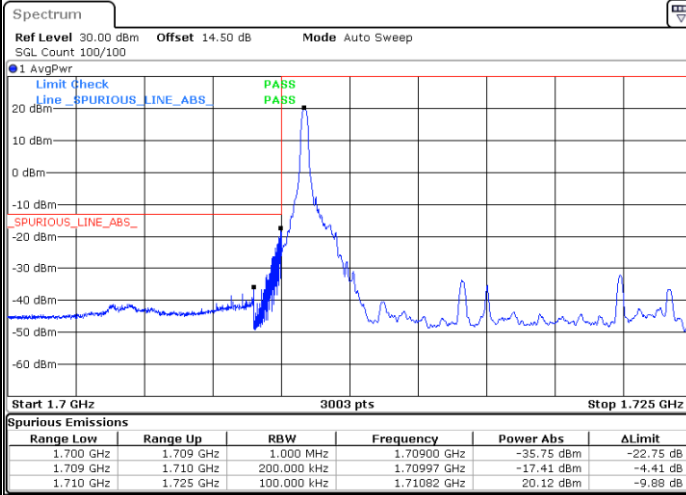




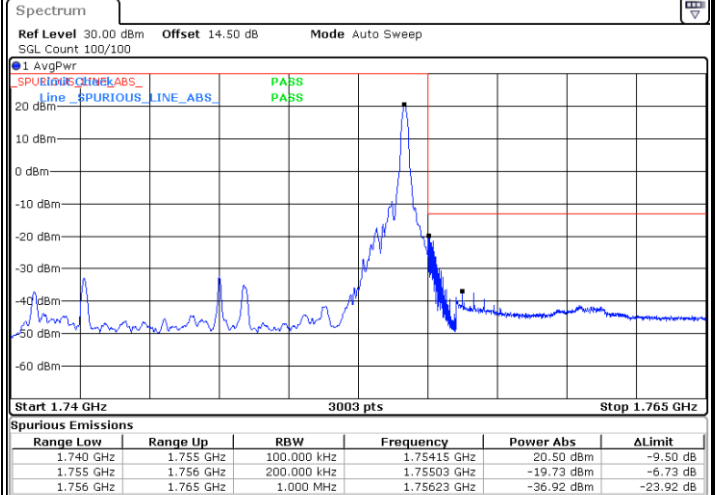
LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



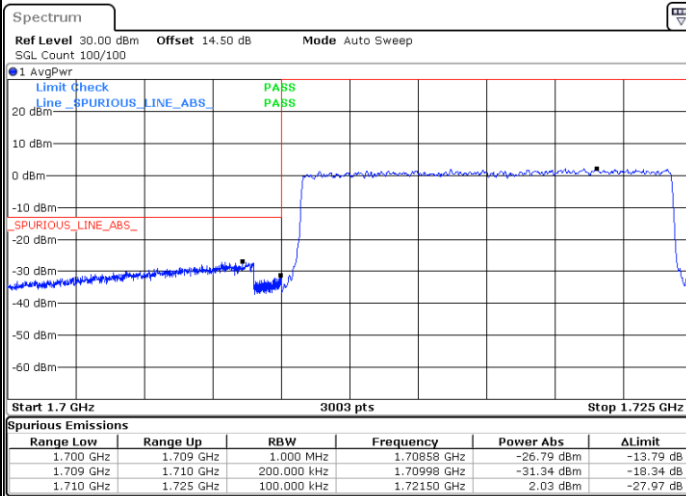
Date: 23.AUG.2023 22:32:36

Highest Band Edge / 1 RB



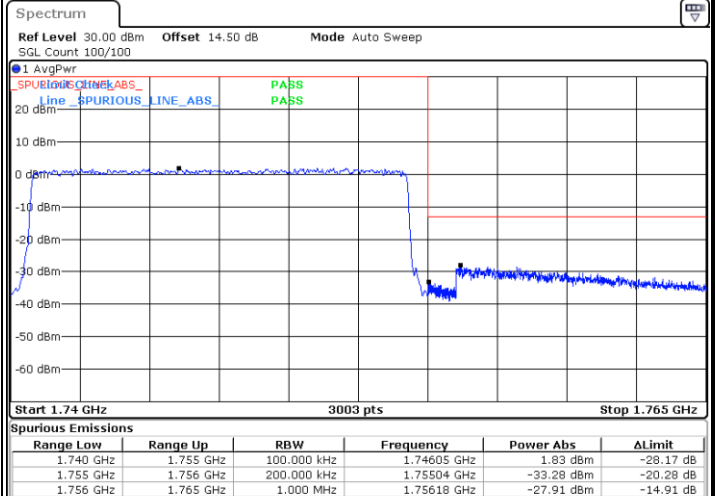
Date: 23.AUG.2023 22:42:18

Lowest Band Edge / Full RB



Date: 23.AUG.2023 22:35:41

Highest Band Edge / Full RB

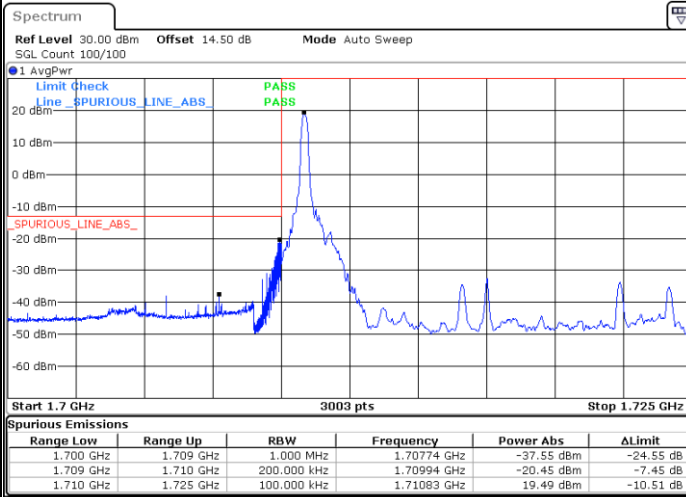


Date: 23.AUG.2023 22:45:22



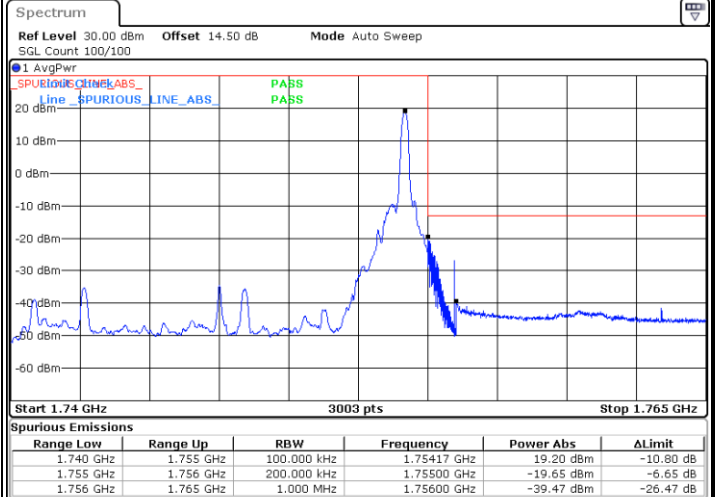
LTE Band 4 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



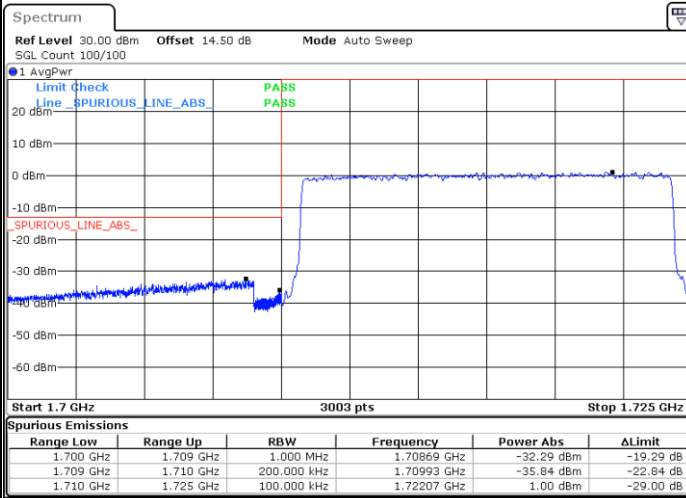
Date: 23.AUG.2023 22:33:38

Highest Band Edge / 1 RB



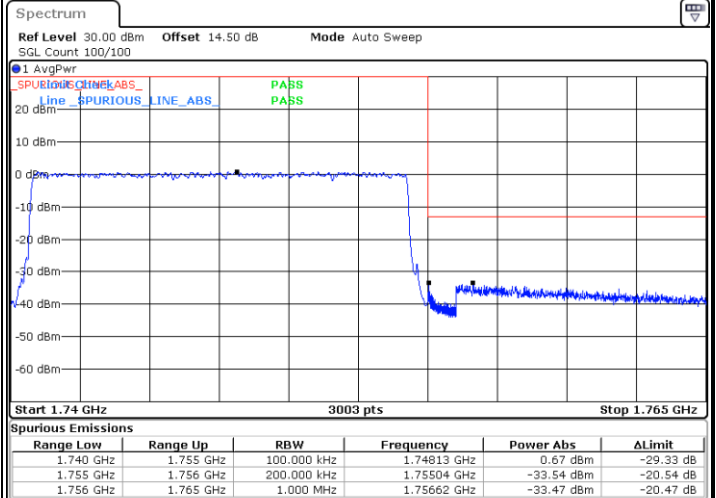
Date: 23.AUG.2023 22:43:19

Lowest Band Edge / Full RB



Date: 23.AUG.2023 22:36:43

Highest Band Edge / Full RB

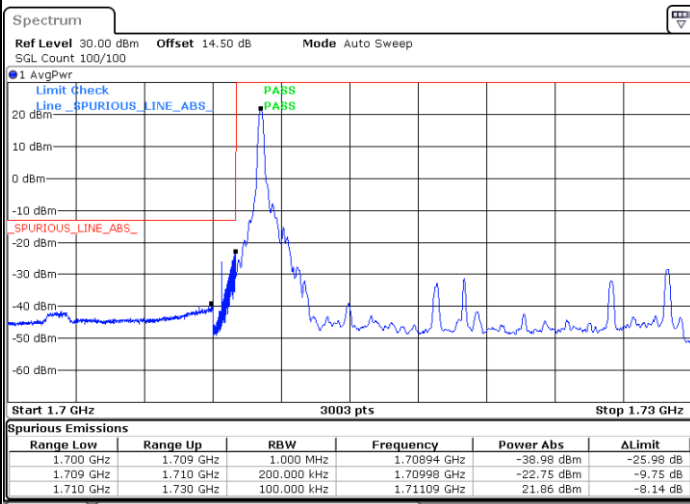


Date: 23.AUG.2023 22:46:24



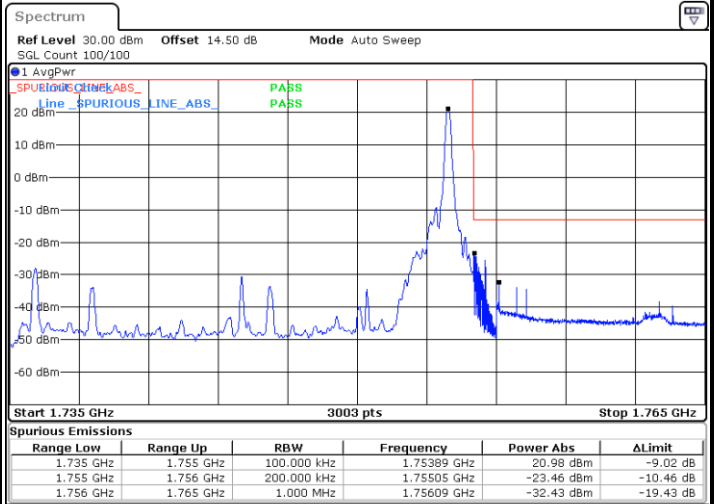
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / 1RB



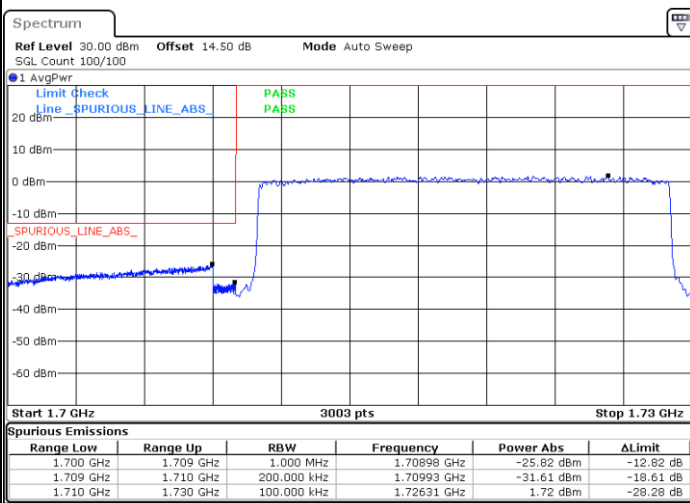
Date: 23.AUG.2023 22:54:51

Highest Band Edge / 1RB



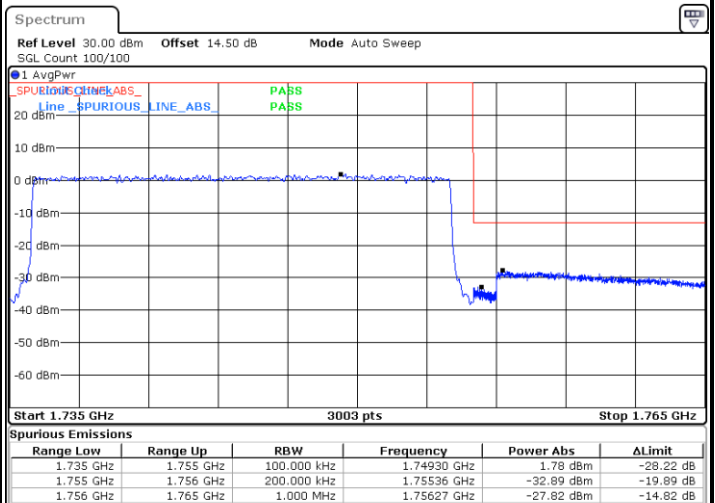
Date: 23.AUG.2023 23:05:53

Lowest Band Edge / Full RB



Date: 23.AUG.2023 22:57:55

Highest Band Edge / Full RB

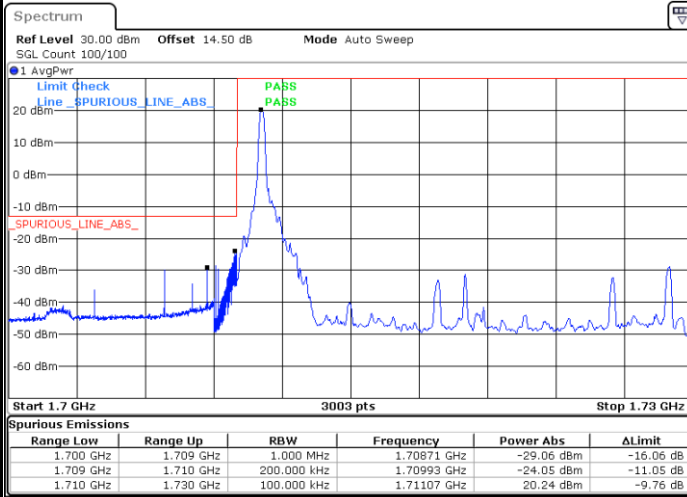


Date: 23.AUG.2023 23:08:58



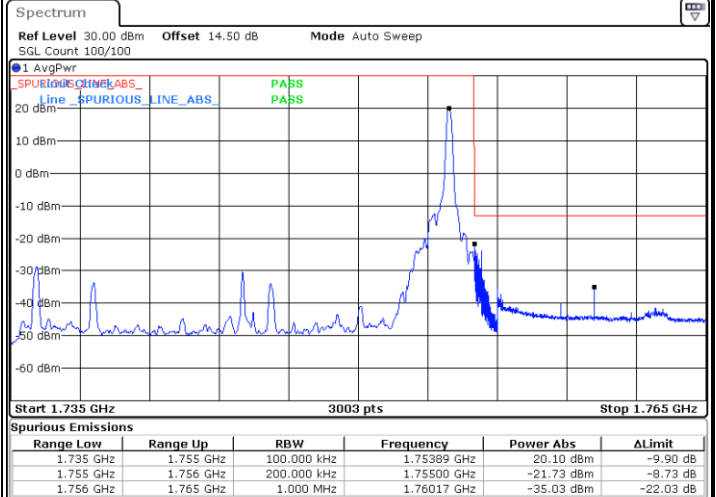
LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



