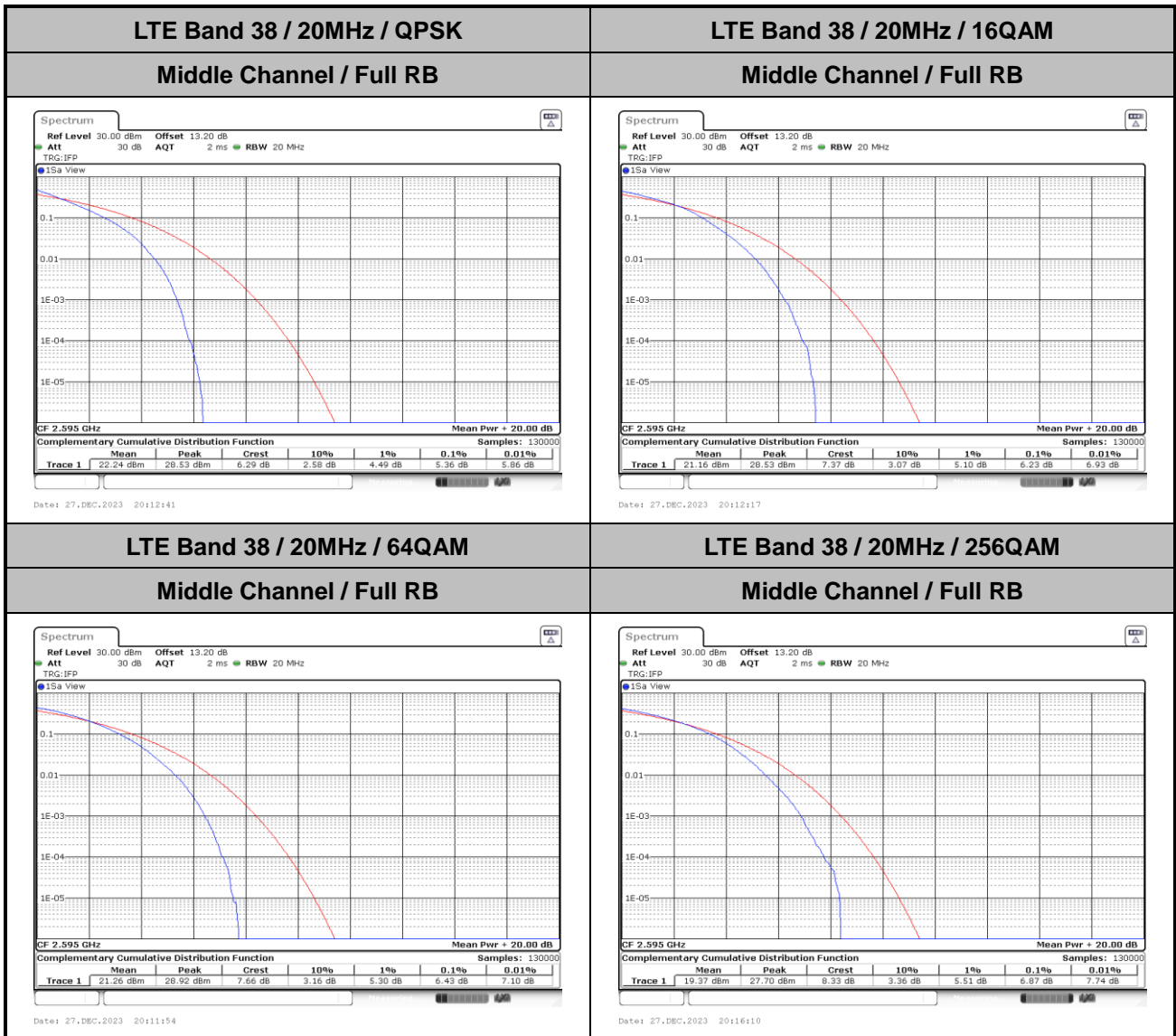




LTE Band 38

Peak-to-Average Ratio

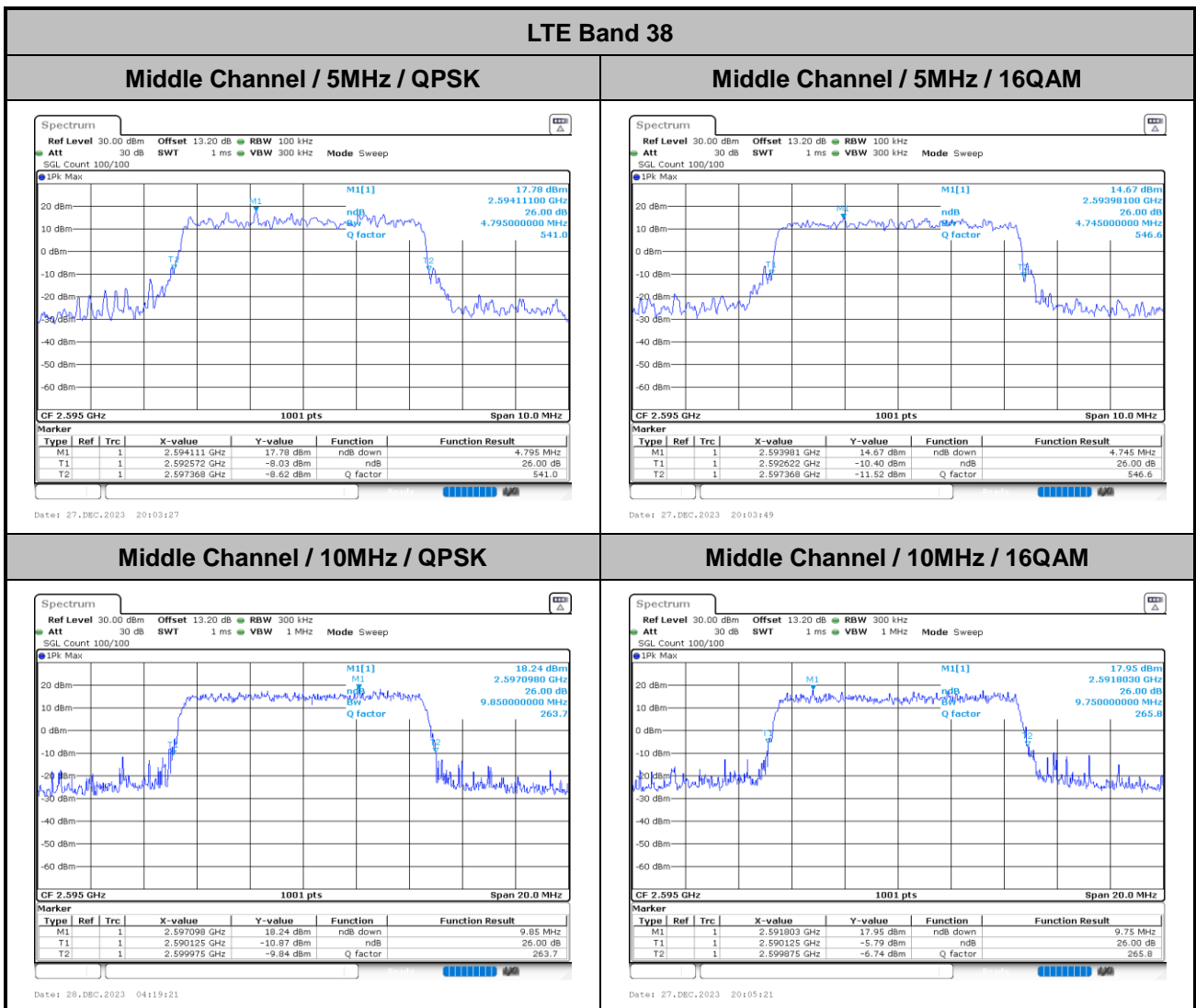
Mode	LTE Band 38 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.36	6.23	6.43	6.87	PASS





26dB Bandwidth

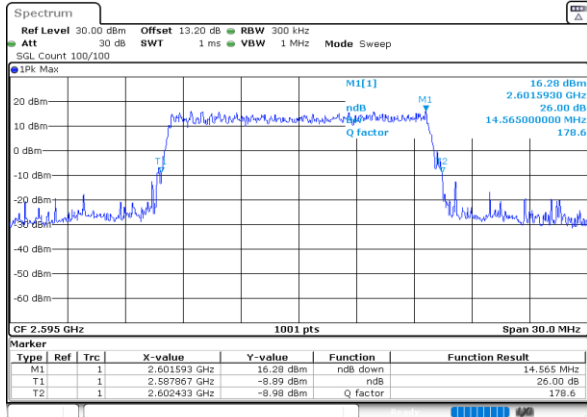
Mode	LTE Band 38 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.79	4.74	9.84	9.75	14.56	14.23	18.82	18.86
Mode	LTE Band 38 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.88	4.93	9.78	9.78	14.53	14.35	18.78	18.74





