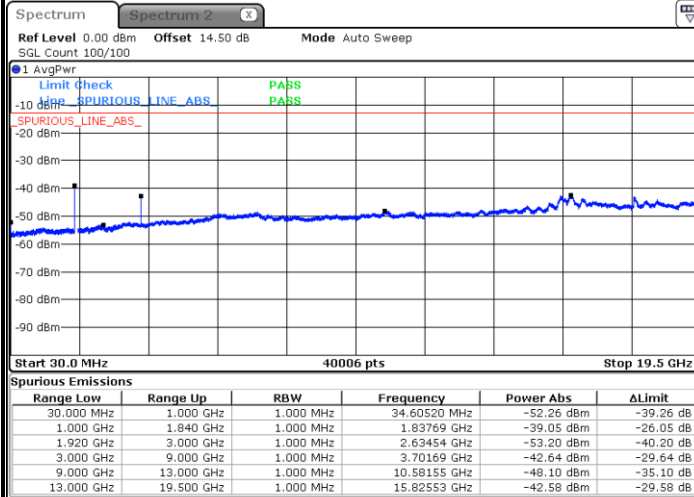




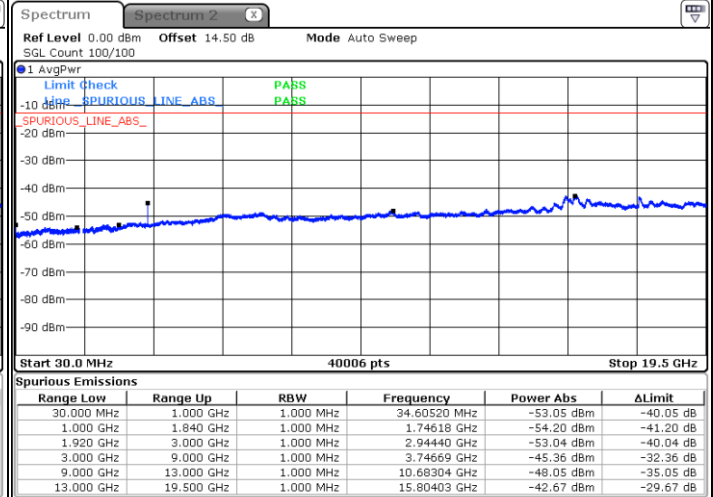
LTE Band 2 / 15MHz

Lowest Channel / QPSK



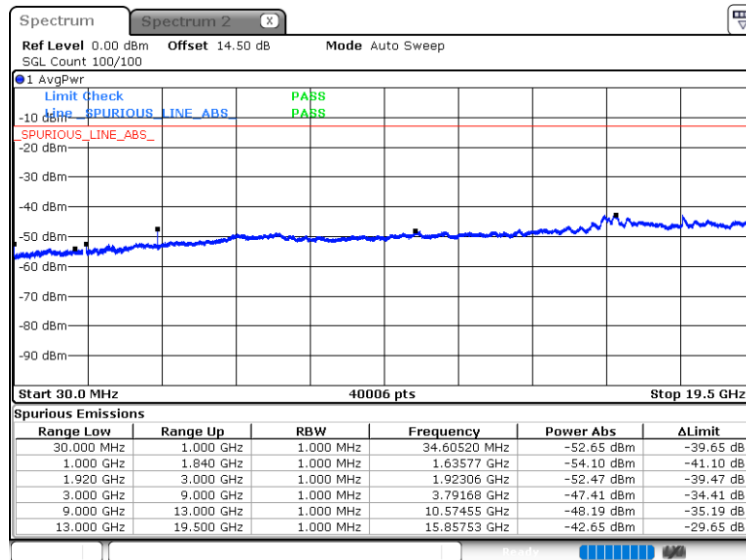
Date: 2.DEC.2024 23:13:42

Middle Channel / QPSK



Date: 2.DEC.2024 23:14:51

Highest Channel / QPSK

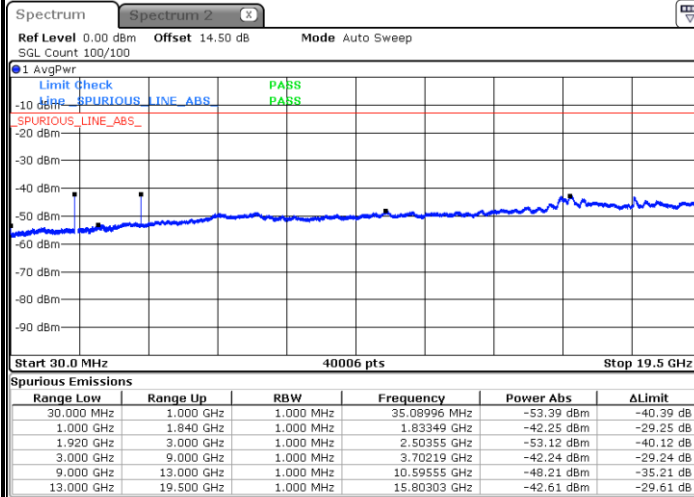


Date: 2.DEC.2024 23:18:40



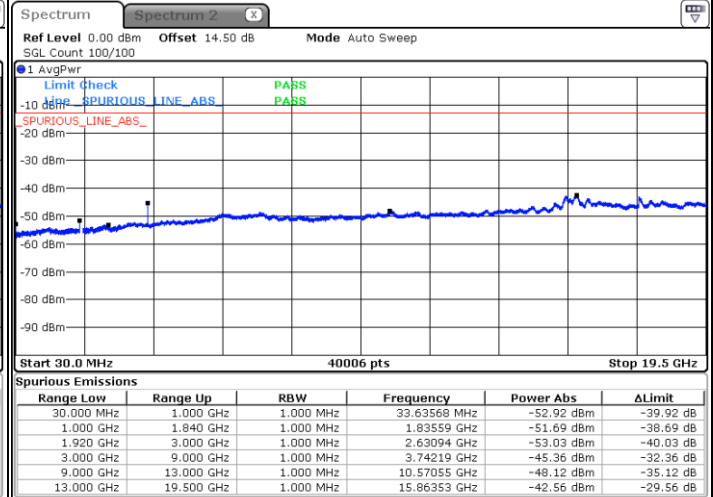
LTE Band 2 / 20MHz

Lowest Channel / QPSK



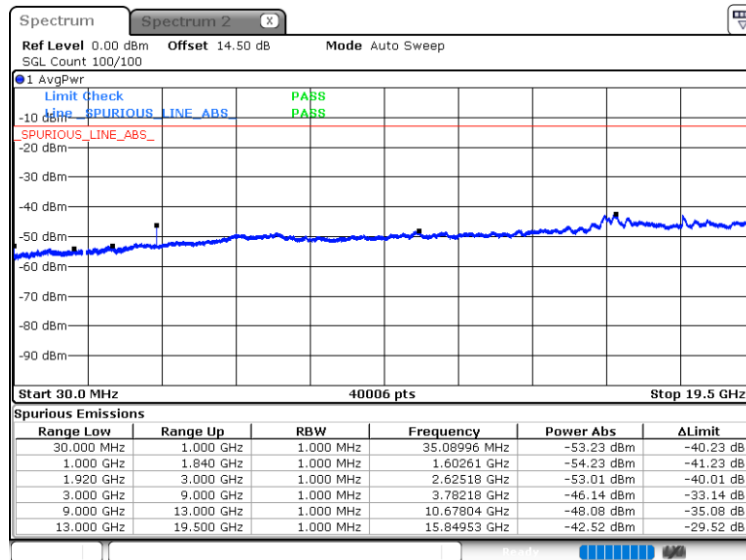
Date: 2.DEC.2024 23:22:34

Middle Channel / QPSK



Date: 2.DEC.2024 23:23:43

Highest Channel / QPSK



Date: 2.DEC.2024 23:27:48

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	0.0001	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

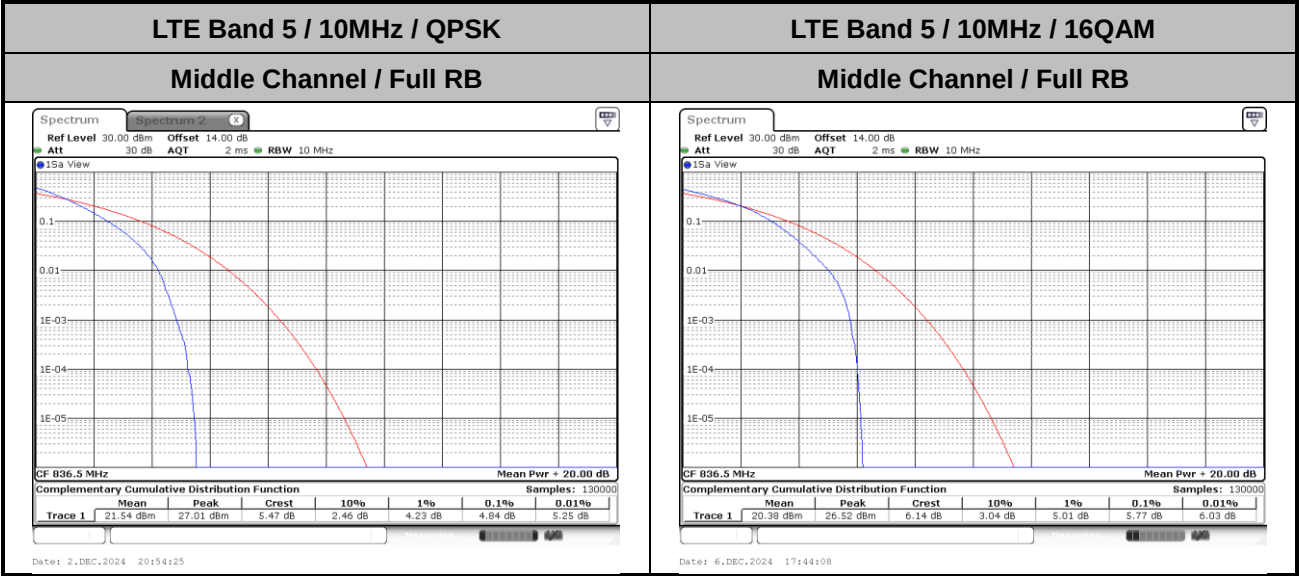
1. Normal Voltage = 3.87 V. ; Battery End Point (BEP)= 3.5 V. ; Maximum Voltage = 4.75 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz			
Mod.	QPSK	16QAM		Limit: 13dB
RB Size	Full RB	Full RB		Result
Middle CH	4.84	5.77		PASS





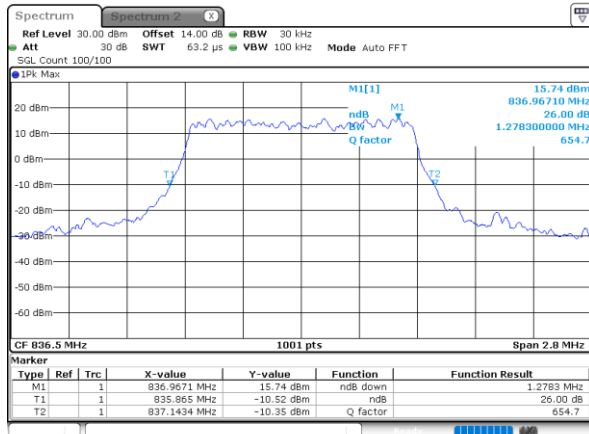
26dB Bandwidth

Mode	LTE Band 5 : 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	1.28	3.01	3.05	4.92	4.84	9.71	5.63	-	-	-	-

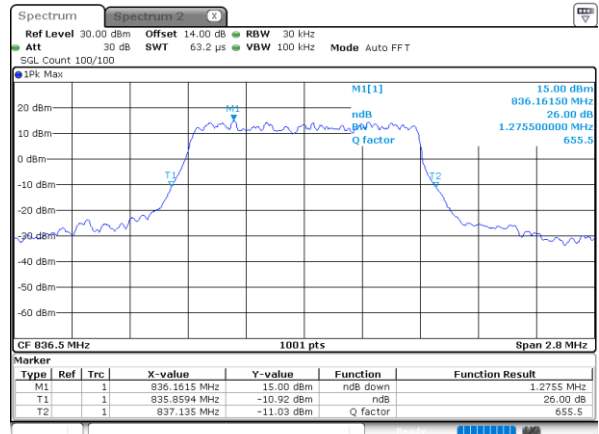


LTE Band 5

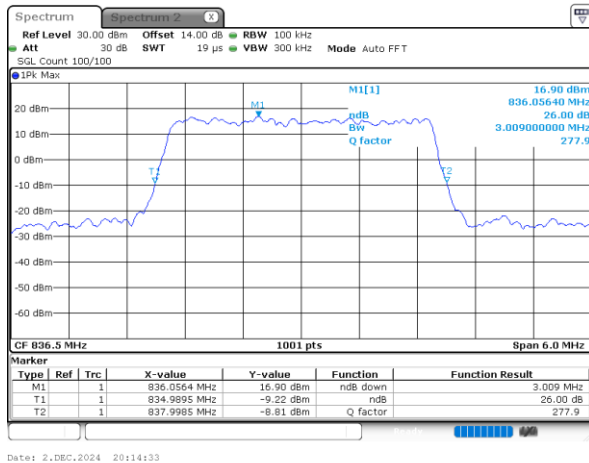
Middle Channel / 1.4MHz / QPSK



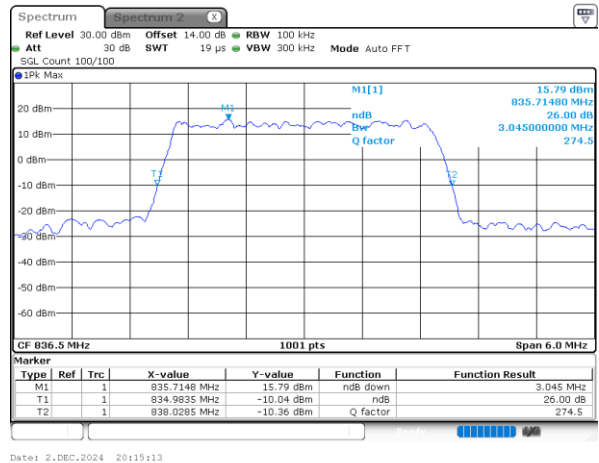
Middle Channel / 1.4MHz / 16QAM



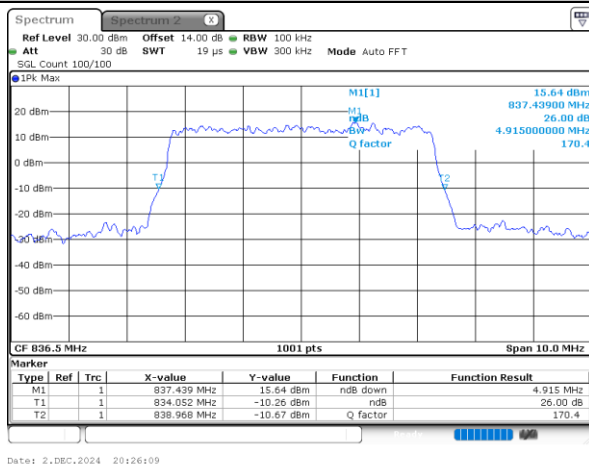
Middle Channel / 3MHz / QPSK



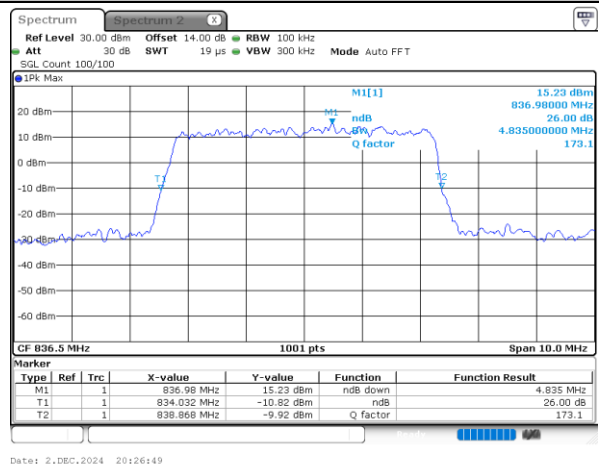
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



