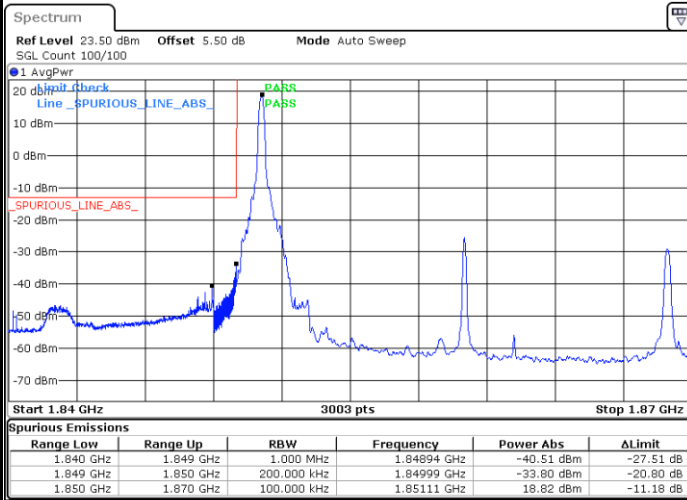




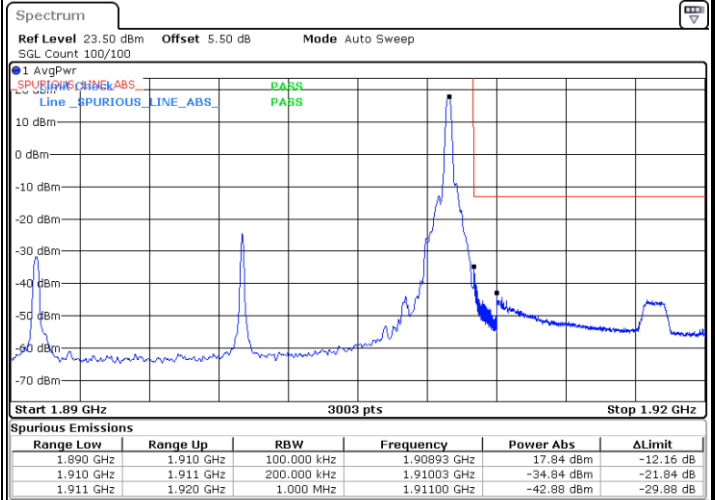
LTE Band 2 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



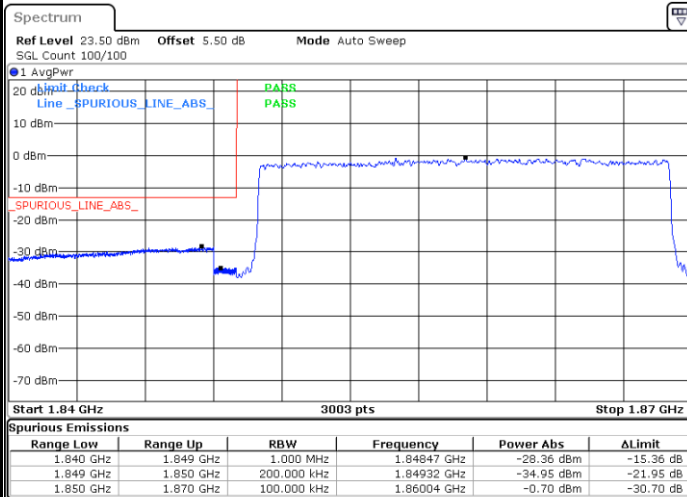
Date: 30 DEC 2020 05:39:17

Highest Band Edge / 1 RB



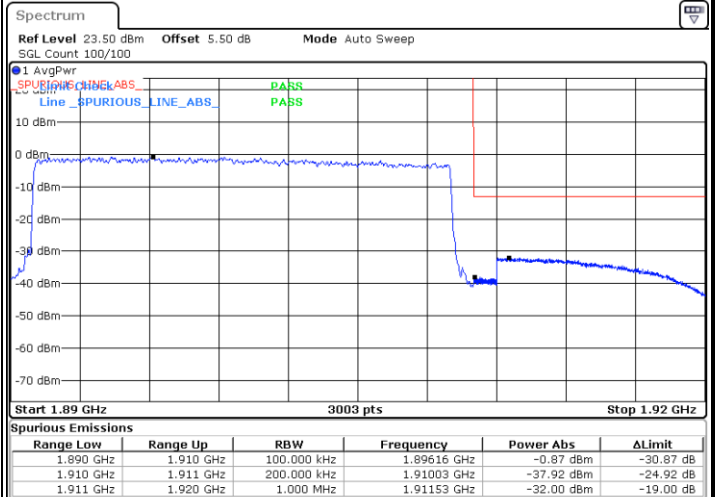
Date: 30 DEC 2020 05:44:38

Lowest Band Edge / Full RB



Date: 30 DEC 2020 05:41:58

Highest Band Edge / Full RB



Date: 30 DEC 2020 05:47:19



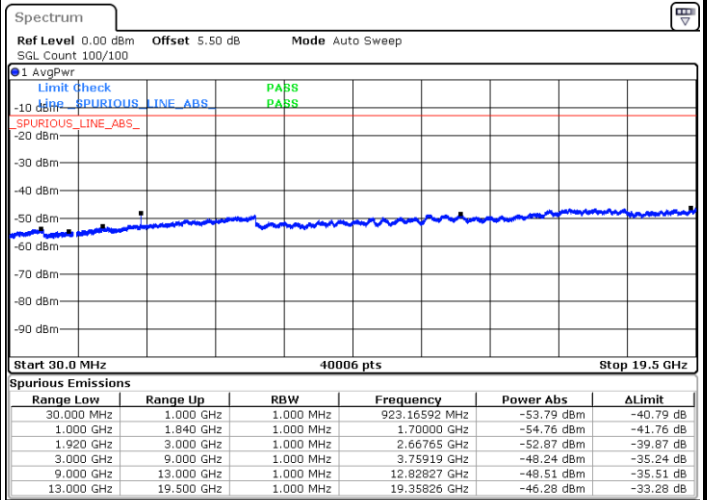
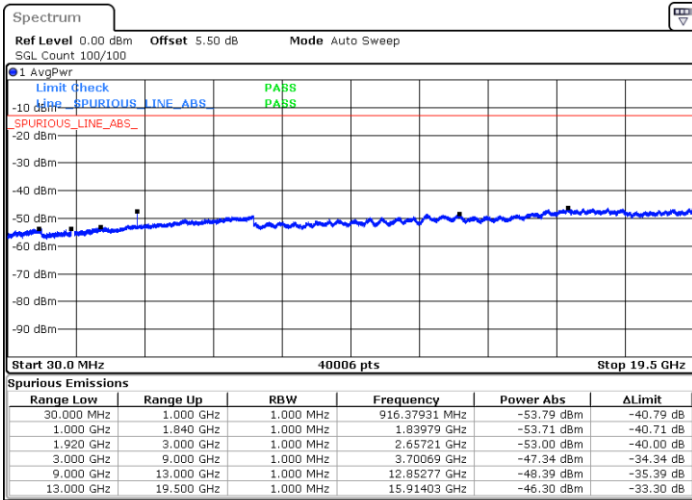
Conducted Spurious Emission



LTE Band 2 / 1.4MHz

Lowest Channel / QPSK

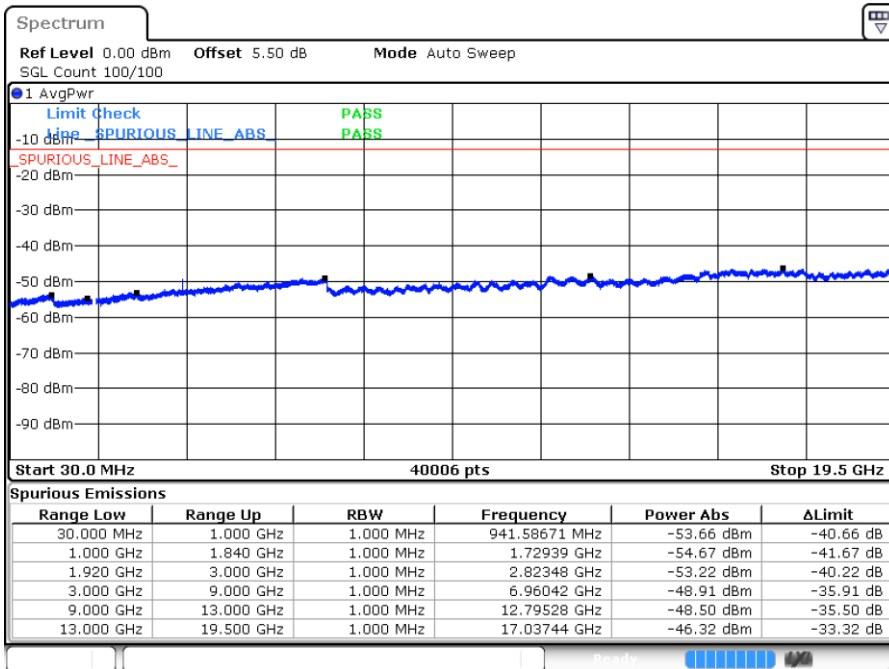
Middle Channel / QPSK



Date: 30 DEC 2020 06:13:34

Date: 30 DEC 2020 06:14:54

Highest Channel / QPSK



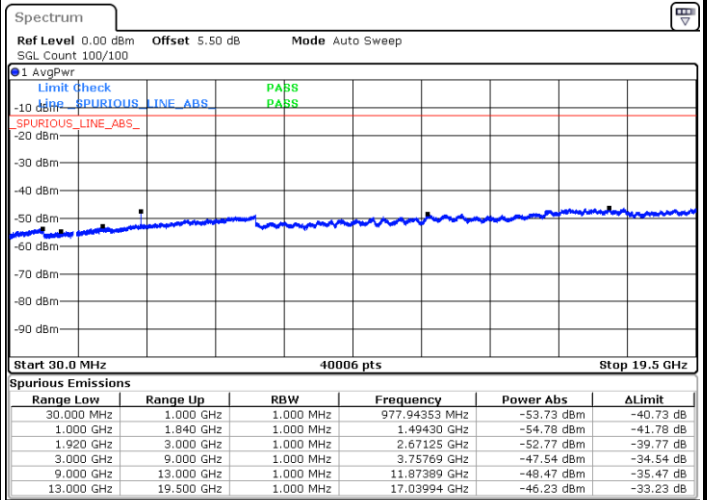
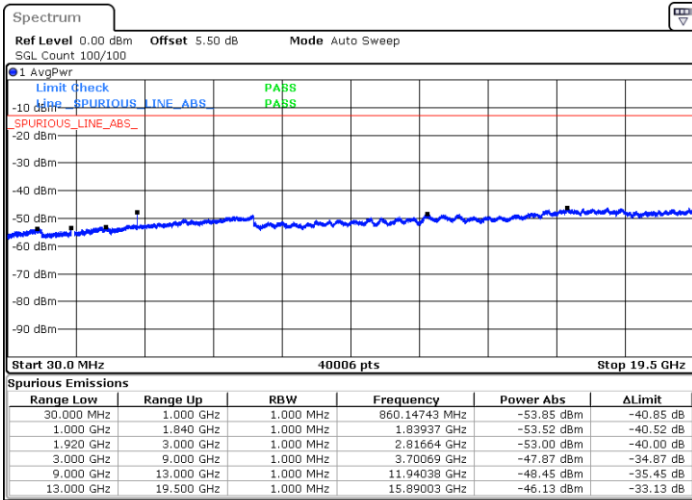
Date: 30 DEC 2020 06:15:56



