



Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0032	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

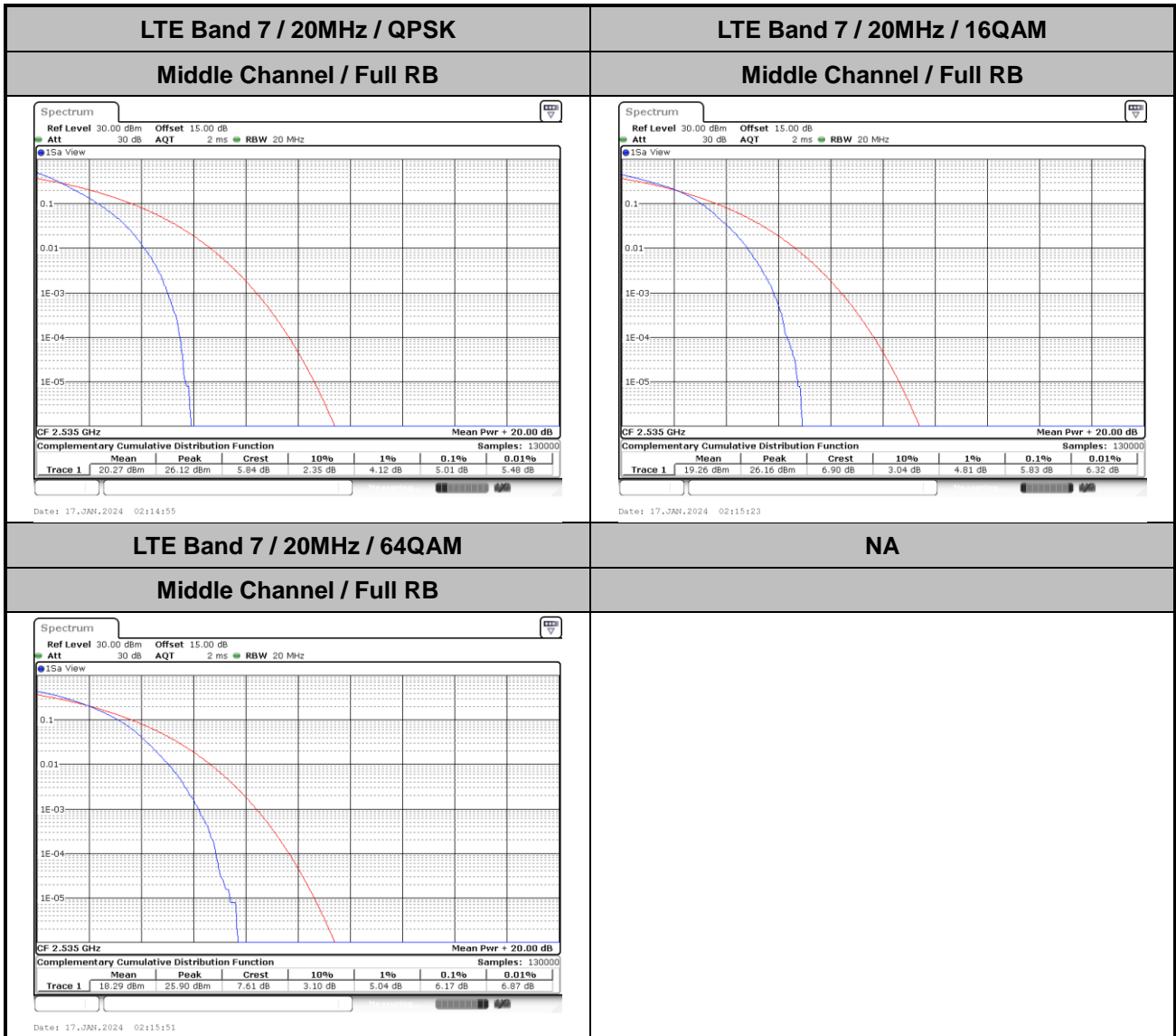
1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.7 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7(Other PA)

Peak-to-Average Ratio

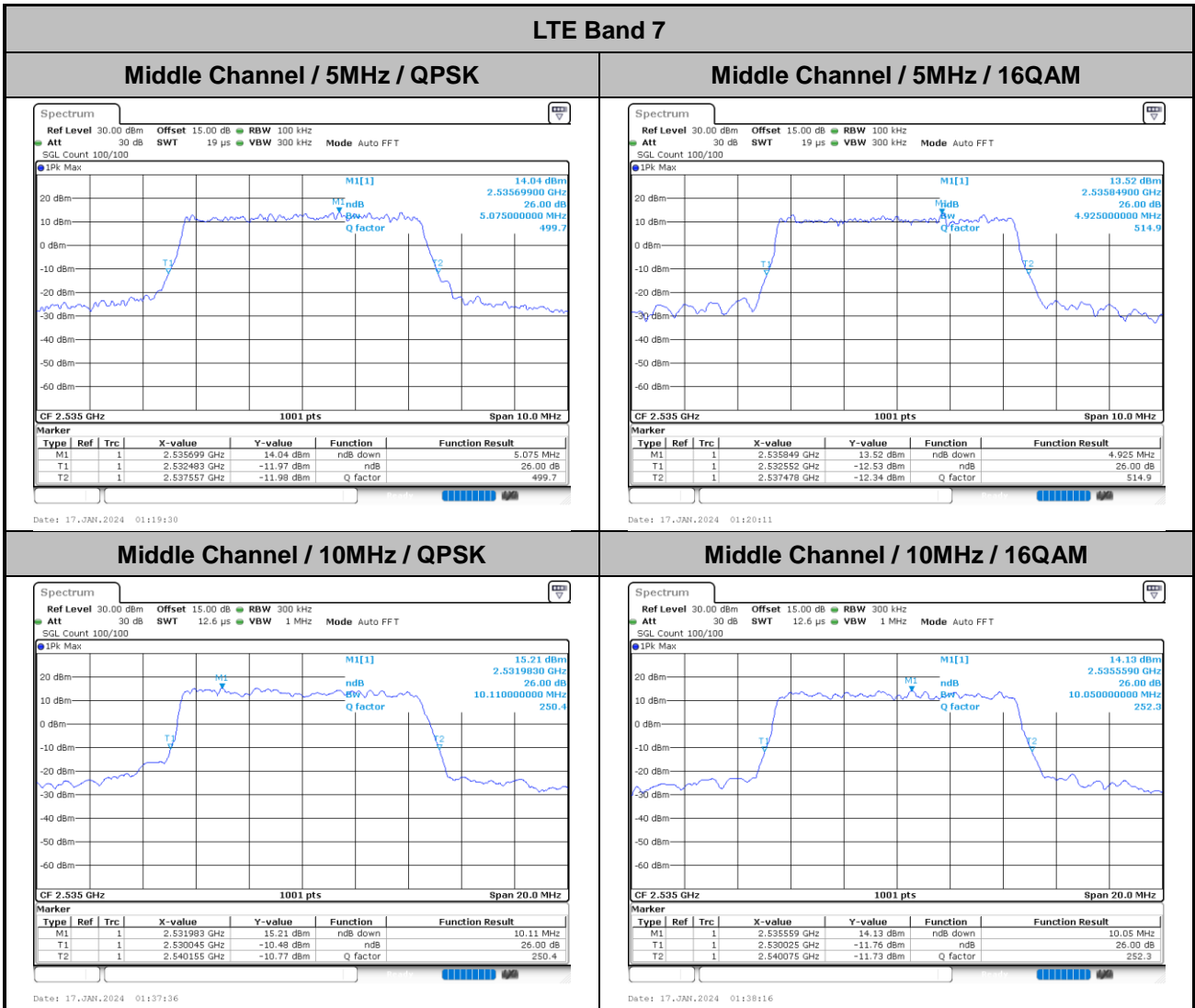
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.01	5.83	6.17	PASS





26dB Bandwidth

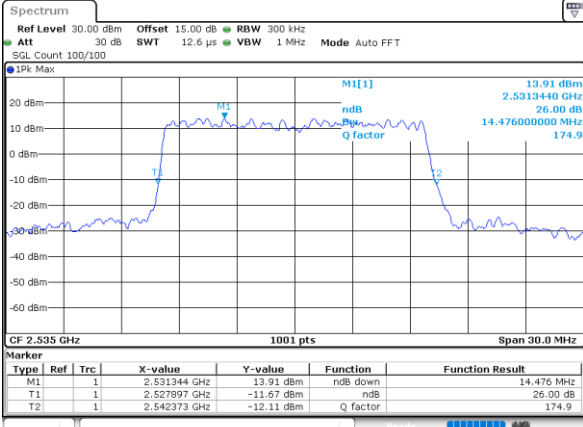
Mode	LTE Band 7 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.08	4.93	10.11	10.05	14.48	14.87	19.62	19.02





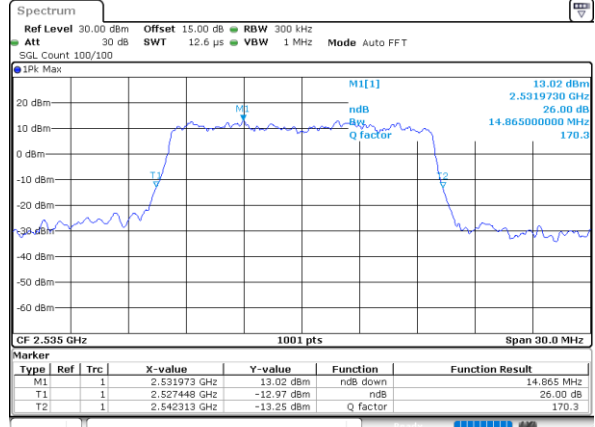
LTE Band 7

Middle Channel / 15MHz / QPSK



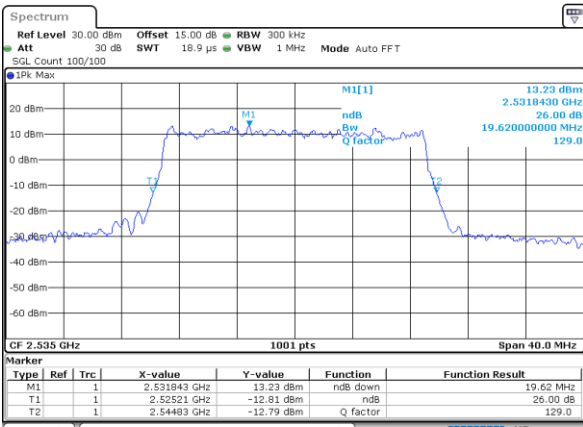
Date: 17_JAN_2024 01:55:40

Middle Channel / 15MHz / 16QAM



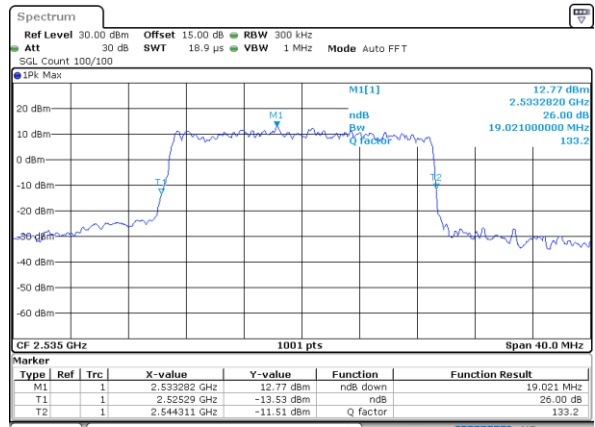
Date: 17_JAN_2024 01:56:20

Middle Channel / 20MHz / QPSK



Date: 17_JAN_2024 02:13:47

Middle Channel / 20MHz / 16QAM

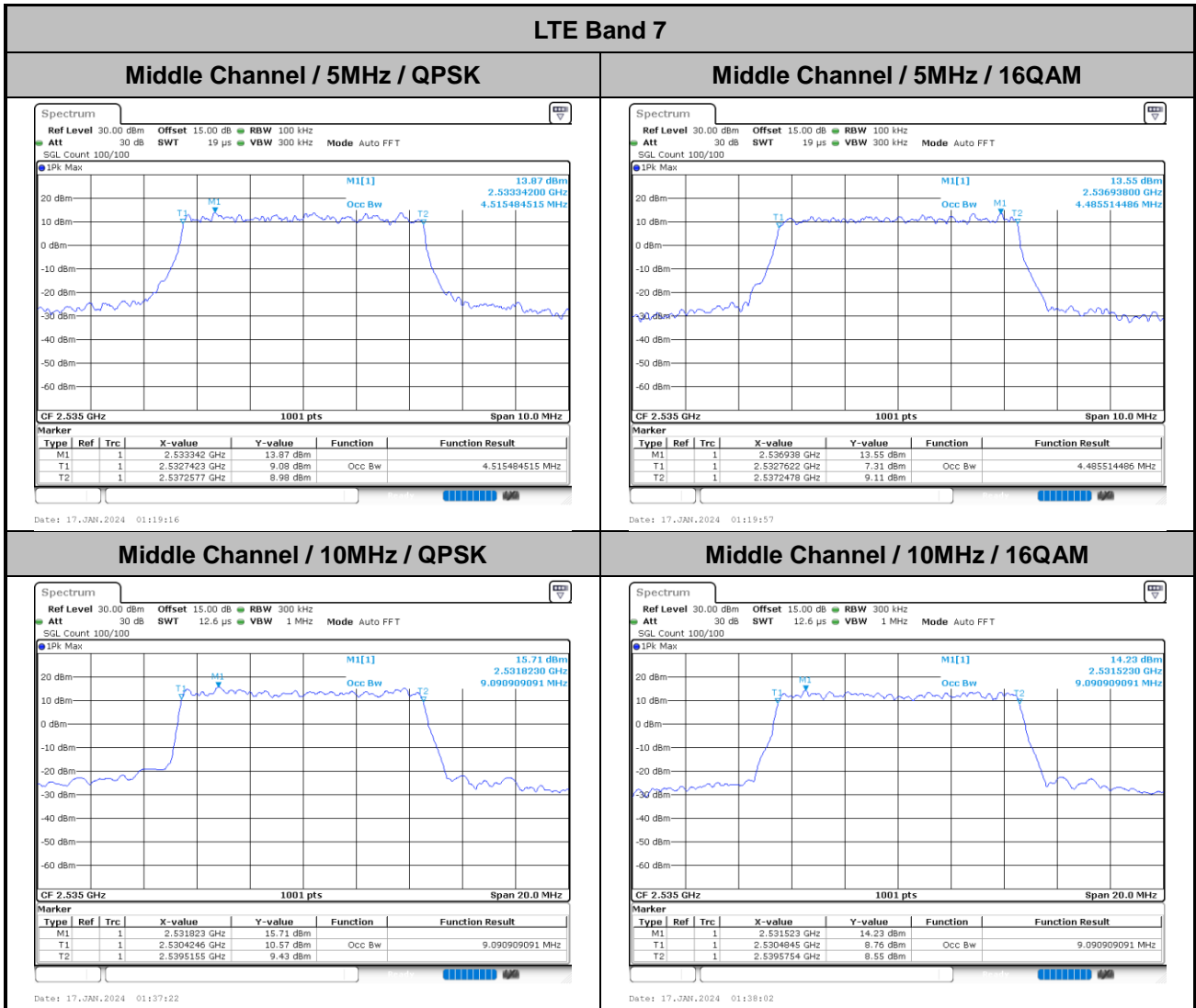


Date: 17_JAN_2024 02:14:27



Occupied Bandwidth

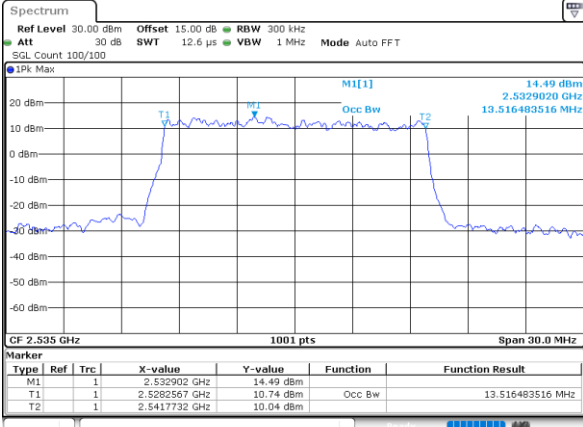
Mode	LTE Band 7 : 99%OBW(MHz)							
	5MHz		10MHz		15MHz		20MHz	
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.52	4.49	9.09	9.09	13.52	13.49	17.90	17.90





