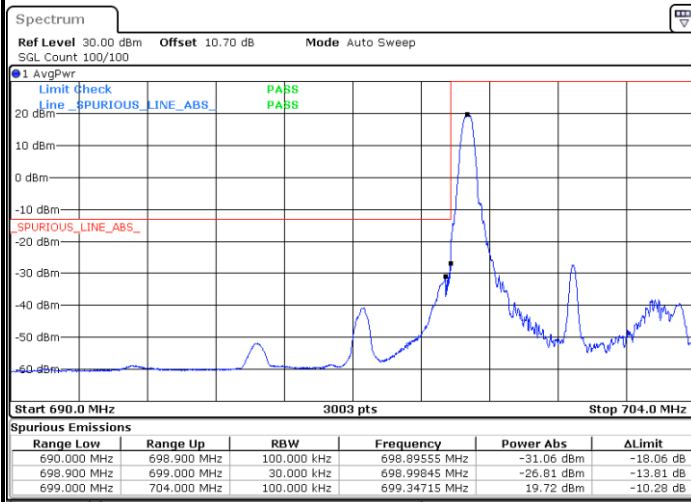


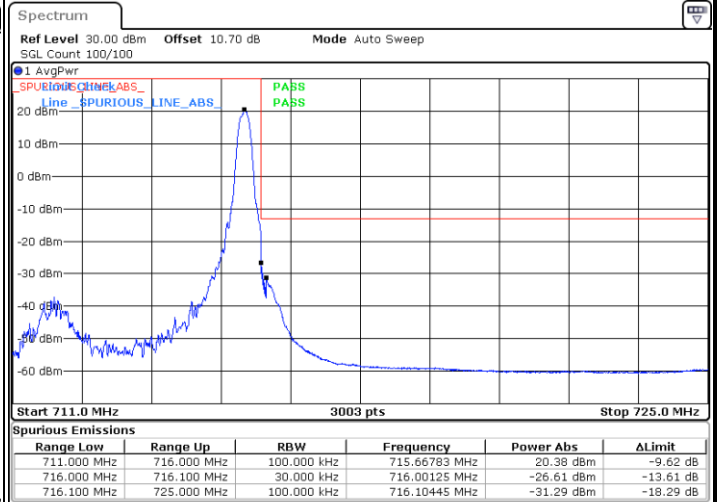


LTE Band 12 / 5MHz / QPSK

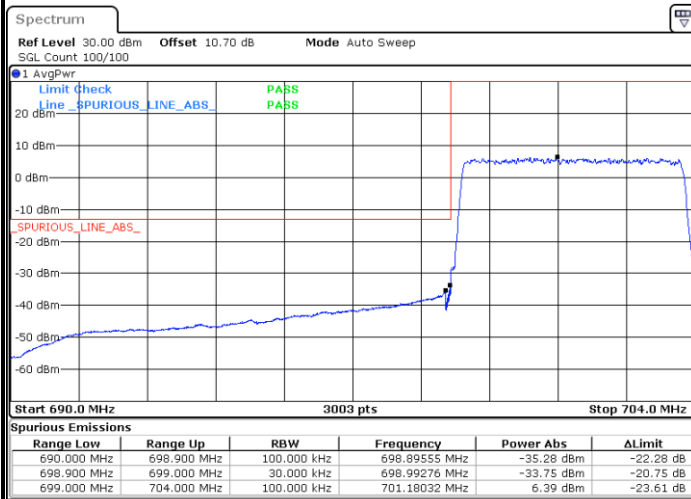
Lowest Band Edge / 1 RB



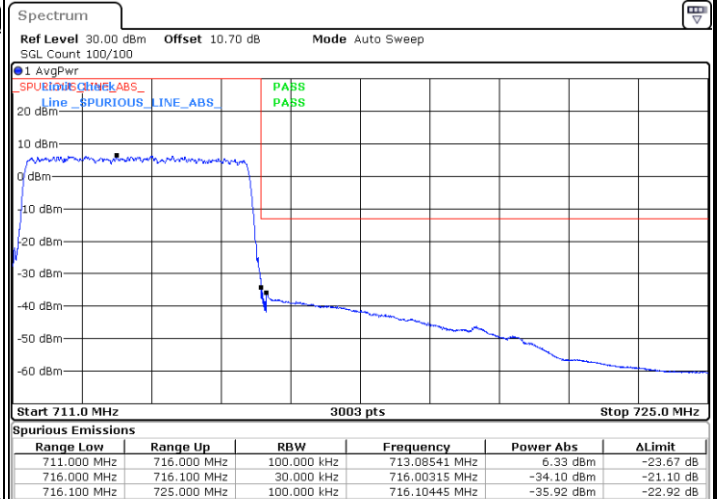
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



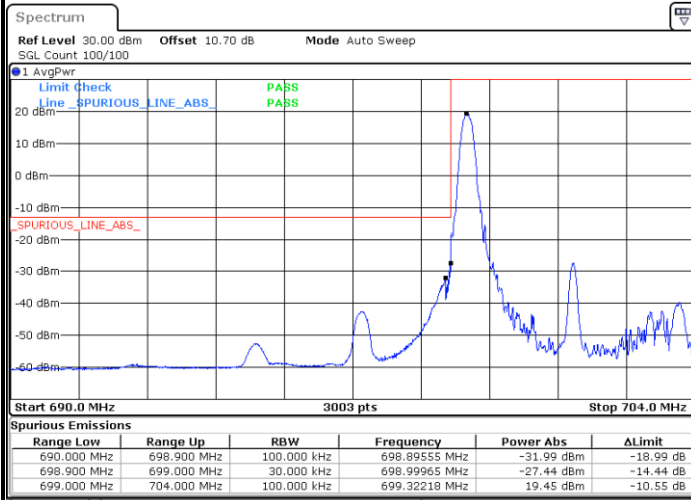
Highest Band Edge / Full RB



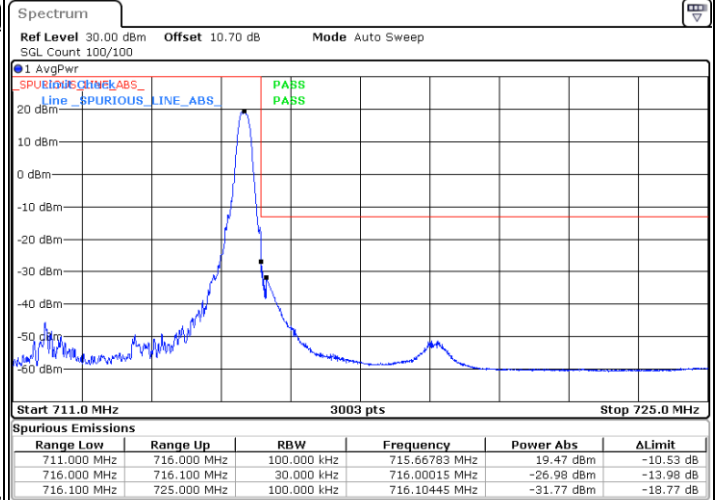


LTE Band 12 / 5MHz / 16QAM

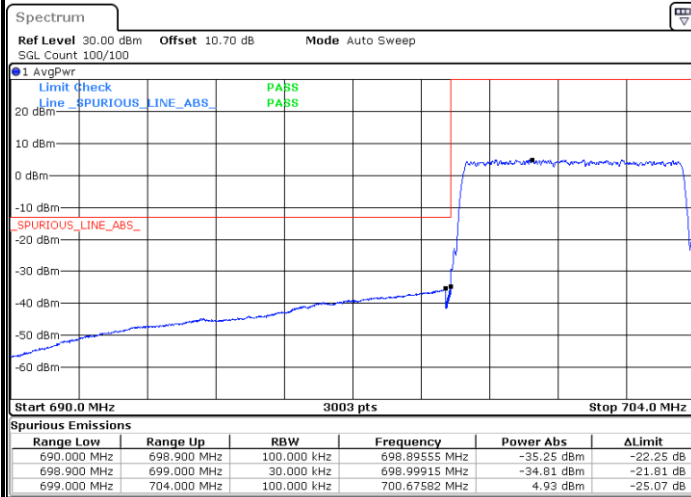
Lowest Band Edge / 1RB



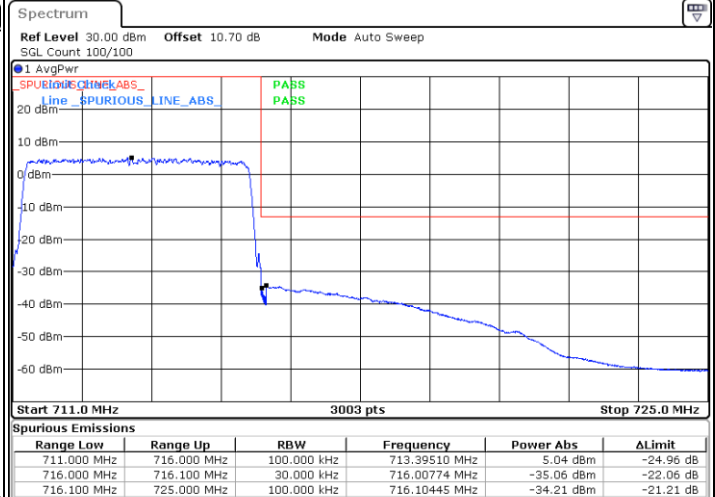
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



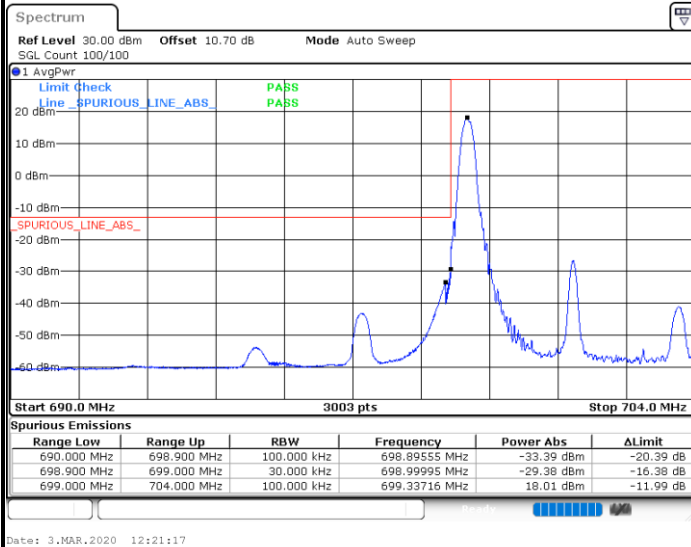
Highest Band Edge / Full RB



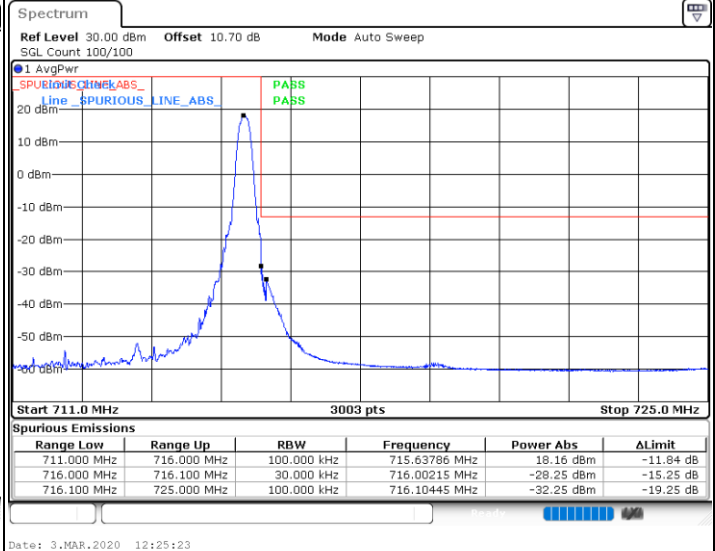


LTE Band 12 / 5MHz / 64QAM

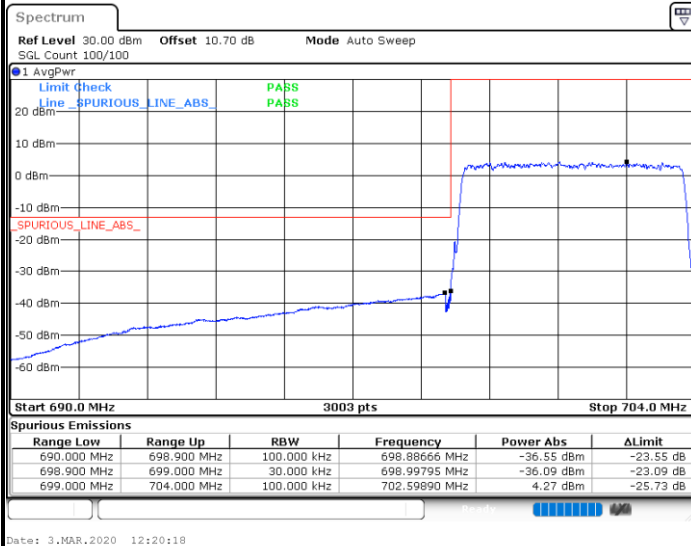
Lowest Band Edge / 1RB



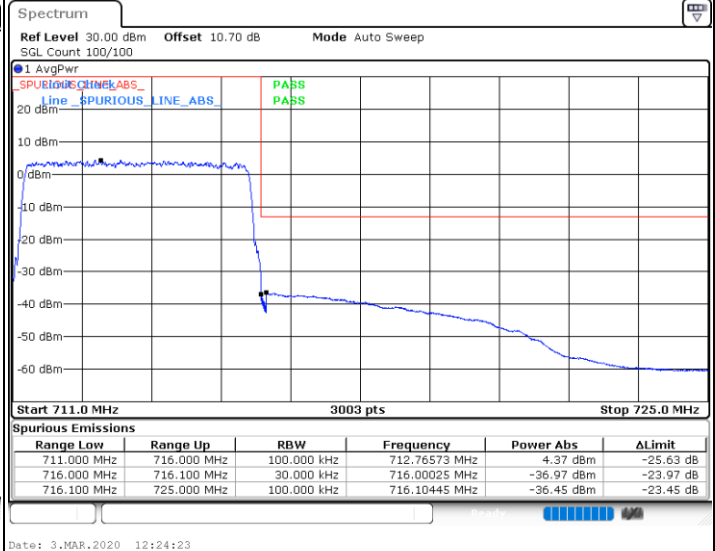
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



