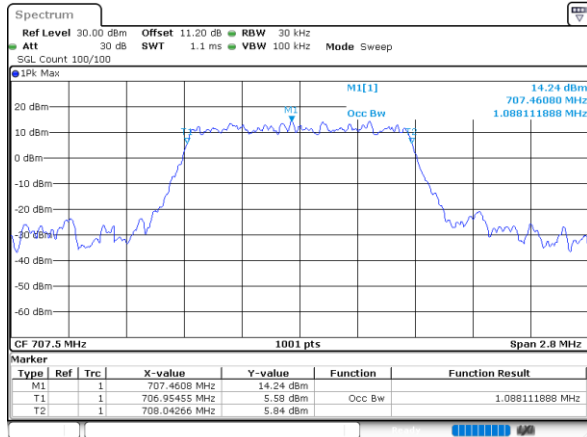


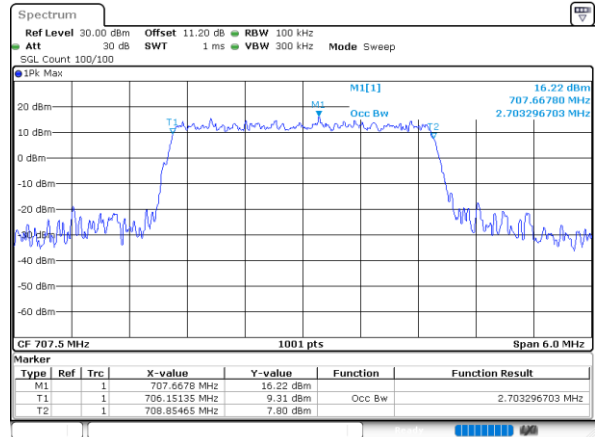


LTE Band 12

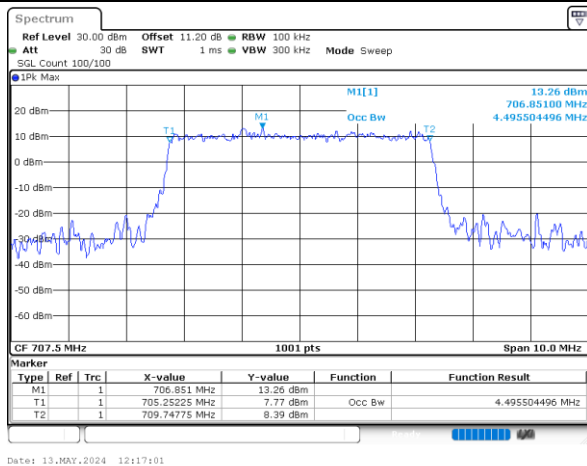
Middle Channel / 1.4MHz / 256QAM



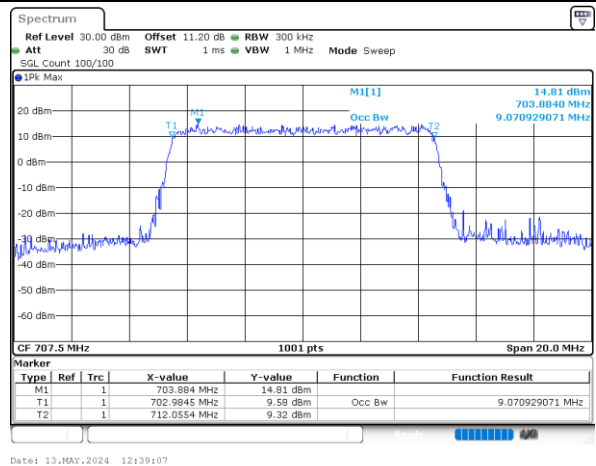
Middle Channel / 3MHz / 256QAM

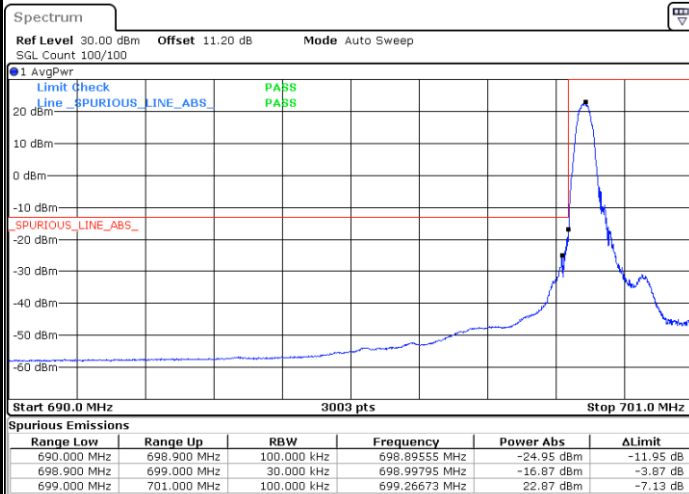
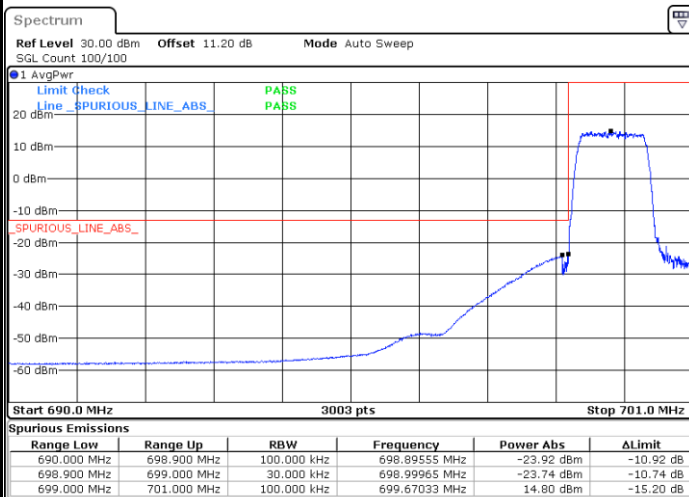
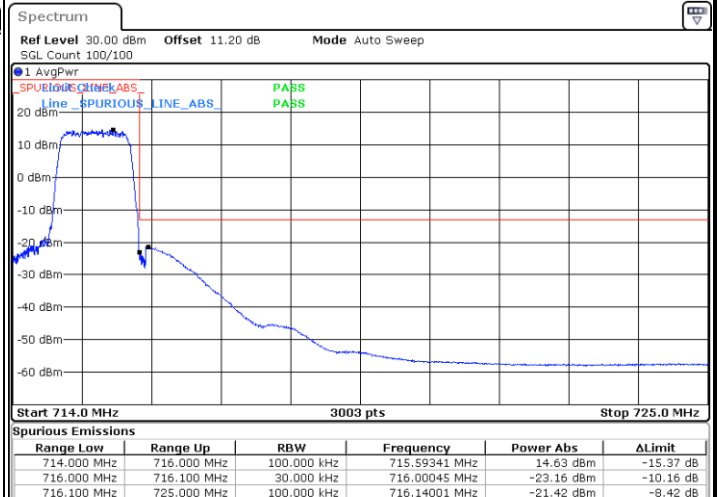


Middle Channel / 5MHz / 256QAM



Middle Channel / 10MHz / 256QAM

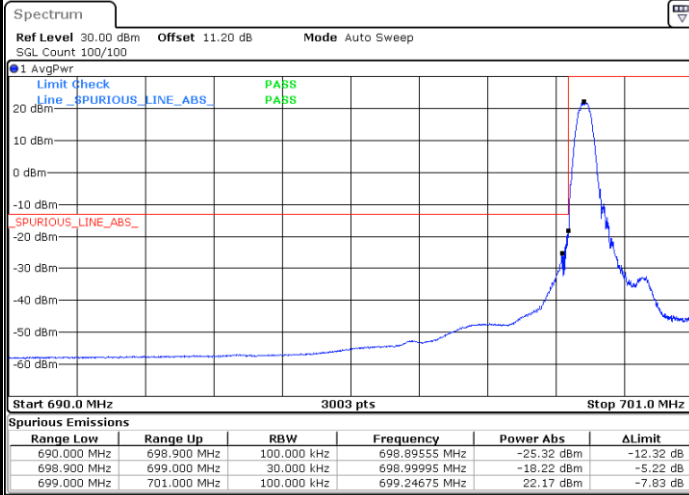


**Conducted Band Edge****LTE Band 12 / 1.4MHz / QPSK****Lowest Band Edge / 1RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

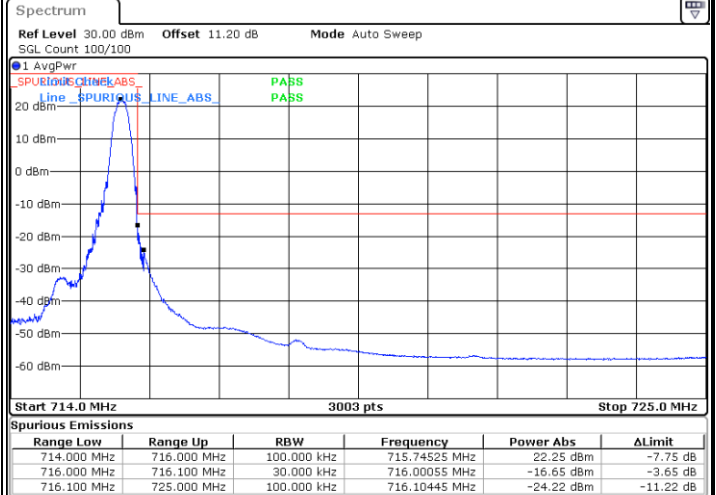


LTE Band 12 / 1.4MHz / 16QAM

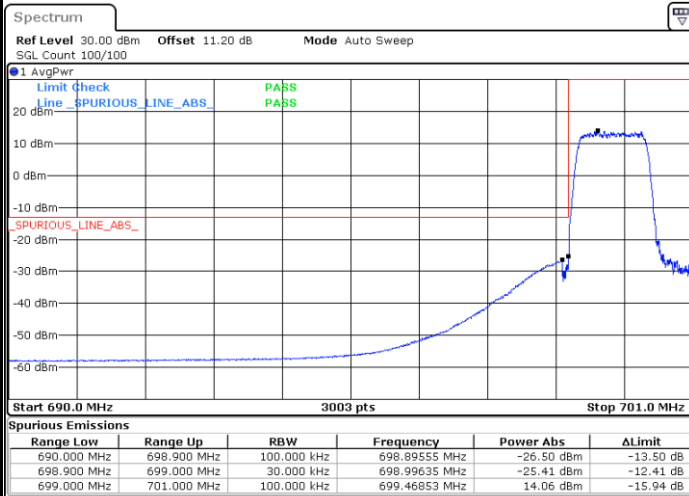
Lowest Band Edge / 1 RB



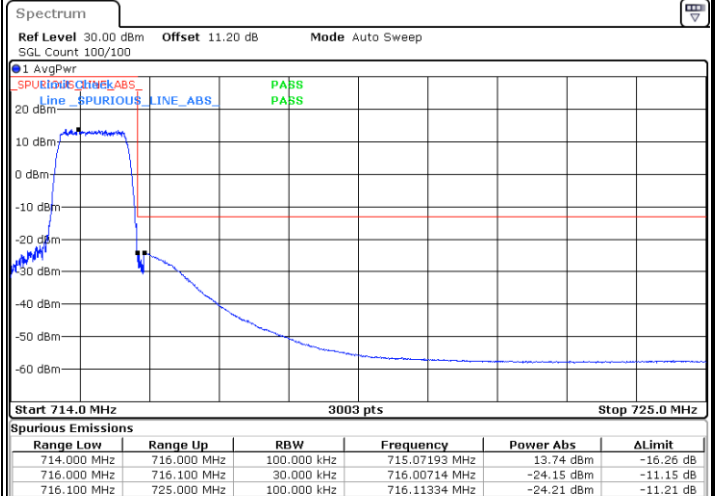
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



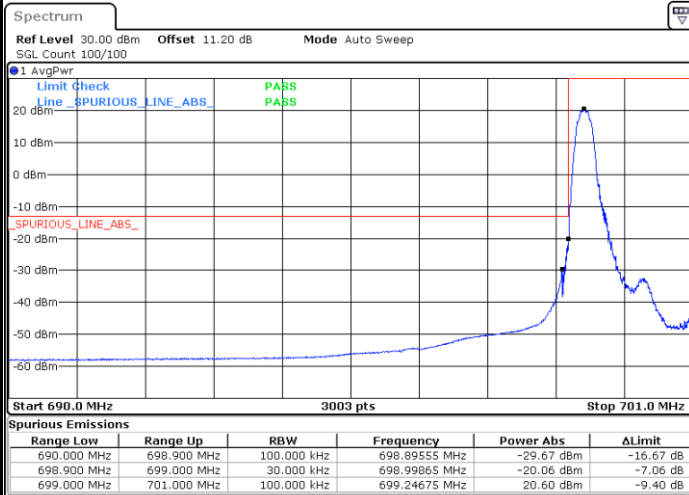
Highest Band Edge / Full RB



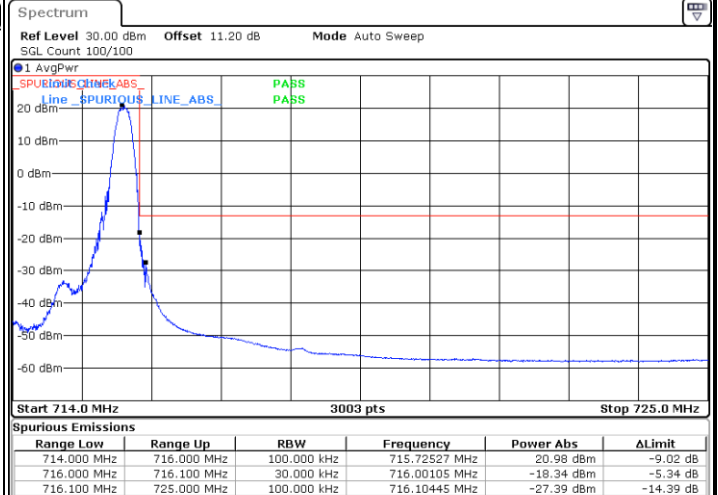


LTE Band 12 / 1.4MHz / 64QAM

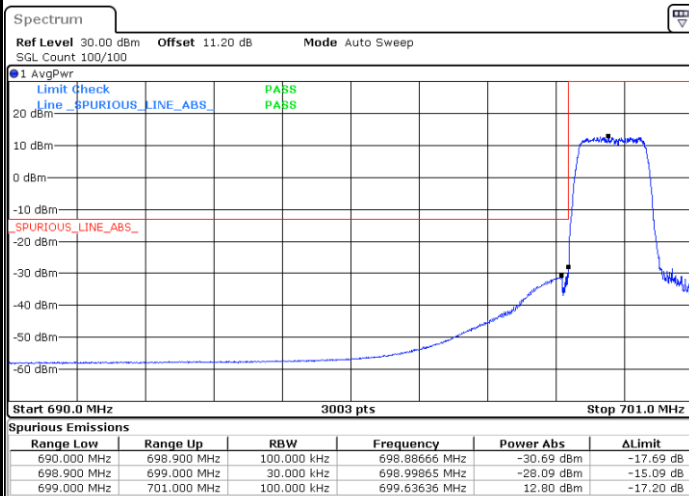
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



