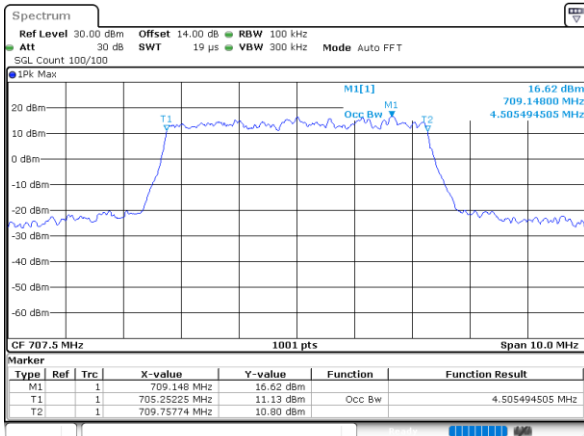
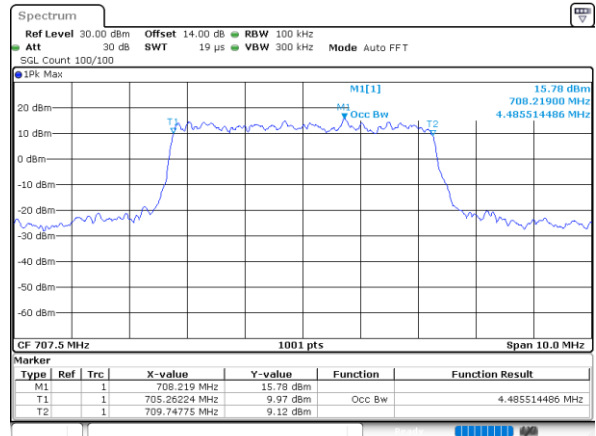




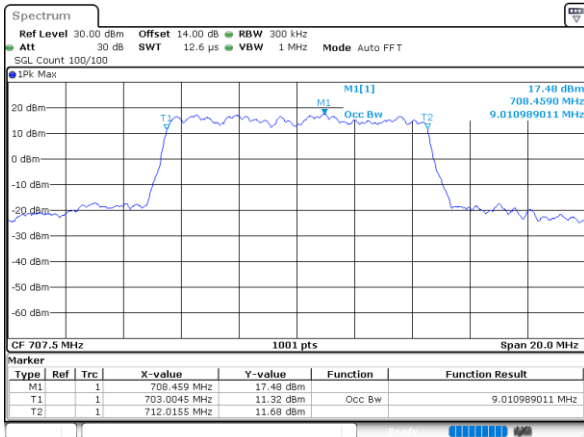
Middle Channel / 5MHz / QPSK



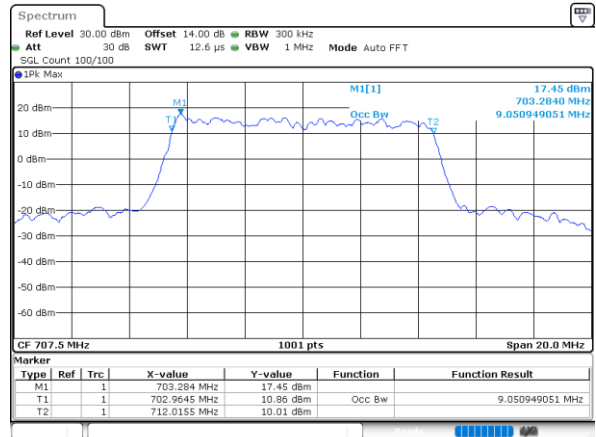
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

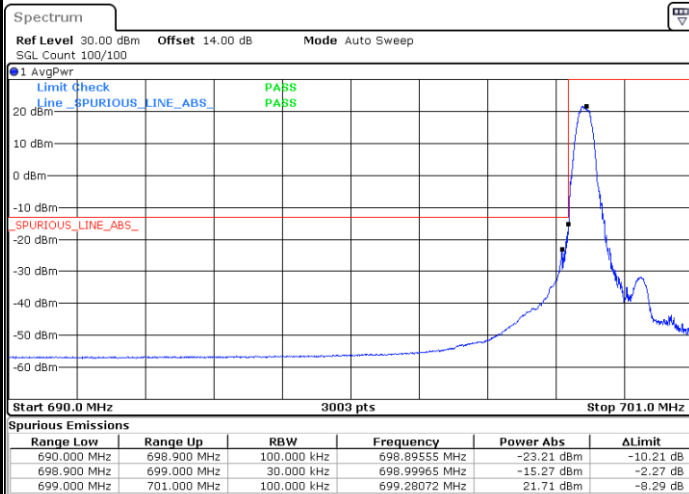




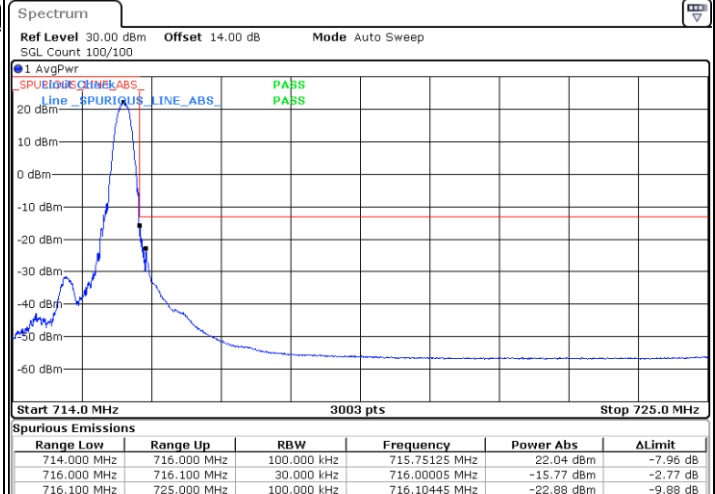
Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

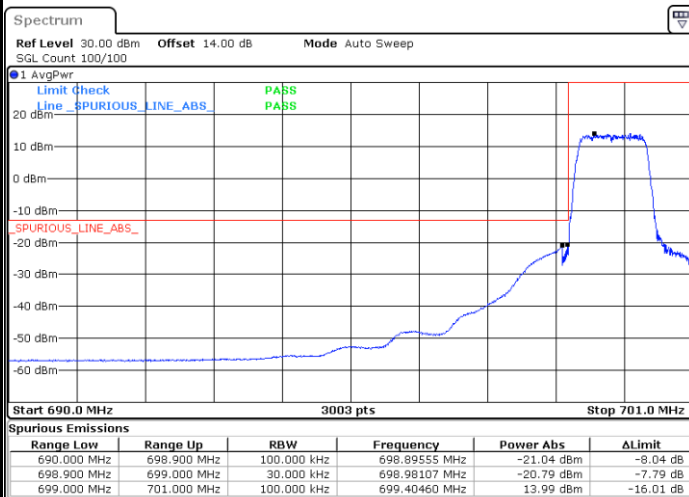
Lowest Band Edge / 1RB



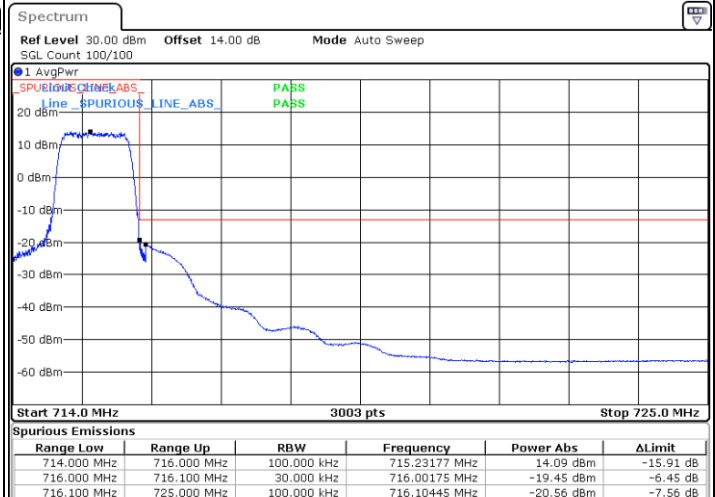
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



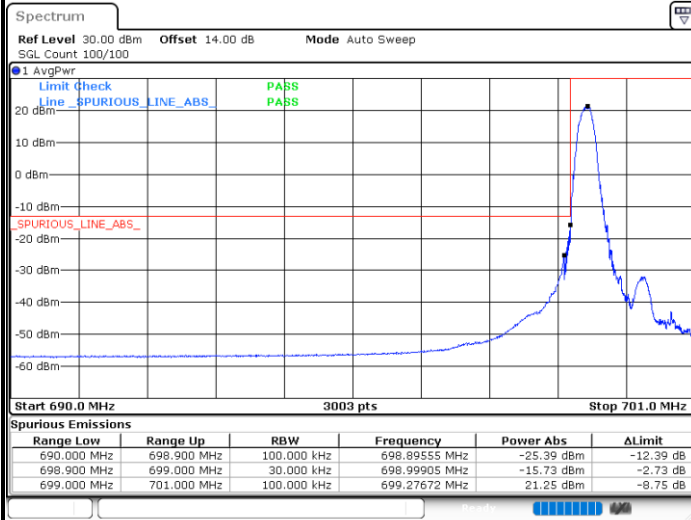
Highest Band Edge / Full RB



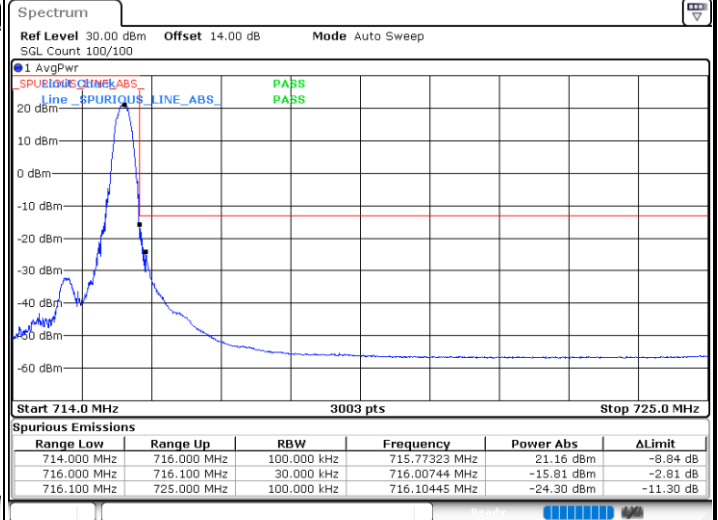


LTE Band 12 / 1.4MHz / 16QAM

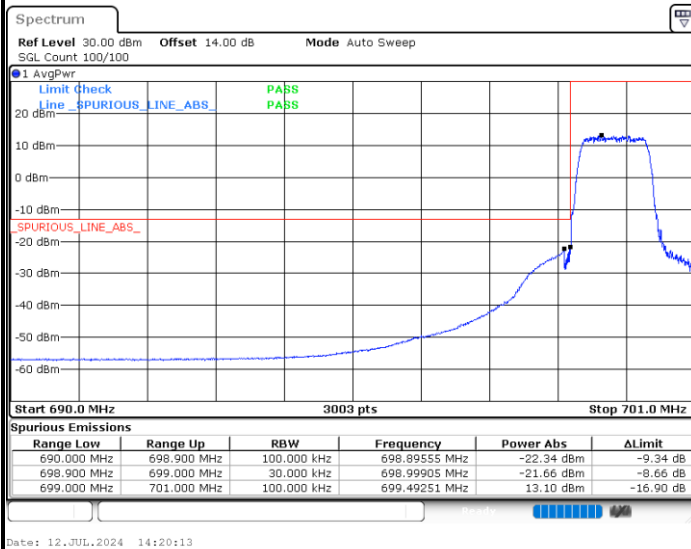
Lowest Band Edge / 1 RB



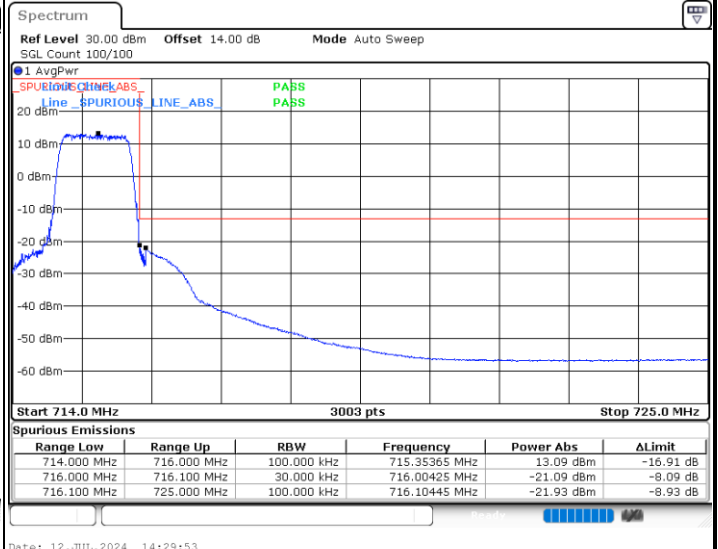
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



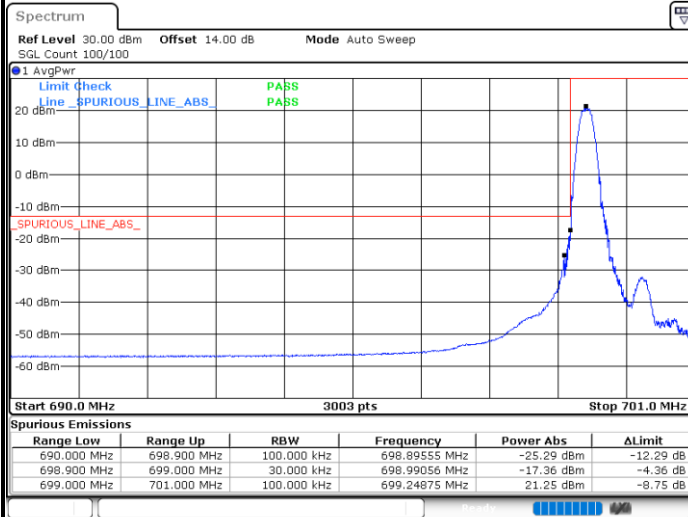
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 64QAM

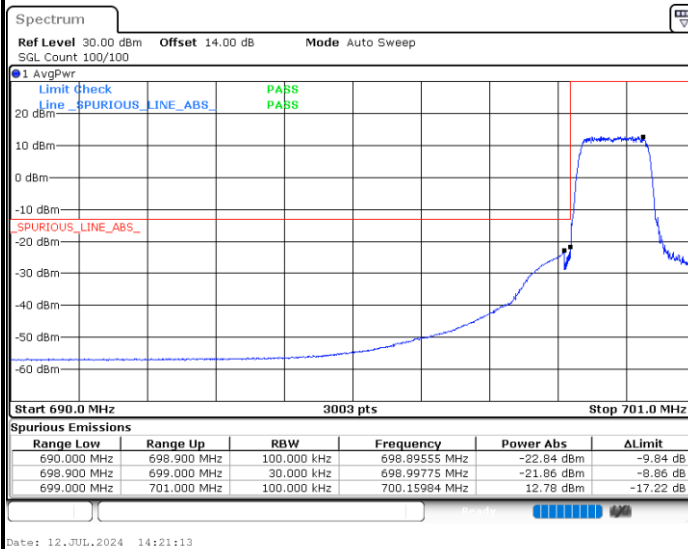
Lowest Band Edge / 1 RB



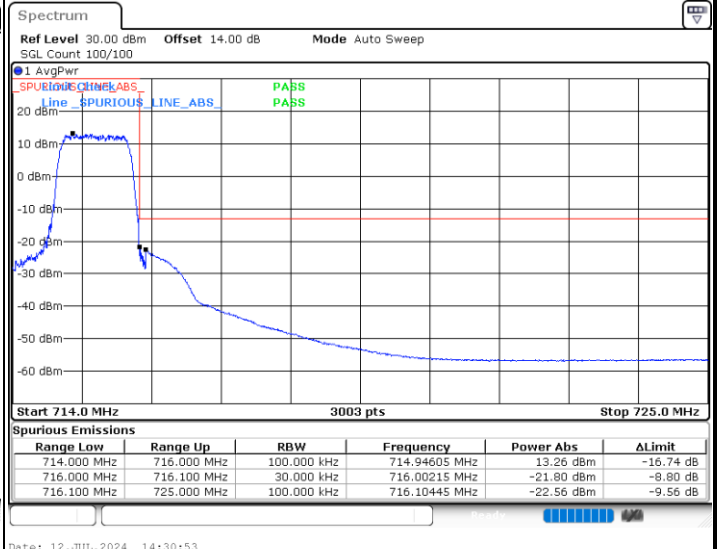
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