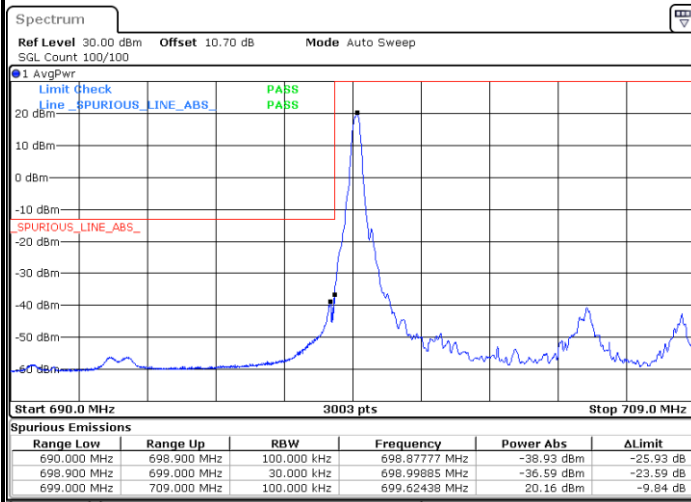
Highest Band Edge / Full RB



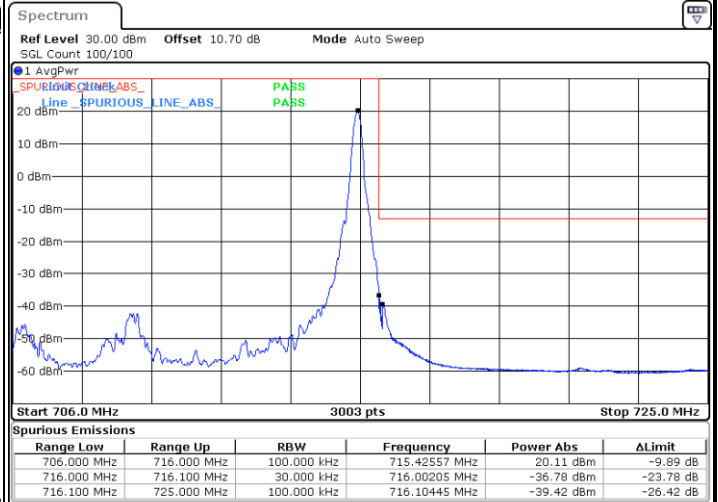


LTE Band 12 / 10MHz / QPSK

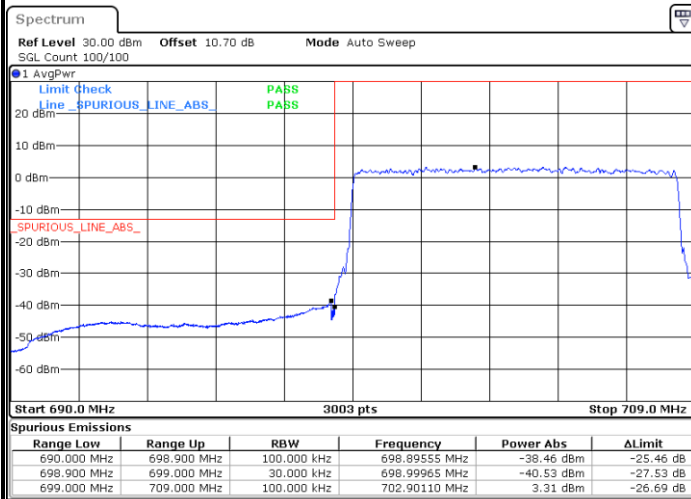
Lowest Band Edge / 1 RB



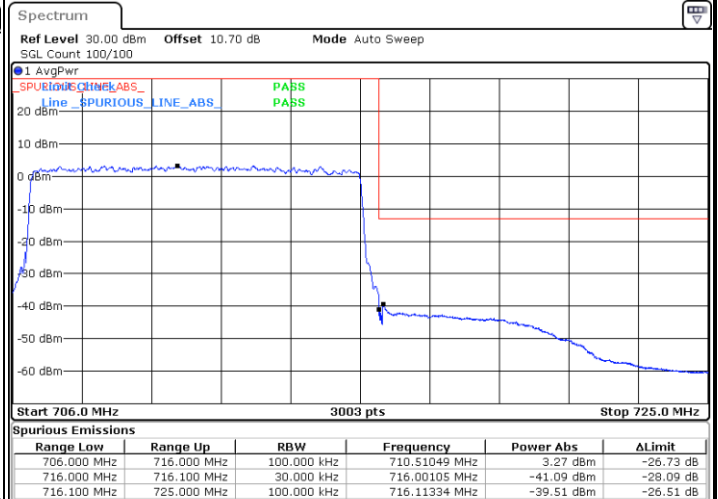
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



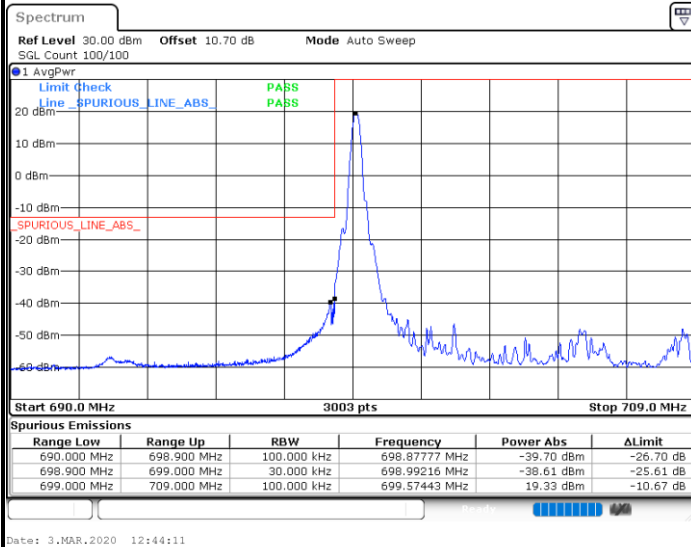
Highest Band Edge / Full RB



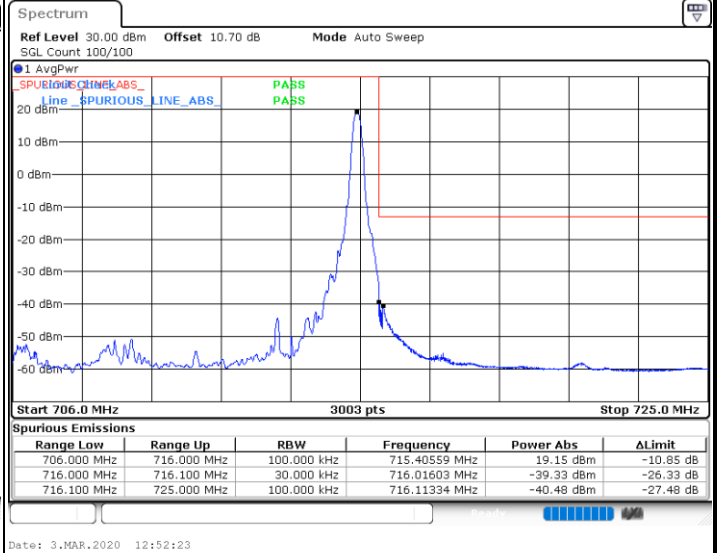


LTE Band 12 / 10MHz / 16QAM

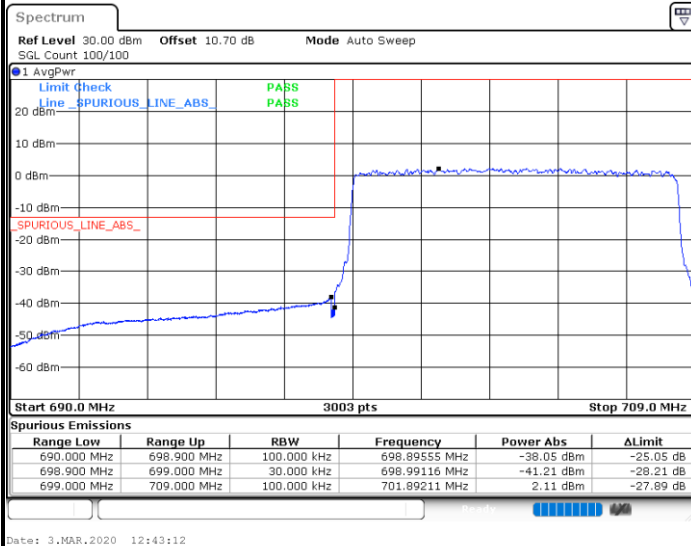
Lowest Band Edge / 1 RB



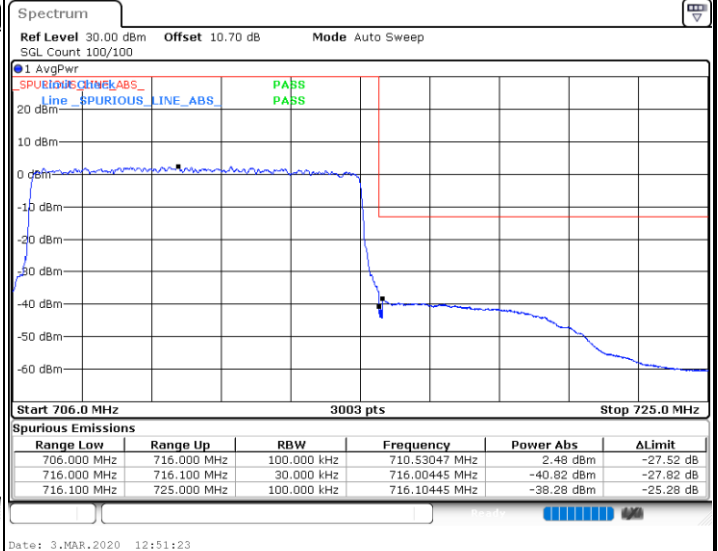
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



