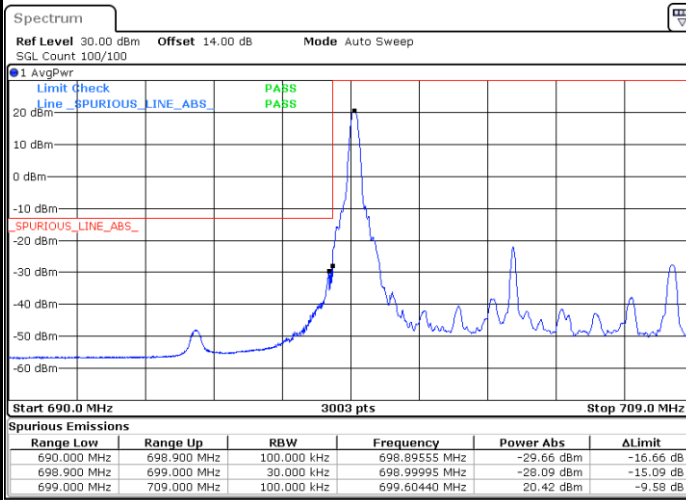


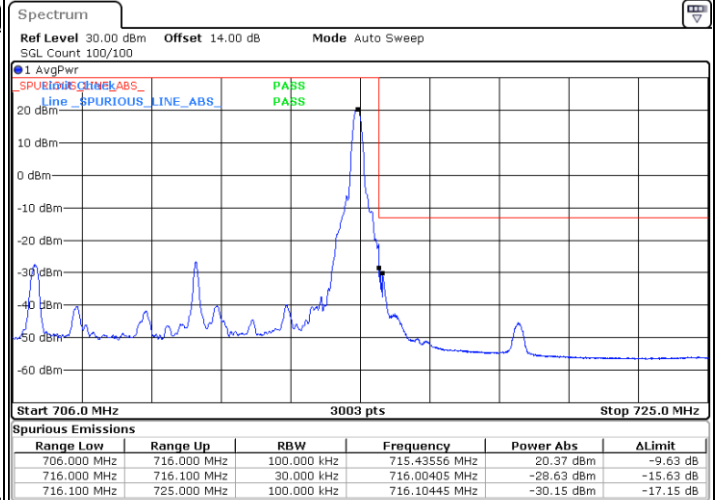


LTE Band 12 / 10MHz / 16QAM

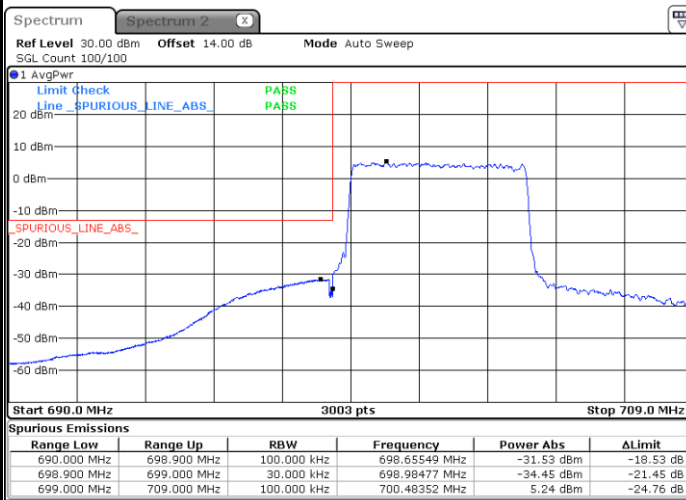
Lowest Band Edge / 1 RB



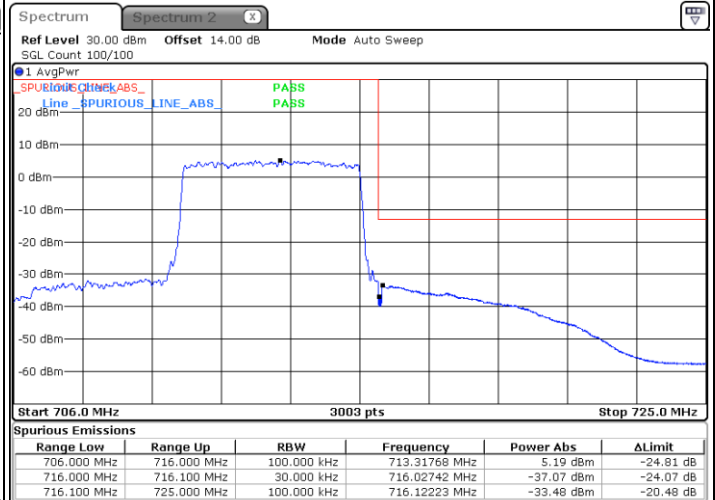
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

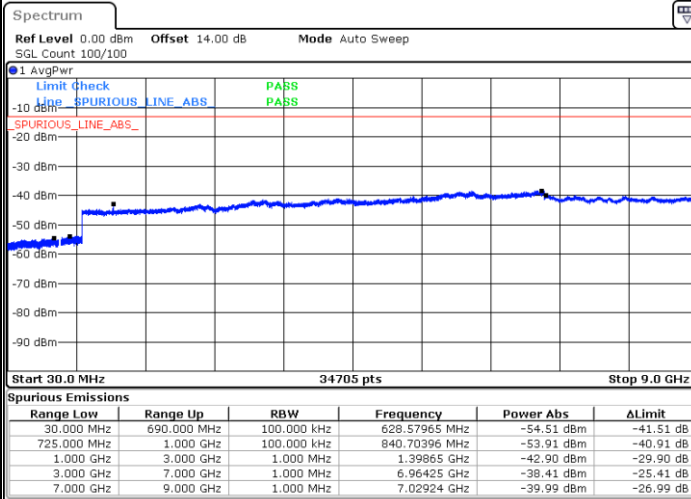




Conducted Spurious Emission

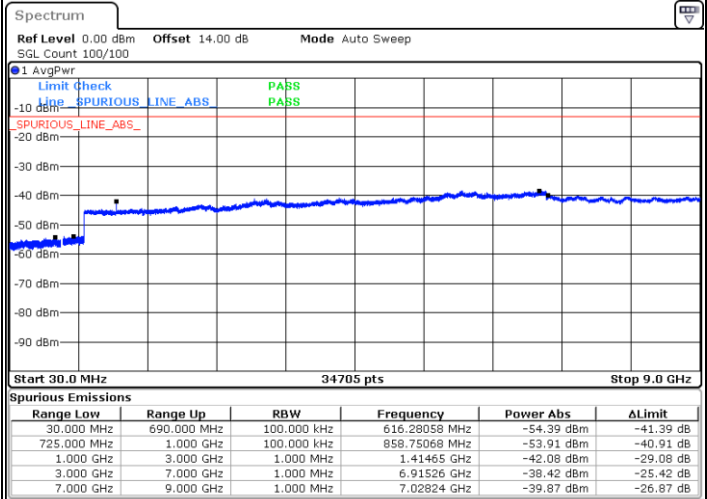
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



