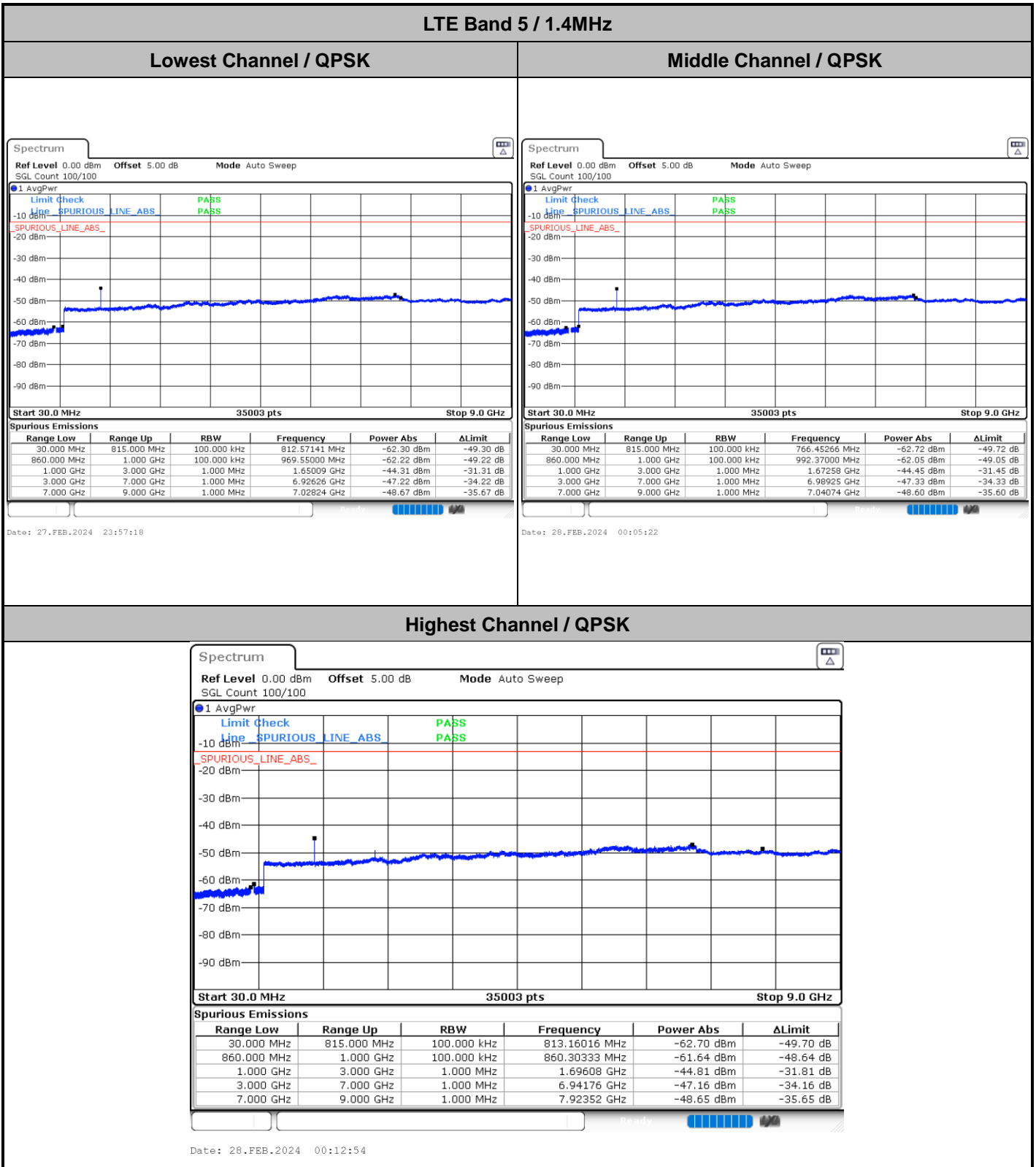




Conducted Spurious Emission

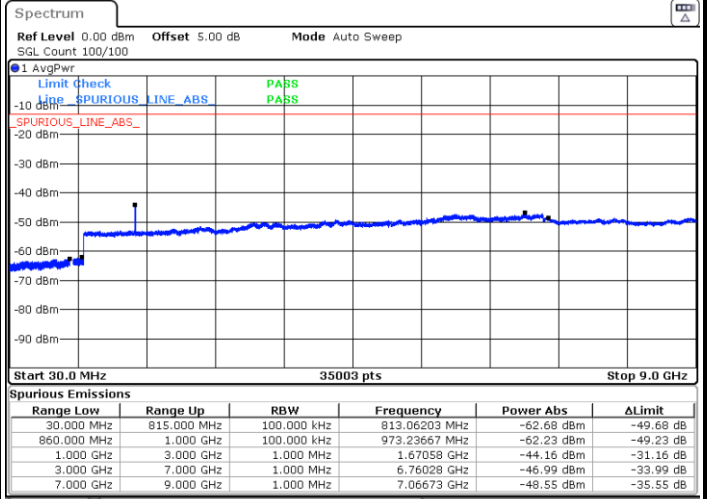
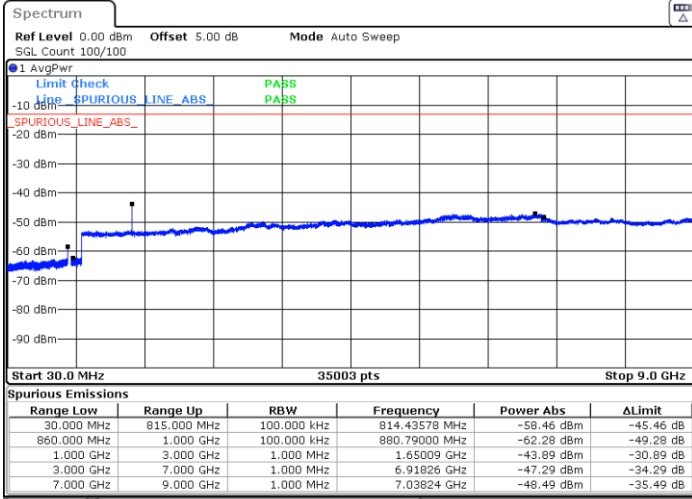




LTE Band 5 / 3MHz

Lowest Channel / QPSK

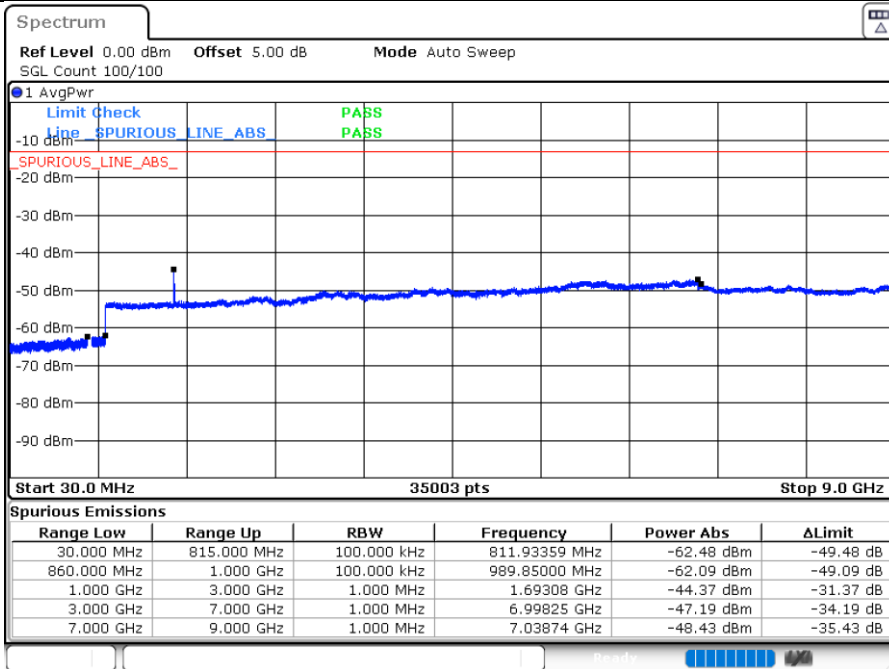
Middle Channel / QPSK



Date: 28.FEB.2024 00:18:48

Date: 28.FEB.2024 00:25:12

Highest Channel / QPSK



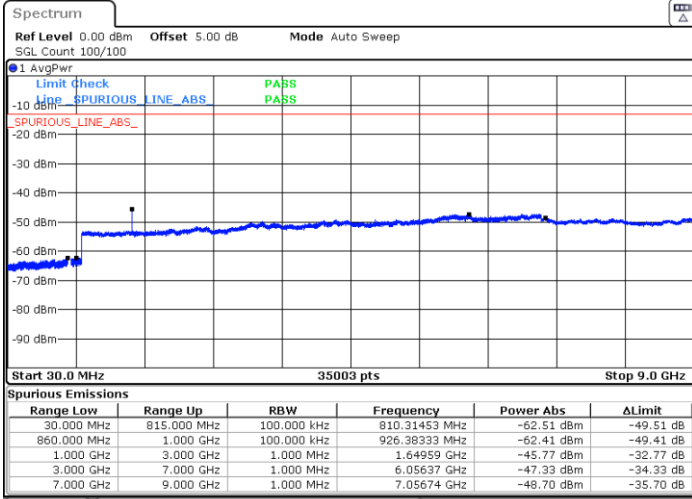
Date: 28.FEB.2024 00:27:42



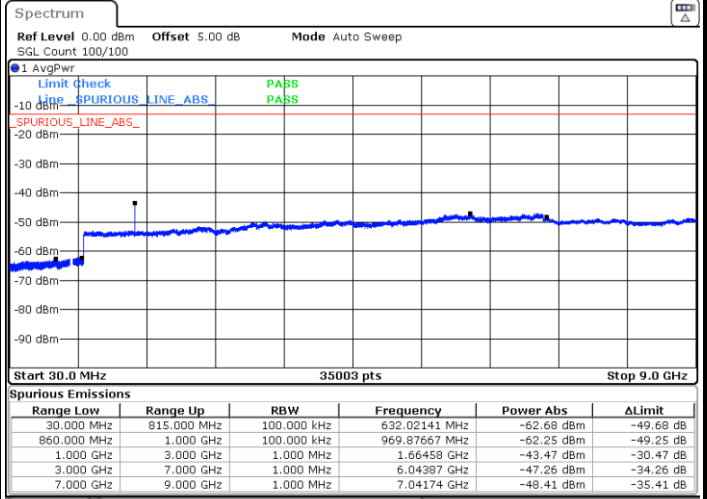
LTE Band 5 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

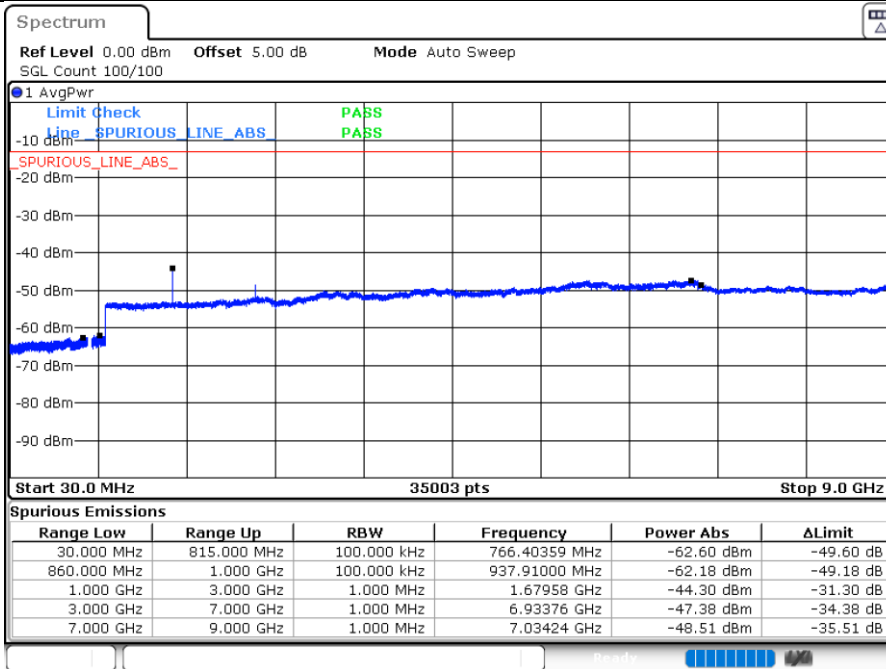


Date: 28.FEB.2024 00:45:59



Date: 28.FEB.2024 00:51:56

Highest Channel / QPSK



Date: 28.FEB.2024 00:55:38



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0036	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0016	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0032	
20	Normal Voltage	0.0021	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.53 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7

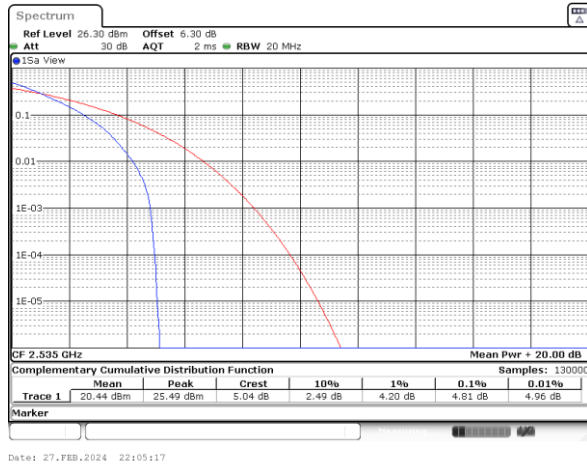
Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.81	5.74	6.35	PASS



