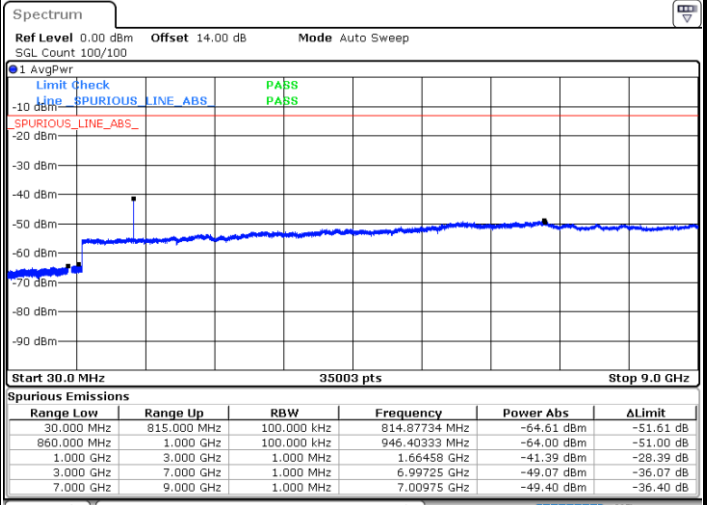
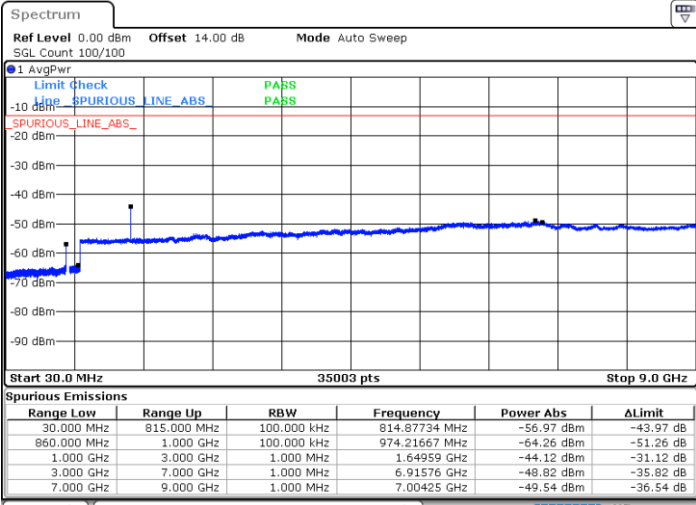




LTE Band 5 / 10MHz

Lowest Channel / QPSK

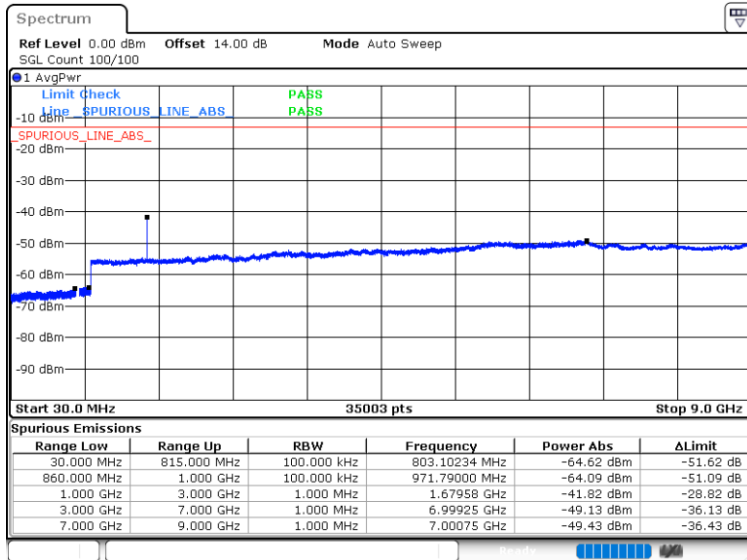
Middle Channel / QPSK



Date: 16.JAN.2024 23:50:59

Date: 16.JAN.2024 23:52:10

Highest Channel / QPSK



Date: 17.JAN.2024 00:02:14



Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0087	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0069	
0	Normal Voltage	0.0071	
-10	Normal Voltage	0.0081	
-20	Normal Voltage	0.0085	
-30	Normal Voltage	0.0083	
20	Maximum Voltage	0.0076	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0084	

Note:

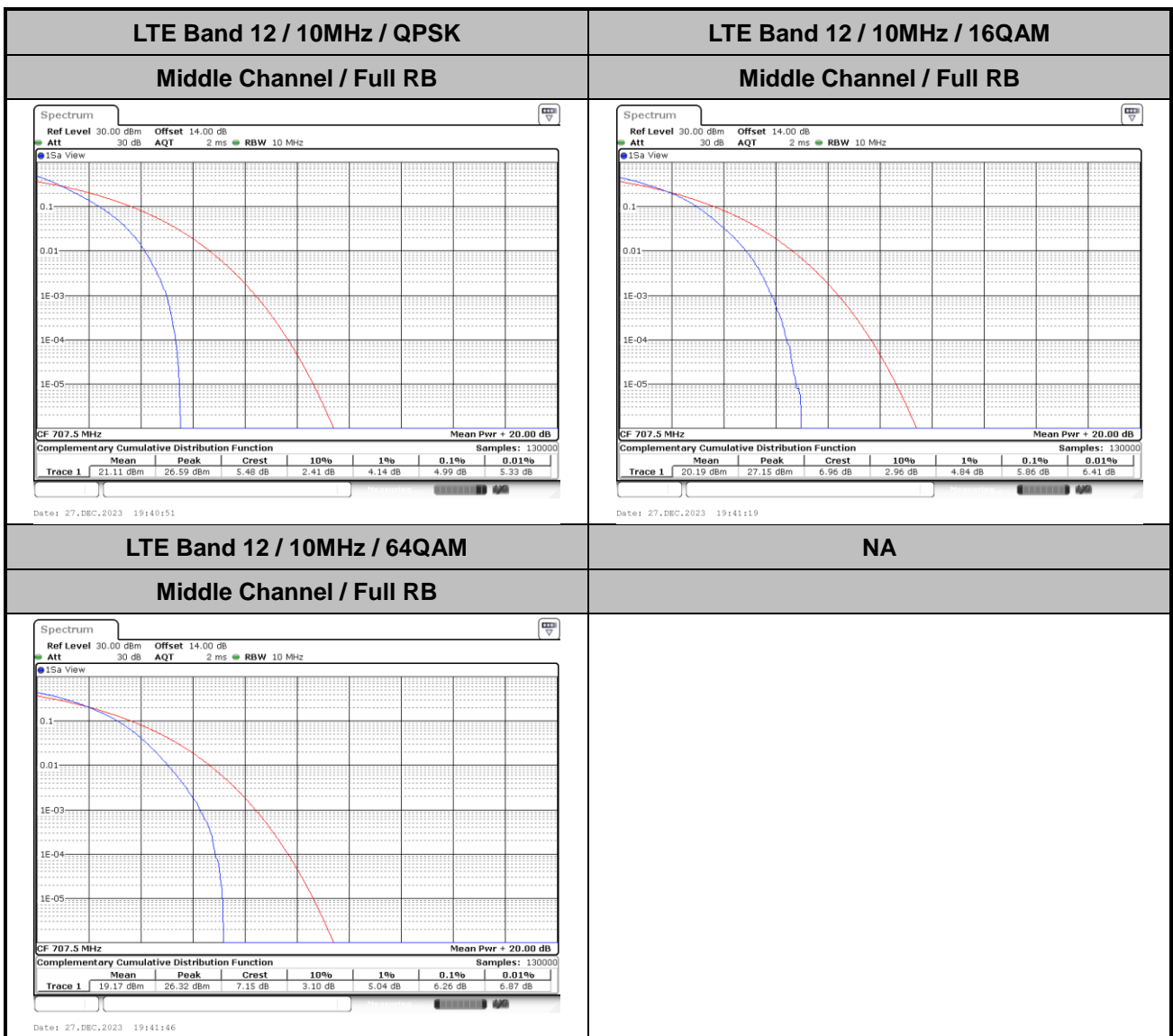
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

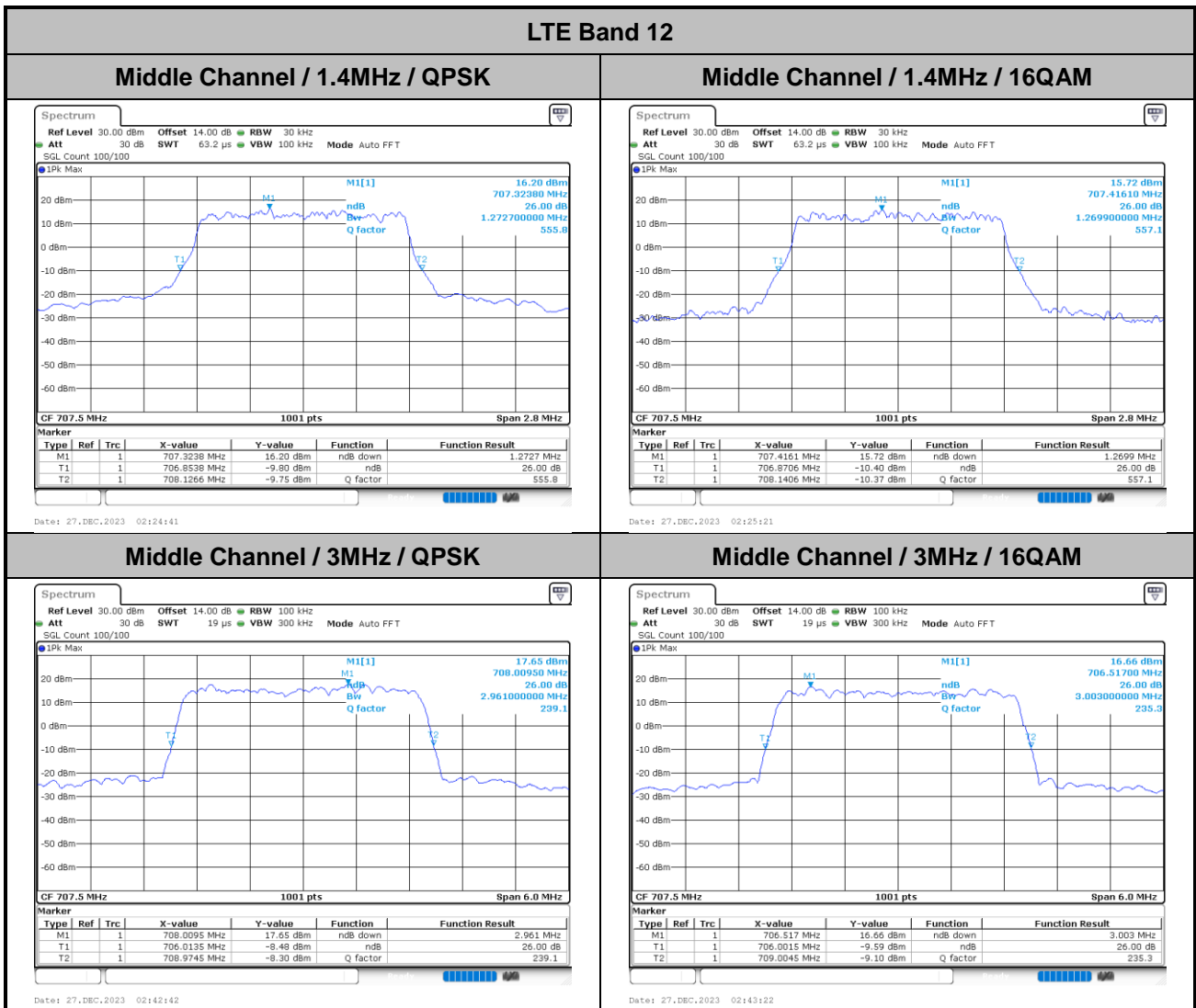
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.99	5.86	6.26	PASS





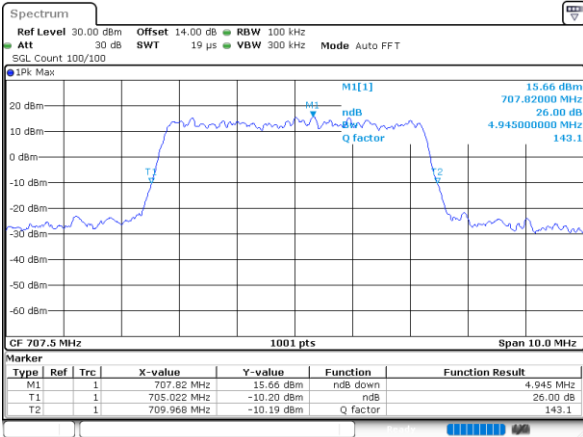
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)									
	1.4MHz		3MHz		5MHz		10MHz		-	-
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	-	-
Middle CH	1.27	1.27	2.96	3.00	4.95	4.88	9.73	9.73	-	-



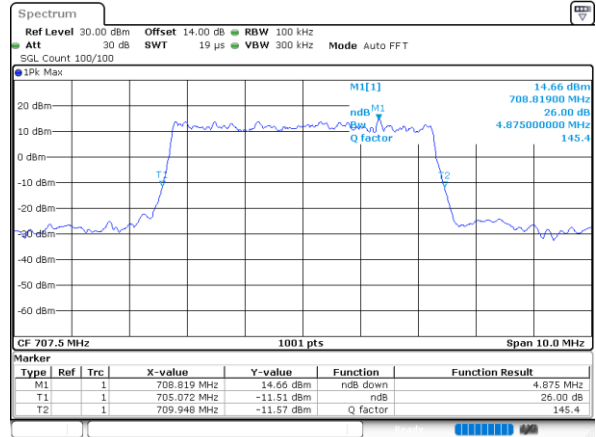


Middle Channel / 5MHz / QPSK



Date: 27, DEC, 2023 03:00:41

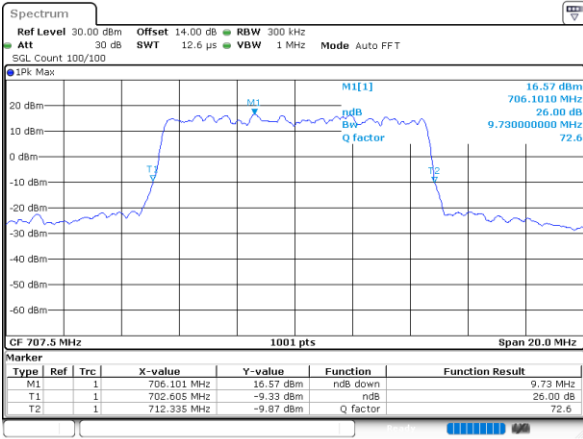
Middle Channel / 5MHz / 16QAM



Date: 27, DEC, 2023 03:01:22

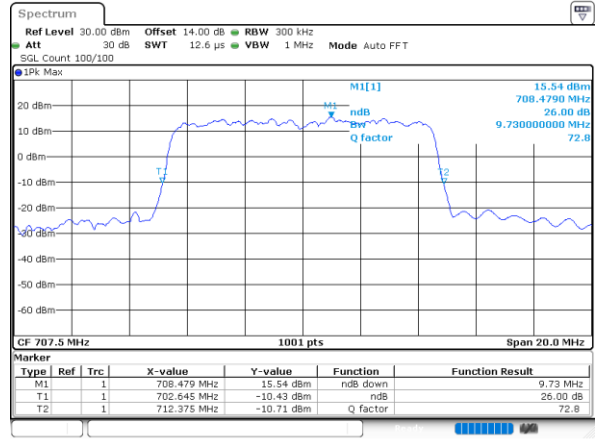
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 27, DEC, 2023 19:02:32

