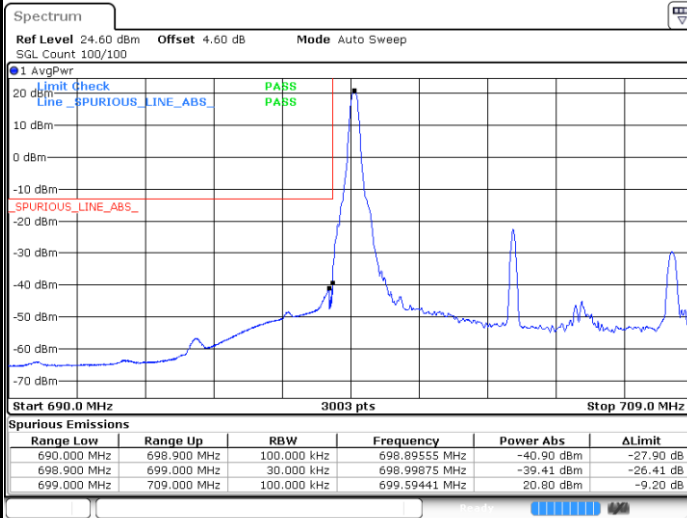


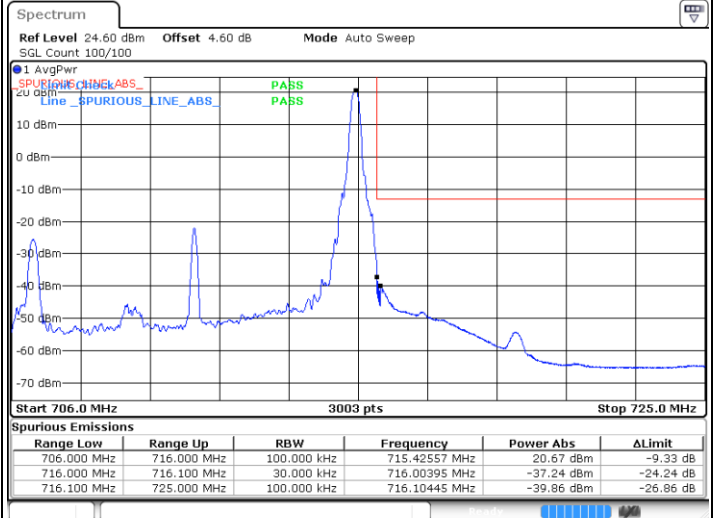


LTE Band 12 / 10MHz / QPSK

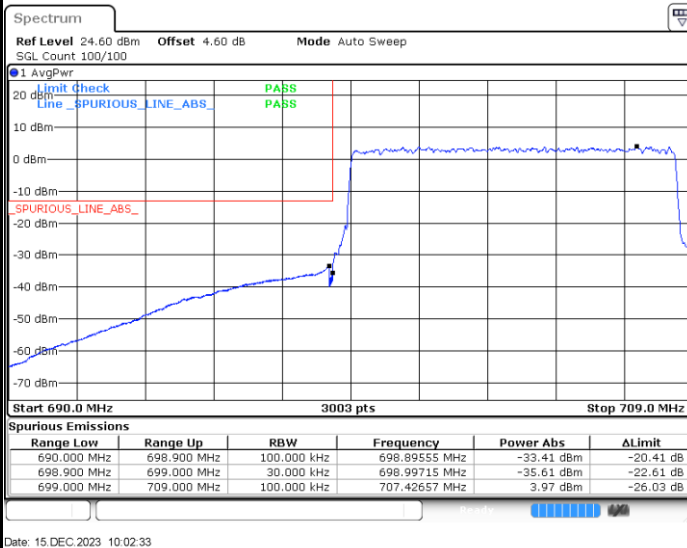
Lowest Band Edge / 1 RB



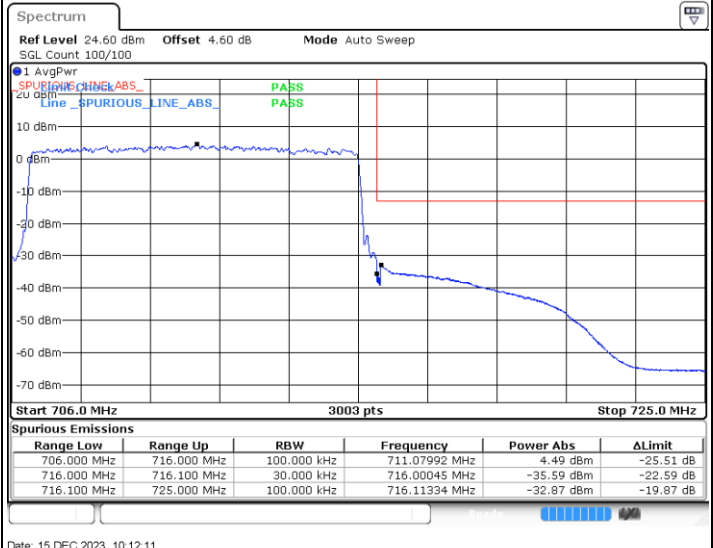
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



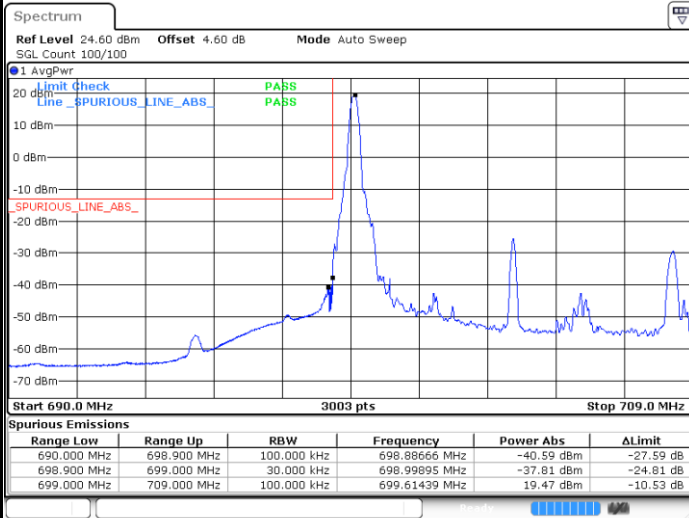
Highest Band Edge / Full RB



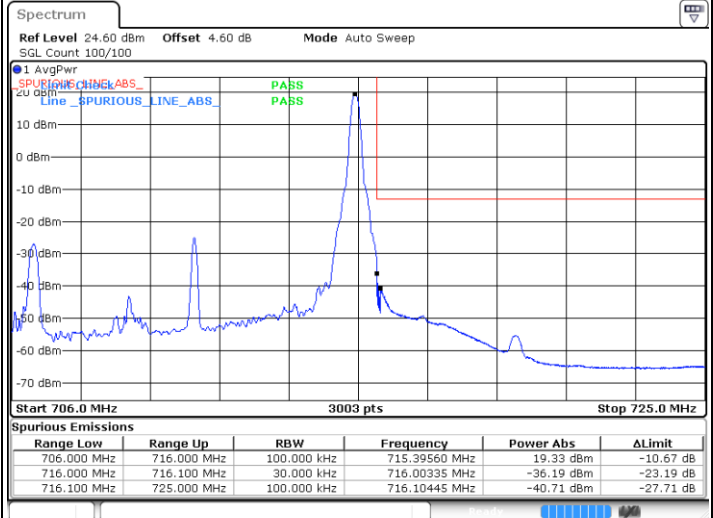


LTE Band 12 / 10MHz / 16QAM

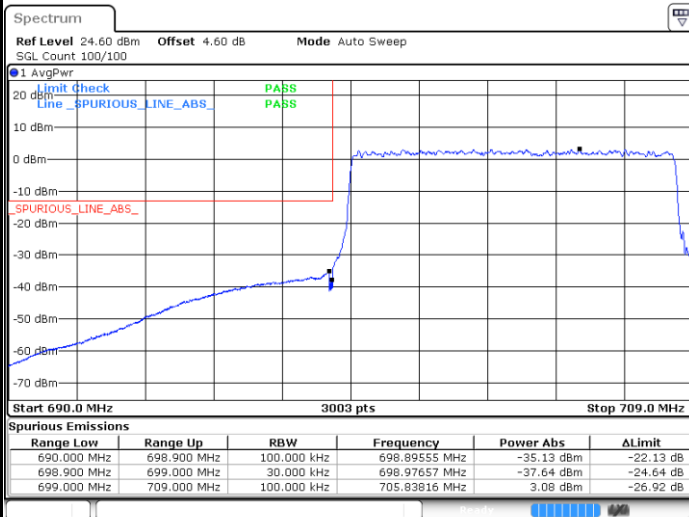
Lowest Band Edge / 1 RB



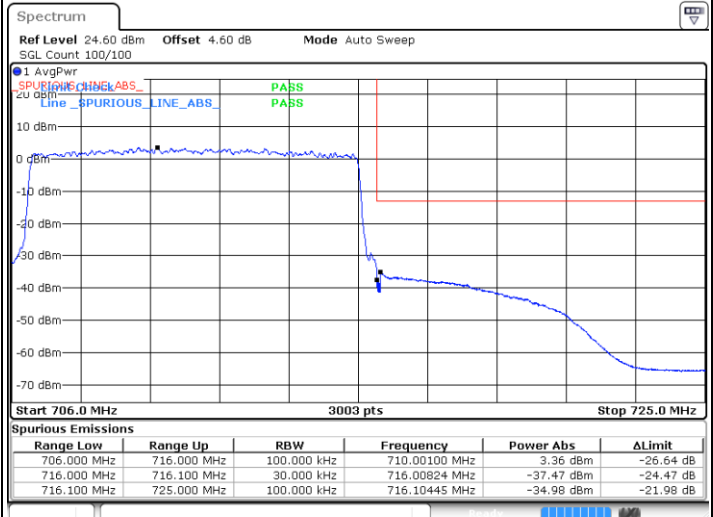
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

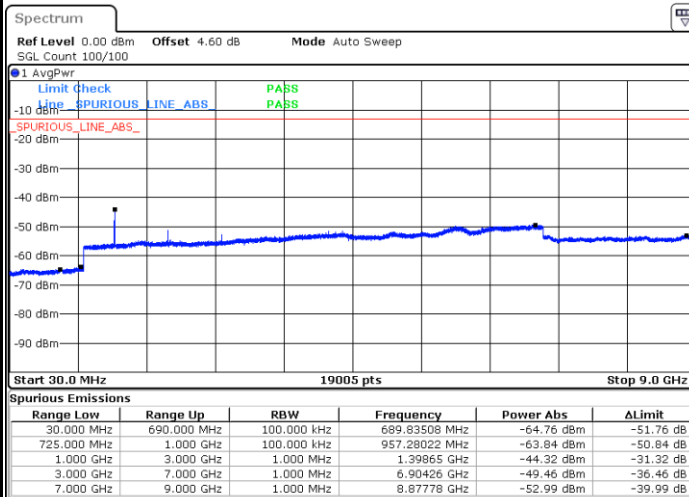




Conducted Spurious Emission

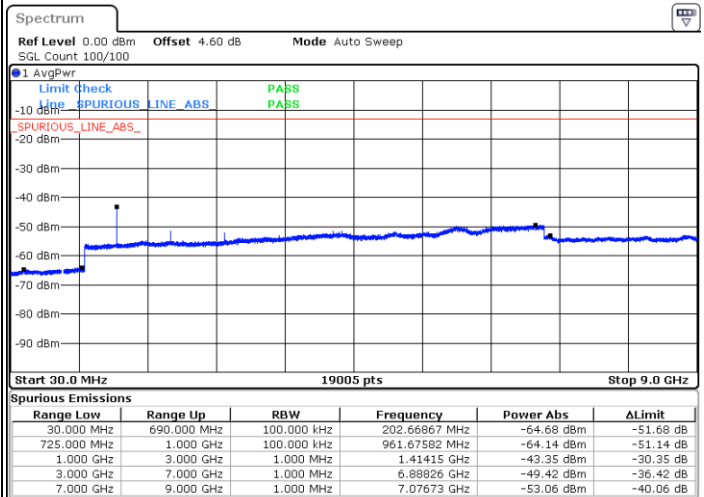
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



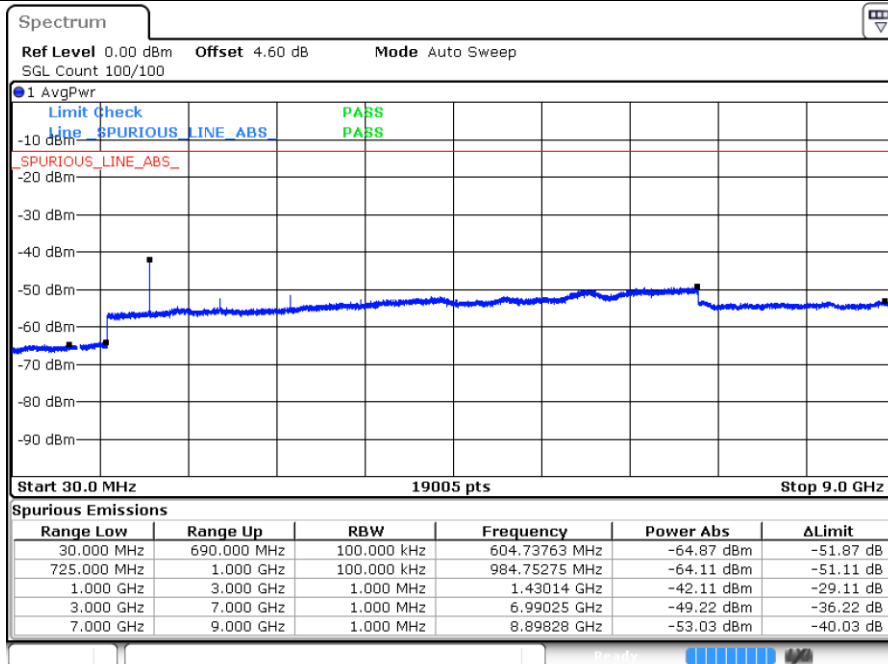
Date: 15 DEC 2023 09:00:50

Middle Channel / QPSK



Date: 15 DEC 2023 09:09:52

Highest Channel / QPSK



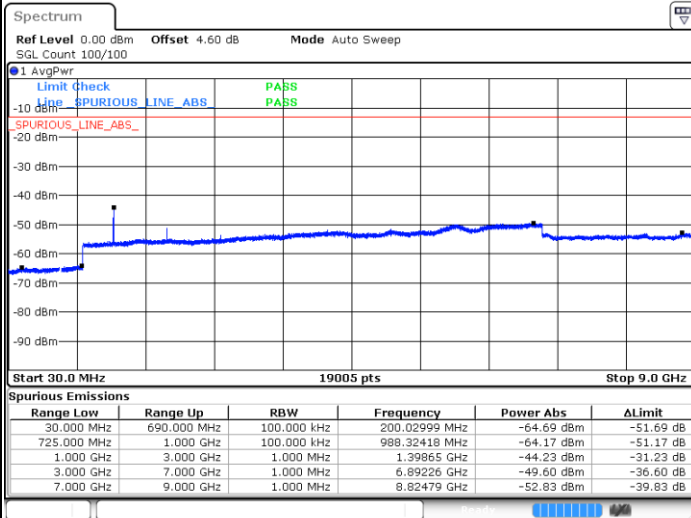
Date: 15 DEC 2023 09:11:52



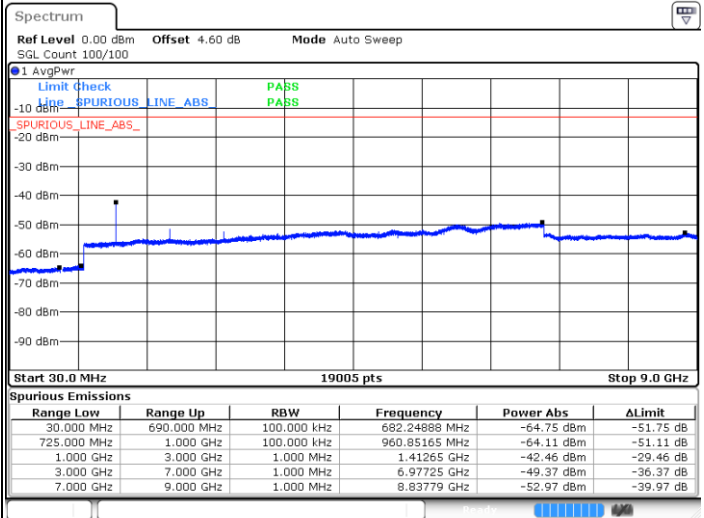
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