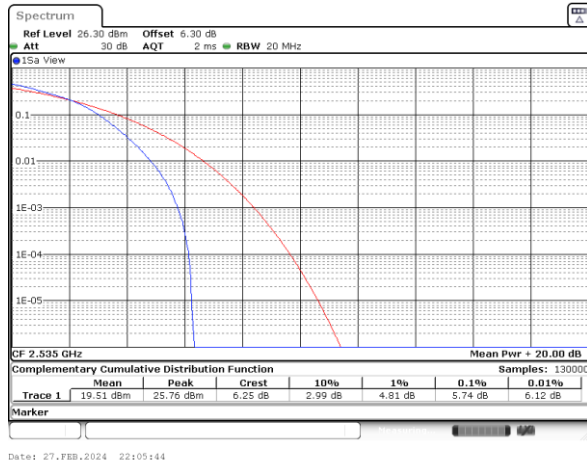
LTE Band 7 / 20MHz

Middle Channel / Full RB/ QPSK



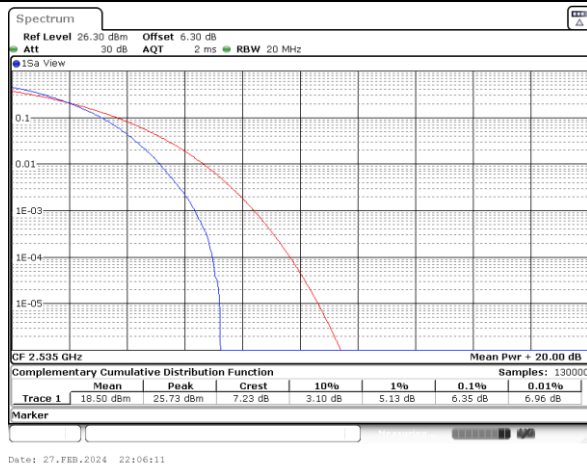
Date: 27.FEB.2024 22:05:17

Middle Channel / Full RB/ 16QAM



Date: 27.FEB.2024 22:05:44

Middle Channel / Full RB/ 64QAM

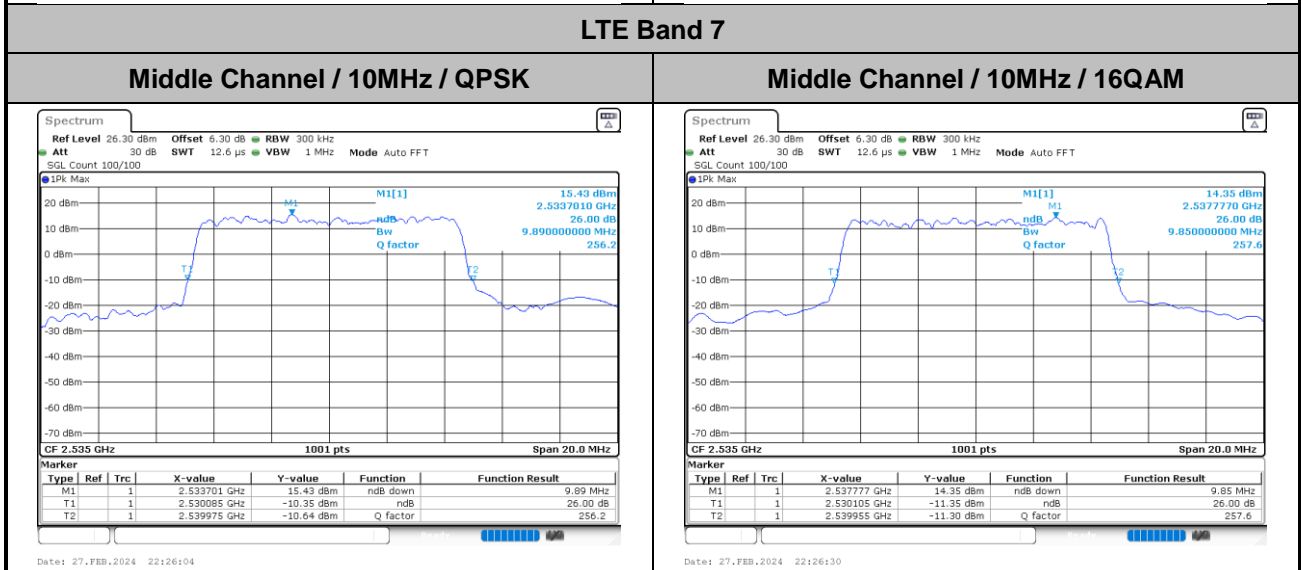
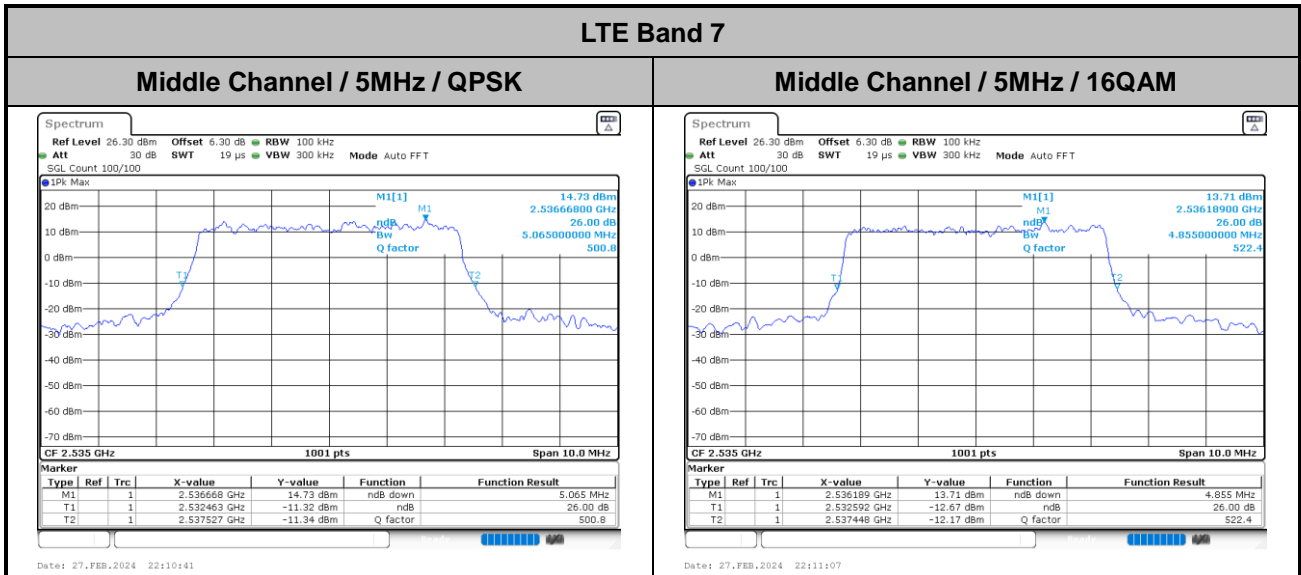


Date: 27.FEB.2024 22:06:11



26dB Bandwidth

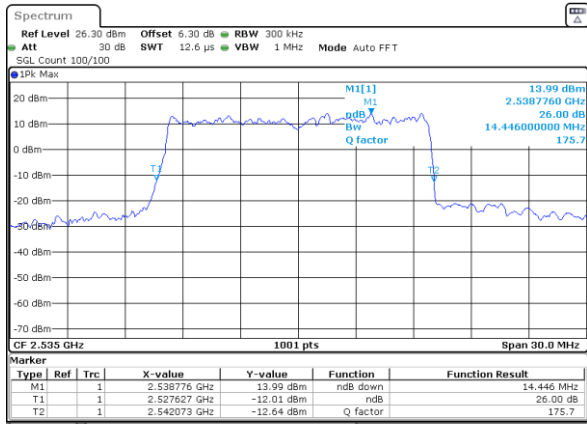
Mode	LTE Band 7 : 26dB BW(MHz)							
	5MHz		10MHz		15MHz		20MHz	
BW								
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.07	4.86	9.89	9.85	14.45	14.33	19.10	19.18





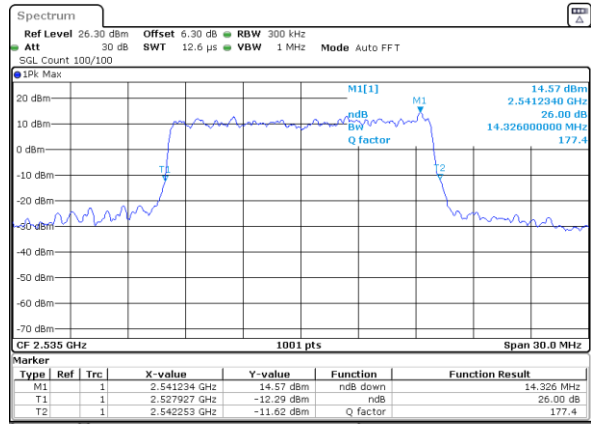
LTE Band 7

Middle Channel / 15MHz / QPSK



Date: 27.FEB.2024 22:30:48

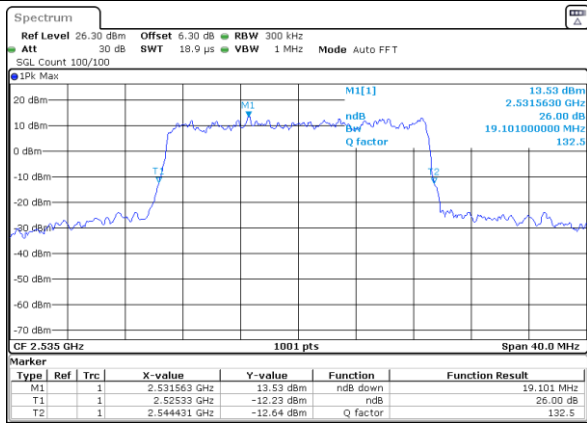
Middle Channel / 15MHz / 16QAM



Date: 27.FEB.2024 22:31:14

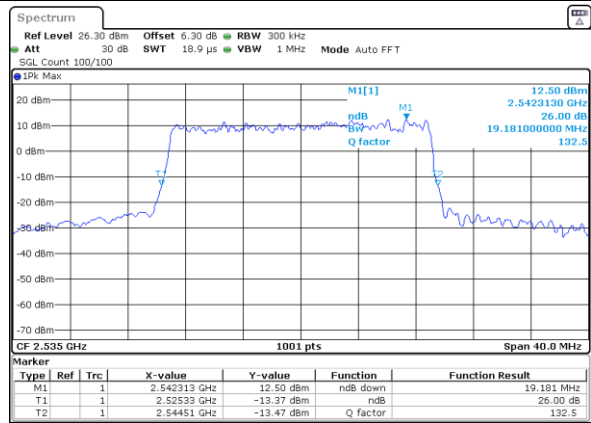
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 27.FEB.2024 22:03:57

Middle Channel / 20MHz / 16QAM

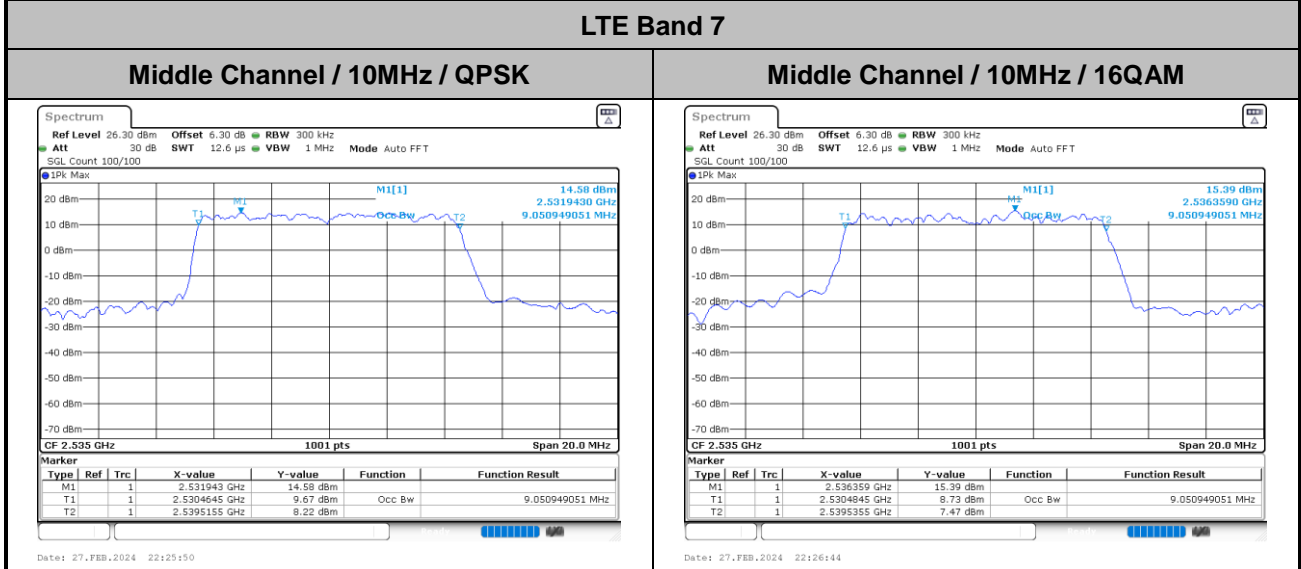
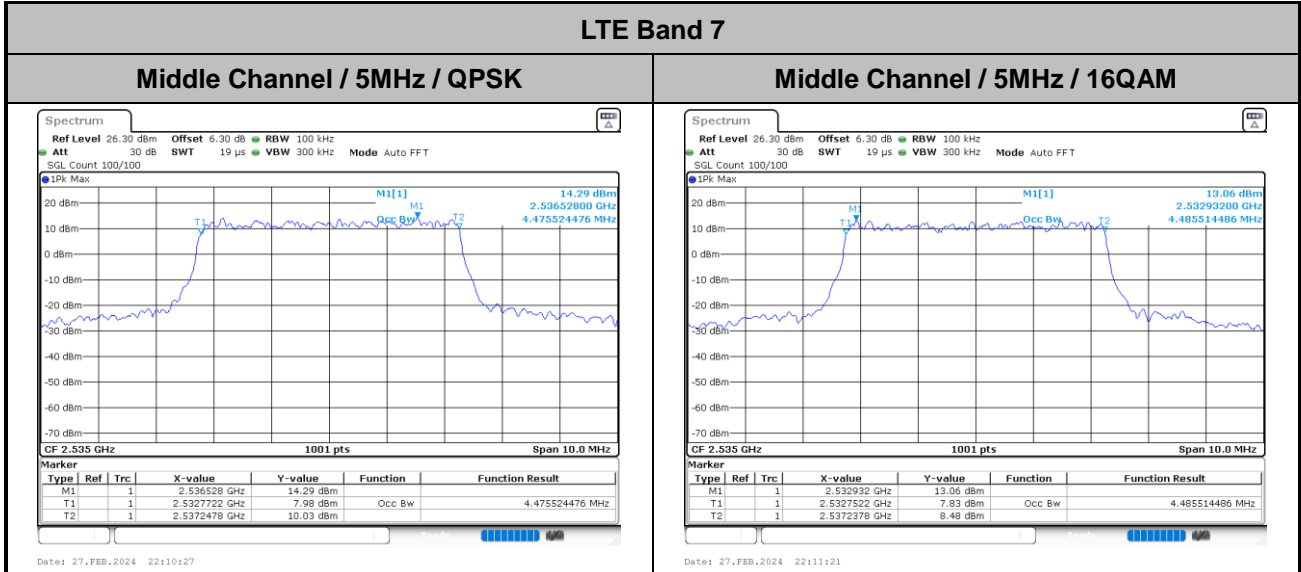


Date: 27.FEB.2024 22:04:50



Occupied Bandwidth

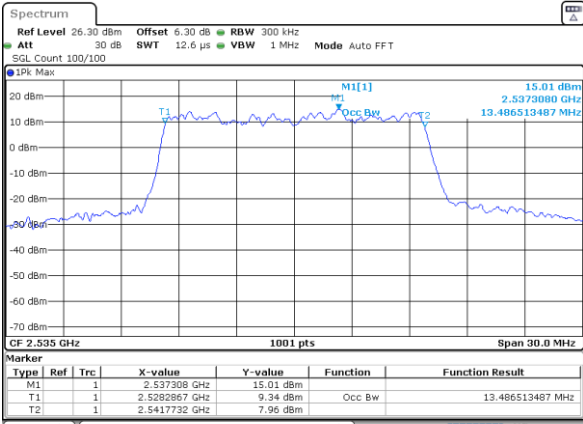
Mode	LTE Band 7 : 99%OBW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.48	4.49	9.05	9.05	13.49	13.46	17.78	17.90





