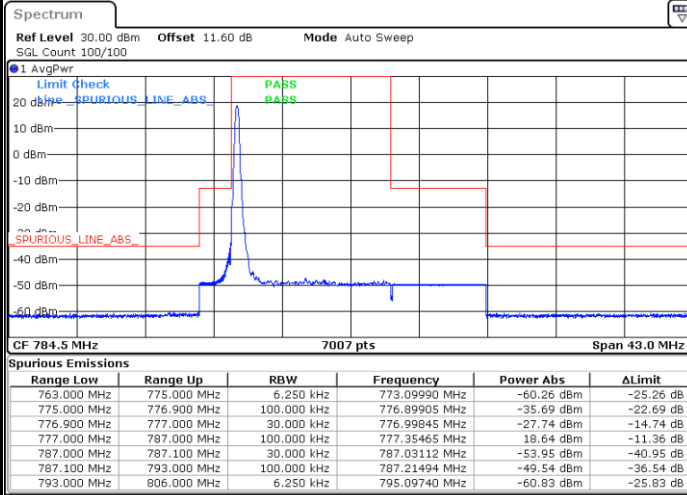




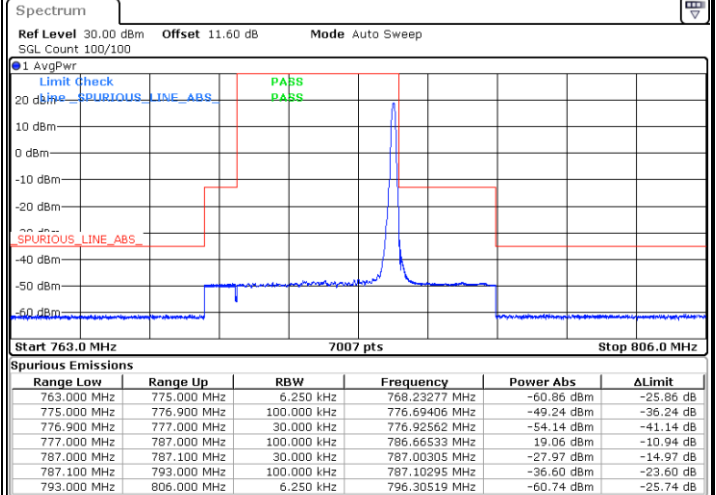
IC LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



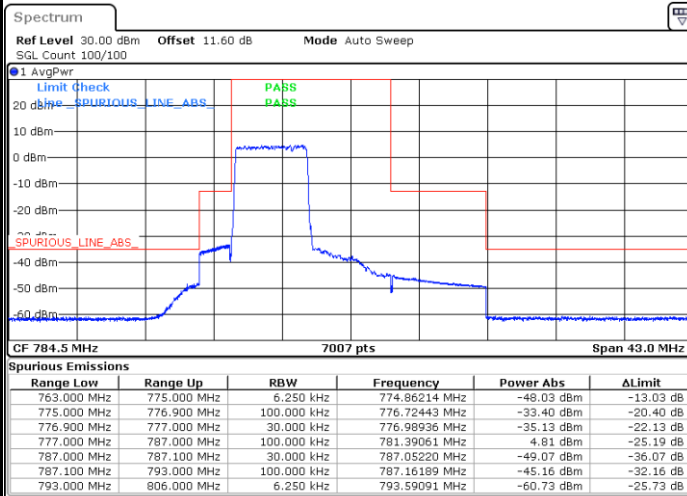
Date: 19.OCT.2023 19:50:20

Highest Band Edge / 1 RB



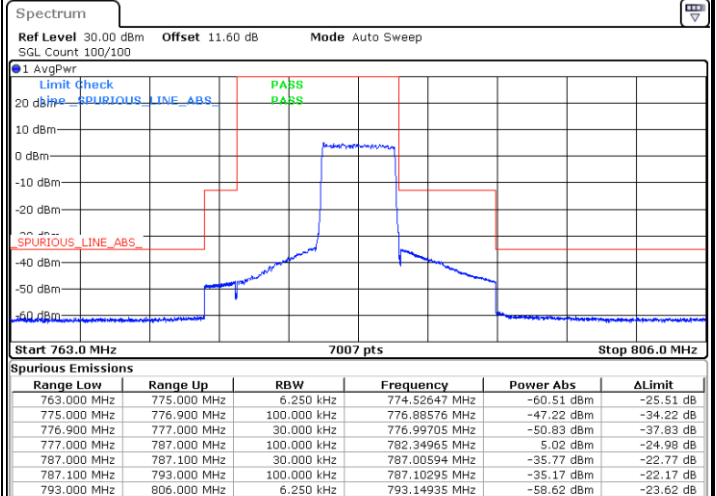
Date: 19.OCT.2023 19:52:26

Lowest Band Edge / Full RB



Date: 19.OCT.2023 19:49:19

Highest Band Edge / Full RB

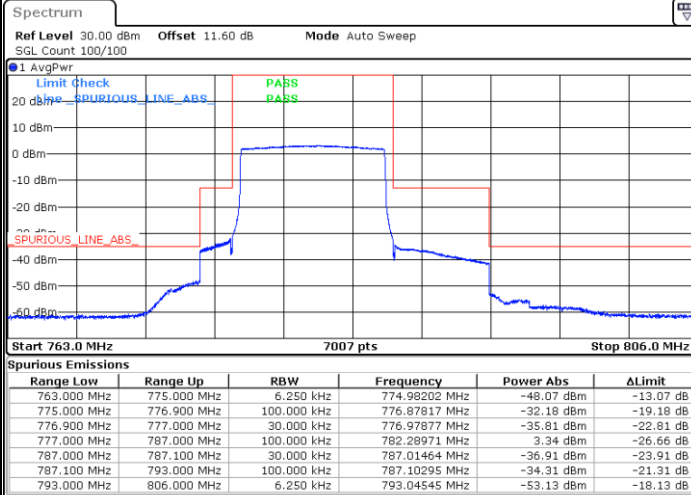


Date: 19.OCT.2023 19:51:26



IC LTE Band 13 / 10MHz / QPSK

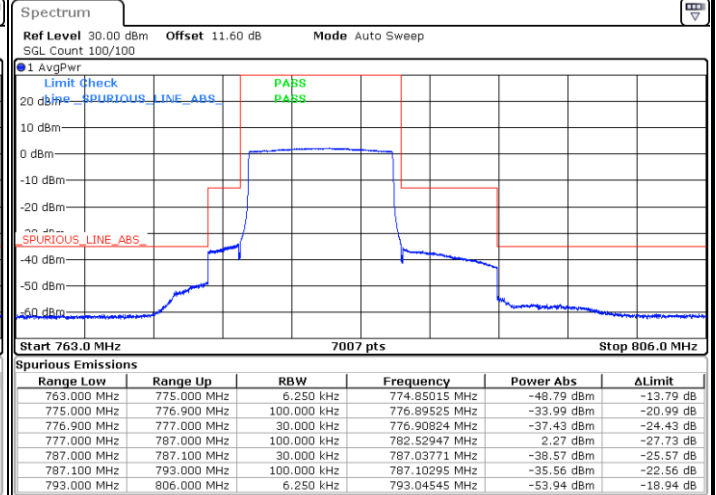
Band Edge / Full RB



Date: 19.OCT.2023 20:03:11

IC LTE Band 13 / 10MHz / 16QAM

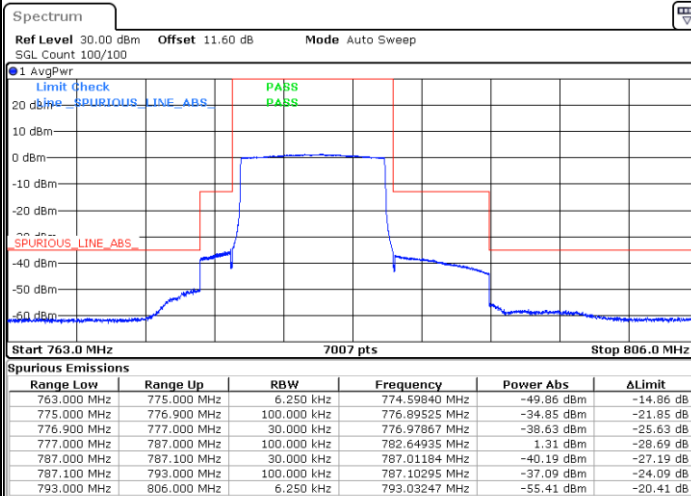
Band Edge / Full RB



Date: 19.OCT.2023 20:05:20

IC LTE Band 13 / 10MHz / 64QAM

Band Edge / Full RB



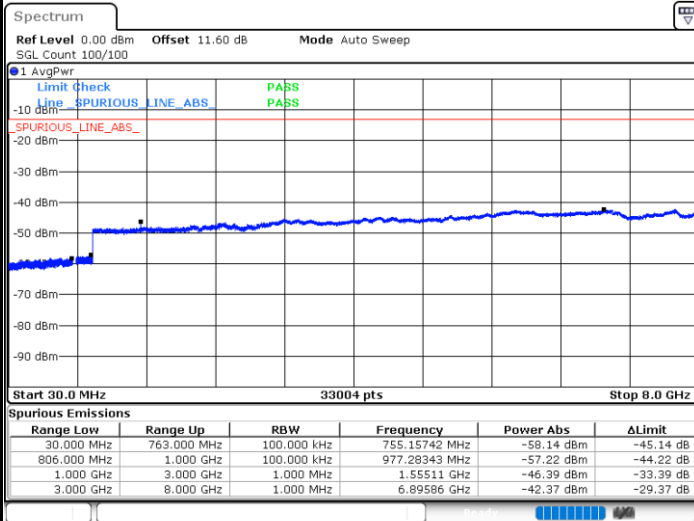
Date: 19.OCT.2023 20:08:33



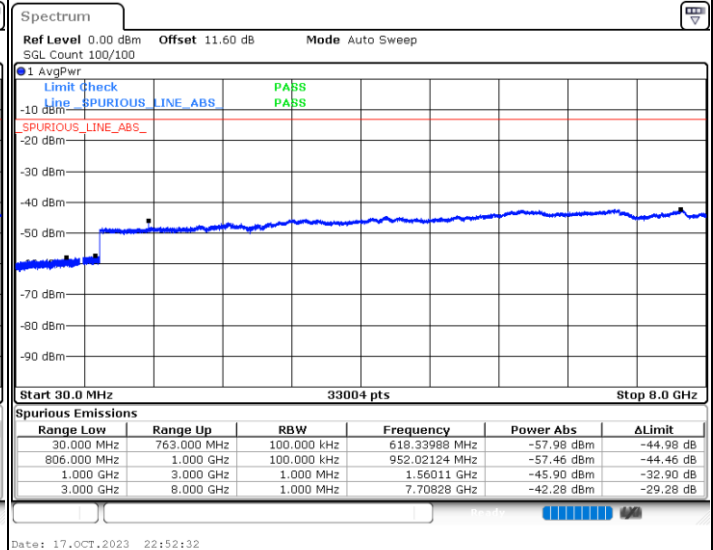
Conducted Spurious Emission

LTE Band 13 / 5MHz

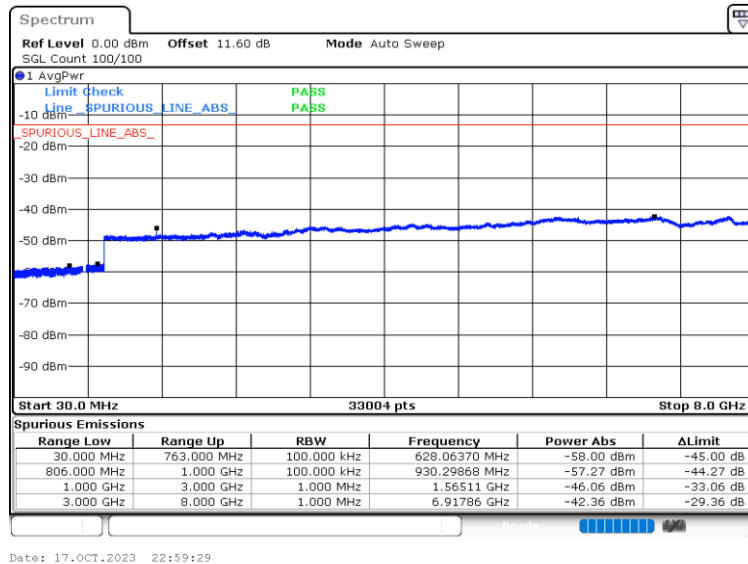
Lowest Channel / QPSK



Middle Channel / QPSK



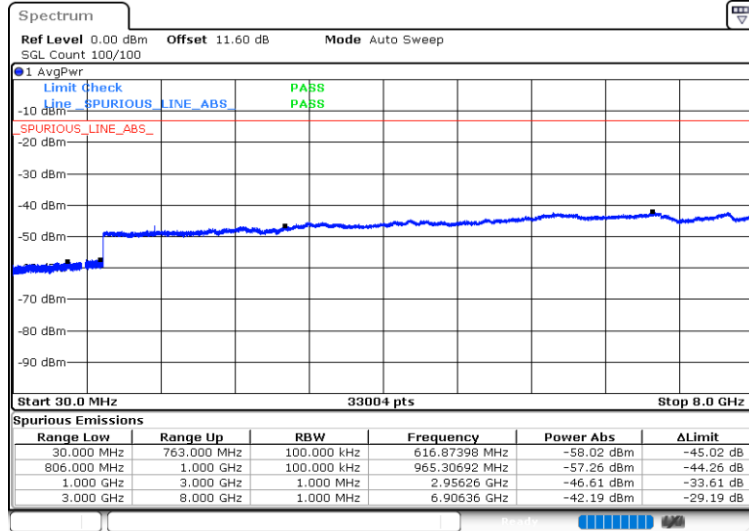
Highest Channel / QPSK





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 17.OCT.2023 23:11:41

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	0.0104	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0081	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0092	
0	Normal Voltage	0.0055	
-10	Normal Voltage	0.0136	
-20	Normal Voltage	0.0157	
-30	Normal Voltage	0.0175	
20	Maximum Voltage	0.0105	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0113	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

