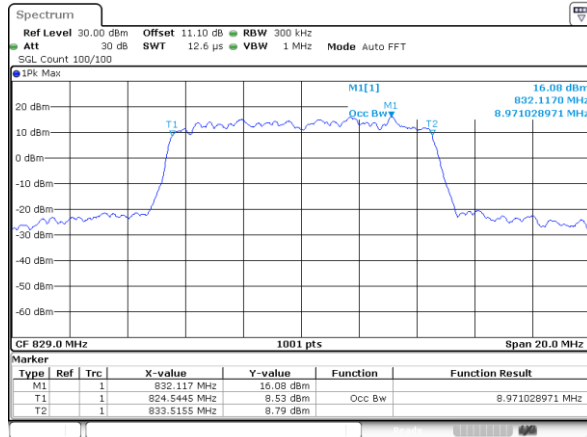




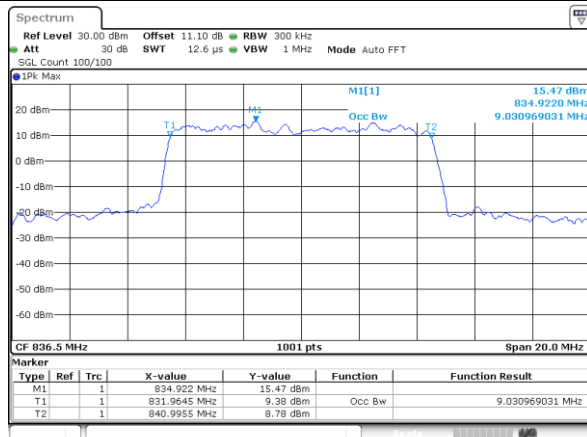
LTE Band 5

Lowest Channel / 10MHz / 16QAM



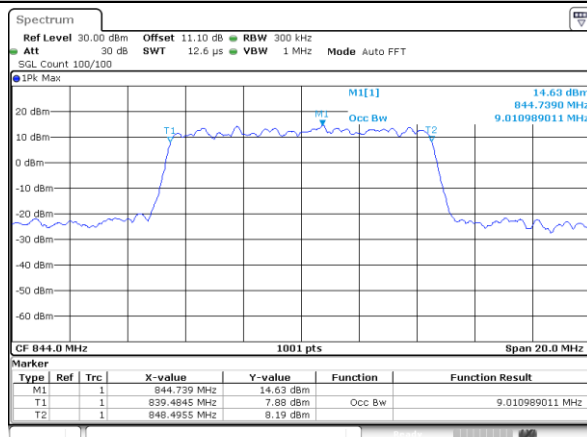
Date: 1.JUL.2020 00:28:41

Middle Channel / 10MHz / 16QAM



Date: 1.JUL.2020 00:33:08

Highest Channel / 10MHz / 16QAM



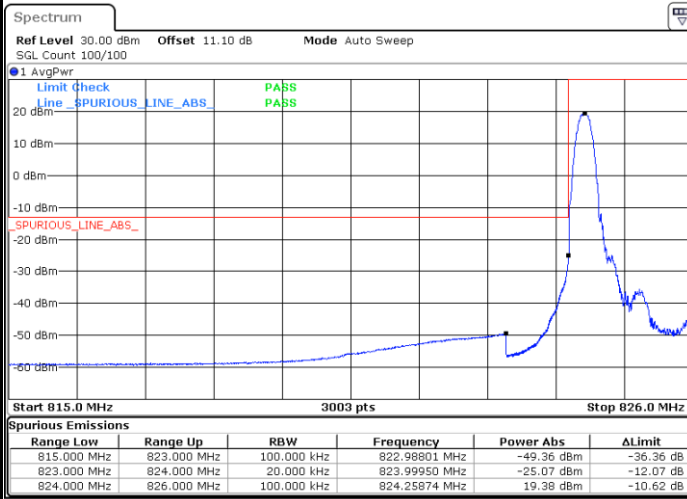
Date: 1.JUL.2020 00:34:18



# Conducted Band Edge

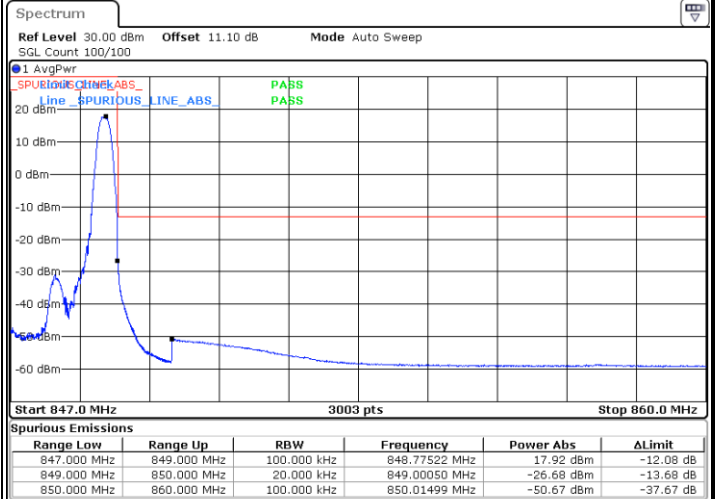
## LTE Band 5 / 1.4MHz / 16QAM

### Lowest Band Edge / 1 RB



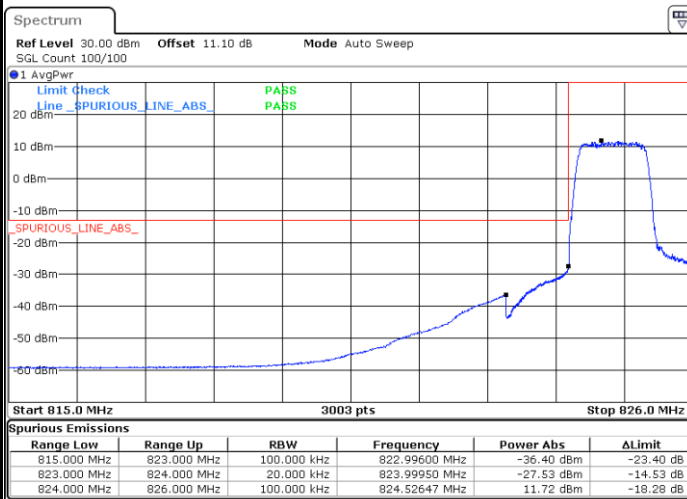
Date: 1.JUL.2020 00:17:31

### Highest Band Edge / 1 RB



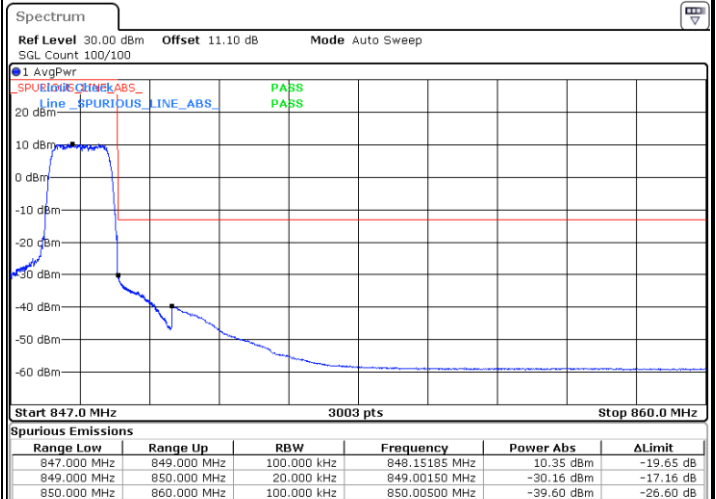
Date: 1.JUL.2020 00:13:02

### Lowest Band Edge / Full RB



Date: 1.JUL.2020 00:07:25

### Highest Band Edge / Full RB

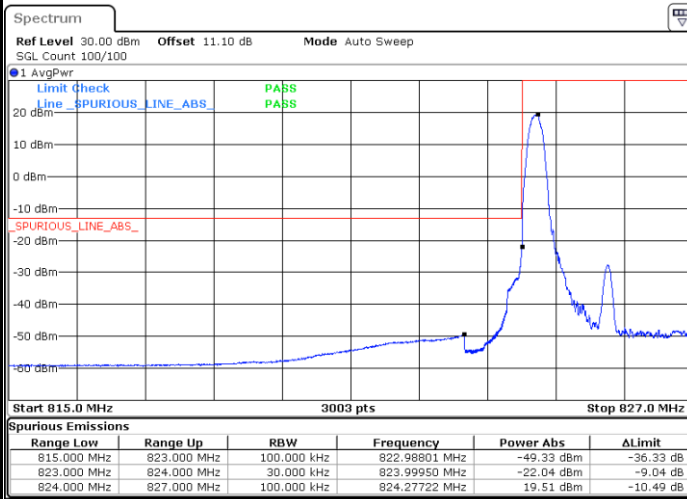


Date: 1.JUL.2020 00:11:23



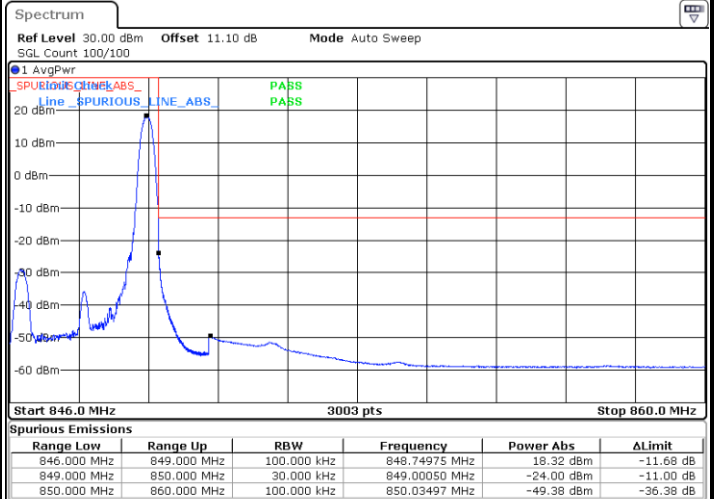
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



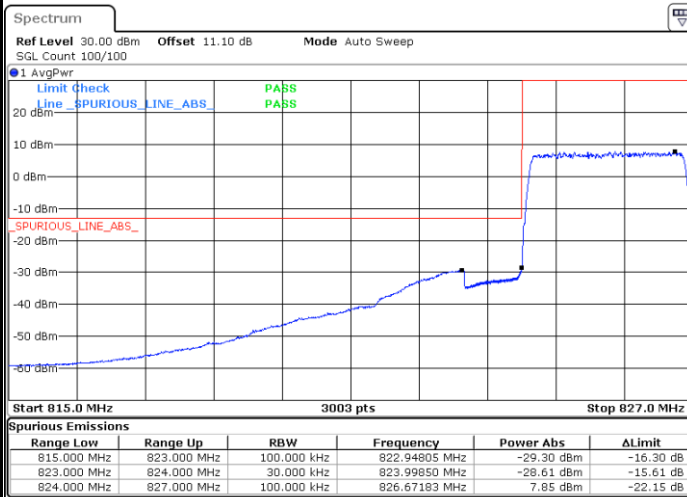
Date: 30 JUN 2020 23:57:18

Highest Band Edge / 1 RB



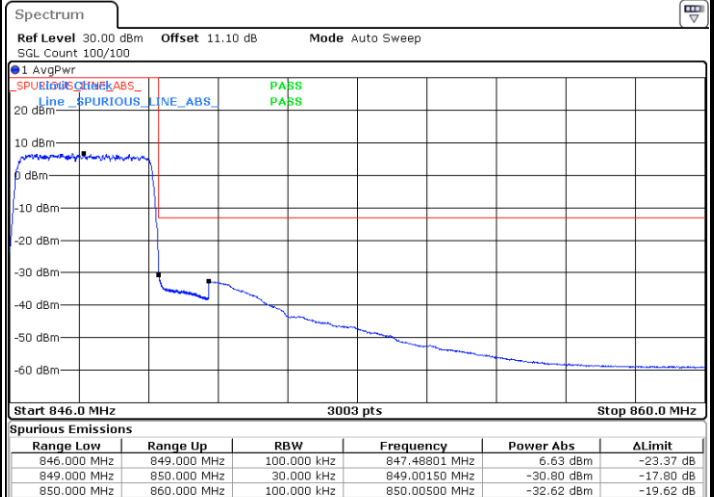
Date: 1 JUL 2020 00:02:56

Lowest Band Edge / Full RB



Date: 30 JUN 2020 23:58:58

Highest Band Edge / Full RB

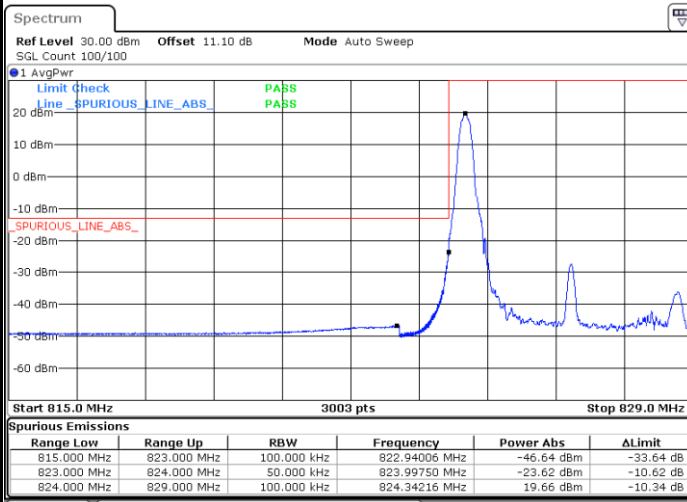


Date: 1 JUL 2020 00:04:35



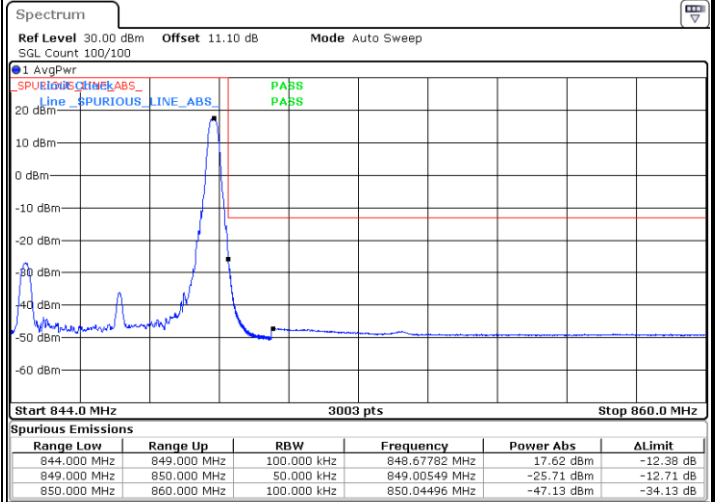
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



