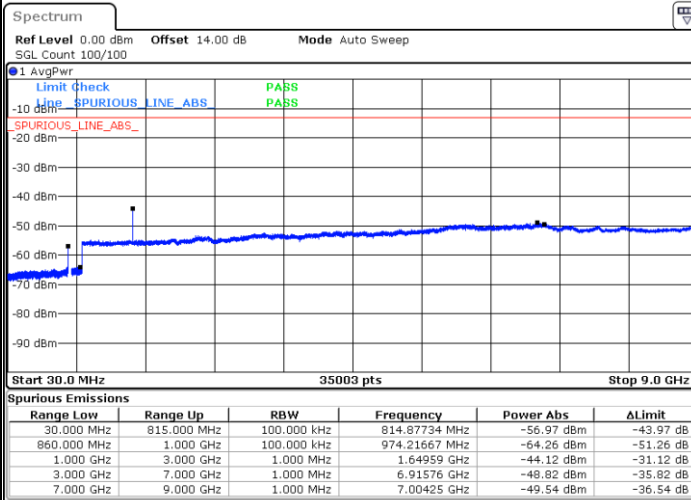




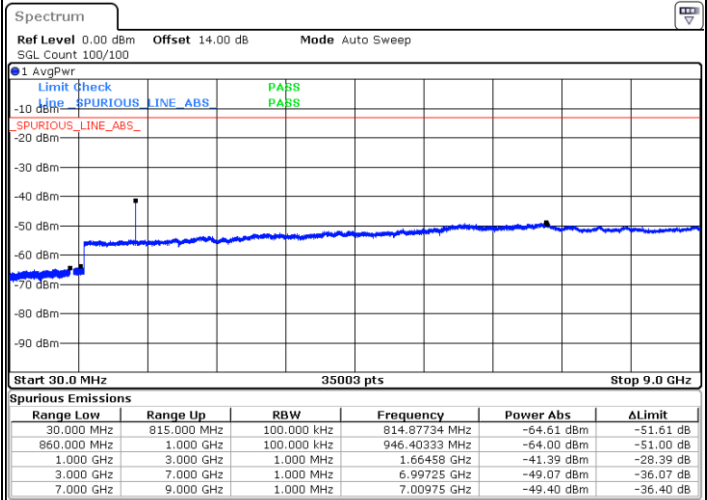
LTE Band 5 / 10MHz

Lowest Channel / QPSK



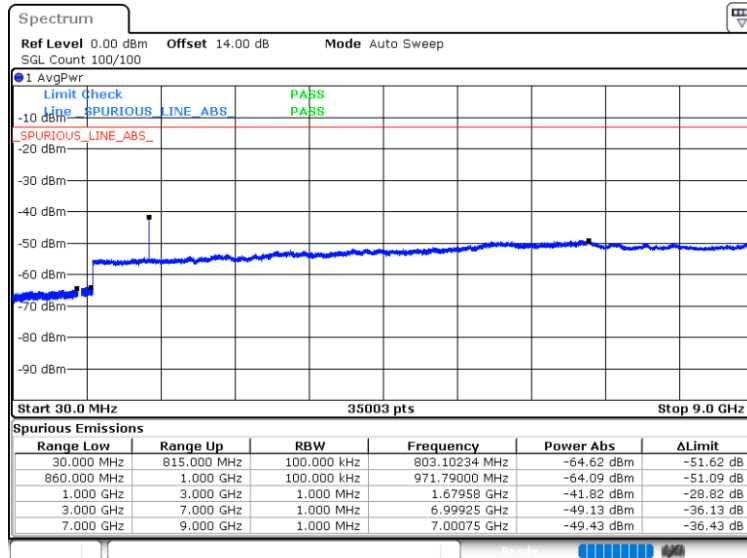
Date: 16.JAN.2024 23:50:59

Middle Channel / QPSK



Date: 16.JAN.2024 23:52:10

Highest Channel / QPSK



Date: 17.JAN.2024 00:02:14

Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0087	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0071	
-10	Normal Voltage	0.0081	
-20	Normal Voltage	0.0085	
-30	Normal Voltage	0.0083	
20	Maximum Voltage	0.0076	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0084	

Note:

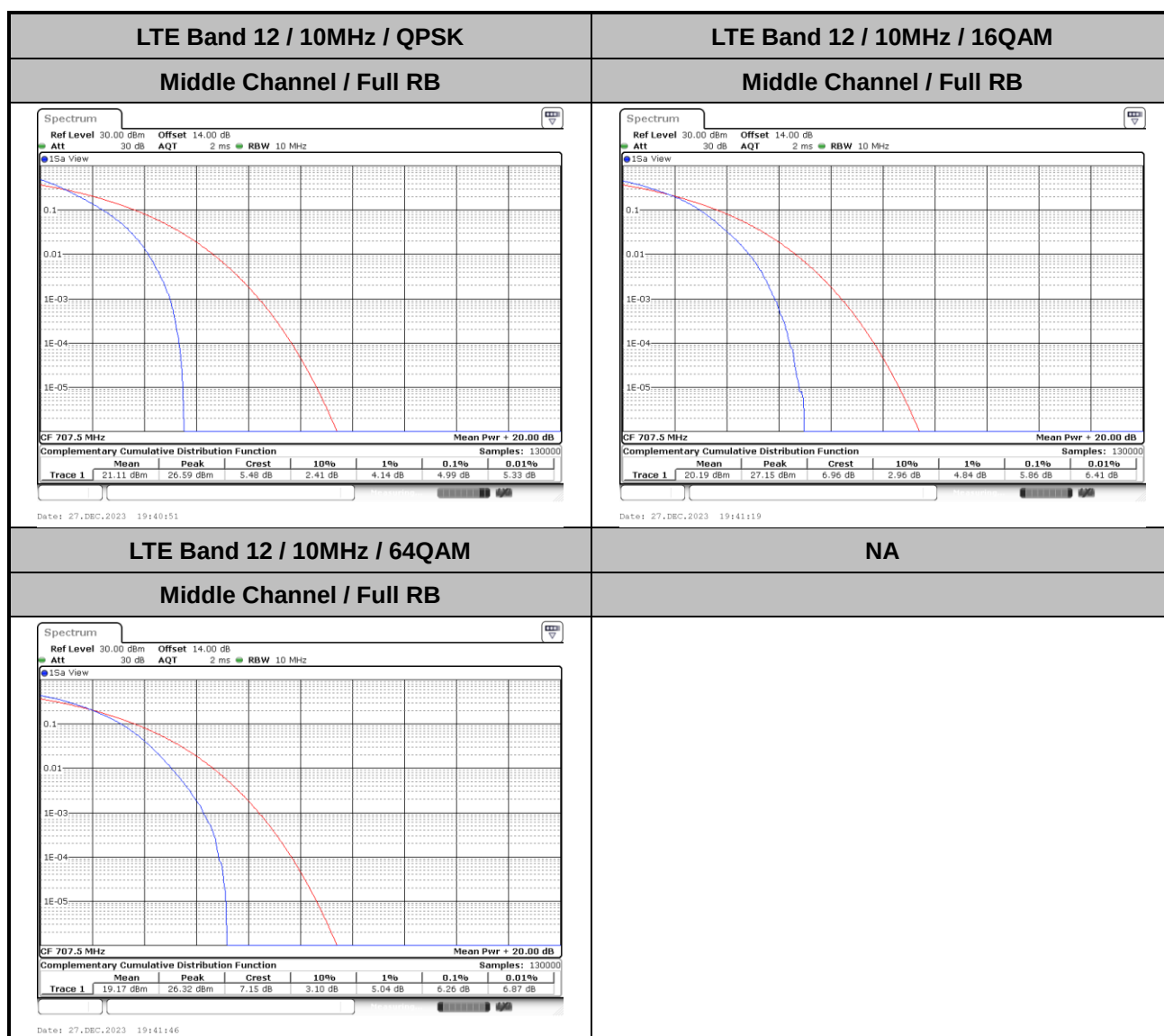
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

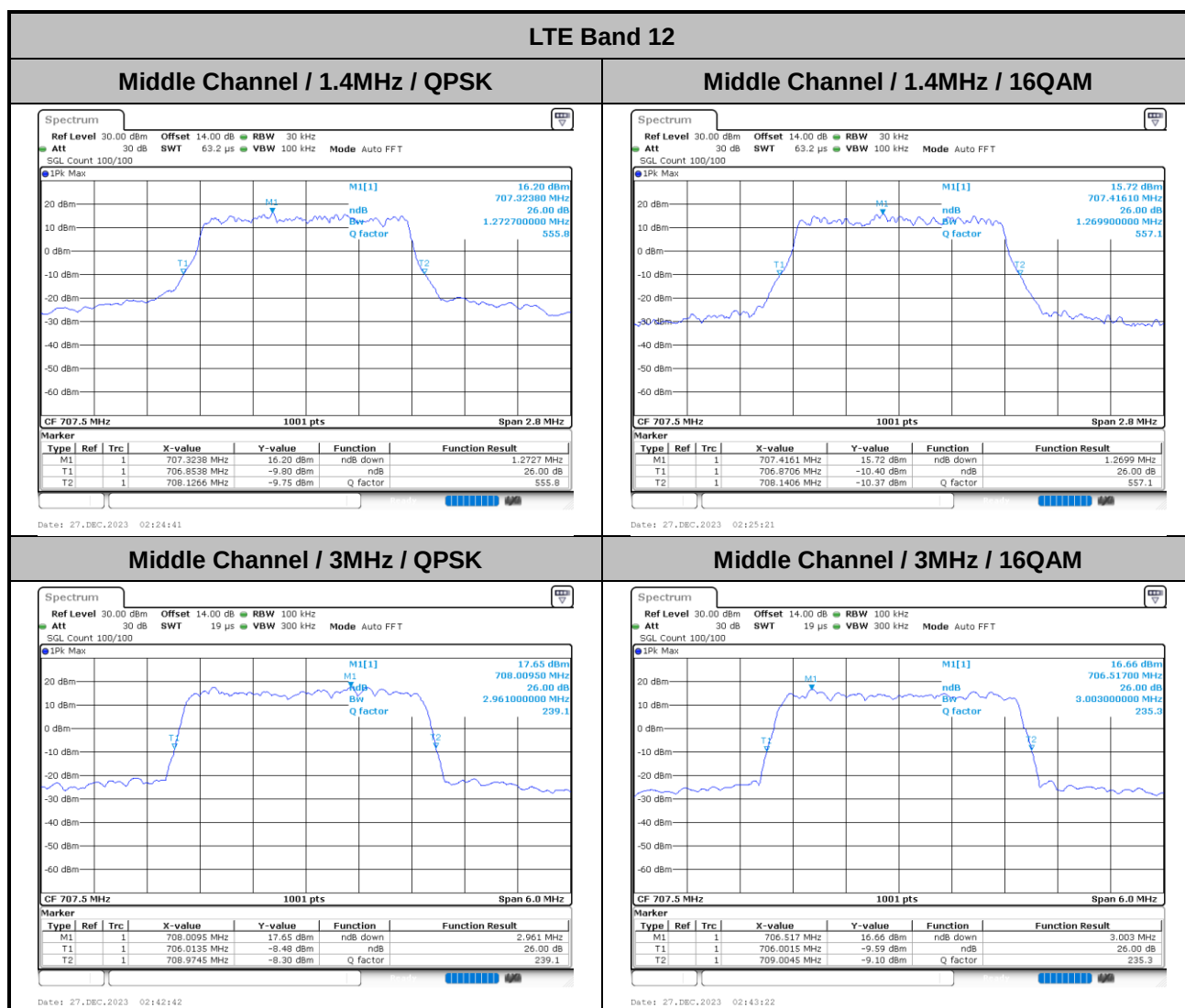
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.99	5.86	6.26	PASS



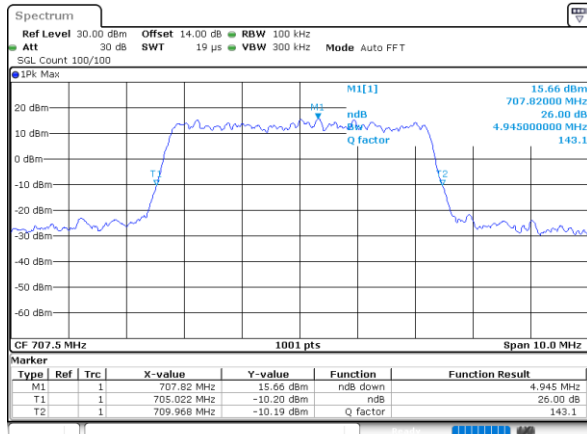
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		-		-	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	1.27	1.27	2.96	3.00	4.95	4.88	9.73	9.73	-	-	-	-



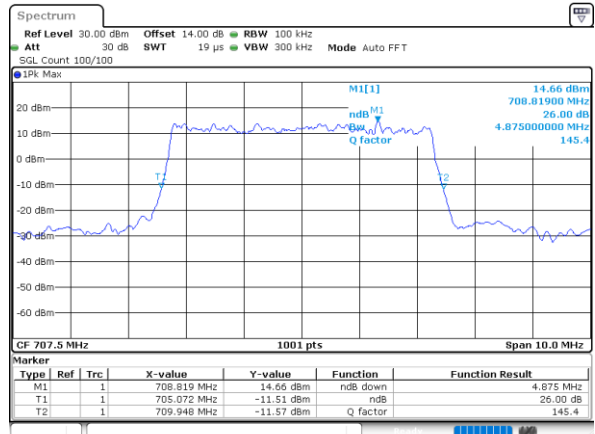


Middle Channel / 5MHz / QPSK



Date: 27.DEC.2023 03:00:41

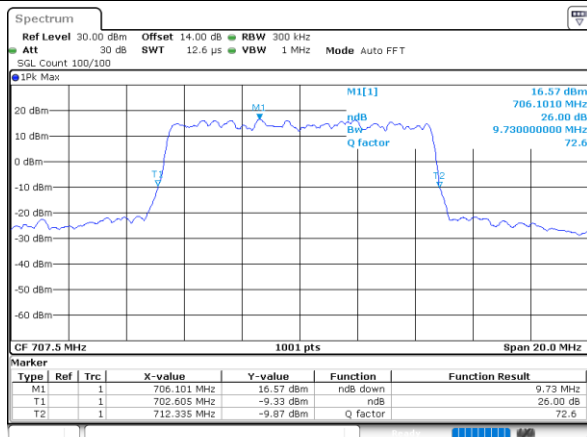
Middle Channel / 5MHz / 16QAM



Date: 27.DEC.2023 03:01:22

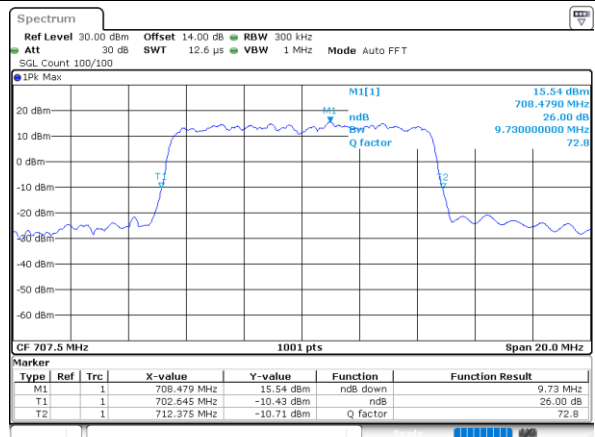
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 27.DEC.2023 19:02:32

