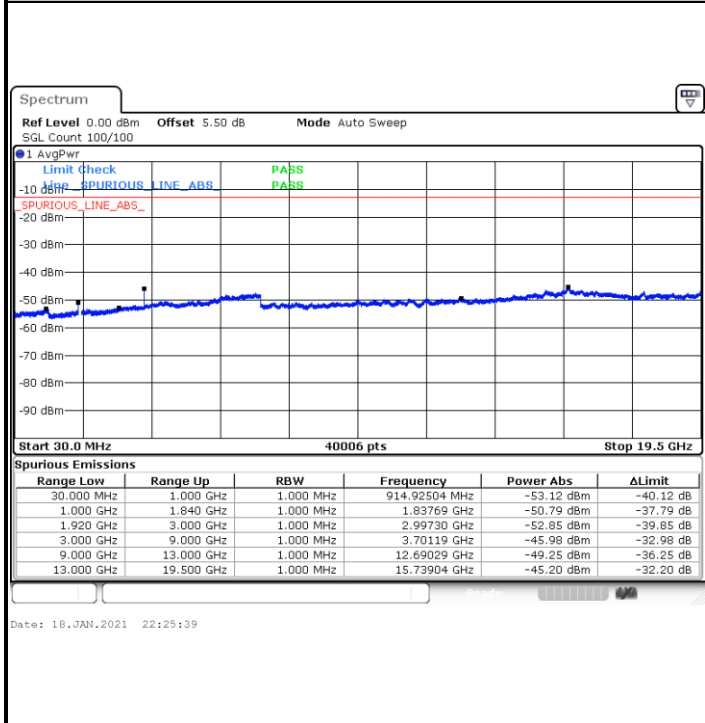


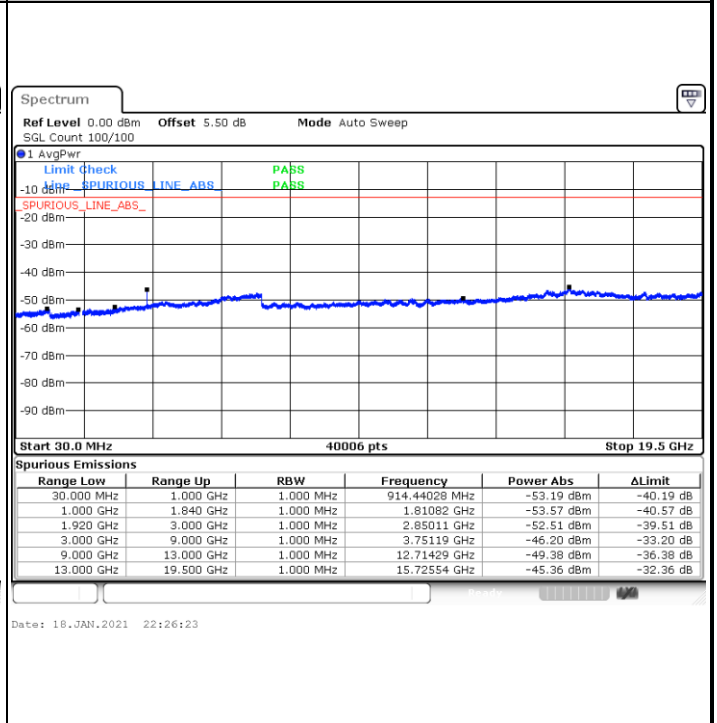


LTE Band 2 / 10MHz

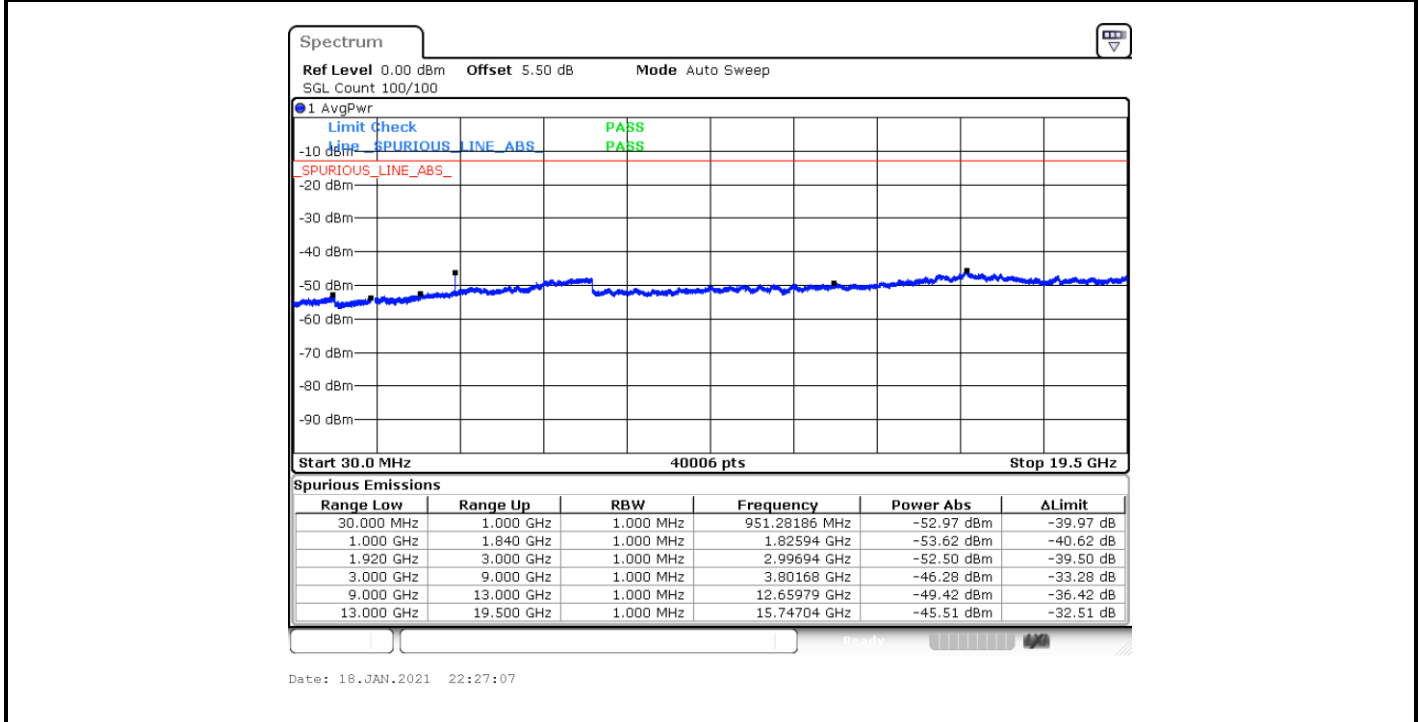
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

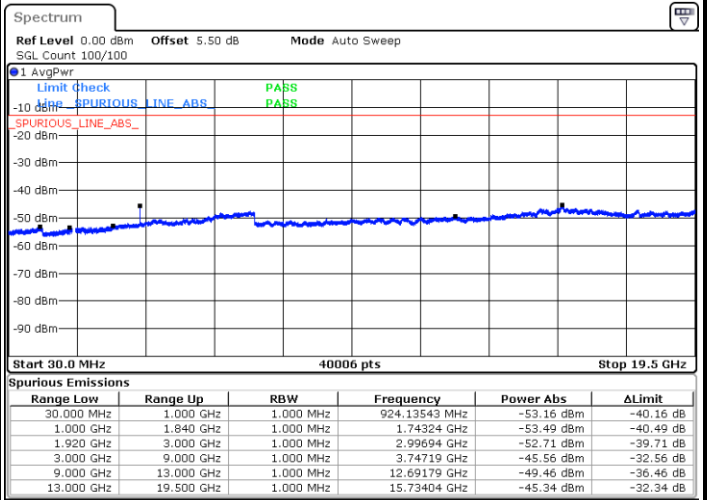
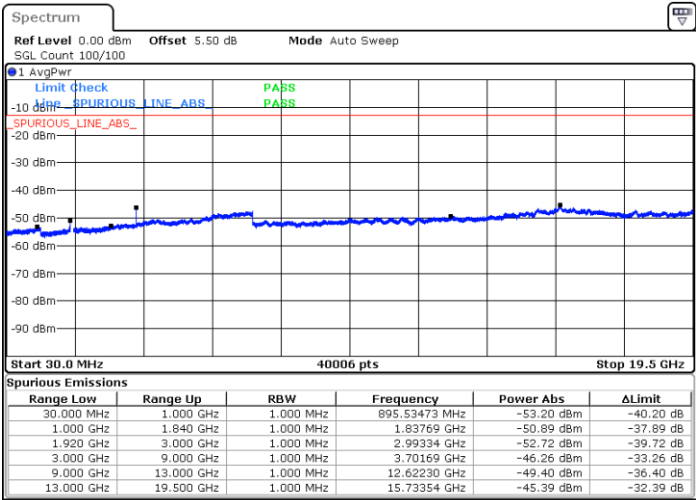




LTE Band 2 / 15MHz

Lowest Channel / QPSK

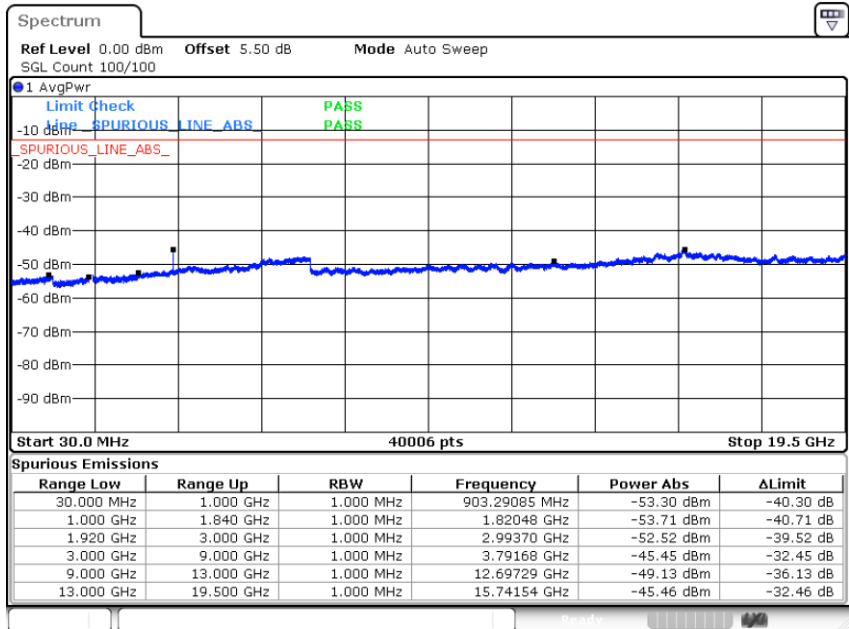
Middle Channel / QPSK



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

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

Highest Channel / QPSK



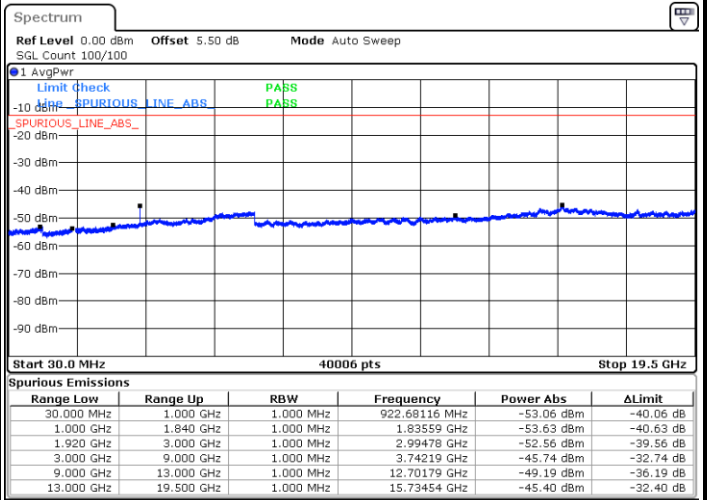
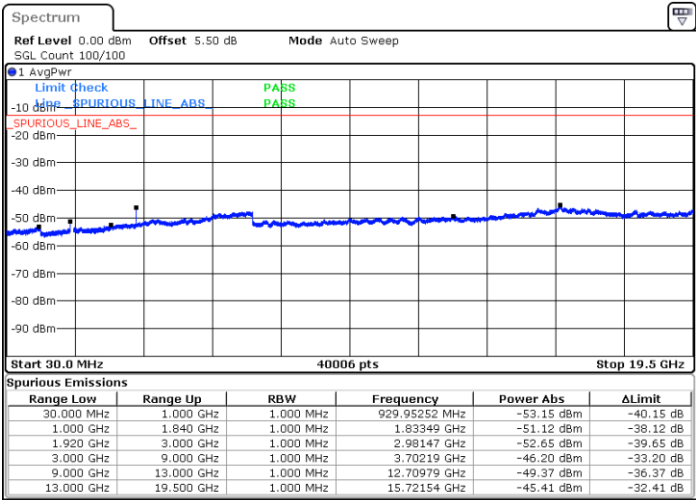
Date: 18.JAN.2021 22:29:43



LTE Band 2 / 20MHz

Lowest Channel / QPSK

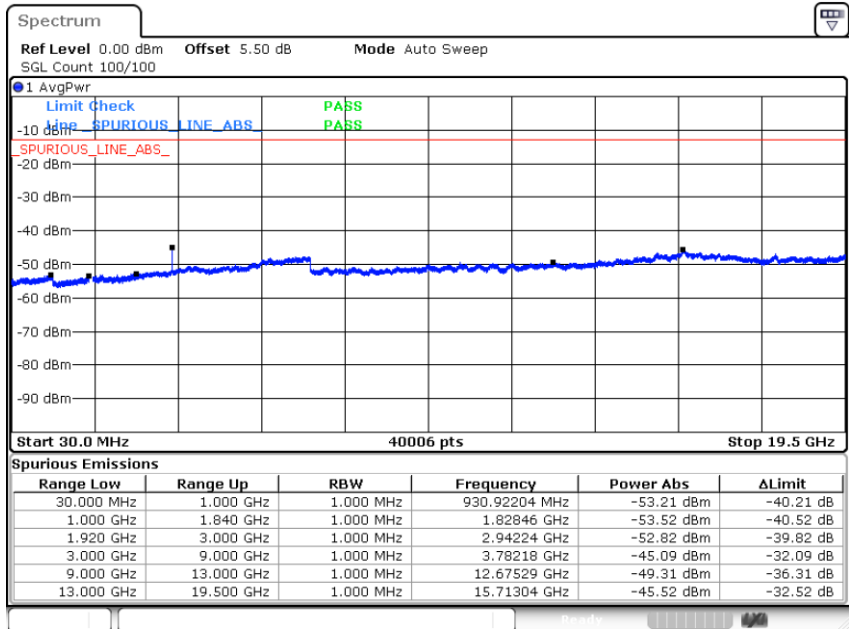
Middle Channel / QPSK



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

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:

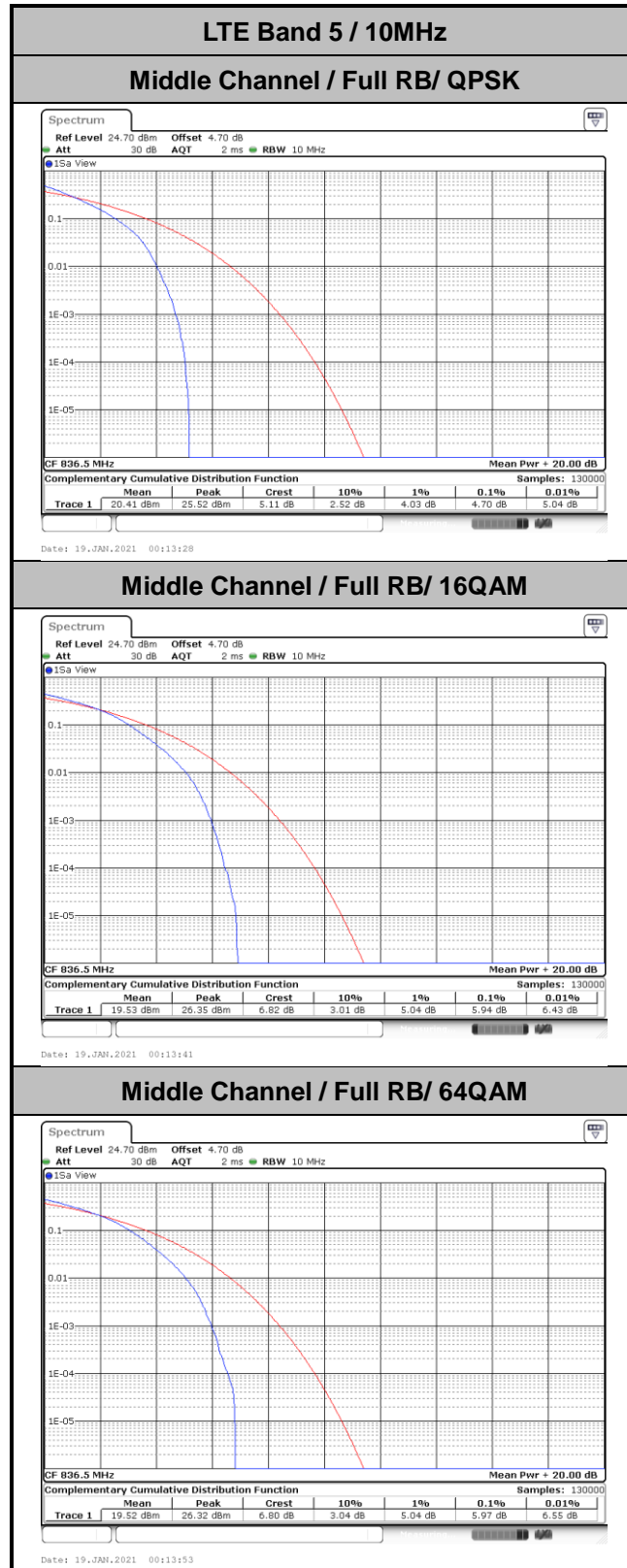
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

Peak-to-Average Ratio

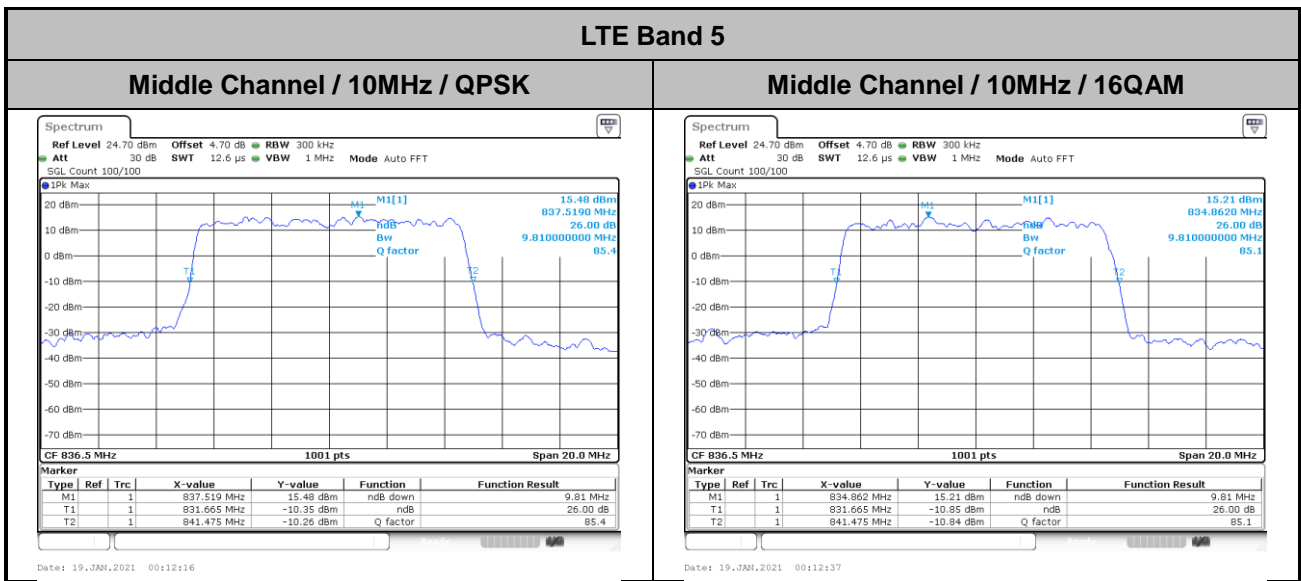
Mode	LTE Band 5 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.70	5.94	5.97	PASS





26dB Bandwidth

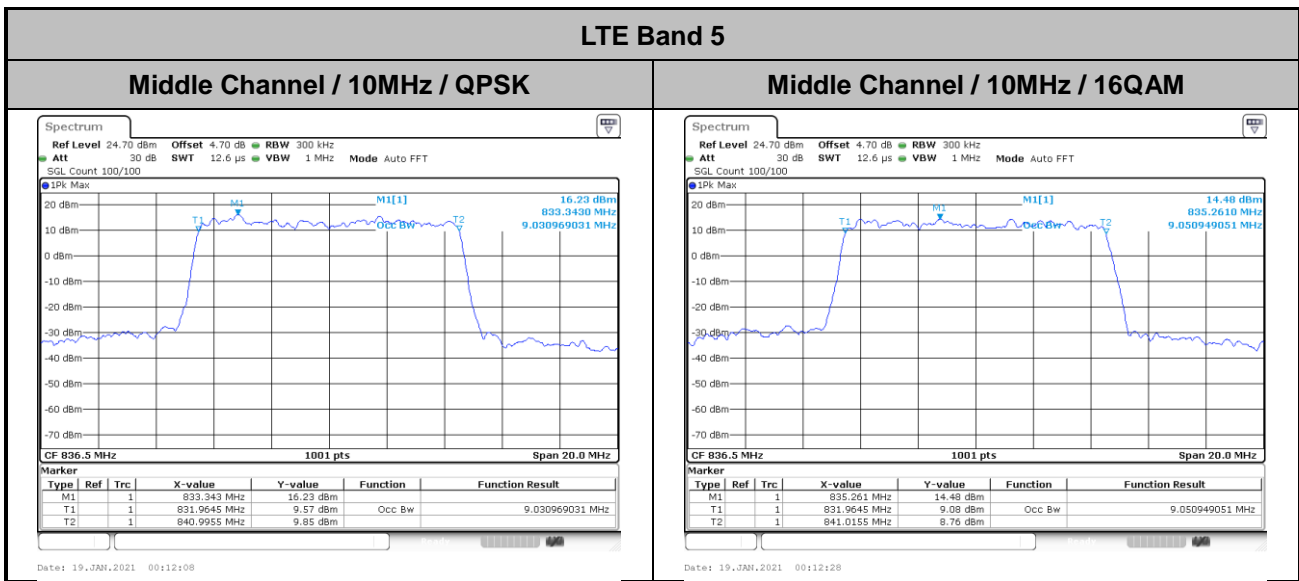
Mode	LTE Band 5 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.81	9.81





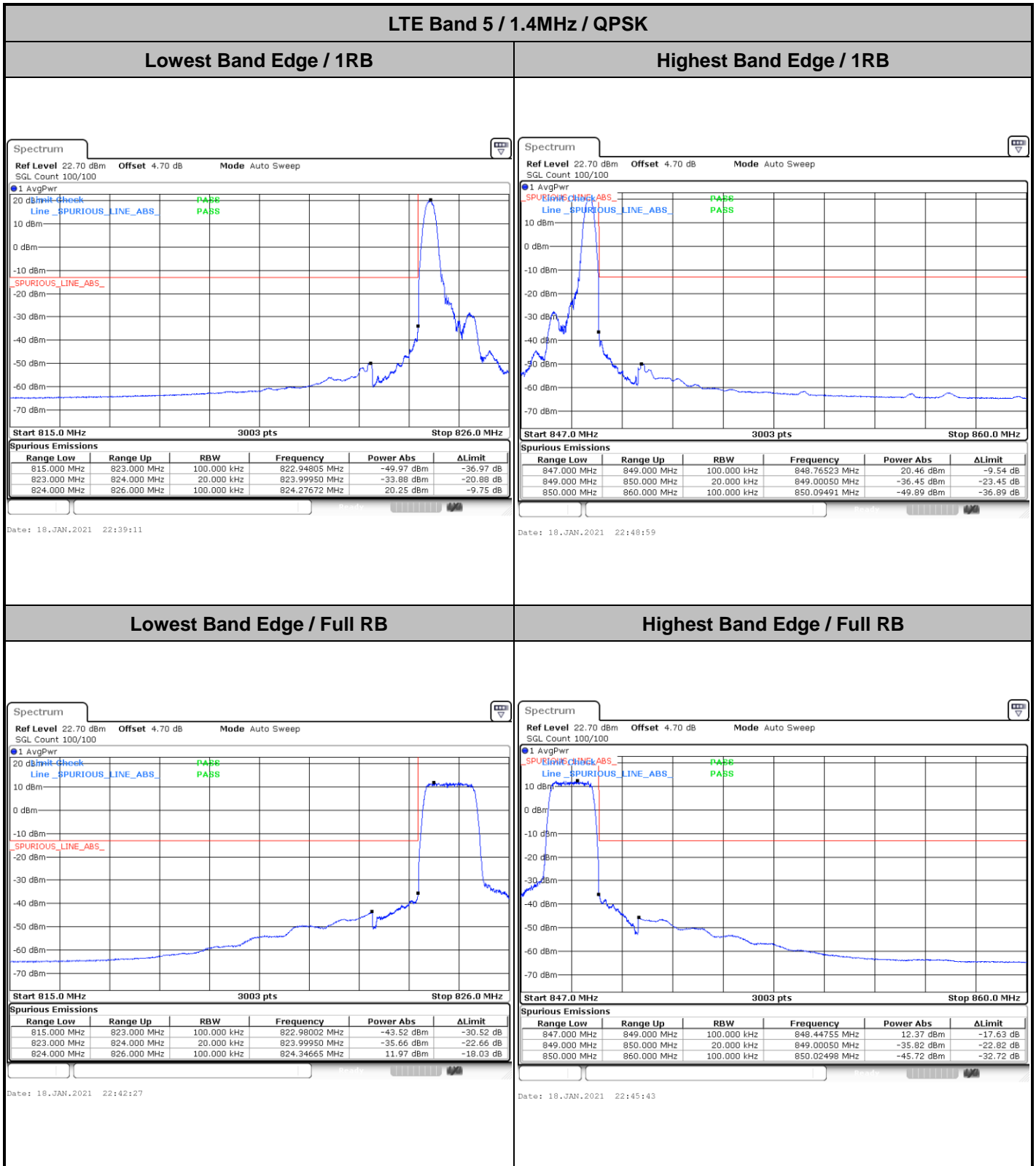
Occupied Bandwidth

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





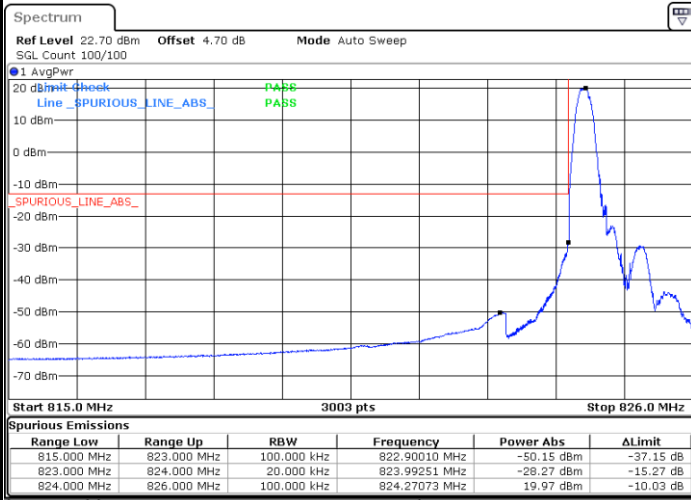
Conducted Band Edge





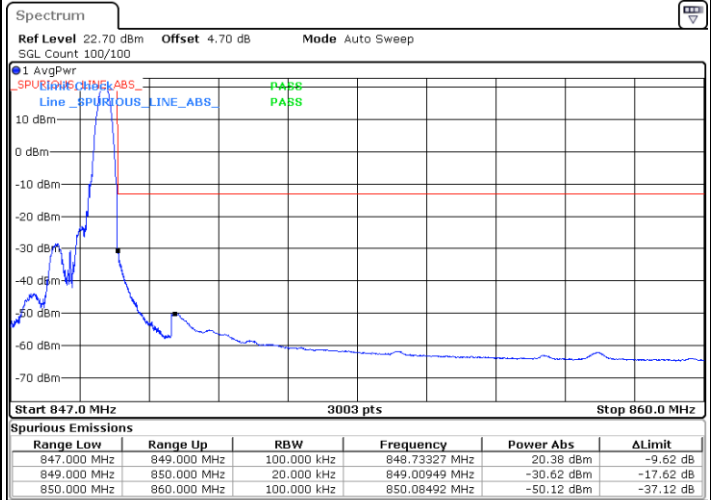
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