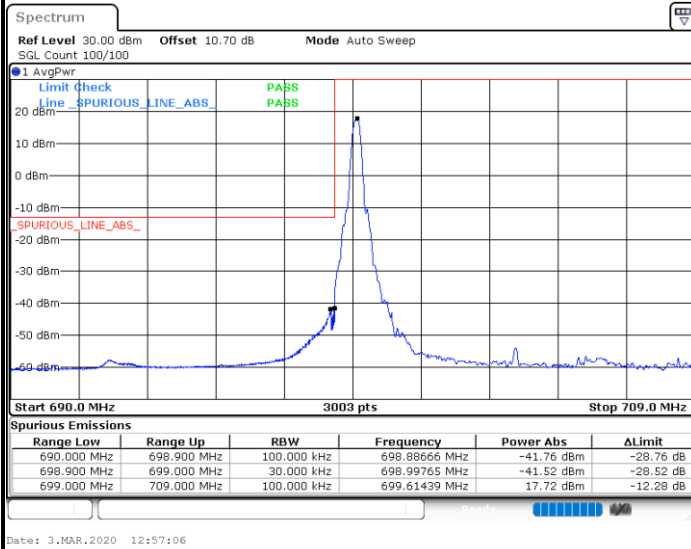
Highest Band Edge / Full RB



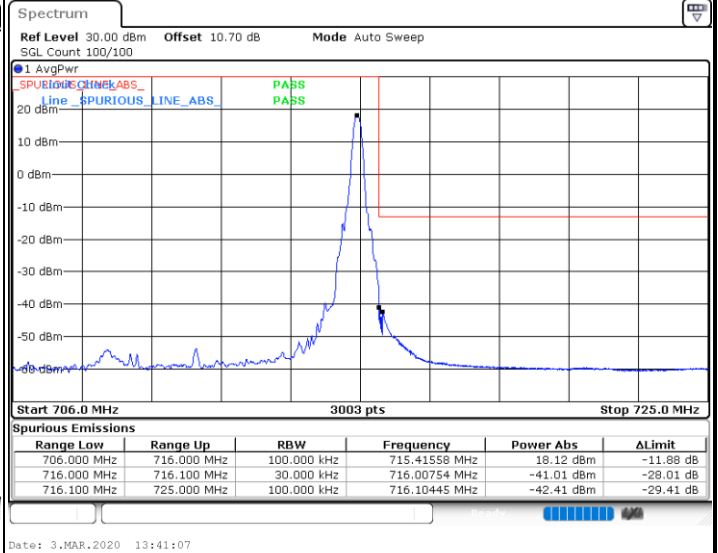


LTE Band 12 / 10MHz / 64QAM

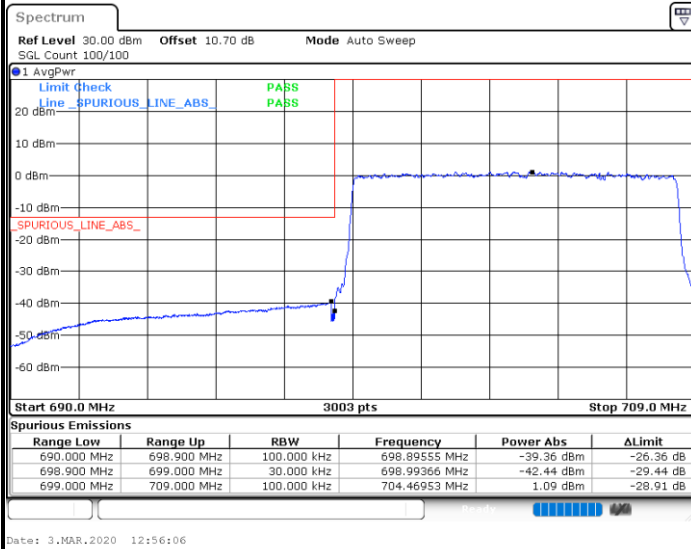
Lowest Band Edge / 1 RB



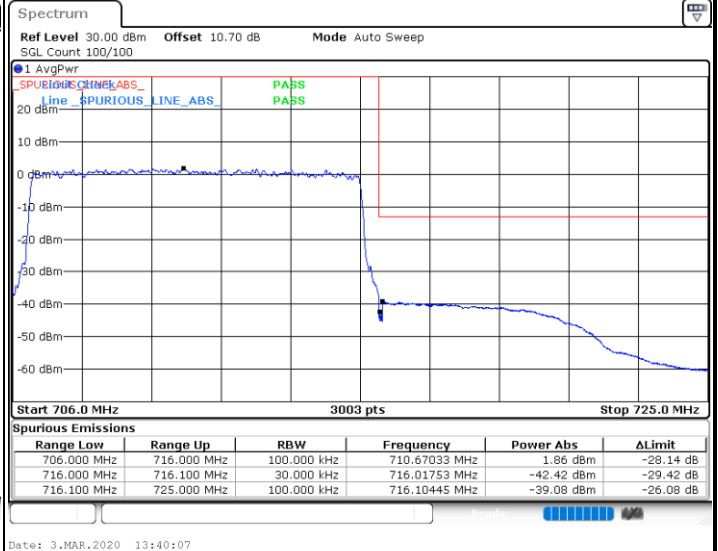
Highest Band Edge / 1 RB

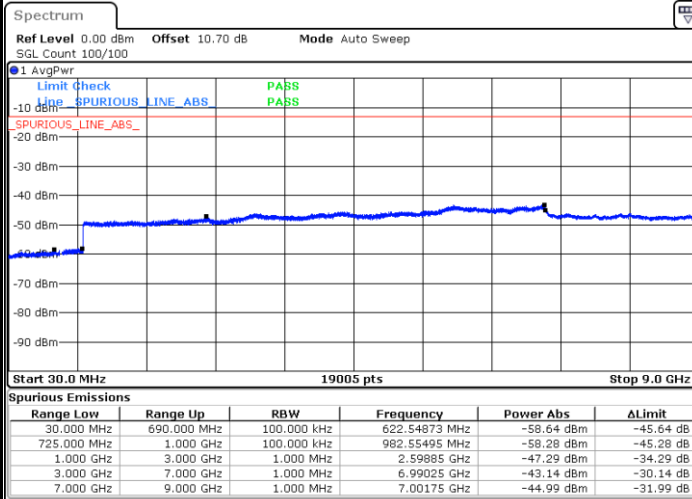


Lowest Band Edge / Full RB

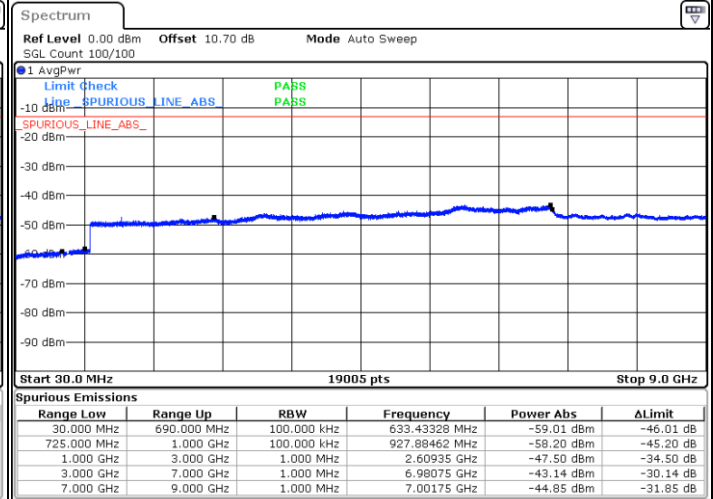


Highest Band Edge / Full RB

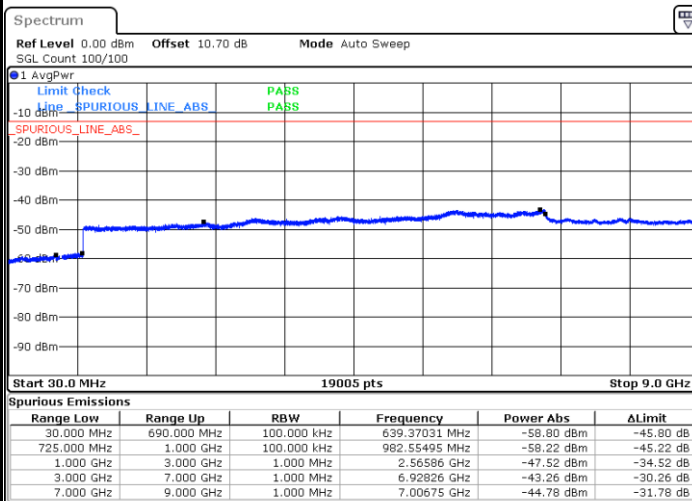


**Conducted Spurious Emission****LTE Band 12 / 1.4MHz****Lowest Channel / QPSK**

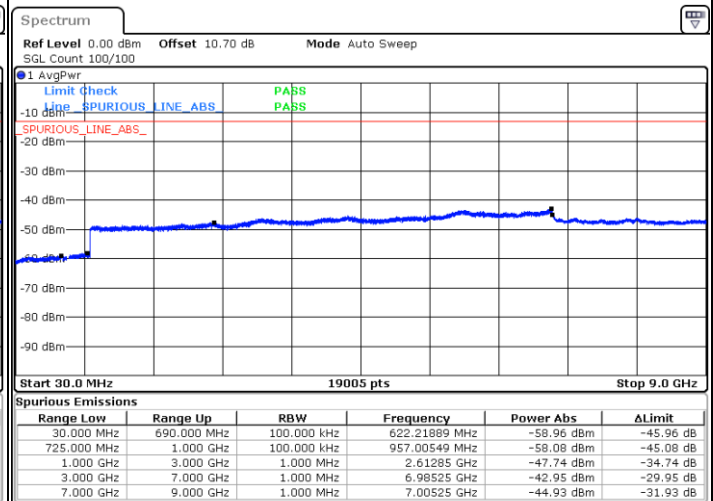
Date: 3.MAR.2020 11:41:23

Lowest Channel / 16QAM

Date: 3.MAR.2020 11:42:03

Middle Channel / QPSK

Date: 3.MAR.2020 11:44:08

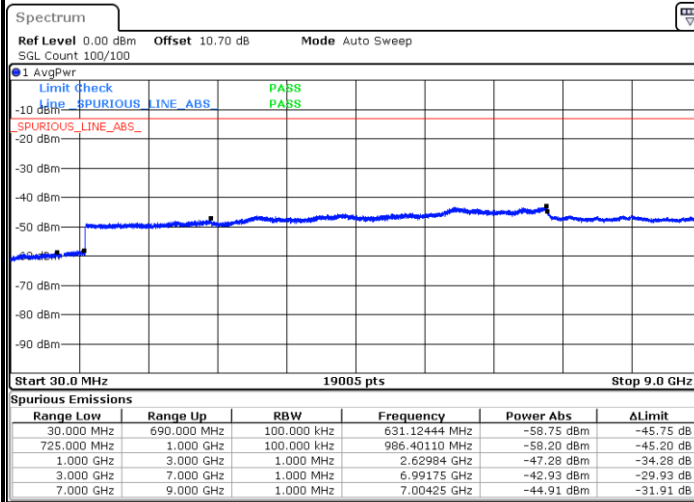
Middle Channel / 16QAM

Date: 3.MAR.2020 11:43:29



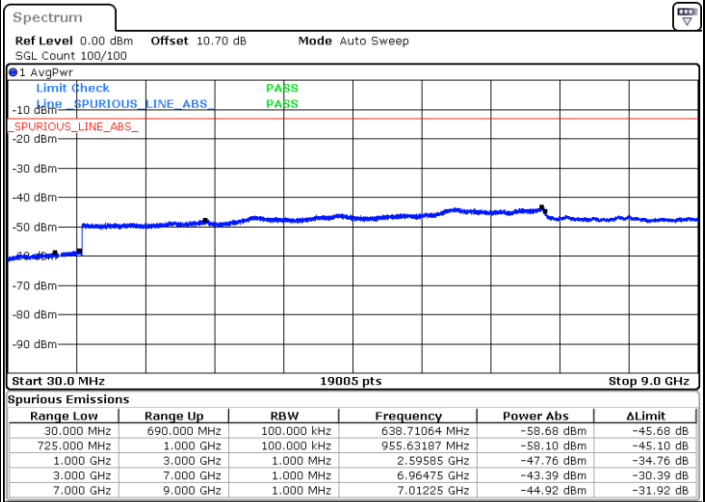
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 3.MAR.2020 11:49:35

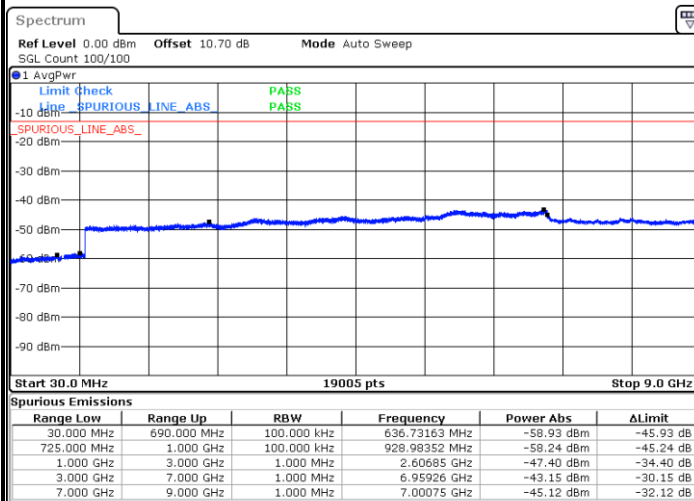
Highest Channel / 16QAM



Date: 3.MAR.2020 11:50:15

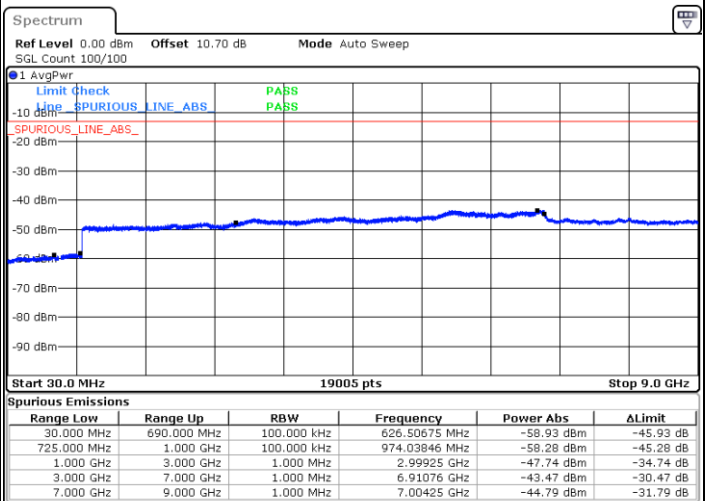
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 3.MAR.2020 12:02:51