Middle Channel / 10MHz / 16QAM

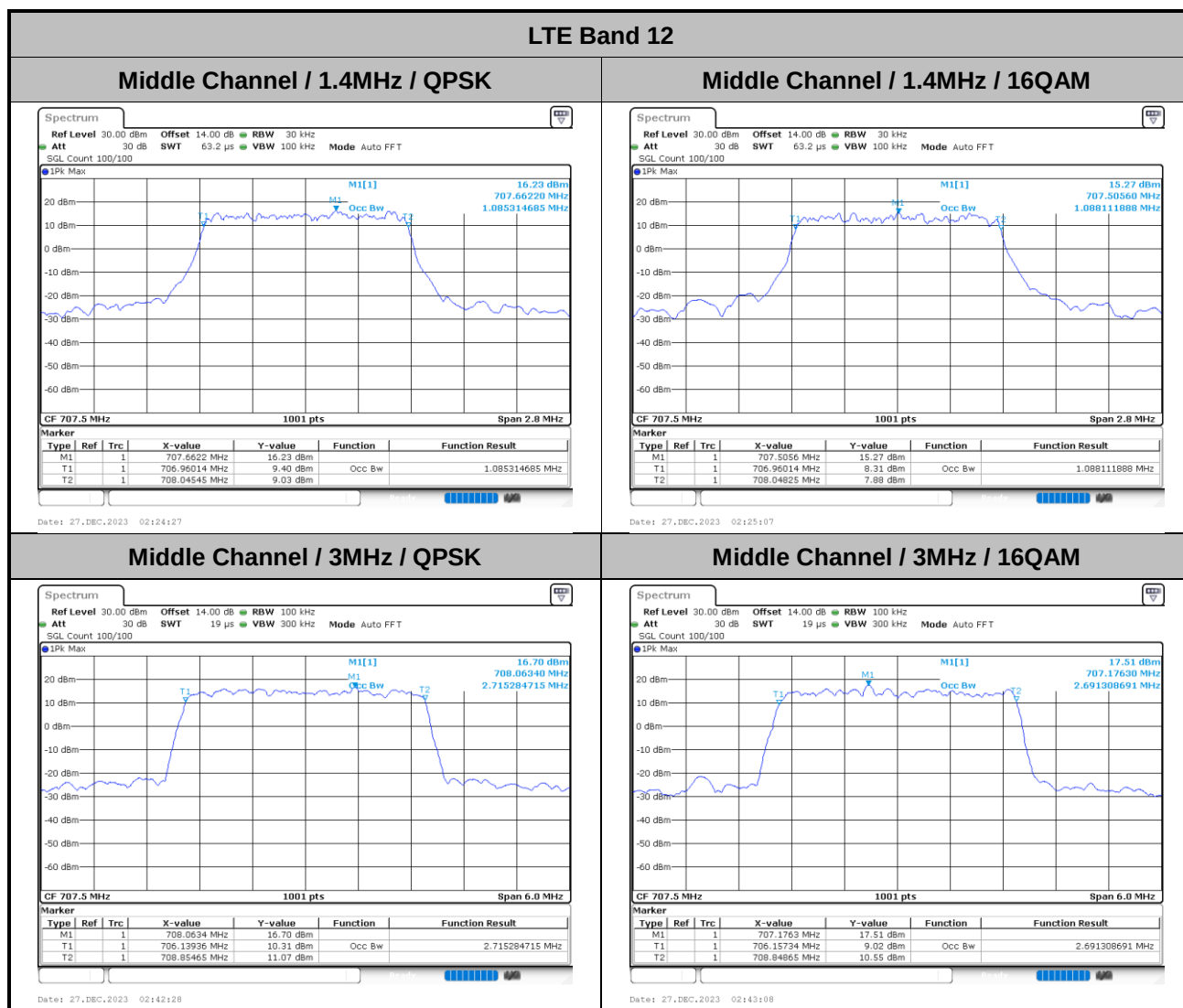


Date: 27.DEC.2023 19:03:12



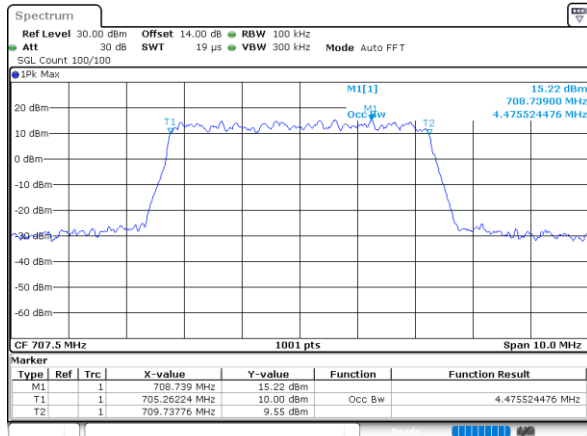
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		-		-	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	1.09	1.09	2.72	2.69	4.48	4.48	9.03	8.97	-	-	-	-

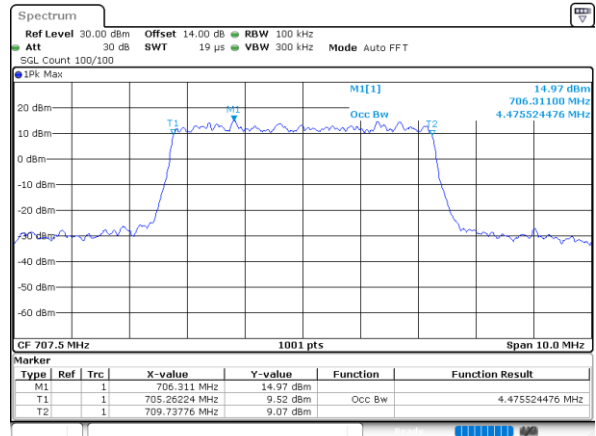




Middle Channel / 5MHz / QPSK

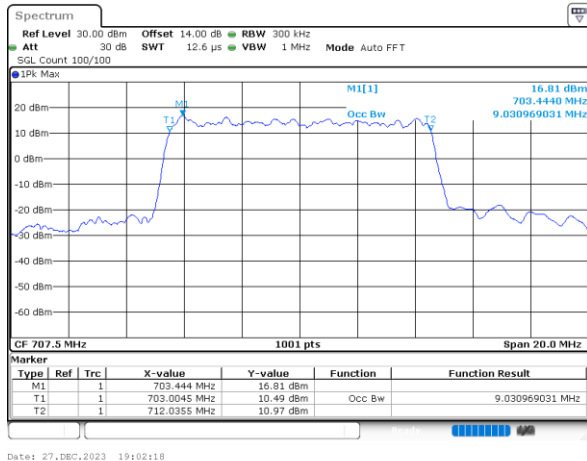


Middle Channel / 5MHz / 16QAM

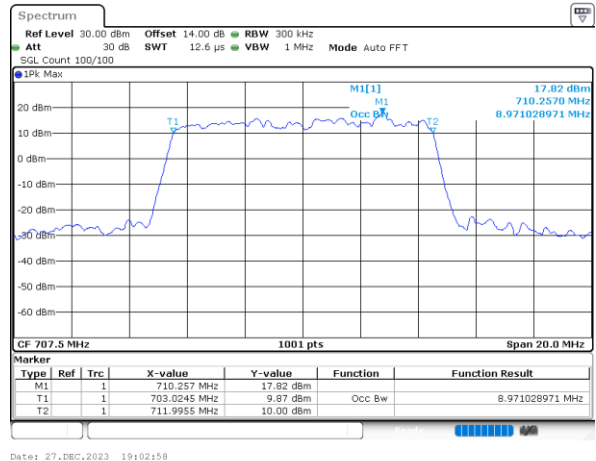


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

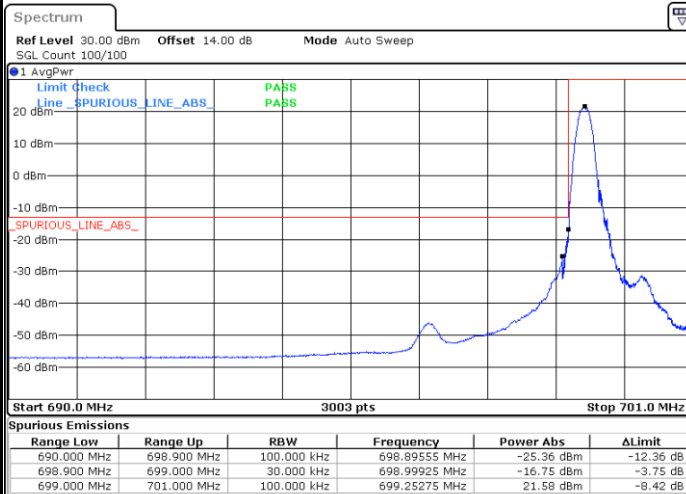




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

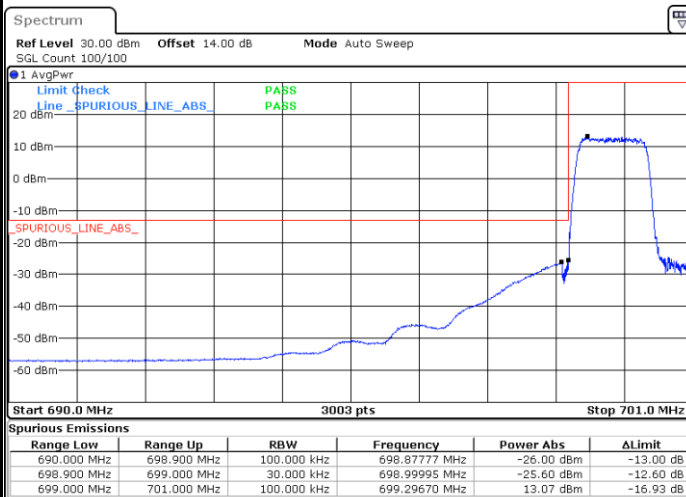
Lowest Band Edge / 1RB



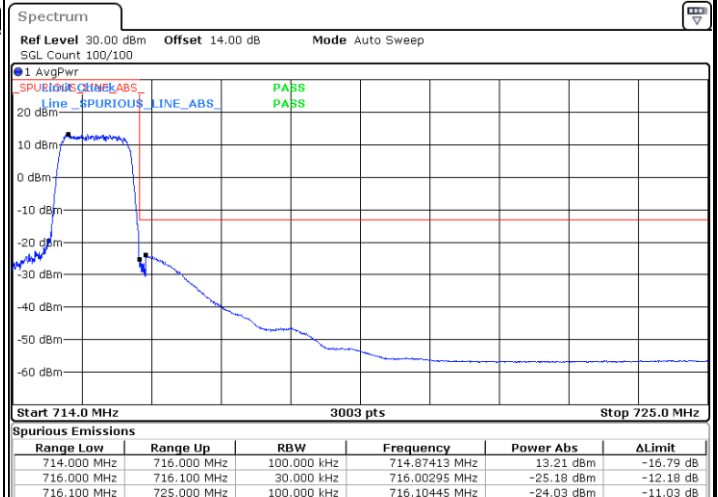
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



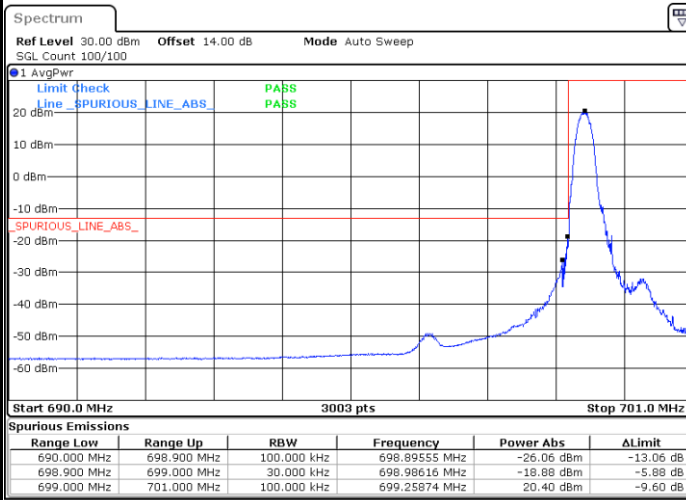
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

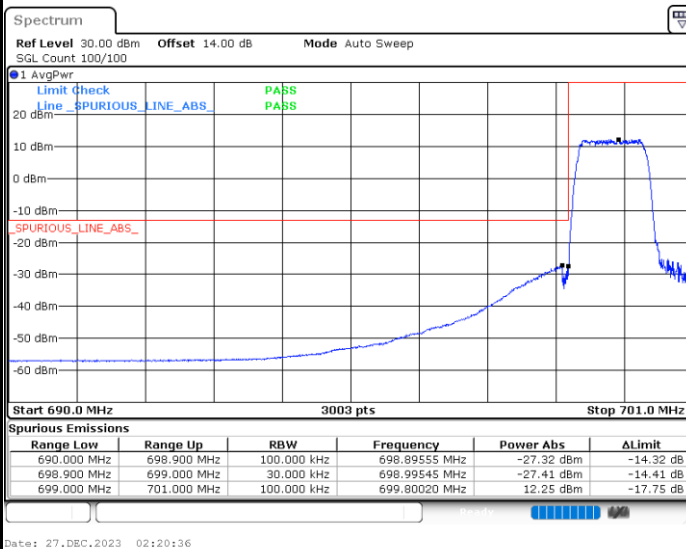
Lowest Band Edge / 1 RB



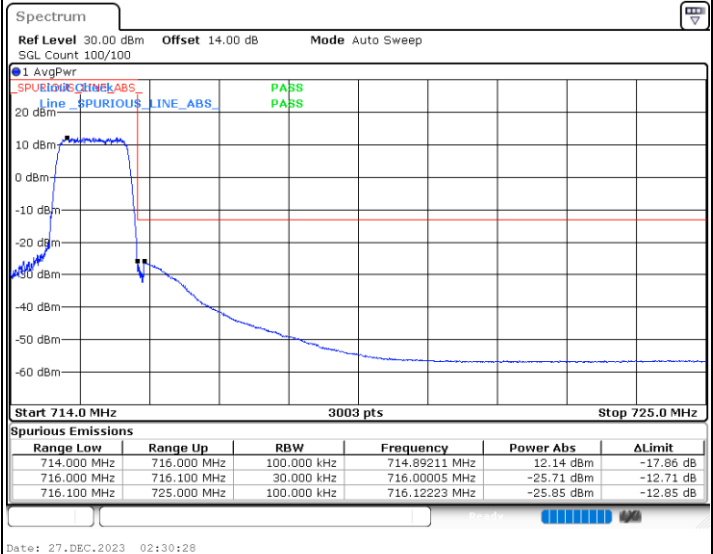
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