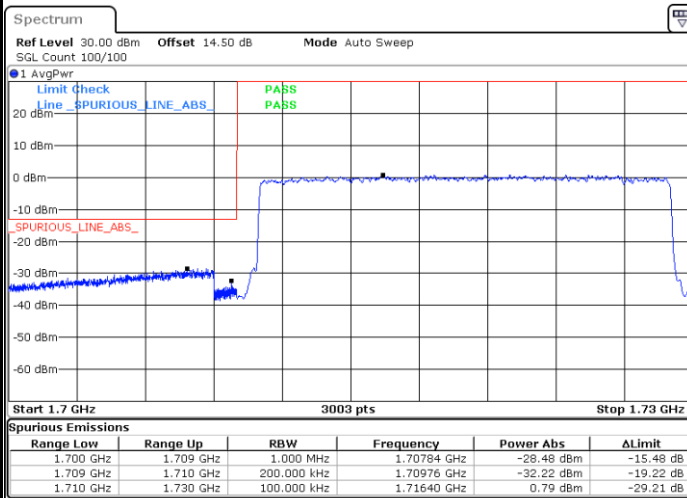
Date: 23.AUG.2023 22:55:52

Highest Band Edge / 1 RB



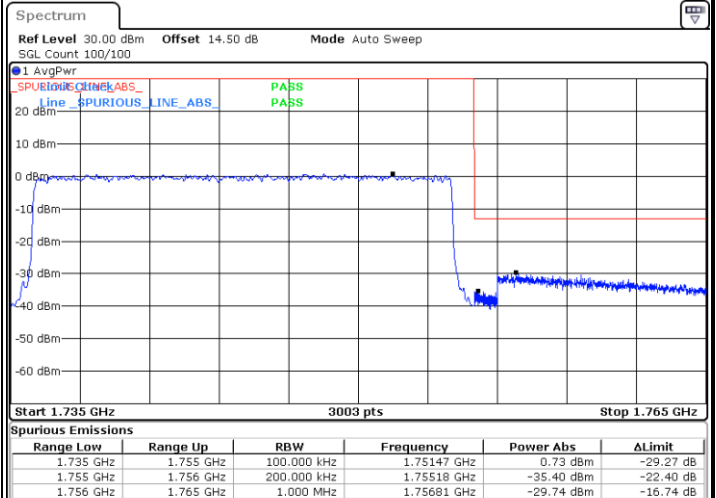
Date: 23.AUG.2023 23:06:55

Lowest Band Edge / Full RB



Date: 23.AUG.2023 22:58:57

Highest Band Edge / Full RB

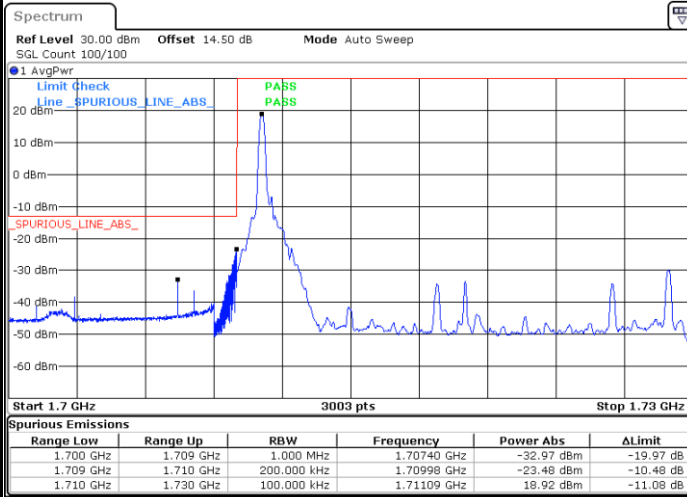


Date: 23.AUG.2023 23:09:59



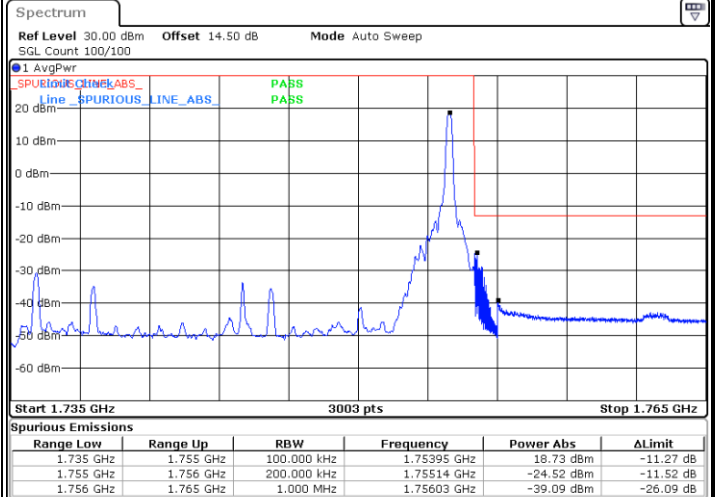
LTE Band 4 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



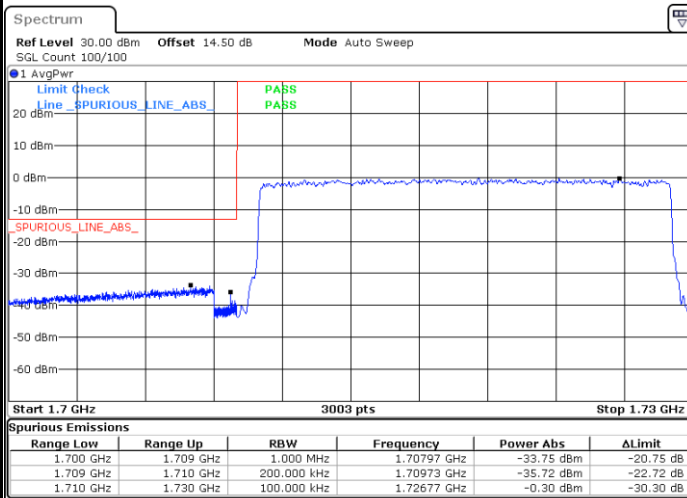
Date: 23.AUG.2023 22:56:54

Highest Band Edge / 1 RB



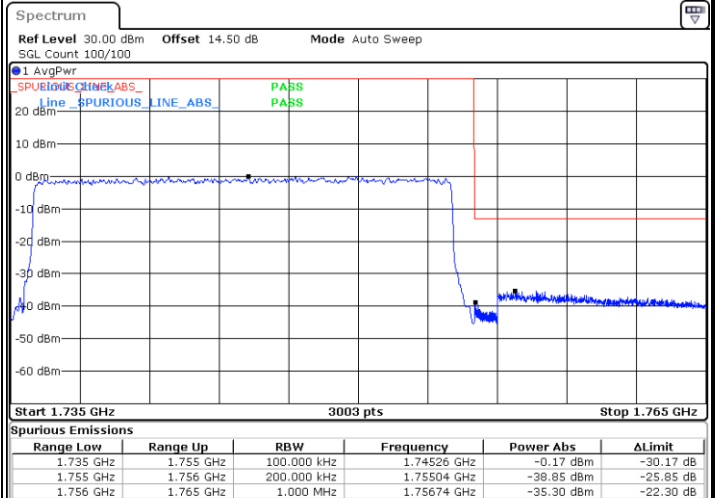
Date: 23.AUG.2023 23:07:56

Lowest Band Edge / Full RB



Date: 23.AUG.2023 22:59:58

Highest Band Edge / Full RB



Date: 23.AUG.2023 23:11:01

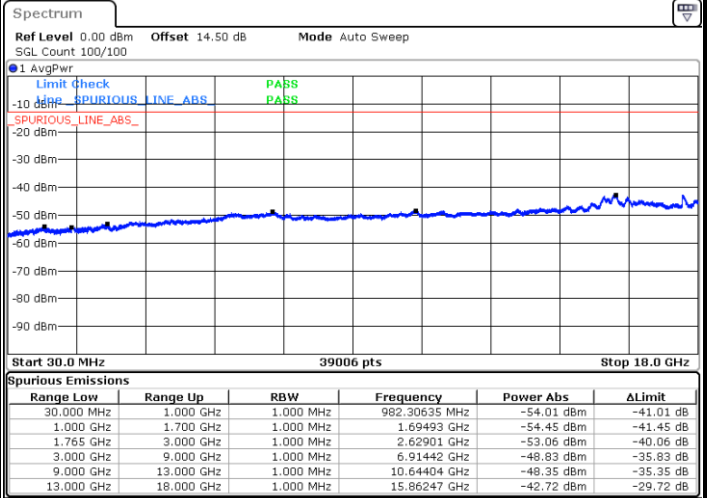
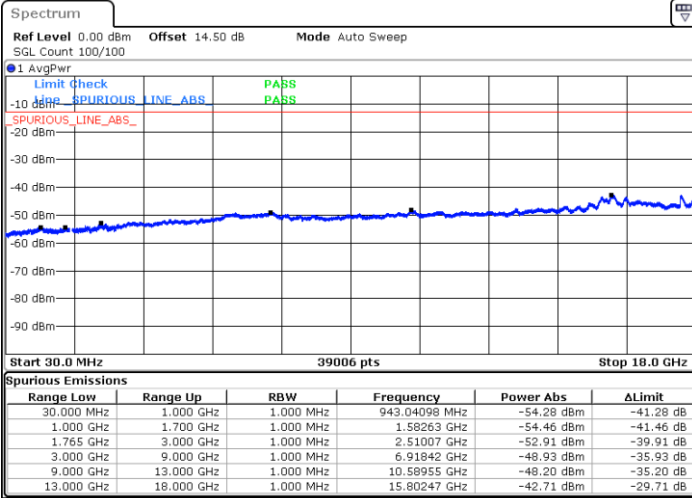


Conducted Spurious Emission

LTE Band 4 / 1.4MHz

Lowest Channel / QPSK

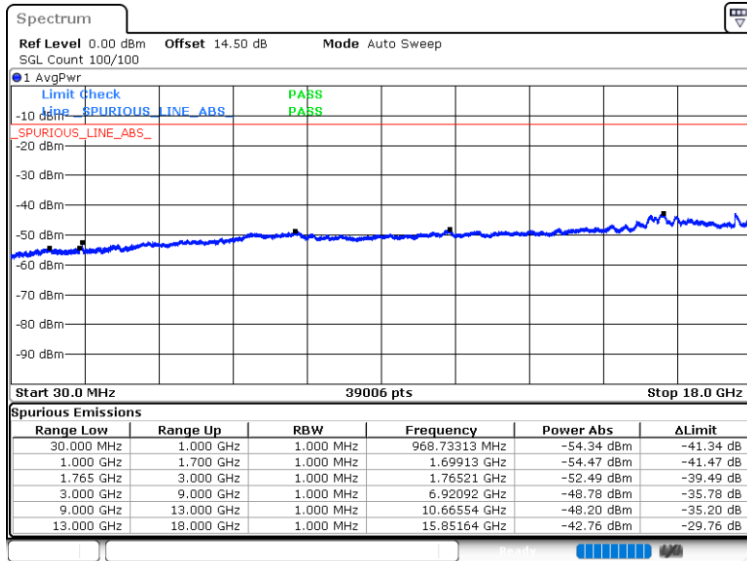
Middle Channel / QPSK



Date: 23.AUG.2023 20:11:56

Date: 23.AUG.2023 20:13:02

Highest Channel / QPSK



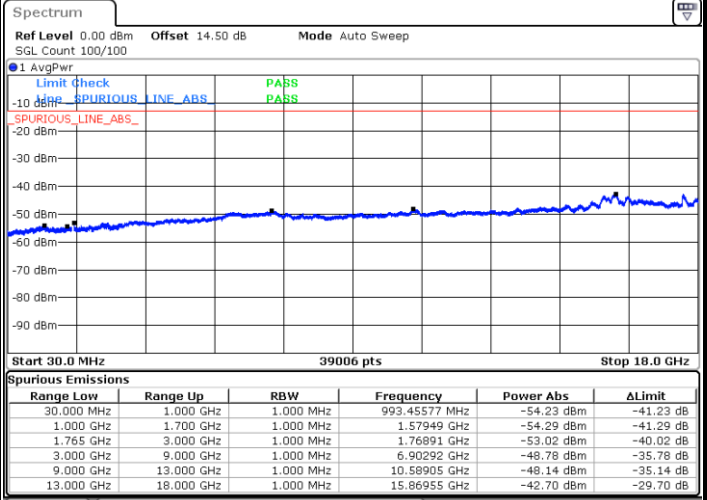
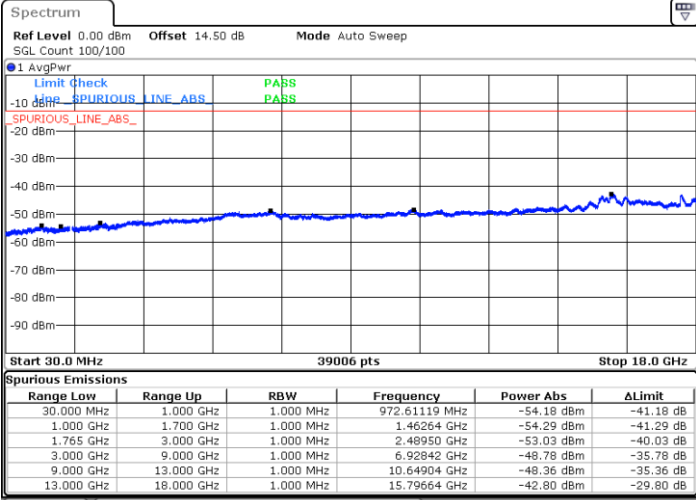
Date: 23.AUG.2023 20:23:07