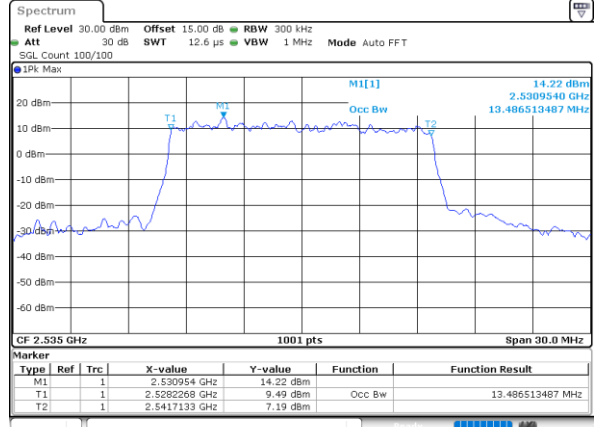
LTE Band 7

Middle Channel / 15MHz / QPSK



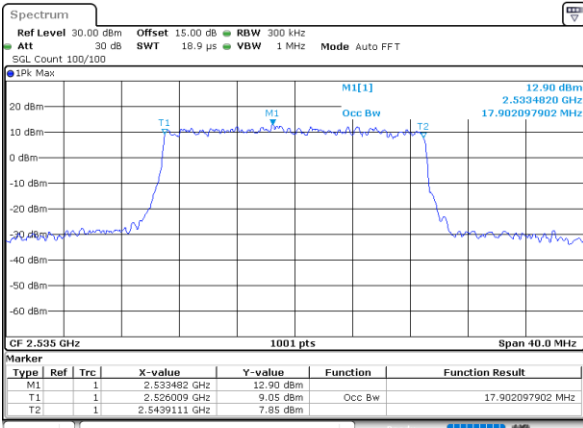
Date: 17_JAN_2024 01:55:26

Middle Channel / 15MHz / 16QAM



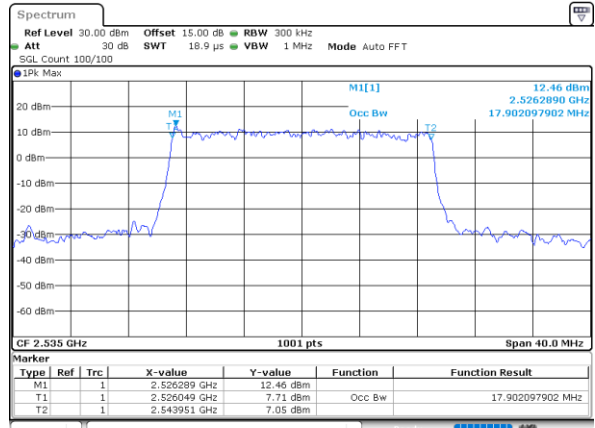
Date: 17_JAN_2024 01:56:06

Middle Channel / 20MHz / QPSK



Date: 17_JAN_2024 02:13:03

Middle Channel / 20MHz / 16QAM



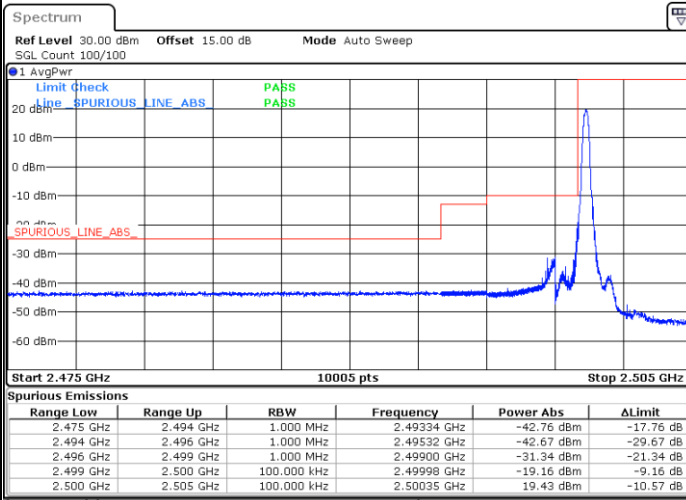
Date: 17_JAN_2024 02:14:13



Conducted Band Edge

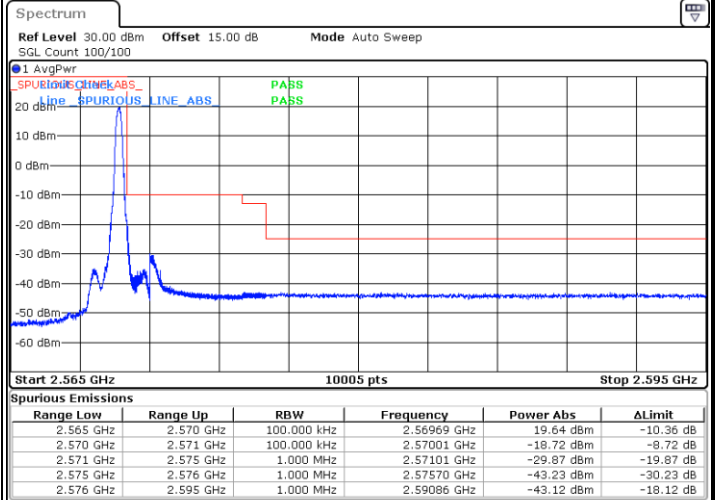
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



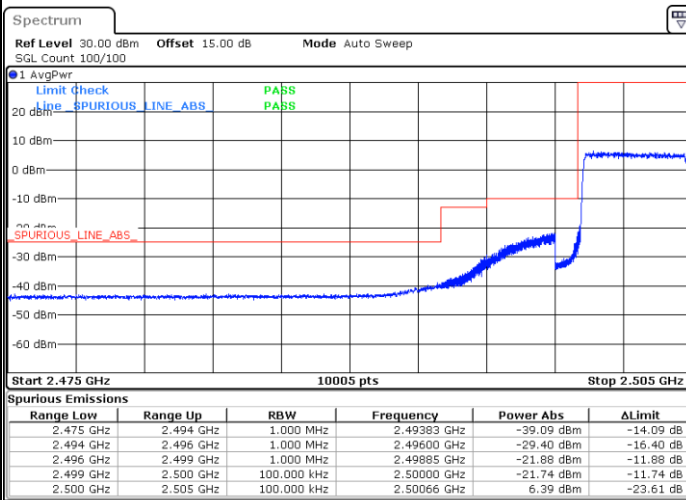
Date: 17.JAN.2024 01:11:16

Highest Band Edge / 1 RB



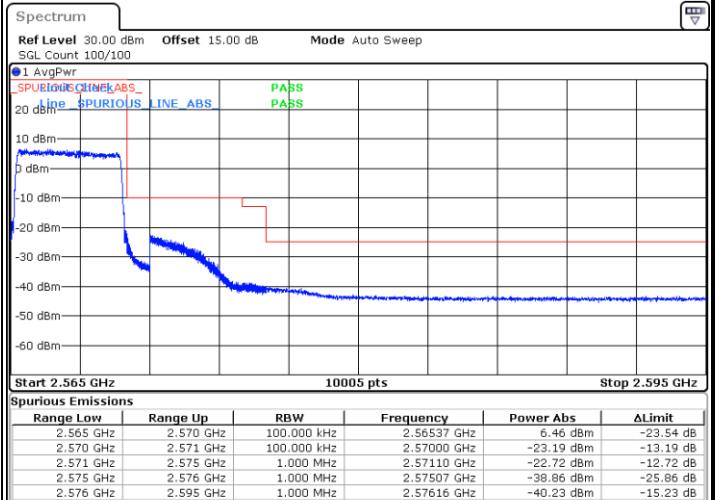
Date: 17.JAN.2024 01:21:12

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:14:24

Highest Band Edge / Full RB

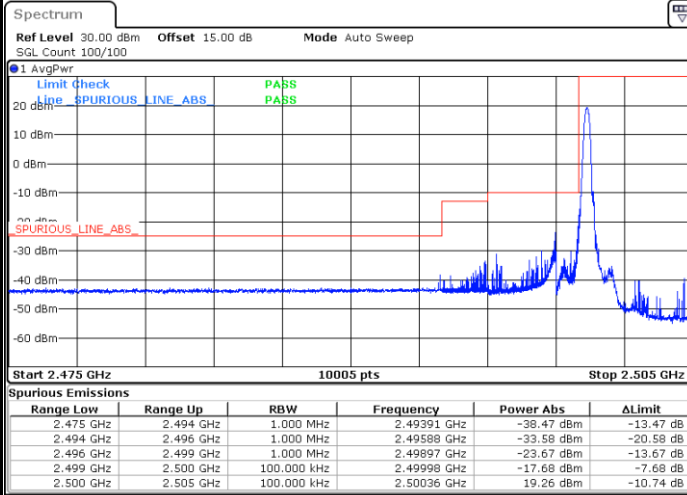


Date: 17.JAN.2024 01:24:18



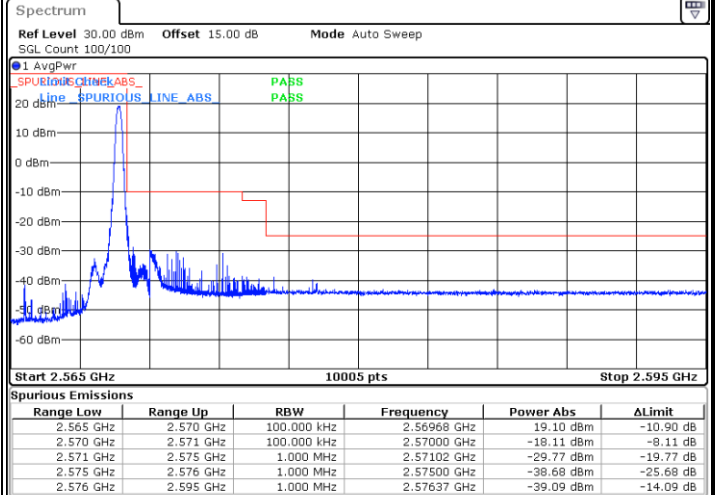
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



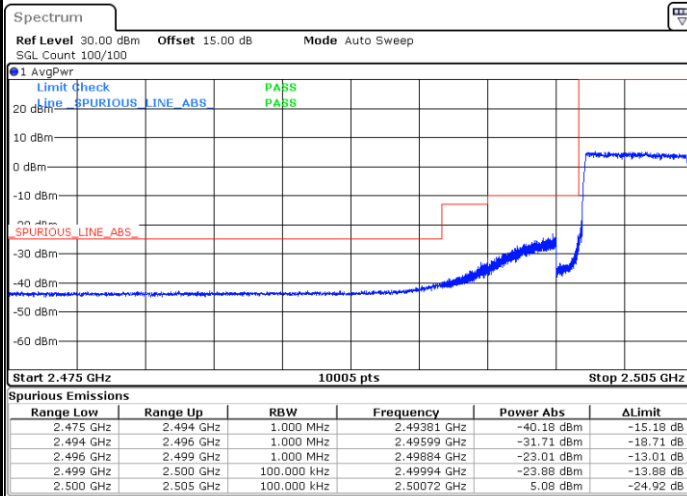
Date: 17.JAN.2024 01:12:18

Highest Band Edge / 1 RB



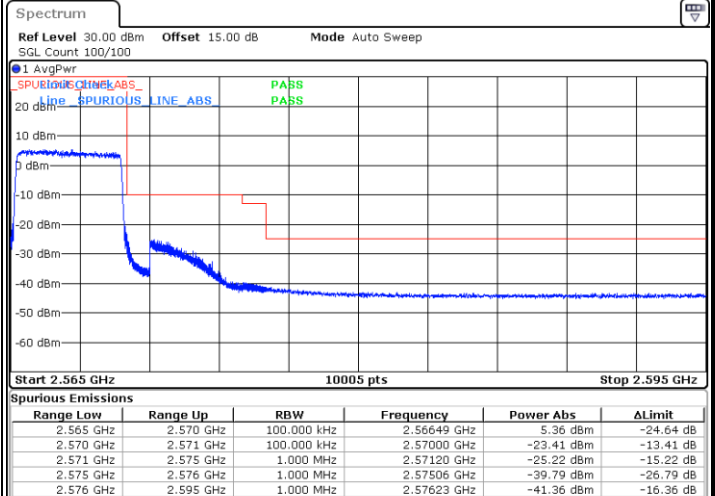
Date: 17.JAN.2024 01:22:14

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:15:26

Highest Band Edge / Full RB

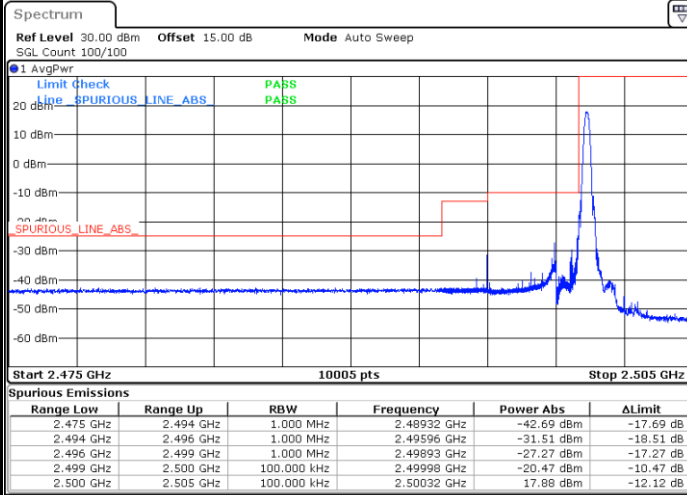


Date: 17.JAN.2024 01:25:20



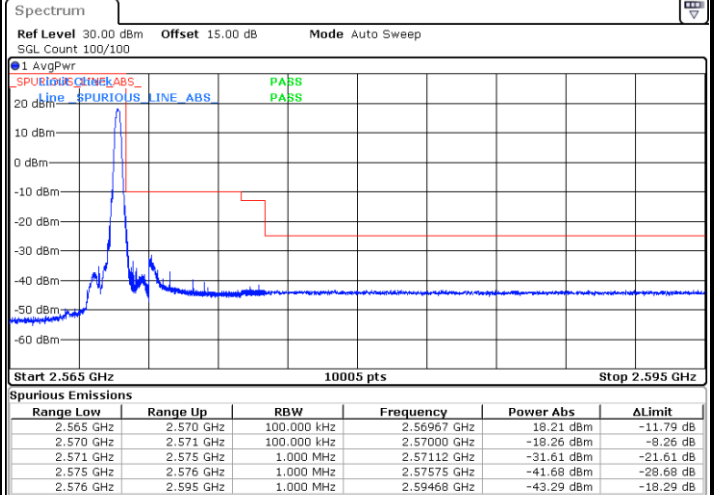
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