LTE Band 2 / 3MHz

Lowest Channel / QPSK

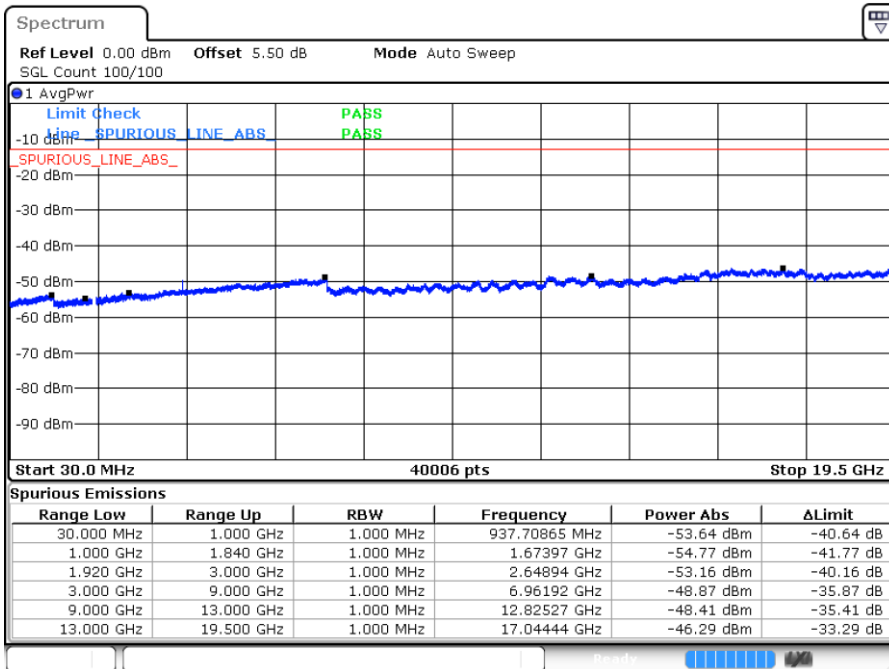
Middle Channel / QPSK



Date: 30 DEC 2020 06:09:34

Date: 30 DEC 2020 06:10:36

Highest Channel / QPSK

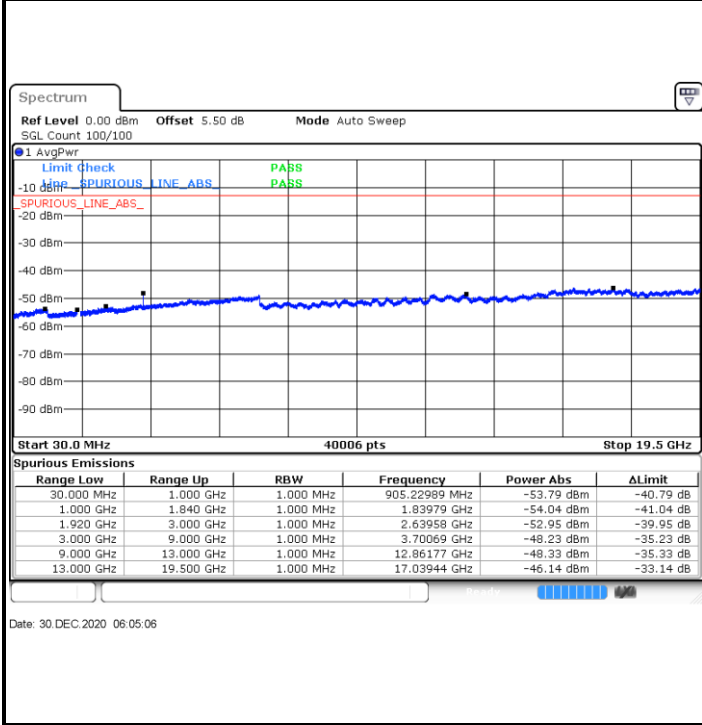


Date: 30 DEC 2020 06:11:43

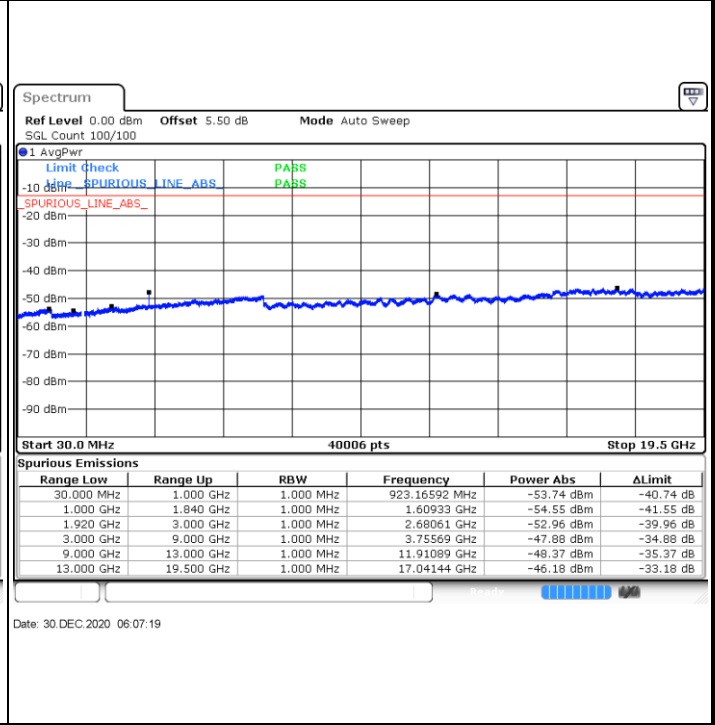


LTE Band 2 / 5MHz

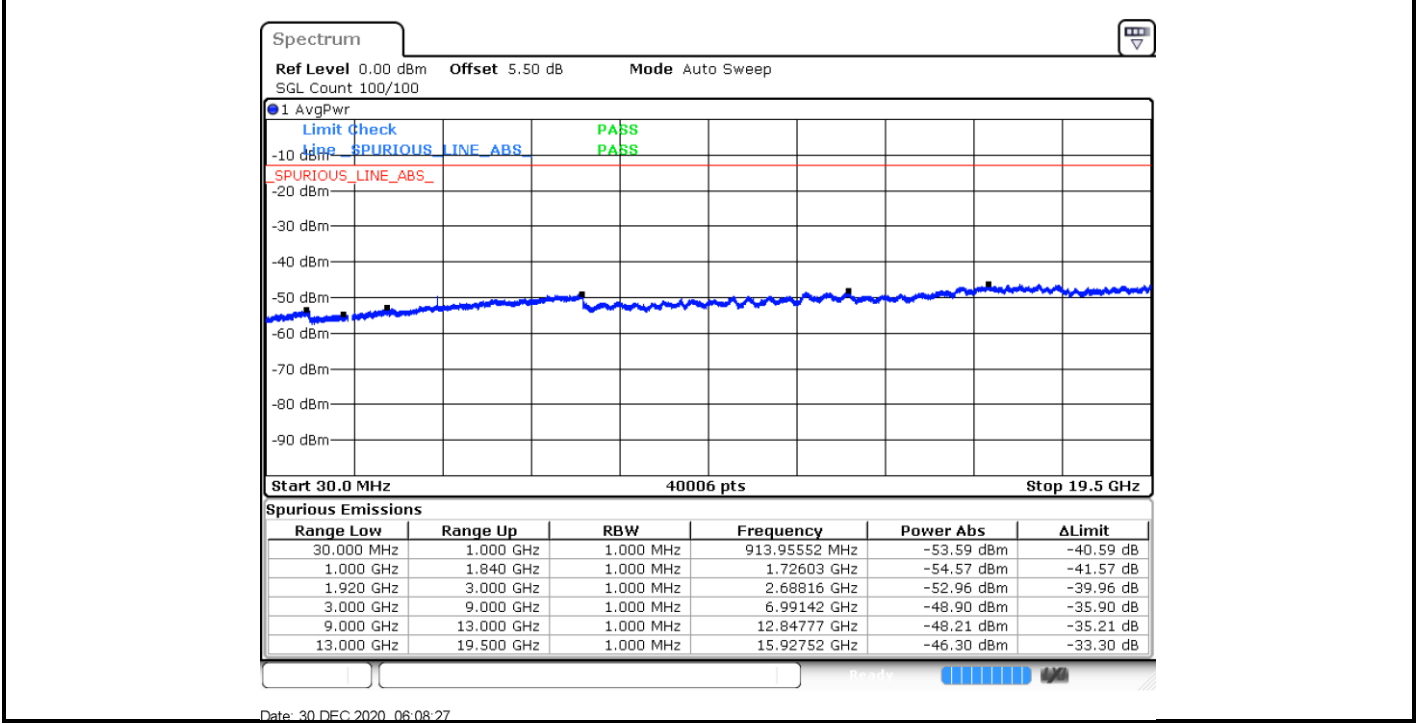
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK

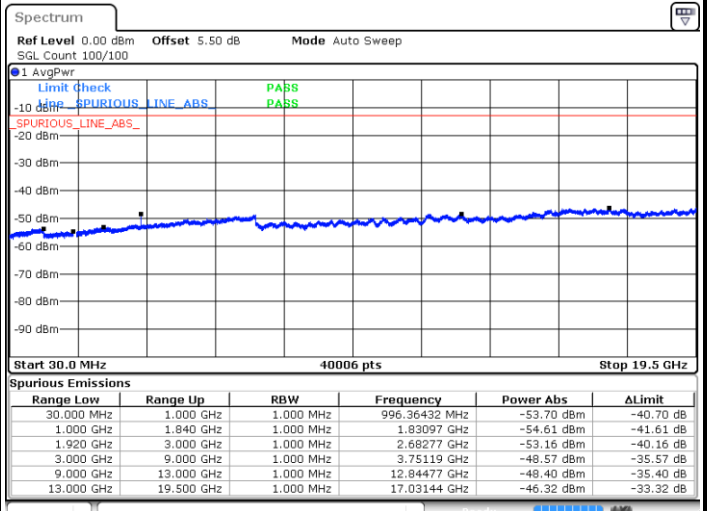
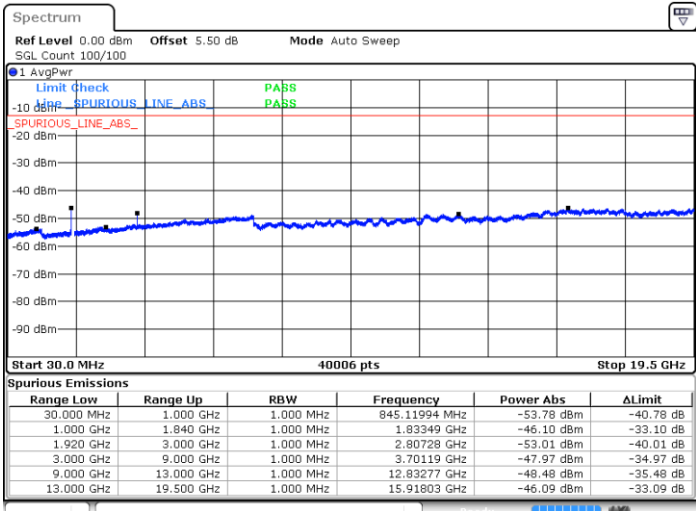




LTE Band 2 / 10MHz

Lowest Channel / QPSK

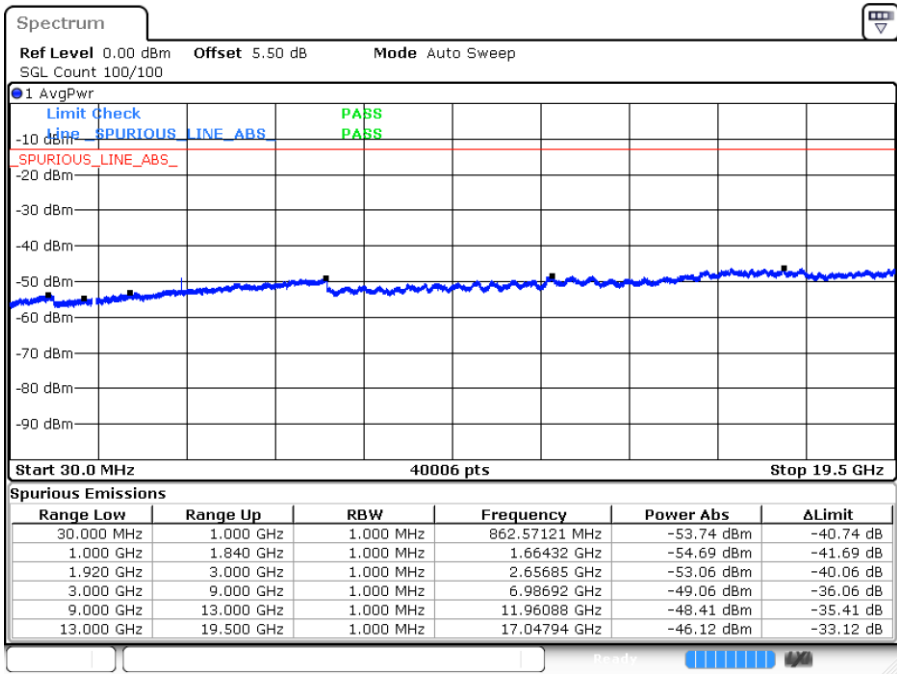
Middle Channel / QPSK



Date: 30 DEC 2020 06:00:42

Date: 30 DEC 2020 06:01:46

Highest Channel / QPSK



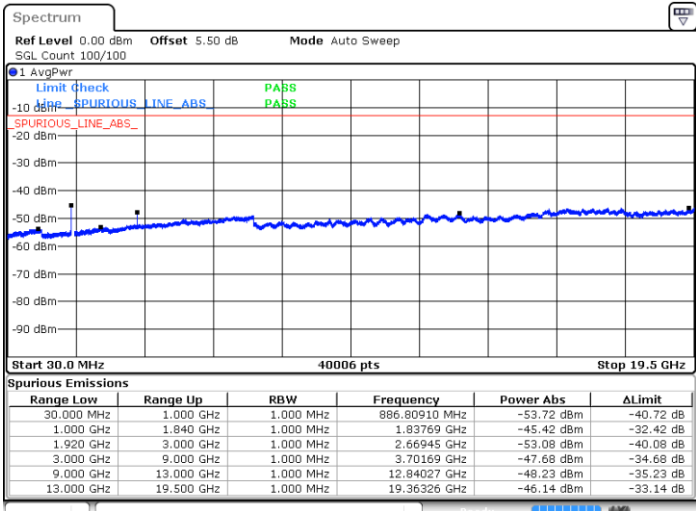
Date: 30 DEC 2020 06:03:29



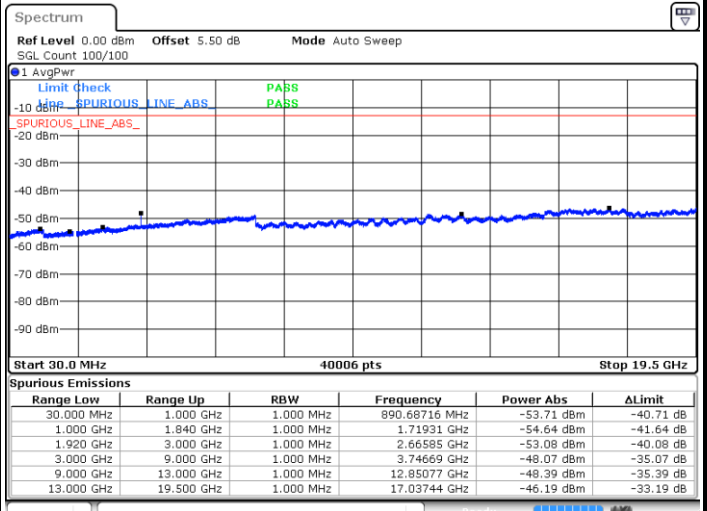
LTE Band 2 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