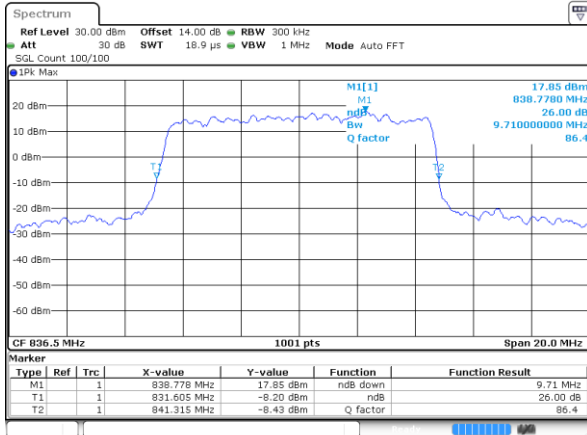
Middle Channel / 5MHz / 16QAM





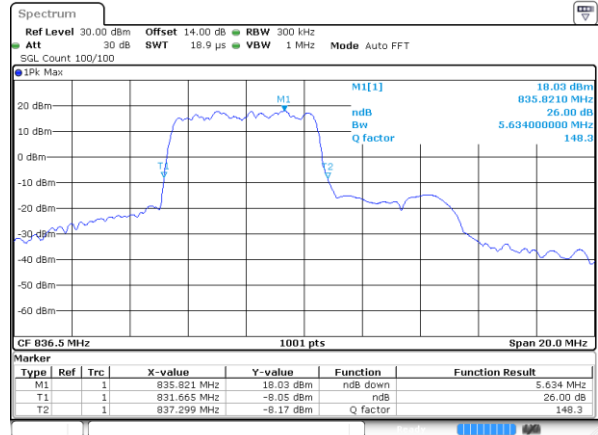
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 6 DEC 2024 16:33:56

Middle Channel / 10MHz / 16QAM



Date: 6 DEC 2024 16:32:44



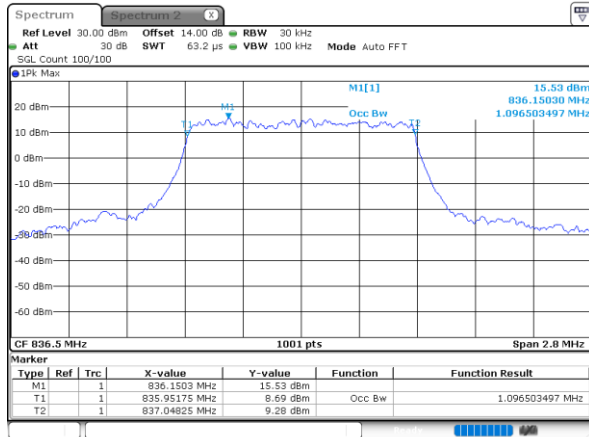
Occupied Bandwidth

Mode	LTE Band 5 : 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	1.10	1.10	2.72	2.72	4.51	4.47	9.01	5.05	-	-	-	-

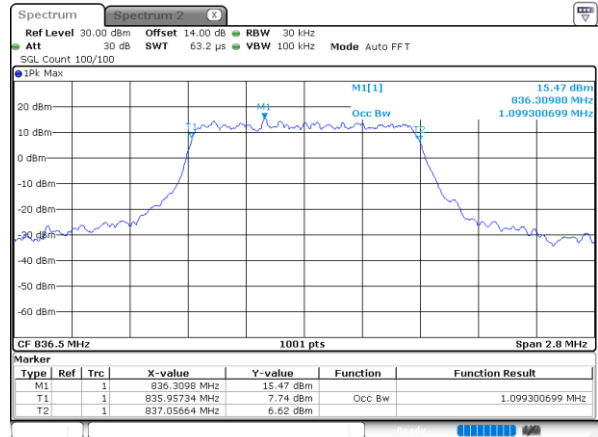


LTE Band 5

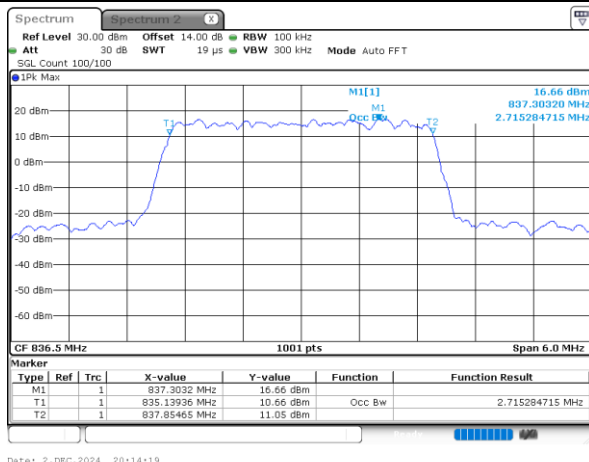
Middle Channel / 1.4MHz / QPSK



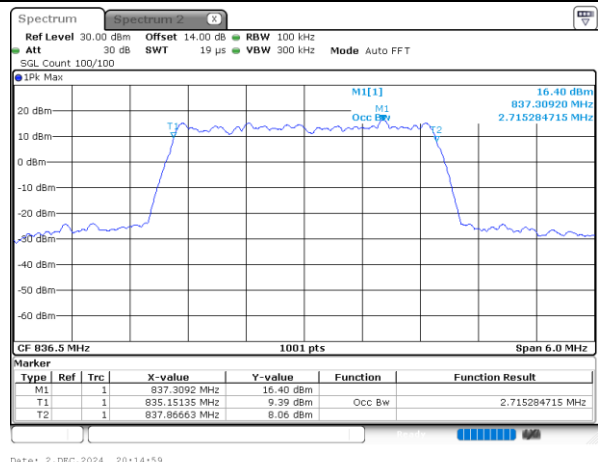
Middle Channel / 1.4MHz / 16QAM



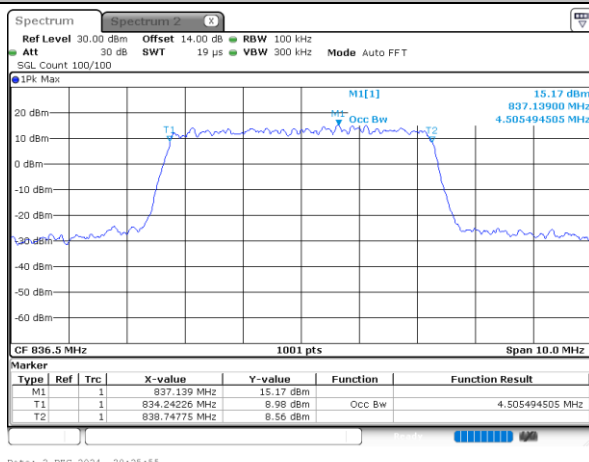
Middle Channel / 3MHz / QPSK



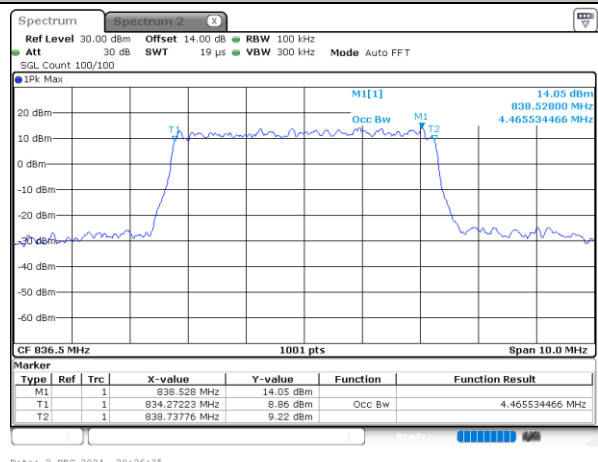
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



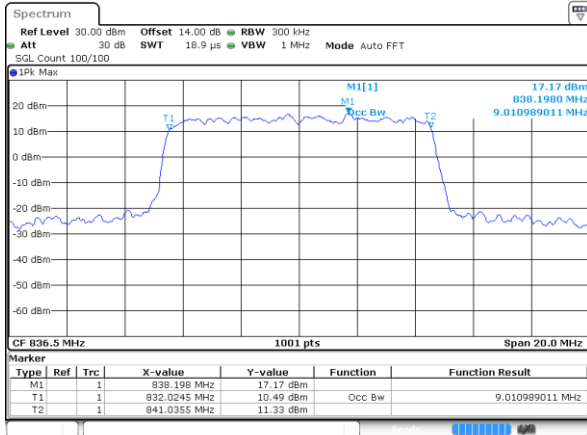
Middle Channel / 5MHz / 16QAM





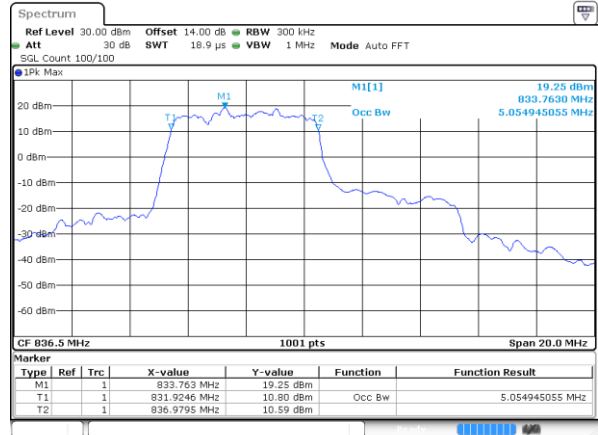
LTE Band 5

Middle Channel / 10MHz / QPSK



Date: 6 DEC 2024 16:33:35

Middle Channel / 10MHz / 16QAM



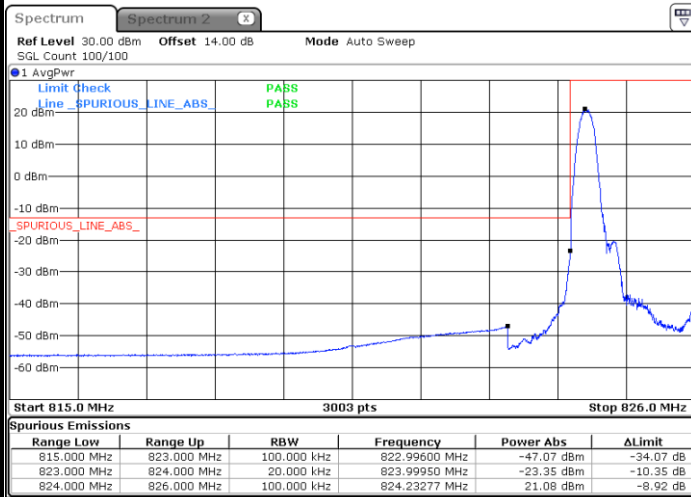
Date: 6 DEC 2024 16:32:34



Conducted Band Edge

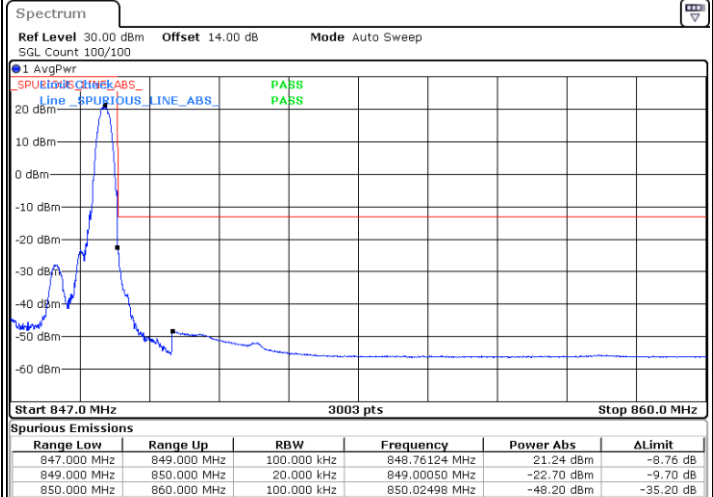
LTE Band 5 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



