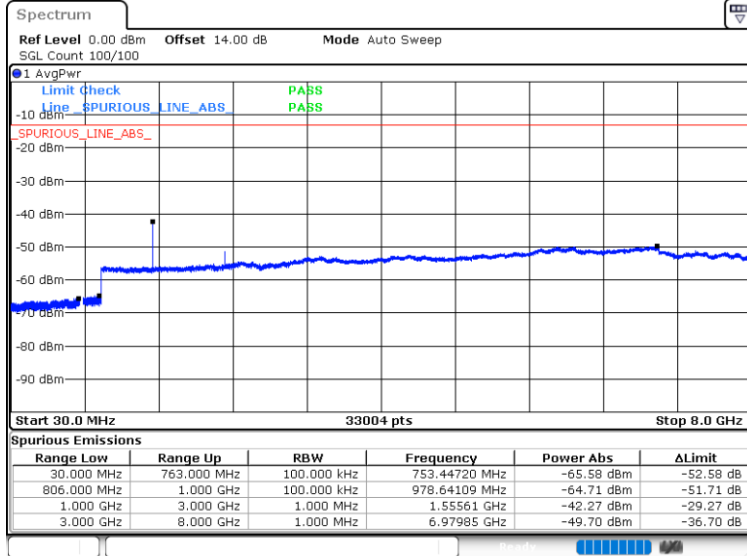




LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 25.JAN.2024 19:30:17



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	0.0012	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

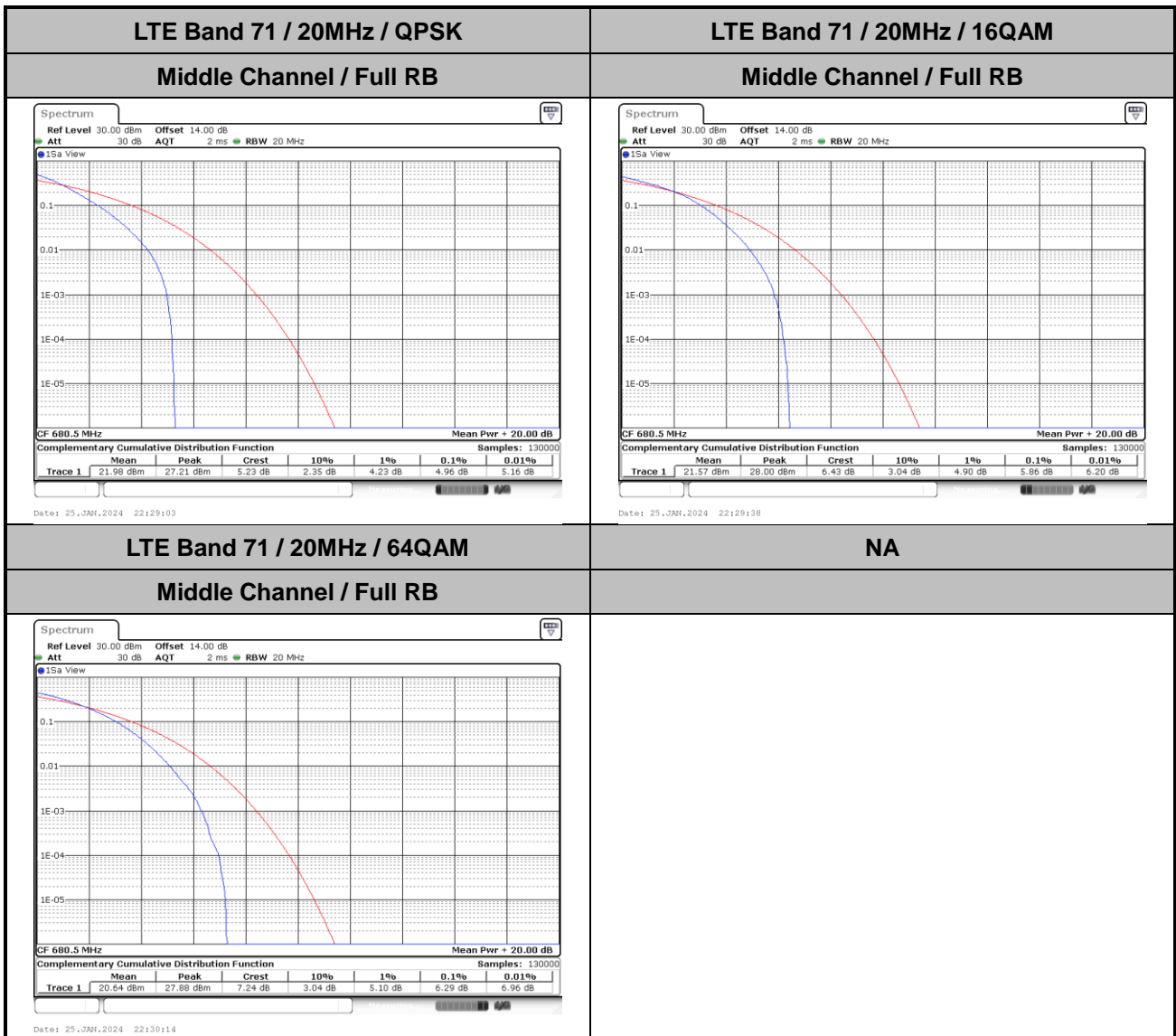
1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 71

Peak-to-Average Ratio

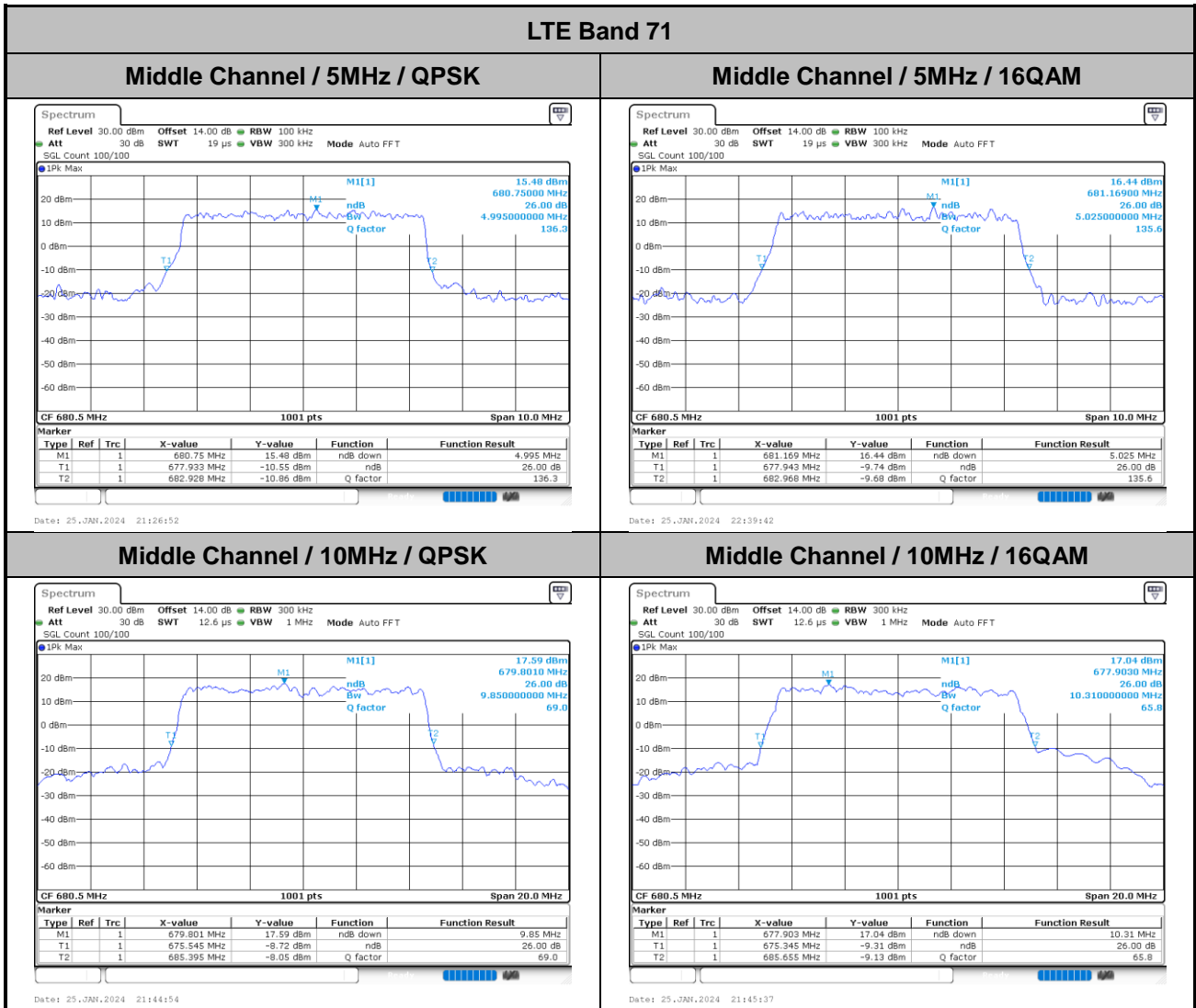
Mode	LTE Band 71 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.96	5.86	6.29	PASS





26dB Bandwidth

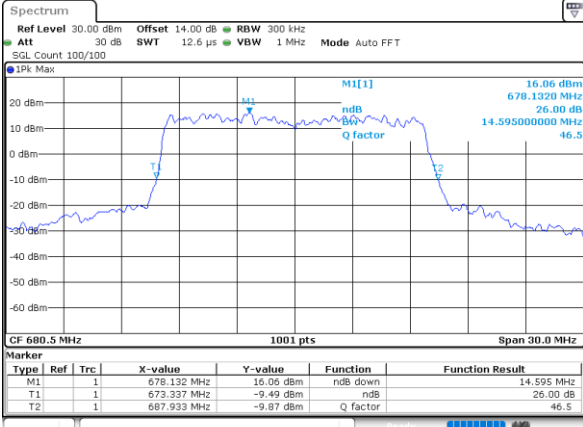
Mode	LTE Band 71 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.00	5.03	9.85	10.31	14.60	14.18	19.06	19.14





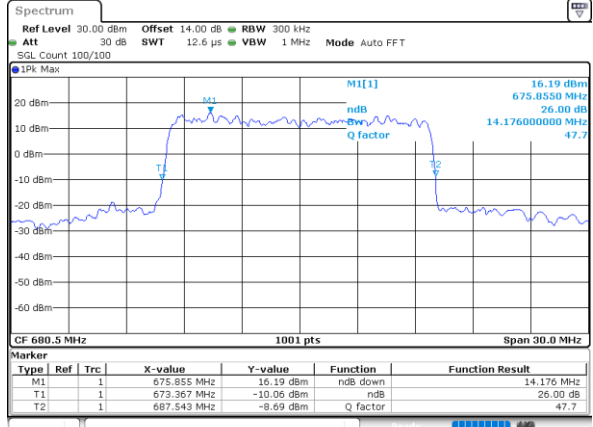
LTE Band 71

Middle Channel / 15MHz / QPSK



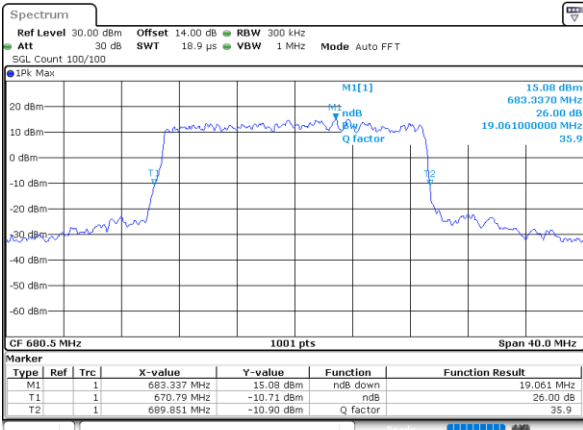
Date: 25_JAN_2024 22:05:16

Middle Channel / 15MHz / 16QAM



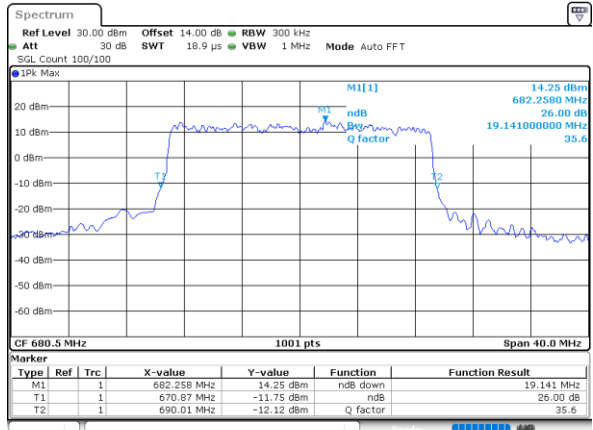
Date: 25_JAN_2024 22:07:53

Middle Channel / 20MHz / QPSK



Date: 25_JAN_2024 22:25:50

Middle Channel / 20MHz / 16QAM

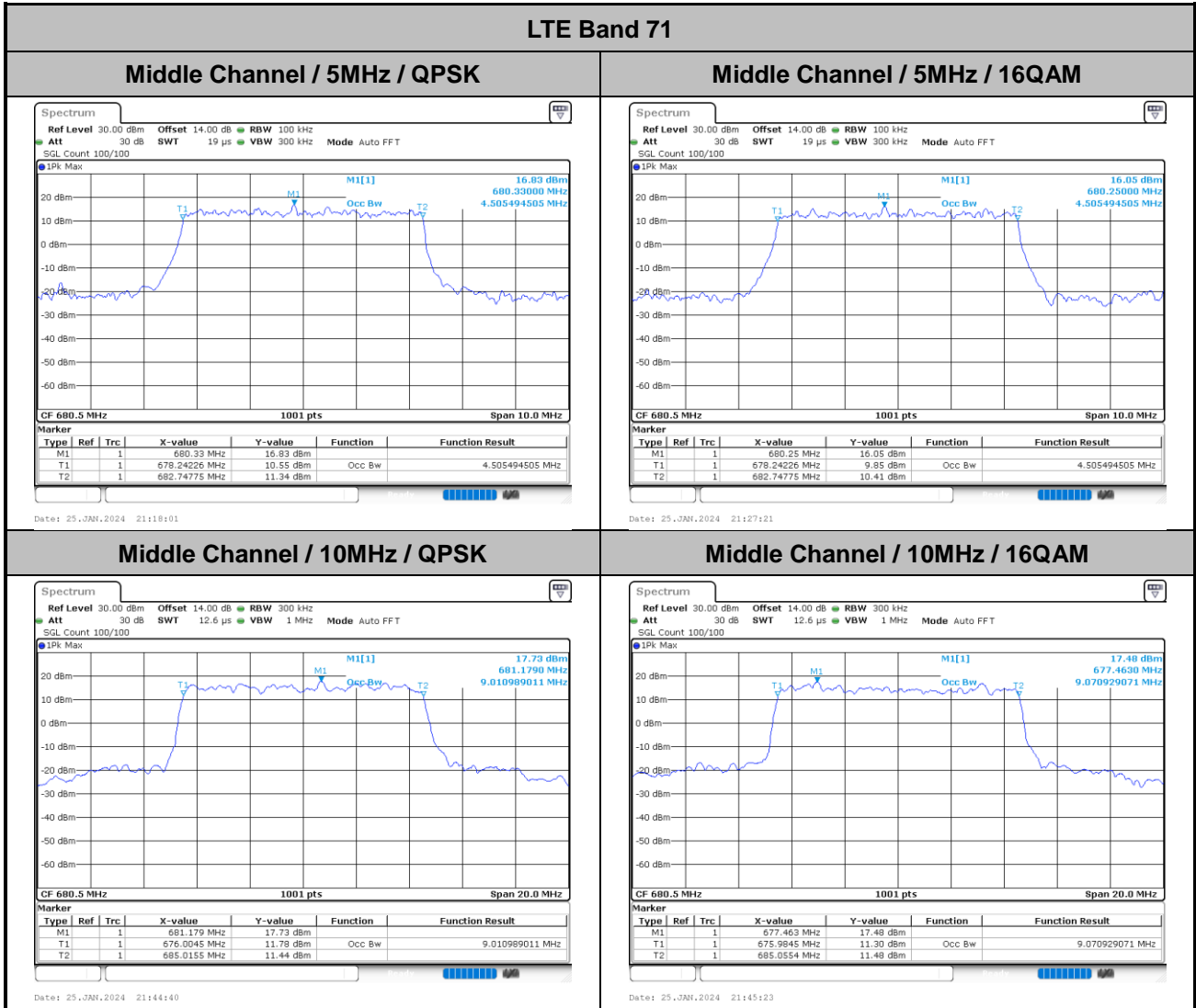


Date: 25_JAN_2024 22:28:33



Occupied Bandwidth

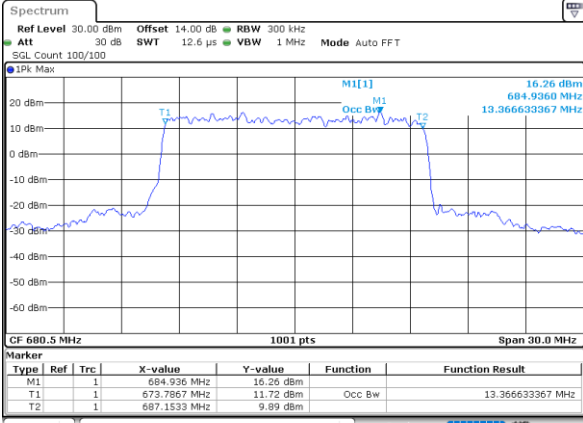
Mode	LTE Band 71 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.51	4.51	9.01	9.07	13.37	13.49	17.78	17.90





