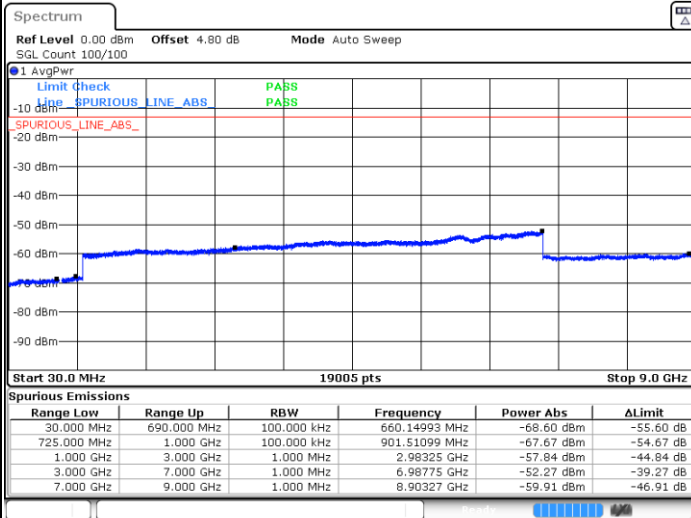




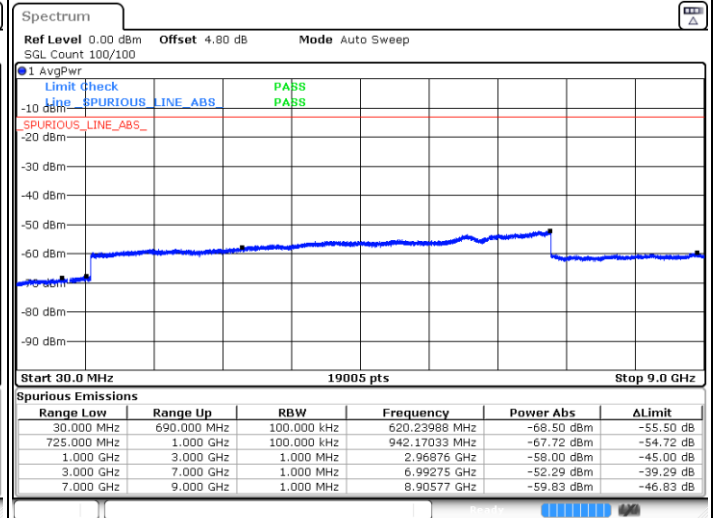
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

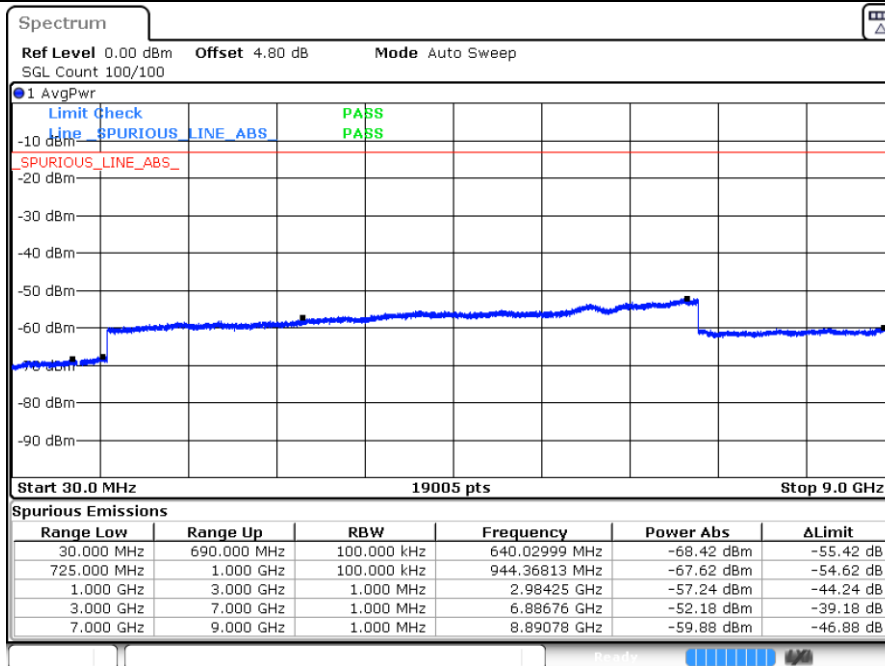


Date: 26 APR 2024 01:40:42



Date: 26 APR 2024 01:49:08

Highest Channel / QPSK



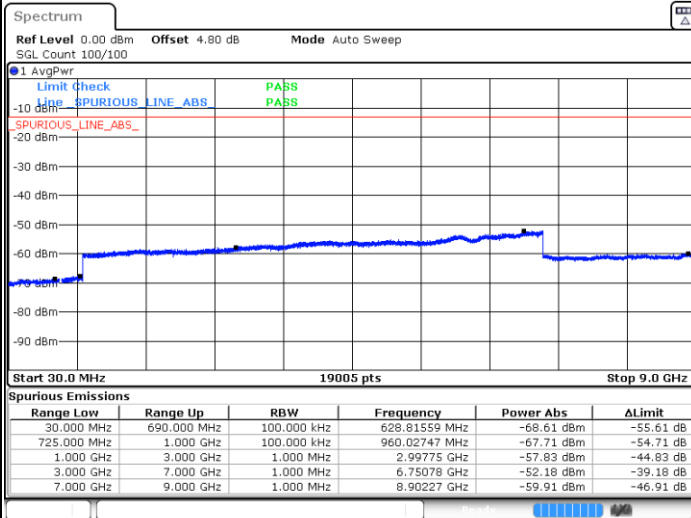
Date: 26 APR 2024 01:51:07



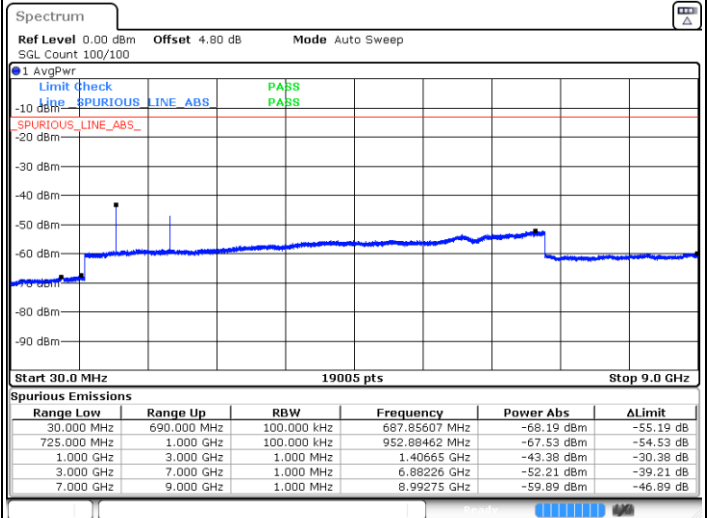
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

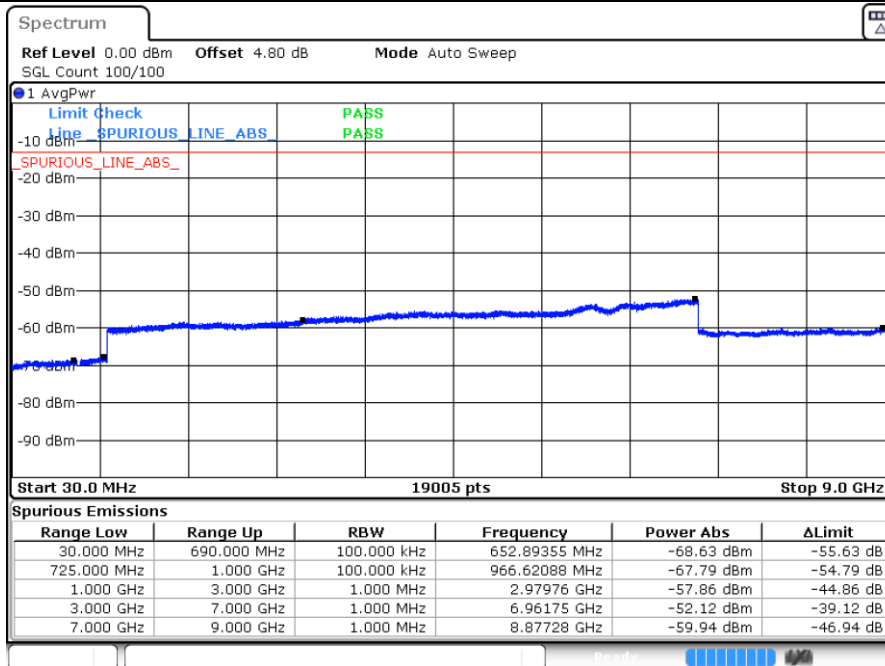


Date: 26 APR 2024 01:59:33



Date: 26 APR 2024 02:07:58

Highest Channel / QPSK



Date: 26 APR 2024 02:09:58

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0044	
30	Normal Voltage	0.0061	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0023	
0	Normal Voltage	0.0042	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0008	
20	Battery End Point	0.0014	

Note:

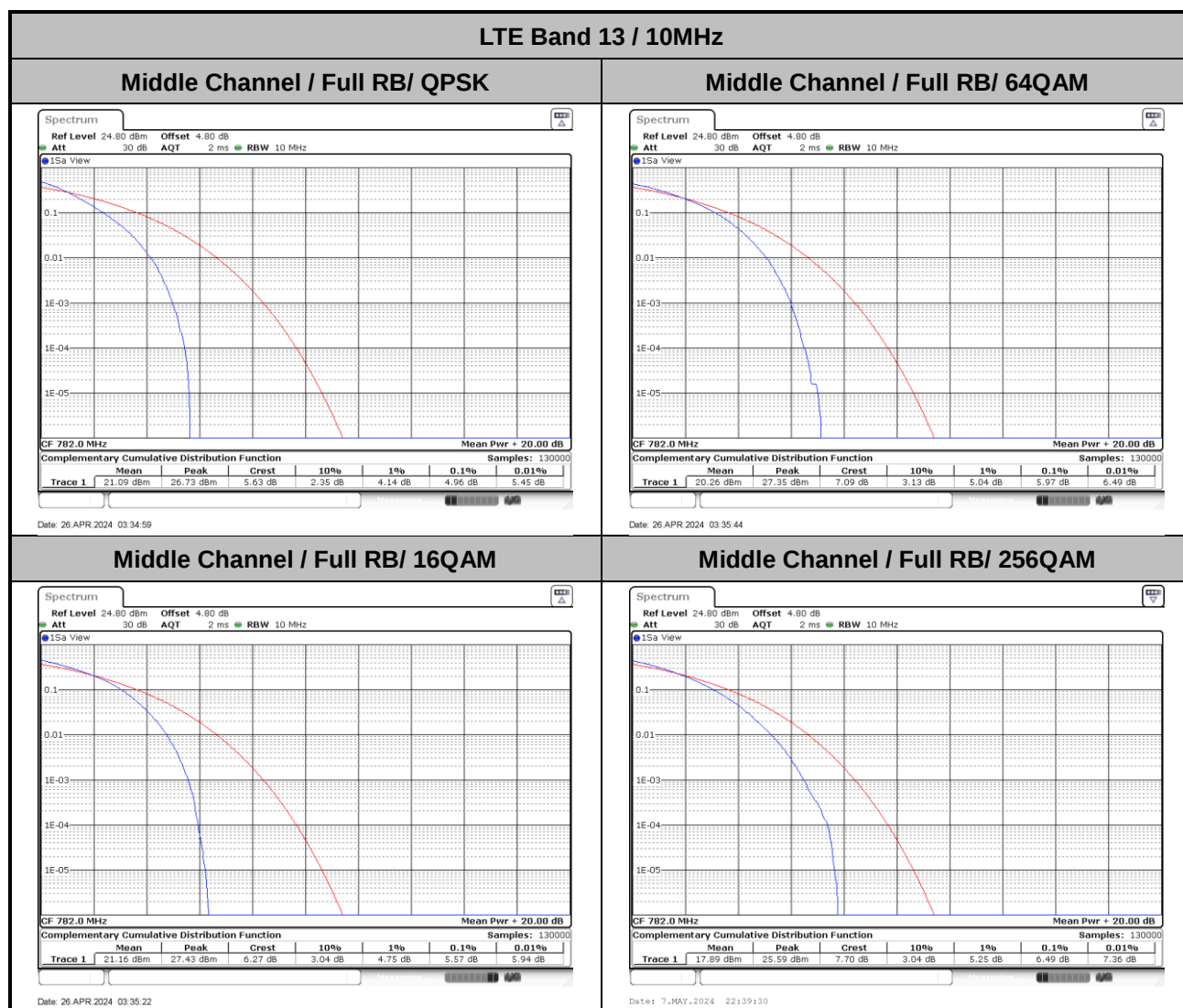
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