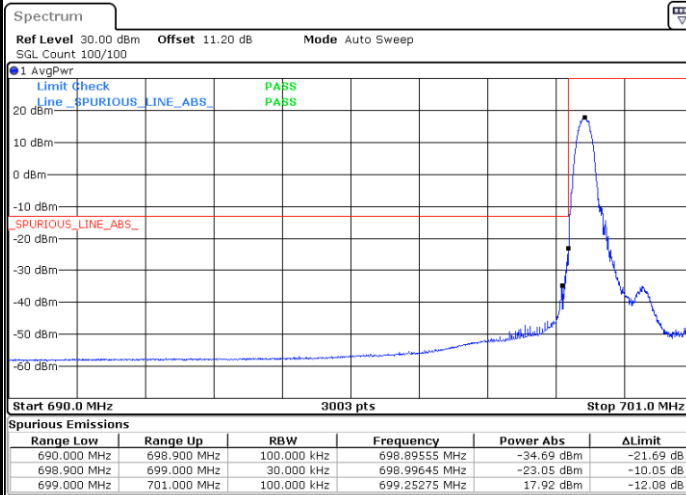
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 256QAM

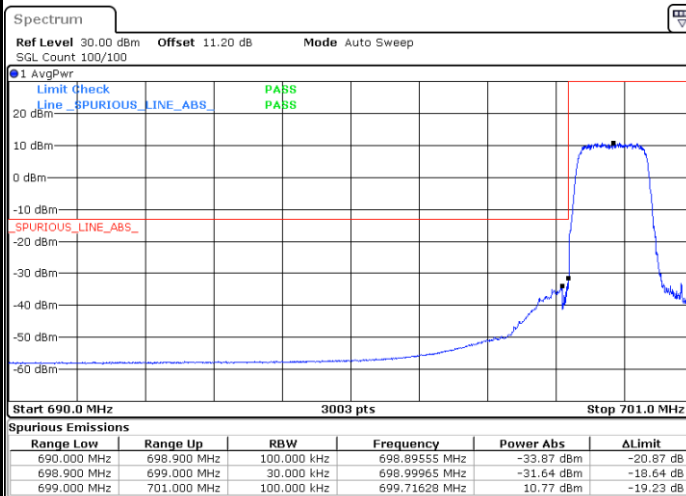
Lowest Band Edge / 1 RB



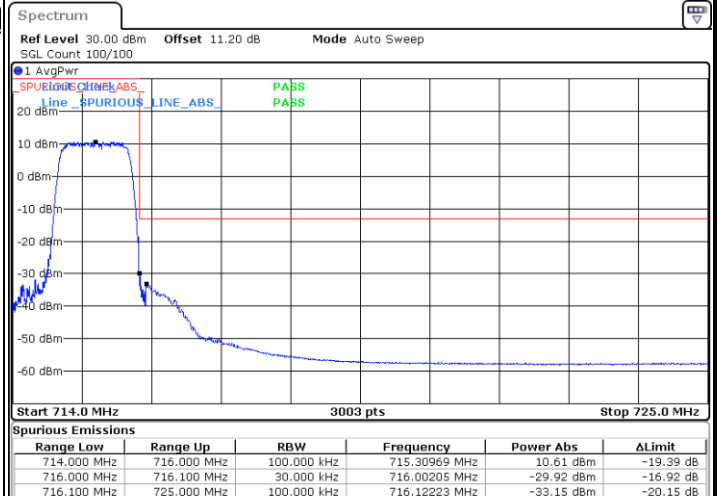
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