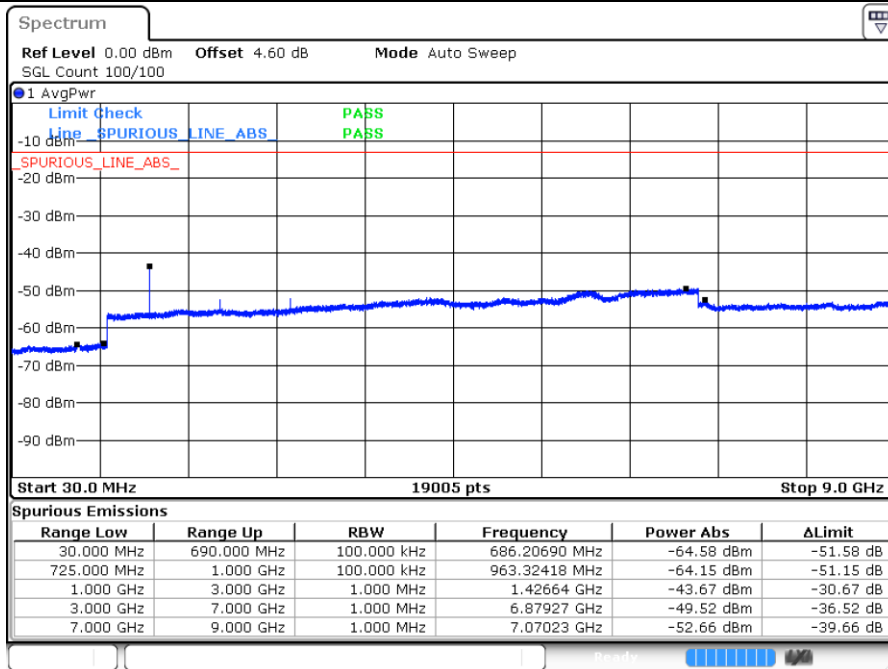


Date: 15 DEC 2023 09:19:31



Date: 15 DEC 2023 09:28:33

Highest Channel / QPSK



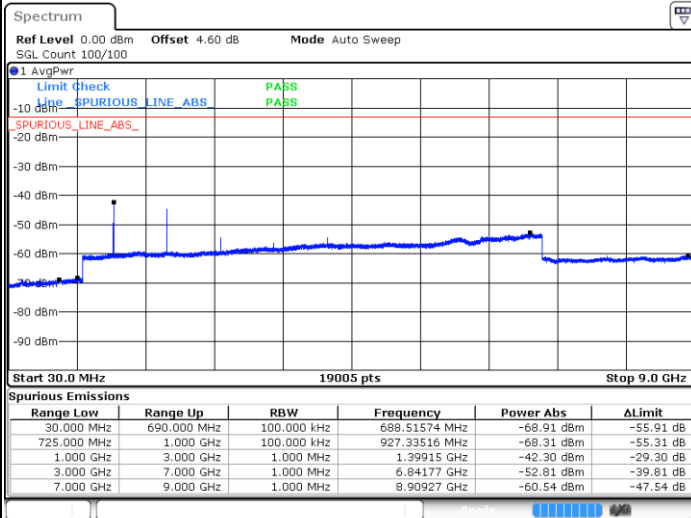
Date: 15 DEC 2023 09:30:33



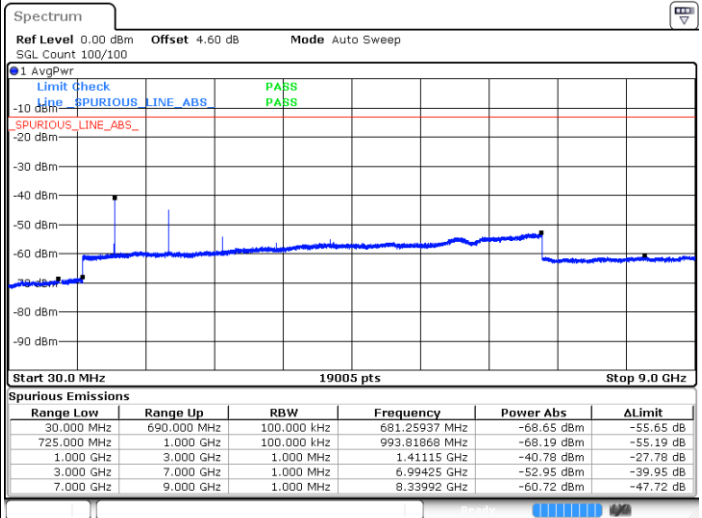
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

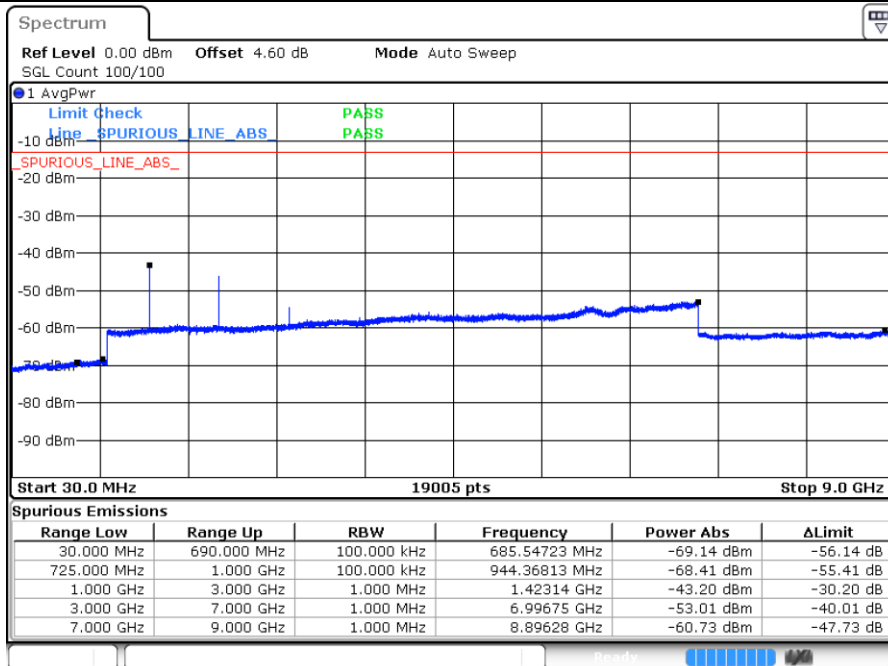


Date: 15 DEC.2023 09:38:12



Date: 15 DEC.2023 09:47:15

Highest Channel / QPSK



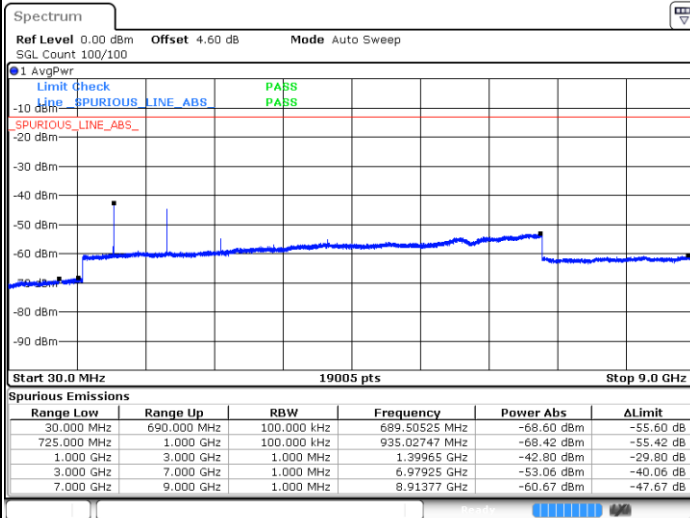
Date: 15 DEC.2023 09:49:15



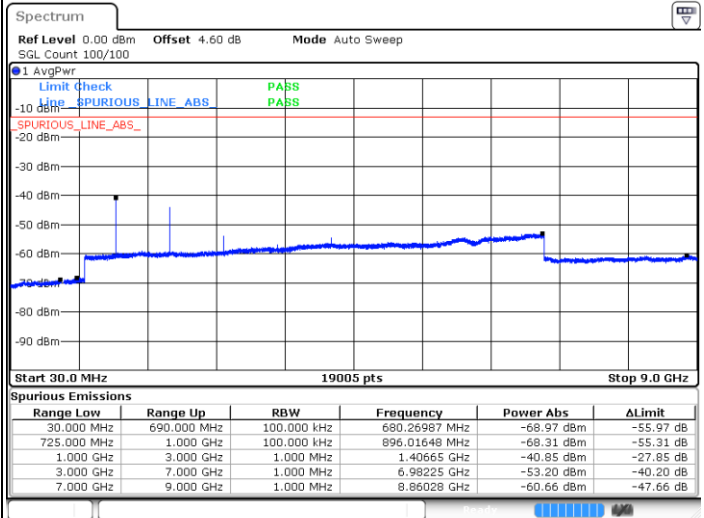
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

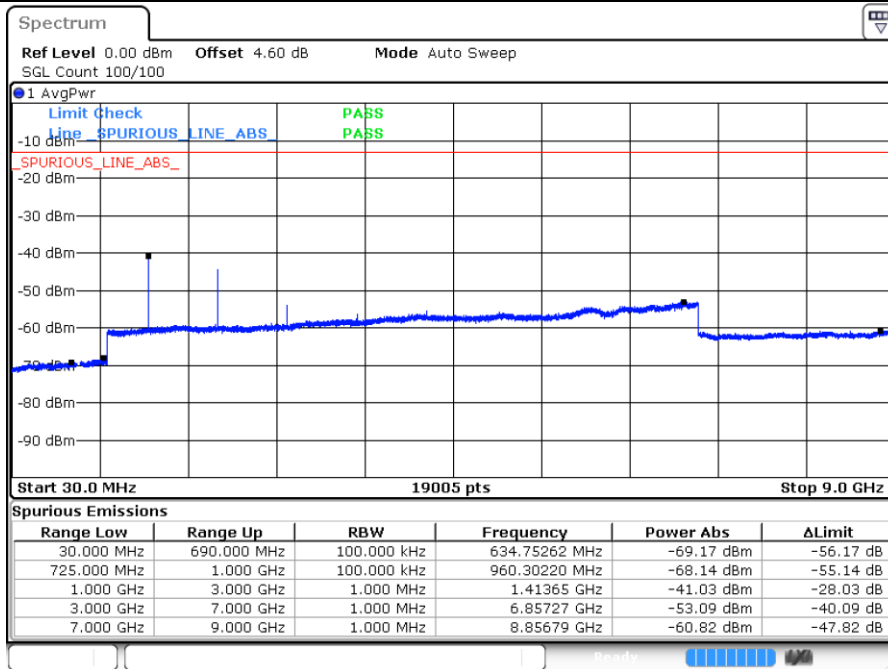


Date: 15 DEC.2023 09:56:55



Date: 15 DEC.2023 10:04:32

Highest Channel / QPSK



Date: 15 DEC.2023 10:06:32

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	0.0037	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0054	
0	Normal Voltage	0.0031	
-10	Normal Voltage	0.0029	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0046	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0018	
20	Minimum Voltage	0.0009	

Note:

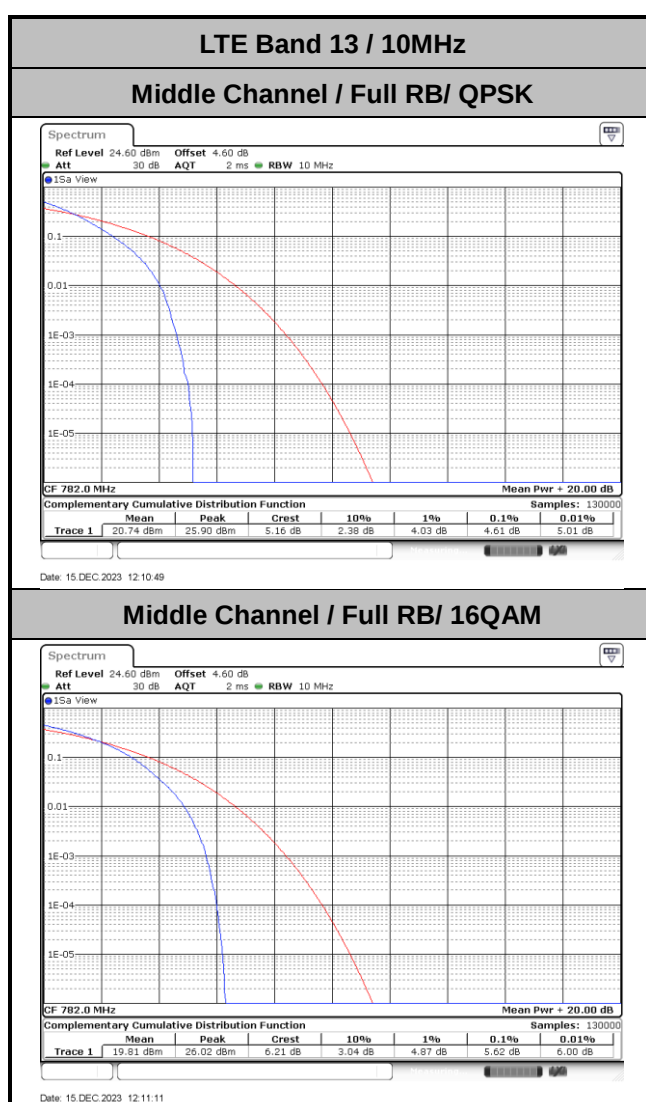
1. Normal Voltage =13 V. ; Minimum Voltage =12 V. ; Maximum Voltage =30 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