LTE Band 4 / 3MHz

Lowest Channel / QPSK

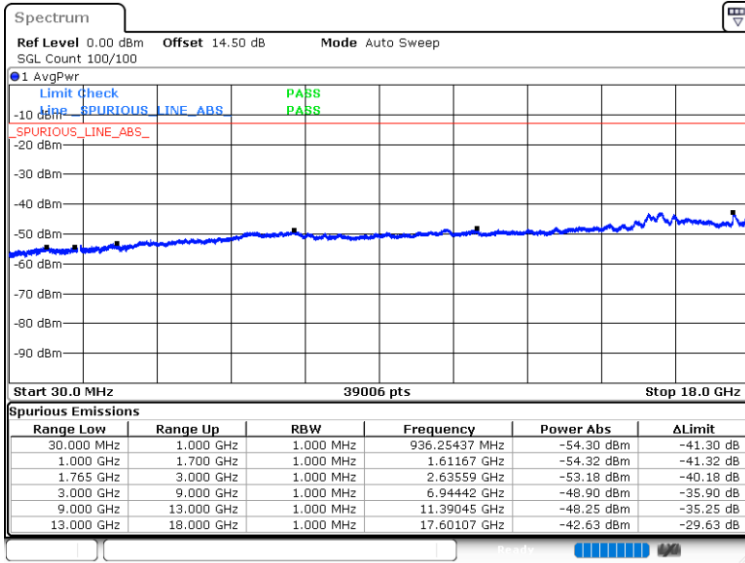
Middle Channel / QPSK



Date: 23.AUG.2023 20:50:11

Date: 23.AUG.2023 20:51:17

Highest Channel / QPSK



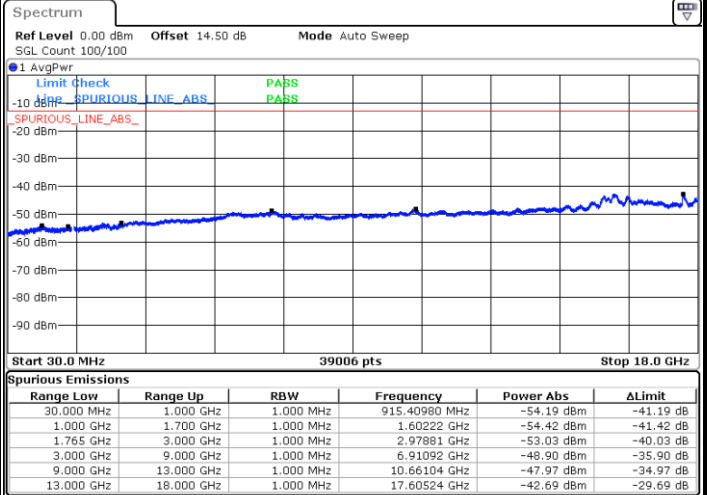
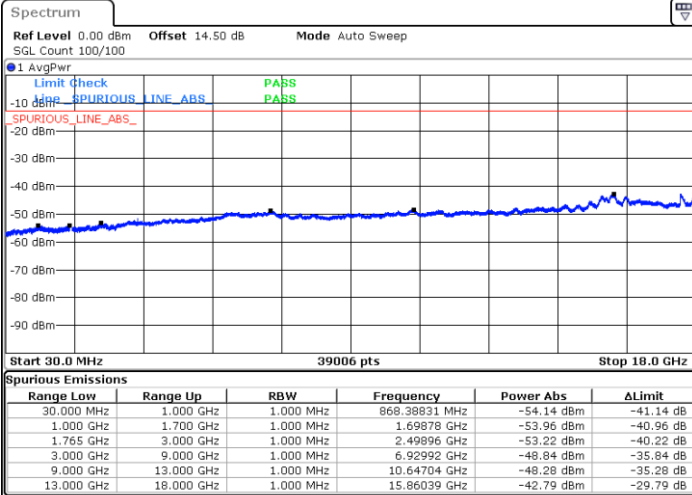
Date: 23.AUG.2023 21:01:22



LTE Band 4 / 5MHz

Lowest Channel / QPSK

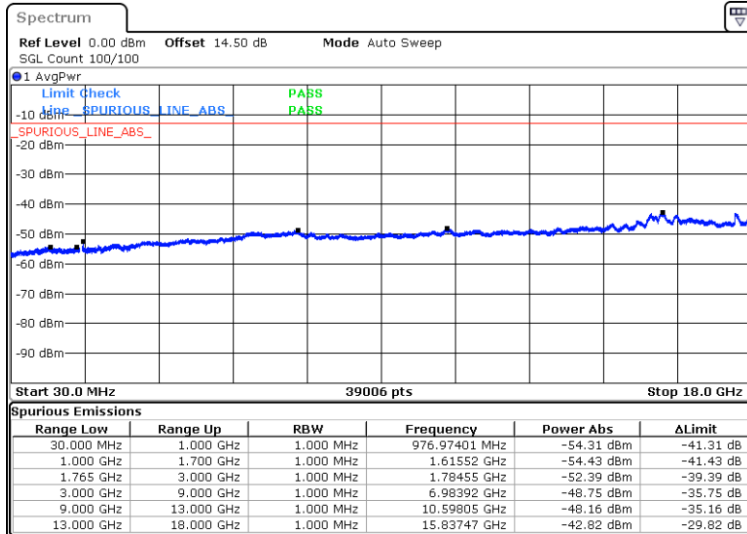
Middle Channel / QPSK



Date: 23.AUG.2023 21:10:54

Date: 23.AUG.2023 21:12:00

Highest Channel / QPSK



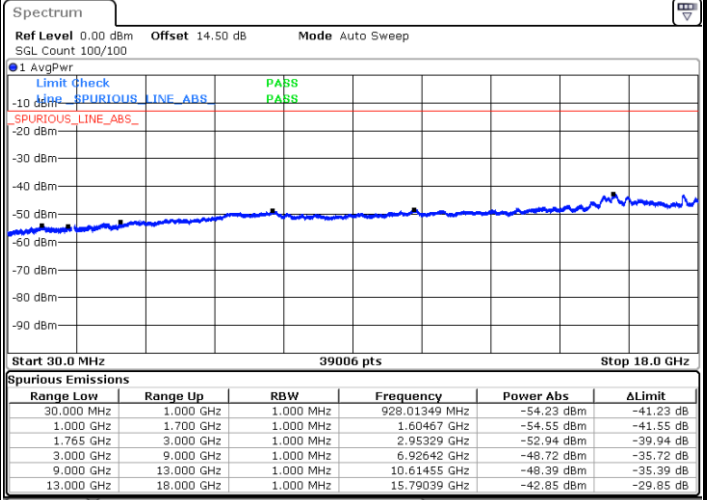
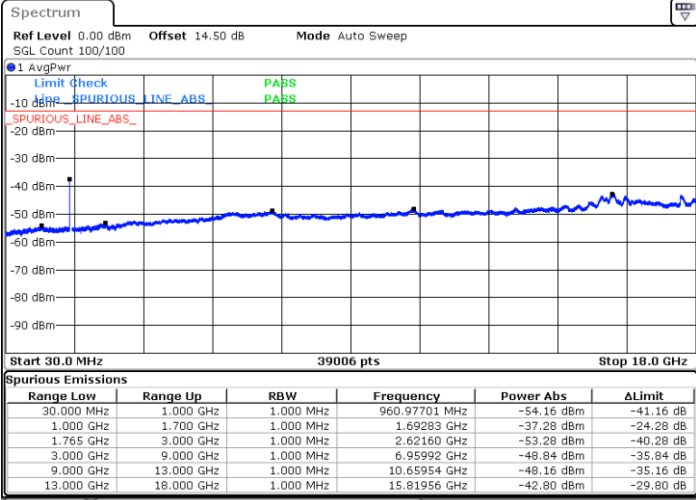
Date: 23.AUG.2023 21:22:05



LTE Band 4 / 10MHz

Lowest Channel / QPSK

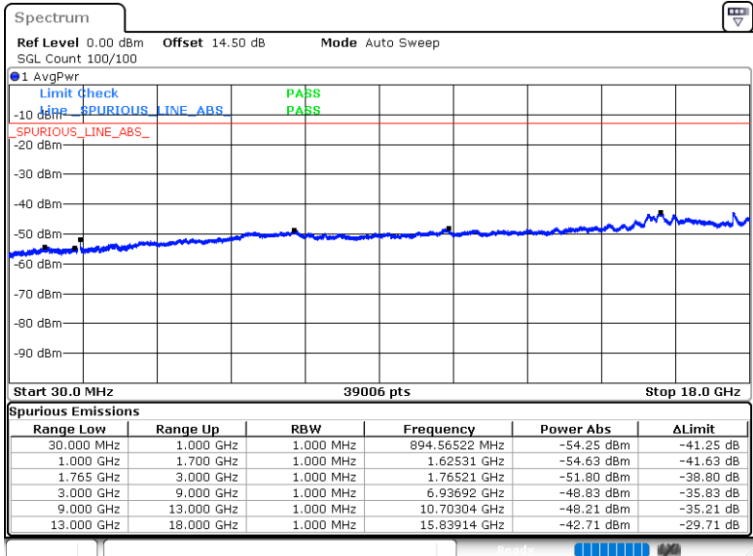
Middle Channel / QPSK



Date: 23.AUG.2023 21:58:18

Date: 23.AUG.2023 21:59:23

Highest Channel / QPSK

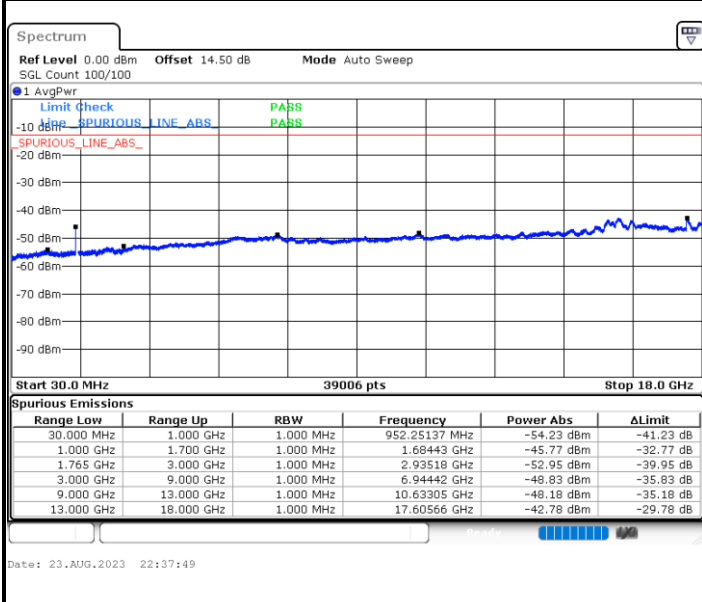


Date: 23.AUG.2023 22:09:28

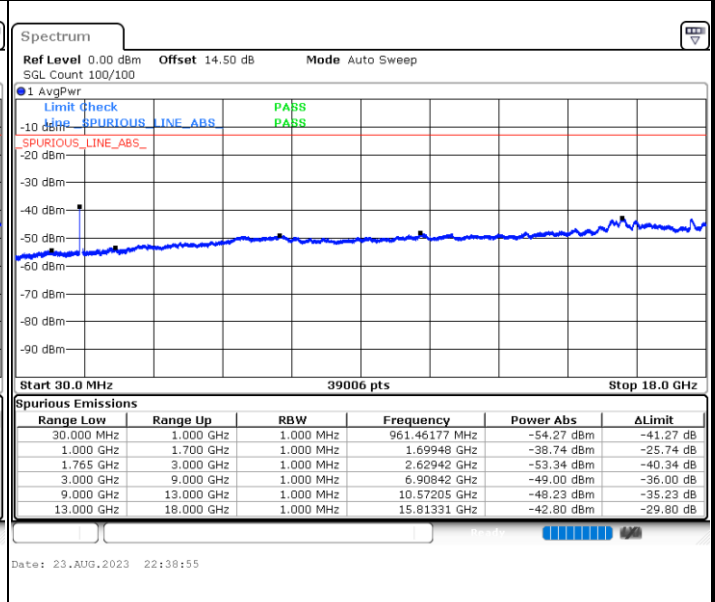


LTE Band 4 / 15MHz

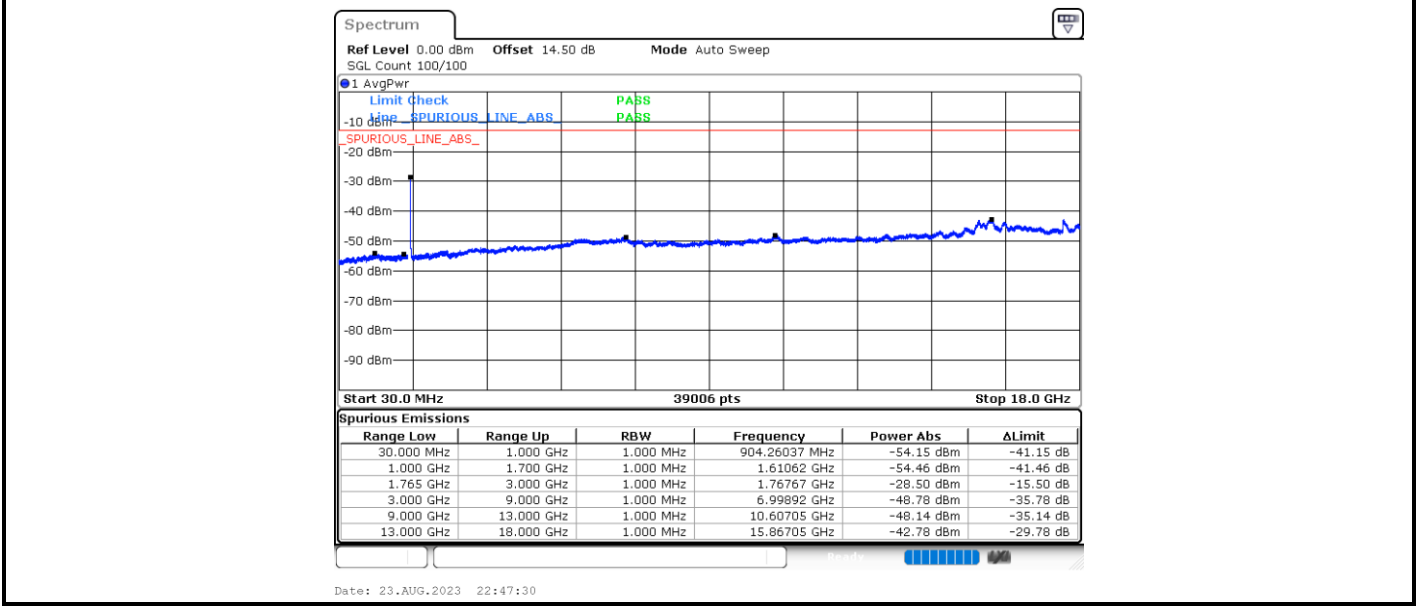
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

