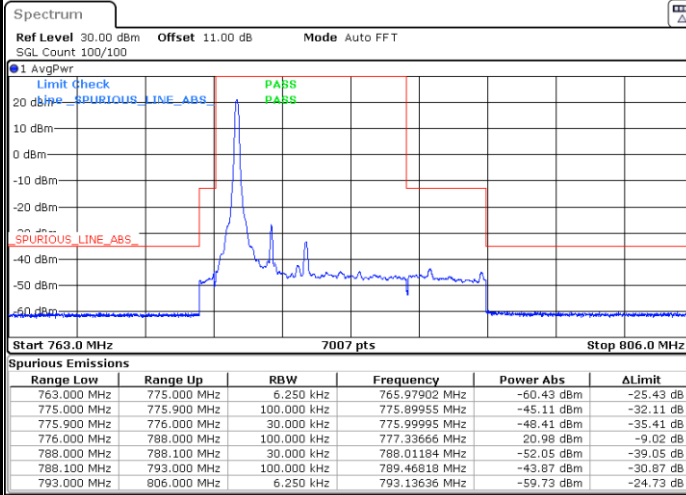


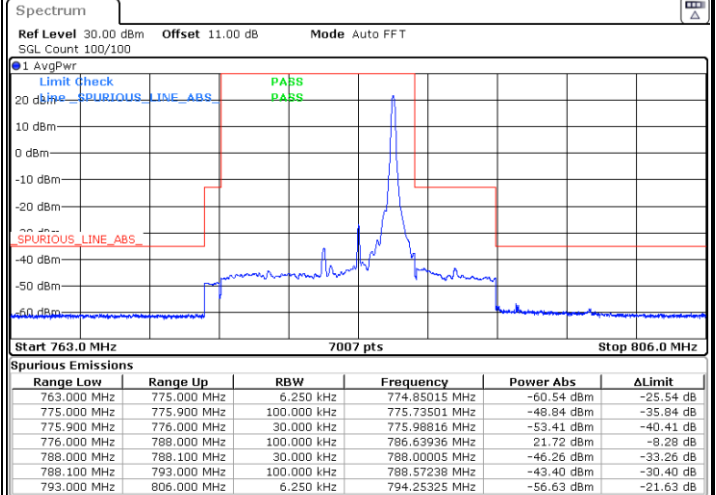


LTE Band 13 / 5MHz / 16QAM

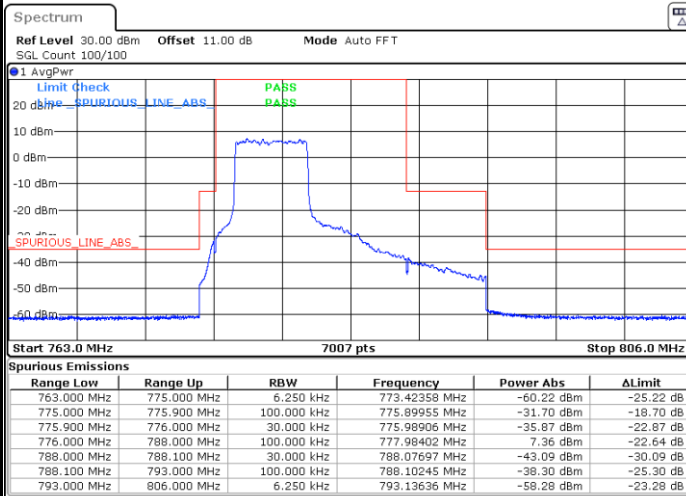
Lowest Band Edge / 1 RB



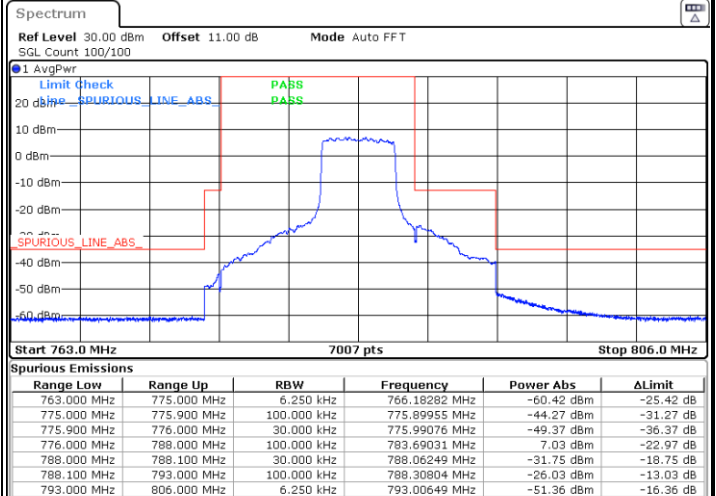
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



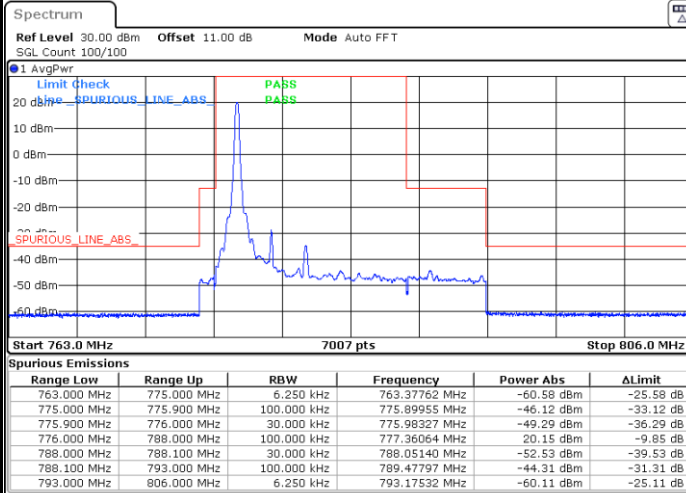
Highest Band Edge / Full RB





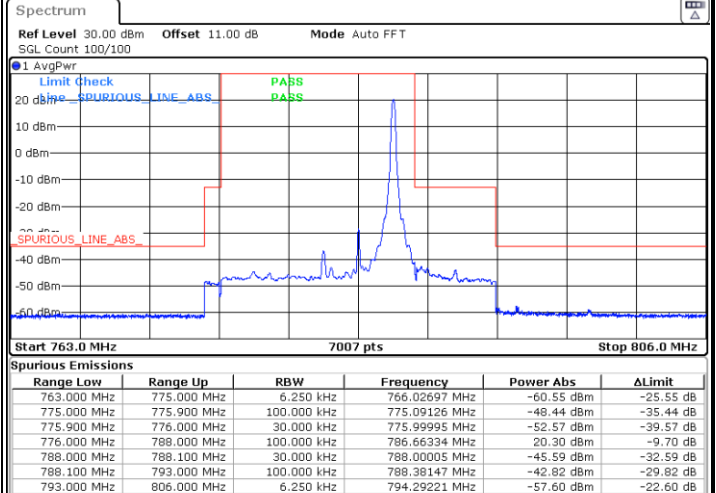
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



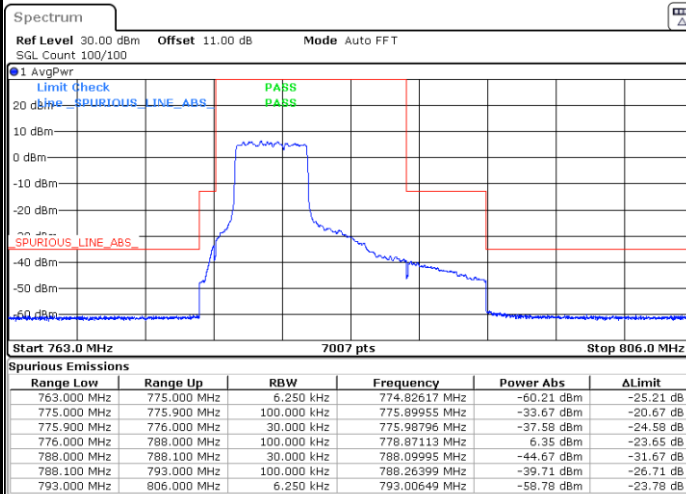
Date: 2.DEC.2022 17:52:42

Highest Band Edge / 1 RB



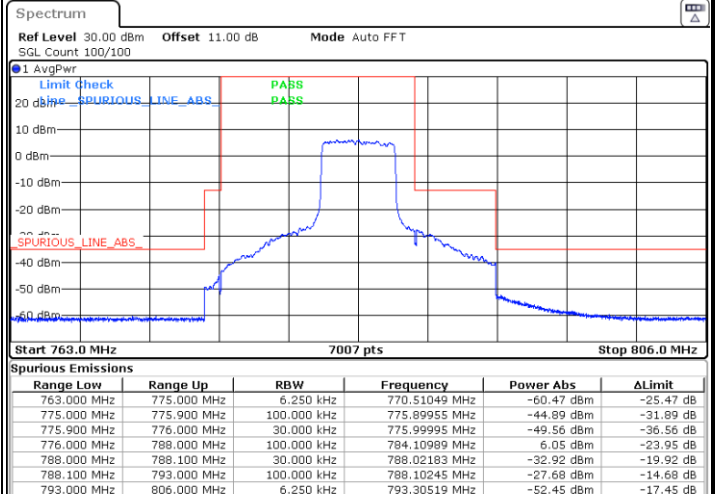
Date: 2.DEC.2022 17:55:26

Lowest Band Edge / Full RB



Date: 2.DEC.2022 17:51:42

Highest Band Edge / Full RB

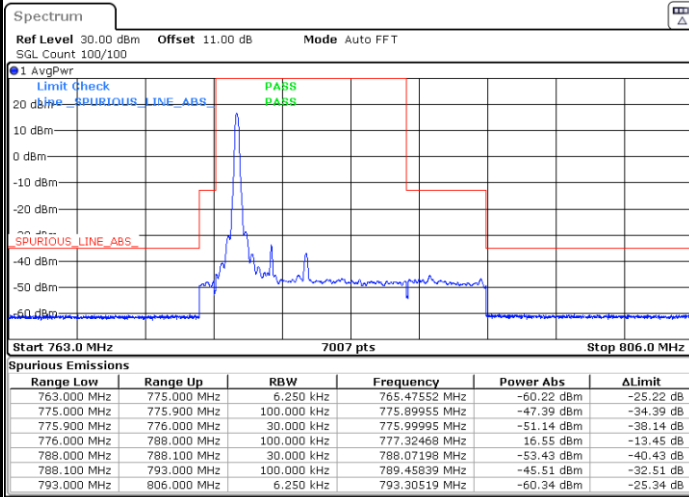


Date: 2.DEC.2022 17:54:25



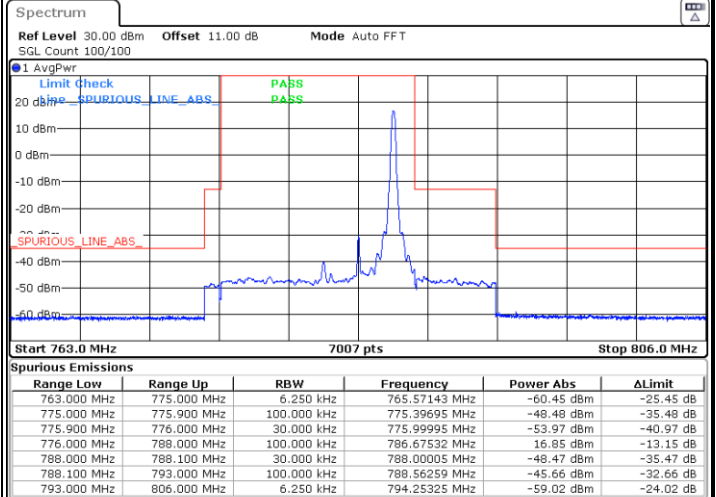
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



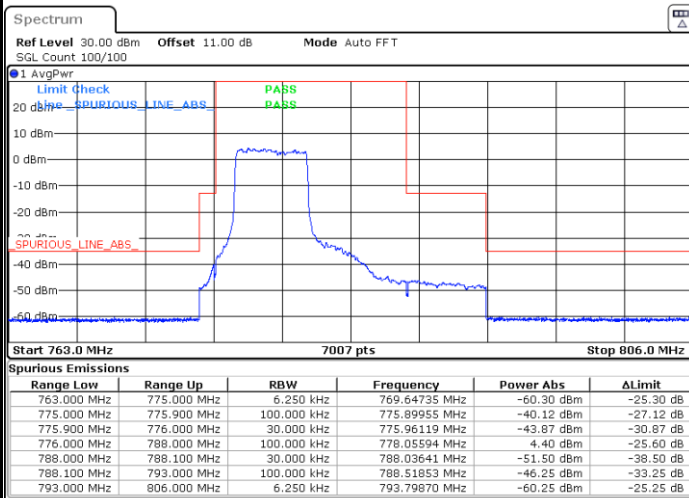
Date: 2.DEC.2022 18:03:48

Highest Band Edge / 1 RB



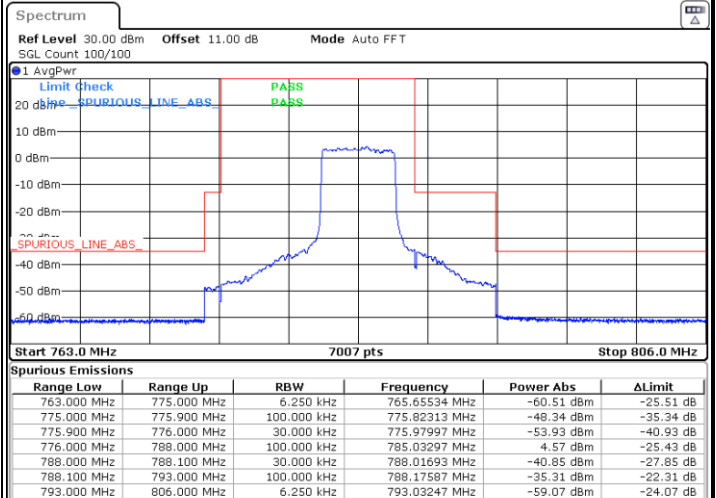
Date: 2.DEC.2022 18:06:32

Lowest Band Edge / Full RB



Date: 2.DEC.2022 18:02:48

Highest Band Edge / Full RB



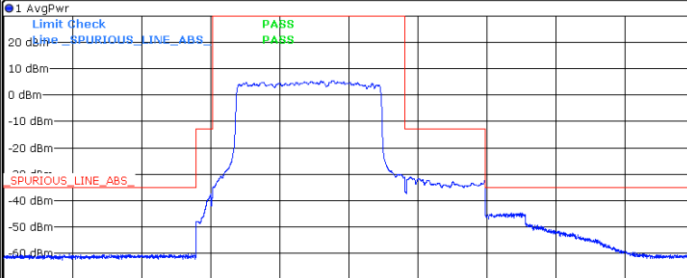
Date: 2.DEC.2022 18:05:31



LTE Band 13 / 10MHz / QPSK

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 dB Mode Auto FFT
SGL Count 100/100

