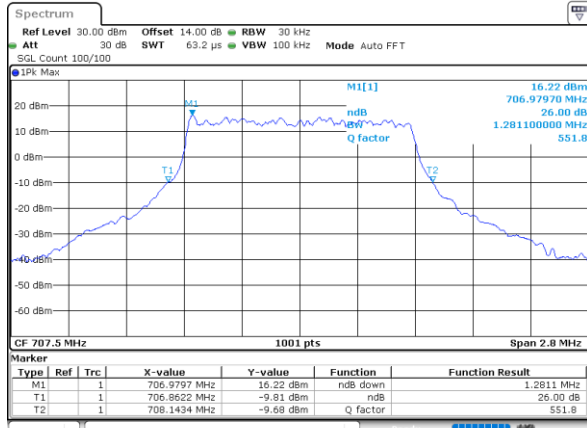




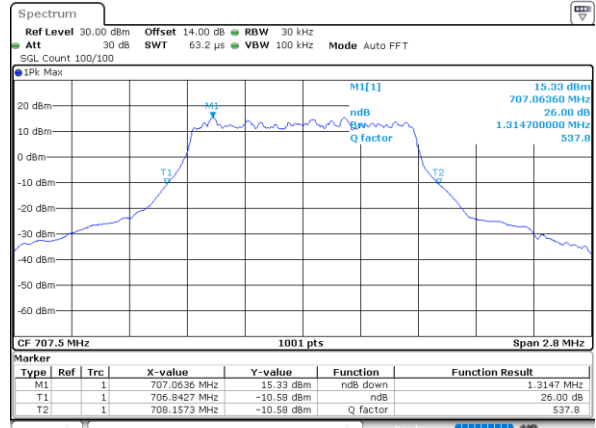
LTE Band 12

Middle Channel / 1.4MHz / QPSK



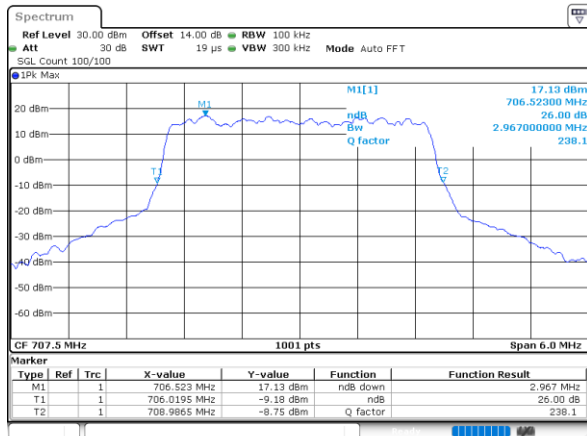
Date: 11.APR.2024 00:42:16

Middle Channel / 1.4MHz / 16QAM



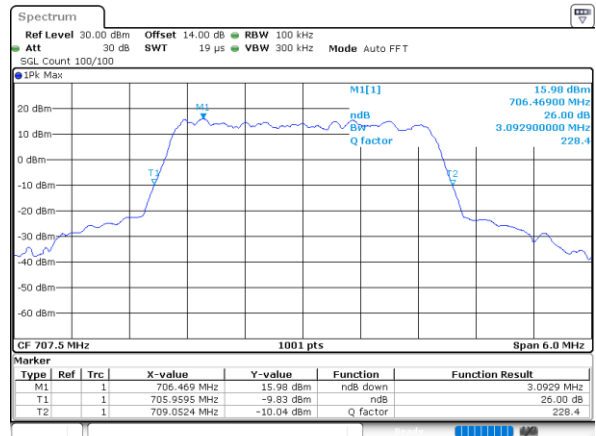
Date: 11.APR.2024 00:42:58

Middle Channel / 3MHz / QPSK



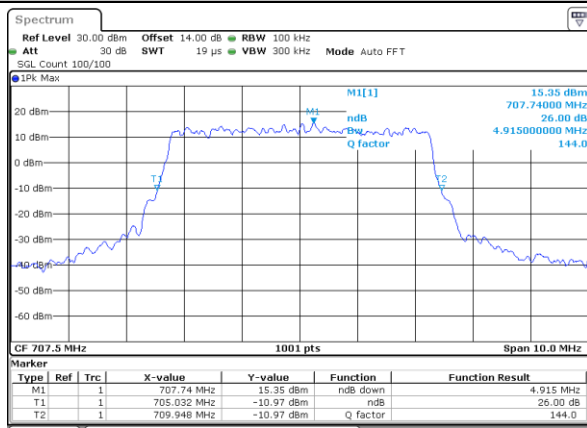
Date: 11.APR.2024 01:00:15

Middle Channel / 3MHz / 16QAM



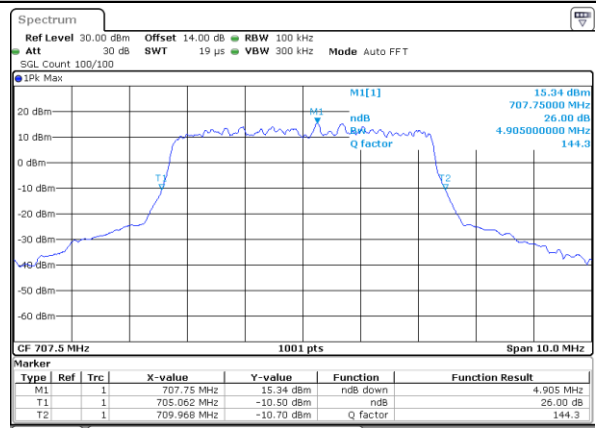
Date: 11.APR.2024 01:00:57

Middle Channel / 5MHz / QPSK



Date: 11.APR.2024 01:18:12

Middle Channel / 5MHz / 16QAM

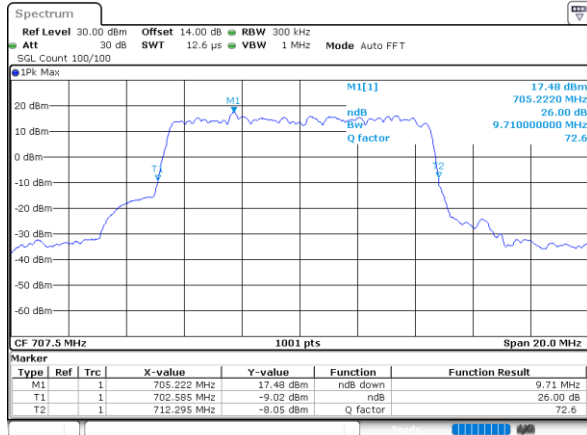


Date: 11.APR.2024 01:18:55



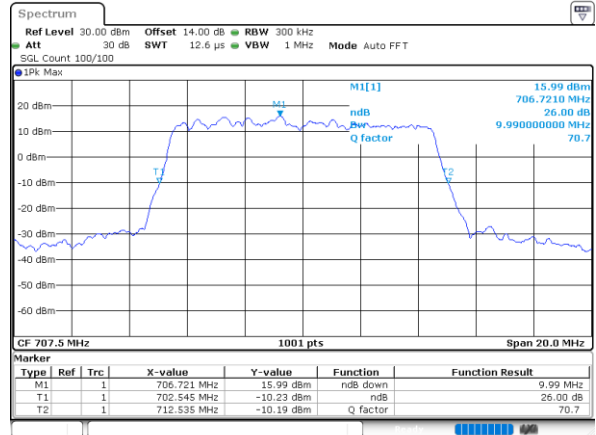
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 11.APR.2024 01:36:11

Middle Channel / 10MHz / 16QAM



Date: 11.APR.2024 01:36:54



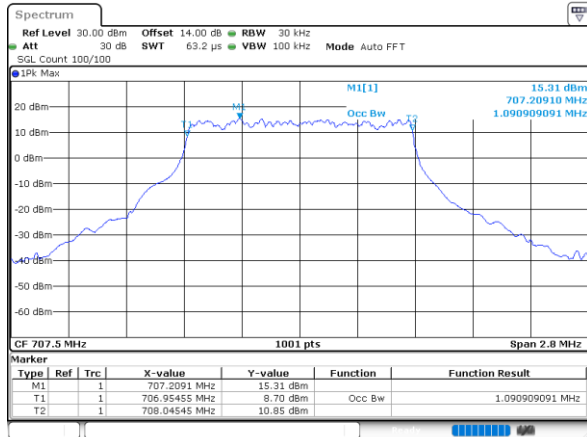
A3.3 Occupied Bandwidth

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	2.75	2.70	4.48	4.49	9.01	9.03

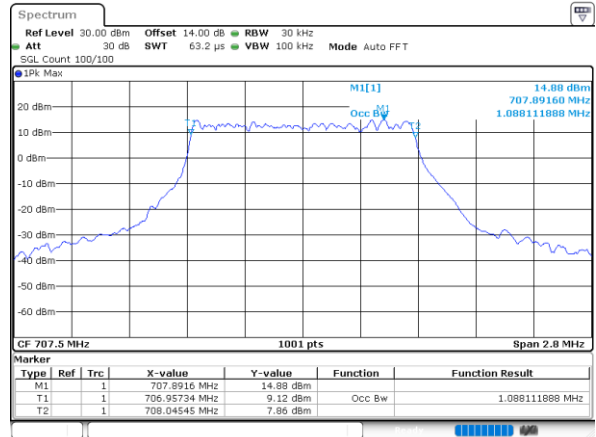


LTE Band 12

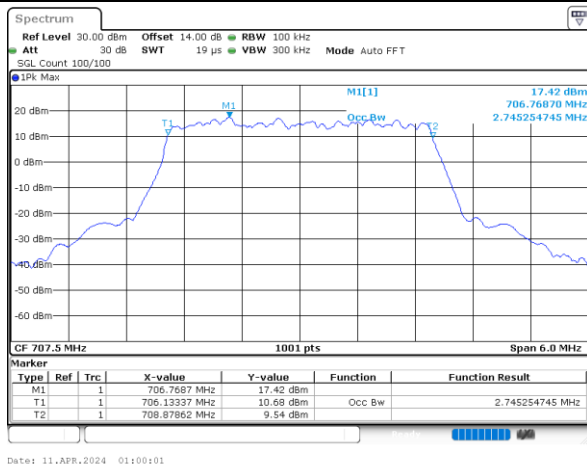
Middle Channel / 1.4MHz / QPSK



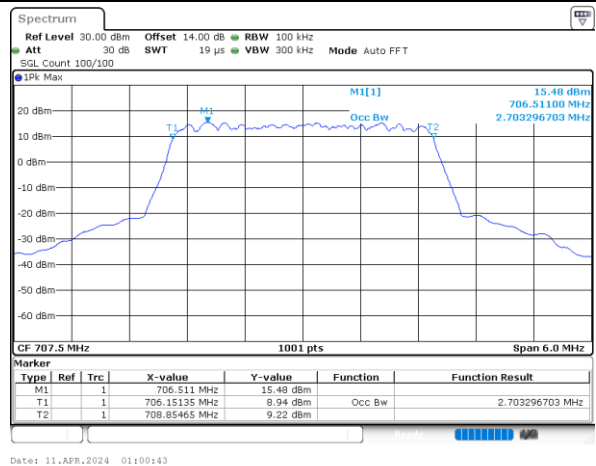
Middle Channel / 1.4MHz / 16QAM



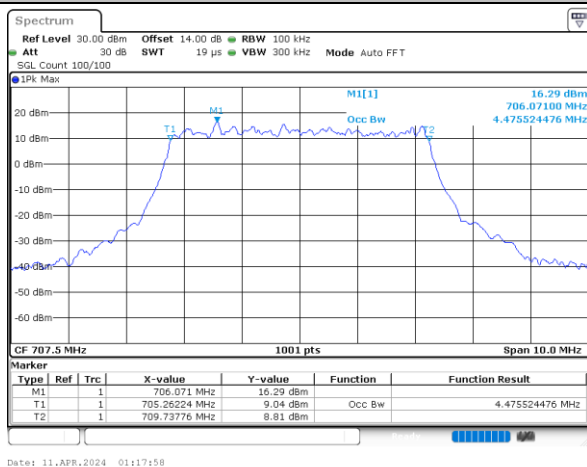
Middle Channel / 3MHz / QPSK



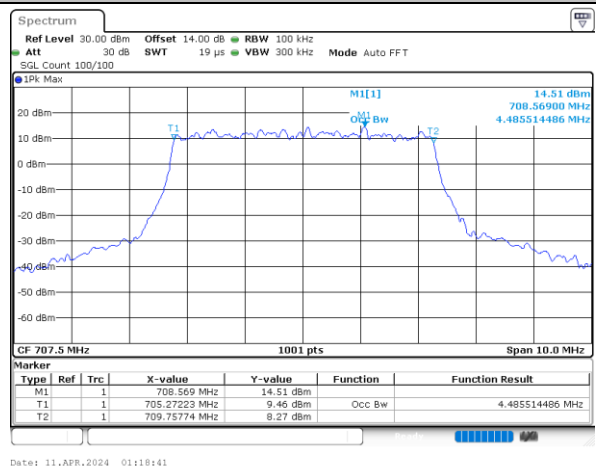
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



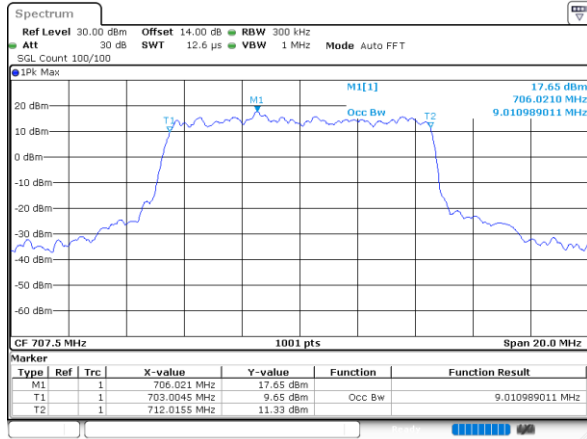
Middle Channel / 5MHz / 16QAM





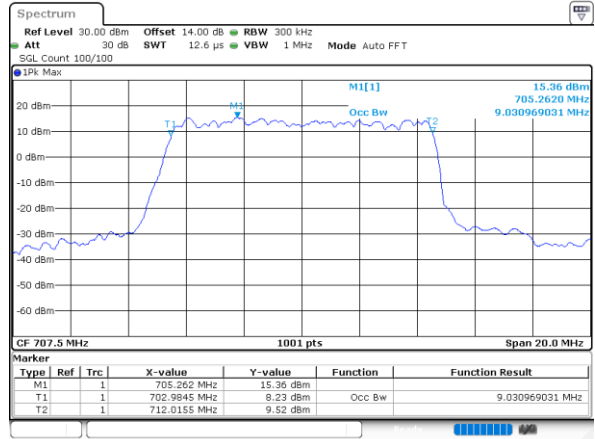
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 11.APR.2024 01:35:57