Middle Channel / 10MHz / 16QAM

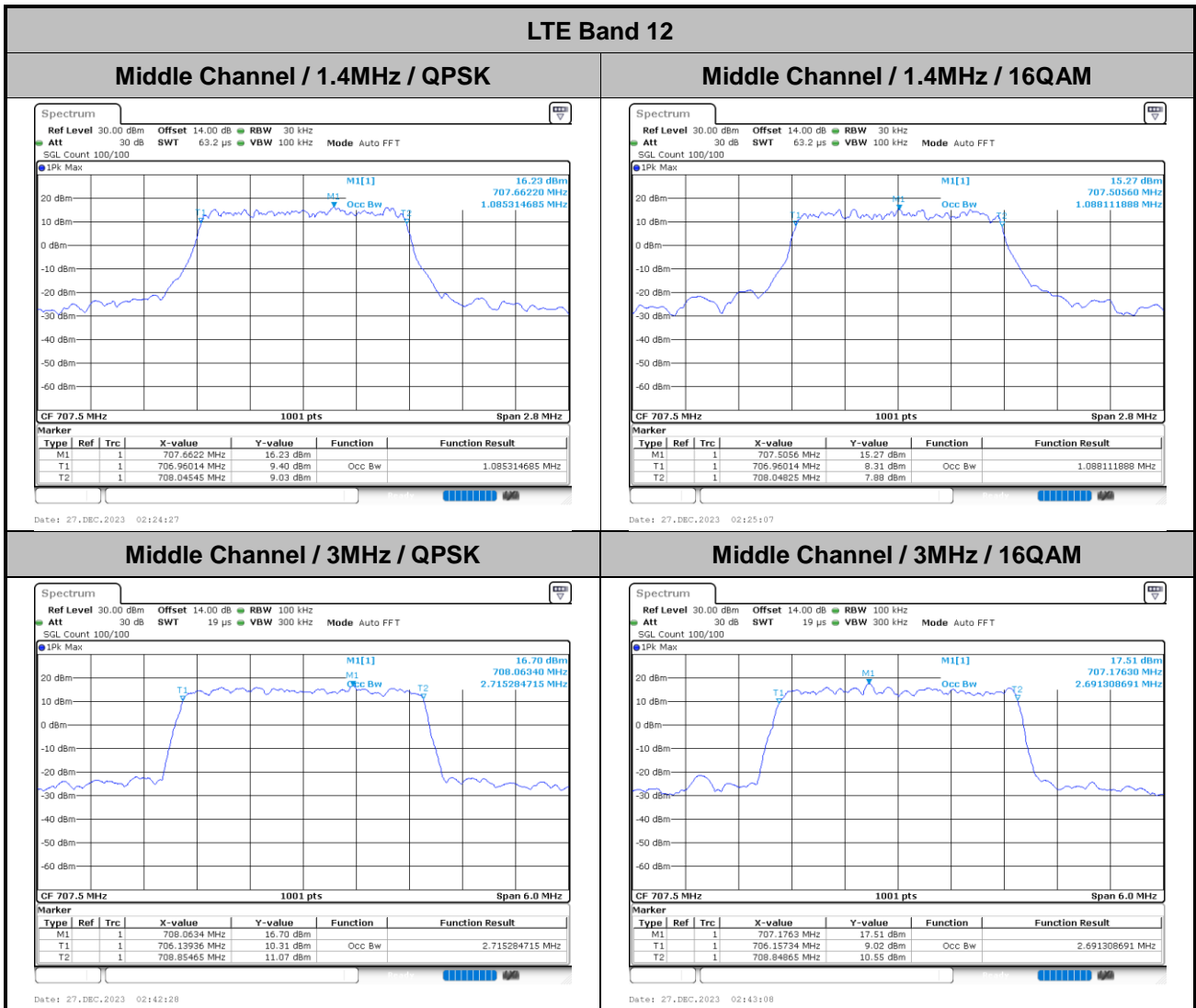


Date: 27, DEC, 2023 19:03:12



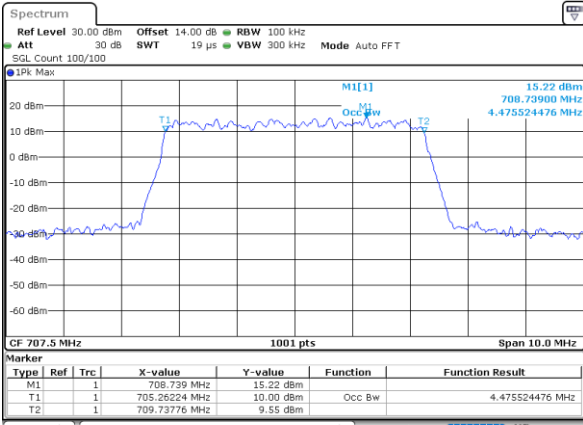
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)									
BW	1.4MHz		3MHz		5MHz		10MHz		-	-
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	-	-
Middle CH	1.09	1.09	2.72	2.69	4.48	4.48	9.03	8.97	-	-



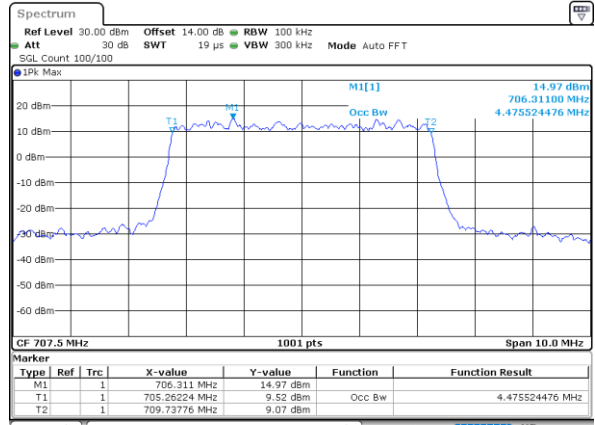


Middle Channel / 5MHz / QPSK



Date: 27.DEC.2023 03:00:27

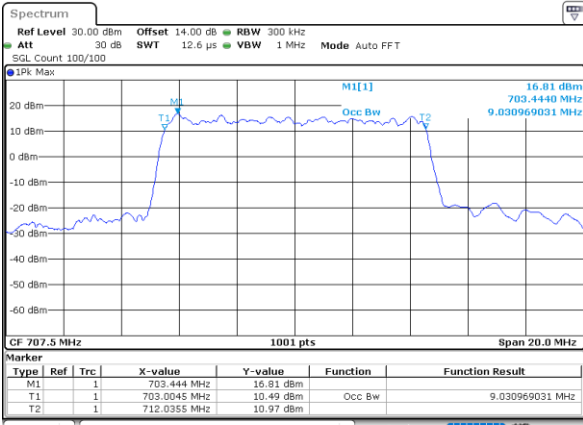
Middle Channel / 5MHz / 16QAM



Date: 27.DEC.2023 03:01:08

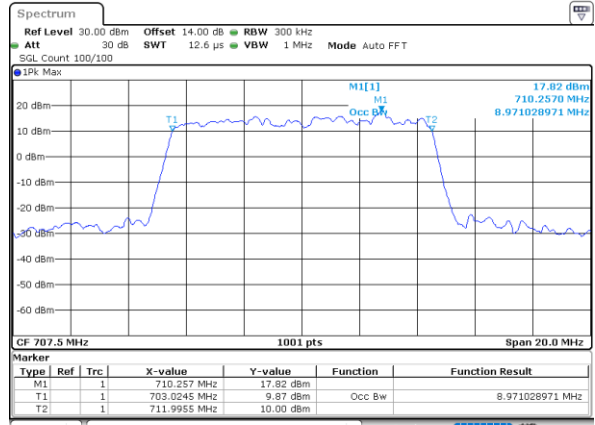
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 27.DEC.2023 19:02:18

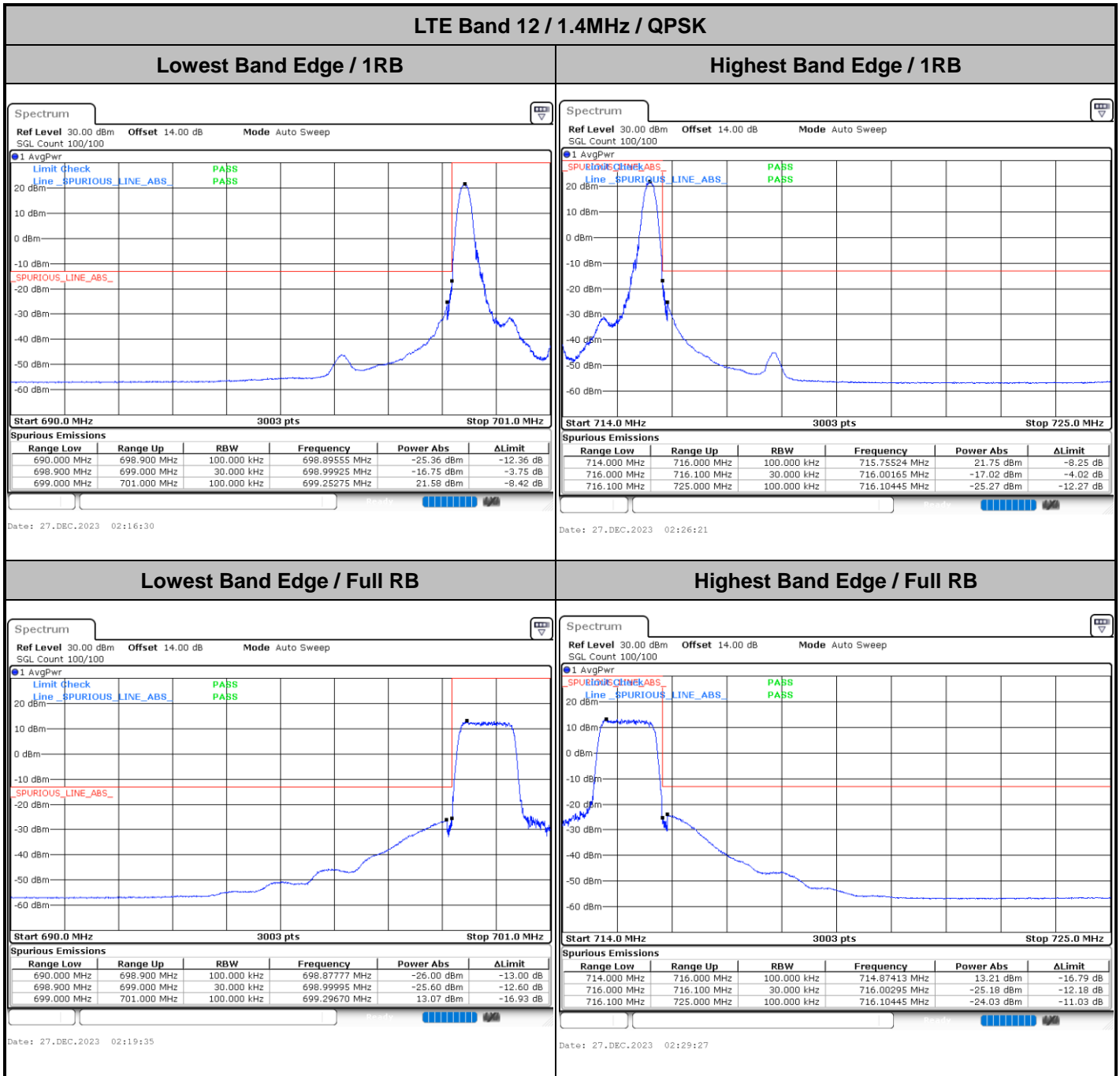
Middle Channel / 10MHz / 16QAM



Date: 27.DEC.2023 19:02:58



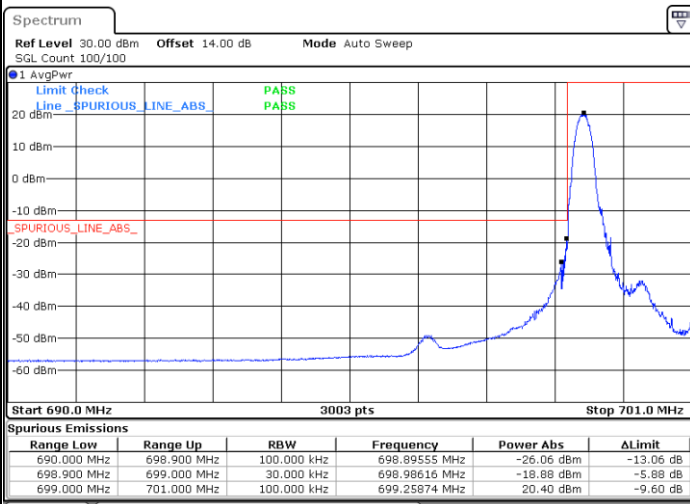
Conducted Band Edge





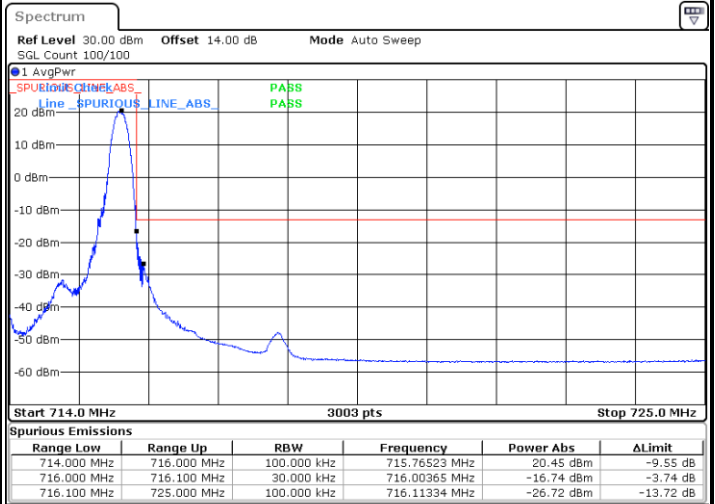
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