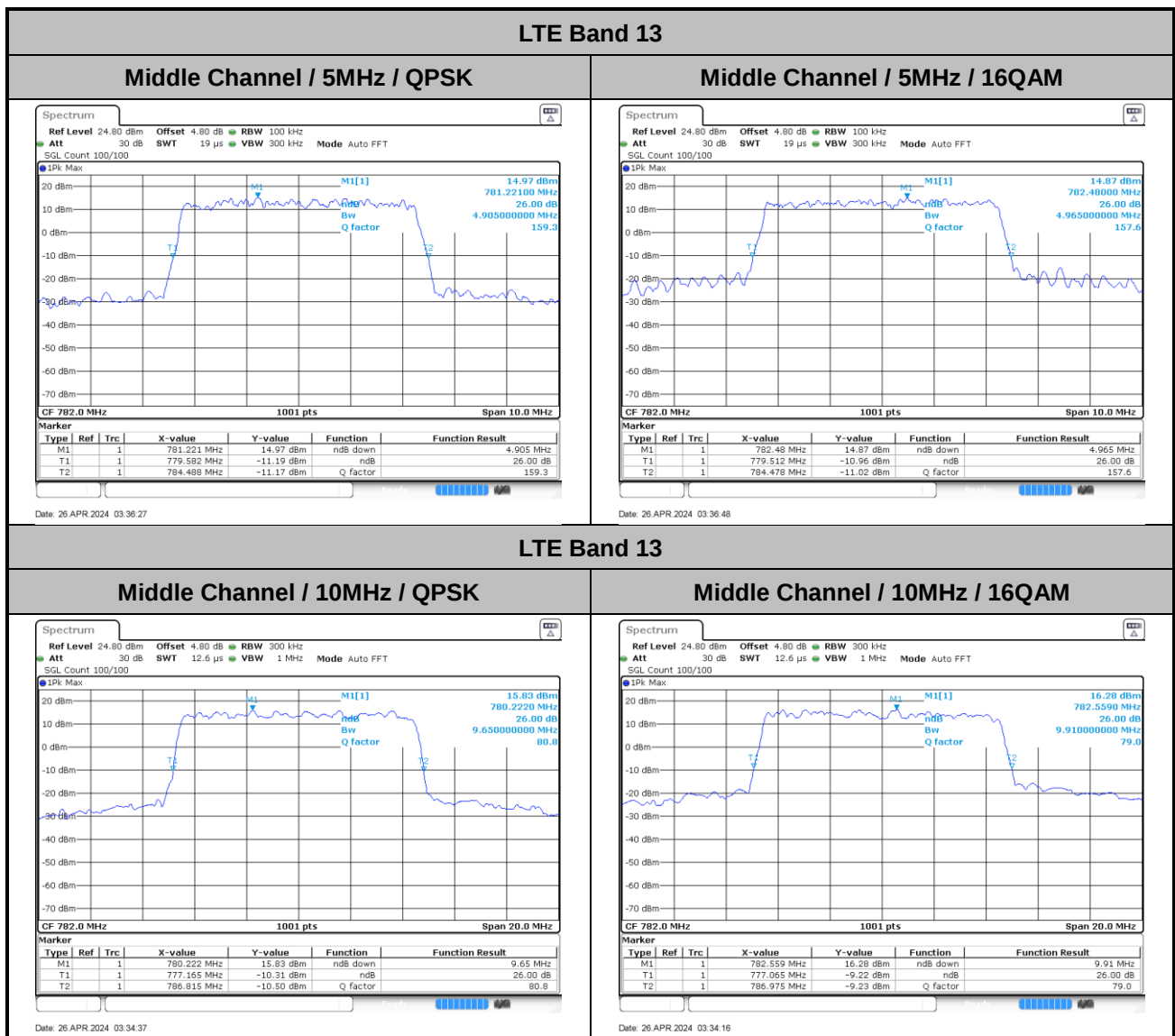
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.96	5.57	5.97	6.49	PASS



**26dB Bandwidth**

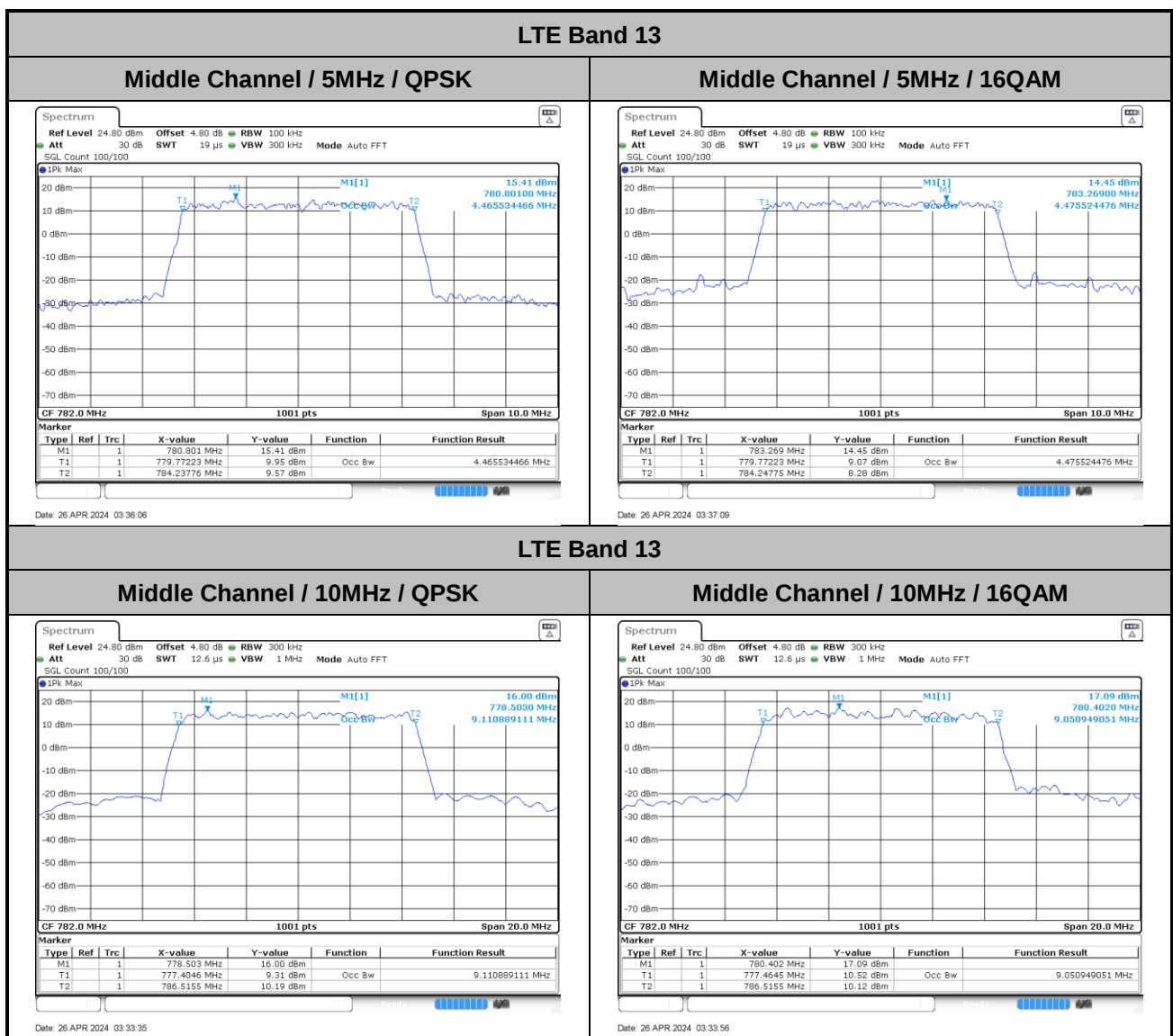
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.91	4.97
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.65	9.91





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.47	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.11	9.05

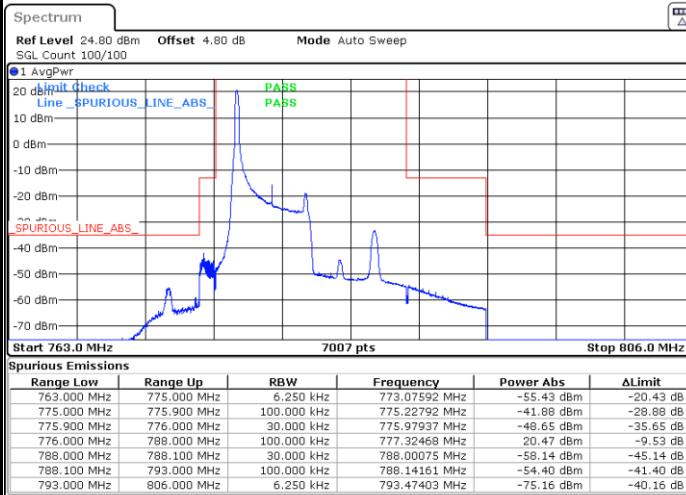




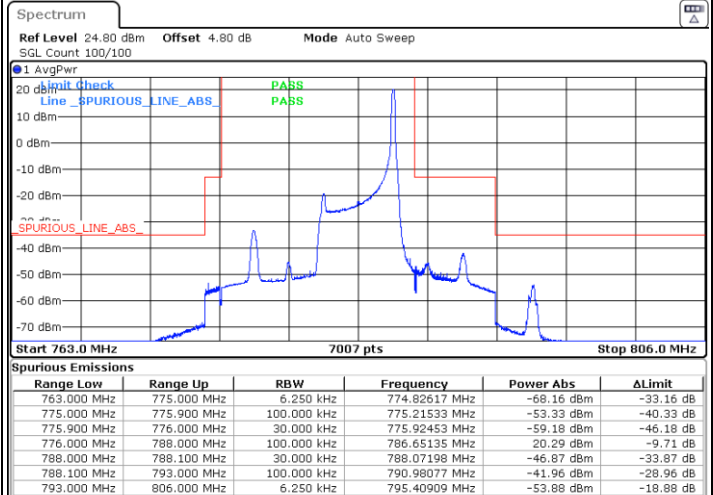
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

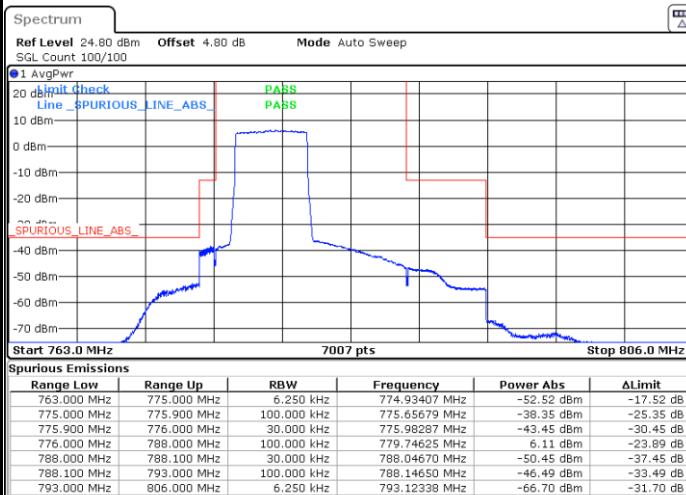
Lowest Band Edge / 1 RB



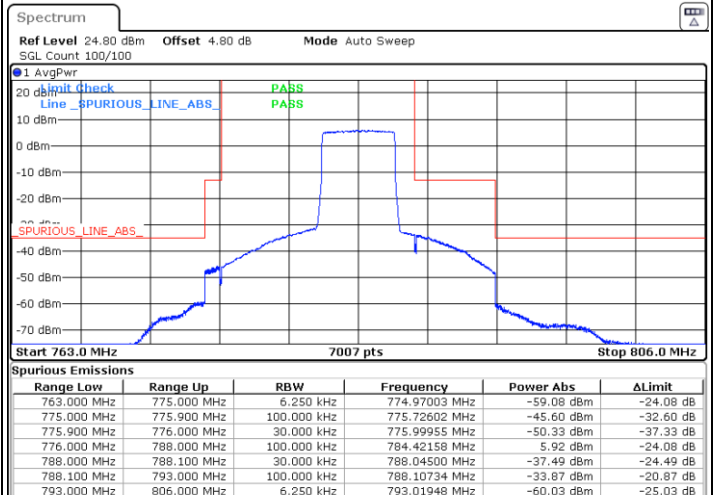
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



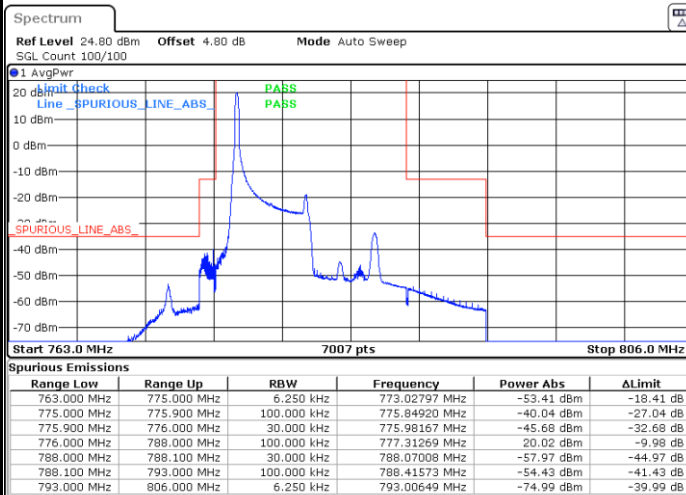
Highest Band Edge / Full RB





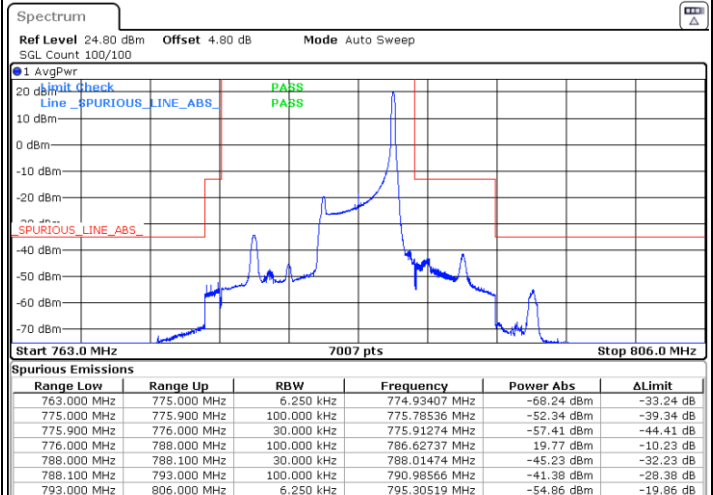
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



