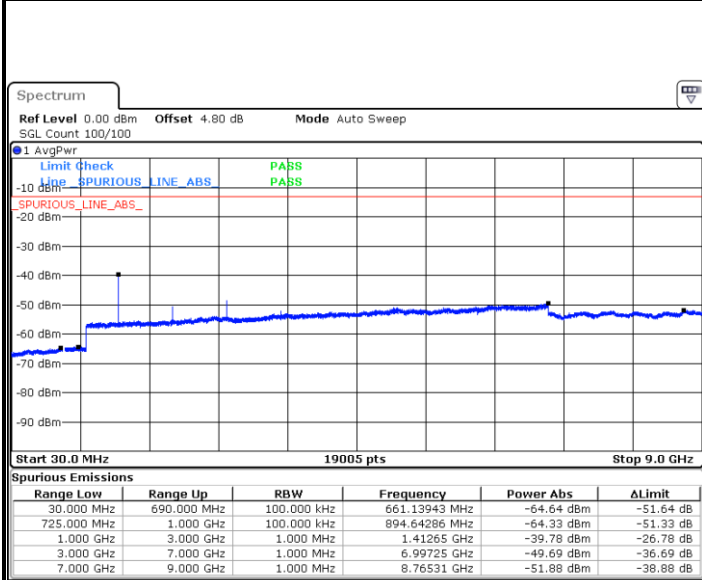




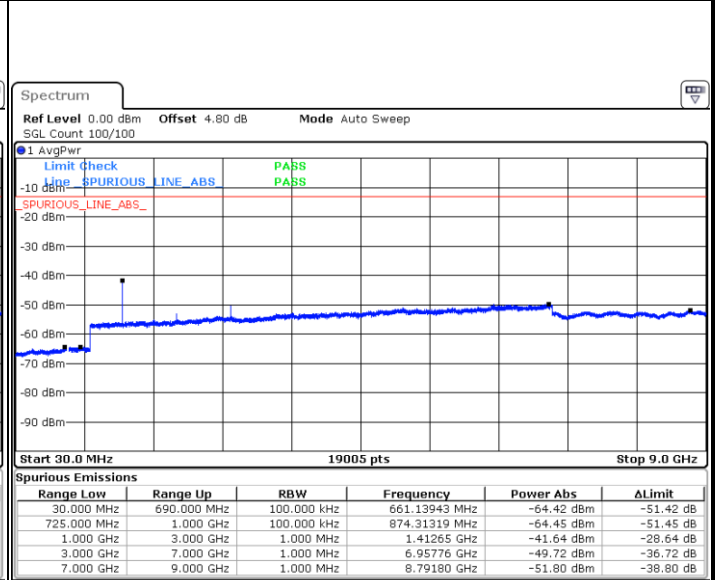
LTE Band 12 / 3MHz

Middle Channel / QPSK



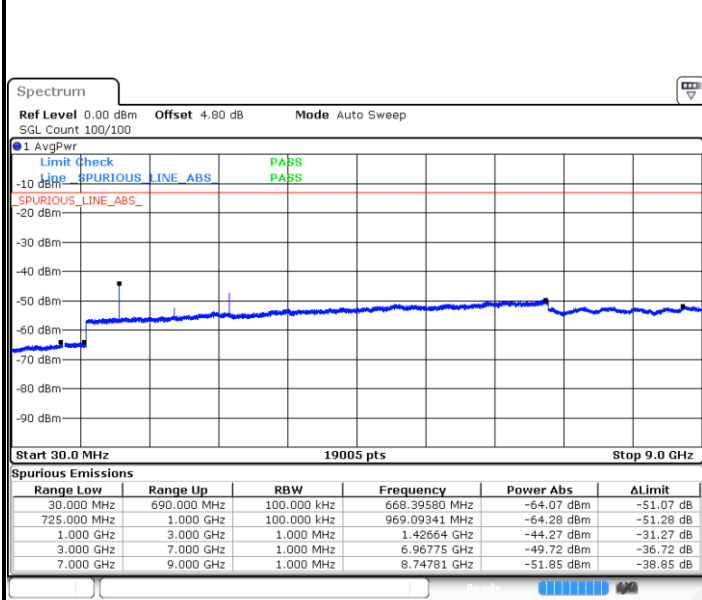
Date: 2 AUG.2020 02:45:40

Middle Channel / 16QAM



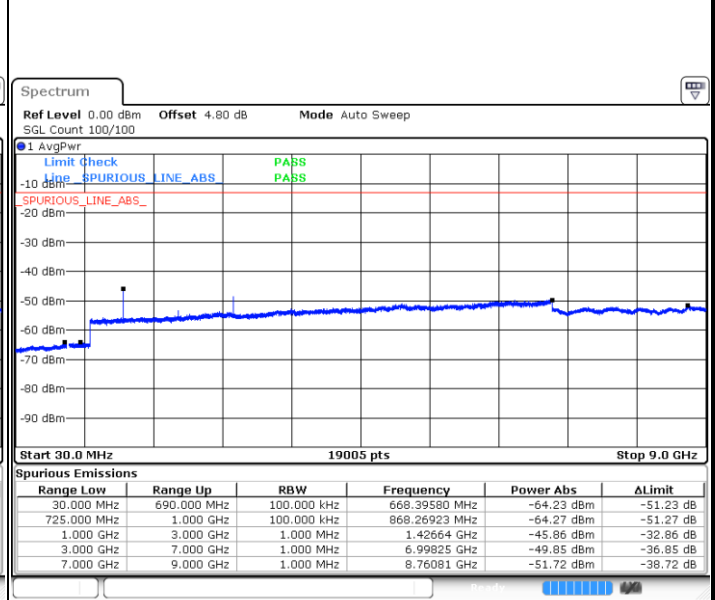
Date: 2 AUG.2020 02:44:46

Highest Channel / QPSK



Date: 2 AUG.2020 02:46:34

Highest Channel / 16QAM



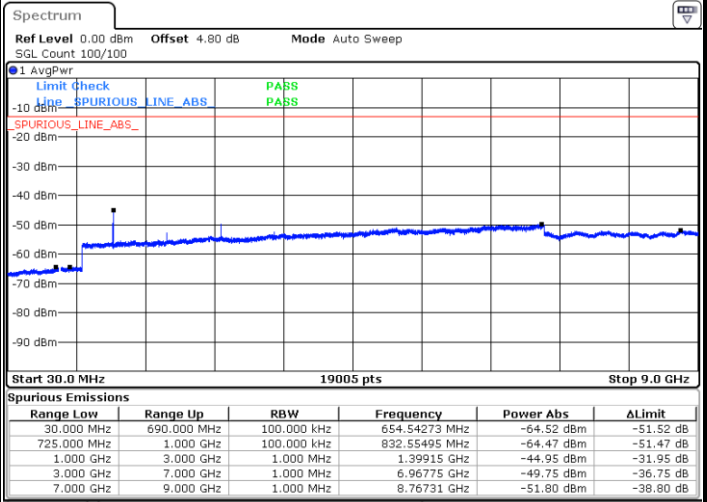
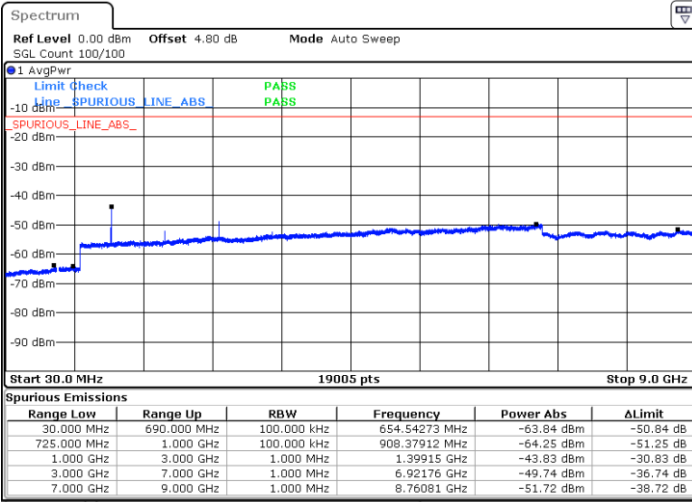
Date: 2 AUG.2020 02:47:29



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

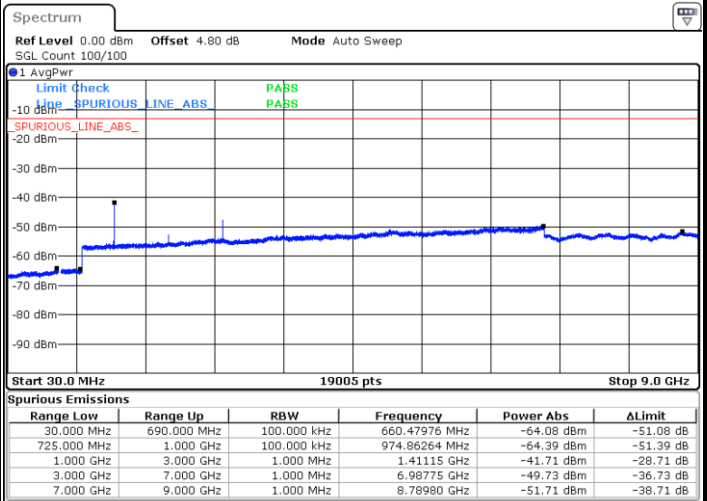
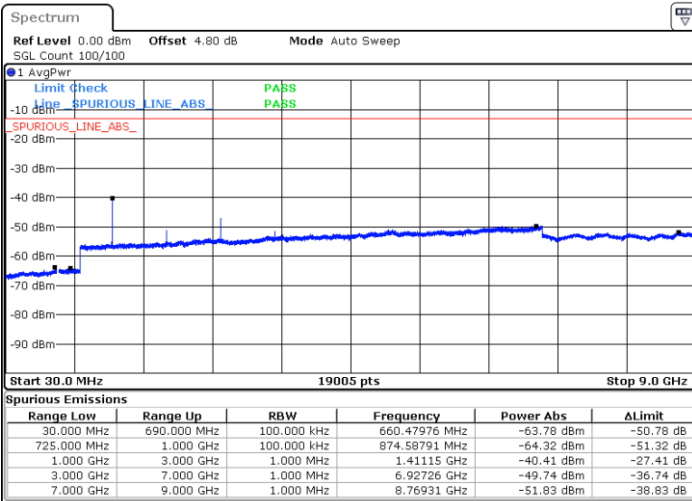


Date: 2 AUG.2020 02:59:22

Date: 2 AUG.2020 03:00:16

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 2 AUG.2020 03:02:04

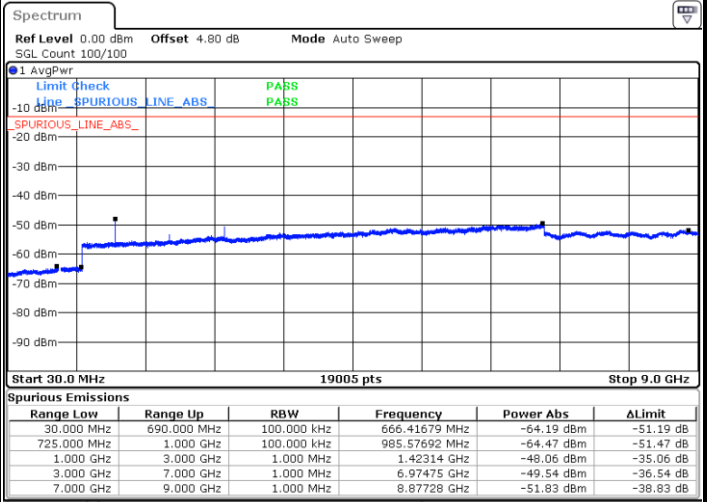
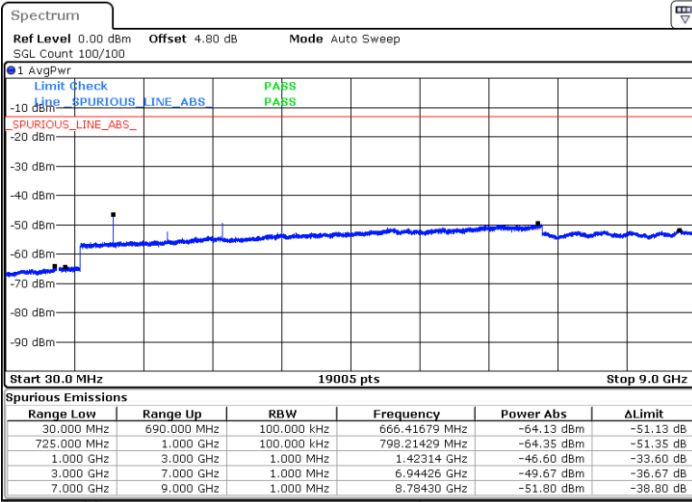
Date: 2 AUG.2020 03:01:10



LTE Band 12 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



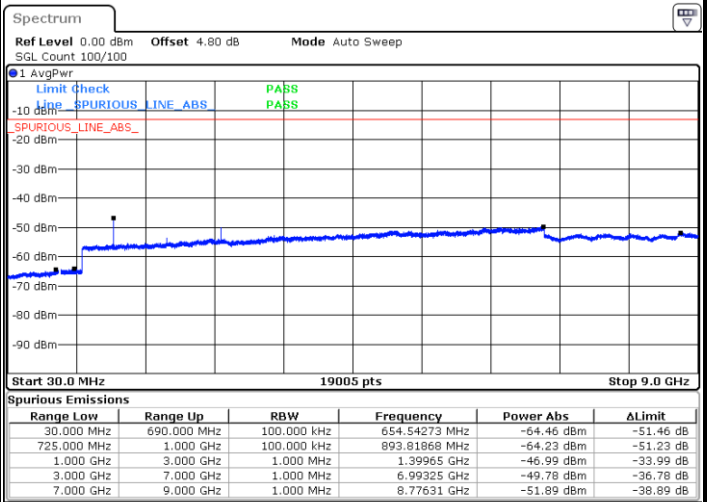
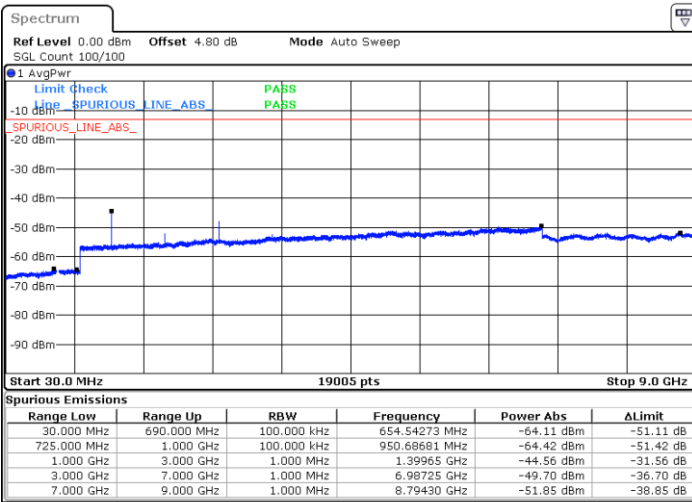
Date: 2 AUG.2020 03:02:59

