

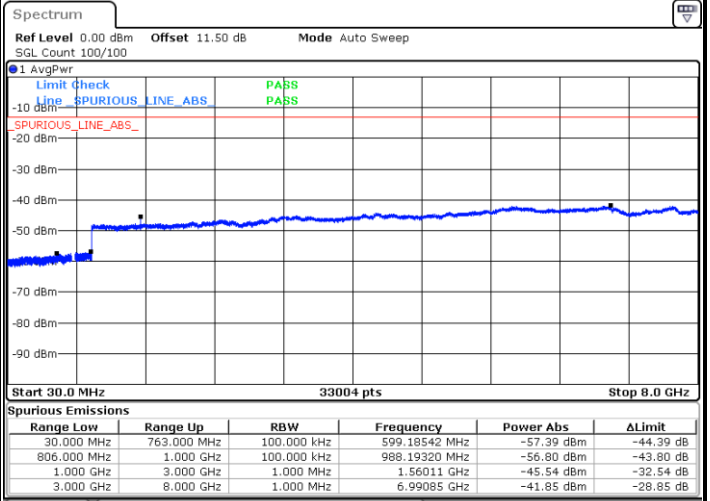
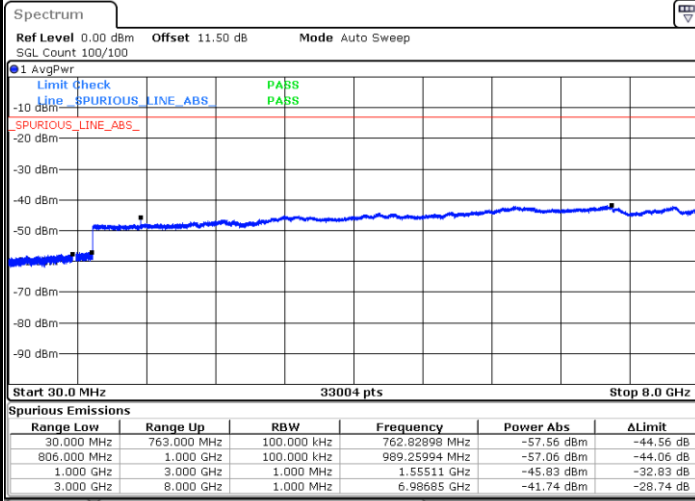


Conducted Spurious Emission

LTE Band 13 / 5MHz

Lowest Channel / QPSK

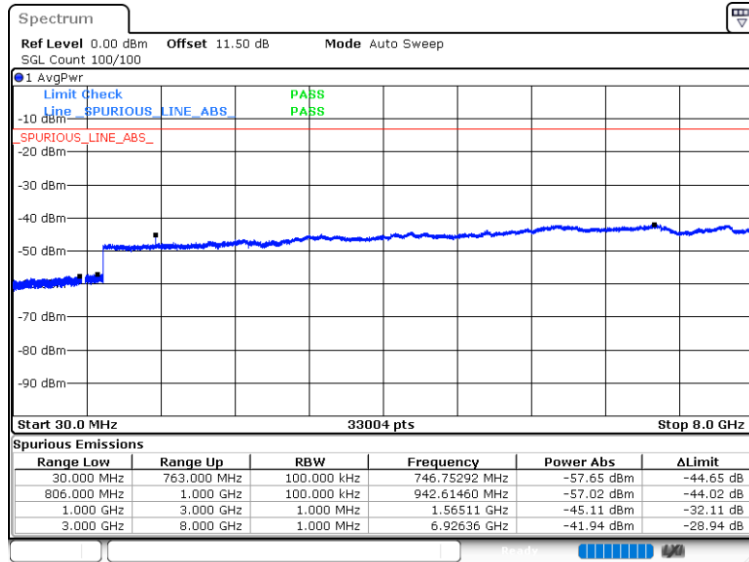
Middle Channel / QPSK



Date: 18.DEC.2023 09:53:17

Date: 18.DEC.2023 09:54:28

Highest Channel / QPSK

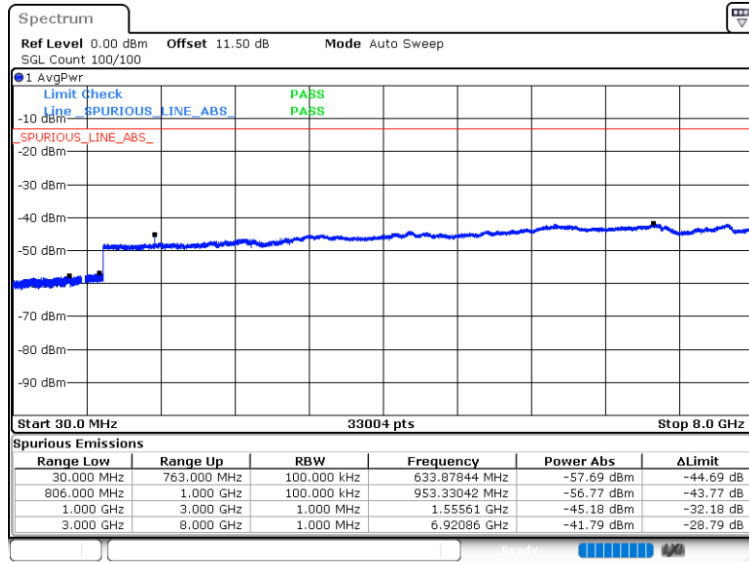


Date: 18.DEC.2023 10:00:39



LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 18.DEC.2023 10:43:43



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	0.0134	
30	Normal Voltage	0.0046	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0113	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0046	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0118	

Note:

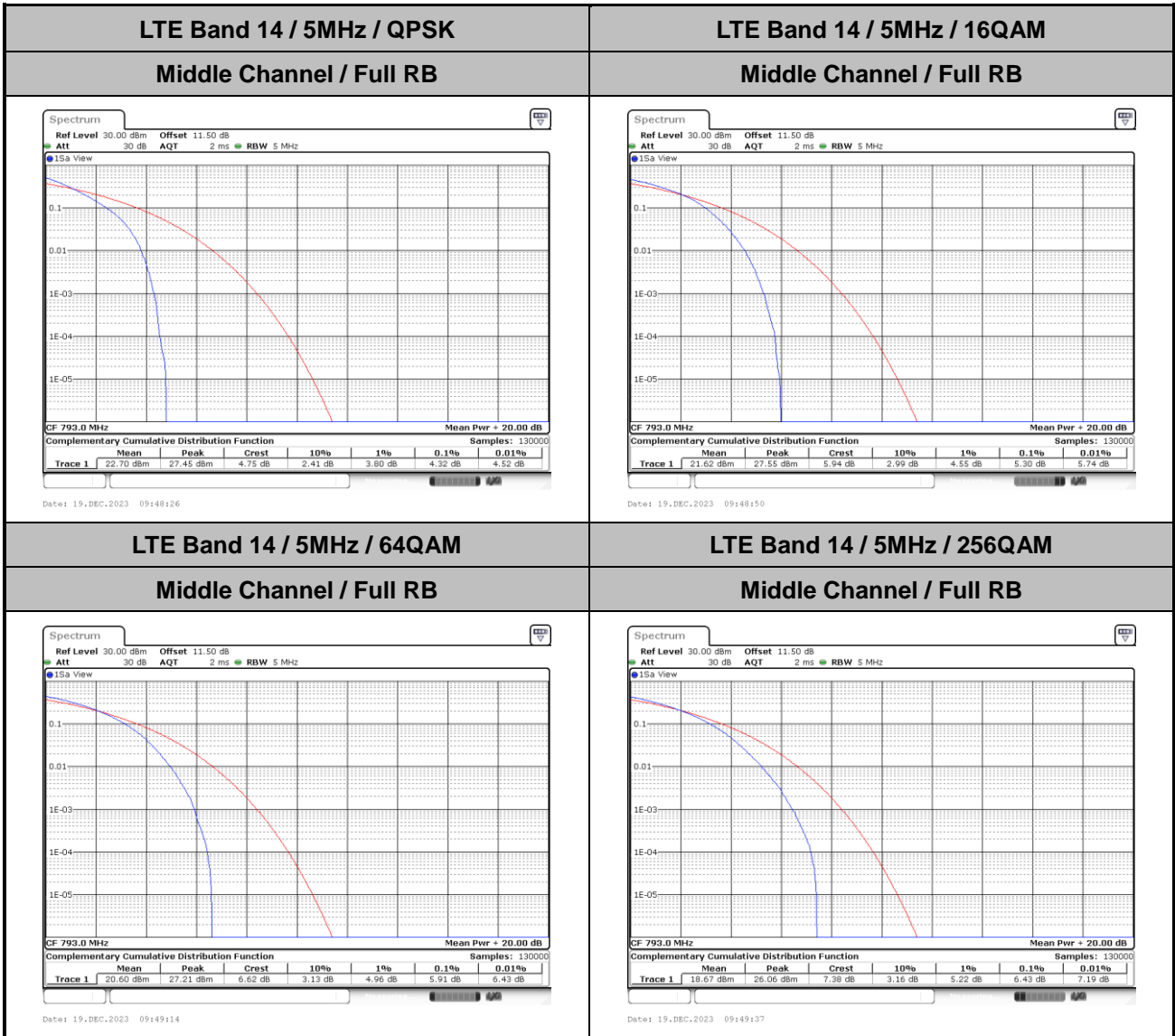
1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

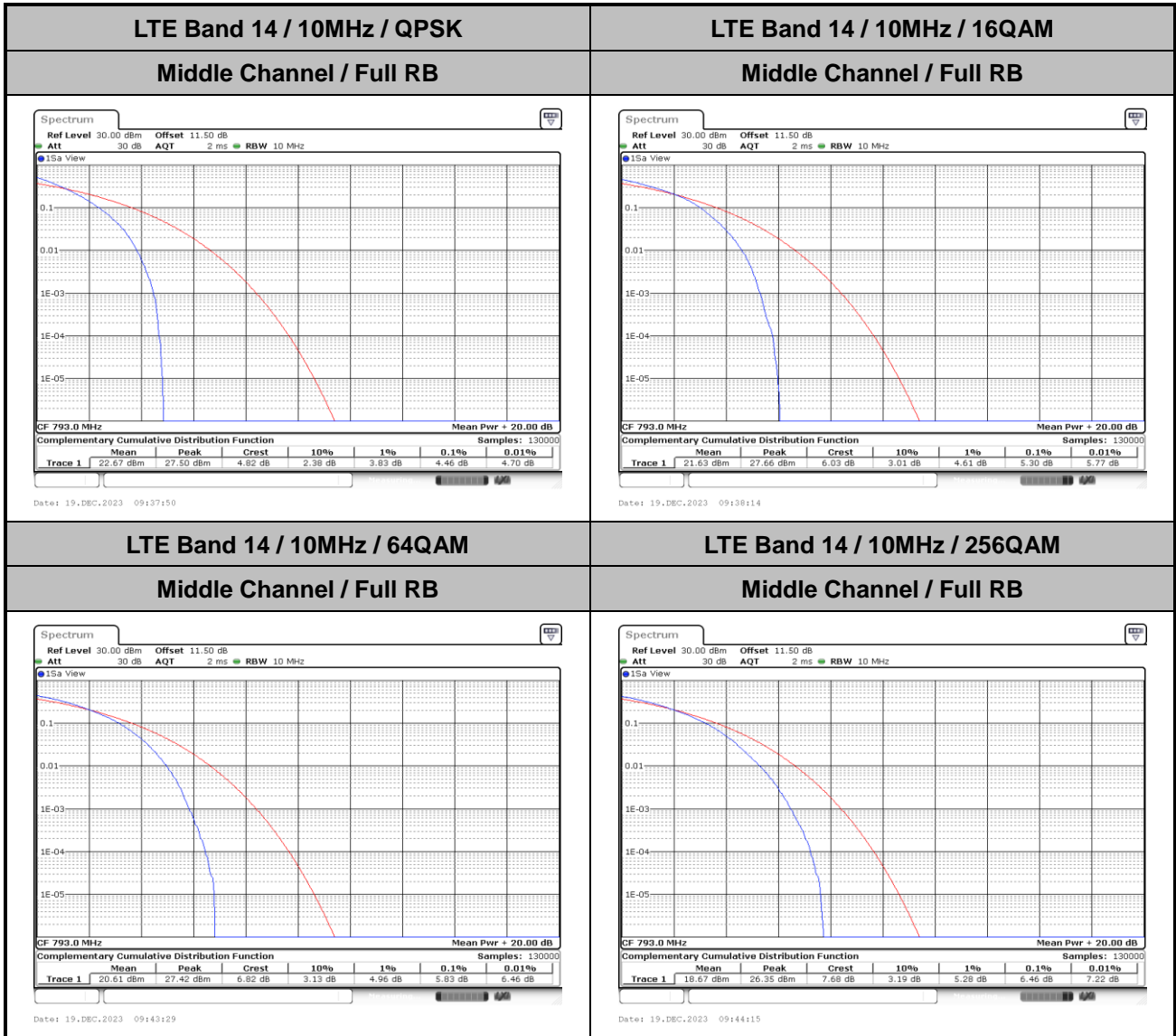


LTE Band 14

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	4.32	5.30	5.91	6.43	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	4.46	5.30	5.83	6.46	PASS

