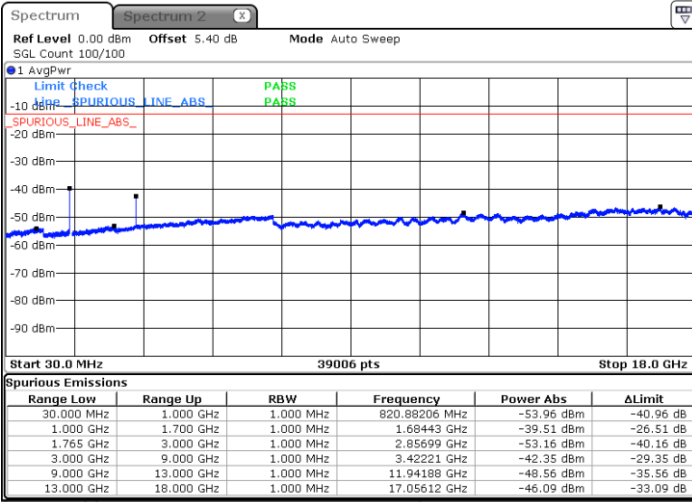




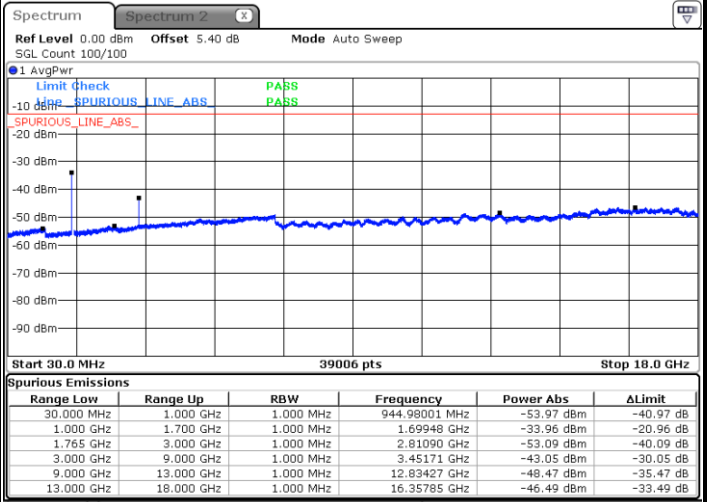
LTE Band 4 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

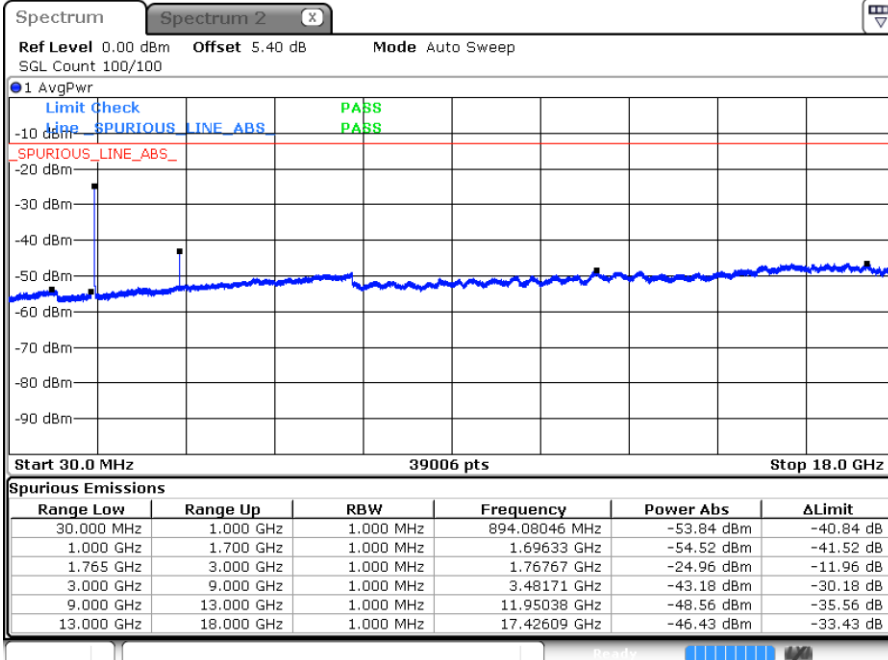


Date: 18 JAN 2022 03:51:05



Date: 18 JAN 2022 04:01:43

Highest Channel / QPSK



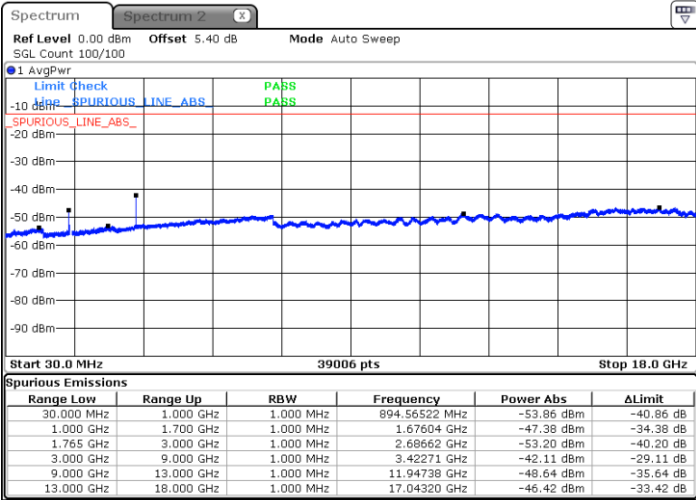
Date: 18 JAN 2022 04:03:15



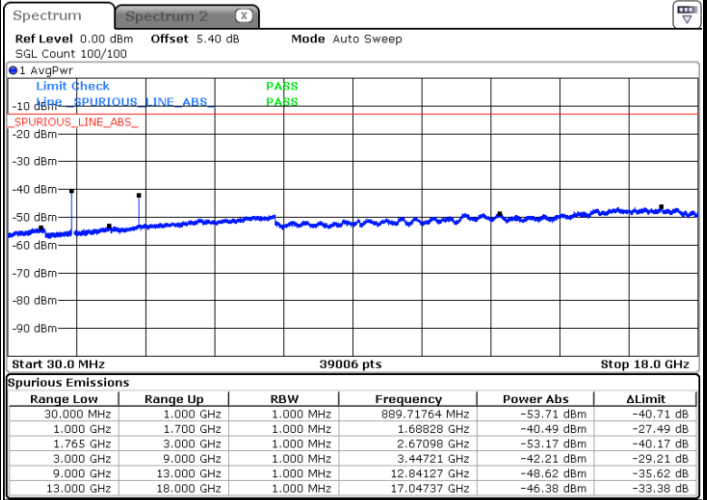
LTE Band 4 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

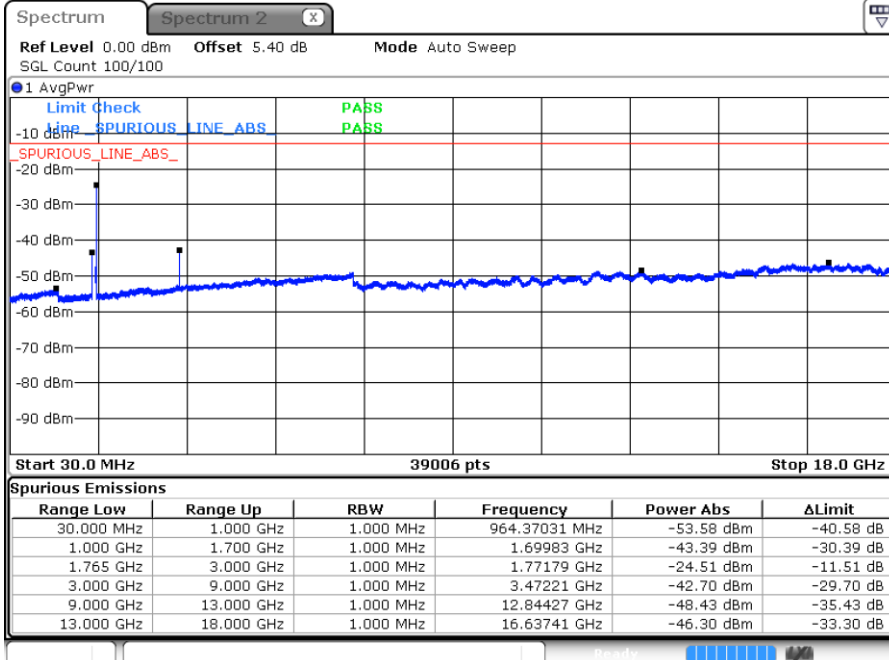


Date: 18 JAN 2022 04:13:57



Date: 18 JAN 2022 04:24:35

Highest Channel / QPSK



Date: 18 JAN 2022 04:26:06



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0024	
20	Battery End Point	0.0013	

Note:

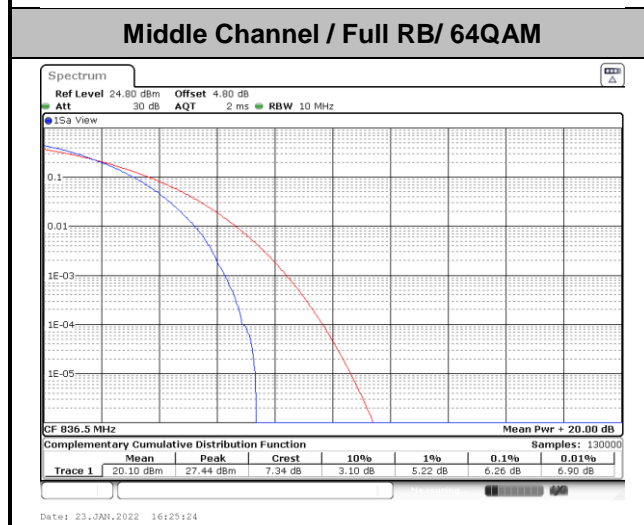
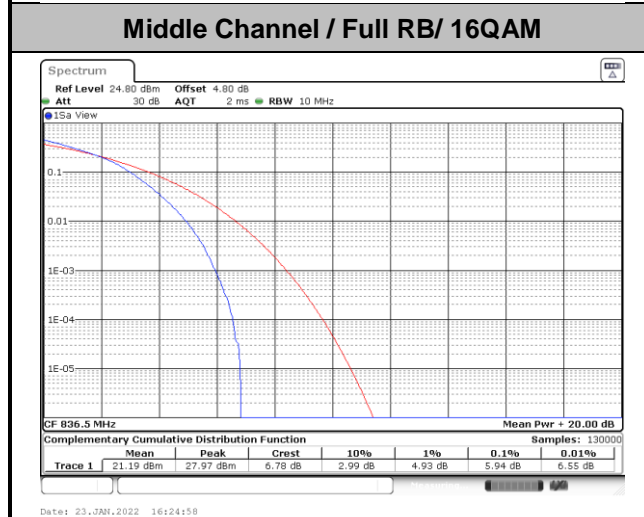
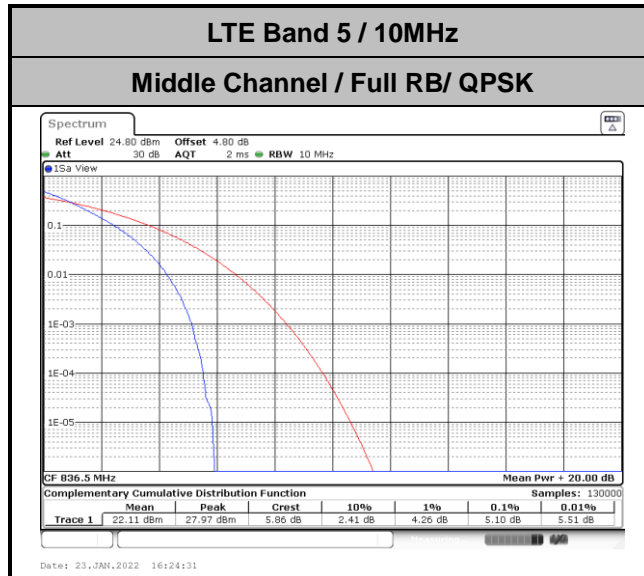
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

Peak-to-Average Ratio

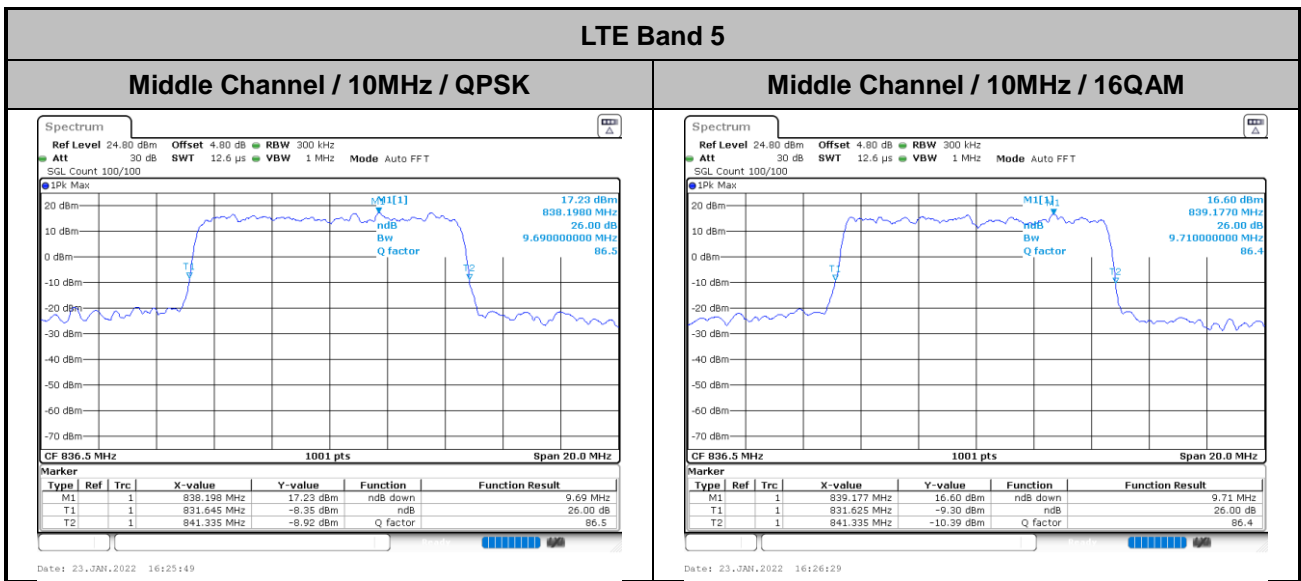
Mode	LTE Band 5 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.10	5.94	6.26	PASS