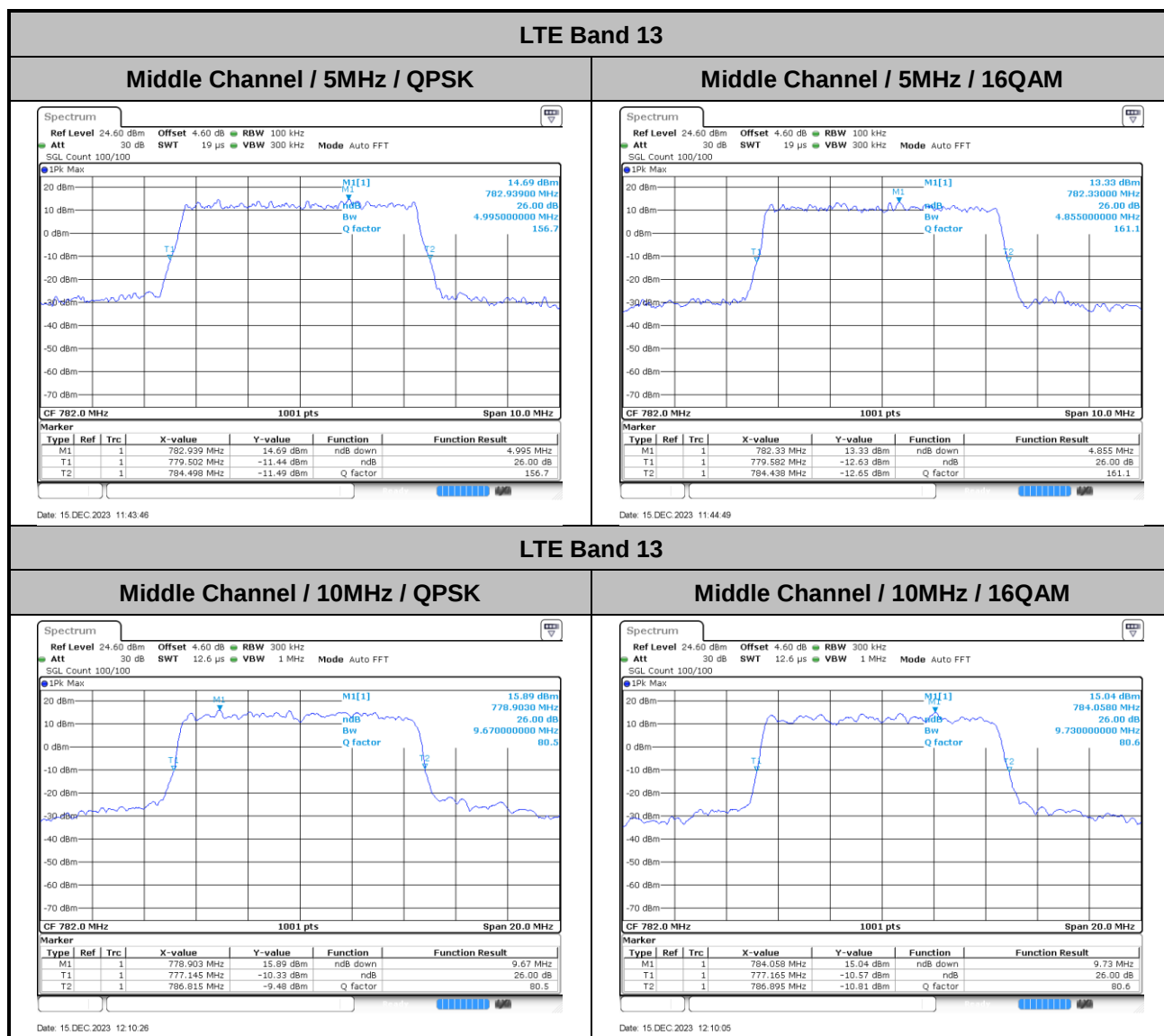
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.61	5.62	PASS



**26dB Bandwidth**

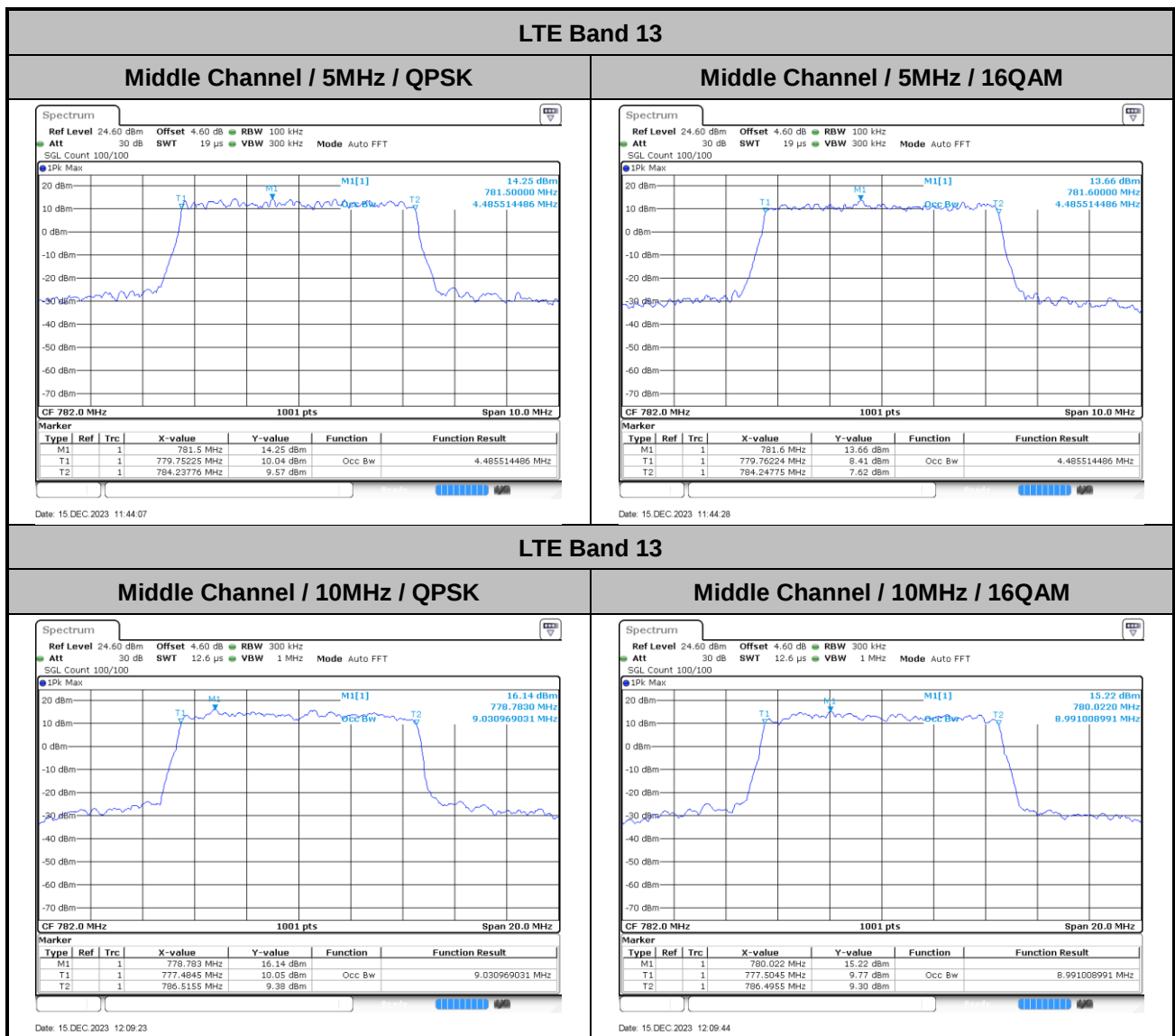
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	5.00	4.86
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.67	9.73





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	8.99

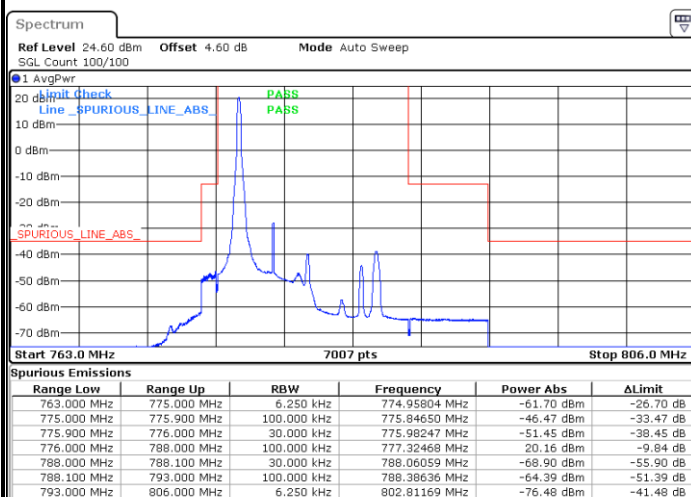




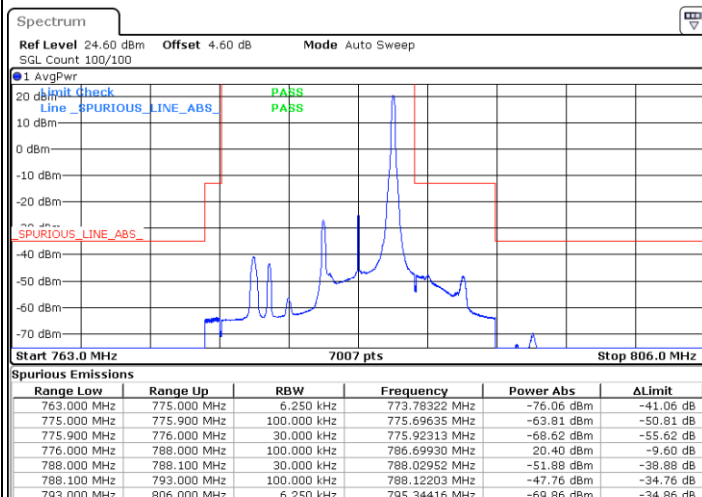
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

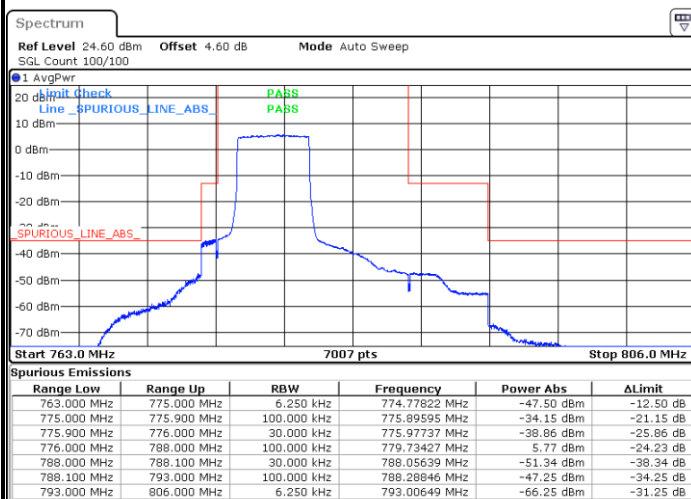
Lowest Band Edge / 1 RB



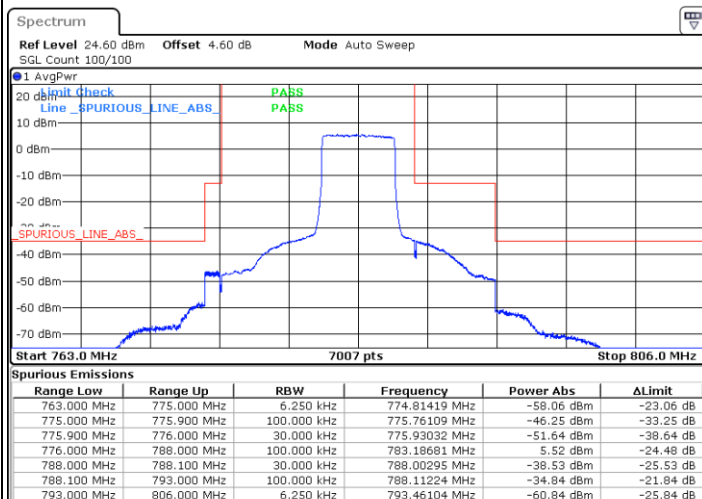
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



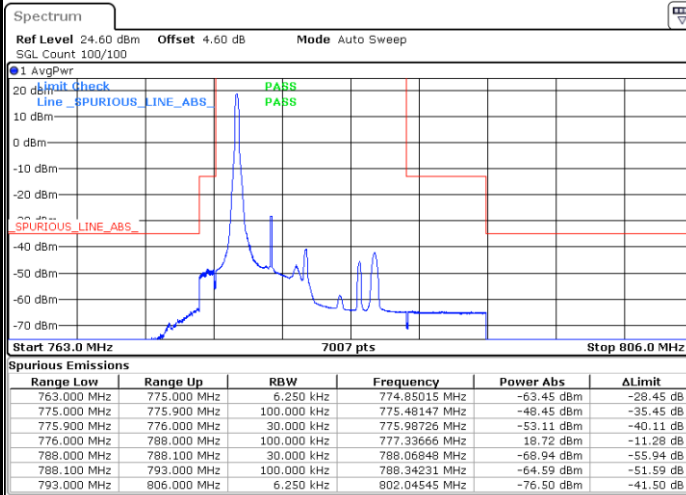
Highest Band Edge / Full RB





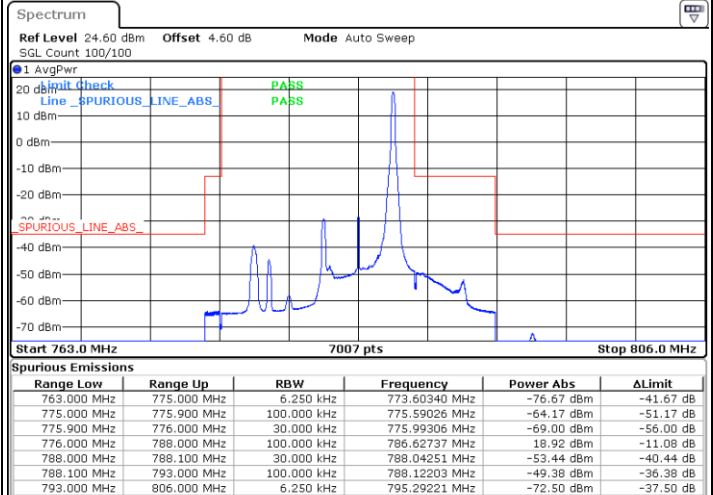
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