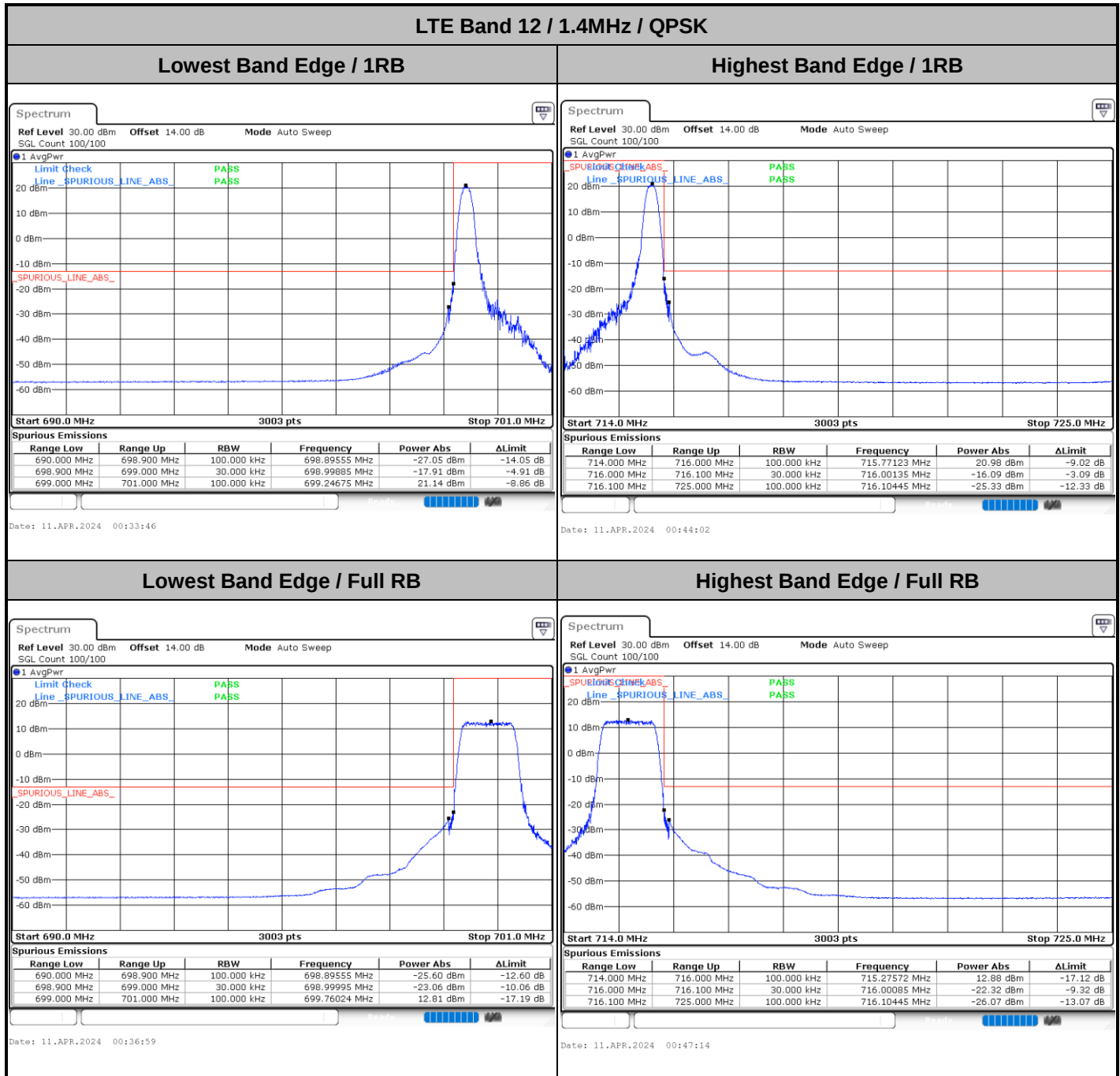
Middle Channel / 10MHz / 16QAM



Date: 11.APR.2024 01:36:40



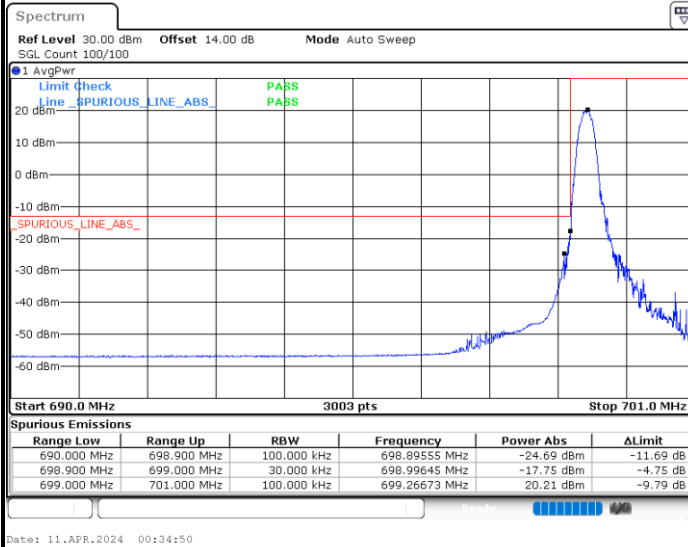
A3.4 Conducted Band Edge



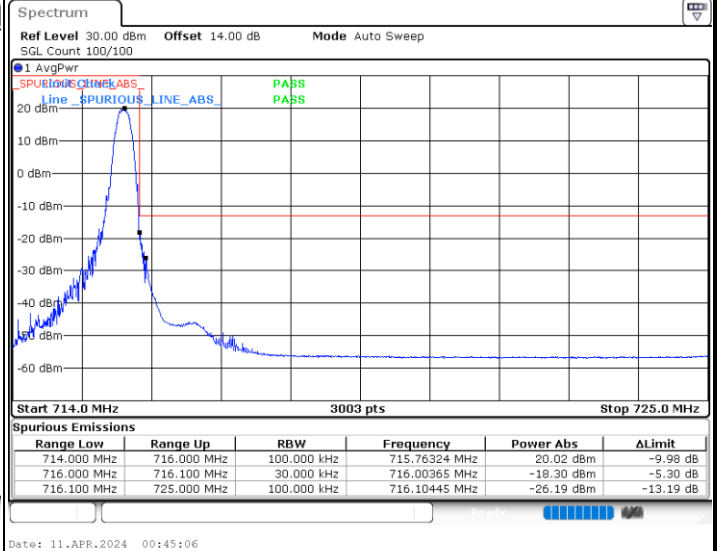


LTE Band 12 / 1.4MHz / 16QAM

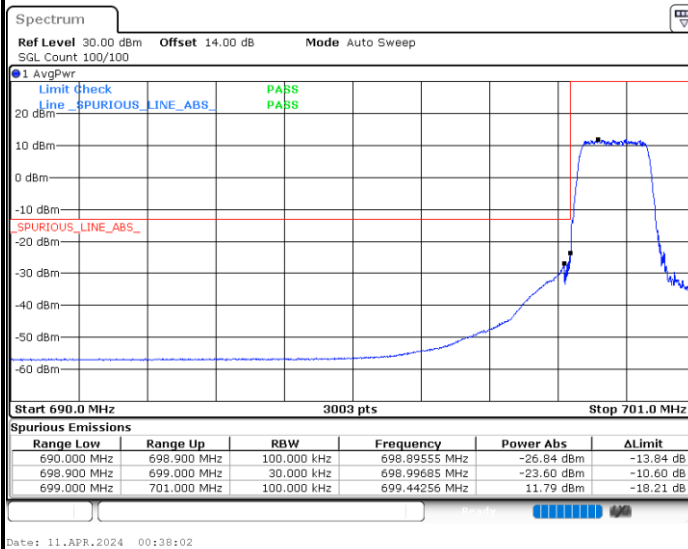
Lowest Band Edge / 1 RB



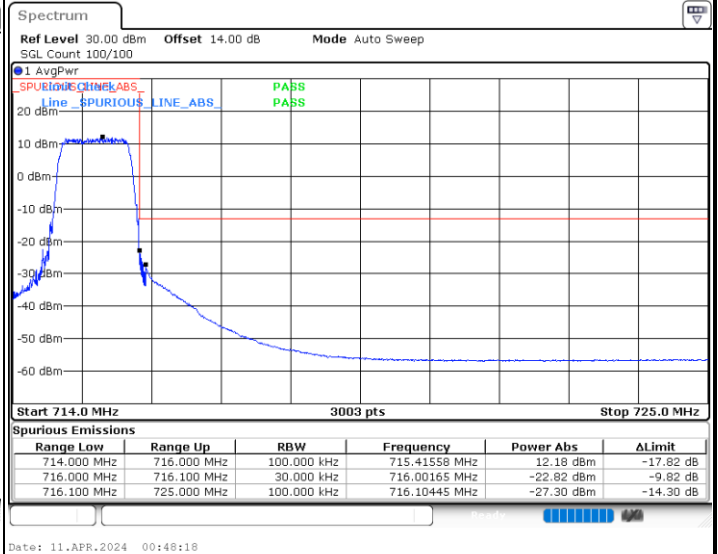
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



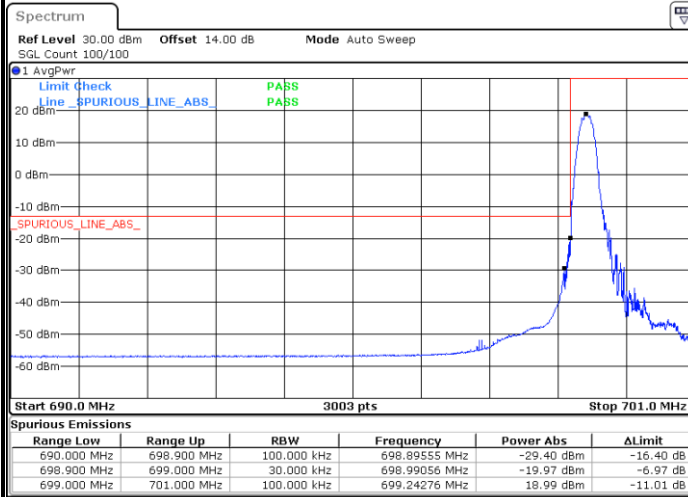
Highest Band Edge / Full RB



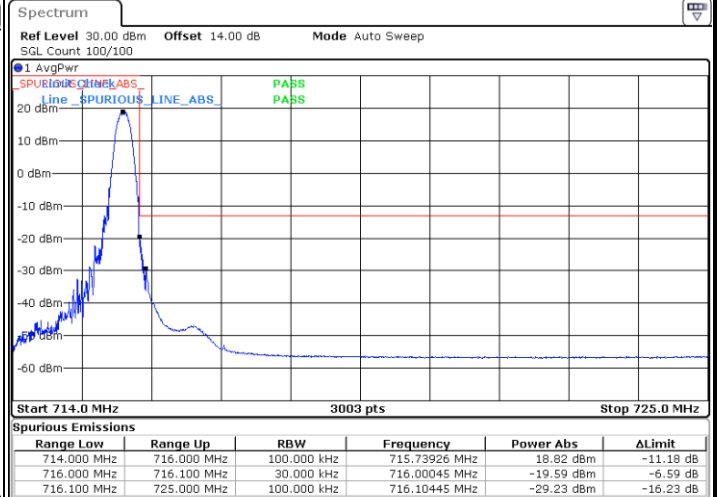


LTE Band 12 / 1.4MHz / 64QAM

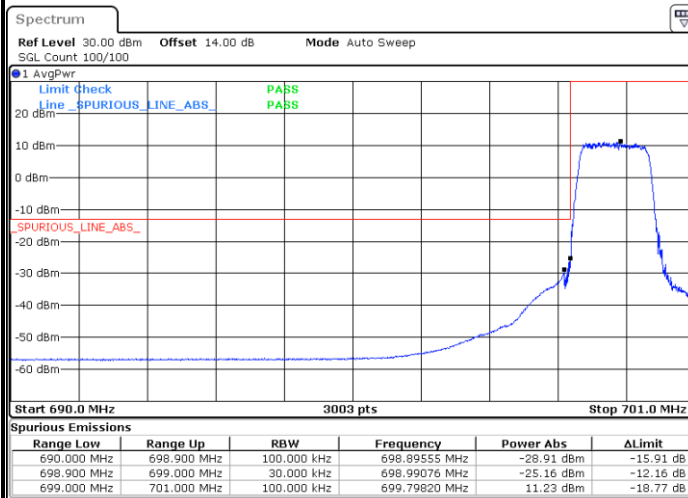
Lowest Band Edge / 1 RB



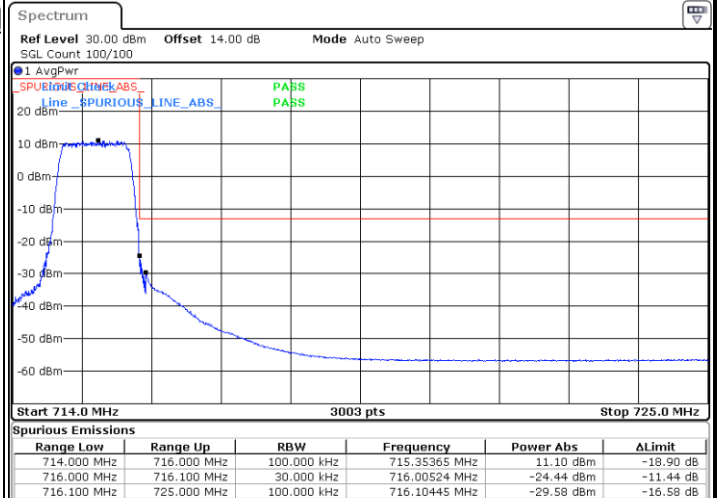
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