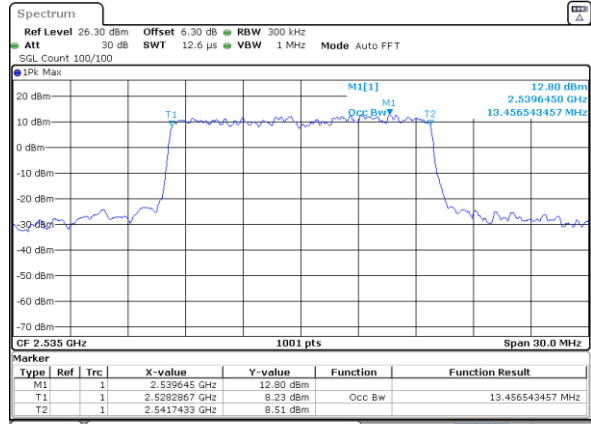
LTE Band 7

Middle Channel / 15MHz / QPSK



Date: 27.FEB.2024 22:30:134

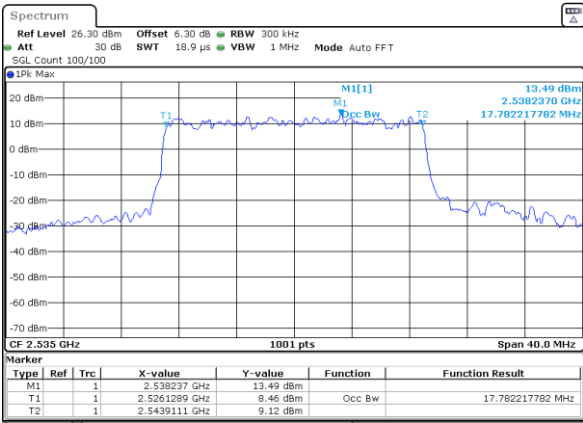
Middle Channel / 15MHz / 16QAM



Date: 27.FEB.2024 22:31:128

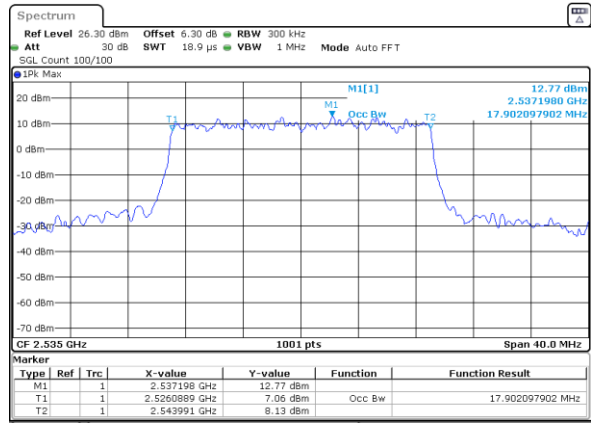
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 27.FEB.2024 22:04:11

Middle Channel / 20MHz / 16QAM



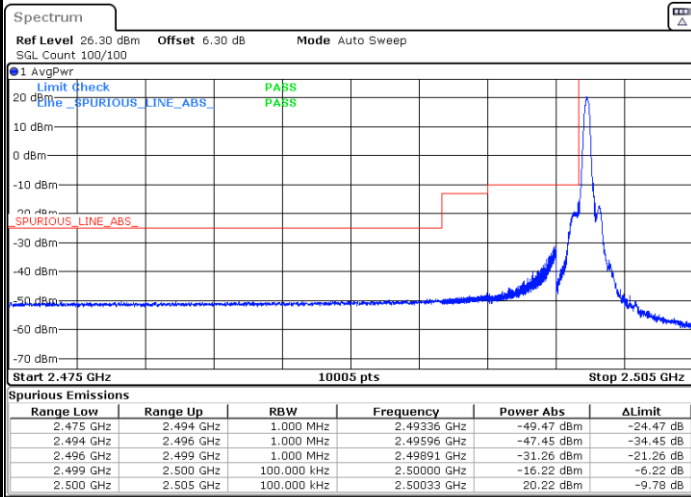
Date: 27.FEB.2024 22:04:136



Conducted Band Edge

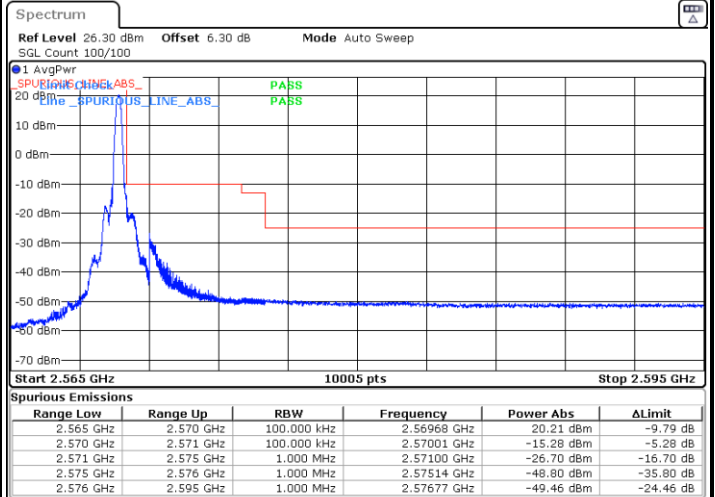
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



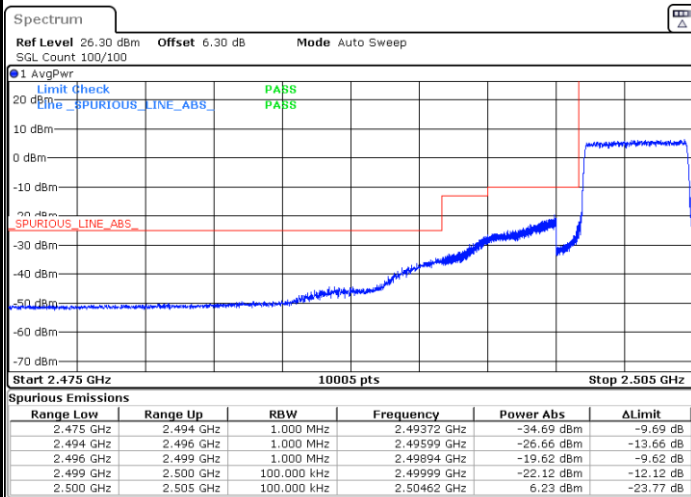
Date: 27.FEB.2024 20:56:38

Highest Band Edge / 1 RB



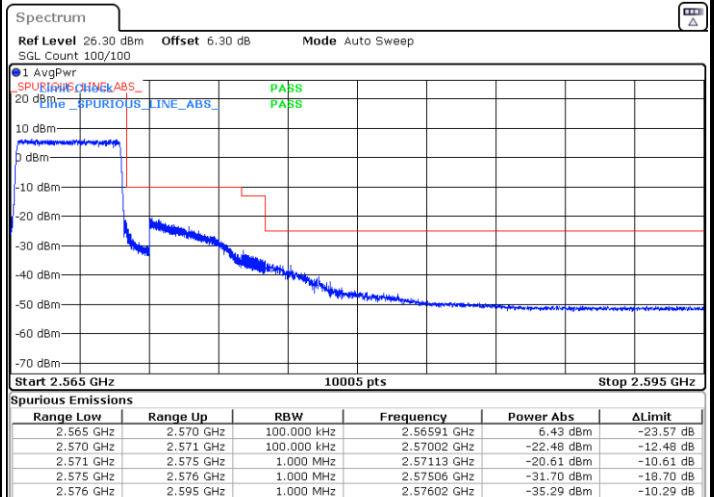
Date: 27.FEB.2024 21:05:11

Lowest Band Edge / Full RB



Date: 27.FEB.2024 21:01:37

Highest Band Edge / Full RB



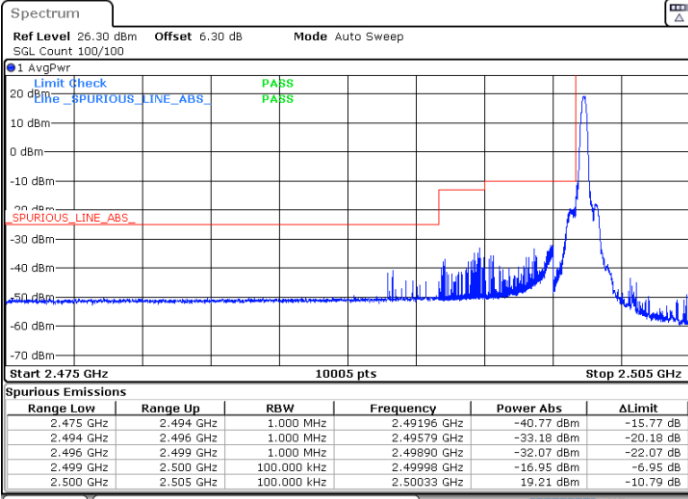
Date: 27.FEB.2024 21:08:59



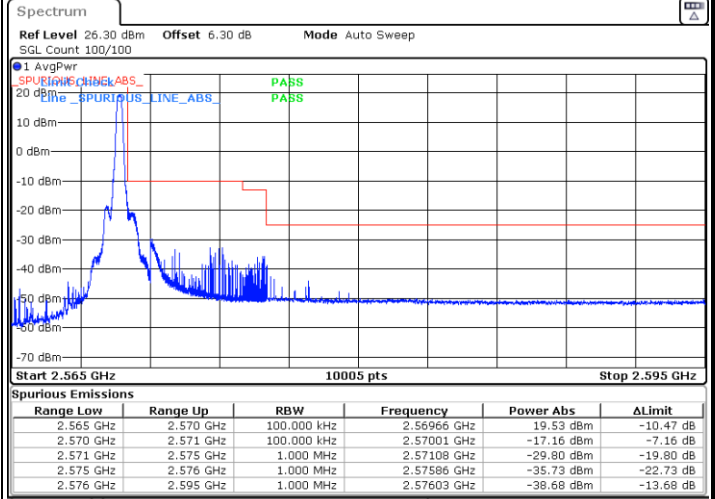
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



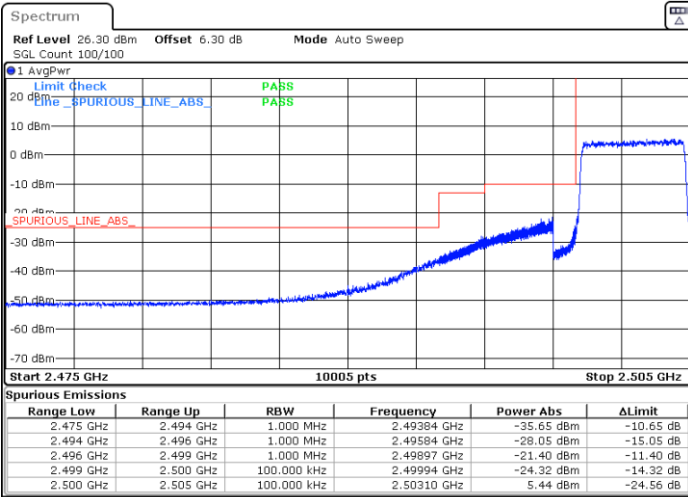
Date: 27.FEB.2024 20:58:34



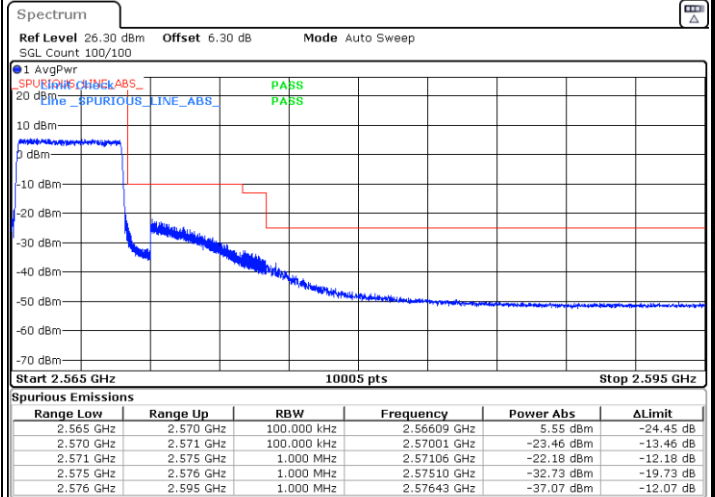
Date: 27.FEB.2024 21:05:57

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.FEB.2024 21:00:52



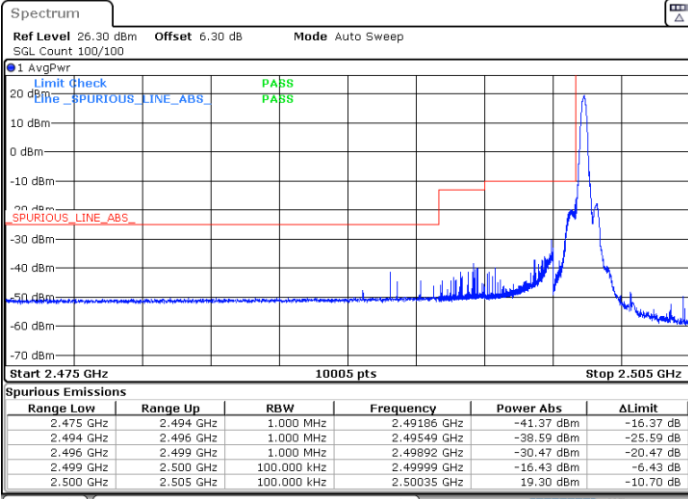
Date: 27.FEB.2024 21:08:14



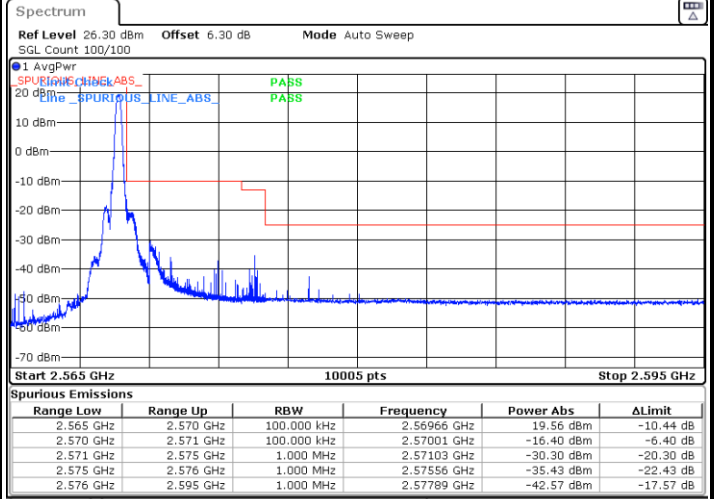
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