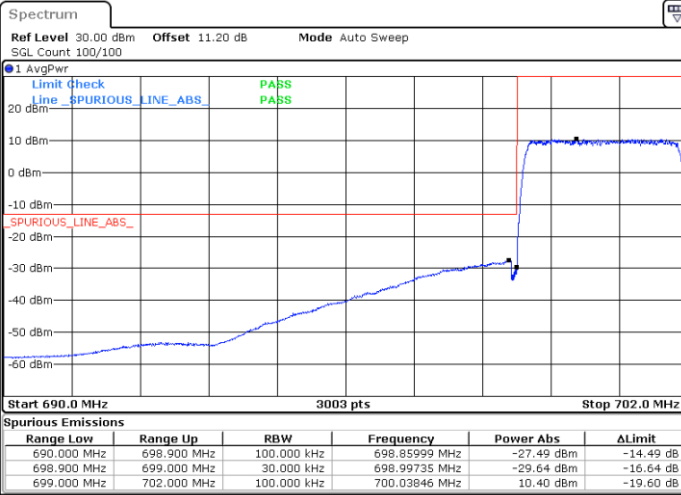
Highest Band Edge / Full RB



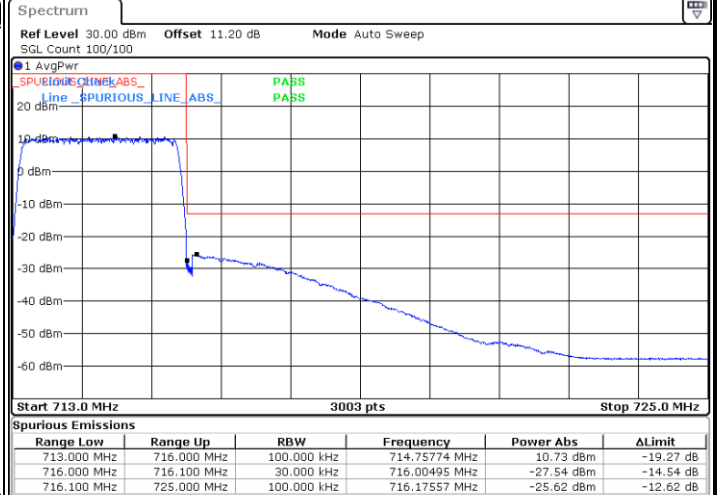


LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / Full RB

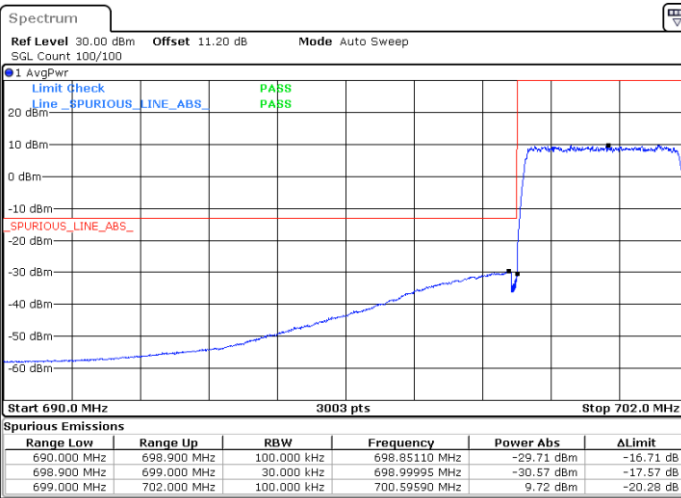


Highest Band Edge / Full RB

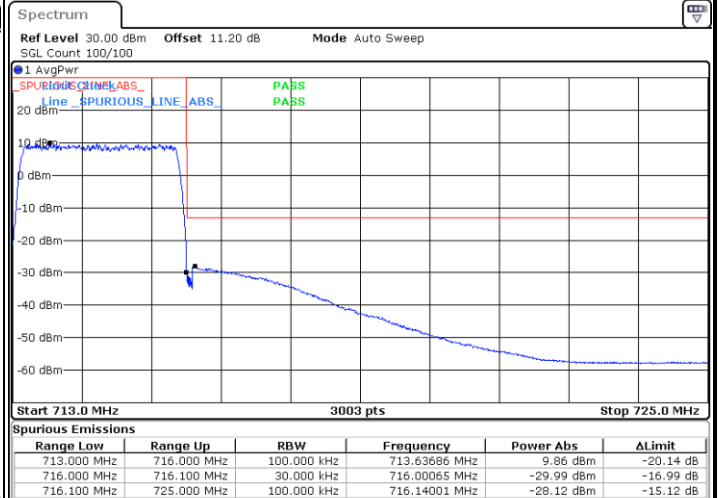


LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / Full RB



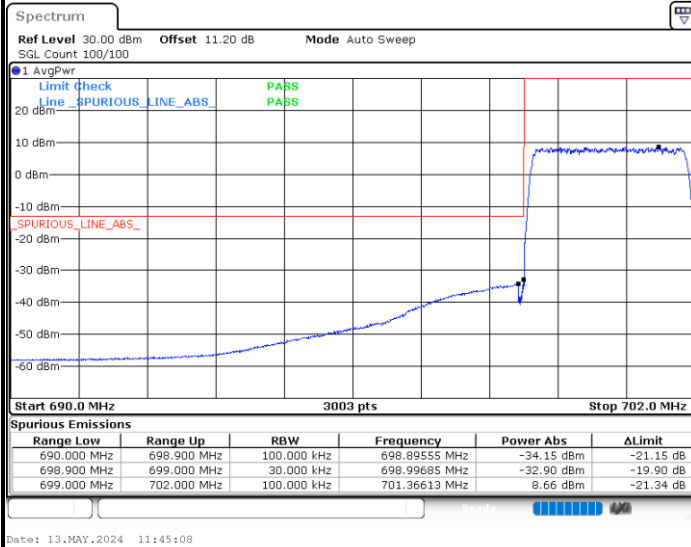
Highest Band Edge / Full RB



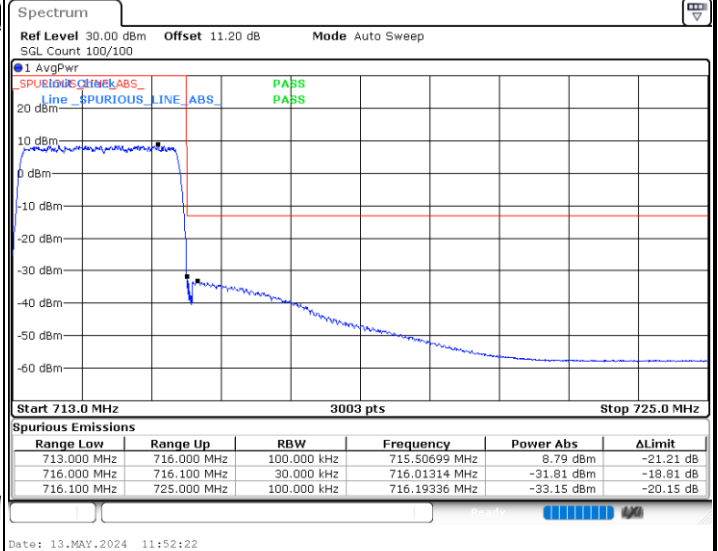


LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / Full RB

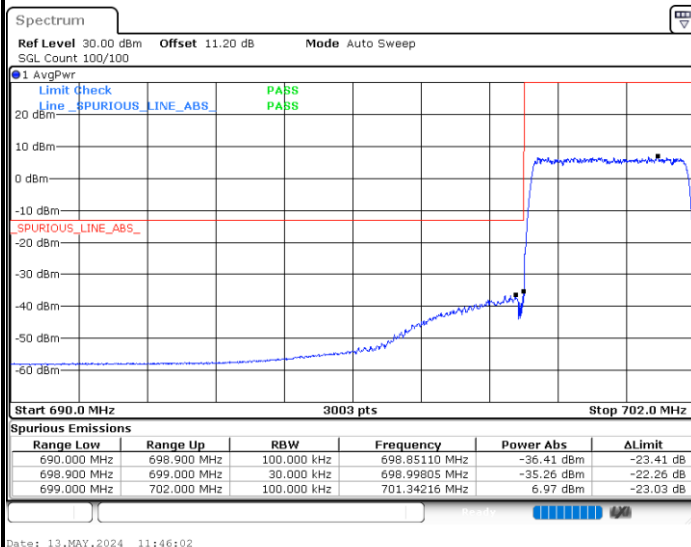


Highest Band Edge / Full RB

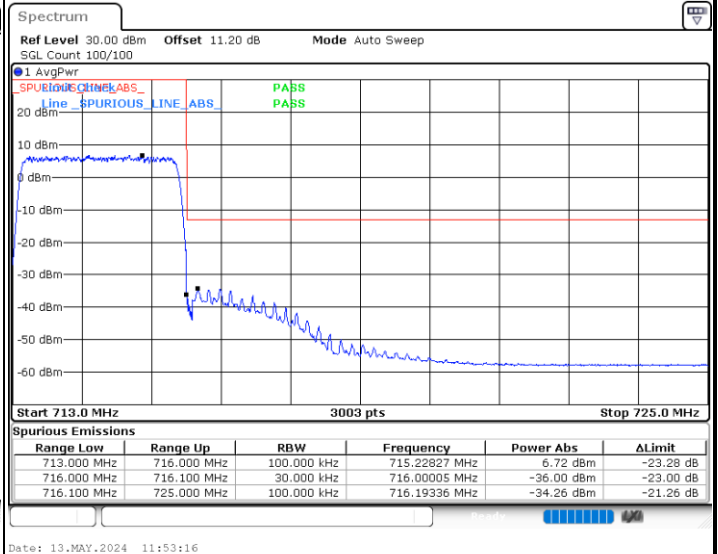


LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / Full RB



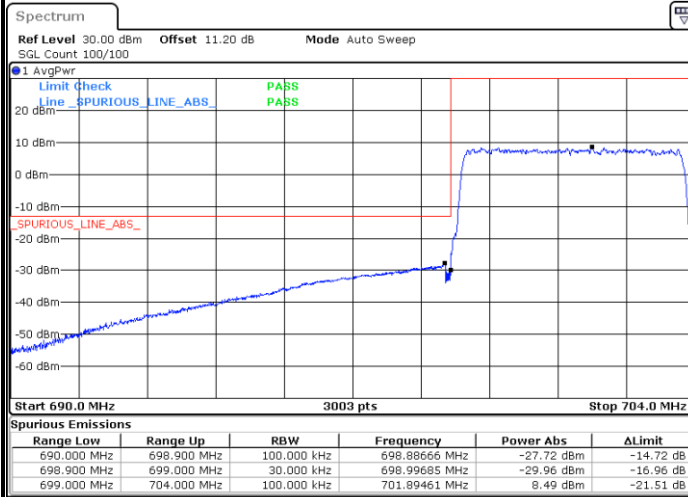
Highest Band Edge / Full RB



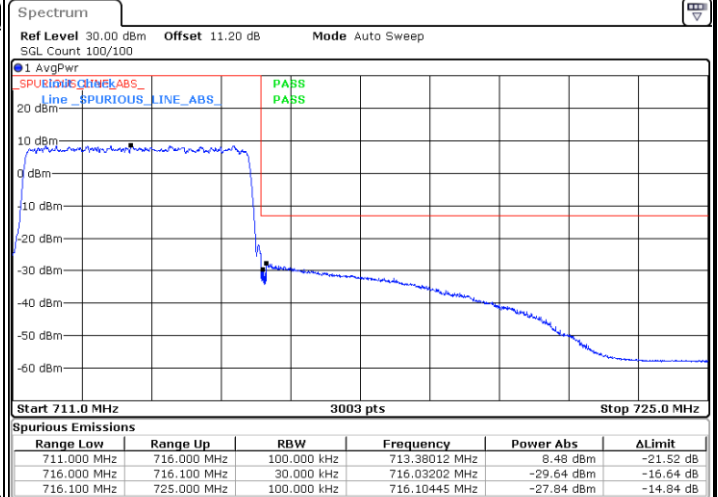


LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / Full RB

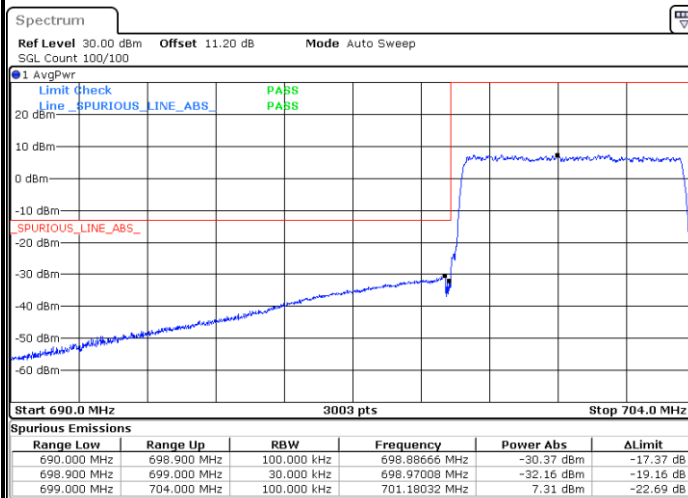


Highest Band Edge / Full RB

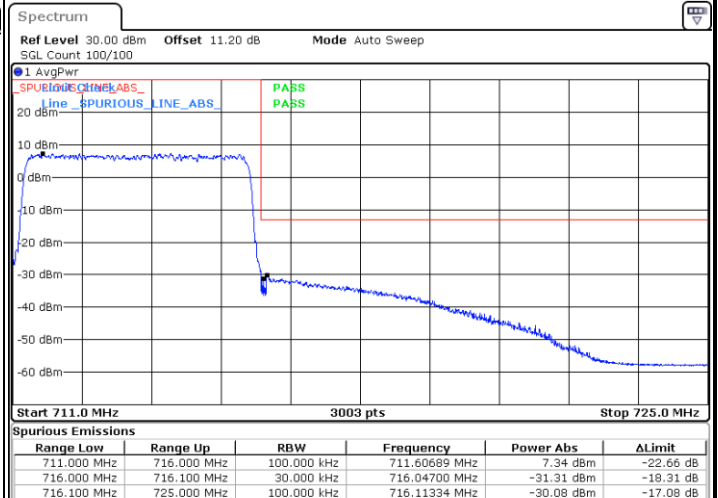


LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / Full RB



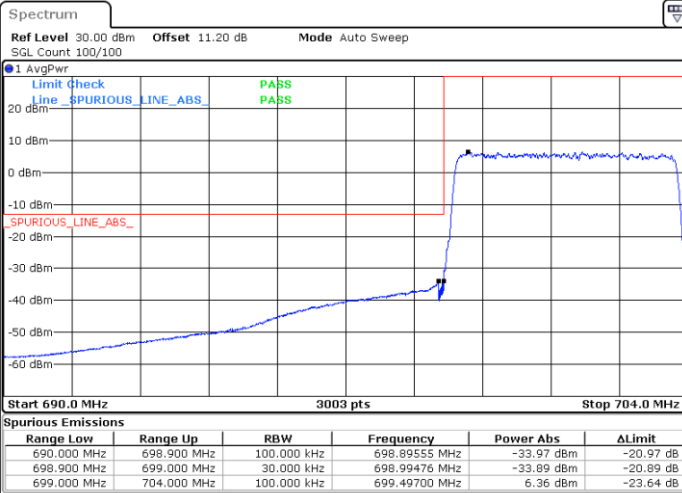
Highest Band Edge / Full RB



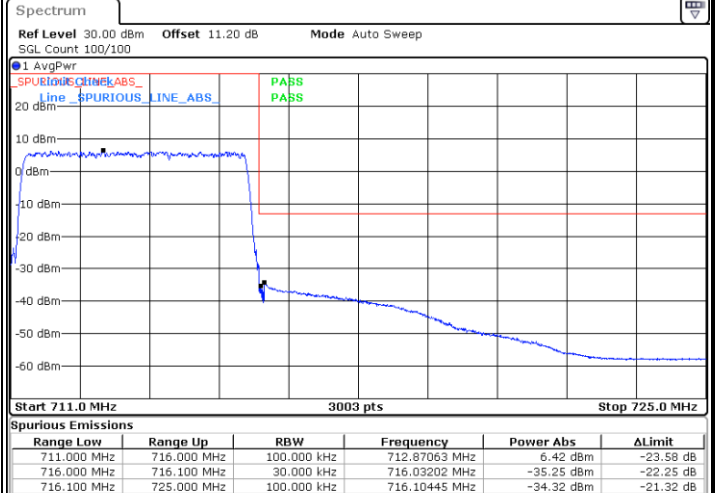


LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / Full RB

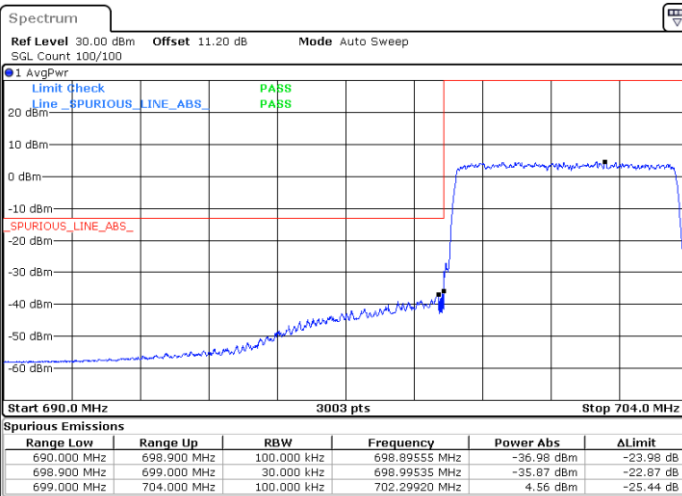


Highest Band Edge / Full RB

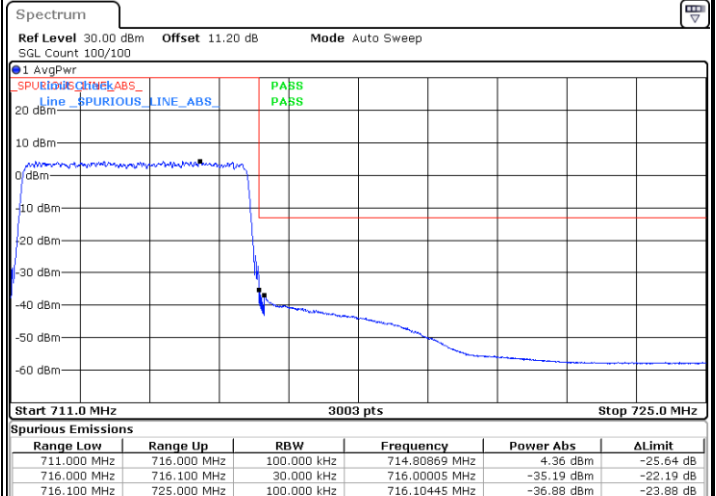


LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / Full RB



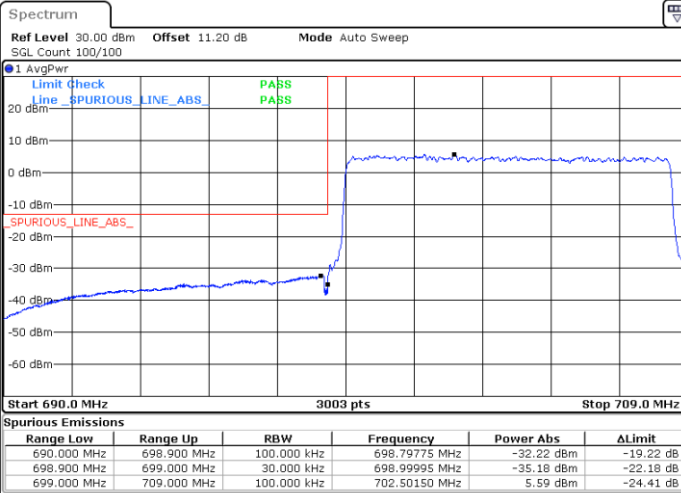
Highest Band Edge / Full RB





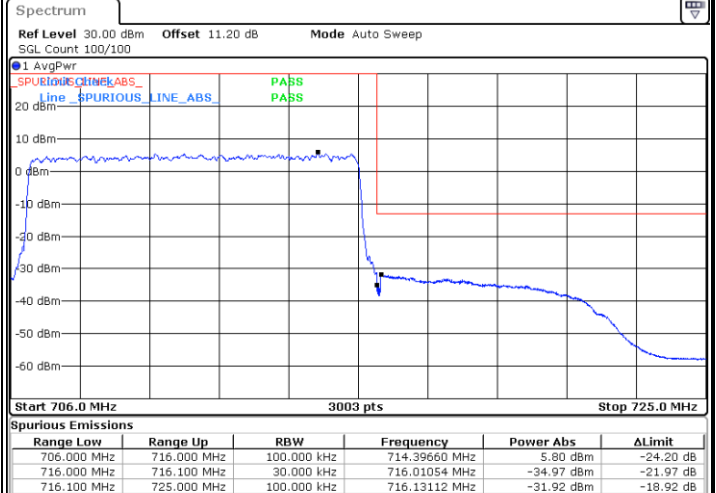
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:27:32

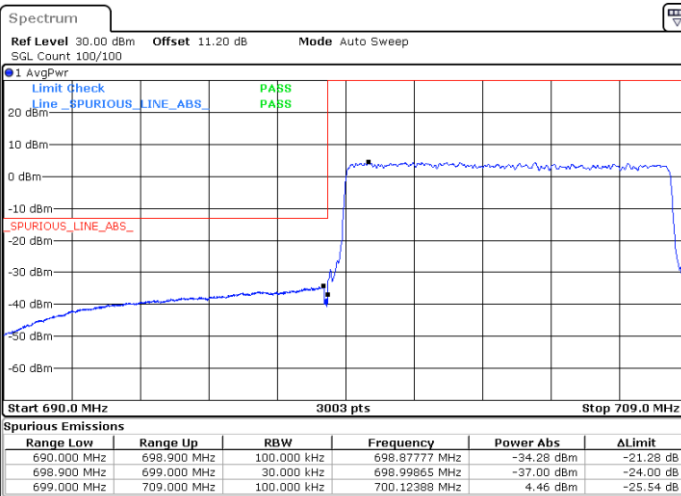
Highest Band Edge / Full RB



Date: 13.MAY.2024 12:34:46

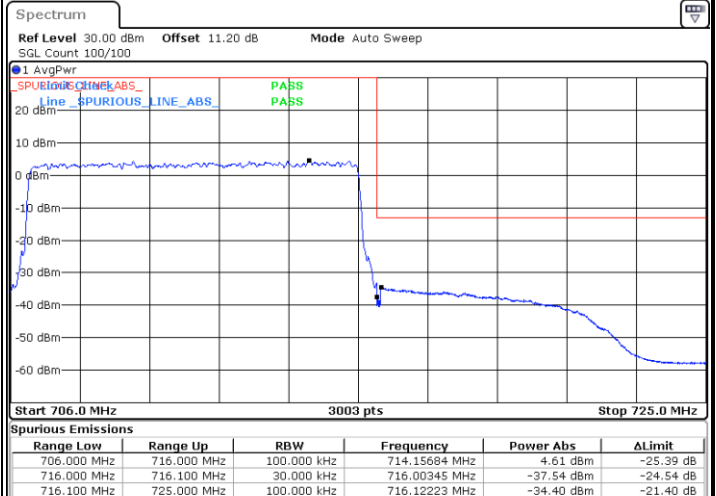
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:28:26