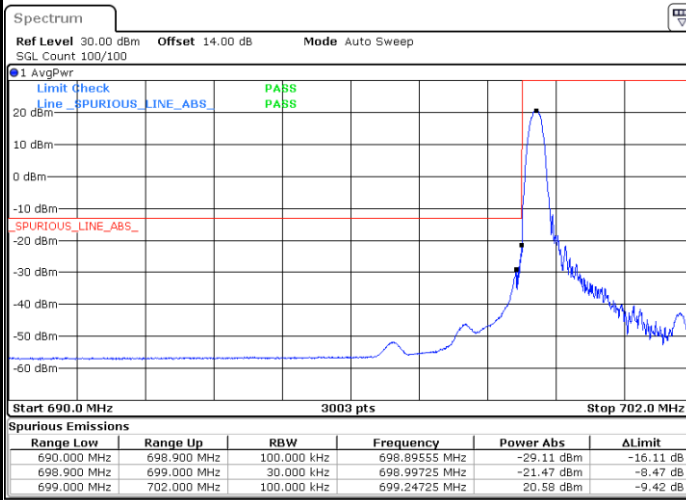
Highest Band Edge / Full RB



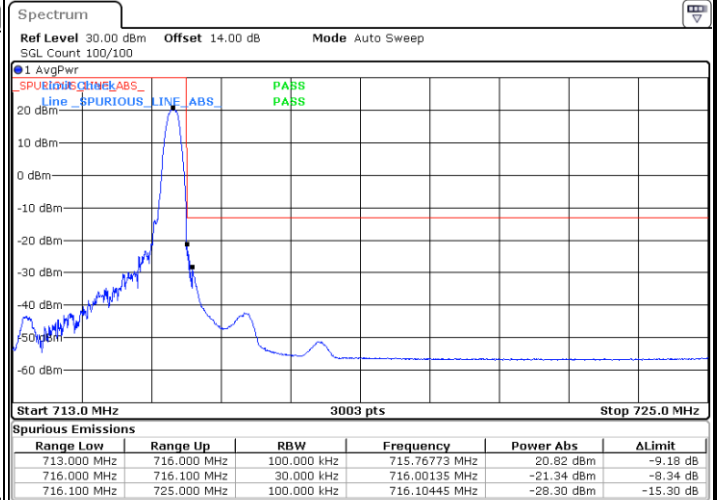


LTE Band 12 / 3MHz / QPSK

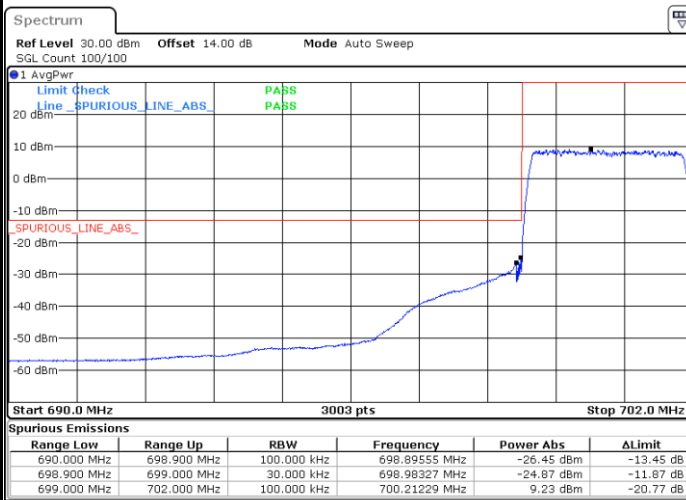
Lowest Band Edge / 1RB



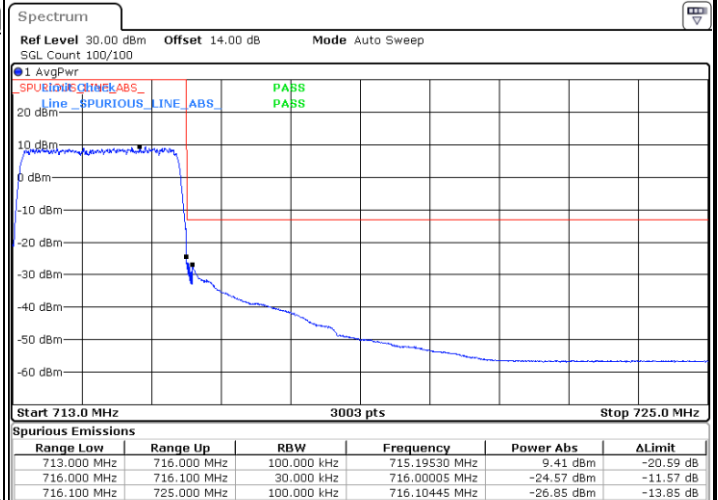
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



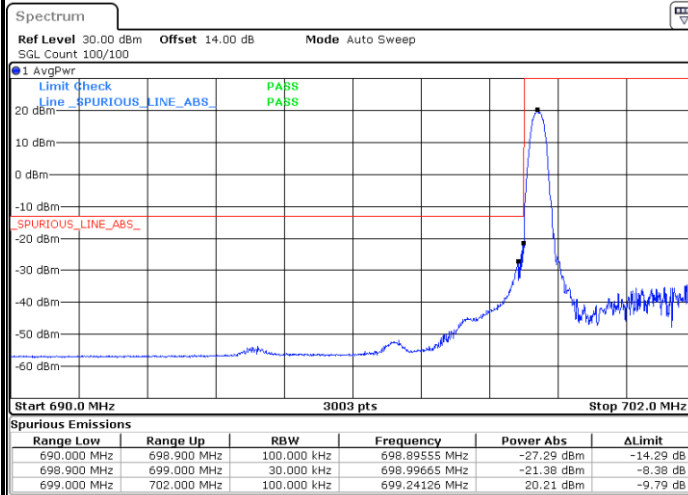
Highest Band Edge / Full RB



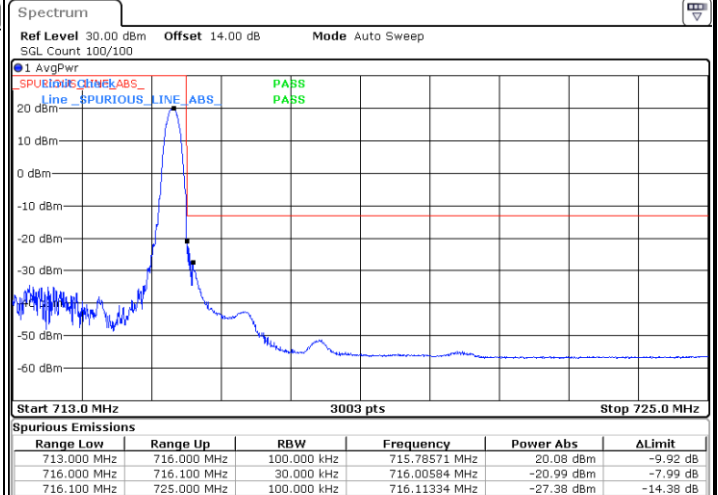


LTE Band 12 / 3MHz / 16QAM

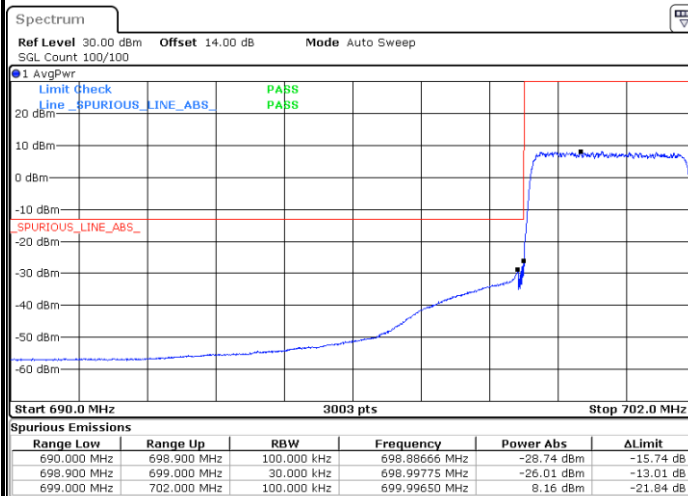
Lowest Band Edge / 1 RB



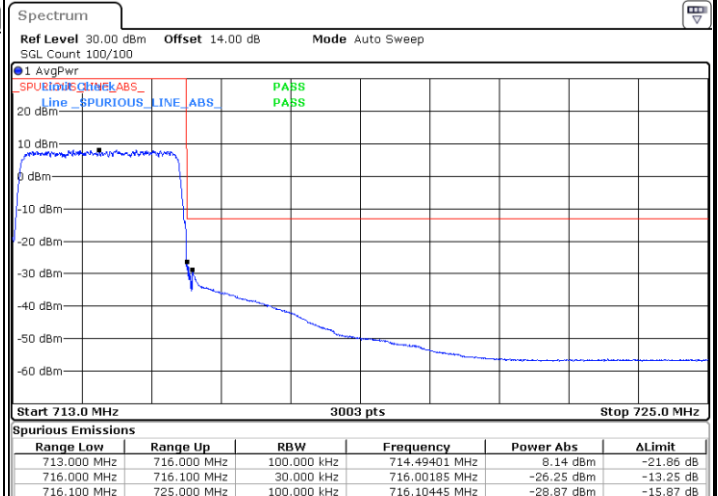
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



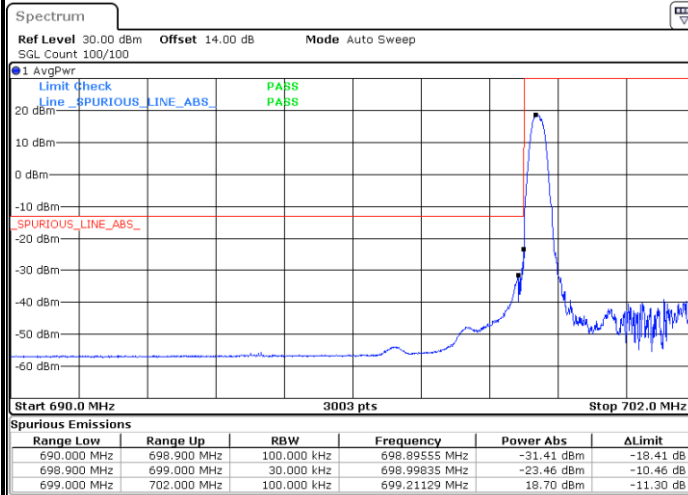
Highest Band Edge / Full RB



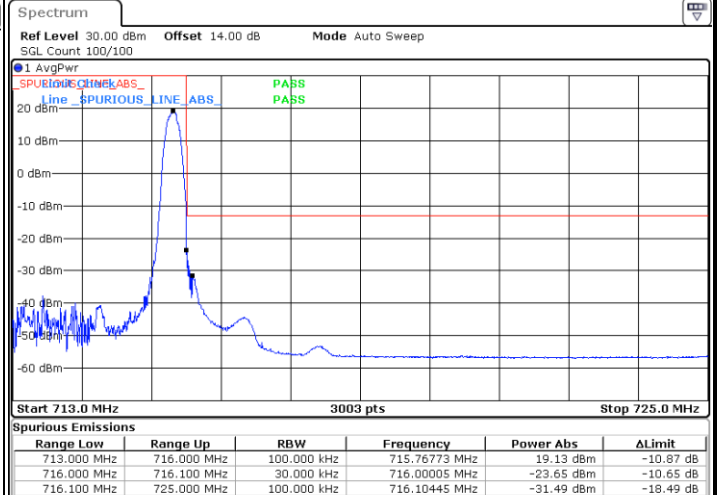


LTE Band 12 / 3MHz / 64QAM

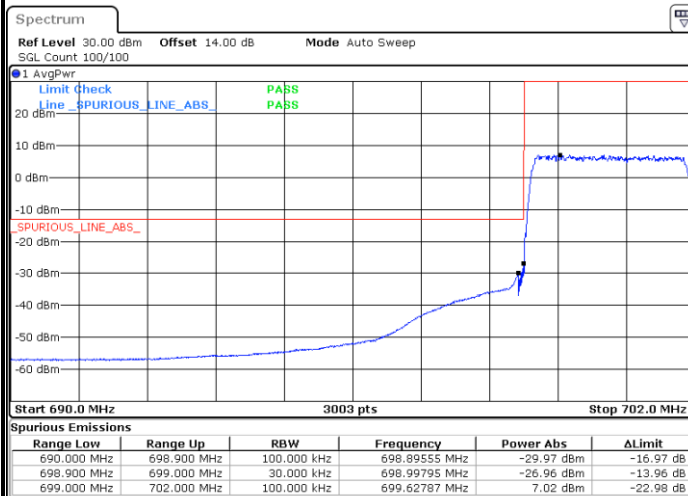
Lowest Band Edge / 1 RB



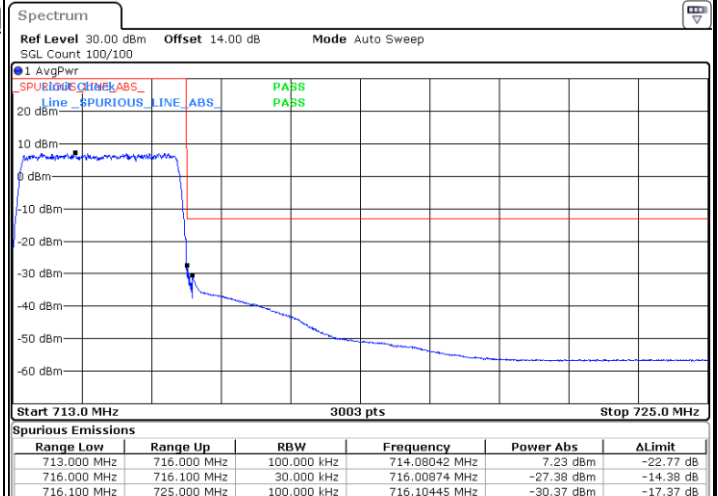
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