Date: 2 AUG.2020 03:03:53

LTE Band 12 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



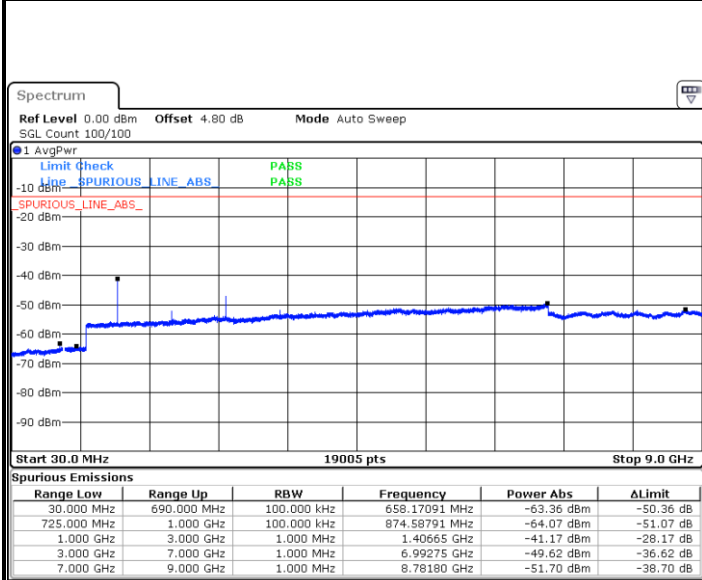
Date: 2 AUG.2020 03:15:46

Date: 2 AUG.2020 03:16:40



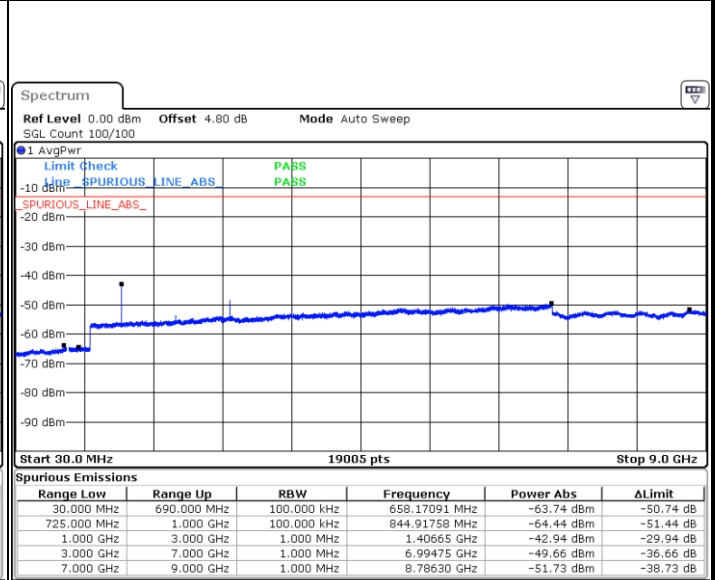
LTE Band 12 / 10MHz

Middle Channel / QPSK



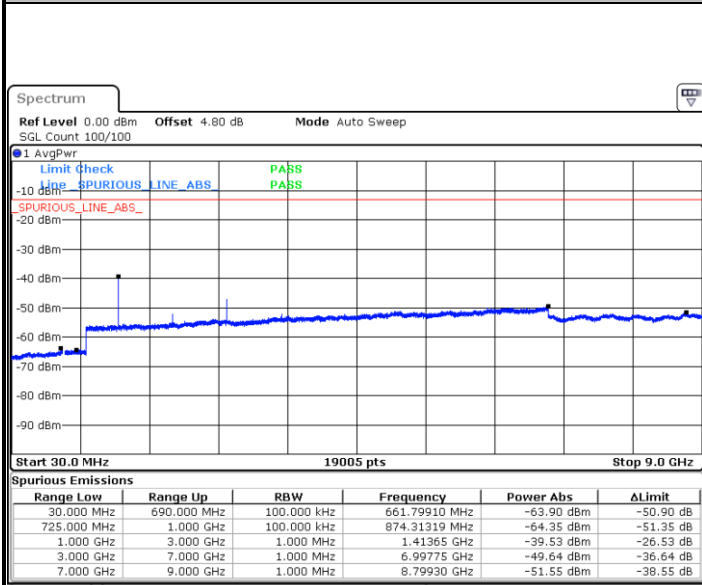
Date: 2 AUG.2020 03:18:29

Middle Channel / 16QAM



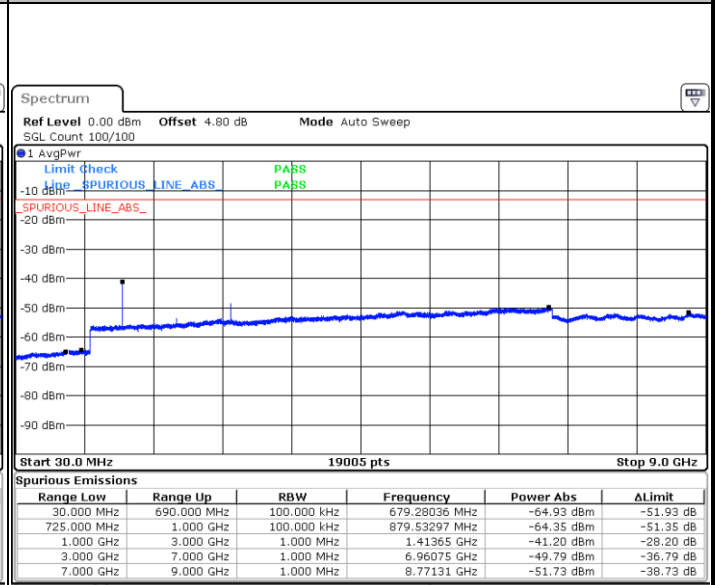
Date: 2 AUG.2020 03:17:34

Highest Channel / QPSK



Date: 2 AUG.2020 03:19:23

Highest Channel / 16QAM



Date: 2 AUG.2020 03:20:17



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0011	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0090	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0102	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0076	
-30	Normal Voltage	0.0068	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0106	

Note:

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



## LTE Band 13

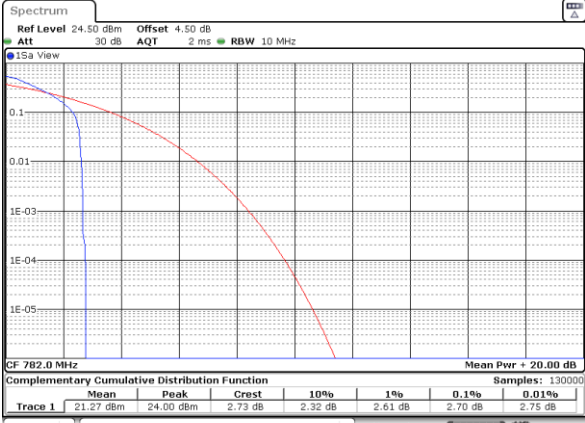
### Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	<b>PASS</b>
Middle CH	2.70	4.61	3.74	5.65	
Highest CH	-	-	-	-	



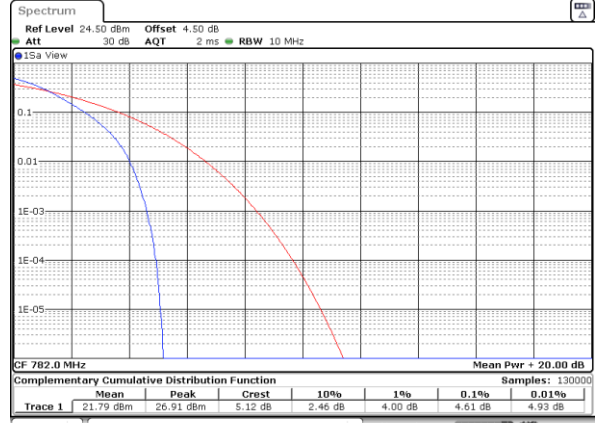
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 6 AUG 2020 11:03:52

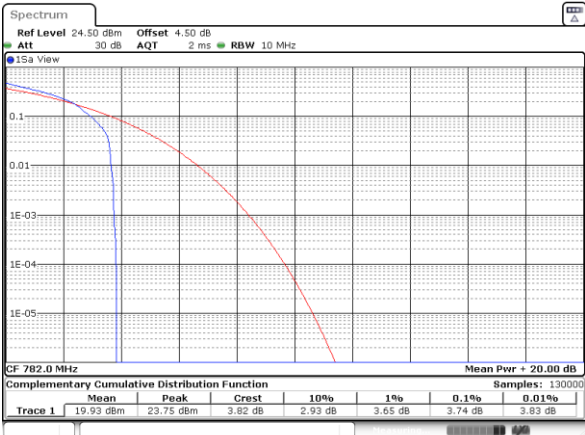
Middle Channel / Full RB



Date: 6 AUG 2020 11:01:18

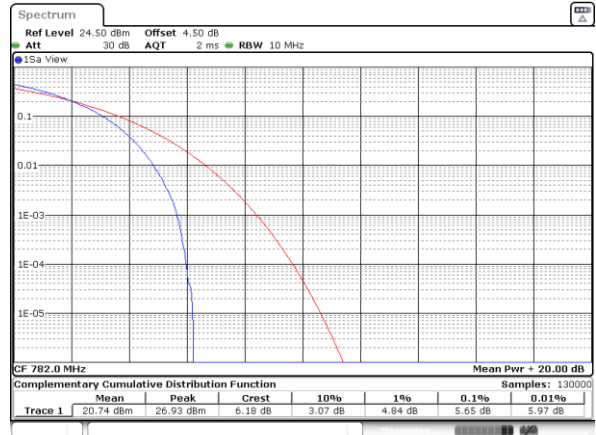
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 6 AUG 2020 11:05:17

Middle Channel / Full RB



Date: 6 AUG 2020 10:59:40



**26dB Bandwidth**

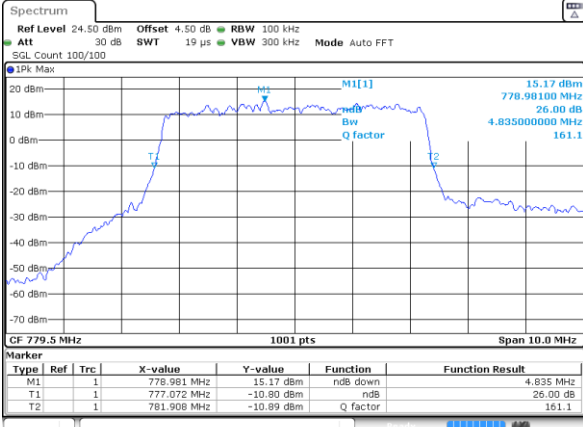
Mode	LTE Band 13 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.84	4.89	-	-	-	-	-	-
Middle CH	-	-	-	-	4.96	4.89	9.79	9.91	-	-	-	-
Highest CH	-	-	-	-	4.94	4.85	-	-	-	-	-	-





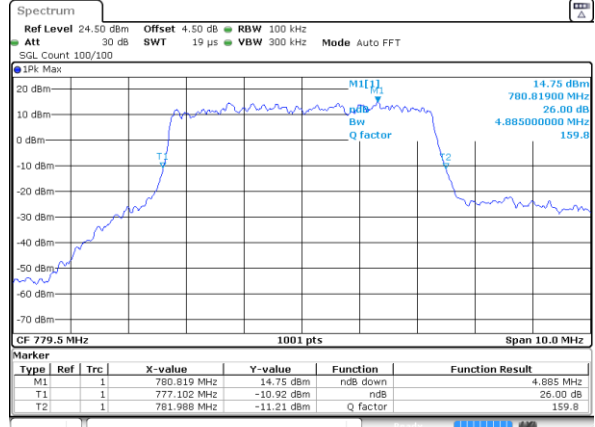
LTE Band 13

Lowest Channel / 5MHz / QPSK



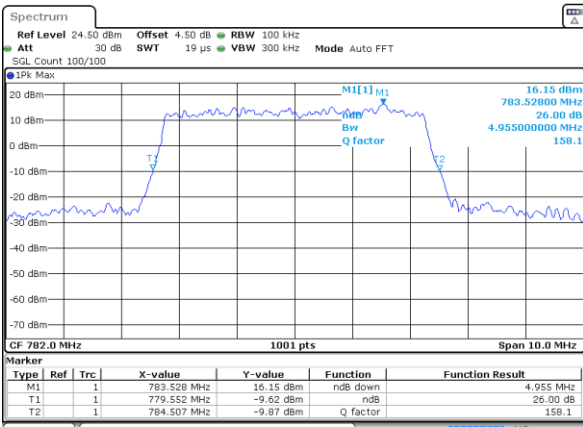
Date: 6 AUG 2020 10:28:14

Lowest Channel / 5MHz / 16QAM



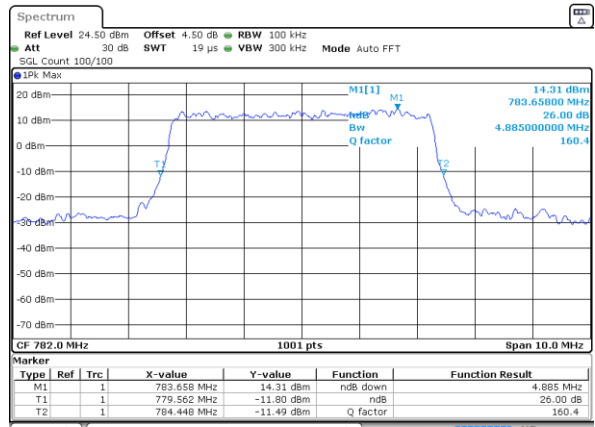
Date: 6 AUG 2020 10:29:56

Middle Channel / 5MHz / QPSK



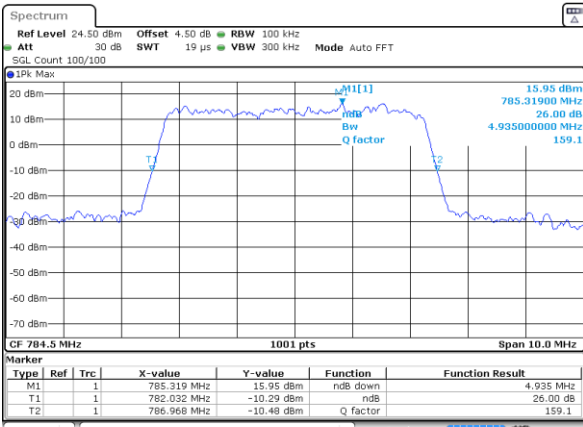
Date: 6 AUG 2020 10:43:19

Middle Channel / 5MHz / 16QAM



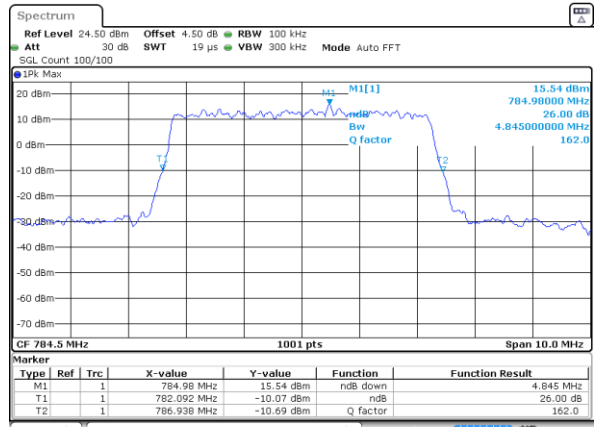
Date: 6 AUG 2020 10:42:55

Highest Channel / 5MHz / QPSK



Date: 6 AUG 2020 10:44:24

Highest Channel / 5MHz / 16QAM

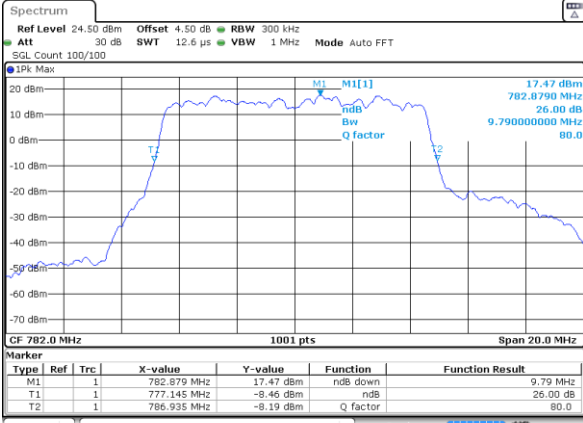


Date: 6 AUG 2020 10:46:11



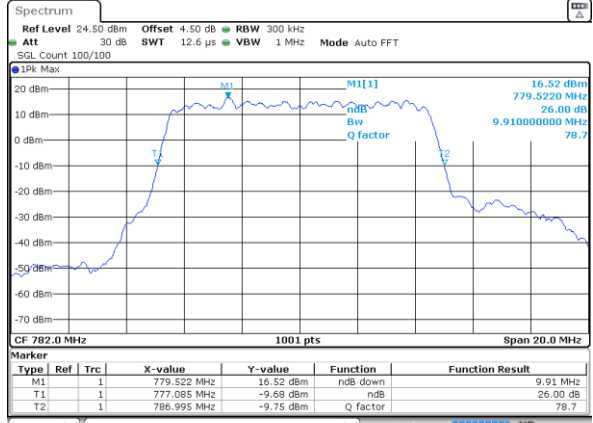
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 6 AUG 2020 11:00:04