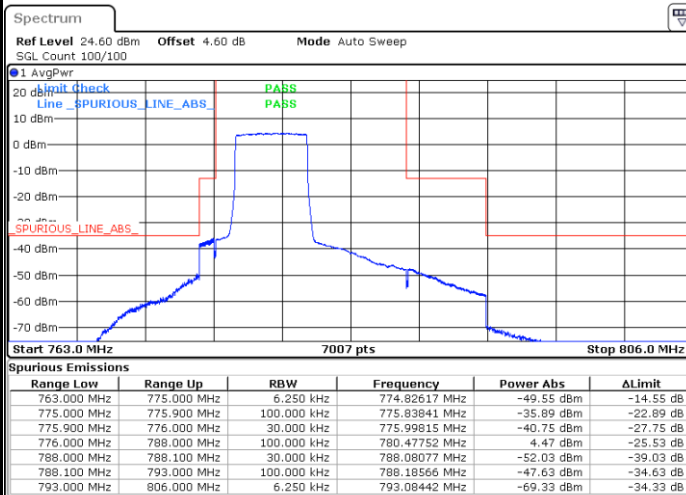
Date: 15 DEC 2023 11:39:46

Highest Band Edge / 1 RB



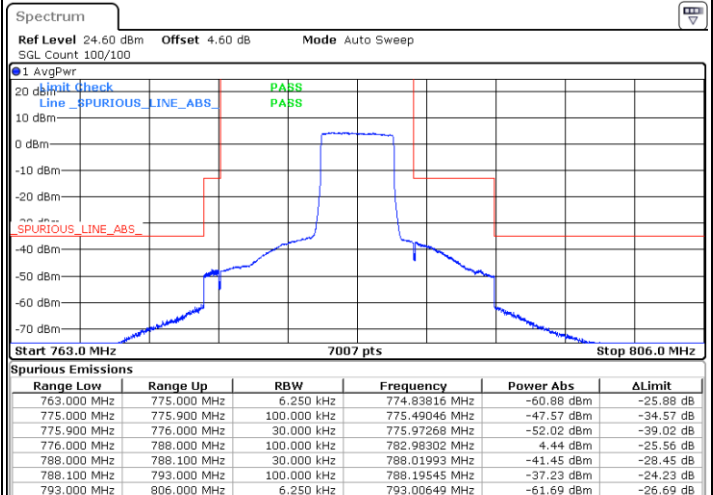
Date: 15 DEC 2023 11:52:28

Lowest Band Edge / Full RB



Date: 15 DEC 2023 11:41:36

Highest Band Edge / Full RB

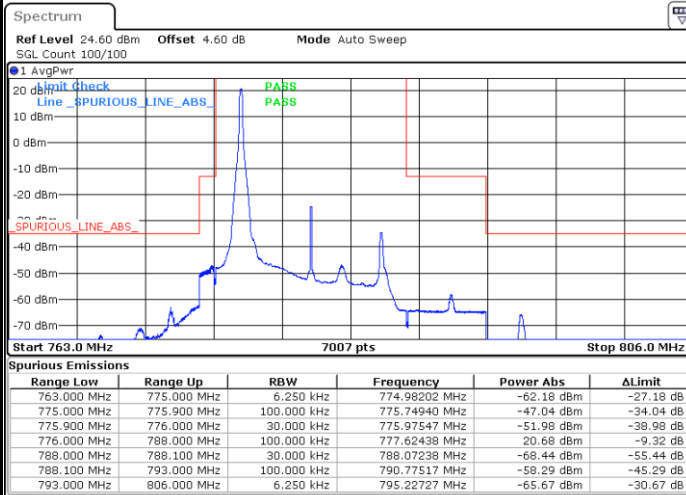


Date: 15 DEC 2023 11:54:17



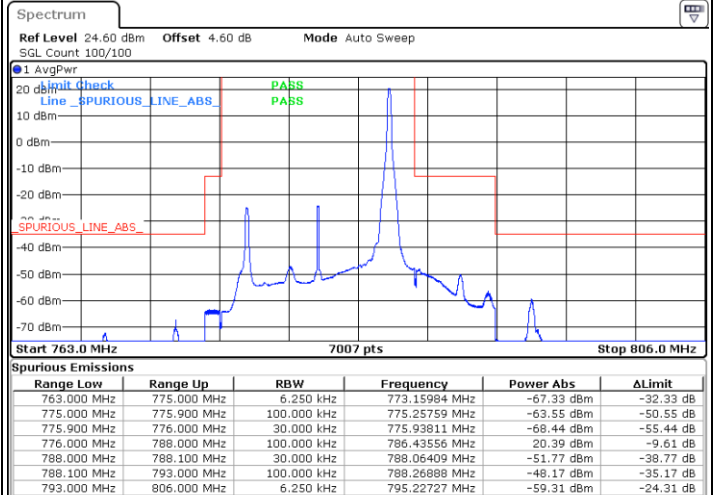
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