Highest Band Edge / Full RB

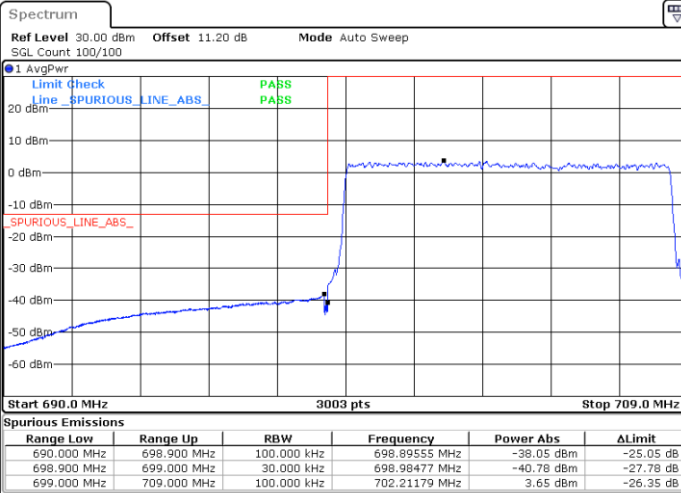


Date: 13.MAY.2024 12:35:40

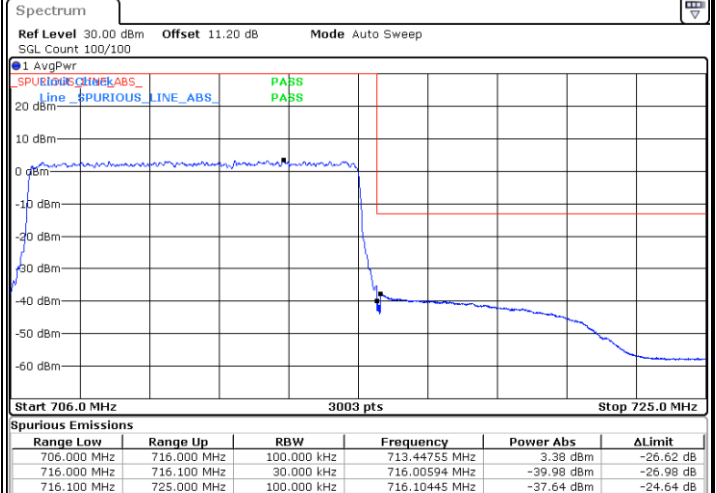


LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / Full RB

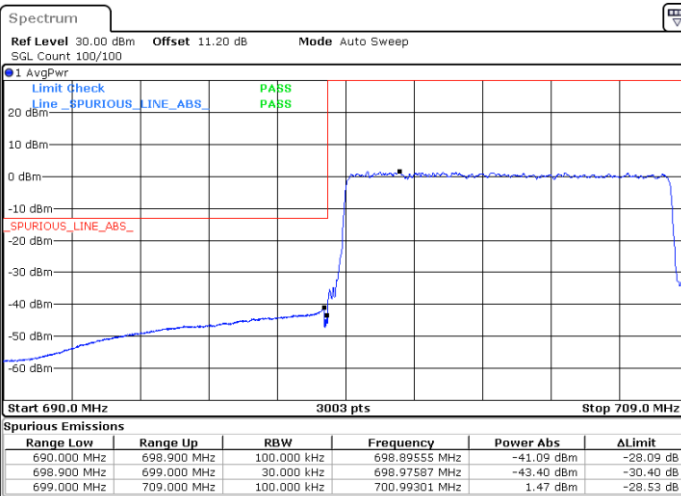


Highest Band Edge / Full RB

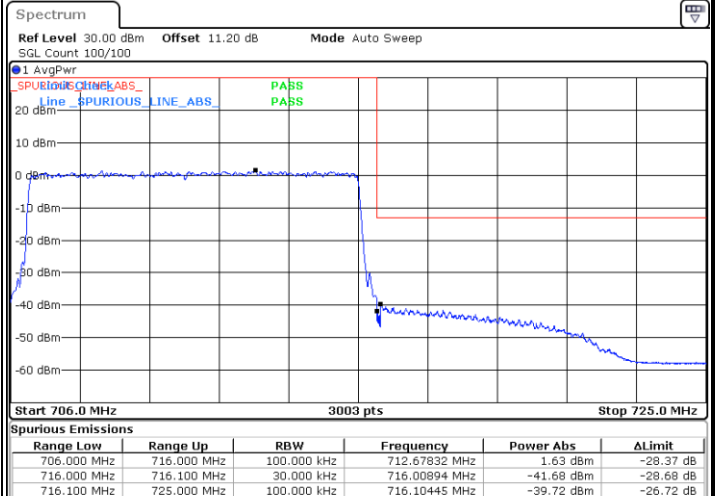


LTE Band 12 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

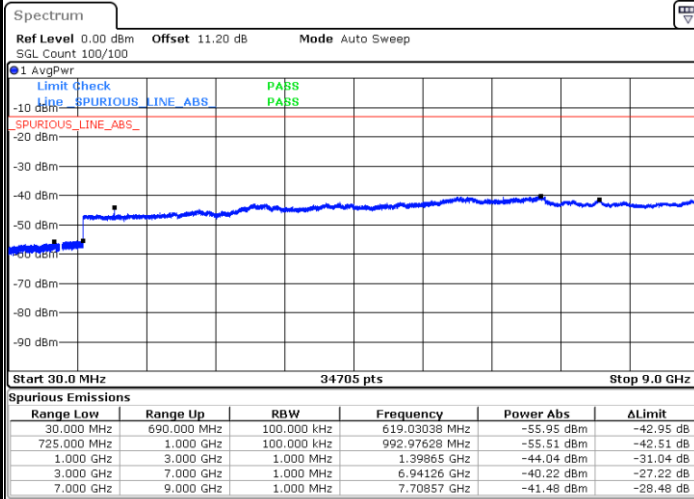




Conducted Spurious Emission

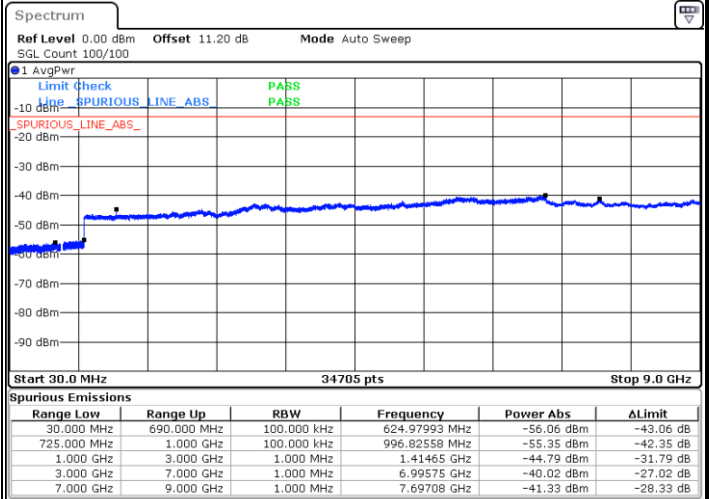
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



