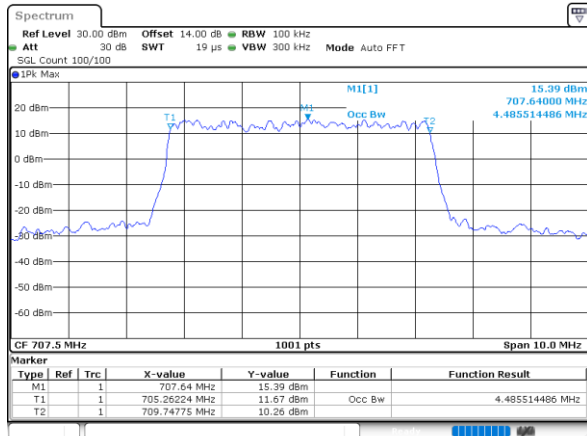


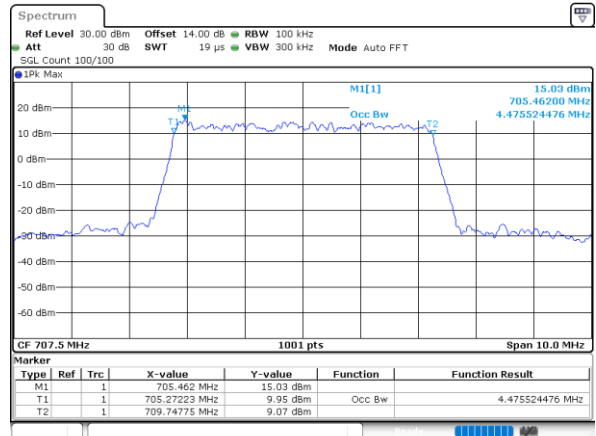


Middle Channel / 5MHz / QPSK



Date: 22.AUG.2024 02:19:23

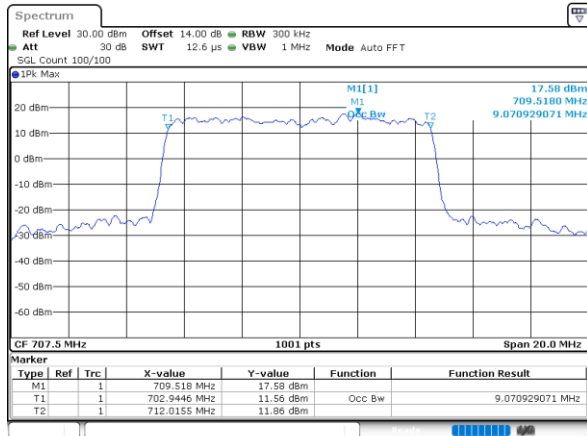
Middle Channel / 5MHz / 16QAM



Date: 22.AUG.2024 02:20:02

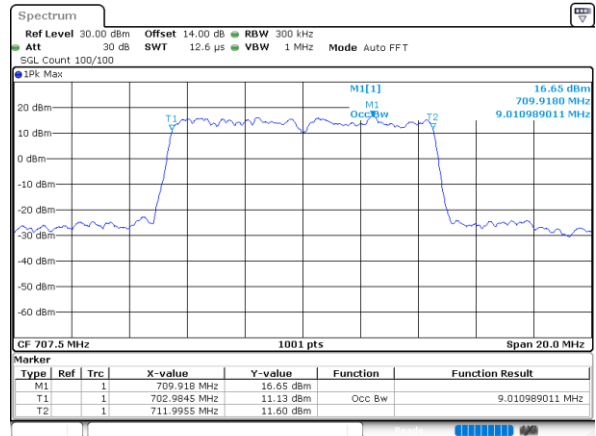
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 22.AUG.2024 02:34:15

Middle Channel / 10MHz / 16QAM



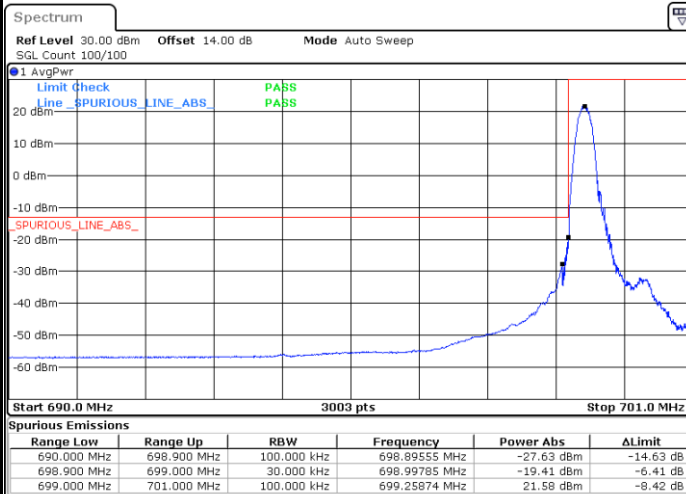
Date: 22.AUG.2024 02:34:54



Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

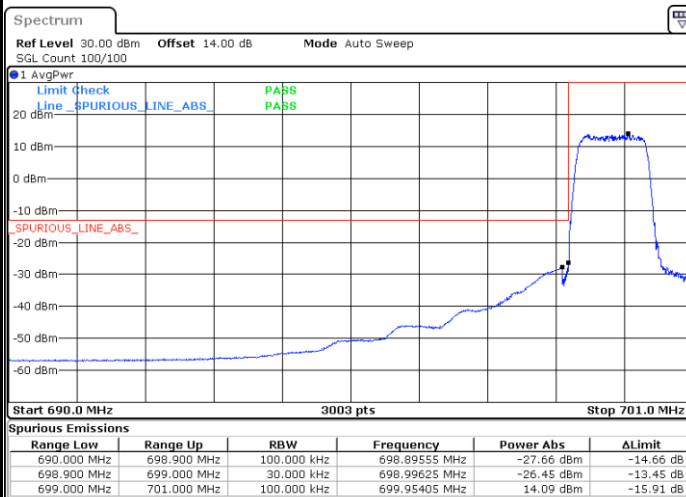
Lowest Band Edge / 1RB



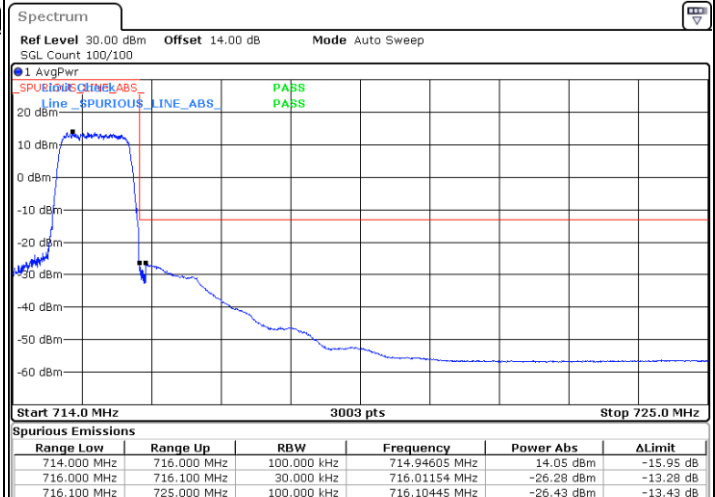
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



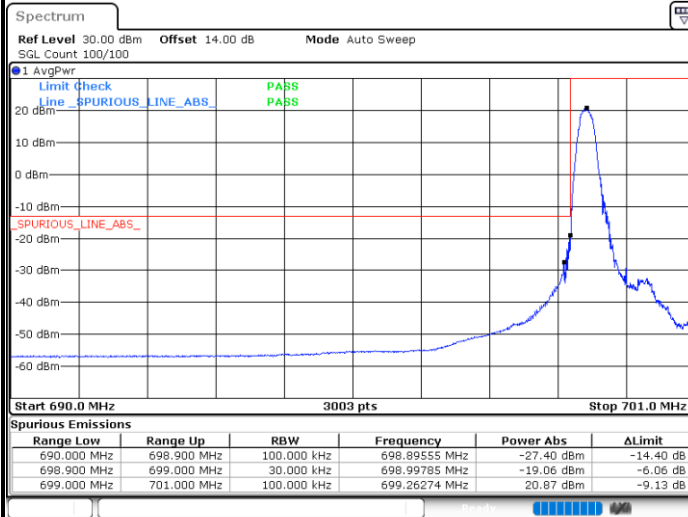
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

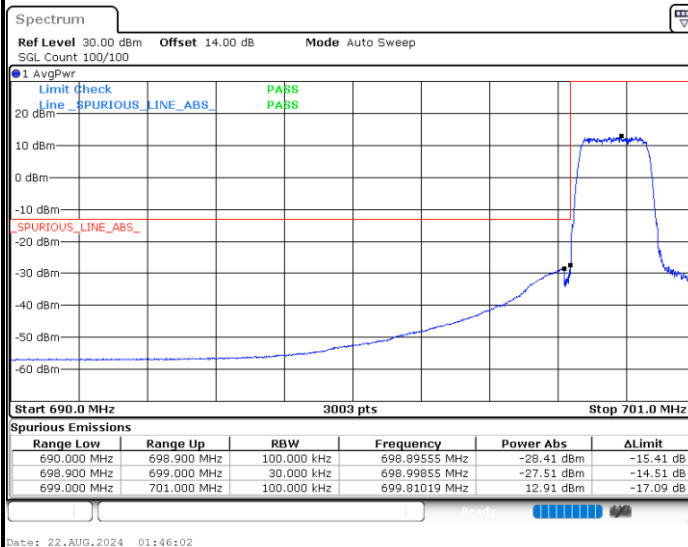
Lowest Band Edge / 1 RB



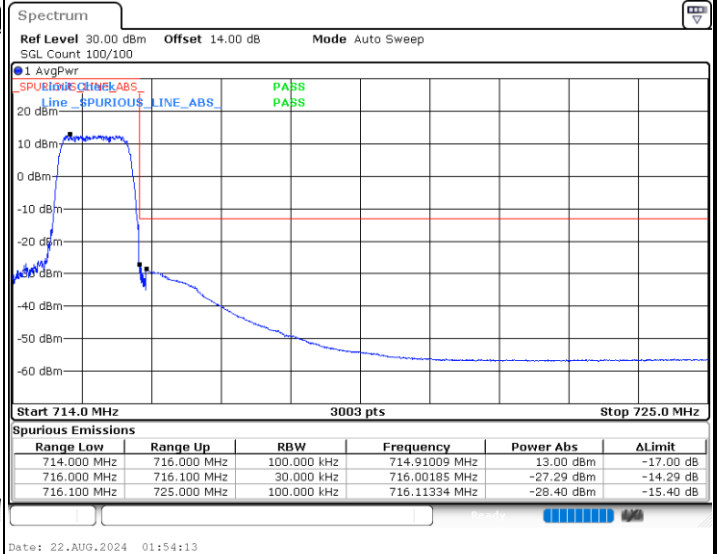
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



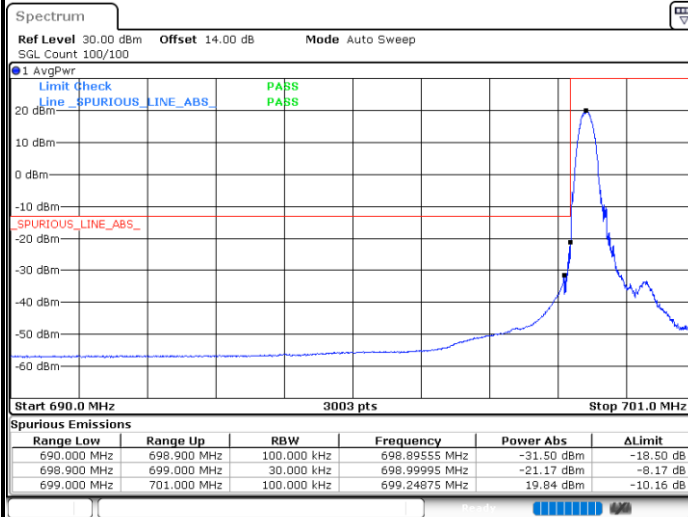
Highest Band Edge / Full RB



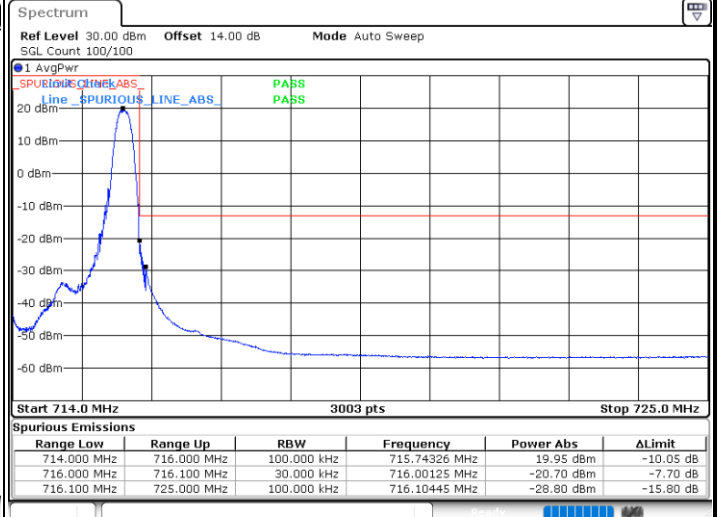


LTE Band 12 / 1.4MHz / 64QAM

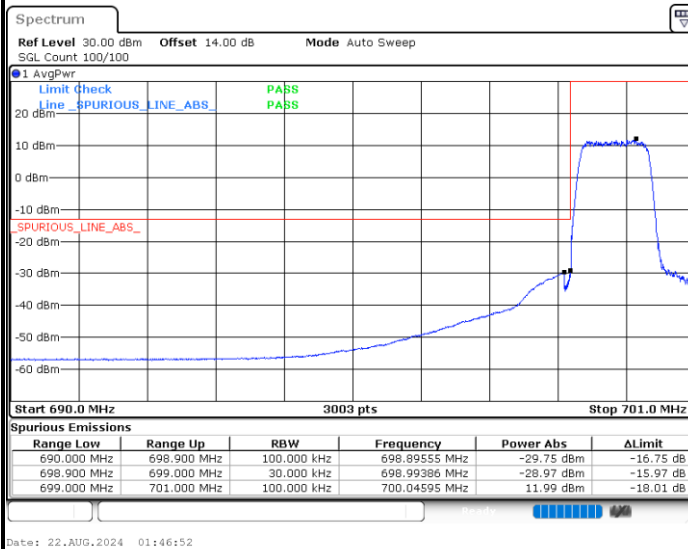
Lowest Band Edge / 1 RB



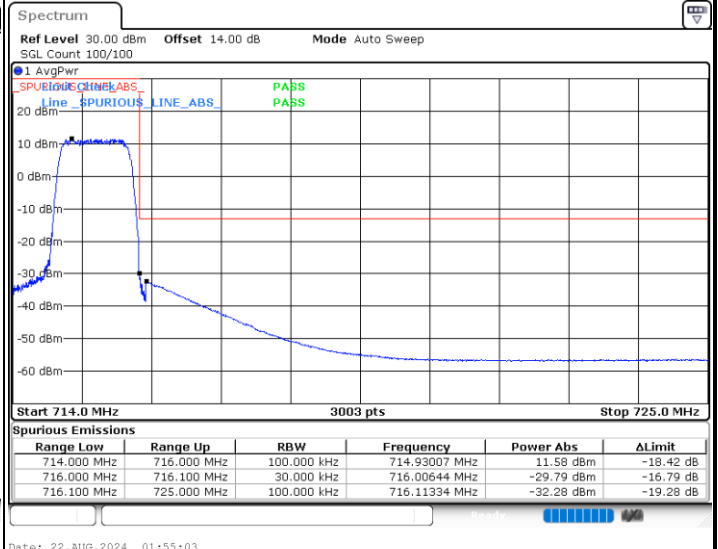
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



