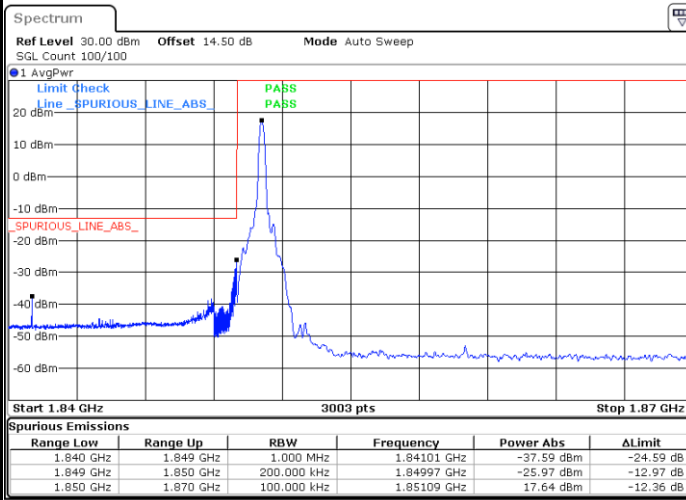


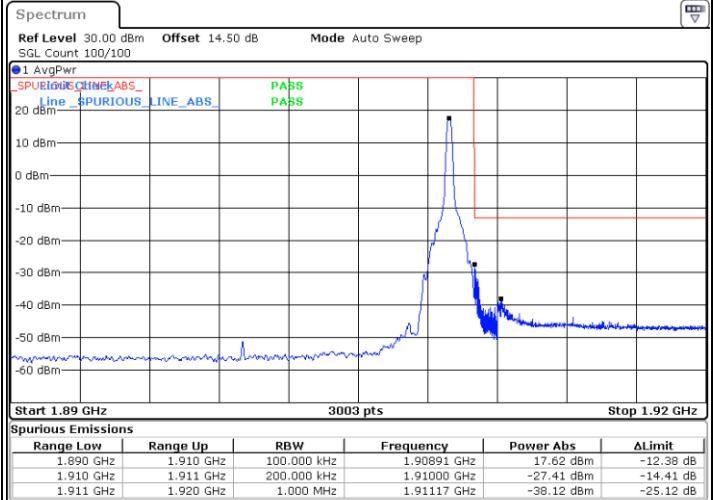


LTE Band 2 / 20MHz / 64QAM

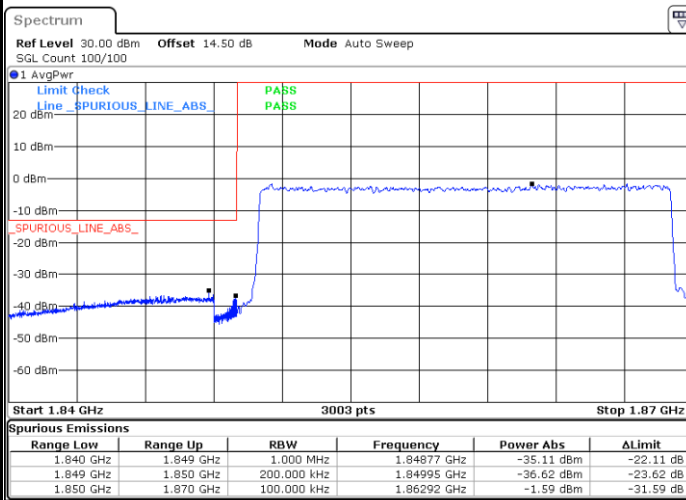
Lowest Band Edge / 1 RB



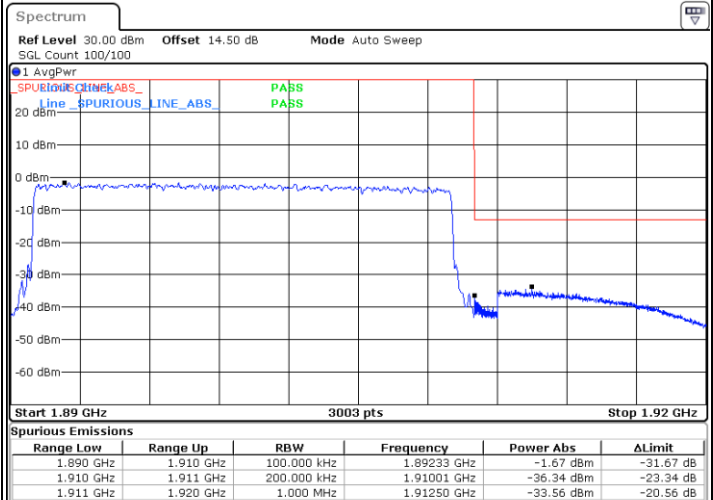
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