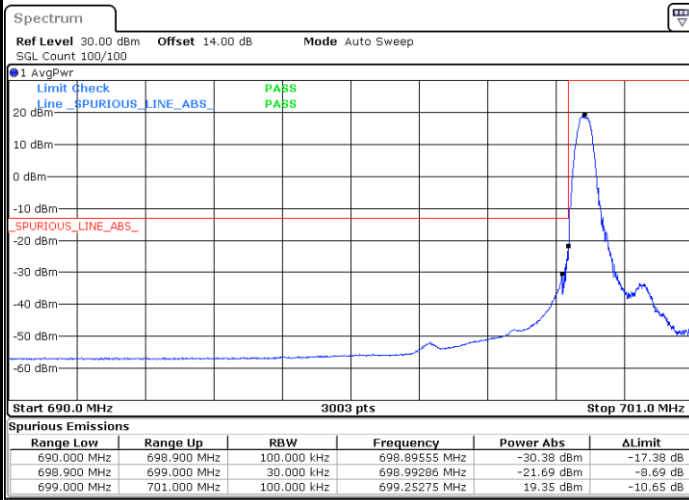
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

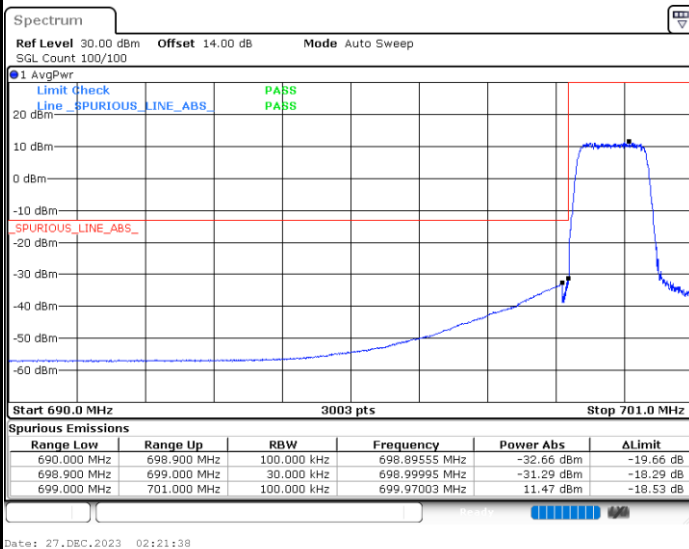
Lowest Band Edge / 1 RB



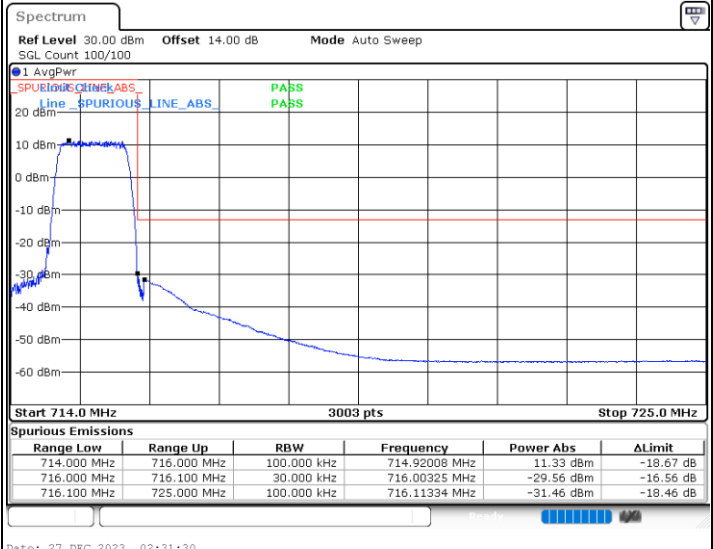
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



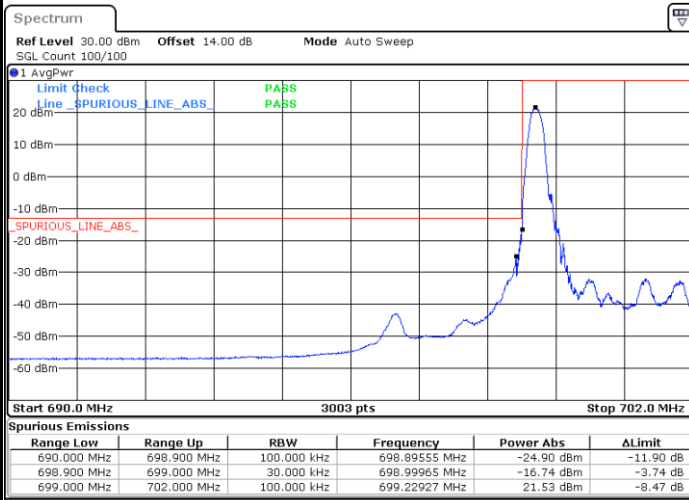
Highest Band Edge / Full RB



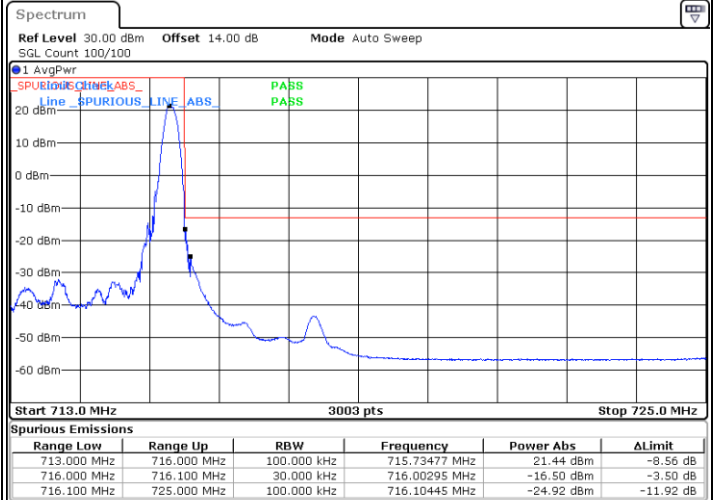


LTE Band 12 / 3MHz / QPSK

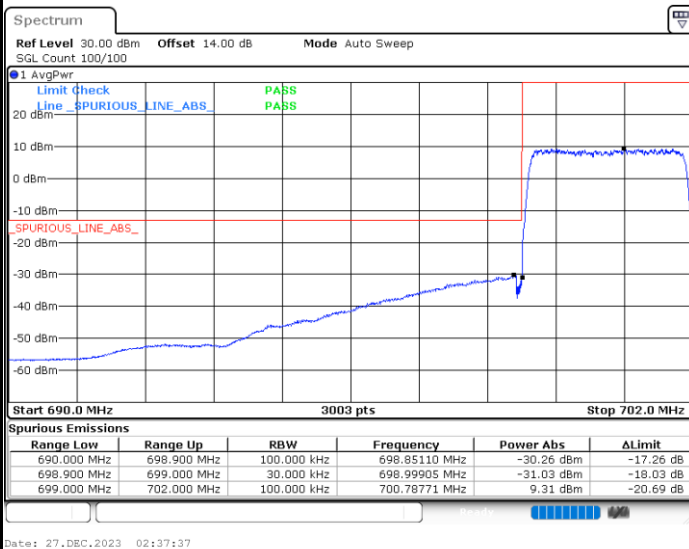
Lowest Band Edge / 1RB



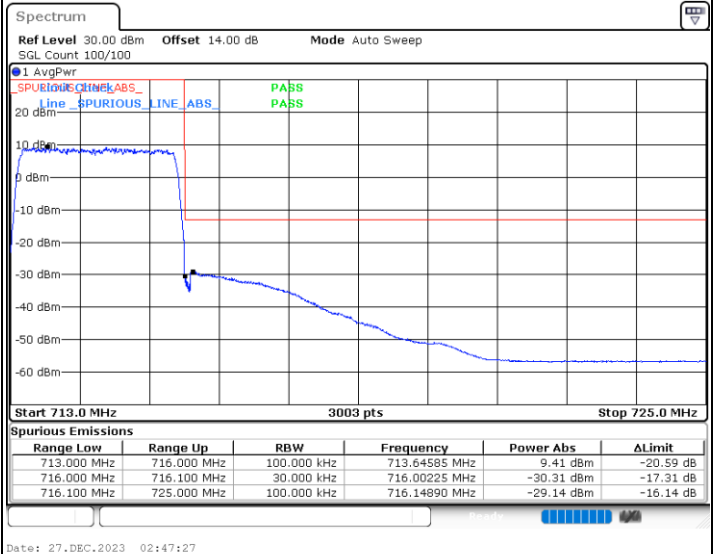
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



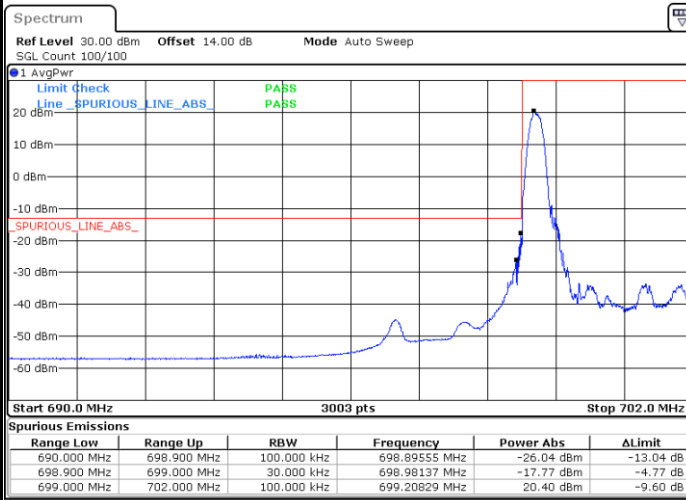
Highest Band Edge / Full RB



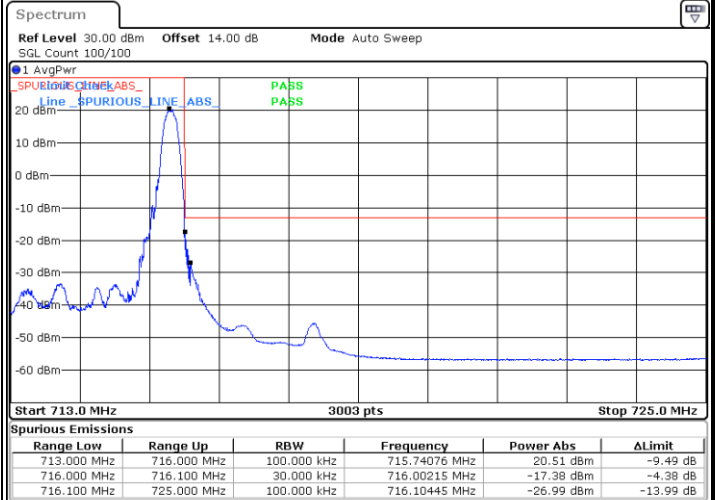


LTE Band 12 / 3MHz / 16QAM

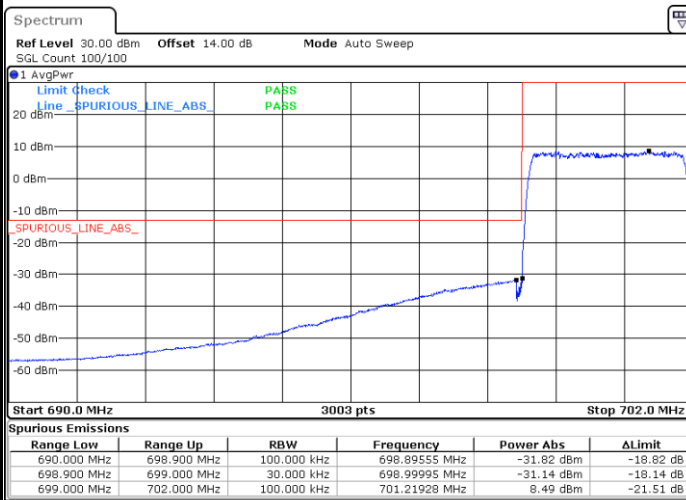
Lowest Band Edge / 1 RB



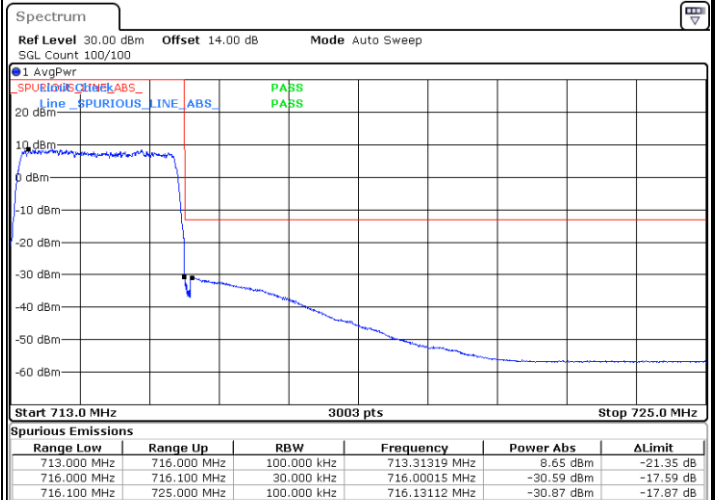
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