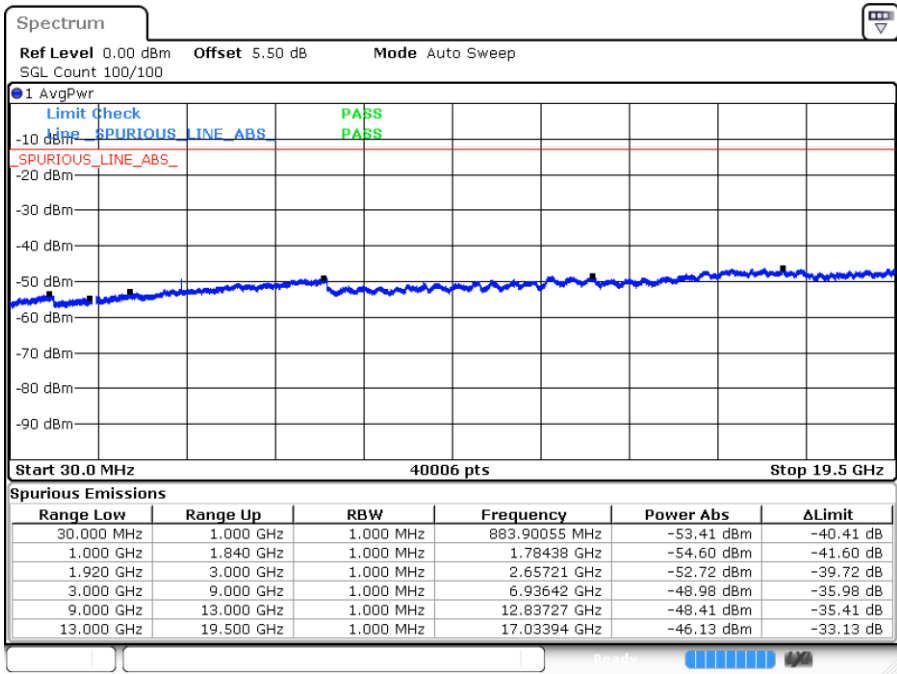


Date: 30 DEC 2020 05:57:27



Date: 30 DEC 2020 05:58:30

Highest Channel / QPSK

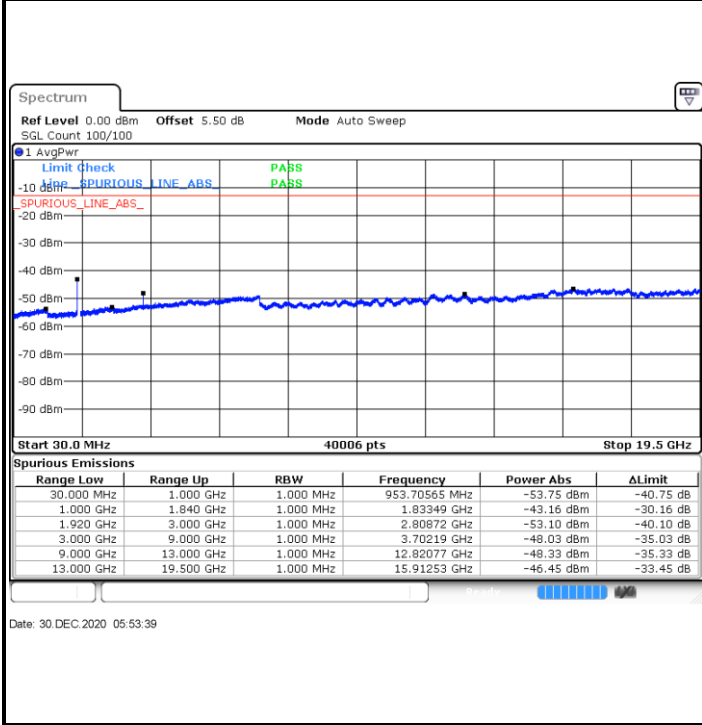


Date: 30 DEC 2020 05:59:36

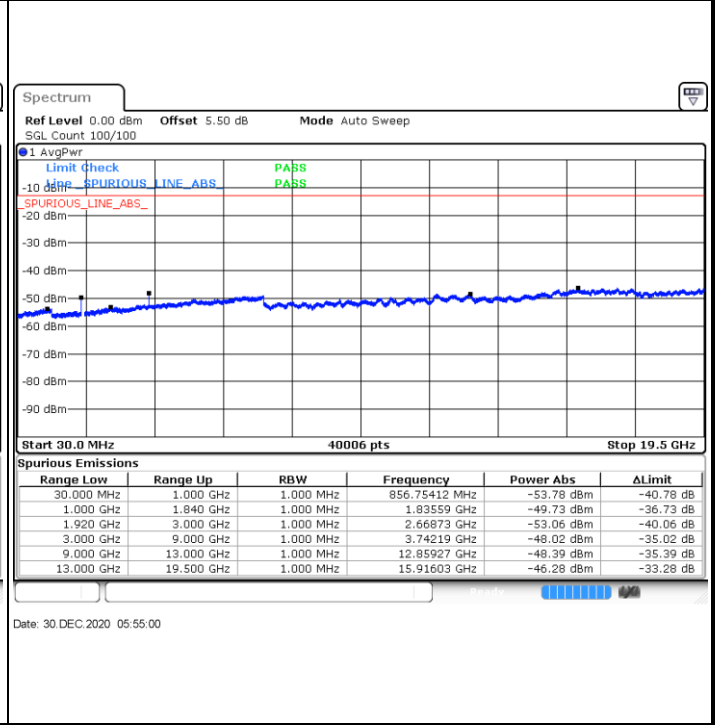


LTE Band 2 / 20MHz

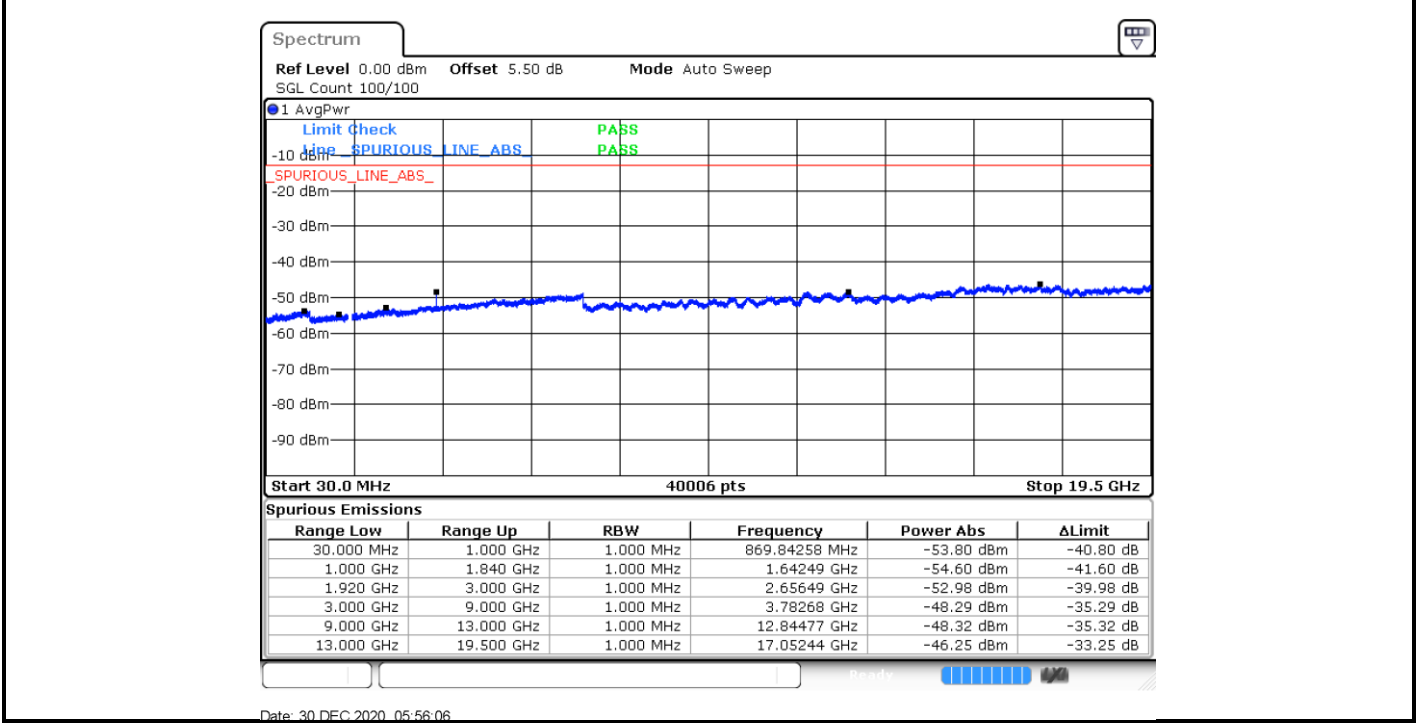
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK





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	0.0019	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0053	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0033	

Note:

1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

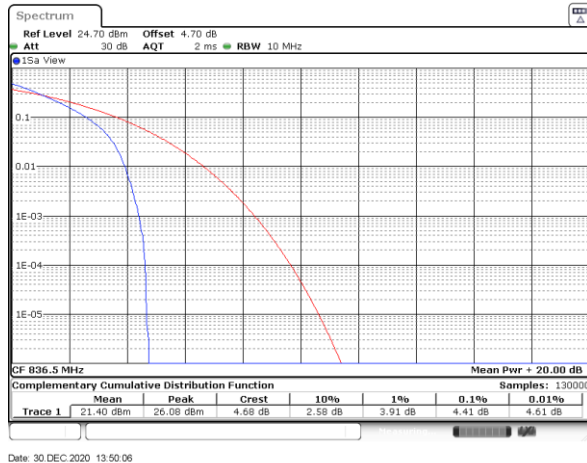
Peak-to-Average Ratio

Mode	LTE Band 5 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.41	5.62	6.29	PASS



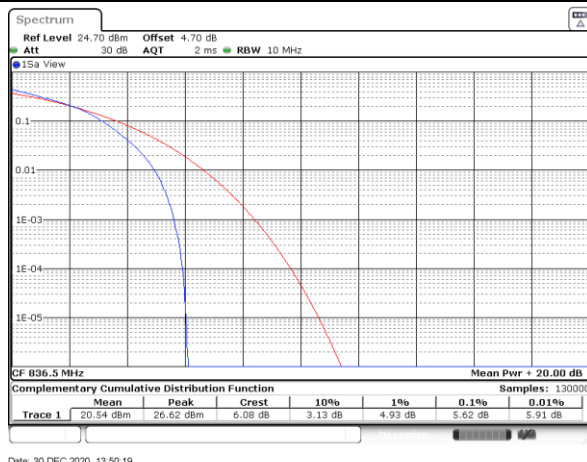
LTE Band 5 / 10MHz

Middle Channel / Full RB/ QPSK



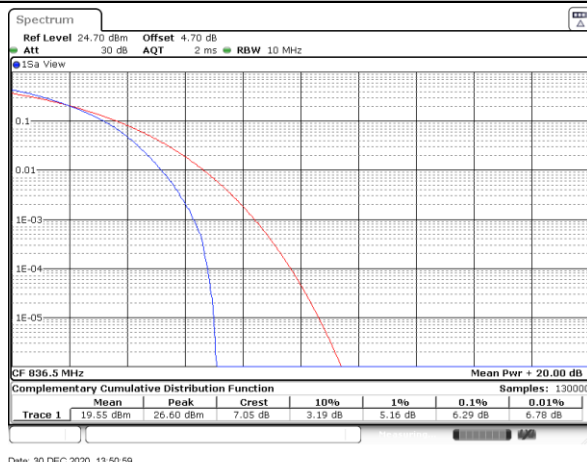
Date: 30 DEC 2020 13:50:06

Middle Channel / Full RB/ 16QAM



Date: 30 DEC 2020 13:50:19

Middle Channel / Full RB/ 64QAM

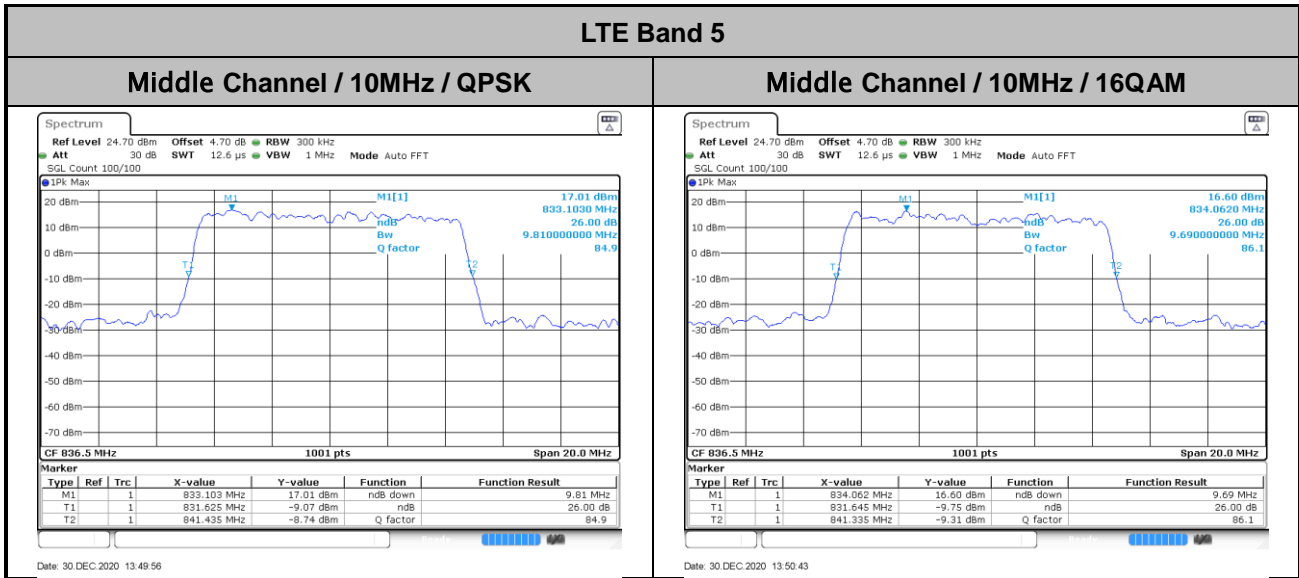


Date: 30 DEC 2020 13:50:59



26dB Bandwidth

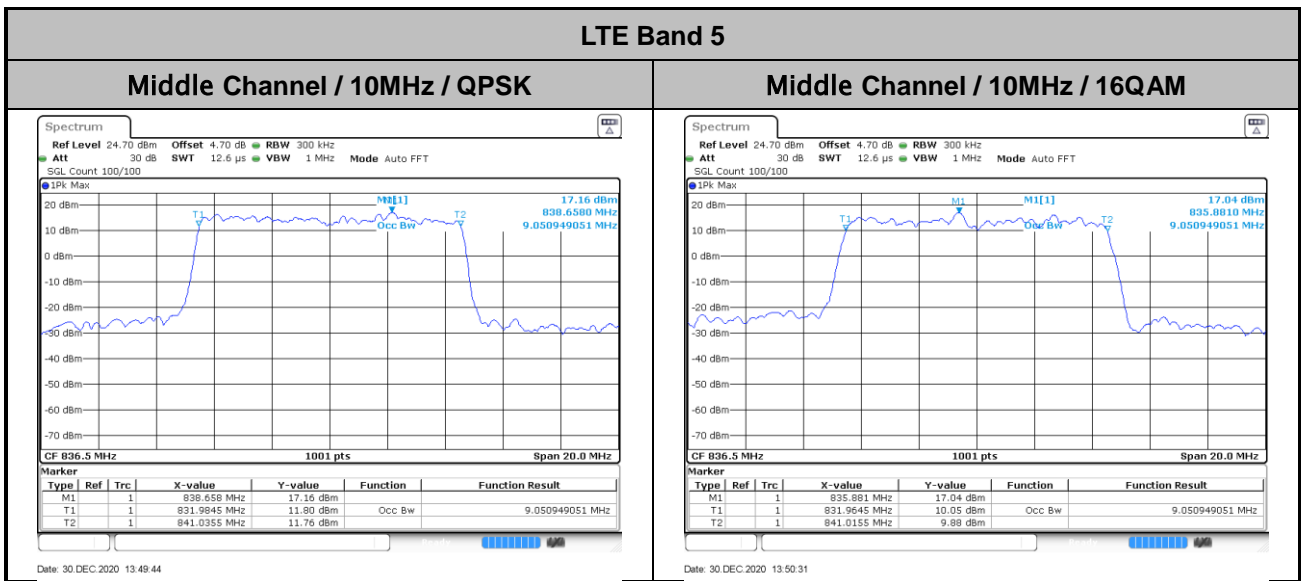
Mode	LTE Band 5 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.81	9.69





Occupied Bandwidth

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





Conducted Band Edge



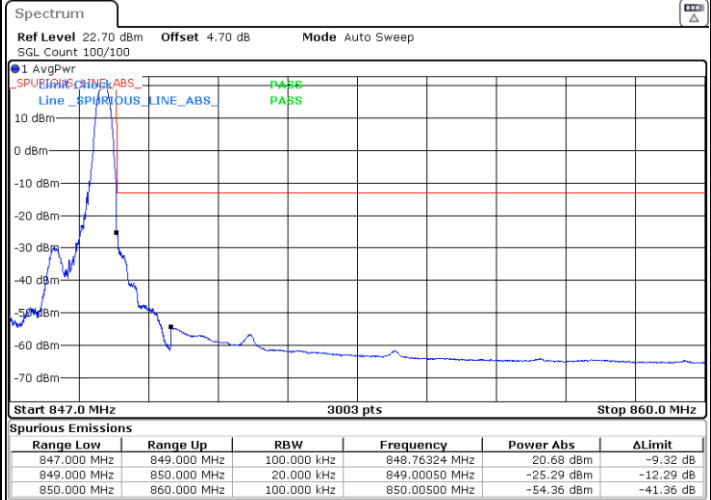
LTE Band 5 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



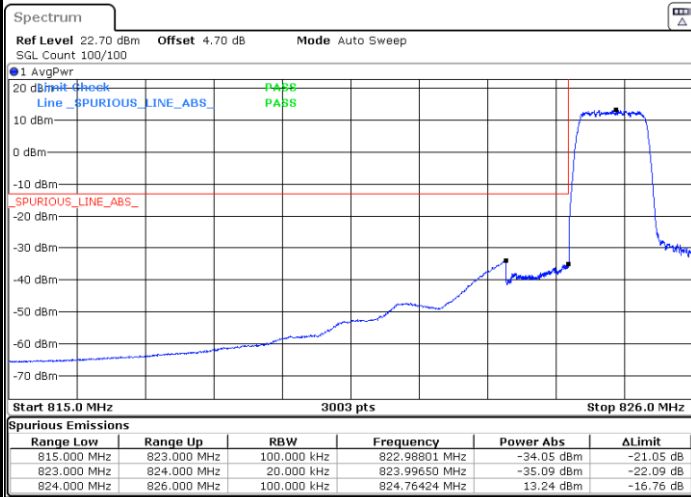
Date: 30 DEC 2020 12:47:38

Highest Band Edge / 1RB



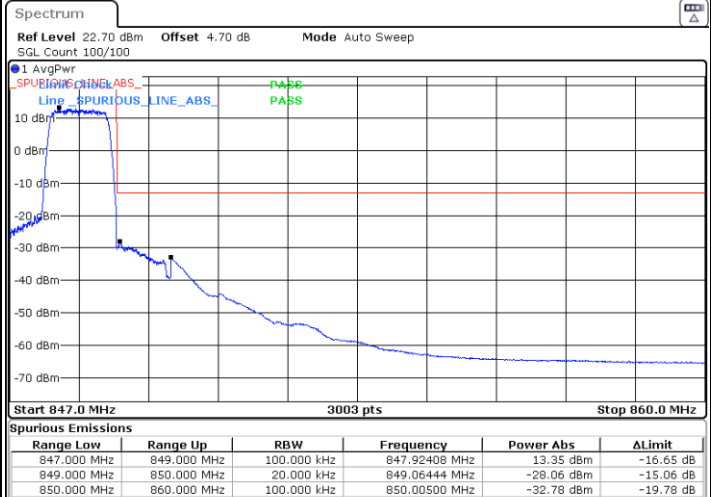
Date: 30 DEC 2020 13:03:52

Lowest Band Edge / Full RB



Date: 30 DEC 2020 12:54:46

Highest Band Edge / Full RB



Date: 30 DEC 2020 12:56:26



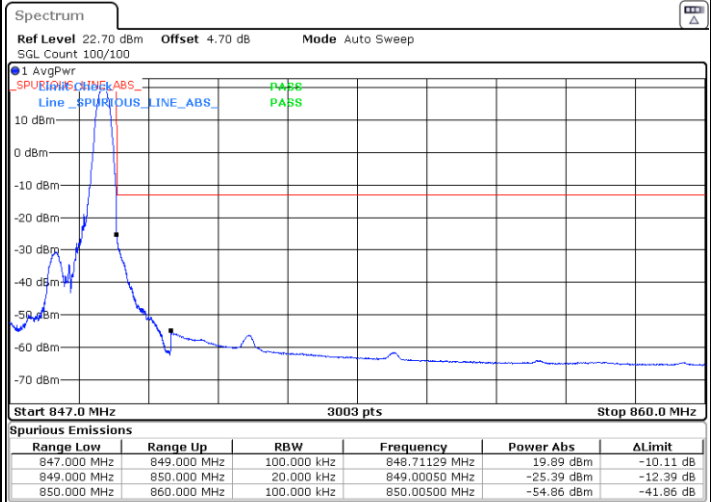
LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