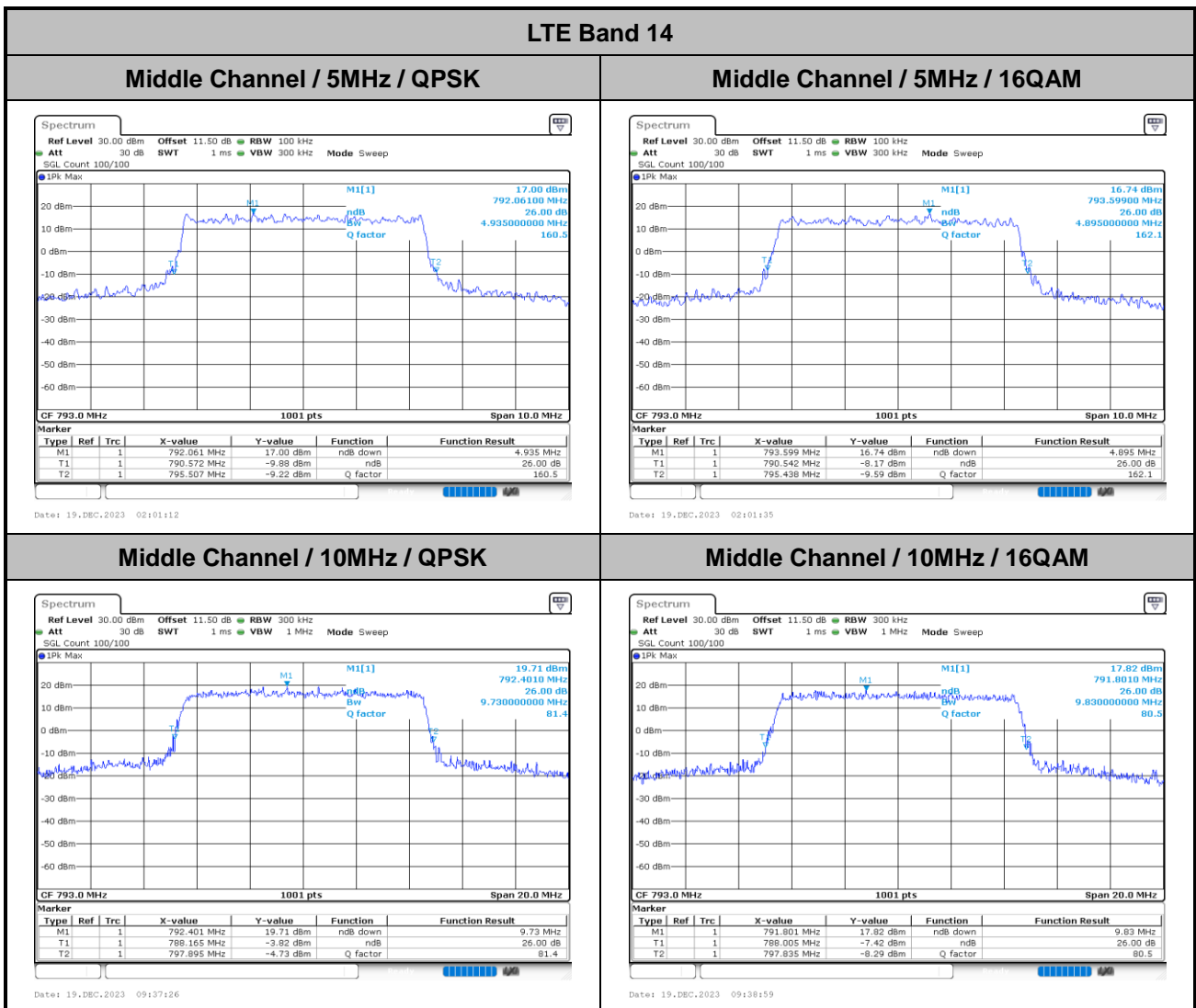






26dB Bandwidth

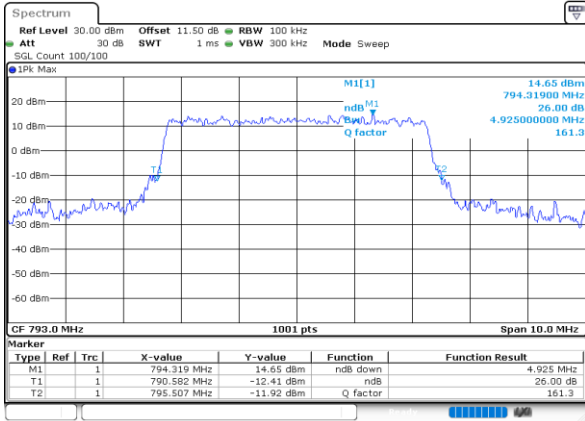
Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.93	4.89	9.73	9.83	-	-	-	-
Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.92	4.94	9.73	9.91	-	-	-	-





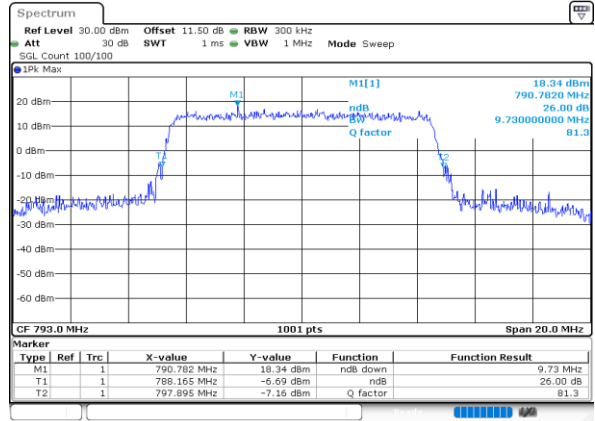
LTE Band 14

Middle Channel / 5MHz / 64QAM



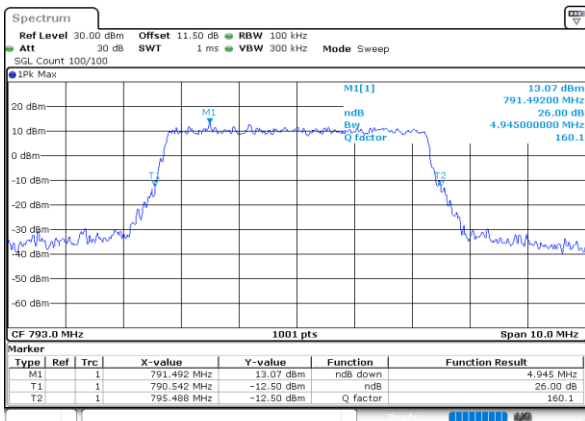
Date: 19_DEC.2023 02:02:42

Middle Channel / 10MHz / 64QAM



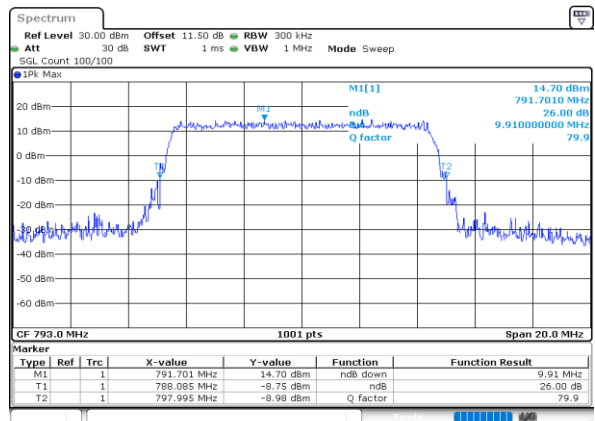
Date: 19_DEC.2023 09:43:51

Middle Channel / 5MHz / 256QAM



Date: 19_DEC.2023 02:03:04

Middle Channel / 10MHz / 256QAM

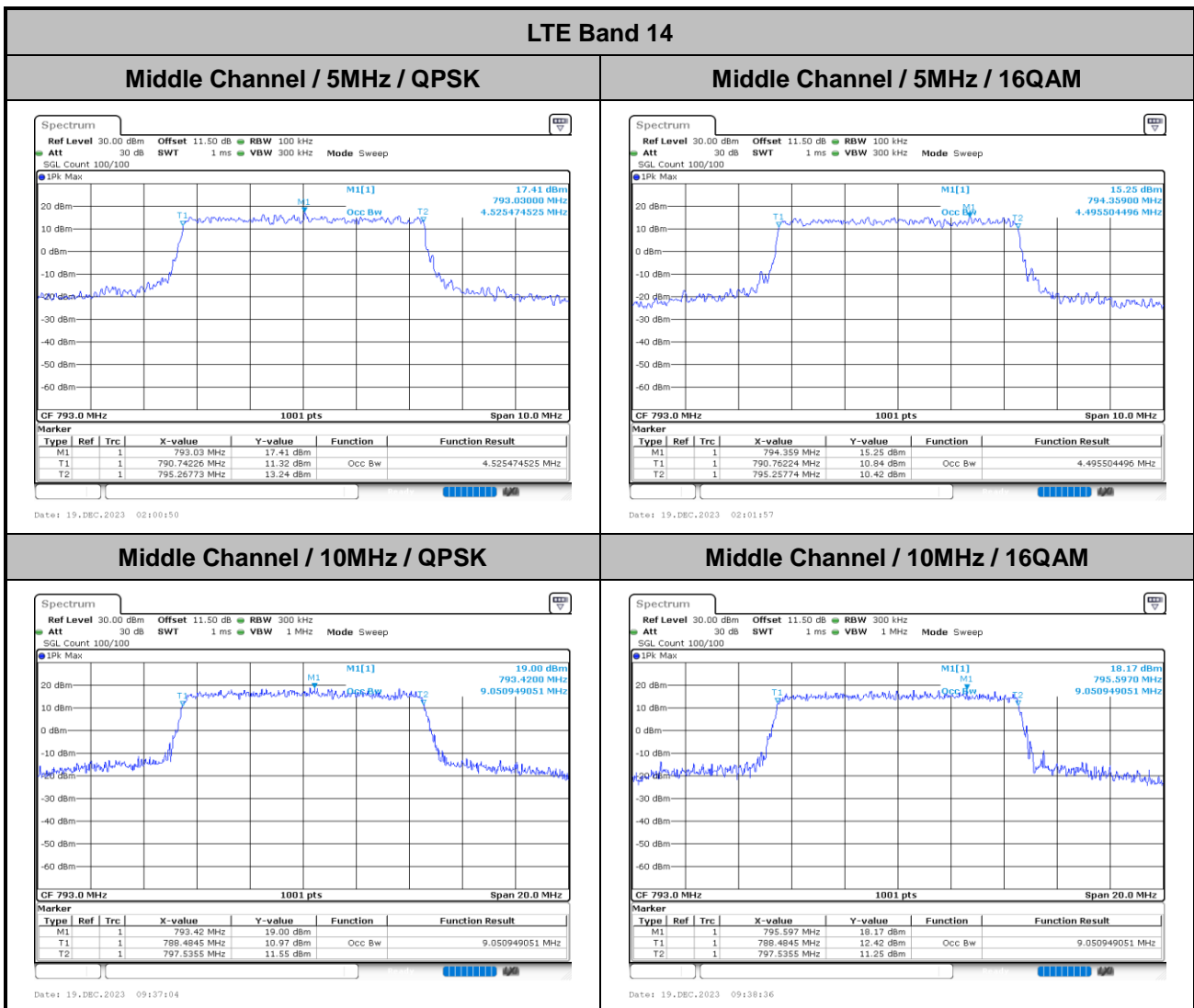


Date: 19_DEC.2023 09:45:00



Occupied Bandwidth

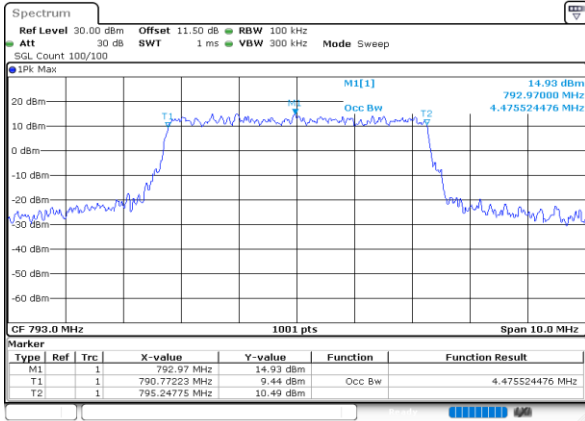
Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.52	4.49	9.05	9.05	-	-	-	-
Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.47	4.50	9.03	8.99	-	-	-	-





