

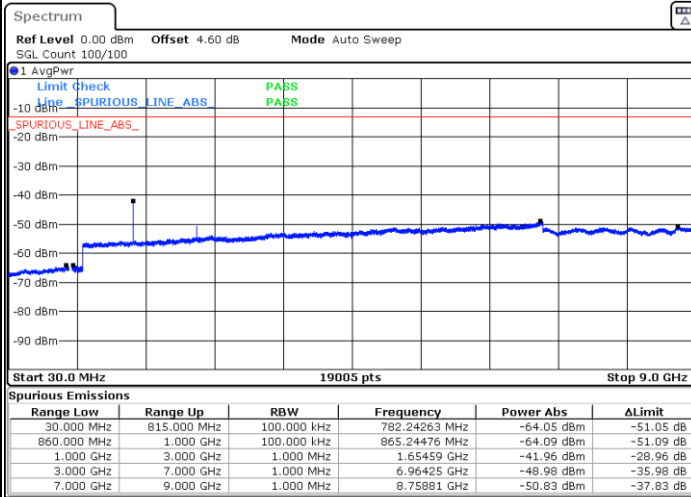


LTE Band 5B / 3MHz+5MHz

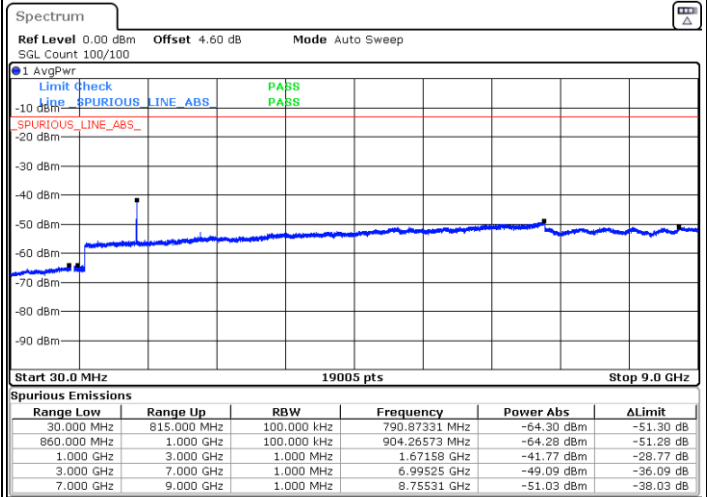
QPSK

Lowest Channel / 1RB14 and 1RB0

Middle Channel / 1RB14 and 1RB0

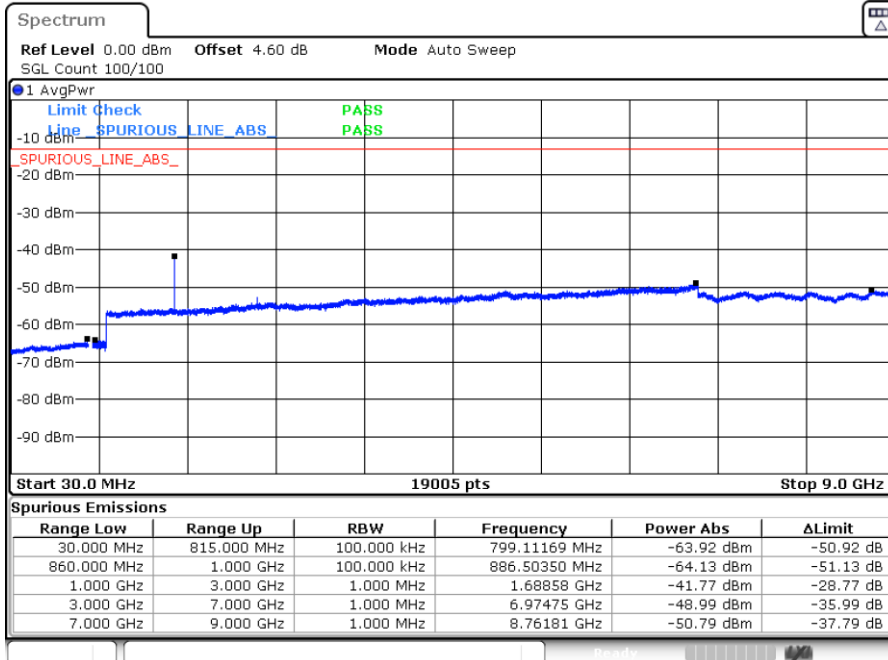


Date: 22.FEB.2023 01:18:15



Date: 22.FEB.2023 01:19:51

Highest Channel / 1RB14 and 1RB0



Date: 22.FEB.2023 01:23:26

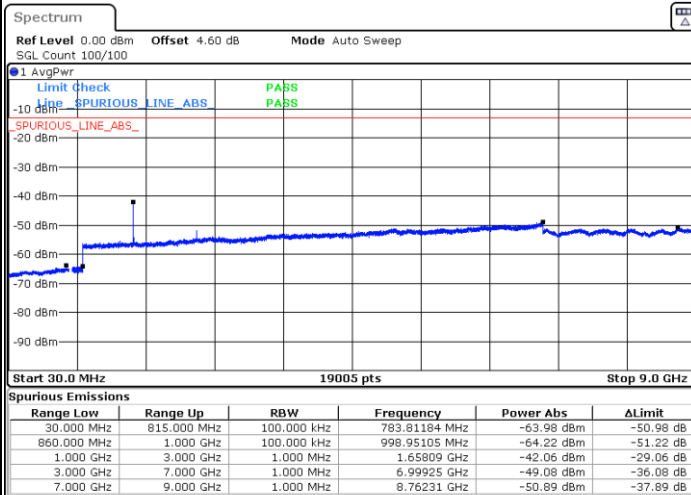


LTE Band 5B / 5MHz+3MHz

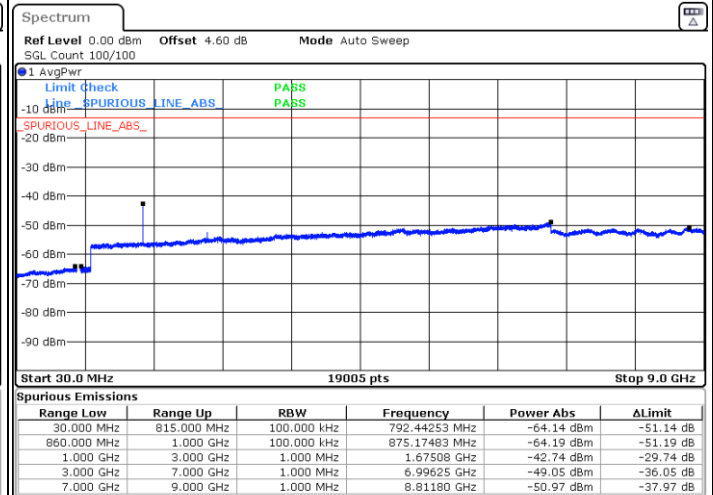
QPSK

Lowest Channel / 1RB24 and 1RB0

Middle Channel / 1RB24 and 1RB0

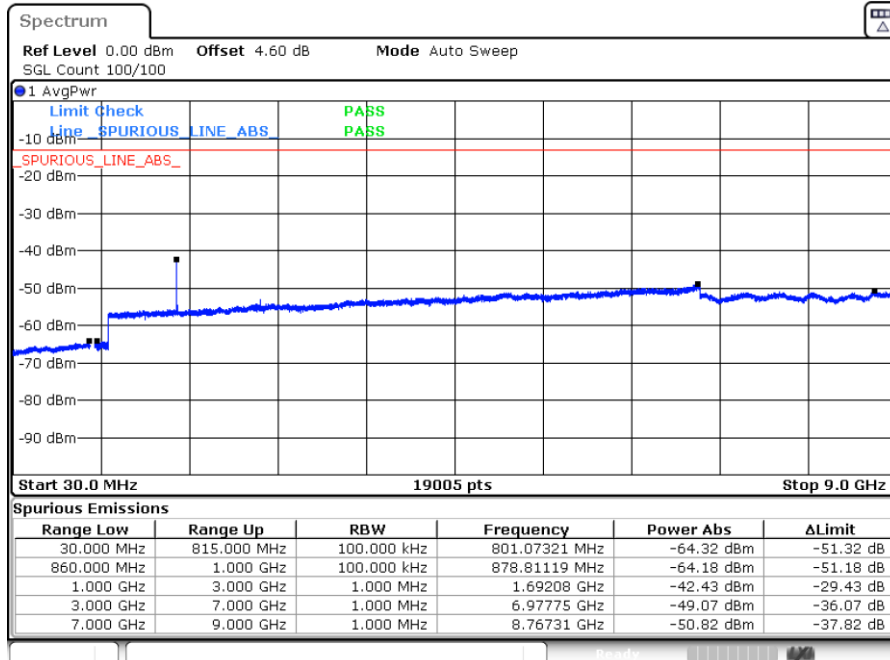


Date: 22.FEB.2023 01:29:56



Date: 22.FEB.2023 01:31:32

Highest Channel / 1RB24 and 1RB0



Date: 22.FEB.2023 01:35:06

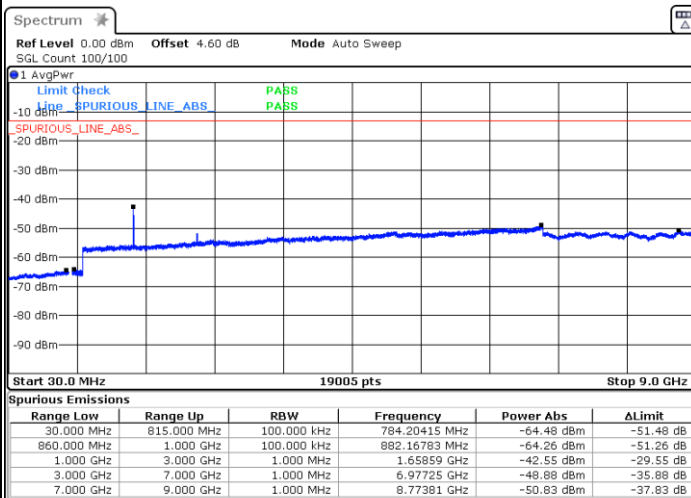


LTE Band 5B / 5MHz+10MHz

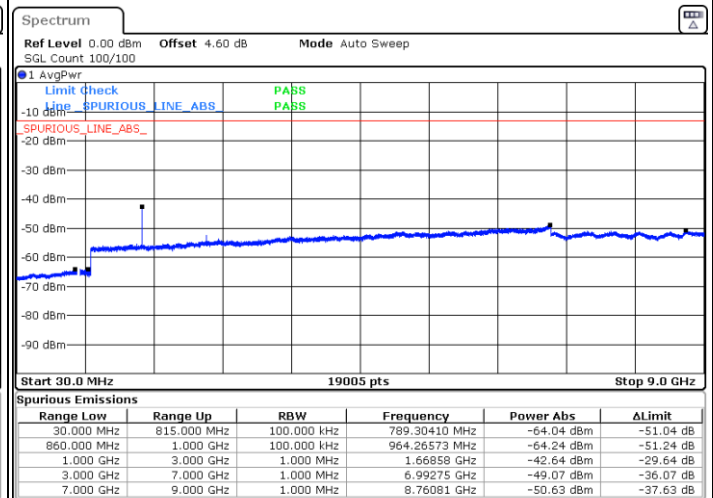
QPSK

Lowest Channel / 1RB24 and 1RB0

Middle Channel / 1RB24 and 1RB0

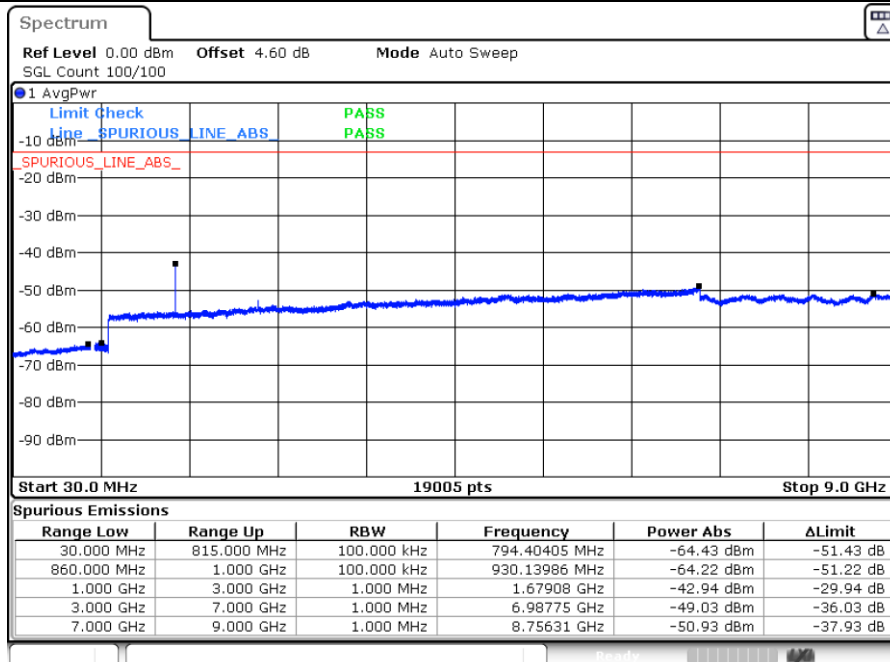


Date: 22.FEB.2023 01:36:42



Date: 22.FEB.2023 01:38:17

Highest Channel / 1RB24 and 1RB0



Date: 22.FEB.2023 01:44:41

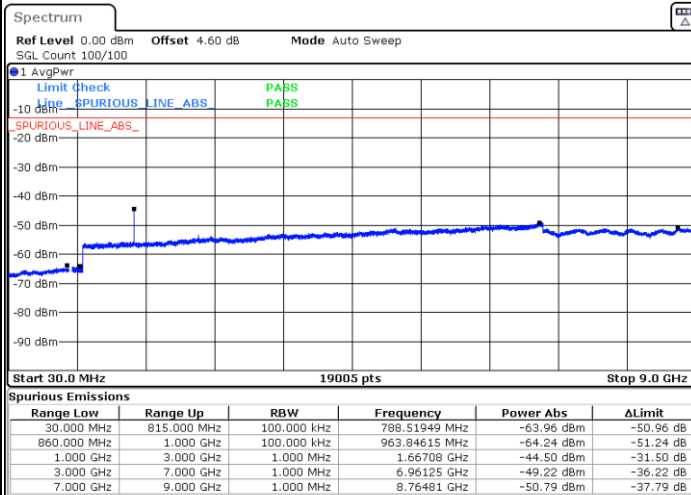


LTE Band 5B / 10MHz+5MHz

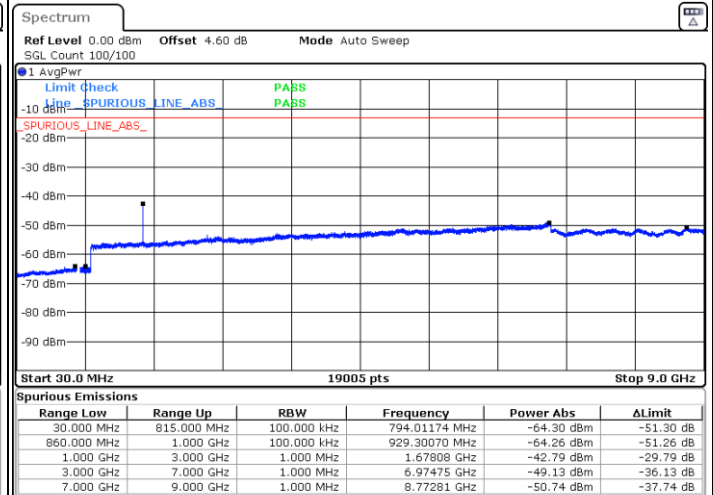
QPSK

Lowest Channel / 1RB49 and 1RB0

Middle Channel / 1RB49 and 1RB0

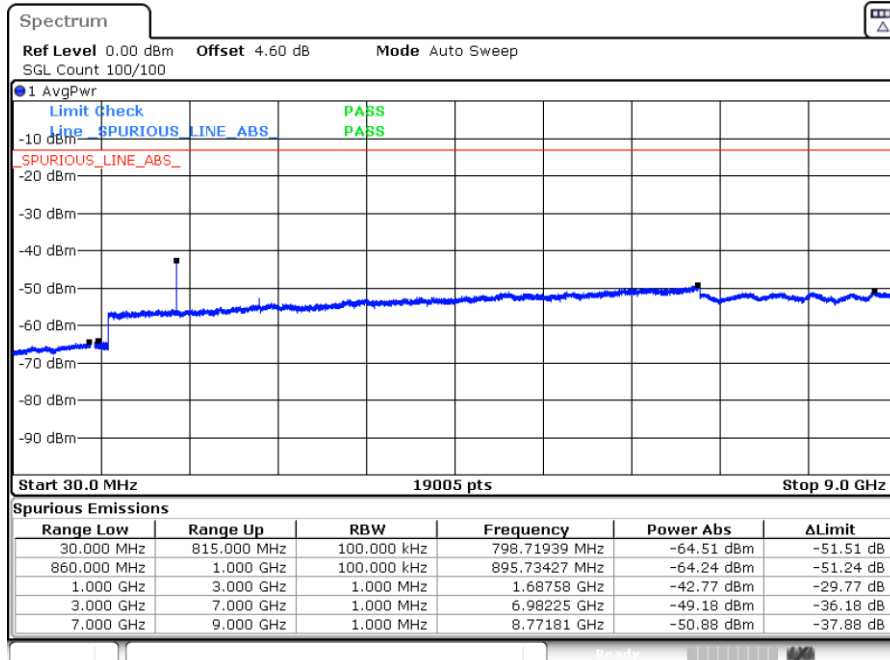


Date: 22.FEB.2023 01:47:10



Date: 22.FEB.2023 01:48:45

Highest Channel / 1RB49 and 1RB0