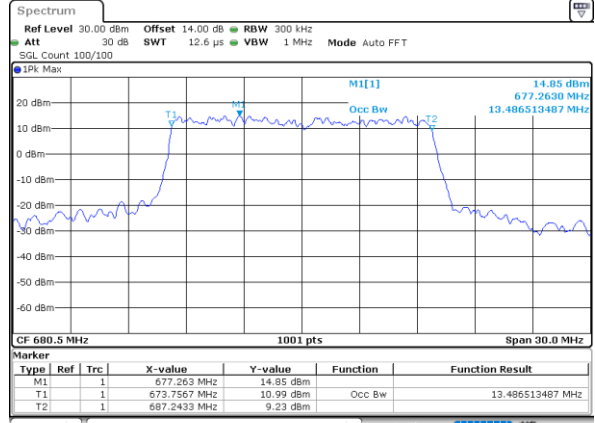
LTE Band 71

Middle Channel / 15MHz / QPSK



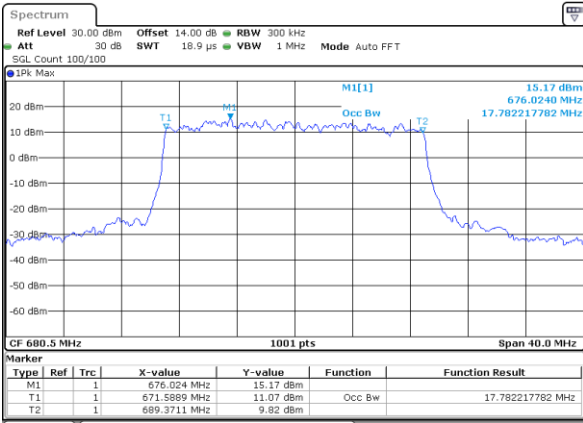
Date: 25_JAN_2024 22:03:07

Middle Channel / 15MHz / 16QAM



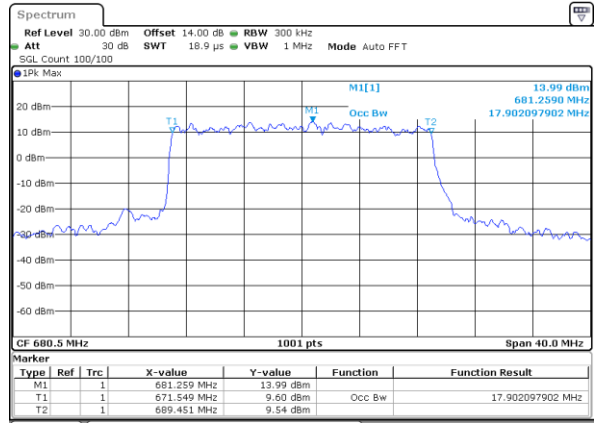
Date: 25_JAN_2024 22:05:45

Middle Channel / 20MHz / QPSK



Date: 25_JAN_2024 22:25:06

Middle Channel / 20MHz / 16QAM



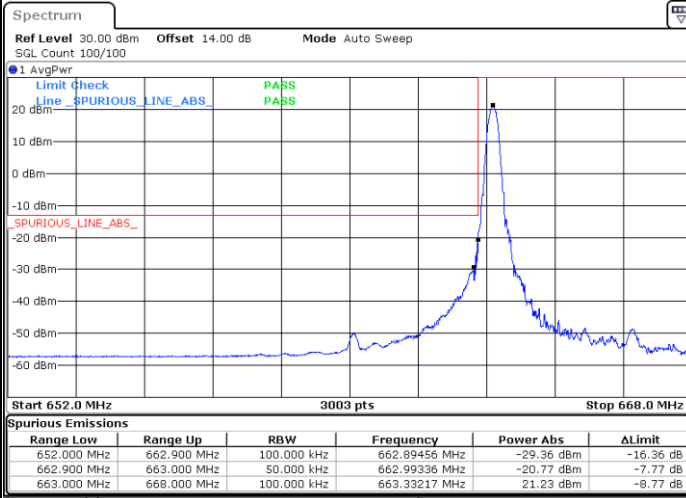
Date: 25_JAN_2024 22:26:24



Conducted Band Edge

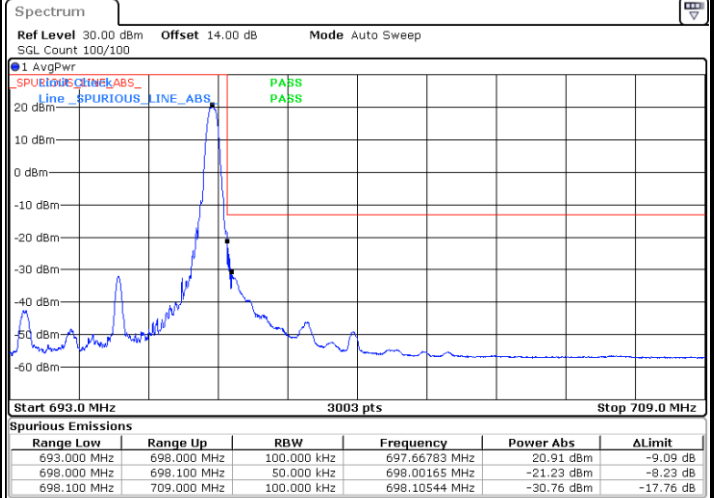
LTE Band 71 / 5MHz / QPSK

Lowest Band Edge / 1 RB



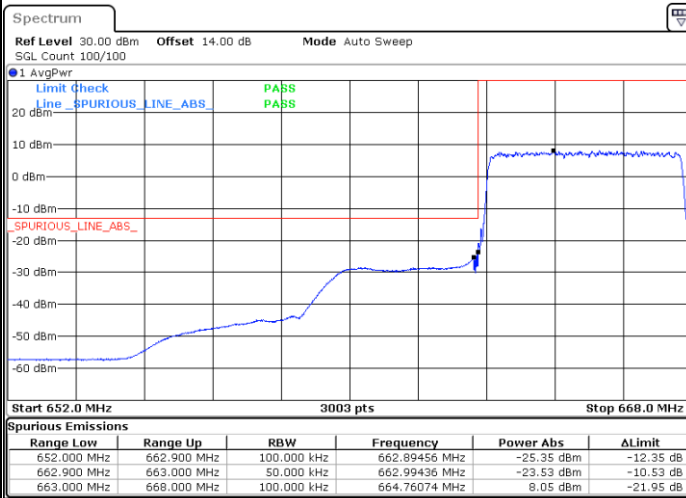
Date: 25.JAN.2024 21:09:38

Highest Band Edge / 1 RB



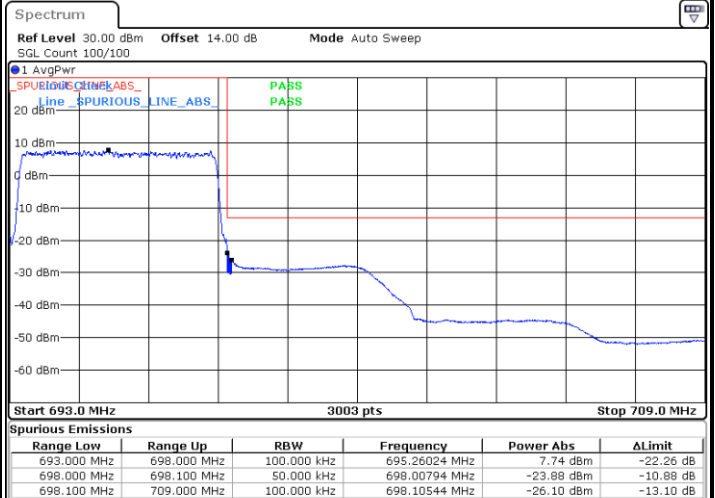
Date: 25.JAN.2024 21:28:42

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:21:20

Highest Band Edge / Full RB

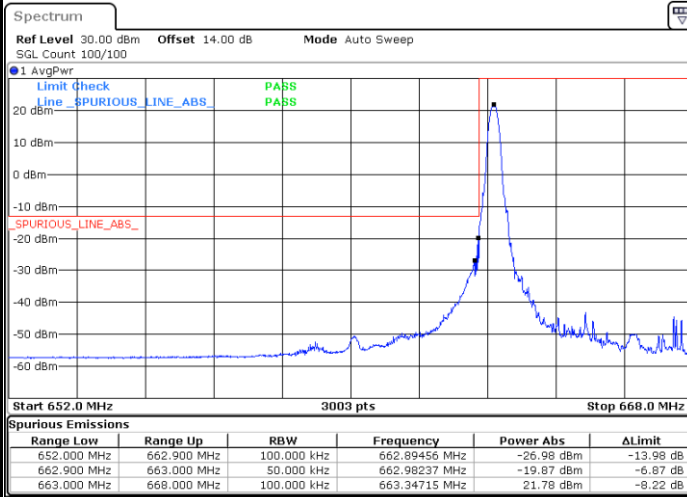


Date: 25.JAN.2024 21:31:54



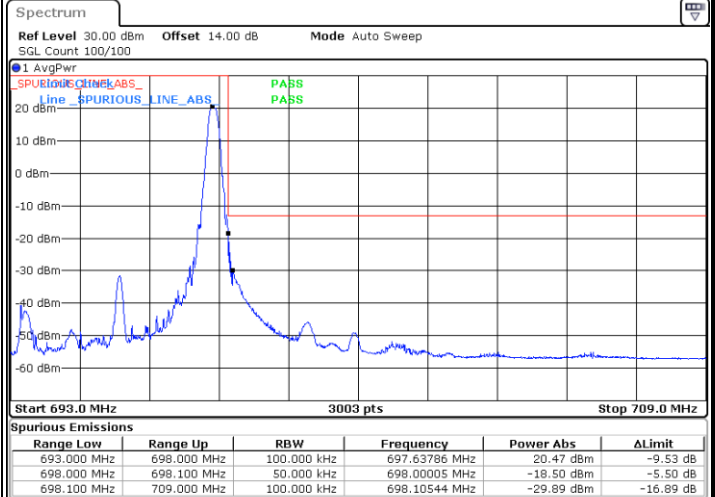
LTE Band 71 / 5MHz / 16QAM

Lowest Band Edge / 1RB



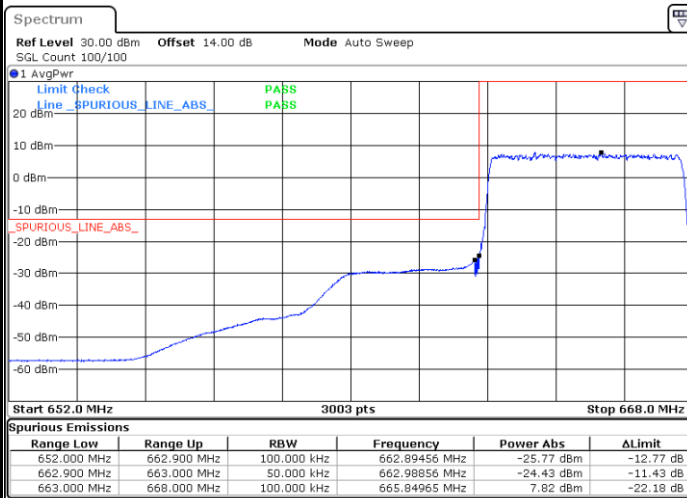
Date: 25.JAN.2024 21:19:12

Highest Band Edge / 1 RB



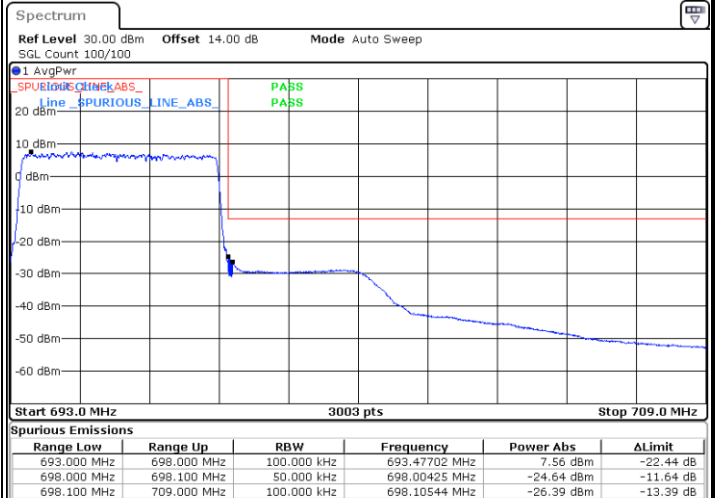
Date: 25.JAN.2024 21:29:46

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:22:23

Highest Band Edge / Full RB

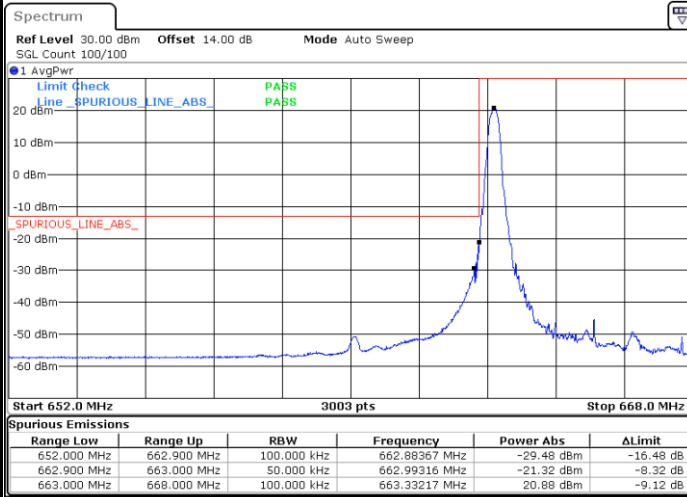


Date: 25.JAN.2024 21:32:58



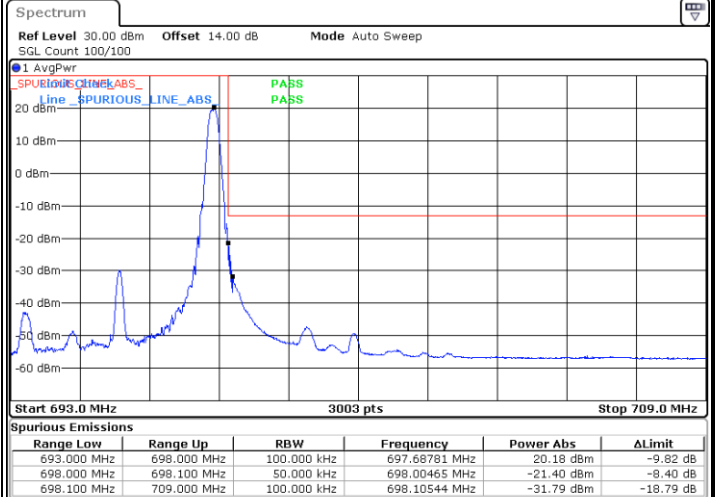
LTE Band 71 / 5MHz / 64QAM

Lowest Band Edge / 1RB



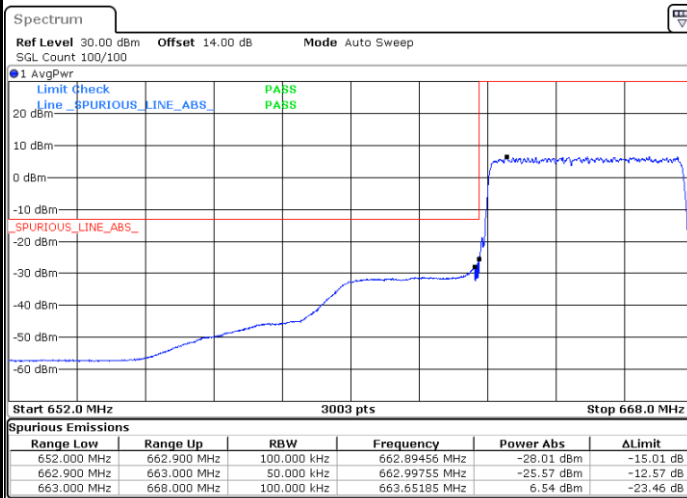