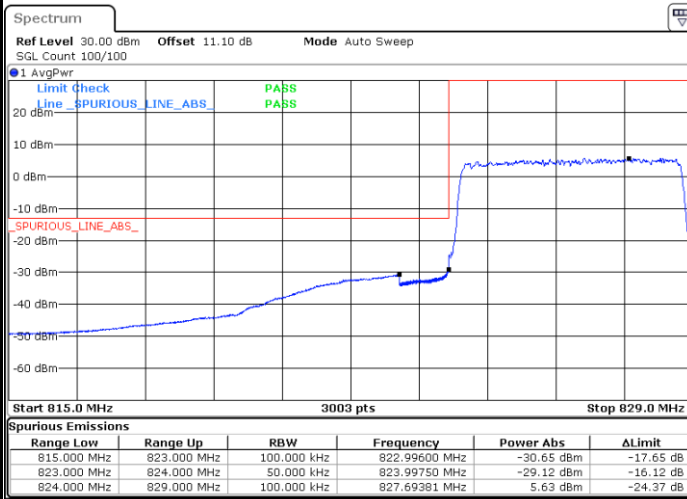
Date: 1.JUL.2020 00:20:26

Highest Band Edge / 1 RB



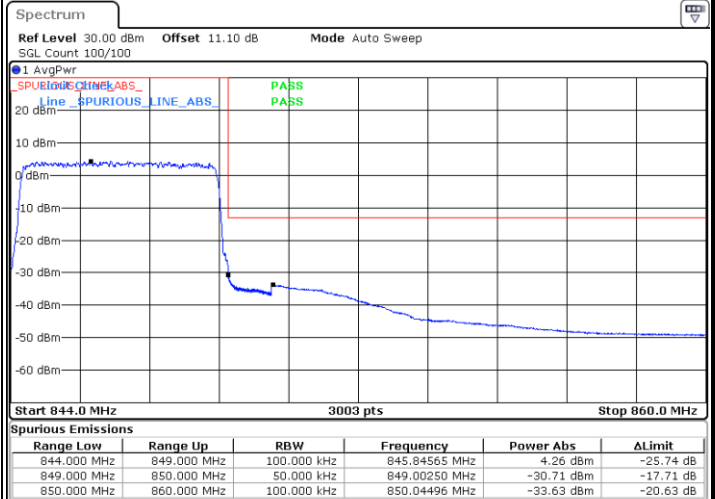
Date: 1.JUL.2020 00:26:03

Lowest Band Edge / Full RB



Date: 1.JUL.2020 00:22:05

Highest Band Edge / Full RB

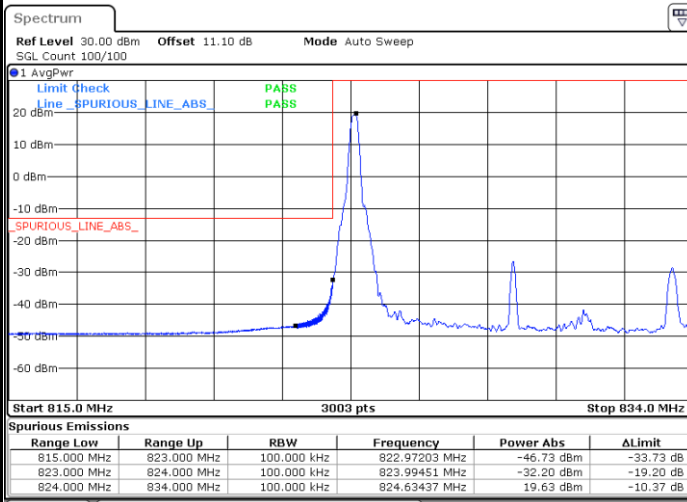


Date: 1.JUL.2020 00:27:42



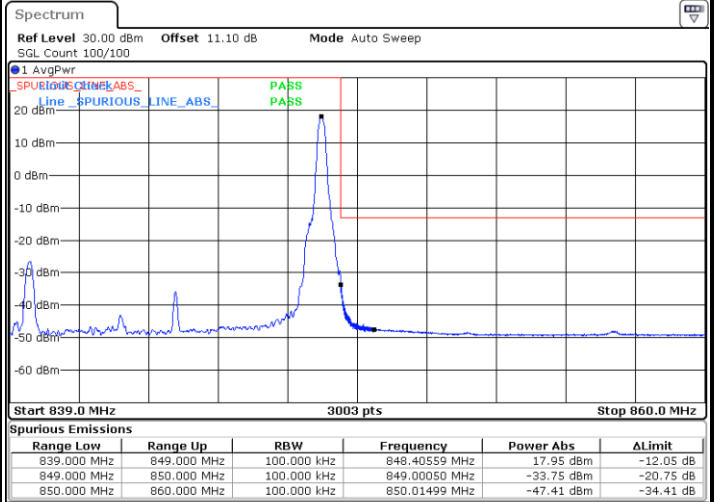
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