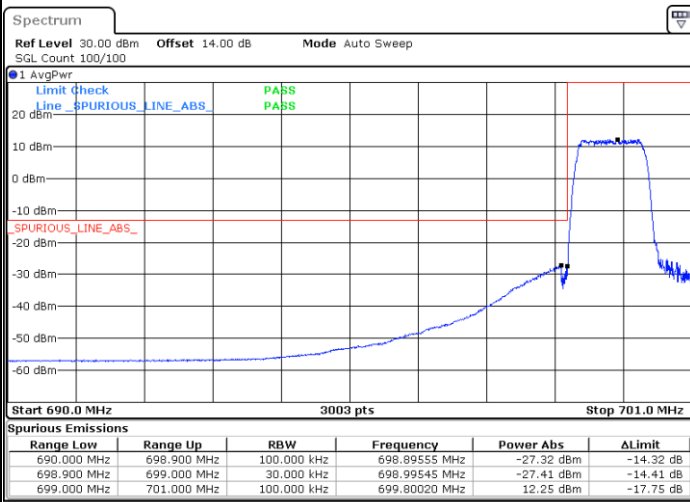
Date: 27.DEC.2023 02:17:31

Highest Band Edge / 1 RB



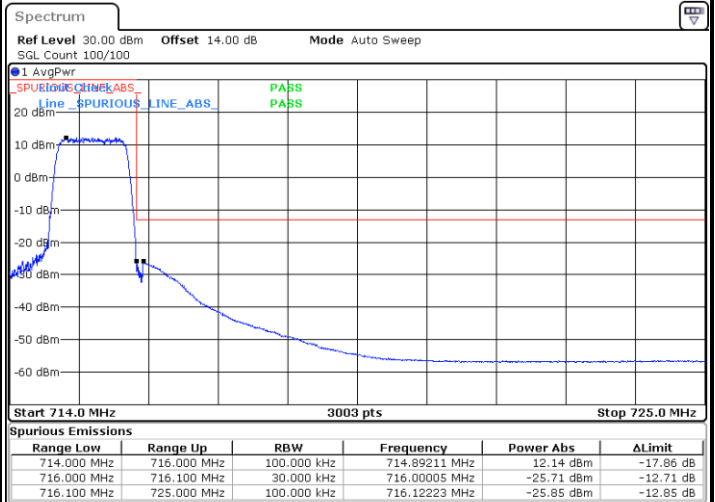
Date: 27.DEC.2023 02:27:23

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:20:36

Highest Band Edge / Full RB

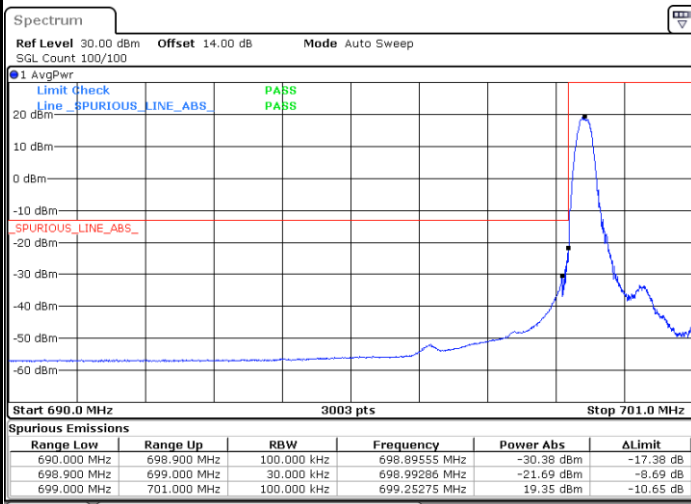


Date: 27.DEC.2023 02:30:28



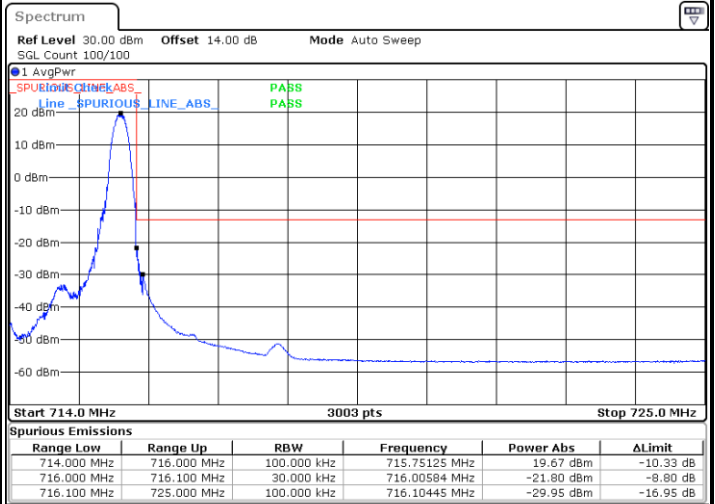
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



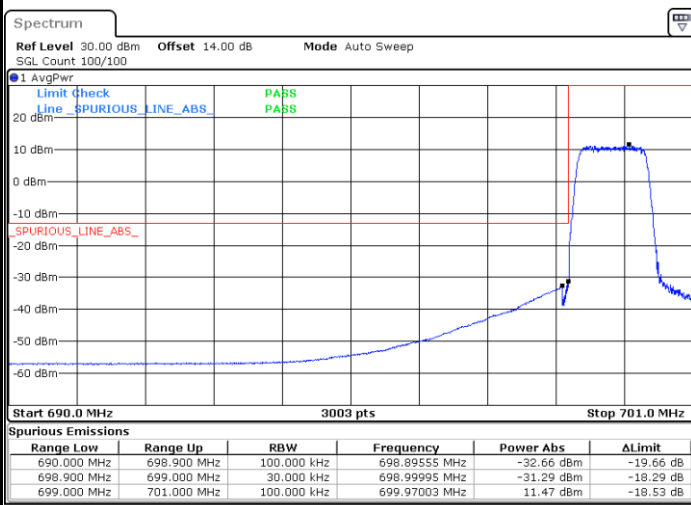
Date: 27.DEC.2023 02:18:33

Highest Band Edge / 1 RB



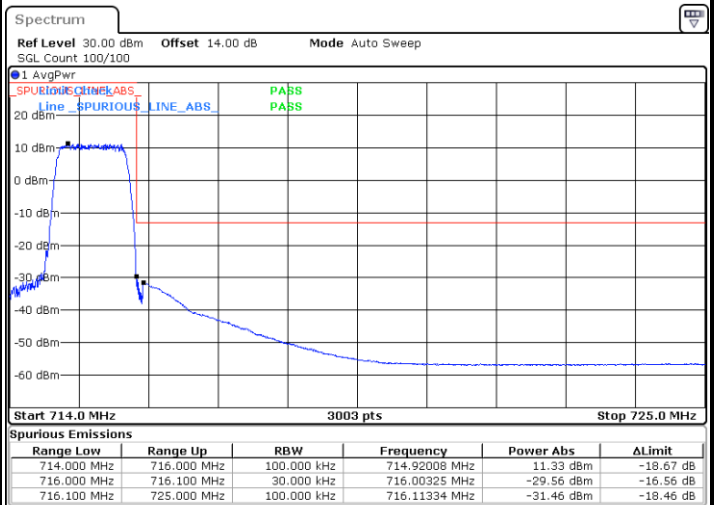
Date: 27.DEC.2023 02:28:25

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:21:38

Highest Band Edge / Full RB

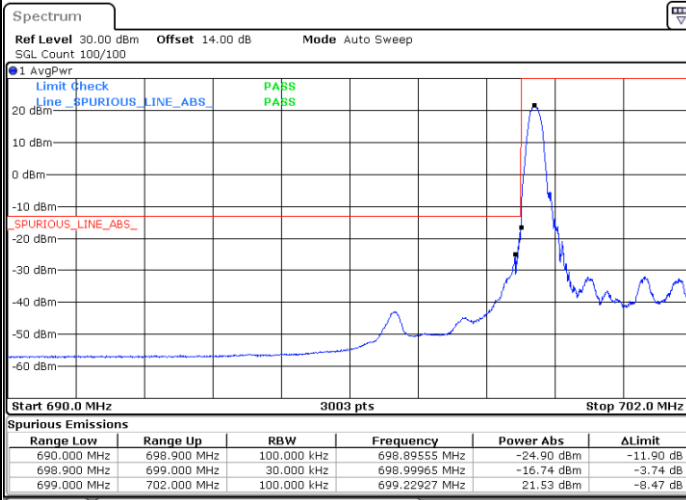


Date: 27.DEC.2023 02:31:30



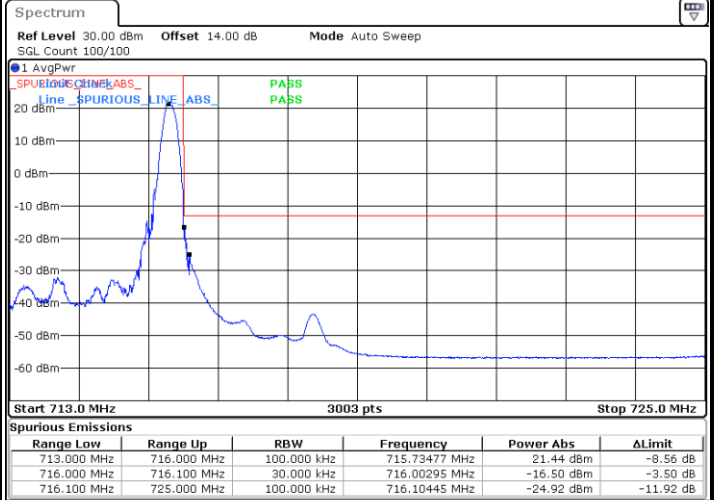
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



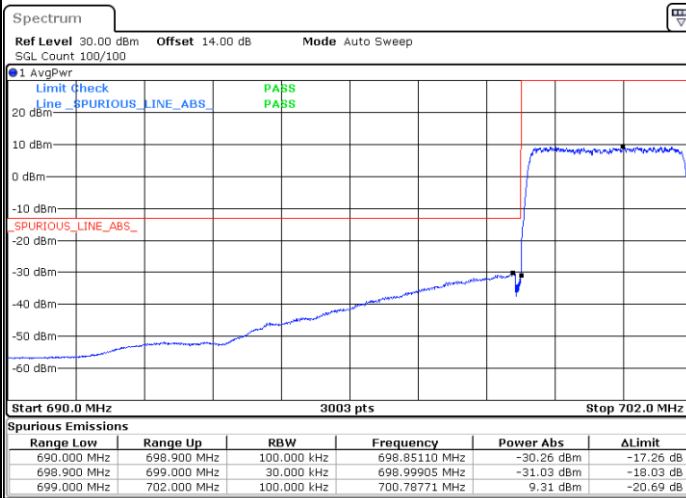
Date: 27.DEC.2023 02:34:33

Highest Band Edge / 1RB



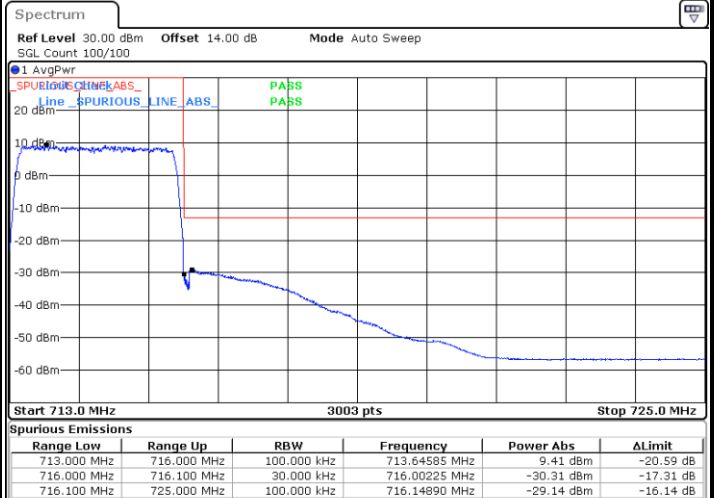
Date: 27.DEC.2023 02:44:23

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:37:37

Highest Band Edge / Full RB

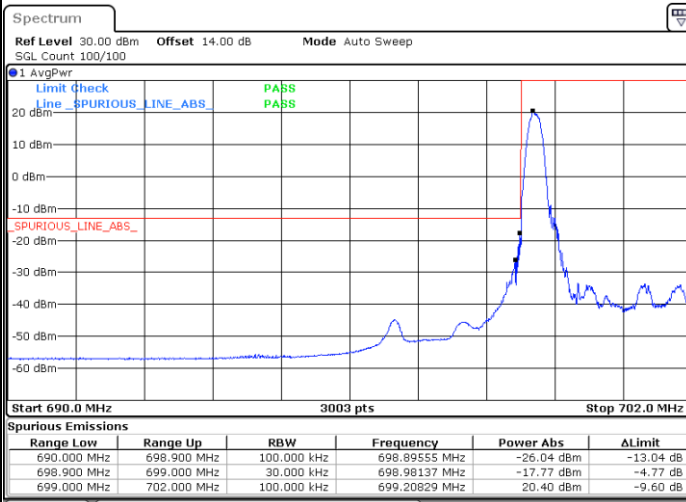


Date: 27.DEC.2023 02:47:27



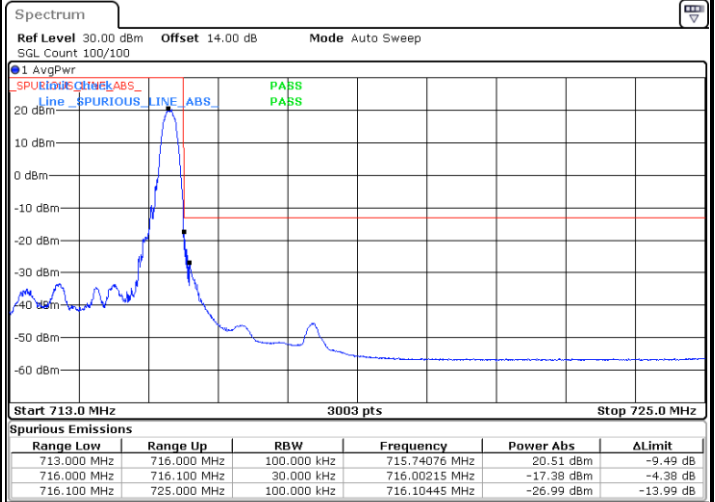
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