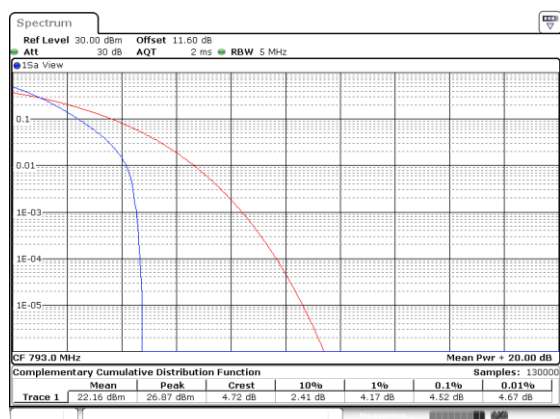
LTE Band 14

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	4.52	6.09	6.55	-	PASS
Mode					
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.04	5.54	6.52	-	PASS

LTE Band 14 / 5MHz / QPSK

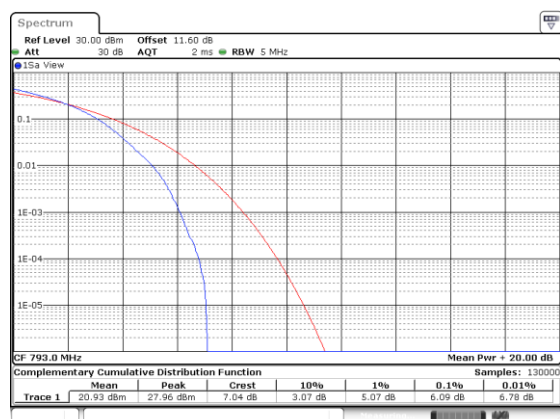
Middle Channel / Full RB



Date: 13.NOV.2023 19:04:54

LTE Band 14 / 5MHz / 16QAM

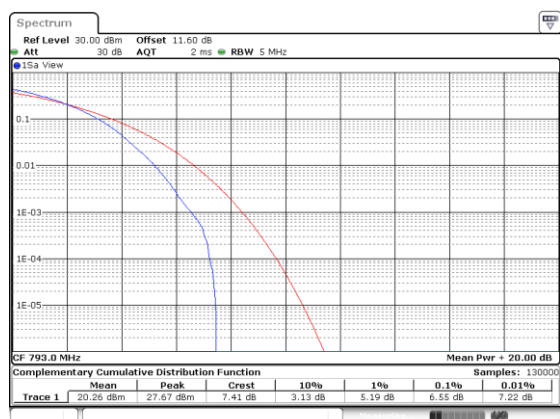
Middle Channel / Full RB



Date: 13.NOV.2023 19:04:24

LTE Band 14 / 5MHz / 64QAM

Middle Channel / Full RB

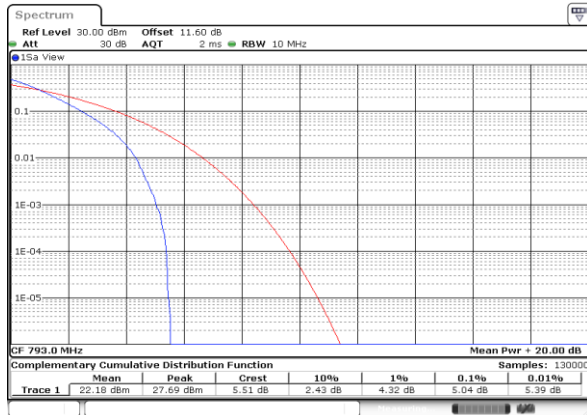


Date: 13.NOV.2023 19:03:54



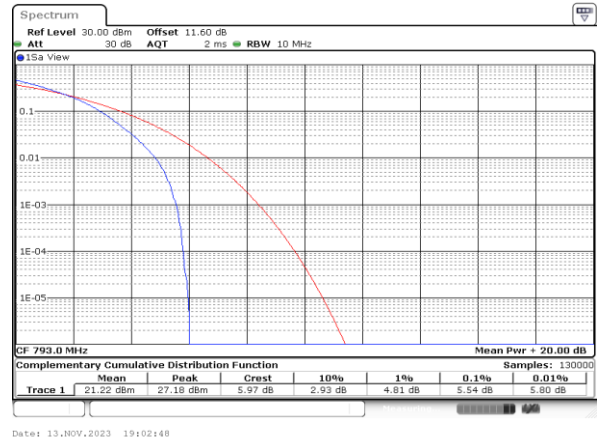
LTE Band 14 / 10MHz / QPSK

Middle Channel / Full RB



LTE Band 14 / 10MHz / 16QAM

Middle Channel / Full RB



LTE Band 14 / 10MHz / 64QAM

Middle Channel / Full RB



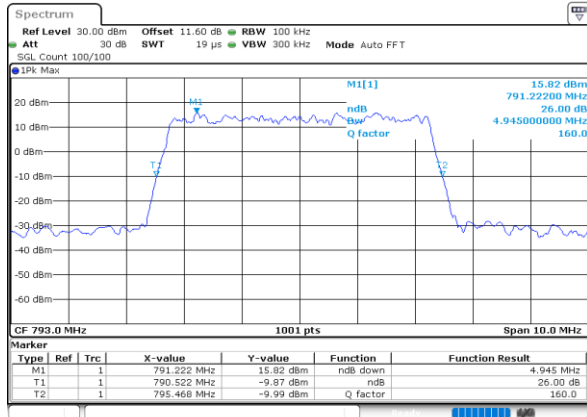
**26dB Bandwidth**

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	-	-	-	-	4.95	4.81	9.73	9.77	-	-	-	-
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	-	-	-	-	4.89	-	9.87	-	-	-	-	-



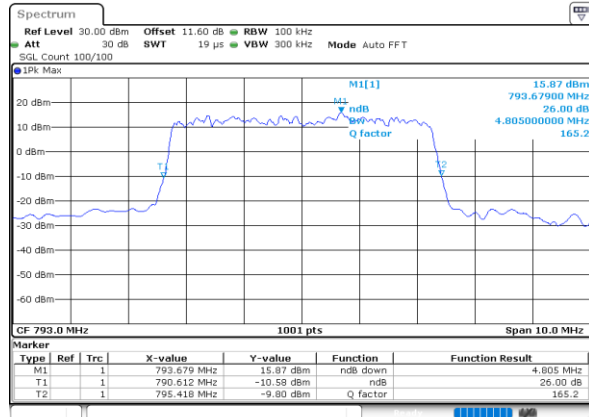
LTE Band 14

Middle Channel / 5MHz / QPSK



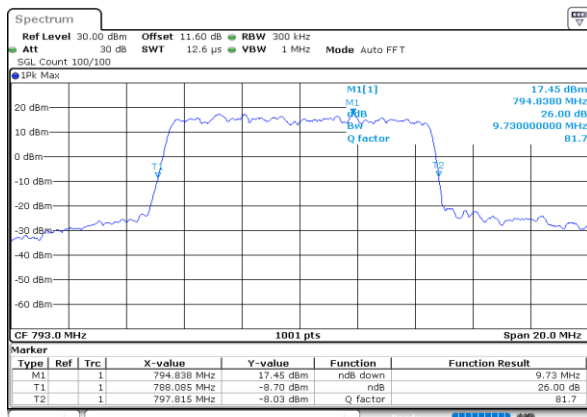
Date: 13.NOV.2023 18:17:11

Middle Channel / 5MHz / 16QAM



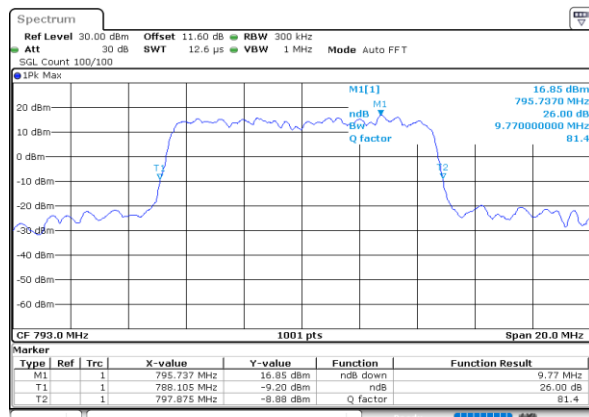
Date: 13.NOV.2023 18:17:40

Middle Channel / 10MHz / QPSK



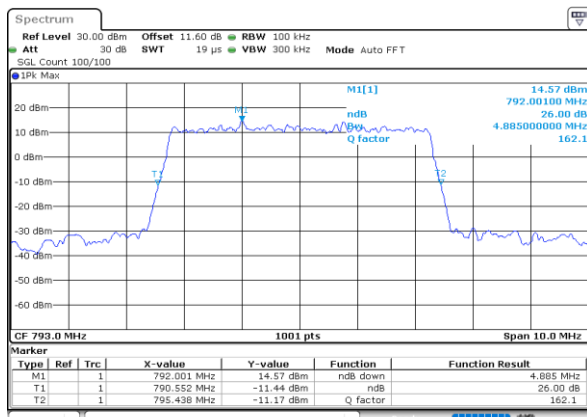
Date: 13.NOV.2023 18:56:00

Middle Channel / 10MHz / 16QAM



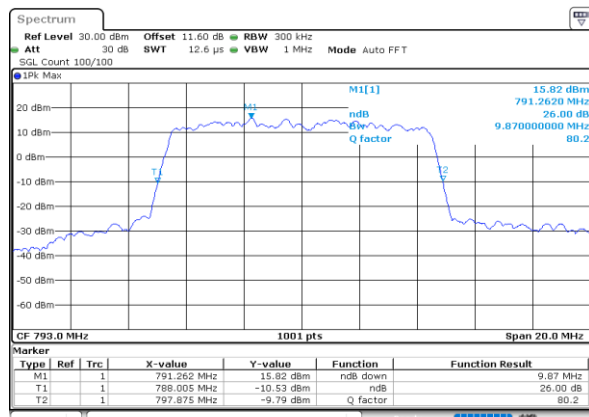
Date: 13.NOV.2023 18:55:31

Middle Channel / 5MHz / 64QAM



Date: 13.NOV.2023 18:26:06

Middle Channel / 10MHz / 64QAM



Date: 13.NOV.2023 18:58:26

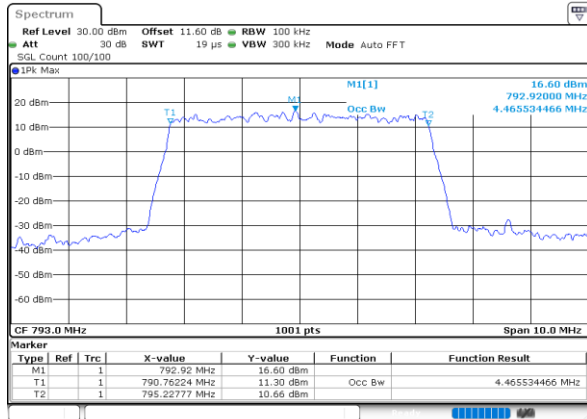
**Occupied Bandwidth**

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	-	-	-	-	4.47	4.49	9.03	8.99	-	-	-	-
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	-	-	-	-	4.51	-	9.05	-	-	-	-	-