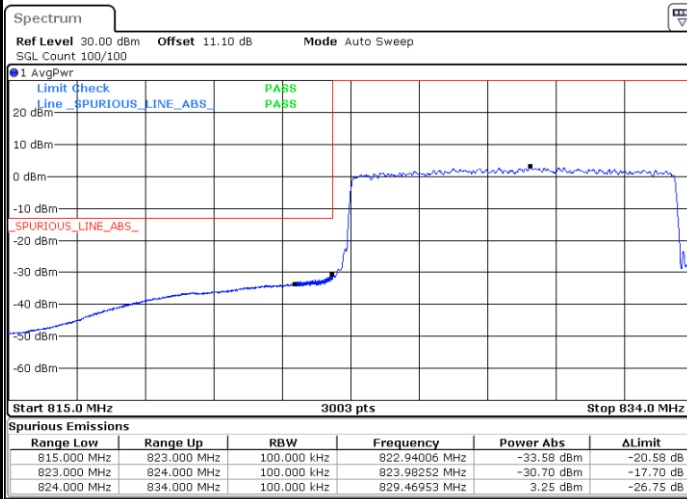
Date: 1.JUL.2020 00:30:31

Highest Band Edge / 1 RB



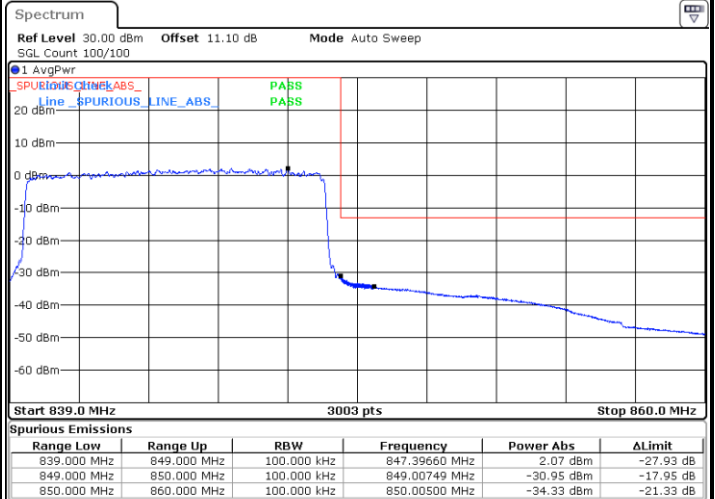
Date: 1.JUL.2020 00:36:08

Lowest Band Edge / Full RB



Date: 1.JUL.2020 00:32:10

Highest Band Edge / Full RB



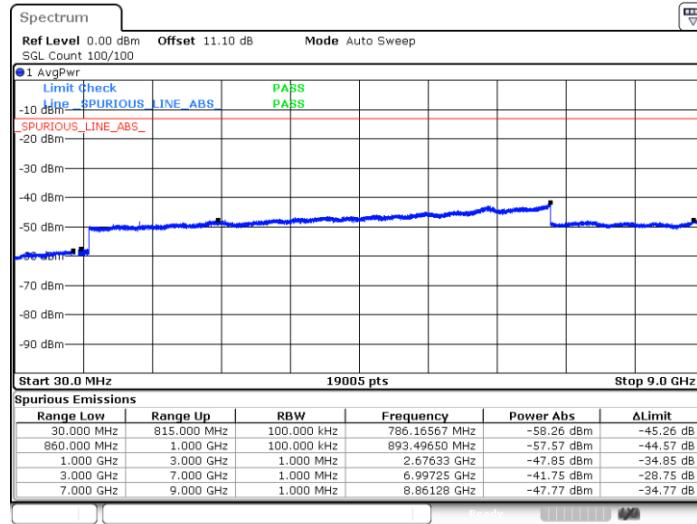
Date: 1.JUL.2020 00:37:47



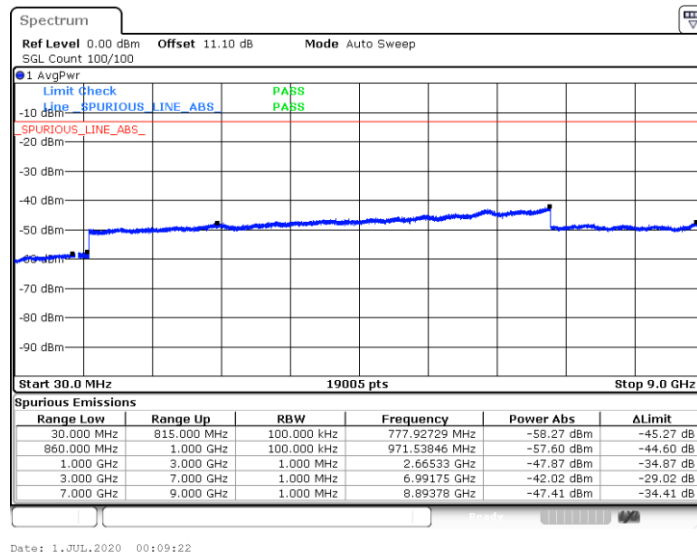
# Conducted Spurious Emission

## LTE Band 5 / 1.4MHz

### Lowest Channel / 16QAM



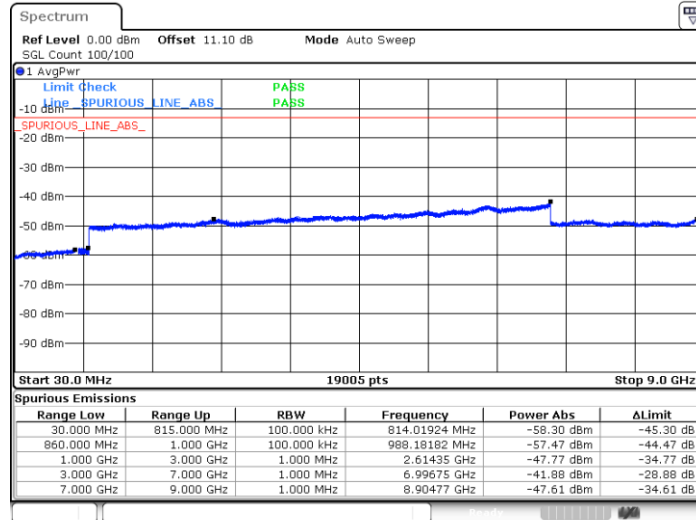
### Middle Channel / 16QAM





LTE Band 5 / 1.4MHz

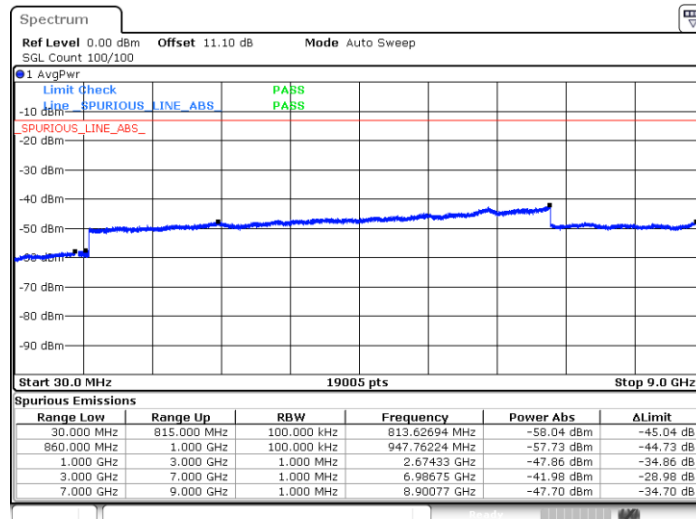
Highest Channel / 16QAM



Date: 1.JUL.2020 00:13:49

LTE Band 5 / 3MHz

Lowest Channel / 16QAM

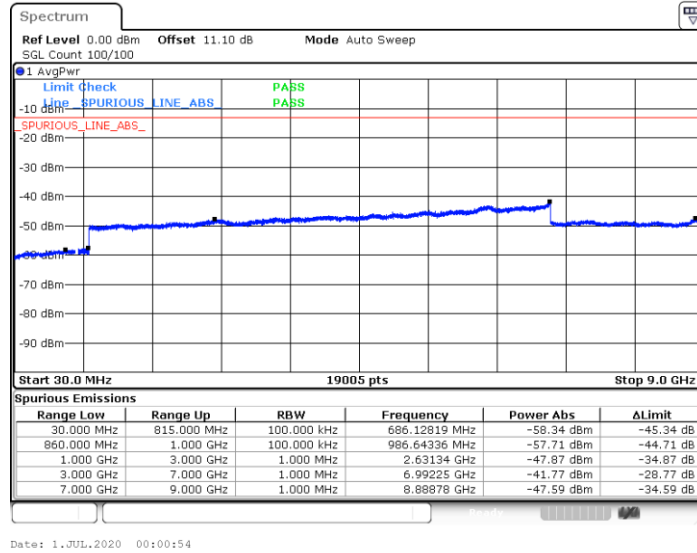


Date: 30.JUN.2020 23:59:44

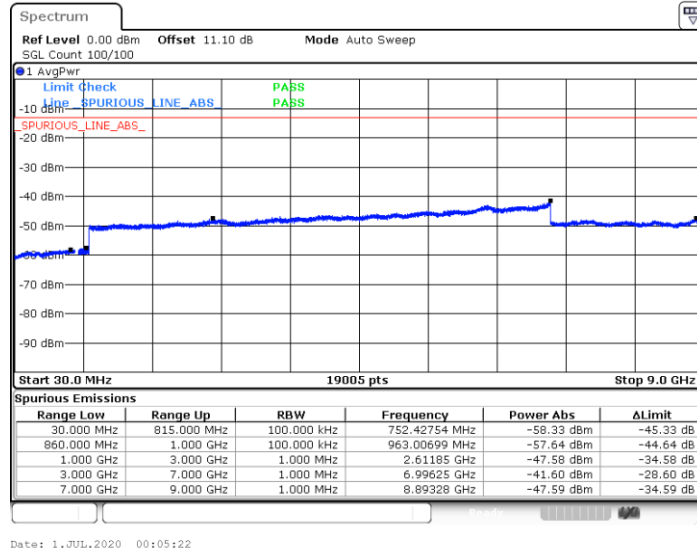


LTE Band 5 / 3MHz

Middle Channel / 16QAM



Highest Channel / 16QAM

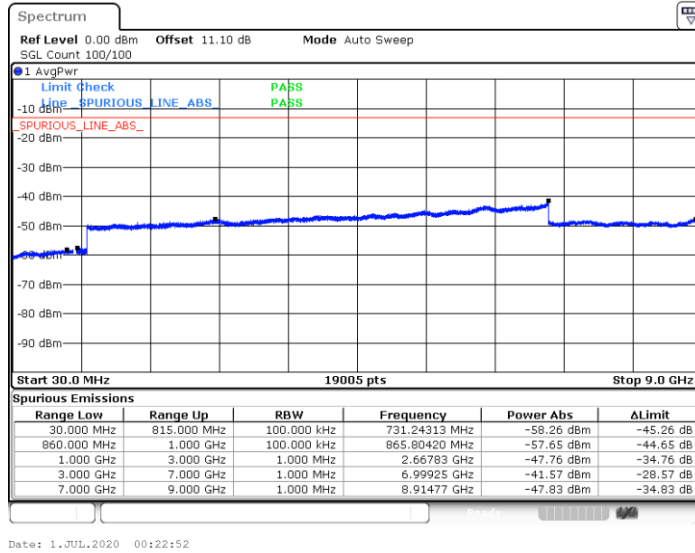




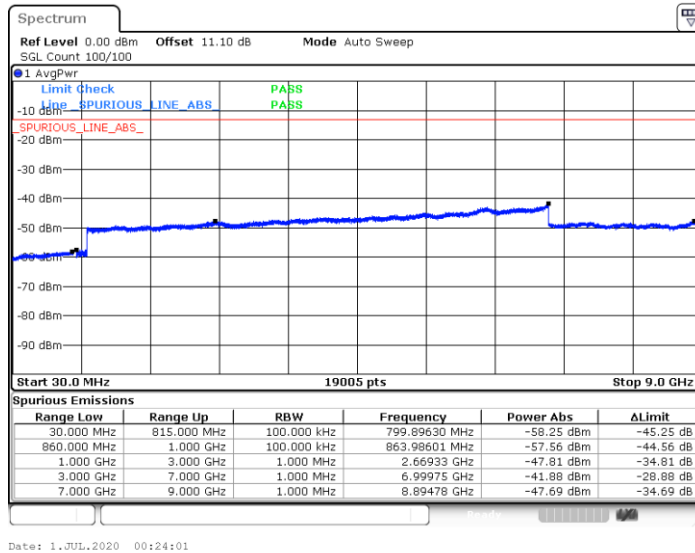


LTE Band 5 / 5MHz

Lowest Channel / 16QAM



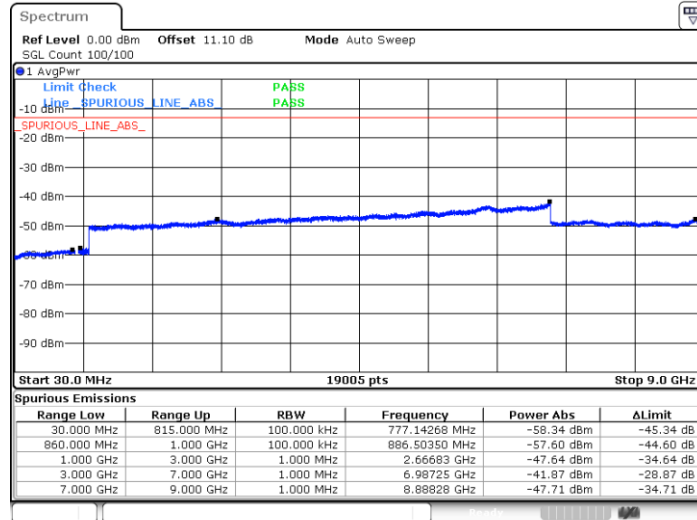
Middle Channel / 16QAM





LTE Band 5 / 5MHz

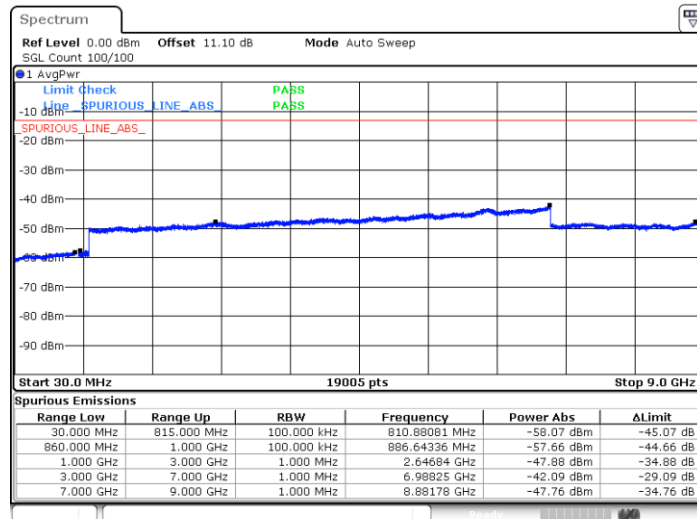
Highest Channel / 16QAM



Date: 1.JUL.2020 00:28:29

LTE Band 5 / 10MHz

Lowest Channel / 16QAM

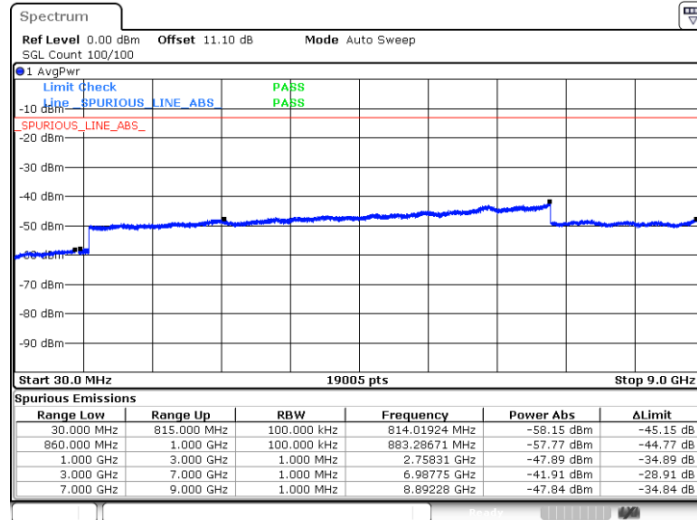


Date: 1.JUL.2020 00:32:56



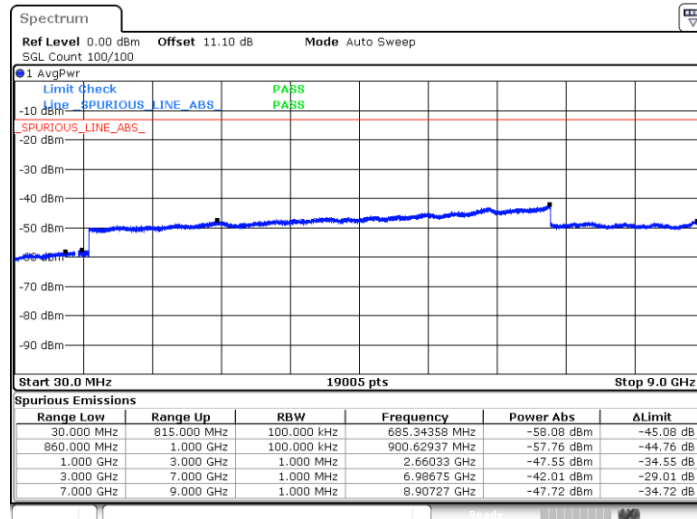
LTE Band 5 / 10MHz

Middle Channel / 16QAM



Date: 1.JUL.2020 00:34:06

Highest Channel / 16QAM



Date: 1.JUL.2020 00:38:34



Frequency Stability

Test Conditions		LTE Band 5 (16QAM) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0074	
30	Normal Voltage	0.0099	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0029	
0	Normal Voltage	0.0072	
-10	Normal Voltage	0.0053	
-20	Normal Voltage	0.0066	
-30	Normal Voltage	0.0047	
20	Maximum Voltage	0.0073	
20	Normal Voltage	0.0029	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =12 V. ; Battery End Point (BEP) =10.2 V. ; Maximum Voltage =13.8 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 7

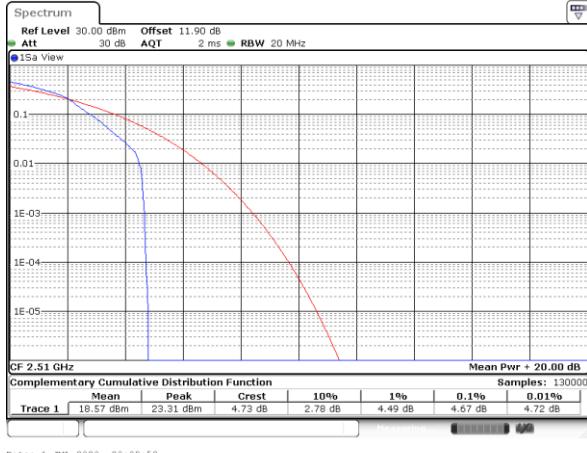
### Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	4.67	5.74	PASS
Middle CH	-	-	5.07	5.57	
Highest CH	-	-	5.25	6.03	



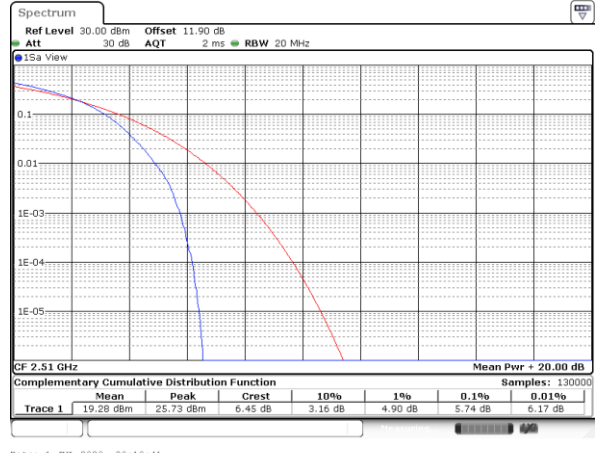
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