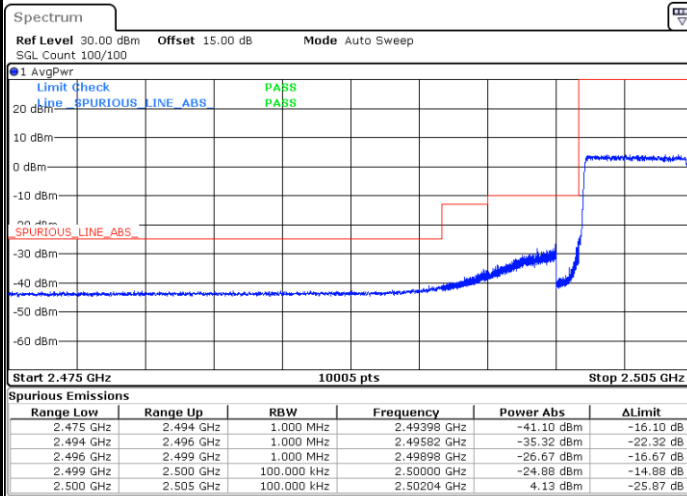
Date: 17.JAN.2024 01:13:21

Highest Band Edge / 1 RB



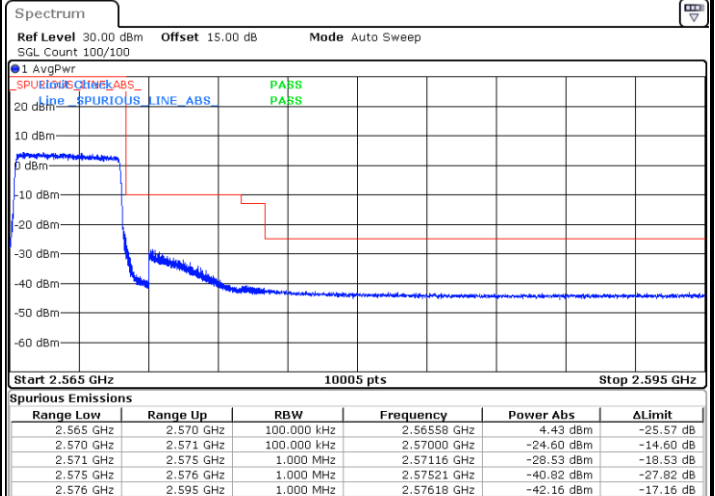
Date: 17.JAN.2024 01:23:16

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:16:29

Highest Band Edge / Full RB

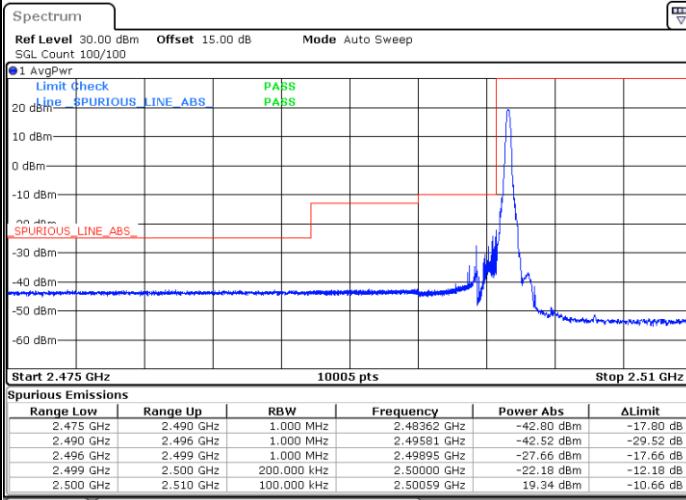


Date: 17.JAN.2024 01:26:21



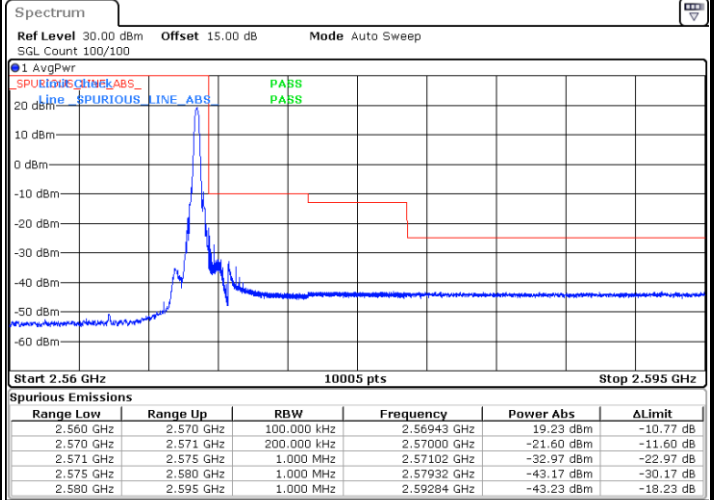
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



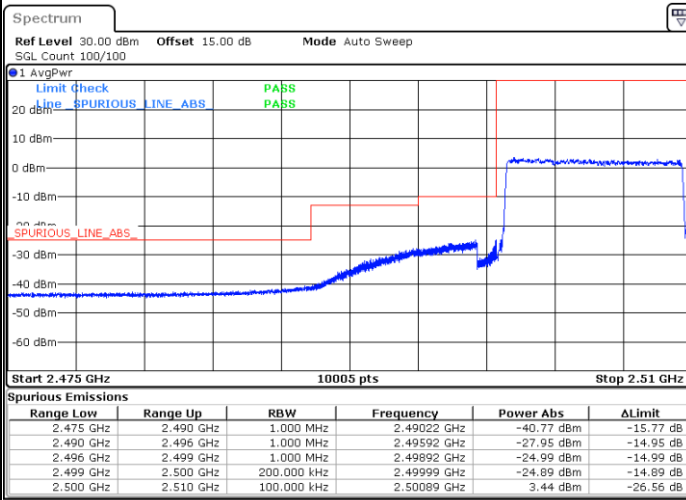
Date: 17.JAN.2024 01:29:24

Highest Band Edge / 1 RB



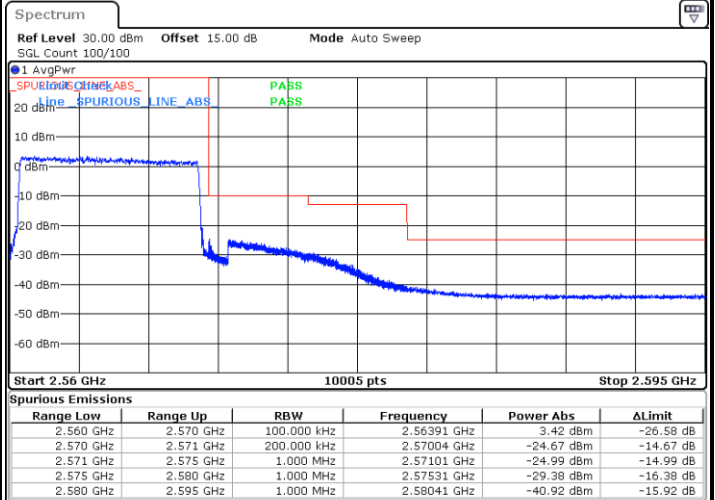
Date: 17.JAN.2024 01:39:17

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:32:30

Highest Band Edge / Full RB

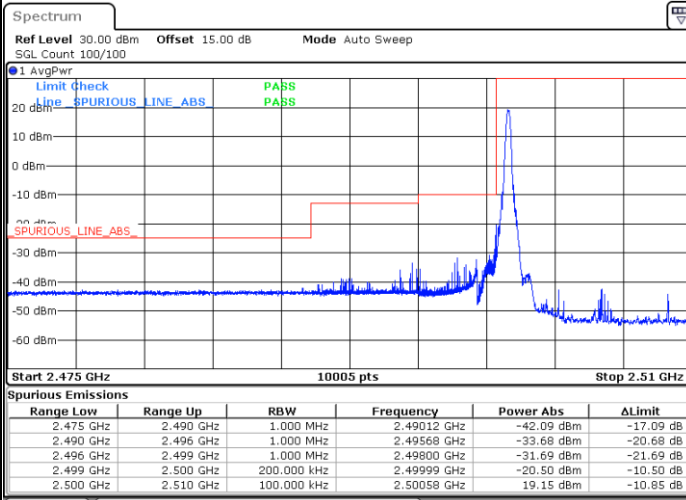


Date: 17.JAN.2024 01:42:23



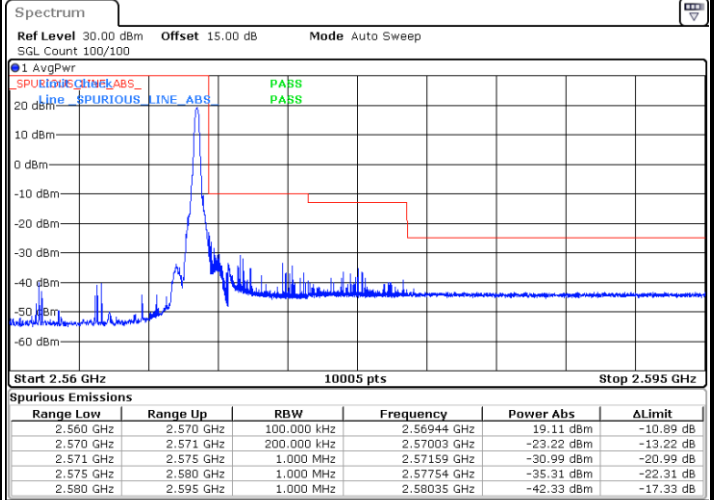
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1RB



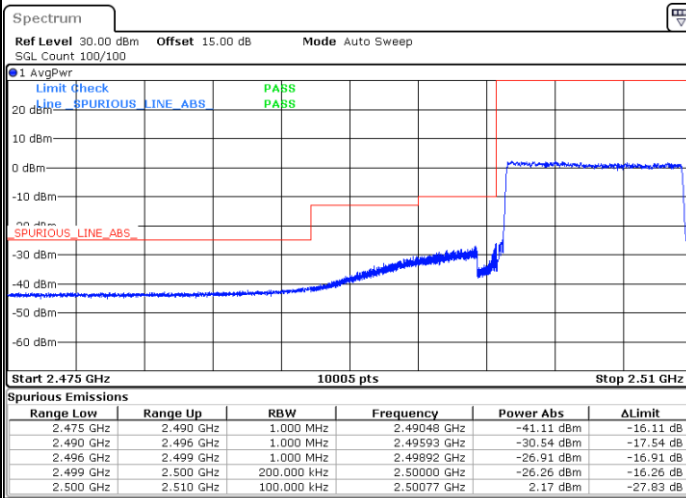
Date: 17.JAN.2024 01:30:26

Highest Band Edge / 1 RB



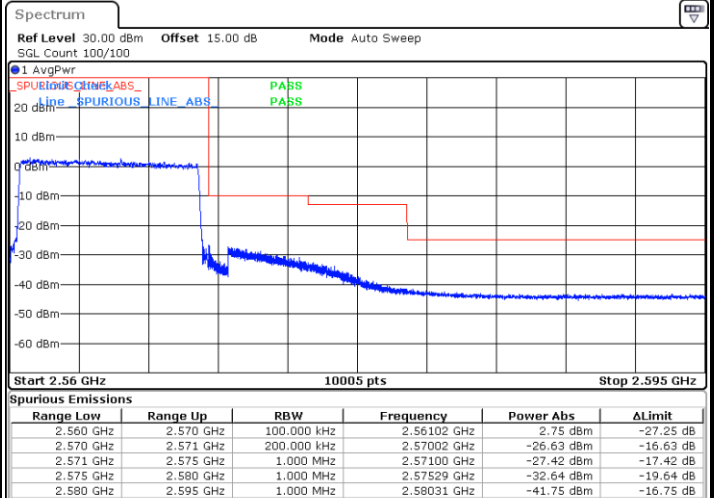
Date: 17.JAN.2024 01:40:19

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:33:32

Highest Band Edge / Full RB

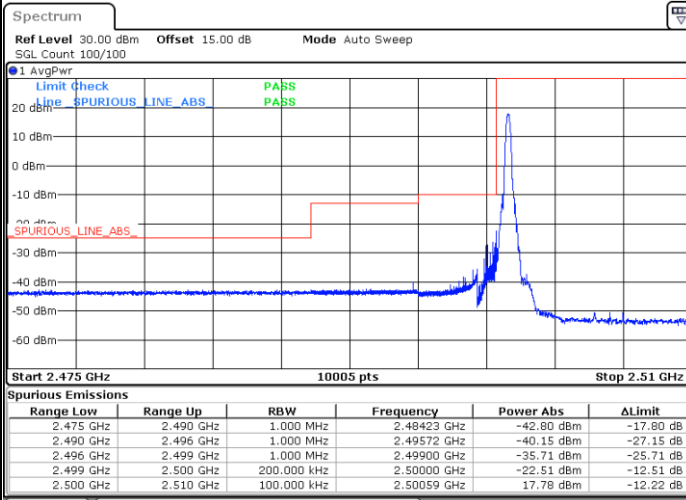


Date: 17.JAN.2024 01:43:25



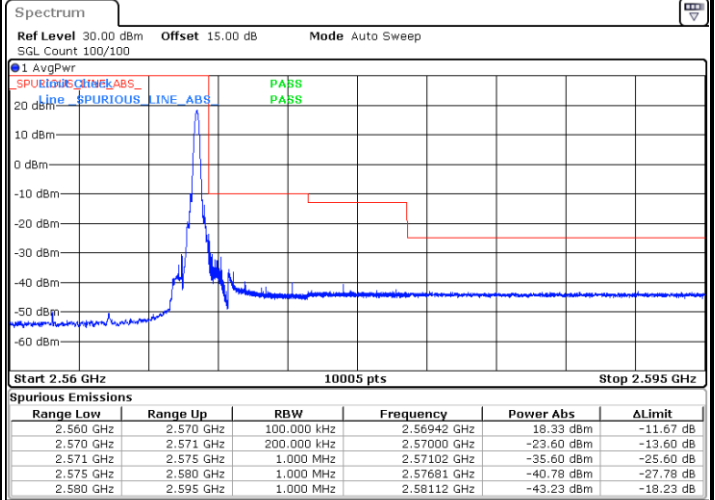
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1RB