Date: 22.FEB.2023 01:52:19

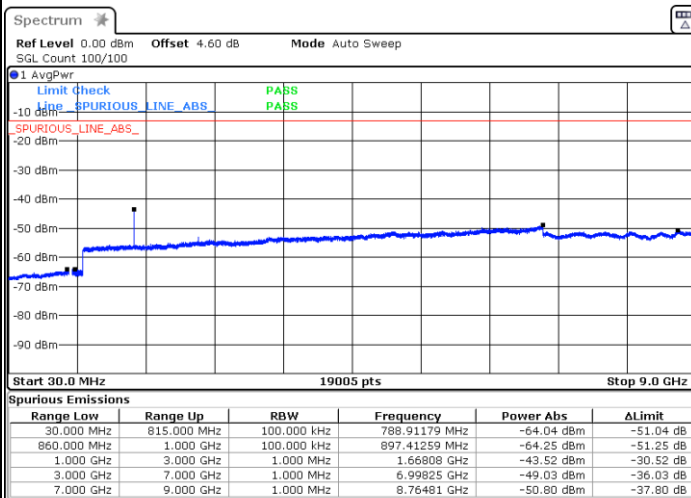


LTE Band 5B / 10MHz+10MHz

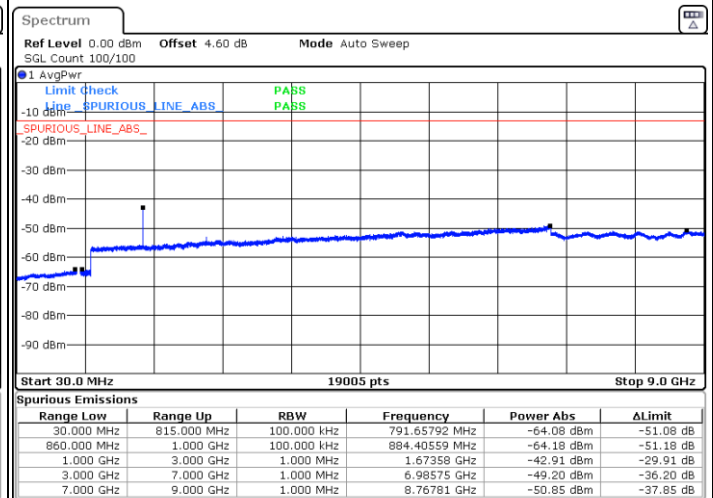
QPSK

Lowest Channel / 1RB49 and 1RB0

Middle Channel / 1RB49 and 1RB0

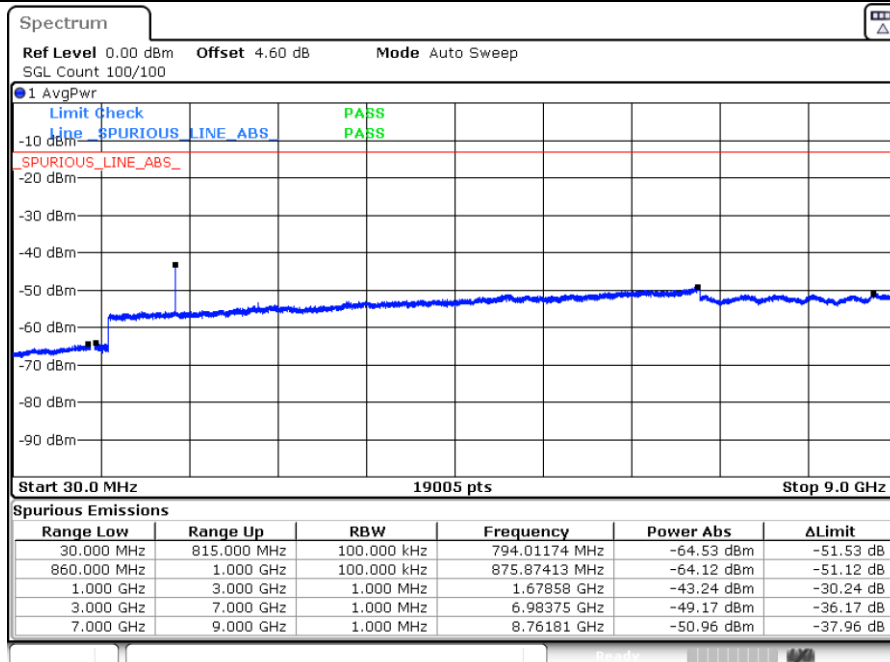


Date: 22.FEB.2023 01:53:55



Date: 22.FEB.2023 01:55:30

Highest Channel / 1RB49 and 1RB0



Date: 22.FEB.2023 01:59:05

Frequency Stability

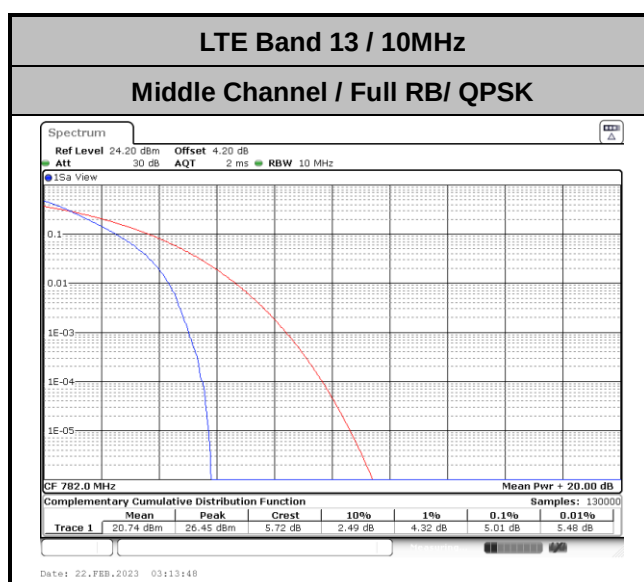
Test Conditions		LTE Band 5B (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz+10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0026	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0042	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0028	
20	Normal Voltage	0.0034	
20	Battery End Point	0.0013	

Note: Normal Voltage =3.85V. ; Battery End Point (BEP) =3.45V. ; Maximum Voltage =4.41 V.

LTE Band 13

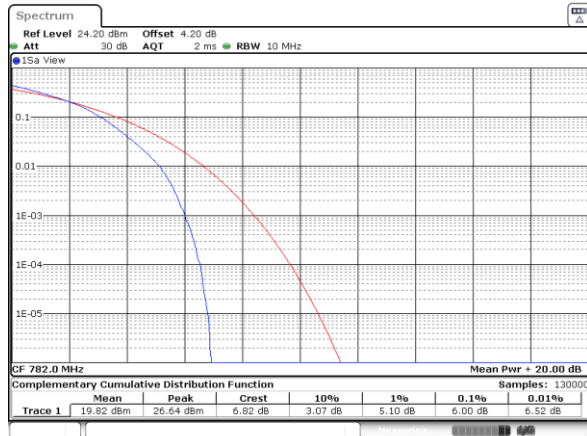
Peak-to-Average Ratio

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	5.01	6.00	6.75	6.72	PASS





Middle Channel / Full RB/ 16QAM



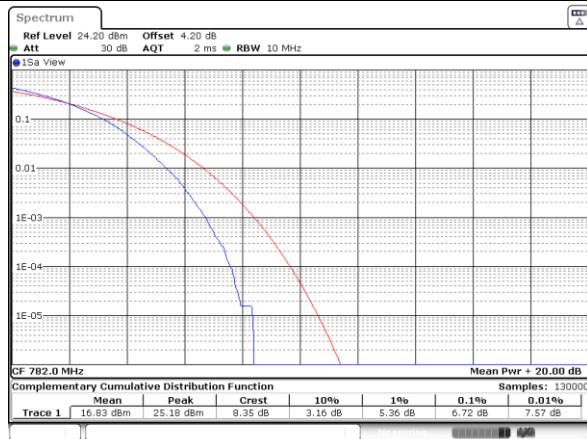
Date: 22.FEB.2023 03:14:10

Middle Channel / Full RB/ 64QAM



Date: 22.FEB.2023 03:14:33

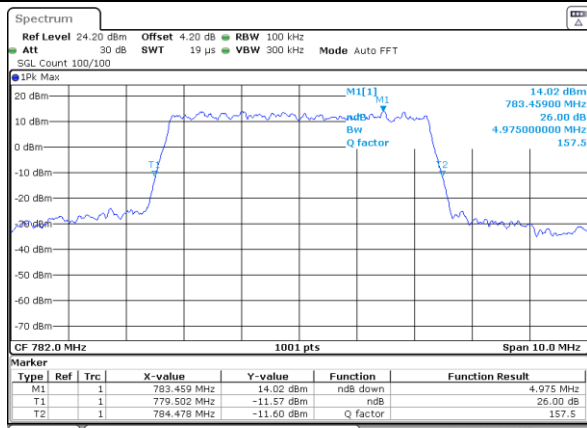
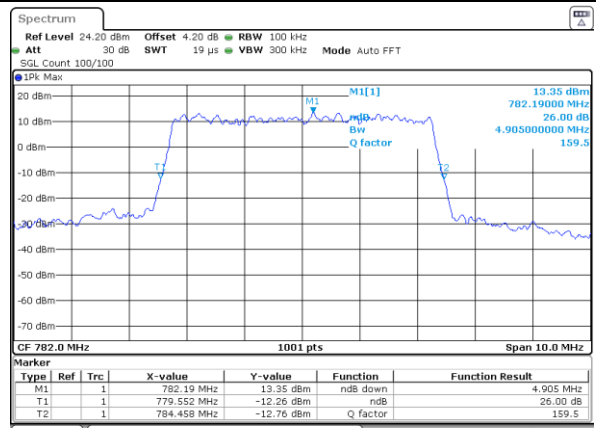
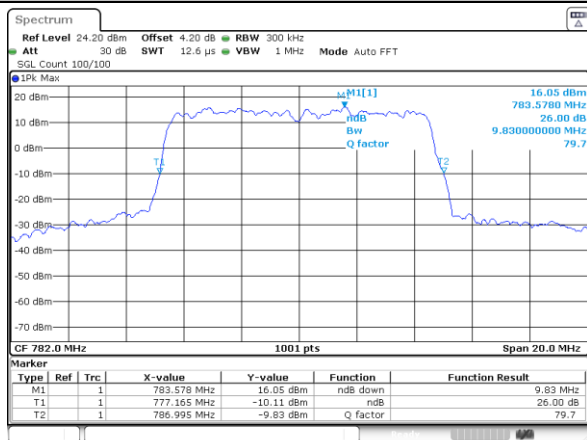
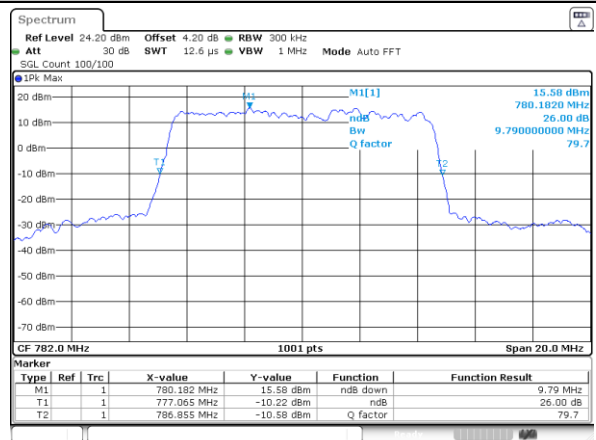
Middle Channel / Full RB/ 256QAM