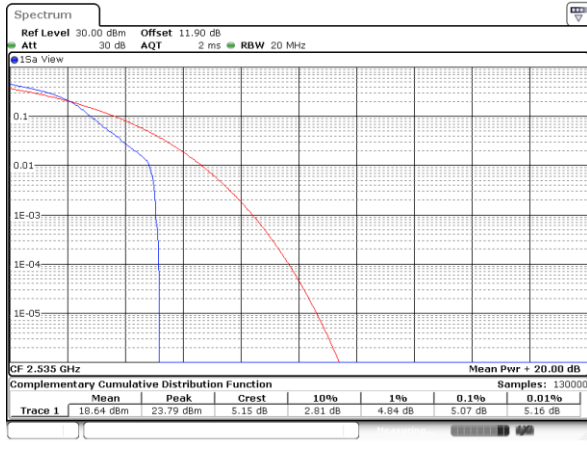
Date: 1.JUL.2020 20:09:58

Lowest Channel / Full RB



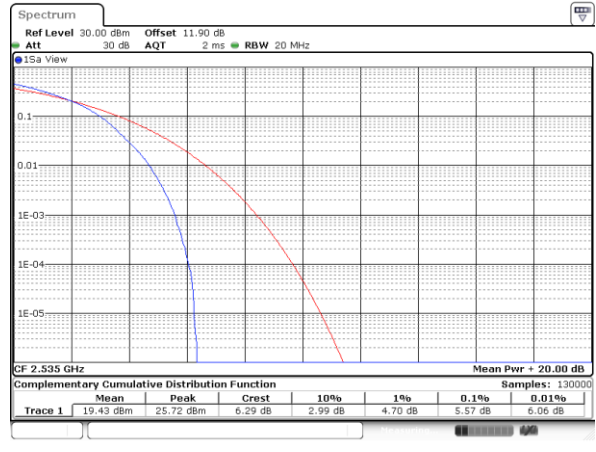
Date: 1.JUL.2020 20:10:41

Middle Channel / 1RB



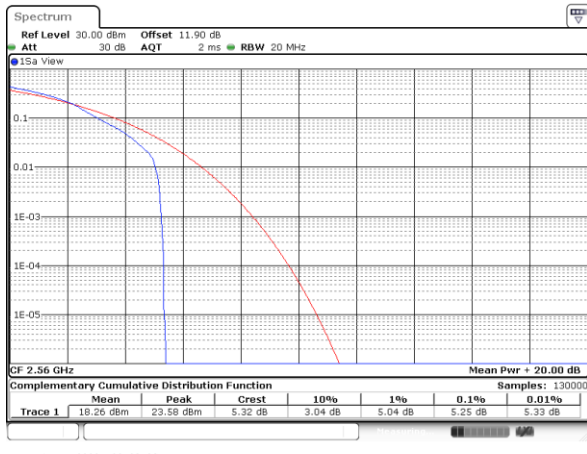
Date: 1.JUL.2020 20:11:22

Middle Channel / Full RB



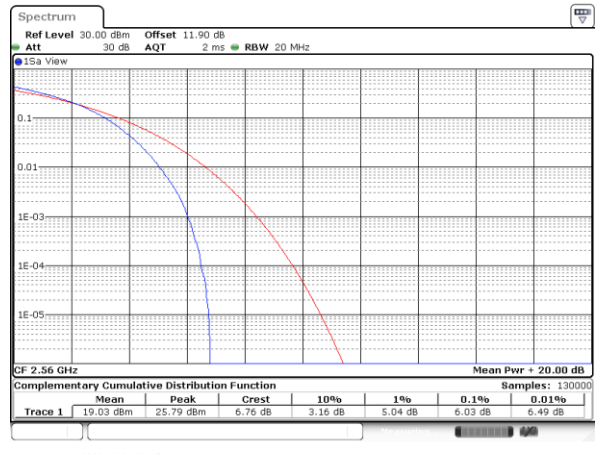
Date: 1.JUL.2020 20:12:12

Highest Channel / 1RB



Date: 1.JUL.2020 20:03:08

Highest Channel / Full RB



Date: 1.JUL.2020 20:03:17



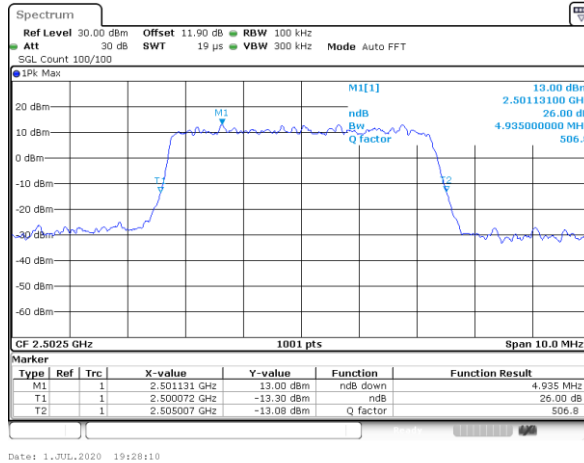
**26dB Bandwidth**

Mode	LTE Band 7 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	-	4.94	-	9.83	-	14.18	-	19.10
Middle CH	-	-	-	-	-	4.88	-	9.77	-	14.60	-	19.14
Highest CH	-	-	-	-	-	4.98	-	9.75	-	14.33	-	18.78

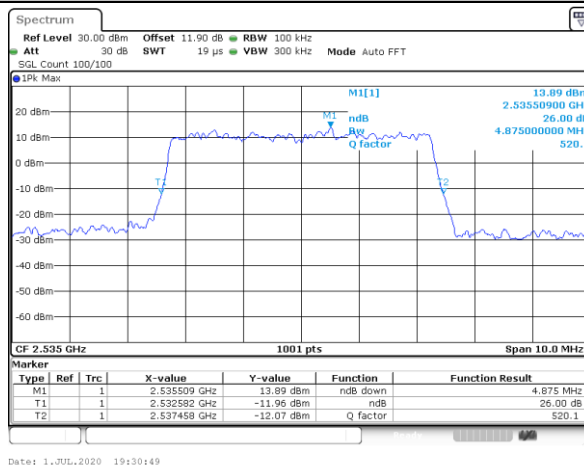


LTE Band 7

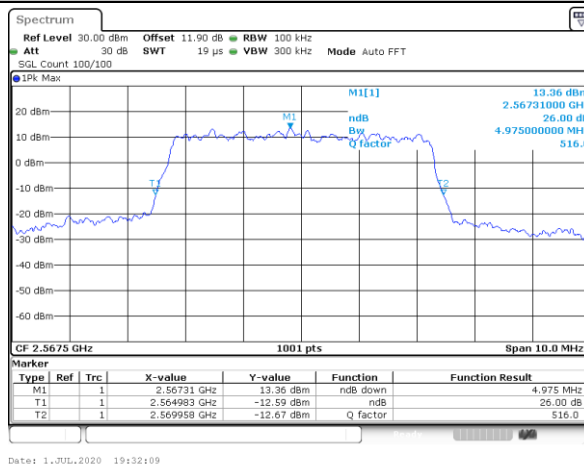
Lowest Channel / 5MHz / 16QAM



Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / 16QAM

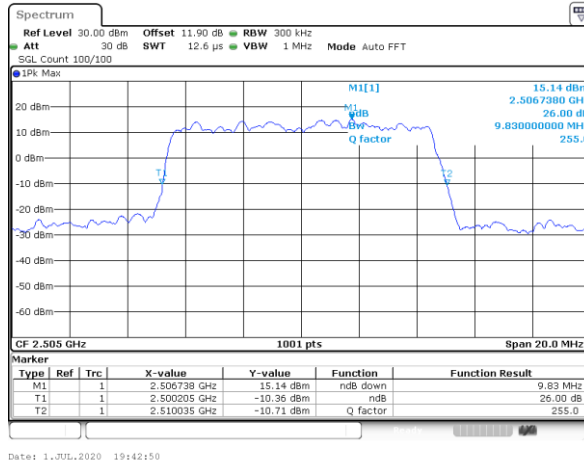






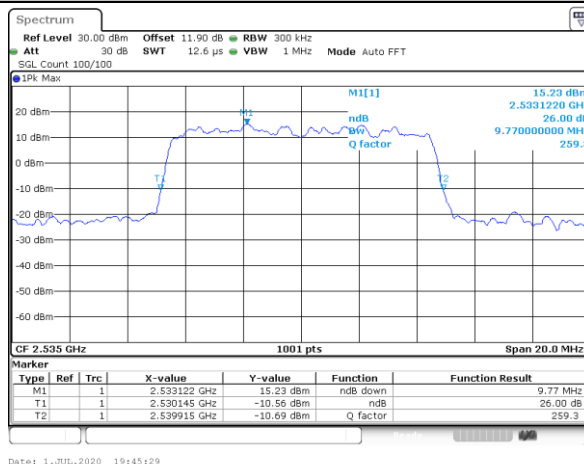
LTE Band 7

Lowest Channel / 10MHz / 16QAM



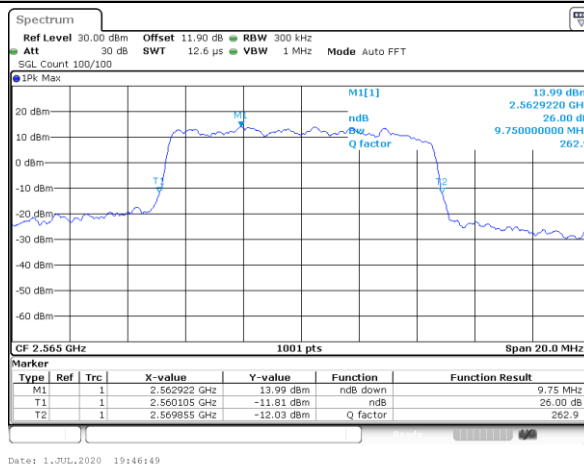
Date: 1.JUL.2020 19:42:50

Middle Channel / 10MHz / 16QAM



Date: 1.JUL.2020 19:45:29

Highest Channel / 10MHz / 16QAM

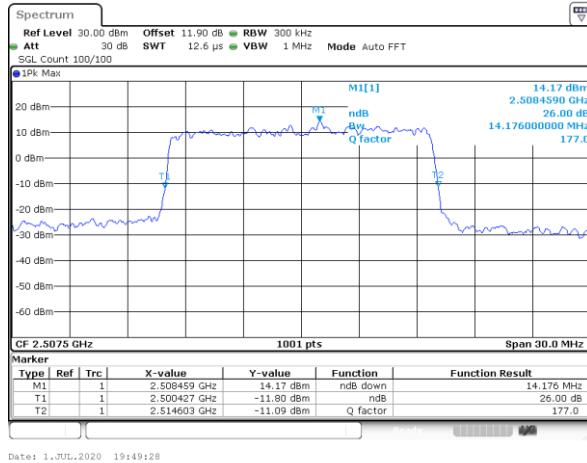


Date: 1.JUL.2020 19:46:49



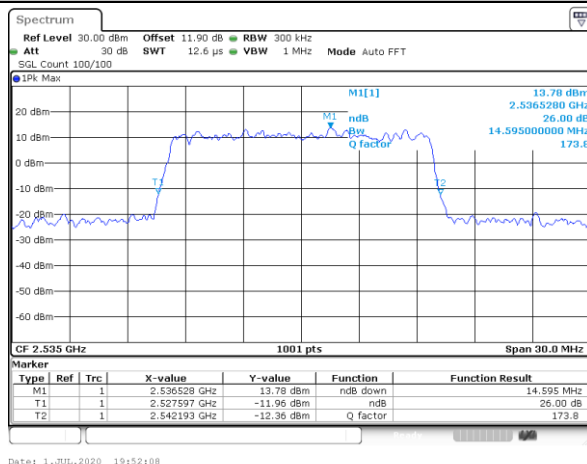
LTE Band 7

Lowest Channel / 15MHz / 16QAM



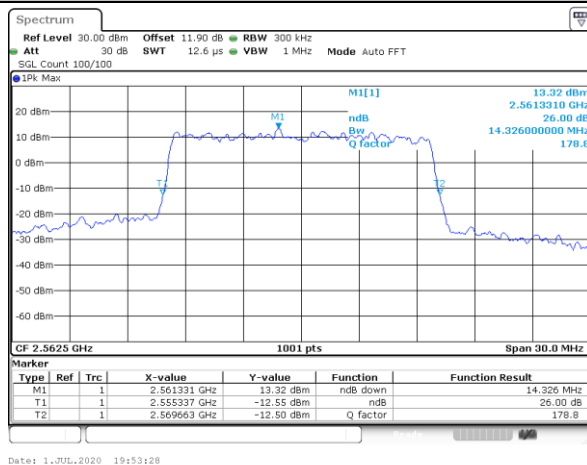
Date: 1.JUL.2020 19:49:28

Middle Channel / 15MHz / 16QAM



Date: 1.JUL.2020 19:52:08

Highest Channel / 15MHz / 16QAM

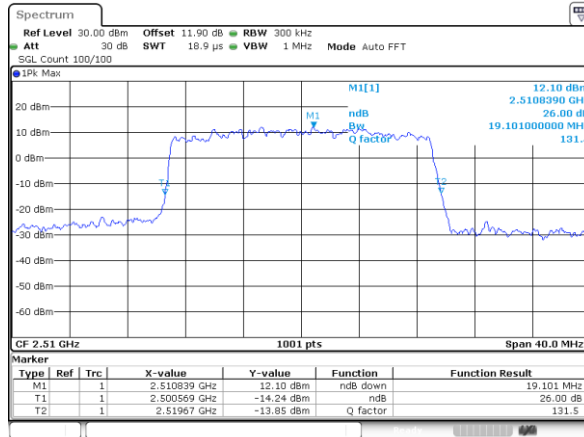


Date: 1.JUL.2020 19:53:28



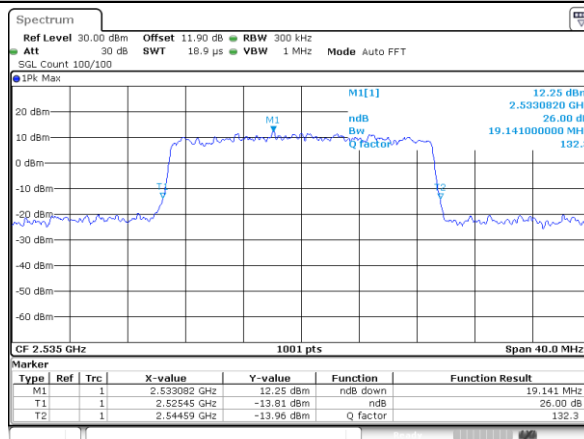
LTE Band 7

Lowest Channel / 20MHz / 16QAM



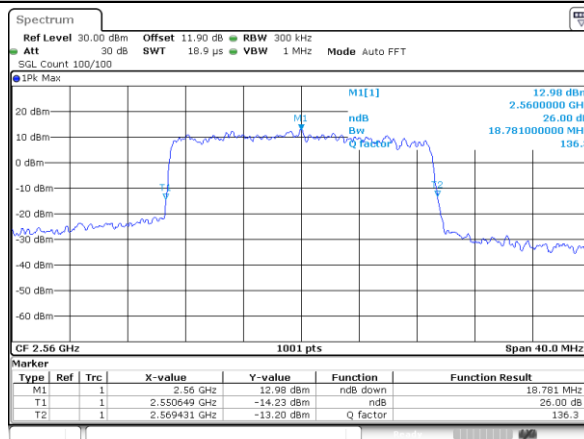
Date: 1.JUL.2020 19:56:07

Middle Channel / 20MHz / 16QAM



Date: 1.JUL.2020 19:59:46

Highest Channel / 20MHz / 16QAM



Date: 1.JUL.2020 20:00:06



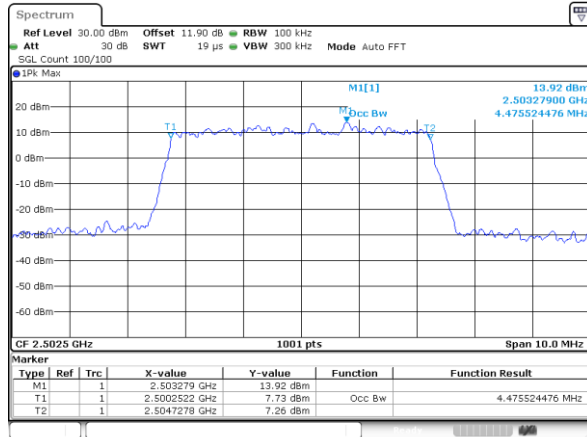
### Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	-	4.48	-	9.07	-	13.43	-	17.90
Middle CH	-	-	-	-	-	4.49	-	9.01	-	13.37	-	17.82
Highest CH	-	-	-	-	-	4.49	-	8.99	-	13.34	-	17.78