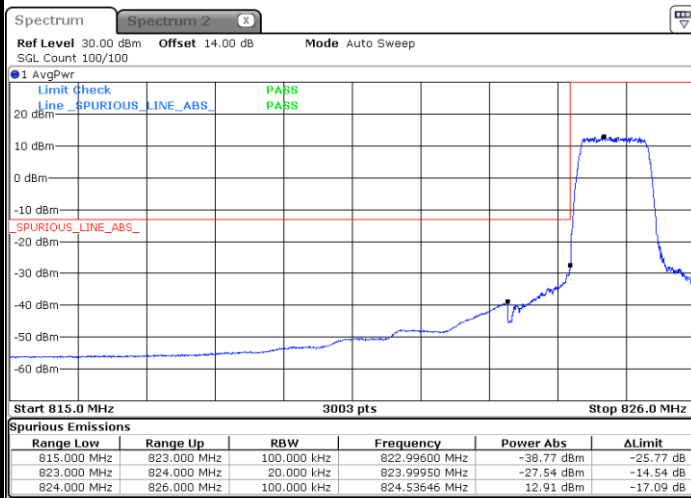
Date: 2.DEC.2024 19:57:48

Highest Band Edge / 1RB



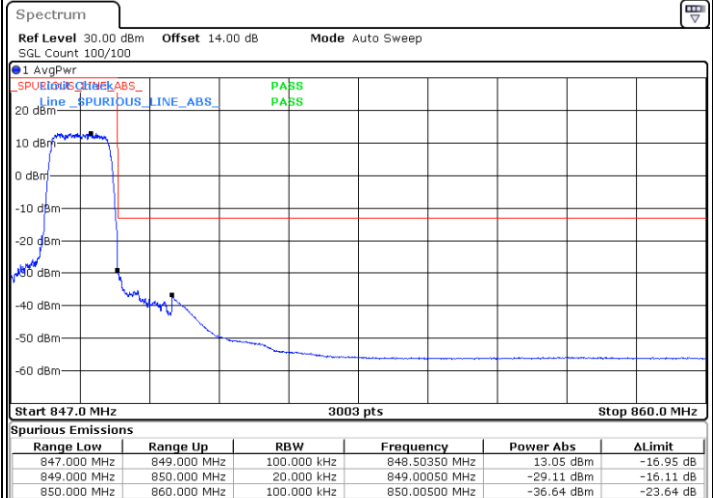
Date: 6.DEC.2024 19:09:49

Lowest Band Edge / Full RB



Date: 2.DEC.2024 19:59:15

Highest Band Edge / Full RB

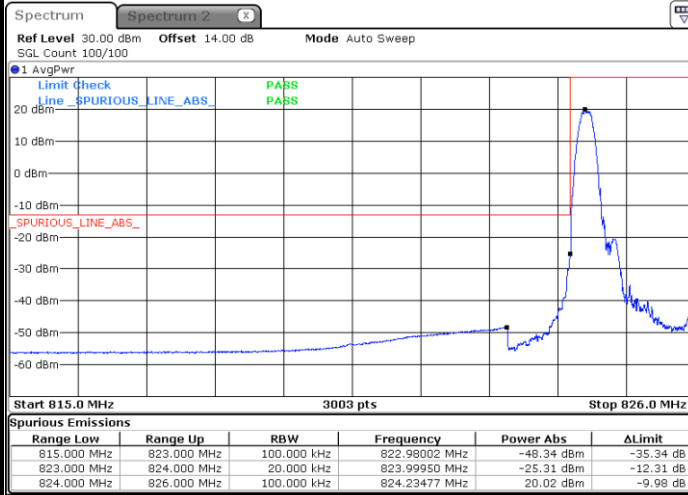


Date: 6.DEC.2024 19:00:05

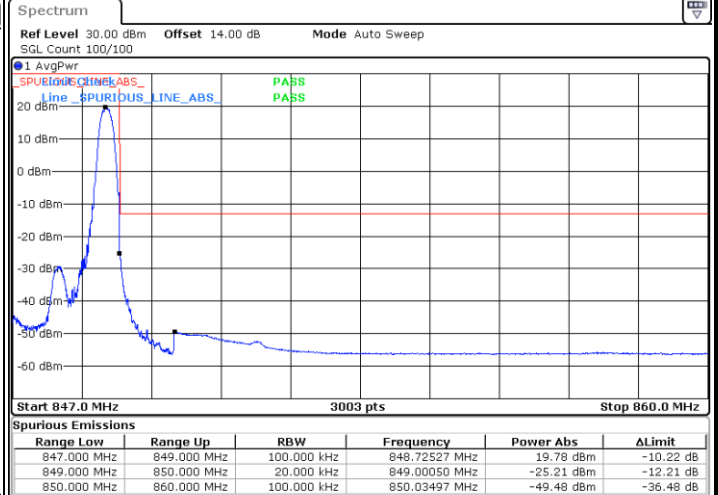


LTE Band 5 / 1.4MHz / 16QAM

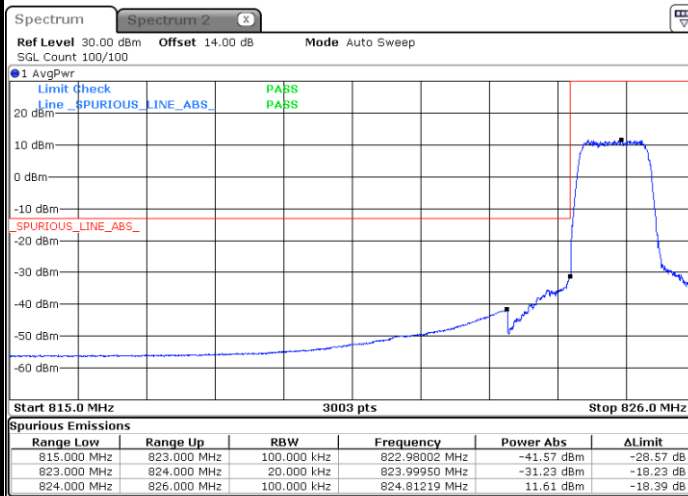
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



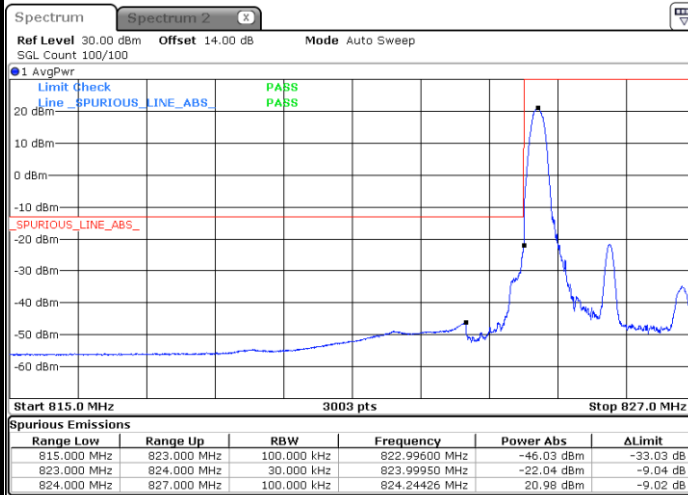
Highest Band Edge / Full RB



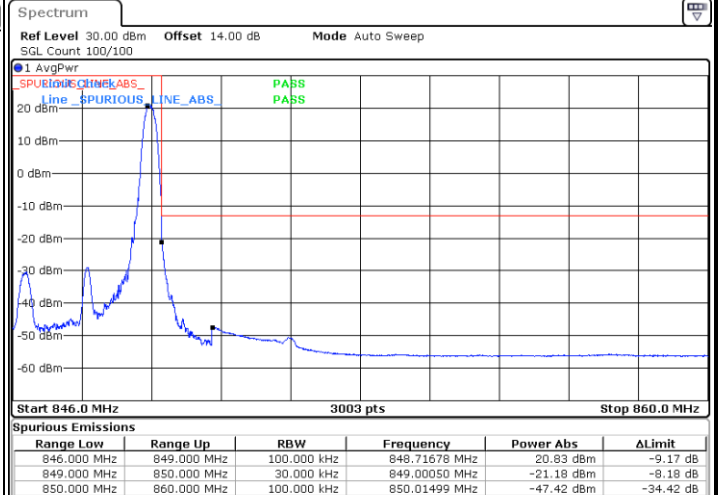


LTE Band 5 / 3MHz / QPSK

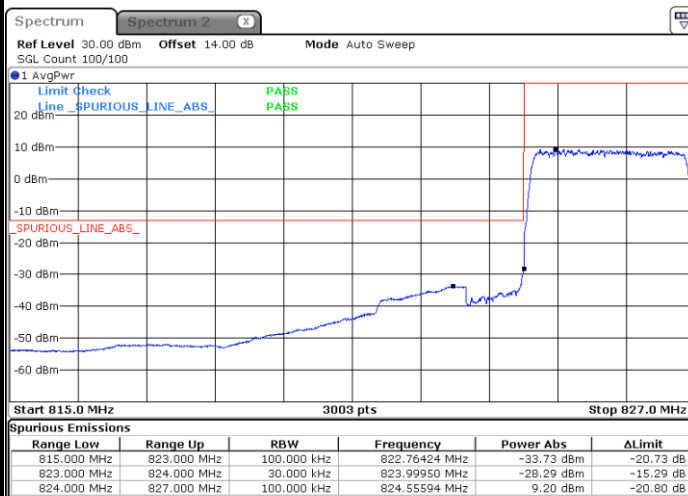
Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



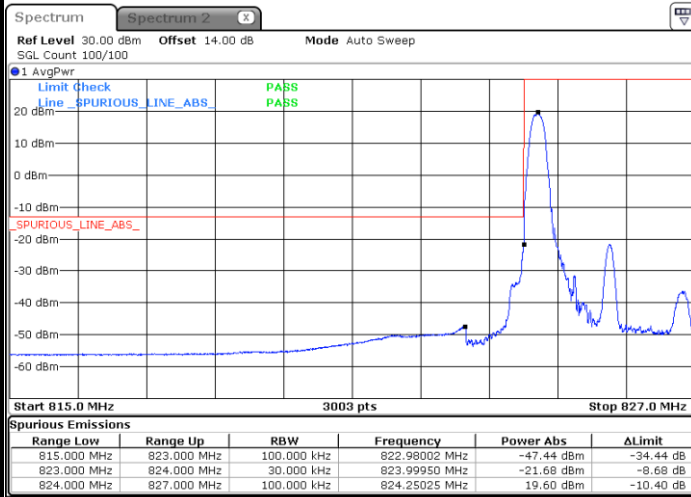
Highest Band Edge / Full RB



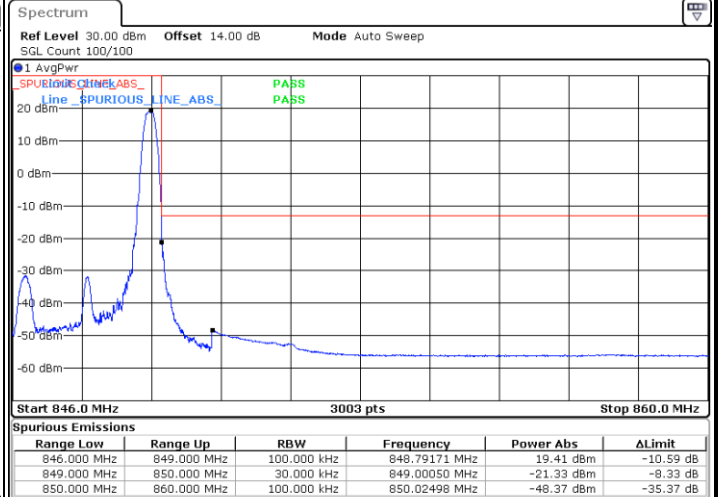


LTE Band 5 / 3MHz / 16QAM

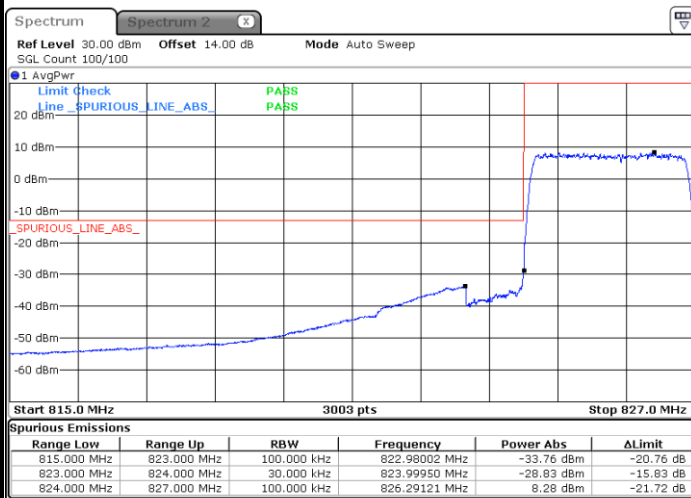
Lowest Band Edge / 1 RB



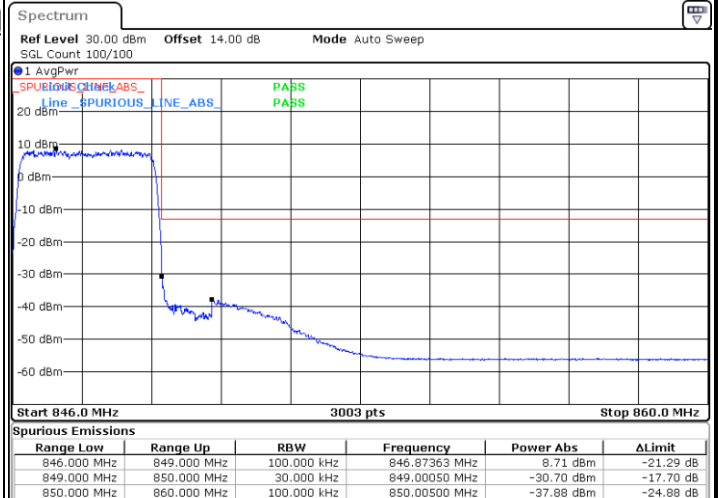
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