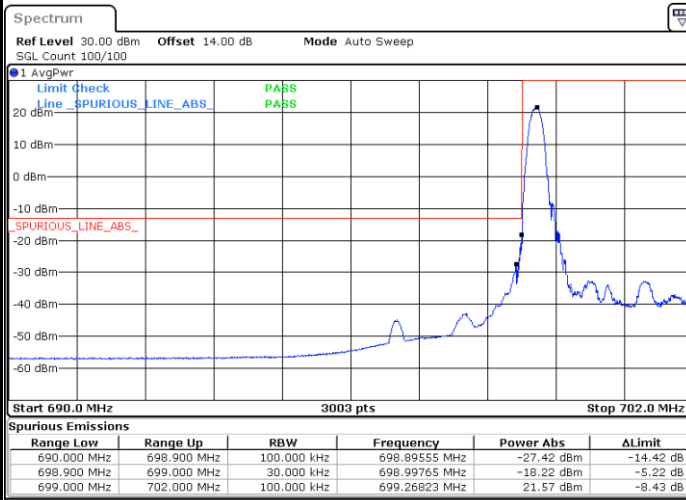
Highest Band Edge / Full RB



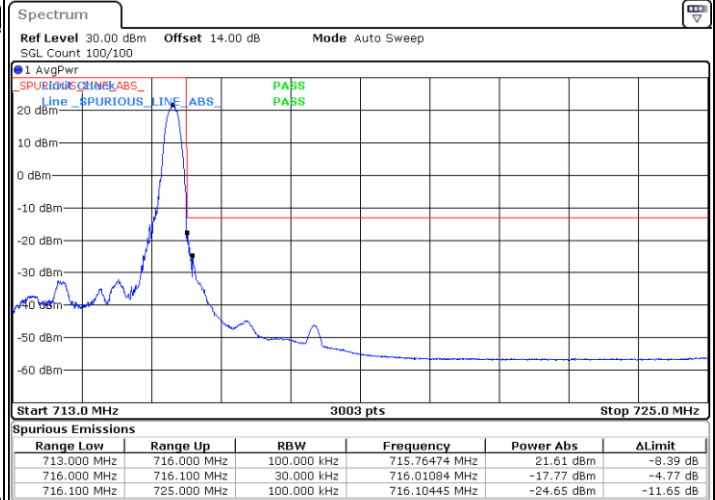


LTE Band 12 / 3MHz / QPSK

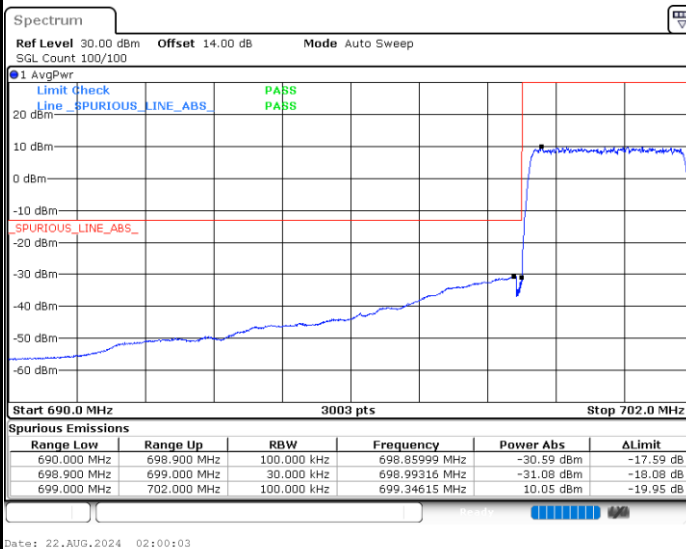
Lowest Band Edge / 1RB



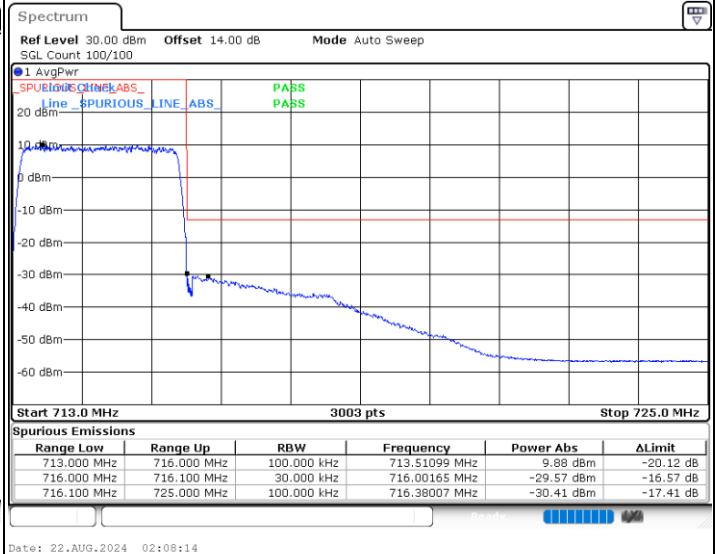
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



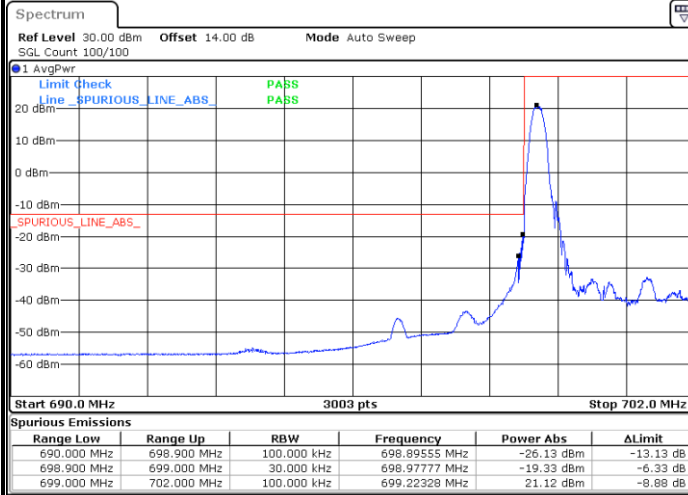
Highest Band Edge / Full RB



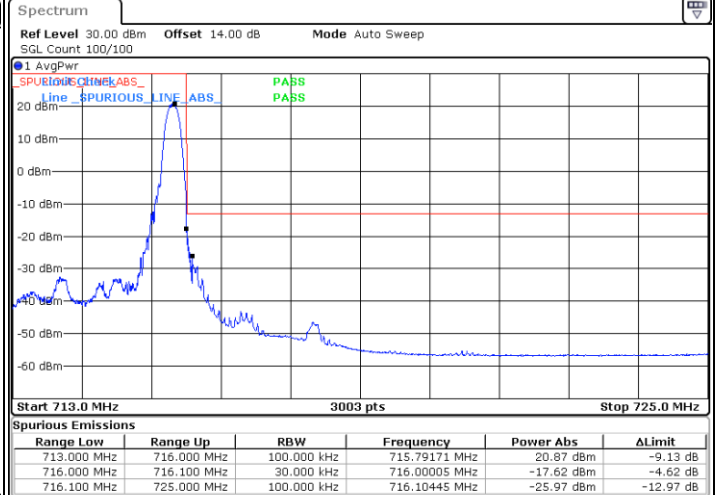


LTE Band 12 / 3MHz / 16QAM

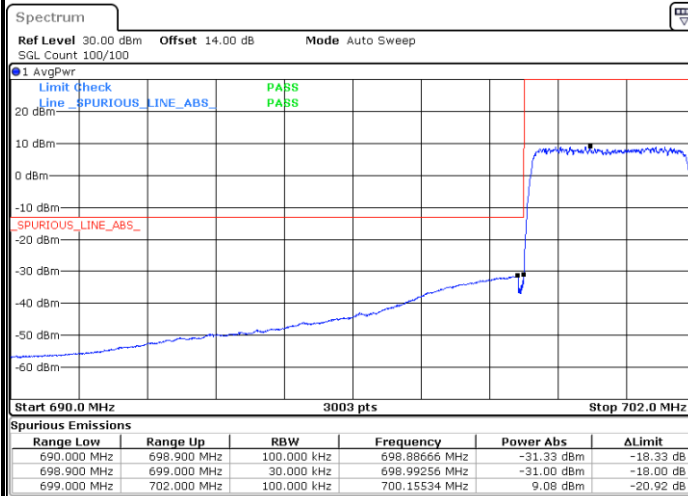
Lowest Band Edge / 1 RB



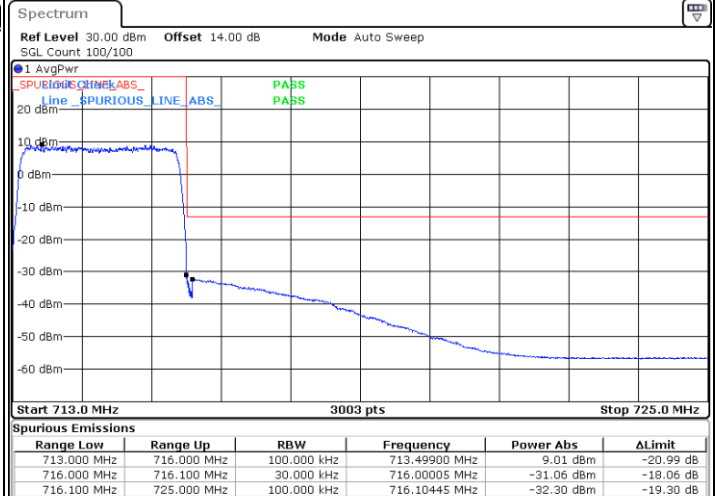
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



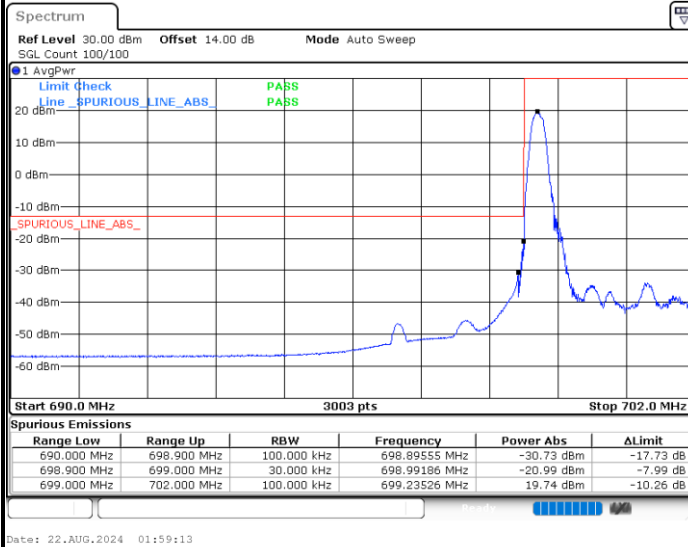
Highest Band Edge / Full RB



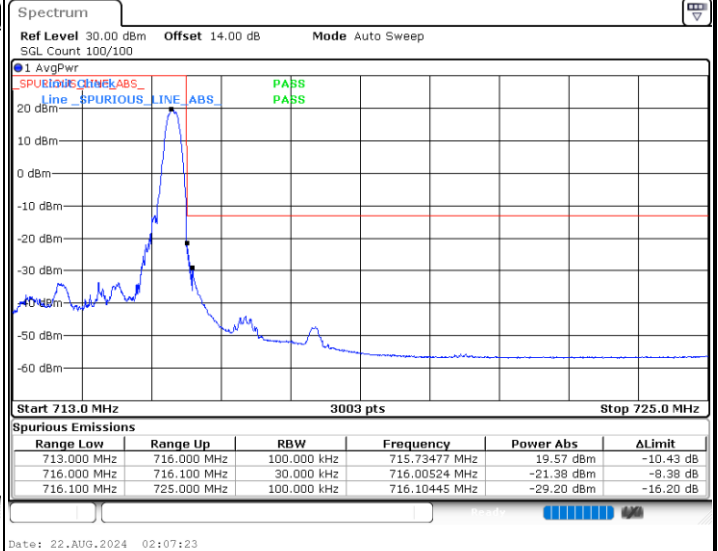


LTE Band 12 / 3MHz / 64QAM

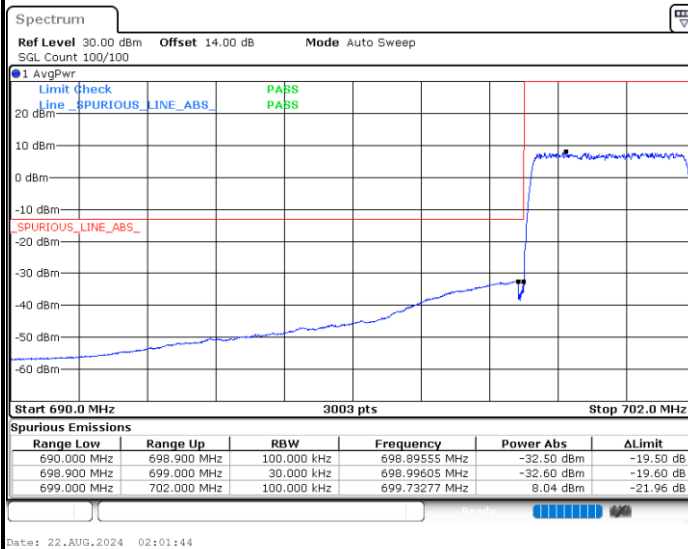
Lowest Band Edge / 1 RB



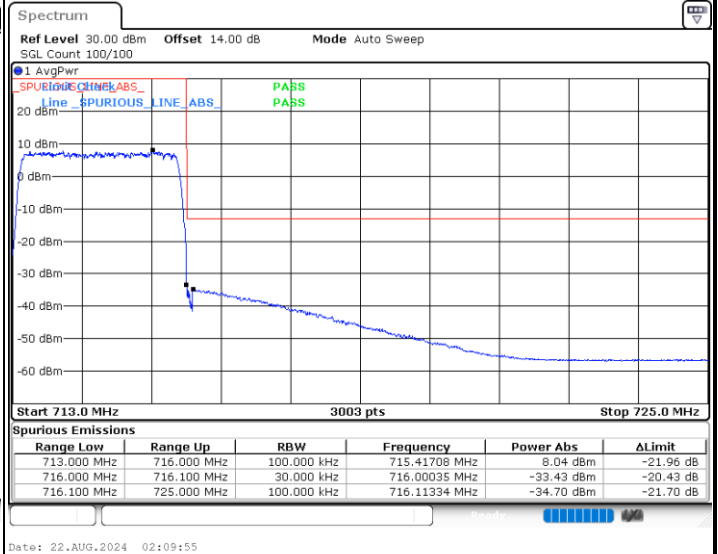
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