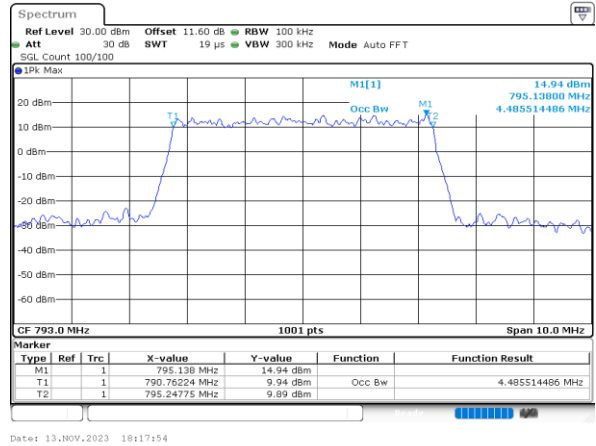


LTE Band 14

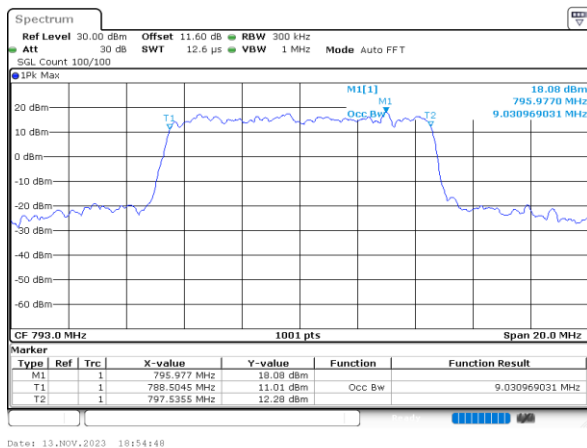
Middle Channel / 5MHz / QPSK



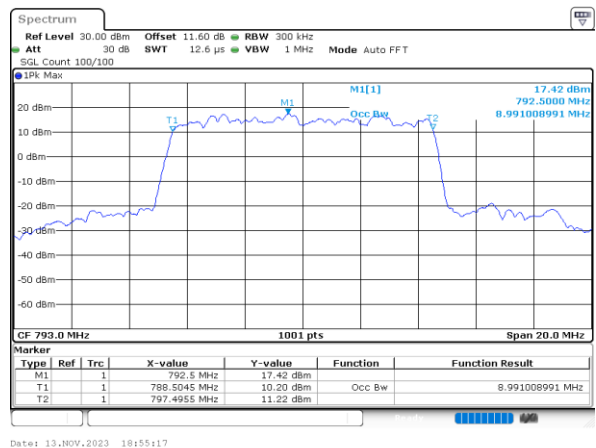
Middle Channel / 5MHz / 16QAM



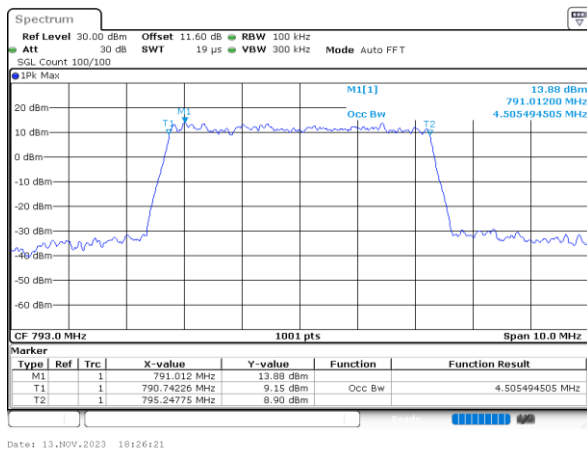
Middle Channel / 10MHz / QPSK



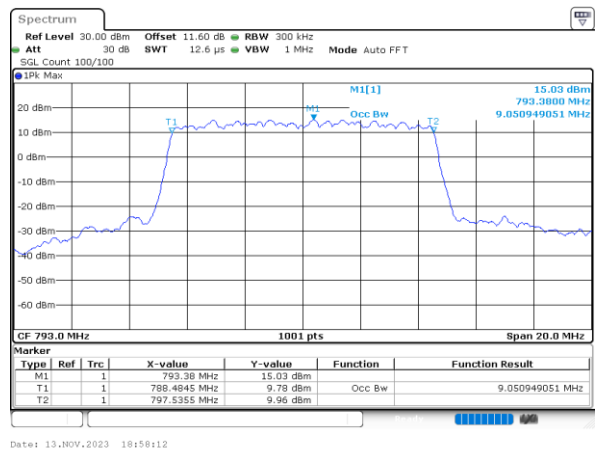
Middle Channel / 10MHz / 16QAM



Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM

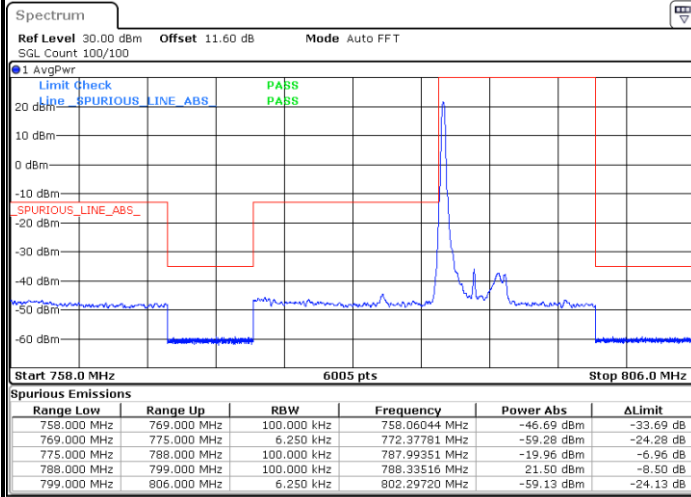




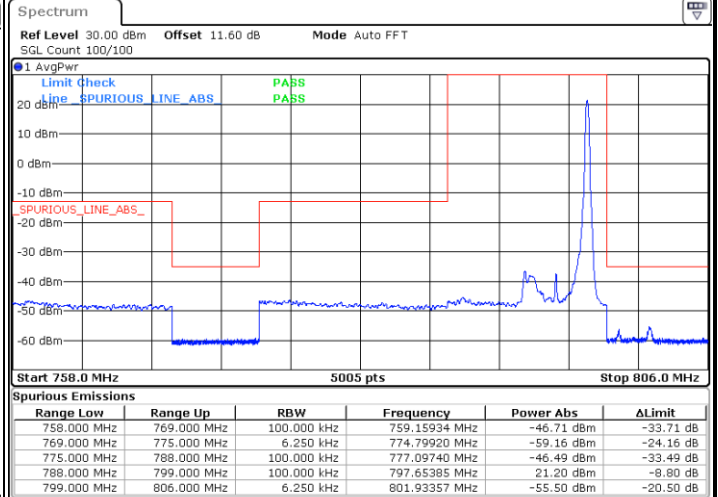
Conducted Band Edge

LTE Band 14 / 5MHz / QPSK

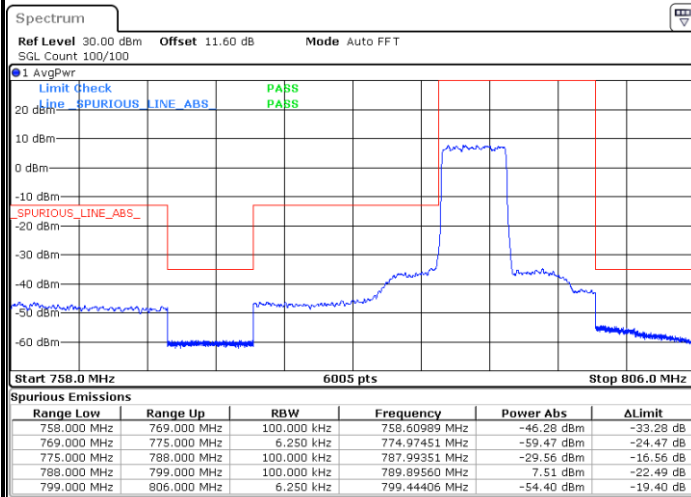
Lowest Band Edge / 1 RB



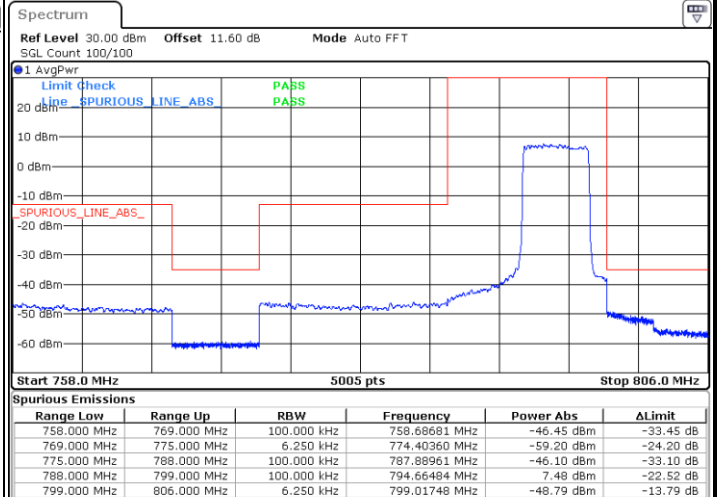
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



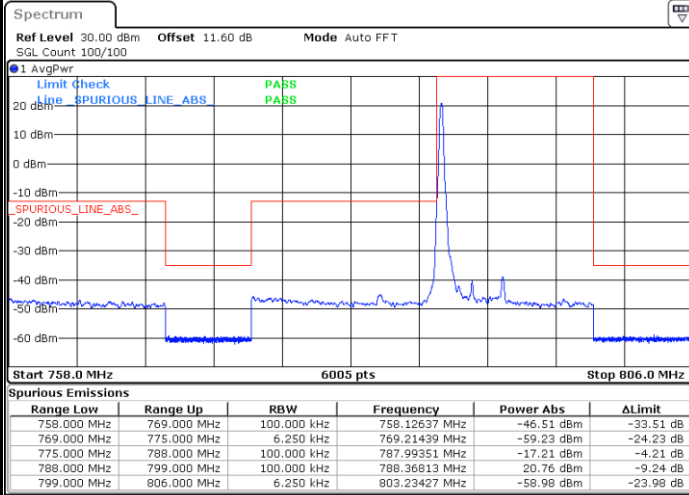
Highest Band Edge / Full RB



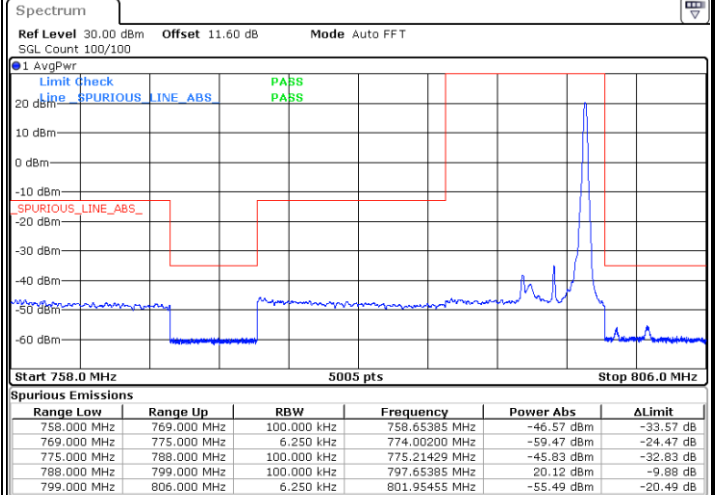


LTE Band 14 / 5MHz / 16QAM

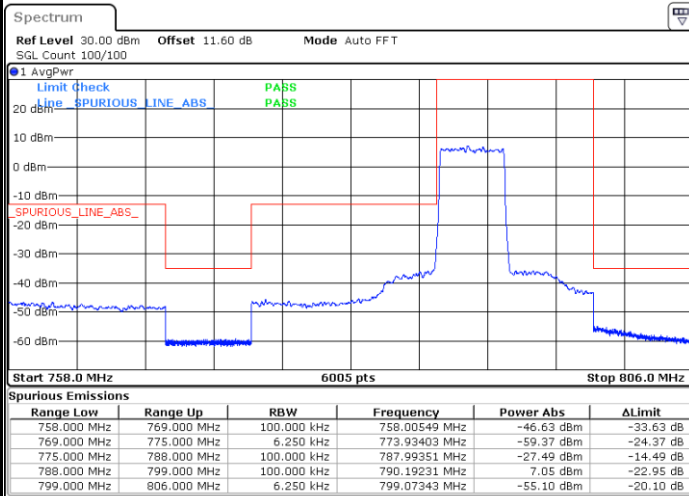
Lowest Band Edge / 1 RB



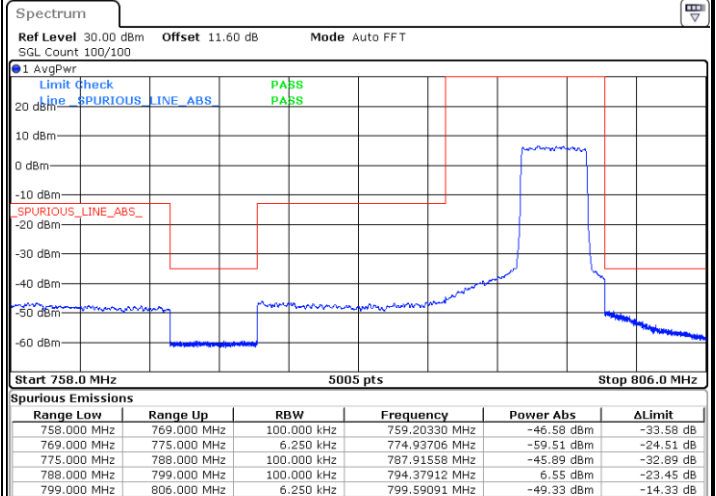
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



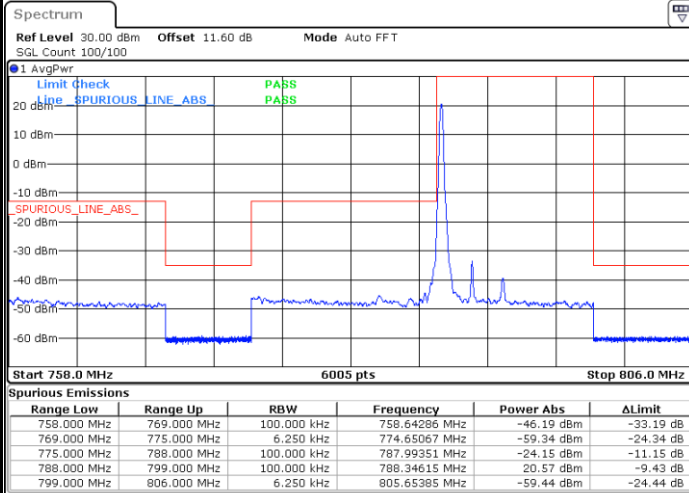
Highest Band Edge / Full RB





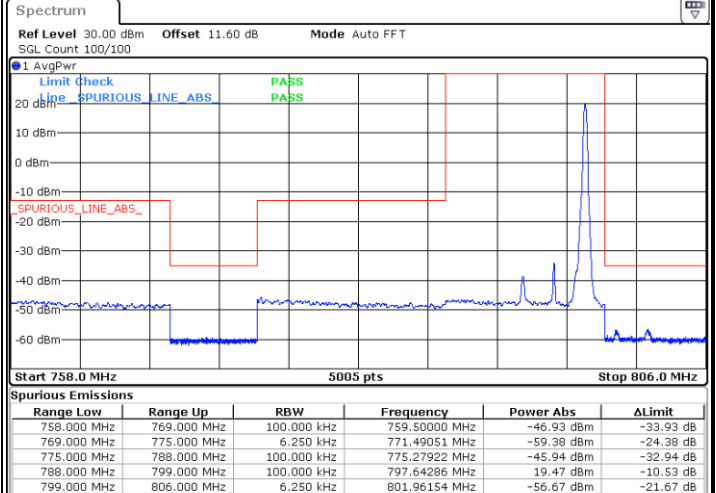
LTE Band 14 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



