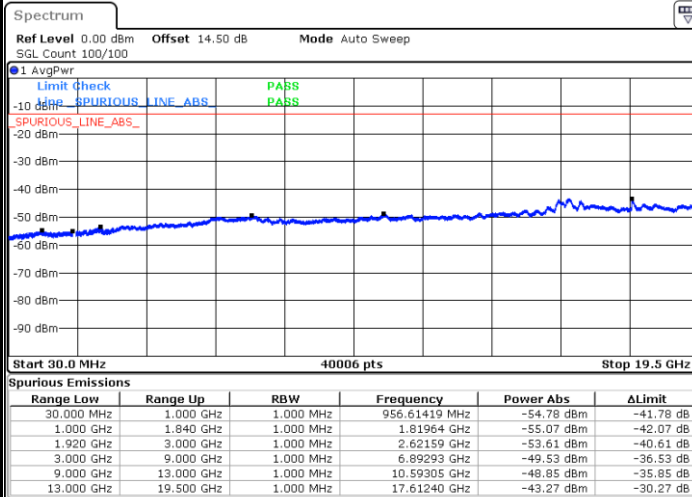




Conducted Spurious Emission

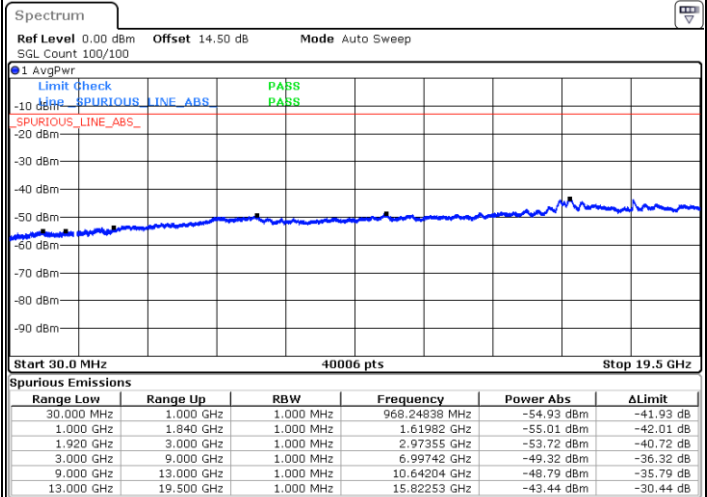
LTE Band 2 / 1.4MHz

Lowest Channel / QPSK



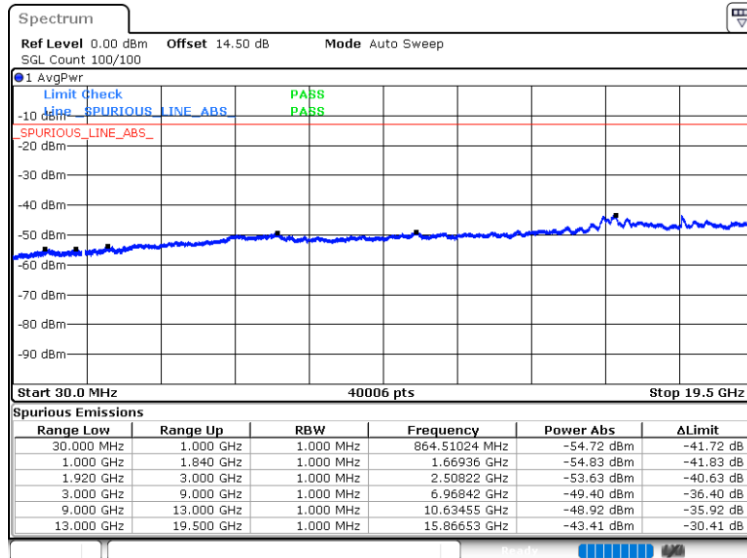
Date: 11.MAR.2024 20:58:07

Middle Channel / QPSK



Date: 11.MAR.2024 21:01:35

Highest Channel / QPSK



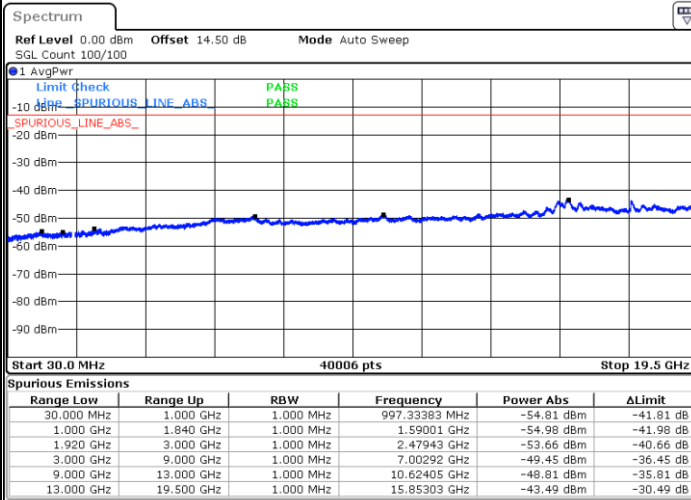
Date: 11.MAR.2024 21:06:31



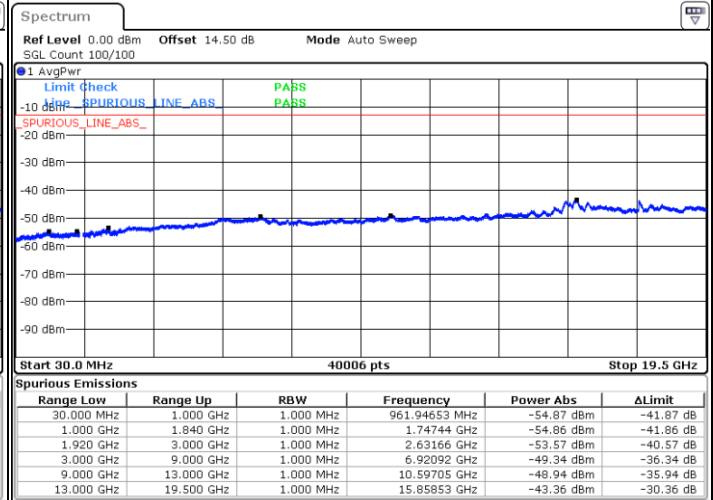
LTE Band 2 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