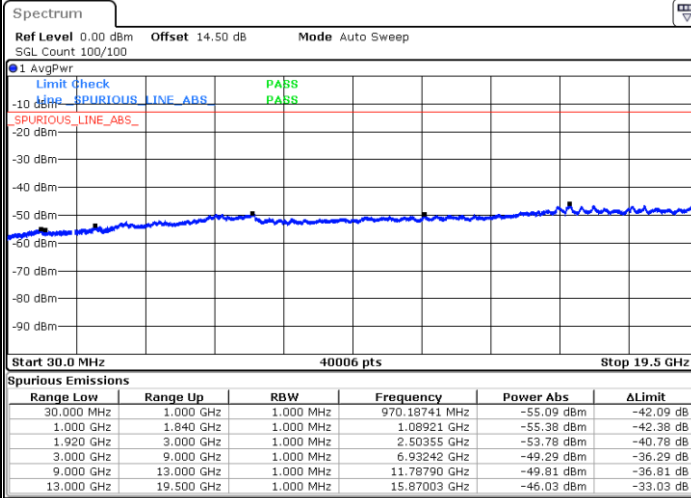




Conducted Spurious Emission

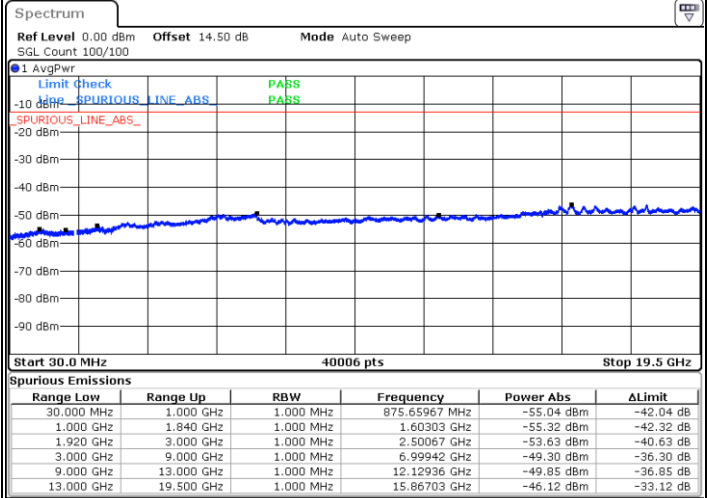
LTE Band 2 / 1.4MHz

Lowest Channel / QPSK



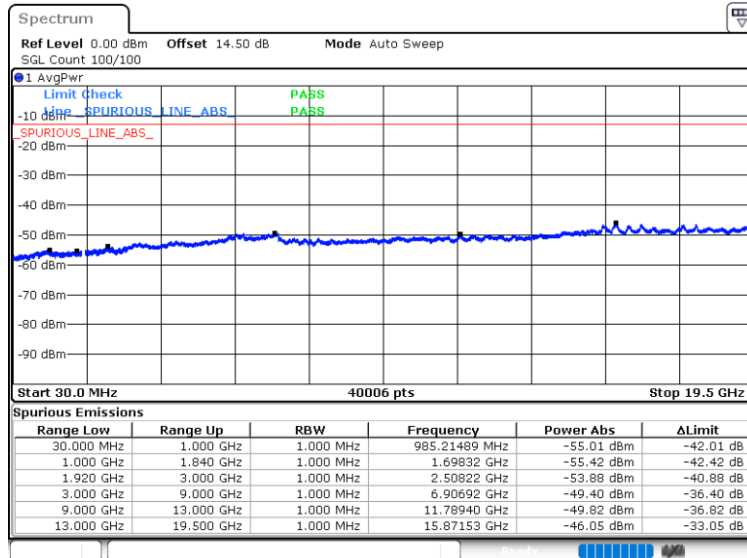
Date: 29.DEC.2023 18:04:54

Middle Channel / QPSK



Date: 29.DEC.2023 18:09:09

Highest Channel / QPSK

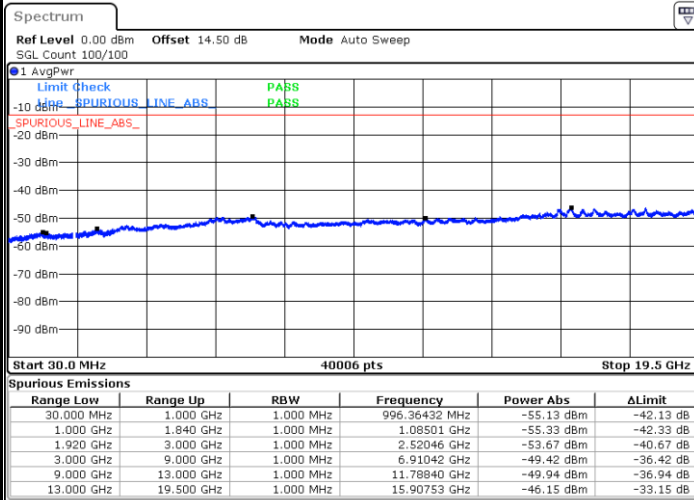


Date: 29.DEC.2023 18:14:46



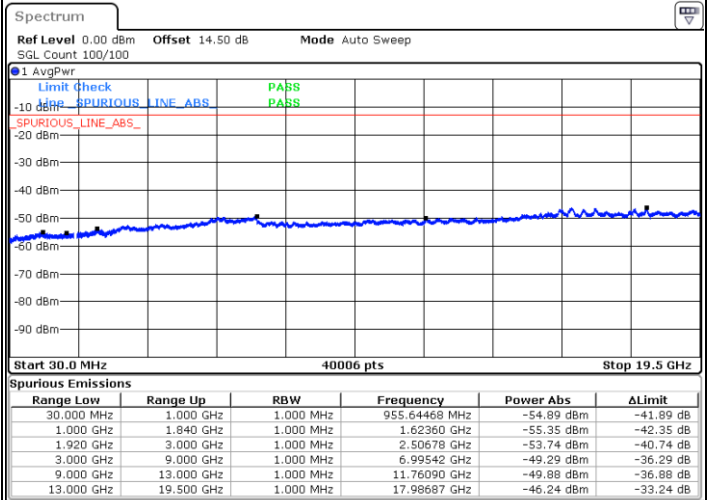
LTE Band 2 / 3MHz

Lowest Channel / QPSK



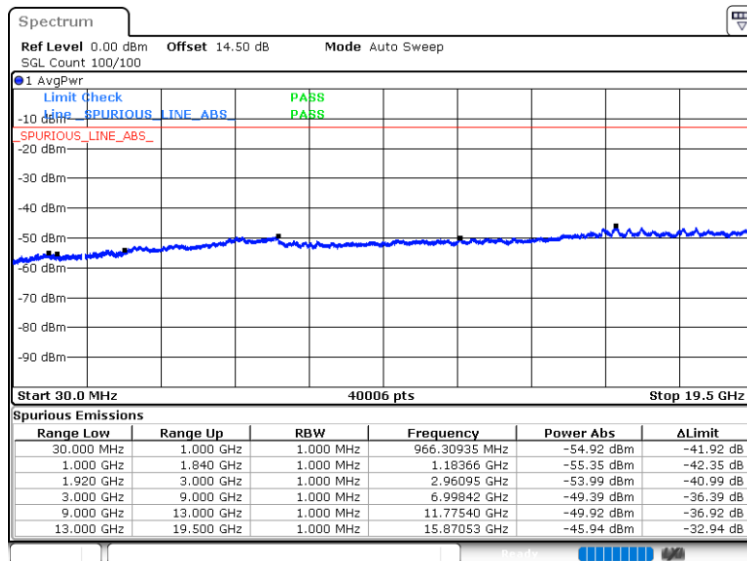
Date: 29.DEC.2023 18:34:27

Middle Channel / QPSK



Date: 29.DEC.2023 18:38:41

Highest Channel / QPSK

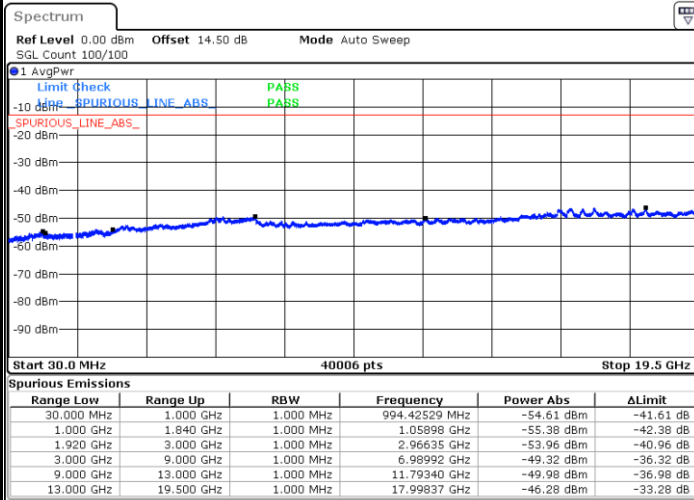


Date: 29.DEC.2023 18:47:23



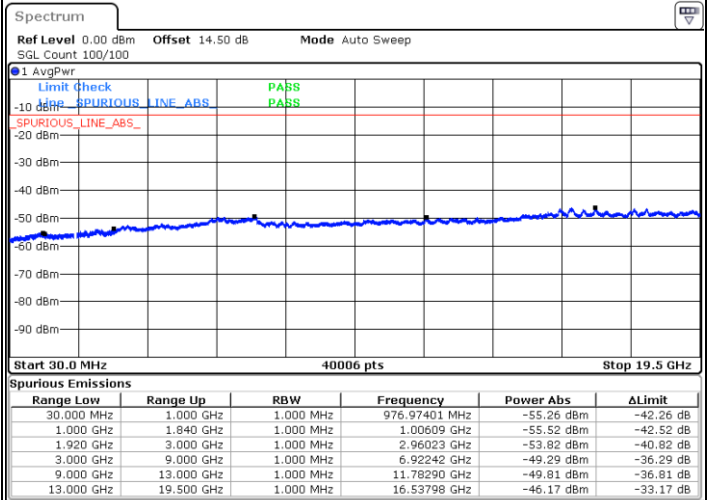
LTE Band 2 / 5MHz

Lowest Channel / QPSK



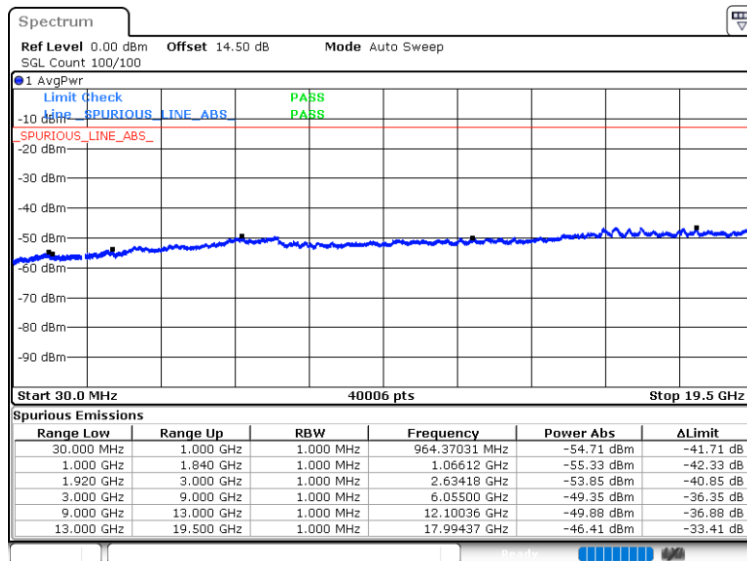
Date: 29.DEC.2023 19:03:34

Middle Channel / QPSK



Date: 29.DEC.2023 19:07:49

Highest Channel / QPSK

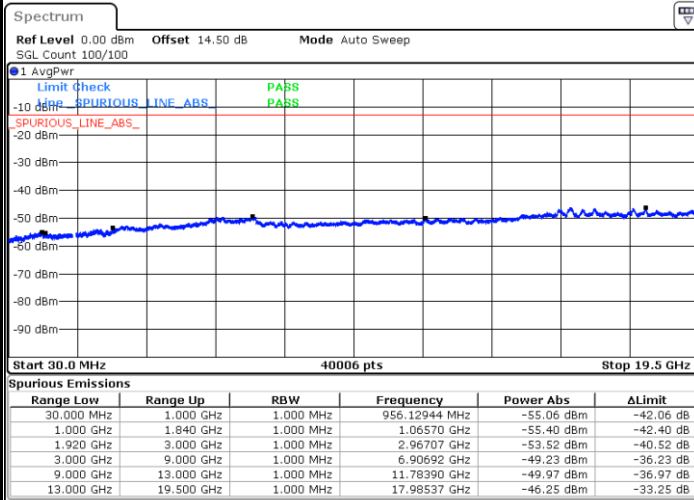


Date: 29.DEC.2023 19:16:31



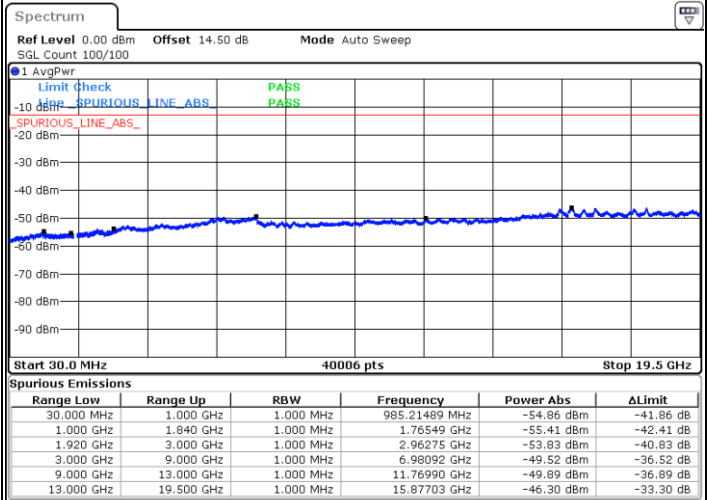
LTE Band 2 / 10MHz

Lowest Channel / QPSK



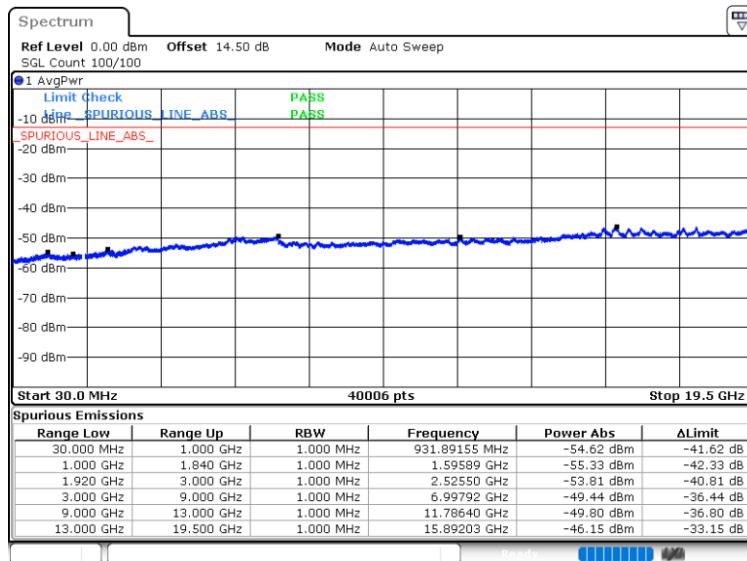
Date: 29.DEC.2023 19:32:11

Middle Channel / QPSK



Date: 29.DEC.2023 19:33:22

Highest Channel / QPSK

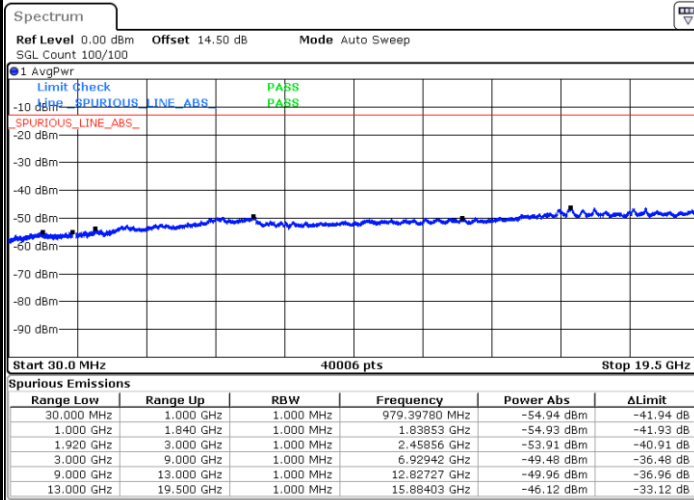


Date: 29.DEC.2023 19:42:04



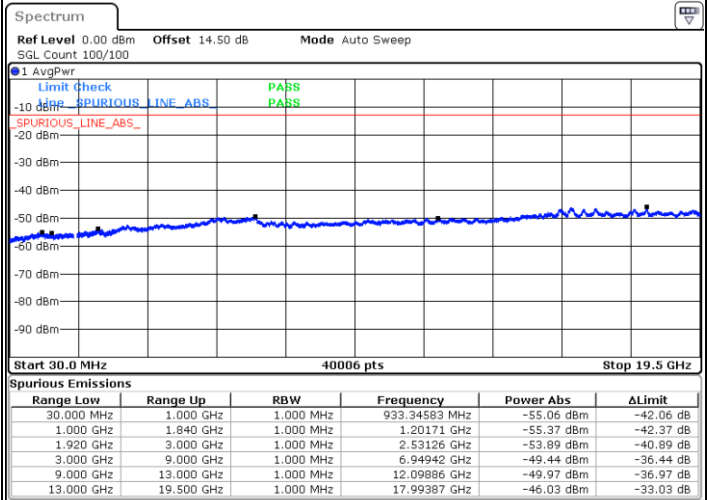
LTE Band 2 / 15MHz

Lowest Channel / QPSK



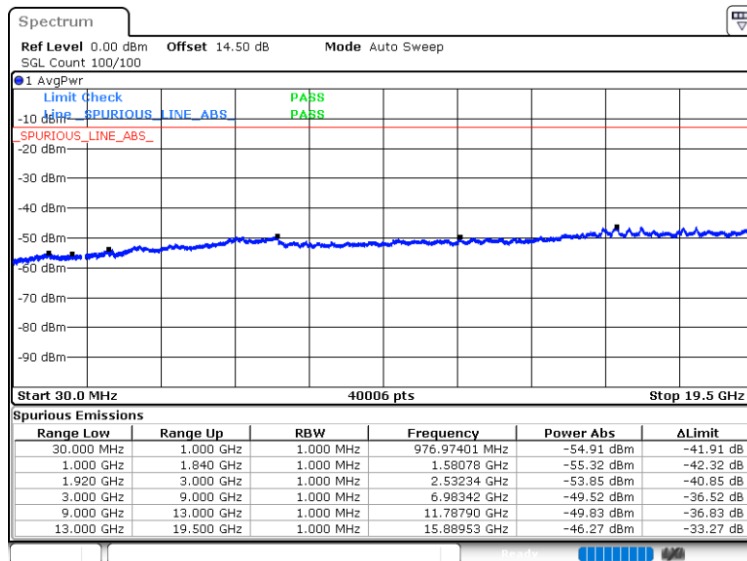
Date: 29.DEC.2023 19:53:40

Middle Channel / QPSK



Date: 29.DEC.2023 19:54:51

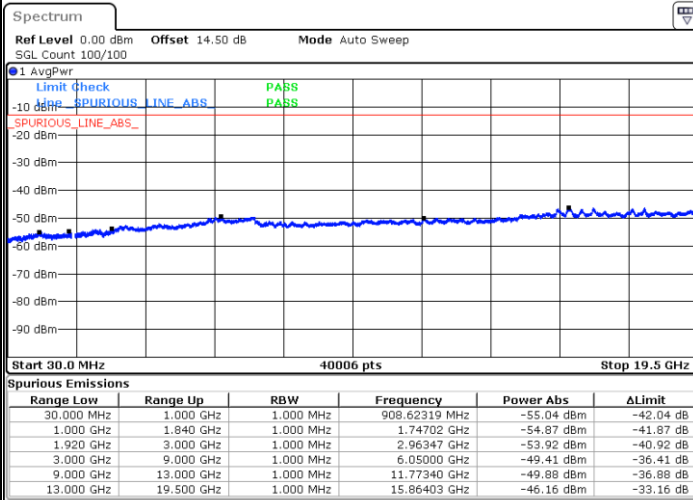
Highest Channel / QPSK



Date: 29.DEC.2023 20:03:33

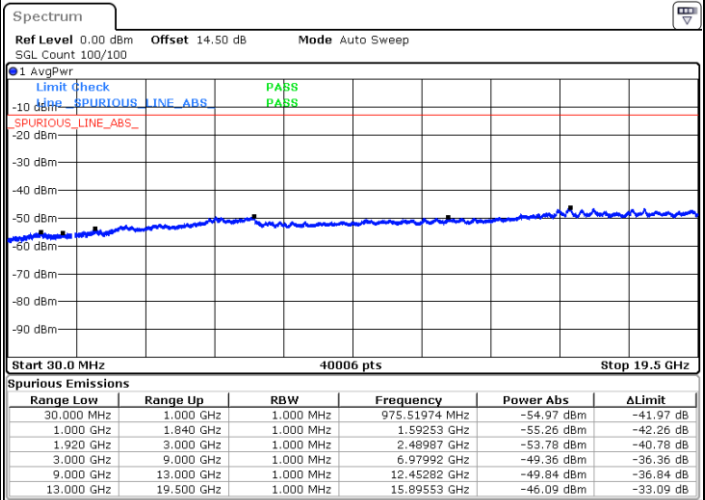
LTE Band 2 / 20MHz

Lowest Channel / QPSK



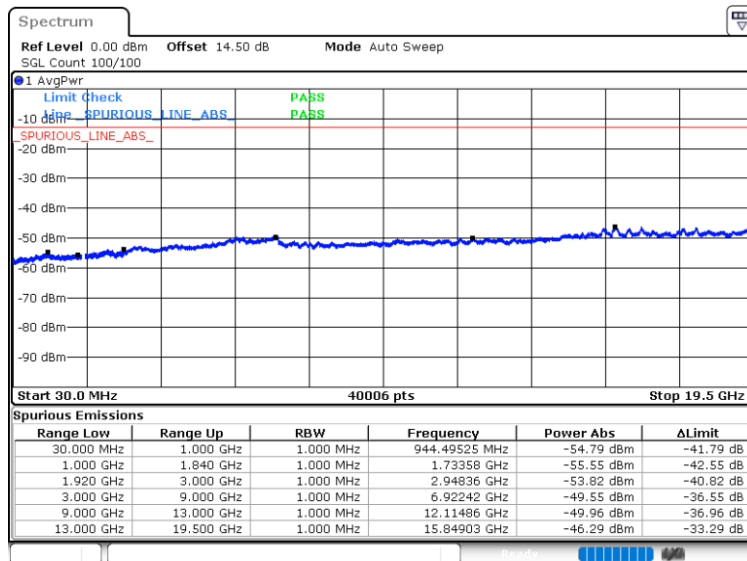
Date: 29.DEC.2023 20:16:53

Middle Channel / QPSK



Date: 29.DEC.2023 20:18:03

Highest Channel / QPSK



Date: 29.DEC.2023 20:28:09

Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0003	
-10	Normal Voltage	0.0001	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0000	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

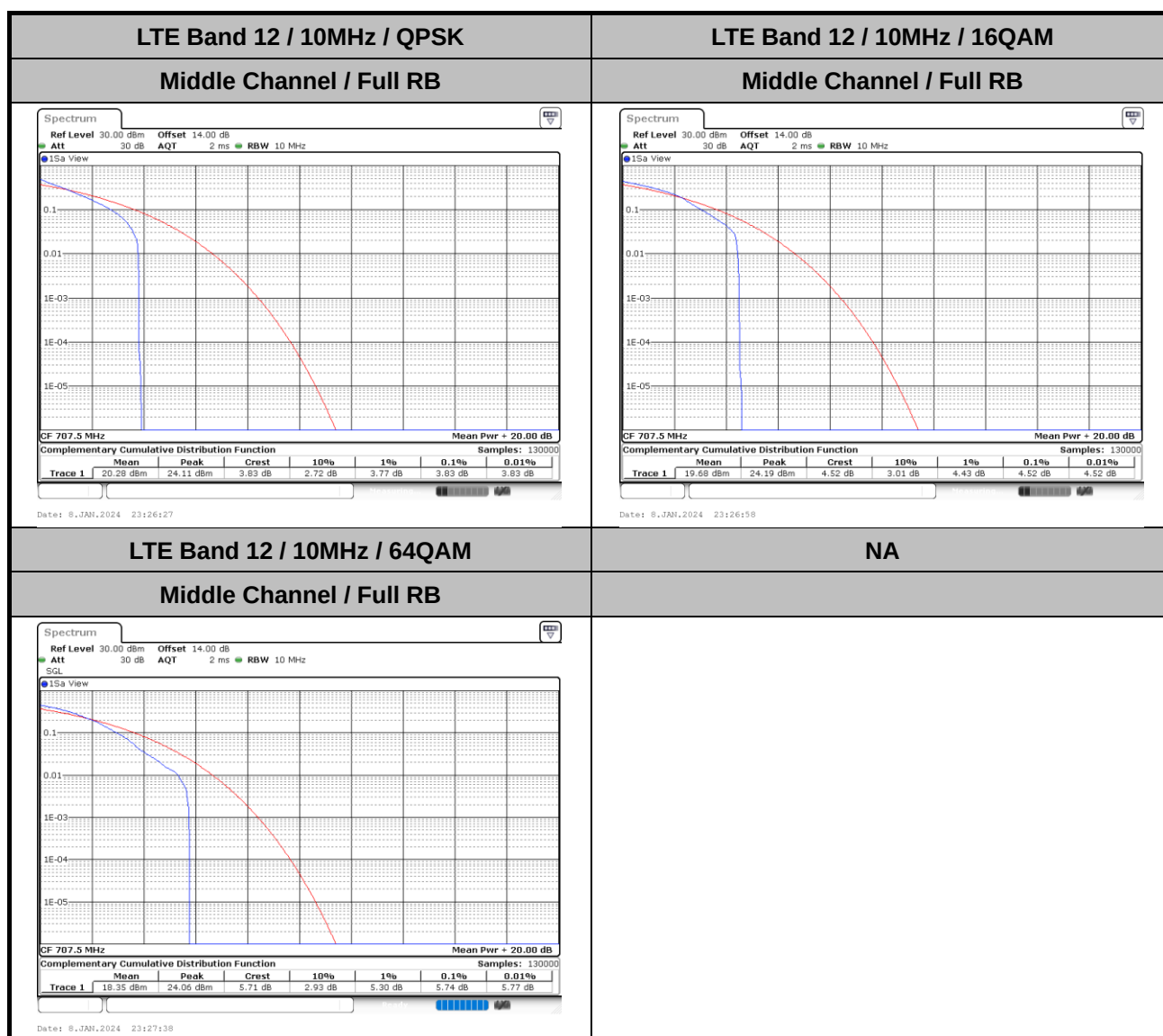
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

