+15MHz

256QAM

Lowest Band Edge / 1RB0 and 1RB74

Highest Band Edge / 1RB0 and 1RB74

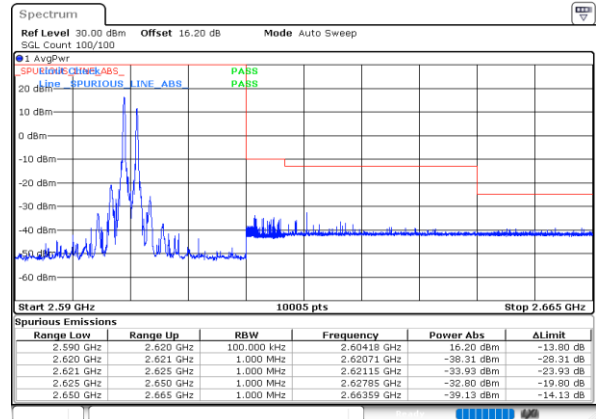
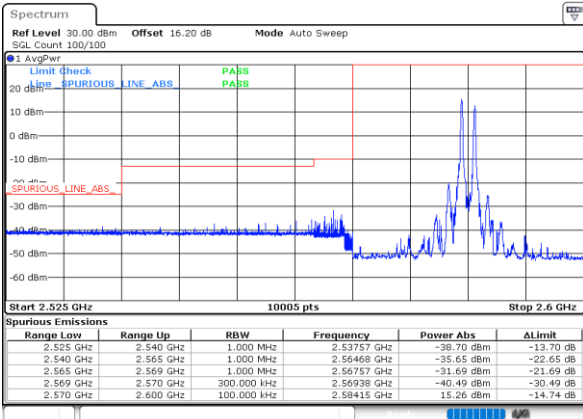


Date: 28. DEC. 2023 01:17:13

Date: 28. DEC. 2023 00:59:15

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

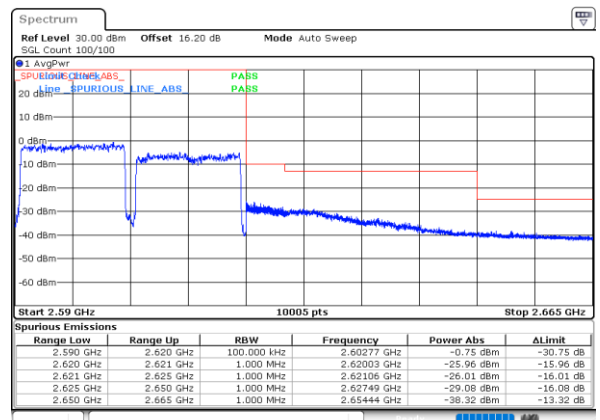
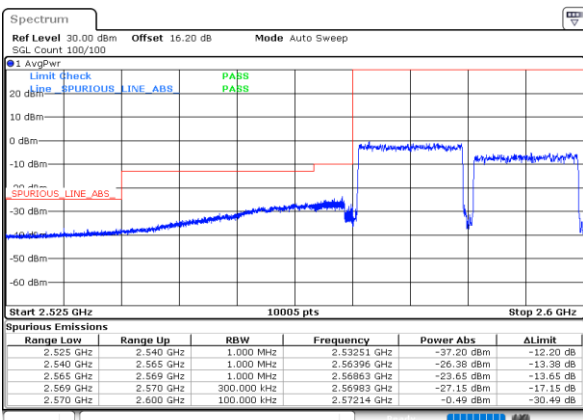