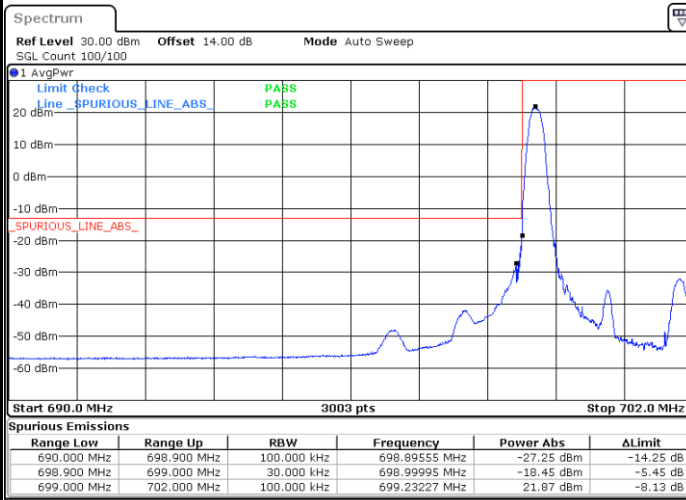
Highest Band Edge / Full RB



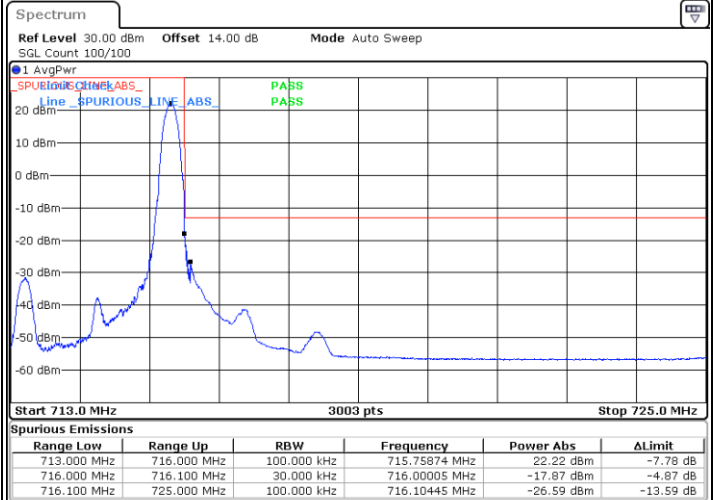


LTE Band 12 / 3MHz / QPSK

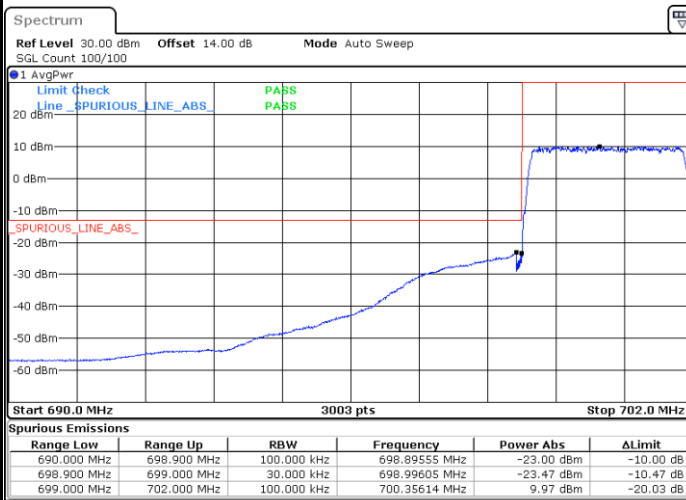
Lowest Band Edge / 1RB



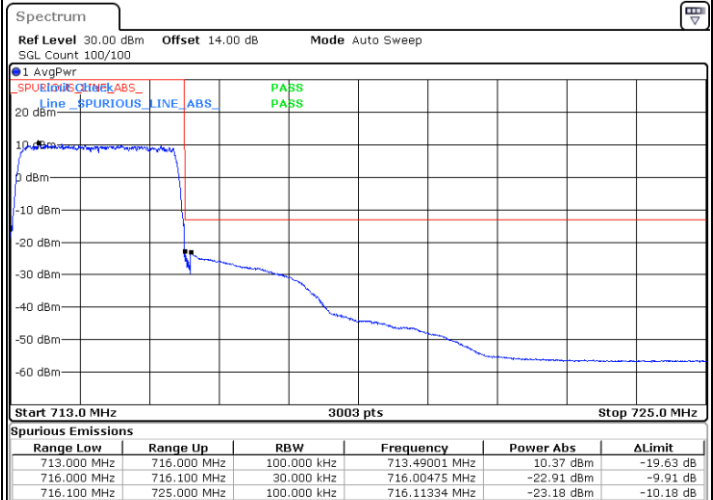
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



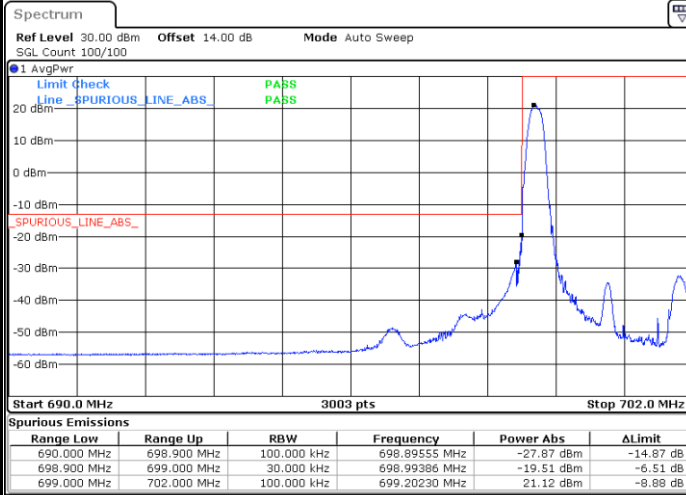
Highest Band Edge / Full RB



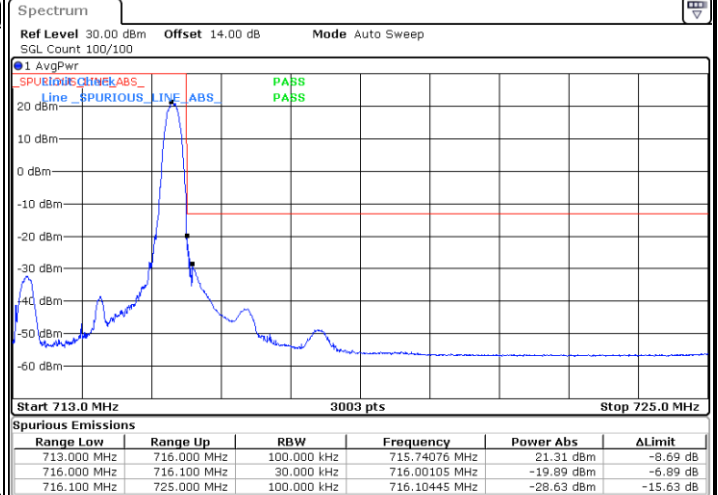


LTE Band 12 / 3MHz / 16QAM

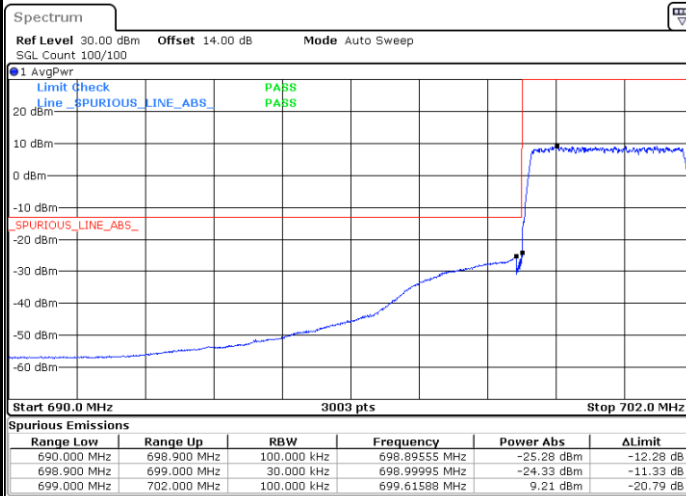
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



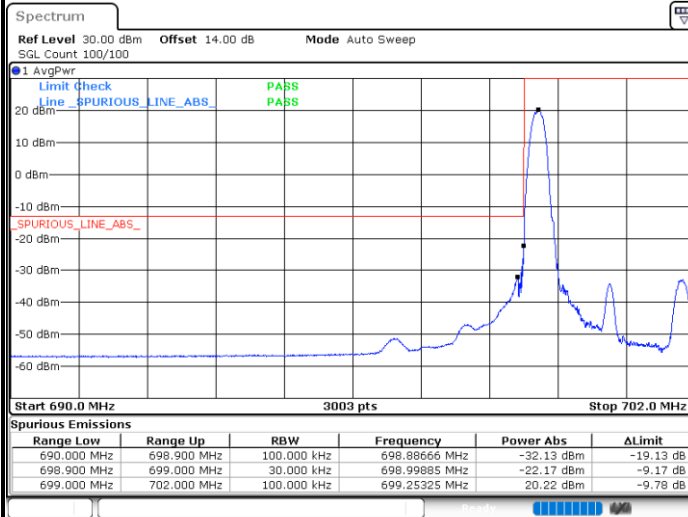
Highest Band Edge / Full RB



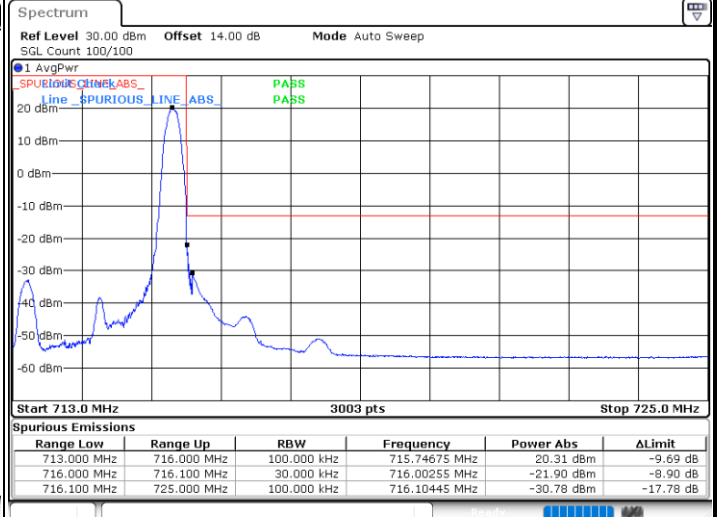


LTE Band 12 / 3MHz / 64QAM

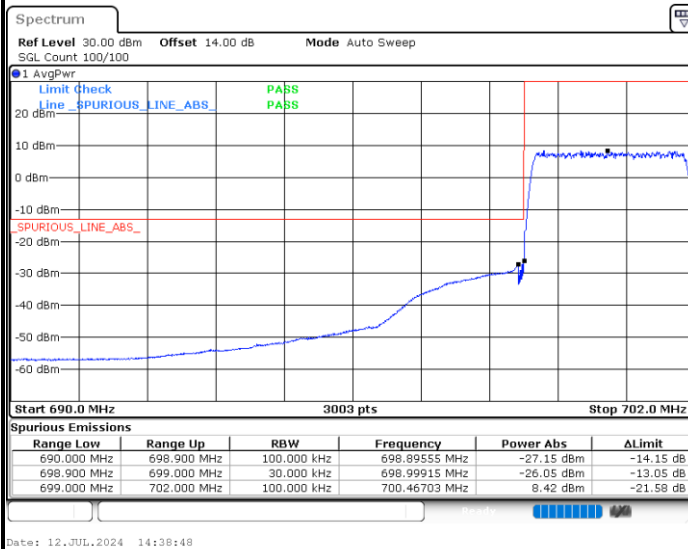
Lowest Band Edge / 1 RB



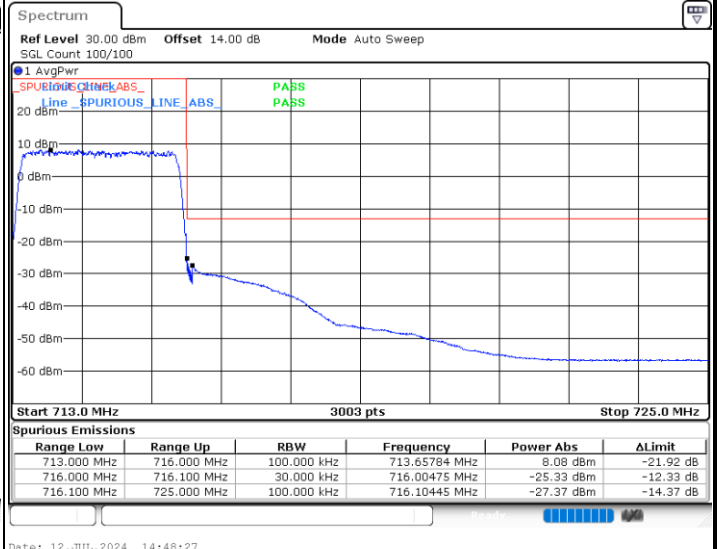
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