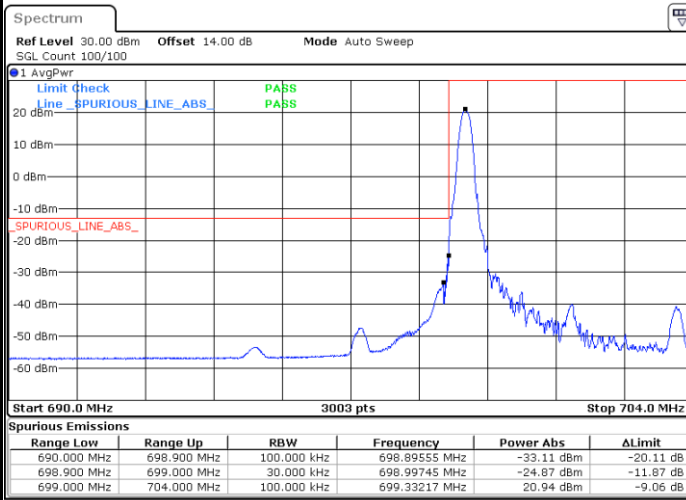
Highest Band Edge / Full RB



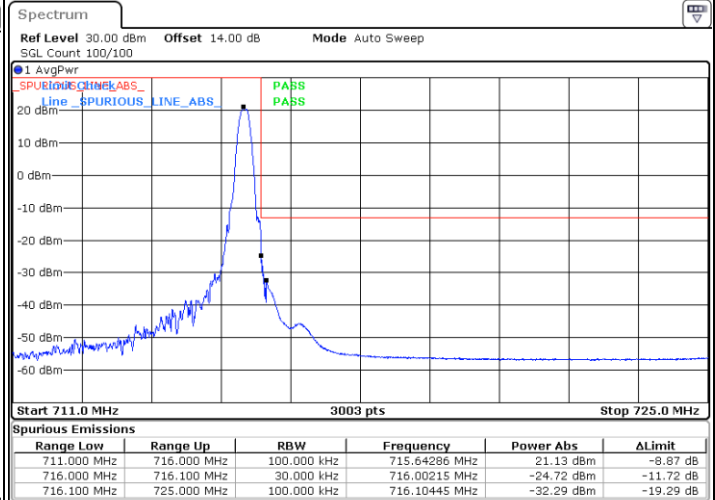


LTE Band 12 / 5MHz / QPSK

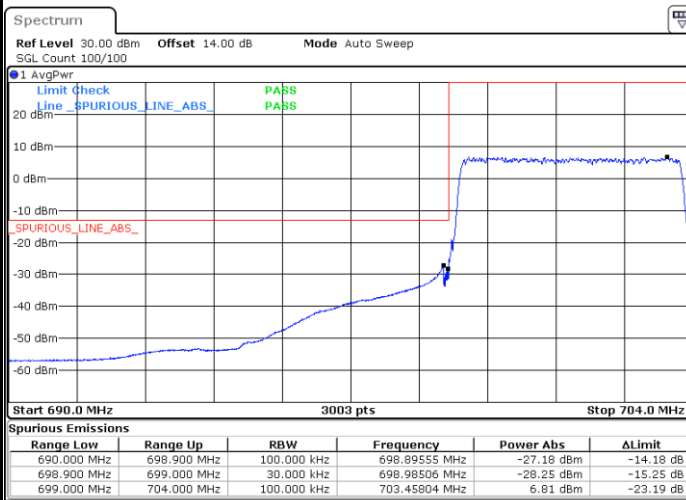
Lowest Band Edge / 1RB



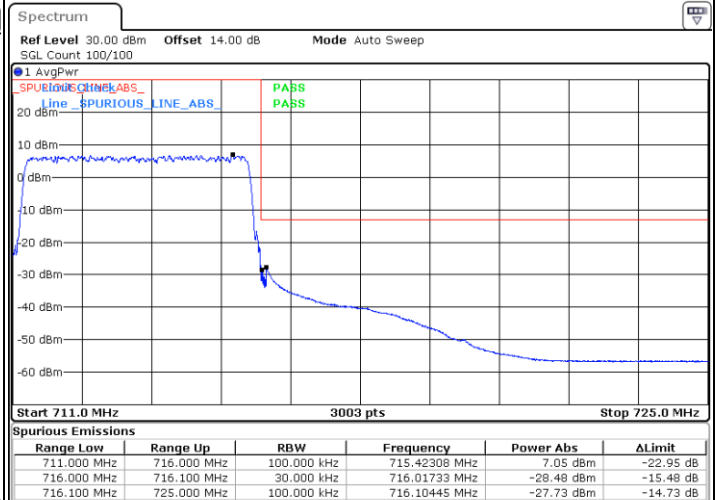
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



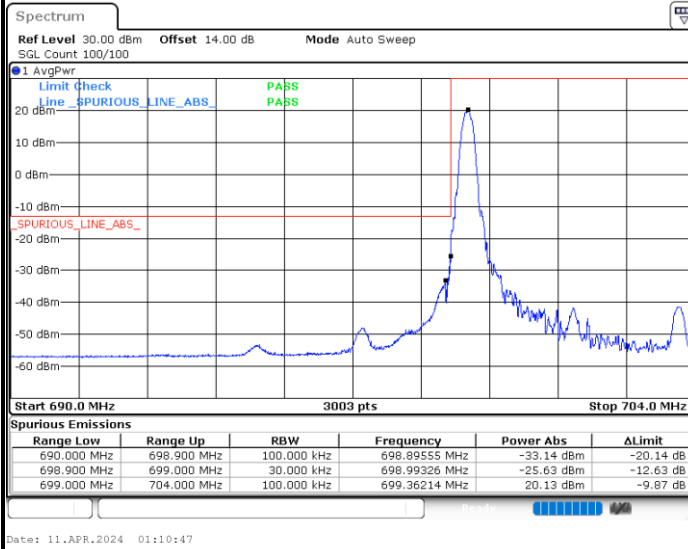
Highest Band Edge / Full RB



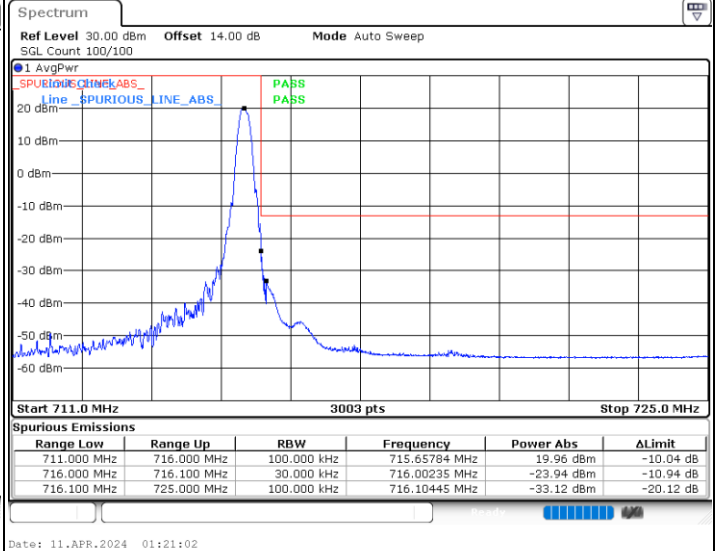


LTE Band 12 / 5MHz / 16QAM

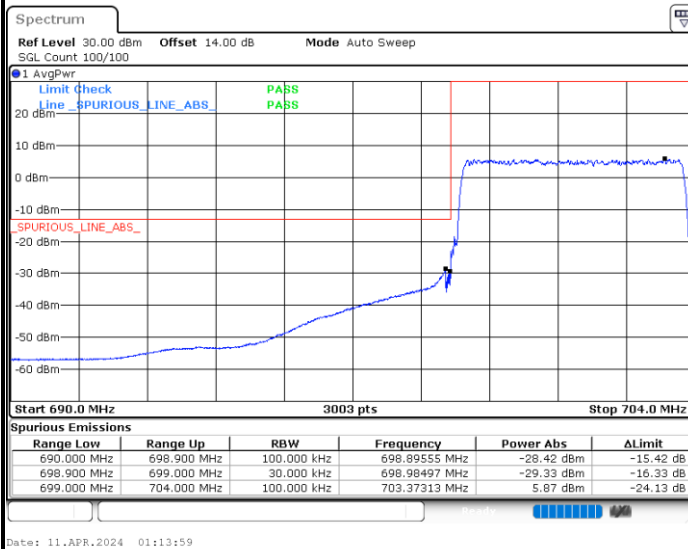
Lowest Band Edge / 1 RB



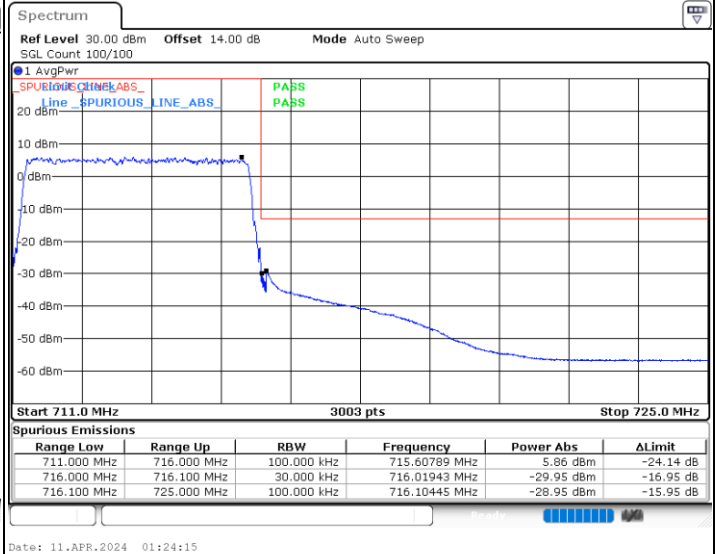
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



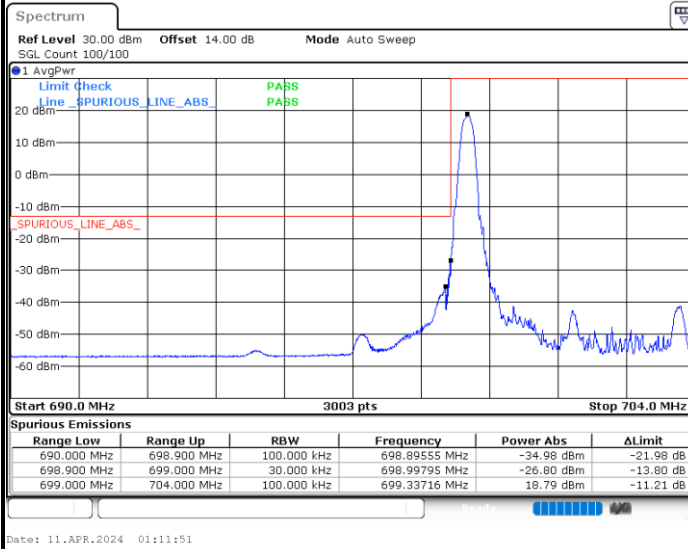
Highest Band Edge / Full RB



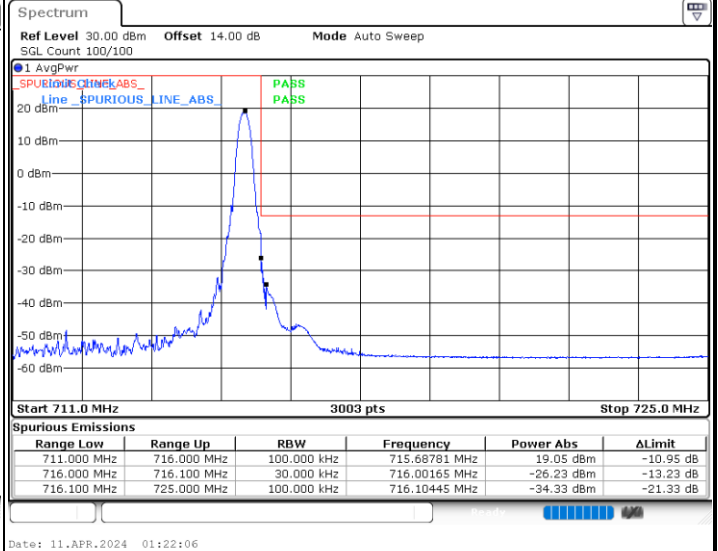


LTE Band 12 / 5MHz / 64QAM

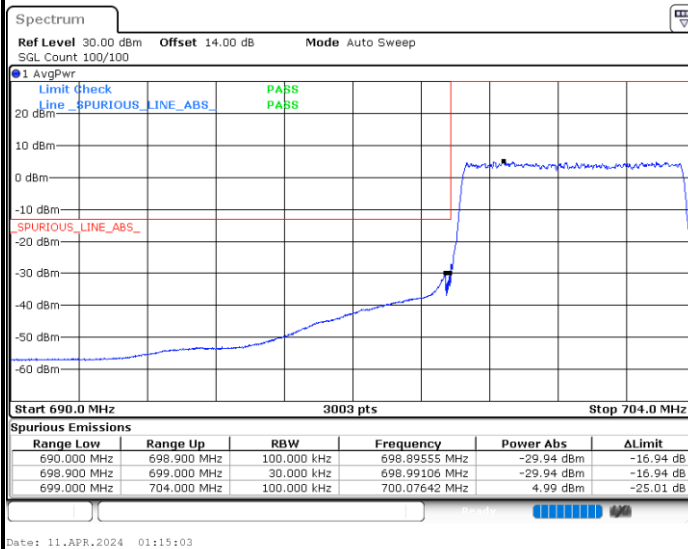
Lowest Band Edge / 1 RB



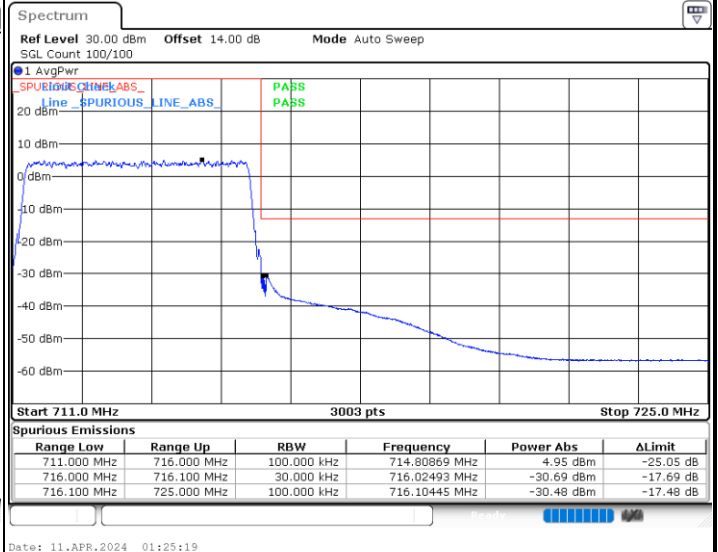
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