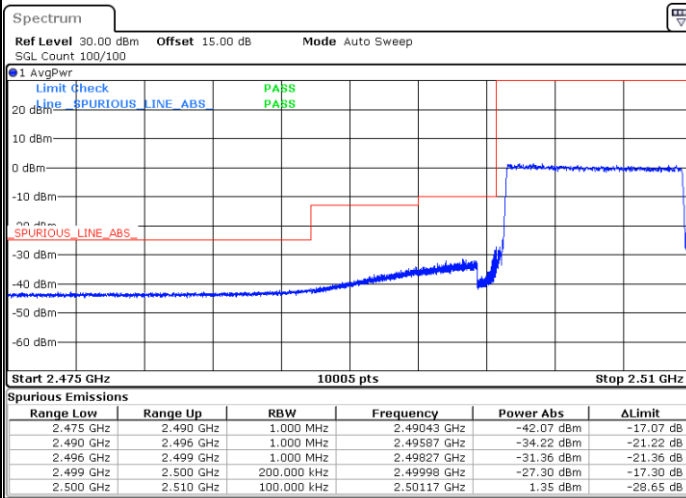
Date: 17.JAN.2024 01:31:28

Highest Band Edge / 1 RB



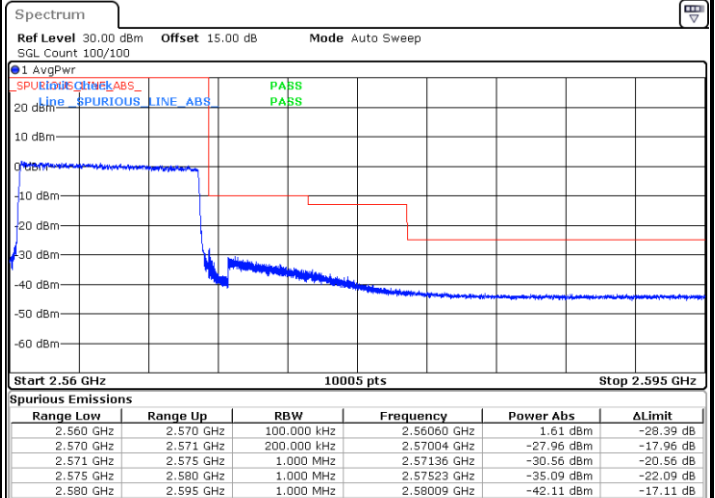
Date: 17.JAN.2024 01:41:21

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:34:34

Highest Band Edge / Full RB

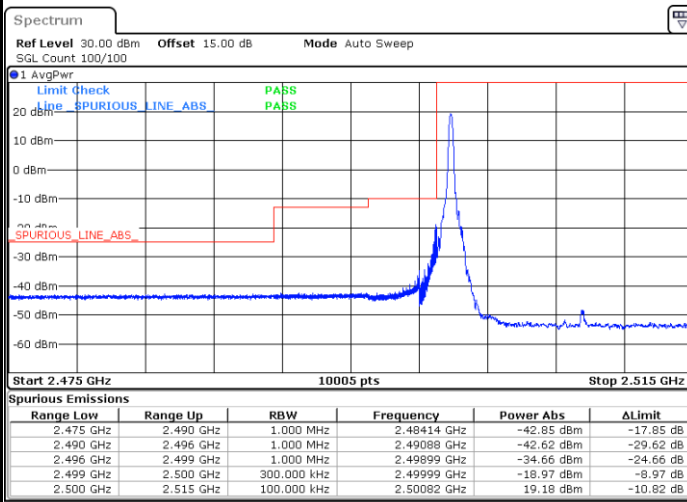


Date: 17.JAN.2024 01:44:26



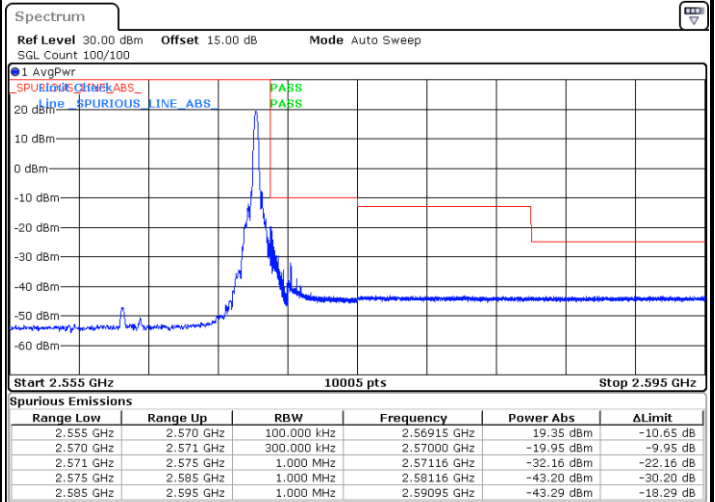
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



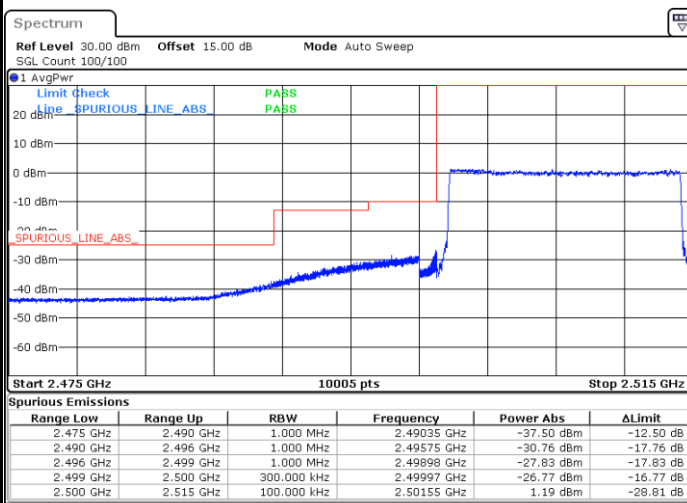
Date: 17.JAN.2024 01:47:28

Highest Band Edge / 1 RB



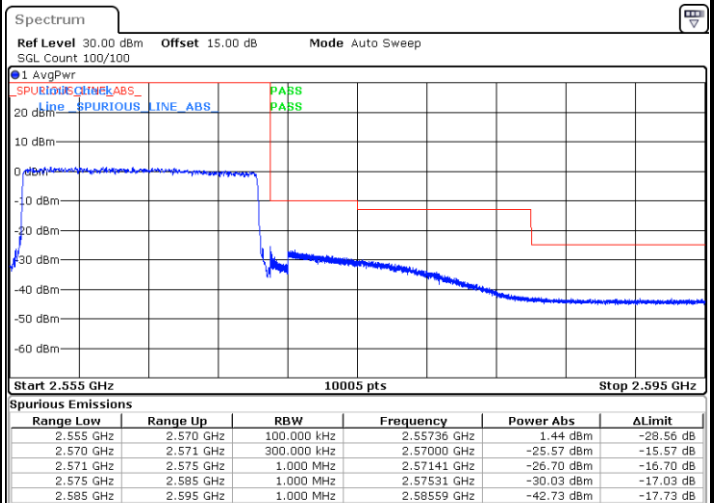
Date: 17.JAN.2024 01:57:21

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:50:34

Highest Band Edge / Full RB

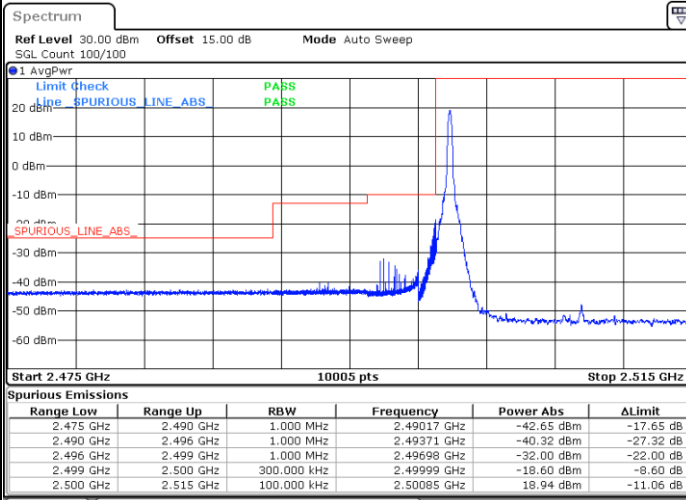


Date: 17.JAN.2024 02:00:28



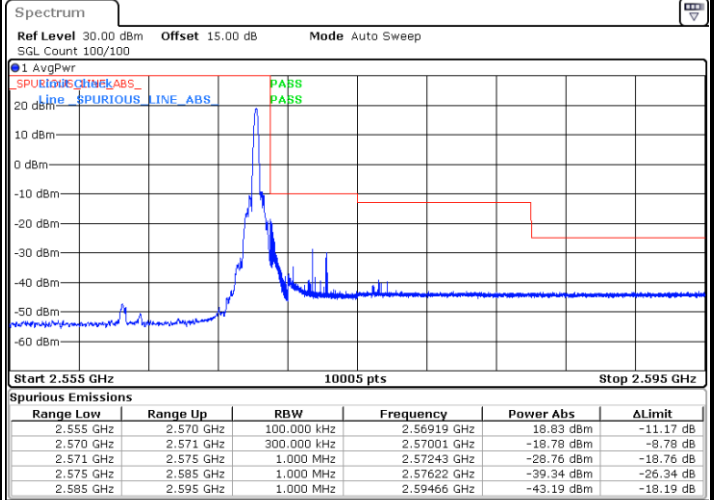
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1RB



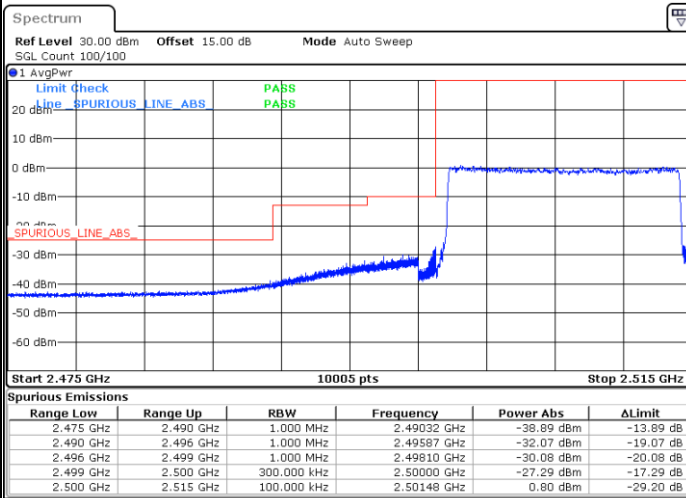
Date: 17.JAN.2024 01:48:30

Highest Band Edge / 1 RB



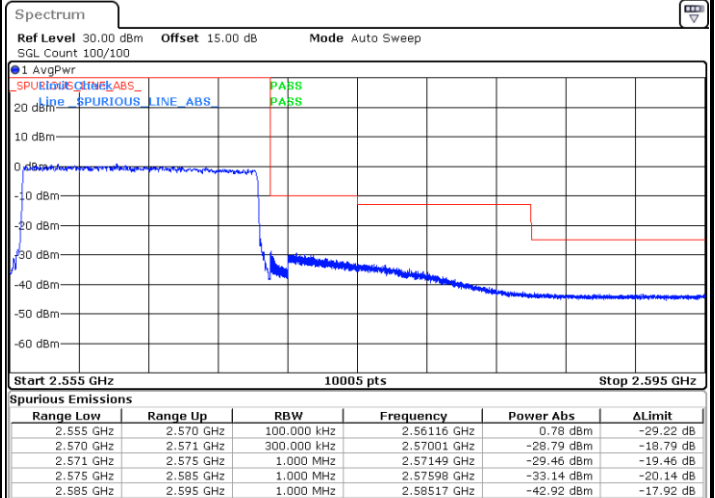
Date: 17.JAN.2024 01:58:23

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:51:36

Highest Band Edge / Full RB

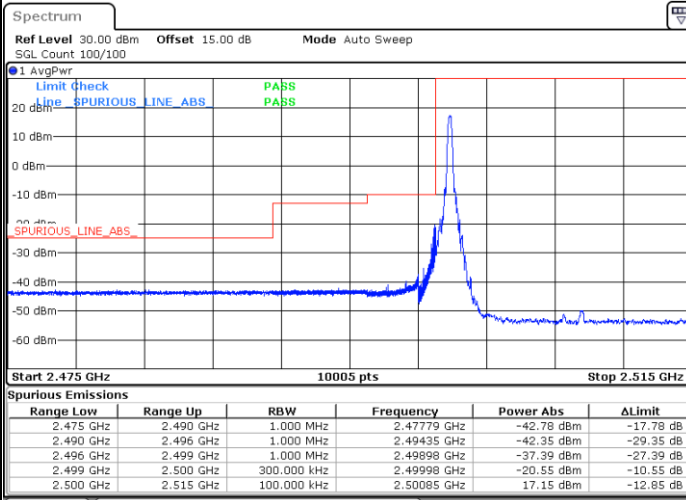


Date: 17.JAN.2024 02:01:30



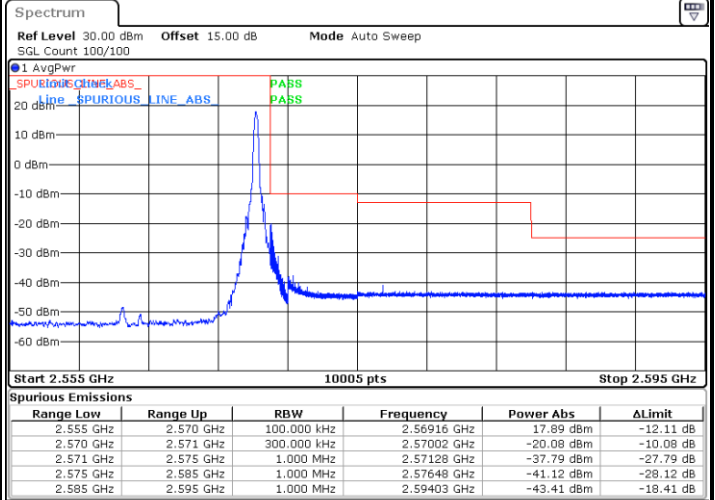
LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1RB