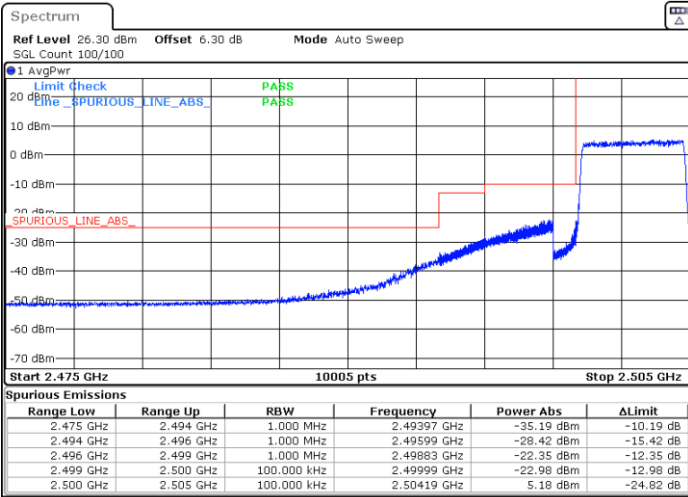
Date: 27.FEB.2024 20:59:20



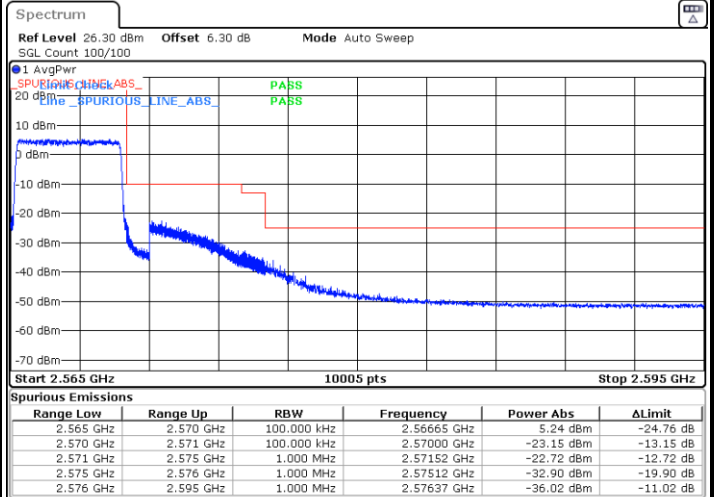
Date: 27.FEB.2024 21:06:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.FEB.2024 21:00:06



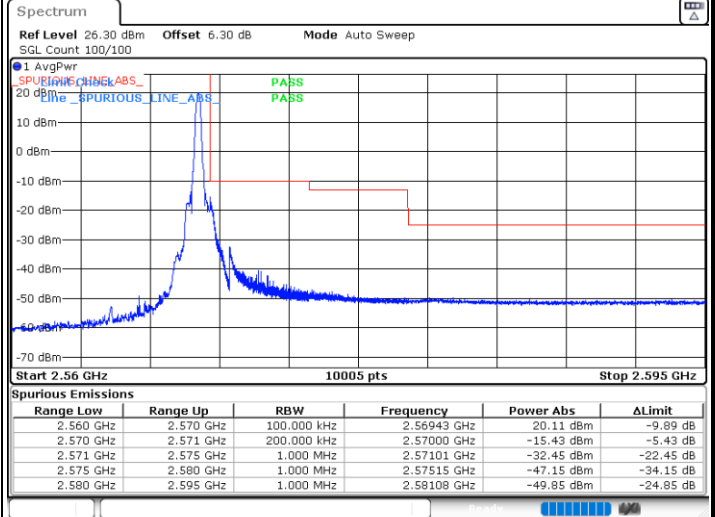
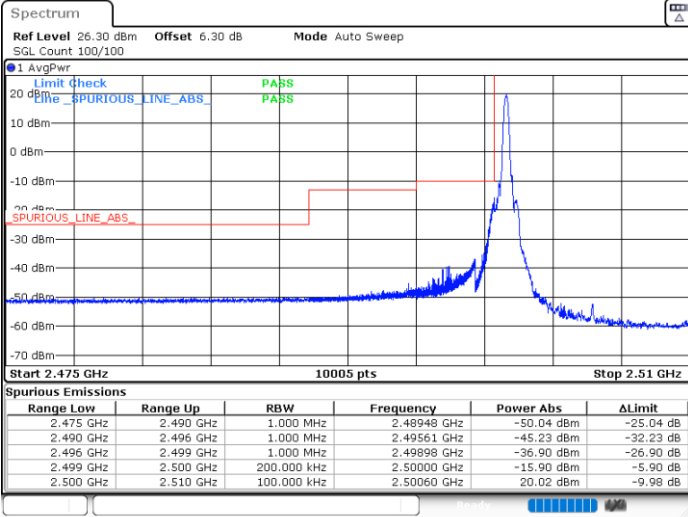
Date: 27.FEB.2024 21:07:28



LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

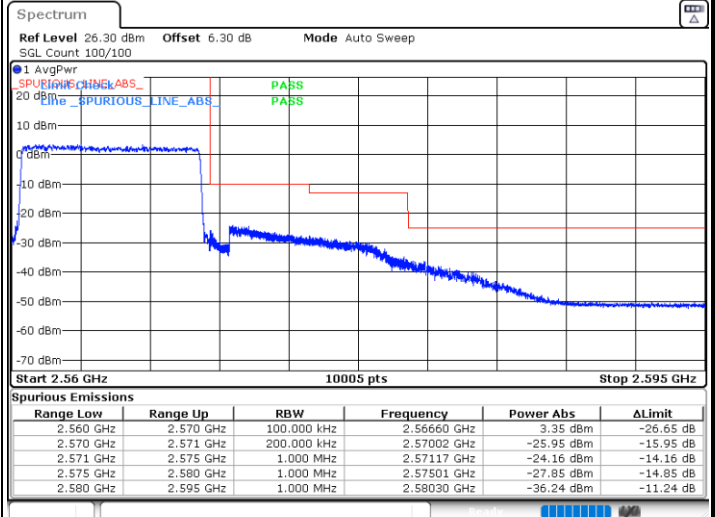
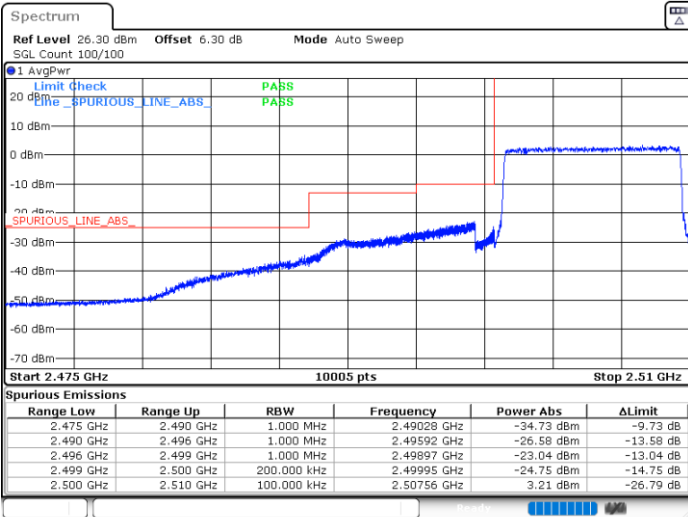


Date: 27.FEB.2024 21:11:41

Date: 27.FEB.2024 21:19:03

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.FEB.2024 21:15:29

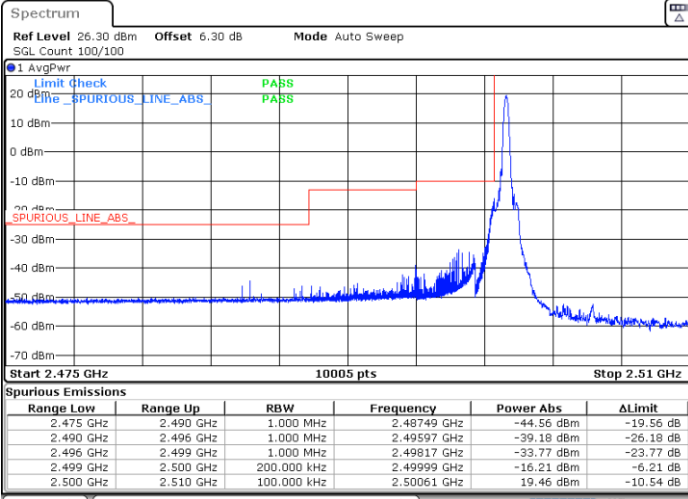
Date: 27.FEB.2024 21:22:51



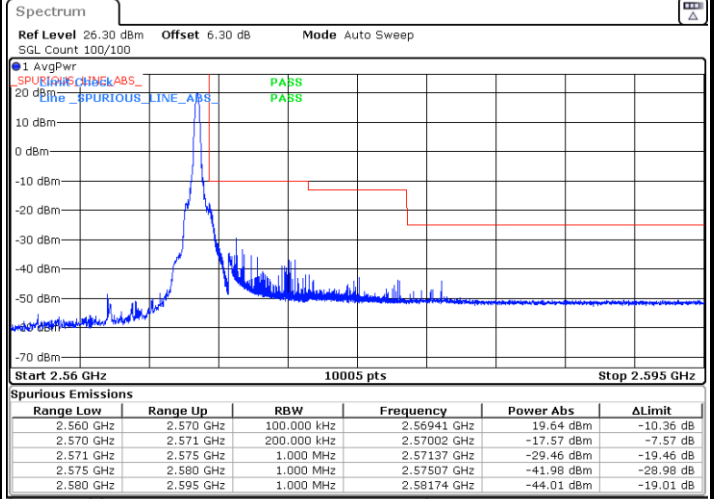
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



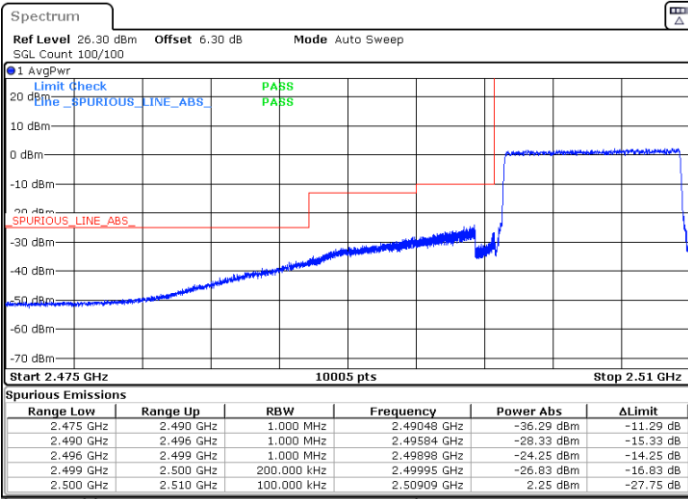
Date: 27.FEB.2024 21:12:26



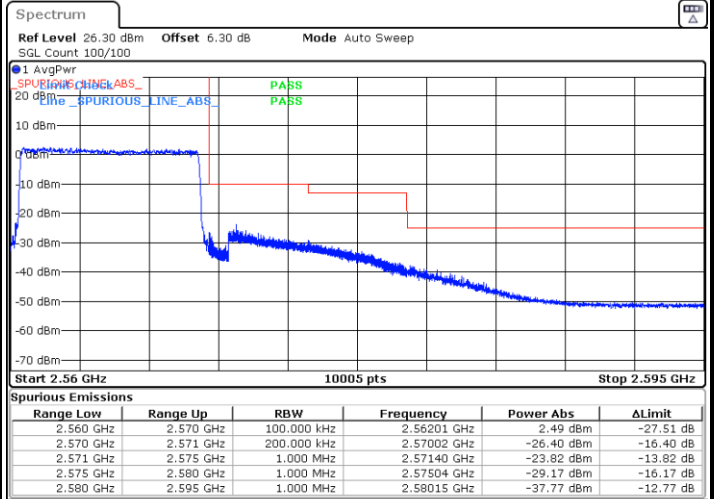
Date: 27.FEB.2024 21:19:48

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.FEB.2024 21:14:43



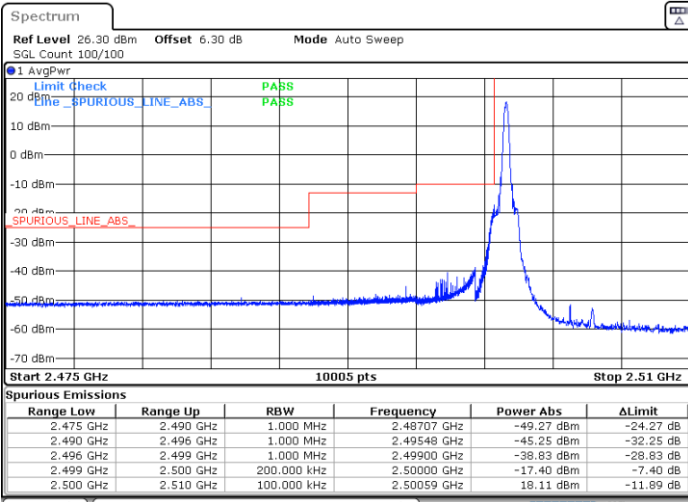
Date: 27.FEB.2024 21:22:05



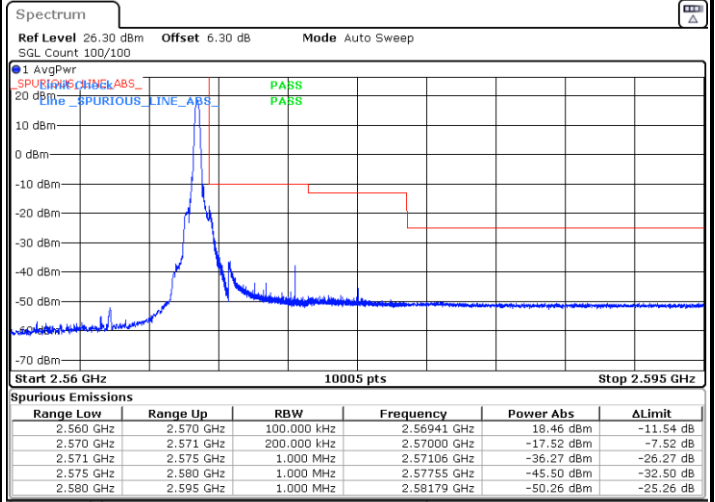
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



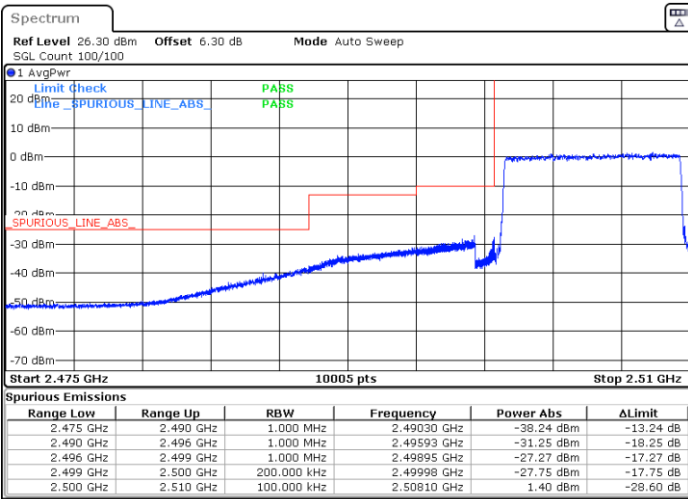
Date: 27.FEB.2024 21:13:12



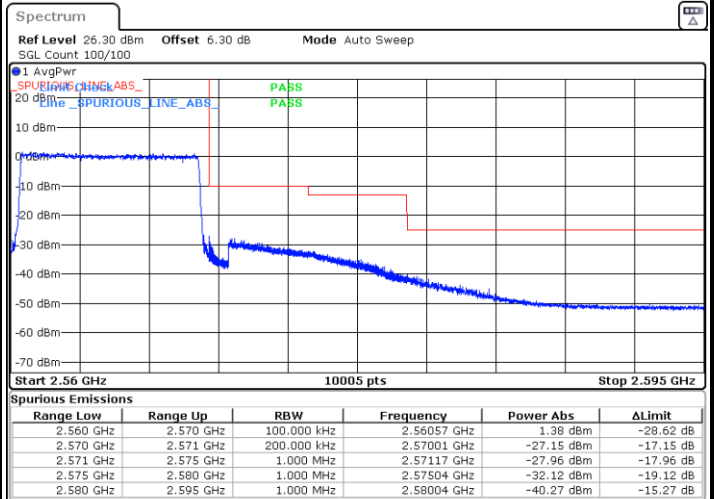
Date: 27.FEB.2024 21:20:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.FEB.2024 21:13:58