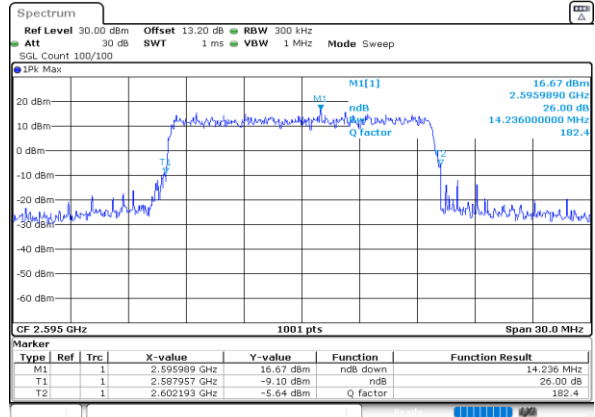
LTE Band 38

Middle Channel / 15MHz / QPSK



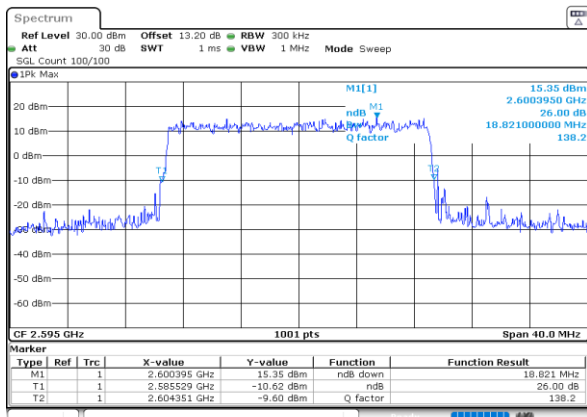
Date: 28 DEC 2023 04:20:55

Middle Channel / 15MHz / 16QAM



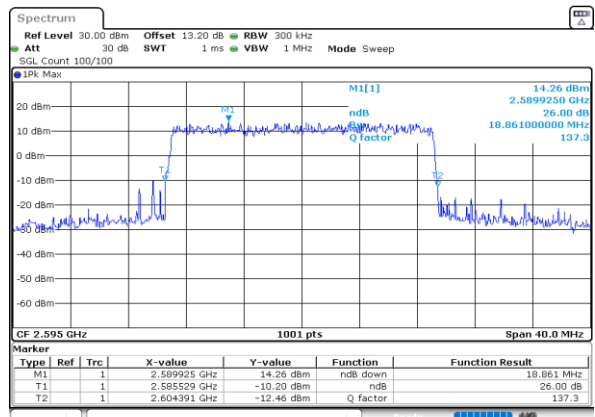
Date: 28 DEC 2023 04:21:22

Middle Channel / 20MHz / QPSK



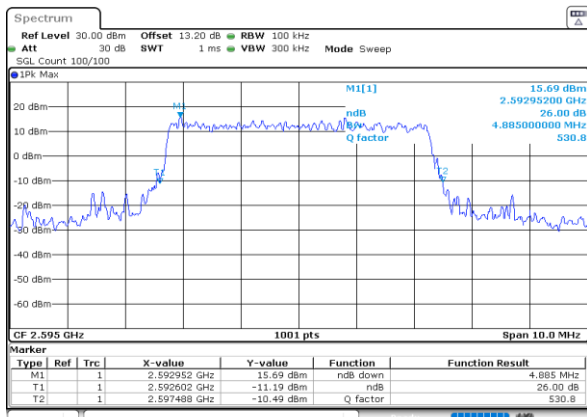
Date: 27 DEC 2023 20:08:02

Middle Channel / 20MHz / 16QAM



