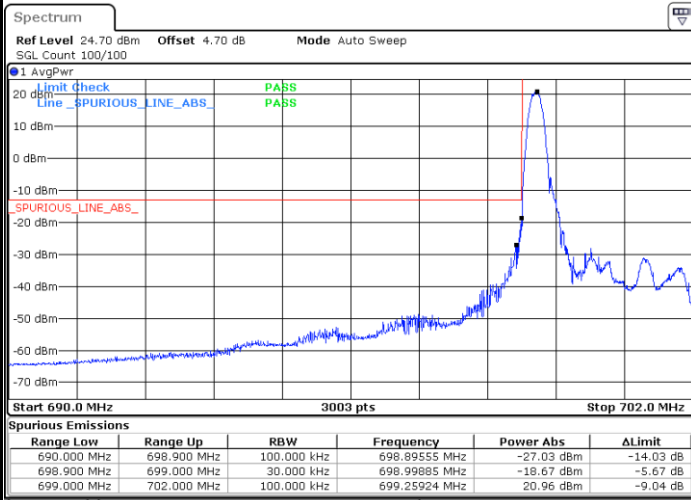




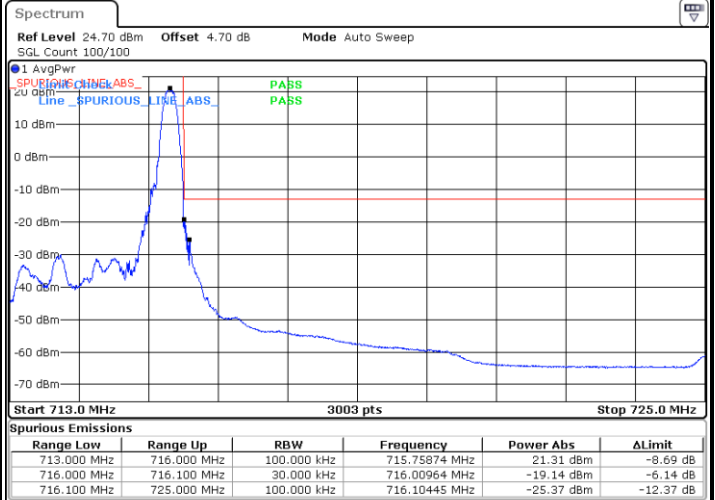
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



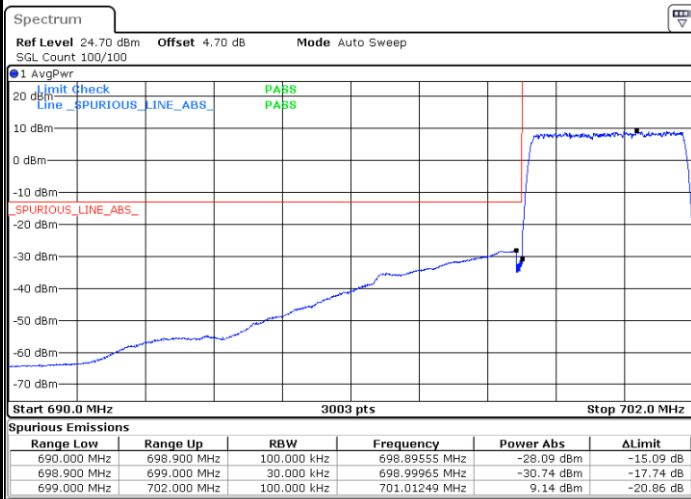
Date: 26.DEC.2021 04:22:52

Highest Band Edge / 1 RB



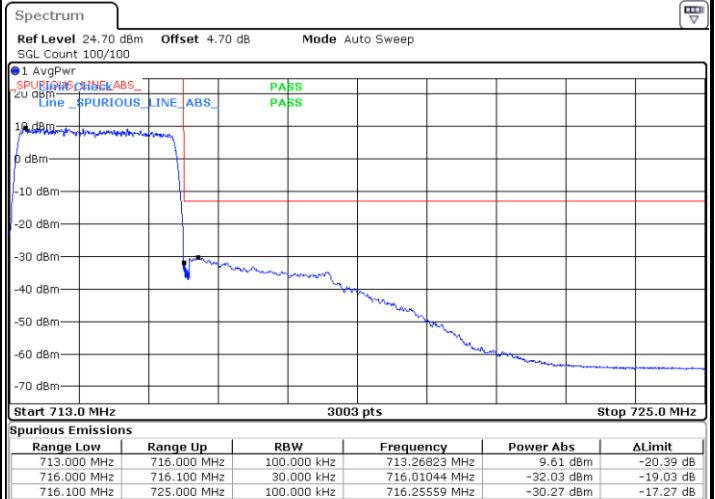
Date: 26.DEC.2021 04:29:55

Lowest Band Edge / Full RB



Date: 26.DEC.2021 04:17:29

Highest Band Edge / Full RB

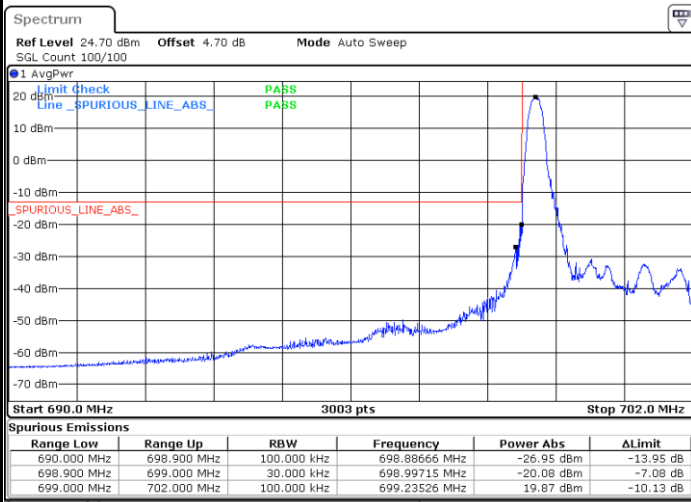


Date: 26.DEC.2021 04:24:38



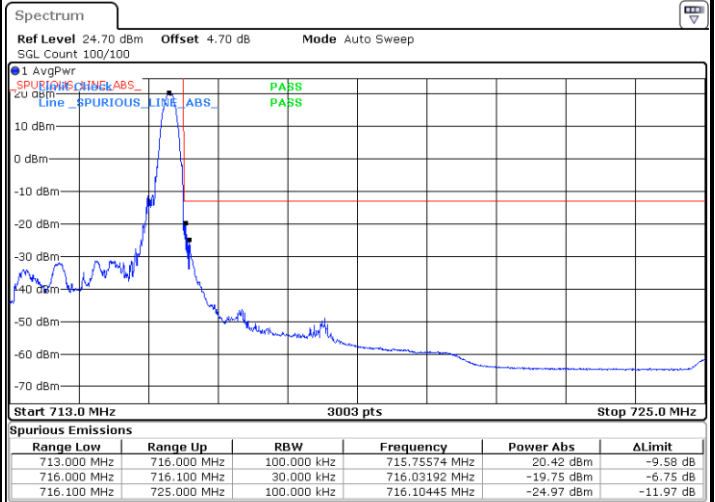
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



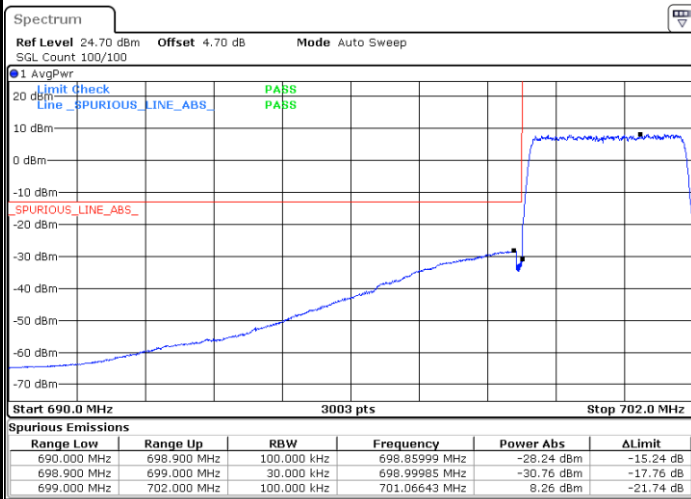
Date: 26.DEC.2021 04:21:00

Highest Band Edge / 1 RB



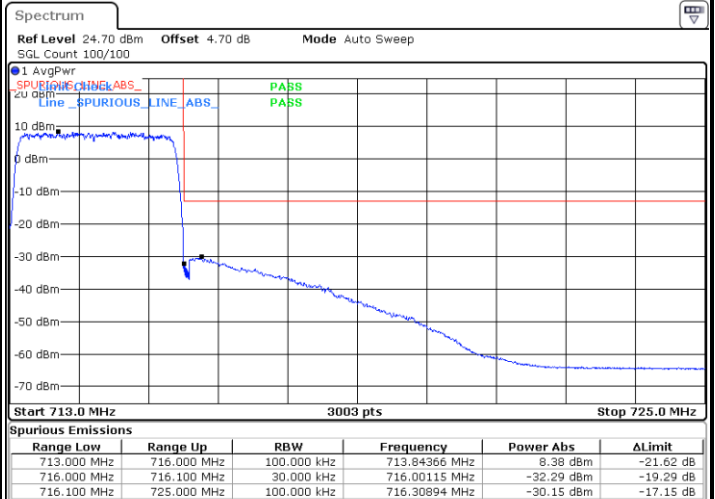
Date: 26.DEC.2021 04:28:09

Lowest Band Edge / Full RB



Date: 26.DEC.2021 04:19:15

Highest Band Edge / Full RB

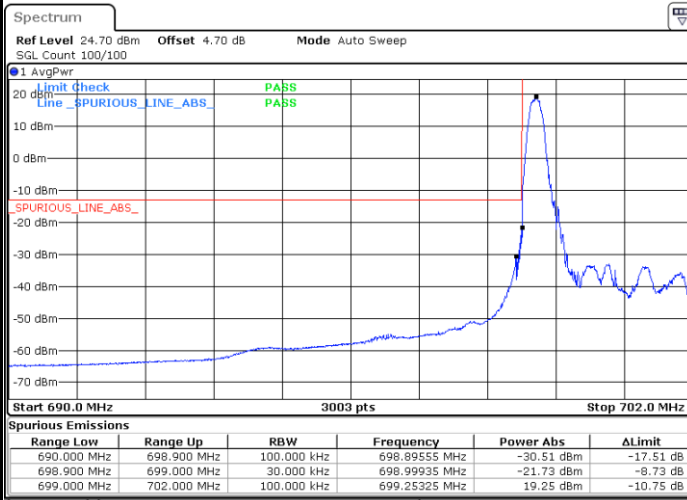


Date: 26.DEC.2021 04:26:23



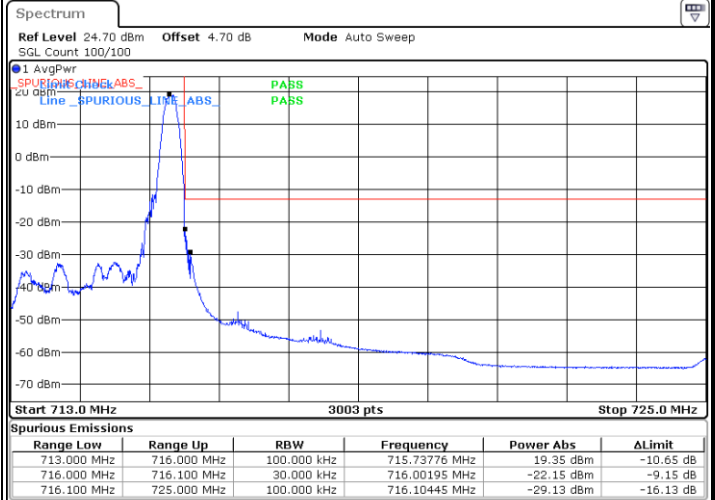
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