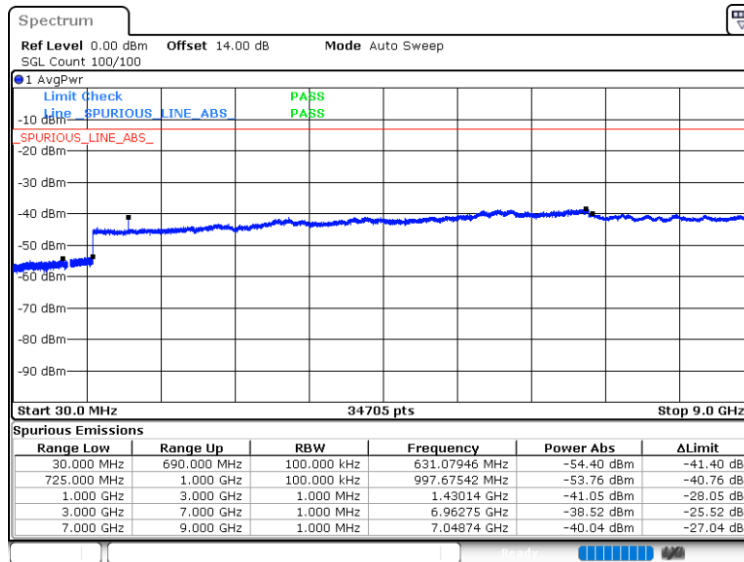
Date: 23.DEC.2023 00:15:45

Middle Channel / QPSK



Date: 23.DEC.2023 00:16:54

Highest Channel / QPSK

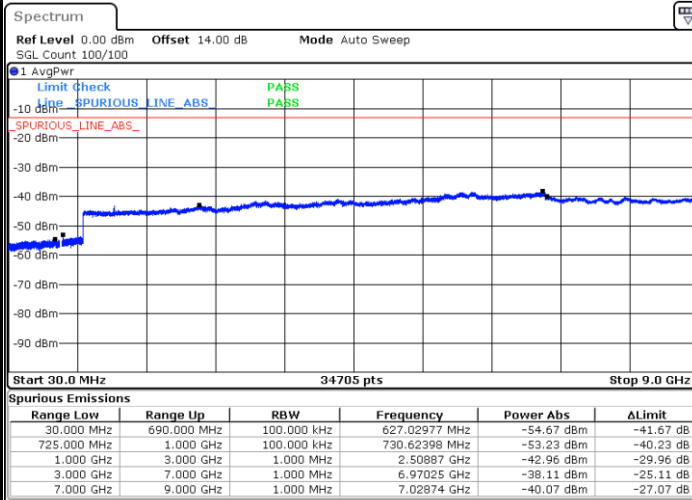


Date: 23.DEC.2023 00:23:25



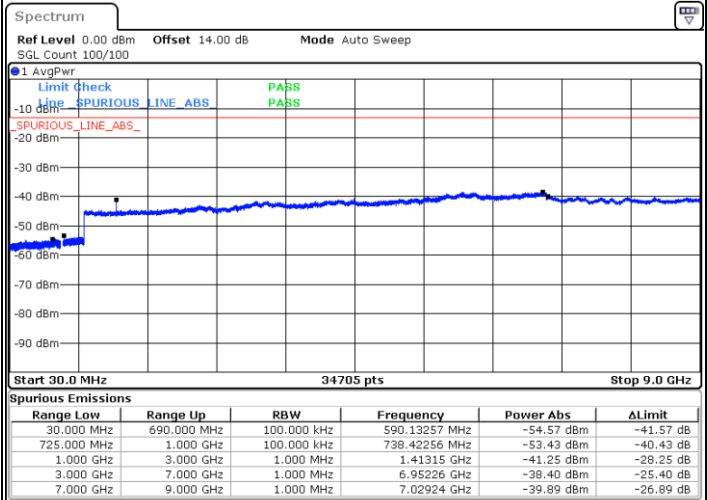
LTE Band 12 / 3MHz

Lowest Channel / QPSK



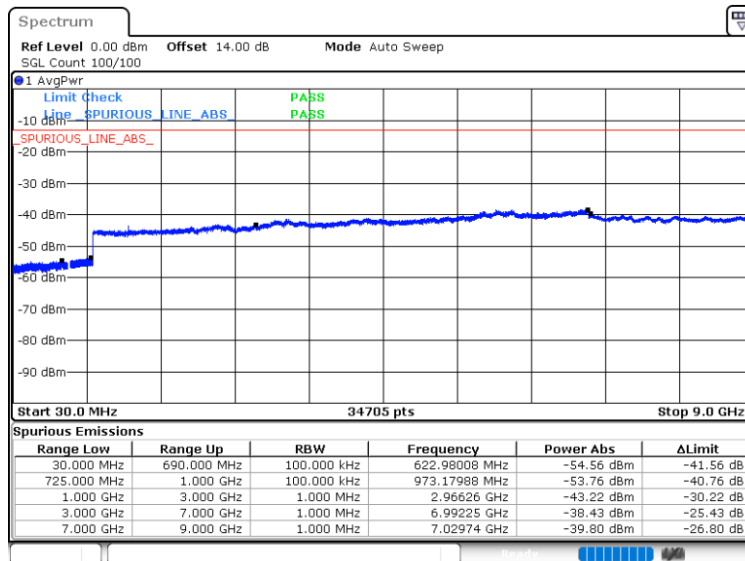
Date: 23.DEC.2023 00:29:19

Middle Channel / QPSK



Date: 23.DEC.2023 00:30:29

Highest Channel / QPSK

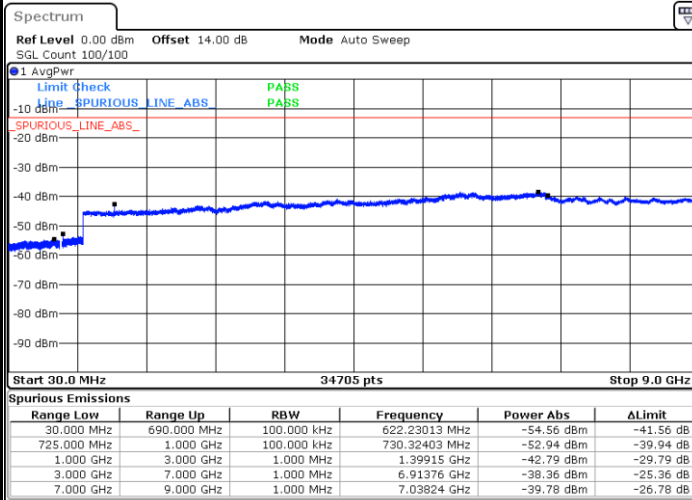


Date: 23.DEC.2023 00:37:00



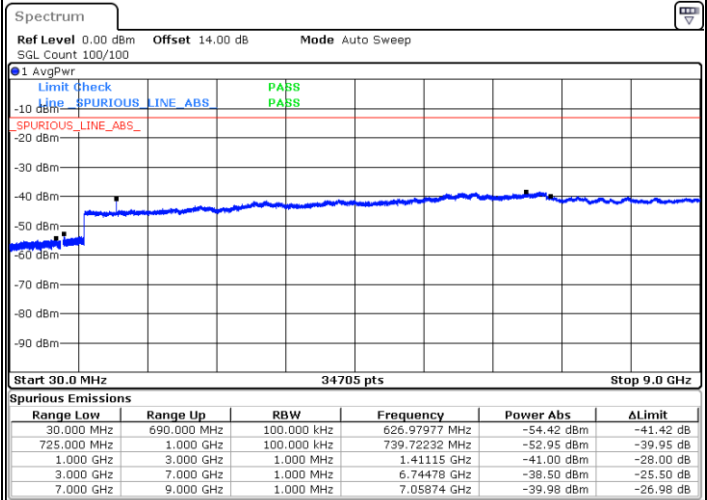
LTE Band 12 / 5MHz

Lowest Channel / QPSK



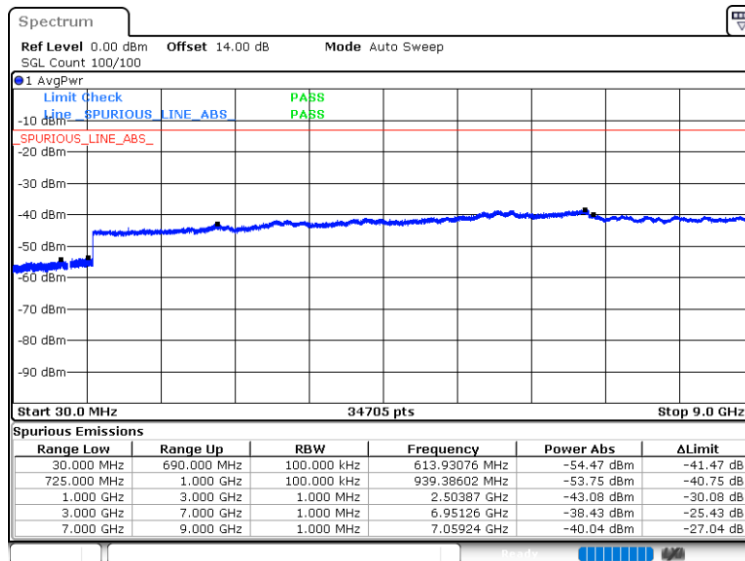
Date: 23.DEC.2023 00:42:54

Middle Channel / QPSK



Date: 23.DEC.2023 00:44:04

Highest Channel / QPSK



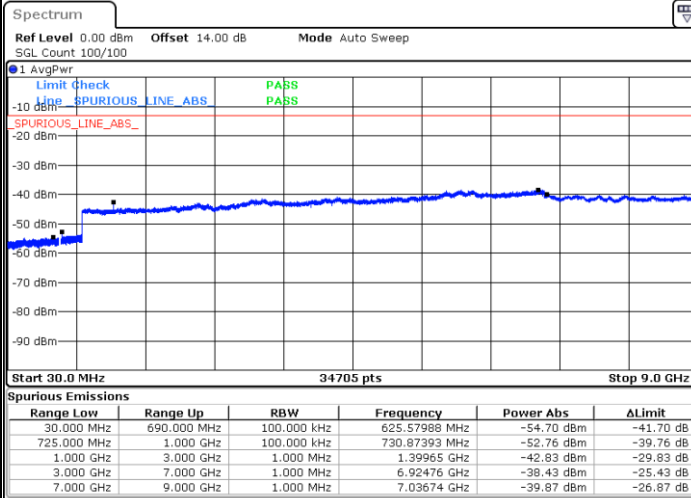
Date: 23.DEC.2023 00:48:54



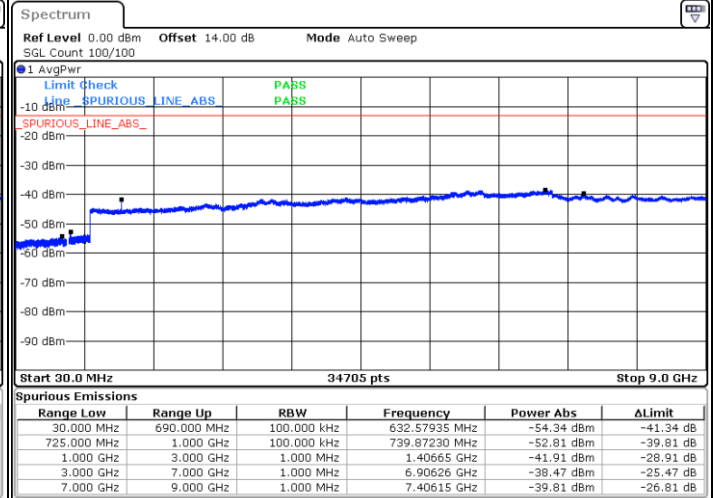
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

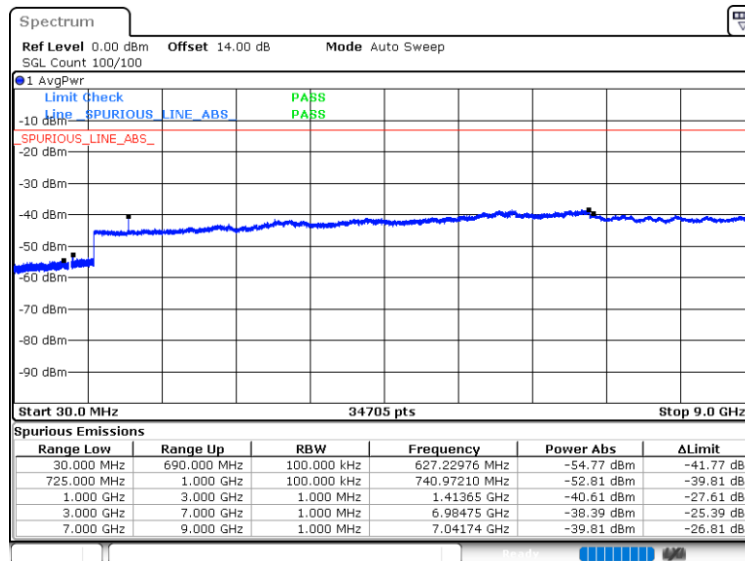


Date: 23.DEC.2023 00:54:52



Date: 23.DEC.2023 00:56:01

Highest Channel / QPSK



Date: 23.DEC.2023 01:00:52

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	0.0012	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0019	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0018	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0000	
20	End Point	0.0013	

Note:

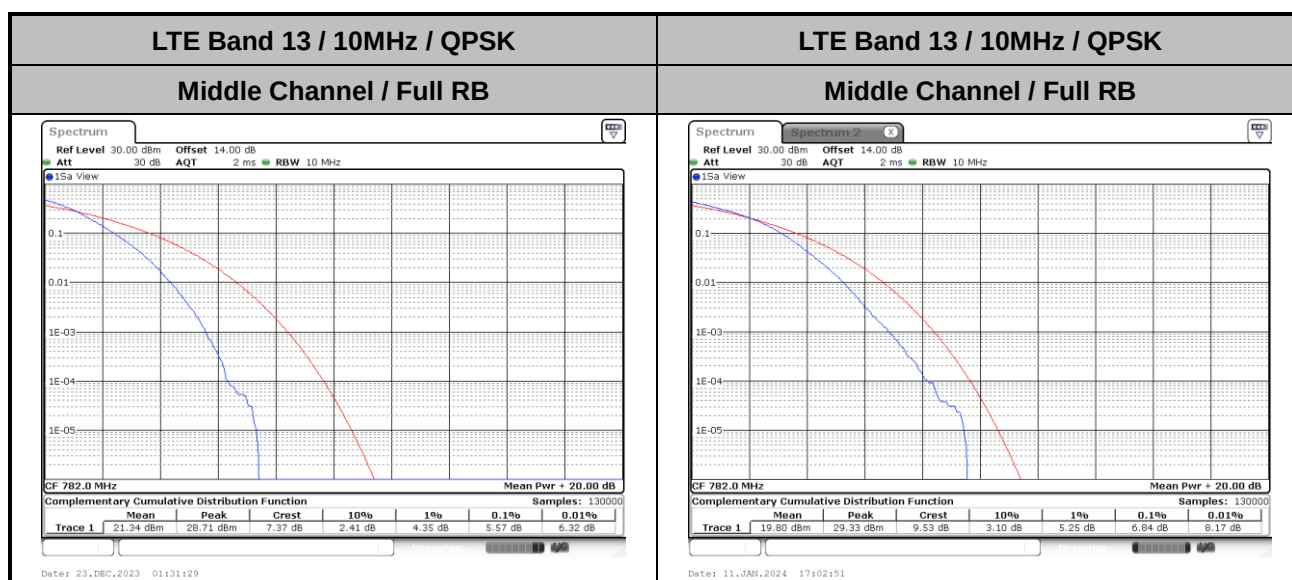
1. Normal Voltage = 3.8 V. ; End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

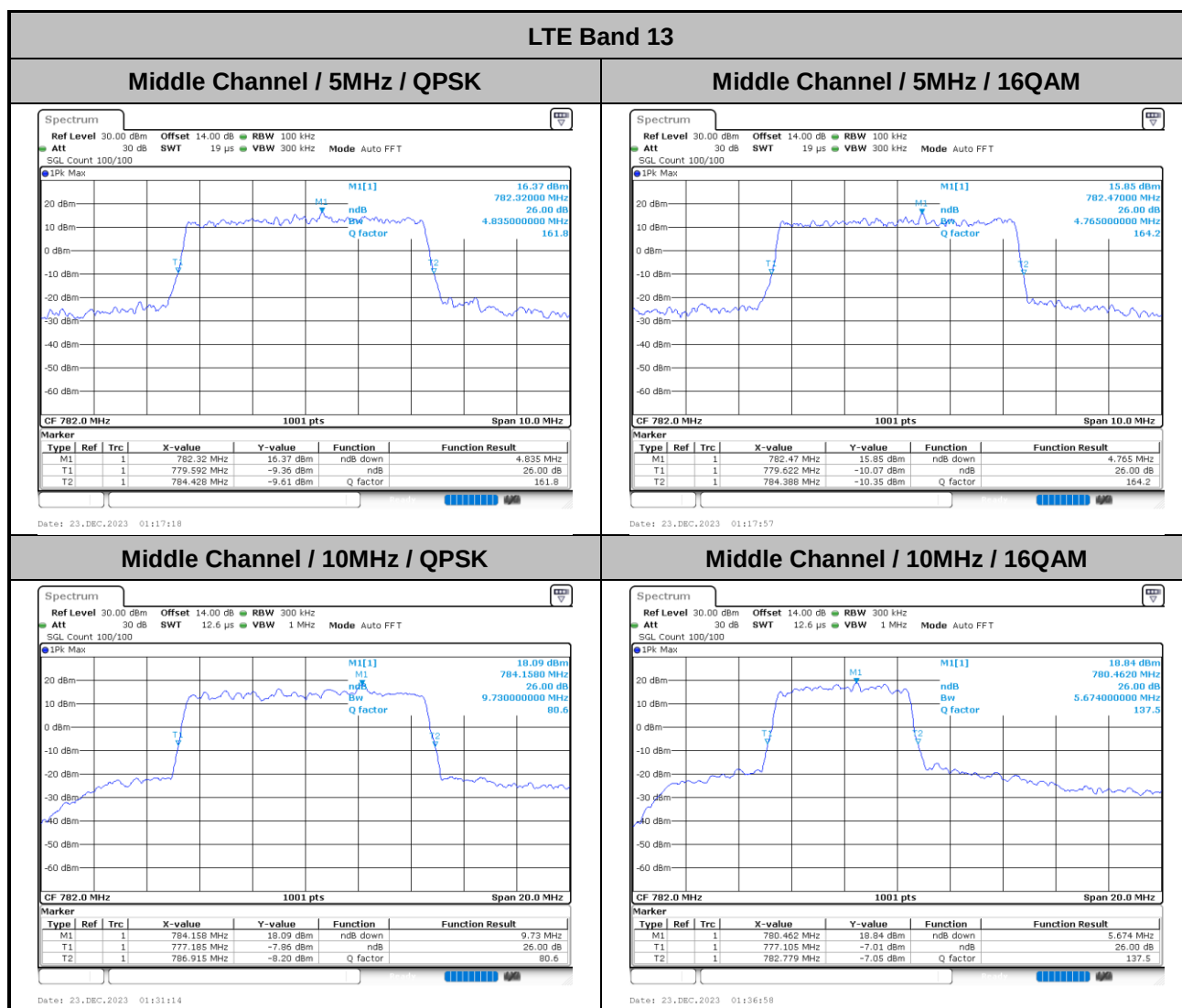
Mode	LTE Band 13 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	Full RB	Result
Middle CH	5.57	6.84	PASS





26dB Bandwidth

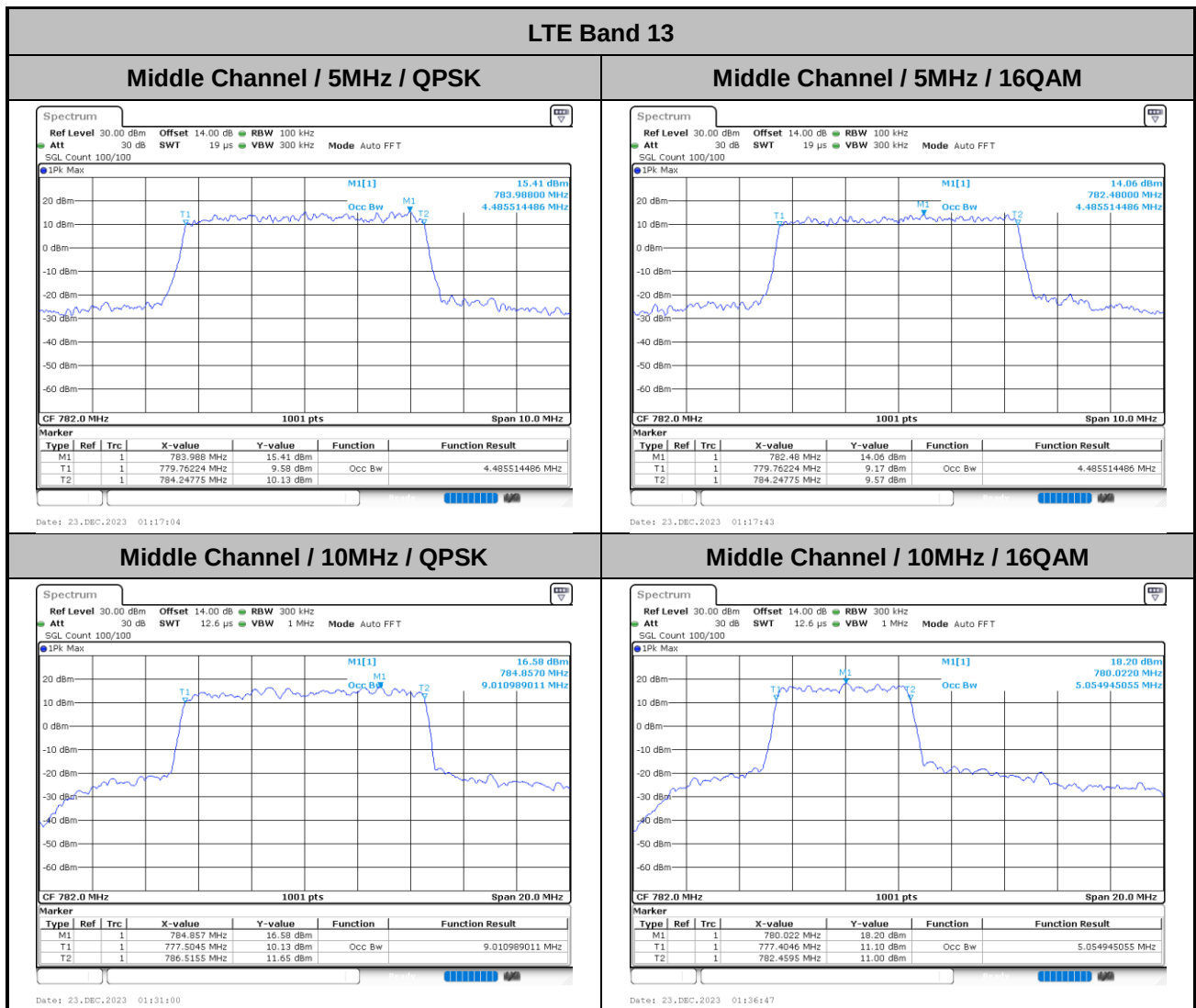
Mode	LTE Band 13 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.84	4.77	9.73	5.67





