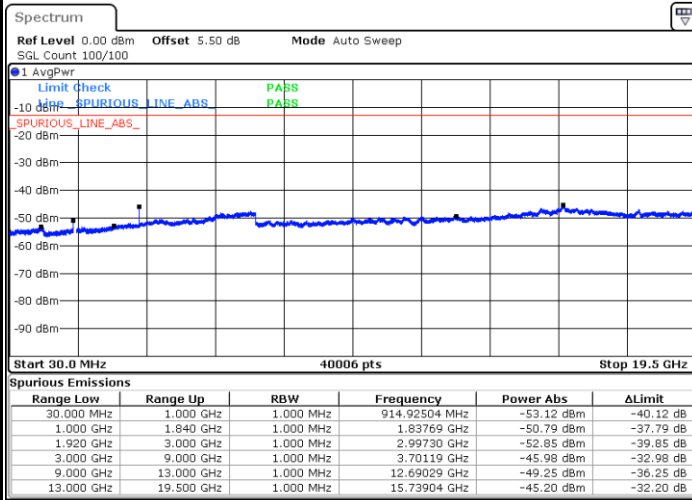




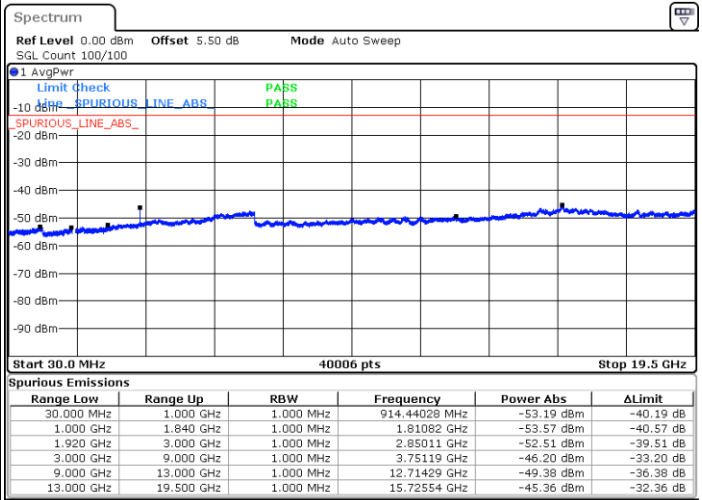
LTE Band 2 / 10MHz

Lowest Channel / QPSK



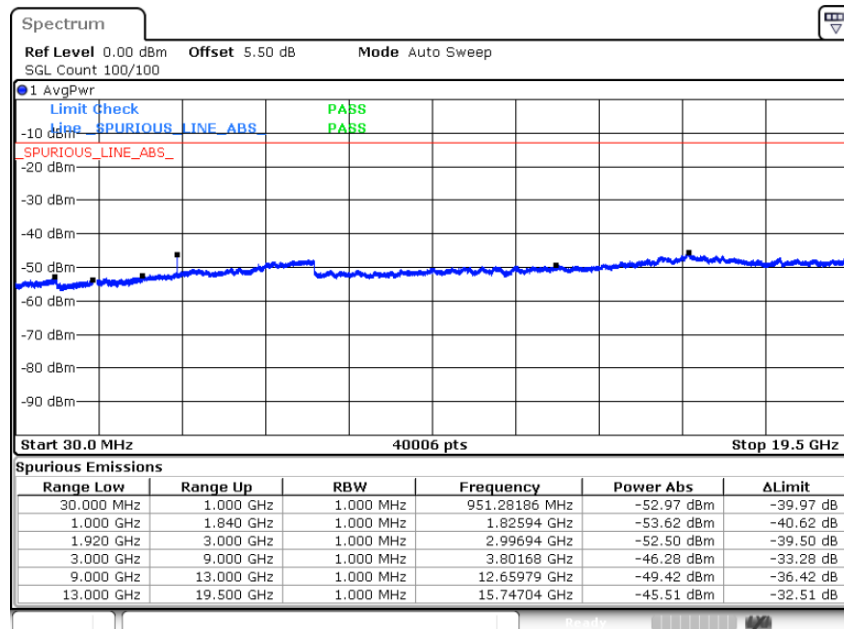
Date: 18.JAN.2021 22:25:39

Middle Channel / QPSK



Date: 18.JAN.2021 22:26:23

Highest Channel / QPSK

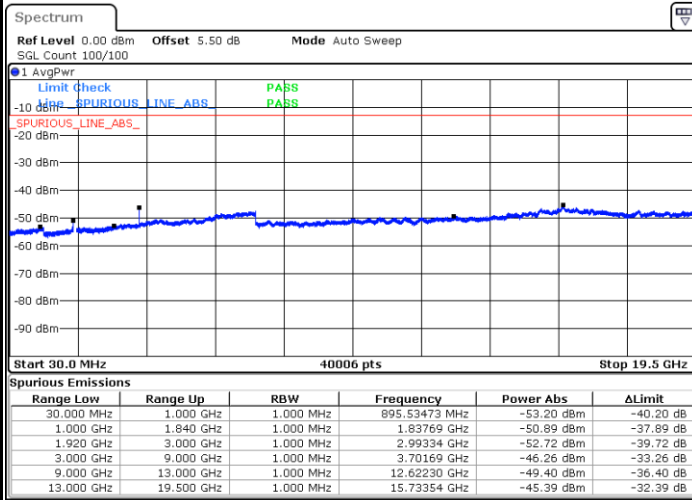


Date: 18.JAN.2021 22:27:07



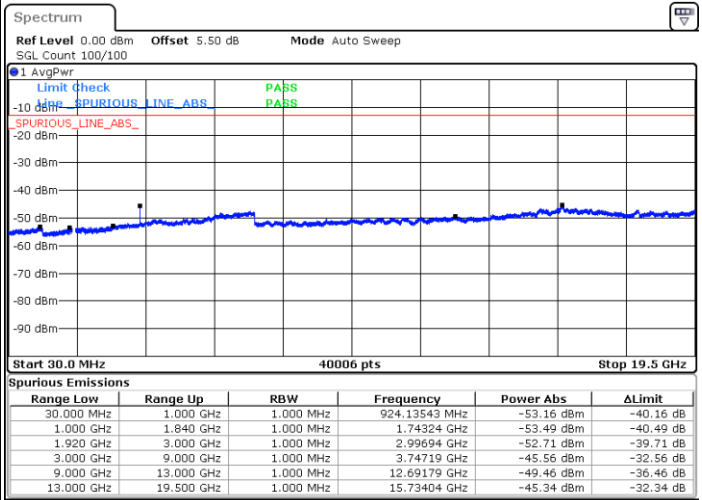
LTE Band 2 / 15MHz

Lowest Channel / QPSK



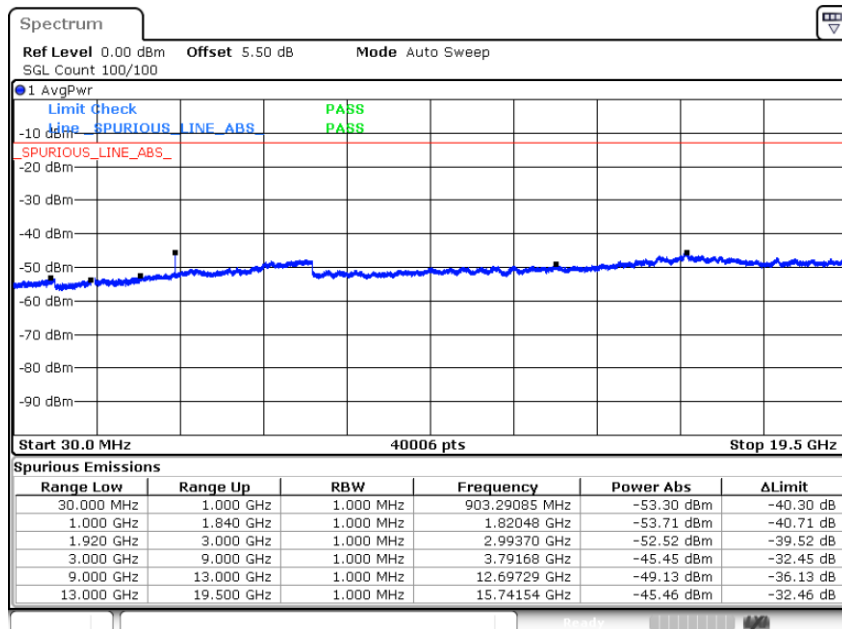
Date: 18.JAN.2021 22:28:10

Middle Channel / QPSK



Date: 18.JAN.2021 22:28:57

Highest Channel / QPSK

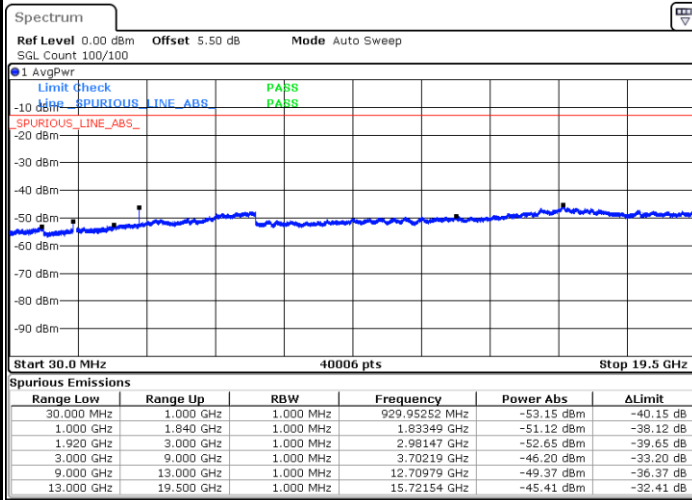


Date: 18.JAN.2021 22:29:43



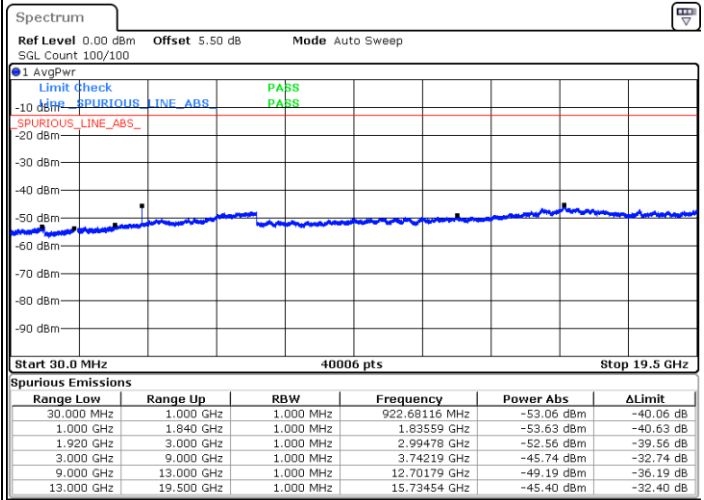
LTE Band 2 / 20MHz

Lowest Channel / QPSK



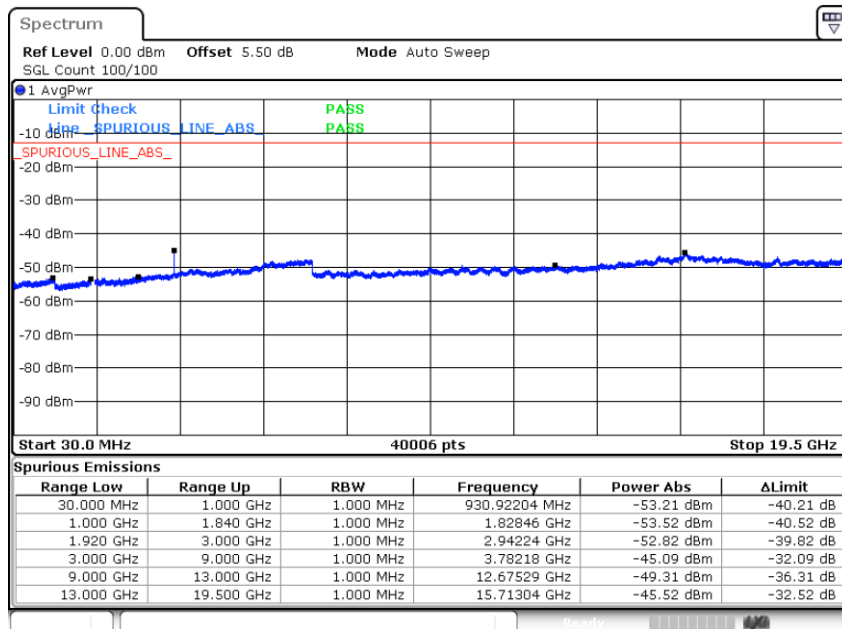
Date: 18.JAN.2021 22:30:28

Middle Channel / QPSK



Date: 18.JAN.2021 22:31:18

Highest Channel / QPSK



Date: 18.JAN.2021 22:32:13

**Frequency Stability**

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0014	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0010	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0009	

Note:

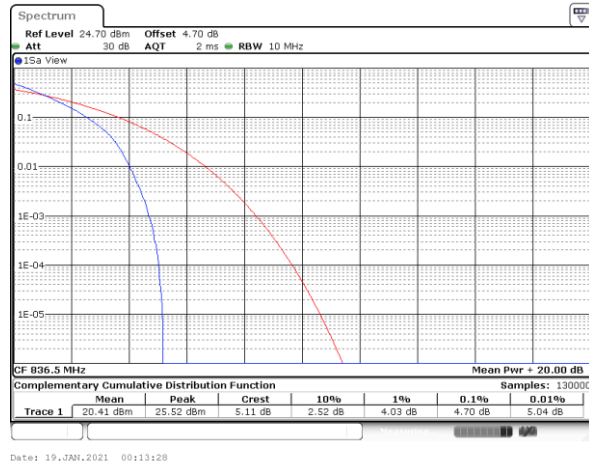
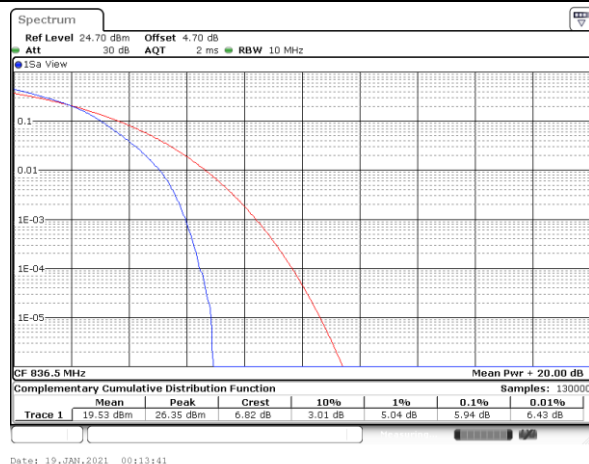
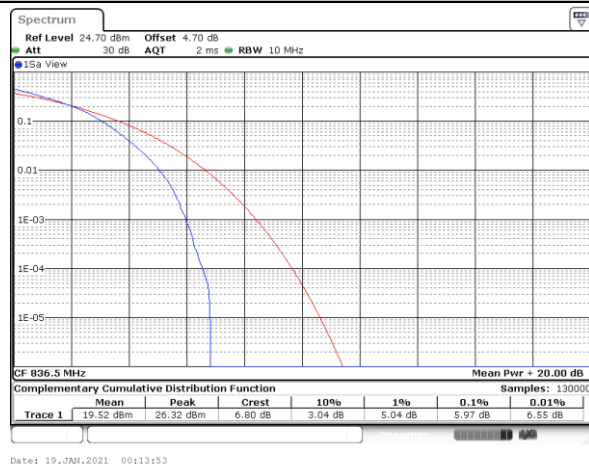
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

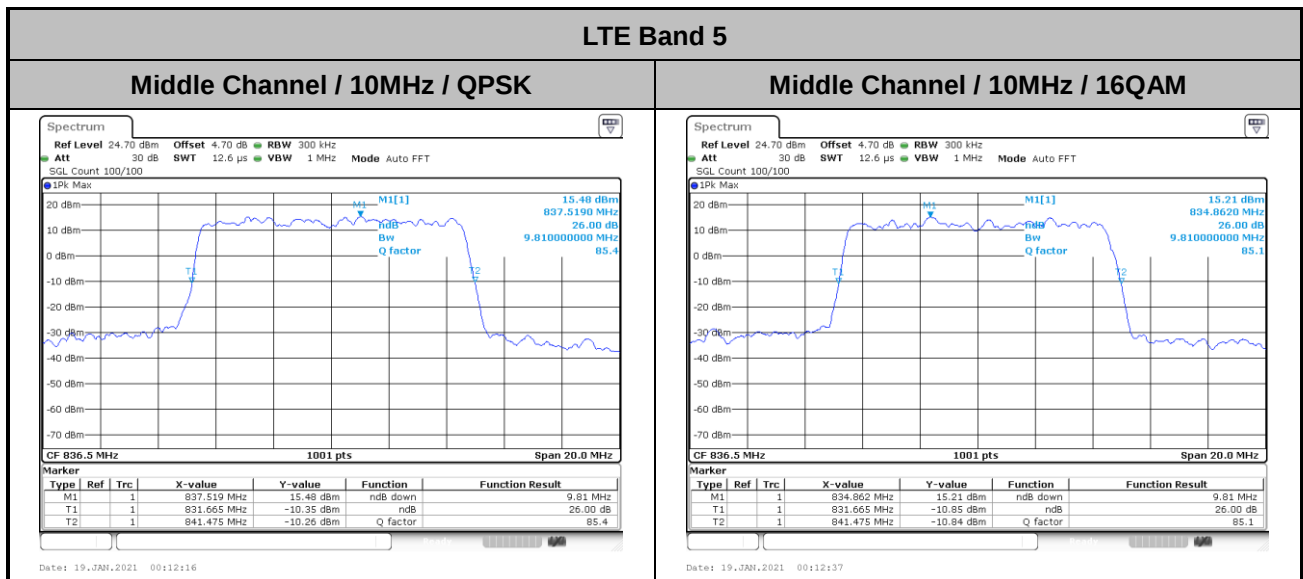
Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.70	5.94	5.97	PASS

LTE Band 5 / 10MHz
Middle Channel / Full RB/ QPSK

Middle Channel / Full RB/ 16QAM

Middle Channel / Full RB/ 64QAM


**26dB Bandwidth**

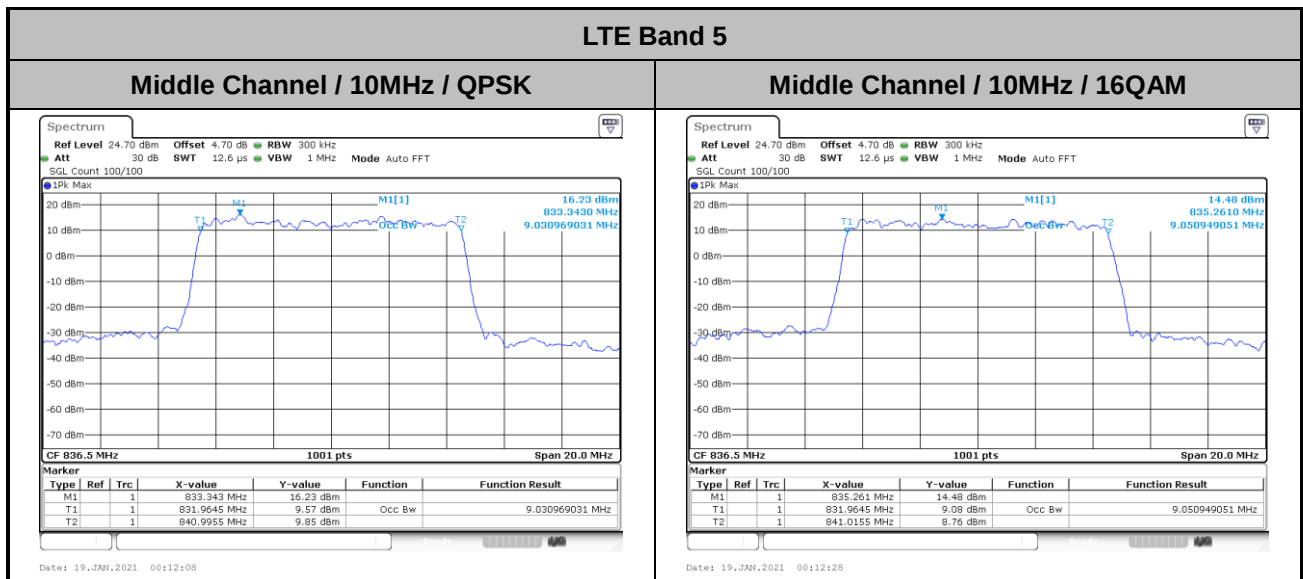
Mode	LTE Band 5 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.81	9.81





Occupied Bandwidth

Mode	LTE Band 5 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.05

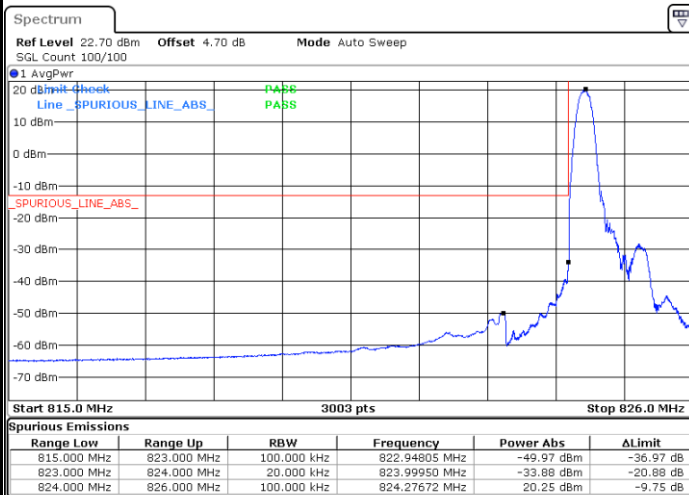




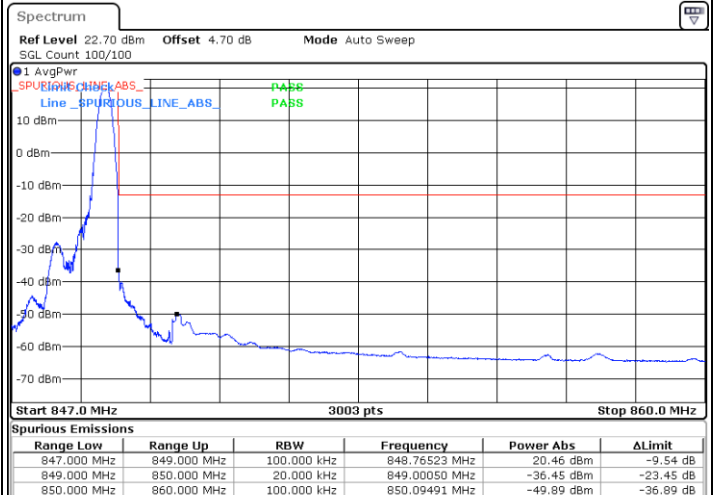
Conducted Band Edge

LTE Band 5 / 1.4MHz / QPSK

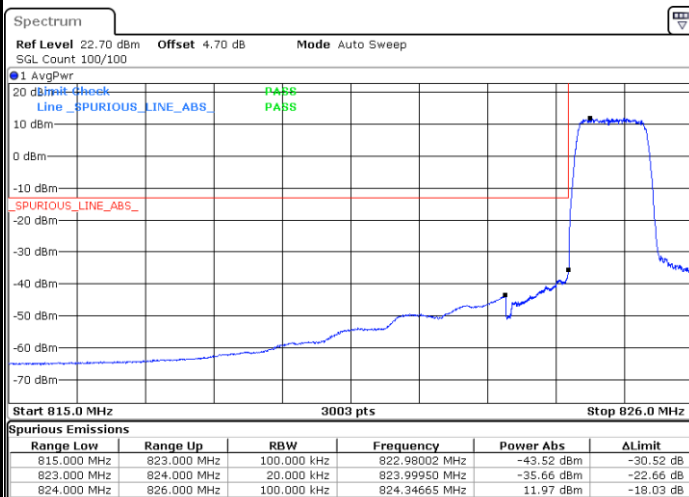
Lowest Band Edge / 1RB



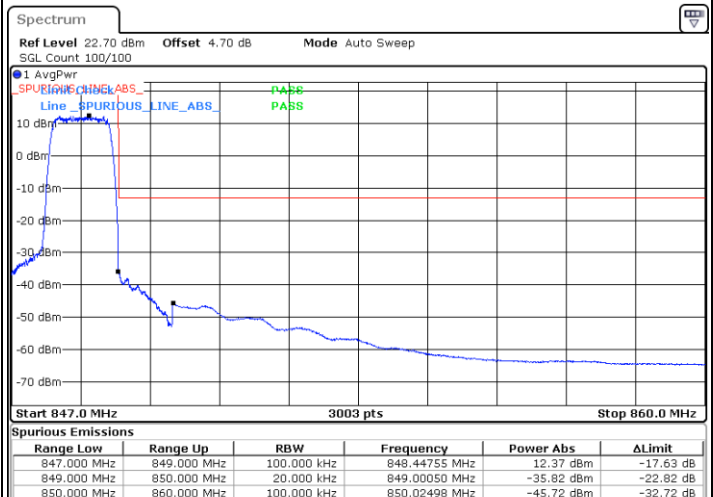
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



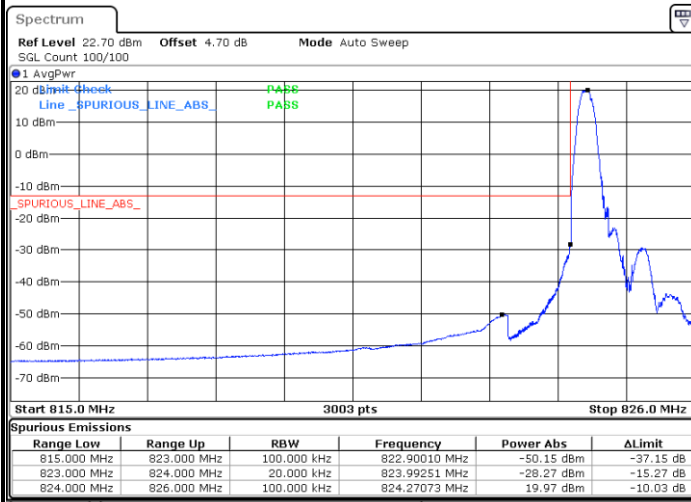
Highest Band Edge / Full RB



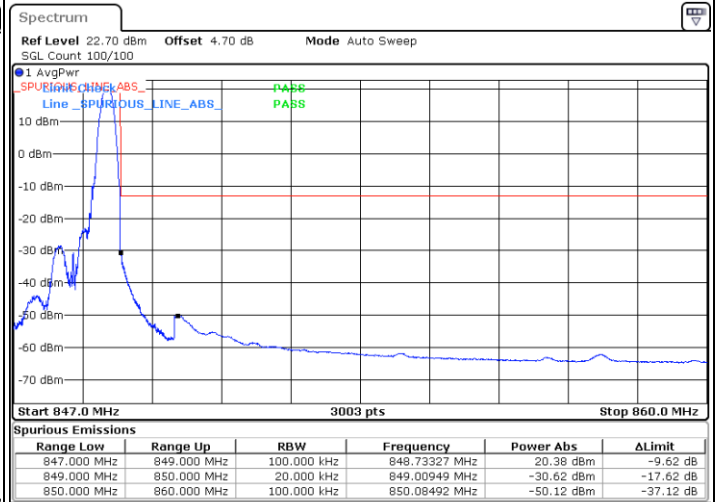


LTE Band 5 / 1.4MHz / 16QAM

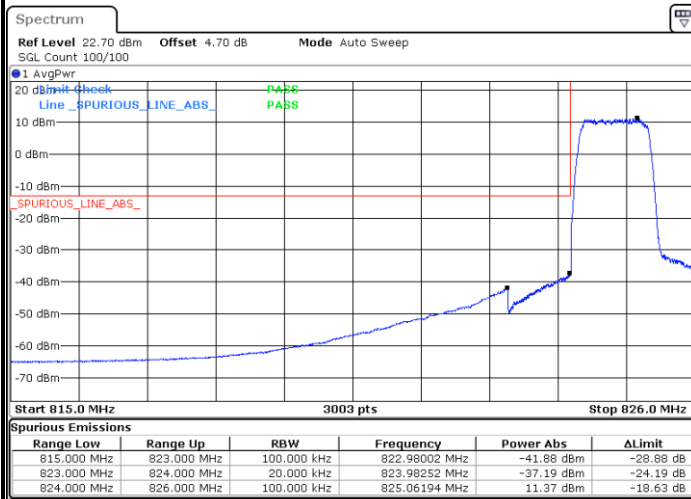
Lowest Band Edge / 1 RB



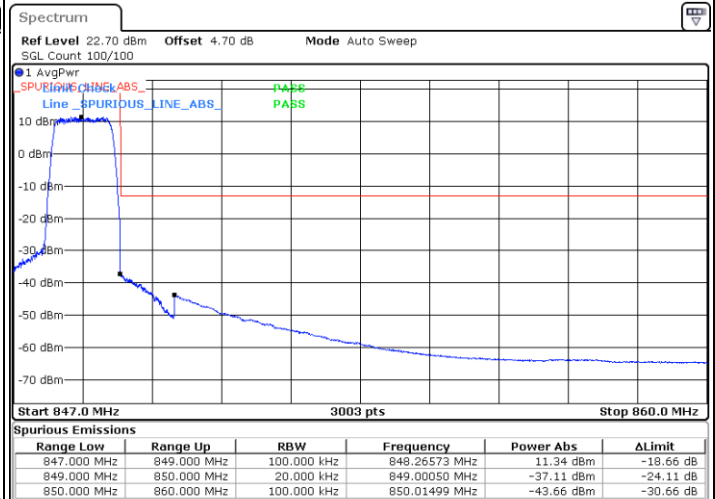
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