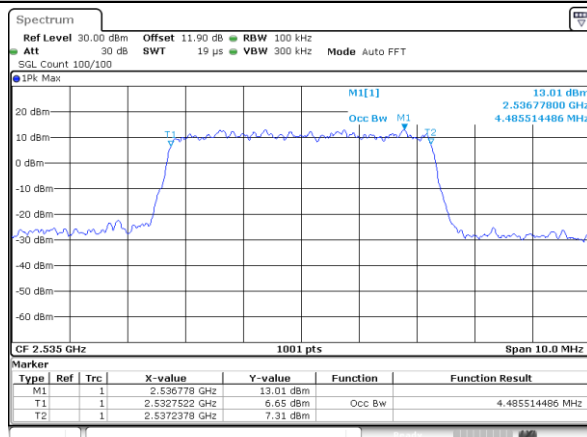
LTE Band 7

Lowest Channel / 5MHz / 16QAM



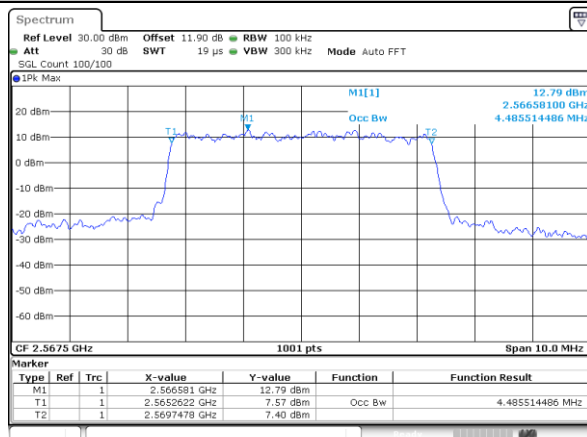
Date: 1.JUL.2020 19:27:58

Middle Channel / 5MHz / 16QAM



Date: 1.JUL.2020 19:30:58

Highest Channel / 5MHz / 16QAM

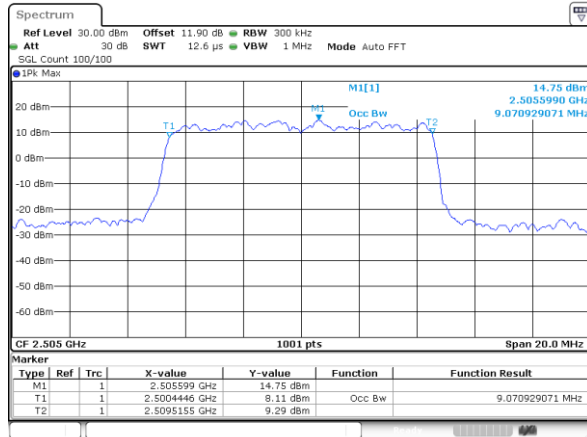


Date: 1.JUL.2020 19:31:57



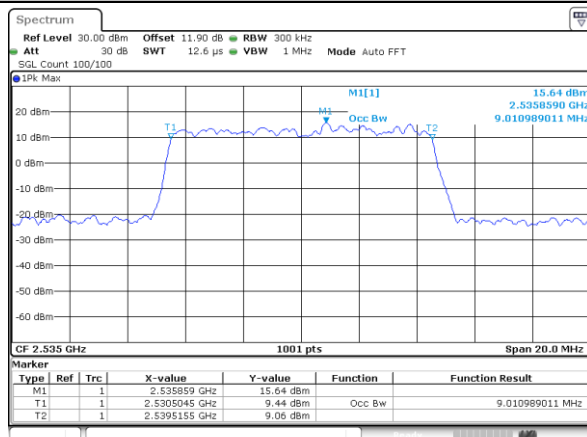
LTE Band 7

Lowest Channel / 10MHz / 16QAM



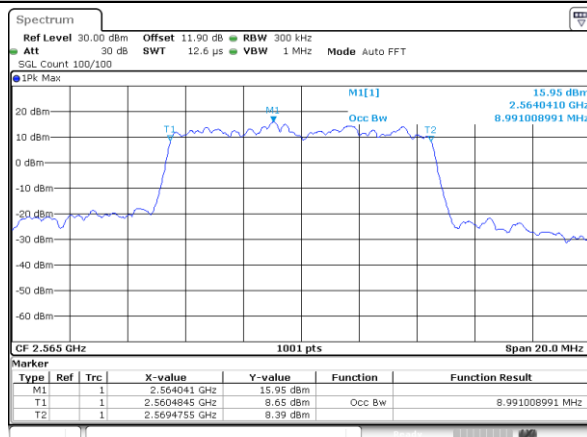
Date: 1.JUL.2020 19:42:39

Middle Channel / 10MHz / 16QAM



Date: 1.JUL.2020 19:45:18

Highest Channel / 10MHz / 16QAM

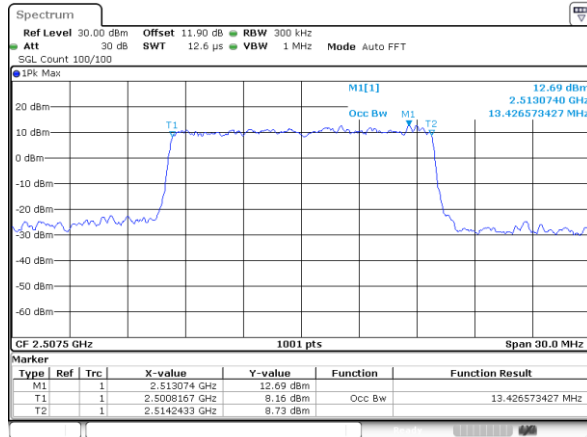


Date: 1.JUL.2020 19:46:37



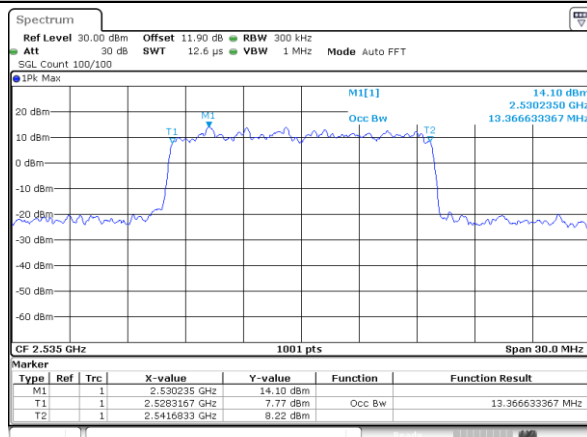
LTE Band 7

Lowest Channel / 15MHz / 16QAM



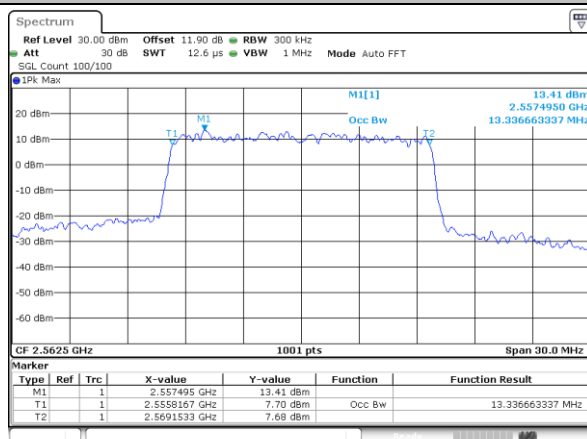
Date: 1.JUL.2020 19:49:17

Middle Channel / 15MHz / 16QAM



Date: 1.JUL.2020 19:51:57

Highest Channel / 15MHz / 16QAM

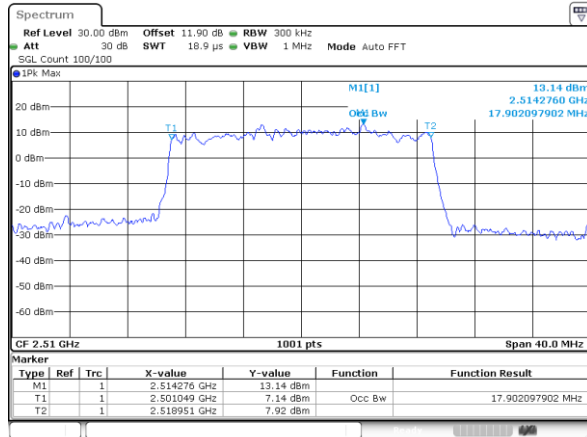


Date: 1.JUL.2020 19:53:17



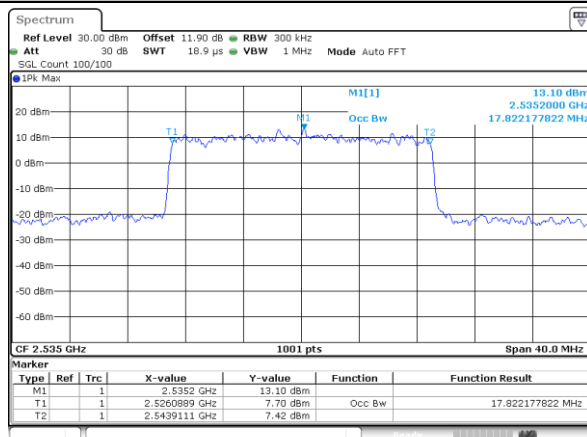
LTE Band 7

Lowest Channel / 20MHz / 16QAM



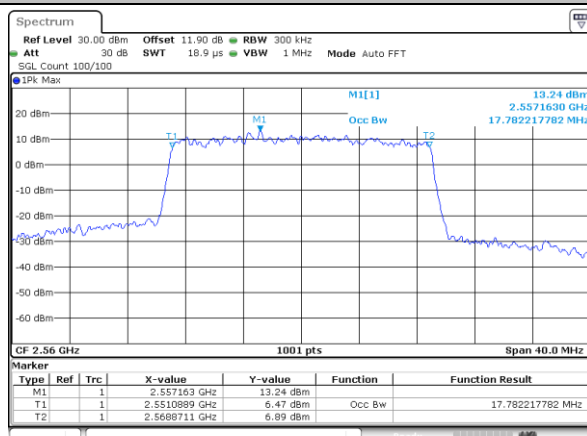
Date: 1.JUL.2020 19:55:56

Middle Channel / 20MHz / 16QAM



Date: 1.JUL.2020 19:59:05

Highest Channel / 20MHz / 16QAM



Date: 1.JUL.2020 19:59:55

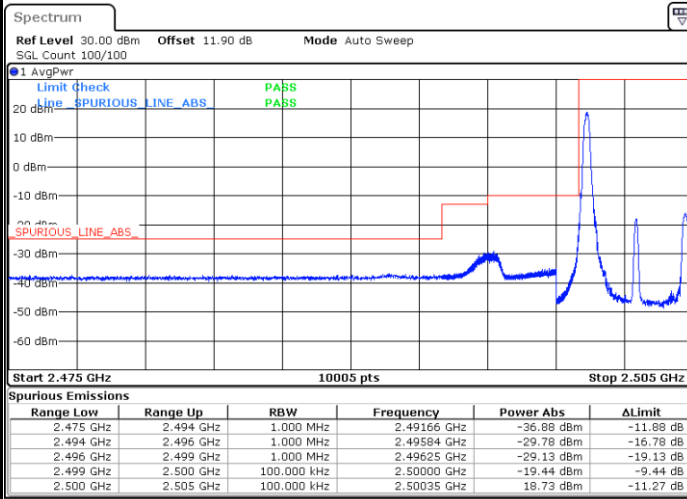