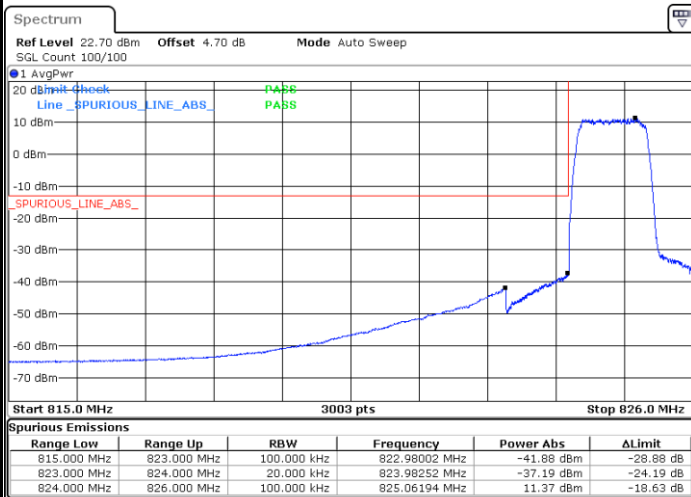
Date: 18.JAN.2021 22:40:49

Highest Band Edge / 1 RB



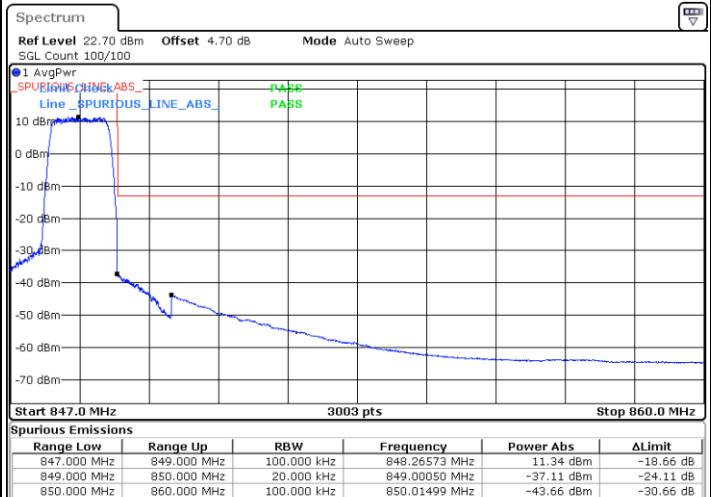
Date: 18.JAN.2021 22:50:37

Lowest Band Edge / Full RB



Date: 18.JAN.2021 22:44:05

Highest Band Edge / Full RB



Date: 18.JAN.2021 22:47:21



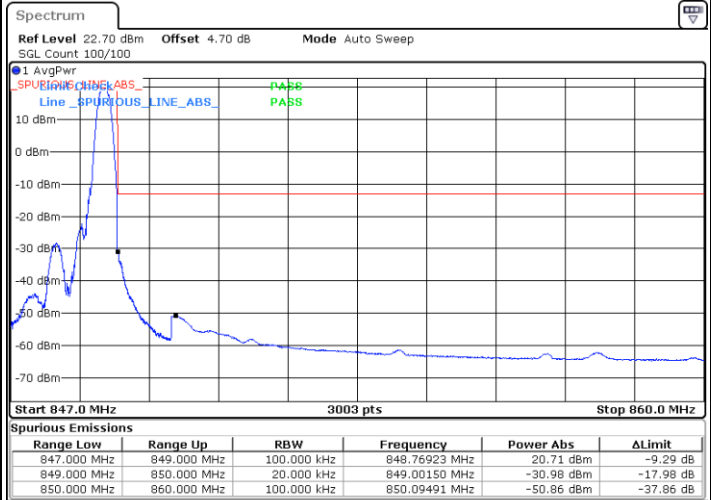
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



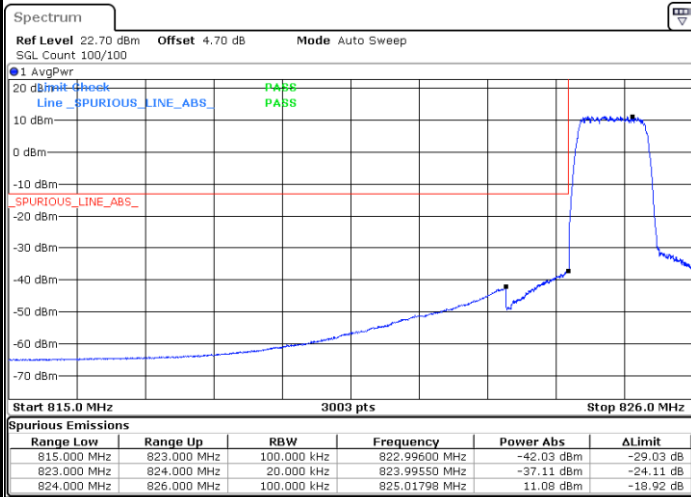
Date: 19.JAN.2021 00:01:36

Highest Band Edge / 1 RB



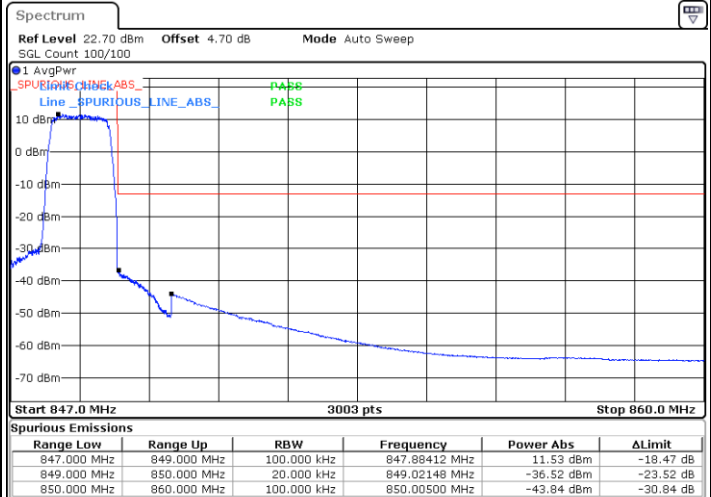
Date: 18.JAN.2021 23:34:39

Lowest Band Edge / Full RB



Date: 19.JAN.2021 00:03:05

Highest Band Edge / Full RB

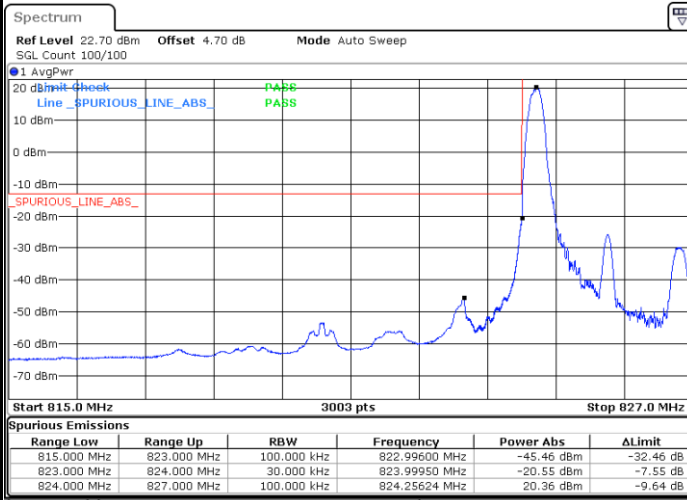


Date: 18.JAN.2021 23:33:01



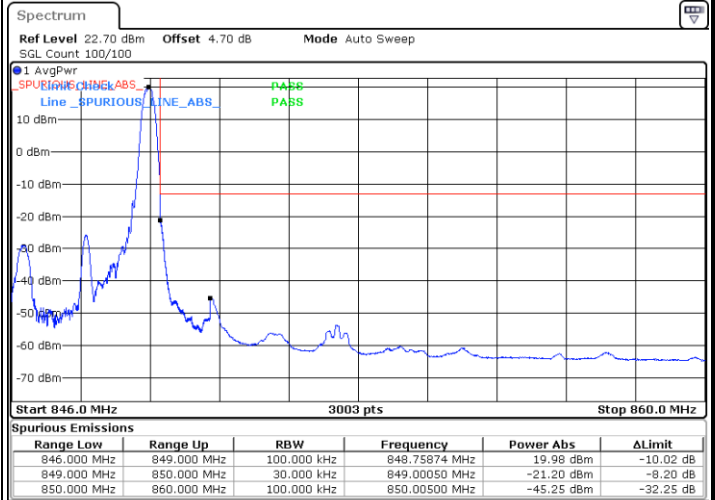
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



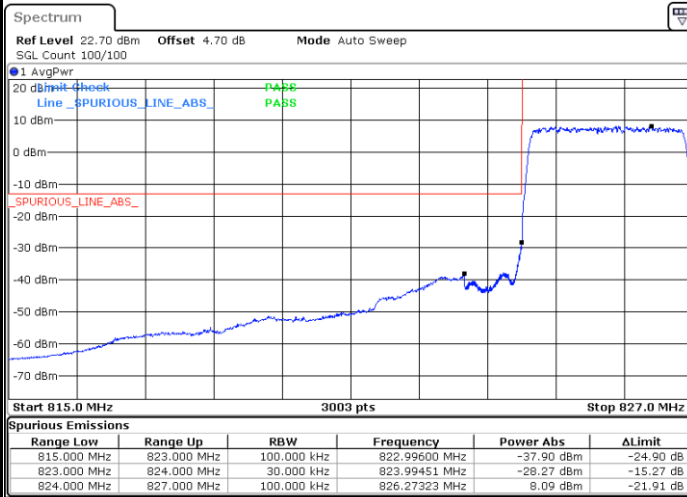
Date: 18.JAN.2021 22:52:14

Highest Band Edge / 1 RB



Date: 18.JAN.2021 22:58:46

Lowest Band Edge / Full RB



Date: 18.JAN.2021 22:55:30

Highest Band Edge / Full RB

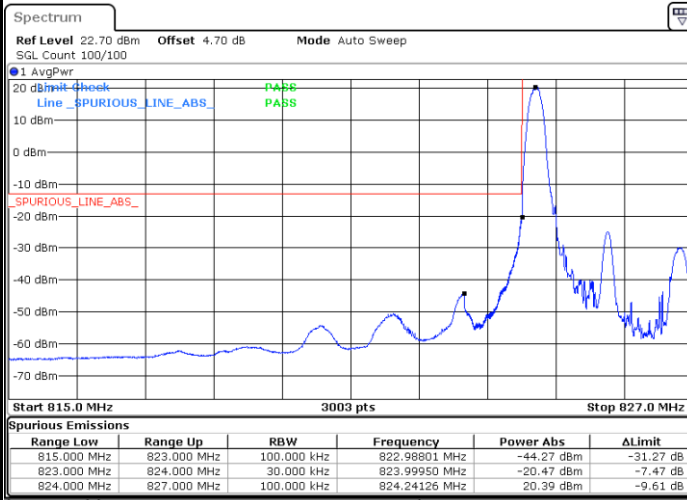


Date: 18.JAN.2021 23:02:02



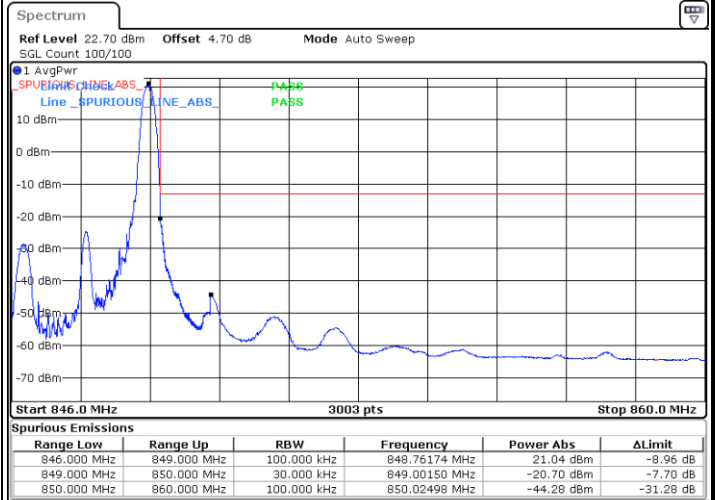
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



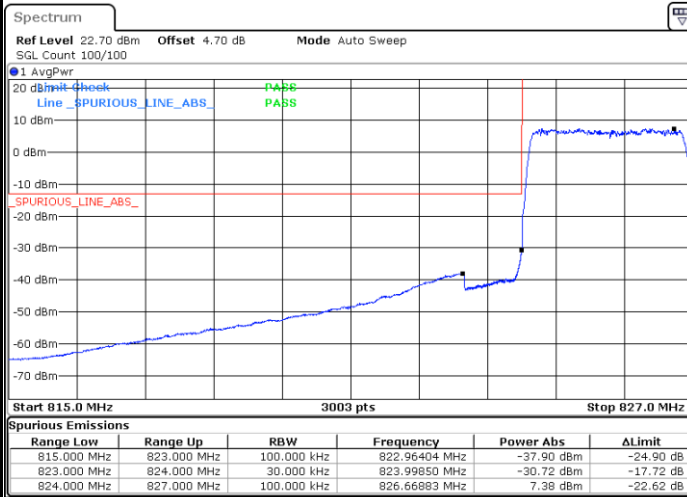
Date: 18.JAN.2021 22:53:52

Highest Band Edge / 1 RB



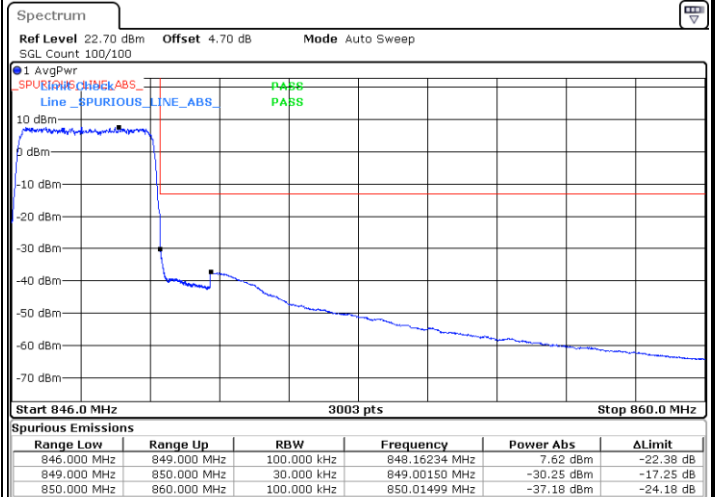
Date: 18.JAN.2021 23:00:24

Lowest Band Edge / Full RB



Date: 18.JAN.2021 22:57:08

Highest Band Edge / Full RB

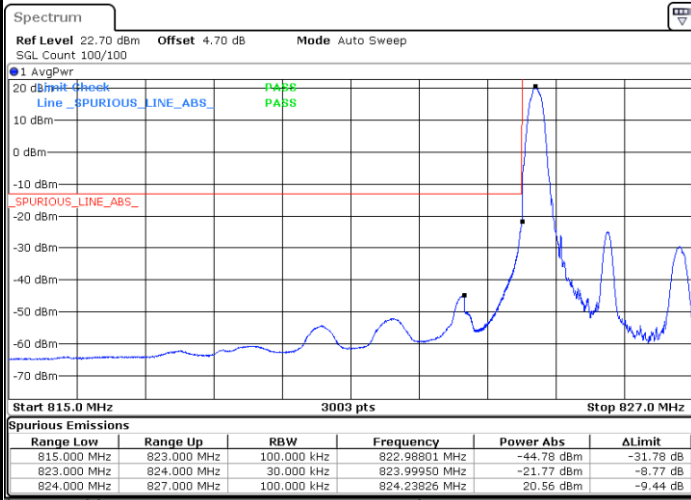


Date: 18.JAN.2021 23:03:40



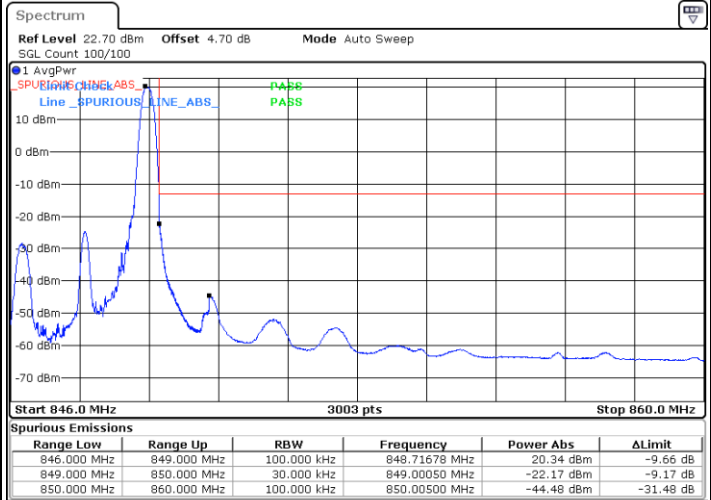
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