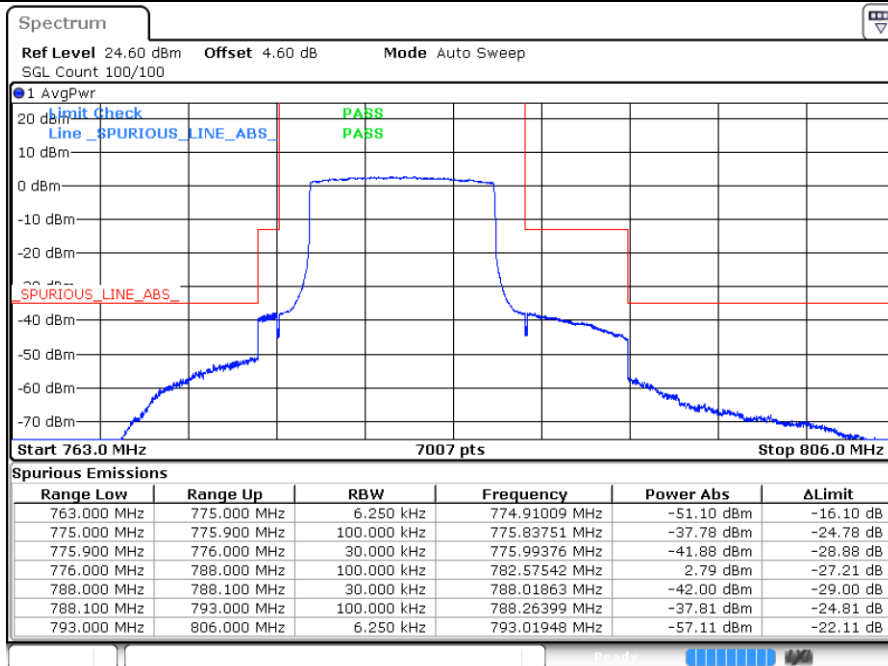
Date: 15.DEC.2023 11:59:56

middle Band Edge / 1 RB



Date: 15.DEC.2023 12:05:24

Middle Band Edge / Full RB

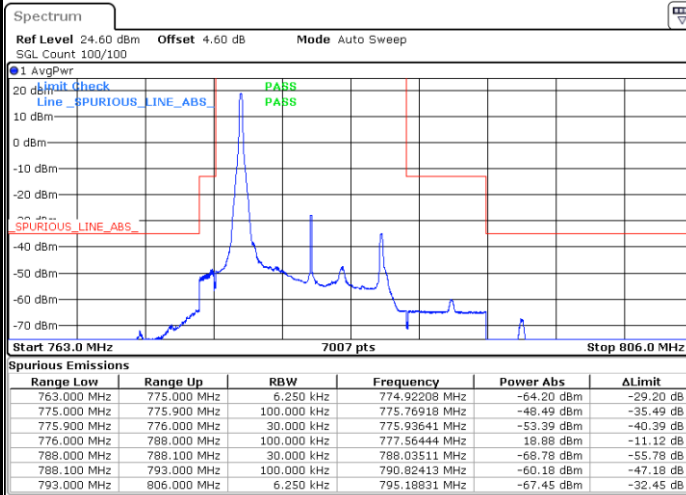


Date: 15.DEC.2023 12:07:13

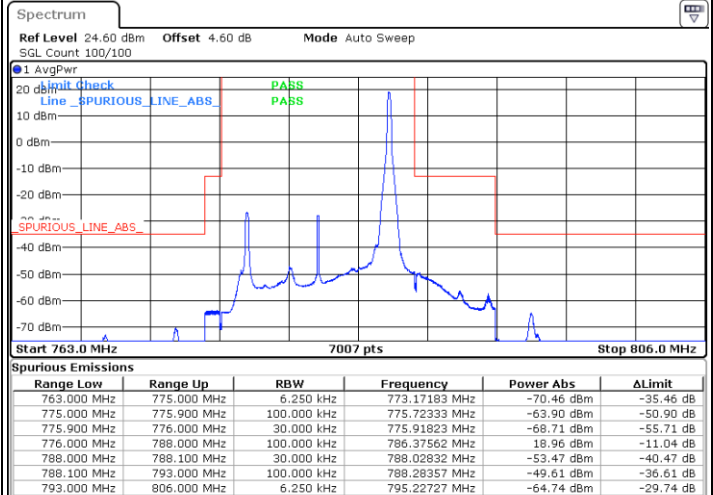


LTE Band 13 / 10MHz / 16QAM

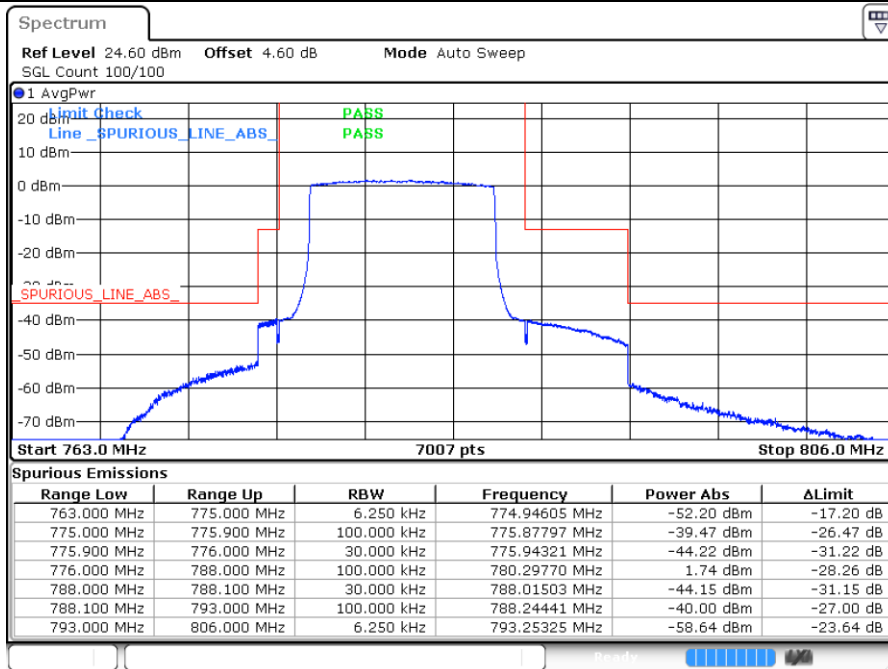
middle Band Edge / 1 RB



middle Band Edge / 1 RB



middle Band Edge / Full RB

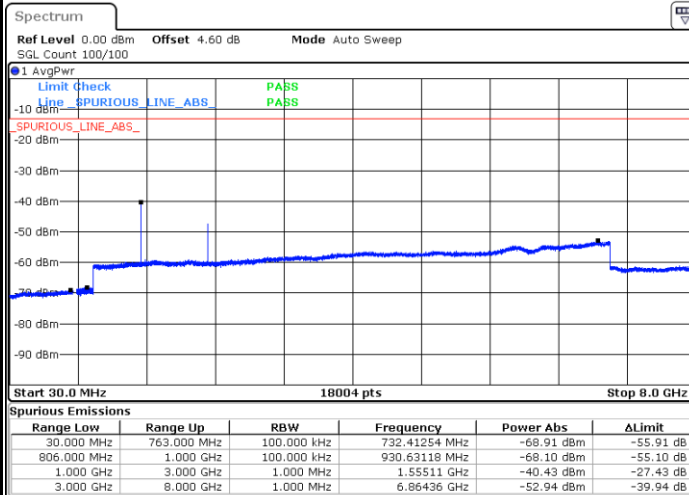




Conducted Spurious Emission

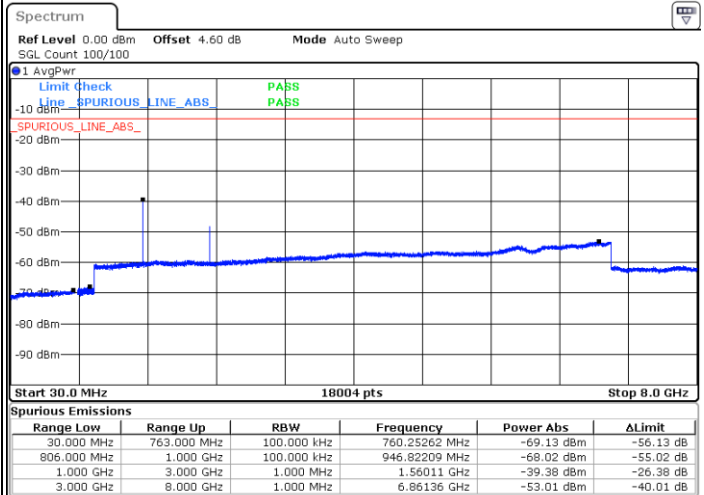
LTE Band 13 / 5MHz

Lowest Channel / QPSK



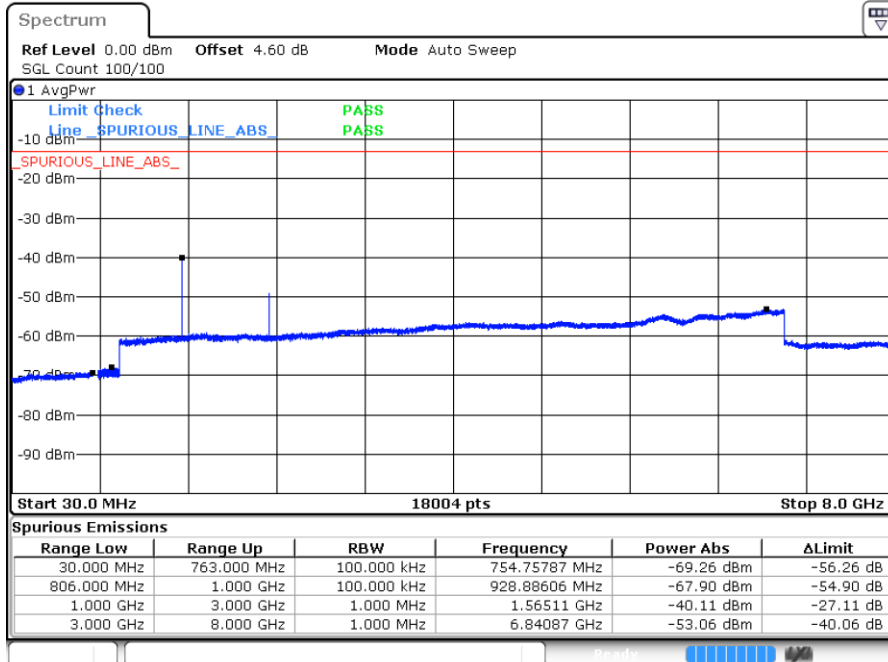
Date: 15 DEC.2023 11:36:06

Middle Channel / QPSK



Date: 15 DEC.2023 11:46:49

Highest Channel / QPSK

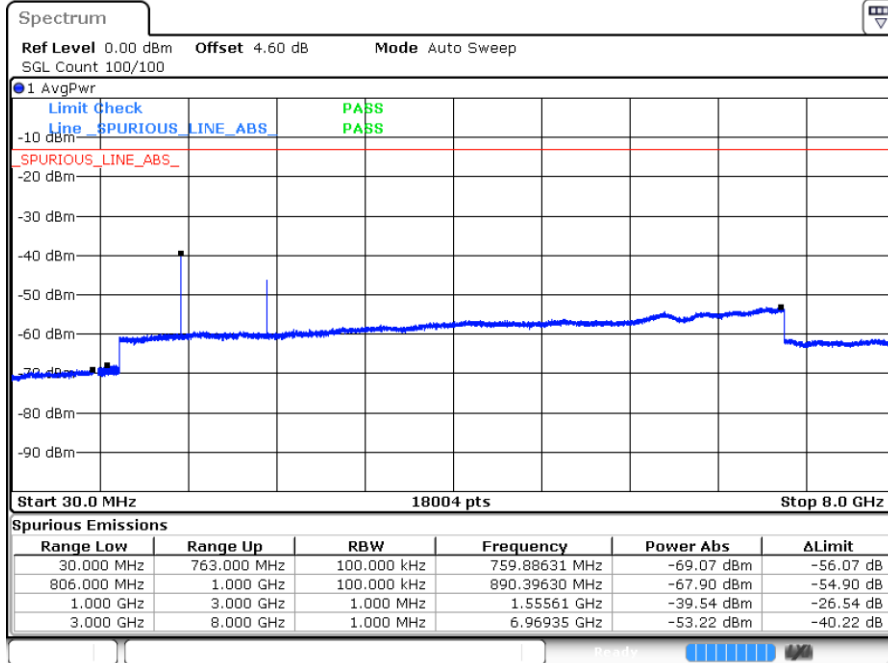


Date: 15 DEC.2023 11:48:48



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 15.DEC.2023 11:58:07

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	0.0051	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0059	
20	Maximum Voltage	0.0066	
20	Normal Voltage	0.0024	
20	Minimum Voltage	0.0005	

Note:

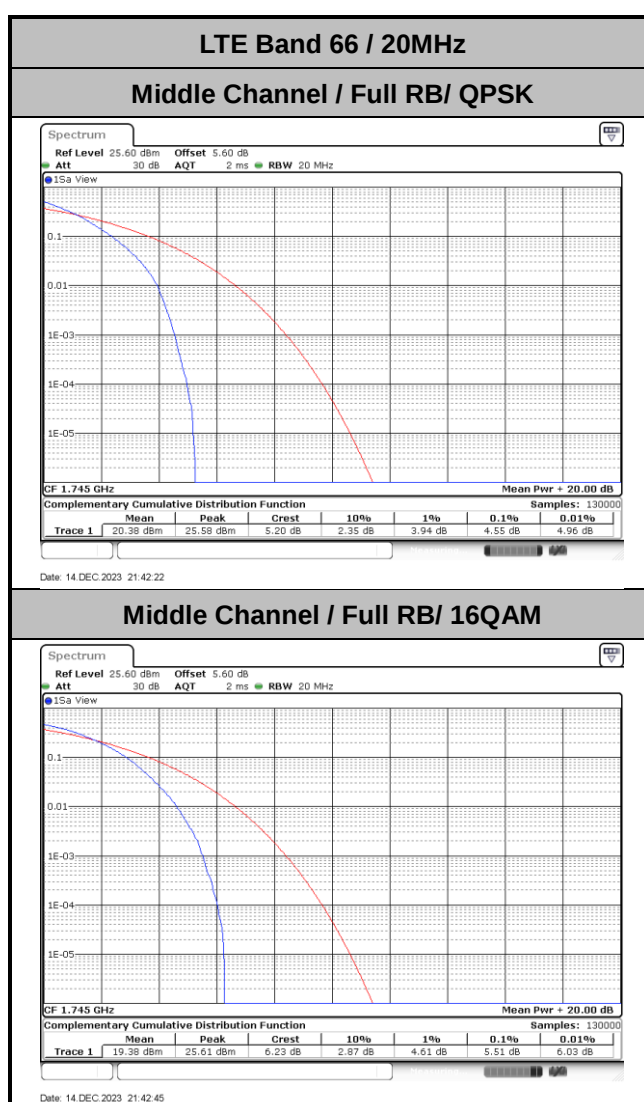
1. Normal Voltage =13 V. ; Minimum Voltage =12V. ; Maximum Voltage =30 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 66

Peak-to-Average Ratio

Mode	LTE Band 66 / 20MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	4.55	5.51	PASS



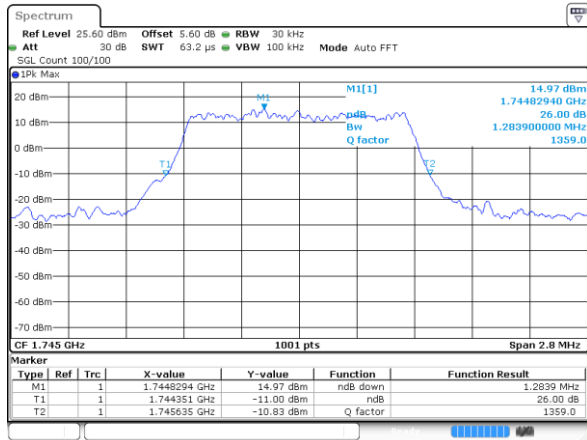
**26dB Bandwidth**

Mode	LTE Band 66 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.28	1.27
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3.02	3.02
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.89	4.89
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.73	9.67
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.45	14.39
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.06	18.94