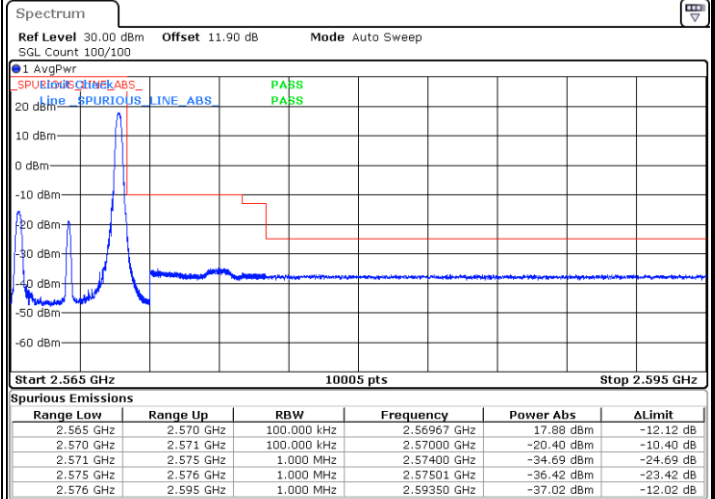
# Conducted Band Edge

## LTE Band 7 / 5MHz / 16QAM

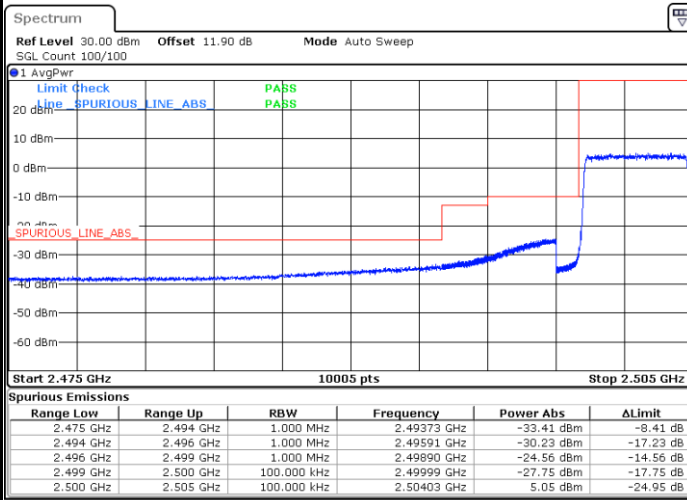
### Lowest Band Edge / 1 RB



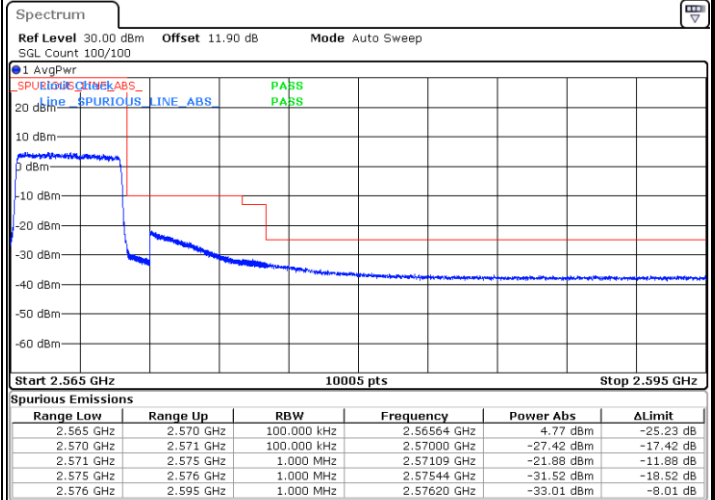
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



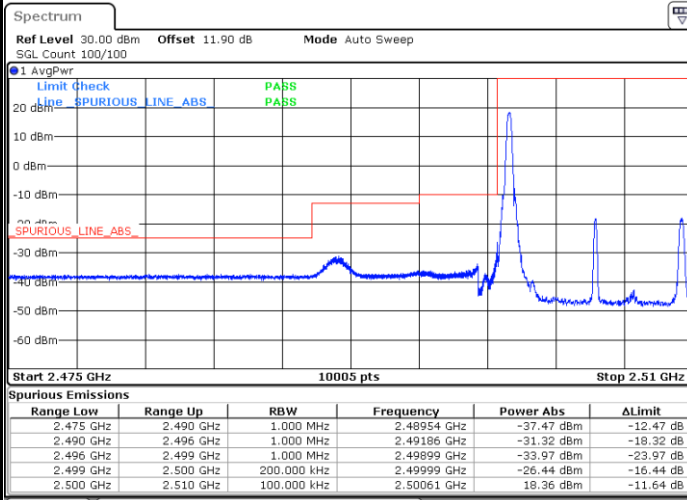
### Highest Band Edge / Full RB





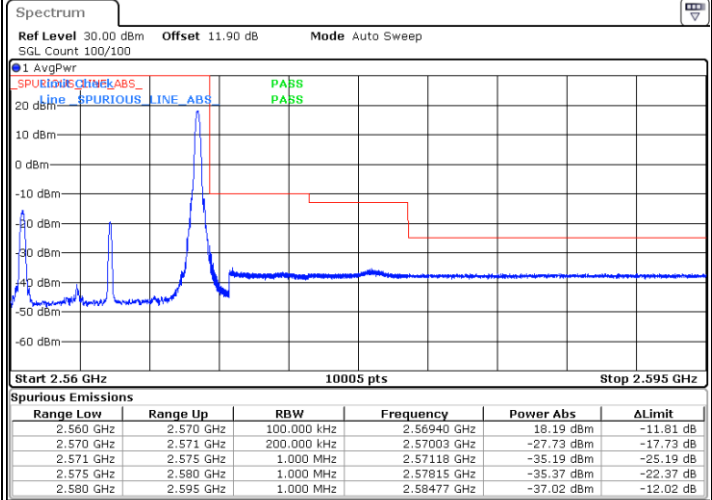
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



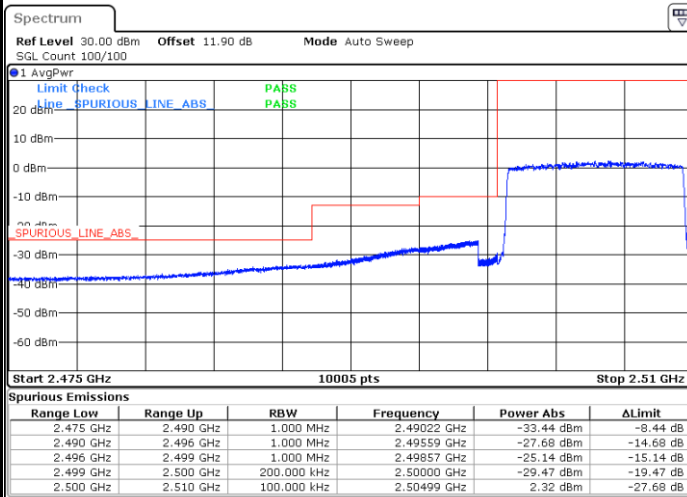
Date: 1.JUL.2020 19:43:30

Highest Band Edge / 1 RB



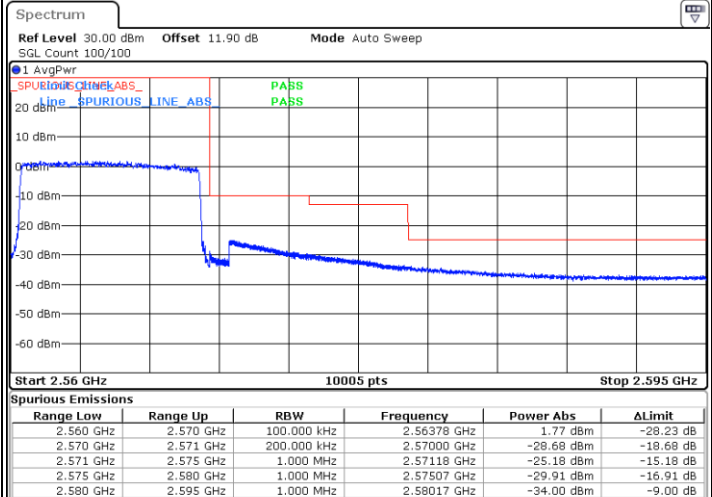
Date: 1.JUL.2020 19:47:29

Lowest Band Edge / Full RB



Date: 1.JUL.2020 19:44:09

Highest Band Edge / Full RB

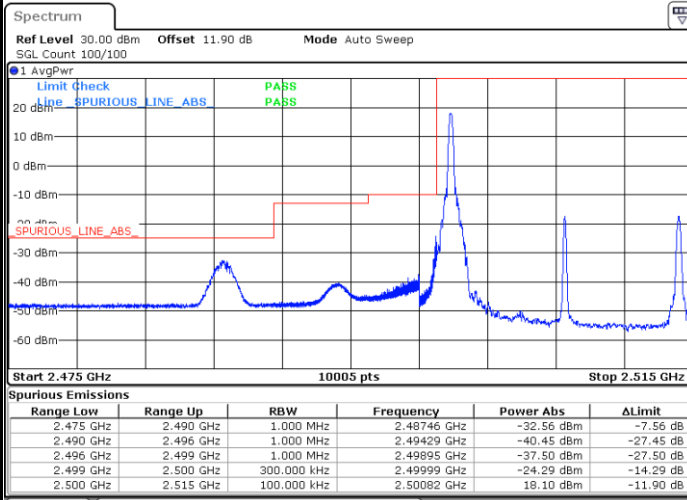


Date: 1.JUL.2020 19:48:08



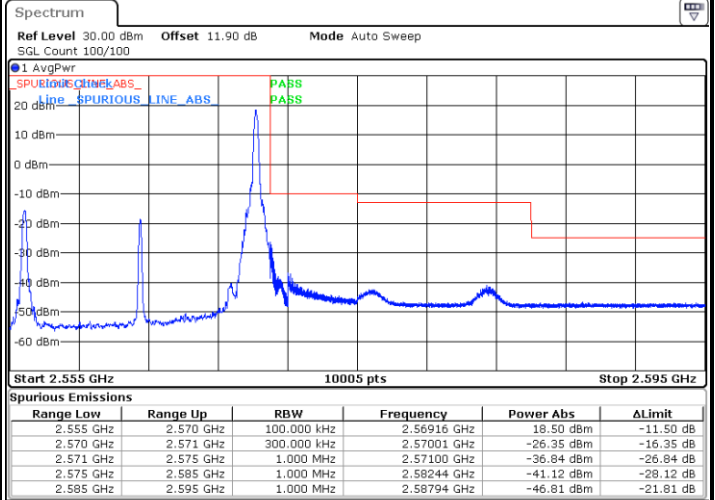
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



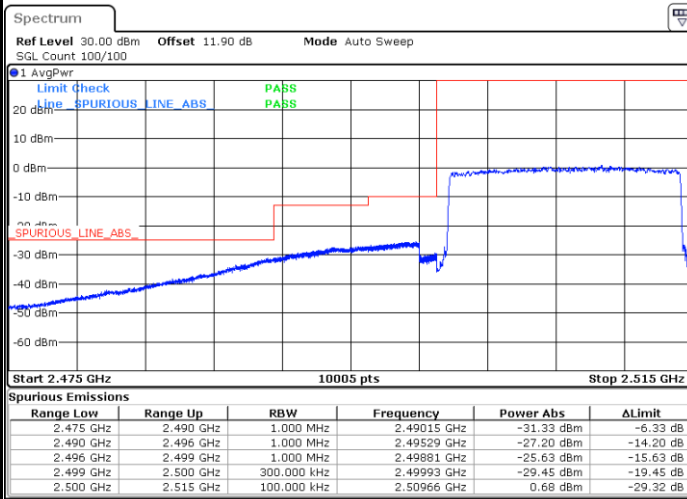
Date: 1.JUL.2020 19:50:08

Highest Band Edge / 1 RB



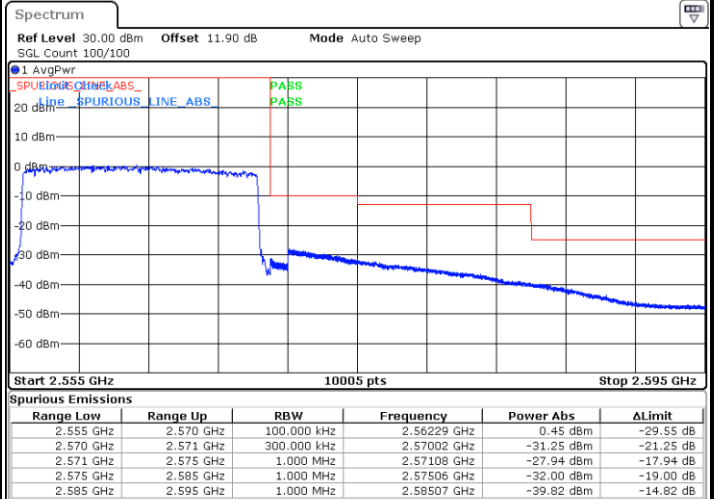
Date: 1.JUL.2020 19:54:08

Lowest Band Edge / Full RB



Date: 1.JUL.2020 19:50:48

Highest Band Edge / Full RB

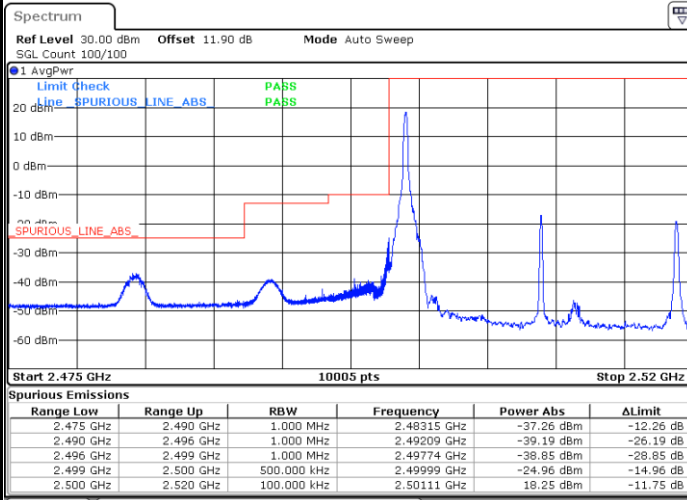


Date: 1.JUL.2020 19:54:47



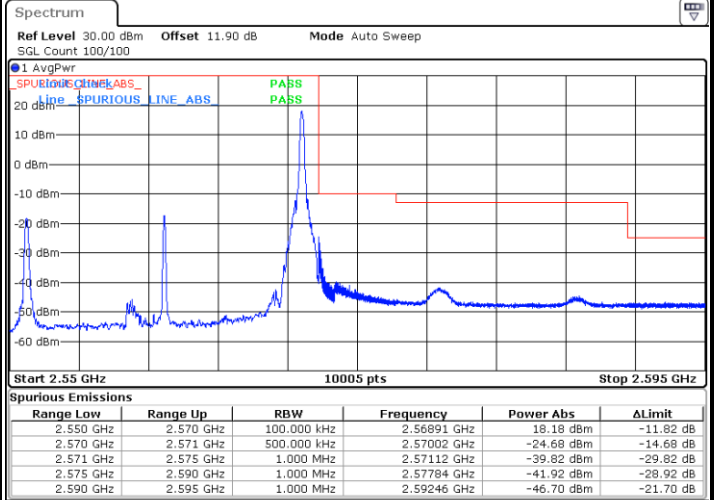
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