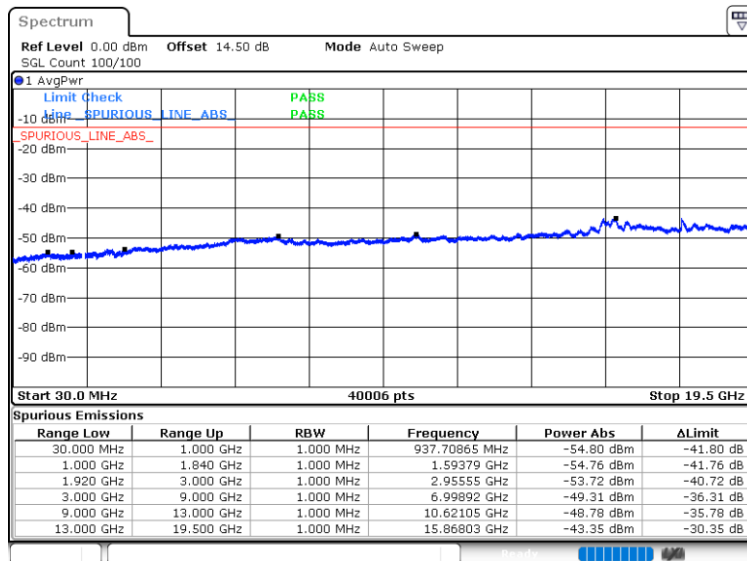


Date: 11.MAR.2024 21:12:58



Date: 11.MAR.2024 21:16:25

Highest Channel / QPSK

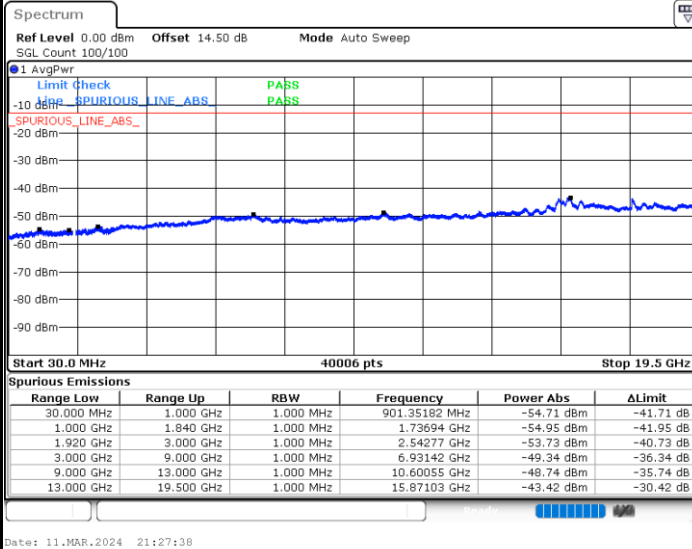


Date: 11.MAR.2024 21:23:28

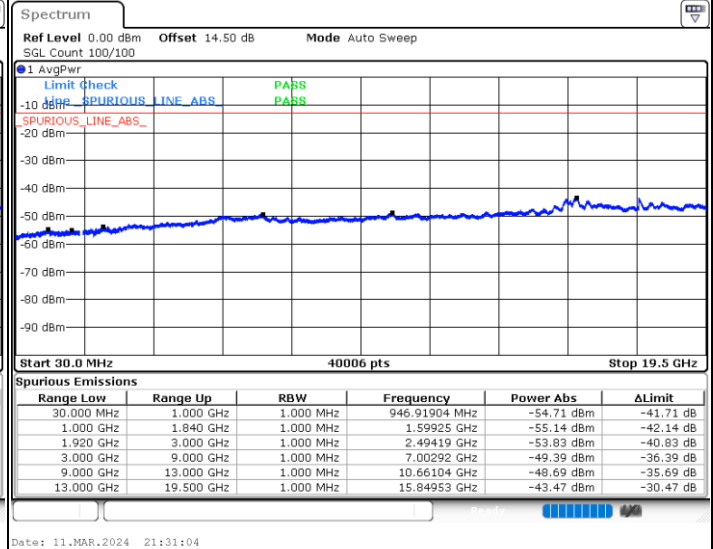


LTE Band 2 / 5MHz

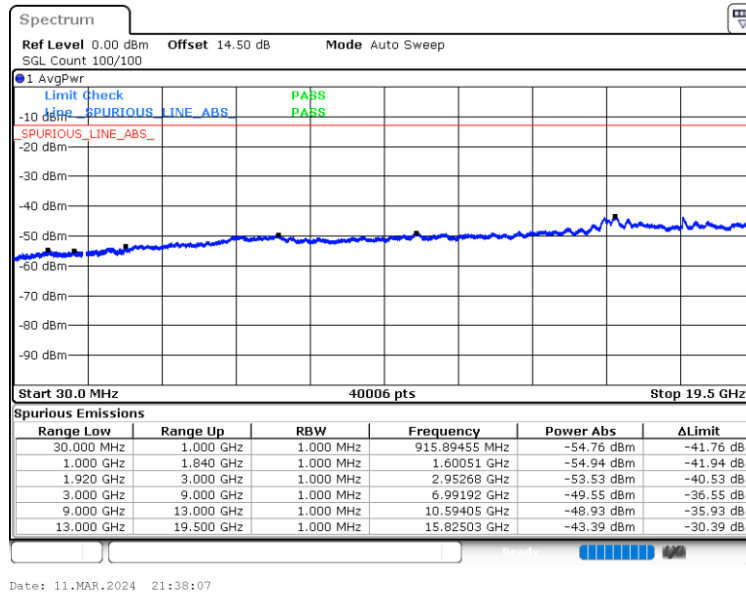
Lowest Channel / QPSK



Middle Channel / QPSK



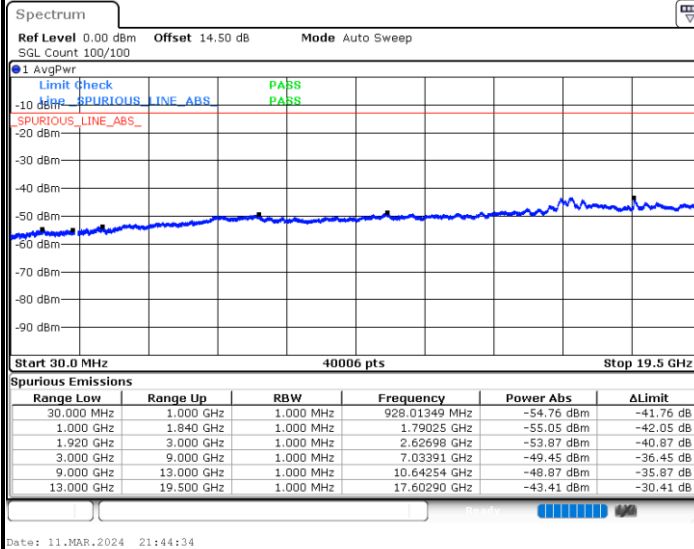
Highest Channel / QPSK



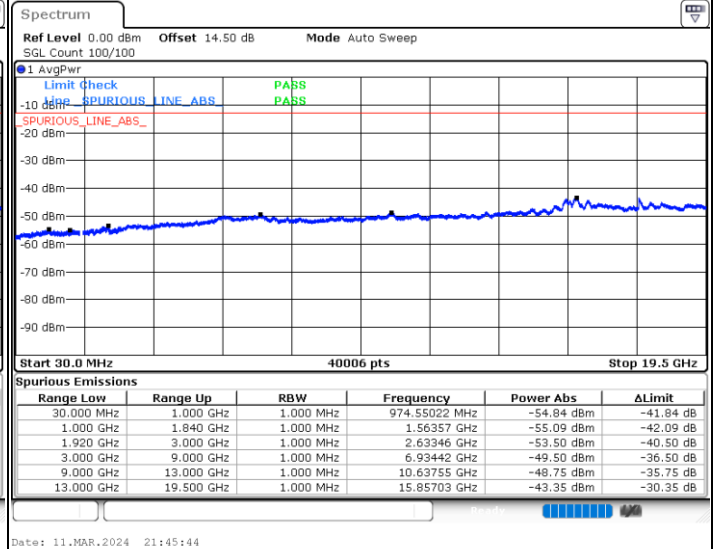


LTE Band 2 / 10MHz

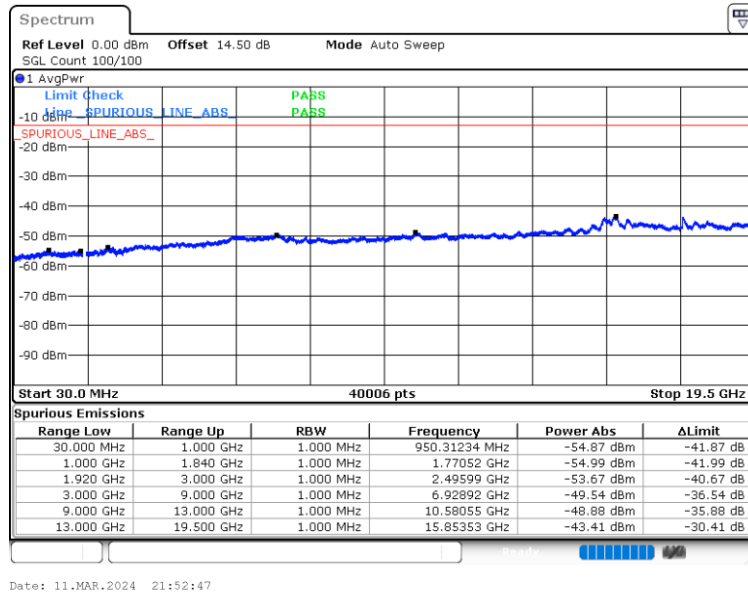
Lowest Channel / QPSK



Middle Channel / QPSK



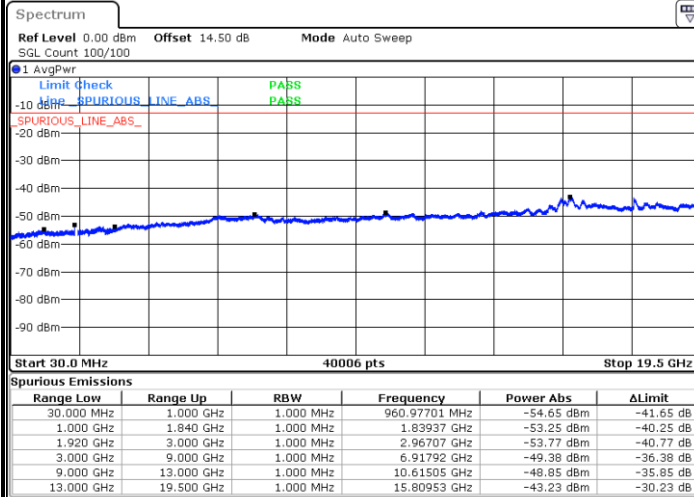
Highest Channel / QPSK





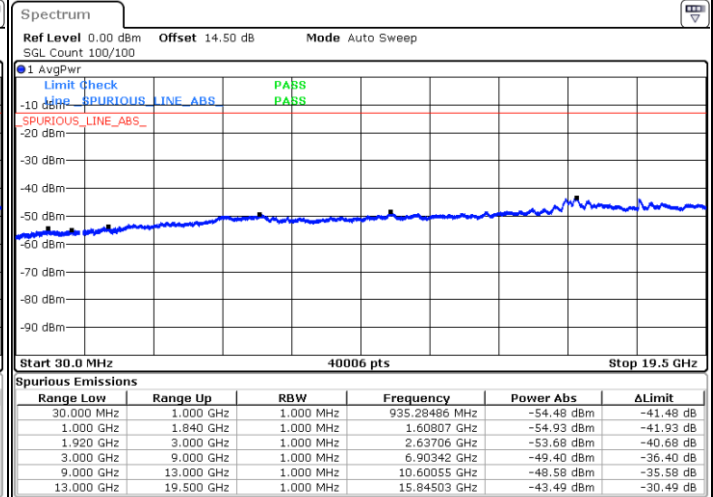
LTE Band 2 / 15MHz

Lowest Channel / QPSK



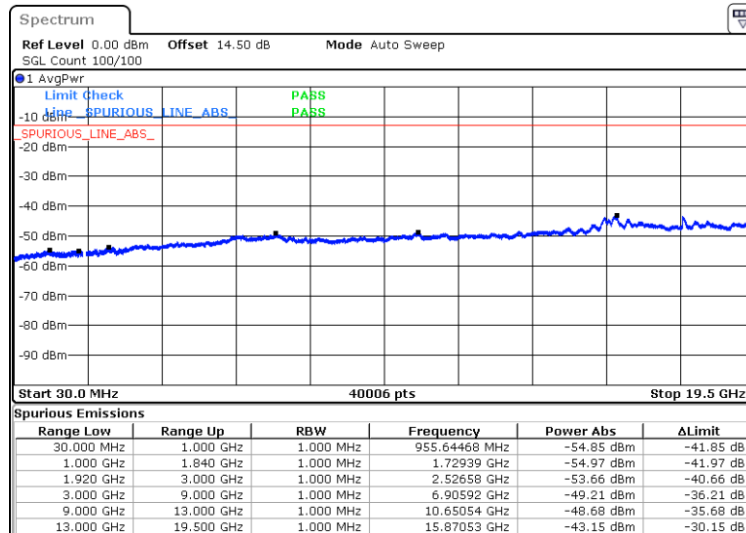
Date: 11.MAR.2024 21:59:14

Middle Channel / QPSK



Date: 11.MAR.2024 22:00:23

Highest Channel / QPSK

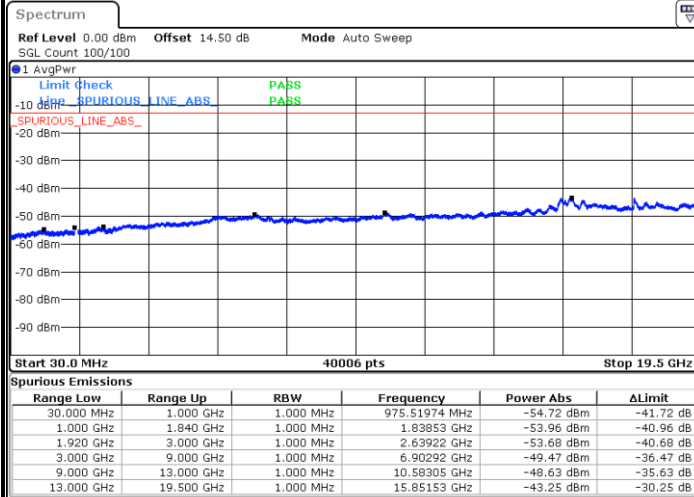


Date: 11.MAR.2024 22:07:26



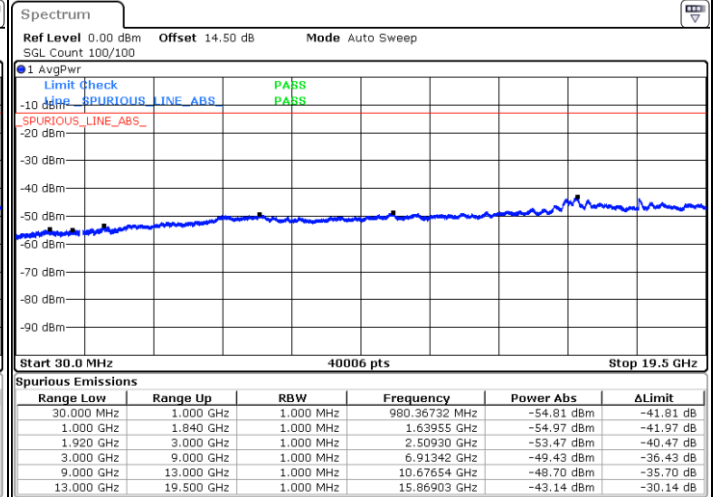
LTE Band 2 / 20MHz

Lowest Channel / QPSK



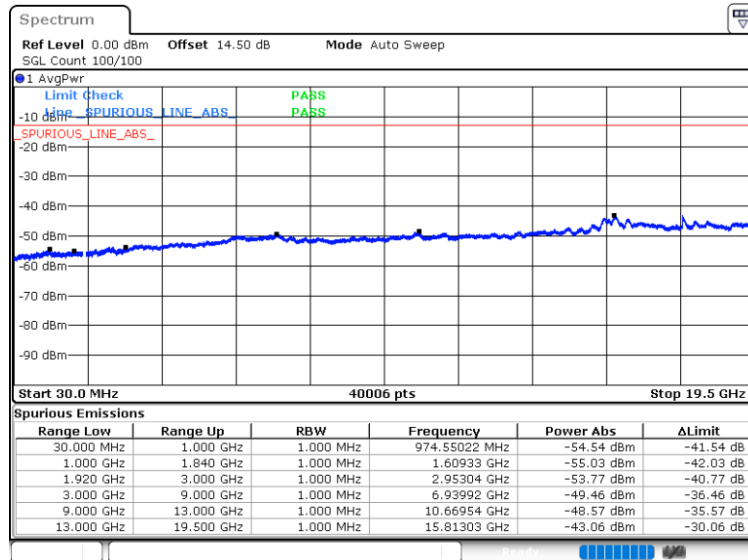
Date: 11.MAR.2024 22:13:53

Middle Channel / QPSK



Date: 11.MAR.2024 22:15:03

Highest Channel / QPSK



Date: 11.MAR.2024 22:23:26

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	0.0005	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

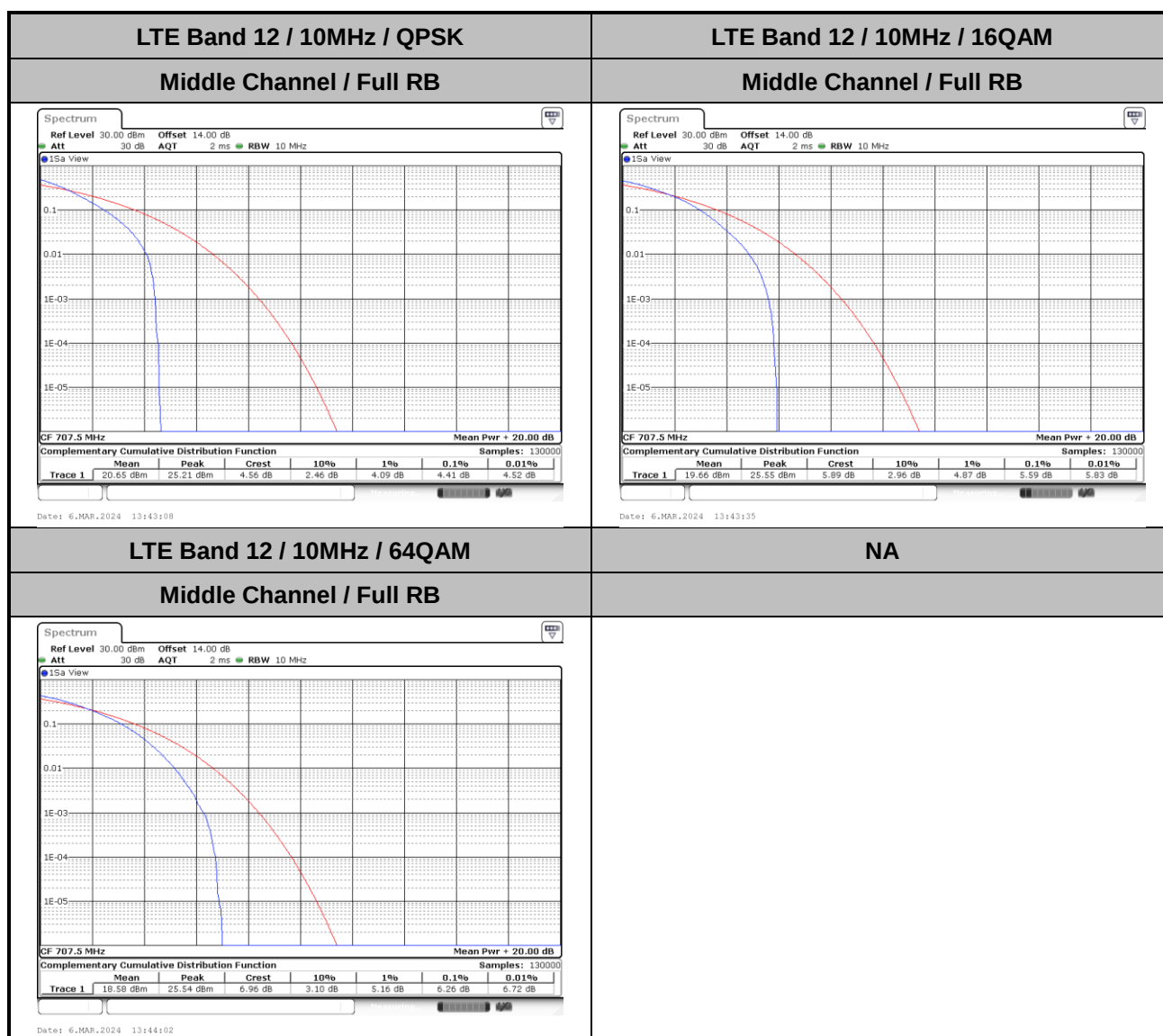
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

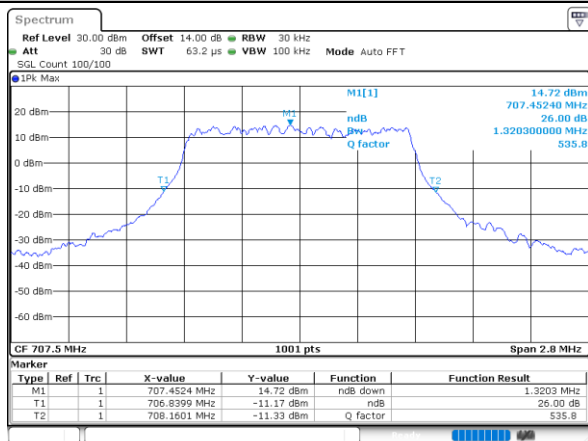
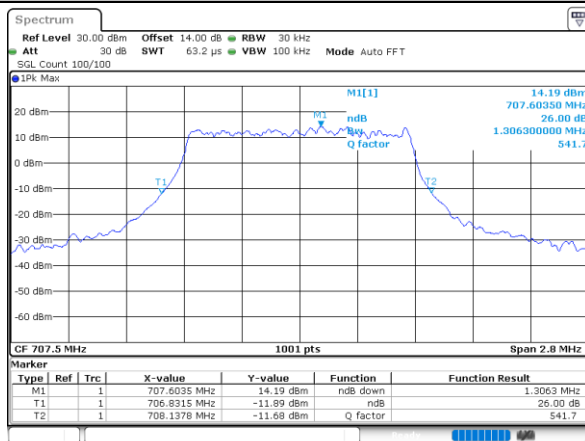
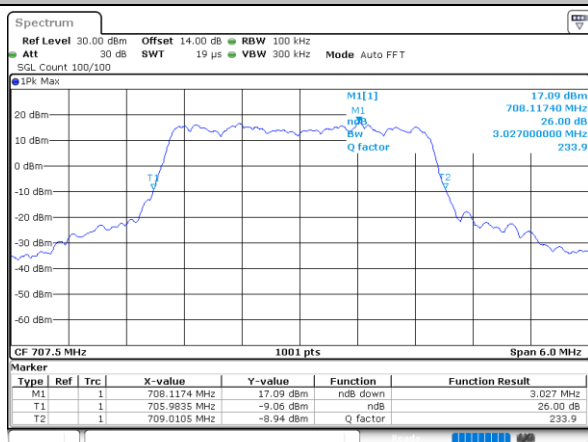
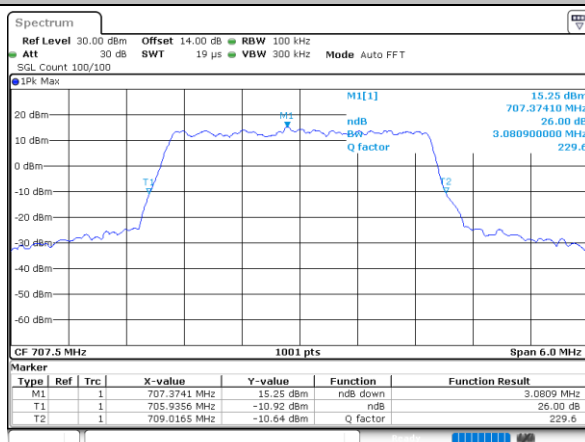
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.41	5.59	6.26	PASS



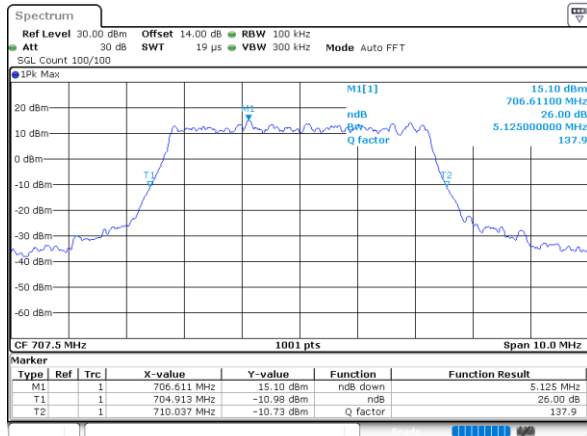
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		-		-	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	1.32	1.31	3.03	3.08	5.13	5.03	9.99	9.93	-	-	-	-