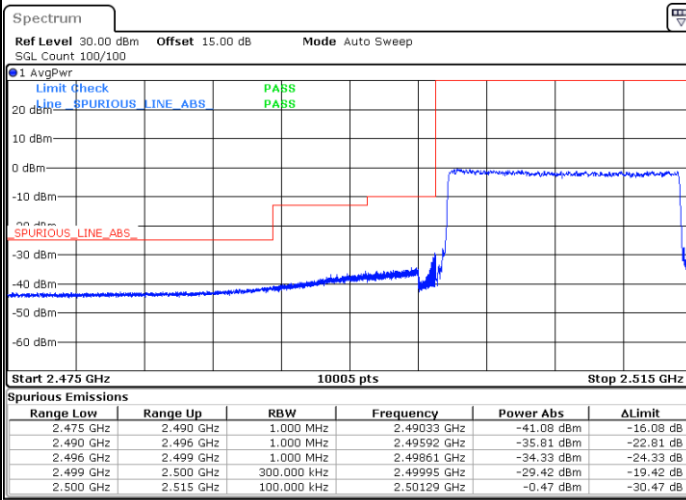
Date: 17.JAN.2024 01:49:32

Highest Band Edge / 1 RB



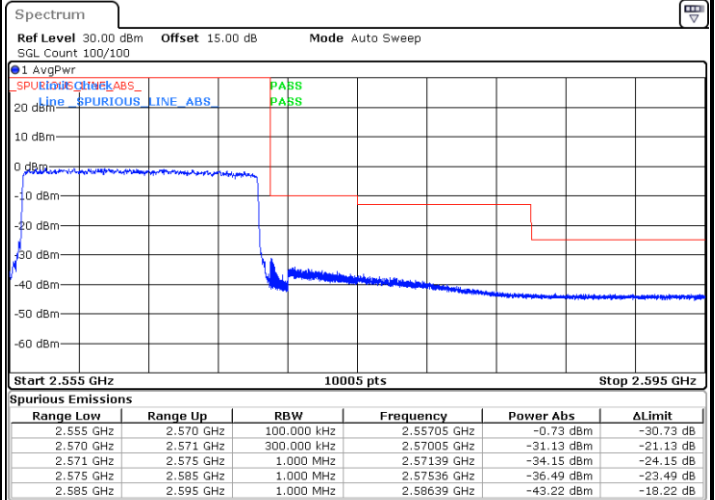
Date: 17.JAN.2024 01:59:25

Lowest Band Edge / Full RB



Date: 17.JAN.2024 01:52:38

Highest Band Edge / Full RB

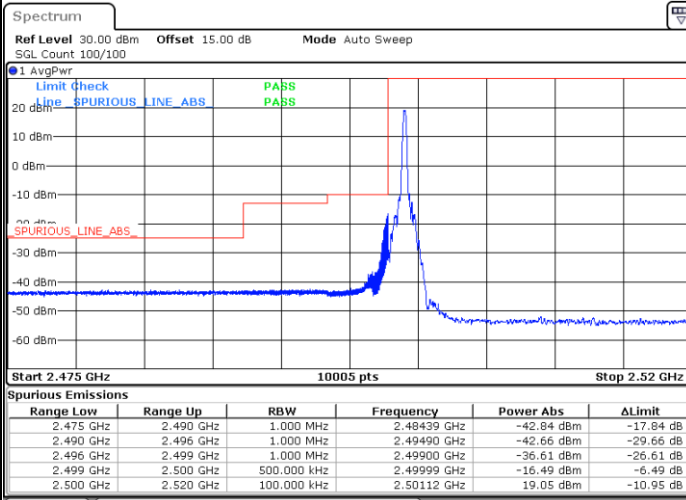


Date: 17.JAN.2024 02:02:32

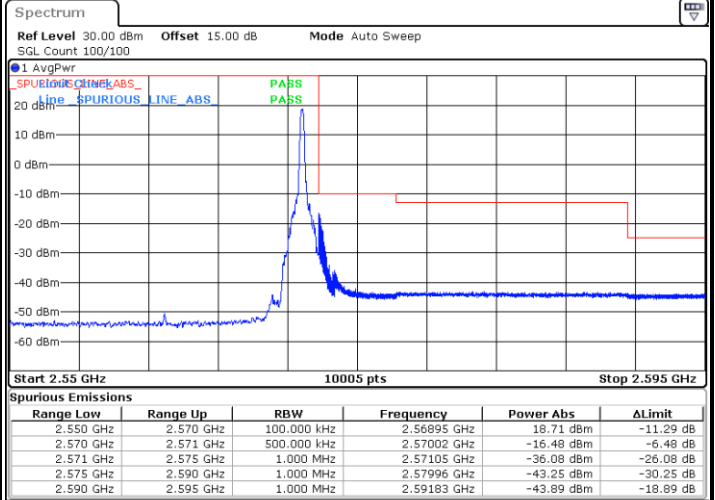


LTE Band 7 / 20MHz / QPSK

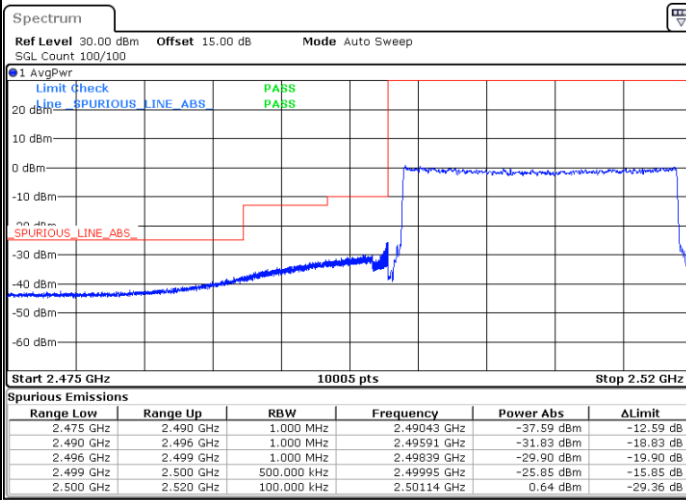
Lowest Band Edge / 1 RB



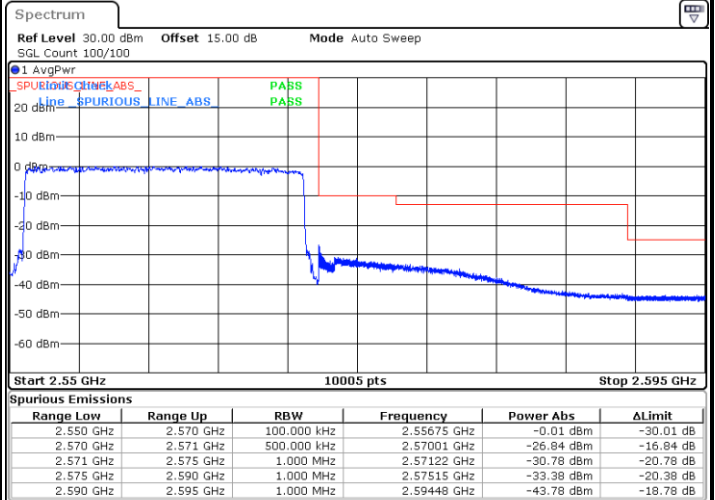
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



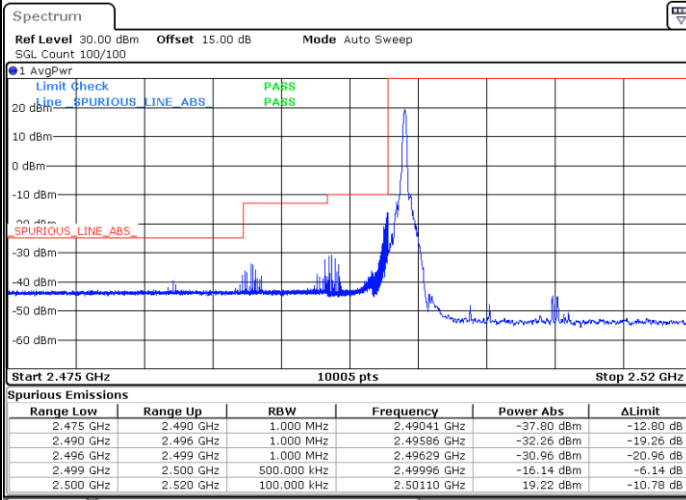
Highest Band Edge / Full RB





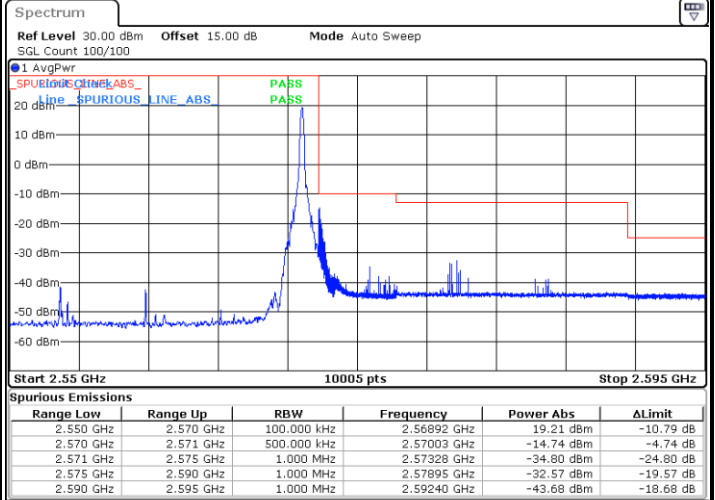
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1RB



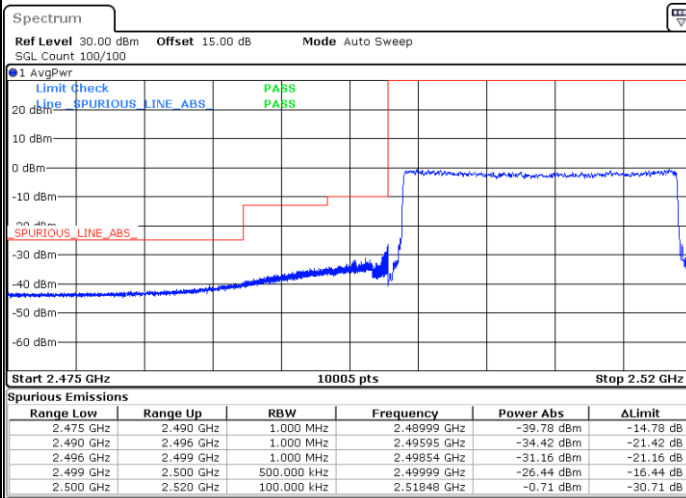
Date: 17.JAN.2024 02:06:36

Highest Band Edge / 1 RB



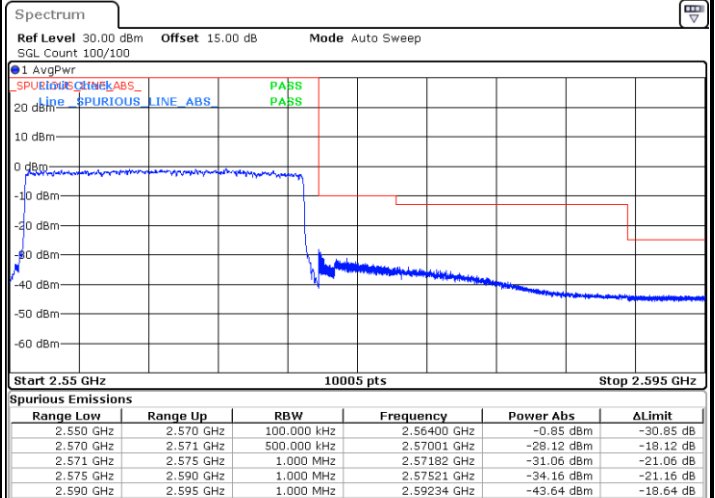
Date: 17.JAN.2024 02:17:54

Lowest Band Edge / Full RB



Date: 17.JAN.2024 02:09:42

Highest Band Edge / Full RB

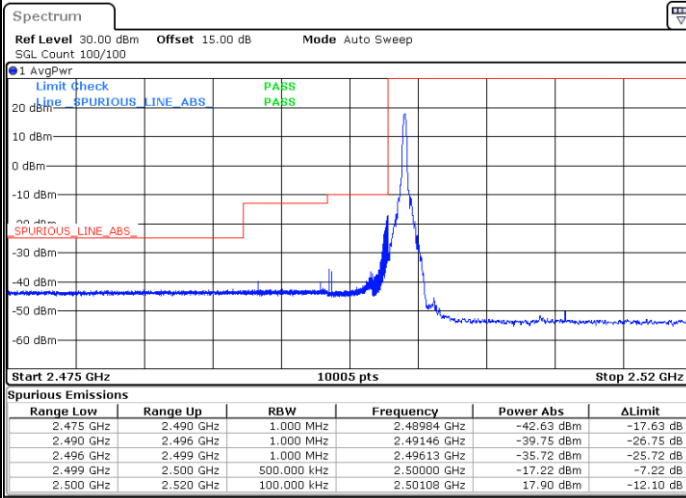


Date: 17.JAN.2024 02:21:00



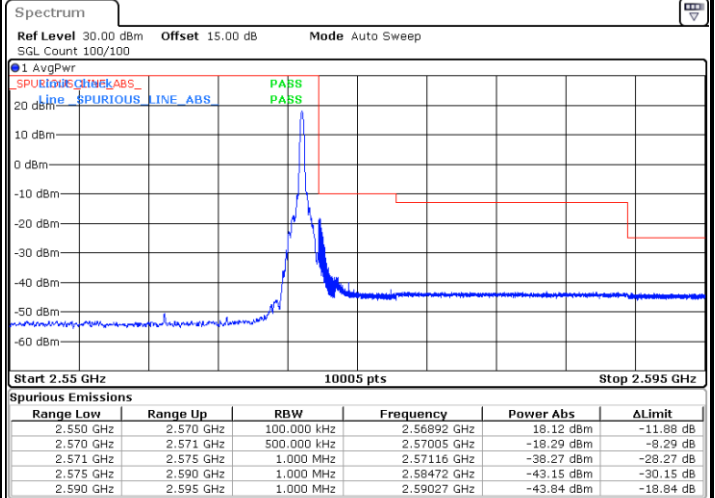
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1RB