Date: 25.JAN.2024 21:20:16

Highest Band Edge / 1 RB



Date: 25.JAN.2024 21:30:50

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:23:27

Highest Band Edge / Full RB

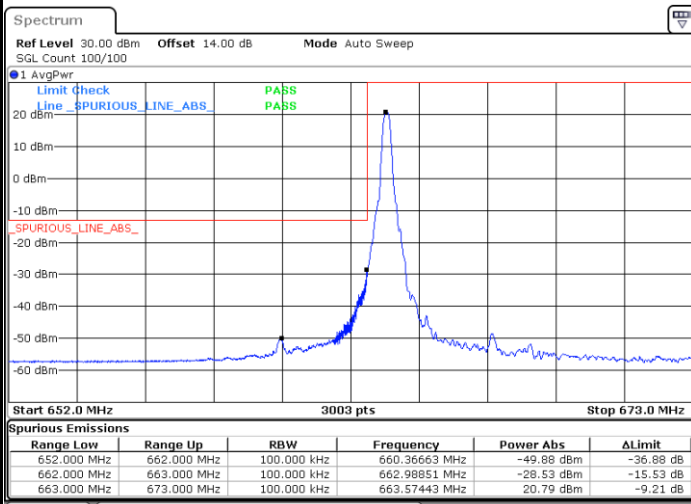


Date: 25.JAN.2024 21:34:02



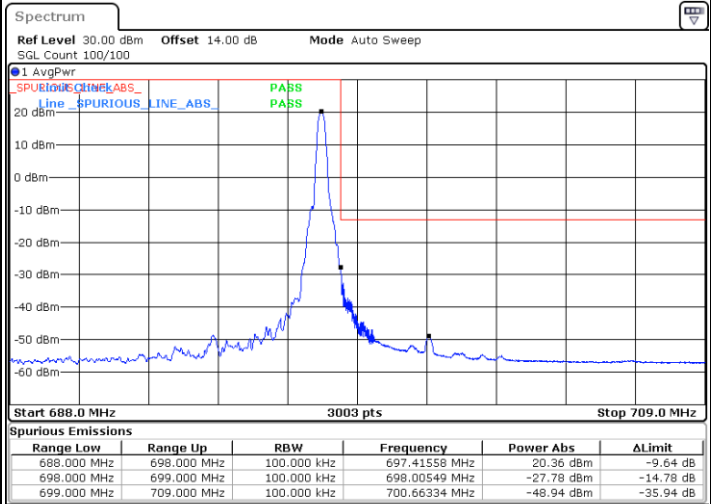
LTE Band 71 / 10MHz / QPSK

Lowest Band Edge / 1 RB



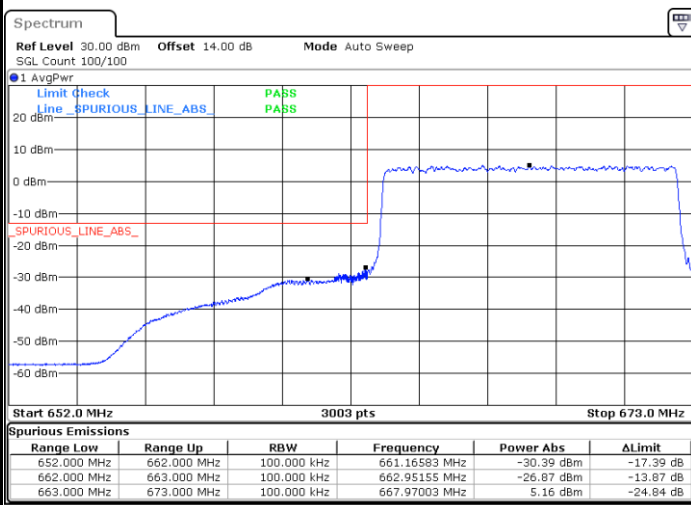
Date: 25.JAN.2024 21:36:24

Highest Band Edge / 1 RB



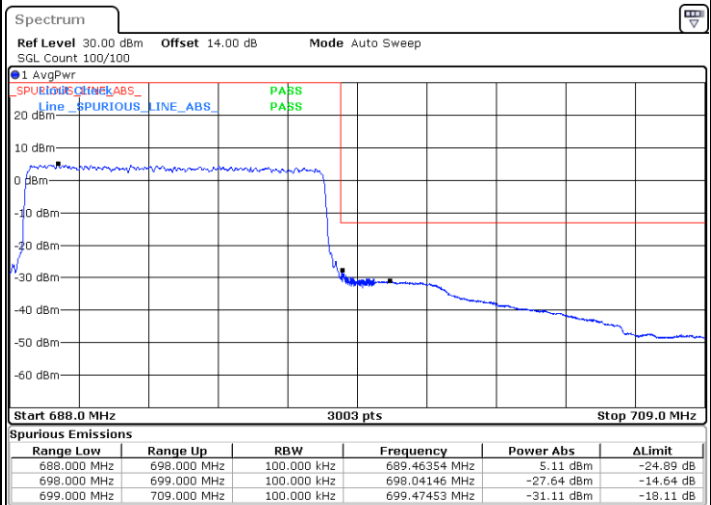
Date: 25.JAN.2024 21:46:40

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:39:36

Highest Band Edge / Full RB

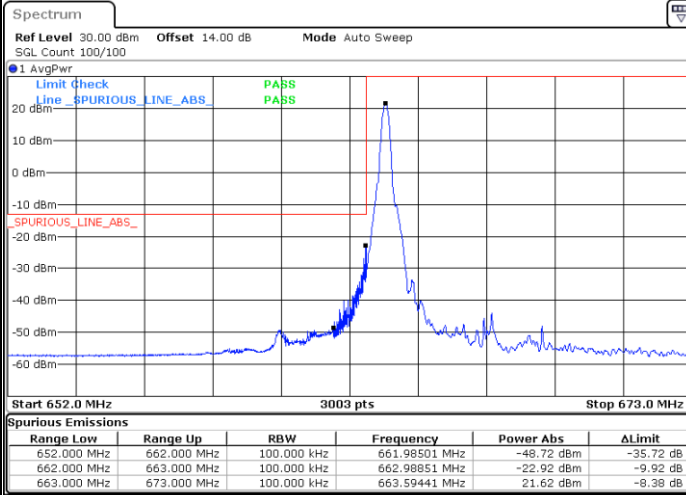


Date: 25.JAN.2024 21:49:55



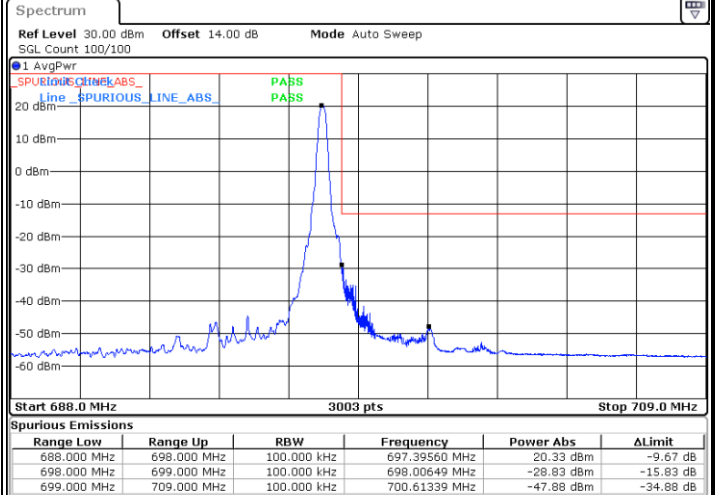
LTE Band 71 / 10MHz / 16QAM

Lowest Band Edge / 1RB



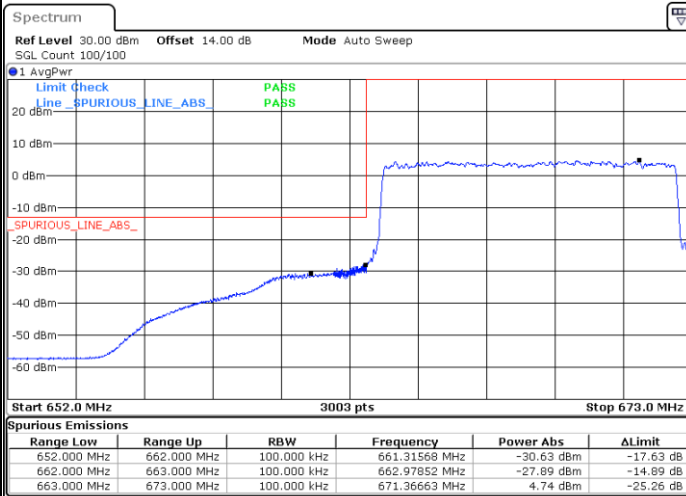
Date: 25.JAN.2024 21:37:28

Highest Band Edge / 1 RB



Date: 25.JAN.2024 21:47:43

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:40:39

Highest Band Edge / Full RB

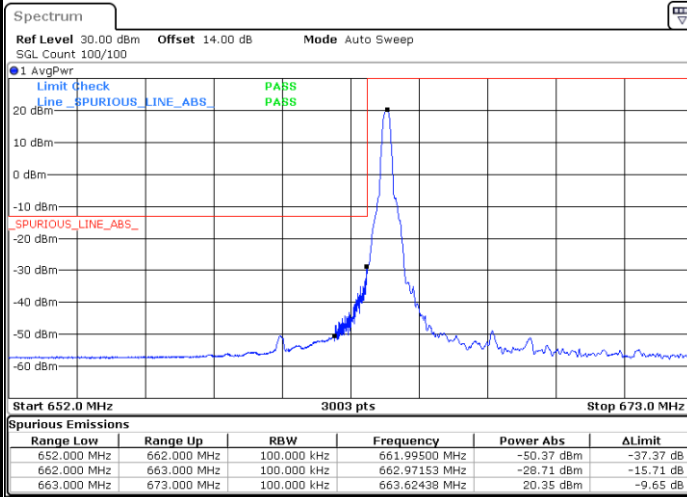


Date: 25.JAN.2024 21:51:04



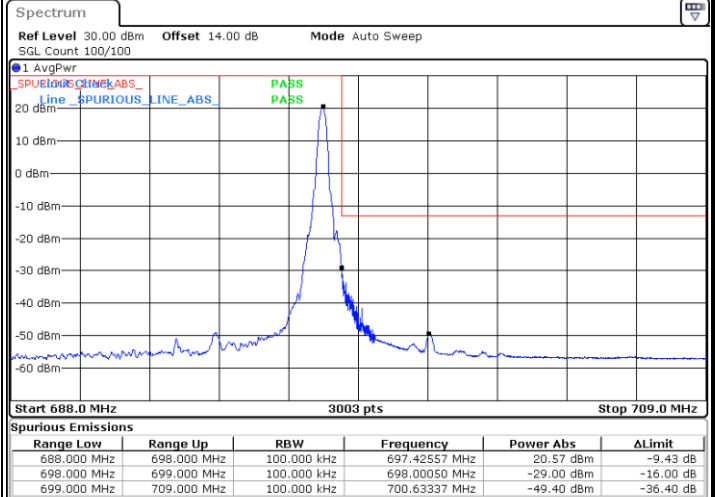
LTE Band 71 / 10MHz / 64QAM

Lowest Band Edge / 1RB



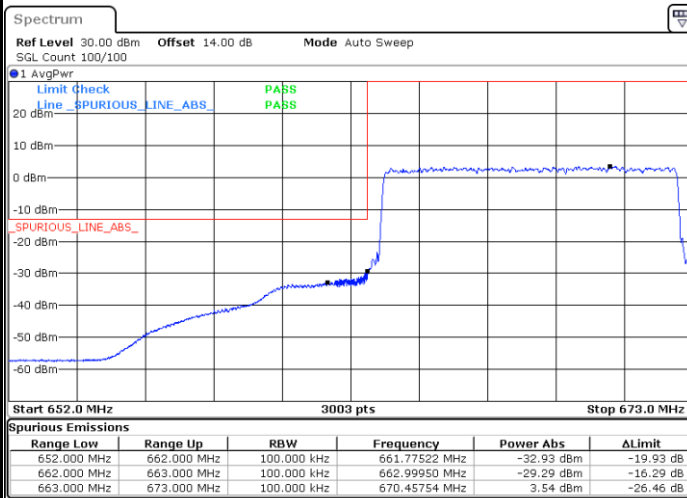
Date: 25.JAN.2024 21:38:32

Highest Band Edge / 1 RB



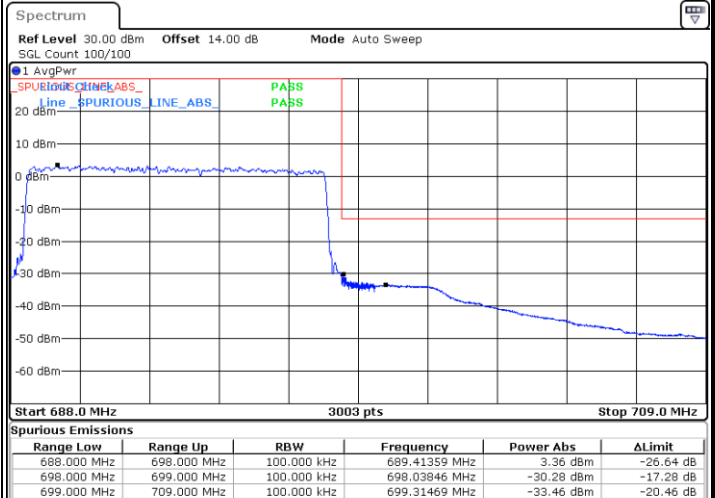
Date: 25.JAN.2024 21:48:47

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:41:43

Highest Band Edge / Full RB