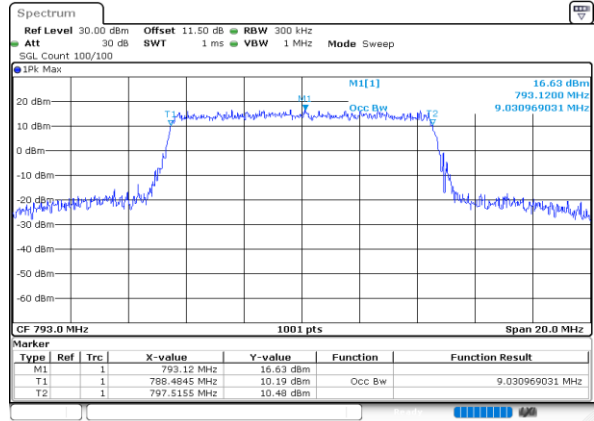
LTE Band 14

Middle Channel / 5MHz / 64QAM



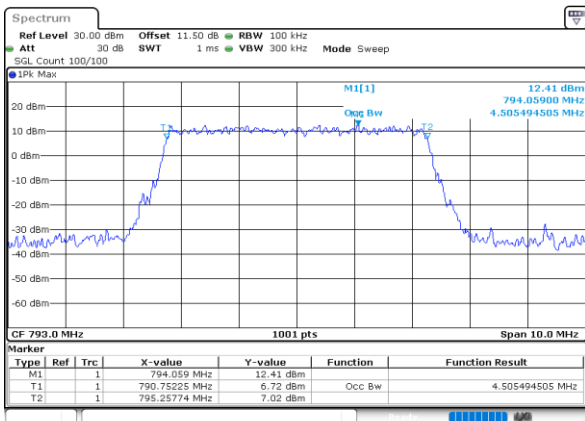
Date: 19 DEC.2023 02:02:19

Middle Channel / 10MHz / 64QAM



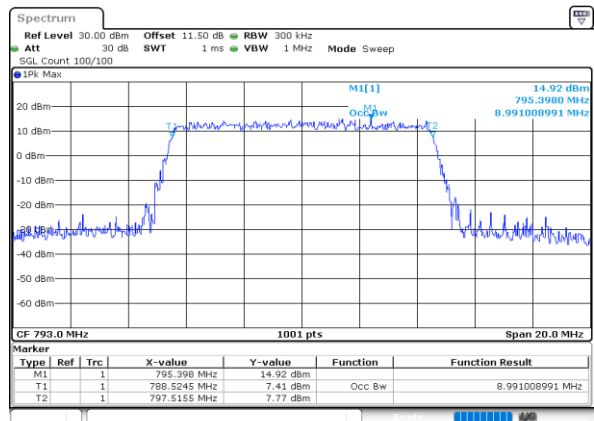
Date: 19 DEC.2023 09:43:05

Middle Channel / 5MHz / 256QAM



Date: 19 DEC.2023 02:03:27

Middle Channel / 10MHz / 256QAM



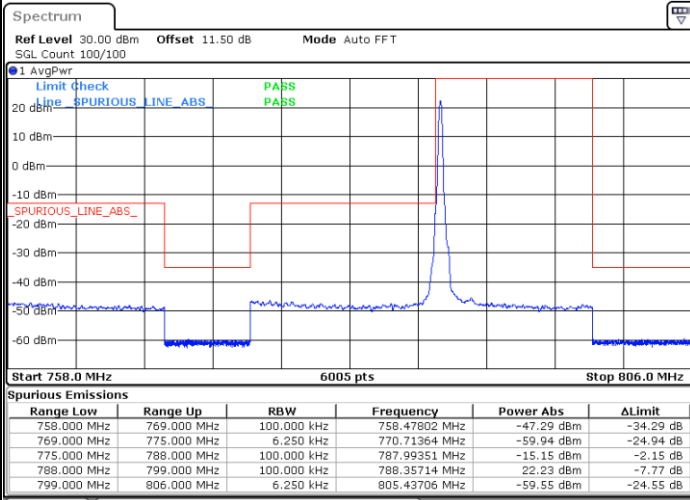
Date: 19 DEC.2023 09:44:37



Conducted Band Edge

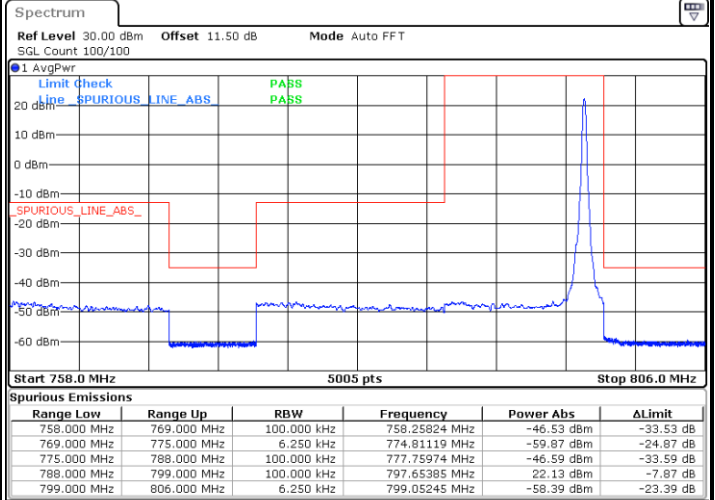
LTE Band 14 / 5MHz / QPSK

Lowest Band Edge / 1 RB



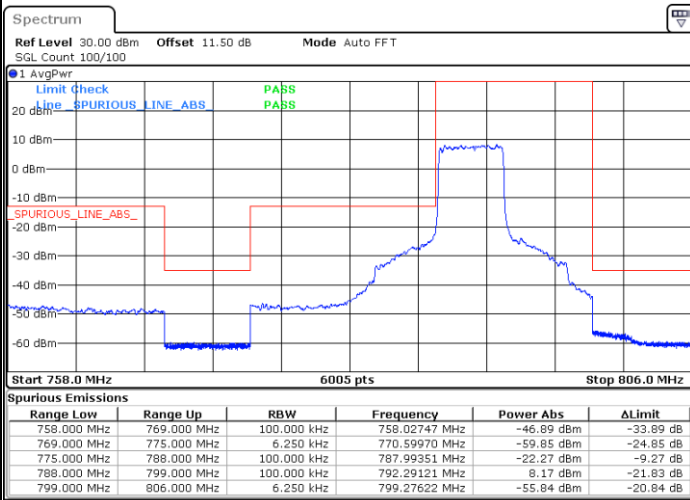
Date: 19.DEC.2023 01:40:15

Highest Band Edge / 1 RB



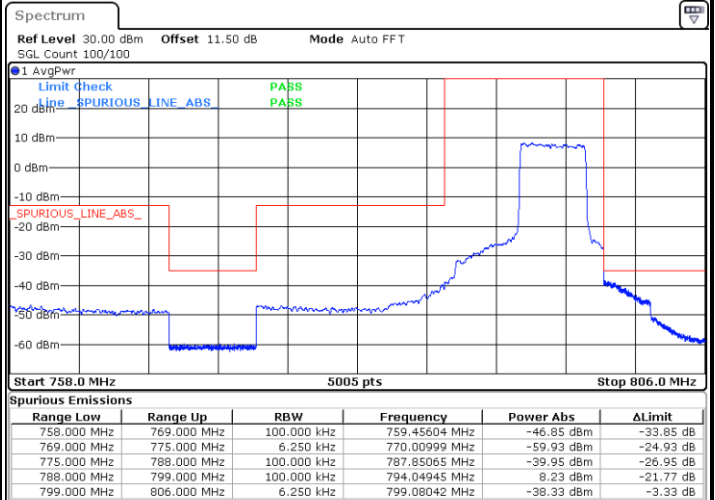
Date: 19.DEC.2023 02:18:45

Lowest Band Edge / Full RB



Date: 19.DEC.2023 01:39:23

Highest Band Edge / Full RB

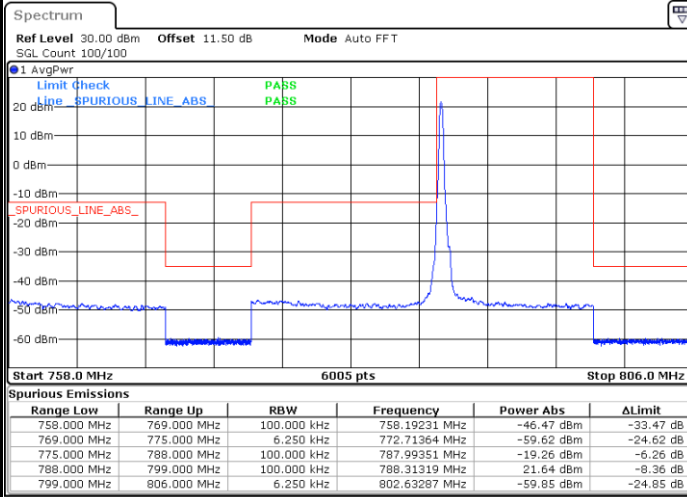


Date: 19.DEC.2023 02:19:37



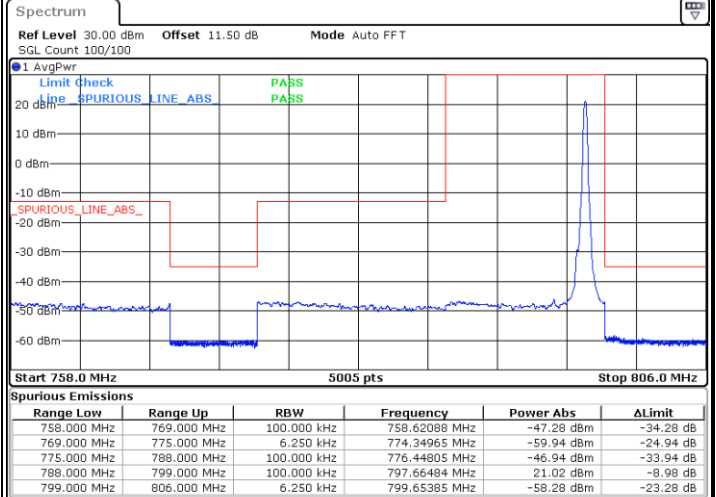
LTE Band 14 / 5MHz / 16QAM

Lowest Band Edge / 1 RB



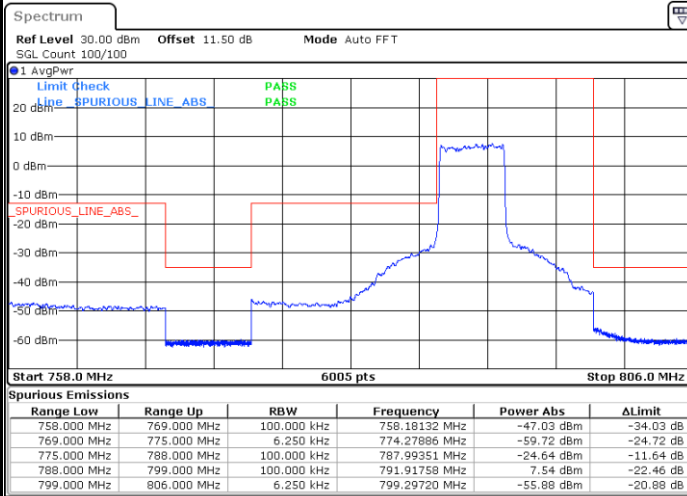
Date: 19.DEC.2023 01:42:18

Highest Band Edge / 1 RB



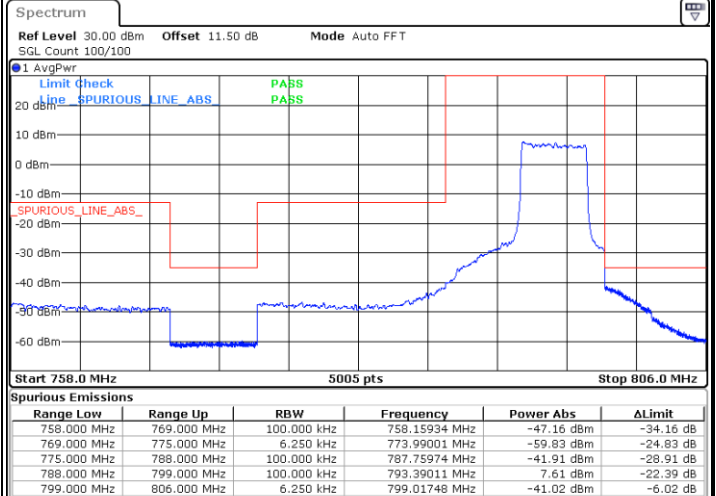
Date: 19.DEC.2023 02:21:21

Lowest Band Edge / Full RB



Date: 19.DEC.2023 01:43:11

Highest Band Edge / Full RB

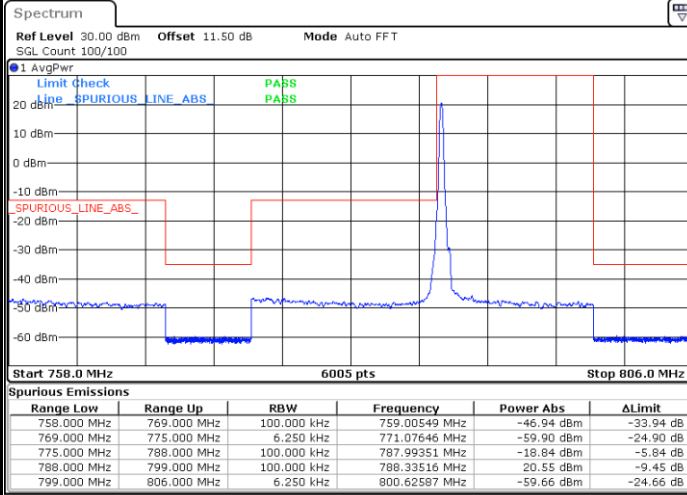


Date: 19.DEC.2023 02:20:29



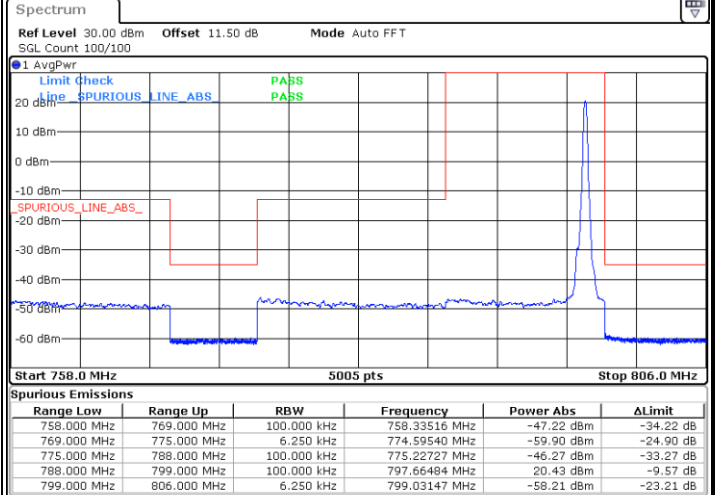
LTE Band 14 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



