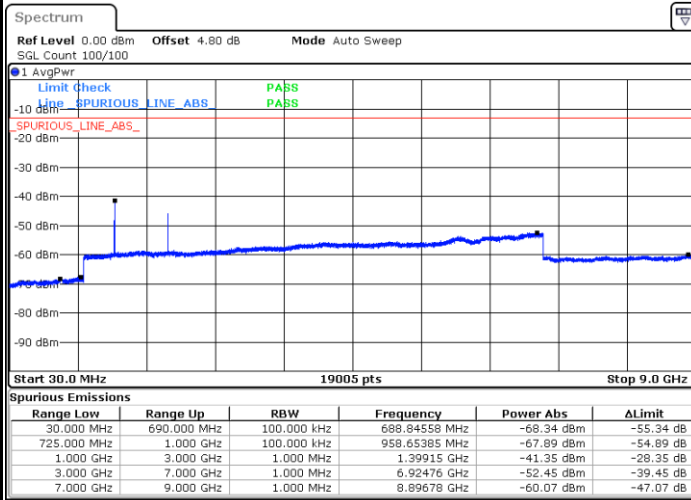




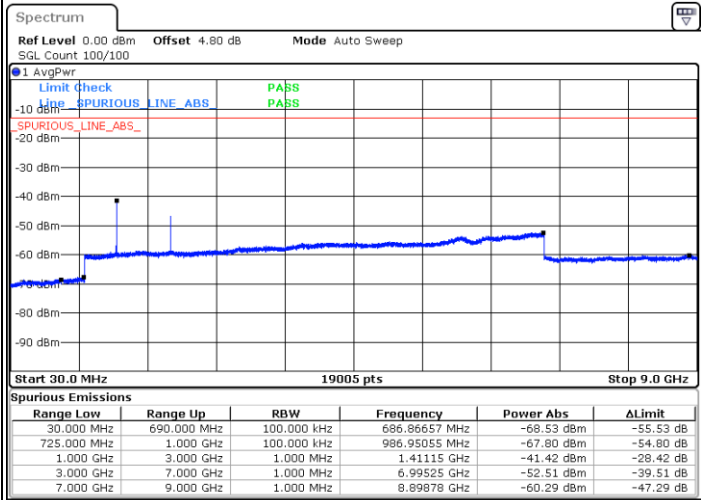
LTE Band 12 / 5MHz

Lowest Channel / QPSK



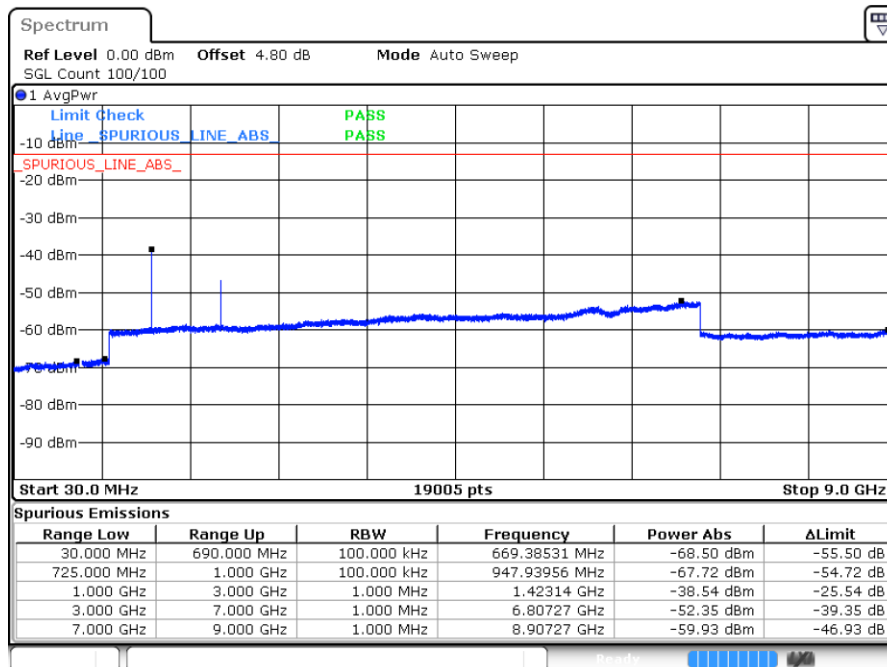
Date: 1 AUG 2023 15:57:39

Middle Channel / QPSK



Date: 1 AUG 2023 16:12:26

Highest Channel / QPSK

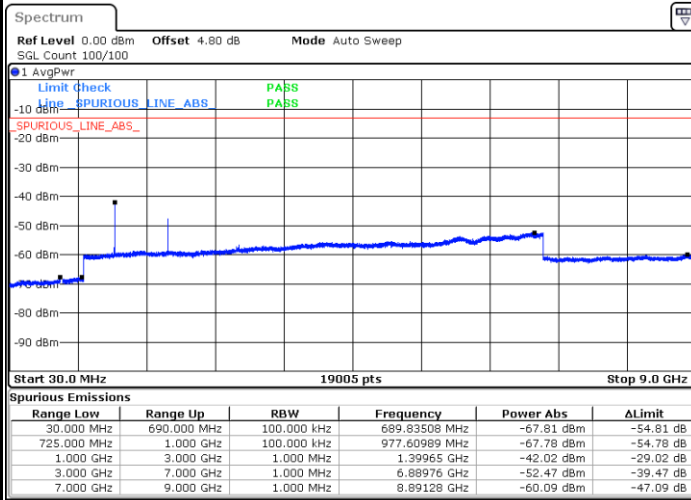


Date: 1 AUG 2023 16:13:46



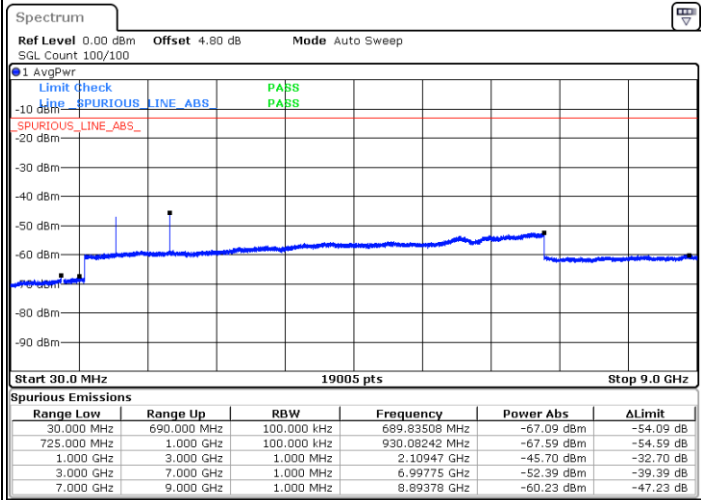
LTE Band 12 / 10MHz

Lowest Channel / QPSK



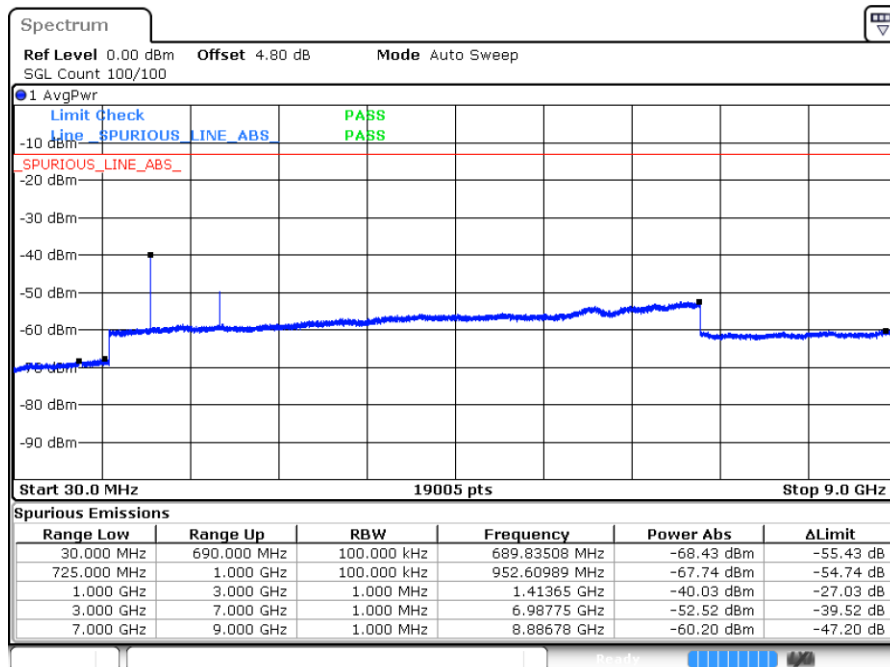
Date: 1 AUG 2023 16:25:27

Middle Channel / QPSK



Date: 1 AUG 2023 16:37:34

Highest Channel / QPSK



Date: 1 AUG 2023 16:38:54

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	0.0032	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0005	
20	Minimum Voltage	0.0017	

Note:

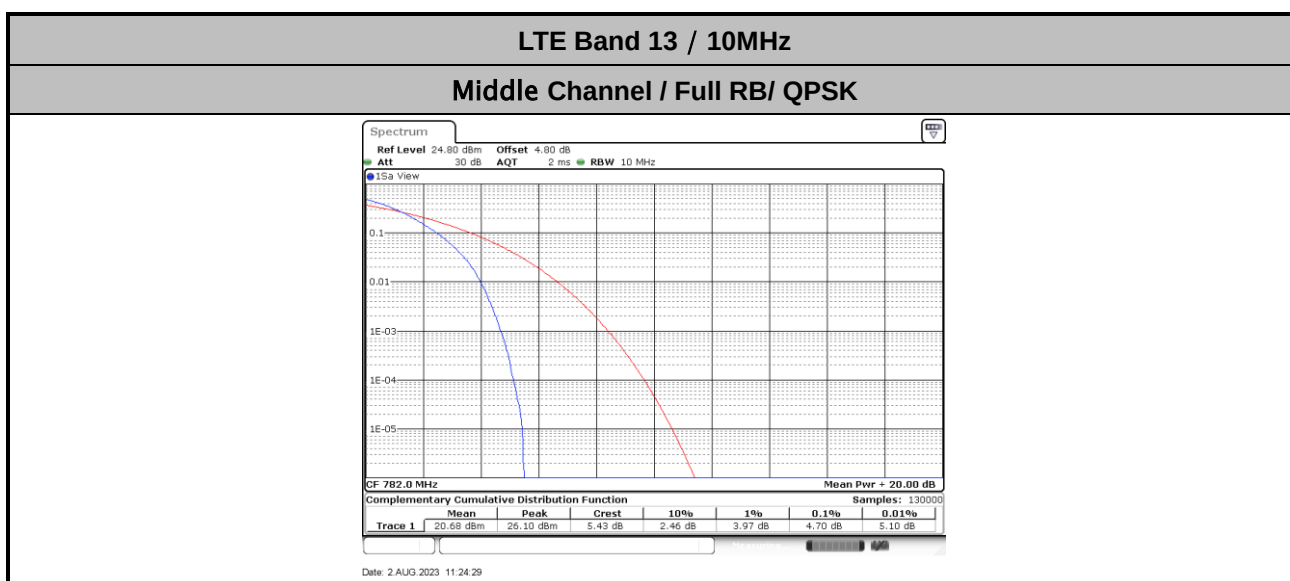
1. Normal Voltage =3.8 V. ; Minimum Voltage =3.5 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