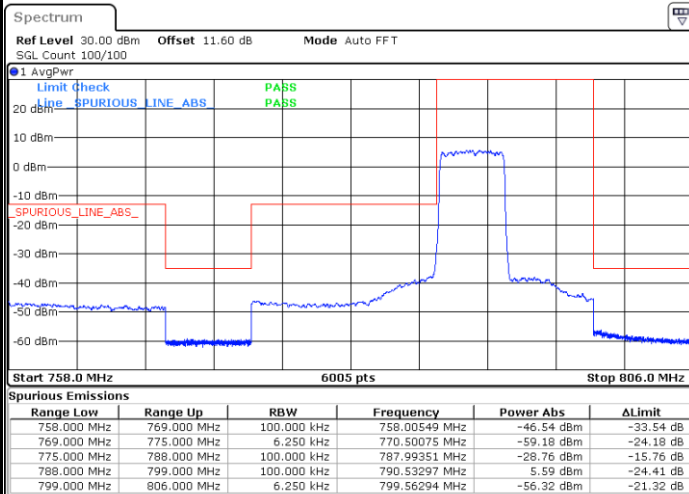
Date: 13.NOV.2023 18:25:36

Highest Band Edge / 1 RB



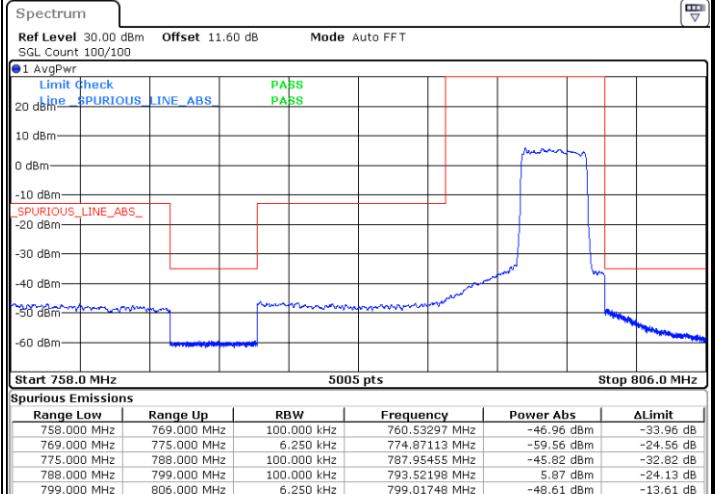
Date: 13.NOV.2023 18:28:18

Lowest Band Edge / Full RB



Date: 13.NOV.2023 18:24:37

Highest Band Edge / Full RB



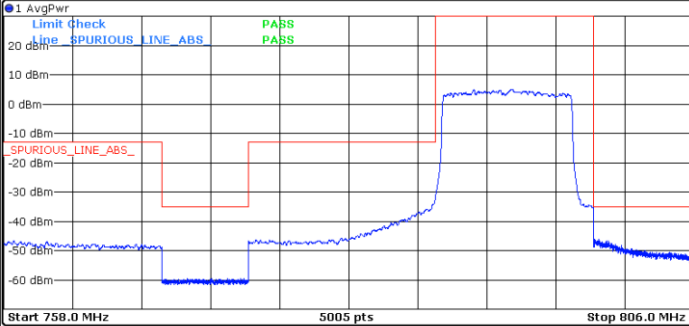
Date: 13.NOV.2023 18:27:18



LTE Band 14 / 10MHz / QPSK

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.60 dB Mode Auto FFT
SGL Count 100/100

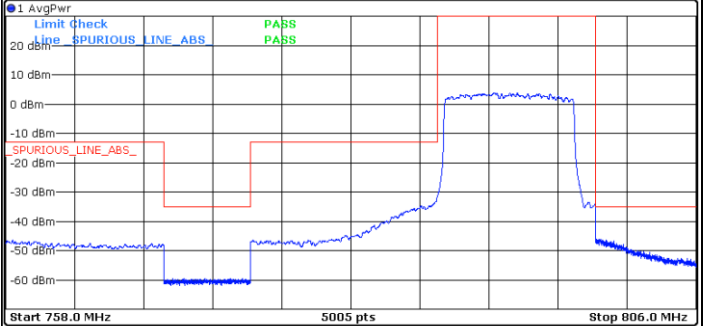
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	758.68681 MHz	-46.82 dBm	-33.82 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.78921 MHz	-59.52 dBm	-24.52 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-32.80 dBm	-19.80 dB
788.000 MHz	799.000 MHz	100.000 kHz	793.34615 MHz	4.98 dBm	-25.02 dB
799.000 MHz	806.000 MHz	6.250 kHz	799.05245 MHz	-46.16 dBm	-11.16 dB

Date: 13.NOV.2023 18:56:43

LTE Band 14 / 10MHz / 16QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.60 dB Mode Auto FFT
SGL Count 100/100

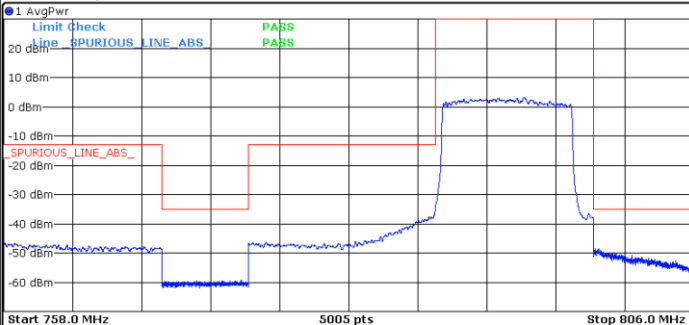
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	758.46703 MHz	-46.57 dBm	-33.57 dB
769.000 MHz	775.000 MHz	6.250 kHz	773.60040 MHz	-59.42 dBm	-24.42 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-31.80 dBm	-18.80 dB
788.000 MHz	799.000 MHz	100.000 kHz	793.06044 MHz	3.82 dBm	-26.18 dB
799.000 MHz	806.000 MHz	6.250 kHz	799.09441 MHz	-46.09 dBm	-11.09 dB

Date: 13.NOV.2023 18:57:42

LTE Band 14 / 10MHz / 64QAM

Band Edge / Full RB

Spectrum

Ref Level 30.00 dBm Offset 11.60 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	758.77473 MHz	-46.68 dBm	-33.68 dB
769.000 MHz	775.000 MHz	6.250 kHz	774.53546 MHz	-59.32 dBm	-24.32 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-35.80 dBm	-22.80 dB
788.000 MHz	799.000 MHz	100.000 kHz	794.17033 MHz	3.14 dBm	-26.86 dB
799.000 MHz	806.000 MHz	6.250 kHz	799.10140 MHz	-48.43 dBm	-13.43 dB