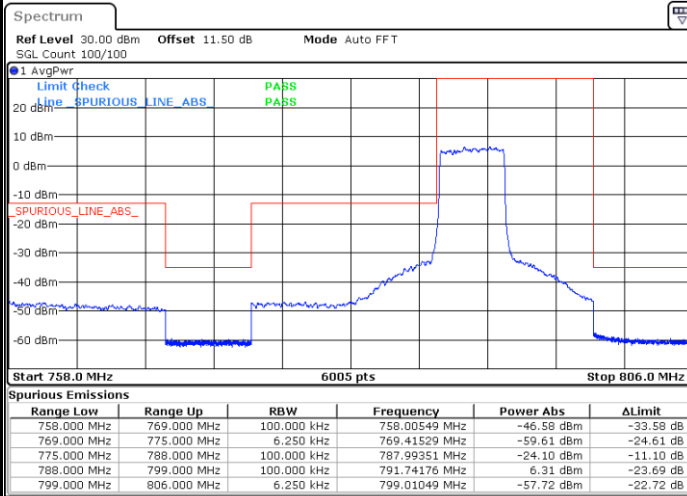
Date: 19.DEC.2023 01:44:55

Highest Band Edge / 1 RB



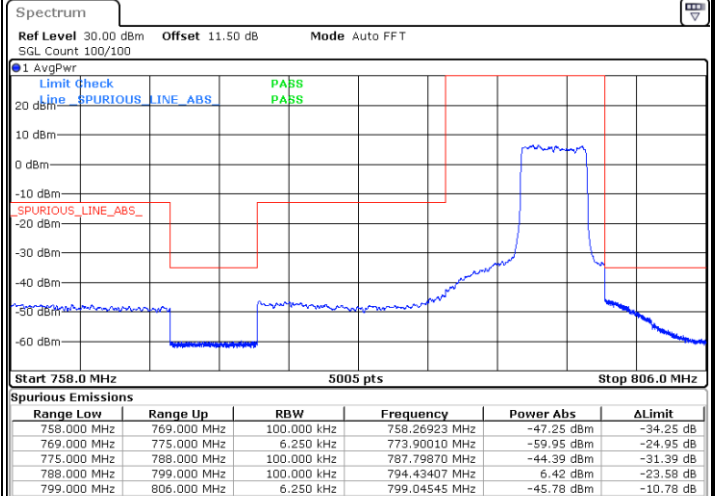
Date: 19.DEC.2023 02:22:13

Lowest Band Edge / Full RB



Date: 19.DEC.2023 01:44:03

Highest Band Edge / Full RB

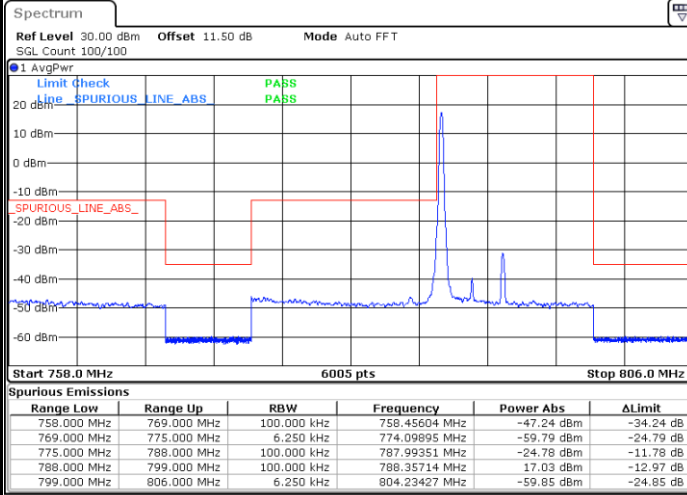


Date: 19.DEC.2023 02:23:05



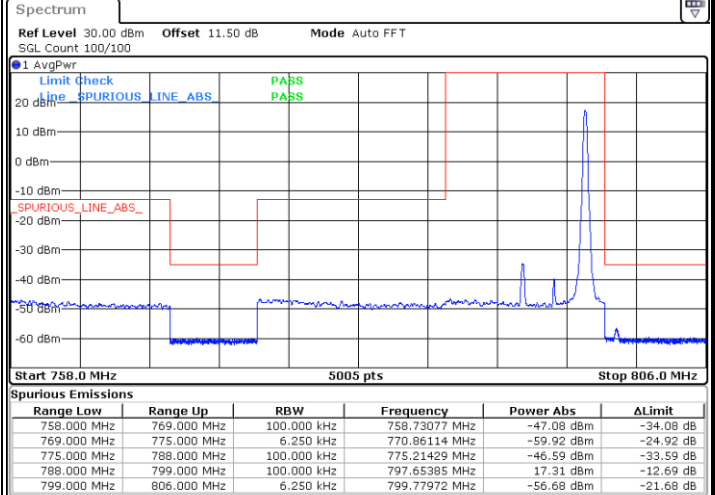
LTE Band 14 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