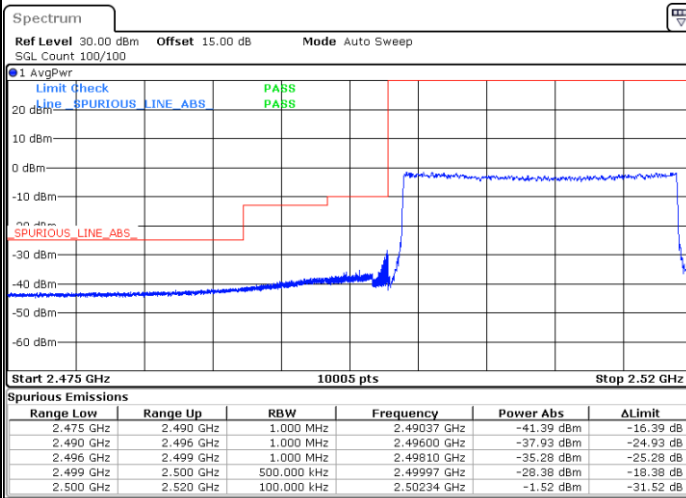
Date: 17.JAN.2024 02:07:38

Highest Band Edge / 1 RB



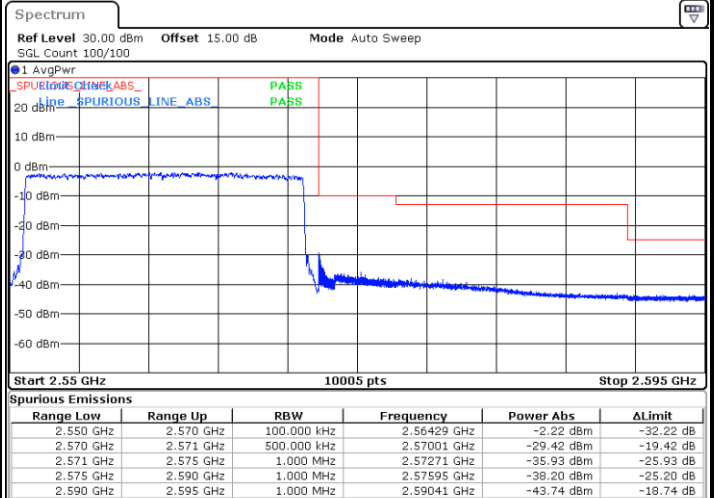
Date: 17.JAN.2024 02:18:56

Lowest Band Edge / Full RB



Date: 17.JAN.2024 02:10:45

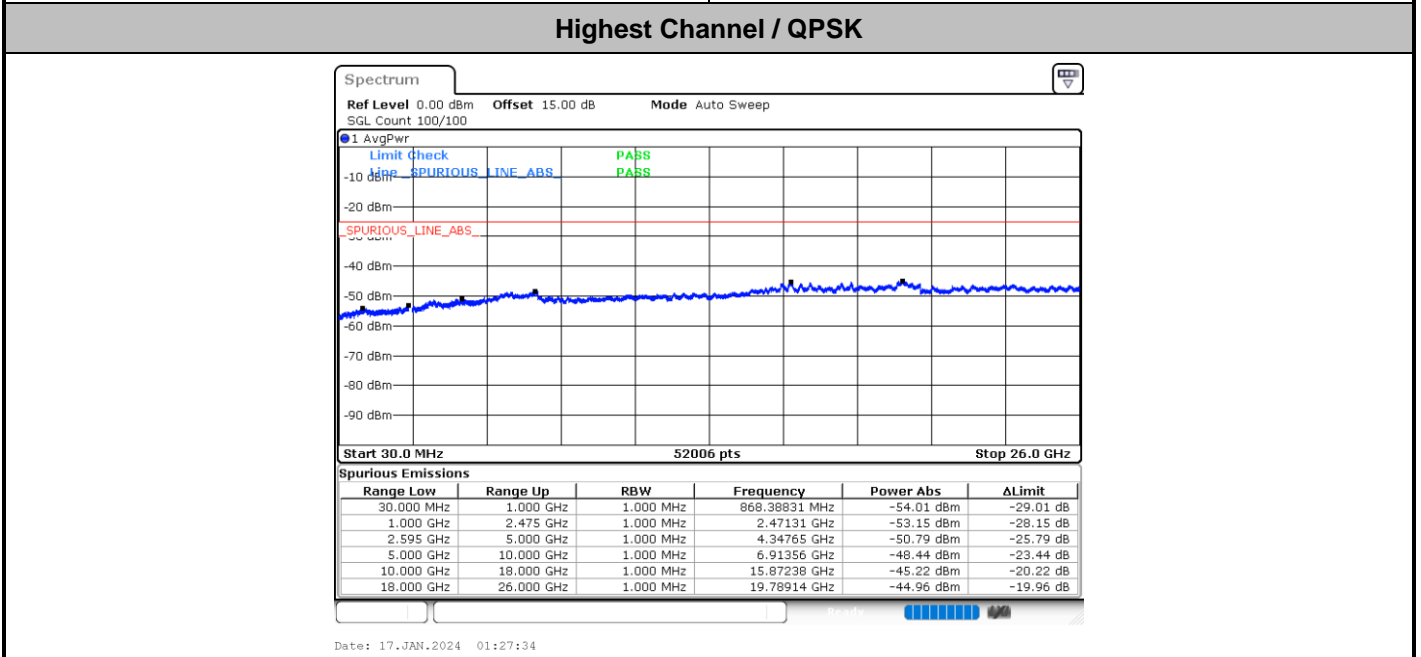
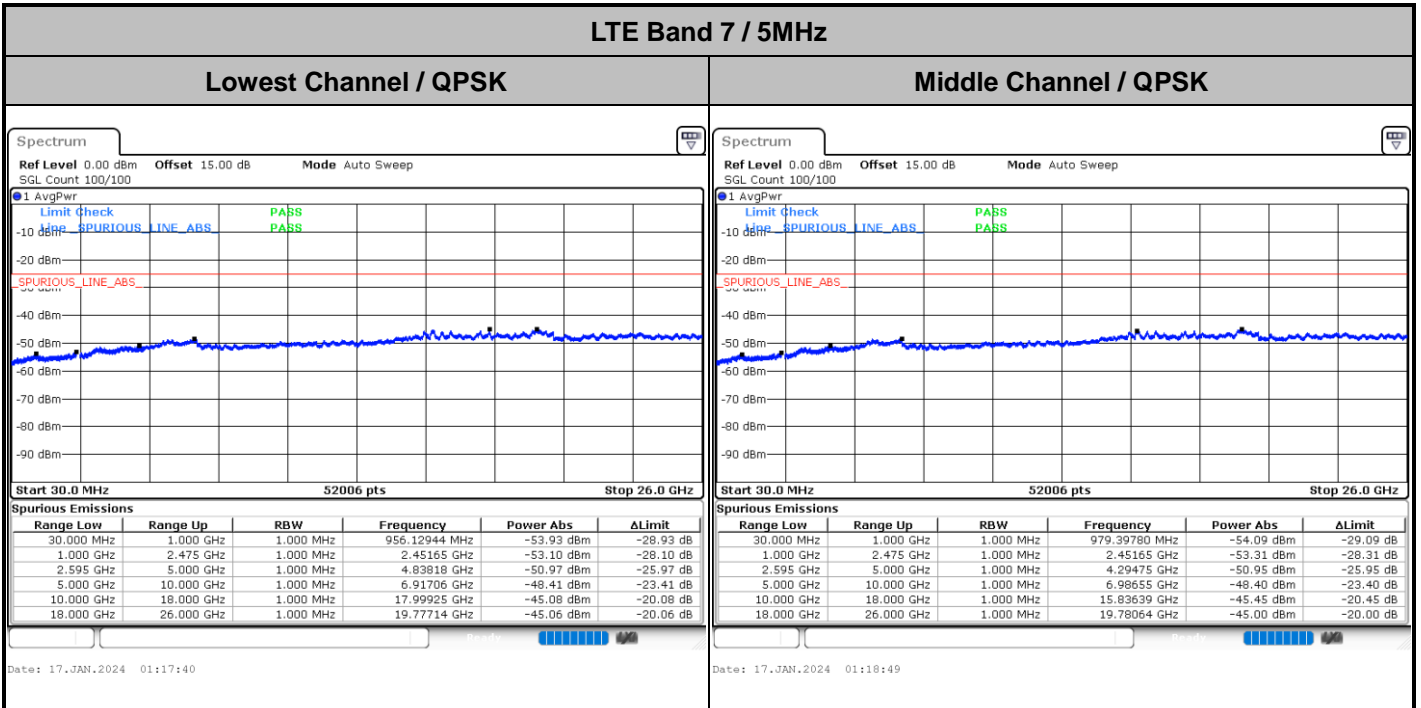
Highest Band Edge / Full RB



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



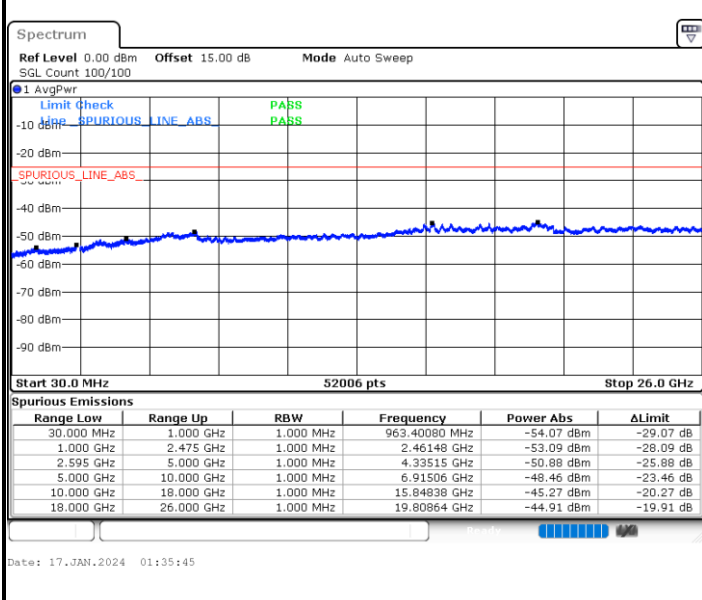
Conducted Spurious Emission



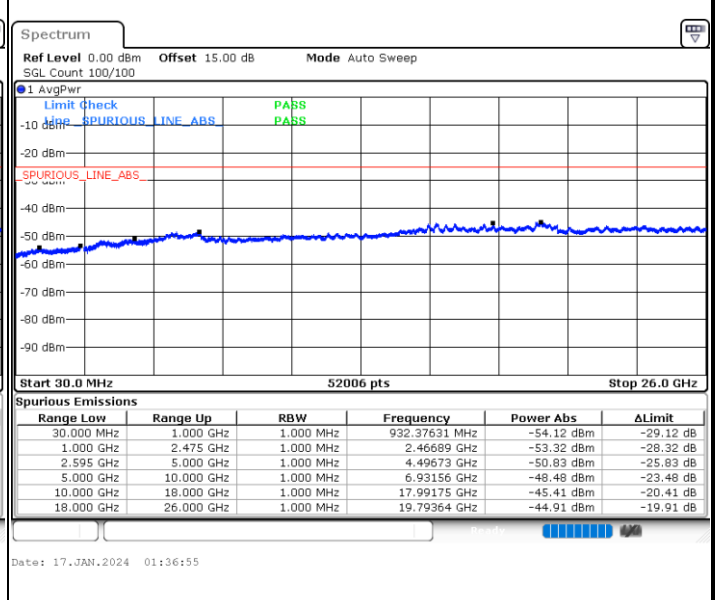


LTE Band 7 / 10MHz

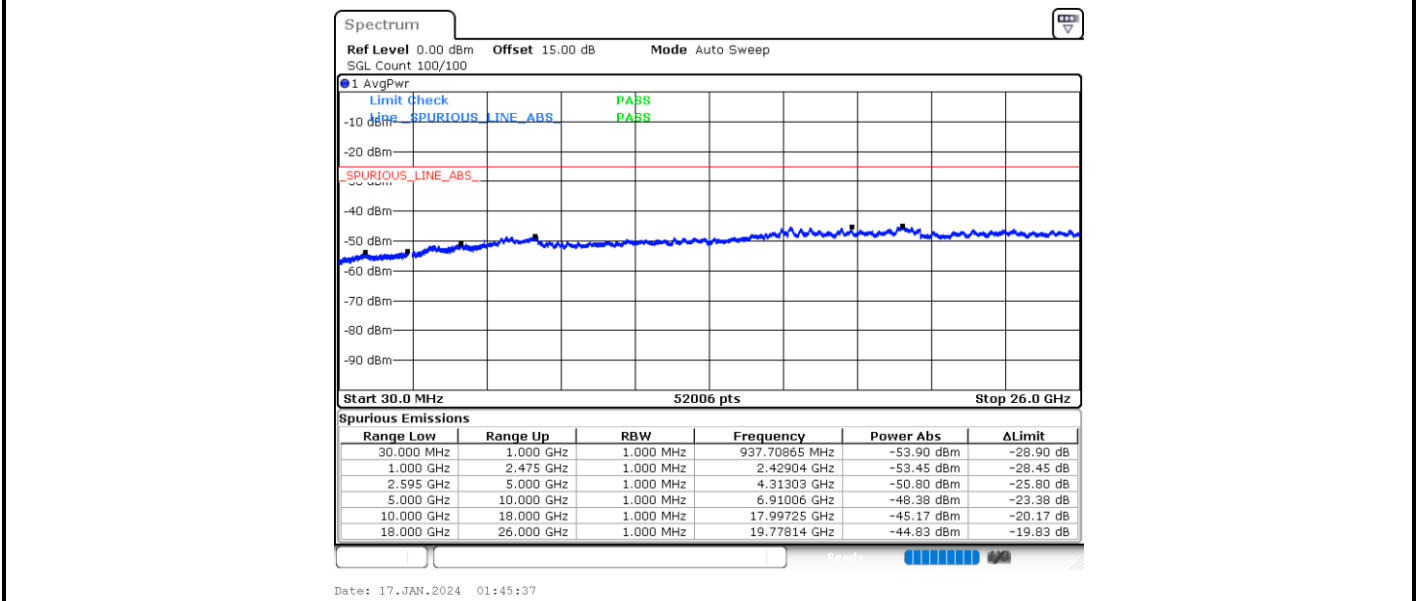
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

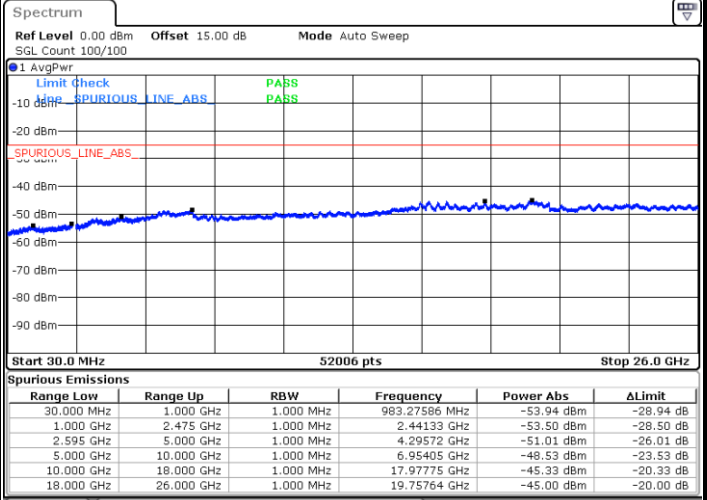
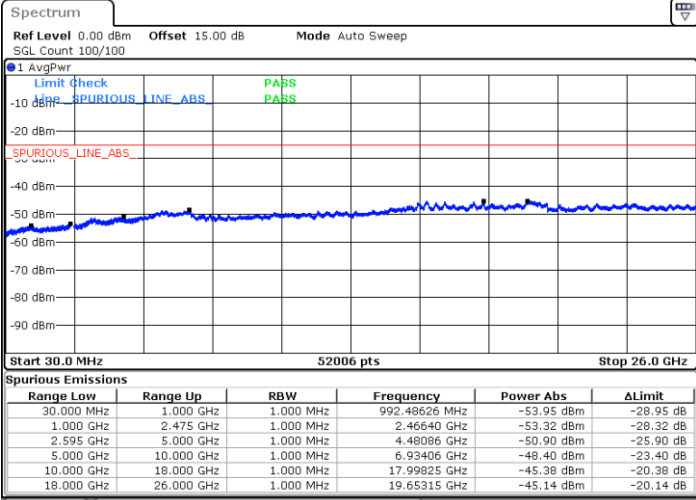