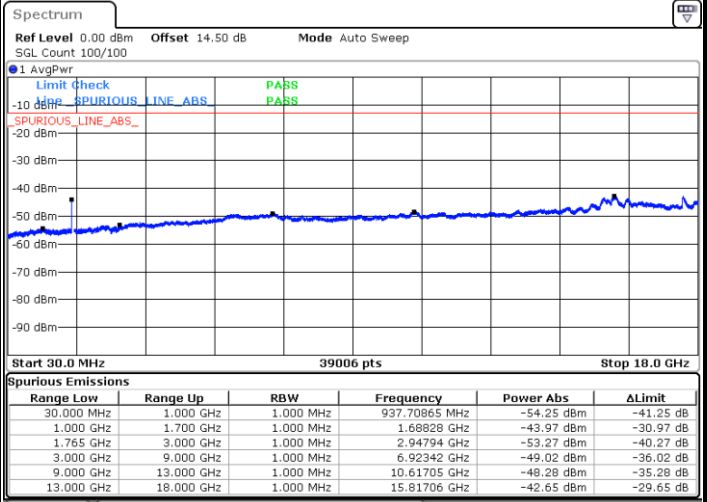
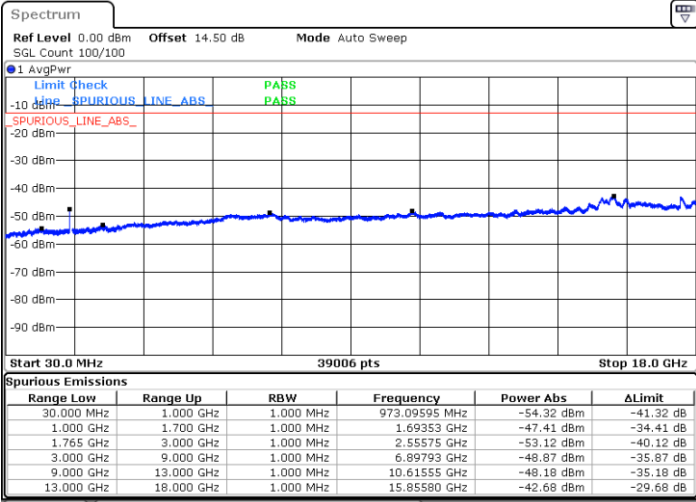




LTE Band 4 / 20MHz

Lowest Channel / QPSK

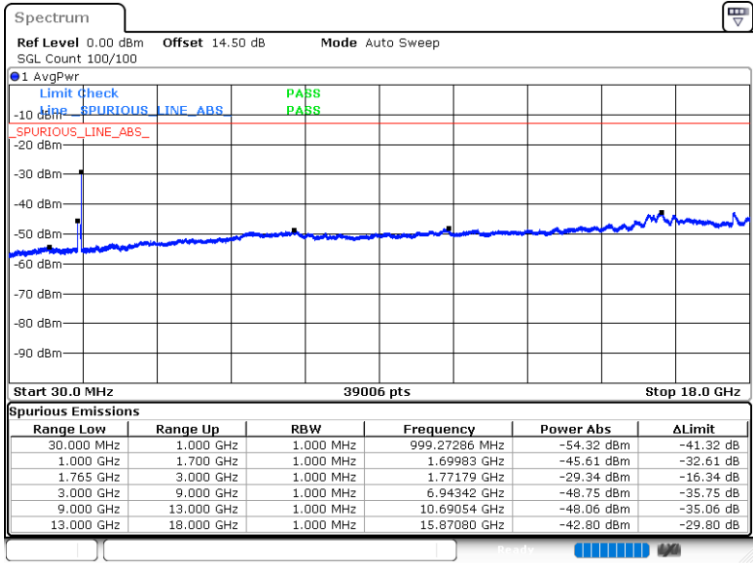
Middle Channel / QPSK



Date: 23.AUG.2023 23:01:04

Date: 23.AUG.2023 23:02:10

Highest Channel / QPSK



Date: 23.AUG.2023 23:12:07



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0008	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0007	

Note:

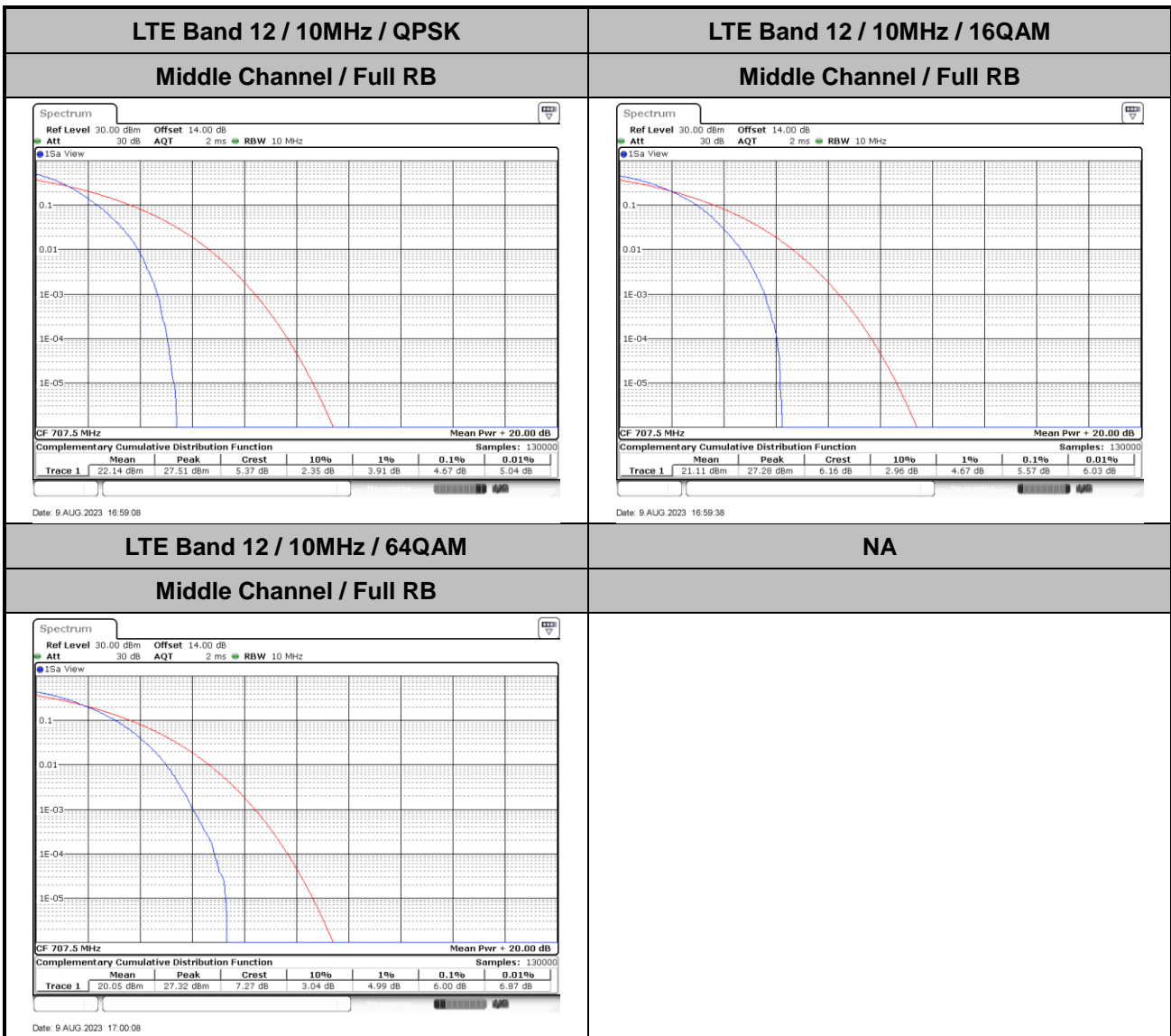
1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12 (Main PA)

Peak-to-Average Ratio

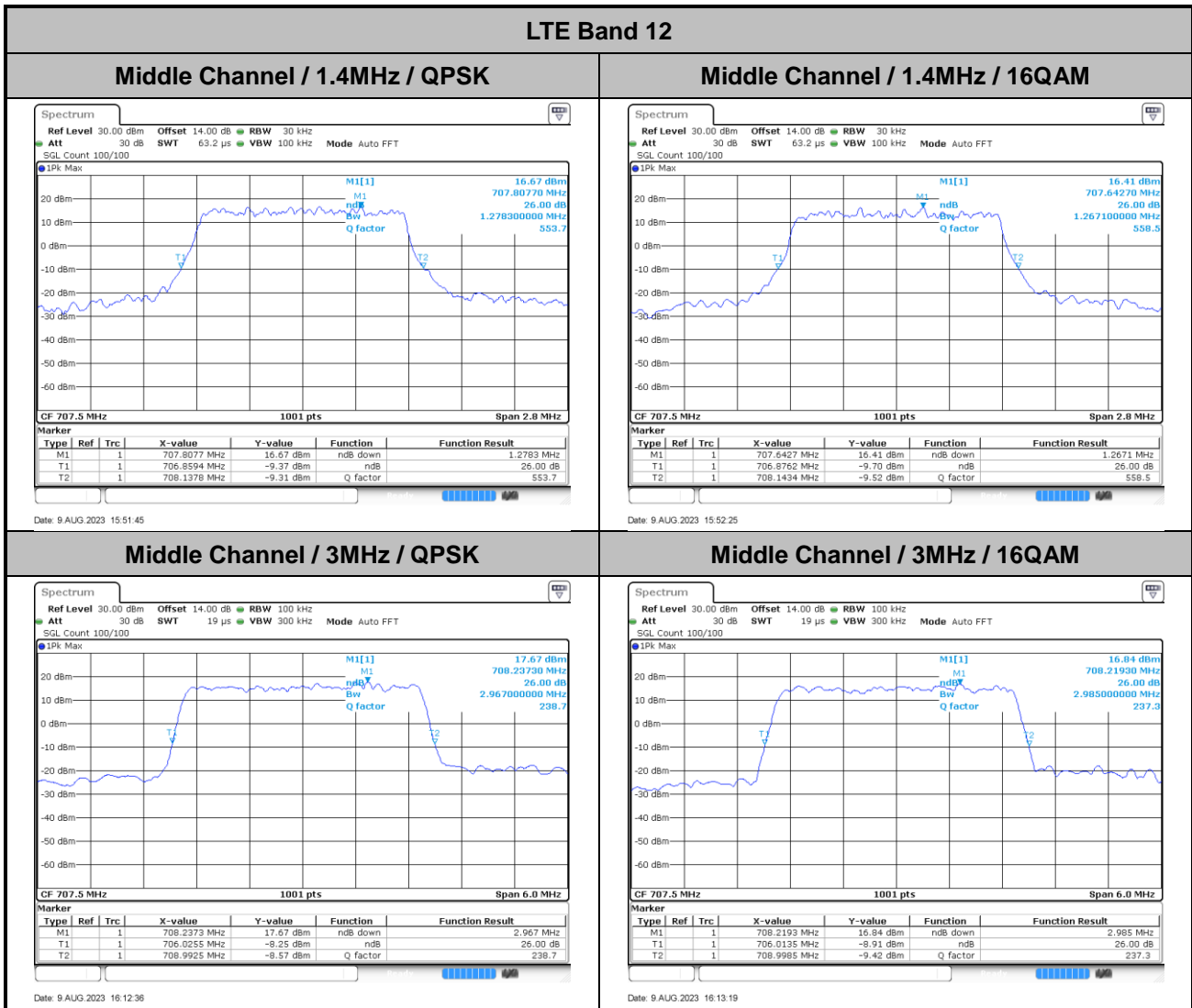
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.67	5.57	6.00	PASS





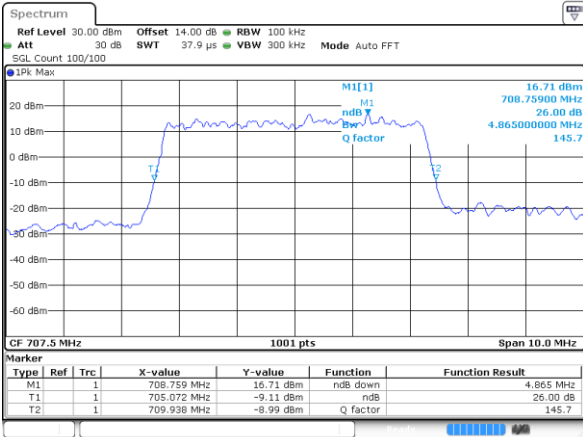
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.28	1.27	2.97	2.99	4.87	4.87	9.65	9.69	-	-	-	-