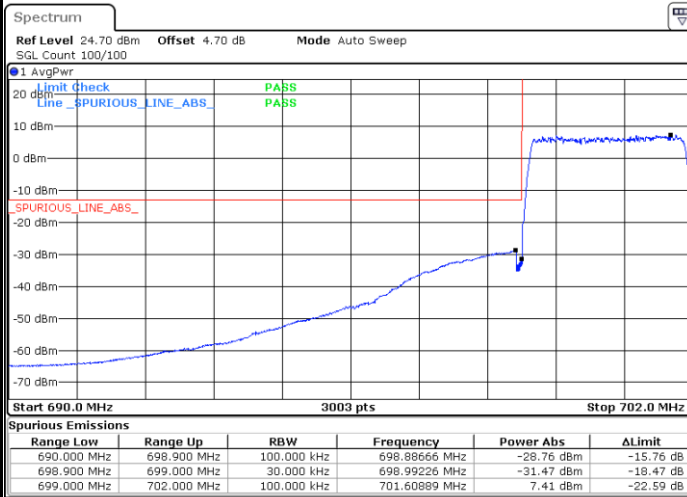
Date: 26.DEC.2021 05:01:40

Highest Band Edge / 1 RB



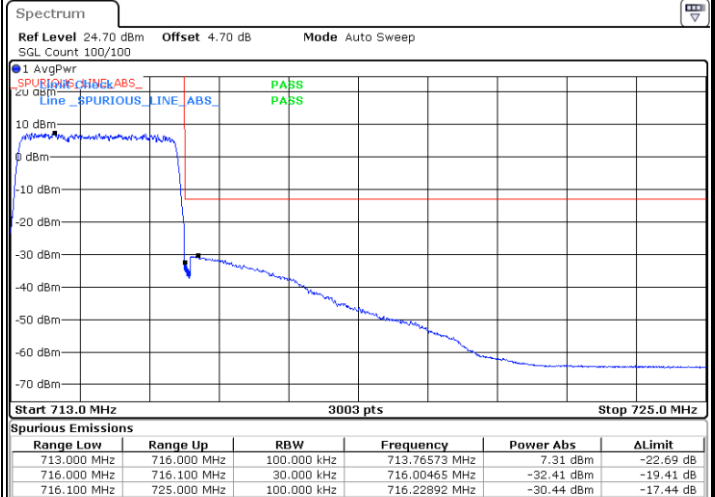
Date: 26.DEC.2021 05:05:11

Lowest Band Edge / Full RB



Date: 26.DEC.2021 04:59:54

Highest Band Edge / Full RB

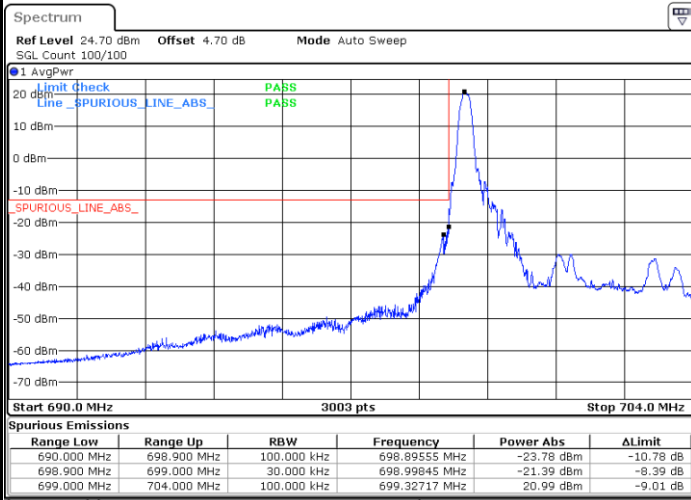


Date: 26.DEC.2021 05:03:25

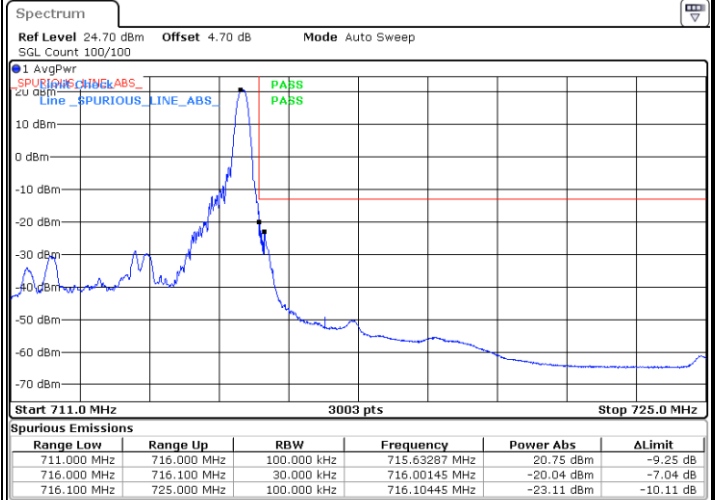


LTE Band 12 / 5MHz / QPSK

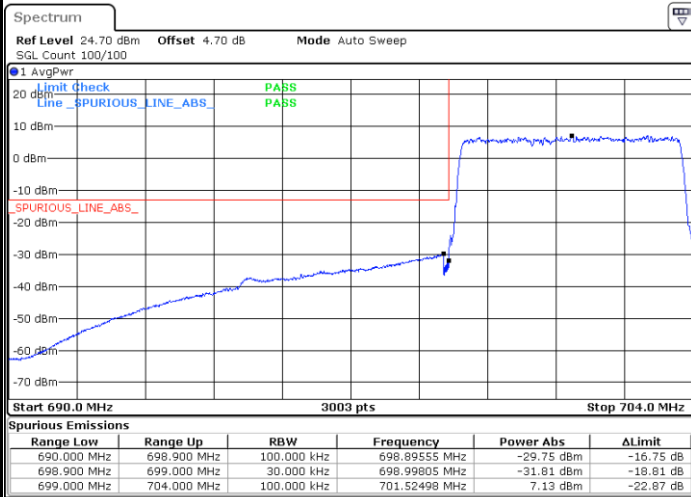
Lowest Band Edge / 1 RB



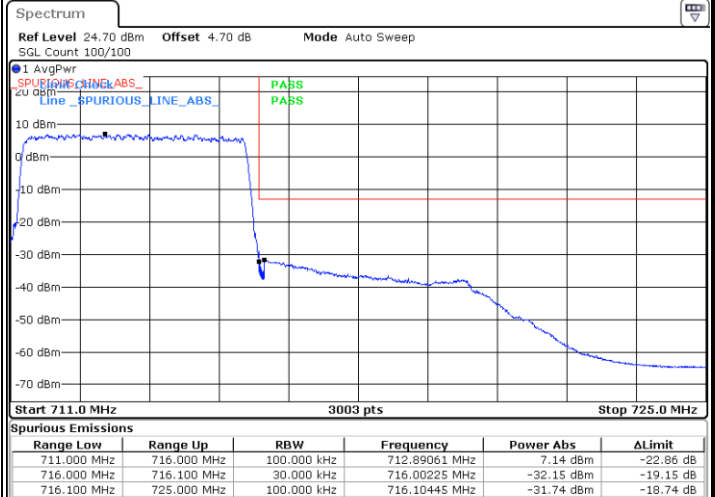
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



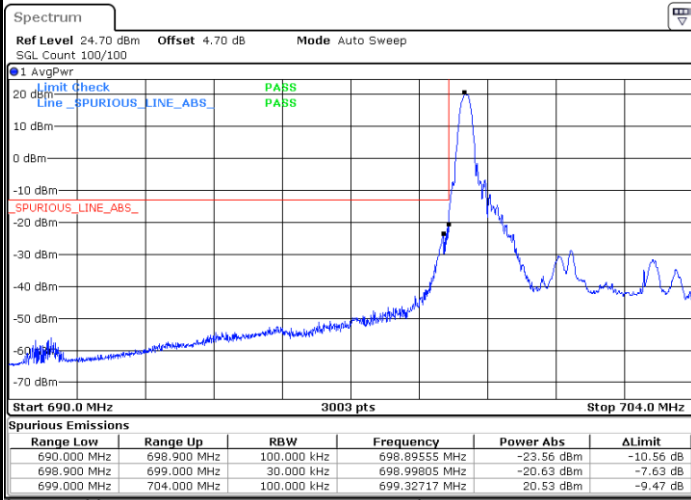
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



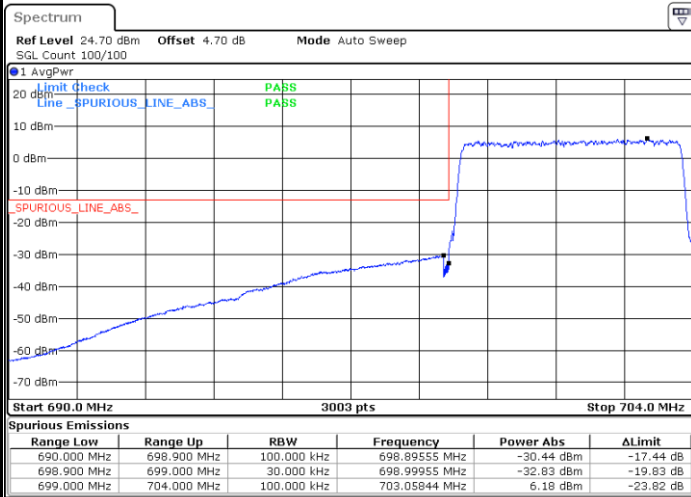
Date: 26.DEC.2021 04:35:12

Highest Band Edge / 1 RB



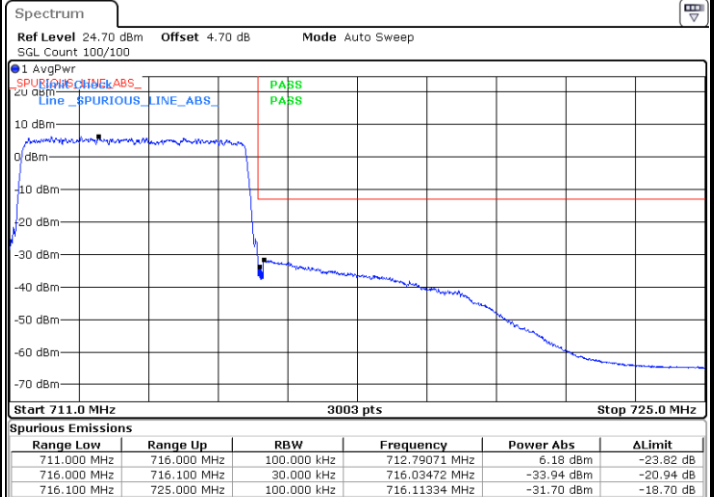
Date: 26.DEC.2021 04:44:01

Lowest Band Edge / Full RB



Date: 26.DEC.2021 04:33:27

Highest Band Edge / Full RB

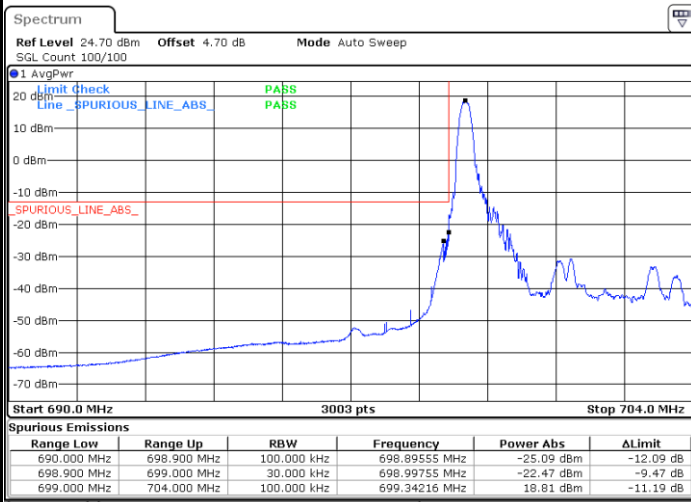


Date: 26.DEC.2021 04:40:30



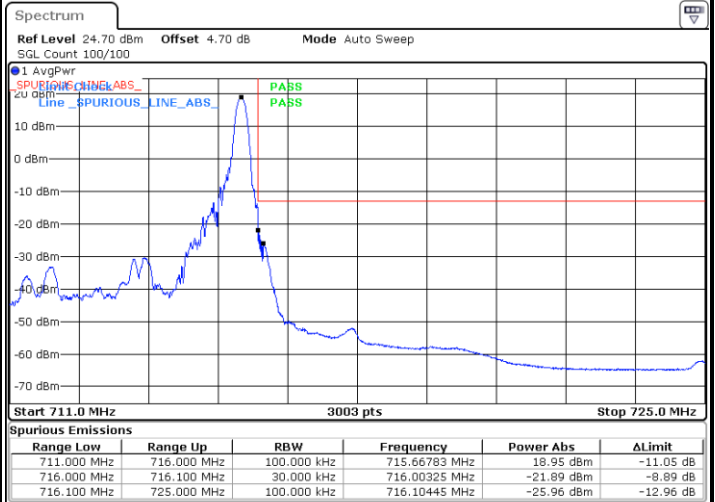
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



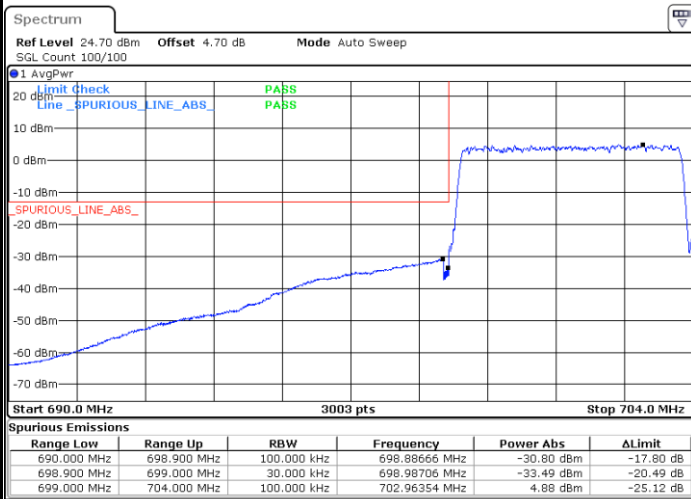
Date: 26.DEC.2021 05:08:43

Highest Band Edge / 1 RB



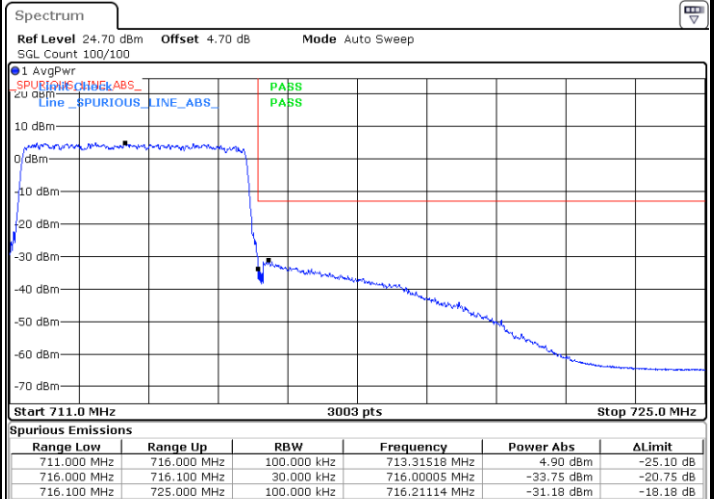
Date: 26.DEC.2021 05:12:14

Lowest Band Edge / Full RB



Date: 26.DEC.2021 05:06:57

Highest Band Edge / Full RB



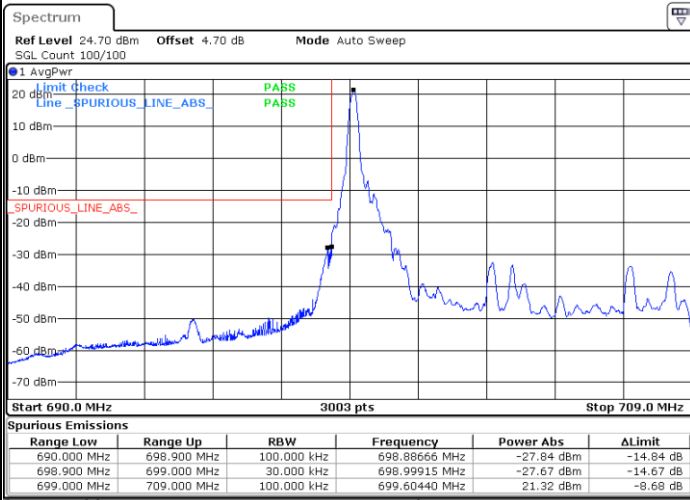
Date: 26.DEC.2021 05:10:29



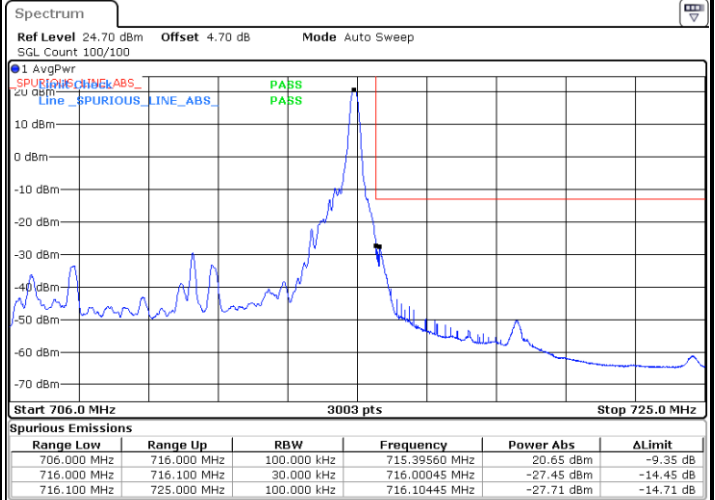
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