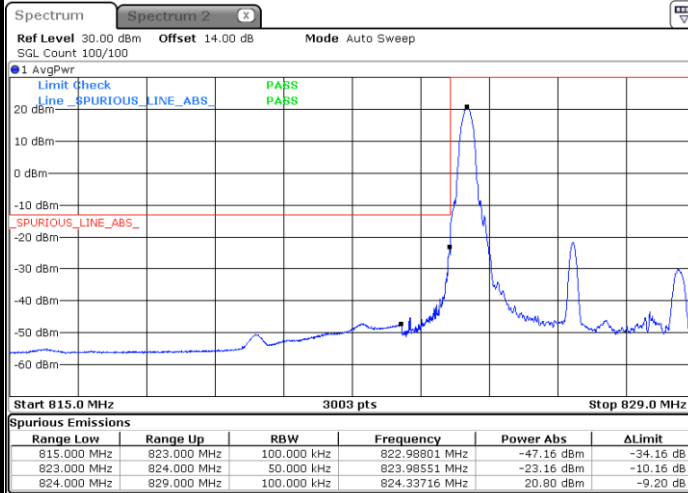
Highest Band Edge / Full RB



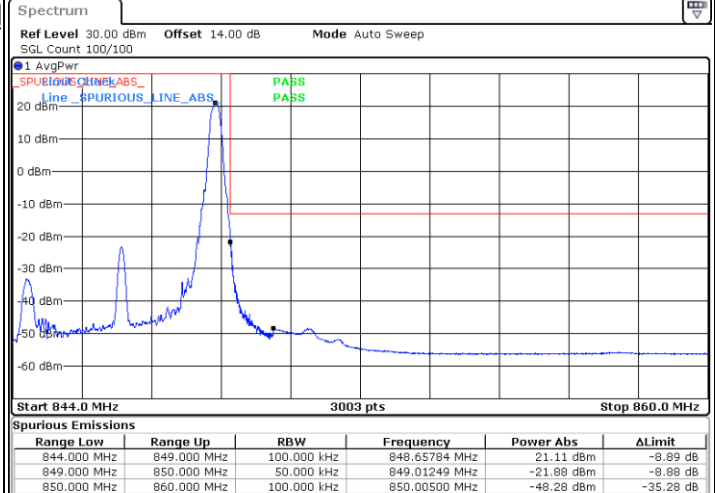


LTE Band 5 / 5MHz / QPSK

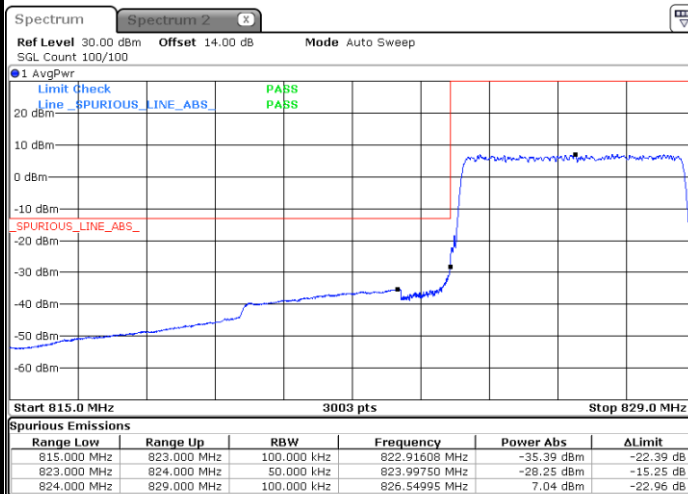
Lowest Band Edge / 1RB



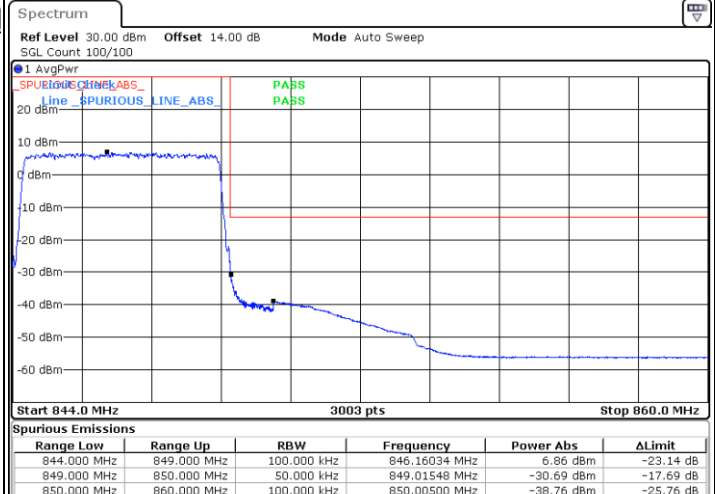
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



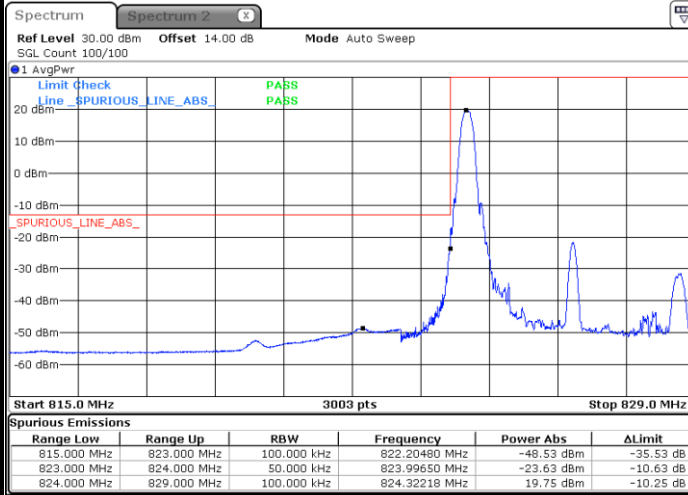
Highest Band Edge / Full RB



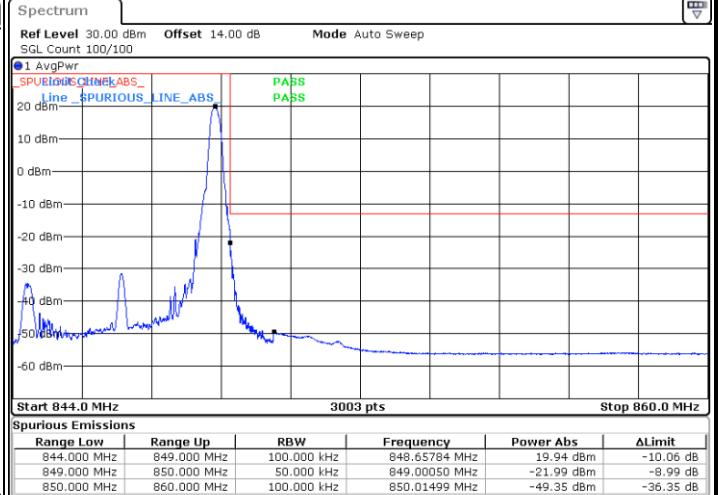


LTE Band 5 / 5MHz / 16QAM

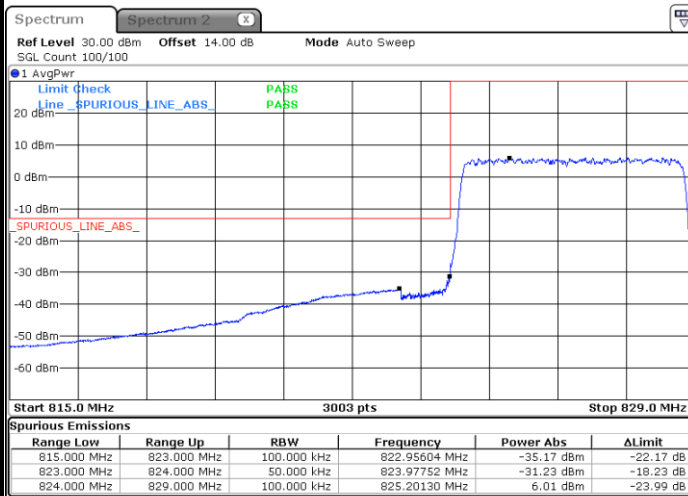
Lowest Band Edge / 1 RB



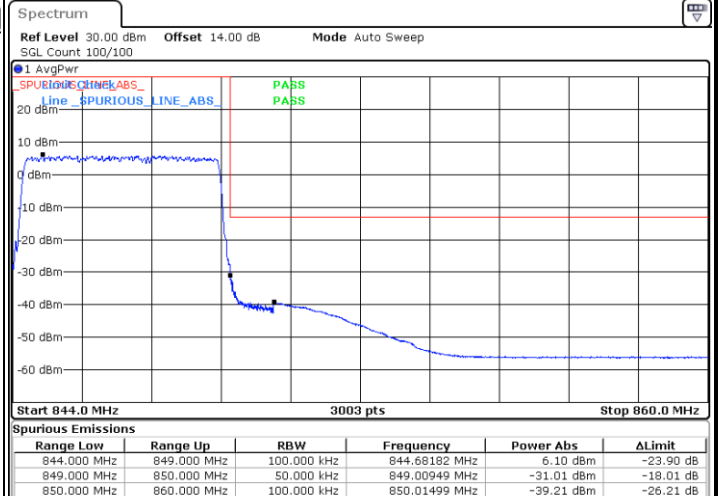
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



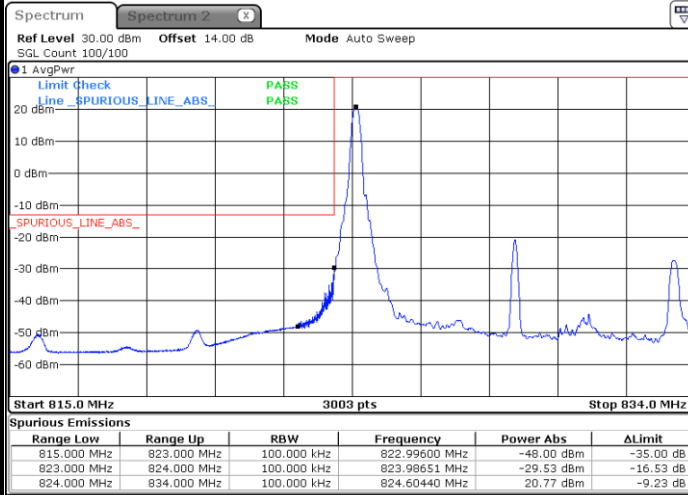
Highest Band Edge / Full RB



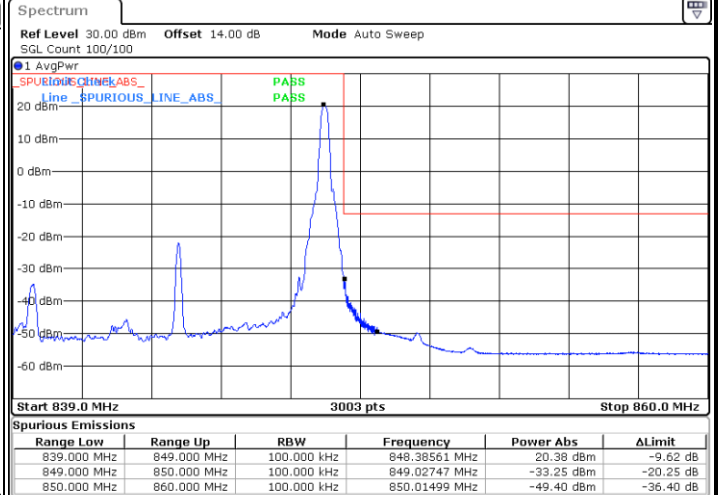


LTE Band 5 / 10MHz / QPSK

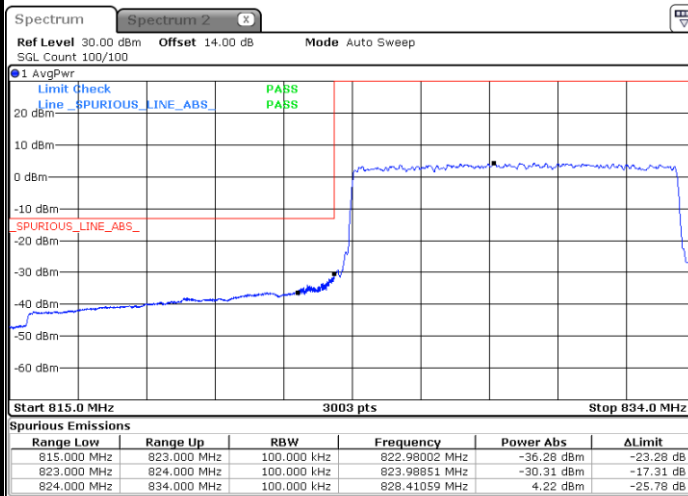
Lowest Band Edge / 1RB



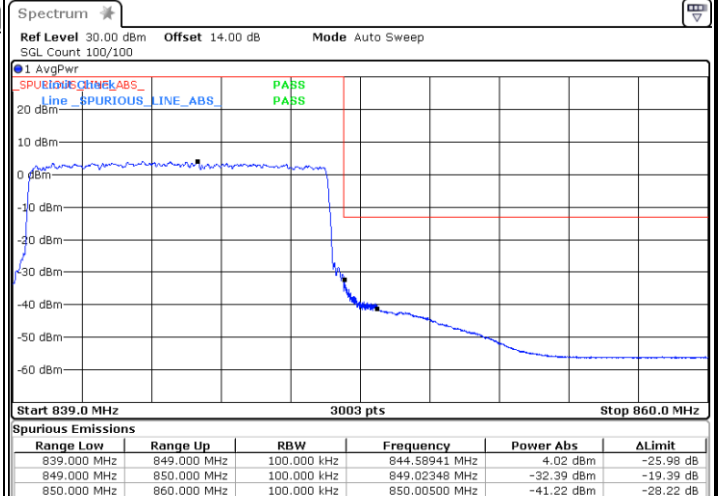
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