Date: 28. DEC. 2023 01:21:32

Date: 28. DEC. 2023 01:03:30

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28. DEC. 2023 01:12:54

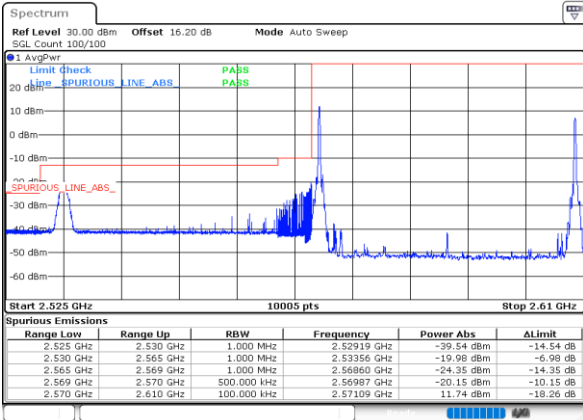
Date: 28. DEC. 2023 00:54:56



LTE Band 38C / 20MHz+20MHz

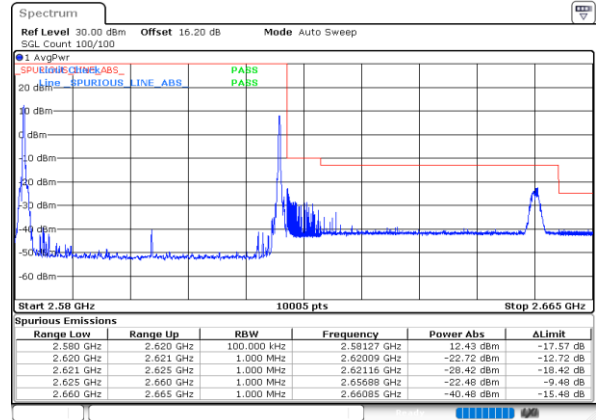
256QAM

Lowest Band Edge / 1RB0 and 1RB9



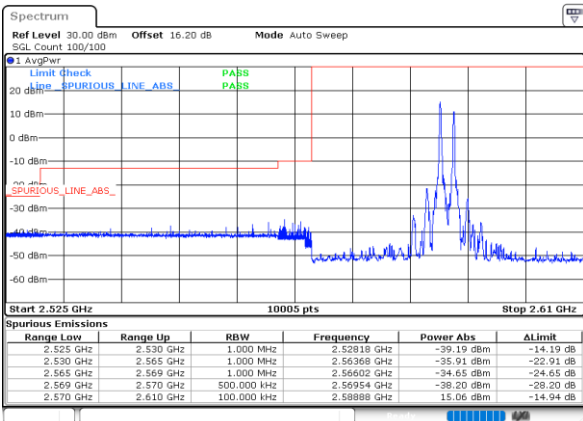
Date: 28. DEC. 2023 01:50:38

Highest Band Edge / 1RB0 and 1RB9



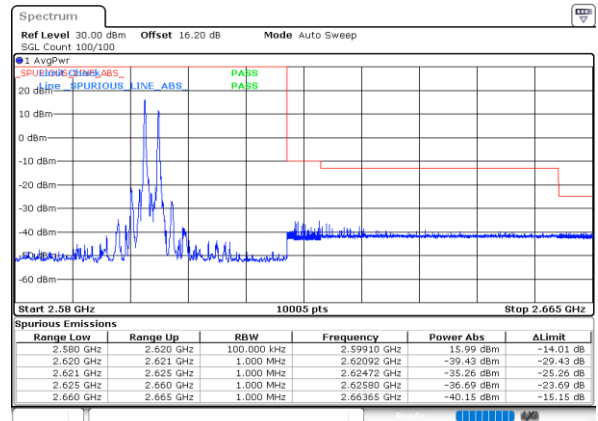
Date: 28. DEC. 2023 01:52:40

Lowest Band Edge / 1RB99 and 1RB0



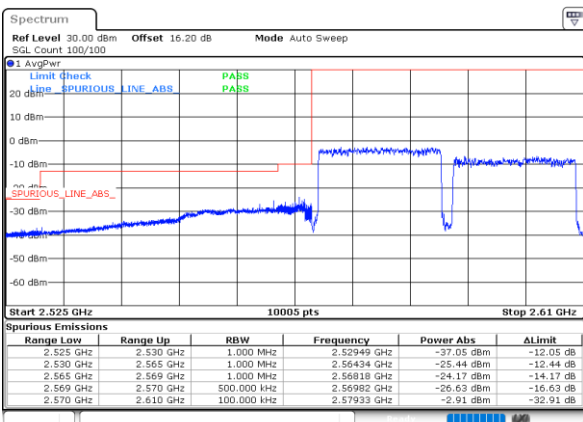
Date: 28. DEC. 2023 01:54:57

Highest Band Edge / 1RB99 and 1RB0



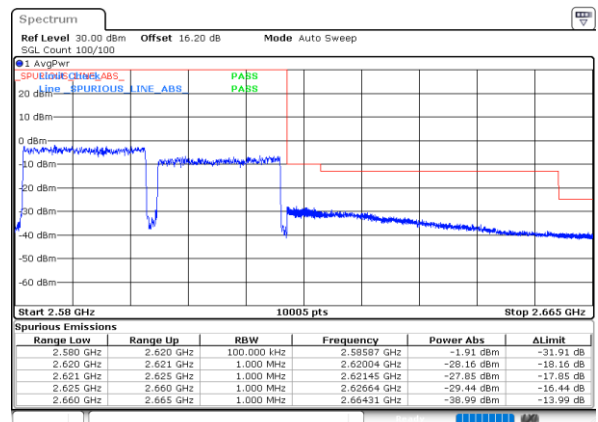
Date: 28. DEC. 2023 01:36:59

Lowest Band Edge / Full RB



Date: 28. DEC. 2023 01:46:19

Highest Band Edge / Full RB



Date: 28. DEC. 2023 01:28:21



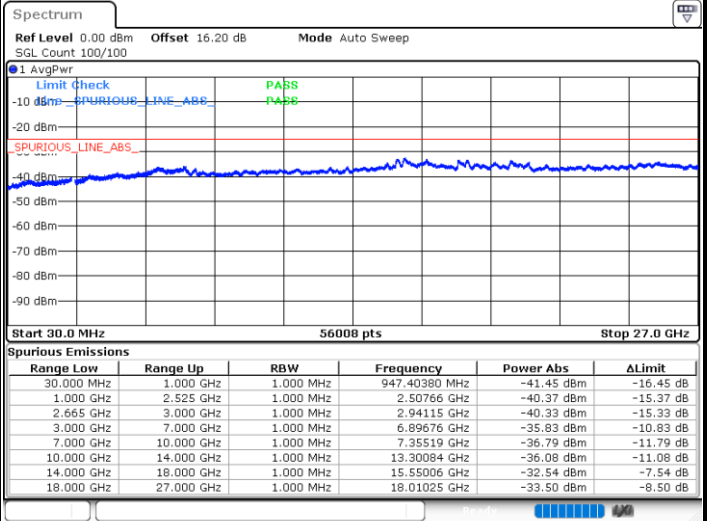
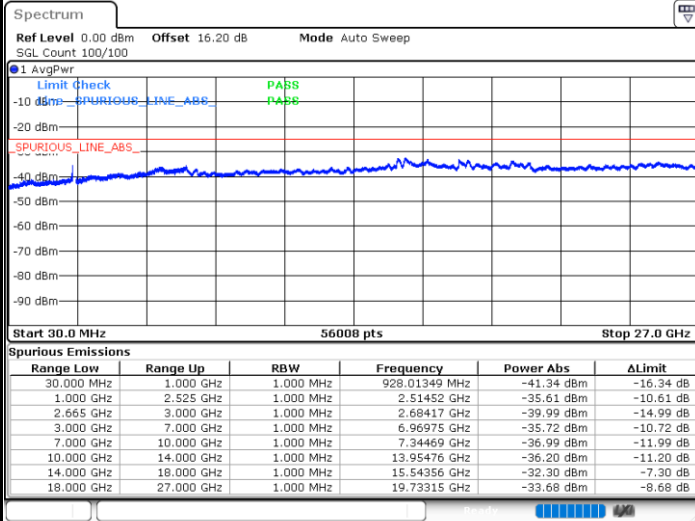
# Conducted Spurious Emission