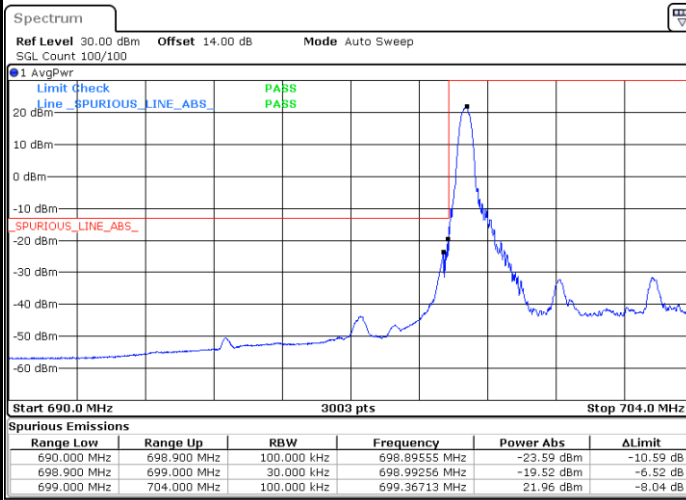
Highest Band Edge / Full RB





LTE Band 12 / 5MHz / QPSK

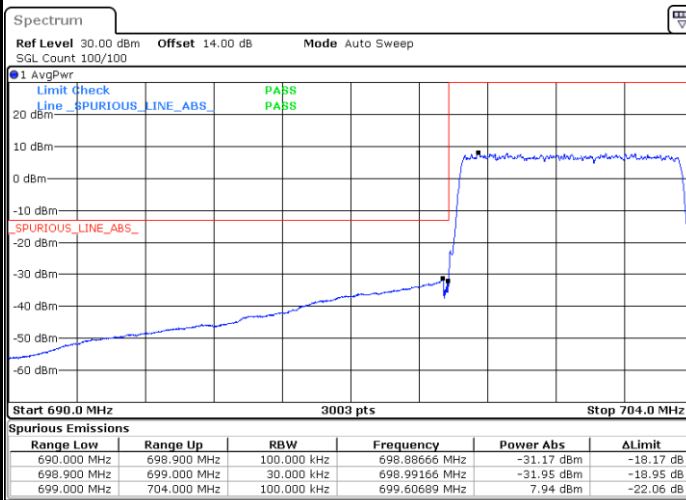
Lowest Band Edge / 1RB



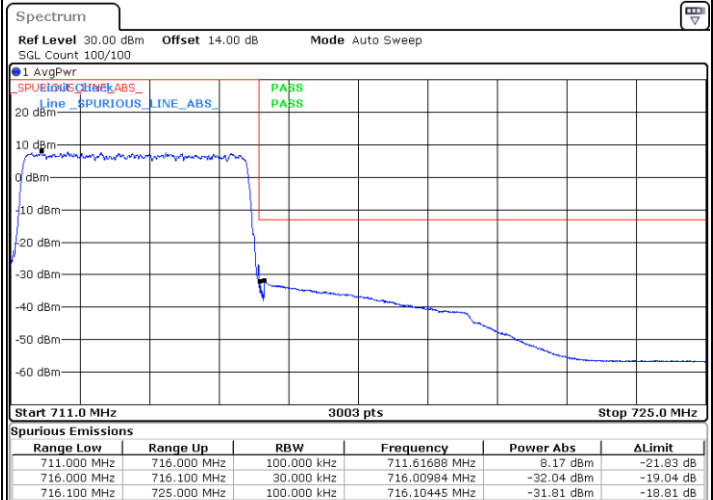
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



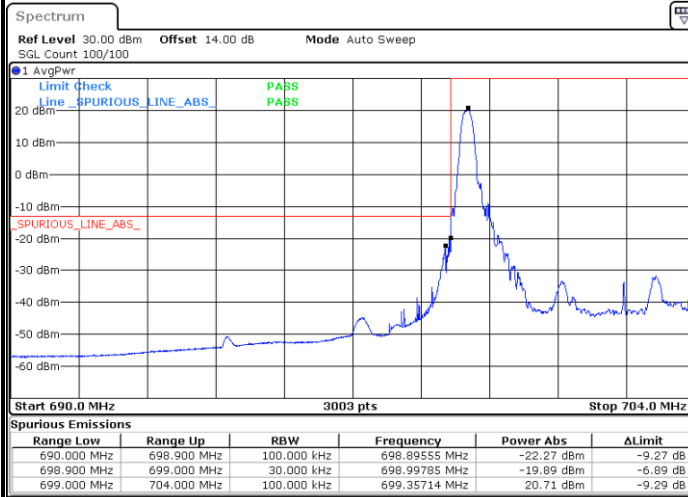
Highest Band Edge / Full RB



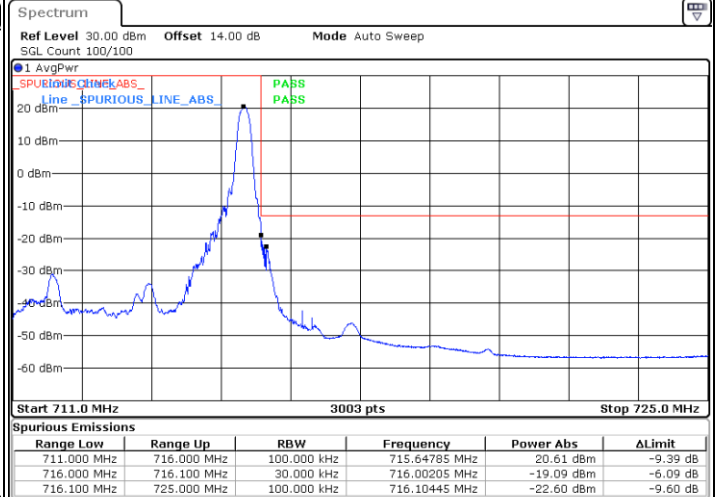


LTE Band 12 / 5MHz / 16QAM

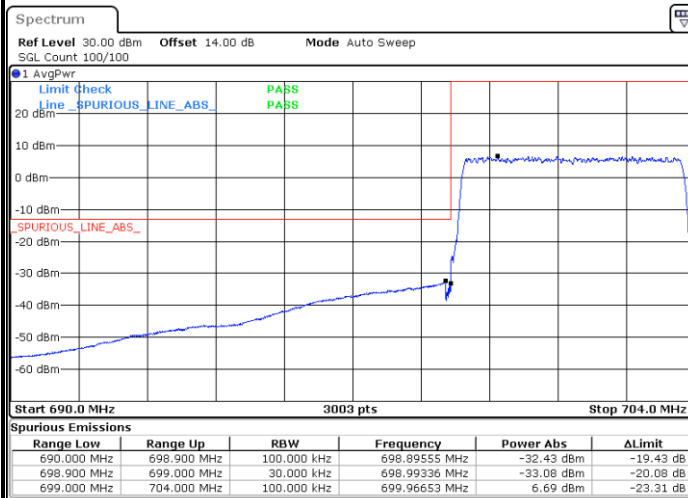
Lowest Band Edge / 1 RB



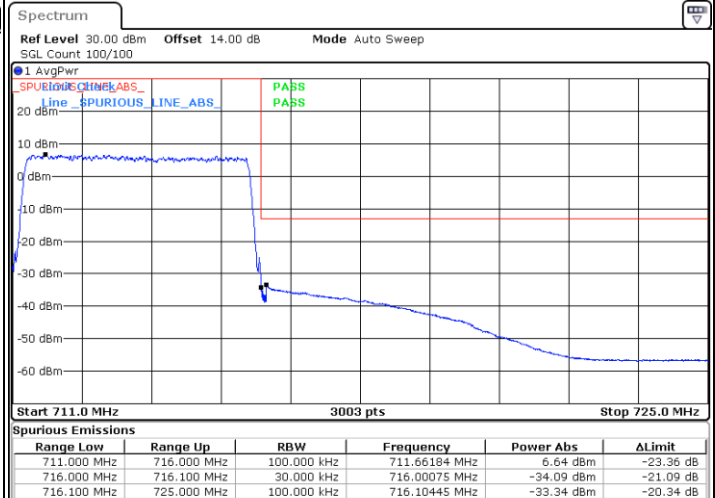
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



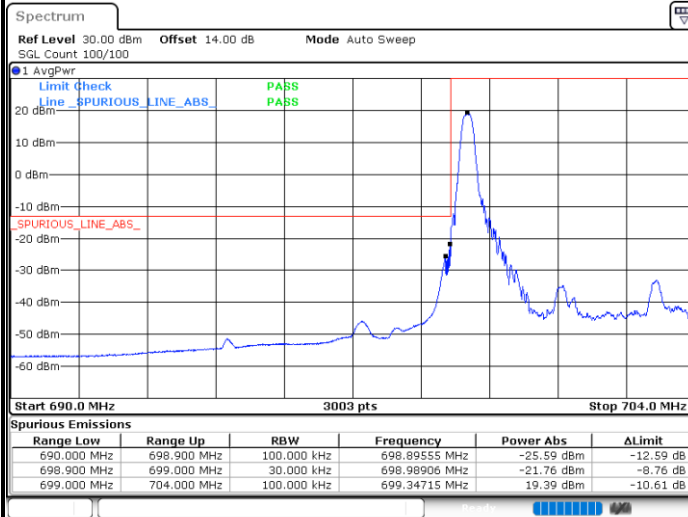
Highest Band Edge / Full RB



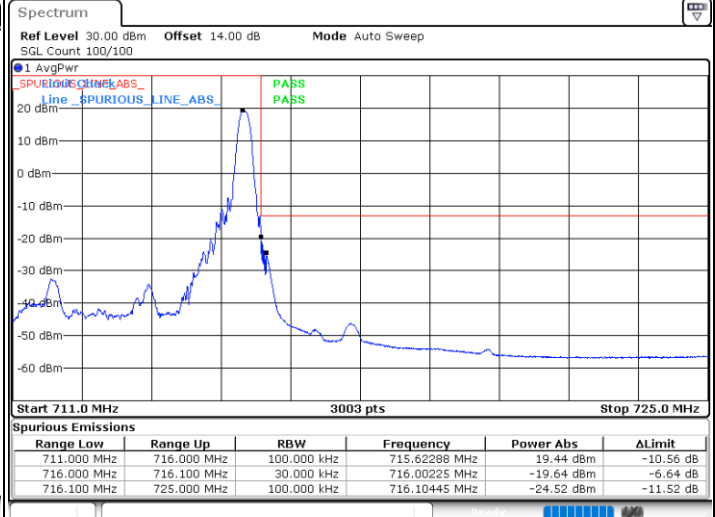


LTE Band 12 / 5MHz / 64QAM

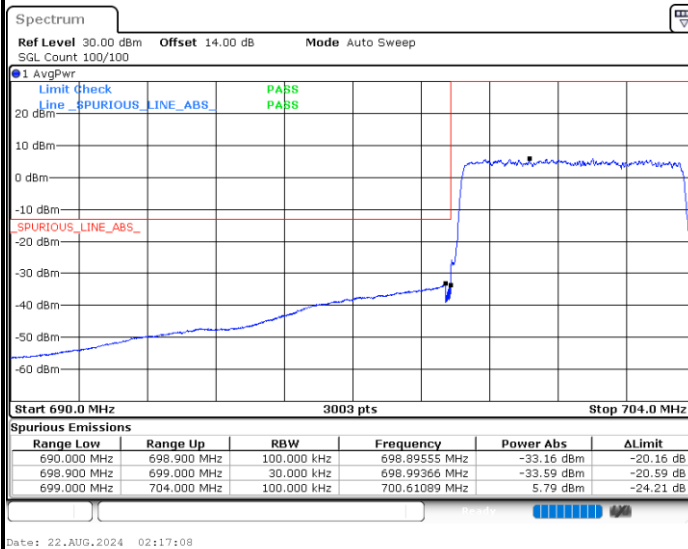
Lowest Band Edge / 1 RB



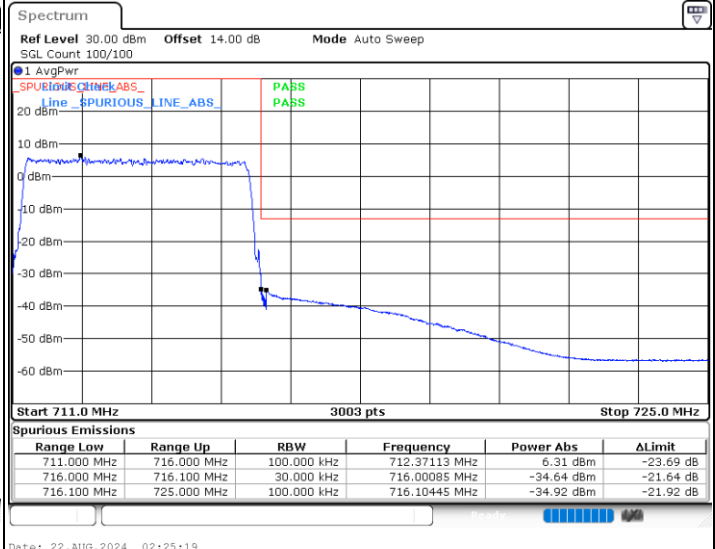
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