26dB Bandwidth

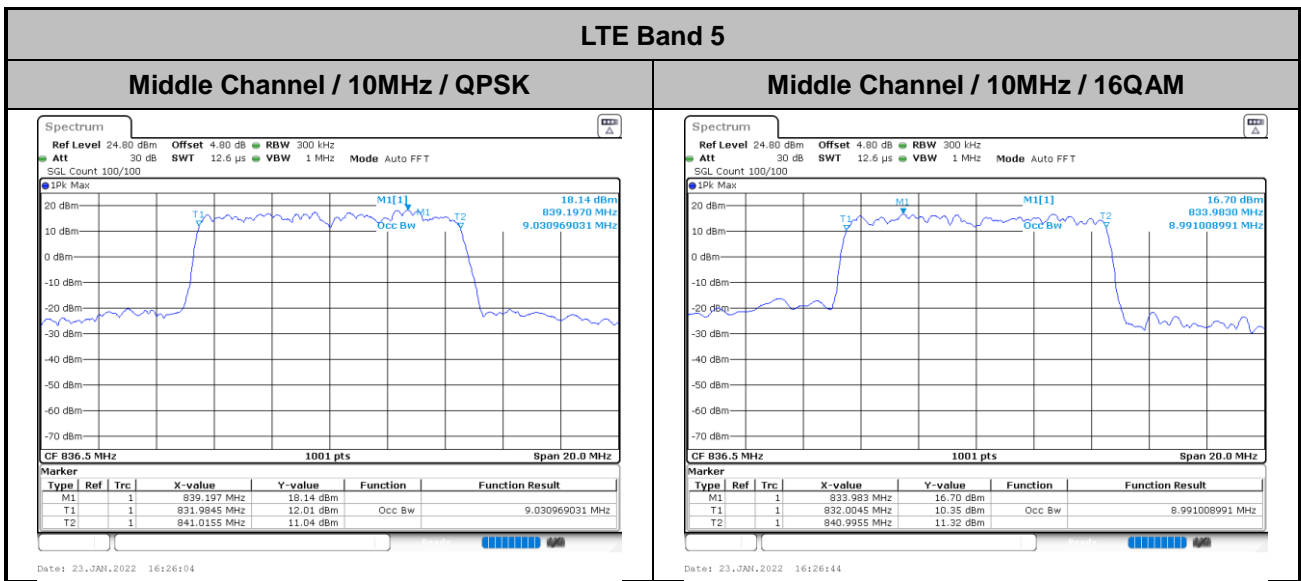
Mode	LTE Band 5 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.69	9.71





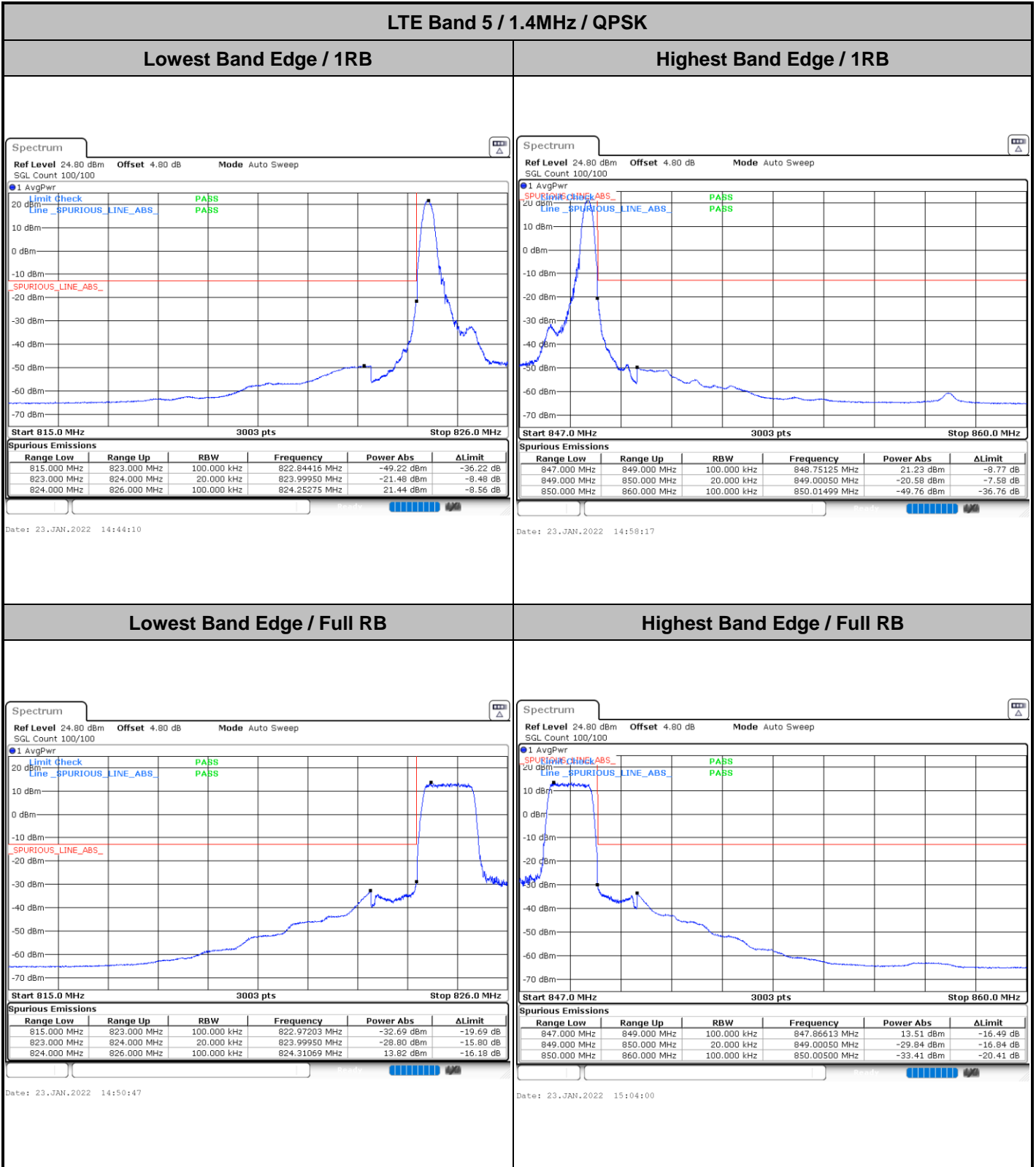
Occupied Bandwidth

Mode	LTE Band 5 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	8.99





Conducted Band Edge





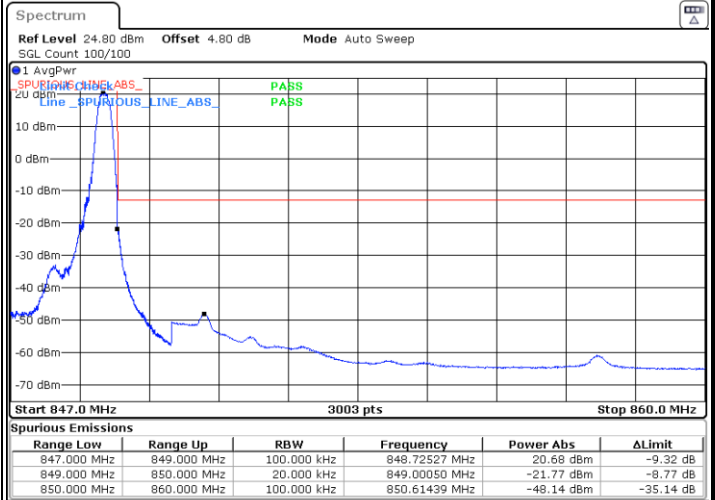
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



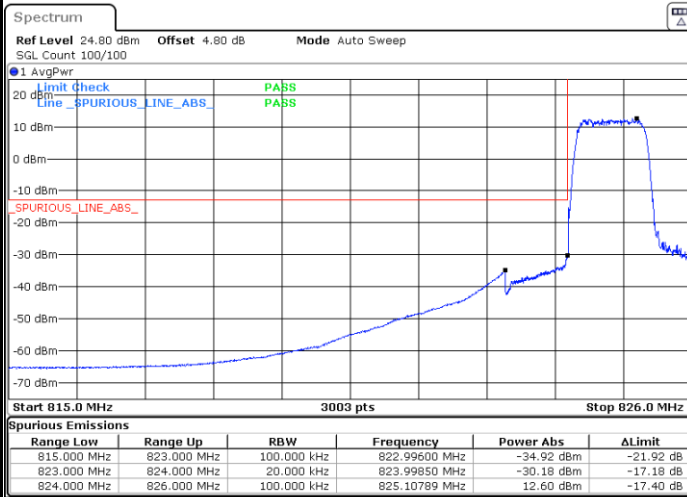
Date: 23.JAN.2022 14:46:59

Highest Band Edge / 1 RB



Date: 23.JAN.2022 15:00:11

Lowest Band Edge / Full RB



Date: 23.JAN.2022 14:52:42

Highest Band Edge / Full RB

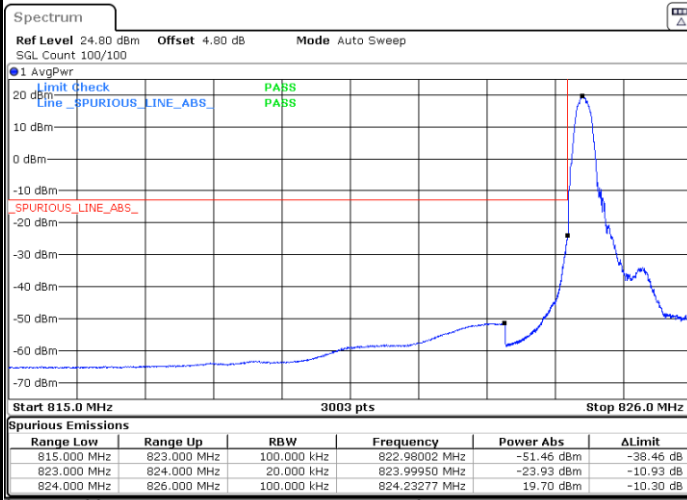


Date: 23.JAN.2022 15:05:54



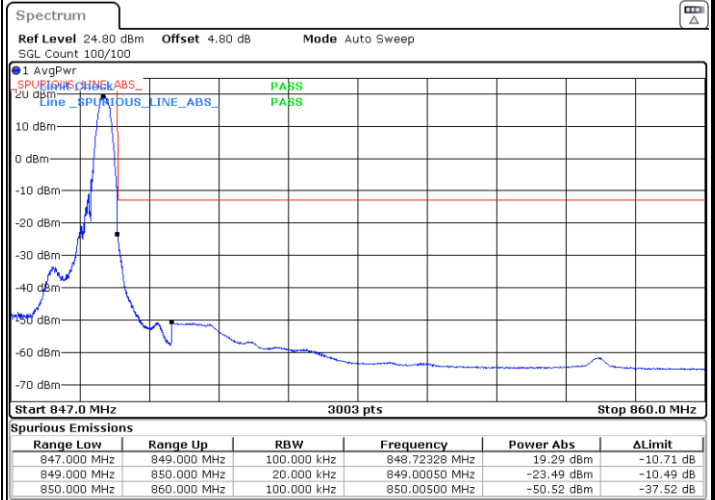
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



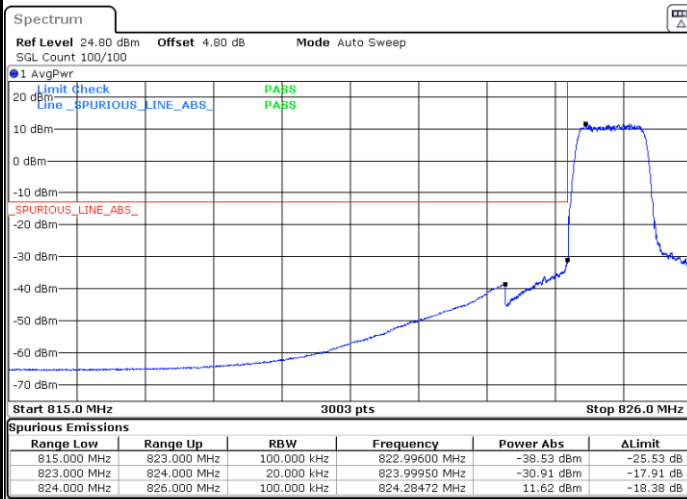
Date: 23.JAN.2022 14:48:53

Highest Band Edge / 1 RB



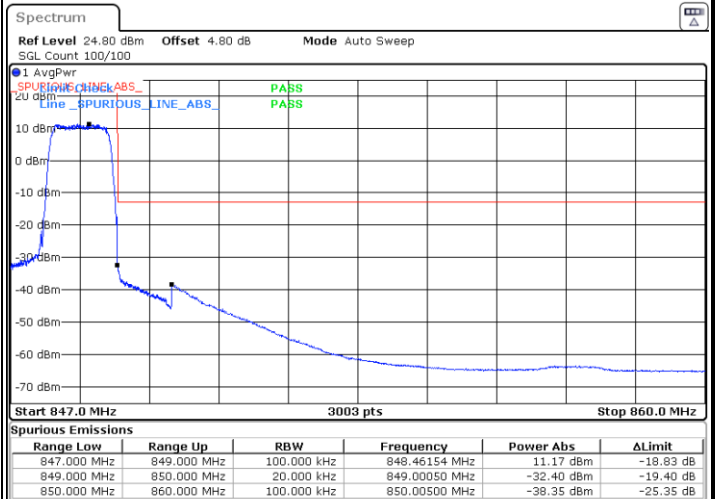
Date: 23.JAN.2022 15:02:05

Lowest Band Edge / Full RB



Date: 23.JAN.2022 14:54:36

Highest Band Edge / Full RB

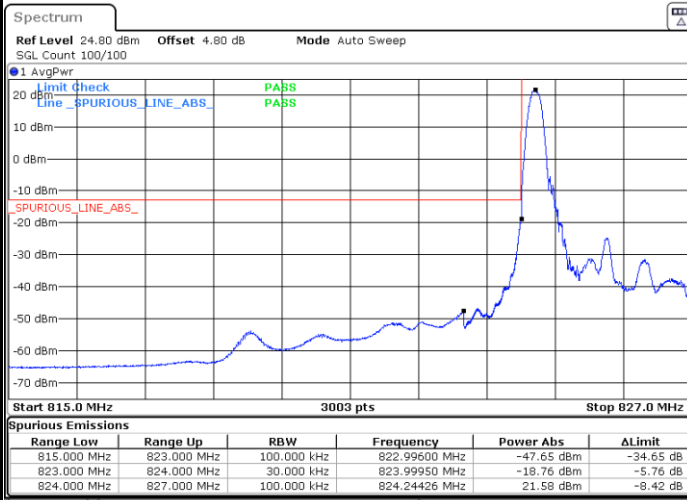


Date: 23.JAN.2022 15:07:48



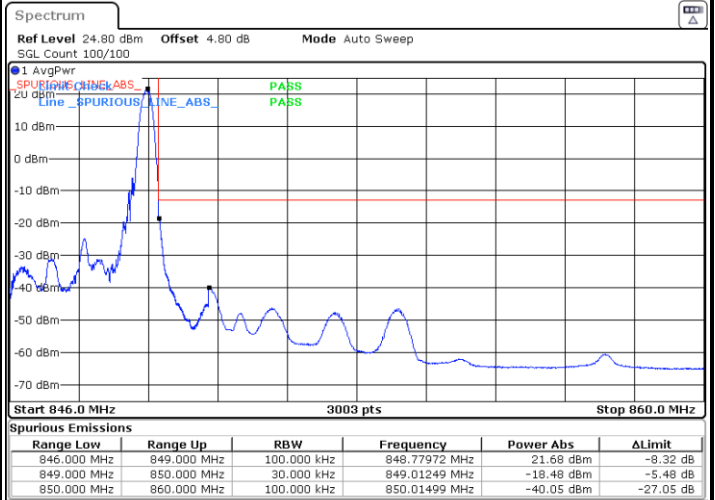
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