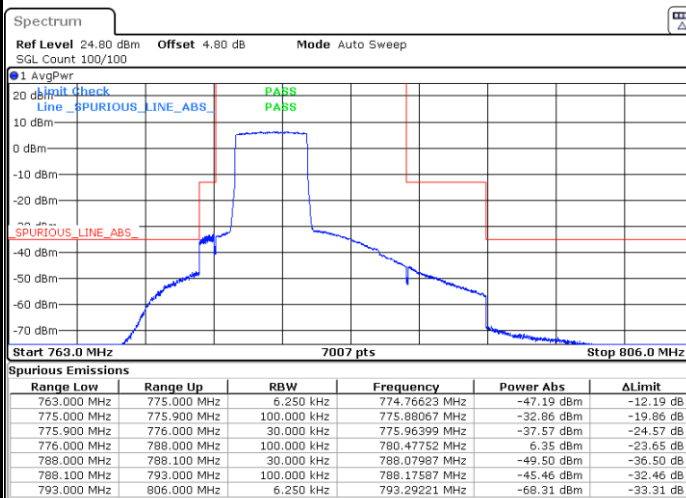
Date: 26 APR 2024 02:52:41

Highest Band Edge / 1 RB



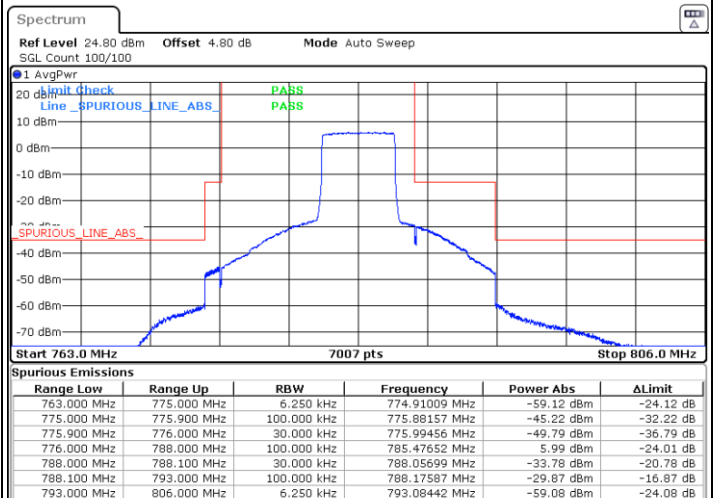
Date: 26 APR 2024 03:07:36

Lowest Band Edge / Full RB



Date: 26 APR 2024 02:58:09

Highest Band Edge / Full RB

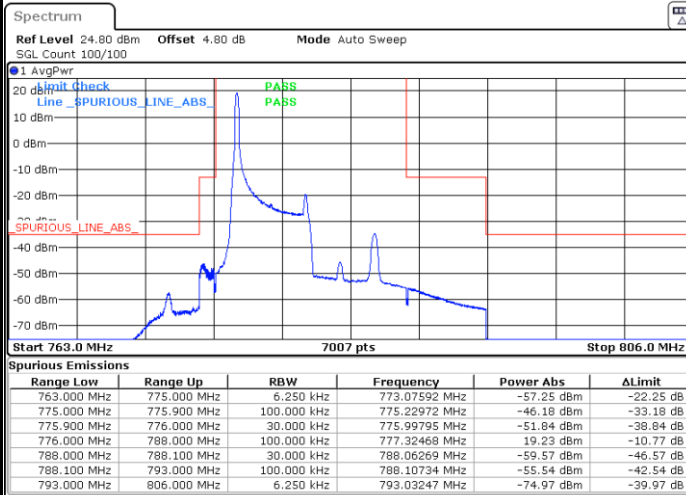


Date: 26 APR 2024 03:13:05



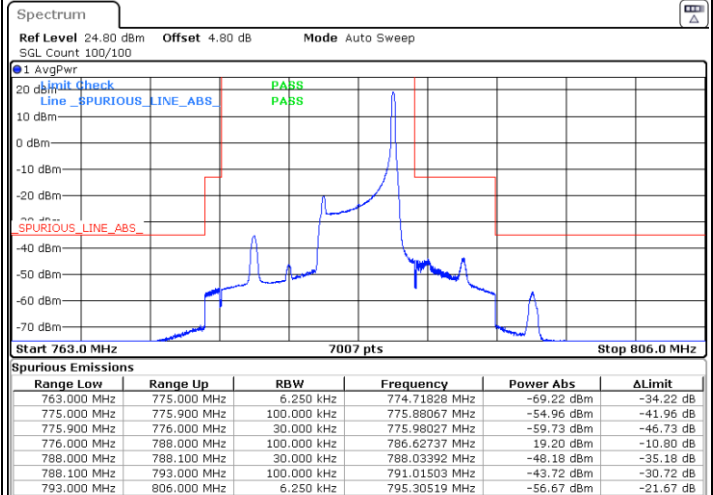
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB



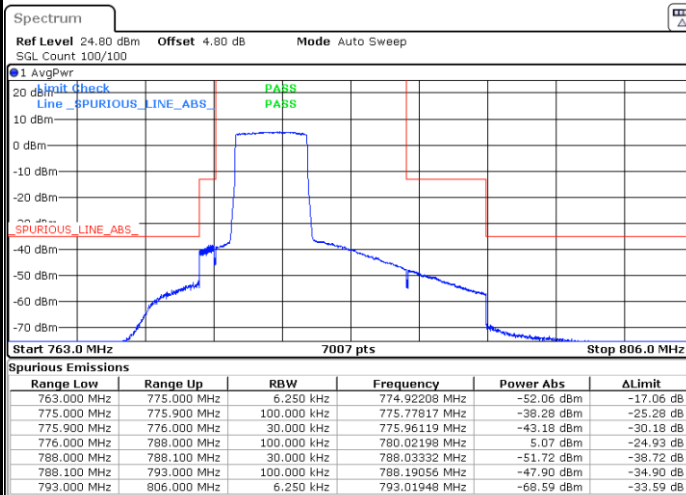
Date: 26 APR 2024 02:54:31

Highest Band Edge / 1 RB



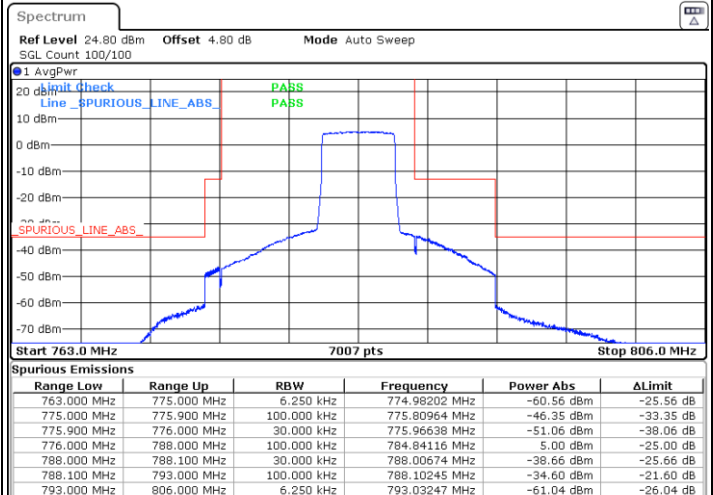
Date: 26 APR 2024 03:09:26

Lowest Band Edge / Full RB



Date: 26 APR 2024 02:56:20

Highest Band Edge / Full RB

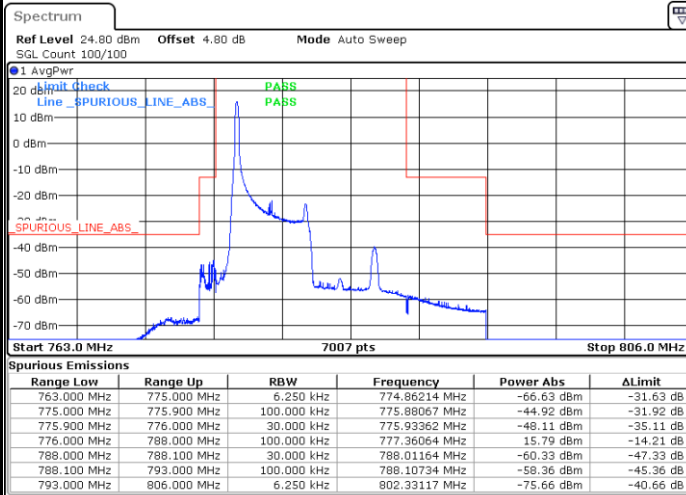


Date: 26 APR 2024 03:11:15

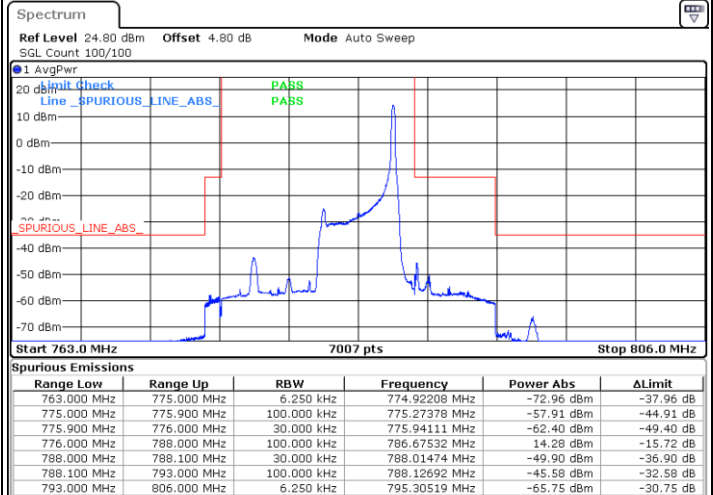


LTE Band 13 / 5MHz / 256QAM

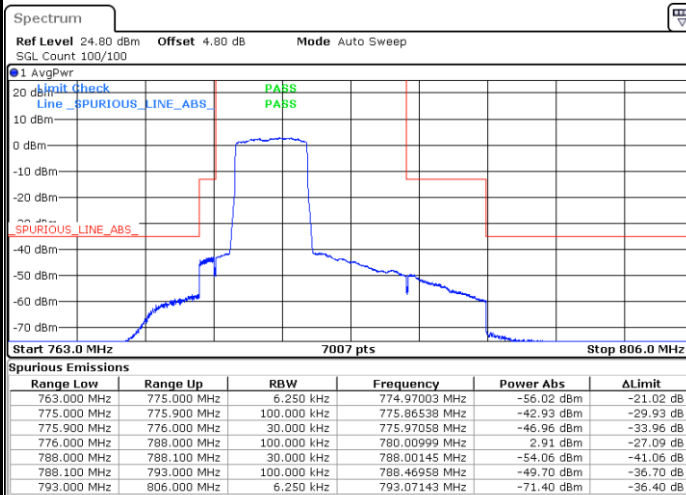
Lowest Band Edge / 1RB



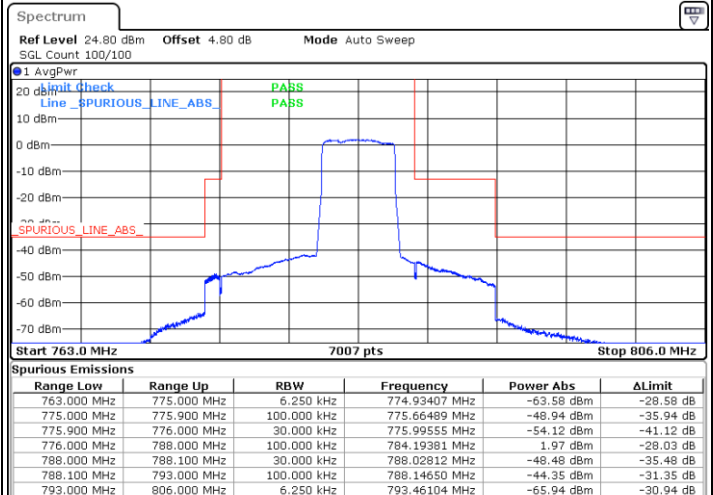
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



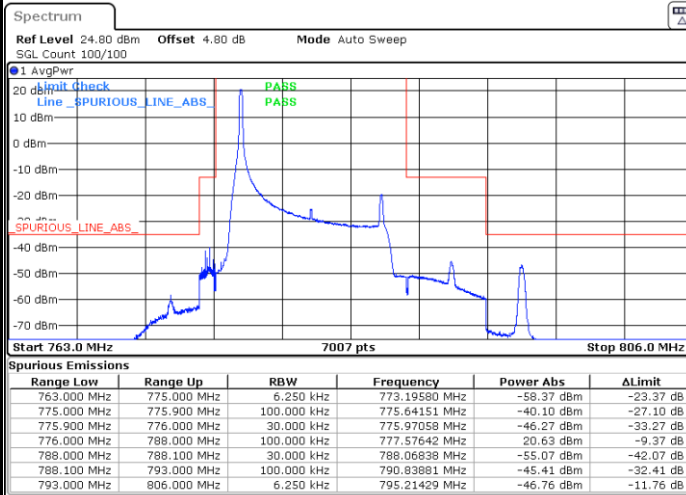
Highest Band Edge / Full RB





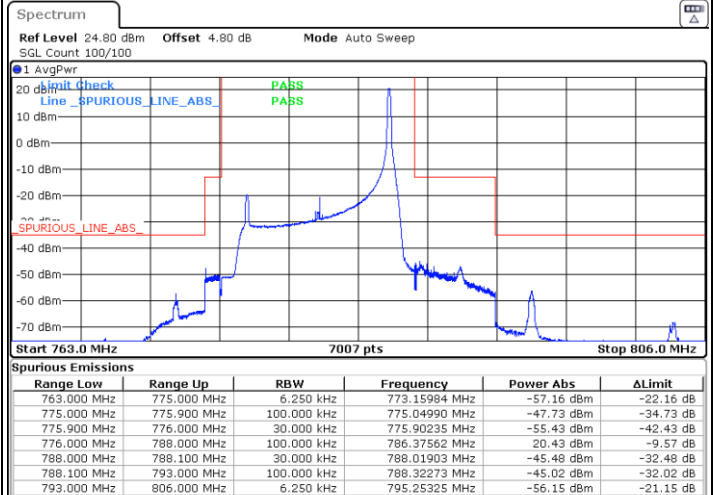
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