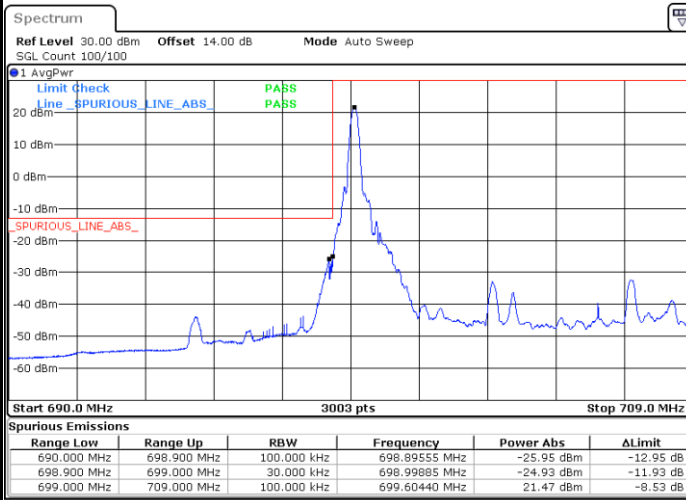
Highest Band Edge / Full RB



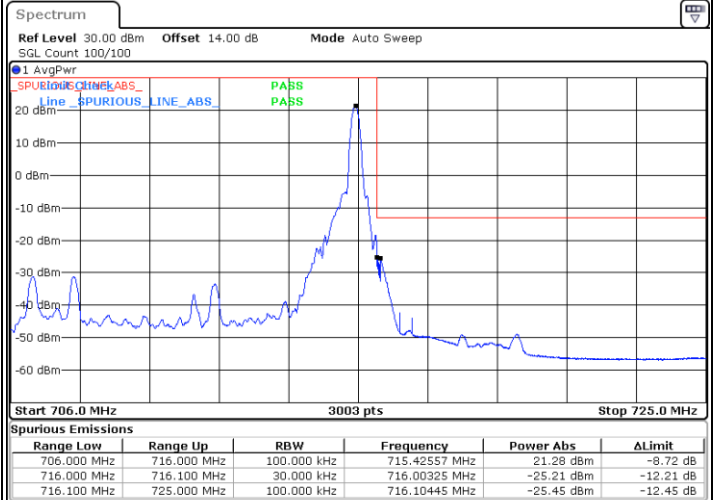


LTE Band 12 / 10MHz / QPSK

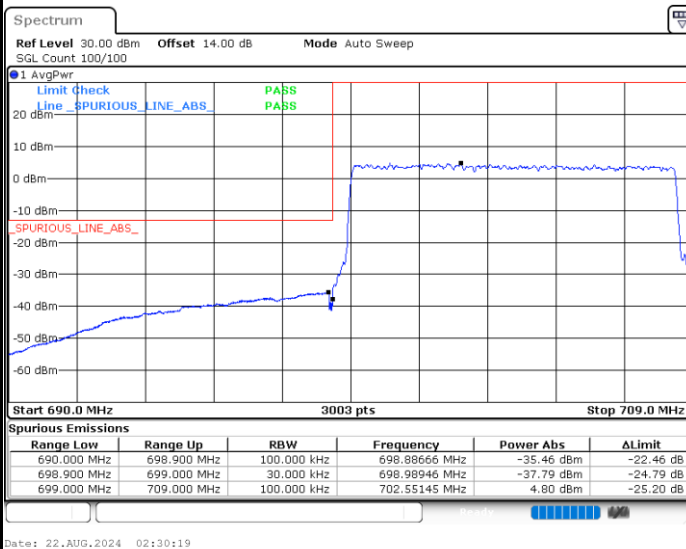
Lowest Band Edge / 1RB



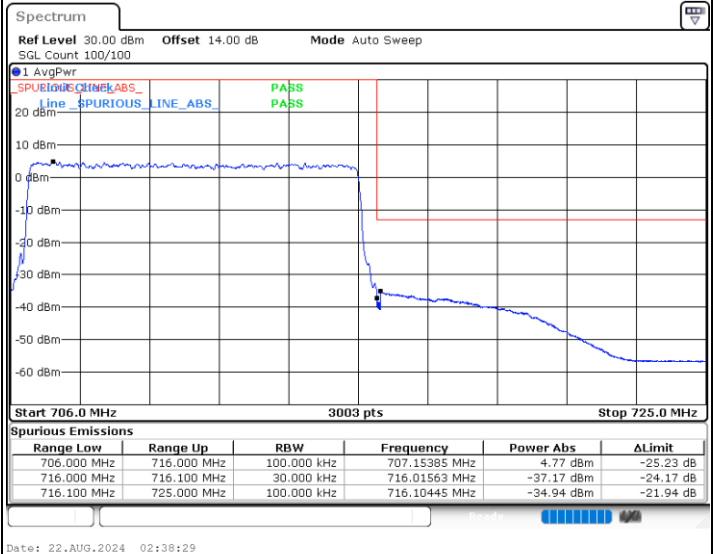
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



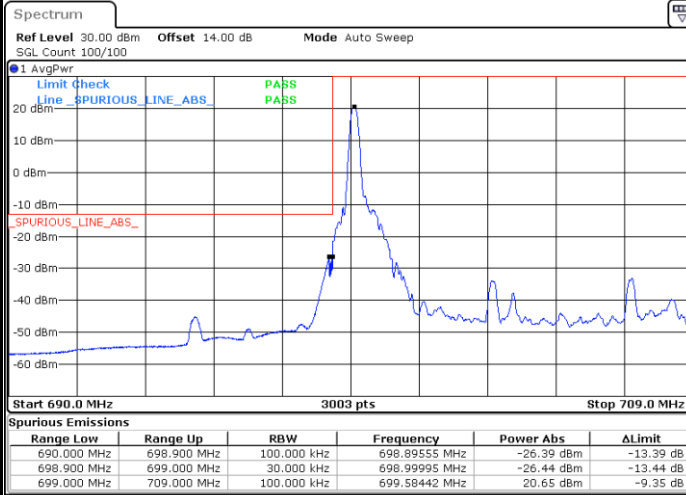
Highest Band Edge / Full RB



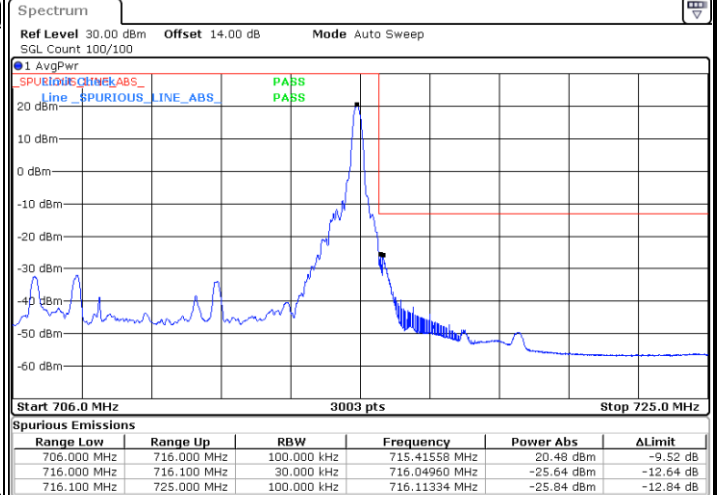


LTE Band 12 / 10MHz / 16QAM

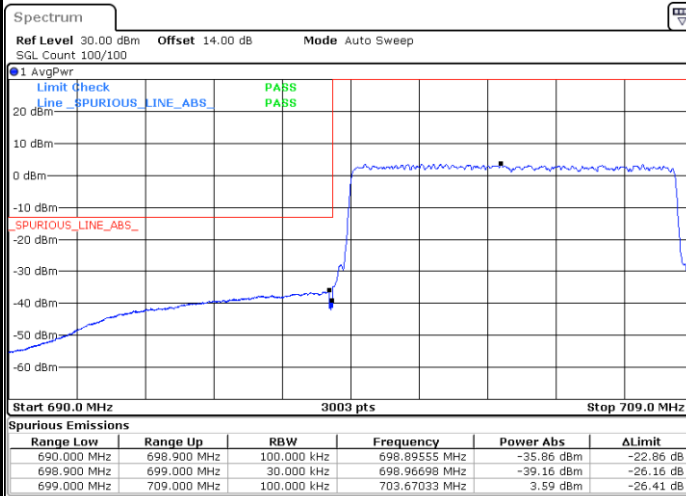
Lowest Band Edge / 1 RB



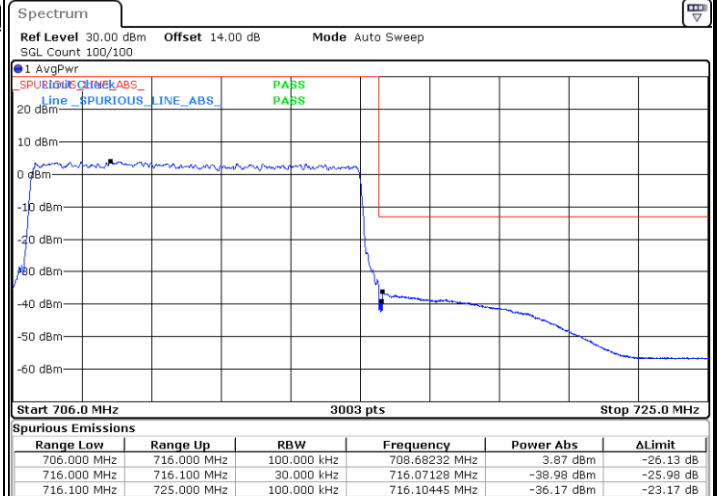
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



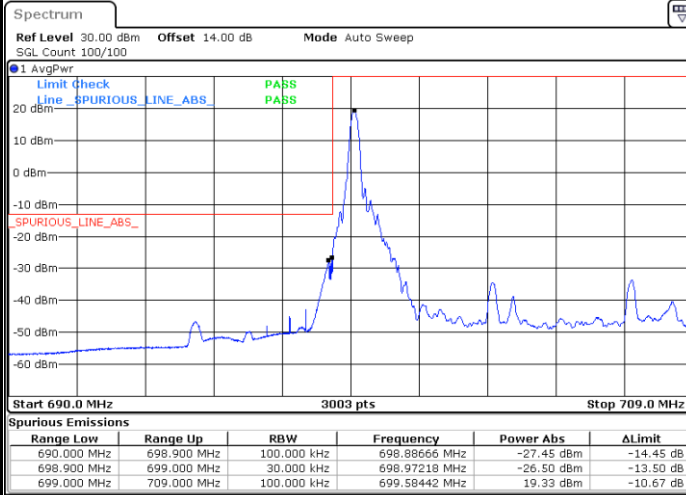
Highest Band Edge / Full RB



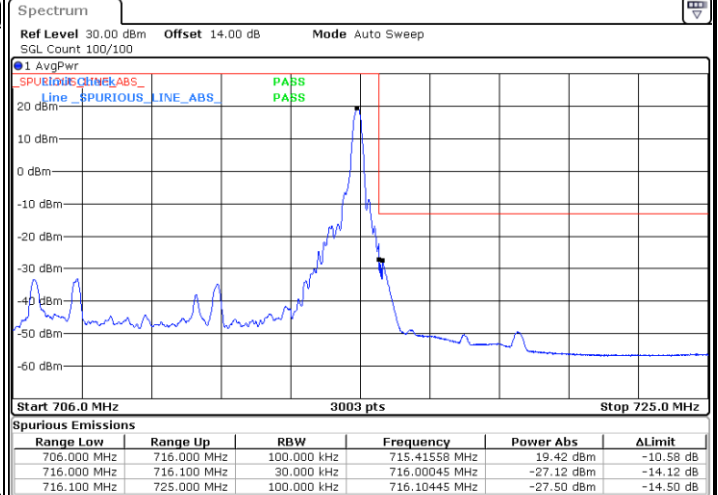


LTE Band 12 / 10MHz / 64QAM

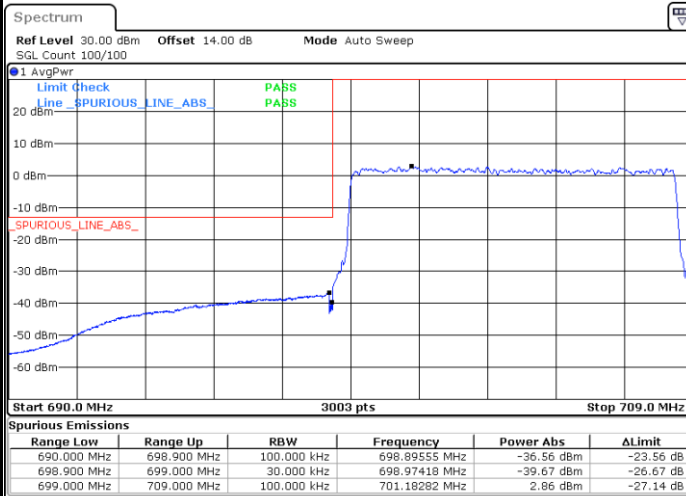
Lowest Band Edge / 1 RB



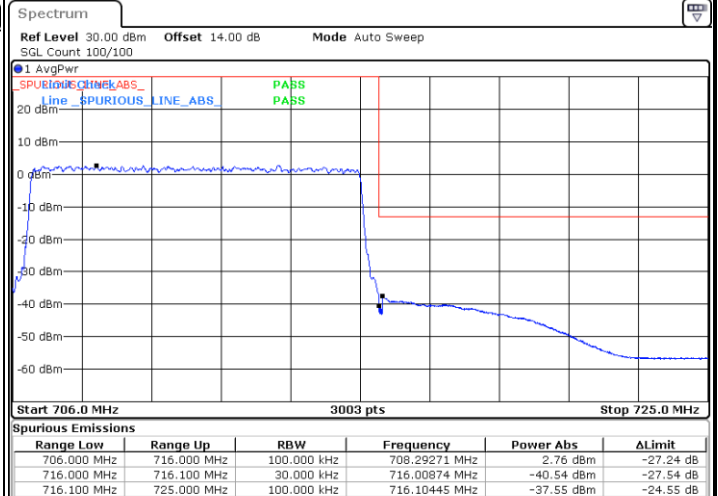
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

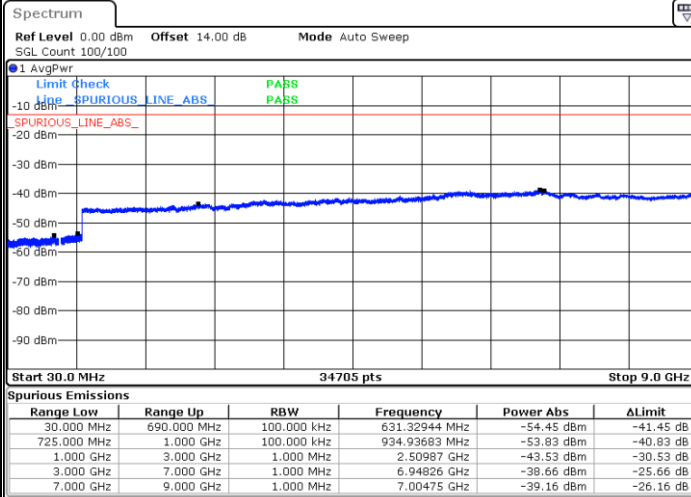




Conducted Spurious Emission

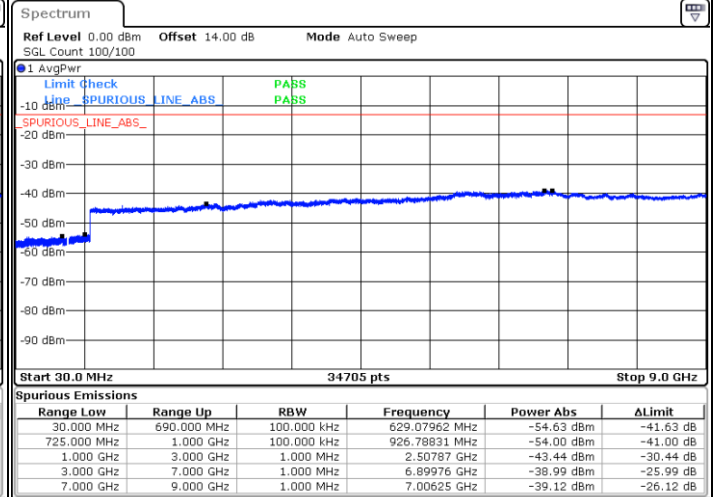
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