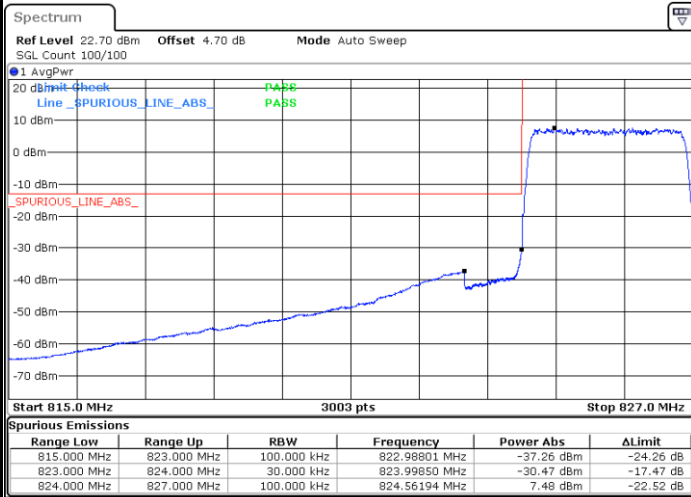
Date: 18.JAN.2021 23:37:55

Highest Band Edge / 1 RB



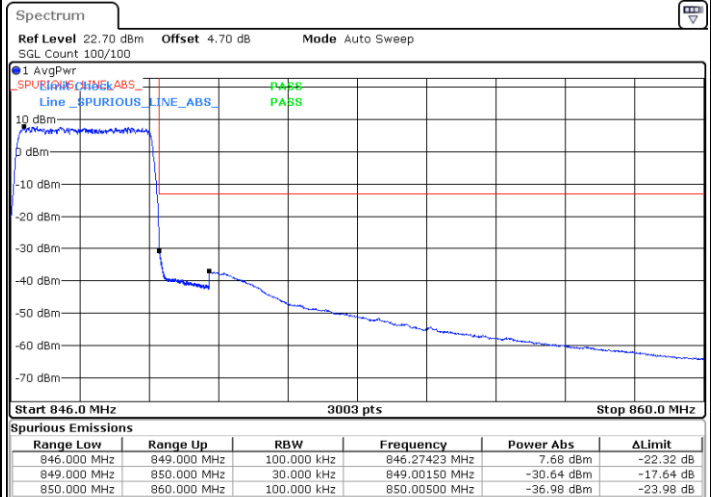
Date: 18.JAN.2021 23:41:10

Lowest Band Edge / Full RB



Date: 18.JAN.2021 23:36:17

Highest Band Edge / Full RB

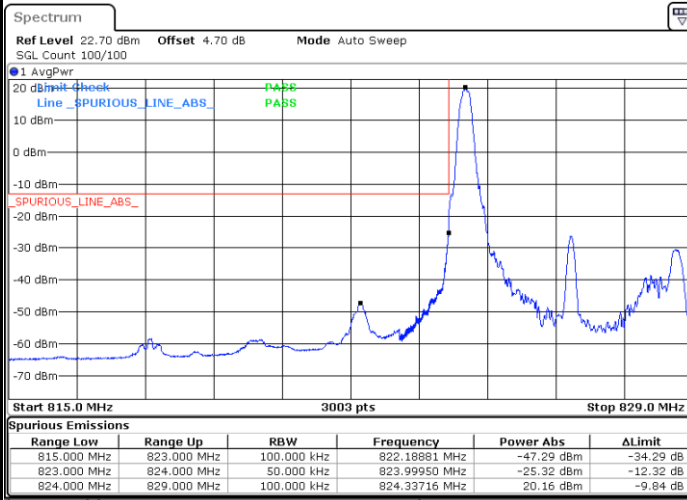


Date: 18.JAN.2021 23:39:32

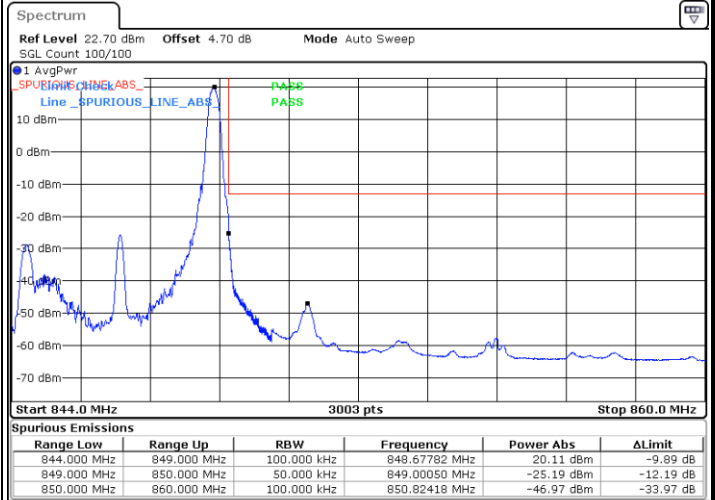


LTE Band 5 / 5MHz / QPSK

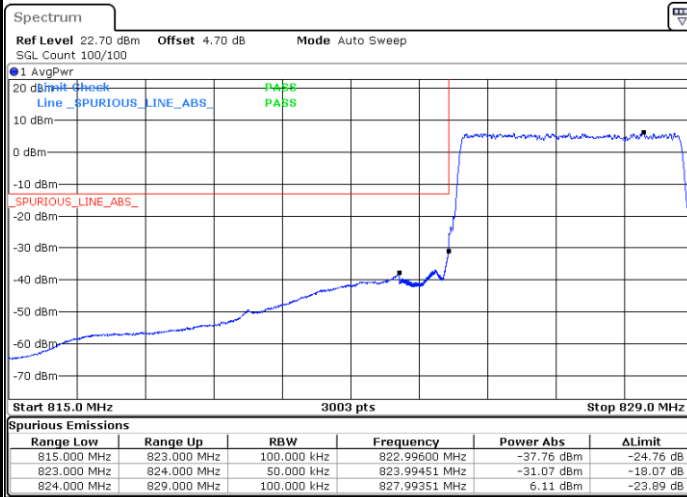
Lowest Band Edge / 1 RB



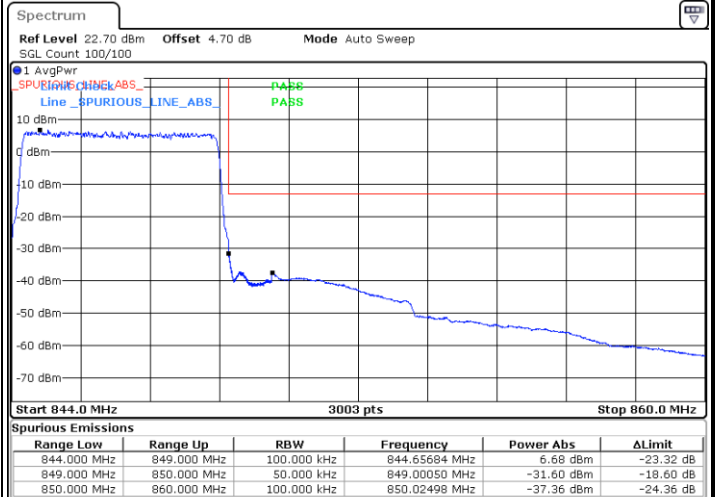
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



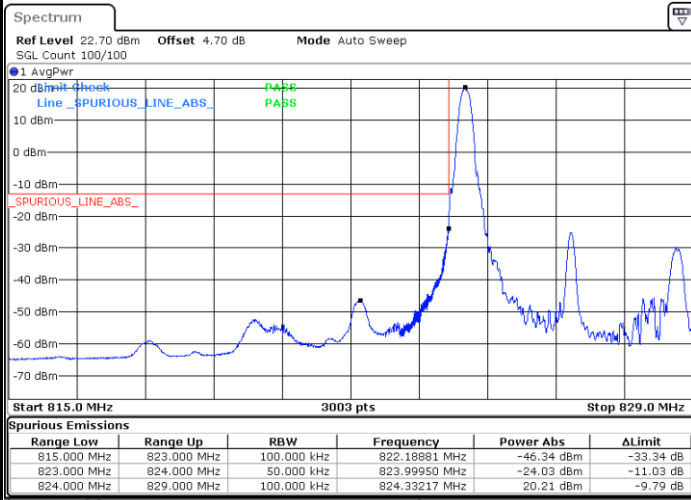
Highest Band Edge / Full RB





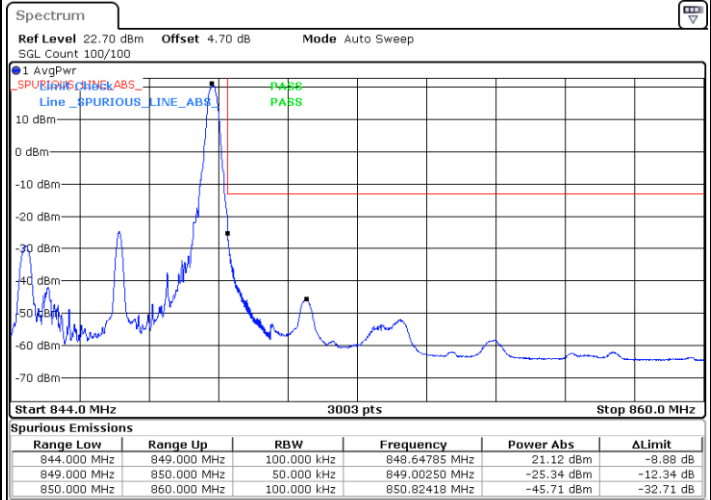
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



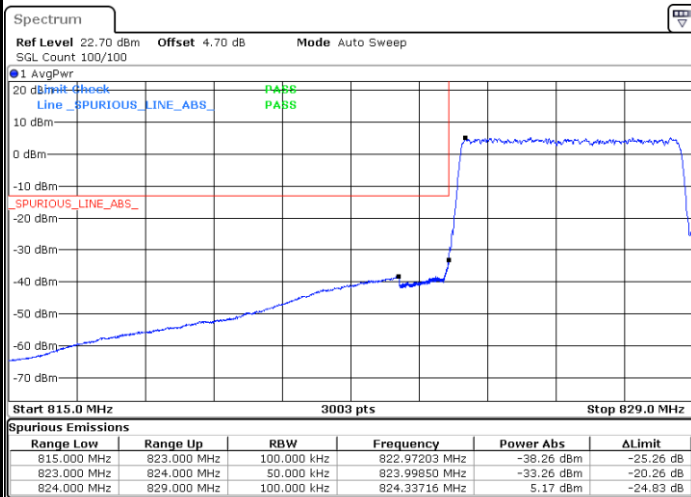
Date: 18.JAN.2021 23:06:55

Highest Band Edge / 1 RB



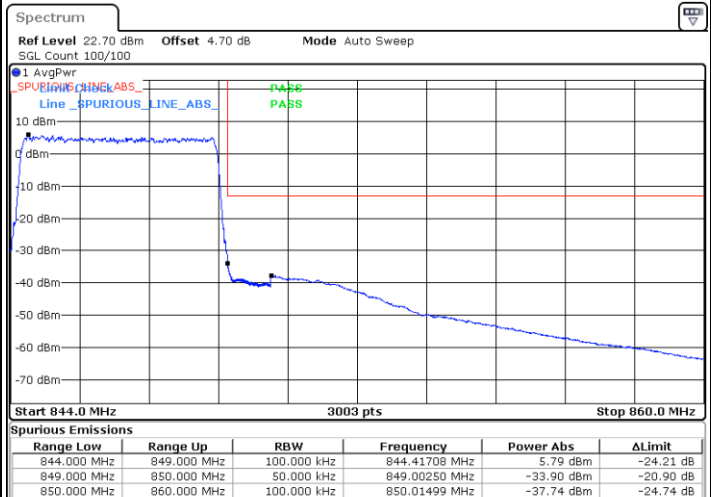
Date: 18.JAN.2021 23:13:27

Lowest Band Edge / Full RB



Date: 18.JAN.2021 23:10:11

Highest Band Edge / Full RB

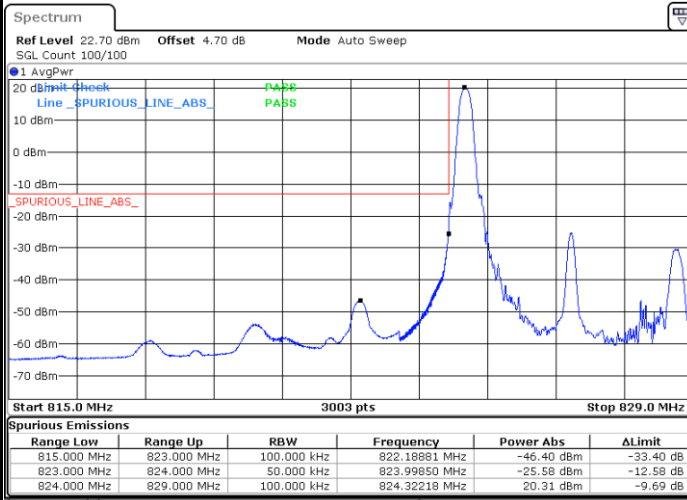


Date: 18.JAN.2021 23:16:42



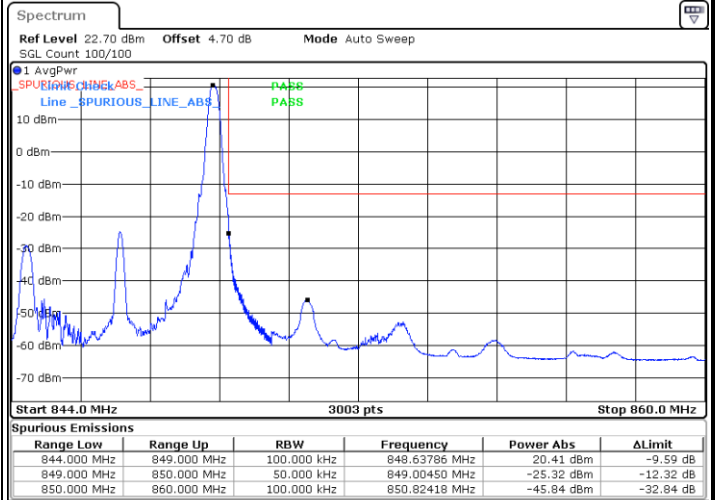
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