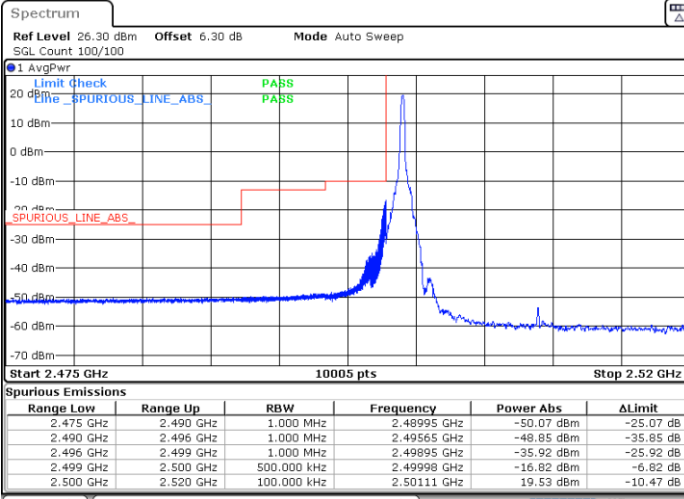
Date: 27.FEB.2024 21:21:20



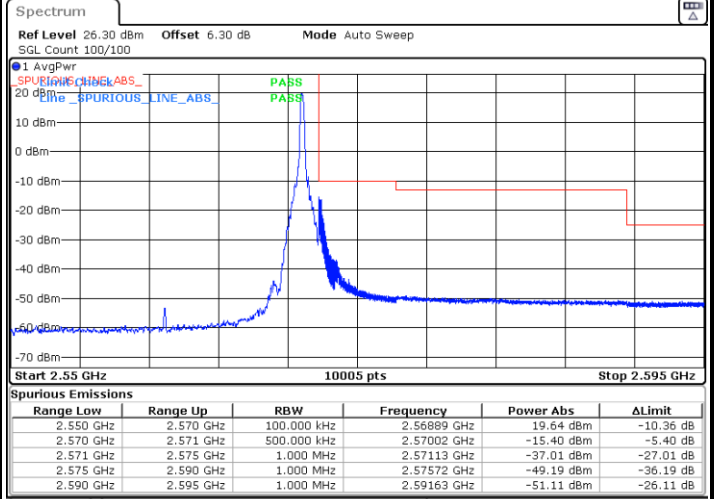
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



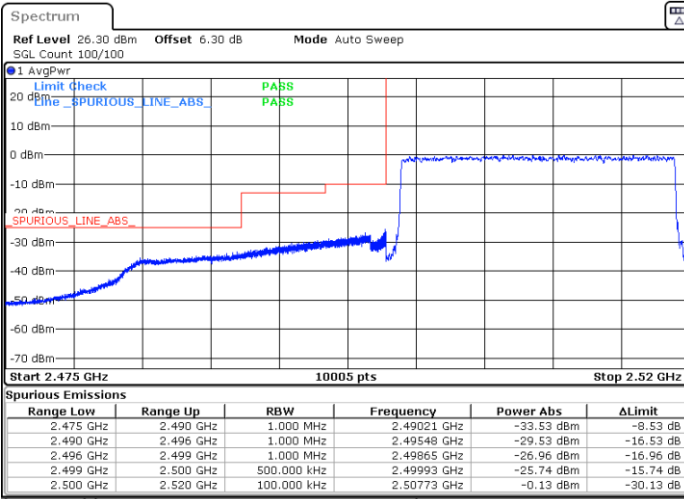
Date: 27.FEB.2024 21:39:25



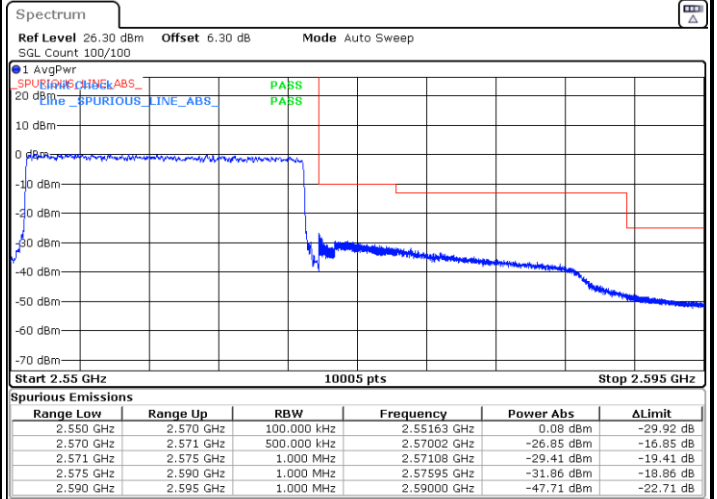
Date: 27.FEB.2024 21:59:43

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.FEB.2024 21:43:14



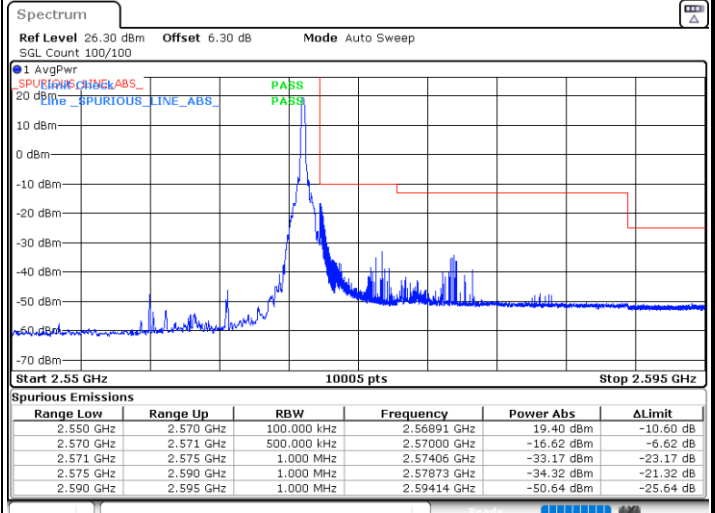
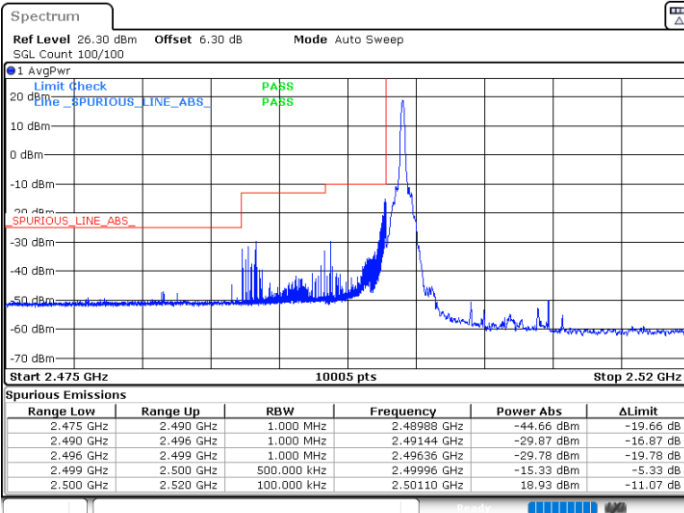
Date: 27.FEB.2024 22:03:30



LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

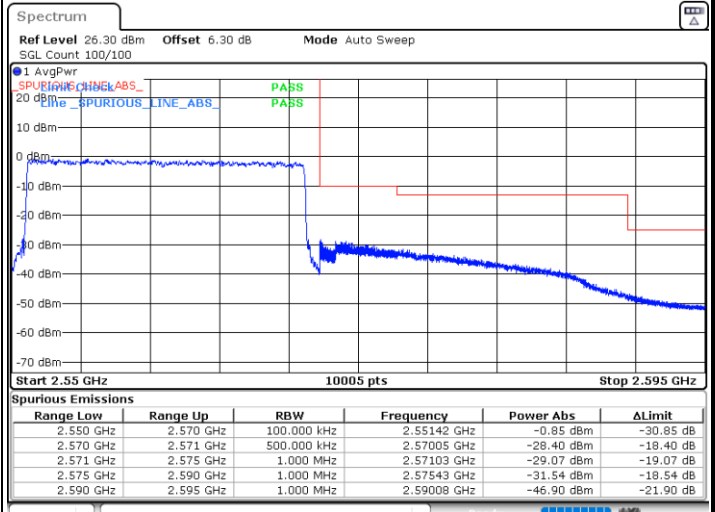
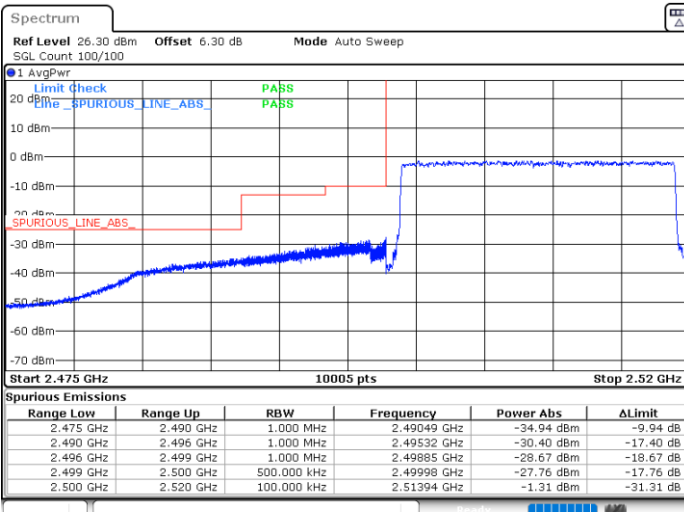


Date: 27.FEB.2024 21:40:11

Date: 27.FEB.2024 22:00:28

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 27.FEB.2024 21:42:28

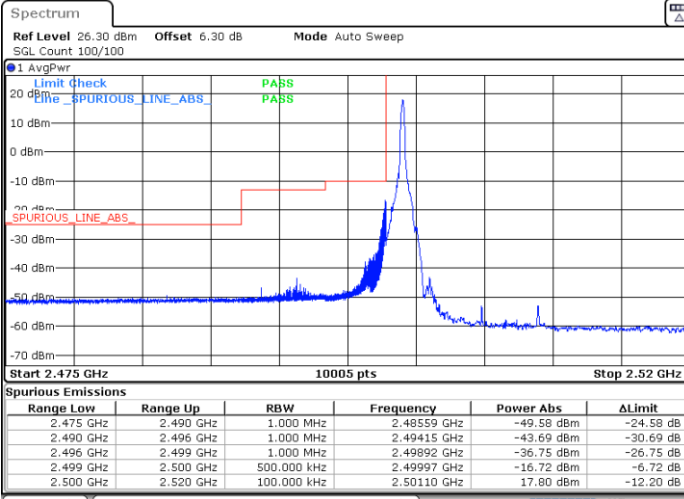
Date: 27.FEB.2024 22:02:45



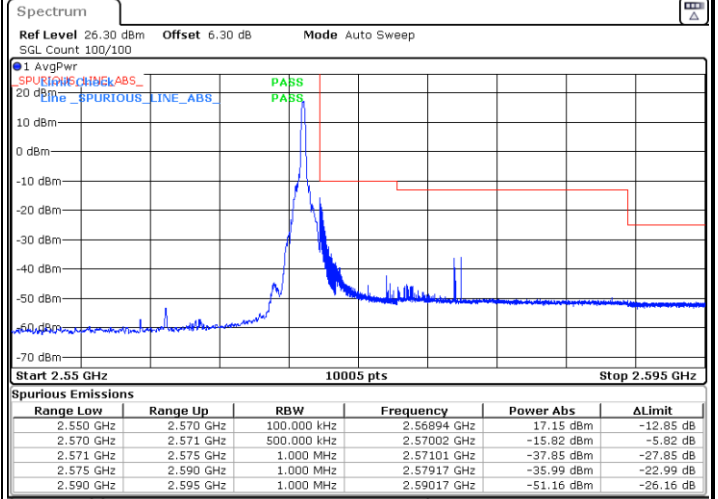
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



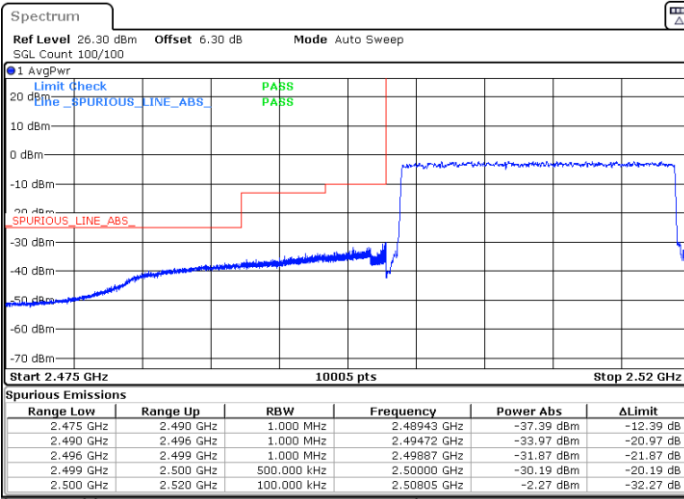
Date: 27.FEB.2024 21:40:57



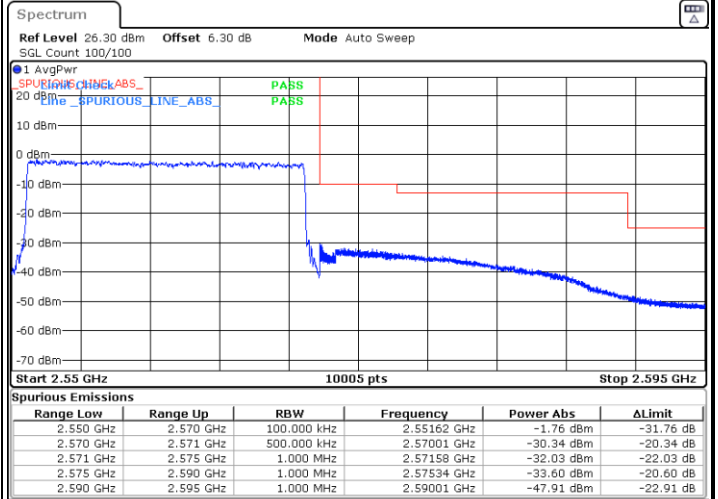
Date: 27.FEB.2024 22:01:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