Lowest Channel / 16QAM

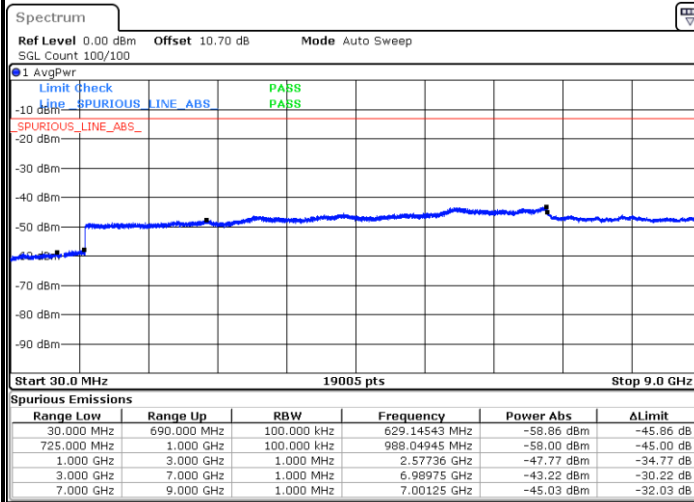


Date: 3.MAR.2020 12:03:31



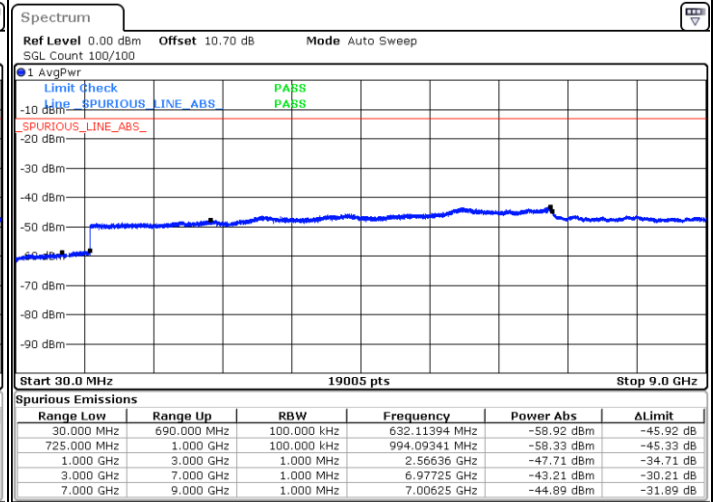
LTE Band 12 / 3MHz

Middle Channel / QPSK



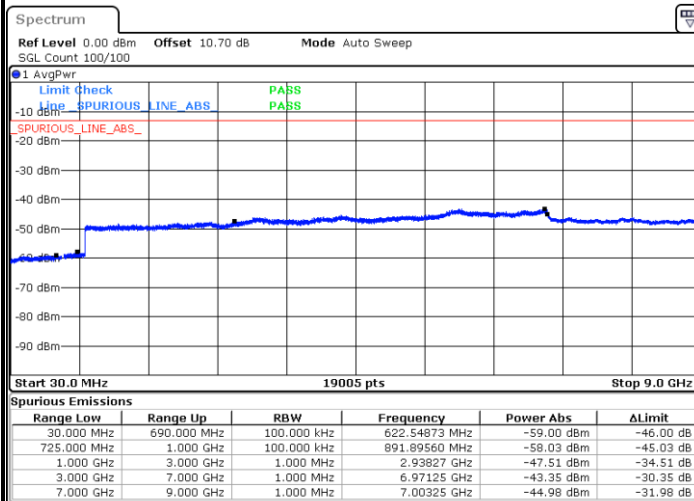
Date: 3.MAR.2020 12:05:36

Middle Channel / 16QAM



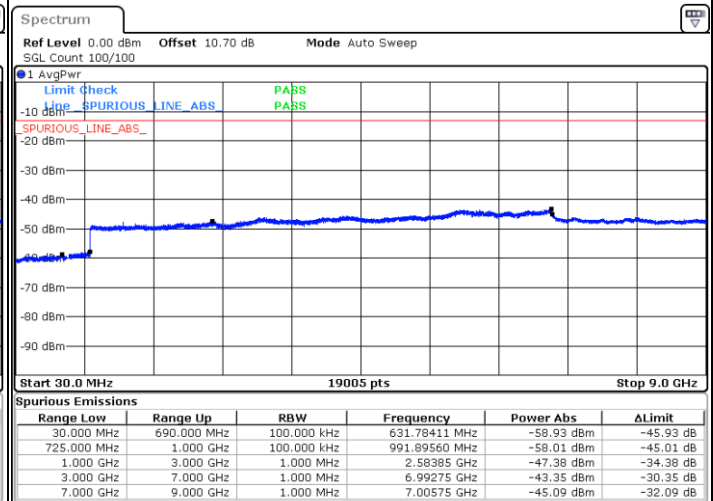
Date: 3.MAR.2020 12:04:57

Highest Channel / QPSK



Date: 3.MAR.2020 12:11:04

Highest Channel / 16QAM

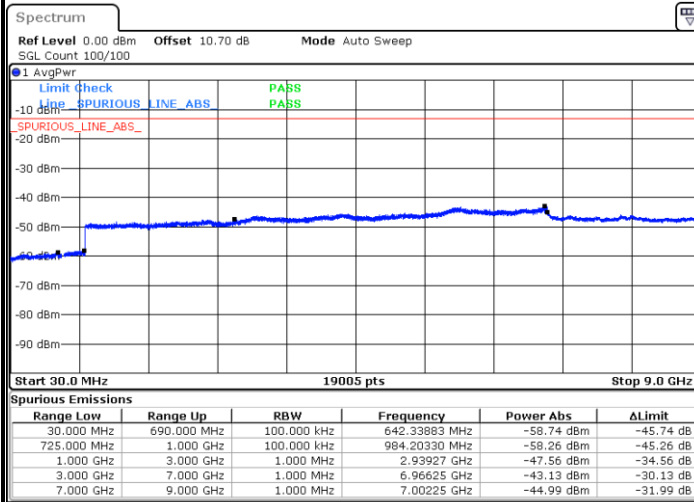


Date: 3.MAR.2020 12:11:44



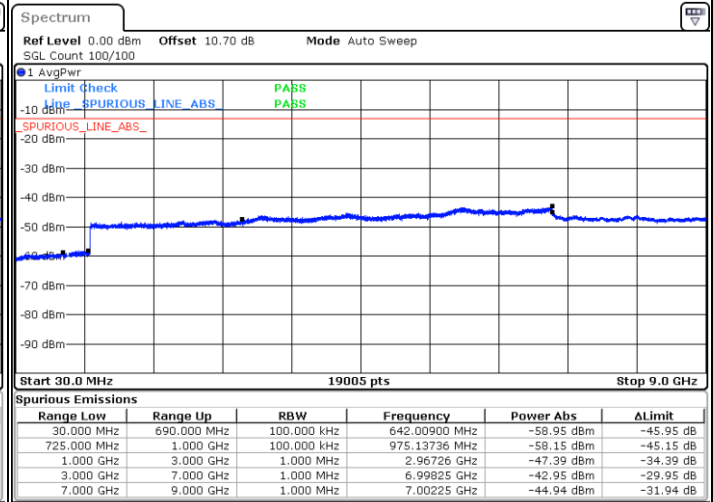
LTE Band 12 / 5MHz

Lowest Channel / QPSK



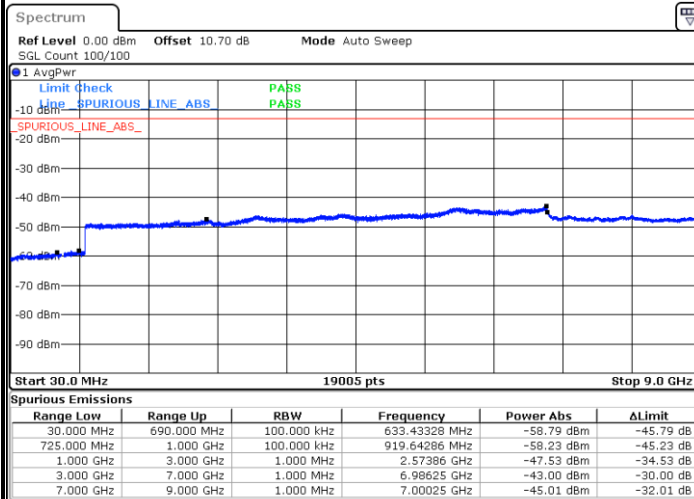
Date: 3.MAR.2020 12:31:31

Lowest Channel / 16QAM



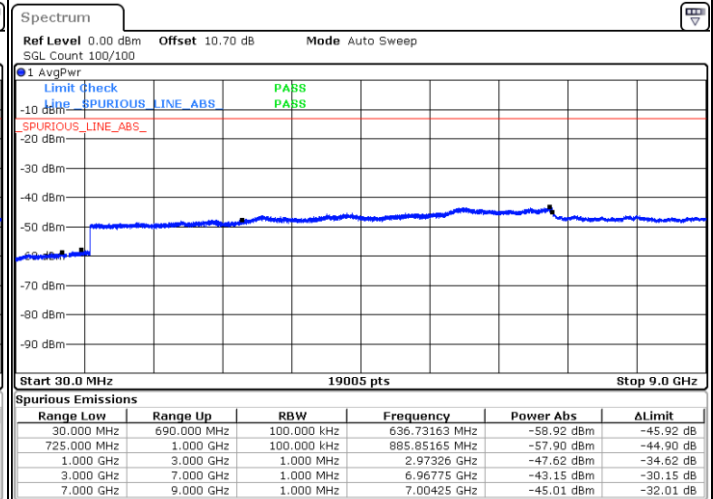
Date: 3.MAR.2020 12:32:11

Middle Channel / QPSK



Date: 3.MAR.2020 12:34:16

Middle Channel / 16QAM

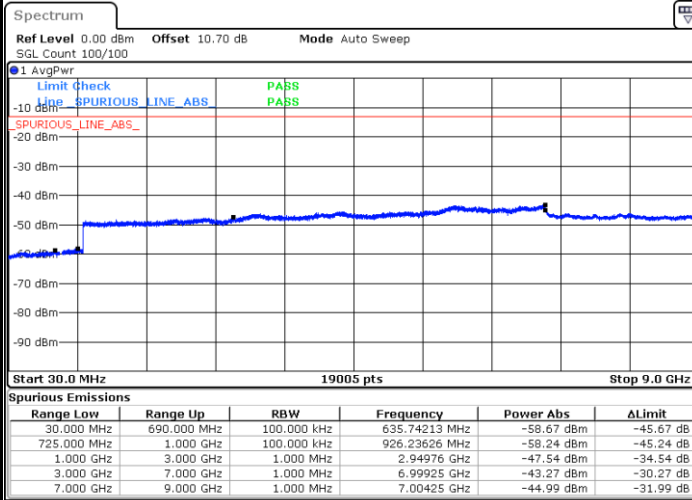


Date: 3.MAR.2020 12:33:37



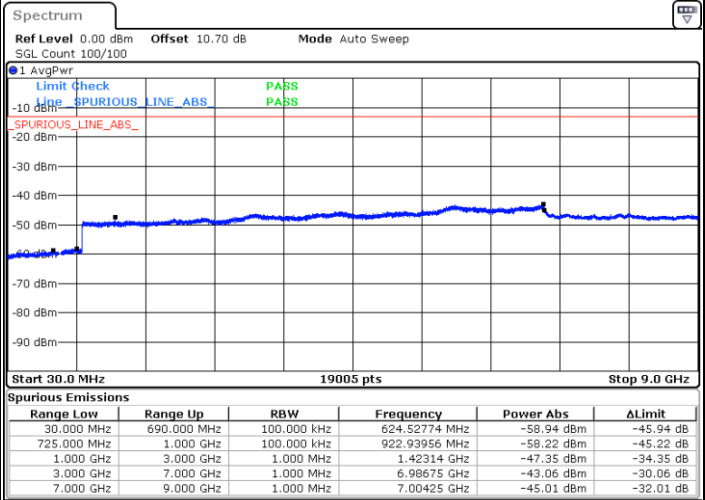
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 3.MAR.2020 12:40:24

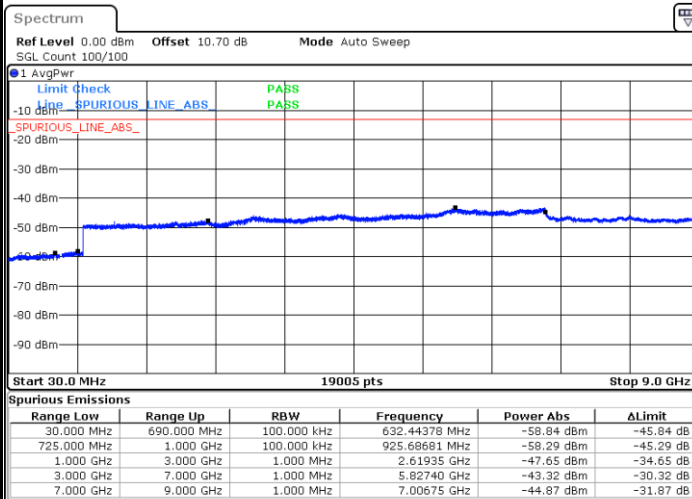
Highest Channel / 16QAM



Date: 3.MAR.2020 12:39:44

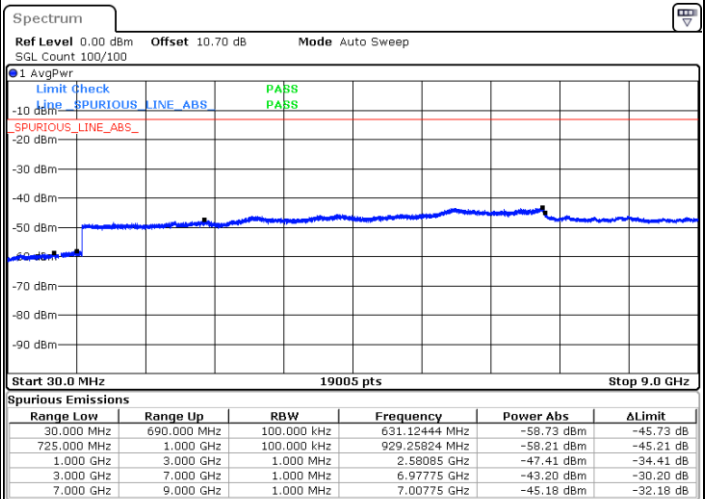
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 3.MAR.2020 12:45:52

Lowest Channel / 16QAM

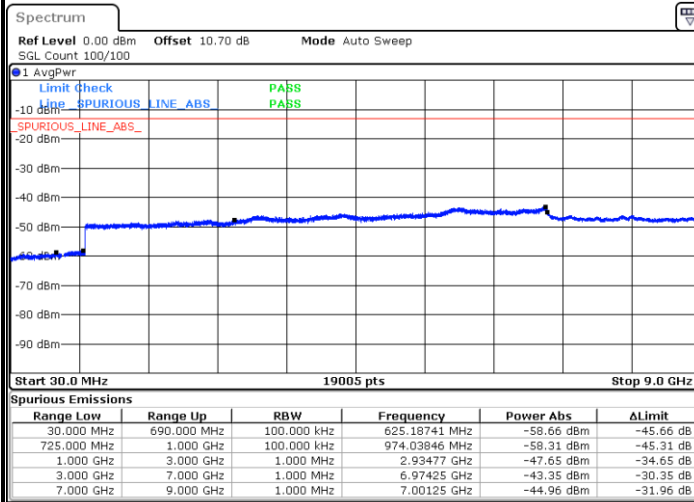


Date: 3.MAR.2020 12:46:32



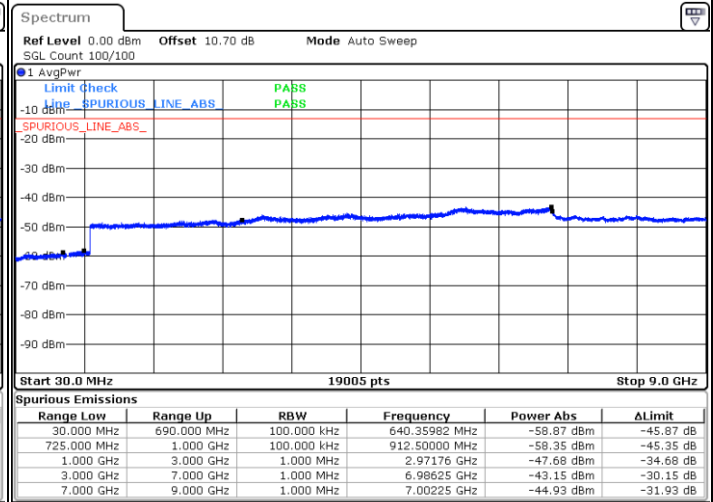
LTE Band 12 / 10MHz

Middle Channel / QPSK



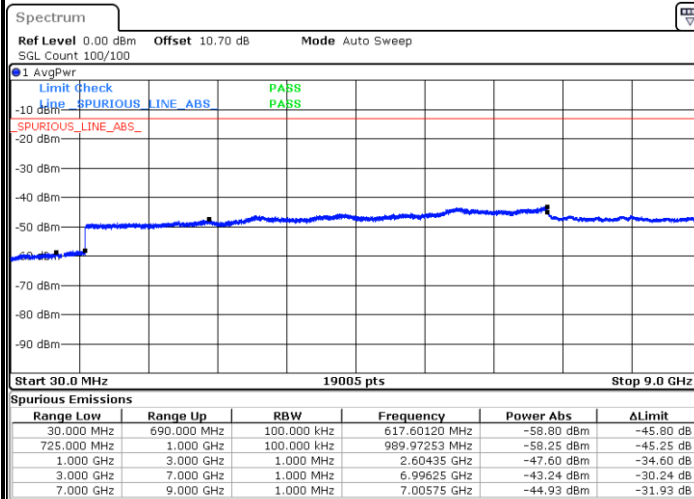
Date: 3.MAR.2020 12:48:36

Middle Channel / 16QAM



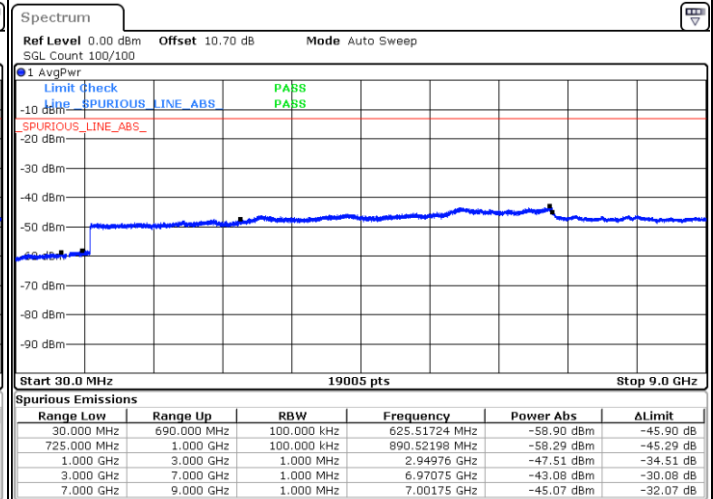
Date: 3.MAR.2020 12:47:57

Highest Channel / QPSK



Date: 3.MAR.2020 12:54:03

Highest Channel / 16QAM

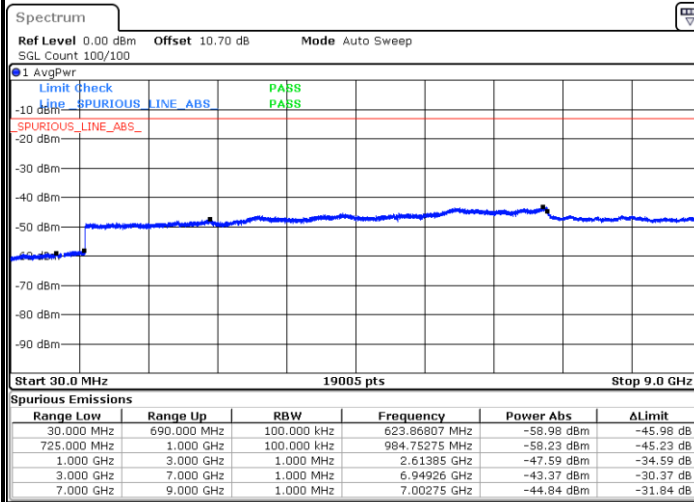


Date: 3.MAR.2020 12:54:43



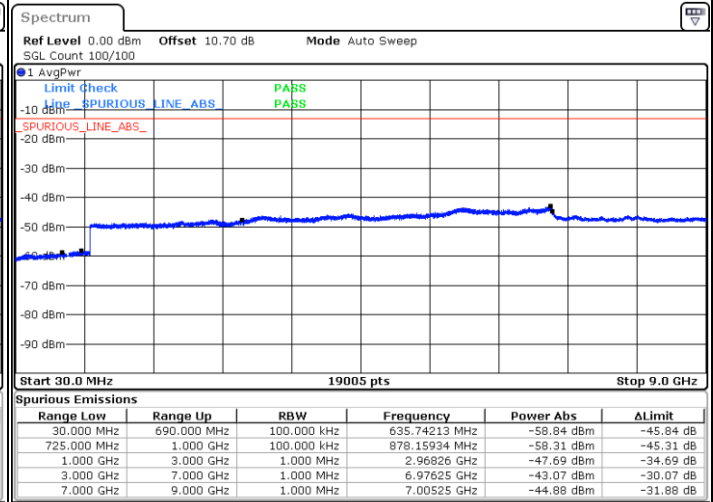
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