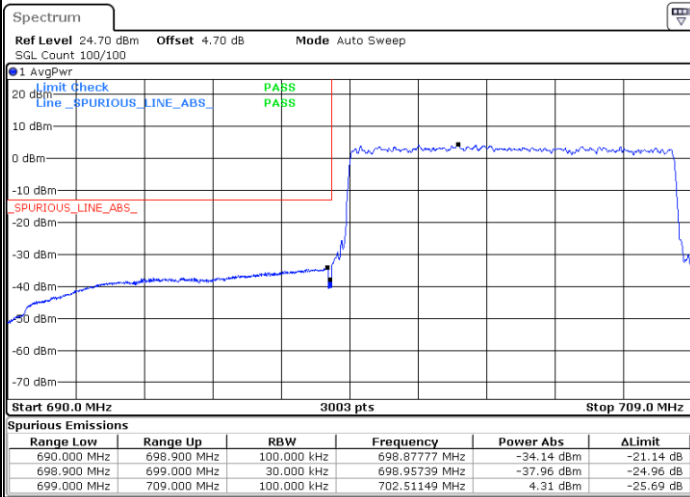
Date: 26.DEC.2021 04:51:05



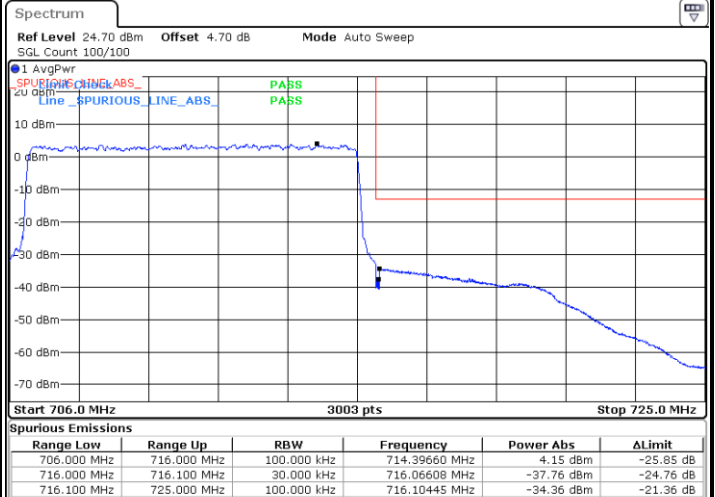
Date: 26.DEC.2021 04:58:08

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 26.DEC.2021 04:45:48

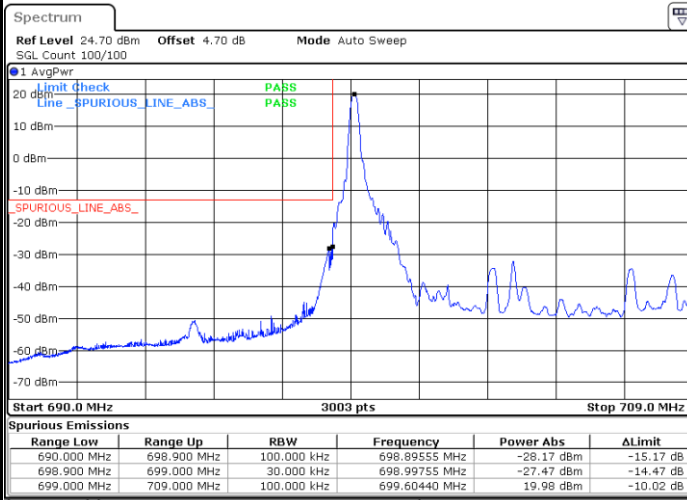


Date: 26.DEC.2021 04:52:51



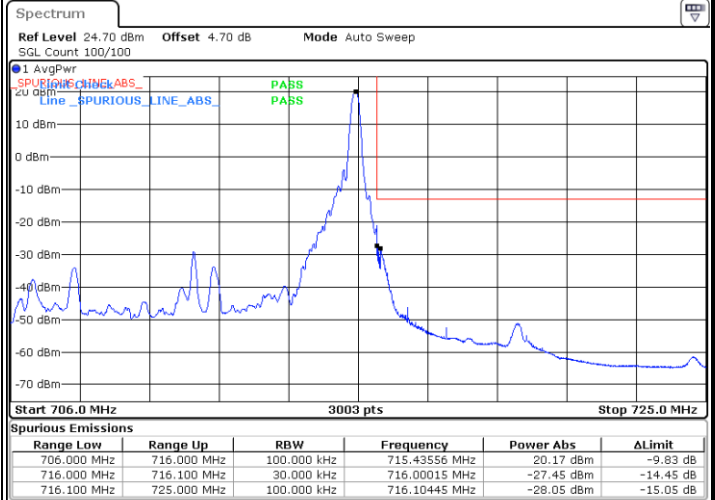
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



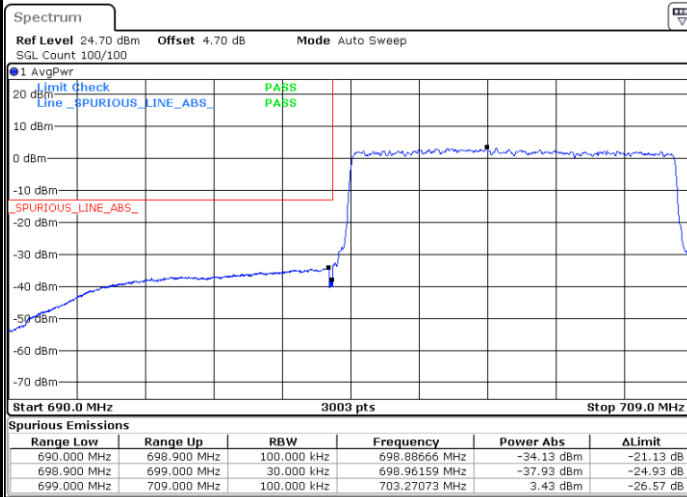
Date: 26.DEC.2021 04:49:19

Highest Band Edge / 1 RB



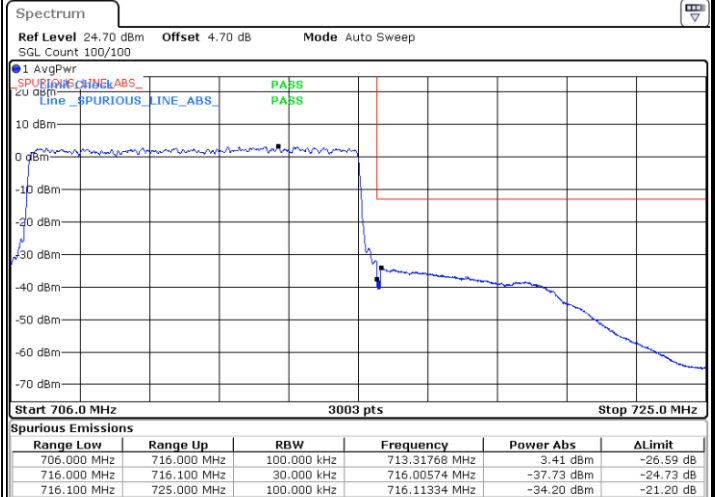
Date: 26.DEC.2021 04:56:22

Lowest Band Edge / Full RB



Date: 26.DEC.2021 04:47:34

Highest Band Edge / Full RB

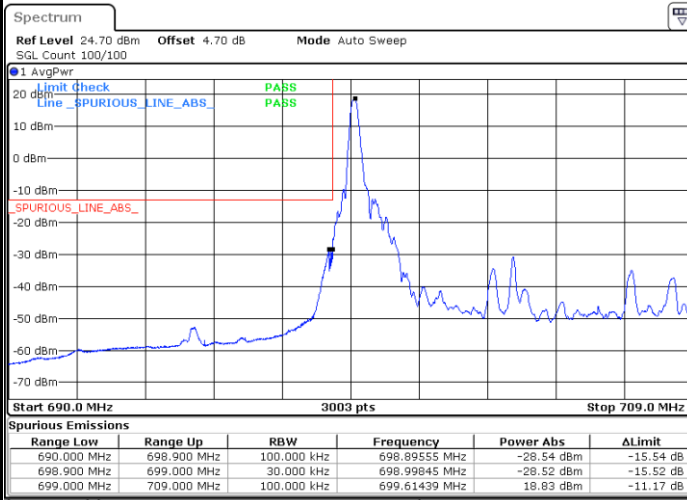


Date: 26.DEC.2021 04:54:37



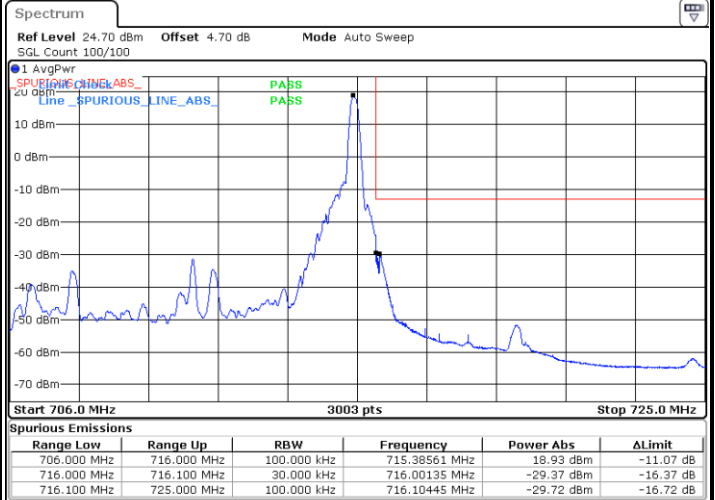
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



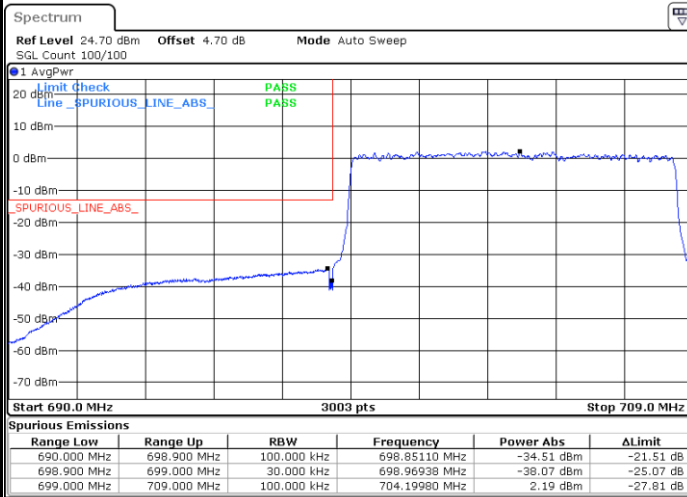
Date: 26.DEC.2021 05:15:46

Highest Band Edge / 1 RB



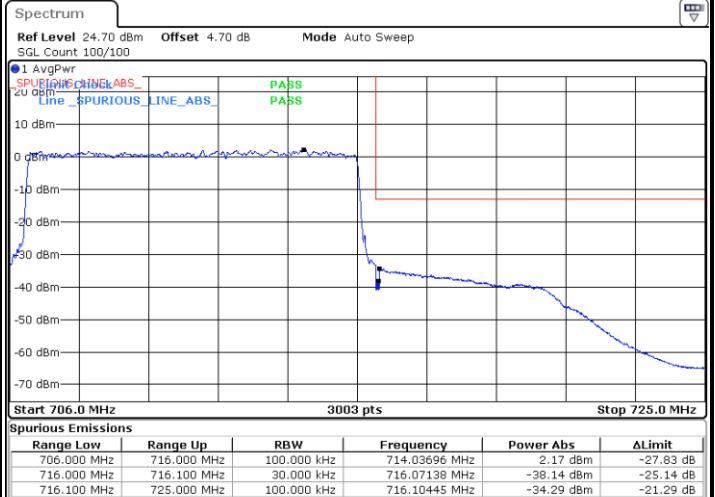
Date: 26.DEC.2021 05:19:18

Lowest Band Edge / Full RB



Date: 26.DEC.2021 05:14:01

Highest Band Edge / Full RB

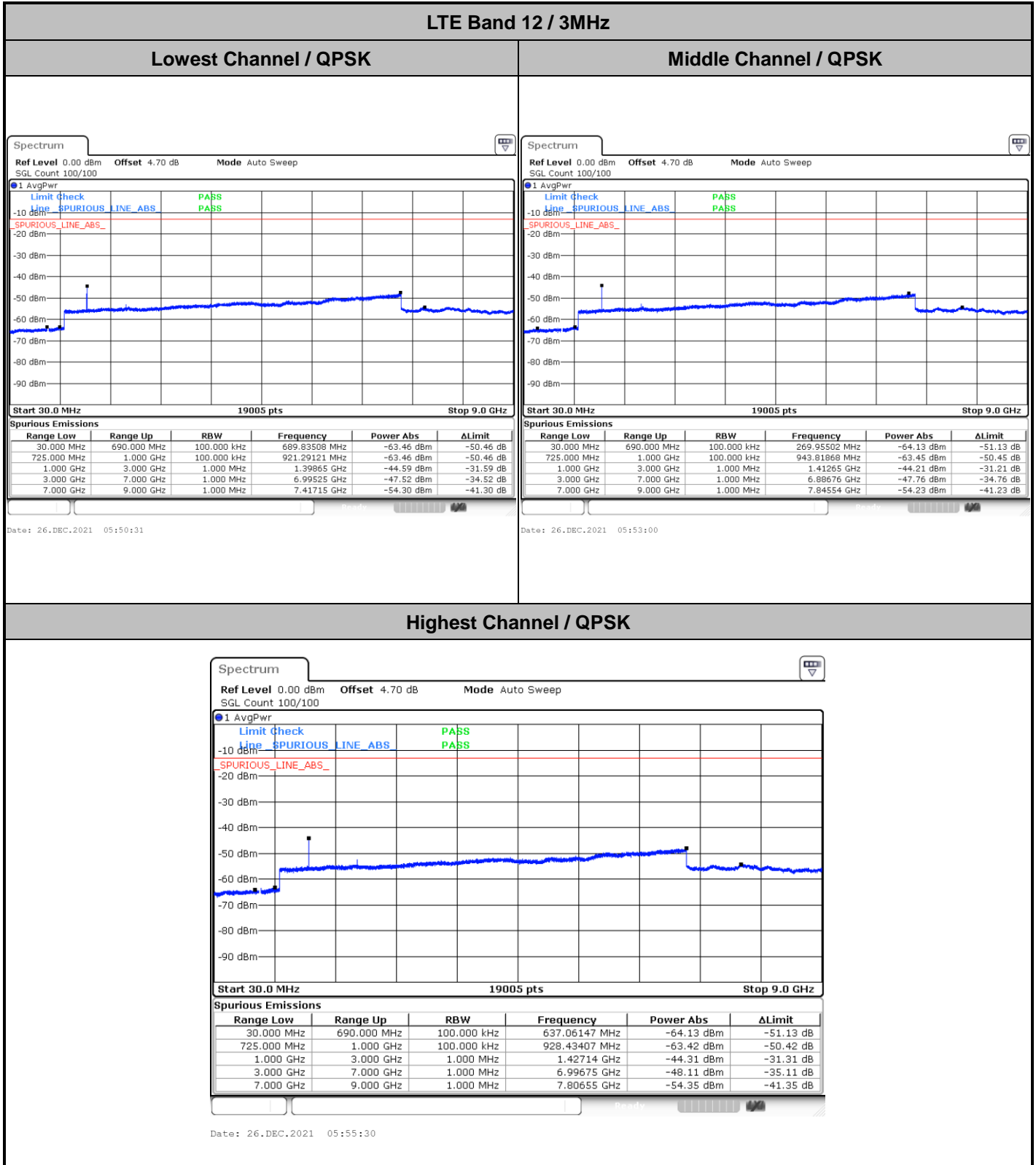


Date: 26.DEC.2021 05:17:32



Conducted Spurious Emission



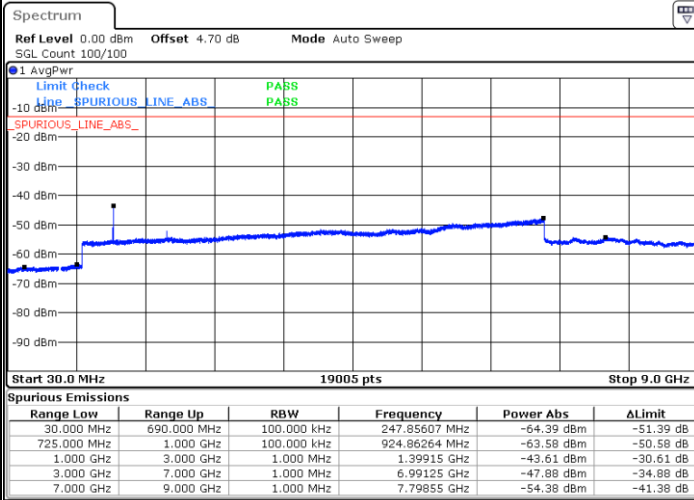




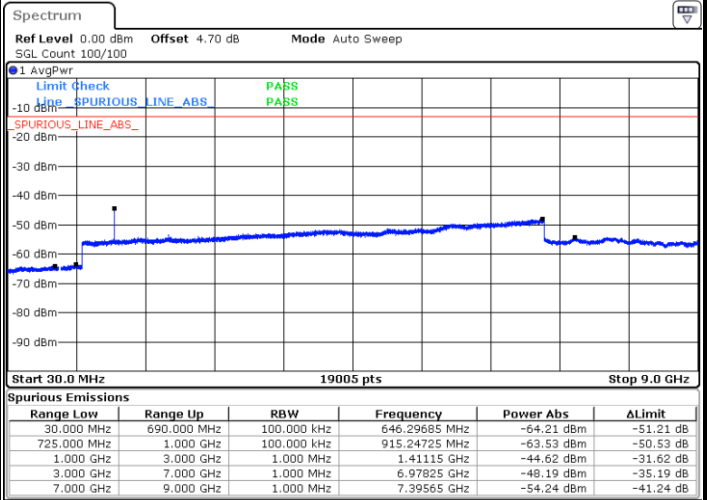
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