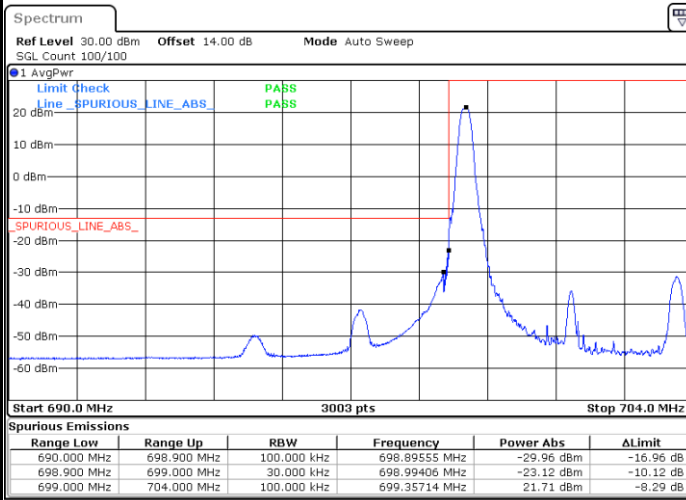
Highest Band Edge / Full RB



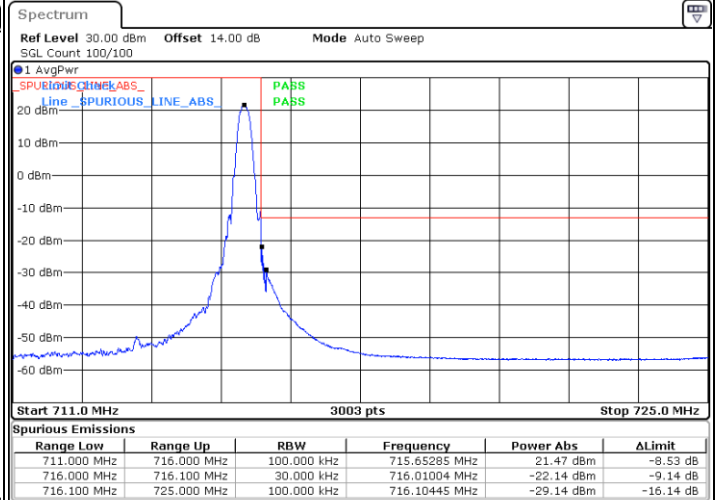


LTE Band 12 / 5MHz / QPSK

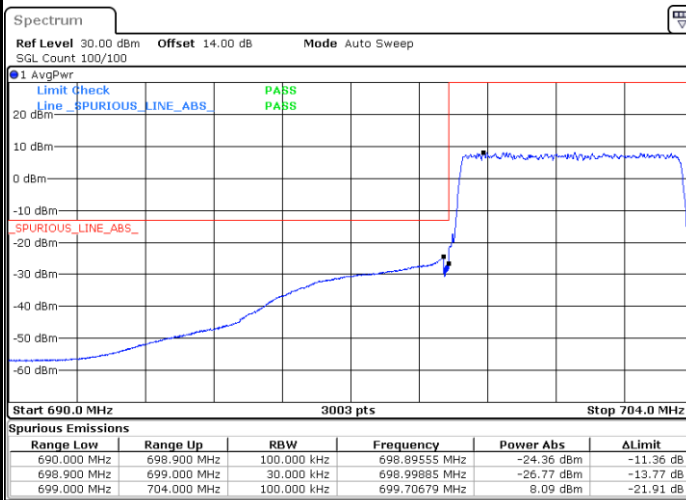
Lowest Band Edge / 1RB



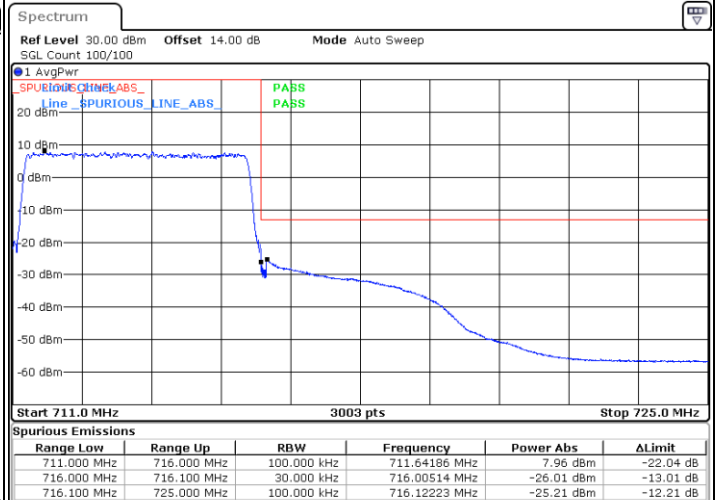
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



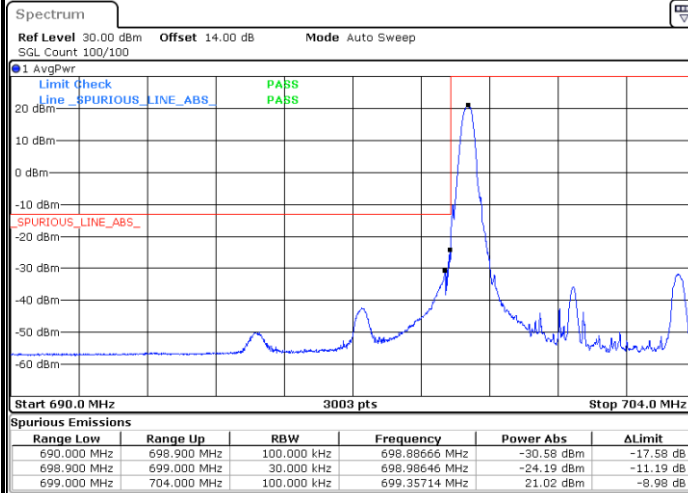
Highest Band Edge / Full RB



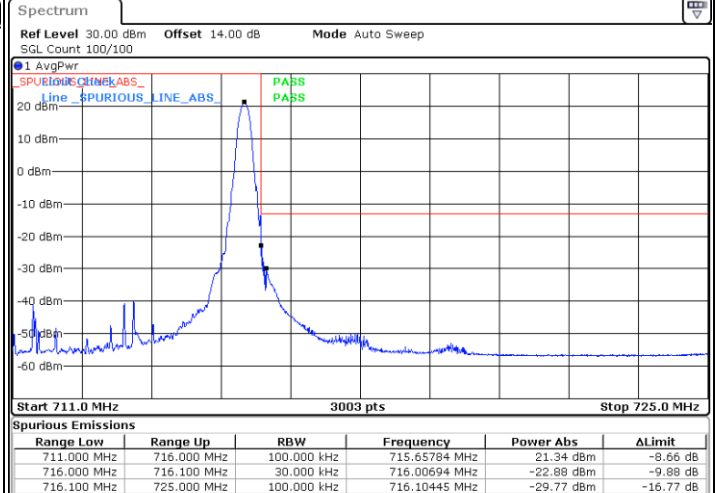


LTE Band 12 / 5MHz / 16QAM

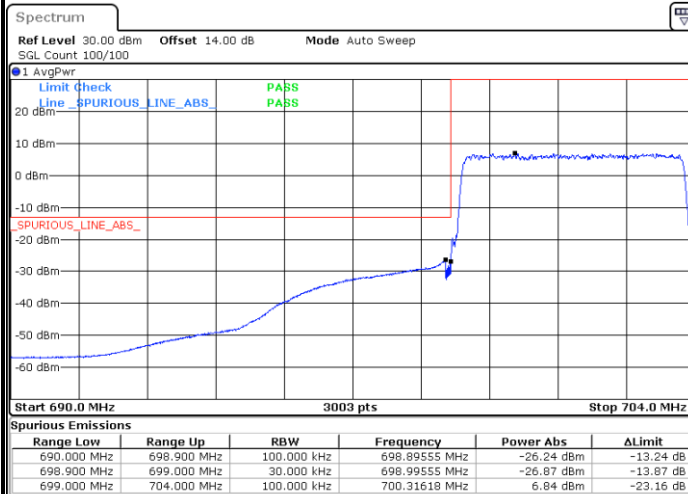
Lowest Band Edge / 1 RB



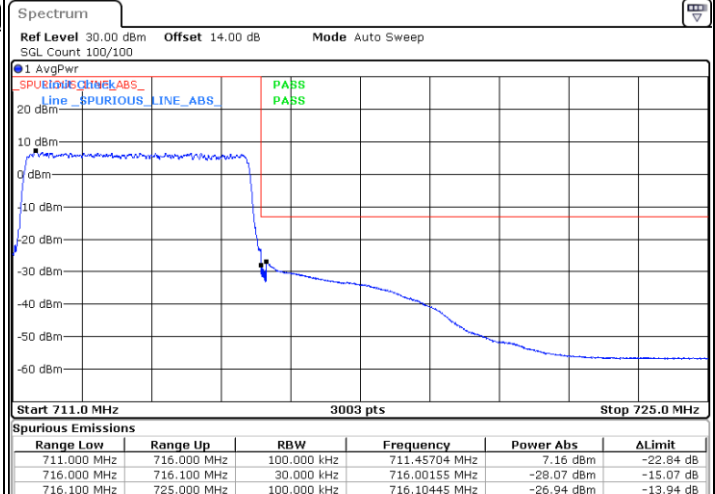
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



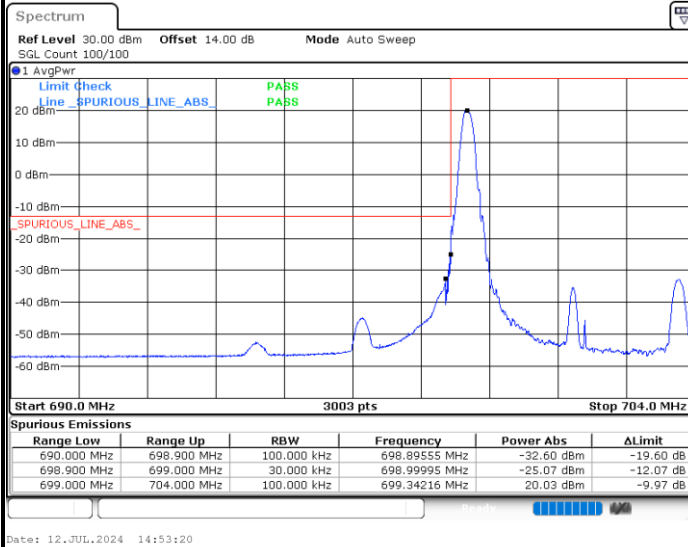
Highest Band Edge / Full RB



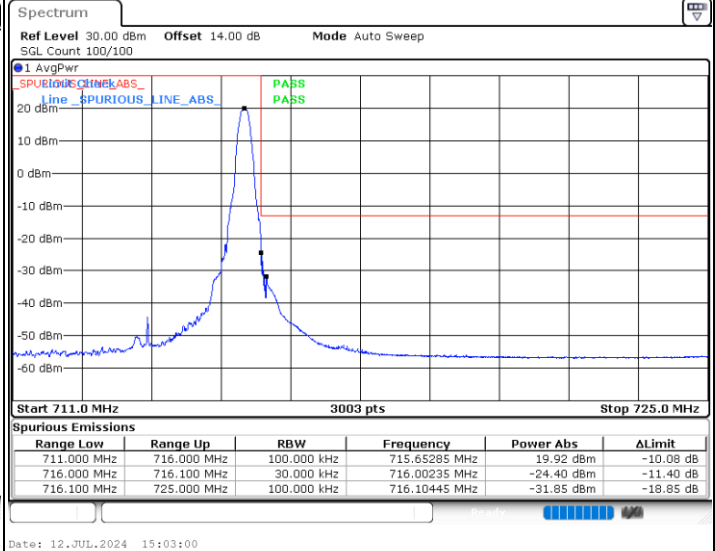


LTE Band 12 / 5MHz / 64QAM

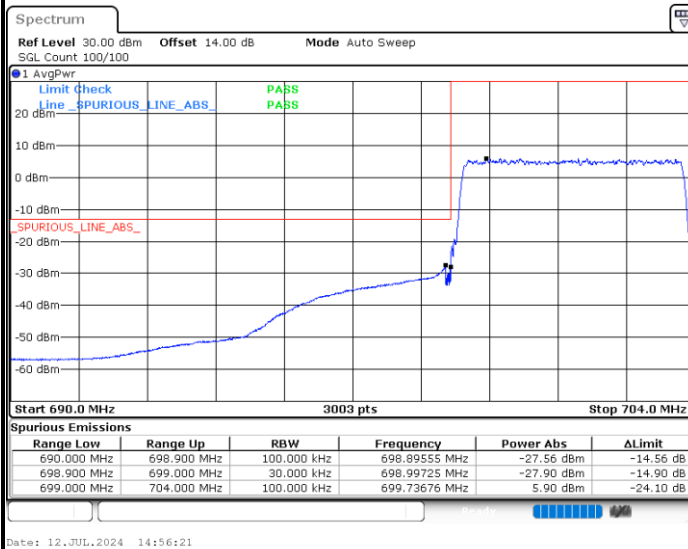
Lowest Band Edge / 1 RB



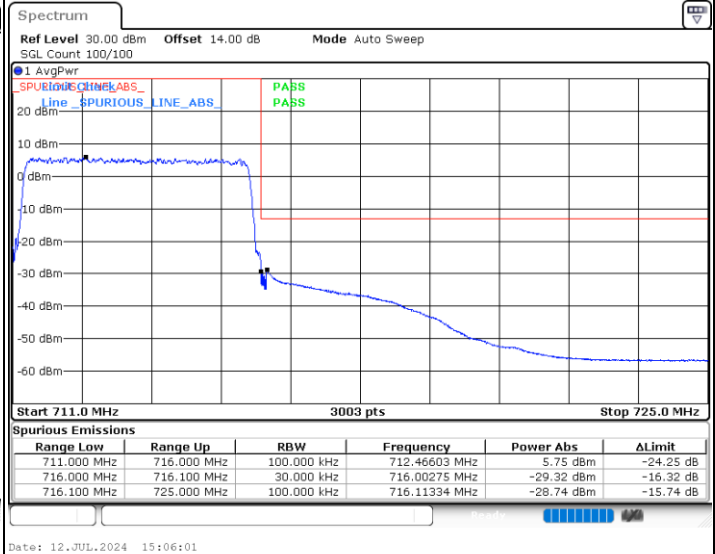
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



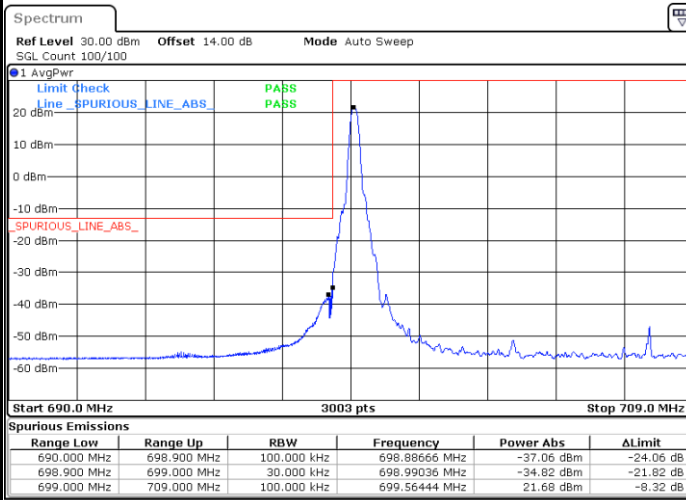
Highest Band Edge / Full RB



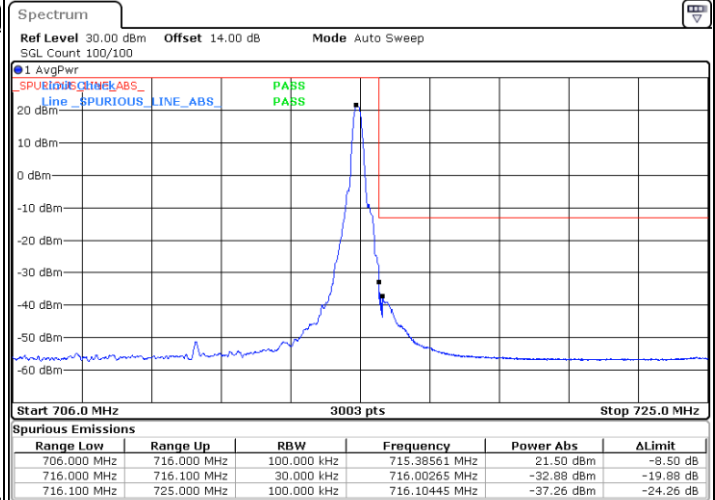


LTE Band 12 / 10MHz / QPSK

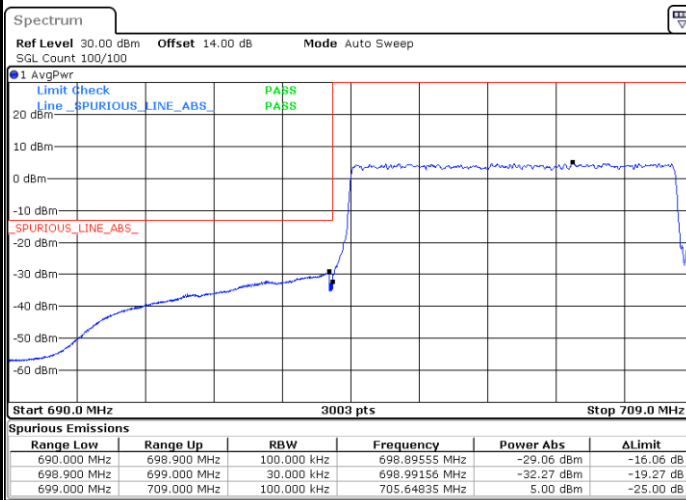
Lowest Band Edge / 1RB



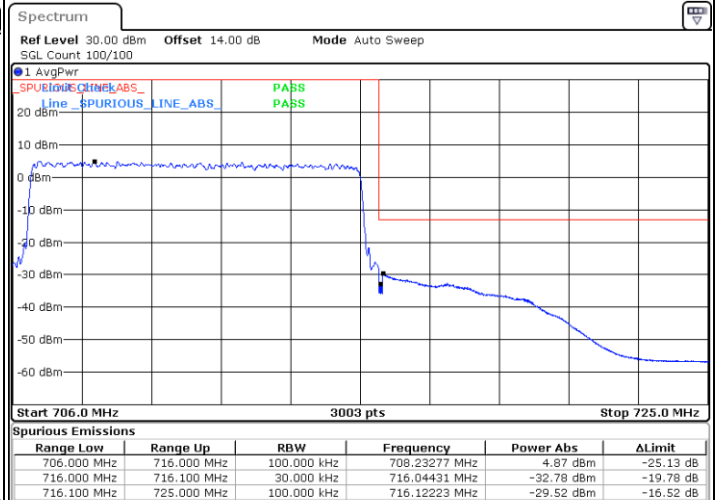
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