LTE Band 12**Middle Channel / 1.4MHz / QPSK****Middle Channel / 1.4MHz / 16QAM****Middle Channel / 3MHz / QPSK****Middle Channel / 3MHz / 16QAM**

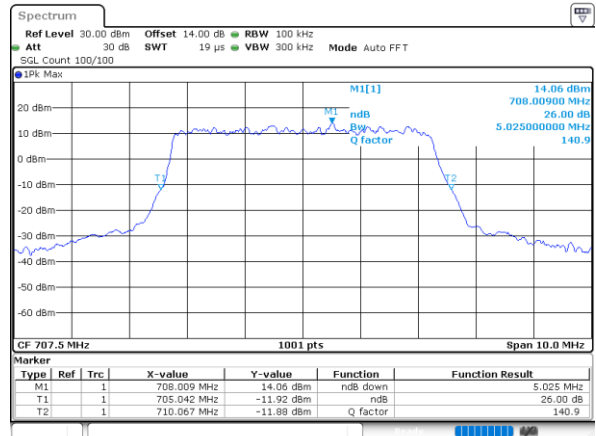


Middle Channel / 5MHz / QPSK



Date: 6.MAR.2024 13:14:28

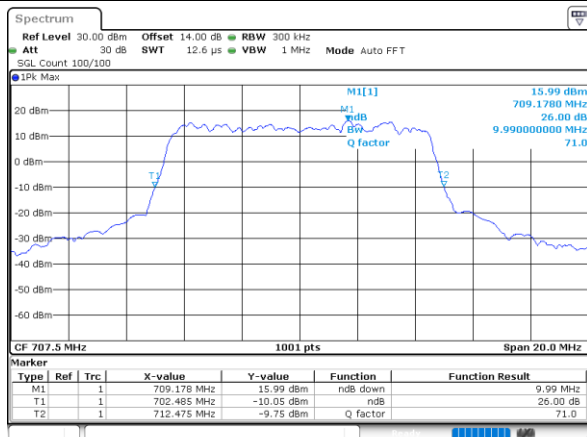
Middle Channel / 5MHz / 16QAM



Date: 6.MAR.2024 13:15:08

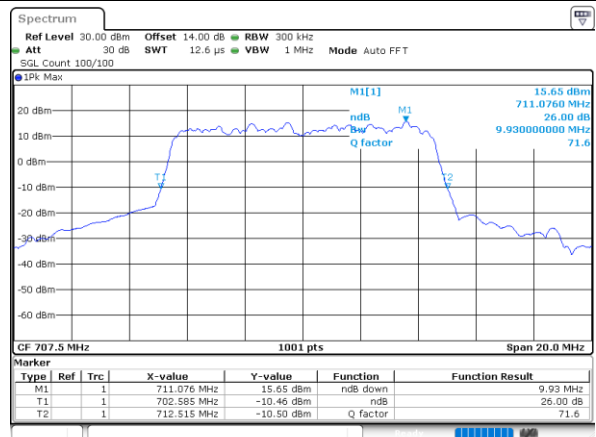
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 6.MAR.2024 13:32:14

Middle Channel / 10MHz / 16QAM



Date: 6.MAR.2024 13:32:53

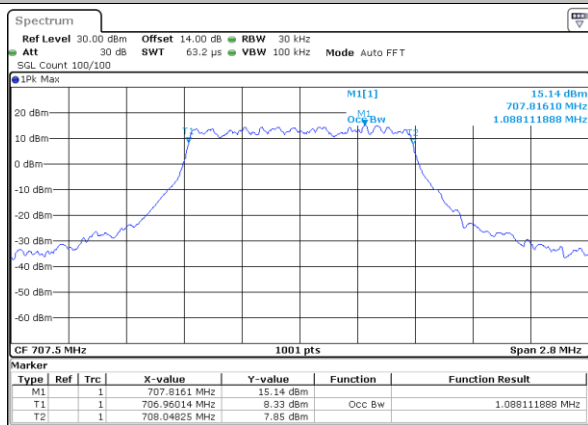


Occupied Bandwidth

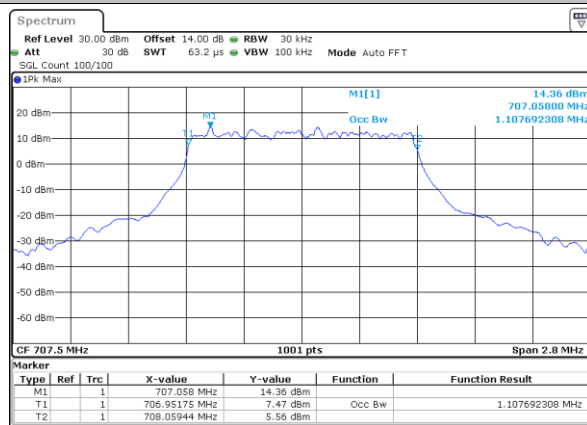
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		-		-	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	1.09	1.11	2.72	2.74	4.52	4.48	9.09	9.01	-	-	-	-

LTE Band 12

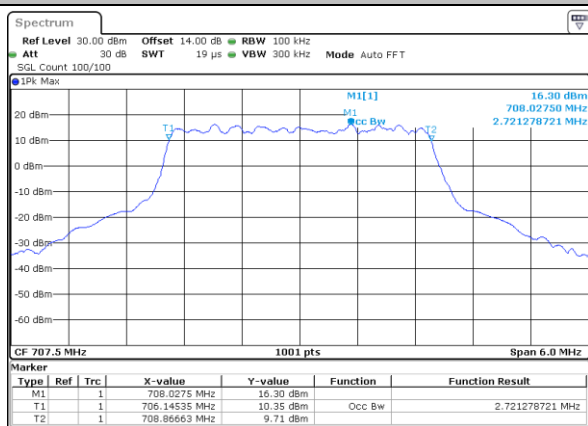
Middle Channel / 1.4MHz / QPSK



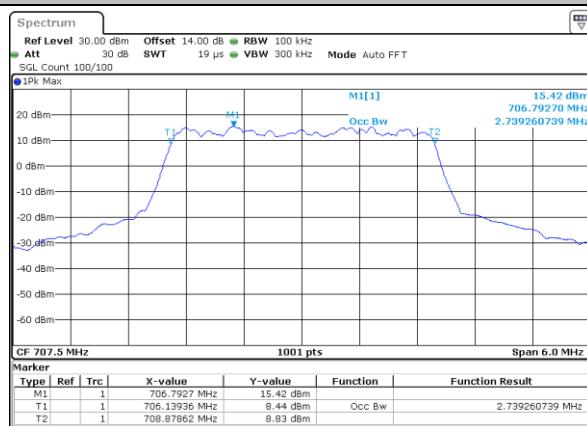
Middle Channel / 1.4MHz / 16QAM



Middle Channel / 3MHz / QPSK

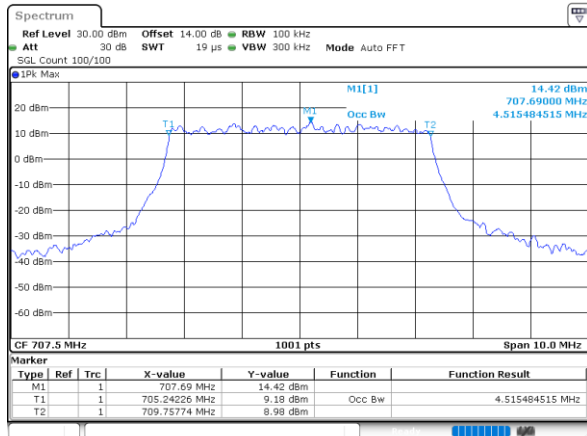


Middle Channel / 3MHz / 16QAM



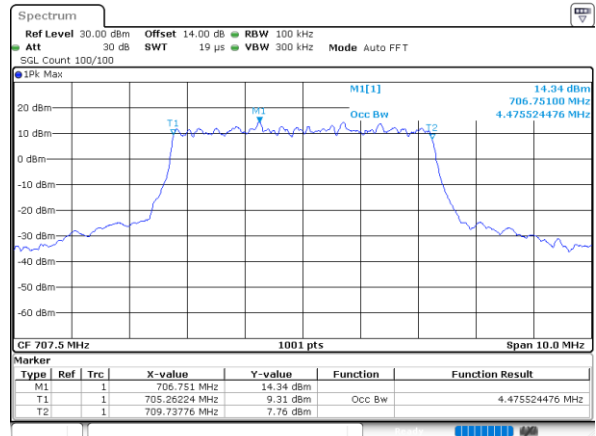


Middle Channel / 5MHz / QPSK



Date: 6.MAR.2024 13:14:14

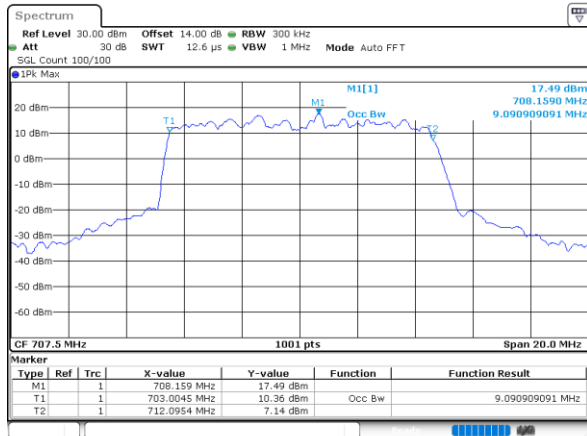
Middle Channel / 5MHz / 16QAM



Date: 6.MAR.2024 13:14:54

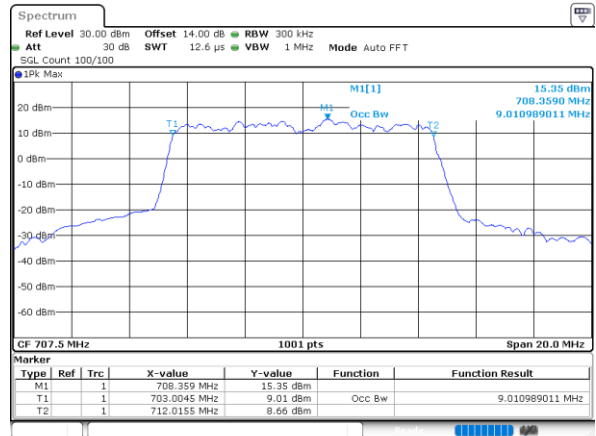
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 6.MAR.2024 13:32:00

Middle Channel / 10MHz / 16QAM



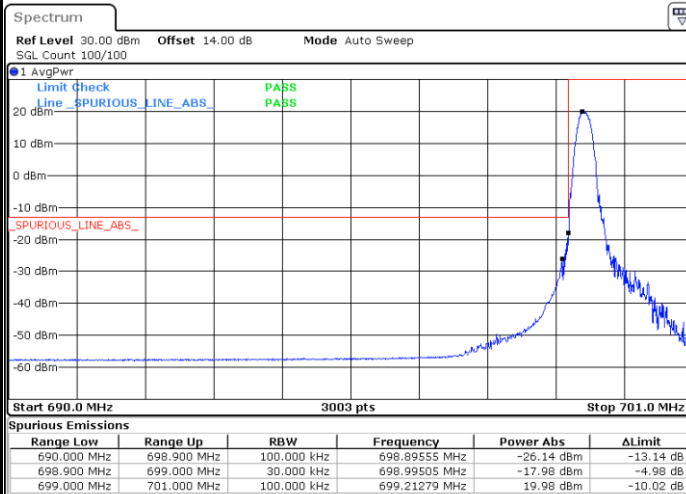
Date: 6.MAR.2024 13:32:39



Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

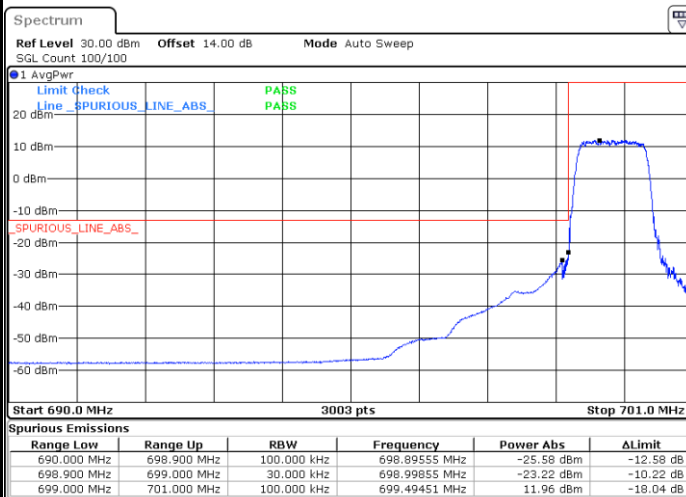
Lowest Band Edge / 1RB



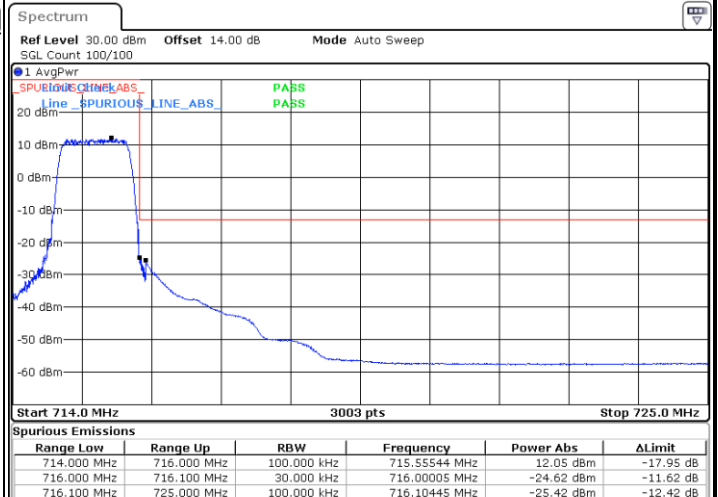
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



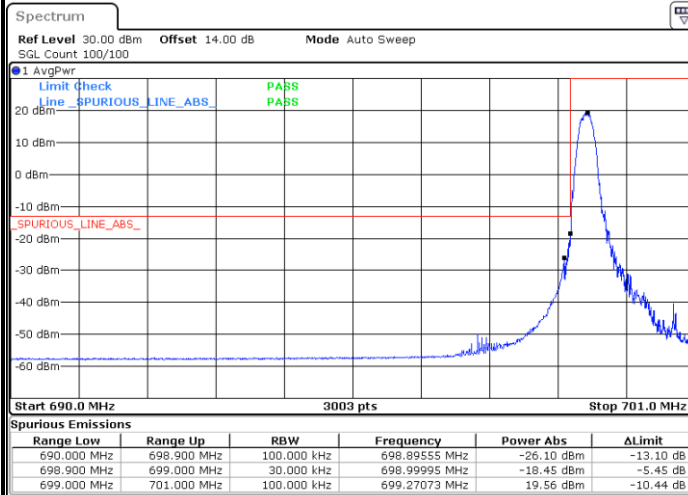
Highest Band Edge / Full RB



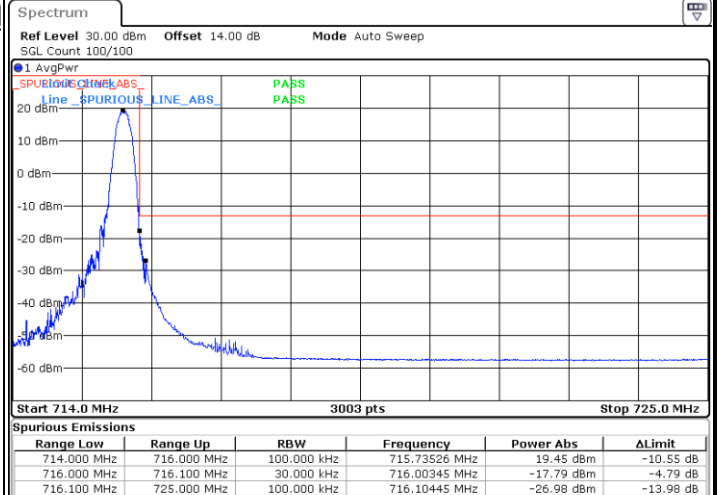


LTE Band 12 / 1.4MHz / 16QAM

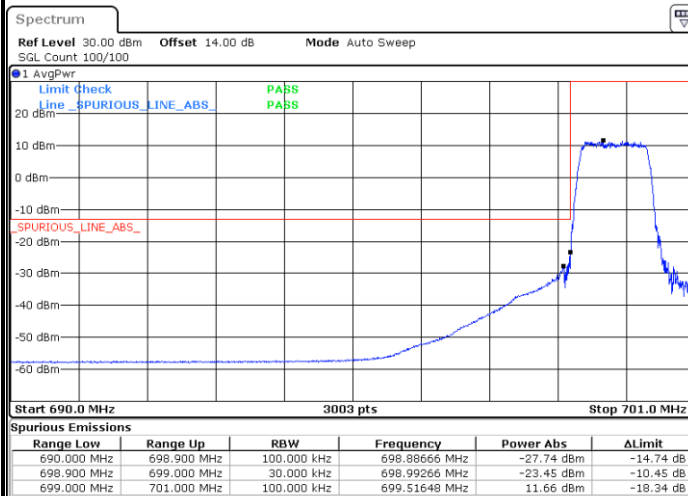
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