Date: 22.FEB.2023 03:14:56

**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.98	4.91
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.83	9.79

LTE Band 13**Middle Channel / 5MHz / QPSK****Middle Channel / 5MHz / 16QAM****LTE Band 13****Middle Channel / 10MHz / QPSK****Middle Channel / 10MHz / 16QAM**

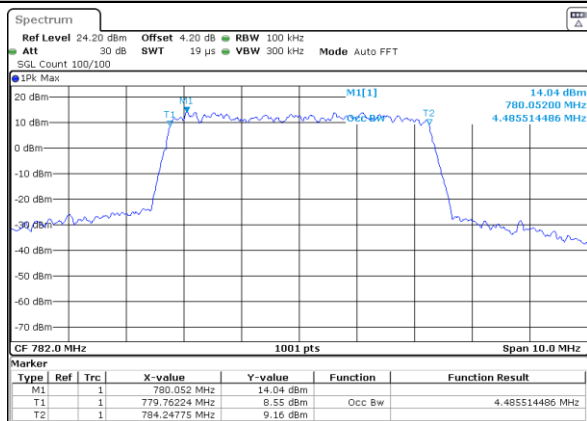


Occupied Bandwidth

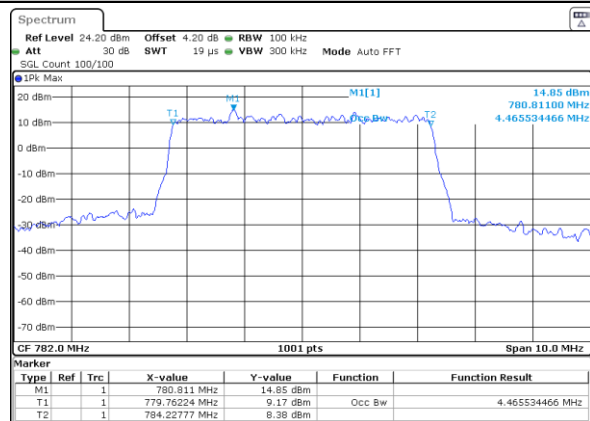
Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.47
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01

LTE Band 13

Middle Channel / 5MHz / QPSK

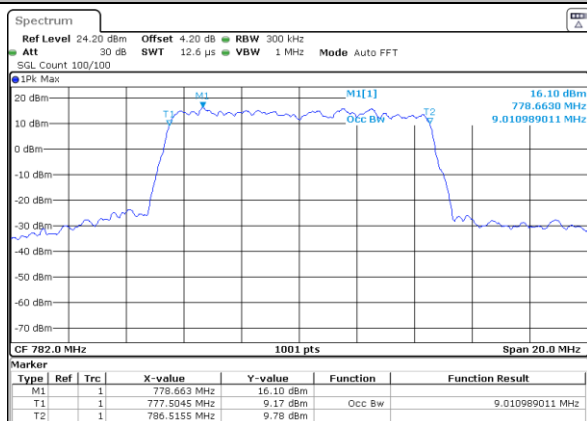


Middle Channel / 5MHz / 16QAM

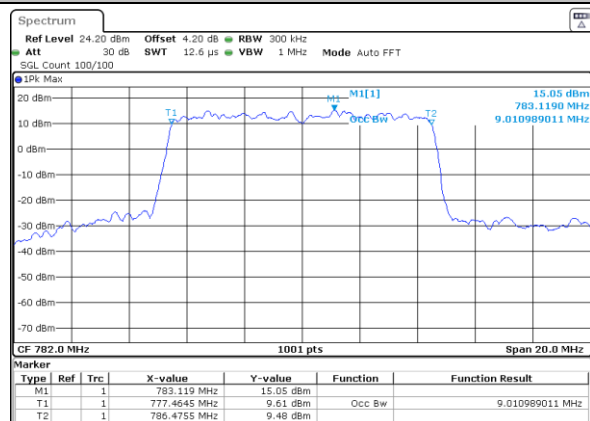


LTE Band 13

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

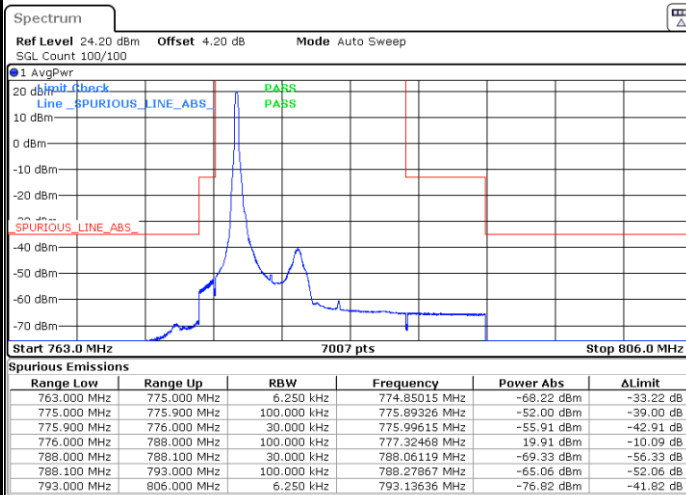




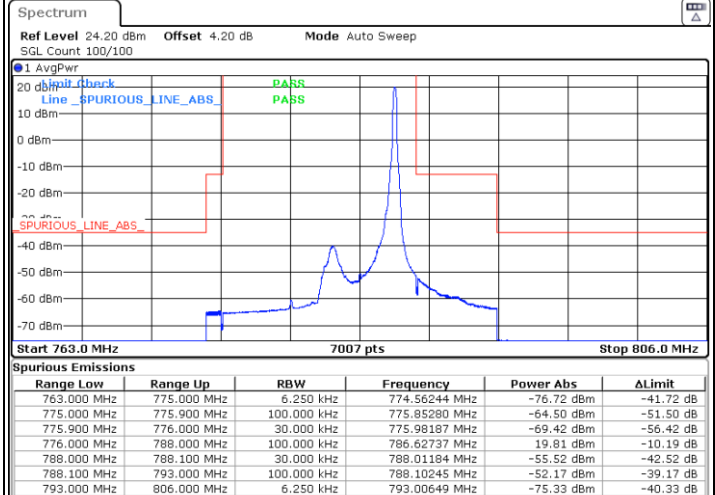
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

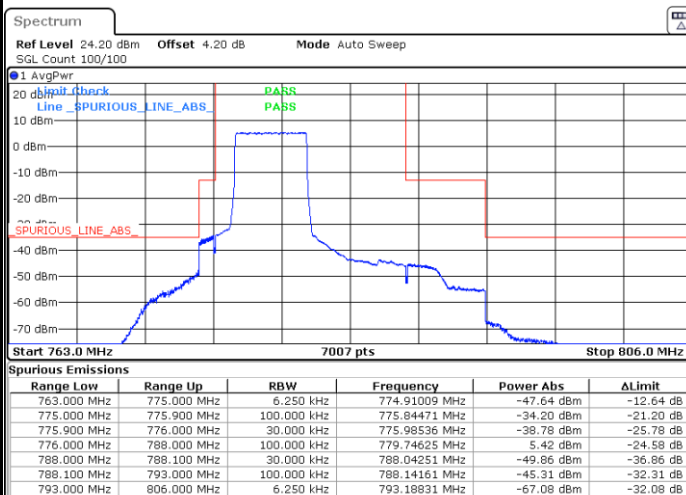
Lowest Band Edge / 1 RB



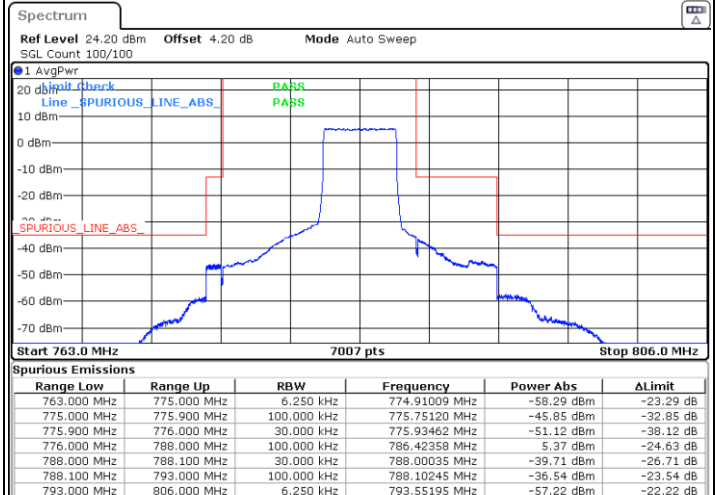
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



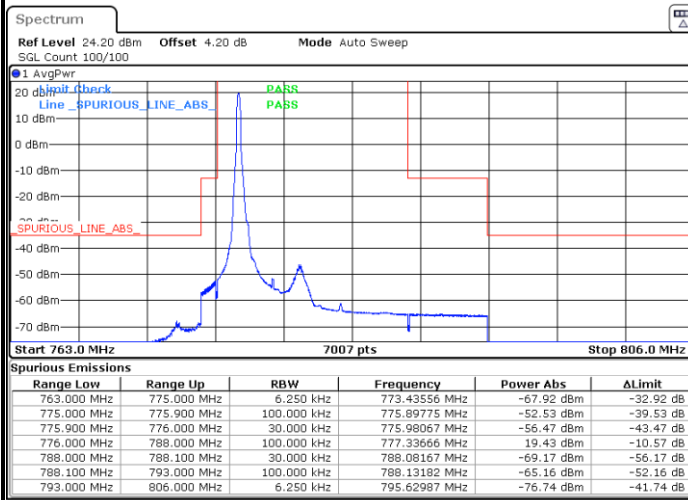
Highest Band Edge / Full RB





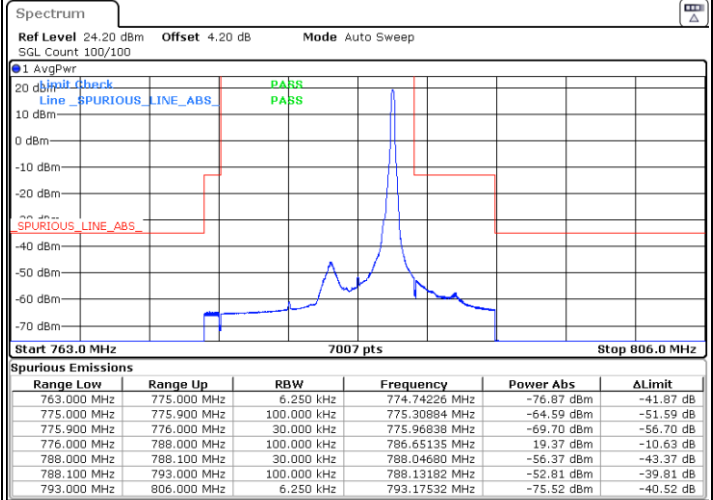
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