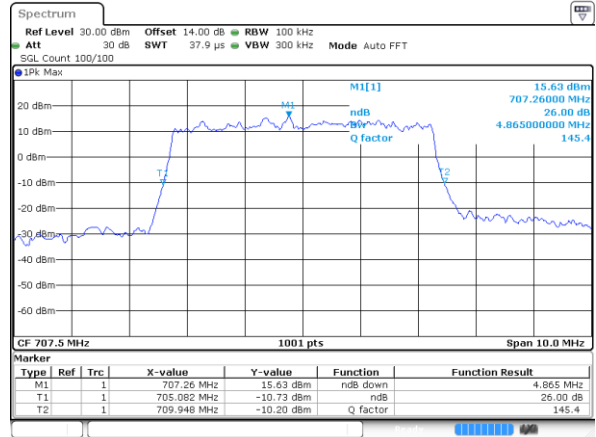




Middle Channel / 5MHz / QPSK

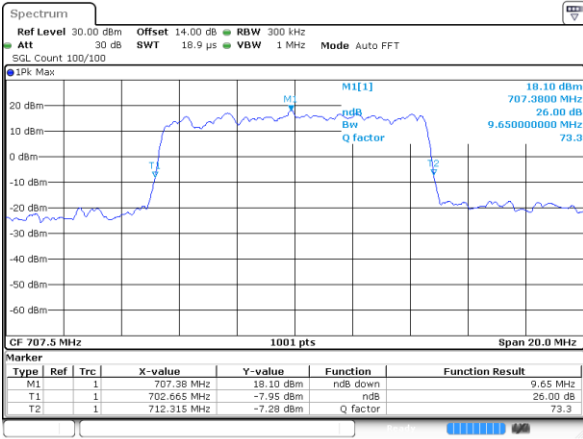


Middle Channel / 5MHz / 16QAM

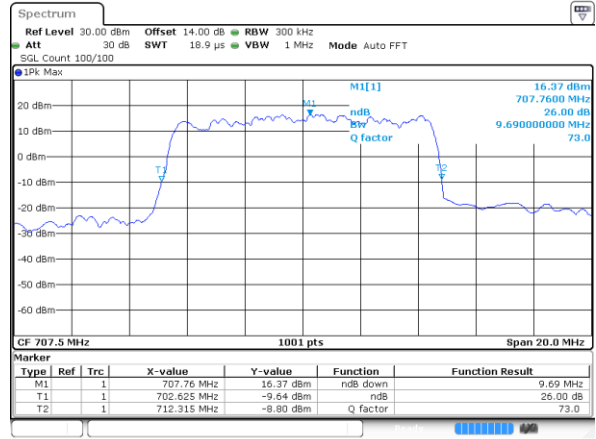


LTE Band 12

Middle Channel / 10MHz / QPSK



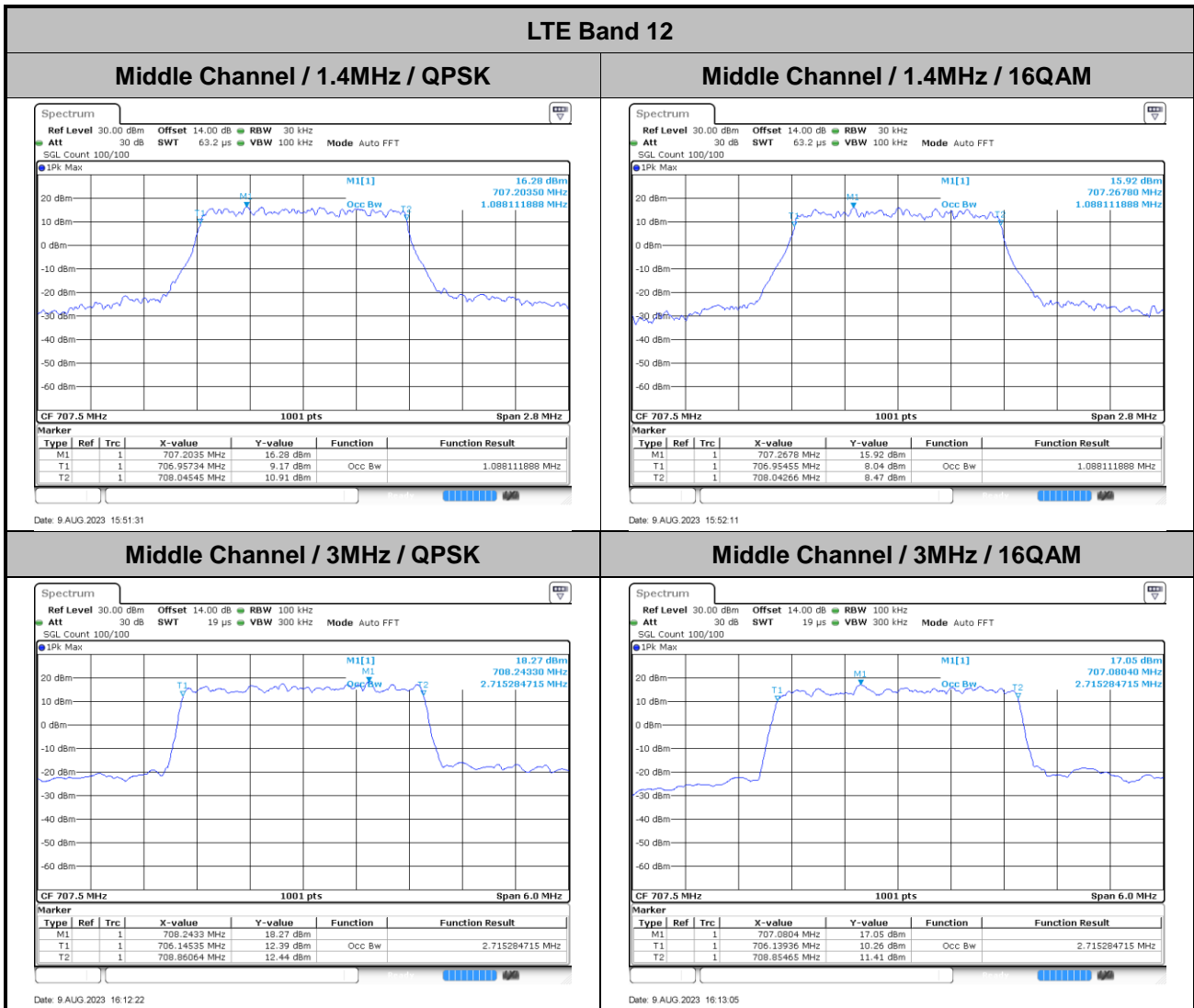
Middle Channel / 10MHz / 16QAM





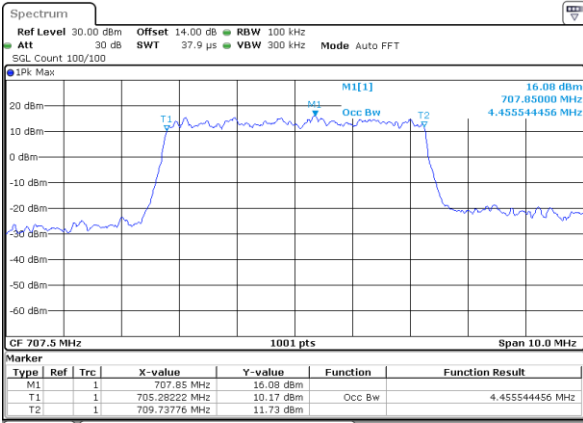
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.09	2.72	2.72	4.46	4.45	9.01	8.95	-	-	-	-



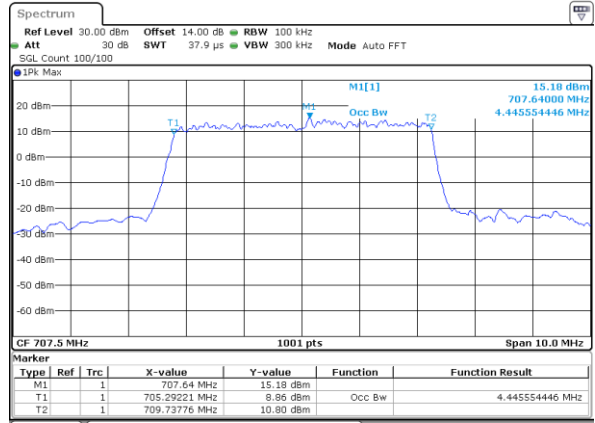


Middle Channel / 5MHz / QPSK



Date: 9 AUG 2023 16:29:02

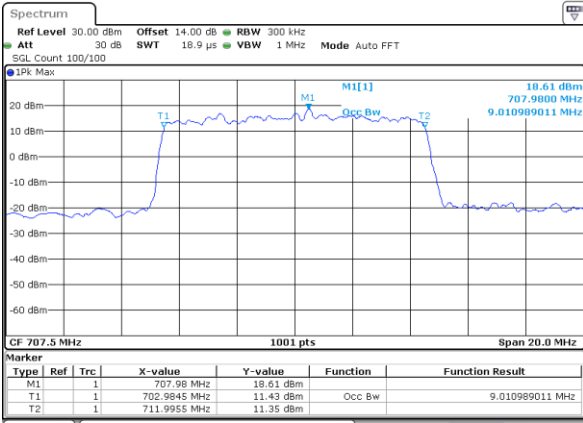
Middle Channel / 5MHz / 16QAM



Date: 9 AUG 2023 16:29:45

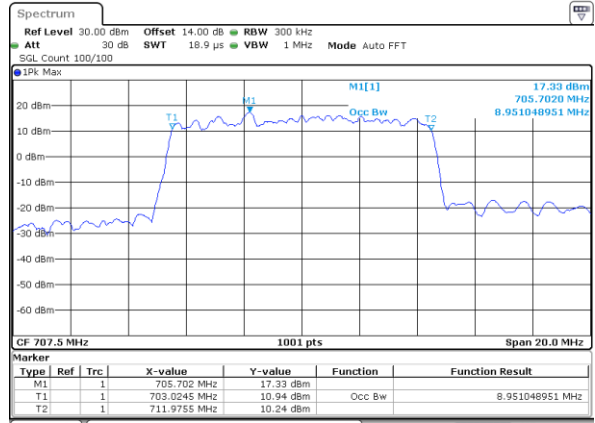
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 9 AUG 2023 16:44:18

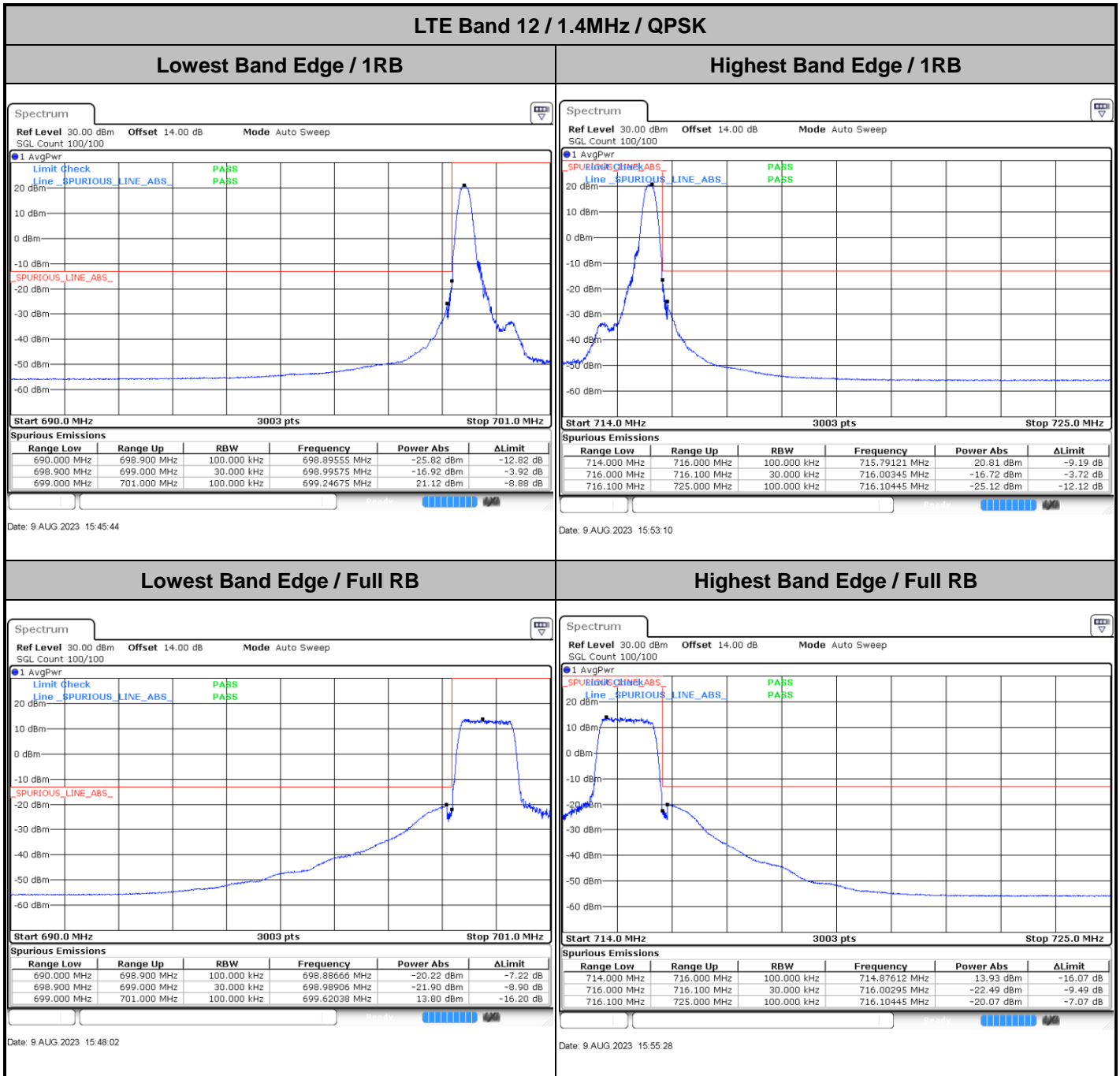
Middle Channel / 10MHz / 16QAM



Date: 9 AUG 2023 16:45:01



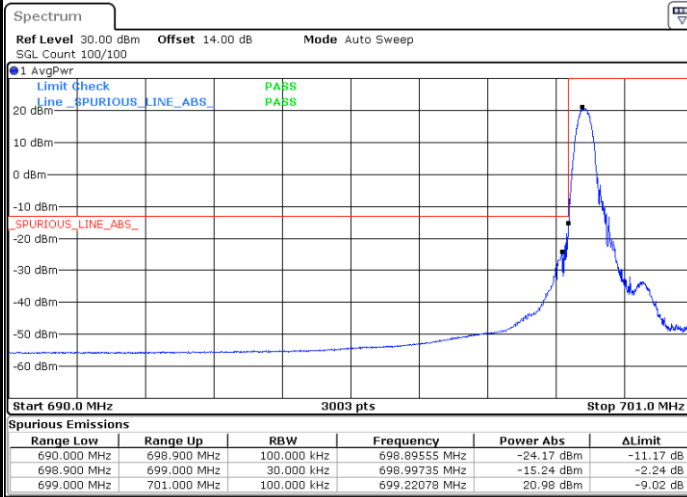
Conducted Band Edge





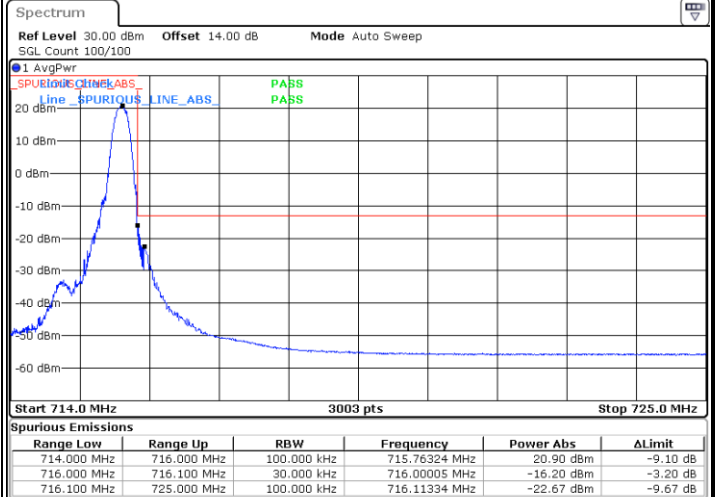
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