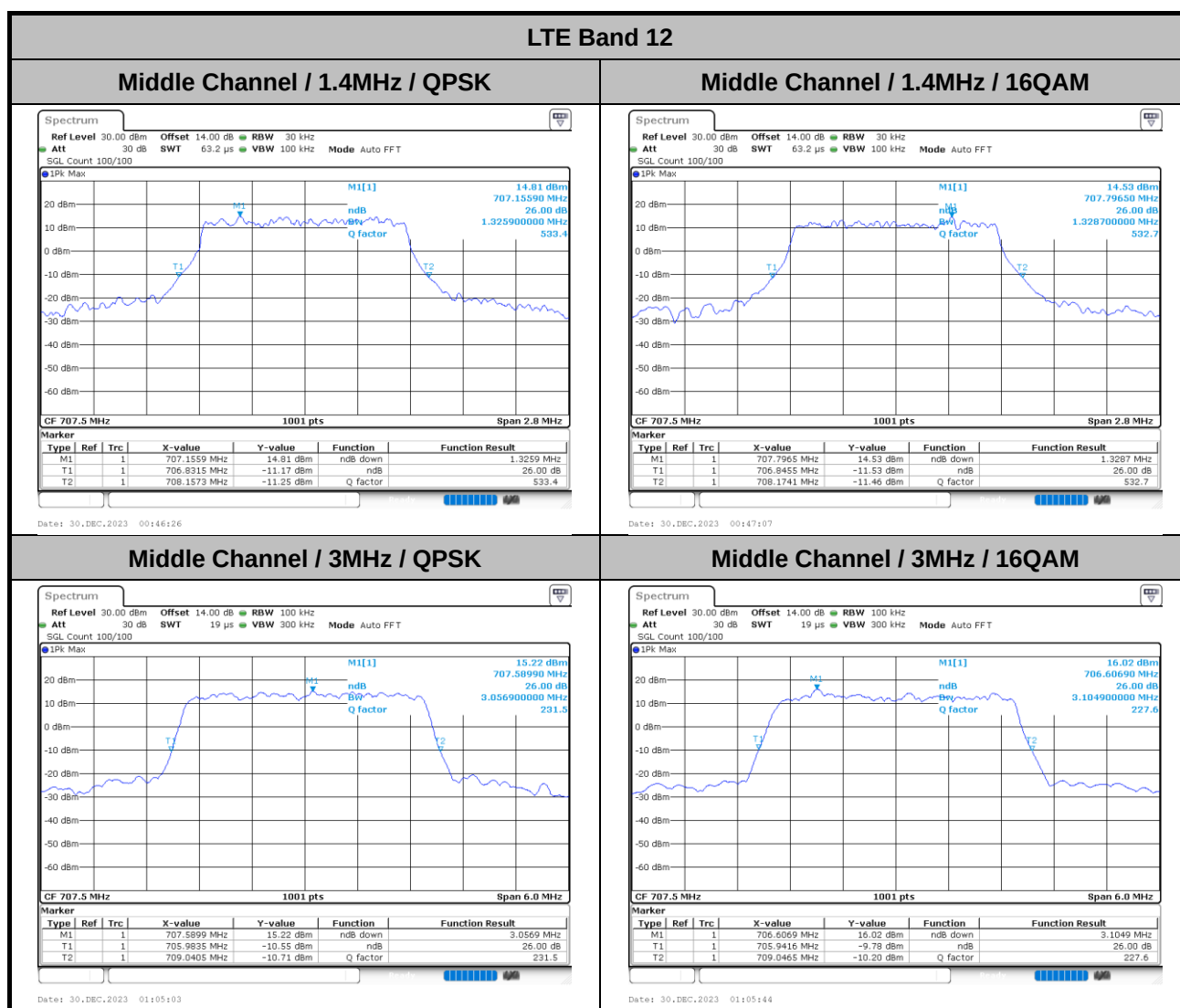
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	3.83	4.52	5.74	PASS





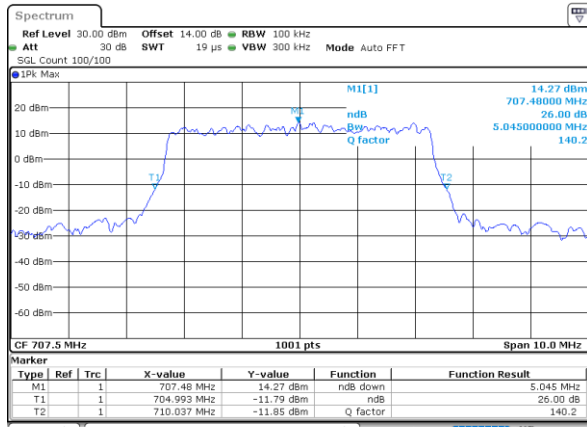
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.33	1.33	3.06	3.10	5.05	5.12	9.67	9.97

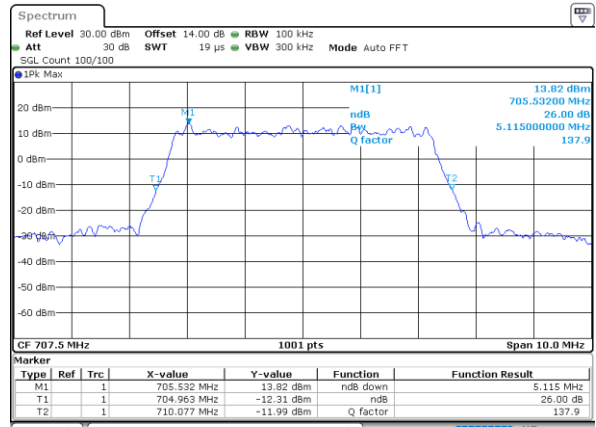




Middle Channel / 5MHz / QPSK

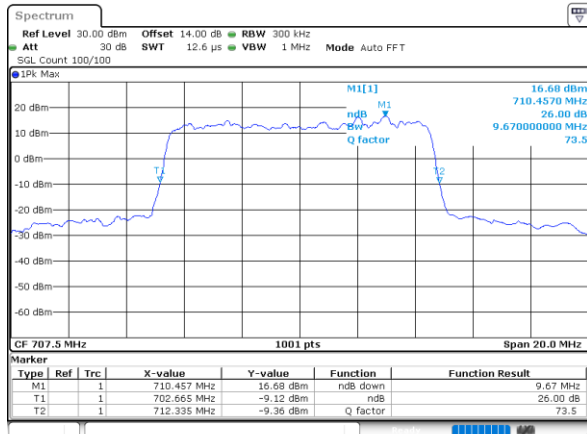


Middle Channel / 5MHz / 16QAM

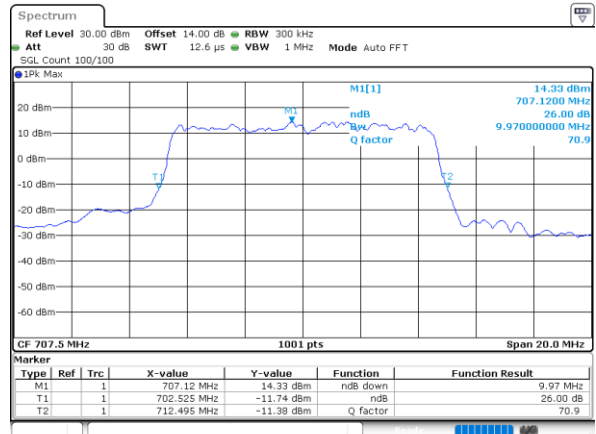


LTE Band 12

Middle Channel / 10MHz / QPSK



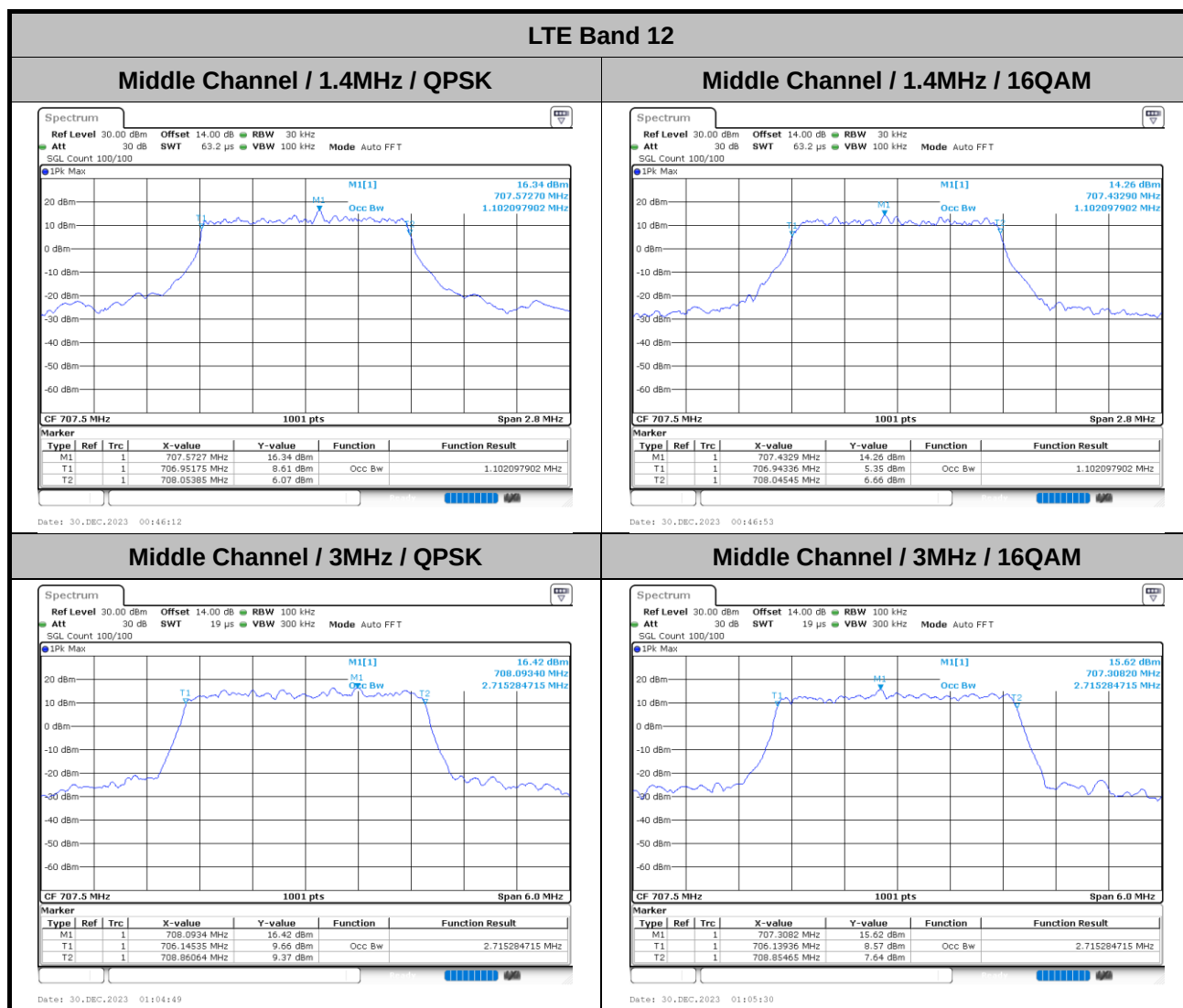
Middle Channel / 10MHz / 16QAM





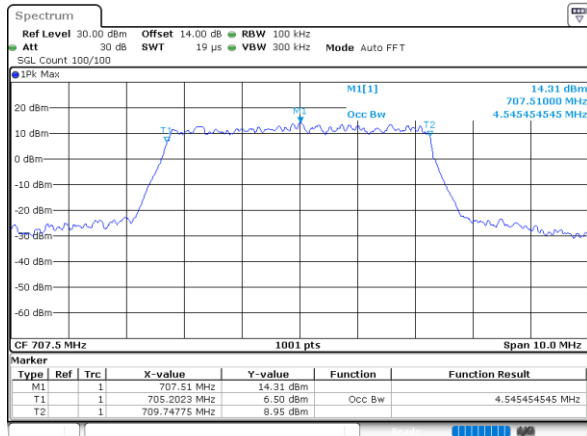
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.10	1.10	2.72	2.72	4.55	4.51	9.09	9.05



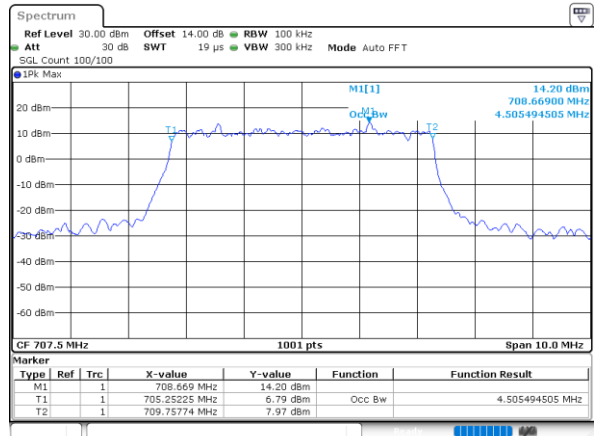


Middle Channel / 5MHz / QPSK



Date: 30, DEC, 2023 01:34:14

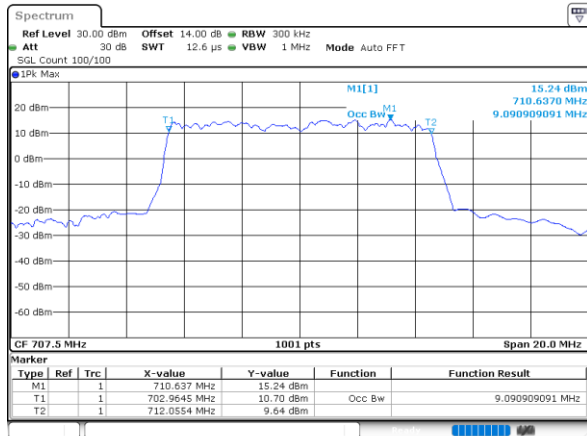
Middle Channel / 5MHz / 16QAM



Date: 30, DEC, 2023 01:34:54

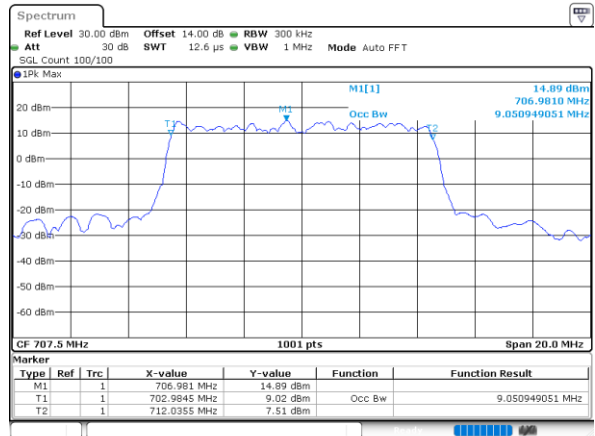
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 30, DEC, 2023 03:23:50