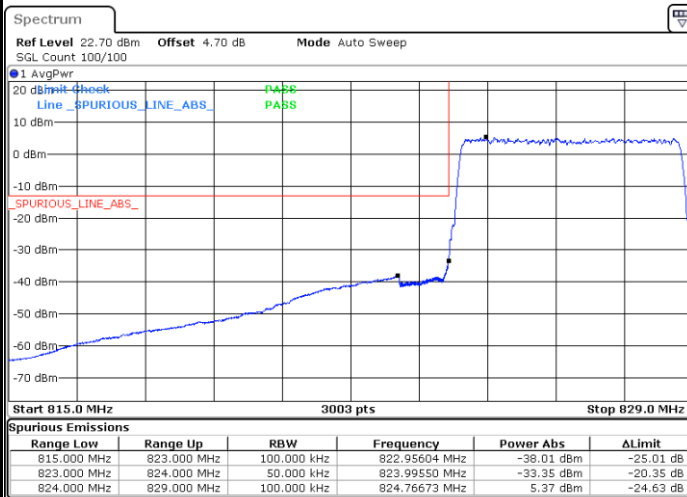
Date: 18.JAN.2021 23:44:26

Highest Band Edge / 1 RB



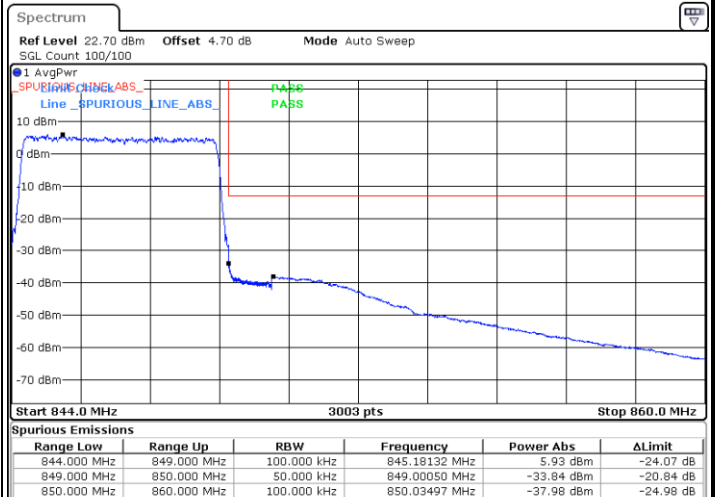
Date: 18.JAN.2021 23:47:42

Lowest Band Edge / Full RB



Date: 18.JAN.2021 23:42:48

Highest Band Edge / Full RB



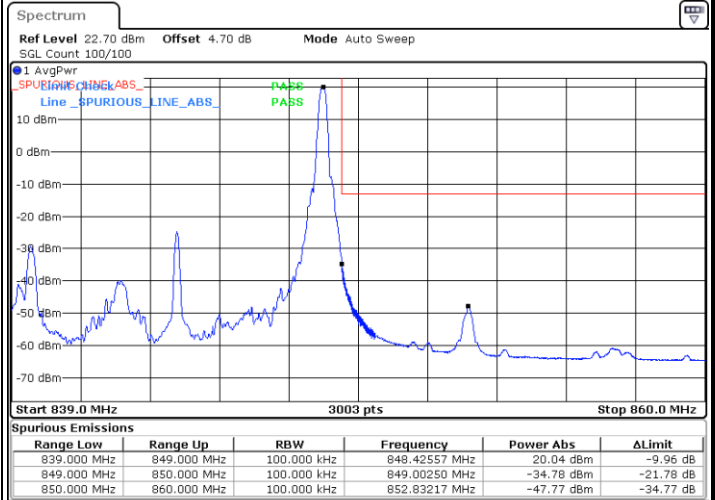
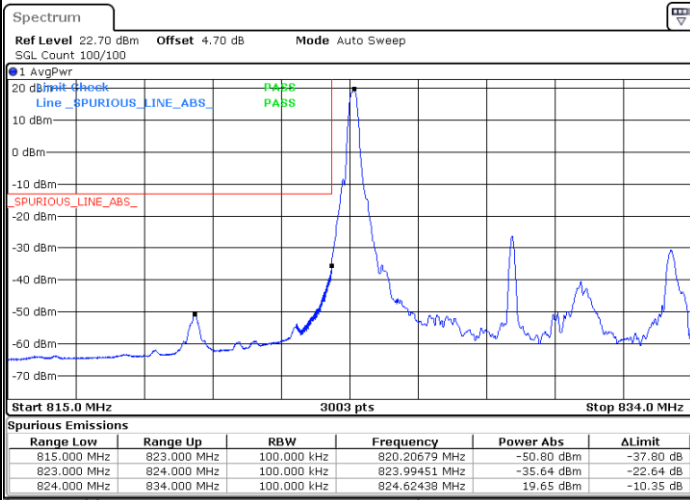
Date: 18.JAN.2021 23:46:04



LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

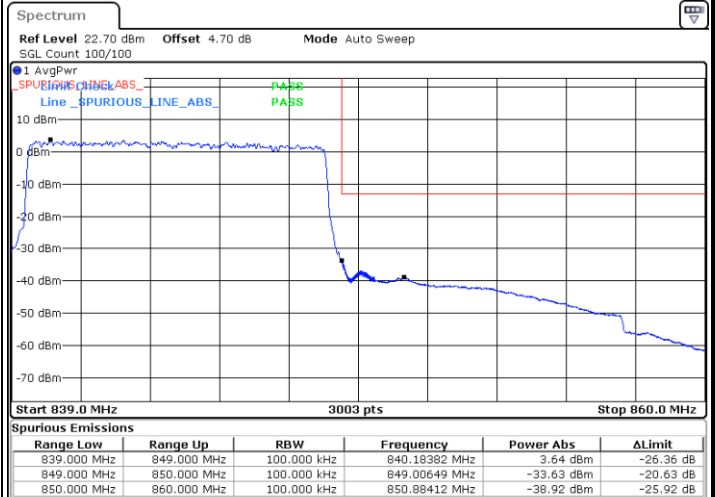
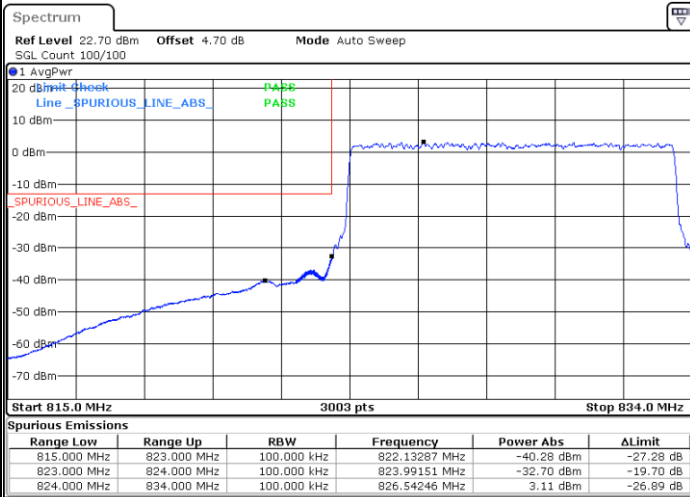


Date: 18.JAN.2021 23:18:20

Date: 18.JAN.2021 23:24:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



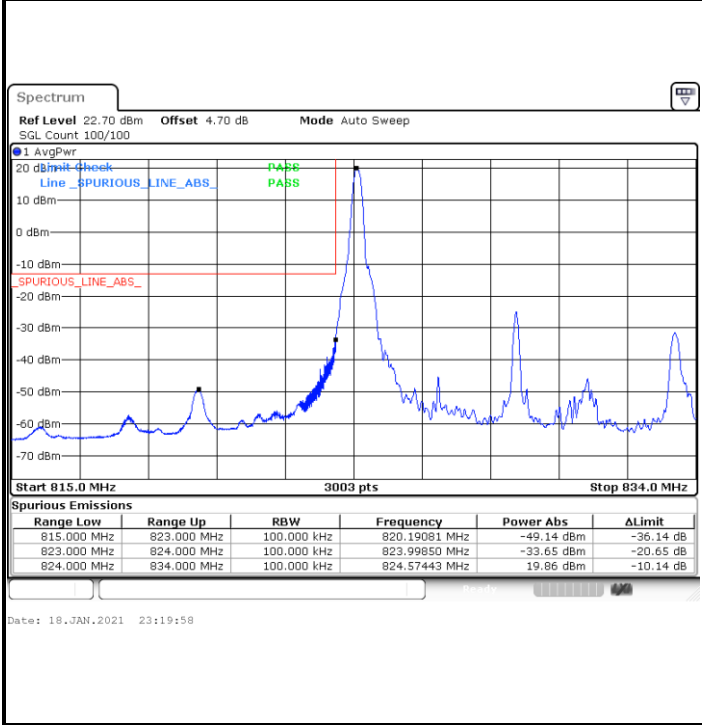
Date: 18.JAN.2021 23:21:36

Date: 18.JAN.2021 23:28:07

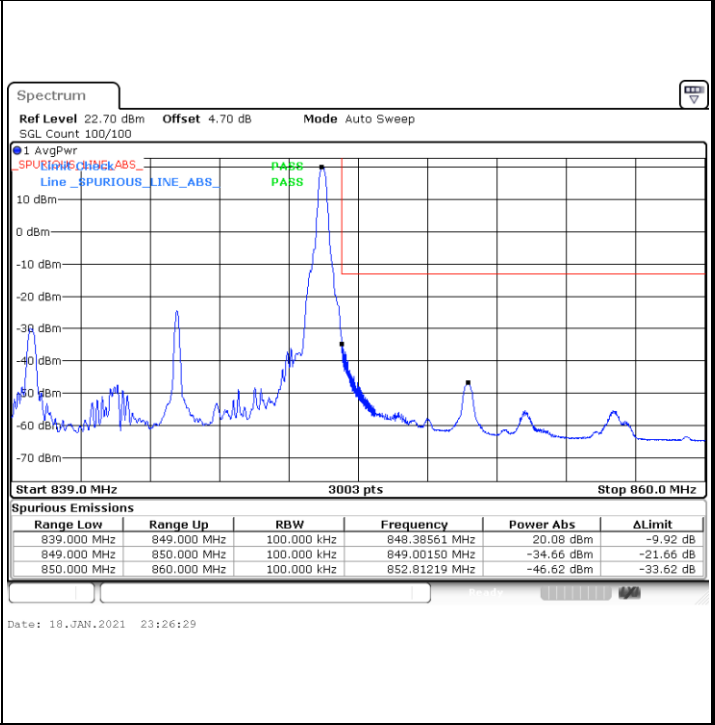


LTE Band 5 / 10MHz / 16QAM

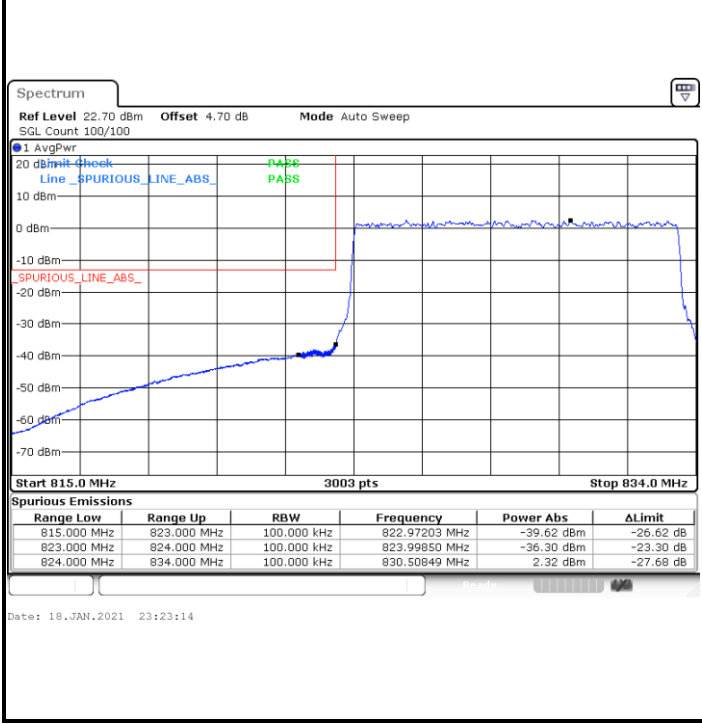
Lowest Band Edge / 1 RB



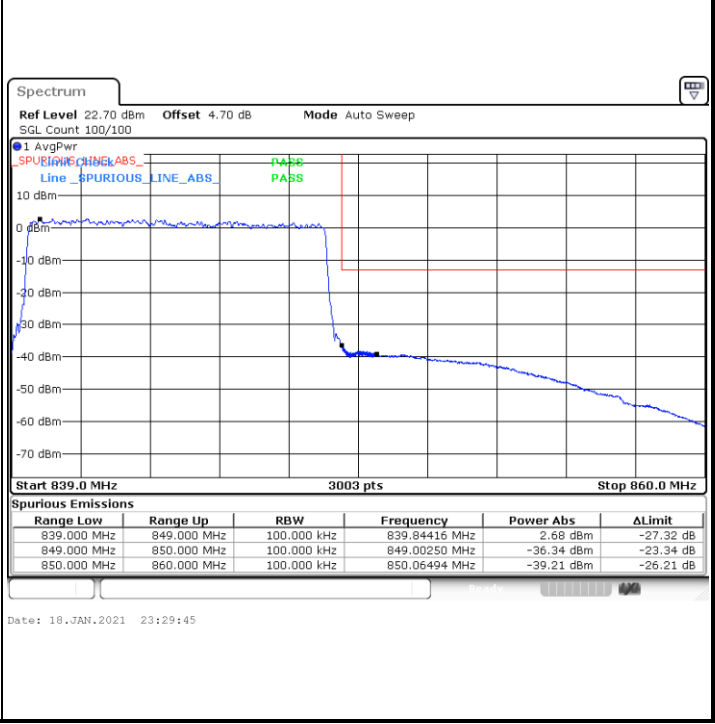
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