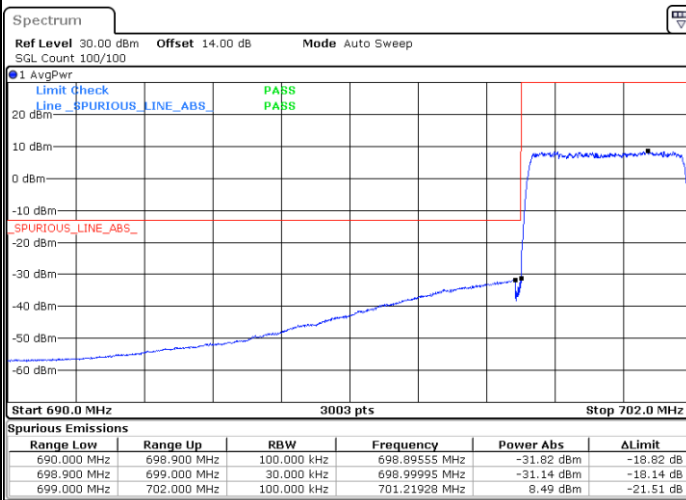
Date: 27.DEC.2023 02:35:34

Highest Band Edge / 1 RB



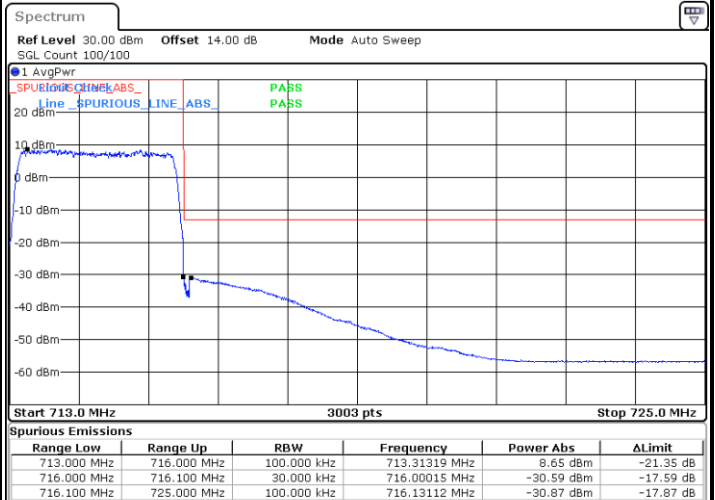
Date: 27.DEC.2023 02:45:24

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:38:39

Highest Band Edge / Full RB

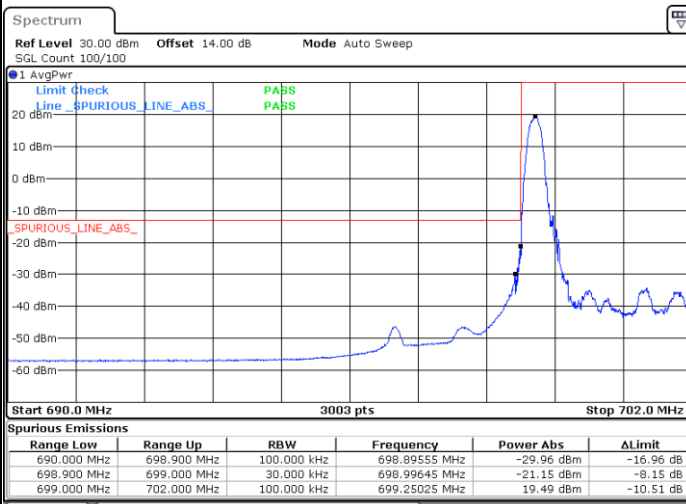


Date: 27.DEC.2023 02:48:29



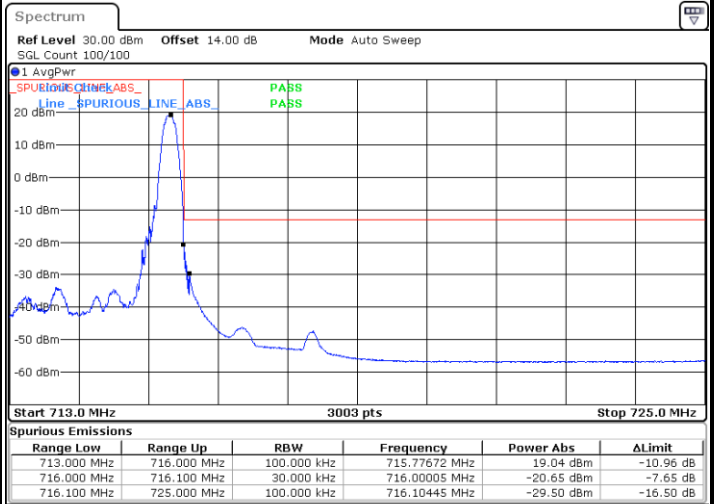
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



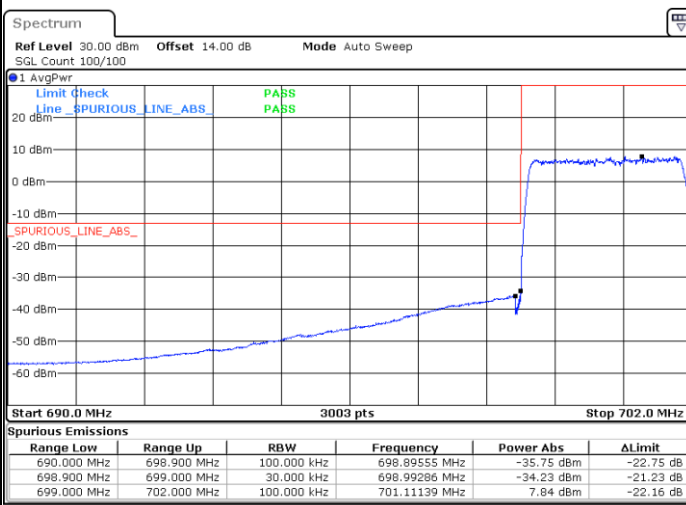
Date: 27.DEC.2023 02:36:36

Highest Band Edge / 1 RB



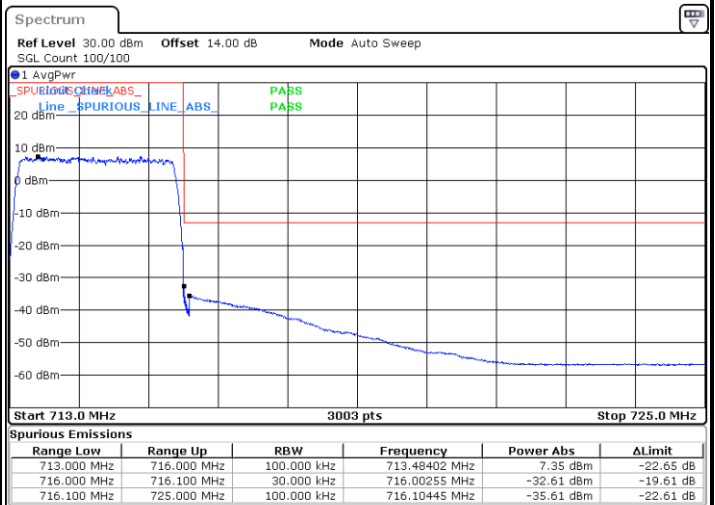
Date: 27.DEC.2023 02:46:26

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:39:40

Highest Band Edge / Full RB

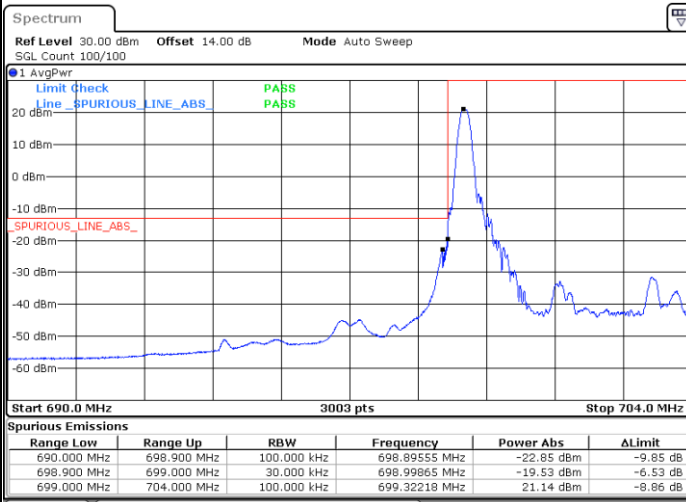


Date: 27.DEC.2023 02:49:30



LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1RB



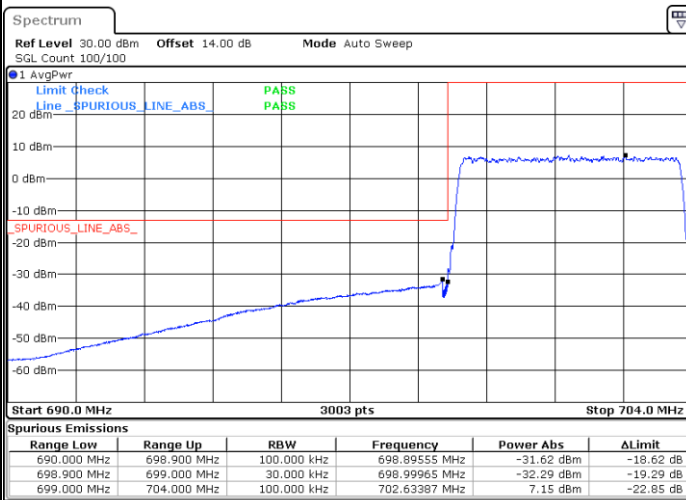
Date: 27.DEC.2023 02:52:31

Highest Band Edge / 1RB



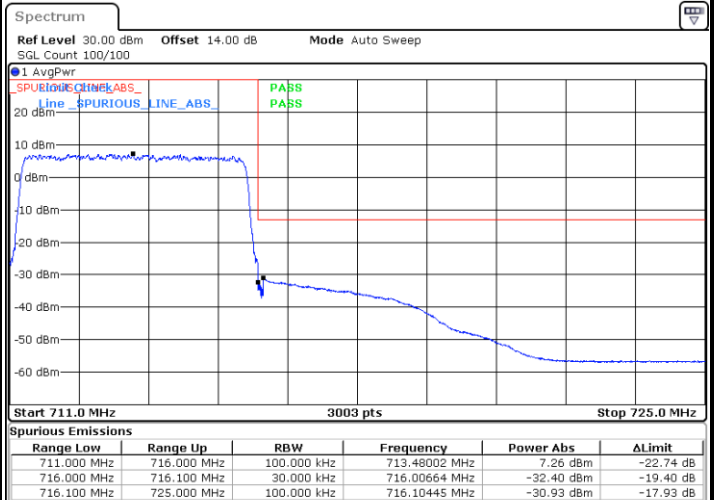
Date: 27.DEC.2023 03:02:22

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:55:36

Highest Band Edge / Full RB

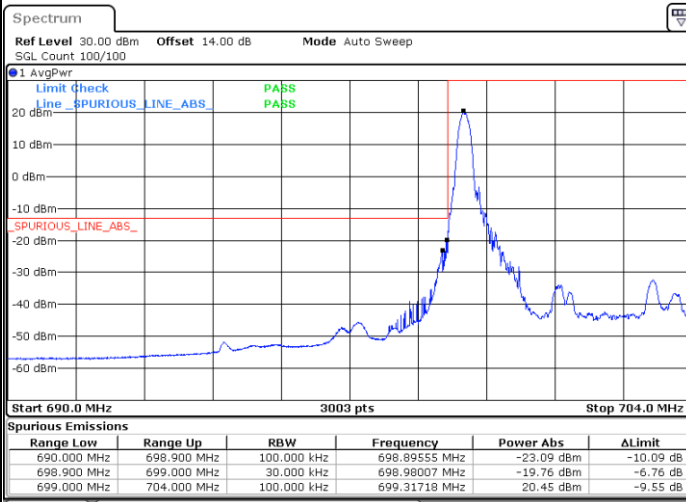


Date: 27.DEC.2023 03:05:27



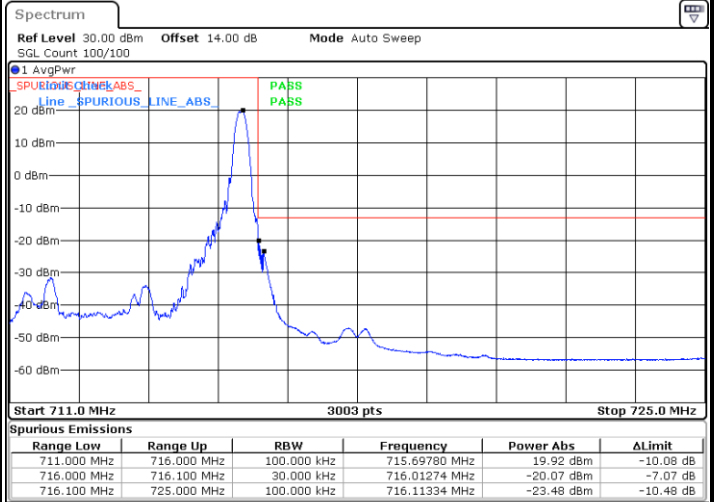
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



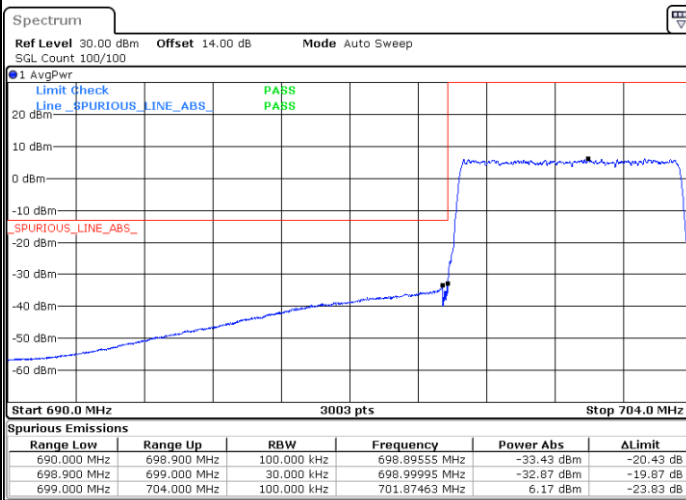
Date: 27.DEC.2023 02:53:33

Highest Band Edge / 1 RB



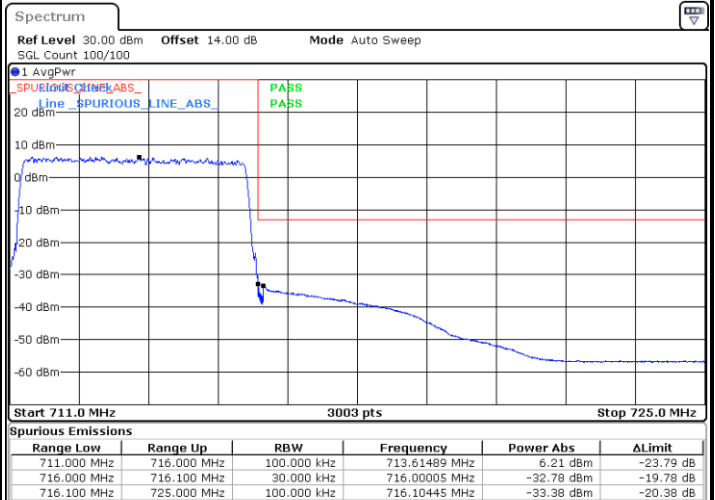
Date: 27.DEC.2023 03:03:23

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:56:38

Highest Band Edge / Full RB

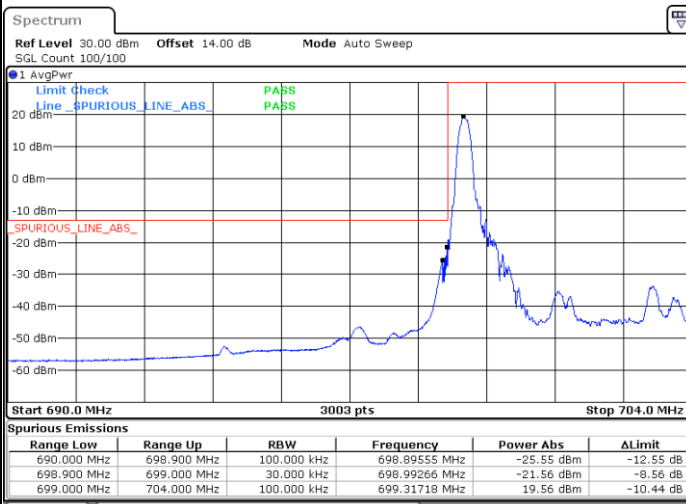


Date: 27.DEC.2023 03:06:28



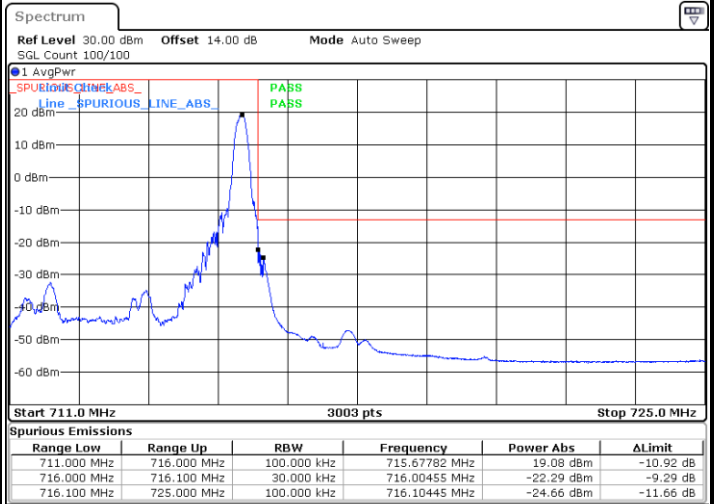
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