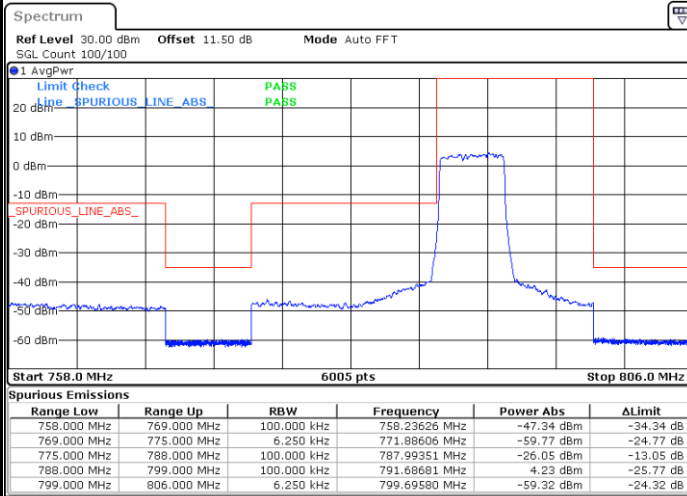
Date: 19.DEC.2023 01:45:47

Highest Band Edge / 1 RB



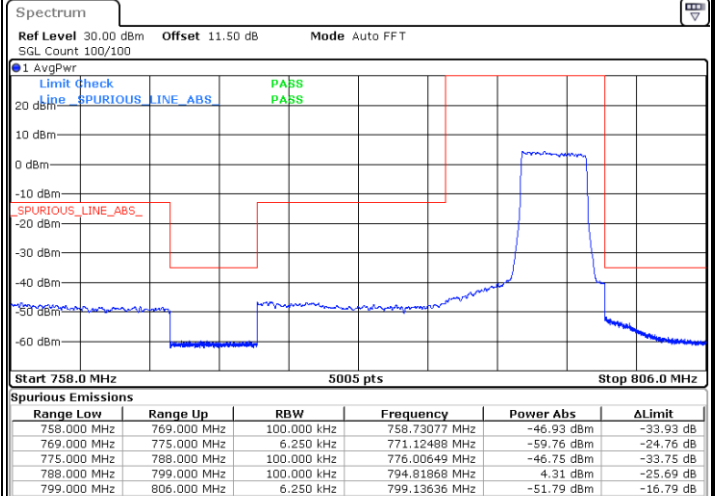
Date: 19.DEC.2023 02:24:52

Lowest Band Edge / Full RB

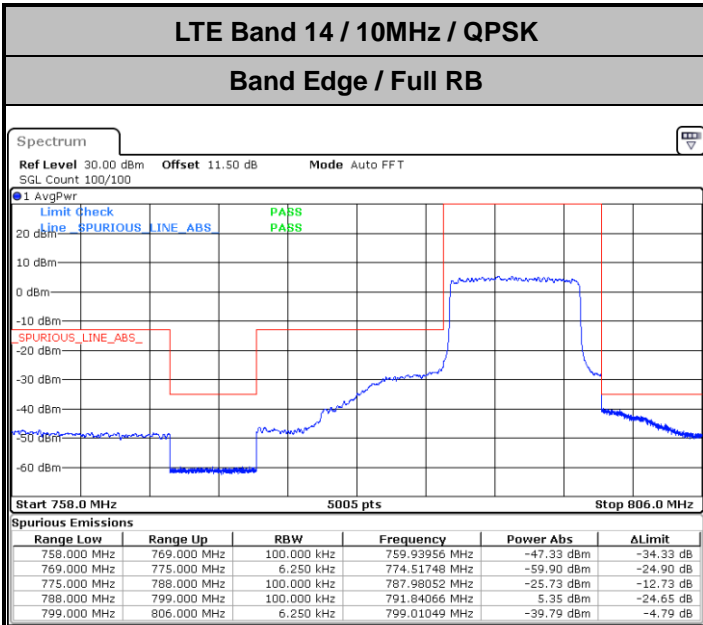


Date: 19.DEC.2023 01:46:42

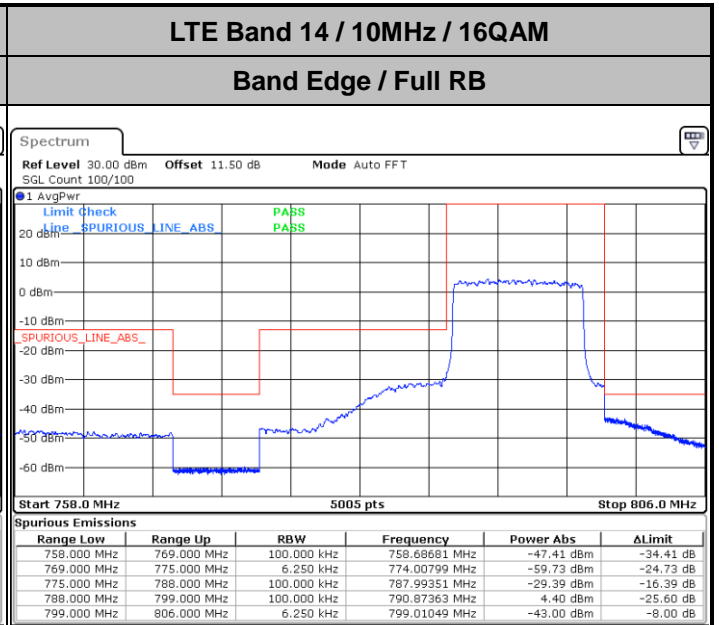
Highest Band Edge / Full RB



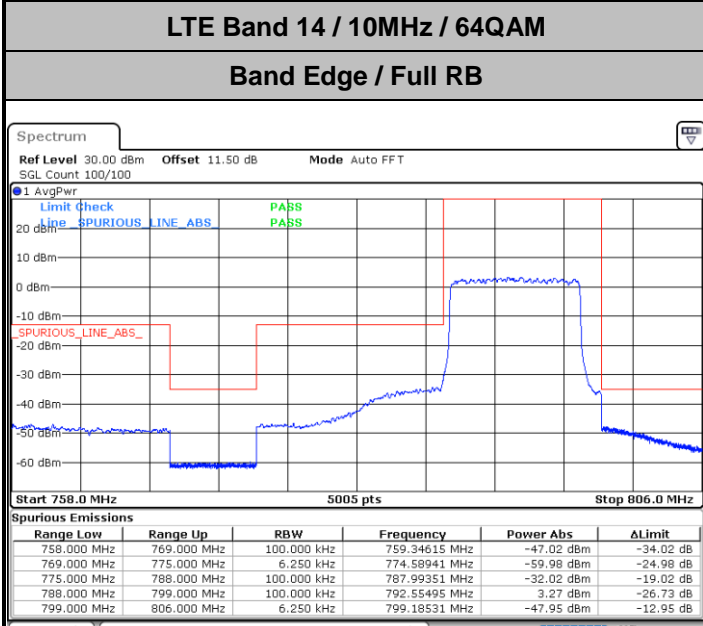
Date: 19.DEC.2023 02:23:57



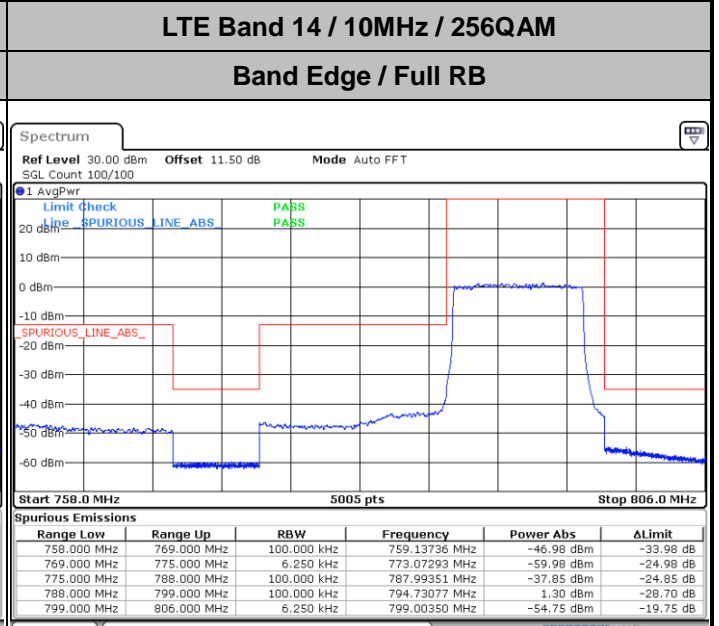
Date: 19.DEC.2023 09:35:40



Date: 19.DEC.2023 09:39:50



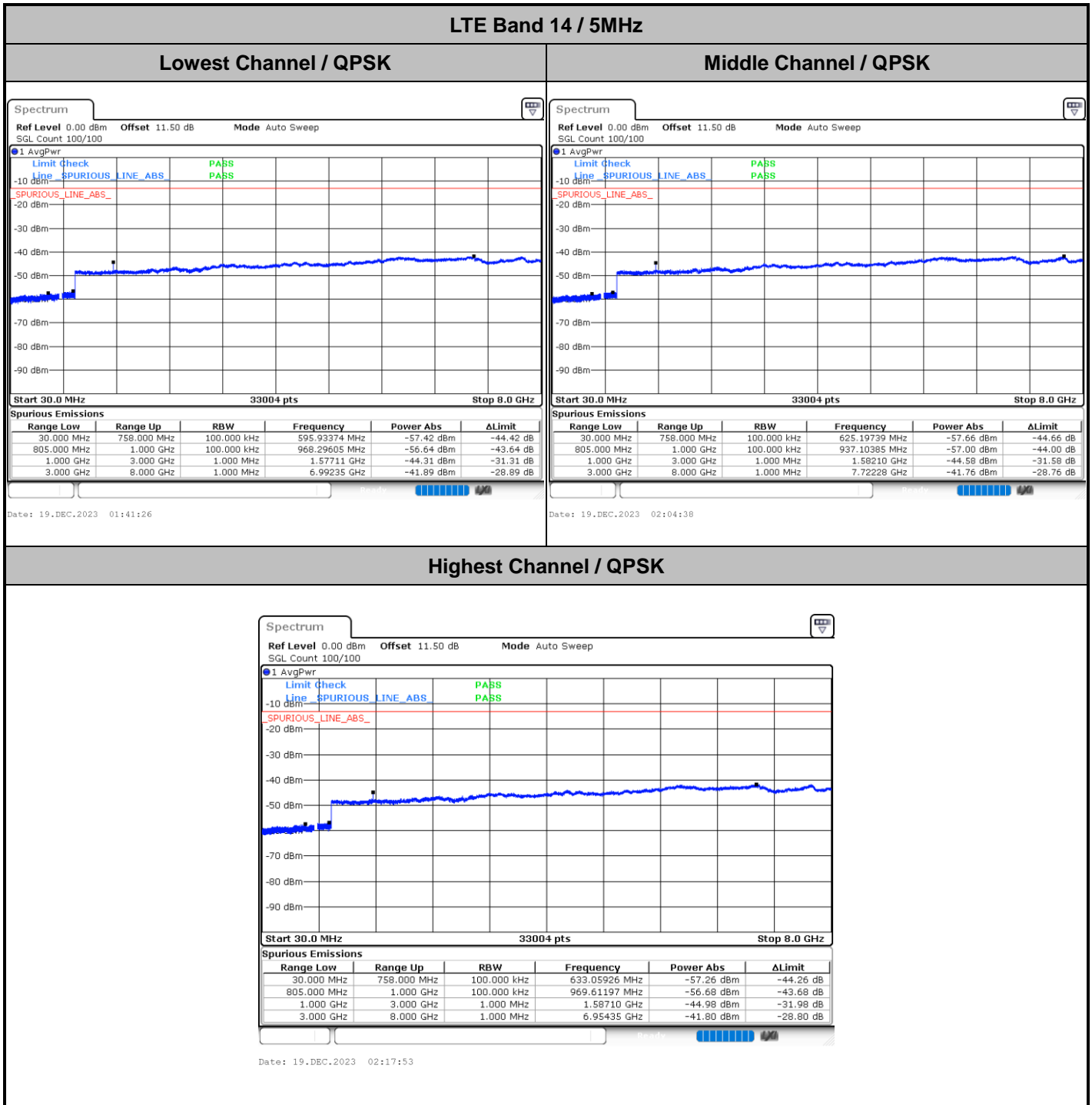
Date: 19.DEC.2023 09:42:42



Date: 19.DEC.2023 09:45:51



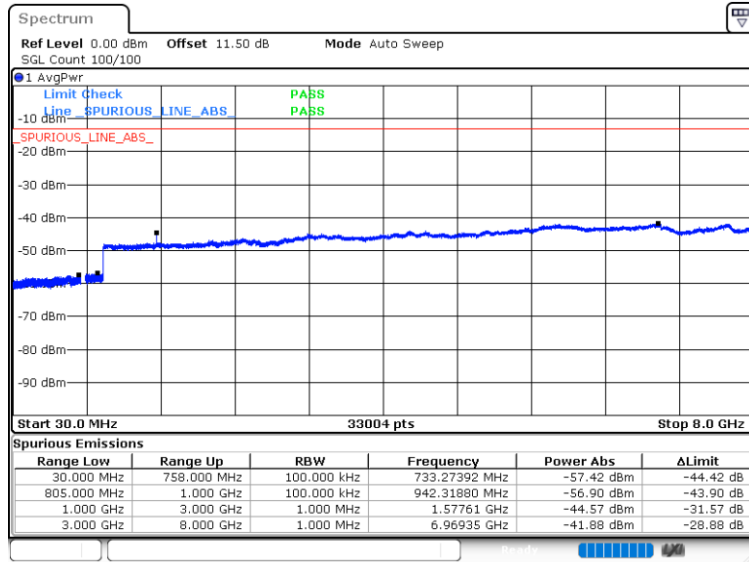
Conducted Spurious Emission





LTE Band 14 / 10MHz

Middle Channel / QPSK



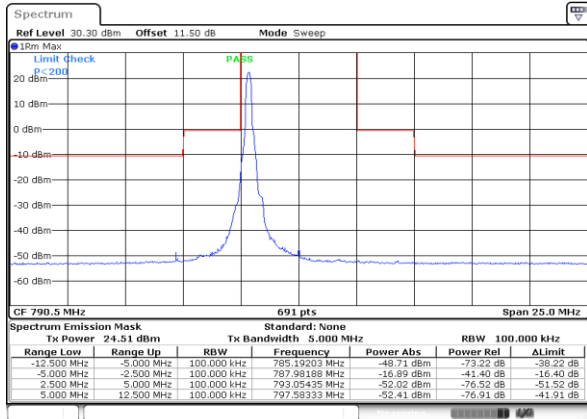
Date: 19.DEC.2023 09:48:02



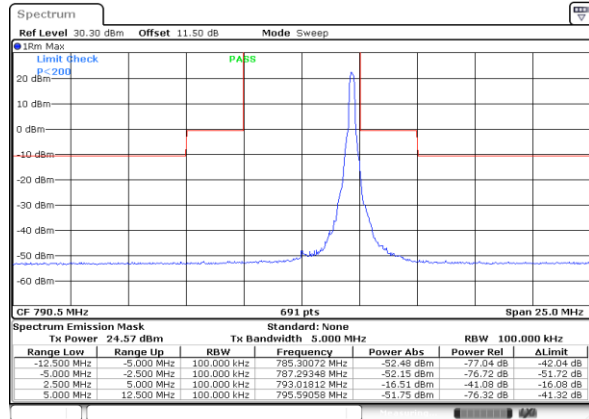
Mask

LTE Band 14 / 5MHz / QPSK

Lowest Channel / 1RB

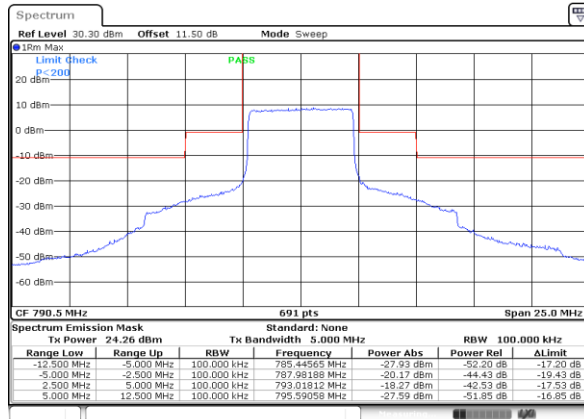


Date: 19.DEC.2023 01:47:47



Date: 19.DEC.2023 01:48:48

Lowest Channel / Full RB

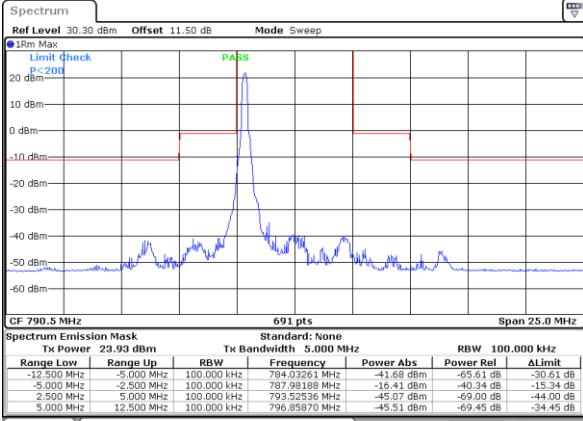


Date: 19.DEC.2023 01:49:49

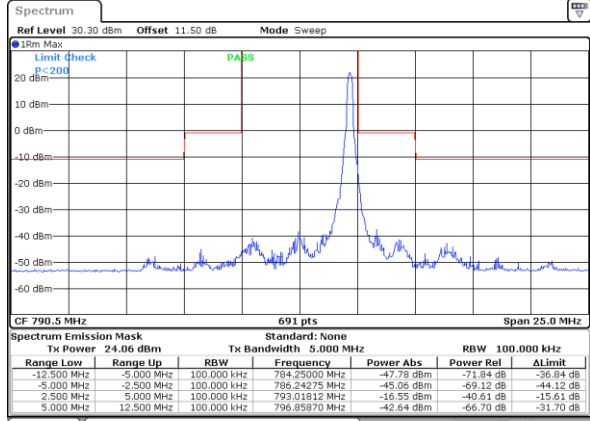


LTE Band 14 / 5MHz / 16QAM

Lowest Channel / 1RB

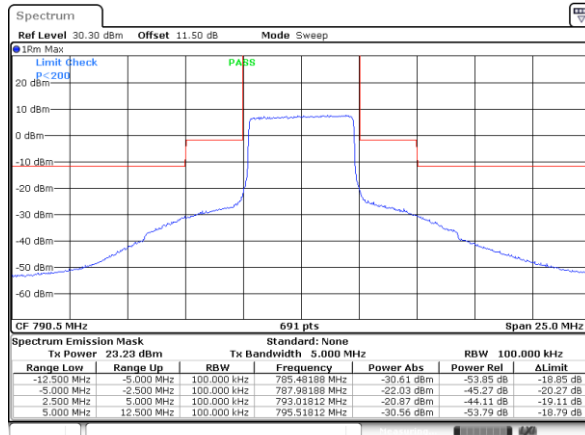


Date: 19, DEC, 2023 01:52:52



Date: 19, DEC, 2023 01:51:51

Lowest Channel / Full RB

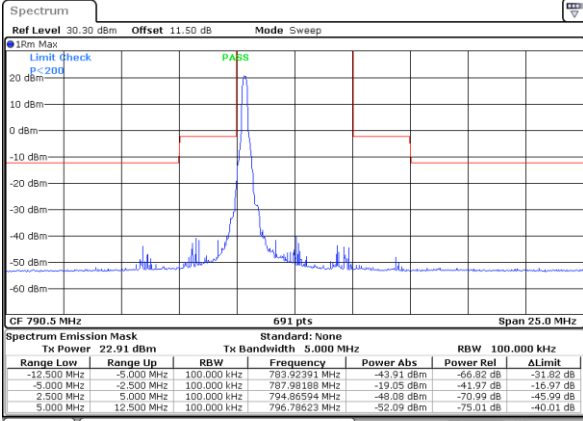


Date: 19, DEC, 2023 01:50:50

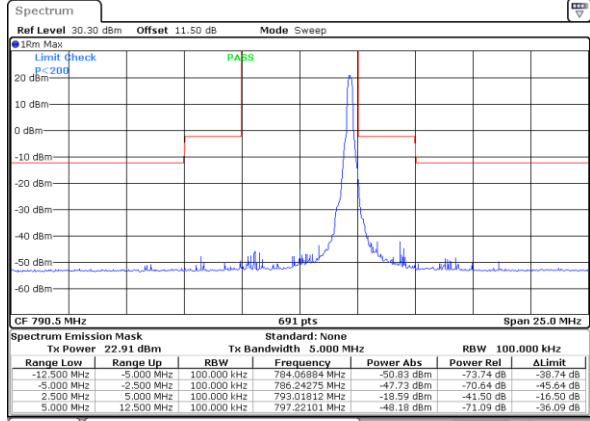


LTE Band 14 / 5MHz / 64QAM

Lowest Channel / 1RB

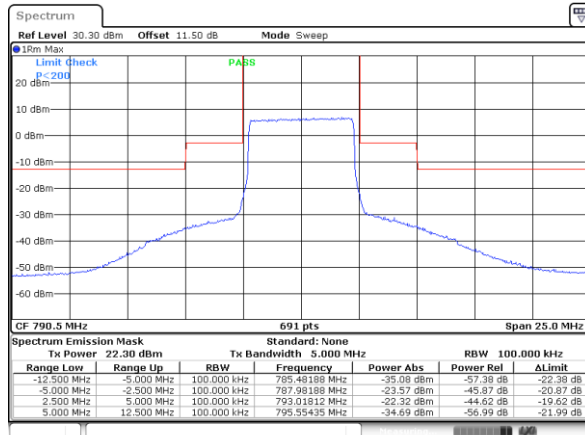


Date: 19, DEC, 2023 01:53:53



Date: 19, DEC, 2023 01:54:54