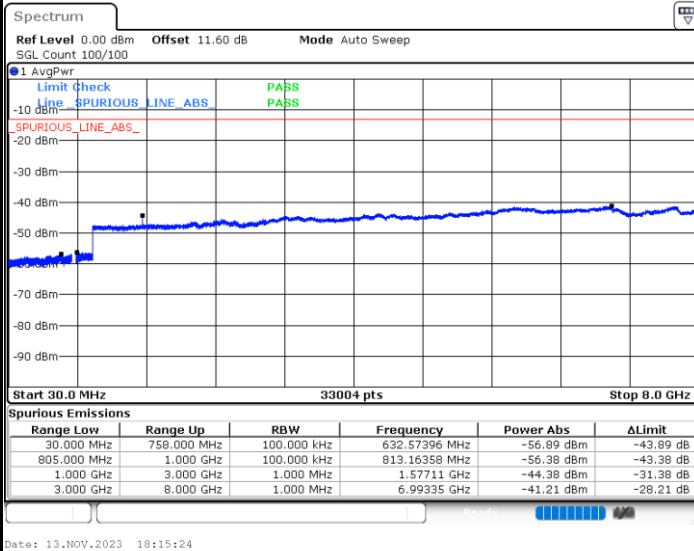
Date: 13.NOV.2023 18:59:09



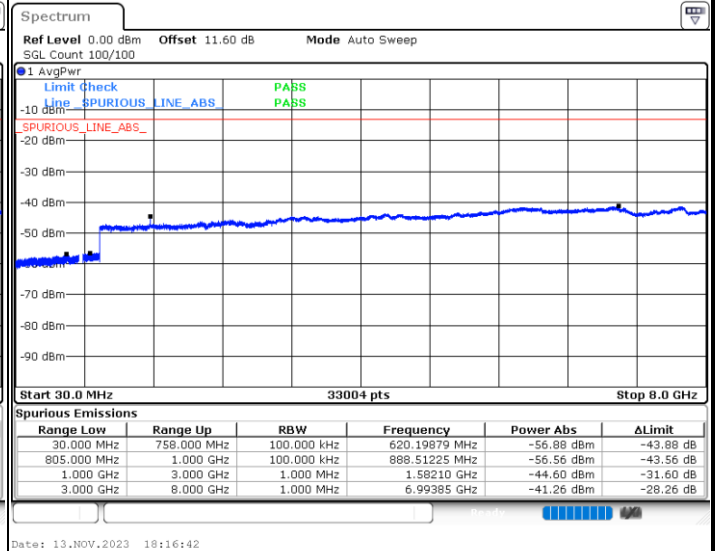
Conducted Spurious Emission

LTE Band 14 / 5MHz

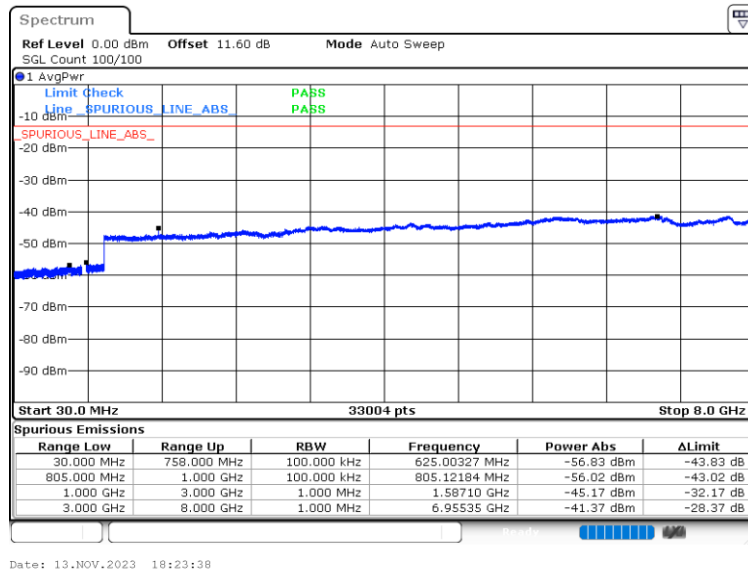
Lowest Channel / QPSK



Middle Channel / QPSK



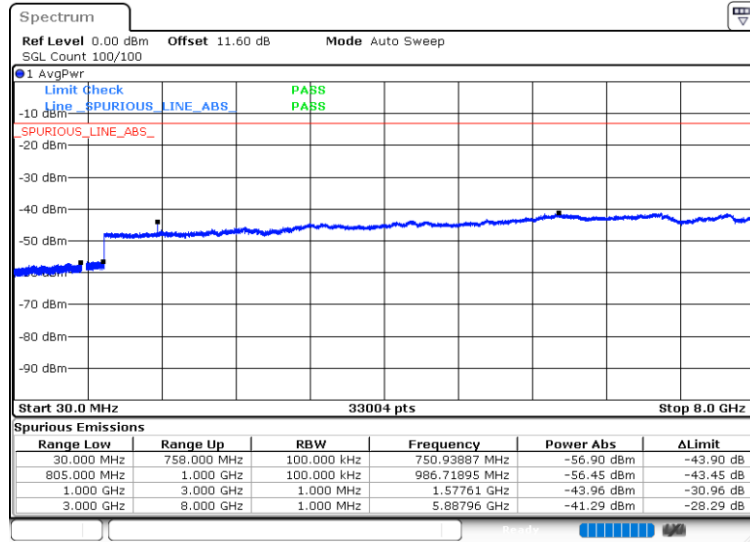
Highest Channel / QPSK





LTE Band 14 / 10MHz

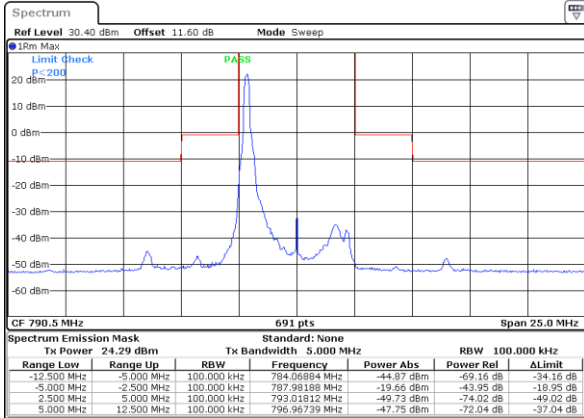
Middle Channel / QPSK



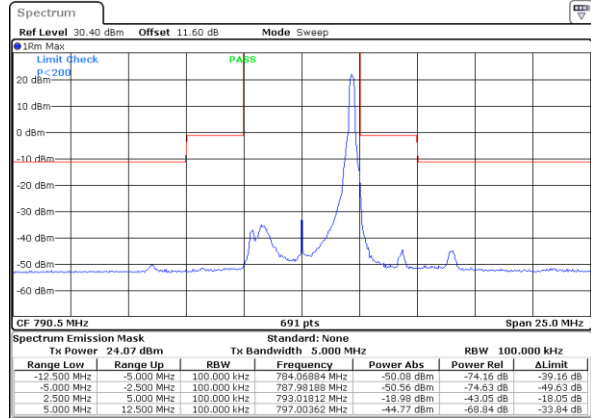
Mask

LTE Band 14 / 5MHz / QPSK

Lowest Channel / 1RB

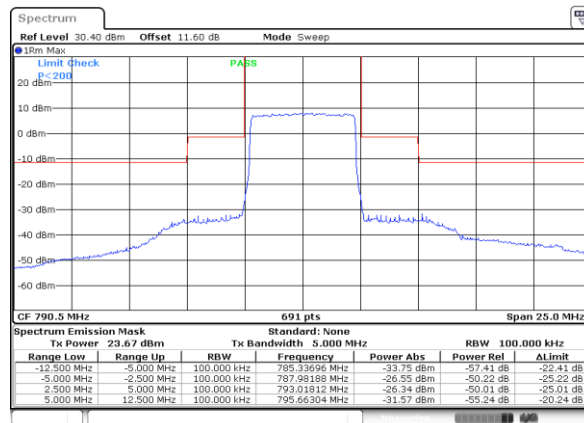


Date: 13.NOV.2023 18:34:05



Date: 13.NOV.2023 18:35:03

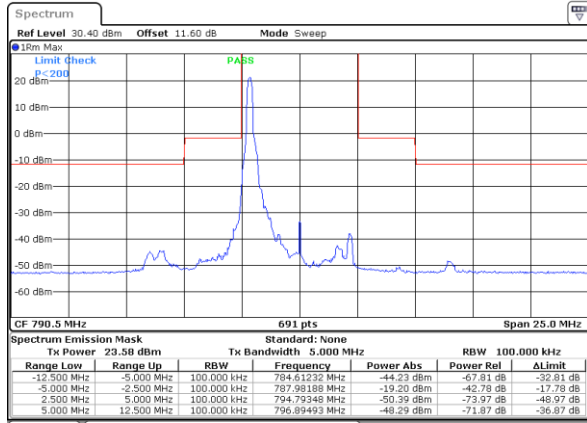
Lowest Channel / Full RB



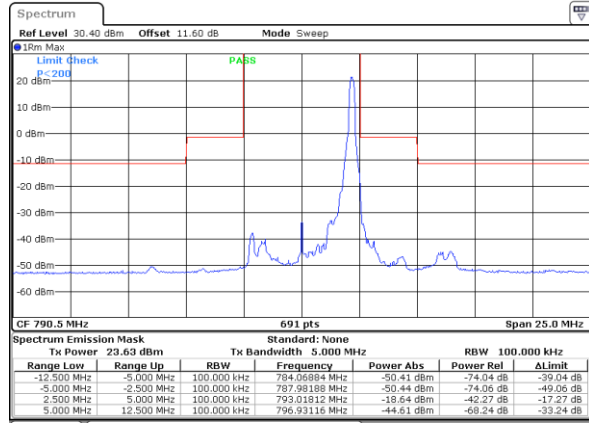
Date: 13.NOV.2023 18:29:17

LTE Band 14 / 5MHz / 16QAM

Lowest Channel / 1RB

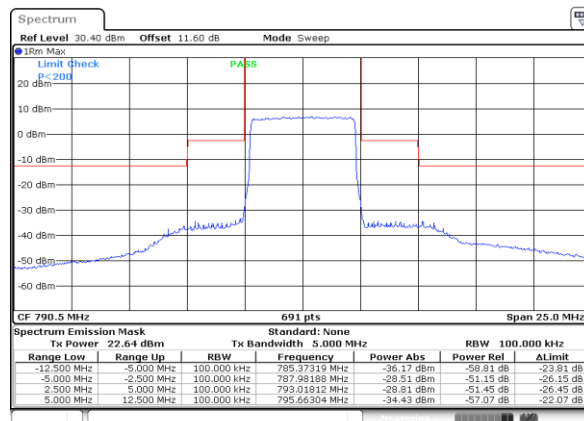


Date: 13.NOV.2023 18:33:07



Date: 13.NOV.2023 18:36:01

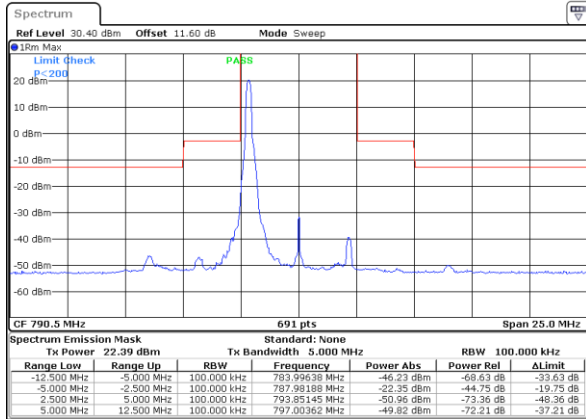
Lowest Channel / Full RB



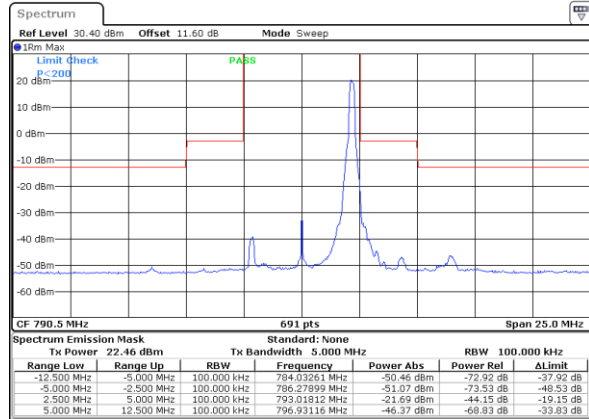
Date: 13.NOV.2023 18:30:14

LTE Band 14 / 5MHz / 64QAM

Lowest Channel / 1RB

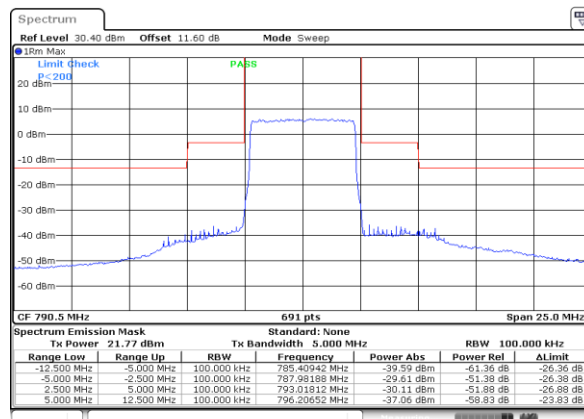


Date: 13.NOV.2023 18:32:10



Date: 13.NOV.2023 18:36:59

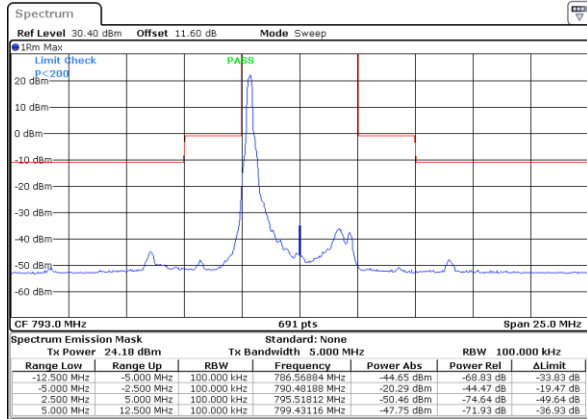
Lowest Channel / Full RB



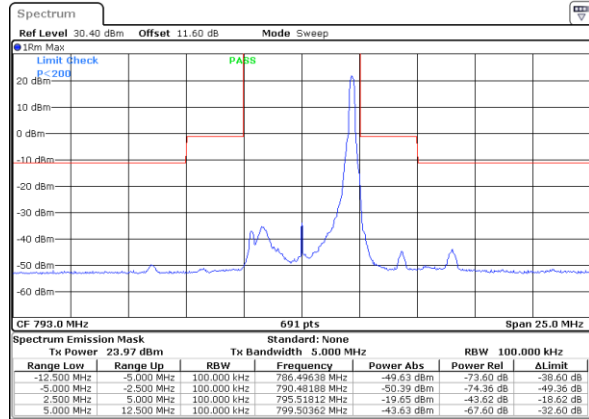
Date: 13.NOV.2023 18:31:12

LTE Band 14 / 5MHz / QPSK

Middle Channel / 1RB

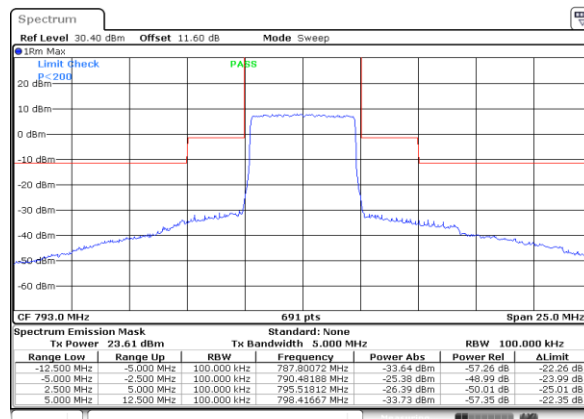


Date: 13.NOV.2023 18:40:47



Date: 13.NOV.2023 18:39:50

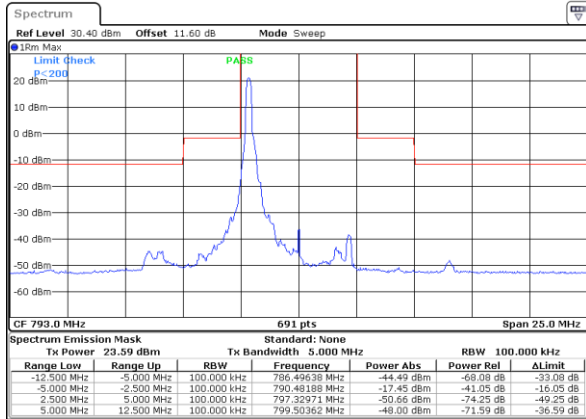
Middle Channel / Full RB



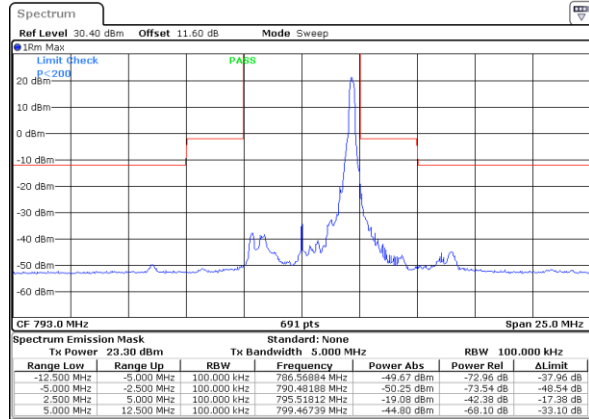
Date: 13.NOV.2023 18:45:34

LTE Band 14 / 5MHz / 16QAM

Middle Channel / 1RB

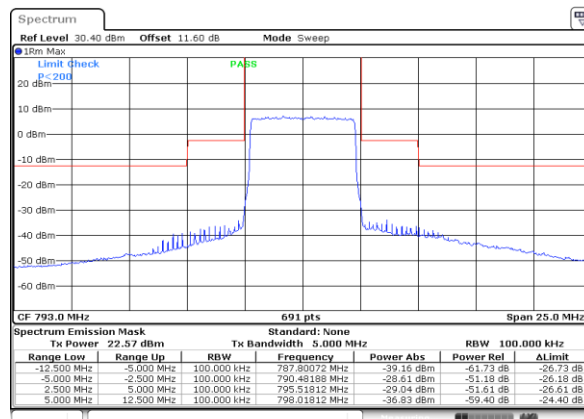


Date: 13.NOV.2023 18:41:45



Date: 13.NOV.2023 18:38:53

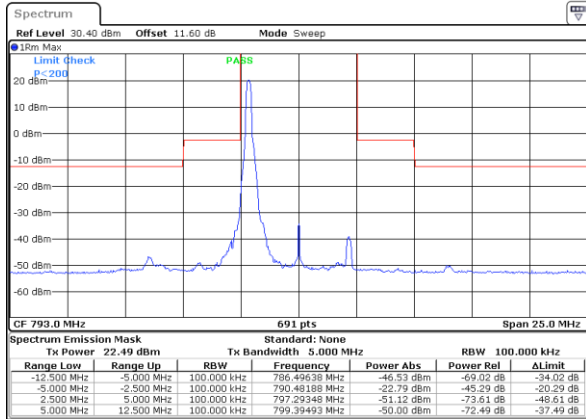
Middle Channel / Full RB



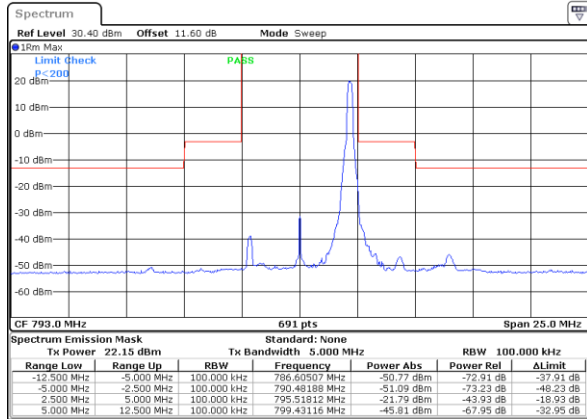
Date: 13.NOV.2023 18:44:36

LTE Band 14 / 5MHz / 64QAM

Middle Channel / 1RB

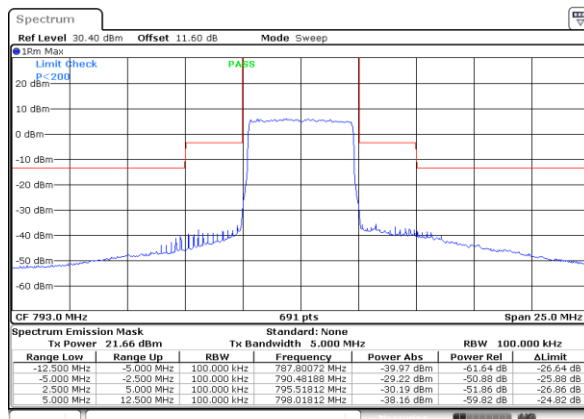


Date: 13.NOV.2023 18:42:42



Date: 13.NOV.2023 18:37:56

Middle Channel / Full RB

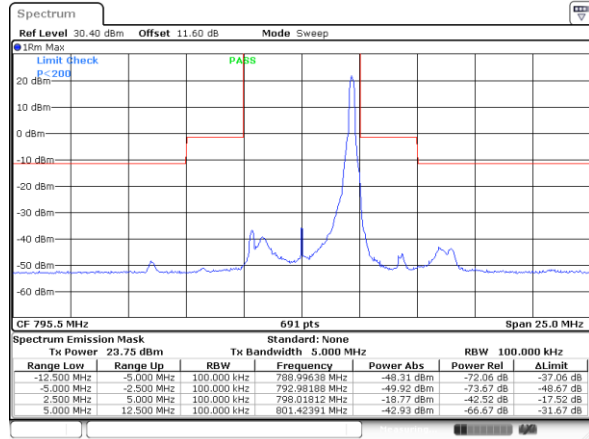
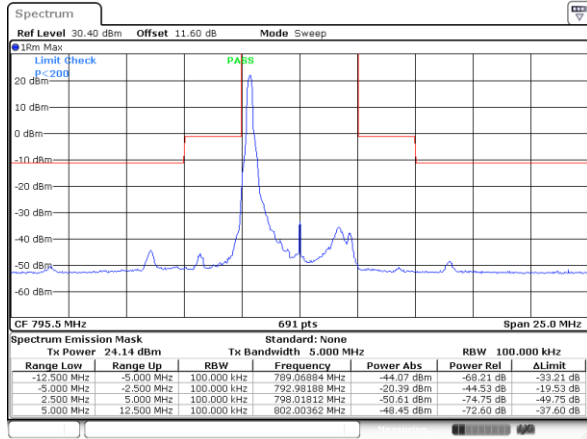