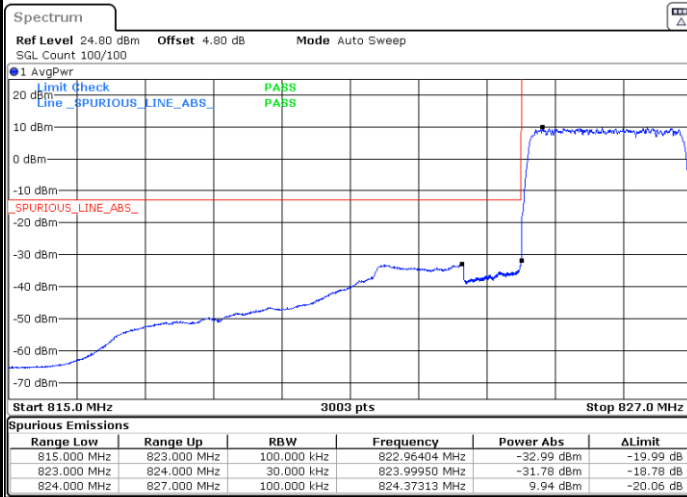
Date: 23.JAN.2022 15:10:26

Highest Band Edge / 1 RB



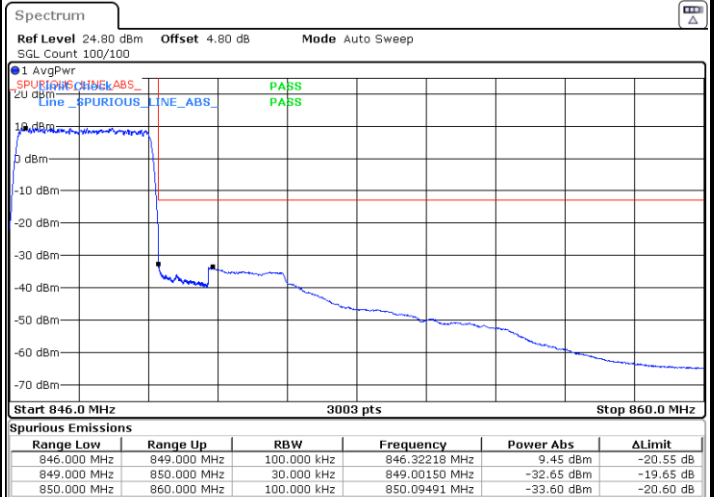
Date: 23.JAN.2022 15:23:36

Lowest Band Edge / Full RB



Date: 23.JAN.2022 15:16:08

Highest Band Edge / Full RB

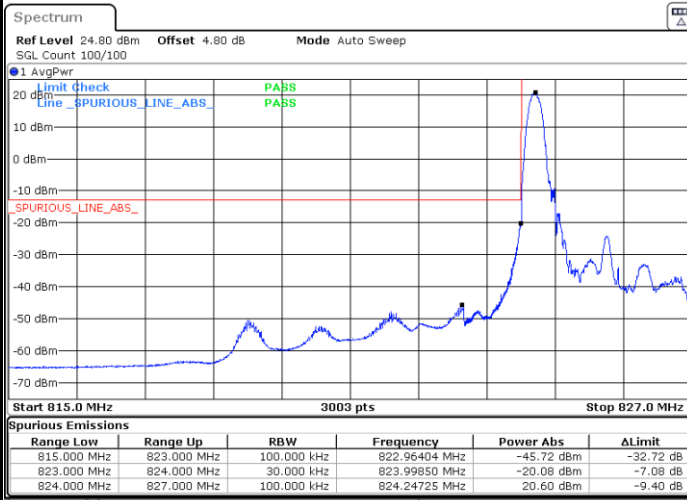


Date: 23.JAN.2022 15:29:18



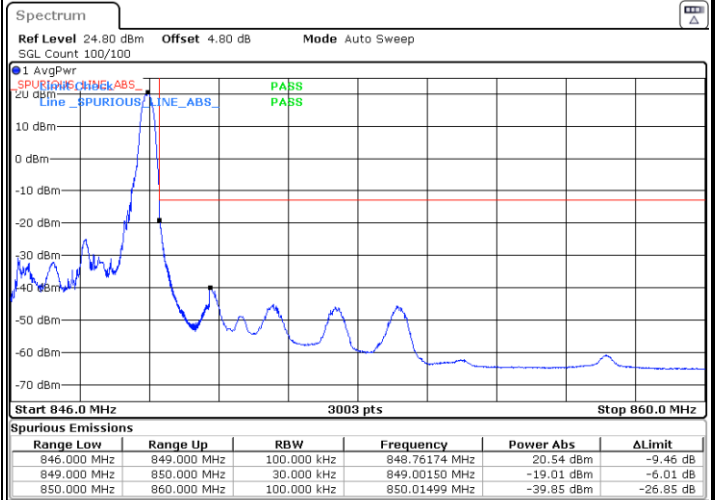
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



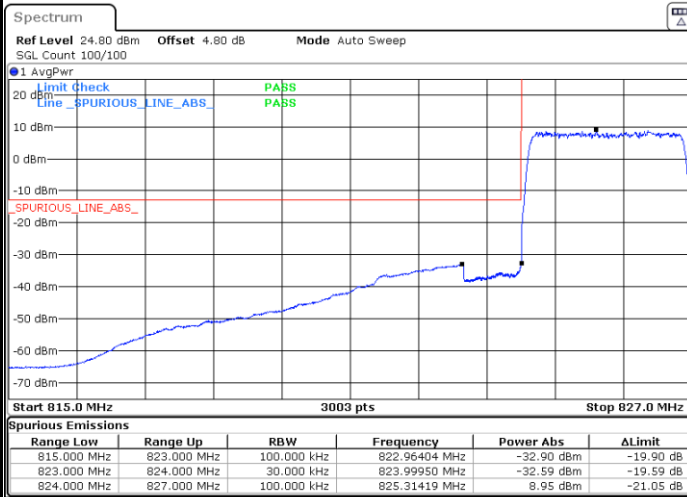
Date: 23.JAN.2022 15:12:20

Highest Band Edge / 1 RB



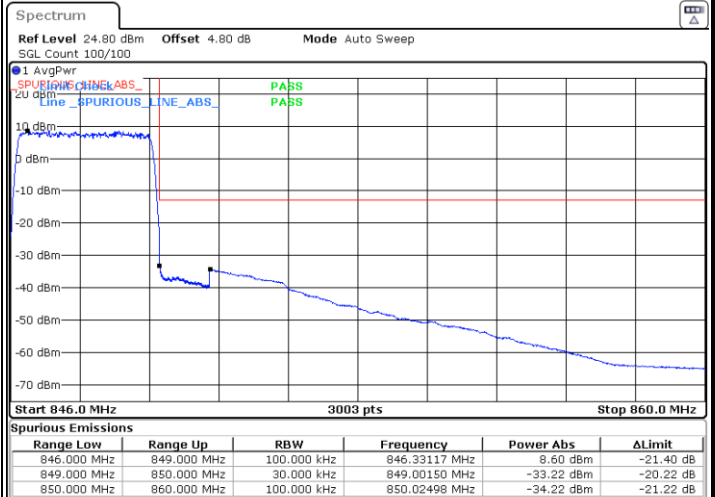
Date: 23.JAN.2022 15:25:30

Lowest Band Edge / Full RB



Date: 23.JAN.2022 15:18:02

Highest Band Edge / Full RB

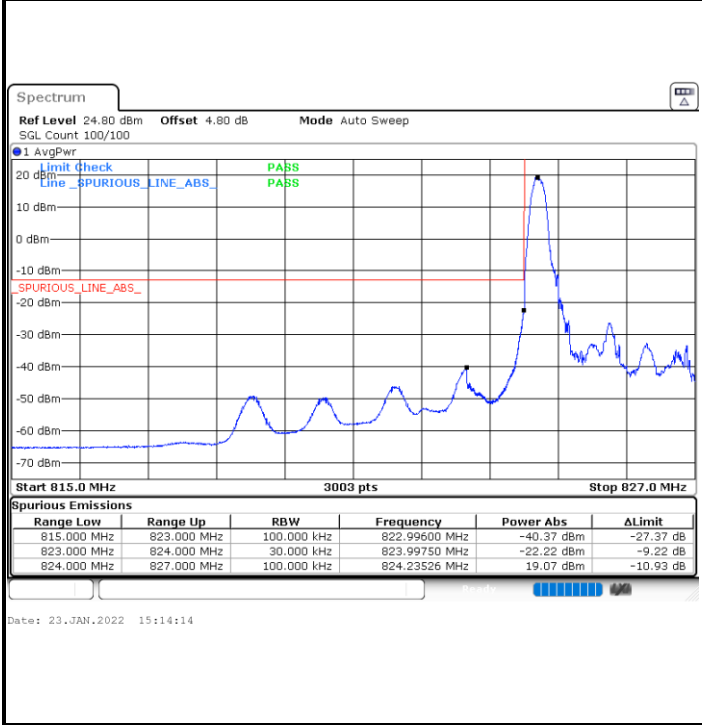


Date: 23.JAN.2022 15:31:12

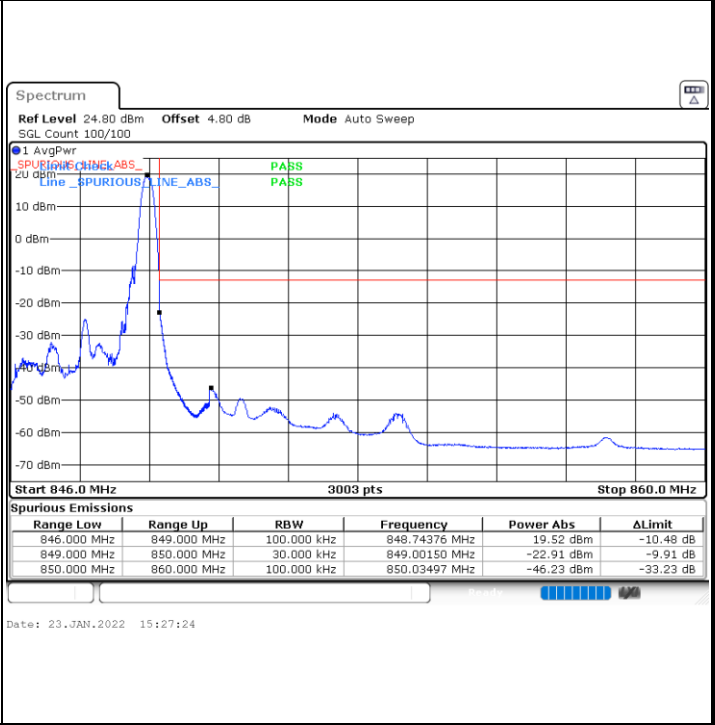


LTE Band 5 / 3MHz / 64QAM

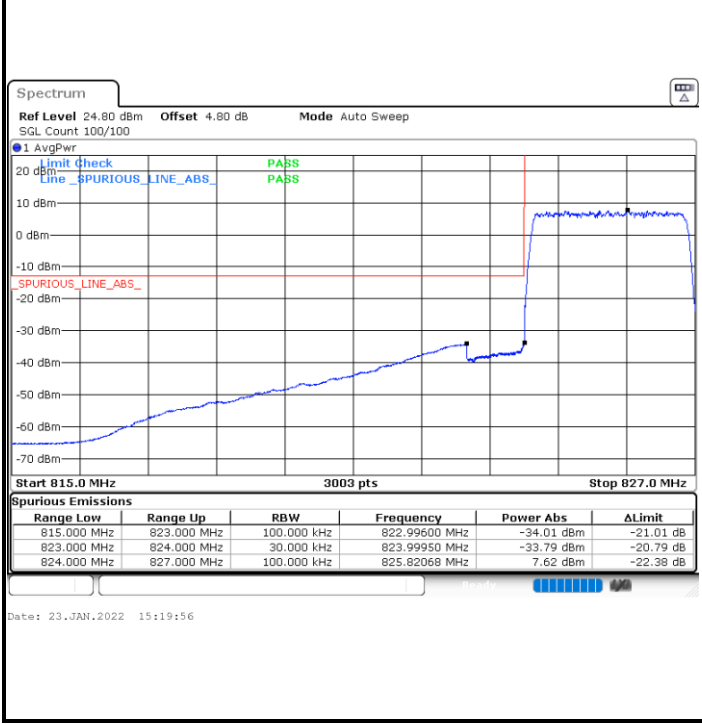
Lowest Band Edge / 1 RB



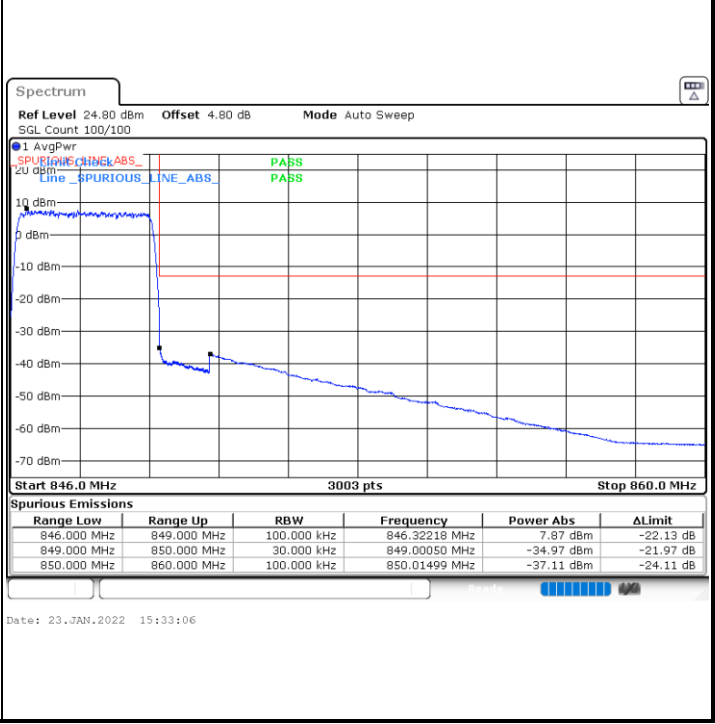
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



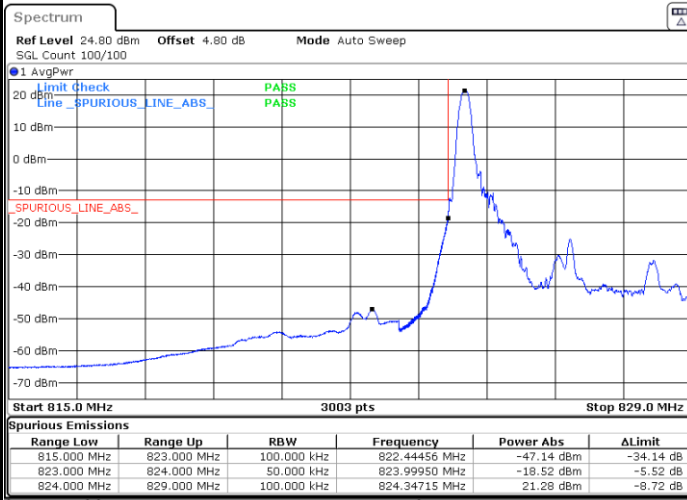
Highest Band Edge / Full RB





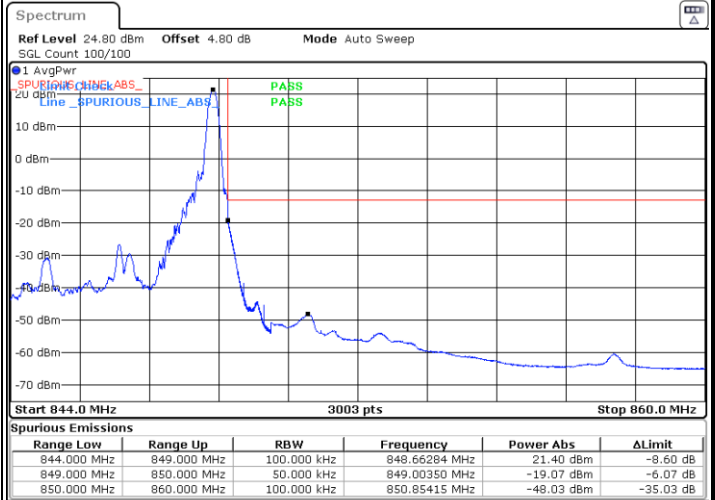
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