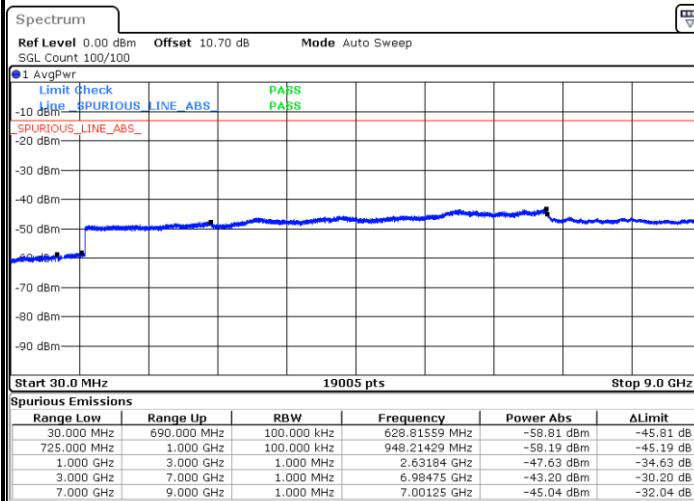
Date: 3.MAR.2020 11:53:18

Middle Channel / 64QAM



Date: 3.MAR.2020 11:54:20

Highest Channel / 64QAM

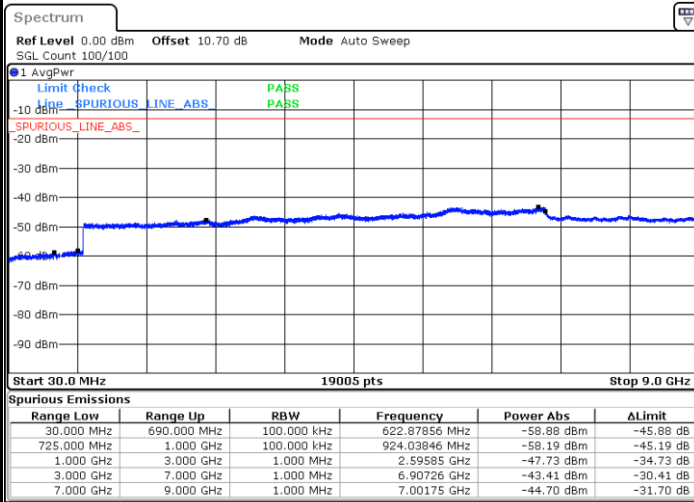


Date: 3.MAR.2020 11:57:23



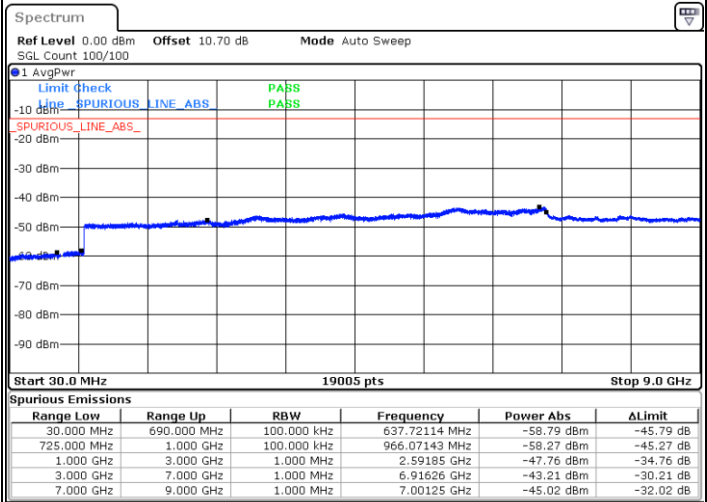
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



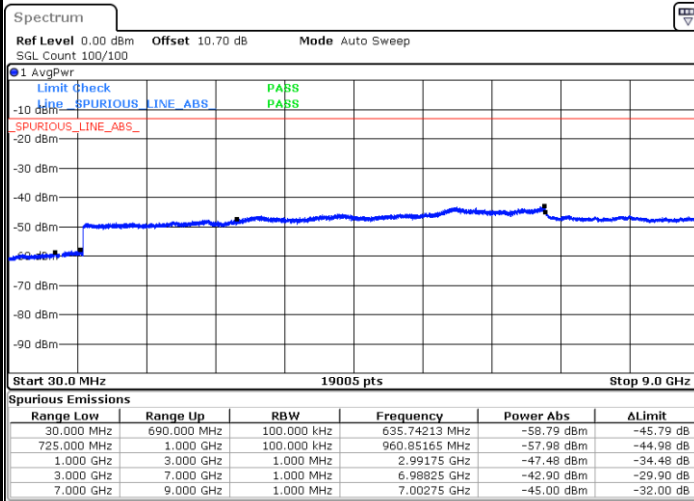
Date: 3.MAR.2020 12:14:48

Middle Channel / 64QAM



Date: 3.MAR.2020 12:15:50

Highest Channel / 64QAM

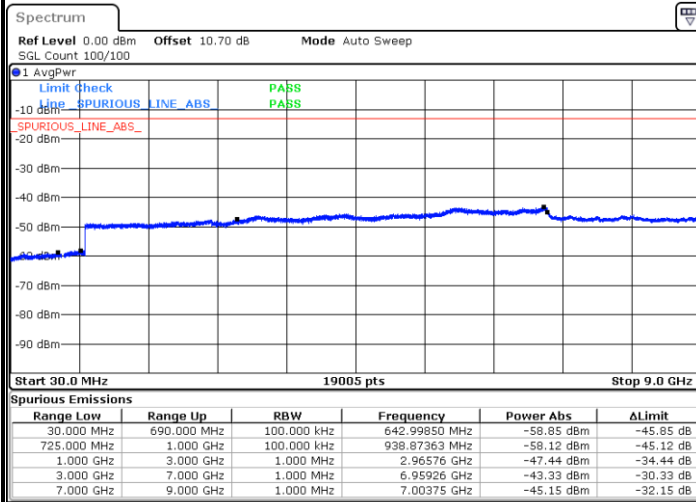


Date: 3.MAR.2020 12:18:53



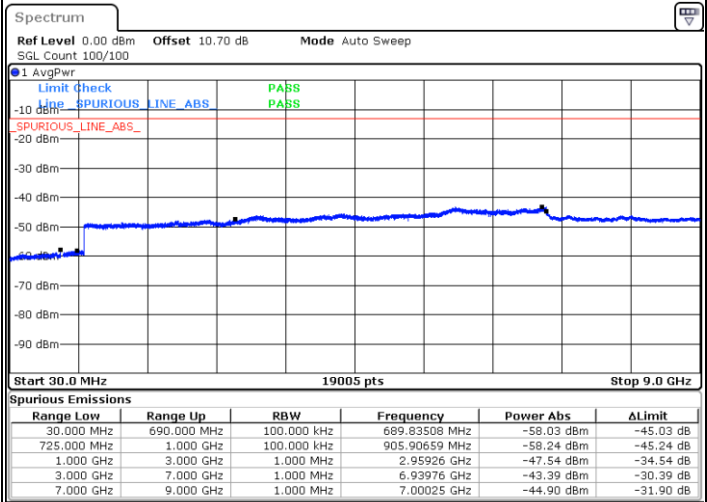
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



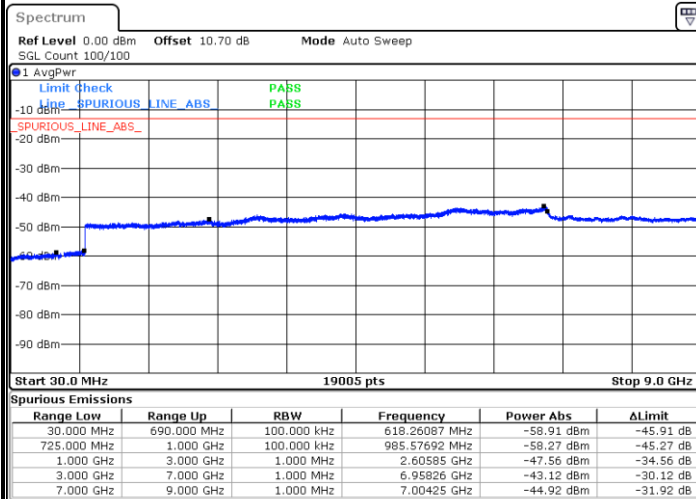
Date: 3.MAR.2020 12:21:58

Middle Channel / 64QAM



Date: 3.MAR.2020 12:23:00

Highest Channel / 64QAM

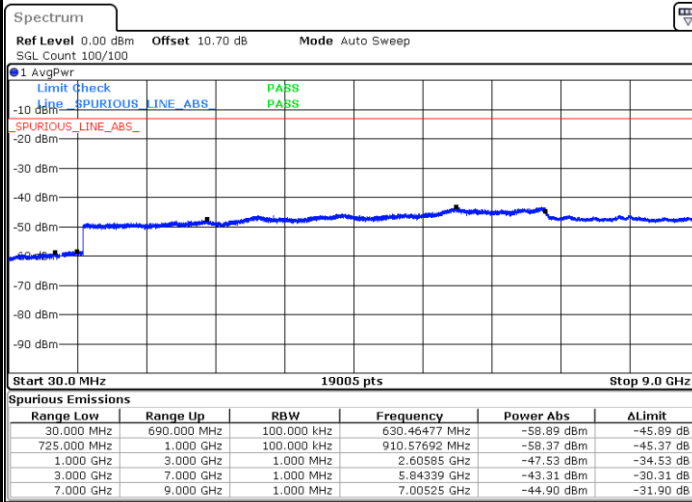


Date: 3.MAR.2020 12:26:04



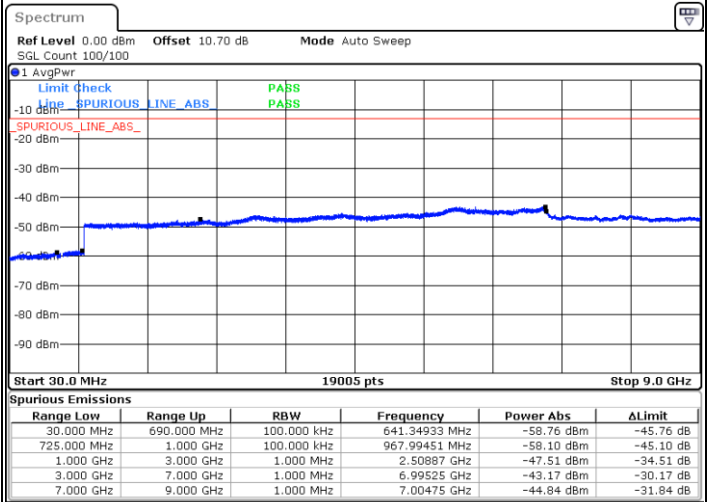
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



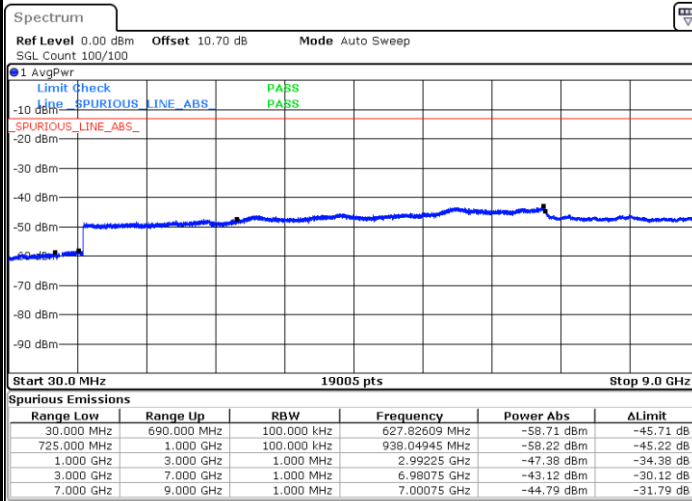
Date: 3.MAR.2020 12:57:47

Middle Channel / 64QAM



Date: 3.MAR.2020 13:38:45

Highest Channel / 64QAM



Date: 3.MAR.2020 13:41:48

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	0.0078	PASS
40	Normal Voltage	0.0072	
30	Normal Voltage	0.0103	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0086	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0066	

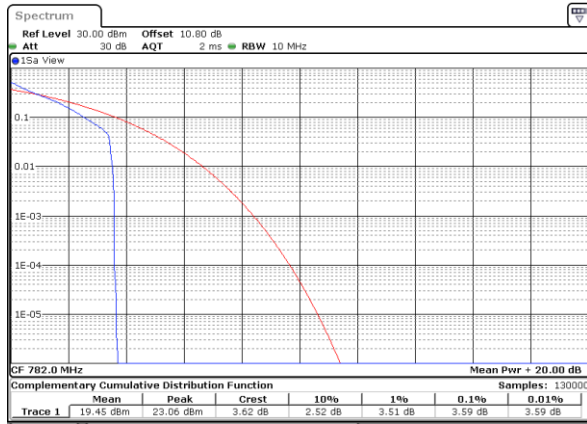
Note:

1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.20 V. ; Maximum Voltage =8.90 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

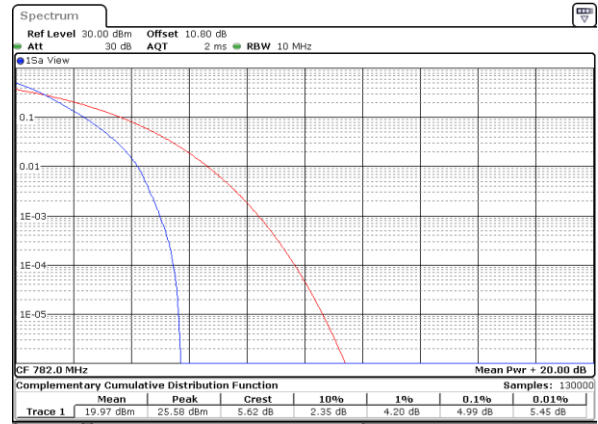
LTE Band 13

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	-	-	-	-	PASS
Middle CH	3.59	4.99	5.33	5.80	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.81	6.38	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB