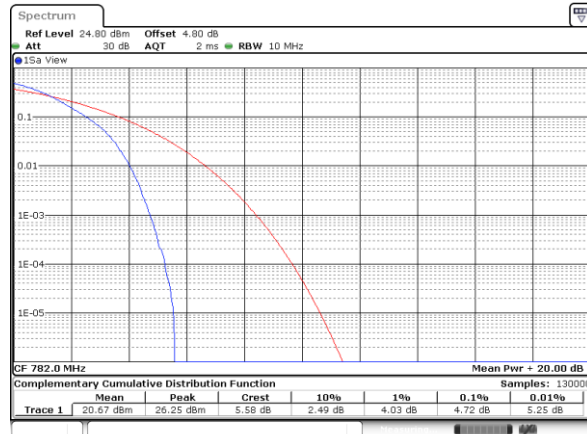
Peak-to-Average Ratio

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	4.70	4.72	6.00	6.03	PASS



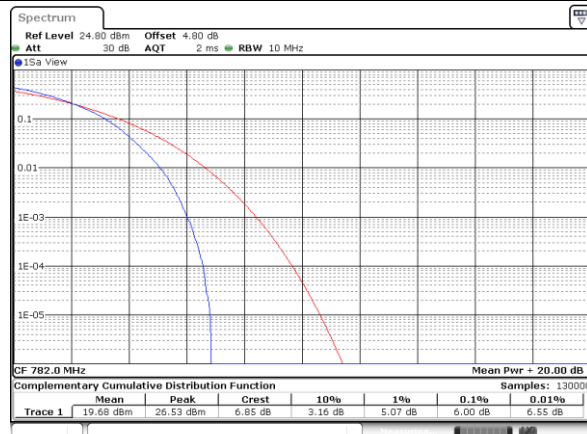


Middle Channel / Full RB/ 16QAM



Date: 2 AUG 2023 11:24:51

Middle Channel / Full RB/ 64QAM



Date: 2 AUG 2023 11:25:14

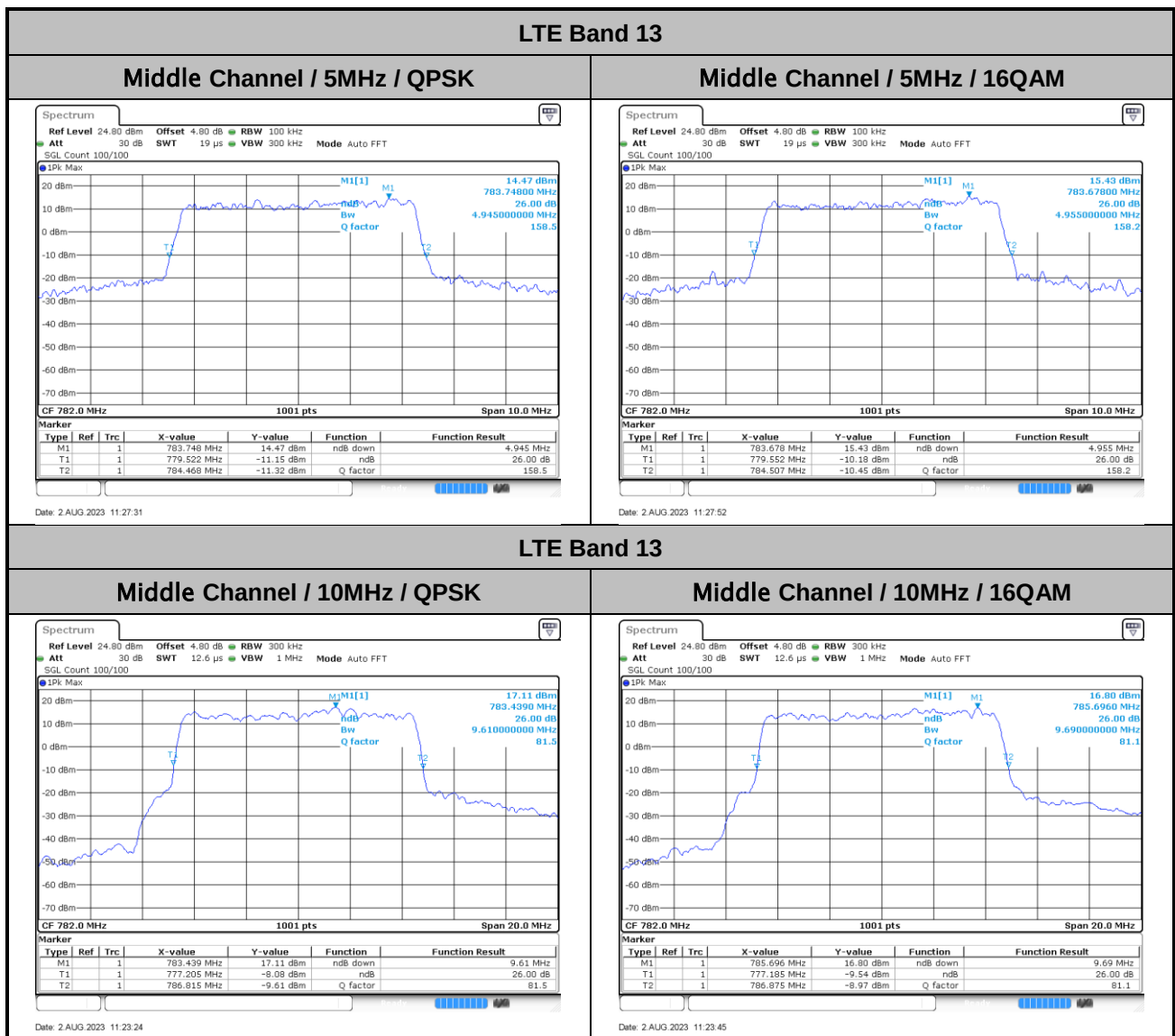
Middle Channel / Full RB/ 256QAM



Date: 2 AUG 2023 11:25:36

**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.95	4.96
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.61	9.69



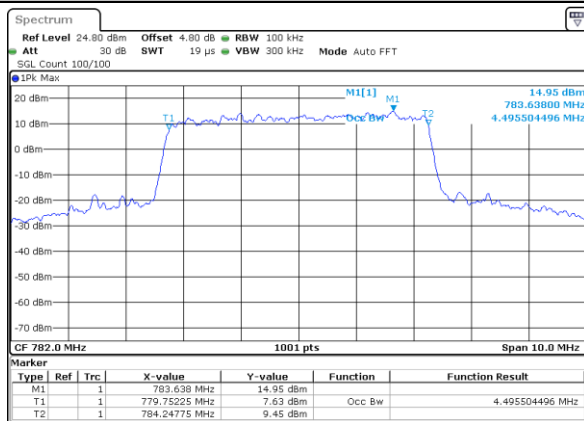


Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.52
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.99	8.97

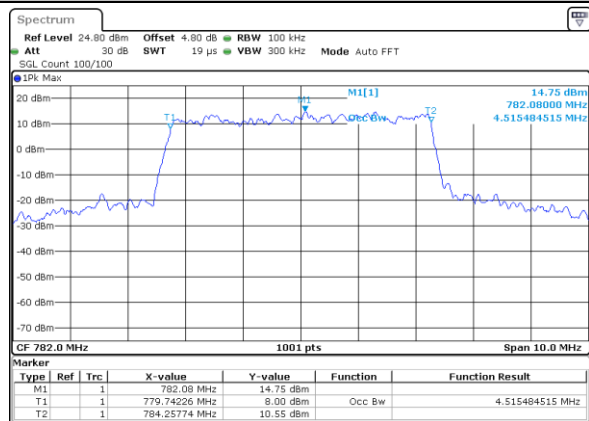
LTE Band 13

Middle Channel / 5MHz / QPSK



Date: 2 AUG 2023 11:27:10

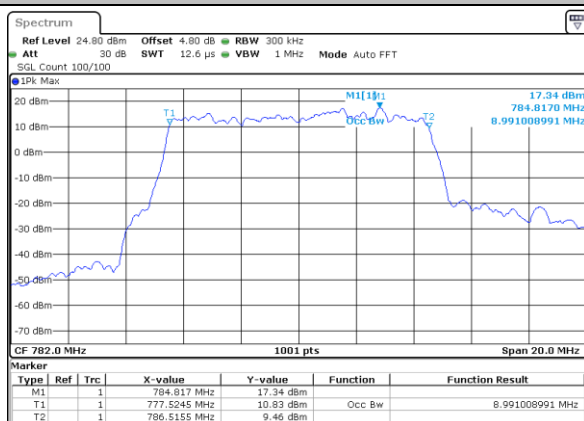
Middle Channel / 5MHz / 16QAM



Date: 2 AUG 2023 11:28:13

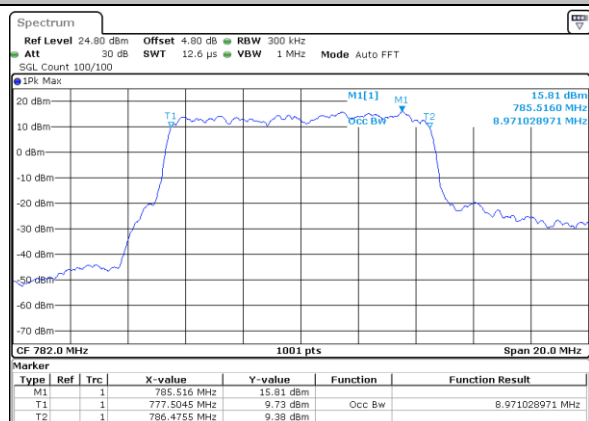
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 2 AUG 2023 11:23:03

Middle Channel / 10MHz / 16QAM



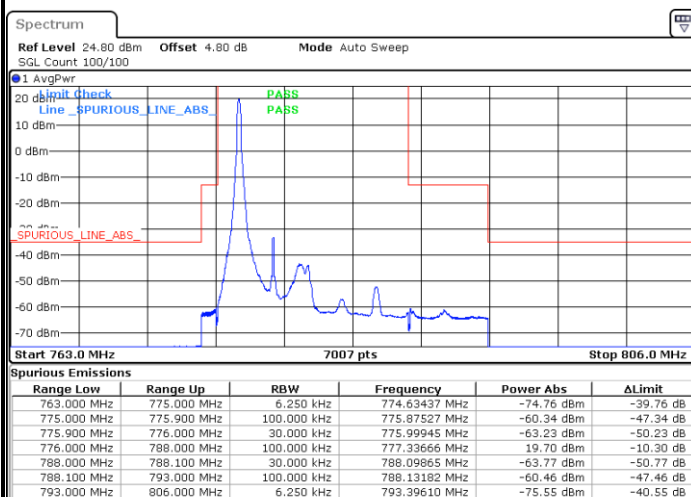
Date: 2 AUG 2023 11:24:06



Conducted Band Edge

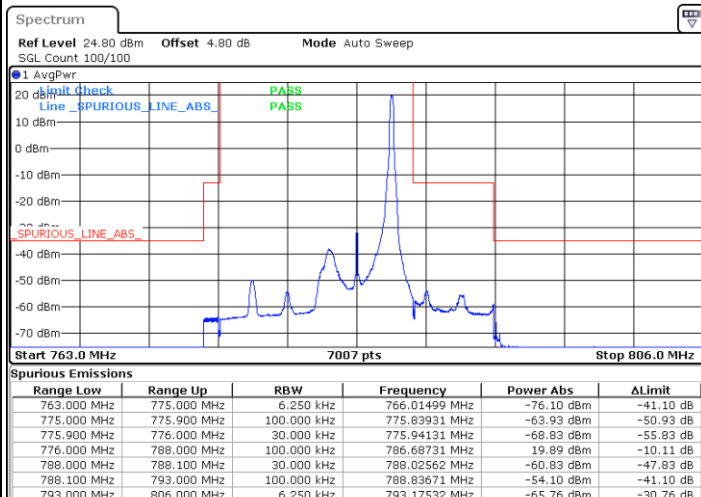
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



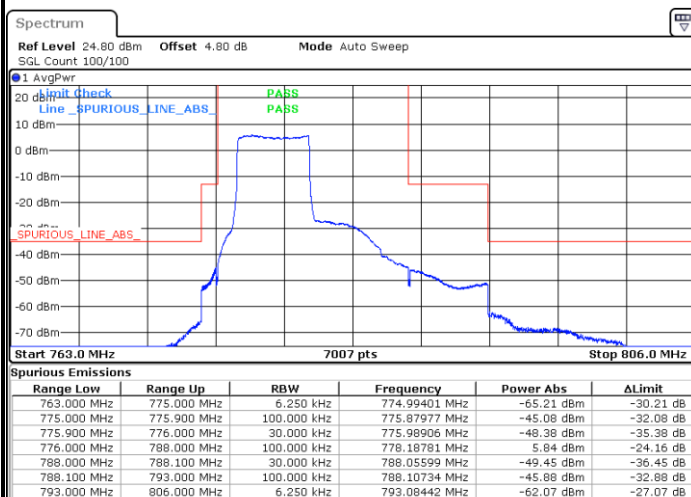
Date: 2 AUG 2023 10:24:00

Highest Band Edge / 1 RB



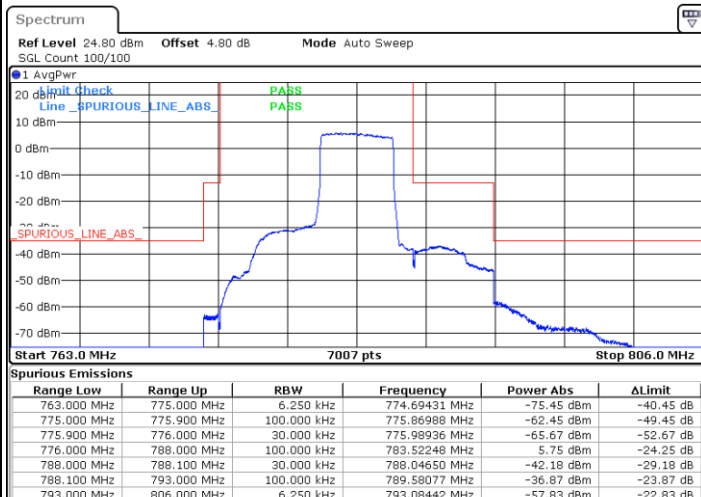
Date: 2 AUG 2023 10:44:33

Lowest Band Edge / Full RB



Date: 2 AUG 2023 10:33:26

Highest Band Edge / Full RB

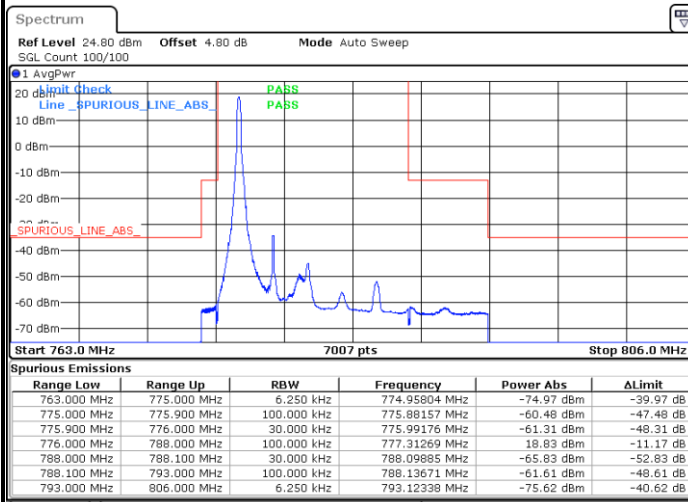


Date: 2 AUG 2023 10:53:00

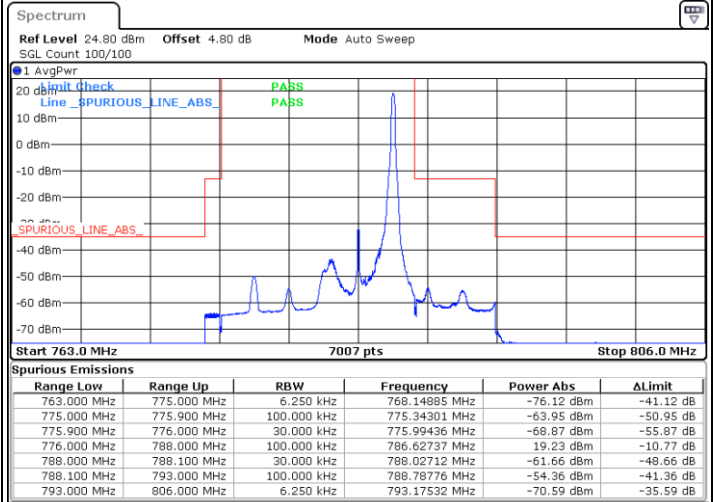


LTE Band 13 / 5MHz / 16QAM

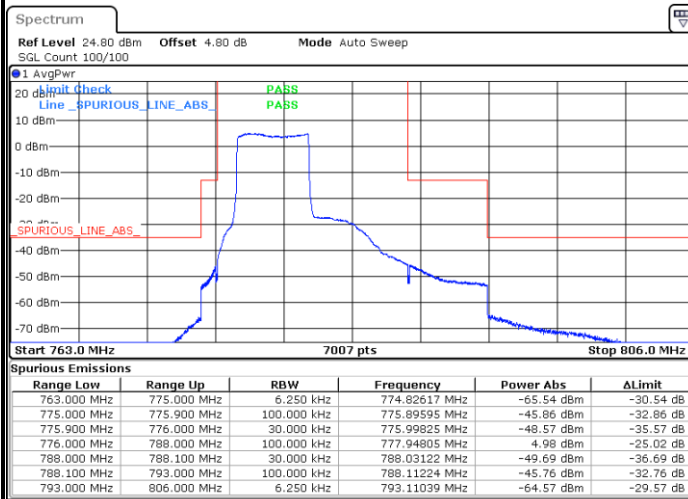
Lowest Band Edge / 1RB



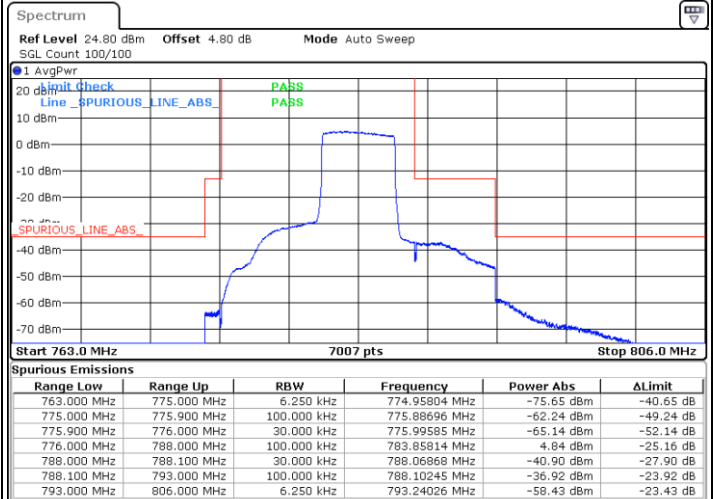
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