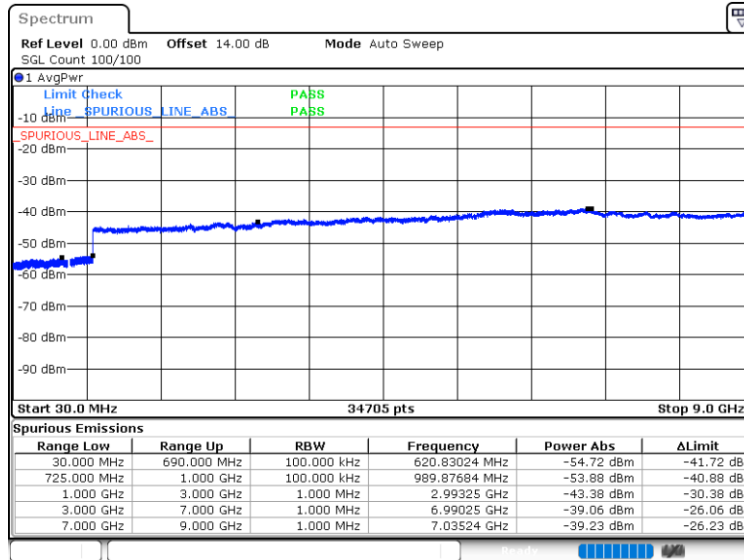
Date: 22.AUG.2024 01:47:48

Middle Channel / QPSK



Date: 22.AUG.2024 01:48:42

Highest Channel / QPSK

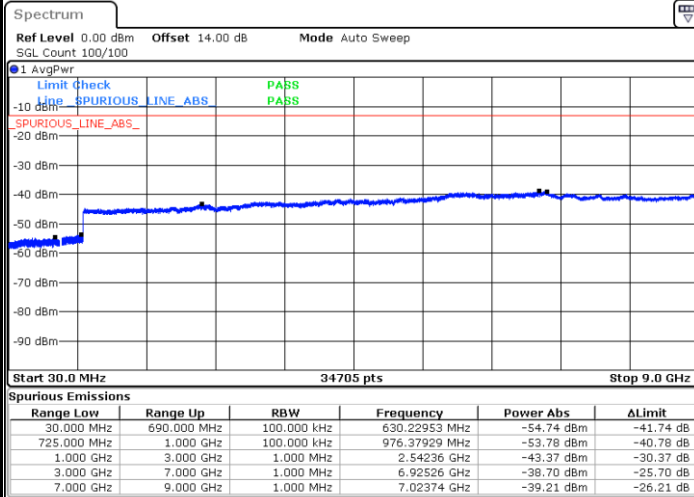


Date: 22.AUG.2024 01:55:58



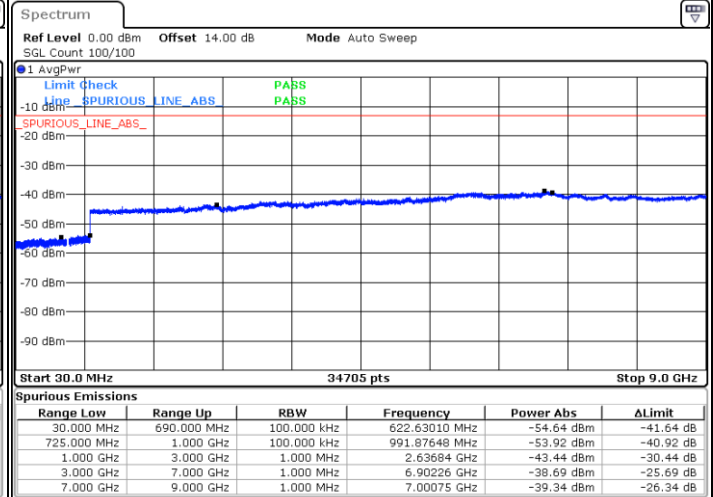
LTE Band 12 / 3MHz

Lowest Channel / QPSK



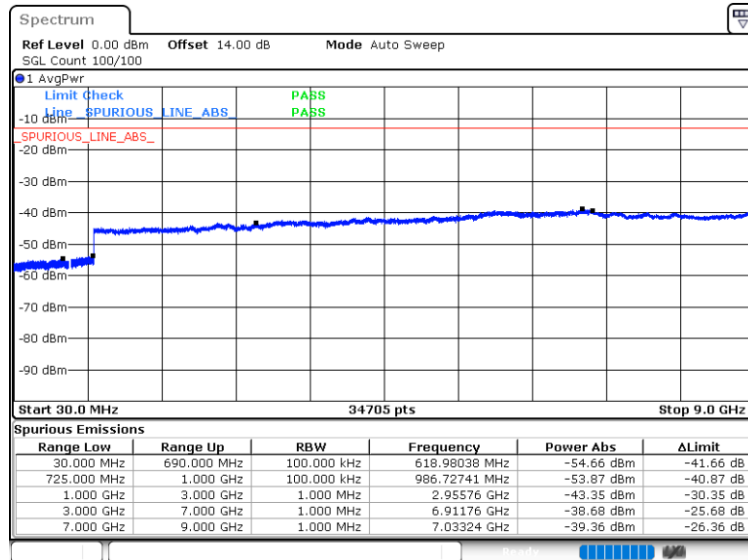
Date: 22.AUG.2024 02:02:39

Middle Channel / QPSK



Date: 22.AUG.2024 02:03:33

Highest Channel / QPSK

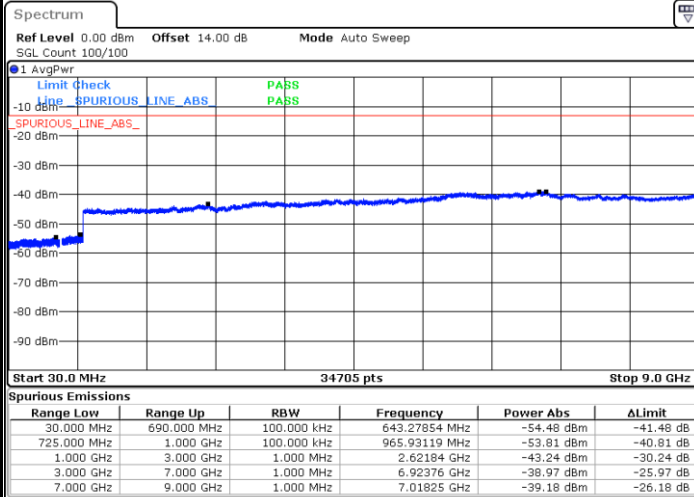


Date: 22.AUG.2024 02:10:50



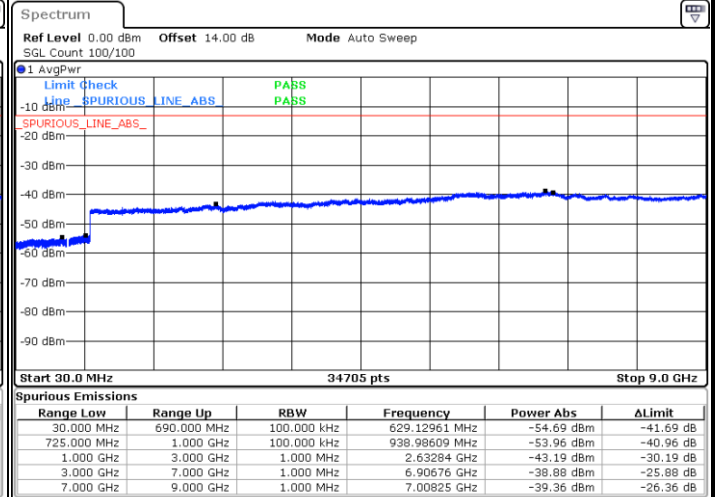
LTE Band 12 / 5MHz

Lowest Channel / QPSK



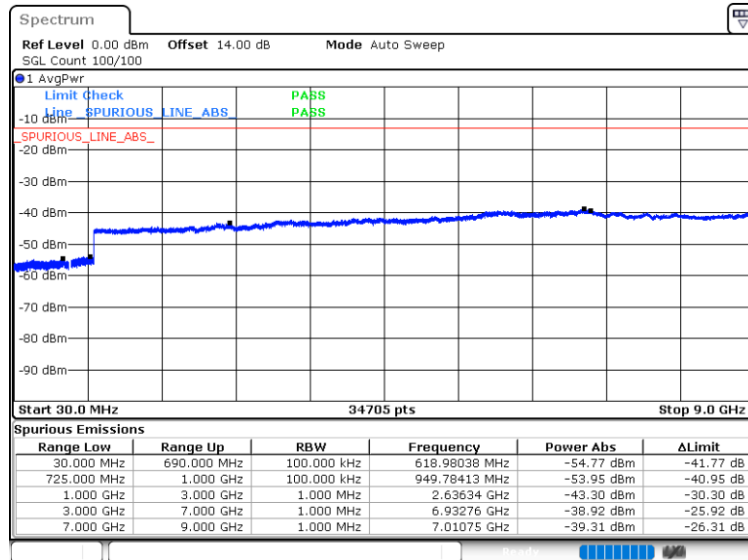
Date: 22.AUG.2024 02:18:03

Middle Channel / QPSK



Date: 22.AUG.2024 02:18:57

Highest Channel / QPSK

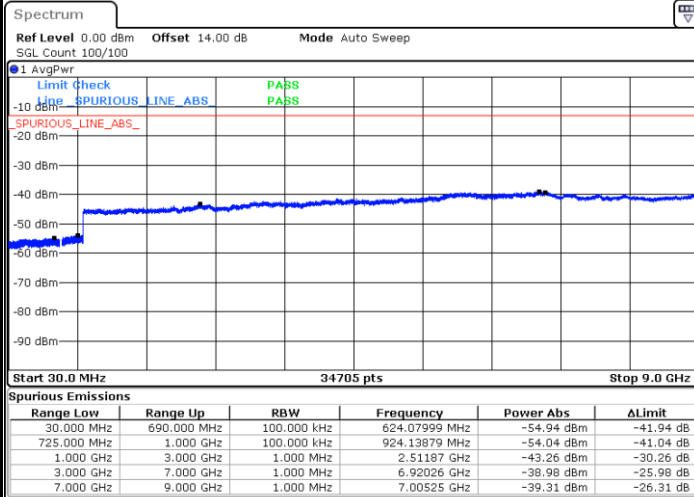


Date: 22.AUG.2024 02:26:14



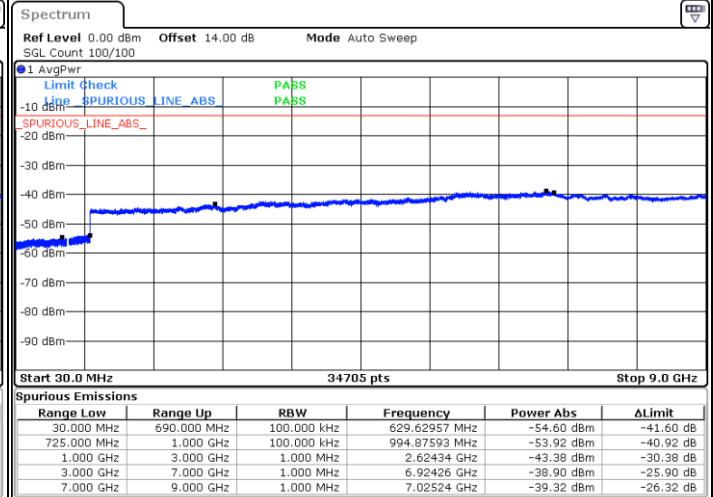
LTE Band 12 / 10MHz

Lowest Channel / QPSK



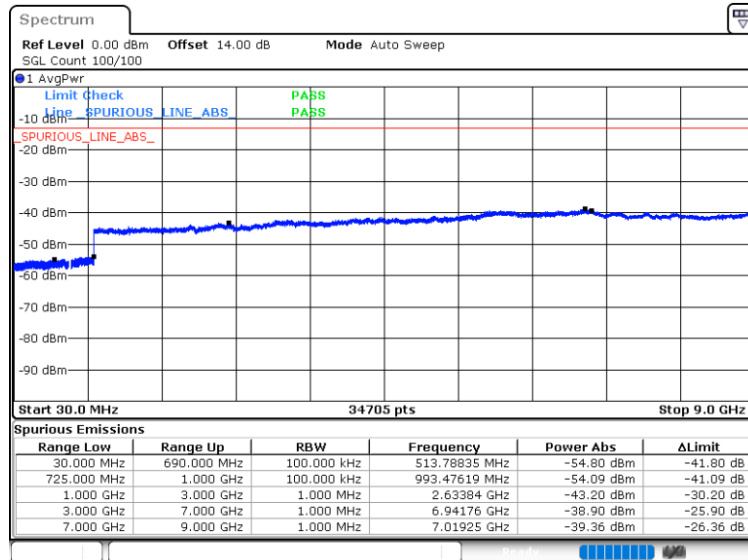
Date: 22.AUG.2024 02:32:55

Middle Channel / QPSK



Date: 22.AUG.2024 02:33:49

Highest Channel / QPSK



Date: 22.AUG.2024 02:41:06

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	0.0037	
30	Normal Voltage	0.0068	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0042	
0	Normal Voltage	0.0174	
-10	Normal Voltage	0.0189	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0041	

Note:

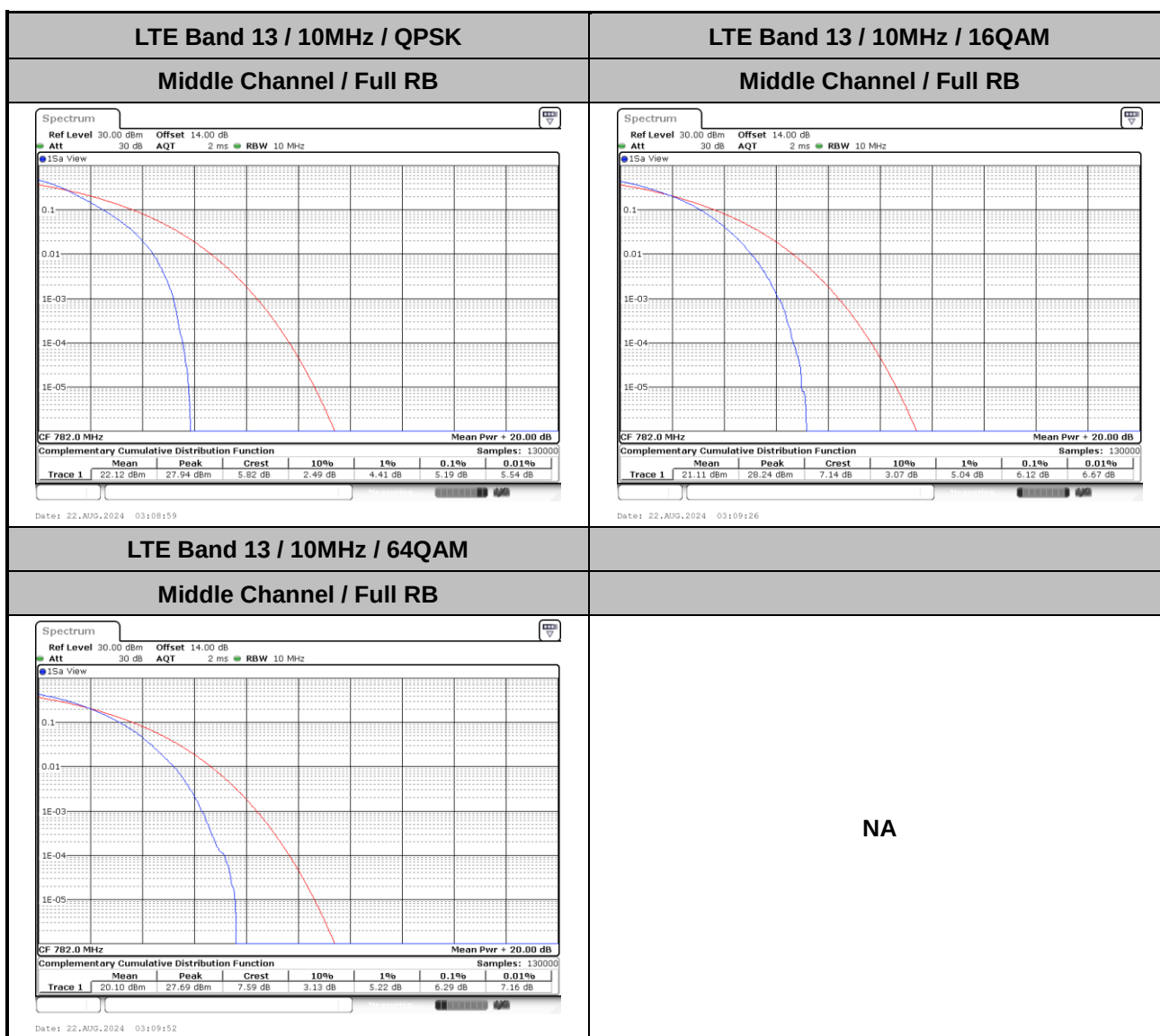
1. Normal Voltage =3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	5.19	6.12	6.29	PASS