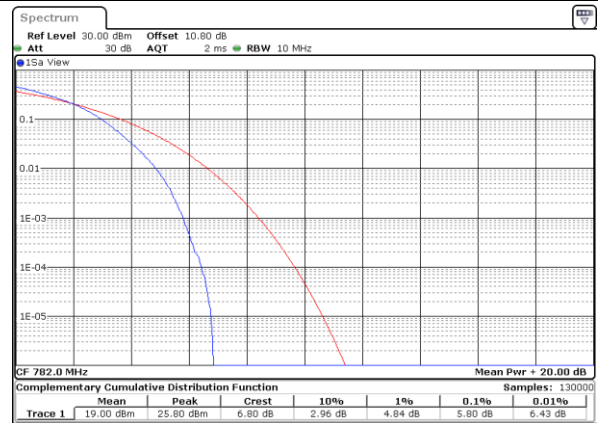
Date: 3.MAR.2020 20:43:58

Middle Channel / Full RB


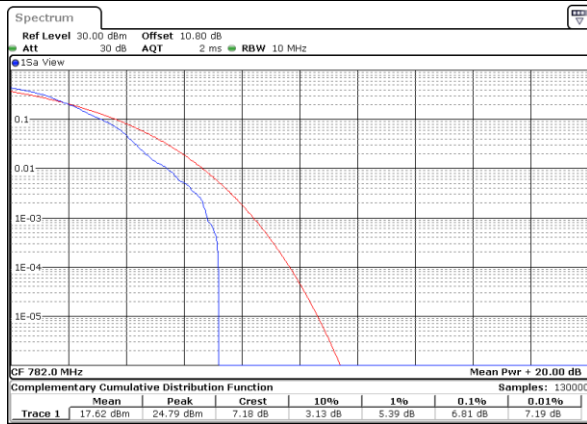
Date: 3.MAR.2020 20:44:14

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB

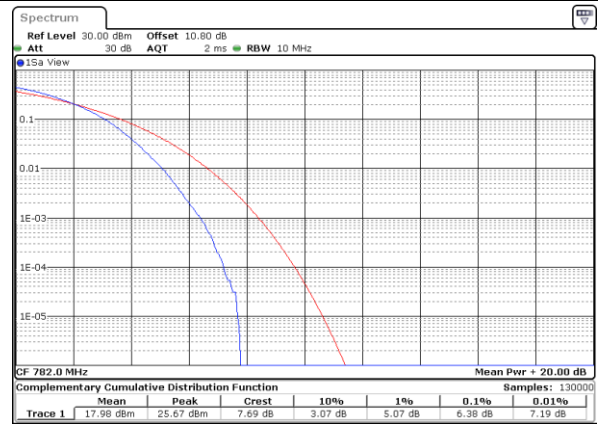

Date: 3.MAR.2020 20:43:39

Middle Channel / Full RB


Date: 3.MAR.2020 20:43:49

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB


Date: 3.MAR.2020 20:43:20

Middle Channel / Full RB


Date: 3.MAR.2020 20:43:30

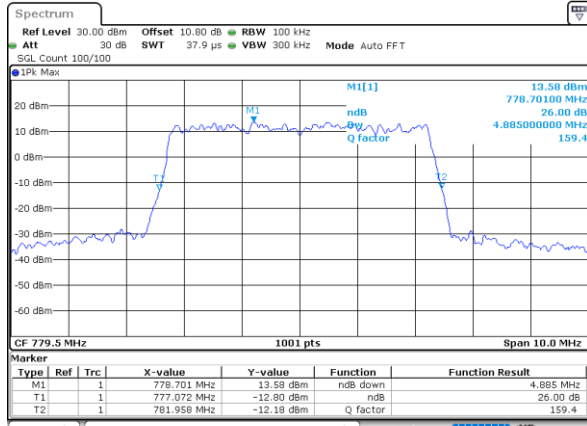
**26dB Bandwidth**

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	-	-	-	-	4.89	4.89	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	4.95	9.65	9.69	-	-	-	-
Highest CH	-	-	-	-	4.88	4.80	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.91	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.82	-	9.77	-	-	-	-	-
Highest CH	-	-	-	-	4.91	-	-	-	-	-	-	-



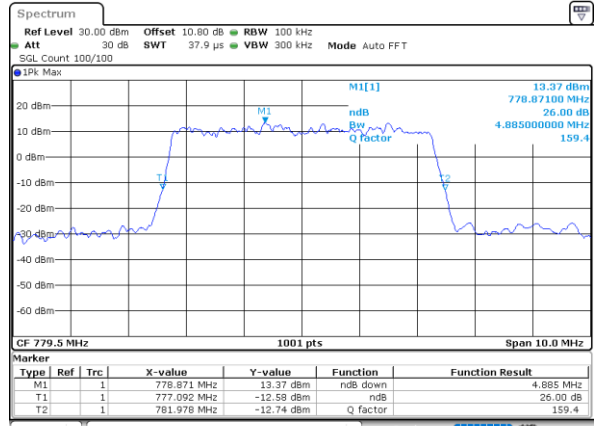
LTE Band 13

Lowest Channel / 5MHz / QPSK



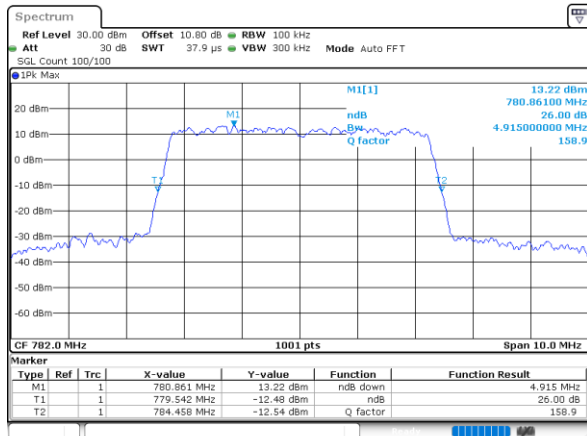
Date: 3,MAR,2020 20:47:14

Lowest Channel / 5MHz / 16QAM



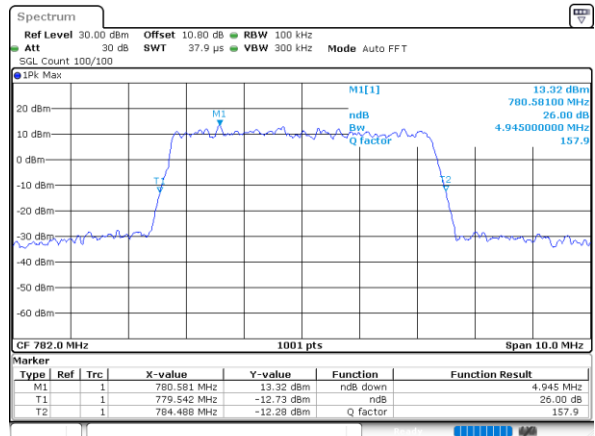
Date: 3,MAR,2020 20:47:02

Middle Channel / 5MHz / QPSK



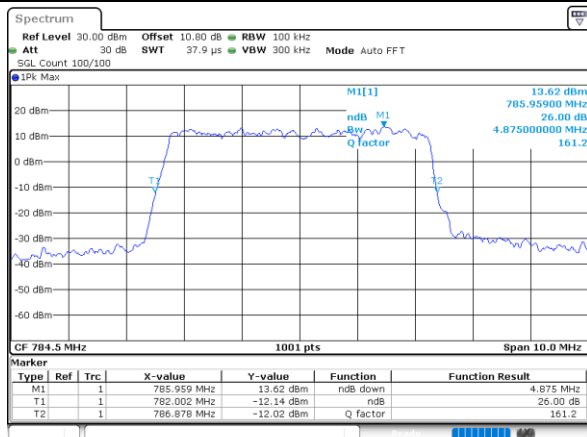
Date: 3,MAR,2020 20:47:26

Middle Channel / 5MHz / 16QAM



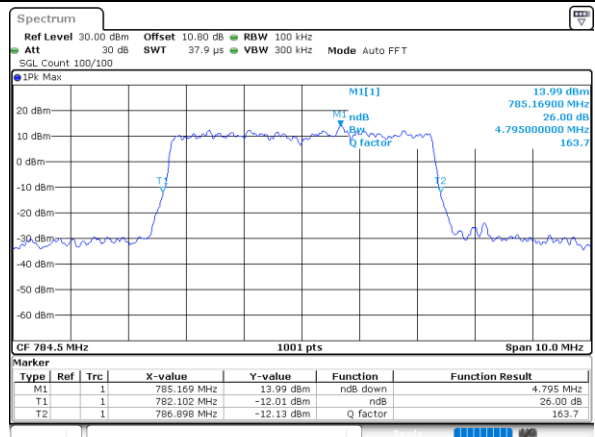
Date: 3,MAR,2020 20:47:38

Highest Channel / 5MHz / QPSK



Date: 3,MAR,2020 20:48:49

Highest Channel / 5MHz / 16QAM

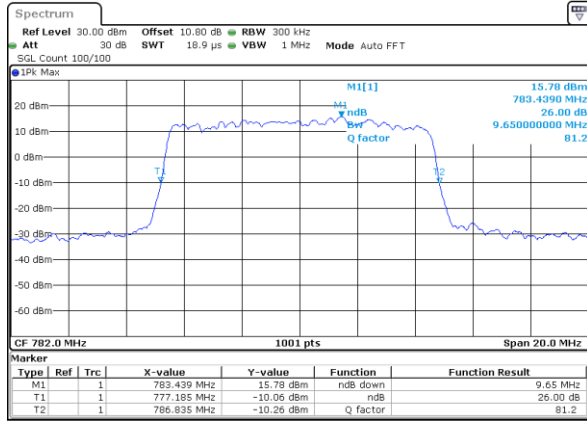


Date: 3,MAR,2020 20:48:37



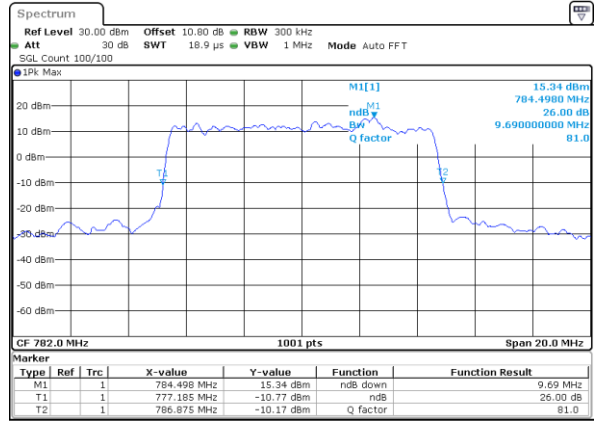
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 3.MAR.2020 20:50:46

Middle Channel / 10MHz / 16QAM

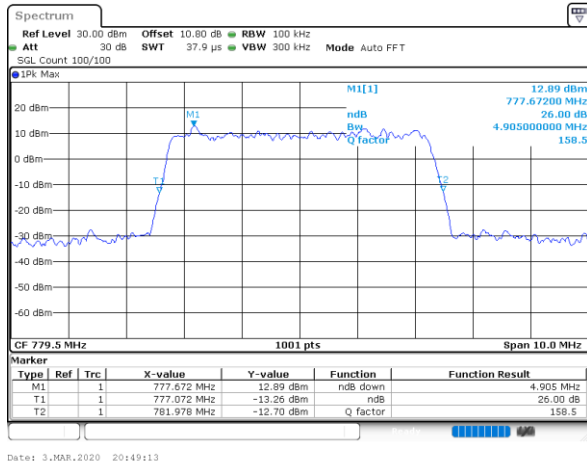


Date: 3.MAR.2020 20:50:35

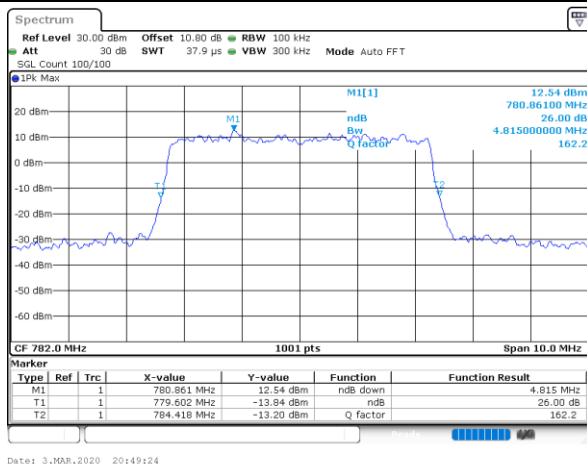


LTE Band 13

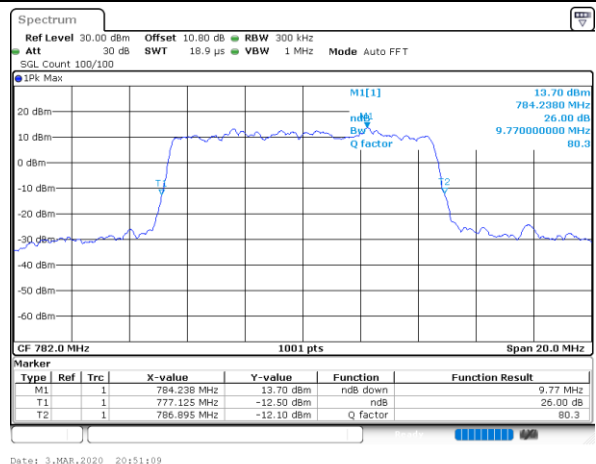
Lowest Channel / 5MHz / 64QAM



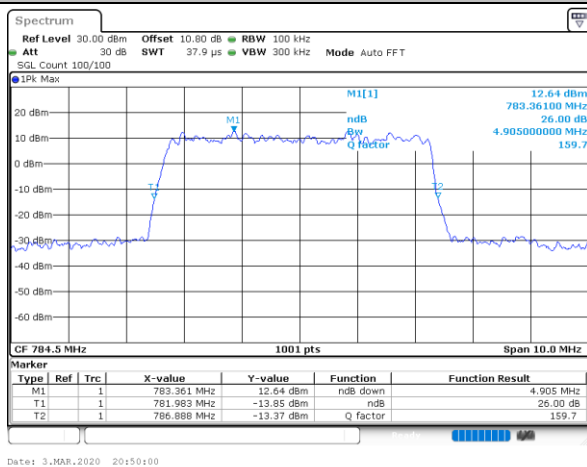
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