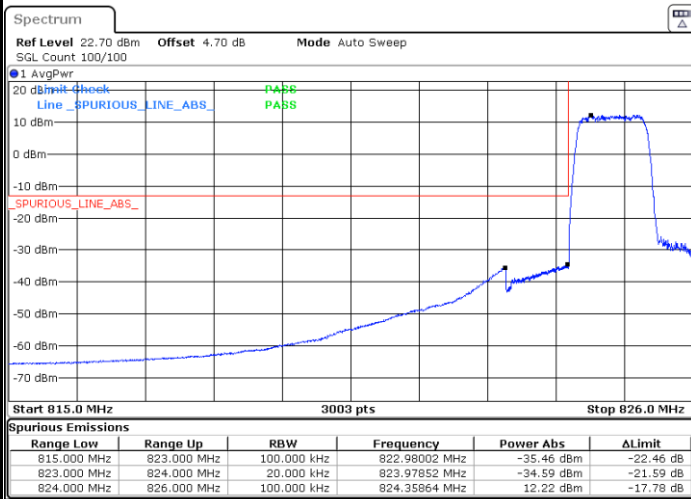
Date: 30 DEC 2020 12:49:06

Highest Band Edge / 1 RB



Date: 30 DEC 2020 13:02:26

Lowest Band Edge / Full RB



Date: 30 DEC 2020 12:53:23

Highest Band Edge / Full RB



Date: 30 DEC 2020 12:57:58



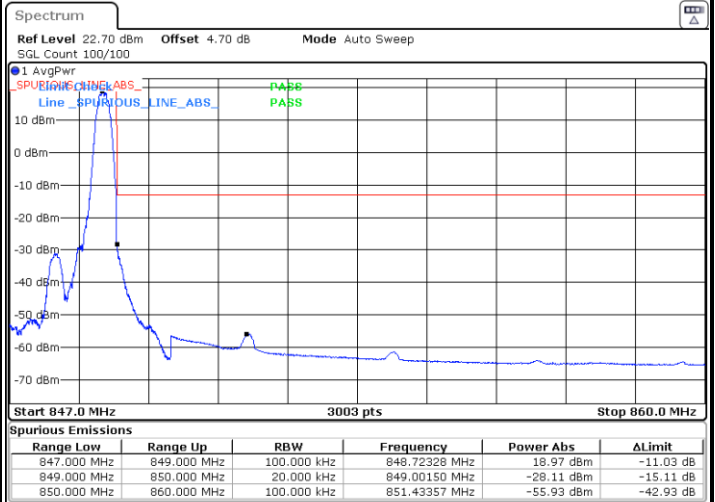
LTE Band 5 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



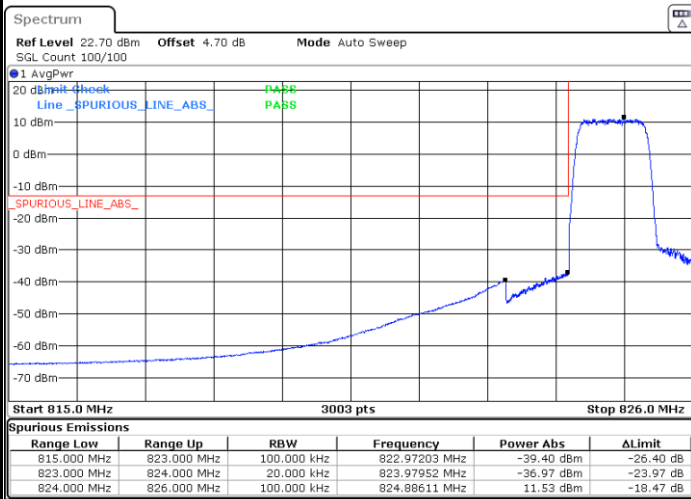
Date: 30 DEC 2020 12:50:33

Highest Band Edge / 1 RB



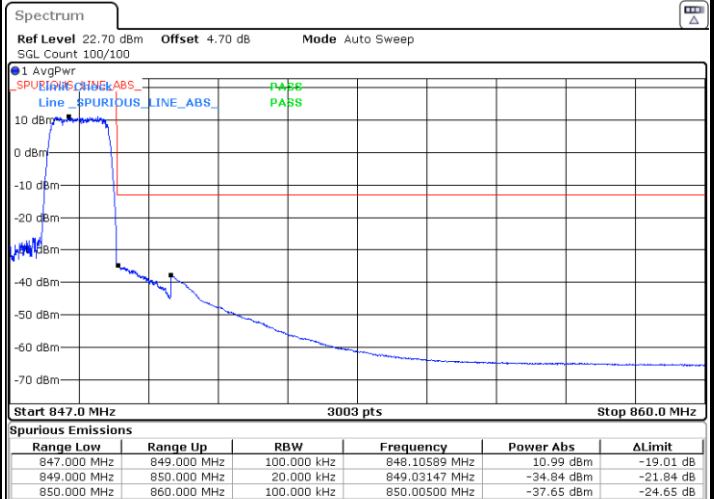
Date: 30 DEC 2020 13:00:58

Lowest Band Edge / Full RB



Date: 30 DEC 2020 12:52:00

Highest Band Edge / Full RB

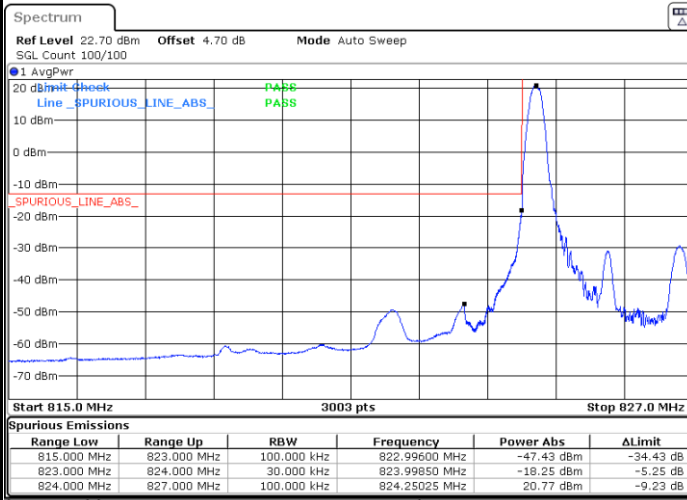


Date: 30 DEC 2020 12:59:29



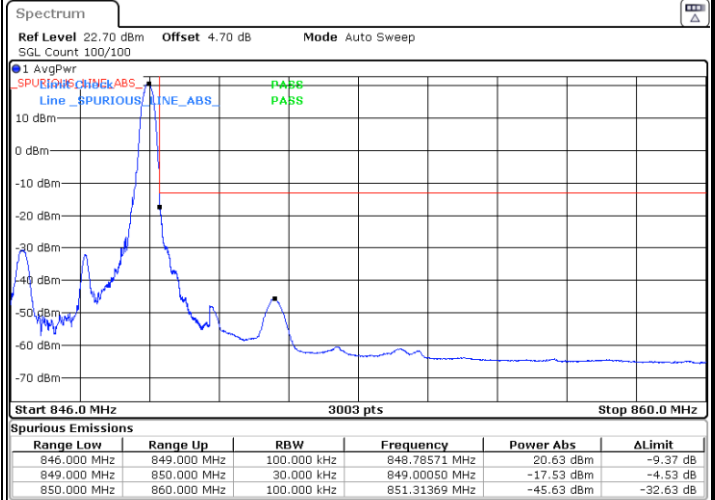
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / 1RB



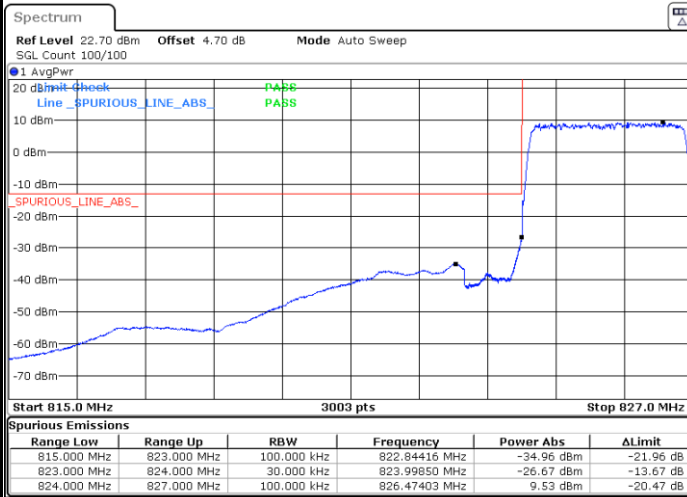
Date: 30 DEC 2020 13:06:36

Highest Band Edge / 1 RB



Date: 30 DEC 2020 13:13:06

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:09:51

Highest Band Edge / Full RB

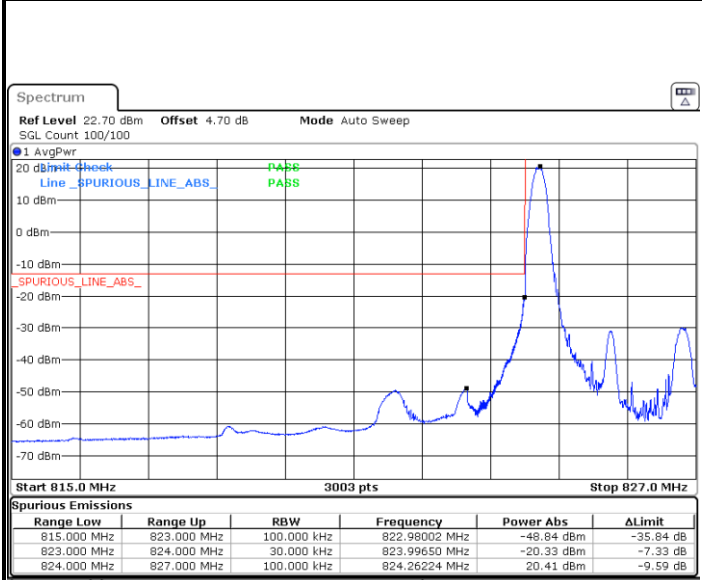


Date: 30 DEC 2020 13:16:21



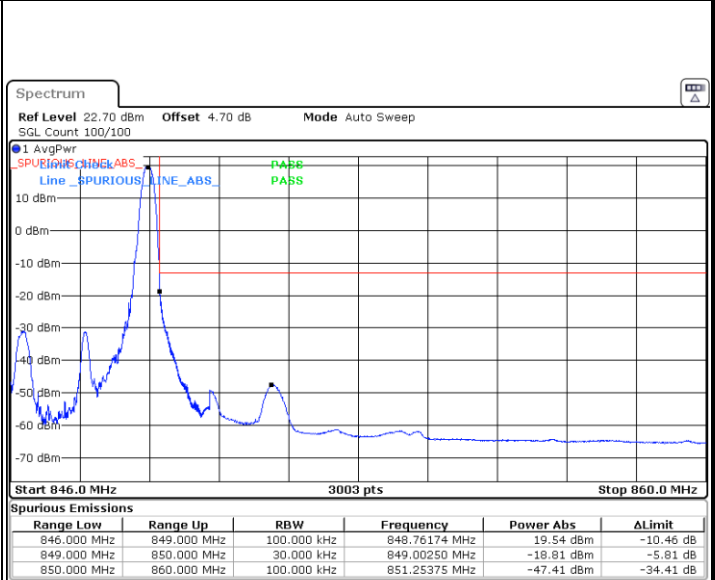
LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



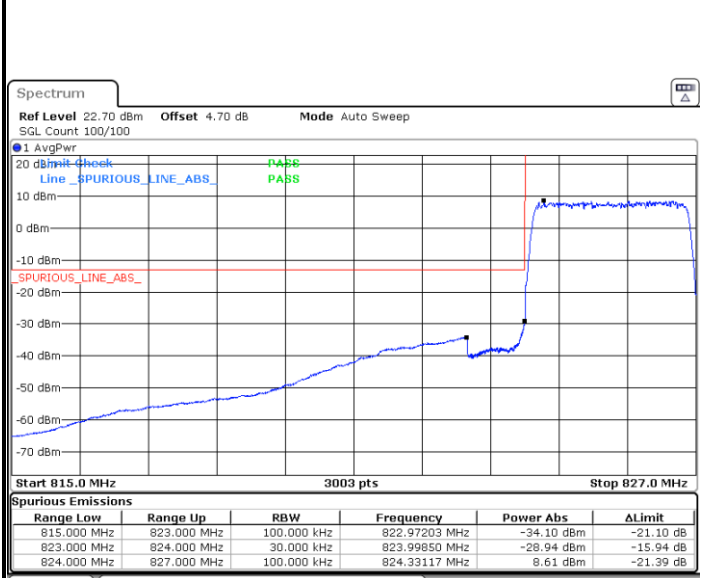
Date: 30 DEC 2020 13:08:13

Highest Band Edge / 1 RB



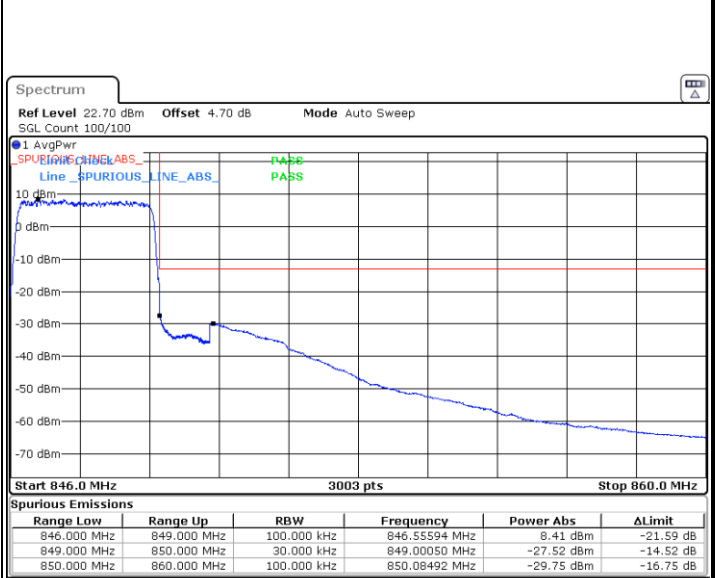
Date: 30 DEC 2020 13:14:43

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:11:28

Highest Band Edge / Full RB

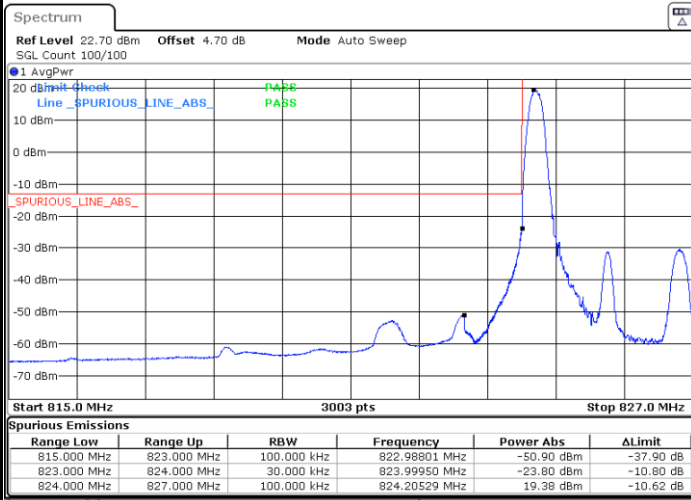


Date: 30 DEC 2020 13:17:58



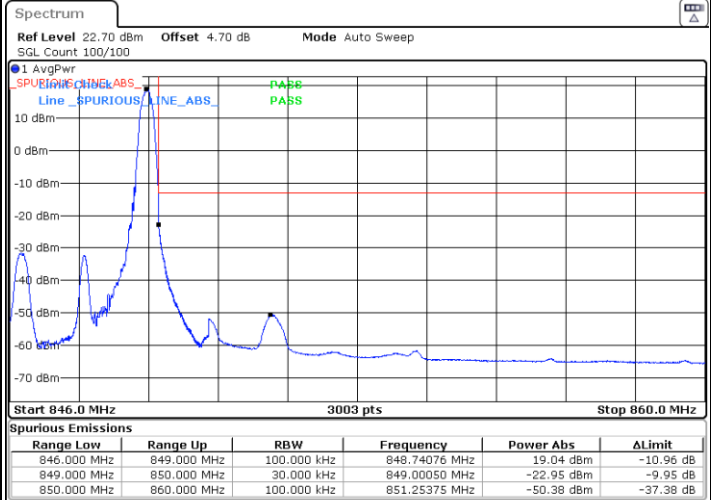
LTE Band 5 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