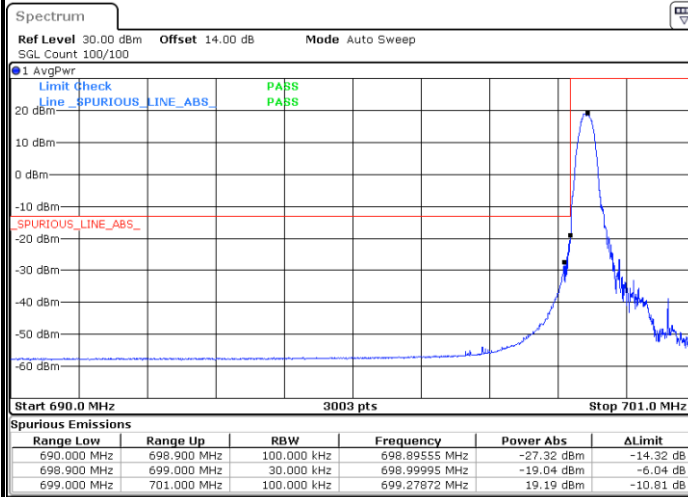
Highest Band Edge / Full RB



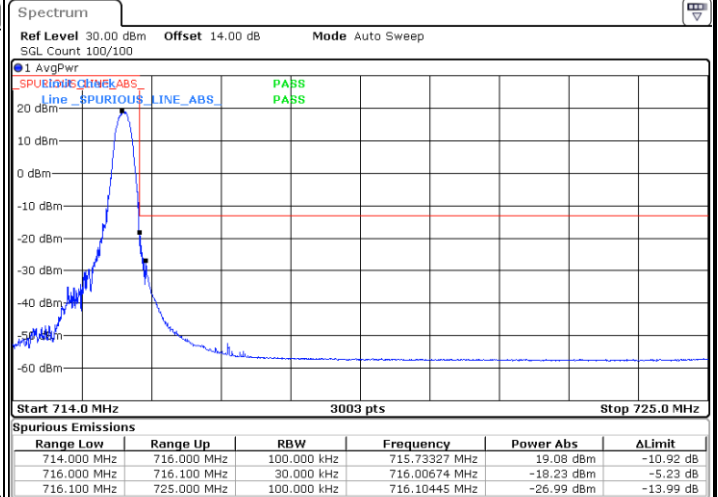


LTE Band 12 / 1.4MHz / 64QAM

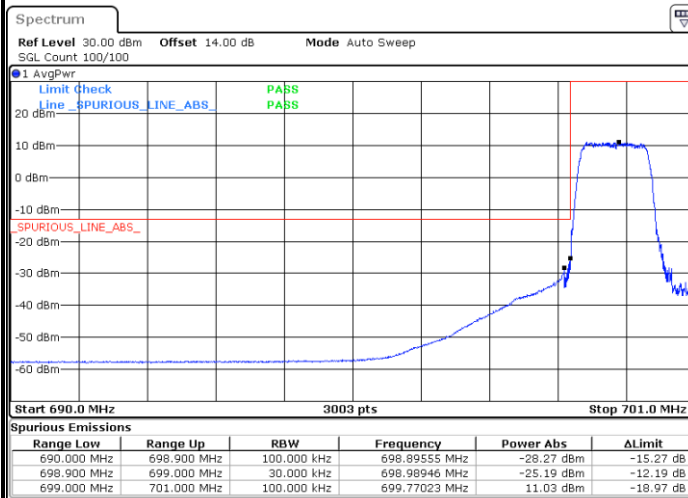
Lowest Band Edge / 1 RB



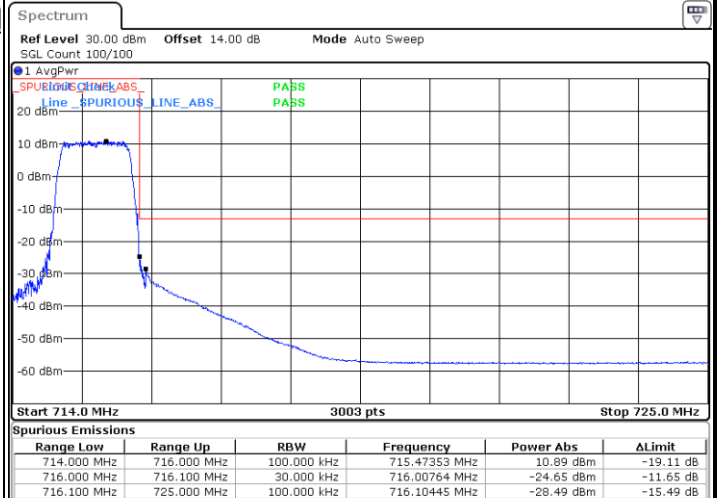
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



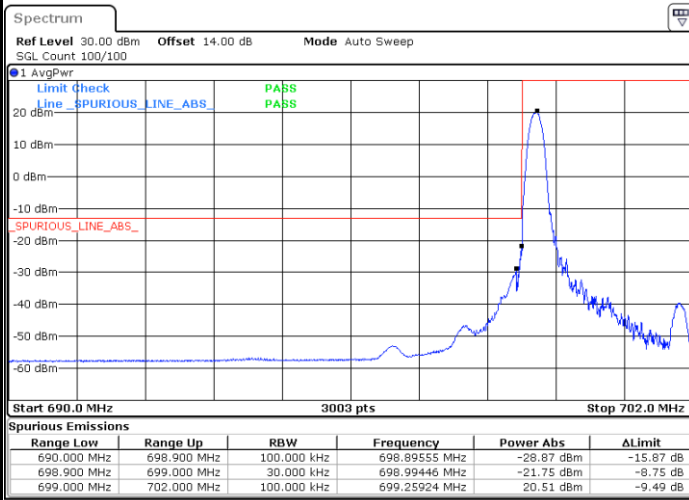
Highest Band Edge / Full RB



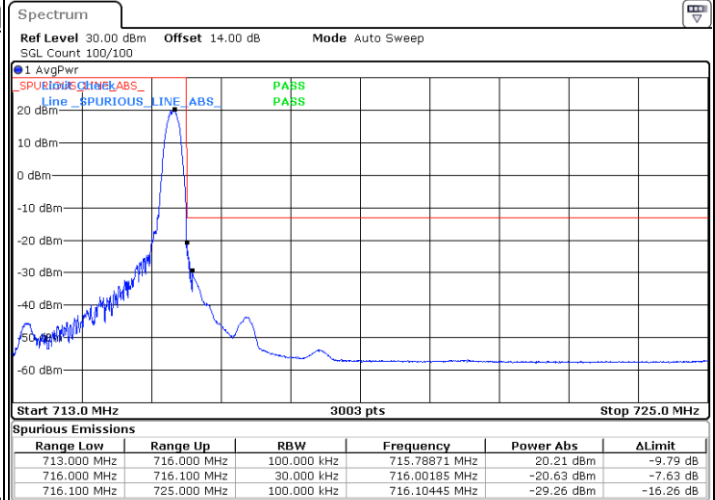


LTE Band 12 / 3MHz / QPSK

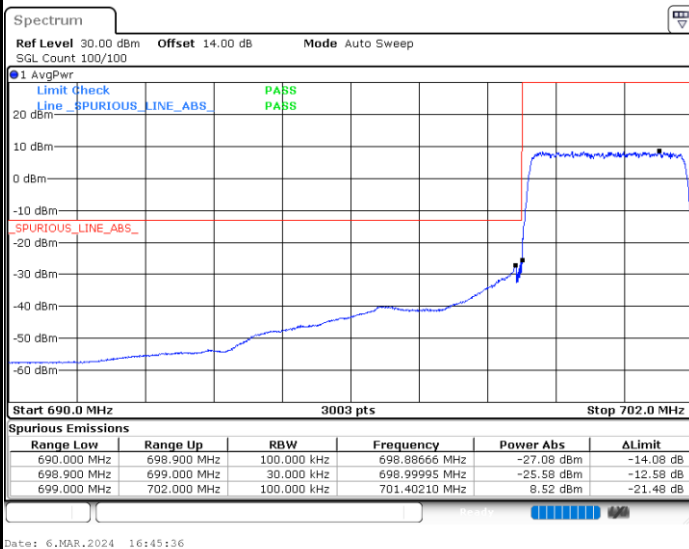
Lowest Band Edge / 1RB



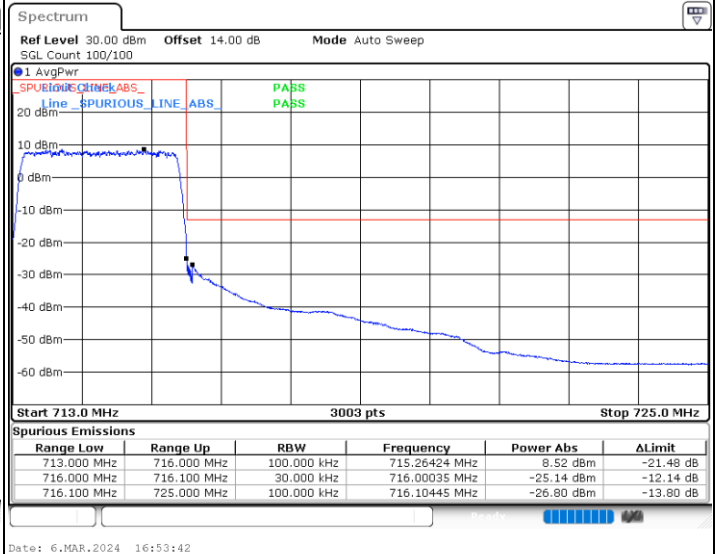
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



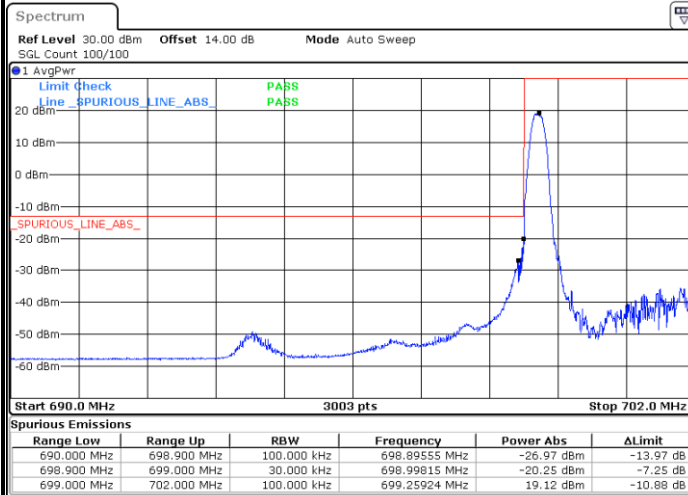
Highest Band Edge / Full RB



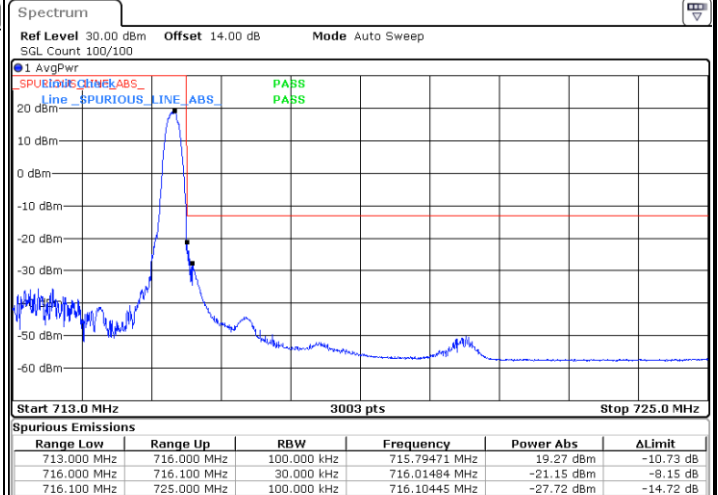


LTE Band 12 / 3MHz / 16QAM

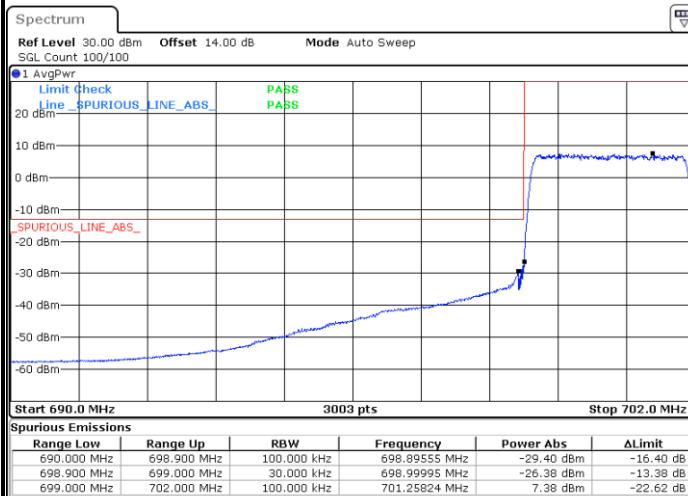
Lowest Band Edge / 1 RB



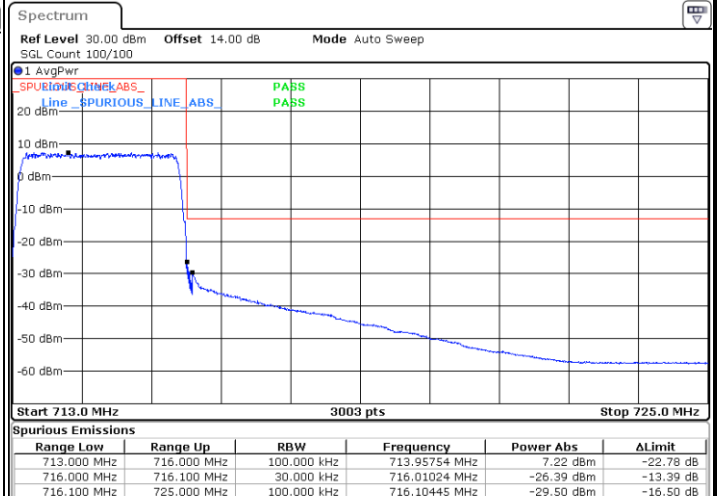
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