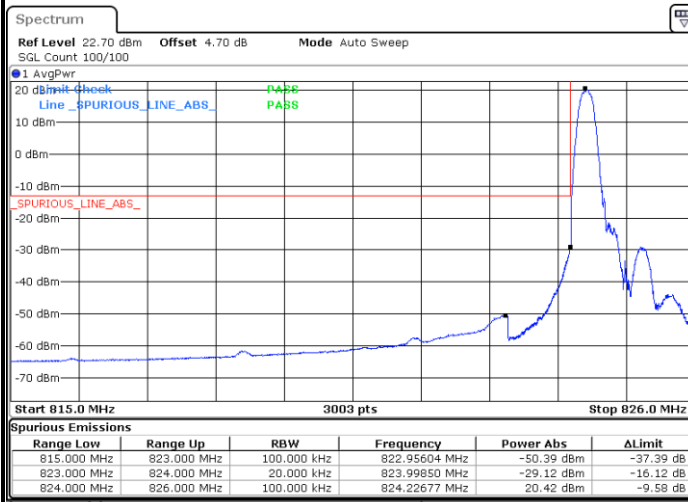
Highest Band Edge / Full RB



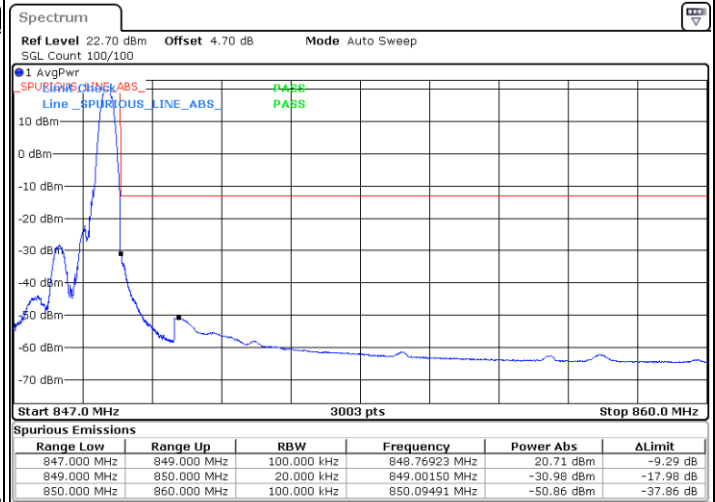


LTE Band 5 / 1.4MHz / 64QAM

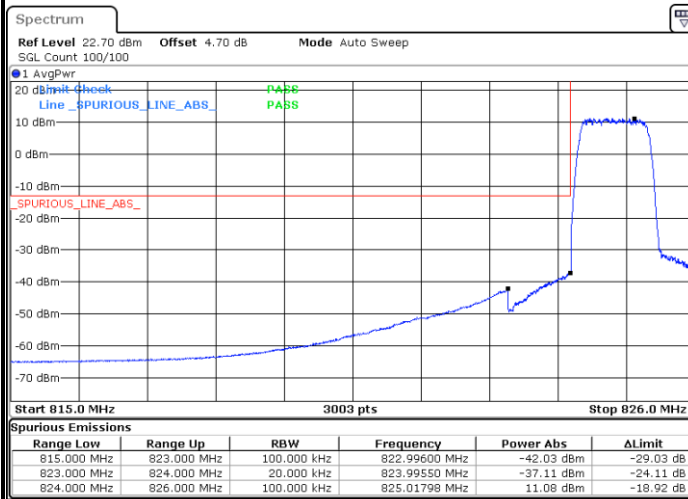
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



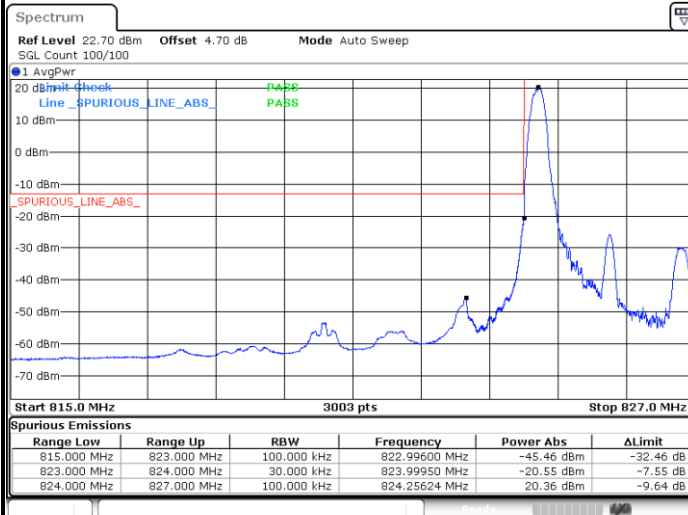
Highest Band Edge / Full RB



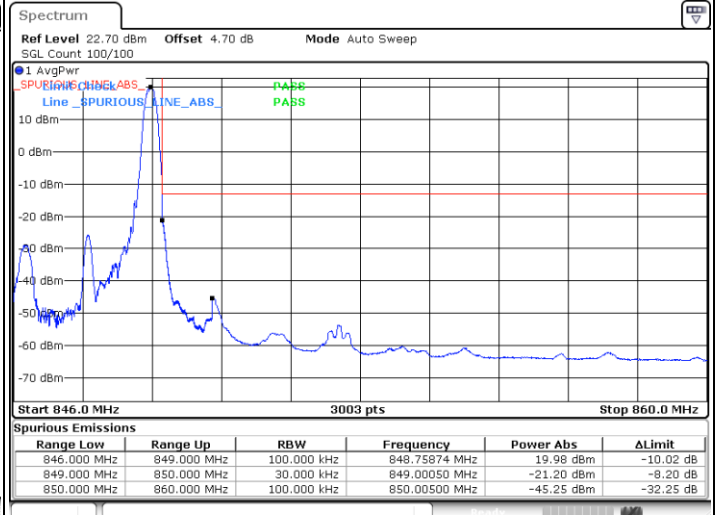


LTE Band 5 / 3MHz / QPSK

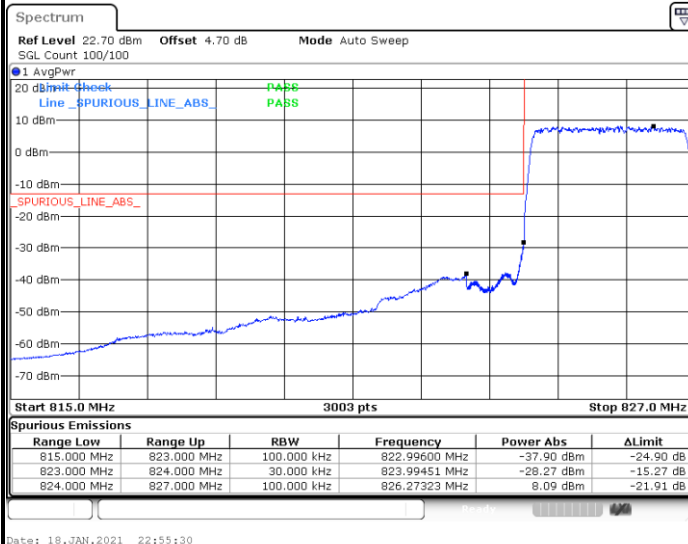
Lowest Band Edge / 1RB



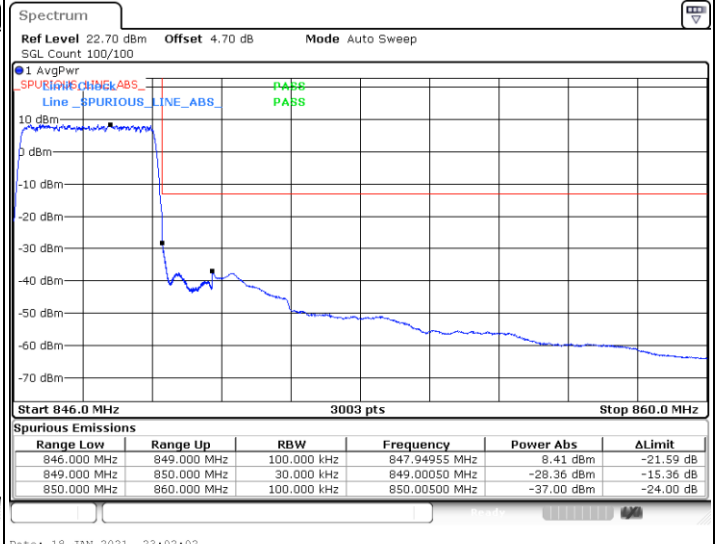
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



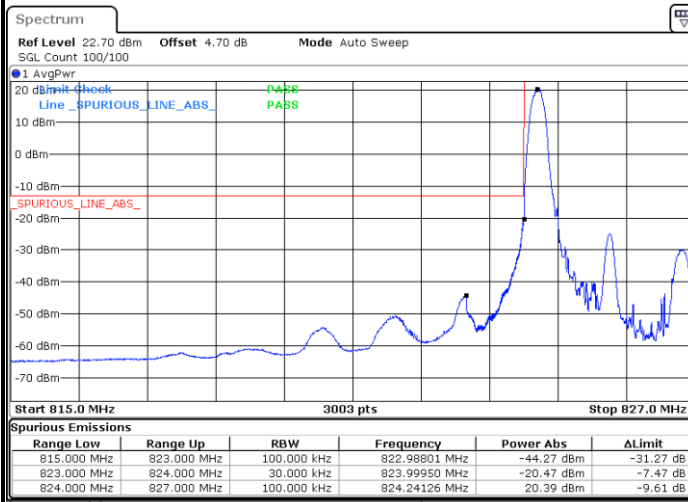
Highest Band Edge / Full RB



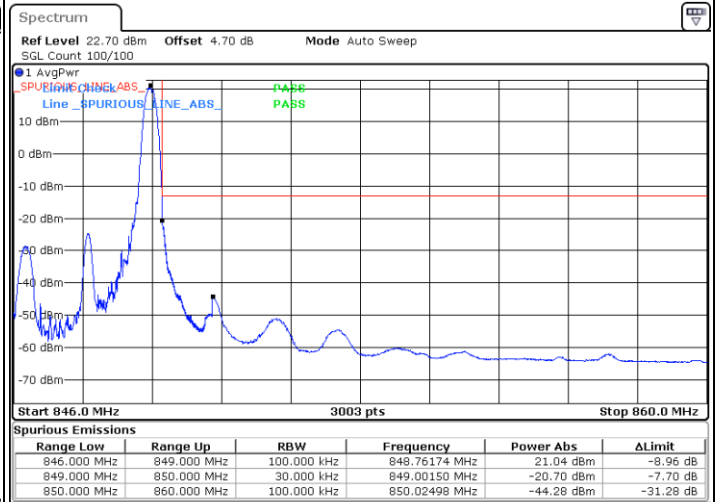


LTE Band 5 / 3MHz / 16QAM

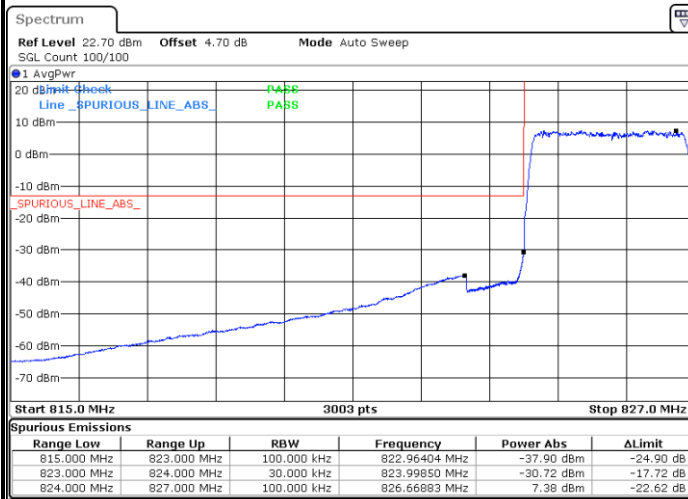
Lowest Band Edge / 1 RB



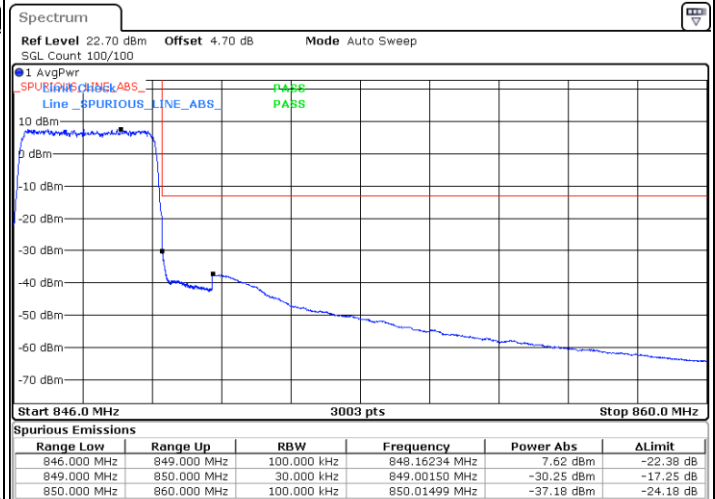
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