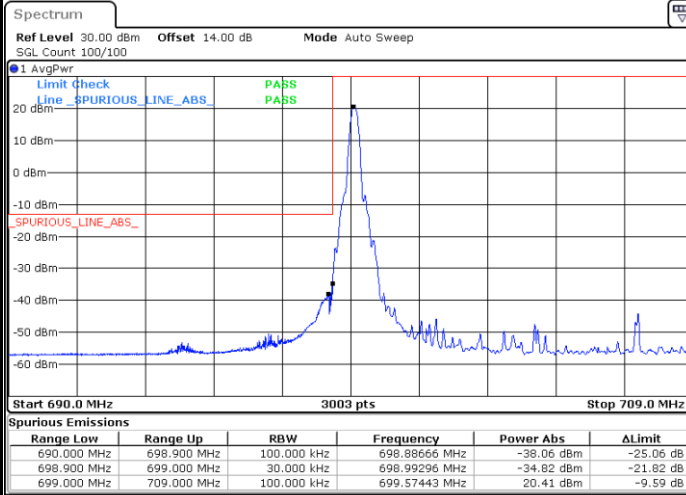
Highest Band Edge / Full RB



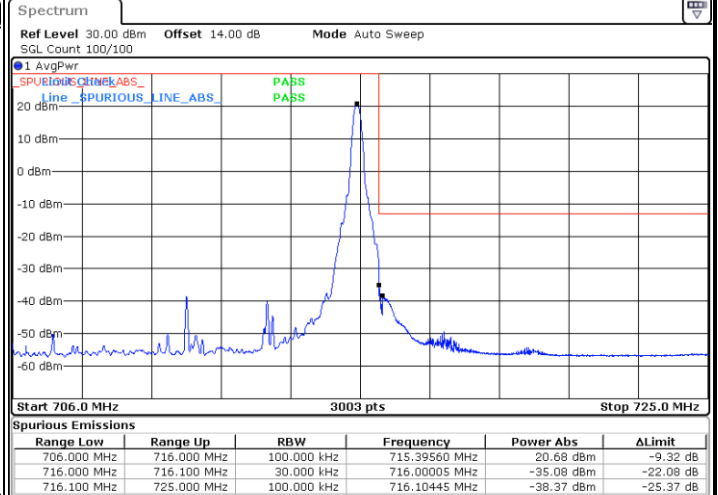


LTE Band 12 / 10MHz / 16QAM

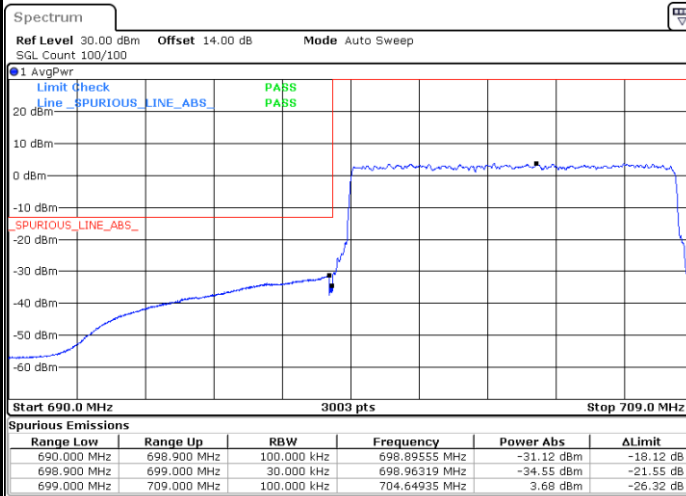
Lowest Band Edge / 1 RB



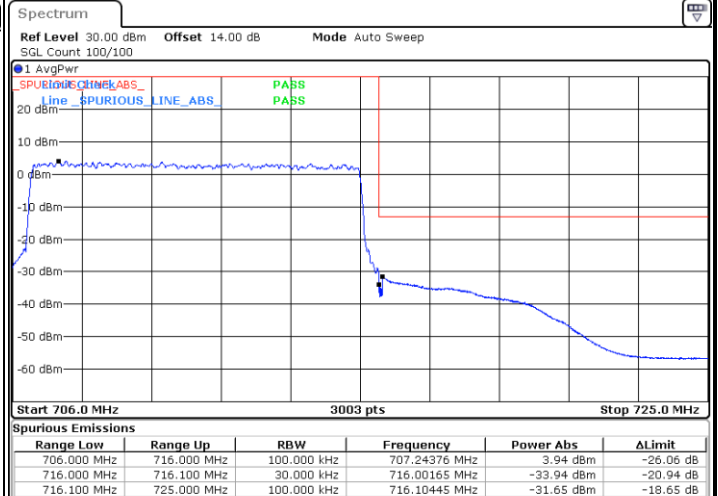
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



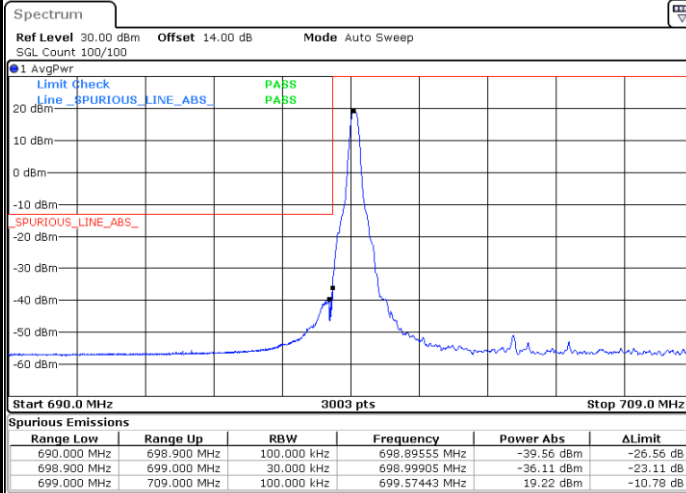
Highest Band Edge / Full RB



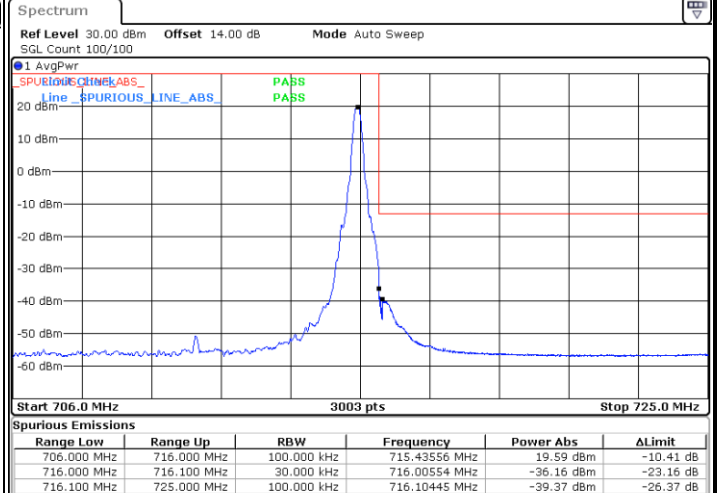


LTE Band 12 / 10MHz / 64QAM

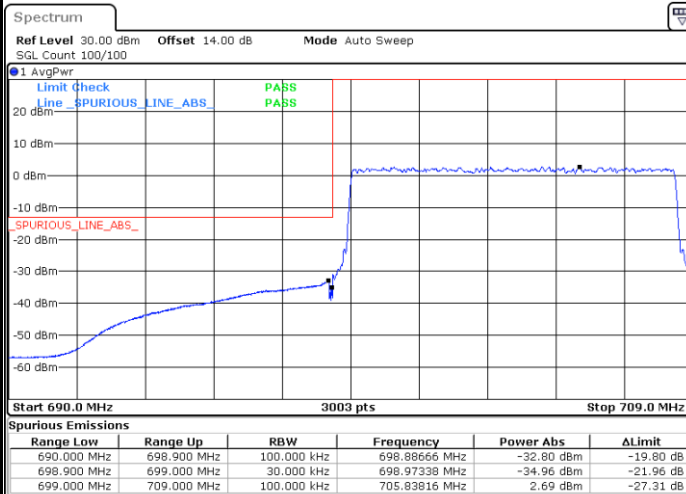
Lowest Band Edge / 1 RB



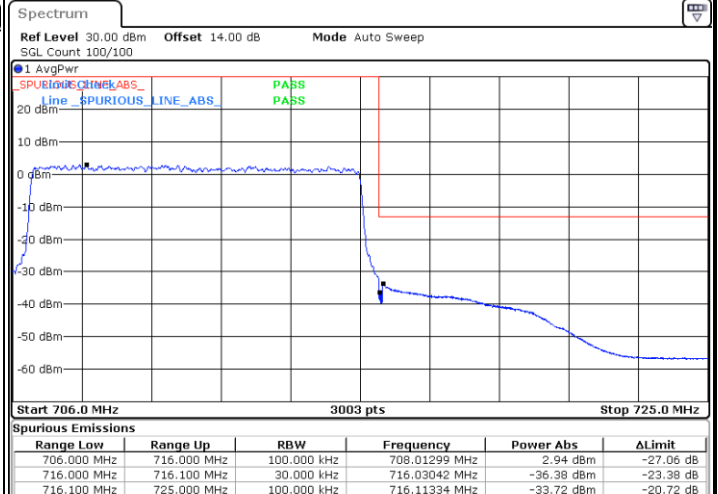
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

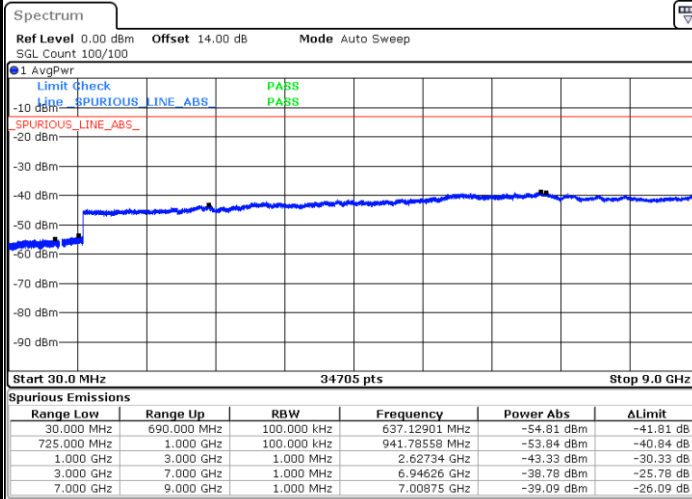




Conducted Spurious Emission

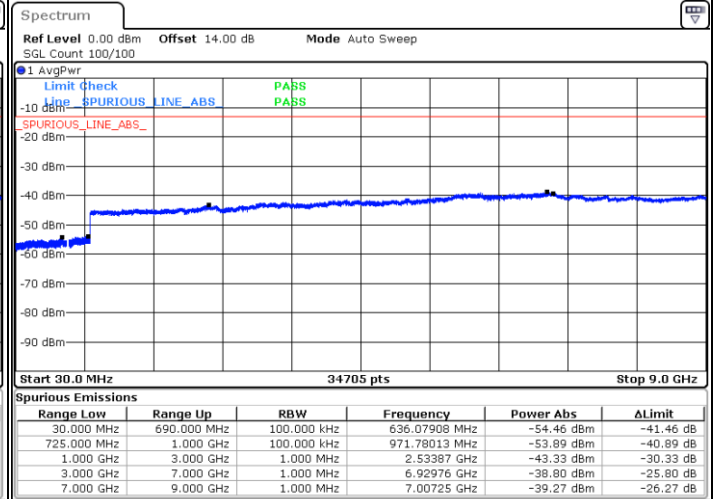
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