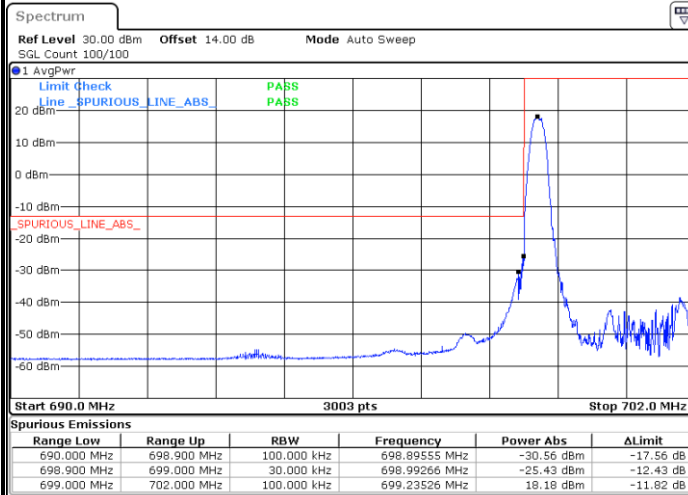
Highest Band Edge / Full RB



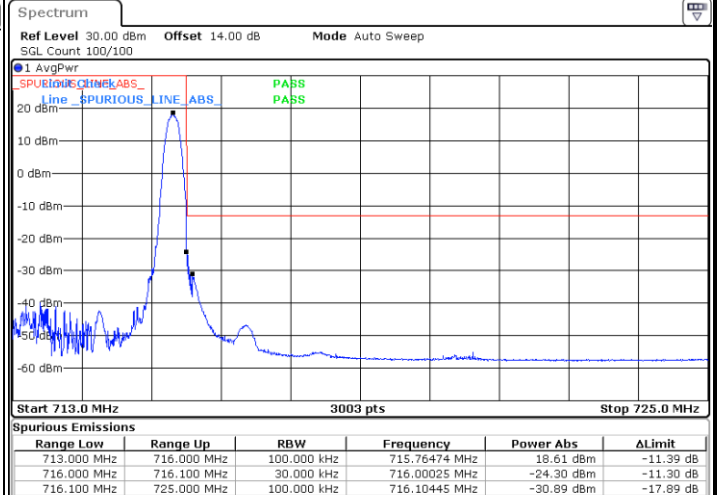


LTE Band 12 / 3MHz / 64QAM

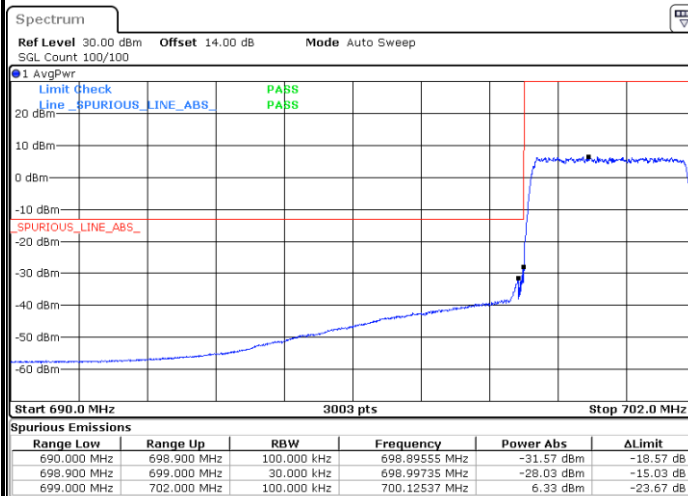
Lowest Band Edge / 1 RB



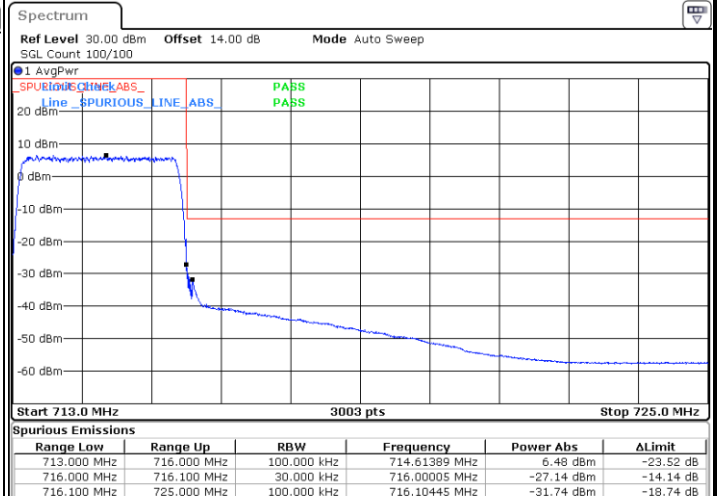
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



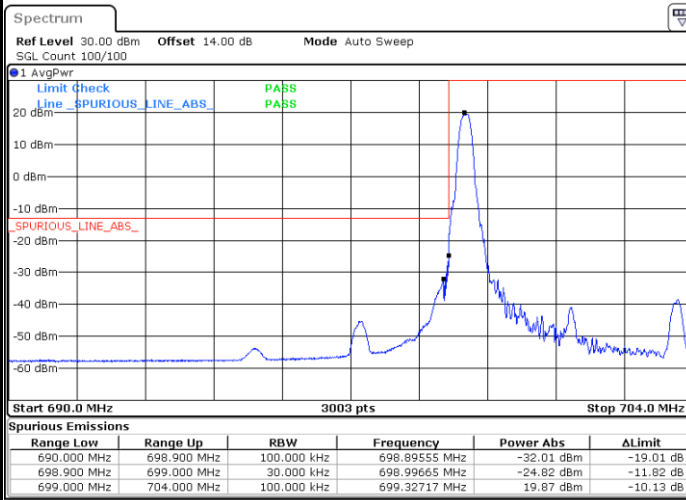
Highest Band Edge / Full RB



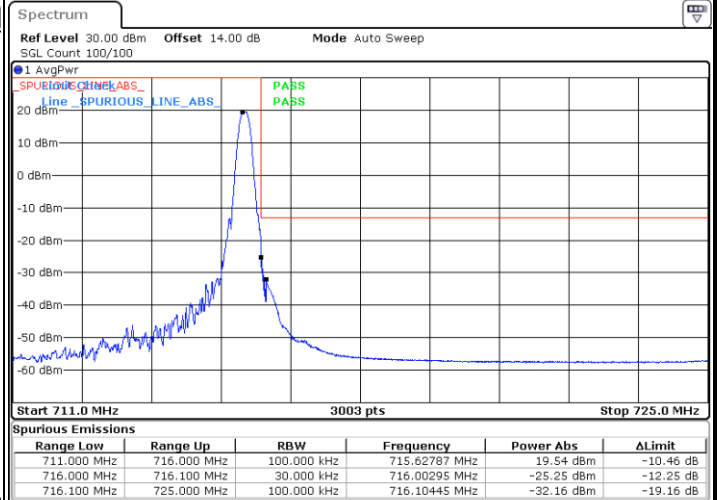


LTE Band 12 / 5MHz / QPSK

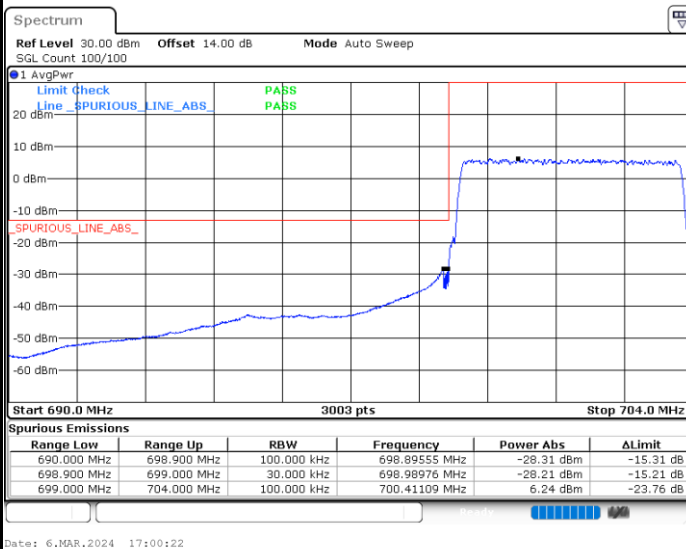
Lowest Band Edge / 1RB



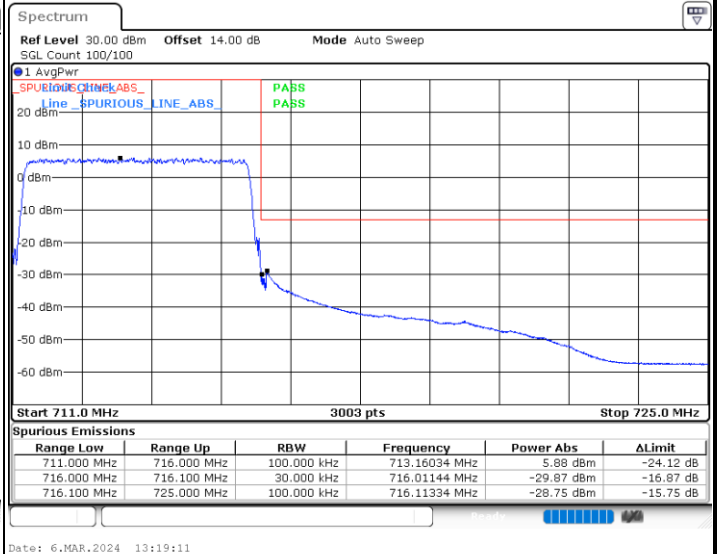
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



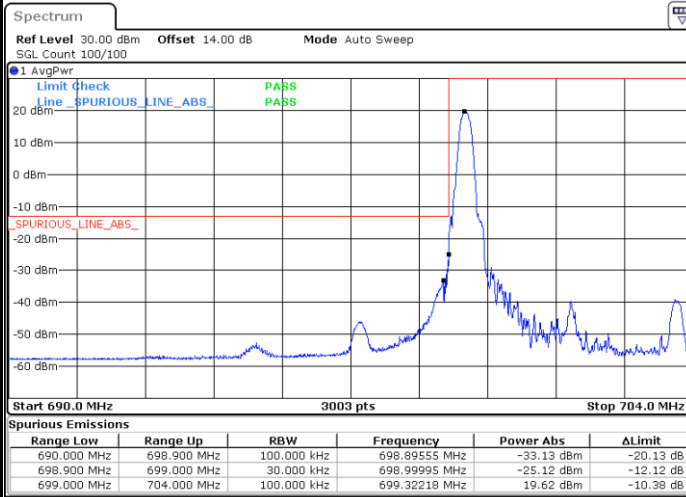
Highest Band Edge / Full RB



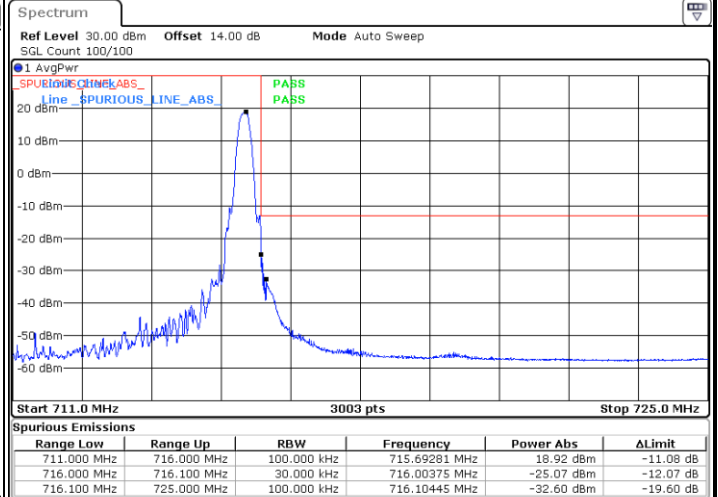


LTE Band 12 / 5MHz / 16QAM

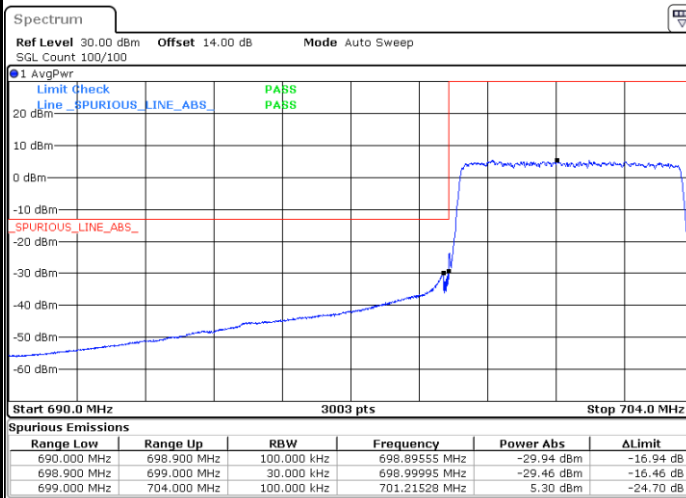
Lowest Band Edge / 1 RB



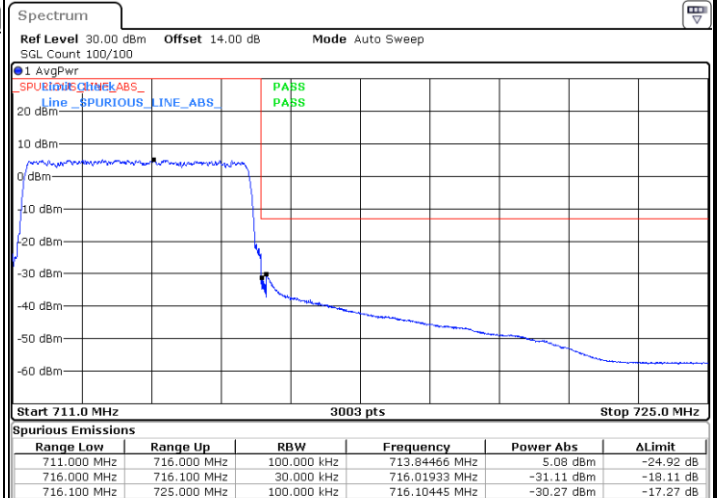
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