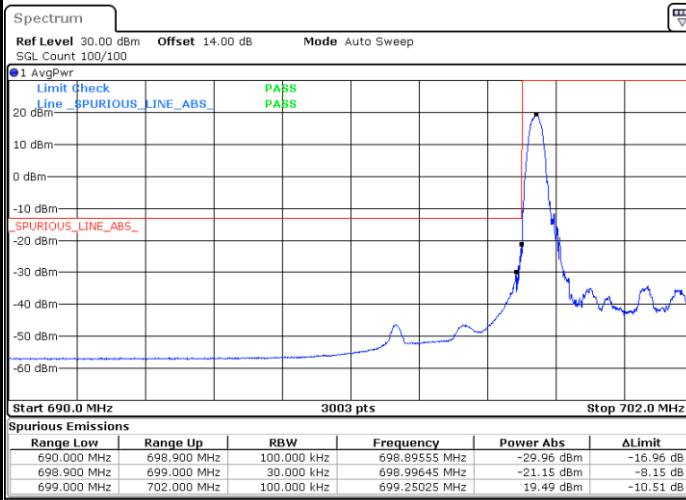
Highest Band Edge / Full RB



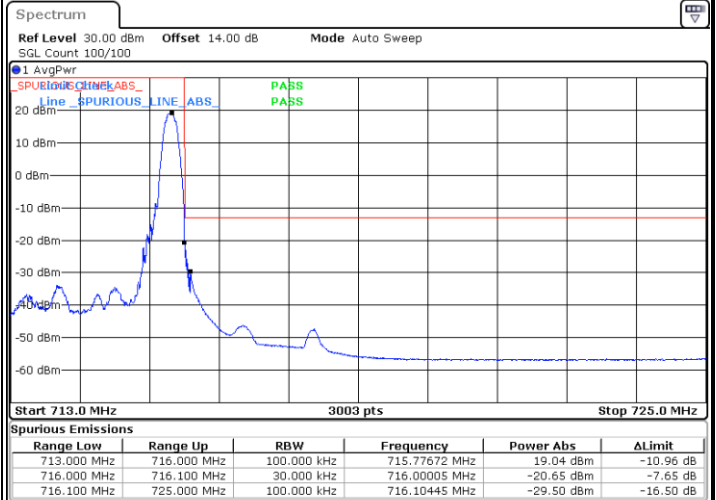


LTE Band 12 / 3MHz / 64QAM

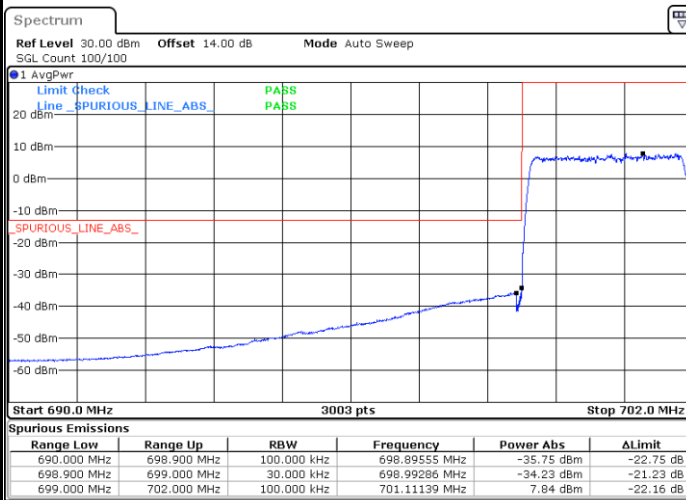
Lowest Band Edge / 1 RB



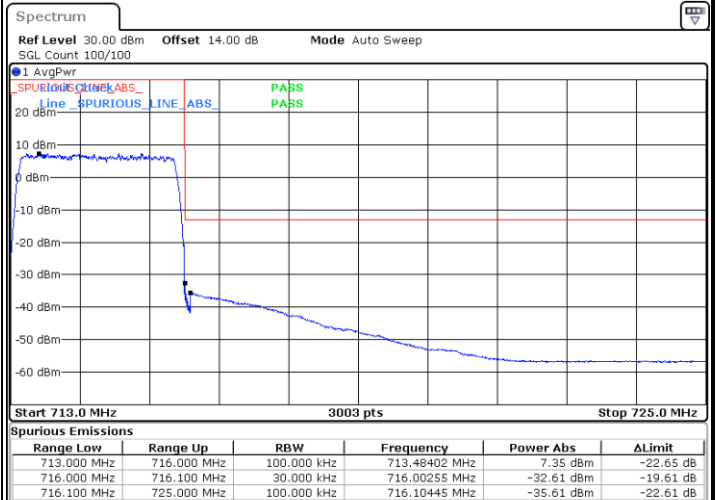
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



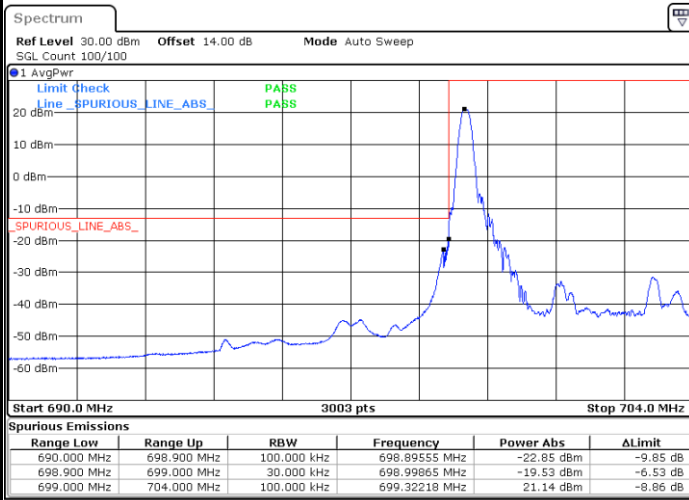
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / QPSK

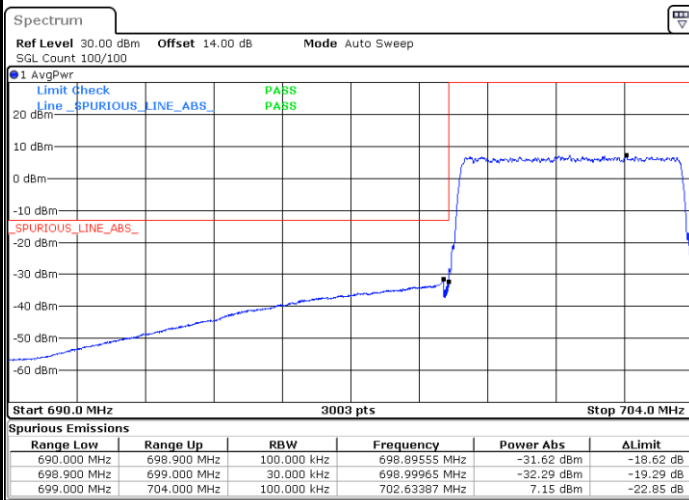
Lowest Band Edge / 1RB



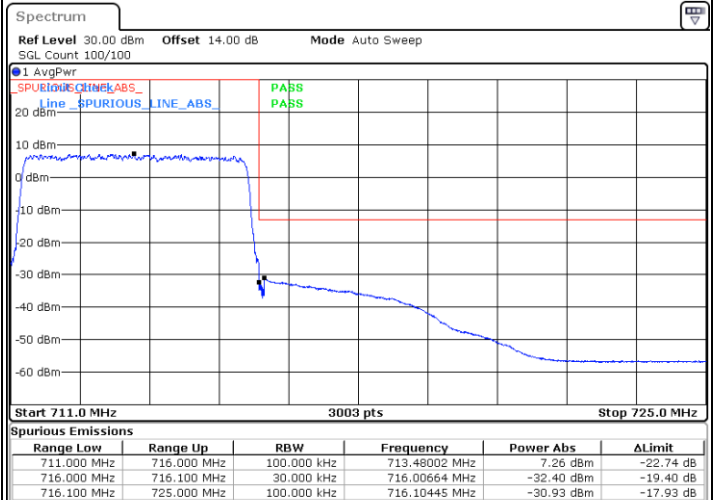
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



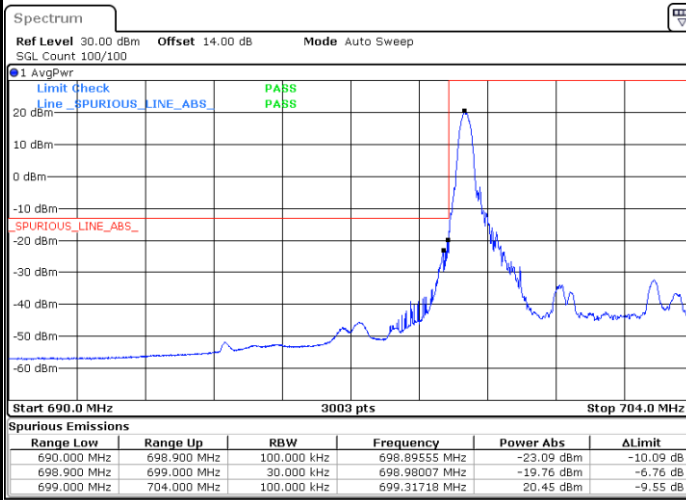
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

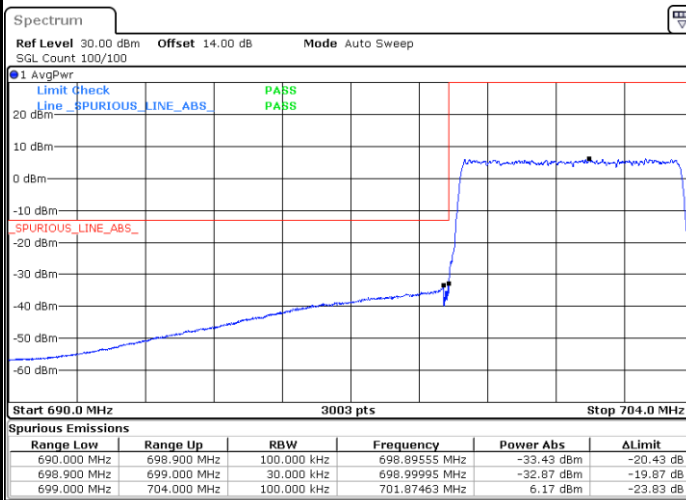
Lowest Band Edge / 1 RB



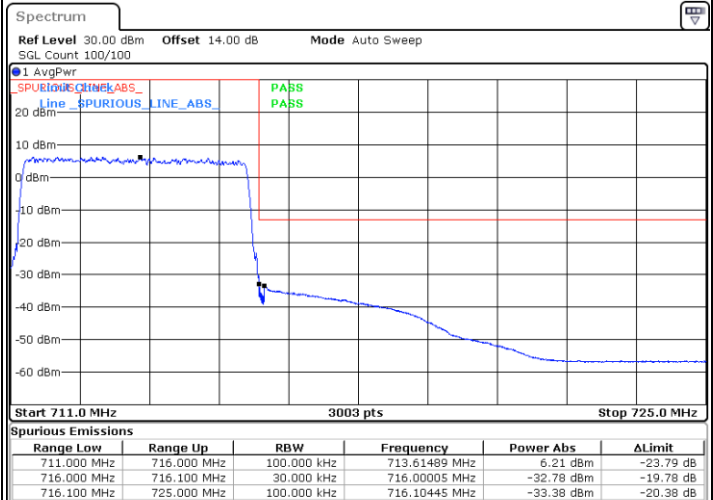
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



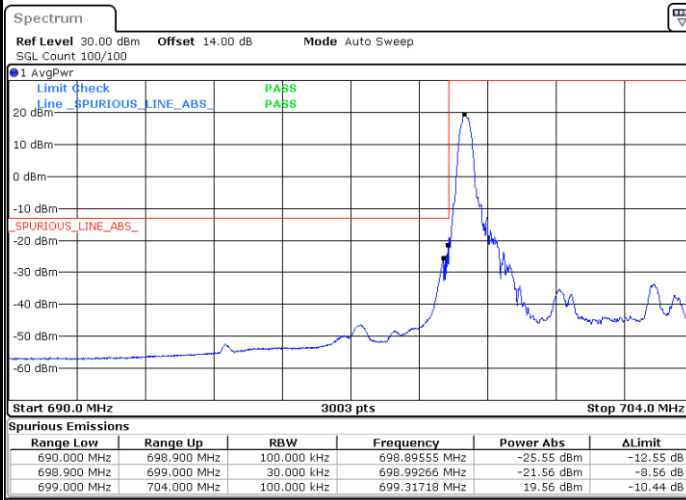
Highest Band Edge / Full RB



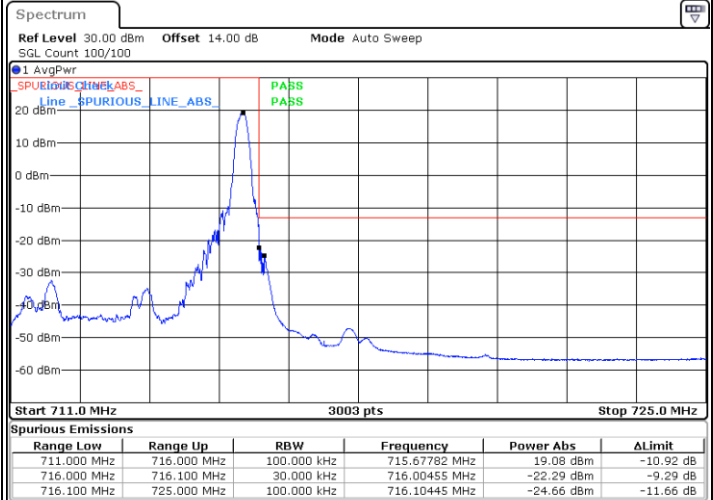


LTE Band 12 / 5MHz / 64QAM

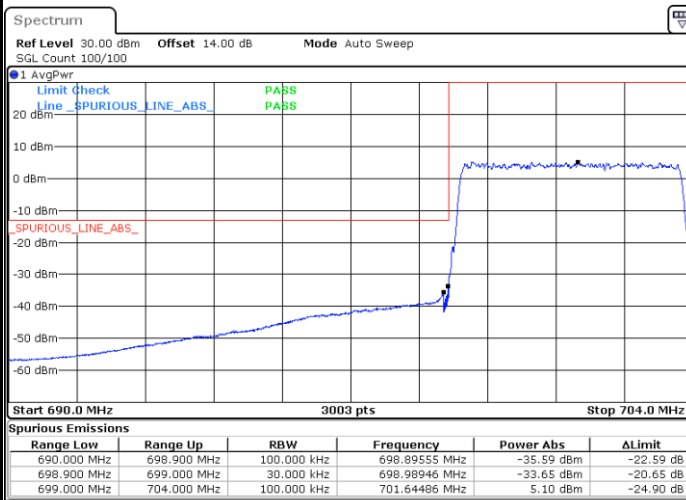
Lowest Band Edge / 1 RB



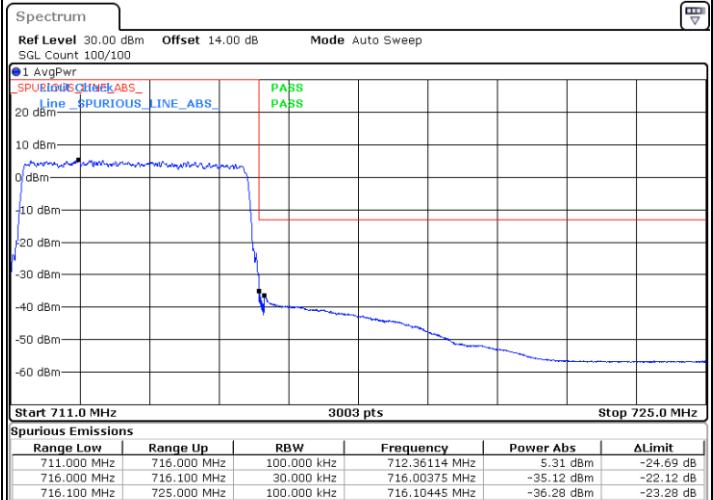
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