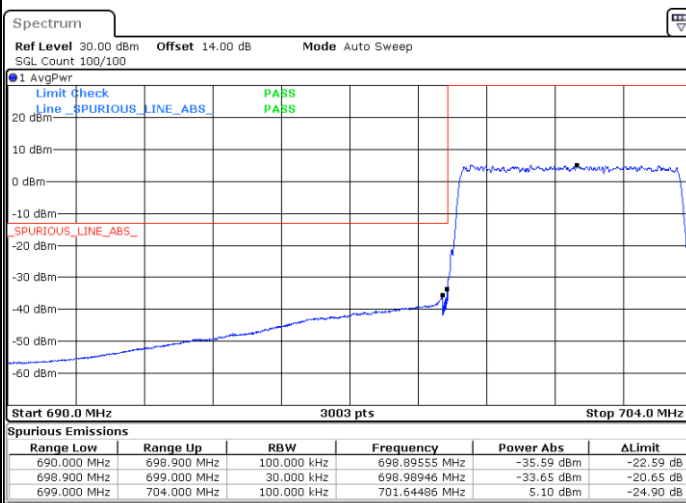
Date: 27.DEC.2023 02:54:34

Highest Band Edge / 1 RB



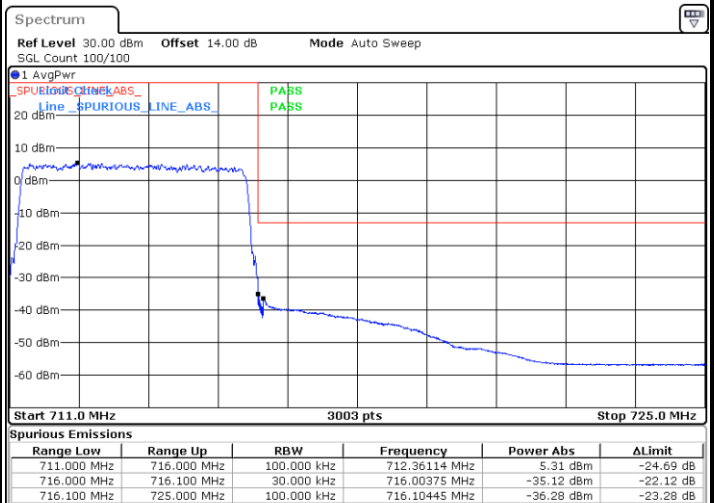
Date: 27.DEC.2023 03:04:25

Lowest Band Edge / Full RB



Date: 27.DEC.2023 02:57:40

Highest Band Edge / Full RB

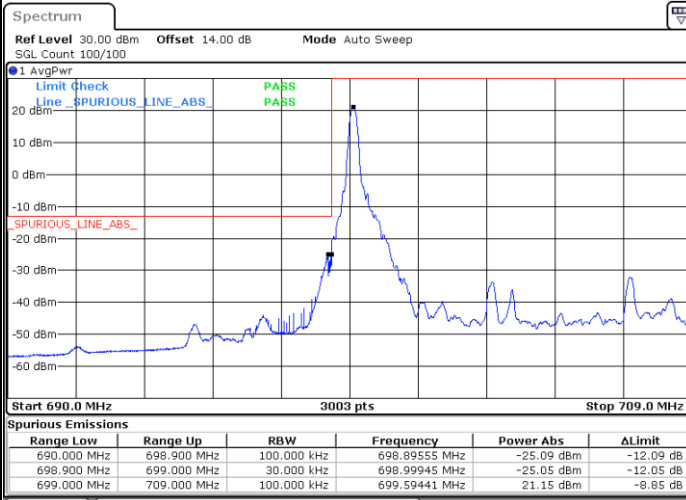


Date: 27.DEC.2023 03:07:30



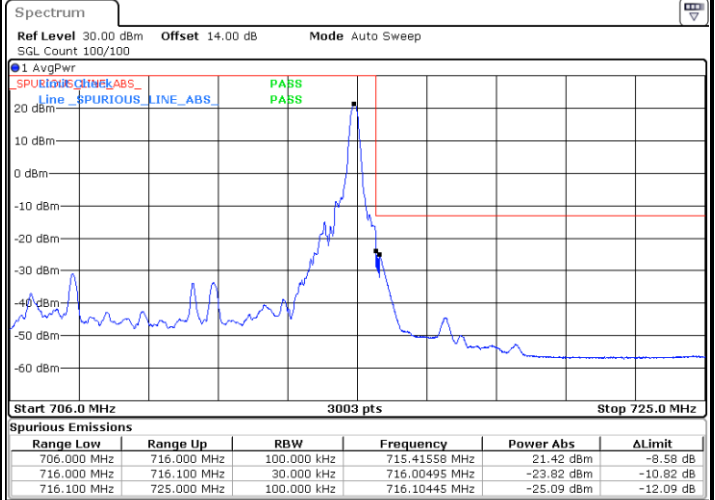
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1RB



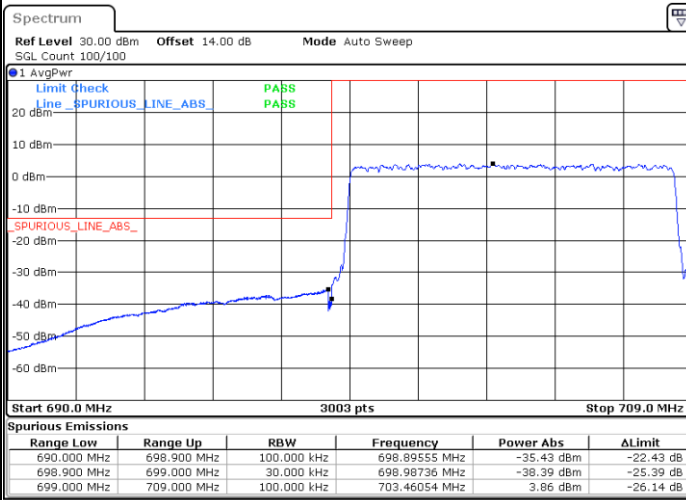
Date: 27.DEC.2023 03:10:28

Highest Band Edge / 1RB



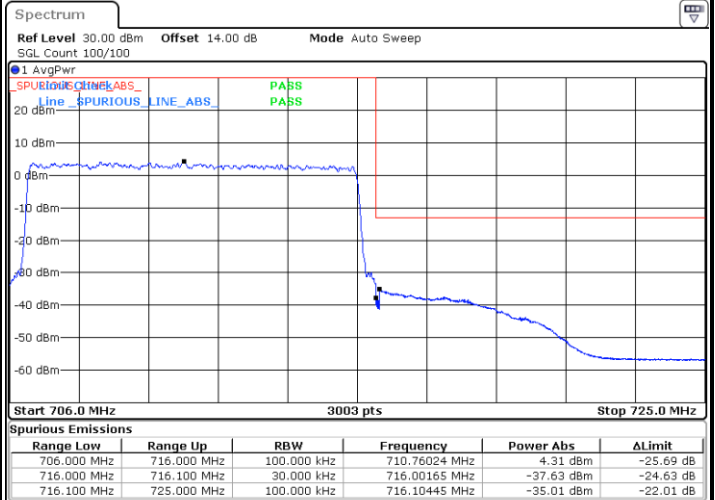
Date: 27.DEC.2023 19:04:12

Lowest Band Edge / Full RB



Date: 27.DEC.2023 03:13:32

Highest Band Edge / Full RB

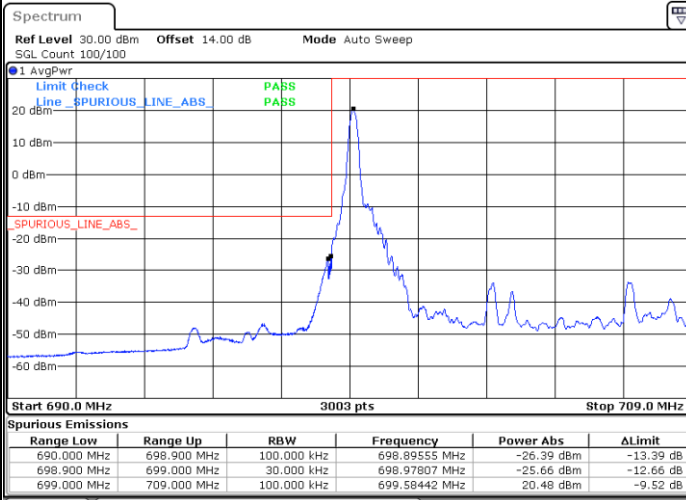


Date: 27.DEC.2023 19:07:18



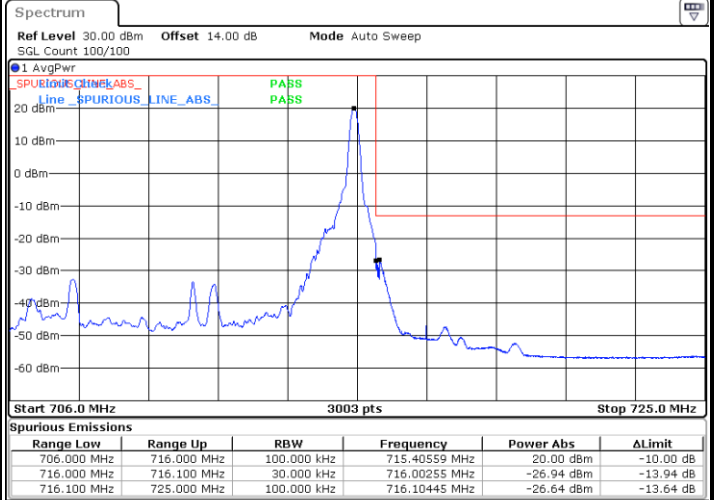
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



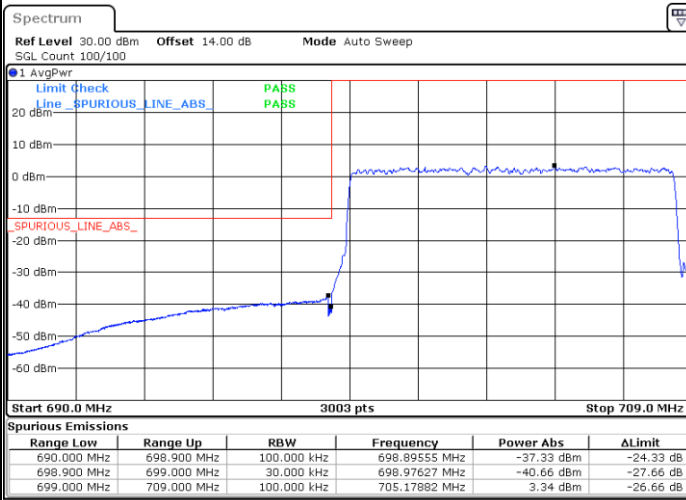
Date: 27.DEC.2023 03:11:29

Highest Band Edge / 1 RB



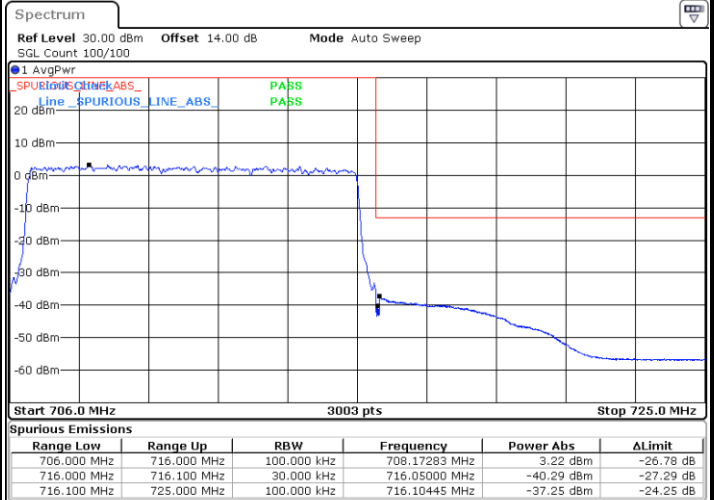
Date: 27.DEC.2023 19:05:14

Lowest Band Edge / Full RB



Date: 27.DEC.2023 03:14:34

Highest Band Edge / Full RB

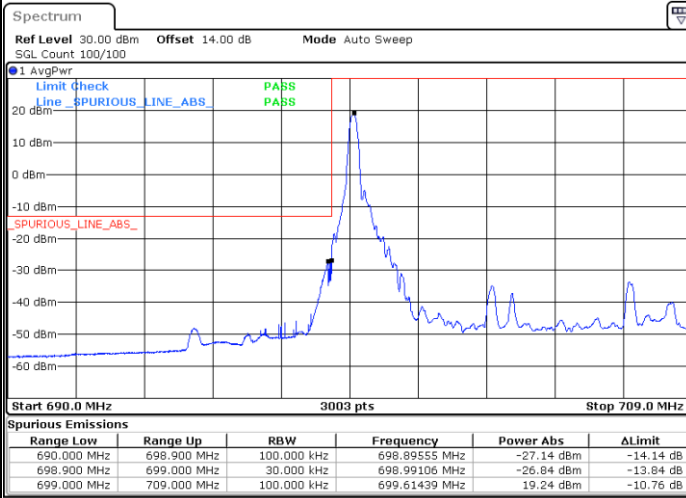


Date: 27.DEC.2023 19:08:20



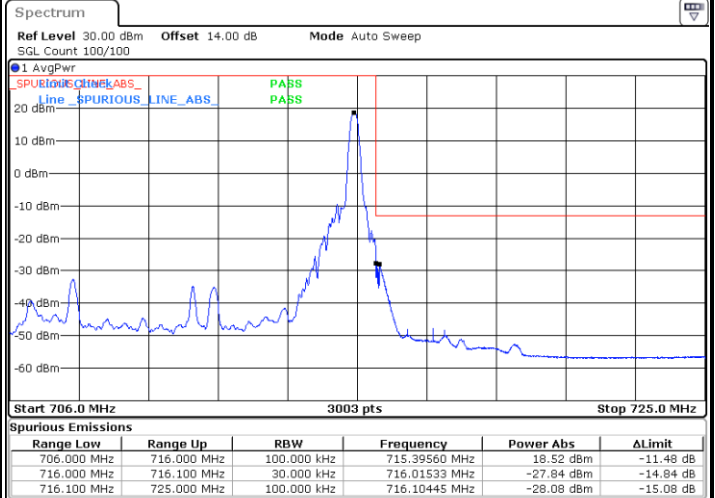
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