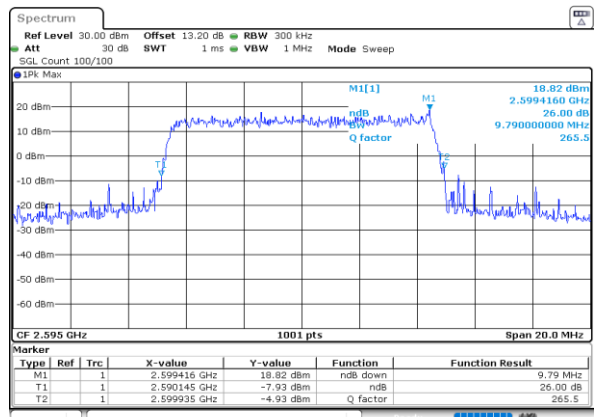
Date: 28 DEC 2023 04:25:59

Middle Channel / 5MHz / 64QAM



Date: 27 DEC 2023 20:09:11

Middle Channel / 10MHz / 64QAM

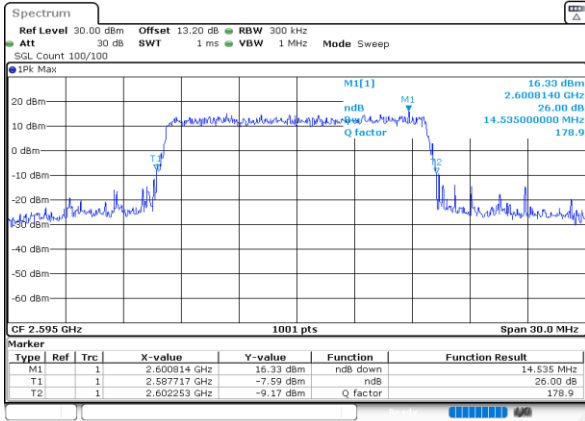


Date: 27 DEC 2023 20:09:57



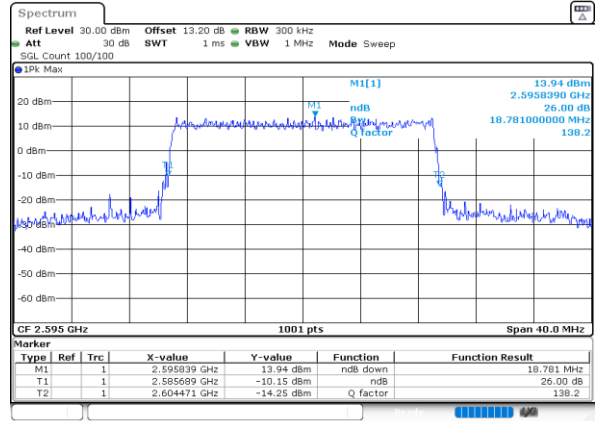
LTE Band 38

Middle Channel / 15MHz / 64QAM



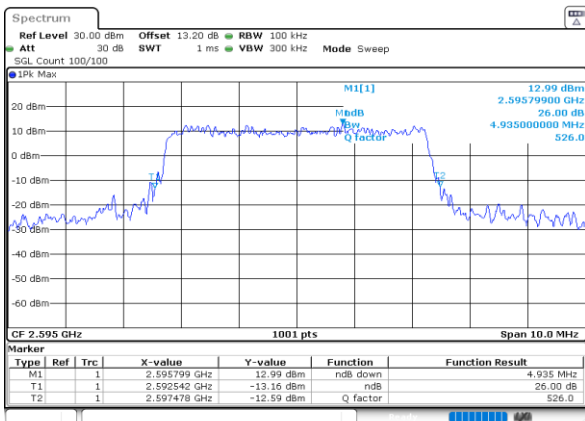
Date: 28. DEC. 2023 04:22:10