Middle Channel / 10MHz / 16QAM



Date: 6 AUG 2020 10:58:27



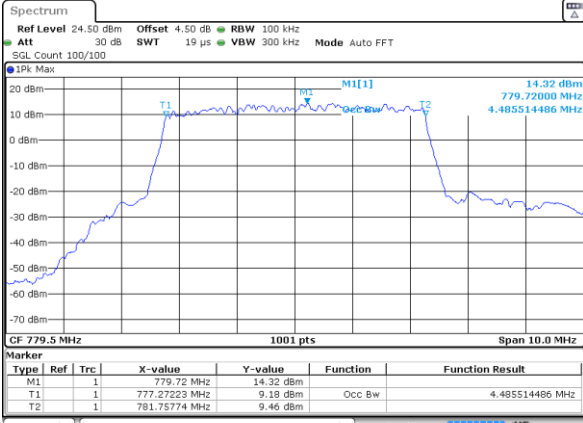
### Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.46	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.50	8.95	8.93	-	-	-	-
Highest CH	-	-	-	-	4.48	4.48	-	-	-	-	-	-



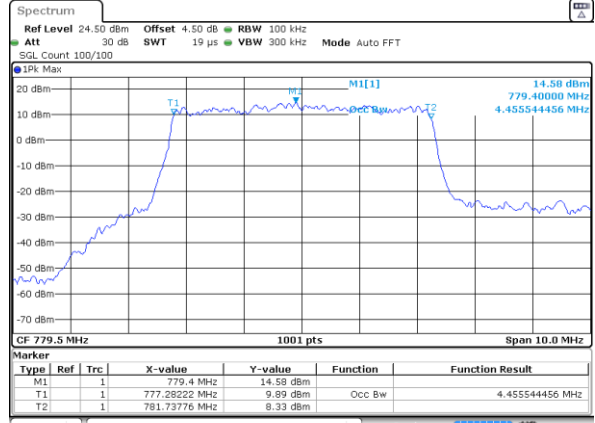
LTE Band 13

Lowest Channel / 5MHz / QPSK



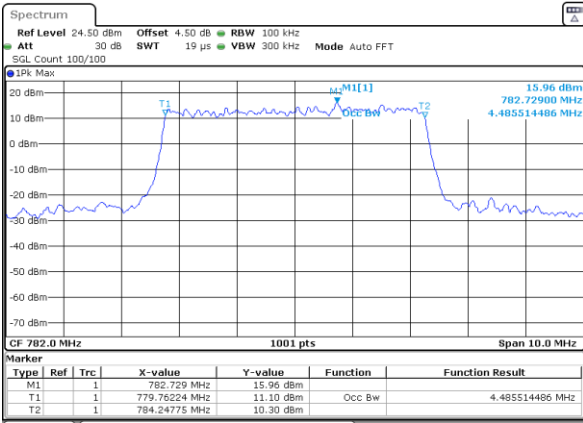
Date: 6 AUG 2020 10:28:06

Lowest Channel / 5MHz / 16QAM



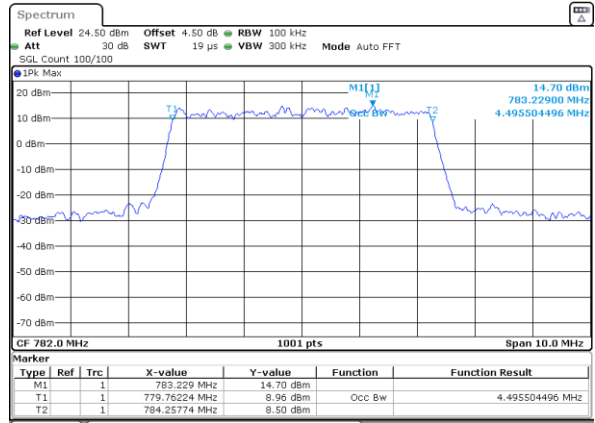
Date: 6 AUG 2020 10:29:49

Middle Channel / 5MHz / QPSK



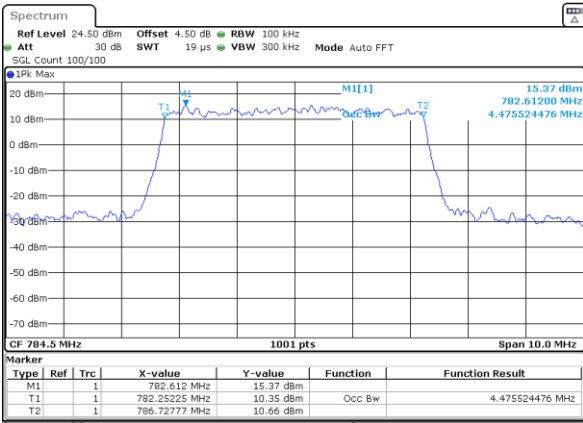
Date: 6 AUG 2020 10:43:11

Middle Channel / 5MHz / 16QAM



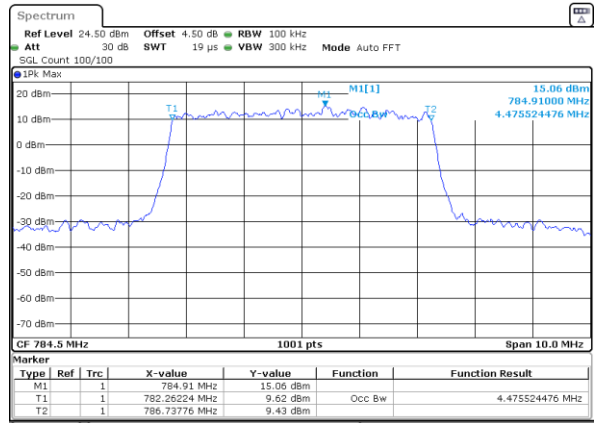
Date: 6 AUG 2020 10:42:47

Highest Channel / 5MHz / QPSK



Date: 6 AUG 2020 10:44:15

Highest Channel / 5MHz / 16QAM

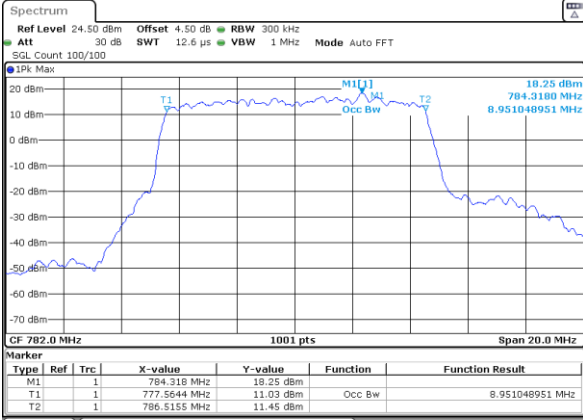


Date: 6 AUG 2020 10:46:05



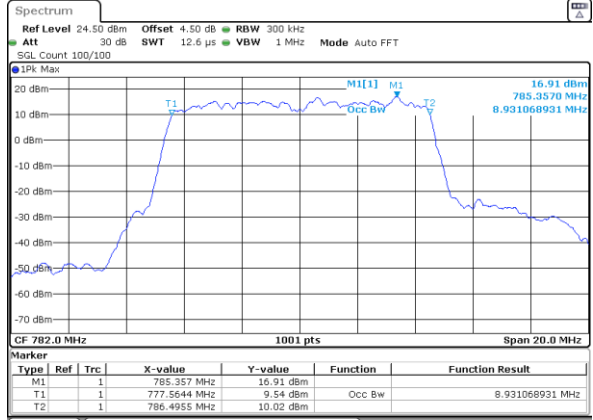
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 6 AUG 2020 10:59:55

Middle Channel / 10MHz / 16QAM



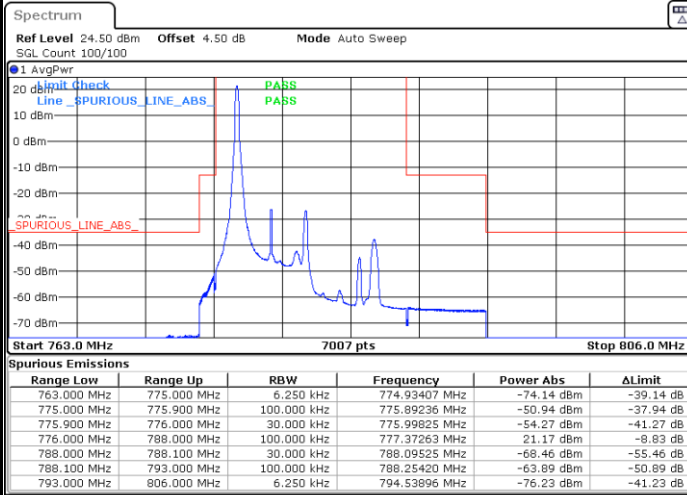
Date: 6 AUG 2020 10:58:14



# Conducted Band Edge

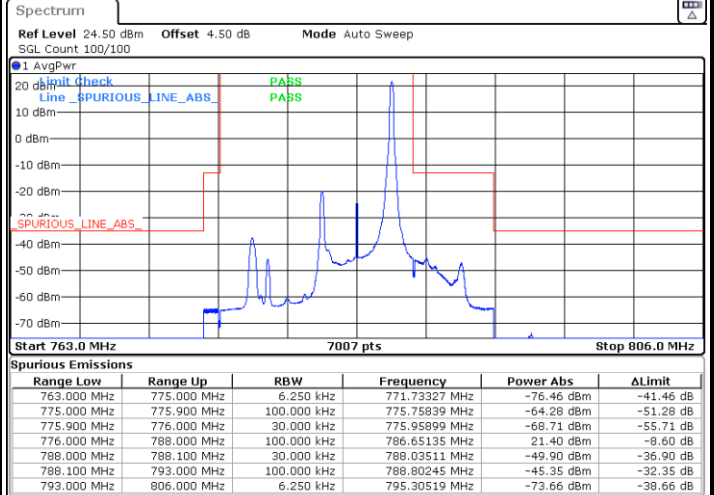
## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



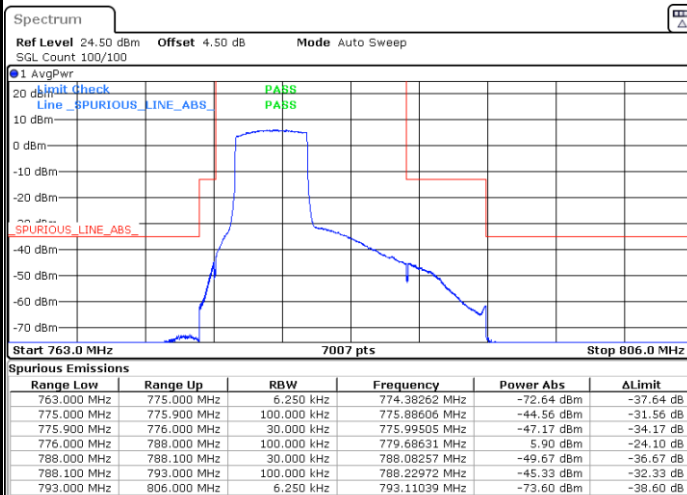
Date: 6 AUG 2020 10:38:22

### Highest Band Edge / 1 RB



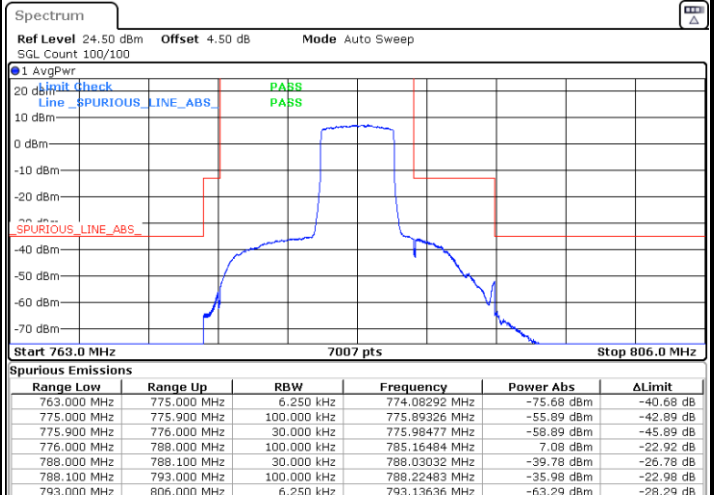
Date: 6 AUG 2020 10:51:51

### Lowest Band Edge / Full RB



Date: 6 AUG 2020 10:29:26

### Highest Band Edge / Full RB



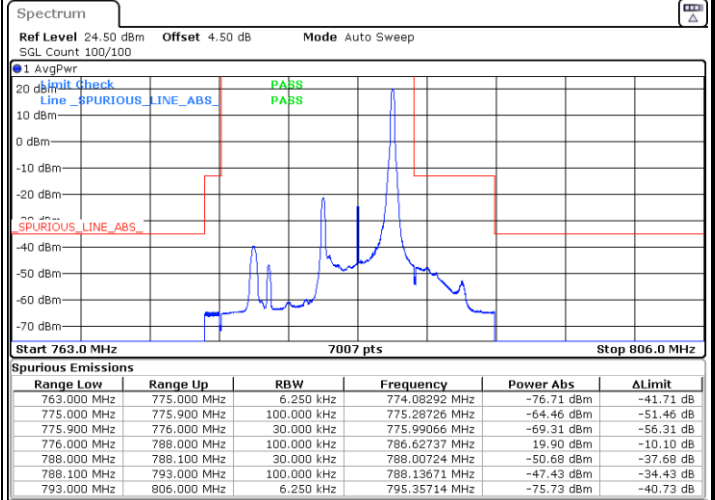
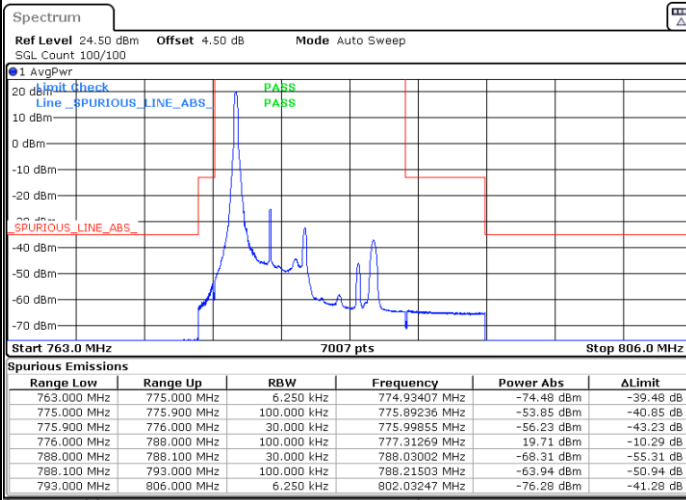
Date: 6 AUG 2020 10:45:48