LTE Band 7 / 15MHz

Lowest Channel / QPSK

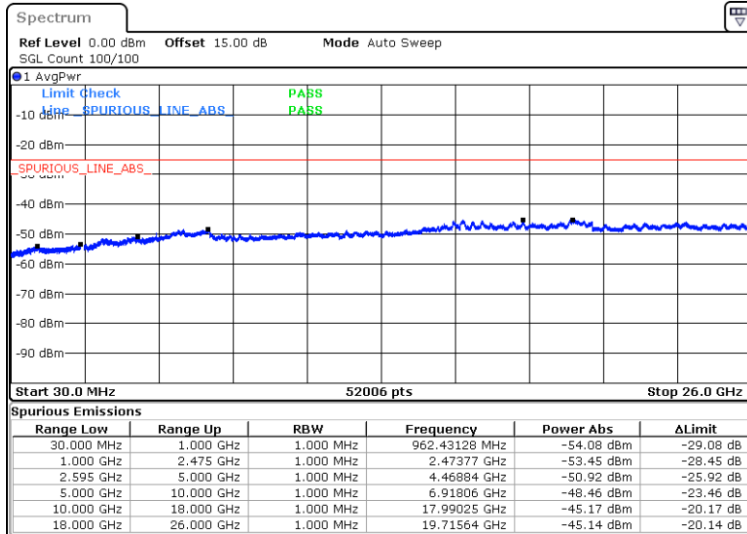
Middle Channel / QPSK



Date: 17.JAN.2024 01:53:49

Date: 17.JAN.2024 01:54:59

Highest Channel / QPSK

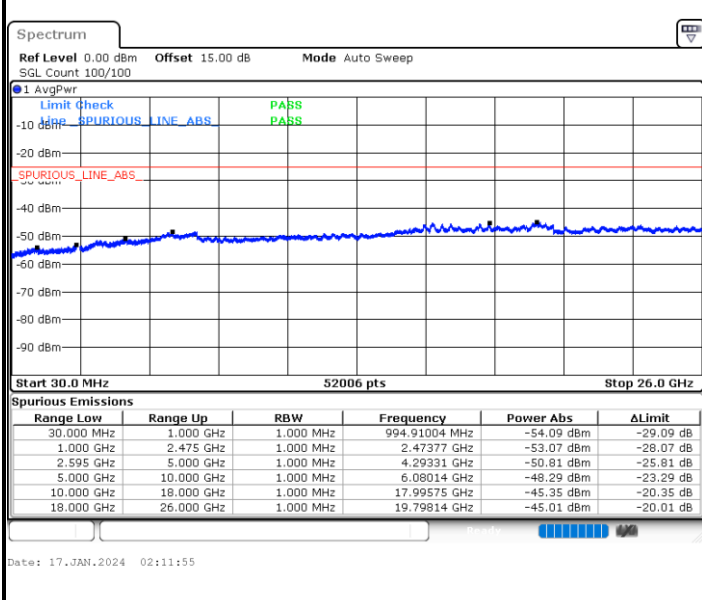


Date: 17.JAN.2024 02:03:43

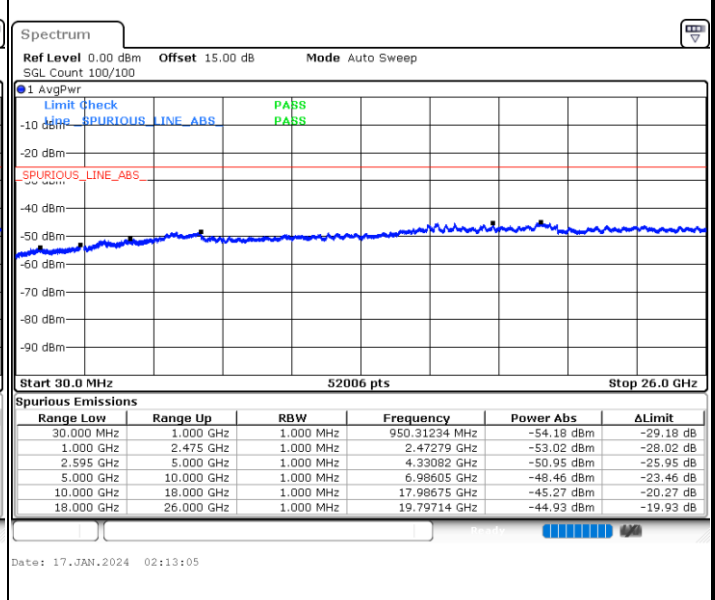


LTE Band 7 / 20MHz

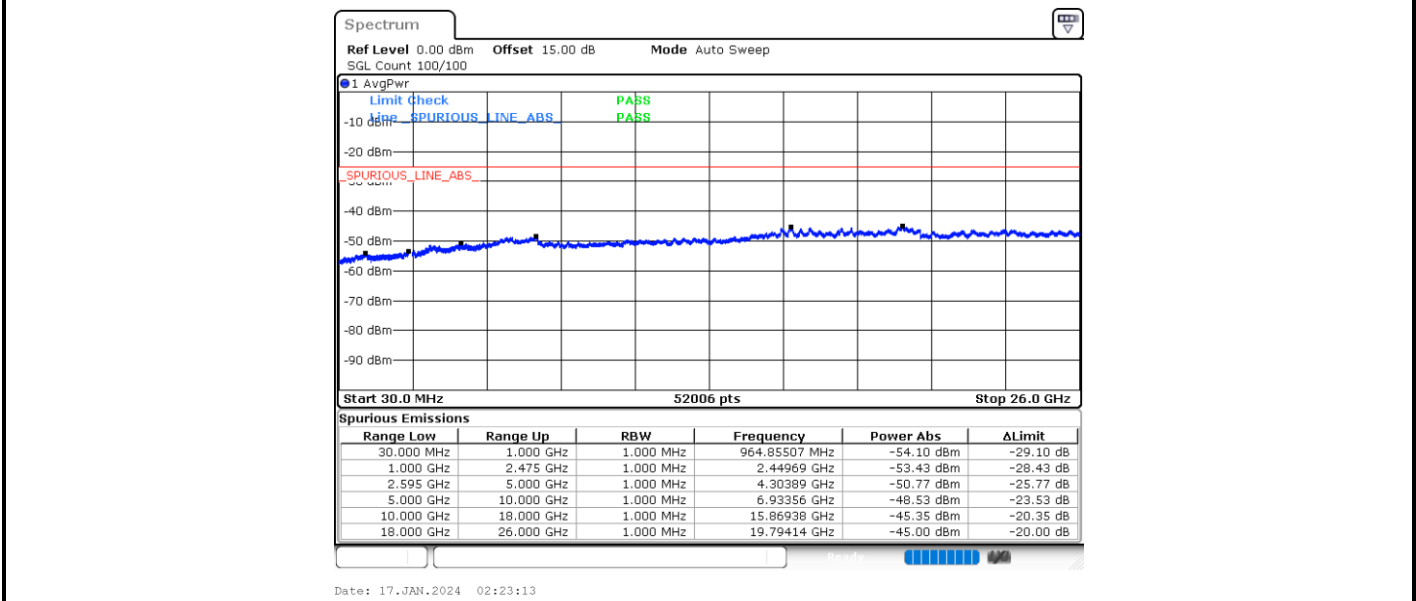
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0032	PASS
40	Normal Voltage	0.0029	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0030	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

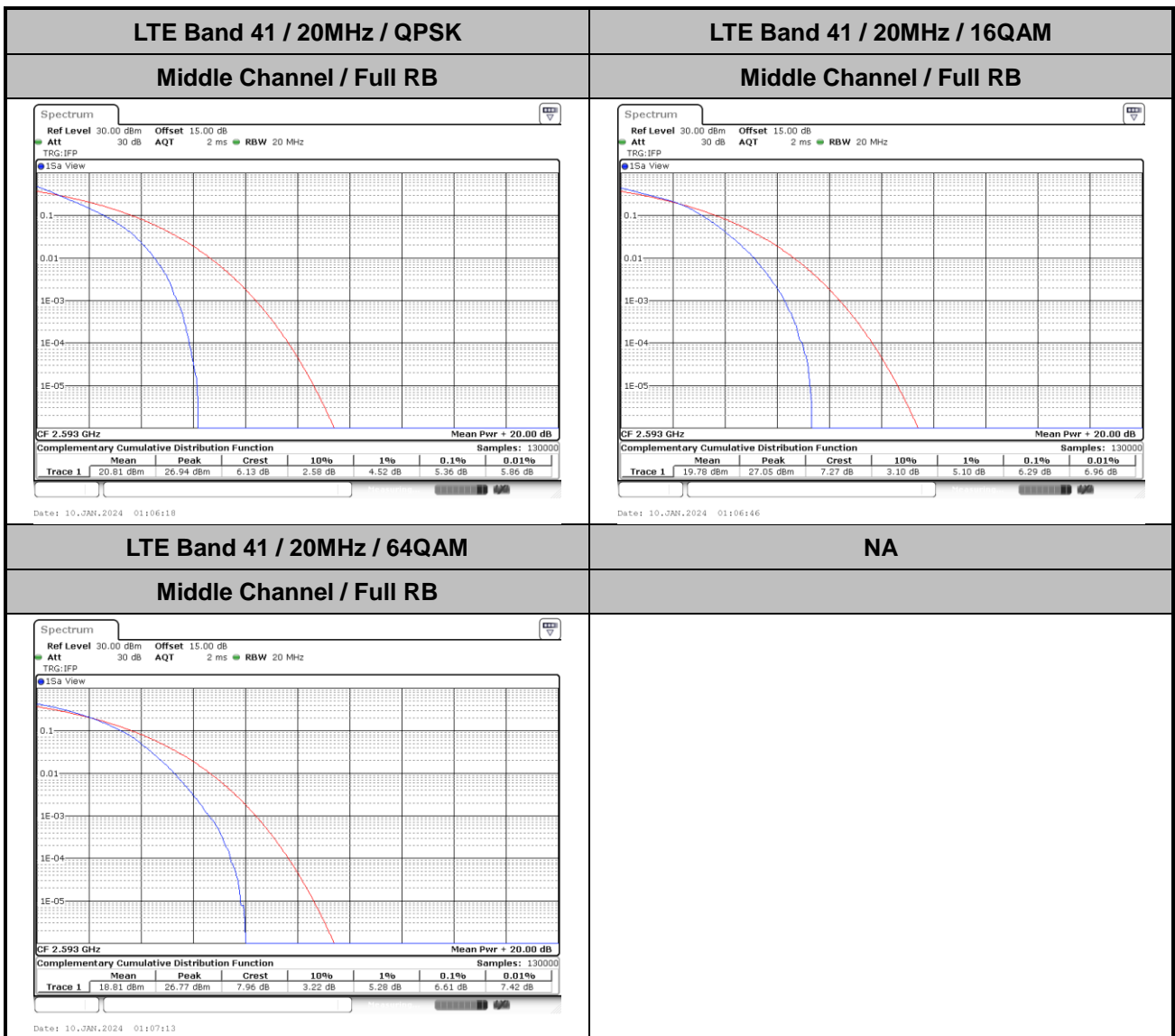
1. Normal Voltage = 3.91 V. ; Battery End Point (BEP) = 3.7 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41(Main PA)

Peak-to-Average Ratio

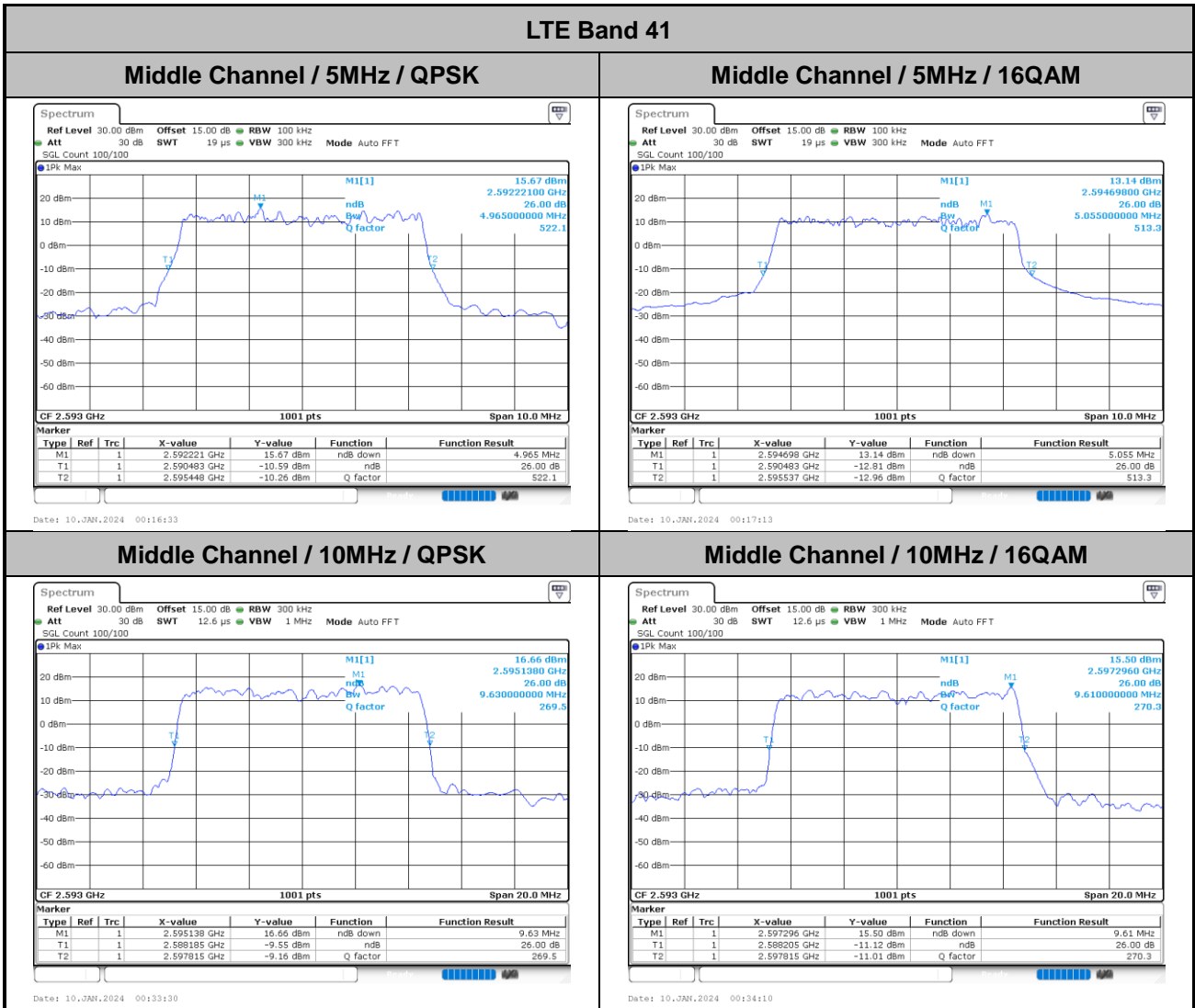
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.36	6.29	6.61	PASS





26dB Bandwidth

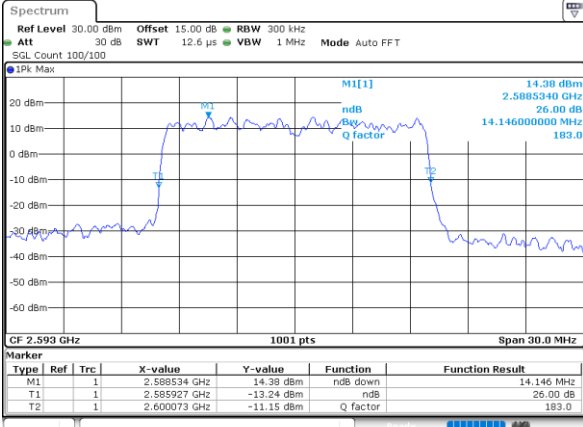
Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.97	5.06	9.63	9.61	14.15	14.12	18.86	19.06