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.49	4.49	9.01	5.05

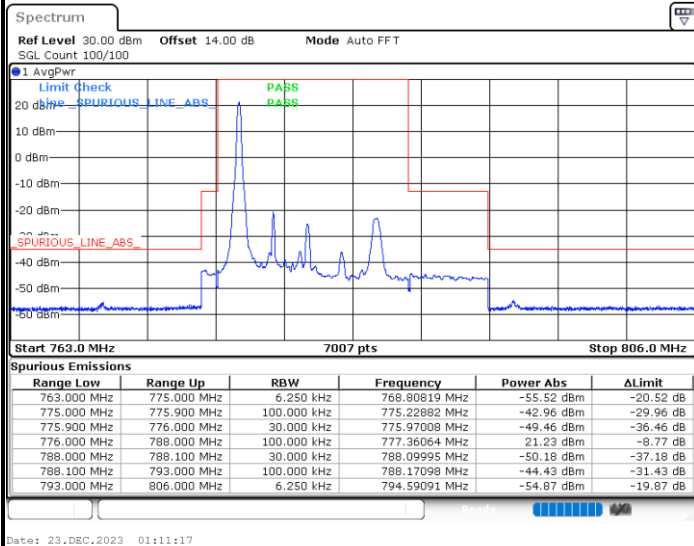




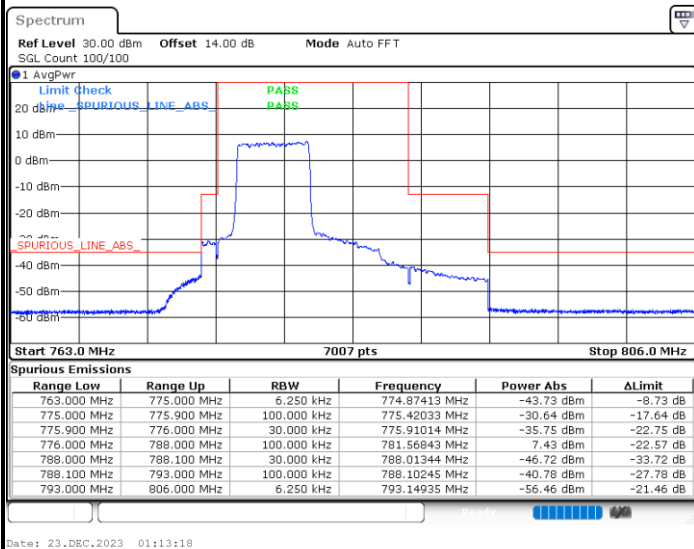
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

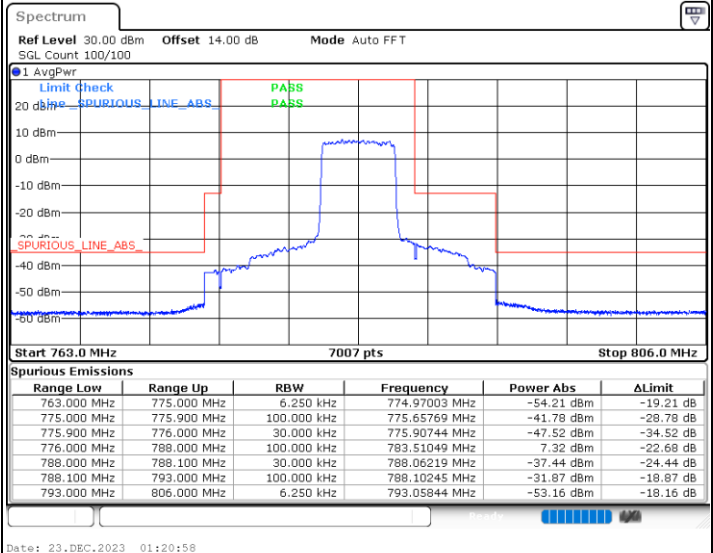
Lowest Band Edge / 1 RB

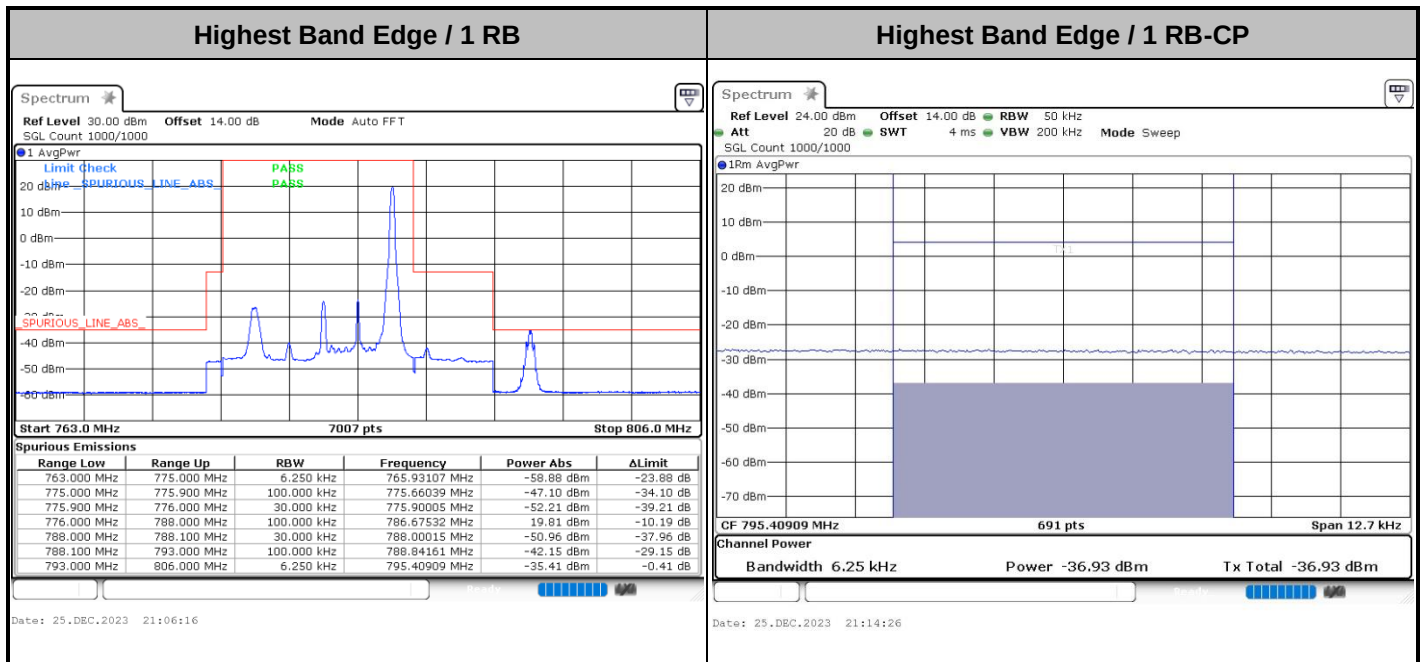


Lowest Band Edge / Full RB



Highest Band Edge / Full RB

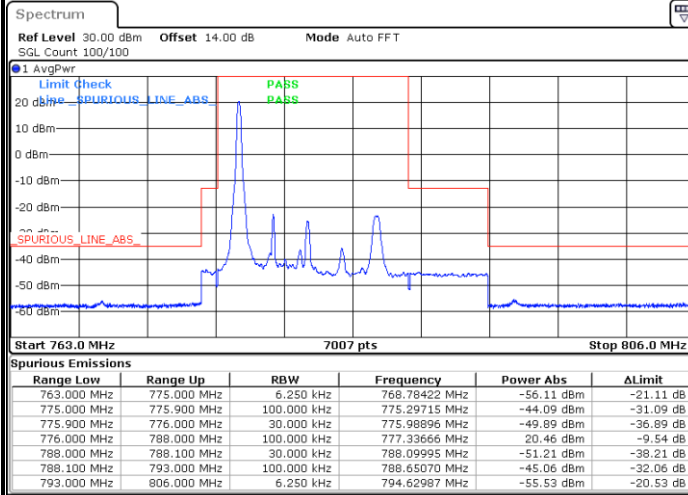






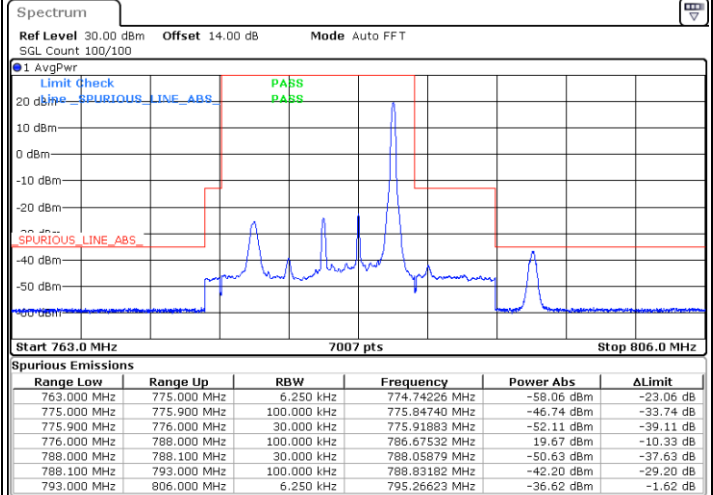
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