Start 763.0 MHz 7007 pts Stop 806.0 MHz

Spurious Emissions

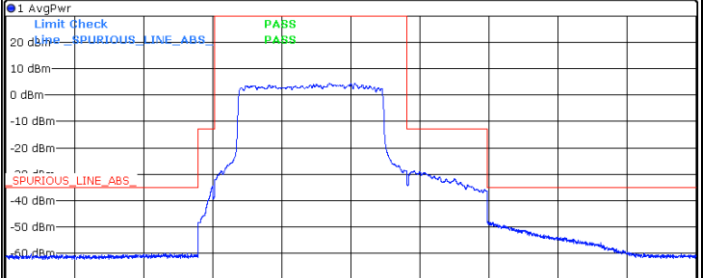
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	767.10589 MHz	-60.43 dBm	-25.43 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-37.43 dBm	-24.43 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98966 MHz	-38.75 dBm	-25.75 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.53447 MHz	-5.47 dBm	-24.53 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-36.58 dBm	-23.58 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.34720 MHz	-31.18 dBm	-18.18 dB
793.000 MHz	806.000 MHz	6.250 kHz	794.61688 MHz	-44.79 dBm	-9.79 dB

Date: 2.DEC.2022 17:57:57

LTE Band 13 / 10MHz / 16QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 dB Mode Auto FFT
SGL Count 100/100

Start 763.0 MHz 7007 pts Stop 806.0 MHz

Spurious Emissions

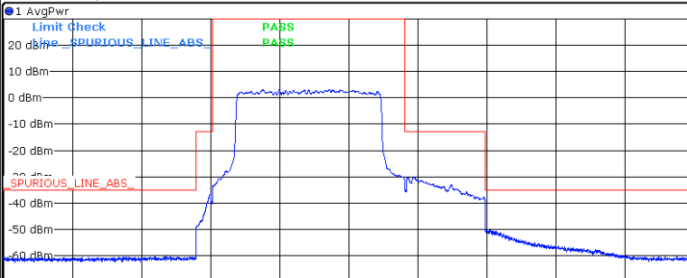
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	772.93207 MHz	-60.11 dBm	-25.11 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-34.54 dBm	-21.54 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98995 MHz	-37.77 dBm	-24.77 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.13886 MHz	-4.41 dBm	-25.59 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.00005 MHz	-33.89 dBm	-20.89 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.44510 MHz	-28.86 dBm	-15.86 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.07143 MHz	-48.05 dBm	-13.05 dB

Date: 2.DEC.2022 17:58:56

LTE Band 13 / 10MHz / 64QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 dB Mode Auto FFT
SGL Count 100/100

Start 763.0 MHz 7007 pts Stop 806.0 MHz

Spurious Emissions

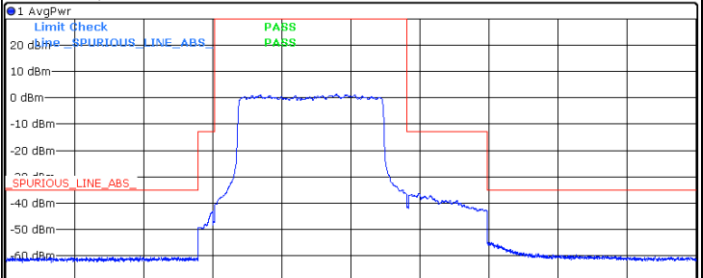
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
763.000 MHz	775.000 MHz	6.250 kHz	773.33966 MHz	-60.29 dBm	-25.29 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-36.58 dBm	-23.58 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.98487 MHz	-39.56 dBm	-26.56 dB
776.000 MHz	788.000 MHz	100.000 kHz	781.72428 MHz	-3.10 dBm	-26.90 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.04431 MHz	-35.23 dBm	-22.23 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.53811 MHz	-30.22 dBm	-17.22 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.03247 MHz	-50.19 dBm	-15.19 dB

Date: 2.DEC.2022 18:00:24

LTE Band 13 / 10MHz / 256QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 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	771.36164 MHz	-60.52 dBm	-25.52 dB
775.000 MHz	775.900 MHz	100.000 kHz	775.89955 MHz	-43.06 dBm	-30.06 dB
775.900 MHz	776.000 MHz	30.000 kHz	775.94960 MHz	-47.14 dBm	-34.14 dB
776.000 MHz	788.000 MHz	100.000 kHz	783.60639 MHz	-1.32 dBm	-28.68 dB
788.000 MHz	788.100 MHz	30.000 kHz	788.07408 MHz	-41.36 dBm	-28.36 dB
788.100 MHz	793.000 MHz	100.000 kHz	788.74371 MHz	-36.51 dBm	-23.51 dB
793.000 MHz	806.000 MHz	6.250 kHz	793.14935 MHz	-54.92 dBm	-19.92 dB

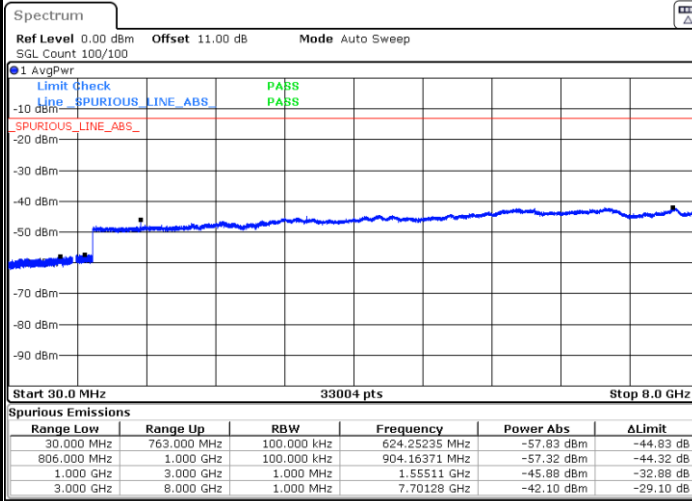
Date: 2.DEC.2022 18:08:05



Conducted Spurious Emission

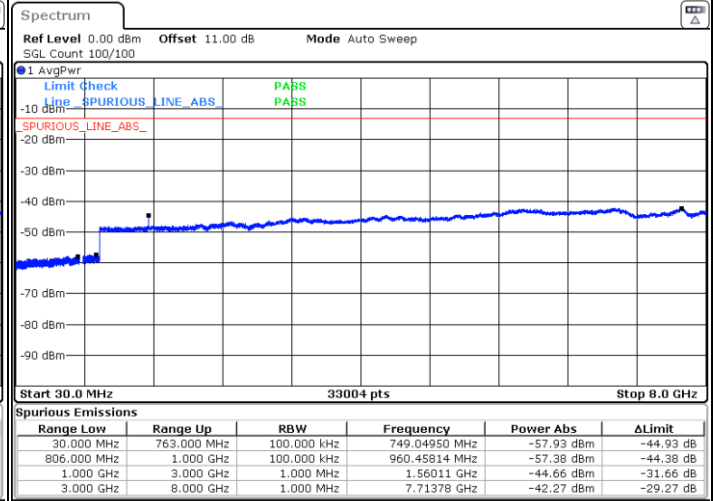
LTE Band 13 / 5MHz

Lowest Channel / QPSK



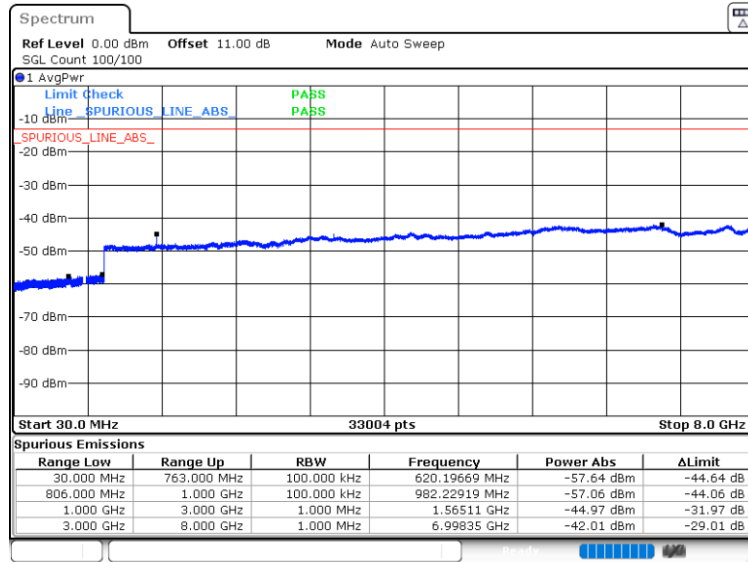
Date: 2.DEC.2022 17:42:25

Middle Channel / QPSK



Date: 2.DEC.2022 17:43:43

Highest Channel / QPSK

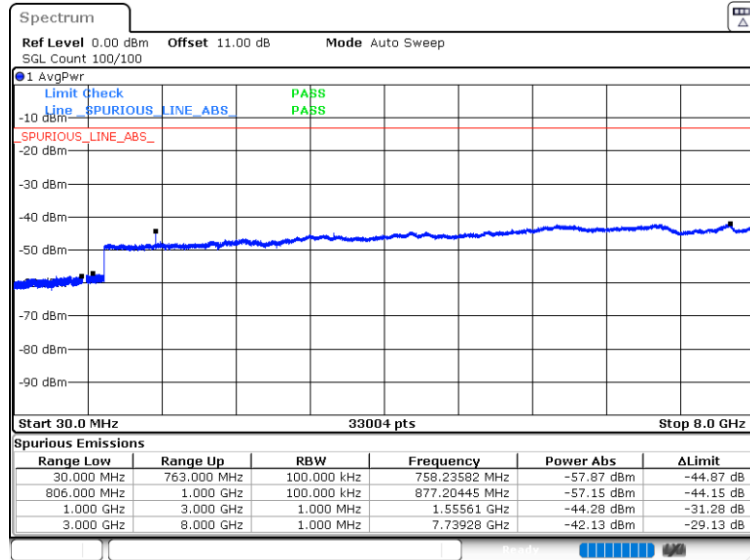


Date: 2.DEC.2022 17:50:43



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 2.DEC.2022 18:09:41

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	0.0229	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0178	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0202	
0	Normal Voltage	0.0116	
-10	Normal Voltage	0.0198	
-20	Normal Voltage	0.0033	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0216	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0084	

Note:

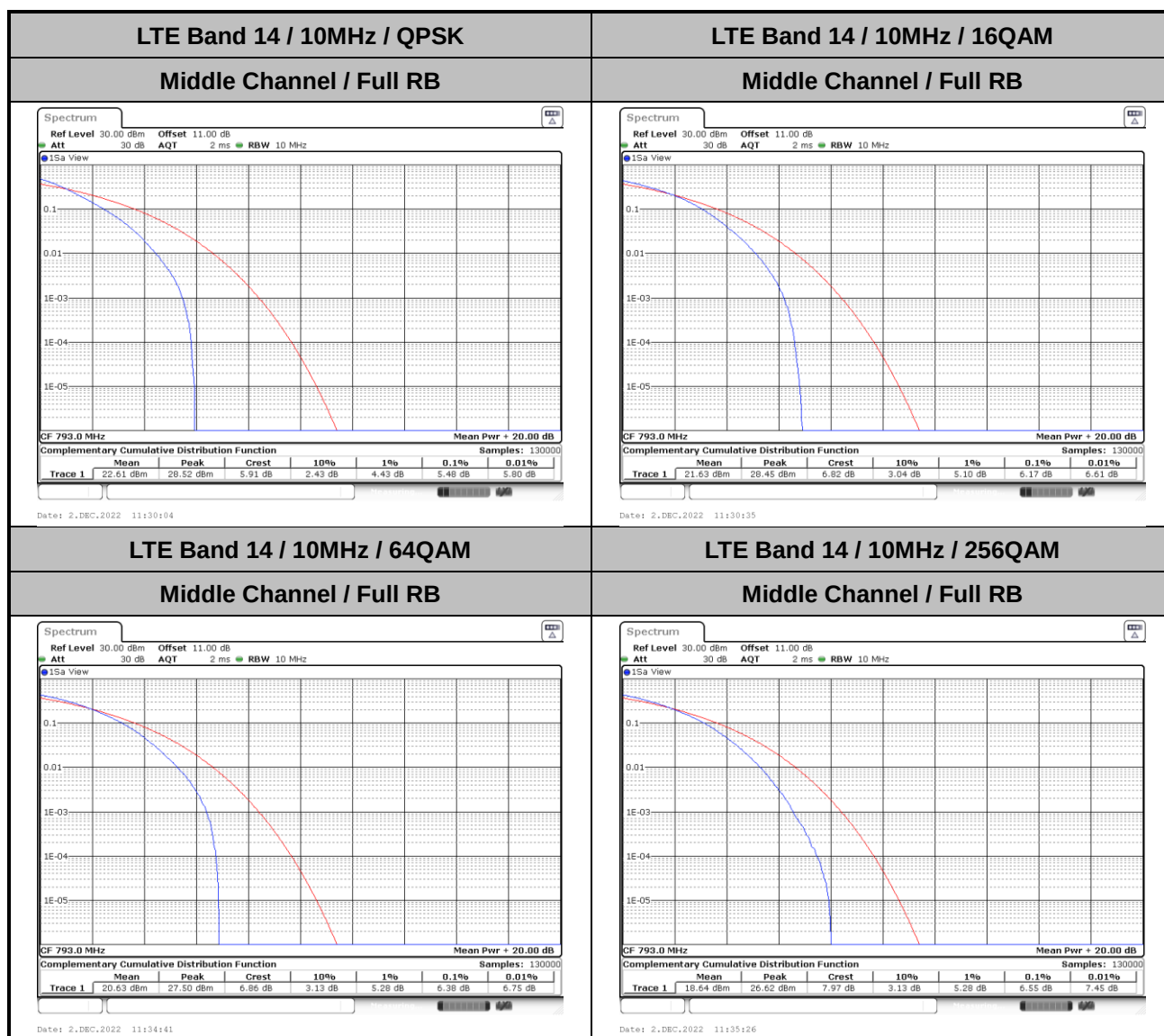
1. Normal Voltage =3.88 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 14