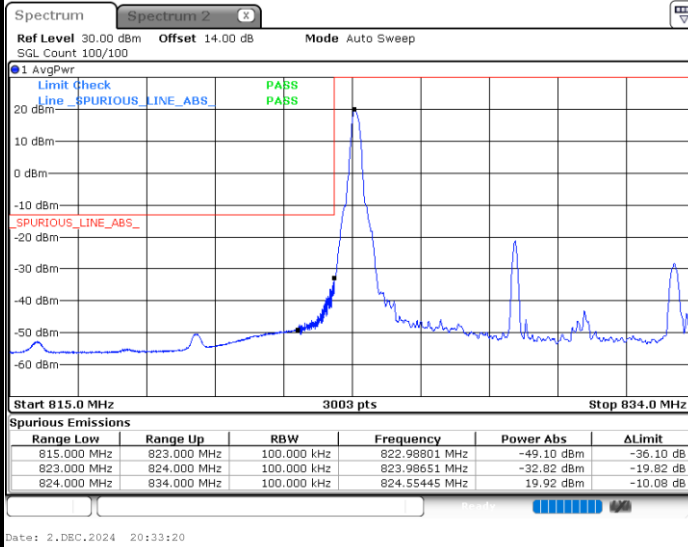
Highest Band Edge / Full RB



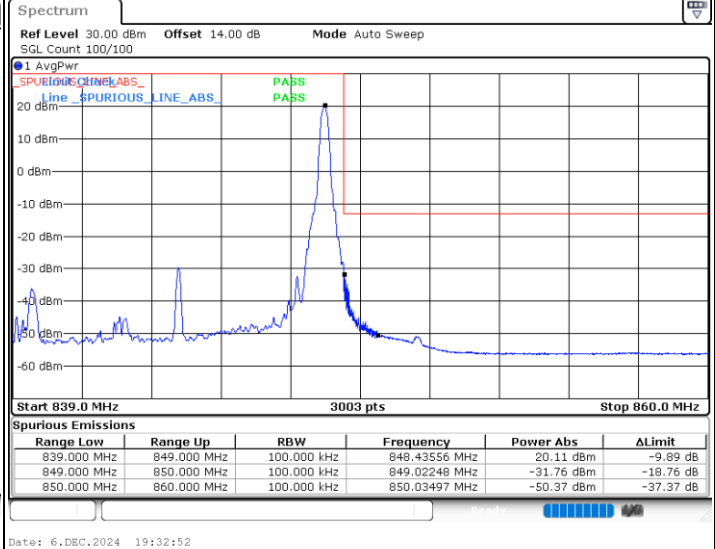


LTE Band 5 / 10MHz / 16QAM

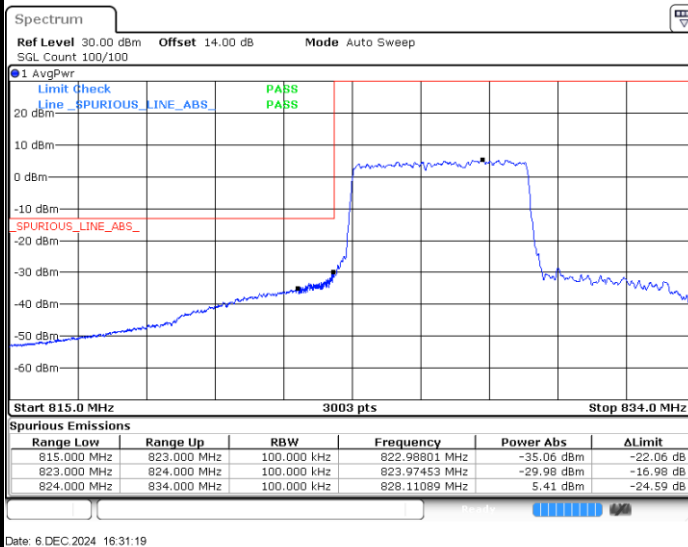
Lowest Band Edge / 1 RB



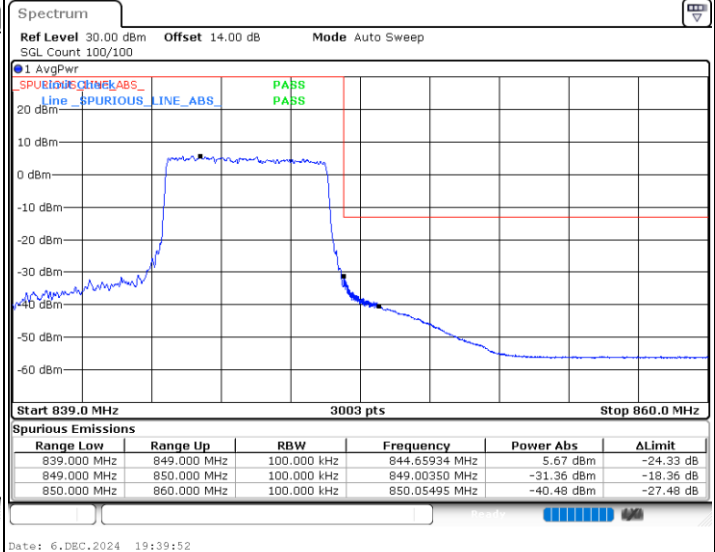
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

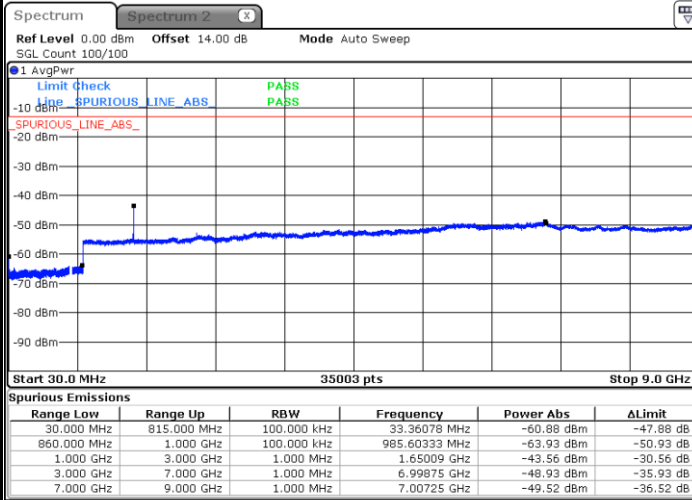




Conducted Spurious Emission

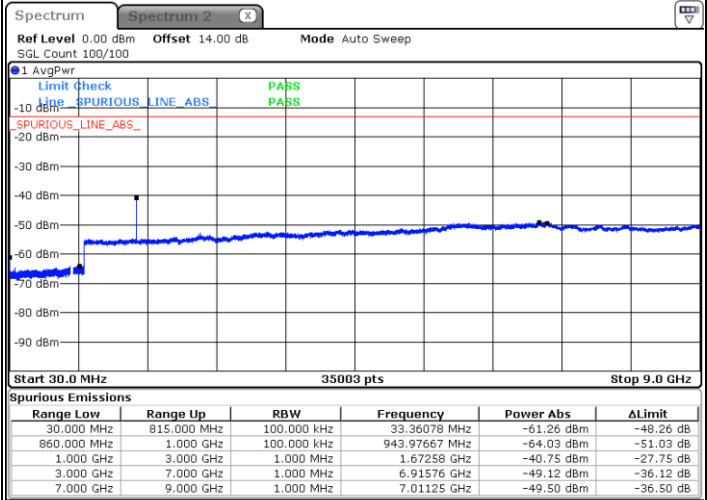
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