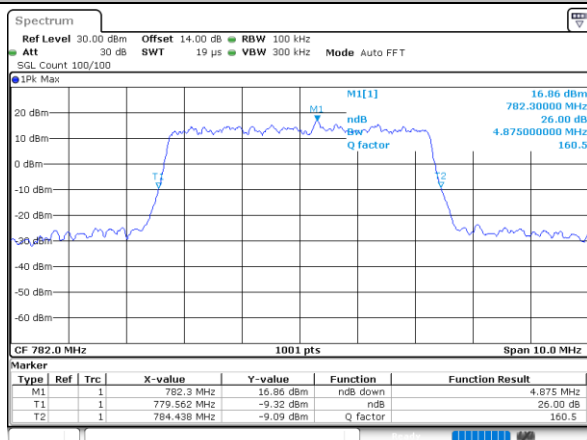


26dB Bandwidth

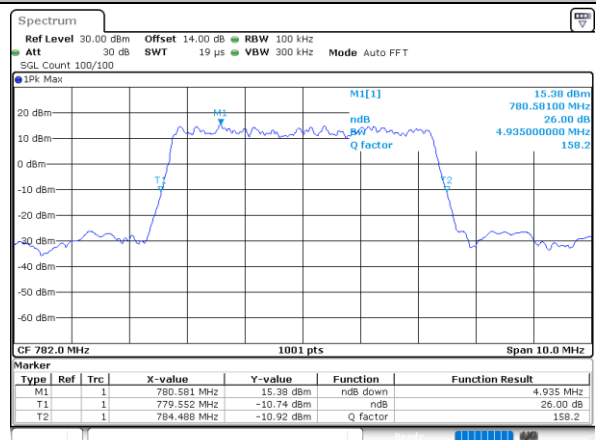
Mode	LTE Band 13 : 26dB BW(MHz)							
BW	-		-		5MHz		10MHz	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.88	4.94	9.85	9.87

LTE Band 13

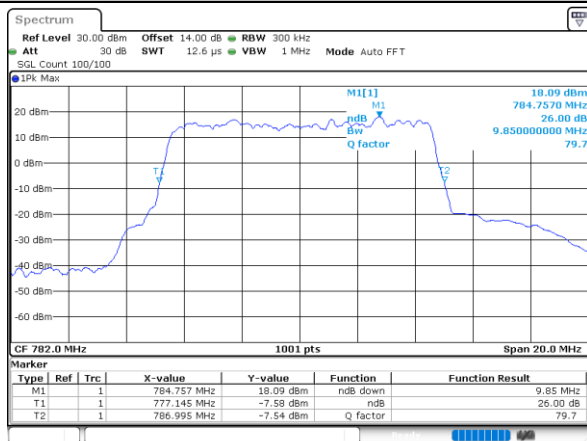
Middle Channel / 5MHz / QPSK



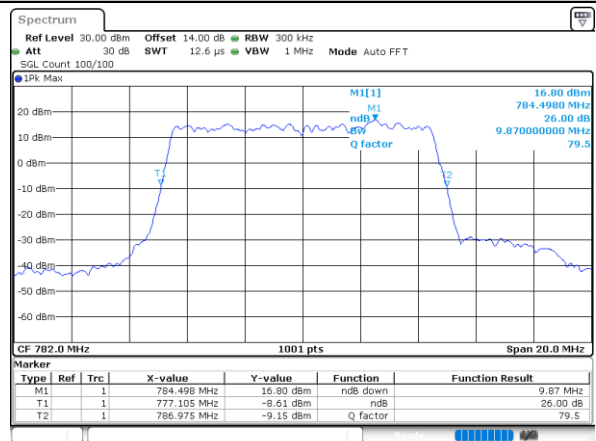
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



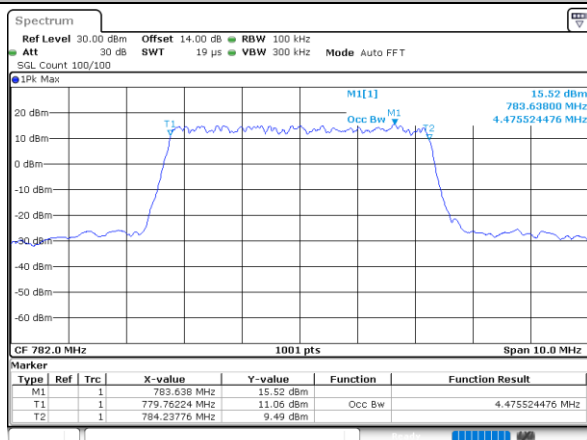


Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)							
BW	-		-		5MHz		10MHz	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.48	8.99	9.01

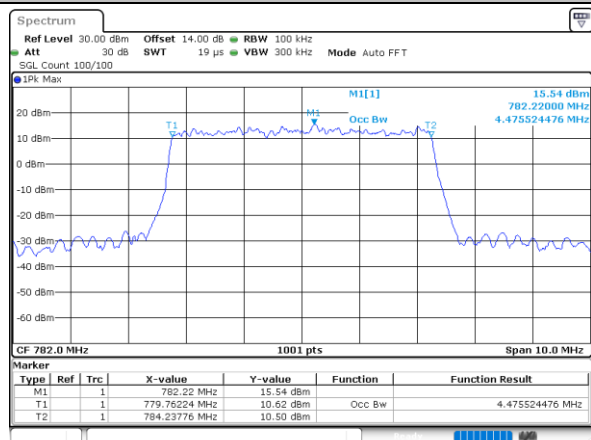
LTE Band 13

Middle Channel / 5MHz / QPSK



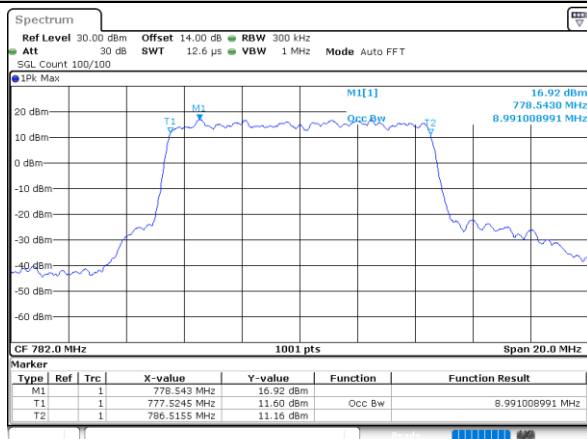
Date: 22_AUG_2024 02:49:38

Middle Channel / 5MHz / 16QAM



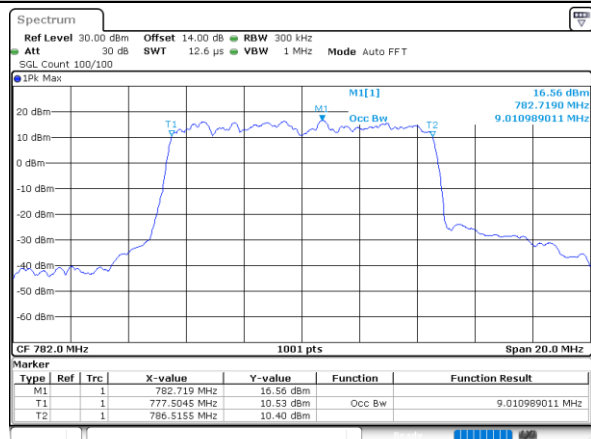
Date: 22_AUG_2024 02:50:18

Middle Channel / 10MHz / QPSK



Date: 22_AUG_2024 03:07:39

Middle Channel / 10MHz / 16QAM



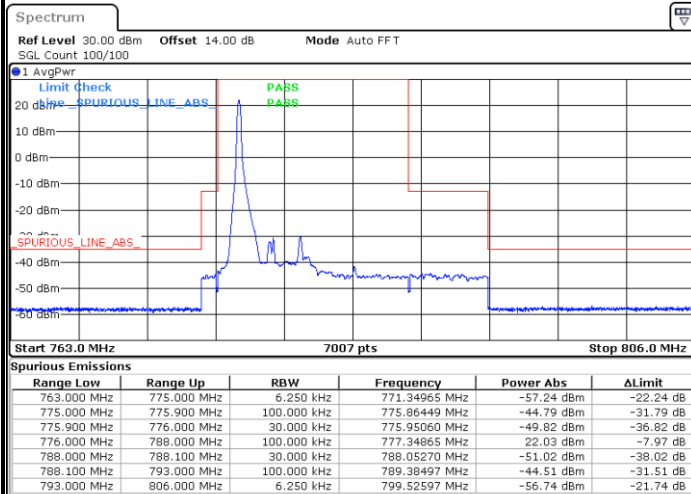
Date: 22_AUG_2024 03:08:18



Conducted Band Edge

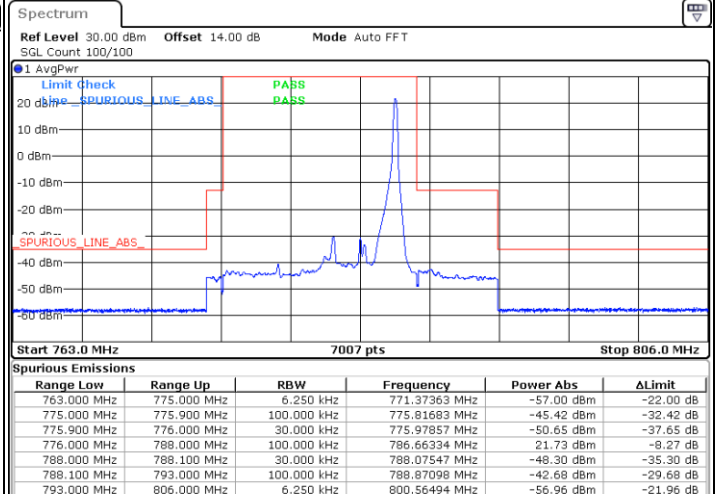
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



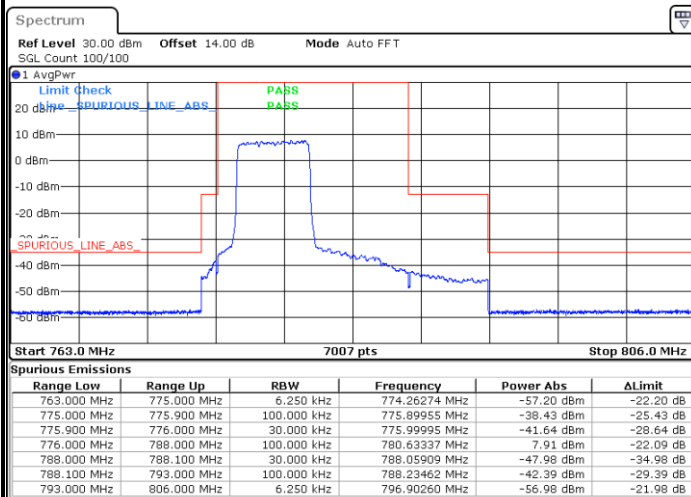
Date: 22.AUG.2024 02:43:11

Highest Band Edge / 1 RB



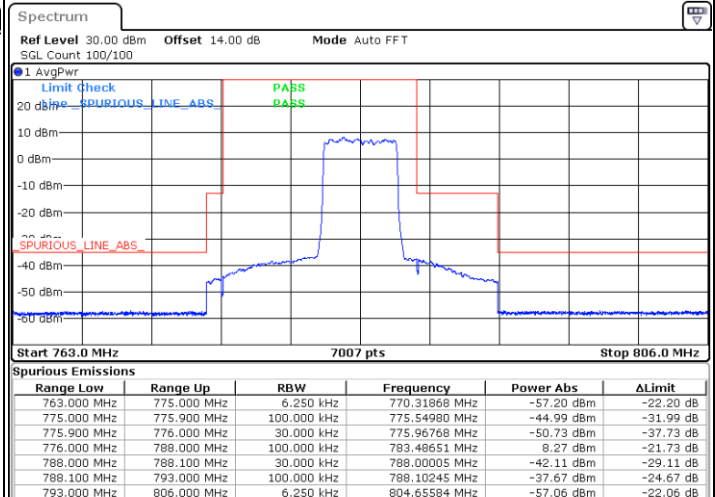
Date: 22.AUG.2024 02:51:21

Lowest Band Edge / Full RB



Date: 22.AUG.2024 02:45:43

Highest Band Edge / Full RB

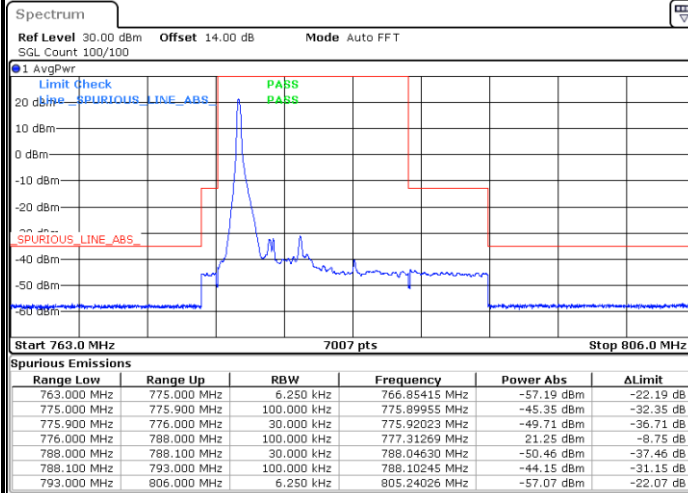


Date: 22.AUG.2024 02:53:53



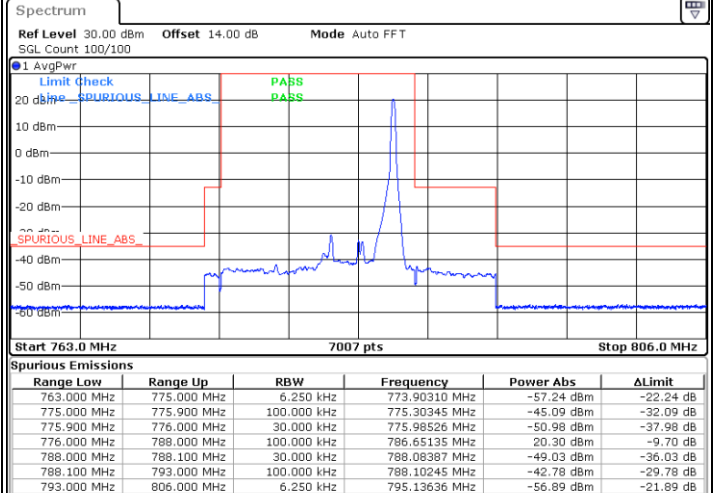
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