Middle Channel / 20MHz / 64QAM



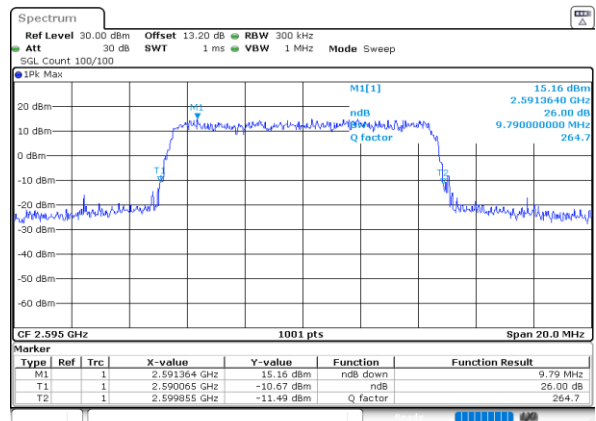
Date: 28. DEC. 2023 04:27:01

Middle Channel / 5MHz / 256QAM



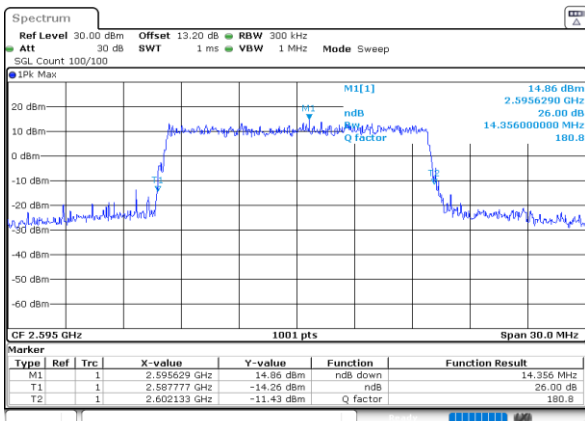
Date: 27. DEC. 2023 20:13:27

Middle Channel / 10MHz / 256QAM



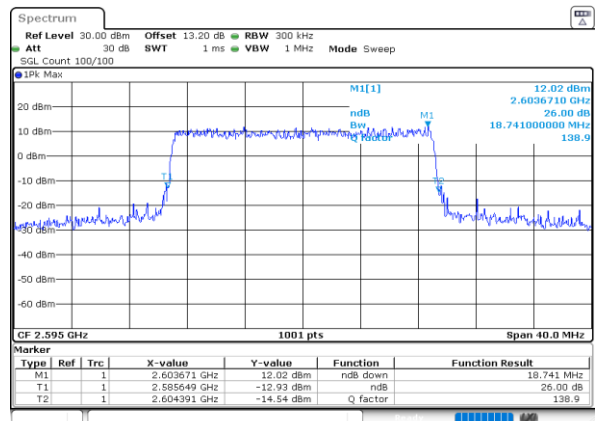
Date: 27. DEC. 2023 20:14:14

Middle Channel / 15MHz / 256QAM



Date: 27. DEC. 2023 20:15:00