Date: 13.NOV.2023 18:43:39

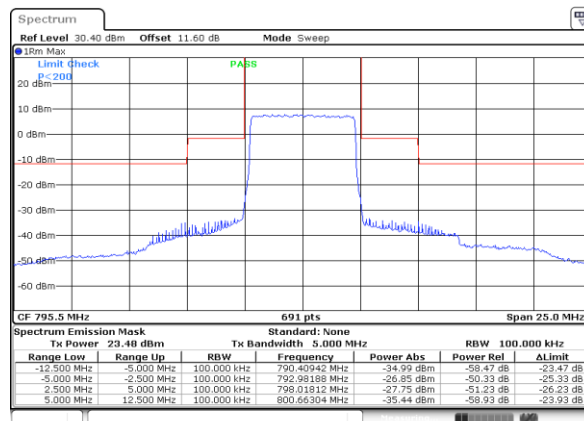


LTE Band 14 / 5MHz / QPSK

Highest Channel / 1RB

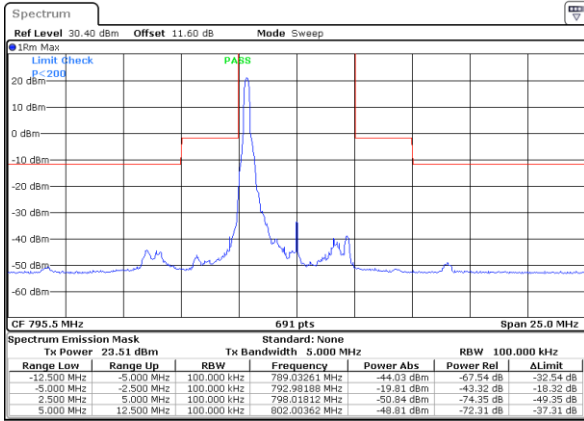


Highest Channel / Full RB

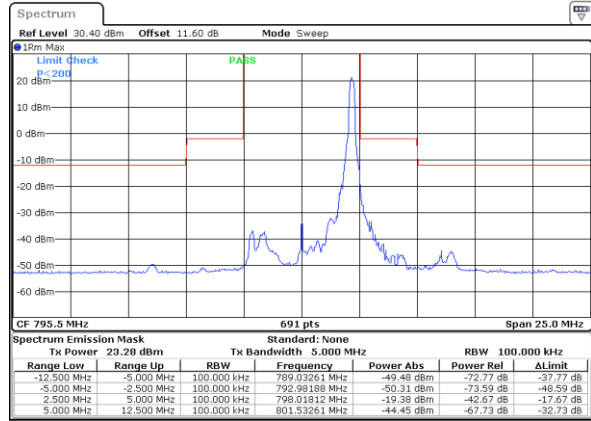


LTE Band 14 / 5MHz / 16QAM

Highest Channel / 1RB

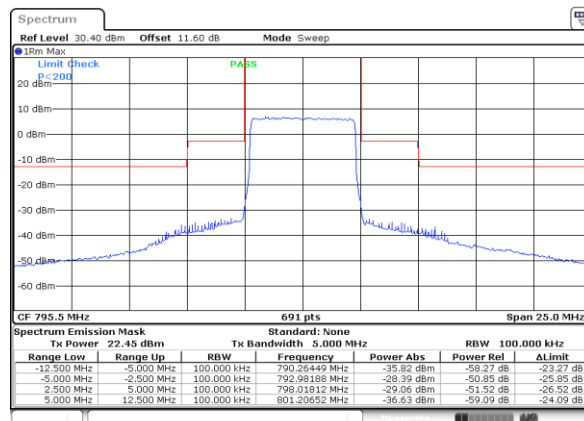


Date: 13.NOV.2023 18:50:22



Date: 13.NOV.2023 18:53:15

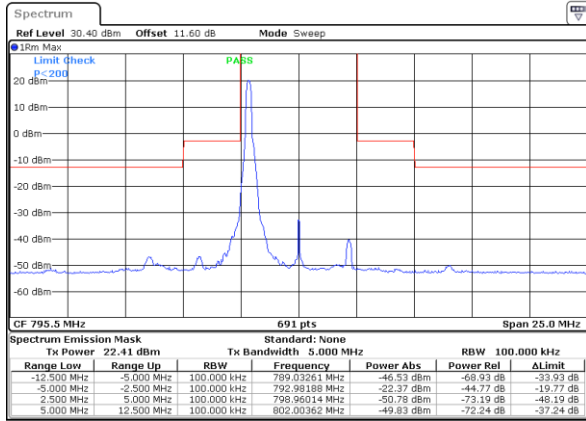
Highest Channel / Full RB



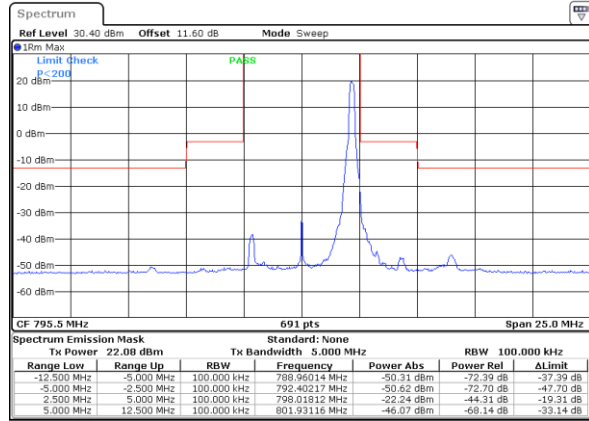
Date: 13.NOV.2023 18:47:29

LTE Band 14 / 5MHz / 64QAM

Highest Channel / 1RB

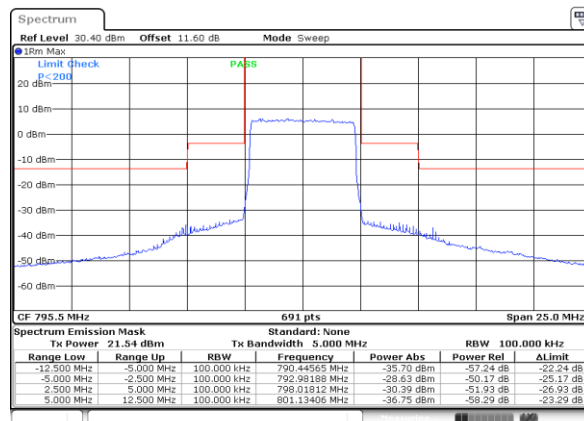


Date: 13.NOV.2023 18:49:24



Date: 13.NOV.2023 18:54:13

Highest Channel / Full RB

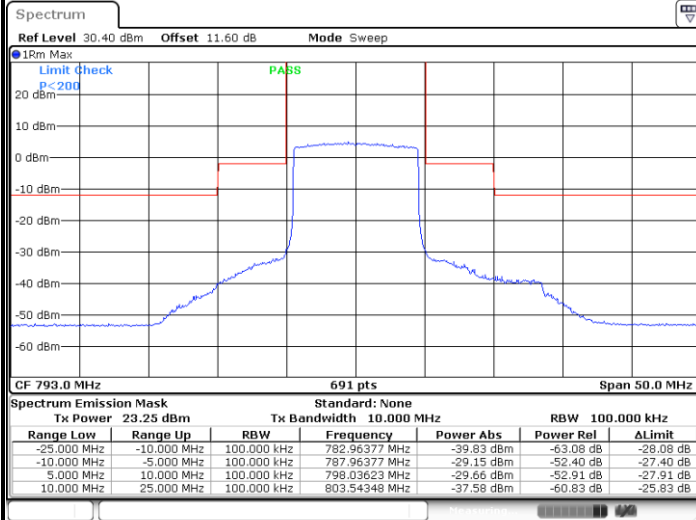


Date: 13.NOV.2023 18:48:27



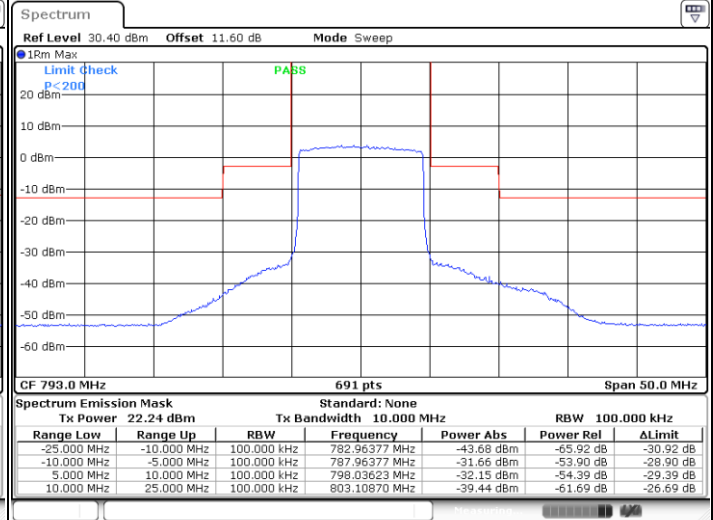
LTE Band 14 / 10MHz / QPSK

Middle Channel / Full RB



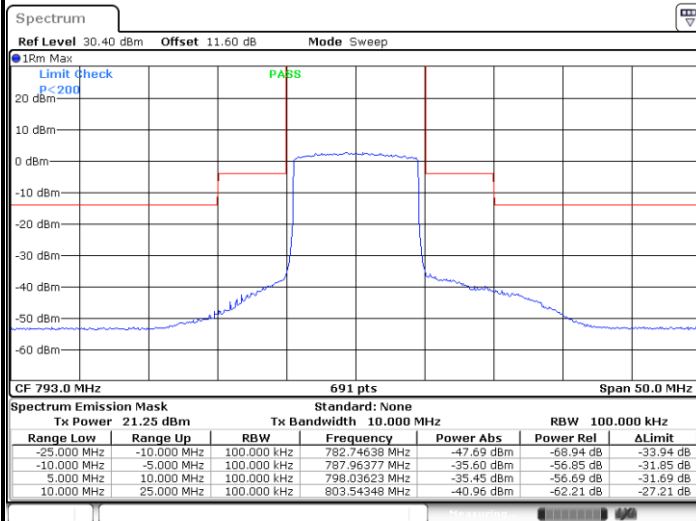
LTE Band 14 / 10MHz / 16QAM

Middle Channel / Full RB



LTE Band 14 / 10MHz / 64QAM

Middle Channel / Full RB



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	0.0035	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0054	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0053	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0049	
-20	Normal Voltage	0.0189	
-30	Normal Voltage	0.0110	
20	Maximum Voltage	0.0159	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0019	

Note:

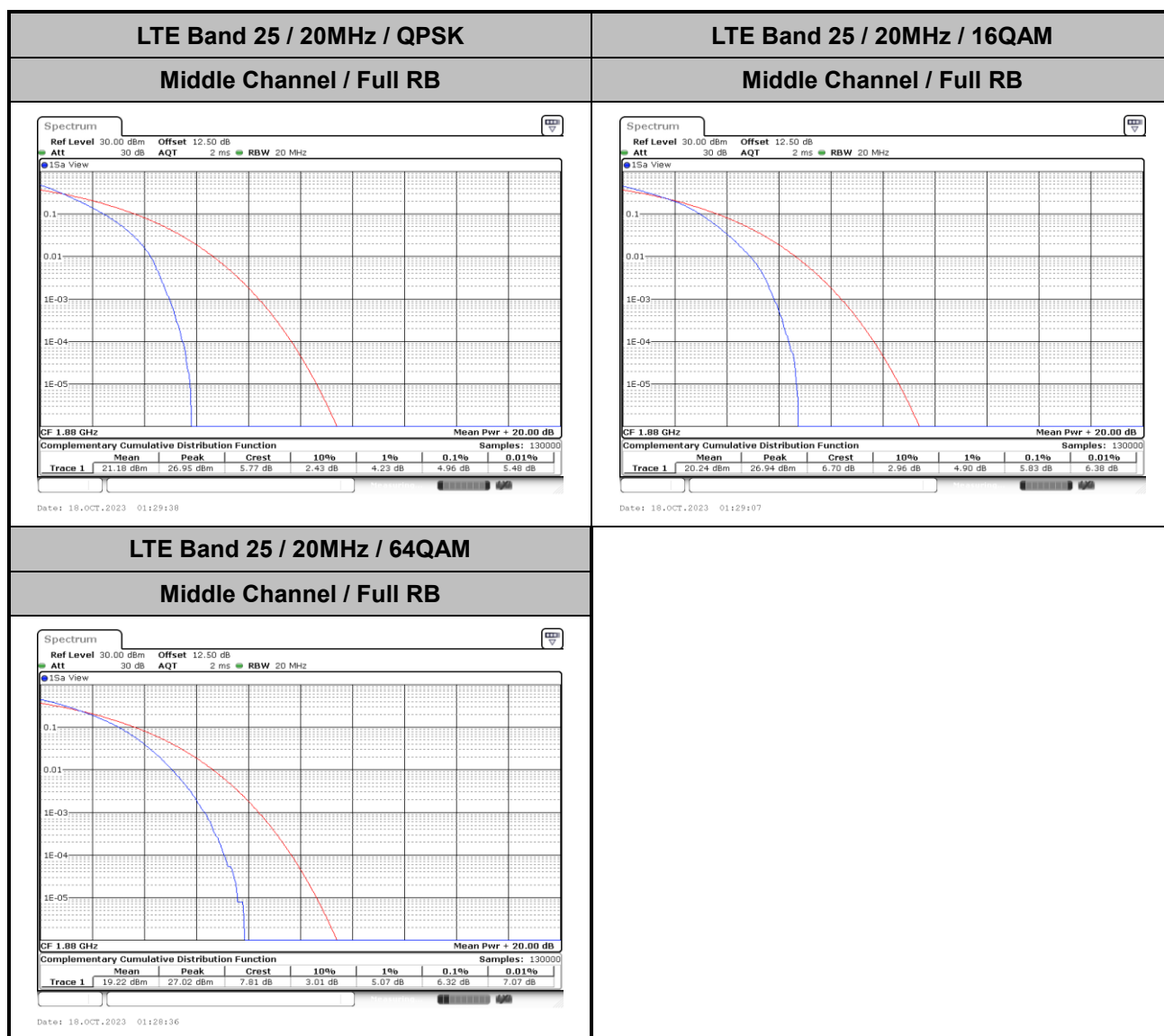
1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	4.96	5.83	6.32	-	PASS