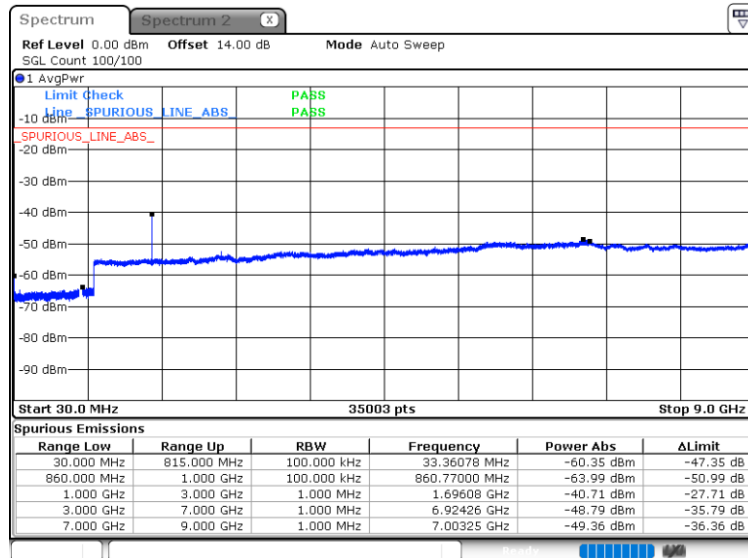
Date: 2.DEC.2024 20:01:09

Middle Channel / QPSK



Date: 2.DEC.2024 20:02:18

Highest Channel / QPSK

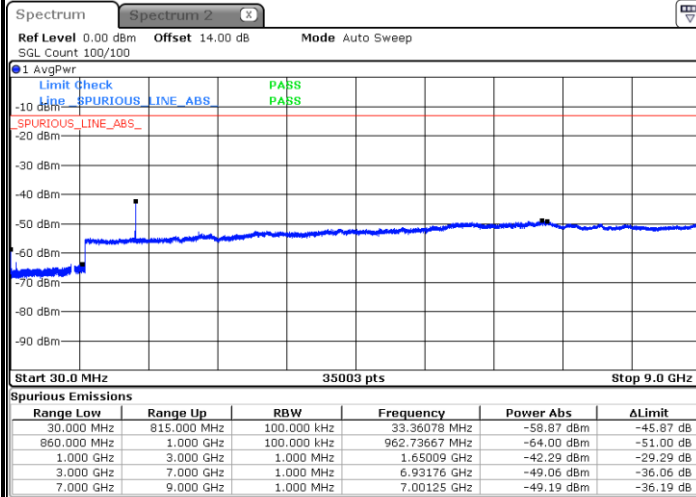


Date: 2.DEC.2024 20:07:57



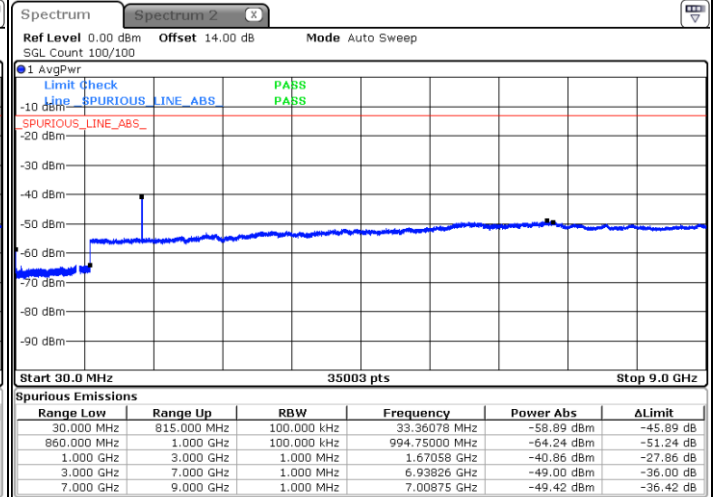
LTE Band 5 / 3MHz

Lowest Channel / QPSK



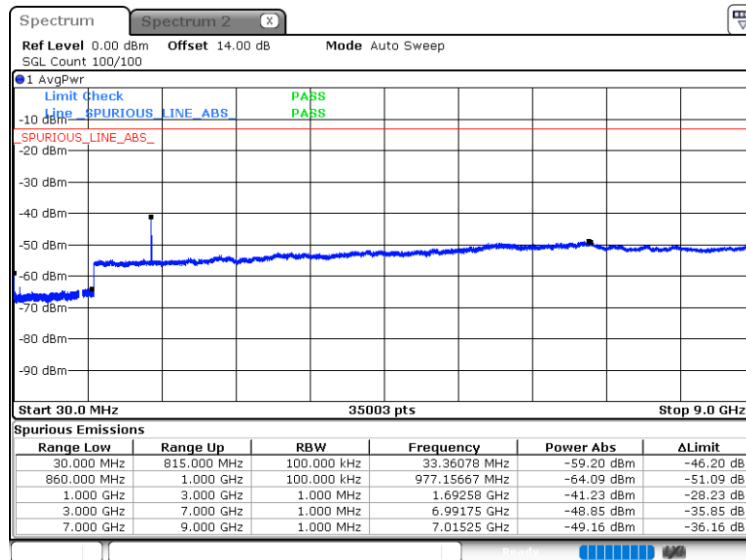
Date: 2.DEC.2024 20:12:45

Middle Channel / QPSK



Date: 2.DEC.2024 20:13:54

Highest Channel / QPSK

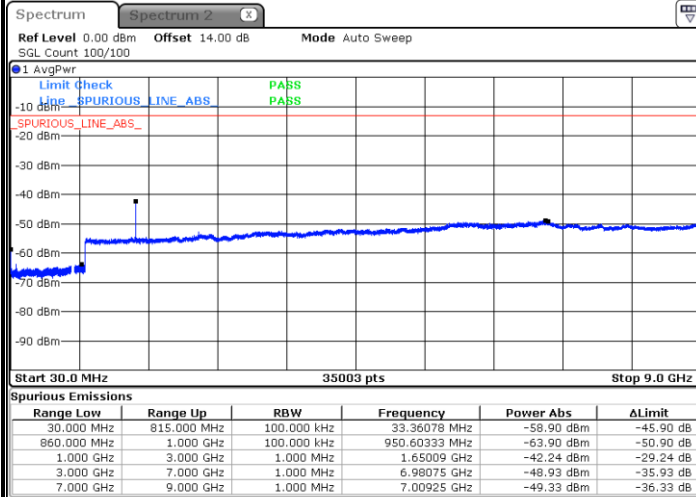


Date: 2.DEC.2024 20:19:33

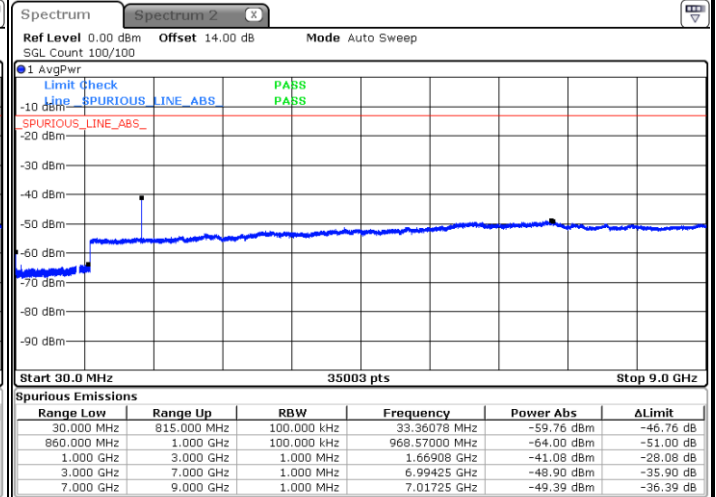


LTE Band 5 / 5MHz

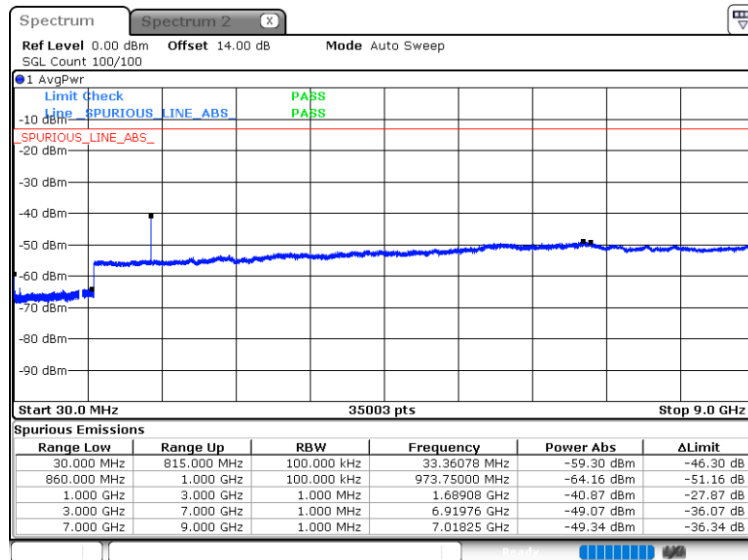
Lowest Channel / QPSK



Middle Channel / QPSK



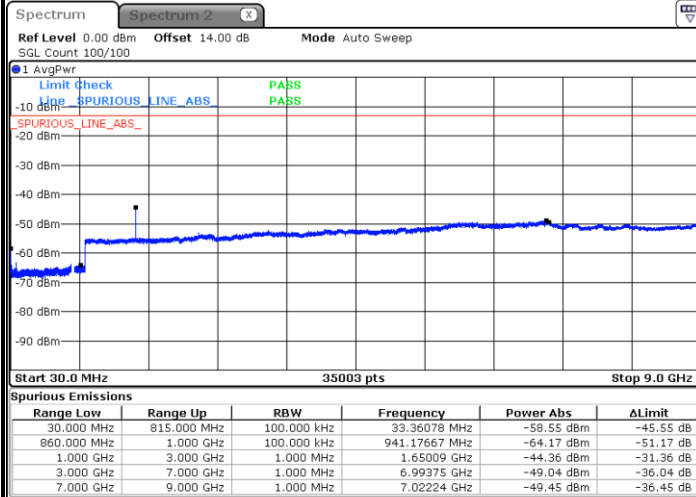
Highest Channel / QPSK





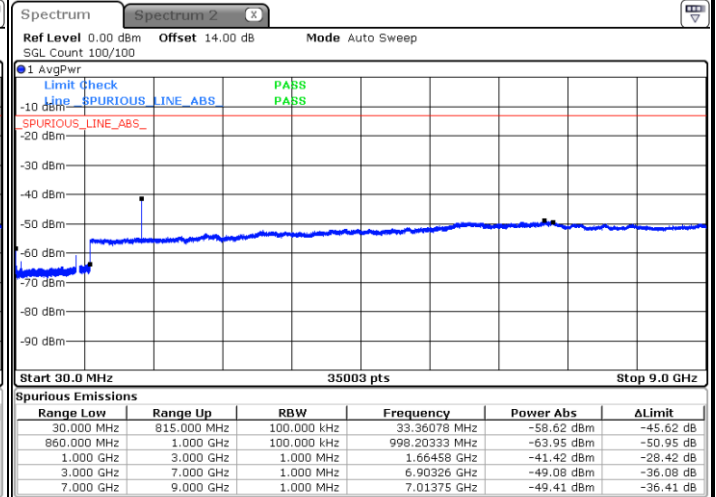
LTE Band 5 / 10MHz

Lowest Channel / QPSK



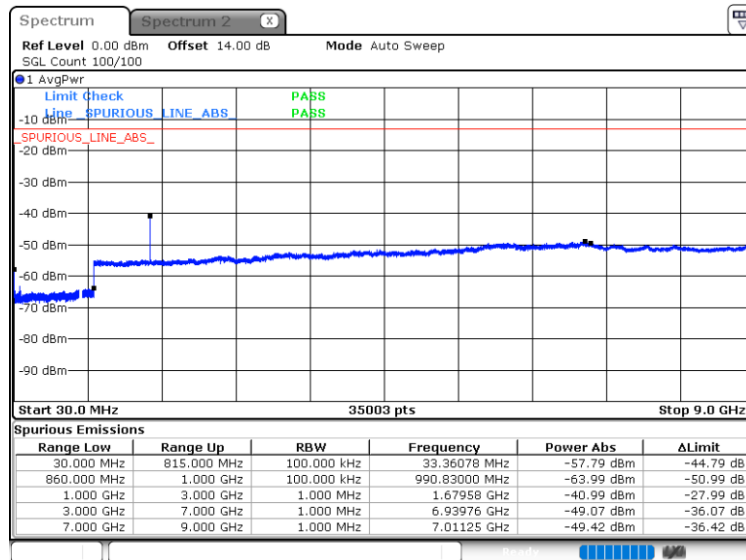
Date: 2.DEC.2024 20:52:21

Middle Channel / QPSK



Date: 2.DEC.2024 20:53:30

Highest Channel / QPSK



Date: 2.DEC.2024 20:57:58

**Frequency Stability**

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0035	PASS
40	Normal Voltage	0.0033	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0026	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0031	

Note:

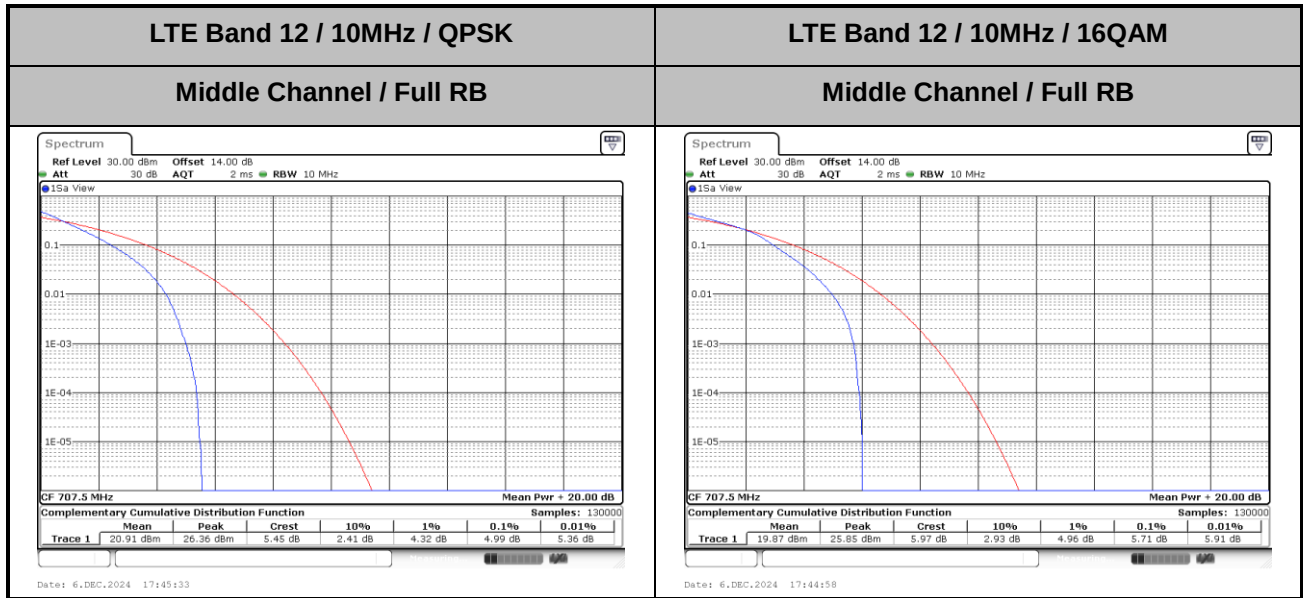
1. Normal Voltage = 3.87 V. ; Battery End Point (BEP)= 3.5 V. ; Maximum Voltage = 4.75 V.



LTE Band 12

Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM		Limit: 13dB
RB Size	Full RB	Full RB		Result
Middle CH	4.99	5.71		PASS





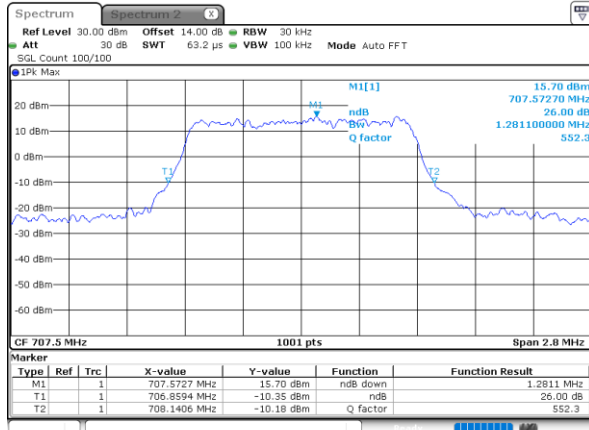
26dB Bandwidth

Mode	LTE Band 12 : 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	1.28	3.02	3.03	4.94	4.95	10.05	5.61	-	-	-	-



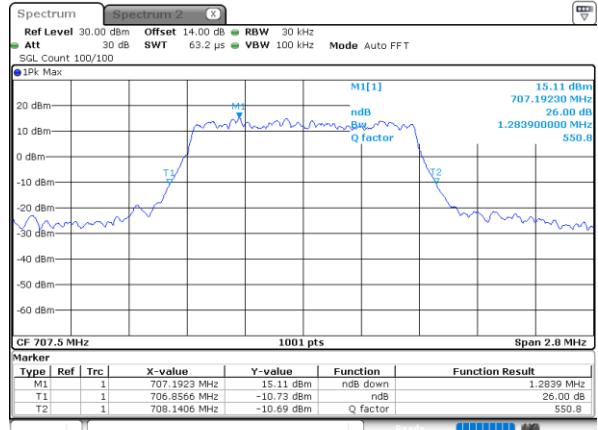
LTE Band 12

Middle Channel / 1.4MHz / QPSK



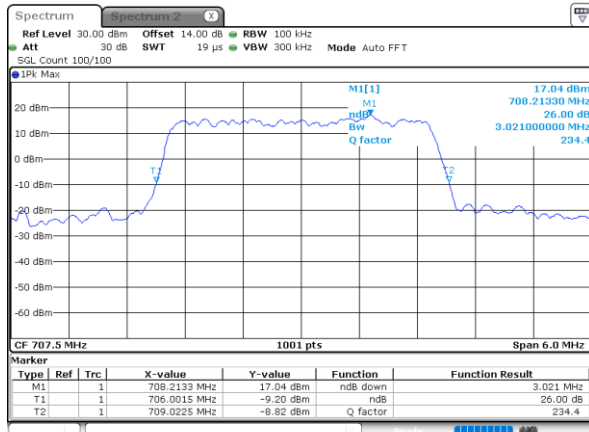
Date: 2.DEC.2024 19:10:14

Middle Channel / 1.4MHz / 16QAM



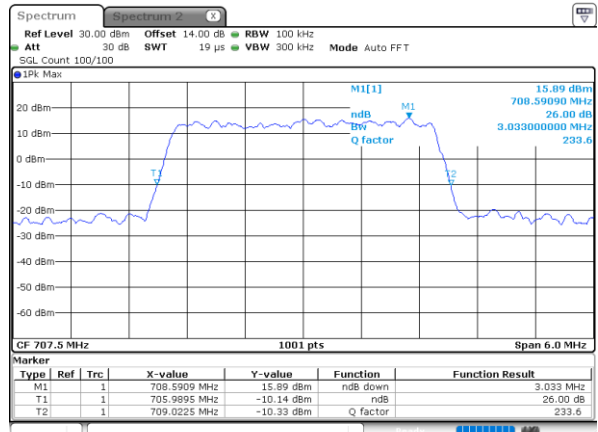
Date: 2.DEC.2024 19:10:53

Middle Channel / 3MHz / QPSK



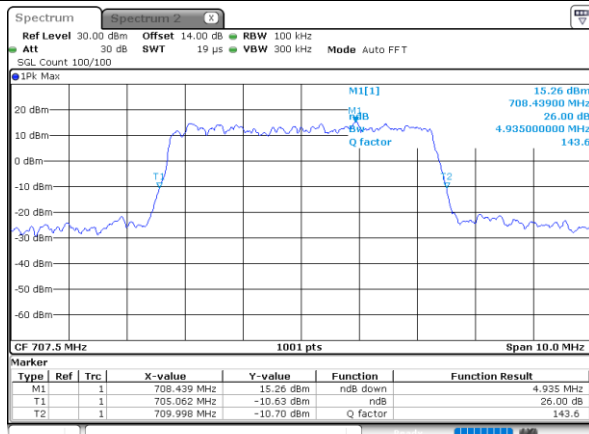
Date: 2.DEC.2024 19:21:48

Middle Channel / 3MHz / 16QAM



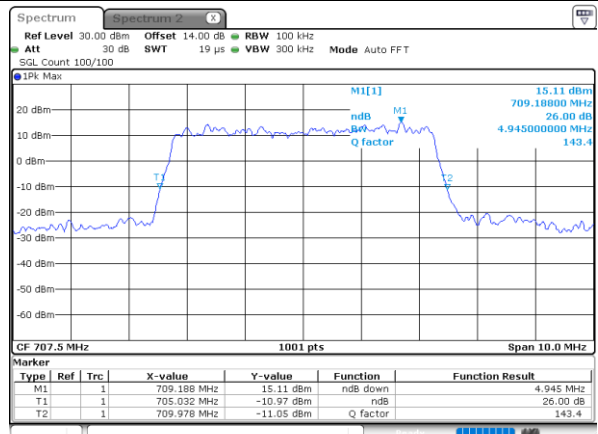
Date: 2.DEC.2024 19:22:28

Middle Channel / 5MHz / QPSK



Date: 2.DEC.2024 19:33:23

Middle Channel / 5MHz / 16QAM

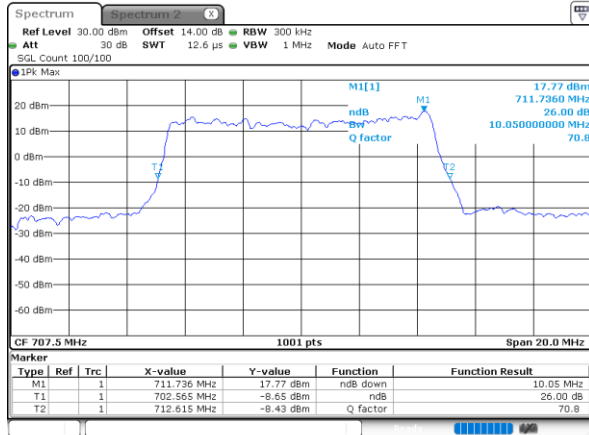


Date: 2.DEC.2024 19:34:03

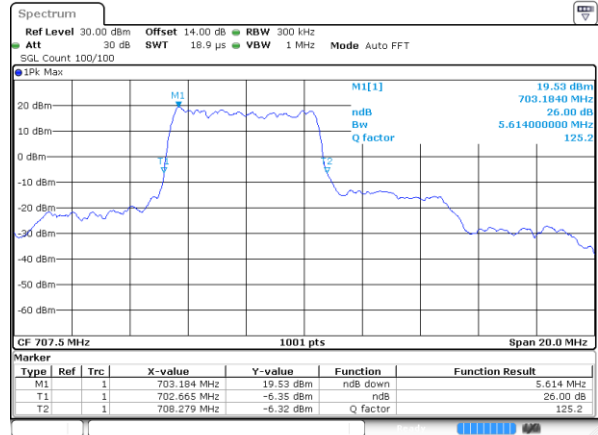


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM





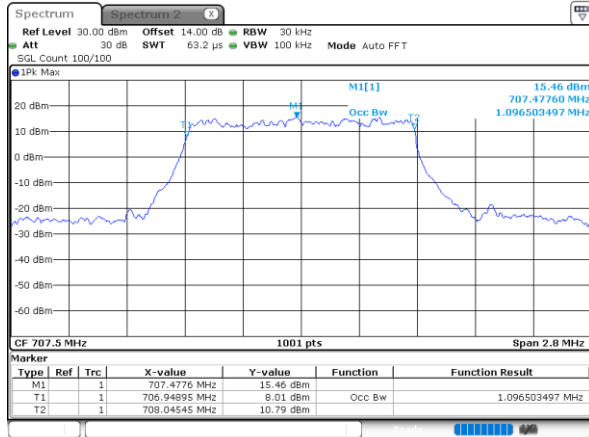
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.10	1.09	2.72	2.72	4.52	4.48	9.11	5.01	-	-	-	-