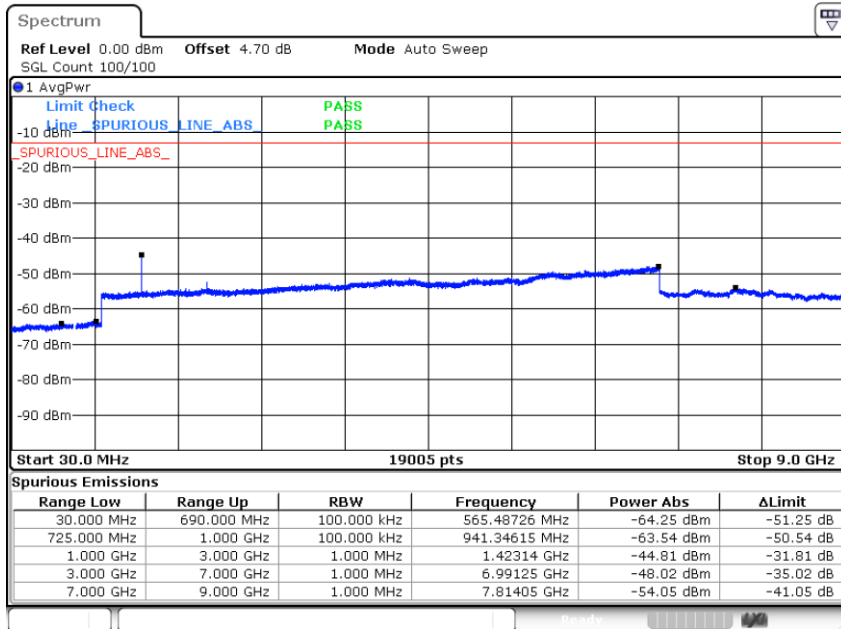


Date: 26.DEC.2021 05:58:01



Date: 26.DEC.2021 06:00:31

Highest Channel / QPSK

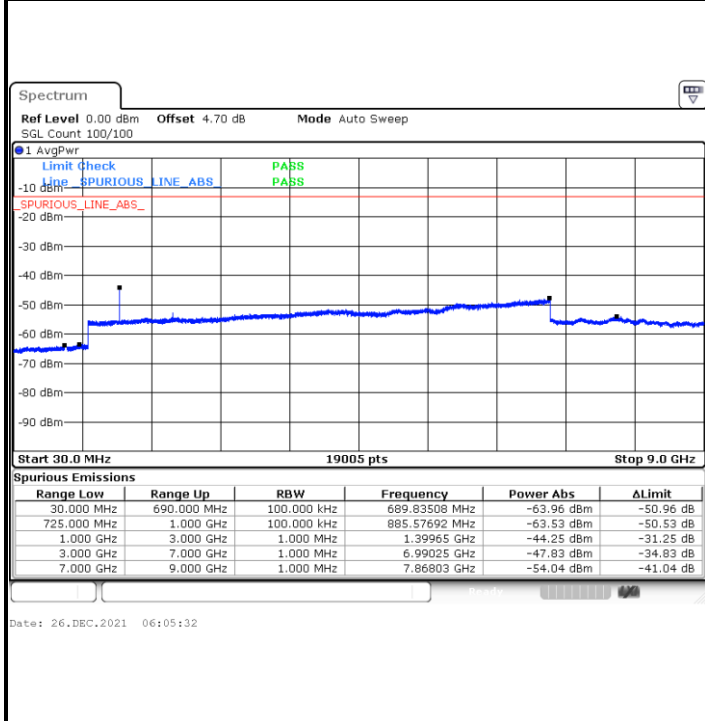


Date: 26.DEC.2021 06:03:01

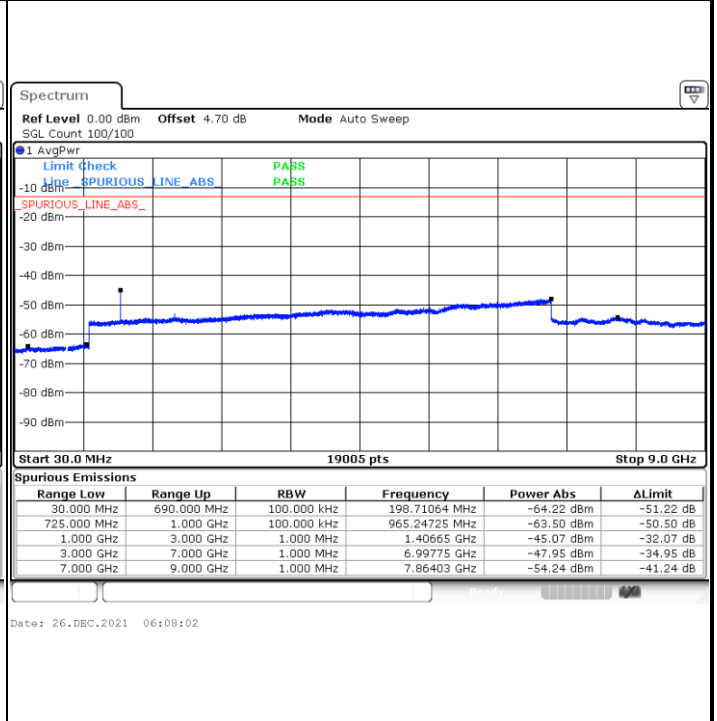


LTE Band 12 / 10MHz

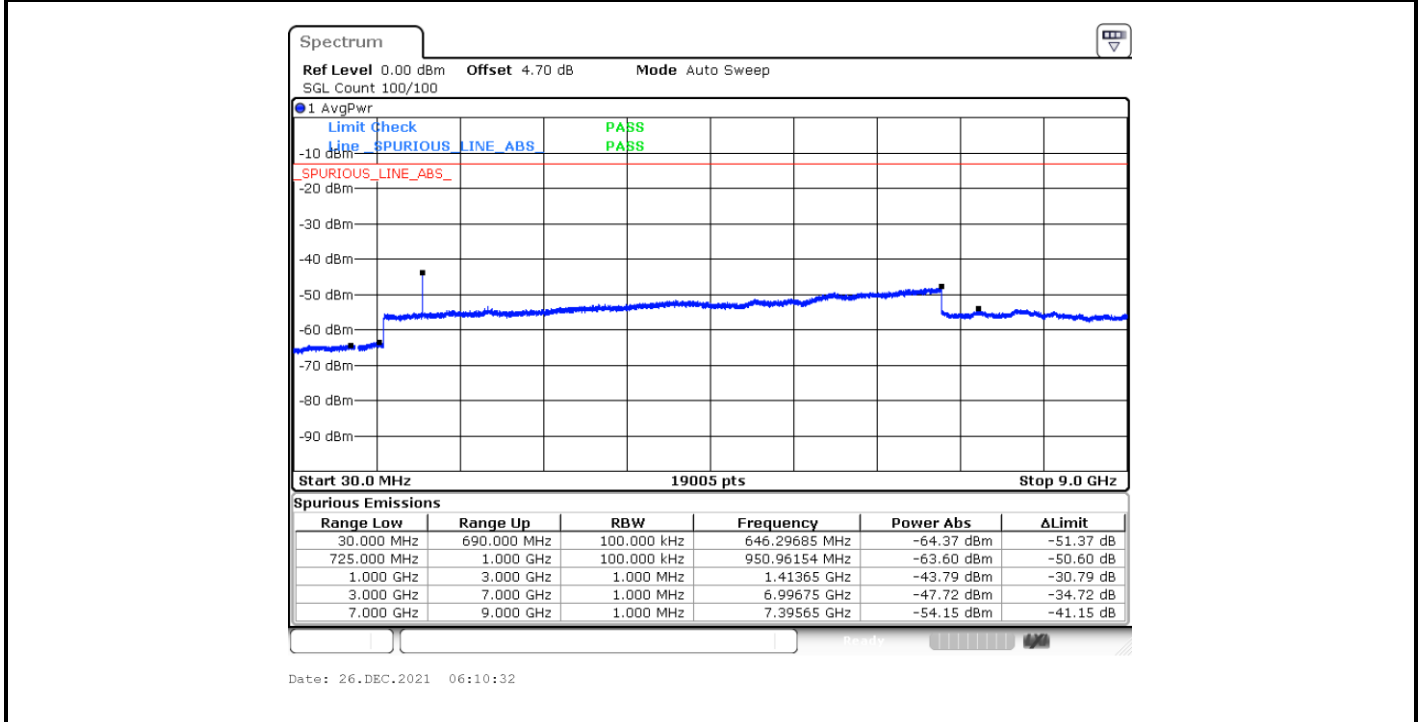
Lowest Channel / QPSK



Middle Channel / QPSK



Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0032	
30	Normal Voltage	0.0009	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0041	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0030	
20	Battery End Point	0.0025	

Note:

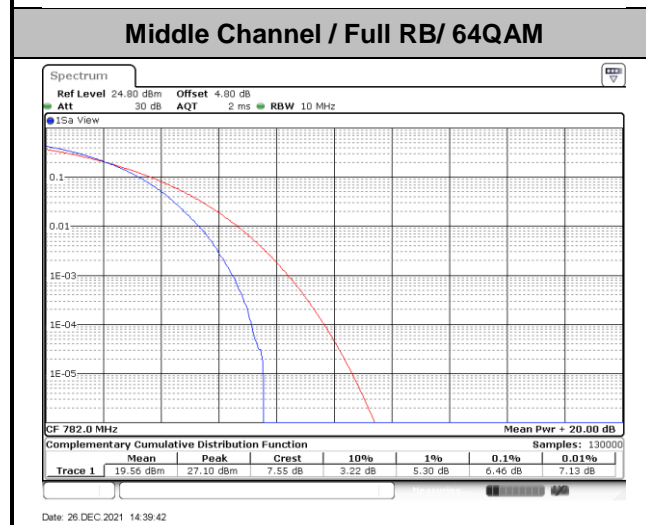
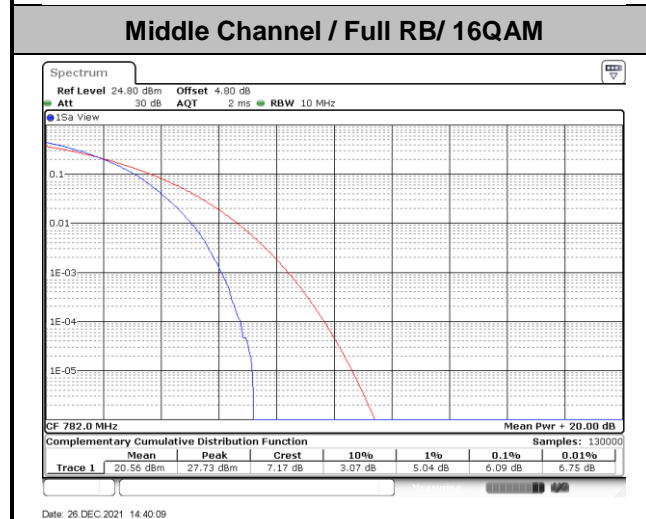
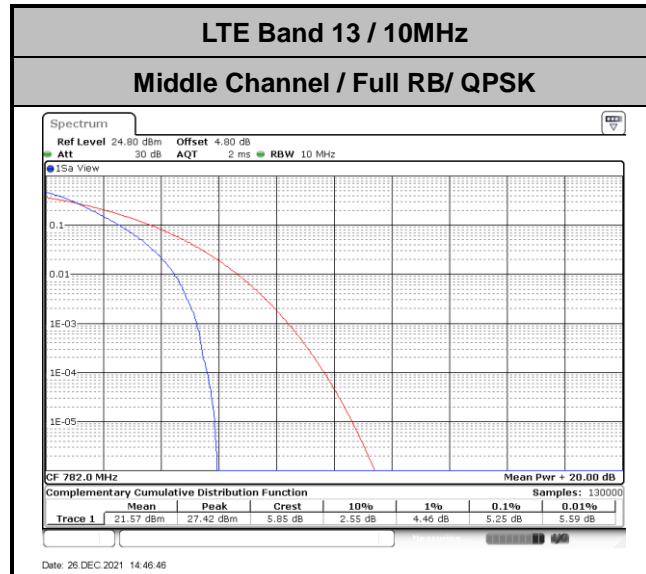
1. Normal Voltage =3.8V. ; Battery End Point (BEP) = 3.6V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