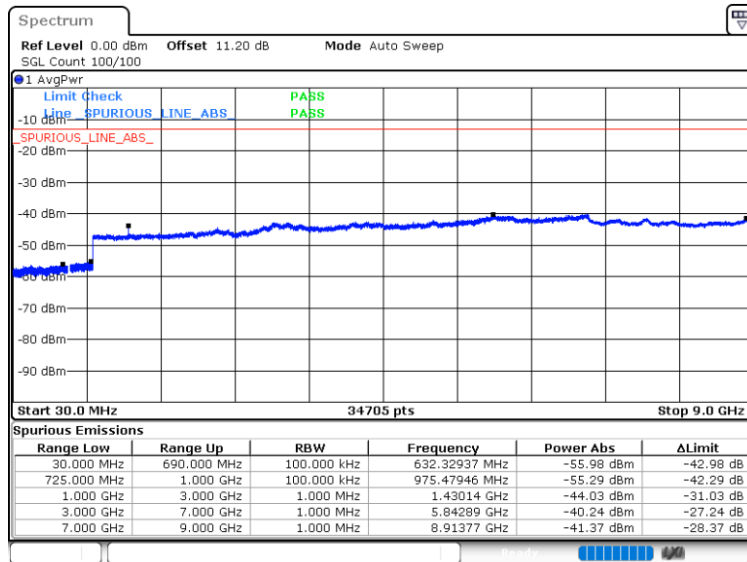
Date: 13.MAY.2024 11:35:40

Middle Channel / QPSK



Date: 13.MAY.2024 11:36:53

Highest Channel / QPSK

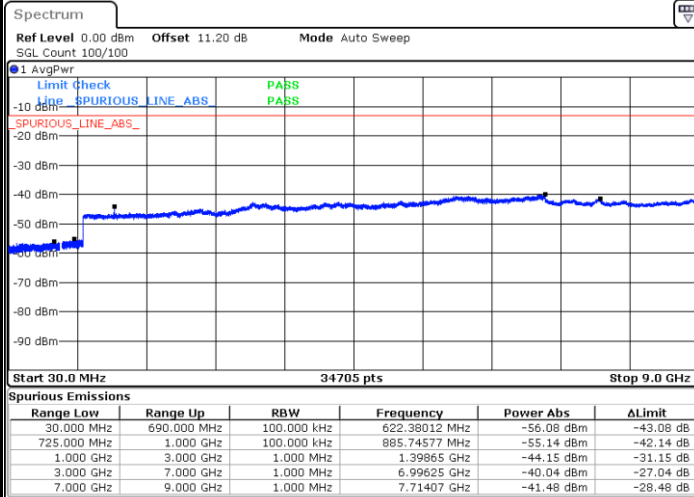


Date: 13.MAY.2024 11:38:06



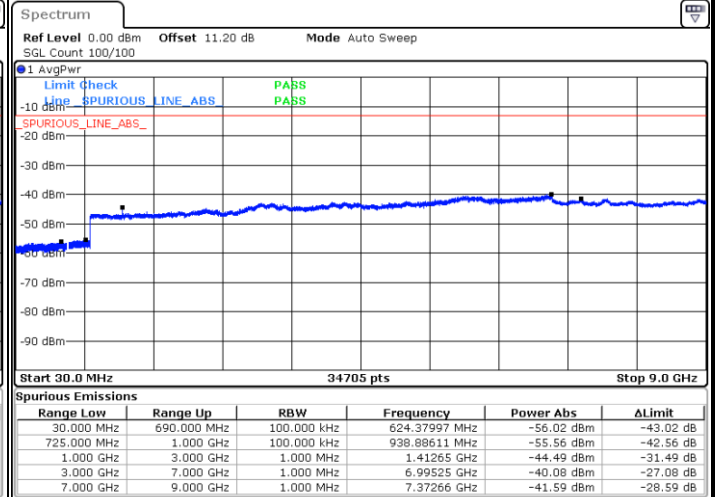
LTE Band 12 / 3MHz

Lowest Channel / QPSK



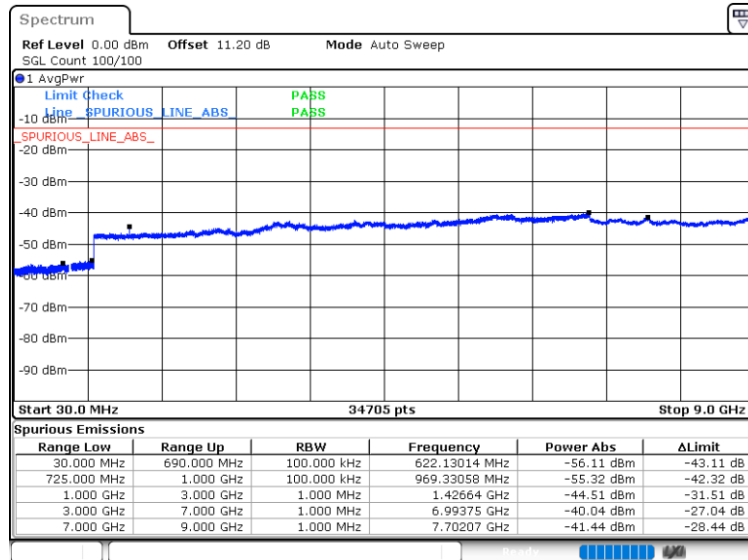
Date: 13.MAY.2024 11:57:46

Middle Channel / QPSK



Date: 13.MAY.2024 11:58:59

Highest Channel / QPSK

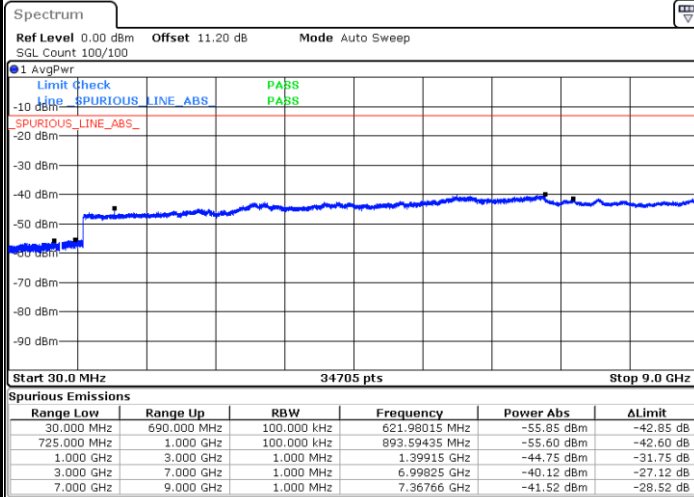


Date: 13.MAY.2024 12:00:12



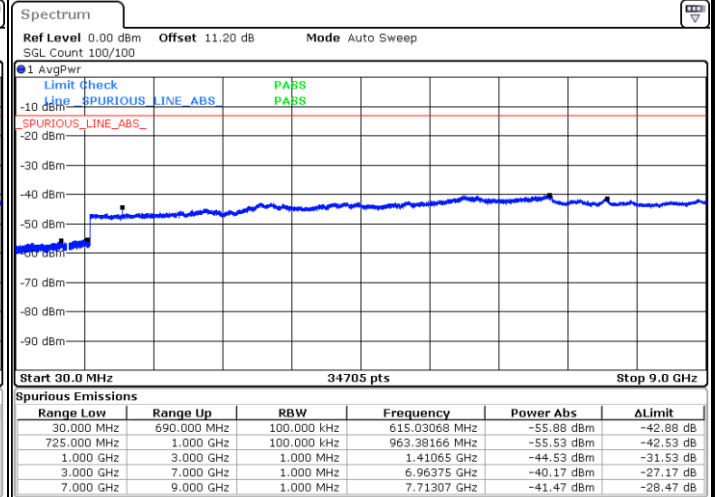
LTE Band 12 / 5MHz

Lowest Channel / QPSK



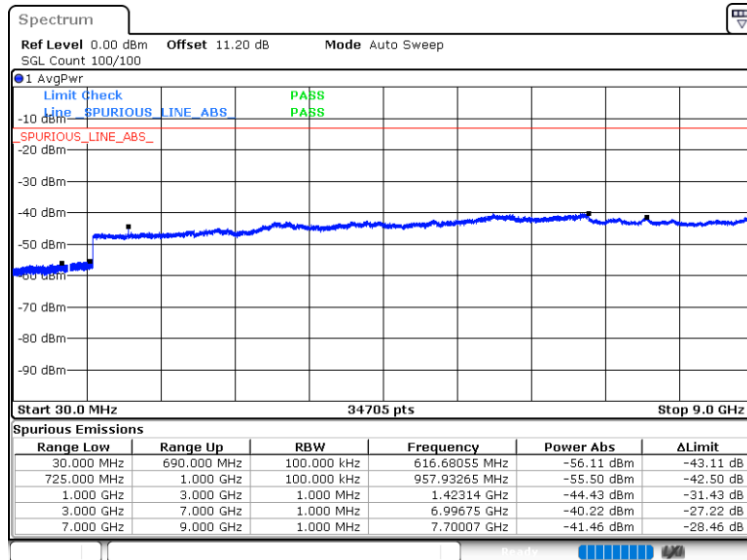
Date: 13.MAY.2024 12:19:52

Middle Channel / QPSK



Date: 13.MAY.2024 12:21:05

Highest Channel / QPSK

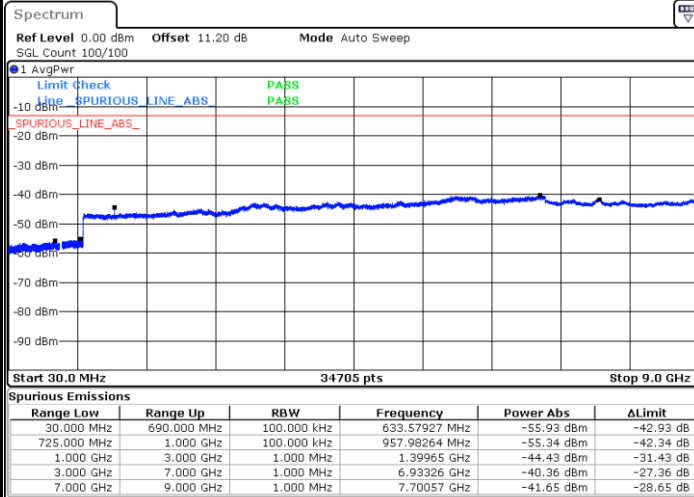


Date: 13.MAY.2024 12:22:18



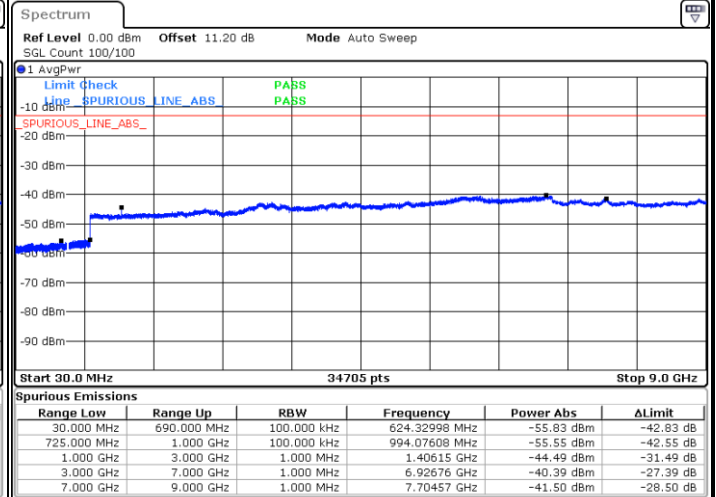
LTE Band 12 / 10MHz

Lowest Channel / QPSK



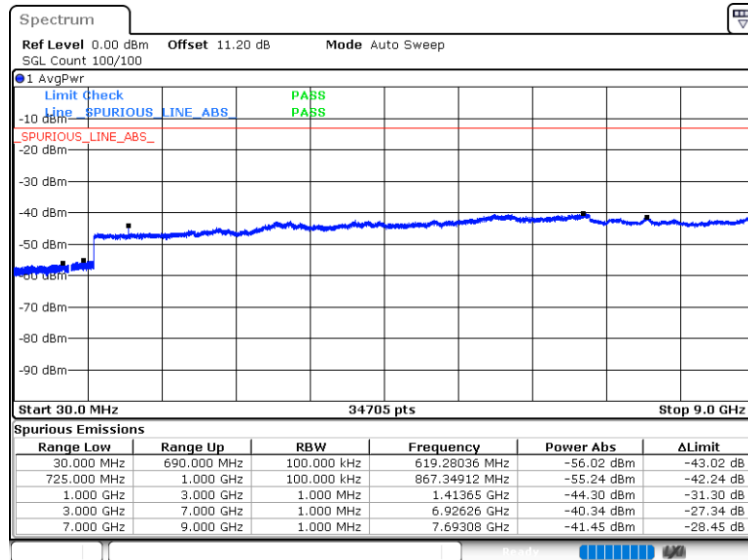
Date: 13.MAY.2024 12:41:59

Middle Channel / QPSK



Date: 13.MAY.2024 12:43:12

Highest Channel / QPSK



Date: 13.MAY.2024 12:44:25

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	0.0131	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0250	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0249	
0	Normal Voltage	0.0153	
-10	Normal Voltage	0.0198	
-20	Normal Voltage	0.0163	
-30	Normal Voltage	0.0205	
20	Maximum Voltage	0.0157	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0057	

Note:

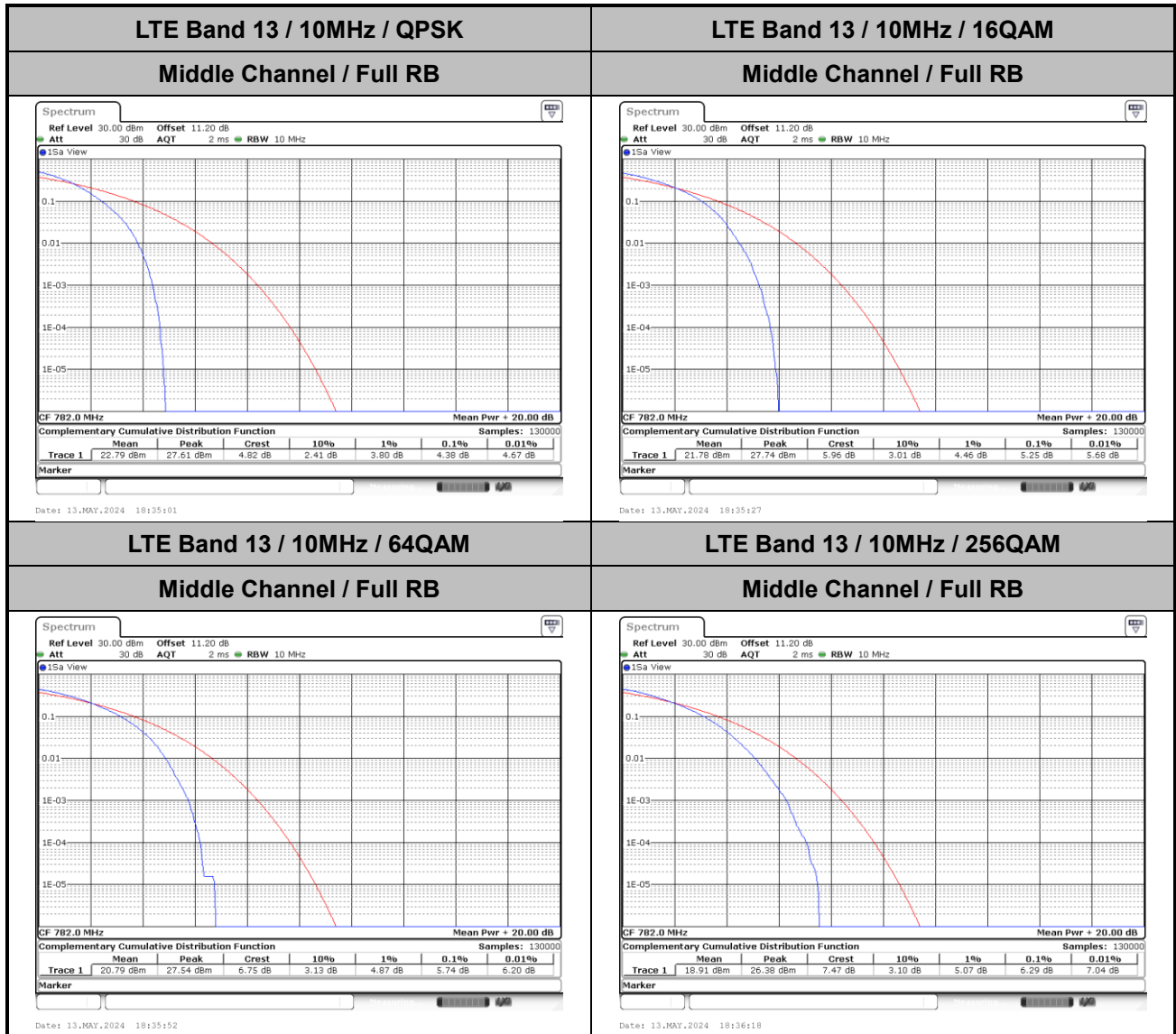
1. Normal Voltage = 3.3 V. ; Battery End Point (BEP) = 3.135 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.38	5.25	5.74	6.29	PASS



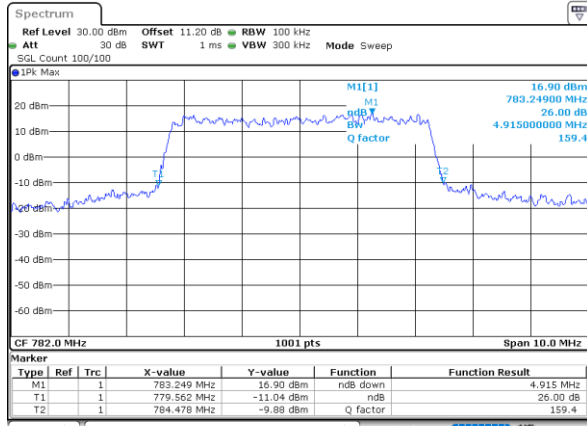
**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.91	4.77	9.81	9.66	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.83	4.84	9.92	9.84	-	-	-	-