Middle Channel / 10MHz / 16QAM



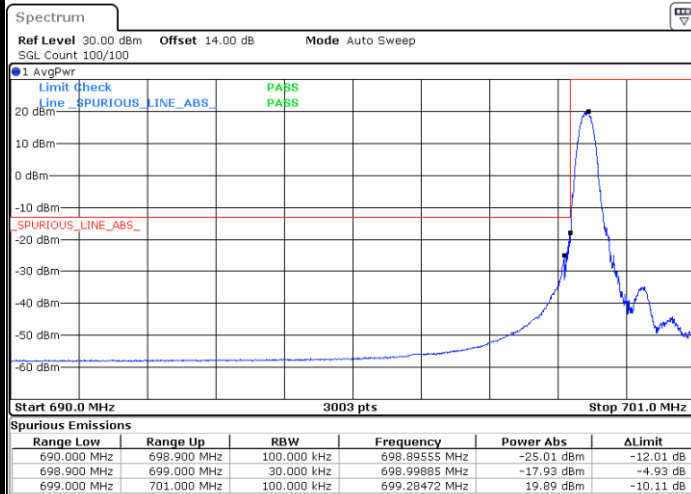
Date: 30, DEC, 2023 03:24:30



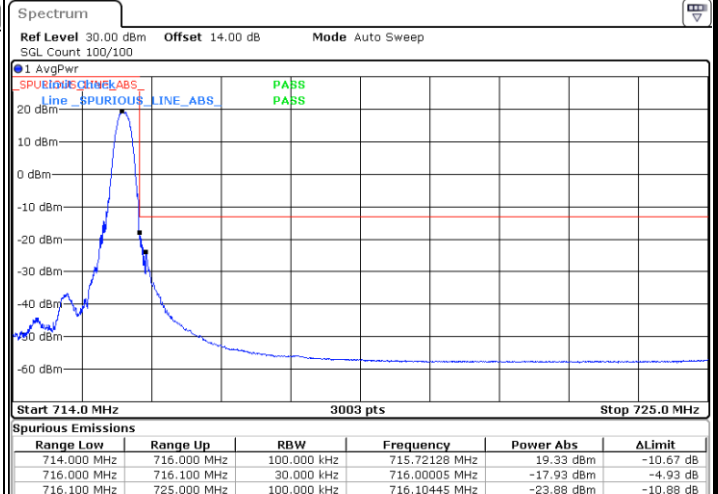
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

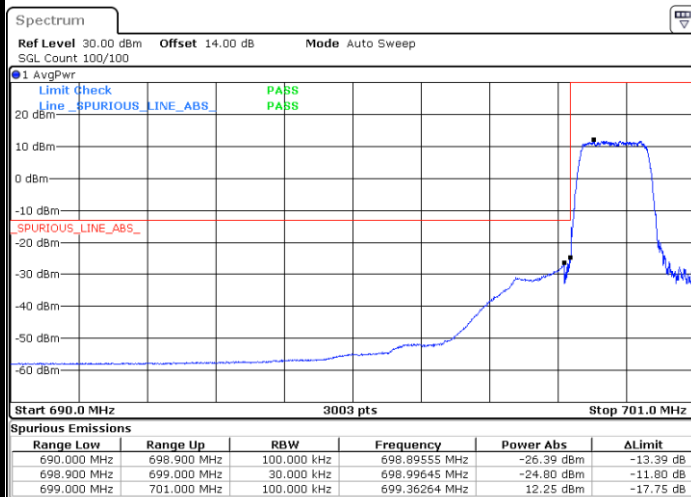
Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



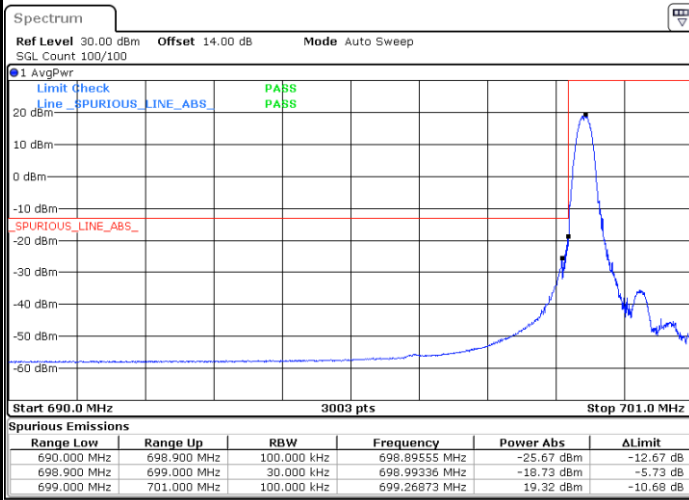
Highest Band Edge / Full RB



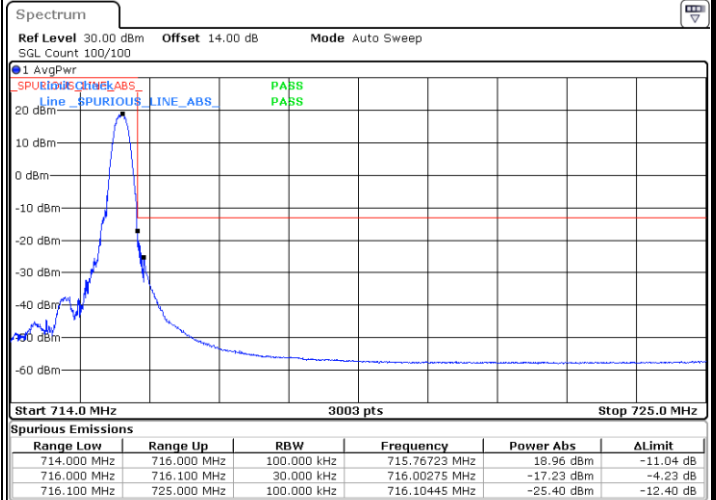


LTE Band 12 / 1.4MHz / 16QAM

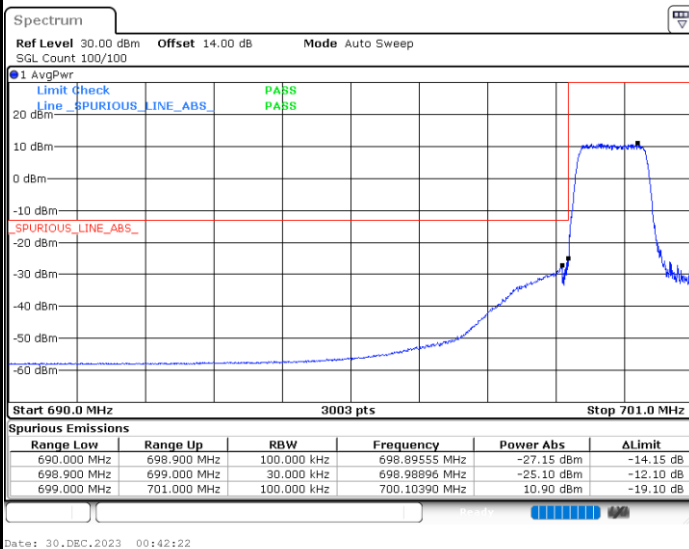
Lowest Band Edge / 1 RB



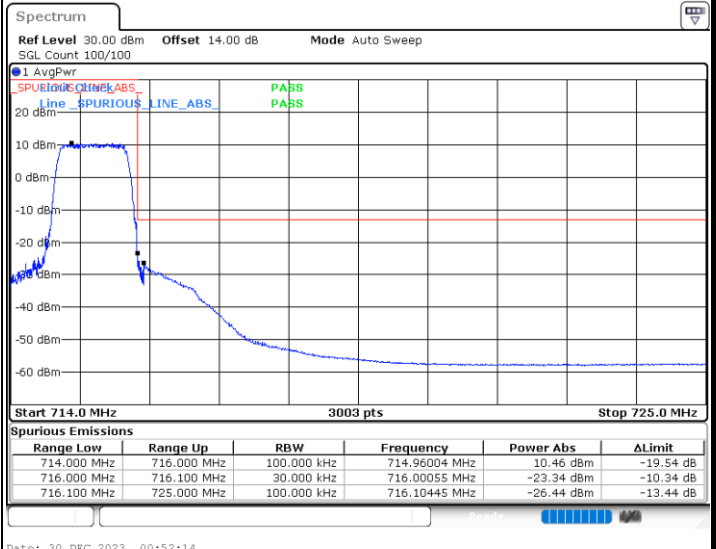
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



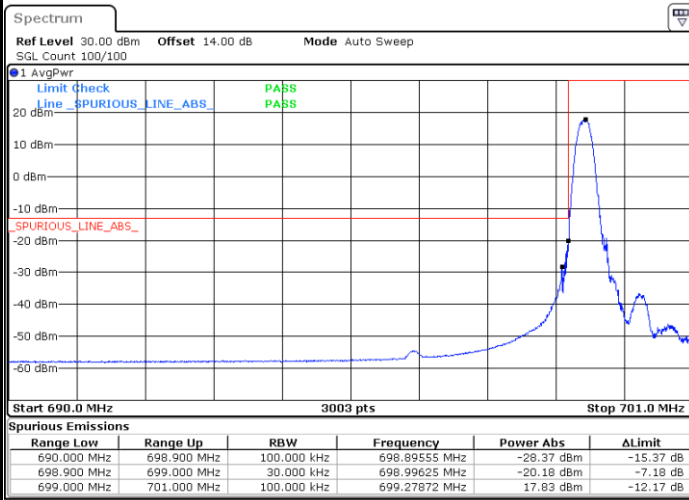
Highest Band Edge / Full RB



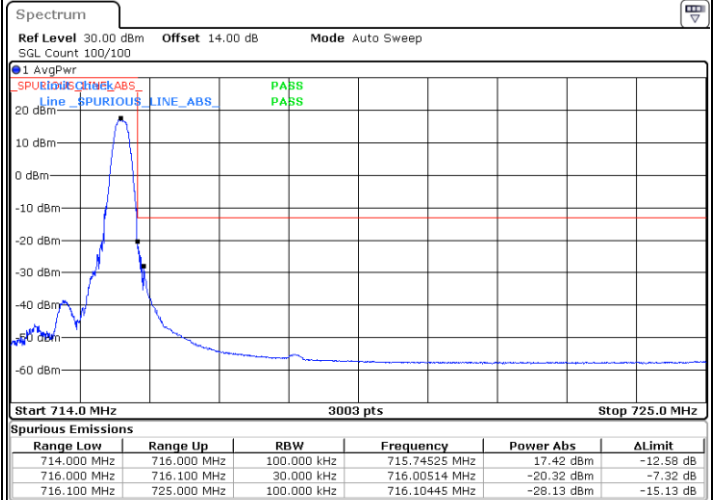


LTE Band 12 / 1.4MHz / 64QAM

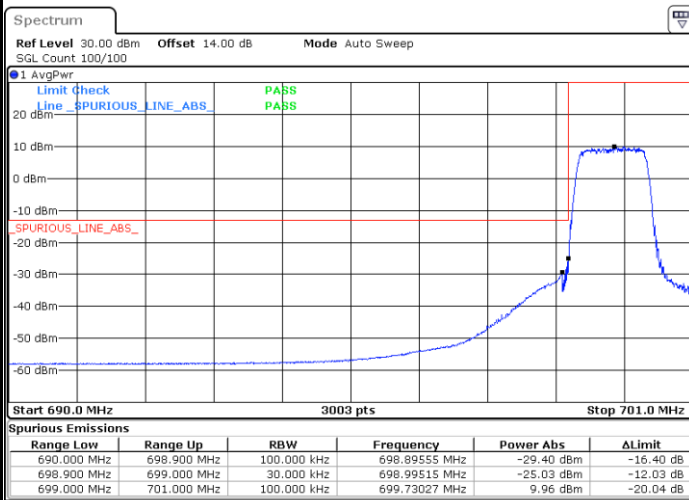
Lowest Band Edge / 1 RB



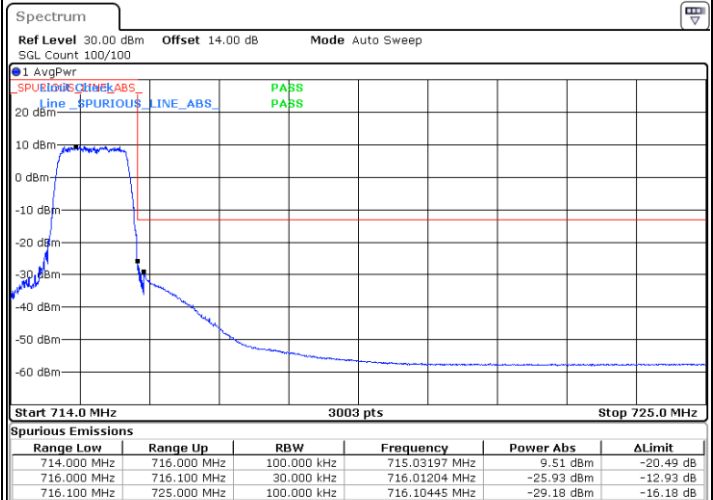
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