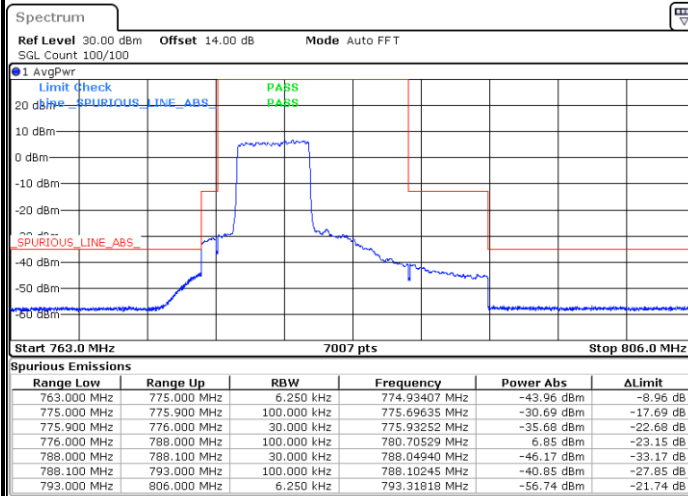
Date: 23.DEC.2023 01:12:18

Highest Band Edge / 1 RB



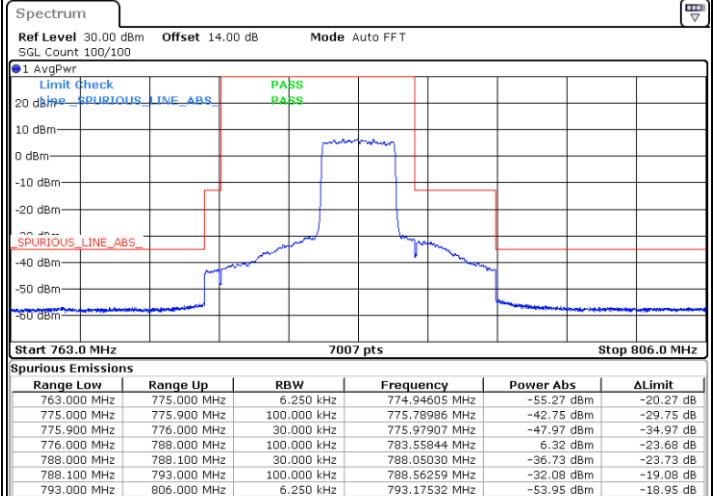
Date: 25.DEC.2023 21:07:45

Lowest Band Edge / Full RB



Date: 23.DEC.2023 01:14:19

Highest Band Edge / Full RB

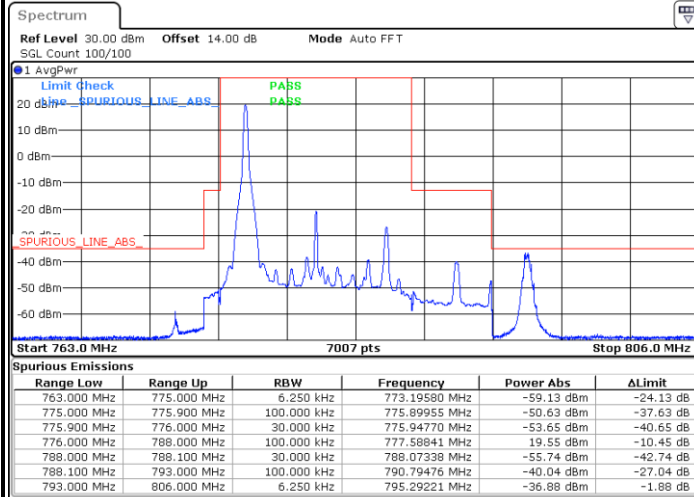


Date: 23.DEC.2023 01:21:59



LTE Band 13 / 10MHz / QPSK

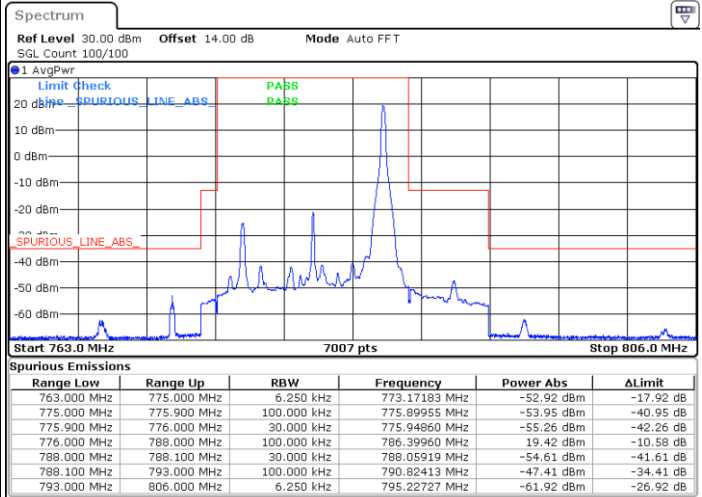
Band Edge / 1 RB



Date: 25.DEC.2023 21:20:32

LTE Band 13 / 10MHz / QPSK

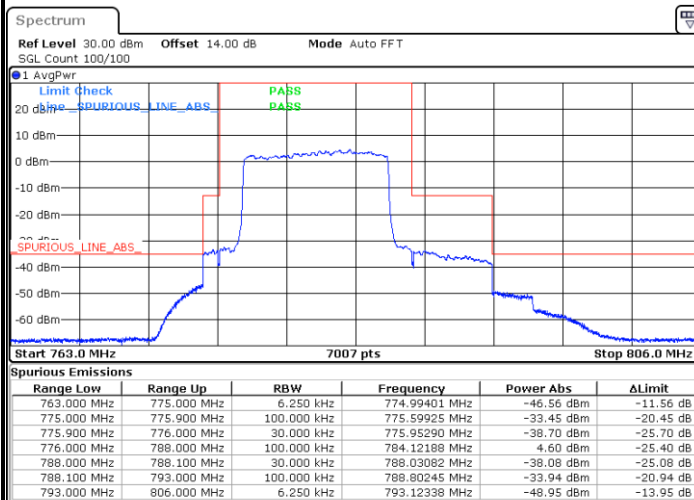
Band Edge / 1 RB



Date: 25.DEC.2023 21:19:36

LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB

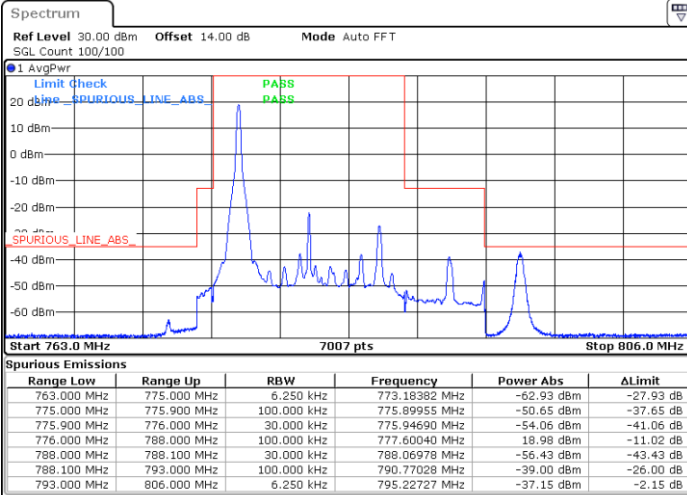


Date: 23.DEC.2023 01:29:25



LTE Band 13 / 10MHz / 16QAM

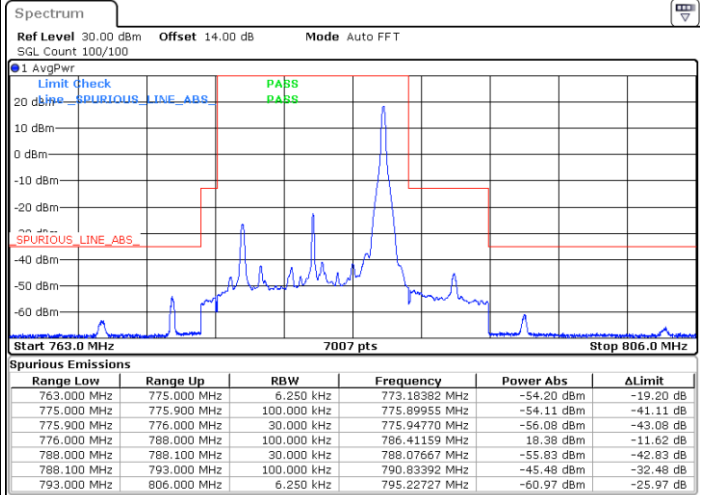
Band Edge / 1 RB



Date: 25.DEC.2023 21:21:01

LTE Band 13 / 10MHz / 16QAM

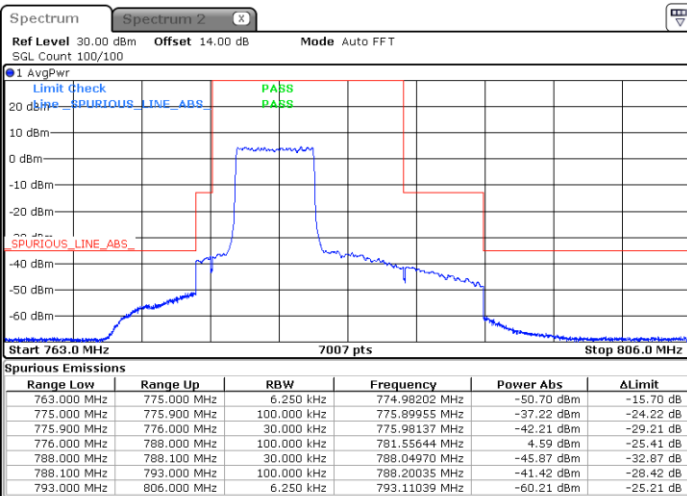
Band Edge / 1 RB



Date: 25.DEC.2023 21:19:58

LTE Band 13 / 10MHz / 16QAM

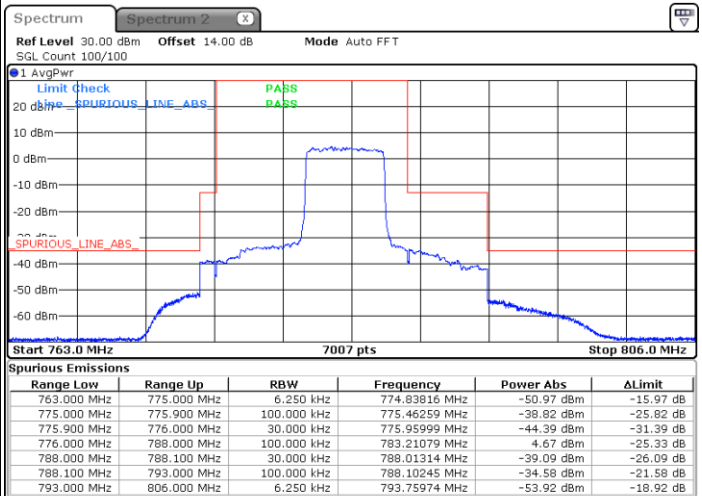
Band Edge / Full RB-Left



Date: 11.JAN.2024 14:41:11

LTE Band 13 / 10MHz / 16QAM

Band Edge / Full RB-Right



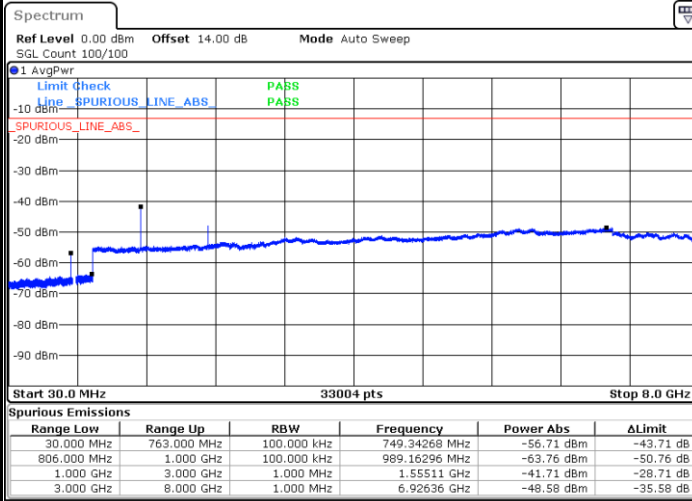
Date: 11.JAN.2024 19:45:51



Conducted Spurious Emission

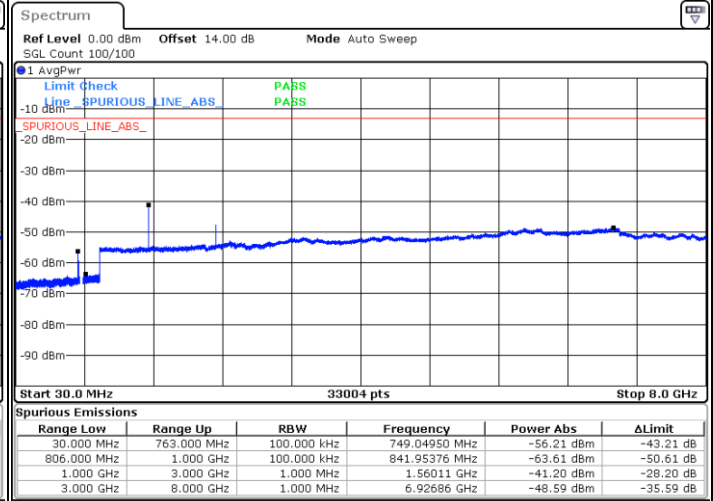
LTE Band 13 / 5MHz

Lowest Channel / QPSK



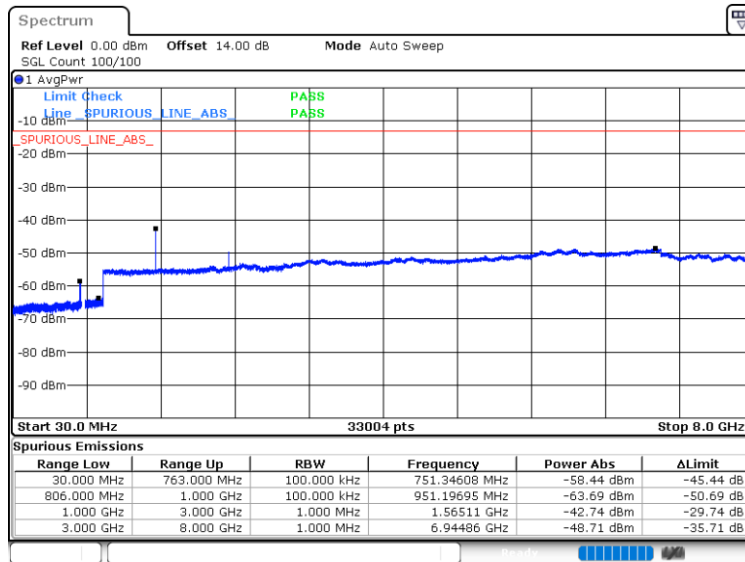
Date: 23.DEC.2023 01:15:29

Middle Channel / QPSK



Date: 23.DEC.2023 01:16:38

Highest Channel / QPSK

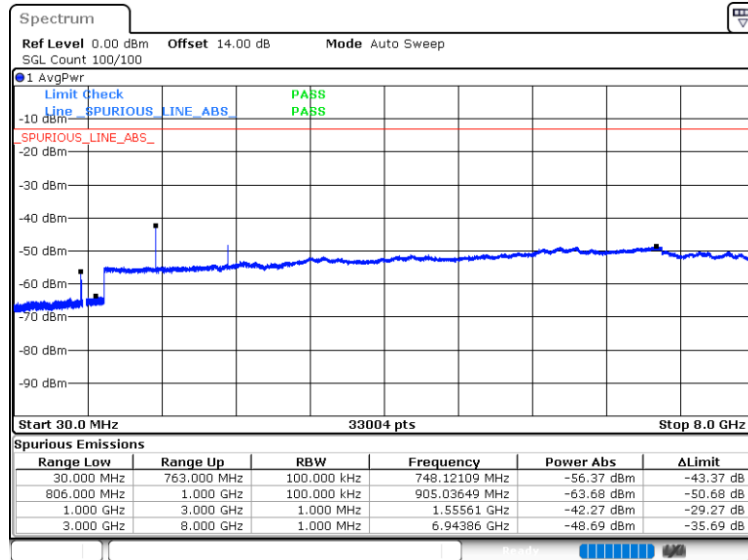


Date: 23.DEC.2023 01:23:09



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 23-DEC-2023 01:30:34

**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	0.0004	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	2.0000	
-30	Normal Voltage	0.0009	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	End Point	0.0005	

Note:

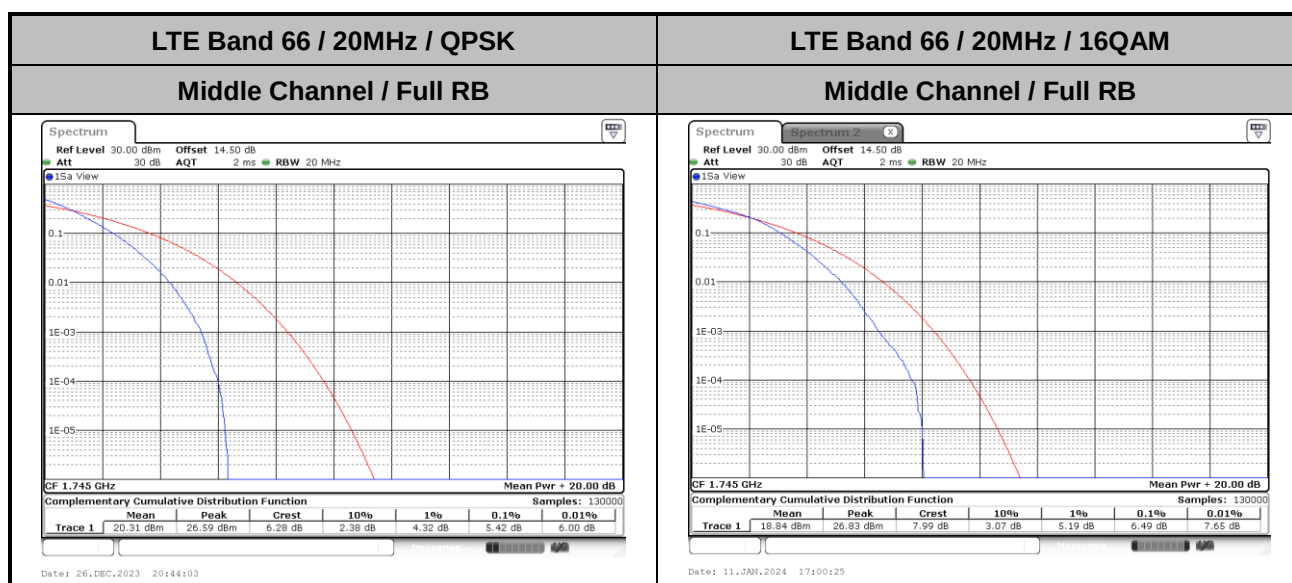
1. Normal Voltage = 3.8 V. ; End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.6 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	5.42	6.49	PASS





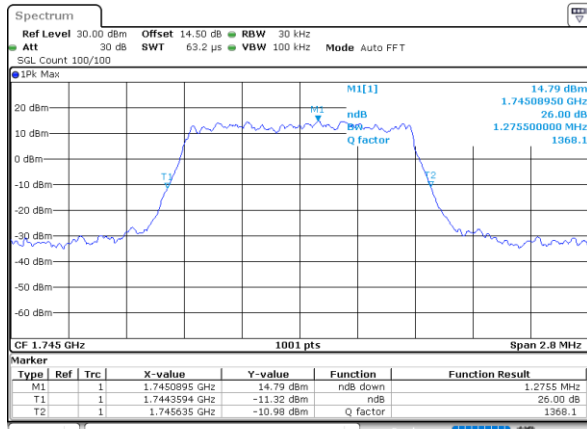
26dB Bandwidth

Mode	LTE Band 66 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.28	1.24	3.01	3.00	4.88	4.92	9.61	5.51	14.30	5.54	18.94	5.67



