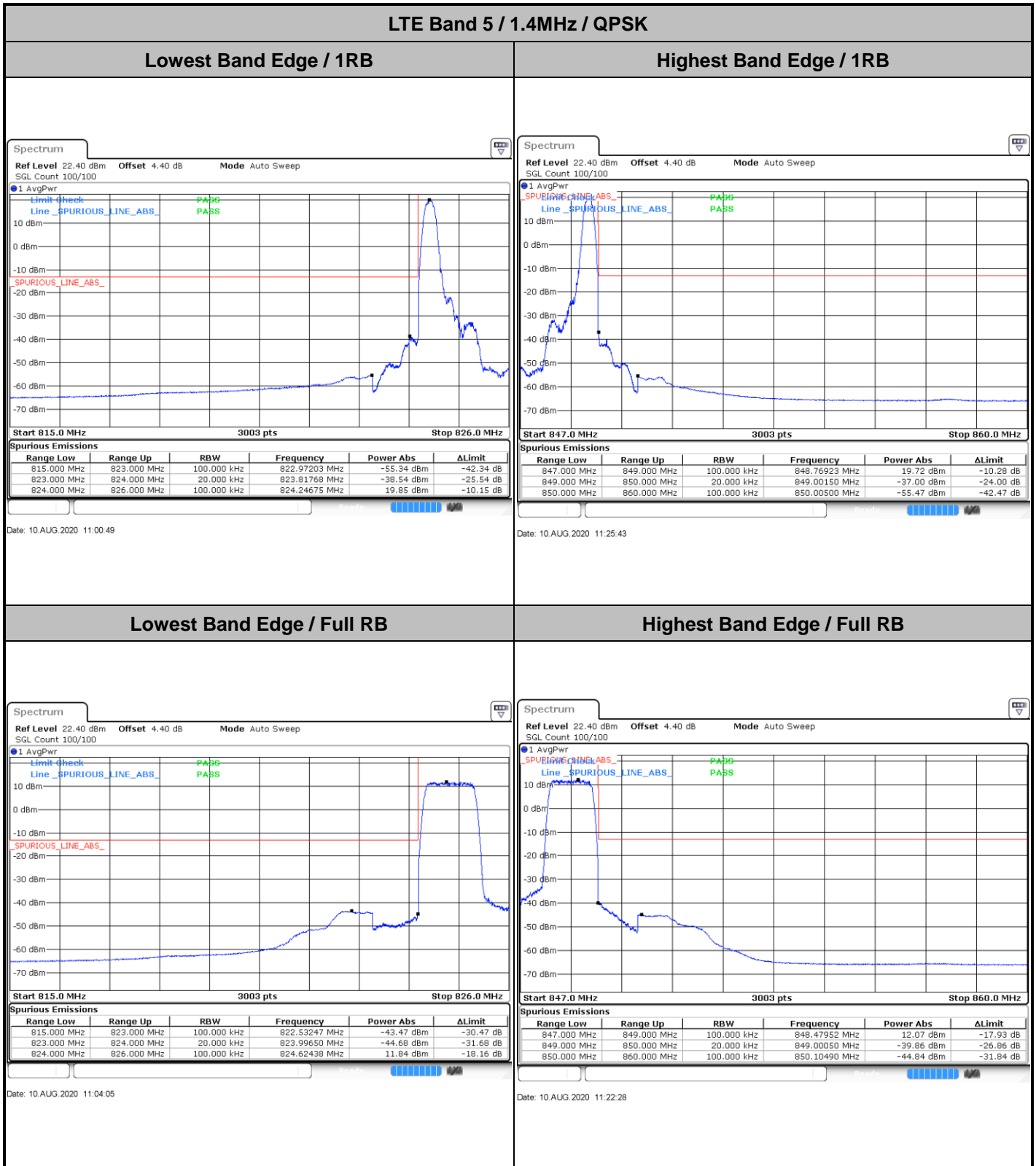




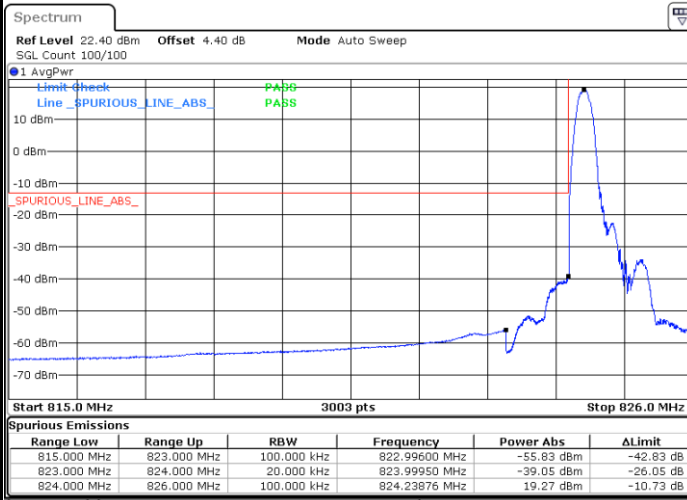
# Conducted Band Edge





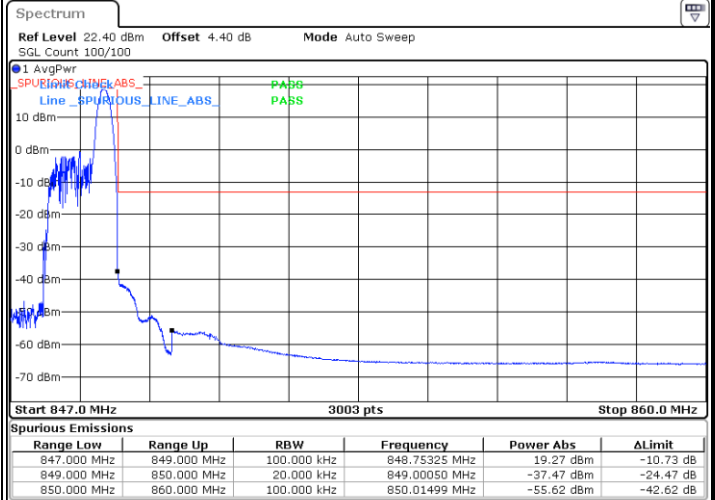
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



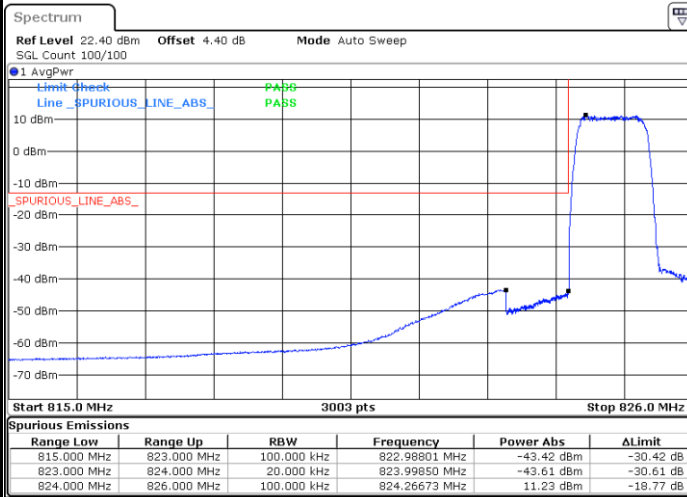
Date: 10 AUG 2020 11:02:27

Highest Band Edge / 1 RB



Date: 10 AUG 2020 11:27:20

Lowest Band Edge / Full RB



Date: 10 AUG 2020 11:05:42

Highest Band Edge / Full RB

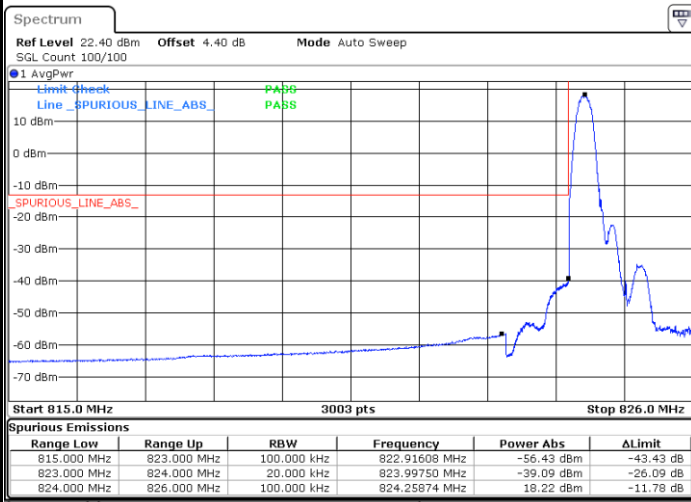


Date: 10 AUG 2020 11:24:05



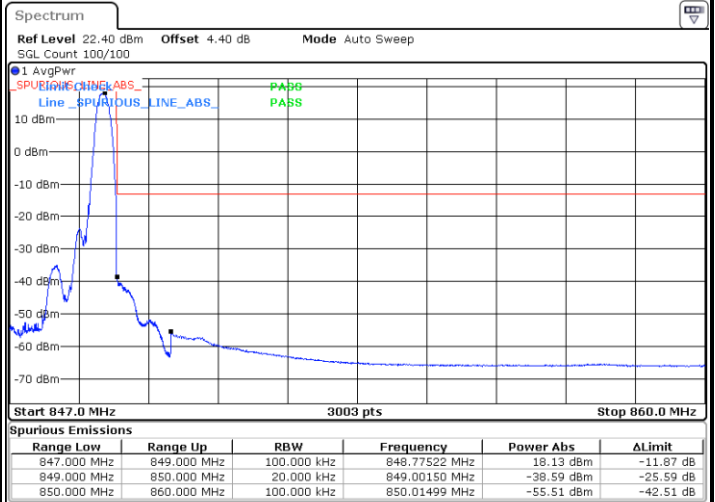
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



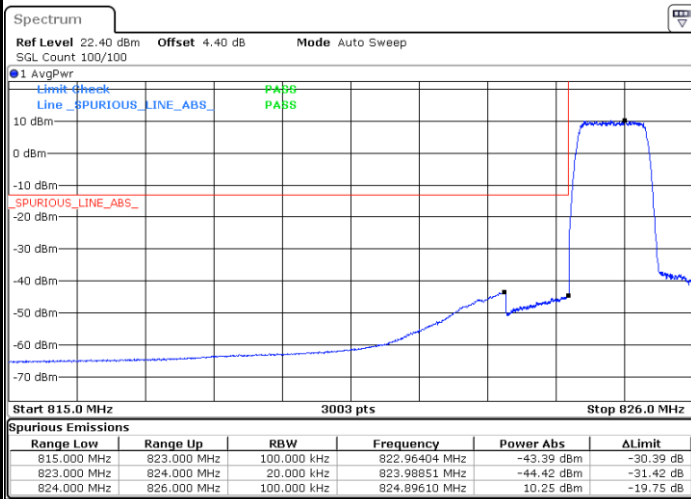
Date: 10 AUG 2020 13:13:04

Highest Band Edge / 1 RB



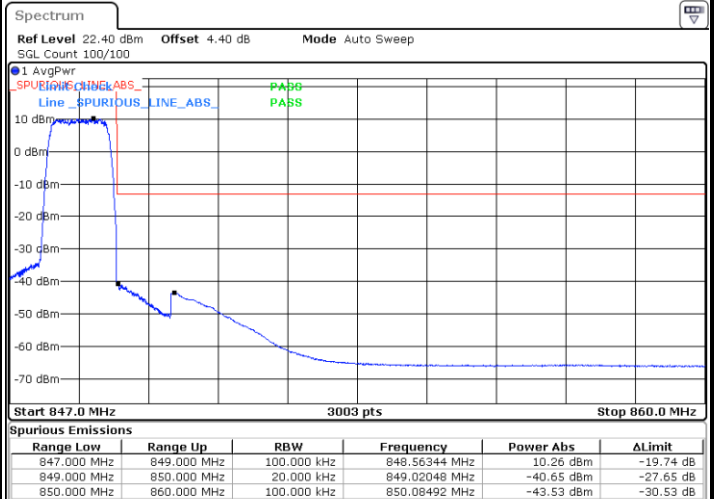
Date: 10 AUG 2020 13:18:48

Lowest Band Edge / Full RB



Date: 10 AUG 2020 13:11:26

Highest Band Edge / Full RB

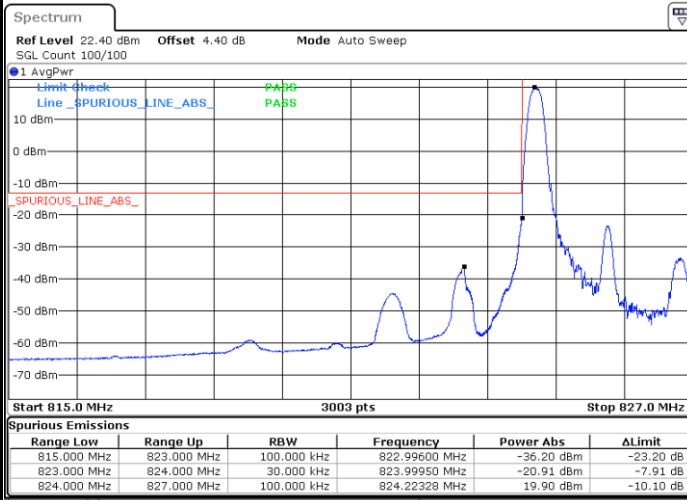


Date: 10 AUG 2020 13:17:10



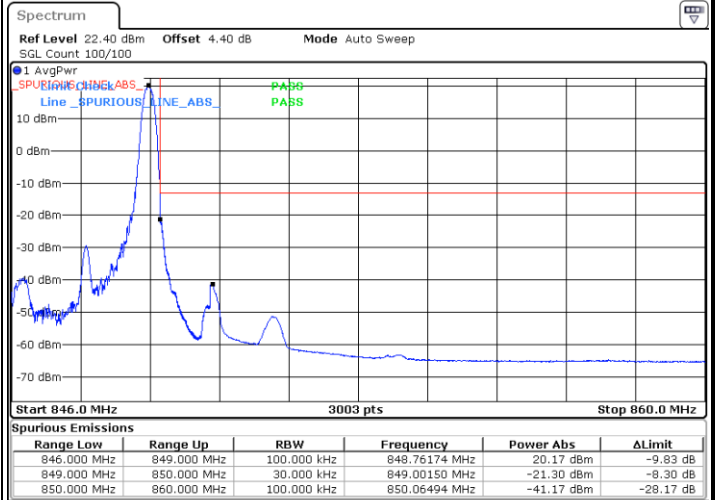
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