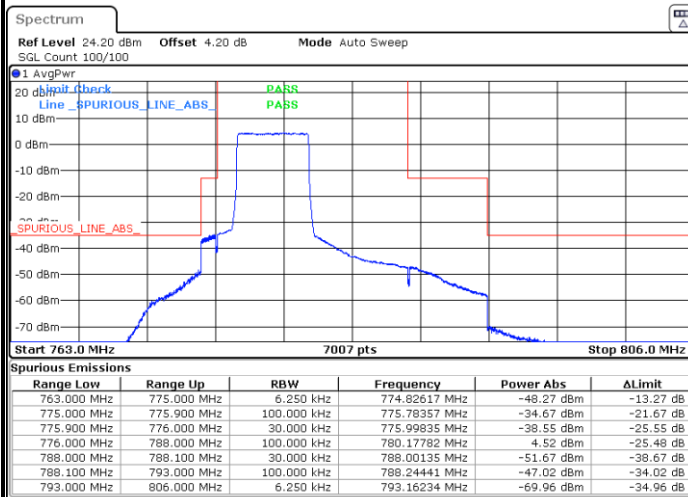
Date: 22.FEB.2023 02:18:39

Highest Band Edge / 1 RB



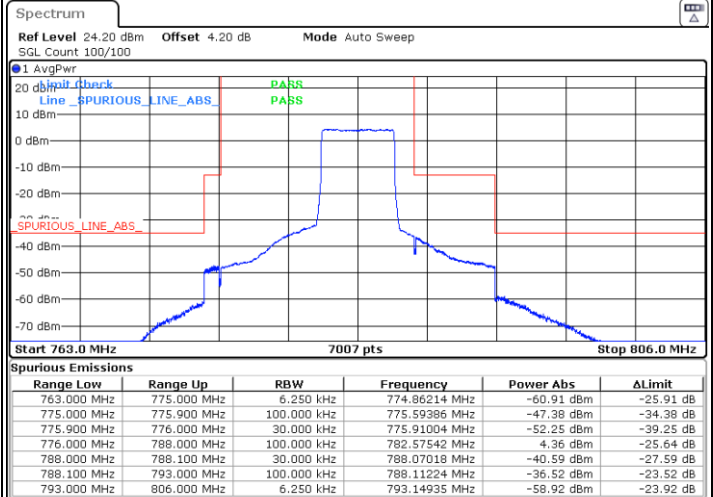
Date: 22.FEB.2023 02:37:24

Lowest Band Edge / Full RB



Date: 22.FEB.2023 02:26:04

Highest Band Edge / Full RB

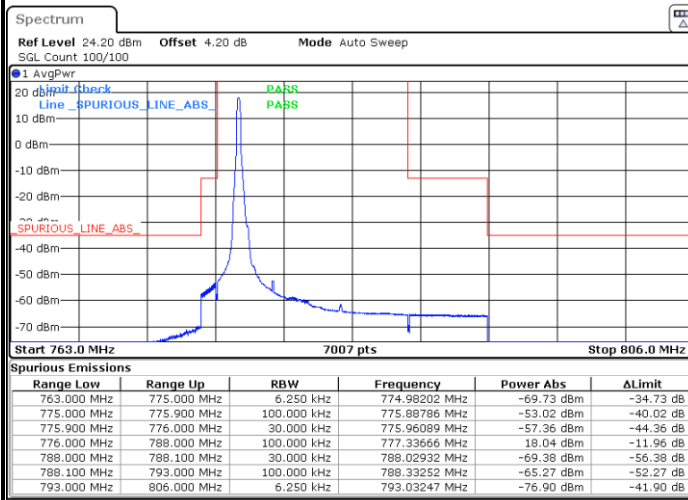


Date: 22.FEB.2023 02:44:53



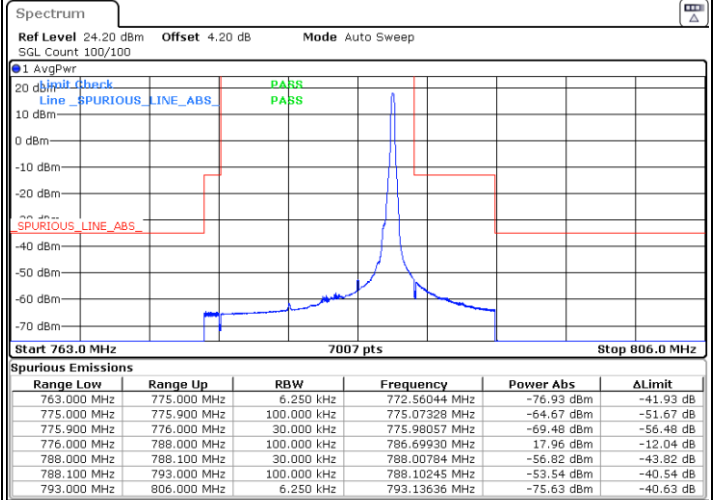
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB



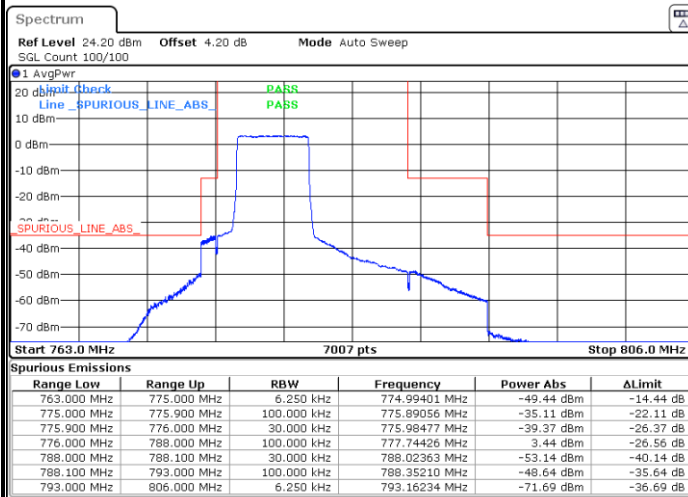
Date: 22.FEB.2023 02:20:28

Highest Band Edge / 1 RB



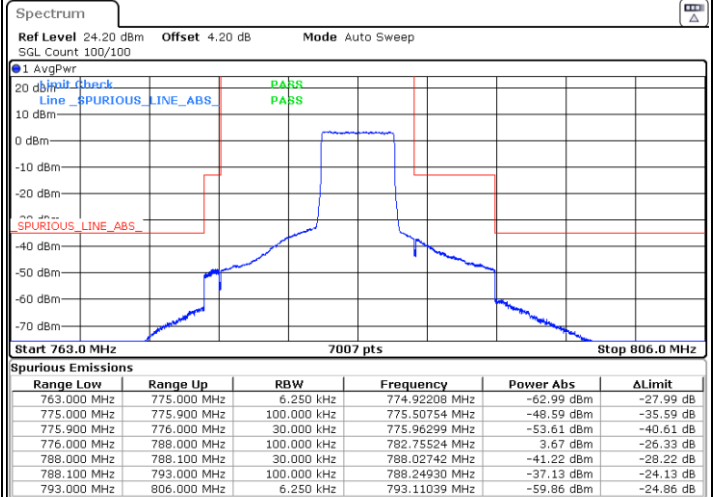
Date: 22.FEB.2023 02:39:16

Lowest Band Edge / Full RB



Date: 22.FEB.2023 02:27:53

Highest Band Edge / Full RB

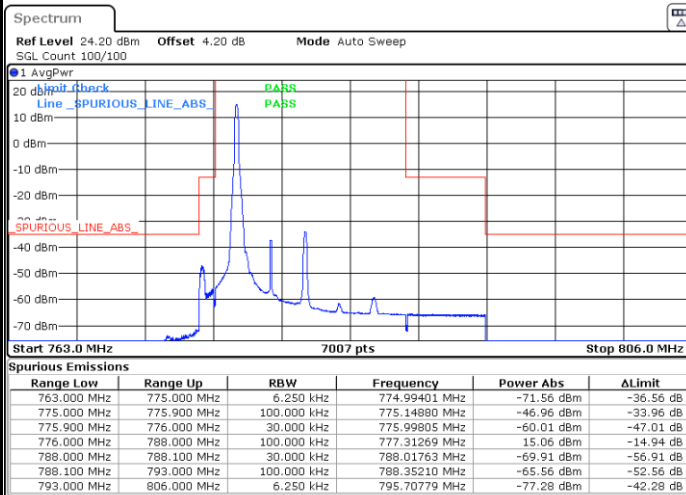


Date: 22.FEB.2023 02:46:42

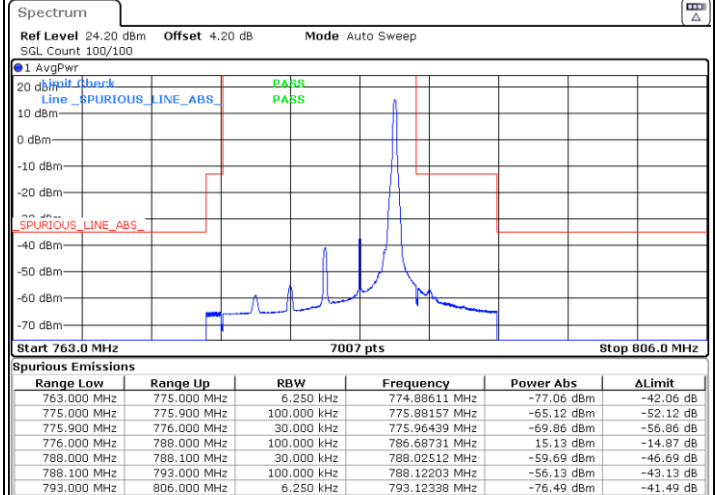


LTE Band 13 / 5MHz / 256QAM

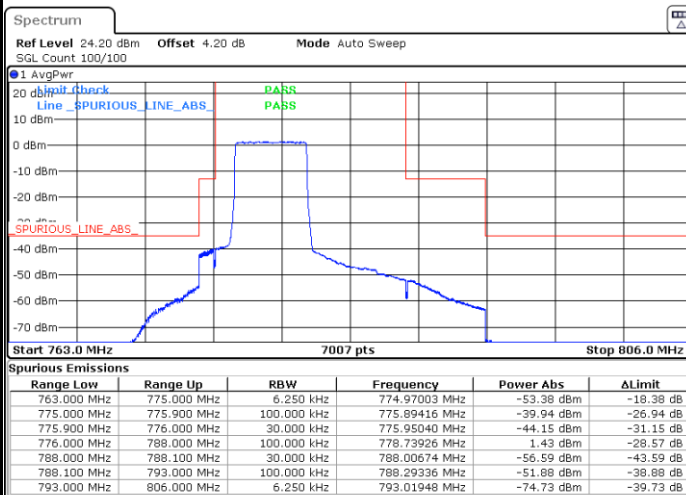
Lowest Band Edge / 1RB



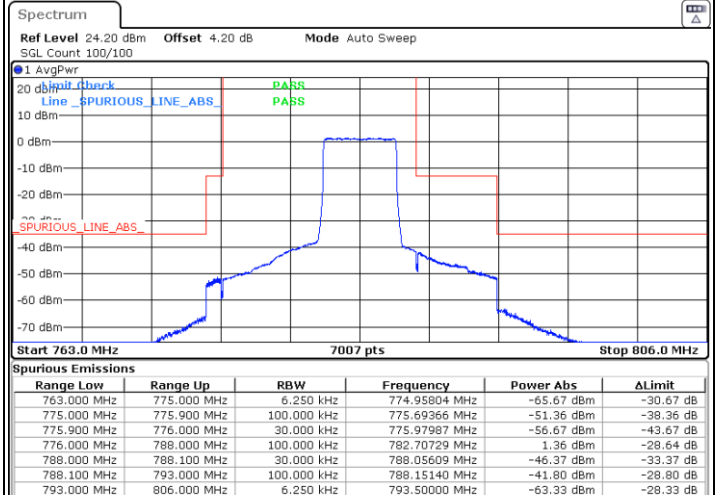
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