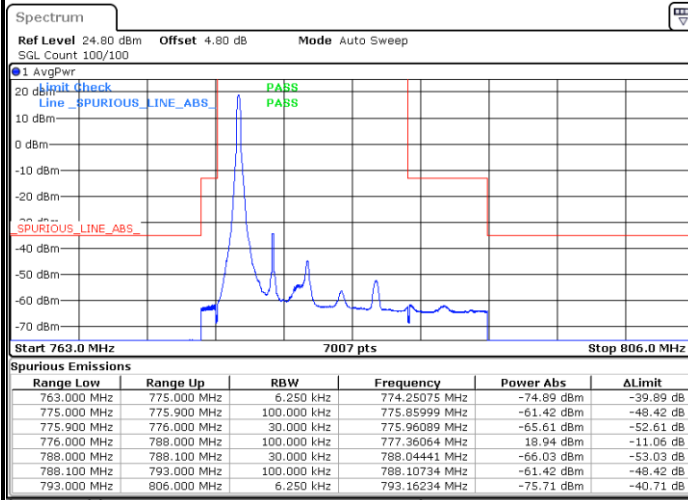
Highest Band Edge / Full RB



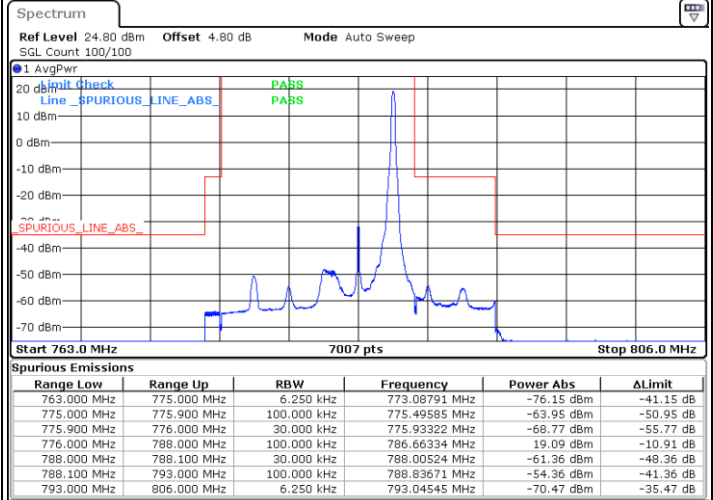


LTE Band 13 / 5MHz / 64QAM

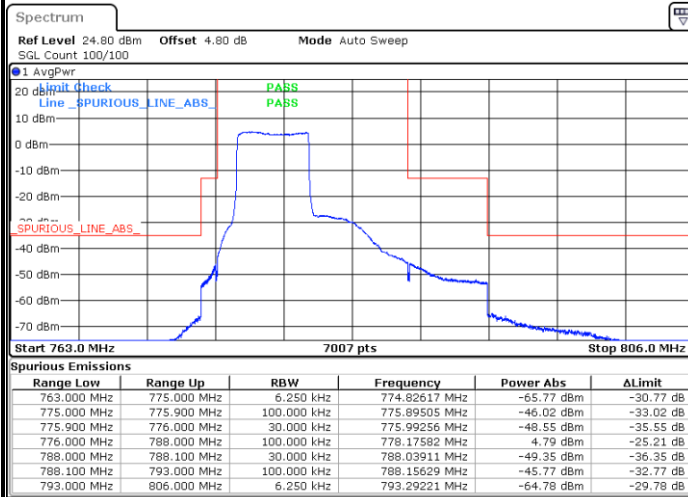
Lowest Band Edge / 1RB



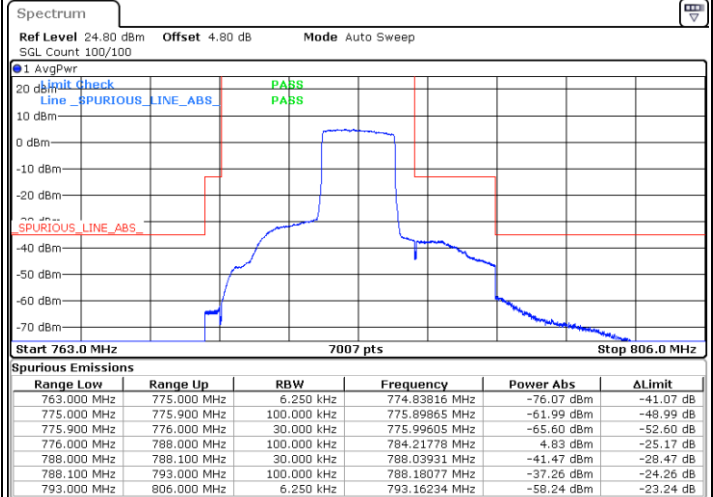
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



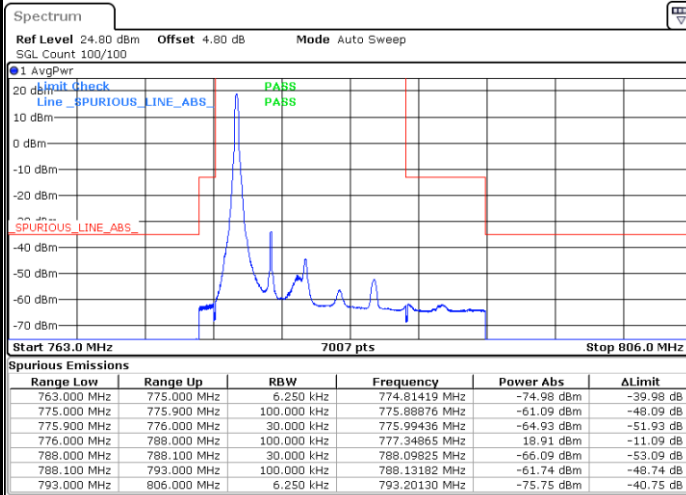
Highest Band Edge / Full RB



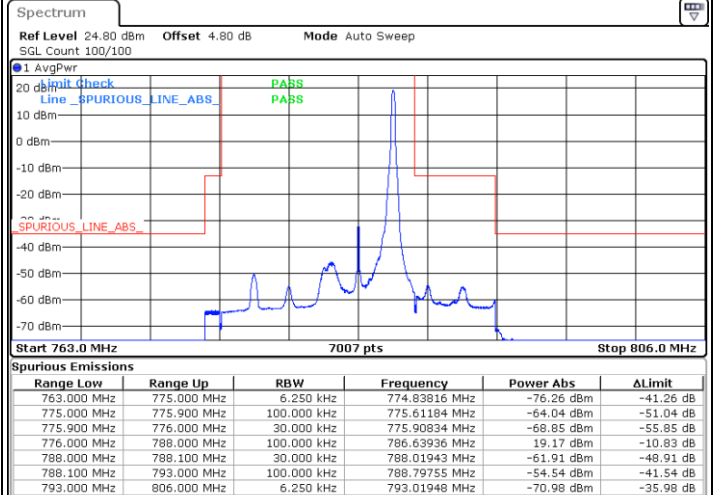


LTE Band 13 / 5MHz / 256QAM

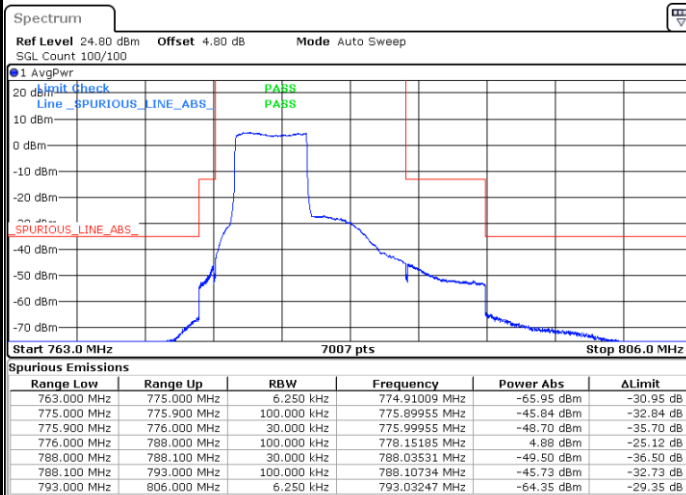
Lowest Band Edge / 1RB



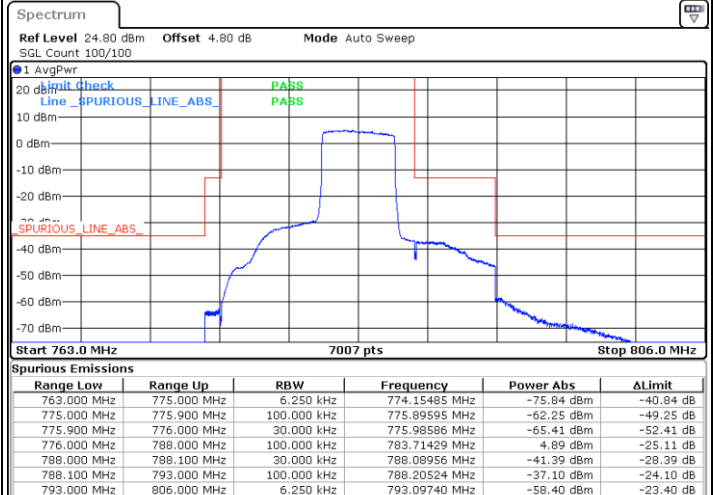
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



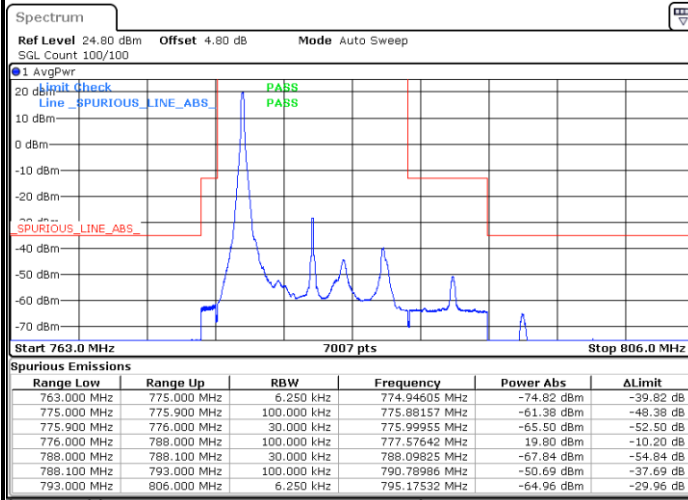
Highest Band Edge / Full RB





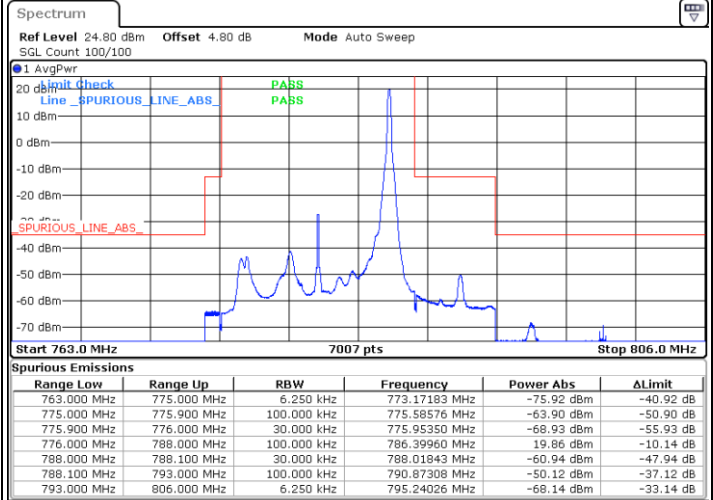
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