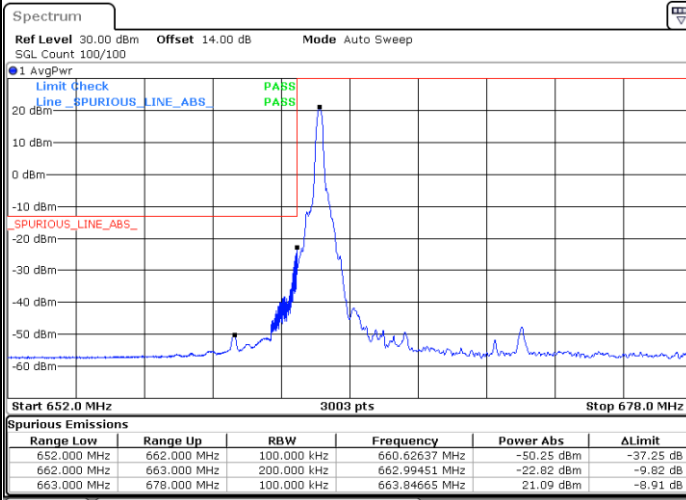


Date: 25.JAN.2024 21:52:08



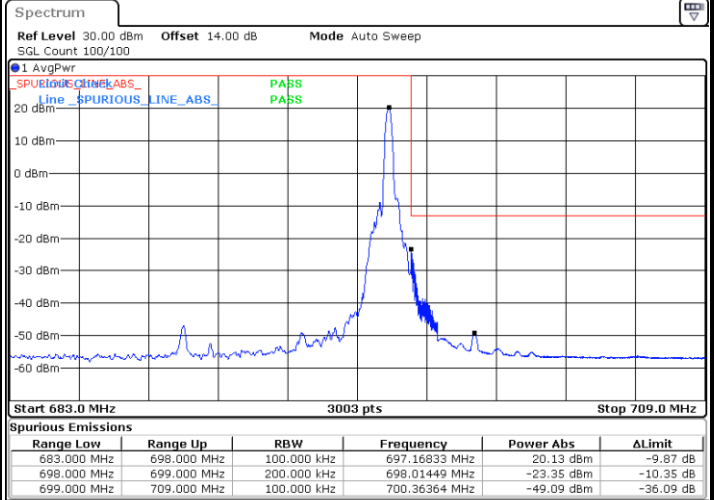
LTE Band 71 / 15MHz / QPSK

Lowest Band Edge / 1 RB



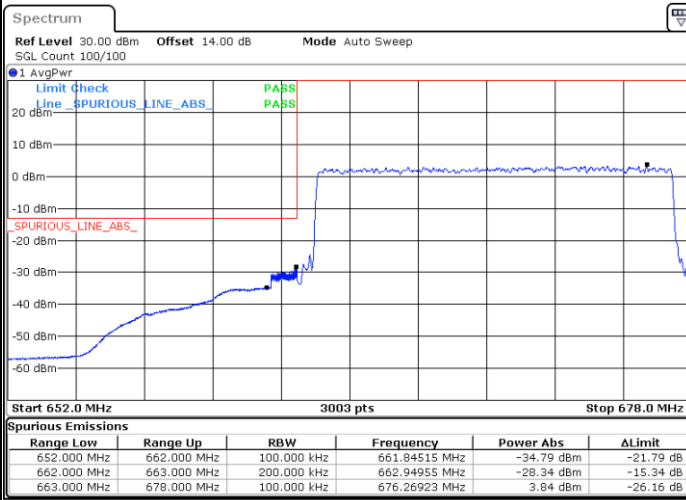
Date: 25.JAN.2024 21:54:34

Highest Band Edge / 1 RB



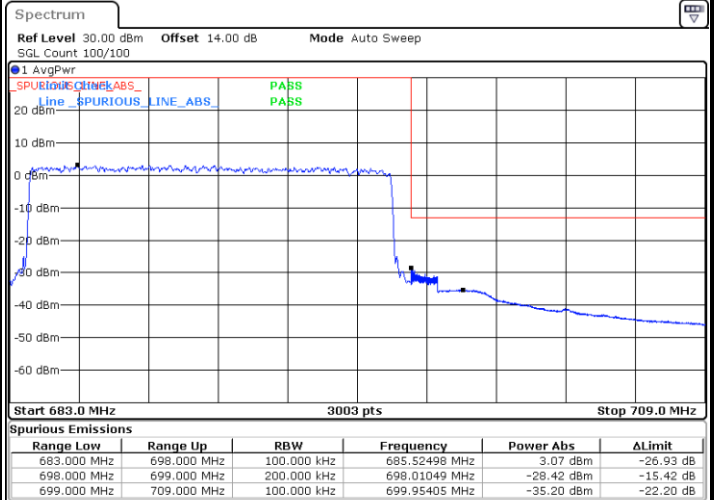
Date: 25.JAN.2024 22:09:02

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:57:55

Highest Band Edge / Full RB

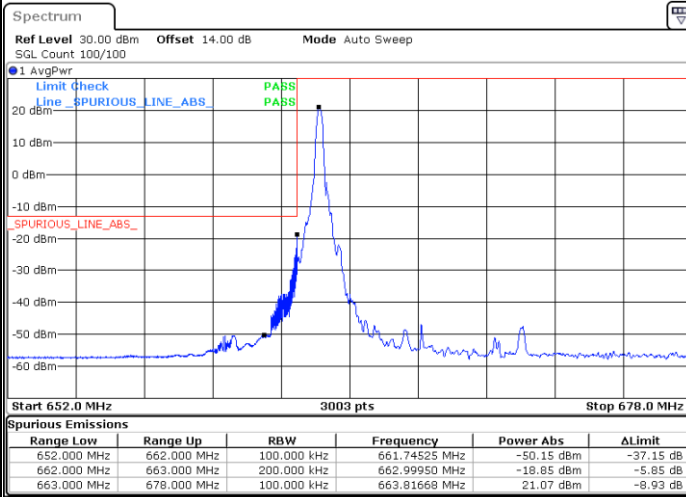


Date: 25.JAN.2024 22:12:23



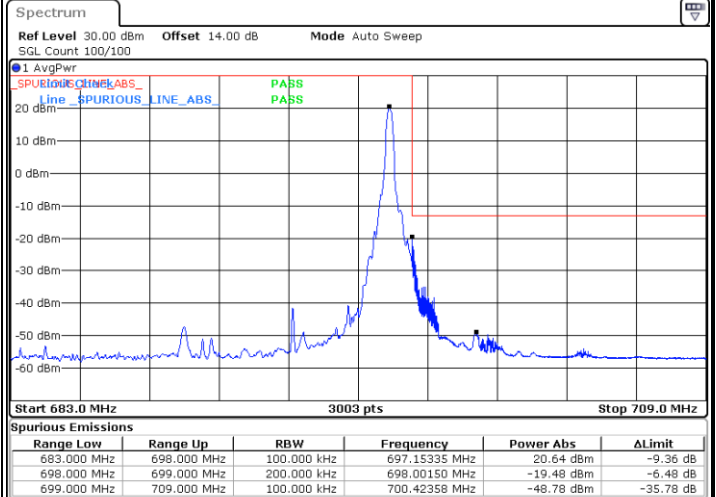
LTE Band 71 / 15MHz / 16QAM

Lowest Band Edge / 1RB



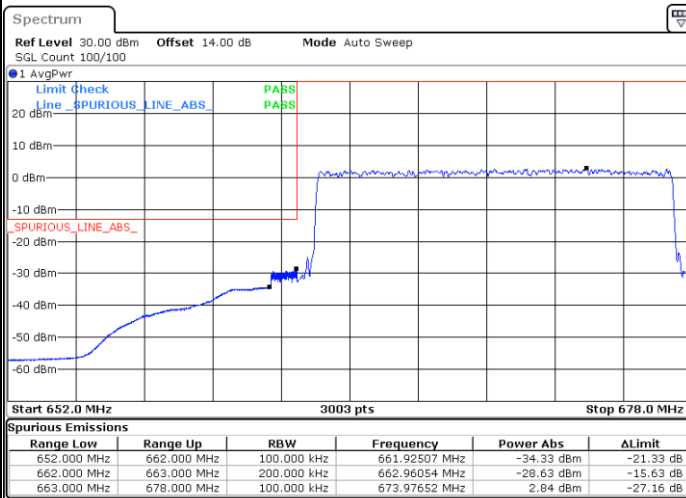
Date: 25.JAN.2024 21:55:38

Highest Band Edge / 1 RB



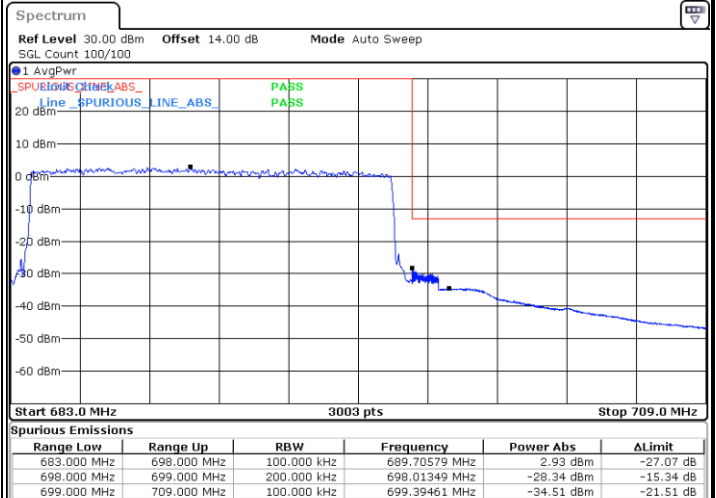
Date: 25.JAN.2024 22:10:06

Lowest Band Edge / Full RB



Date: 25.JAN.2024 21:58:59

Highest Band Edge / Full RB

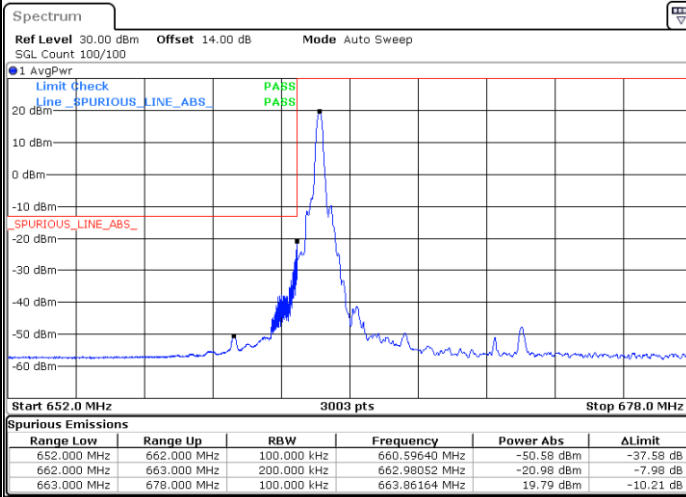


Date: 25.JAN.2024 22:13:26



LTE Band 71 / 15MHz / 64QAM

Lowest Band Edge / 1RB



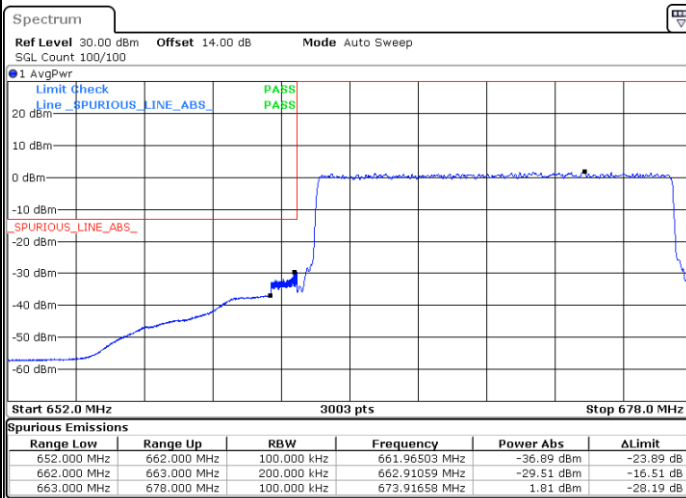
Date: 25.JAN.2024 21:56:47

Highest Band Edge / 1 RB



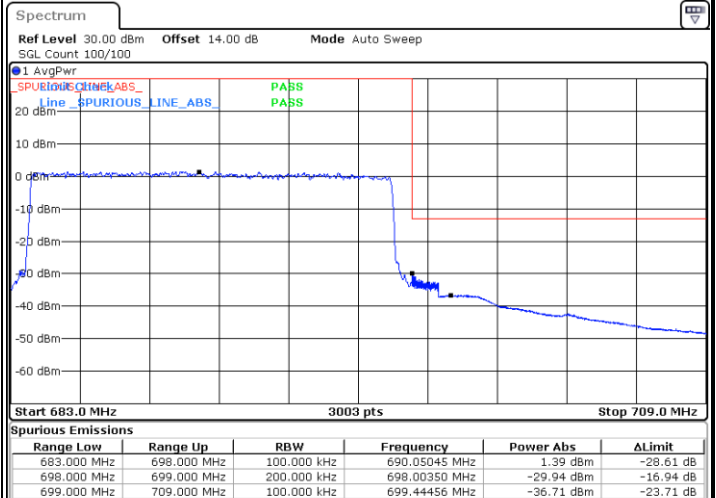
Date: 25.JAN.2024 22:11:14

Lowest Band Edge / Full RB



Date: 25.JAN.2024 22:00:07

Highest Band Edge / Full RB

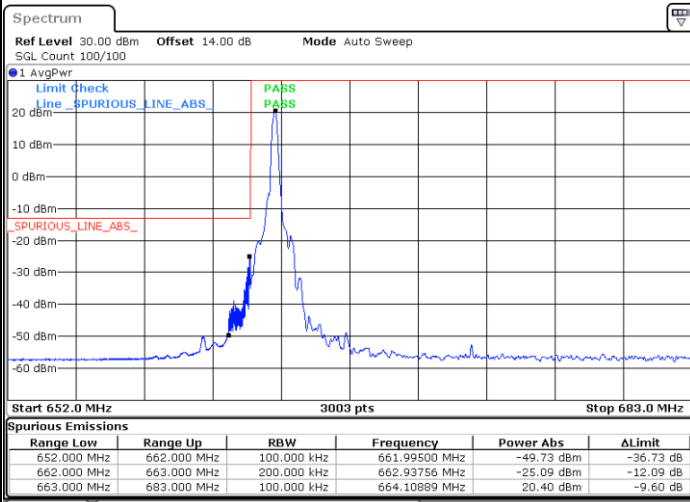


Date: 25.JAN.2024 22:14:35



LTE Band 71 / 20MHz / QPSK

Lowest Band Edge / 1 RB



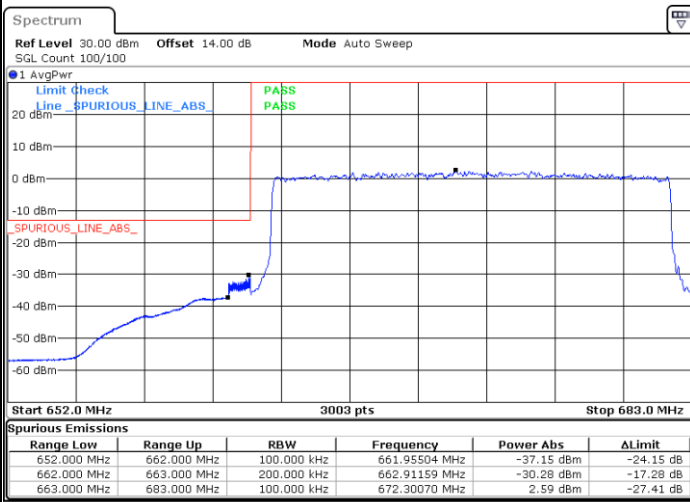
Date: 25.JAN.2024 22:17:02