## LTE Band 38C / 15MHz+15MHz

### QPSK

#### Lowest Channel / 1RB0 and 1RB74

#### Lowest Channel / 1RB74 and 1RB0

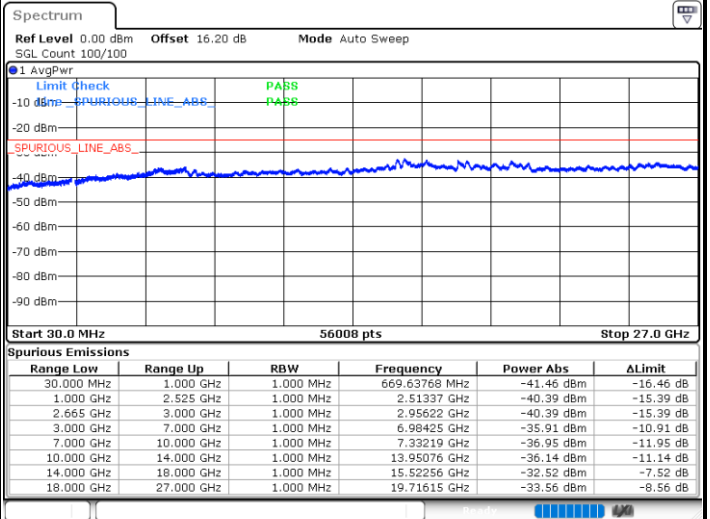
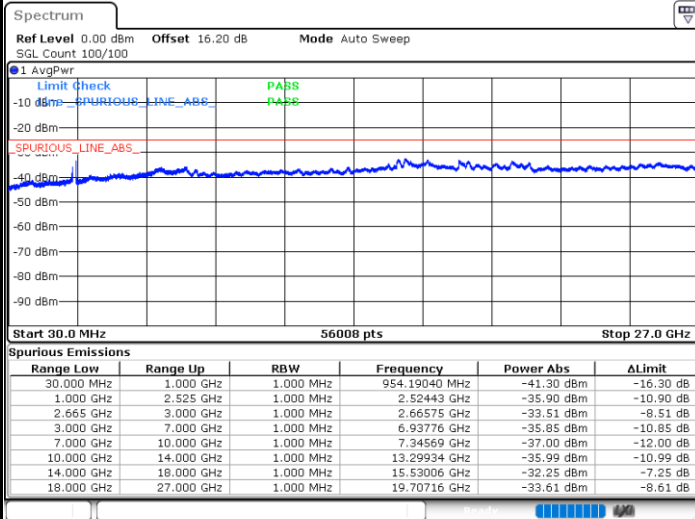