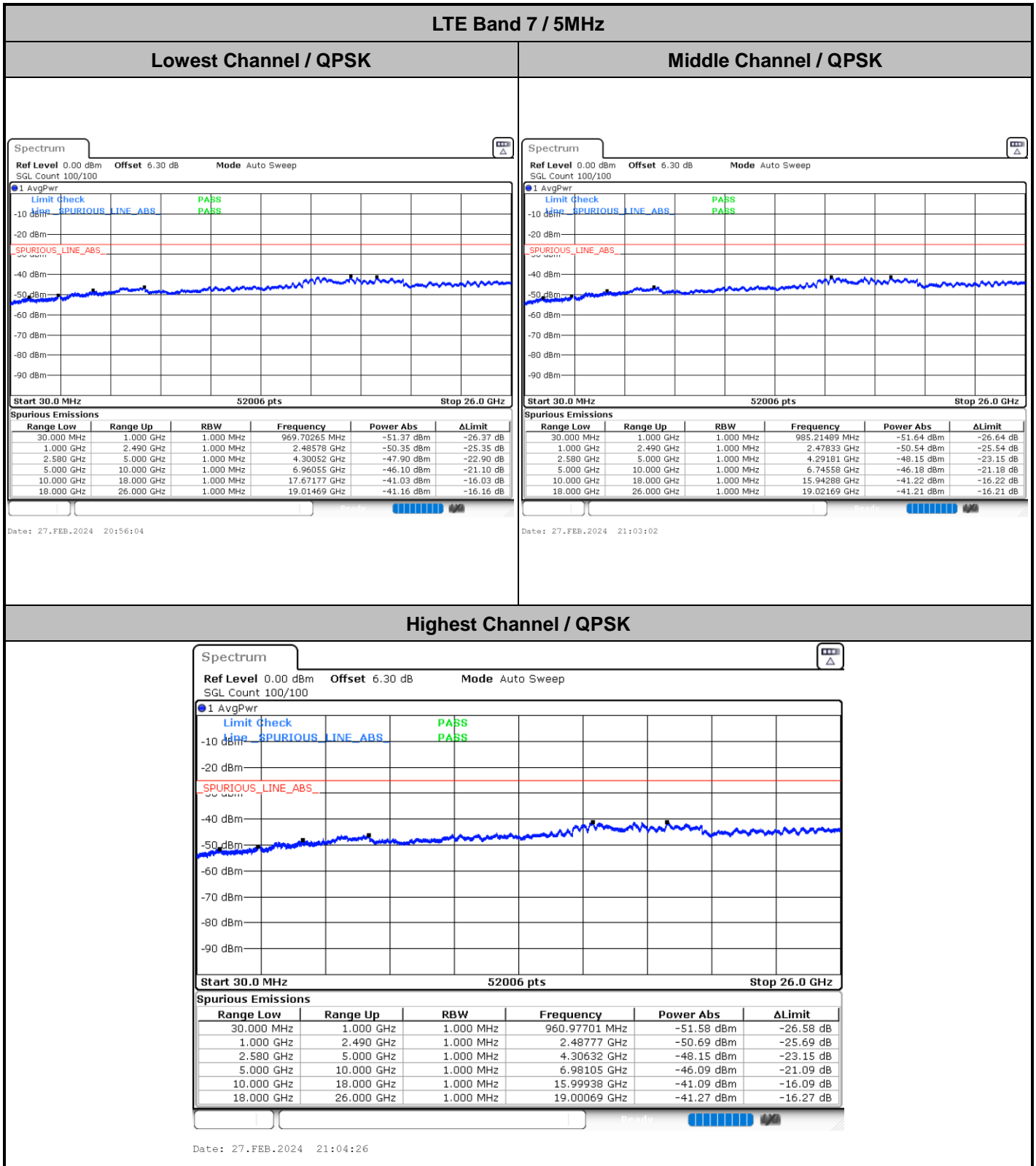
Date: 27.FEB.2024 21:41:42



Date: 27.FEB.2024 22:01:59



Conducted Spurious Emission

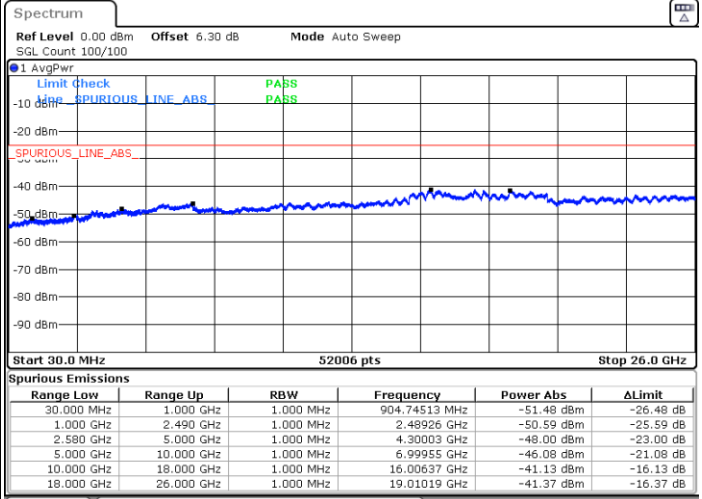
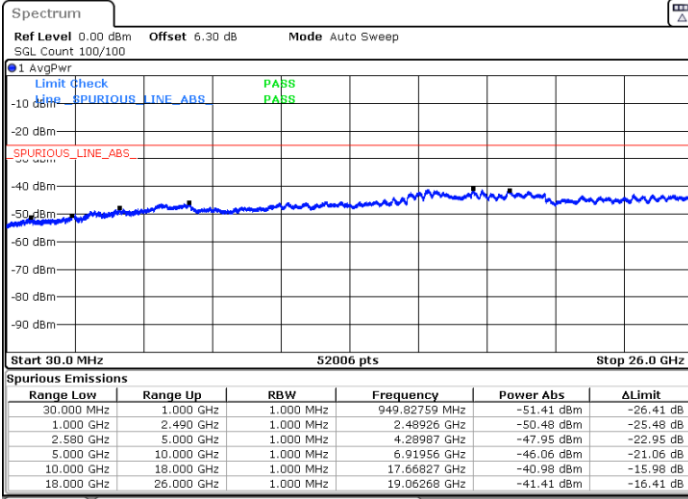




LTE Band 7 / 10MHz

Lowest Channel / QPSK

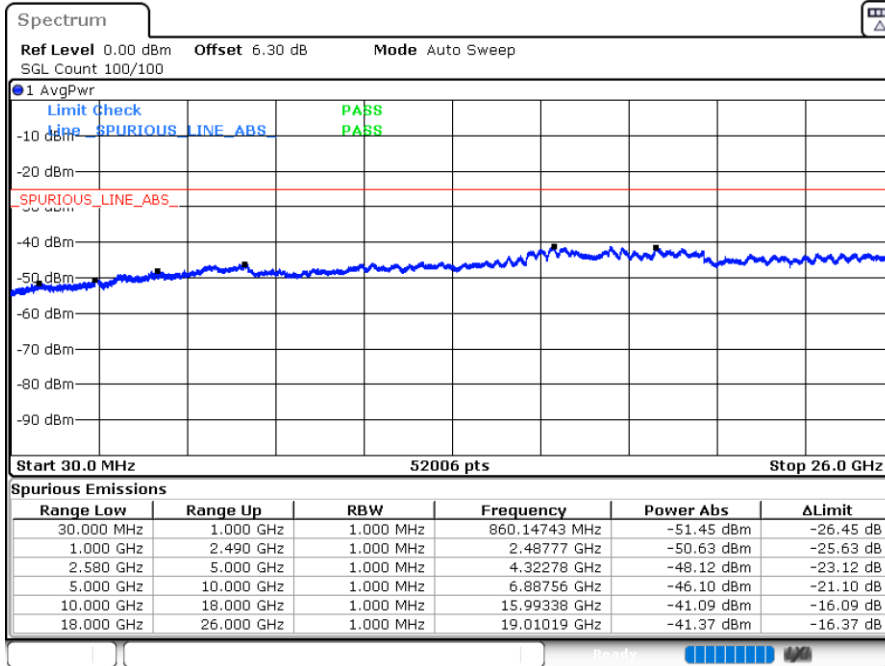
Middle Channel / QPSK



Date: 27.FEB.2024 21:11:07

Date: 27.FEB.2024 21:16:53

Highest Channel / QPSK



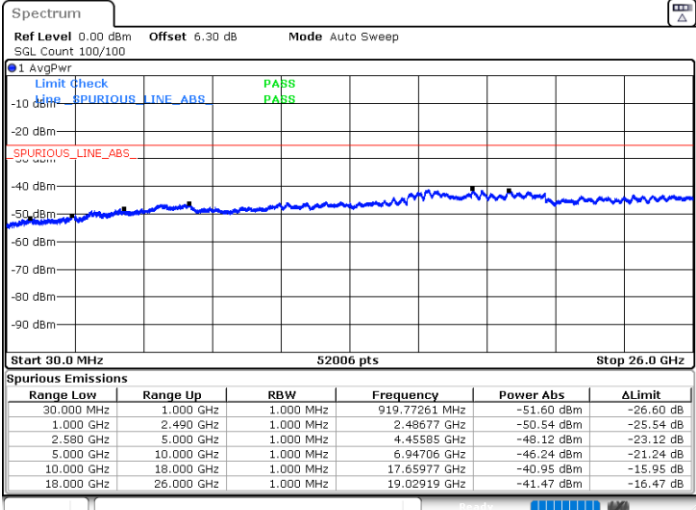
Date: 27.FEB.2024 21:18:17



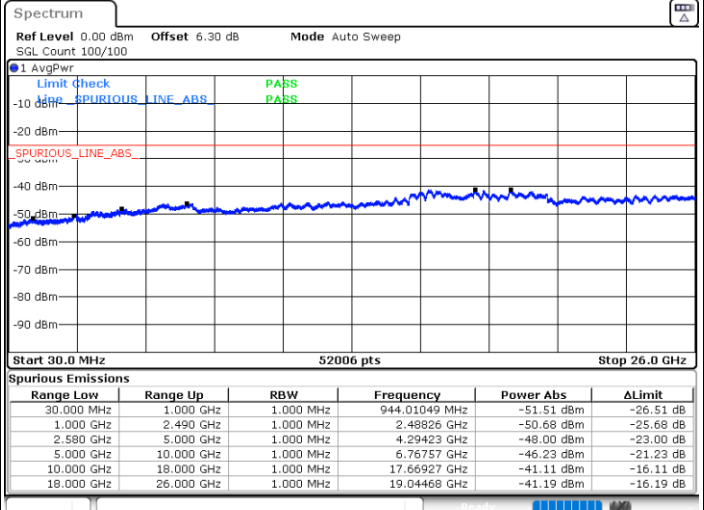
LTE Band 7 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

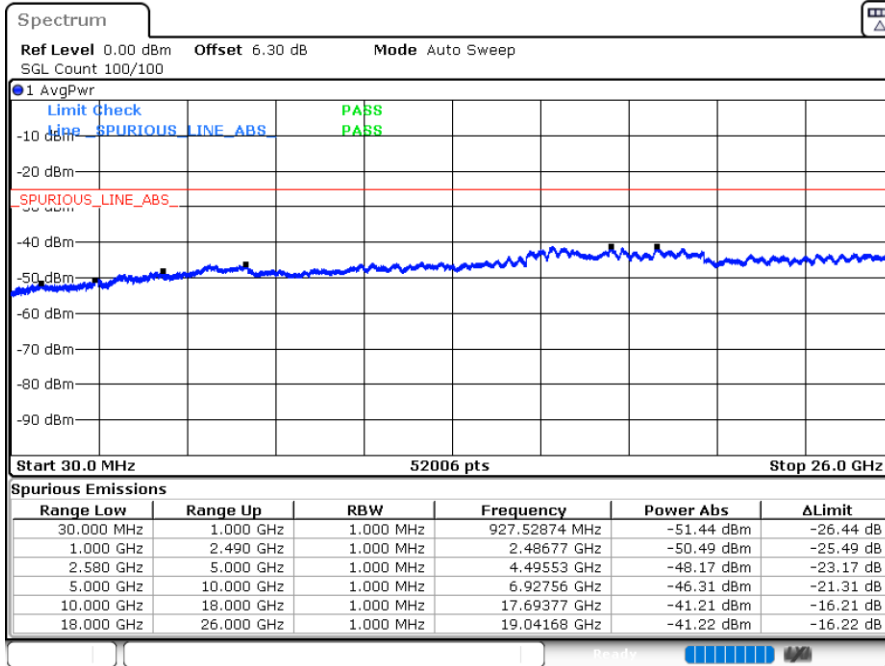


Date: 27.FEB.2024 21:38:51



Date: 27.FEB.2024 21:44:38

Highest Channel / QPSK



Date: 27.FEB.2024 21:58:57



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	0.0026	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0036	
-10	Normal Voltage	0.0033	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0021	
20	Battery End Point	0.0030	

Note:

1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.53 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

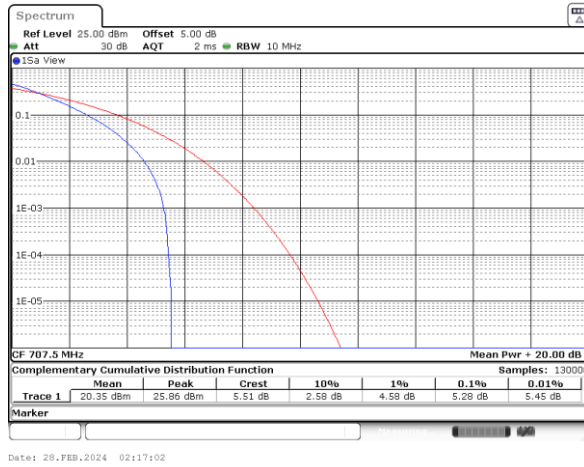
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.28	6.29	6.87	PASS

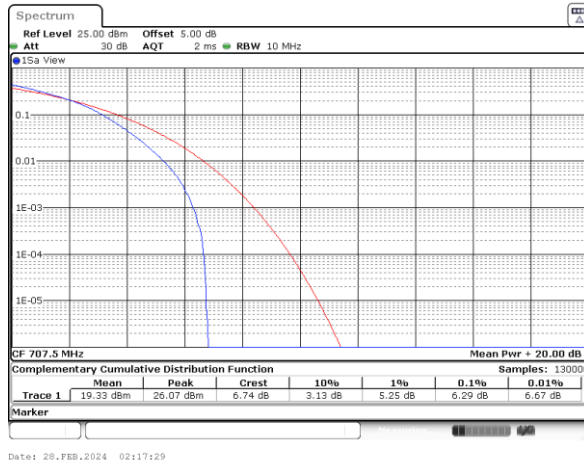


LTE Band 12 / 10MHz

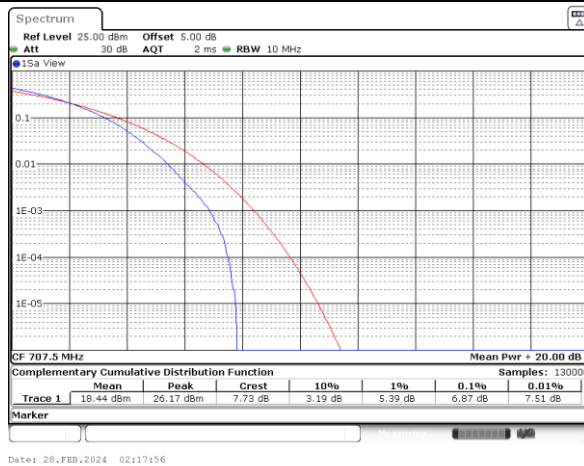
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM