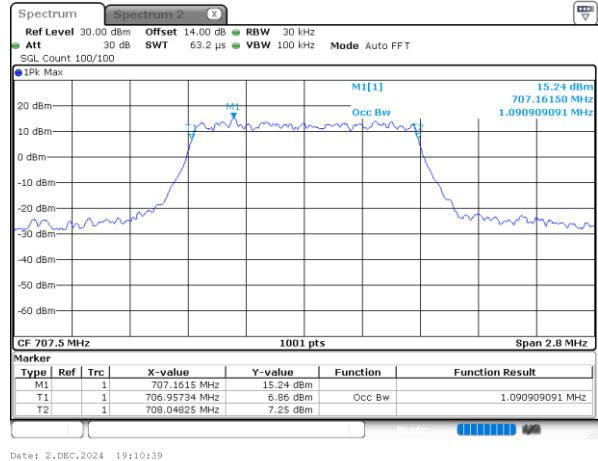


LTE Band 12

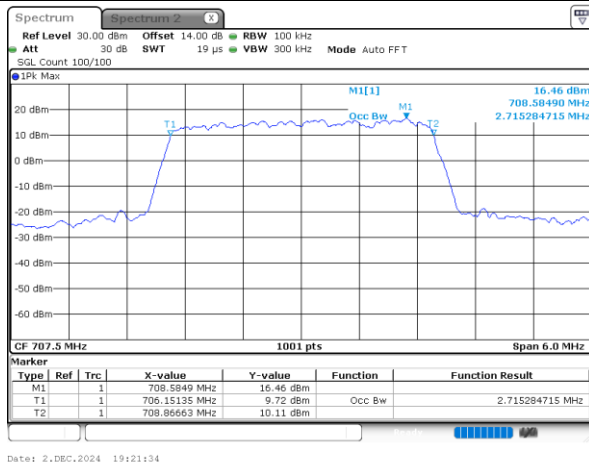
Middle Channel / 1.4MHz / QPSK



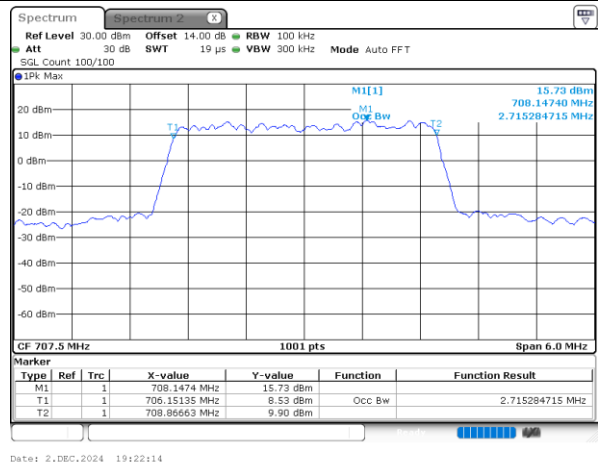
Middle Channel / 1.4MHz / 16QAM



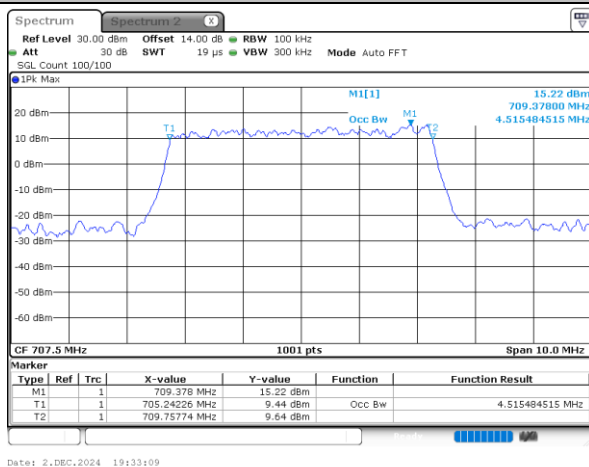
Middle Channel / 3MHz / QPSK



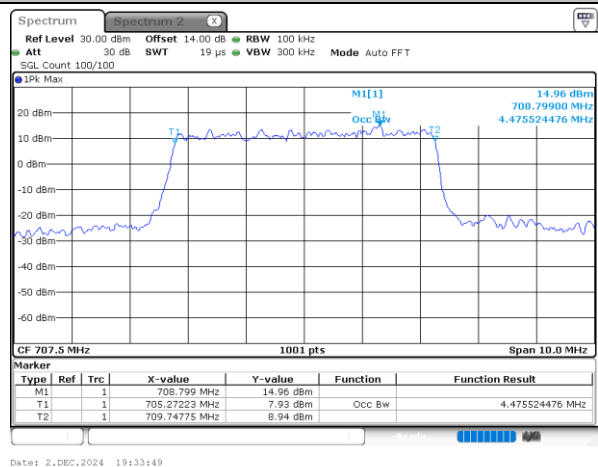
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



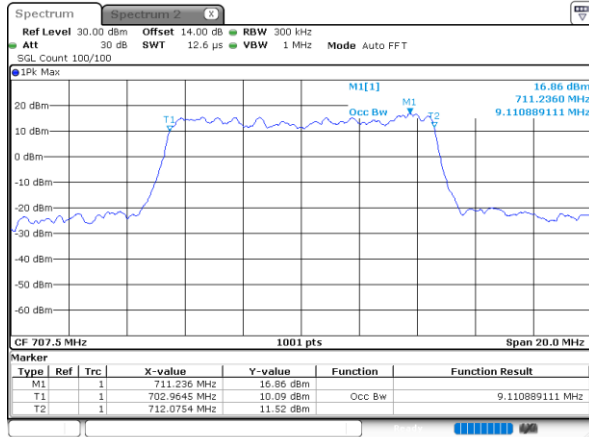
Middle Channel / 5MHz / 16QAM



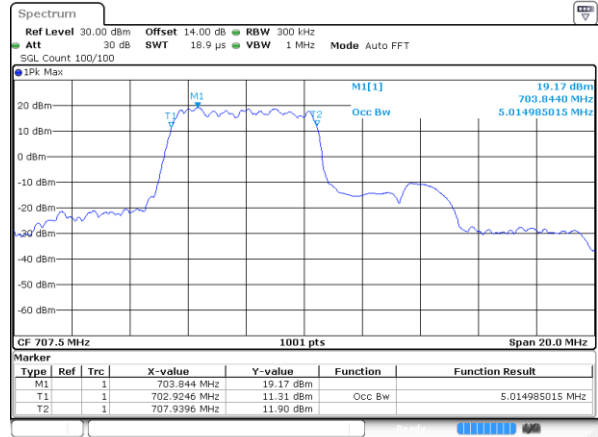


LTE Band 12

Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

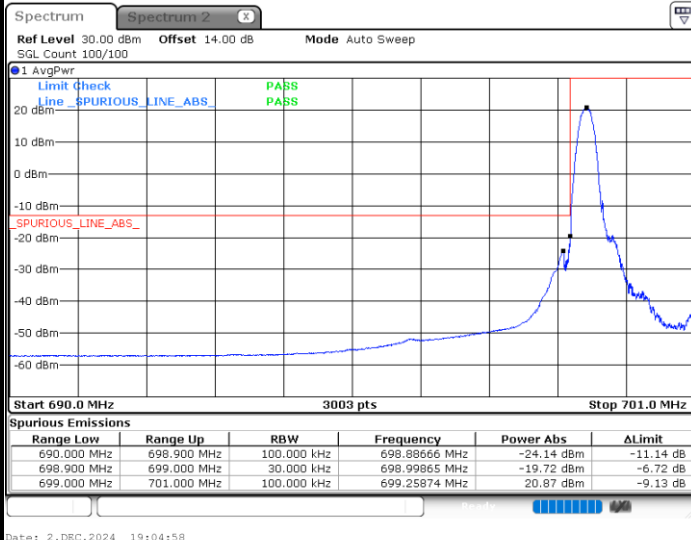




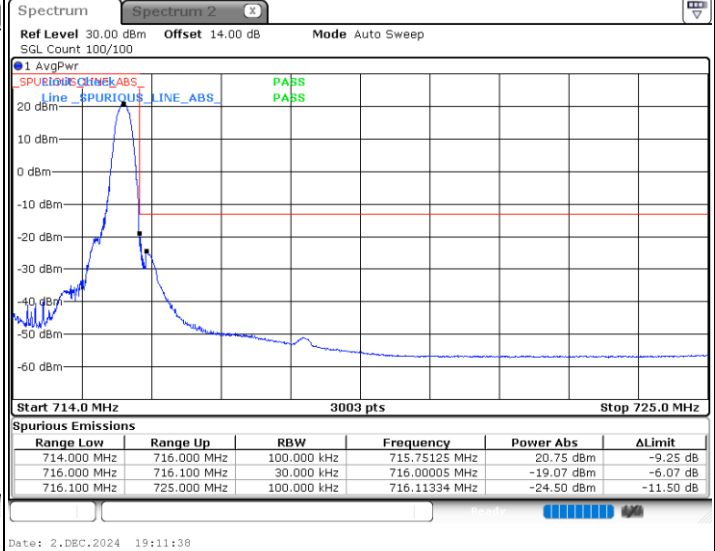
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

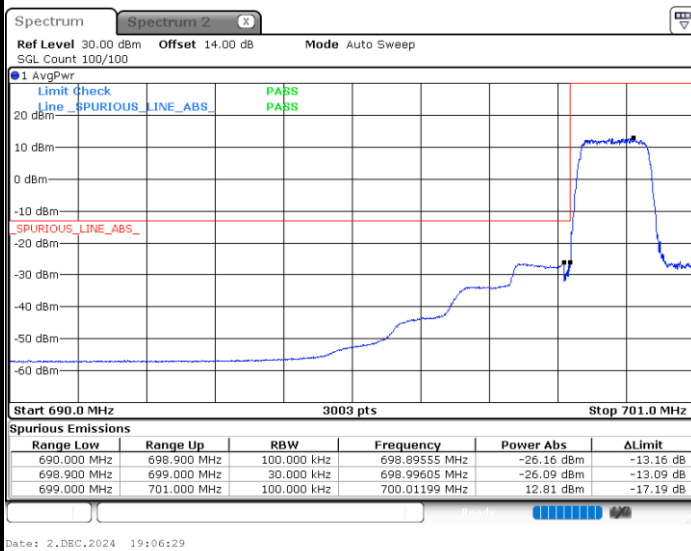
Lowest Band Edge / 1RB



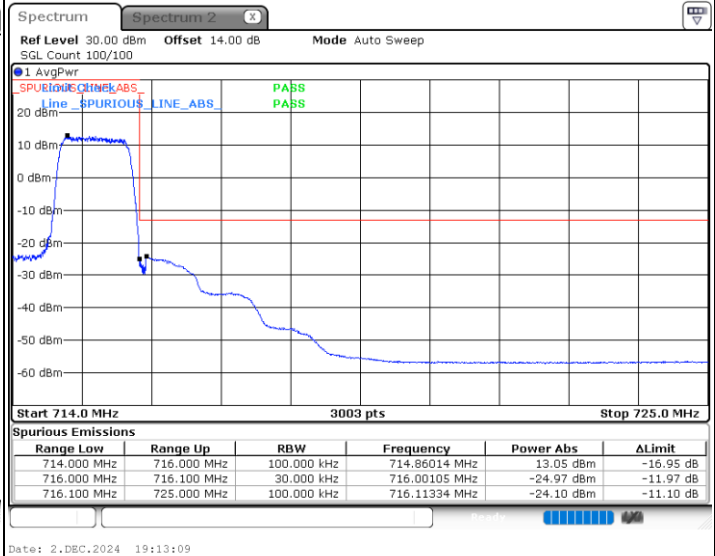
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



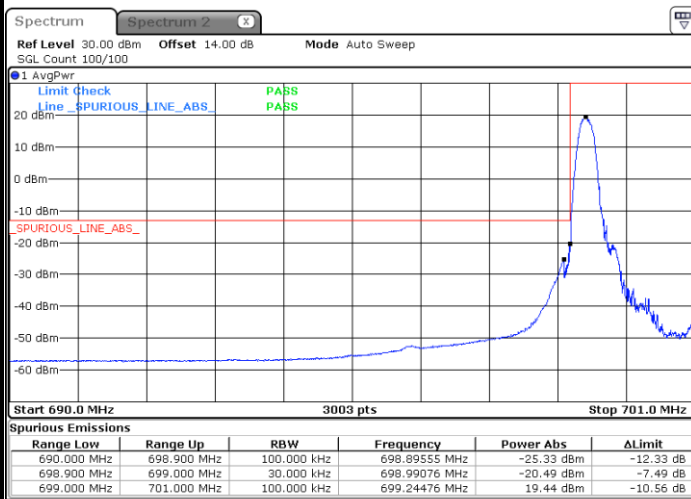
Highest Band Edge / Full RB



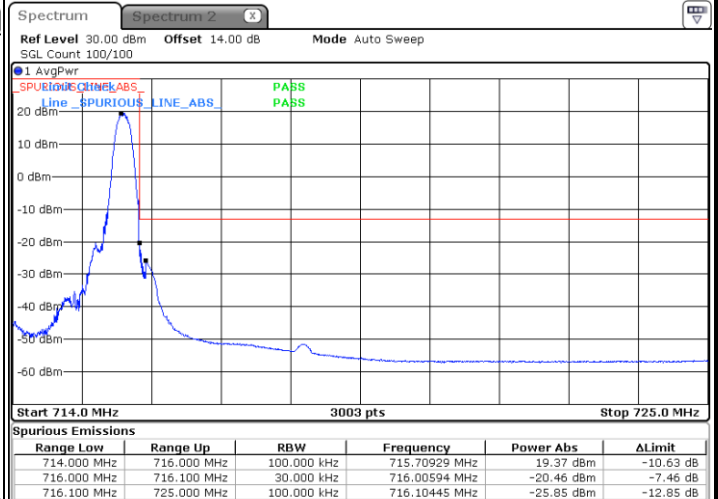


LTE Band 12 / 1.4MHz / 16QAM

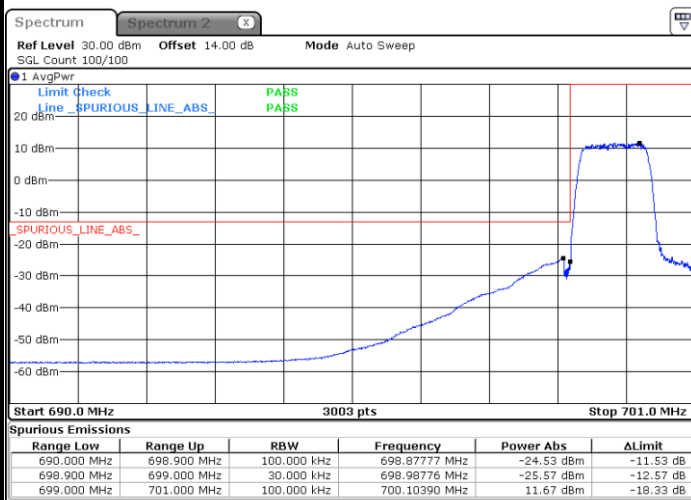
Lowest Band Edge / 1 RB



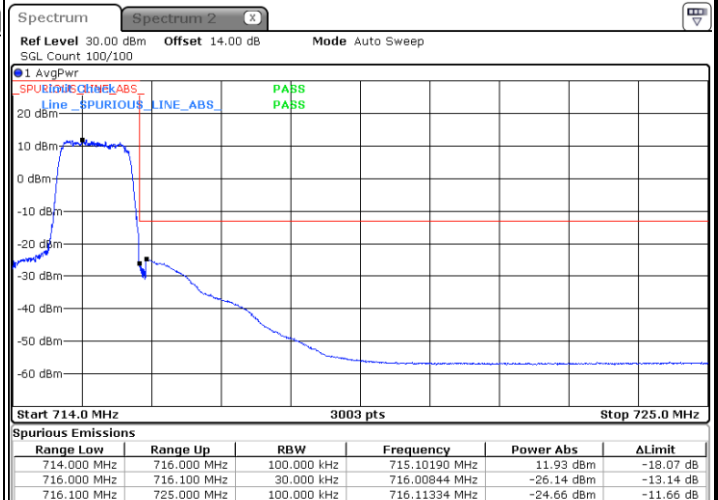
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