Peak-to-Average Ratio

Mode	LTE Band 14 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.48	6.17	6.38	6.55	PASS



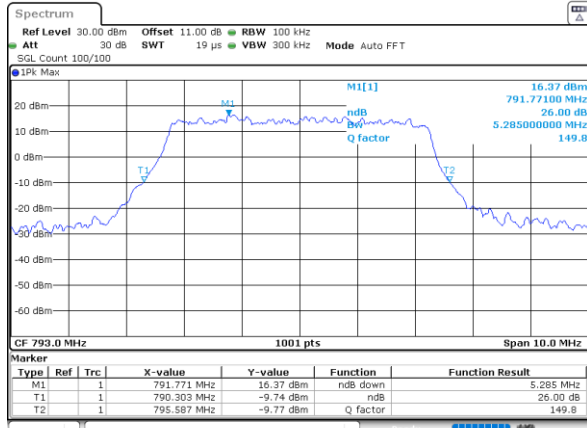
**26dB Bandwidth**

Mode	LTE Band 14 : 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	-	-	-	-	5.29	4.87	10.13	9.91	-	-	-	-
Mode	LTE Band 14 : 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	-	-	-	-	4.97	5.19	10.59	9.79	-	-	-	-



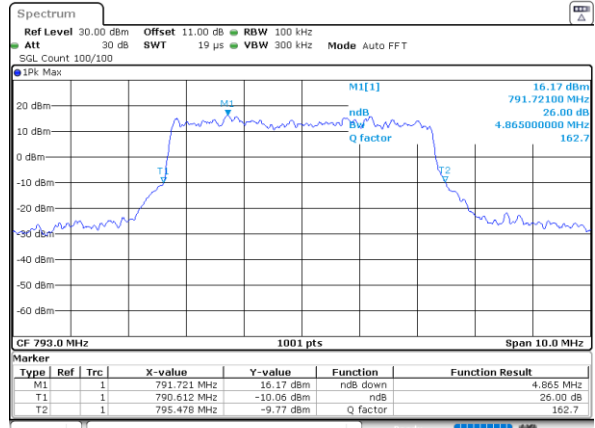
LTE Band 14

Middle Channel / 5MHz / QPSK



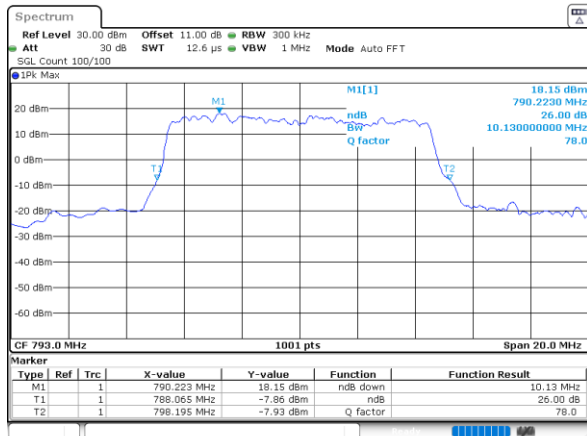
Date: 2.DEC.2022 10:52:09

Middle Channel / 5MHz / 16QAM



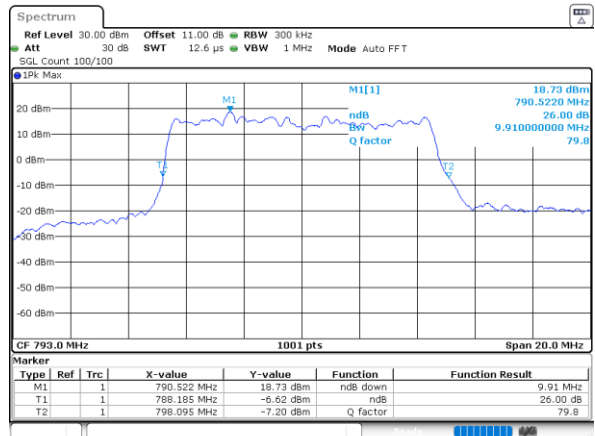
Date: 2.DEC.2022 10:52:38

Middle Channel / 10MHz / QPSK



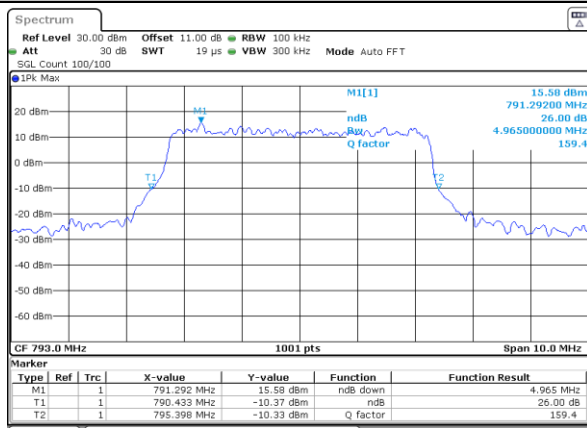
Date: 2.DEC.2022 11:29:49

Middle Channel / 10MHz / 16QAM



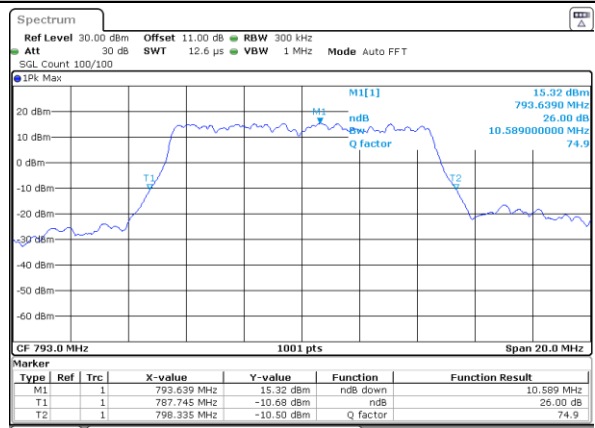
Date: 2.DEC.2022 11:31:04

Middle Channel / 5MHz / 64QAM



Date: 2.DEC.2022 10:53:34

Middle Channel / 10MHz / 64QAM

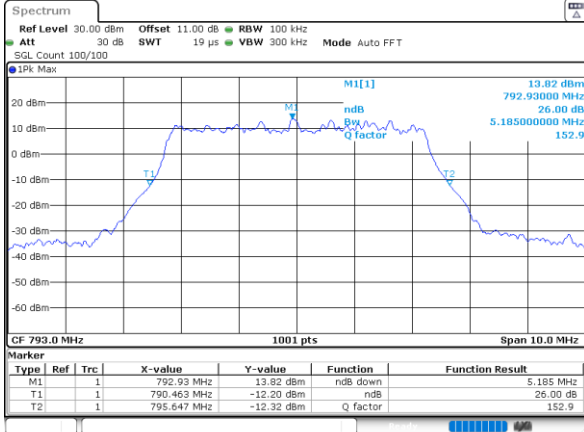


Date: 2.DEC.2022 11:34:56



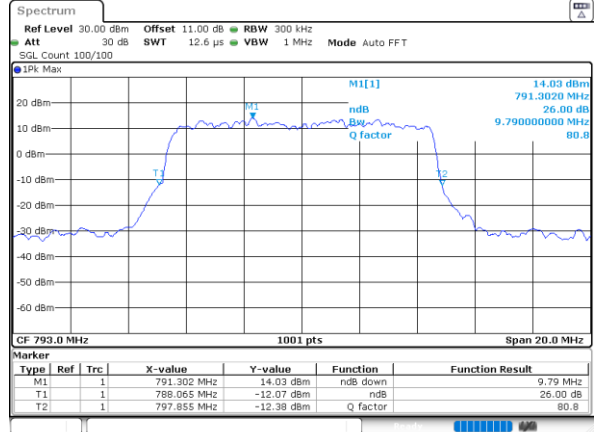
LTE Band 14

Middle Channel / 5MHz / 256QAM



Date: 2.DEC.2022 10:54:03

Middle Channel / 10MHz / 256QAM



Date: 2.DEC.2022 11:35:56

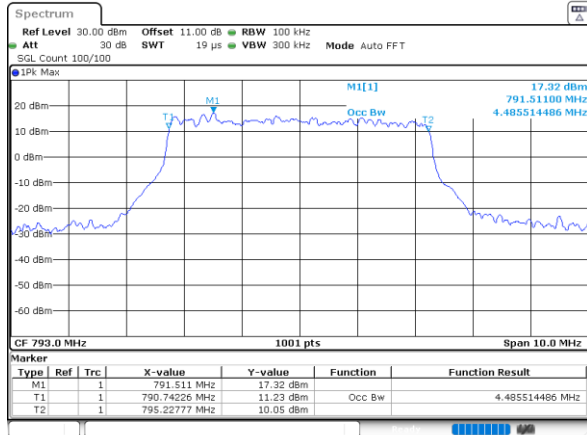
**Occupied Bandwidth**

Mode	LTE Band 14 : 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	4.51	9.01	9.01	-	-	-	-
Mode	LTE Band 14 : 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	-	-	-	-	4.48	4.49	9.07	9.03	-	-	-	-

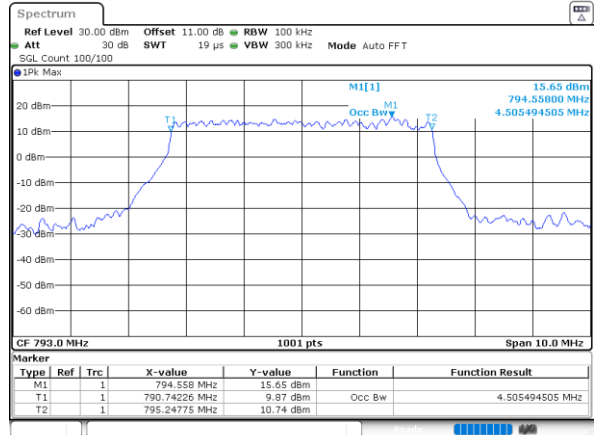


LTE Band 14

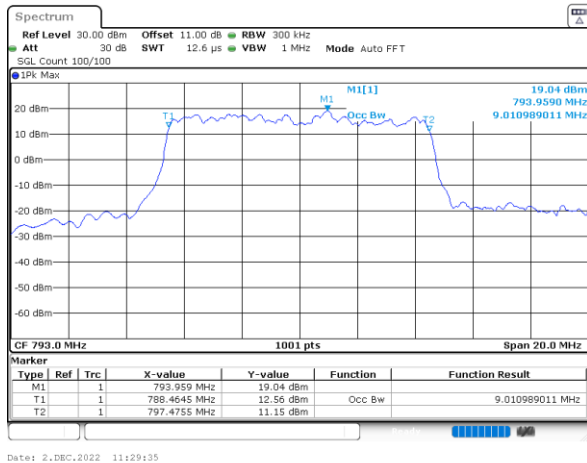
Middle Channel / 5MHz / QPSK



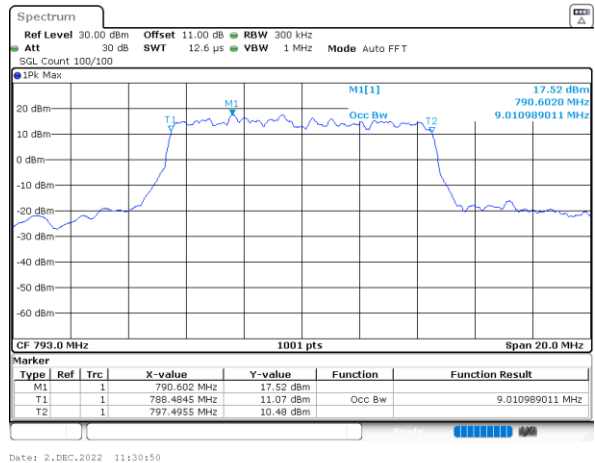
Middle Channel / 5MHz / 16QAM



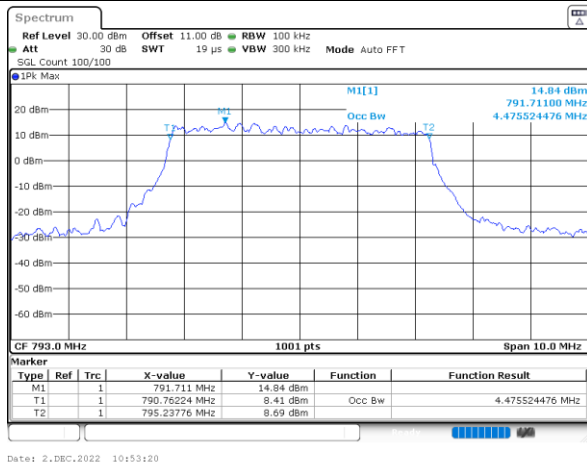
Middle Channel / 10MHz / QPSK



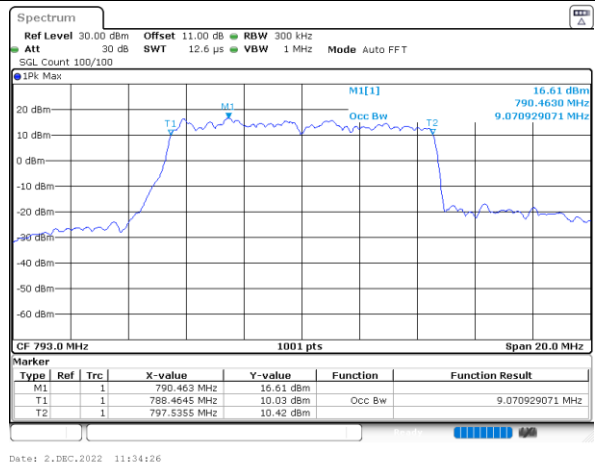
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