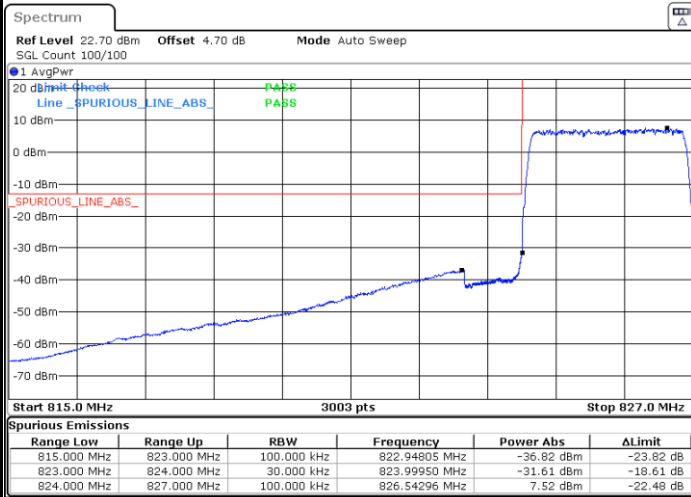
Date: 30 DEC 2020 13:29:27

Highest Band Edge / 1 RB



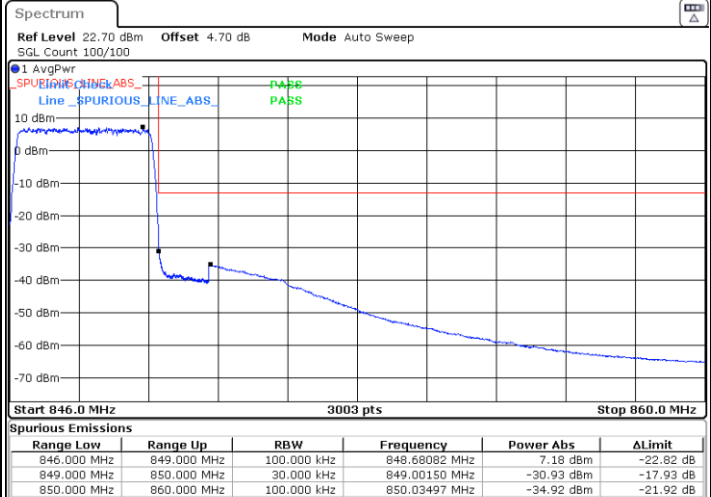
Date: 30 DEC 2020 13:26:30

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:30:23

Highest Band Edge / Full RB

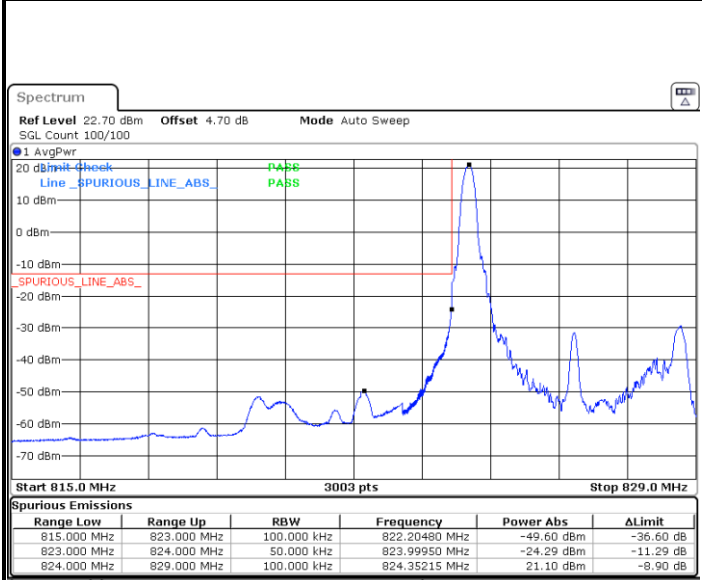


Date: 30 DEC 2020 13:25:25



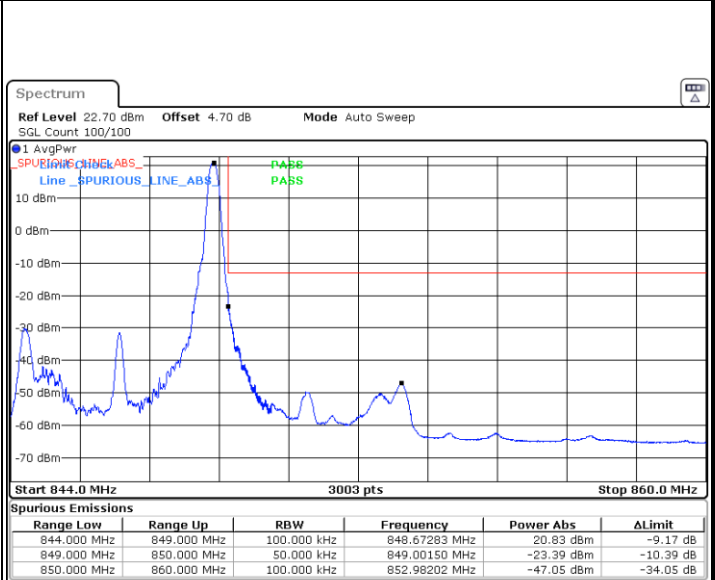
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / 1 RB



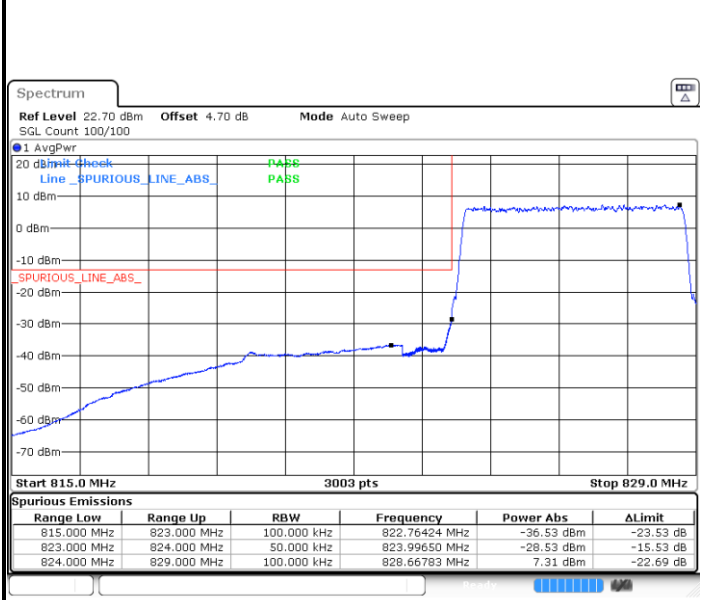
Date: 30 DEC 2020 13:34:14

Highest Band Edge / 1 RB



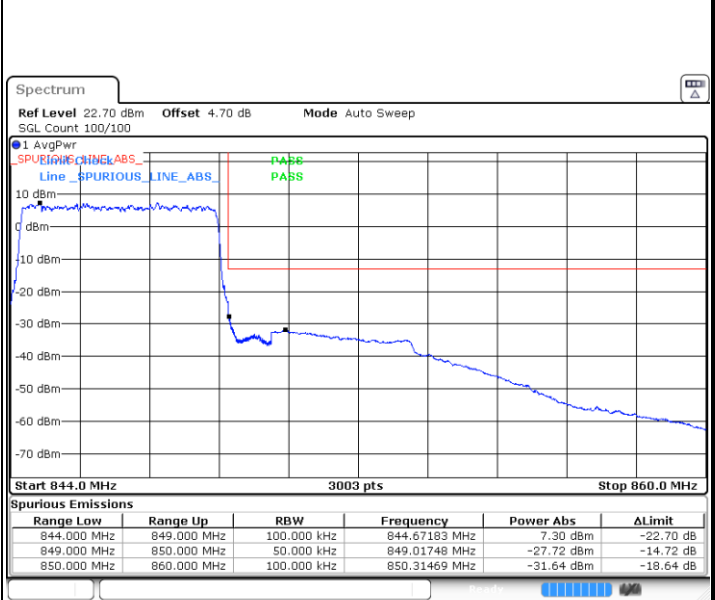
Date: 30 DEC 2020 13:40:44

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:37:29

Highest Band Edge / Full RB

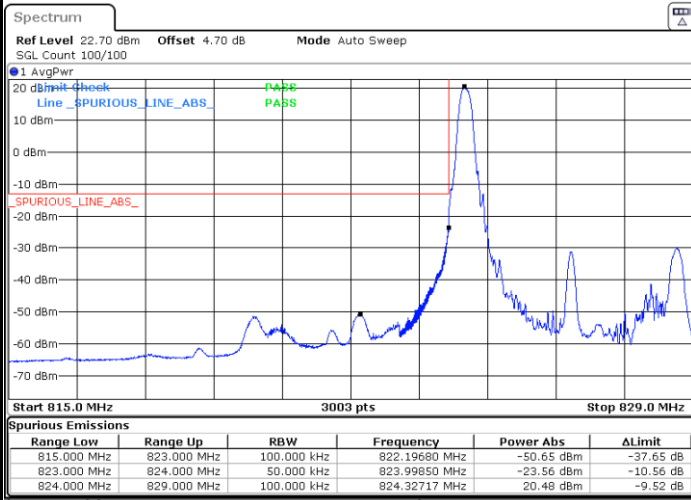


Date: 30 DEC 2020 13:43:59



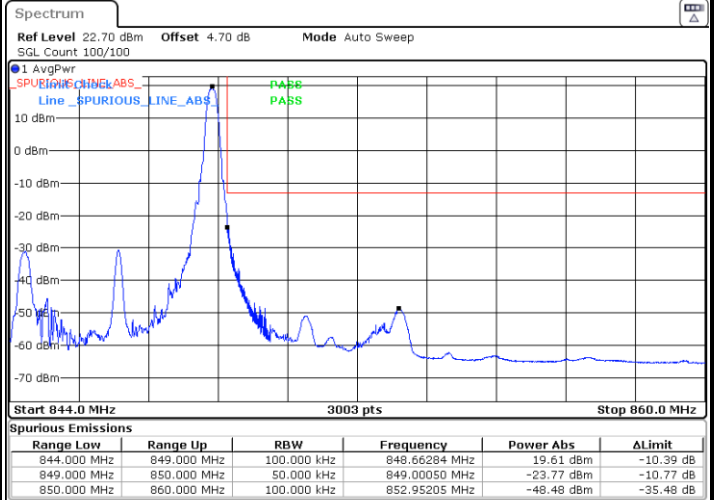
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / 1RB



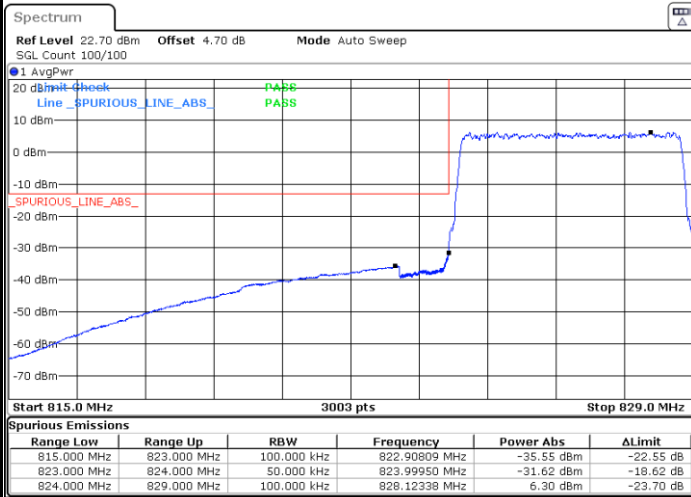
Date: 30 DEC 2020 13:35:51

Highest Band Edge / 1 RB



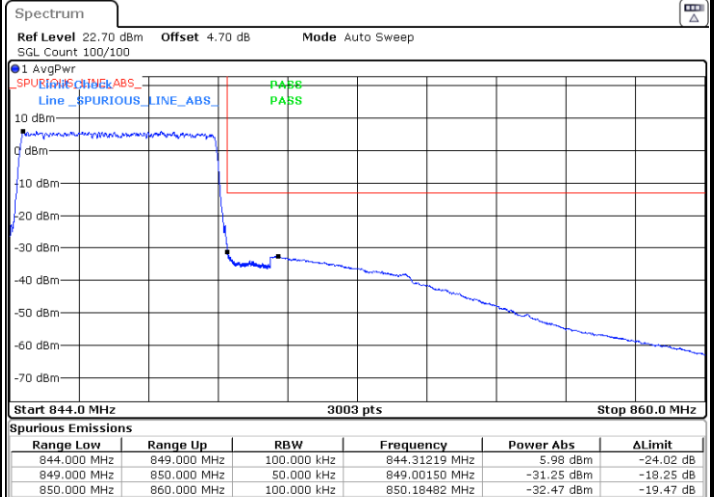
Date: 30 DEC 2020 13:42:21

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:39:06

Highest Band Edge / Full RB

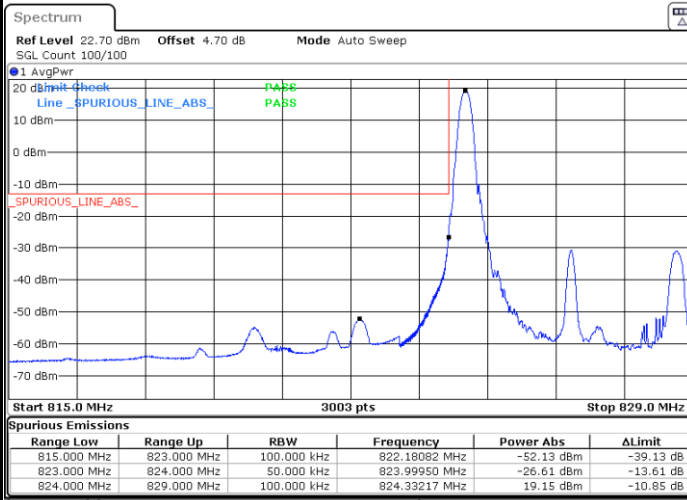


Date: 30 DEC 2020 13:45:36



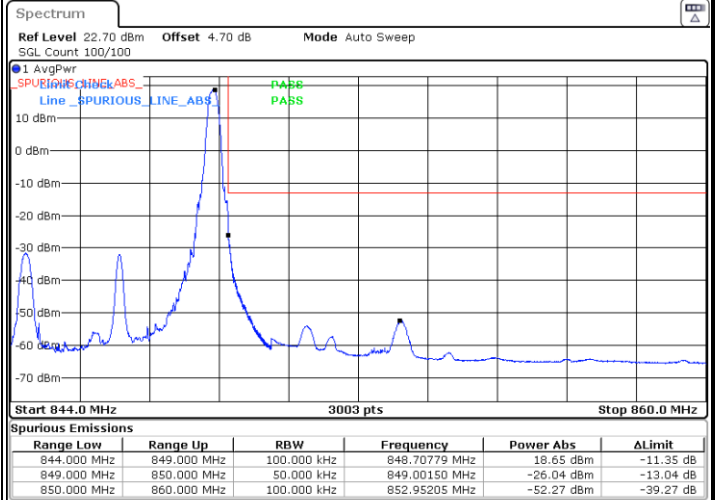
LTE Band 5 / 5MHz / 64QAM

Lowest Band Edge / 1RB



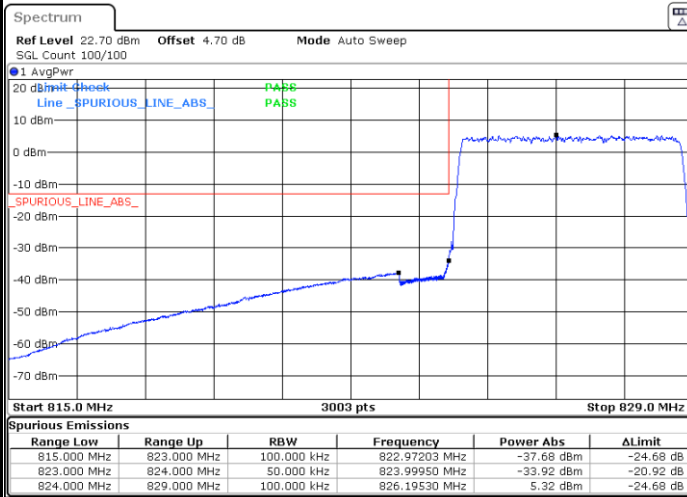
Date: 30 DEC 2020 13:48:05

Highest Band Edge / 1 RB



Date: 30 DEC 2020 13:47:24

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:48:46

Highest Band Edge / Full RB

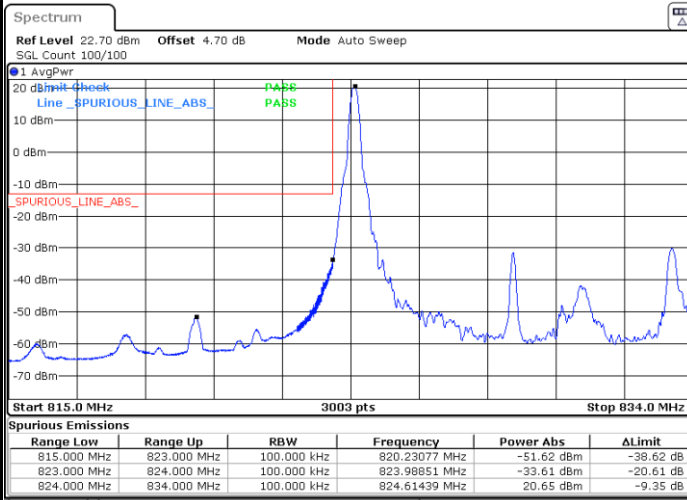


Date: 30 DEC 2020 13:46:27



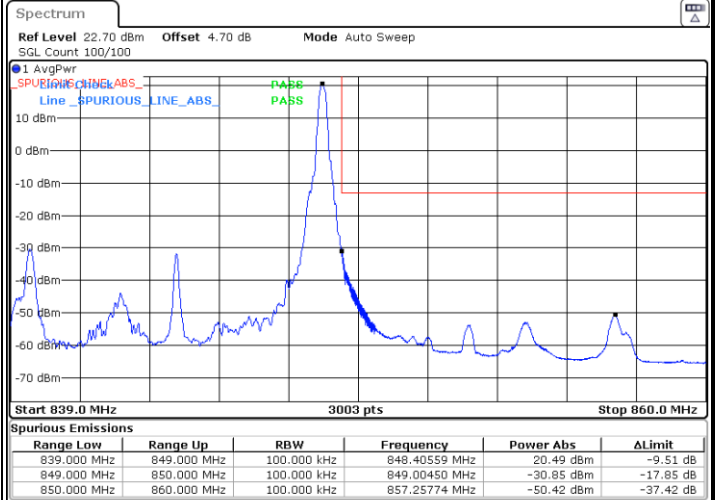
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / 1 RB