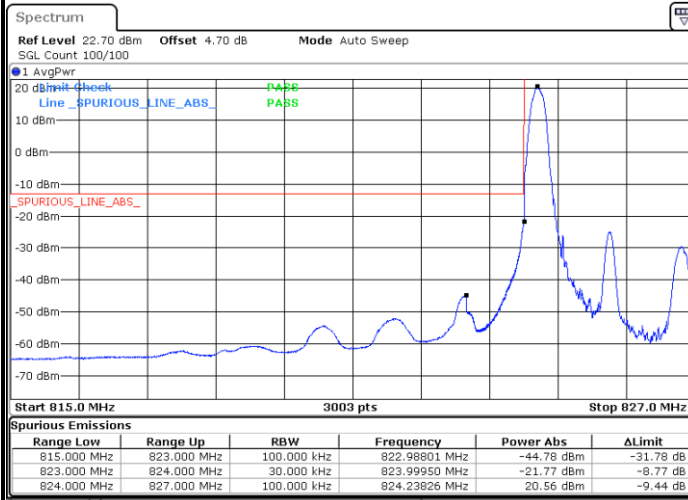
Highest Band Edge / Full RB



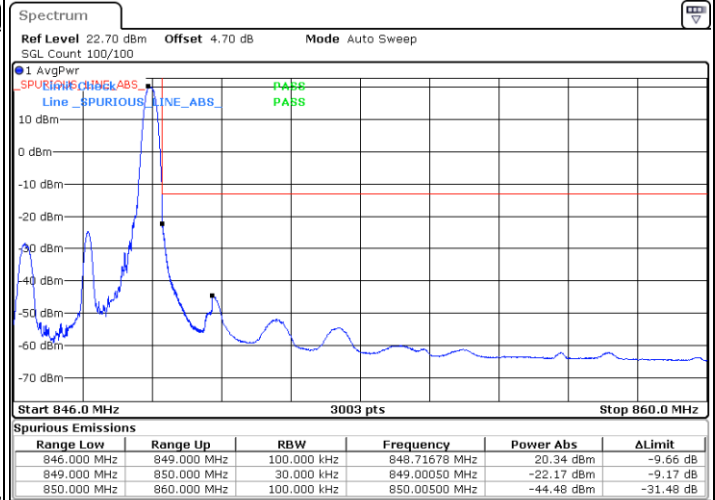


LTE Band 5 / 3MHz / 64QAM

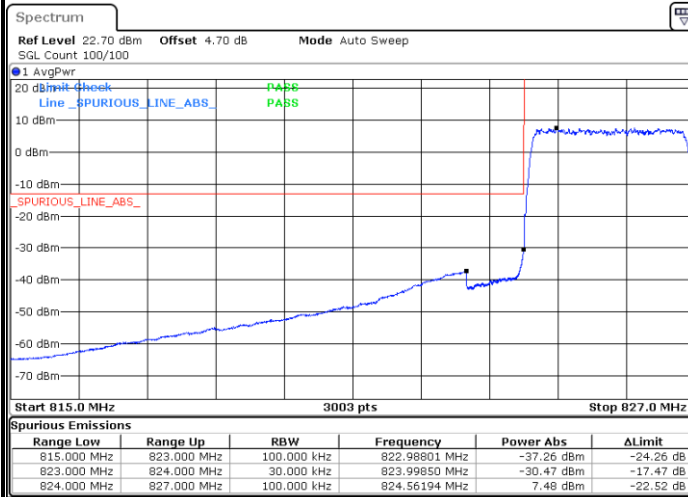
Lowest Band Edge / 1 RB



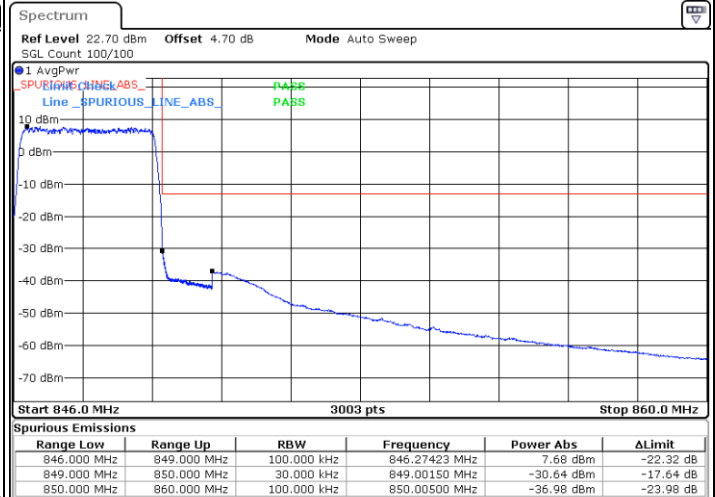
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



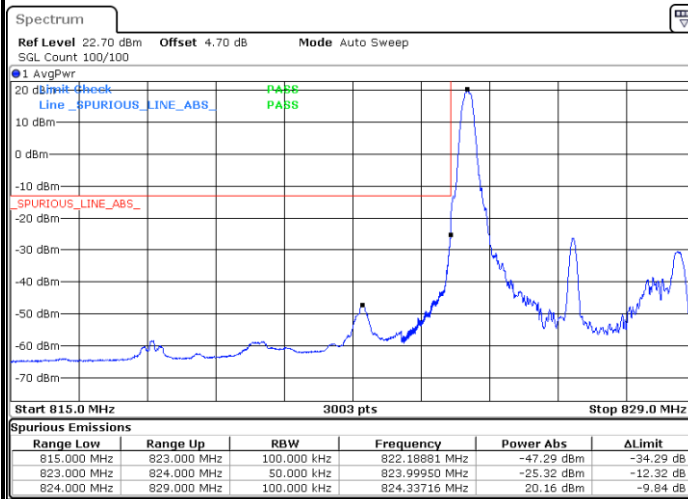
Highest Band Edge / Full RB



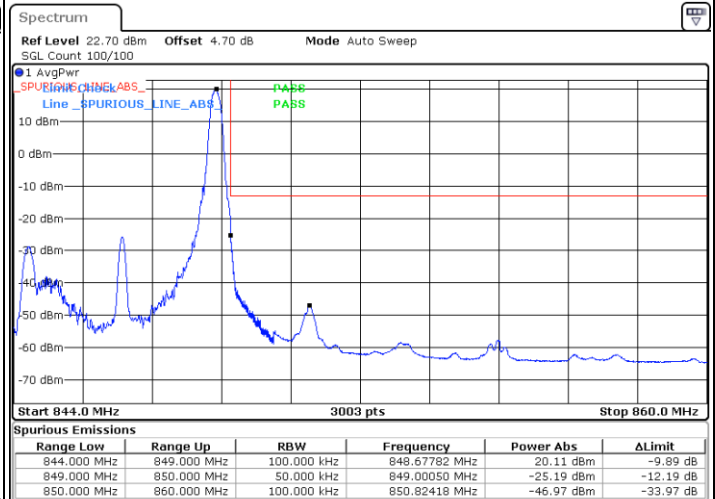


LTE Band 5 / 5MHz / QPSK

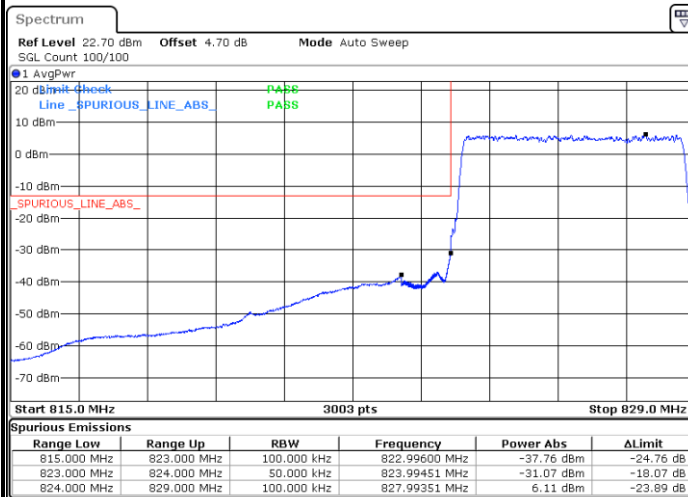
Lowest Band Edge / 1 RB



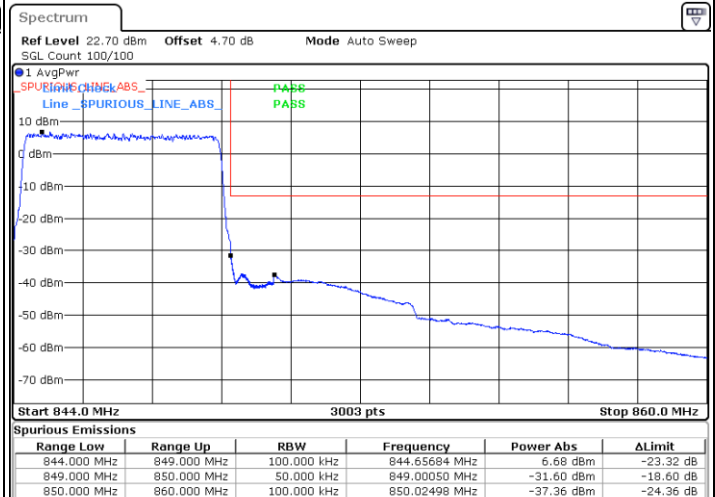
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



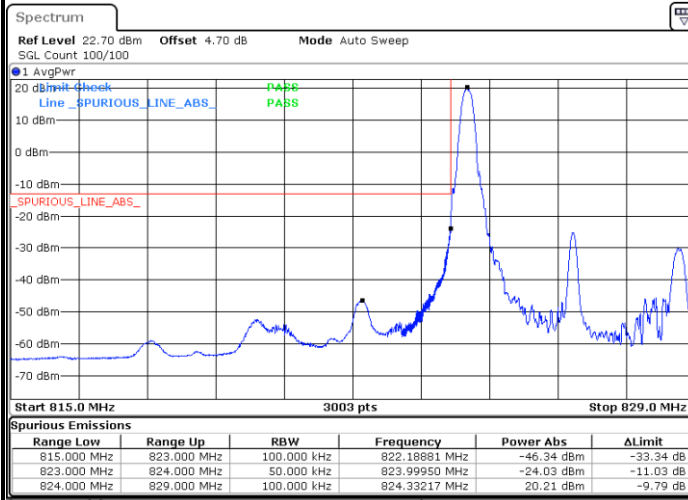
Highest Band Edge / Full RB



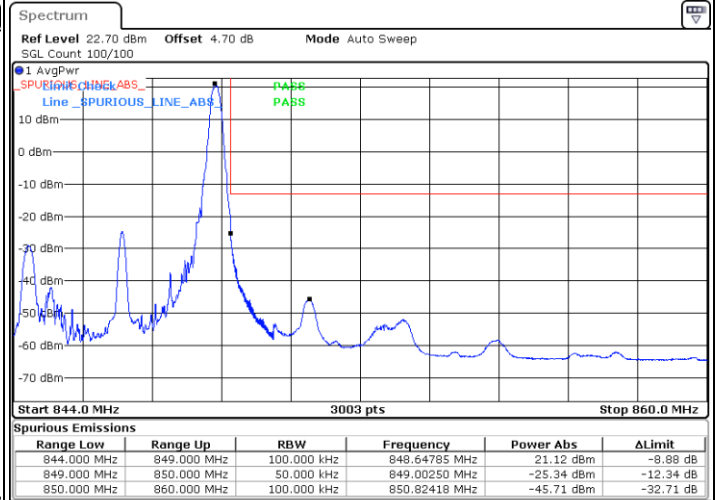


LTE Band 5 / 5MHz / 16QAM

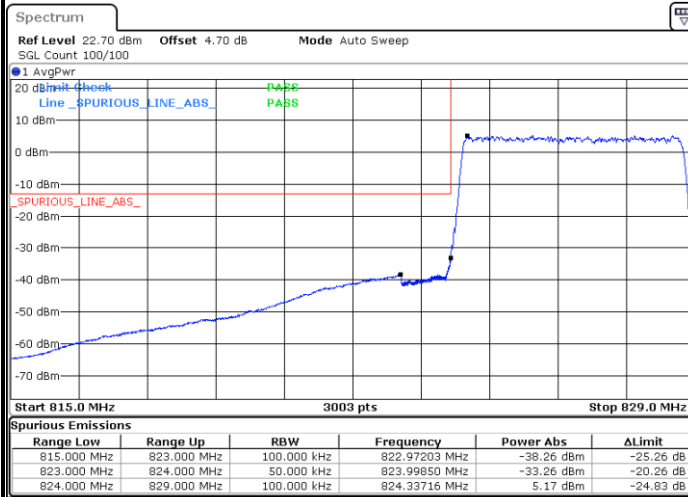
Lowest Band Edge / 1RB



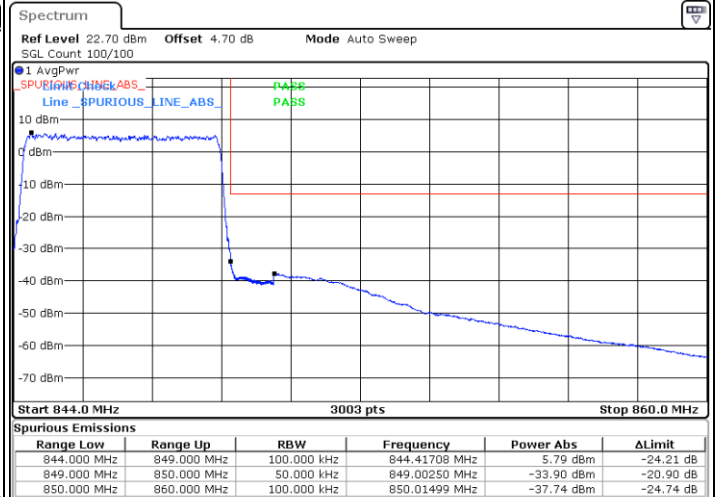
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