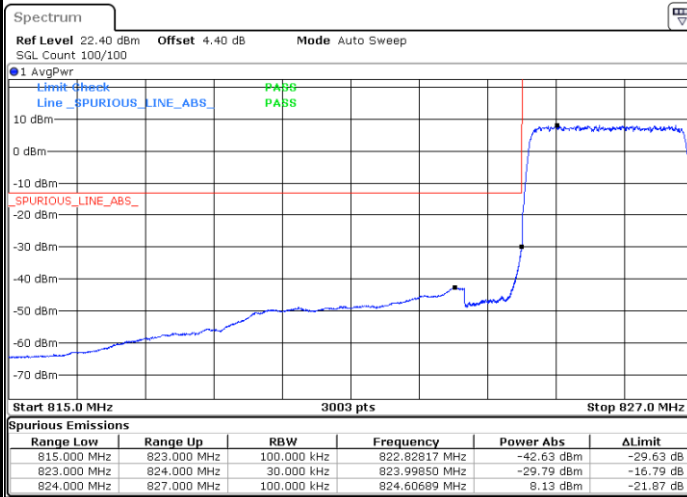
Date: 10 AUG 2020 11:31:37

Highest Band Edge / 1 RB



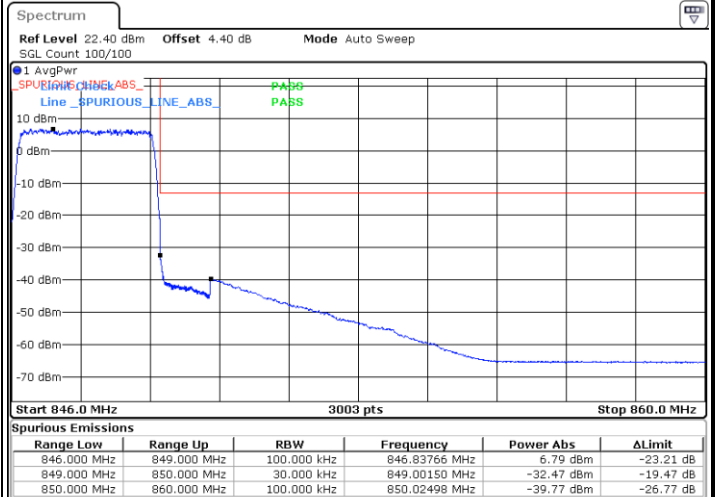
Date: 18 AUG 2020 01:09:56

Lowest Band Edge / Full RB



Date: 10 AUG 2020 11:34:52

Highest Band Edge / Full RB

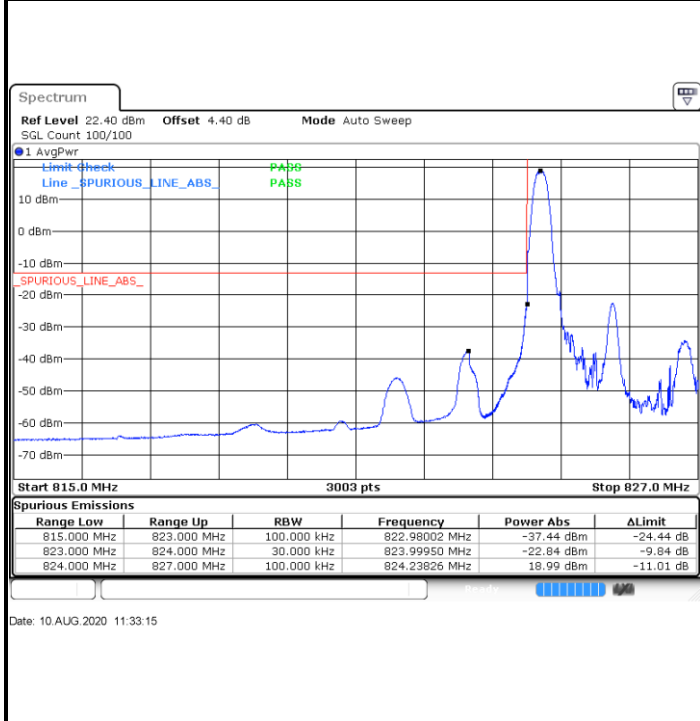


Date: 18 AUG 2020 00:30:39

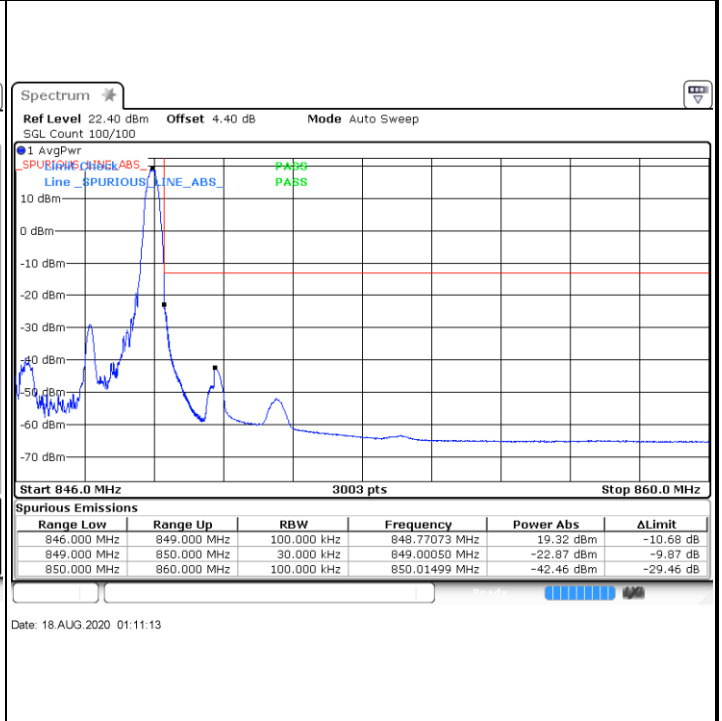


**LTE Band 5 / 3MHz / 16QAM**

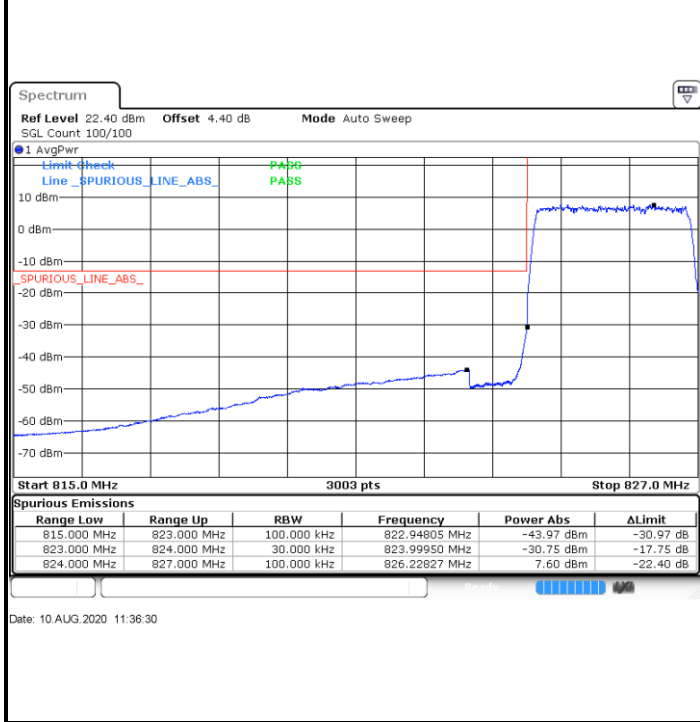
**Lowest Band Edge / 1 RB**



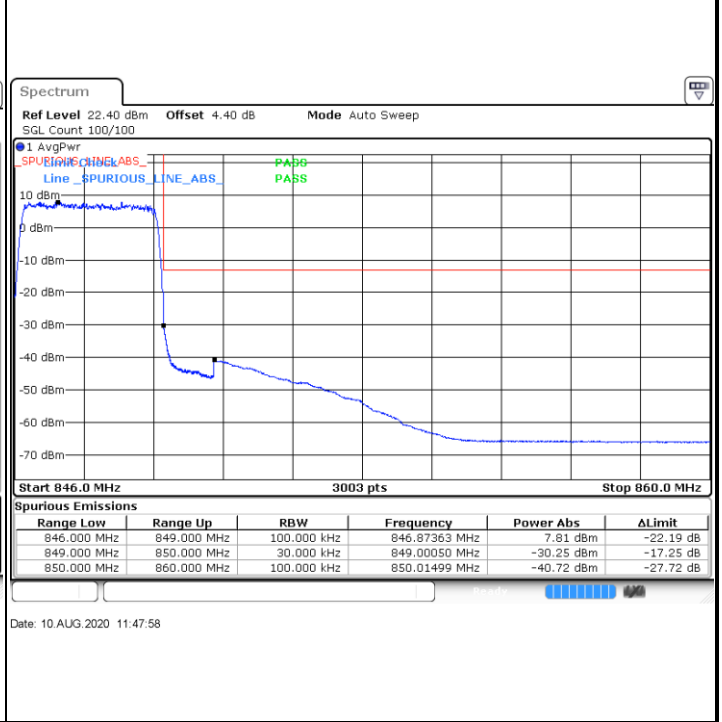
**Highest Band Edge / 1 RB**



**Lowest Band Edge / Full RB**



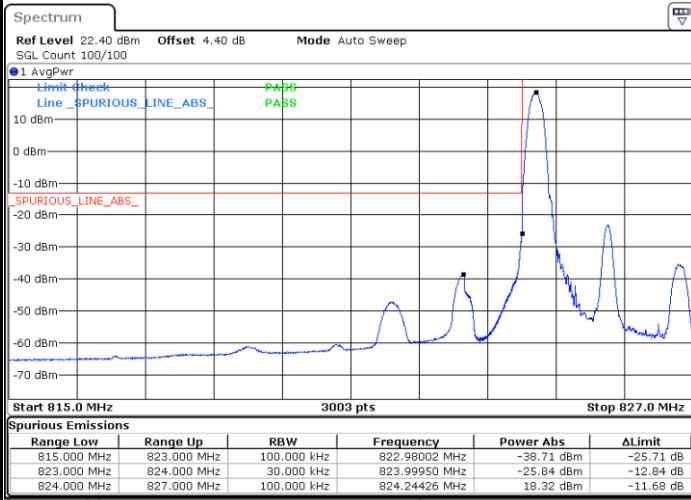
**Highest Band Edge / Full RB**





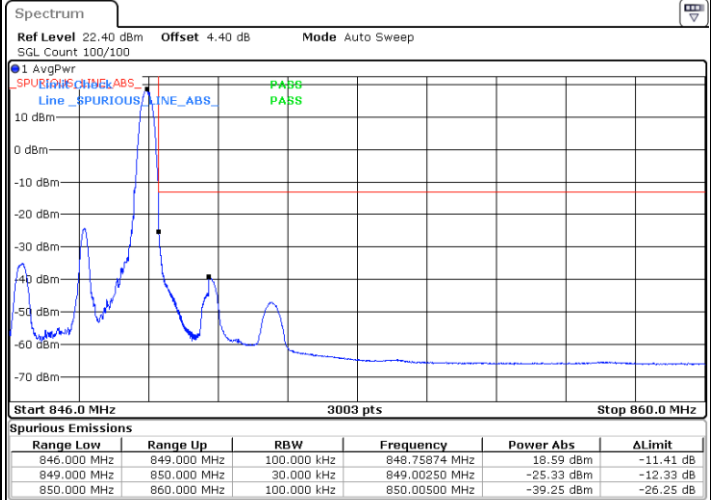
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



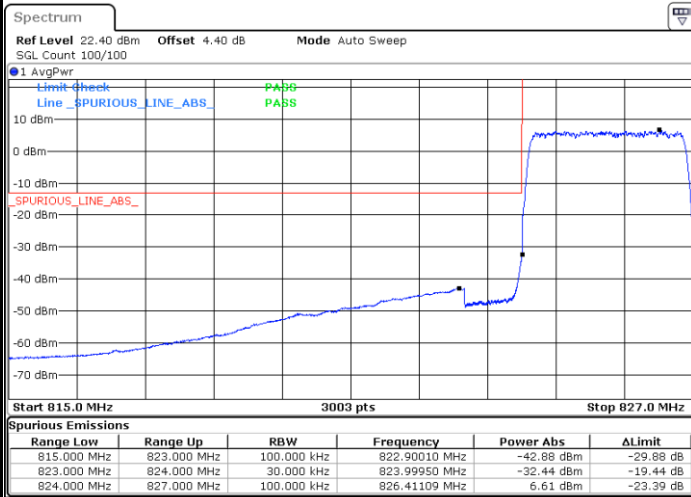
Date: 10 AUG 2020 13:23:18

Highest Band Edge / 1 RB



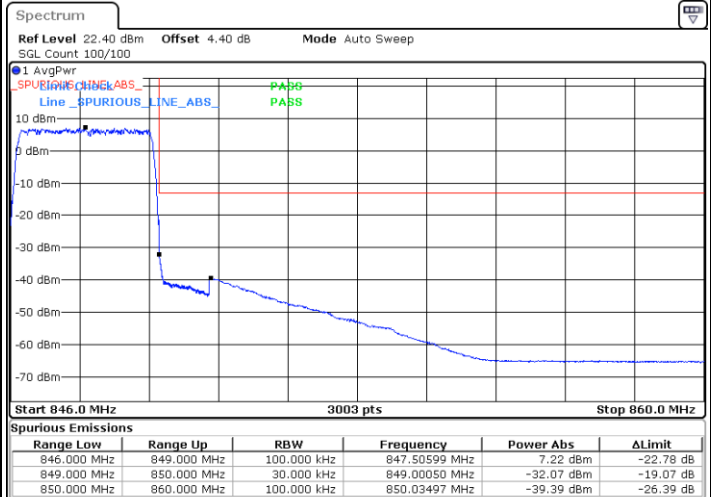
Date: 10 AUG 2020 13:29:02

Lowest Band Edge / Full RB



Date: 10 AUG 2020 13:21:40

Highest Band Edge / Full RB

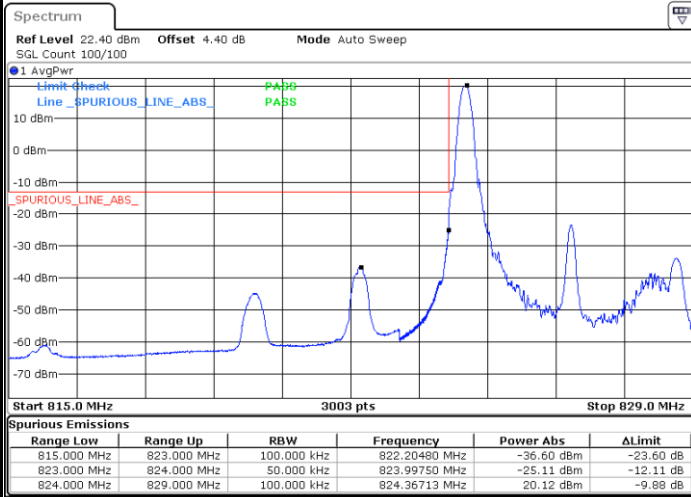


Date: 17 AUG 2020 23:58:29



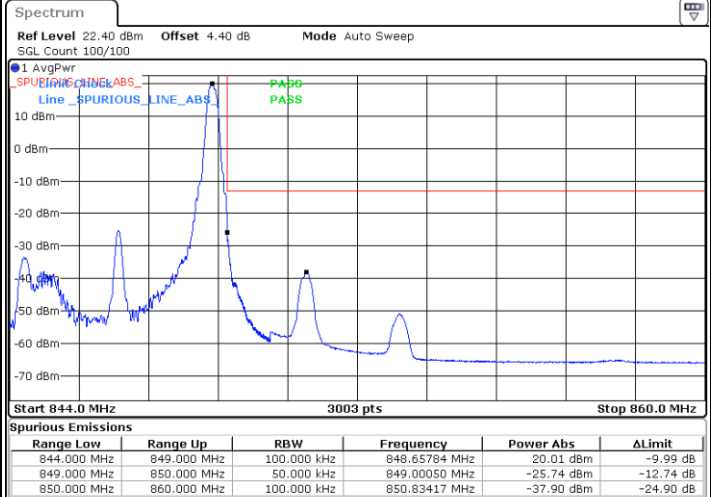
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