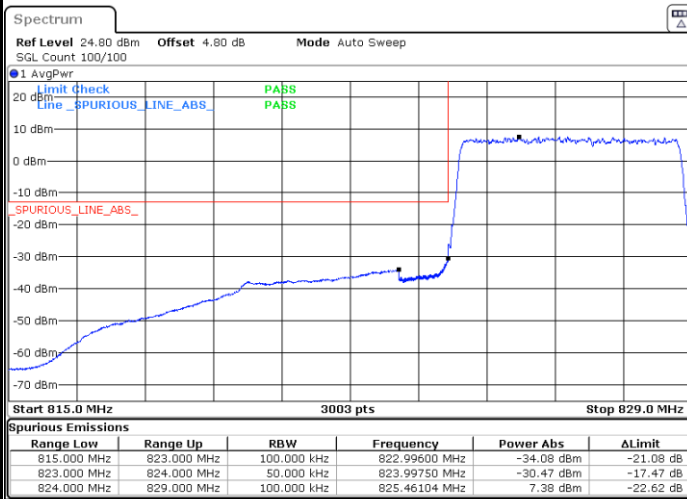
Date: 23.JAN.2022 15:35:44

Highest Band Edge / 1 RB



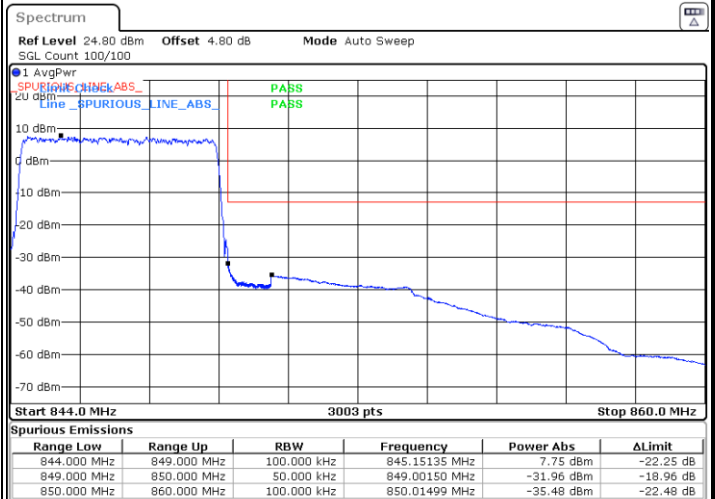
Date: 23.JAN.2022 15:49:29

Lowest Band Edge / Full RB



Date: 23.JAN.2022 15:42:11

Highest Band Edge / Full RB

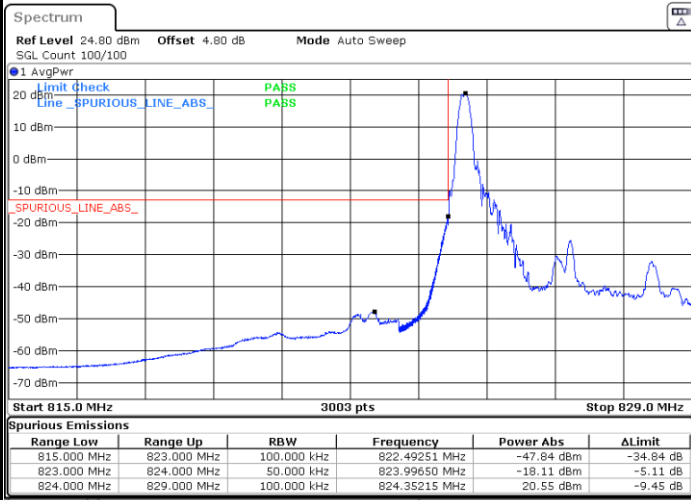


Date: 23.JAN.2022 15:55:11



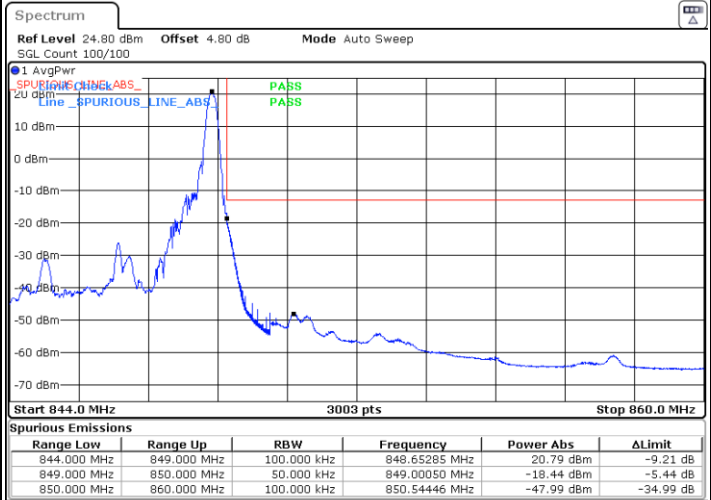
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



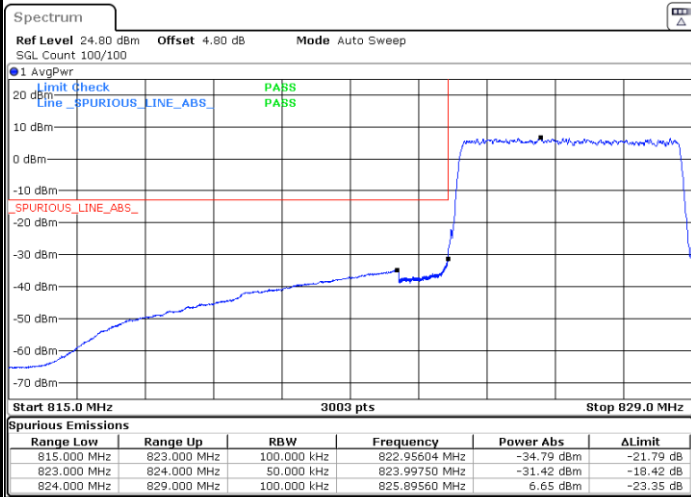
Date: 23.JAN.2022 15:37:38

Highest Band Edge / 1 RB



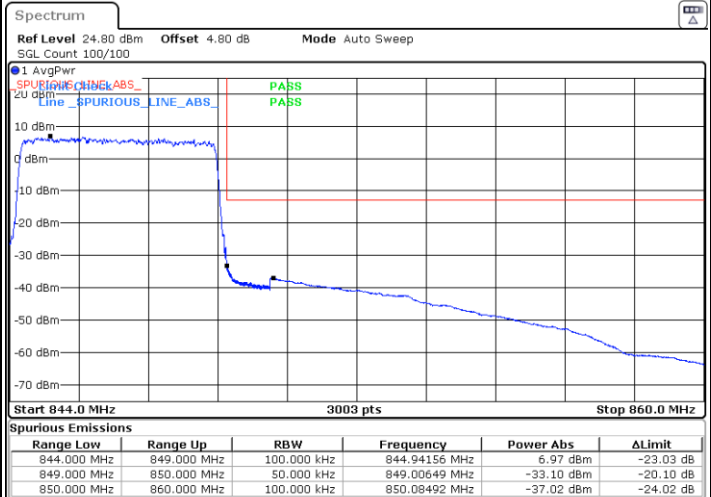
Date: 23.JAN.2022 15:51:24

Lowest Band Edge / Full RB



Date: 23.JAN.2022 15:44:04

Highest Band Edge / Full RB

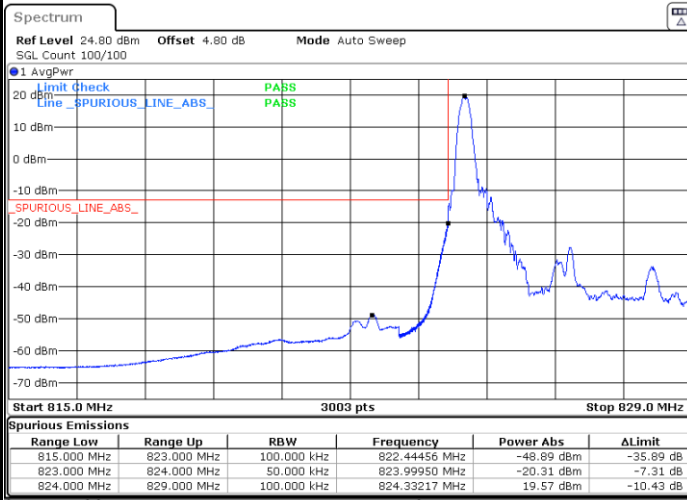


Date: 23.JAN.2022 15:57:05



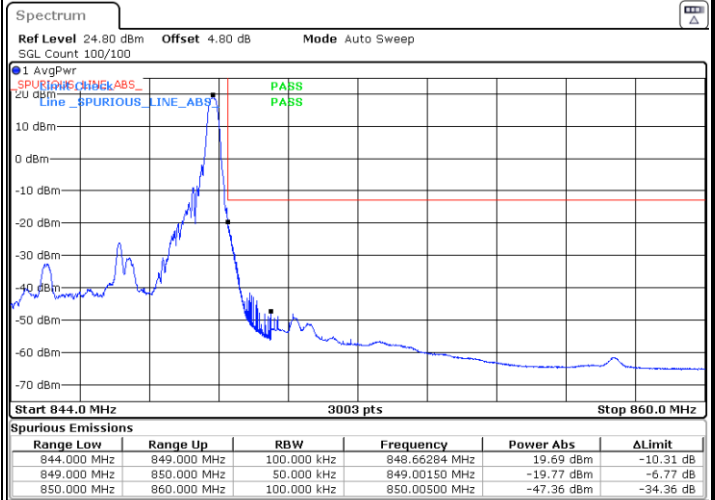
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