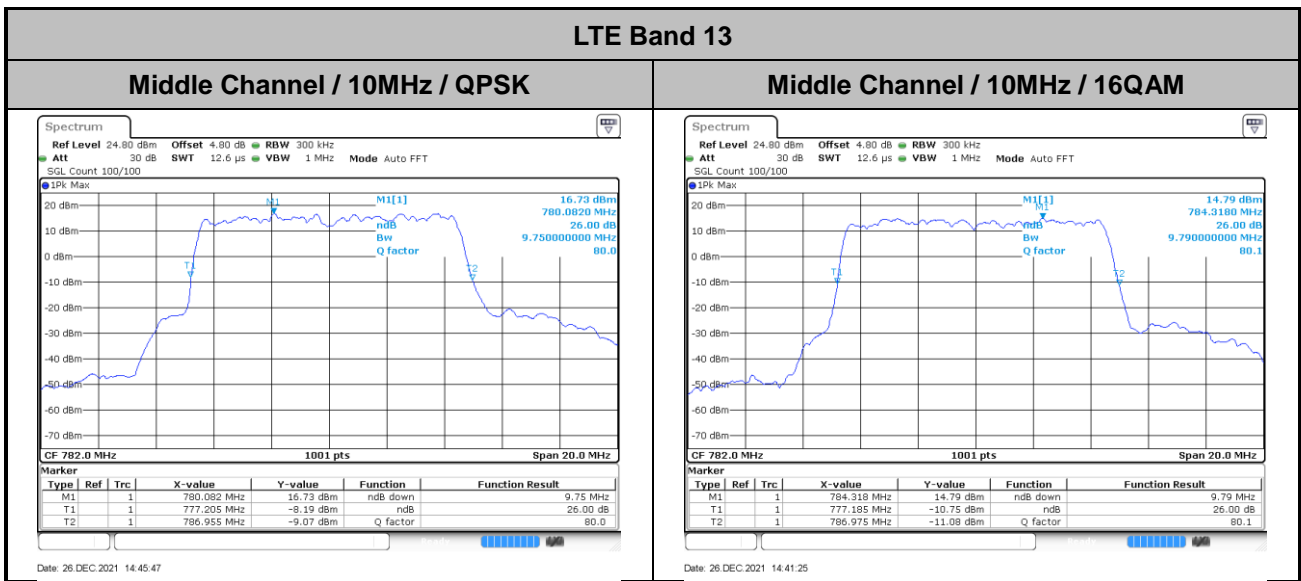
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.25	6.09	6.46	PASS





26dB Bandwidth

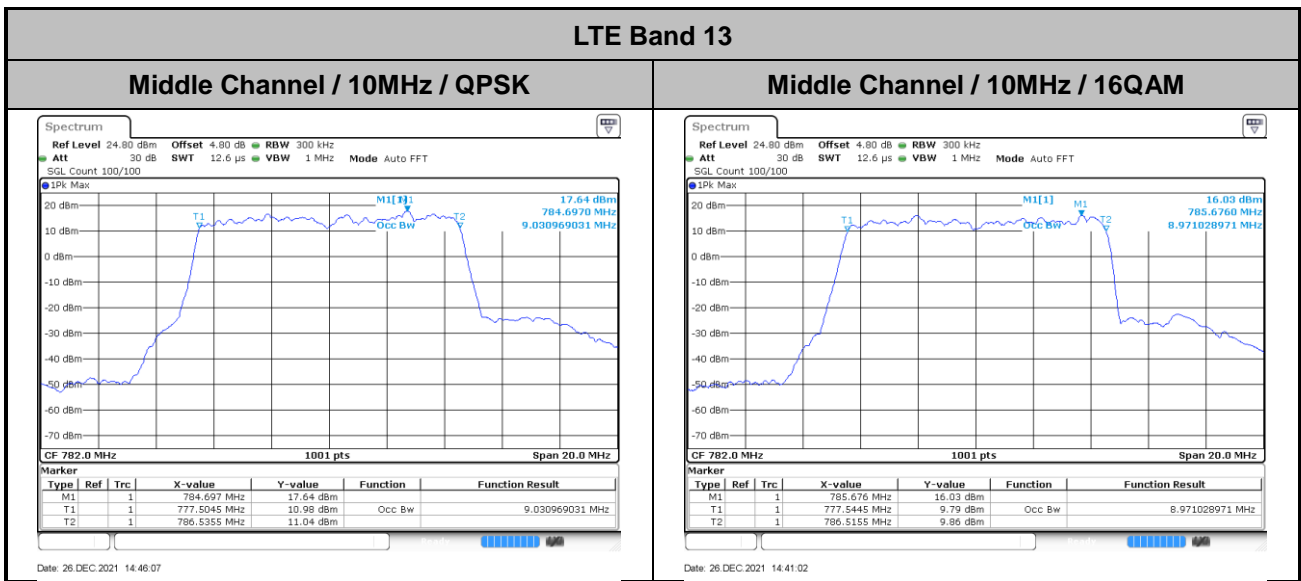
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.75	9.79





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	8.97

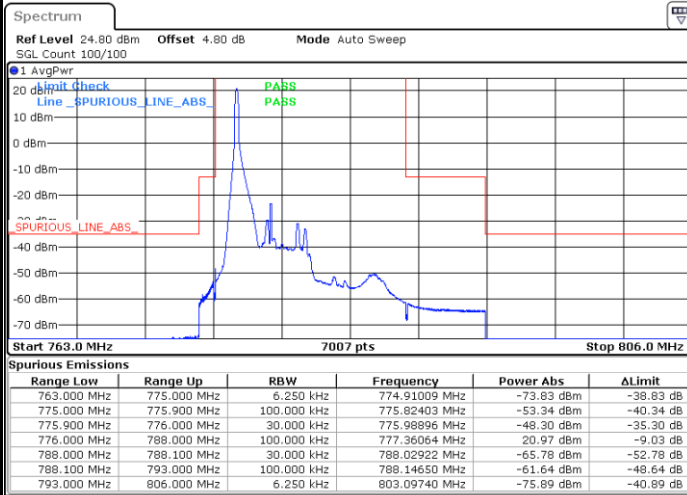




Conducted Band Edge

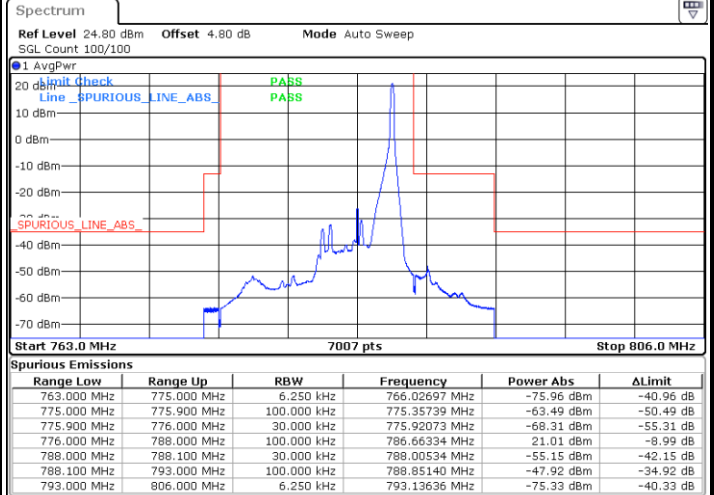
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



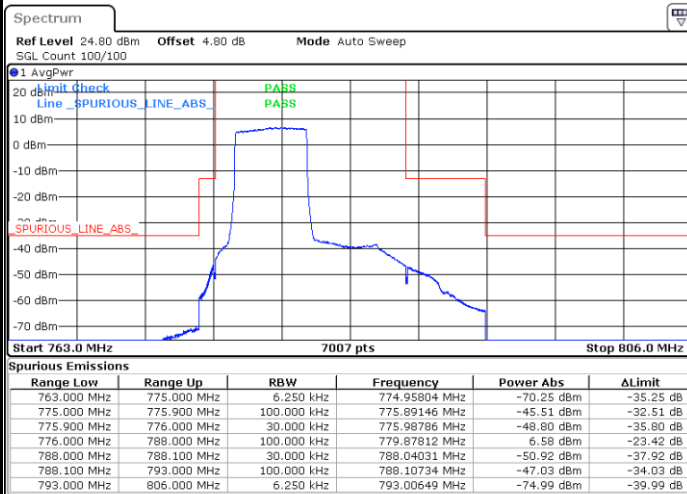
Date: 26 DEC 2021 14:00:35

Highest Band Edge / 1 RB



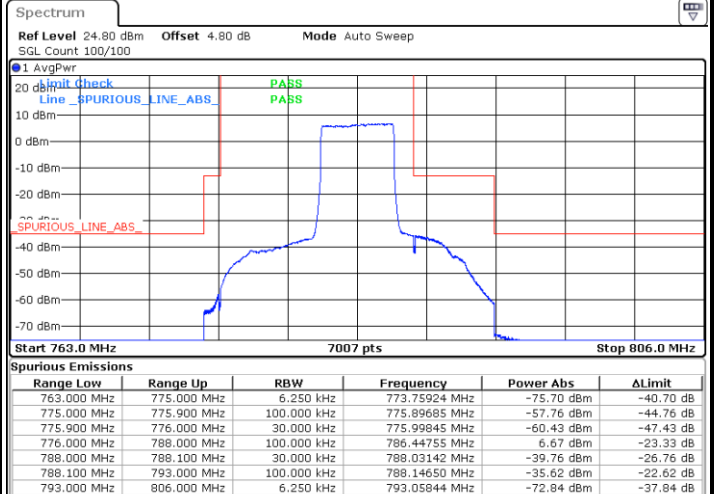
Date: 26 DEC 2021 14:17:49

Lowest Band Edge / Full RB



Date: 26 DEC 2021 14:11:05

Highest Band Edge / Full RB

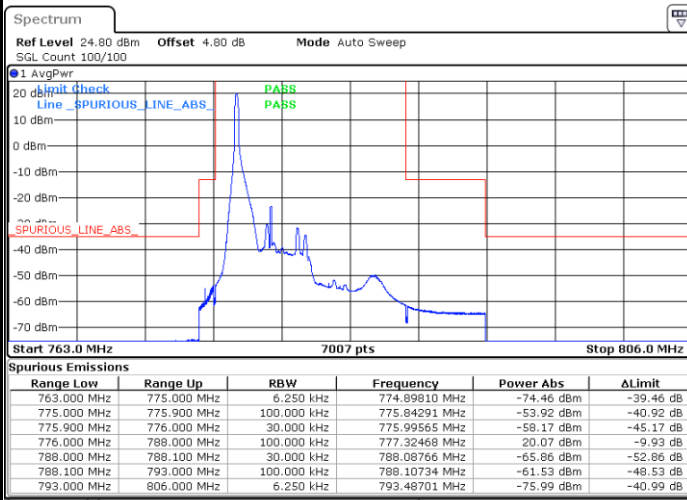


Date: 26 DEC 2021 14:27:27



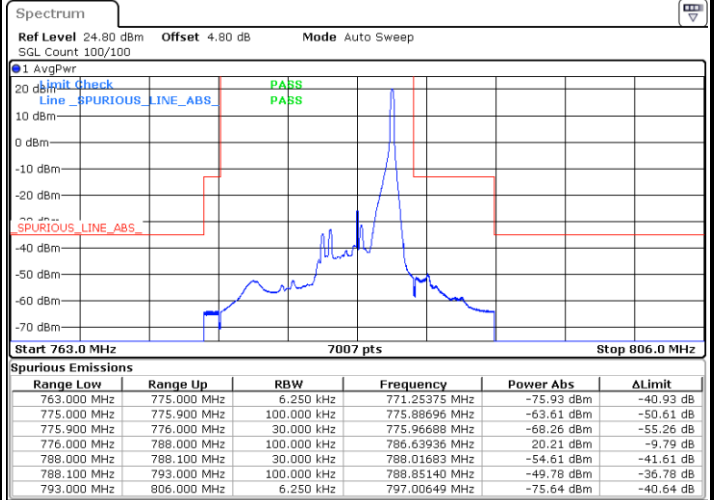
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB



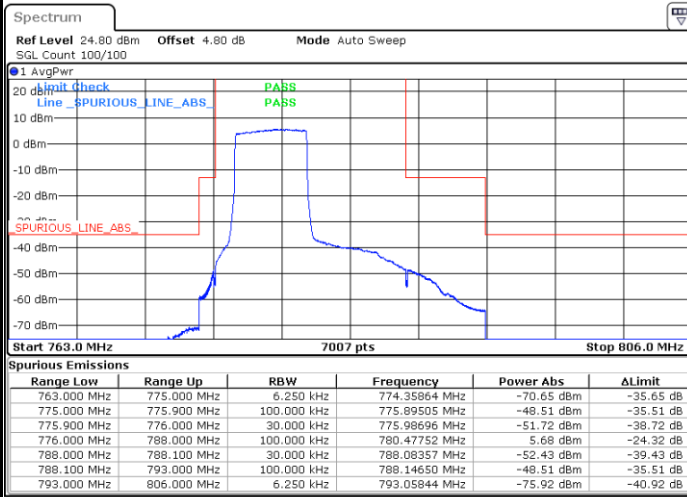
Date: 26 DEC 2021 14:02:08

Highest Band Edge / 1 RB



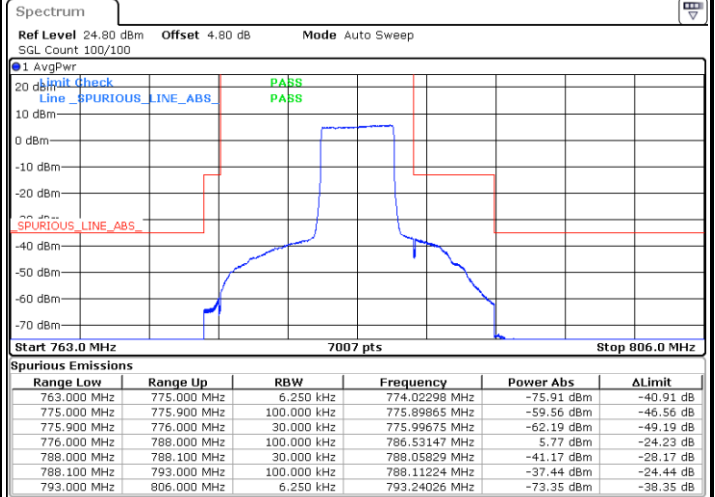
Date: 26 DEC 2021 14:19:30

Lowest Band Edge / Full RB



Date: 26 DEC 2021 14:09:34

Highest Band Edge / Full RB

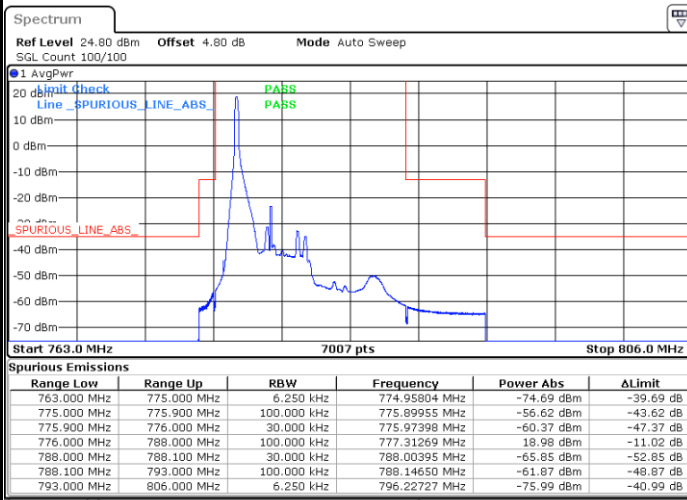


Date: 26 DEC 2021 14:25:49



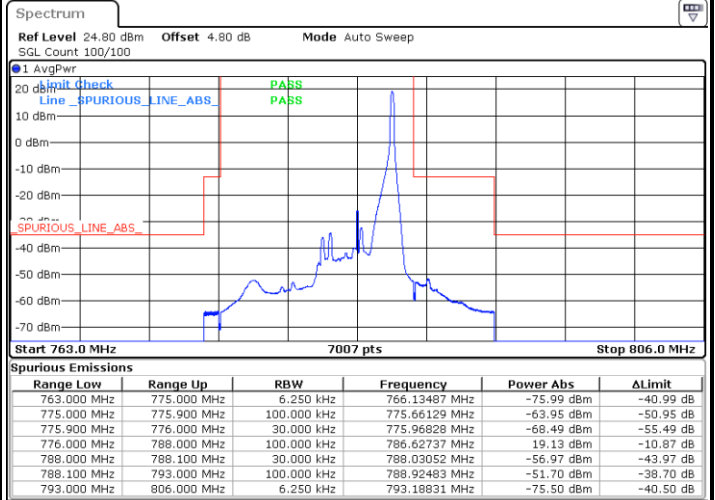
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB