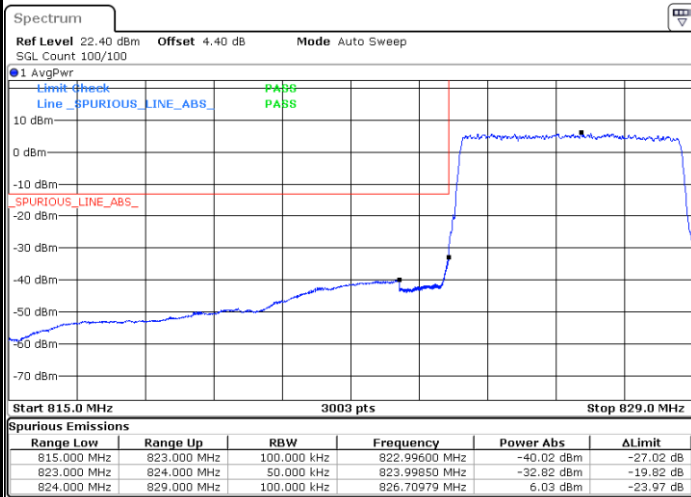
Date: 10 AUG 2020 11:52:05

Highest Band Edge / 1 RB



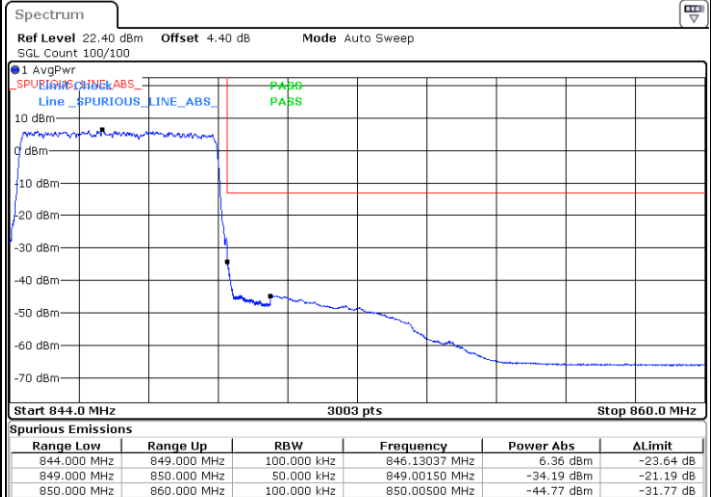
Date: 10 AUG 2020 12:09:30

Lowest Band Edge / Full RB



Date: 10 AUG 2020 11:55:20

Highest Band Edge / Full RB

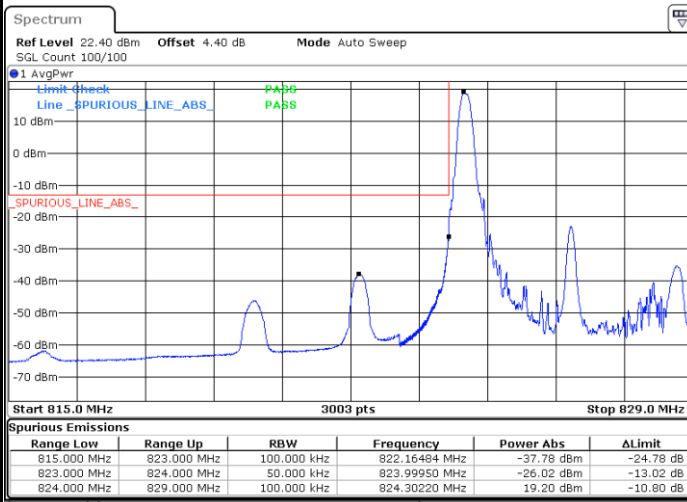


Date: 10 AUG 2020 12:12:45



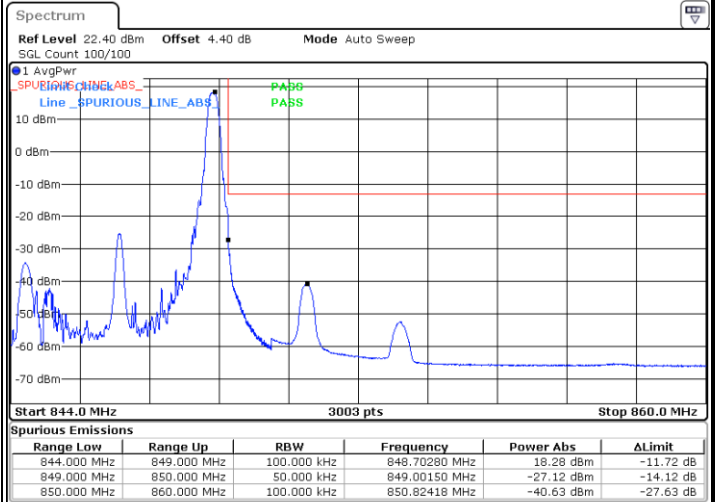
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



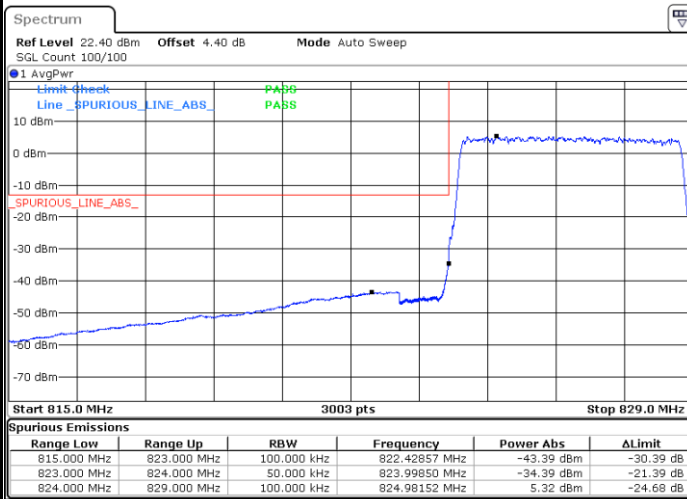
Date: 10 AUG 2020 11:53:43

Highest Band Edge / 1 RB



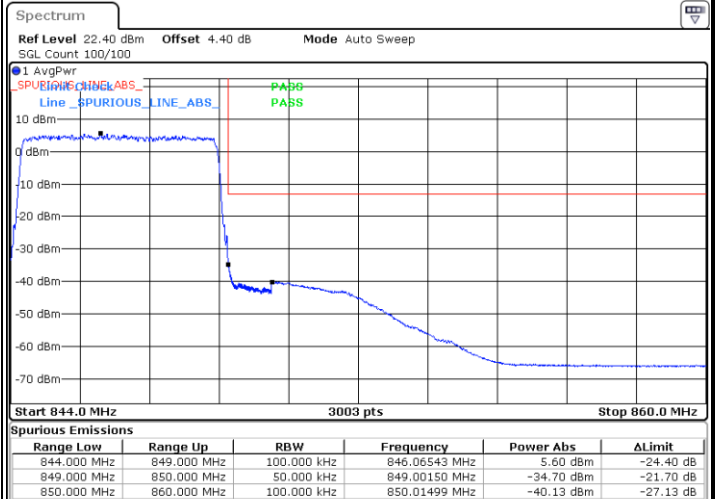
Date: 10 AUG 2020 12:11:07

Lowest Band Edge / Full RB



Date: 10 AUG 2020 11:56:58

Highest Band Edge / Full RB



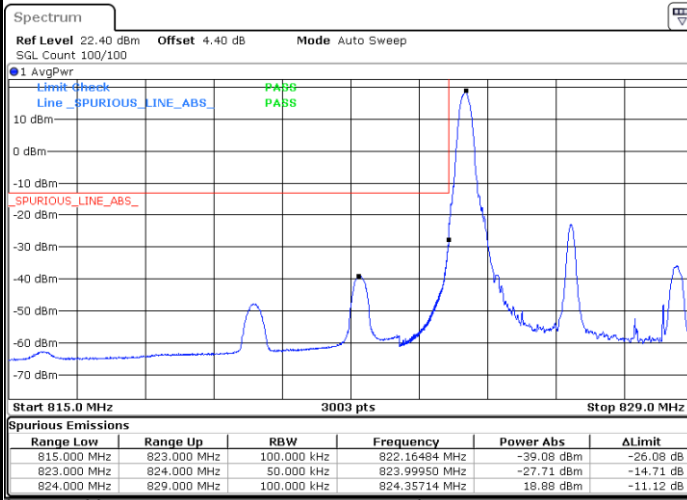
Date: 10 AUG 2020 12:14:22





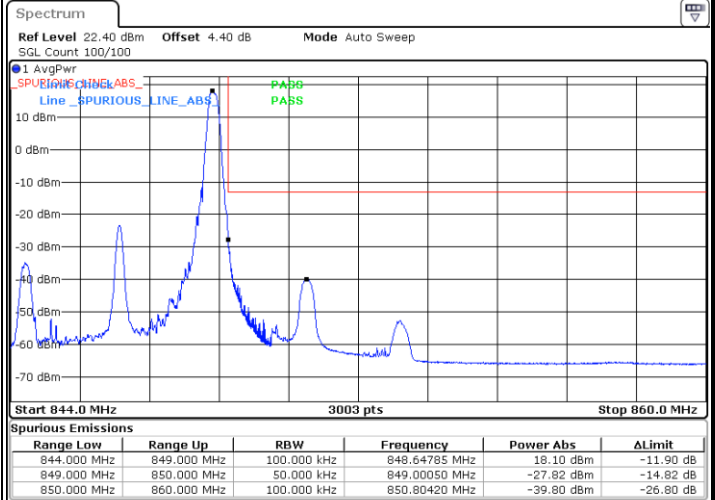
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



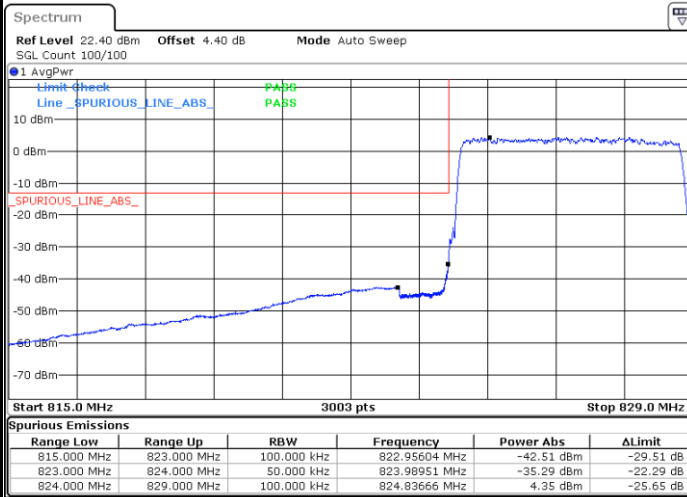
Date: 10 AUG 2020 13:33:31

Highest Band Edge / 1 RB



Date: 10 AUG 2020 13:39:16

Lowest Band Edge / Full RB



Date: 10 AUG 2020 13:31:54

Highest Band Edge / Full RB

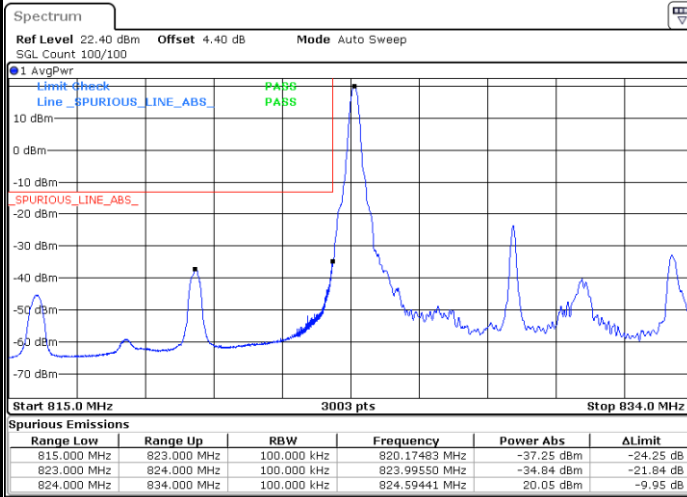


Date: 10 AUG 2020 13:37:38



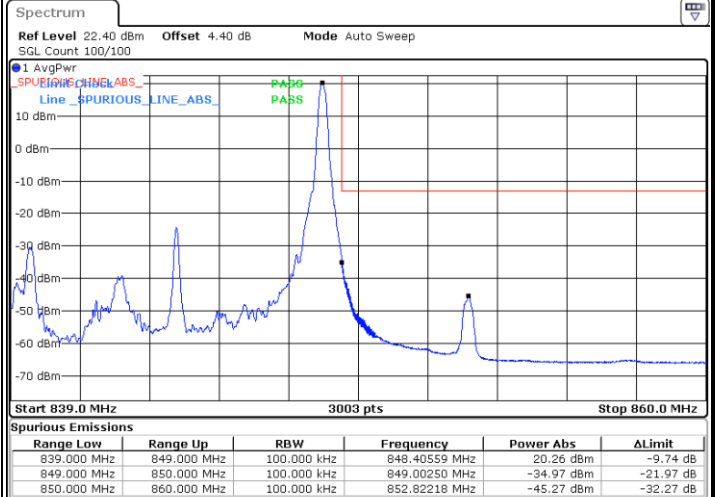
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



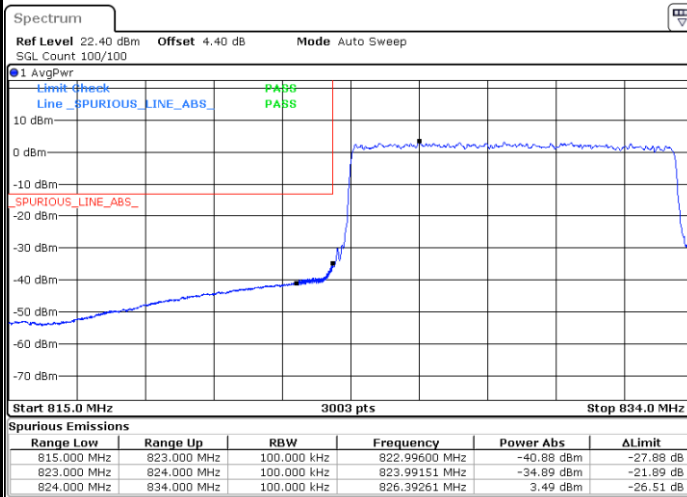
Date: 10 AUG 2020 12:19:53

Highest Band Edge / 1 RB



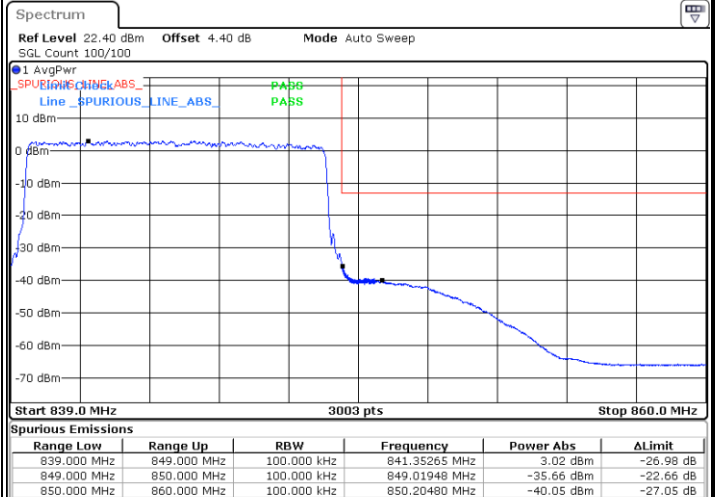
Date: 10 AUG 2020 12:31:22

Lowest Band Edge / Full RB



Date: 10 AUG 2020 12:23:08

Highest Band Edge / Full RB

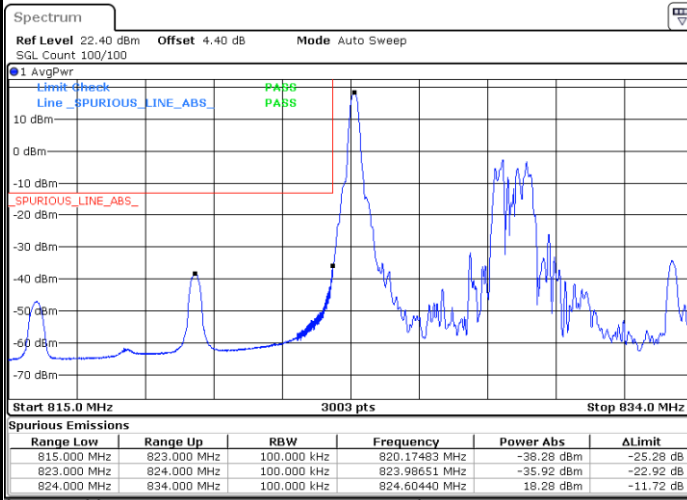


Date: 10 AUG 2020 12:34:37



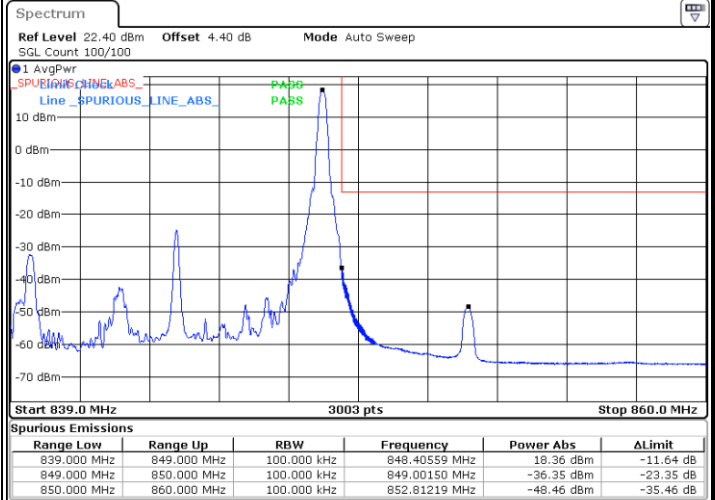
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