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

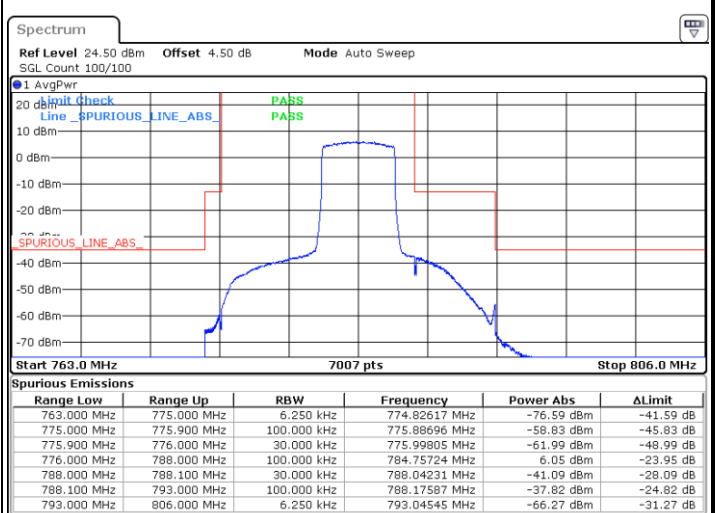
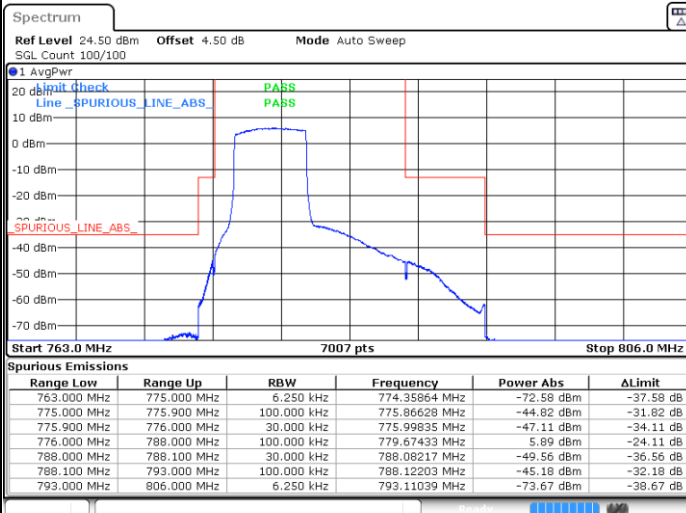