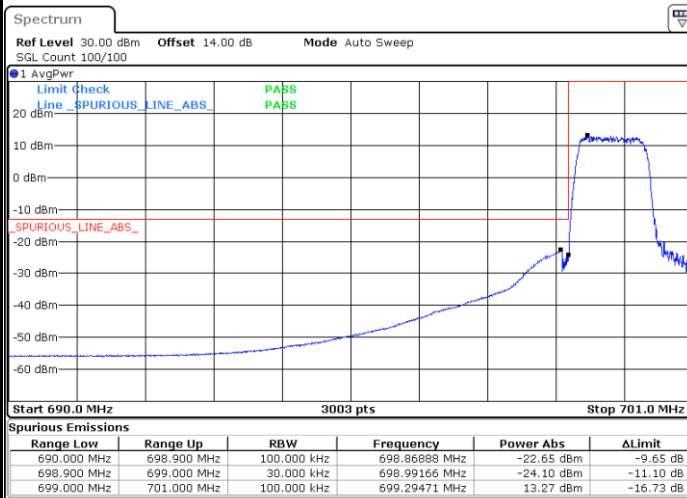
Date: 9 AUG 2023 15:46:30

Highest Band Edge / 1 RB



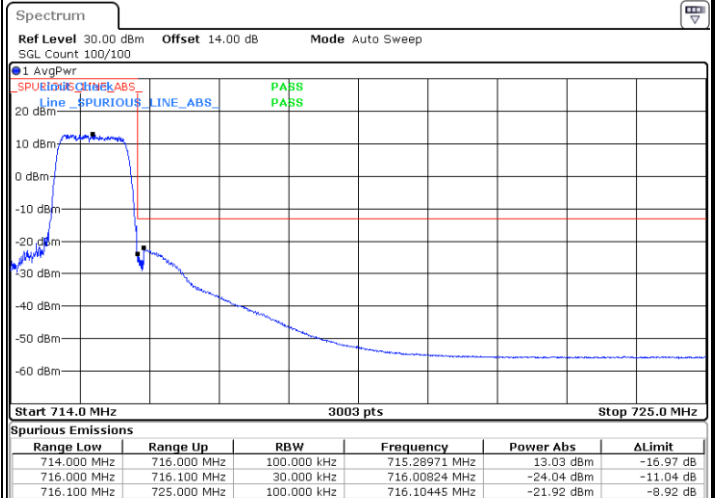
Date: 9 AUG 2023 15:53:56

Lowest Band Edge / Full RB



Date: 9 AUG 2023 15:46:49

Highest Band Edge / Full RB

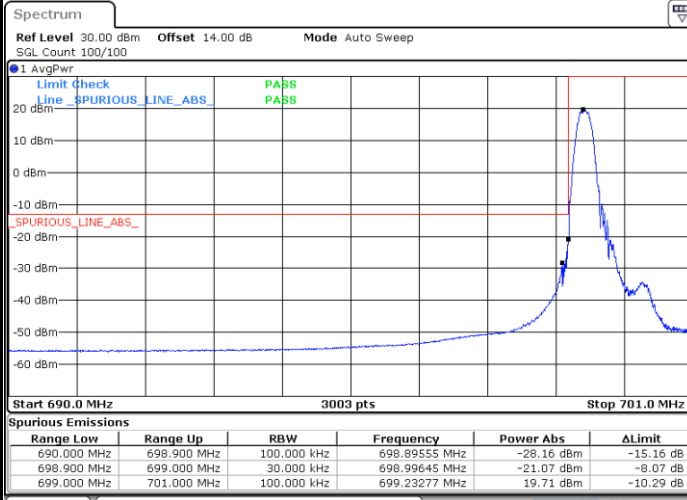


Date: 9 AUG 2023 15:56:13



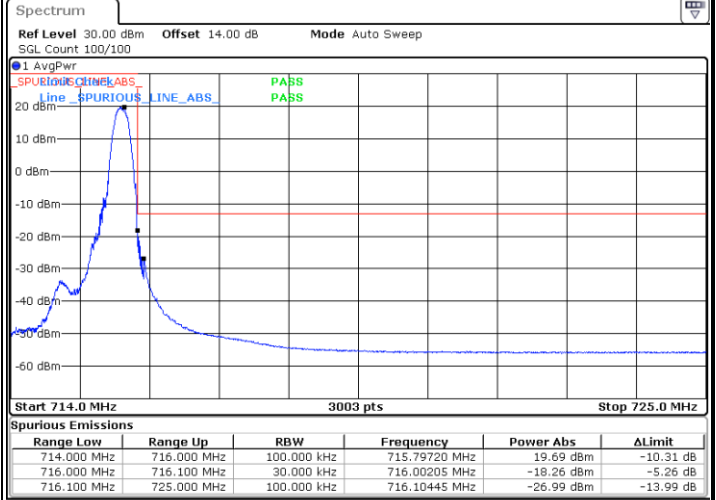
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



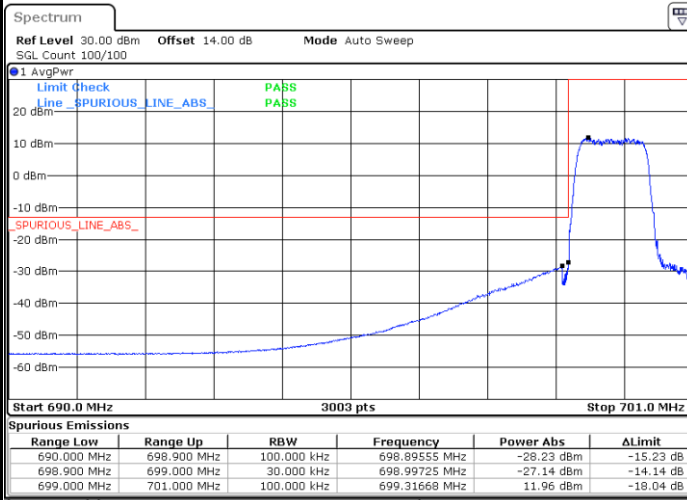
Date: 9 AUG 2023 15:47:16

Highest Band Edge / 1 RB



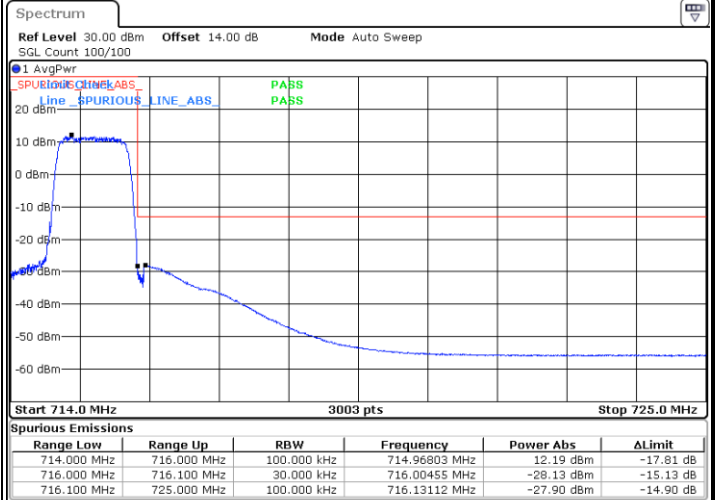
Date: 9 AUG 2023 15:54:42

Lowest Band Edge / Full RB



Date: 9 AUG 2023 15:49:36

Highest Band Edge / Full RB

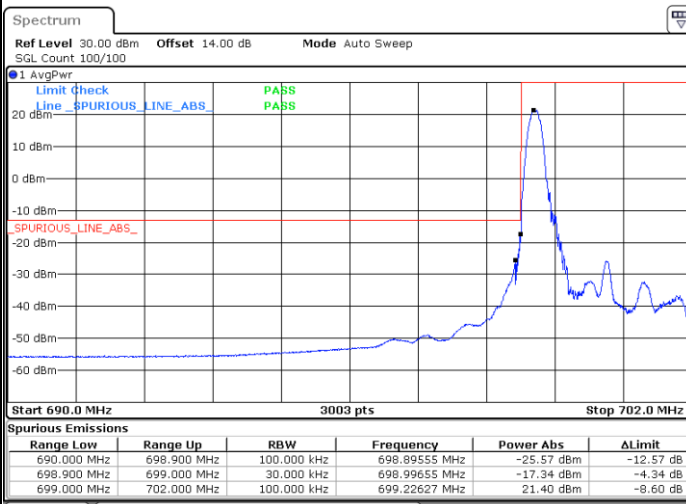


Date: 9 AUG 2023 15:56:59



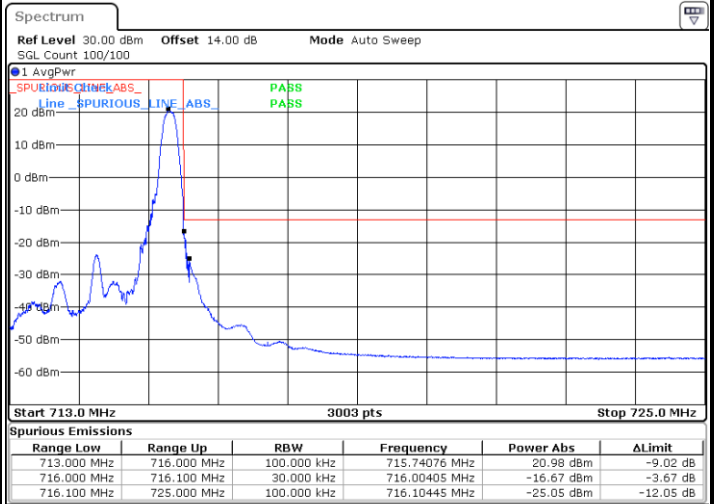
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



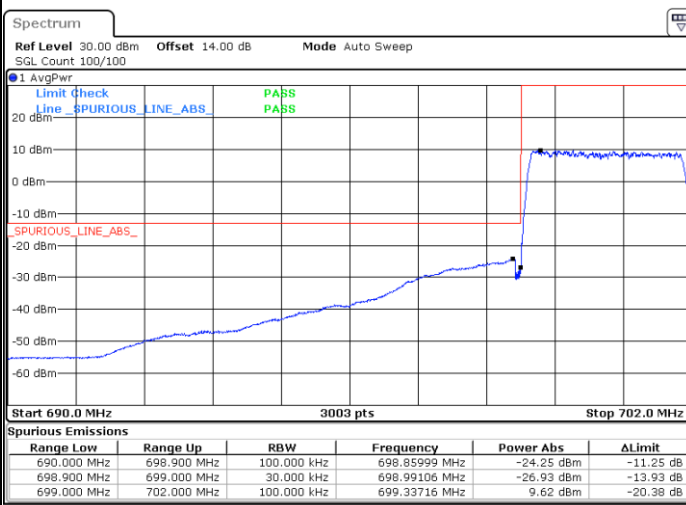
Date: 9 AUG 2023 16:06:09

Highest Band Edge / 1RB



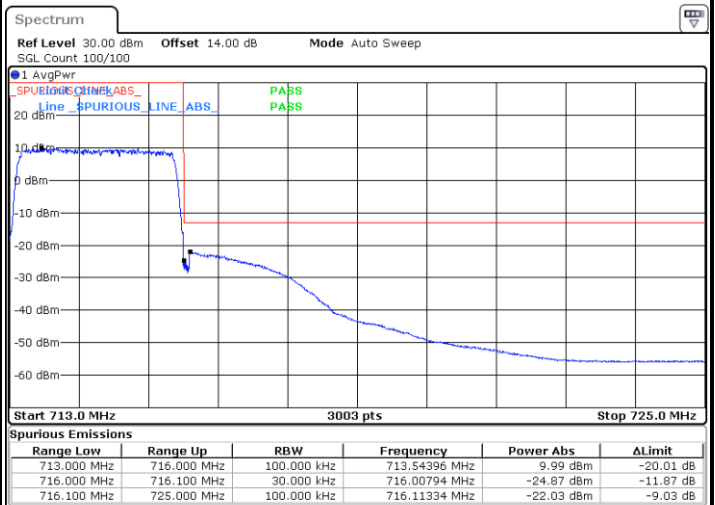
Date: 9 AUG 2023 16:14:07

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:08:38

Highest Band Edge / Full RB

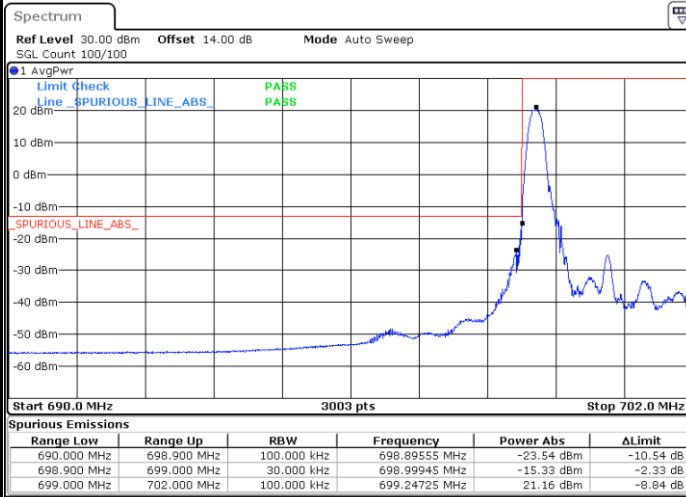


Date: 9 AUG 2023 16:16:34



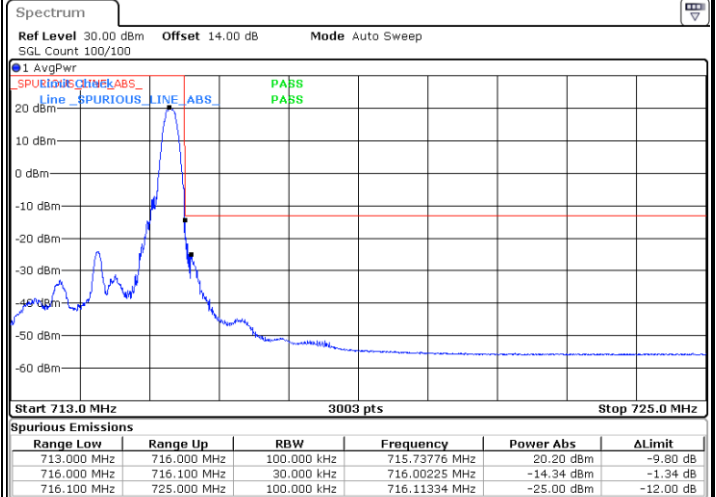
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



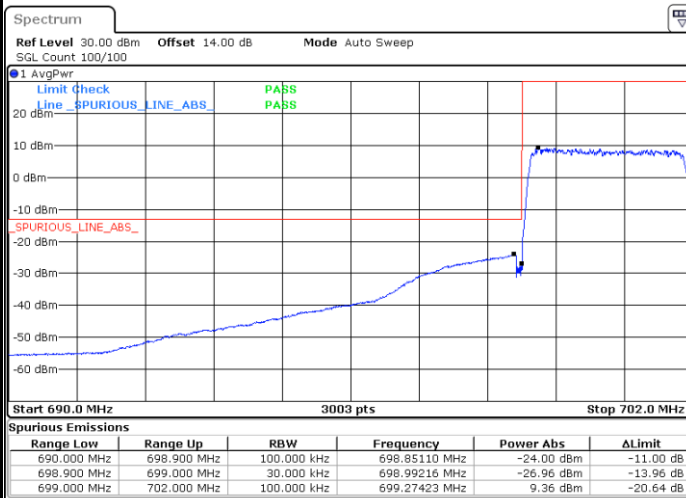
Date: 9 AUG 2023 16:06:59

Highest Band Edge / 1 RB



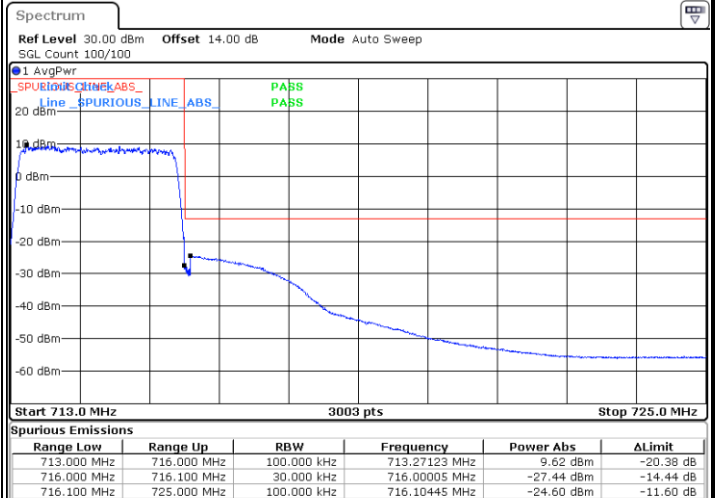
Date: 9 AUG 2023 16:14:56

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:09:27

Highest Band Edge / Full RB

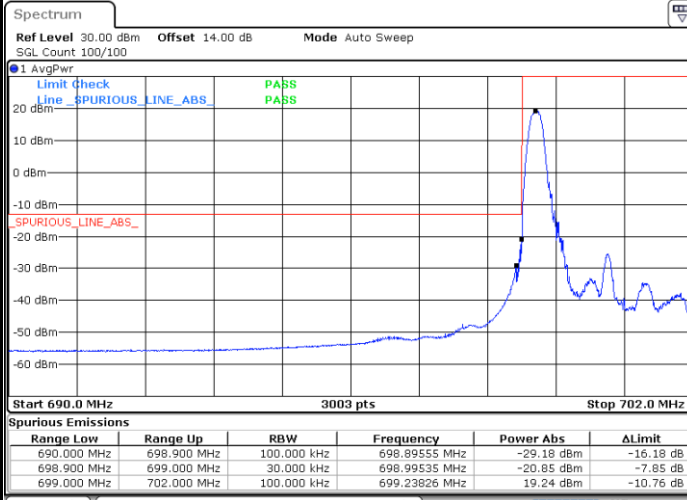


Date: 9 AUG 2023 16:17:23



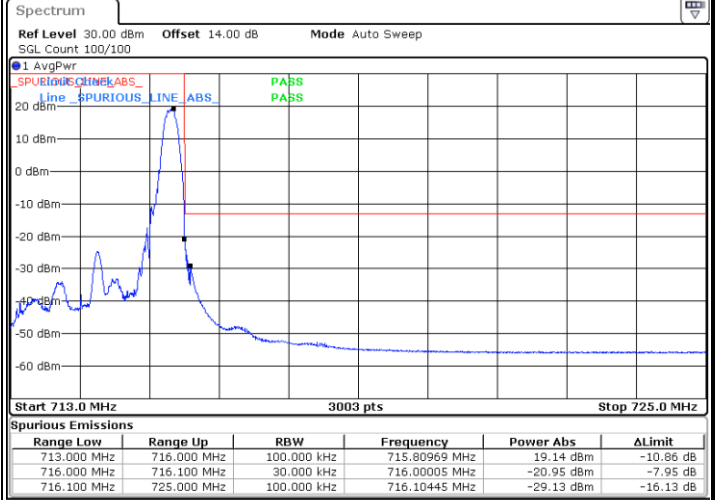
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