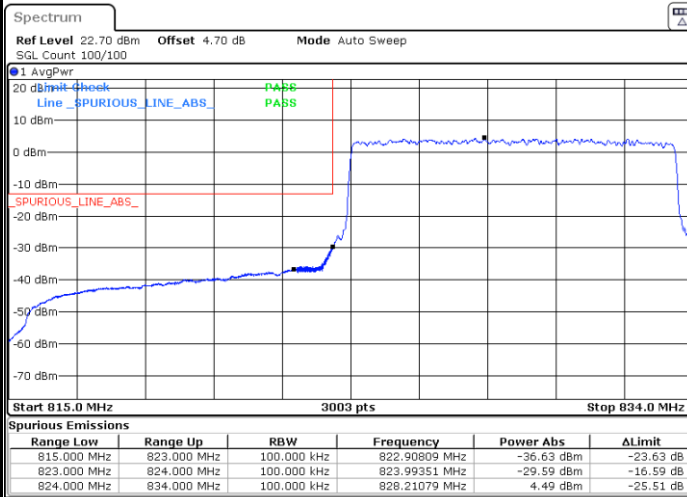
Date: 30 DEC 2020 13:52:10

Highest Band Edge / 1 RB



Date: 30 DEC 2020 13:59:14

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:54:54

Highest Band Edge / Full RB

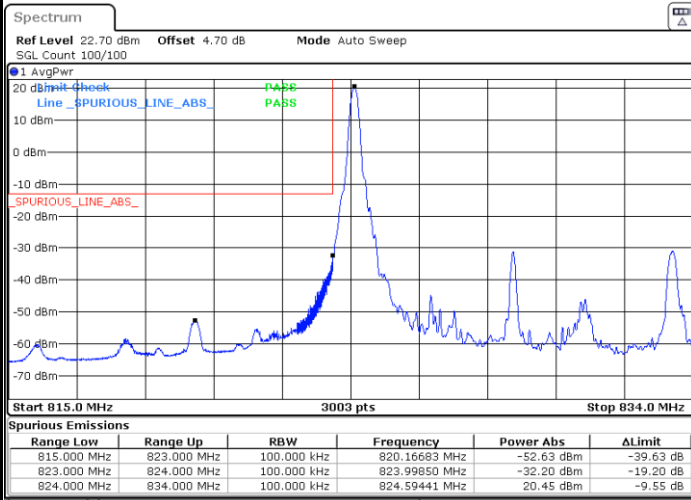


Date: 30 DEC 2020 13:55:39



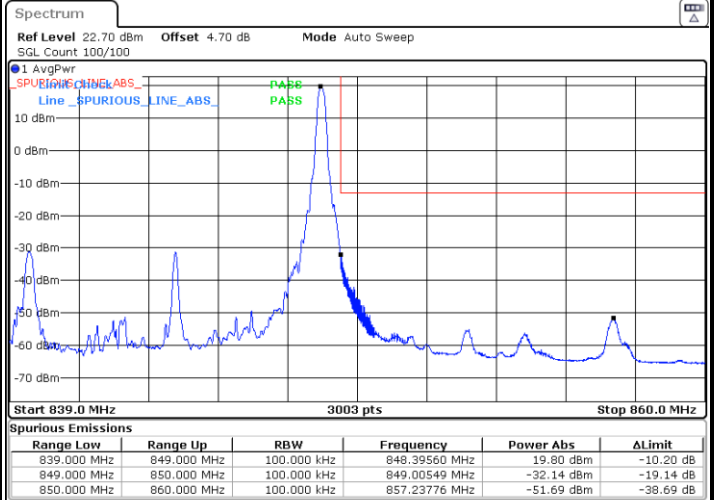
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



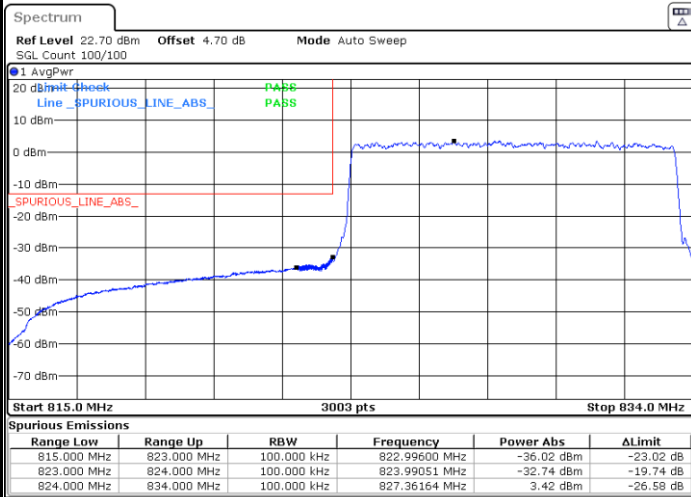
Date: 30 DEC 2020 13:52:44

Highest Band Edge / 1 RB



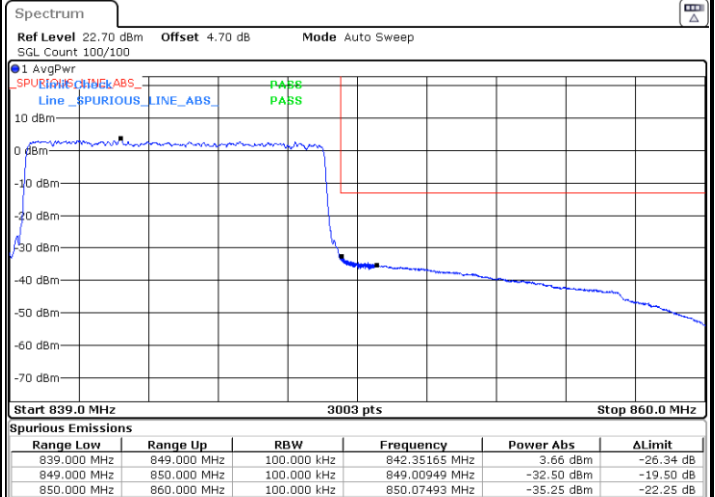
Date: 30 DEC 2020 13:58:36

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:54:23

Highest Band Edge / Full RB

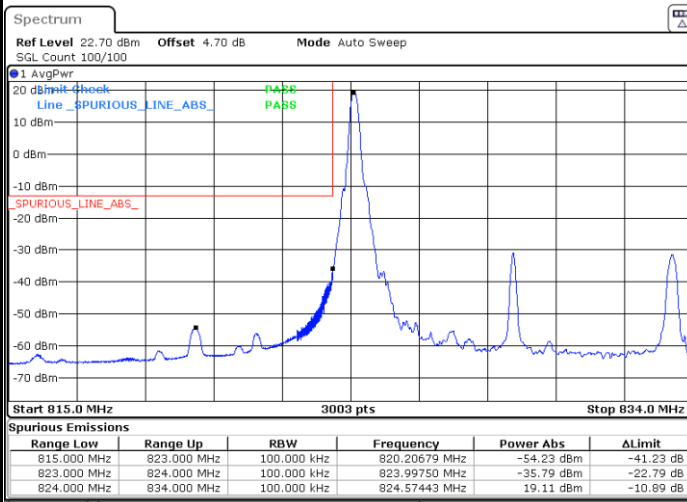


Date: 30 DEC 2020 13:56:15



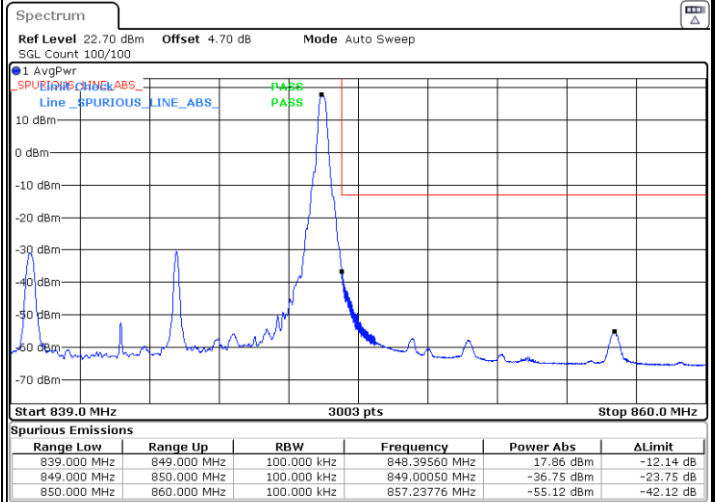
LTE Band 5 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



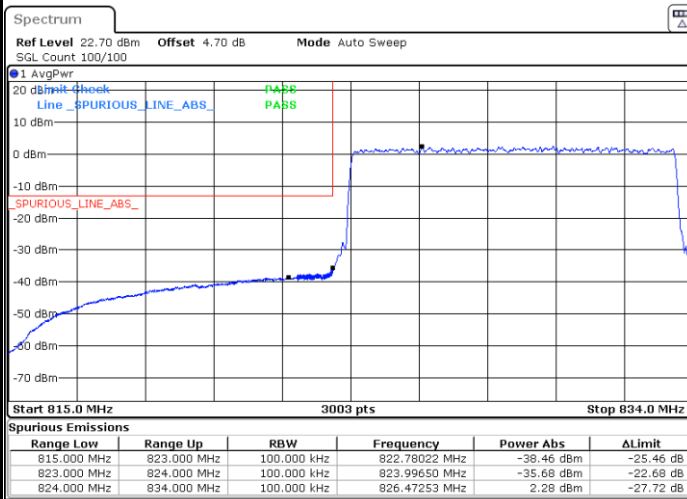
Date: 30 DEC 2020 13:53:17

Highest Band Edge / 1 RB



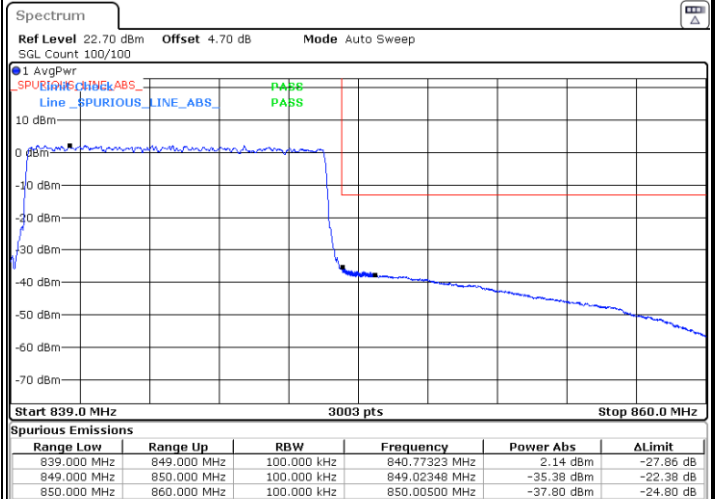
Date: 30 DEC 2020 13:57:46

Lowest Band Edge / Full RB



Date: 30 DEC 2020 13:53:50

Highest Band Edge / Full RB



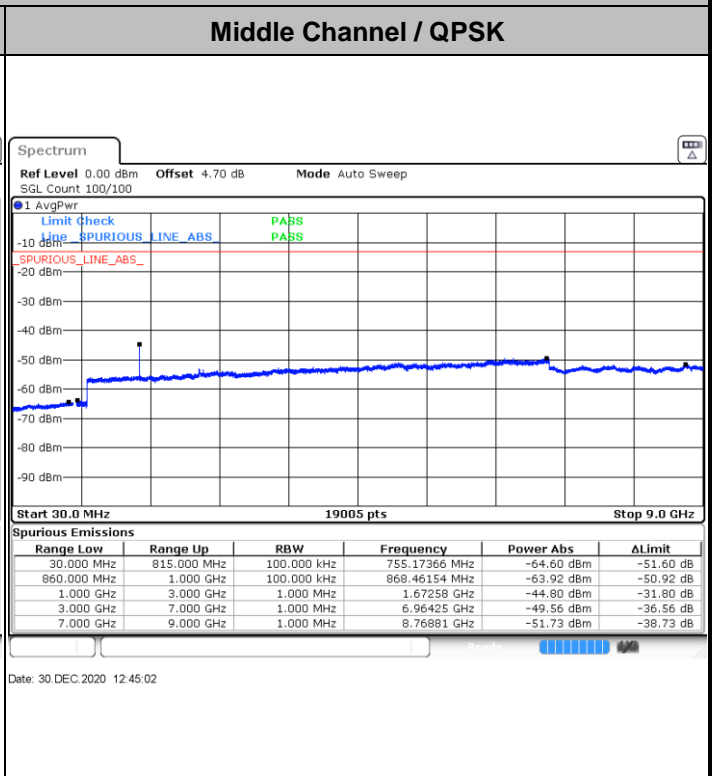
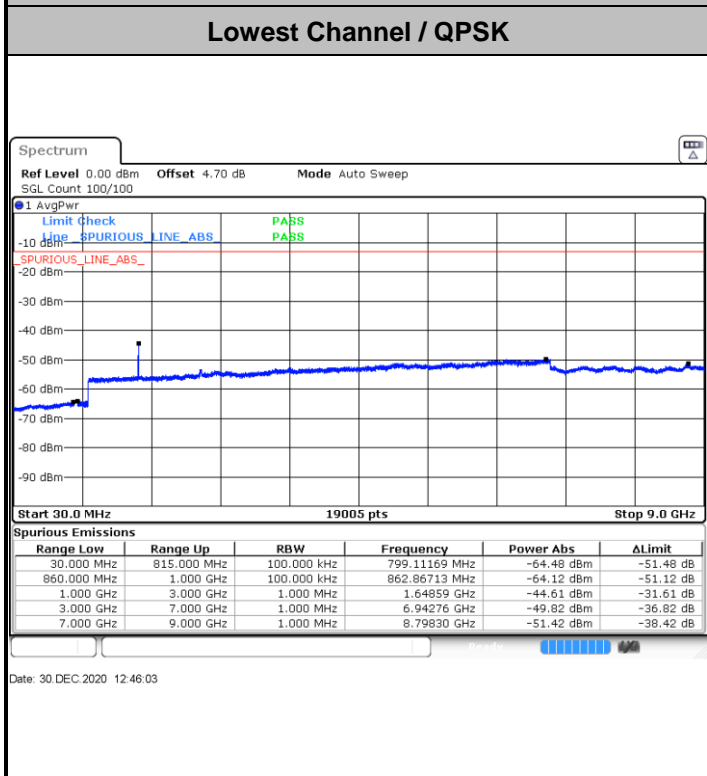
Date: 30 DEC 2020 13:56:52