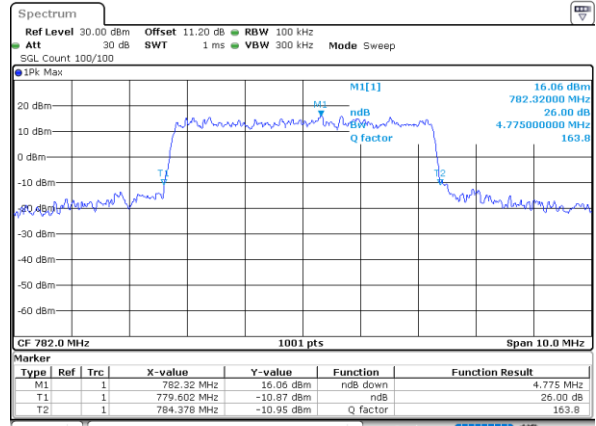


LTE Band 13

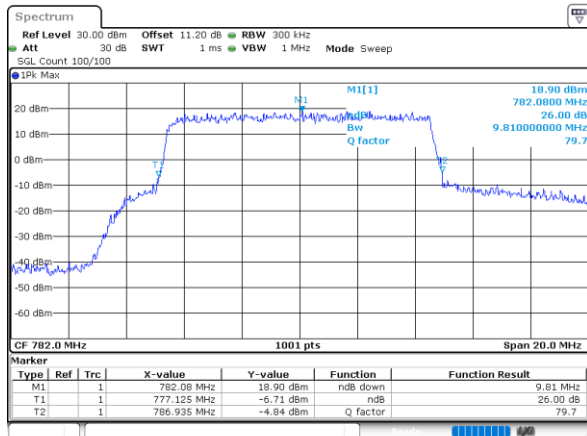
Middle Channel / 5MHz / QPSK



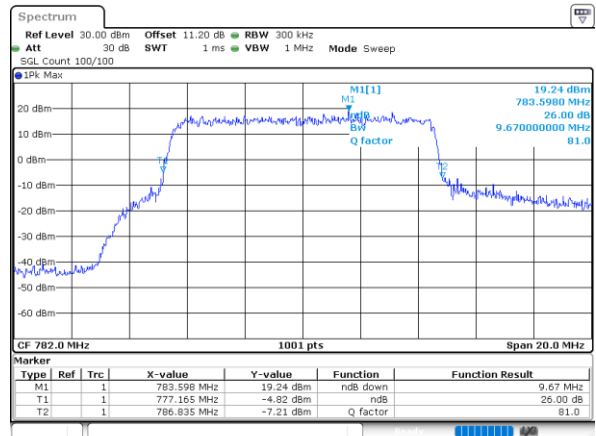
Middle Channel / 5MHz / 16QAM



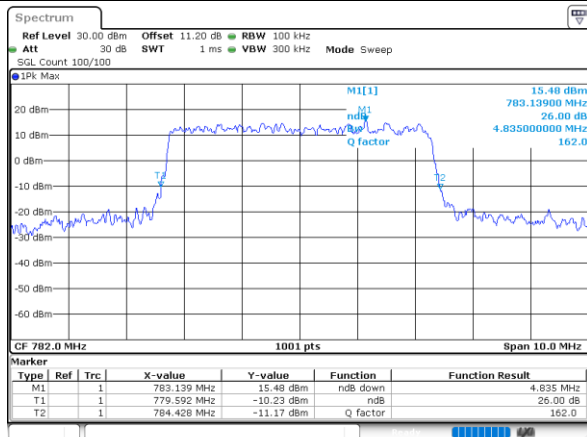
Middle Channel / 10MHz / QPSK



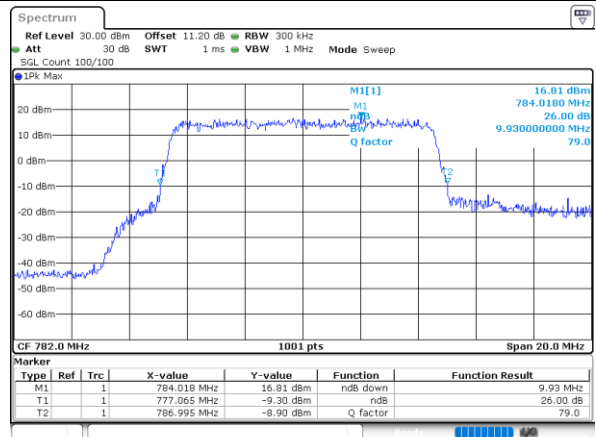
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



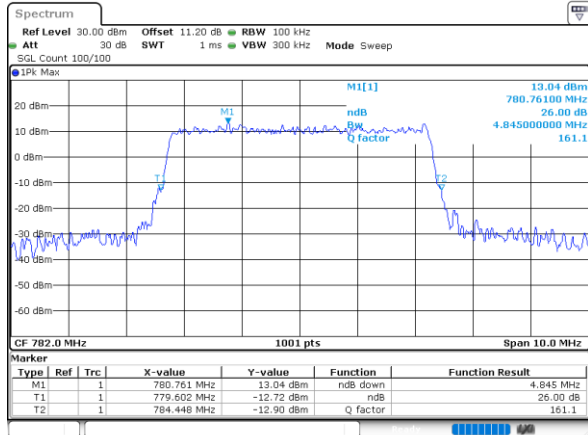
Middle Channel / 10MHz / 64QAM





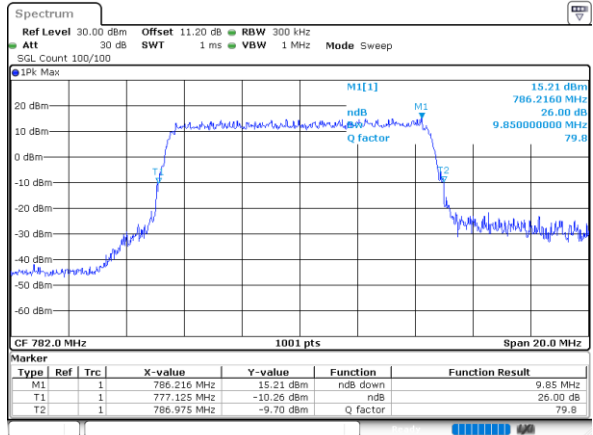
LTE Band 13

Middle Channel / 5MHz / 256QAM



Date: 13.MAY.2024 18:23:21

Middle Channel / 10MHz / 256QAM



Date: 13.MAY.2024 18:34:35

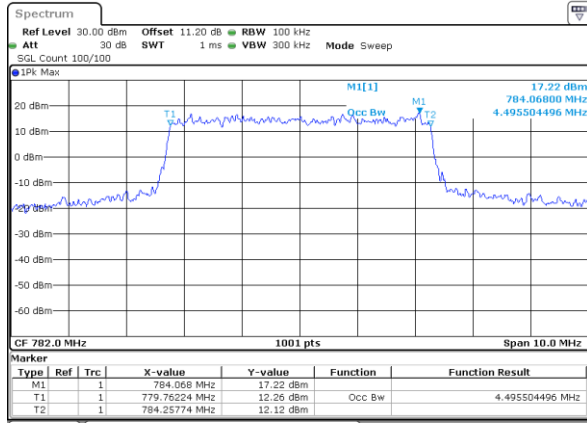
**Occupied Bandwidth**

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.49	4.50	9.07	8.99	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.51	4.48	9.03	9.01	-	-	-	-