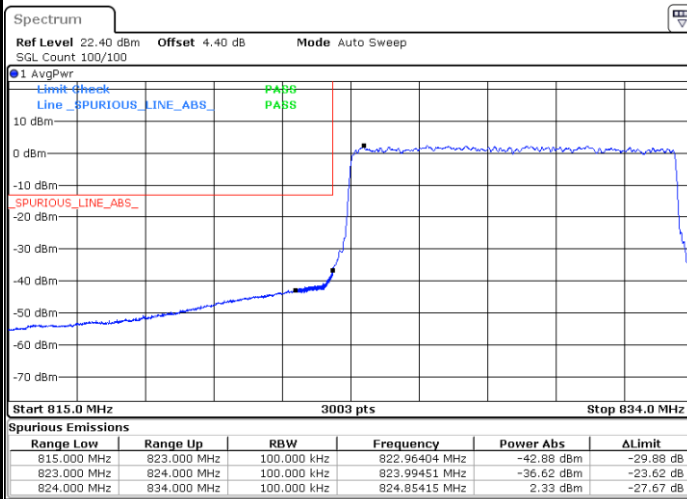
Date: 10 AUG 2020 12:21:31

Highest Band Edge / 1 RB



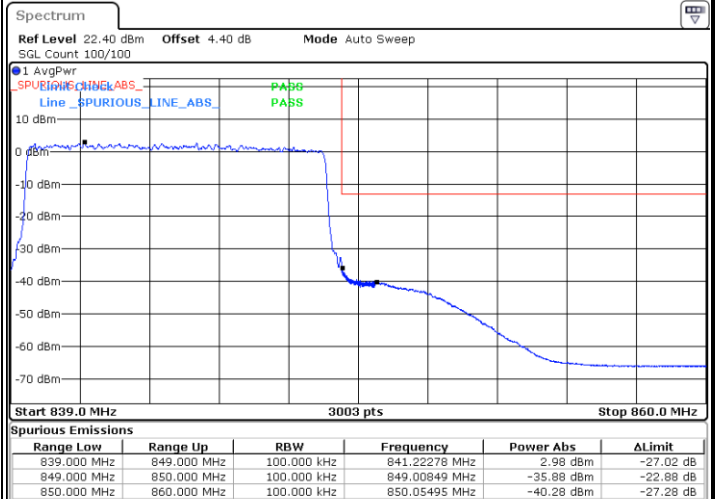
Date: 10 AUG 2020 12:33:00

Lowest Band Edge / Full RB



Date: 10 AUG 2020 12:24:46

Highest Band Edge / Full RB

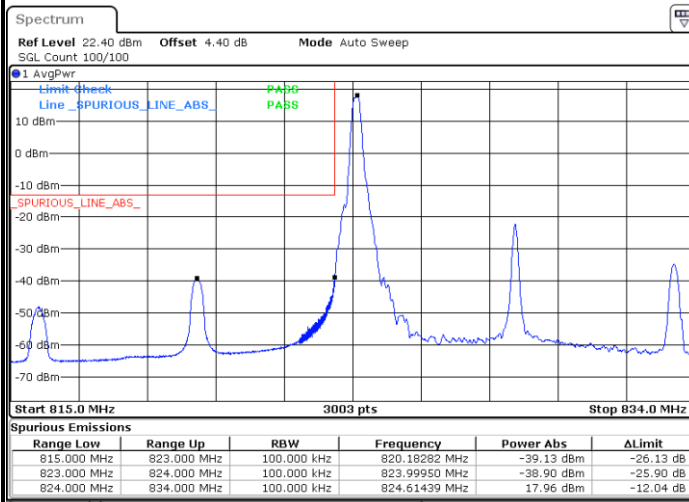


Date: 10 AUG 2020 12:36:15



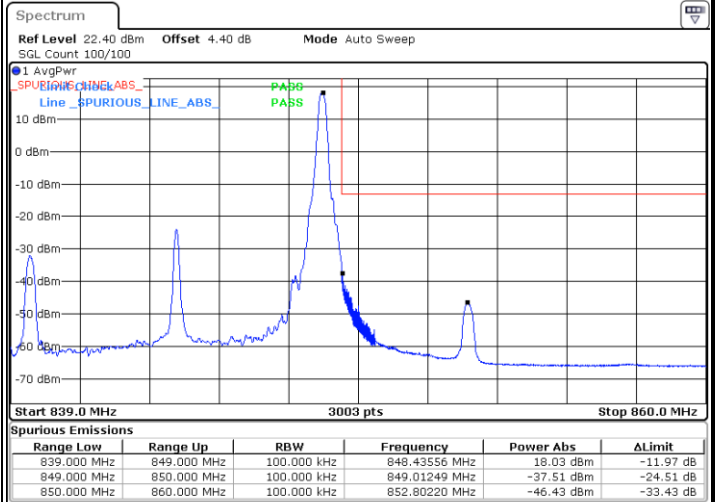
LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



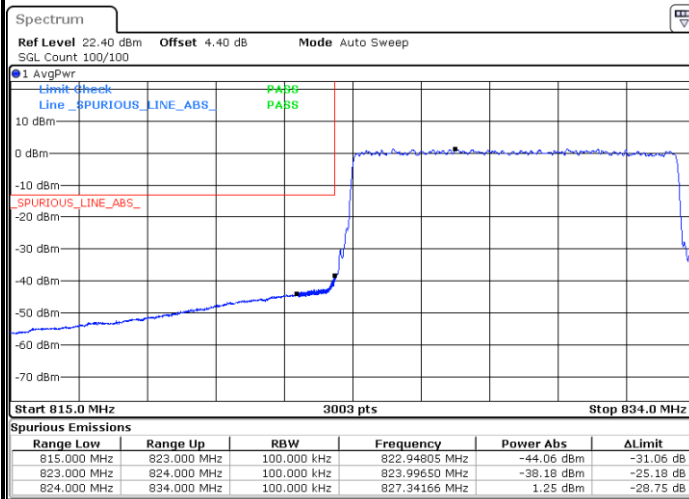
Date: 10 AUG 2020 13:43:46

Highest Band Edge / 1 RB



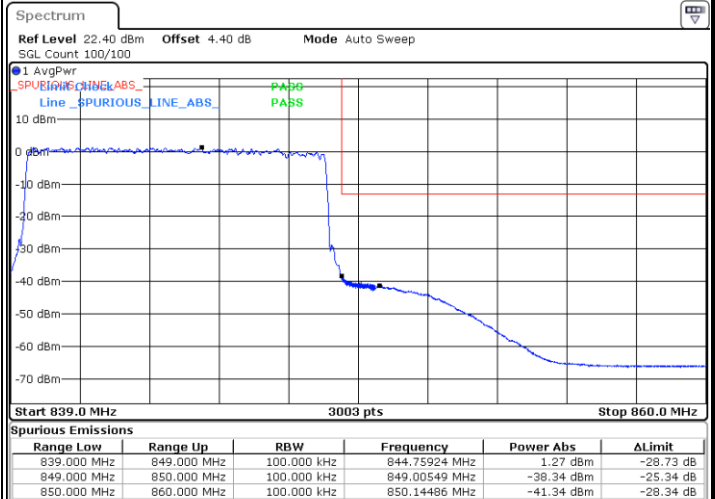
Date: 10 AUG 2020 13:49:30

Lowest Band Edge / Full RB



Date: 10 AUG 2020 13:42:08

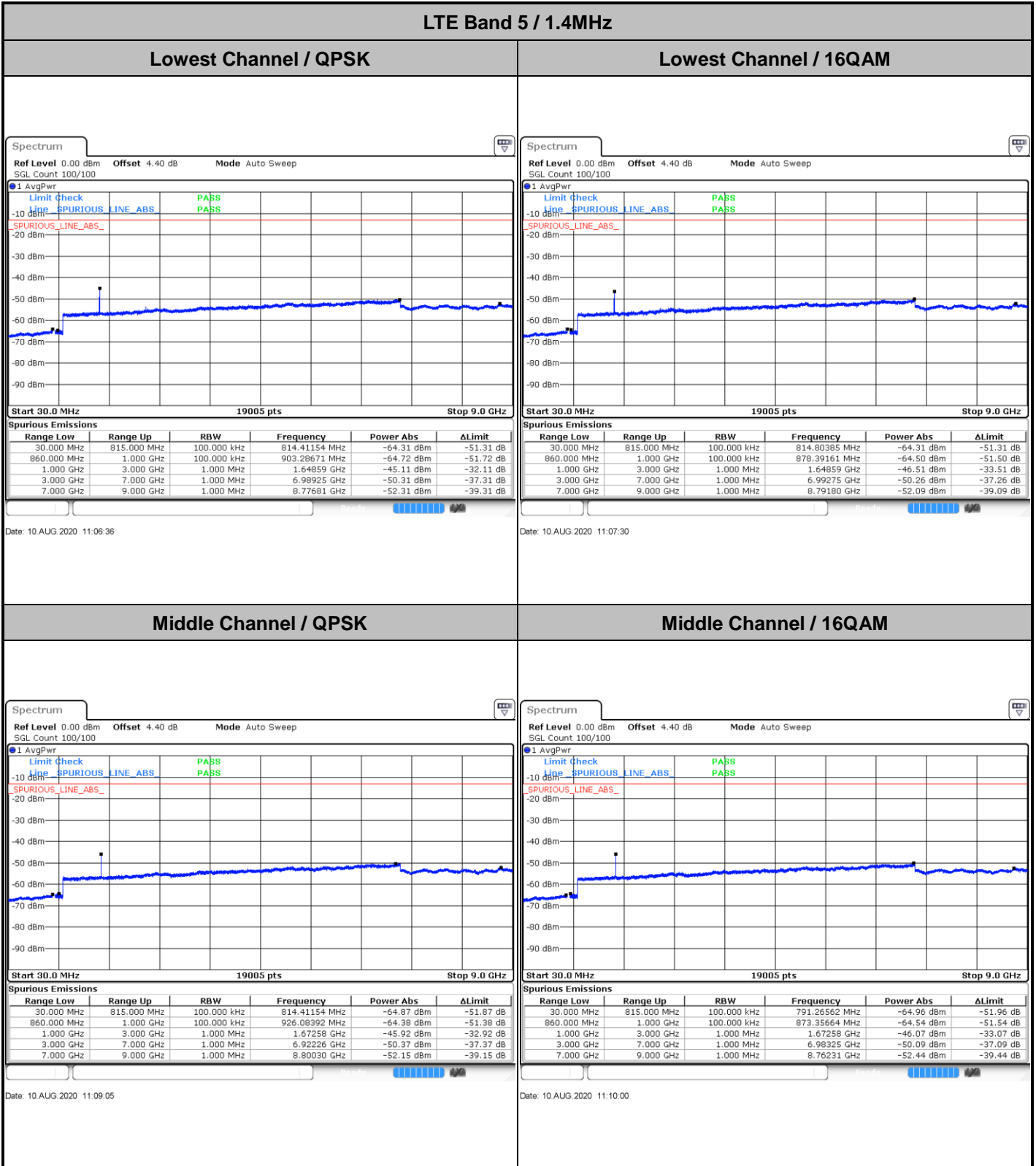
Highest Band Edge / Full RB



Date: 10 AUG 2020 13:47:53



# Conducted Spurious Emission

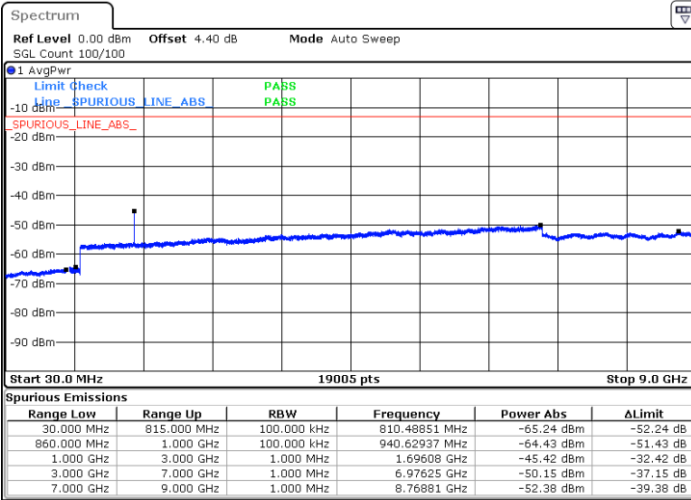




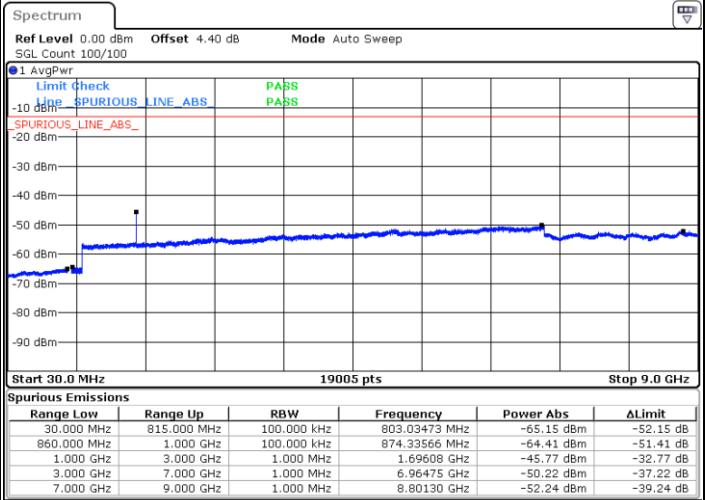
LTE Band 5 / 1.4MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 10.AUG.2020 11:28:14