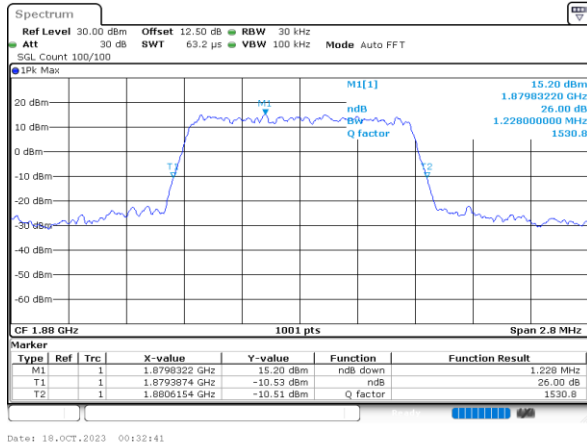
**26dB Bandwidth**

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	1.23	1.22	3.02	3.00	4.92	4.98	9.83	9.83	14.39	14.51	19.18	18.78
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	1.22	-	3.00	-	4.86	-	9.85	-	14.33	-	18.82	-

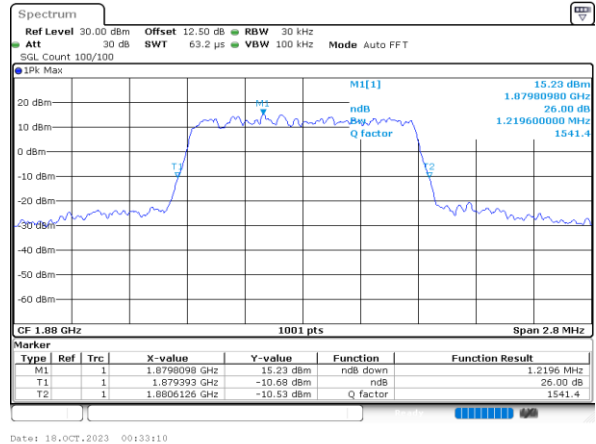


LTE Band 25

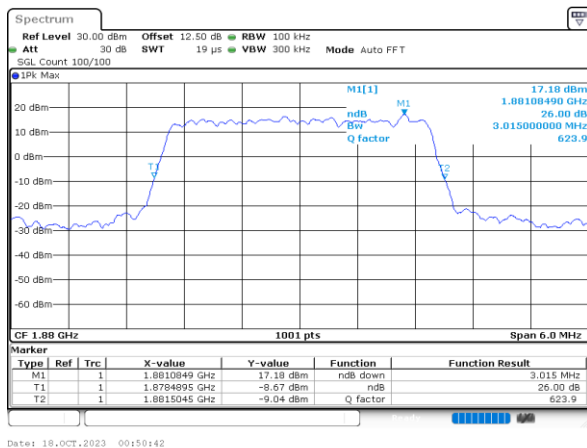
Middle Channel / 1.4MHz / QPSK



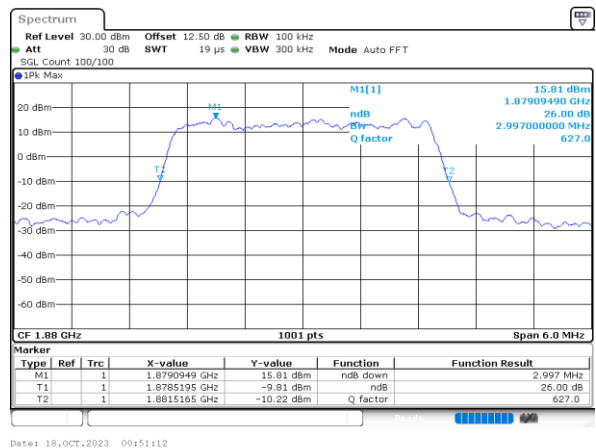
Middle Channel / 1.4MHz / 16QAM



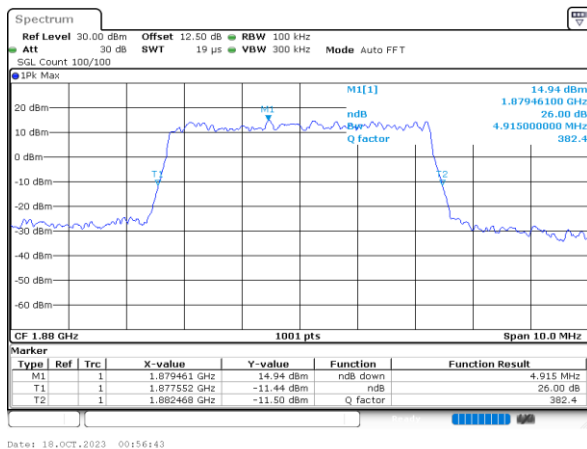
Middle Channel / 3MHz / QPSK



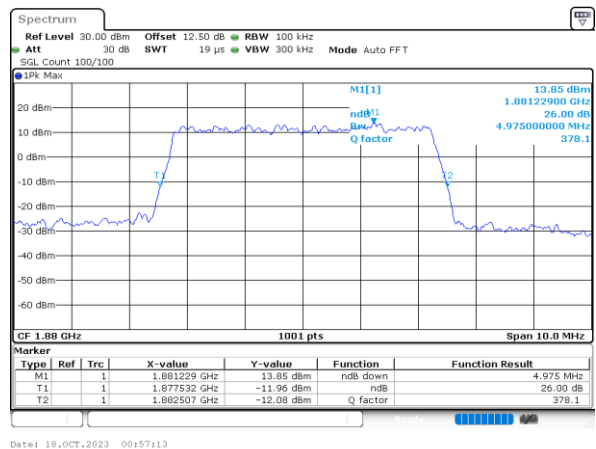
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



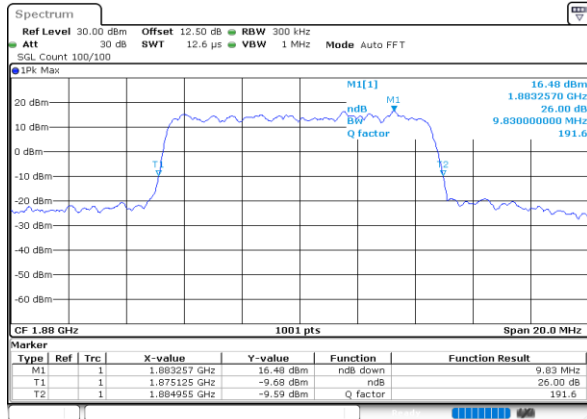
Middle Channel / 5MHz / 16QAM



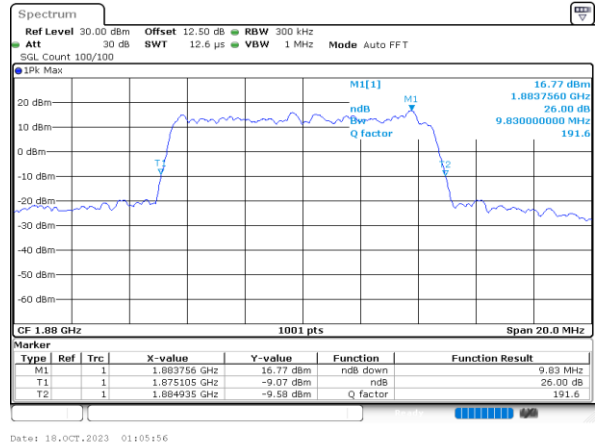


LTE Band 25

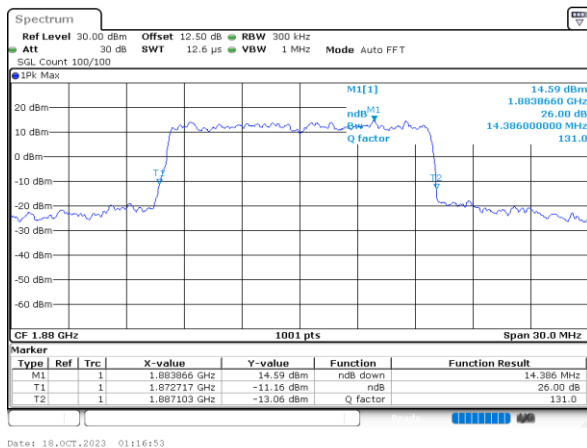
Middle Channel / 10MHz / QPSK



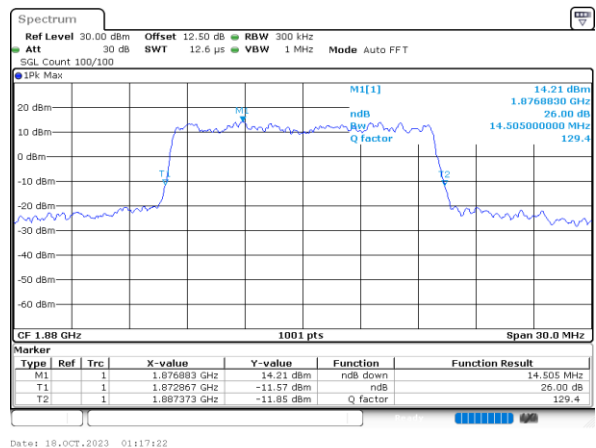
Middle Channel / 10MHz / 16QAM



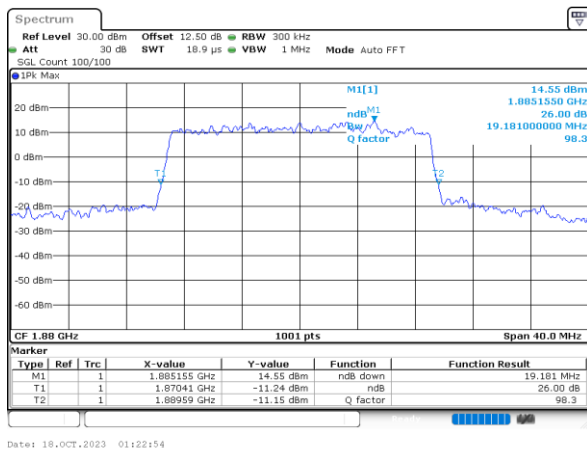
Middle Channel / 15MHz / QPSK



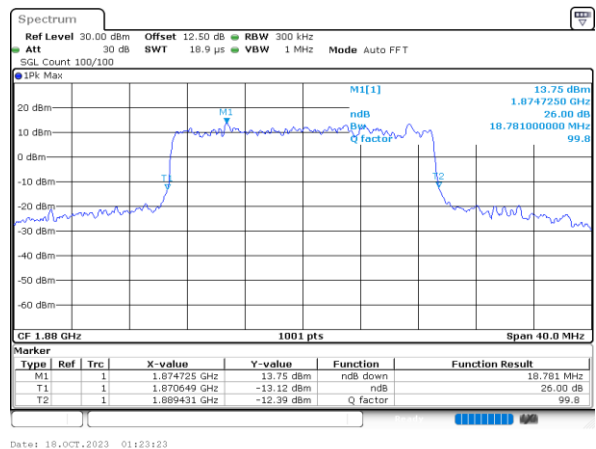
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