Highest Band Edge / 1 RB



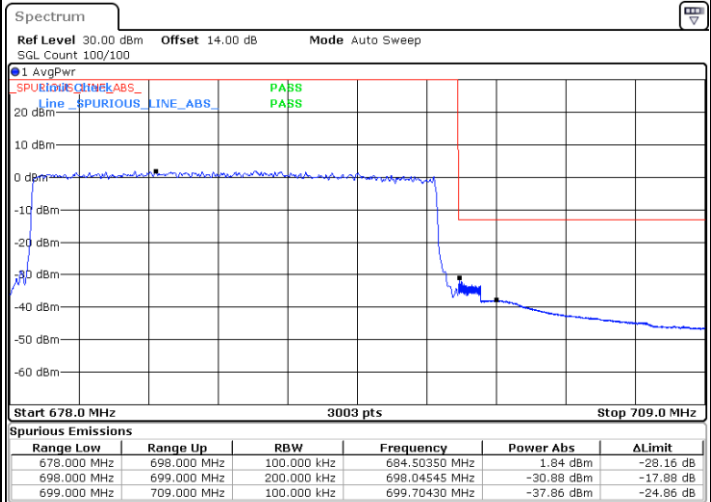
Date: 25.JAN.2024 22:31:17

Lowest Band Edge / Full RB



Date: 25.JAN.2024 22:20:21

Highest Band Edge / Full RB

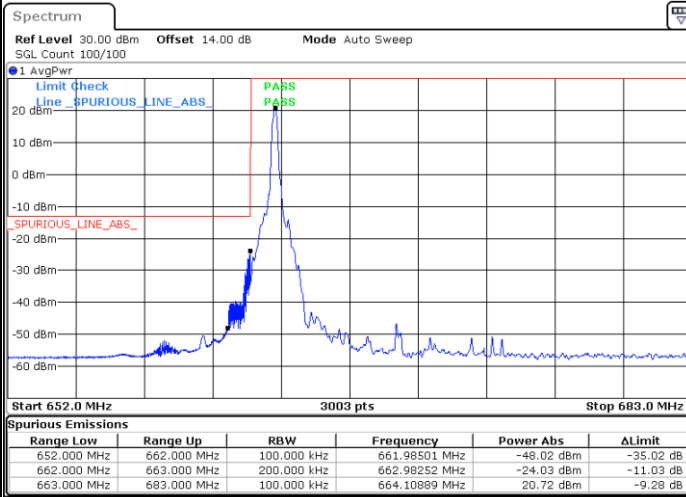


Date: 25.JAN.2024 22:34:36



LTE Band 71 / 20MHz / 16QAM

Lowest Band Edge / 1RB



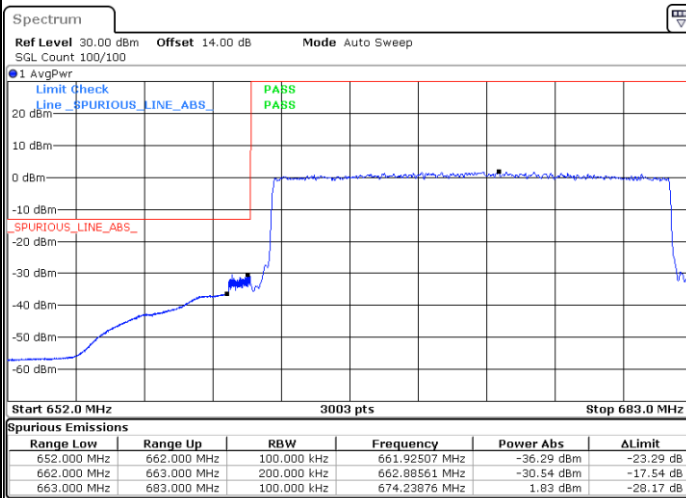
Date: 25.JAN.2024 22:18:08

Highest Band Edge / 1 RB



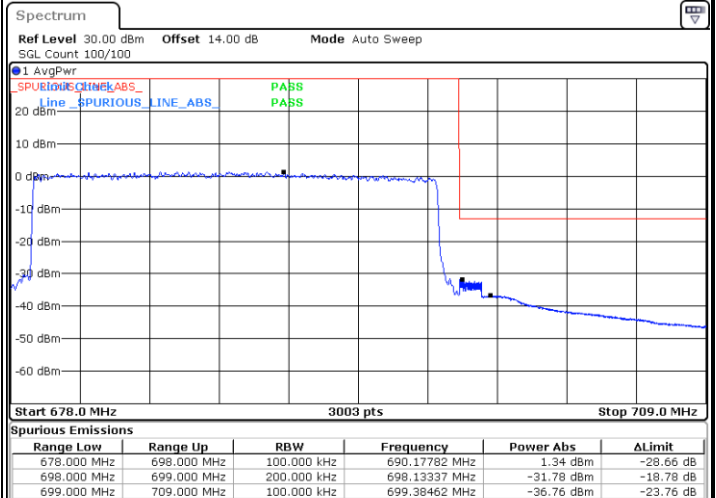
Date: 25.JAN.2024 22:32:23

Lowest Band Edge / Full RB



Date: 25.JAN.2024 22:21:29

Highest Band Edge / Full RB

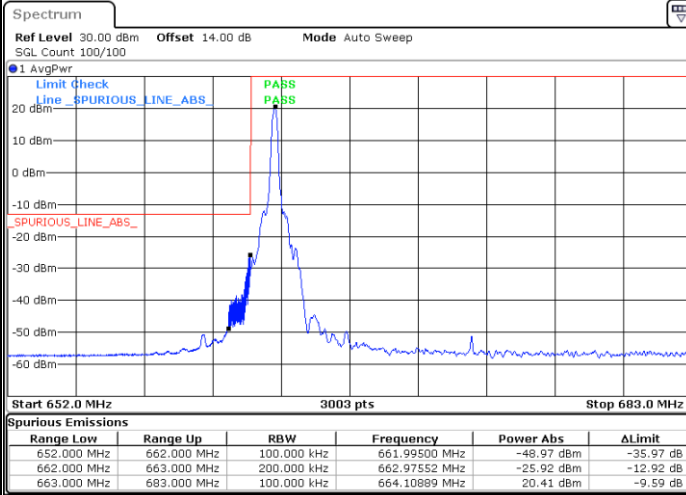


Date: 25.JAN.2024 22:35:44



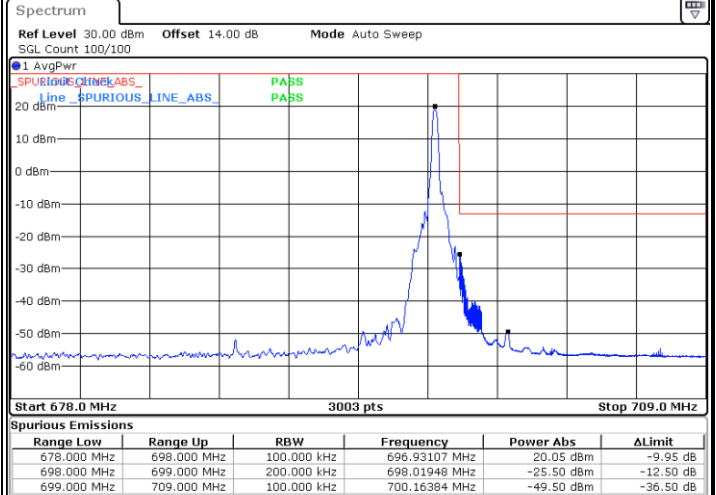
LTE Band 71 / 20MHz / 64QAM

Lowest Band Edge / 1RB



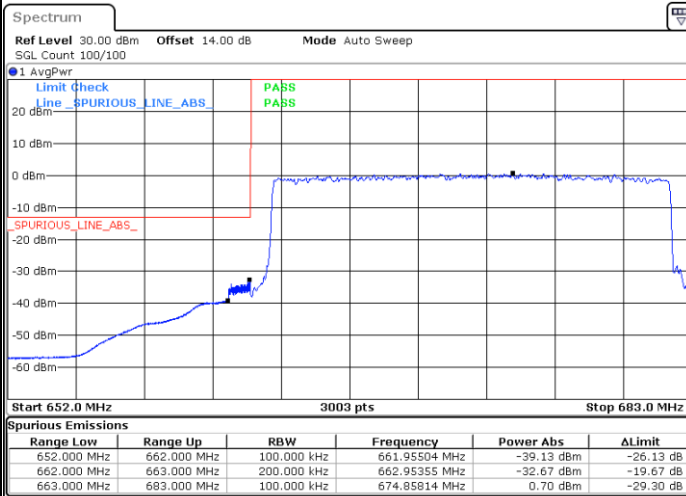
Date: 25.JAN.2024 22:19:17

Highest Band Edge / 1 RB



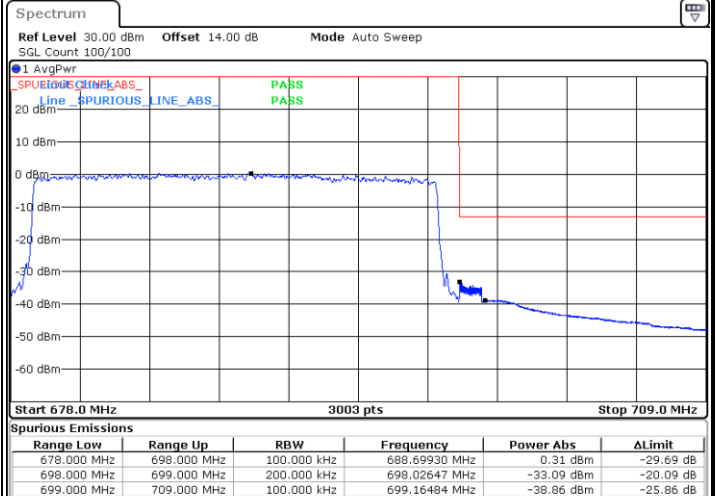
Date: 25.JAN.2024 22:33:32

Lowest Band Edge / Full RB



Date: 25.JAN.2024 22:22:38

Highest Band Edge / Full RB



Date: 25.JAN.2024 22:36:53

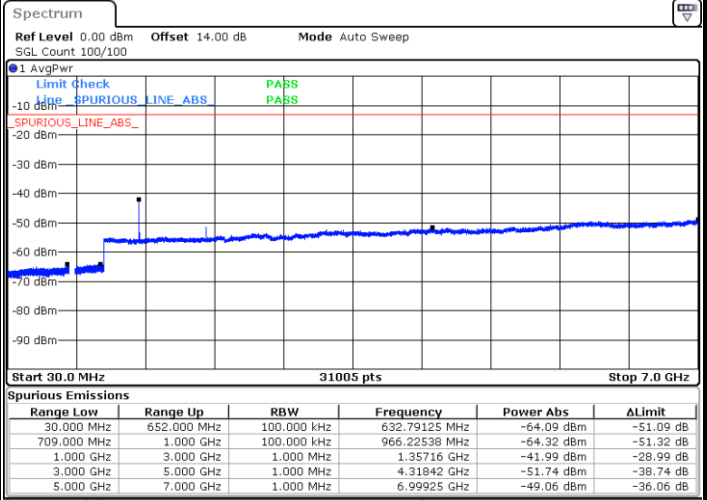
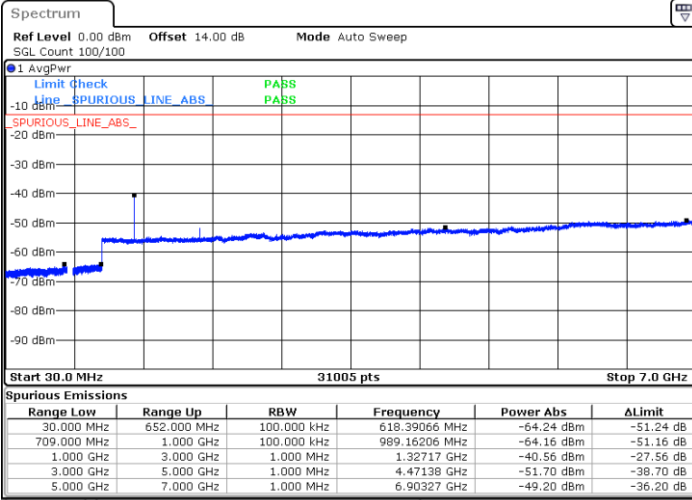


Conducted Spurious Emission

LTE Band 71 / 5MHz

Lowest Channel / QPSK

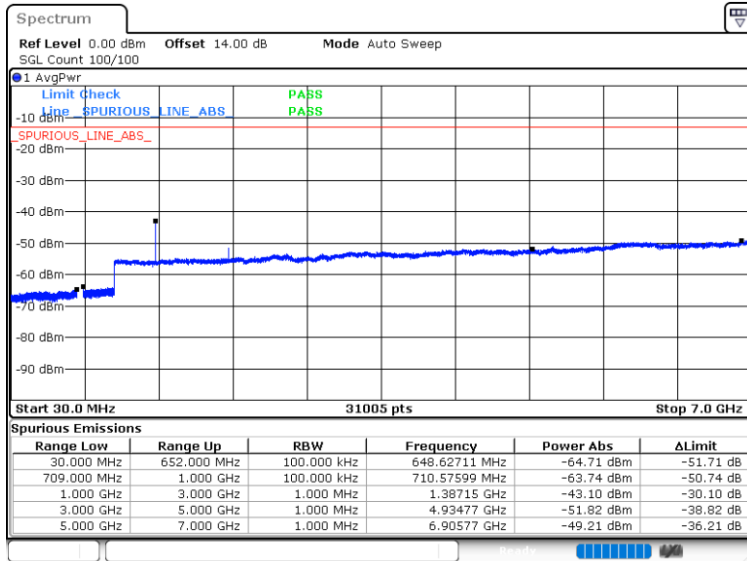
Middle Channel / QPSK



Date: 25.JAN.2024 21:24:41

Date: 25.JAN.2024 21:25:53

Highest Channel / QPSK



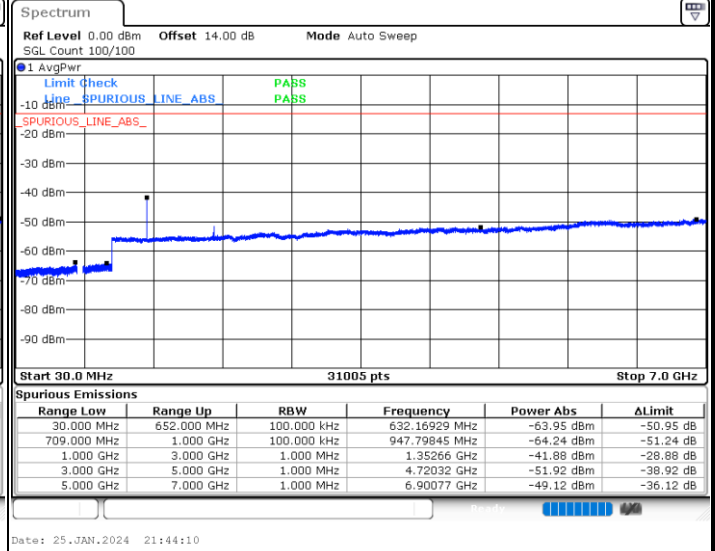
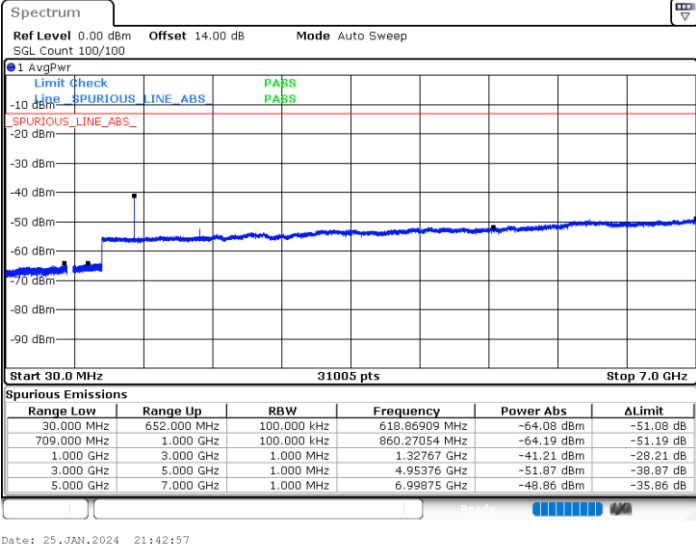
Date: 25.JAN.2024 21:35:15