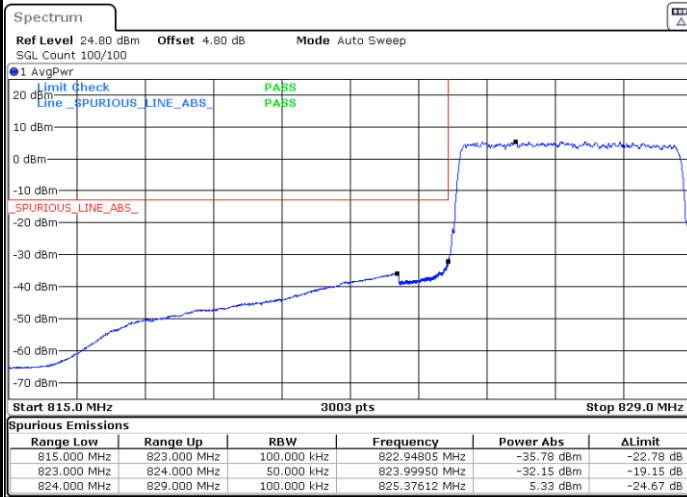
Date: 23.JAN.2022 15:40:16

Highest Band Edge / 1 RB



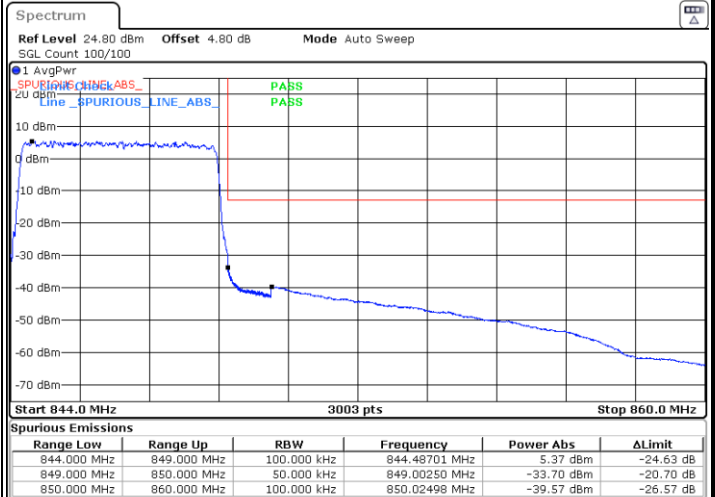
Date: 23.JAN.2022 15:53:18

Lowest Band Edge / Full RB



Date: 23.JAN.2022 15:45:58

Highest Band Edge / Full RB

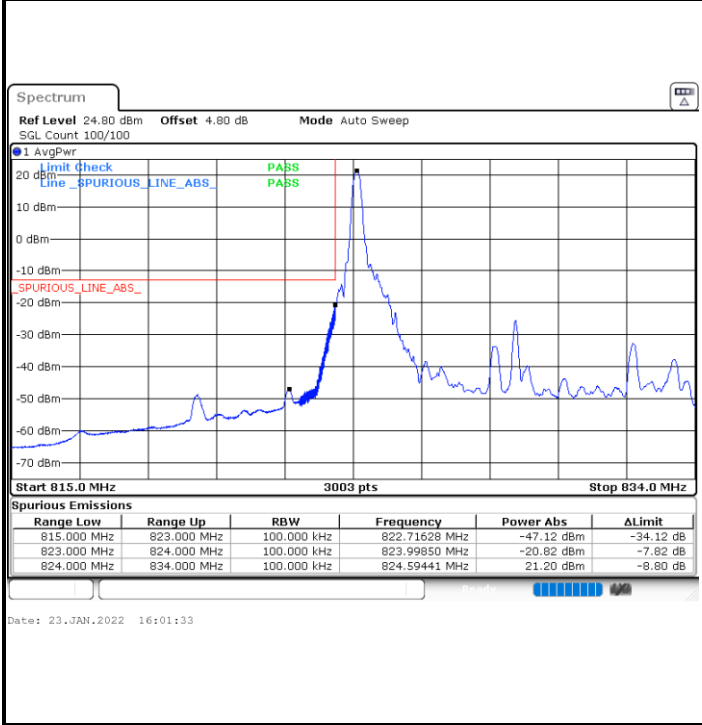


Date: 23.JAN.2022 15:53:00

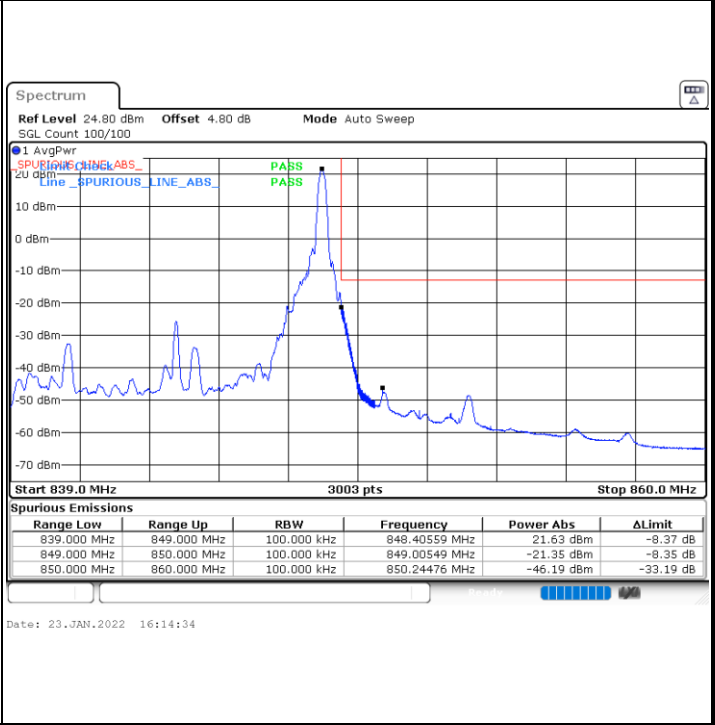


LTE Band 5 / 10MHz / QPSK

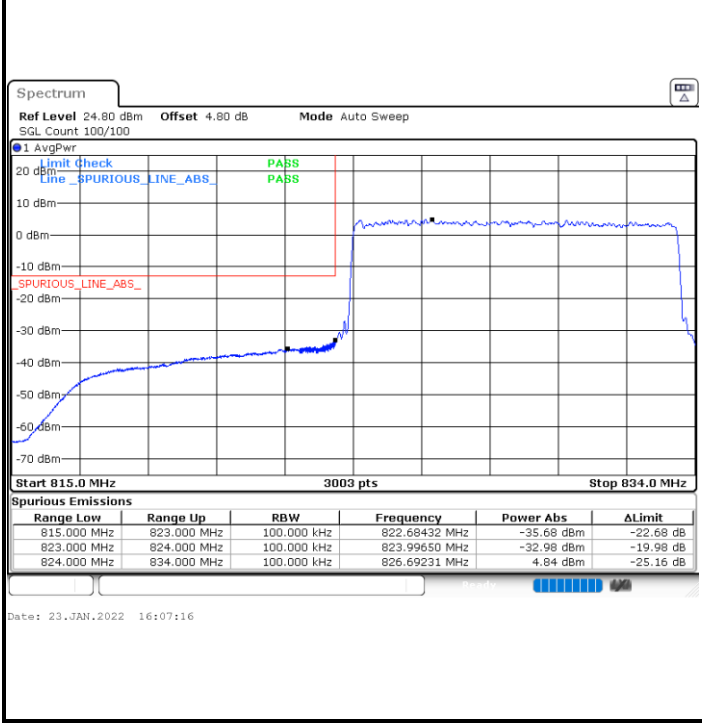
Lowest Band Edge / 1 RB



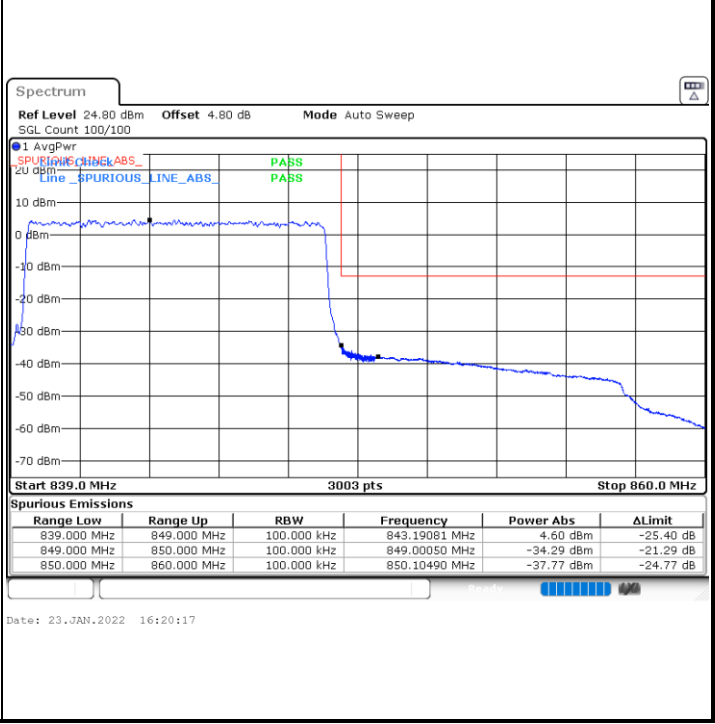
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



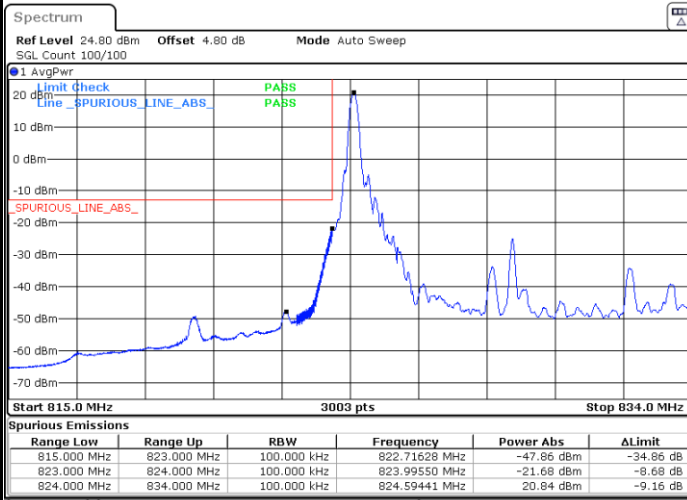
Highest Band Edge / Full RB





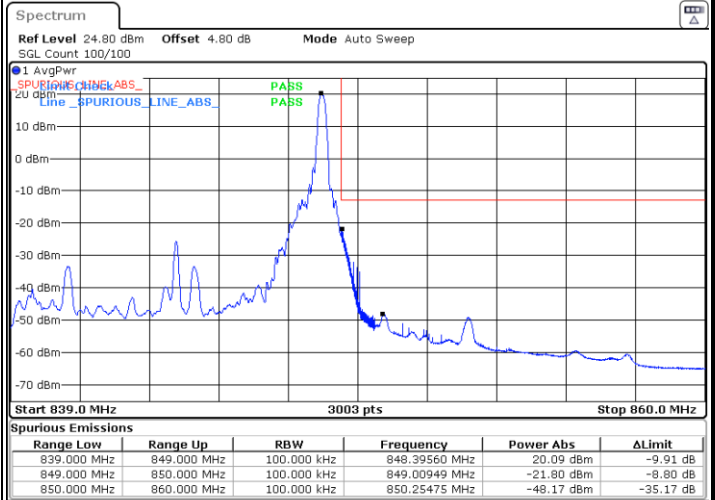
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



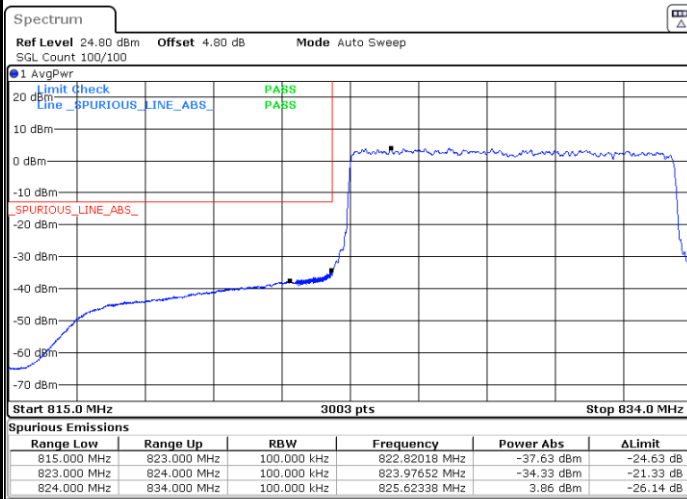
Date: 23.JAN.2022 16:03:27

Highest Band Edge / 1 RB



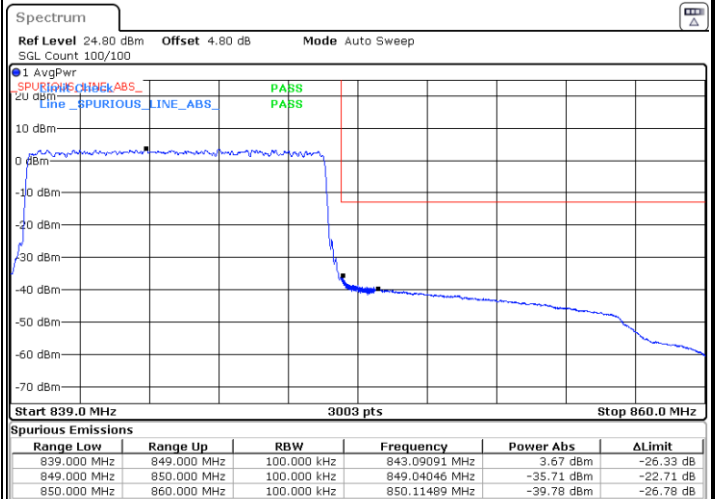
Date: 23.JAN.2022 16:16:29

Lowest Band Edge / Full RB



Date: 23.JAN.2022 16:09:09

Highest Band Edge / Full RB

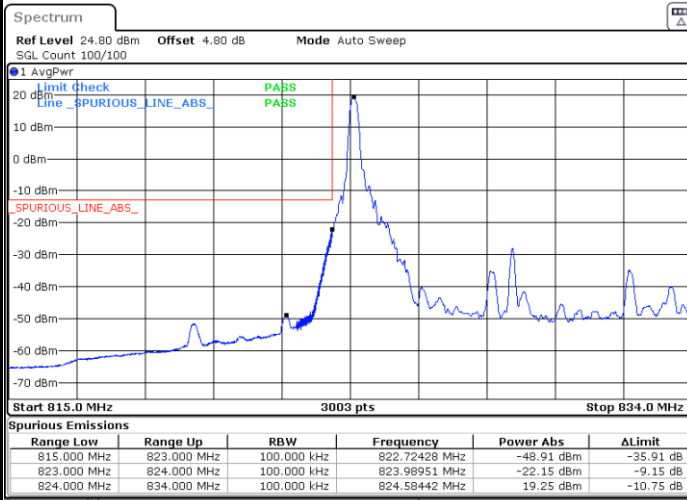


Date: 23.JAN.2022 16:22:11



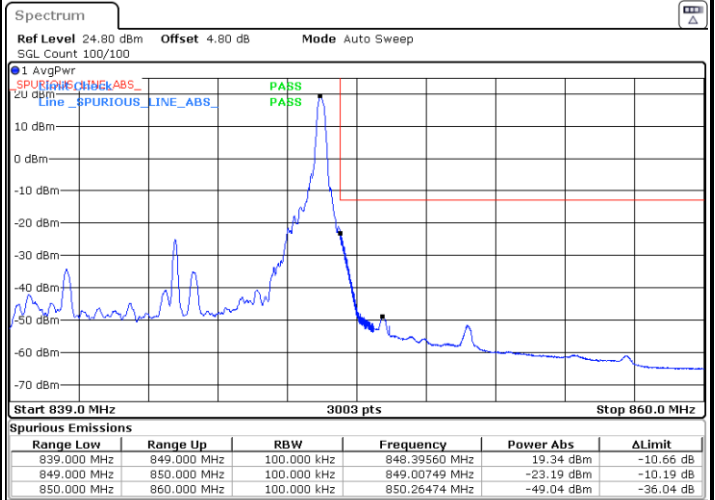
LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