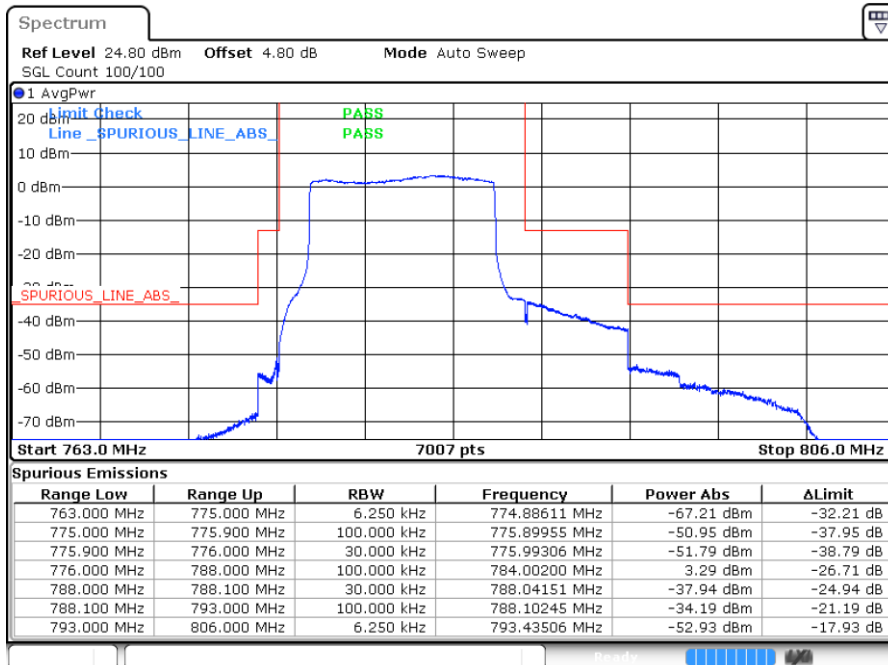
Date: 2 AUG 2023 11:02:39

middle Band Edge / 1 RB



Date: 2 AUG 2023 11:17:14

Middle Band Edge / Full RB

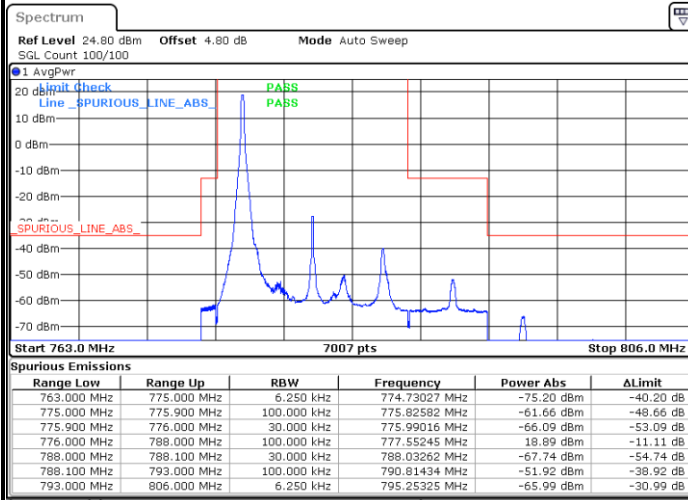


Date: 2 AUG 2023 11:09:57



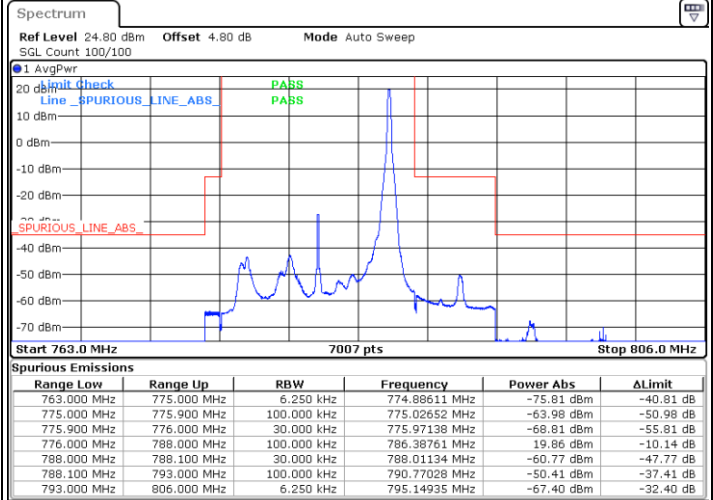
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



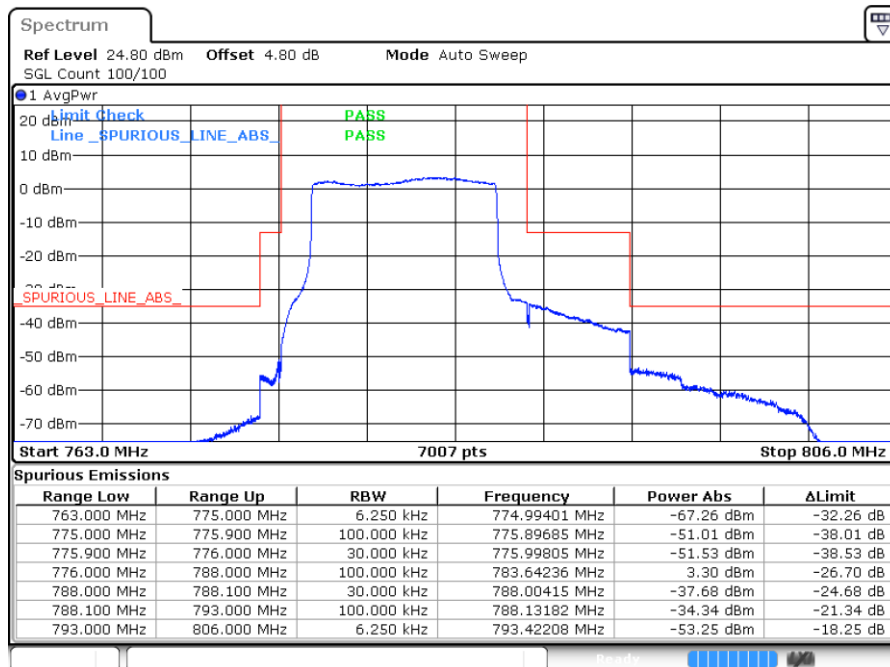
Date: 2 AUG 2023 11:04:28

middle Band Edge / 1 RB



Date: 2 AUG 2023 11:19:03

middle Band Edge / Full RB

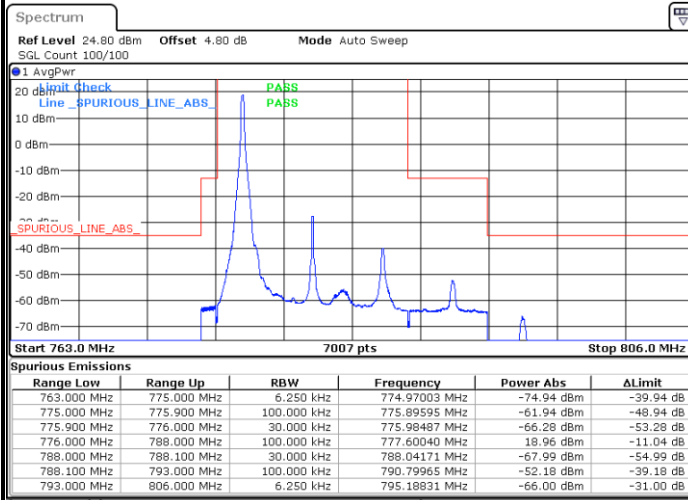


Date: 2 AUG 2023 11:11:46

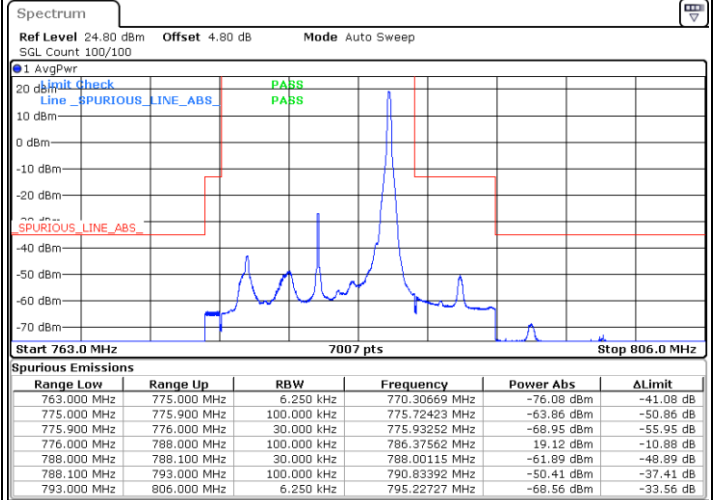


LTE Band 13 / 10MHz / 64QAM

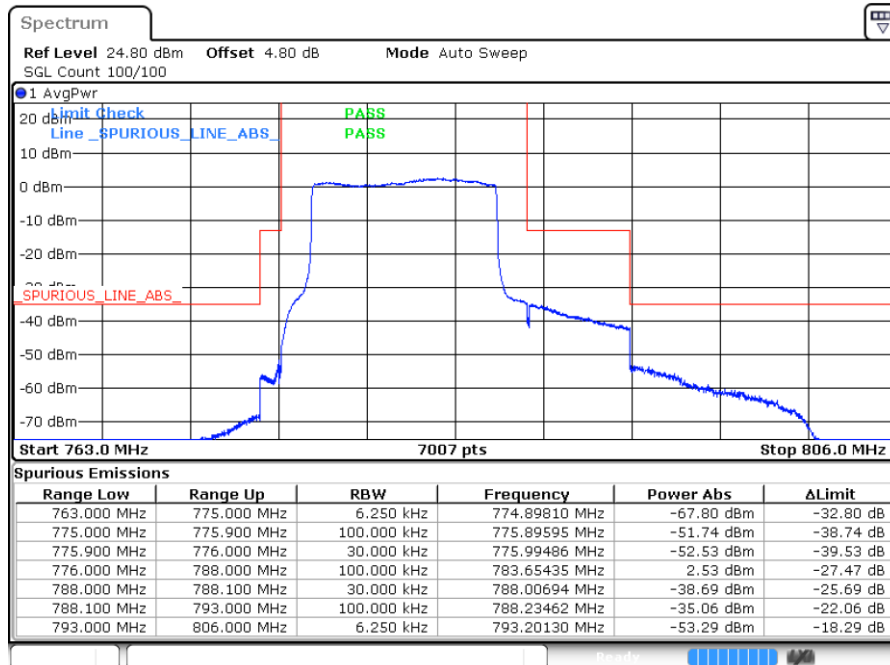
middle Band Edge / 1 RB



middle Band Edge / 1 RB



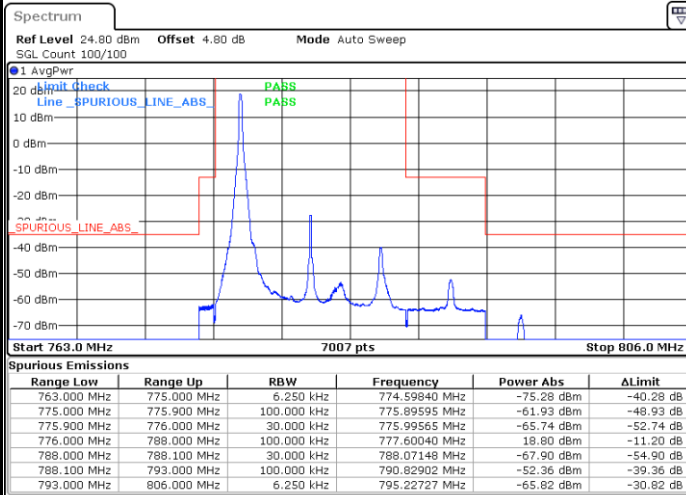
middle Band Edge / Full RB





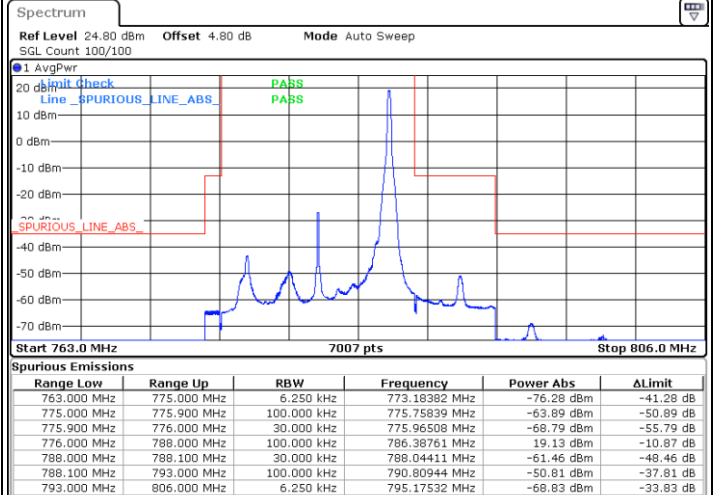
LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB