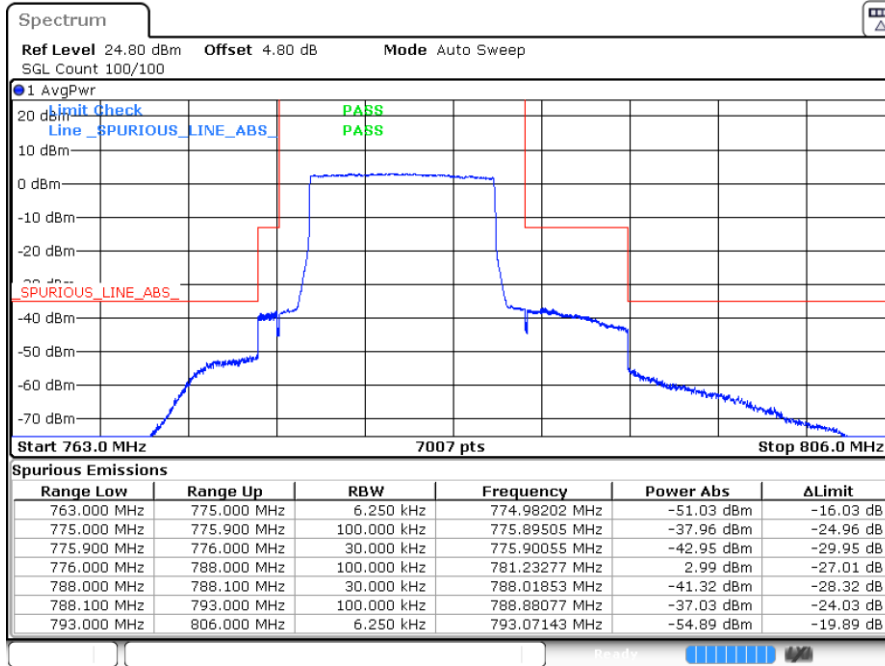
Date: 26 APR 2024 03:18:43

middle Band Edge / 1 RB



Date: 26 APR 2024 03:27:47

Middle Band Edge / Full RB

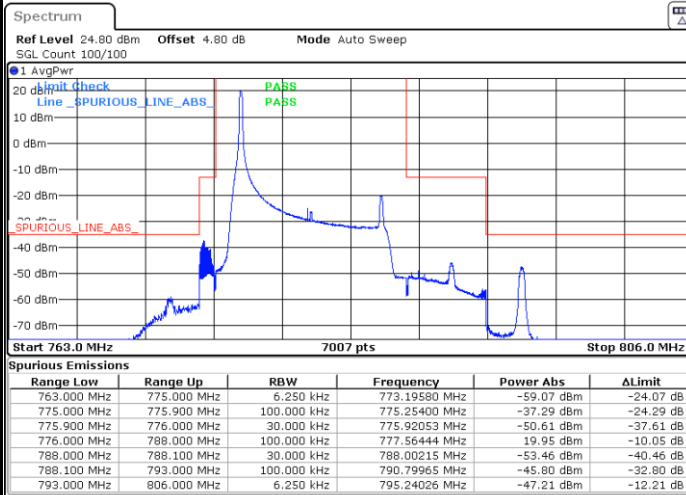


Date: 26 APR 2024 03:29:36



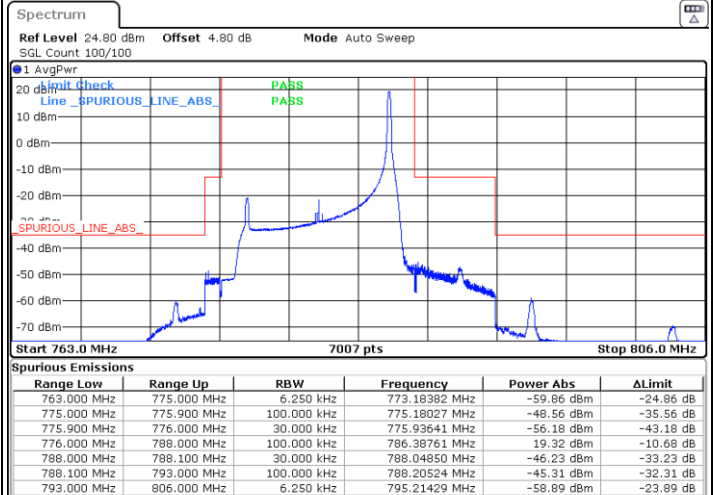
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



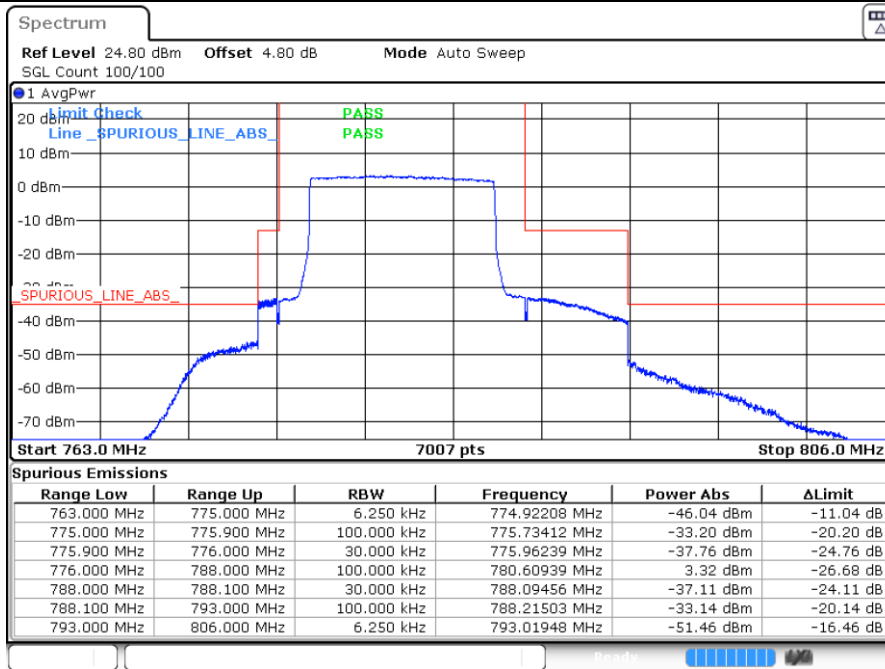
Date: 26 APR 2024 03:20:32

middle Band Edge / 1 RB



Date: 26 APR 2024 03:25:59

middle Band Edge / Full RB

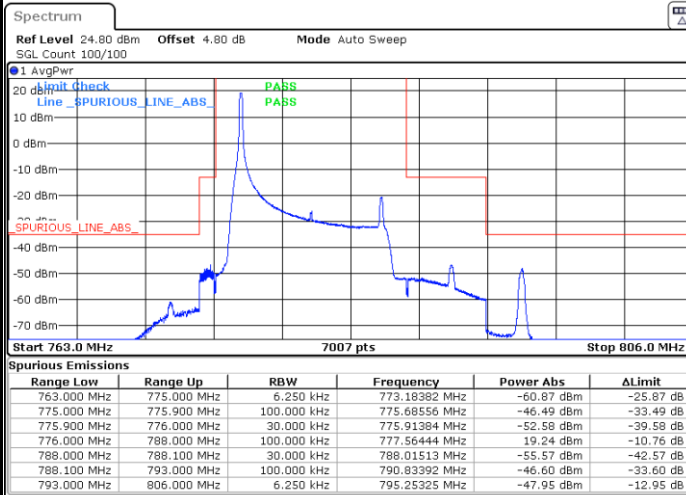


Date: 26 APR 2024 03:31:25



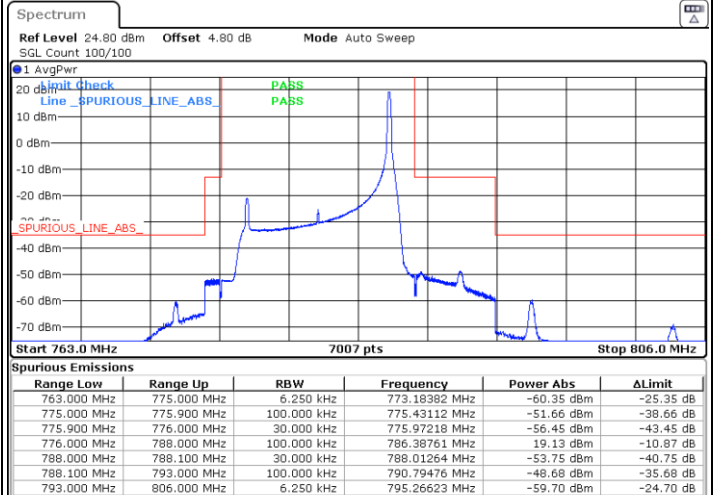
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