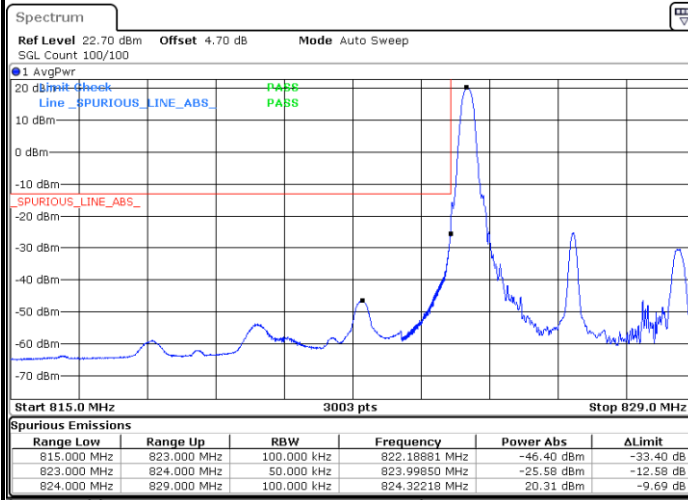
Highest Band Edge / Full RB



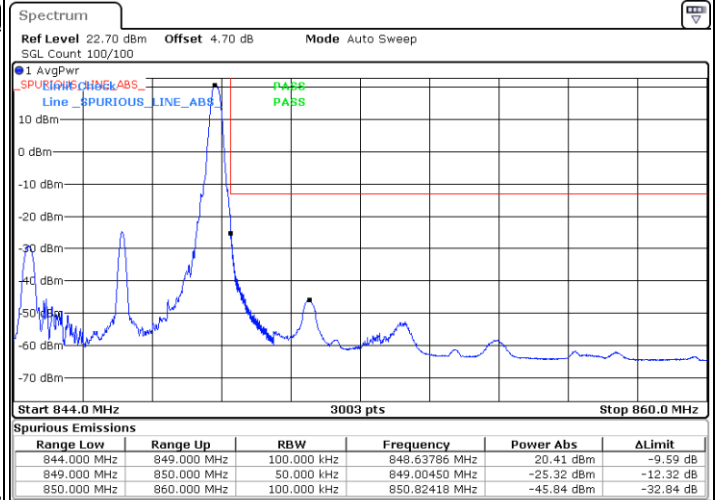


LTE Band 5 / 5MHz / 64QAM

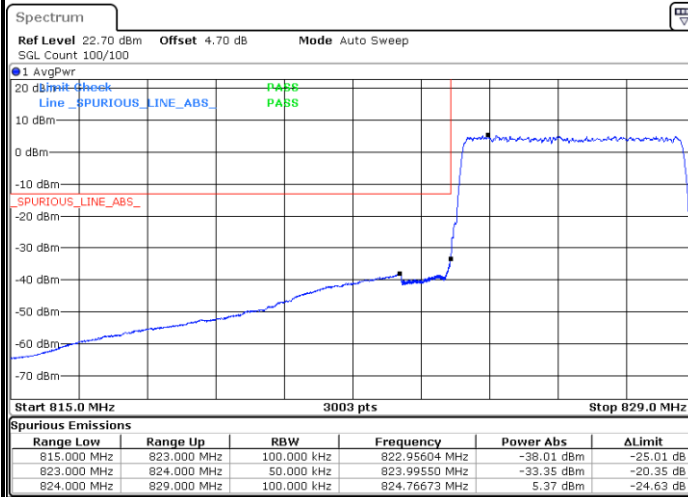
Lowest Band Edge / 1RB



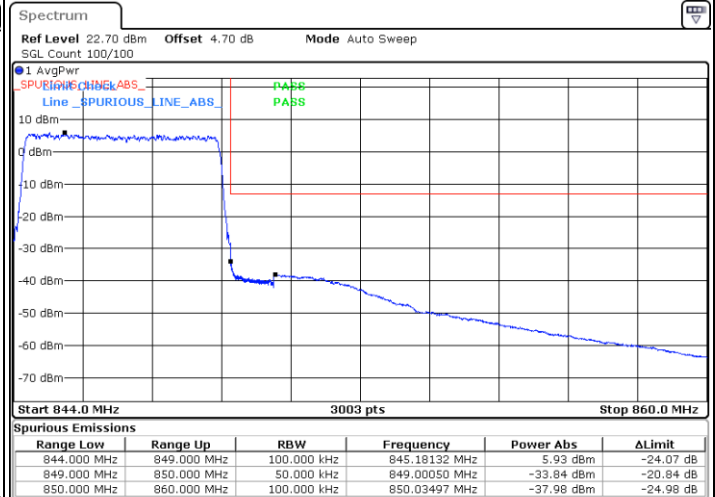
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



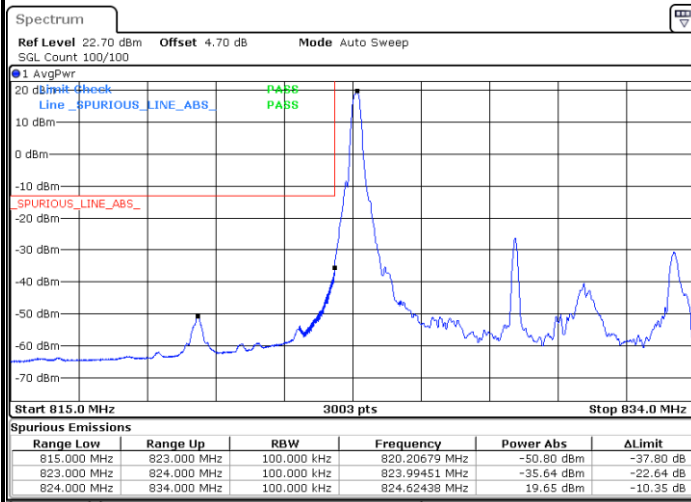
Highest Band Edge / Full RB



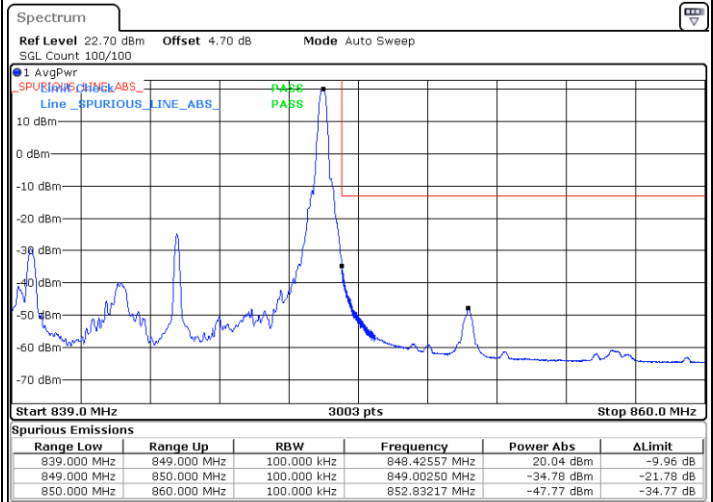


LTE Band 5 / 10MHz / QPSK

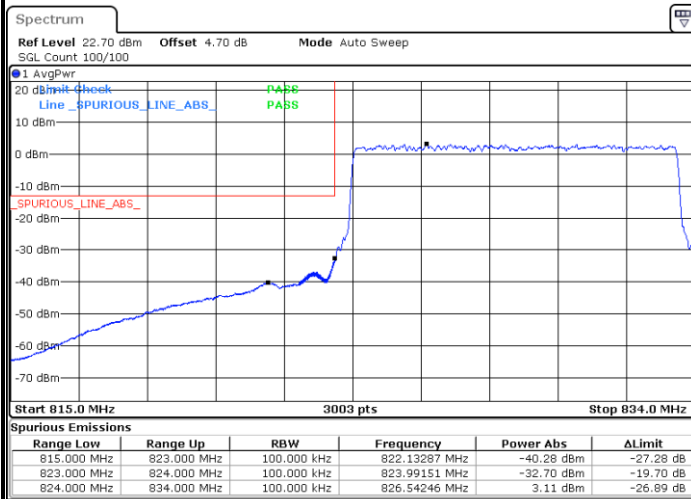
Lowest Band Edge / 1 RB



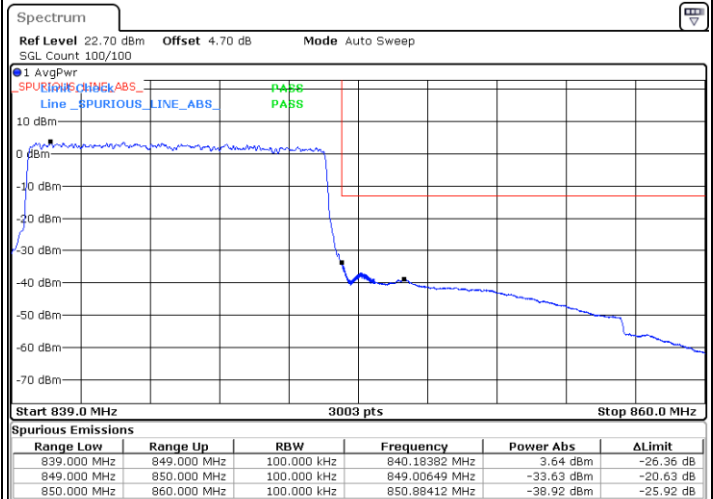
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



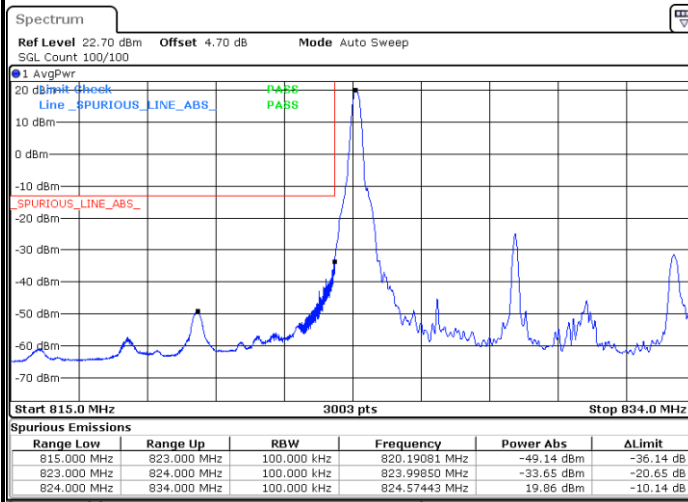
Highest Band Edge / Full RB



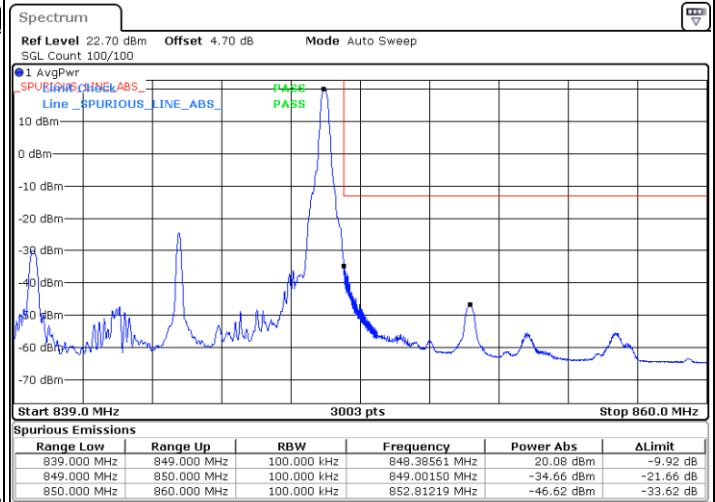


LTE Band 5 / 10MHz / 16QAM

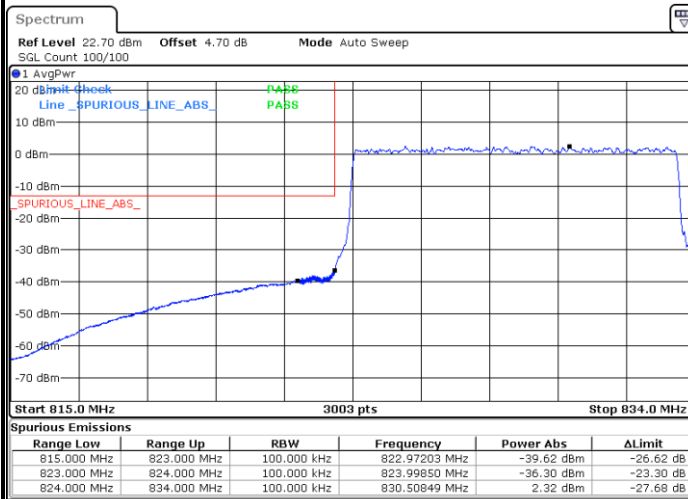
Lowest Band Edge / 1 RB



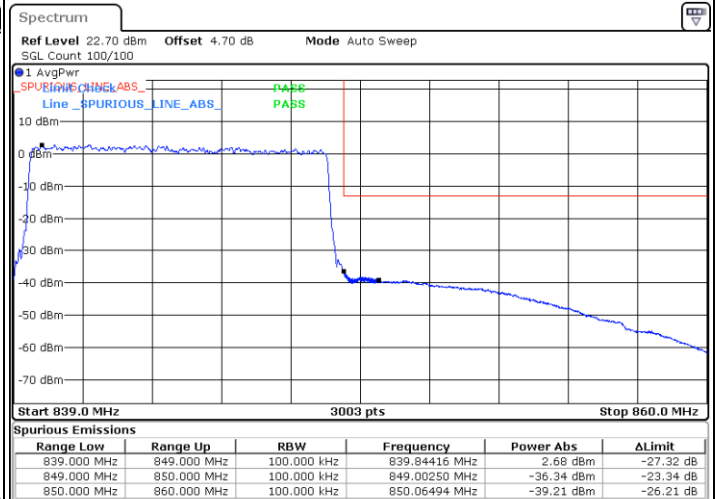
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