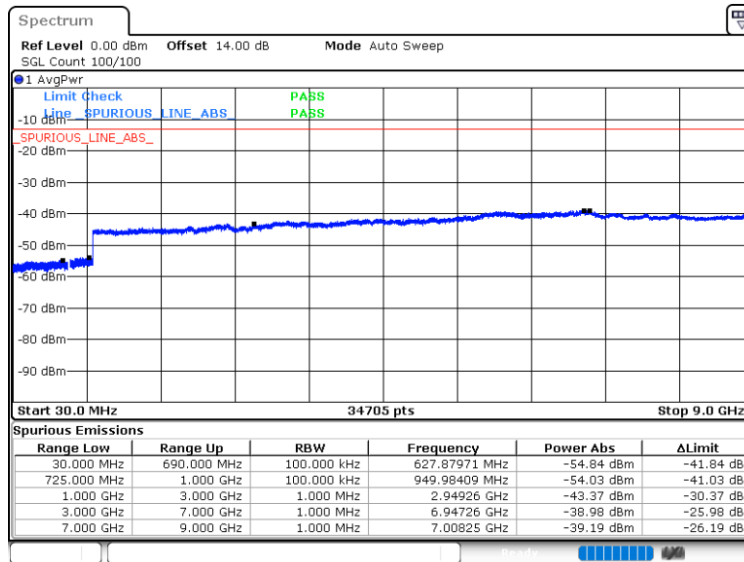
Date: 12.JUL.2024 14:22:23

Middle Channel / QPSK



Date: 12.JUL.2024 14:23:32

Highest Channel / QPSK

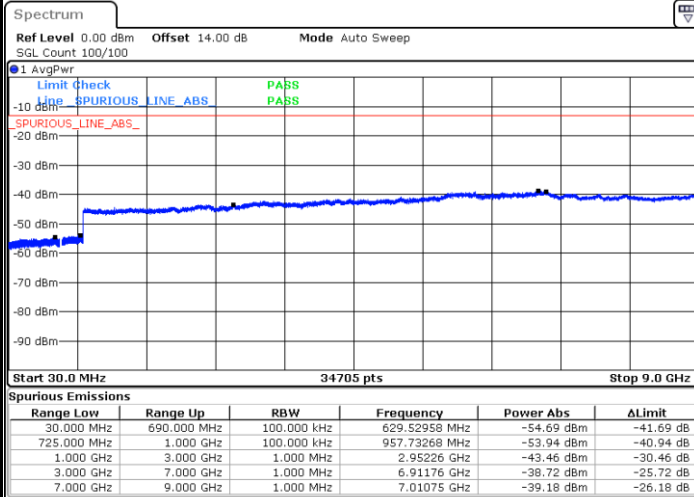


Date: 12.JUL.2024 14:32:03



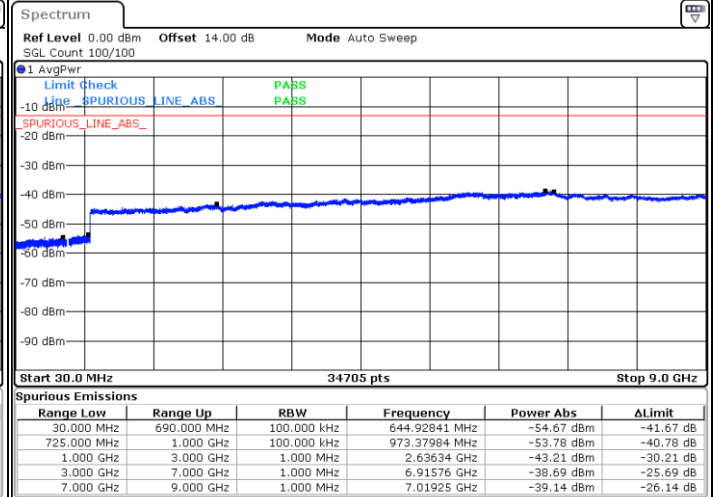
LTE Band 12 / 3MHz

Lowest Channel / QPSK



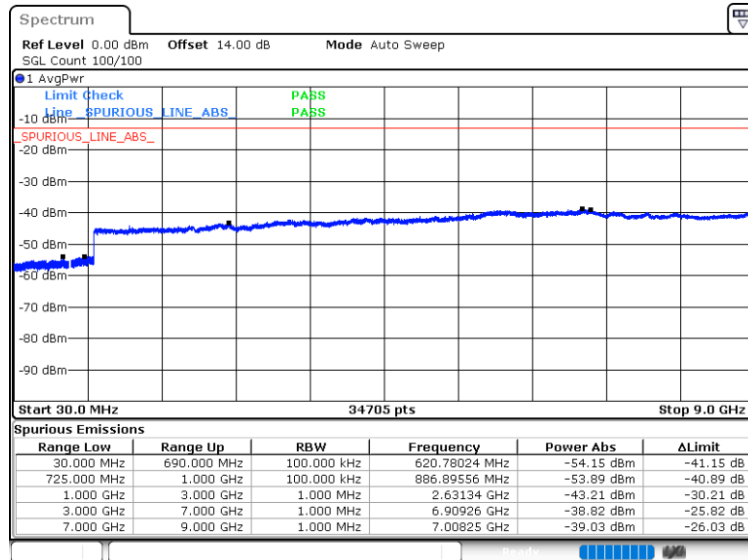
Date: 12.JUL.2024 14:39:58

Middle Channel / QPSK



Date: 12.JUL.2024 14:41:07

Highest Channel / QPSK

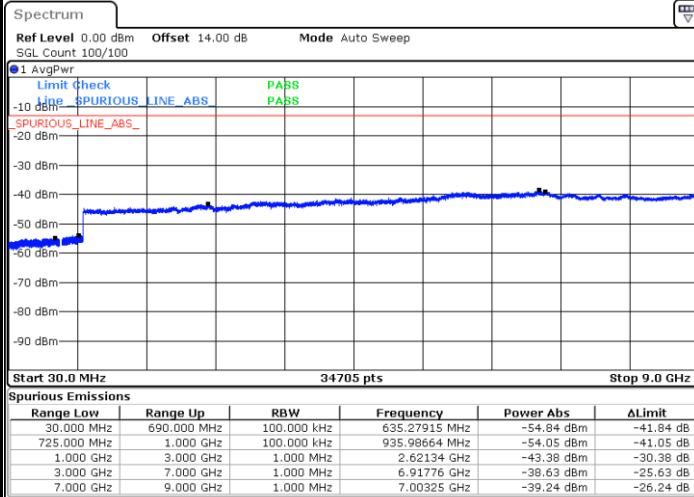


Date: 12.JUL.2024 14:49:37



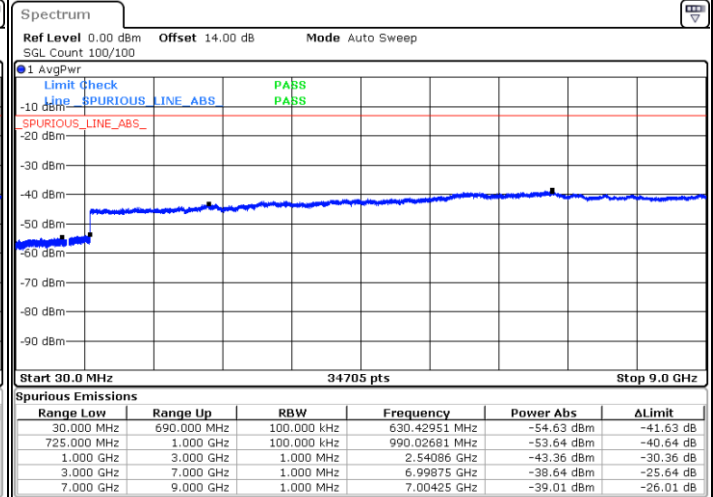
LTE Band 12 / 5MHz

Lowest Channel / QPSK



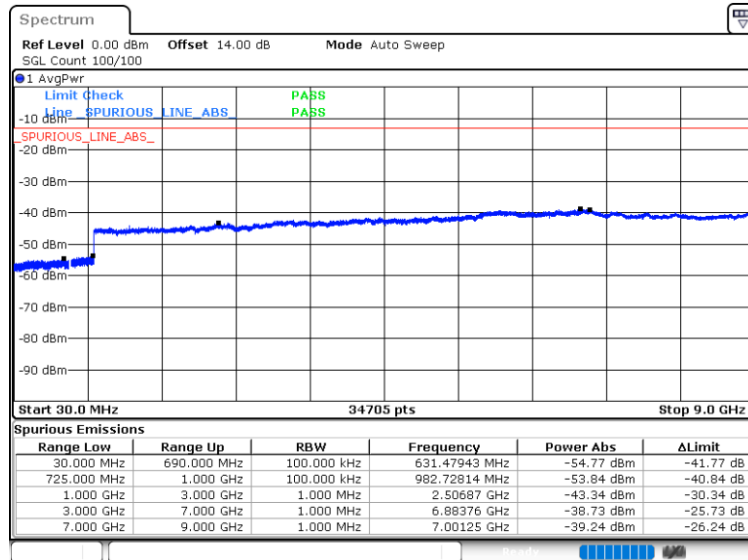
Date: 12.JUL.2024 14:57:31

Middle Channel / QPSK



Date: 12.JUL.2024 14:58:40

Highest Channel / QPSK

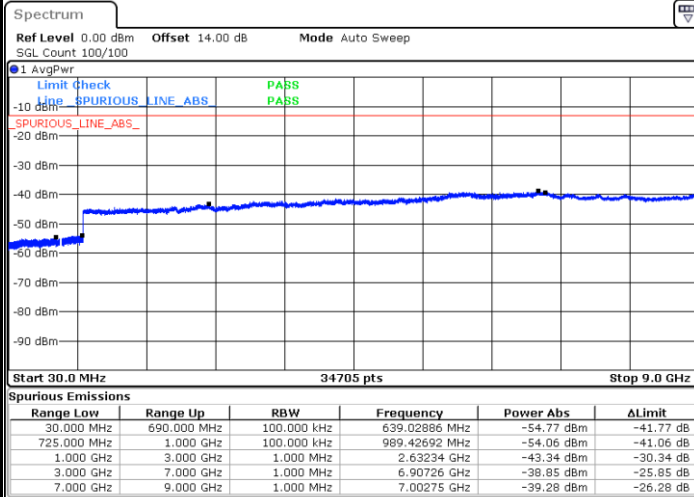


Date: 12.JUL.2024 15:07:10



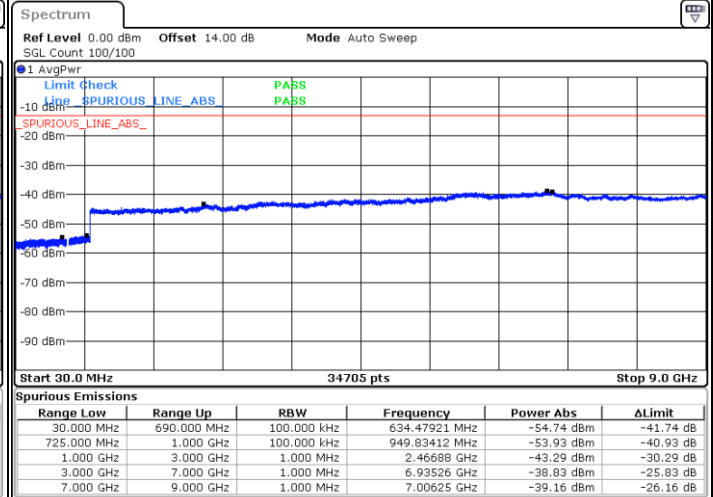
LTE Band 12 / 10MHz

Lowest Channel / QPSK



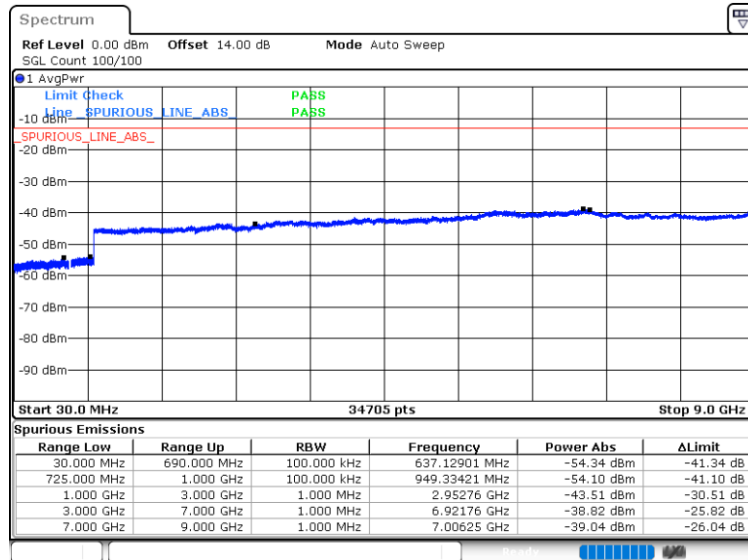
Date: 12.JUL.2024 15:15:06

Middle Channel / QPSK



Date: 12.JUL.2024 15:16:15

Highest Channel / QPSK



Date: 12.JUL.2024 15:24:45

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	0.0007	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0020	
0	Normal Voltage	0.0000	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0011	

Note:

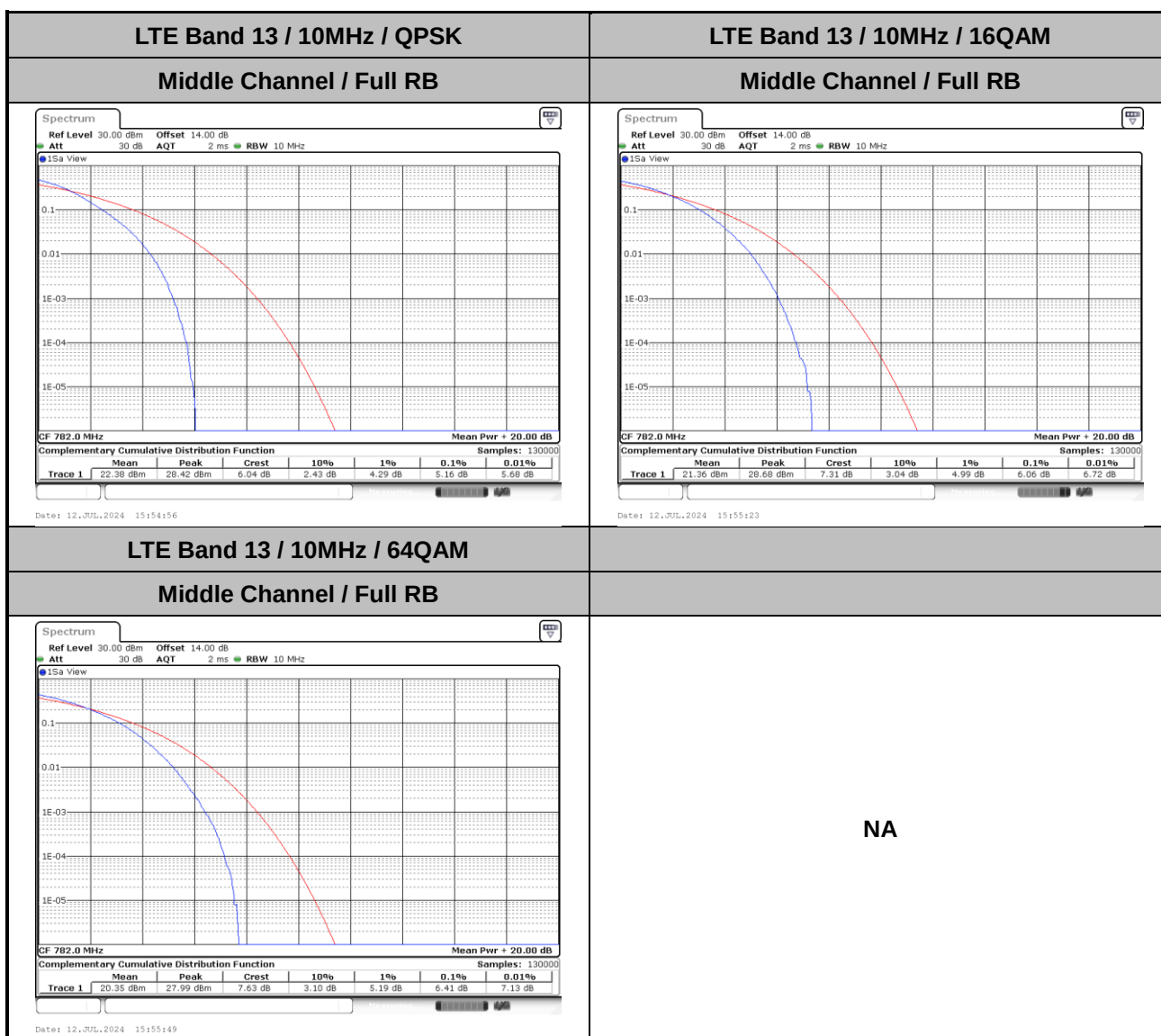
1. Normal Voltage = 3.85 V. ; Minimum Voltage = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

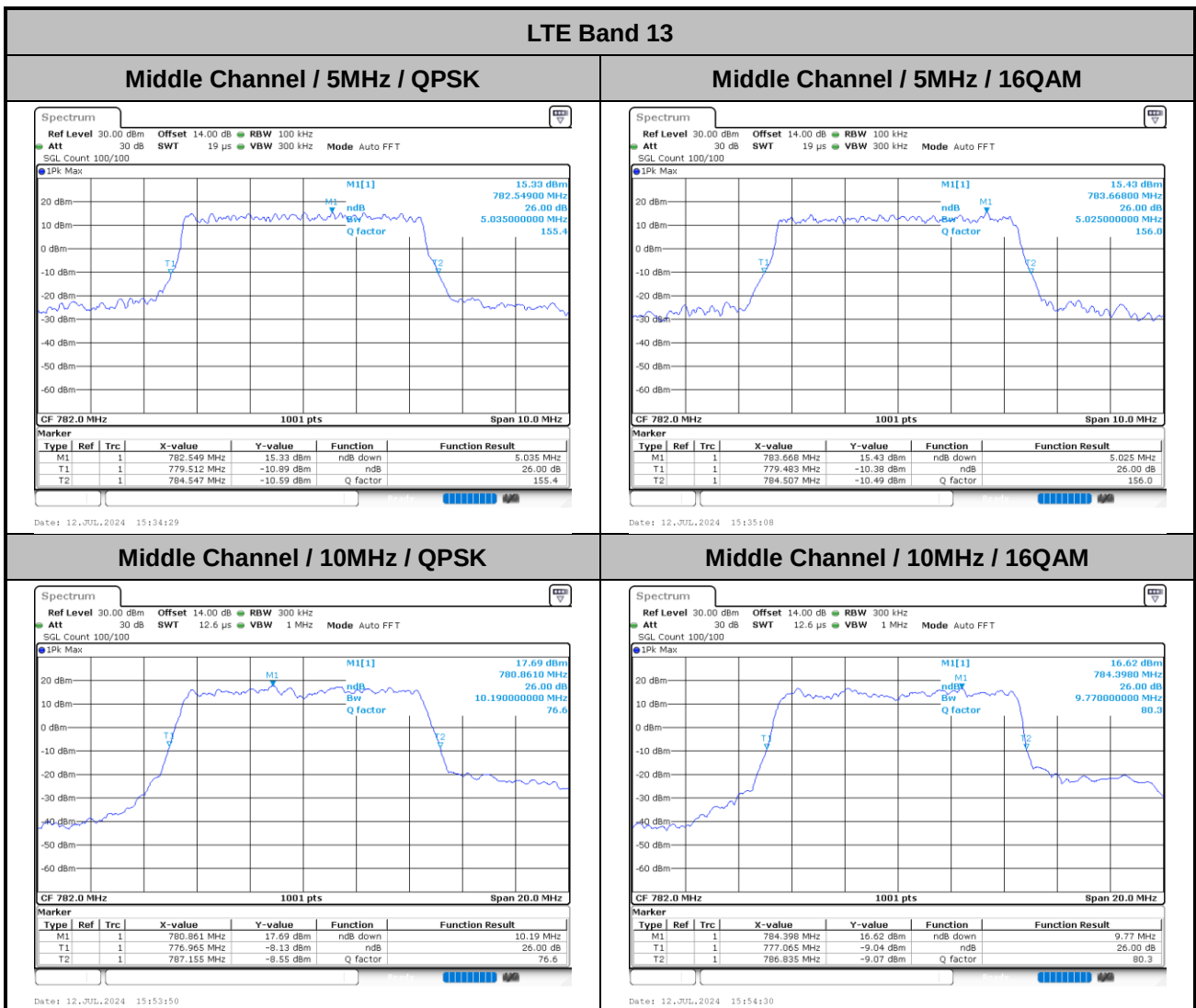
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.16	6.06	6.41	PASS