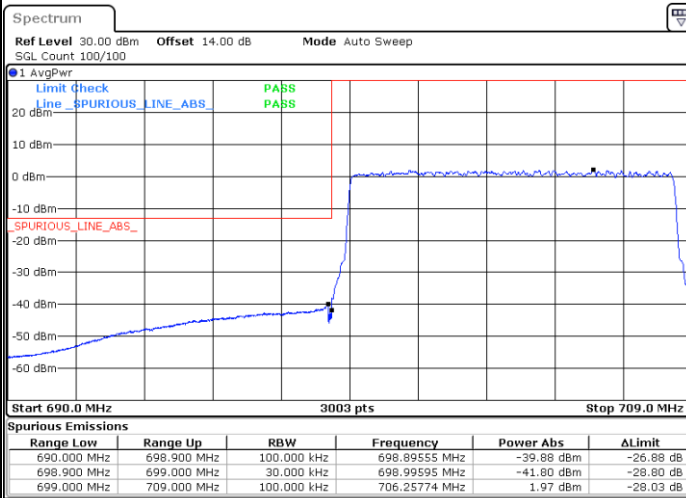
Date: 27.DEC.2023 03:12:31

Highest Band Edge / 1 RB



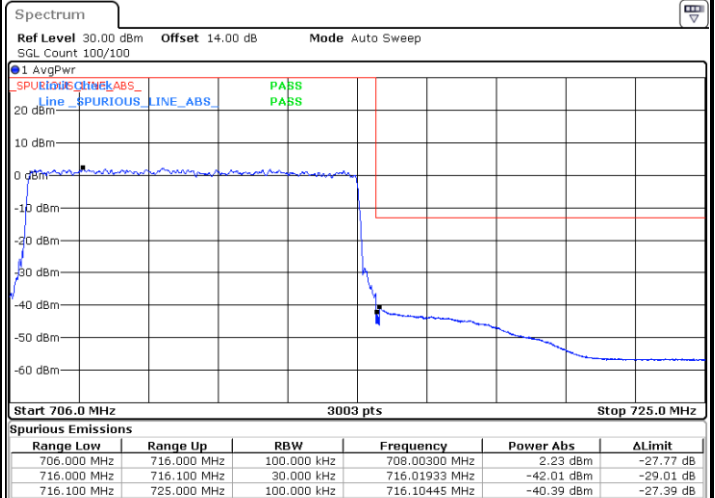
Date: 27.DEC.2023 19:06:16

Lowest Band Edge / Full RB



Date: 27.DEC.2023 03:15:35

Highest Band Edge / Full RB



Date: 27.DEC.2023 19:09:21



Conducted Spurious Emission

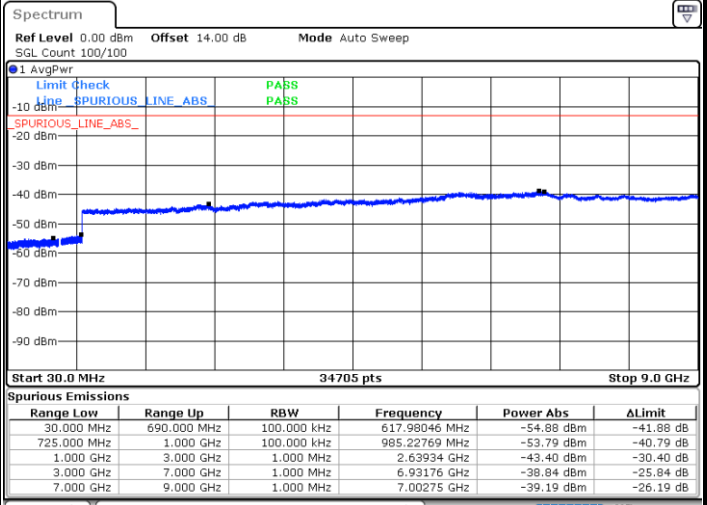
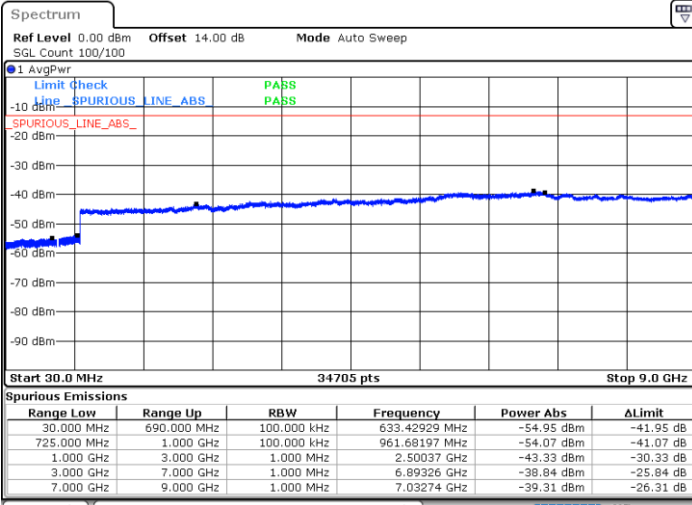




LTE Band 12 / 3MHz

Lowest Channel / QPSK

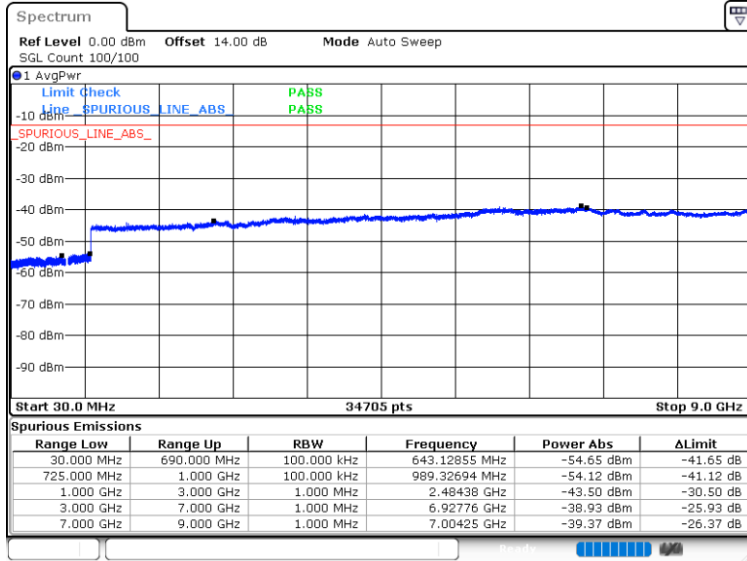
Middle Channel / QPSK



Date: 27.DEC.2023 02:40:51

Date: 27.DEC.2023 02:42:01

Highest Channel / QPSK



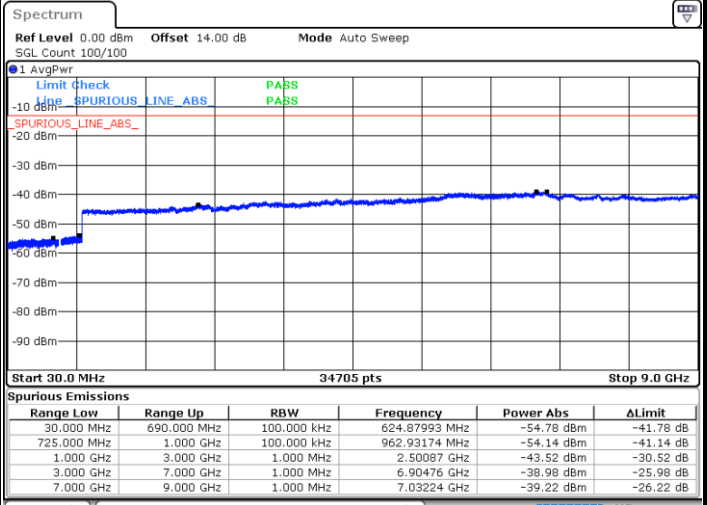
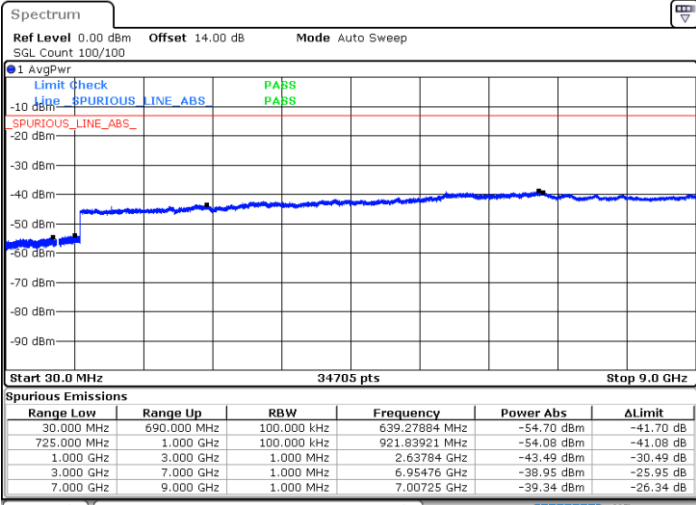
Date: 27.DEC.2023 02:50:41



LTE Band 12 / 5MHz

Lowest Channel / QPSK

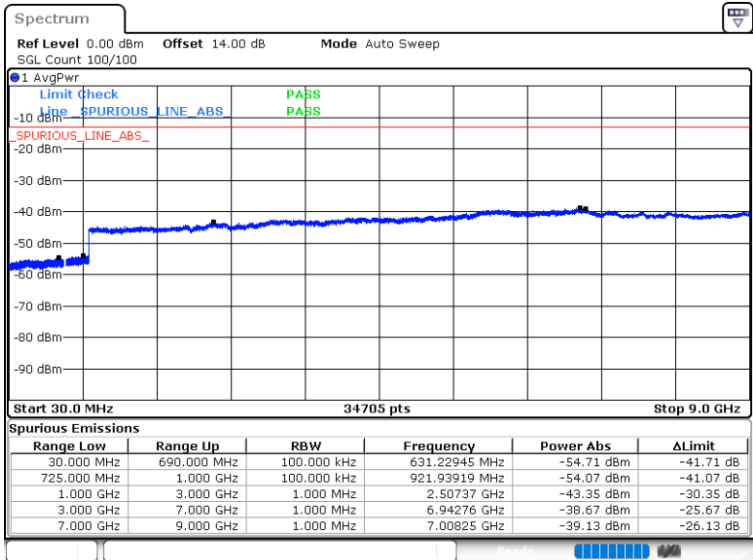
Middle Channel / QPSK



Date: 27.DEC.2023 02:58:51

Date: 27.DEC.2023 03:00:01

Highest Channel / QPSK



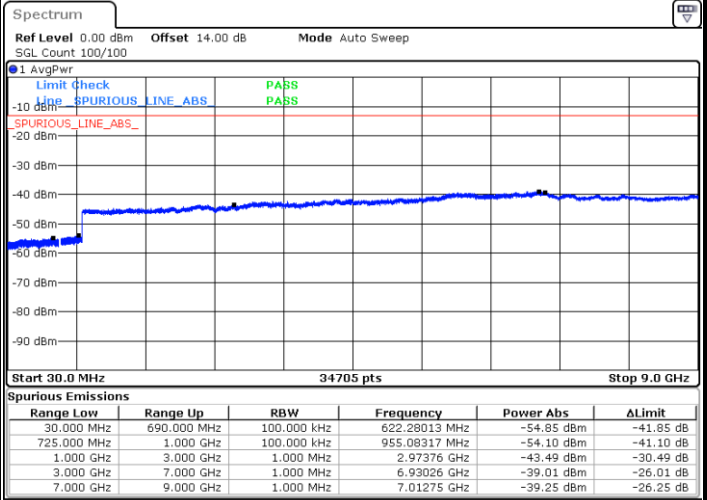
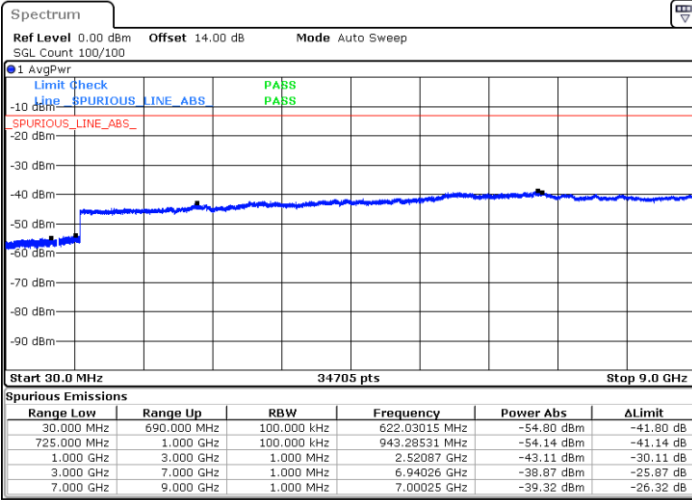
Date: 27.DEC.2023 03:08:41



LTE Band 12 / 10MHz

Lowest Channel / QPSK

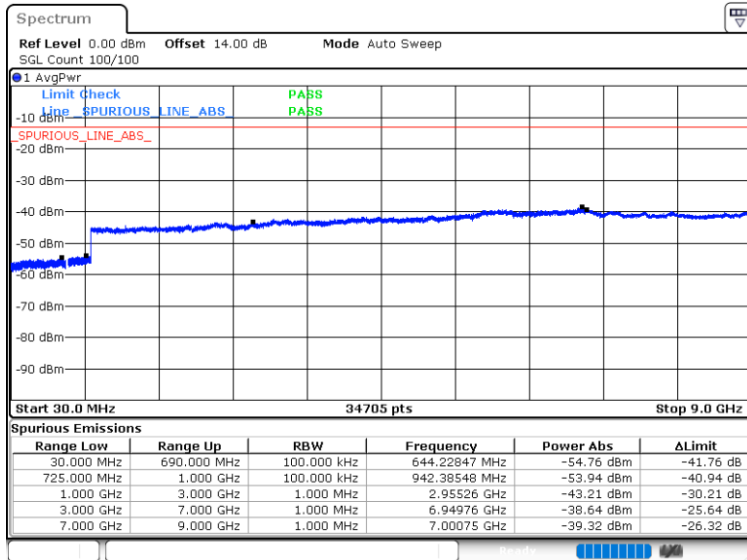
Middle Channel / QPSK



Date: 27.DEC.2023 03:16:46

Date: 27.DEC.2023 03:17:57

Highest Channel / QPSK



Date: 27.DEC.2023 19:10:33



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	0.0003	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0001	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