Date: 6 AUG.2020 10:36:24

Date: 6 AUG.2020 10:53:15

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

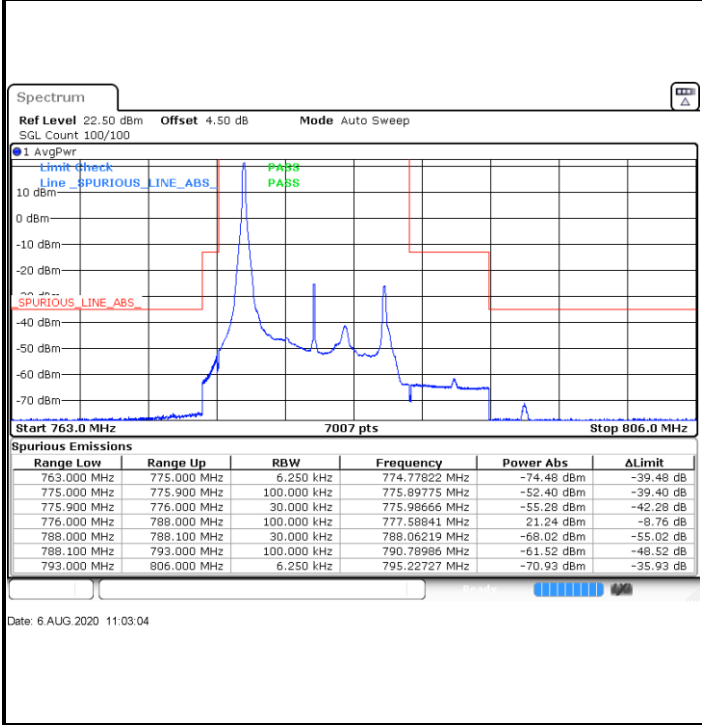


Date: 6 AUG.2020 10:30:58

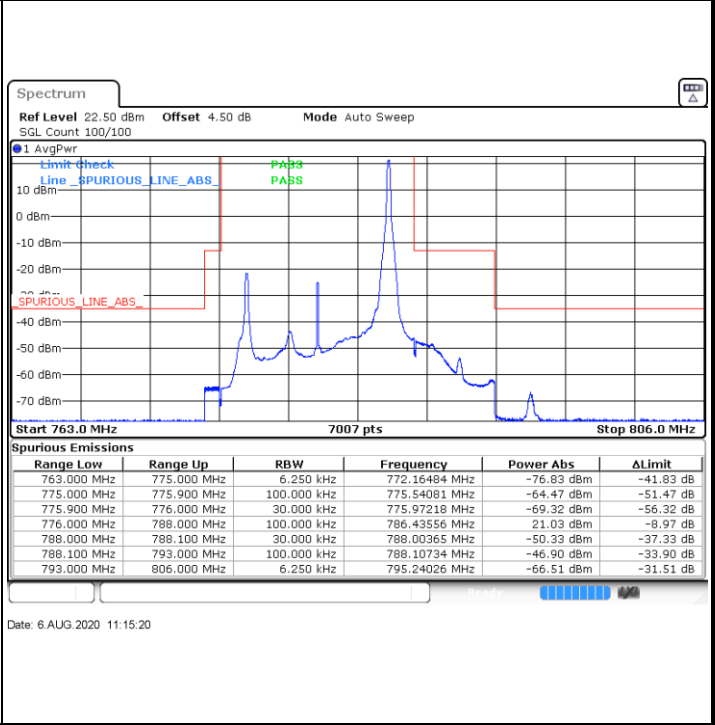


**LTE Band 13 / 10MHz / QPSK**

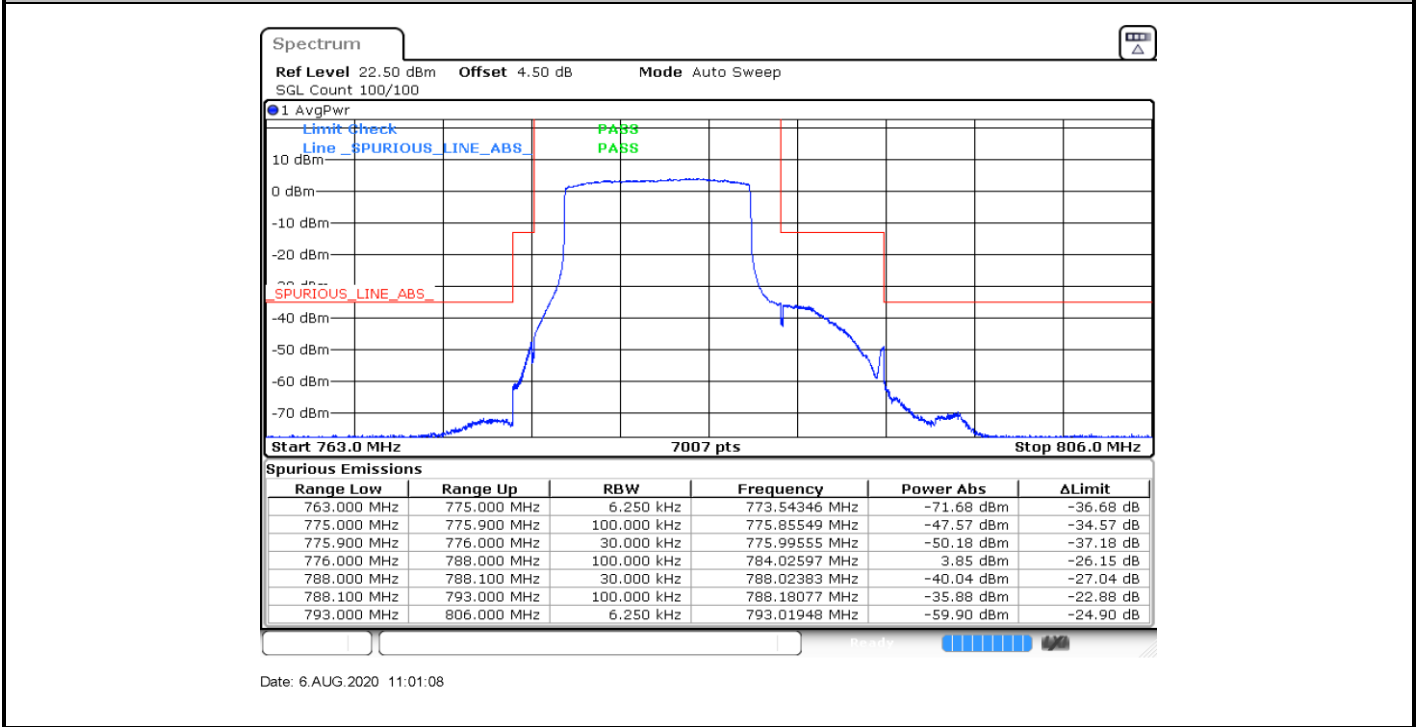
**Lowest Band Edge / 1 RB**



**Highest Band Edge / 1 RB**



**Band Edge / Full RB**

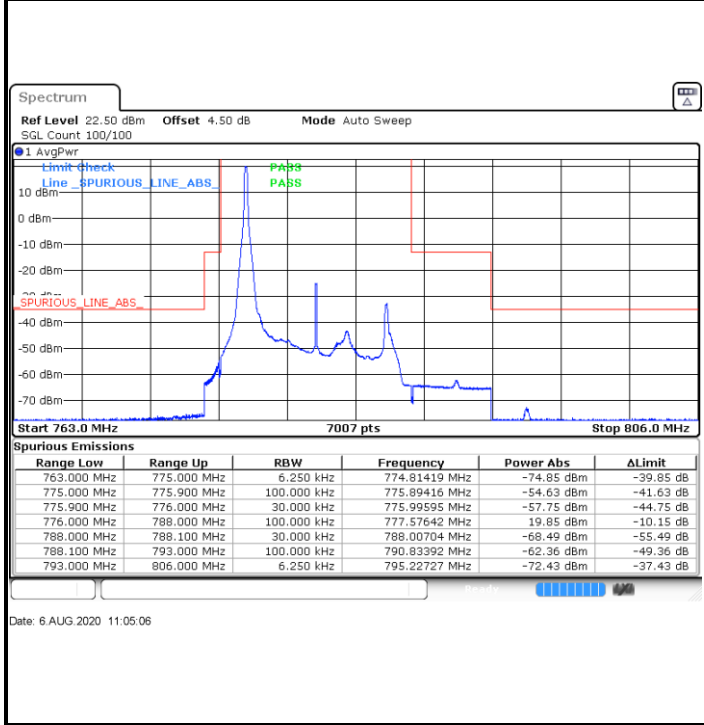




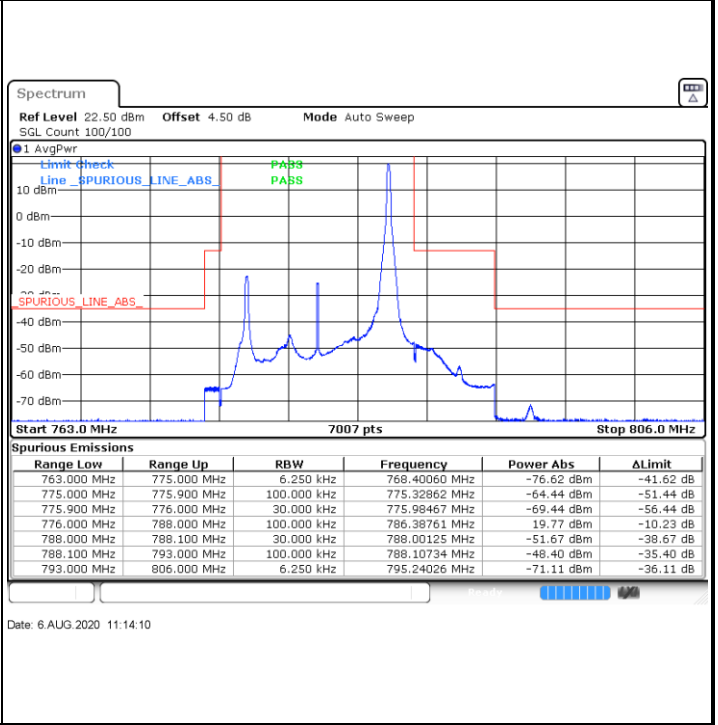


**LTE Band 13 / 10MHz / 16QAM**

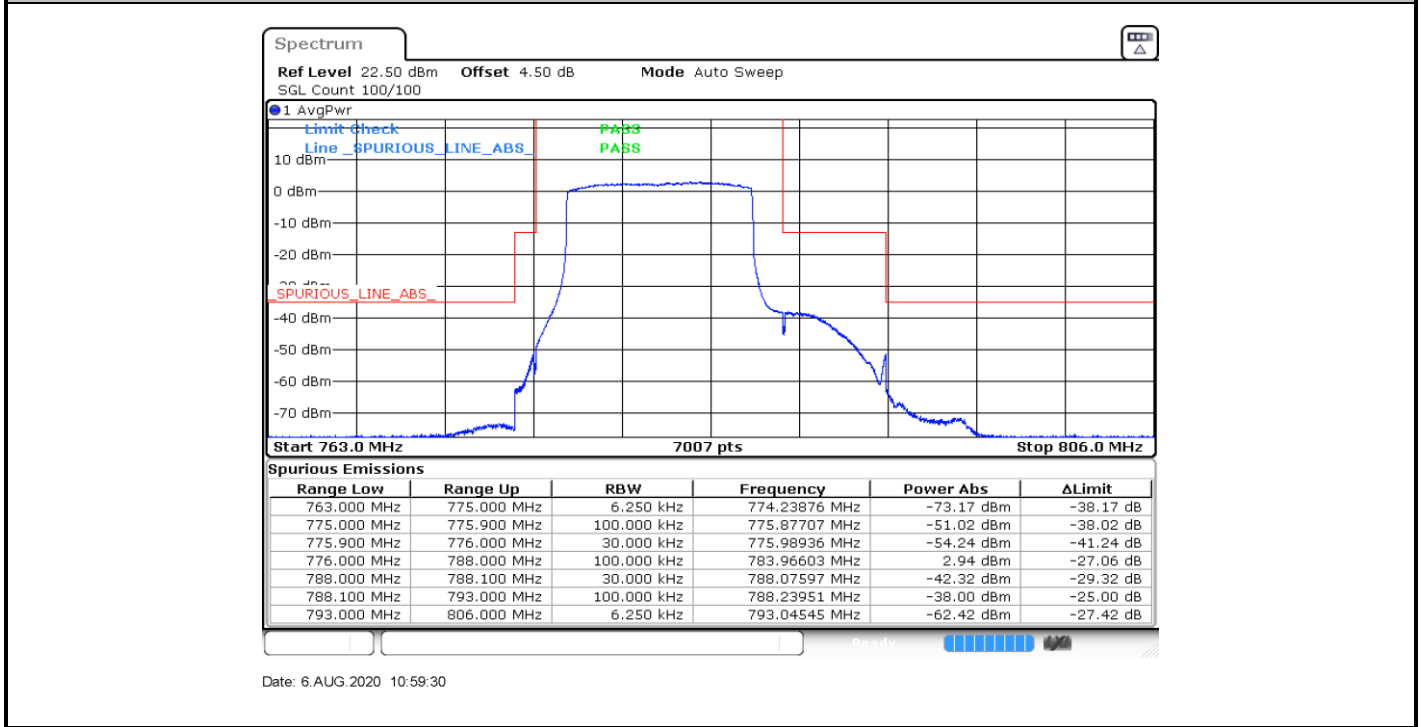
**Lowest Band Edge / 1 RB**



**Highest Band Edge / 1 RB**

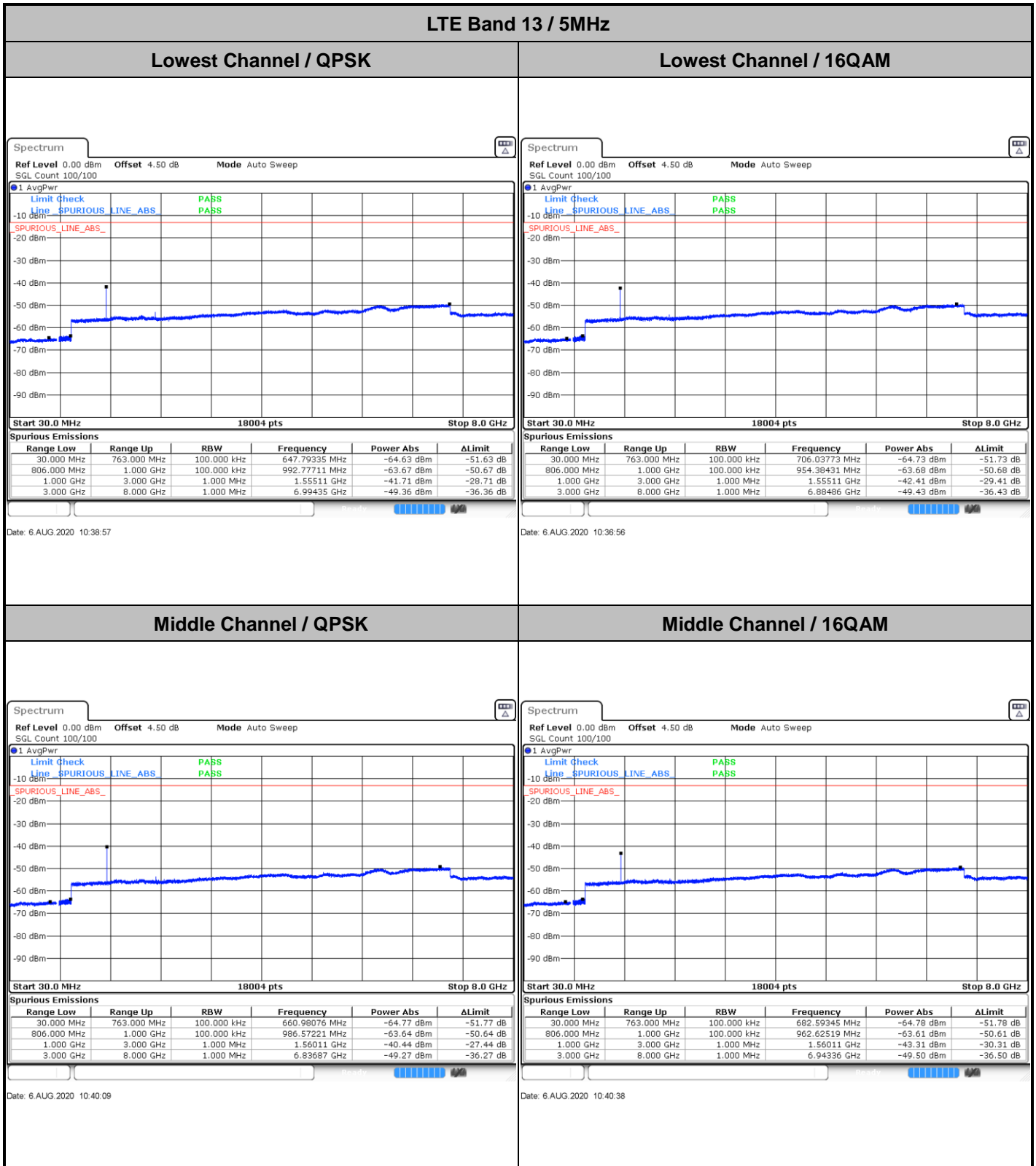


**Band Edge / Full RB**





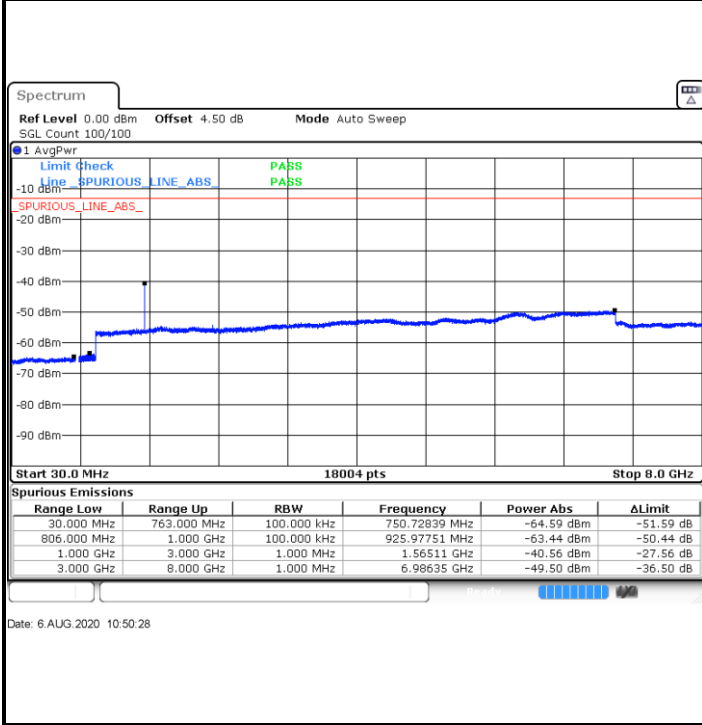
# Conducted Spurious Emission



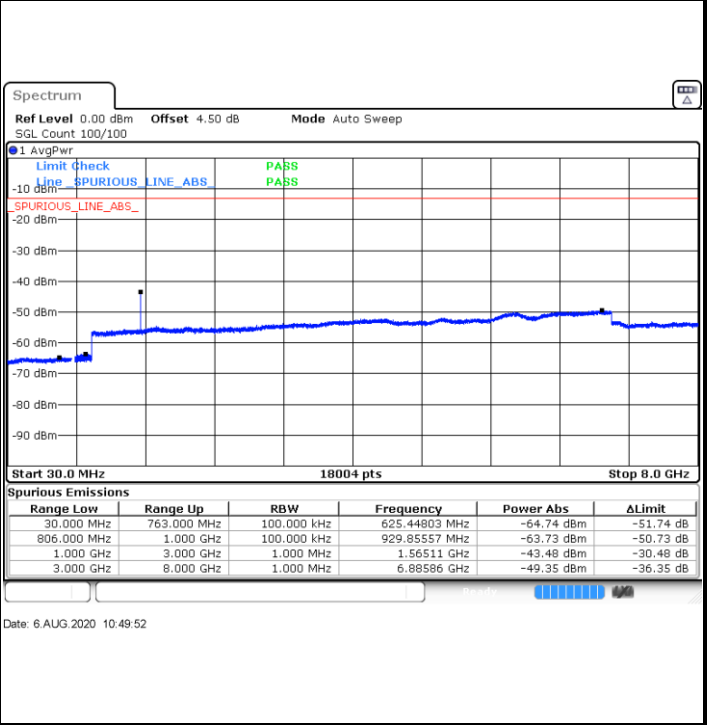


LTE Band 13 / 5MHz

Highest Channel / QPSK

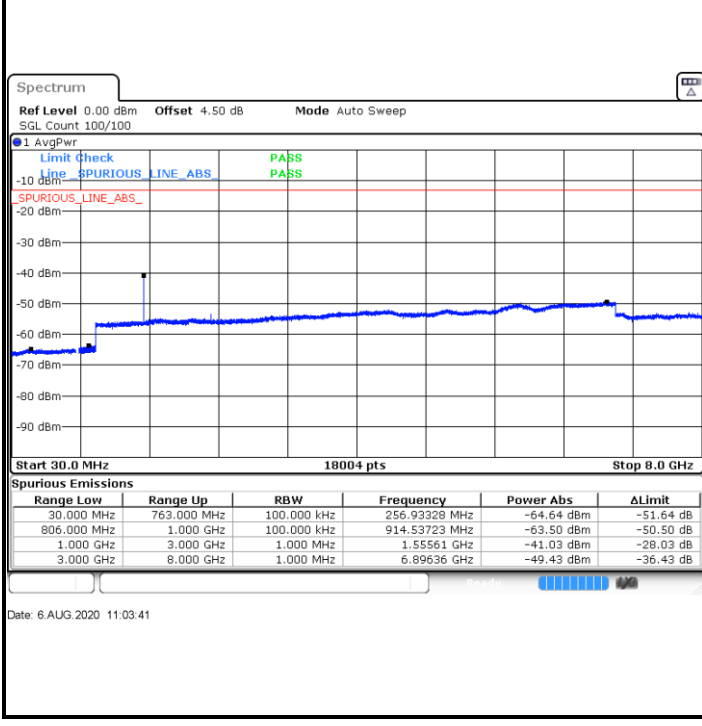


Highest Channel / 16QAM

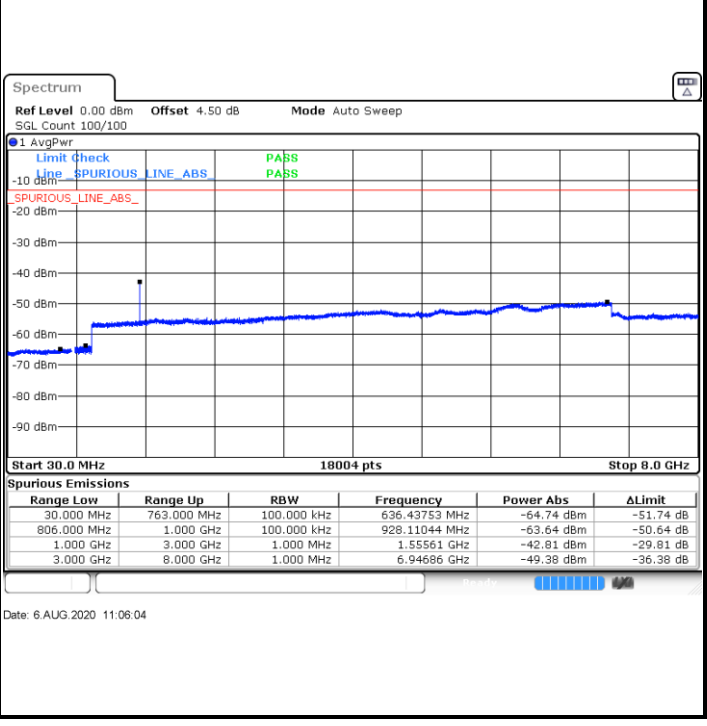


LTE Band 13 / 10MHz

Middle Channel / QPSK



Middle Channel / 16QAM





Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0008	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

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



# LTE Band 17

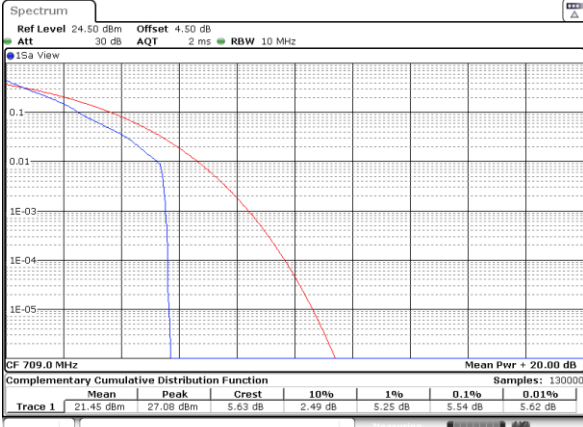
## Peak-to-Average Ratio

Mode	LTE Band 17 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.54	5.07	5.86	6.06	PASS
Middle CH	5.51	5.04	6.14	6.03	
Highest CH	5.42	5.13	6.09	5.97	