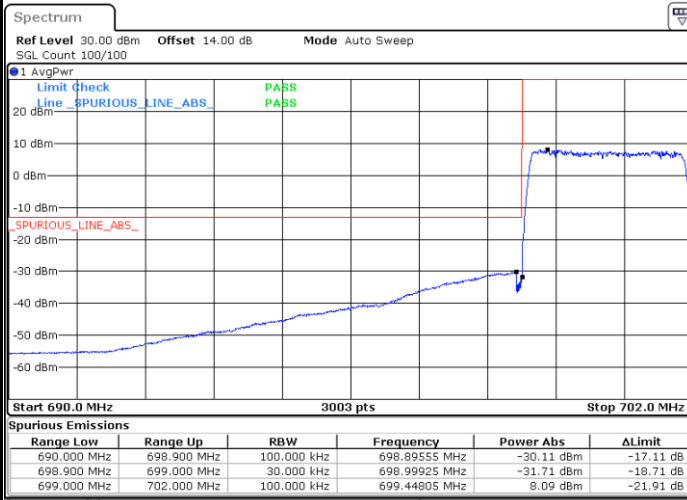
Date: 9 AUG 2023 16:07:48

Highest Band Edge / 1 RB



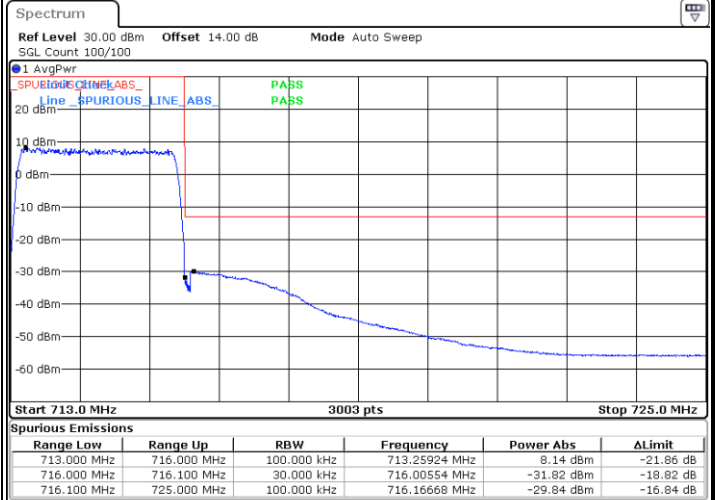
Date: 9 AUG 2023 16:15:45

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:10:16

Highest Band Edge / Full RB

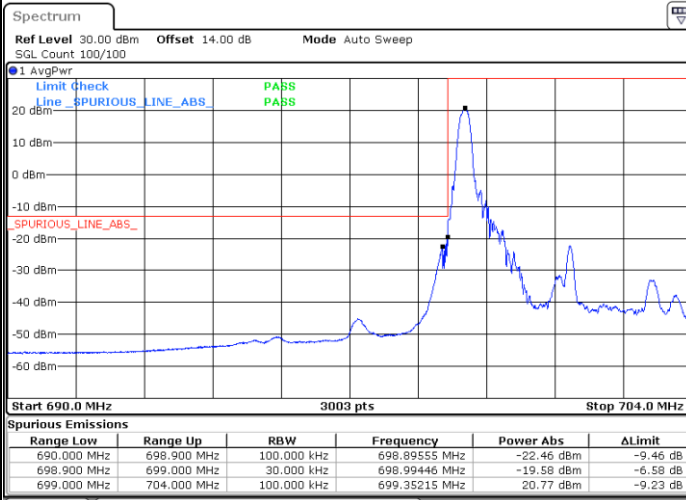


Date: 9 AUG 2023 16:18:12



LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1RB



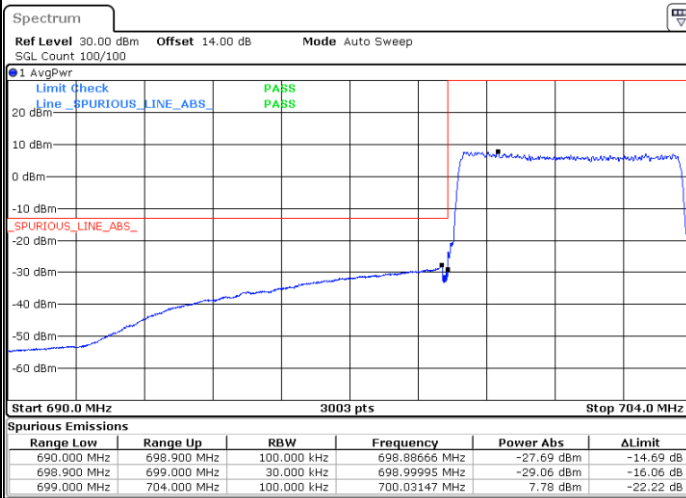
Date: 9 AUG 2023 16:22:51

Highest Band Edge / 1RB



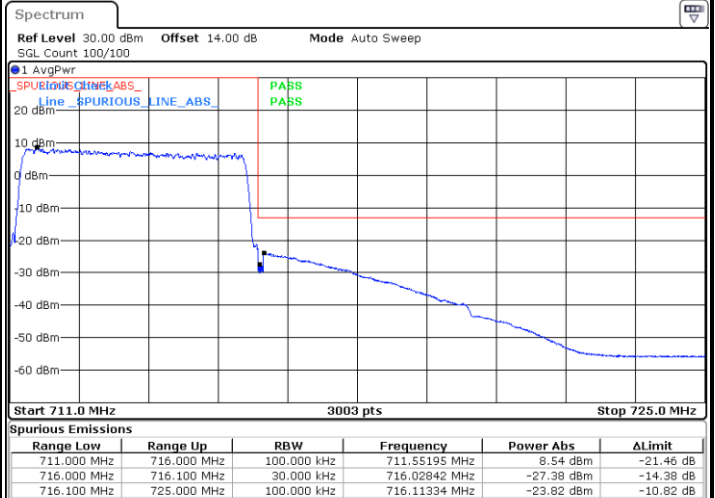
Date: 9 AUG 2023 16:30:47

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:25:19

Highest Band Edge / Full RB

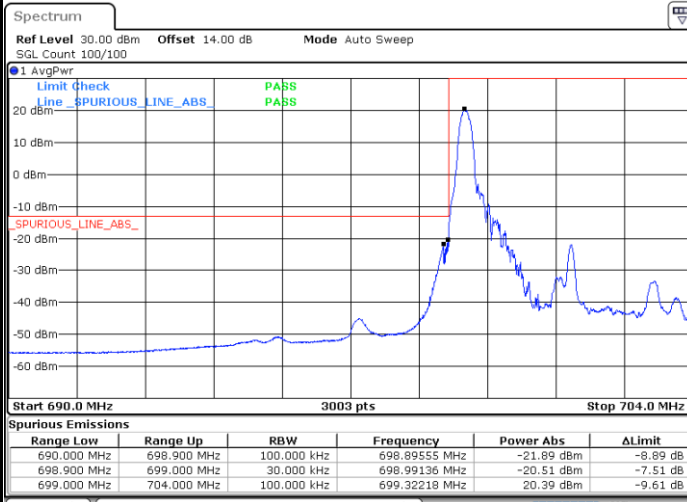


Date: 9 AUG 2023 16:33:14



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



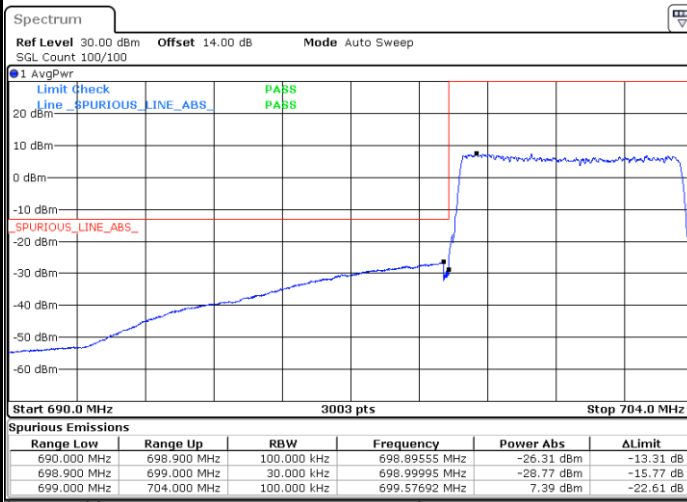
Date: 9 AUG 2023 16:23:40

Highest Band Edge / 1 RB



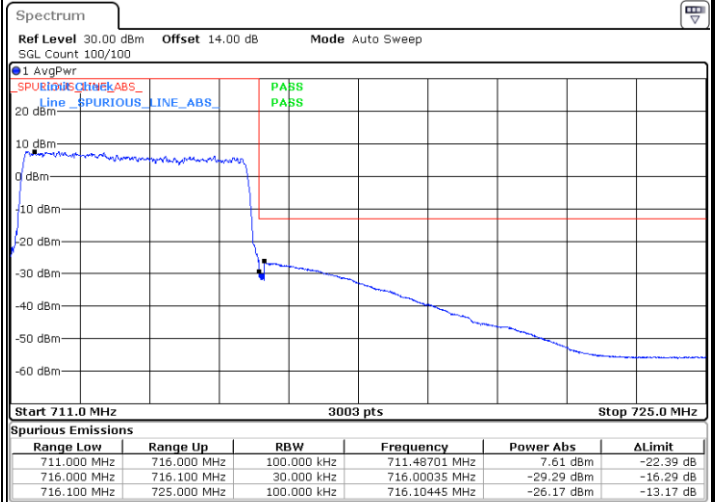
Date: 9 AUG 2023 16:31:36

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:26:08

Highest Band Edge / Full RB

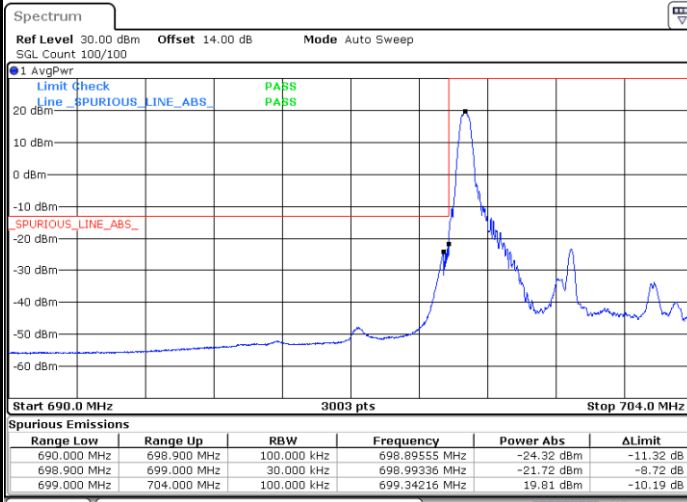


Date: 9 AUG 2023 16:34:03



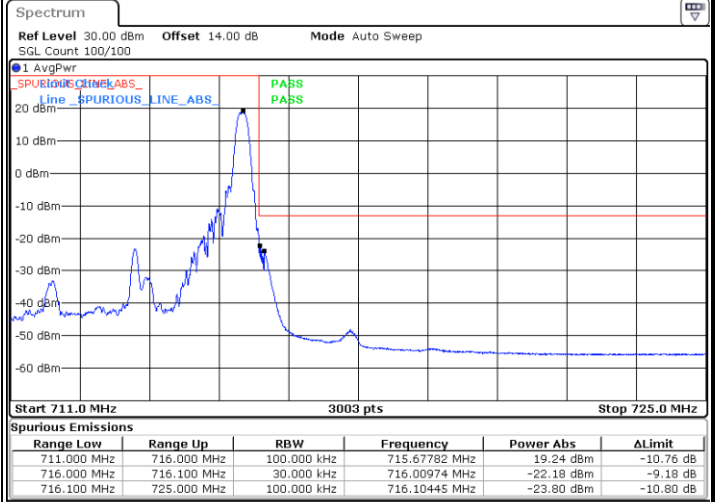
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