**26dB Bandwidth**

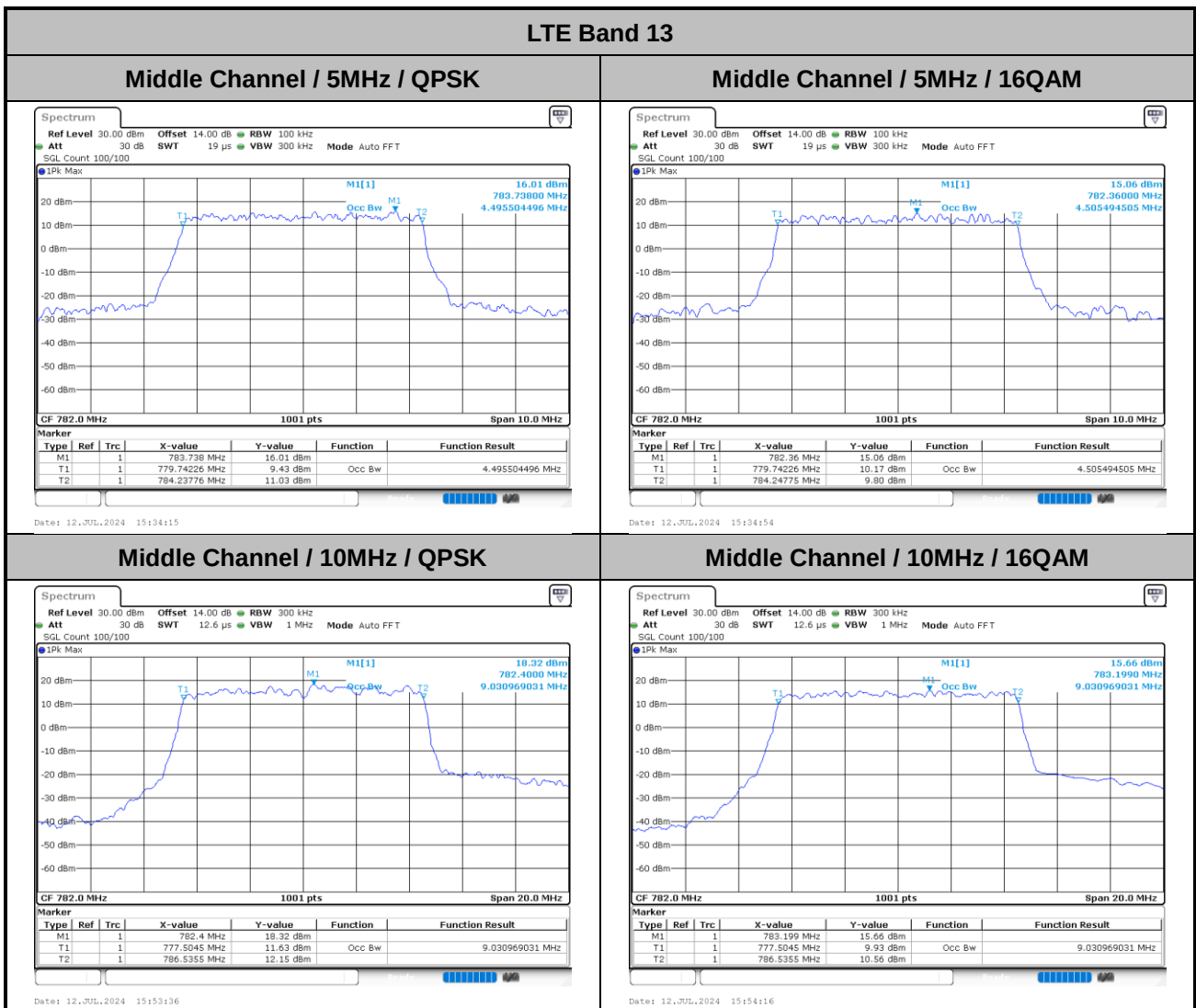
Mode	LTE Band 13 : 26dB BW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	5.04	5.03	10.19	9.77





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)			
BW	5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM
Middle CH	4.50	4.51	9.03	9.03

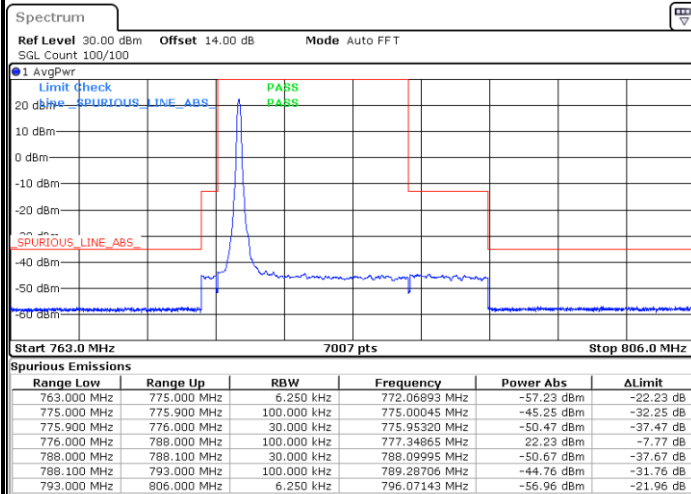




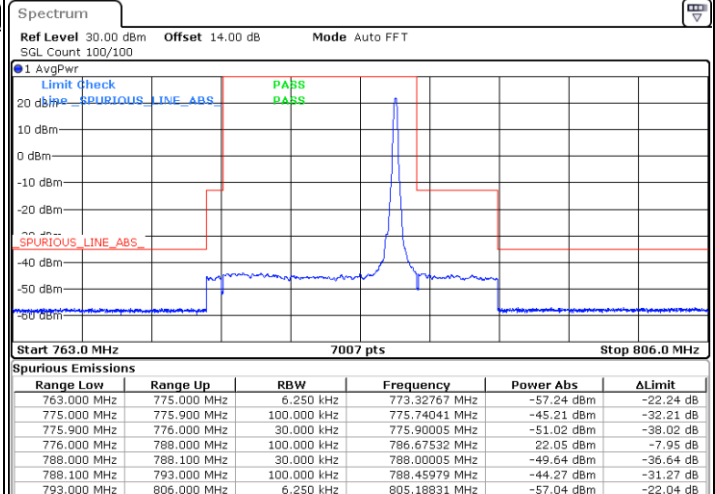
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

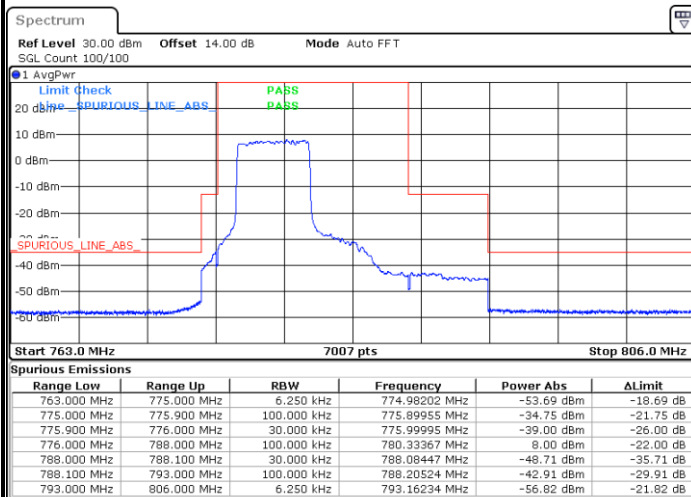
Lowest Band Edge / 1 RB



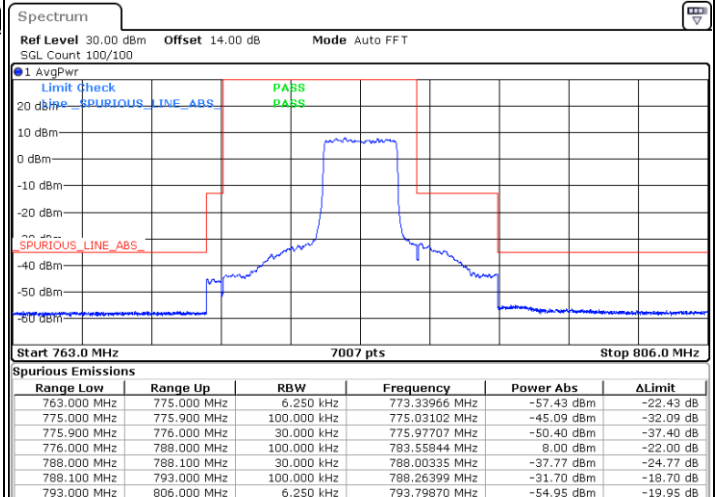
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



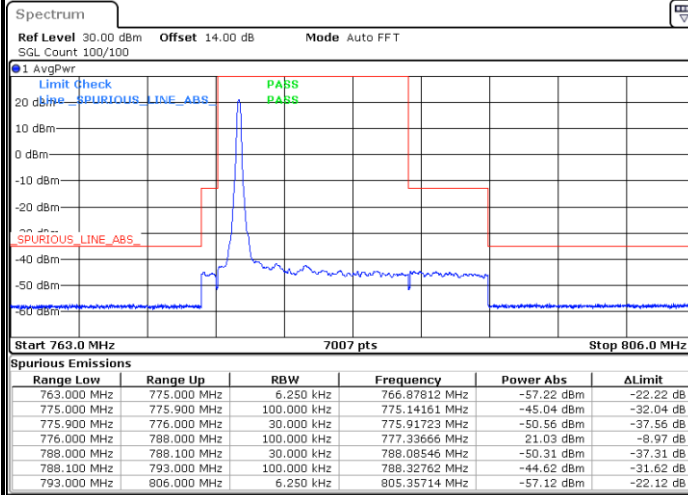
Highest Band Edge / Full RB





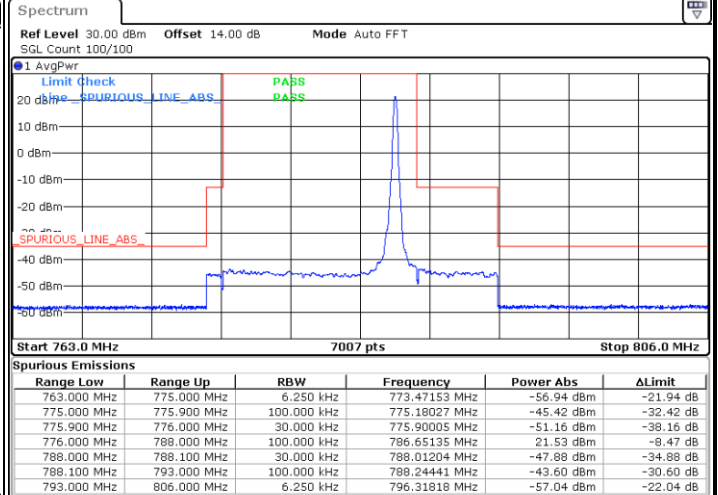
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



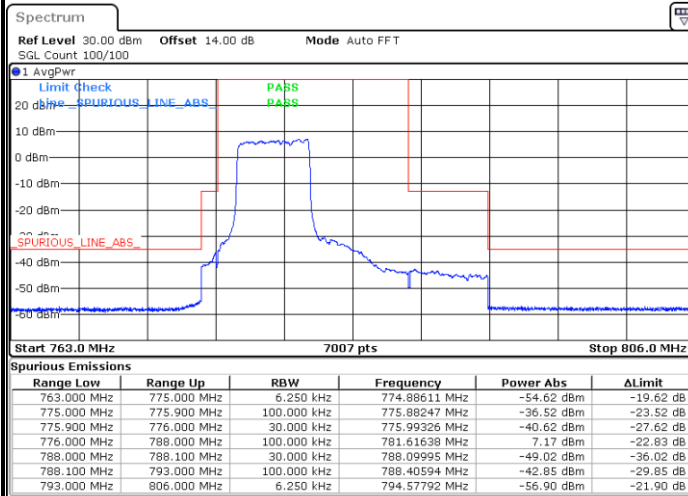
Date: 12.JUL.2024 15:27:29

Highest Band Edge / 1 RB



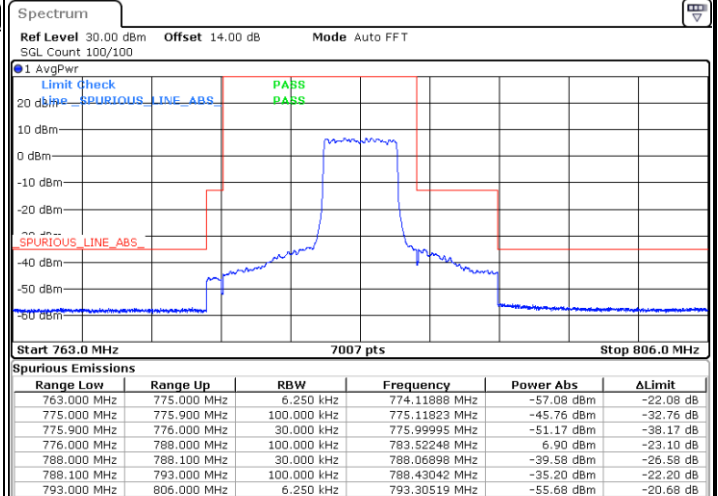
Date: 12.JUL.2024 15:37:08

Lowest Band Edge / Full RB



Date: 12.JUL.2024 15:30:30

Highest Band Edge / Full RB

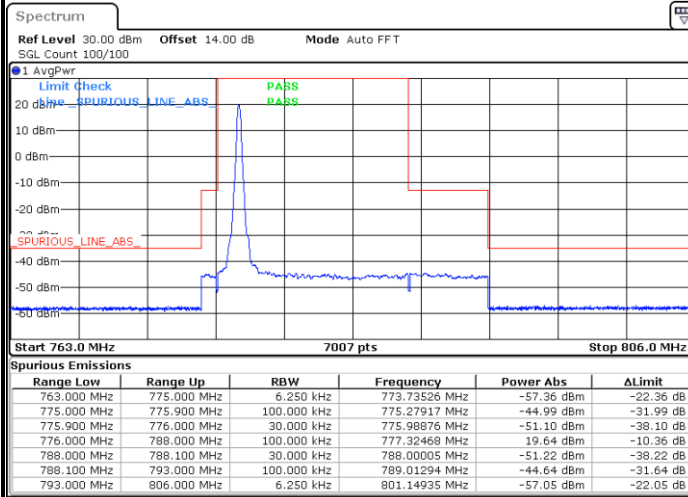


Date: 12.JUL.2024 15:40:10



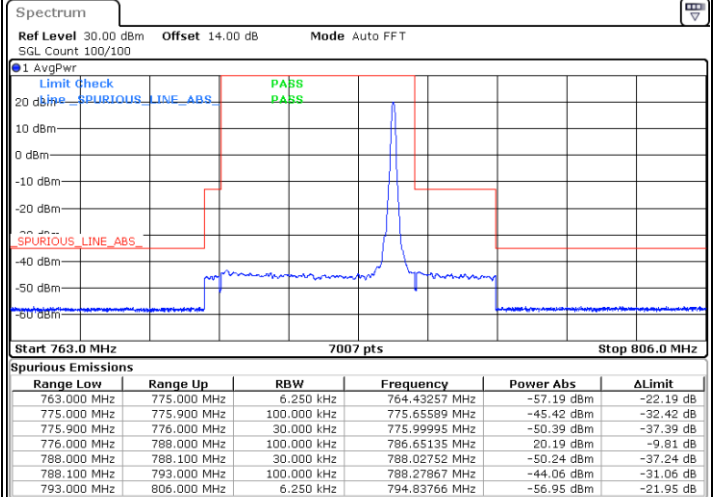
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