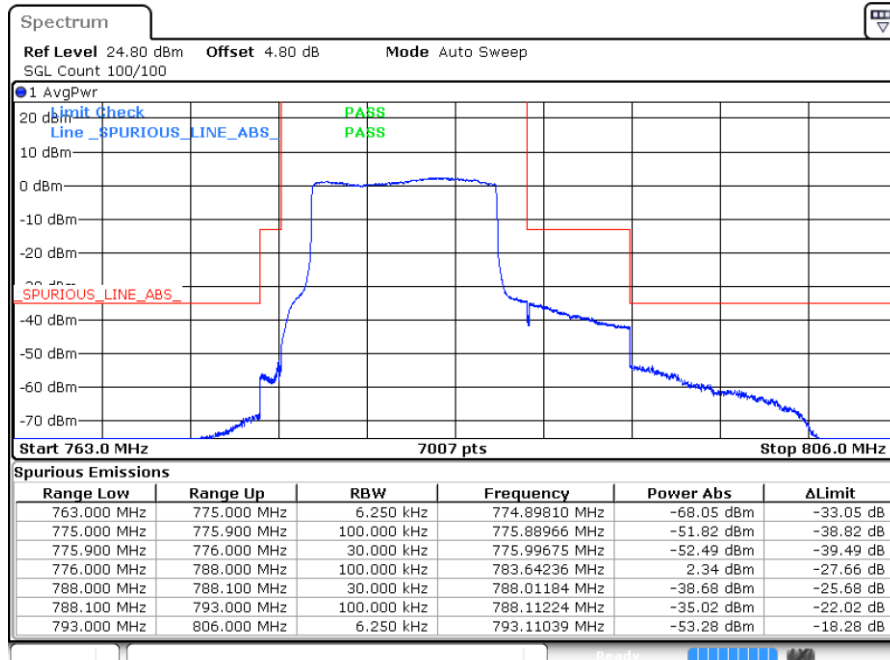
Date: 2 AUG 2023 11:08:07

middle Band Edge / 1 RB



Date: 2 AUG 2023 11:22:42

middle Band Edge / Full RB



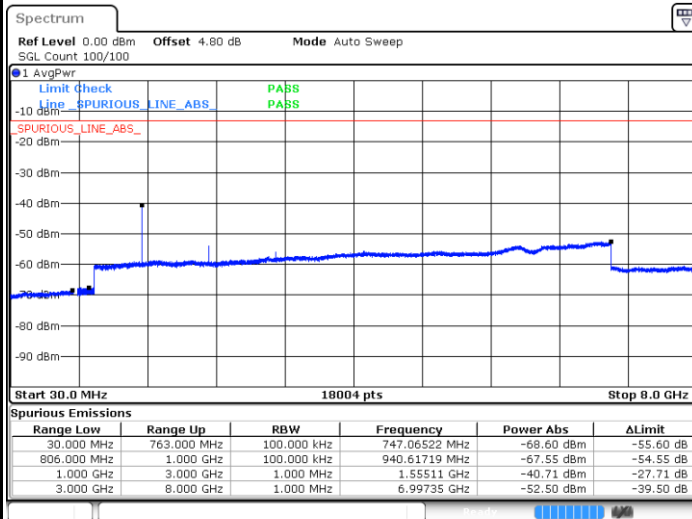
Date: 2 AUG 2023 11:15:24



Conducted Spurious Emission

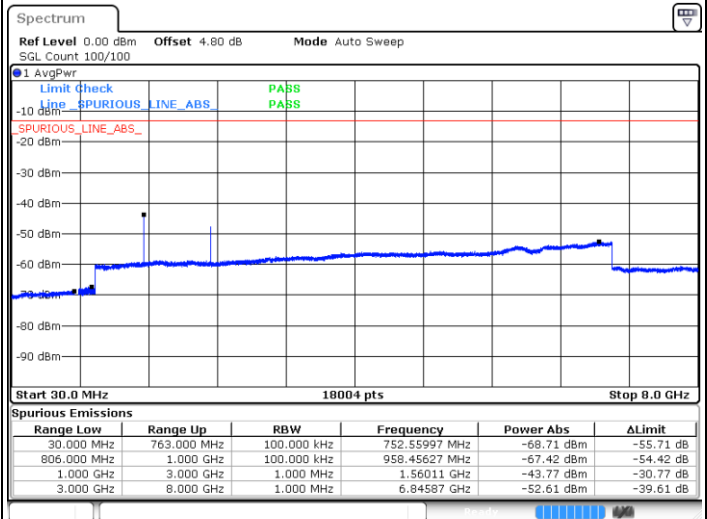
LTE Band 13 / 5MHz

Lowest Channel / QPSK



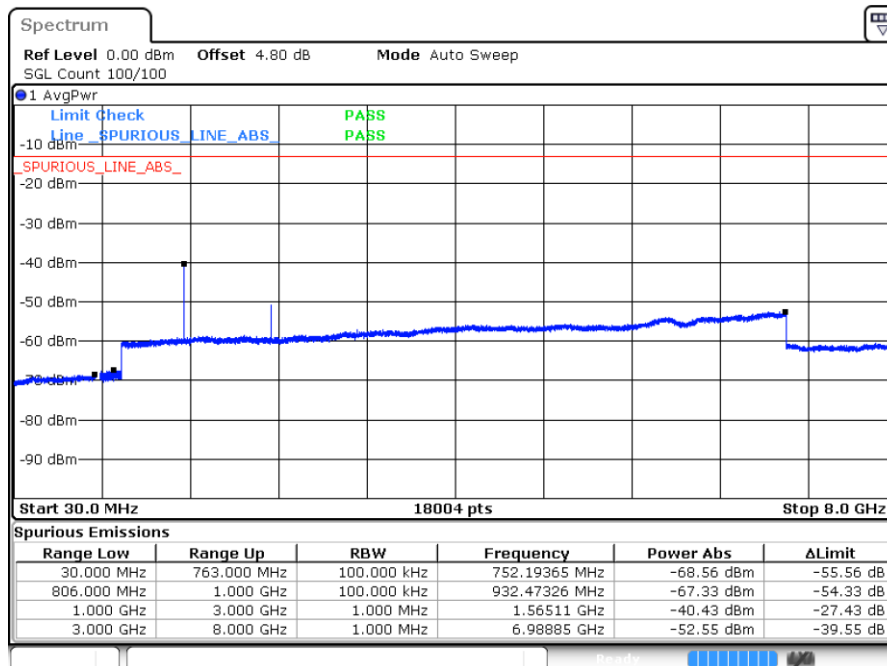
Date: 2 AUG 2023 10:22:11

Middle Channel / QPSK



Date: 2 AUG 2023 10:41:23

Highest Channel / QPSK

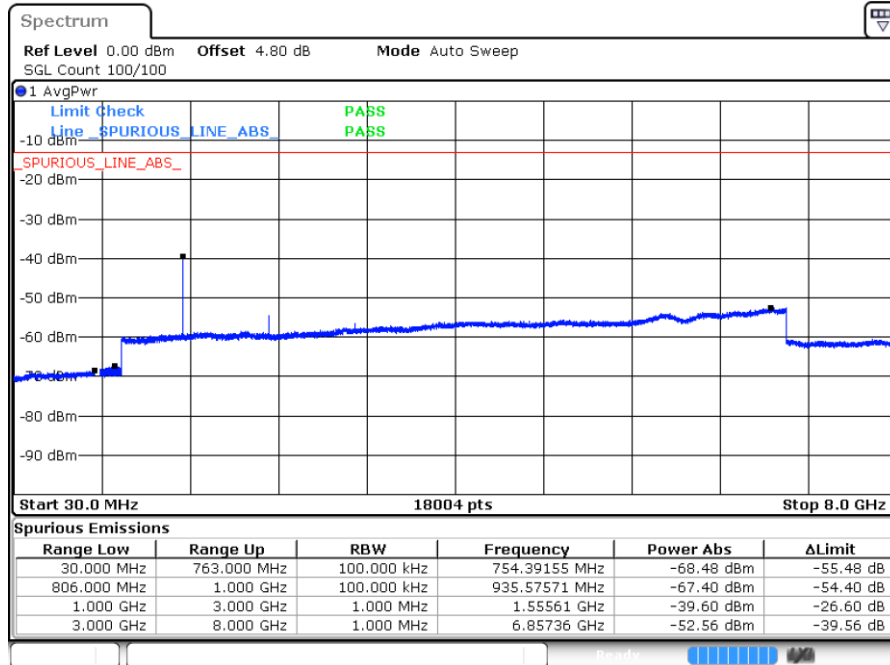


Date: 2 AUG 2023 10:42:43



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 2 AUG 2023 11:00:50

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	0.0029	PASS
40	Normal Voltage	0.0042	
30	Normal Voltage	0.0059	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0035	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0044	
20	Minimum Voltage	0.0006	

Note:

1. Normal Voltage =3.8 V. ; Minimum Voltage =3.5 V. ; Maximum Voltage =4.35 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



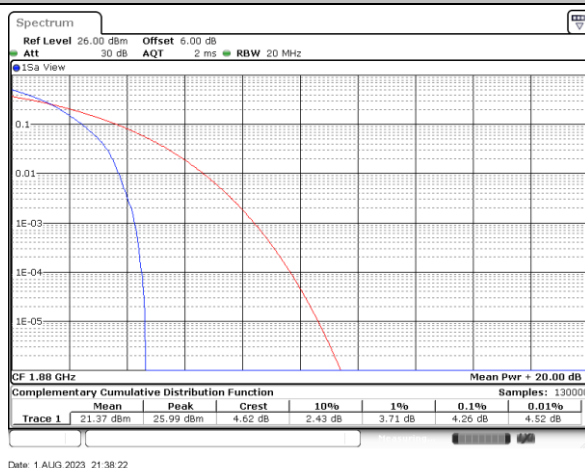
LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.26	5.62	6.32	6.26	PASS

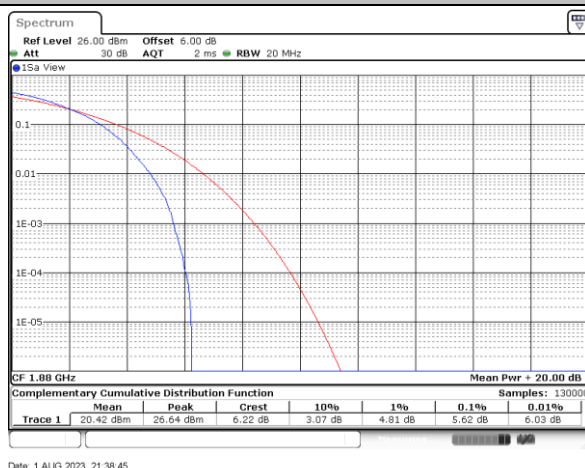
LTE Band 25 / 20MHz

Middle Channel / Full RB/ QPSK



Date: 1 AUG 2023 21:38:22

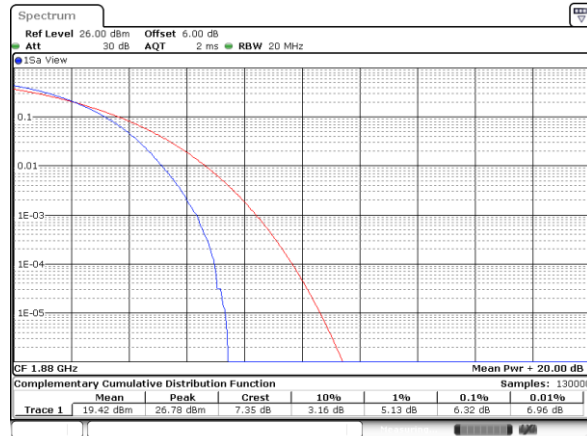
Middle Channel / Full RB/ 16QAM



Date: 1 AUG 2023 21:38:45

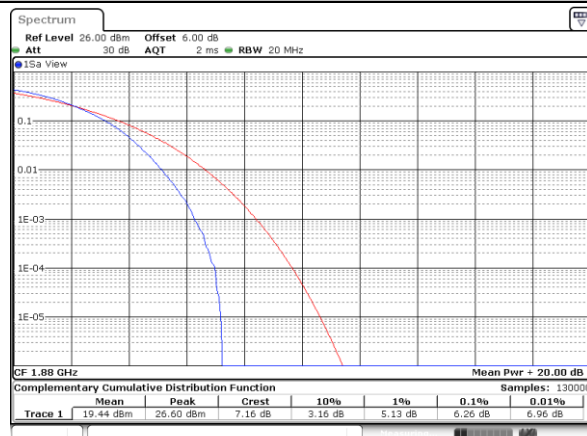


Middle Channel / Full RB/ 64QAM



Date: 1.AUG.2023 21:39:08

Middle Channel / Full RB/ 256QAM



Date: 1.AUG.2023 21:39:32

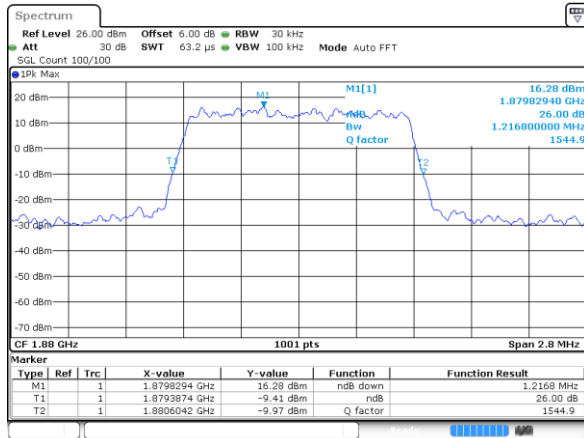
**26dB Bandwidth**

Mode	LTE Band 25 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.22	1.22
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.02	3.05
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.86	4.93
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.89	9.89
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.42	14.27
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.86	18.74