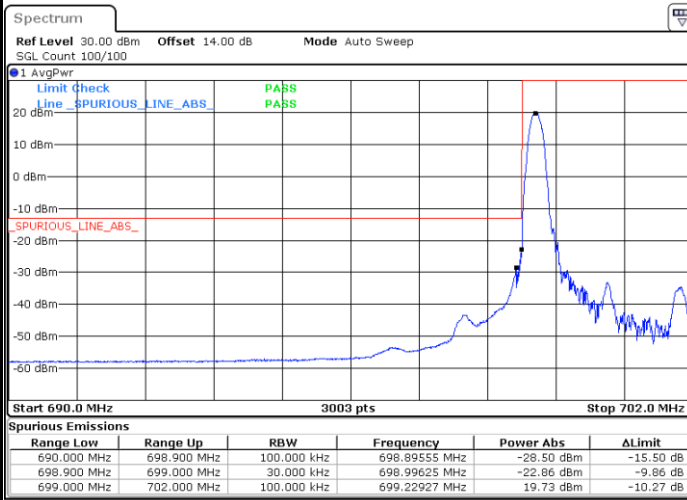
Highest Band Edge / Full RB



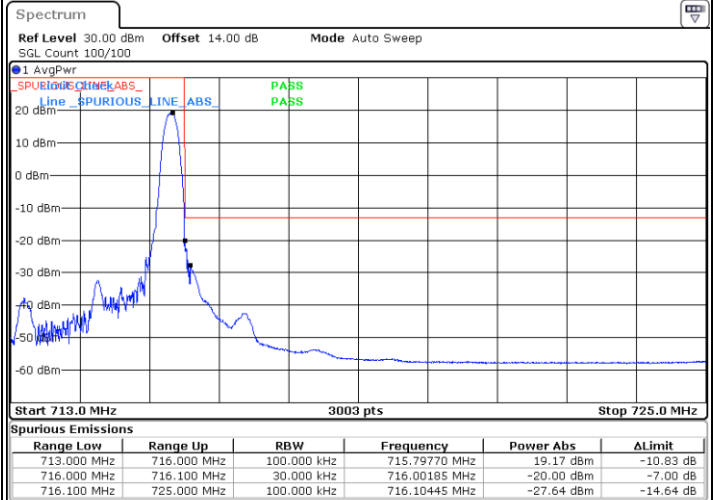


LTE Band 12 / 3MHz / QPSK

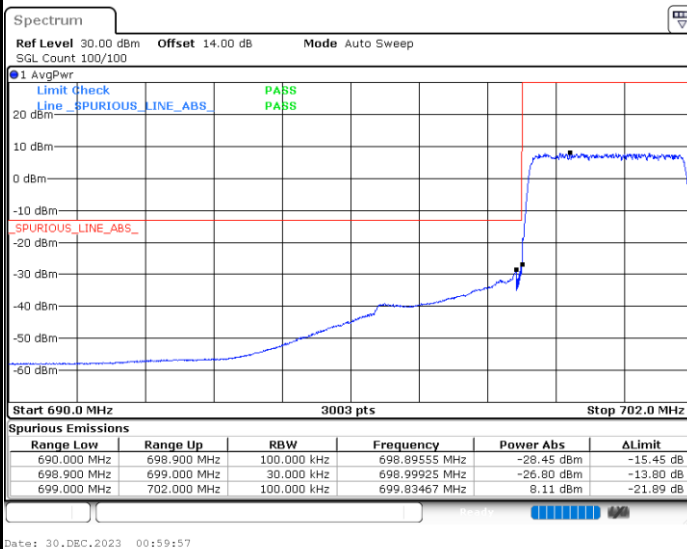
Lowest Band Edge / 1RB



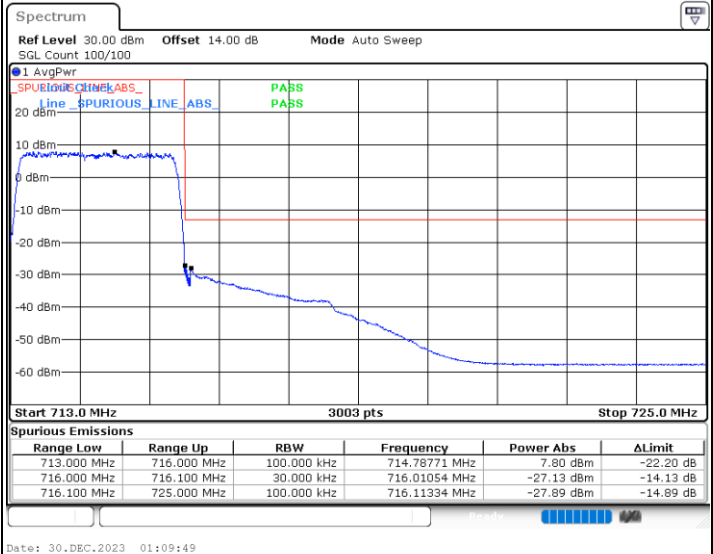
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



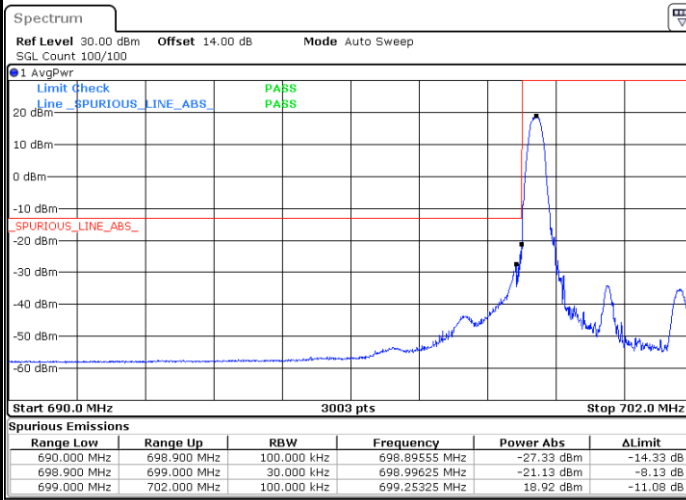
Highest Band Edge / Full RB



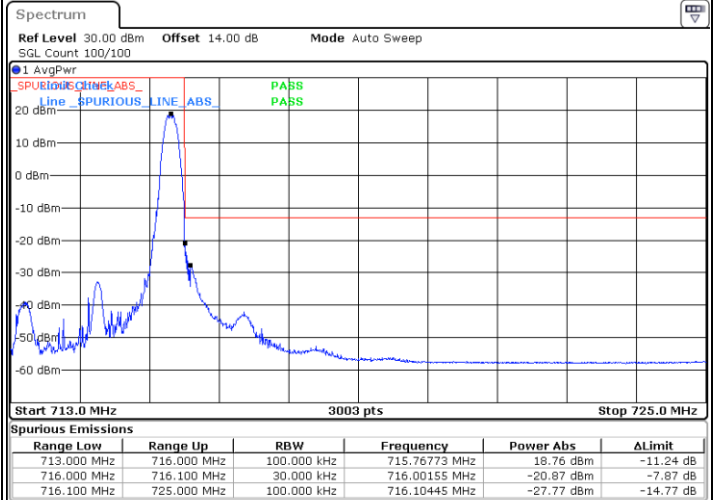


LTE Band 12 / 3MHz / 16QAM

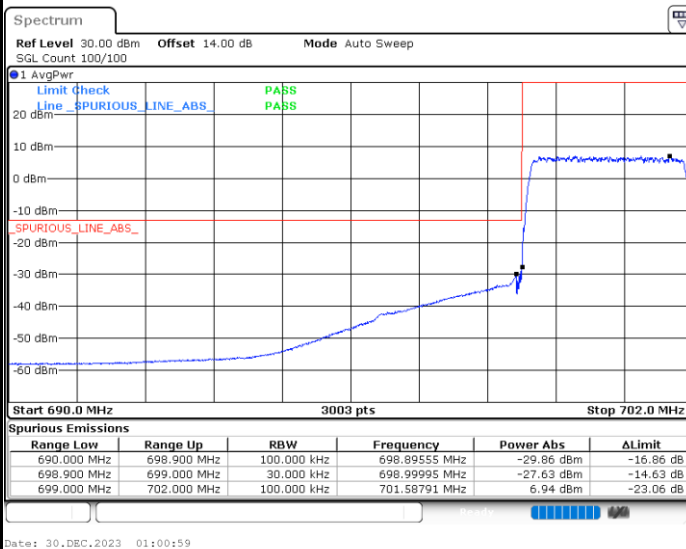
Lowest Band Edge / 1 RB



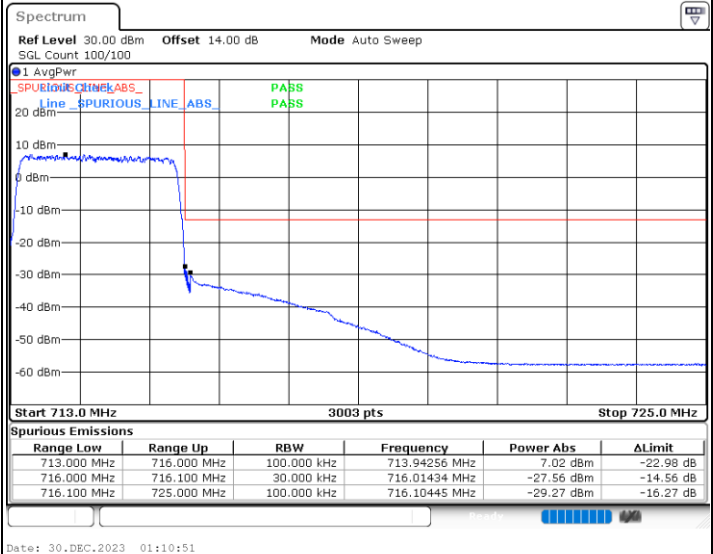
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



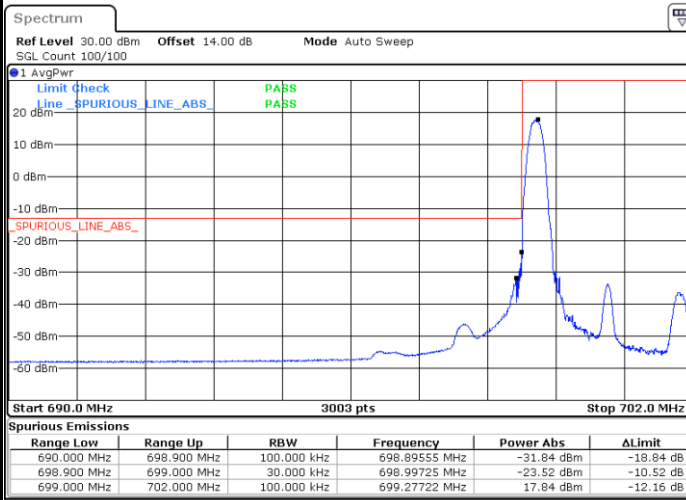
Highest Band Edge / Full RB



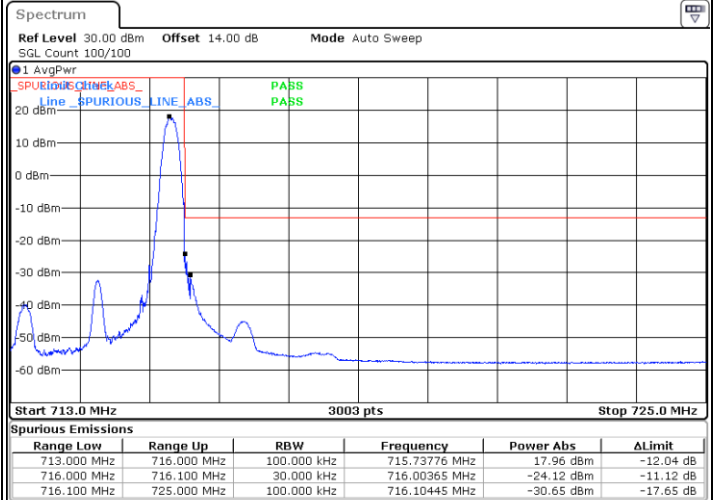


LTE Band 12 / 3MHz / 64QAM

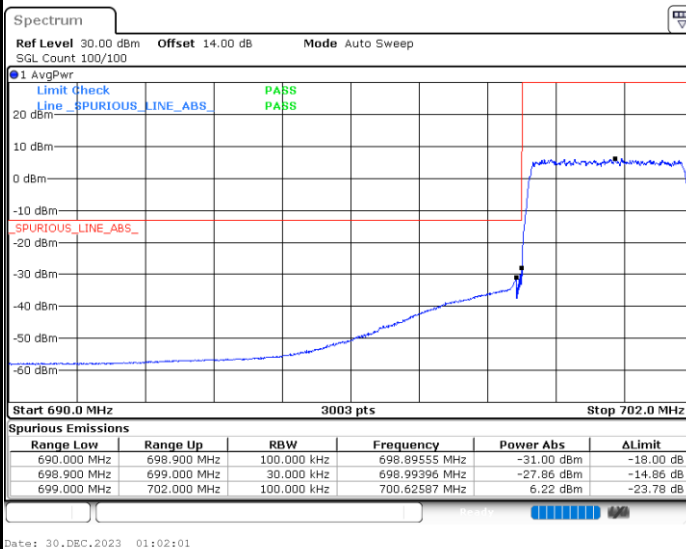
Lowest Band Edge / 1 RB



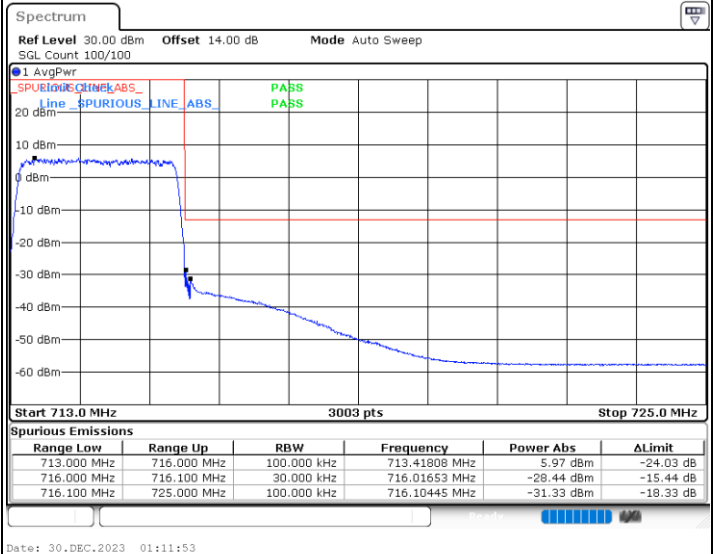
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