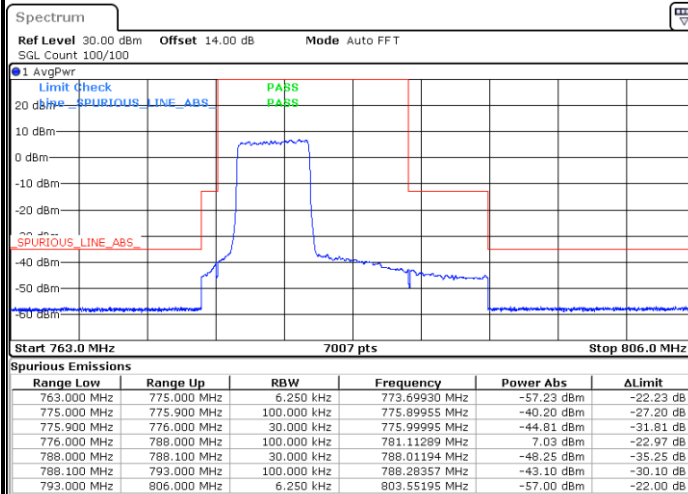
Date: 22.AUG.2024 02:44:02

Highest Band Edge / 1 RB



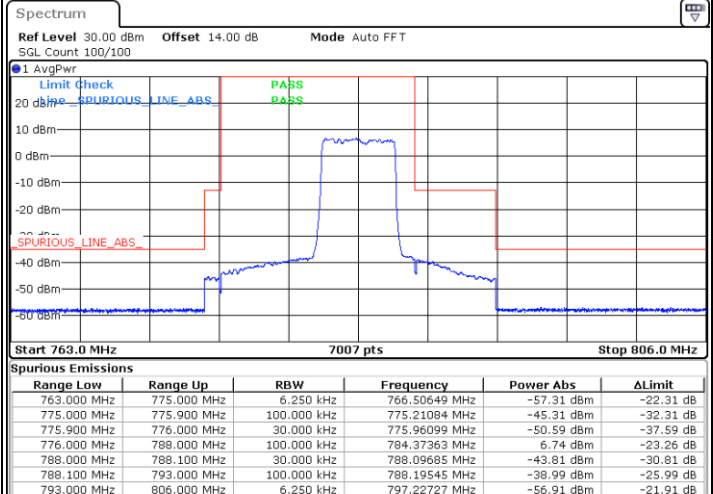
Date: 22.AUG.2024 02:52:12

Lowest Band Edge / Full RB



Date: 22.AUG.2024 02:46:33

Highest Band Edge / Full RB

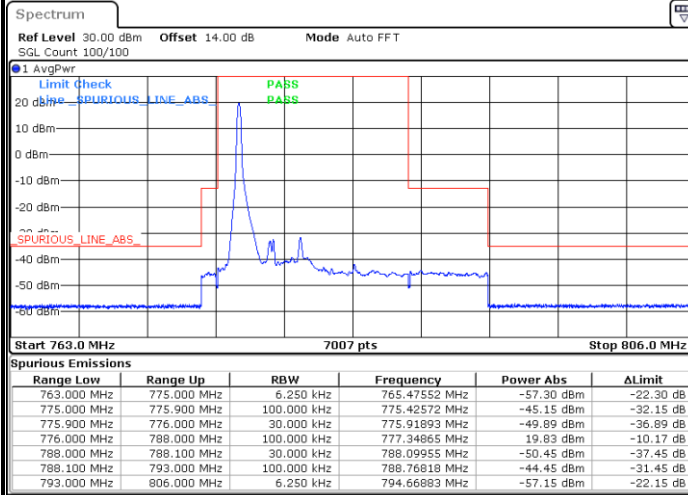


Date: 22.AUG.2024 02:54:44



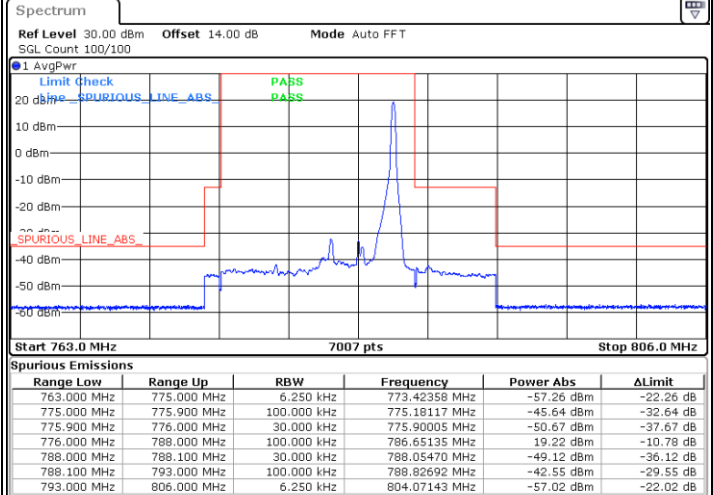
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



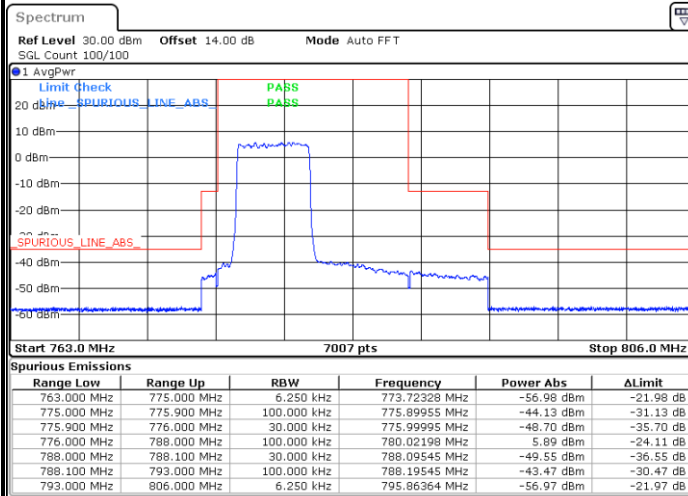
Date: 22.AUG.2024 02:44:52

Highest Band Edge / 1 RB



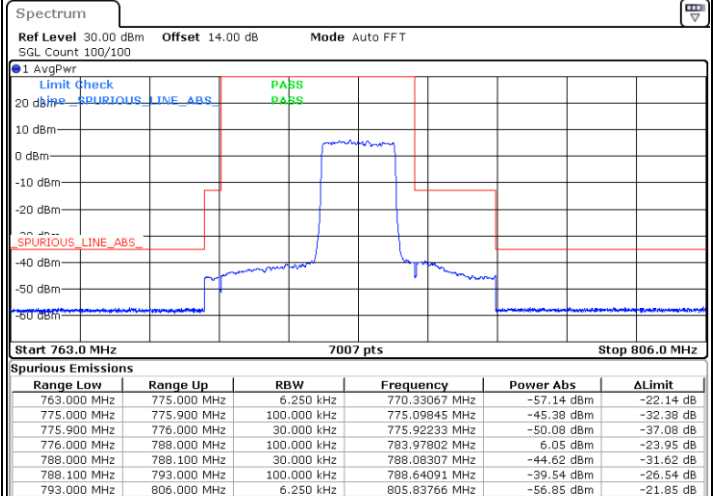
Date: 22.AUG.2024 02:53:02

Lowest Band Edge / Full RB



Date: 22.AUG.2024 02:47:24

Highest Band Edge / Full RB

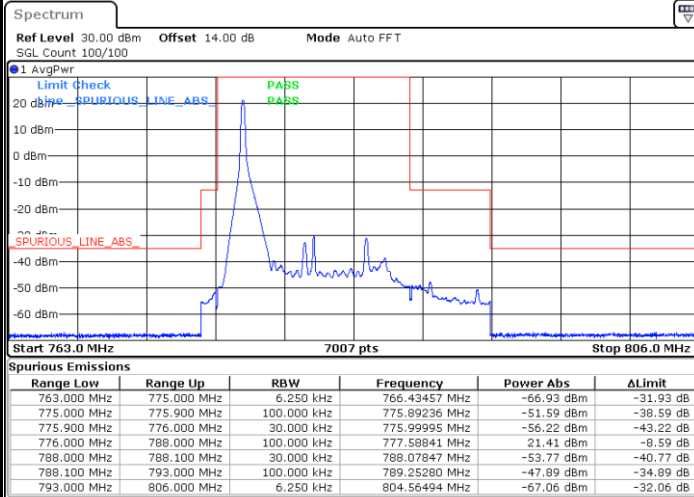


Date: 22.AUG.2024 02:53:34



LTE Band 13 / 10MHz / QPSK

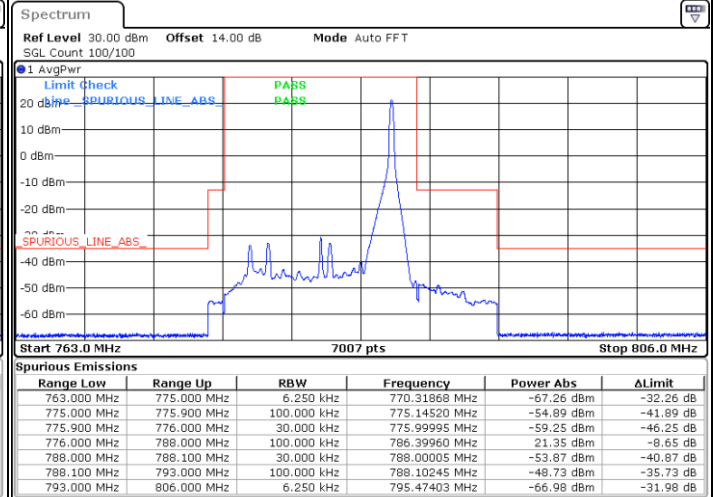
Band Edge / 1 RB



Date: 22.AUG.2024 02:59:39

LTE Band 13 / 10MHz / QPSK

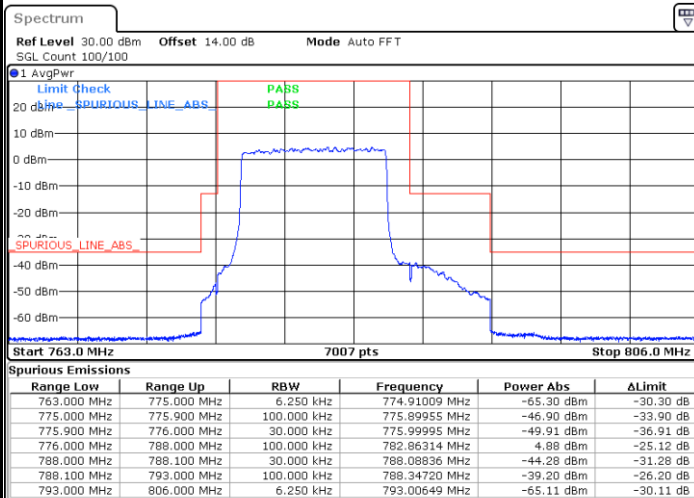
Band Edge / 1 RB



Date: 22.AUG.2024 03:02:08

LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB



Date: 22.AUG.2024 03:04:39

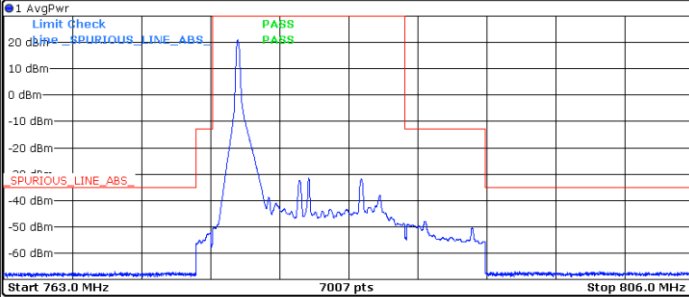
NA



LTE Band 13 / 10MHz / 16QAM

Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 14.00 dB Mode Auto FFT
SGL Count 100/100

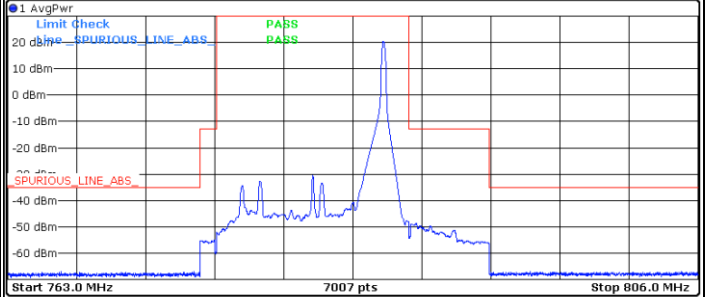
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	769.89910 MHz	-67.14 dBm	-32.14 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-52.17 dBm	-39.17 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99995 MHz	-56.40 dBm	-43.40 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.57642 MHz	20.87 dBm	-9.13 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-53.72 dBm	-40.72 dB
788.100 MHz	793.000 MHz	100.000 kHz	789.23322 MHz	-48.06 dBm	-35.06 dB
793.000 MHz	806.000 MHz	6.250 kHz	800.12338 MHz	-66.99 dBm	-31.99 dB

Date: 22.AUG.2024 03:00:28

LTE Band 13 / 10MHz / 16QAM

Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 14.00 dB Mode Auto FFT
SGL Count 100/100

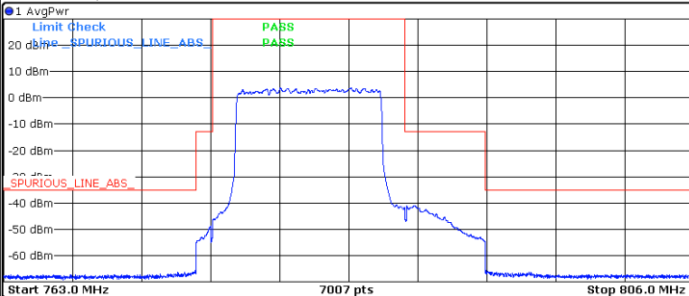
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	766.32667 MHz	-67.07 dBm	-32.07 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89865 MHz	-54.97 dBm	-41.97 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90005 MHz	-58.92 dBm	-45.92 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.38761 MHz	20.42 dBm	-9.58 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.09995 MHz	-53.23 dBm	-40.23 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.44510 MHz	-48.59 dBm	-35.59 dB
793.000 MHz	806.000 MHz	6.250 kHz	804.96753 MHz	-67.04 dBm	-32.04 dB

Date: 22.AUG.2024 03:02:59

LTE Band 13 / 10MHz / 16QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 14.00 dB Mode Auto FFT
SGL Count 100/100

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.89810 MHz	-65.72 dBm	-30.72 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-49.77 dBm	-35.77 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99995 MHz	-53.37 dBm	-40.37 dB
776.000 MHz	788.000 MHz	100.000 kHz	784.63736 MHz	3.84 dBm	-26.16 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.08227 MHz	-46.20 dBm	-33.20 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.58217 MHz	-41.09 dBm	-28.09 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.05844 MHz	-65.55 dBm	-30.55 dB

Date: 22.AUG.2024 03:05:29

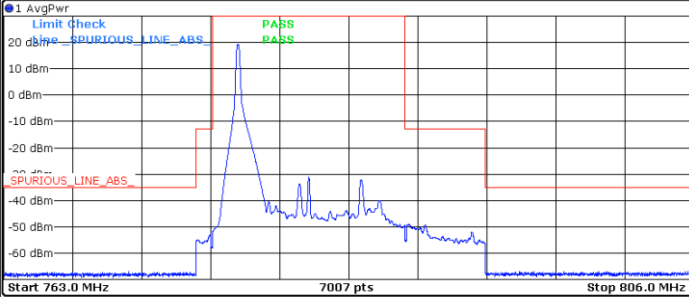
NA



LTE Band 13 / 10MHz / 64QAM

Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 14.00 dB Mode Auto FFT
SGL Count 100/100