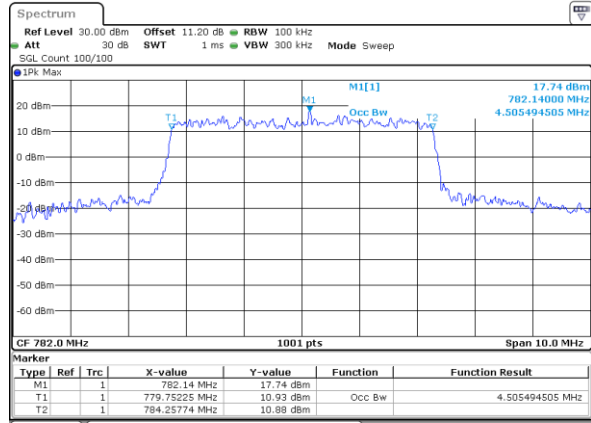
LTE Band 13

Middle Channel / 5MHz / QPSK



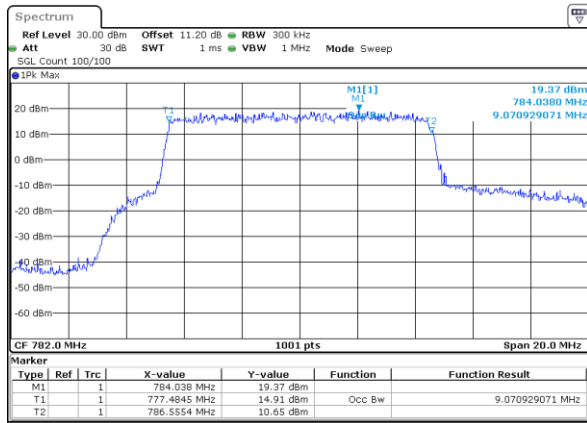
Date: 13.MAY.2024 18:20:20

Middle Channel / 5MHz / 16QAM



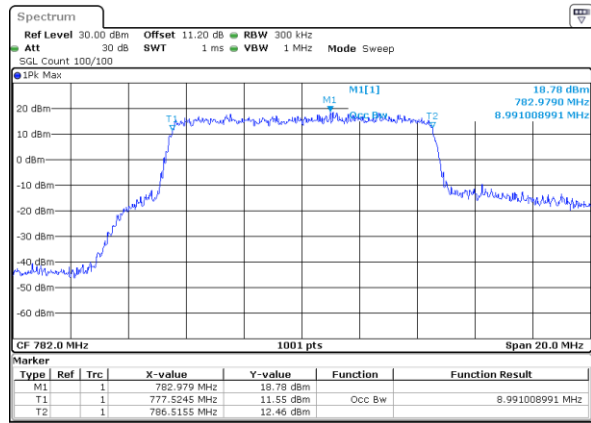
Date: 13.MAY.2024 18:20:53

Middle Channel / 10MHz / QPSK



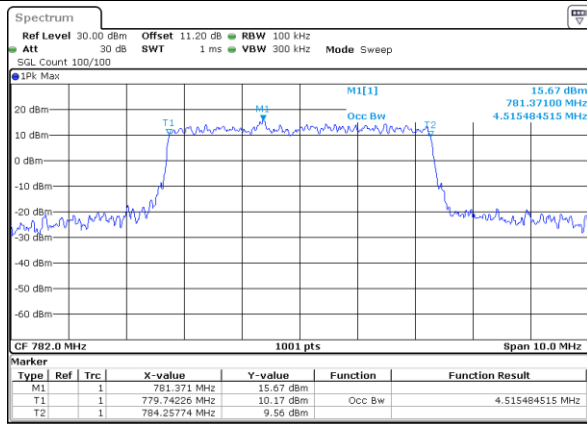
Date: 13.MAY.2024 18:31:42

Middle Channel / 10MHz / 16QAM



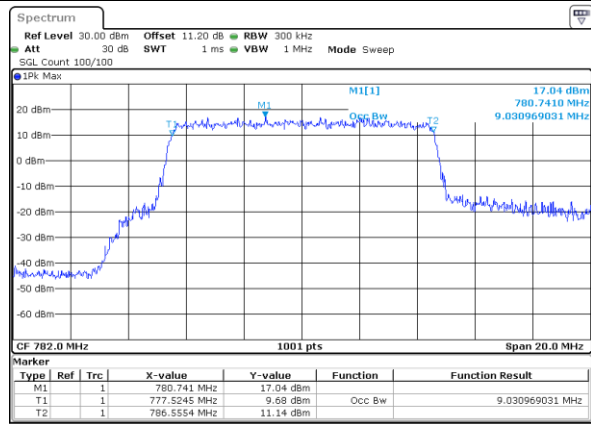
Date: 13.MAY.2024 18:32:07

Middle Channel / 5MHz / 64QAM



Date: 13.MAY.2024 18:21:18

Middle Channel / 10MHz / 64QAM

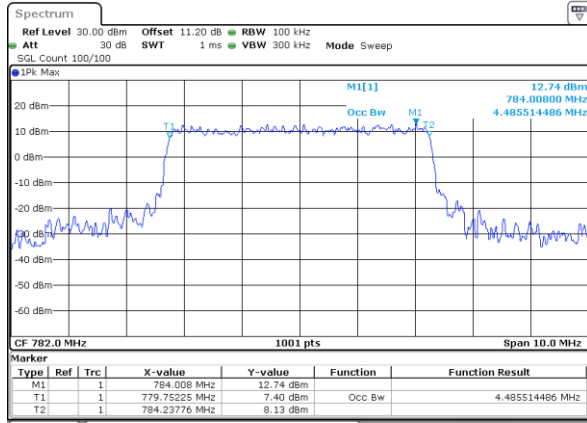


Date: 13.MAY.2024 18:32:32



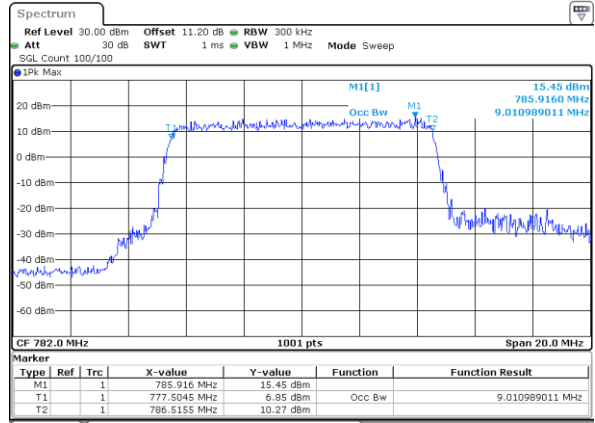
LTE Band 13

Middle Channel / 5MHz / 256QAM

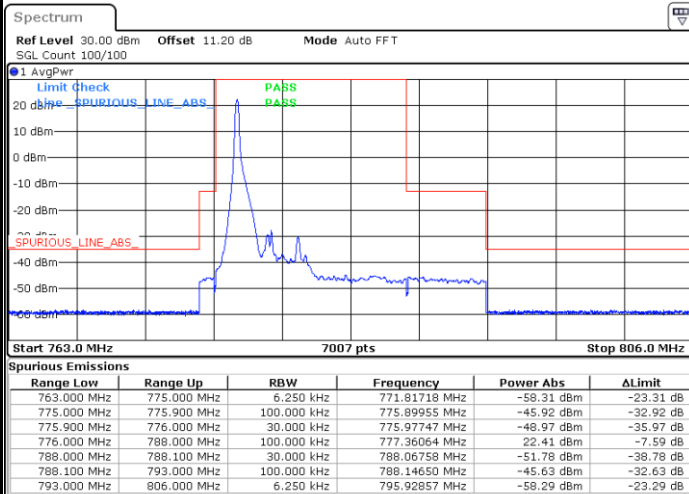
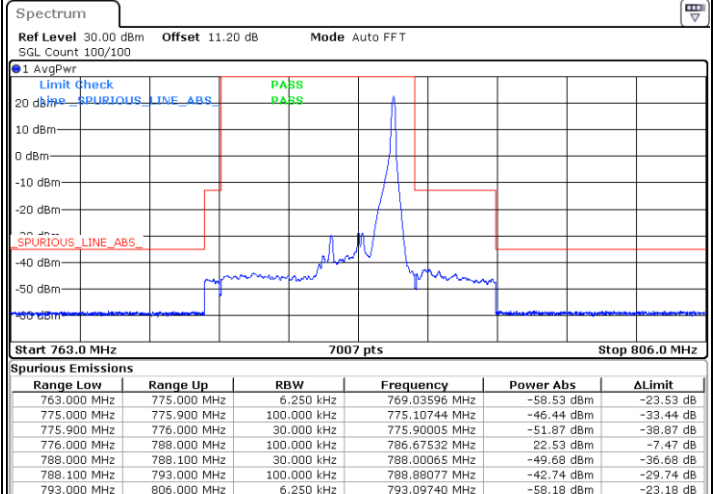
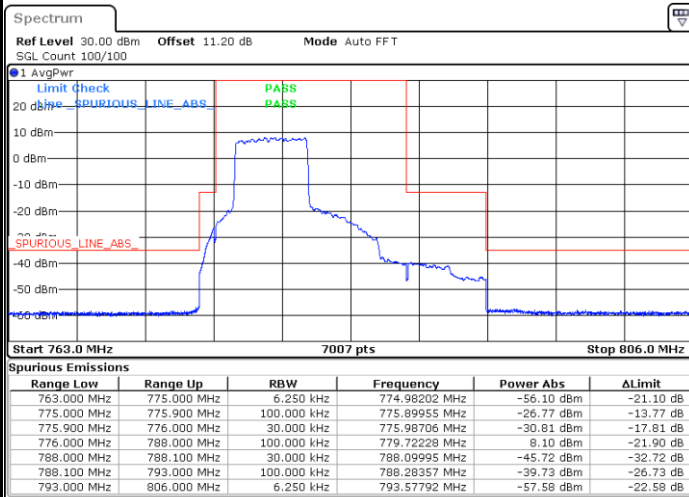
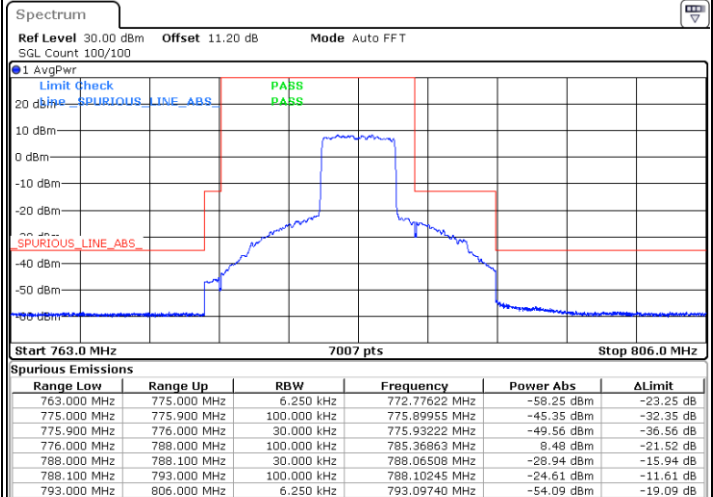


Date: 13.MAY.2024 18:21:42

Middle Channel / 10MHz / 256QAM



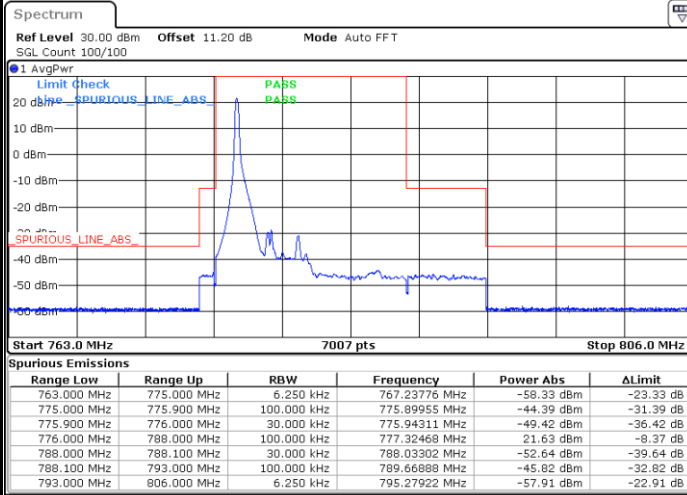
Date: 13.MAY.2024 18:32:57

**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**



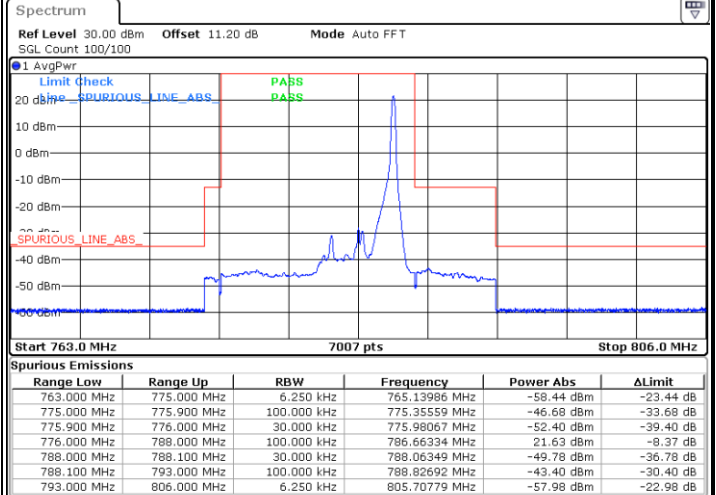
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



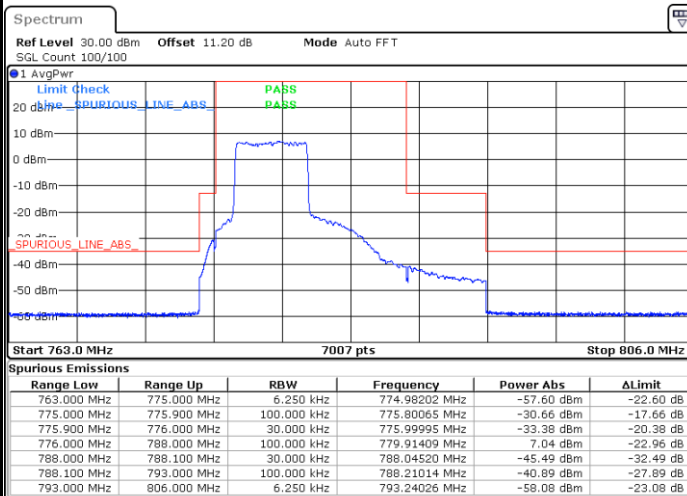
Date: 13.MAY.2024 18:10:16

Highest Band Edge / 1 RB



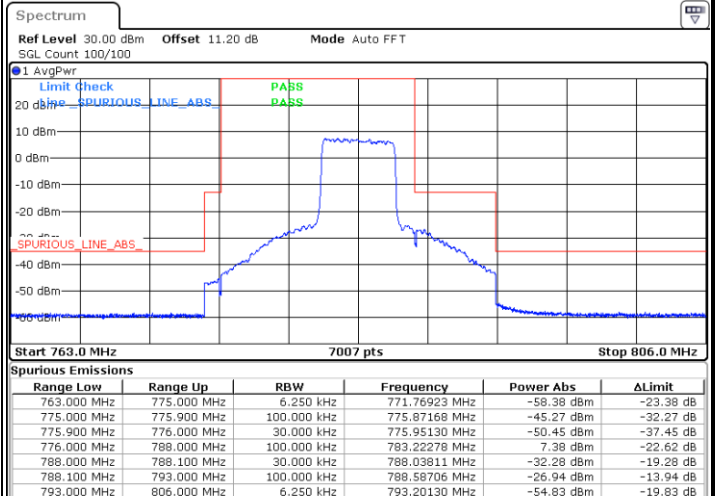
Date: 13.MAY.2024 18:18:14

Lowest Band Edge / Full RB



Date: 13.MAY.2024 12:48:40

Highest Band Edge / Full RB

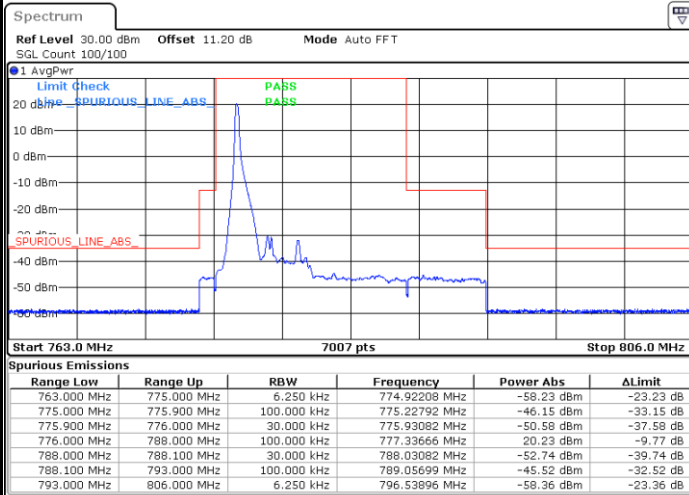


Date: 13.MAY.2024 18:14:37



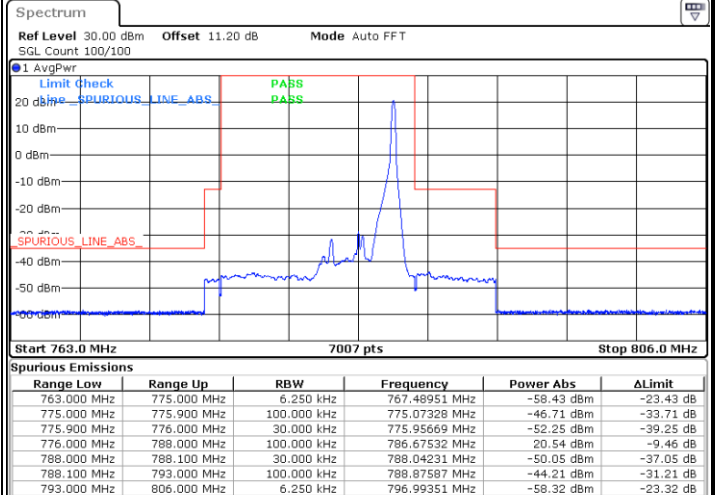
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



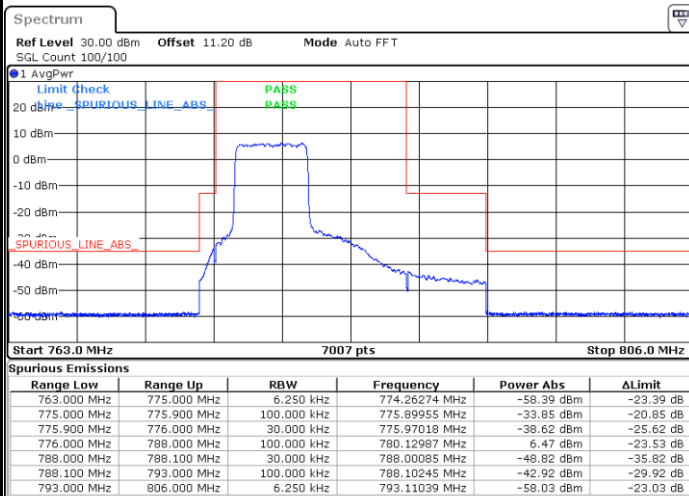
Date: 13.MAY.2024 18:11:11

Highest Band Edge / 1 RB



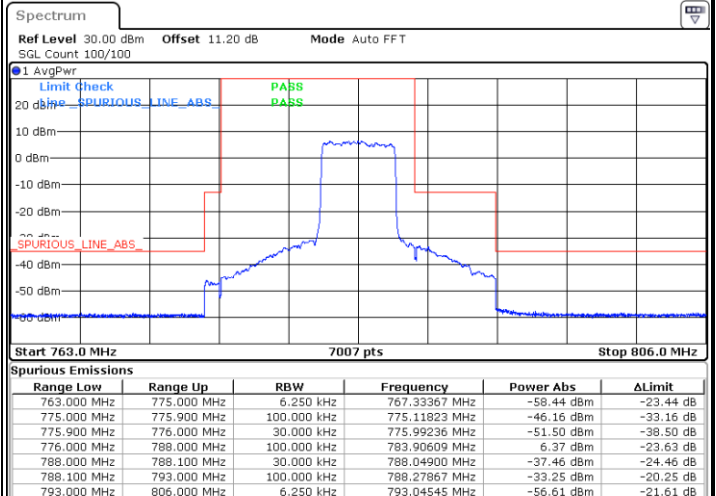
Date: 13.MAY.2024 18:19:08

Lowest Band Edge / Full RB



Date: 13.MAY.2024 18:07:34

Highest Band Edge / Full RB

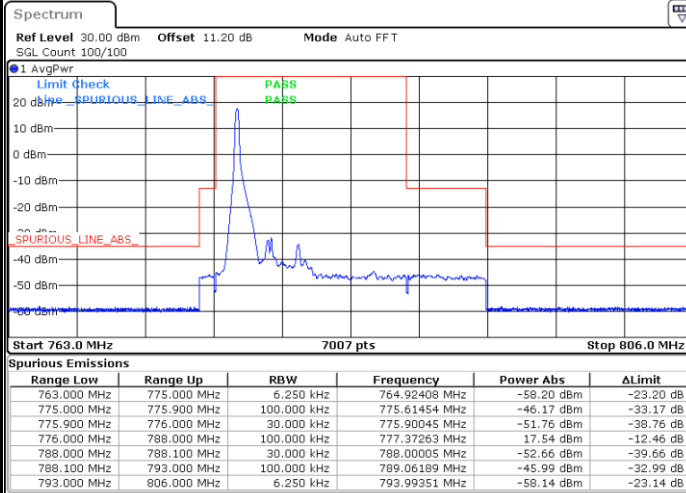


Date: 13.MAY.2024 18:15:31



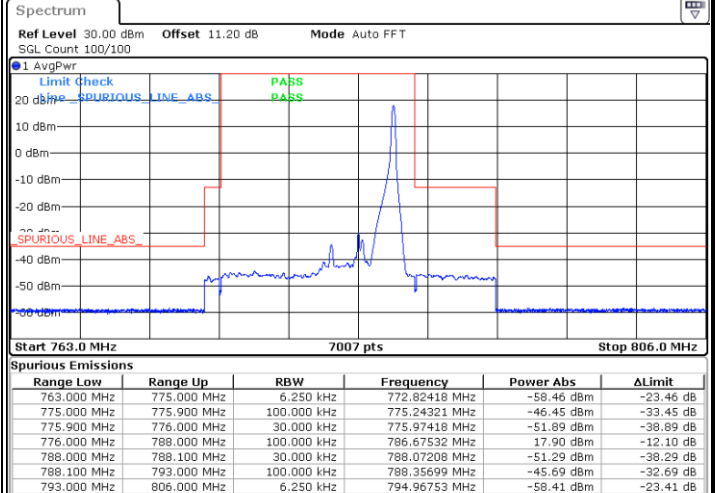
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