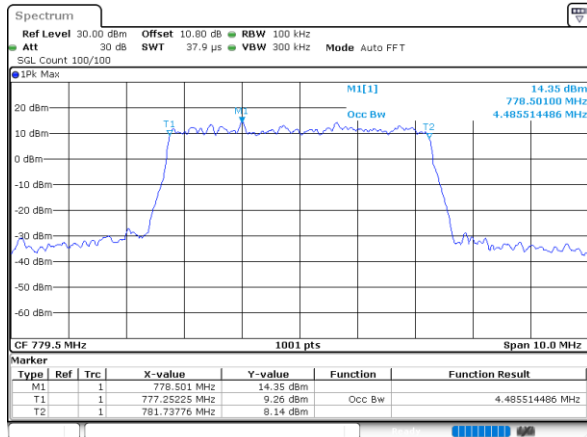
**Occupied Bandwidth**

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	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	4.48	8.99	8.99	-	-	-	-
Highest CH	-	-	-	-	4.47	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	-	-	-	-	4.51	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	-	8.97	-	-	-	-	-
Highest CH	-	-	-	-	4.48	-	-	-	-	-	-	-

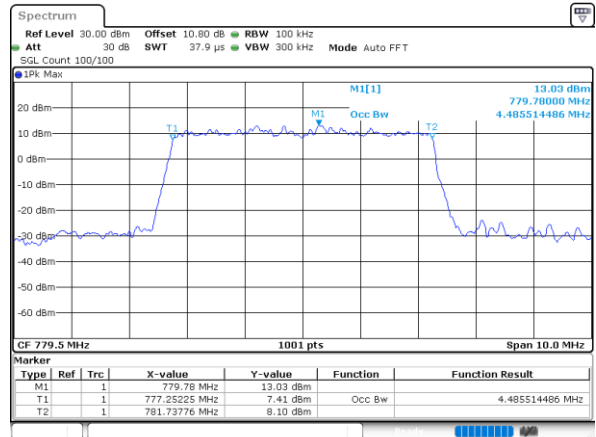


LTE Band 13

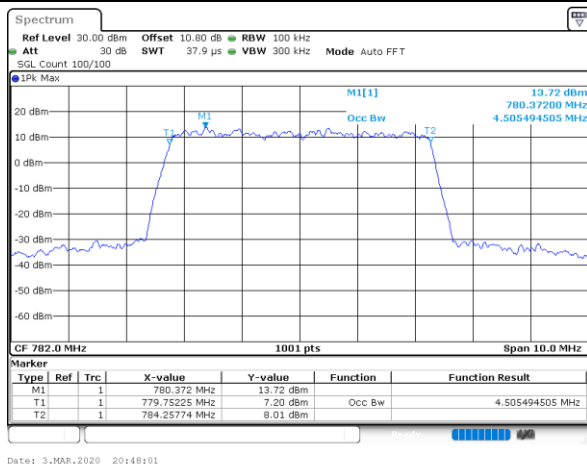
Lowest Channel / 5MHz / QPSK



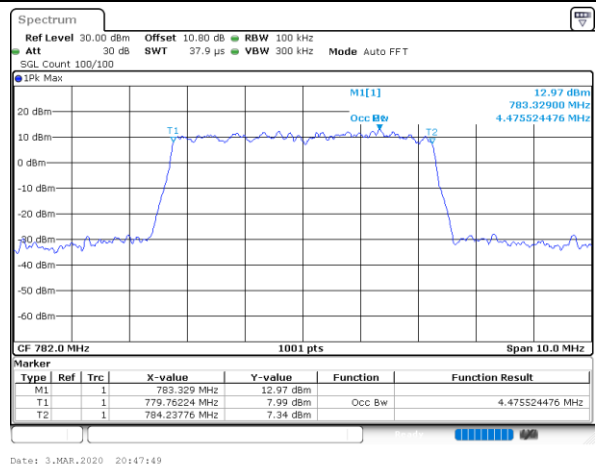
Lowest Channel / 5MHz / 16QAM



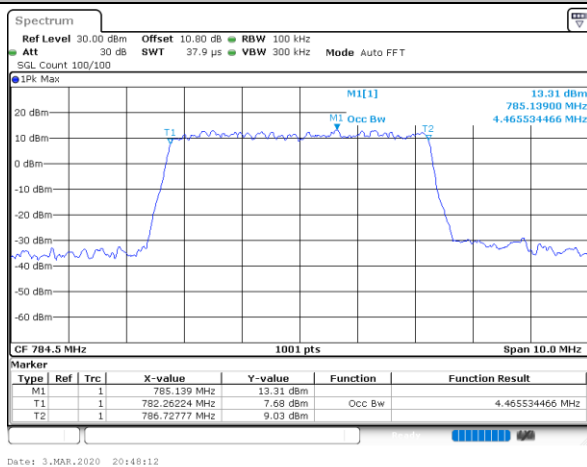
Middle Channel / 5MHz / QPSK



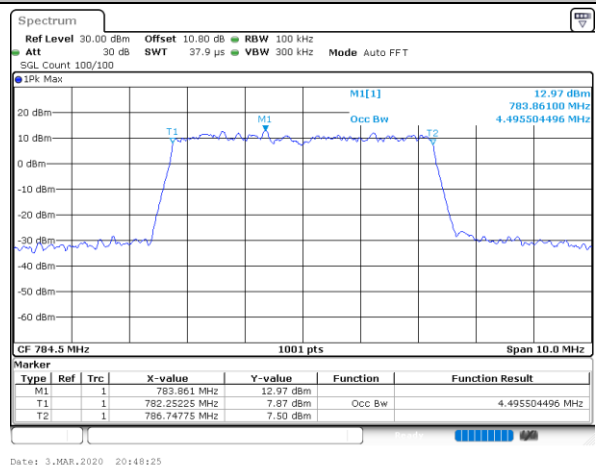
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



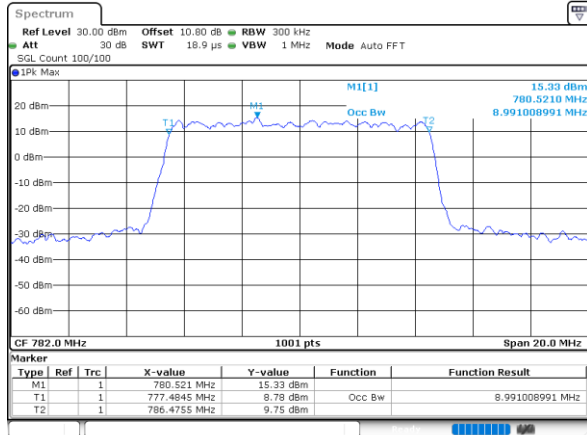
Highest Channel / 5MHz / 16QAM





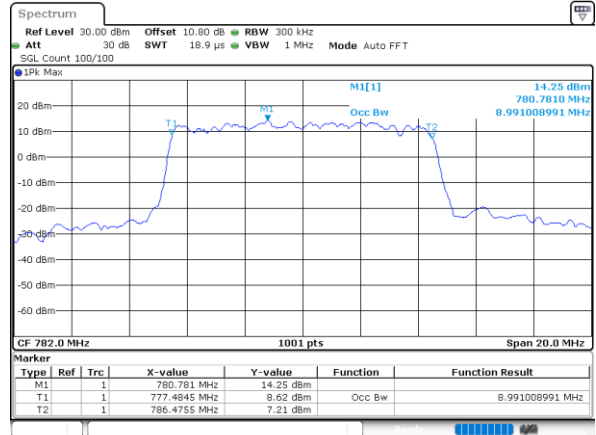
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 3.MAR.2020 20:50:12

Middle Channel / 10MHz / 16QAM

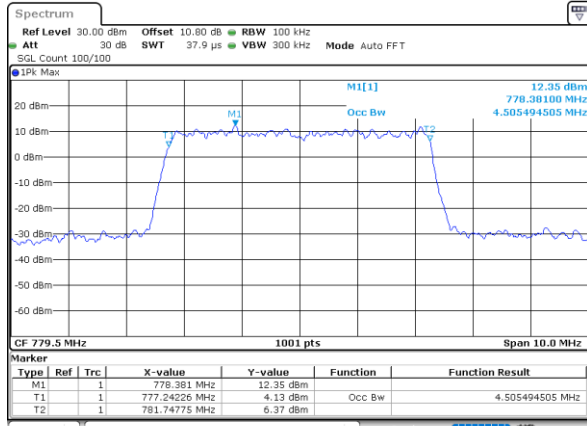


Date: 3.MAR.2020 20:50:24

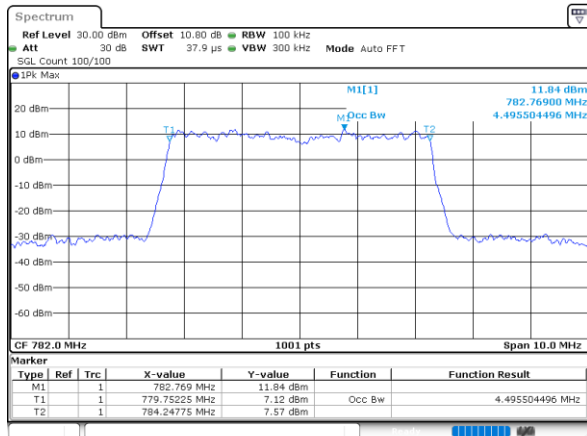


LTE Band 13

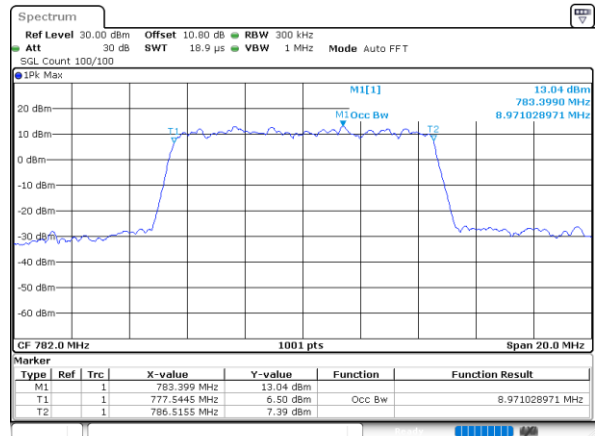
Lowest Channel / 5MHz / 64QAM



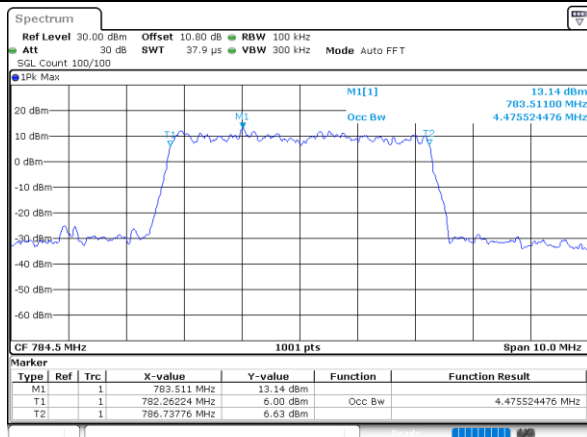
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

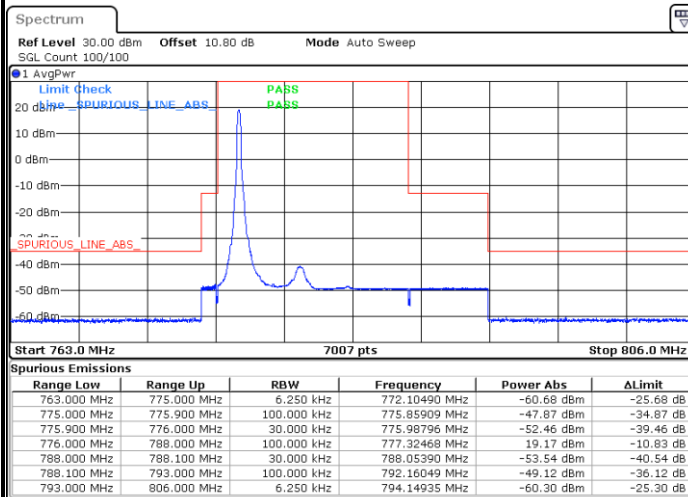




Conducted Band Edge

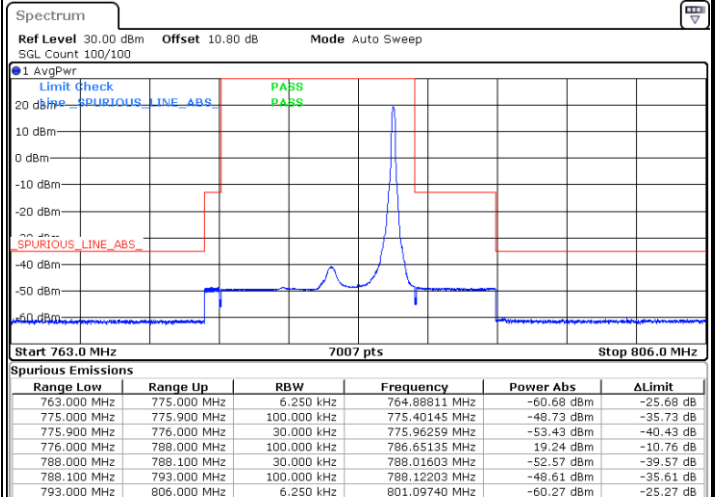
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