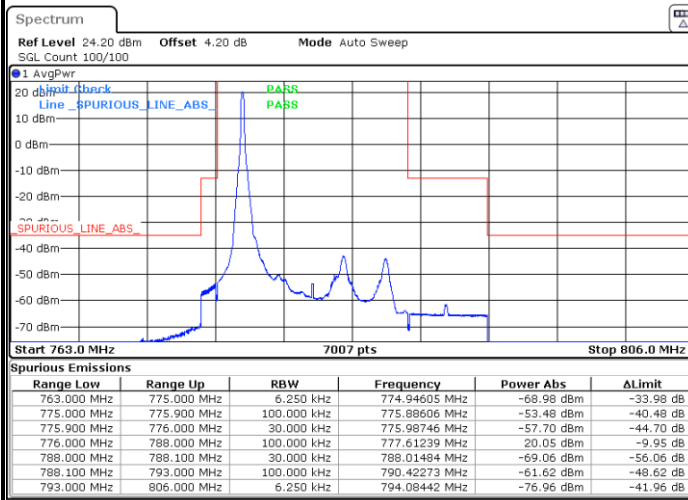
Highest Band Edge / Full RB



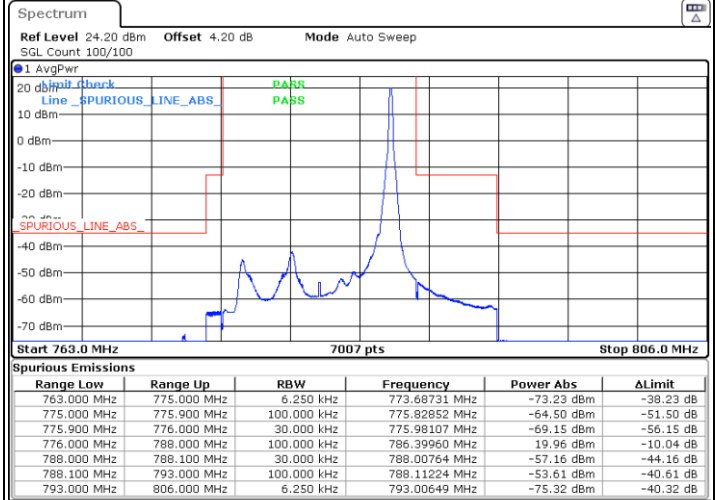


LTE Band 13 / 10MHz / QPSK

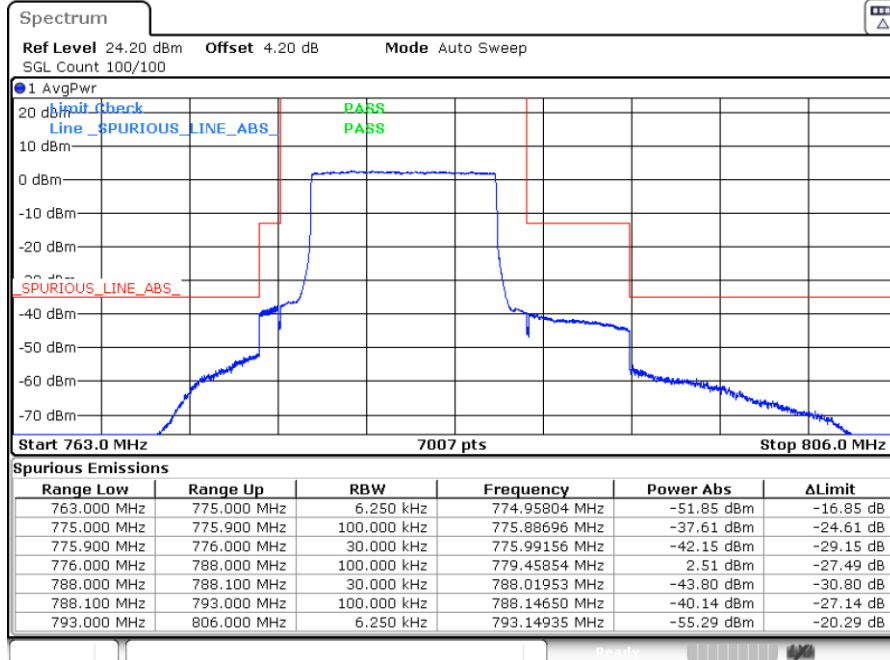
middle Band Edge / 1 RB



middle Band Edge / 1 RB

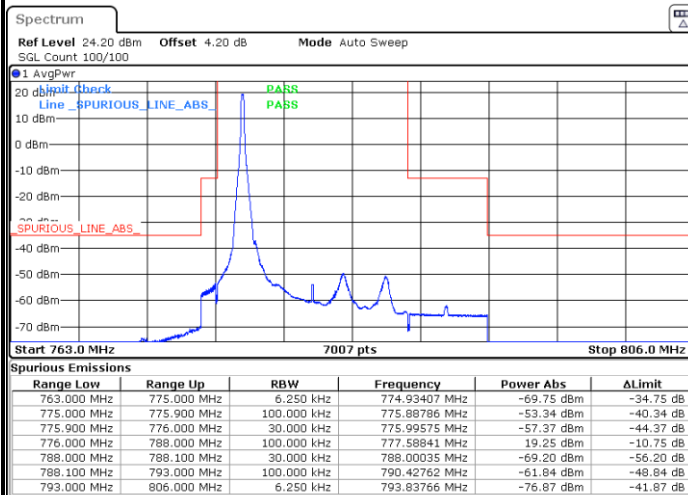


Middle Band Edge / Full RB



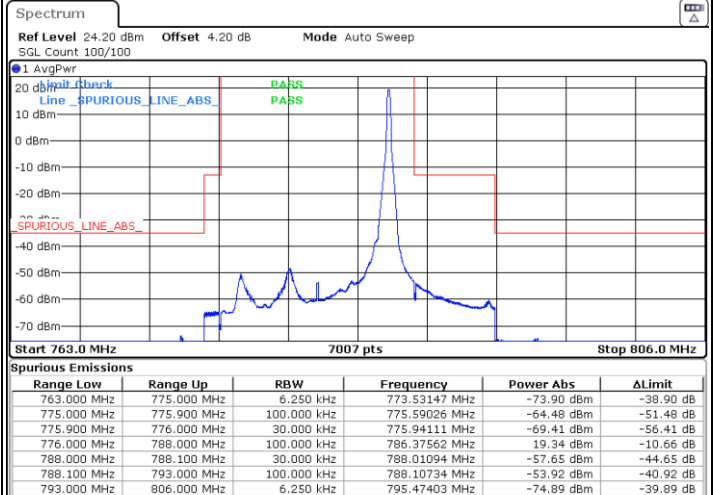
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