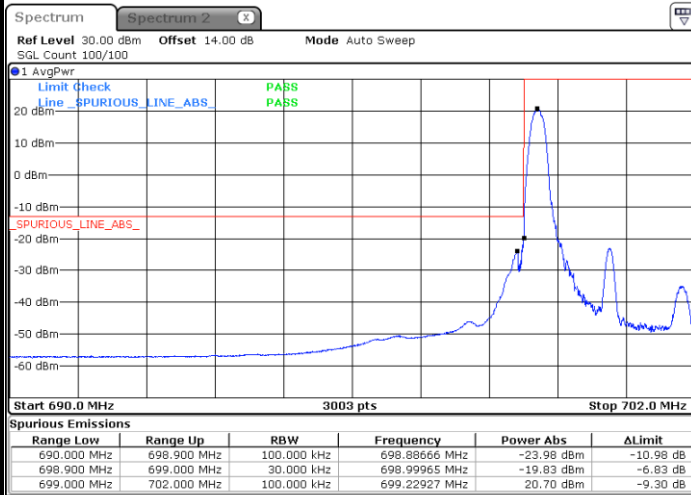
Highest Band Edge / Full RB



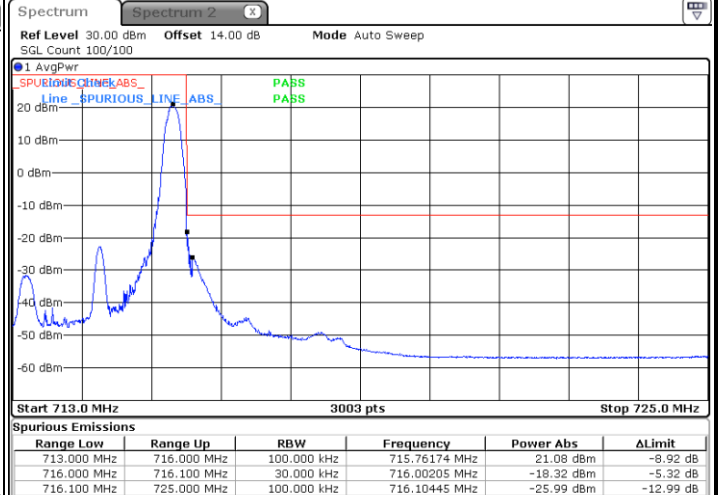


LTE Band 12 / 3MHz / QPSK

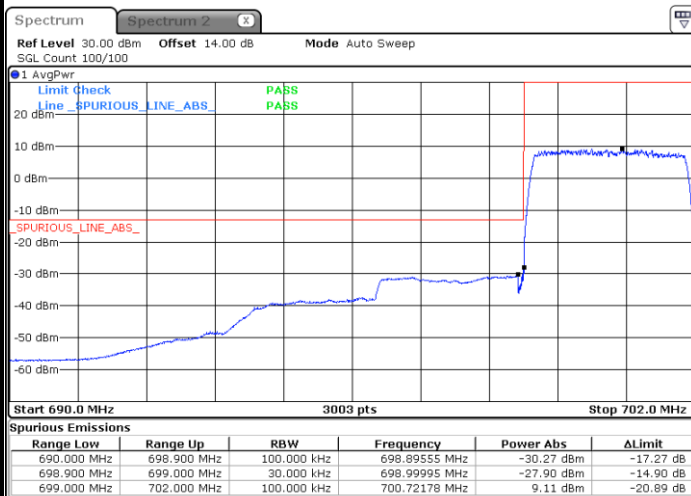
Lowest Band Edge / 1RB



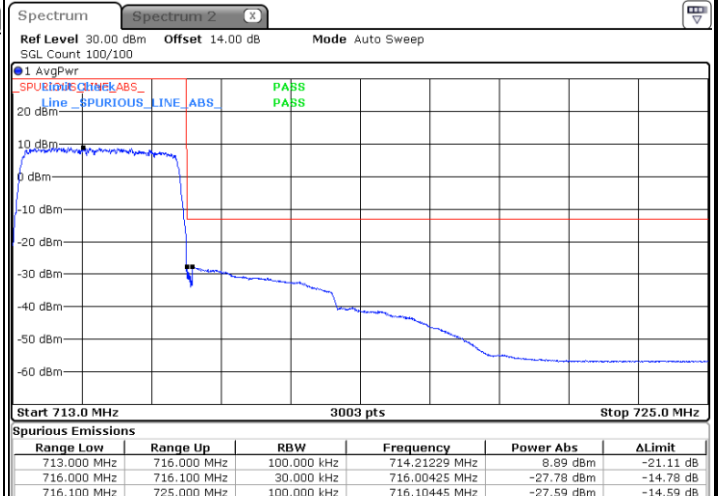
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



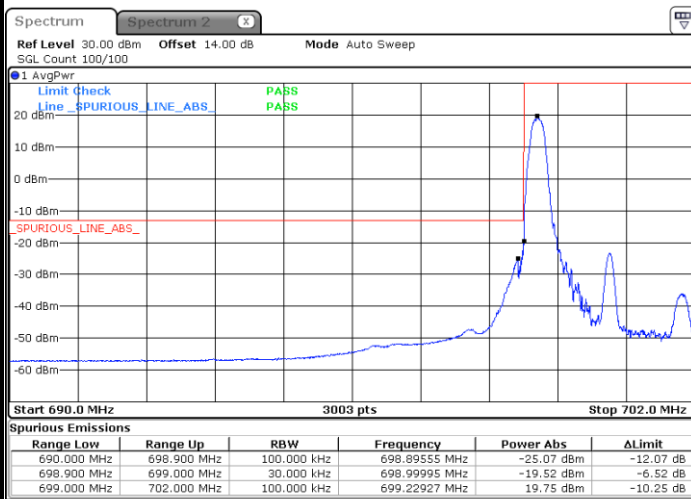
Highest Band Edge / Full RB



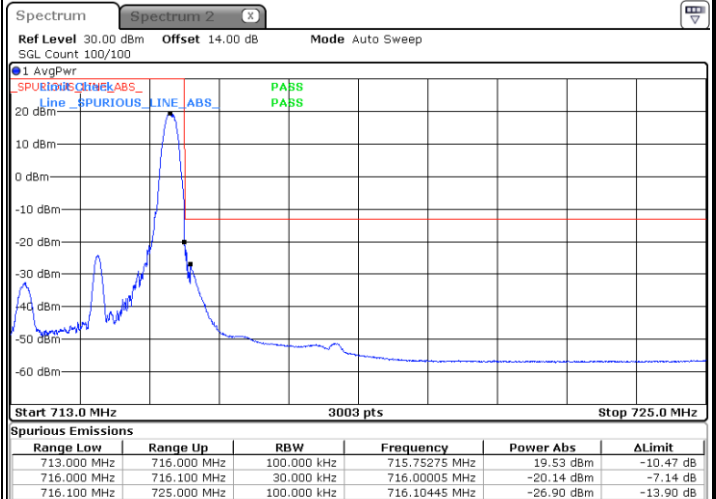


LTE Band 12 / 3MHz / 16QAM

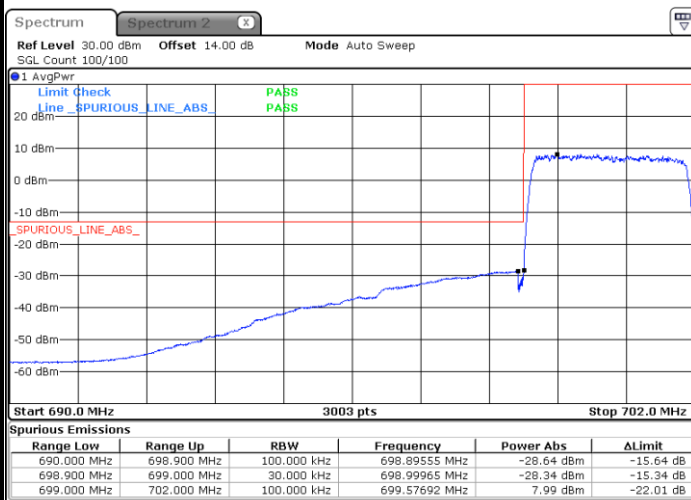
Lowest Band Edge / 1 RB



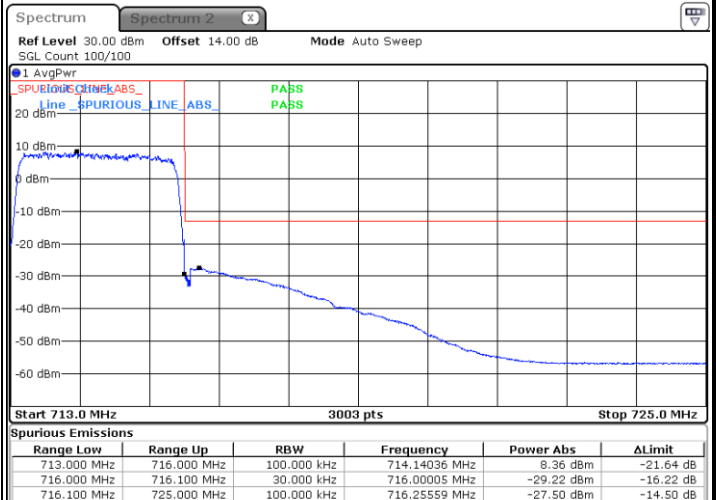
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



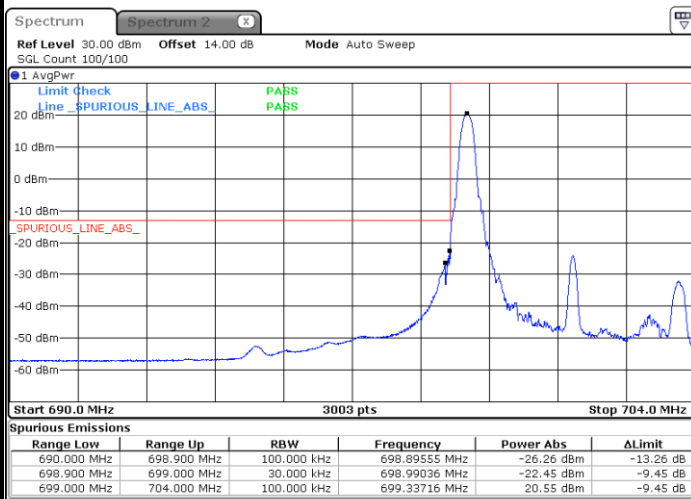
Highest Band Edge / Full RB



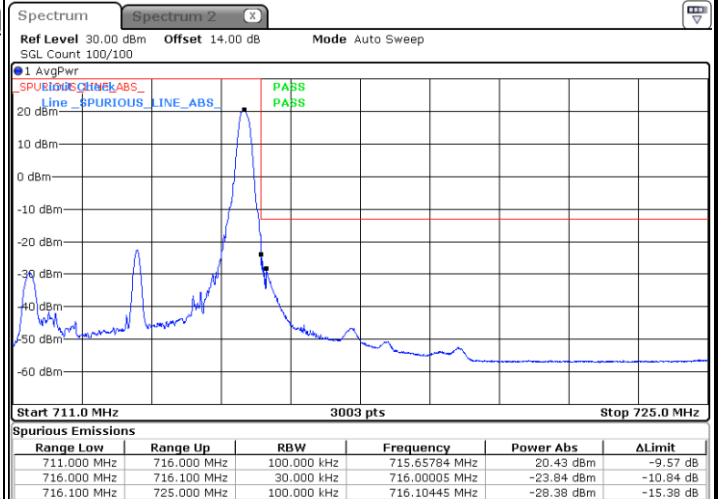


LTE Band 12 / 5MHz / QPSK

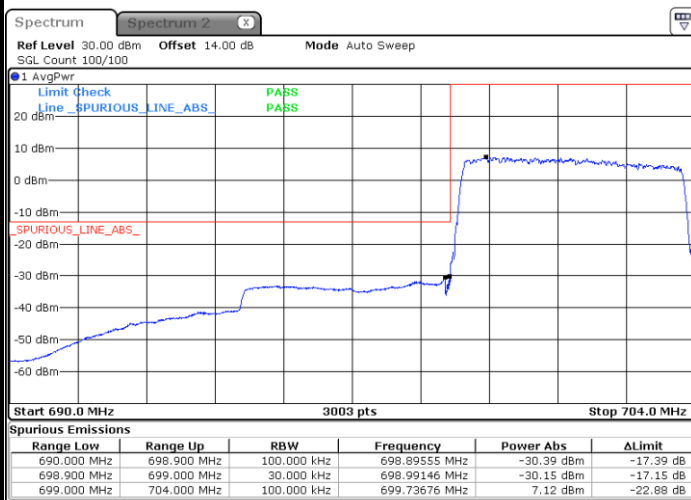
Lowest Band Edge / 1RB



Highest Band Edge / 1RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