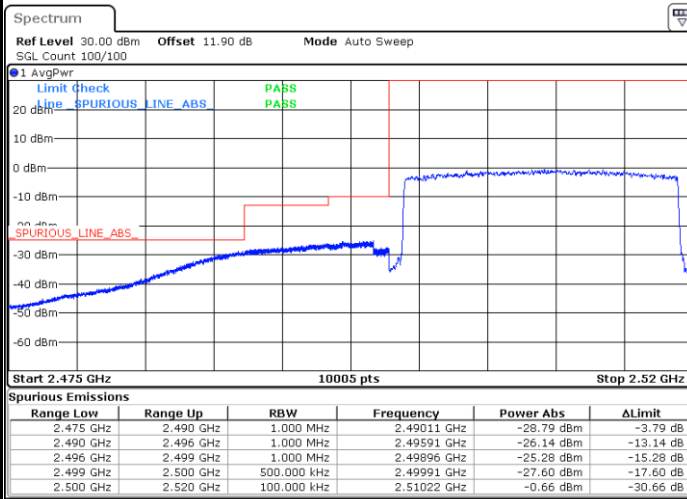
Date: 1.JUL.2020 19:56:47

Highest Band Edge / 1RB



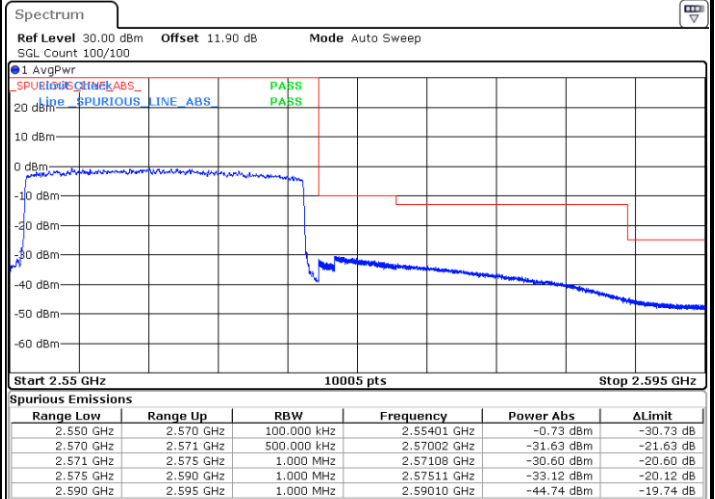
Date: 1.JUL.2020 20:00:45

Lowest Band Edge / Full RB



Date: 1.JUL.2020 19:57:27

Highest Band Edge / Full RB



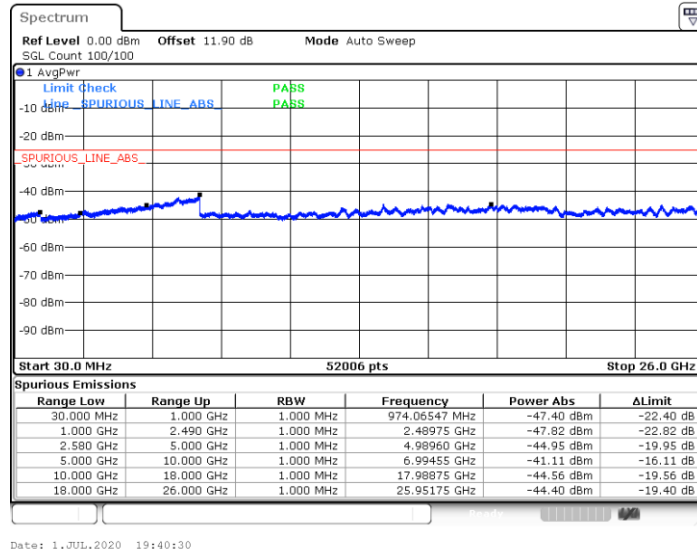
Date: 1.JUL.2020 20:01:25



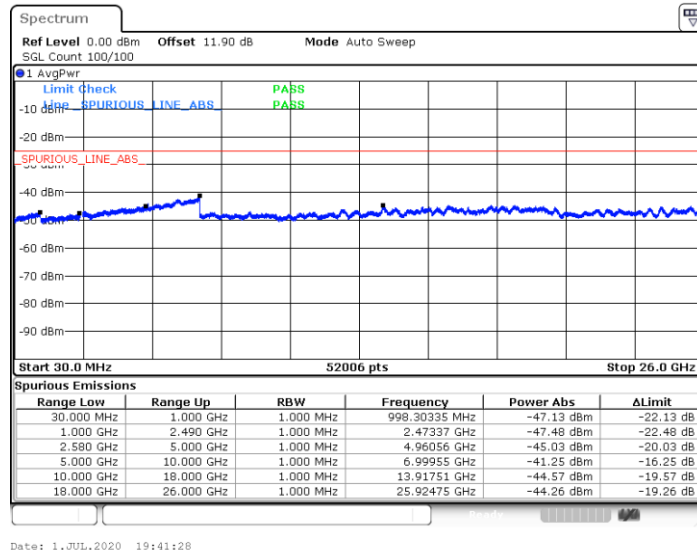
# Conducted Spurious Emission

## LTE Band 7 / 5MHz

### Lowest Channel / 16QAM



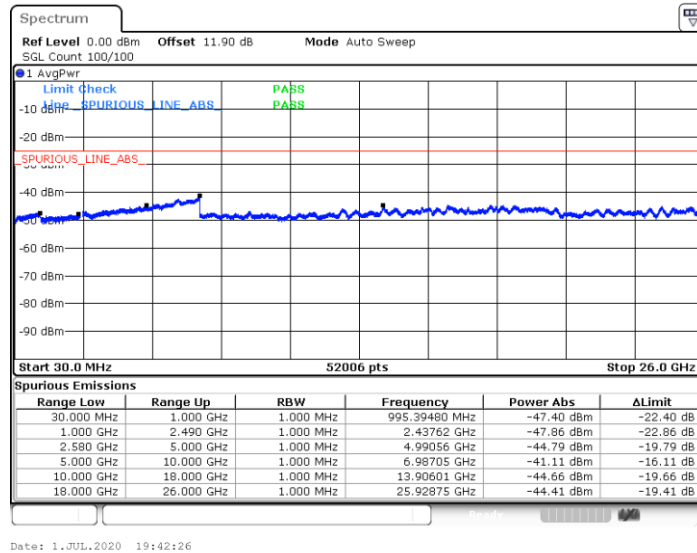
### Middle Channel / 16QAM





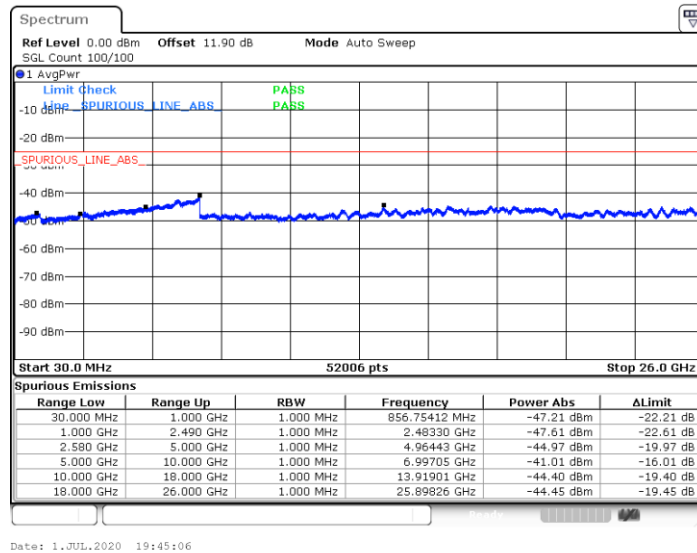
LTE Band 7 / 5MHz

Highest Channel / 16QAM



LTE Band 7 / 10MHz

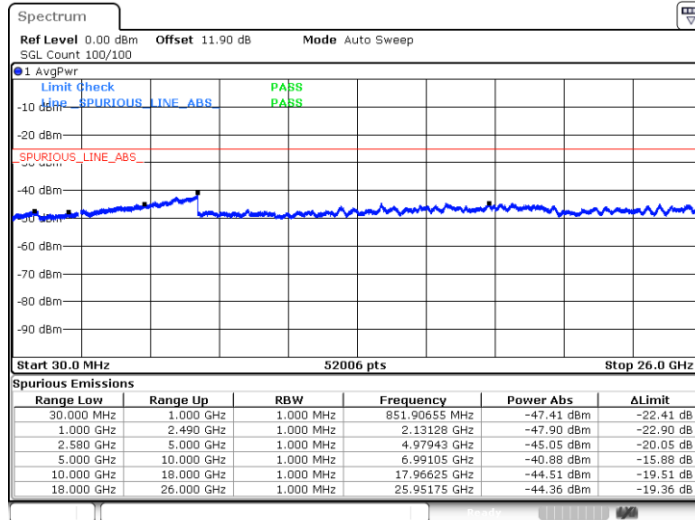
Lowest Channel / 16QAM





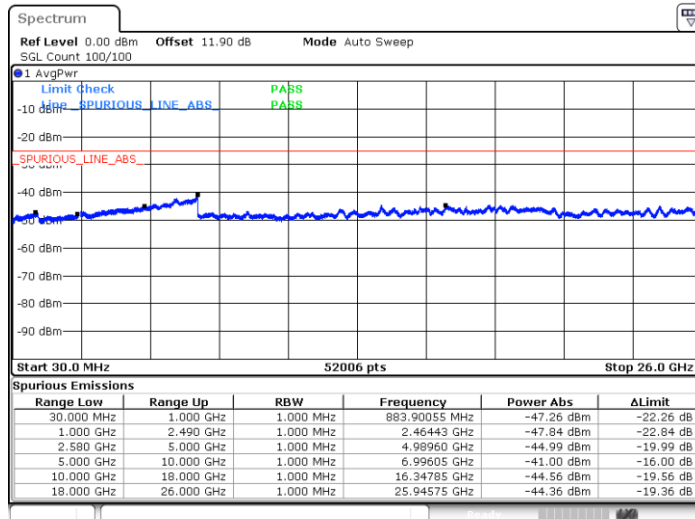
LTE Band 7 / 10MHz

Middle Channel / 16QAM



Date: 1.JUL.2020 19:46:26

Highest Channel / 16QAM

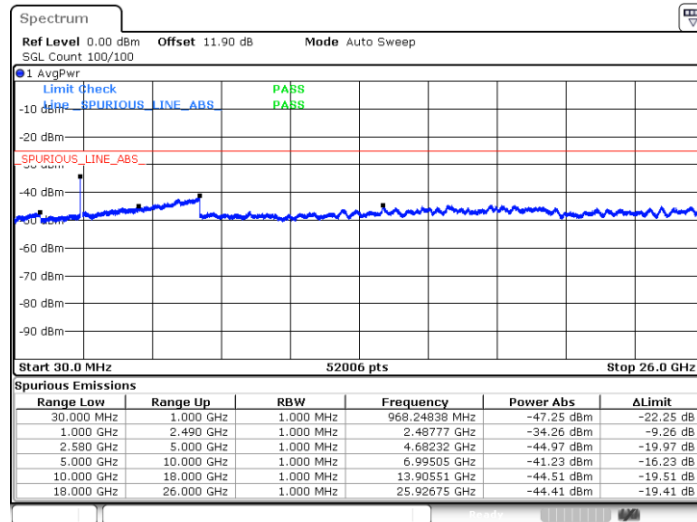


Date: 1.JUL.2020 19:49:05



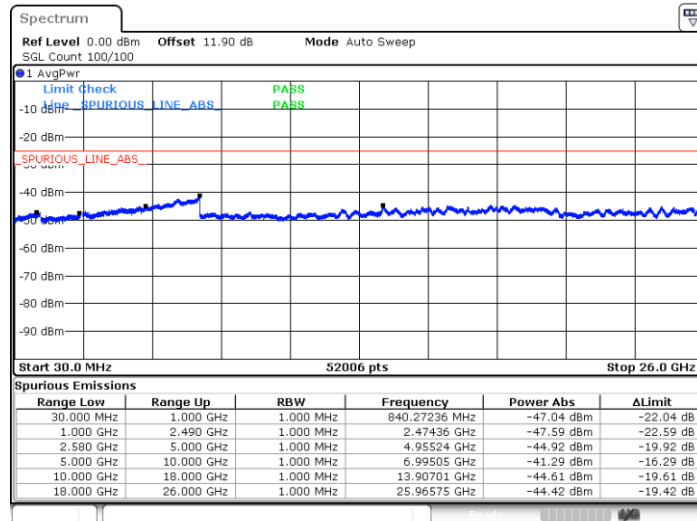
LTE Band 7 / 15MHz

Lowest Channel / 16QAM



Date: 1.JUL.2020 19:51:45

Middle Channel / 16QAM



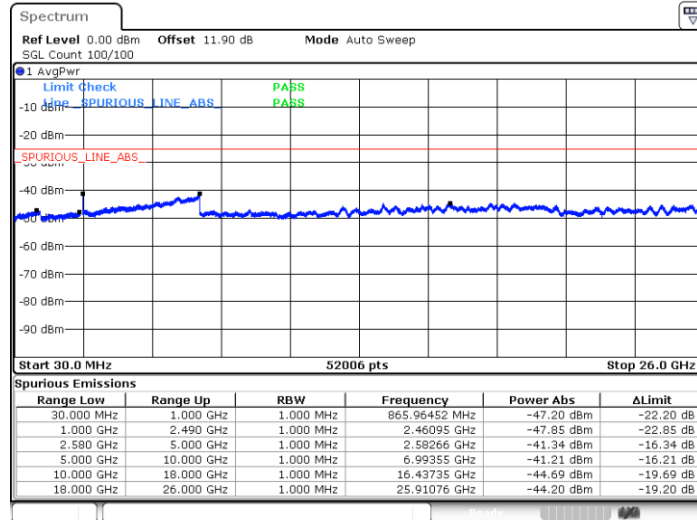
Date: 1.JUL.2020 19:53:05





LTE Band7 / 15MHz

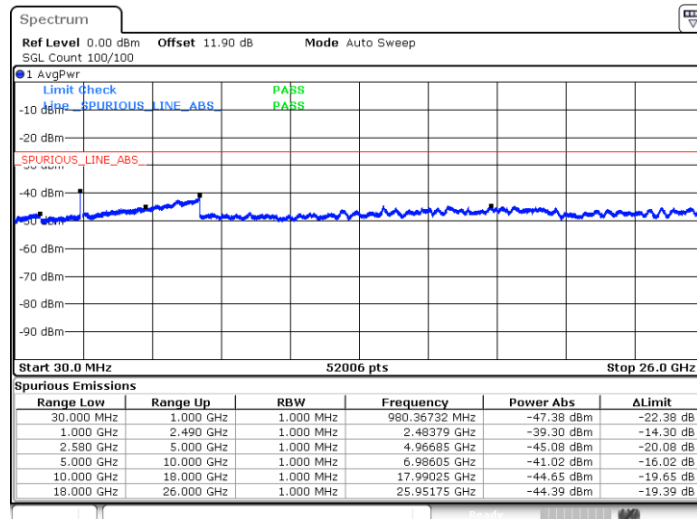
Highest Channel / 16QAM



Date: 1.JUL.2020 19:55:44

LTE Band 7 / 20MHz

Lowest Channel / 16QAM

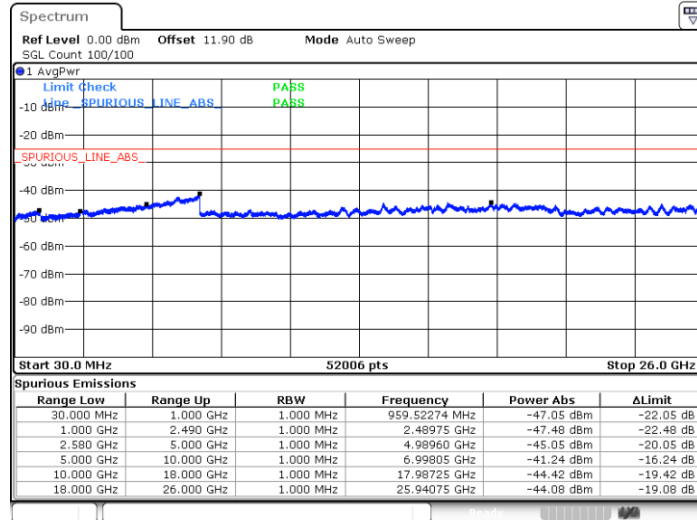


Date: 1.JUL.2020 19:58:23



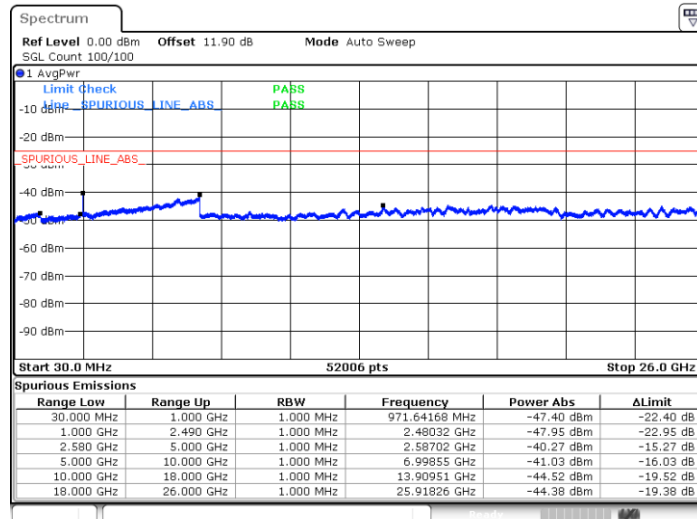
LTE Band 7 / 20MHz

Middle Channel / 16QAM



Date: 1.JUL.2020 19:59:43

Highest Channel / 16QAM



Date: 1.JUL.2020 20:02:21



Frequency Stability