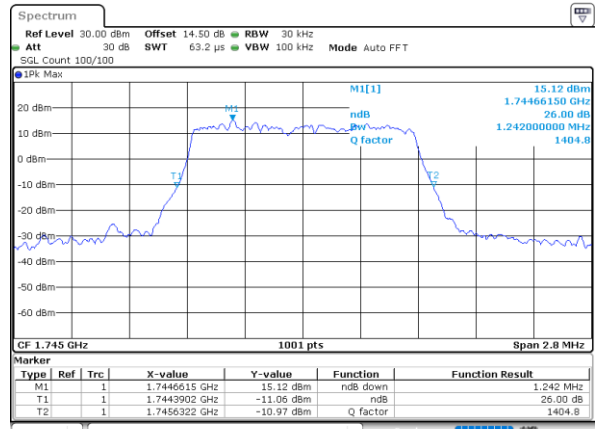
LTE Band 66

Middle Channel / 1.4MHz / QPSK



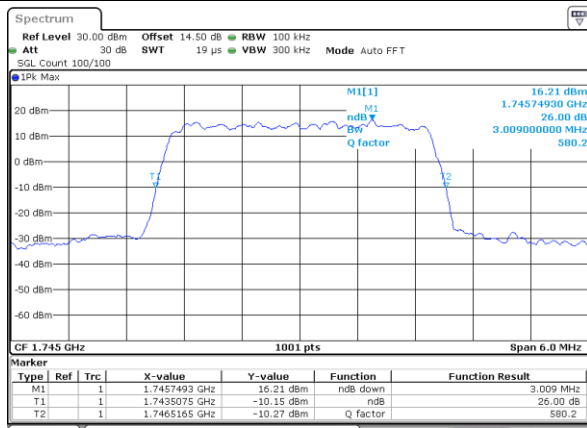
Date: 26.DEC.2023 19:35:34

Middle Channel / 1.4MHz / 16QAM



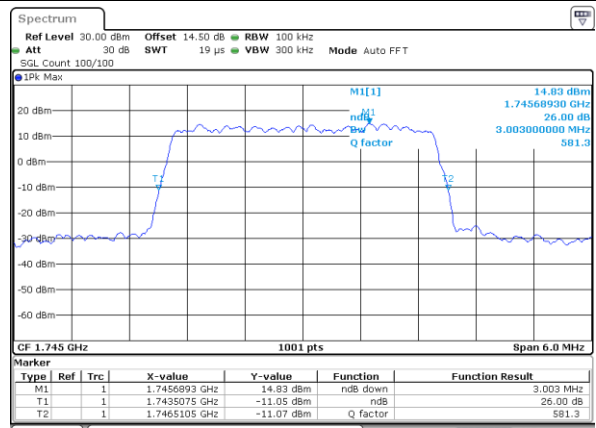
Date: 26.DEC.2023 19:36:14

Middle Channel / 3MHz / QPSK



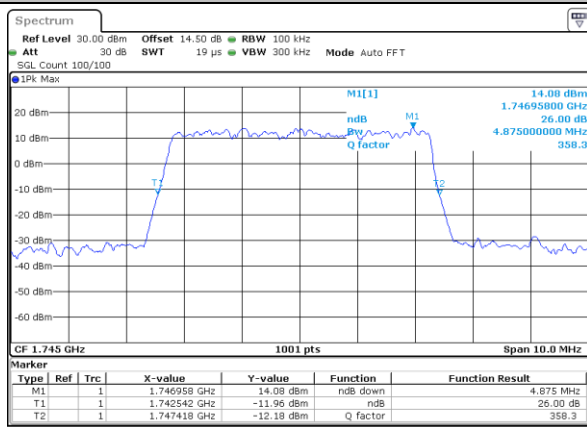
Date: 26.DEC.2023 19:52:56

Middle Channel / 3MHz / 16QAM



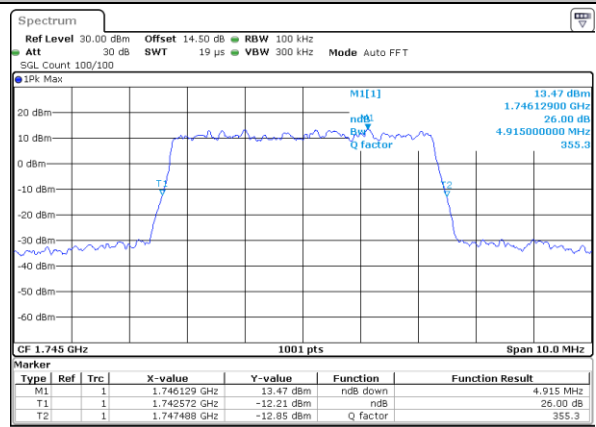
Date: 26.DEC.2023 19:53:36

Middle Channel / 5MHz / QPSK



Date: 26.DEC.2023 20:07:05

Middle Channel / 5MHz / 16QAM

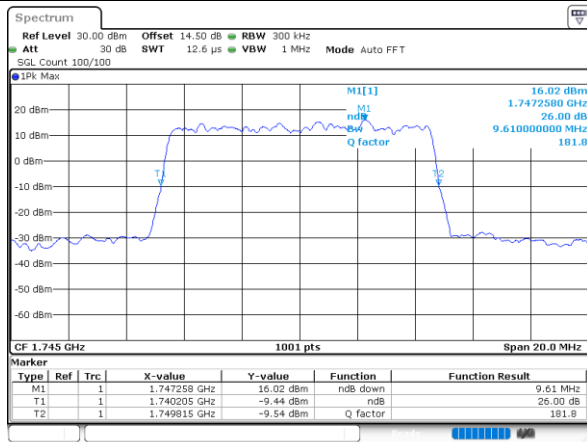


Date: 26.DEC.2023 20:07:45



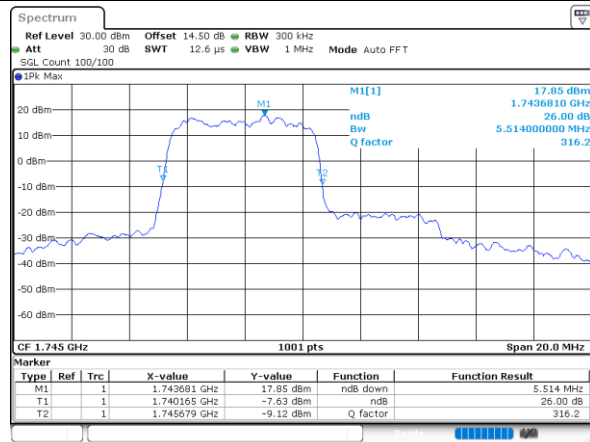
LTE Band 66

Middle Channel / 10MHz / QPSK



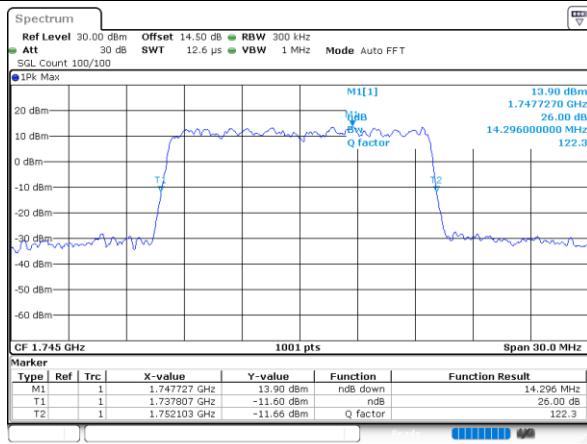
Date: 26.DEC.2023 20:21:51

Middle Channel / 10MHz / 16QAM



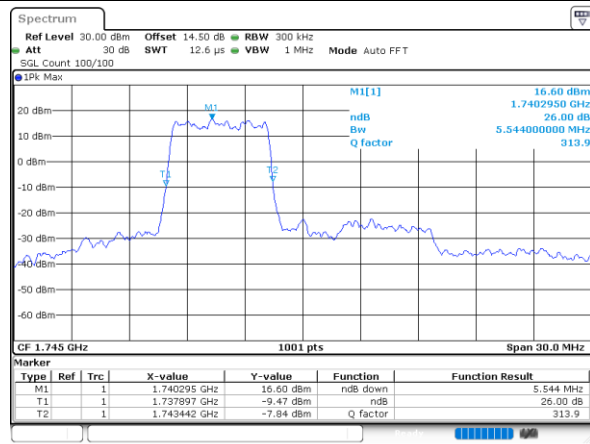
Date: 26.DEC.2023 20:57:59

Middle Channel / 15MHz / QPSK



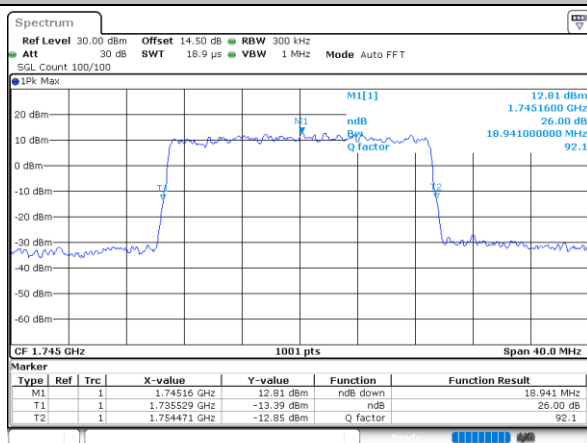
Date: 26.DEC.2023 20:32:51

Middle Channel / 15MHz / 16QAM



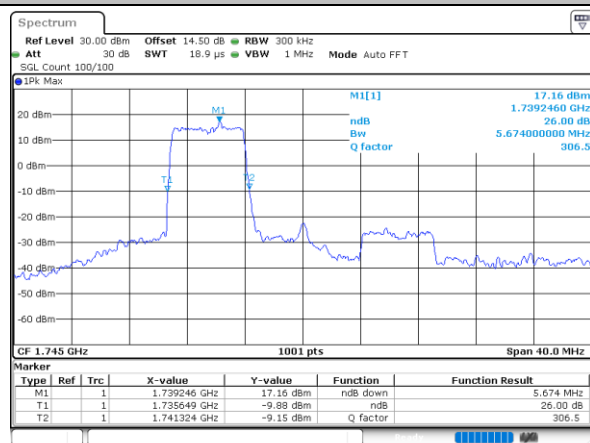
Date: 26.DEC.2023 20:57:06

Middle Channel / 20MHz / QPSK



Date: 26.DEC.2023 20:43:48

Middle Channel / 20MHz / 16QAM



Date: 26.DEC.2023 20:52:44



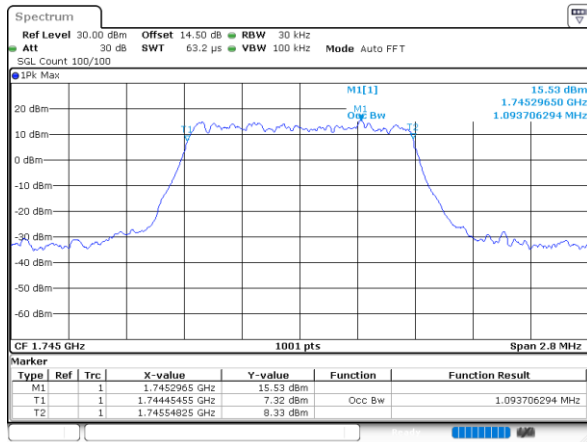
Occupied Bandwidth

Mode	LTE Band 66 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.09	2.71	2.70	4.48	4.48	9.03	4.98	13.52	5.03	17.90	5.00

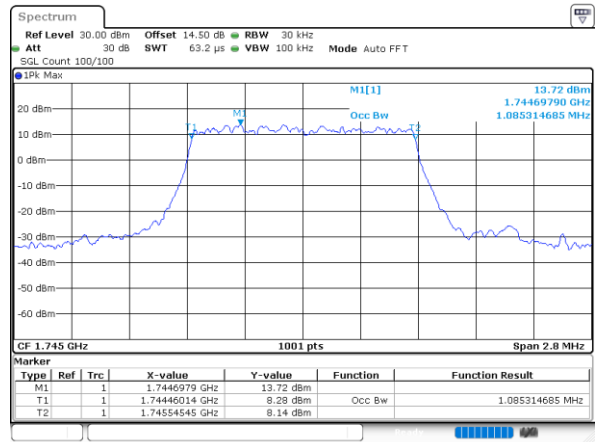


LTE Band 66

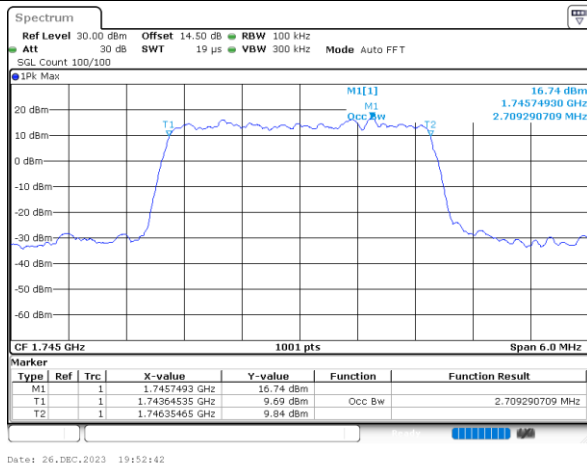
Middle Channel / 1.4MHz / QPSK



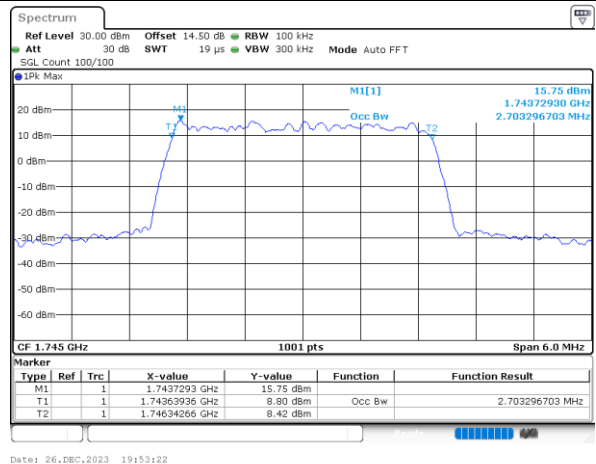
Middle Channel / 1.4MHz / 16QAM



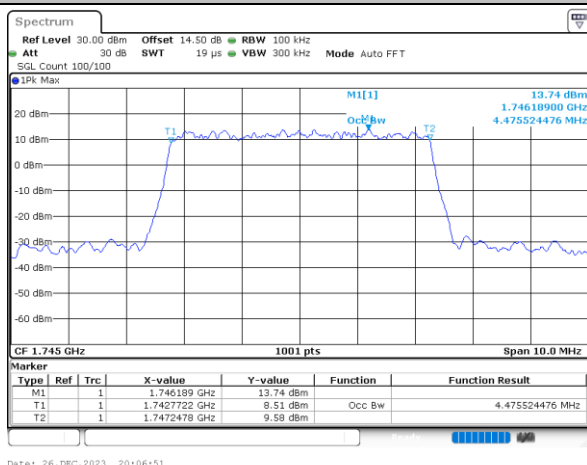
Middle Channel / 3MHz / QPSK



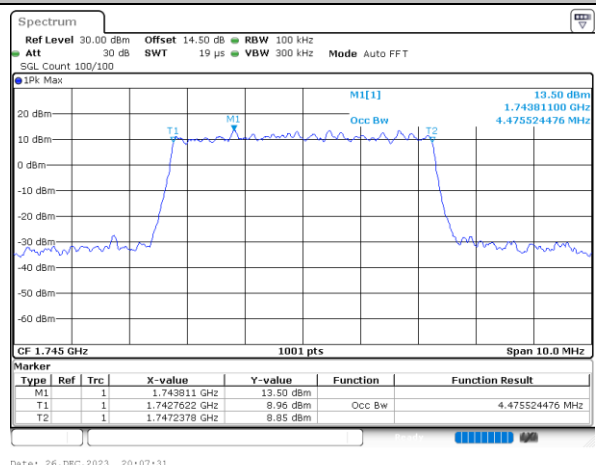
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