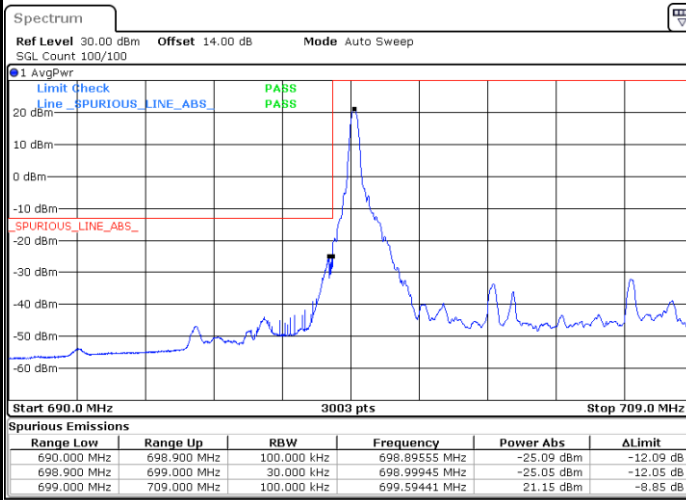
Highest Band Edge / Full RB



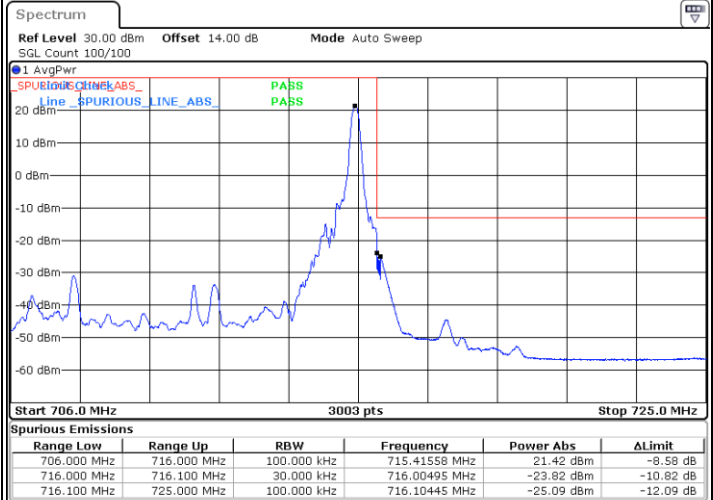


LTE Band 12 / 10MHz / QPSK

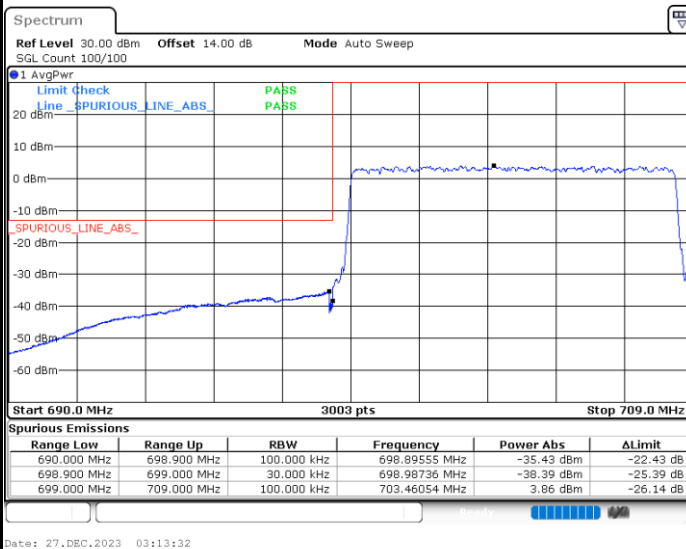
Lowest Band Edge / 1RB



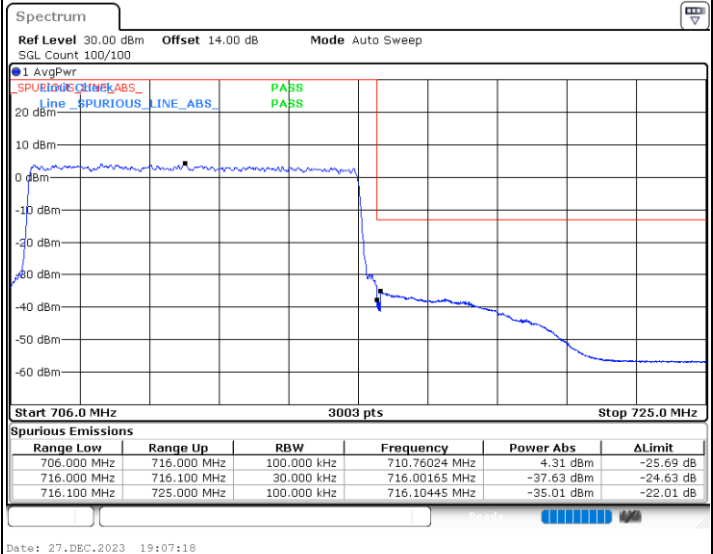
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



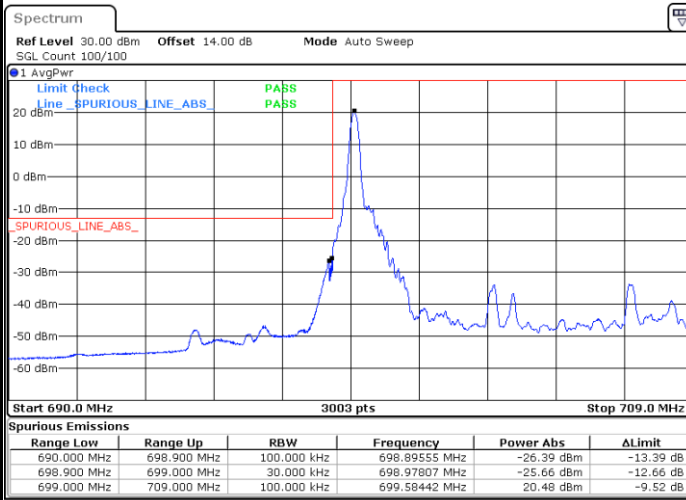
Highest Band Edge / Full RB



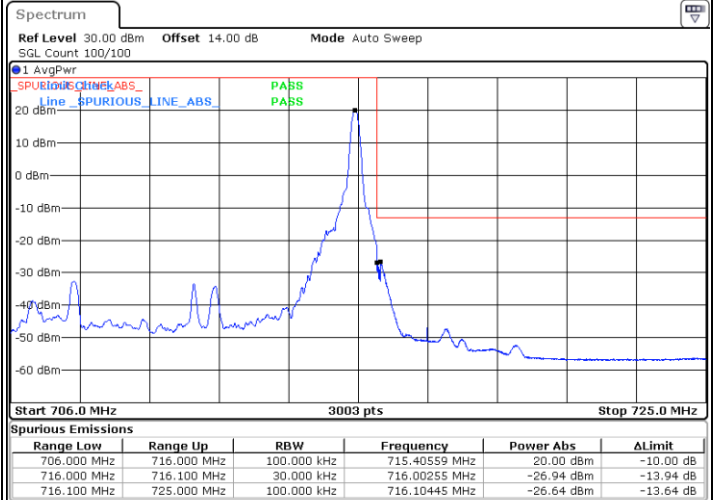


LTE Band 12 / 10MHz / 16QAM

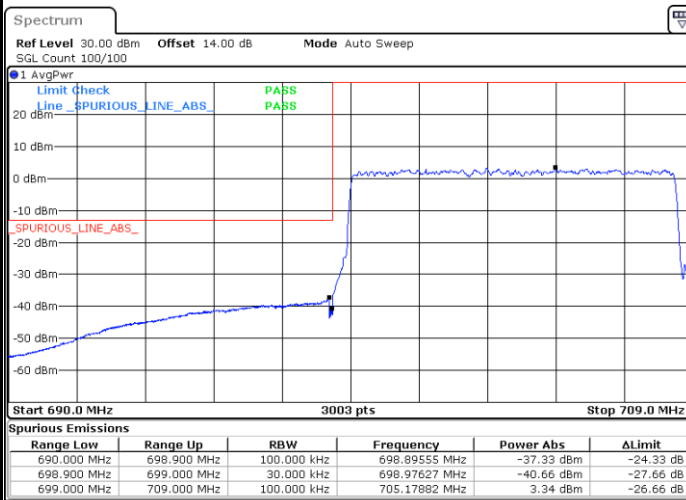
Lowest Band Edge / 1 RB



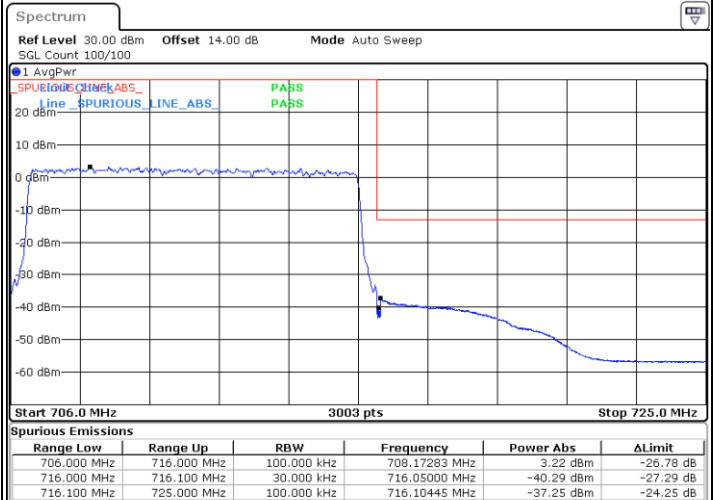
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



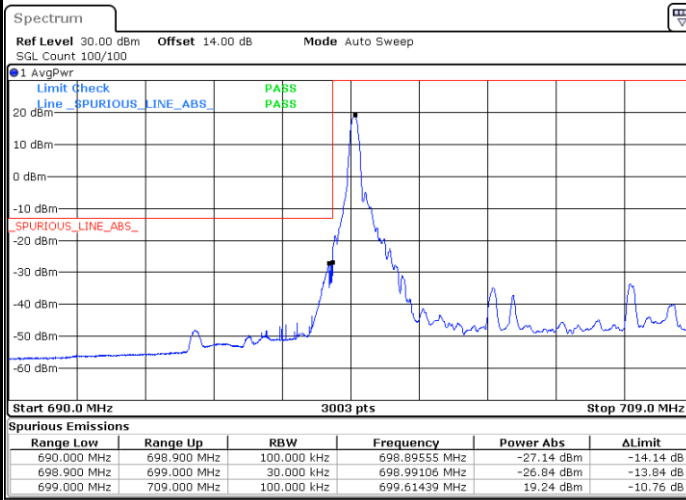
Highest Band Edge / Full RB



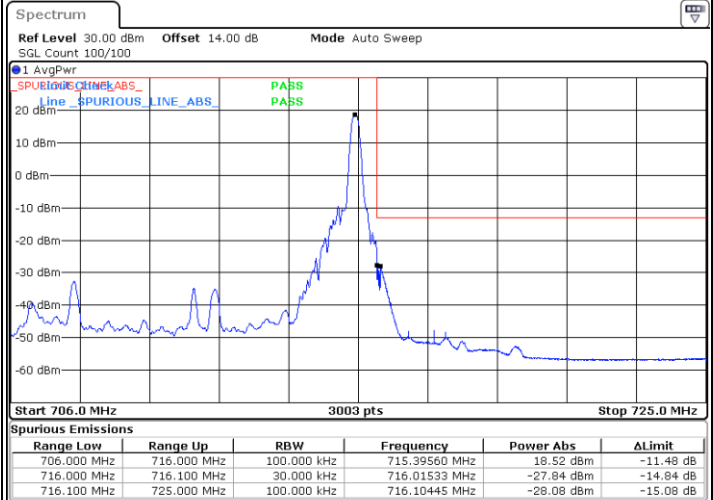


LTE Band 12 / 10MHz / 64QAM

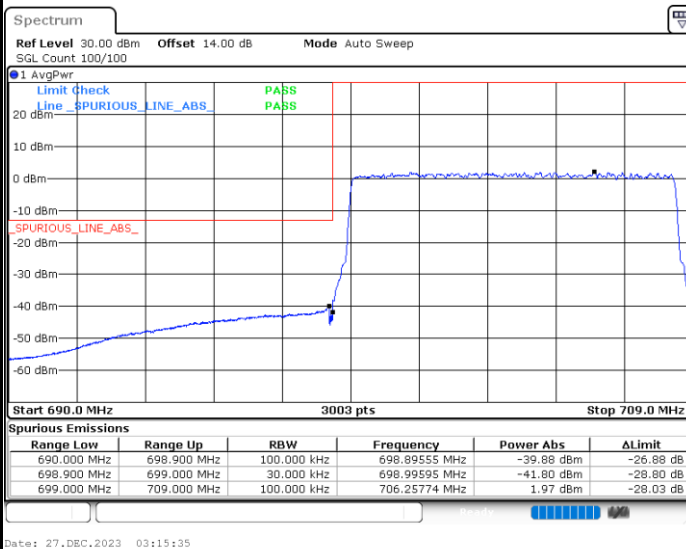
Lowest Band Edge / 1 RB



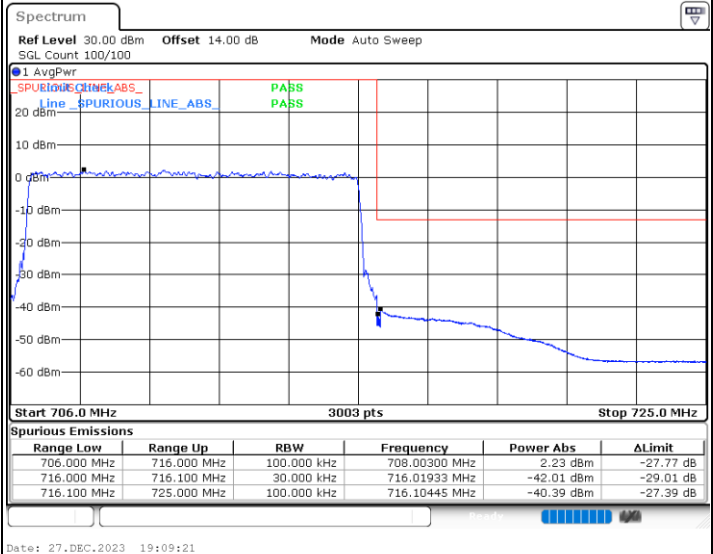
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