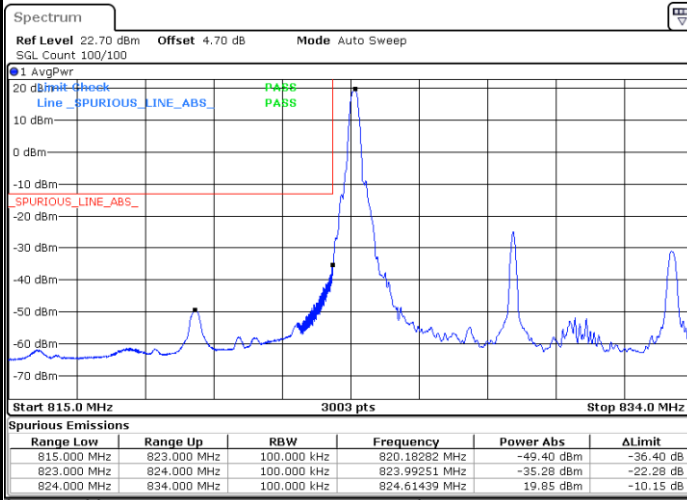
Highest Band Edge / Full RB





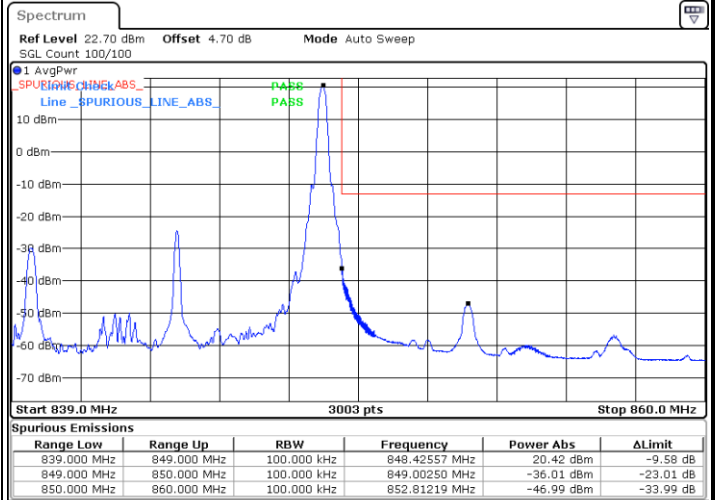
LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



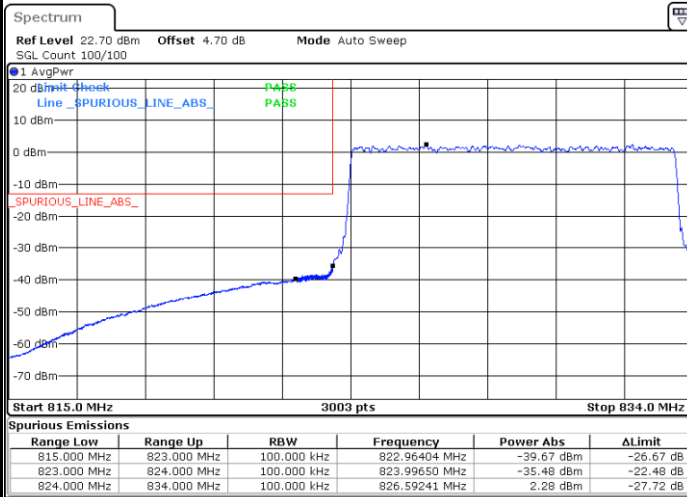
Date: 18.JAN.2021 23:50:57

Highest Band Edge / 1 RB



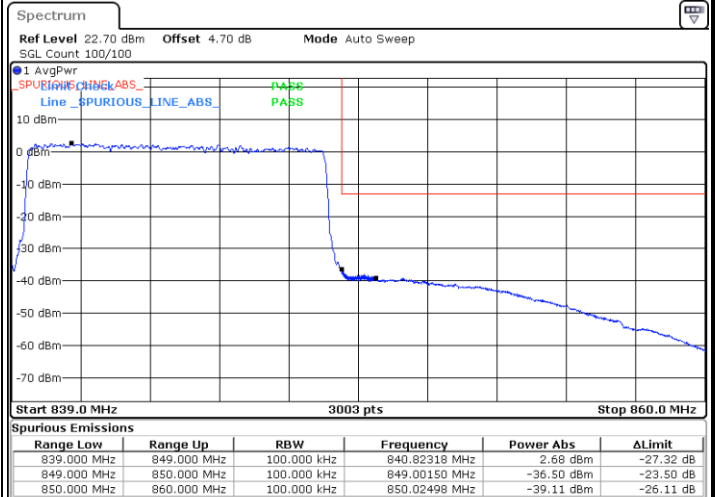
Date: 18.JAN.2021 23:54:13

Lowest Band Edge / Full RB



Date: 18.JAN.2021 23:49:19

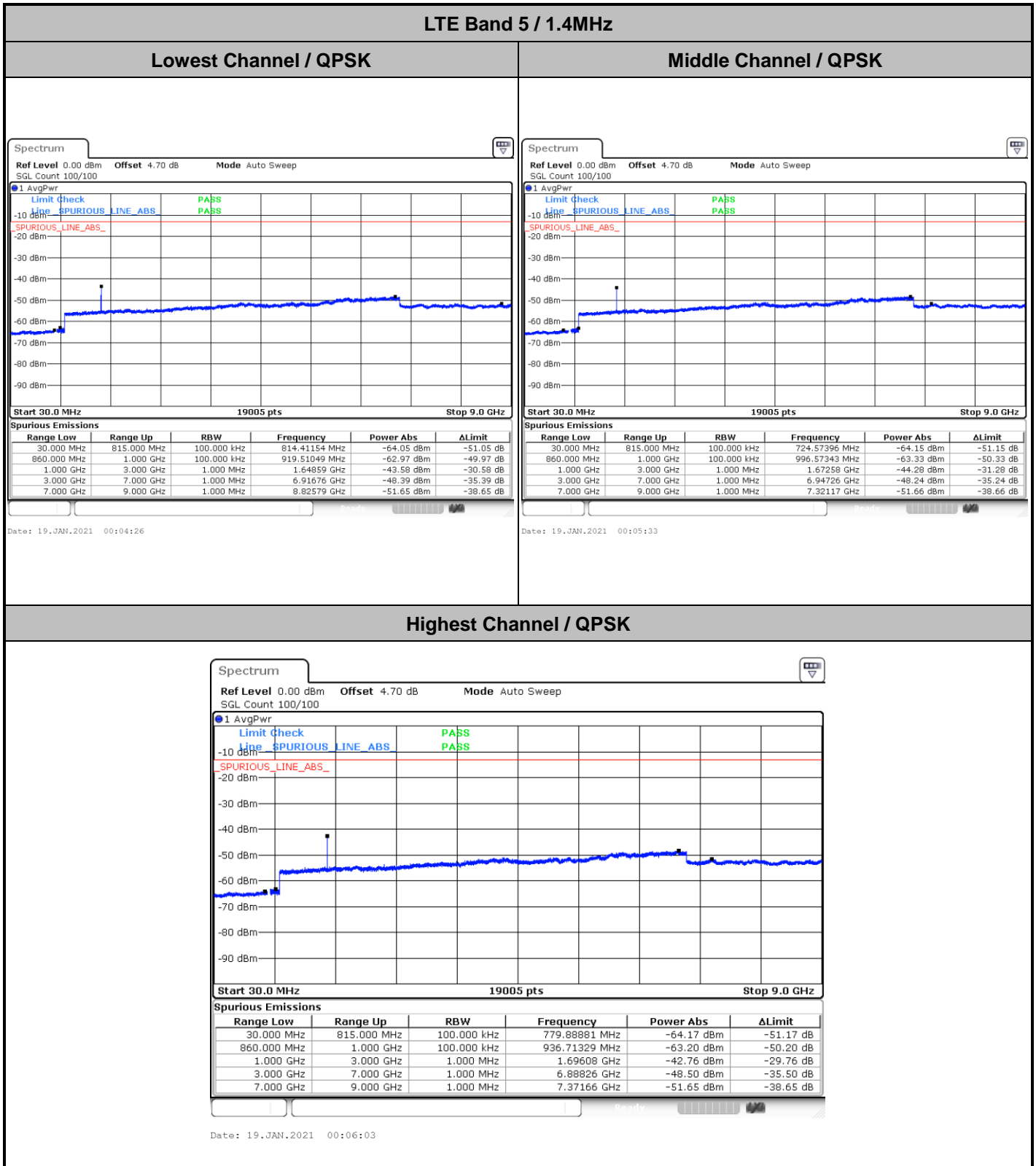
Highest Band Edge / Full RB



Date: 18.JAN.2021 23:52:35



Conducted Spurious Emission

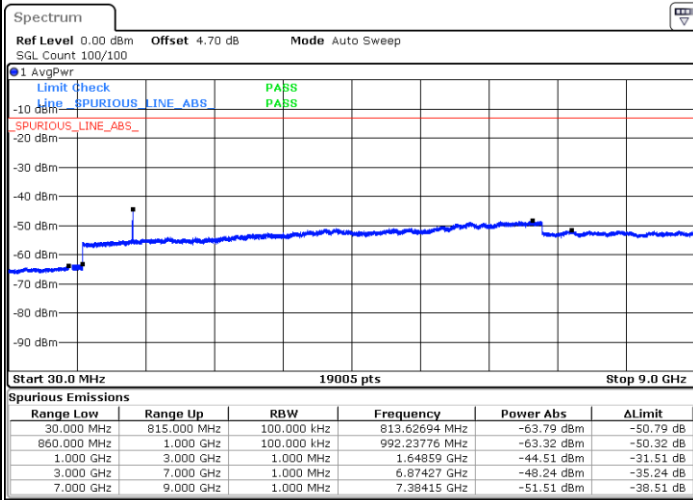




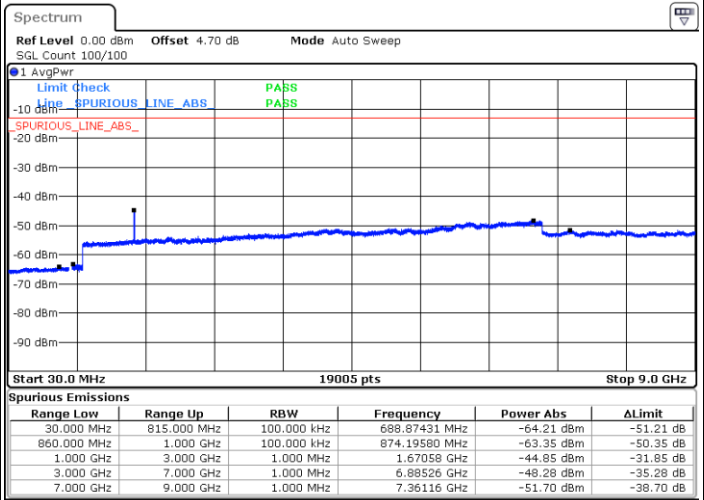
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

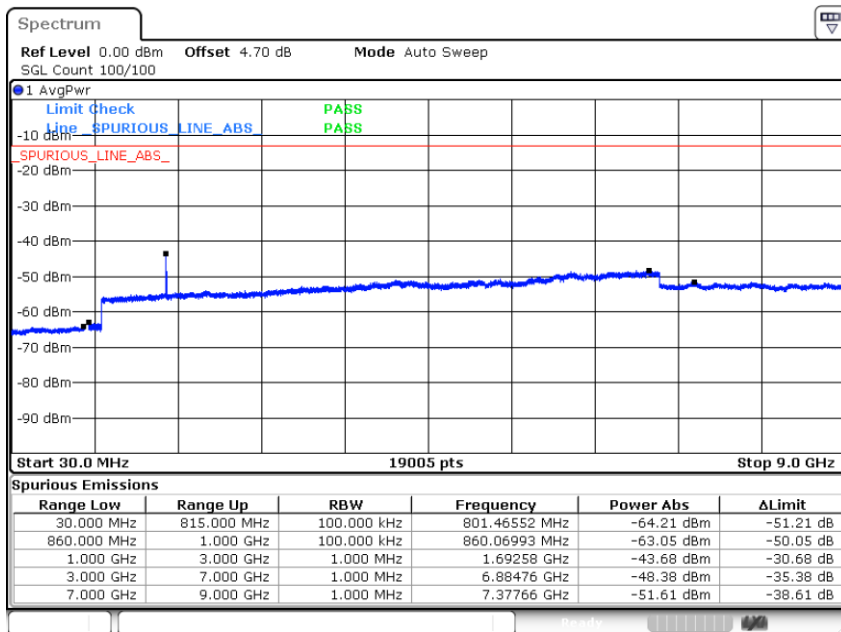


Date: 19.JAN.2021 00:06:32



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

Highest Channel / QPSK



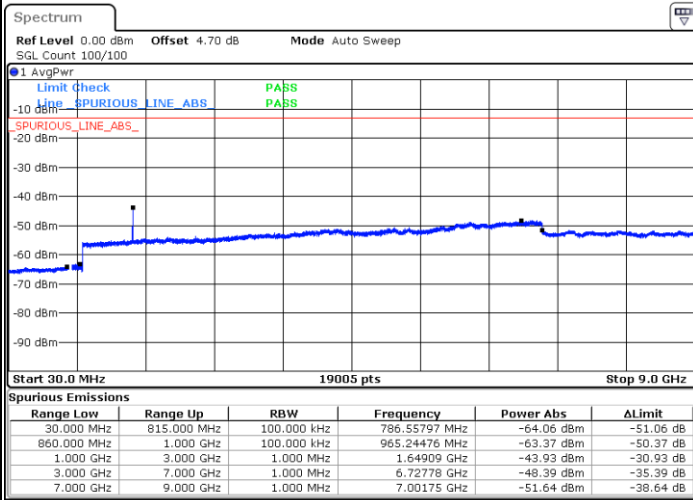
Date: 19.JAN.2021 00:07:26



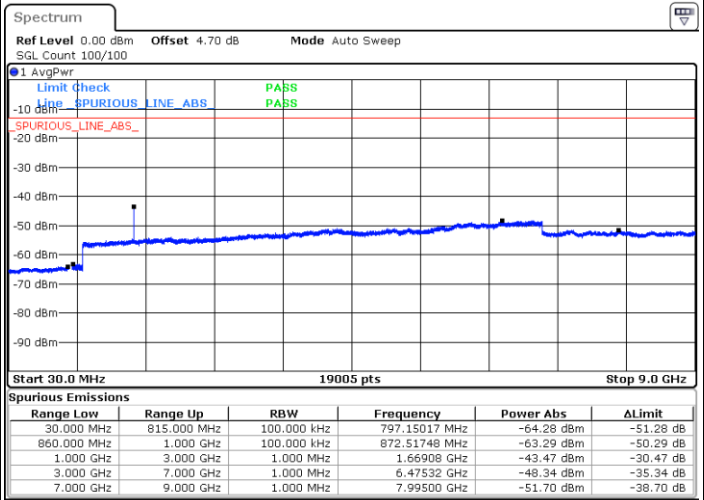
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