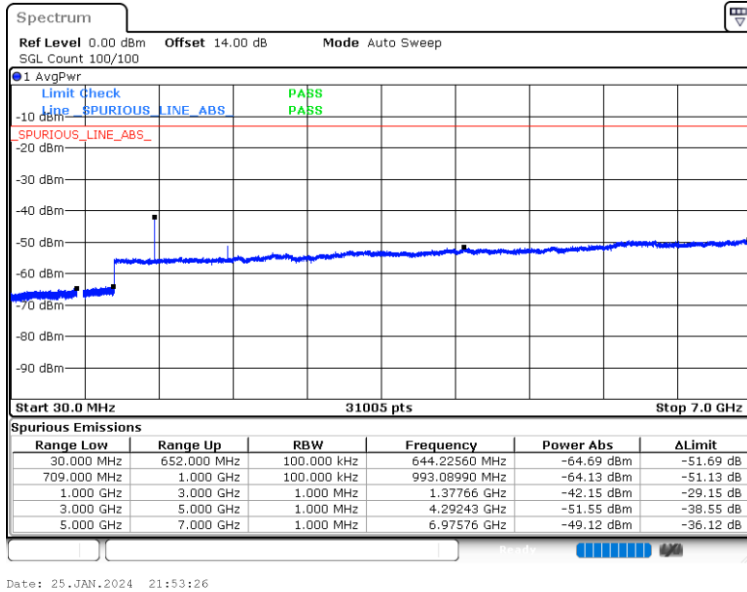
LTE Band 71 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

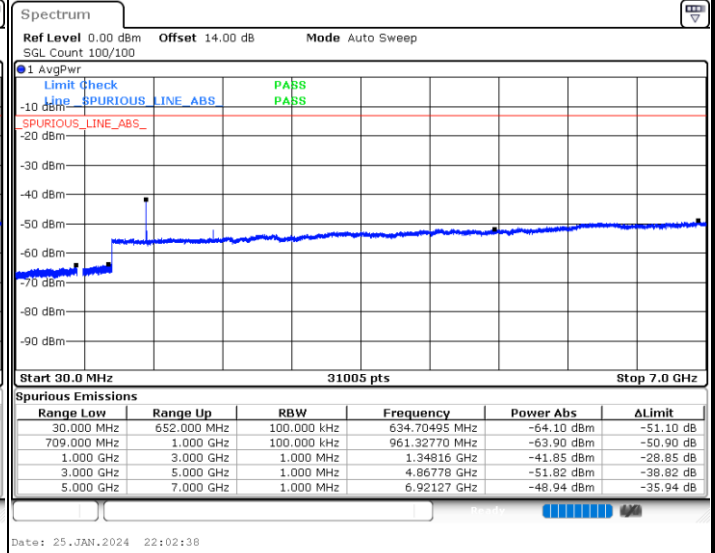
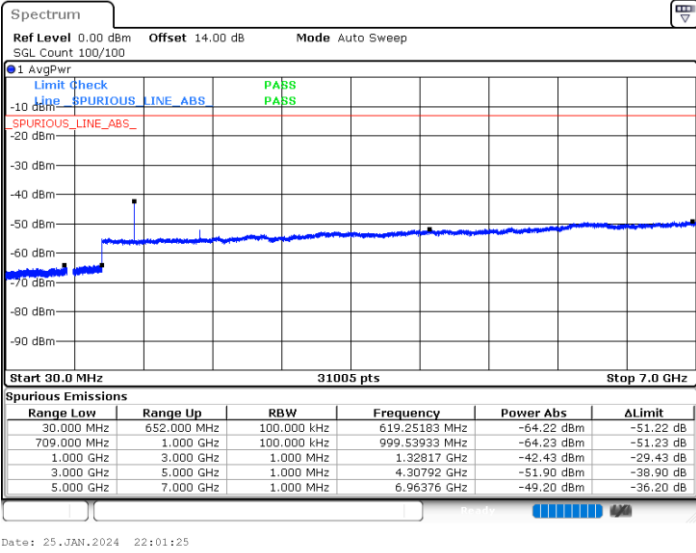




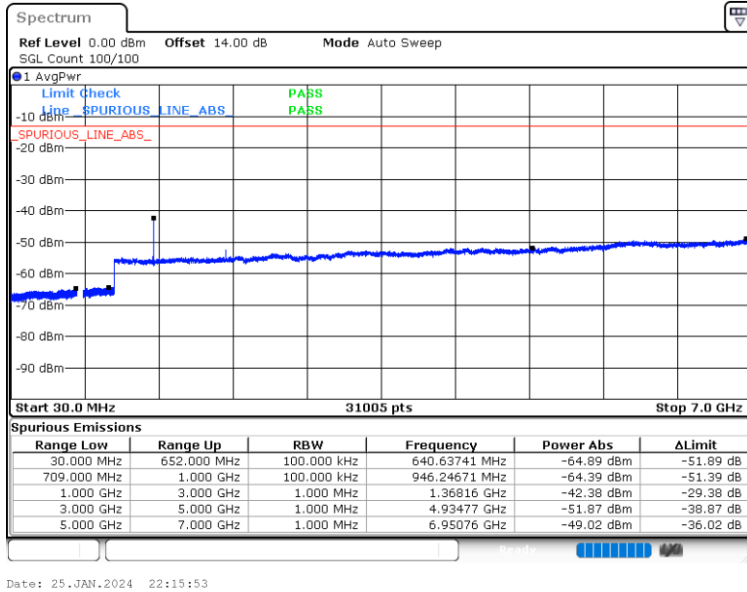
LTE Band 71 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

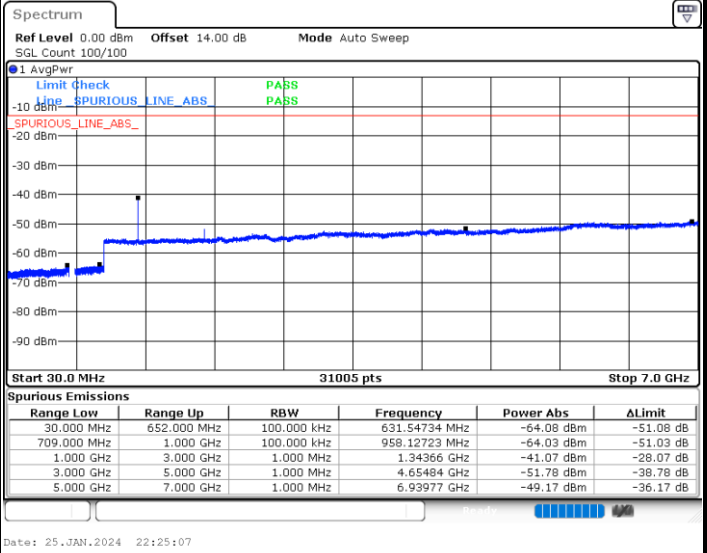
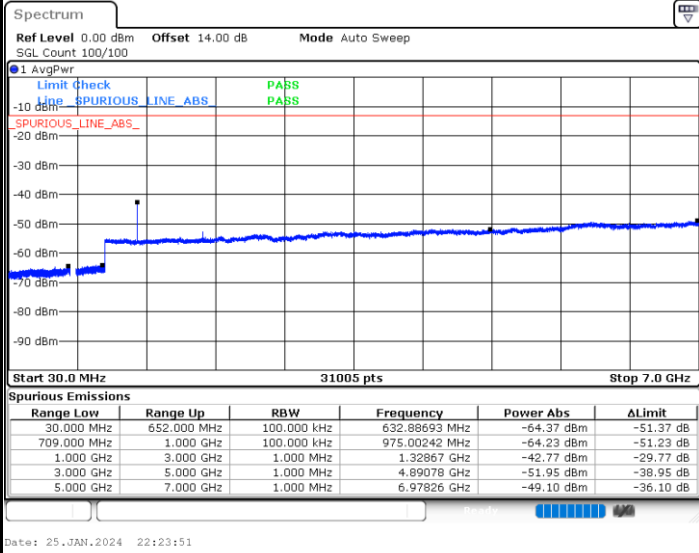




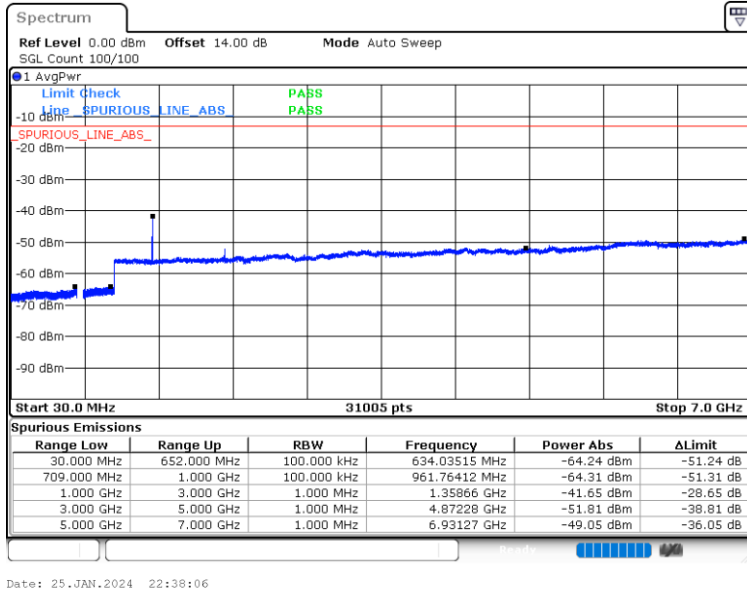
LTE Band 71 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0003	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0008	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

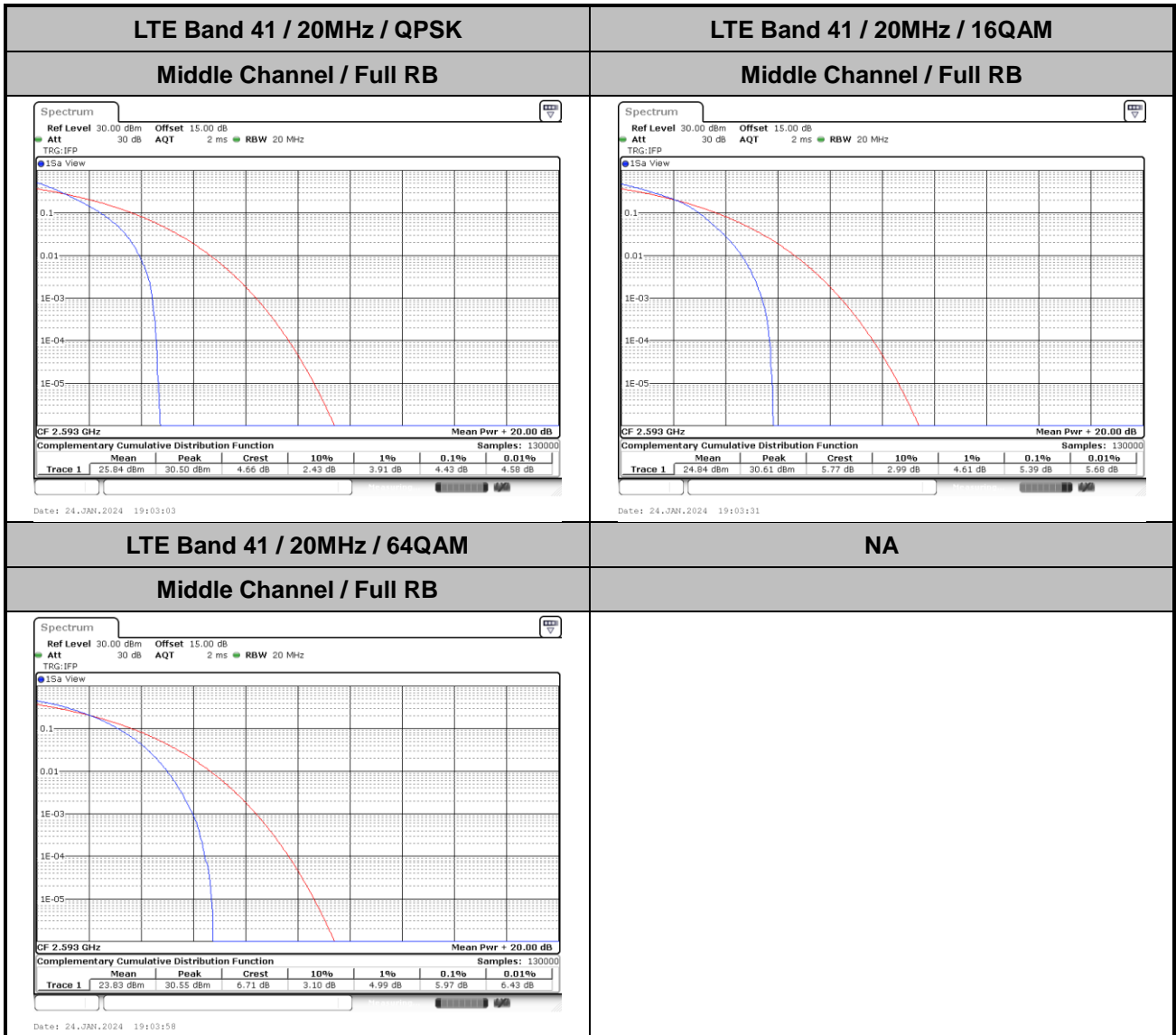
1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.5 V..
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

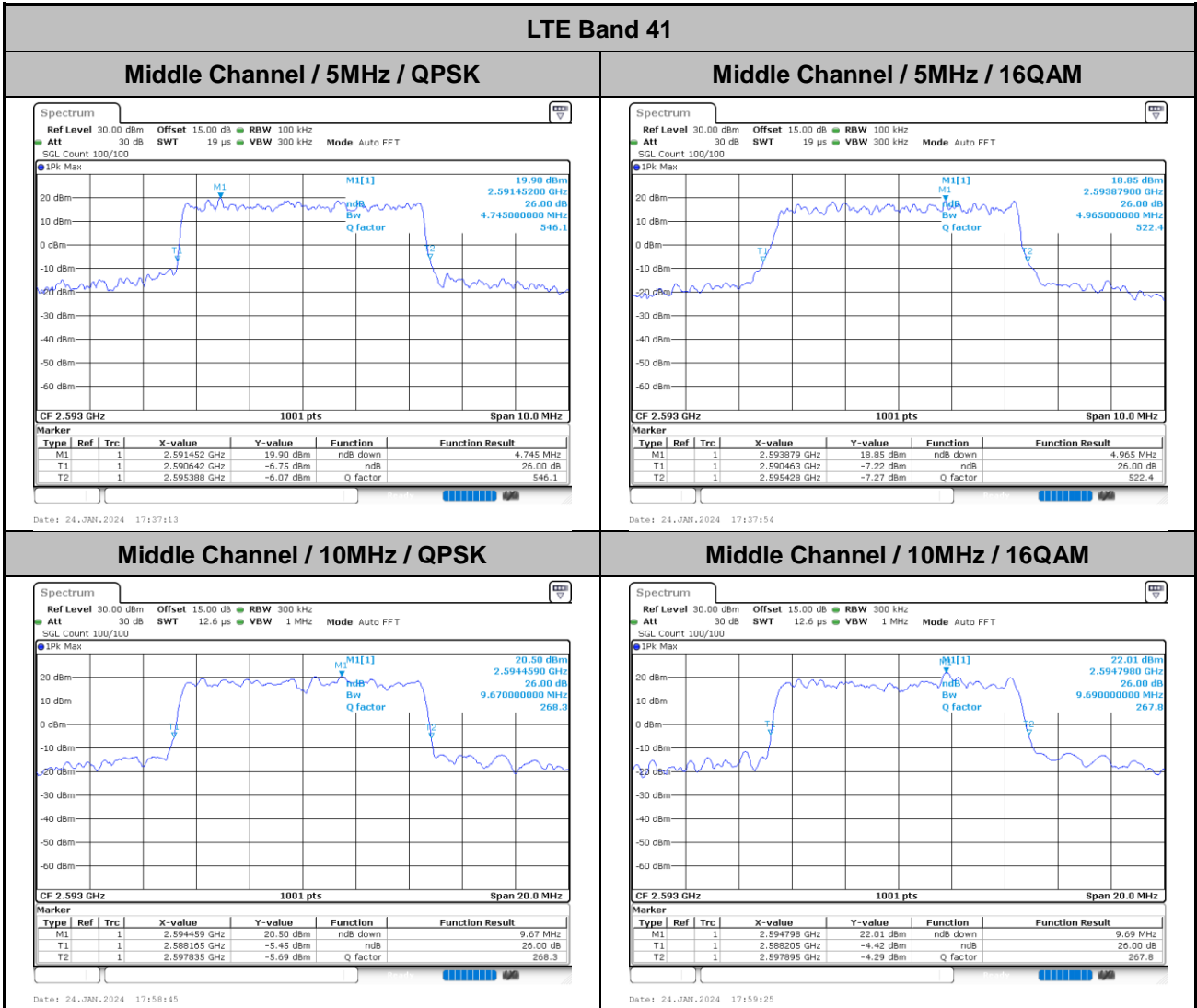
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.43	5.39	5.97	PASS