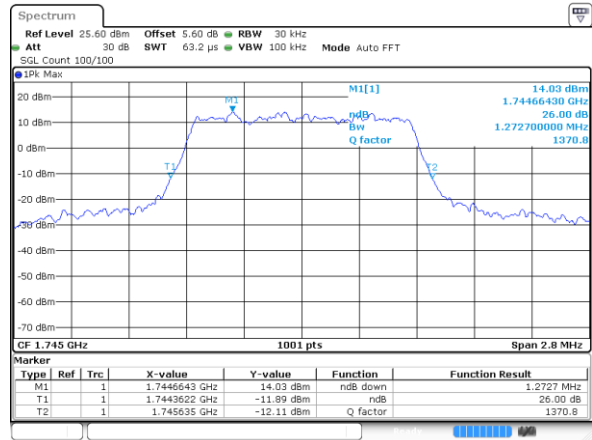
LTE Band 66

Middle Channel / 1.4MHz / QPSK



Date: 14 DEC 2023 20:14:28

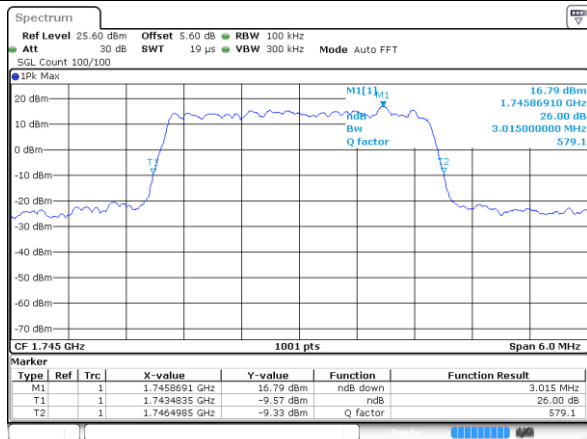
Middle Channel / 1.4MHz / 16QAM



Date: 14 DEC 2023 20:14:50

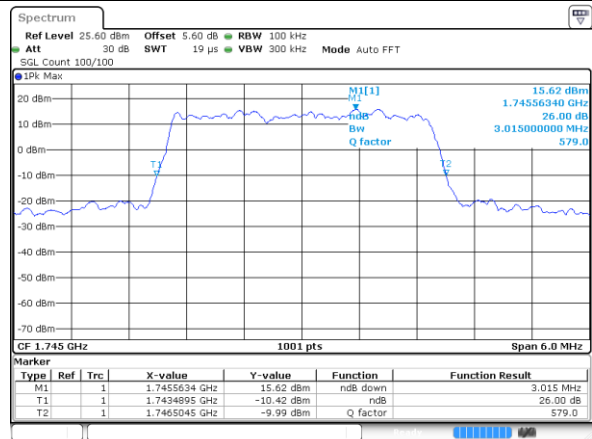
LTE Band 66

Middle Channel / 3MHz / QPSK



Date: 14 DEC 2023 20:33:12

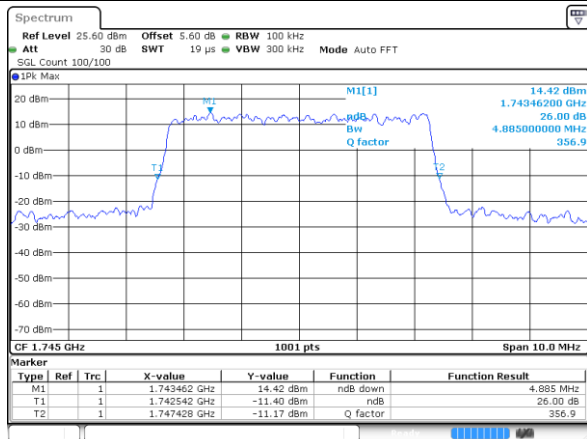
Middle Channel / 3MHz / 16QAM



Date: 14 DEC 2023 20:33:34

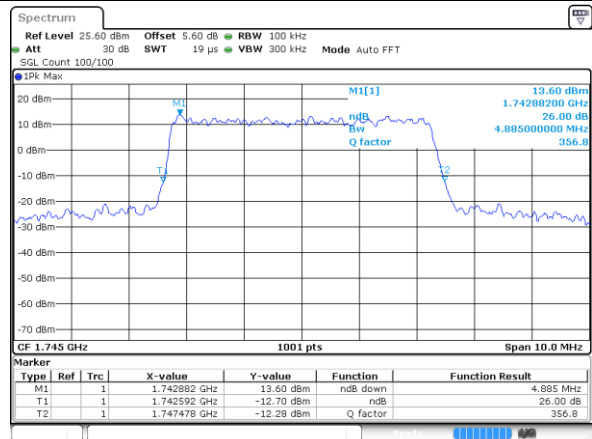
LTE Band 66

Middle Channel / 5MHz / QPSK



Date: 14 DEC 2023 20:54:21

Middle Channel / 5MHz / 16QAM

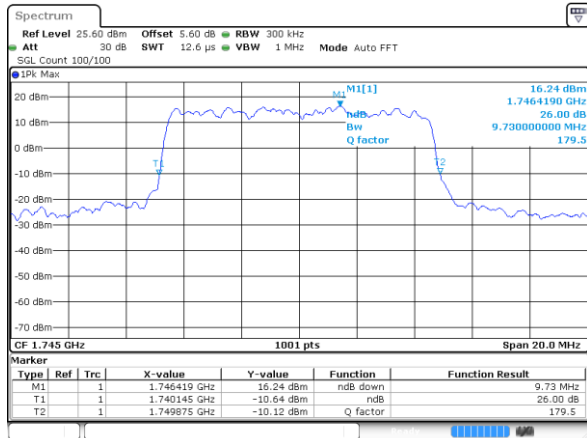


Date: 14 DEC 2023 20:54:42



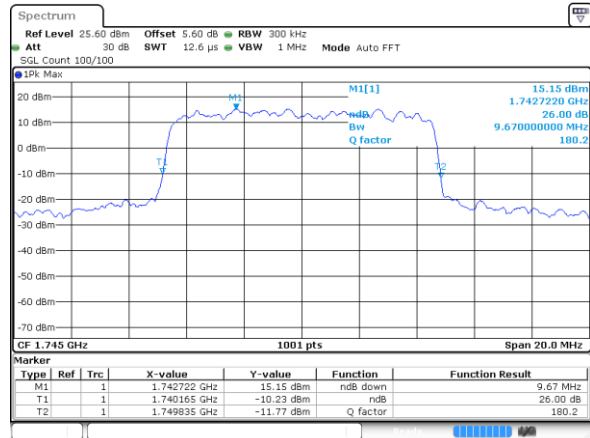
LTE Band 66

Middle Channel / 10MHz / QPSK



Date: 14 DEC 2023 21:07:45

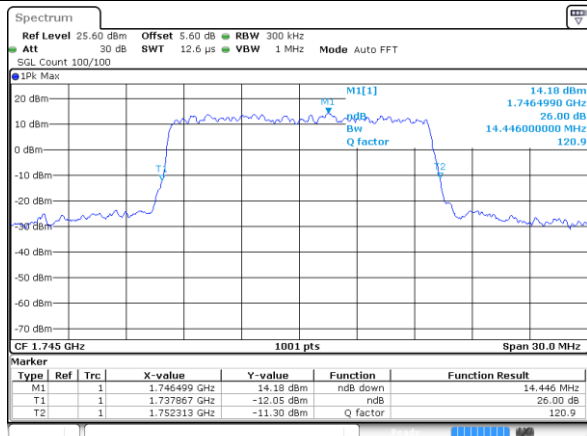
Middle Channel / 10MHz / 16QAM



Date: 14 DEC 2023 21:08:06

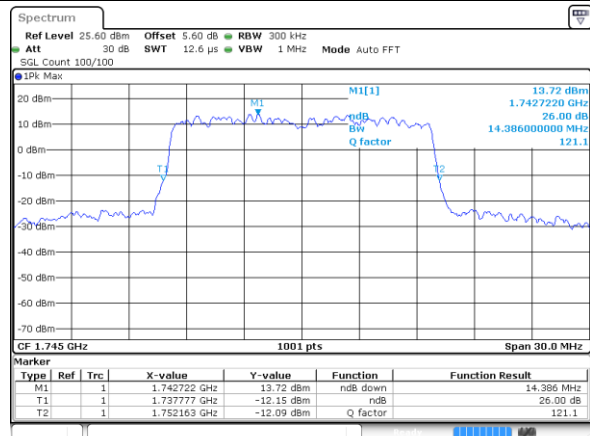
LTE Band 66

Middle Channel / 15MHz / QPSK



Date: 14 DEC 2023 21:21:10

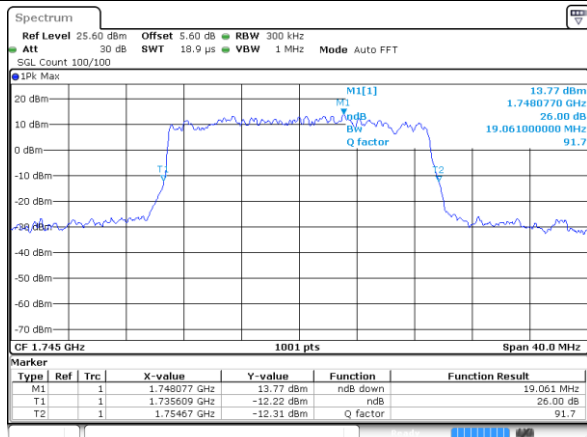
Middle Channel / 15MHz / 16QAM



Date: 14 DEC 2023 21:21:32

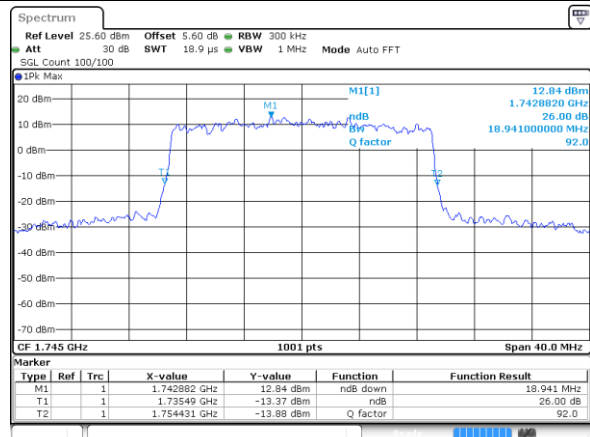
LTE Band 66

Middle Channel / 20MHz / QPSK



Date: 14 DEC 2023 21:41:38

Middle Channel / 20MHz / 16QAM



Date: 14 DEC 2023 21:41:59

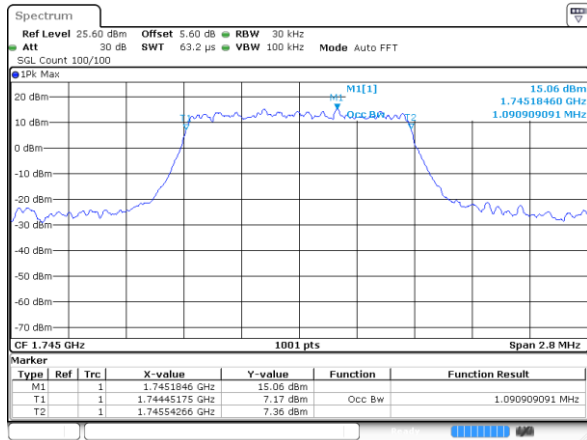
**Occupied Bandwidth**

Mode	LTE Band 66 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.73	2.71
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.48	4.51
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	8.97	8.95
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.43	13.43
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.82	17.78