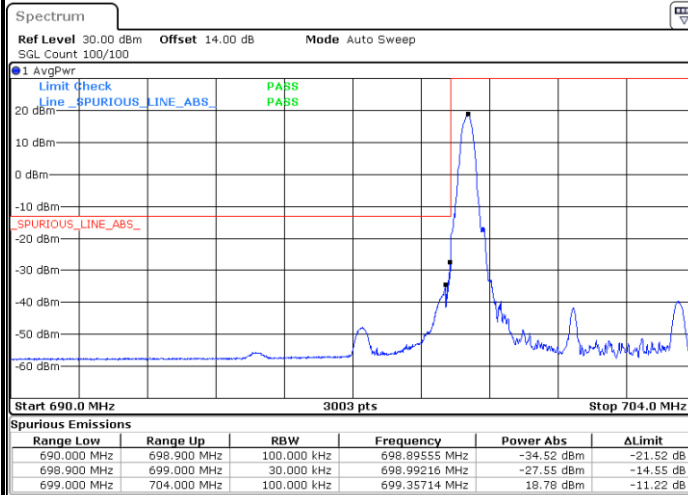
Highest Band Edge / Full RB



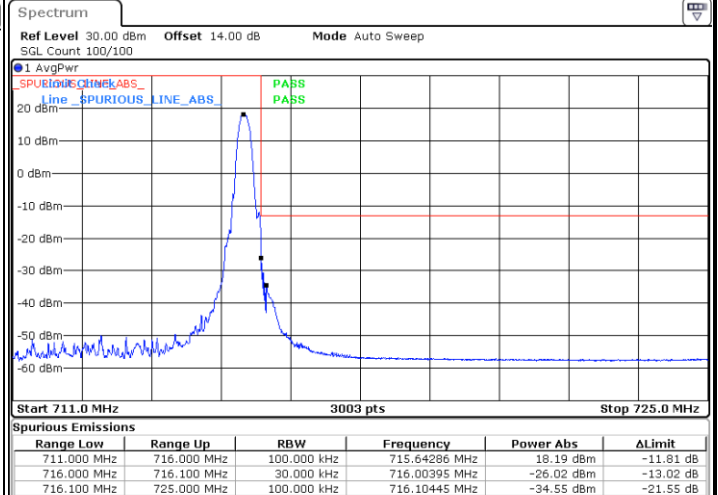


LTE Band 12 / 5MHz / 64QAM

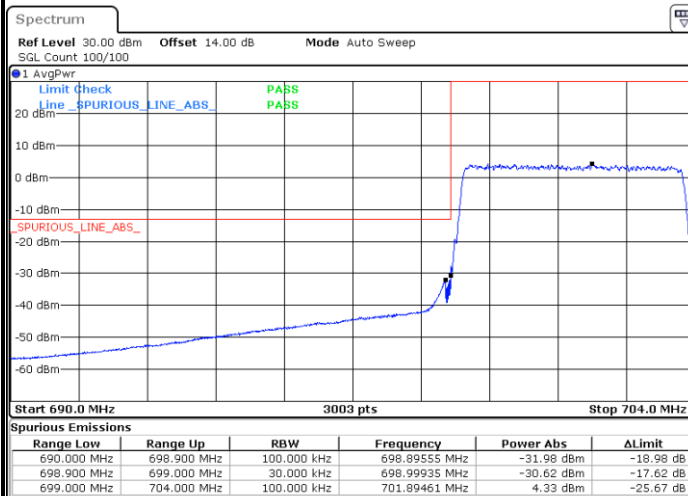
Lowest Band Edge / 1 RB



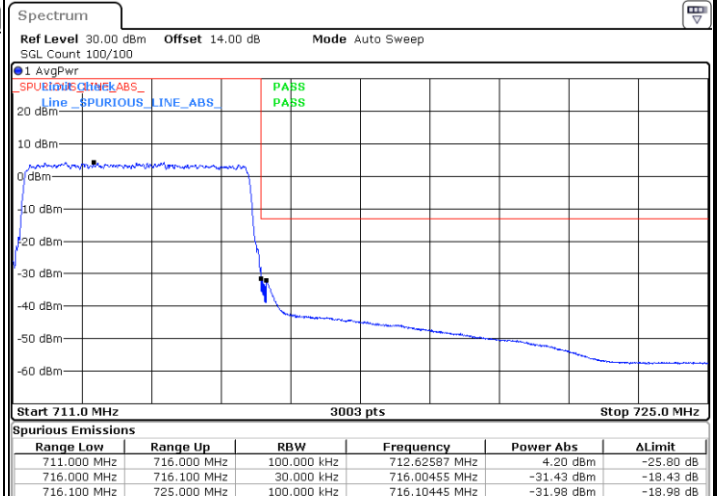
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



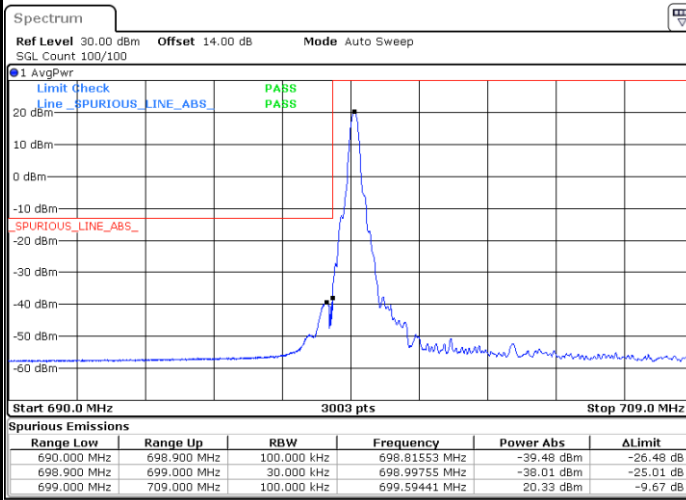
Highest Band Edge / Full RB



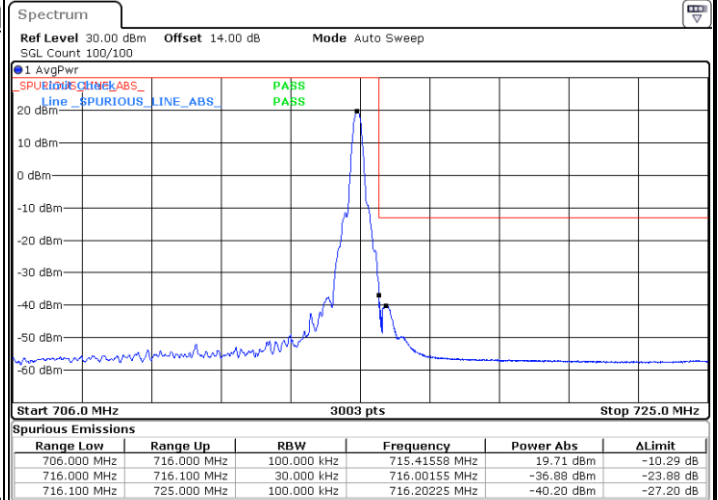


LTE Band 12 / 10MHz / QPSK

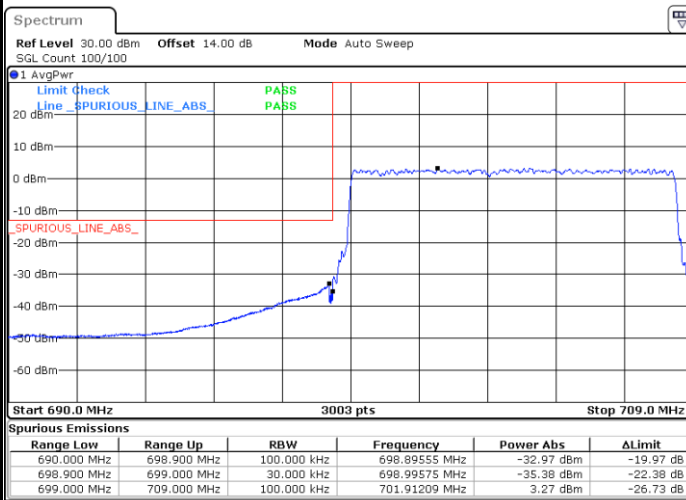
Lowest Band Edge / 1RB



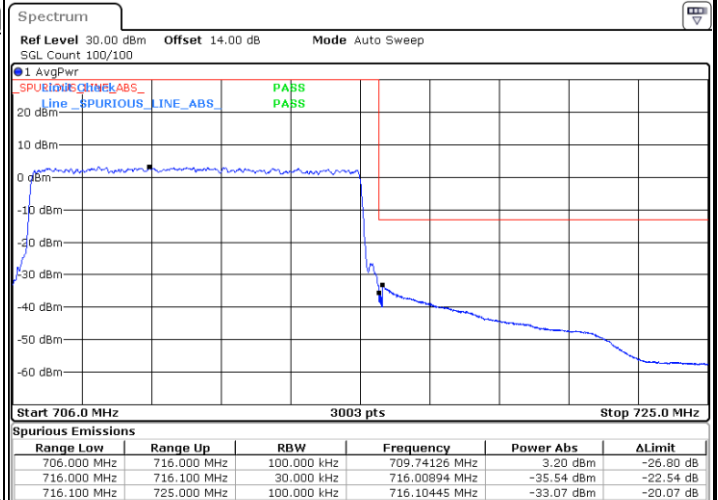
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



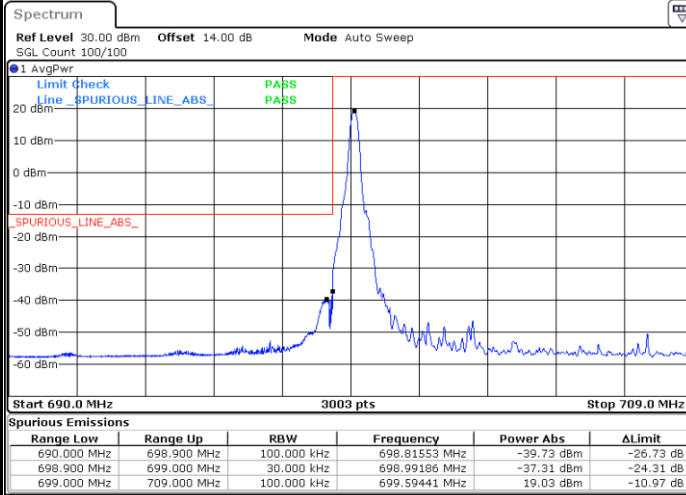
Highest Band Edge / Full RB



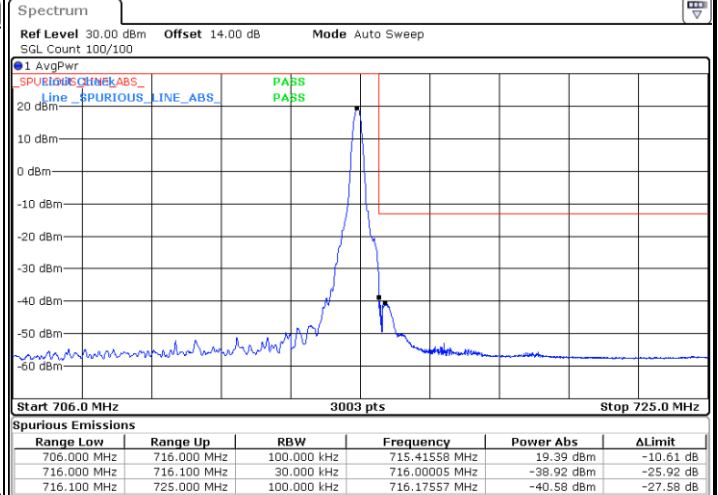


LTE Band 12 / 10MHz / 16QAM

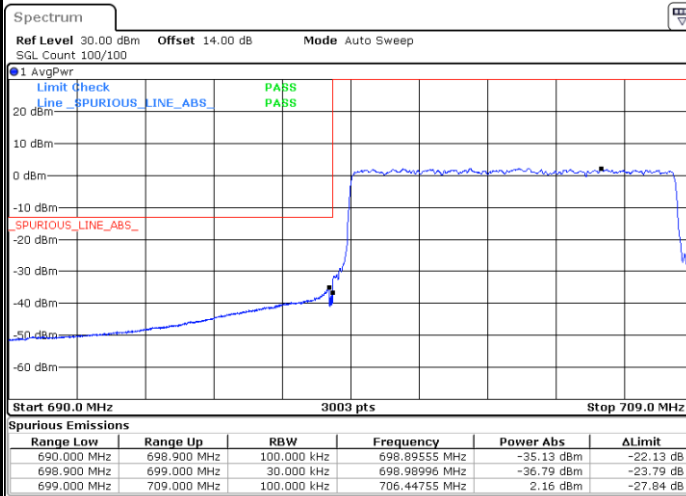
Lowest Band Edge / 1 RB



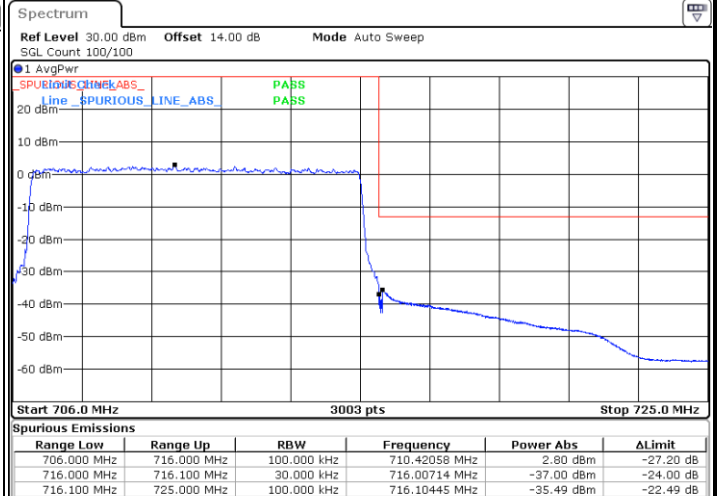
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



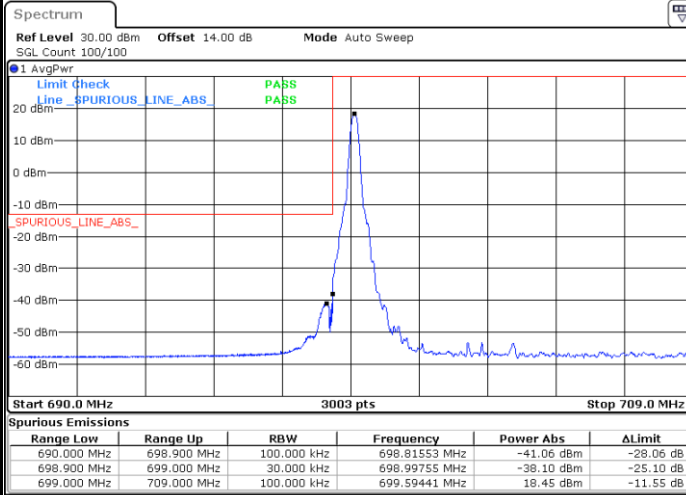
Highest Band Edge / Full RB



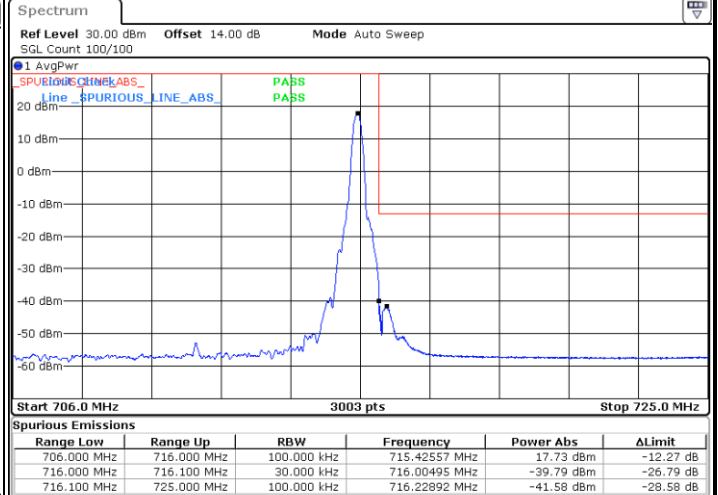


LTE Band 12 / 10MHz / 64QAM

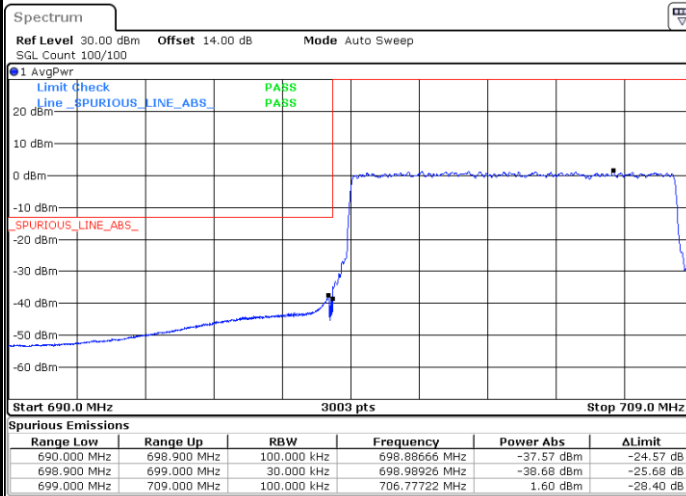
Lowest Band Edge / 1 RB



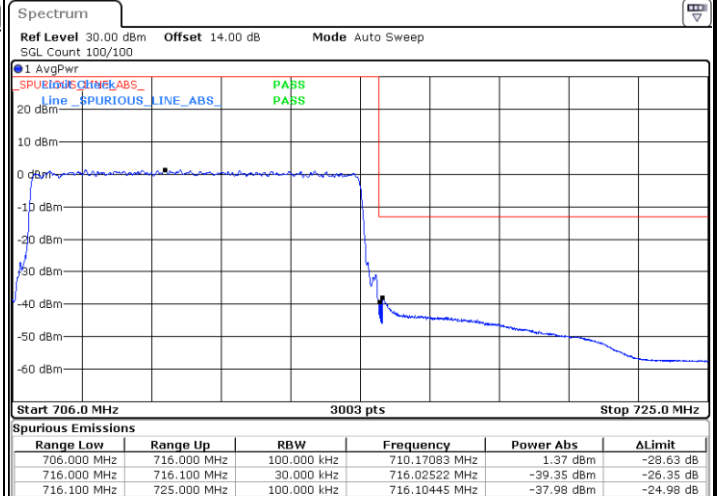
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