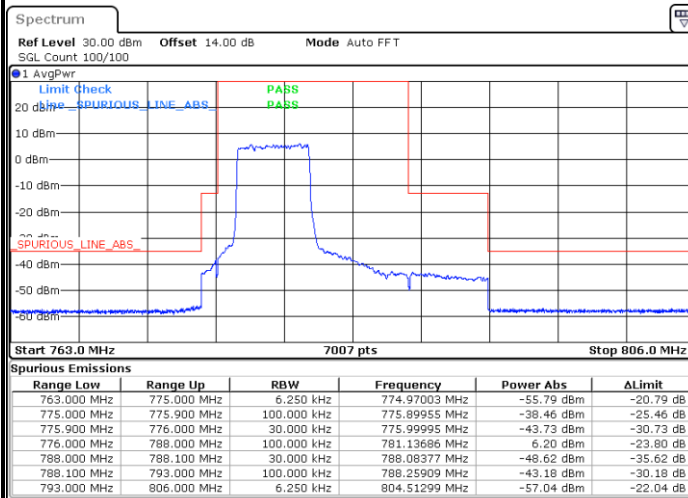
Date: 12.JUL.2024 15:28:29

Highest Band Edge / 1 RB



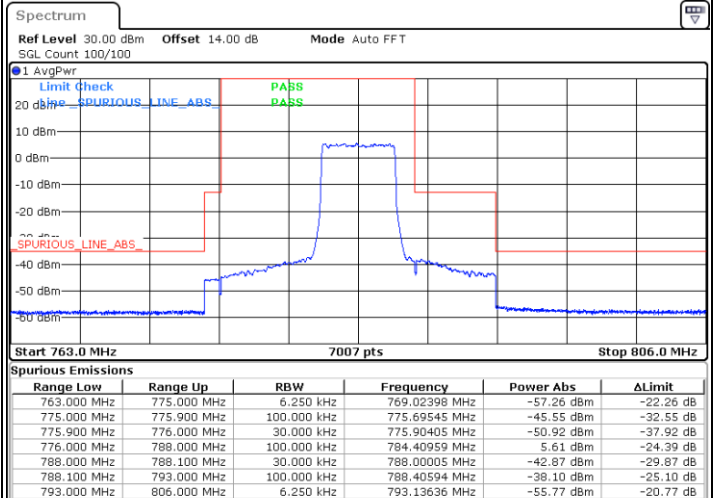
Date: 12.JUL.2024 15:38:09

Lowest Band Edge / Full RB



Date: 12.JUL.2024 15:31:30

Highest Band Edge / Full RB

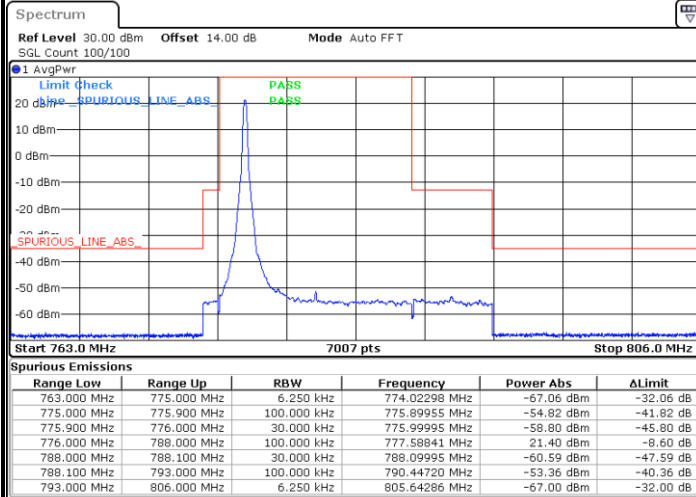


Date: 12.JUL.2024 15:41:10



LTE Band 13 / 10MHz / QPSK

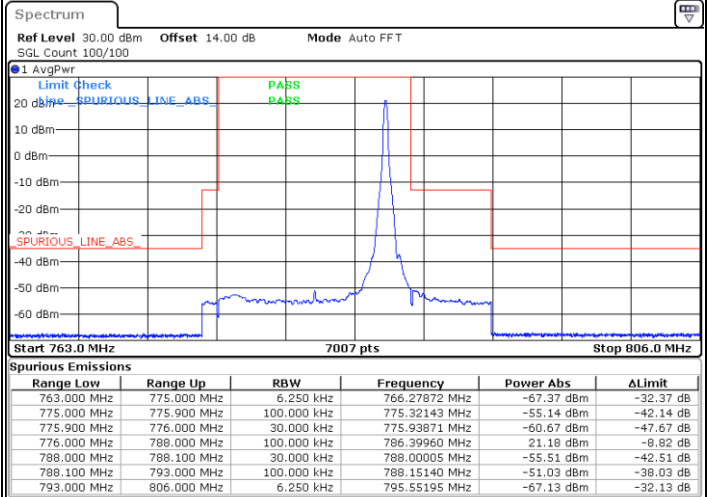
Band Edge / 1 RB



Date: 12.JUL.2024 15:44:03

LTE Band 13 / 10MHz / QPSK

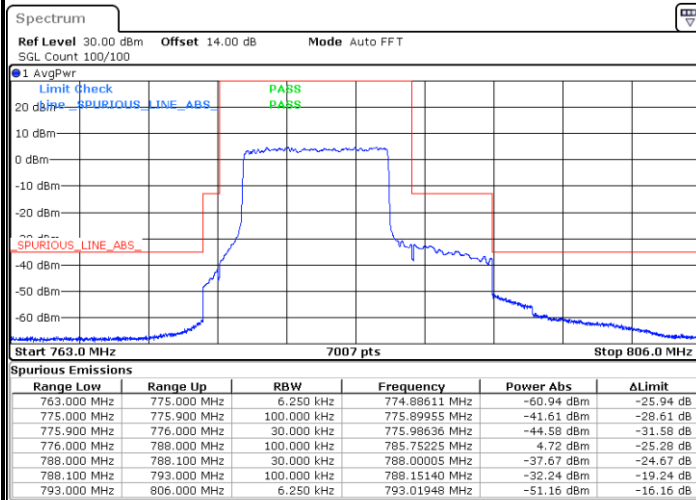
Band Edge / 1 RB



Date: 12.JUL.2024 15:47:02

LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB



Date: 12.JUL.2024 15:50:02

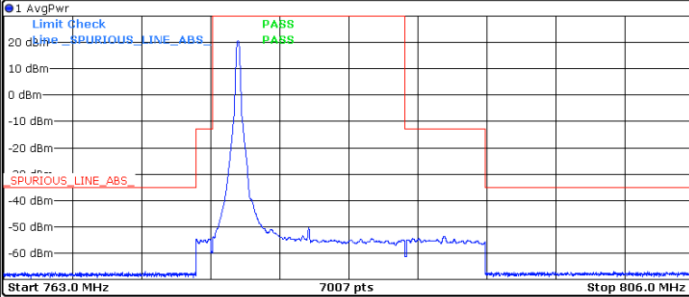
NA



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

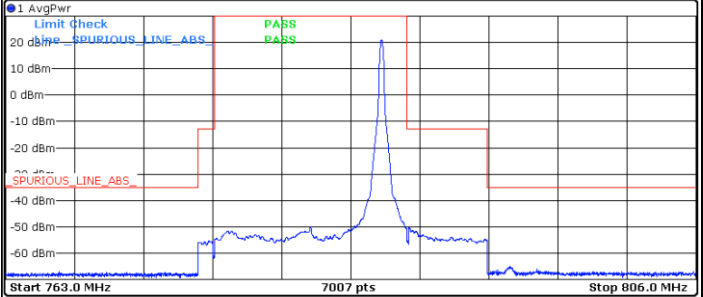
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	771.80519 MHz	-67.16 dBm	-32.16 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.78896 MHz	-54.74 dBm	-41.74 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.95609 MHz	-59.25 dBm	-46.25 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.58841 MHz	-20.77 dBm	-9.23 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-61.02 dBm	-48.02 dB
788.100 MHz	793.000 MHz	100.000 kHz	790.43252 MHz	-53.73 dBm	-40.73 dB
793.000 MHz	806.000 MHz	6.250 kHz	803.13636 MHz	-57.09 dBm	-32.09 dB

Date: 12.JUL.2024 15:45:03

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

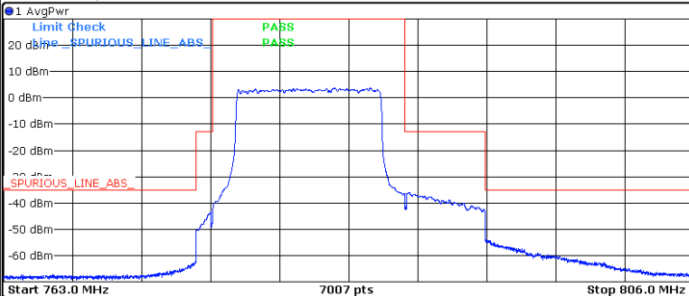
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	766.33866 MHz	-67.06 dBm	-32.06 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.65859 MHz	-55.37 dBm	-42.37 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.92722 MHz	-61.01 dBm	-46.01 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.39960 MHz	-20.91 dBm	-9.09 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.06139 MHz	-55.41 dBm	-42.41 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.11713 MHz	-50.30 dBm	-37.30 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.42208 MHz	-65.13 dBm	-30.13 dB

Date: 12.JUL.2024 15:48:02

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	-62.31 dBm	-27.31 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-43.30 dBm	-30.30 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98796 MHz	-47.59 dBm	-34.59 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.59441 MHz	3.64 dBm	-26.36 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05260 MHz	-41.30 dBm	-28.30 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.25909 MHz	-36.17 dBm	-23.17 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.12338 MHz	-54.07 dBm	-19.07 dB

Date: 12.JUL.2024 15:51:01

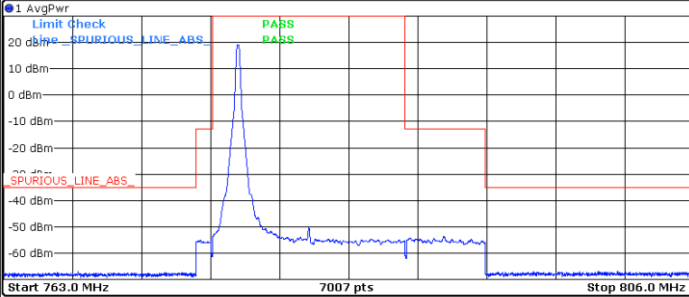
NA



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

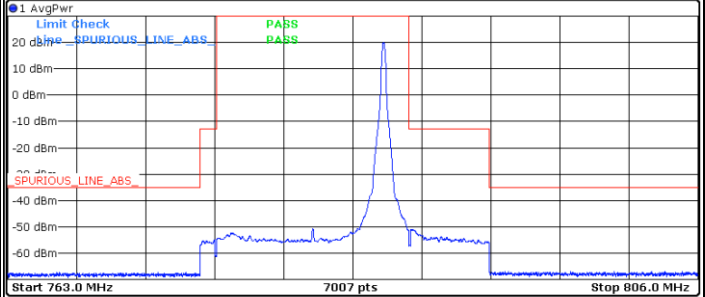
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	767.63337 MHz	-67.13 dBm	-32.13 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.25130 MHz	-55.07 dBm	-42.07 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.94690 MHz	-60.45 dBm	-47.45 dB
776.000 MHz	788.000 MHz	100.000 kHz	777.60040 MHz	-19.17 dBm	-10.83 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-60.91 dBm	-47.91 dB
788.100 MHz	793.000 MHz	100.000 kHz	790.41783 MHz	-53.69 dBm	-40.69 dB
793.000 MHz	806.000 MHz	6.250 kHz	798.85065 MHz	-66.88 dBm	-31.88 dB

Date: 12.JUL.2024 15:46:02

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

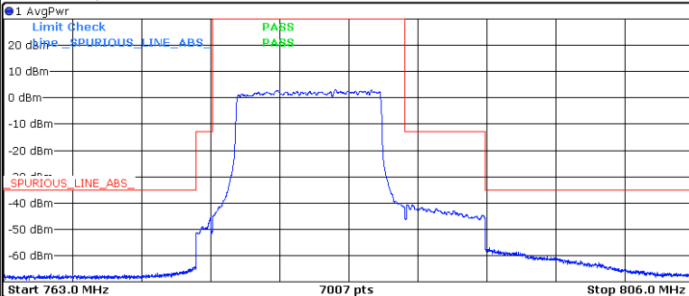
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.09491 MHz	-67.44 dBm	-32.44 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89595 MHz	-55.05 dBm	-42.05 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.90005 MHz	-60.71 dBm	-47.71 dB
776.000 MHz	788.000 MHz	100.000 kHz	786.41159 MHz	-19.87 dBm	-10.13 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05410 MHz	-57.05 dBm	-44.05 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.10245 MHz	-51.13 dBm	-38.13 dB
793.000 MHz	806.000 MHz	6.250 kHz	803.09740 MHz	-66.99 dBm	-31.99 dB

Date: 12.JUL.2024 15:49:02

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	774.98202 MHz	-64.35 dBm	-29.35 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-45.40 dBm	-32.40 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.97408 MHz	-50.76 dBm	-37.76 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.66633 MHz	3.10 dBm	-26.90 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-45.70 dBm	-32.70 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.14161 MHz	-40.64 dBm	-27.64 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.24026 MHz	-57.00 dBm	-22.00 dB