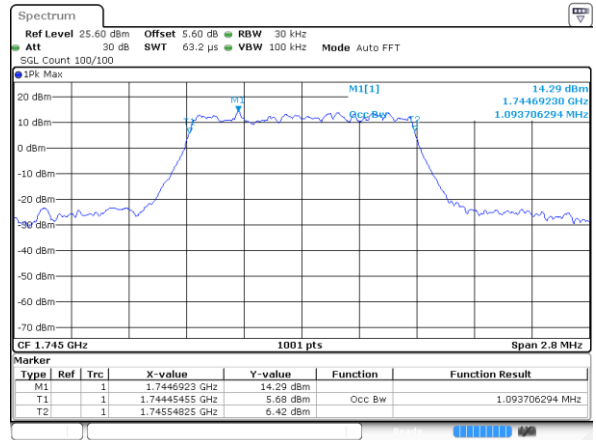


LTE Band 66

Middle Channel / 1.4MHz / QPSK

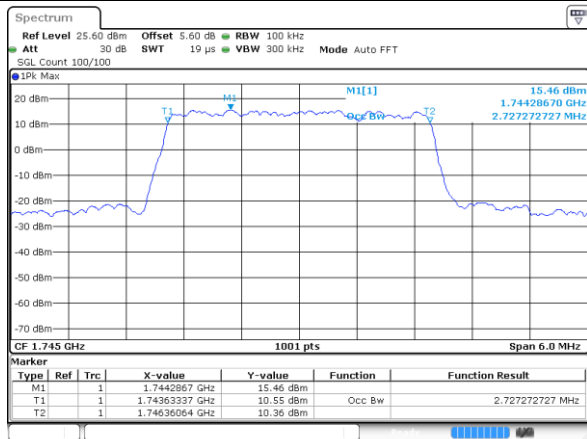


Middle Channel / 1.4MHz / 16QAM

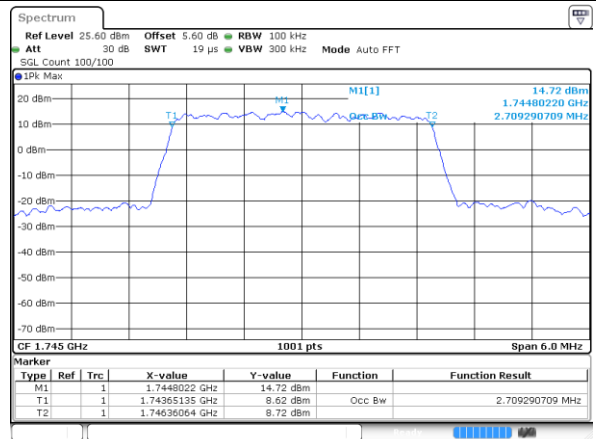


LTE Band 66

Middle Channel / 3MHz / QPSK

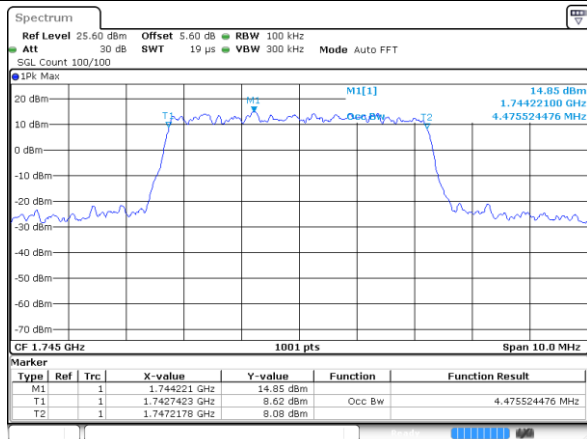


Middle Channel / 3MHz / 16QAM

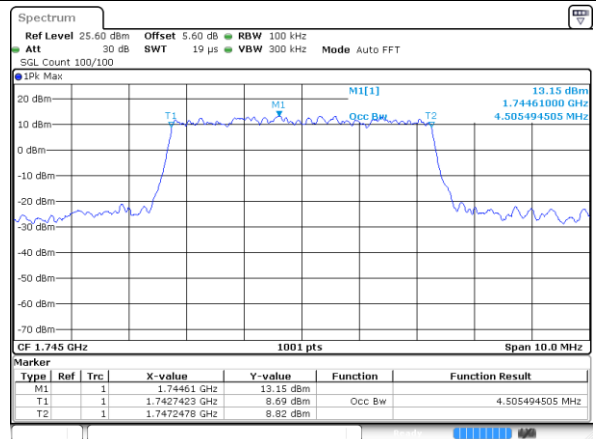


LTE Band 66

Middle Channel / 5MHz / QPSK



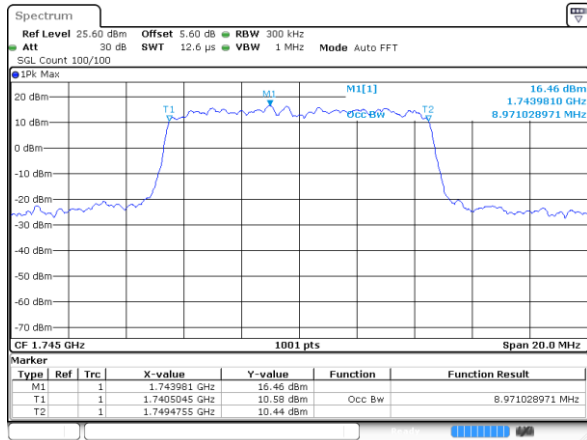
Middle Channel / 5MHz / 16QAM



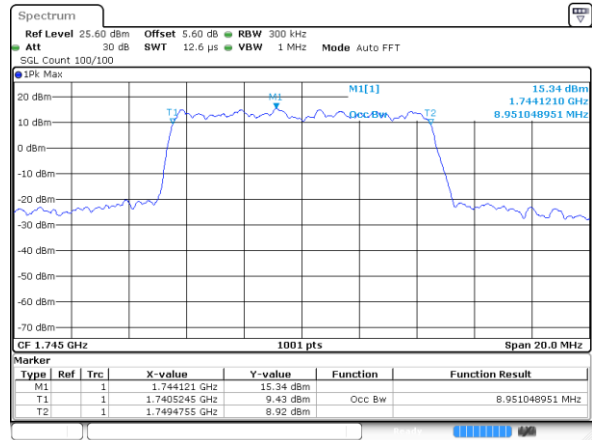


LTE Band 66

Middle Channel / 10MHz / QPSK

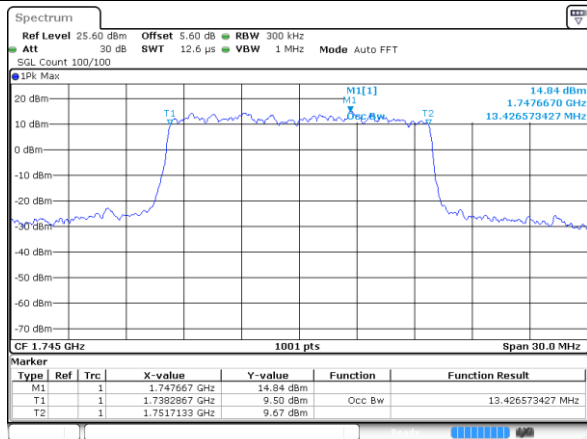


Middle Channel / 10MHz / 16QAM

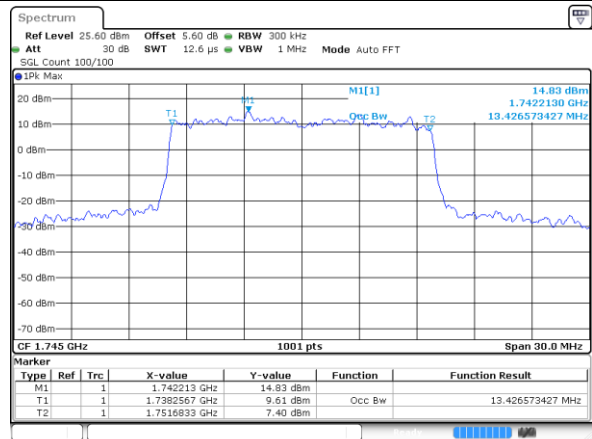


LTE Band 66

Middle Channel / 15MHz / QPSK

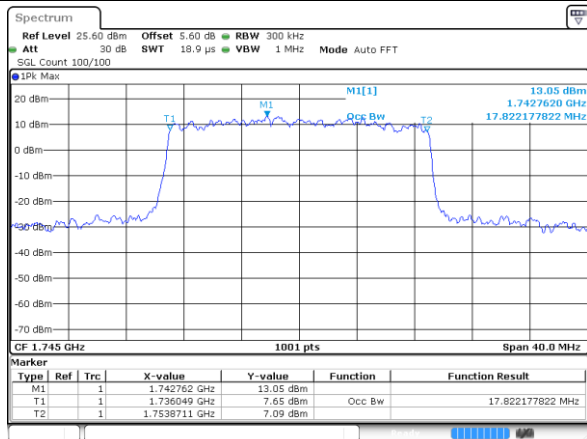


Middle Channel / 15MHz / 16QAM

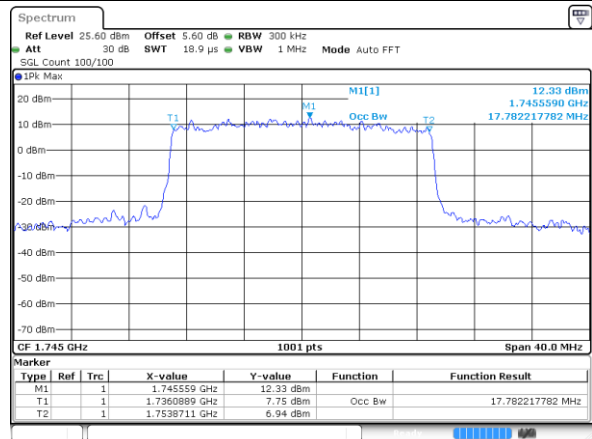


LTE Band 66

Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

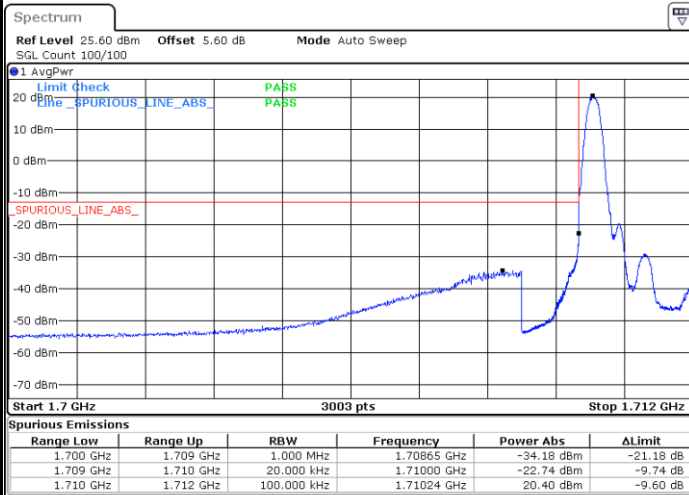




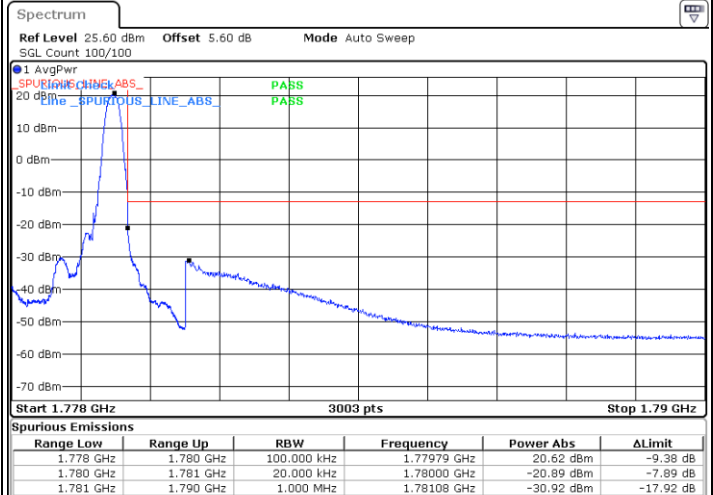
Conducted Band Edge

LTE Band 66 / 1.4MHz / QPSK

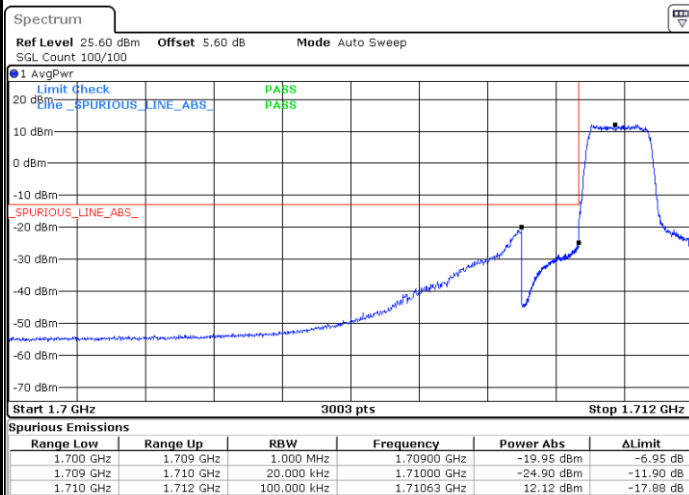
Lowest Band Edge / 1RB



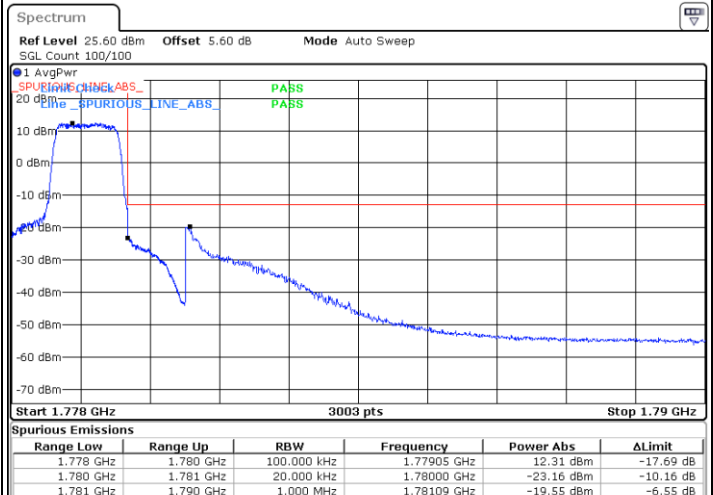
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



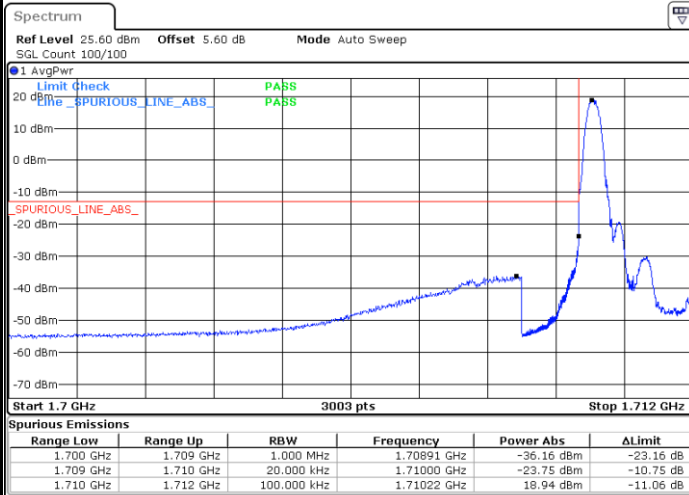
Highest Band Edge / Full RB



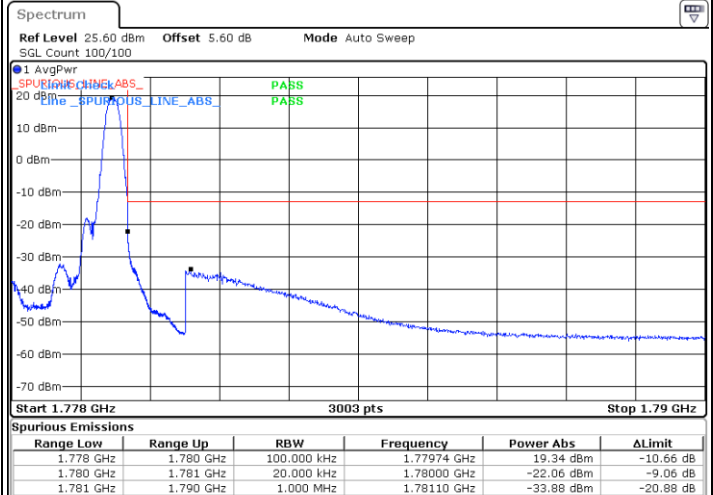


LTE Band 66 / 1.4MHz / 16QAM

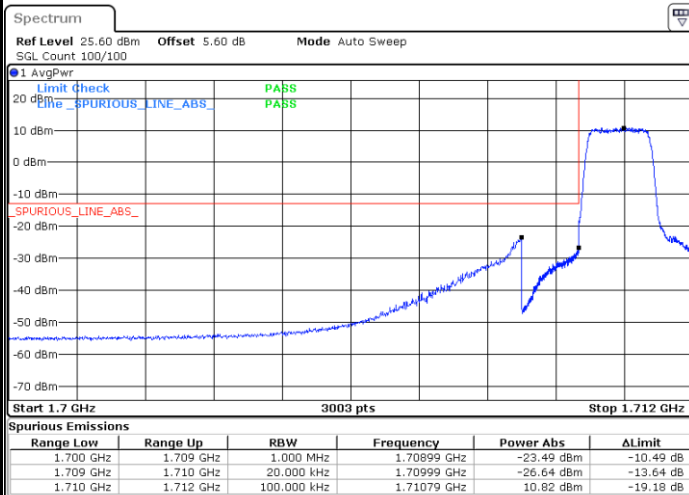
Lowest Band Edge / 1 RB



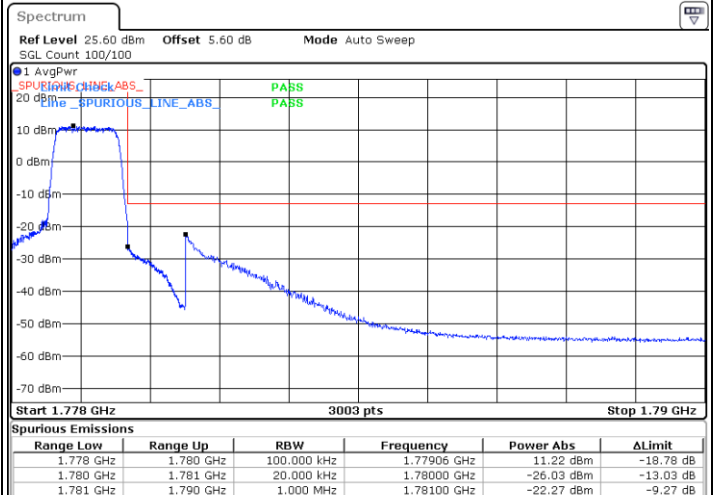
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



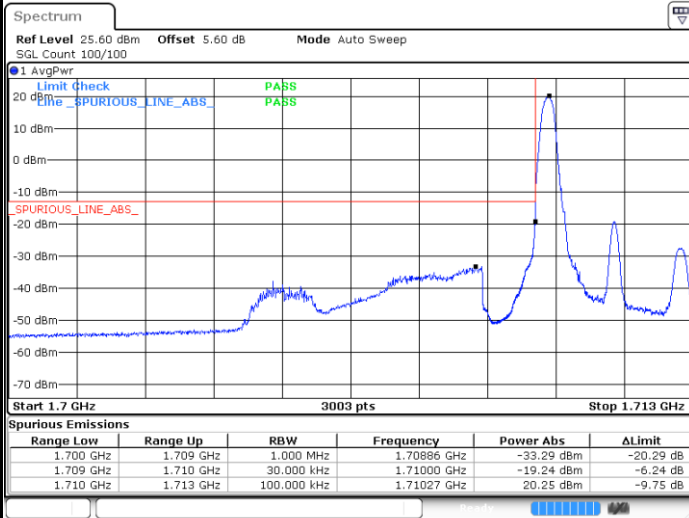
Highest Band Edge / Full RB



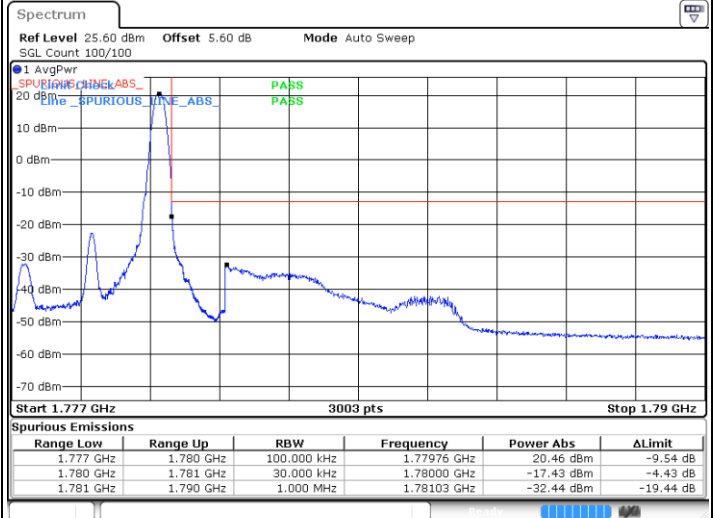


LTE Band 66 / 3MHz / QPSK

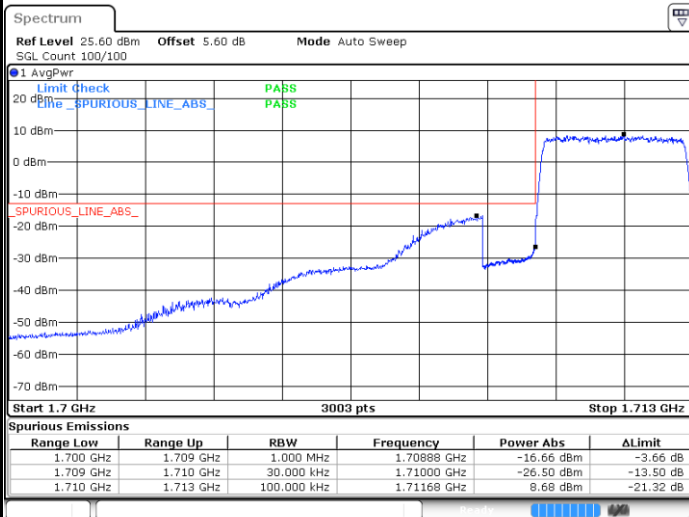
Lowest Band Edge / 1RB



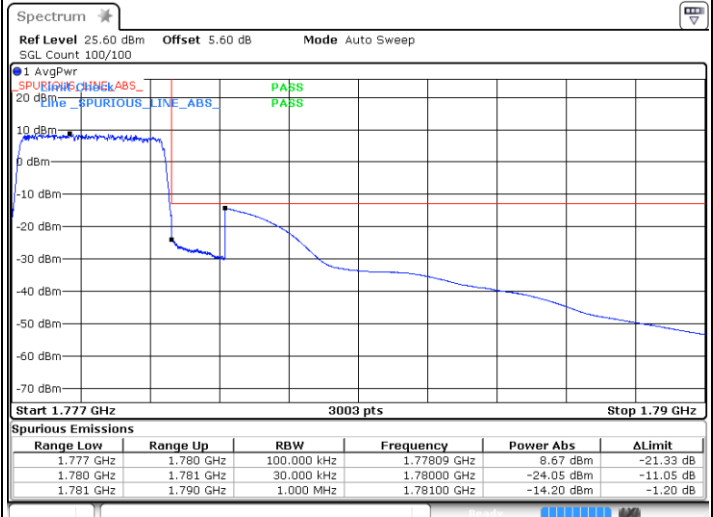
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



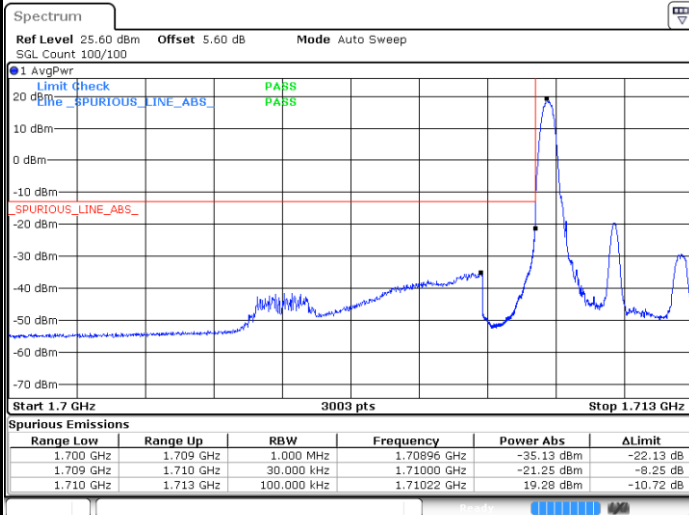
Highest Band Edge / Full RB



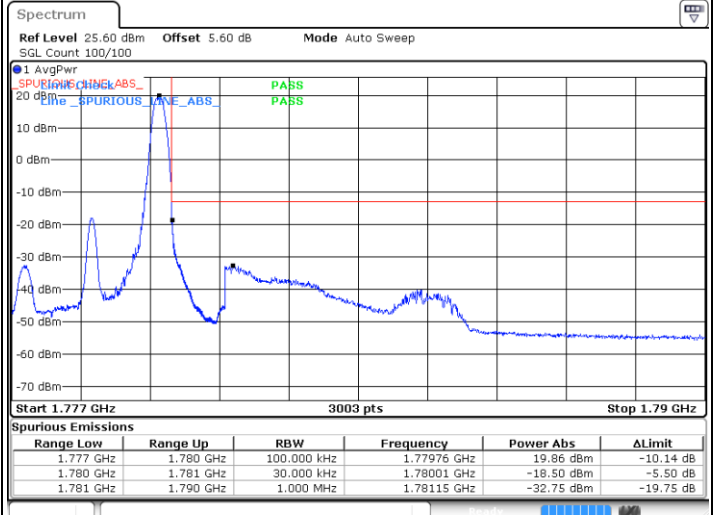


LTE Band 66 / 3MHz / 16QAM

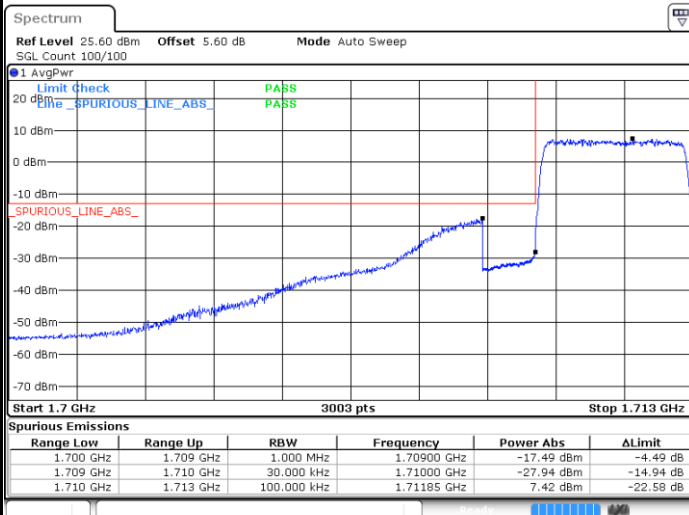
Lowest Band Edge / 1 RB



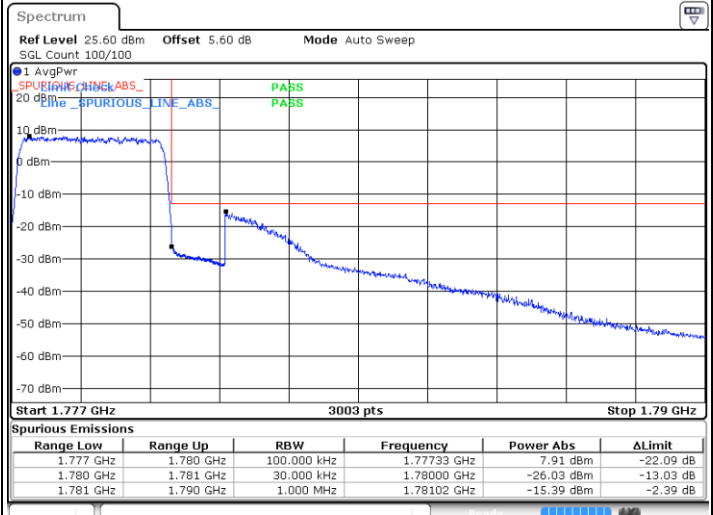
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