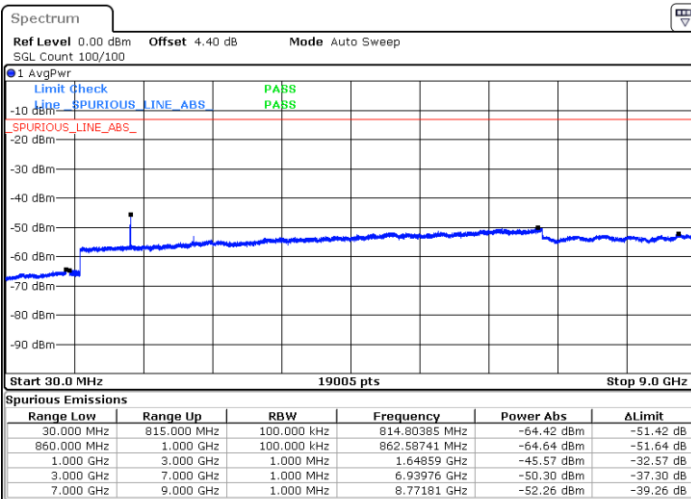


Date: 10.AUG.2020 11:29:08

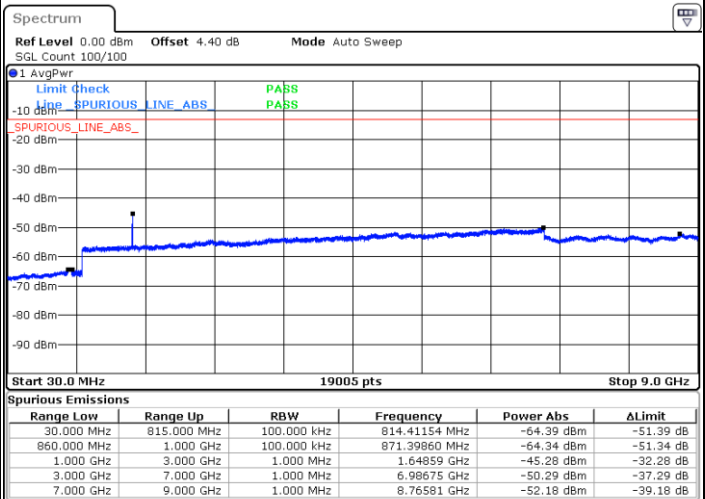
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 10.AUG.2020 11:37:23

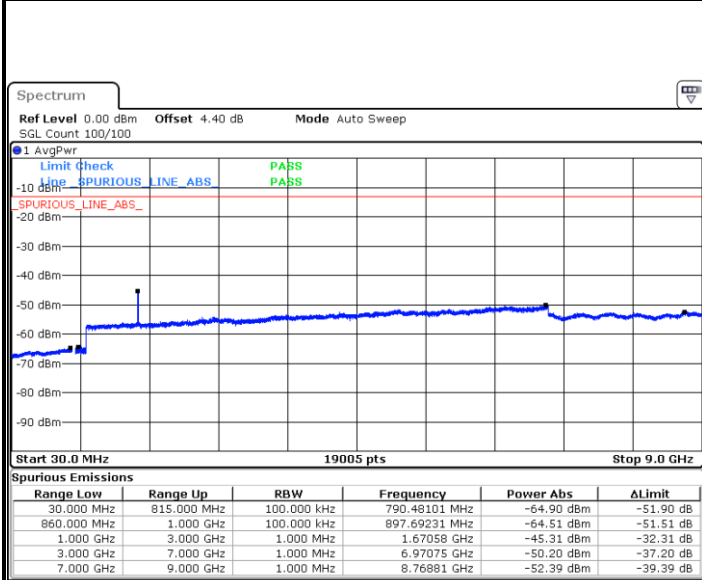


Date: 10.AUG.2020 11:38:18



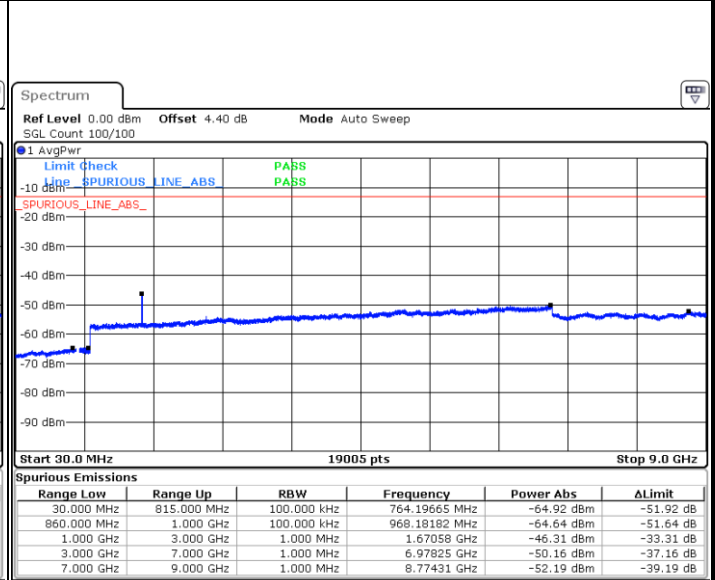
LTE Band 5 / 3MHz

Middle Channel / QPSK



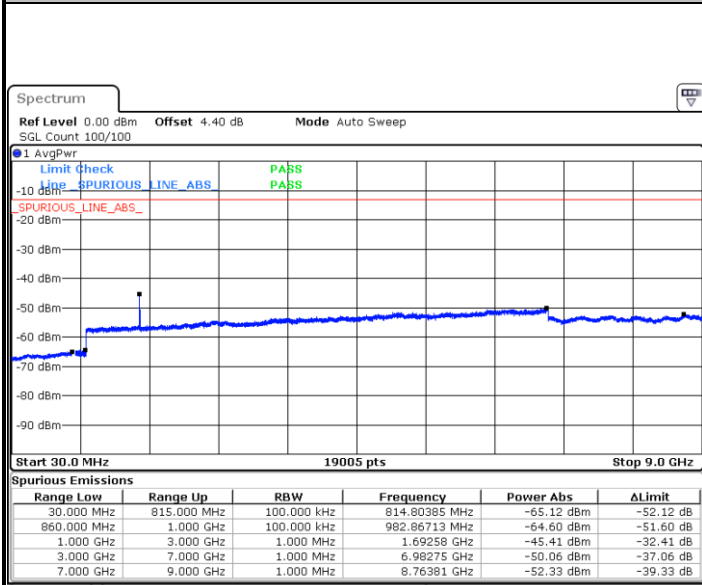
Date: 10.AUG.2020 11:39:53

Middle Channel / 16QAM



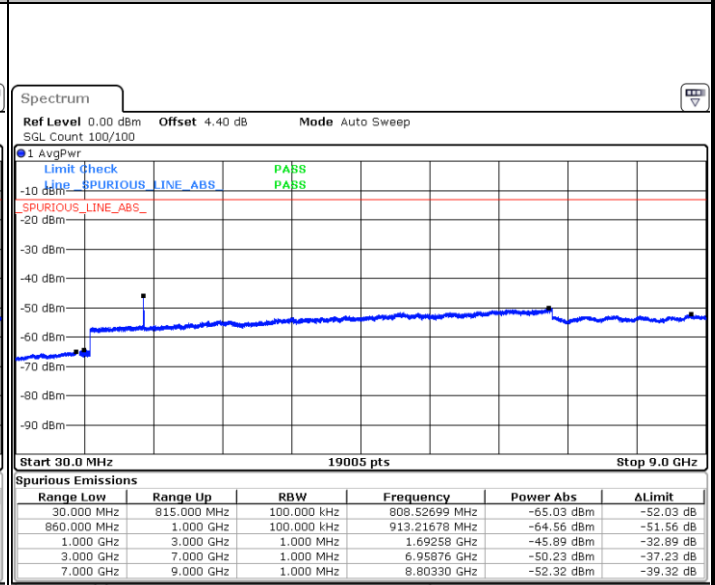
Date: 10.AUG.2020 11:40:47

Highest Channel / QPSK



Date: 10.AUG.2020 11:48:52

Highest Channel / 16QAM



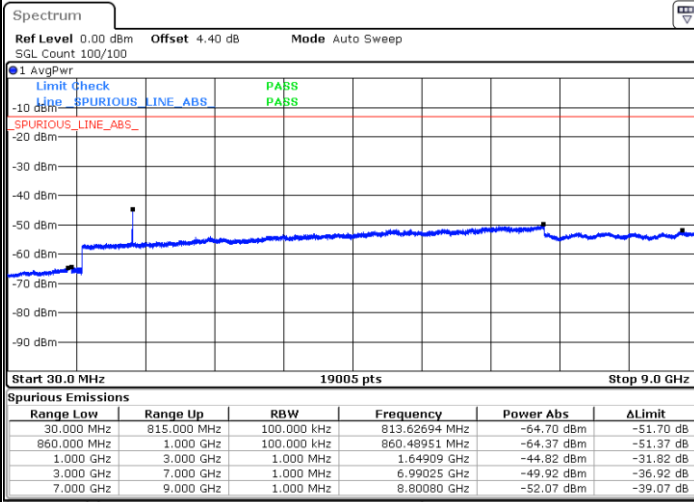
Date: 10.AUG.2020 11:49:47



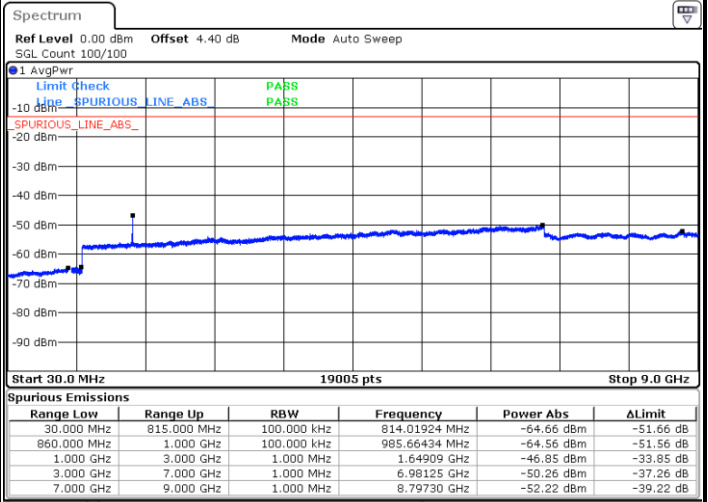
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