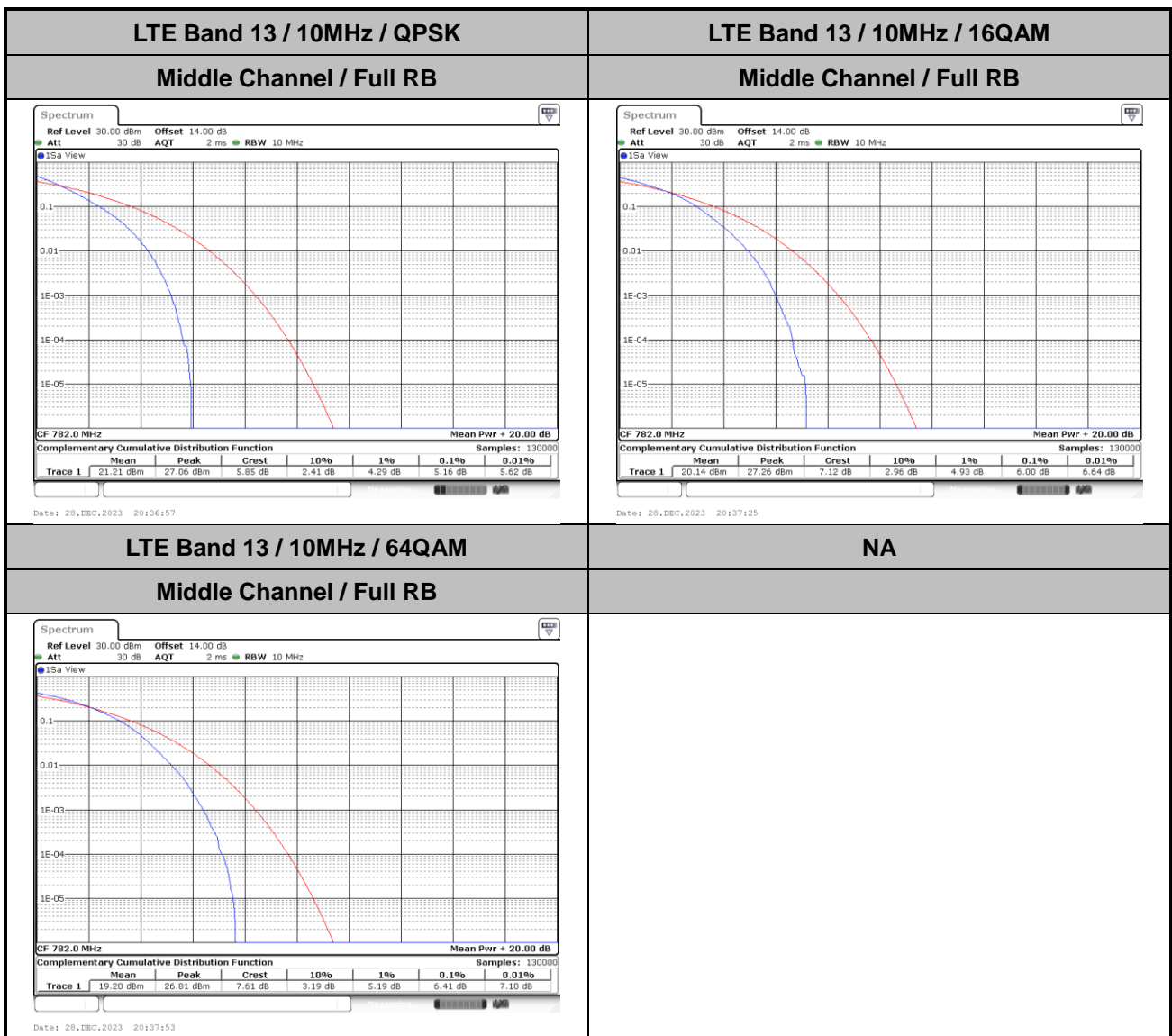
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

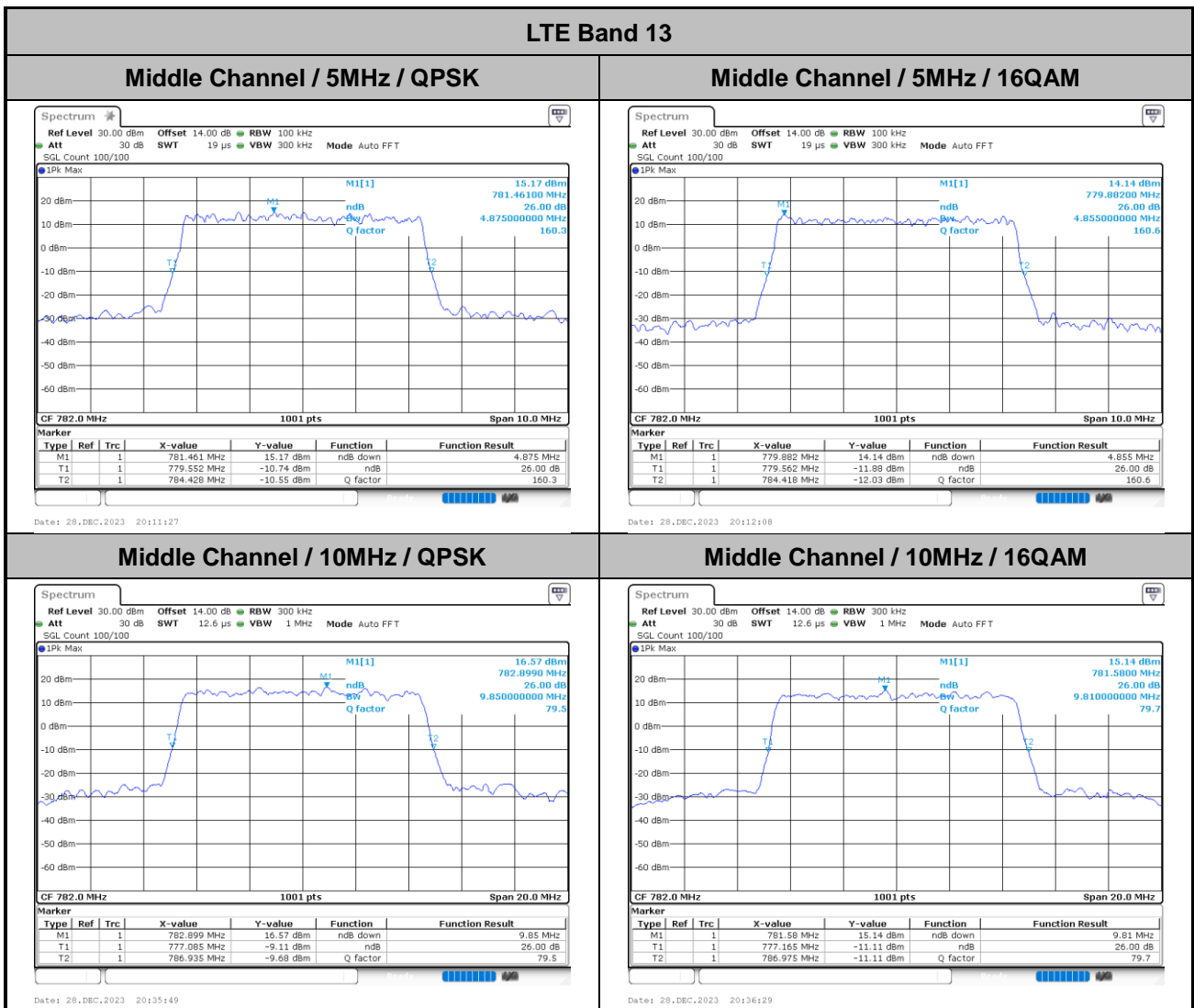
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	6.00	6.41	PASS





26dB Bandwidth

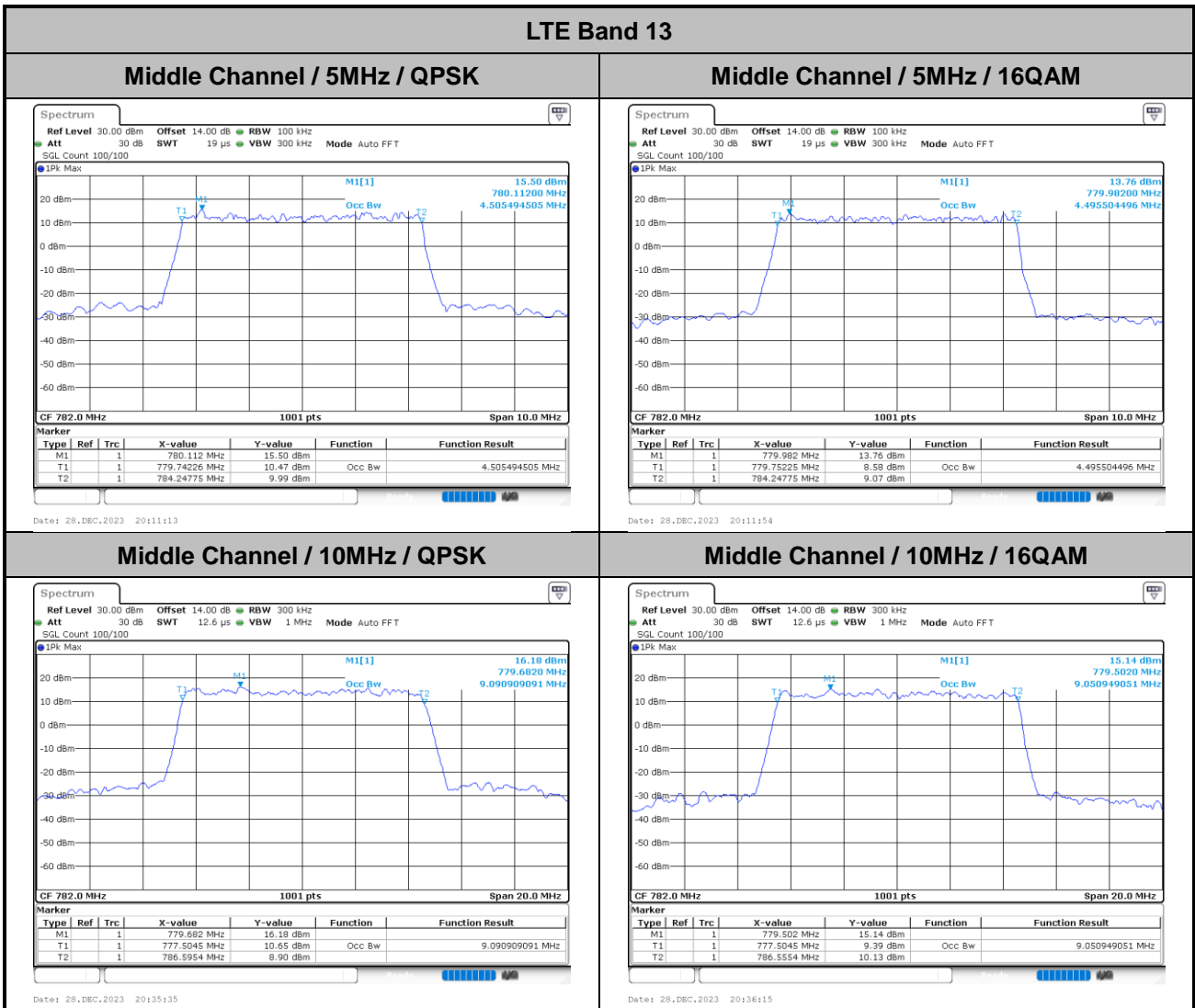
Mode	LTE Band 13 : 26dB BW(MHz)													
BW	-			-			5MHz		10MHz		-		-	
Mod.	-	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-	
Middle CH	-	-	-	-	-	4.88	4.86	9.85	9.81	-	-	-	-	





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	-			5MHz			10MHz			-		
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	-	-	-	-
Middle CH	-	-	-	-	4.51	4.50	9.09	9.05	-	-	-	-



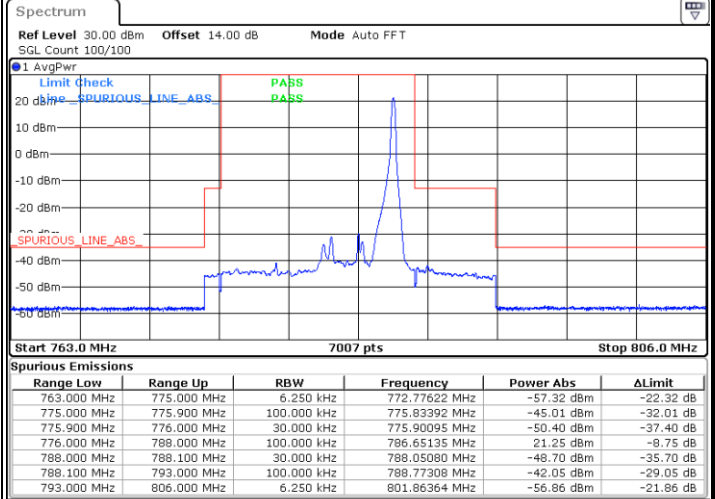
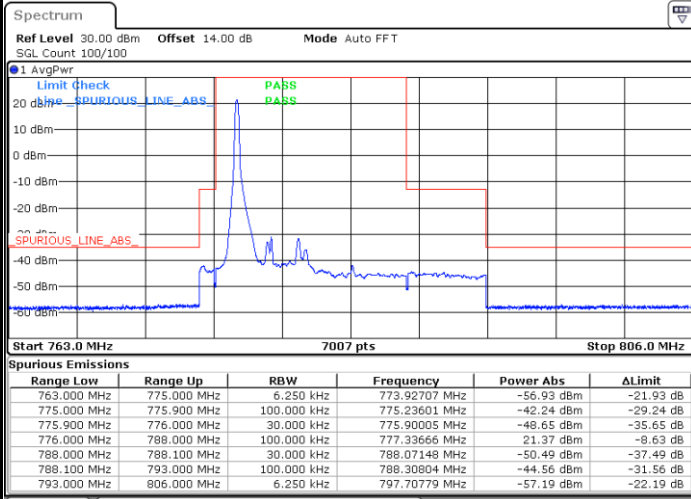


Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

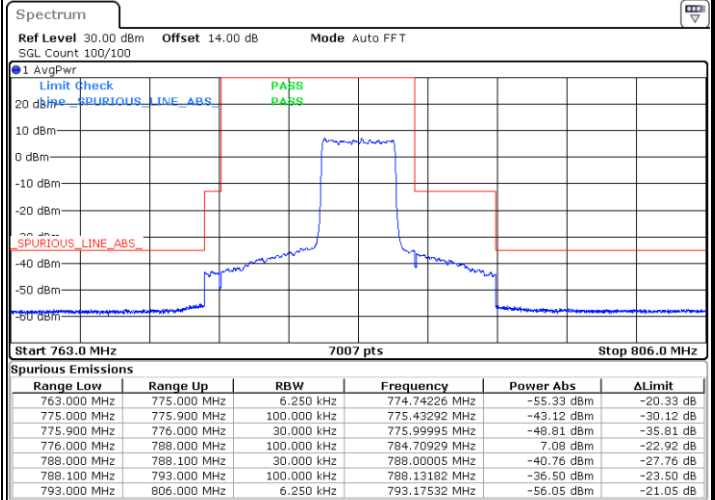
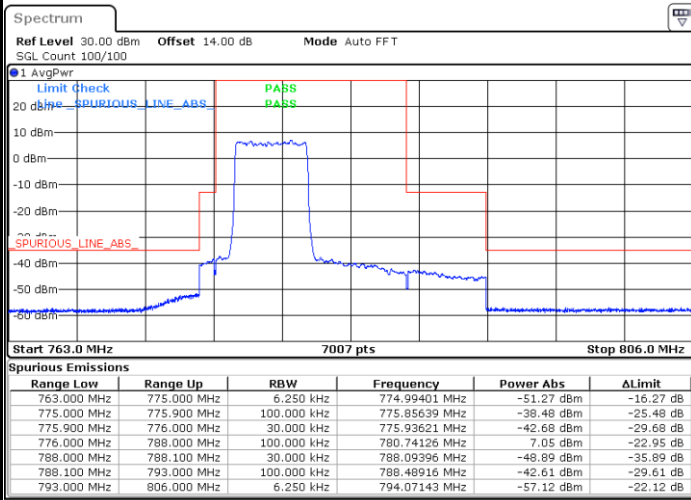


Date: 28.DEC.2023 20:03:13

Date: 28.DEC.2023 20:13:10

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 28.DEC.2023 20:06:20

Date: 28.DEC.2023 20:16:16



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

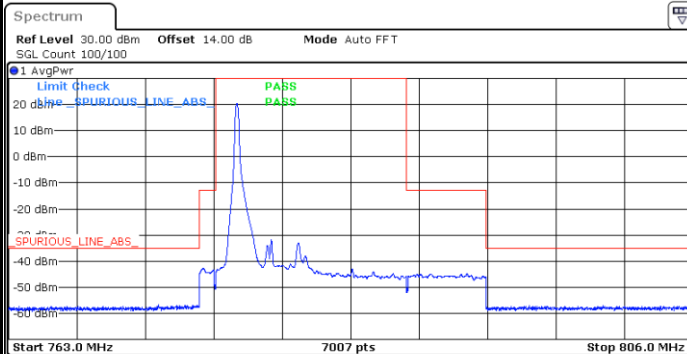


Table with 6 columns: Range Low, Range Up, RBW, Frequency, Power Abs, ΔLimit. Contains spurious emission data for the lowest band edge.