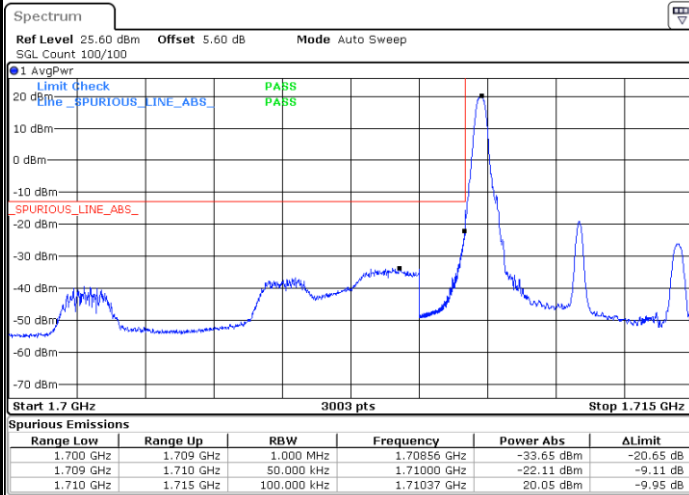
Highest Band Edge / Full RB



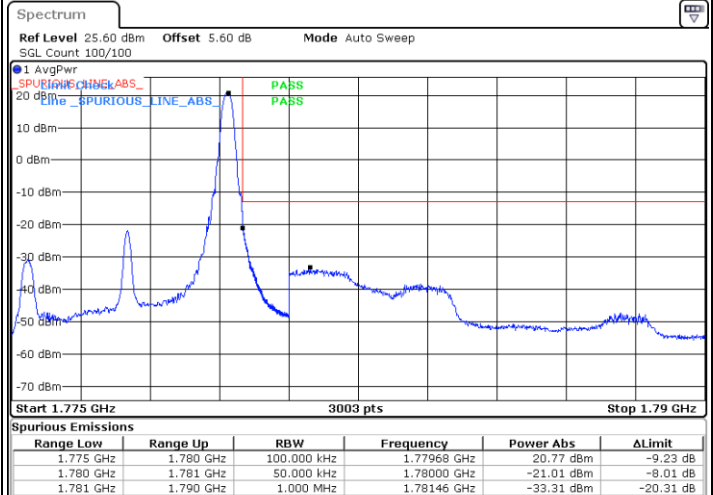


LTE Band 66 / 5MHz / QPSK

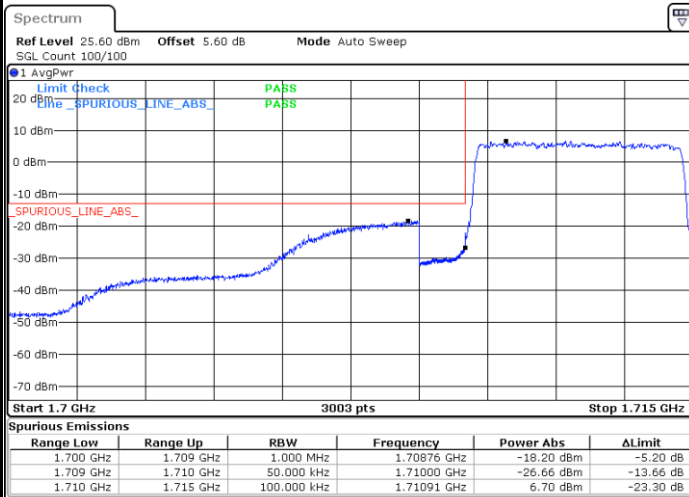
Lowest Band Edge / 1 RB



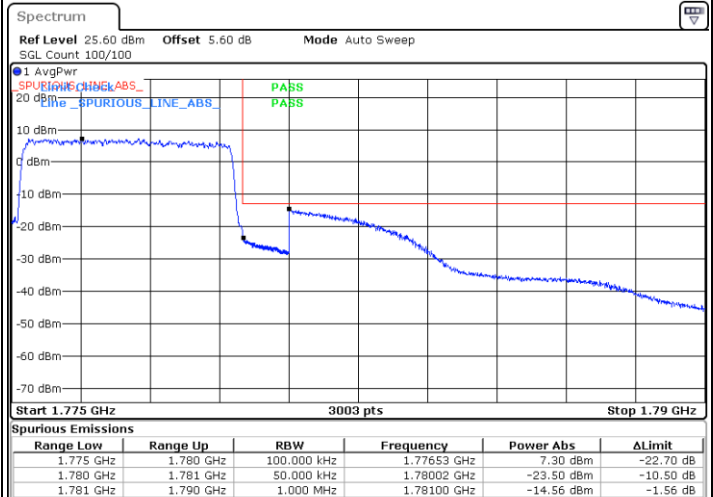
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



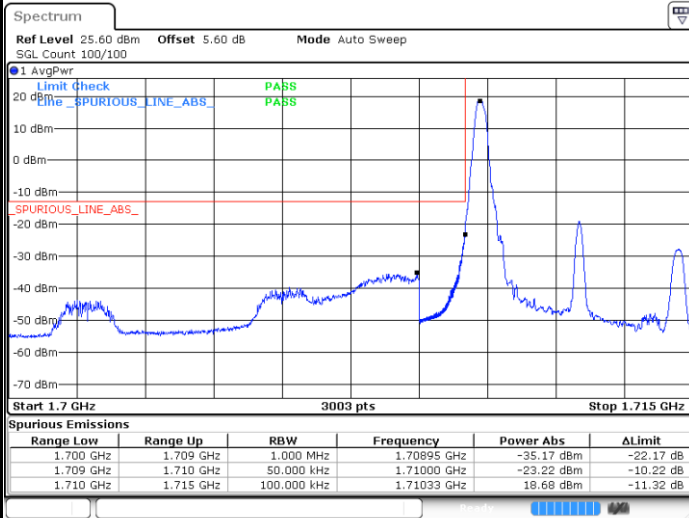
Highest Band Edge / Full RB



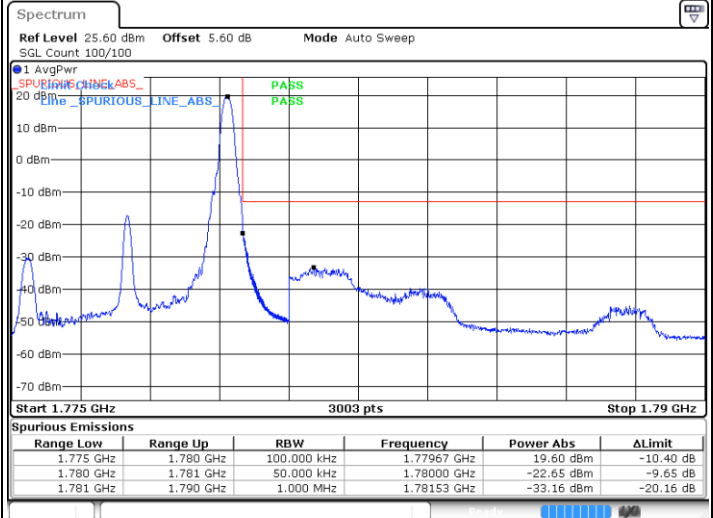


LTE Band 66 / 5MHz / 16QAM

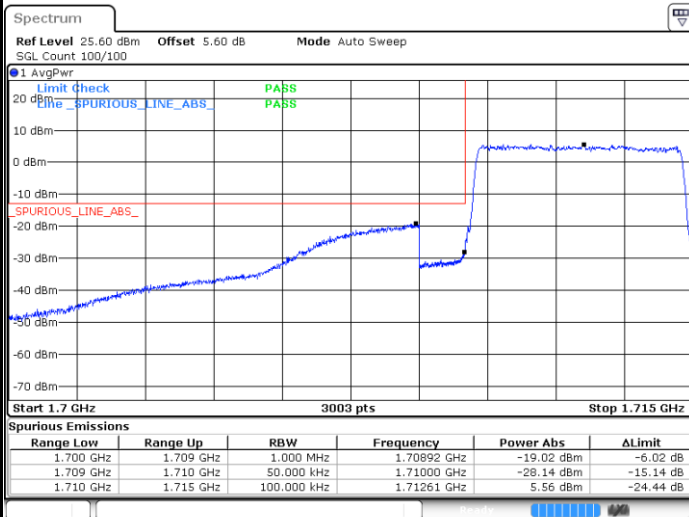
Lowest Band Edge / 1RB



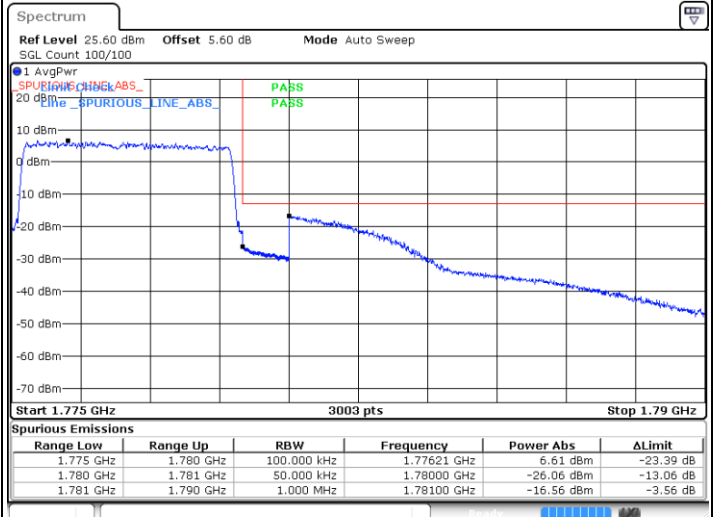
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



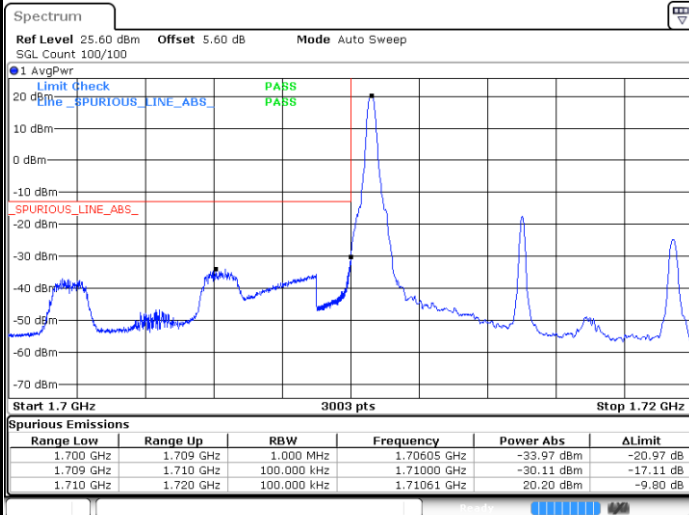
Highest Band Edge / Full RB



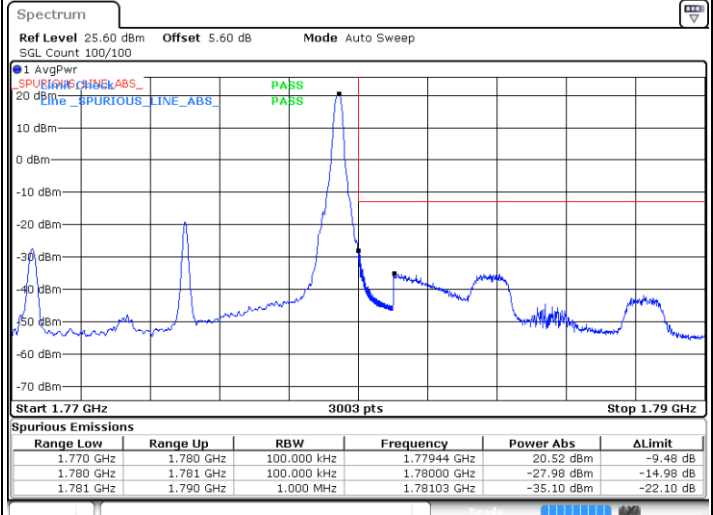


LTE Band 66 / 10MHz / QPSK

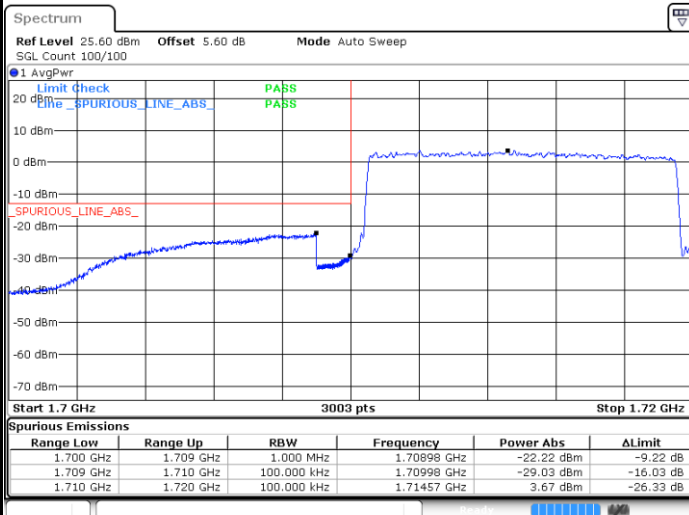
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