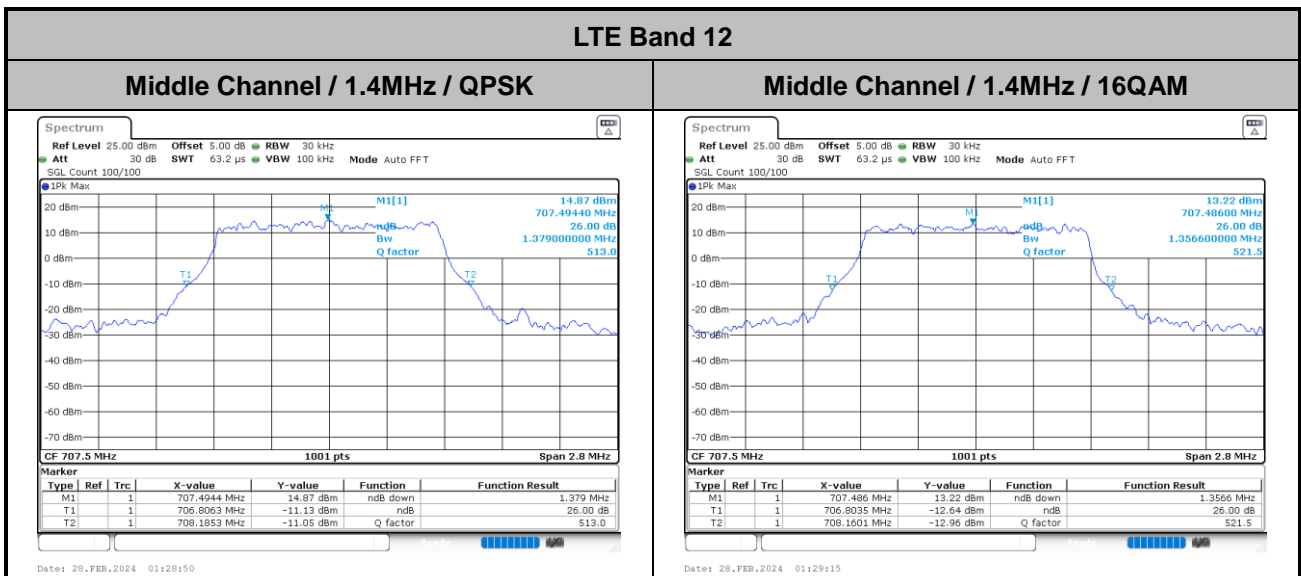
Middle Channel / Full RB/ 64QAM





26dB Bandwidth

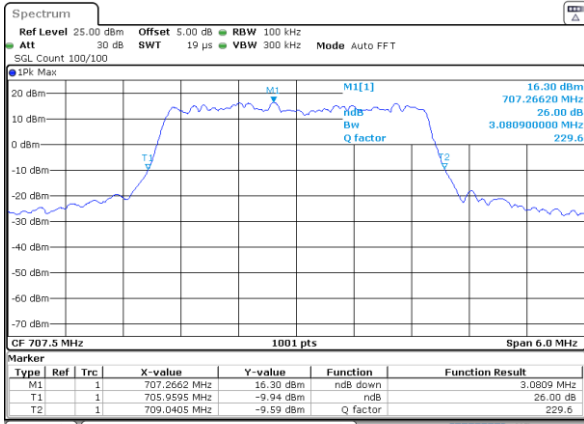
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.38	1.36
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.08	3.05
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.03	4.93
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.95	10.03



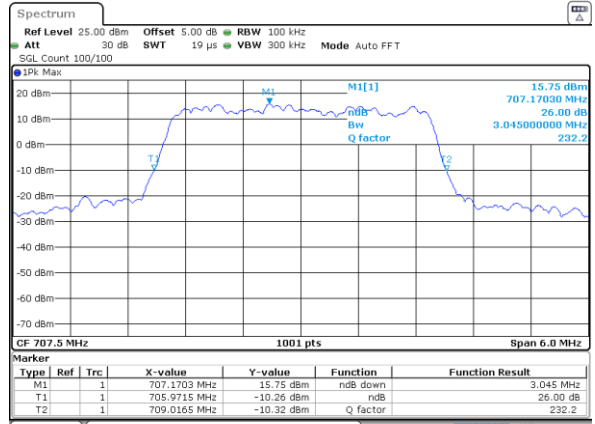


LTE Band 12

Middle Channel / 3MHz / QPSK

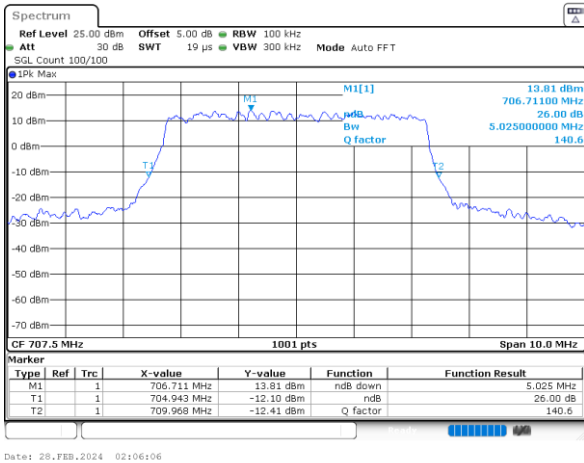


Middle Channel / 3MHz / 16QAM

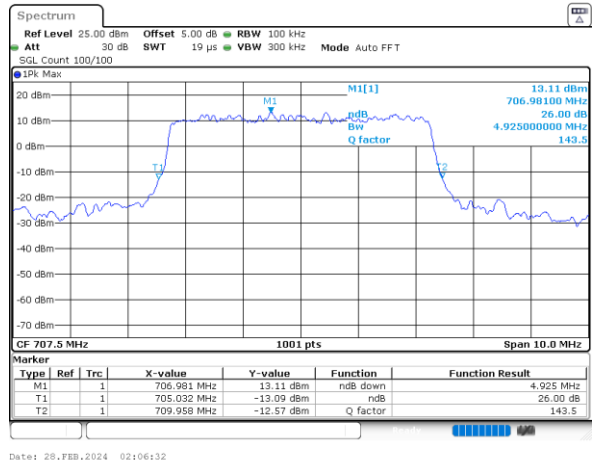


LTE Band 12

Middle Channel / 5MHz / QPSK

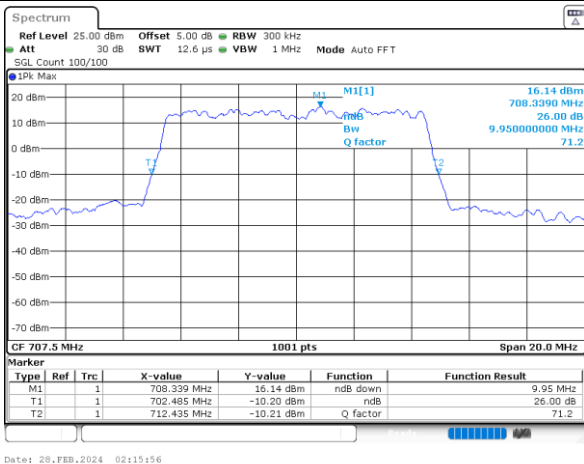


Middle Channel / 5MHz / 16QAM

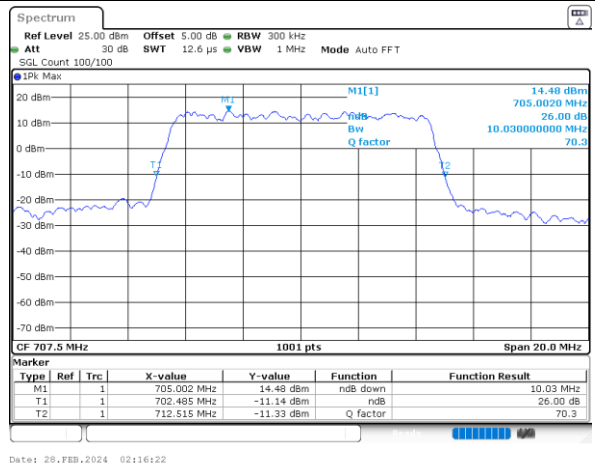


LTE Band 12

Middle Channel / 10MHz / QPSK



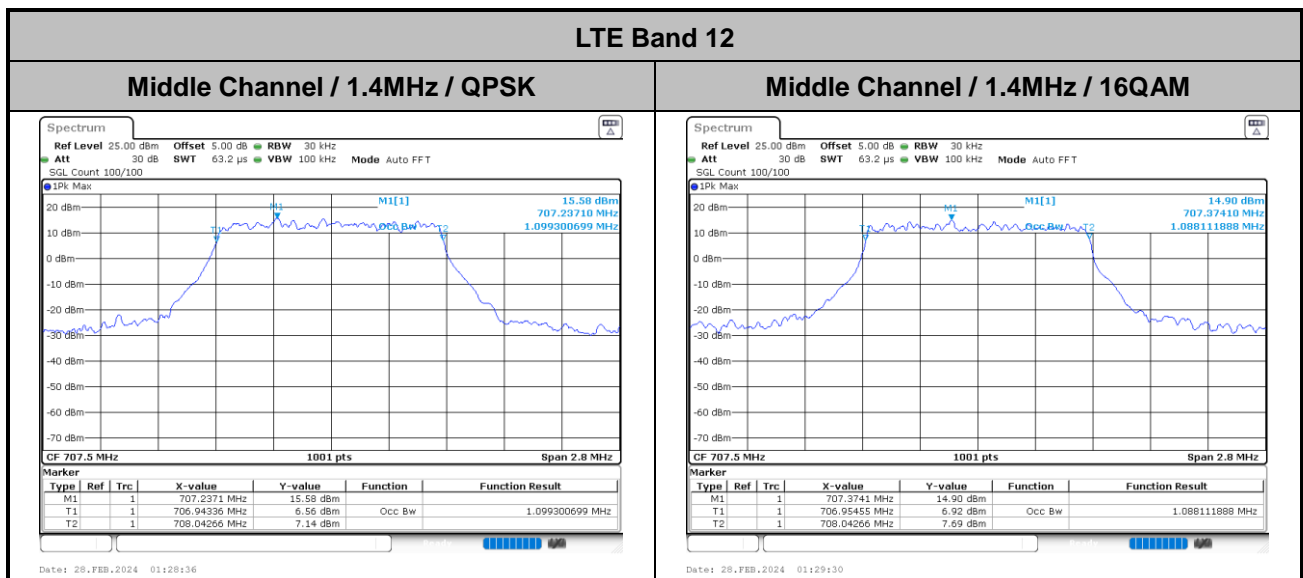
Middle Channel / 10MHz / 16QAM





Occupied Bandwidth

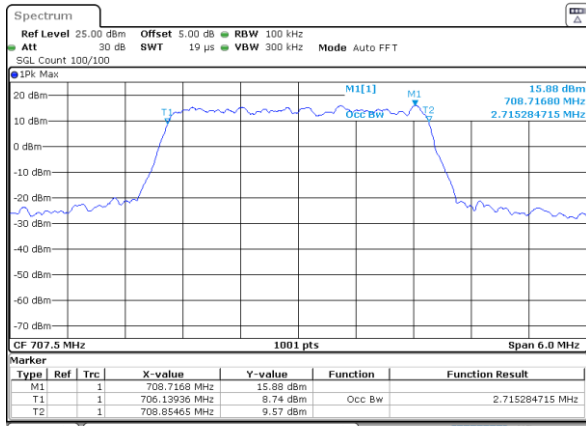
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.10	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.72	2.71
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.51
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.05





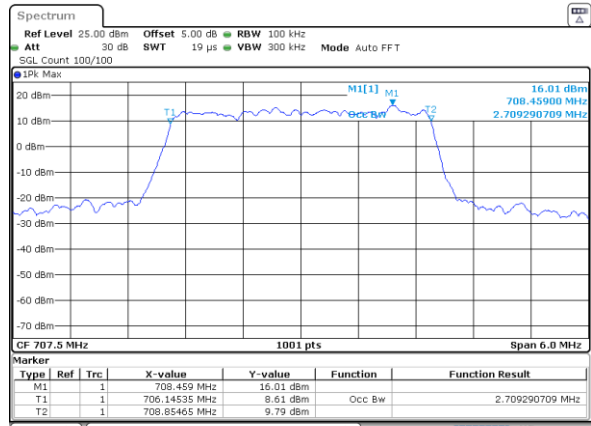
LTE Band 12

Middle Channel / 3MHz / QPSK



Date: 28.FEB.2024 01:44:24

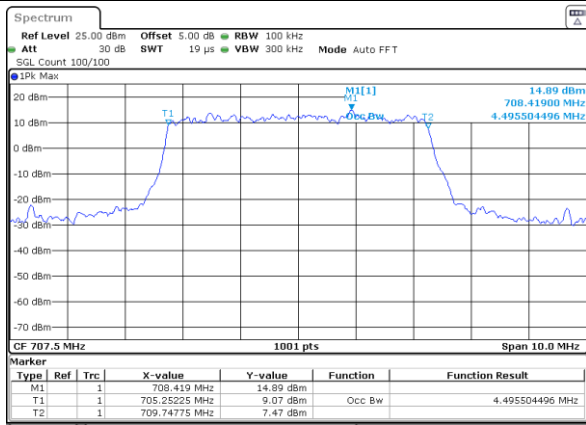
Middle Channel / 3MHz / 16QAM



Date: 28.FEB.2024 01:45:17

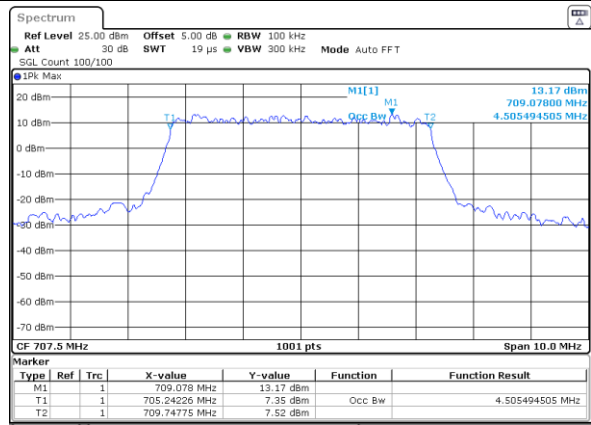
LTE Band 12

Middle Channel / 5MHz / QPSK



Date: 28.FEB.2024 02:05:52

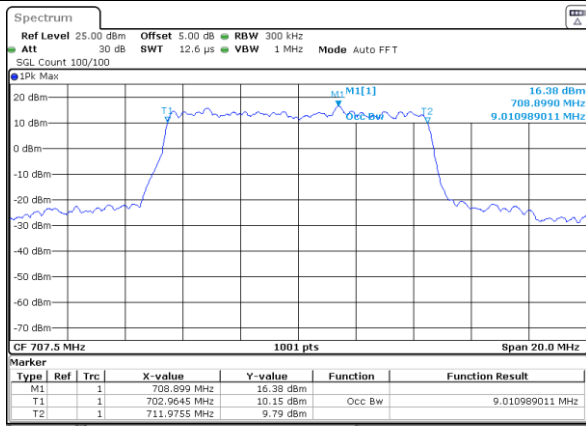
Middle Channel / 5MHz / 16QAM



Date: 28.FEB.2024 02:06:46

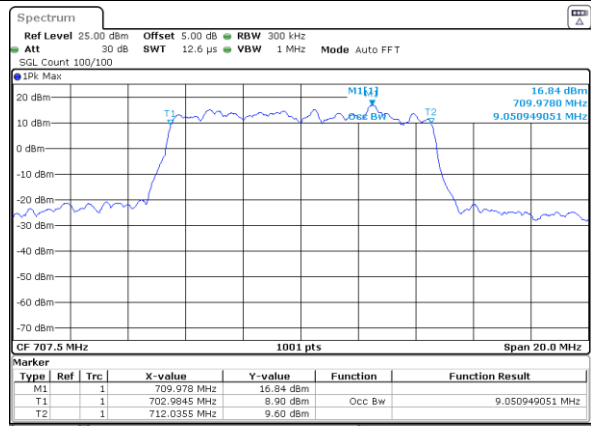
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 28.FEB.2024 02:15:42