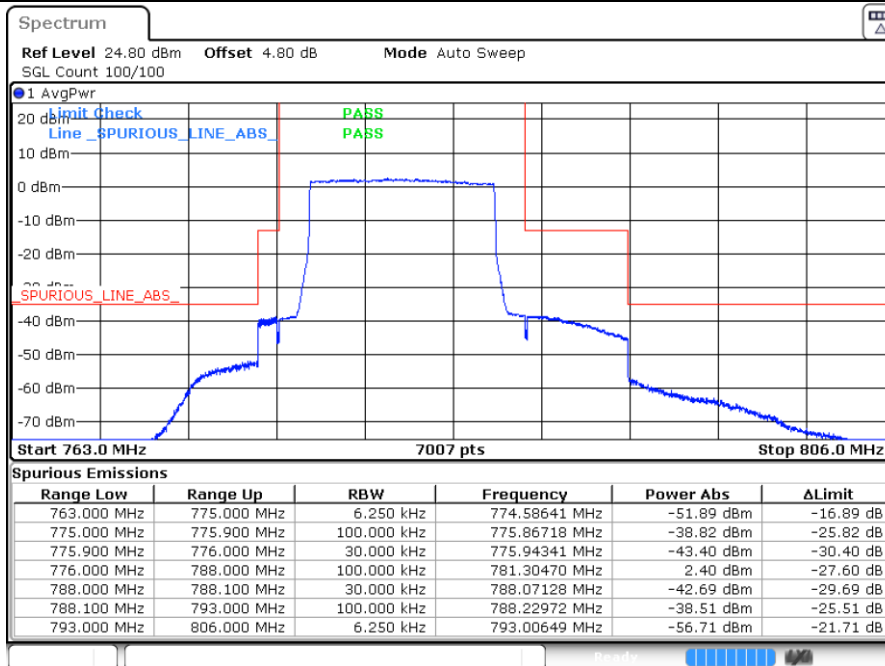
Date: 26 APR 2024 03:22:11

middle Band Edge / 1 RB



Date: 26 APR 2024 03:24:10

middle Band Edge / Full RB

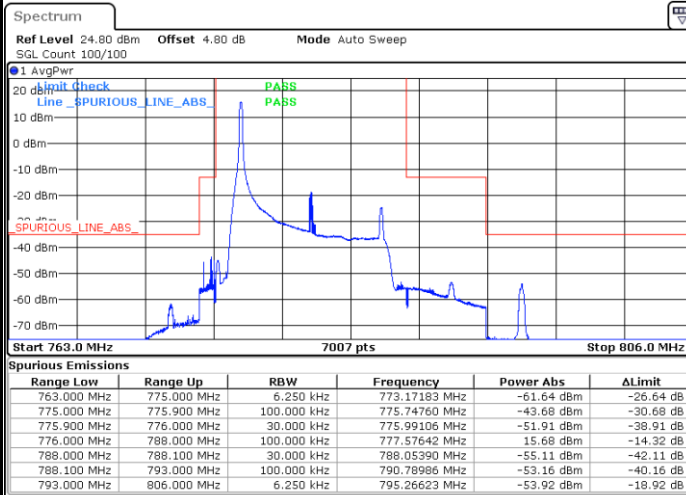


Date: 26 APR 2024 03:33:14

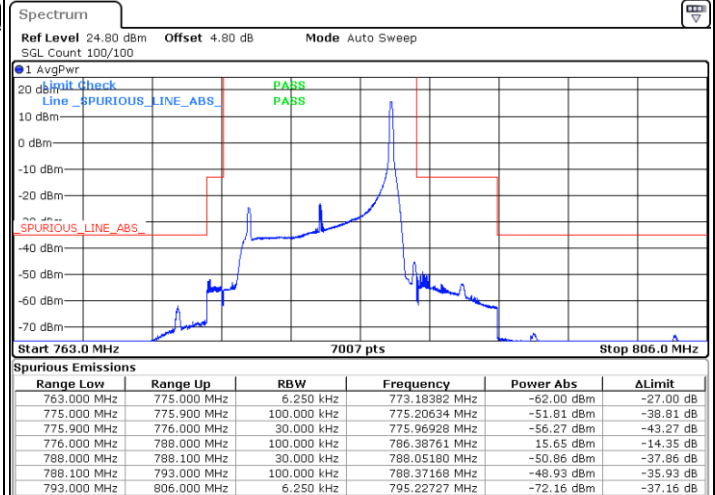


LTE Band 13 / 10MHz / 256QAM

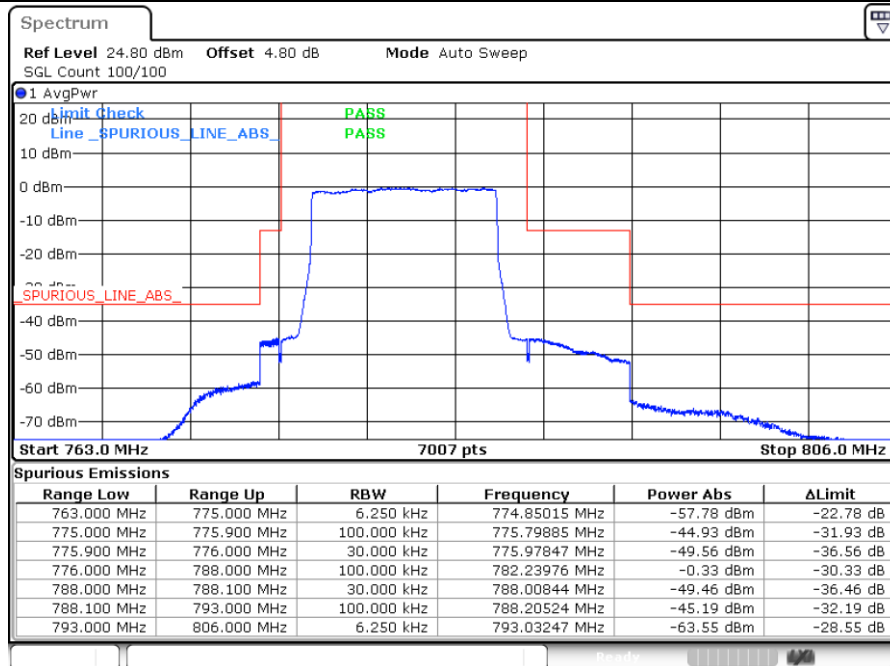
middle Band Edge / 1 RB



middle Band Edge / 1 RB



middle Band Edge / Full RB

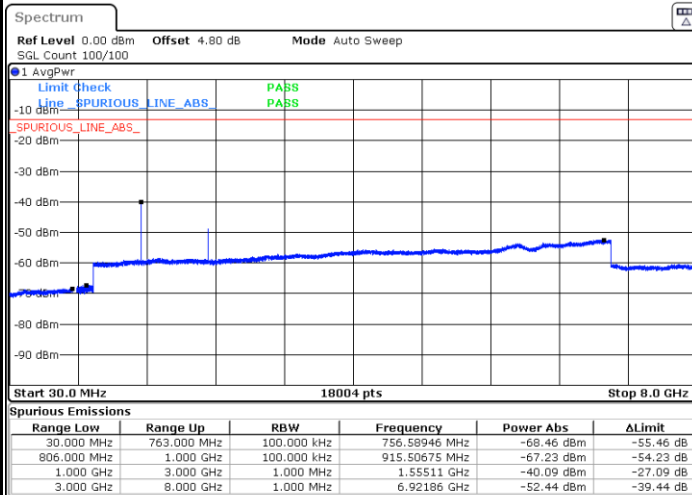




Conducted Spurious Emission

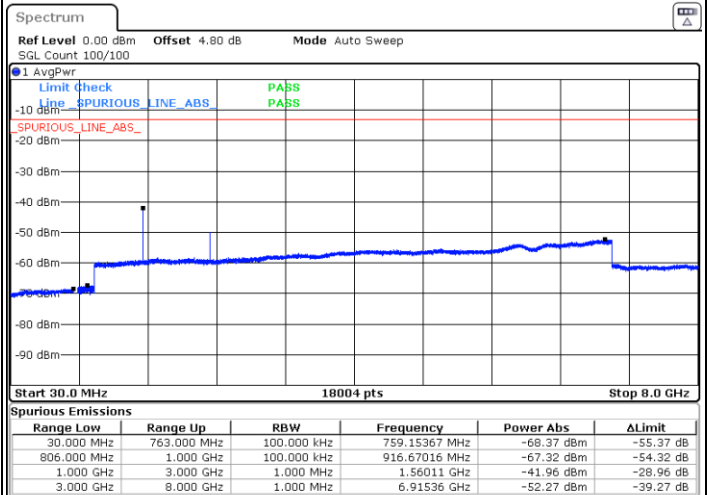
LTE Band 13 / 5MHz

Lowest Channel / QPSK



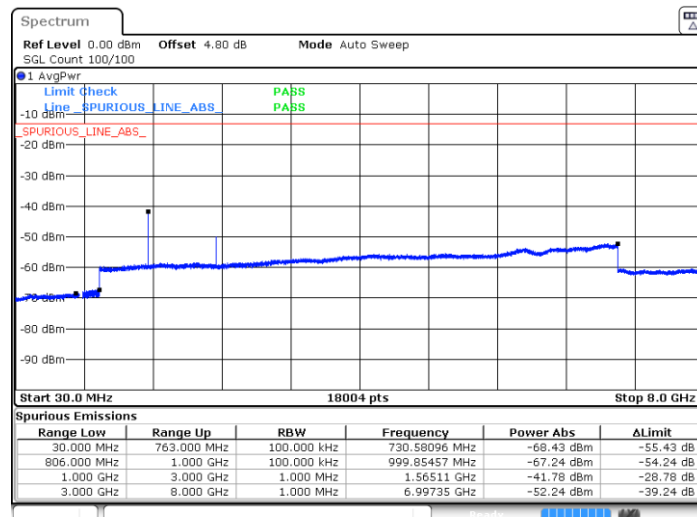
Date: 26 APR 2024 02:43:36

Middle Channel / QPSK



Date: 26 APR 2024 03:01:58

Highest Channel / QPSK

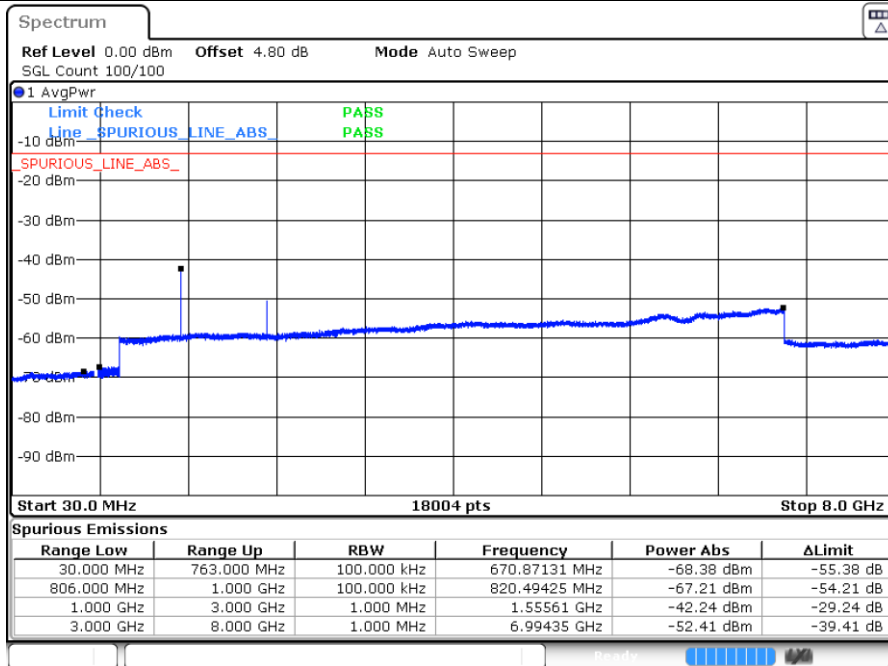


Date: 26 APR 2024 03:03:57



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 26.APR.2024 03:16:54

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	0.0020	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0059	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0071	
-10	Normal Voltage	0.0051	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0008	
20	Battery End Point	0.0013	

Note:

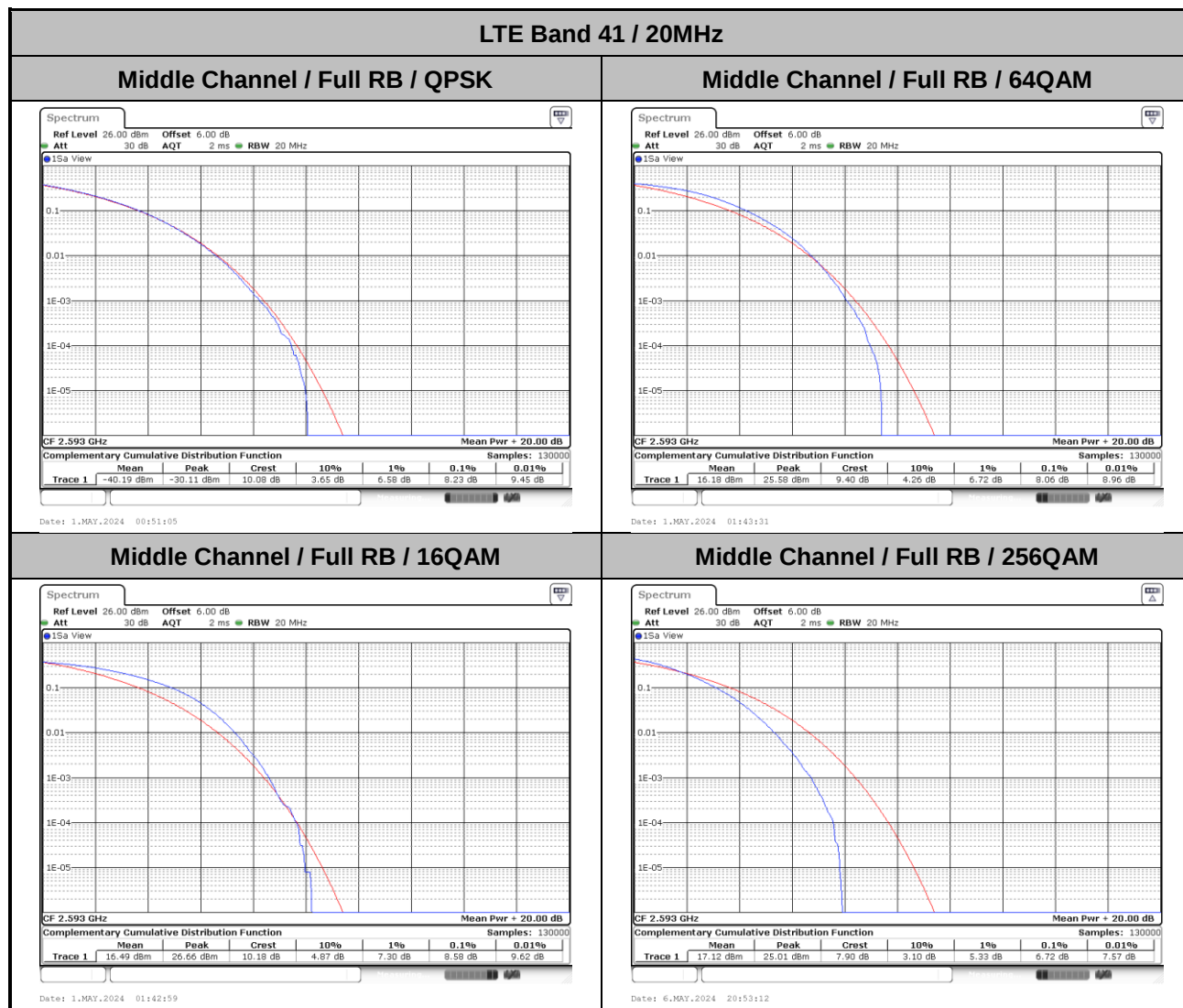
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41_Main PA

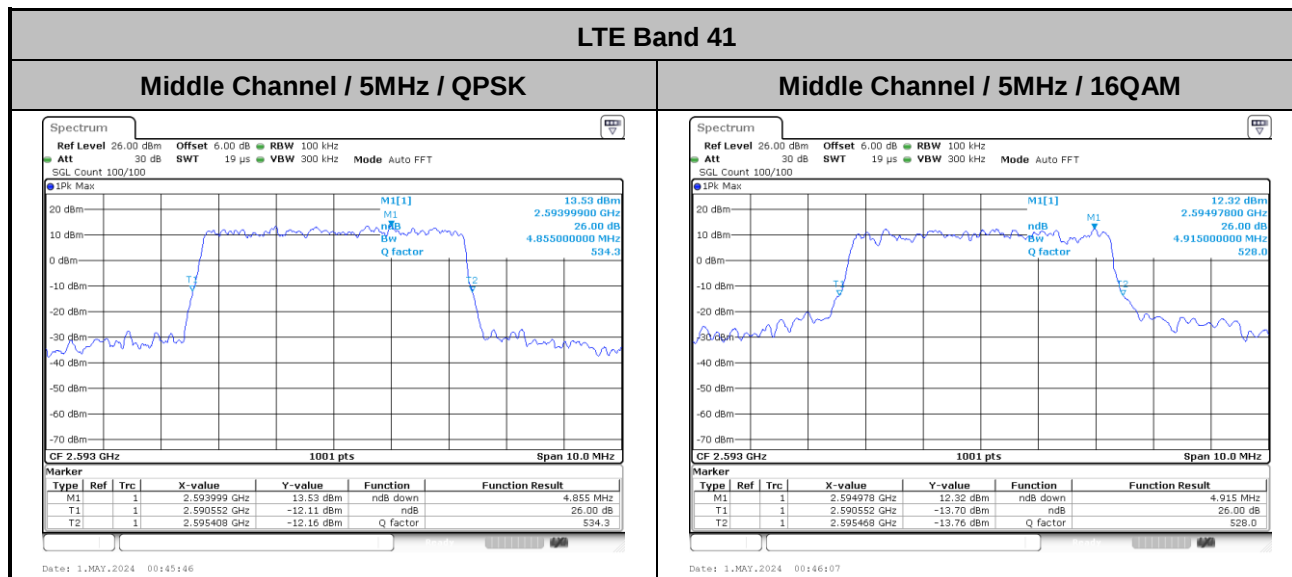
Peak-to-Average Ratio

Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	8.23	8.58	8.06	6.72	PASS



**26dB Bandwidth**

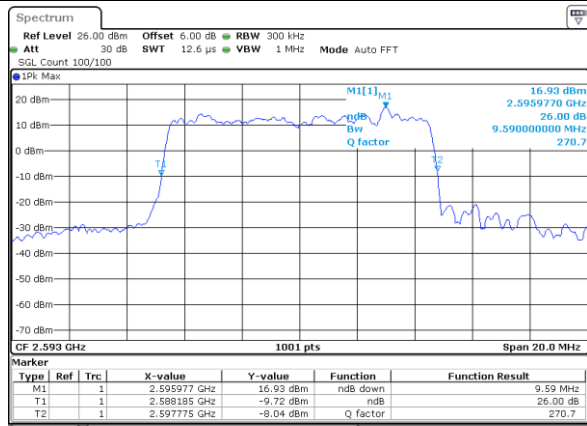
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.86	4.92
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.59	9.75
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.30	14.12
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.86	18.82