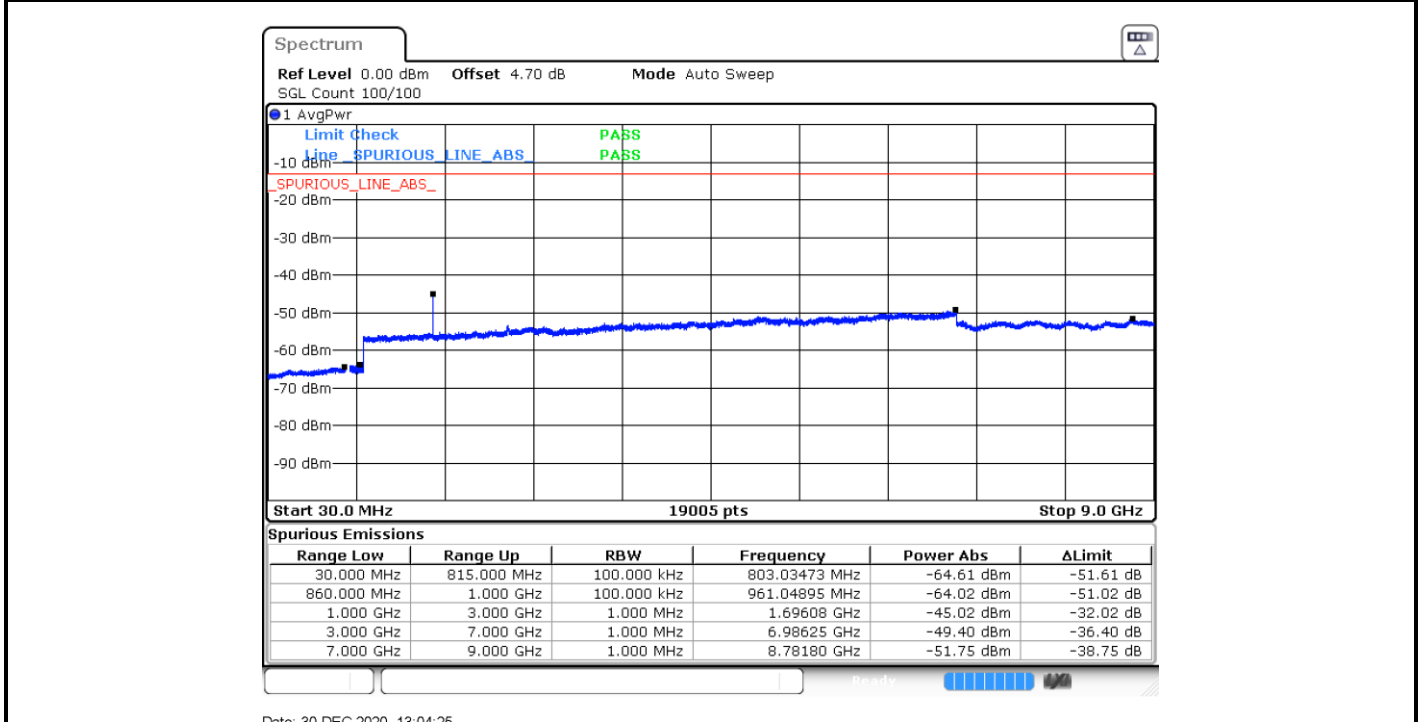
Conducted Spurious Emission



LTE Band 5 / 1.4MHz



Highest Channel / QPSK

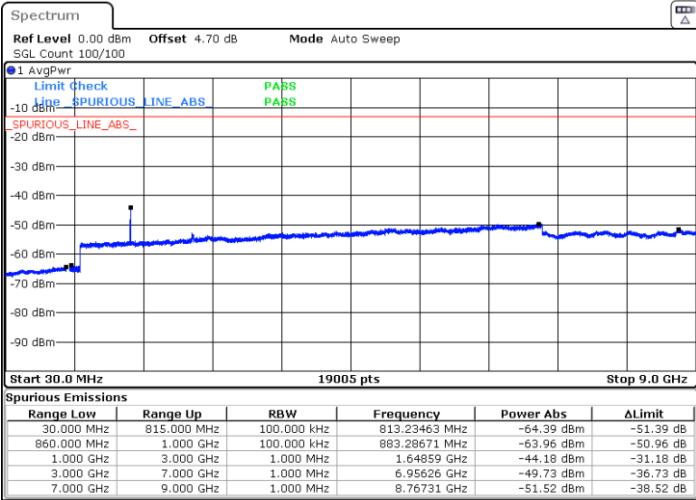




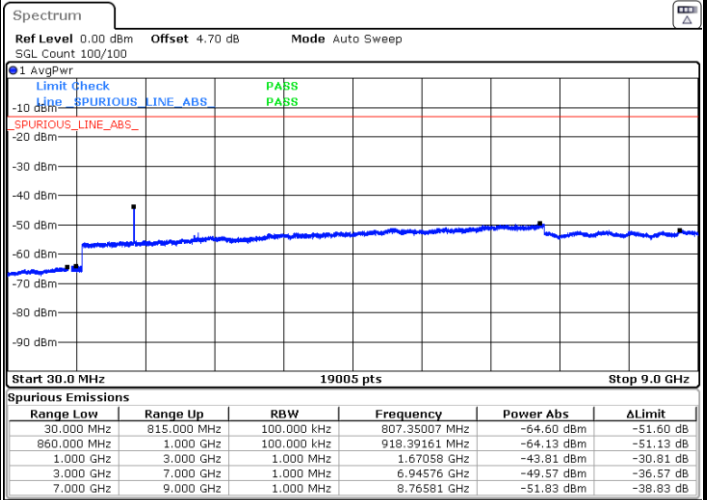
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

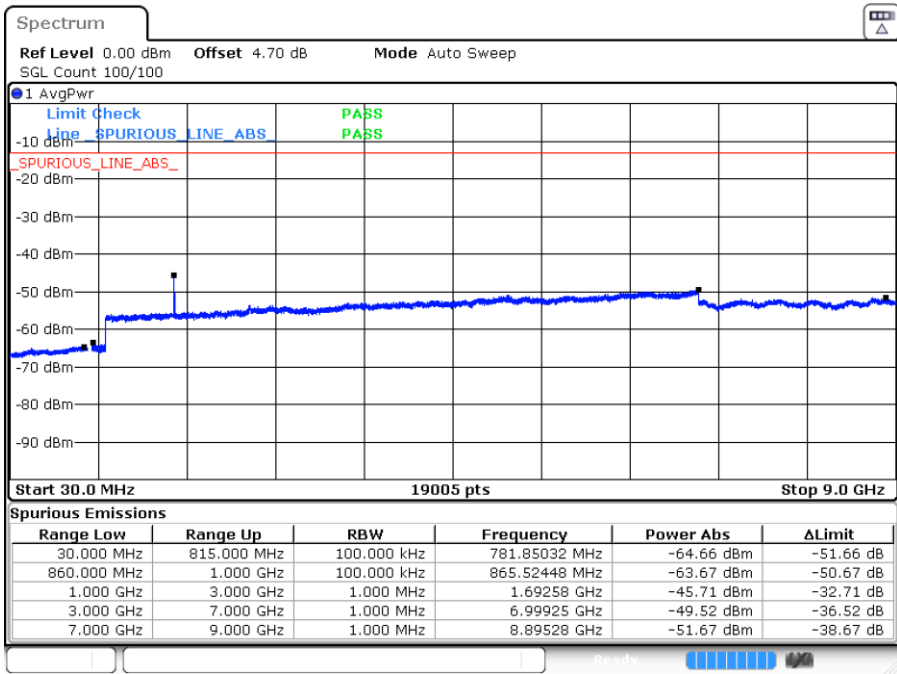


Date: 30 DEC 2020 13:28:31



Date: 30 DEC 2020 13:28:04

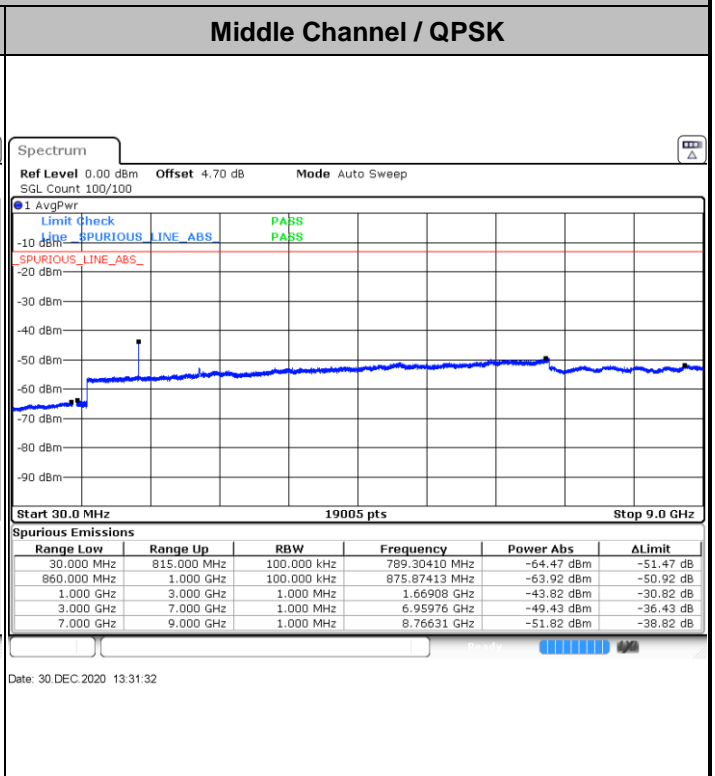
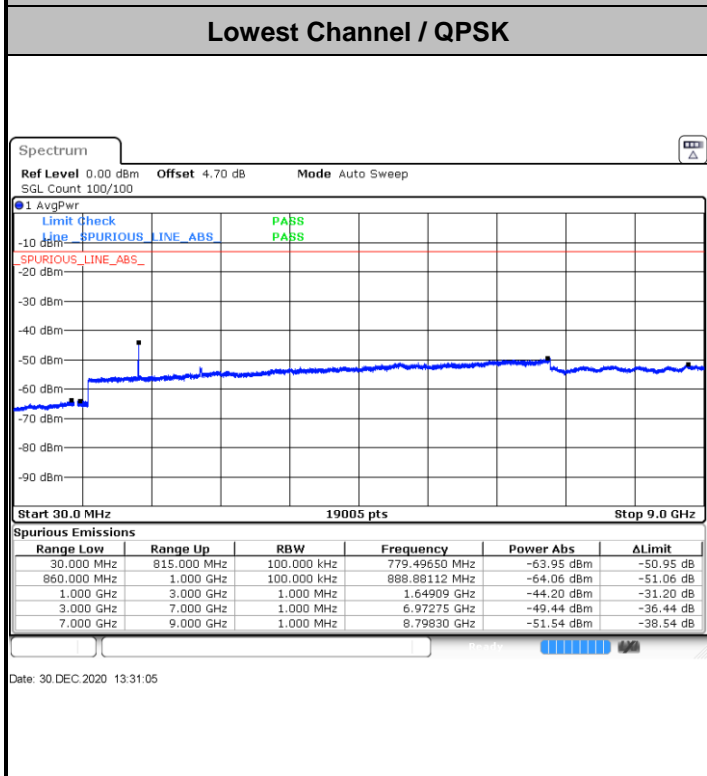
Highest Channel / QPSK