Date: 12.JUL.2024 15:52:01

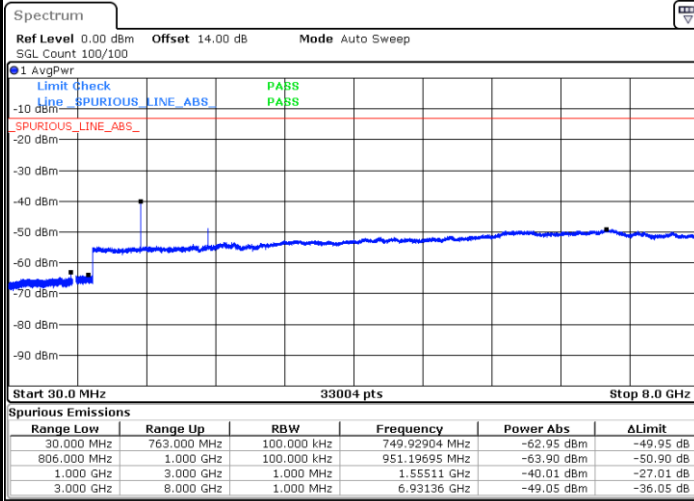
NA



Conducted Spurious Emission

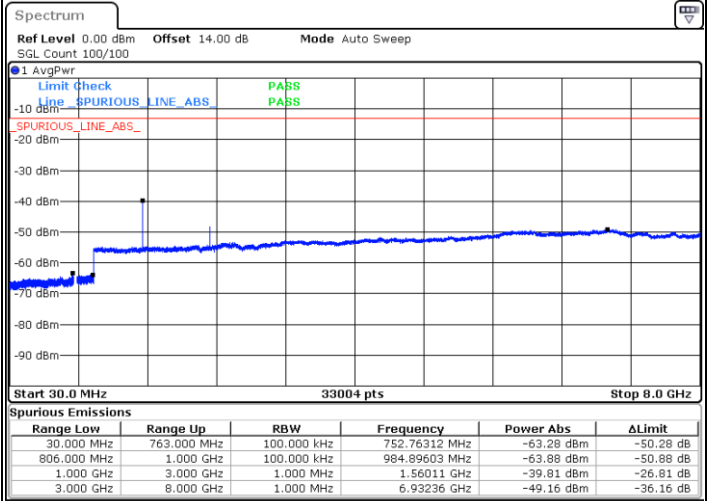
LTE Band 13 / 5MHz

Lowest Channel / QPSK



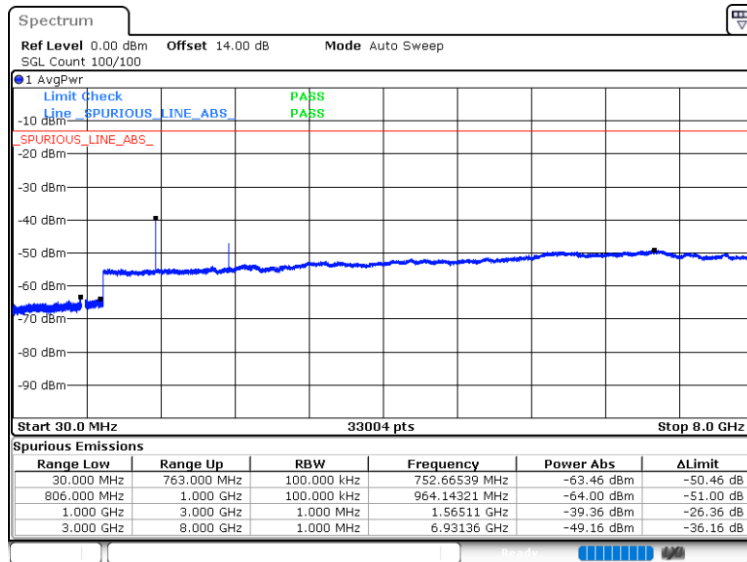
Date: 12.JUL.2024 15:32:40

Middle Channel / QPSK



Date: 12.JUL.2024 15:33:49

Highest Channel / QPSK

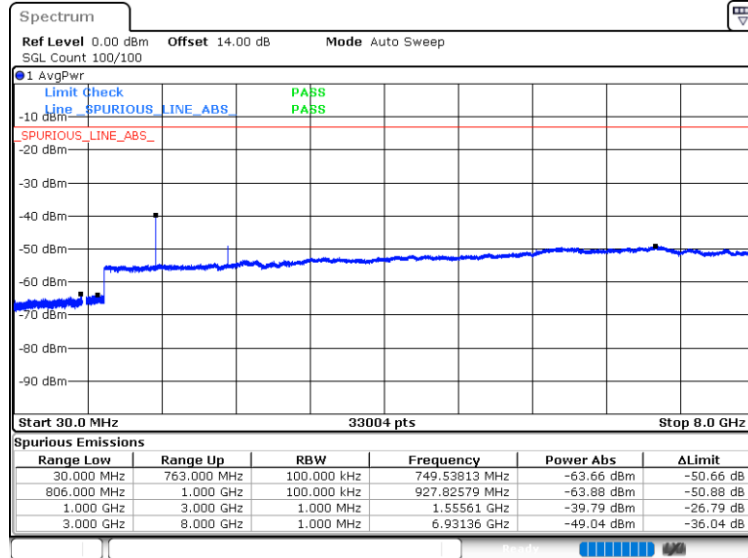


Date: 12.JUL.2024 15:42:20



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 12.JUL.2024 15:53:11

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	0.0014	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0010	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0003	

Note:

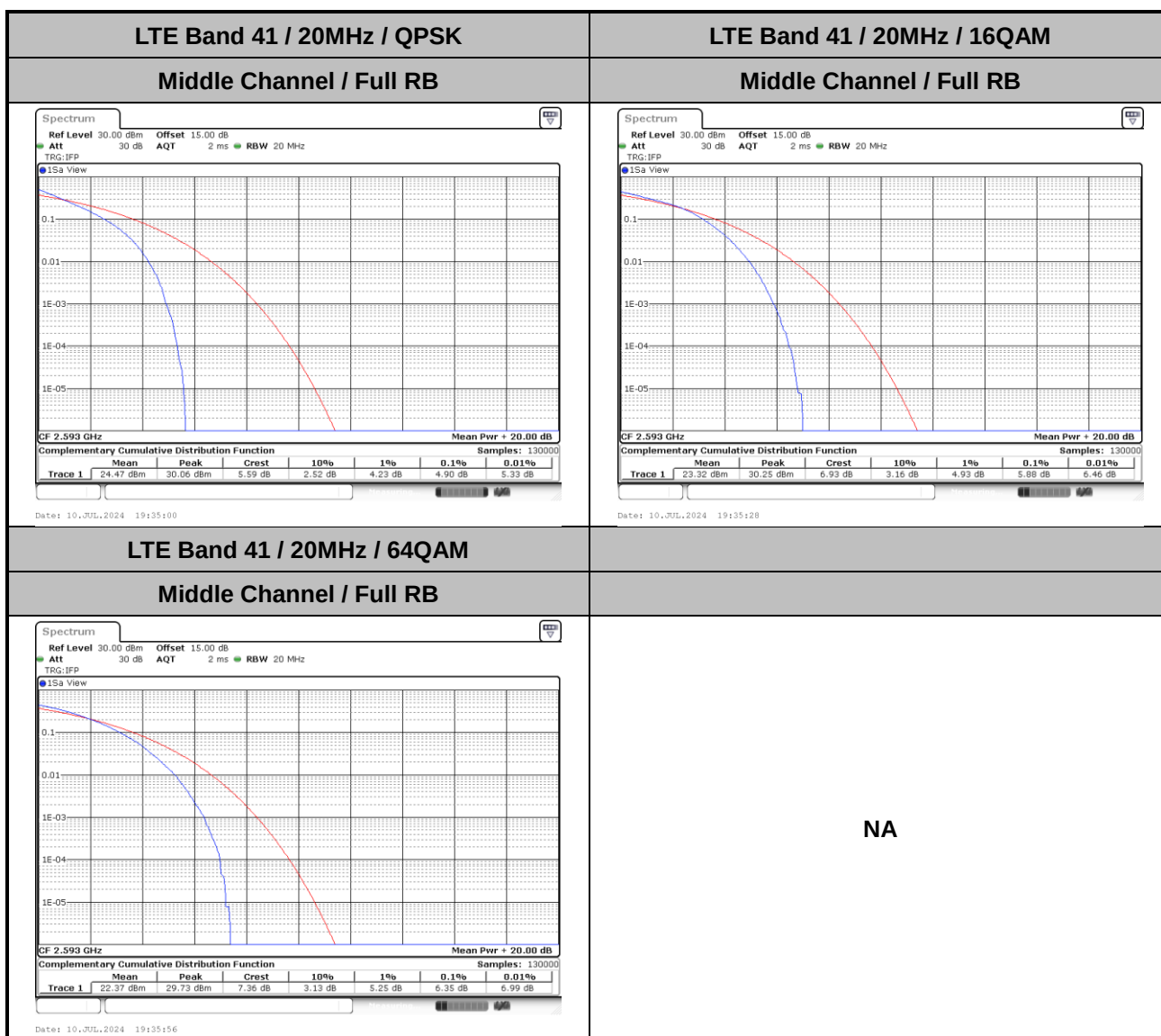
1. Normal Voltage =3.85 V. ; Minimum Voltage =3.6 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

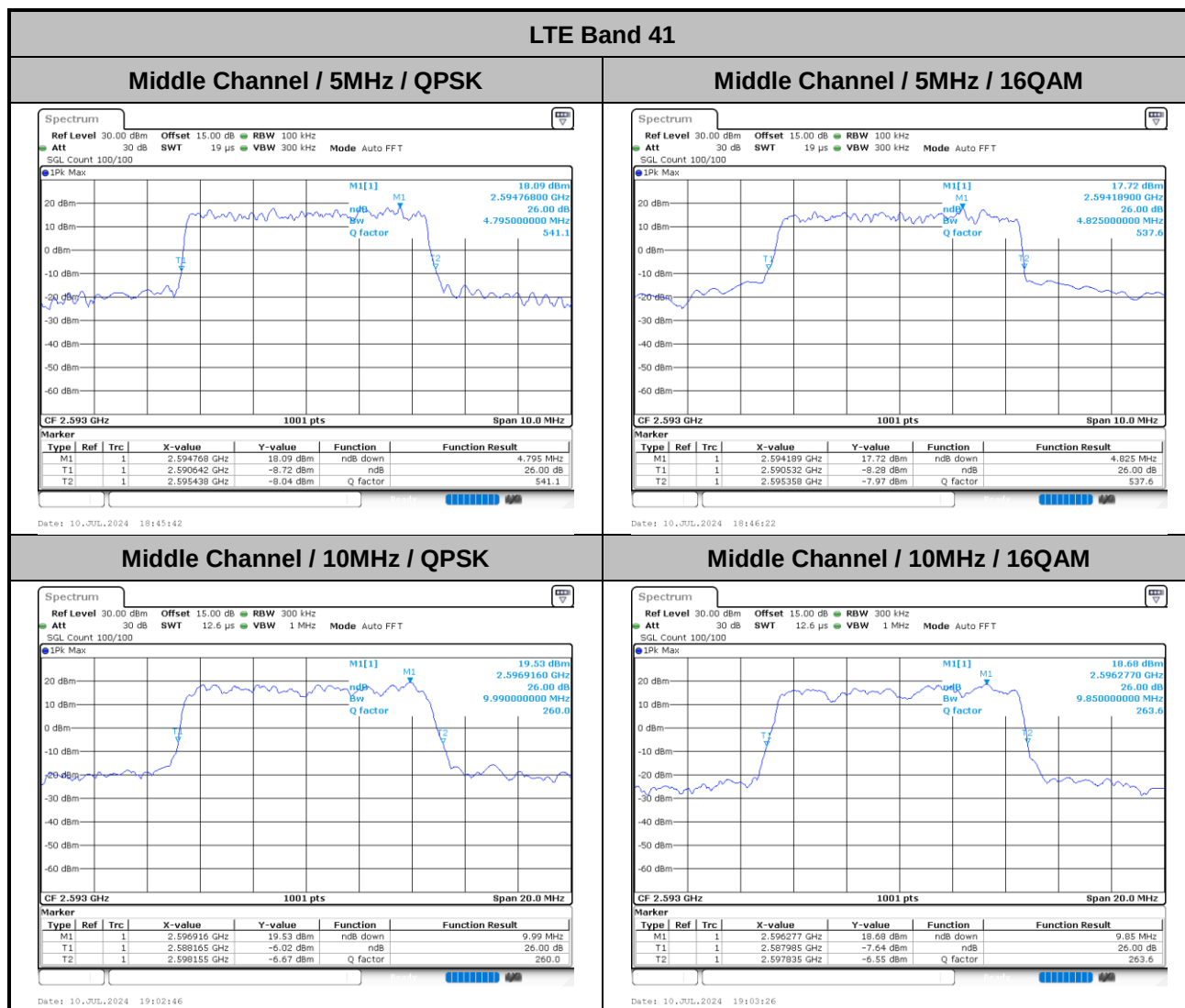
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.90	5.88	6.35	PASS





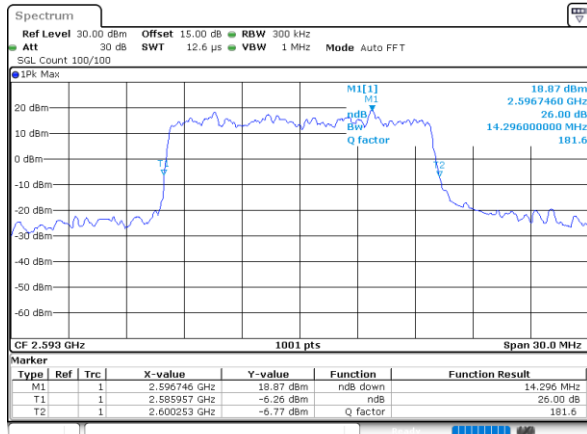
26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.80	4.83	9.99	9.85	14.30	14.69	18.70	18.74



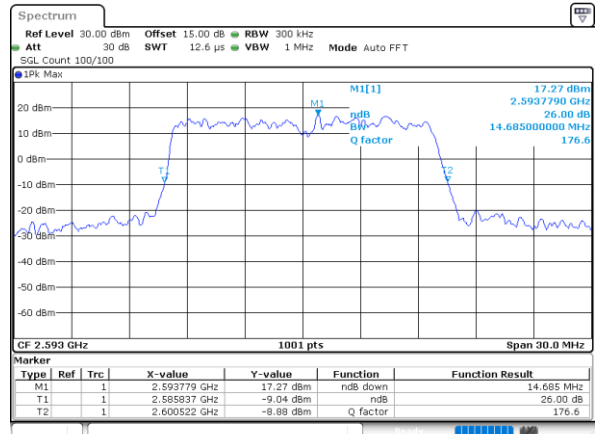


Middle Channel / 15MHz / QPSK



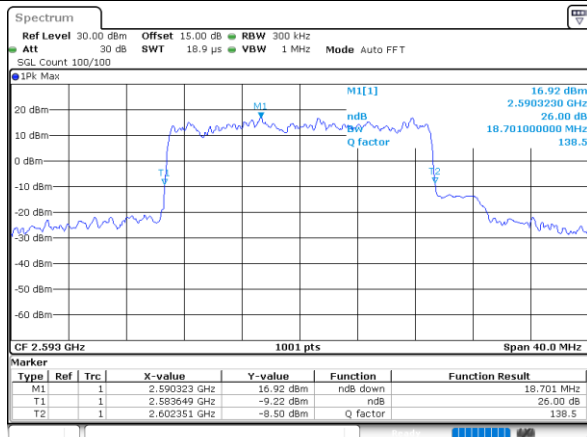
Date: 10_JUL_2024 19:17:49

Middle Channel / 15MHz / 16QAM



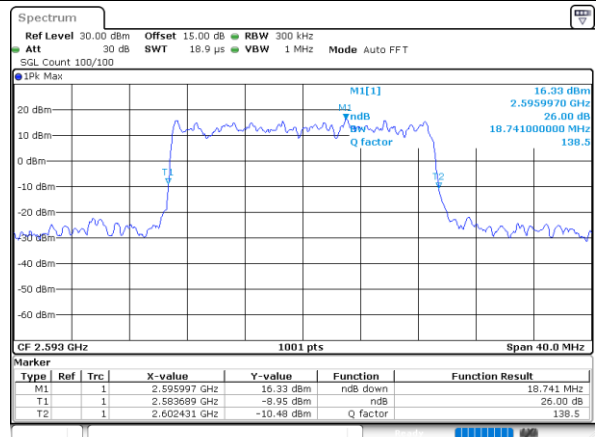
Date: 10_JUL_2024 19:18:30

Middle Channel / 20MHz / QPSK



Date: 10_JUL_2024 19:33:51

Middle Channel / 20MHz / 16QAM



Date: 10_JUL_2024 19:34:32