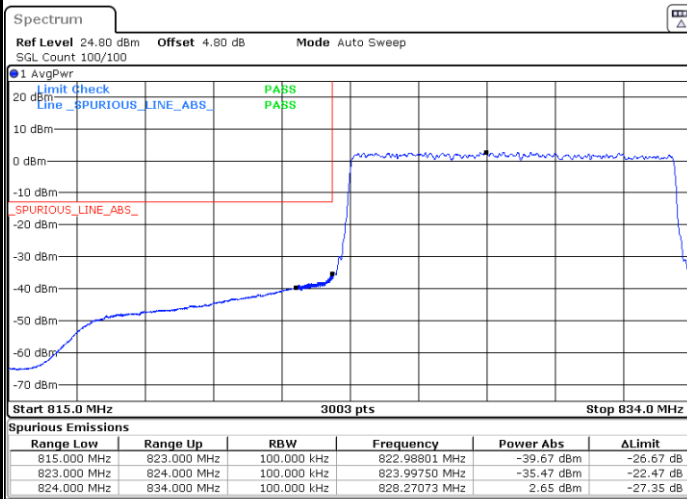
Date: 23.JAN.2022 16:05:21

Highest Band Edge / 1 RB



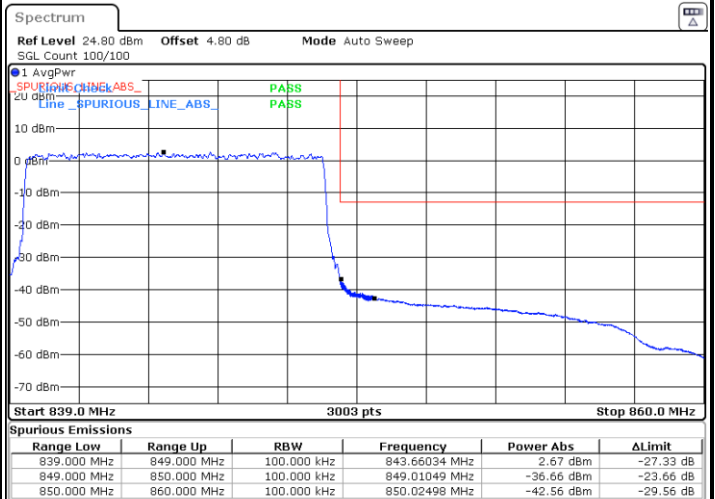
Date: 23.JAN.2022 16:18:23

Lowest Band Edge / Full RB



Date: 23.JAN.2022 16:11:03

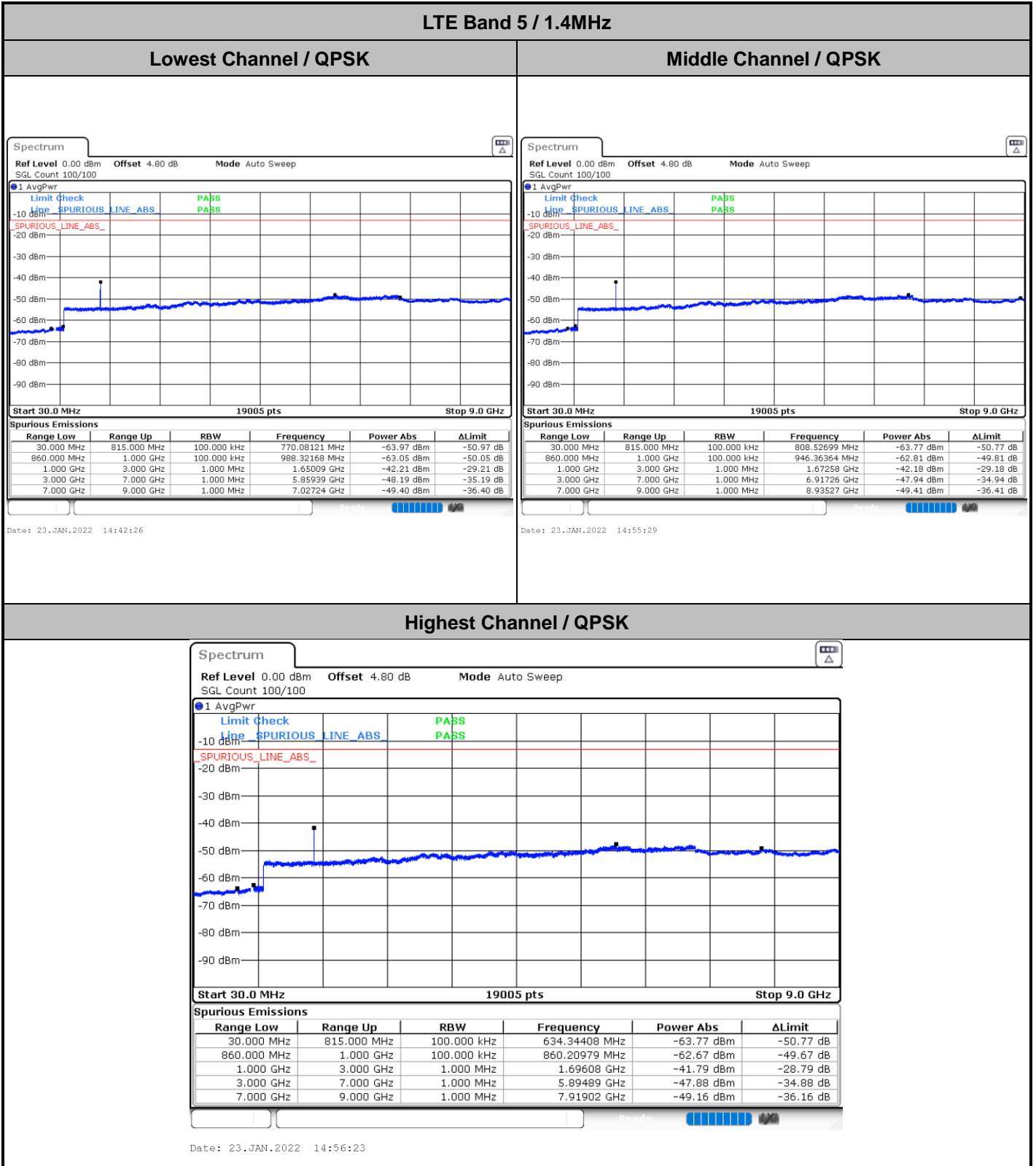
Highest Band Edge / Full RB



Date: 23.JAN.2022 16:24:05



Conducted Spurious Emission

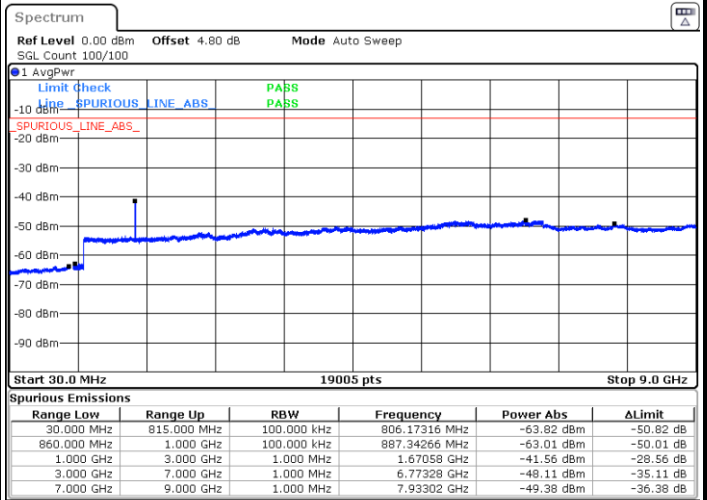
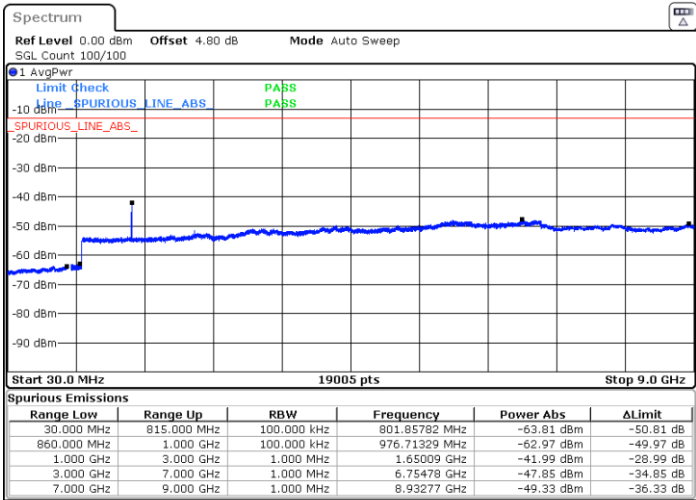




LTE Band 5 / 3MHz

Lowest Channel / QPSK

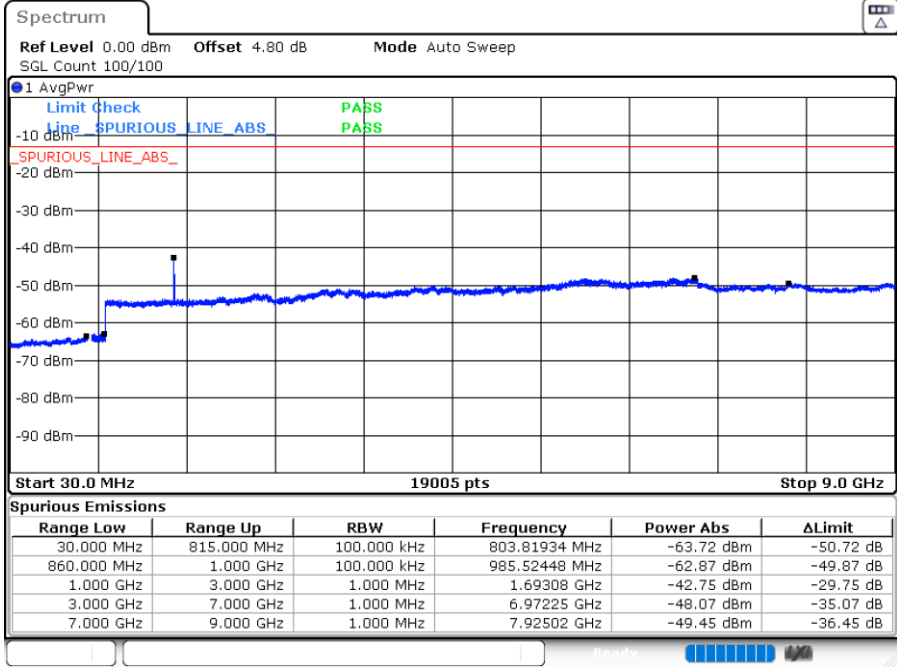
Middle Channel / QPSK



Date: 23.JAN.2022 15:08:42

Date: 23.JAN.2022 15:20:49

Highest Channel / QPSK



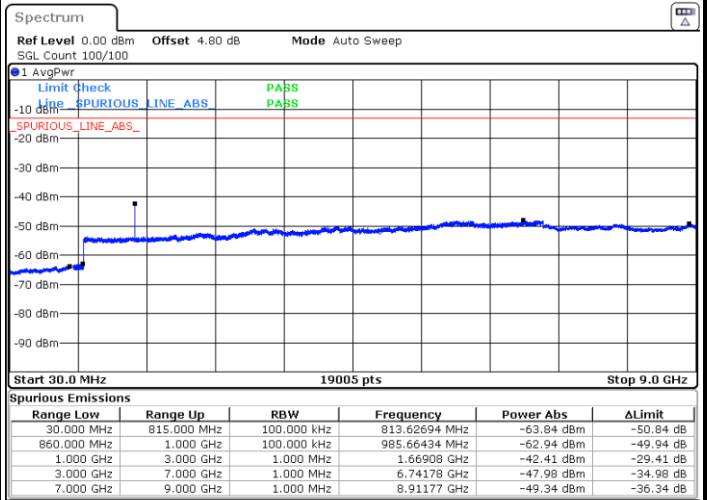
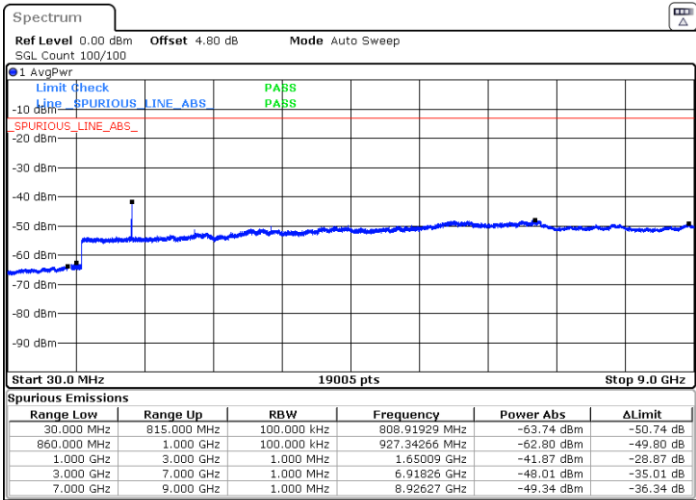
Date: 23.JAN.2022 15:21:43



LTE Band 5 / 5MHz

Lowest Channel / QPSK

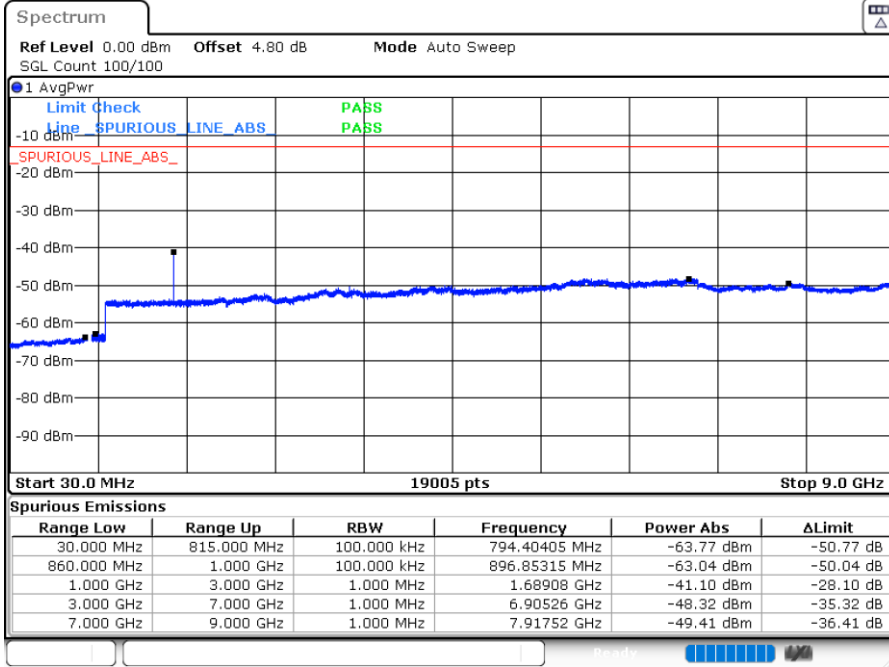
Middle Channel / QPSK



Date: 23.JAN.2022 15:34:01

Date: 23.JAN.2022 15:46:47

Highest Channel / QPSK



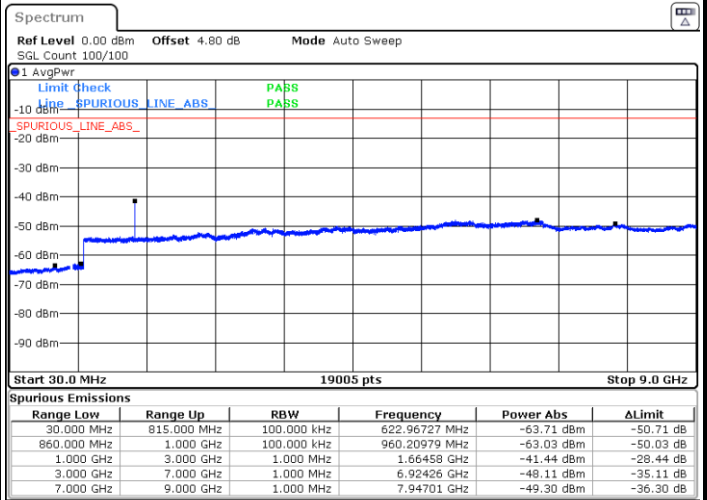
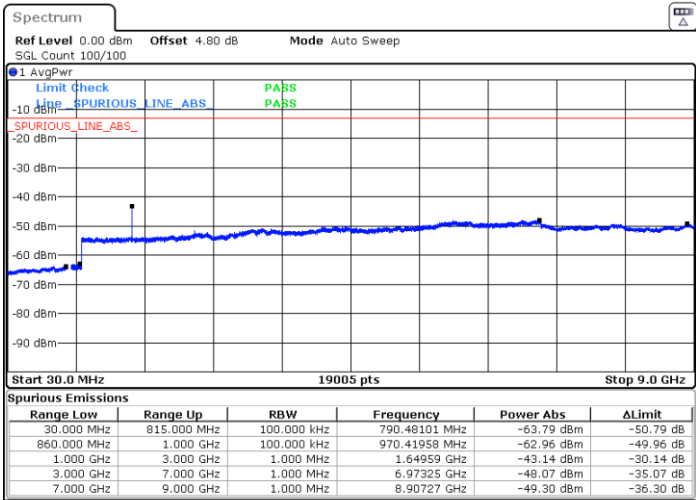
Date: 23.JAN.2022 15:47:36



LTE Band 5 / 10MHz

Lowest Channel / QPSK

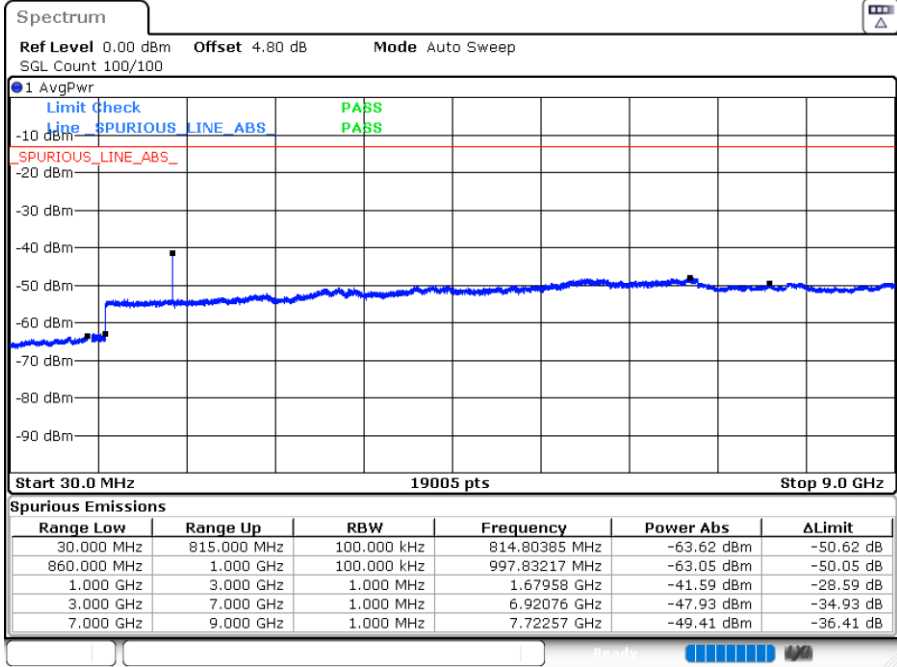
Middle Channel / QPSK



Date: 23.JAN.2022 15:59:49

Date: 23.JAN.2022 16:11:52

Highest Channel / QPSK



Date: 23.JAN.2022 16:12:41



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	0.0018	PASS
40	Normal Voltage	0.0025	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0021	
20	Battery End Point	0.0019	