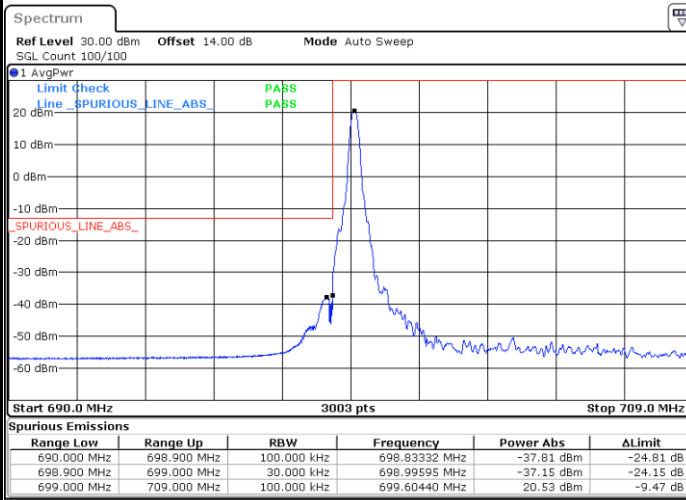
Highest Band Edge / Full RB



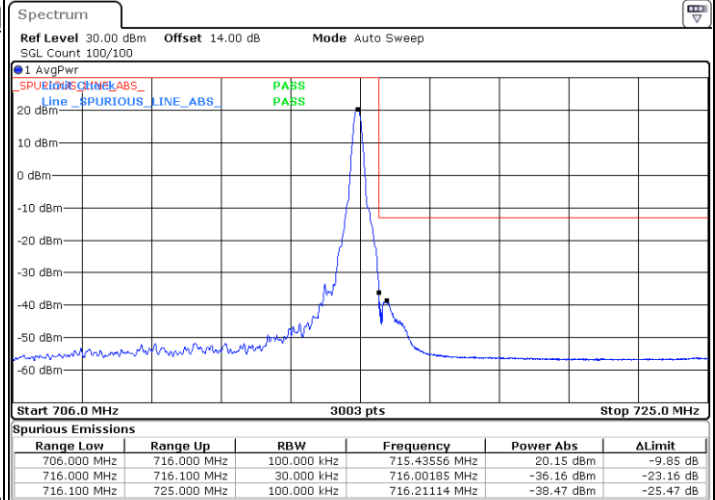


LTE Band 12 / 10MHz / QPSK

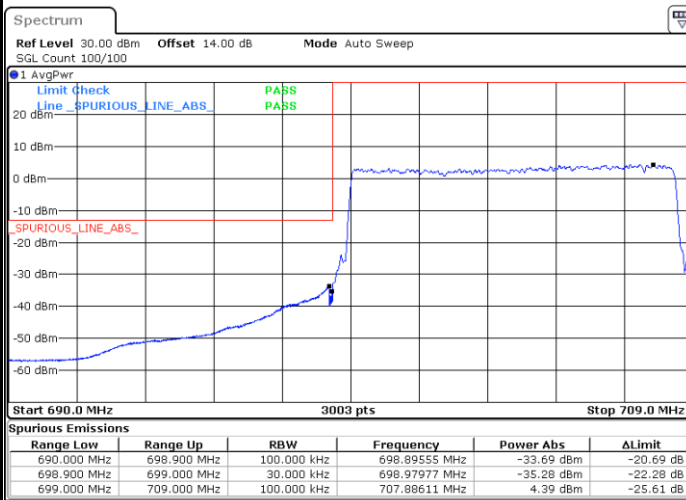
Lowest Band Edge / 1RB



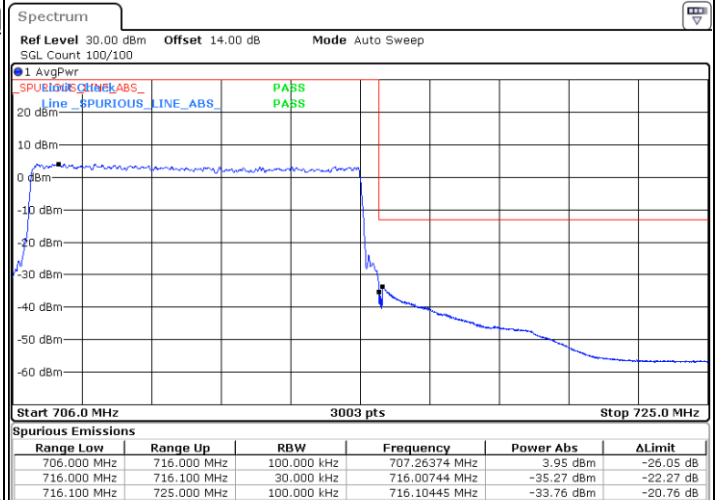
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



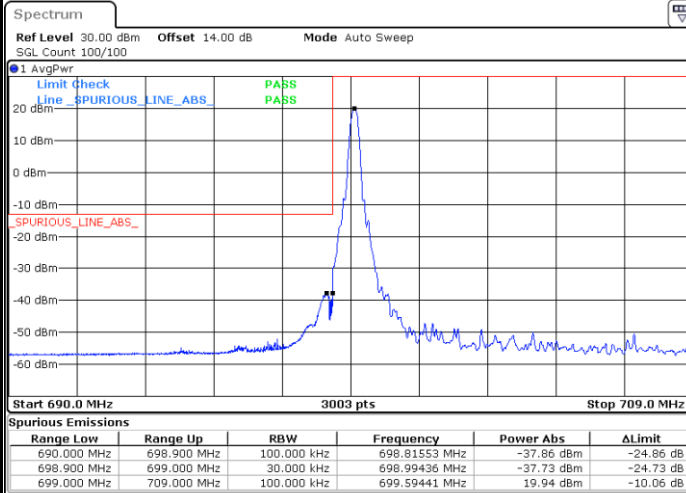
Highest Band Edge / Full RB



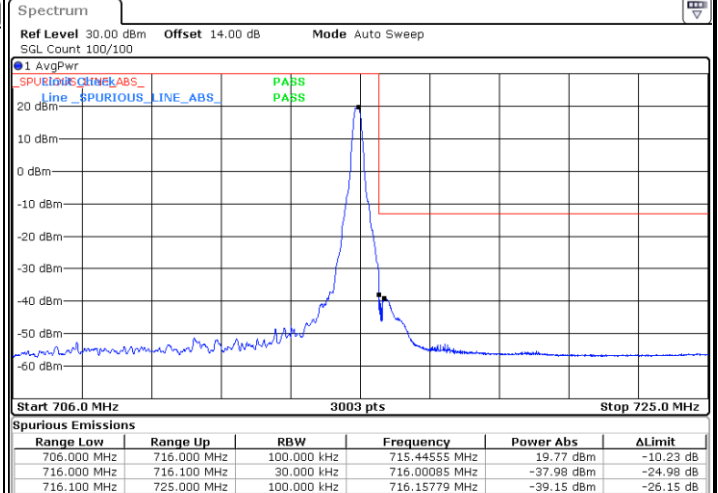


LTE Band 12 / 10MHz / 16QAM

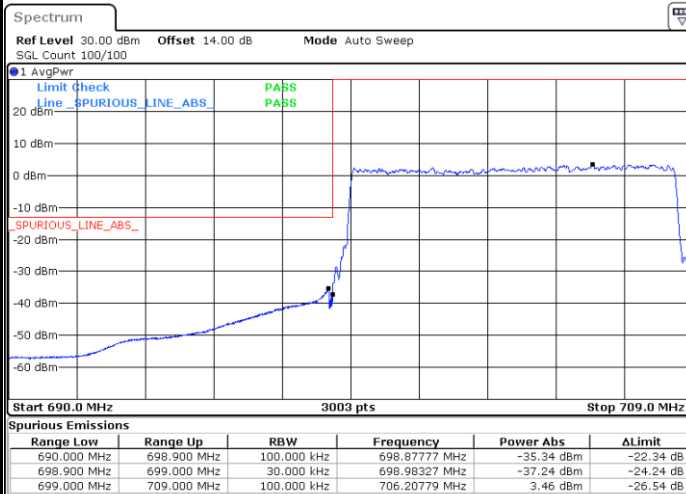
Lowest Band Edge / 1 RB



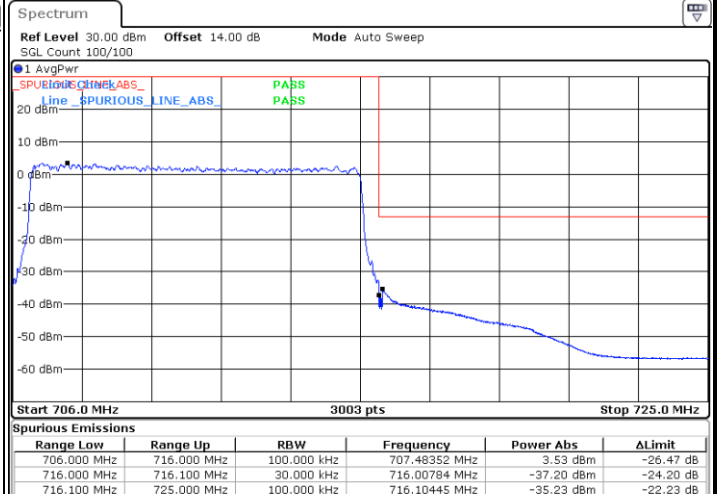
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



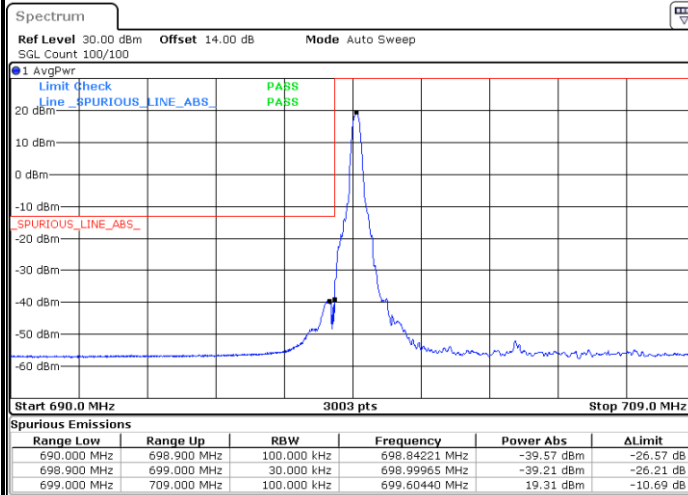
Highest Band Edge / Full RB



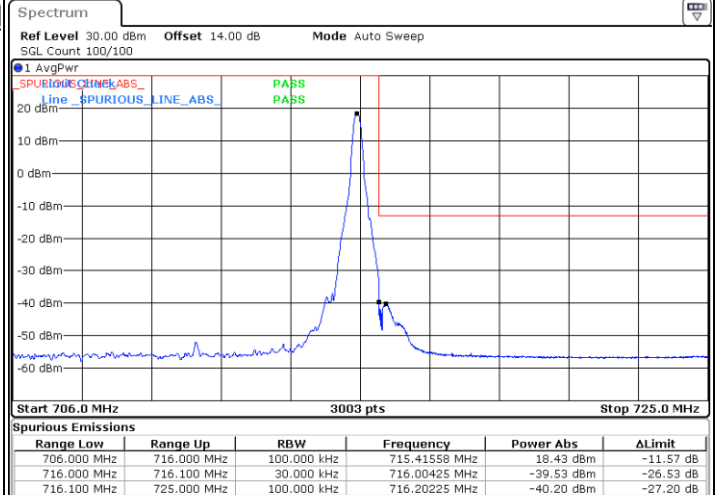


LTE Band 12 / 10MHz / 64QAM

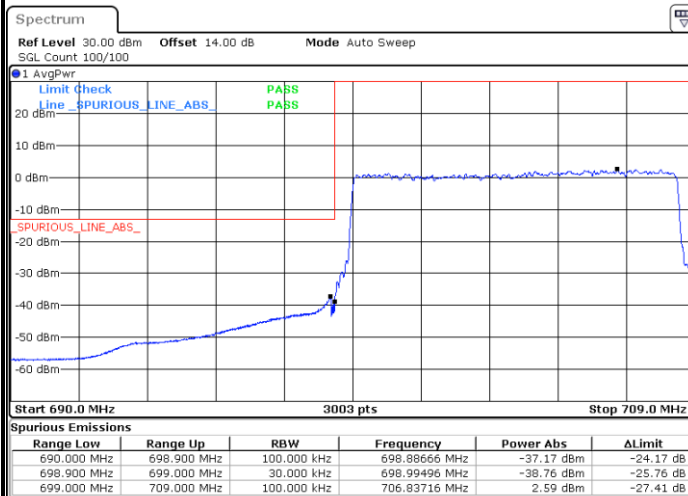
Lowest Band Edge / 1 RB



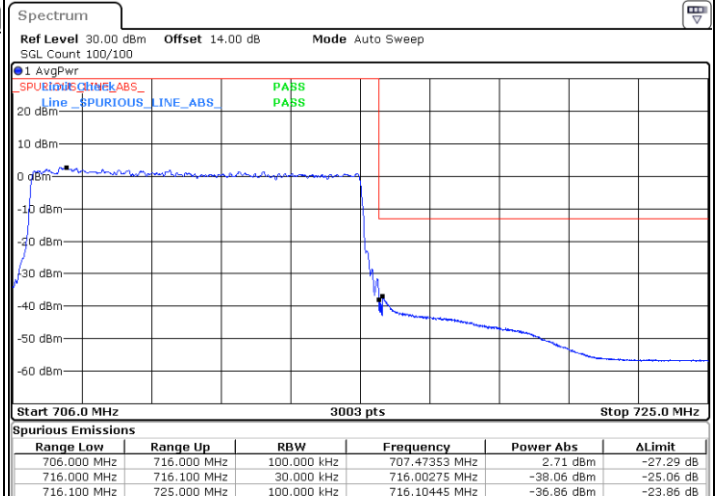
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB