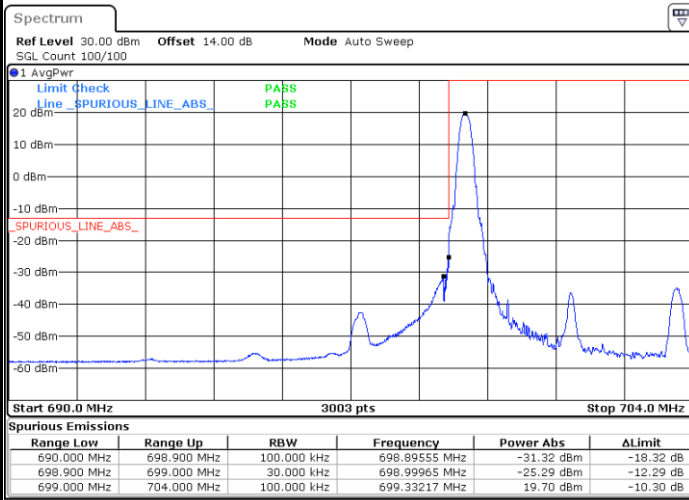
Highest Band Edge / Full RB



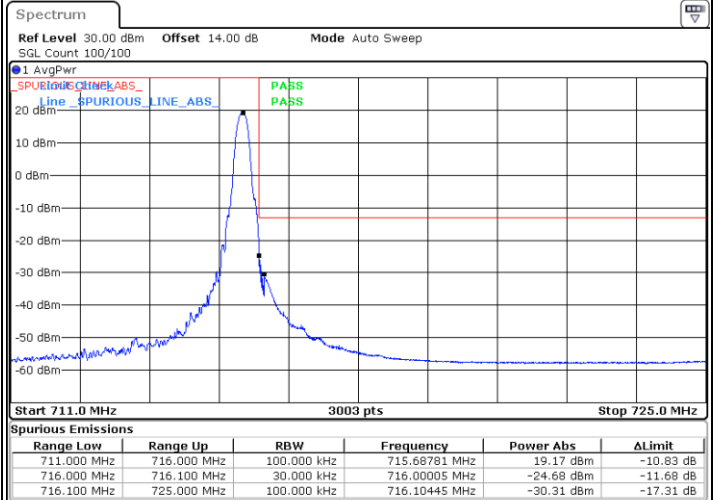


LTE Band 12 / 5MHz / QPSK

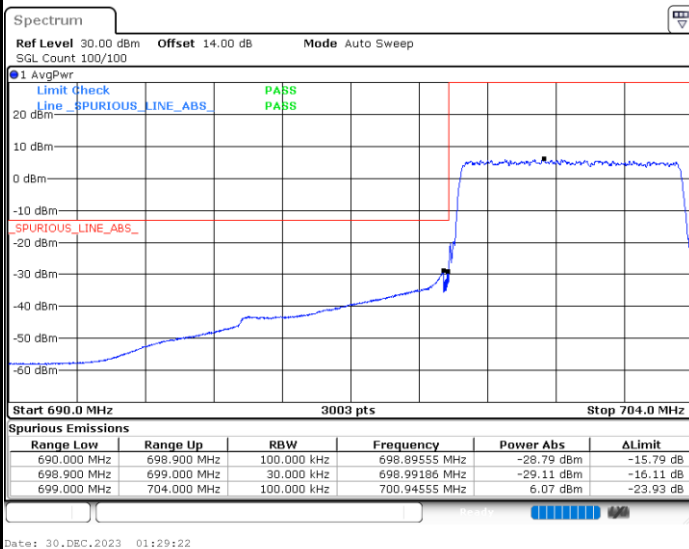
Lowest Band Edge / 1RB



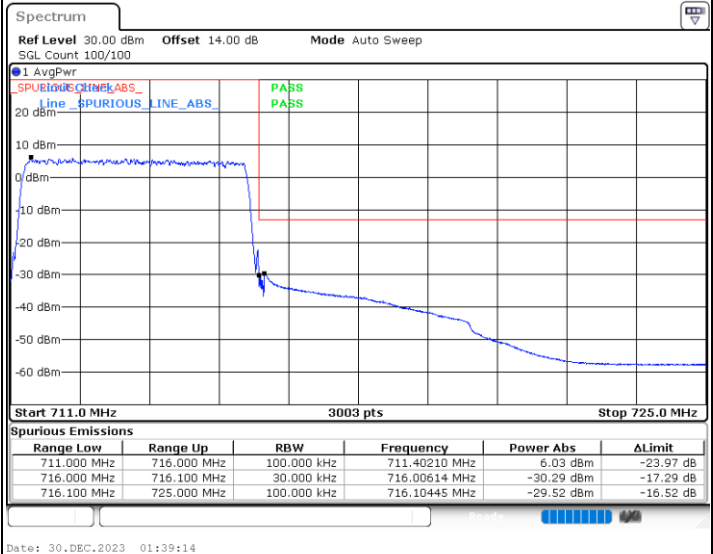
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



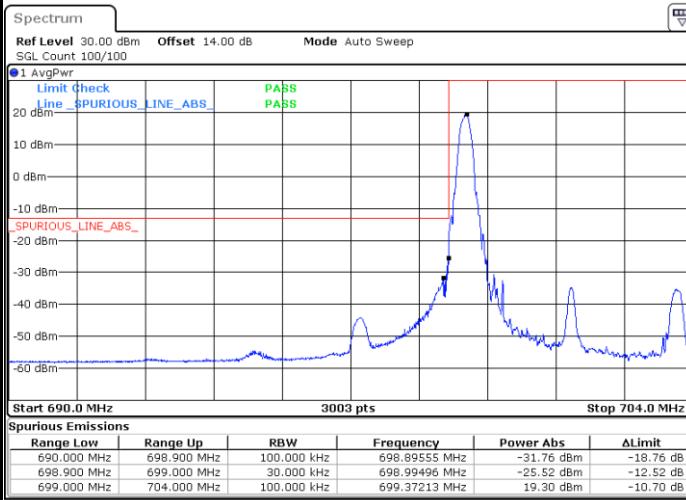
Highest Band Edge / Full RB



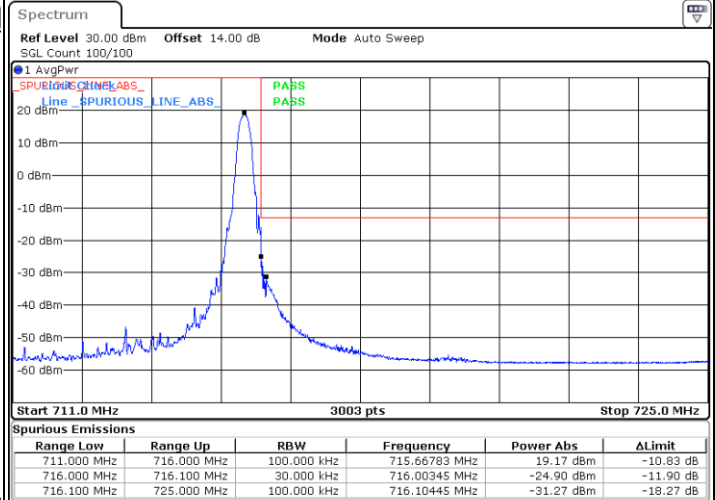


LTE Band 12 / 5MHz / 16QAM

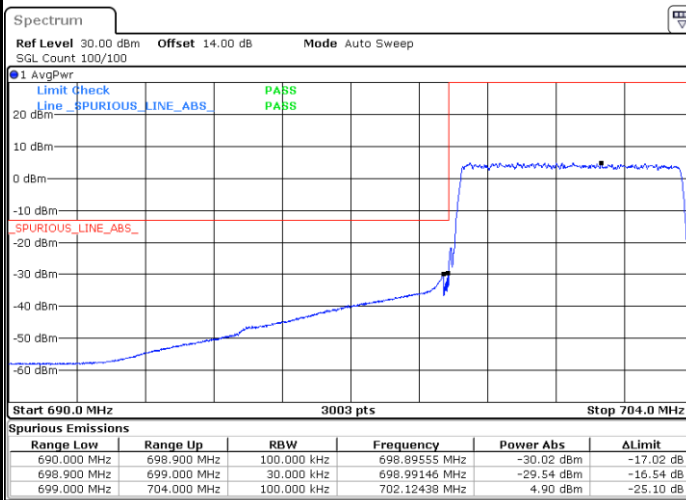
Lowest Band Edge / 1 RB



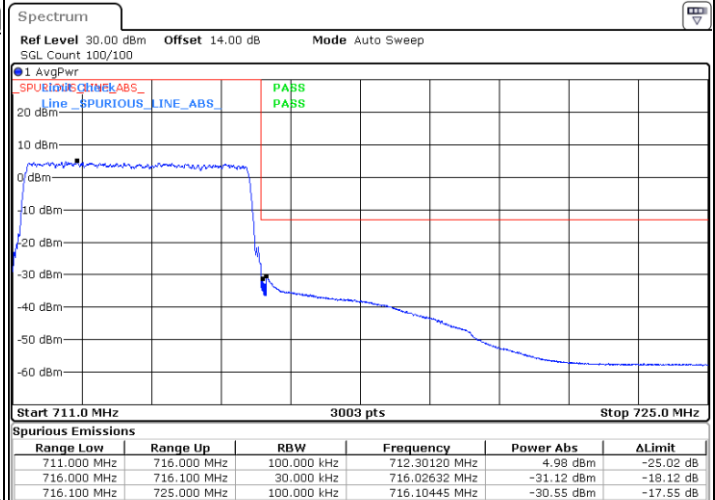
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



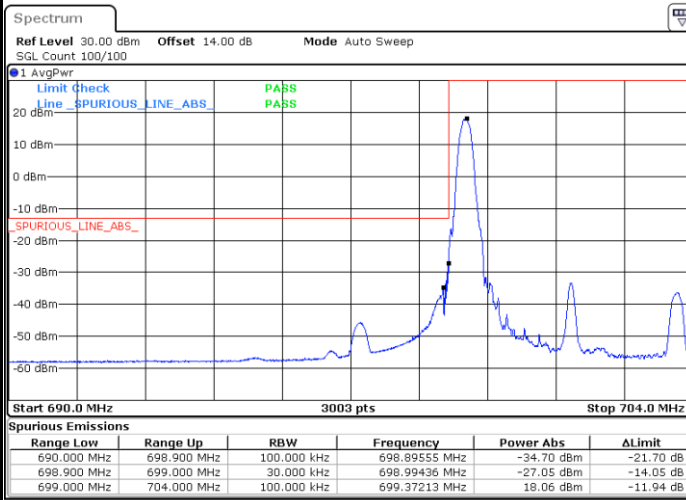
Highest Band Edge / Full RB



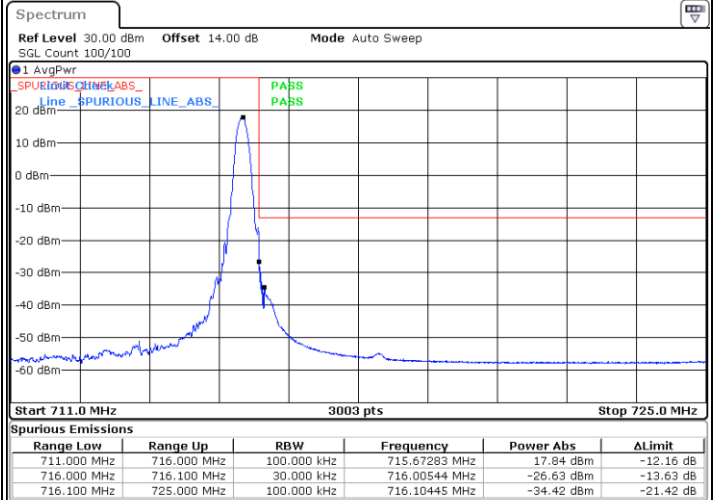


LTE Band 12 / 5MHz / 64QAM

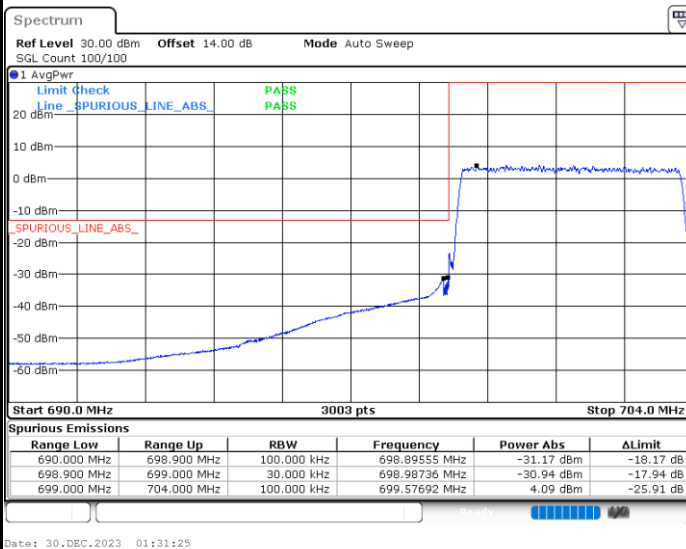
Lowest Band Edge / 1 RB



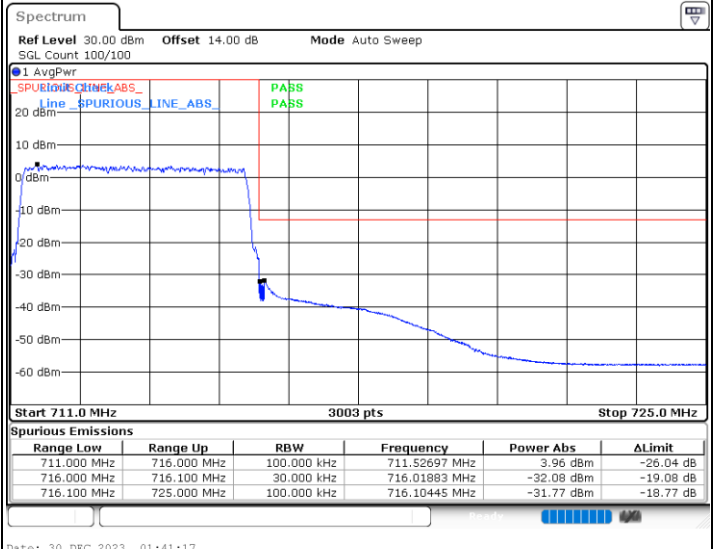
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



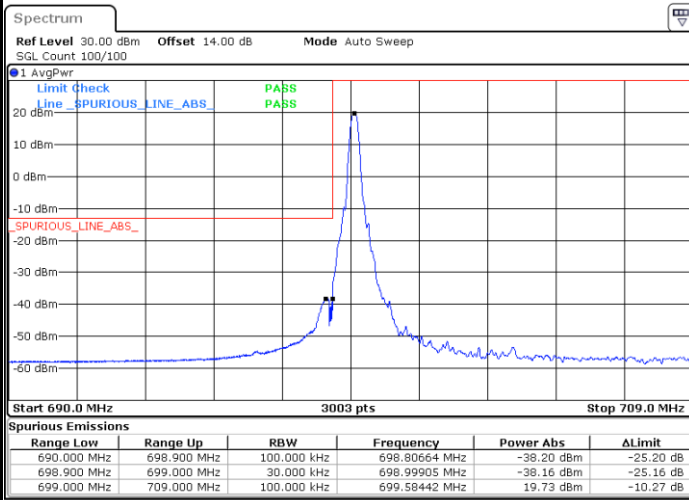
Highest Band Edge / Full RB



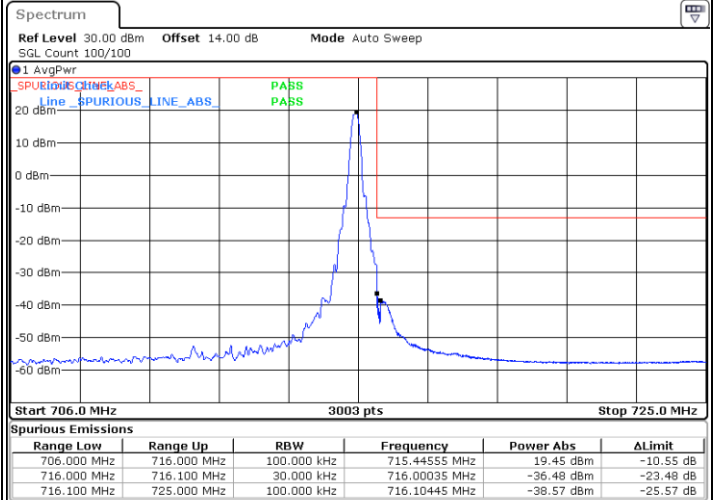


LTE Band 12 / 10MHz / QPSK

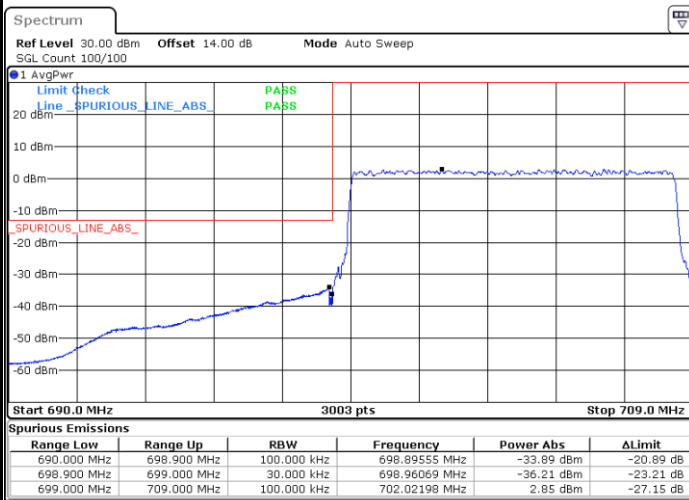
Lowest Band Edge / 1RB



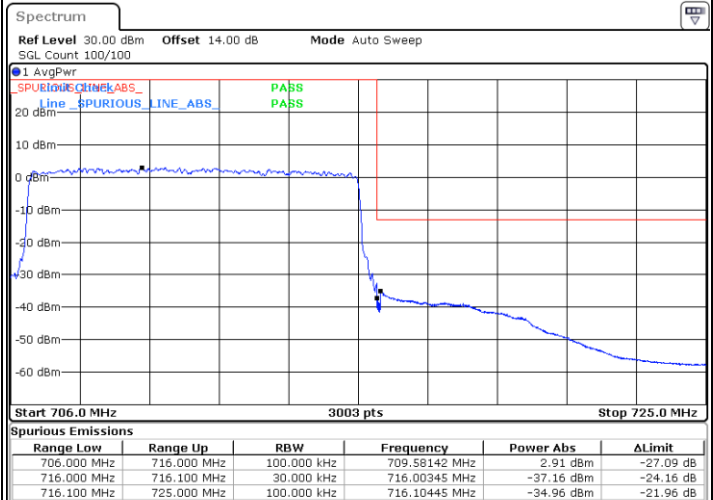
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