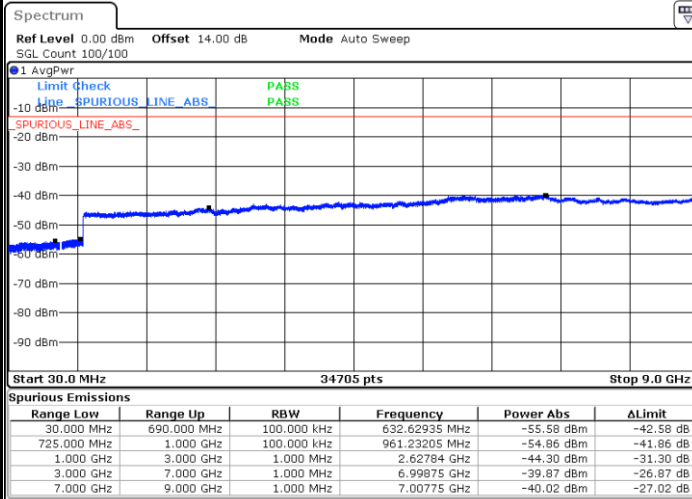




Conducted Spurious Emission

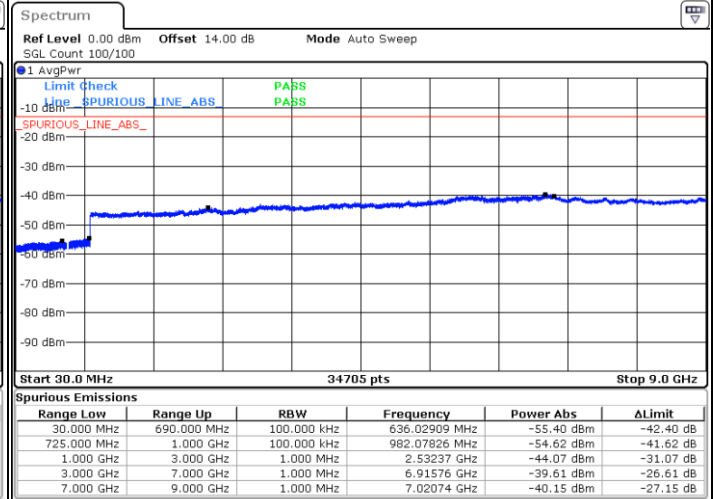
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



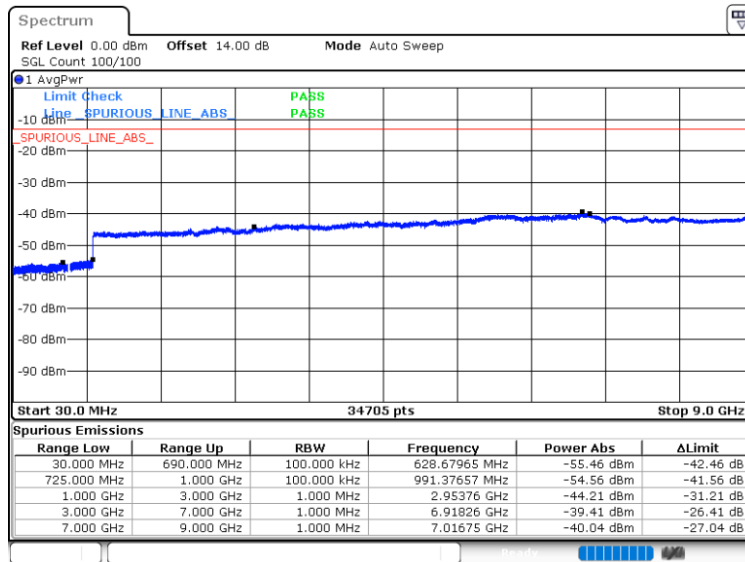
Date: 6.MAR.2024 12:37:07

Middle Channel / QPSK



Date: 6.MAR.2024 12:38:17

Highest Channel / QPSK

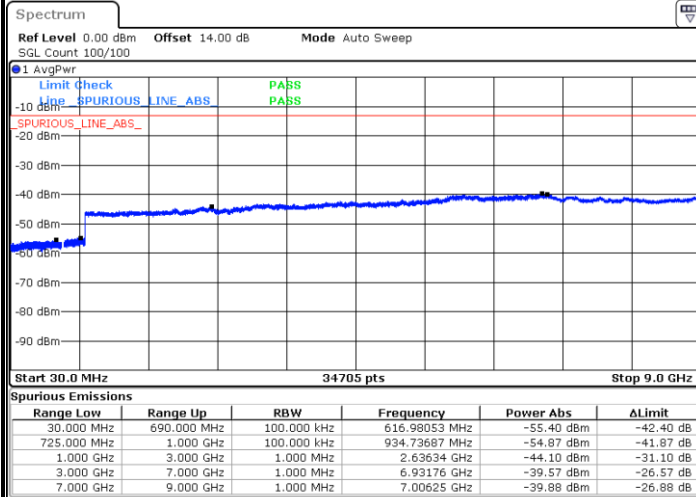


Date: 6.MAR.2024 12:46:54



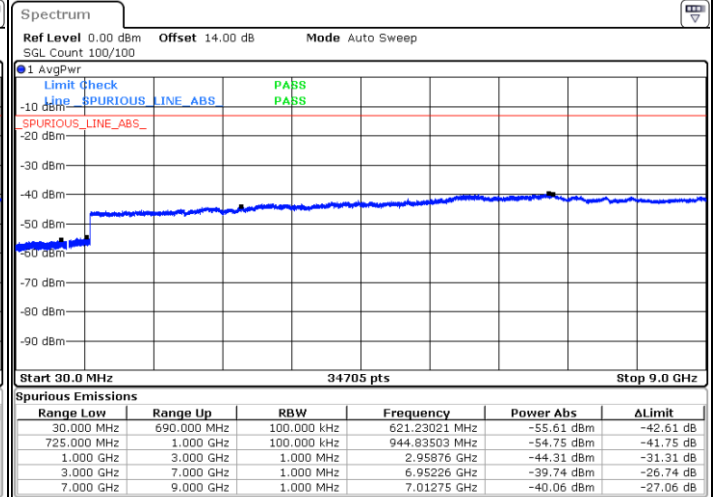
LTE Band 12 / 3MHz

Lowest Channel / QPSK



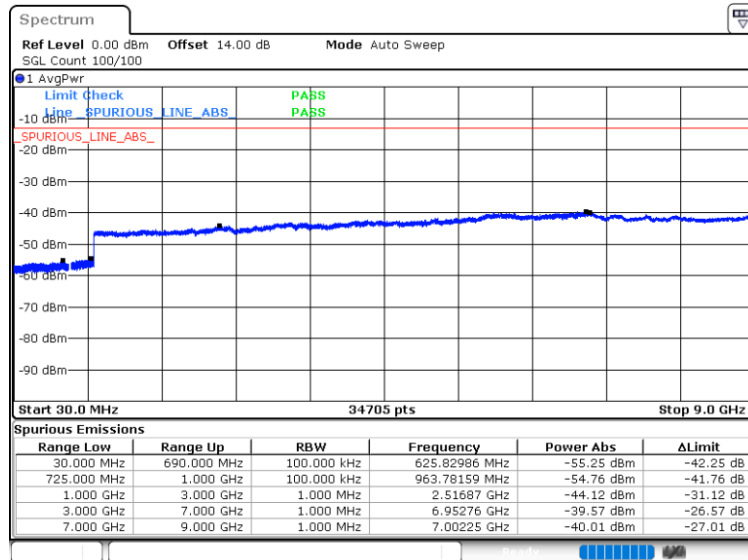
Date: 6.MAR.2024 16:48:09

Middle Channel / QPSK



Date: 6.MAR.2024 16:48:59

Highest Channel / QPSK

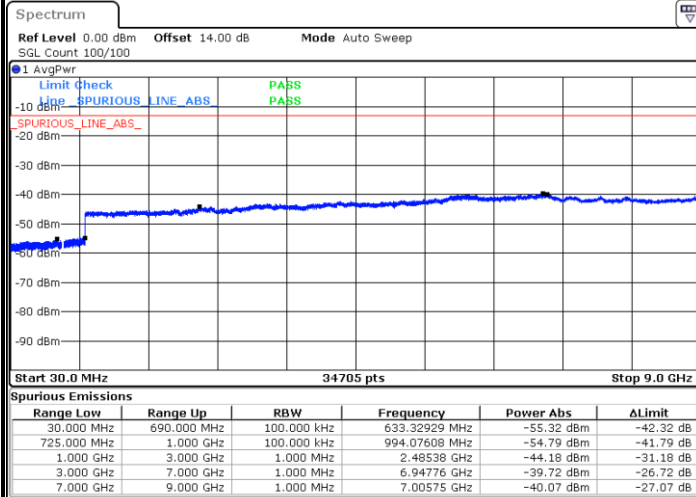


Date: 6.MAR.2024 16:56:15



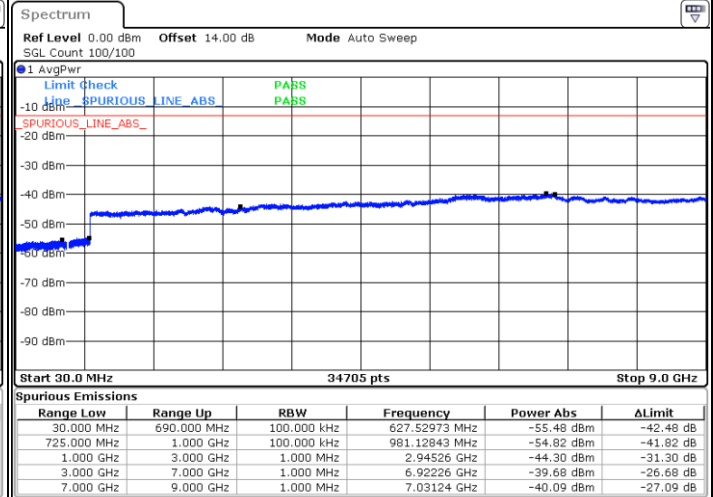
LTE Band 12 / 5MHz

Lowest Channel / QPSK



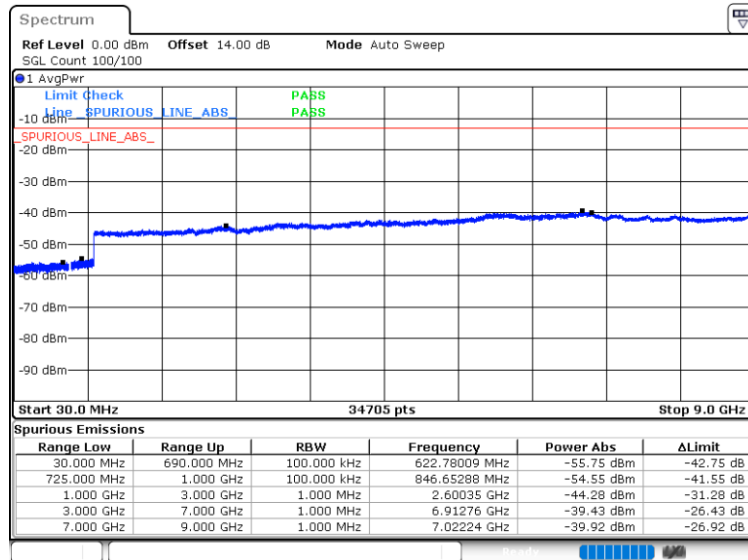
Date: 6.MAR.2024 13:12:39

Middle Channel / QPSK



Date: 6.MAR.2024 13:13:48

Highest Channel / QPSK

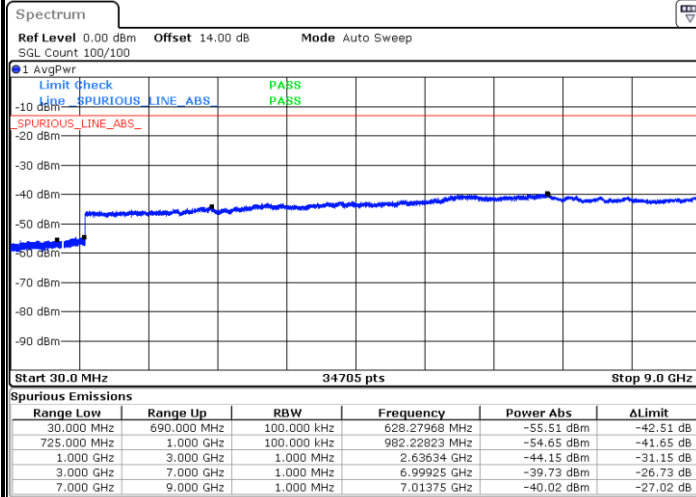


Date: 6.MAR.2024 13:22:24



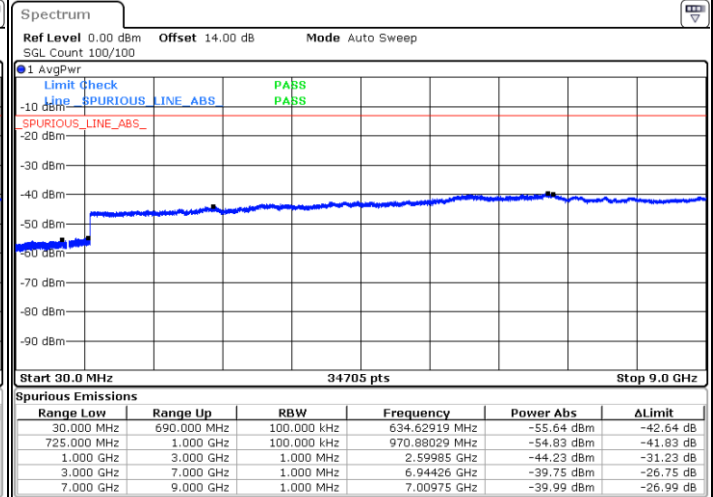
LTE Band 12 / 10MHz

Lowest Channel / QPSK



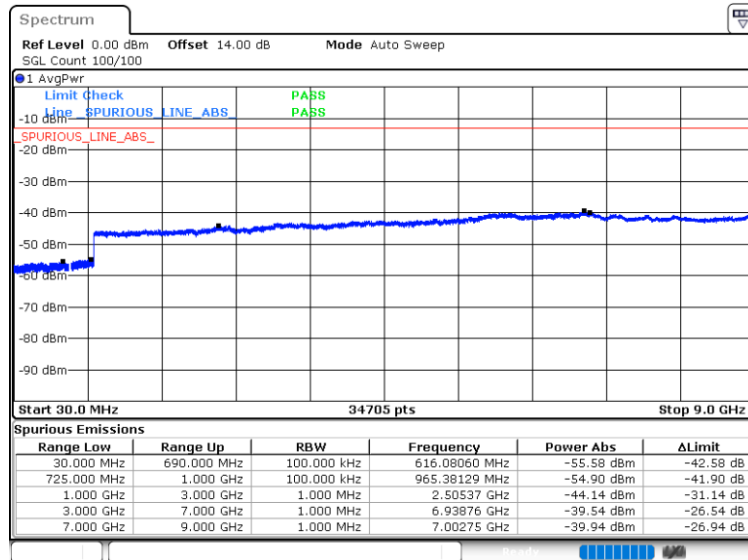
Date: 6.MAR.2024 13:30:24

Middle Channel / QPSK



Date: 6.MAR.2024 13:31:34

Highest Channel / QPSK



Date: 6.MAR.2024 13:40:10

**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	0.0029	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0061	
0	Normal Voltage	0.0059	
-10	Normal Voltage	0.0067	
-20	Normal Voltage	0.0054	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