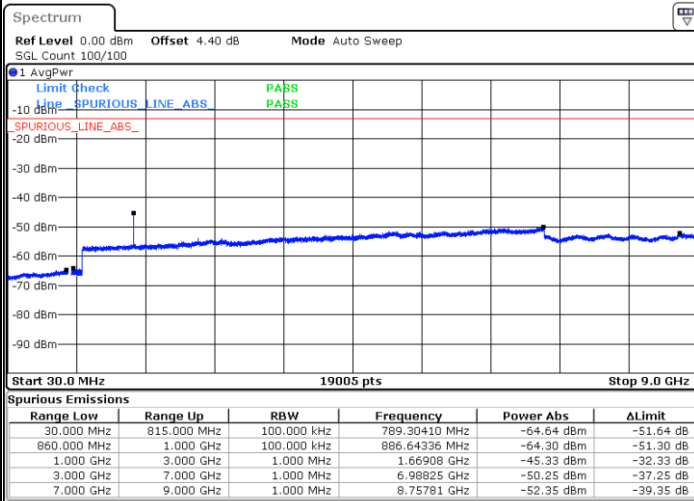
Date: 10.AUG.2020 11:57:51



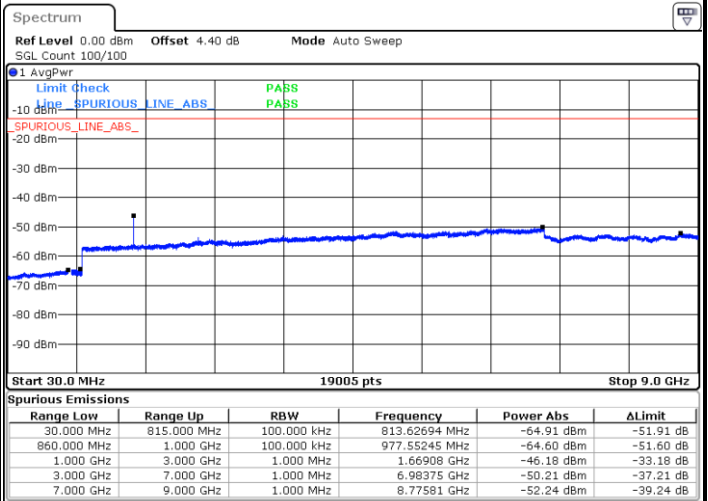
Date: 10.AUG.2020 11:58:46

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 10.AUG.2020 12:06:16



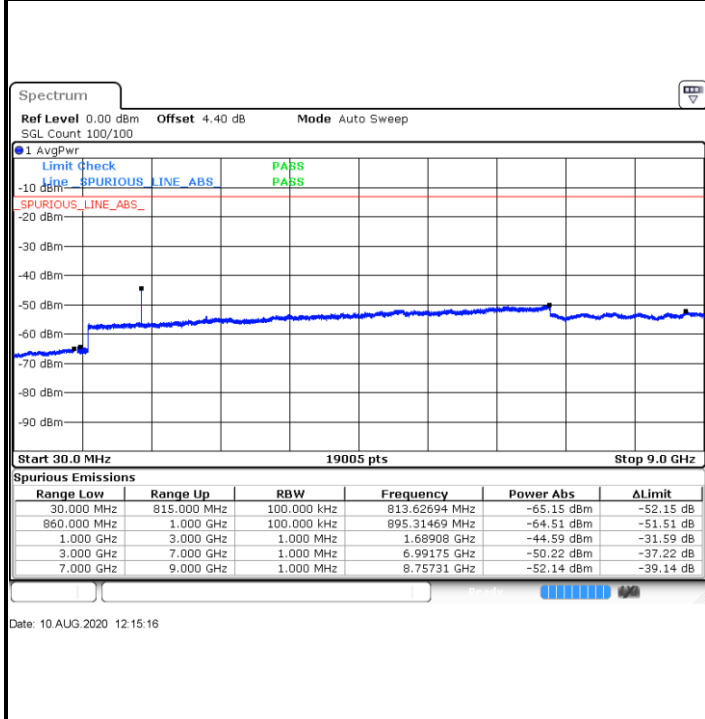
Date: 10.AUG.2020 12:07:11



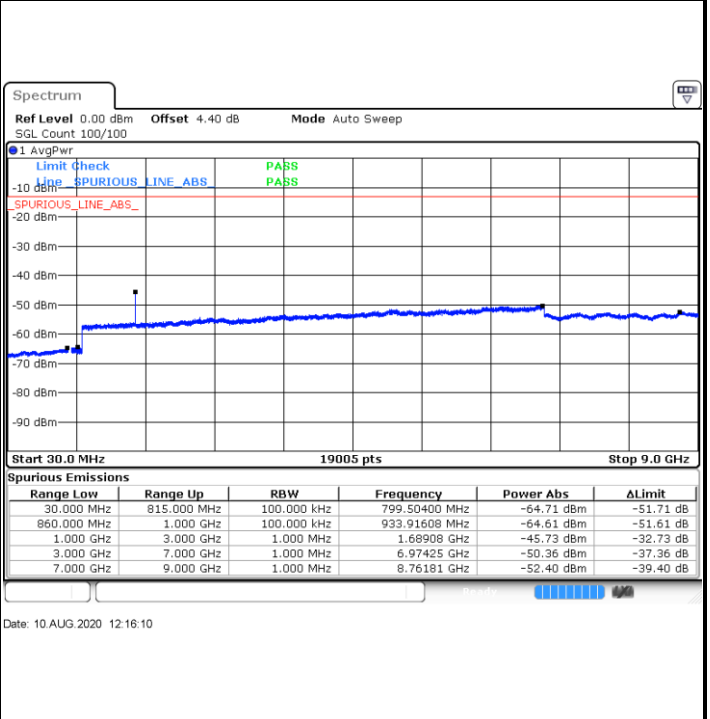


LTE Band 5 / 5MHz

Highest Channel / QPSK

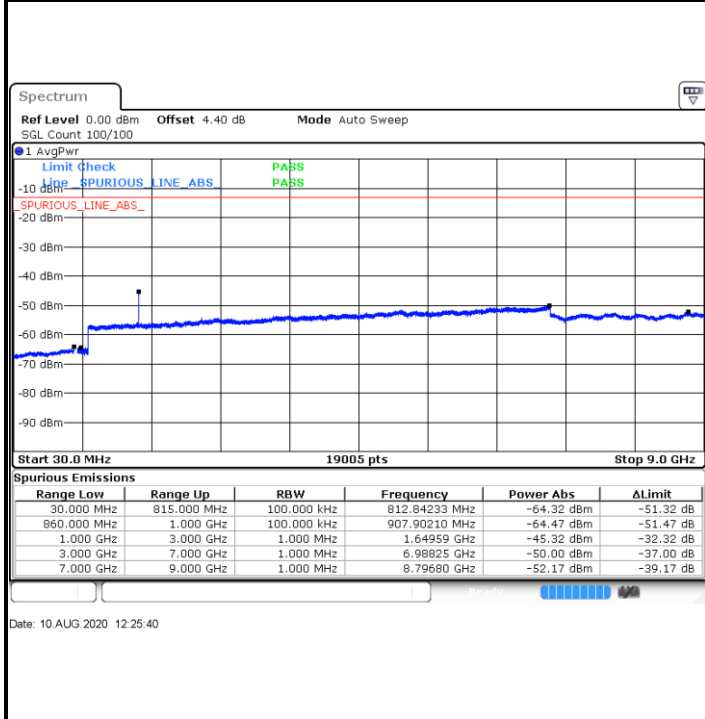


Highest Channel / 16QAM

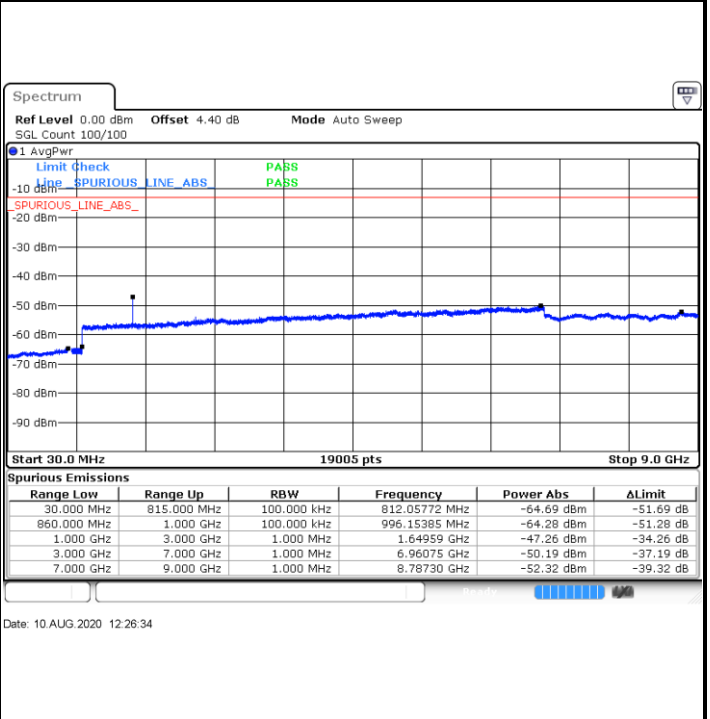


LTE Band 5 / 10MHz

Lowest Channel / QPSK



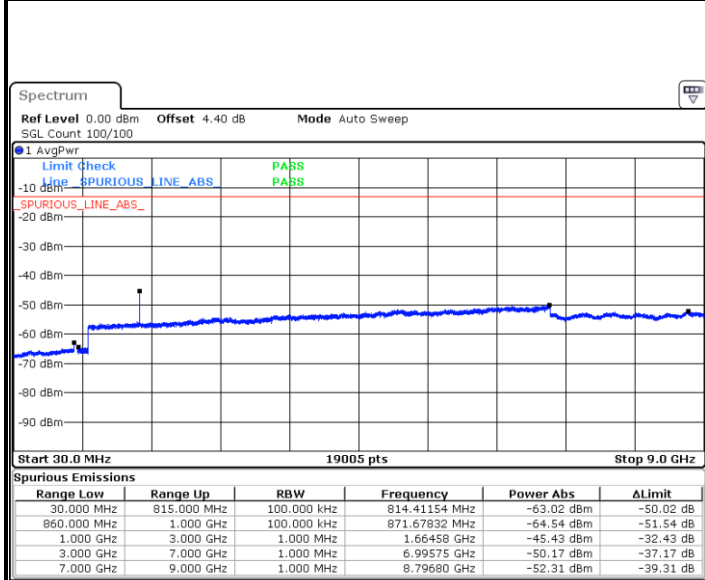
Lowest Channel / 16QAM





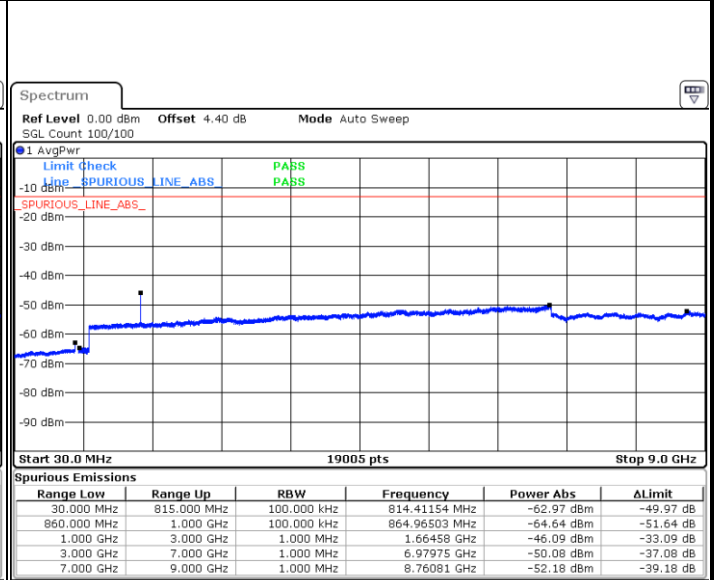
LTE Band 5 / 10MHz

Middle Channel / QPSK



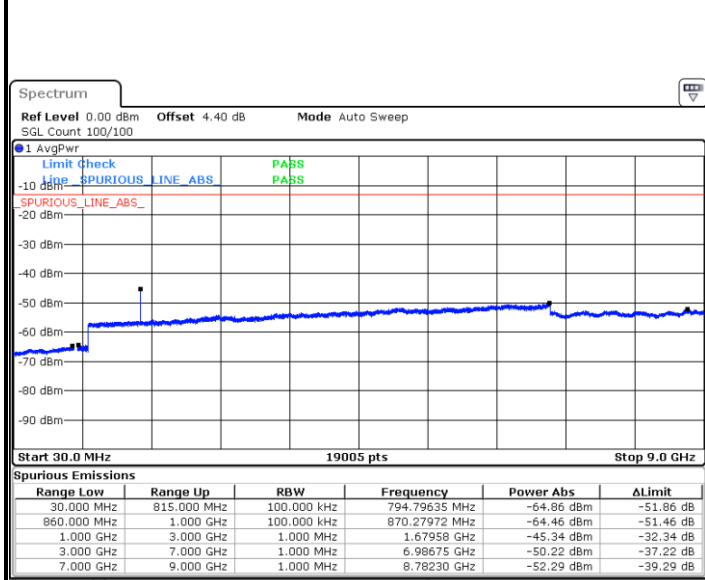
Date: 10.AUG.2020 12:28:09

Middle Channel / 16QAM



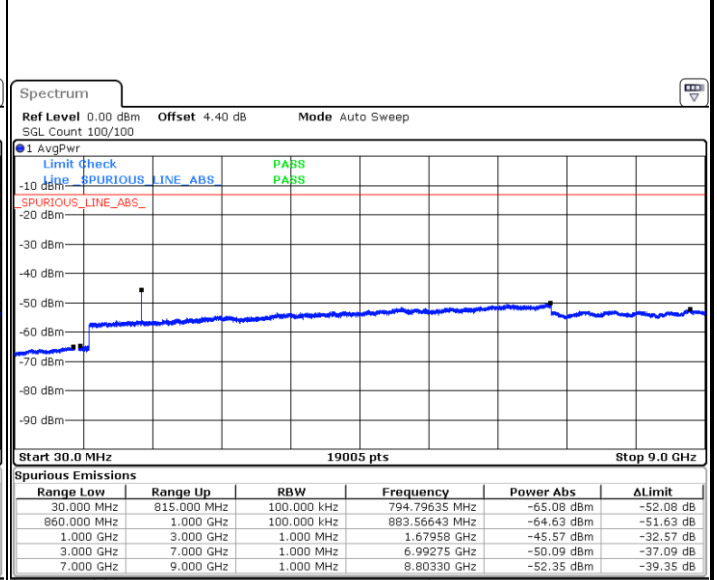
Date: 10.AUG.2020 12:29:04

Highest Channel / QPSK



Date: 10.AUG.2020 12:37:08

Highest Channel / 16QAM



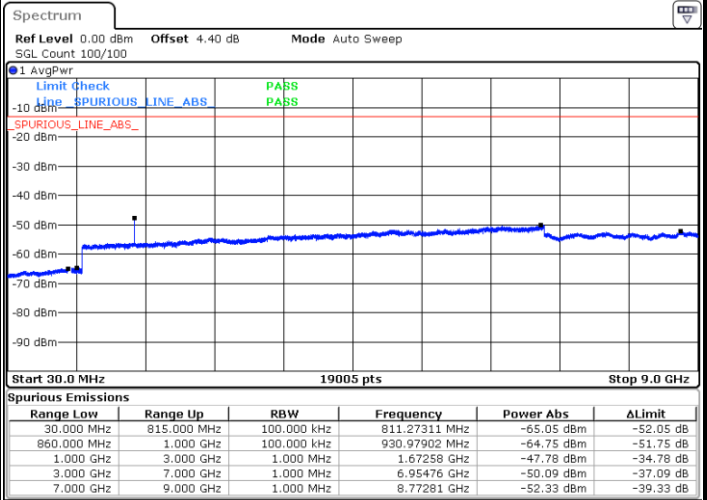
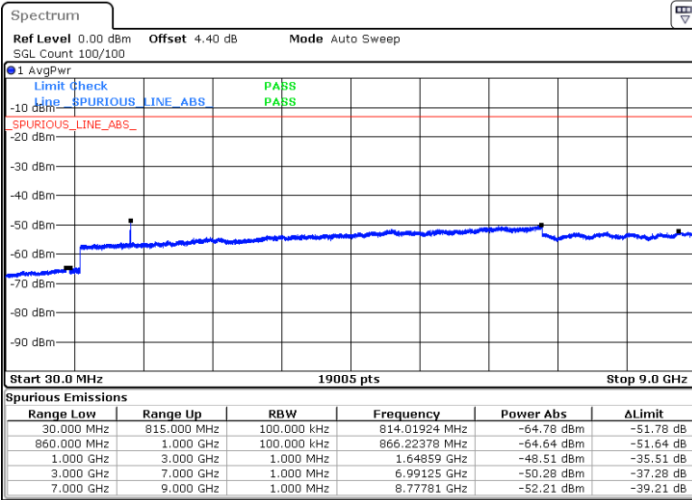
Date: 10.AUG.2020 12:38:03



LTE Band 5 / 1.4MHz

Lowest Channel / 64QAM

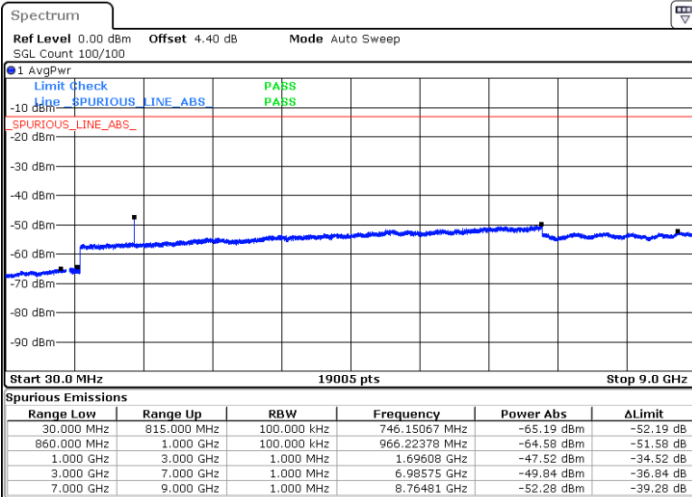
Middle Channel / 64QAM



Date: 10.AUG.2020 13:13:57

Date: 10.AUG.2020 13:14:52

Highest Channel / 64QAM



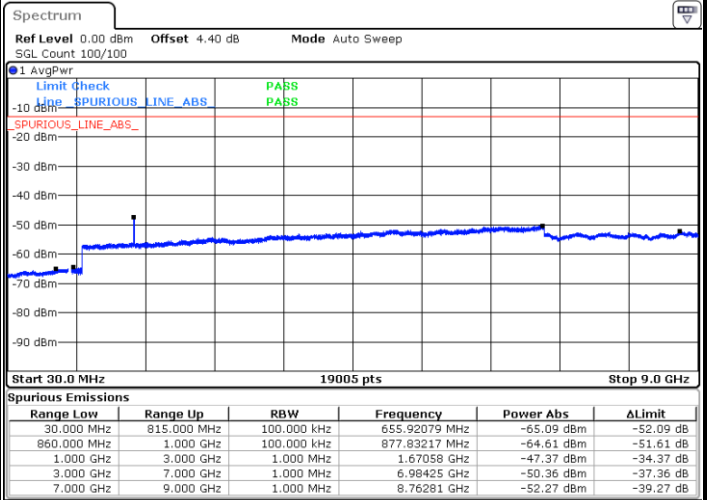
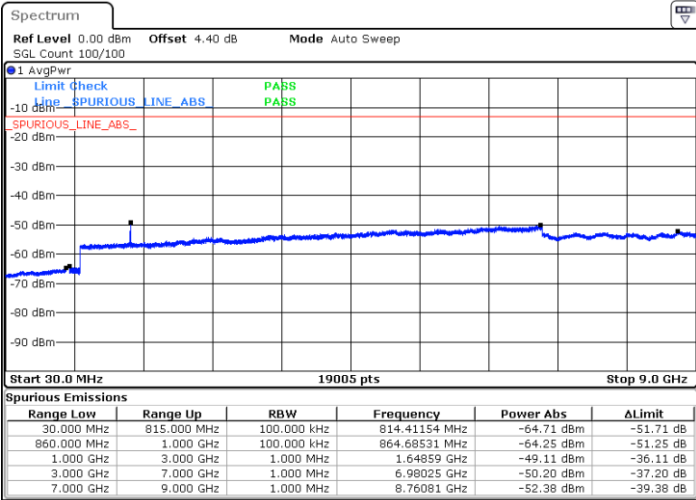
Date: 10.AUG.2020 13:19:42