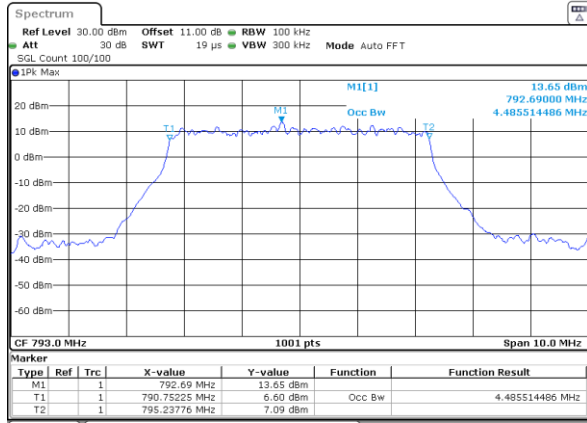
Middle Channel / 10MHz / 64QAM





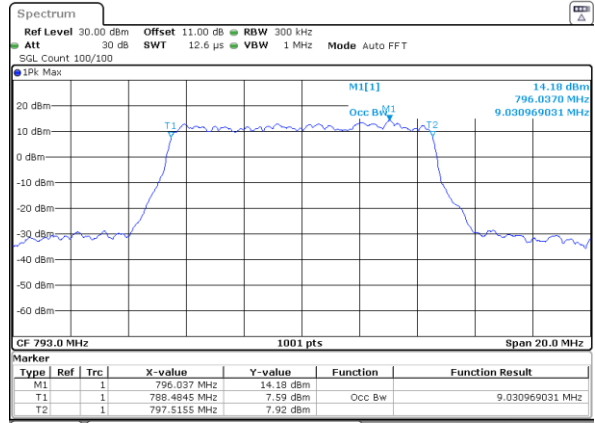
LTE Band 14

Middle Channel / 5MHz / 256QAM



Date: 2.DEC.2022 10:54:18

Middle Channel / 10MHz / 256QAM



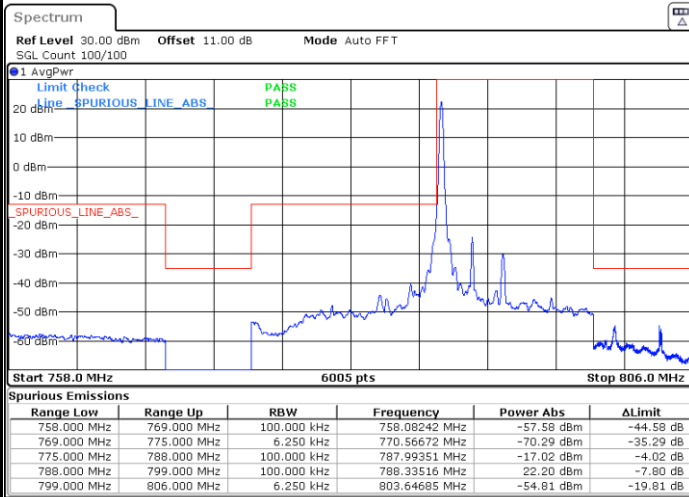
Date: 2.DEC.2022 11:35:42



Conducted Band Edge

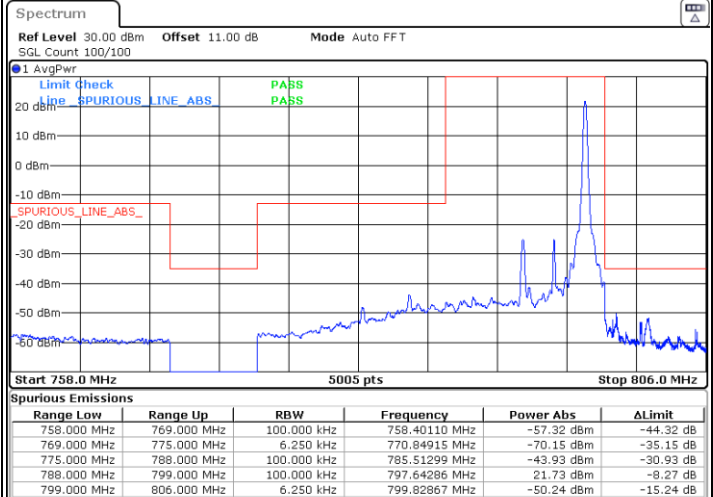
LTE Band 14 / 5MHz / QPSK

Lowest Band Edge / 1 RB



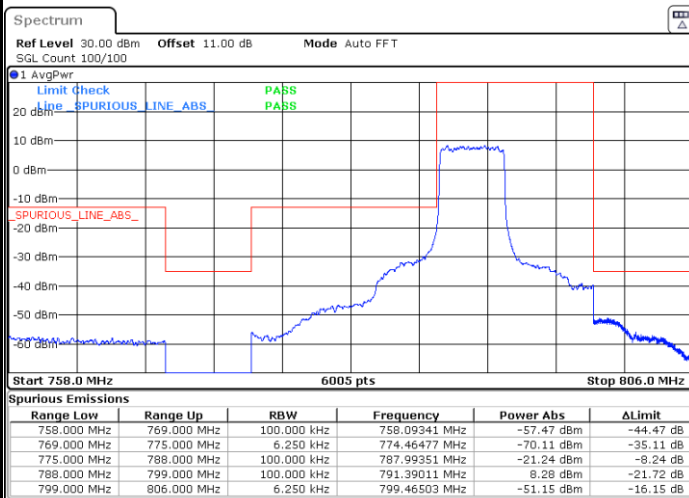
Date: 2.DEC.2022 10:32:43

Highest Band Edge / 1 RB



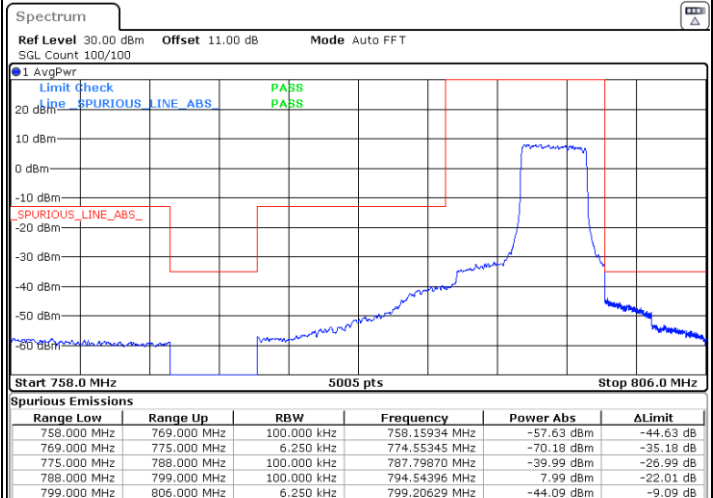
Date: 2.DEC.2022 11:09:01

Lowest Band Edge / Full RB



Date: 2.DEC.2022 10:31:44

Highest Band Edge / Full RB

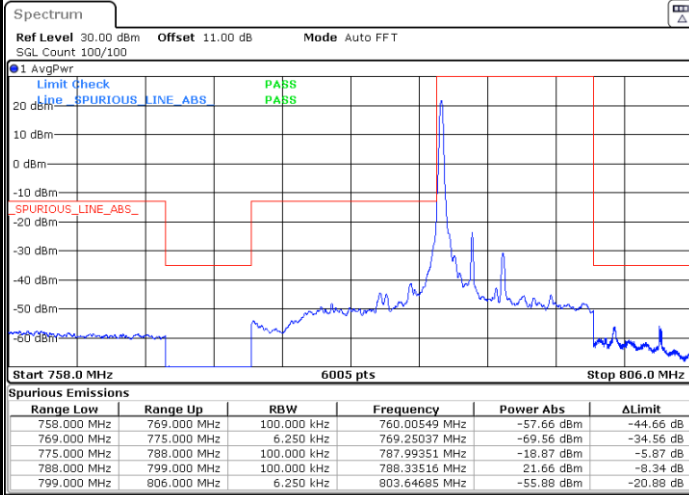


Date: 2.DEC.2022 11:10:01

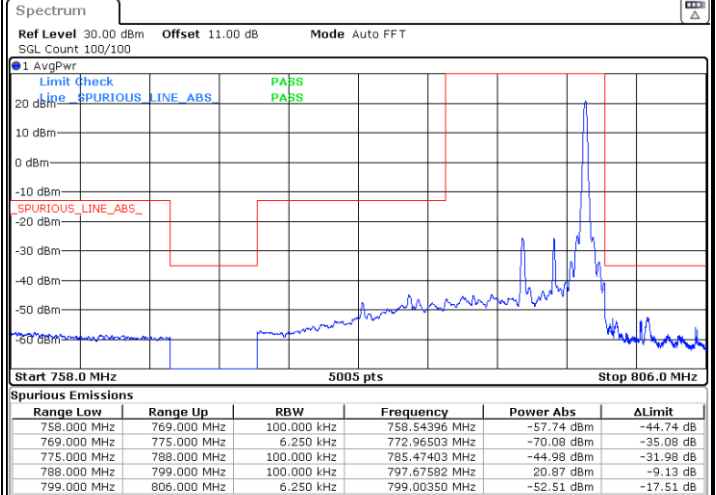


LTE Band 14 / 5MHz / 16QAM

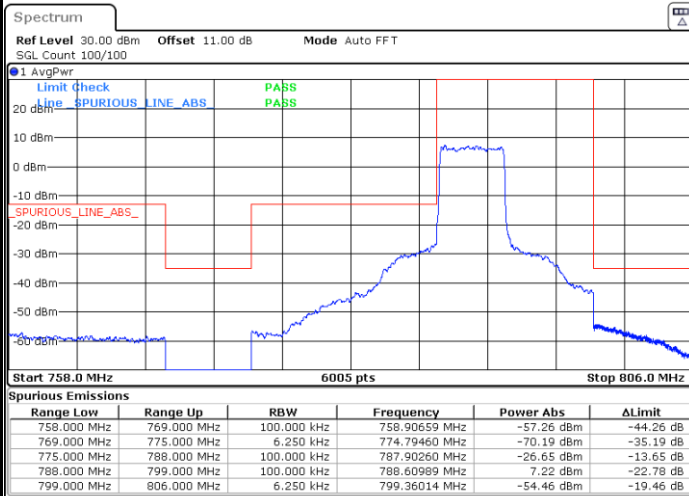
Lowest Band Edge / 1 RB



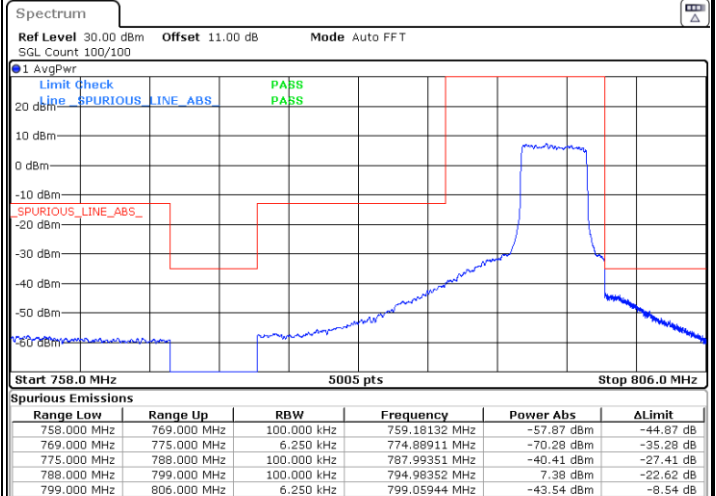
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



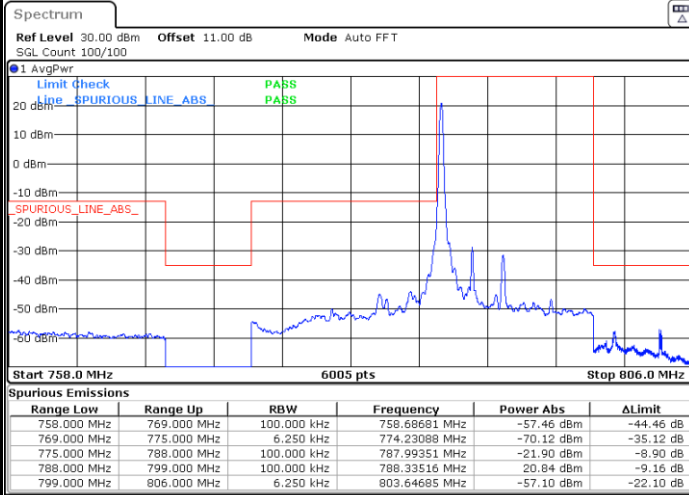
Highest Band Edge / Full RB





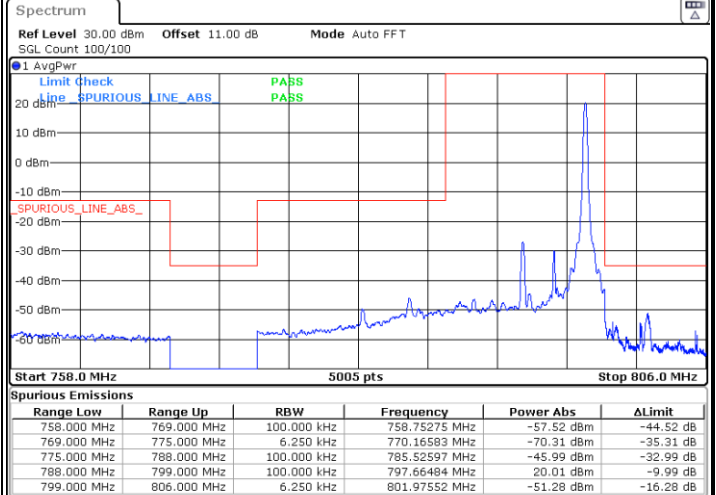
LTE Band 14 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