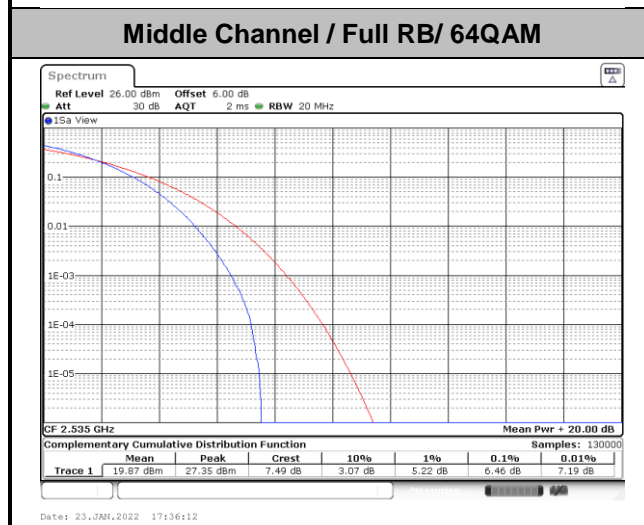
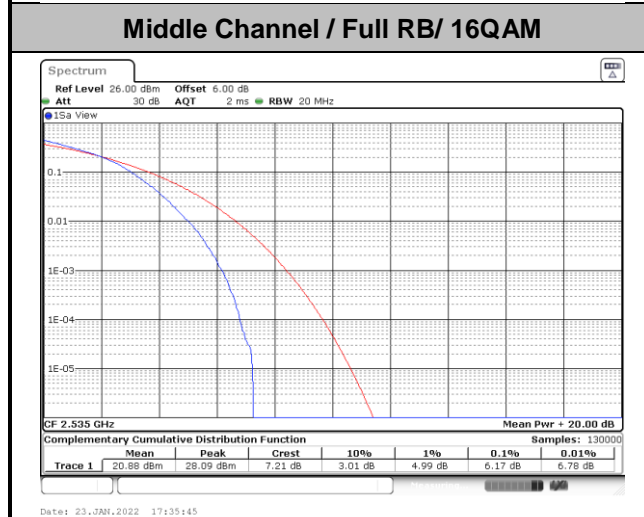
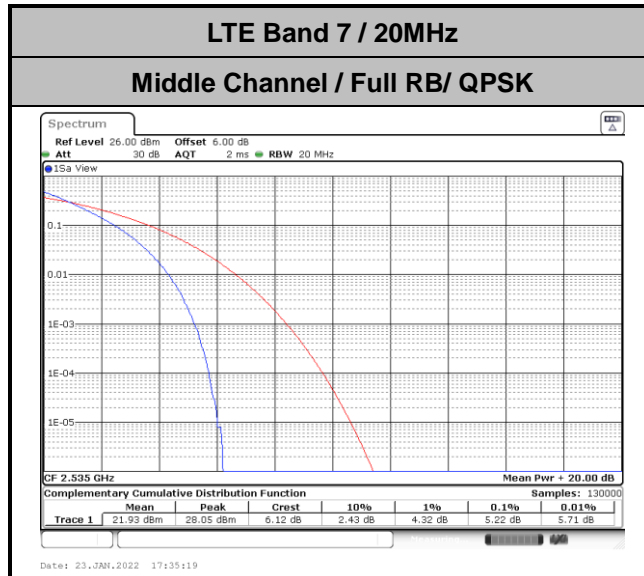
Note: Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.



LTE Band 7

Peak-to-Average Ratio

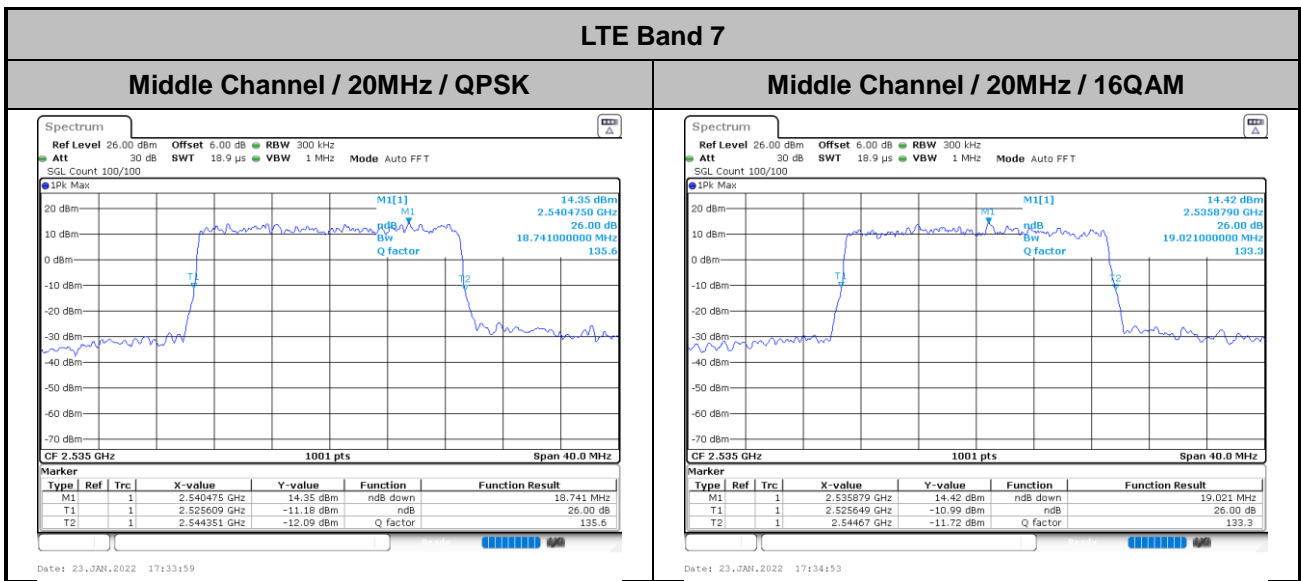
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.22	6.17	6.46	PASS





26dB Bandwidth

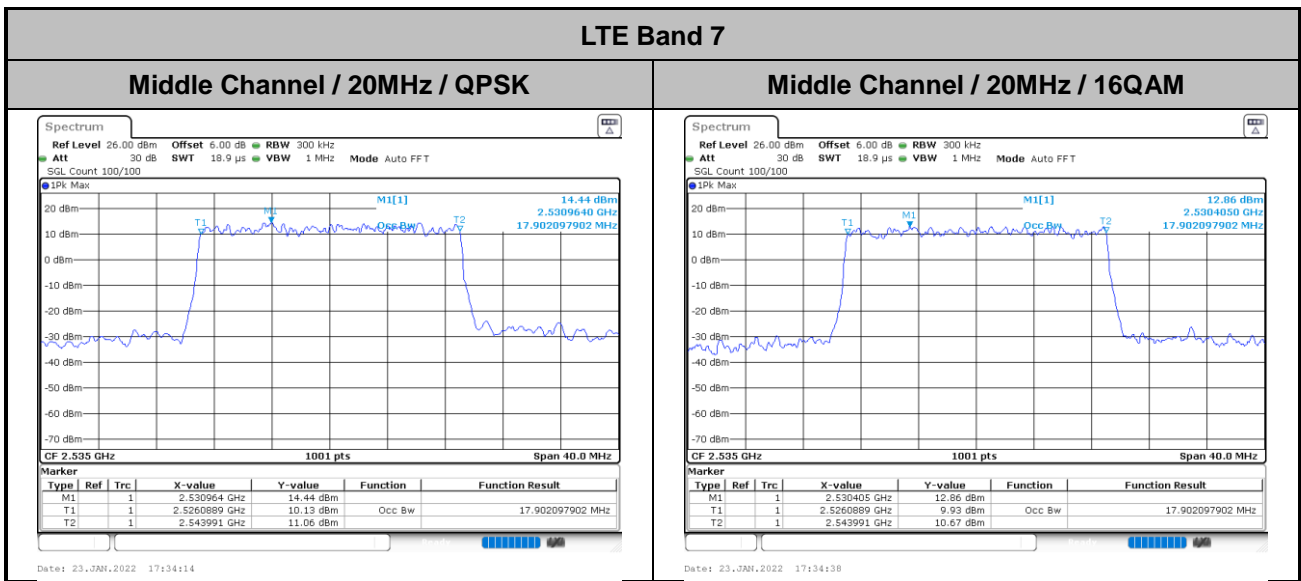
Mode	LTE Band 7 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.74	19.02





Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.90

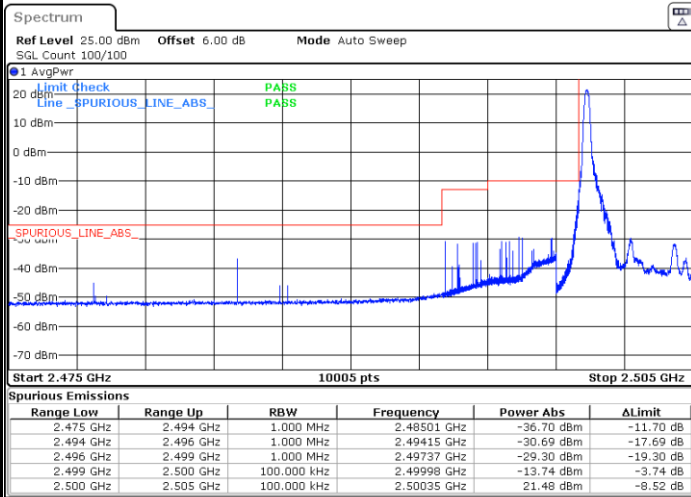




Conducted Band Edge

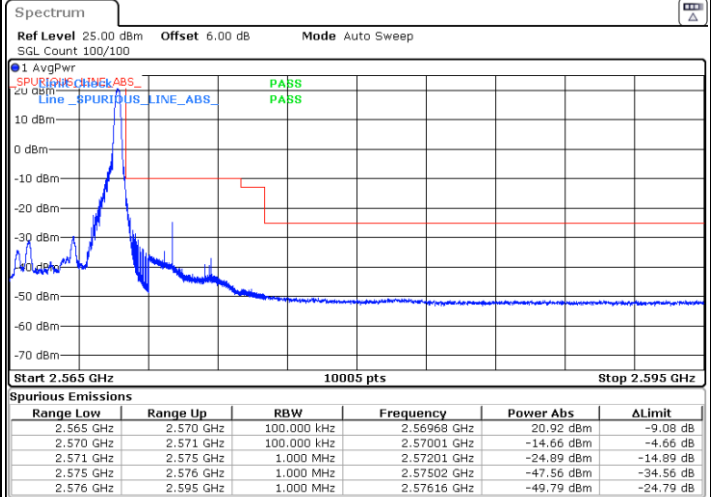
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



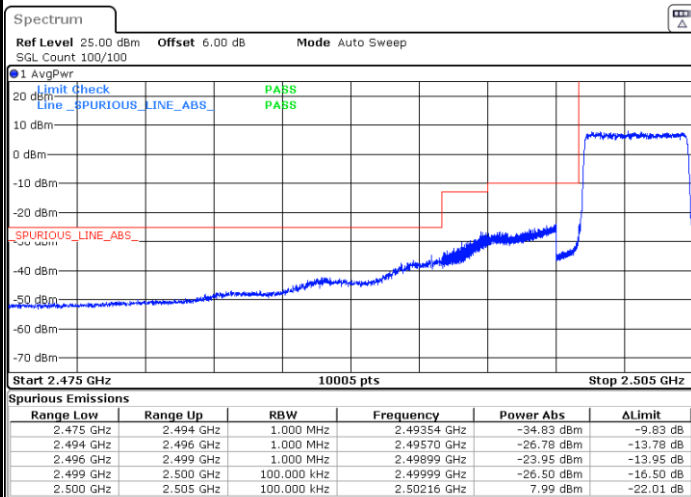
Date: 23.JAN.2022 16:38:22

Highest Band Edge / 1 RB



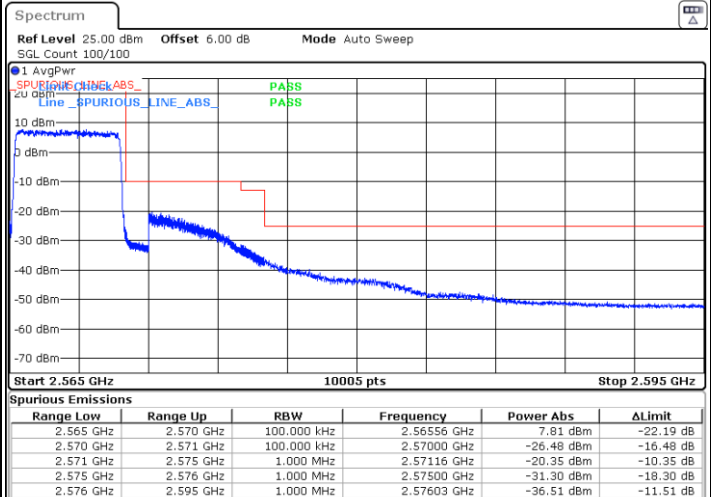
Date: 23.JAN.2022 16:46:41

Lowest Band Edge / Full RB



Date: 23.JAN.2022 16:43:31

Highest Band Edge / Full RB

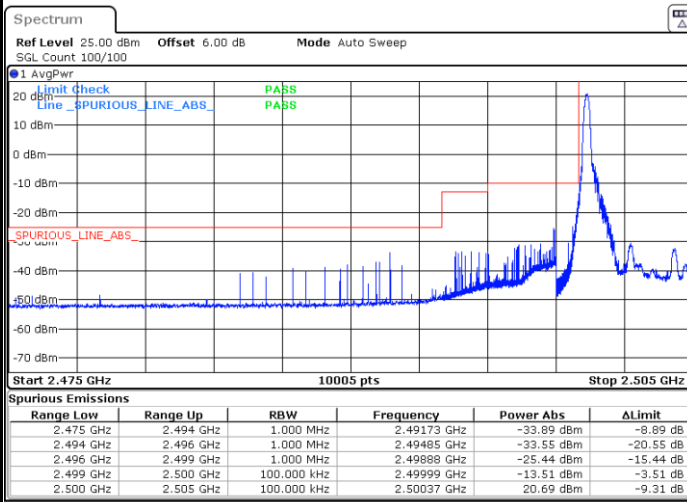


Date: 23.JAN.2022 16:51:12



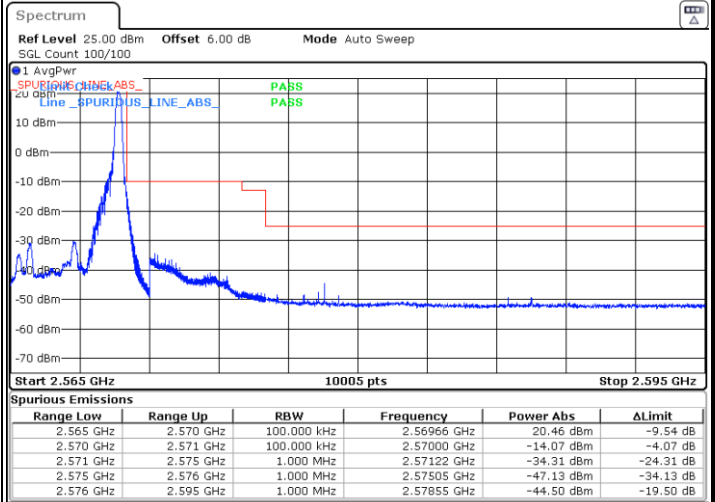
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