Test Conditions		LTE Band 7 (16QAM) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0077	PASS
40	Normal Voltage	0.0054	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0077	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0030	
-30	Normal Voltage	0.0062	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0077	
20	Battery End Point	0.0020	

Note:

1. Normal Voltage =12 V. ; Battery End Point (BEP) =10.2 V. ; Maximum Voltage =13.8 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 12

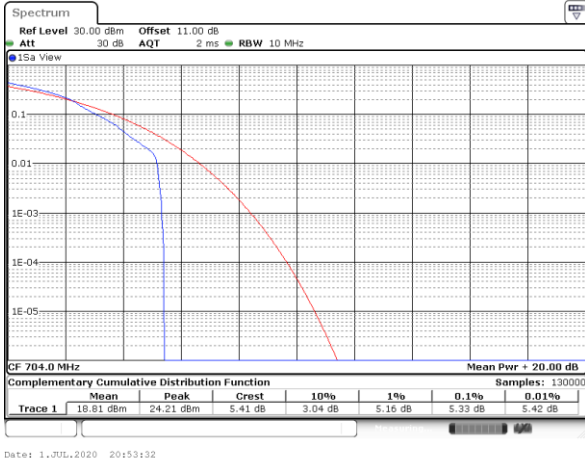
### Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	5.33	5.83	<b>PASS</b>
Middle CH	-	-	5.13	5.65	
Highest CH	-	-	5.10	5.65	



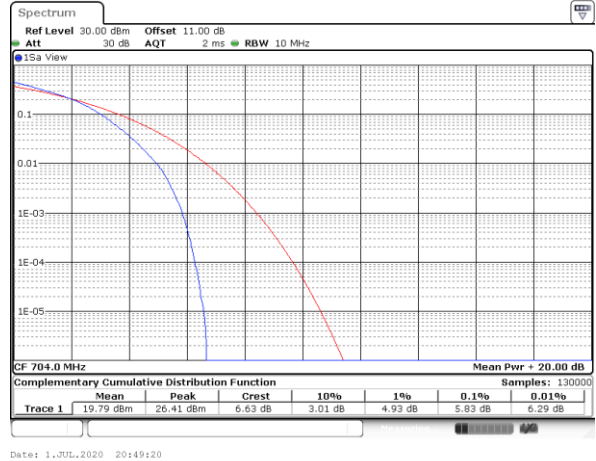
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



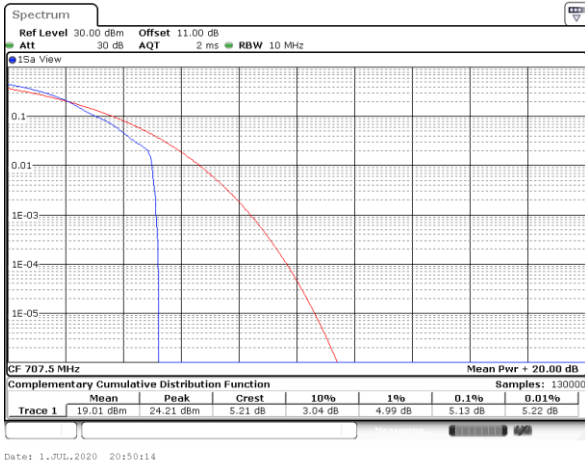
Date: 1.JUL.2020 20:53:32

Lowest Channel / Full RB



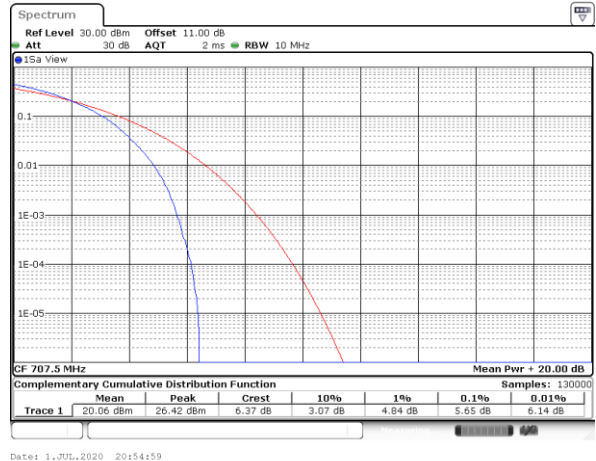
Date: 1.JUL.2020 20:49:20

Middle Channel / 1RB



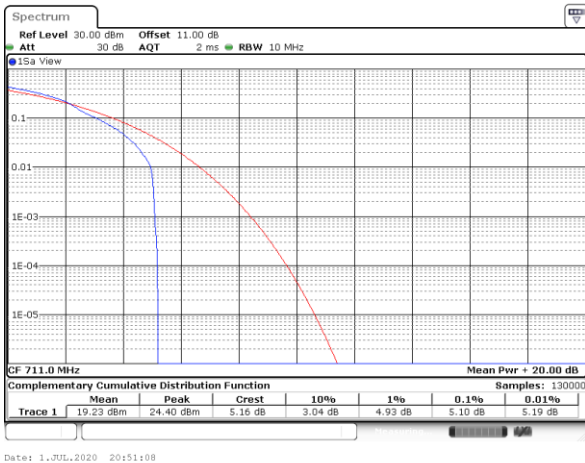
Date: 1.JUL.2020 20:50:14

Middle Channel / Full RB



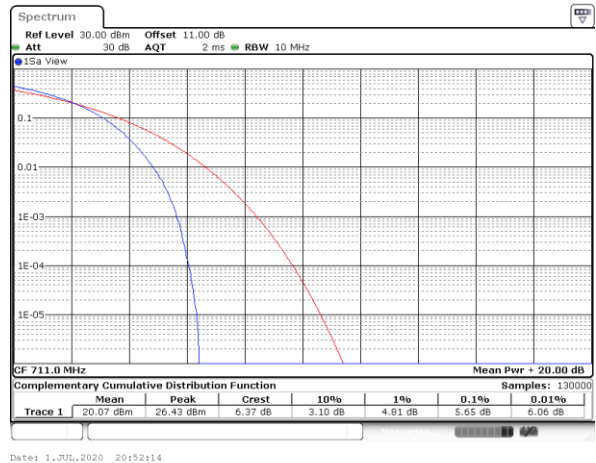
Date: 1.JUL.2020 20:54:59

Highest Channel / 1RB



Date: 1.JUL.2020 20:51:08

Highest Channel / Full RB



Date: 1.JUL.2020 20:52:14



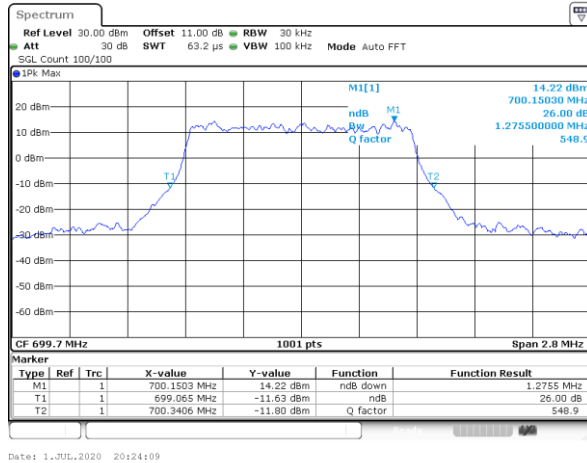
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	1.28	-	3.00	-	4.95	-	9.99	-	-	-	-
Middle CH	-	1.29	-	3.00	-	4.99	-	9.67	-	-	-	-
Highest CH	-	1.30	-	2.94	-	5.03	-	9.91	-	-	-	-

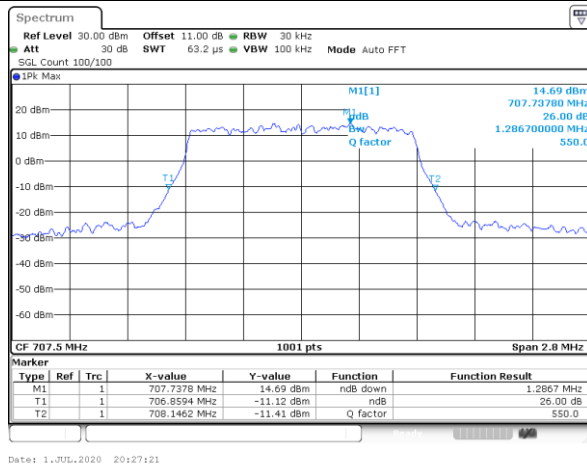


LTE Band 12

Lowest Channel / 1.4MHz / 16QAM



Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / 16QAM