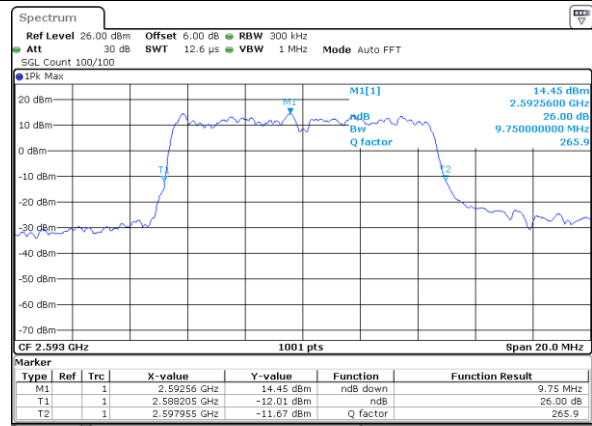


LTE Band 41

Middle Channel / 10MHz / QPSK

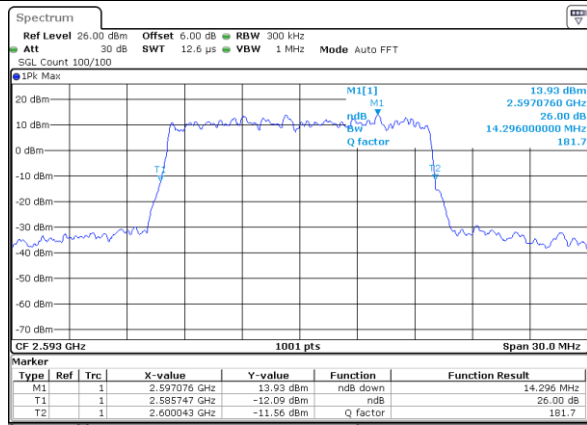


Middle Channel / 10MHz / 16QAM

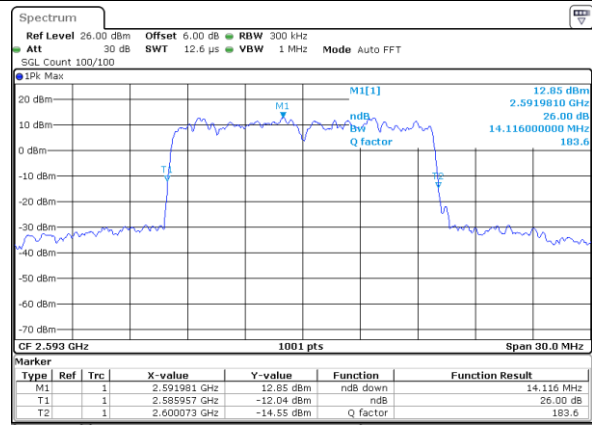


LTE Band 41

Middle Channel / 15MHz / QPSK

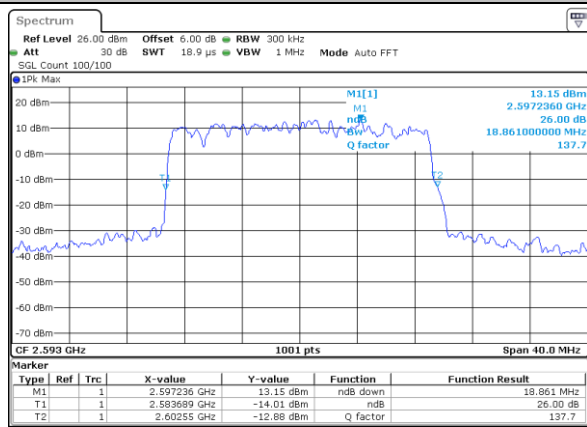


Middle Channel / 15MHz / 16QAM

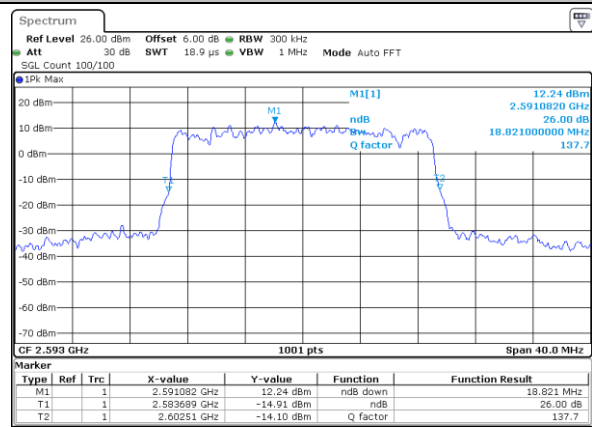


LTE Band 41

Middle Channel / 20MHz / QPSK



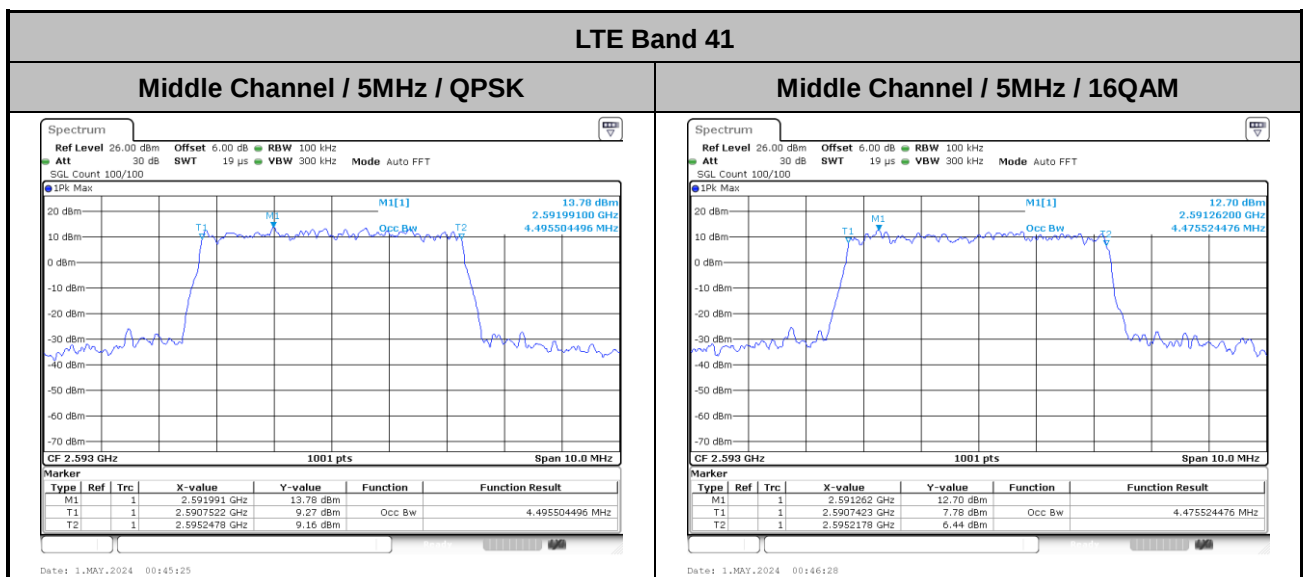
Middle Channel / 20MHz / 16QAM





Occupied Bandwidth

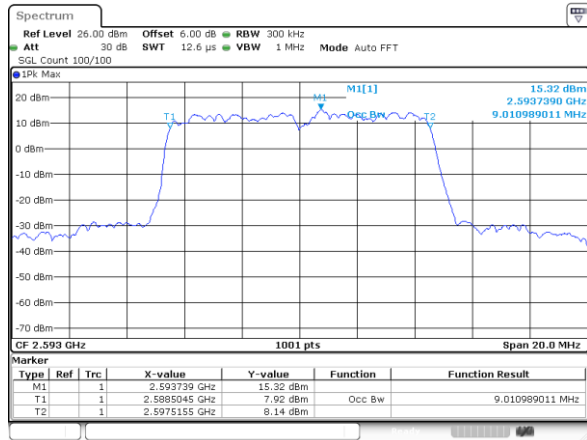
Mode	LTE Band 41 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.37	13.40
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.74	17.82





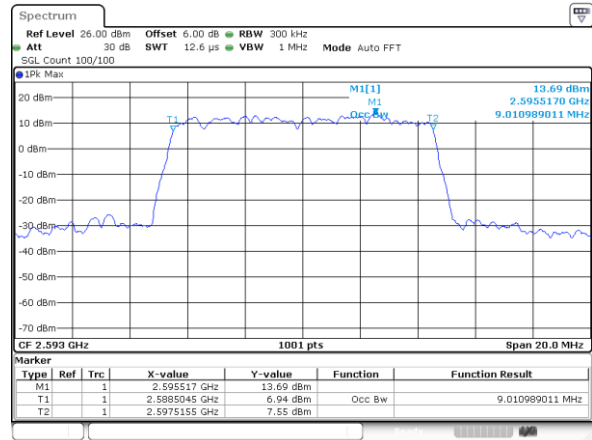
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 1.MAY.2024 00:46:49

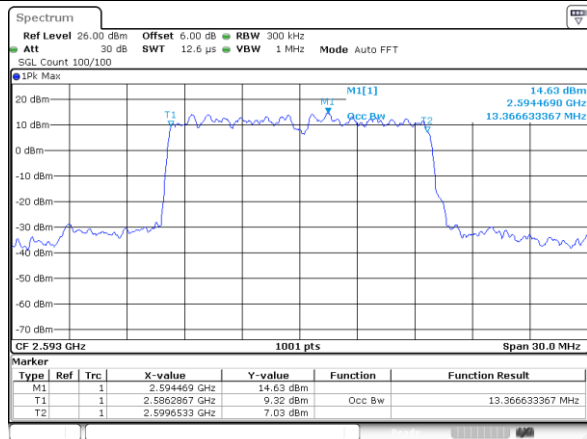
Middle Channel / 10MHz / 16QAM



Date: 1.MAY.2024 00:47:52

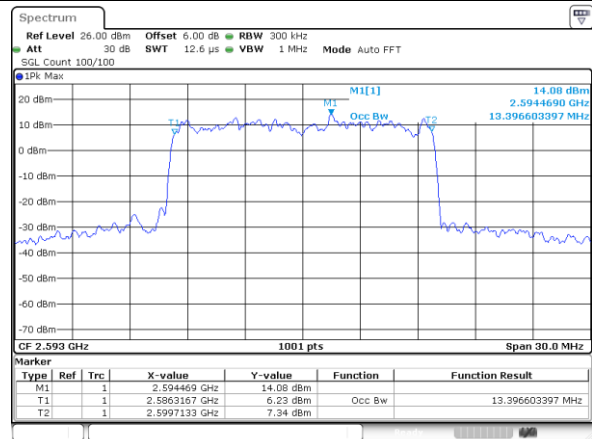
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 1.MAY.2024 00:48:14

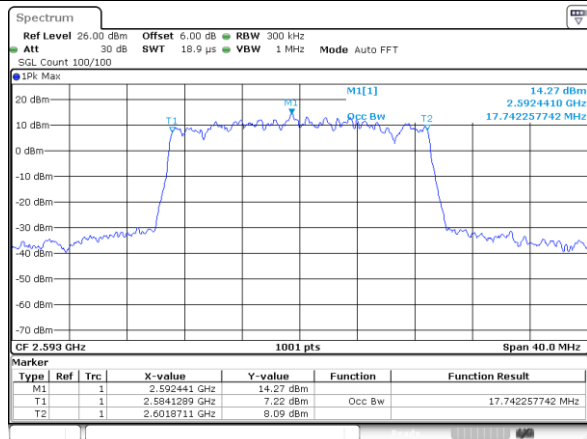
Middle Channel / 15MHz / 16QAM



Date: 1.MAY.2024 00:49:17

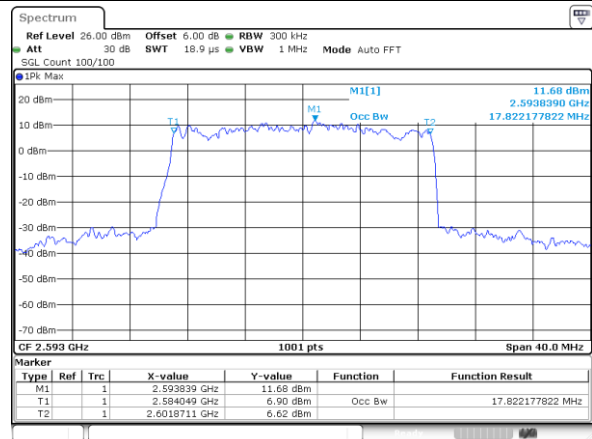
LTE Band 41

Middle Channel / 20MHz / QPSK

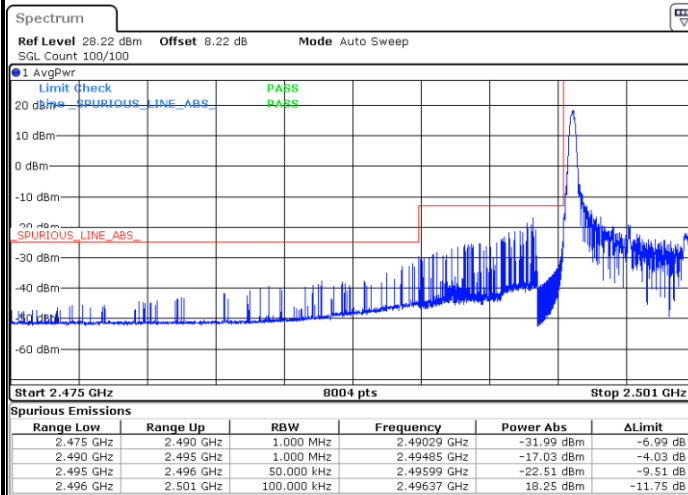
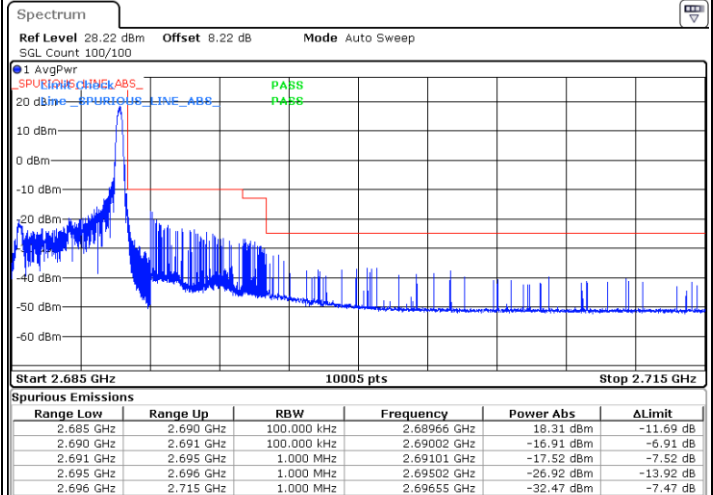
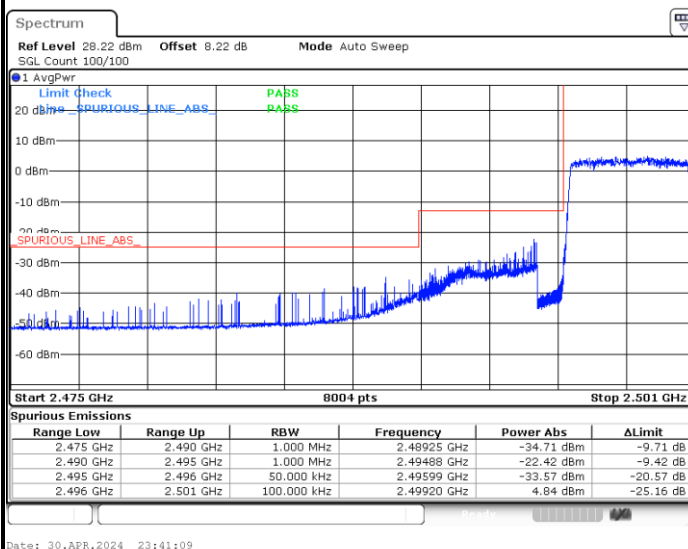
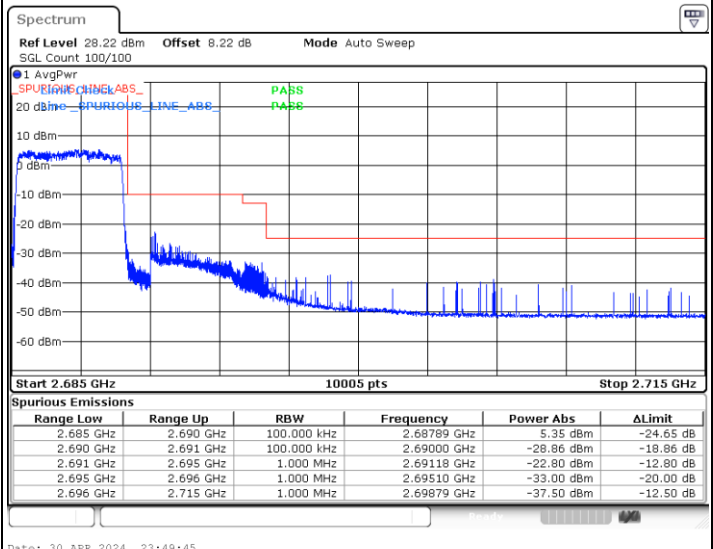