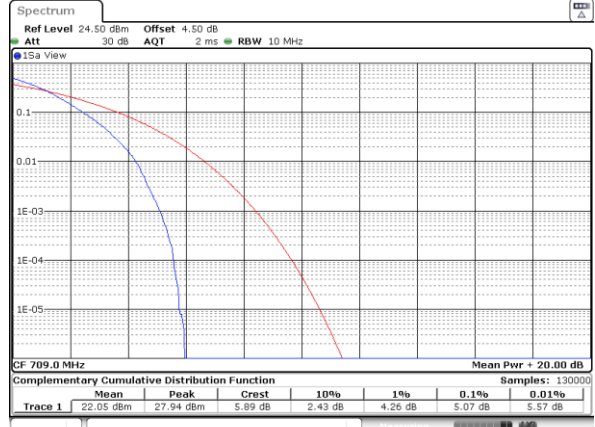
LTE Band 17 / 10MHz / QPSK

Lowest Channel / 1RB



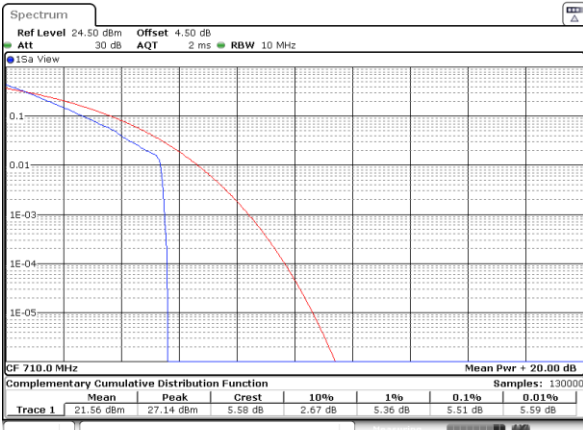
Date: 6 AUG 2020 11:55:41

Lowest Channel / Full RB



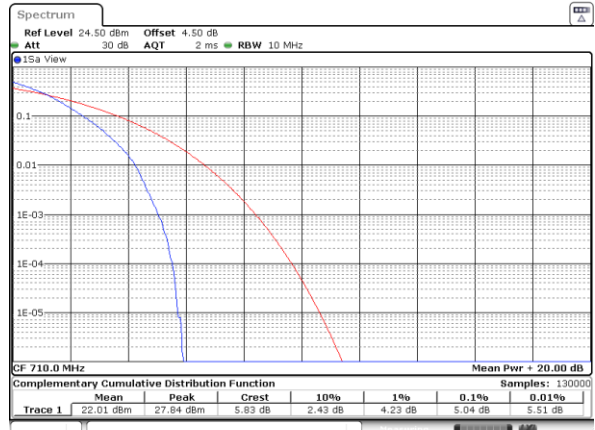
Date: 6 AUG 2020 11:53:54

Middle Channel / 1RB



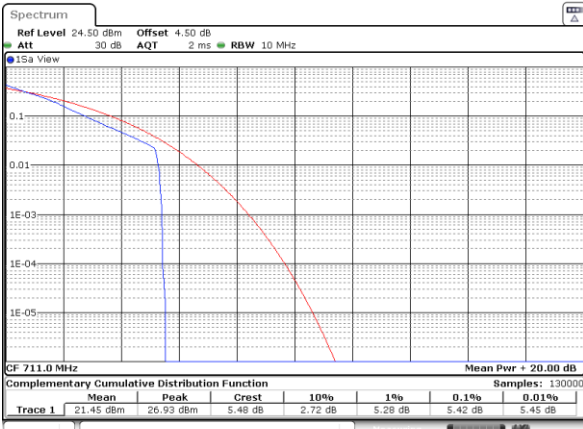
Date: 6 AUG 2020 12:06:17

Middle Channel / Full RB



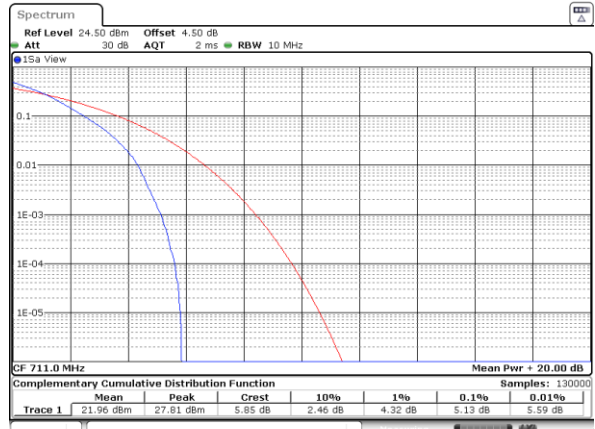
Date: 6 AUG 2020 12:07:19

Highest Channel / 1RB



Date: 6 AUG 2020 12:14:14

Highest Channel / Full RB

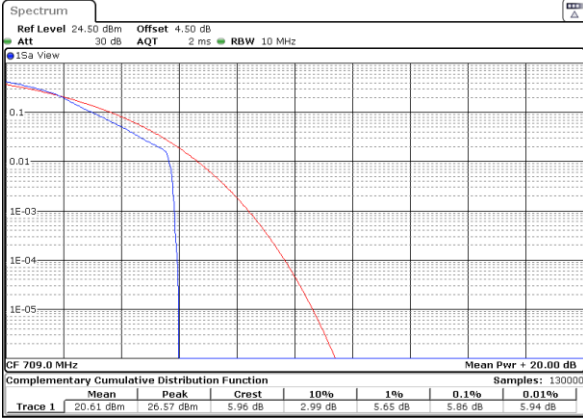


Date: 6 AUG 2020 12:13:14



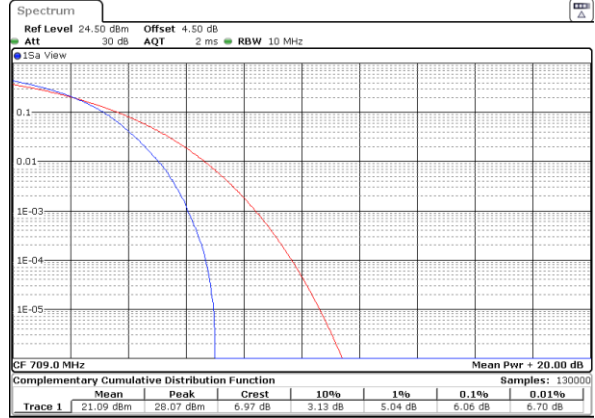
LTE Band 17 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 6 AUG 2020 12:01:59

Lowest Channel / Full RB



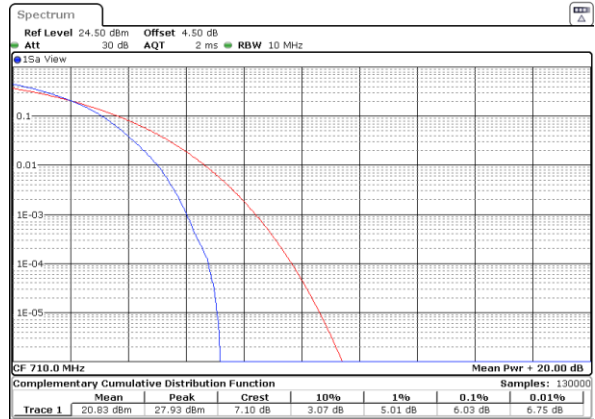
Date: 6 AUG 2020 11:52:33

Middle Channel / 1RB



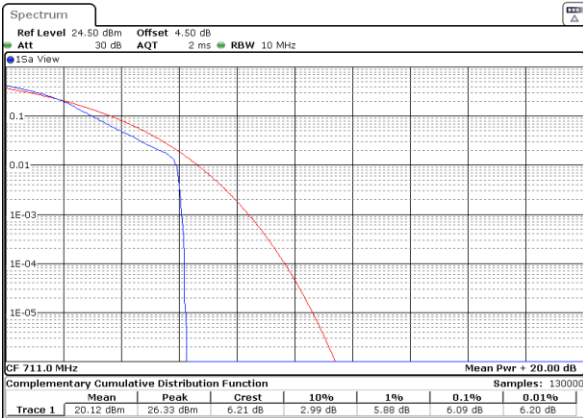
Date: 6 AUG 2020 12:05:34

Middle Channel / Full RB



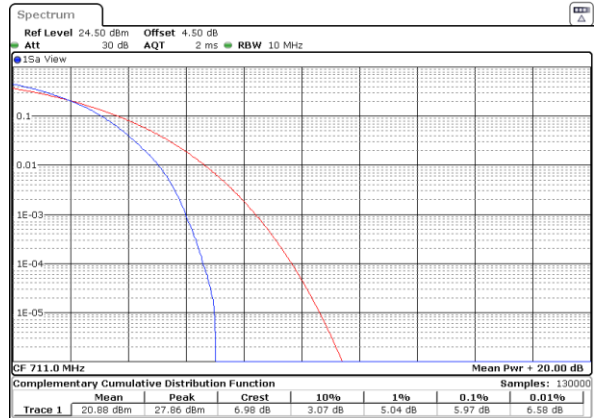
Date: 6 AUG 2020 12:08:05

Highest Channel / 1RB



Date: 6 AUG 2020 12:15:07

Highest Channel / Full RB



Date: 6 AUG 2020 12:11:47



**26dB Bandwidth**

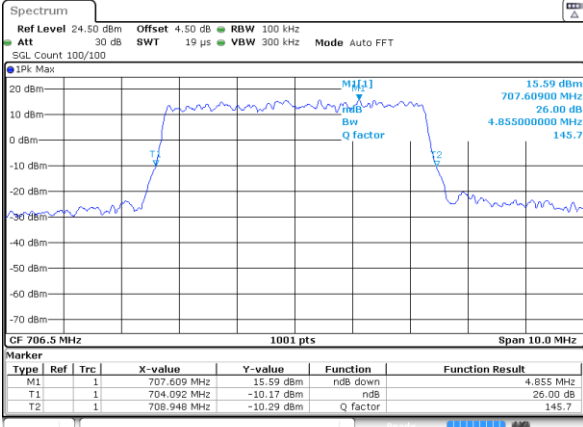
Mode	LTE Band 17 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.86	4.92	9.91	9.79	-	-	-	-
Middle CH	-	-	-	-	4.95	4.92	9.93	9.81	-	-	-	-
Highest CH	-	-	-	-	4.95	4.90	9.69	9.93	-	-	-	-