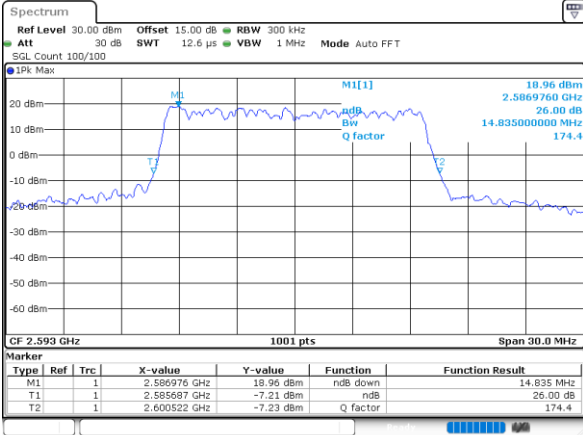
26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.75	4.97	9.67	9.69	14.84	14.39	19.54	18.98



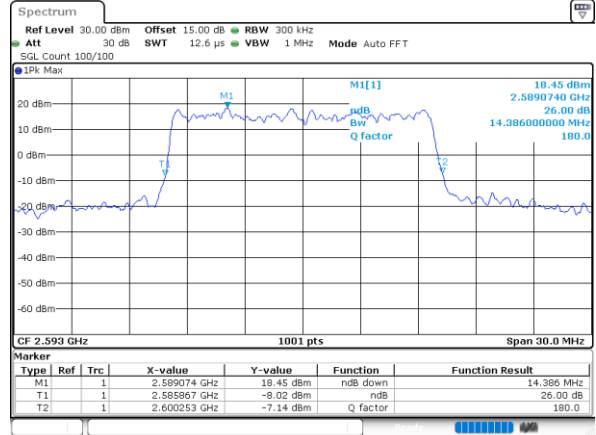


Middle Channel / 15MHz / QPSK



Date: 24_JAN.2024 18:40:21

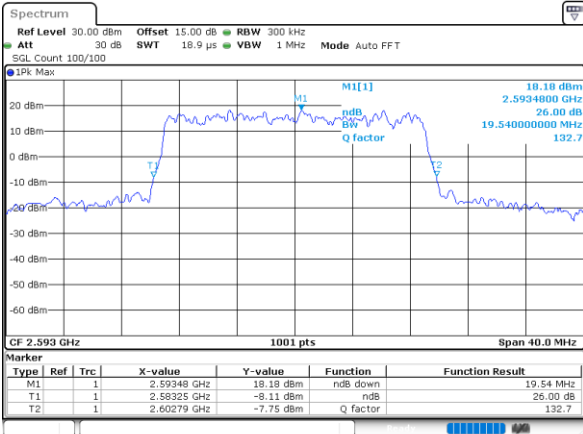
Middle Channel / 15MHz / 16QAM



Date: 24_JAN.2024 18:41:02

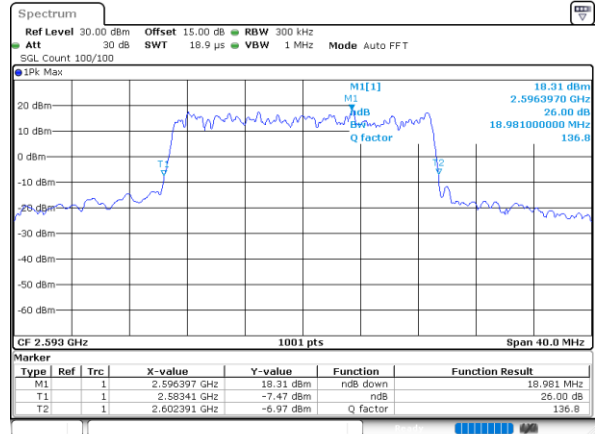
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 24_JAN.2024 19:01:55

Middle Channel / 20MHz / 16QAM

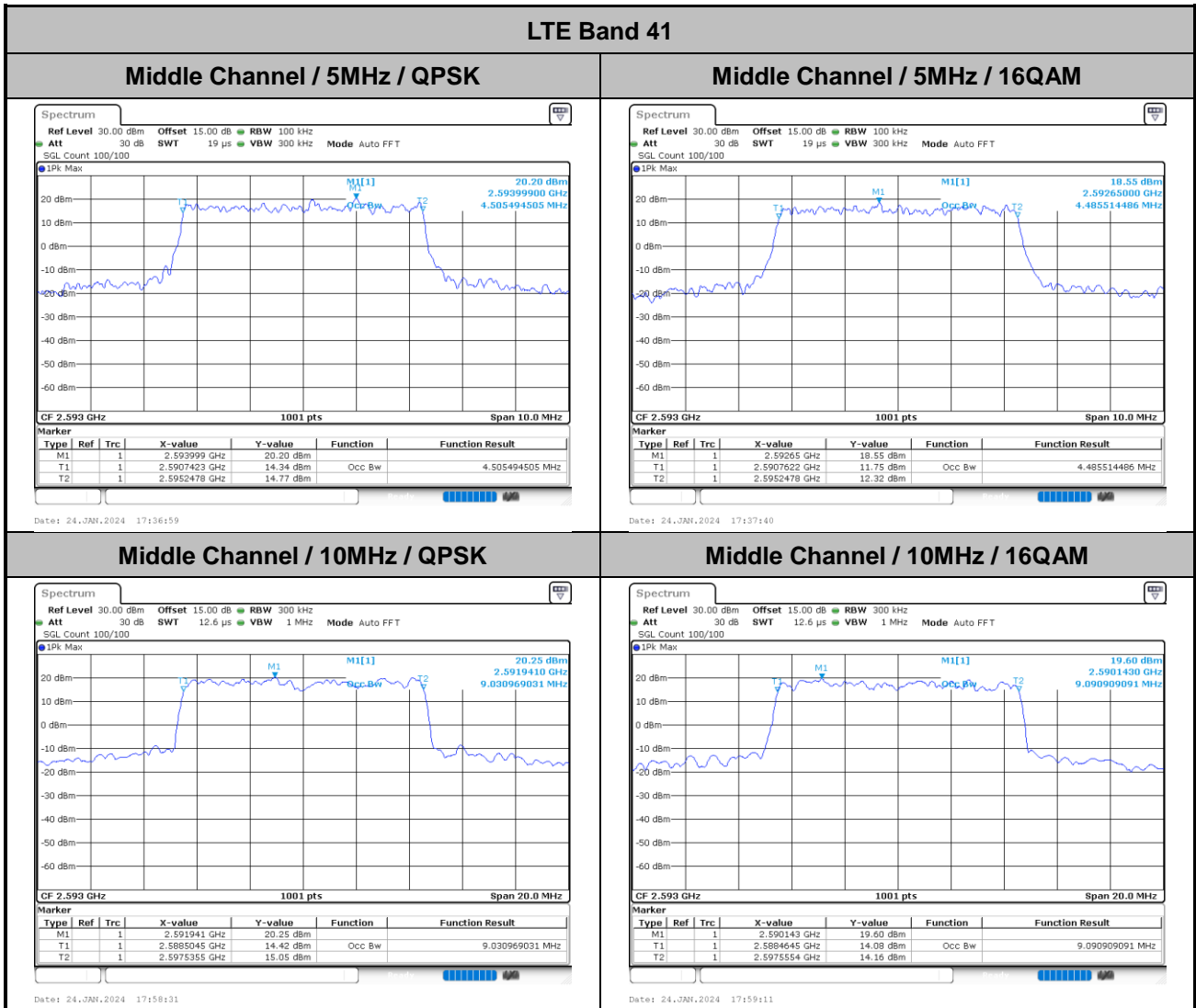


Date: 24_JAN.2024 19:02:35



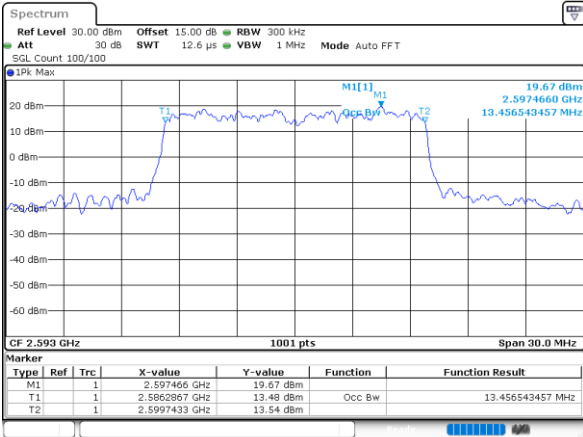
Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.51	4.49	9.03	9.09	13.46	13.37	17.90	17.86



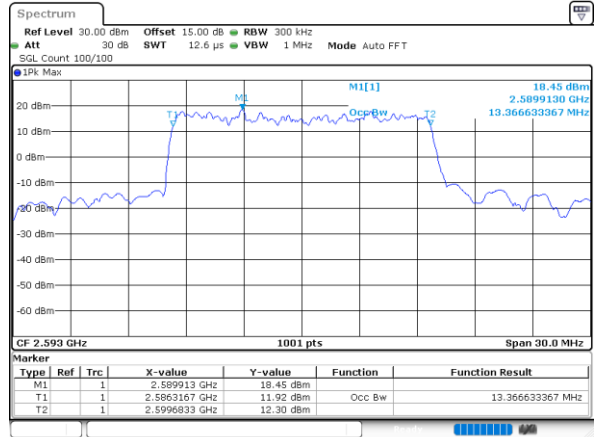


Middle Channel / 15MHz / QPSK



Date: 24, JAN, 2024 18:40:07

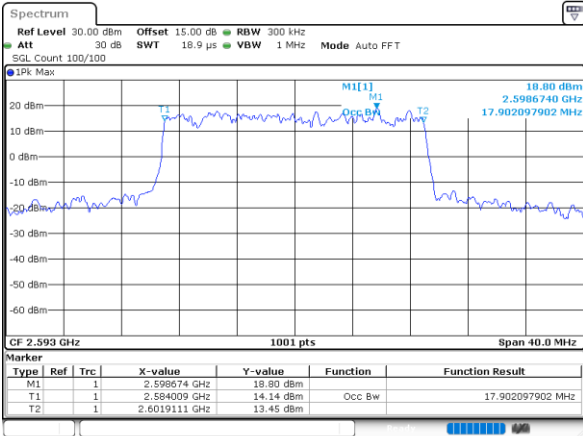
Middle Channel / 15MHz / 16QAM



Date: 24, JAN, 2024 18:40:48

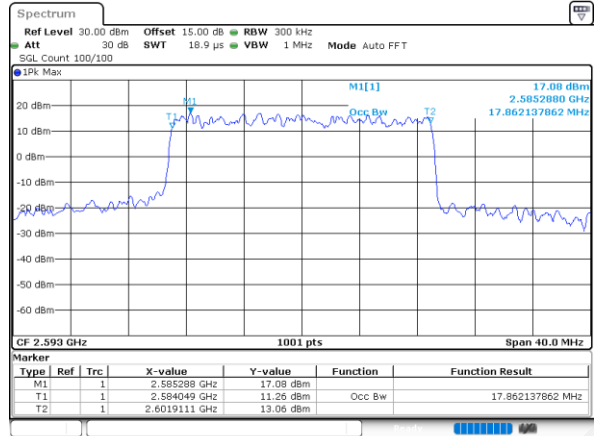
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 24, JAN, 2024 19:01:41