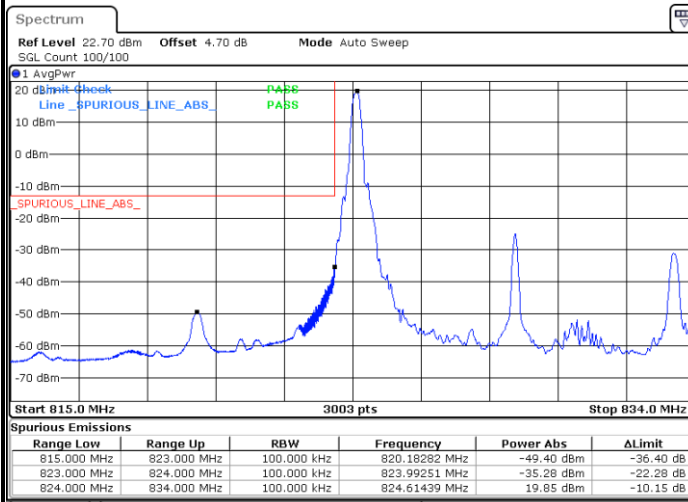
Highest Band Edge / Full RB



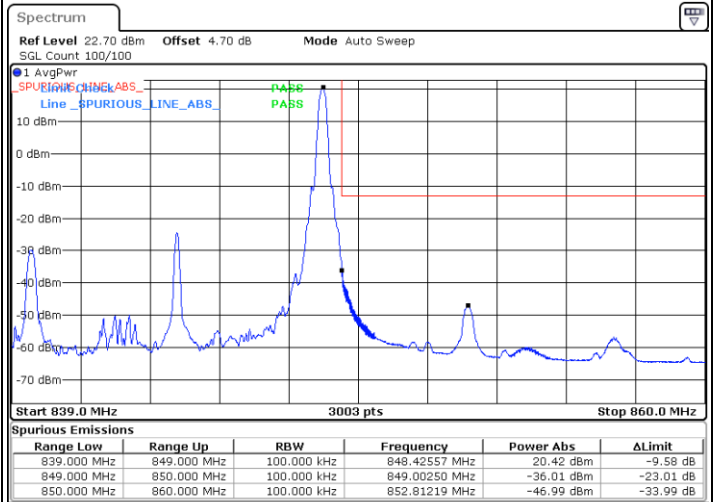


LTE Band 5 / 10MHz / 64QAM

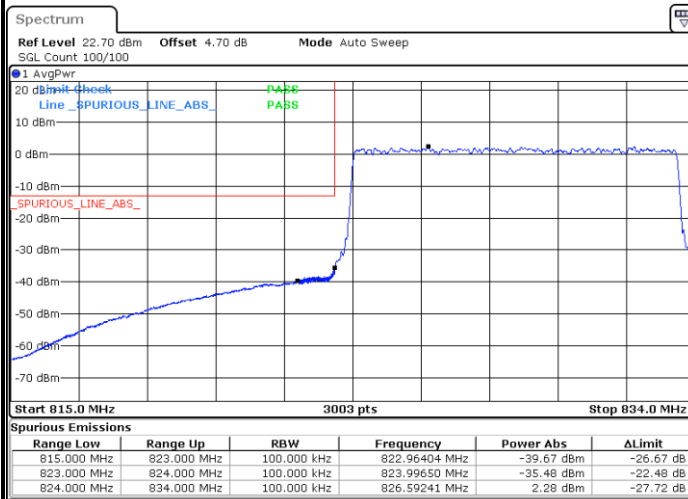
Lowest Band Edge / 1 RB



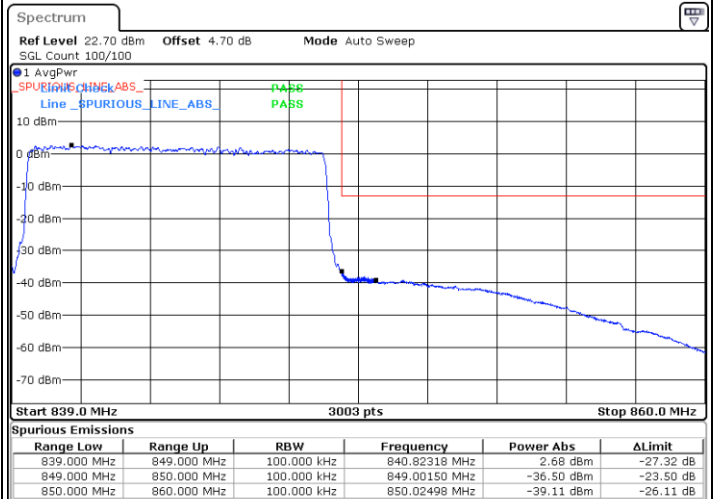
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