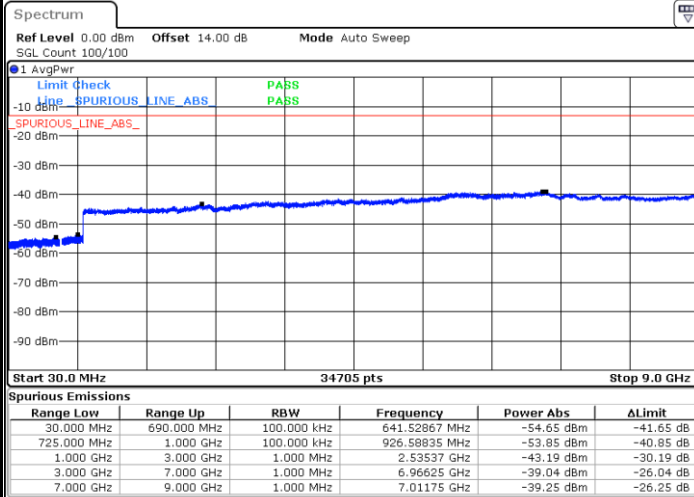
A3.5 Conducted Spurious Emission





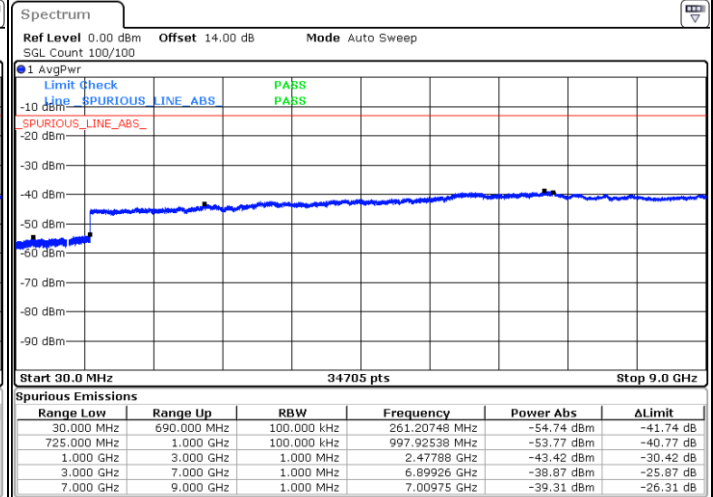
LTE Band 12 / 3MHz

Lowest Channel / QPSK



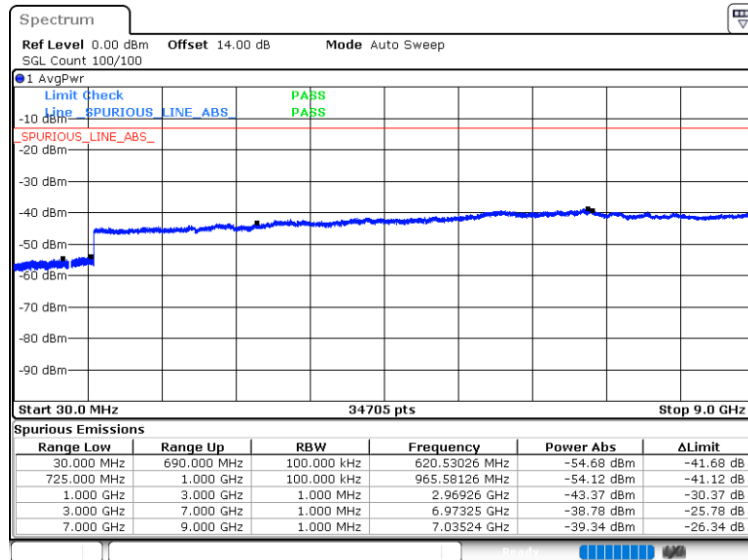
Date: 11.APR.2024 00:58:19

Middle Channel / QPSK



Date: 11.APR.2024 00:59:31

Highest Channel / QPSK

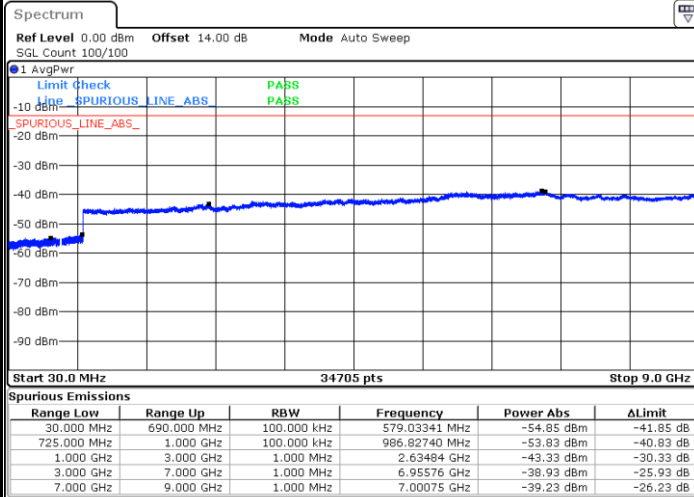


Date: 11.APR.2024 01:08:34



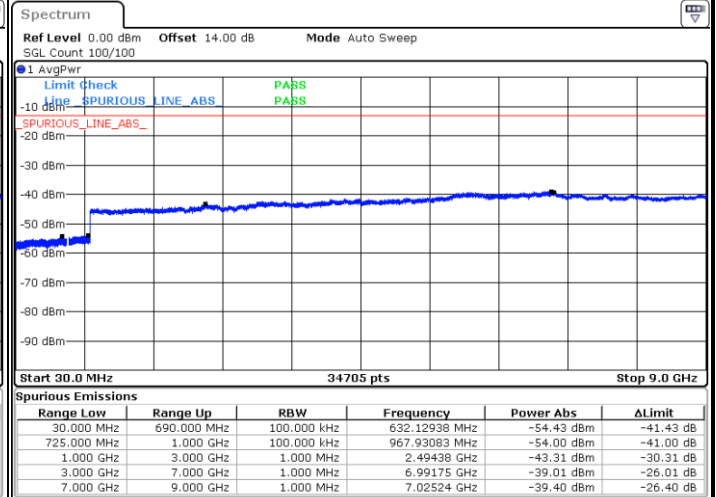
LTE Band 12 / 5MHz

Lowest Channel / QPSK



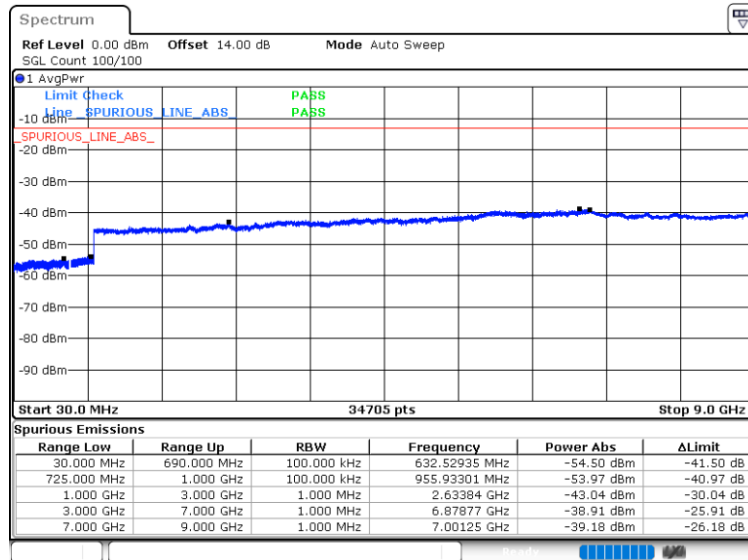
Date: 11.APR.2024 01:16:17

Middle Channel / QPSK



Date: 11.APR.2024 01:17:29

Highest Channel / QPSK

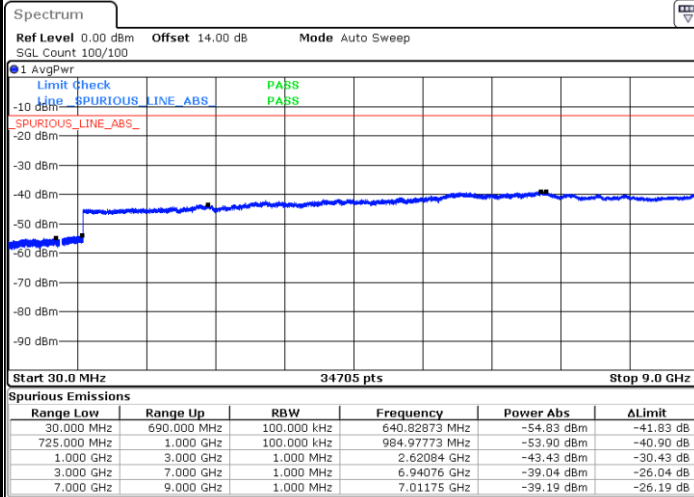


Date: 11.APR.2024 01:26:32



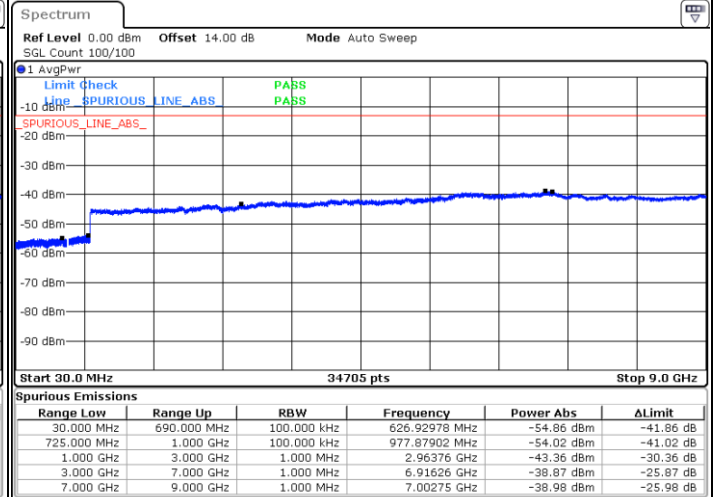
LTE Band 12 / 10MHz

Lowest Channel / QPSK



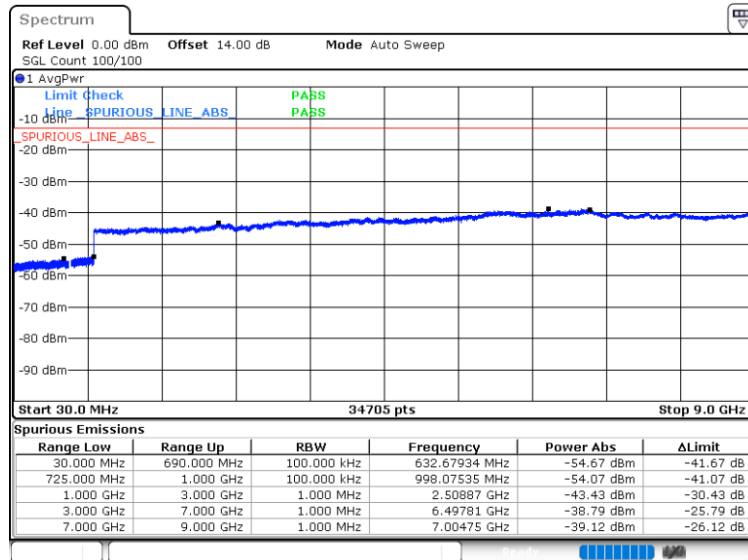
Date: 11.APR.2024 01:34:15

Middle Channel / QPSK



Date: 11.APR.2024 01:35:28

Highest Channel / QPSK



Date: 11.APR.2024 01:44:30

A3.6 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	0.0004	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0002	

Note:

1. Normal Voltage = 12 V. ; Minimum Voltage = 10.8 V. ; Maximum Voltage = 13.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



A4. LTE Band 13

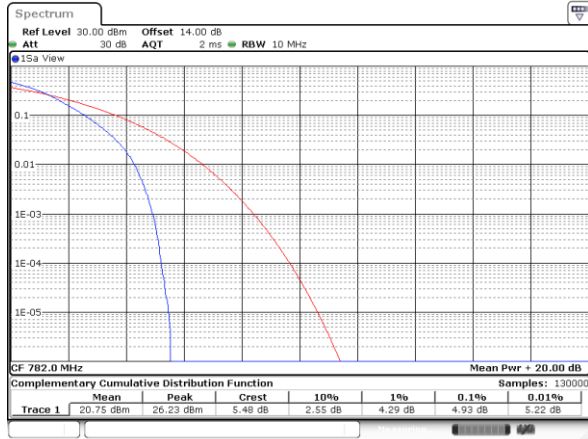
A4.1 Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.93	5.86	6.49	PASS



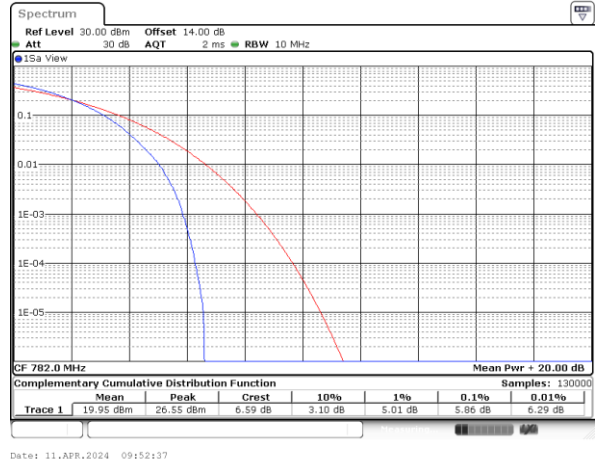
LTE Band 13 / 10MHz / QPSK

Middle Channel / Full RB



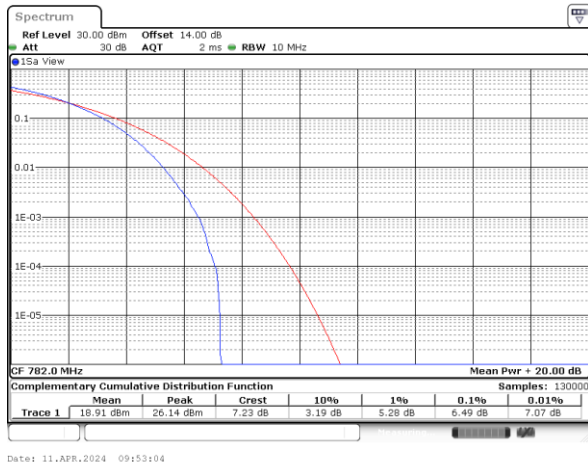
LTE Band 13 / 10MHz / 16QAM

Middle Channel / Full RB



LTE Band 13 / 10MHz / 64QAM

Middle Channel / Full RB



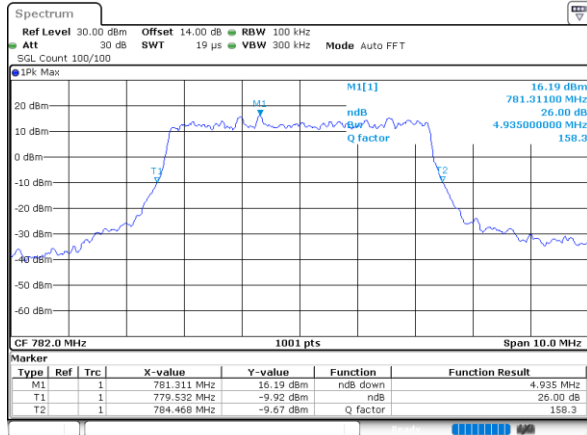
**A4.2 26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.94	5.01	10.19	9.93

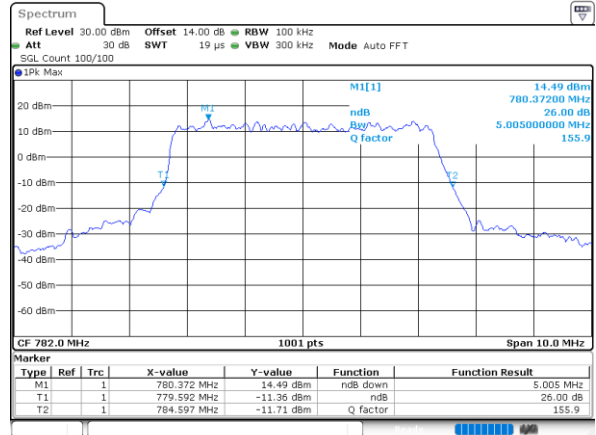


LTE Band 13

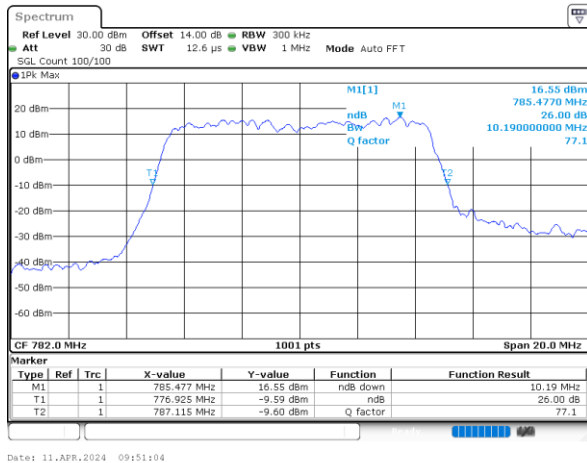
Middle Channel / 5MHz / QPSK



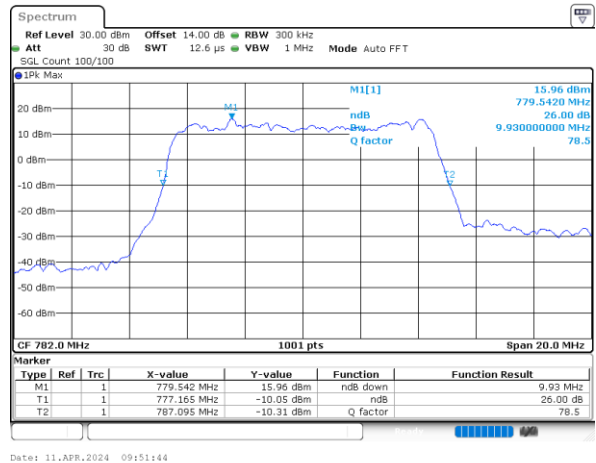
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM