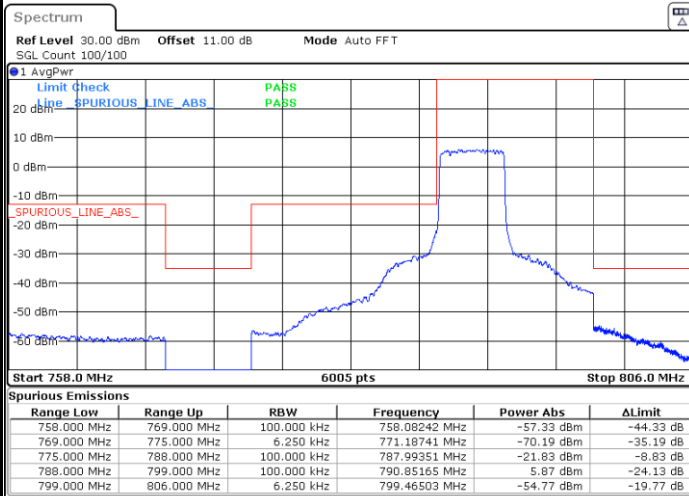
Date: 2.DEC.2022 10:37:45

Highest Band Edge / 1 RB



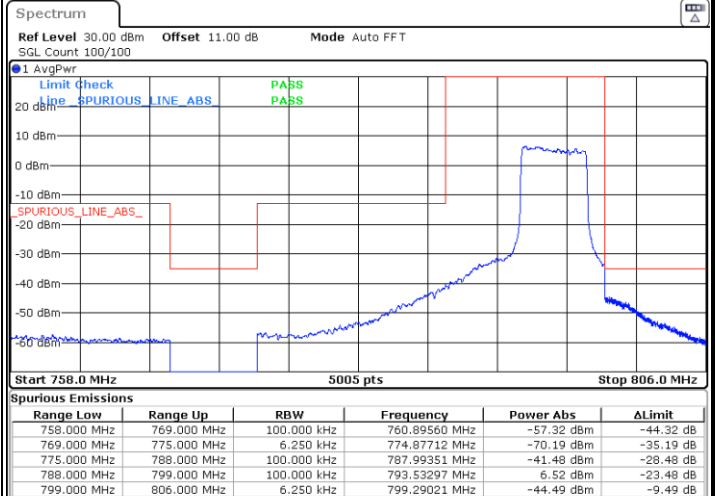
Date: 2.DEC.2022 11:13:00

Lowest Band Edge / Full RB



Date: 2.DEC.2022 10:36:45

Highest Band Edge / Full RB

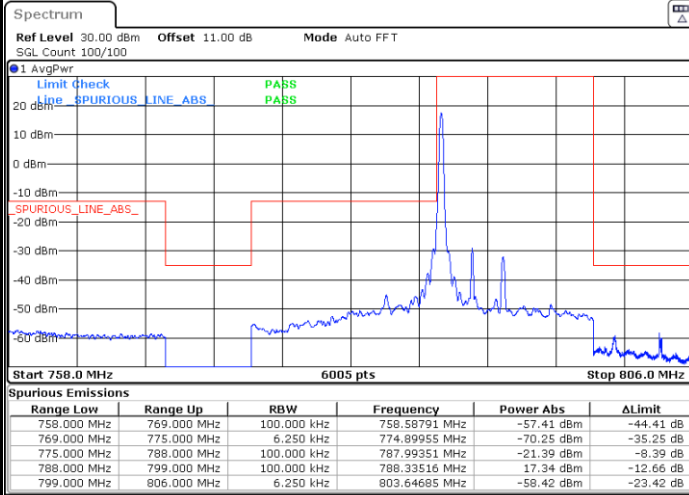


Date: 2.DEC.2022 11:14:00

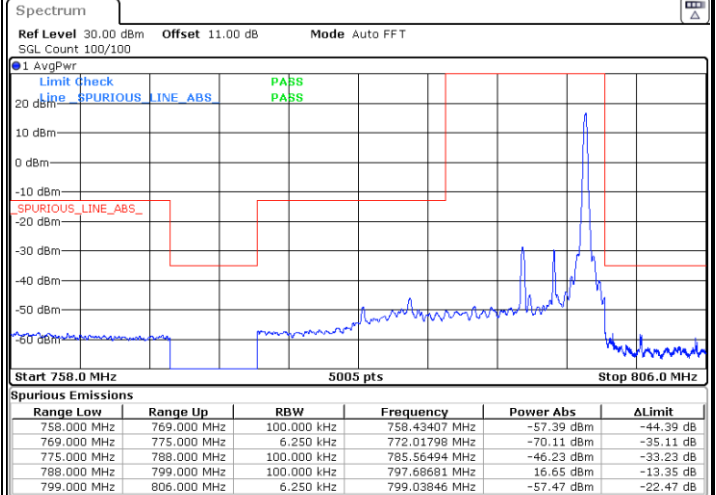


LTE Band 14 / 5MHz / 256QAM

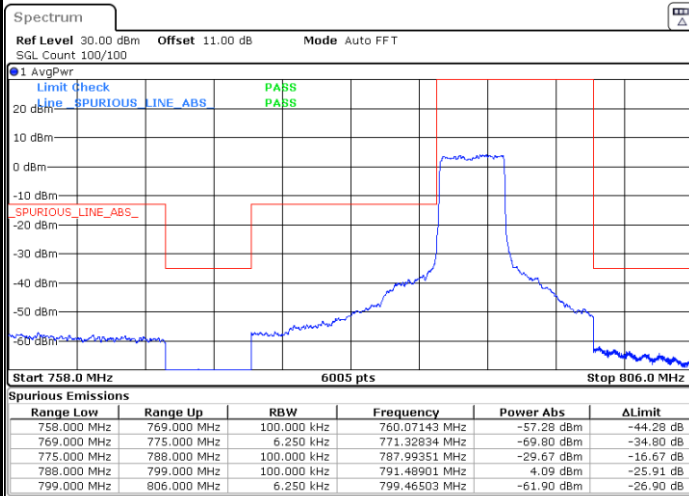
Lowest Band Edge / 1 RB



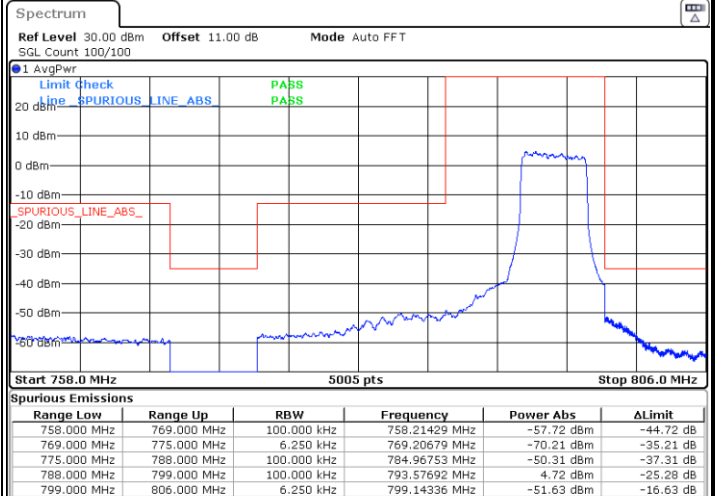
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

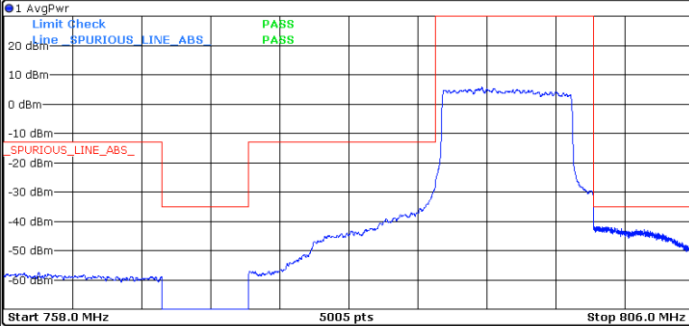




LTE Band 14 / 10MHz / QPSK

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 dB Mode Auto FFT
SGL Count 100/100

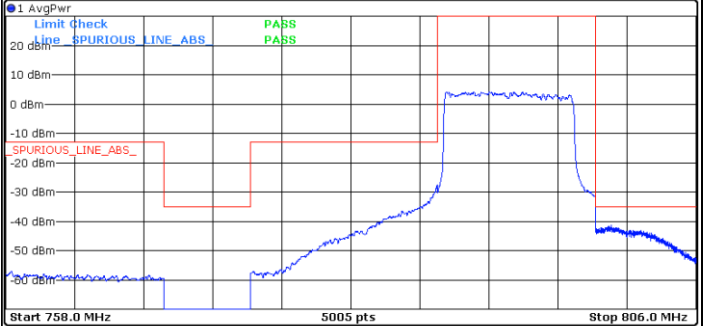
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	760.42308 MHz	-57.55 dBm	-44.55 dB
769.000 MHz	775.000 MHz	6.250 kHz	771.62238 MHz	-70.06 dBm	-35.06 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-28.51 dBm	-15.51 dB
788.000 MHz	799.000 MHz	100.000 kHz	791.24725 MHz	5.72 dBm	-24.28 dB
799.000 MHz	806.000 MHz	6.250 kHz	799.23427 MHz	-41.81 dBm	-6.81 dB

Date: 2.DEC.2022 11:28:37

LTE Band 14 / 10MHz / 16QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 dB Mode Auto FFT
SGL Count 100/100

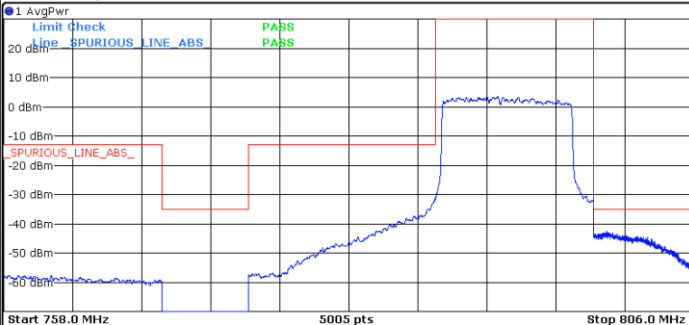
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	758.39011 MHz	-57.18 dBm	-44.18 dB
769.000 MHz	775.000 MHz	6.250 kHz	772.76124 MHz	-70.12 dBm	-35.12 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-27.69 dBm	-14.69 dB
788.000 MHz	799.000 MHz	100.000 kHz	790.55495 MHz	4.16 dBm	-25.84 dB
799.000 MHz	806.000 MHz	6.250 kHz	800.08741 MHz	-41.46 dBm	-6.46 dB

Date: 2.DEC.2022 11:31:47

LTE Band 14 / 10MHz / 64QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 dB Mode Auto FFT
SGL Count 100/100

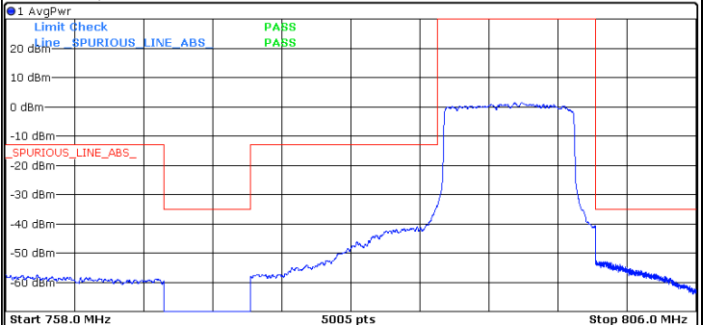
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	758.35714 MHz	-57.70 dBm	-44.70 dB
769.000 MHz	775.000 MHz	6.250 kHz	772.85714 MHz	-70.33 dBm	-35.33 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-31.40 dBm	-18.40 dB
788.000 MHz	799.000 MHz	100.000 kHz	792.34615 MHz	3.57 dBm	-26.43 dB
799.000 MHz	806.000 MHz	6.250 kHz	799.89161 MHz	-42.39 dBm	-7.39 dB

Date: 2.DEC.2022 11:34:11

LTE Band 14 / 10MHz / 256QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.00 dB Mode Auto FFT
SGL Count 100/100

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	758.01648 MHz	-57.52 dBm	-44.52 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.56743 MHz	-70.26 dBm	-35.26 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-33.57 dBm	-28.57 dB
788.000 MHz	799.000 MHz	100.000 kHz	793.37912 MHz	1.42 dBm	-28.58 dB
799.000 MHz	806.000 MHz	6.250 kHz	799.08042 MHz	-52.66 dBm	-17.66 dB