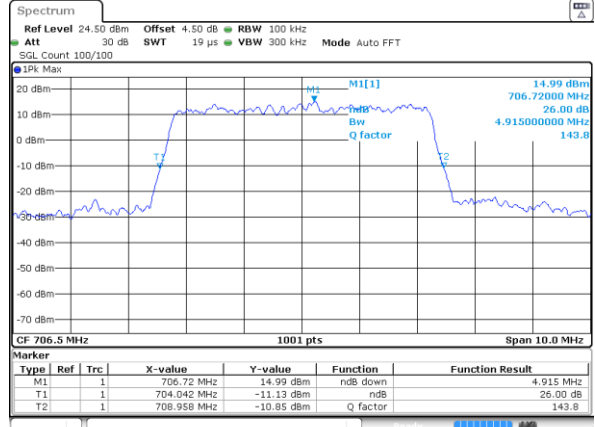
LTE Band 17

Lowest Channel / 5MHz / QPSK



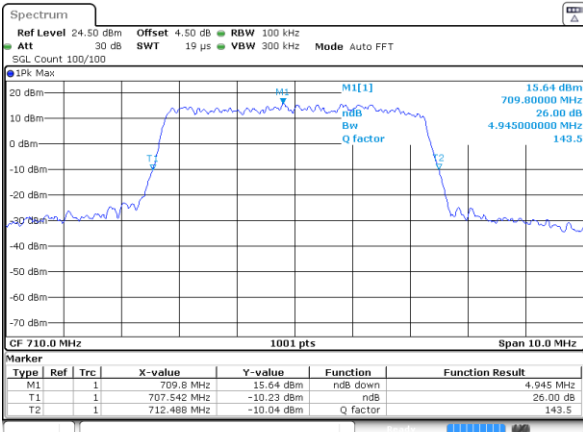
Date: 6 AUG 2020 11:22:32

Lowest Channel / 5MHz / 16QAM



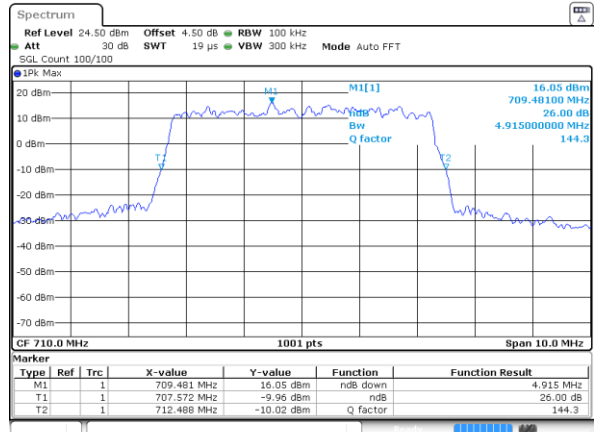
Date: 6 AUG 2020 11:23:49

Middle Channel / 5MHz / QPSK



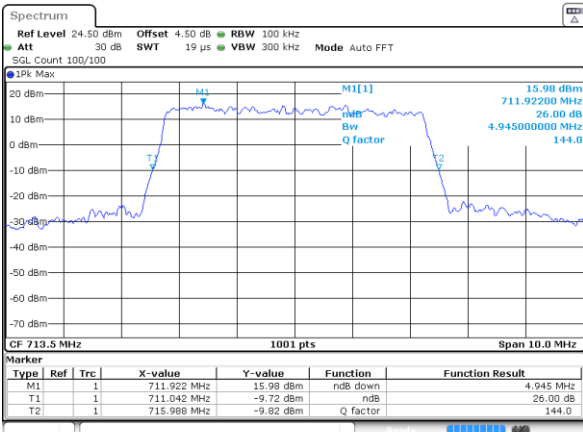
Date: 6 AUG 2020 11:35:16

Middle Channel / 5MHz / 16QAM



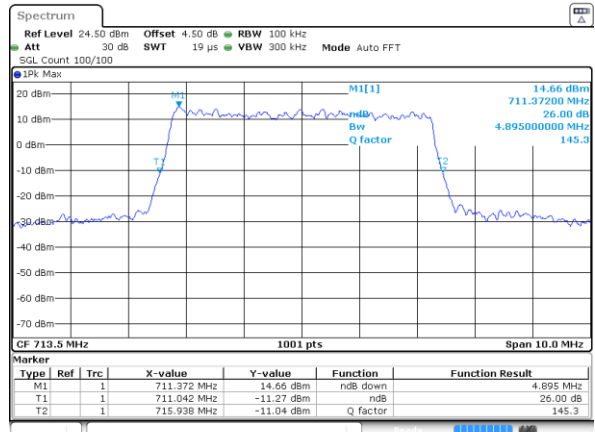
Date: 6 AUG 2020 11:34:54

Highest Channel / 5MHz / QPSK



Date: 6 AUG 2020 11:36:40

Highest Channel / 5MHz / 16QAM

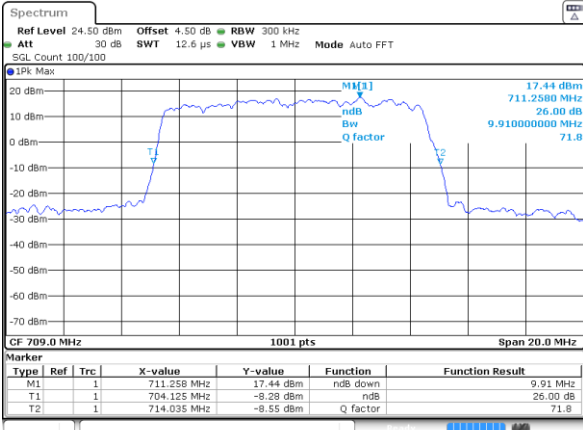


Date: 6 AUG 2020 11:38:10



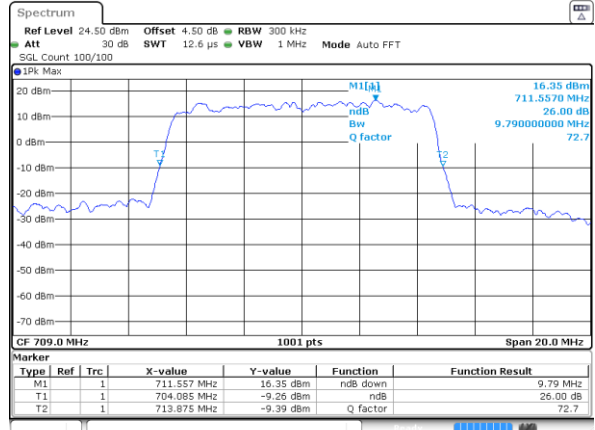
LTE Band 17

Lowest Channel / 10MHz / QPSK



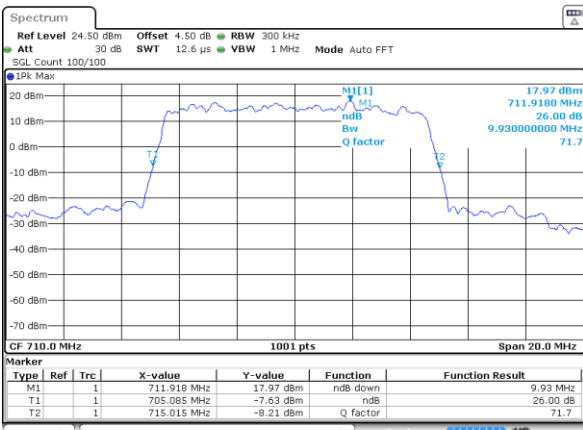
Date: 6 AUG 2020 11:52:57

Lowest Channel / 10MHz / 16QAM



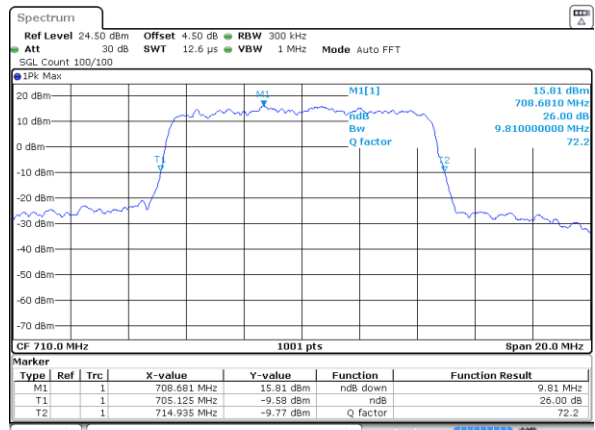
Date: 6 AUG 2020 11:51:28

Middle Channel / 10MHz / QPSK



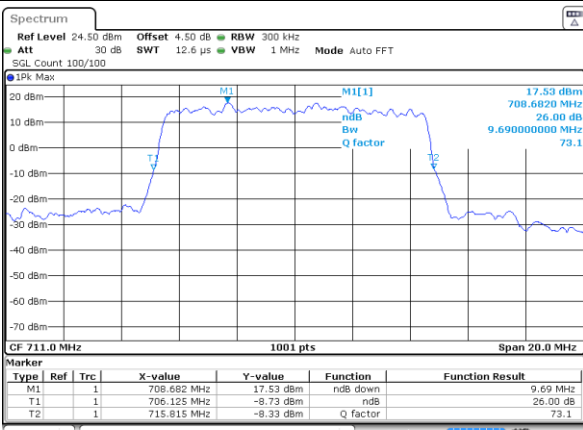
Date: 6 AUG 2020 12:07:06

Middle Channel / 10MHz / 16QAM



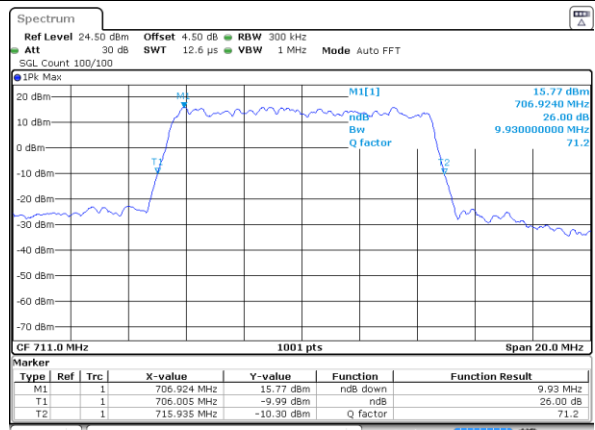
Date: 6 AUG 2020 12:07:47

Highest Channel / 10MHz / QPSK



Date: 6 AUG 2020 12:12:30

Highest Channel / 10MHz / 16QAM



Date: 6 AUG 2020 12:10:54



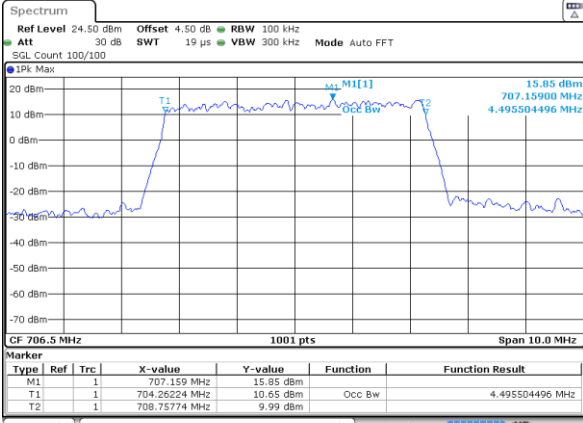
### Occupied Bandwidth

Mode	LTE Band 17 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.50	4.47	8.91	8.95	-	-	-	-
Middle CH	-	-	-	-	4.48	4.48	8.93	8.95	-	-	-	-
Highest CH	-	-	-	-	4.51	4.50	9.03	9.03	-	-	-	-