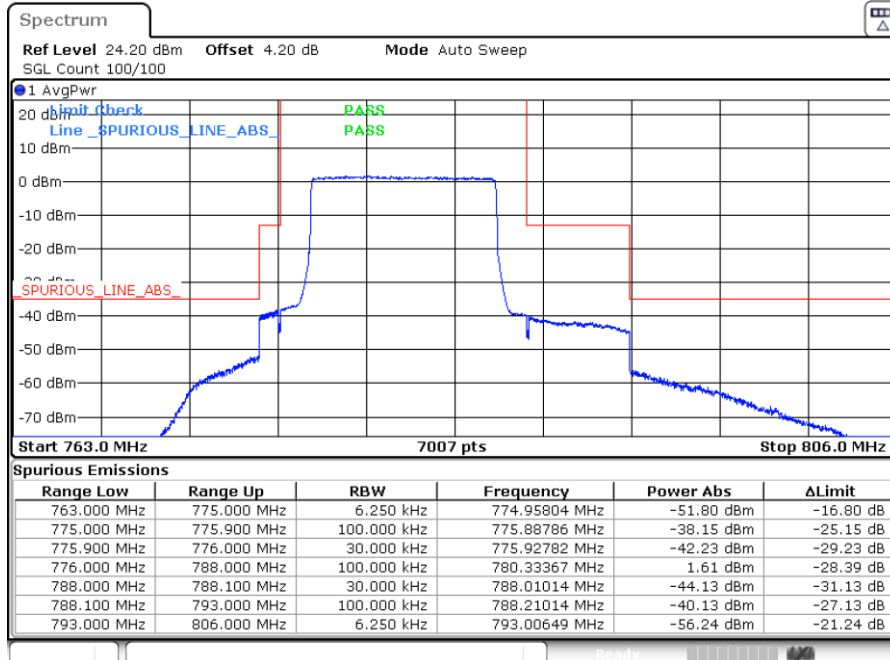
Date: 22.FEB.2023 02:53:39

middle Band Edge / 1 RB



Date: 22.FEB.2023 03:08:17

middle Band Edge / Full RB

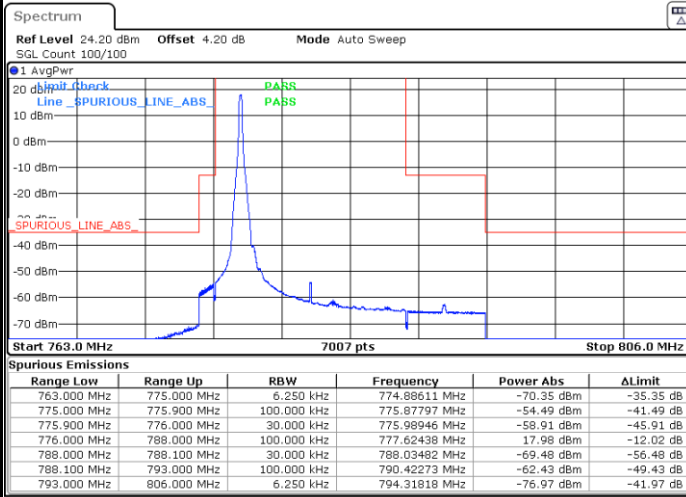


Date: 22.FEB.2023 03:00:58

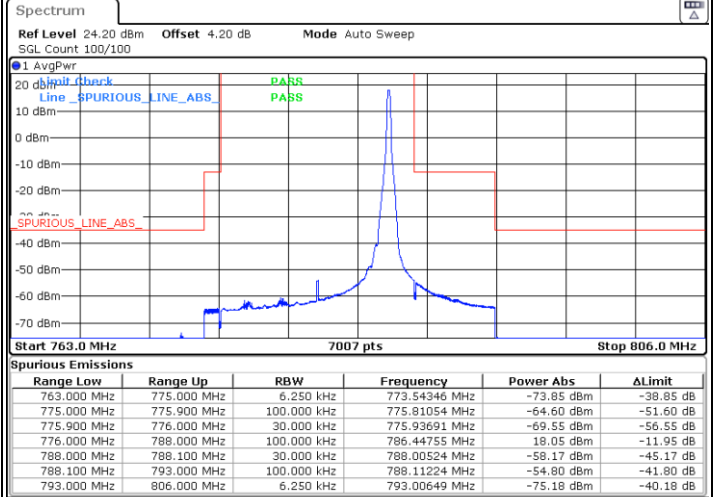


LTE Band 13 / 10MHz / 64QAM

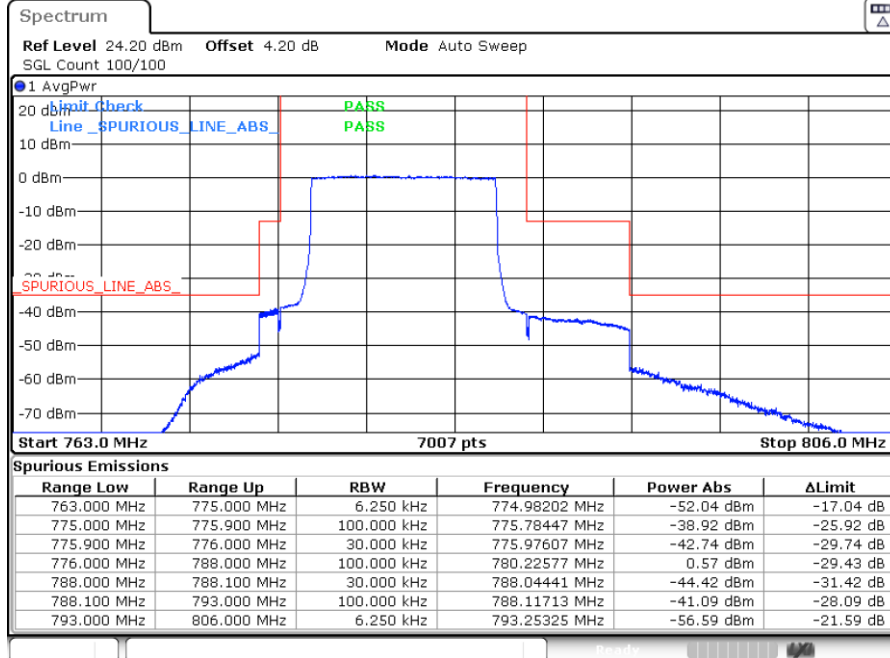
middle Band Edge / 1 RB



middle Band Edge / 1 RB



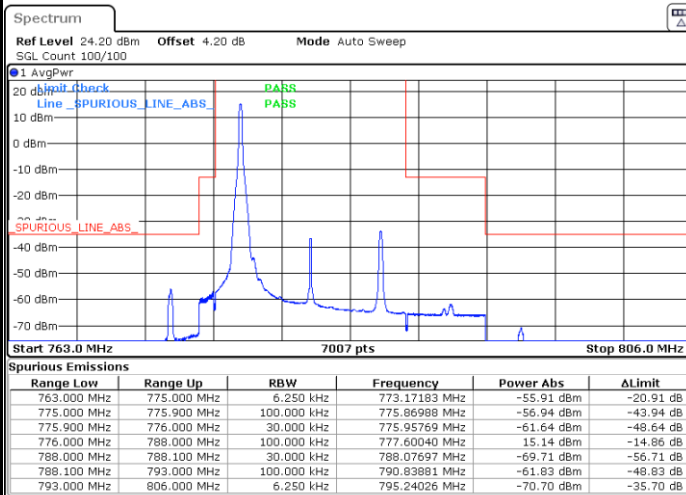
middle Band Edge / Full RB





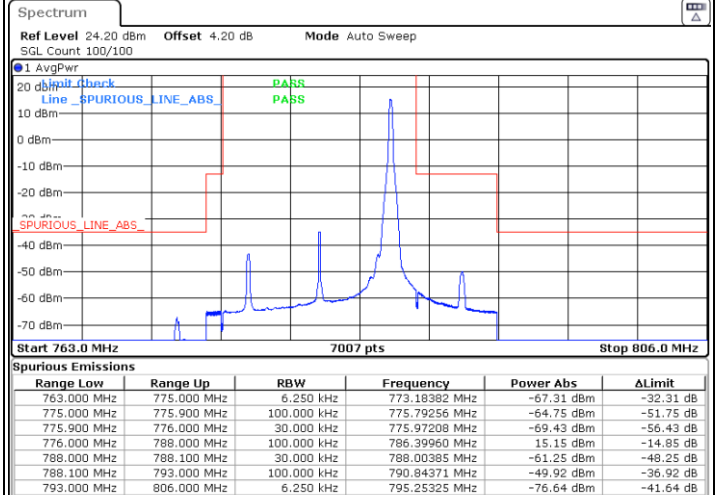
LTE Band 13 / 10MHz / 256QAM

middle Band Edge / 1 RB



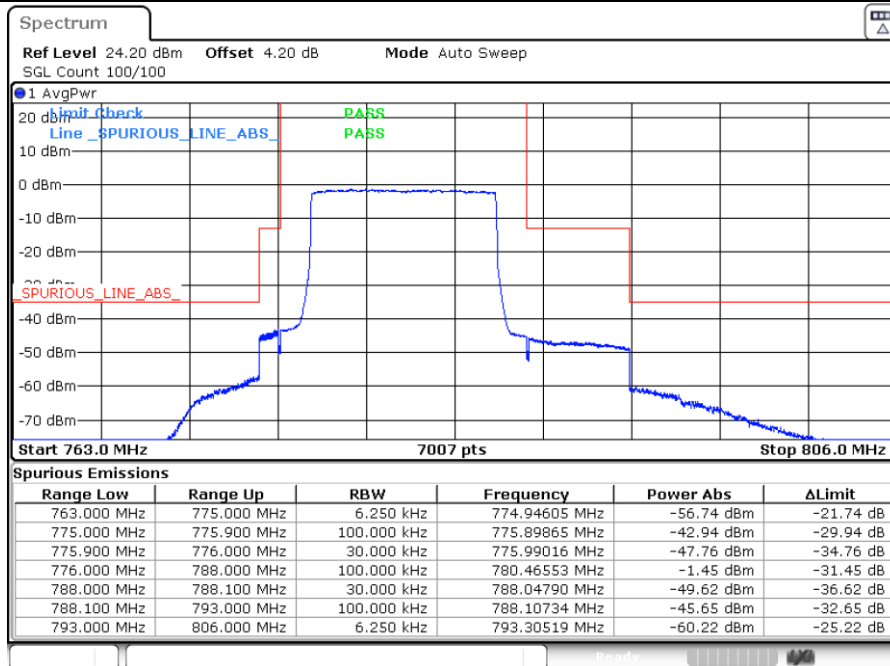
Date: 22.FEB.2023 02:57:17

middle Band Edge / 1 RB



Date: 22.FEB.2023 03:11:58

middle Band Edge / Full RB



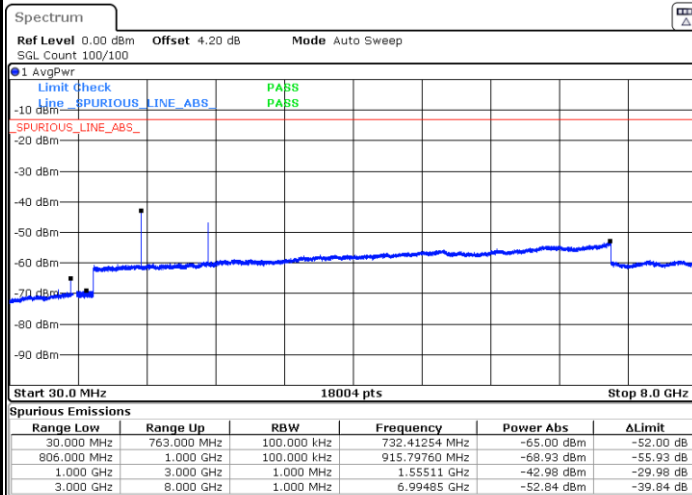
Date: 22.FEB.2023 03:04:38



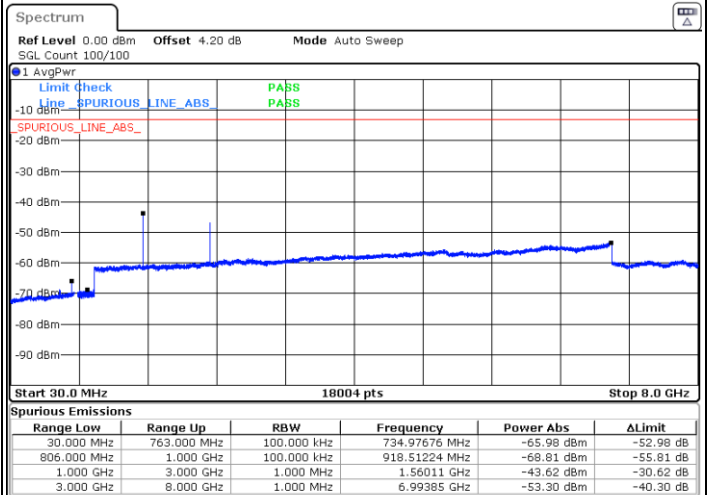
Conducted Spurious Emission

LTE Band 13 / 5MHz

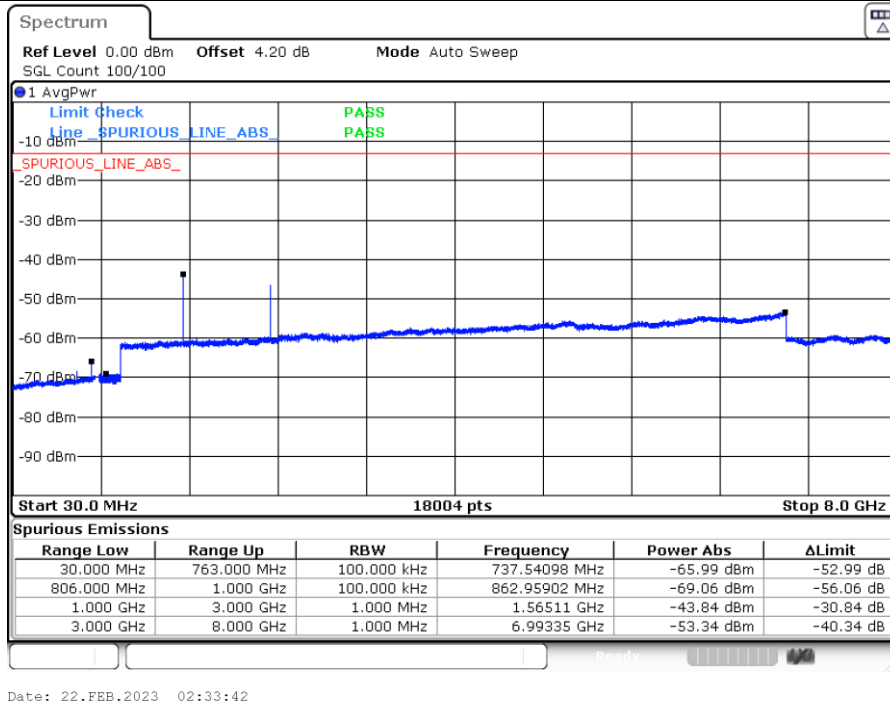
Lowest Channel / QPSK



Middle Channel / QPSK



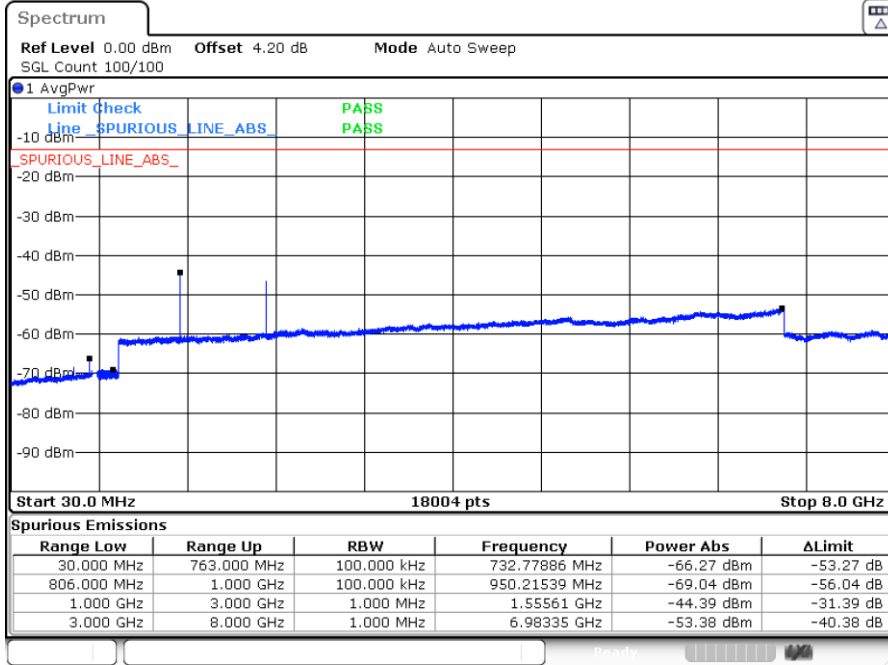
Highest Channel / QPSK





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 22.FEB.2023 02:49:57

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	0.0025	PASS
40	Normal Voltage	0.0046	
30	Normal Voltage	0.0053	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0029	
-10	Normal Voltage	0.0034	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0027	

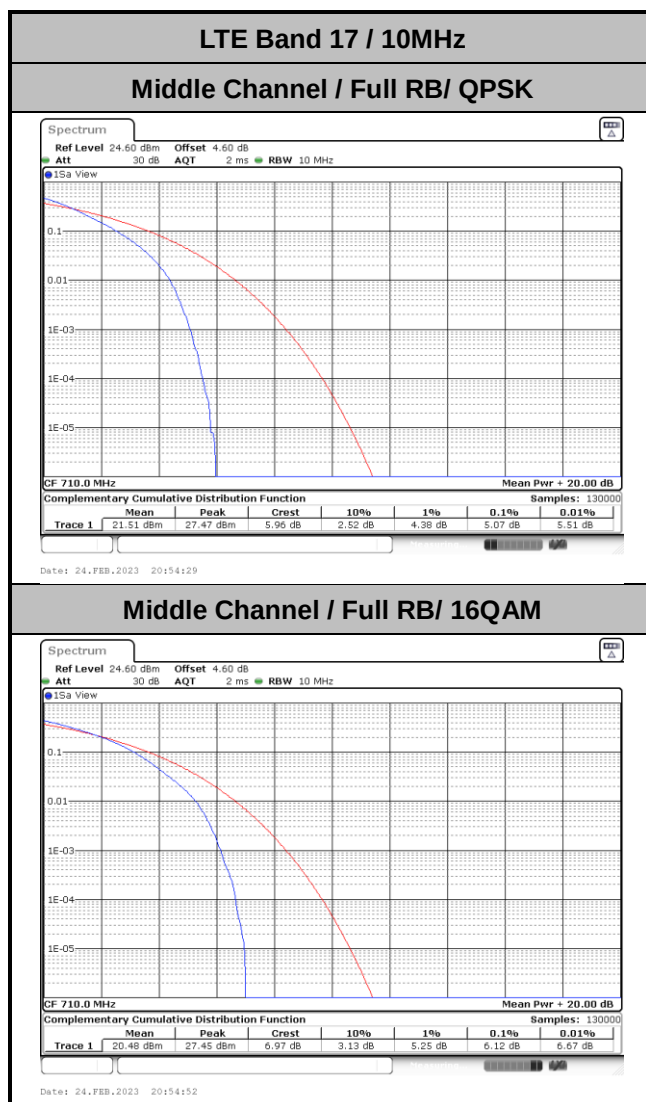
Note:

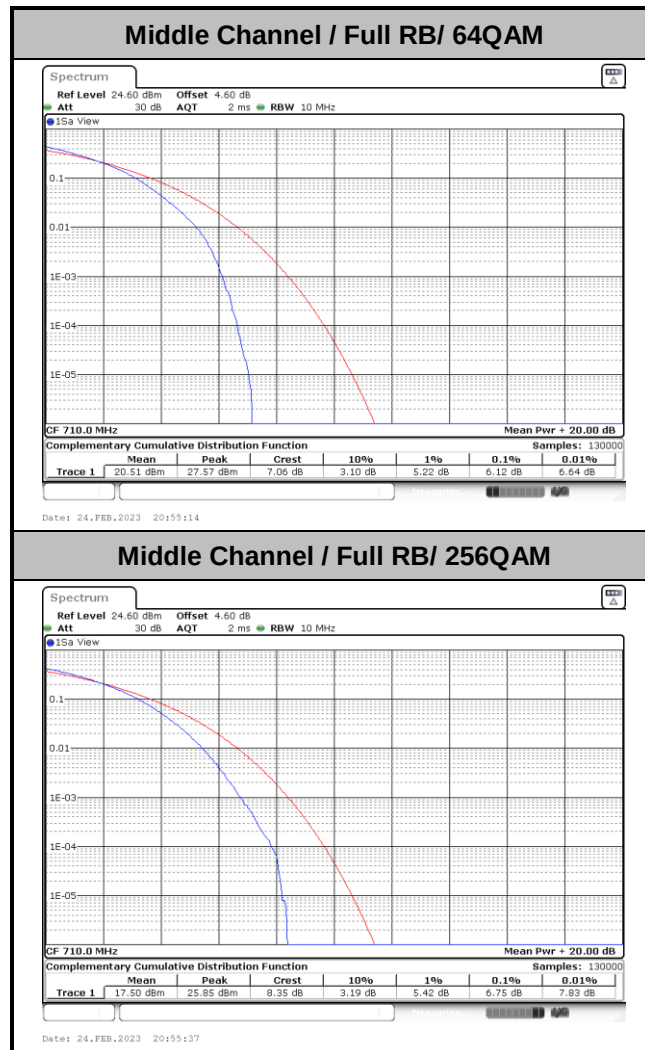
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.45 V. ; Maximum Voltage =4.41 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 17

Peak-to-Average Ratio

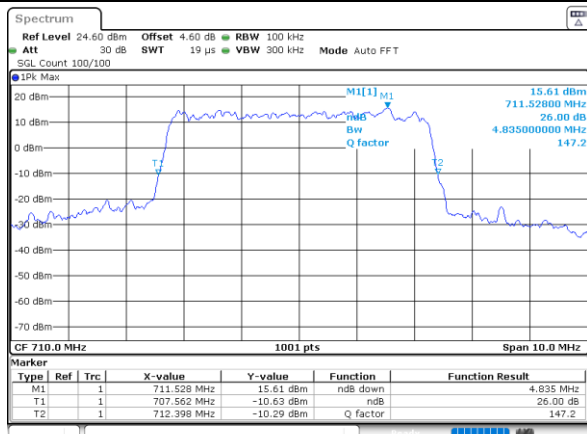
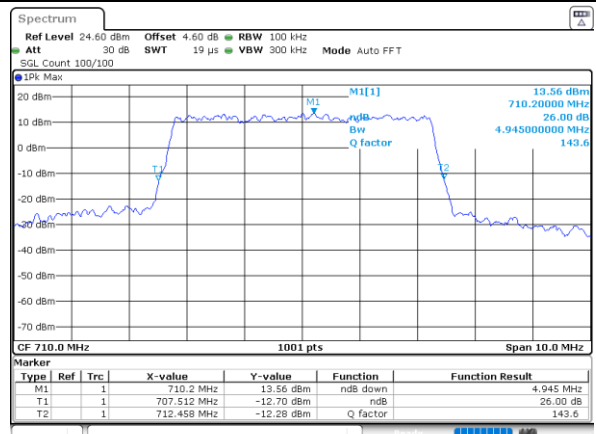
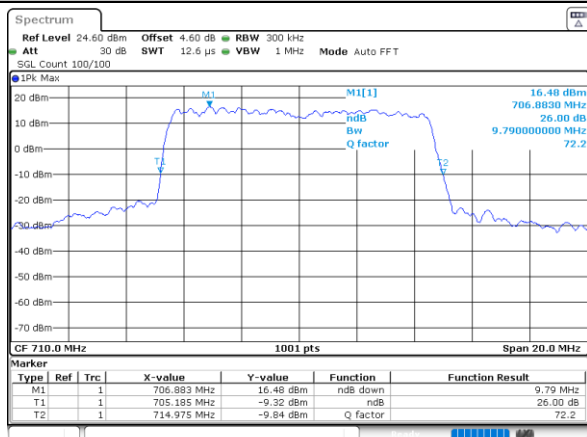
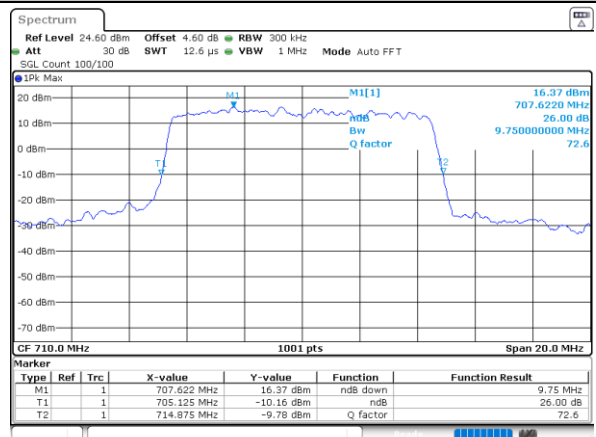
Mode	LTE Band 17 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.07	6.12	6.12	6.75	PASS