Lowest Channel / Full RB

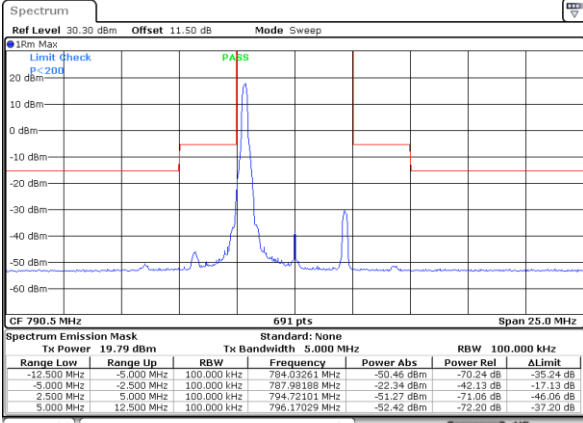


Date: 19, DEC, 2023 01:55:56

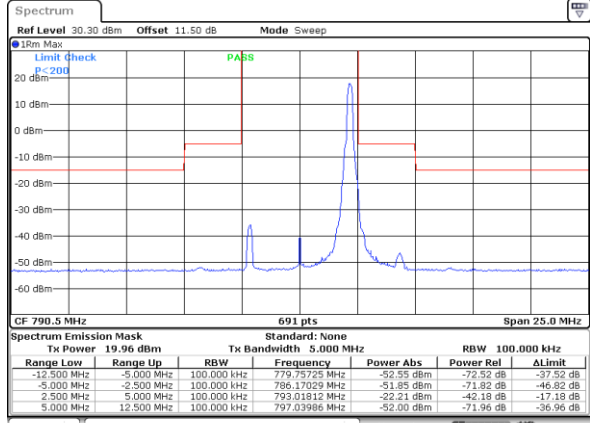


LTE Band 14 / 5MHz / 256QAM

Lowest Channel / 1RB

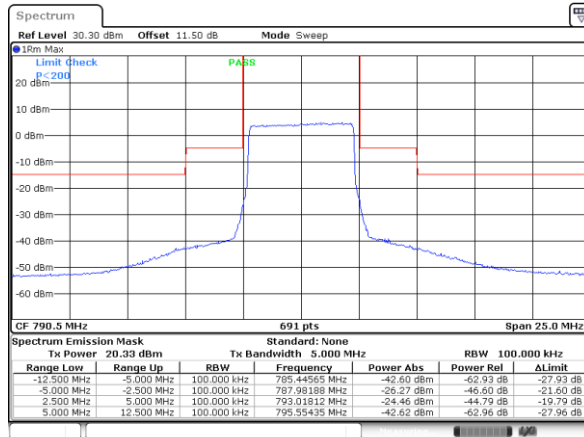


Date: 19.DEC.2023 01:59:05



Date: 19.DEC.2023 01:58:01

Lowest Channel / Full RB

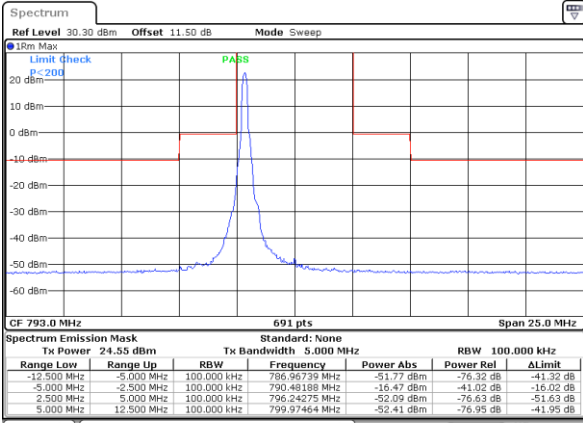


Date: 19.DEC.2023 01:56:57

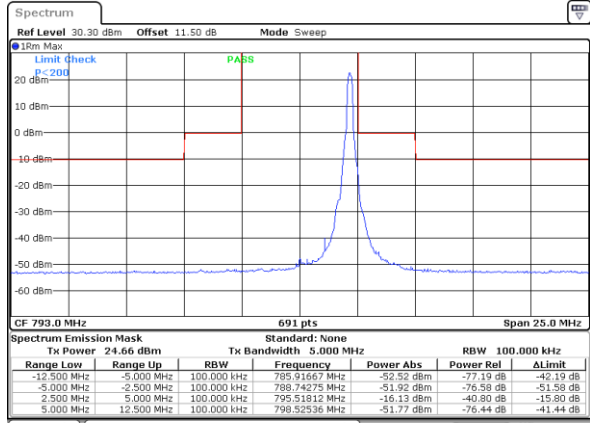


LTE Band 14 / 5MHz / QPSK

Middle Channel / 1RB

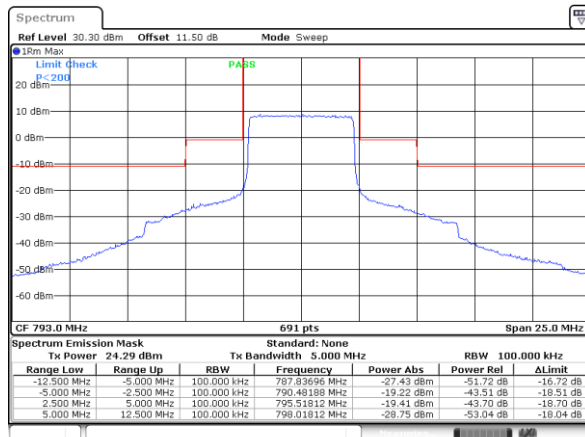


Date: 19, DEC, 2023 02:05:38



Date: 19, DEC, 2023 02:06:38

Middle Channel / Full RB

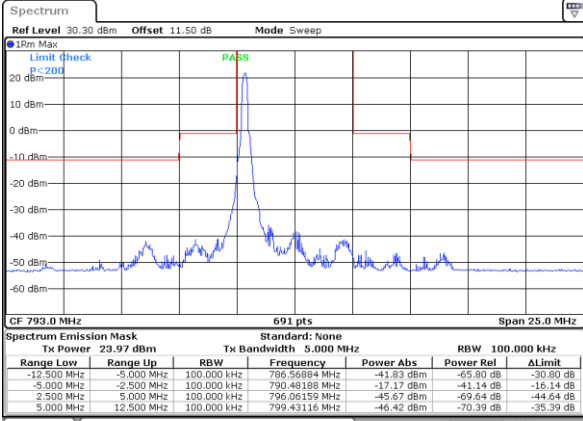


Date: 19, DEC, 2023 02:07:39

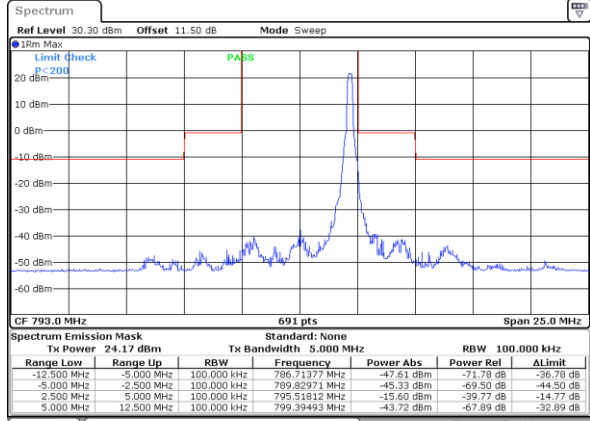


LTE Band 14 / 5MHz / 16QAM

Middle Channel / 1RB

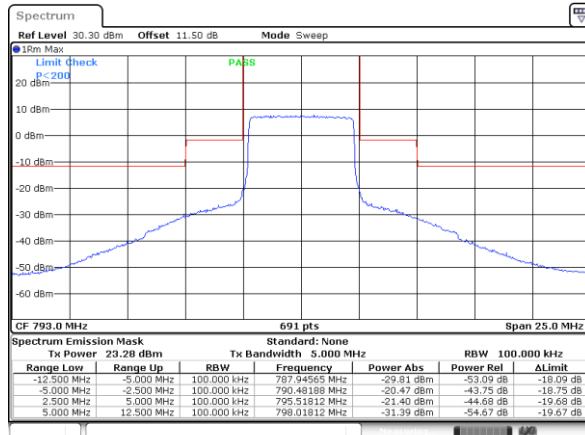


Date: 19, DEC, 2023 02:10:40



Date: 19, DEC, 2023 02:09:40

Middle Channel / Full RB

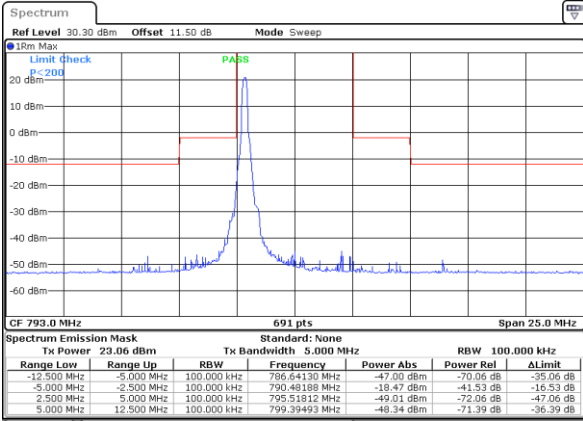


Date: 19, DEC, 2023 02:08:39

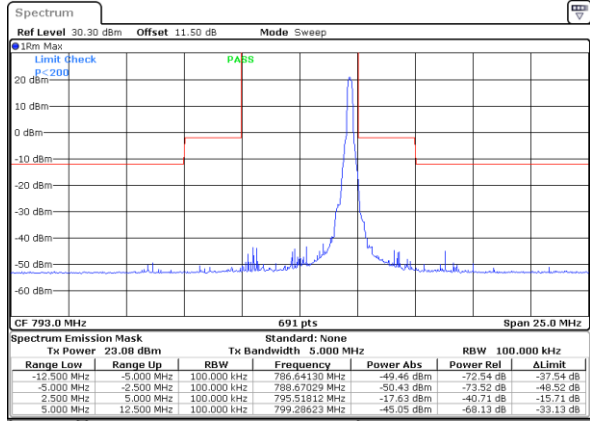


LTE Band 14 / 5MHz / 64QAM

Middle Channel / 1RB

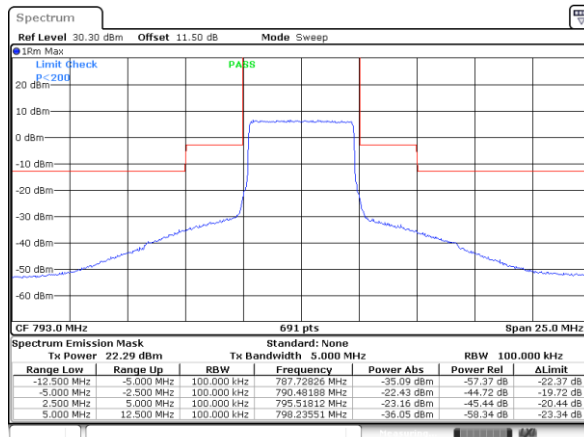


Date: 19.DEC.2023 02:11:40



Date: 19.DEC.2023 02:12:40

Middle Channel / Full RB

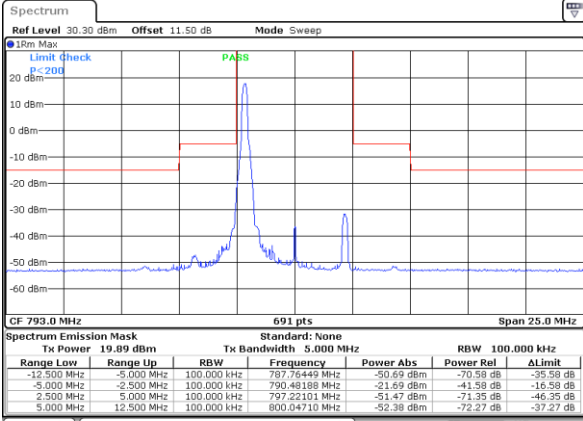


Date: 19.DEC.2023 02:13:41

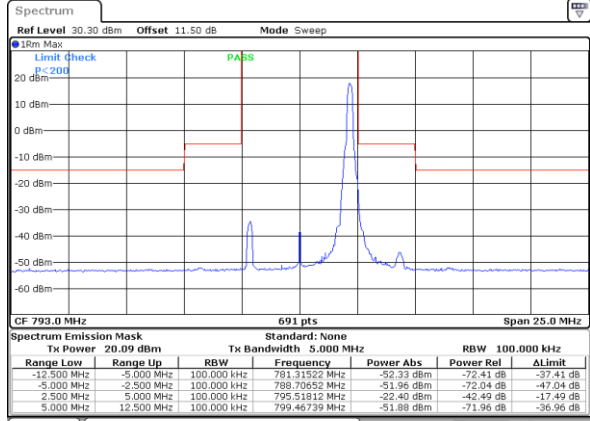


LTE Band 14 / 5MHz / 256QAM

Middle Channel / 1RB

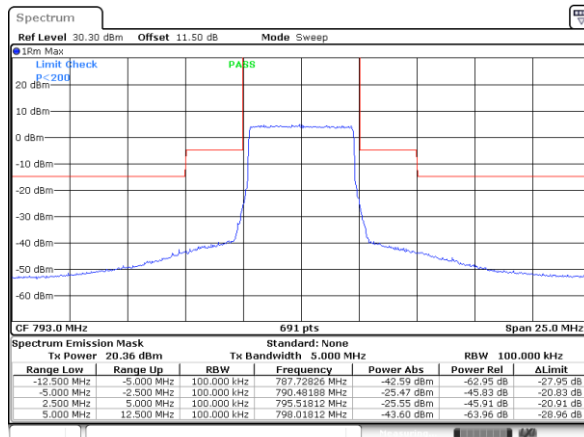


Date: 19, DEC, 2023 02:16:42



Date: 19, DEC, 2023 02:15:42

Middle Channel / Full RB

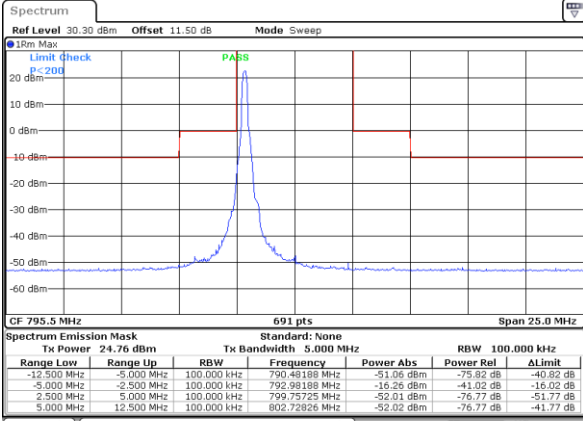


Date: 19, DEC, 2023 02:14:41

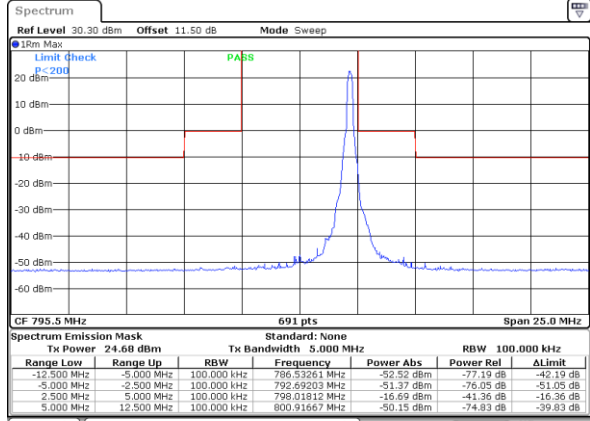