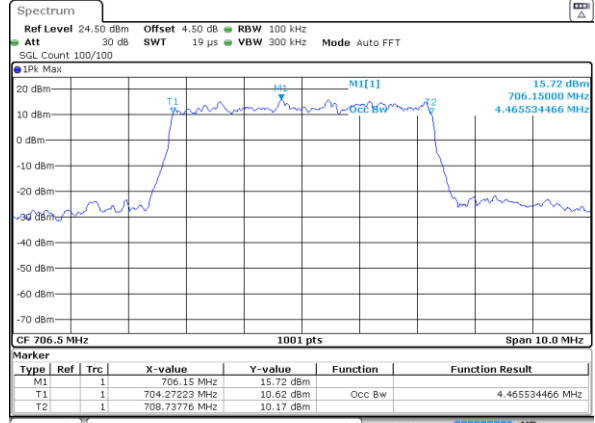
LTE Band 17

Lowest Channel / 5MHz / QPSK



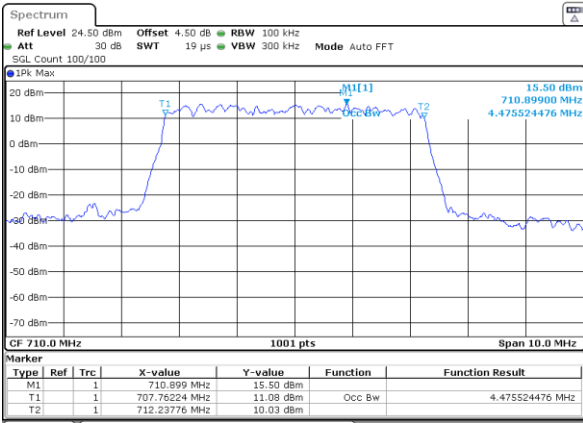
Date: 6 AUG 2020 11:22:21

Lowest Channel / 5MHz / 16QAM



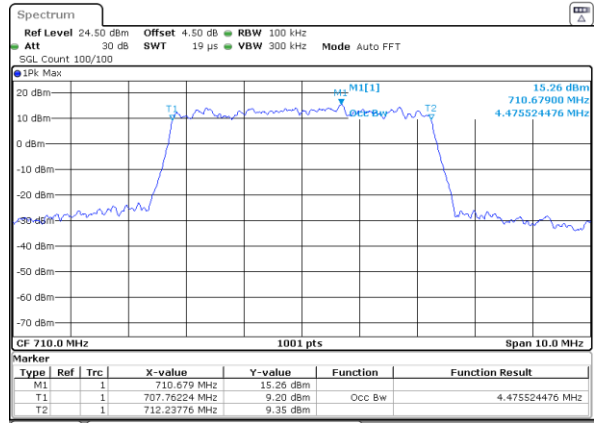
Date: 6 AUG 2020 11:23:42

Middle Channel / 5MHz / QPSK



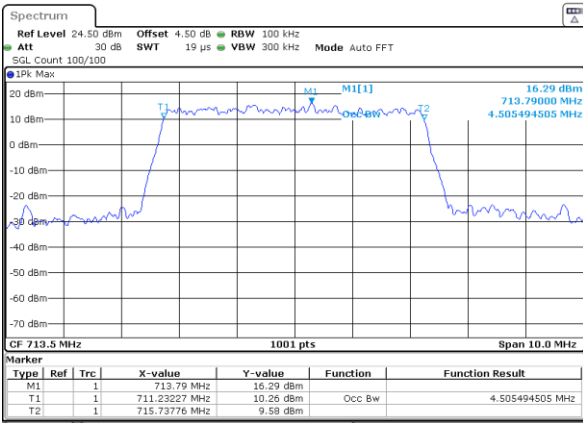
Date: 6 AUG 2020 11:35:08

Middle Channel / 5MHz / 16QAM



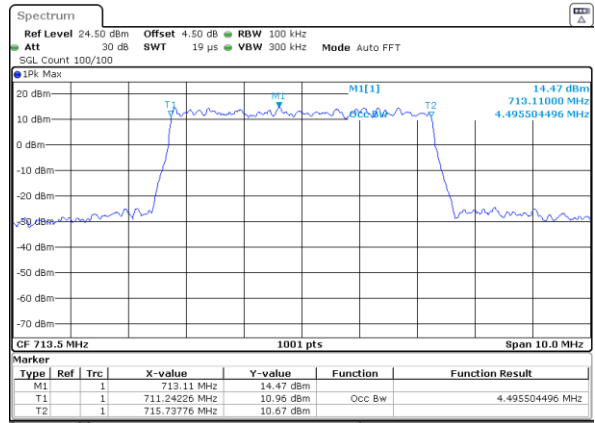
Date: 6 AUG 2020 11:34:46

Highest Channel / 5MHz / QPSK



Date: 6 AUG 2020 11:36:31

Highest Channel / 5MHz / 16QAM

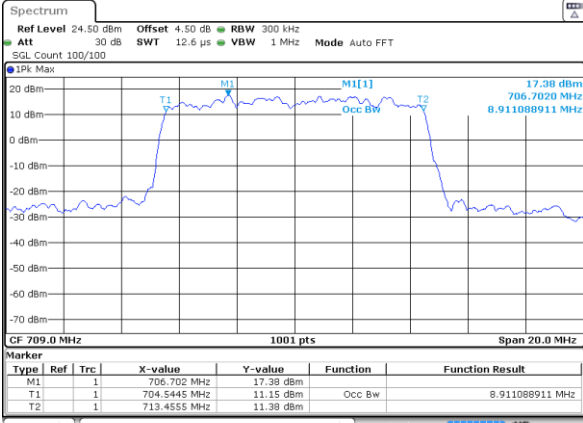


Date: 6 AUG 2020 11:38:03



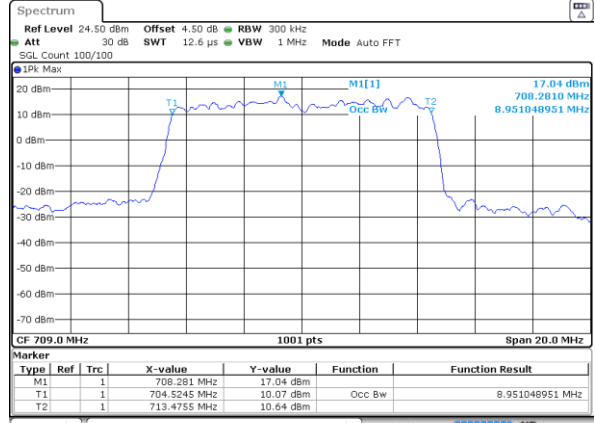
LTE Band 17

Lowest Channel / 10MHz / QPSK



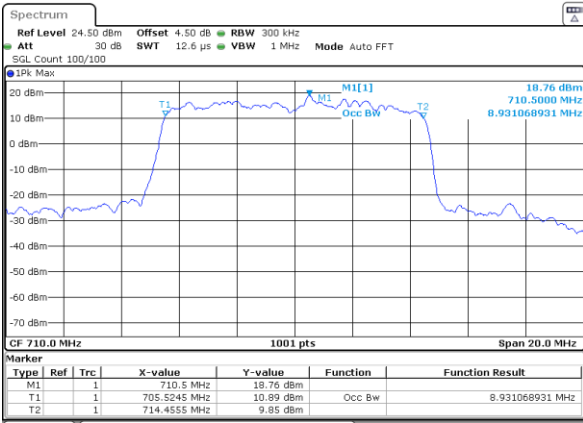
Date: 6 AUG 2020 11:52:50

Lowest Channel / 10MHz / 16QAM



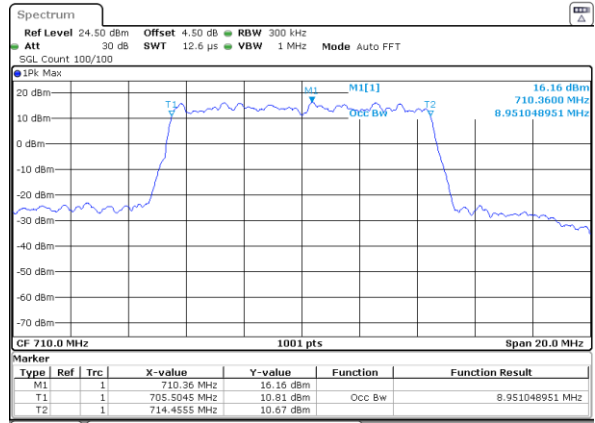
Date: 6 AUG 2020 11:51:22

Middle Channel / 10MHz / QPSK



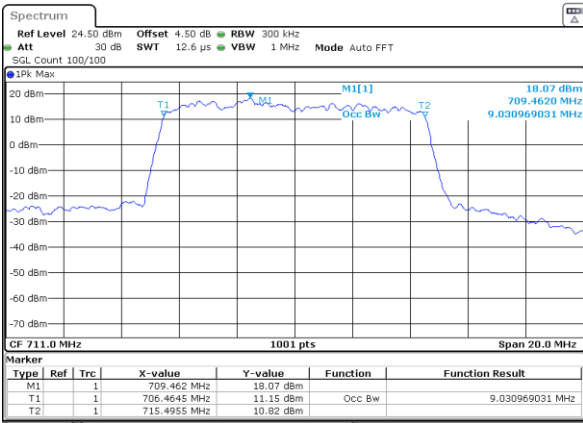
Date: 6 AUG 2020 12:06:58

Middle Channel / 10MHz / 16QAM



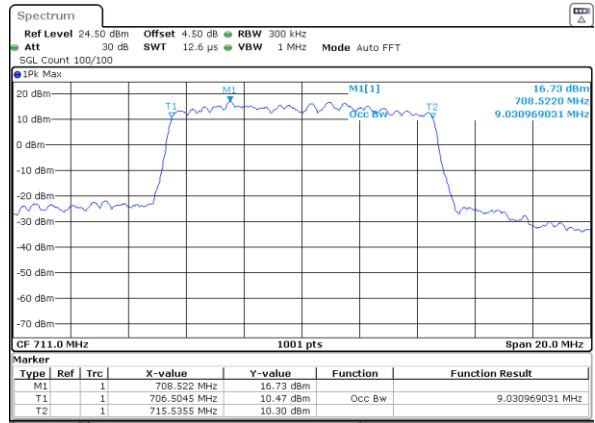
Date: 6 AUG 2020 12:07:37

Highest Channel / 10MHz / QPSK



Date: 6 AUG 2020 12:12:23

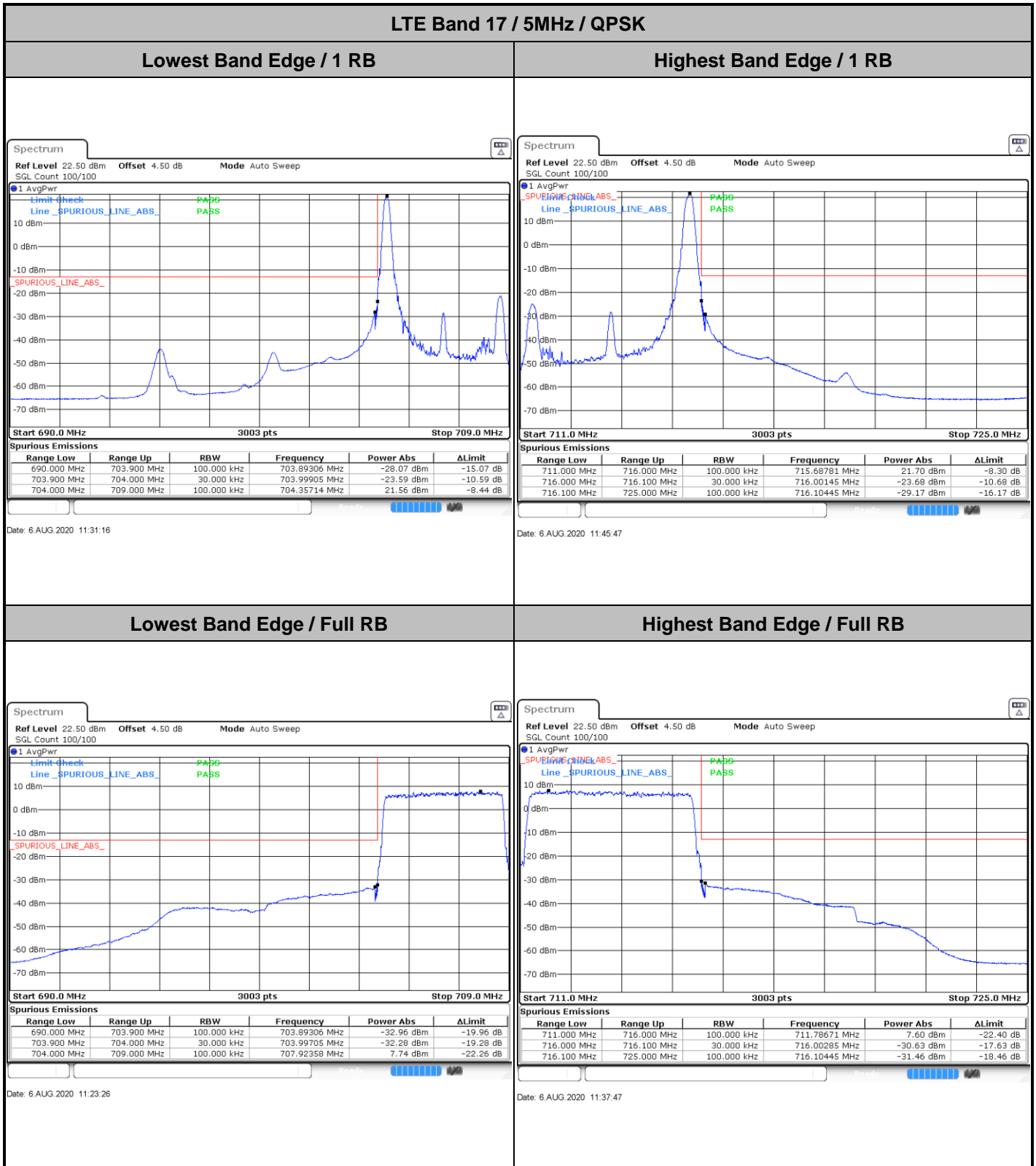
Highest Channel / 10MHz / 16QAM



Date: 6 AUG 2020 12:10:47



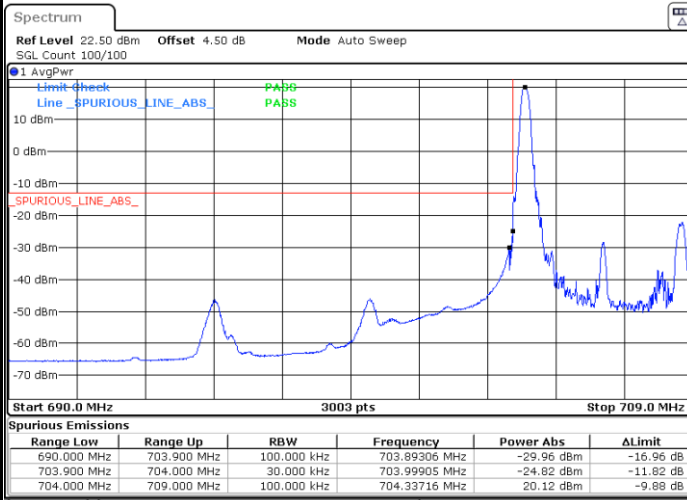
# Conducted Band Edge





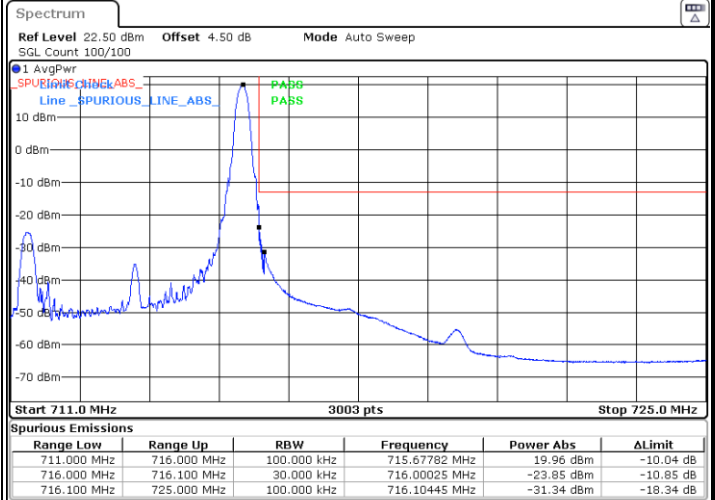
LTE Band 17 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



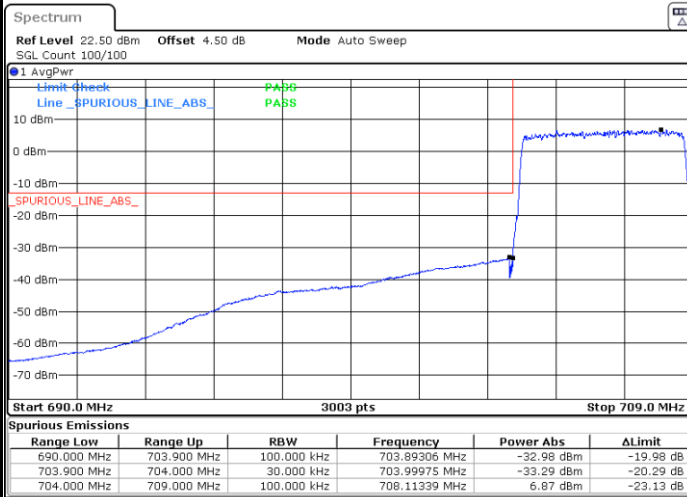
Date: 6 AUG 2020 11:29:40

Highest Band Edge / 1 RB



Date: 6 AUG 2020 11:46:33

Lowest Band Edge / Full RB



Date: 6 AUG 2020 11:25:27

Highest Band Edge / Full RB

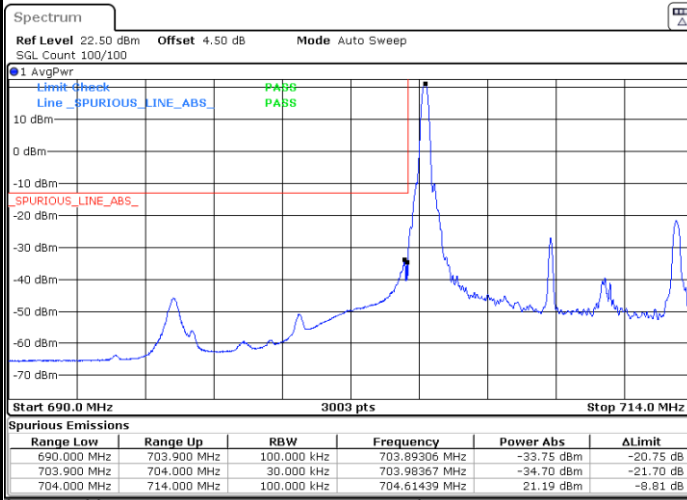


Date: 6 AUG 2020 11:38:42



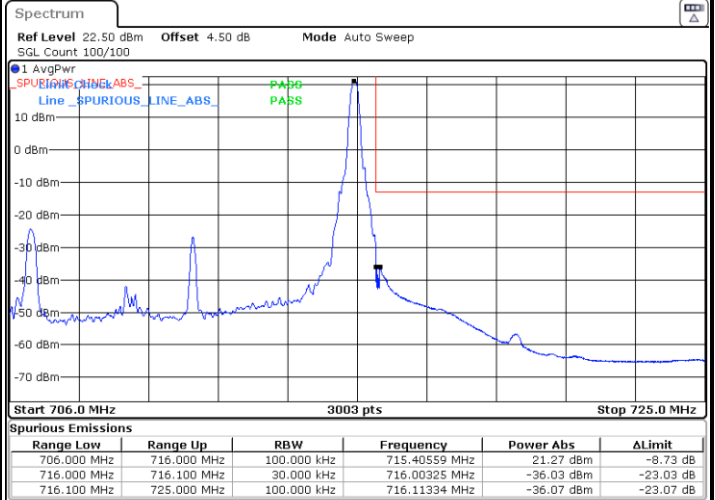
LTE Band 17 / 10MHz / QPSK

Lowest Band Edge / 1 RB



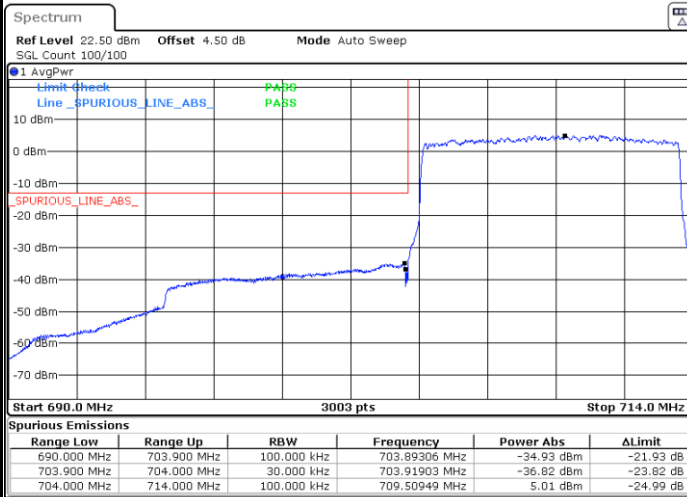
Date: 6 AUG.2020 11:55:11

Highest Band Edge / 1 RB



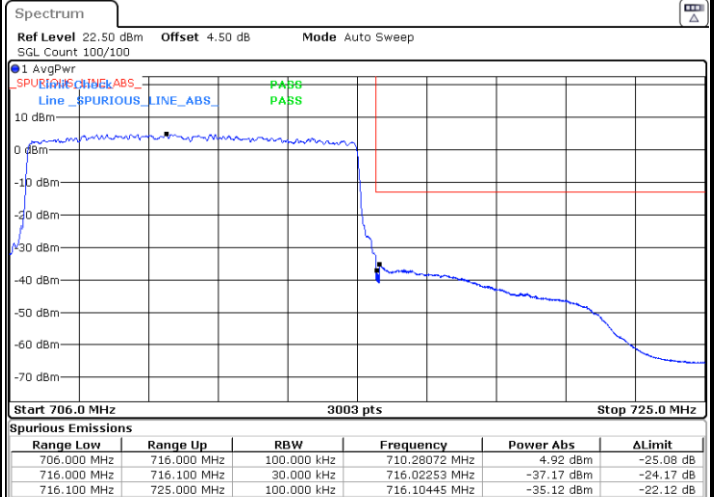
Date: 6 AUG.2020 12:18:20

Lowest Band Edge / Full RB



Date: 6 AUG.2020 11:53:37

Highest Band Edge / Full RB



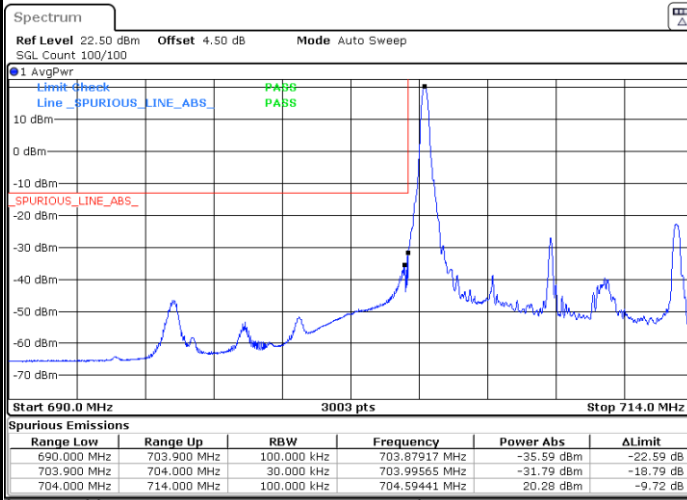
Date: 6 AUG.2020 12:13:04





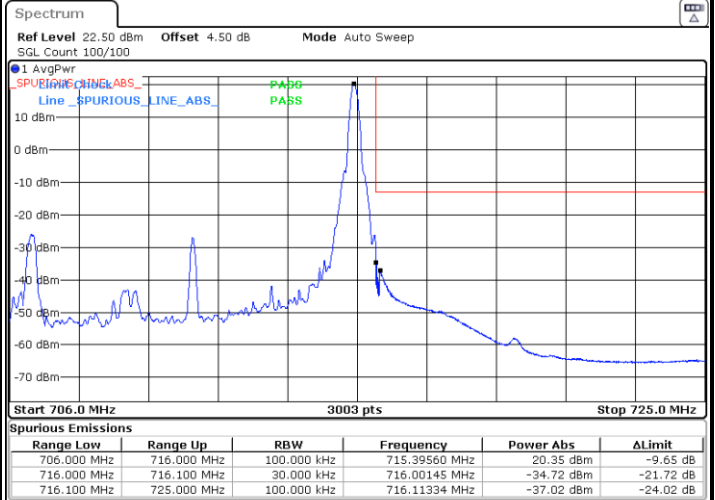
LTE Band 17 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



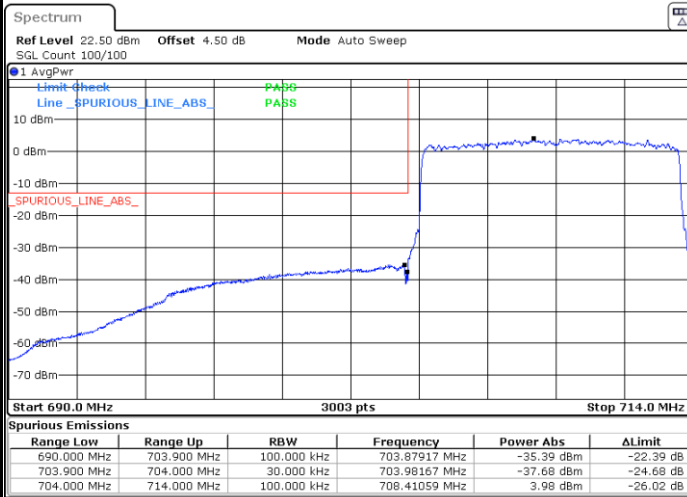
Date: 6 AUG. 2020 12:00:54

Highest Band Edge / 1 RB



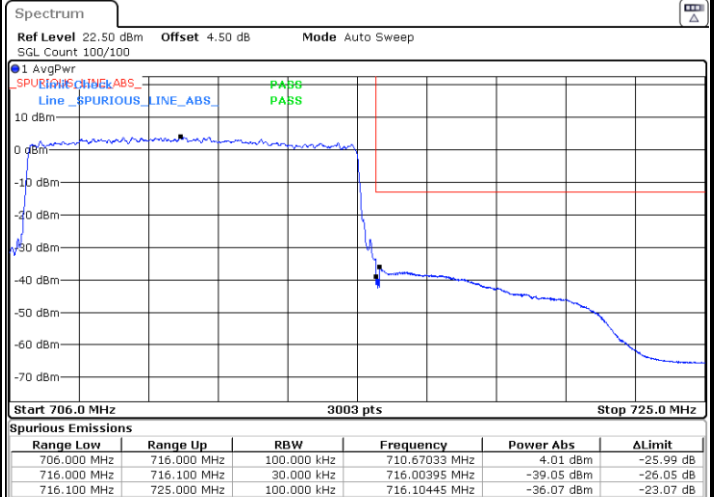
Date: 6 AUG. 2020 12:17:43

Lowest Band Edge / Full RB



Date: 6 AUG. 2020 11:52:11

Highest Band Edge / Full RB



Date: 6 AUG. 2020 12:11:28