Date: 28.DEC.2023 20:04:15

Highest Band Edge / 1 RB

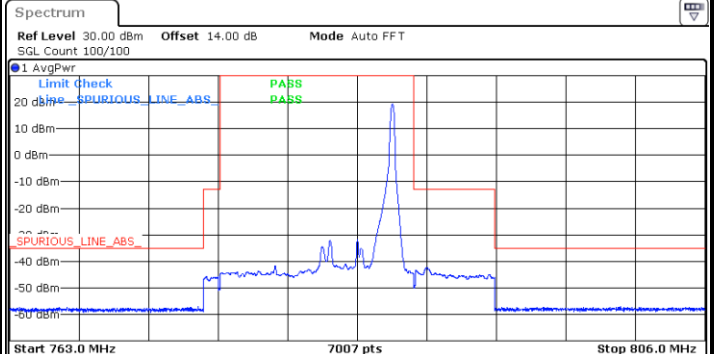


Table with 6 columns: Range Low, Range Up, RBW, Frequency, Power Abs, ΔLimit. Contains spurious emission data for the highest band edge.

Date: 28.DEC.2023 20:14:12

Lowest Band Edge / Full RB

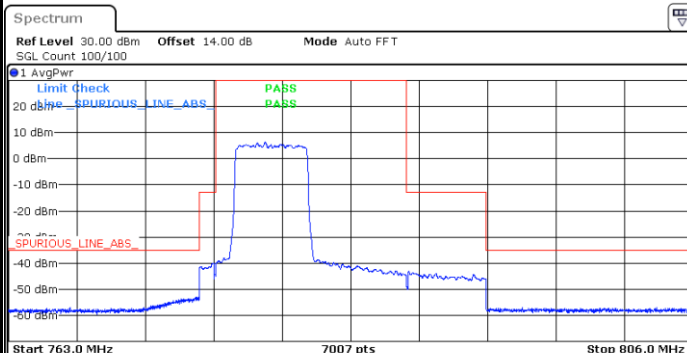


Table with 6 columns: Range Low, Range Up, RBW, Frequency, Power Abs, ΔLimit. Contains spurious emission data for the lowest band edge (Full RB).

Date: 28.DEC.2023 20:07:22

Highest Band Edge / Full RB

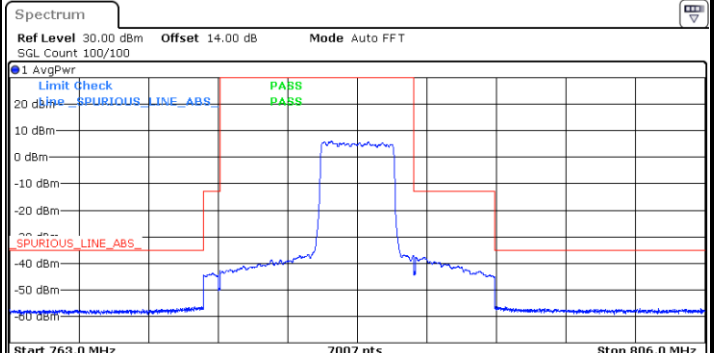


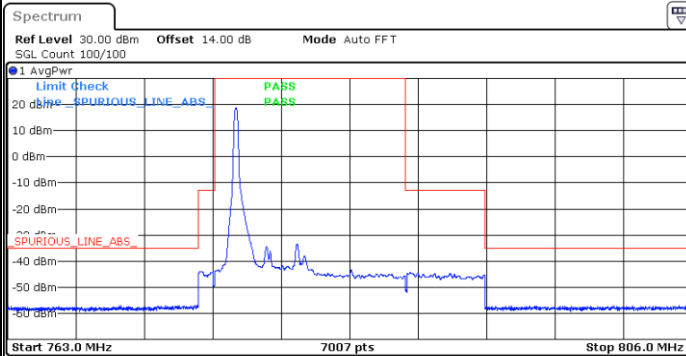
Table with 6 columns: Range Low, Range Up, RBW, Frequency, Power Abs, ΔLimit. Contains spurious emission data for the highest band edge (Full RB).

Date: 28.DEC.2023 20:17:18



LTE Band 13 / 5MHz / 64QAM

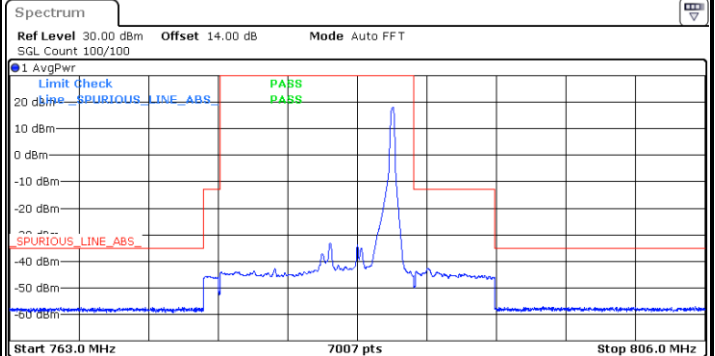
Lowest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.93407 MHz	-56.90 dBm	-21.90 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.20005 MHz	-43.94 dBm	-30.94 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99186 MHz	-49.29 dBm	-36.29 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.36064 MHz	18.85 dBm	-11.15 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.04760 MHz	-51.06 dBm	-38.06 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.28357 MHz	-44.55 dBm	-31.55 dB
793.000 MHz	806.000 MHz	6.250 kHz	805.20130 MHz	-57.09 dBm	-22.09 dB

Date: 28.DEC.2023 20:05:18

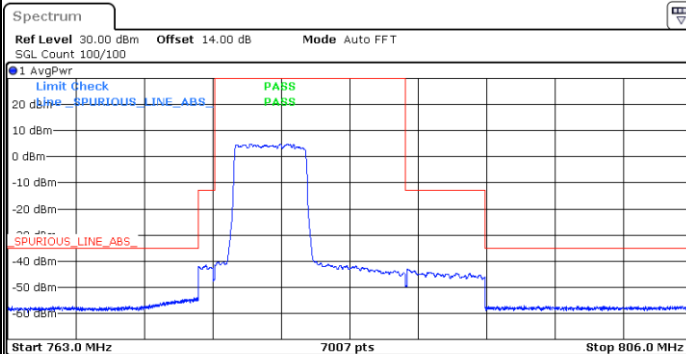
Highest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.65135 MHz	-57.23 dBm	-22.23 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.11913 MHz	-45.61 dBm	-32.61 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90005 MHz	-51.28 dBm	-38.28 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.66731 MHz	18.20 dBm	-11.80 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.09306 MHz	-49.10 dBm	-36.10 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.84161 MHz	-42.59 dBm	-29.59 dB
793.000 MHz	806.000 MHz	6.250 kHz	796.00649 MHz	-57.09 dBm	-22.09 dB

Date: 28.DEC.2023 20:15:14

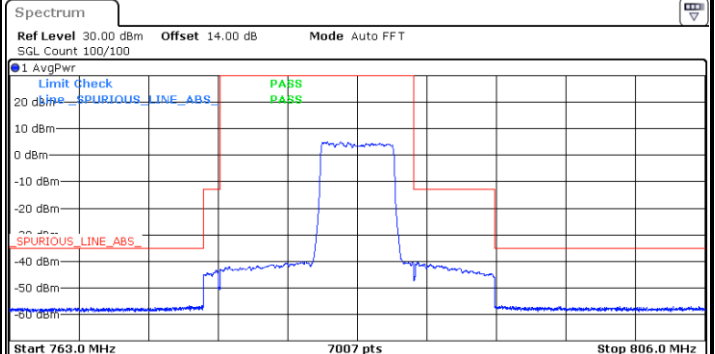
Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.71828 MHz	-53.98 dBm	-18.98 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.45180 MHz	-41.56 dBm	-28.56 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99995 MHz	-46.72 dBm	-33.72 dB
776.000 MHz	788.000 MHz	100.000 kHz	780.58541 MHz	4.91 dBm	-25.09 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.09995 MHz	-49.10 dBm	-36.10 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10734 MHz	-42.99 dBm	-29.99 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.44805 MHz	-57.15 dBm	-22.15 dB

Date: 28.DEC.2023 20:08:24

Highest Band Edge / Full RB

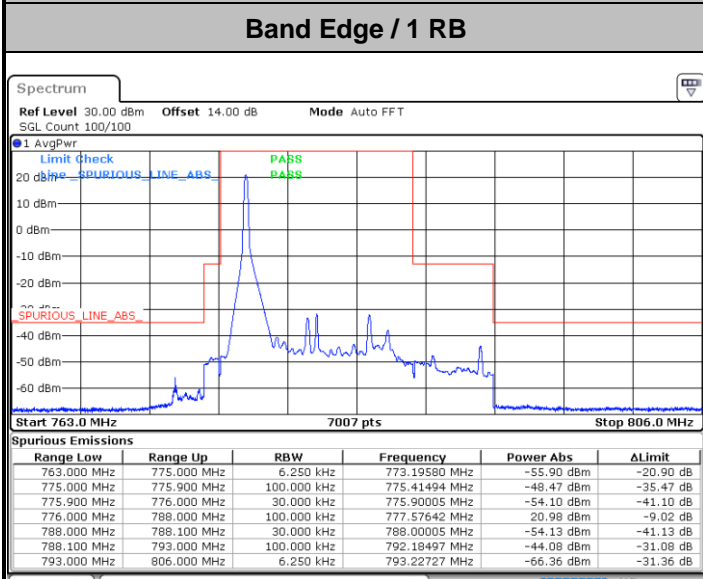


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.95804 MHz	-56.57 dBm	-21.57 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.78906 MHz	-43.54 dBm	-30.54 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96149 MHz	-49.90 dBm	-36.90 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.46254 MHz	5.02 dBm	-24.98 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.07987 MHz	-45.65 dBm	-32.65 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.24930 MHz	-40.38 dBm	-27.38 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.42208 MHz	-56.84 dBm	-21.84 dB

Date: 28.DEC.2023 20:18:20

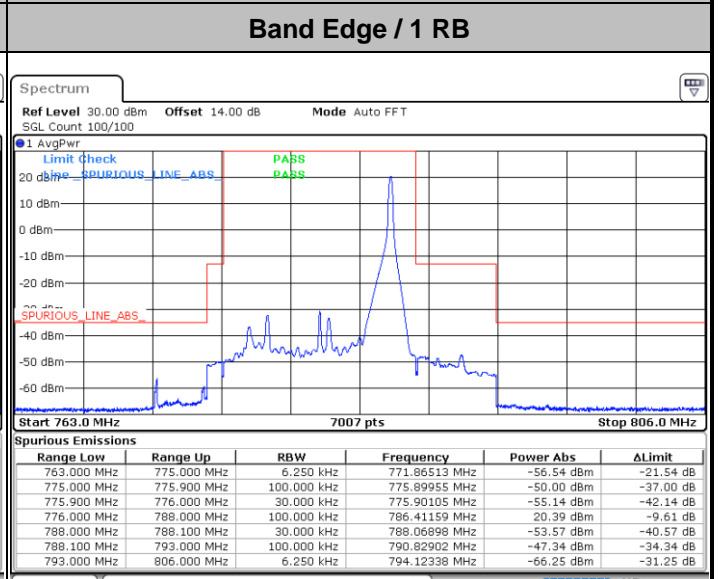


LTE Band 13 / 10MHz / QPSK
Band Edge / 1 RB



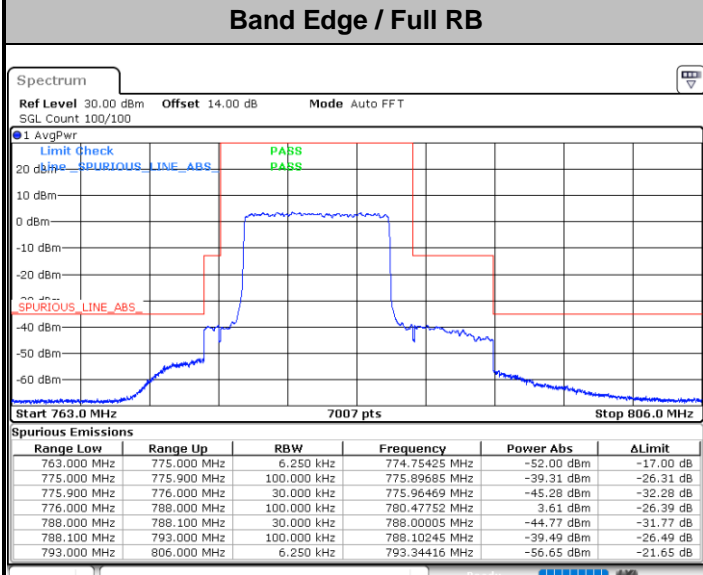
Date: 28.DEC.2023 20:25:45

LTE Band 13 / 10MHz / QPSK
Band Edge / 1 RB



Date: 28.DEC.2023 20:28:50

LTE Band 13 / 10MHz / QPSK
Band Edge / Full RB



Date: 28.DEC.2023 20:31:54

NA