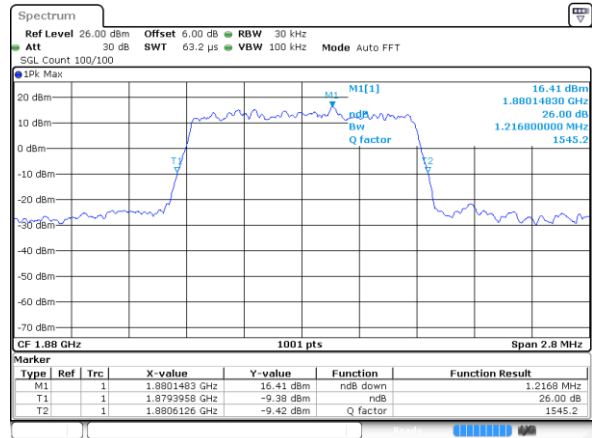
LTE Band 25

Middle Channel / 1.4MHz / QPSK



Date: 1 AUG 2023 21:52:44

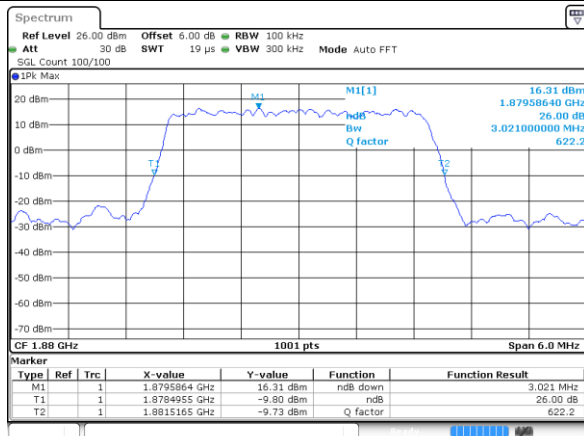
Middle Channel / 1.4MHz / 16QAM



Date: 1 AUG 2023 21:53:06

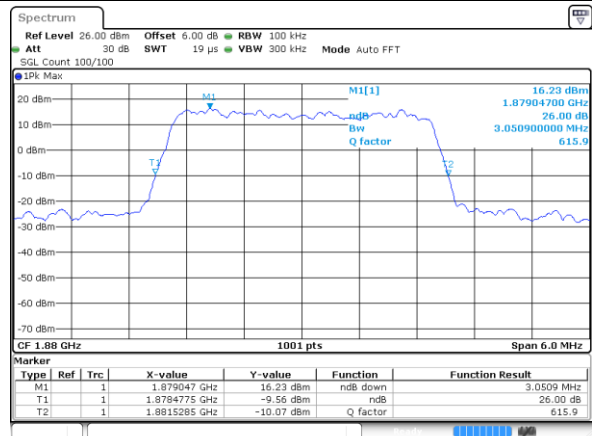
LTE Band 25

Middle Channel / 3MHz / QPSK



Date: 1 AUG 2023 21:50:59

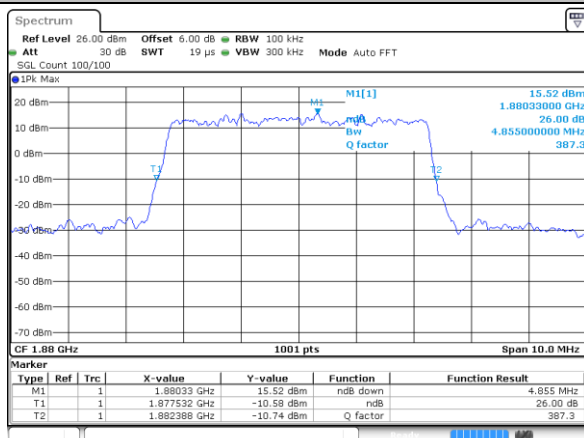
Middle Channel / 3MHz / 16QAM



Date: 1 AUG 2023 21:51:21

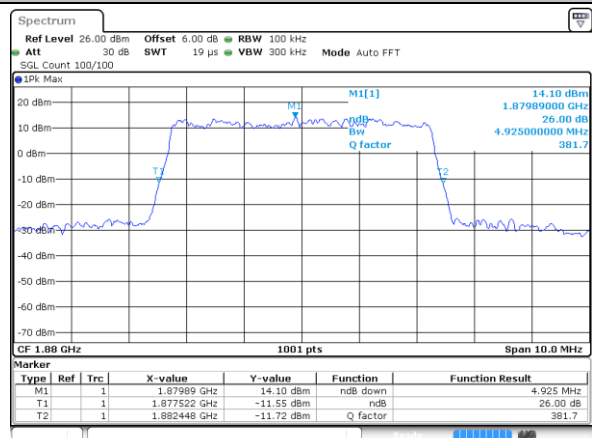
LTE Band 25

Middle Channel / 5MHz / QPSK



Date: 1 AUG 2023 21:47:23

Middle Channel / 5MHz / 16QAM

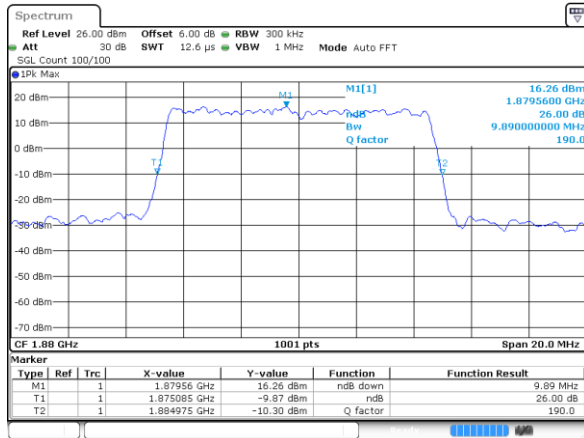


Date: 1 AUG 2023 21:47:45

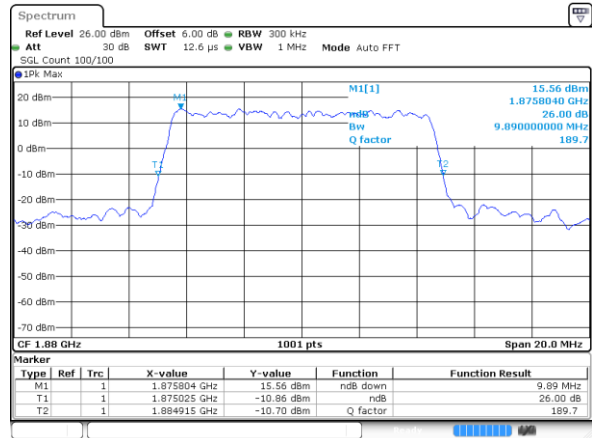


LTE Band 25

Middle Channel / 10MHz / QPSK

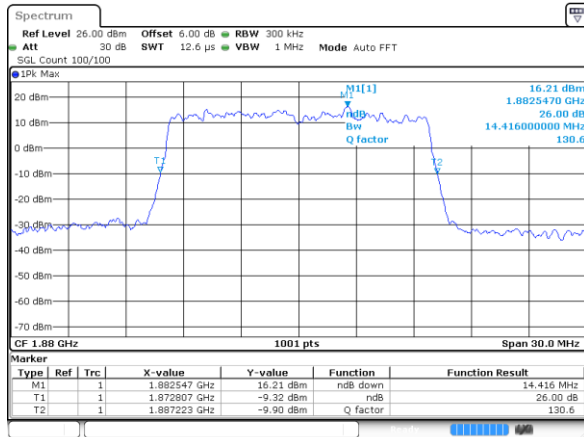


Middle Channel / 10MHz / 16QAM

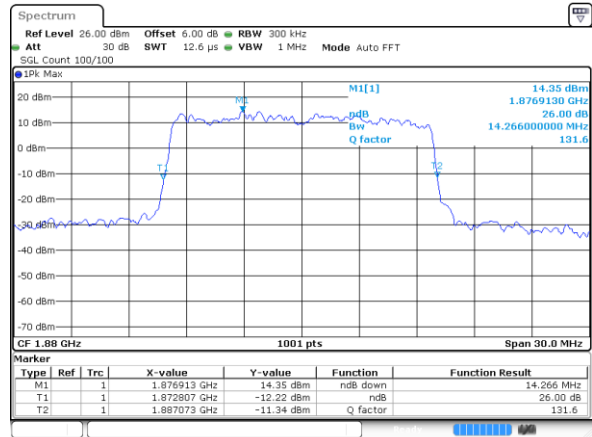


LTE Band 25

Middle Channel / 15MHz / QPSK

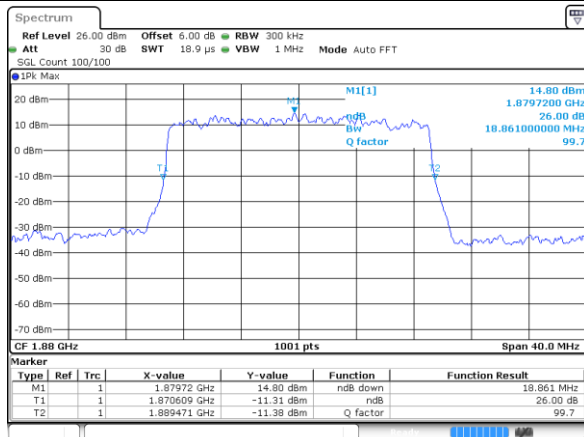


Middle Channel / 15MHz / 16QAM

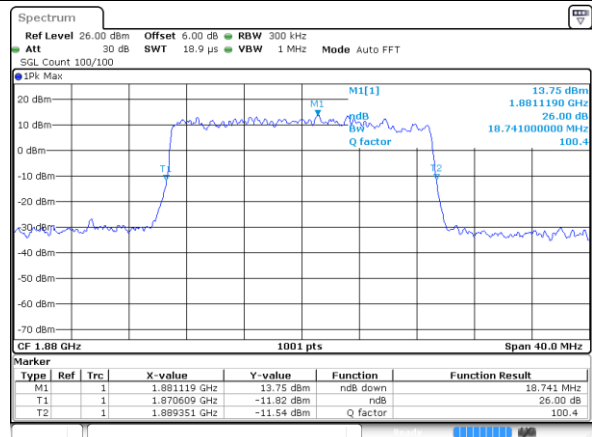


LTE Band 25

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM



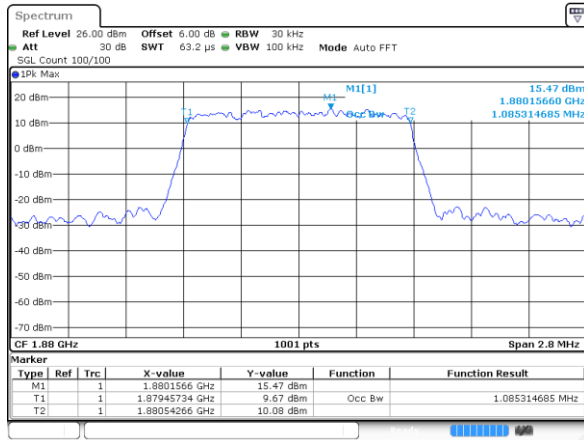
**Occupied Bandwidth**

Mode	LTE Band 25 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.10
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.70	2.71
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.50
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.37	13.34
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	17.82