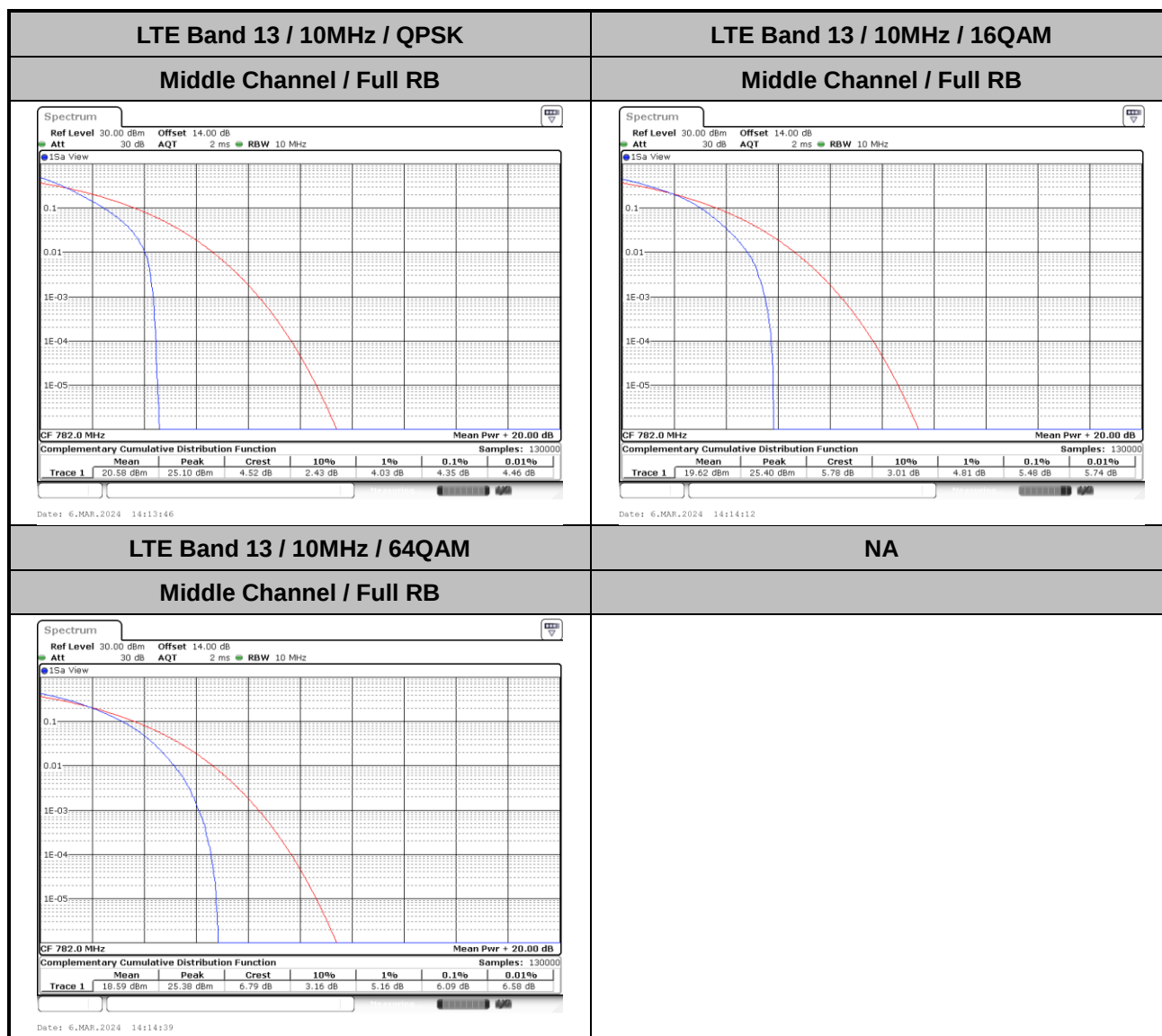
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	4.35	5.48	6.09	PASS



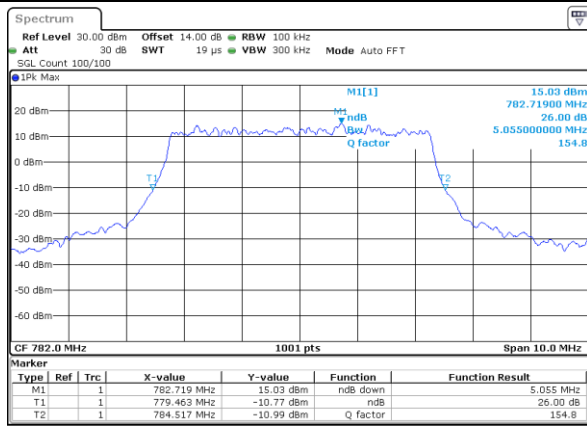


26dB Bandwidth

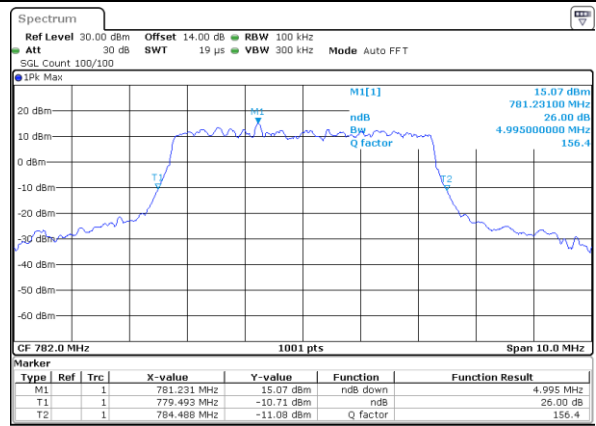
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	-		-		5MHz		10MHz		-		-	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	-	-	-	-	5.06	5.00	9.89	9.87	-	-	-	-

LTE Band 13

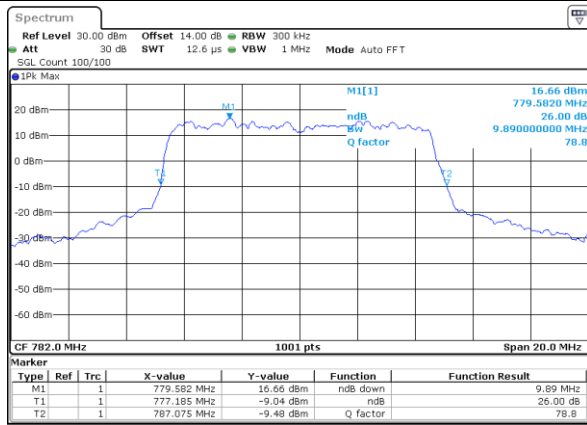
Middle Channel / 5MHz / QPSK



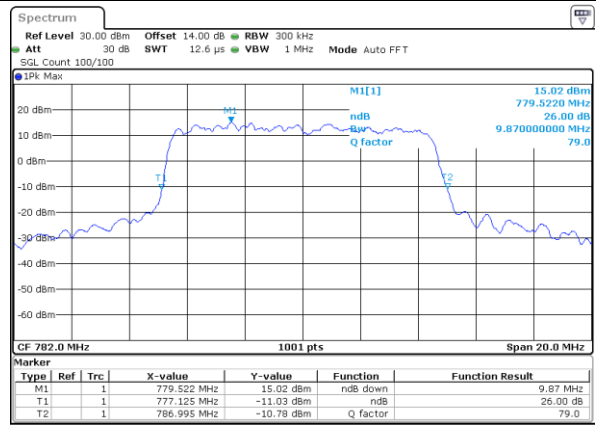
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



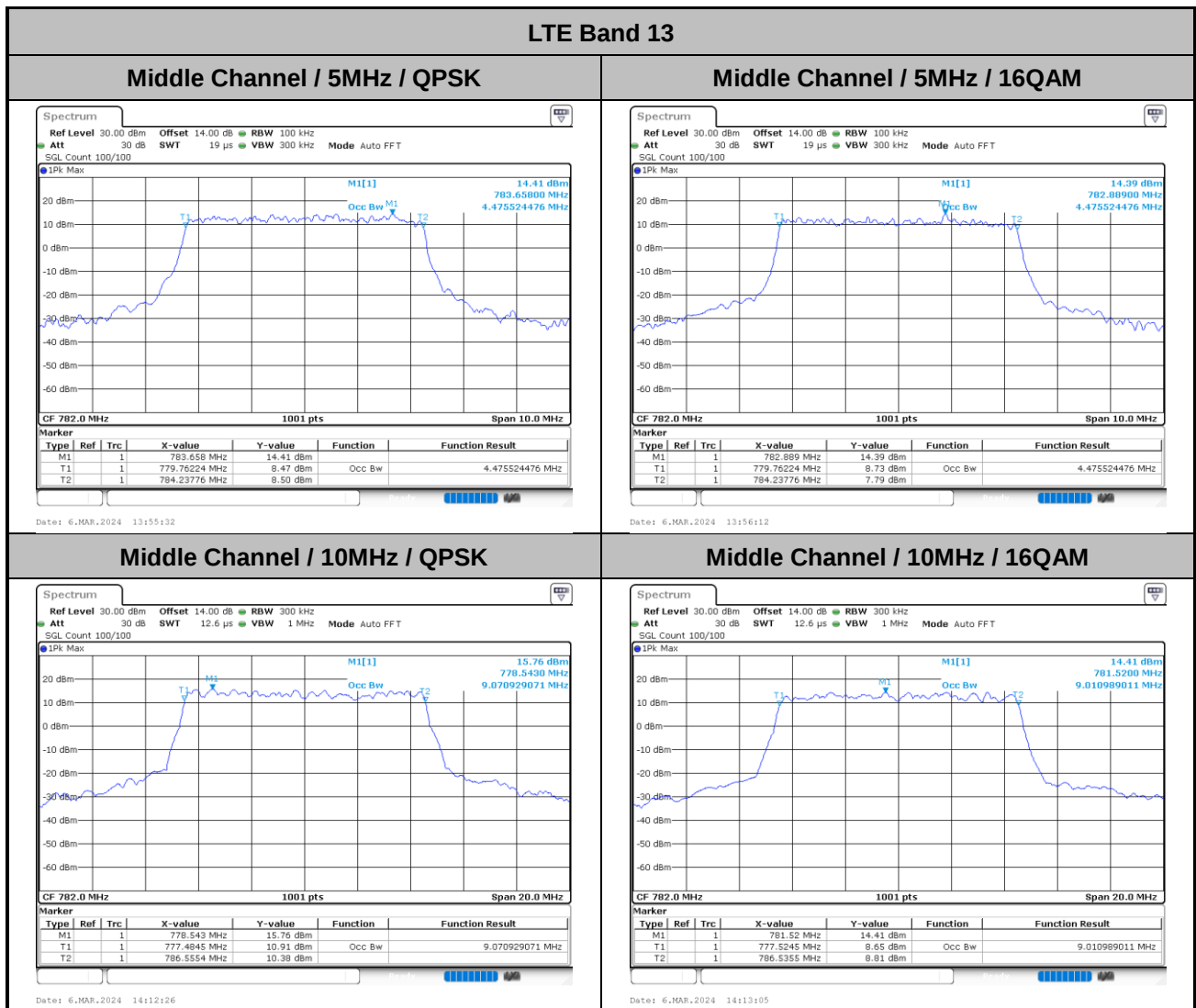
Middle Channel / 10MHz / 16QAM





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	-			5MHz			10MHz			-		
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	-	-	-	-	4.48	4.48	9.07	9.01	-	-	-	-

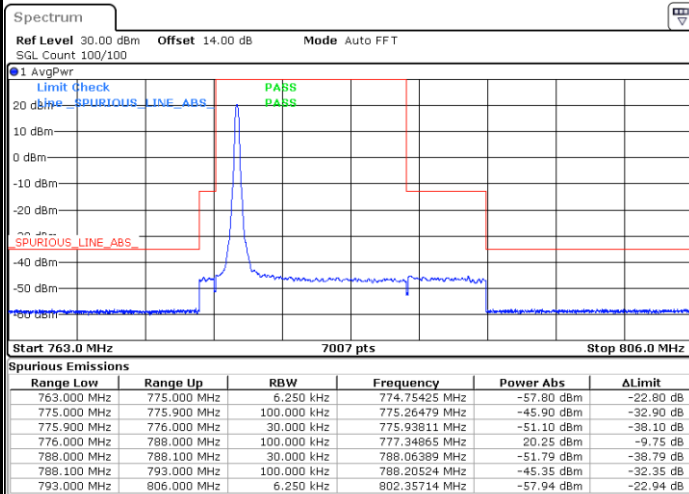




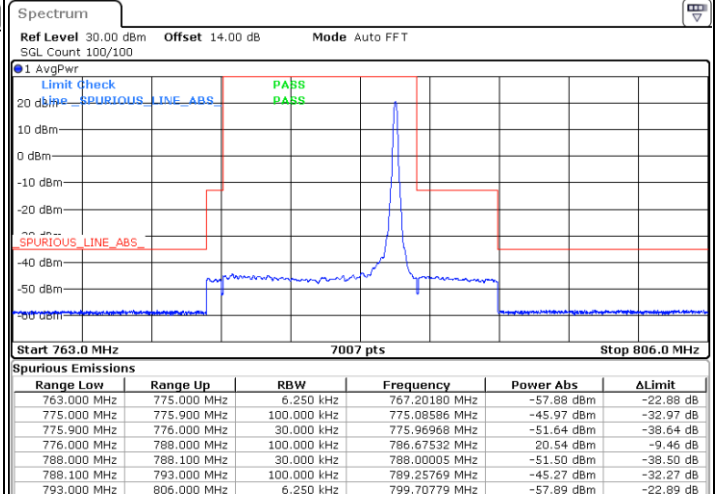
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

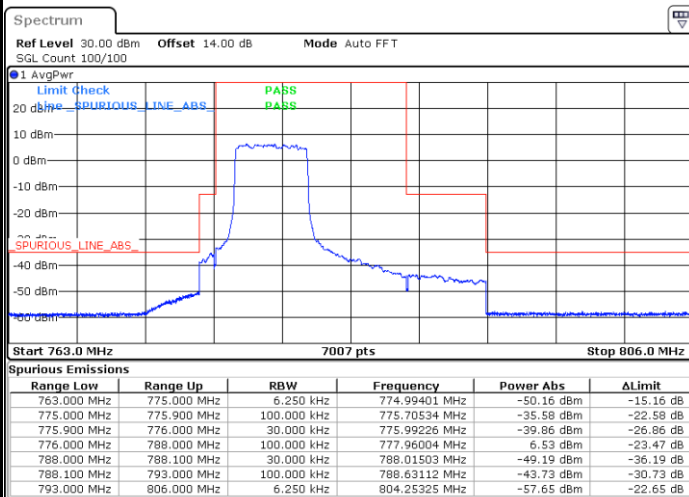
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