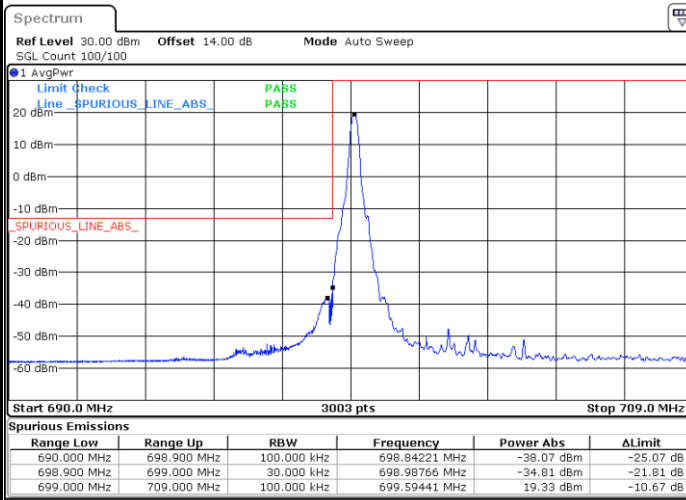
Highest Band Edge / Full RB



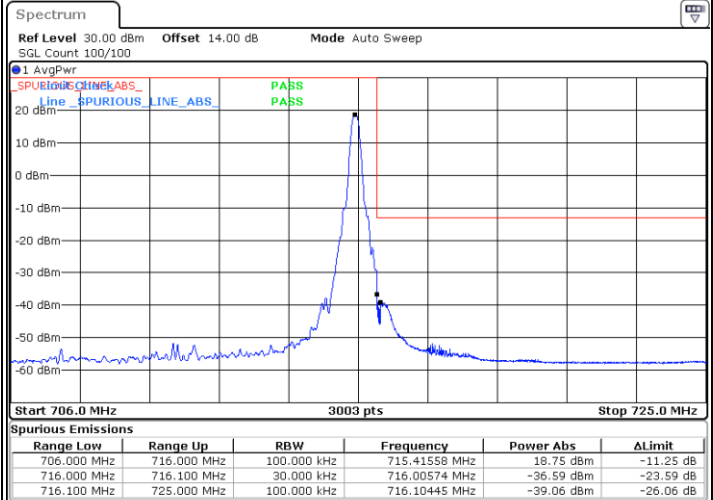


LTE Band 12 / 10MHz / 16QAM

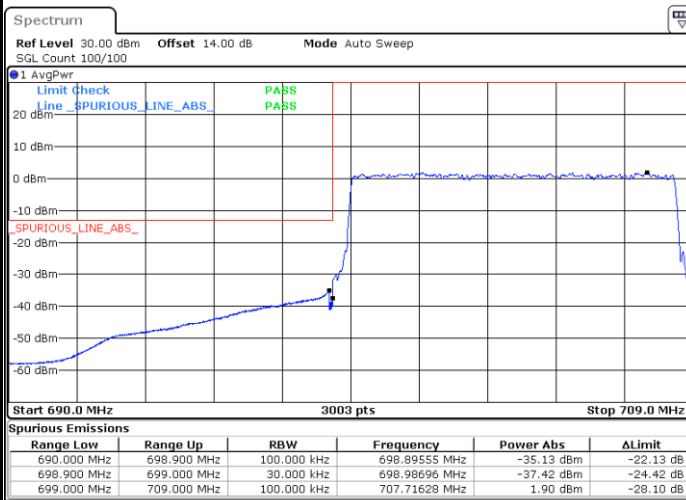
Lowest Band Edge / 1 RB



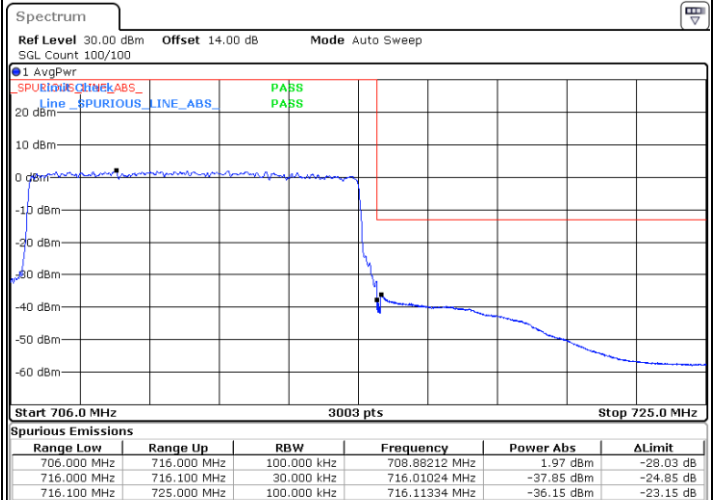
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



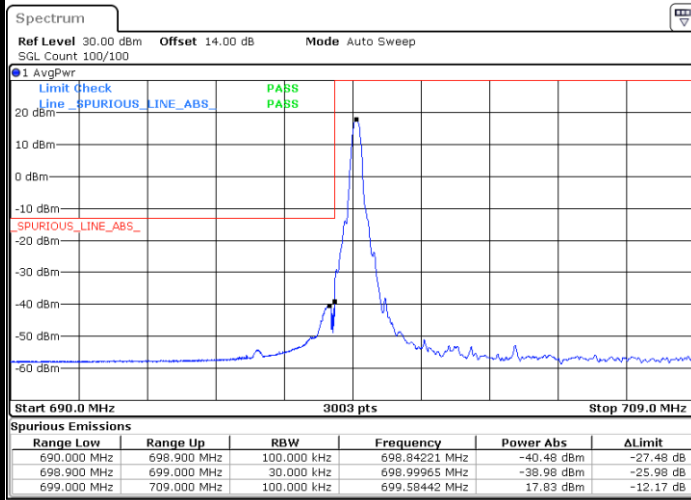
Highest Band Edge / Full RB



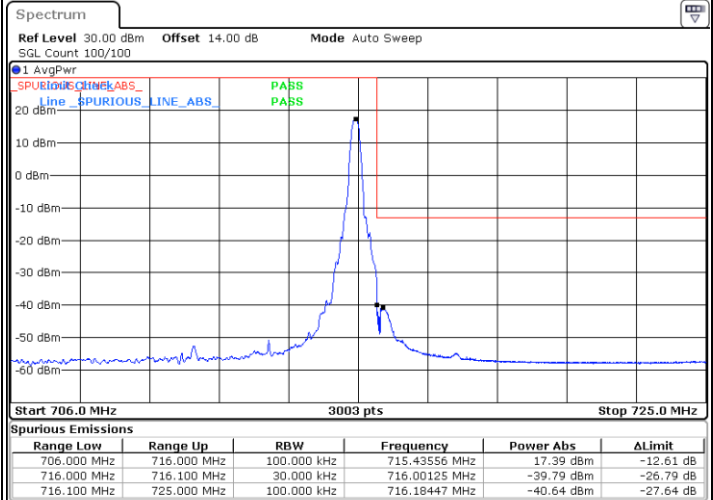


LTE Band 12 / 10MHz / 64QAM

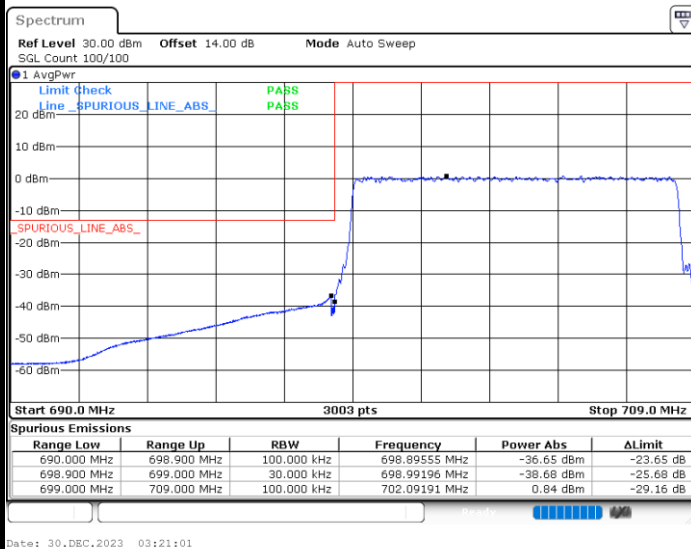
Lowest Band Edge / 1 RB



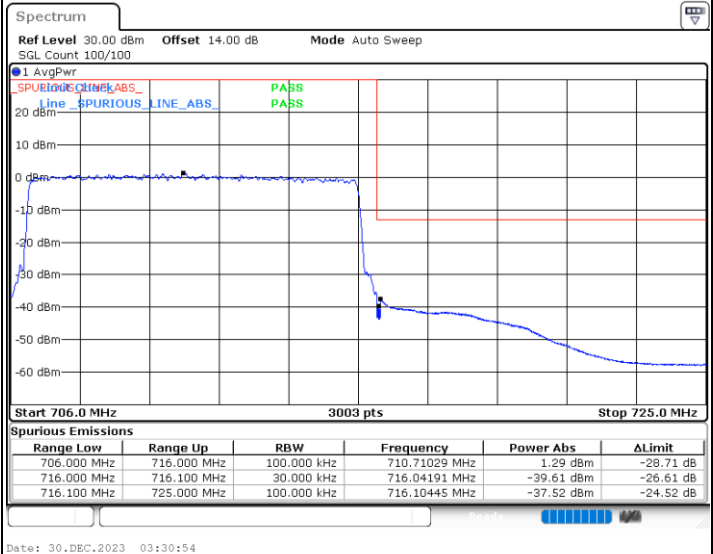
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

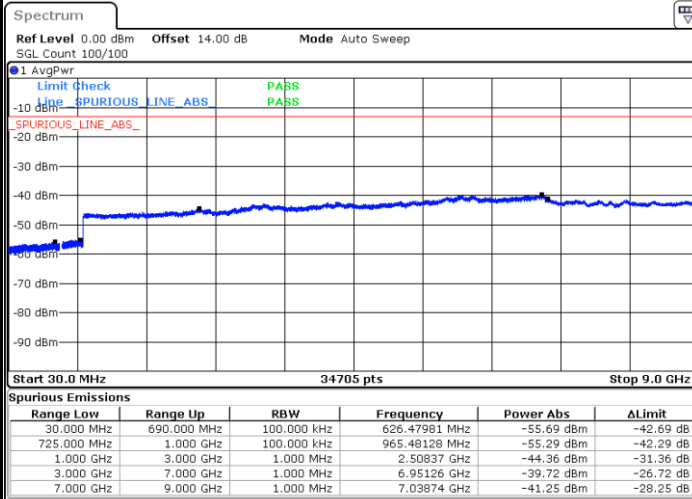




Conducted Spurious Emission

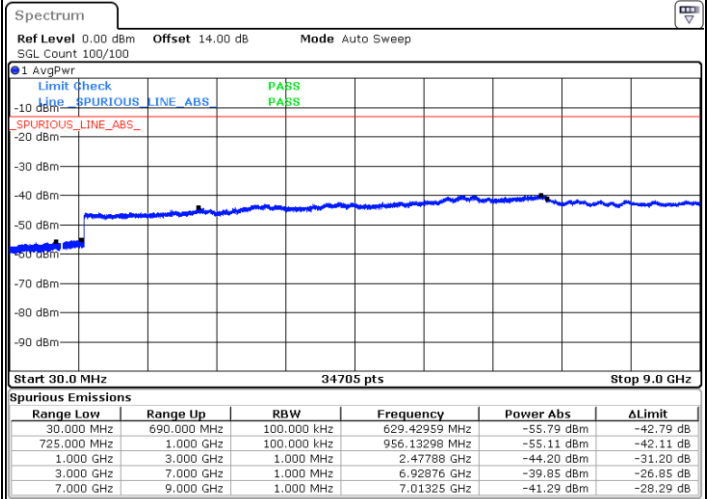
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