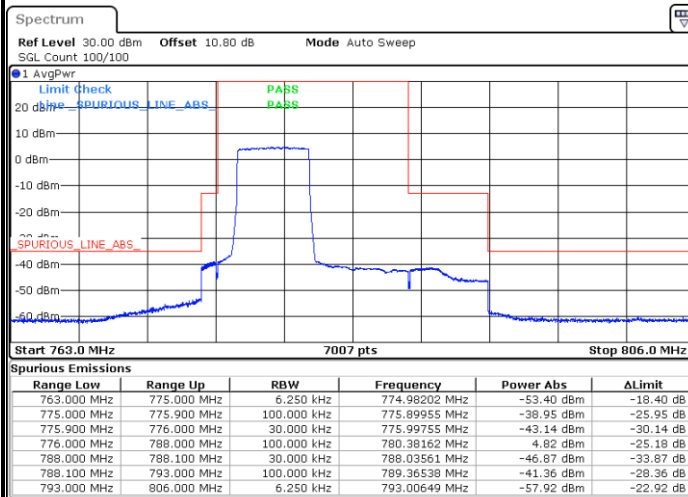
Date: 3 MAR 2020 19:25:48

Highest Band Edge / 1 RB



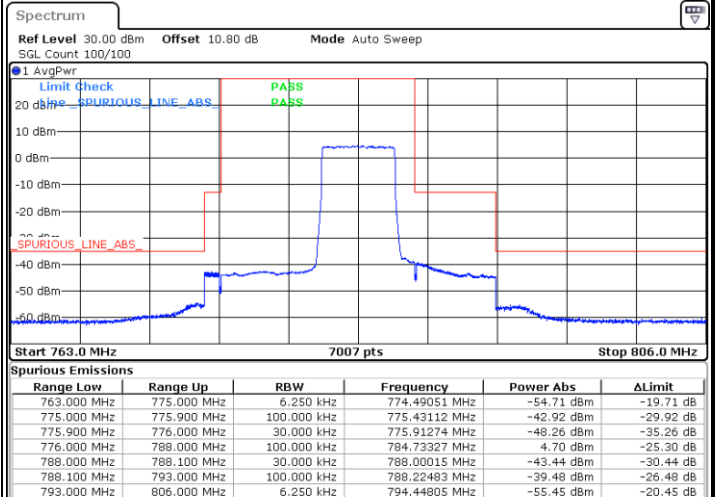
Date: 3 MAR 2020 19:36:37

Lowest Band Edge / Full RB



Date: 3 MAR 2020 19:20:50

Highest Band Edge / Full RB

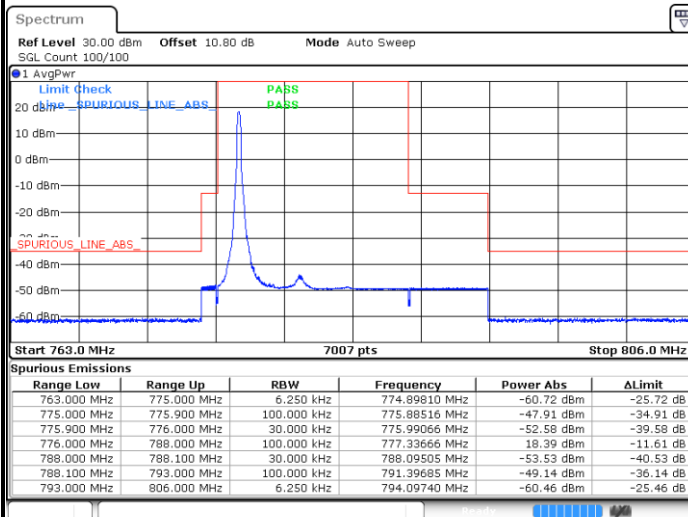


Date: 3 MAR 2020 19:31:39

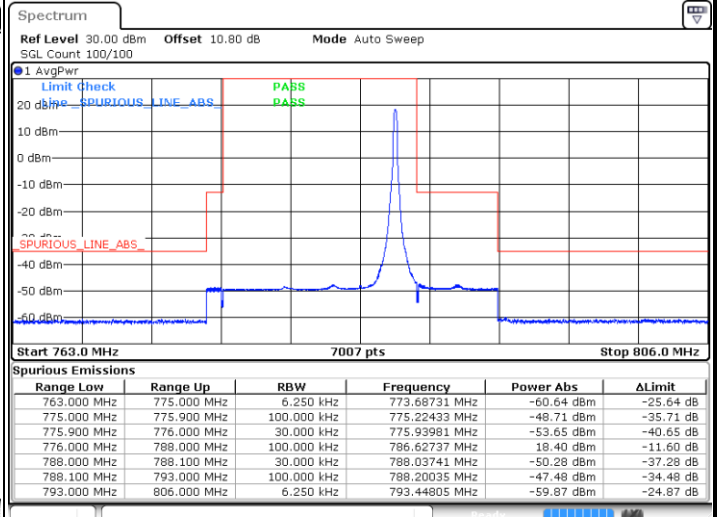


LTE Band 13 / 5MHz / 16QAM

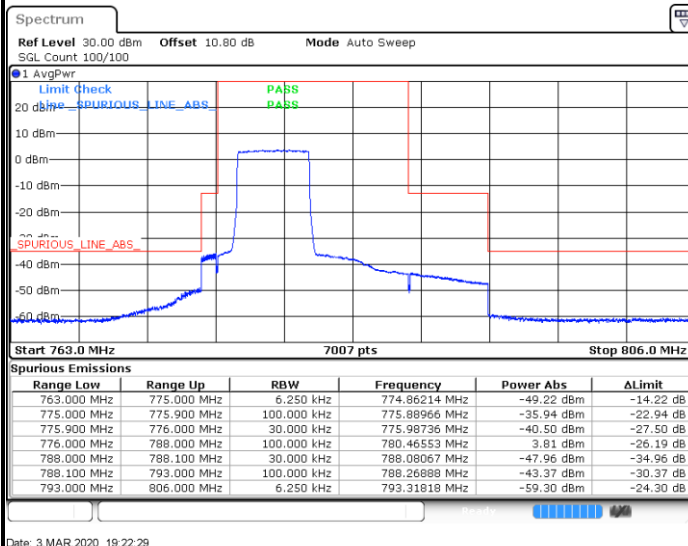
Lowest Band Edge / 1 RB



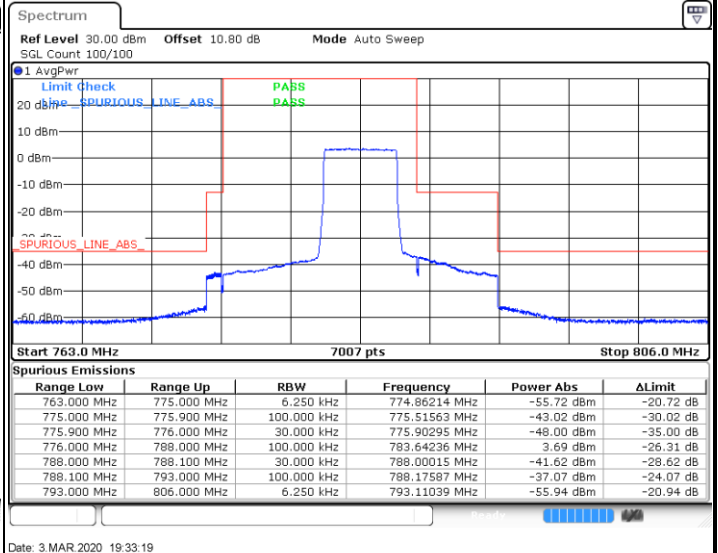
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



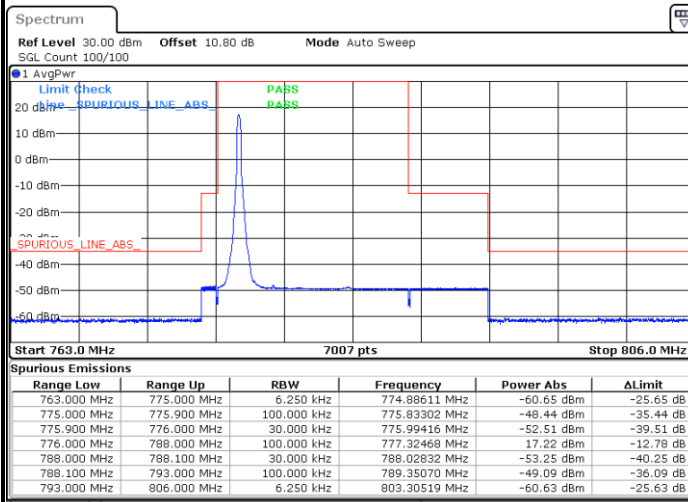
Highest Band Edge / Full RB



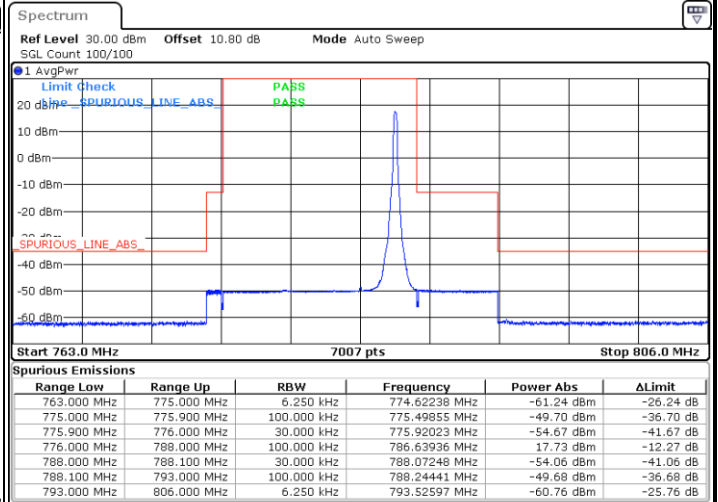


LTE Band 13 / 5MHz / 64QAM

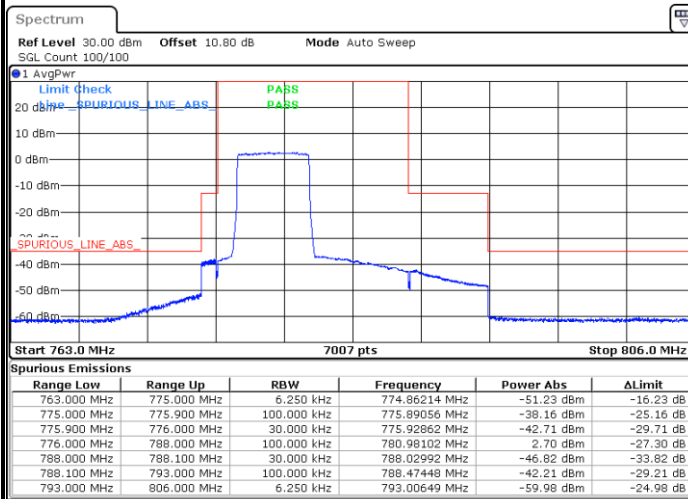
Lowest Band Edge / 1 RB



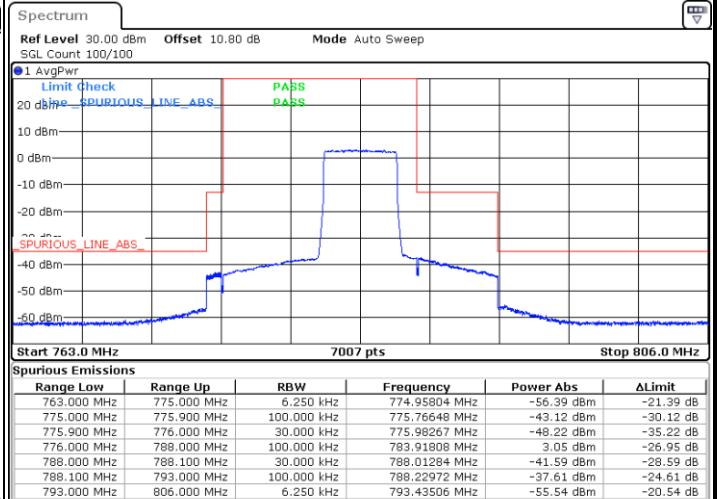
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



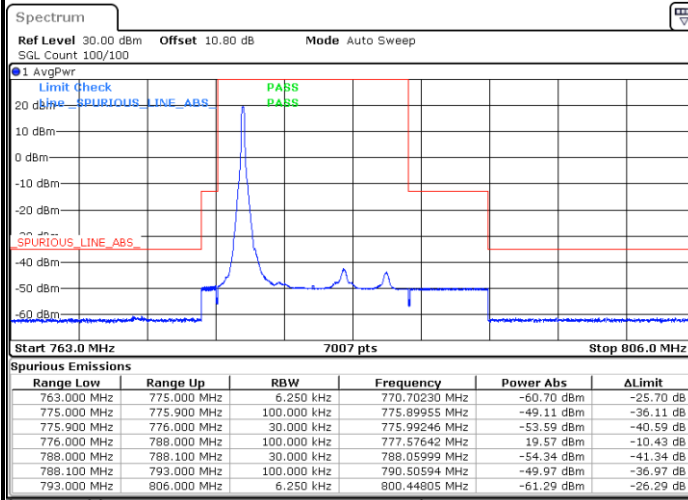
Highest Band Edge / Full RB





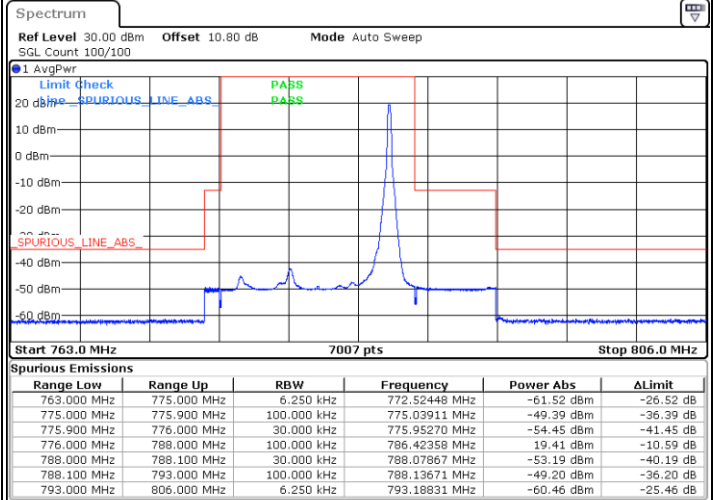
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



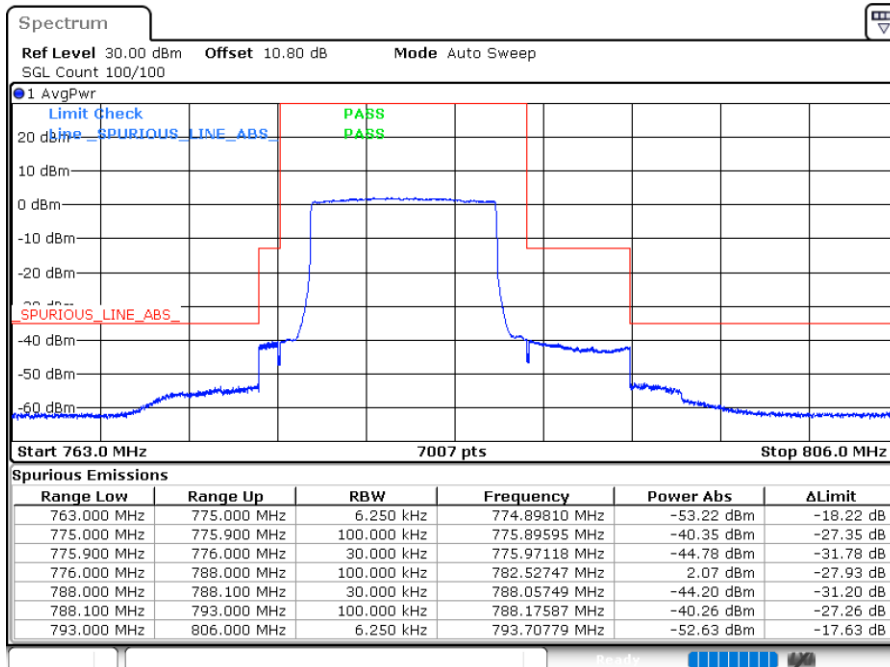
Date: 3.MAR.2020 20:30:42

Highest Band Edge / 1 RB



Date: 3.MAR.2020 20:32:21

Band Edge / Full RB



Date: 3.MAR.2020 20:25:44