Date: 1.MAY.2024 00:49:39

Middle Channel / 20MHz / 16QAM



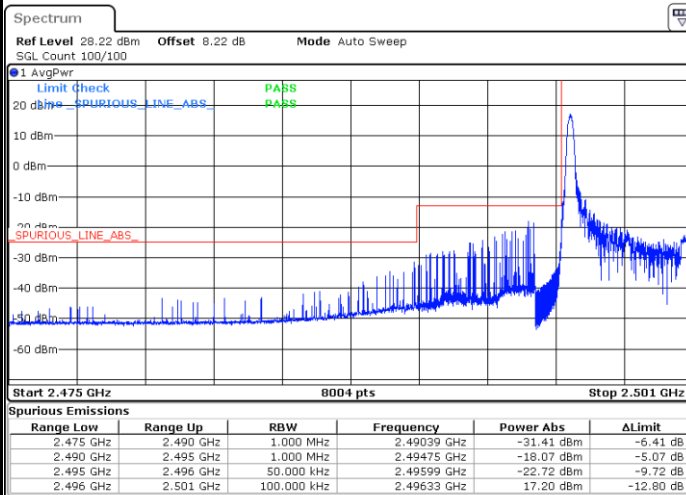
Date: 1.MAY.2024 00:50:42

**Conducted Band Edge****LTE Band 41 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

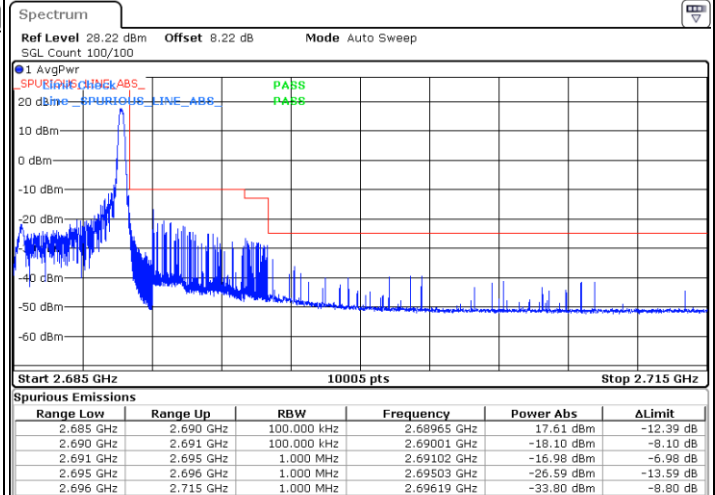


LTE Band 41 / 5MHz / 16QAM

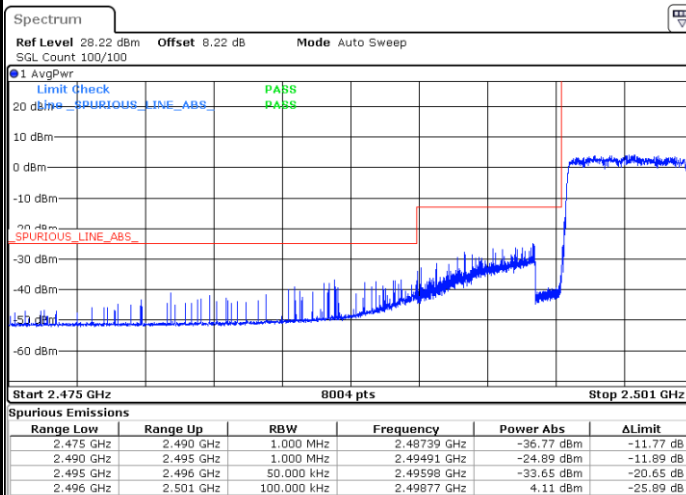
Lowest Band Edge / 1RB



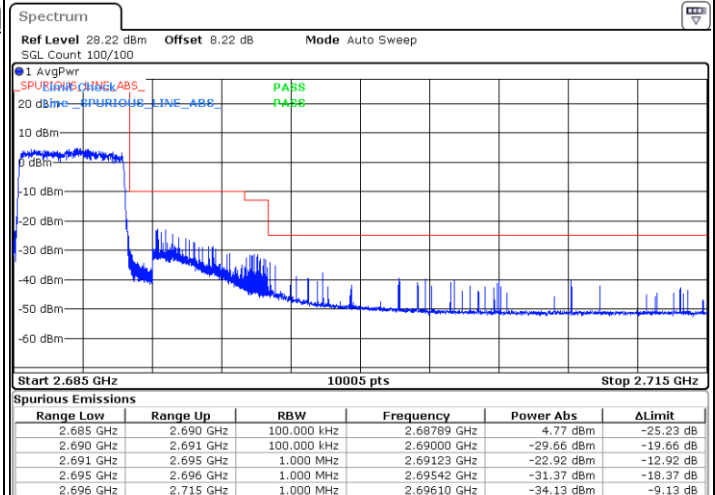
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



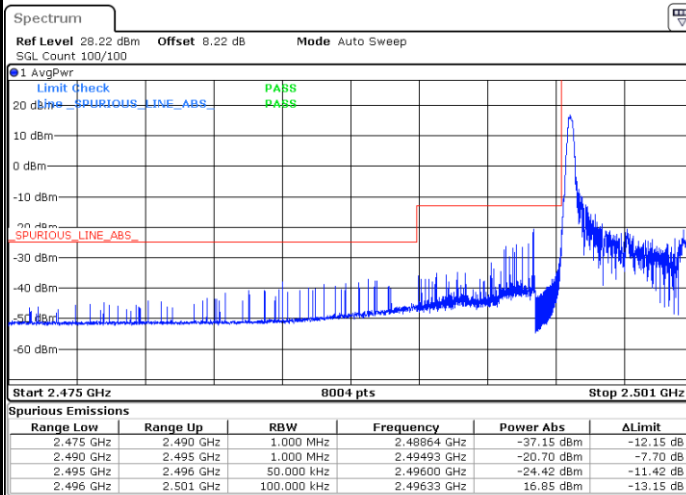
Highest Band Edge / Full RB



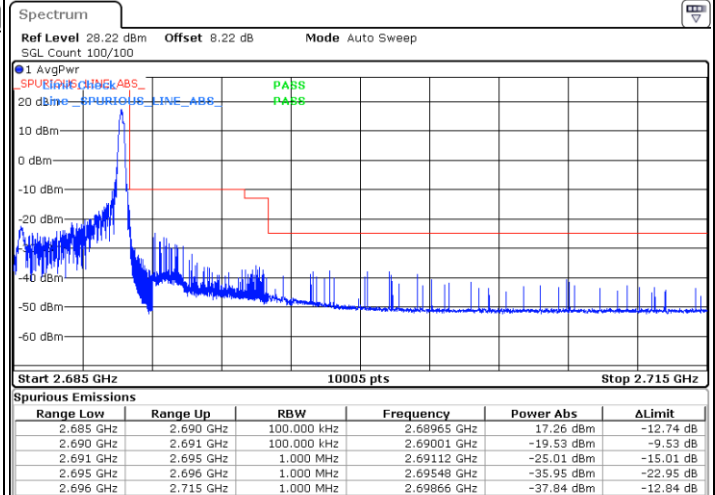


LTE Band 41 / 5MHz / 64QAM

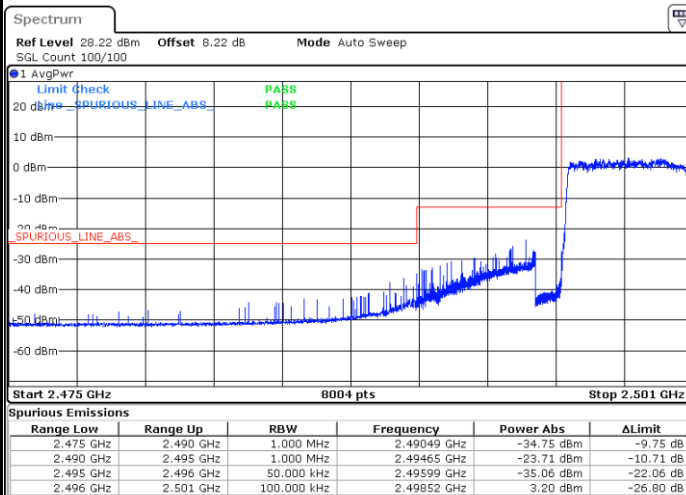
Lowest Band Edge / 1RB



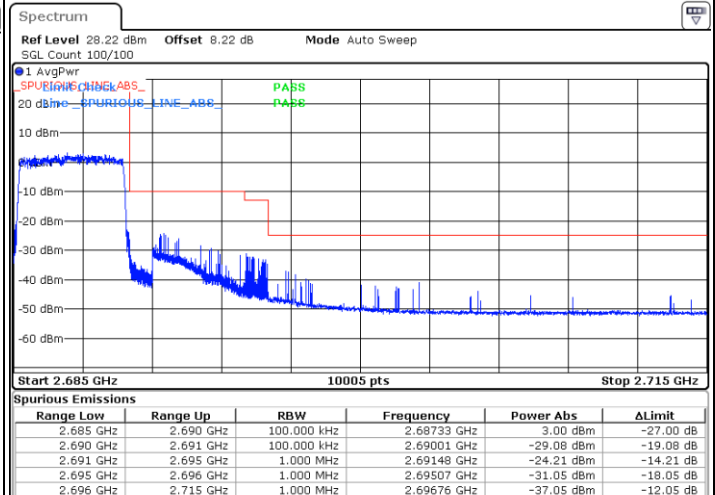
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



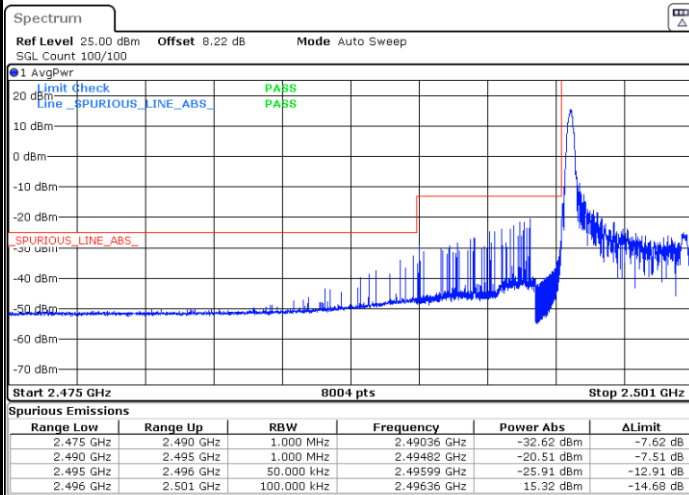
Highest Band Edge / Full RB



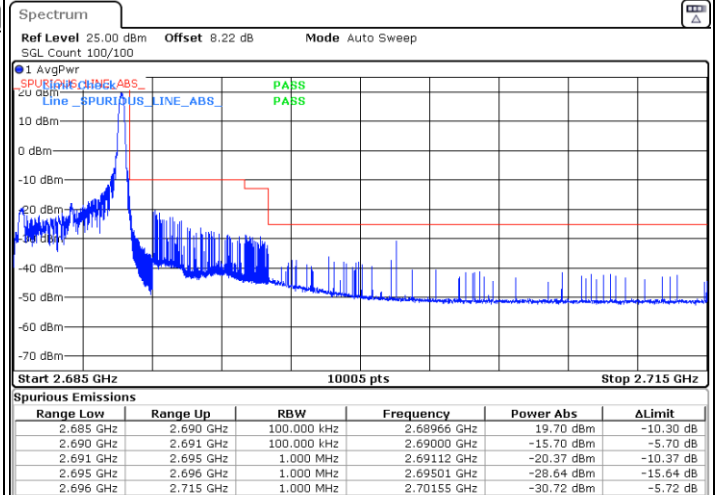


LTE Band 41 / 5MHz / 256QAM

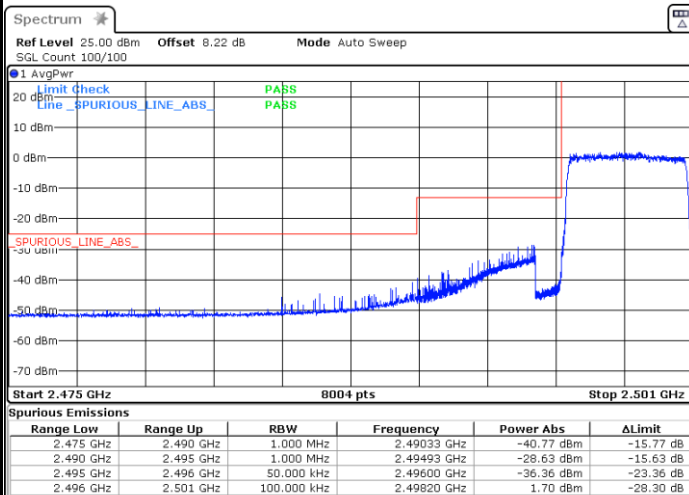
Lowest Band Edge / 1RB



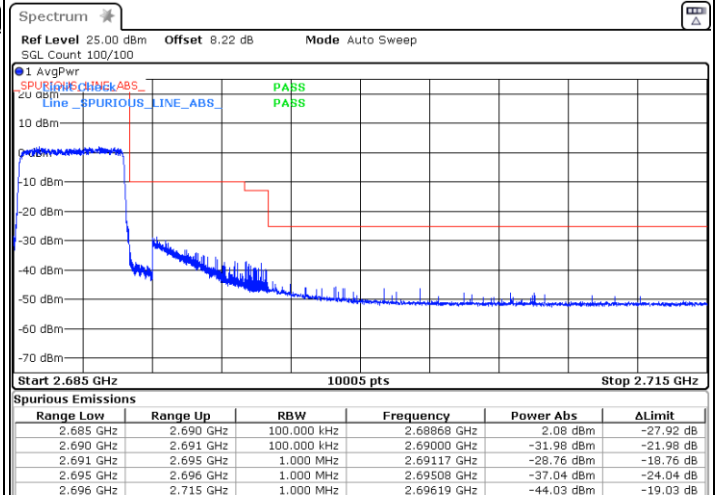
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