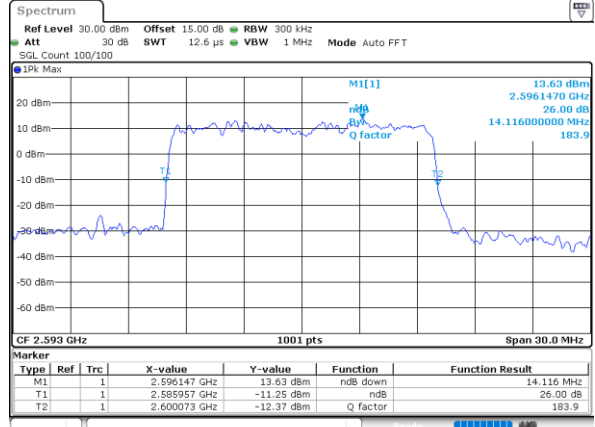
LTE Band 41

Middle Channel / 15MHz / QPSK



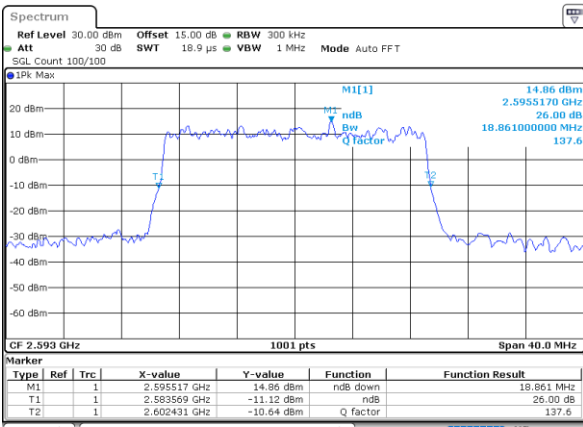
Date: 10_JAN_2024 00:49:13

Middle Channel / 15MHz / 16QAM



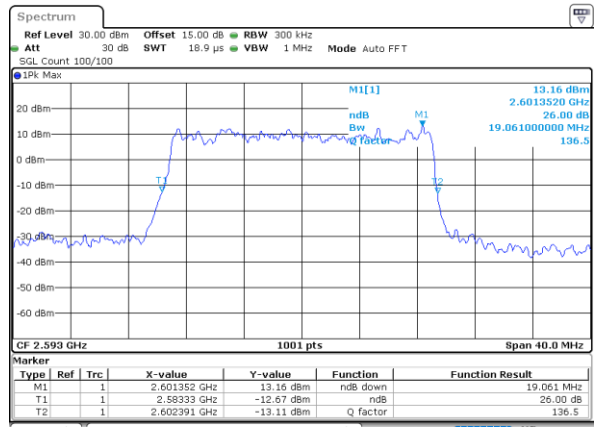
Date: 10_JAN_2024 00:49:53

Middle Channel / 20MHz / QPSK



Date: 10_JAN_2024 01:05:11

Middle Channel / 20MHz / 16QAM

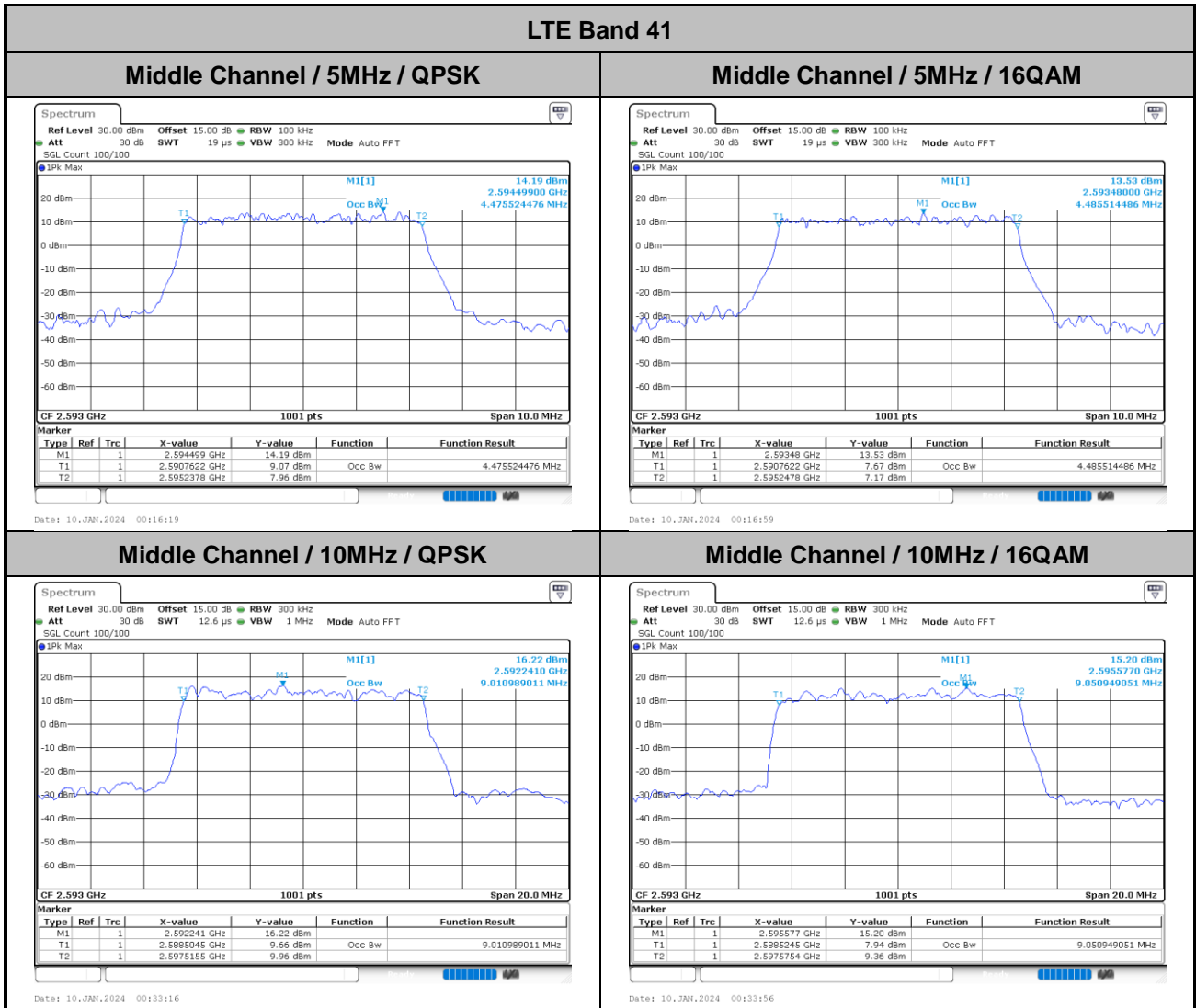


Date: 10_JAN_2024 01:05:51



Occupied Bandwidth

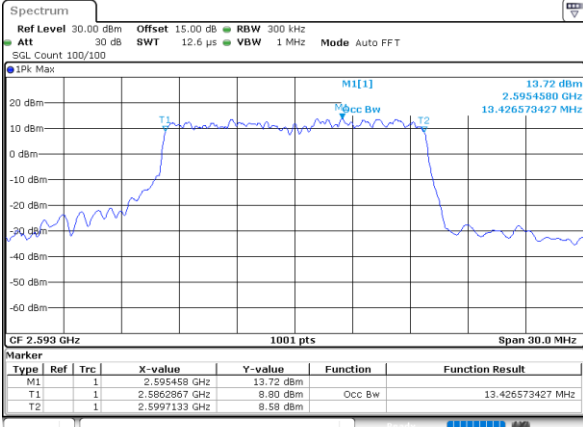
Mode	LTE Band 41 : 99%OBW(MHz)							
	5MHz		10MHz		15MHz		20MHz	
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.48	4.49	9.01	9.05	13.43	13.40	17.94	17.90





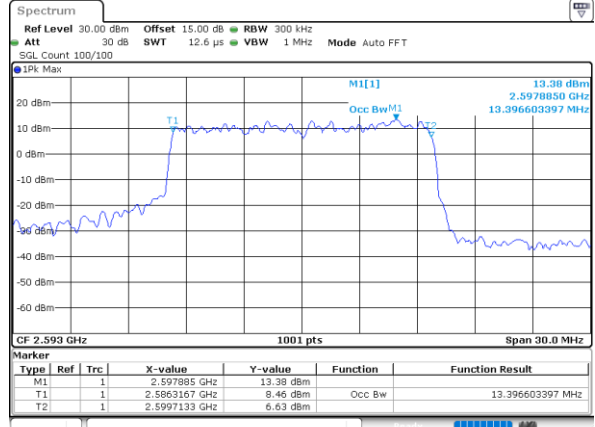
LTE Band 41

Middle Channel / 15MHz / QPSK



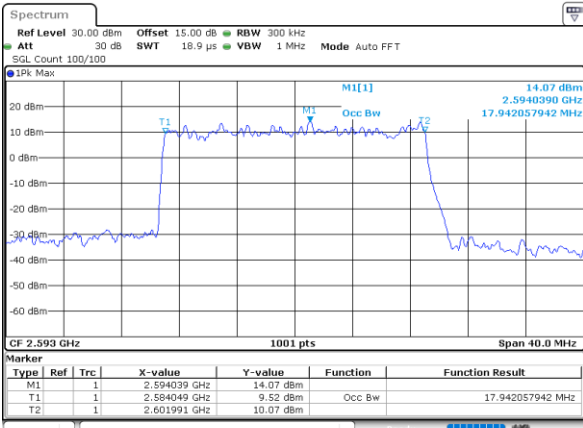
Date: 10_JAN_2024 00:48:59

Middle Channel / 15MHz / 16QAM



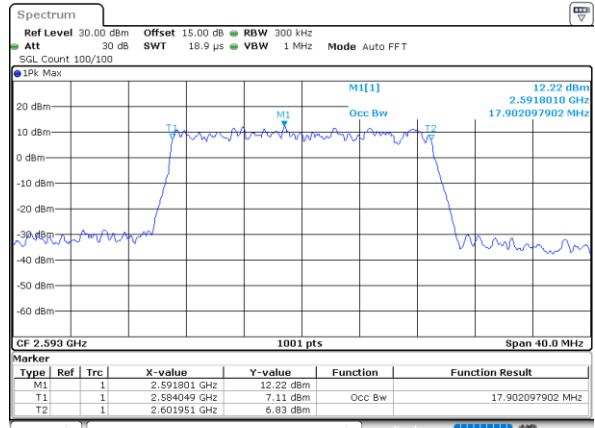
Date: 10_JAN_2024 00:49:39

Middle Channel / 20MHz / QPSK



Date: 10_JAN_2024 01:04:57

Middle Channel / 20MHz / 16QAM



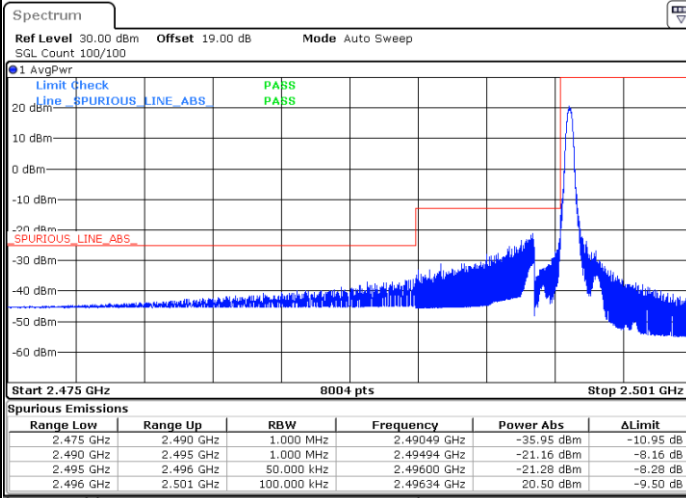
Date: 10_JAN_2024 01:05:37



Conducted Band Edge

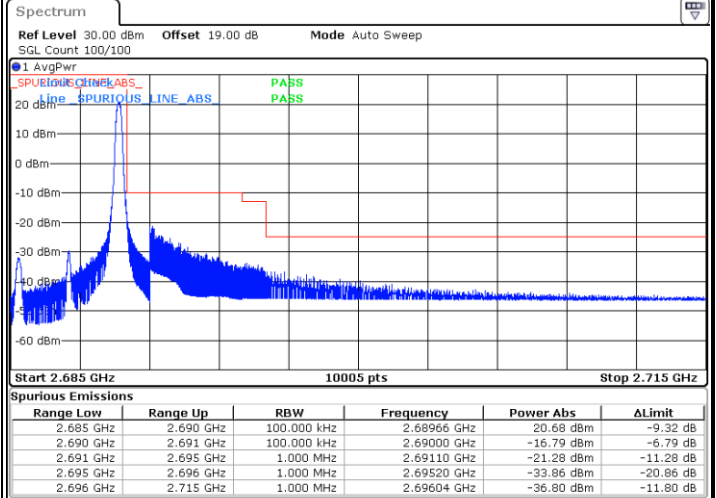
LTE Band 41 / 5MHz / QPSK

Lowest Band Edge / 1 RB



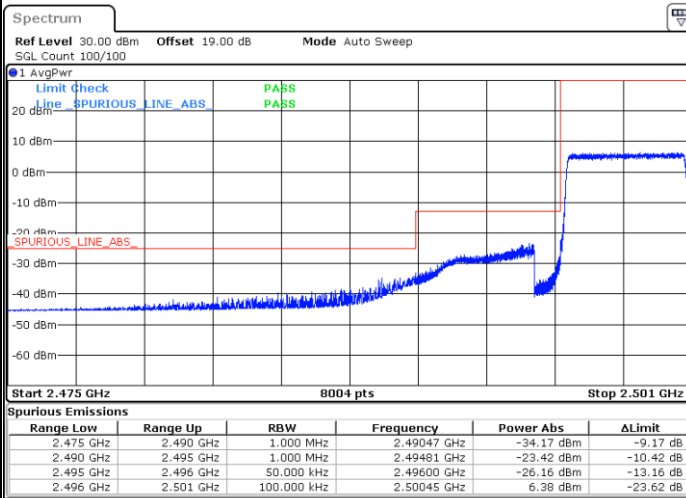
Date: 9, JAN, 2024 23:51:28

Highest Band Edge / 1 RB



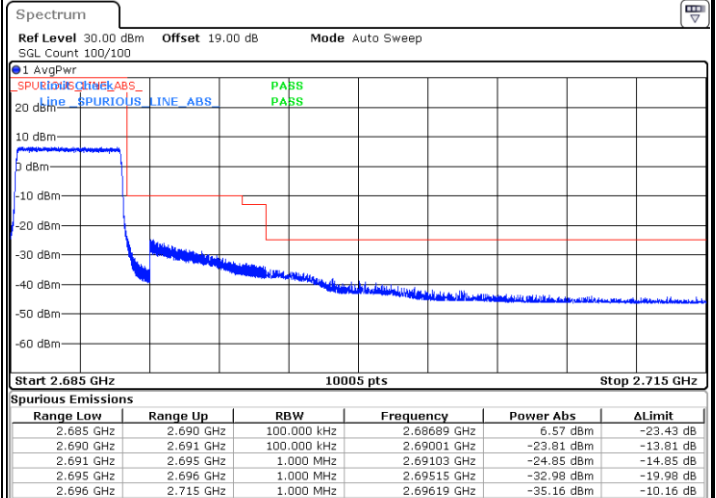
Date: 10, JAN, 2024 01:27:13

Lowest Band Edge / Full RB



Date: 10, JAN, 2024 00:13:40

Highest Band Edge / Full RB

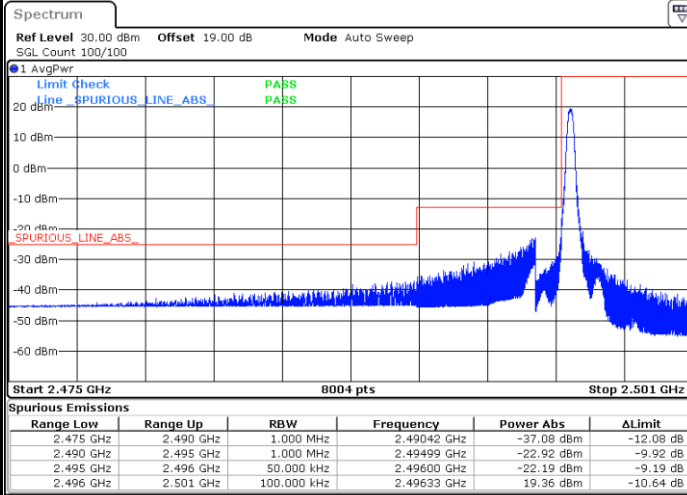


Date: 10, JAN, 2024 01:34:00



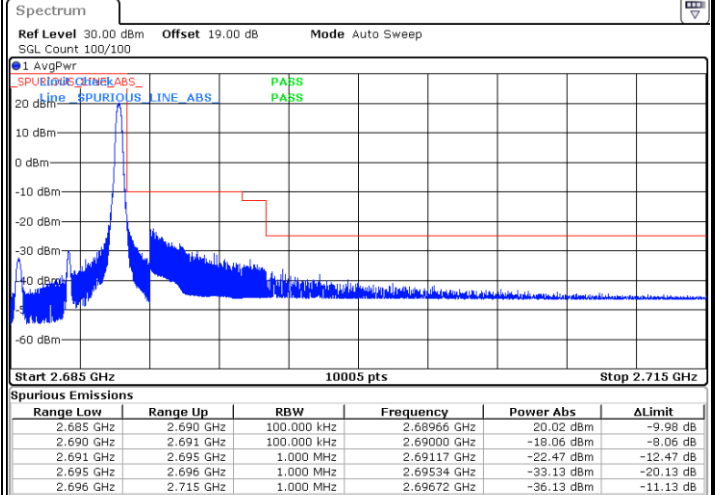
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



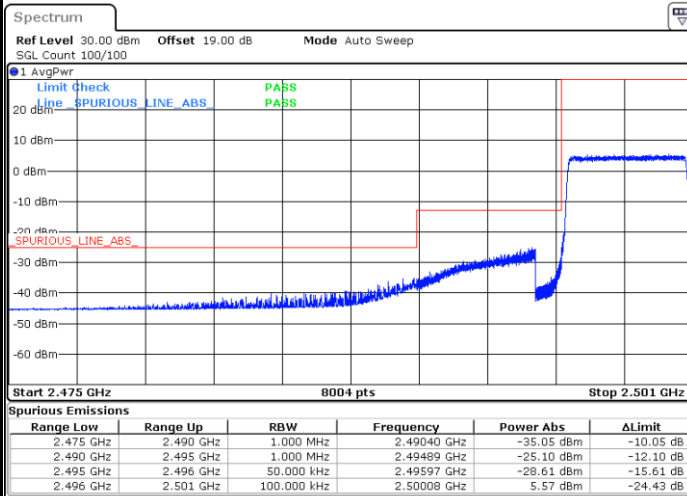
Date: 9, JAN, 2024 23:52:20

Highest Band Edge / 1 RB



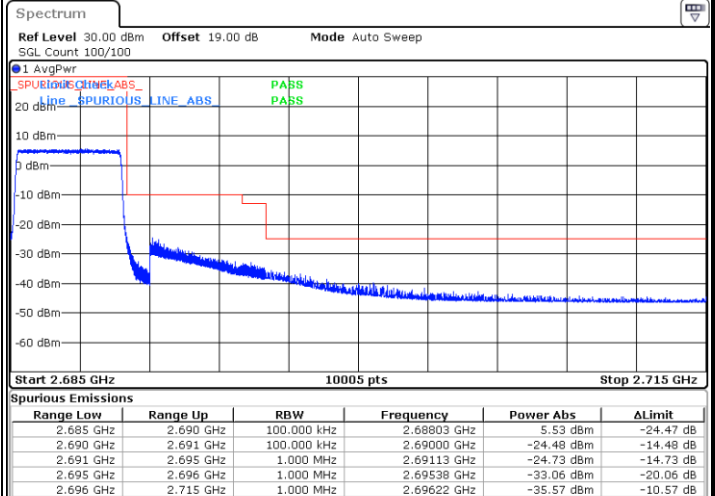
Date: 10, JAN, 2024 01:28:34

Lowest Band Edge / Full RB



Date: 10, JAN, 2024 00:12:47

Highest Band Edge / Full RB



Date: 10, JAN, 2024 01:32:38