Date: 28.DEC.2023 01:24:00

Date: 28.DEC.2023 01:22:46

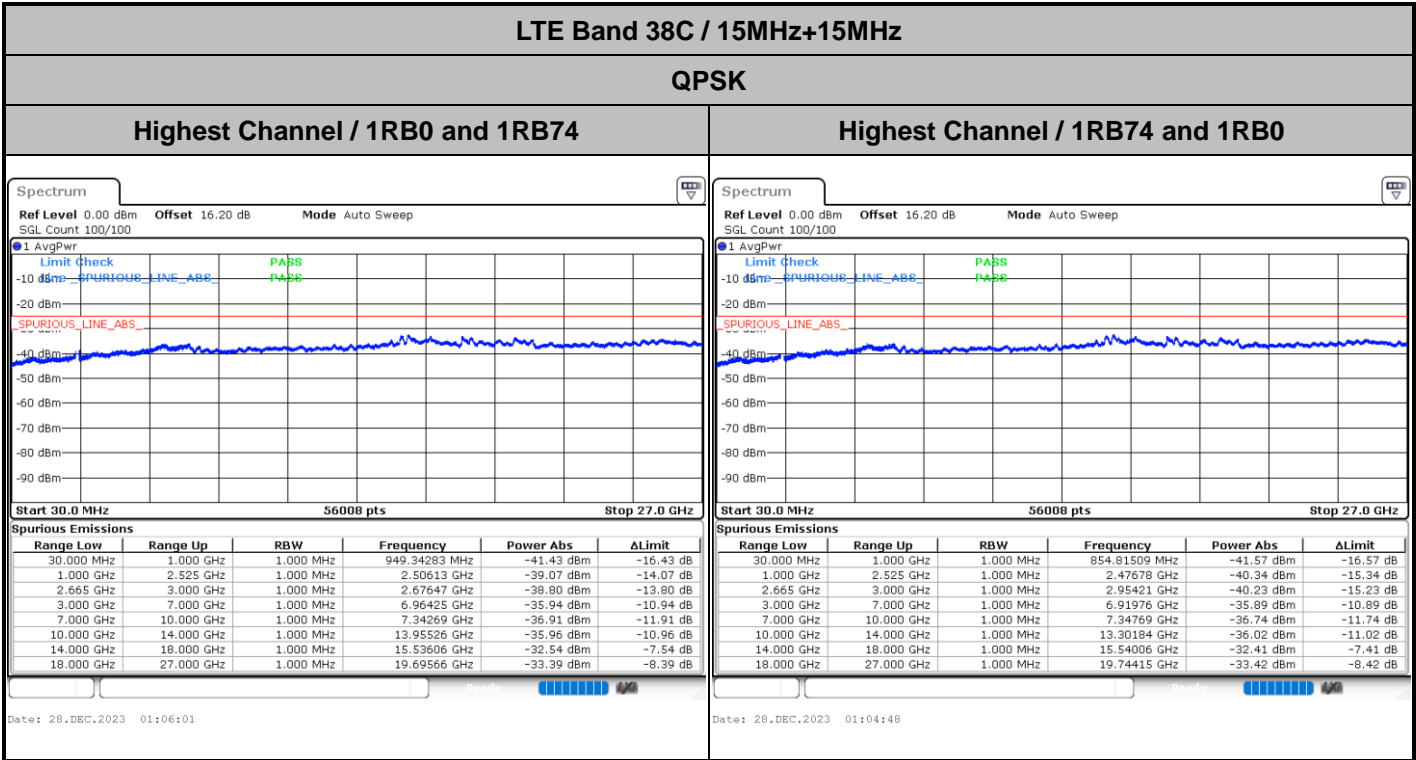
#### Middle Channel / 1RB0 and 1RB74

#### Middle Channel / 1RB74 and 1RB0



Date: 28.DEC.2023 01:07:18

Date: 28.DEC.2023 01:08:32



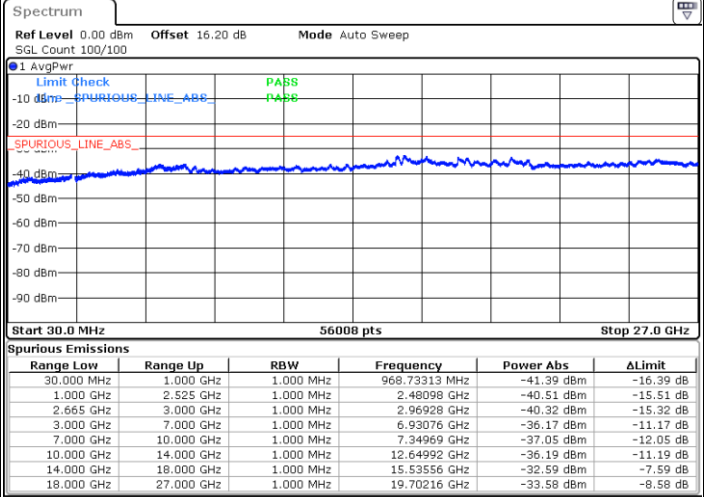
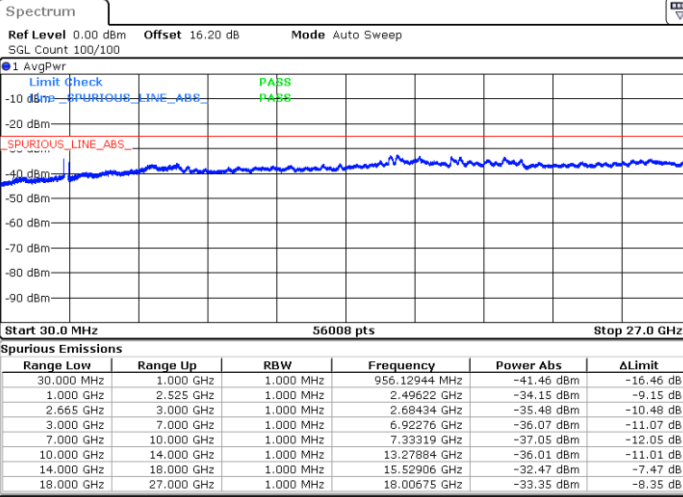


LTE Band 38C / 20MHz+20MHz

QPSK

Lowest Channel / 1RB0 and 1RB99

Lowest Channel / 1RB99 and 1RB0

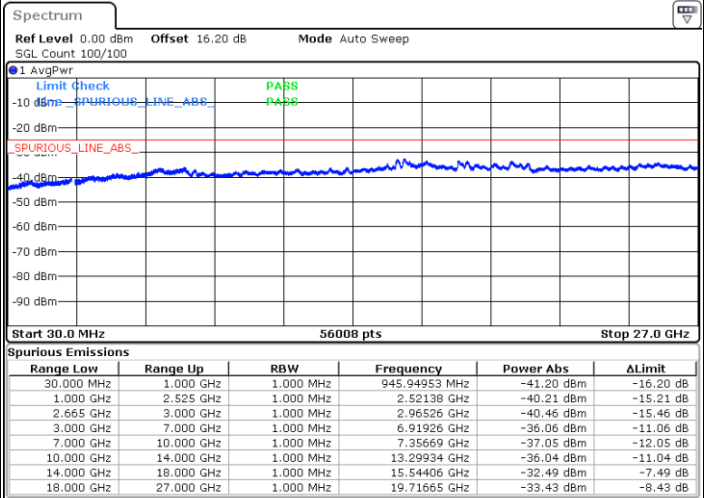
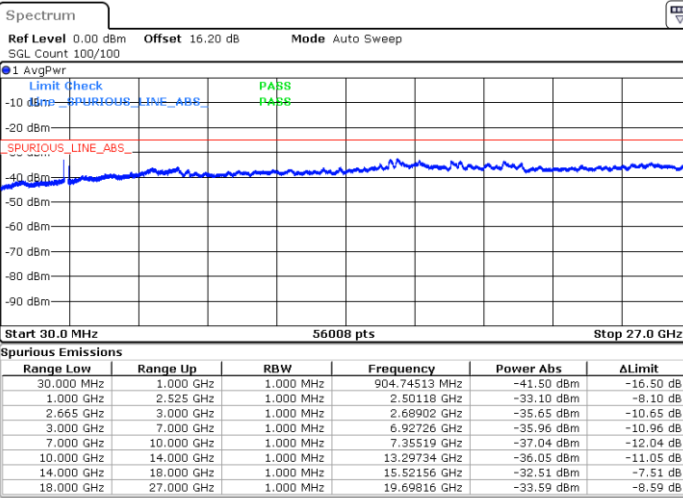