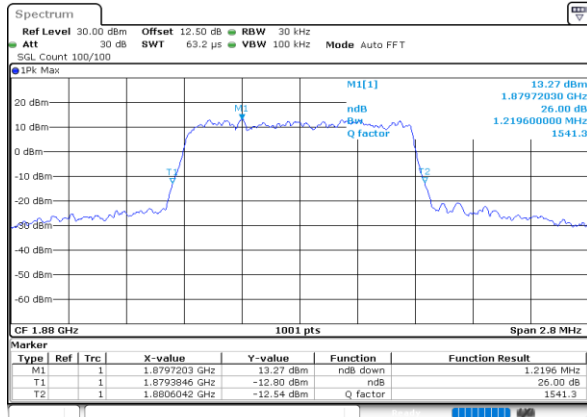
Middle Channel / 20MHz / 16QAM



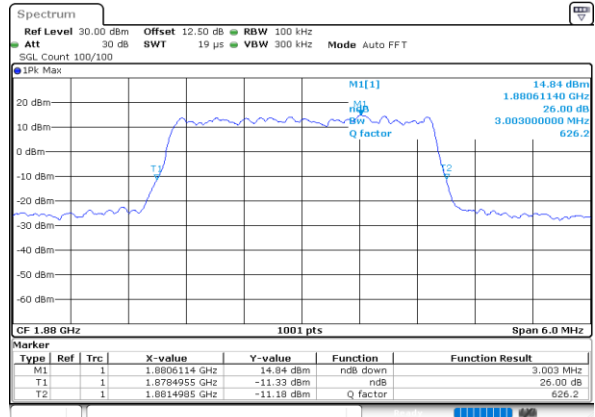


LTE Band 25

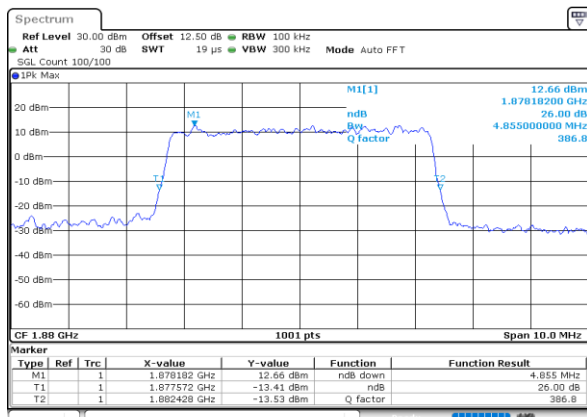
Middle Channel / 1.4MHz / 64QAM



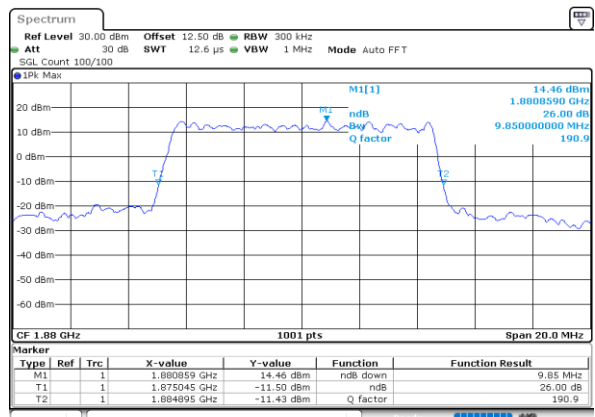
Middle Channel / 3MHz / 64QAM



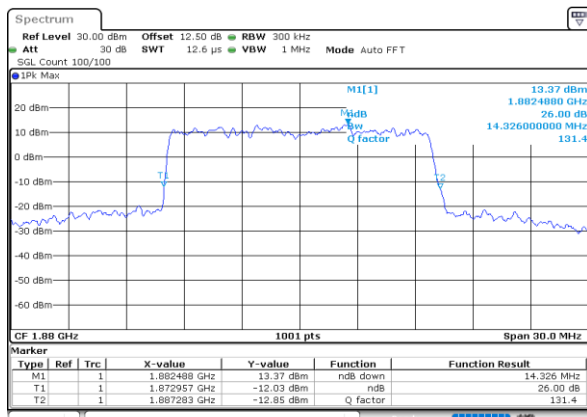
Middle Channel / 5MHz / 64QAM



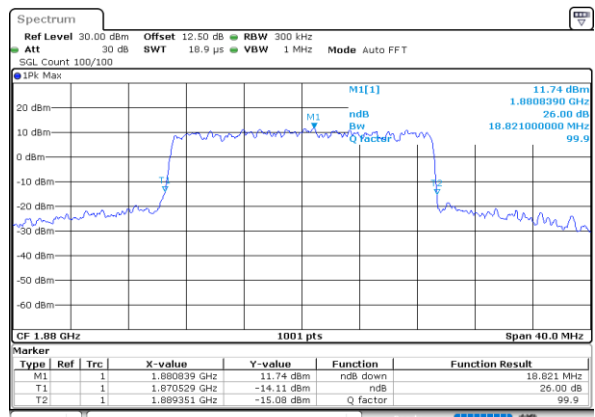
Middle Channel / 10MHz / 64QAM



Middle Channel / 15MHz / 64QAM



Middle Channel / 20MHz / 64QAM



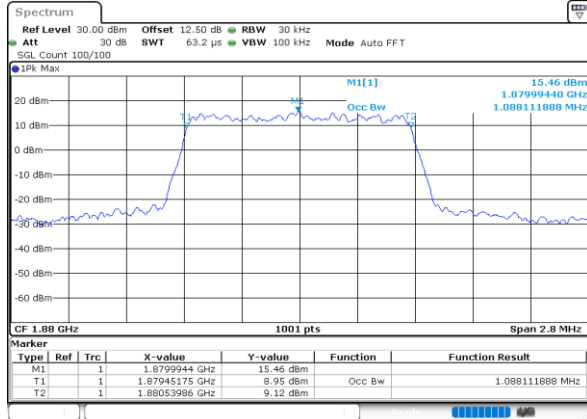
**Occupied Bandwidth**

Mode	LTE Band 25 : 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	1.09	1.08	2.71	2.70	4.49	4.52	9.01	8.97	13.43	13.46	17.90	17.82
Mode	LTE Band 25 : 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	1.09	-	2.73	-	4.49	-	9.03	-	13.46	-	17.94	-

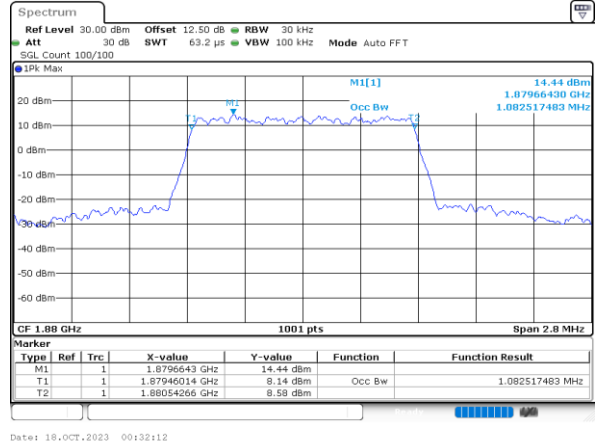


LTE Band 25

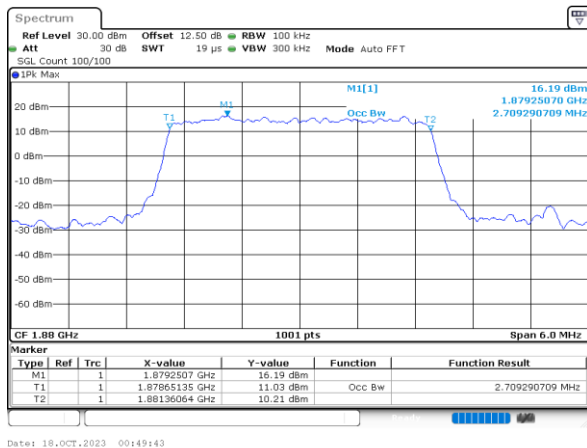
Middle Channel / 1.4MHz / QPSK



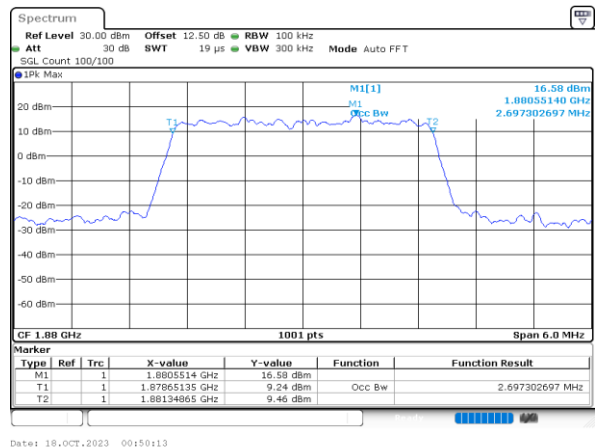
Middle Channel / 1.4MHz / 16QAM



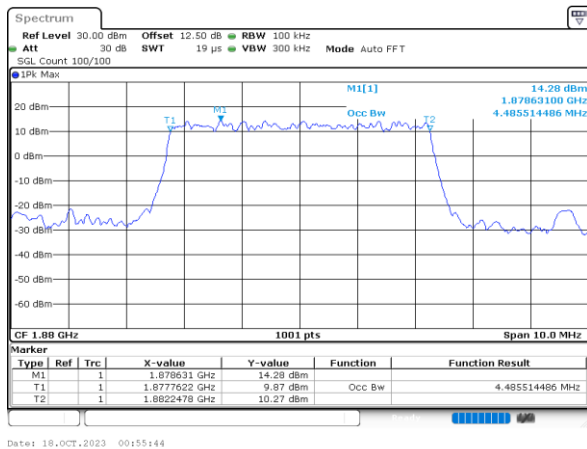
Middle Channel / 3MHz / QPSK



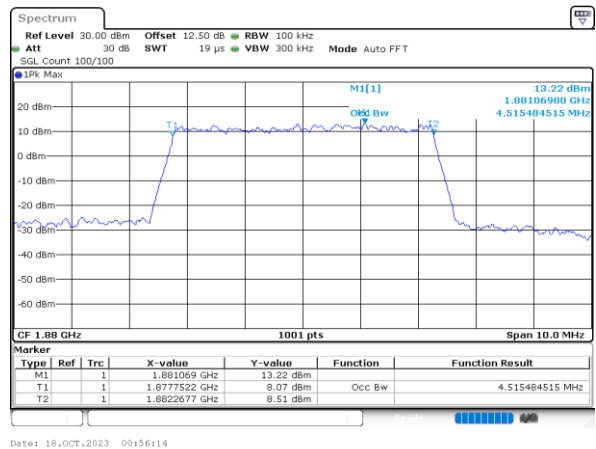
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



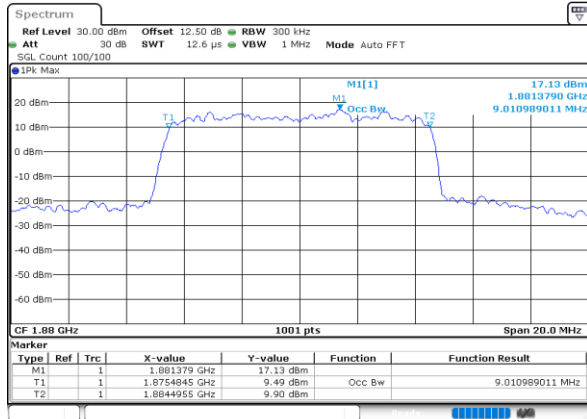
Middle Channel / 5MHz / 16QAM



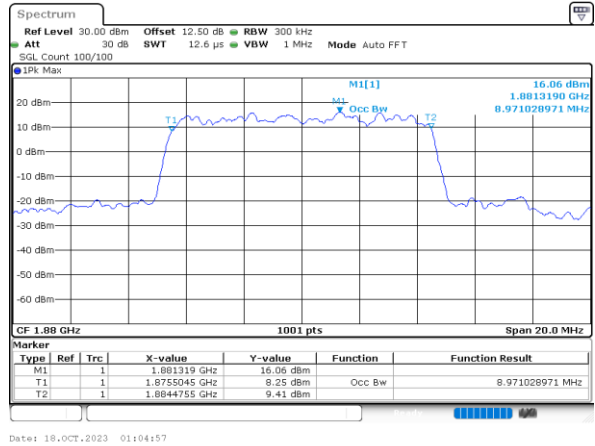


LTE Band 25

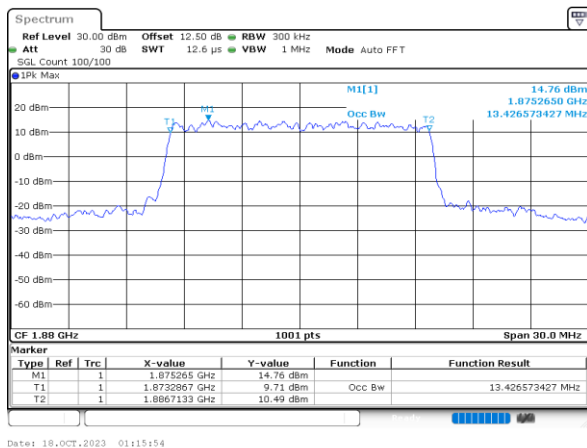
Middle Channel / 10MHz / QPSK



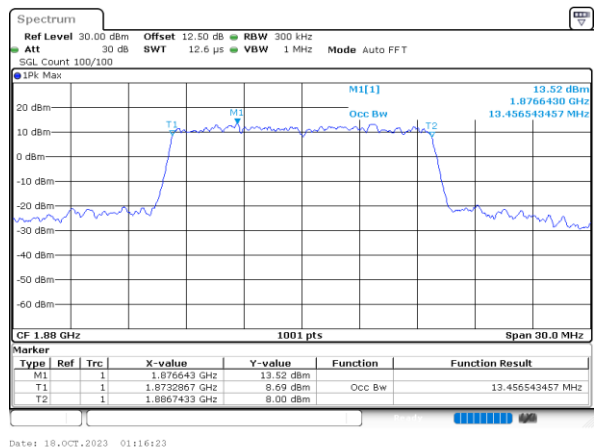
Middle Channel / 10MHz / 16QAM



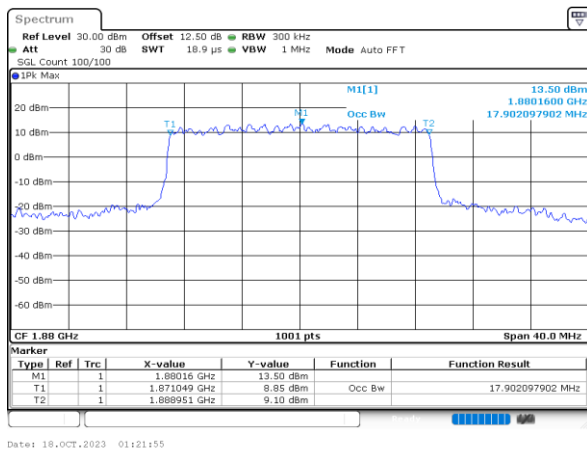
Middle Channel / 15MHz / QPSK



Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