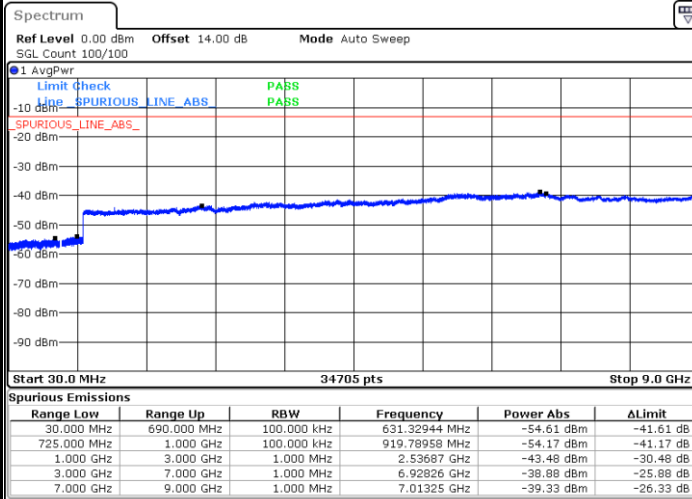




Conducted Spurious Emission

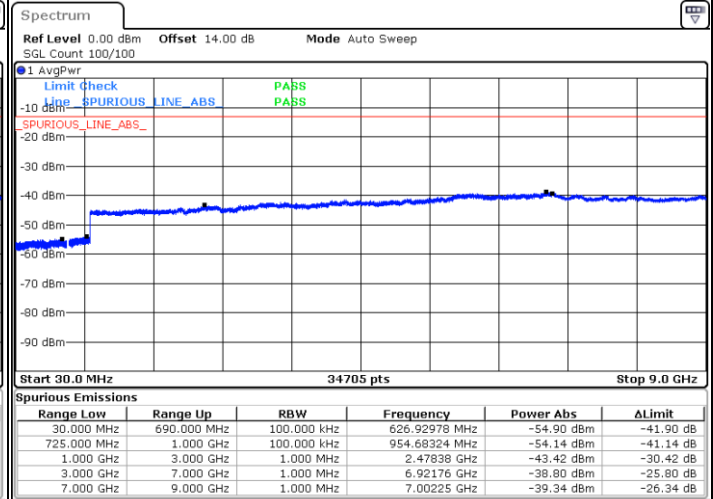
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



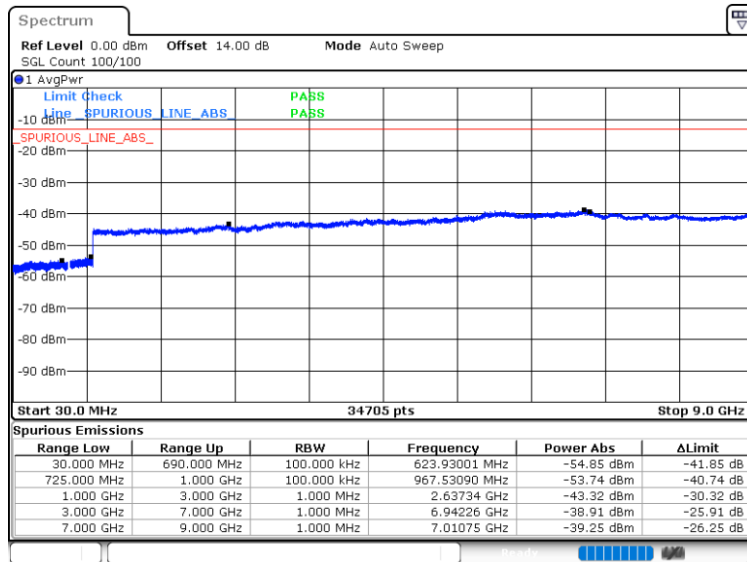
Date: 27.DEC.2023 02:22:49

Middle Channel / QPSK



Date: 27.DEC.2023 02:24:00

Highest Channel / QPSK



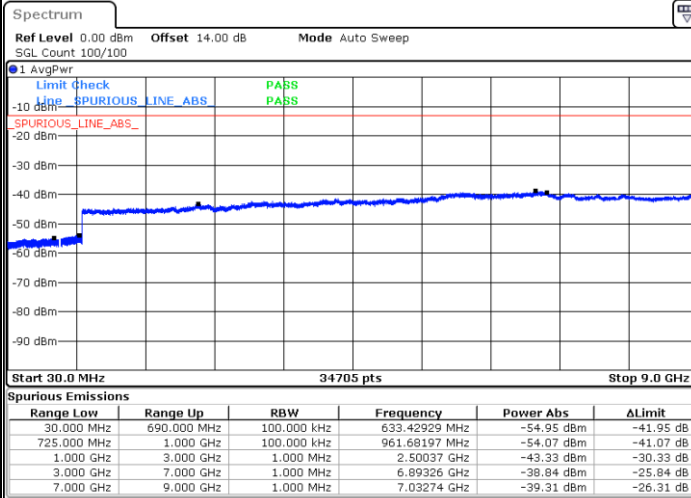
Date: 27.DEC.2023 02:32:41



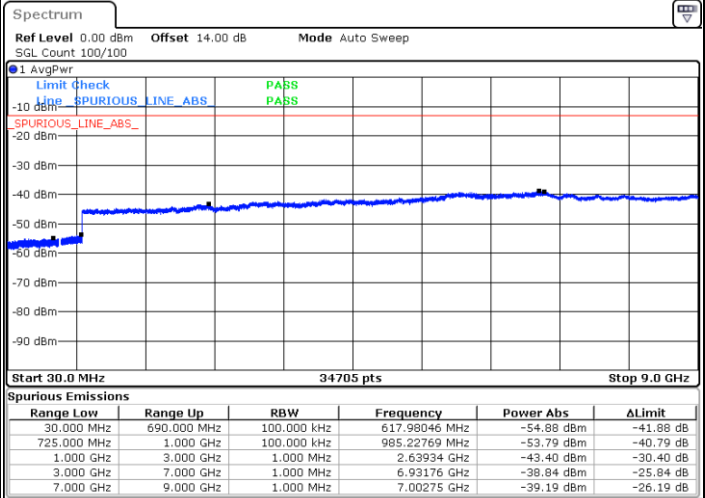
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

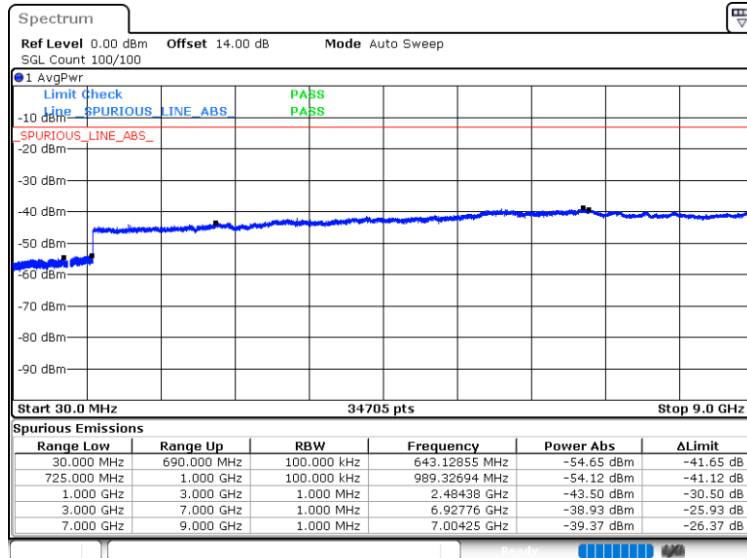


Date: 27.DEC.2023 02:40:51



Date: 27.DEC.2023 02:42:01

Highest Channel / QPSK

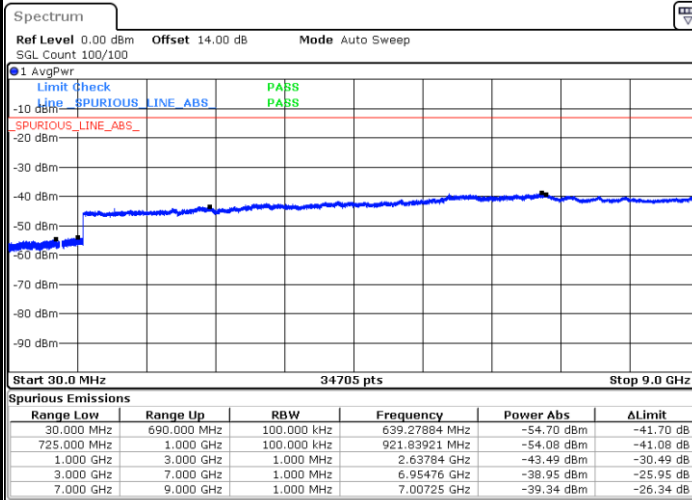


Date: 27.DEC.2023 02:50:41



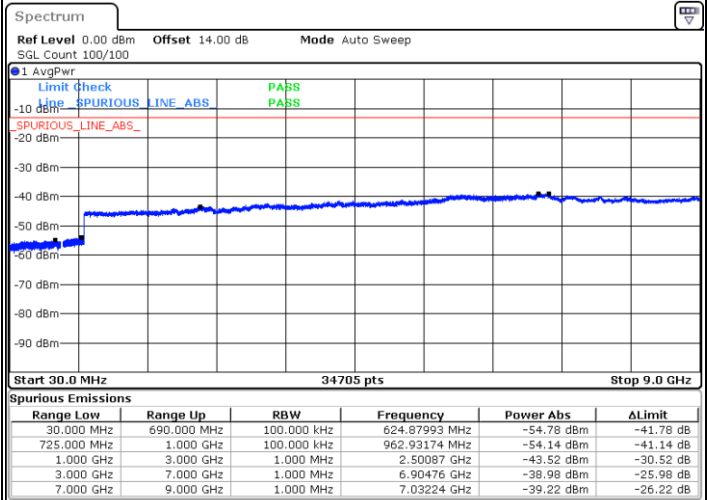
LTE Band 12 / 5MHz

Lowest Channel / QPSK



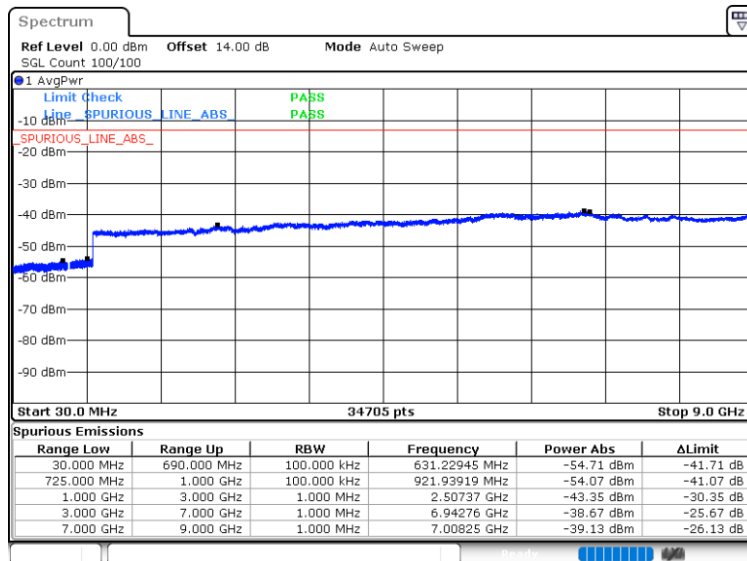
Date: 27.DEC.2023 02:58:51

Middle Channel / QPSK



Date: 27.DEC.2023 03:00:01

Highest Channel / QPSK

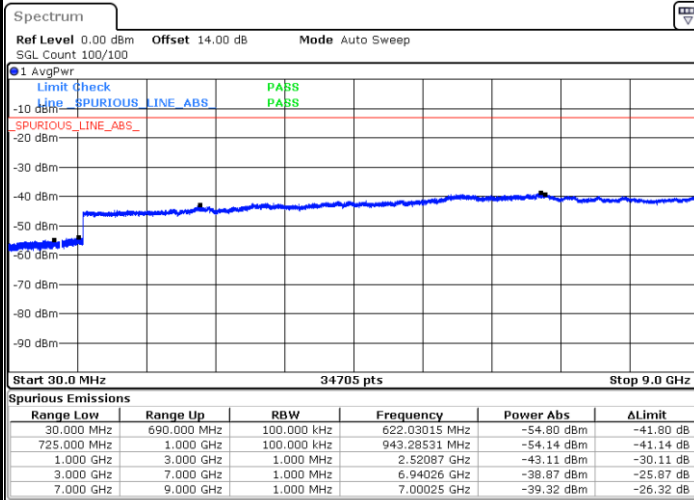


Date: 27.DEC.2023 03:08:41



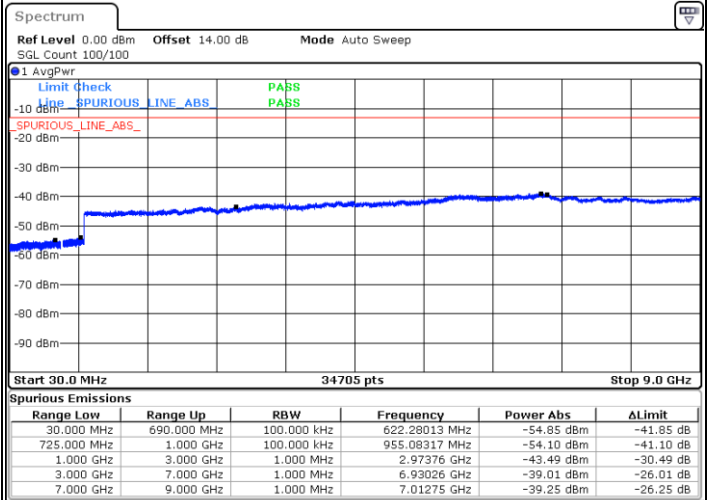
LTE Band 12 / 10MHz

Lowest Channel / QPSK



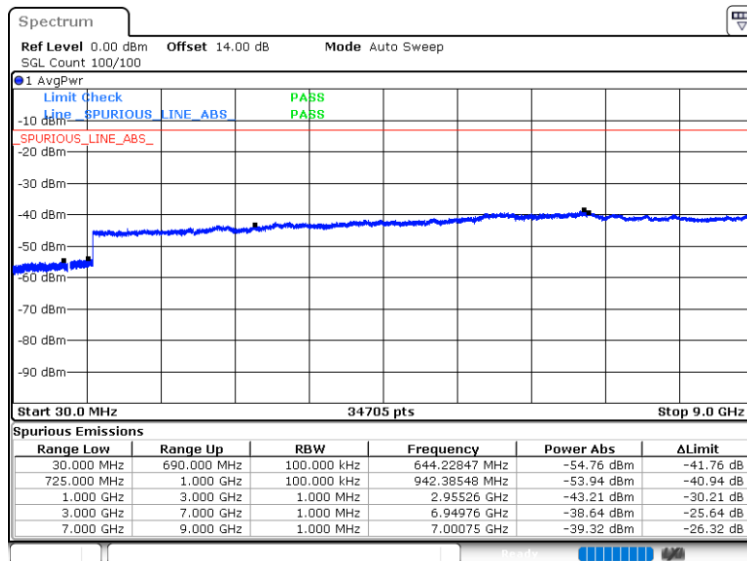
Date: 27.DEC.2023 03:16:46

Middle Channel / QPSK



Date: 27.DEC.2023 03:17:57

Highest Channel / QPSK



Date: 27.DEC.2023 19:10:33

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	0.0003	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