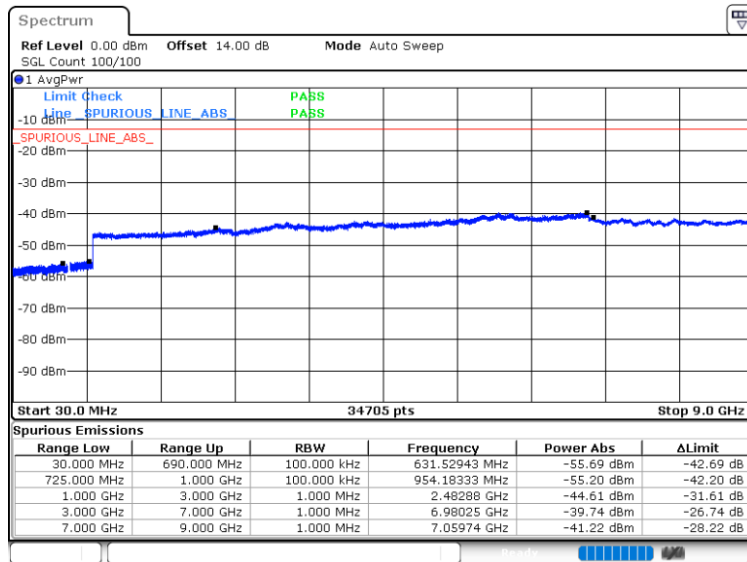
Date: 30.DEC.2023 00:44:35

Middle Channel / QPSK



Date: 30.DEC.2023 00:45:45

Highest Channel / QPSK



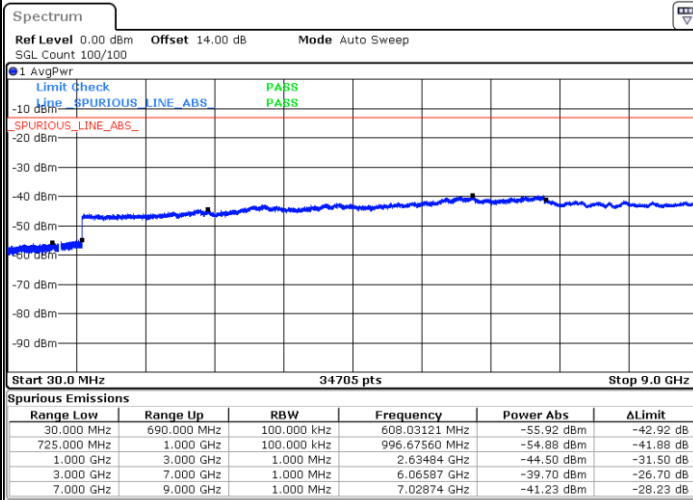
Date: 30.DEC.2023 00:54:27



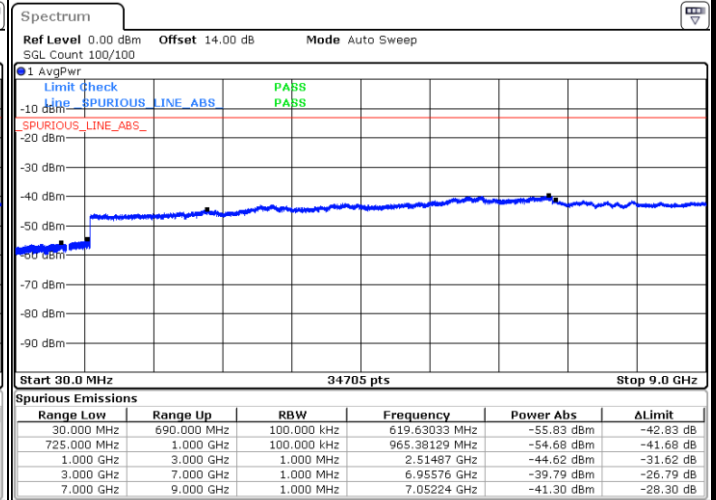
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

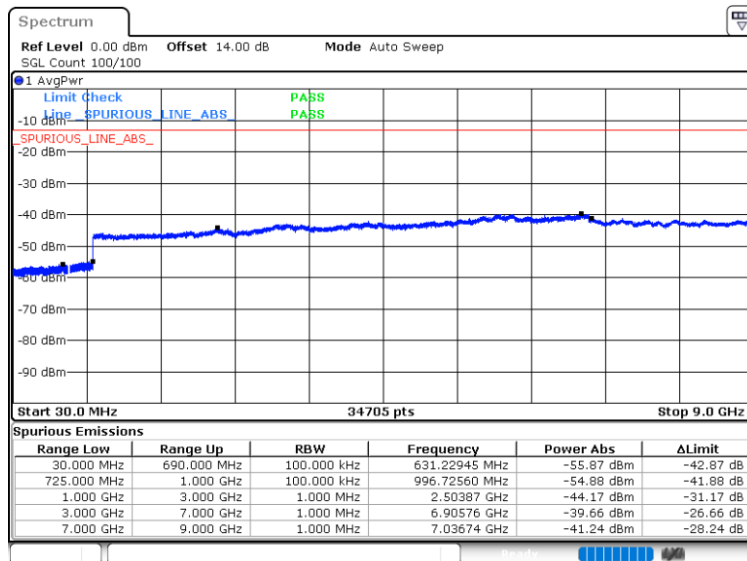


Date: 30.DEC.2023 01:03:12



Date: 30.DEC.2023 01:04:22

Highest Channel / QPSK



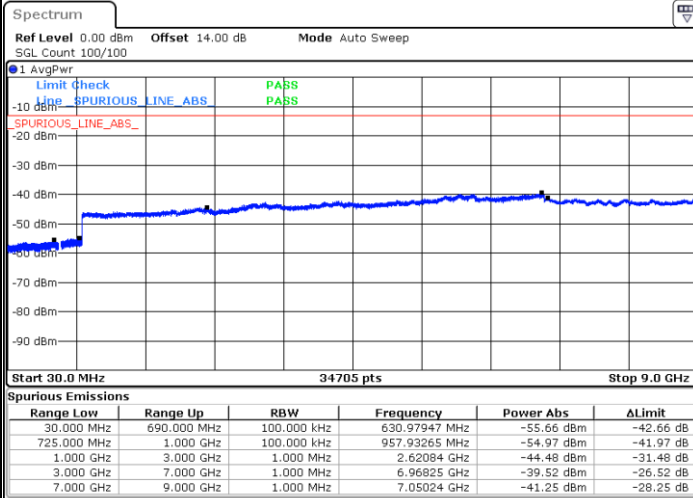
Date: 30.DEC.2023 01:13:04



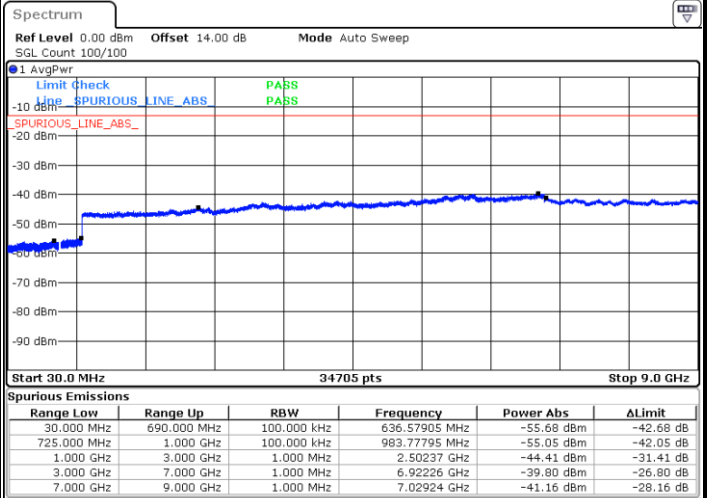
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

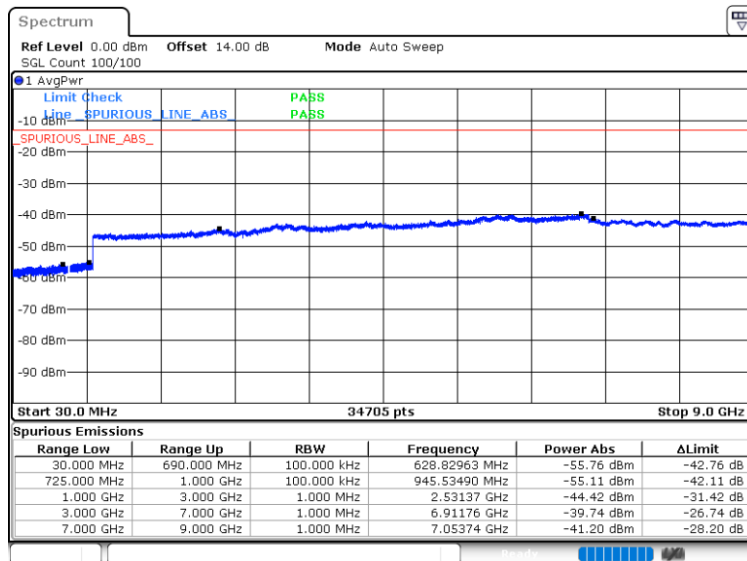


Date: 30.DEC.2023 01:32:36



Date: 30.DEC.2023 01:33:46

Highest Channel / QPSK



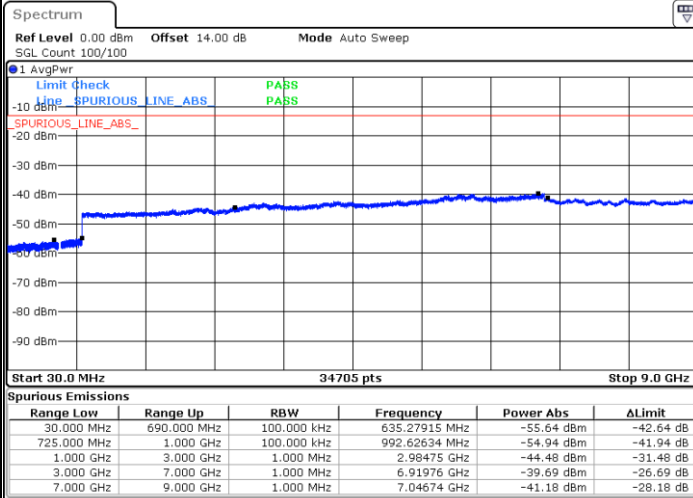
Date: 30.DEC.2023 01:42:29



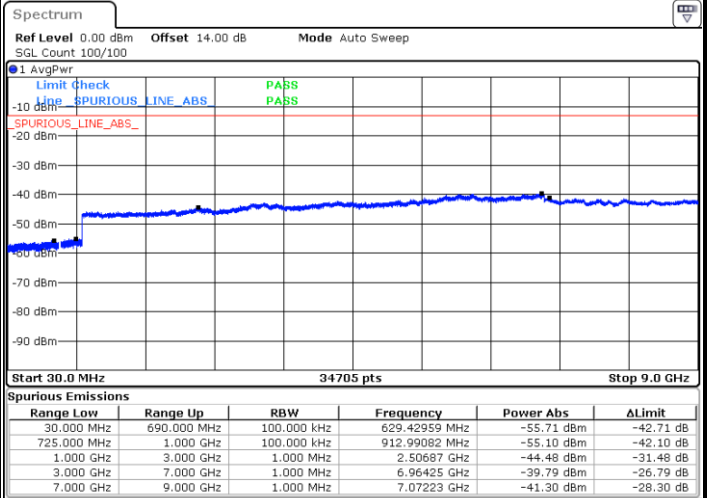
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

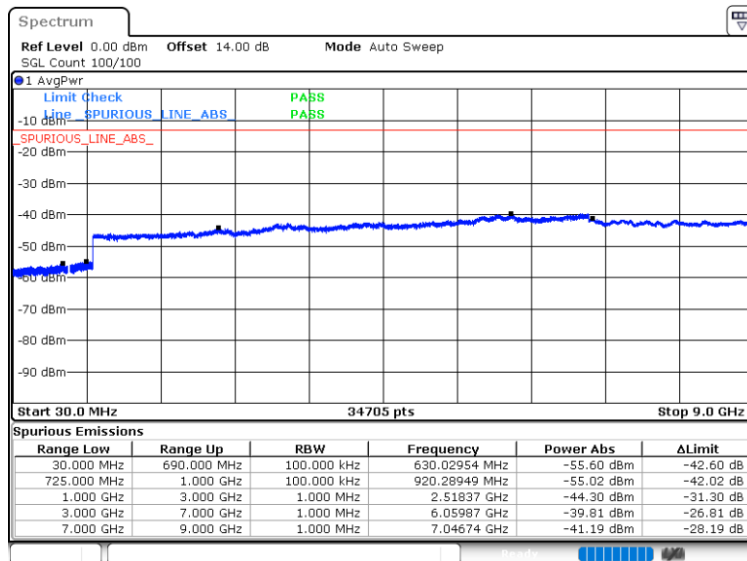


Date: 30.DEC.2023 03:22:12



Date: 30.DEC.2023 03:23:23

Highest Channel / QPSK



Date: 30.DEC.2023 03:32:05

**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	0.0004	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

Note:

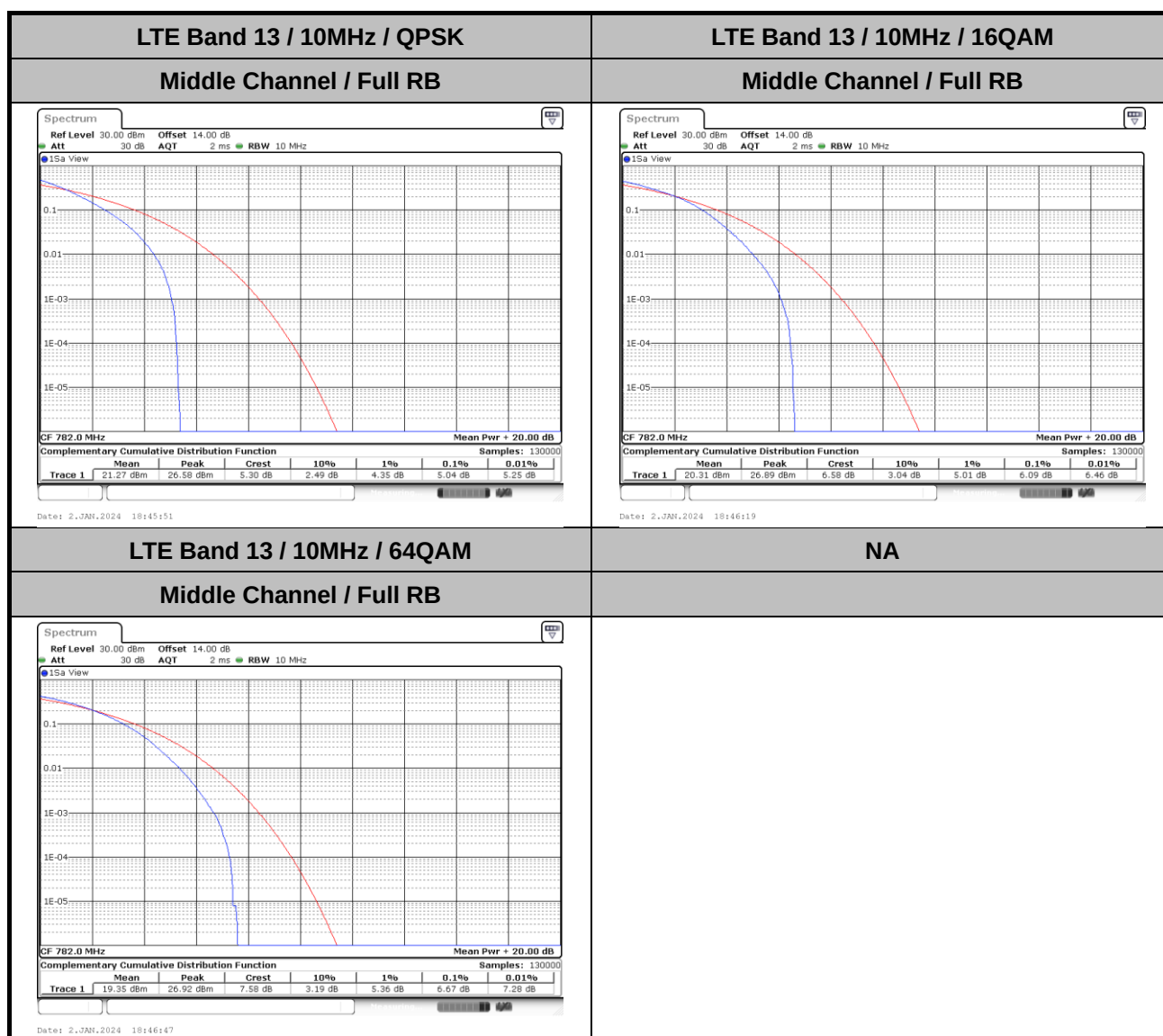
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	5.04	6.09	6.67	PASS





26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	-			5MHz		10MHz		-			-	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	-	-	-	-	4.90	4.99	9.85	9.87	-	-	-	-