Date: 28.DEC.2023 01:57:25

Date: 28.DEC.2023 01:56:11

MiddleChannel / 1RB0 and 1RB99

Middle Channel / 1RB99 and 1RB0



Date: 28.DEC.2023 01:40:44

Date: 28.DEC.2023 01:41:58

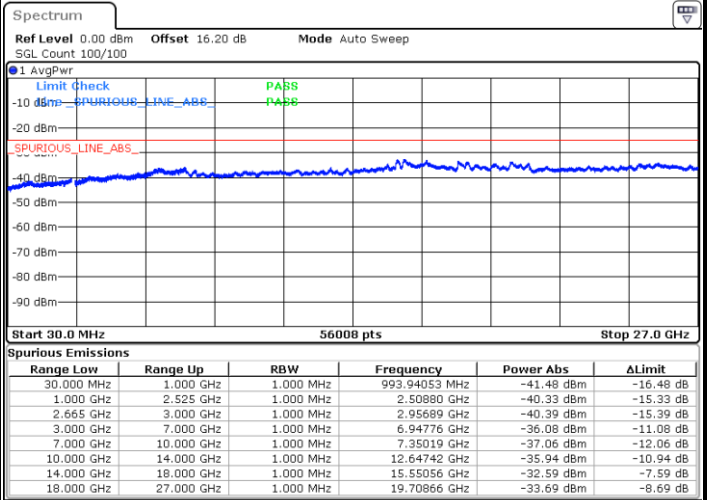
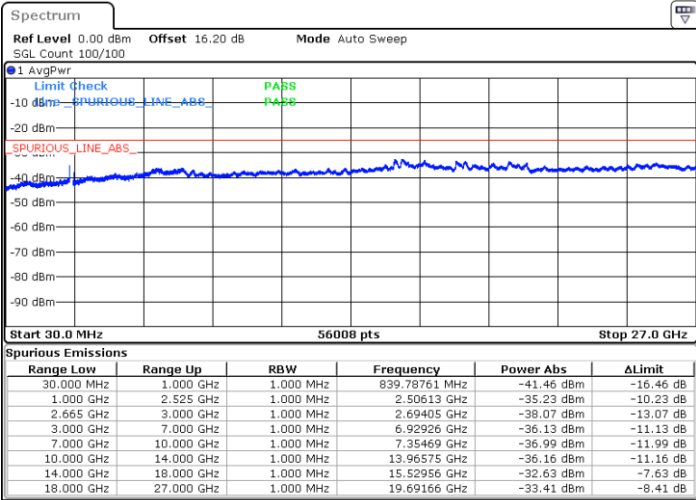