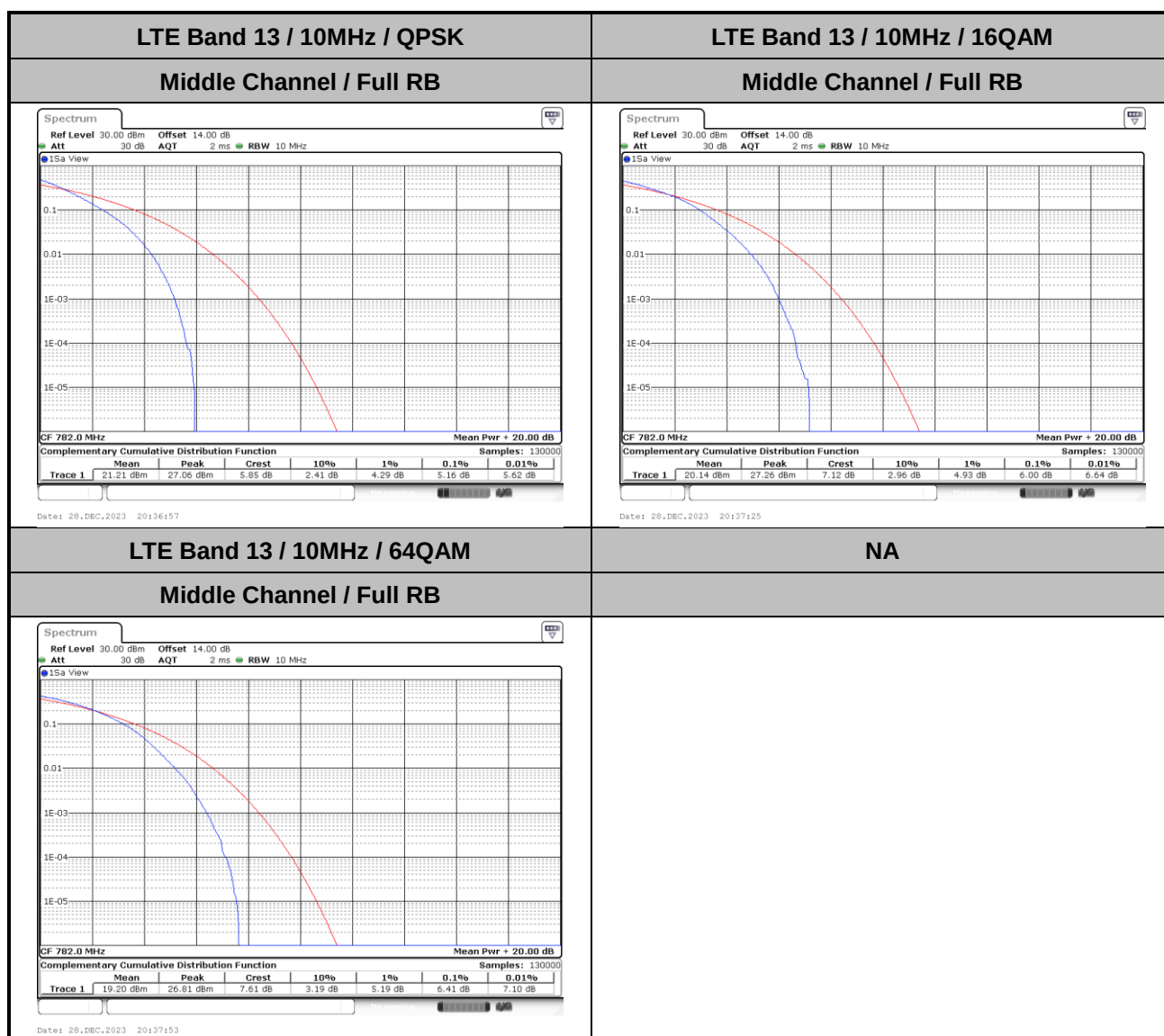
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

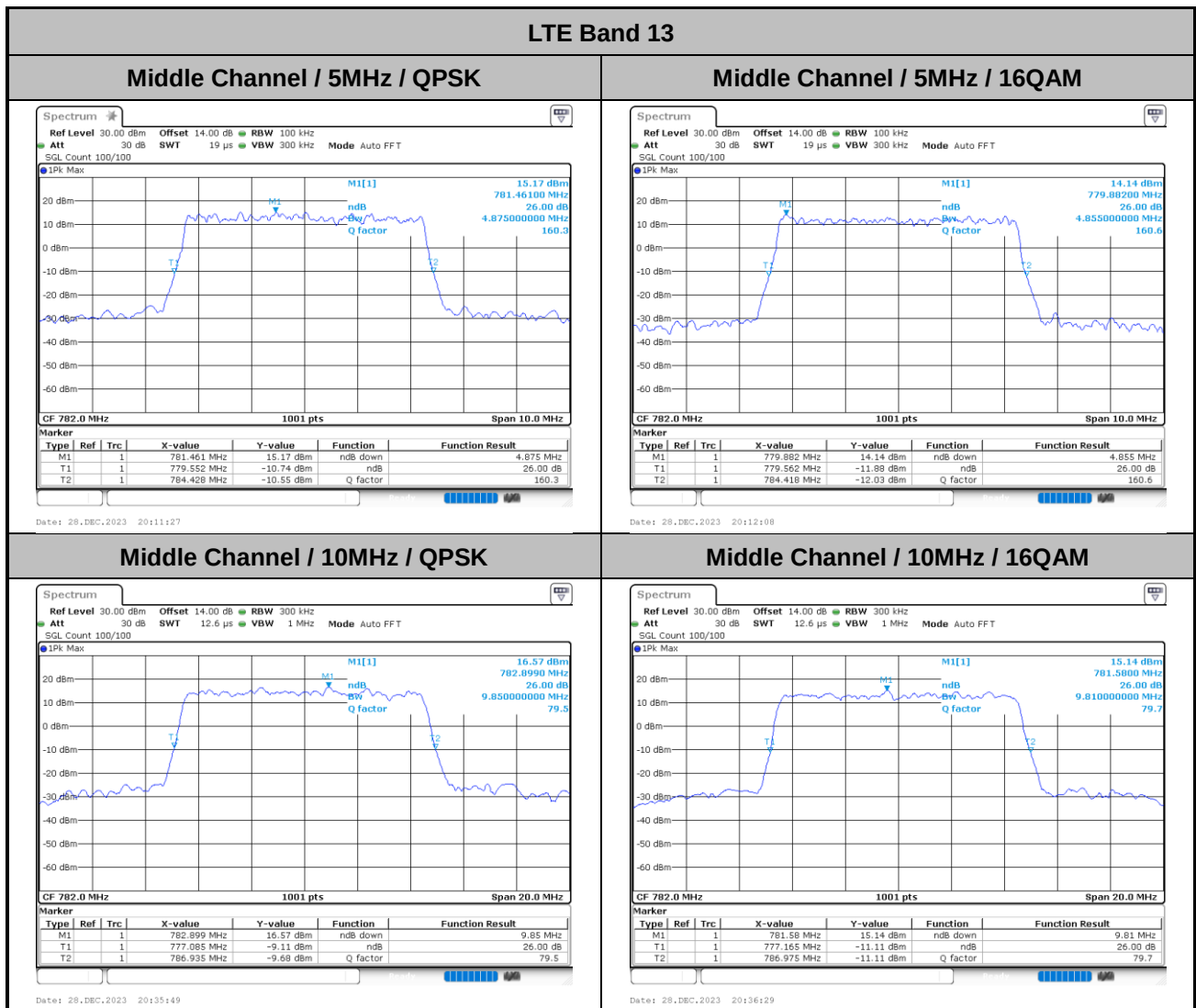
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	6.00	6.41	PASS





26dB Bandwidth

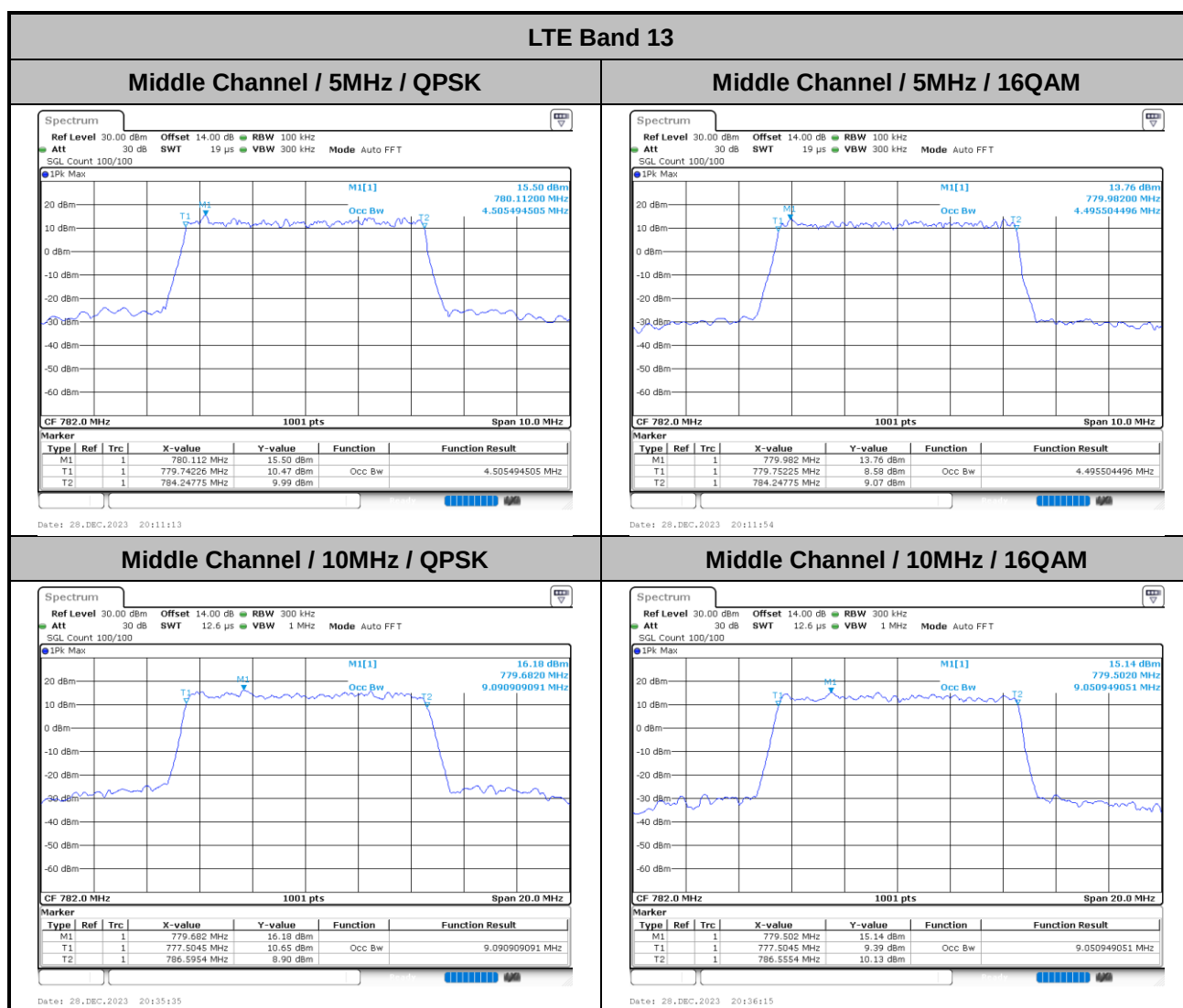
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	-	-	-	-	4.88	4.86	9.85	9.81	-	-	-	-





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	-			5MHz			10MHz			-		
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	-	-	-	-	4.51	4.50	9.09	9.05	-	-	-	-

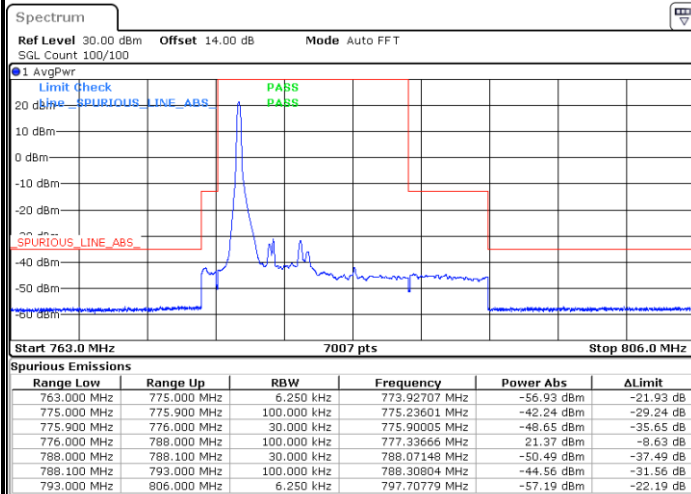




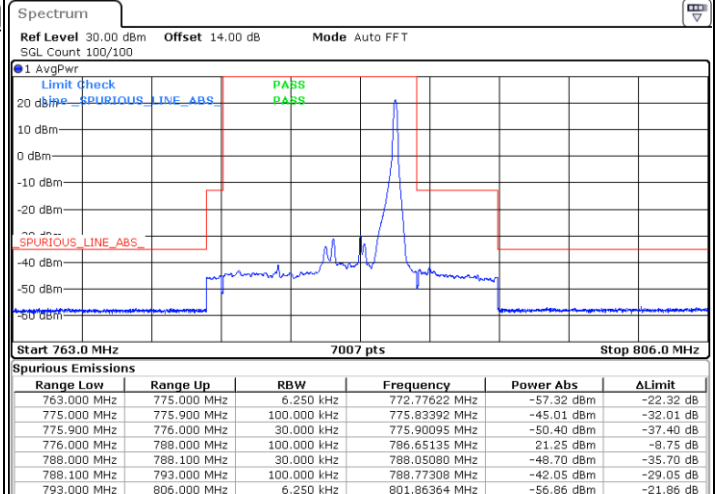
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