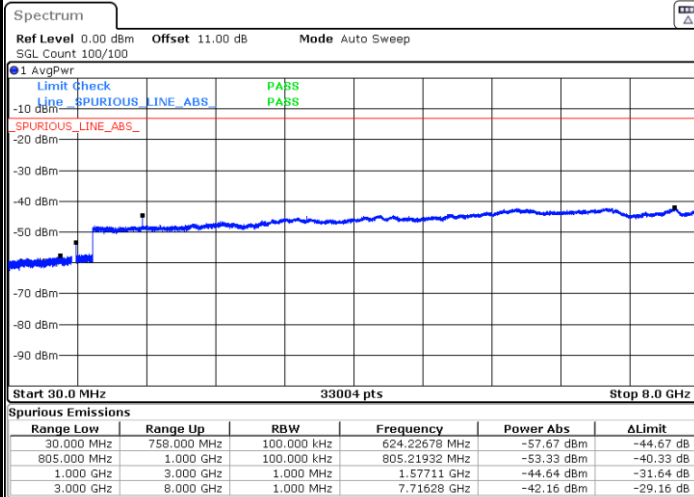
Date: 2.DEC.2022 11:36:39



Conducted Spurious Emission

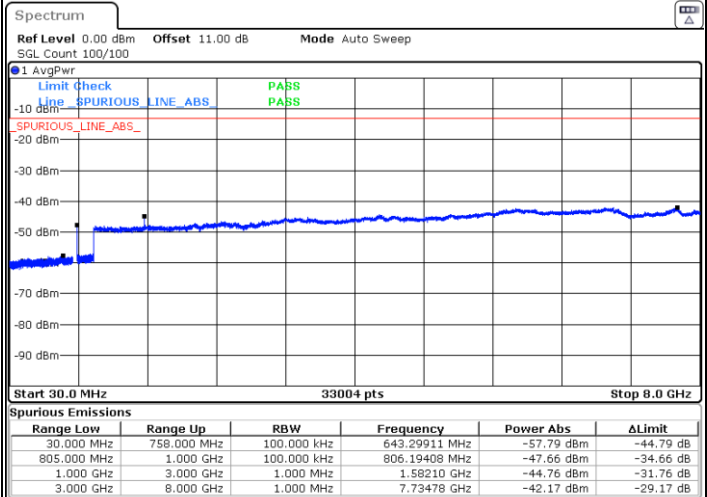
LTE Band 14 / 5MHz

Lowest Channel / QPSK



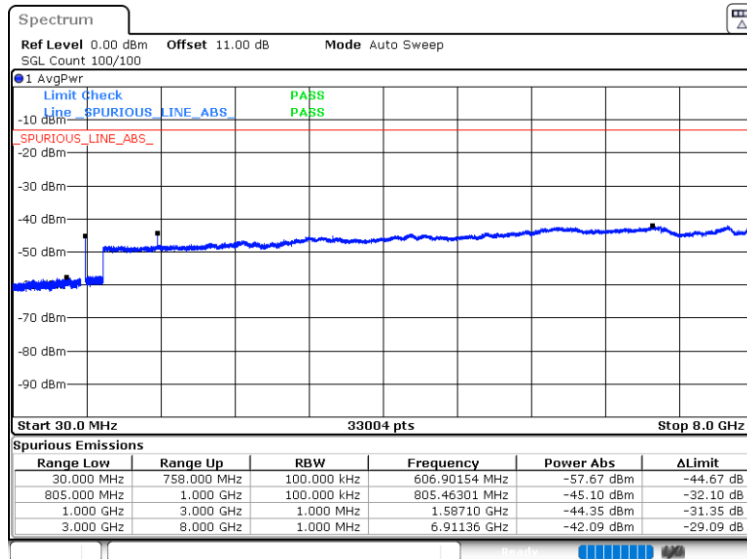
Date: 2.DEC.2022 10:33:47

Middle Channel / QPSK



Date: 2.DEC.2022 10:55:35

Highest Channel / QPSK

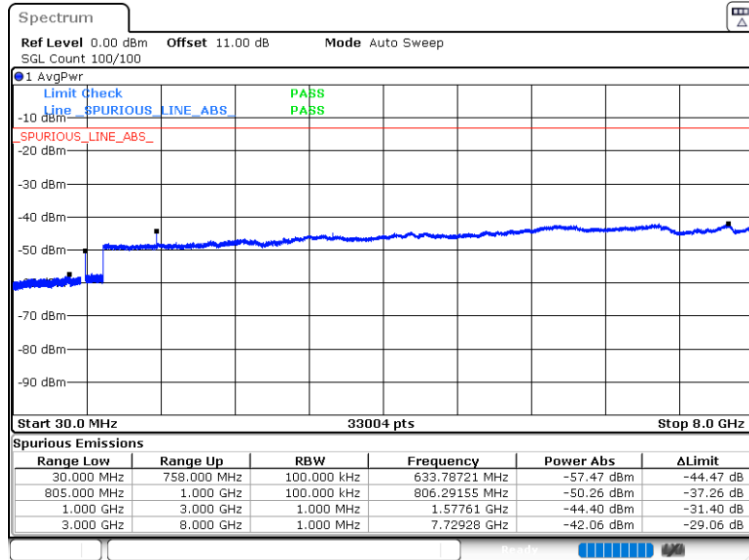


Date: 2.DEC.2022 11:08:02

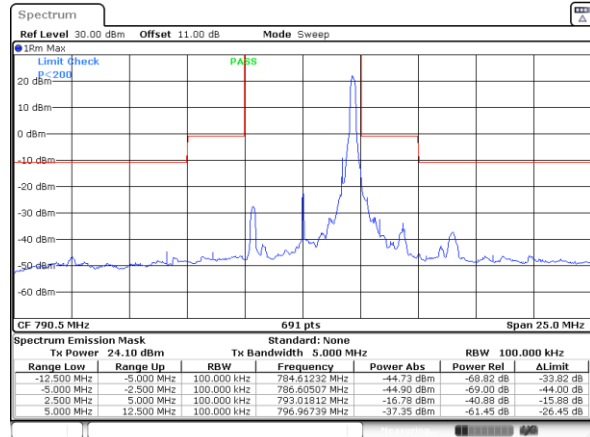
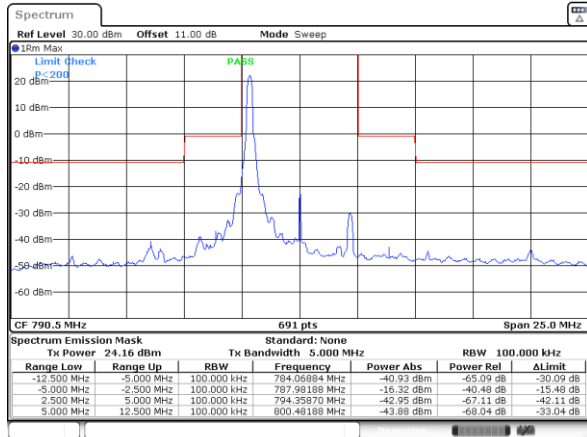
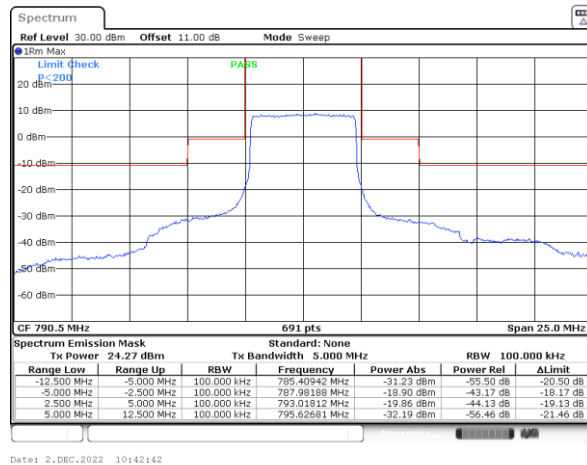


LTE Band 14 / 10MHz

Middle Channel / QPSK

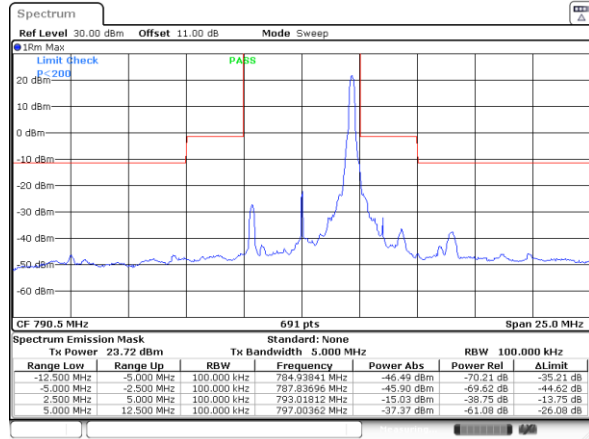
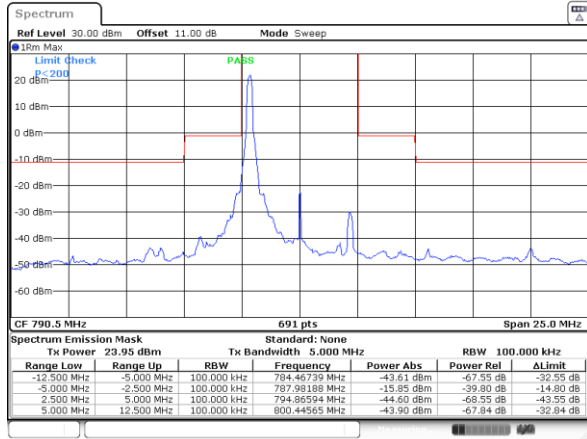


Date: 2.DEC.2022 11:38:40

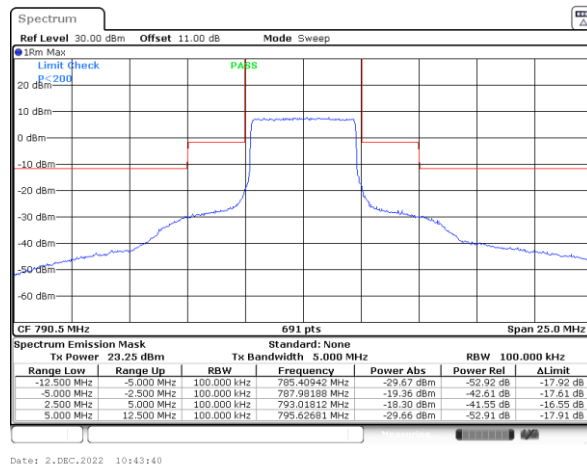
**Mask****LTE Band 14 / 5MHz / QPSK****Lowest Channel / 1RB****Lowest Channel / Full RB**

LTE Band 14 / 5MHz / 16QAM

Lowest Channel / 1RB

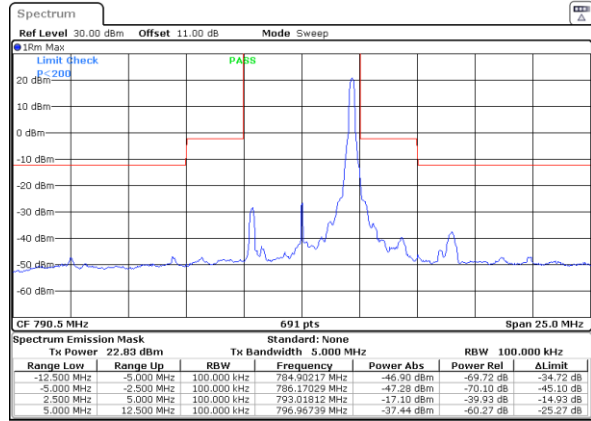
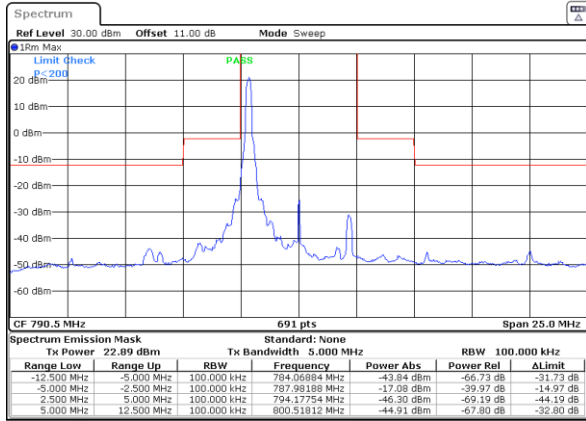


Lowest Channel / Full RB

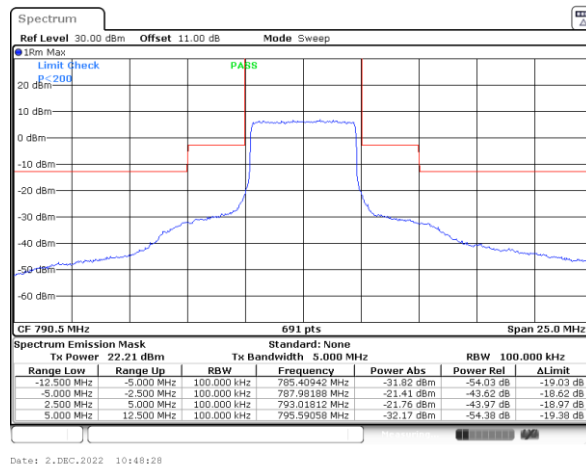


LTE Band 14 / 5MHz / 64QAM

Lowest Channel / 1RB



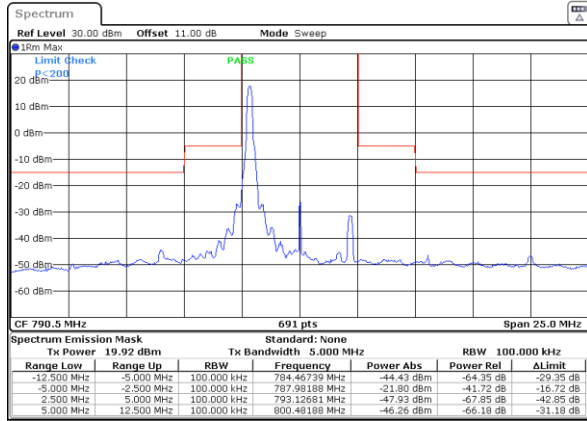
Lowest Channel / Full RB



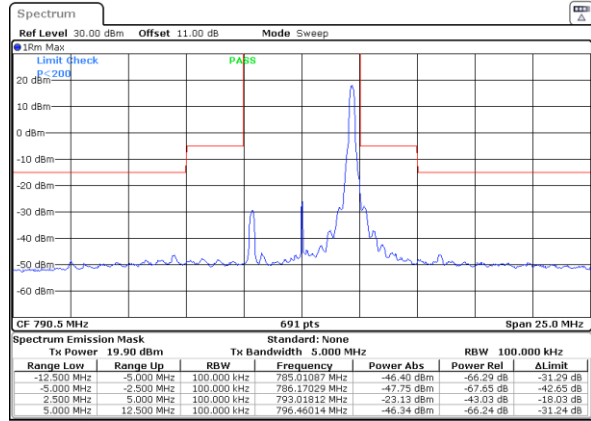


LTE Band 14 / 5MHz / 256QAM

Lowest Channel / 1RB

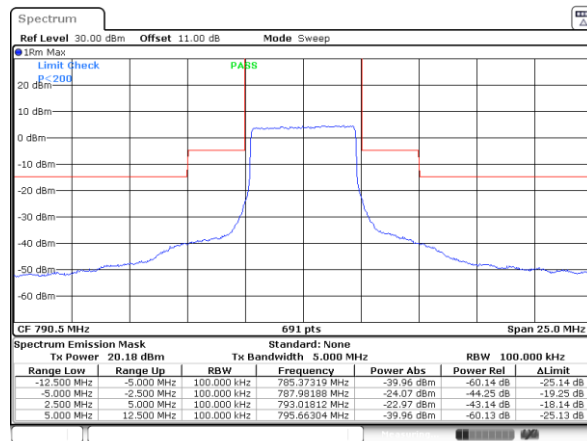


Date: 2.DEC.2022 10:51:25

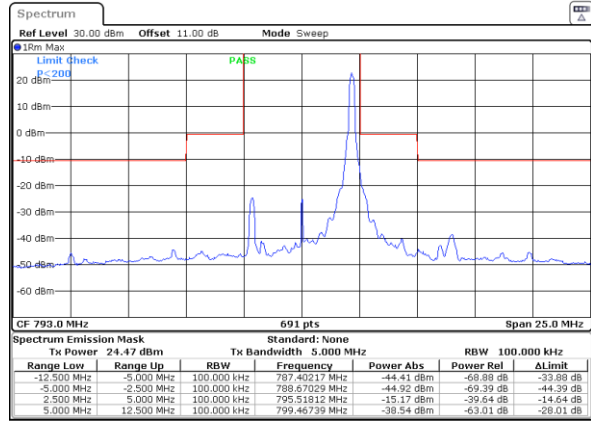
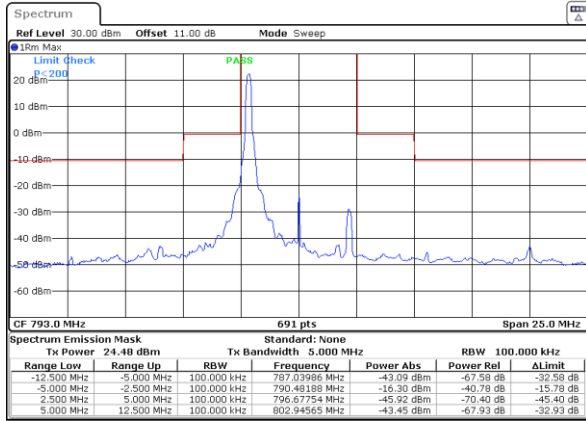
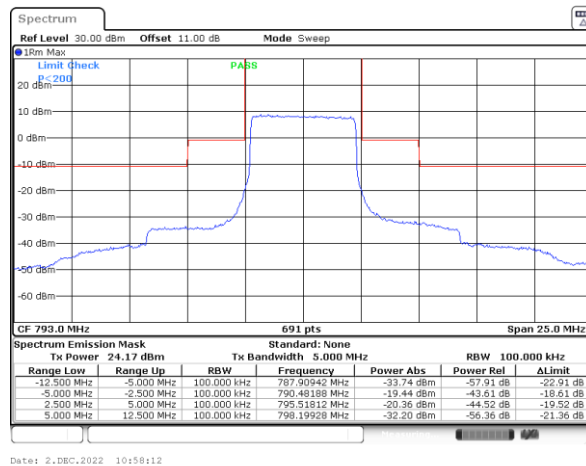