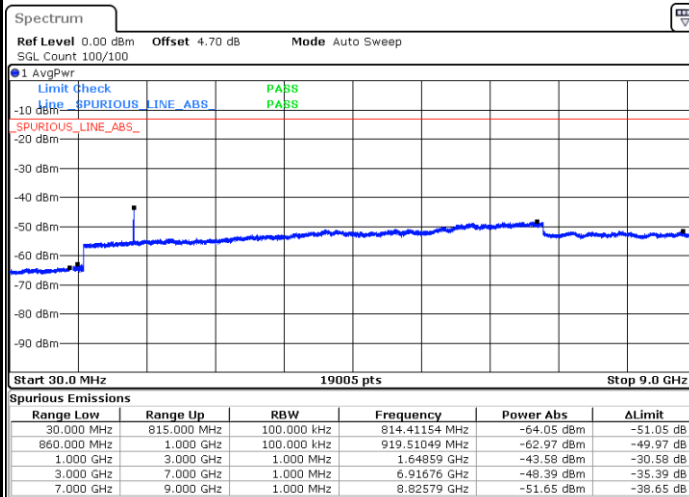




Conducted Spurious Emission

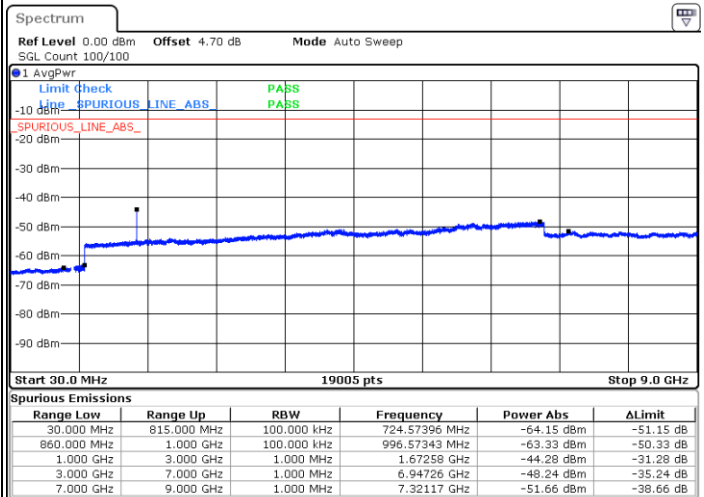
LTE Band 5 / 1.4MHz

Lowest Channel / QPSK



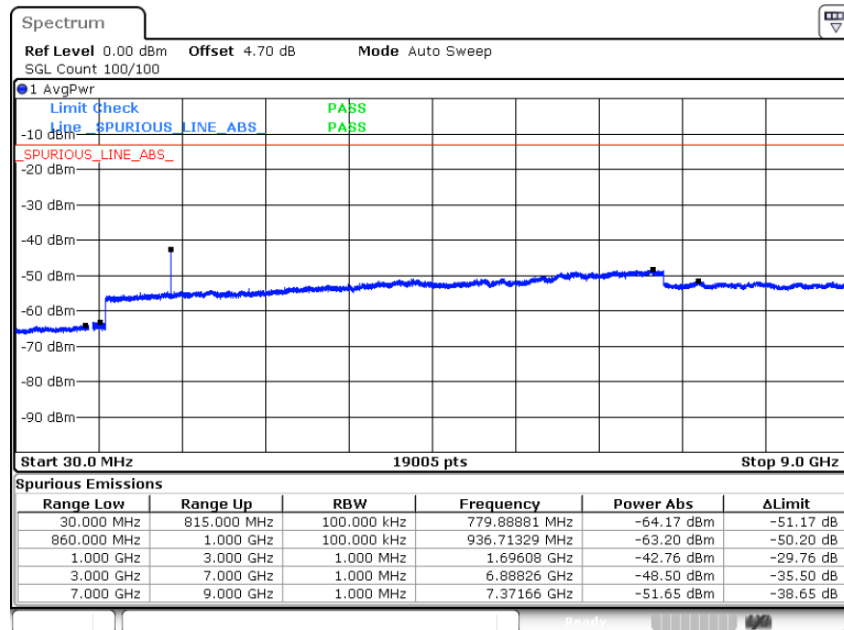
Date: 19.JAN.2021 00:04:26

Middle Channel / QPSK



Date: 19.JAN.2021 00:05:33

Highest Channel / QPSK

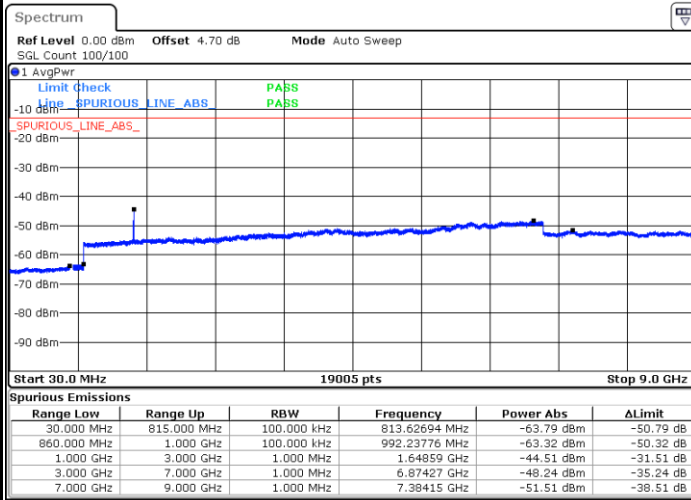


Date: 19.JAN.2021 00:06:03



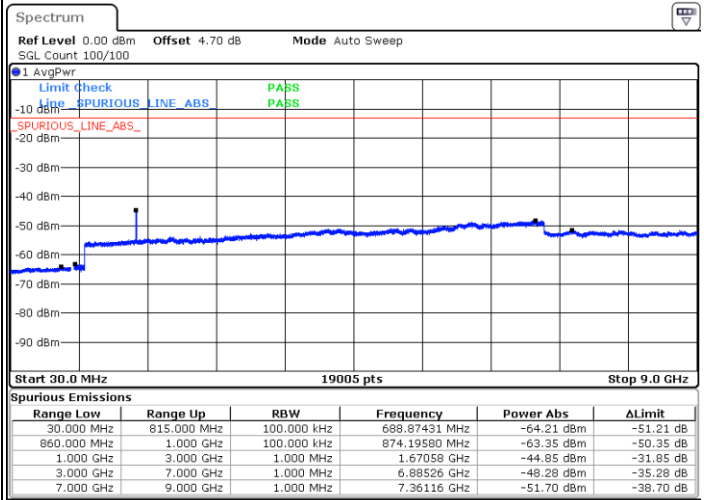
LTE Band 5 / 3MHz

Lowest Channel / QPSK



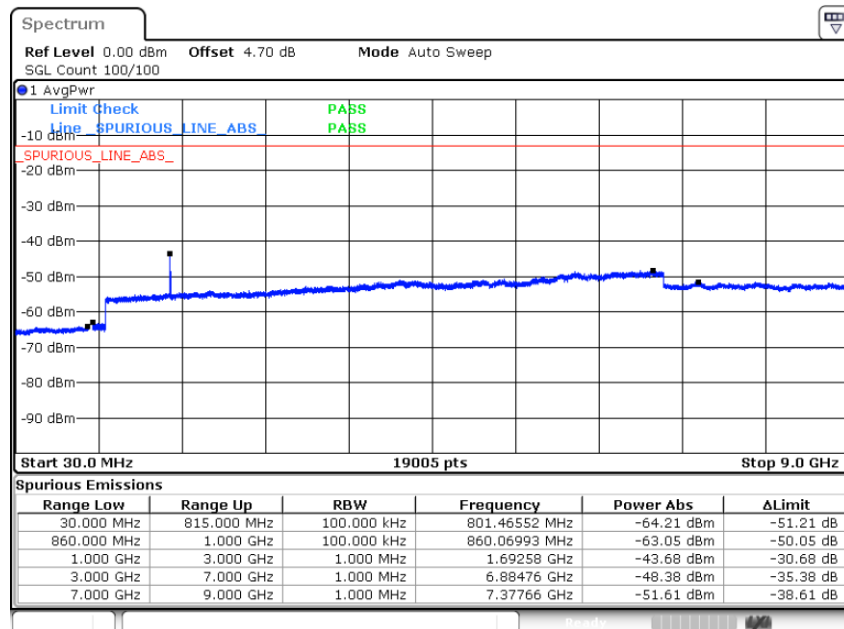
Date: 19.JAN.2021 00:06:32

Middle Channel / QPSK



Date: 19.JAN.2021 00:06:58

Highest Channel / QPSK

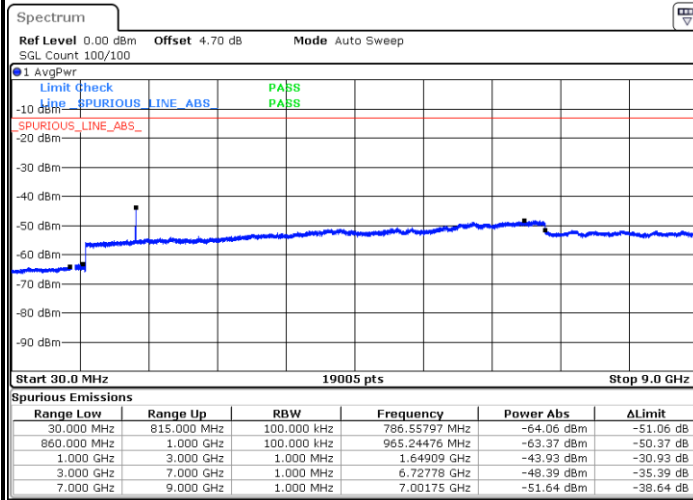


Date: 19.JAN.2021 00:07:26



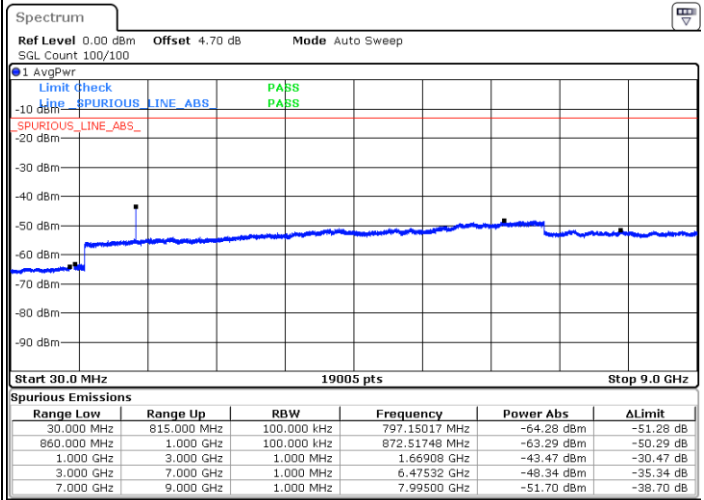
LTE Band 5 / 5MHz

Lowest Channel / QPSK



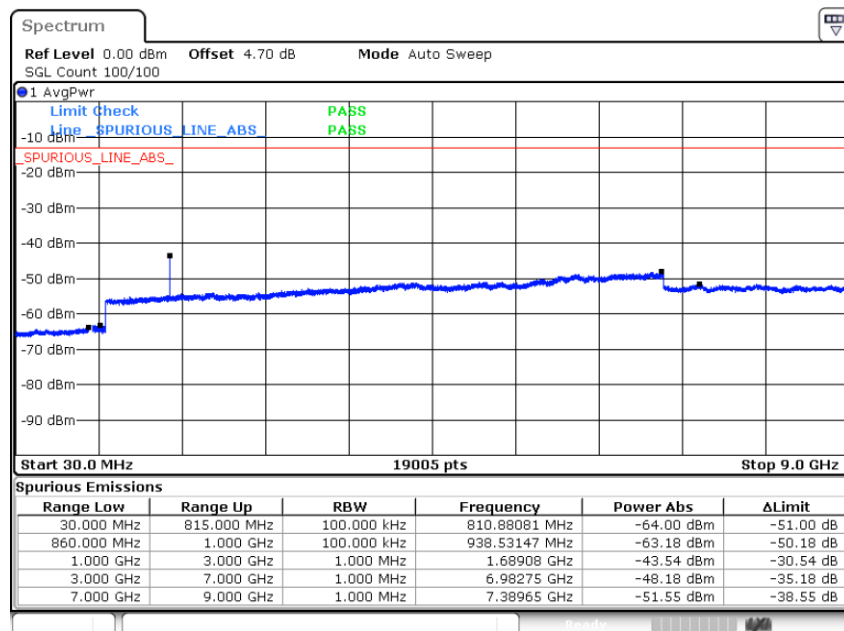
Date: 19.JAN.2021 00:07:57

Middle Channel / QPSK



Date: 19.JAN.2021 00:08:25

Highest Channel / QPSK

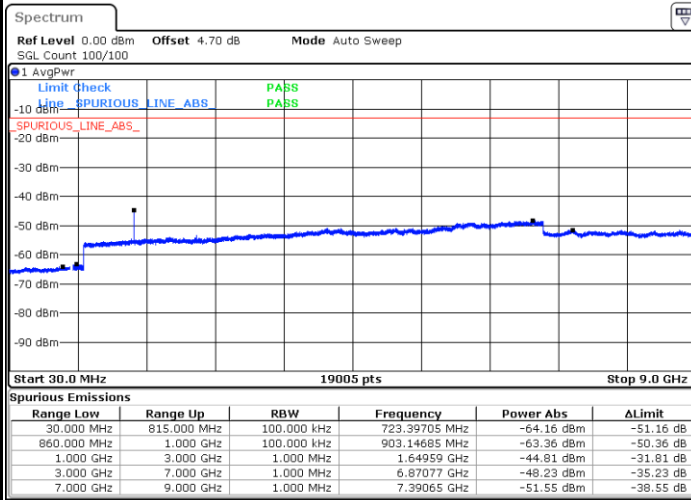


Date: 19.JAN.2021 00:08:53



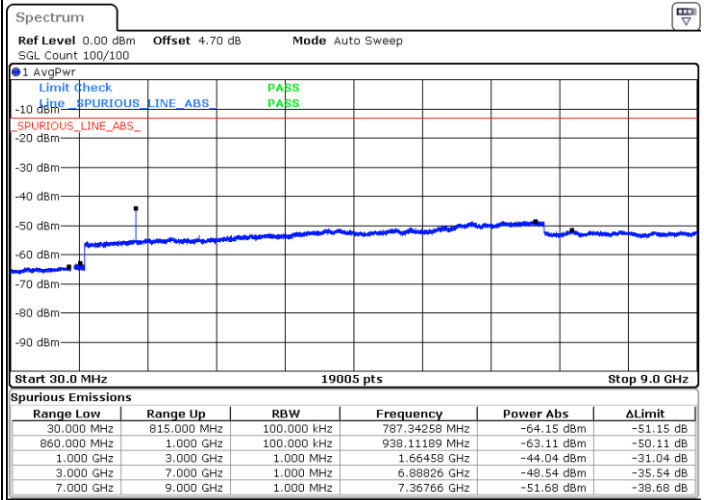
LTE Band 5 / 10MHz

Lowest Channel / QPSK



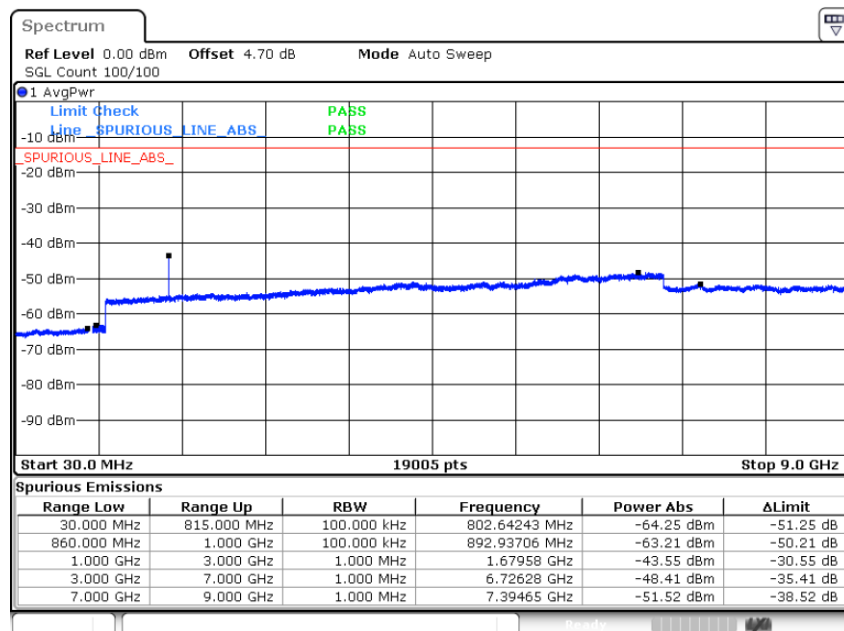
Date: 19.JAN.2021 00:10:32

Middle Channel / QPSK



Date: 19.JAN.2021 00:11:06

Highest Channel / QPSK



Date: 19.JAN.2021 00:11:41

**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	0.0010	PASS
40	Normal Voltage	0.0043	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0056	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0010	
20	Battery End Point	0.0062	

Note: Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.



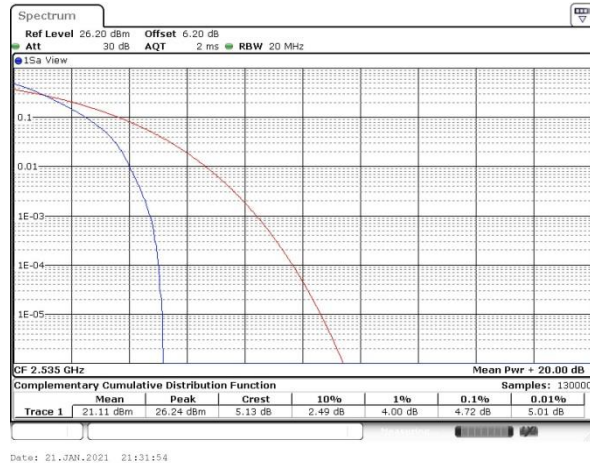
LTE Band 7

Peak-to-Average Ratio

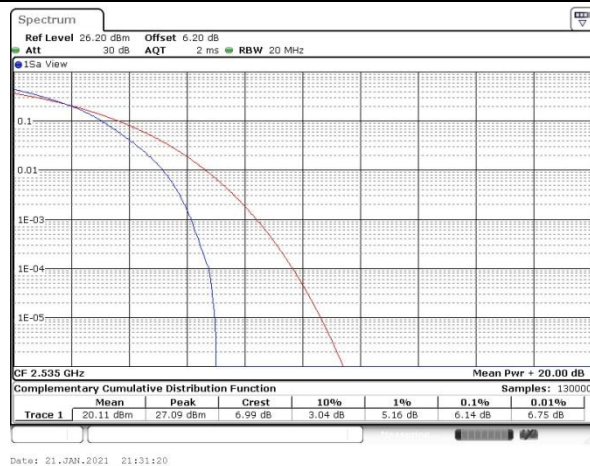
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.72	6.14	6.64	PASS

LTE Band 7 / 20MHz

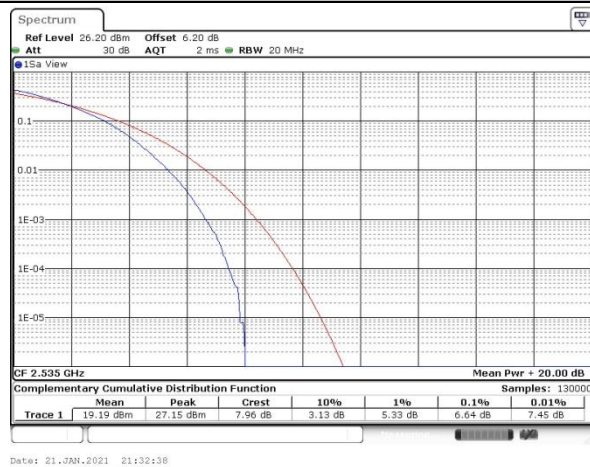
Middle Channel / Full RB/ QPSK



Middle Channel / Full RB/ 16QAM

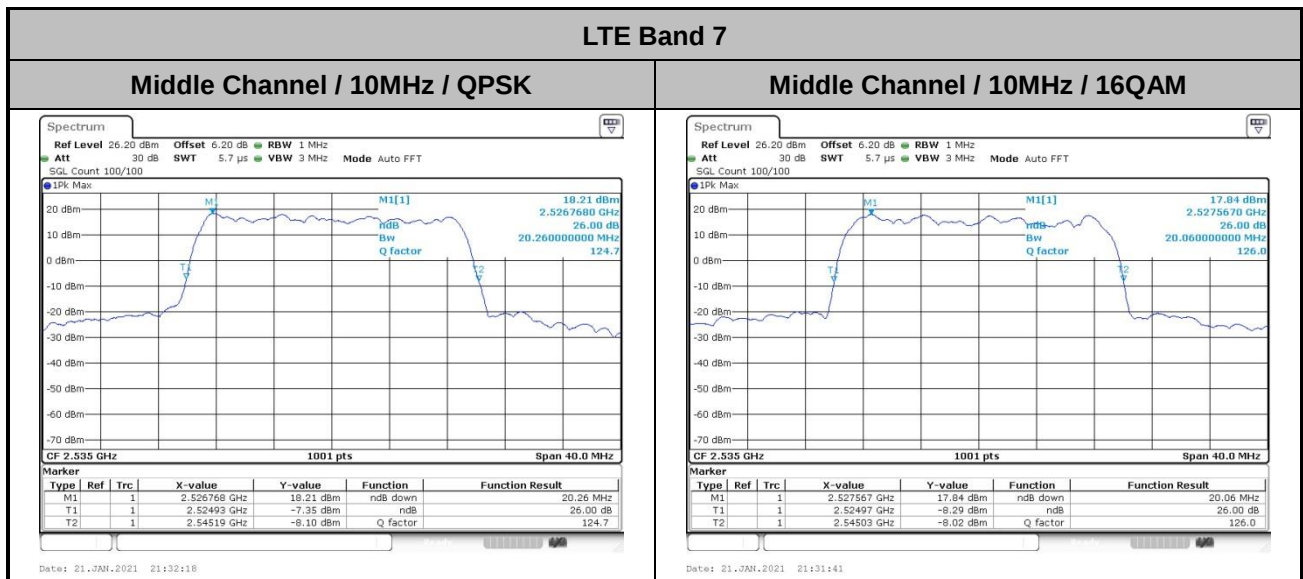


Middle Channel / Full RB/ 64QAM



**26dB Bandwidth**

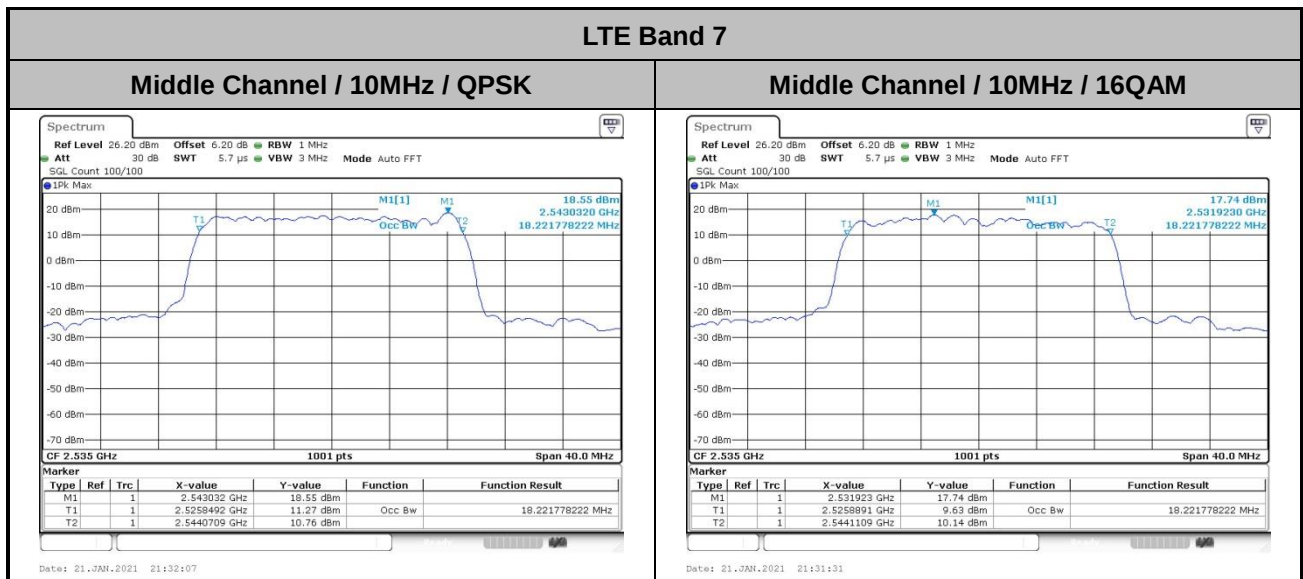
Mode	LTE Band 7 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	20.26	20.06





Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.22	18.22

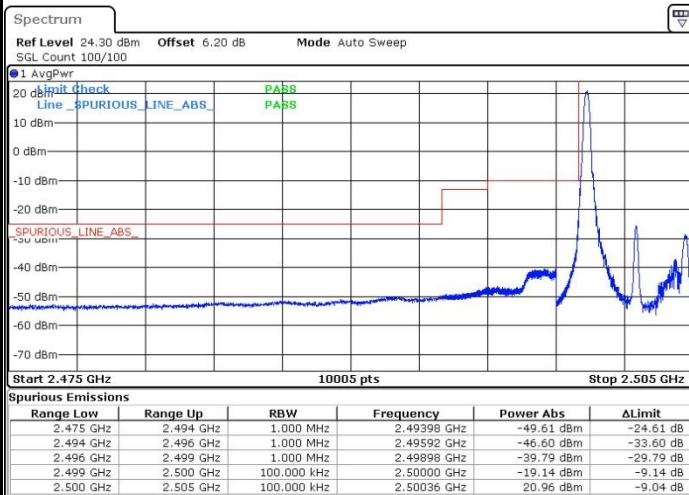




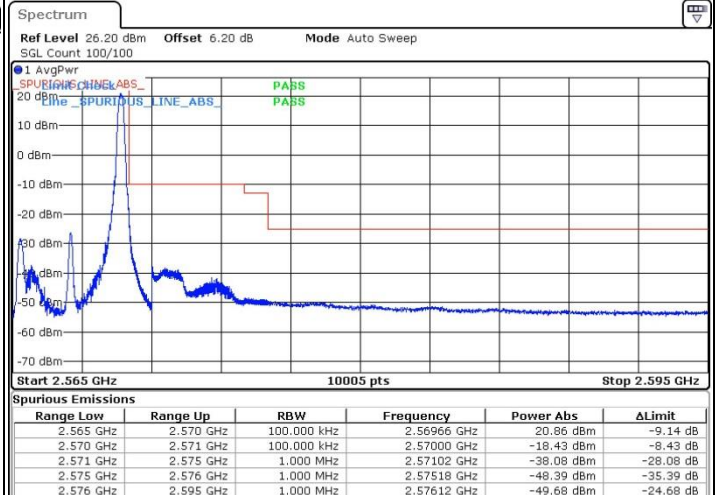
Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

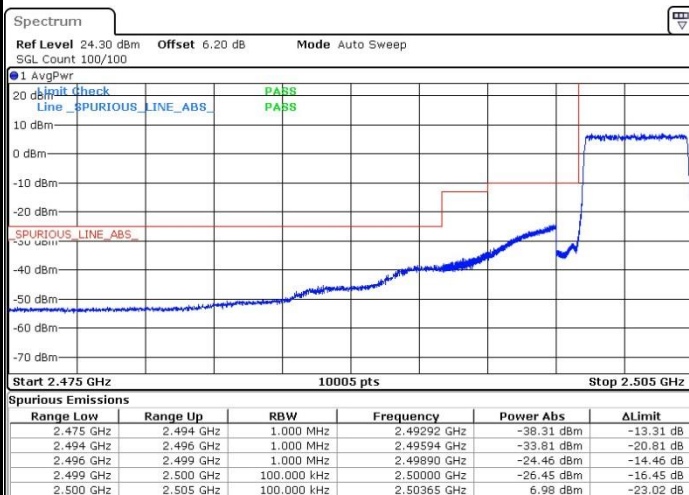
Lowest Band Edge / 1RB



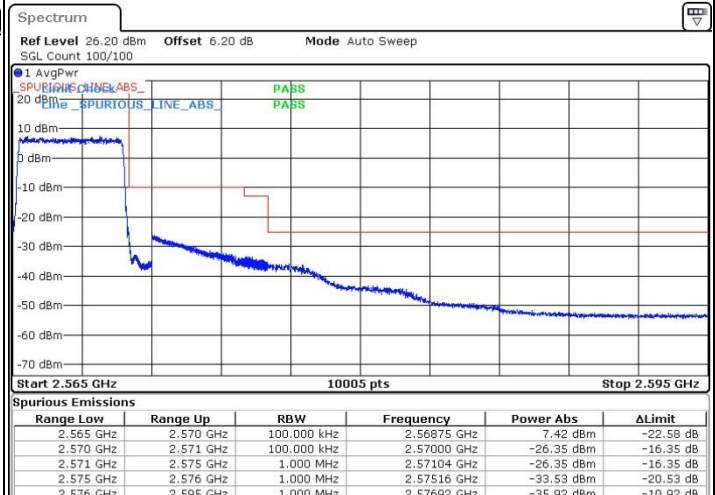
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



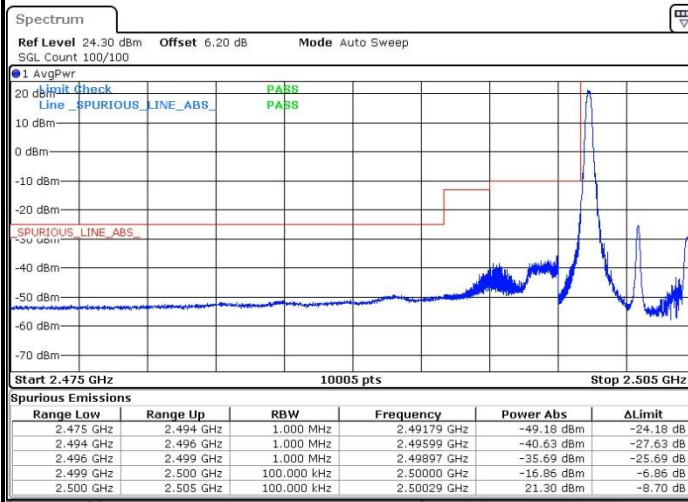
Highest Band Edge / Full RB



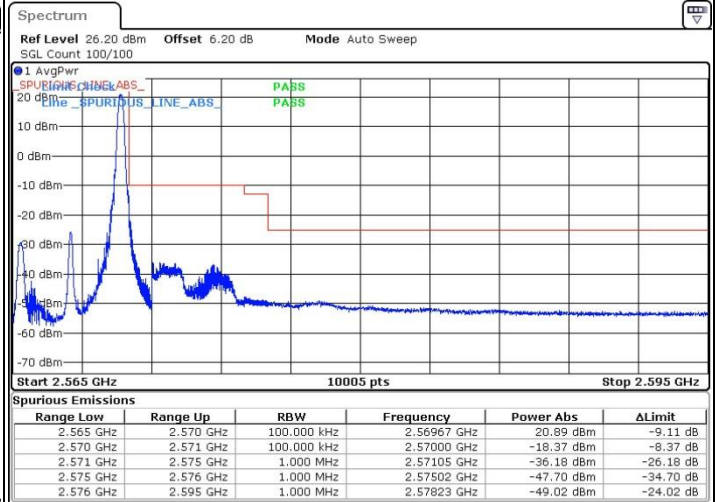


LTE Band 7 / 5MHz / 16QAM

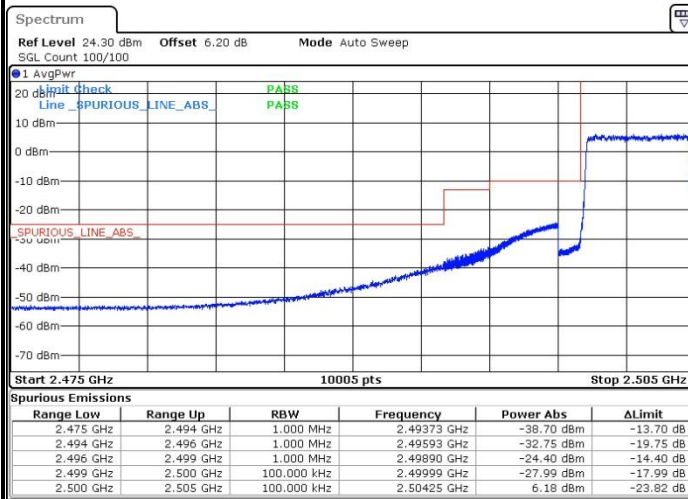
Lowest Band Edge / 1 RB



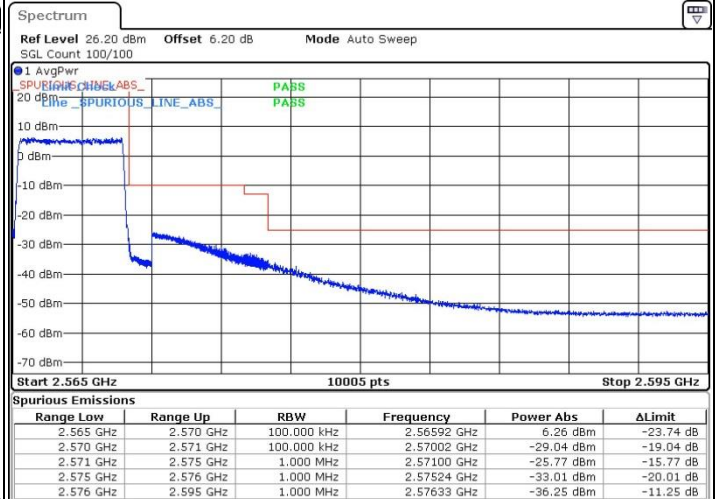
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



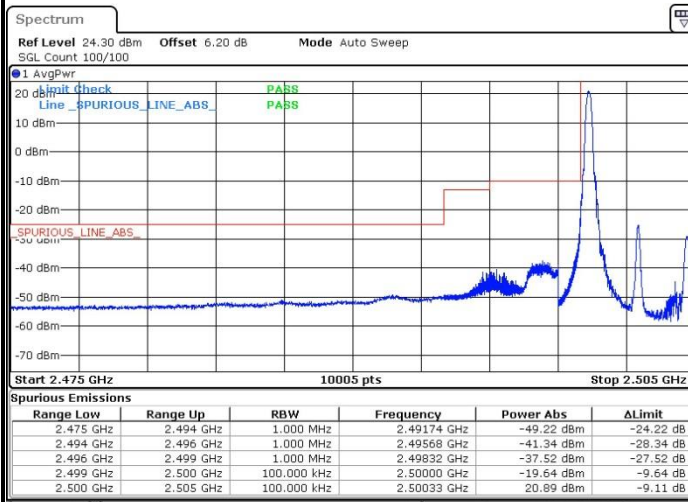
Highest Band Edge / Full RB



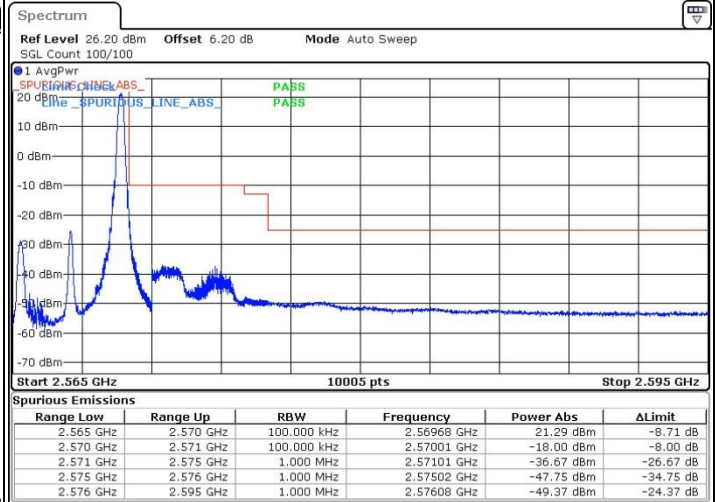


LTE Band 7 / 5MHz / 64QAM

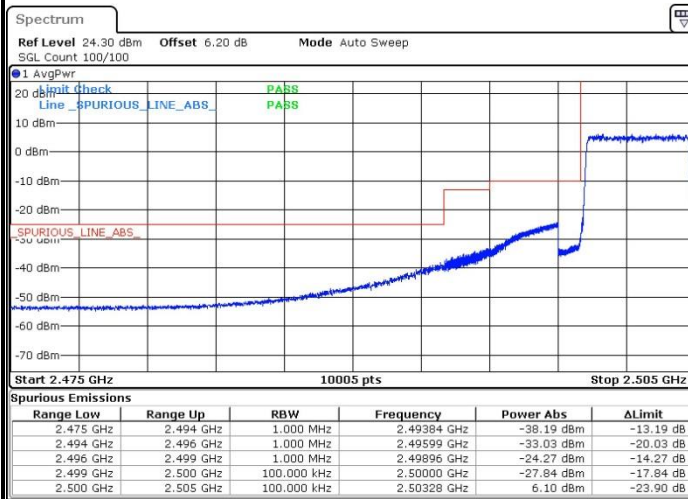
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