LTE Band 38C / 20MHz+20MHz

QPSK

Highest Channel / 1RB0 and 1RB99

Highest Channel / 1RB99 and 1RB0



Date: 28.DEC.2023 01:39:27

Date: 28.DEC.2023 01:38:13

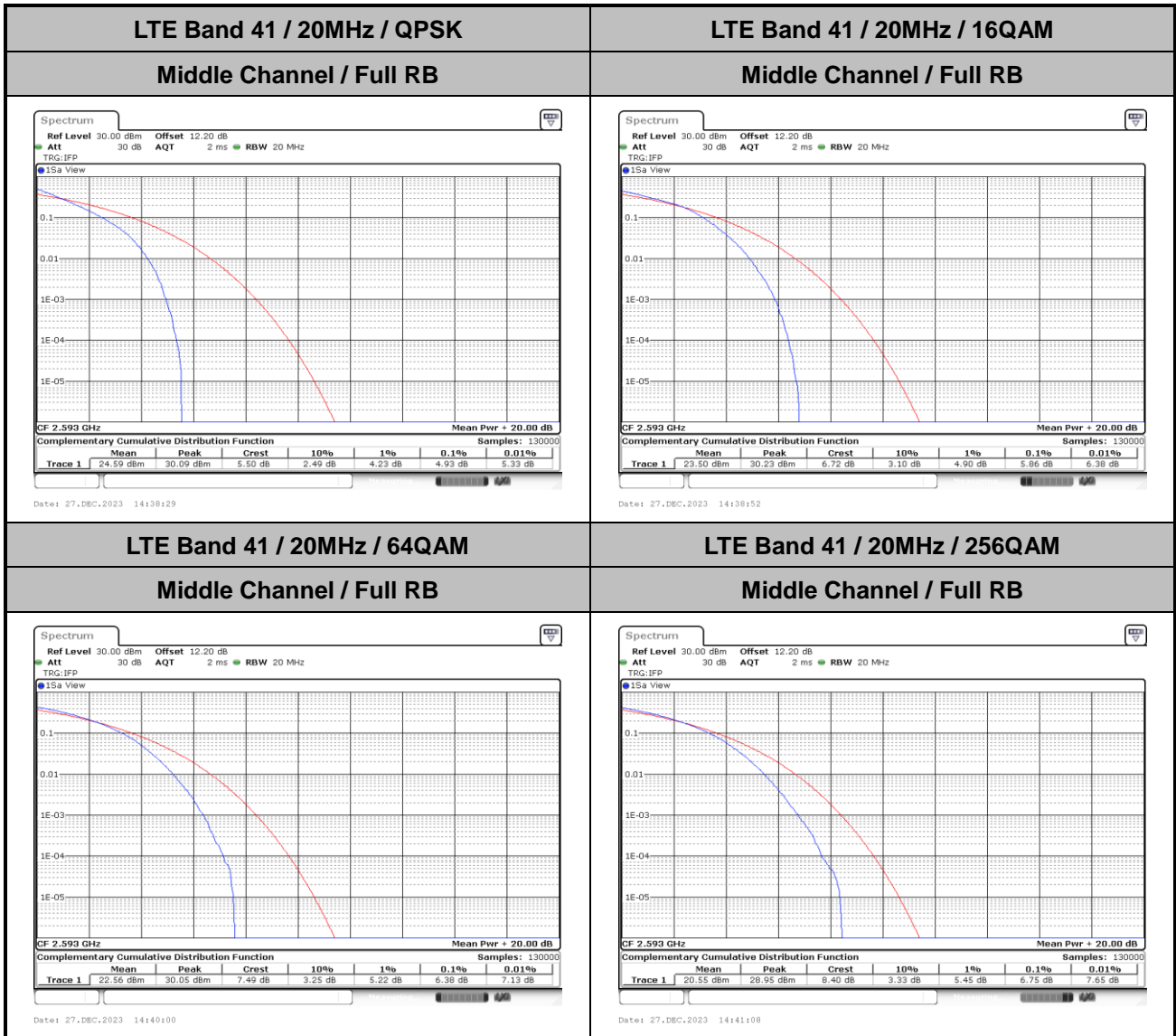


## LTE Band 41(HPUE)

### Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.93	5.86	6.38	6.75	PASS







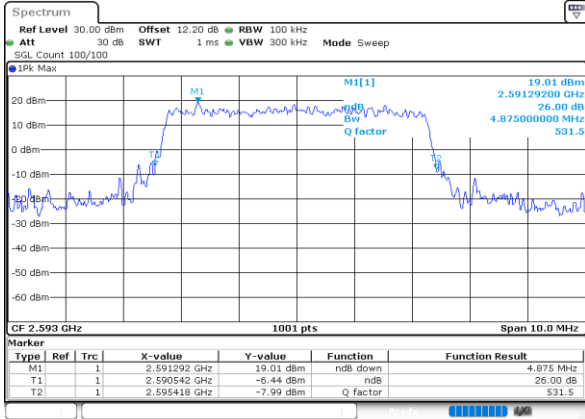
**26dB Bandwidth**

Mode	LTE Band 41 : 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	4.76	9.73	9.71	14.26	14.26	18.70	18.82
Mode	LTE Band 41 : 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	-	-	-	-	4.73	4.83	9.66	9.65	14.41	14.41	18.78	18.86