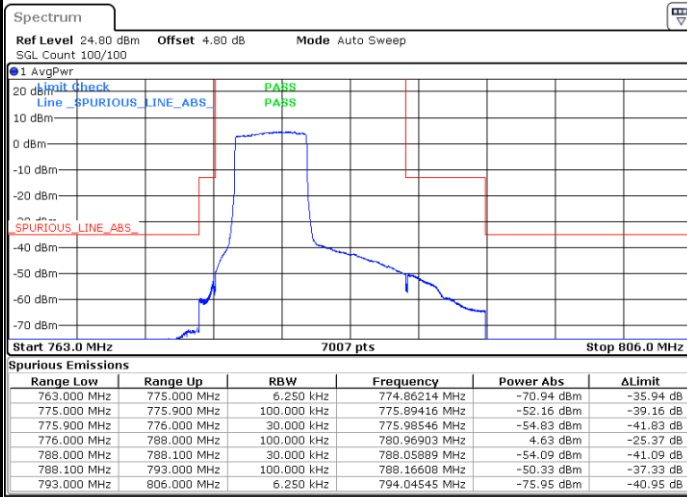
Date: 26 DEC 2021 14:03:33

Highest Band Edge / 1 RB



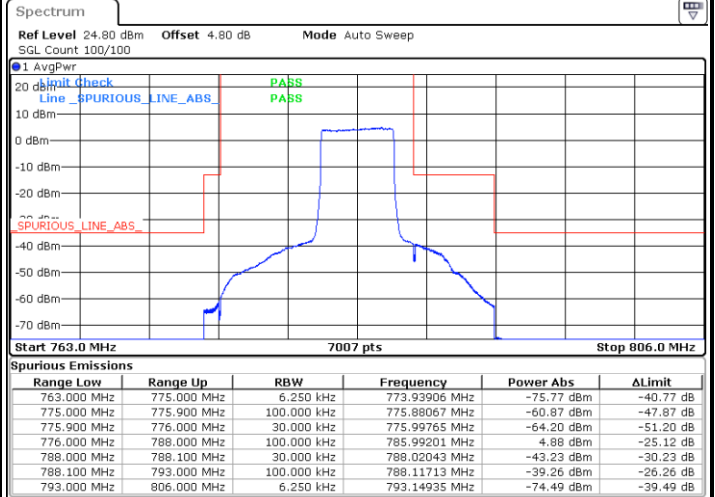
Date: 26 DEC 2021 14:21:38

Lowest Band Edge / Full RB



Date: 26 DEC 2021 14:08:05

Highest Band Edge / Full RB

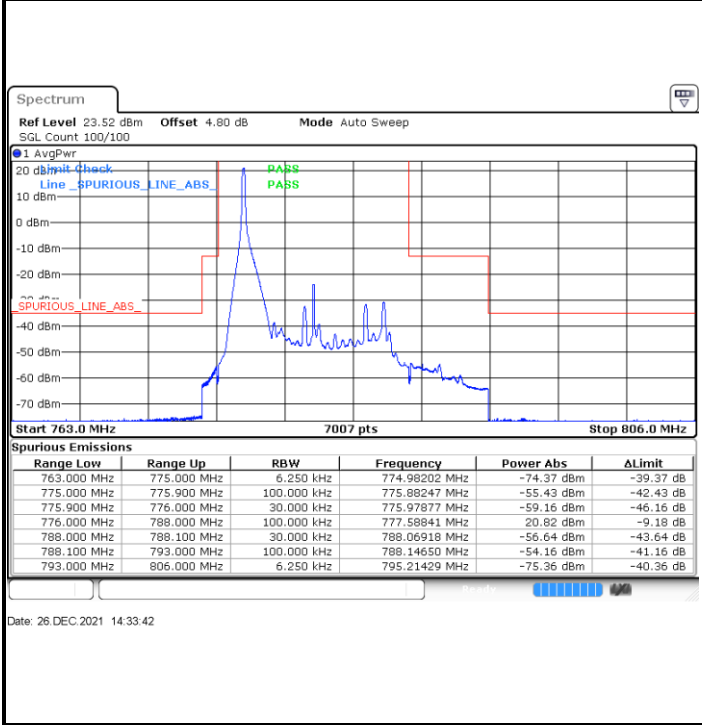


Date: 26 DEC 2021 14:23:58

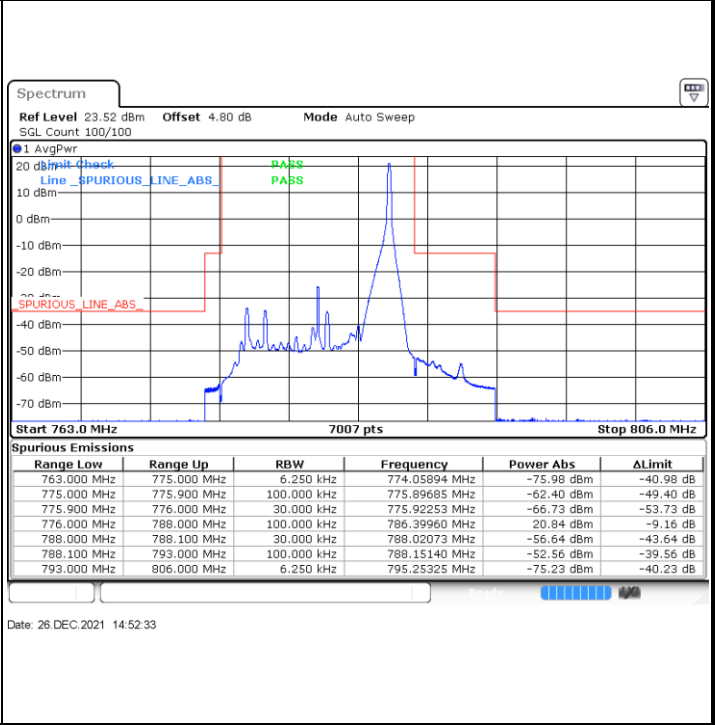


LTE Band 13 / 10MHz / QPSK

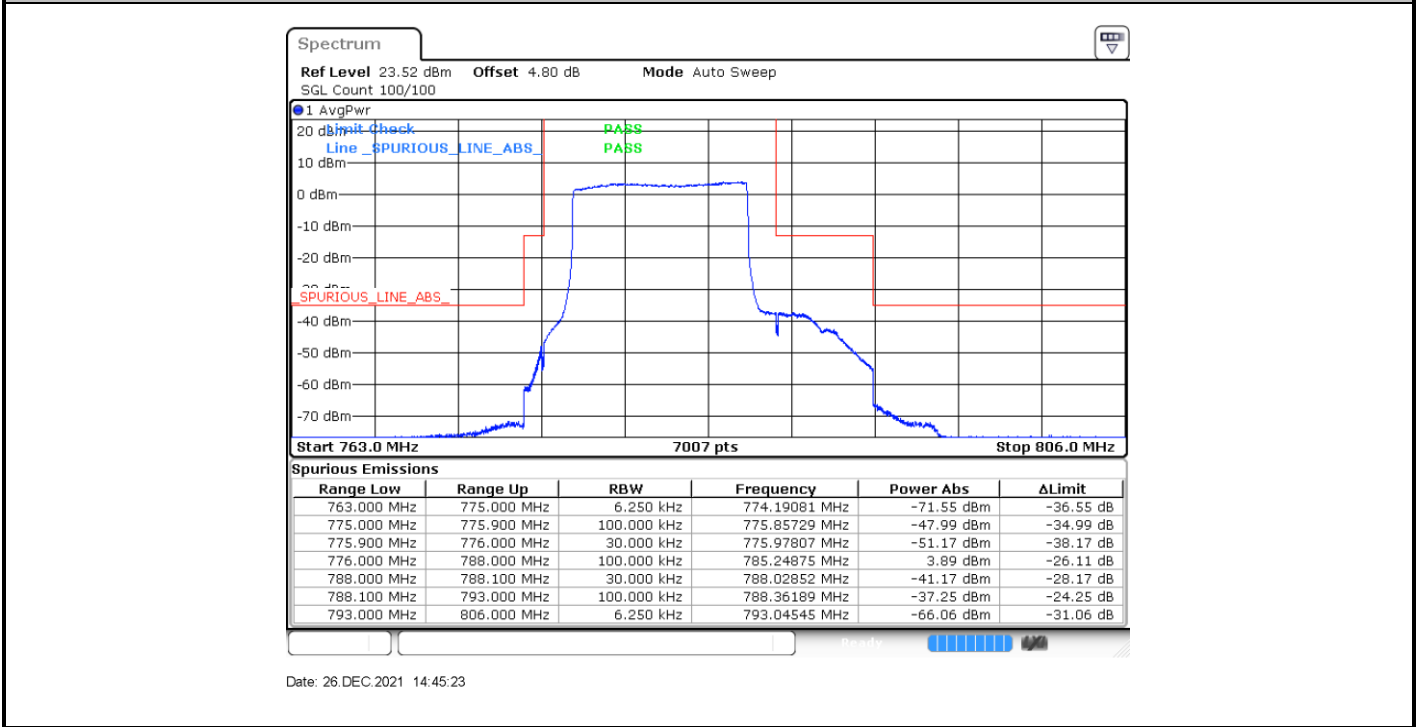
middle Band Edge / 1 RB



middle Band Edge / 1 RB



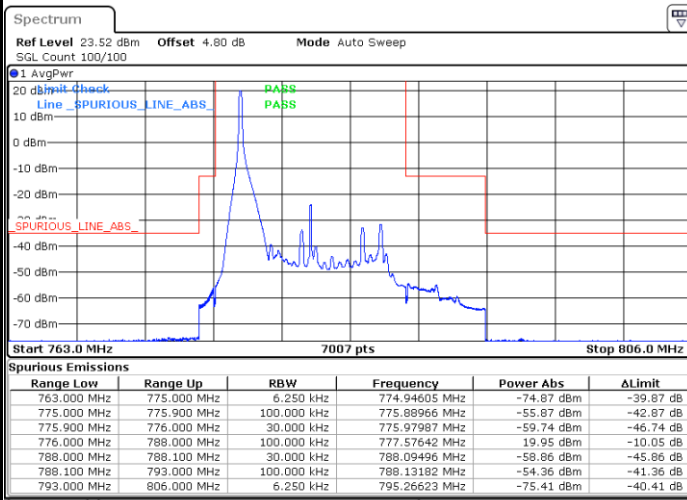
Middle Band Edge / Full RB





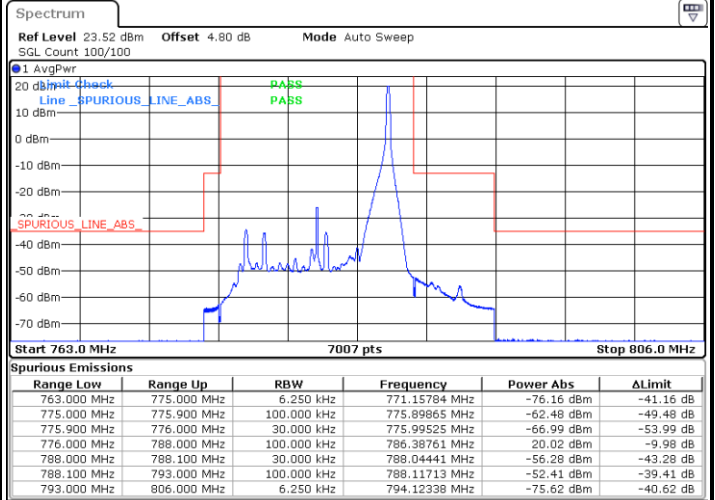
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



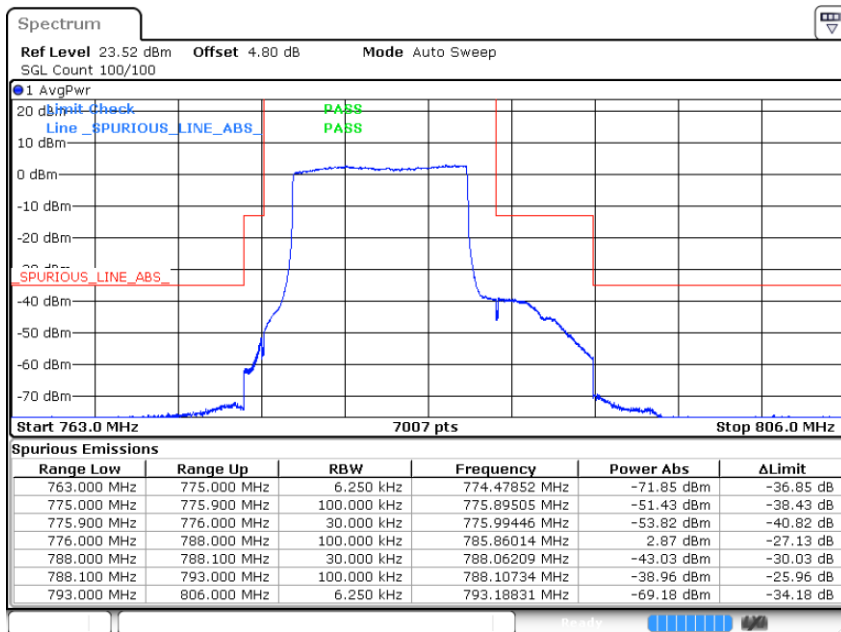
Date: 26 DEC 2021 14:36:00

middle Band Edge / 1 RB



Date: 26 DEC 2021 14:50:57

middle Band Edge / Full RB

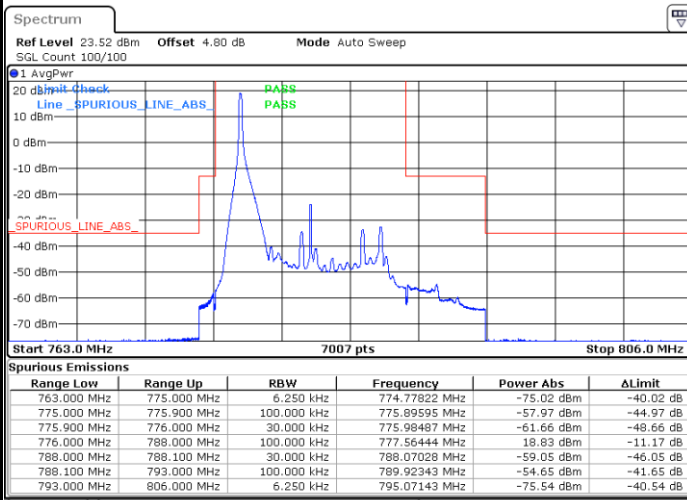


Date: 26 DEC 2021 14:43:52



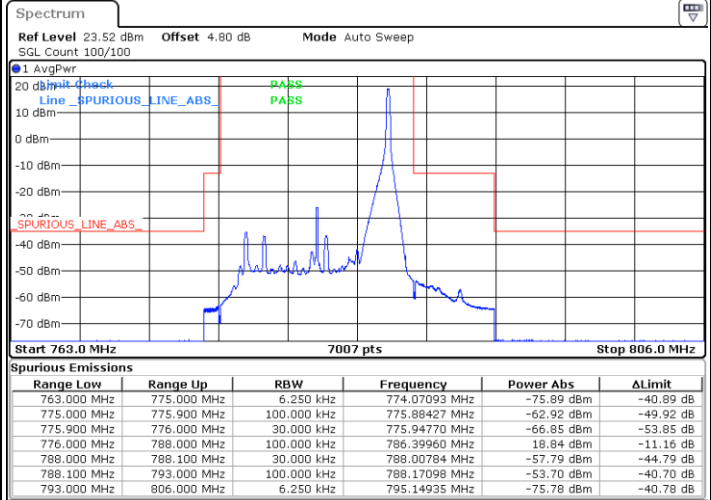
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