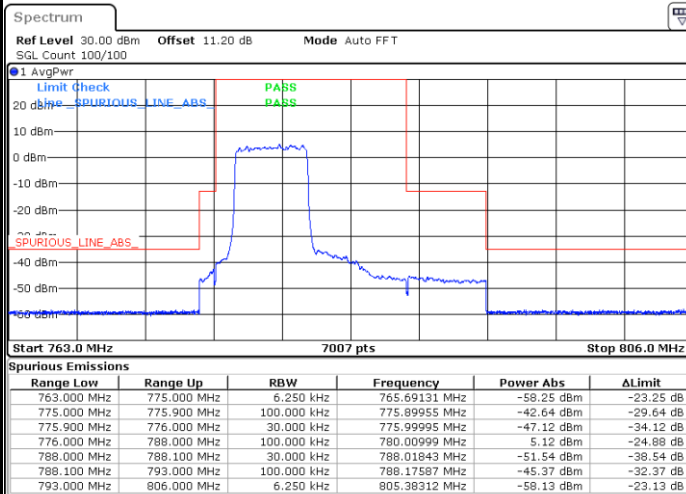
Date: 13.MAY.2024 18:12:05

Highest Band Edge / 1 RB



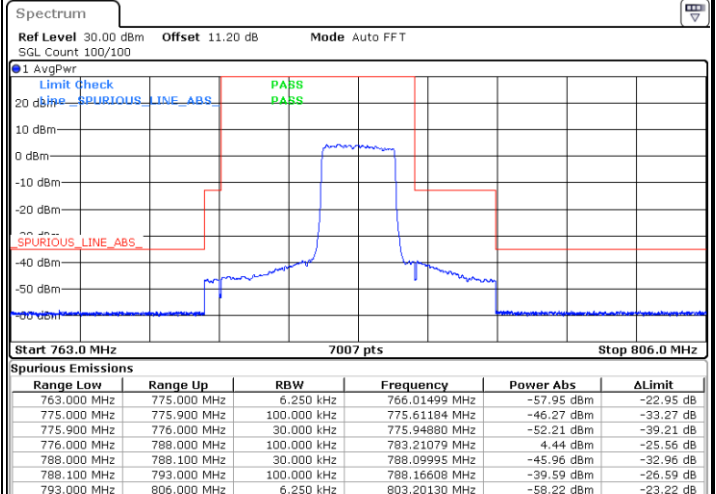
Date: 13.MAY.2024 18:20:03

Lowest Band Edge / Full RB



Date: 13.MAY.2024 18:08:28

Highest Band Edge / Full RB



Date: 13.MAY.2024 18:16:26



LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.20 dB Mode Auto FFT
SGL Count 100/100

Start 763.0 MHz 7007 pts Stop 806.0 MHz

Spurious Emissions

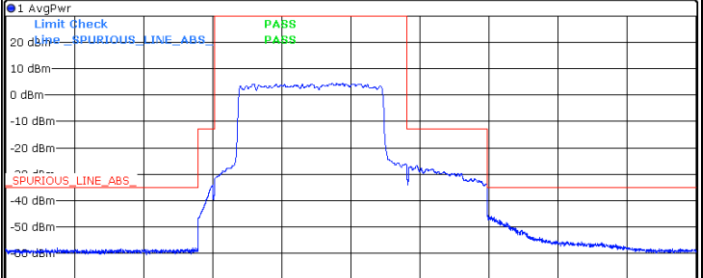
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.98202 MHz	-57.88 dBm	-22.88 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-31.73 dBm	-18.73 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96548 MHz	-35.39 dBm	-22.39 dB
776.000 MHz	788.000 MHz	100.000 kHz	784.14585 MHz	5.37 dBm	-24.63 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.03072 MHz	-29.68 dBm	-16.68 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.22483 MHz	-25.24 dBm	-12.24 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.09740 MHz	-43.26 dBm	-8.26 dB

Date: 13.MAY.2024 18:28:37

LTE Band 13 / 10MHz / 16QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.20 dB Mode Auto FFT
SGL Count 100/100

Start 763.0 MHz 7007 pts Stop 806.0 MHz

Spurious Emissions

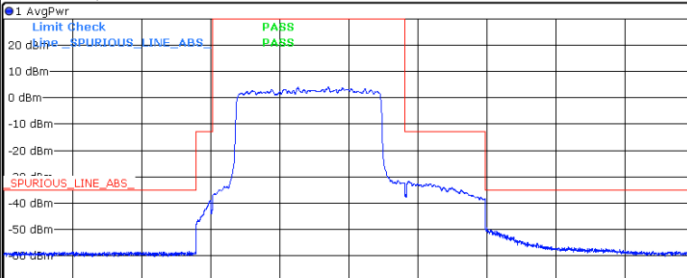
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.80220 MHz	-58.05 dBm	-23.05 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-34.25 dBm	-21.25 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99995 MHz	-37.31 dBm	-24.31 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.34266 MHz	4.43 dBm	-25.57 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-31.68 dBm	-18.68 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.58706 MHz	-26.81 dBm	-13.81 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.03247 MHz	-45.74 dBm	-10.74 dB

Date: 13.MAY.2024 18:29:30

LTE Band 13 / 10MHz / 64QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.20 dB Mode Auto FFT
SGL Count 100/100

Start 763.0 MHz 7007 pts Stop 806.0 MHz

Spurious Emissions

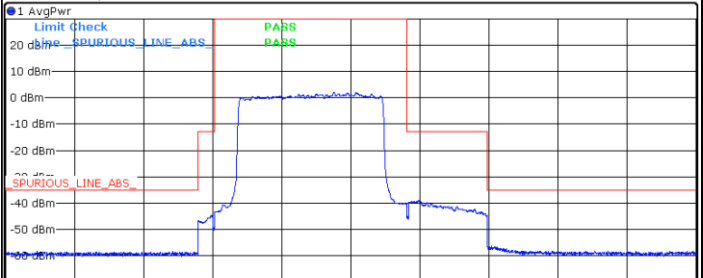
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	774.51449 MHz	-58.53 dBm	-23.53 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-39.24 dBm	-26.24 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.99426 MHz	-42.48 dBm	-29.48 dB
776.000 MHz	788.000 MHz	100.000 kHz	781.31668 MHz	3.96 dBm	-26.04 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.04560 MHz	-36.87 dBm	-23.87 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.21993 MHz	-31.81 dBm	-18.81 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.12338 MHz	-49.35 dBm	-14.35 dB

Date: 13.MAY.2024 18:30:24

LTE Band 13 / 10MHz / 256QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.20 dB Mode Auto FFT
SGL Count 100/100

Start 763.0 MHz 7007 pts Stop 806.0 MHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.42358 MHz	-58.48 dBm	-23.48 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.80425 MHz	-44.80 dBm	-31.80 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.96129 MHz	-49.48 dBm	-36.48 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.43856 MHz	1.98 dBm	-28.02 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.05709 MHz	-45.06 dBm	-32.06 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.71923 MHz	-39.12 dBm	-26.12 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.27922 MHz	-56.28 dBm	-21.28 dB

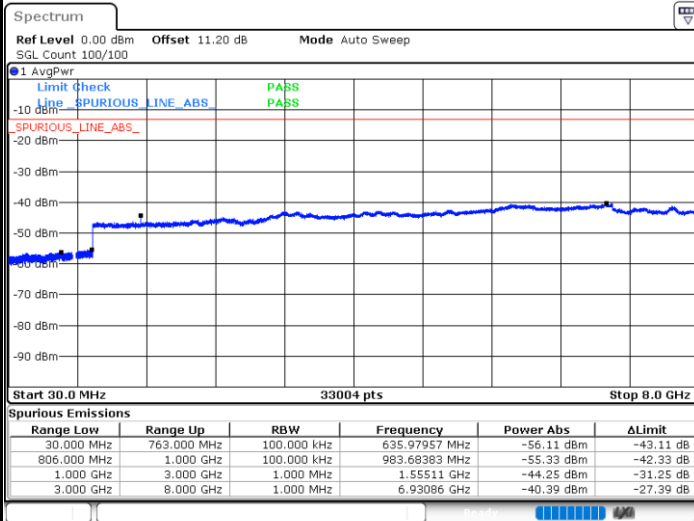
Date: 13.MAY.2024 18:31:17



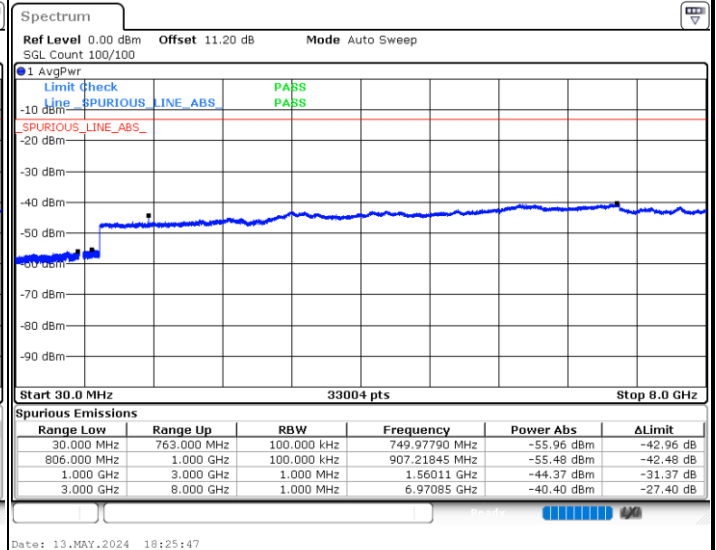
Conducted Spurious Emission

LTE Band 13 / 5MHz

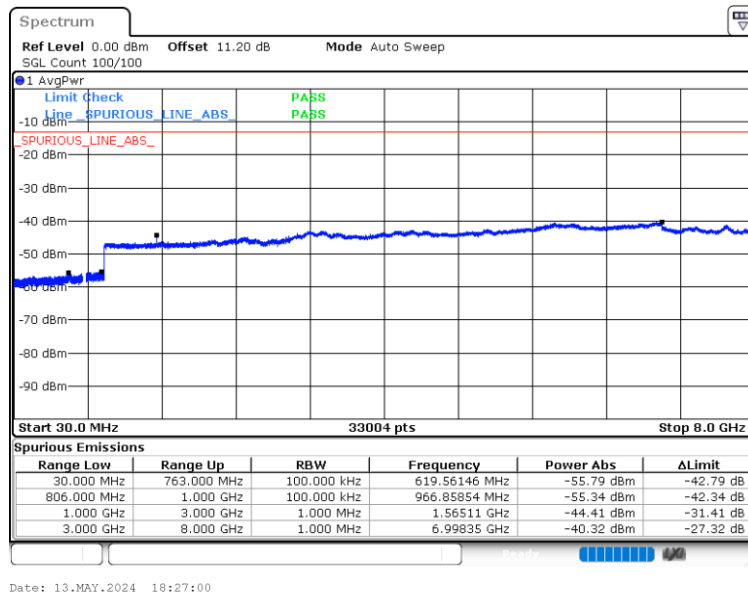
Lowest Channel / QPSK



Middle Channel / QPSK



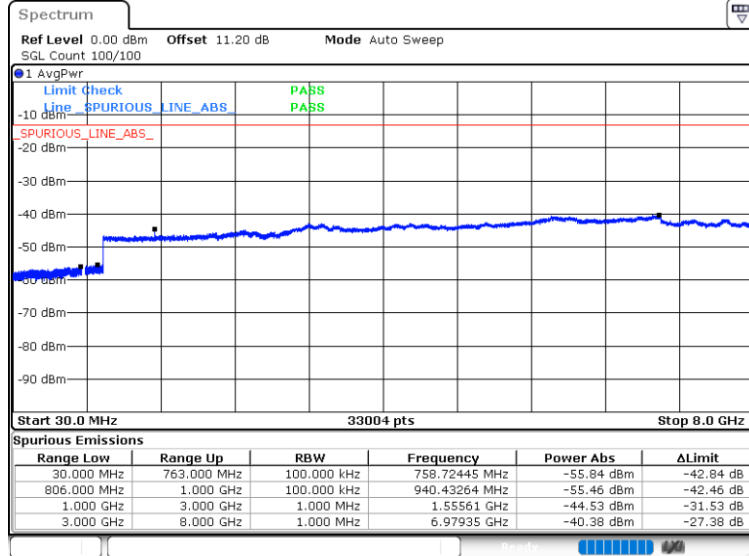
Highest Channel / QPSK





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 13-MAY-2024 18:37:31

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	0.0113	PASS
40	Normal Voltage	0.0040	
30	Normal Voltage	0.0132	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0097	
0	Normal Voltage	0.0051	
-10	Normal Voltage	0.0105	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0119	
20	Maximum Voltage	0.0109	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0066	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.135 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 14

Peak-to-Average Ratio

Mode	LTE Band 14 / 5MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.06	4.93	5.57	6.23	PASS
Mode	LTE Band 14 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.03	4.99	5.59	6.26	PASS