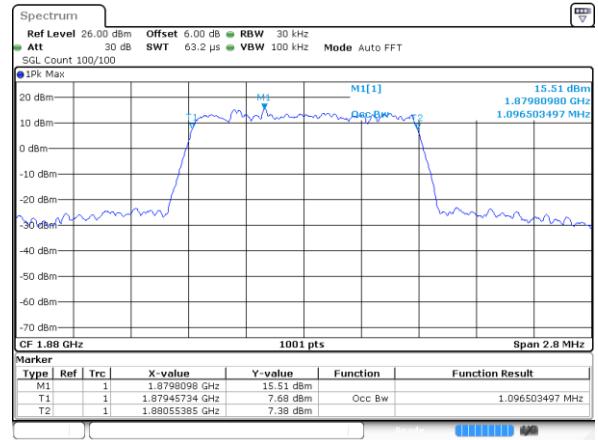


LTE Band 25

Middle Channel / 1.4MHz / QPSK

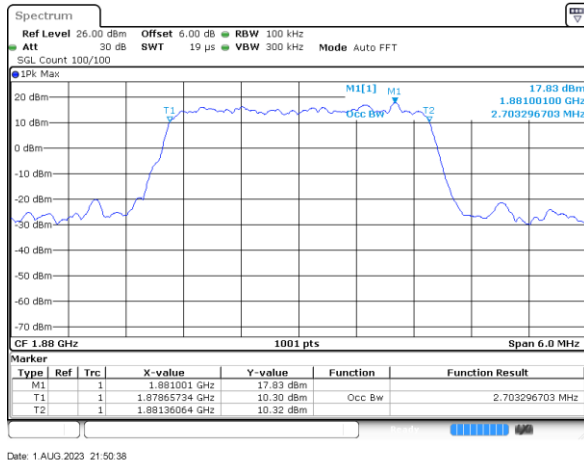


Middle Channel / 1.4MHz / 16QAM

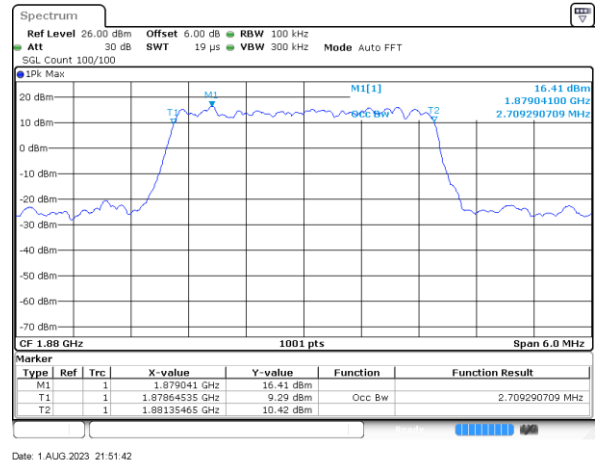


LTE Band 25

Middle Channel / 3MHz / QPSK

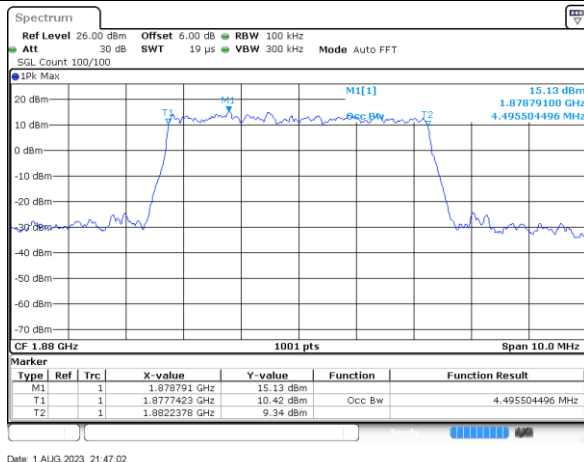


Middle Channel / 3MHz / 16QAM

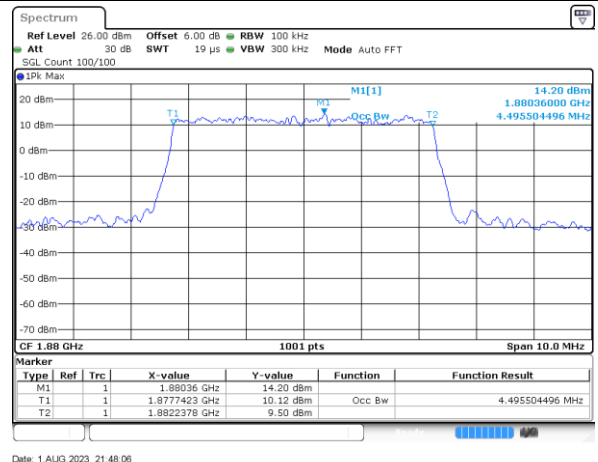


LTE Band 25

Middle Channel / 5MHz / QPSK



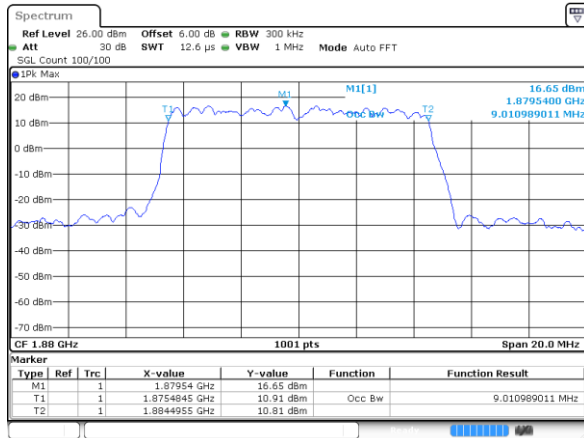
Middle Channel / 5MHz / 16QAM





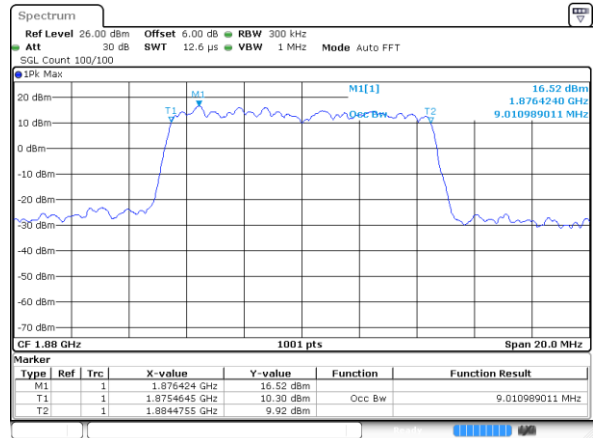
LTE Band 25

Middle Channel / 10MHz / QPSK



Date: 1.AUG.2023 21:45:35

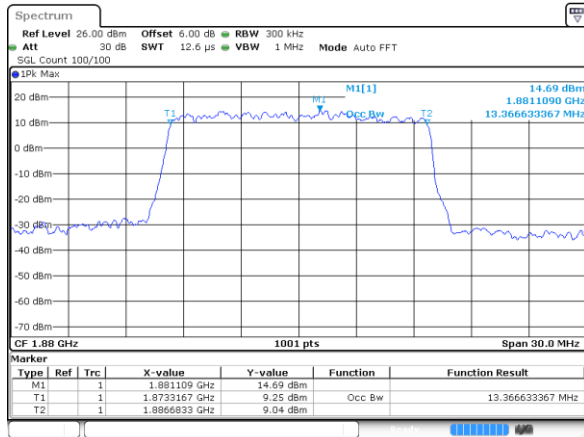
Middle Channel / 10MHz / 16QAM



Date: 1.AUG.2023 21:46:39

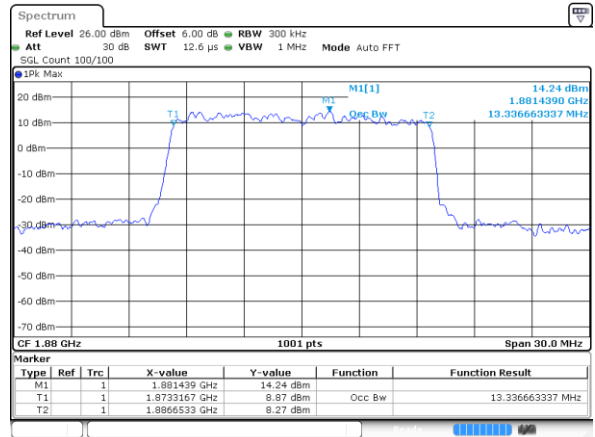
LTE Band 25

Middle Channel / 15MHz / QPSK



Date: 1.AUG.2023 21:44:08

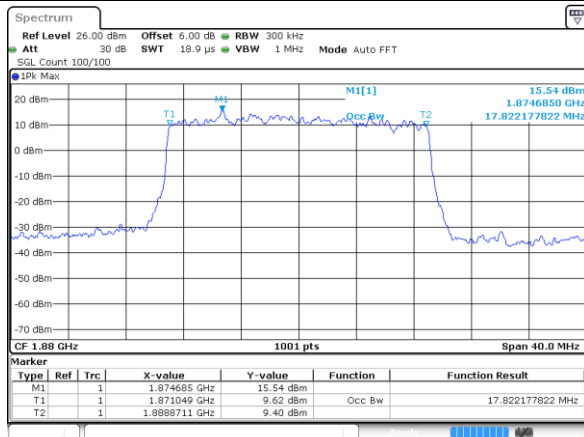
Middle Channel / 15MHz / 16QAM



Date: 1.AUG.2023 21:45:13

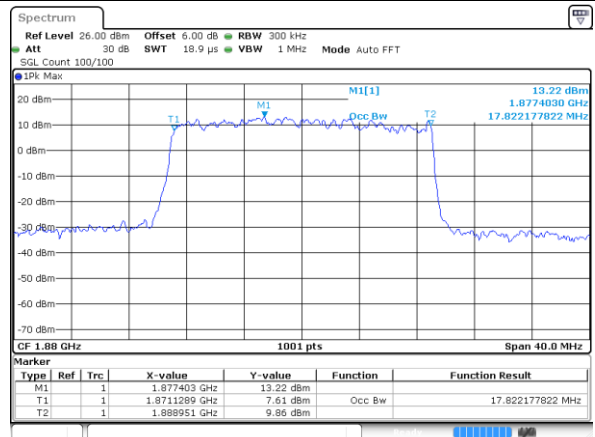
LTE Band 25

Middle Channel / 20MHz / QPSK



Date: 1.AUG.2023 21:23:59

Middle Channel / 20MHz / 16QAM



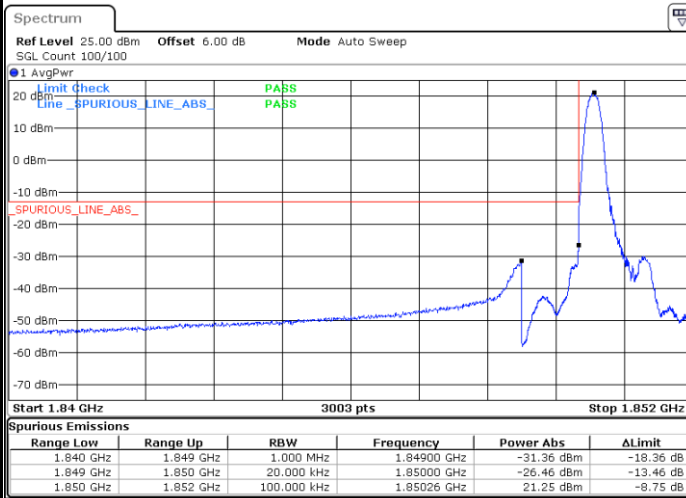
Date: 1.AUG.2023 21:25:03



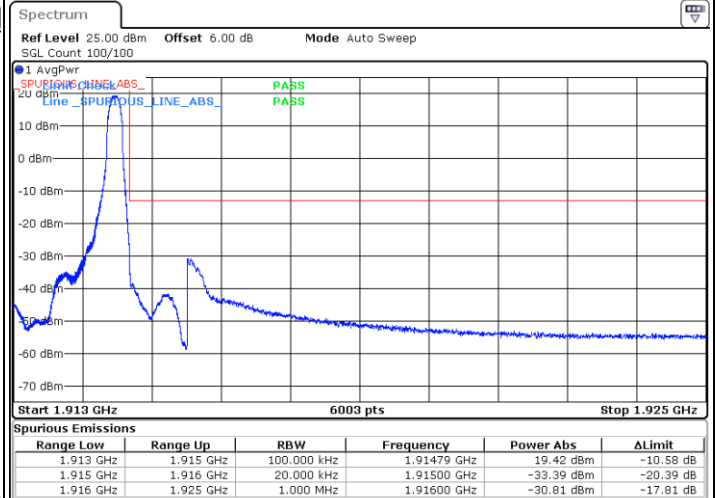
Conducted Band Edge

LTE Band 25 / 1.4MHz / QPSK

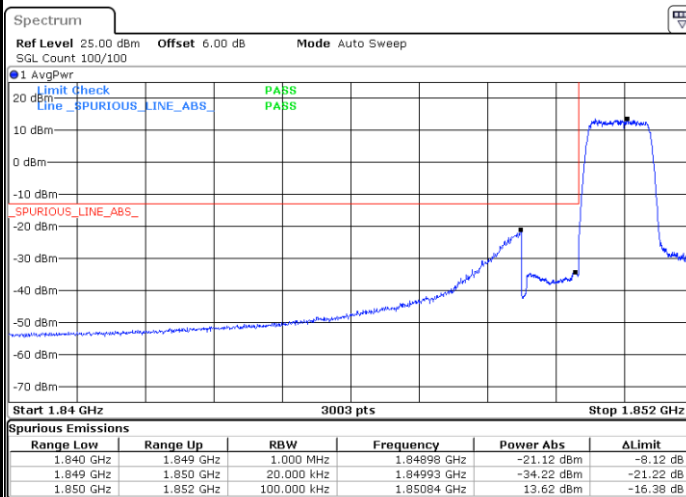
Lowest Band Edge / 1RB



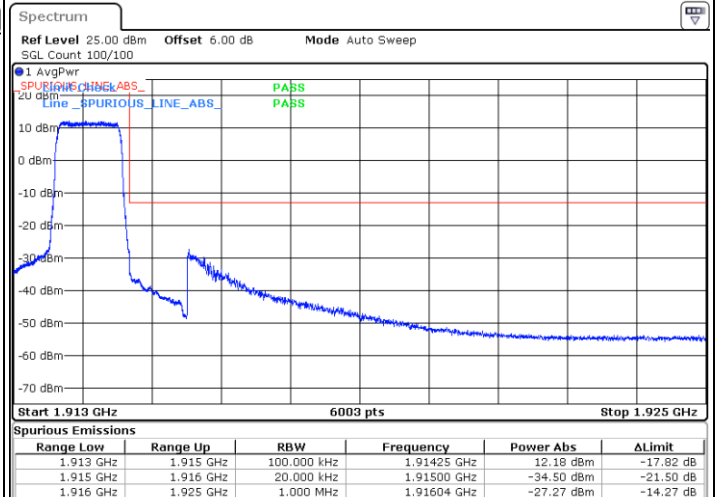
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



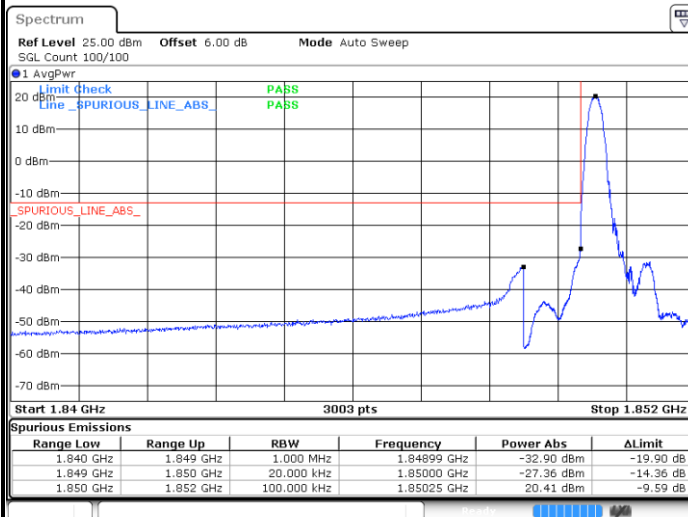
Highest Band Edge / Full RB



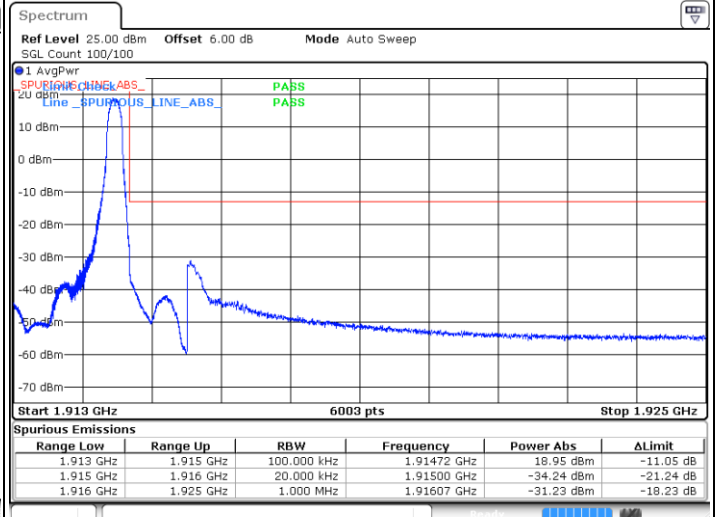


LTE Band 25 / 1.4MHz / 16QAM

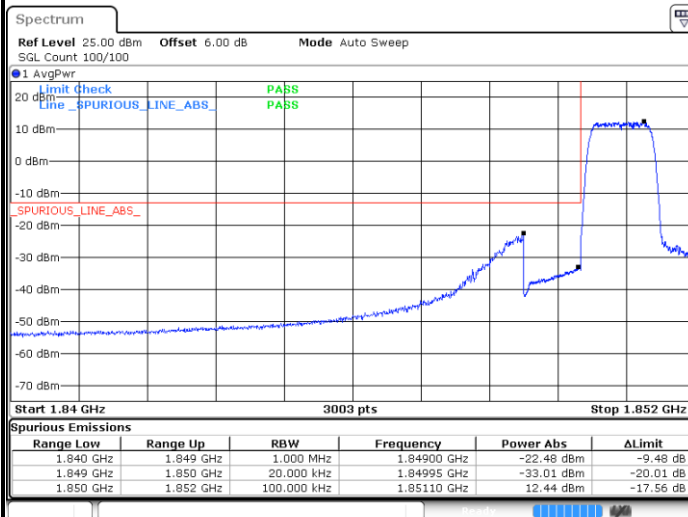
Lowest Band Edge / 1 RB



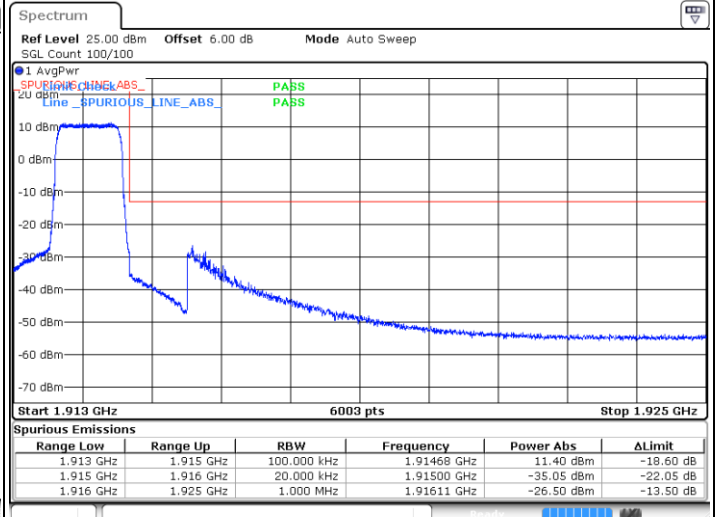
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