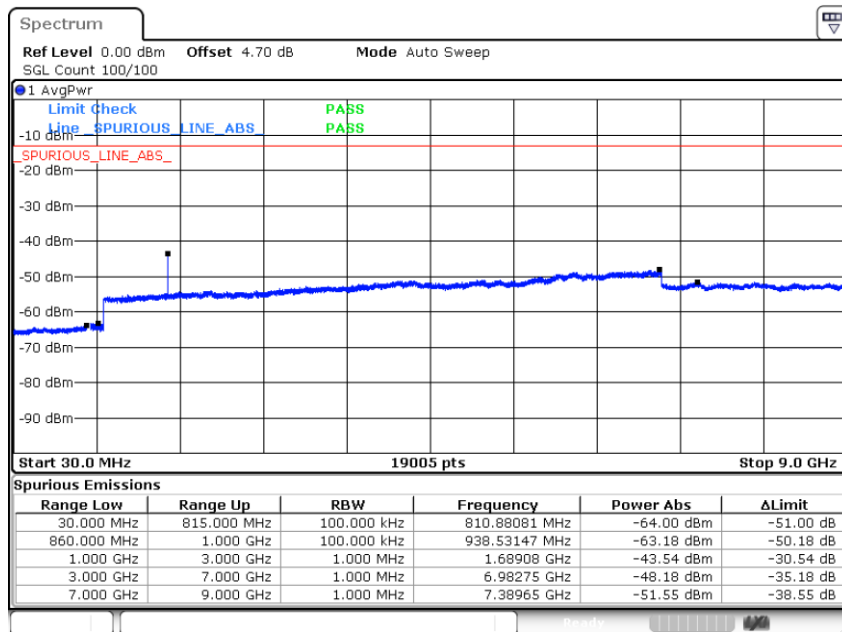


Date: 19. JAN. 2021 00:07:57



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

Highest Channel / QPSK



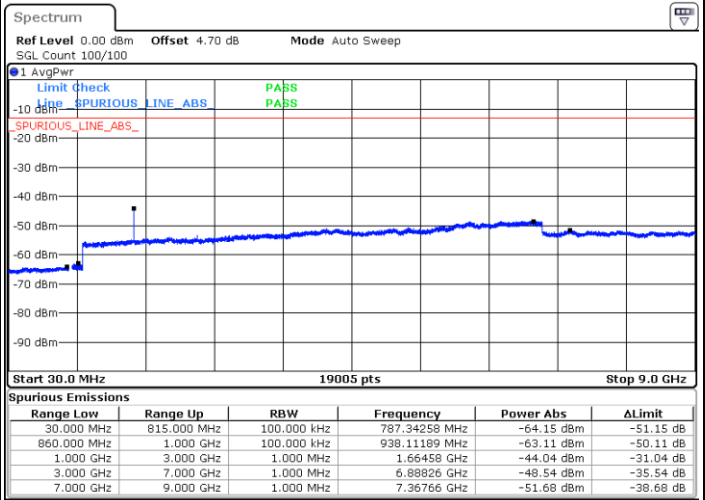
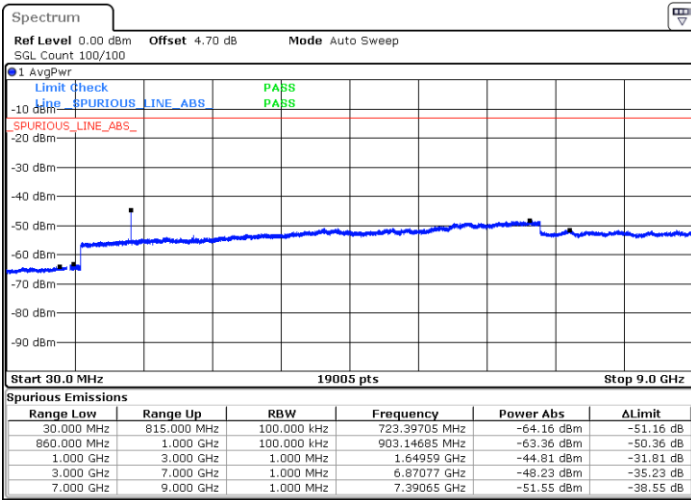
Date: 19. JAN. 2021 00:08:53



LTE Band 5 / 10MHz

Lowest Channel / QPSK

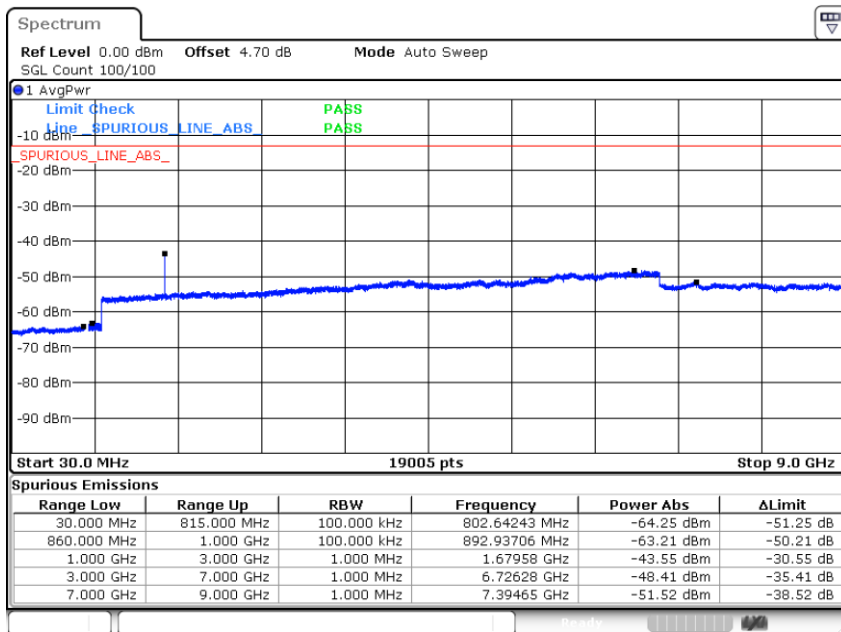
Middle Channel / QPSK



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

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	

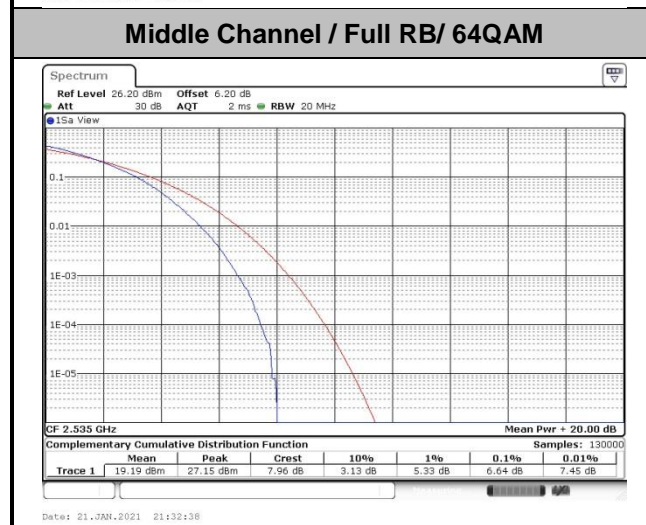
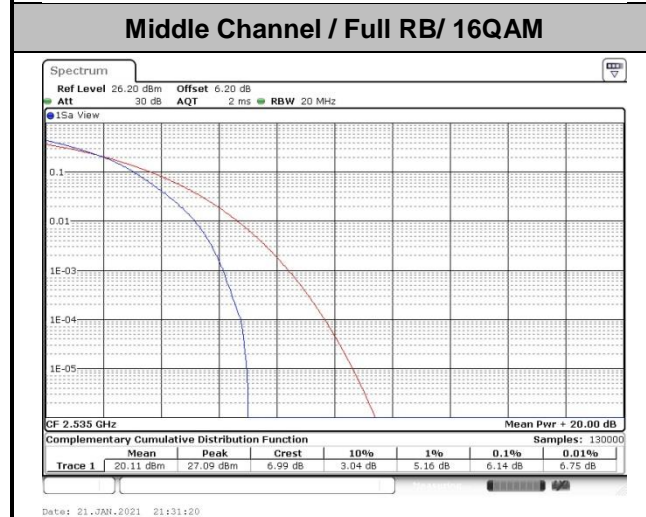
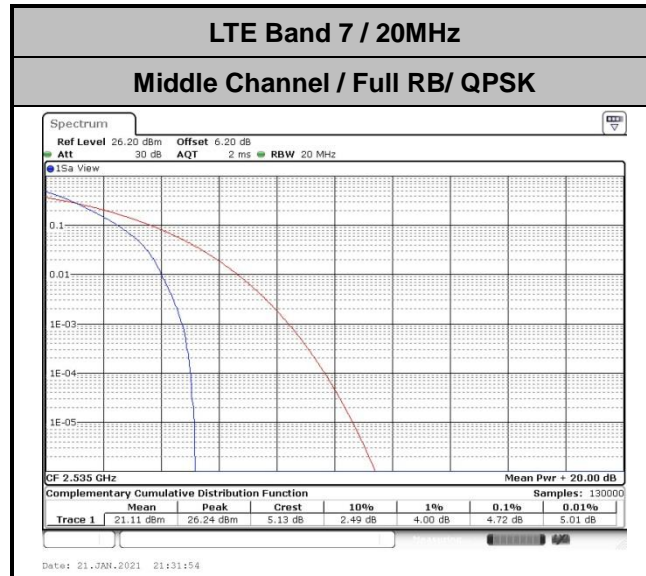
Note: Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.



LTE Band 7

Peak-to-Average Ratio

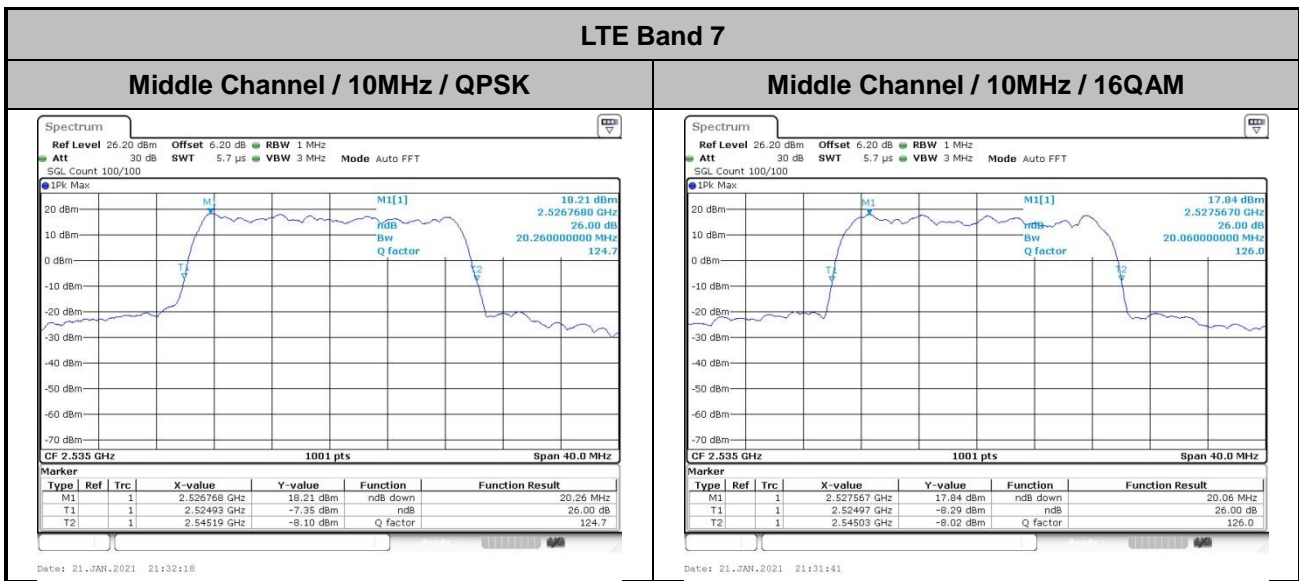
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.72	6.14	6.64	PASS





26dB Bandwidth

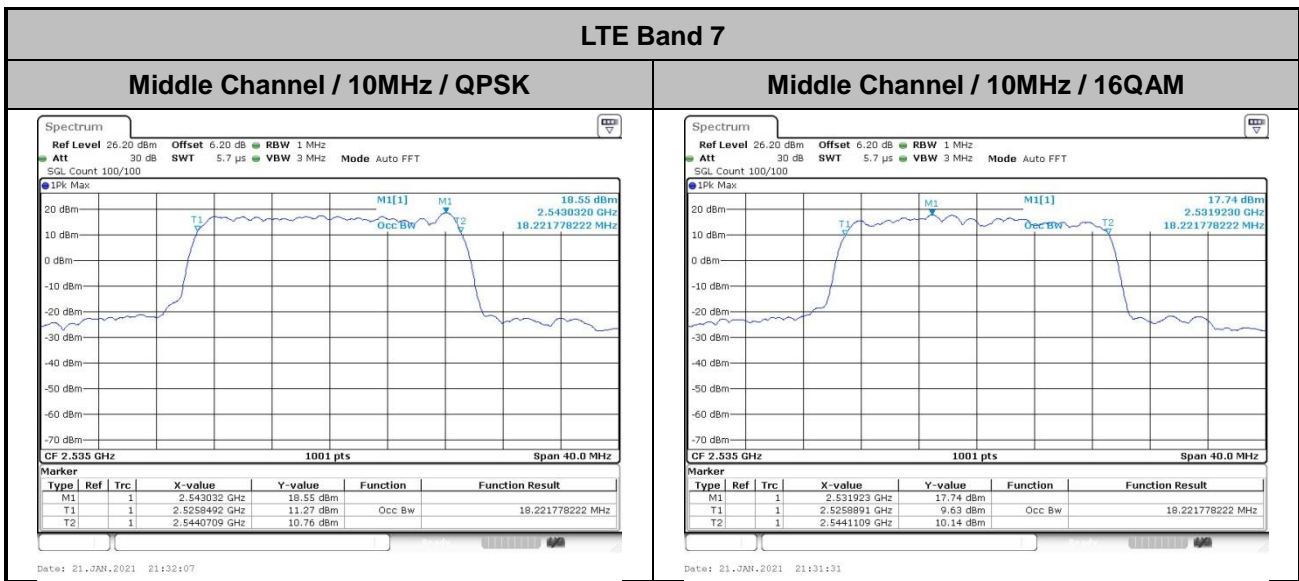
Mode	LTE Band 7 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	20.26	20.06