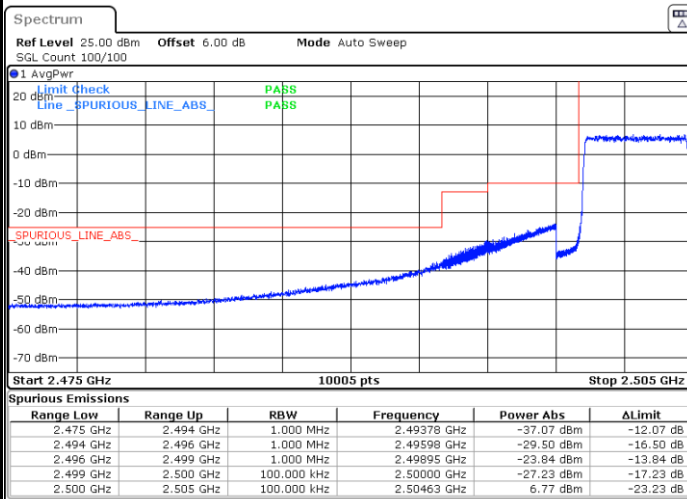
Date: 23.JAN.2022 16:39:53

Highest Band Edge / 1 RB



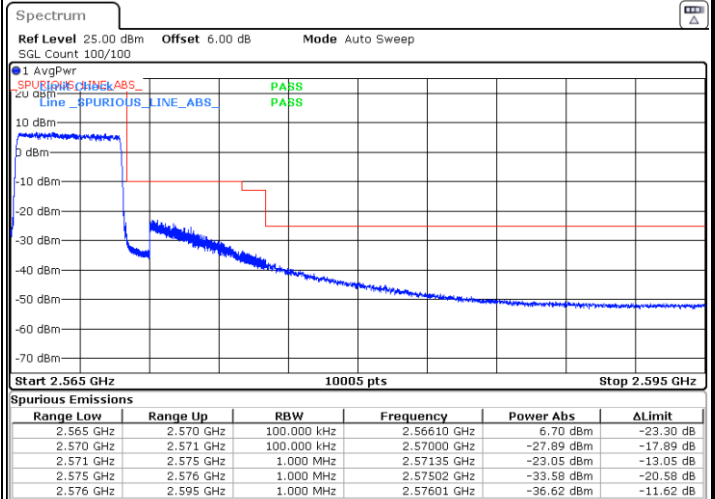
Date: 23.JAN.2022 16:47:35

Lowest Band Edge / Full RB



Date: 23.JAN.2022 16:42:36

Highest Band Edge / Full RB

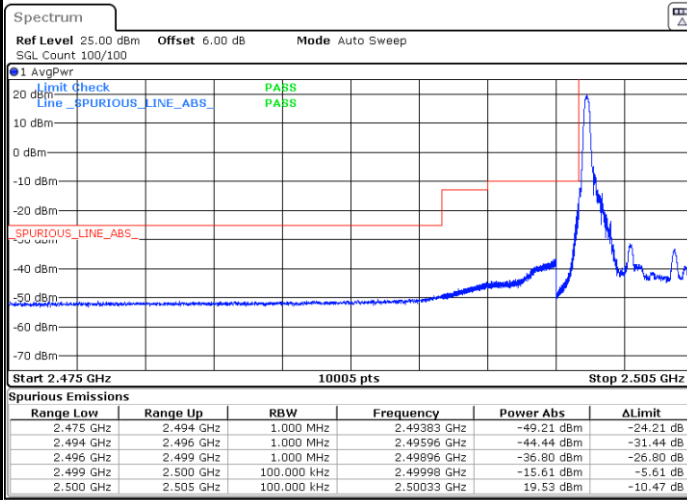


Date: 23.JAN.2022 16:50:18



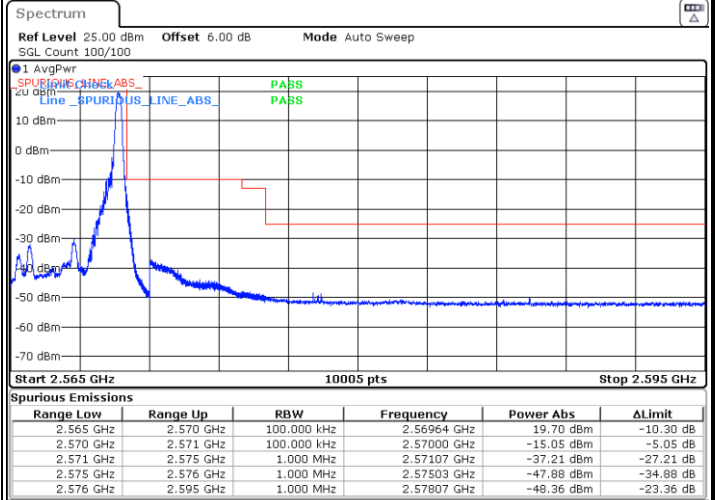
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



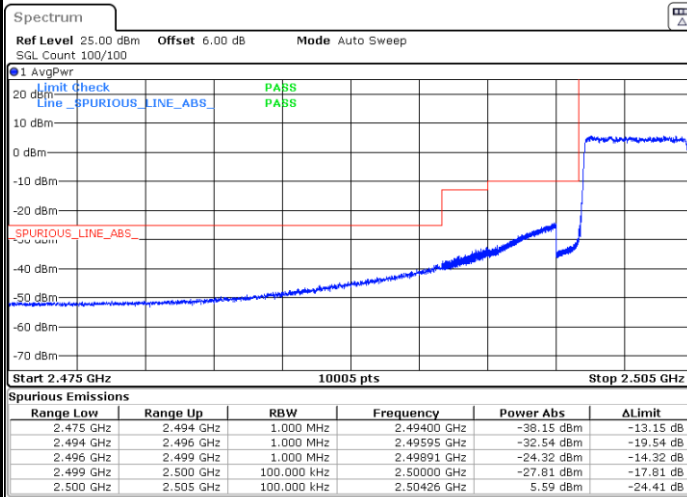
Date: 23.JAN.2022 16:40:47

Highest Band Edge / 1 RB



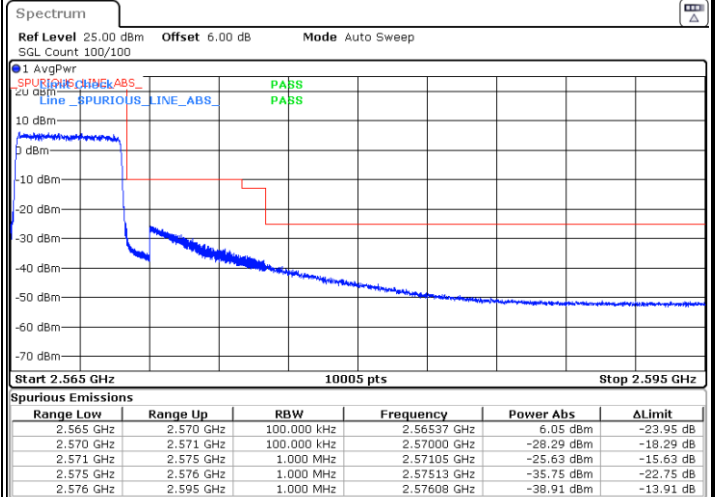
Date: 23.JAN.2022 16:48:29

Lowest Band Edge / Full RB



Date: 23.JAN.2022 16:41:42

Highest Band Edge / Full RB



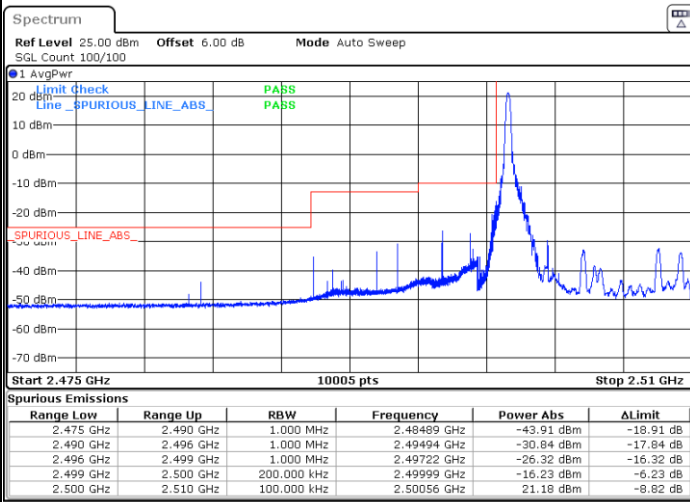
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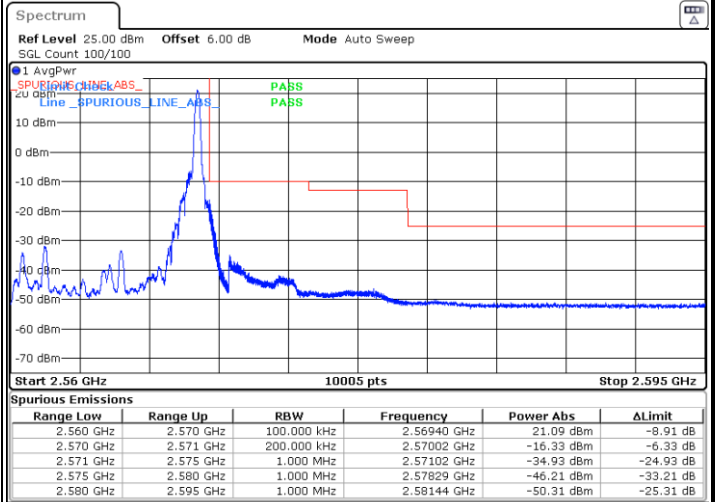
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



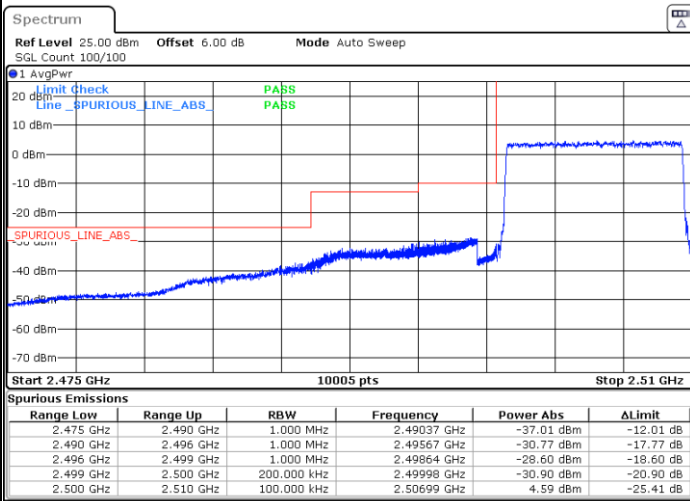
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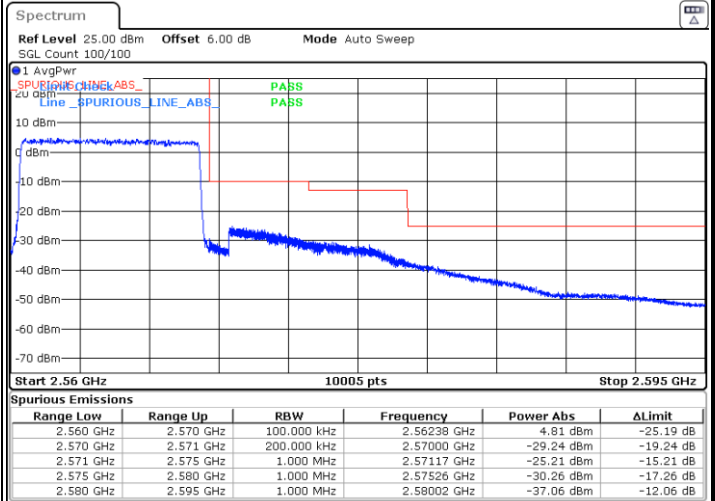
Date: 23.JAN.2022 17:00:48

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.JAN.2022 16:57:38

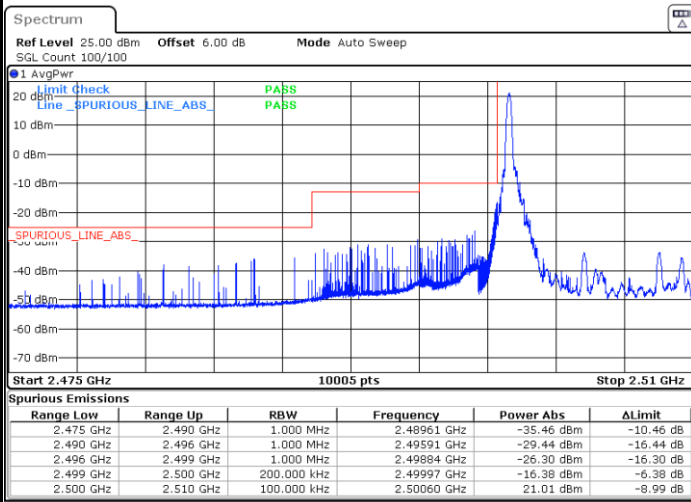


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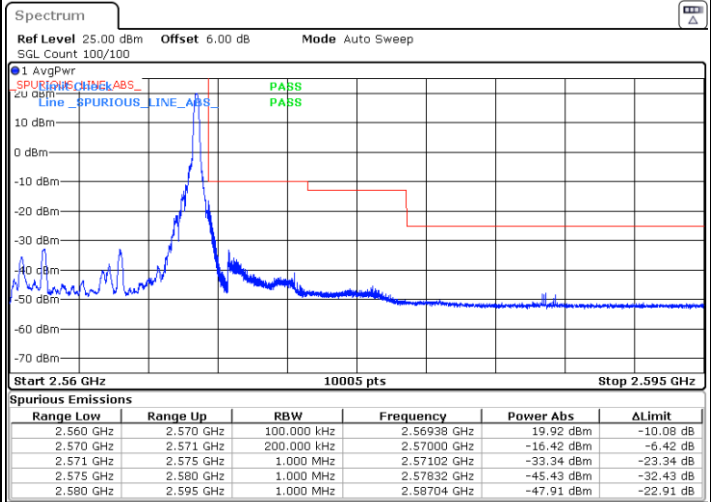
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



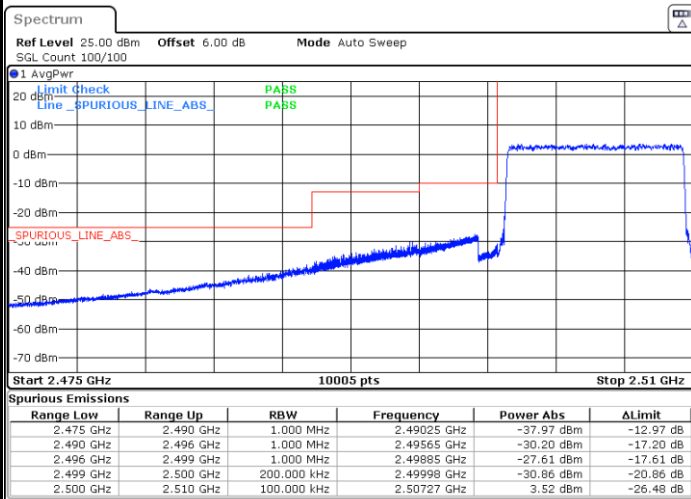
Date: 23.JAN.2022 16:54:00

Highest Band Edge / 1 RB



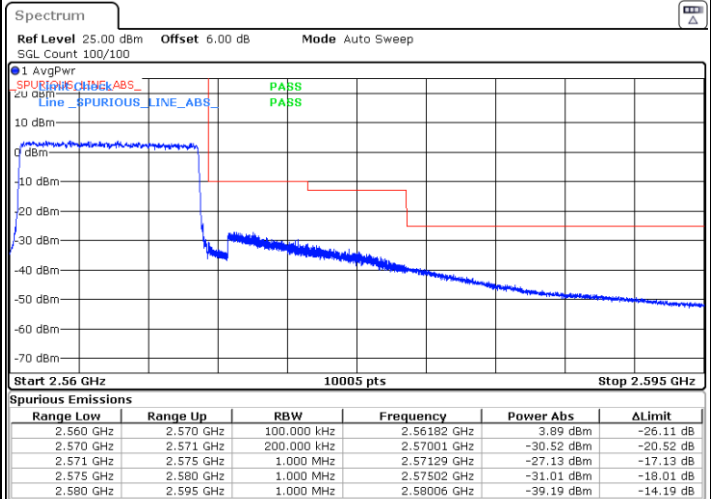
Date: 23.JAN.2022 17:01:42

Lowest Band Edge / Full RB



Date: 23.JAN.2022 16:56:43

Highest Band Edge / Full RB



Date: 23.JAN.2022 17:04:25