Middle Channel / 20MHz / 16QAM



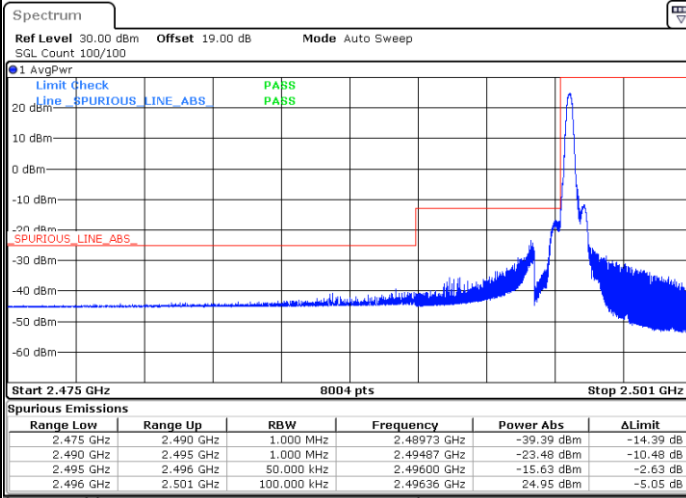
Date: 24, JAN, 2024 19:02:21



Conducted Band Edge

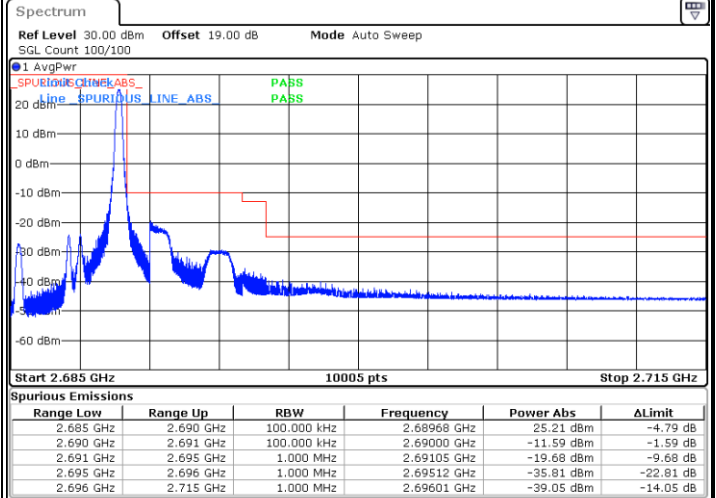
LTE Band 41 / 5MHz / QPSK

Lowest Band Edge / 1 RB



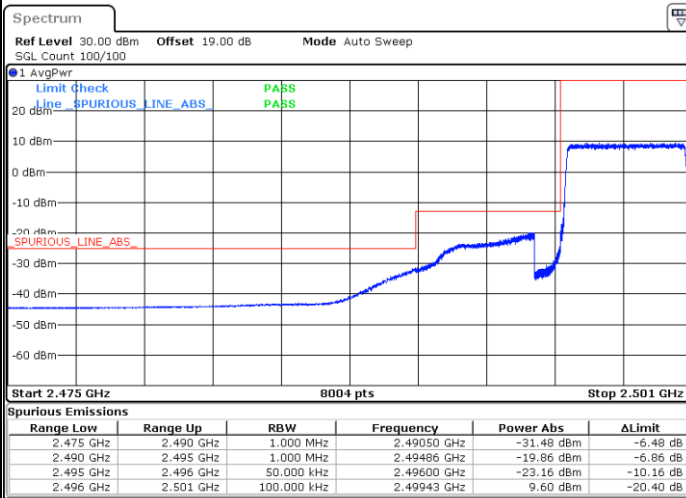
Date: 24.JAN.2024 17:28:57

Highest Band Edge / 1 RB



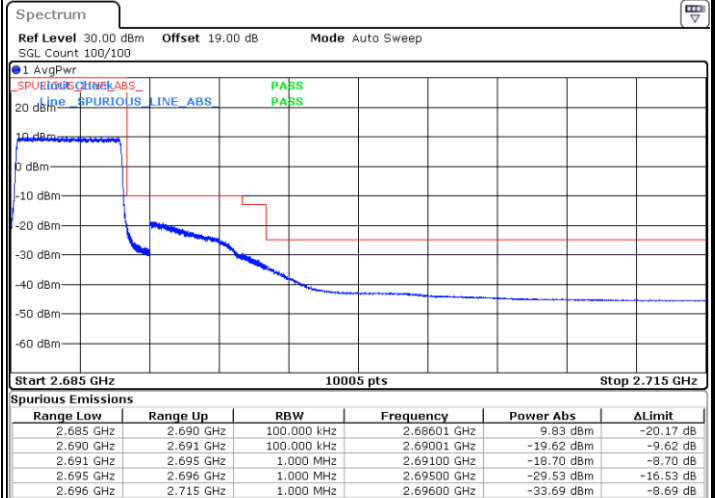
Date: 24.JAN.2024 17:38:57

Lowest Band Edge / Full RB



Date: 29.JAN.2024 22:23:46

Highest Band Edge / Full RB

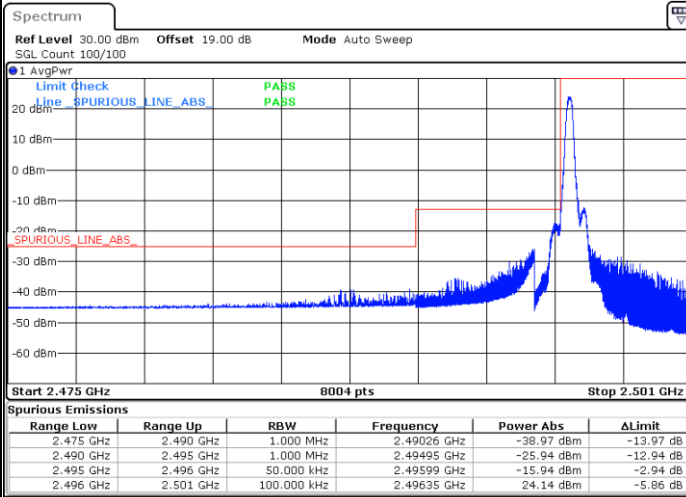


Date: 29.JAN.2024 22:25:04



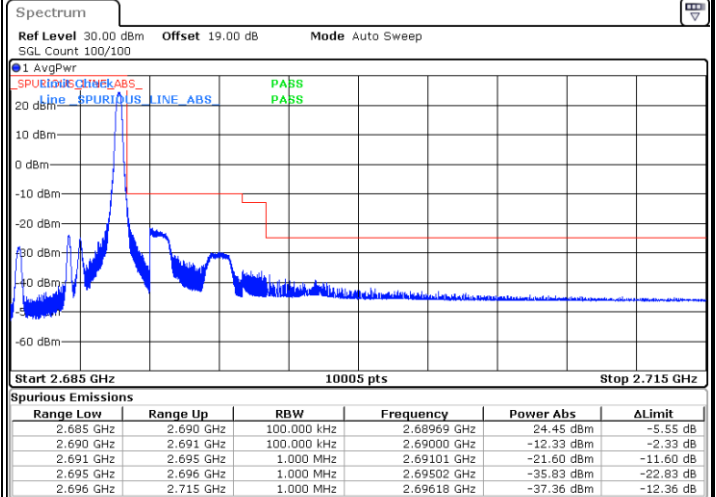
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



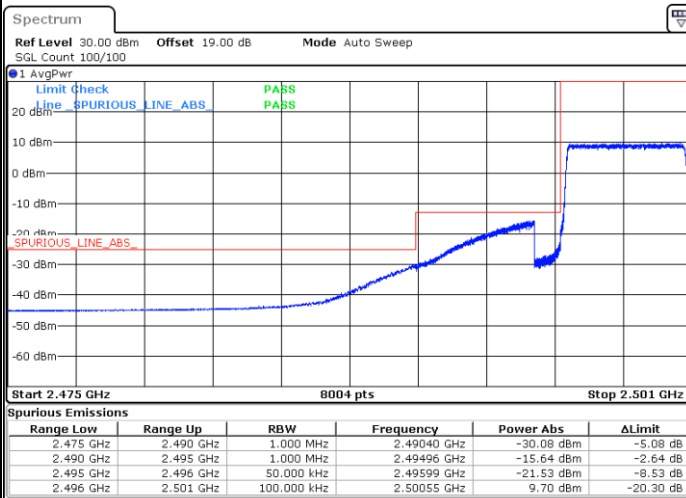
Date: 24.JAN.2024 17:30:00

Highest Band Edge / 1 RB



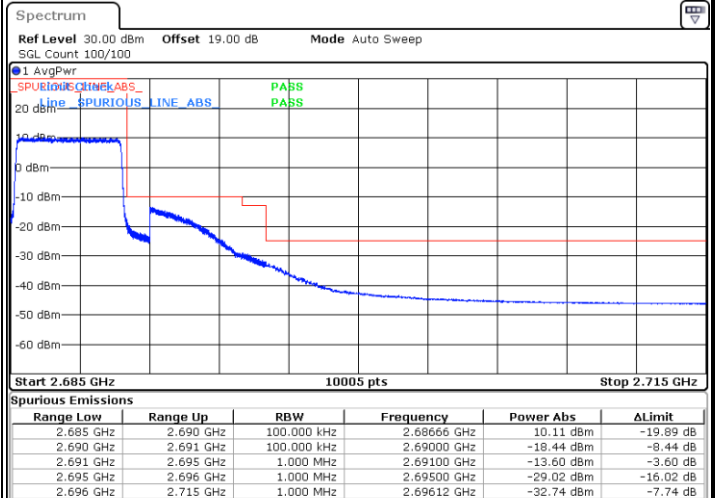
Date: 24.JAN.2024 17:40:02

Lowest Band Edge / Full RB



Date: 24.JAN.2024 17:33:07

Highest Band Edge / Full RB

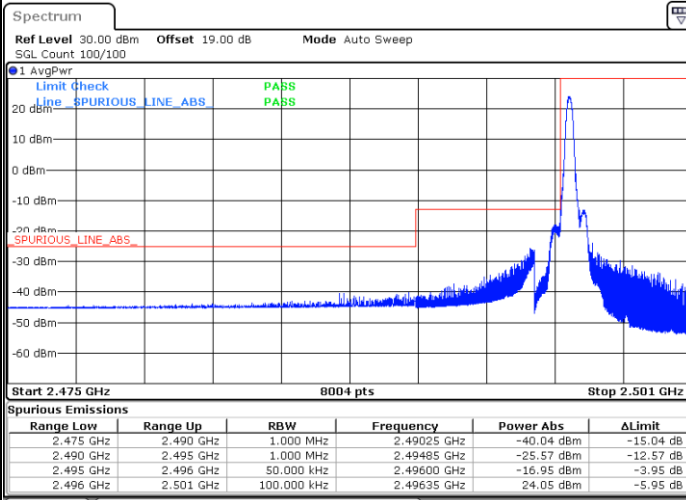


Date: 24.JAN.2024 17:43:16



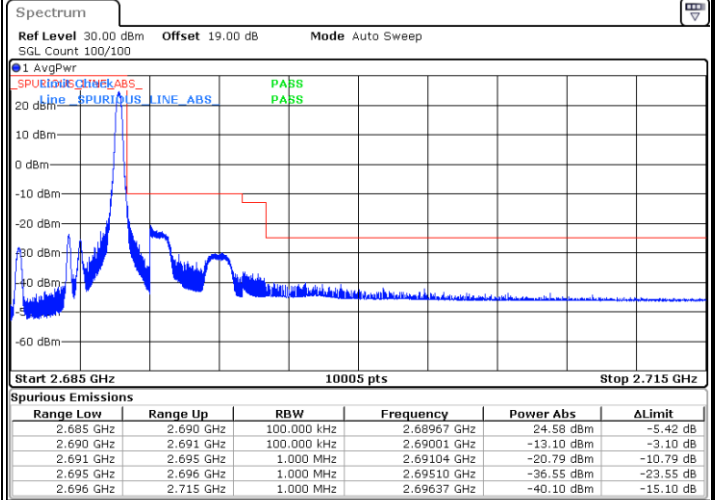
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



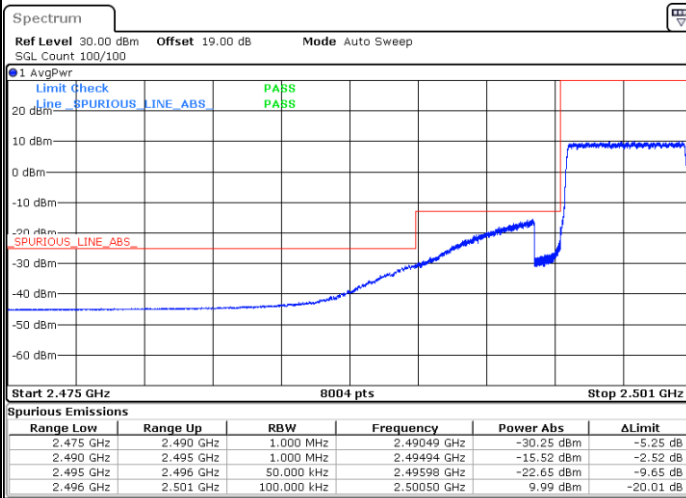
Date: 24.JAN.2024 17:31:02

Highest Band Edge / 1 RB



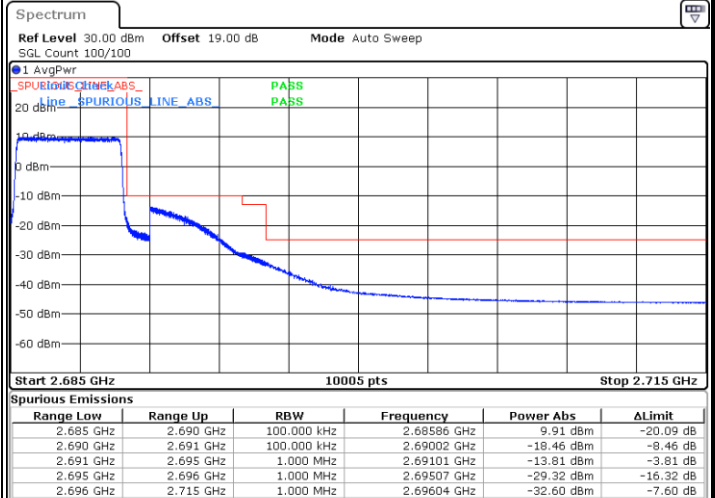
Date: 24.JAN.2024 17:41:07

Lowest Band Edge / Full RB



Date: 24.JAN.2024 17:32:04

Highest Band Edge / Full RB

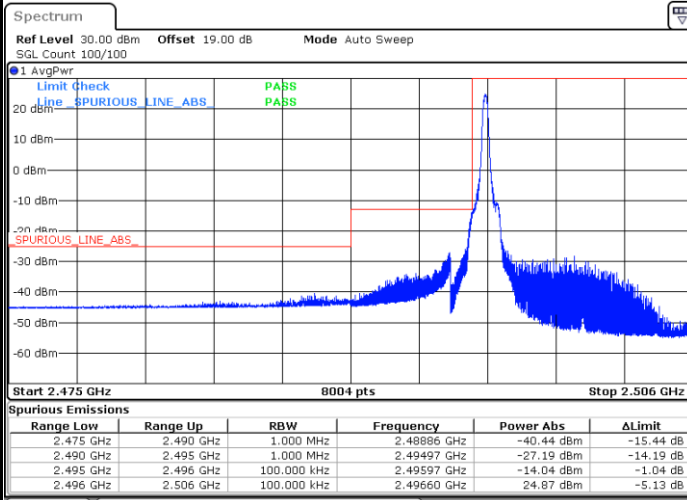


Date: 24.JAN.2024 17:42:11



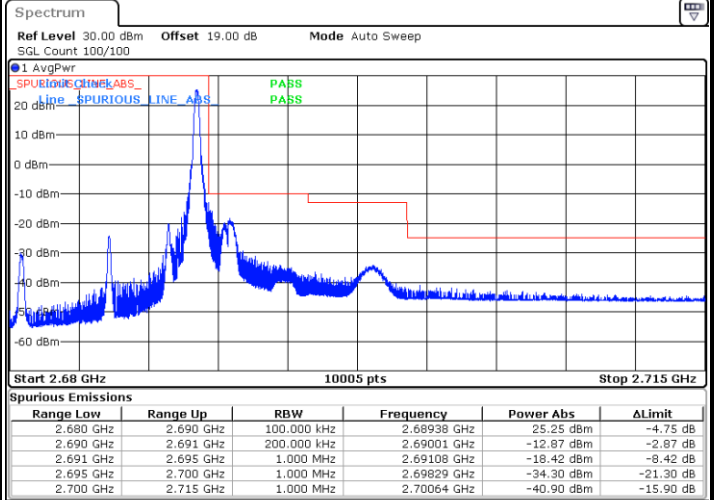
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



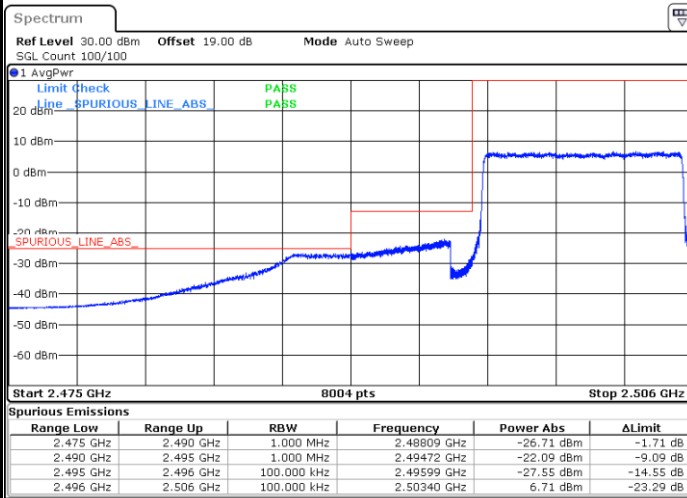
Date: 24.JAN.2024 17:50:31

Highest Band Edge / 1 RB



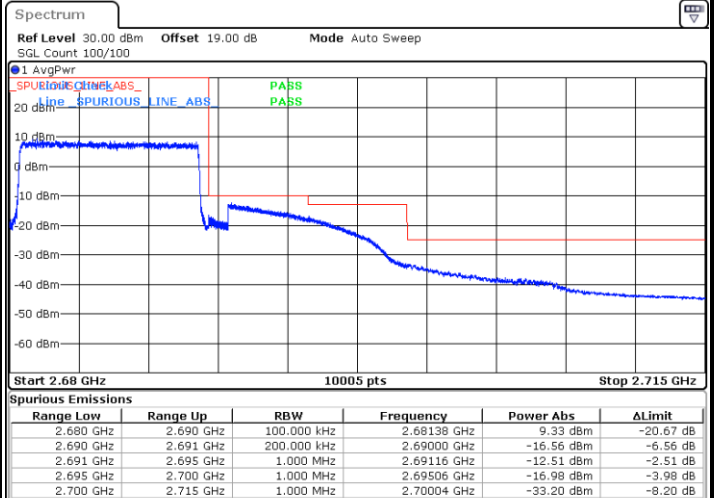
Date: 24.JAN.2024 18:00:26

Lowest Band Edge / Full RB



Date: 29.JAN.2024 22:13:23

Highest Band Edge / Full RB



Date: 24.JAN.2024 18:05:36