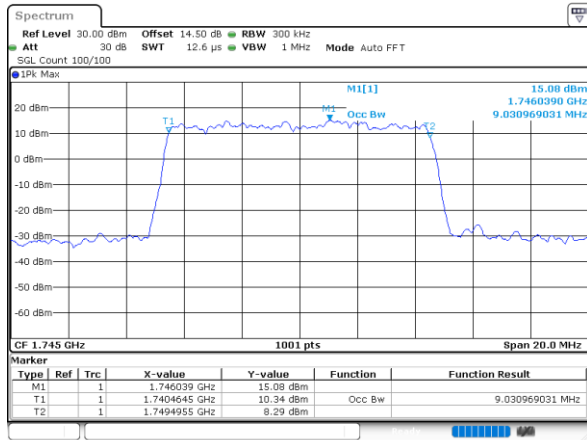
Middle Channel / 5MHz / 16QAM



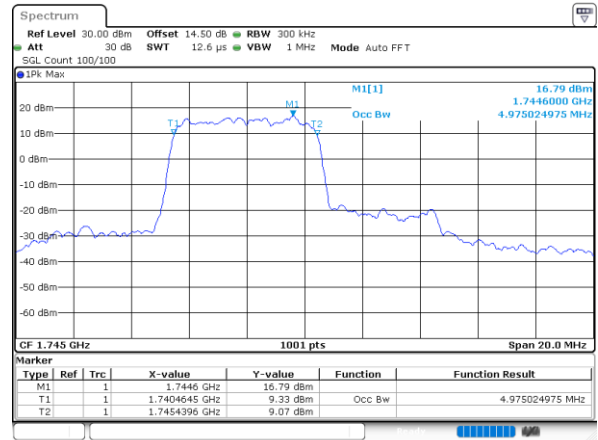


LTE Band 66

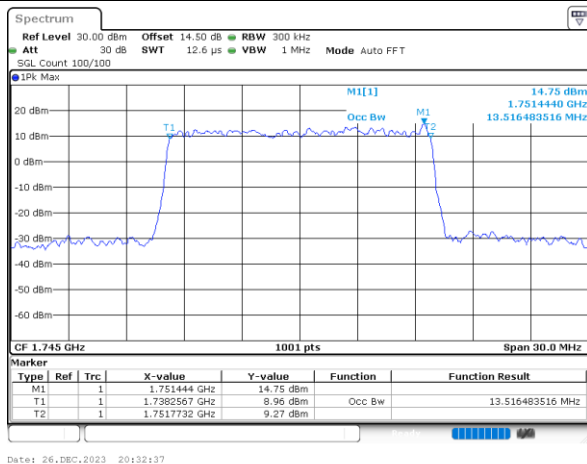
Middle Channel / 10MHz / QPSK



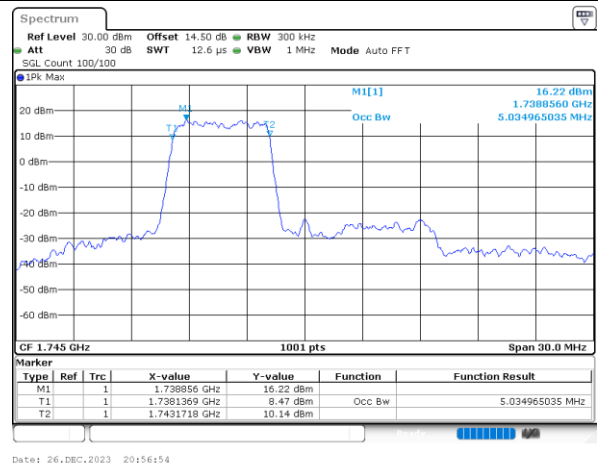
Middle Channel / 10MHz / 16QAM



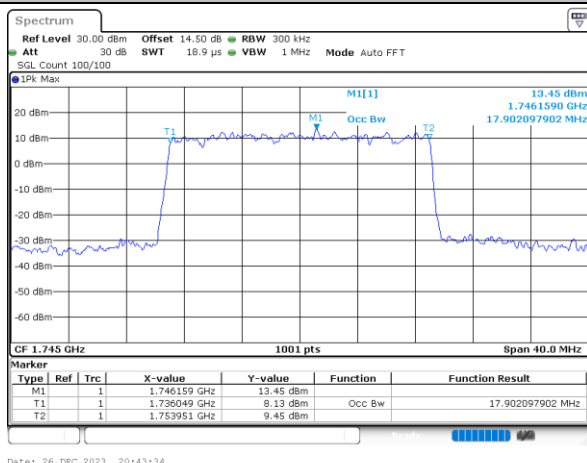
Middle Channel / 15MHz / QPSK



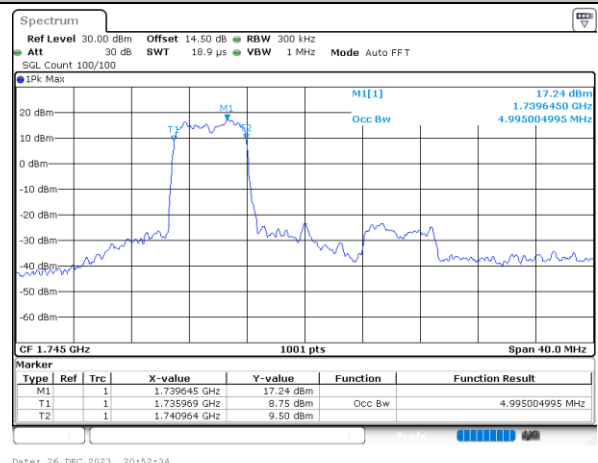
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

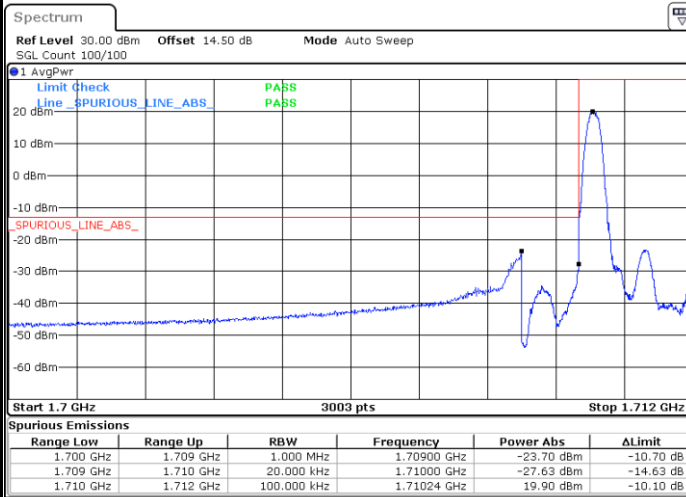




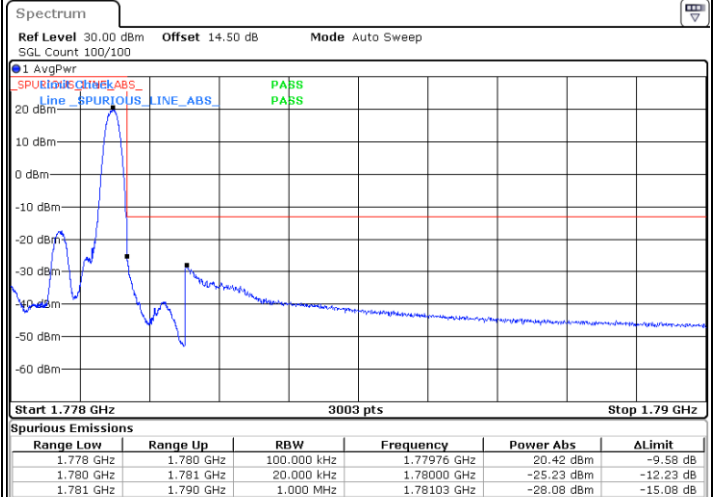
Conducted Band Edge

LTE Band 66 / 1.4MHz / QPSK

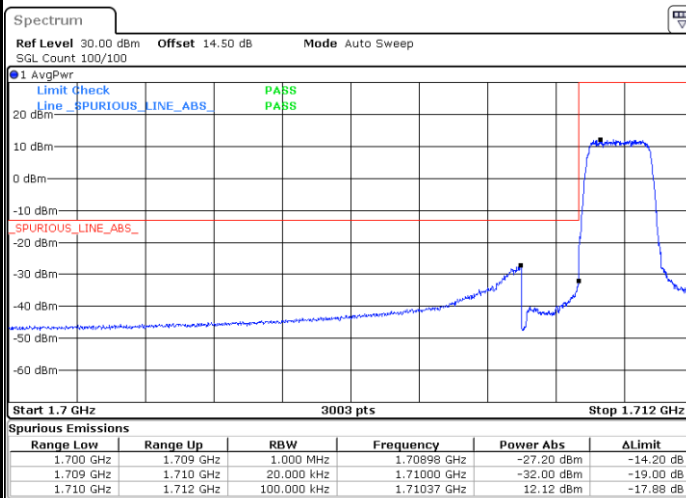
Lowest Band Edge / 1RB



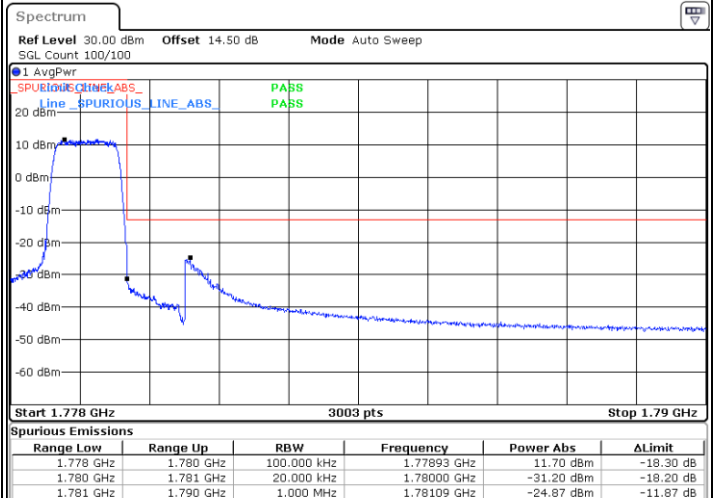
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



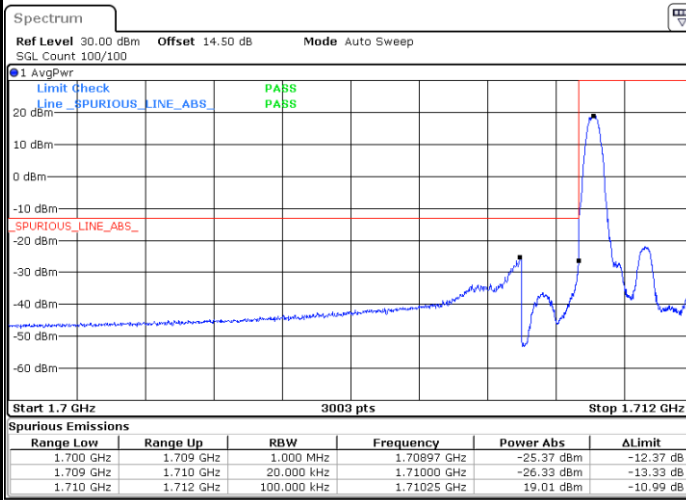
Highest Band Edge / Full RB



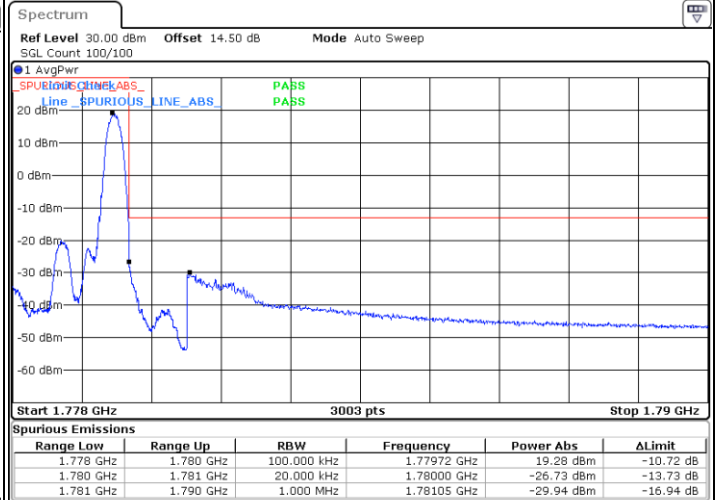


LTE Band 66 / 1.4MHz / 16QAM

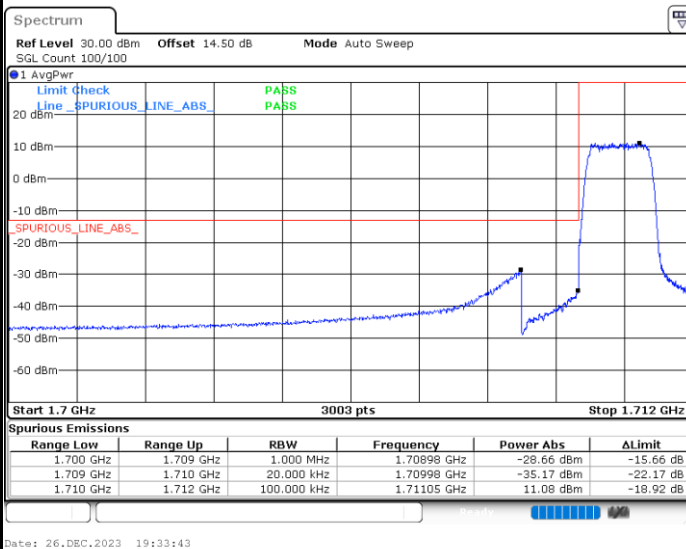
Lowest Band Edge / 1 RB



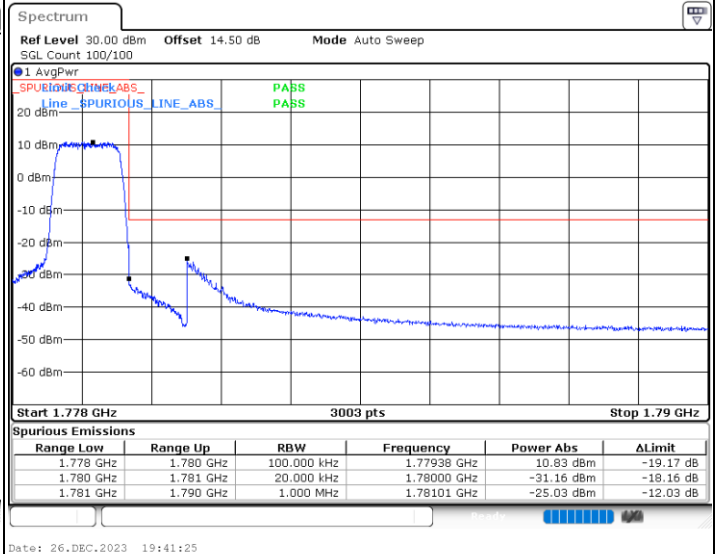
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