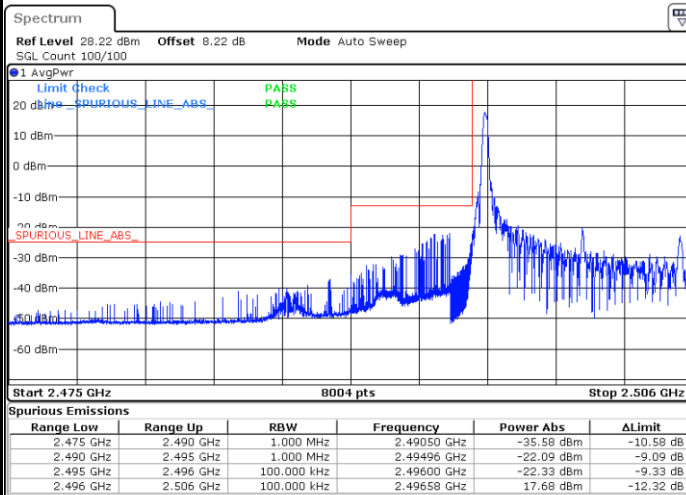
Highest Band Edge / Full RB



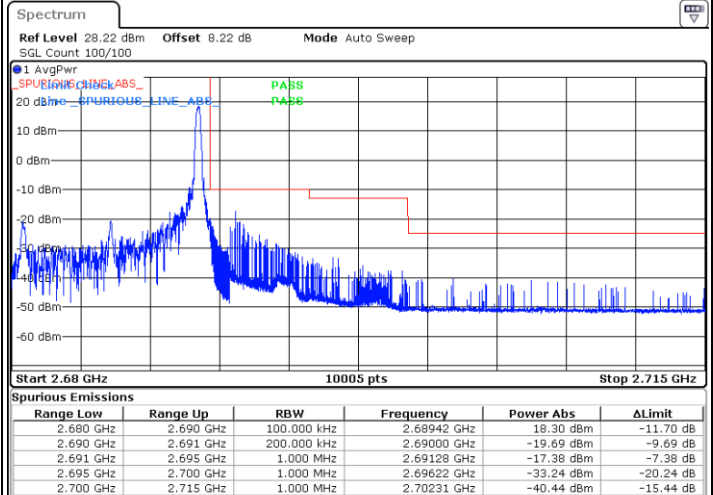


LTE Band 41 / 10MHz / QPSK

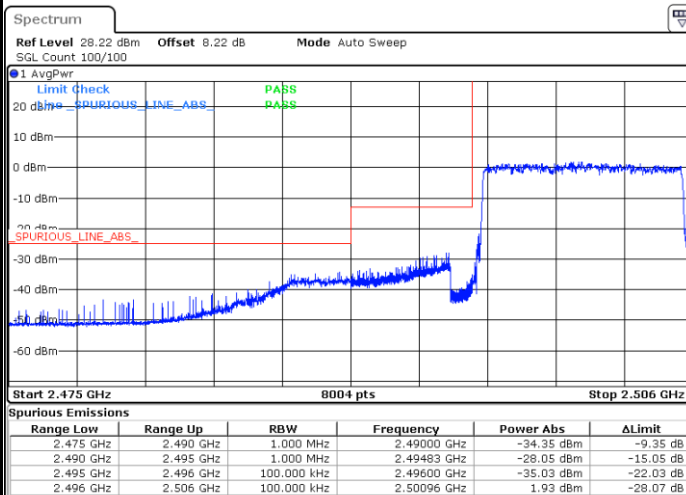
Lowest Band Edge / 1 RB



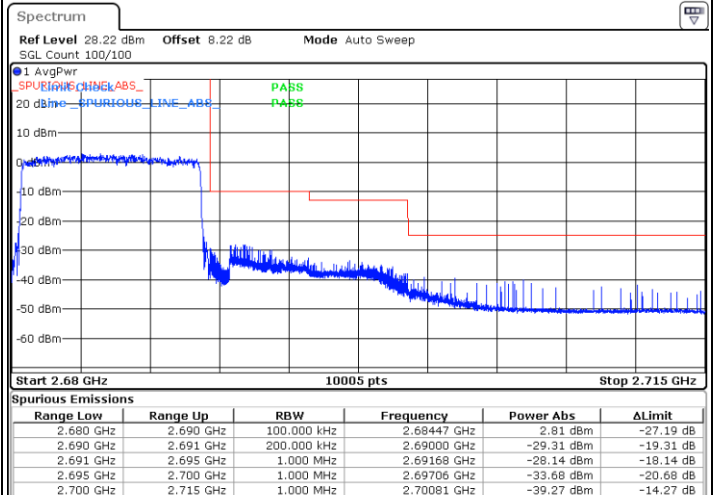
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



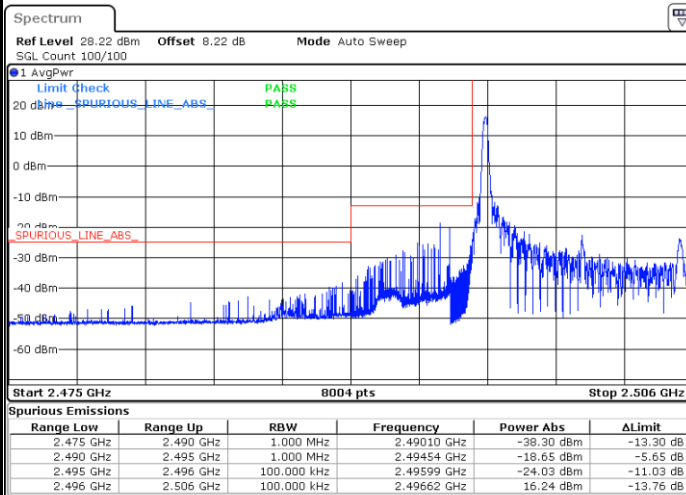
Highest Band Edge / Full RB



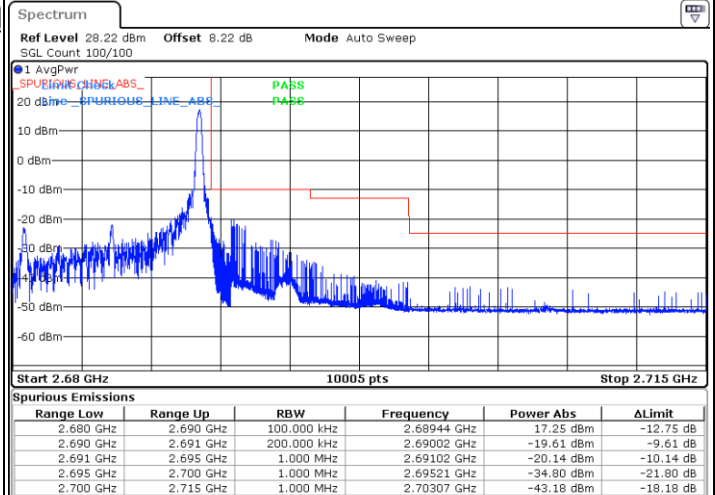


LTE Band 41 / 10MHz / 16QAM

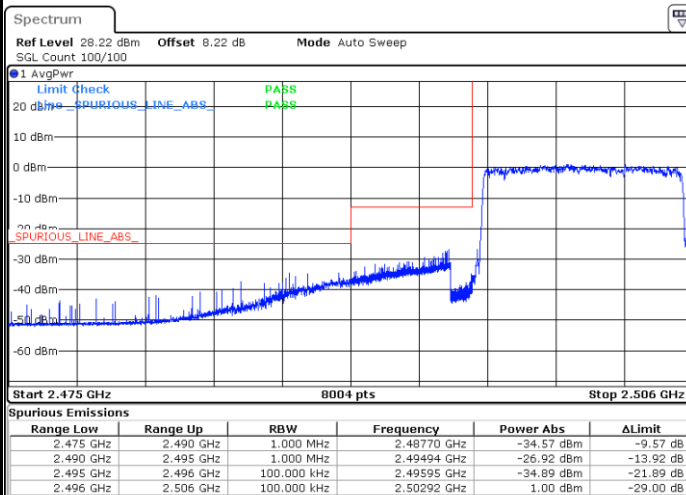
Lowest Band Edge / 1 RB



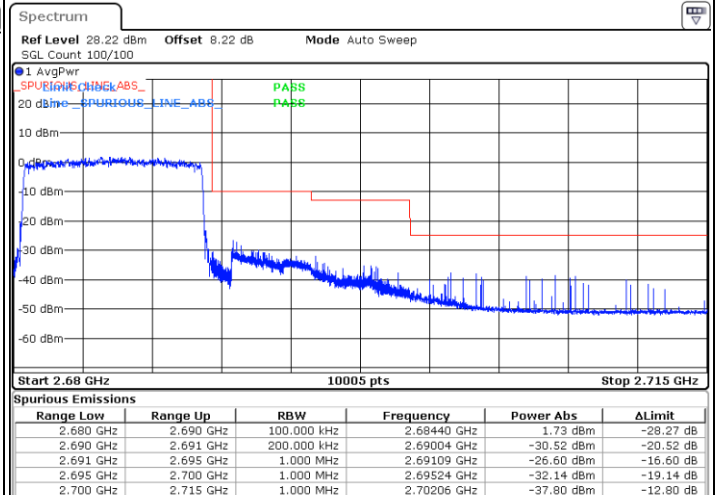
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



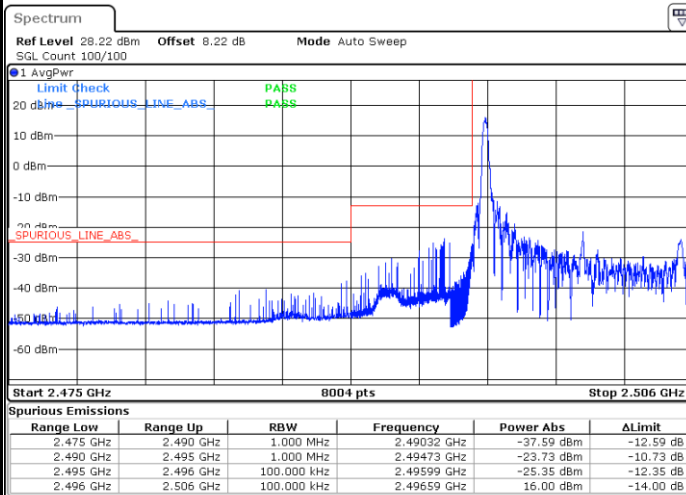
Highest Band Edge / Full RB



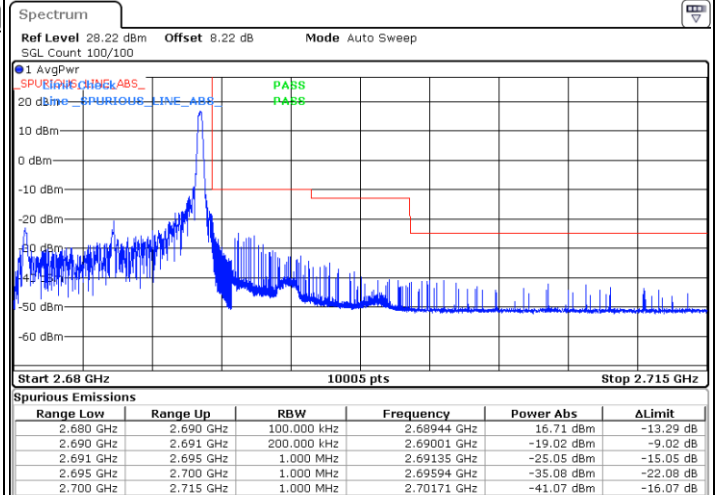


LTE Band 41 / 10MHz / 64QAM

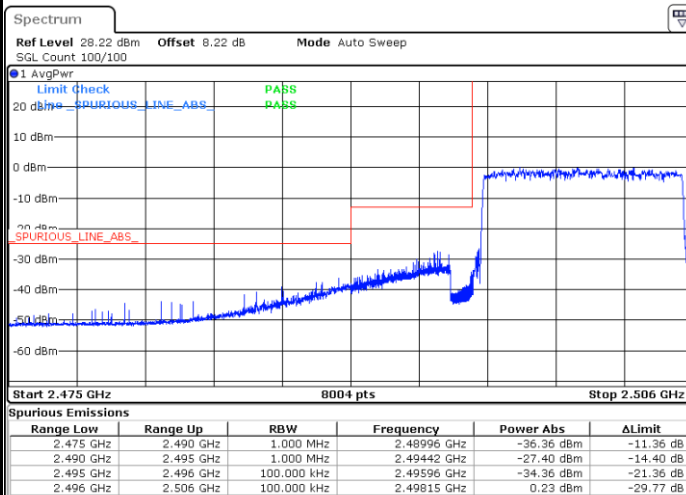
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