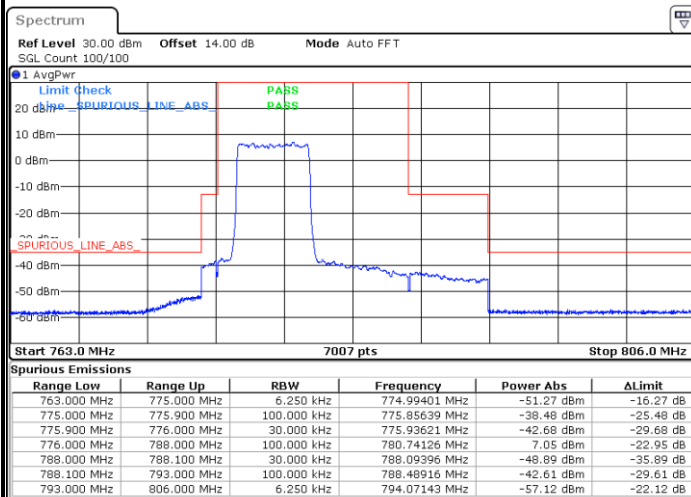
Lowest Band Edge / 1 RB



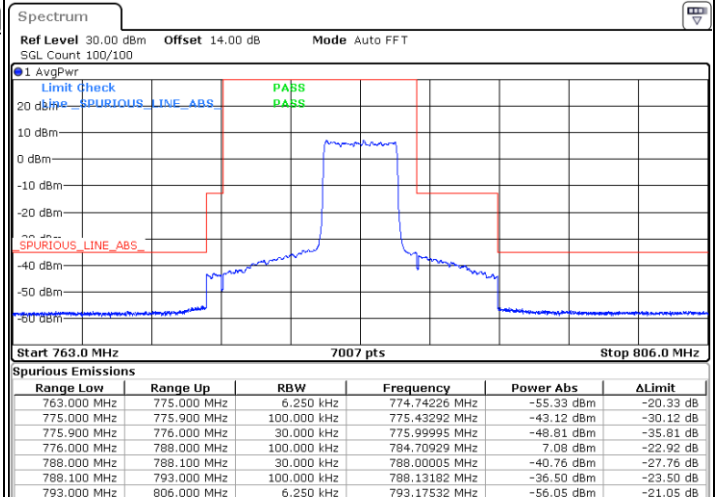
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



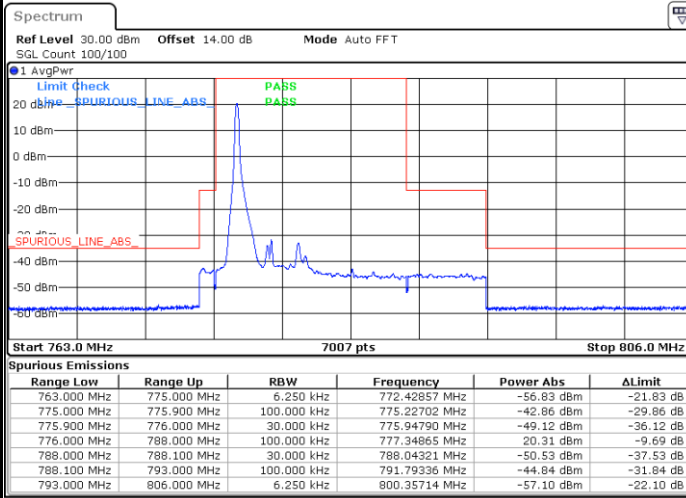
Highest Band Edge / Full RB





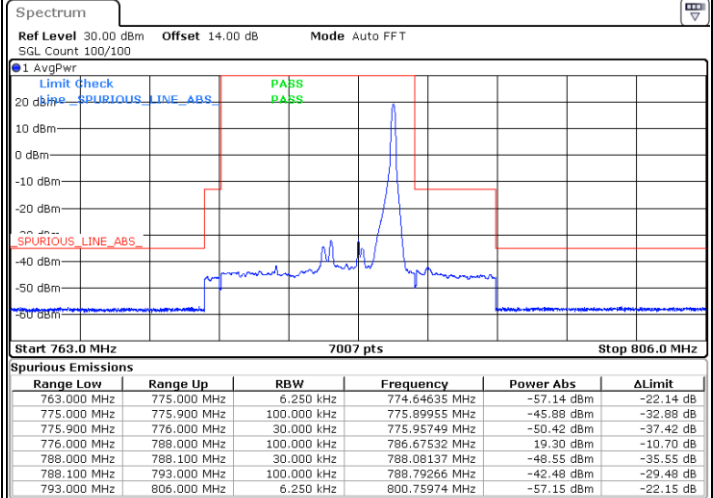
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



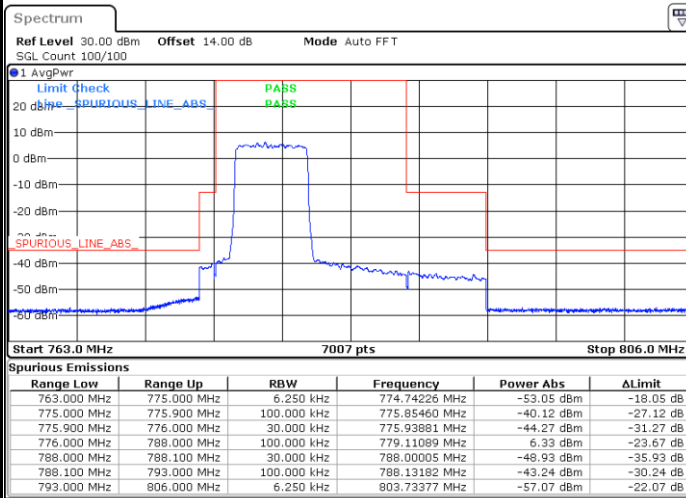
Date: 28.DEC.2023 20:04:15

Highest Band Edge / 1 RB



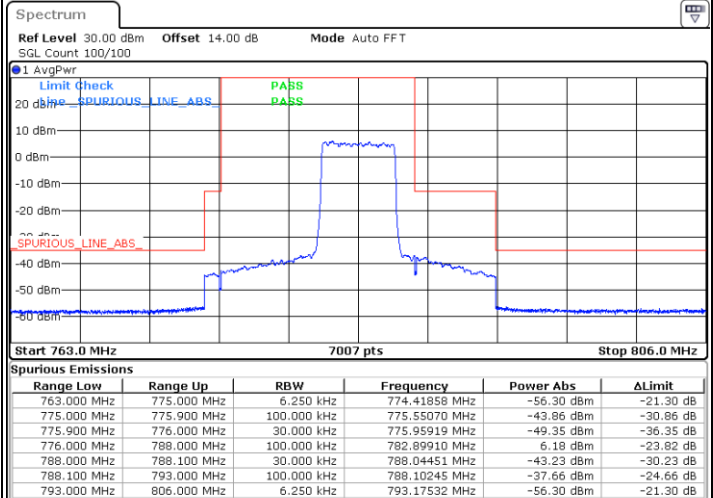
Date: 28.DEC.2023 20:14:12

Lowest Band Edge / Full RB



Date: 28.DEC.2023 20:07:22

Highest Band Edge / Full RB

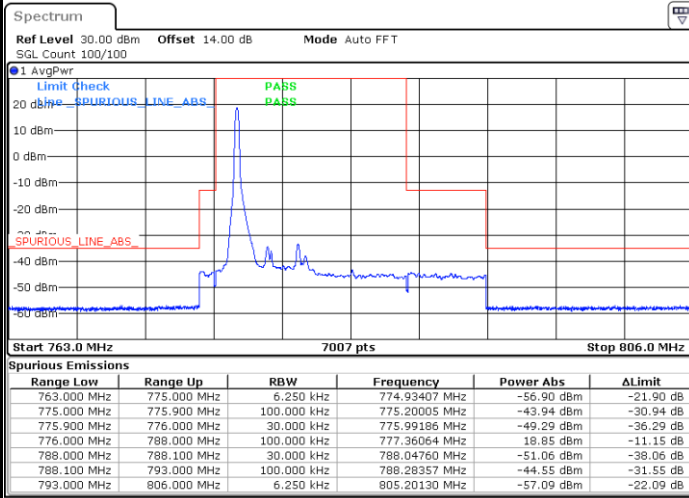


Date: 28.DEC.2023 20:17:18

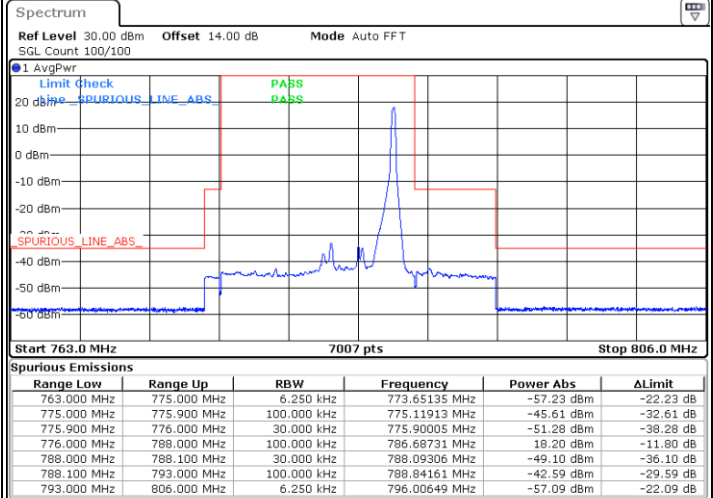


LTE Band 13 / 5MHz / 64QAM

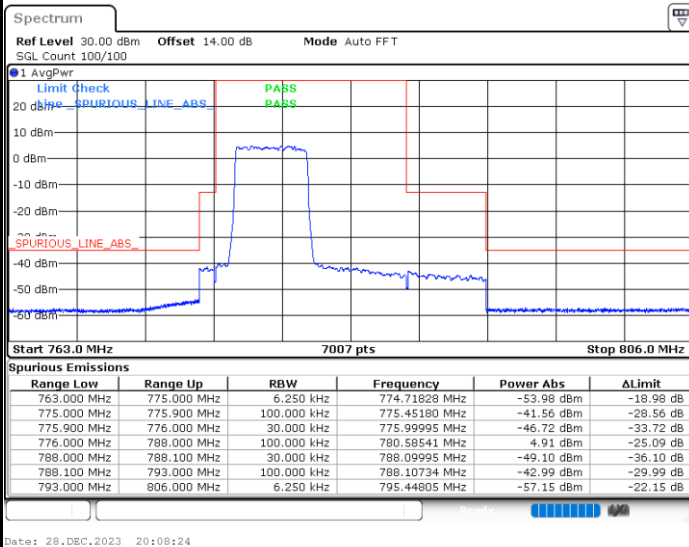
Lowest Band Edge / 1 RB



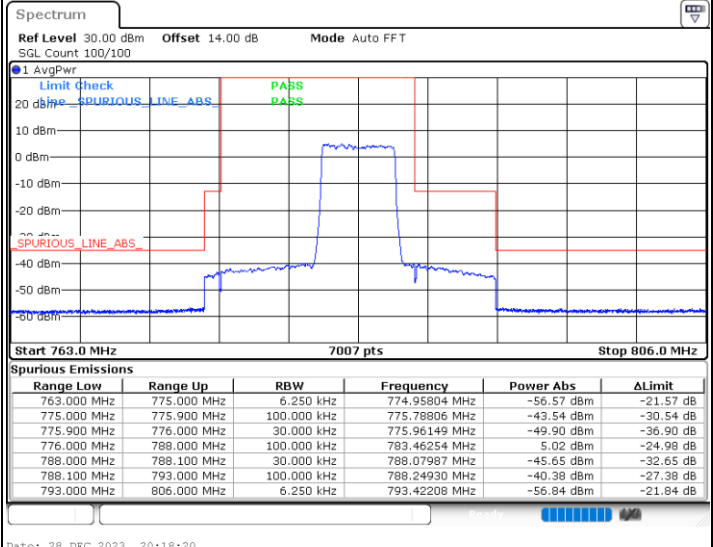
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



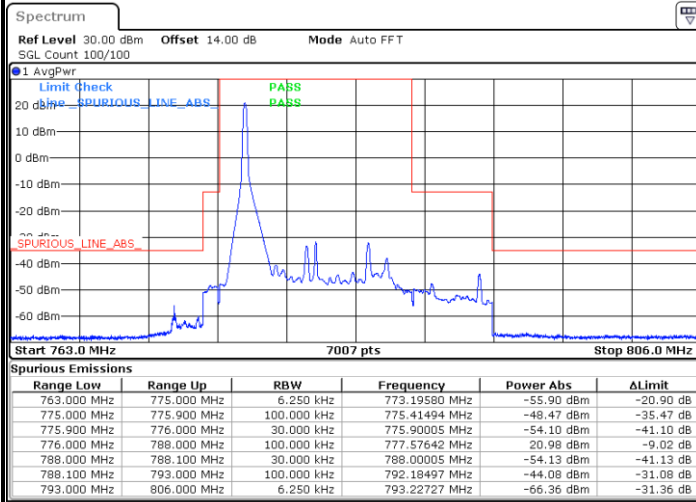
Highest Band Edge / Full RB





LTE Band 13 / 10MHz / QPSK

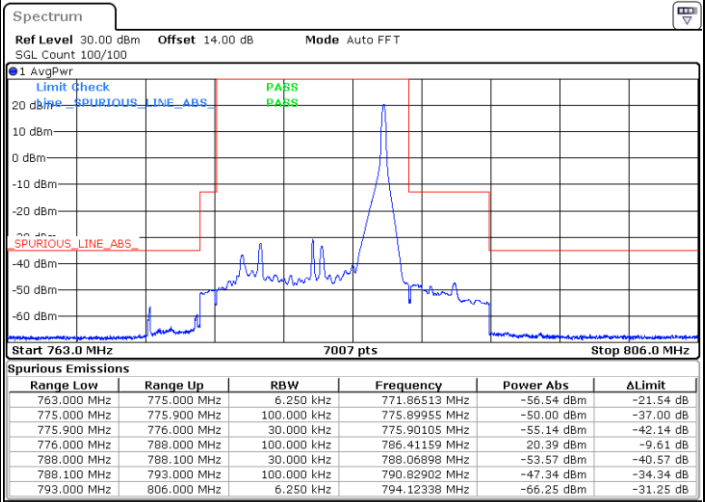
Band Edge / 1 RB



Date: 28.DEC.2023 20:25:45

LTE Band 13 / 10MHz / QPSK

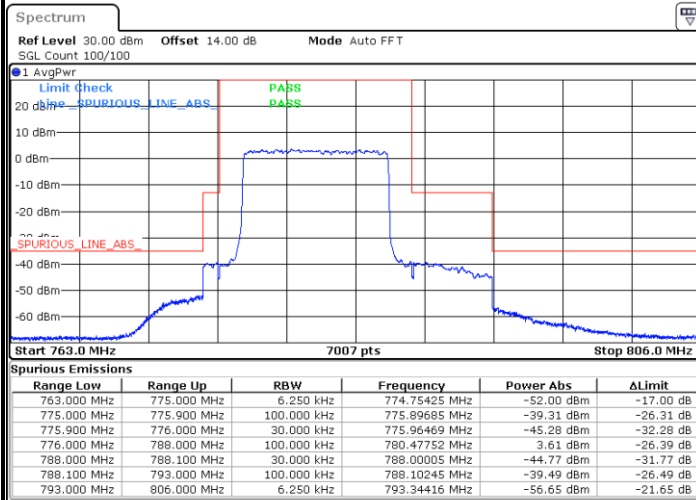
Band Edge / 1 RB



Date: 28.DEC.2023 20:28:50

LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB



Date: 28.DEC.2023 20:31:54

NA