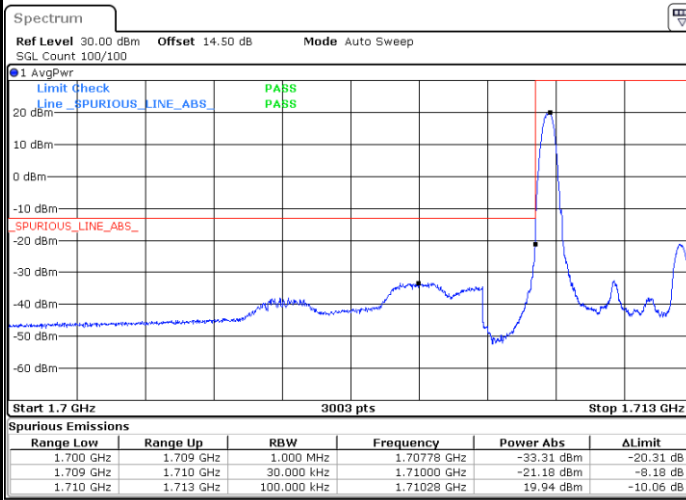
Highest Band Edge / Full RB



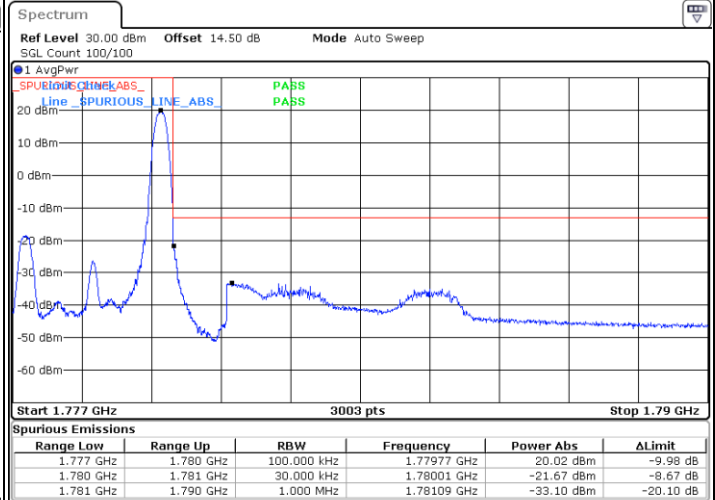


LTE Band 66 / 3MHz / QPSK

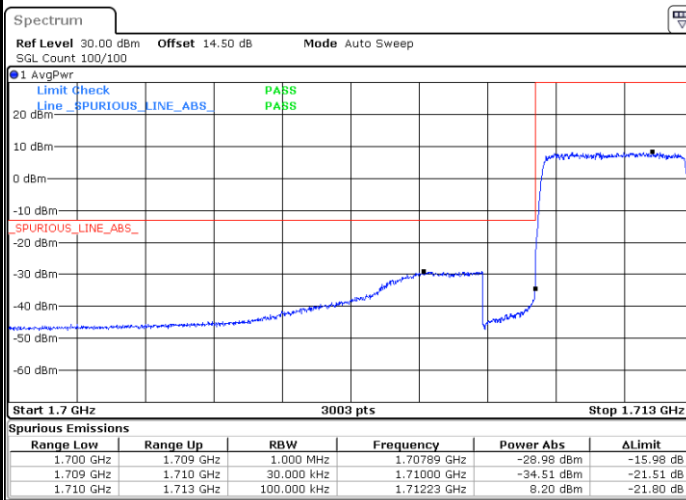
Lowest Band Edge / 1RB



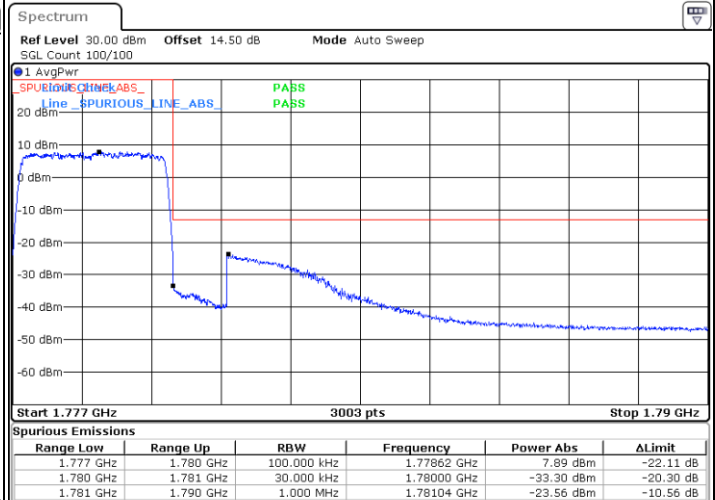
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



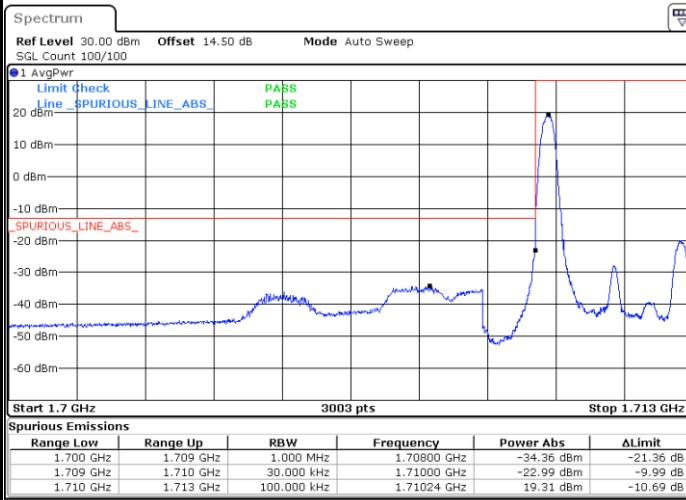
Highest Band Edge / Full RB





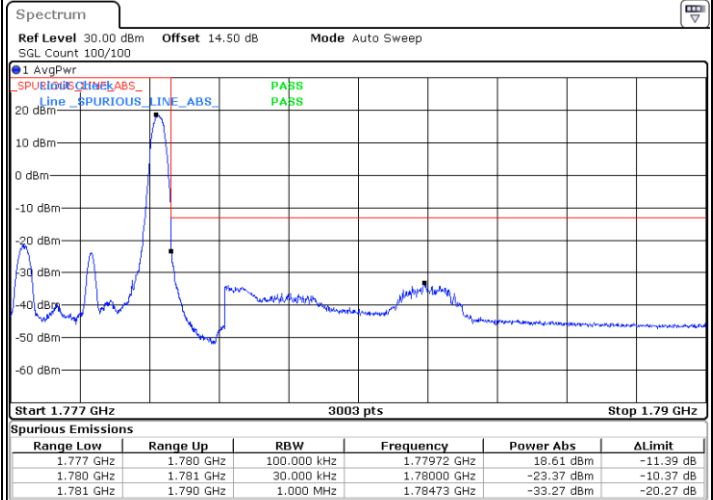
LTE Band 66 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