Occupied Bandwidth

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

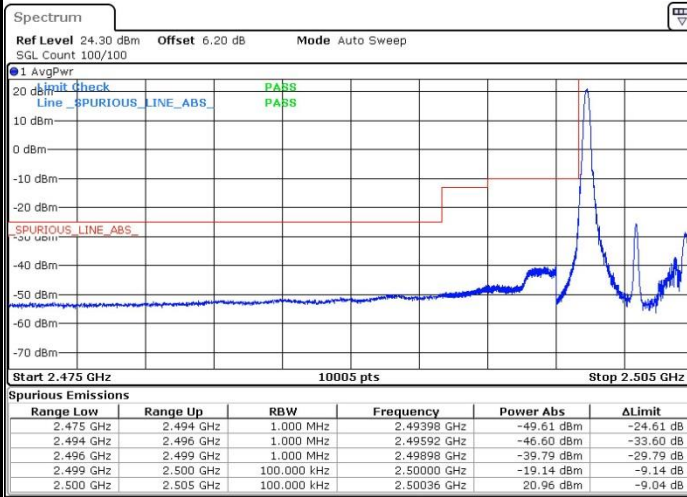




Conducted Band Edge

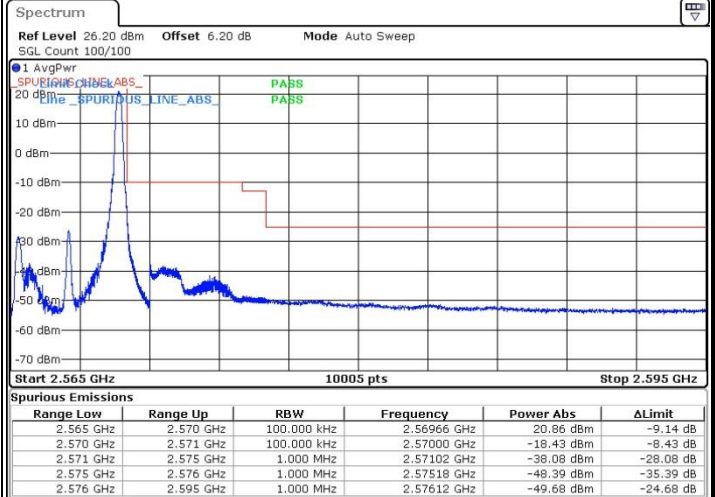
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1RB



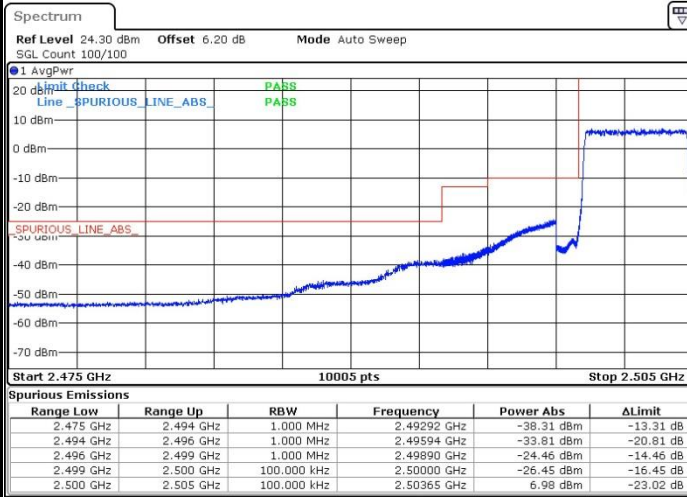
Date: 21.JAN.2021 18:36:02

Highest Band Edge / 1RB



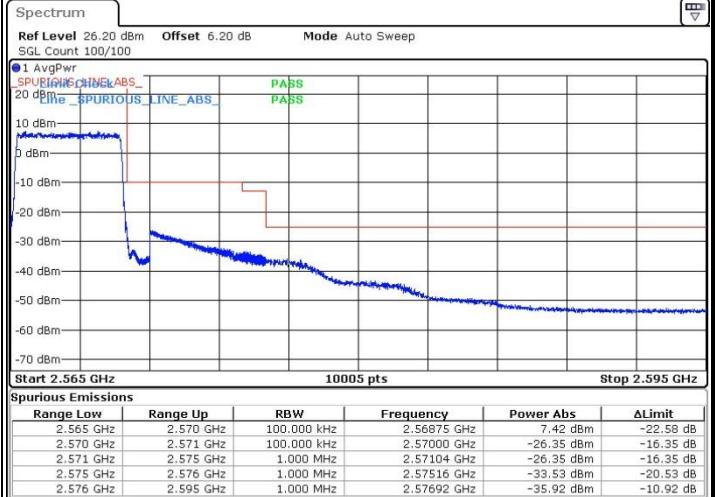
Date: 21.JAN.2021 18:42:30

Lowest Band Edge / Full RB



Date: 21.JAN.2021 18:39:33

Highest Band Edge / Full RB



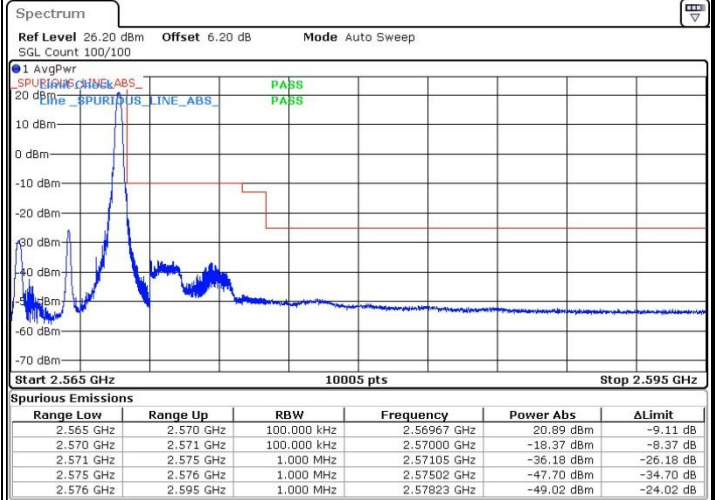
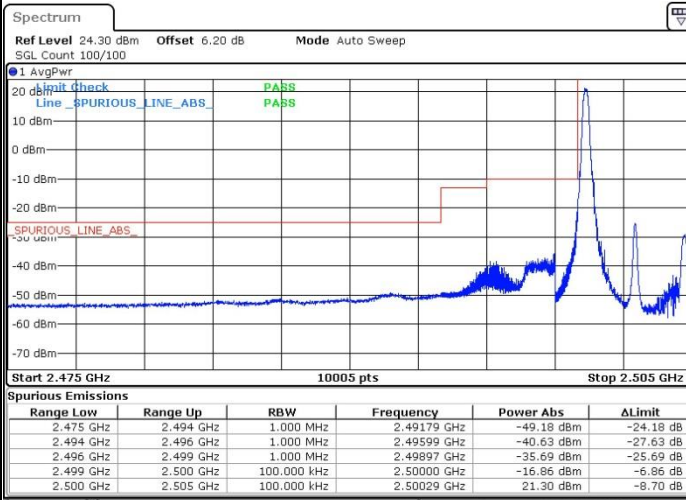
Date: 21.JAN.2021 18:40:08



LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

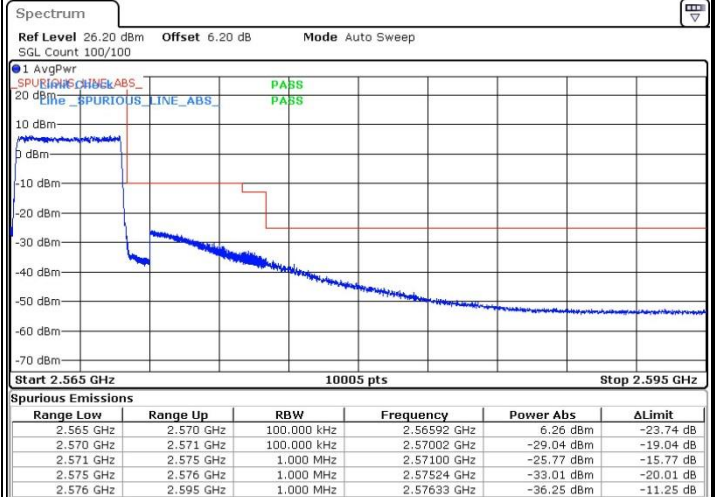
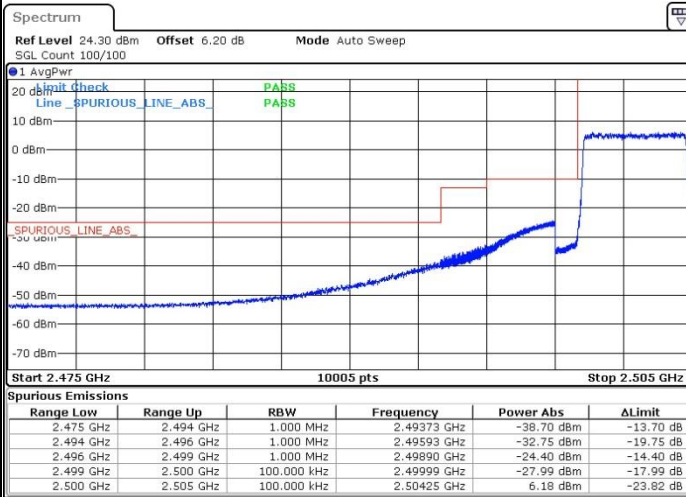


Date: 21.JAN.2021 18:38:01

Date: 21.JAN.2021 18:42:11

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.JAN.2021 18:39:12

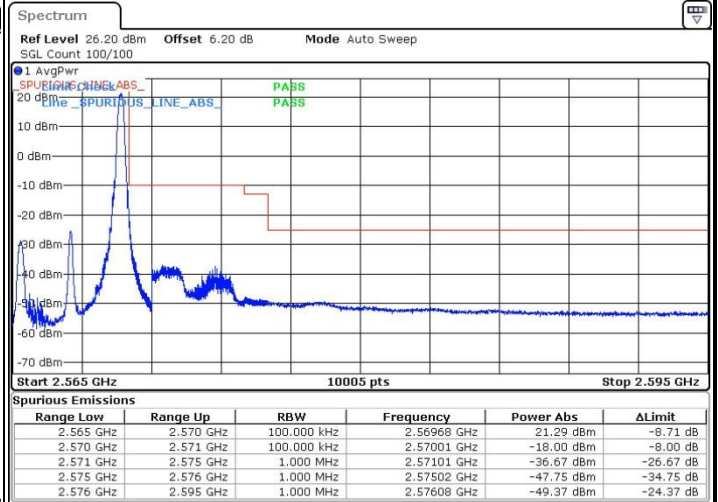
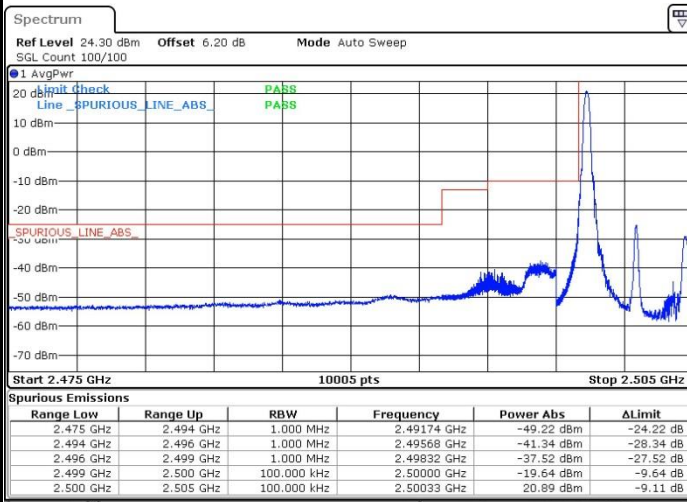
Date: 21.JAN.2021 18:40:28



LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

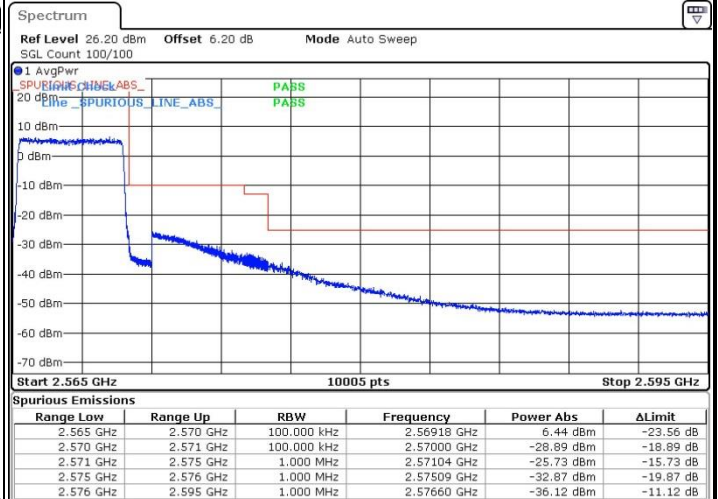
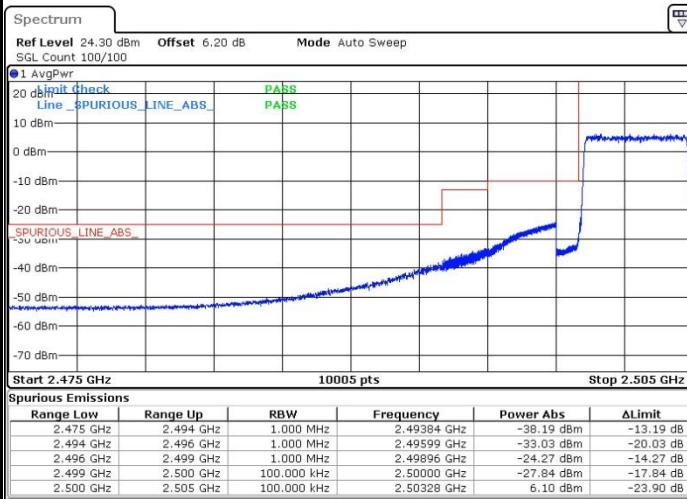


Date: 21.JAN.2021 18:38:21

Date: 21.JAN.2021 18:41:54

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.JAN.2021 18:38:54

Date: 21.JAN.2021 18:41:23