LTE Band 5 / 3MHz

Lowest Channel / 64QAM

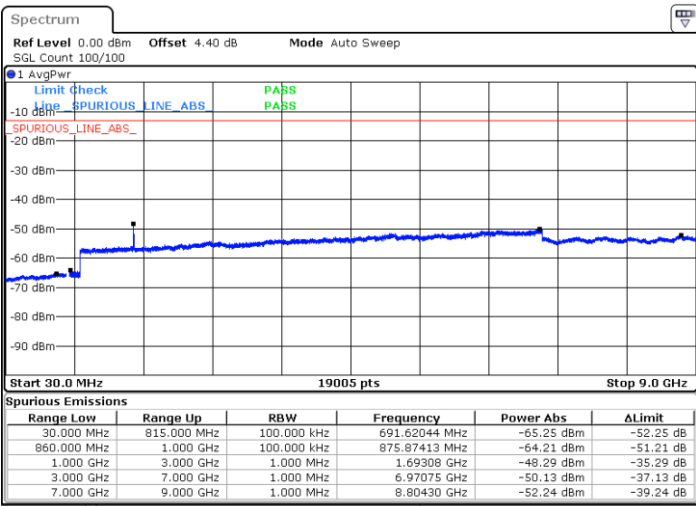
Middle Channel / 64QAM



Date: 10.AUG.2020 13:24:11

Date: 10.AUG.2020 13:25:06

Highest Channel / 64QAM

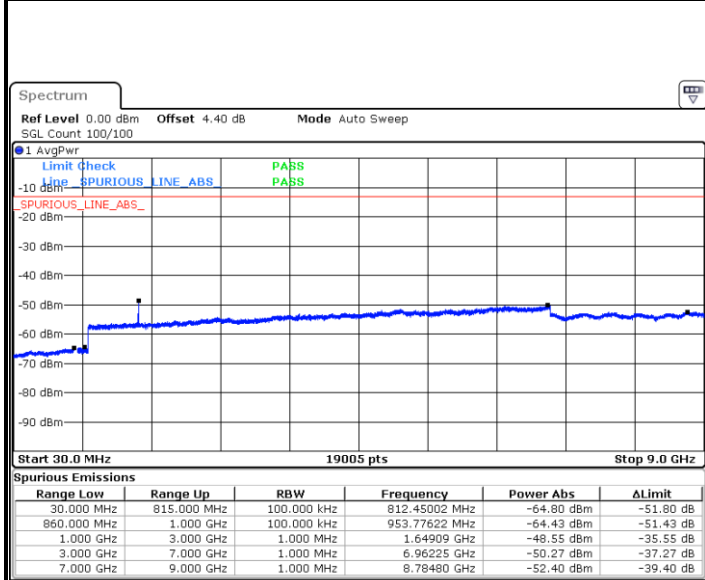


Date: 10.AUG.2020 13:29:55



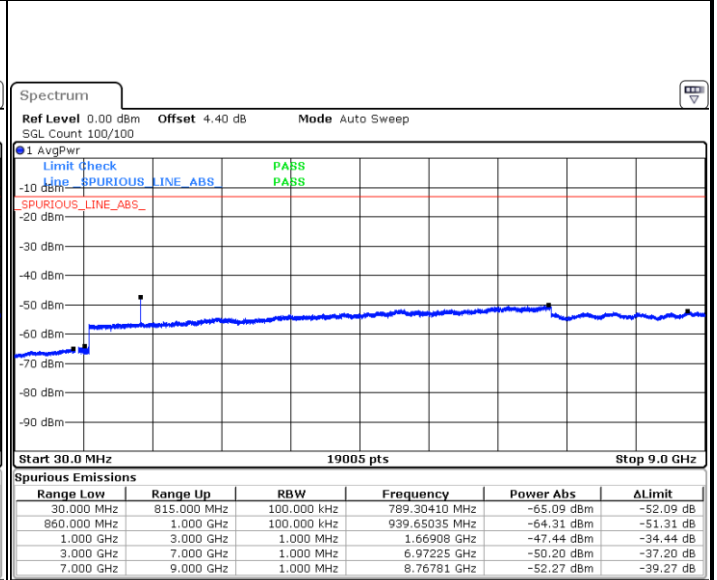
**LTE Band 5 / 5MHz**

**Lowest Channel / 64QAM**



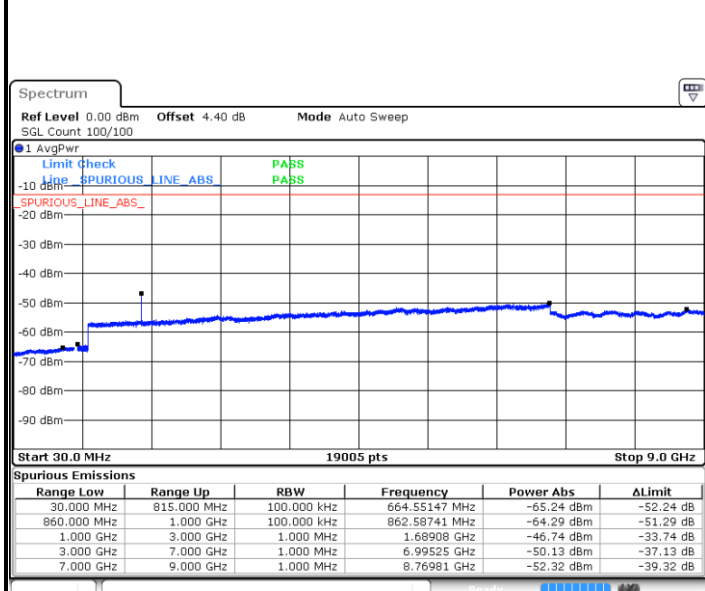
Date: 10.AUG.2020 13:34:25

**Middle Channel / 64QAM**



Date: 10.AUG.2020 13:35:20

**Highest Channel / 64QAM**

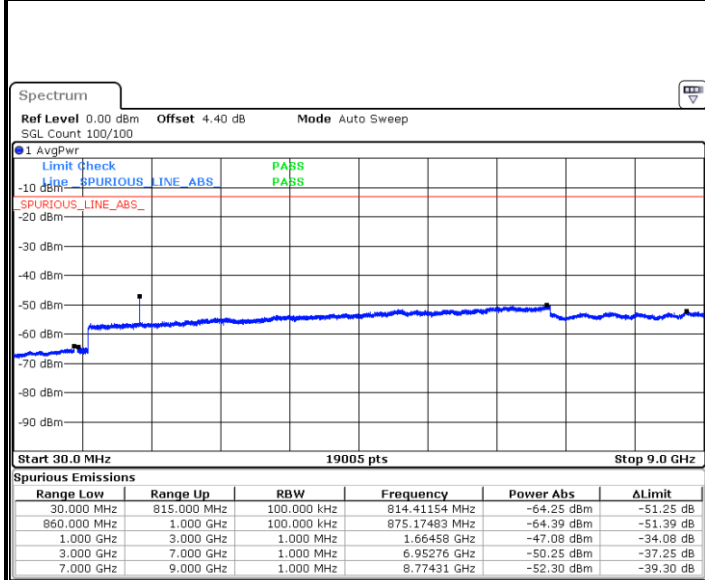


Date: 10.AUG.2020 13:40:10



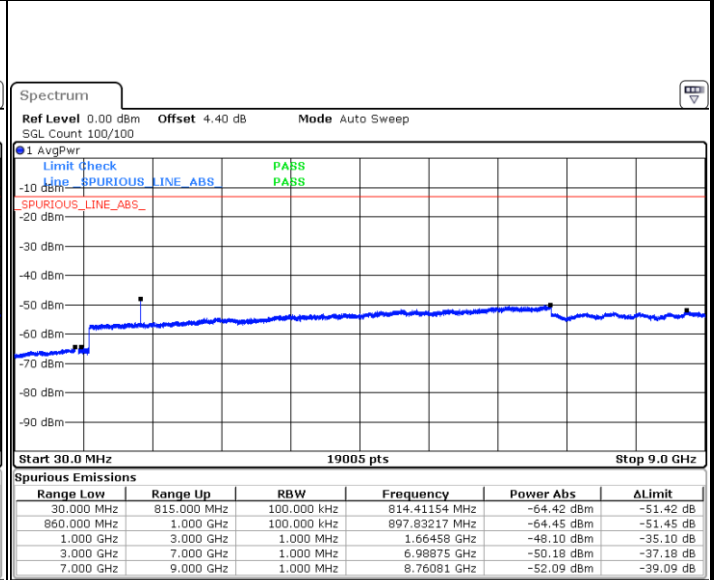
**LTE Band 5 / 10MHz**

**Lowest Channel / 64QAM**



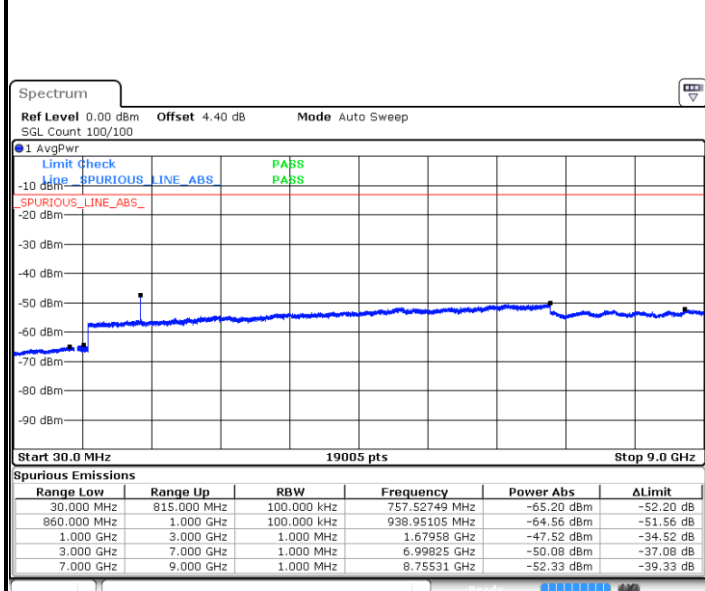
Date: 10.AUG.2020 13:44:40

**Middle Channel / 64QAM**



Date: 10.AUG.2020 13:45:34

**Highest Channel / 64QAM**



Date: 10.AUG.2020 13:50:24



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0010	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0045	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0054	
0	Normal Voltage	0.0056	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0055	
20	Maximum Voltage	0.0049	
20	Normal Voltage	0.0057	
20	Battery End Point	0.0012	

Note: Normal Voltage =3.9 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.35 V.



# LTE Band 13

## Peak-to-Average Ratio

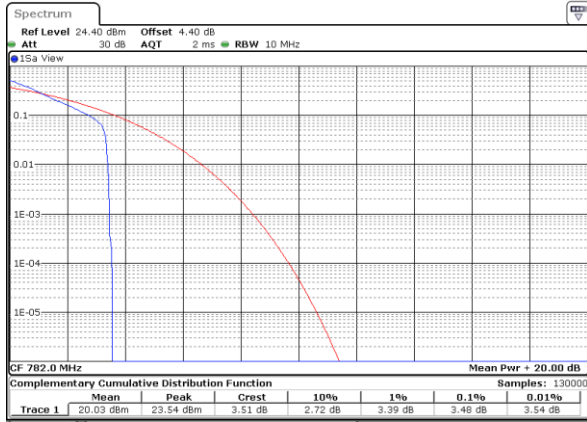
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.48	4.87	5.22	5.86	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.38	6.35	-	-	
Highest CH	-	-	-	-	





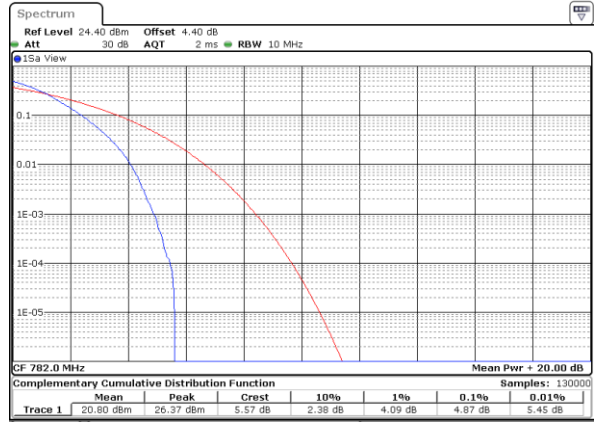
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 10 AUG 2020 15:26:10

Middle Channel / Full RB



Date: 10 AUG 2020 15:26:37

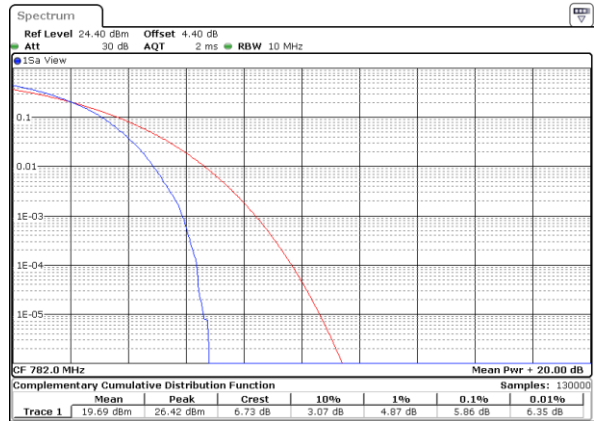
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 10 AUG 2020 15:26:19

Middle Channel / Full RB



Date: 10 AUG 2020 15:26:29

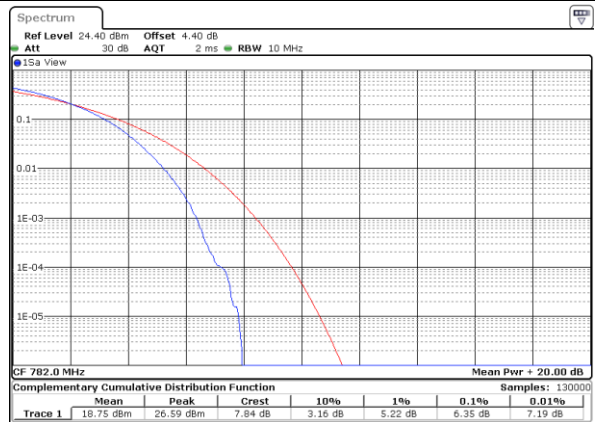
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 10 AUG 2020 15:58:25

Middle Channel / Full RB



Date: 10 AUG 2020 15:58:37



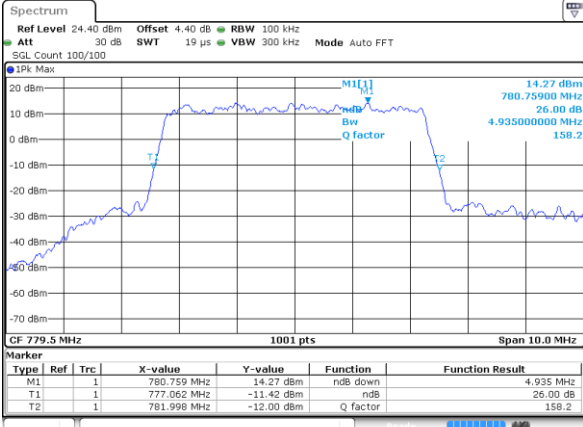
**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.94	4.92	-	-	-	-	-	-
Middle CH	-	-	-	-	4.94	4.83	9.79	9.71	-	-	-	-
Highest CH	-	-	-	-	4.89	4.93	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.86	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	-	9.77	-	-	-	-	-
Highest CH	-	-	-	-	4.92	-	-	-	-	-	-	-



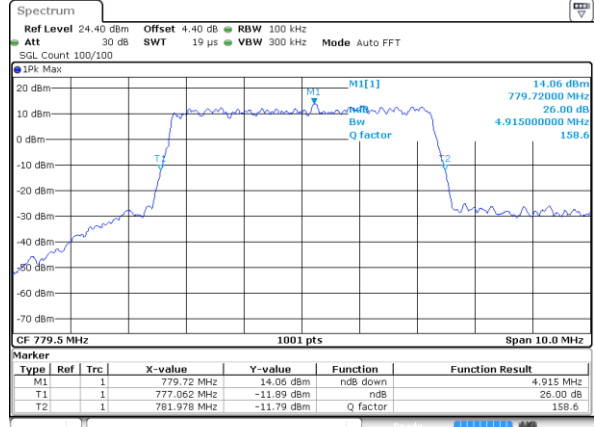
LTE Band 13

Lowest Channel / 5MHz / QPSK



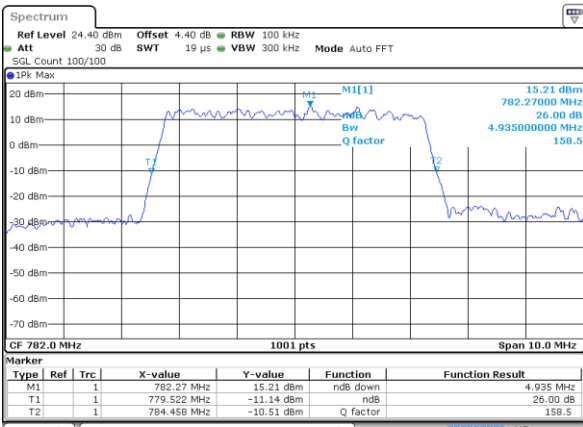
Date: 10 AUG 2020 14:52:20

Lowest Channel / 5MHz / 16QAM



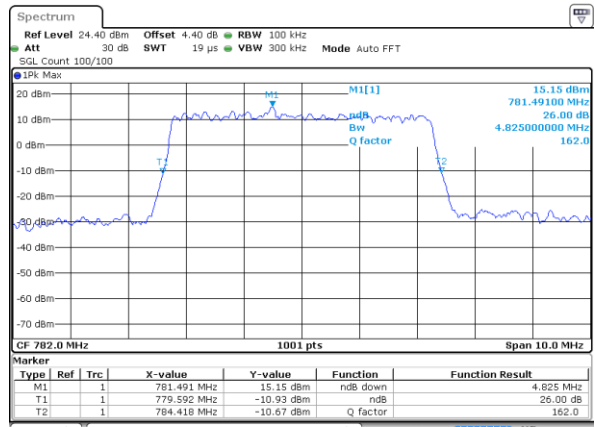
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Middle Channel / 5MHz / QPSK