Middle Channel / 20MHz / 256QAM

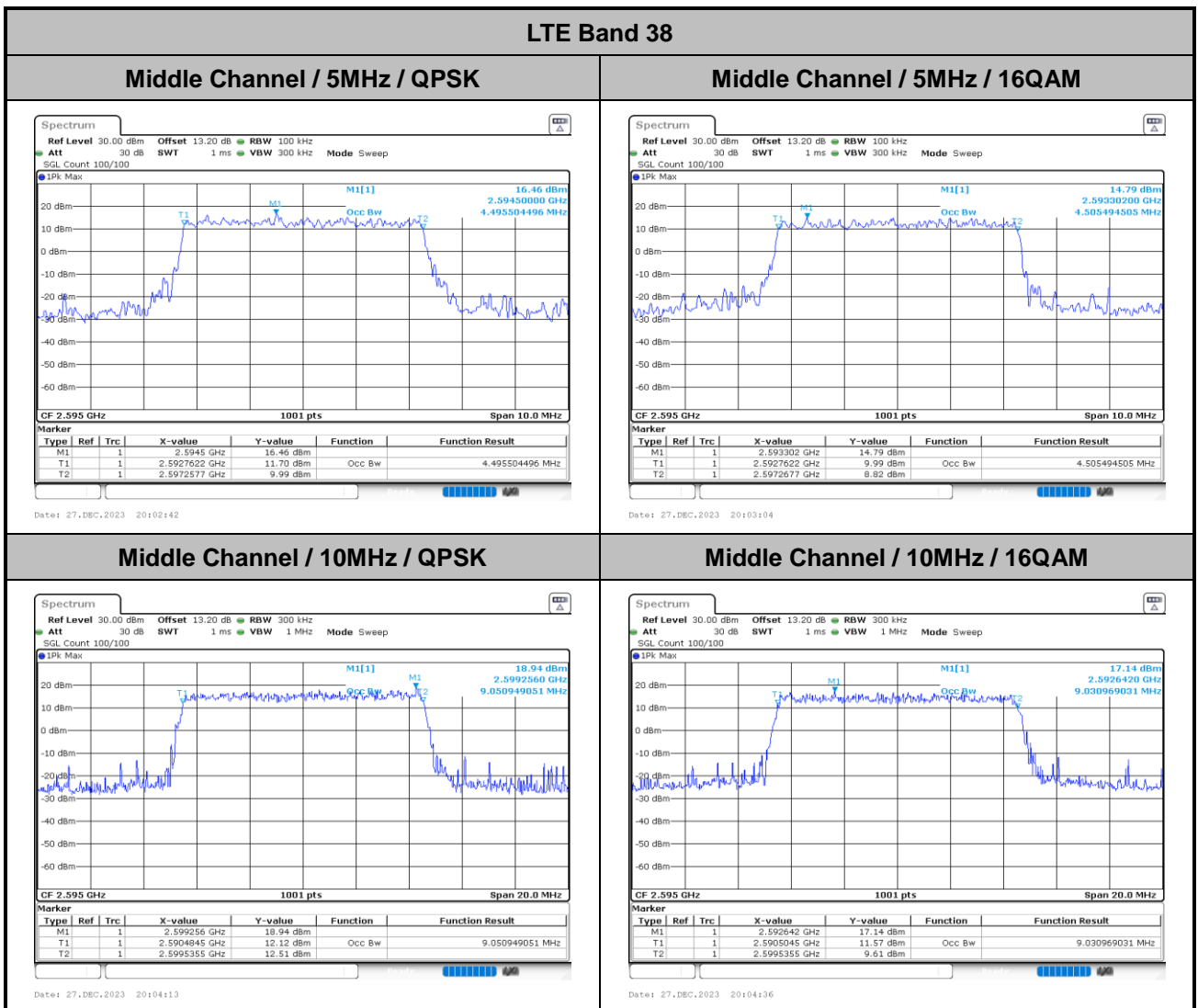


Date: 27. DEC. 2023 20:15:47



Occupied Bandwidth

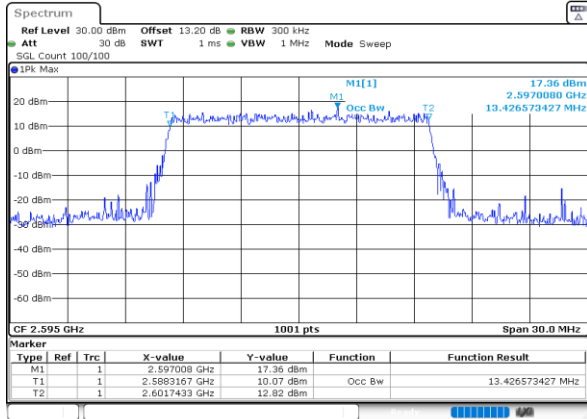
Mode	LTE Band 38 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.49	4.50	9.05	9.03	13.42	13.51	17.94	17.90
Mode	LTE Band 38 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.49	4.49	9.05	9.11	13.39	13.48	17.86	17.94