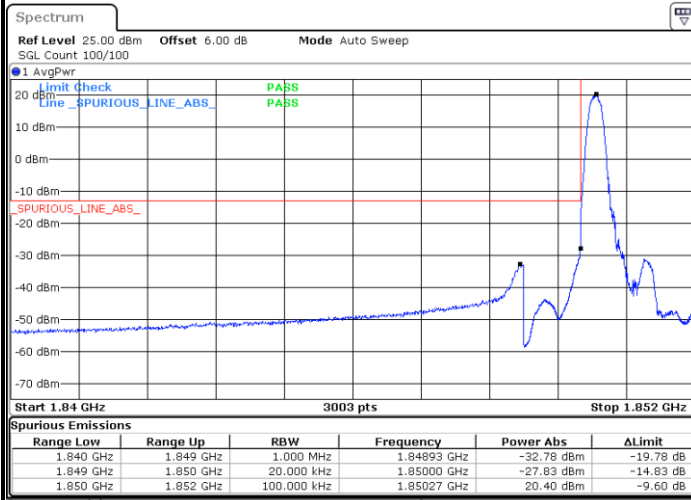
Highest Band Edge / Full RB



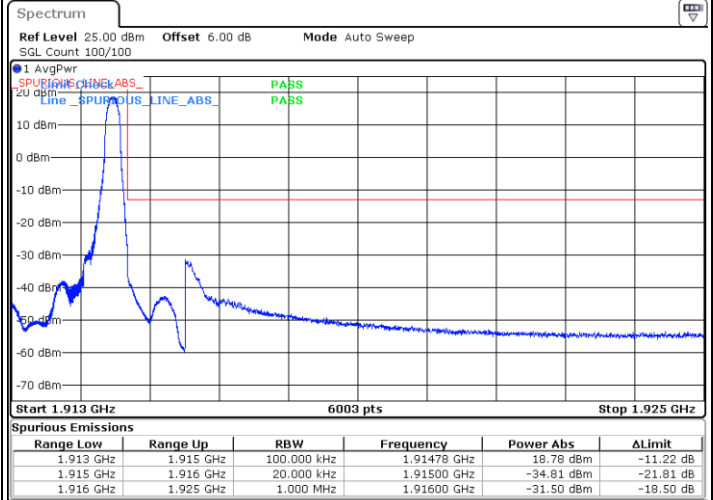


LTE Band 25 / 1.4MHz / 64QAM

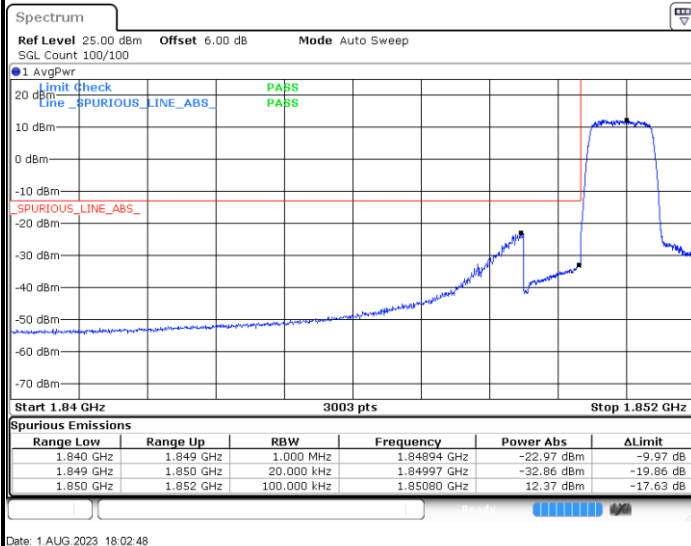
Lowest Band Edge / 1 RB



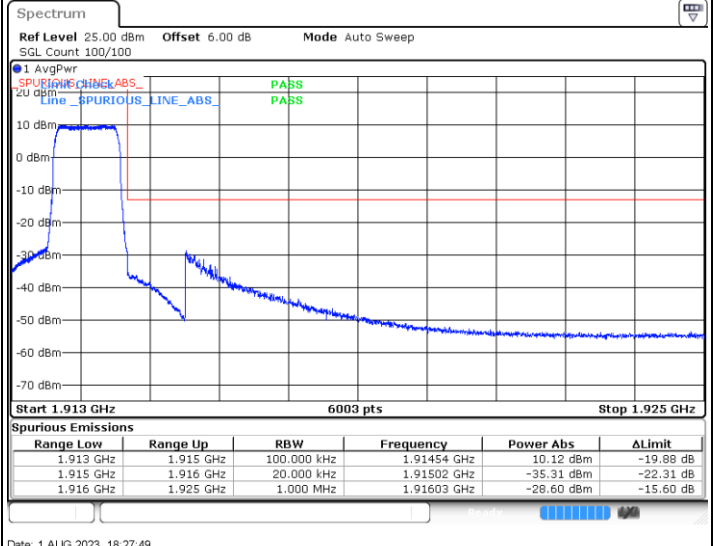
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



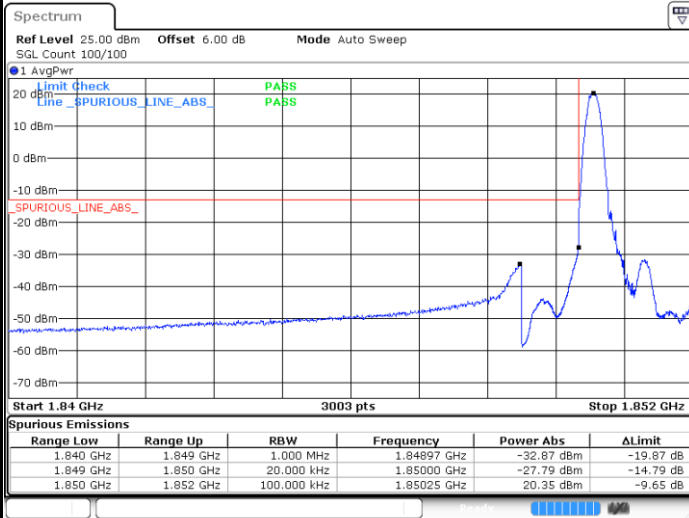
Highest Band Edge / Full RB



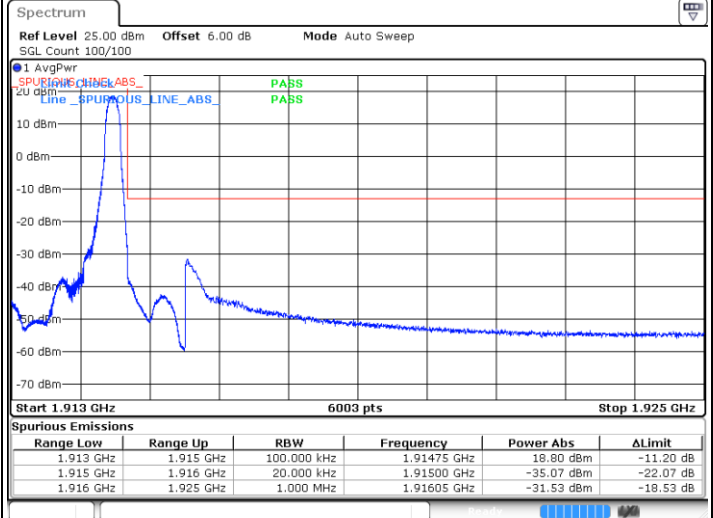


LTE Band 25 / 1.4MHz / 256QAM

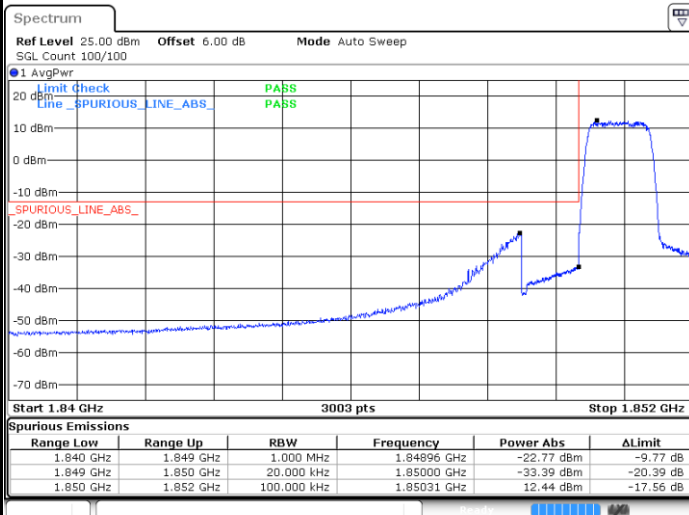
Lowest Band Edge / 1 RB



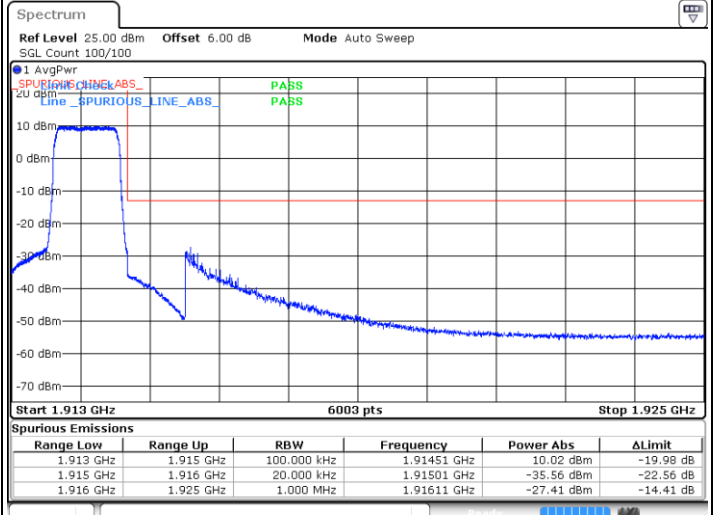
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



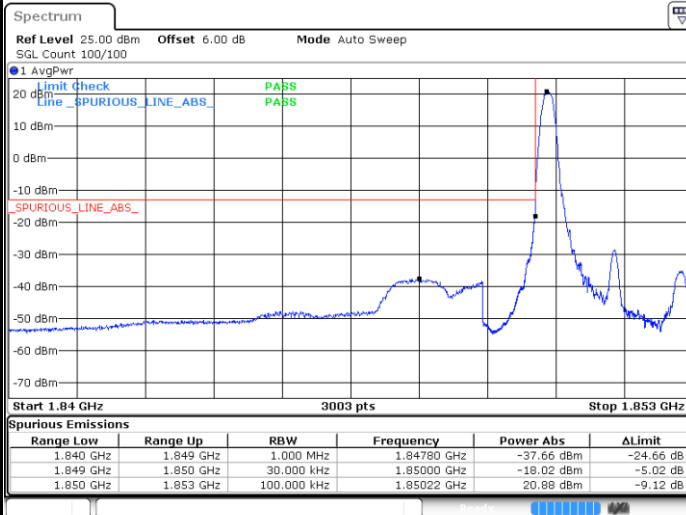
Highest Band Edge / Full RB



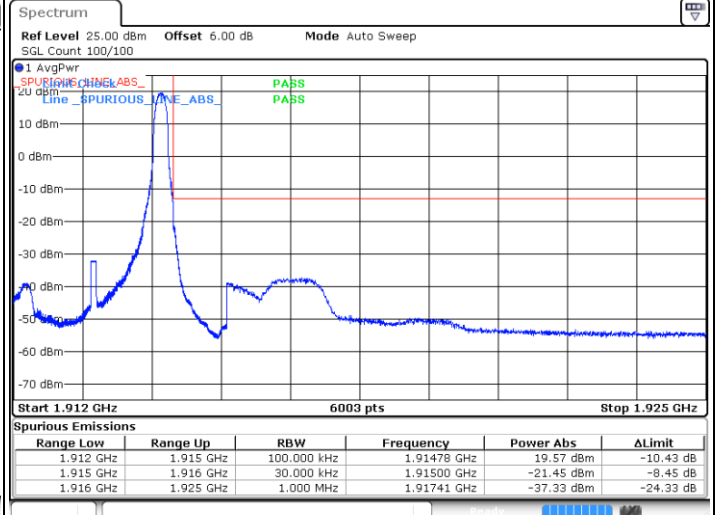


LTE Band 25 / 3MHz / QPSK

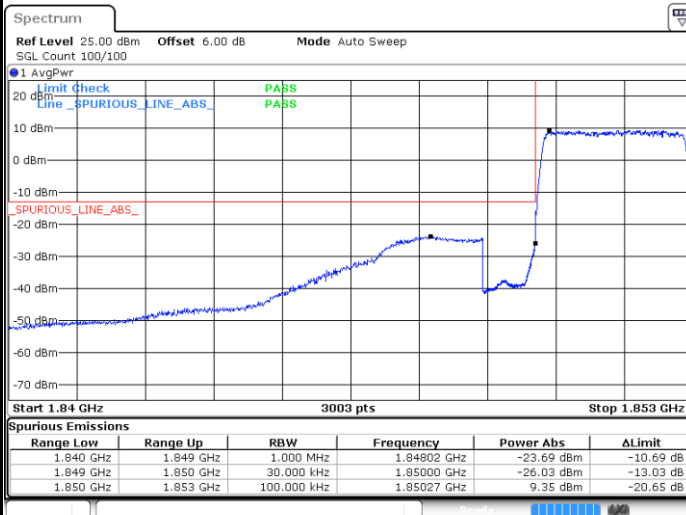
Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