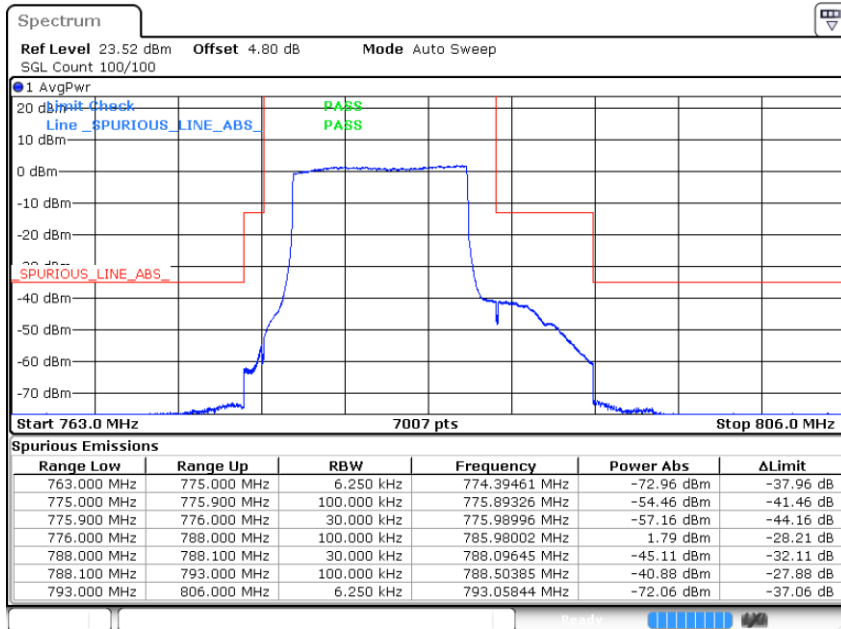
Date: 26 DEC 2021 14:37:33

middle Band Edge / 1 RB



Date: 26 DEC 2021 14:54:50

middle Band Edge / Full RB



Date: 26 DEC 2021 14:39:06

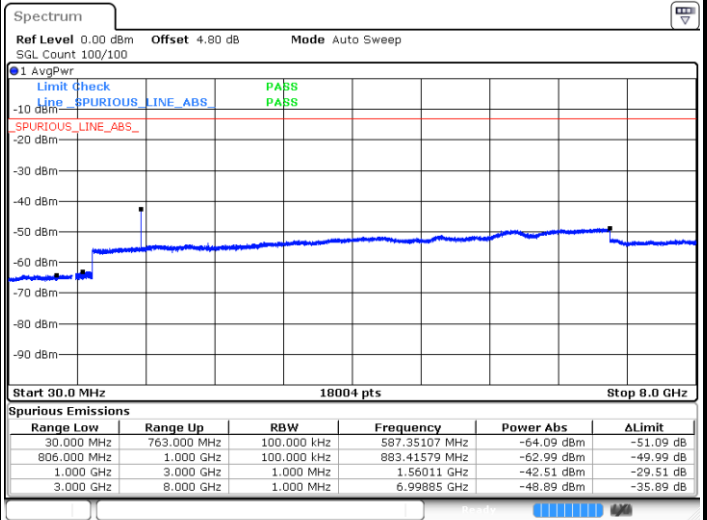
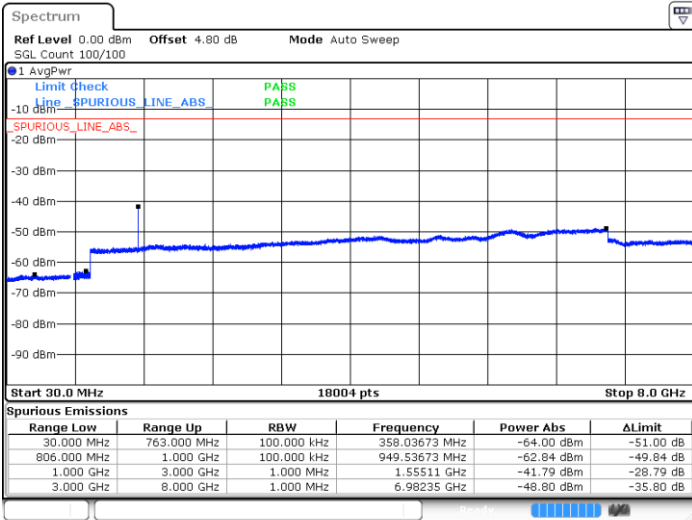


Conducted Spurious Emission

LTE Band 13 / 5MHz

Lowest Channel / QPSK

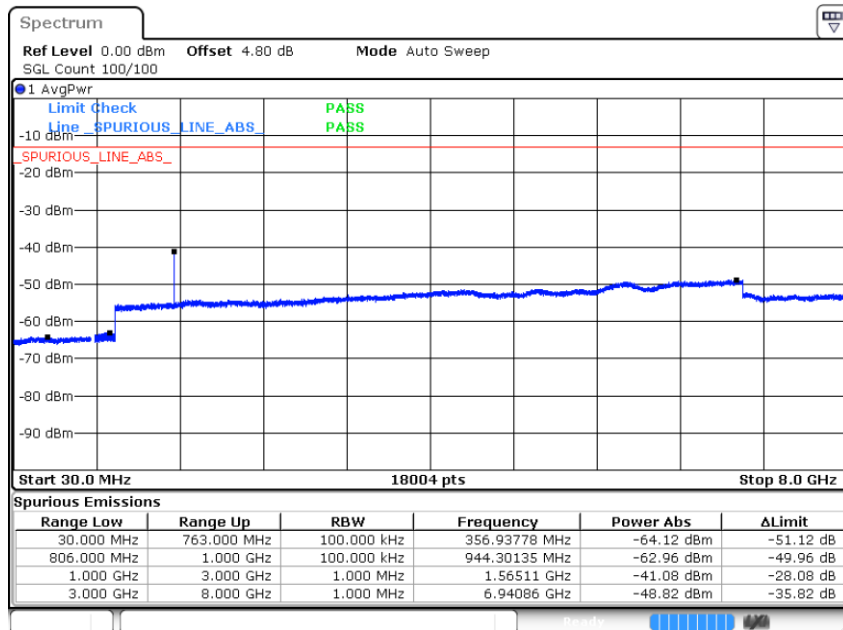
Middle Channel / QPSK



Date: 26 DEC.2021 13:58:52

Date: 26 DEC.2021 14:13:33

Highest Channel / QPSK

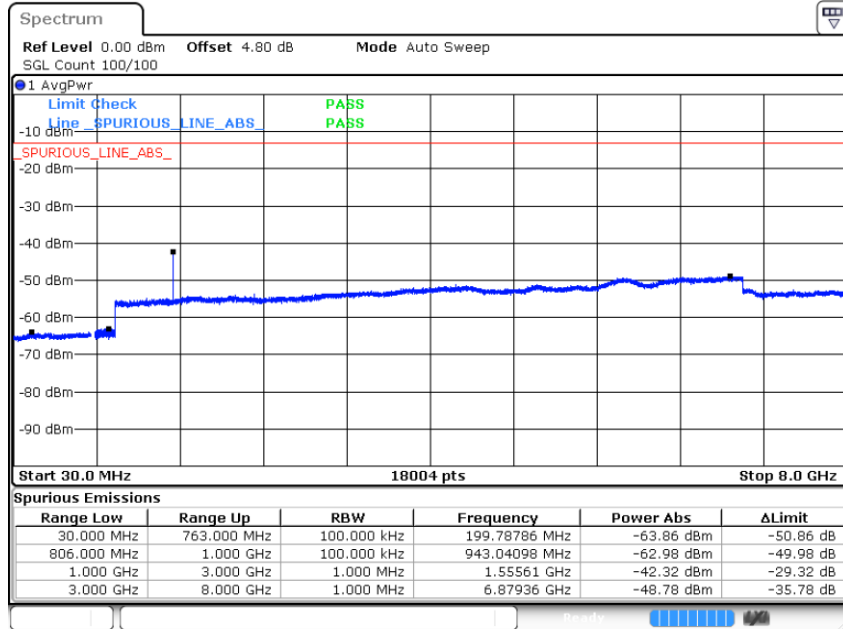


Date: 26 DEC.2021 14:15:27



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 26.DEC.2021 14:30:55



Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0000	PASS
40	Normal Voltage	0.0010	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0010	
10	Normal Voltage	0.0000	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0007	
-20	Normal Voltage	0.0022	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0010	
20	Battery End Point	0.0019	

Note:

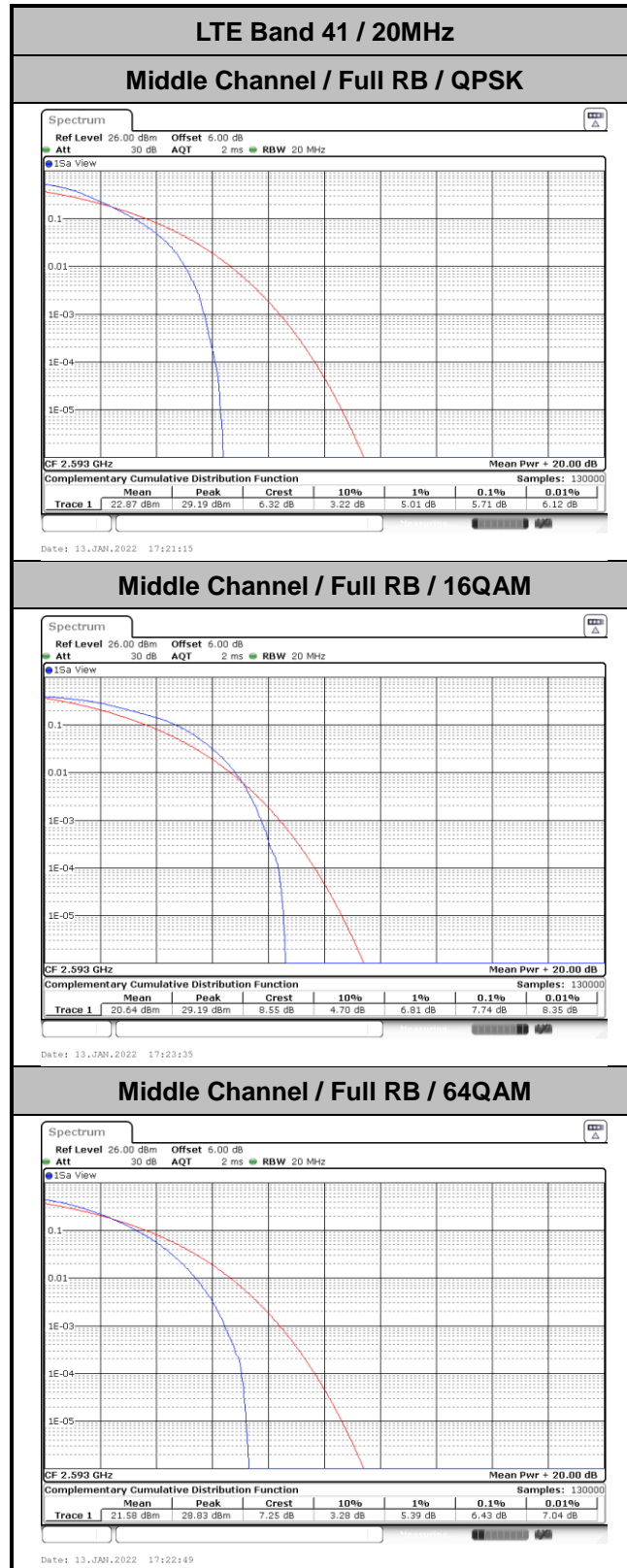
1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

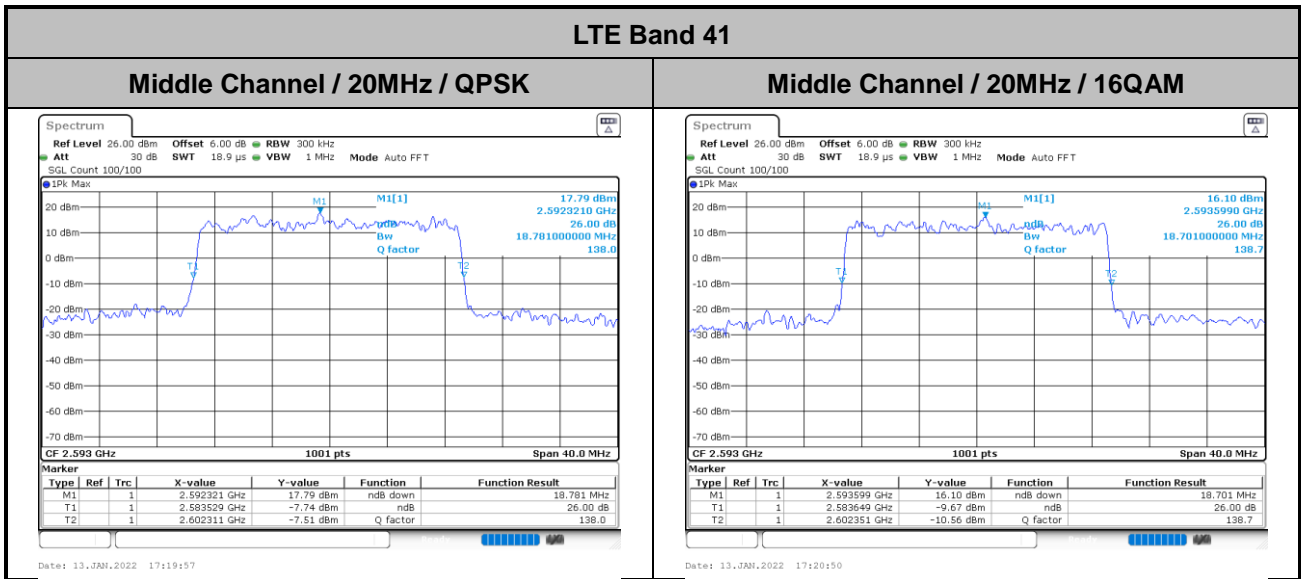
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.71	7.74	6.43	PASS