Date: 2.DEC.2022 10:50:27

Lowest Channel / Full RB

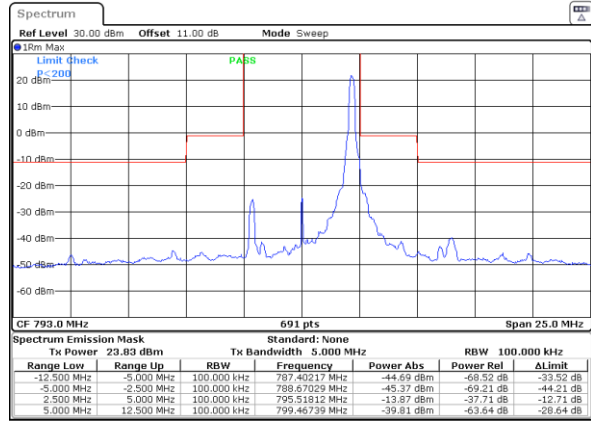
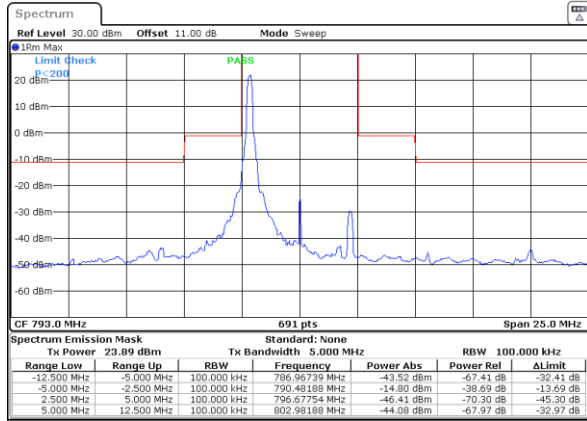


Date: 2.DEC.2022 10:49:26

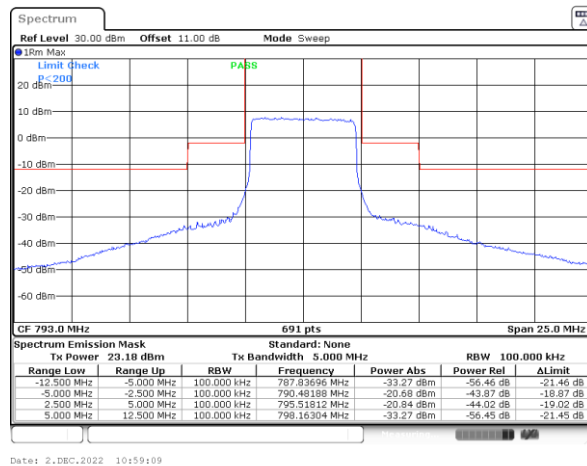
LTE Band 14 / 5MHz / QPSK
Middle Channel / 1RB

Middle Channel / Full RB


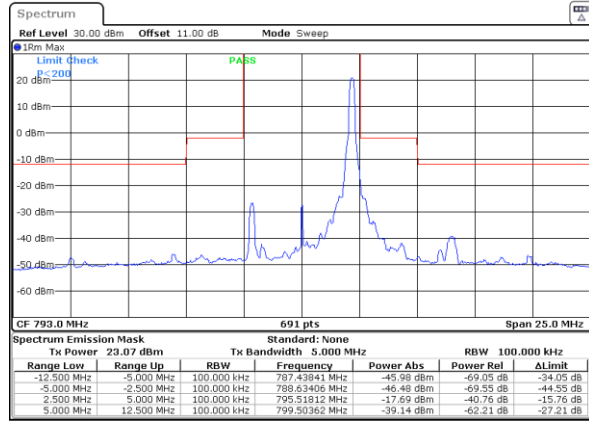
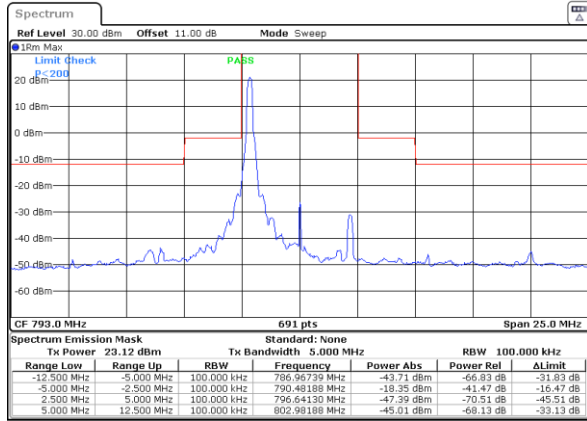
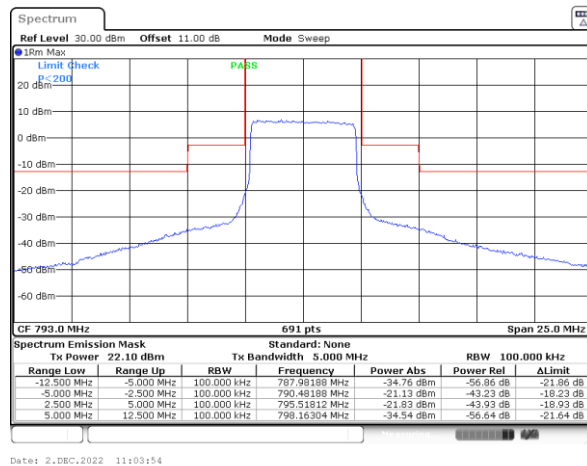
LTE Band 14 / 5MHz / 16QAM

Middle Channel / 1RB



Middle Channel / Full RB

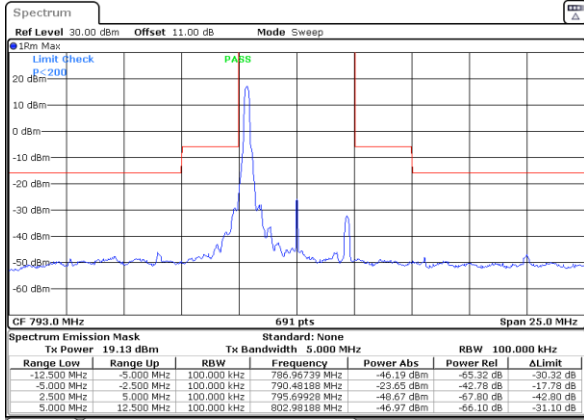


LTE Band 14 / 5MHz / 64QAM
Middle Channel / 1RB

Middle Channel / Full RB


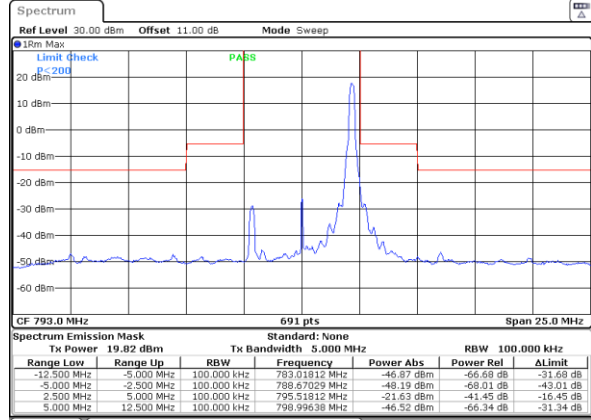


LTE Band 14 / 5MHz / 256QAM

Middle Channel / 1RB

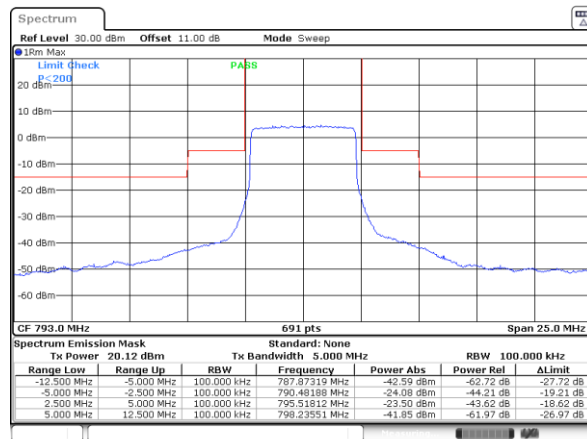


Date: 7.DEC.2022 22:57:33

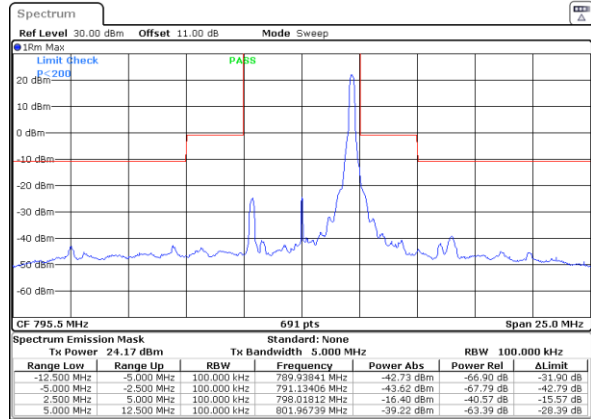
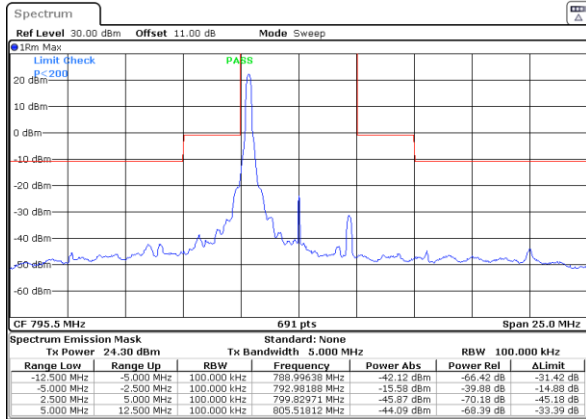
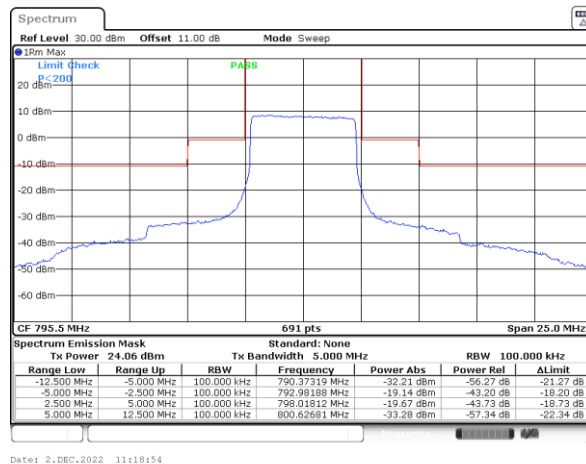


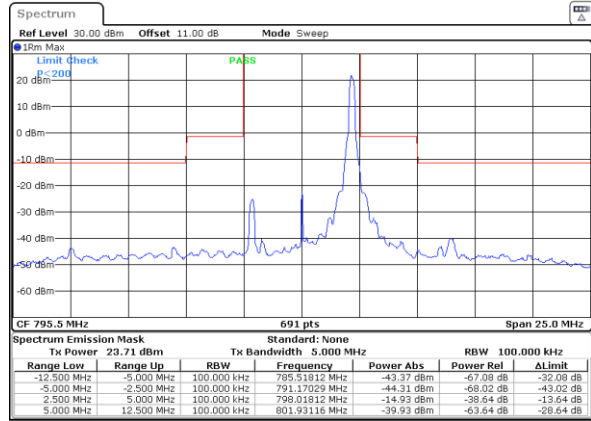
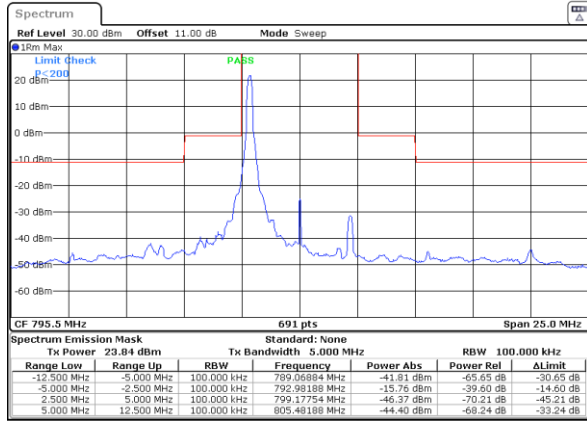
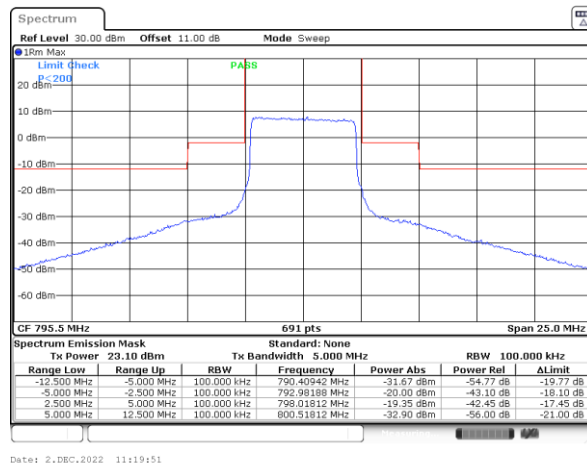
Date: 2.DEC.2022 11:05:48