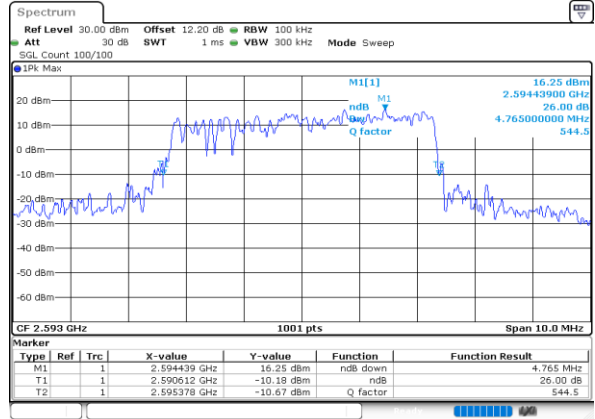
LTE Band 41

Middle Channel / 5MHz / QPSK



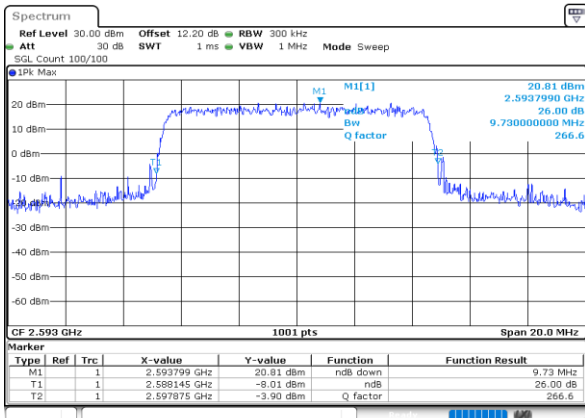
Date: 27 DEC 2023 13:46:19

Middle Channel / 5MHz / 16QAM



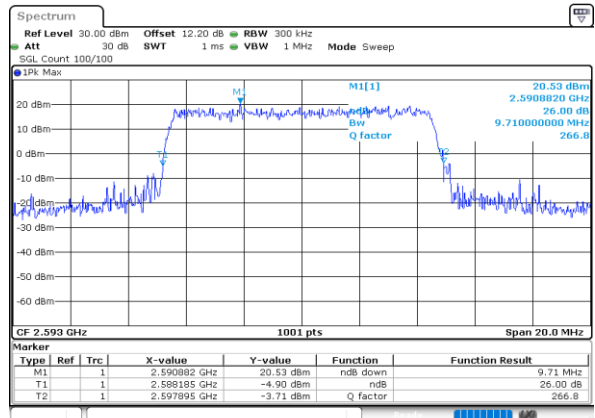
Date: 27 DEC 2023 13:47:04

Middle Channel / 10MHz / QPSK



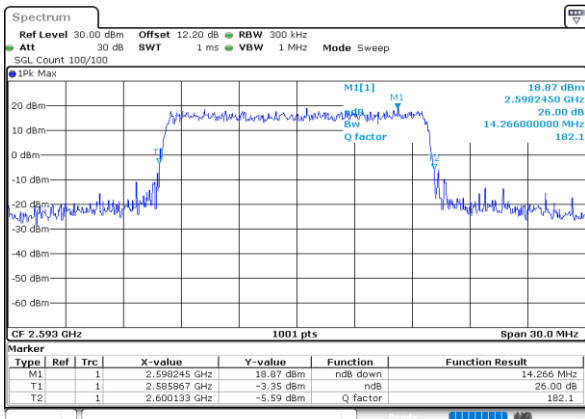
Date: 27 DEC 2023 14:04:34

Middle Channel / 10MHz / 16QAM



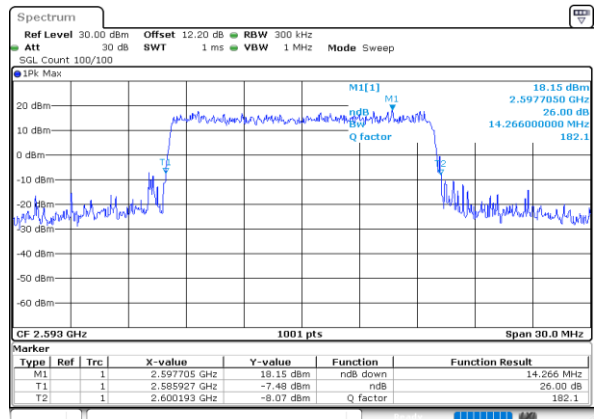
Date: 27 DEC 2023 14:05:19

Middle Channel / 15MHz / QPSK



Date: 27 DEC 2023 14:25:52

Middle Channel / 15MHz / 16QAM

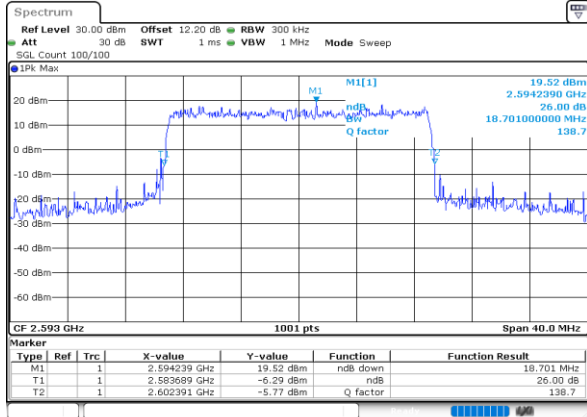


Date: 27 DEC 2023 14:26:37



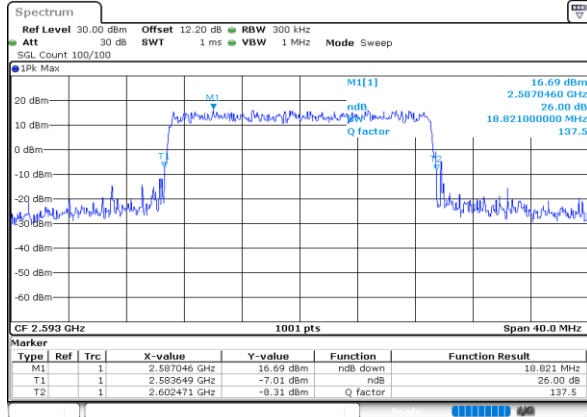
LTE Band 41

Middle Channel / 20MHz / QPSK



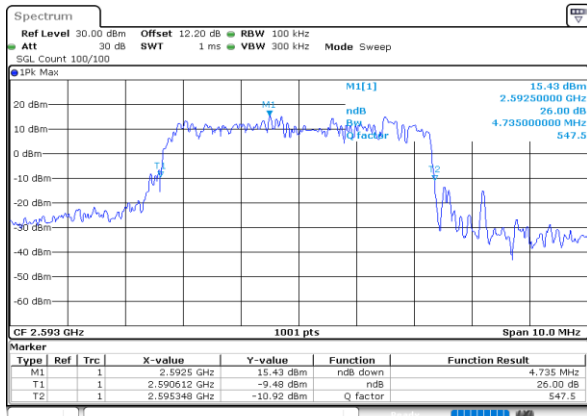
Date: 27 DEC 2023 14:38:05

Middle Channel / 20MHz / 16QAM



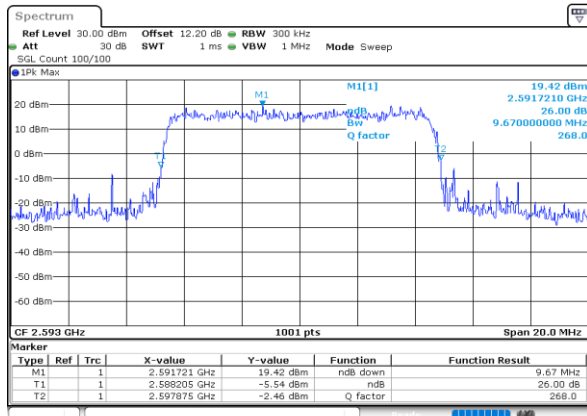
Date: 27 DEC 2023 14:39:13

Middle Channel / 5MHz / 64QAM



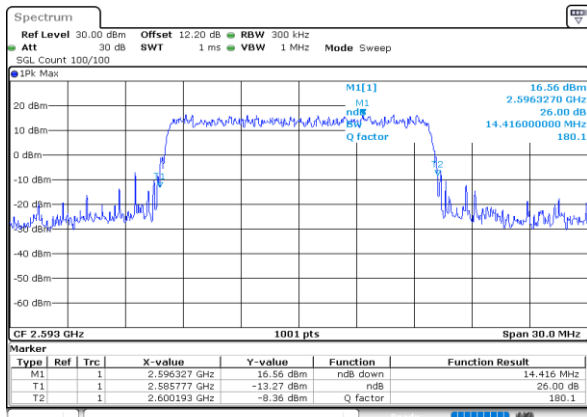