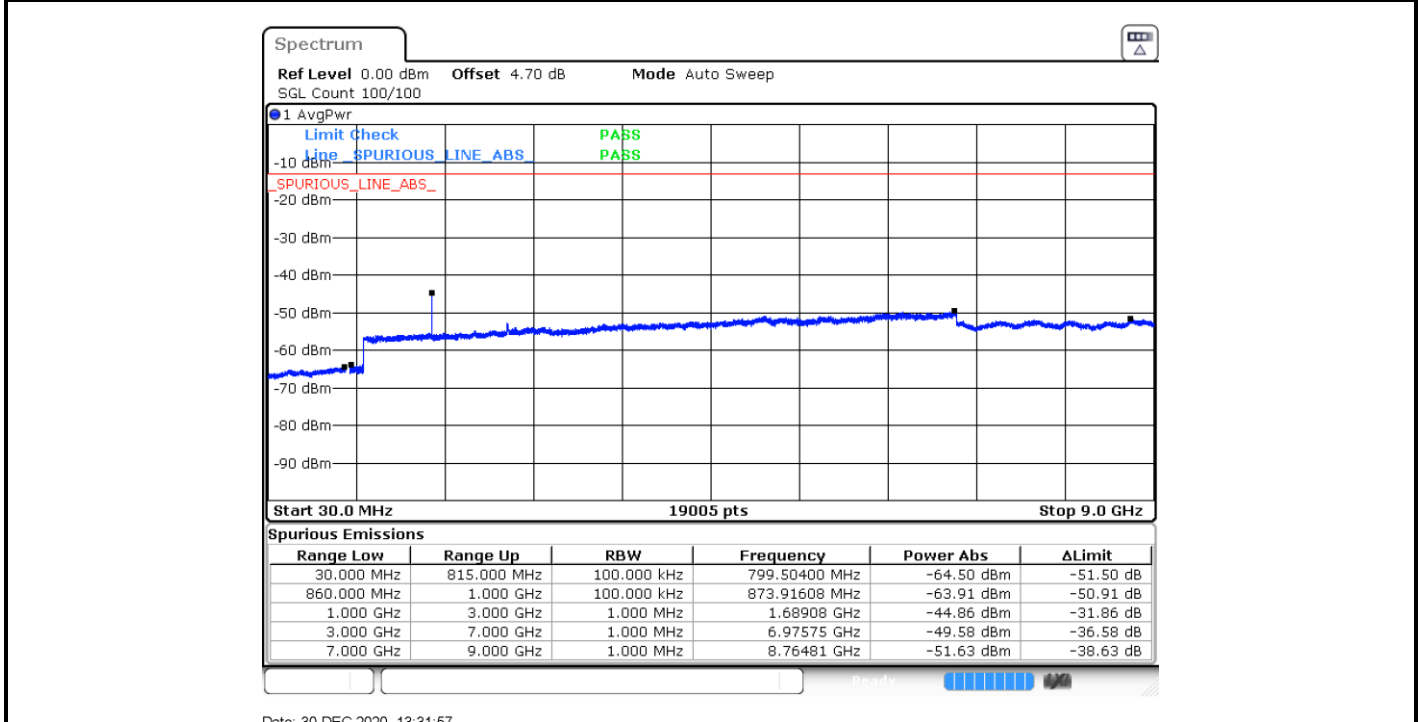
Date: 30 DEC 2020 13:27:35



LTE Band 5 / 5MHz



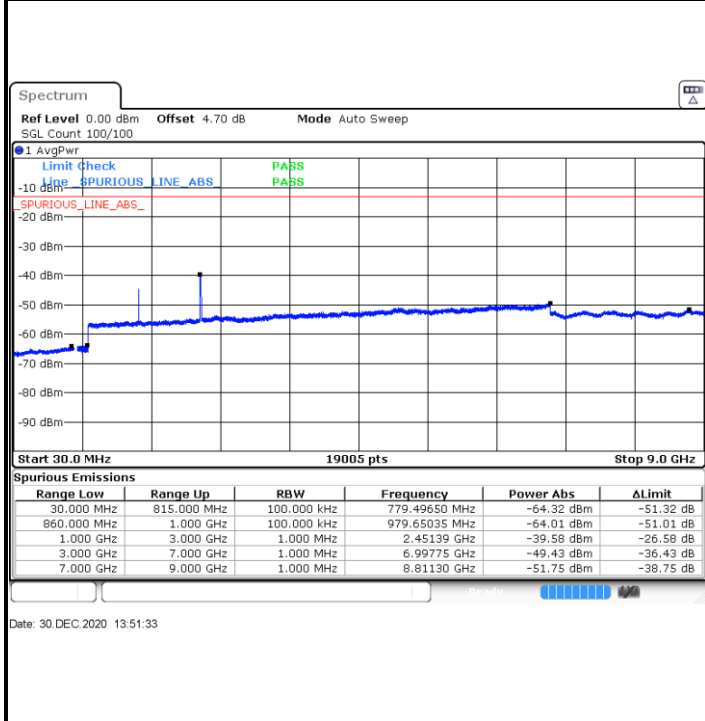
Highest Channel / QPSK



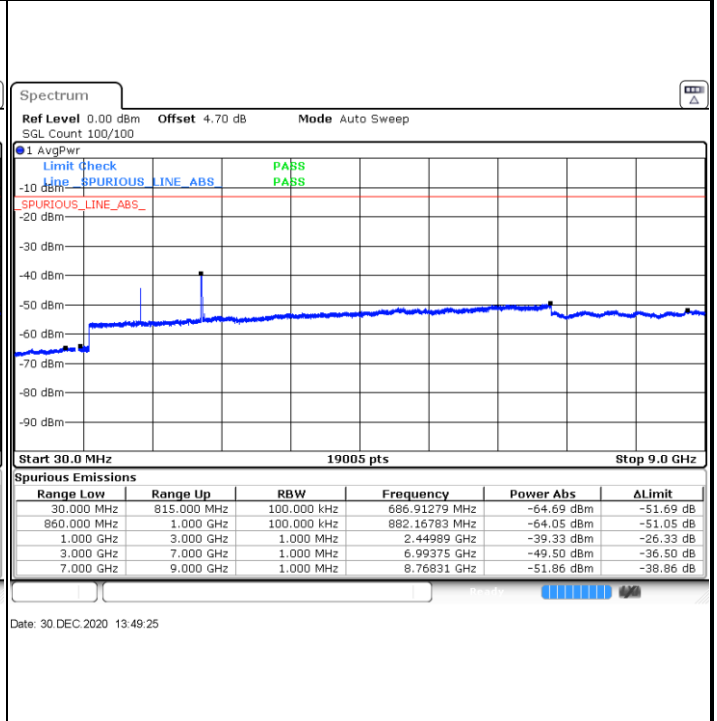


LTE Band 5 / 10MHz

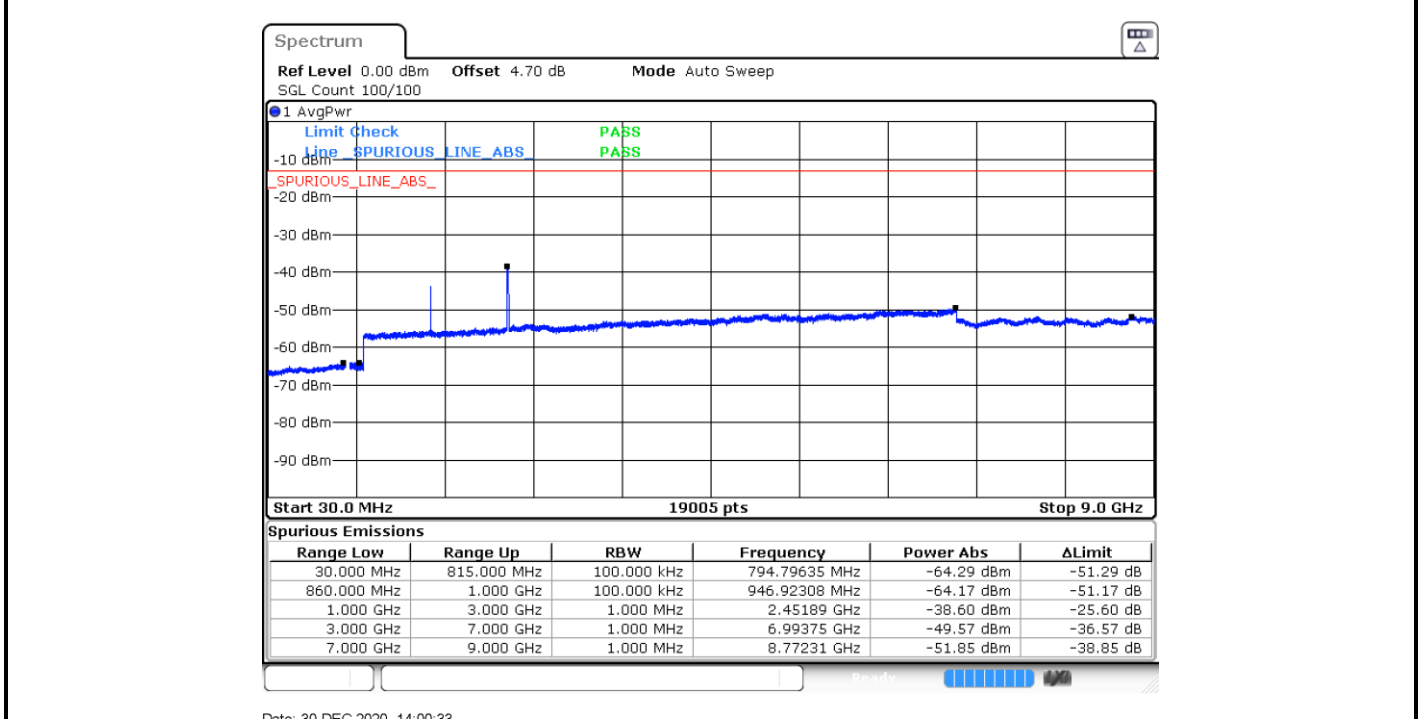
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK





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	0.0019	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0035	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0053	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0033	

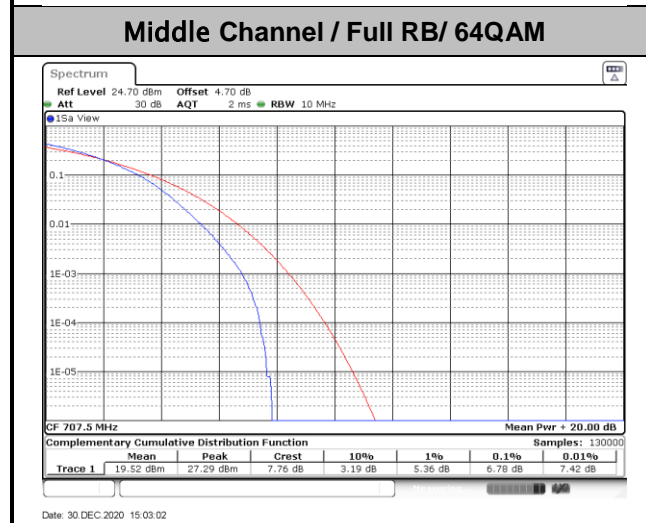
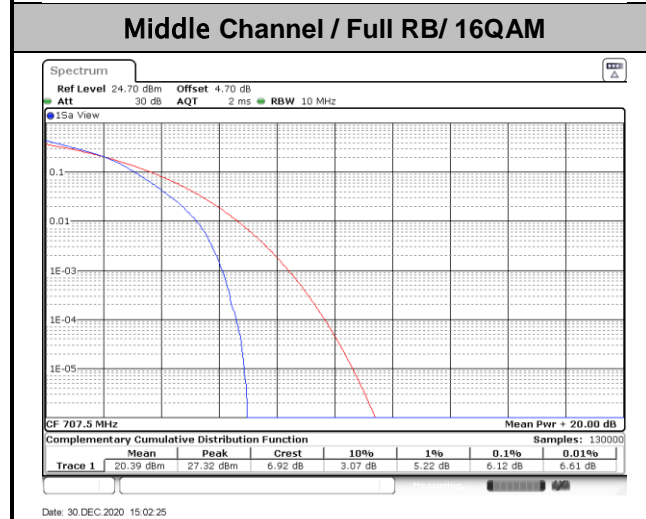
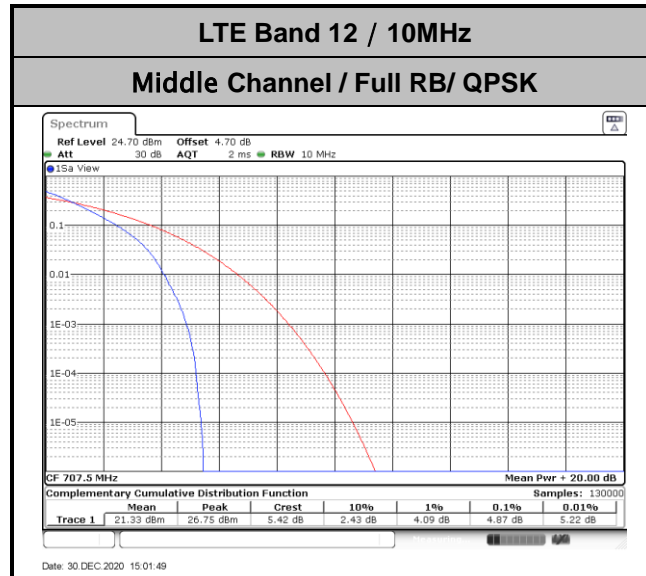
Note: Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.4 V.



LTE Band 12

Peak-to-Average Ratio

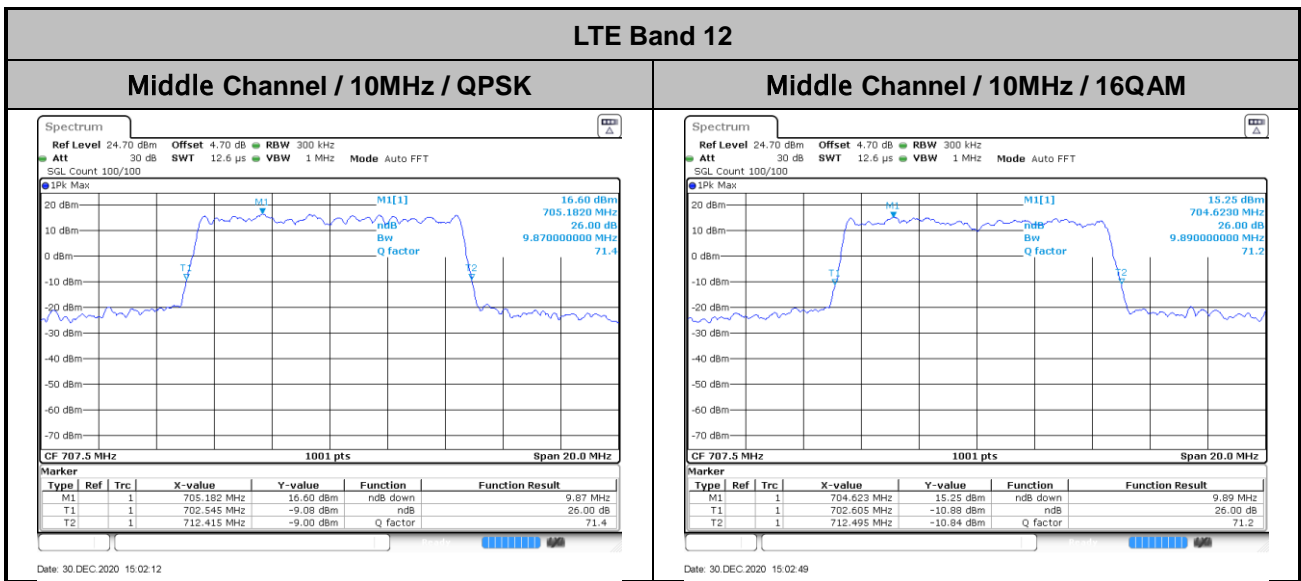
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.87	6.12	6.78	PASS





26dB Bandwidth

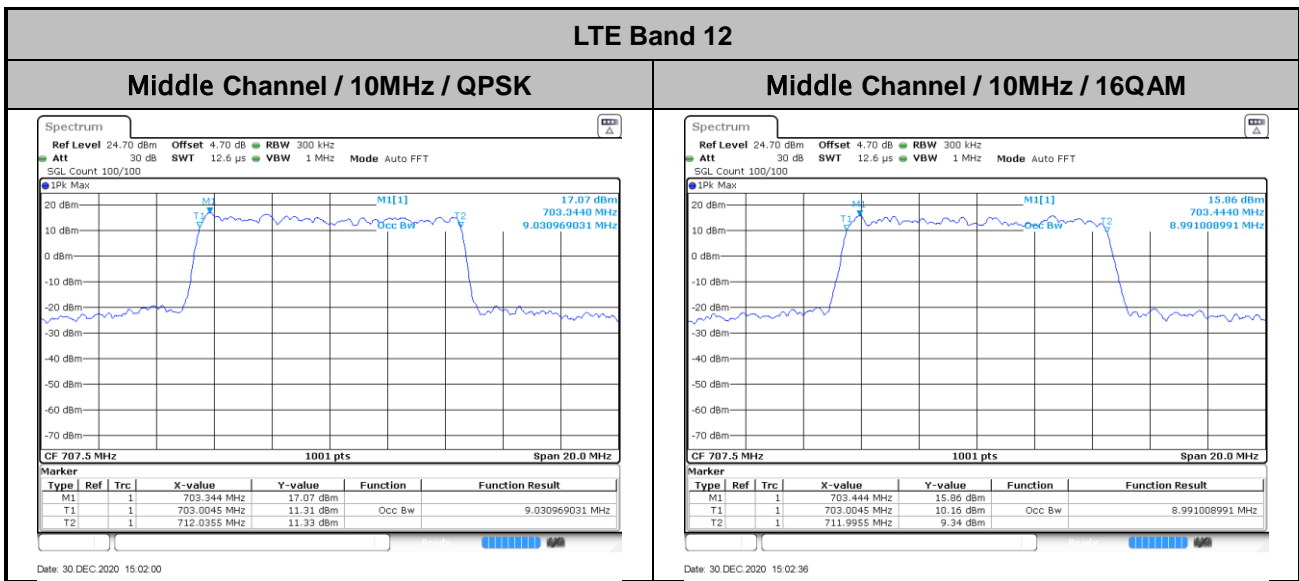
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.87	9.89





Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	8.99



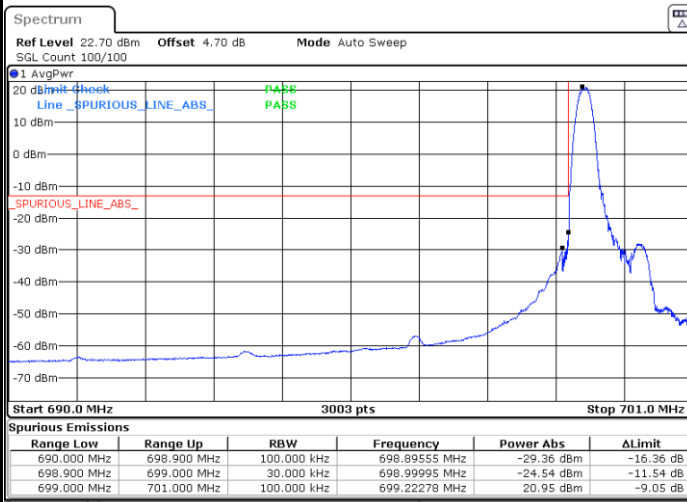


Conducted Band Edge



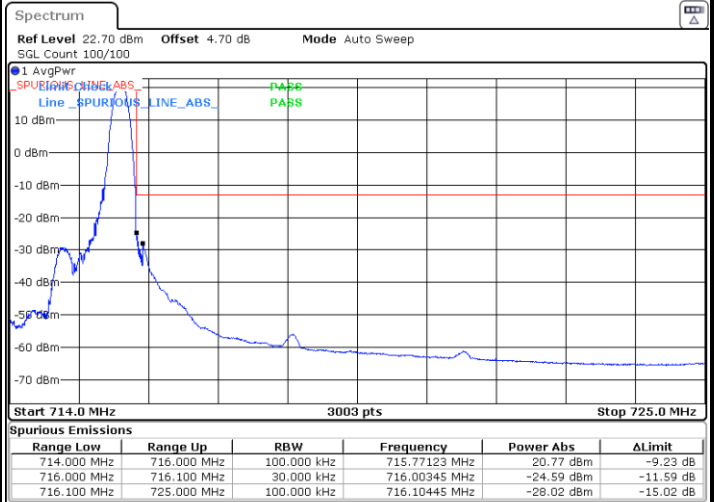
LTE Band 12 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



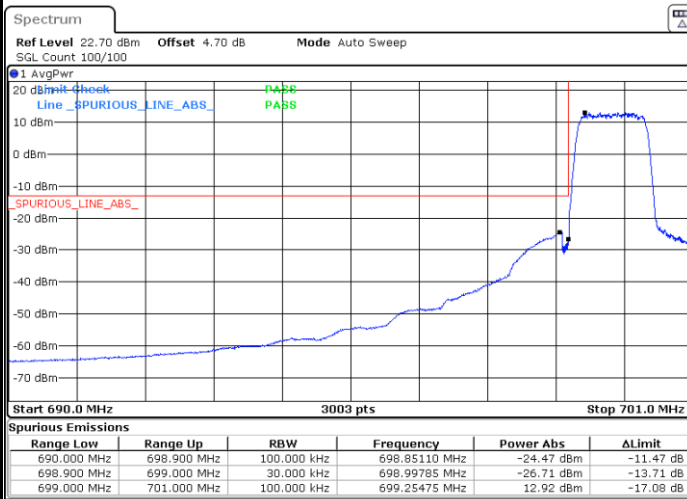
Date: 30 DEC 2020 14:06:49

Highest Band Edge / 1RB



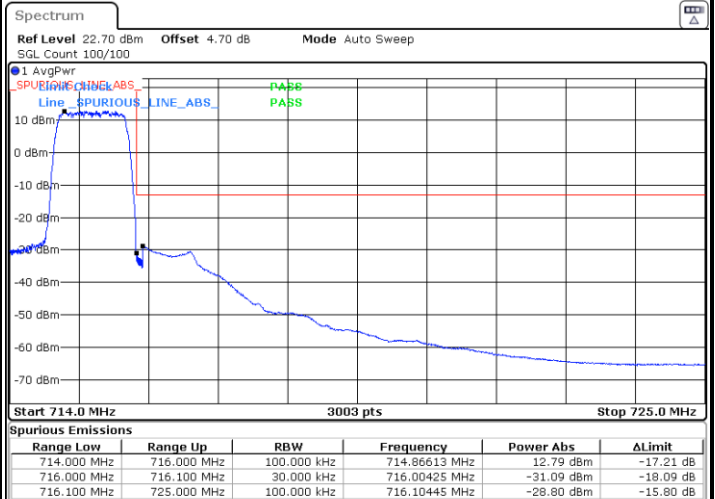
Date: 30 DEC 2020 14:12:27

Lowest Band Edge / Full RB



Date: 30 DEC 2020 14:07:57

Highest Band Edge / Full RB



Date: 30 DEC 2020 14:11:20