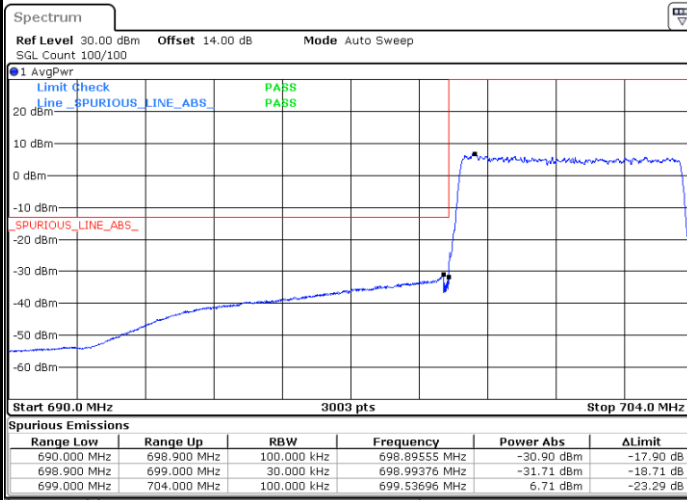
Date: 9 AUG 2023 16:24:30

Highest Band Edge / 1 RB



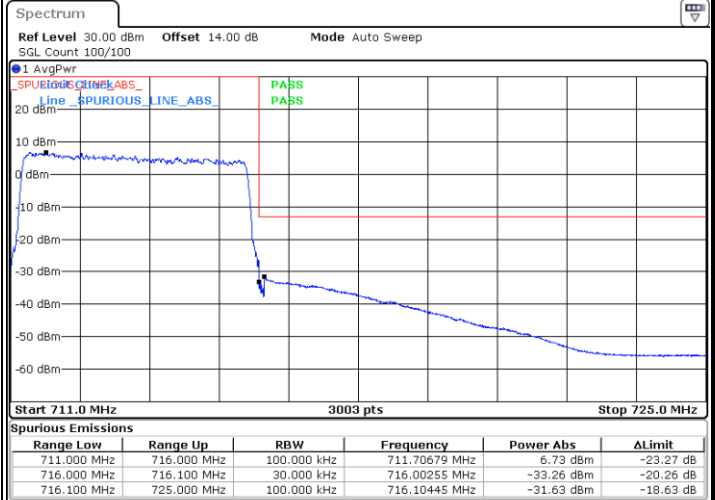
Date: 9 AUG 2023 16:32:25

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:26:57

Highest Band Edge / Full RB

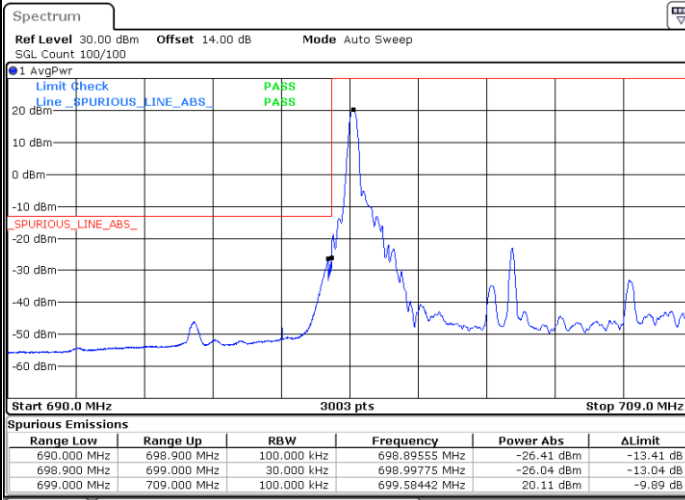


Date: 9 AUG 2023 16:34:53



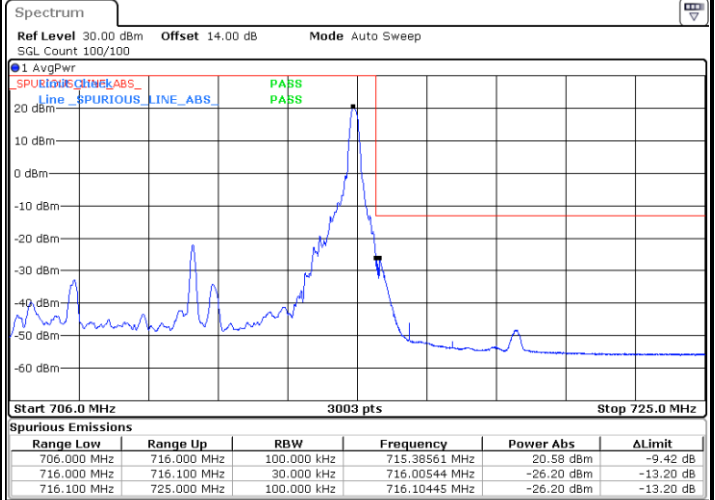
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1RB



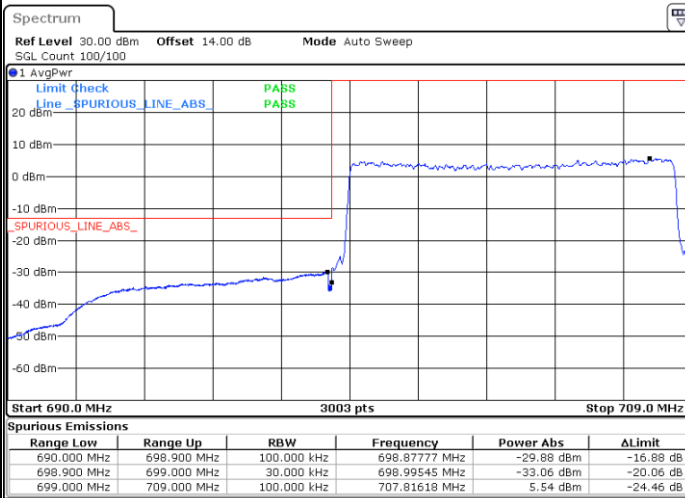
Date: 9 AUG 2023 16:38:05

Highest Band Edge / 1RB



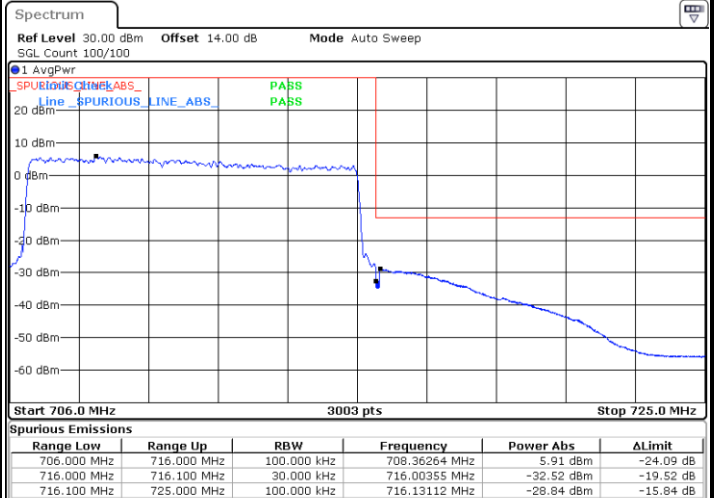
Date: 9 AUG 2023 16:46:03

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:40:34

Highest Band Edge / Full RB

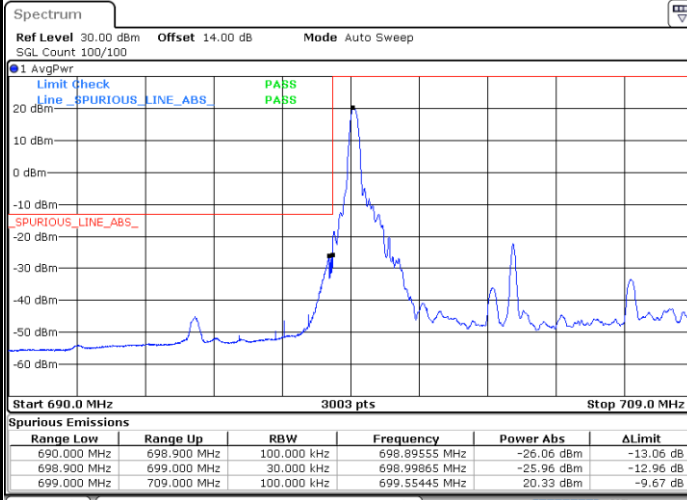


Date: 9 AUG 2023 16:48:32



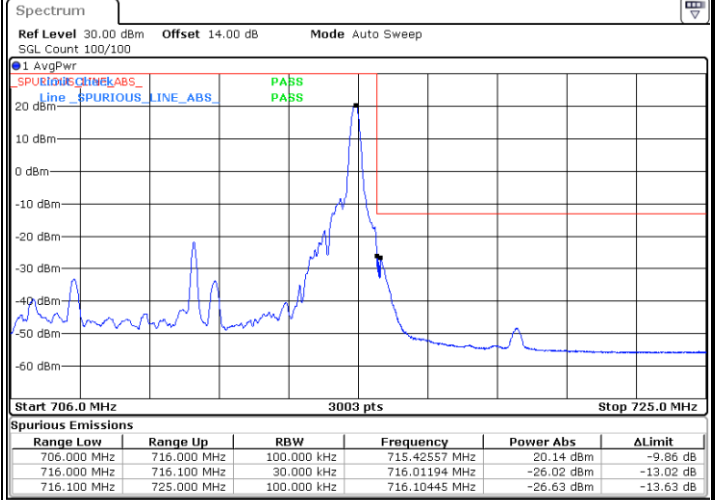
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



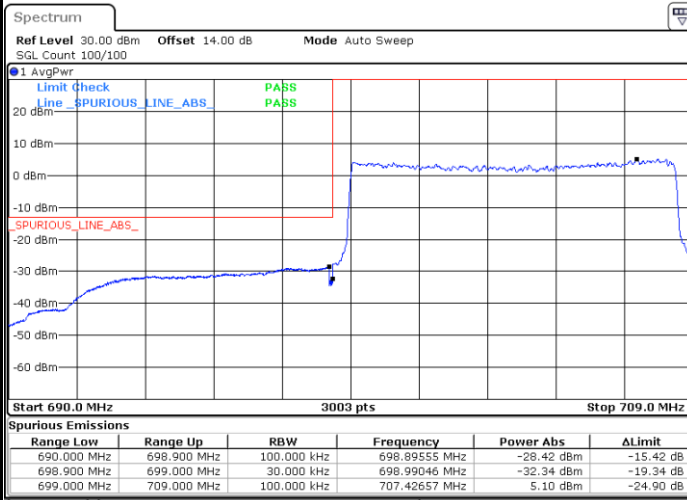
Date: 9 AUG 2023 16:38:55

Highest Band Edge / 1 RB



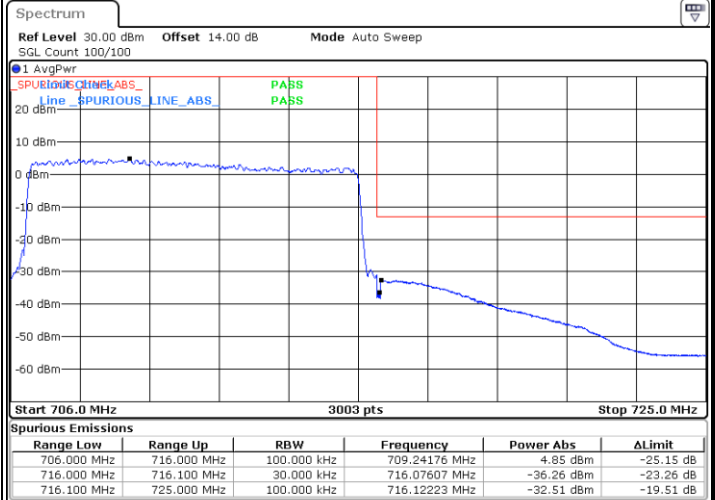
Date: 9 AUG 2023 16:48:53

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:41:23

Highest Band Edge / Full RB

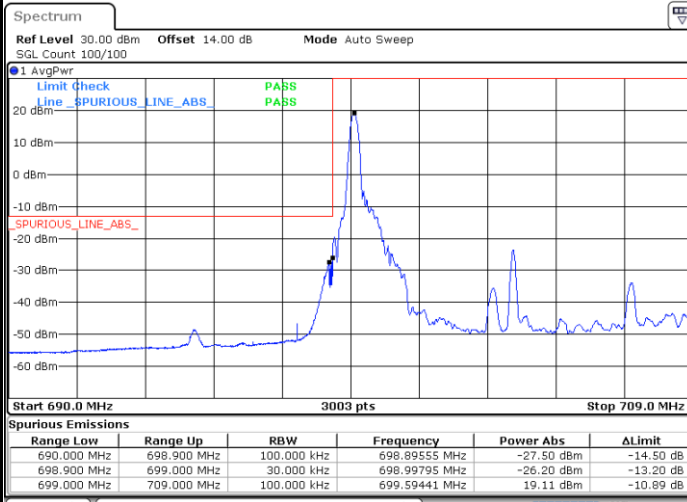


Date: 9 AUG 2023 16:49:21



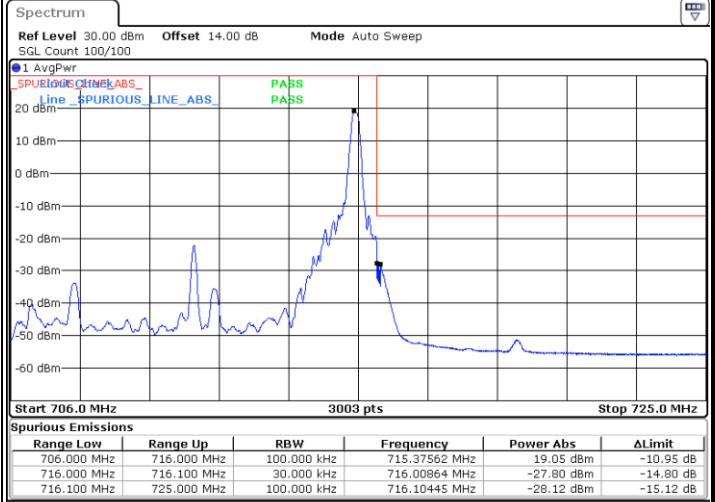
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



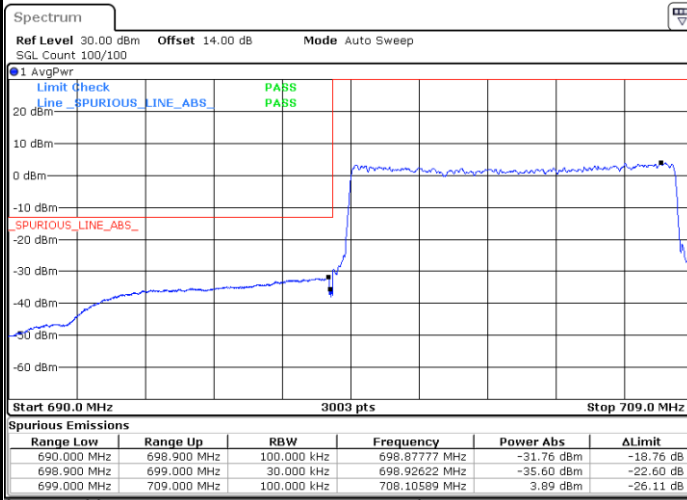
Date: 9 AUG 2023 16:39:44

Highest Band Edge / 1 RB



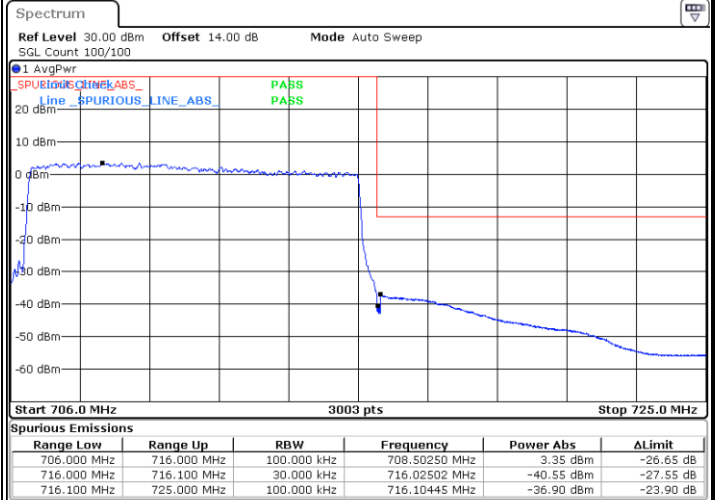
Date: 9 AUG 2023 16:47:42

Lowest Band Edge / Full RB



Date: 9 AUG 2023 16:42:13

Highest Band Edge / Full RB



Date: 9 AUG 2023 16:50:11



Conducted Spurious Emission