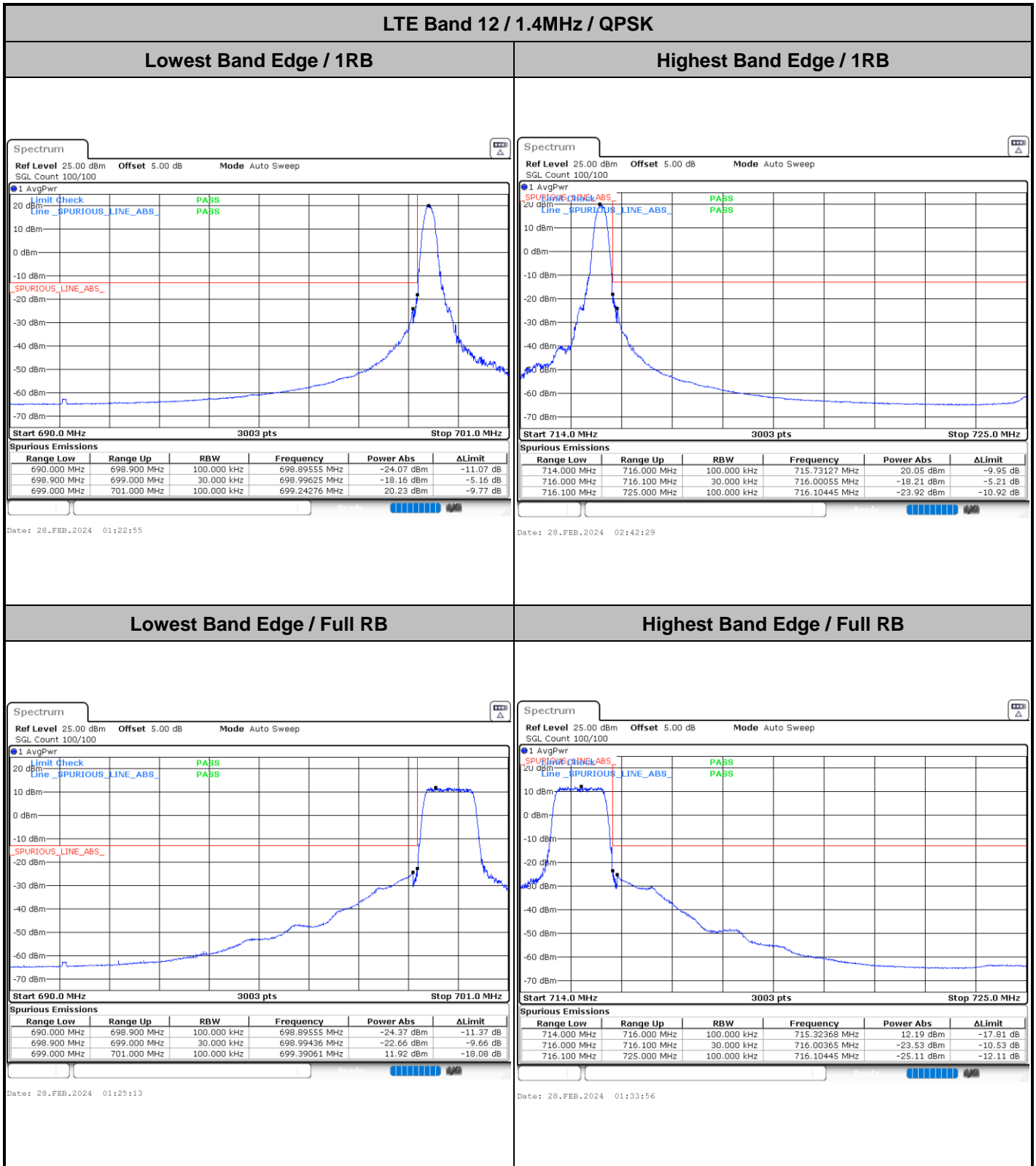
Middle Channel / 10MHz / 16QAM



Date: 28.FEB.2024 02:16:36



Conducted Band Edge

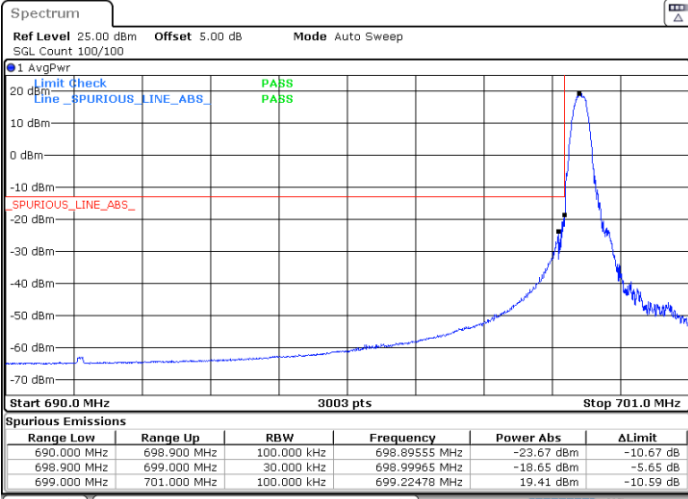




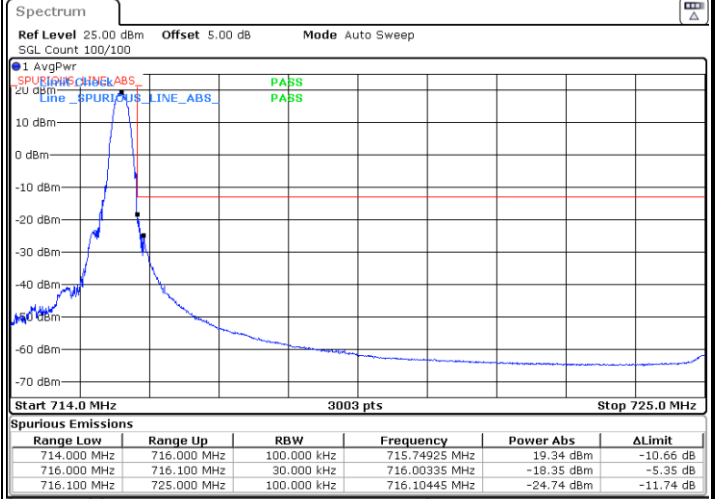
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



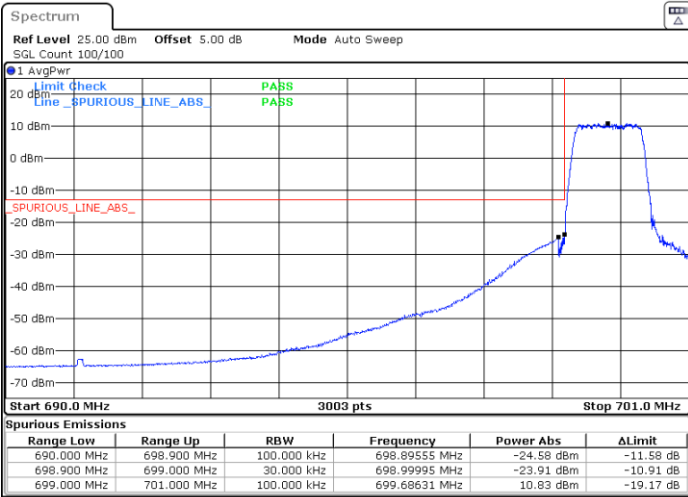
Date: 28.FEB.2024 01:23:41



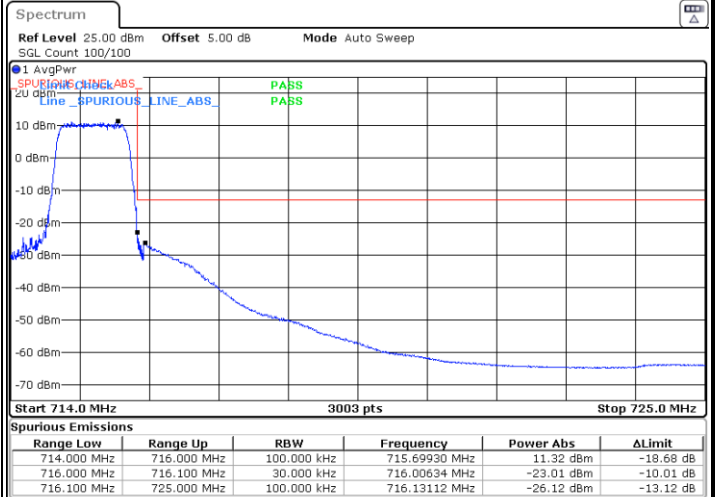
Date: 28.FEB.2024 01:32:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28.FEB.2024 01:25:59



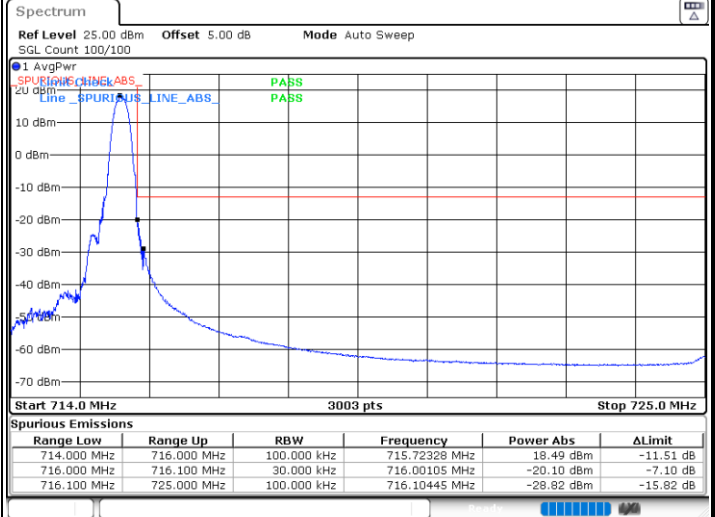
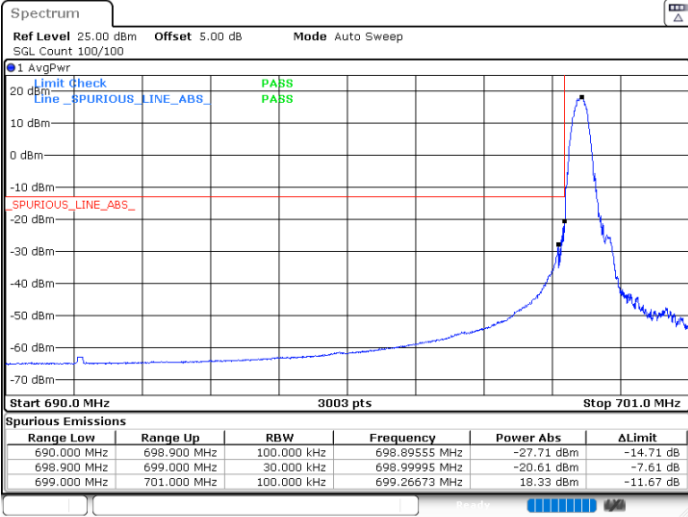
Date: 28.FEB.2024 01:34:42



LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

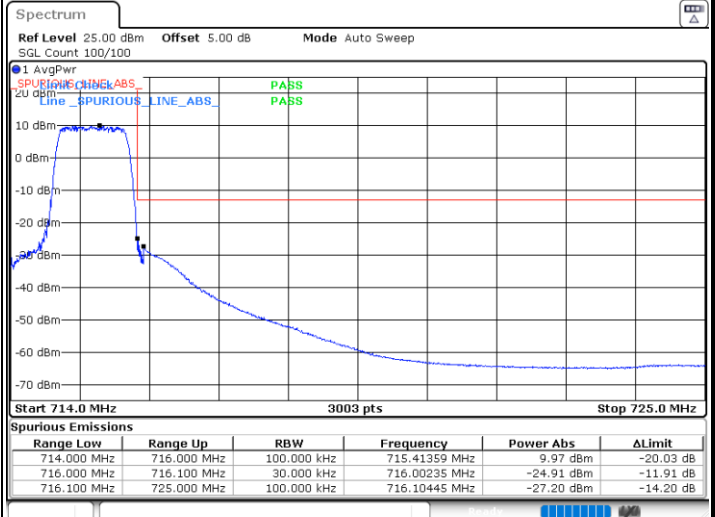
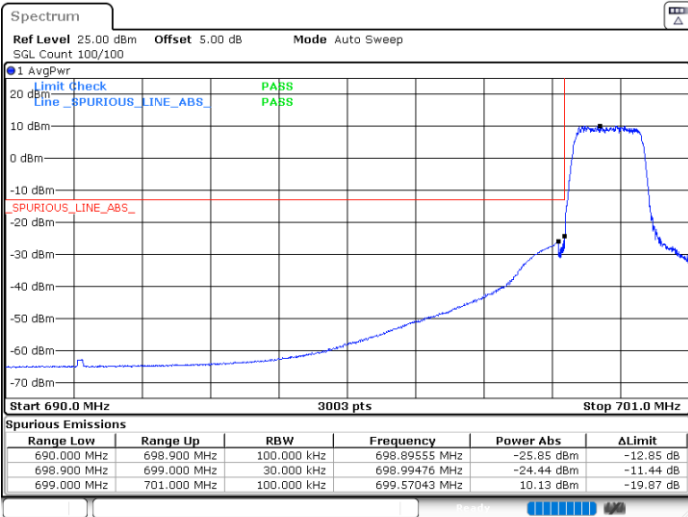


Date: 28.FEB.2024 01:24:27

Date: 28.FEB.2024 01:33:10

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28.FEB.2024 01:26:45

Date: 28.FEB.2024 01:35:28