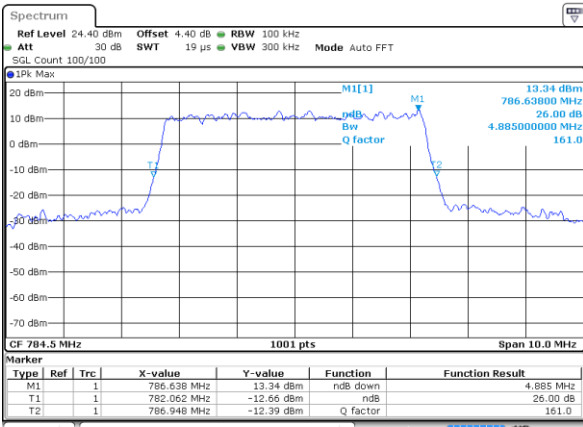
Date: 10 AUG 2020 15:01:19

Middle Channel / 5MHz / 16QAM



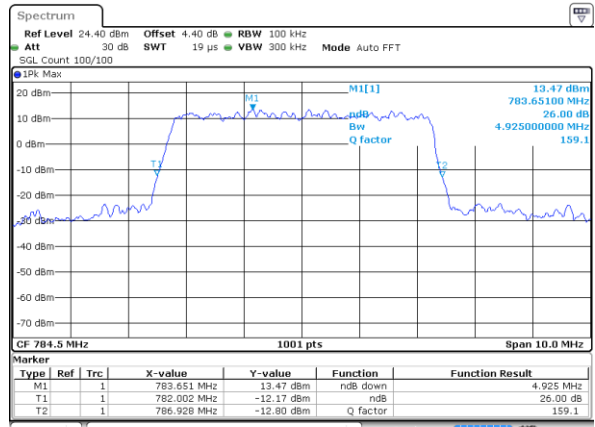
Date: 10 AUG 2020 15:01:29

Highest Channel / 5MHz / QPSK



Date: 10 AUG 2020 15:03:58

Highest Channel / 5MHz / 16QAM

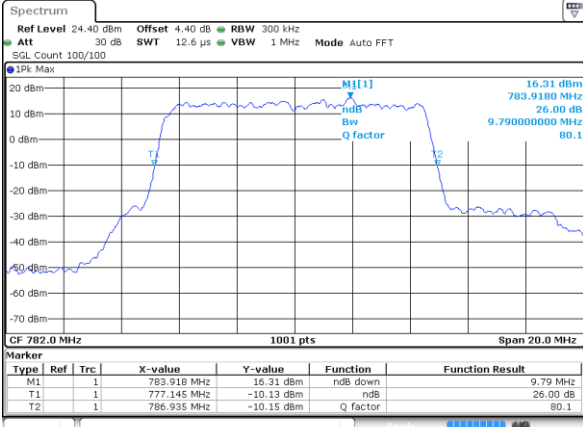


Date: 10 AUG 2020 15:03:48



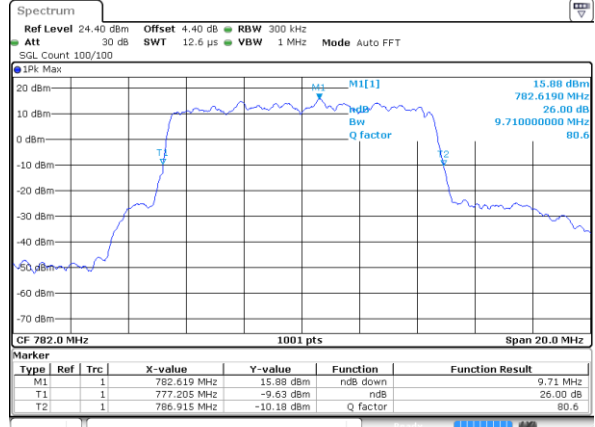
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 10 AUG 2020 15:14:46

Middle Channel / 10MHz / 16QAM

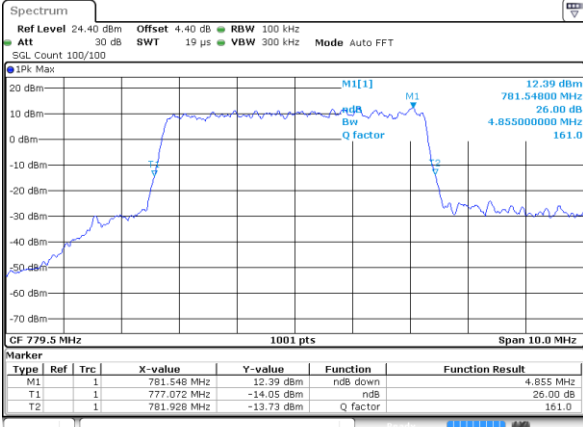


Date: 10 AUG 2020 15:14:36



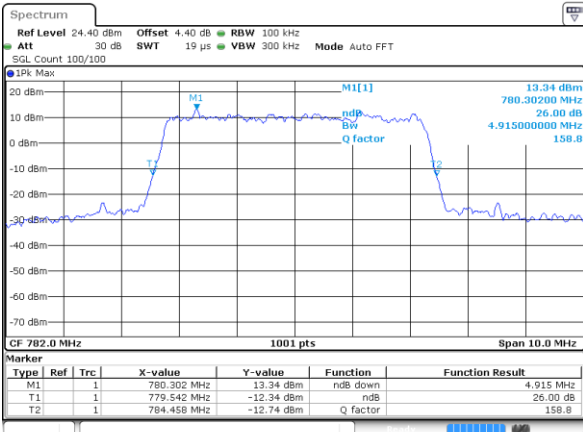
LTE Band 13

Lowest Channel / 5MHz / 64QAM



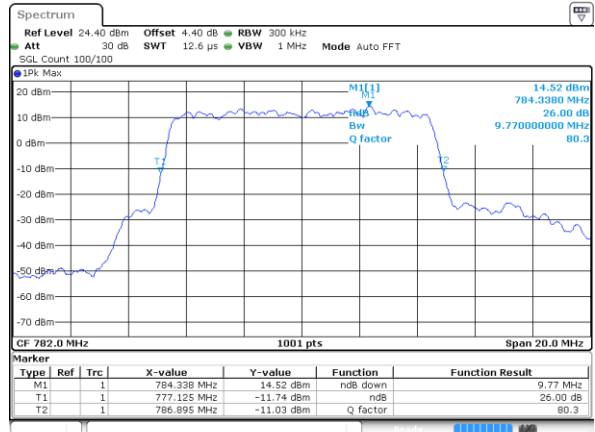
Date: 10 AUG 2020 15:27:18

Middle Channel / 5MHz / 64QAM



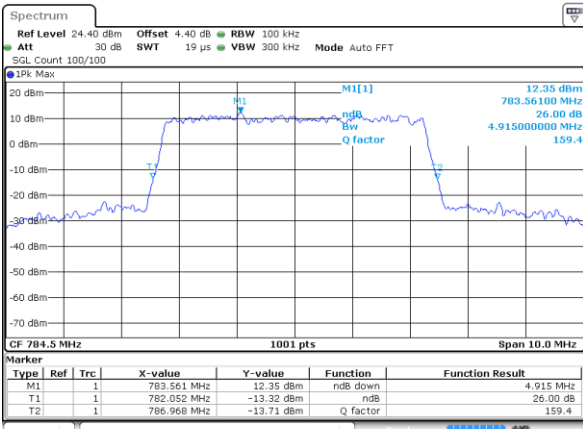
Date: 10 AUG 2020 15:27:28

Middle Channel / 10MHz / 64QAM



Date: 10 AUG 2020 15:37:12

Highest Channel / 5MHz / 64QAM



Date: 10 AUG 2020 15:27:38



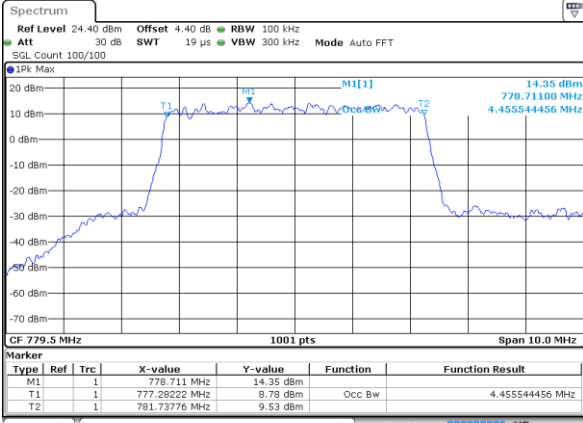
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.46	4.51	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.47	8.97	8.95	-	-	-	-
Highest CH	-	-	-	-	4.50	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	-	9.01	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-



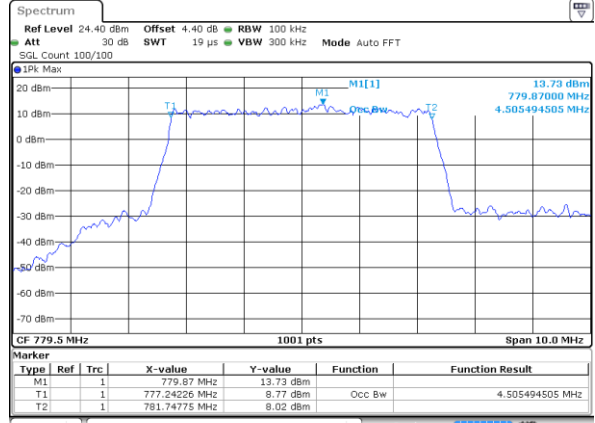
LTE Band 13

Lowest Channel / 5MHz / QPSK



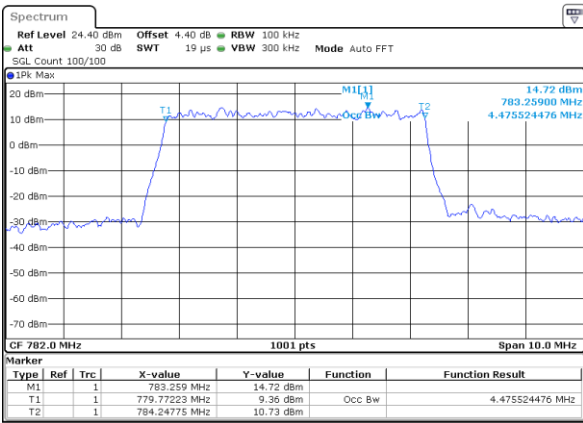
Date: 10 AUG 2020 14:52:50

Lowest Channel / 5MHz / 16QAM



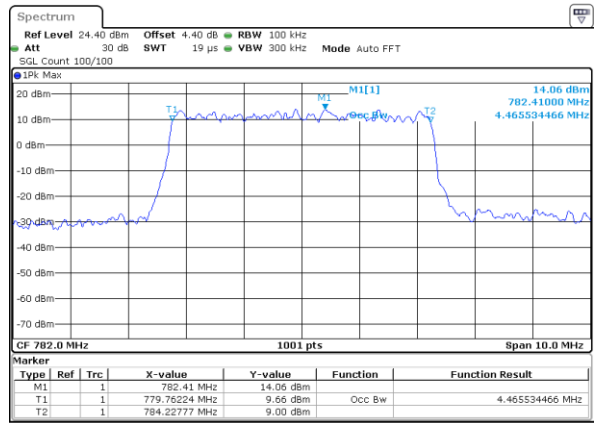
Date: 10 AUG 2020 14:52:40

Middle Channel / 5MHz / QPSK



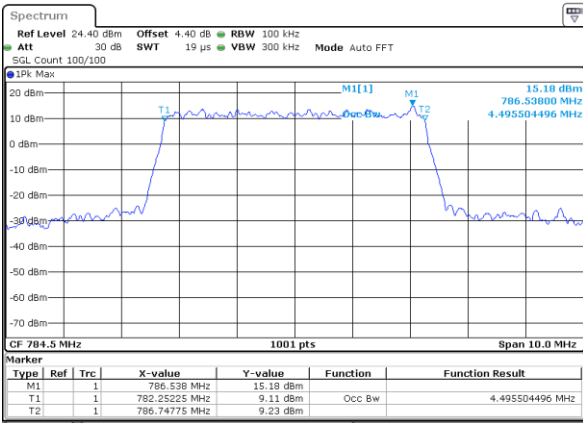
Date: 10 AUG 2020 15:01:39

Middle Channel / 5MHz / 16QAM



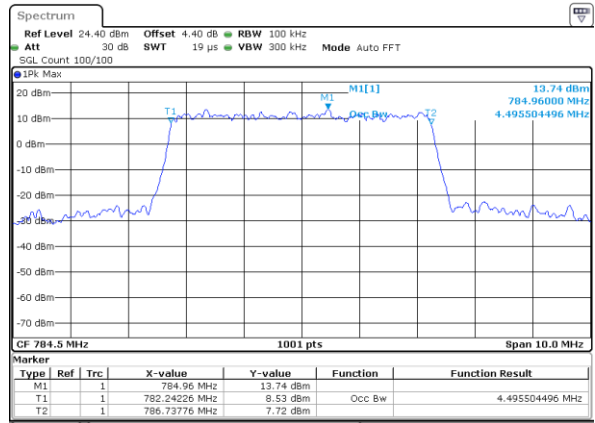
Date: 10 AUG 2020 15:01:49

Highest Channel / 5MHz / QPSK



Date: 10 AUG 2020 15:04:08

Highest Channel / 5MHz / 16QAM

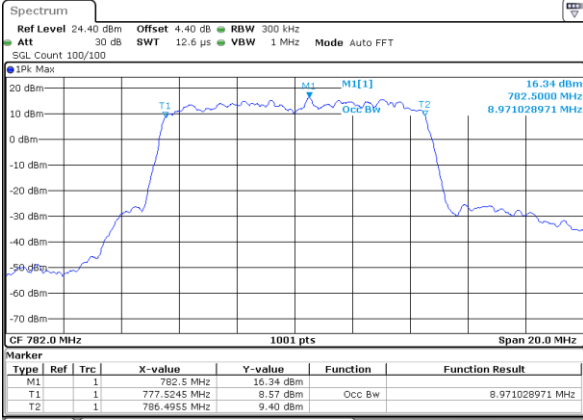


Date: 10 AUG 2020 15:04:18



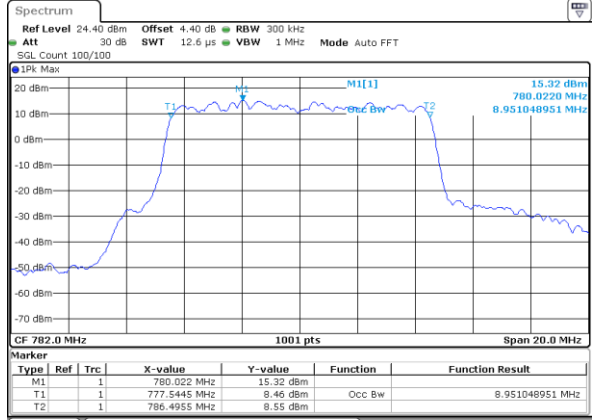
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 10 AUG 2020 15:14:56

Middle Channel / 10MHz / 16QAM



Date: 10 AUG 2020 15:15:06