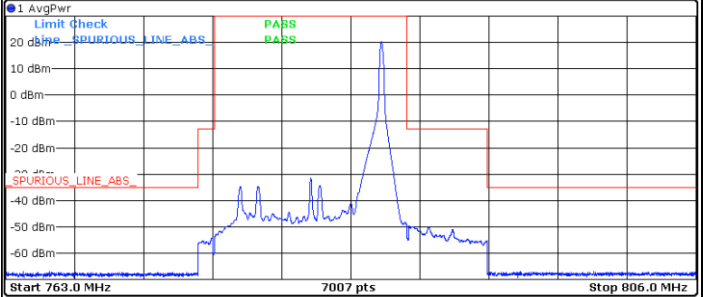
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.77423 MHz	-66.99 dBm	-31.99 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-52.82 dBm	-39.82 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96750 MHz	-57.66 dBm	-44.66 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.58841 MHz	19.27 dBm	-10.73 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.09995 MHz	-54.96 dBm	-41.96 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.23951 MHz	-49.20 dBm	-36.20 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.13636 MHz	-66.91 dBm	-31.91 dB

Date: 22.AUG.2024 03:01:18

LTE Band 13 / 10MHz / 64QAM

Band Edge / 1 RB

Spectrum

Ref Level 30.00 dBm Offset 14.00 dB Mode Auto FFT
SGL Count 100/100

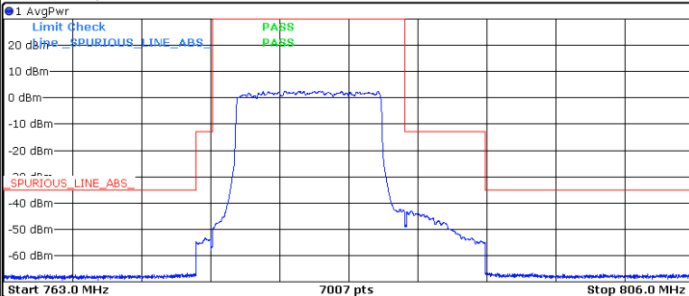
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	764.07293 MHz	-67.10 dBm	-32.10 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.84381 MHz	-54.37 dBm	-41.37 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99995 MHz	-60.01 dBm	-47.01 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.38761 MHz	20.22 dBm	-9.78 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-54.11 dBm	-41.11 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10245 MHz	-49.72 dBm	-36.72 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.08442 MHz	-66.99 dBm	-31.99 dB

Date: 22.AUG.2024 03:03:48

LTE Band 13 / 10MHz / 64QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 14.00 dB Mode Auto FFT
SGL Count 100/100

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.45455 MHz	-66.80 dBm	-31.80 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.55969 MHz	-53.49 dBm	-40.49 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99995 MHz	-56.33 dBm	-43.33 dB
776.000 MHz	788.000 MHz	100.000 kHz	782.86314 MHz	2.58 dBm	-27.42 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05509 MHz	-48.49 dBm	-35.49 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.40594 MHz	-43.06 dBm	-30.06 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.08442 MHz	-66.58 dBm	-31.58 dB

Date: 22.AUG.2024 03:06:19

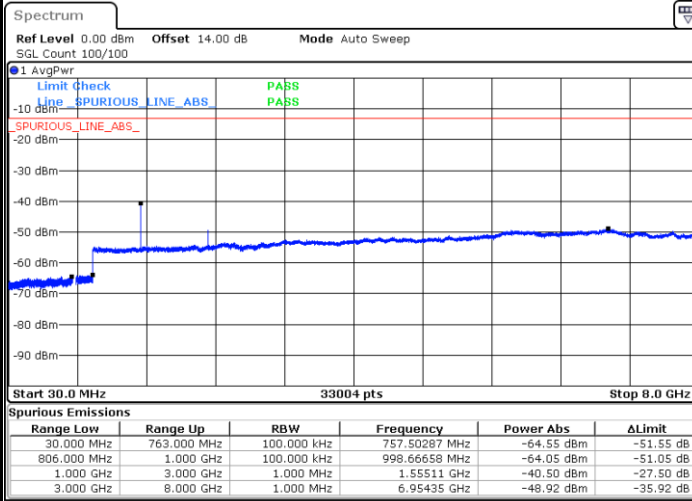
NA



Conducted Spurious Emission

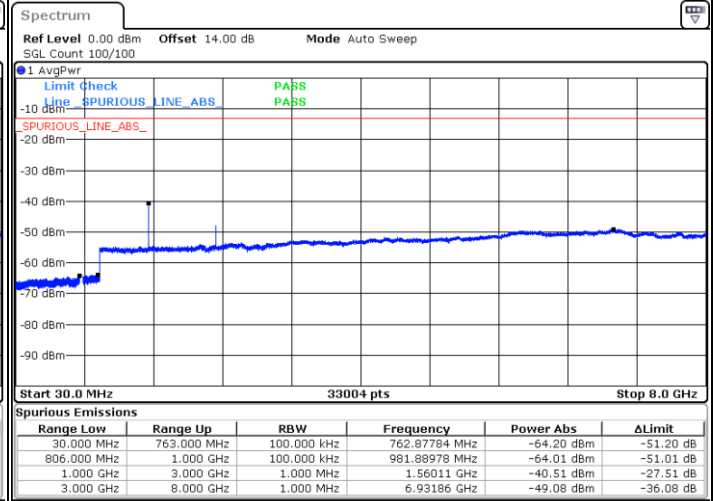
LTE Band 13 / 5MHz

Lowest Channel / QPSK



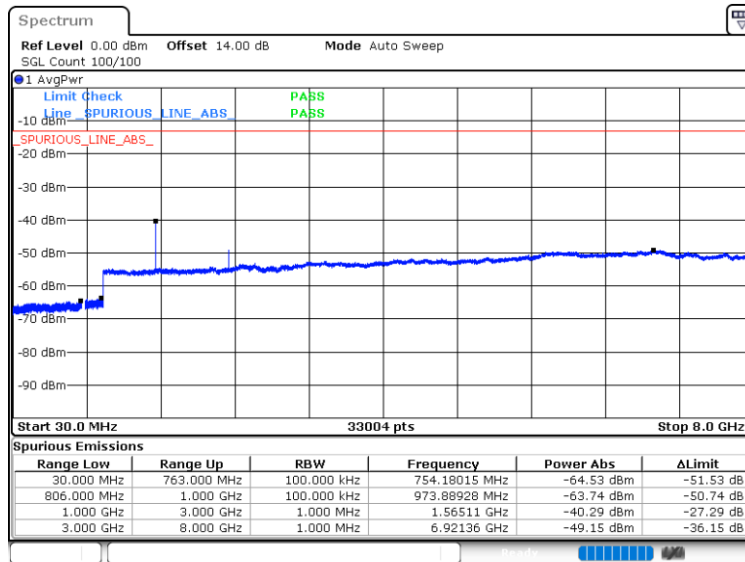
Date: 22.AUG.2024 02:48:19

Middle Channel / QPSK



Date: 22.AUG.2024 02:49:13

Highest Channel / QPSK

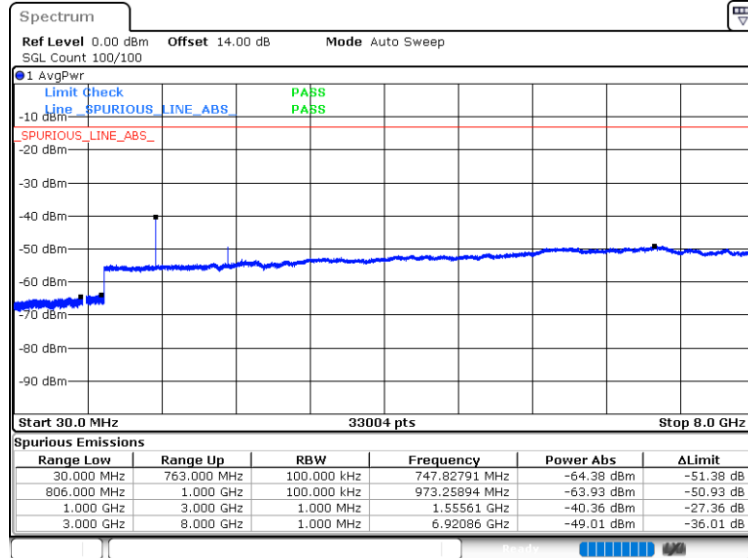


Date: 22.AUG.2024 02:56:29



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 22.AUG.2024 03:07:13

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	0.0176	PASS
40	Normal Voltage	0.0116	
30	Normal Voltage	0.0130	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0091	
0	Normal Voltage	0.0141	
-10	Normal Voltage	0.0008	
20	Maximum Voltage	0.0050	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0020	

Note:

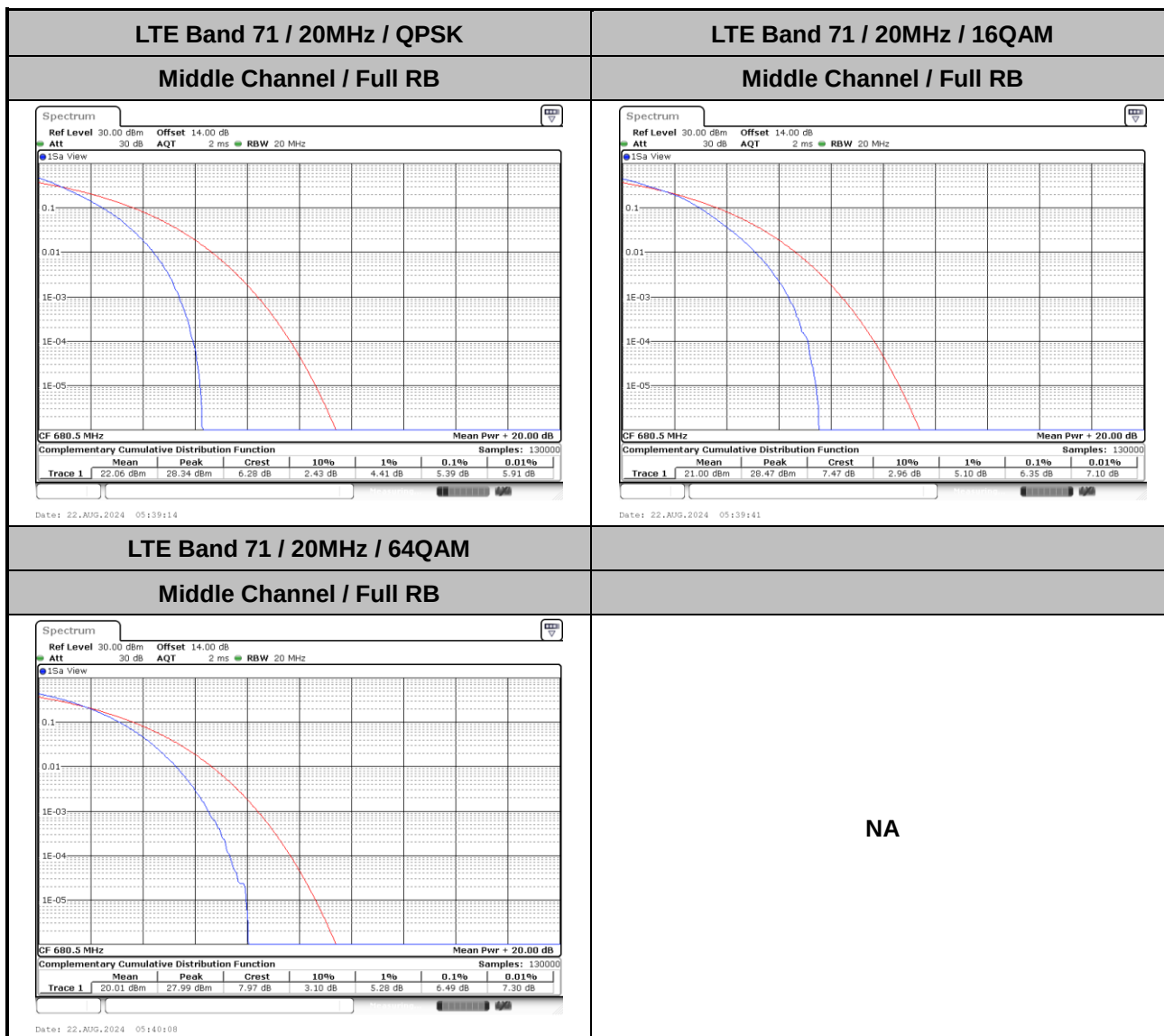
1. Normal Voltage =3.8V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 71

Peak-to-Average Ratio

Mode	LTE Band 71 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.39	6.35	6.49	PASS



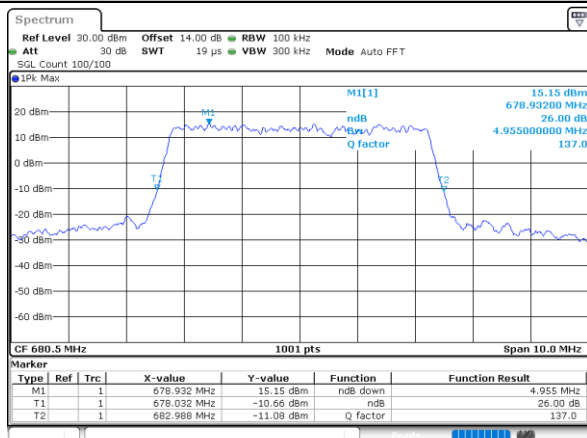


26dB Bandwidth

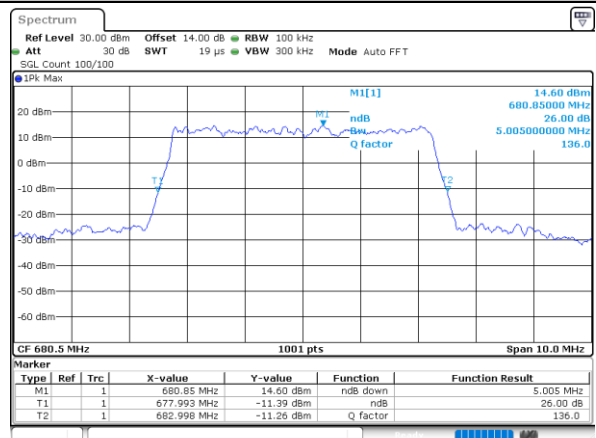
Mode	LTE Band 71 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.96	5.01	9.79	9.71	14.36	14.36	19.14	19.02

LTE Band 71

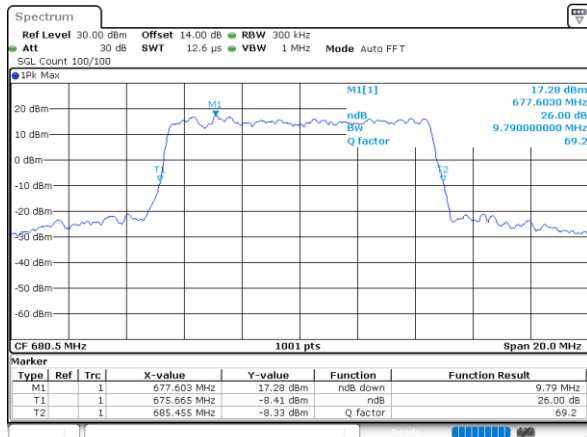
Middle Channel / 5MHz / QPSK



Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