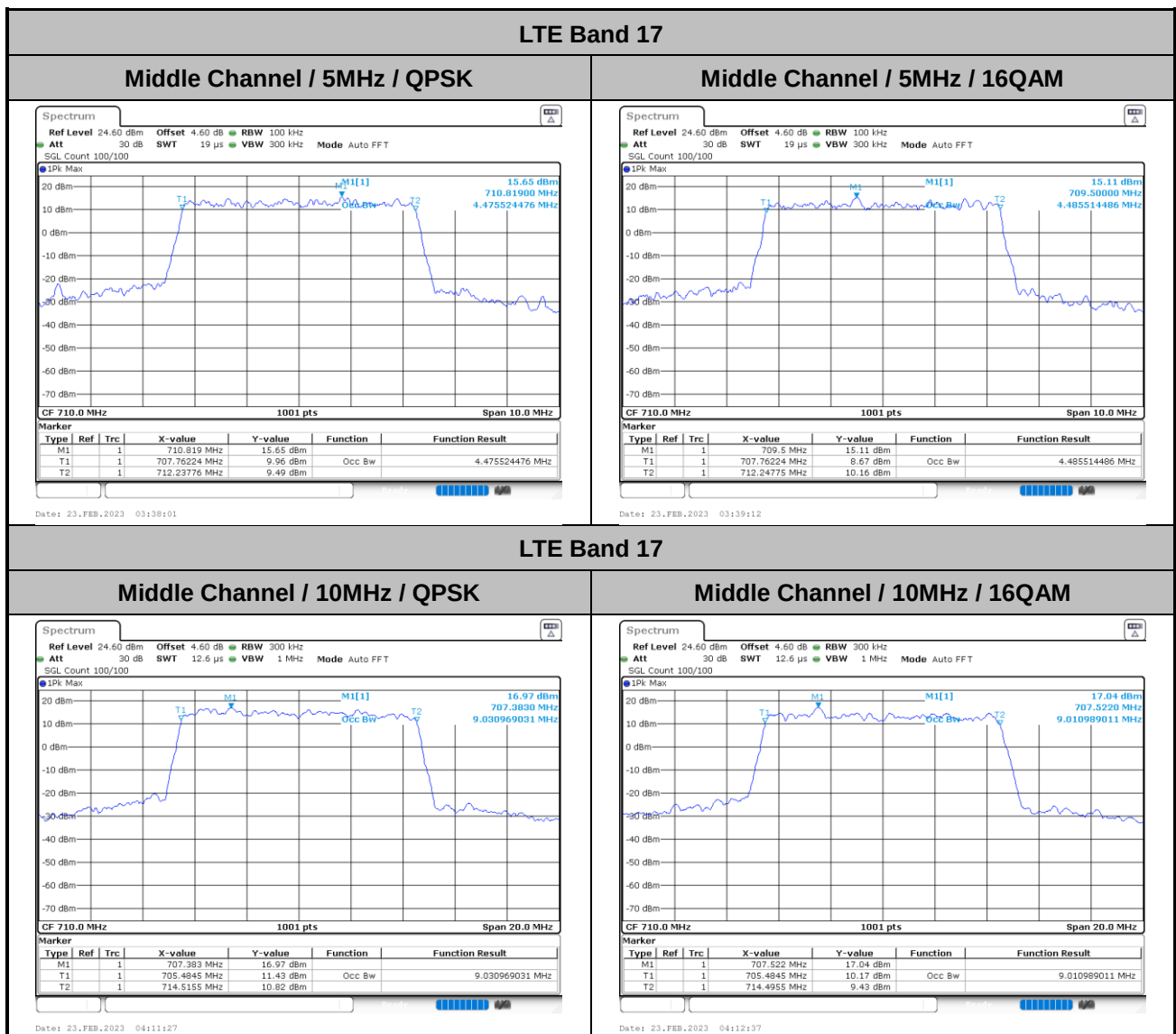
**26dB Bandwidth**

Mode	LTE Band 17 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.84	4.95
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.79	9.75

LTE Band 17**Middle Channel / 5MHz / QPSK****Middle Channel / 5MHz / 16QAM****LTE Band 17****Middle Channel / 10MHz / QPSK****Middle Channel / 10MHz / 16QAM**

Occupied Bandwidth

Mode	LTE Band 17 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.48	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.01

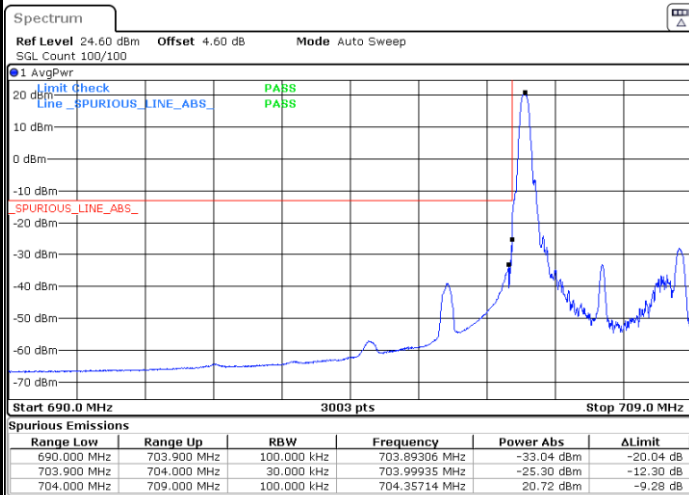




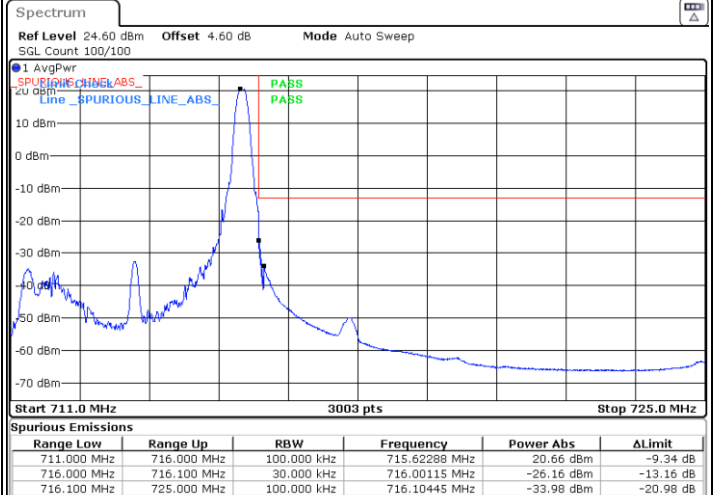
Conducted Band Edge

LTE Band 17 / 5MHz / QPSK

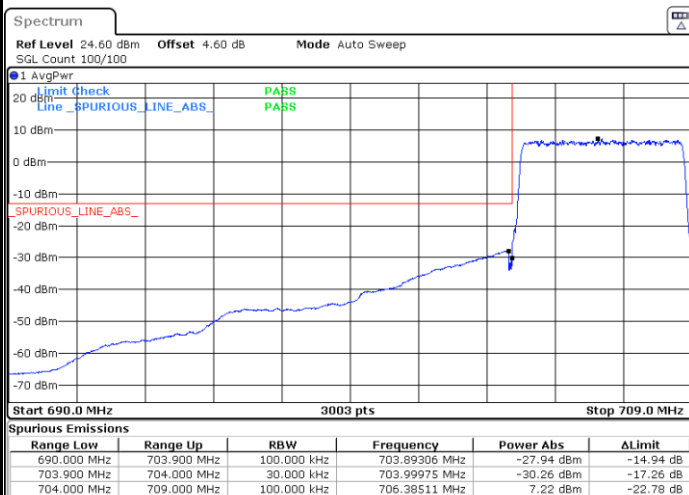
Lowest Band Edge / 1 RB



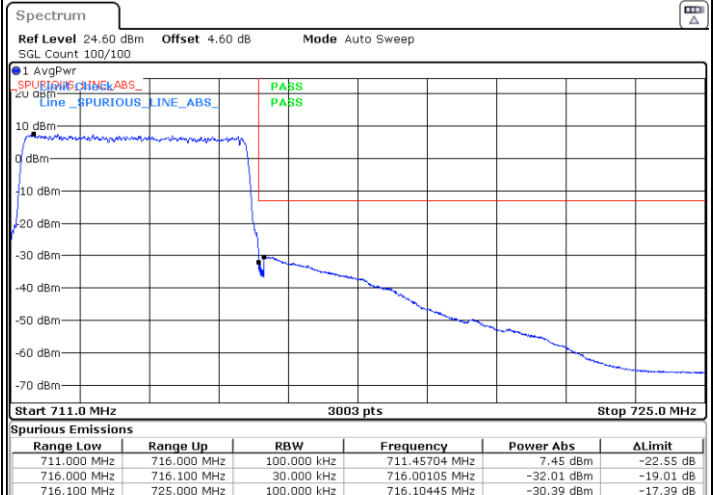
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



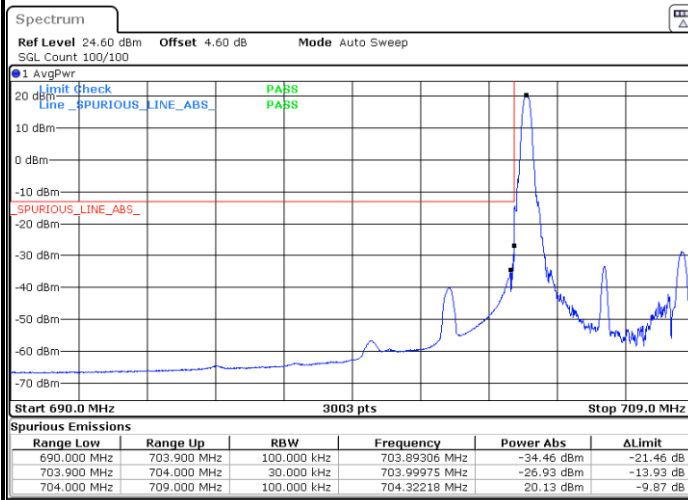
Highest Band Edge / Full RB



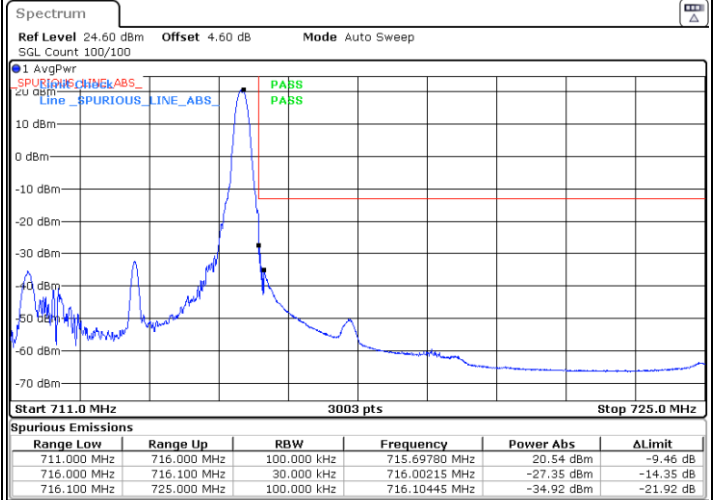


LTE Band 17 / 5MHz / 16QAM

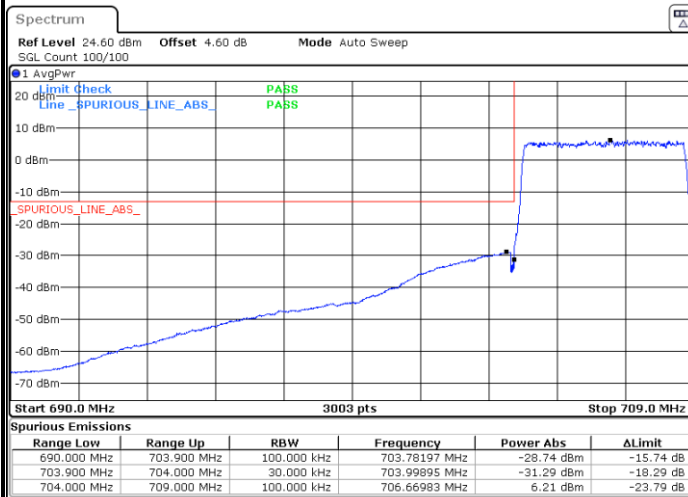
Lowest Band Edge / 1RB



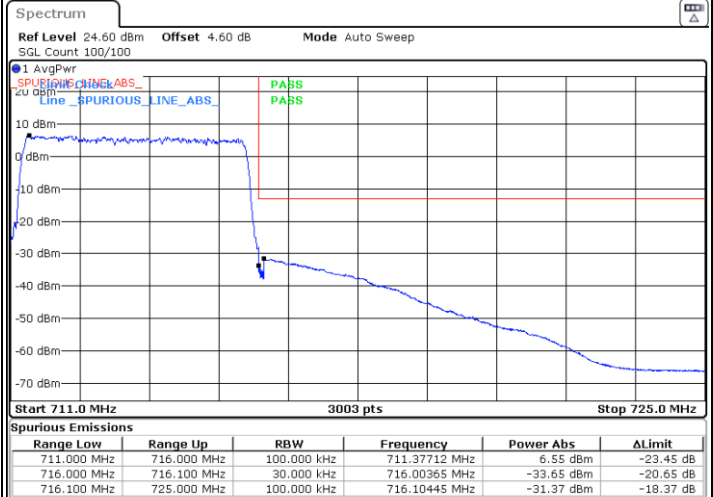
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