26dB Bandwidth

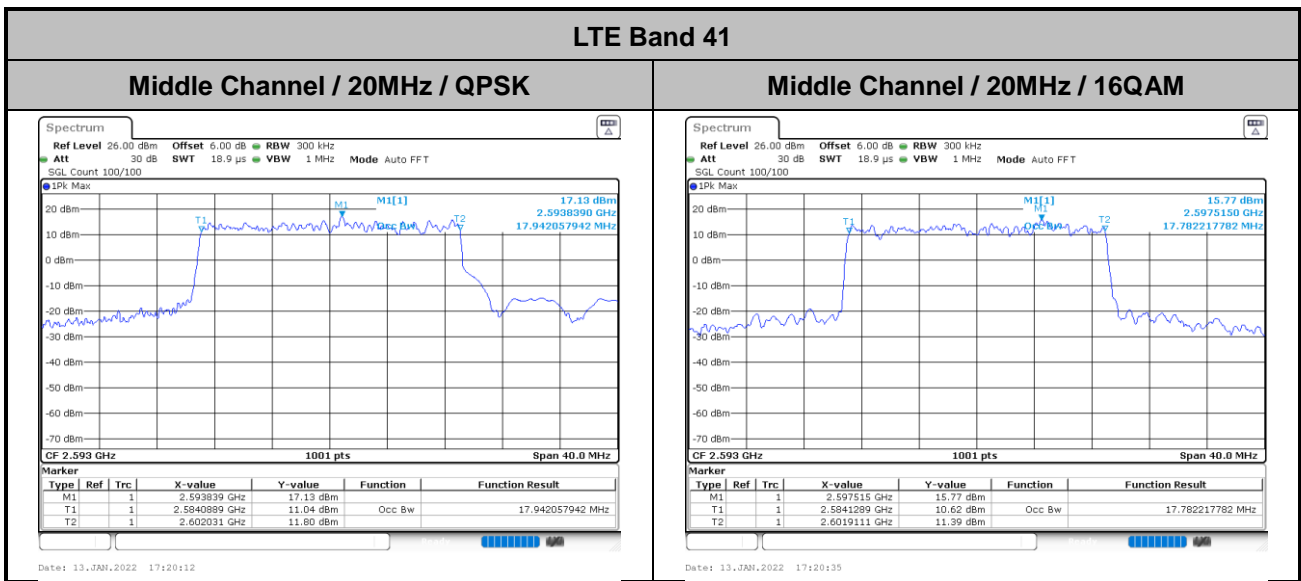
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.78	18.70





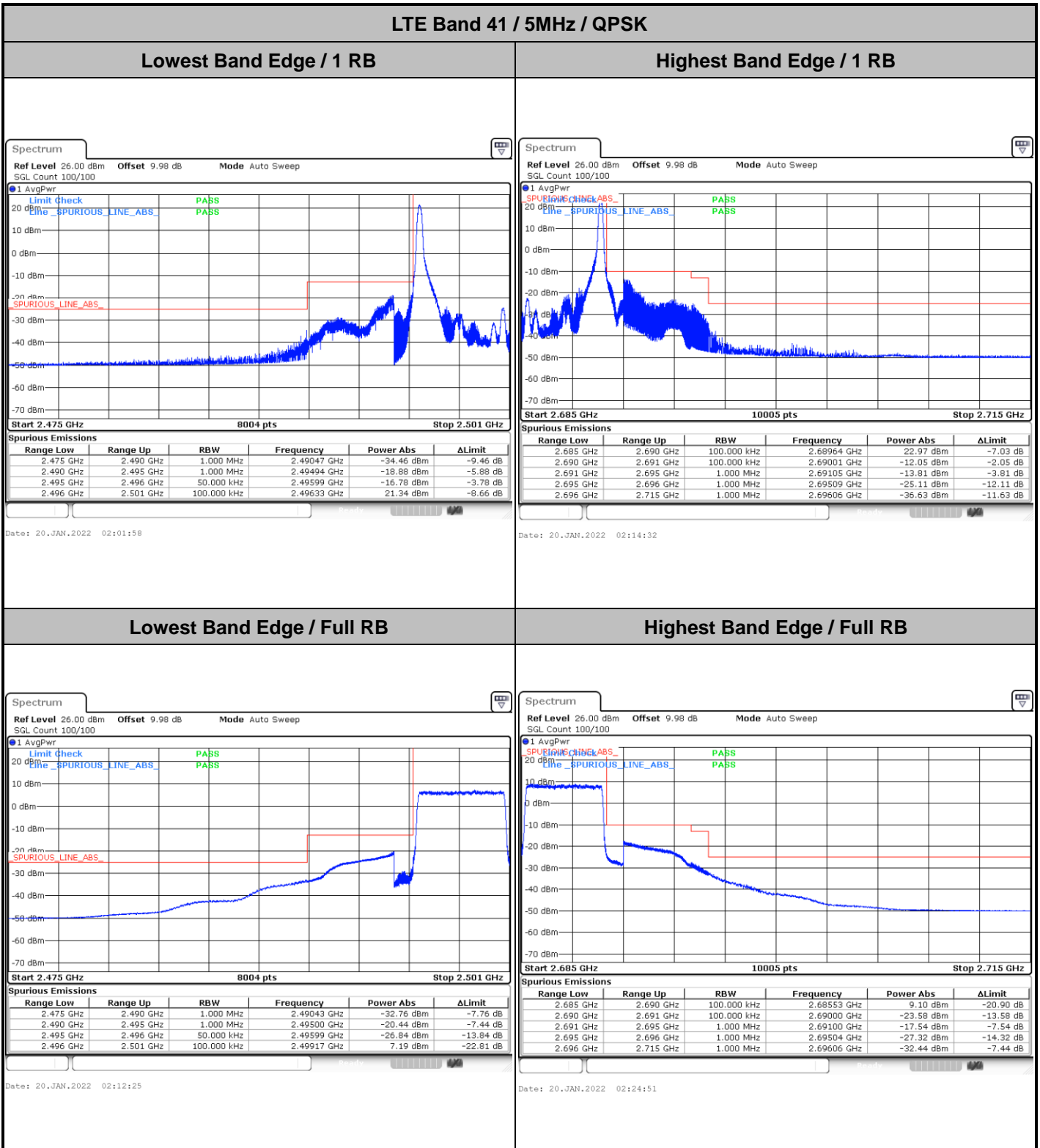
Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.94	17.78





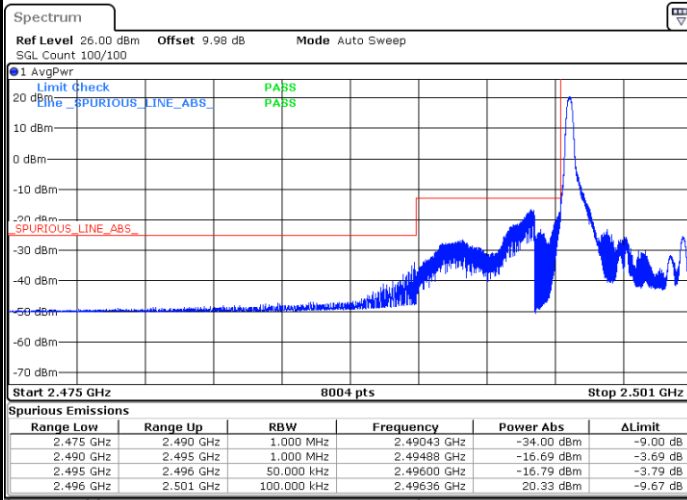
Conducted Band Edge





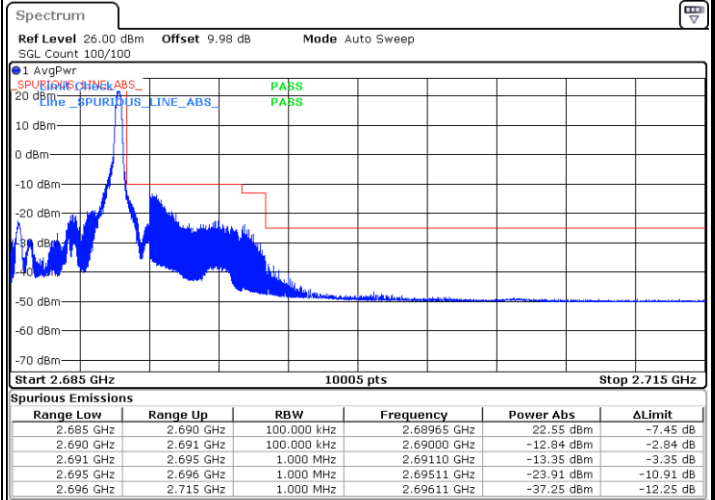
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



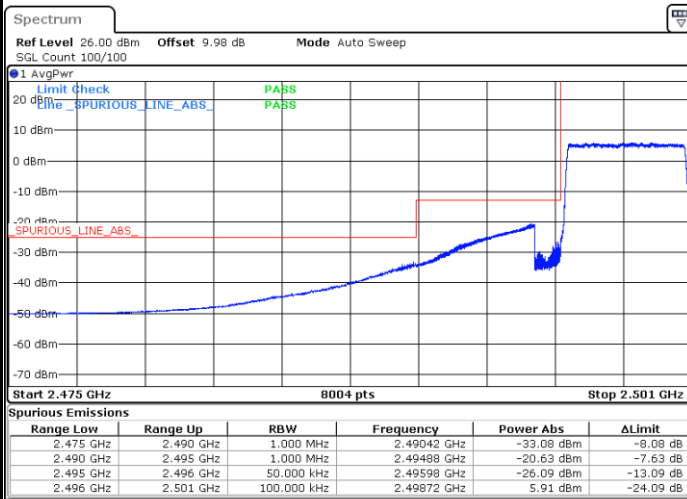
Date: 20.JAN.2022 02:04:02

Highest Band Edge / 1 RB



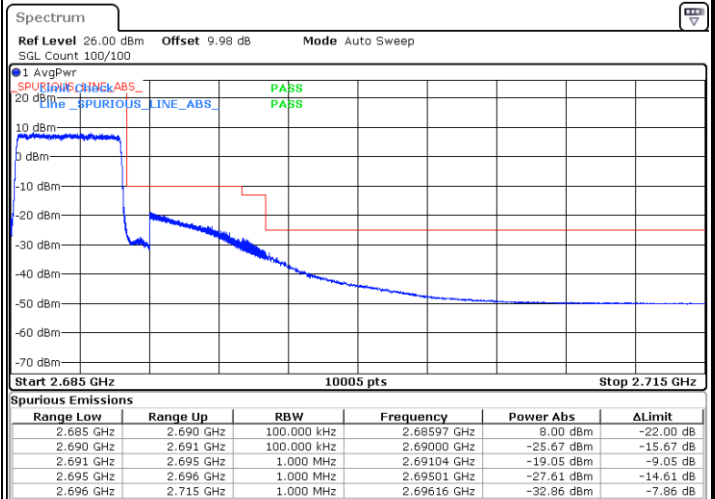
Date: 20.JAN.2022 02:16:36

Lowest Band Edge / Full RB



Date: 20.JAN.2022 02:10:20

Highest Band Edge / Full RB

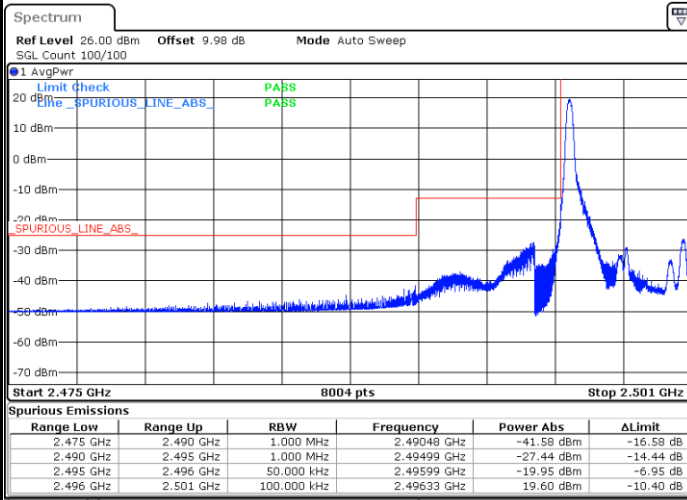


Date: 20.JAN.2022 02:22:47



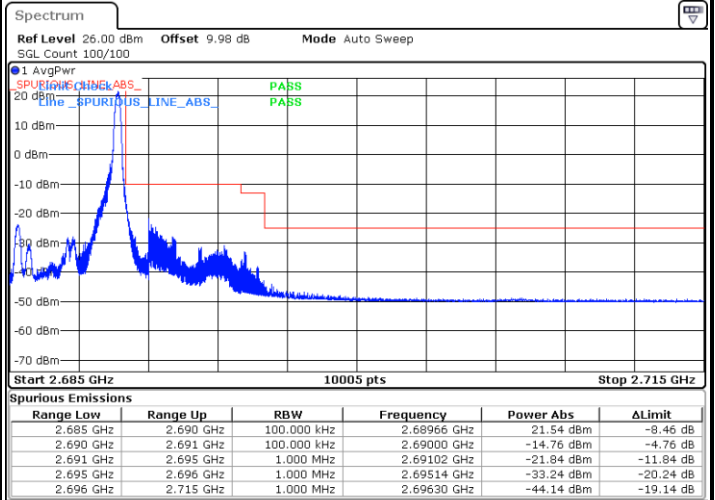
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



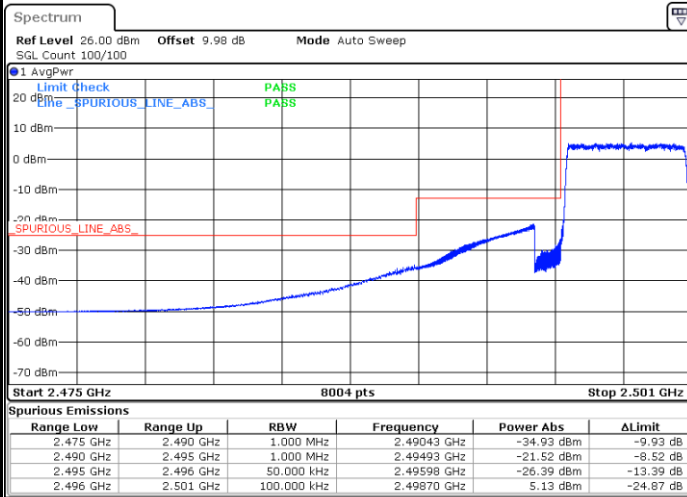
Date: 20.JAN.2022 02:06:08

Highest Band Edge / 1 RB



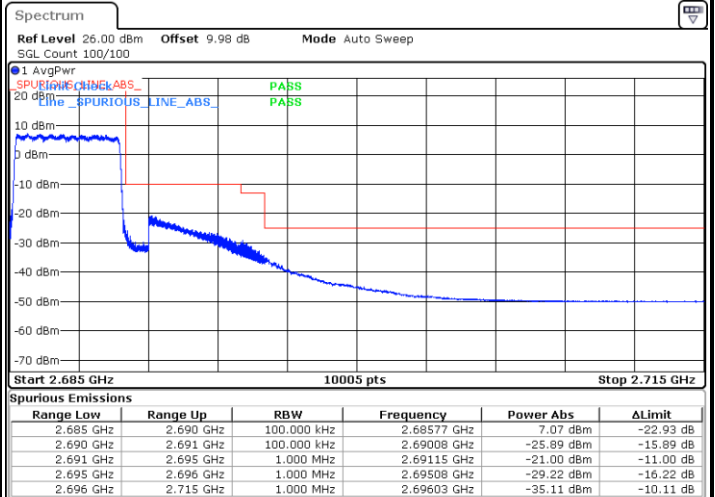
Date: 20.JAN.2022 02:18:40

Lowest Band Edge / Full RB



Date: 20.JAN.2022 02:08:13

Highest Band Edge / Full RB



Date: 20.JAN.2022 02:20:44