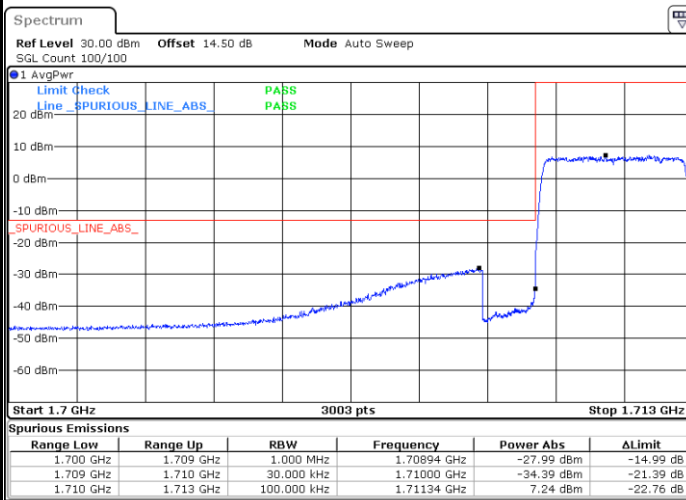
Date: 26.DEC.2023 19:47:54

Highest Band Edge / 1 RB



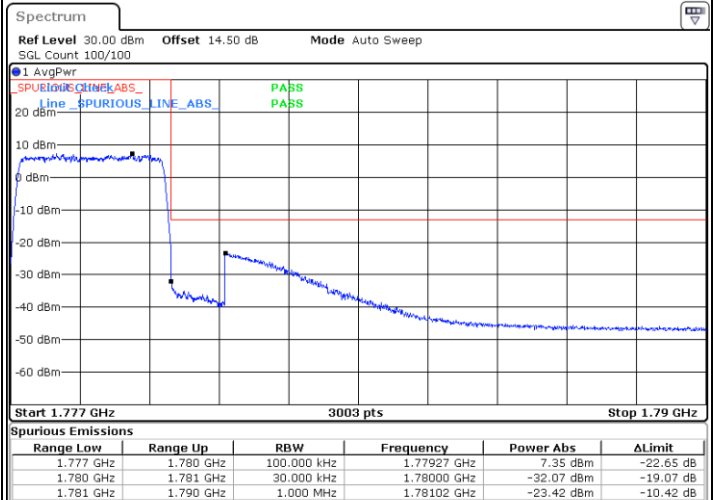
Date: 26.DEC.2023 19:55:36

Lowest Band Edge / Full RB



Date: 26.DEC.2023 19:51:05

Highest Band Edge / Full RB

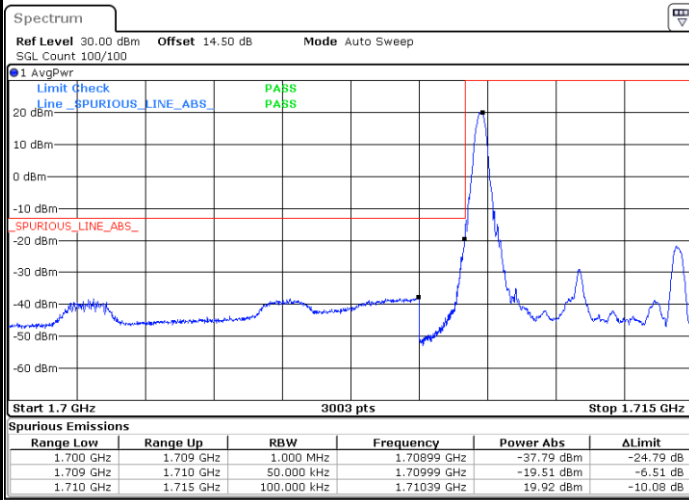


Date: 26.DEC.2023 19:57:38



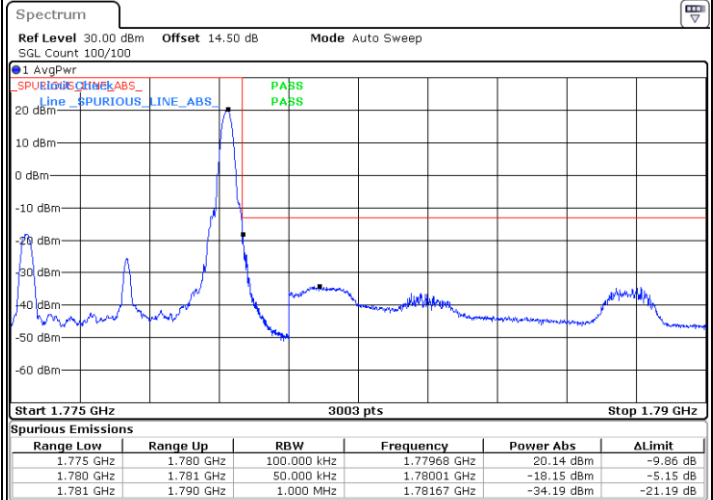
LTE Band 66 / 5MHz / QPSK

Lowest Band Edge / 1RB



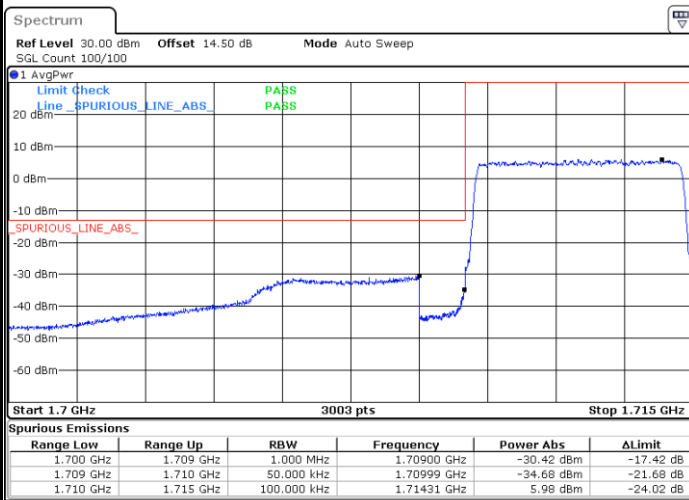
Date: 26.DEC.2023 20:01:03

Highest Band Edge / 1RB



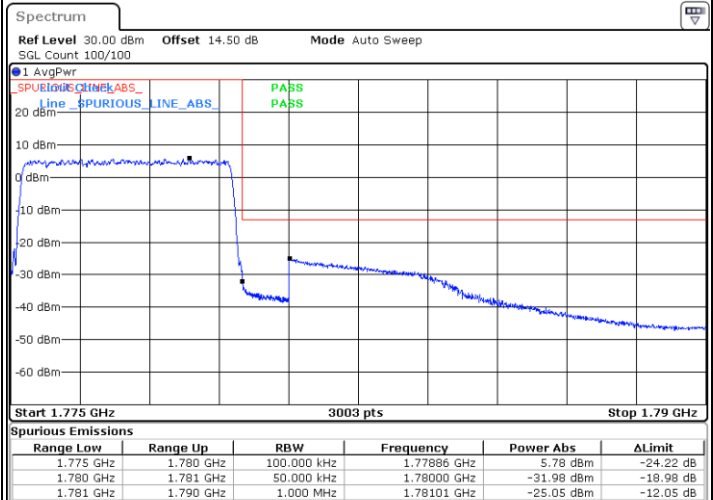
Date: 26.DEC.2023 20:08:45

Lowest Band Edge / Full RB



Date: 26.DEC.2023 20:04:14

Highest Band Edge / Full RB

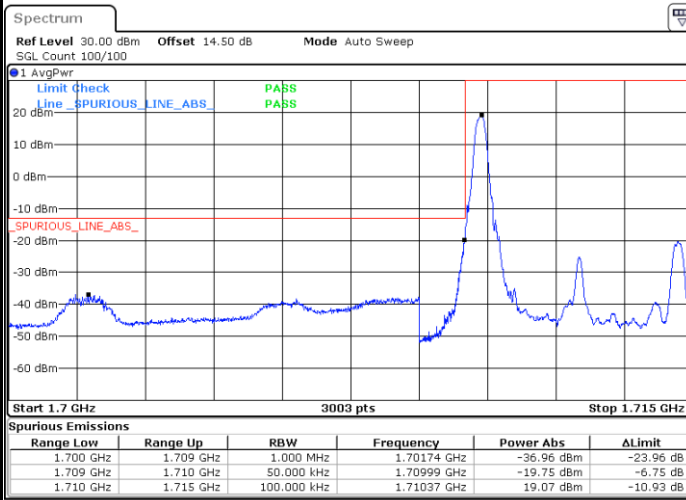


Date: 26.DEC.2023 20:10:46

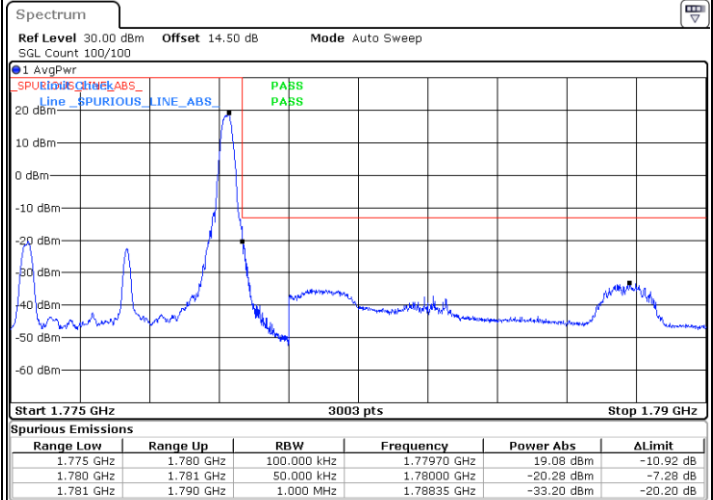


LTE Band 66 / 5MHz / 16QAM

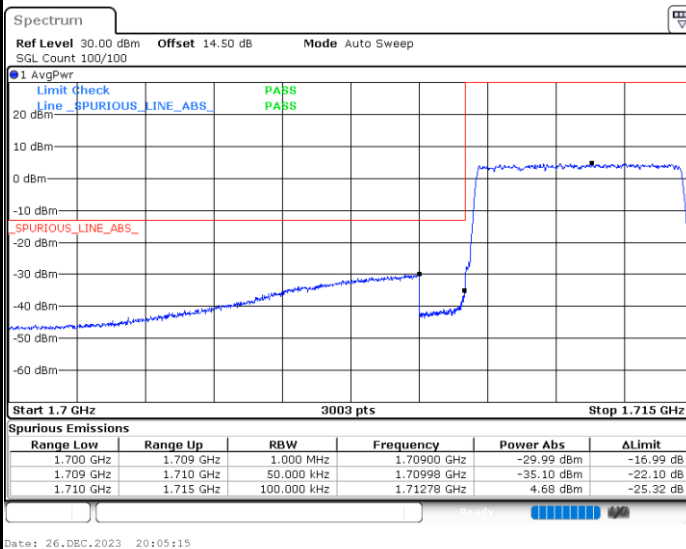
Lowest Band Edge / 1 RB



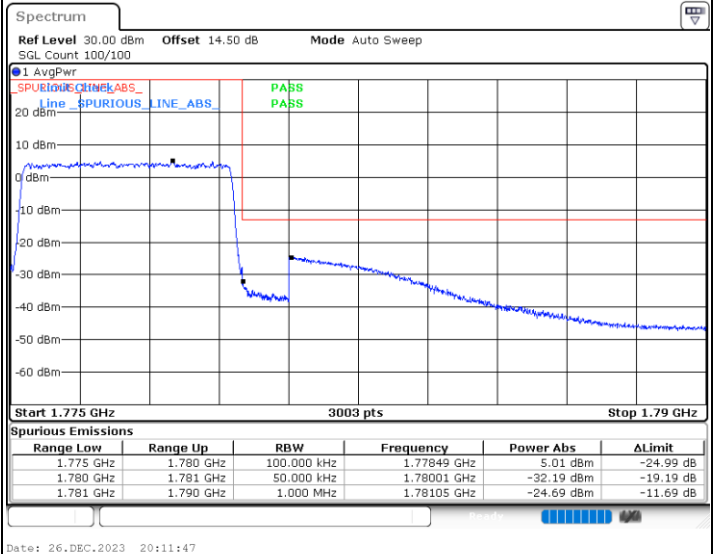
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



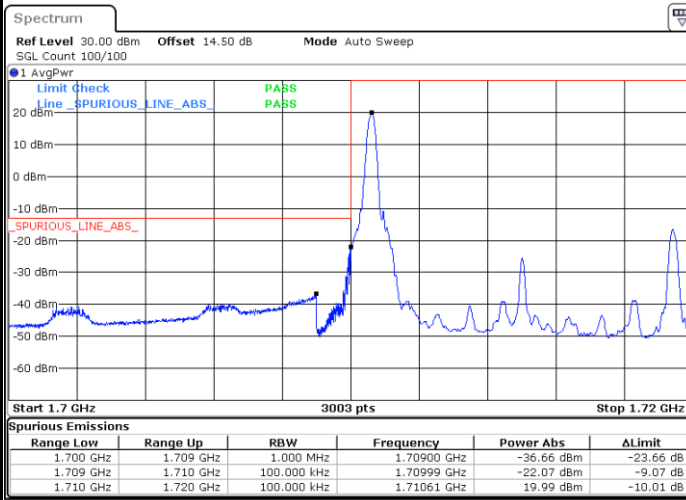
Highest Band Edge / Full RB



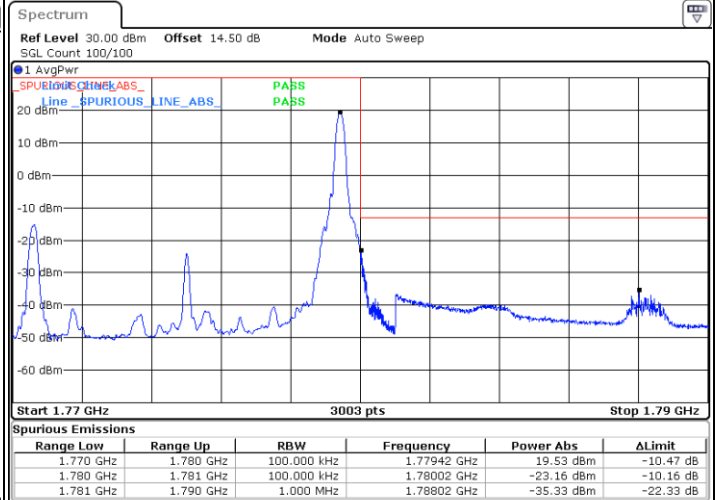


LTE Band 66 / 10MHz / QPSK

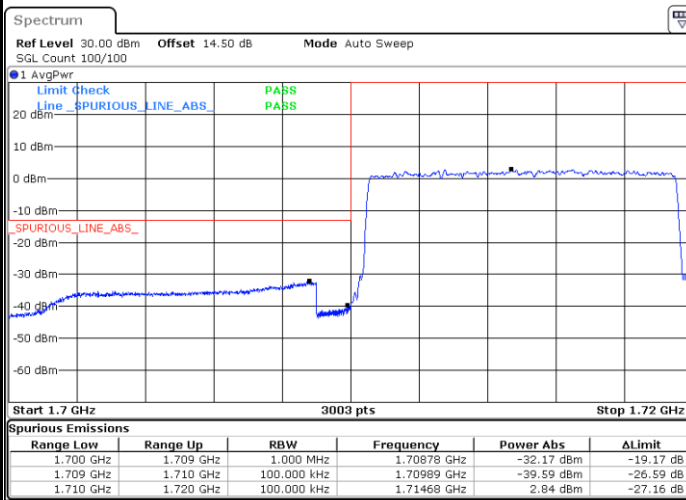
Lowest Band Edge / 1RB



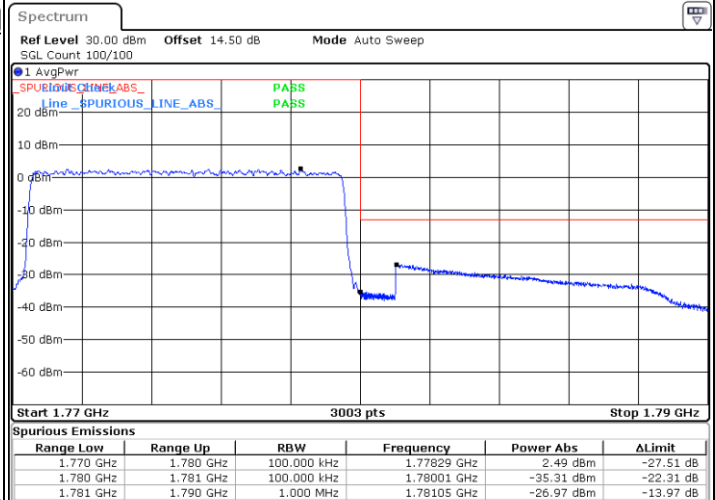
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



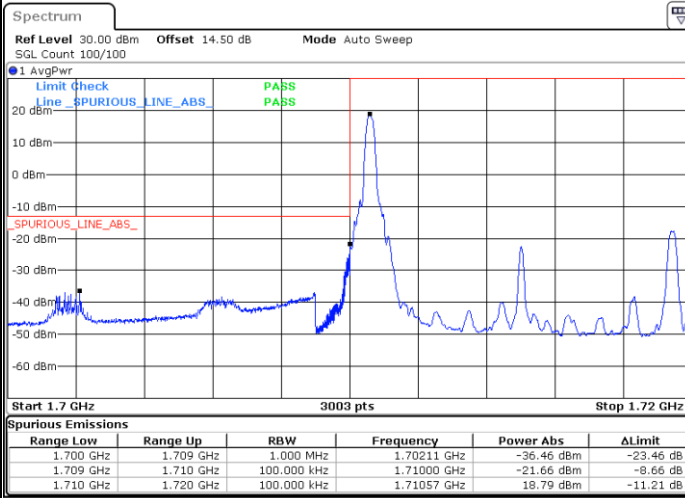
Highest Band Edge / Full RB



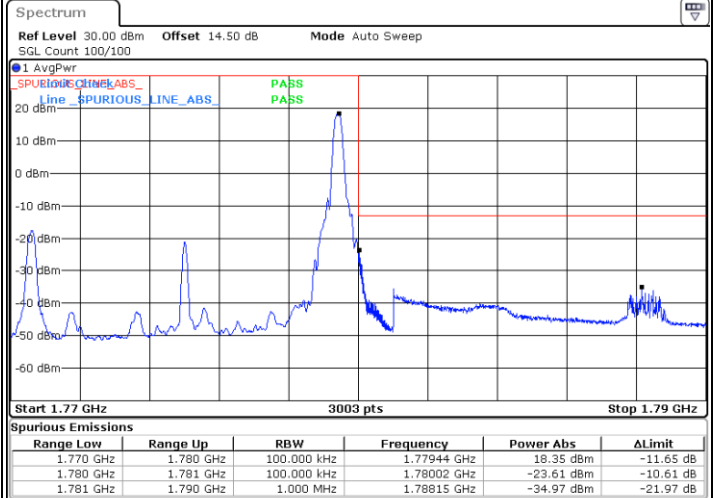


LTE Band 66 / 10MHz / 16QAM

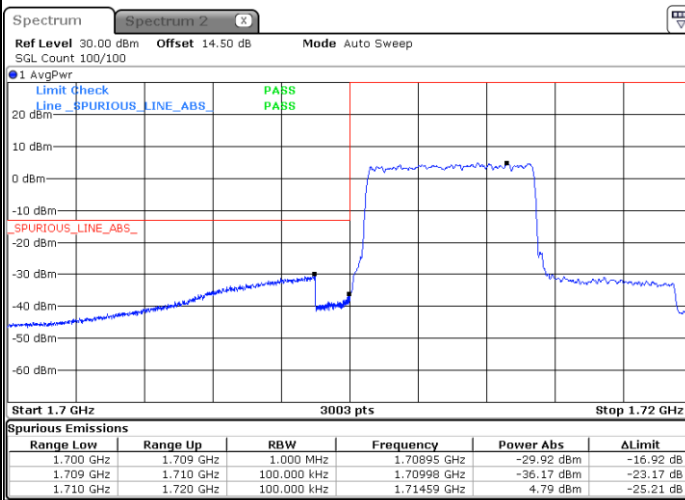
Lowest Band Edge / 1 RB



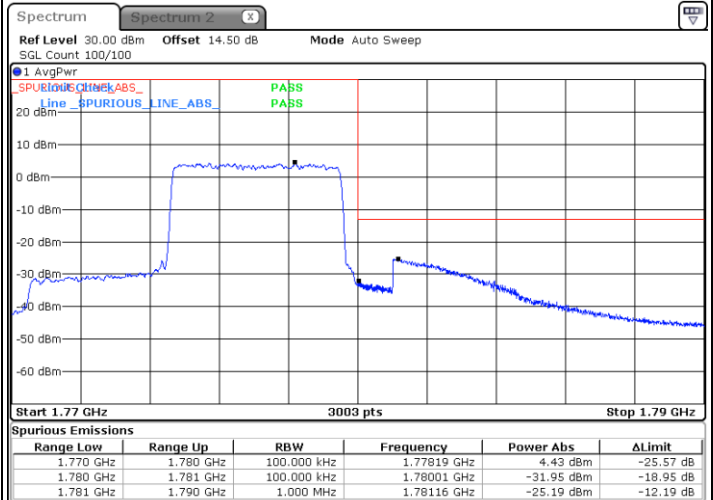
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



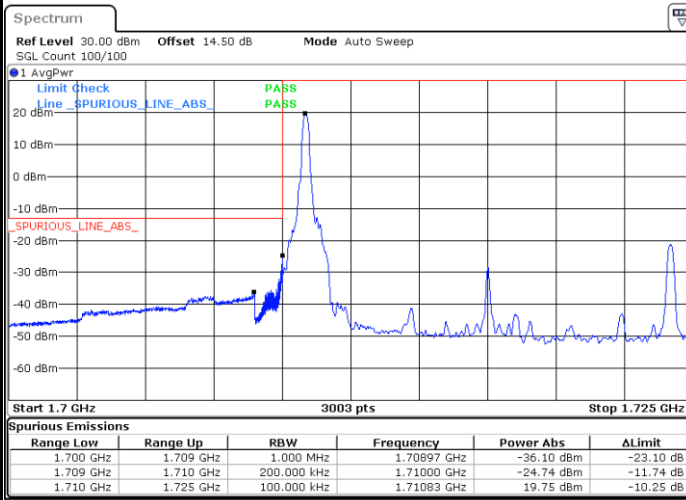
Highest Band Edge / Full RB



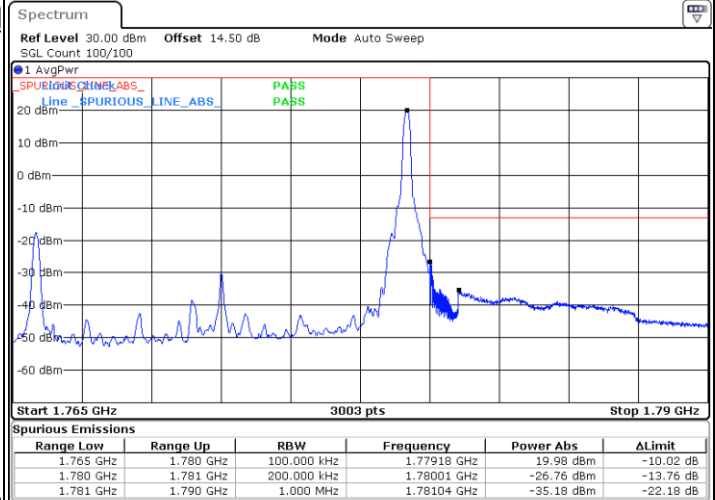


LTE Band 66 / 15MHz / QPSK

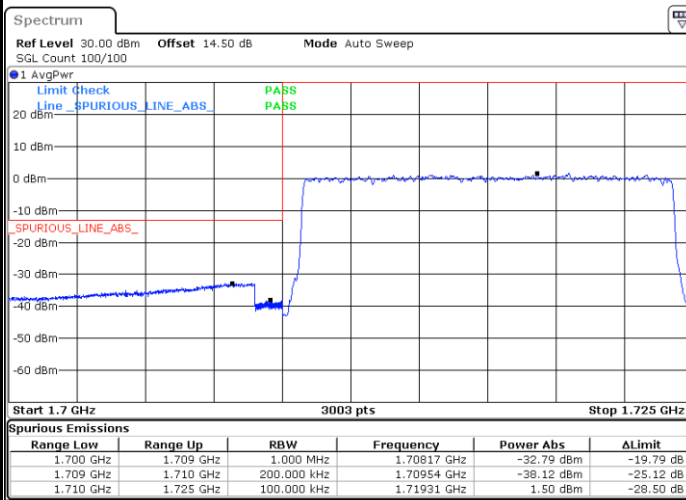
Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