Date: 27 DEC 2023 13:47:40

Middle Channel / 10MHz / 64QAM



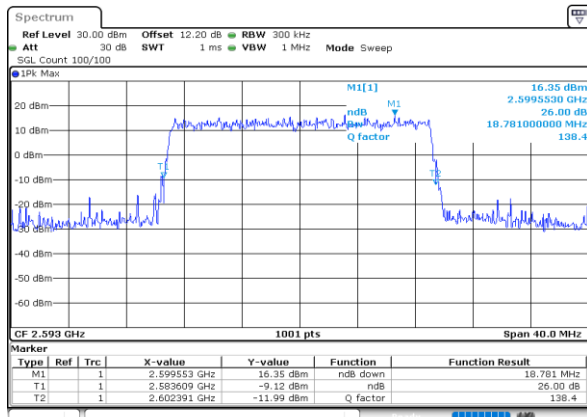
Date: 27 DEC 2023 14:10:03

Middle Channel / 15MHz / 64QAM



Date: 27 DEC 2023 14:27:21

Middle Channel / 20MHz / 64QAM

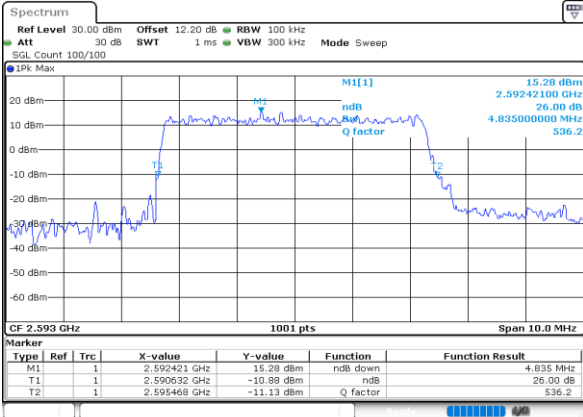


Date: 27 DEC 2023 14:40:45



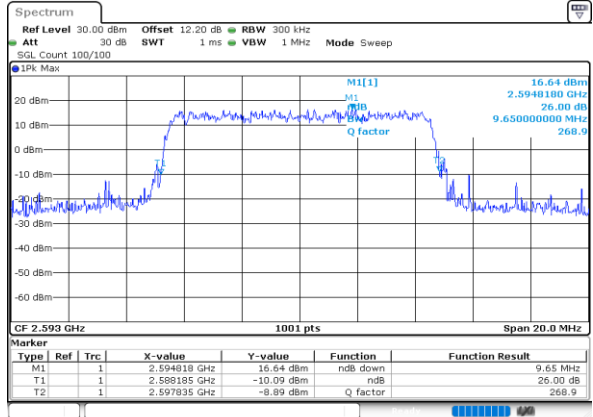
LTE Band 41

Middle Channel / 5MHz / 256QAM



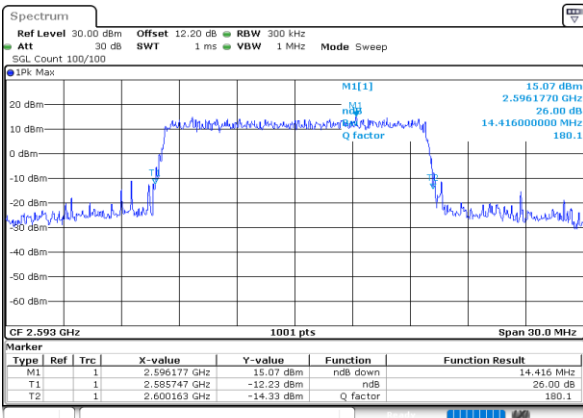
Date: 27 DEC 2023 13:48:33

Middle Channel / 10MHz / 256QAM



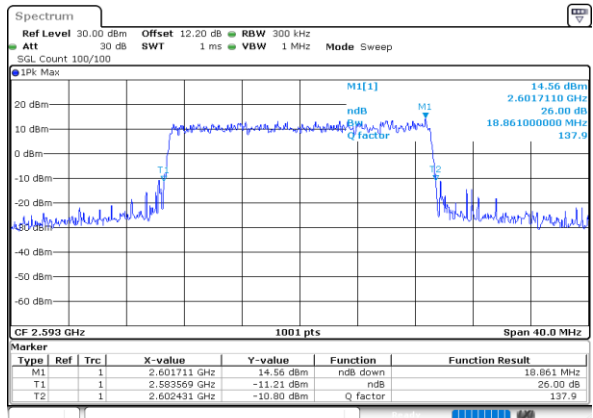
Date: 27 DEC 2023 14:06:48

Middle Channel / 15MHz / 256QAM



Date: 27 DEC 2023 14:28:06

Middle Channel / 20MHz / 256QAM



Date: 27 DEC 2023 14:41:53



Occupied Bandwidth

Mode	LTE Band 41 : 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	-	-	-	-	4.47	4.49	9.07	9.07	13.42	13.48	17.98	17.98
Mode	LTE Band 41 : 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	-	-	-	-	4.51	4.51	9.03	9.05	13.48	13.51	17.90	17.90