LTE Band 14 / 5MHz / QPSK

Highest Channel / 1RB

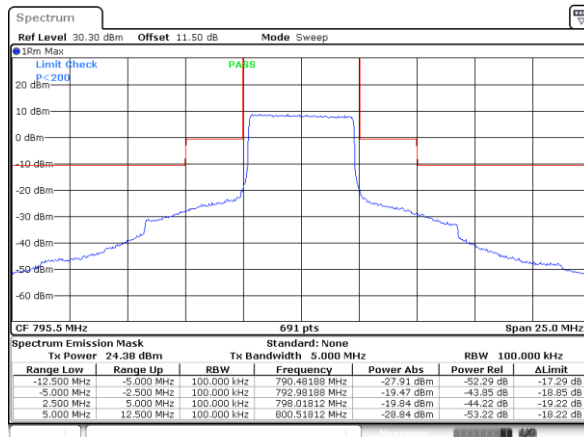


Date: 19.DEC.2023 02:25:57



Date: 19.DEC.2023 02:26:58

Highest Channel / Full RB

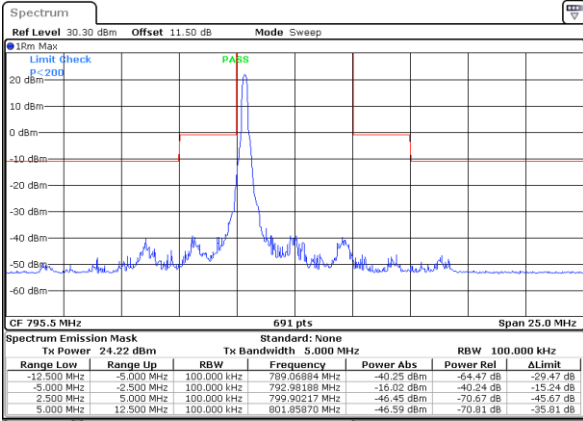


Date: 19.DEC.2023 02:27:59

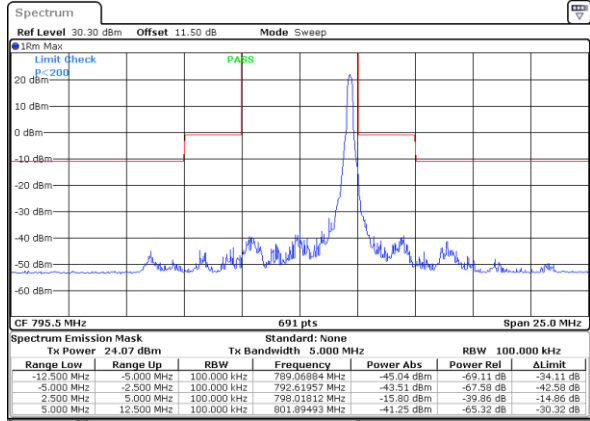


LTE Band 14 / 5MHz / 16QAM

Highest Channel / 1RB

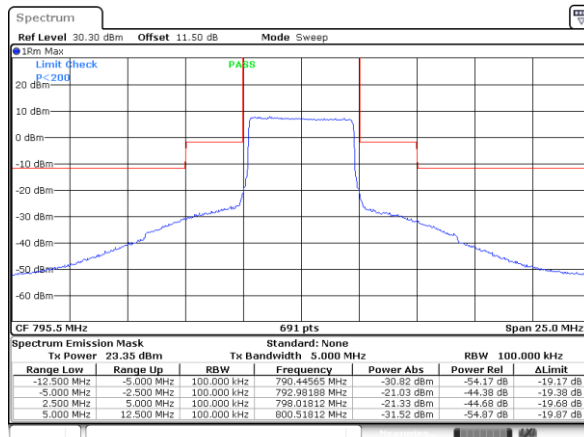


Date: 19, DEC, 2023 02:13:02



Date: 19, DEC, 2023 02:13:01

Highest Channel / Full RB

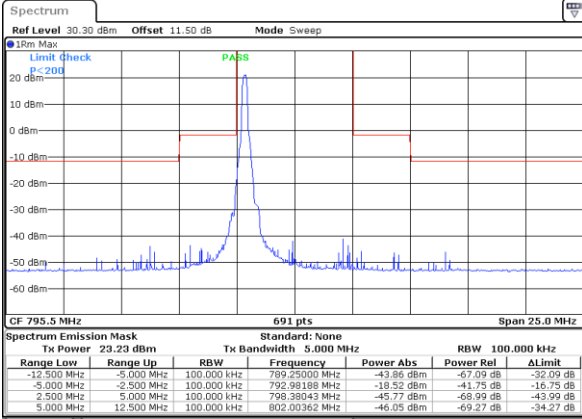


Date: 19, DEC, 2023 02:29:00

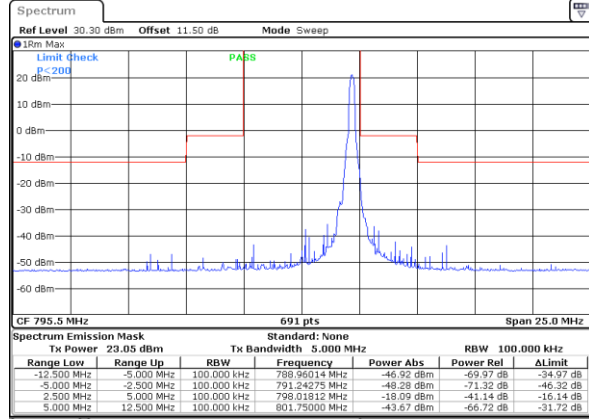


LTE Band 14 / 5MHz / 64QAM

Highest Channel / 1RB

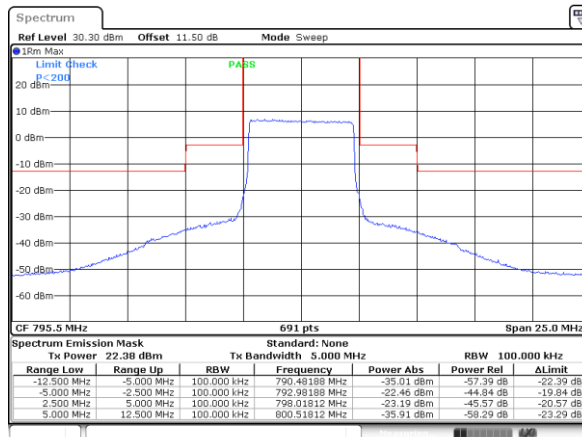


Date: 19, DEC, 2023 02:12:03



Date: 19, DEC, 2023 02:13:04

Highest Channel / Full RB

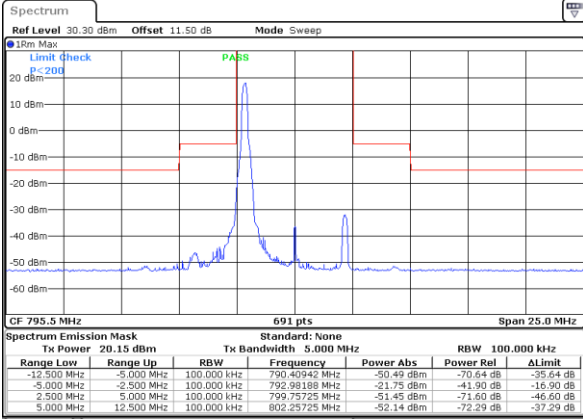


Date: 19, DEC, 2023 02:14:05

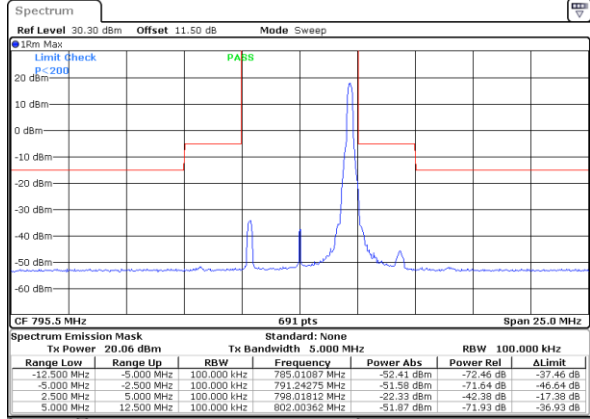


LTE Band 14 / 5MHz / 256QAM

Highest Channel / 1RB

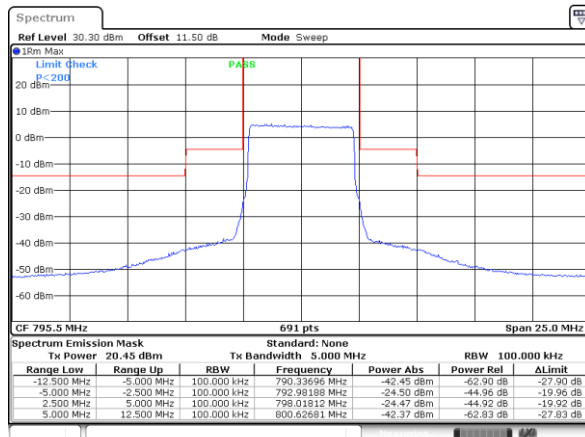


Date: 19, DEC, 2023 02:17:14

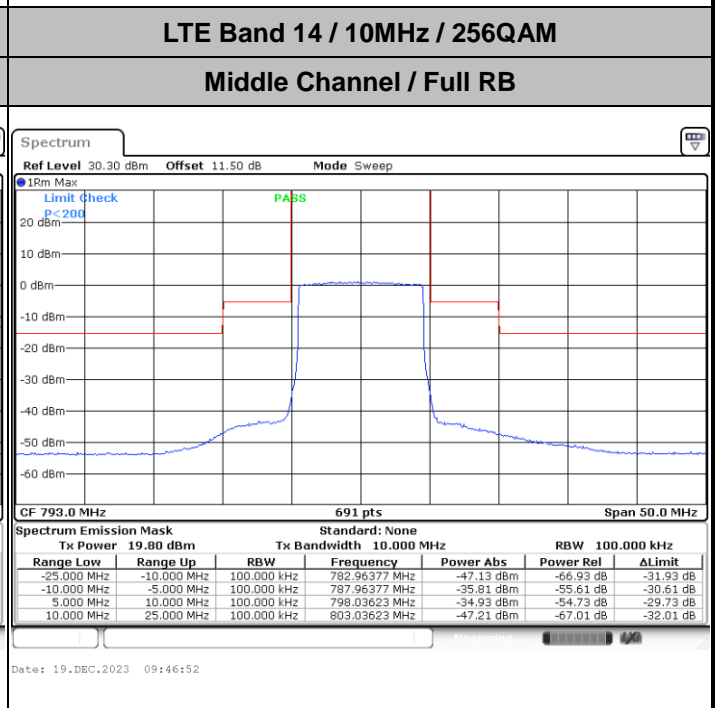
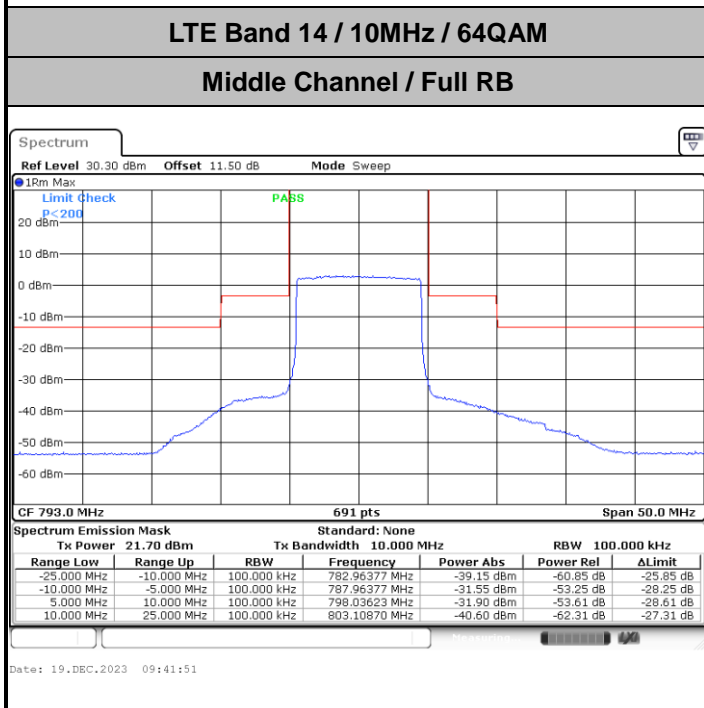
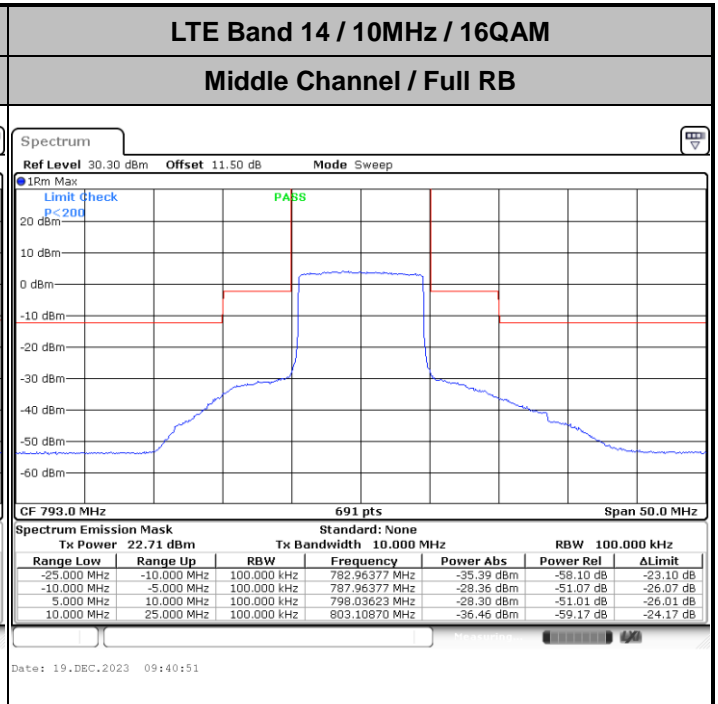
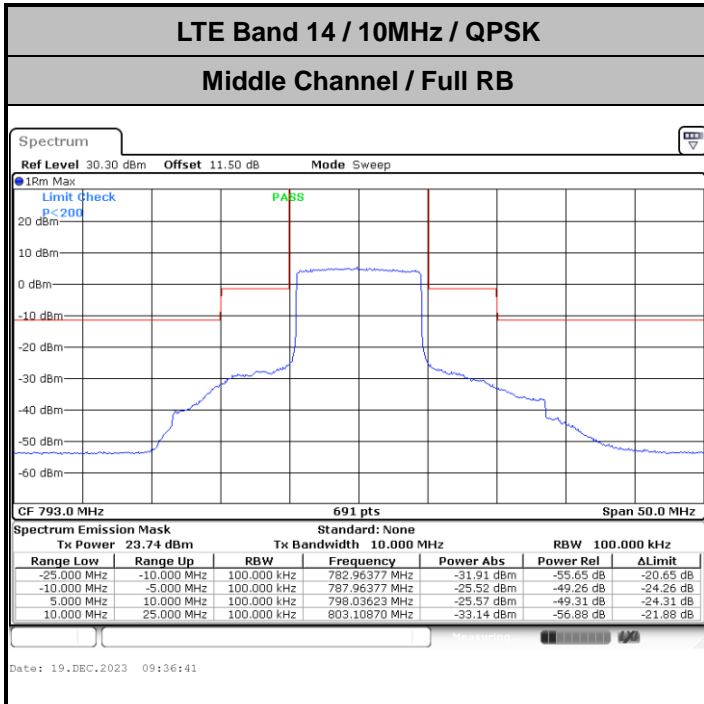


Date: 19, DEC, 2023 02:16:10

Highest Channel / Full RB



Date: 19, DEC, 2023 02:15:06





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	0.0019	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0050	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0004	
-20	Normal Voltage	0.0063	
-30	Normal Voltage	0.0141	
20	Maximum Voltage	0.0124	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0093	

Note:

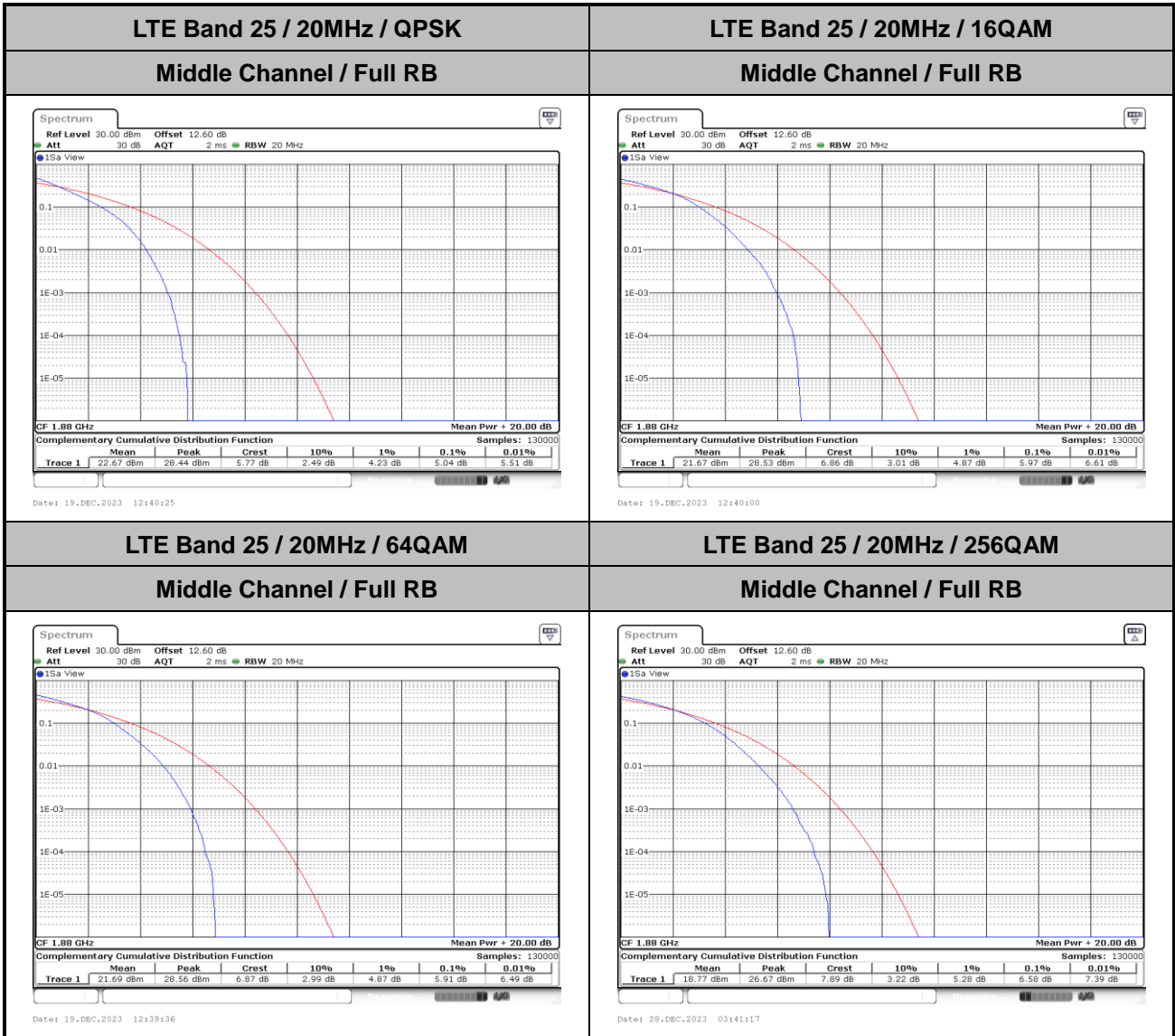
- 1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.2 V
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

Peak-to-Average Ratio

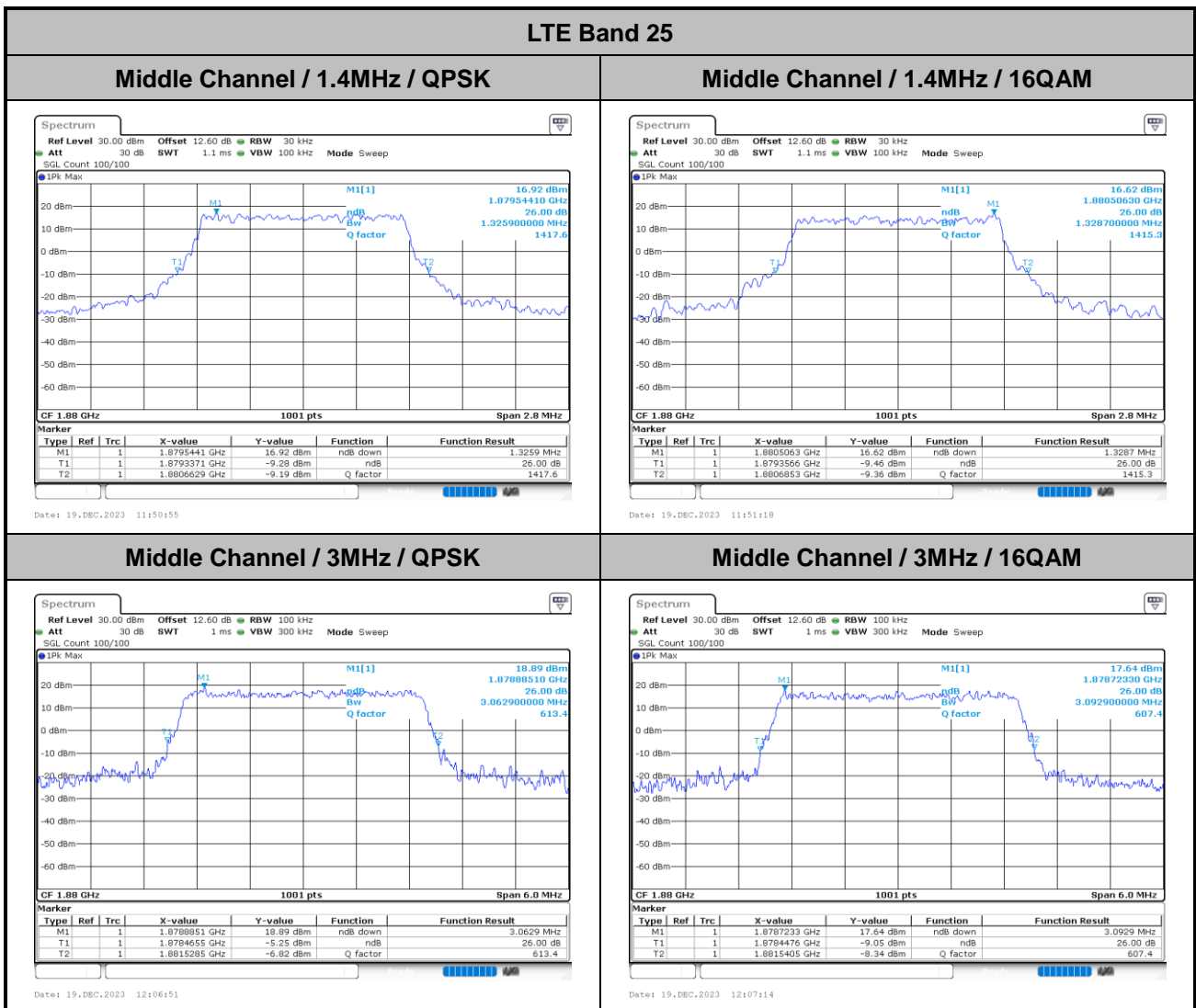
Mode	LTE Band 25 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.04	5.97	5.91	6.58	PASS





26dB Bandwidth

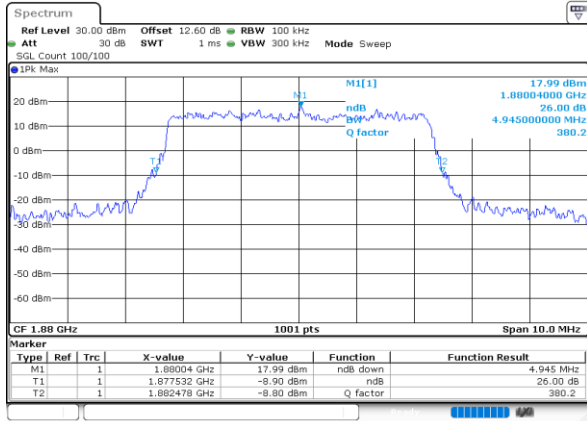
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.32	1.32	3.06	3.09	4.94	4.98	9.91	9.78	14.47	14.47	18.98	18.90
Mode	LTE Band 25 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	1.32	1.29	3.08	3.02	4.91	4.92	9.99	9.83	14.59	14.47	18.86	18.98





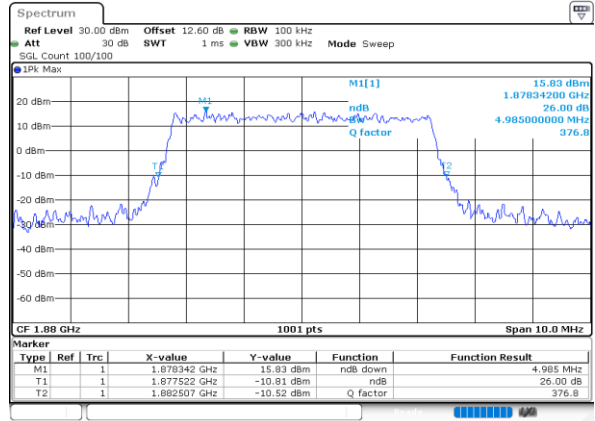
LTE Band 25

Middle Channel / 5MHz / QPSK



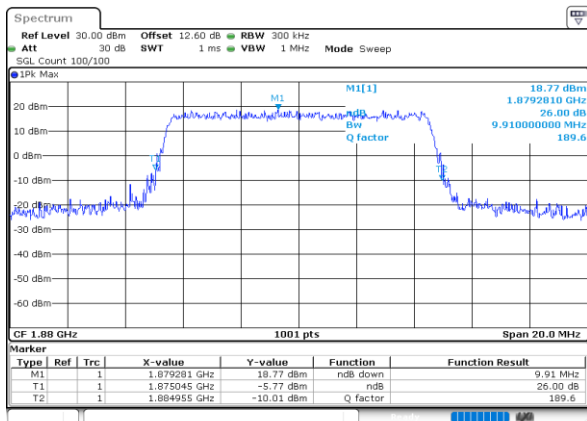
Date: 19 DEC 2023 12:11:54

Middle Channel / 5MHz / 16QAM



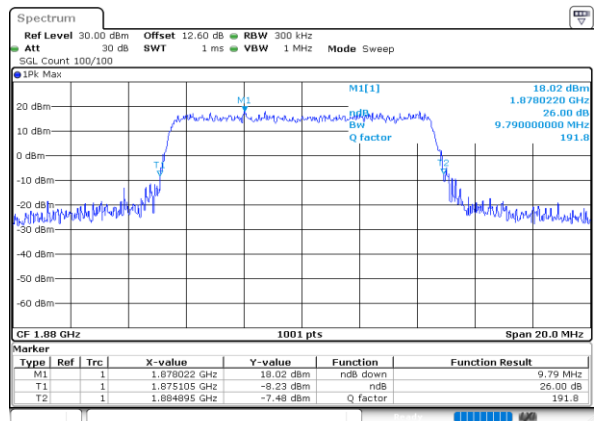
Date: 19 DEC 2023 12:12:17

Middle Channel / 10MHz / QPSK



Date: 19 DEC 2023 12:19:27

Middle Channel / 10MHz / 16QAM

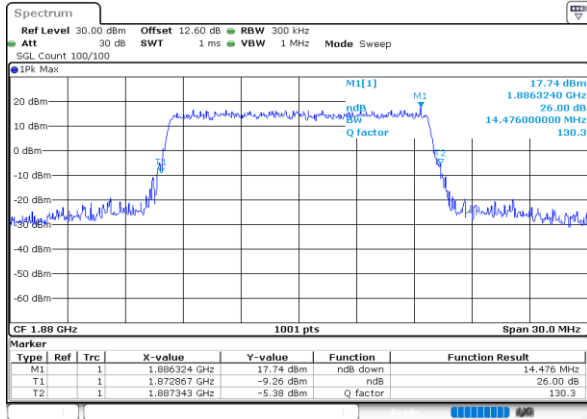


Date: 19 DEC 2023 12:19:51



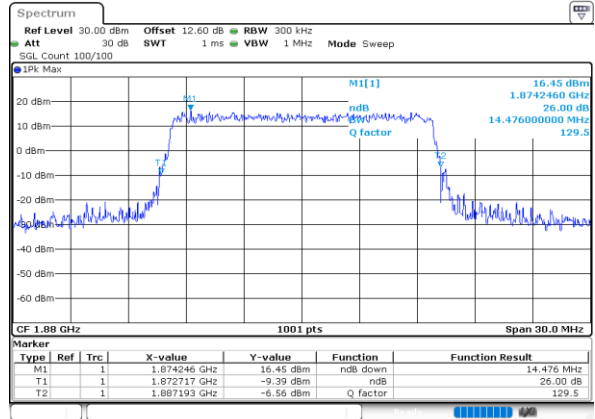
LTE Band 25

Middle Channel / 15MHz / QPSK



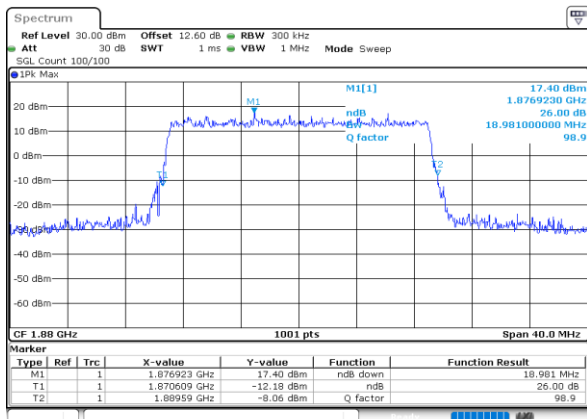
Date: 19. DEC. 2023 12:29:31

Middle Channel / 15MHz / 16QAM



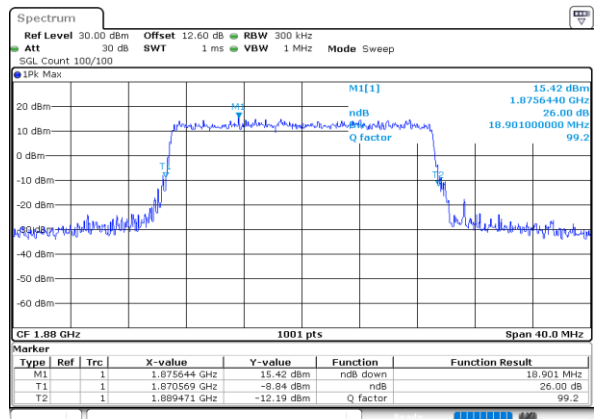
Date: 19. DEC. 2023 12:29:54

Middle Channel / 20MHz / QPSK



Date: 19. DEC. 2023 12:34:34

Middle Channel / 20MHz / 16QAM



Date: 19. DEC. 2023 12:34:57