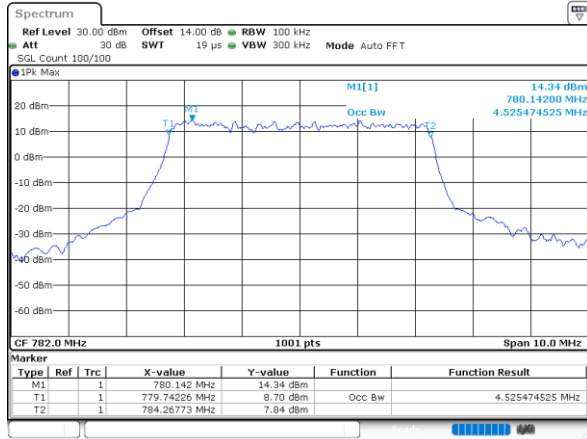
A4.3 Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.53	4.49	9.01	9.03

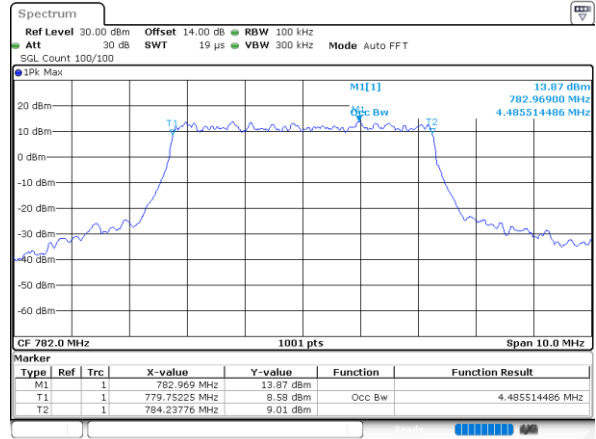


LTE Band 13

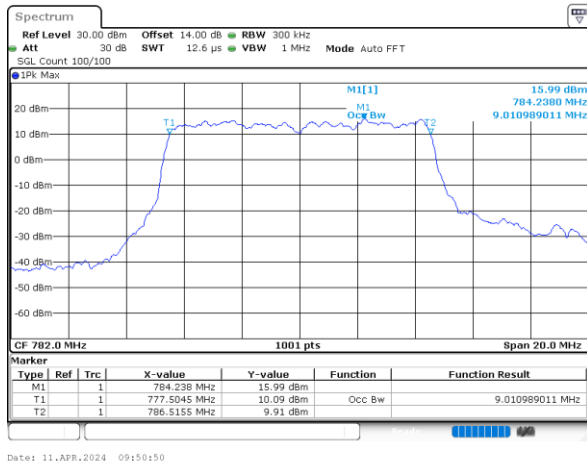
Middle Channel / 5MHz / QPSK



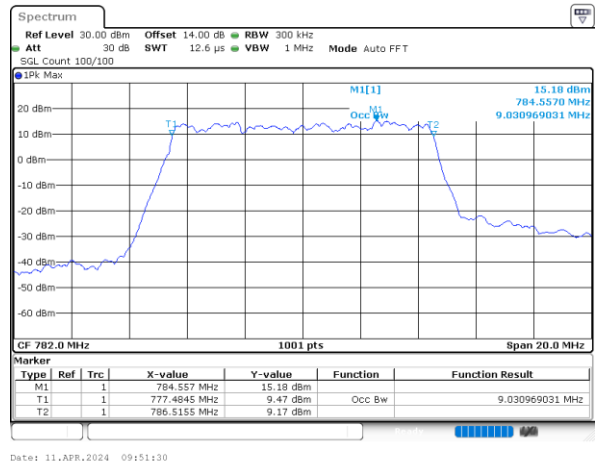
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

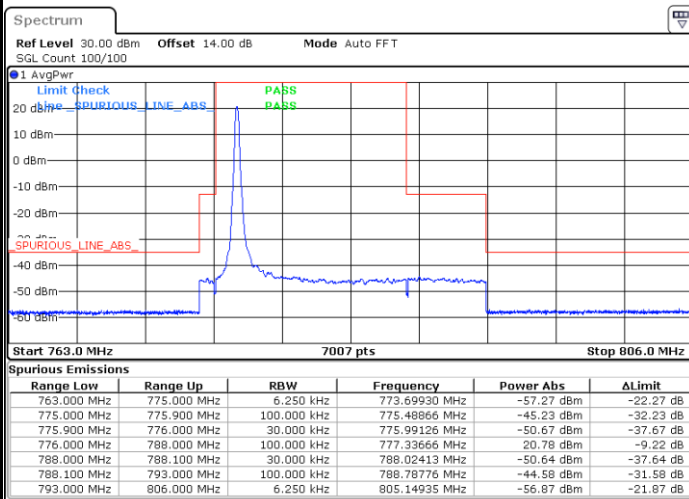




A4.4 Conducted Band Edge

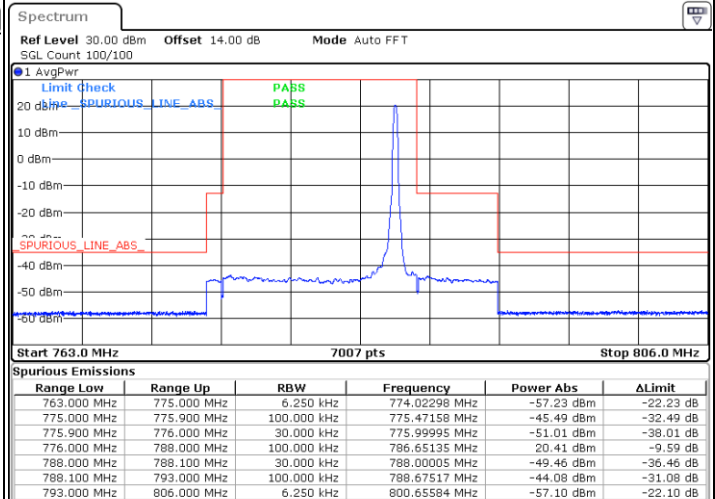
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



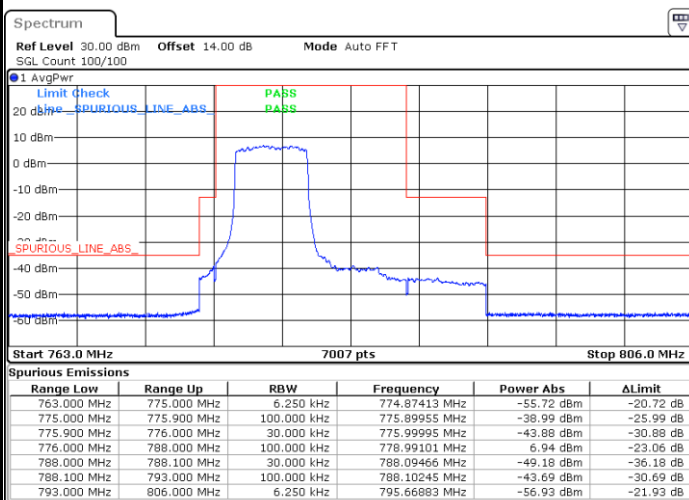
Date: 11.APR.2024 01:45:39

Highest Band Edge / 1 RB



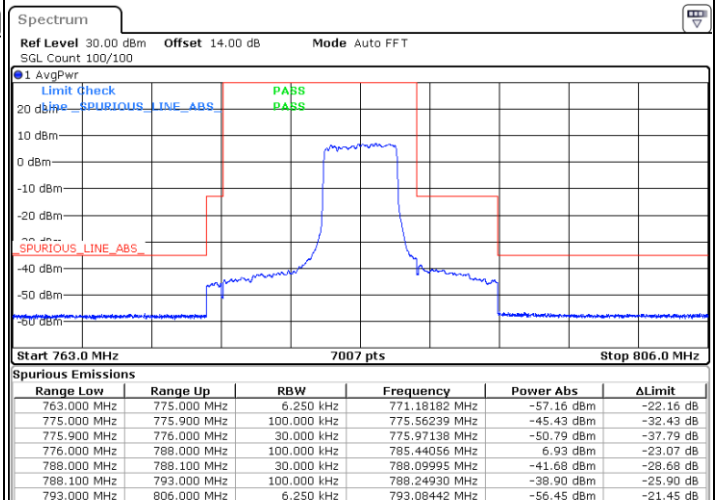
Date: 11.APR.2024 01:55:56

Lowest Band Edge / Full RB



Date: 11.APR.2024 01:48:52

Highest Band Edge / Full RB

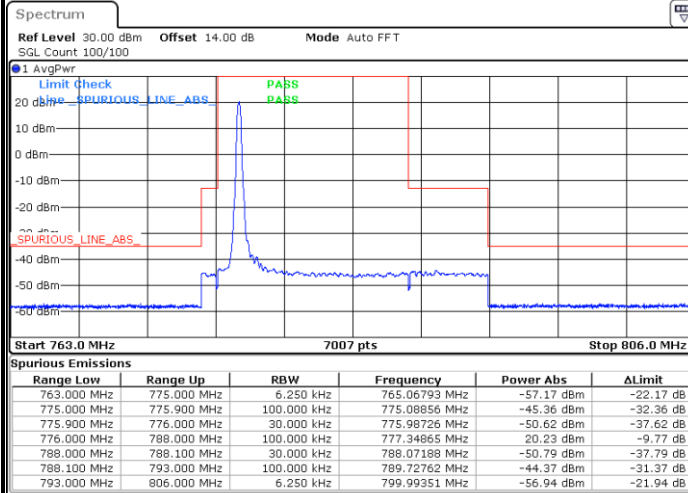


Date: 11.APR.2024 01:59:08



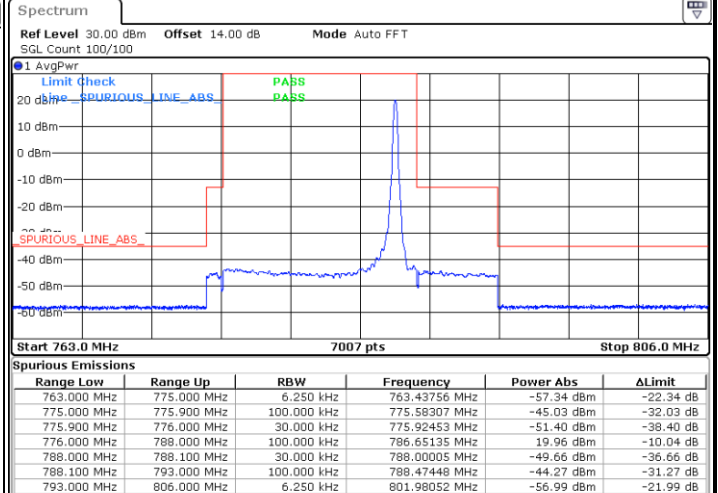
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



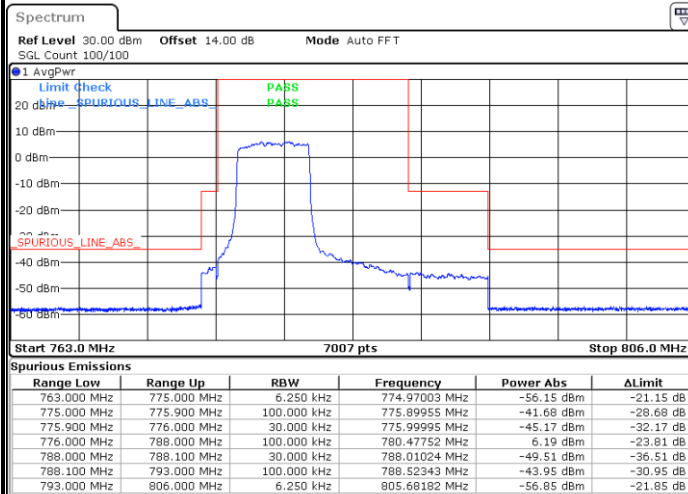
Date: 11.APR.2024 01:46:44

Highest Band Edge / 1 RB



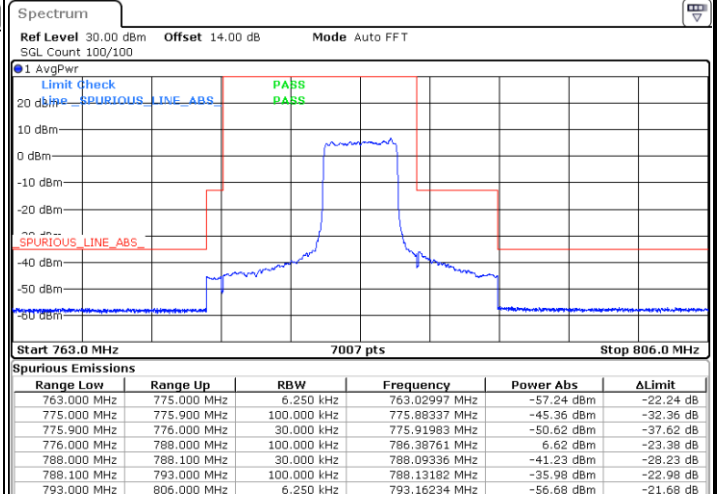
Date: 11.APR.2024 01:57:00

Lowest Band Edge / Full RB



Date: 11.APR.2024 01:49:56

Highest Band Edge / Full RB

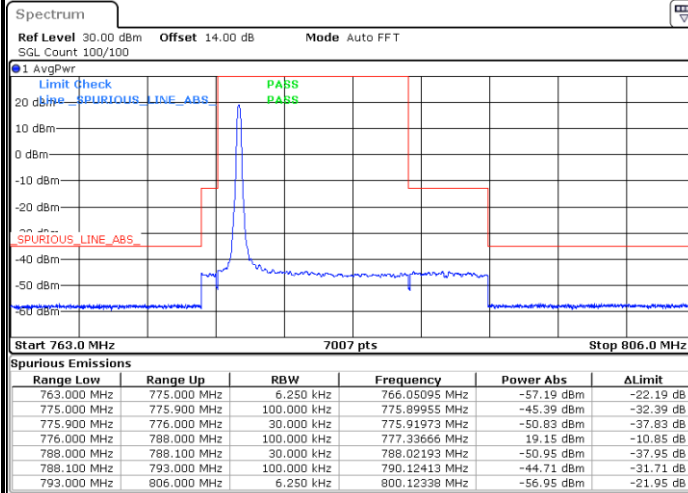


Date: 11.APR.2024 02:00:12



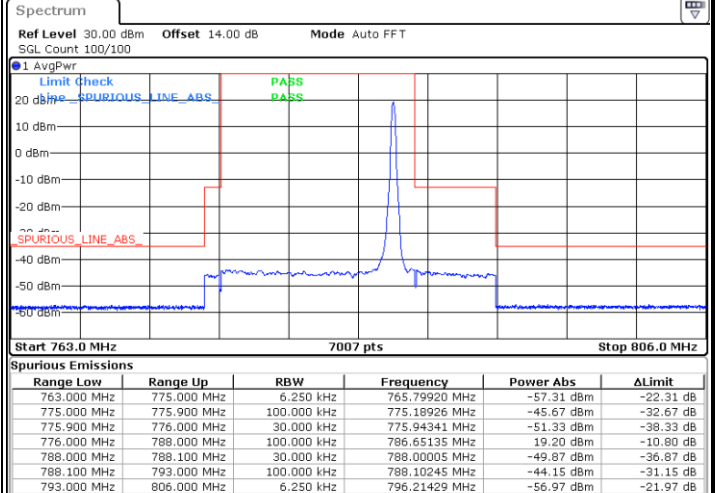
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