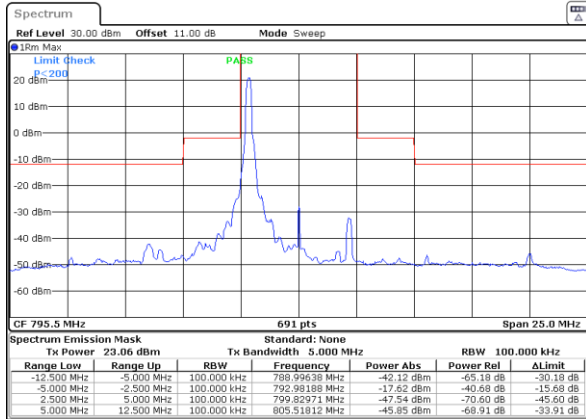
Middle Channel / Full RB



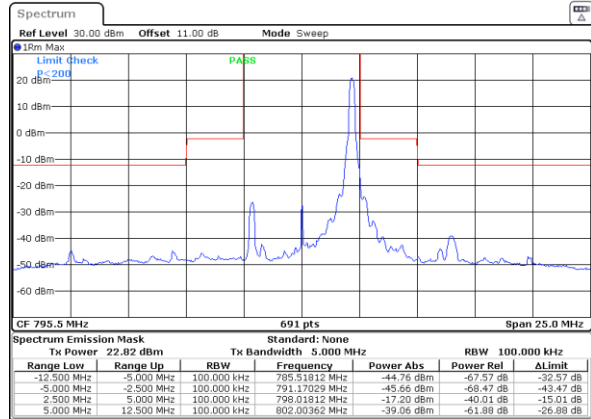
Date: 2.DEC.2022 11:04:51

LTE Band 14 / 5MHz / QPSK
Highest Channel / 1RB

Highest Channel / Full RB


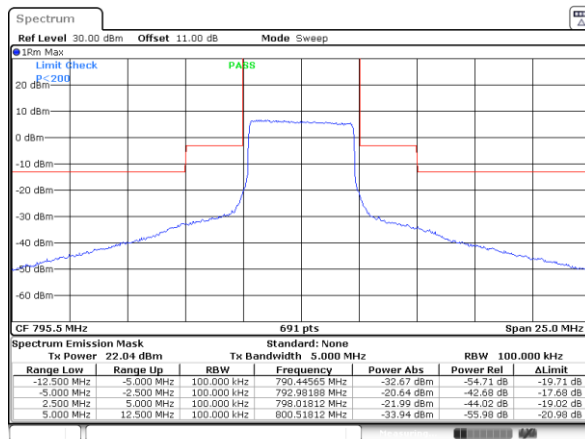
LTE Band 14 / 5MHz / 16QAM
Highest Channel / 1RB

Highest Channel / Full RB


LTE Band 14 / 5MHz / 64QAM
Highest Channel / 1RB


Date: 2.DEC.2022 11:22:45



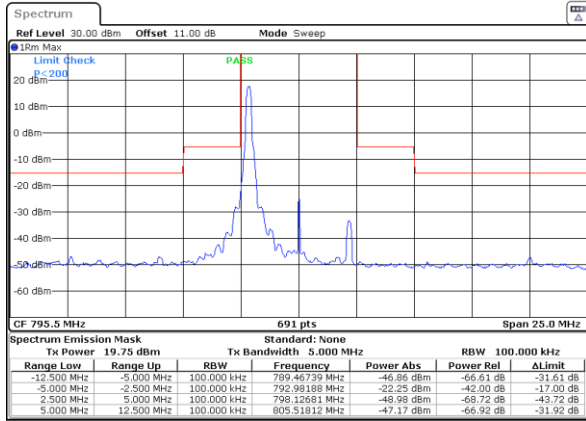
Date: 2.DEC.2022 11:23:42

Highest Channel / Full RB


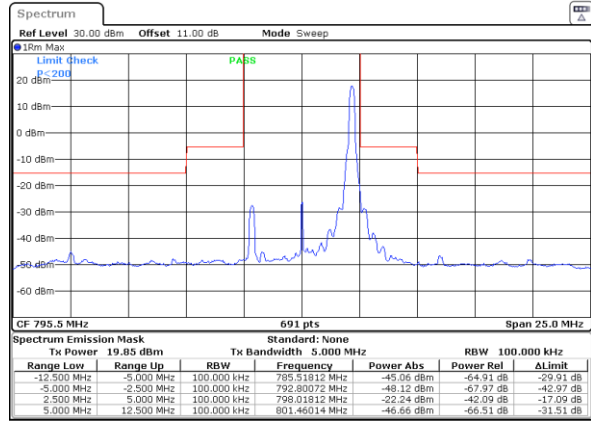
Date: 2.DEC.2022 11:24:40

LTE Band 14 / 5MHz / 256QAM

Highest Channel / 1RB

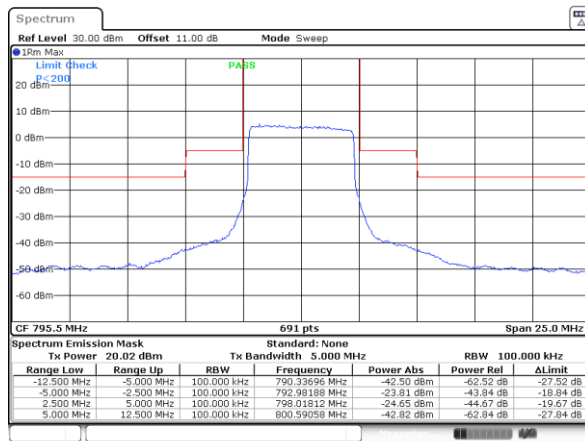


Date: 2.DEC.2022 11:27:33



Date: 2.DEC.2022 11:26:36

Highest Channel / Full RB

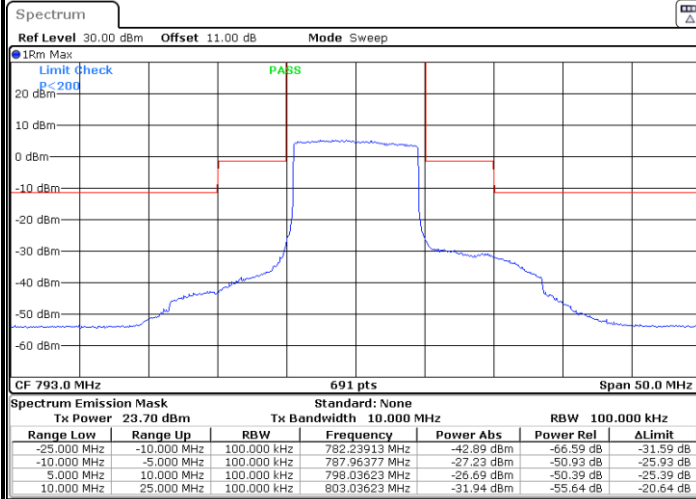


Date: 2.DEC.2022 11:25:38



LTE Band 14 / 10MHz / QPSK

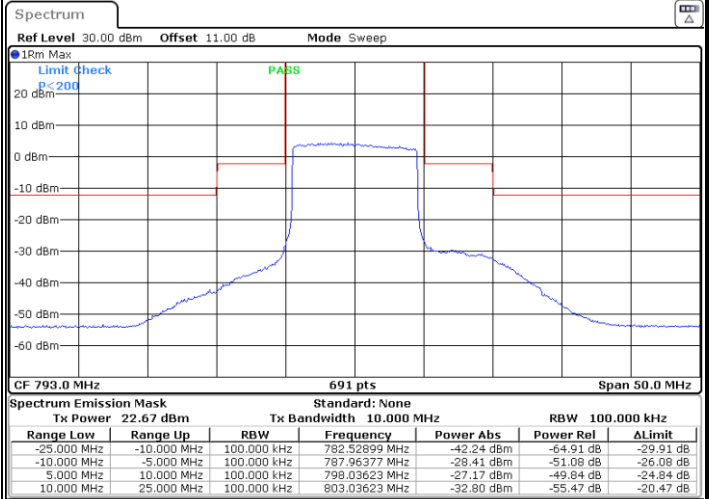
Middle Channel / Full RB



Date: 2.DEC.2022 11:29:21

LTE Band 14 / 10MHz / 16QAM

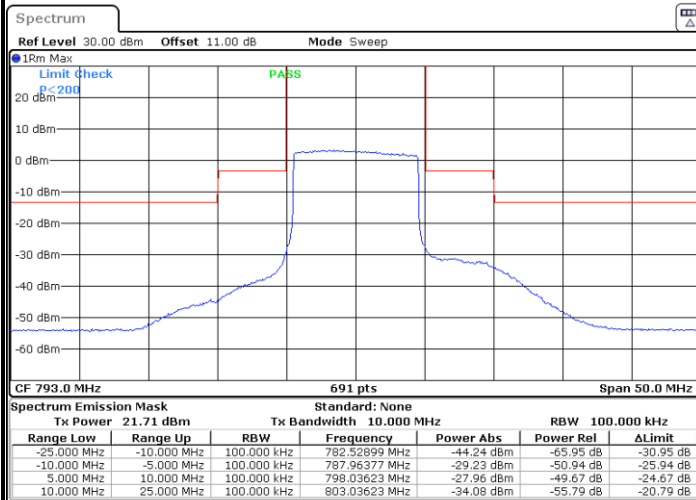
Middle Channel / Full RB



Date: 2.DEC.2022 11:32:30

LTE Band 14 / 10MHz / 64QAM

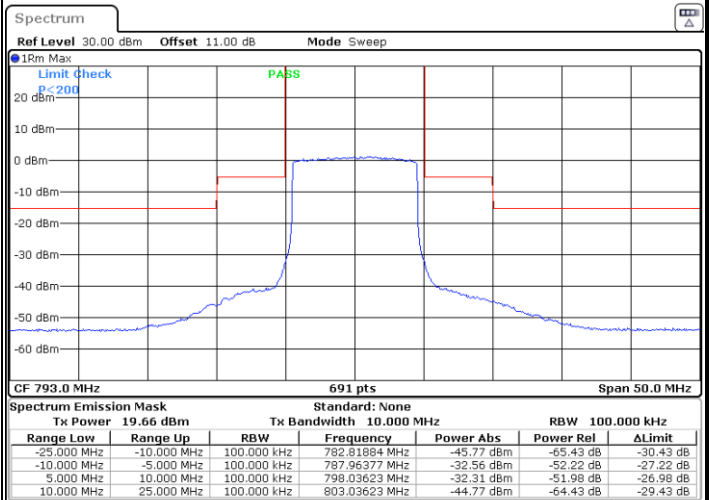
Middle Channel / Full RB



Date: 2.DEC.2022 11:33:27

LTE Band 14 / 10MHz / 256QAM

Middle Channel / Full RB



Date: 2.DEC.2022 11:37:22

Frequency Stability

Test Conditions		LTE Band 14 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0073	PASS
40	Normal Voltage	0.0121	
30	Normal Voltage	0.0068	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0037	
0	Normal Voltage	0.0158	
-10	Normal Voltage	0.0145	
-20	Normal Voltage	0.0131	
-30	Normal Voltage	0.0037	
20	Maximum Voltage	0.0068	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0039	

Note:

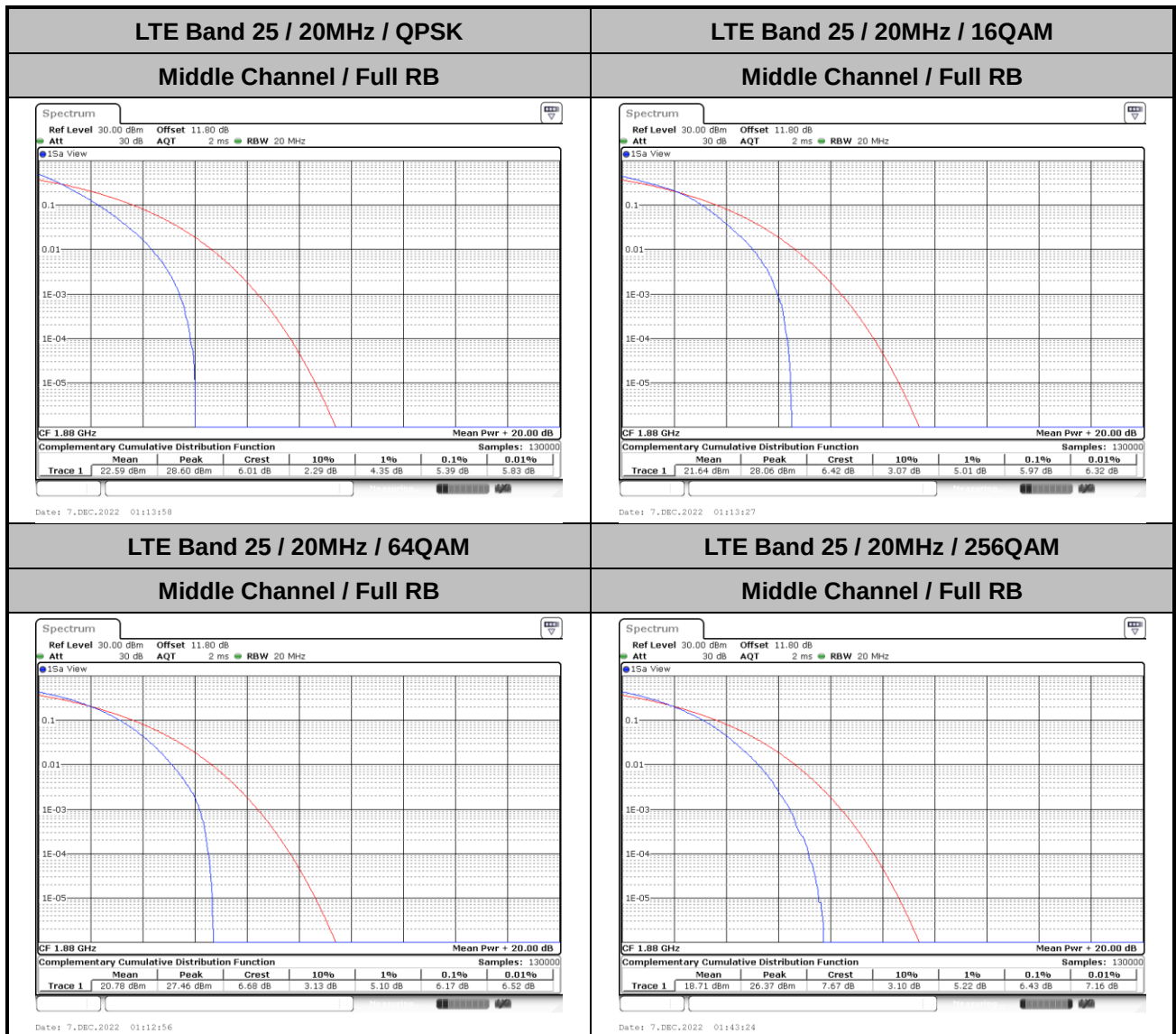
1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.39	5.97	6.17	6.43	PASS



**26dB Bandwidth**

Mode	LTE Band 25 : 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	1.33	1.35	3.09	3.15	5.07	5.10	10.17	10.35	15.35	14.48	19.42	19.22
Mode	LTE Band 25 : 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	1.28	1.32	3.05	3.05	5.07	5.16	10.13	10.23	14.75	14.51	19.66	19.26