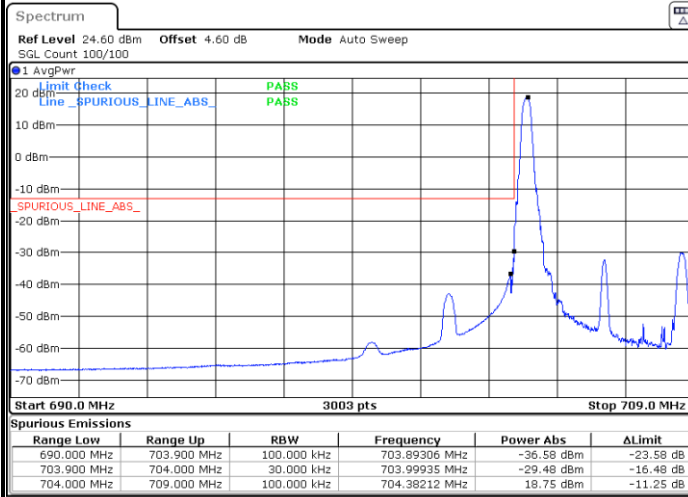
Highest Band Edge / Full RB



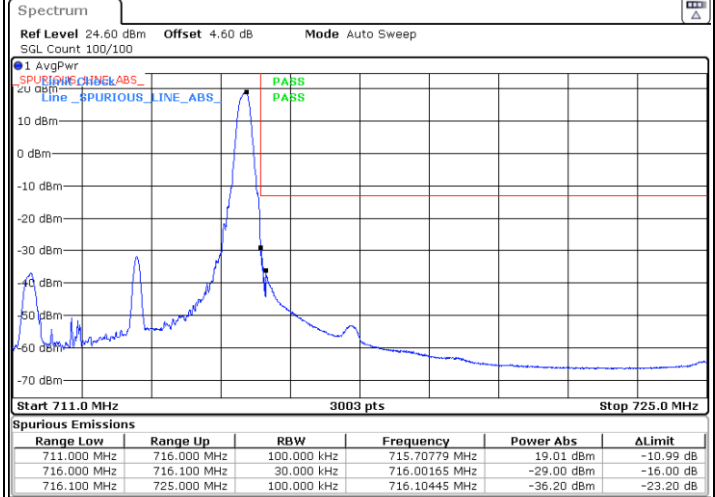


LTE Band 17 / 5MHz / 64QAM

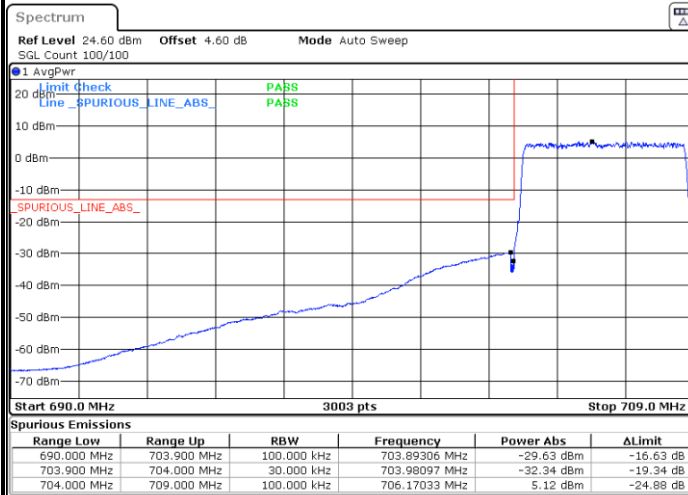
Lowest Band Edge / 1RB



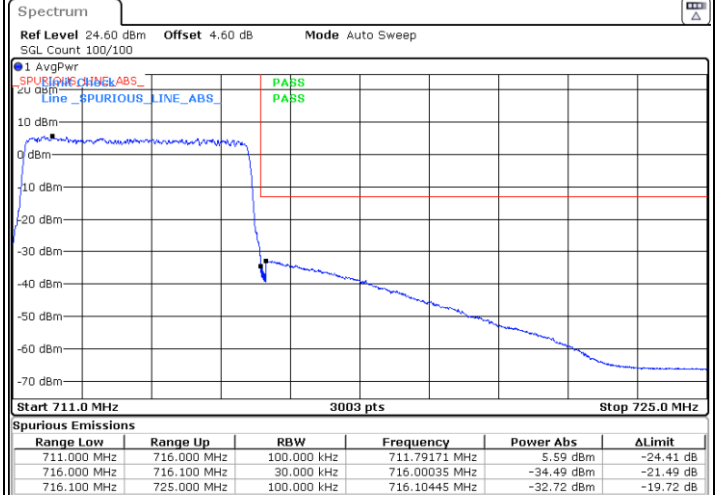
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



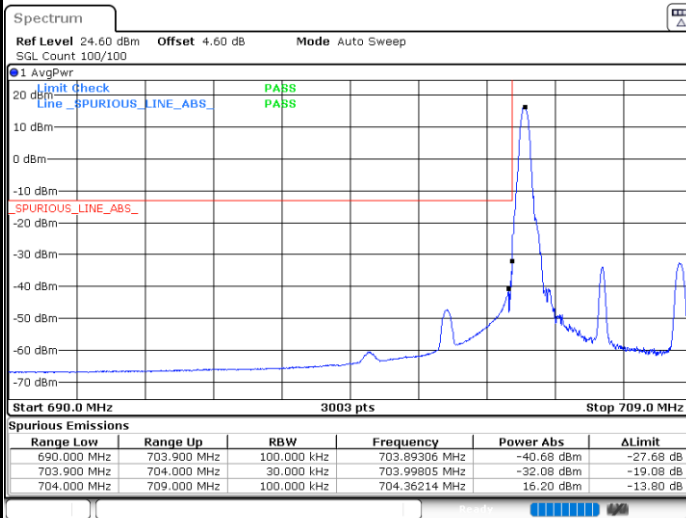
Highest Band Edge / Full RB



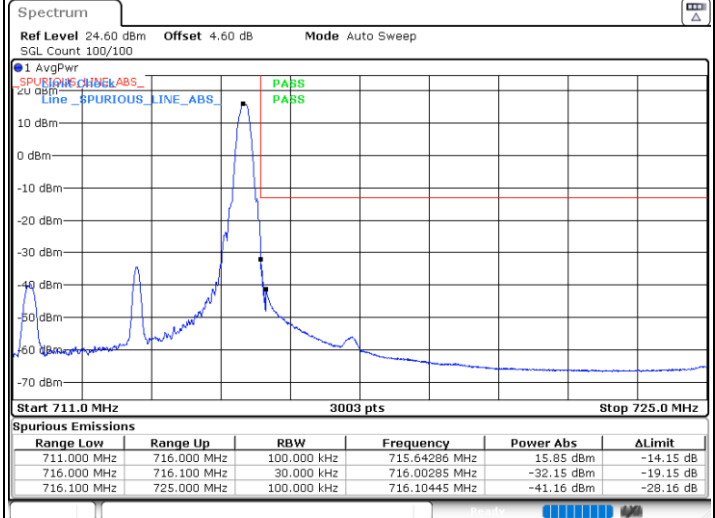


LTE Band 17 / 5MHz / 256QAM

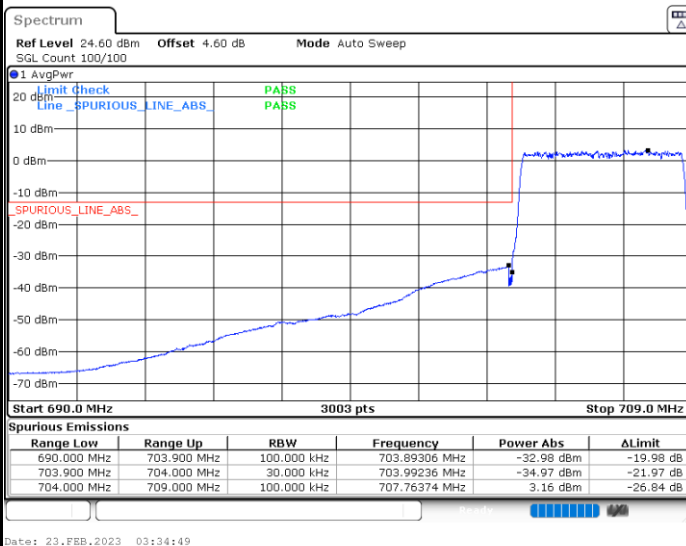
Lowest Band Edge / 1RB



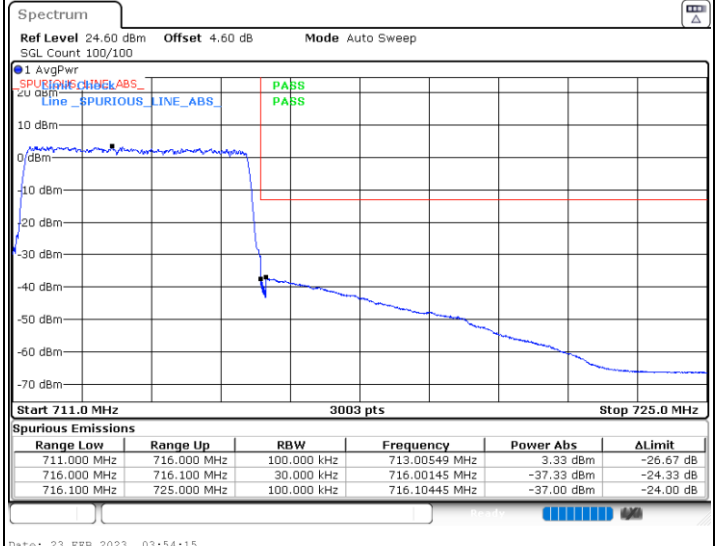
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



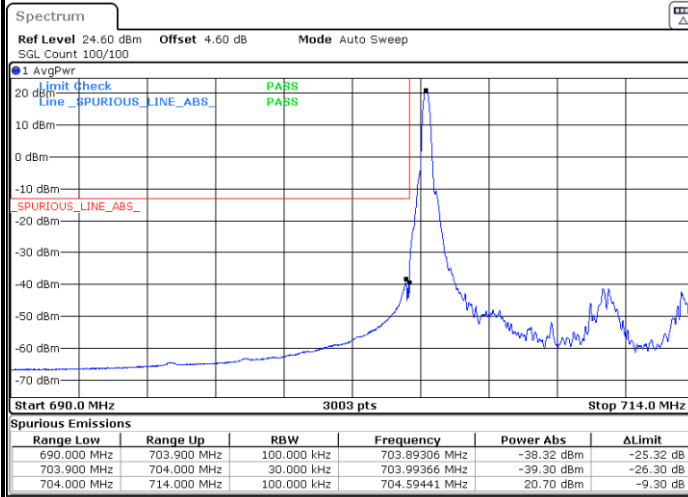
Highest Band Edge / Full RB



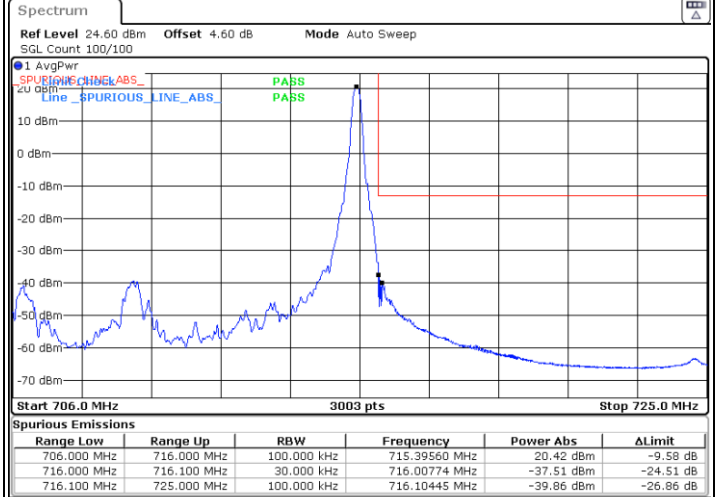


LTE Band 17 / 10MHz / QPSK

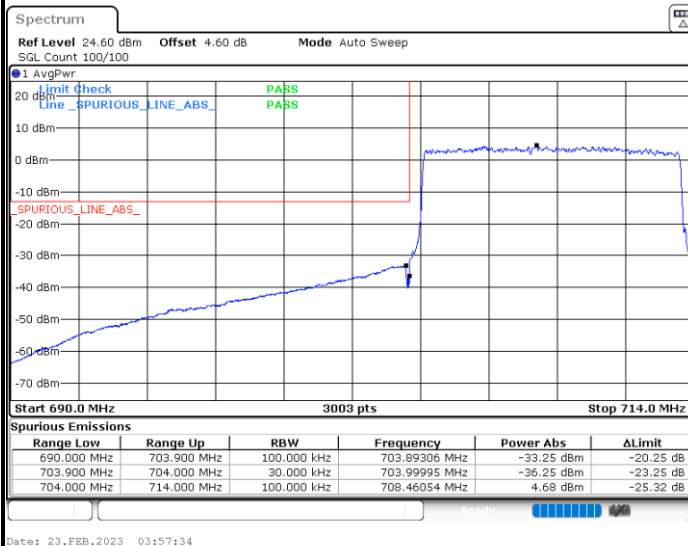
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