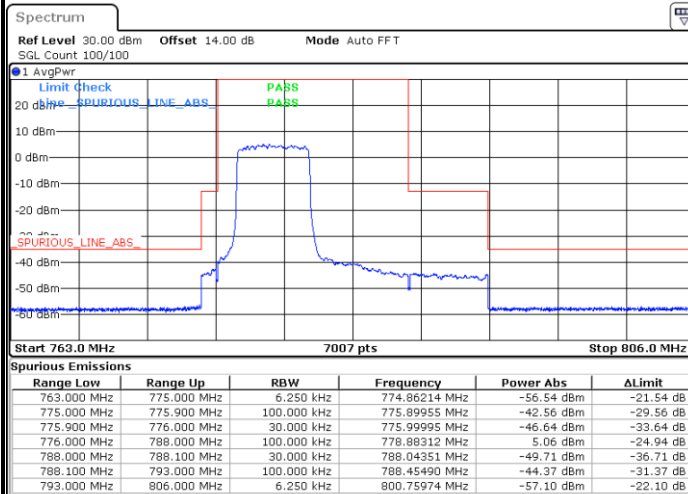
Date: 11.APR.2024 01:47:48

Highest Band Edge / 1 RB



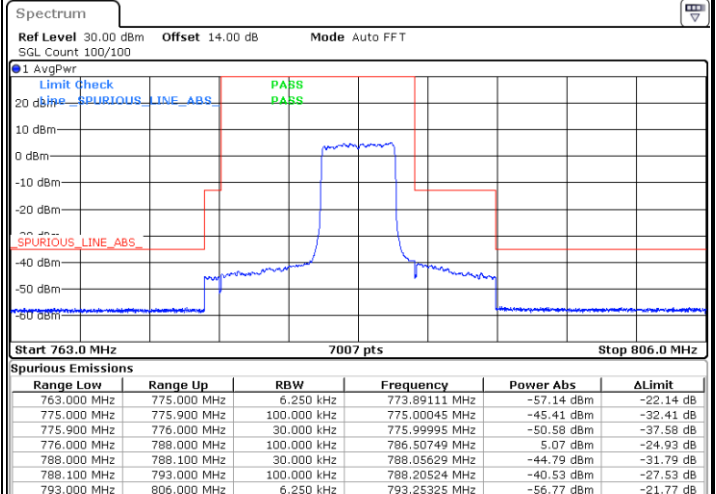
Date: 11.APR.2024 01:58:04

Lowest Band Edge / Full RB



Date: 11.APR.2024 01:51:00

Highest Band Edge / Full RB

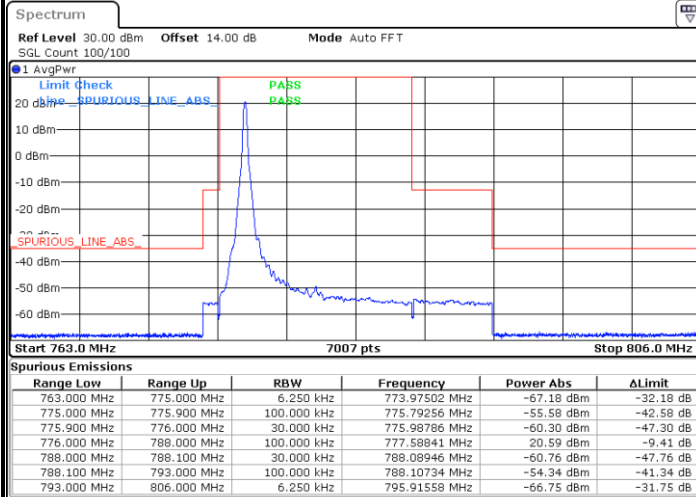


Date: 11.APR.2024 02:01:16



LTE Band 13 / 10MHz / QPSK

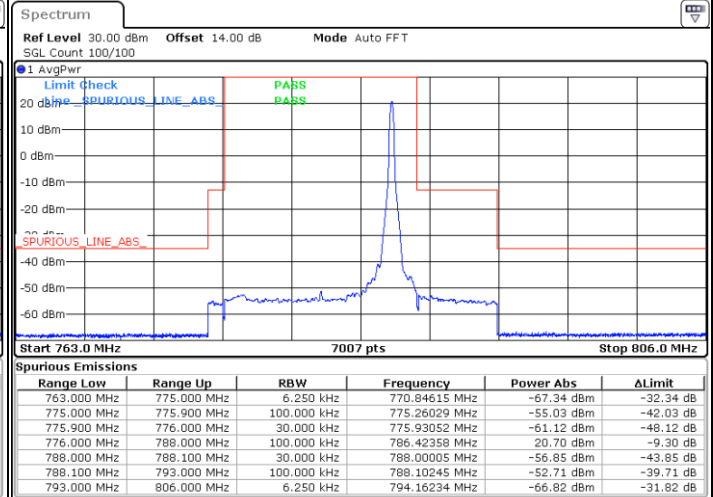
Band Edge / 1 RB



Date: 11.APR.2024 02:03:38

LTE Band 13 / 10MHz / QPSK

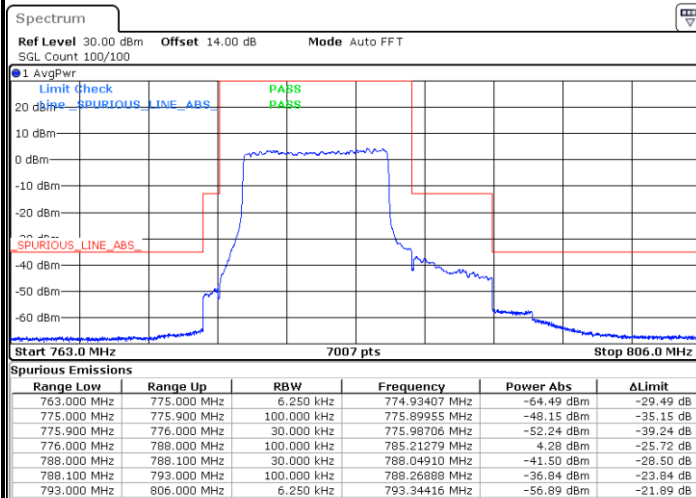
Band Edge / 1 RB



Date: 11.APR.2024 02:06:49

LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB



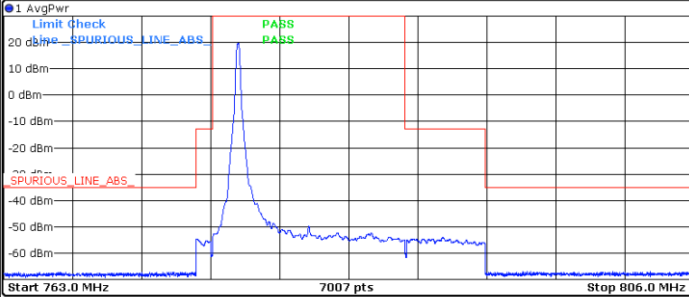
Date: 11.APR.2024 02:10:00



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

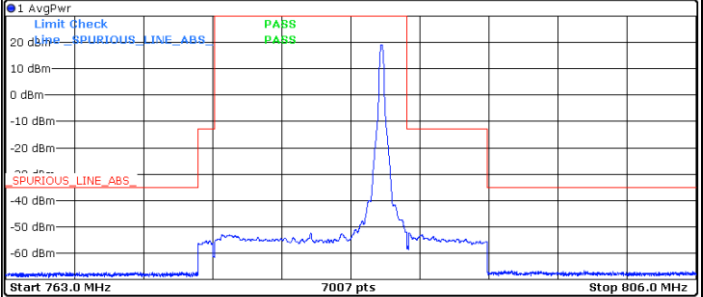
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.26773 MHz	-67.21 dBm	-32.21 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.03821 MHz	-54.79 dBm	-41.79 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98227 MHz	-60.63 dBm	-47.63 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.60040 MHz	19.72 dBm	-10.28 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00544 MHz	-60.44 dBm	-47.44 dB
788.100 MHz	793.000 MHz	100.000 kHz	790.34441 MHz	-54.12 dBm	-41.12 dB
793.000 MHz	806.000 MHz	6.250 kHz	800.92857 MHz	-67.03 dBm	-32.03 dB

Date: 11.APR.2024 02:04:42

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

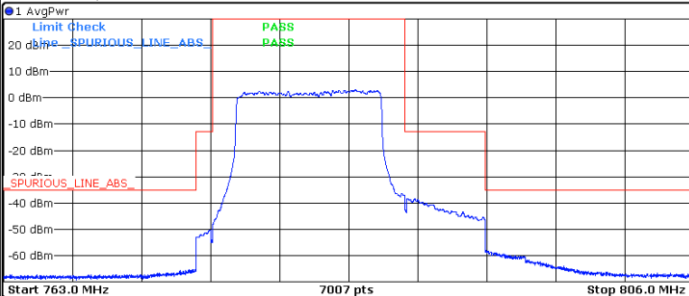
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.25075 MHz	-67.31 dBm	-32.31 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.49675 MHz	-55.43 dBm	-42.43 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90005 MHz	-60.65 dBm	-47.65 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.42359 MHz	19.20 dBm	-10.80 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.03222 MHz	-57.42 dBm	-44.42 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10245 MHz	-52.41 dBm	-39.41 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.53896 MHz	-66.71 dBm	-31.71 dB

Date: 11.APR.2024 02:07:53

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	774.97003 MHz	-65.18 dBm	-30.18 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-50.25 dBm	-37.25 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.92812 MHz	-54.14 dBm	-41.14 dB
776.000 MHz	788.000 MHz	100.000 kHz	784.90110 MHz	2.95 dBm	-27.05 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00405 MHz	-42.84 dBm	-29.84 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.16119 MHz	-38.38 dBm	-25.38 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.03247 MHz	-58.11 dBm	-23.11 dB

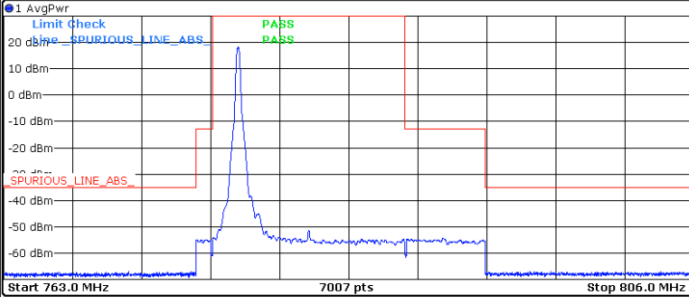
Date: 11.APR.2024 02:11:03



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

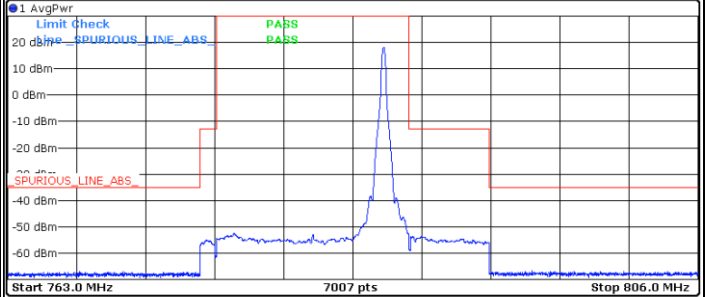
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.77423 MHz	-66.93 dBm	-31.93 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.29895 MHz	-54.89 dBm	-41.89 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.94221 MHz	-60.66 dBm	-47.66 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.61239 MHz	-18.27 dBm	-11.73 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.08846 MHz	-60.25 dBm	-47.25 dB
788.100 MHz	793.000 MHz	100.000 kHz	790.35909 MHz	-54.42 dBm	-41.42 dB
793.000 MHz	806.000 MHz	6.250 kHz	803.90260 MHz	-66.97 dBm	-31.97 dB

Date: 11.APR.2024 02:05:45

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

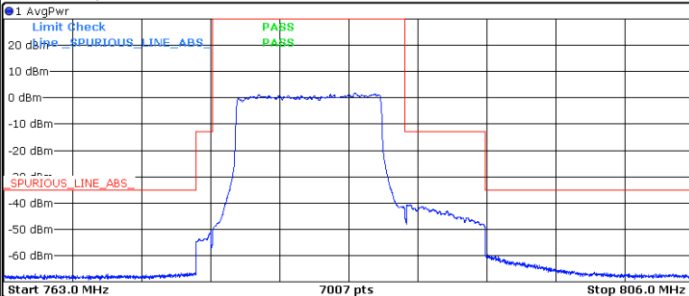
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	770.21079 MHz	-67.03 dBm	-32.03 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.37897 MHz	-55.16 dBm	-42.16 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96229 MHz	-60.95 dBm	-47.95 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.41159 MHz	-18.00 dBm	-12.00 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-58.44 dBm	-45.44 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.23951 MHz	-53.72 dBm	-40.72 dB
793.000 MHz	806.000 MHz	6.250 kHz	795.62987 MHz	-66.80 dBm	-31.80 dB

Date: 11.APR.2024 02:08:56

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	774.40659 MHz	-66.58 dBm	-31.58 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89236 MHz	-51.22 dBm	-38.22 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99965 MHz	-55.93 dBm	-42.93 dB
776.000 MHz	788.000 MHz	100.000 kHz	784.86513 MHz	-1.87 dBm	-28.13 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.01543 MHz	-45.94 dBm	-32.94 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10245 MHz	-40.78 dBm	-27.78 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.00649 MHz	-59.72 dBm	-24.72 dB

Date: 11.APR.2024 09:48:56