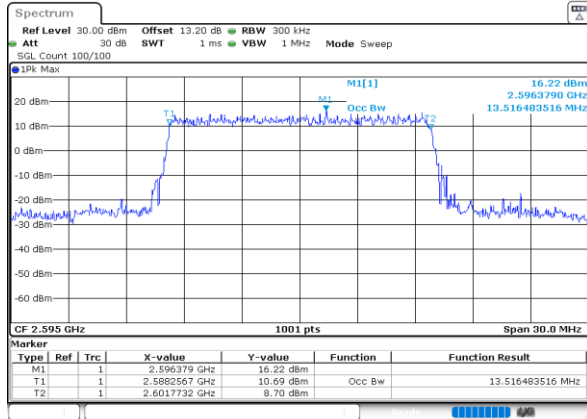
LTE Band 38

Middle Channel / 15MHz / QPSK



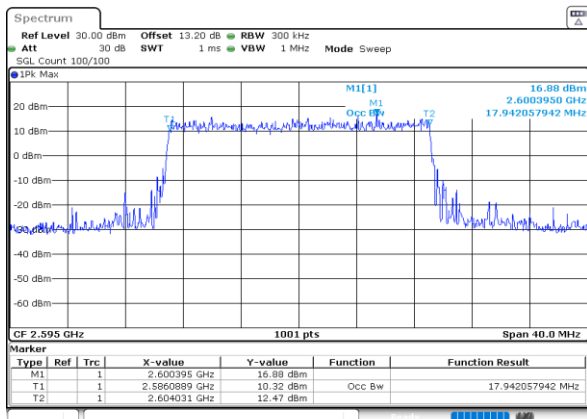
Date: 28. DEC. 2023 04:24:54

Middle Channel / 15MHz / 16QAM



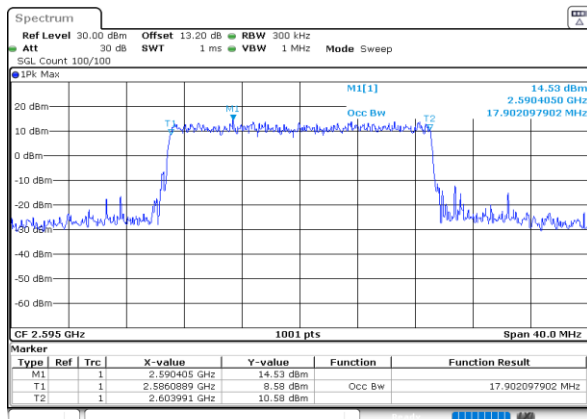
Date: 27. DEC. 2023 20:06:08

Middle Channel / 20MHz / QPSK



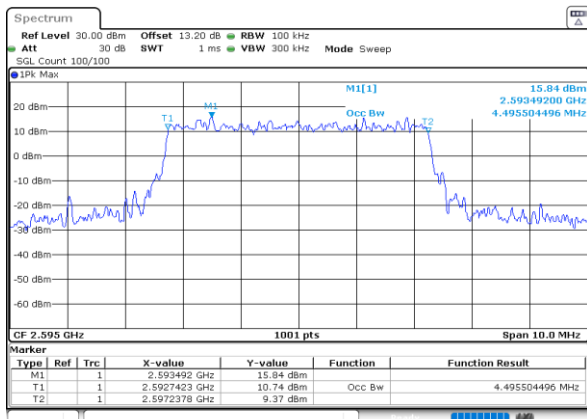
Date: 27. DEC. 2023 20:07:17

Middle Channel / 20MHz / 16QAM



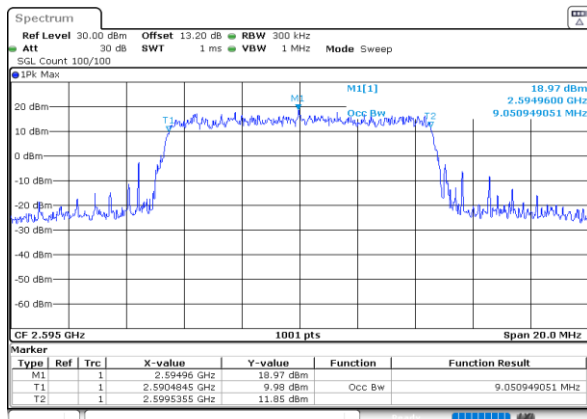
Date: 27. DEC. 2023 20:07:39

Middle Channel / 5MHz / 64QAM



Date: 27. DEC. 2023 20:08:48

Middle Channel / 10MHz / 64QAM

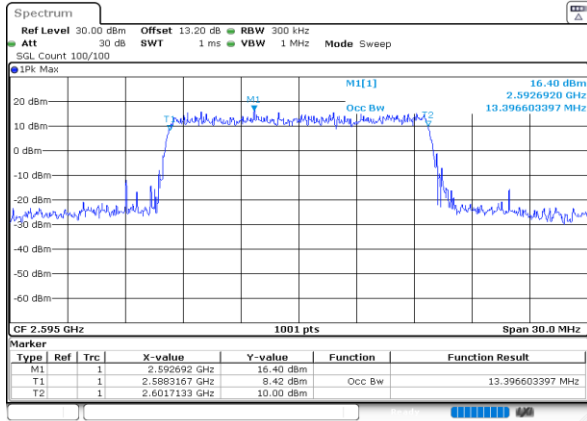


Date: 27. DEC. 2023 20:09:35



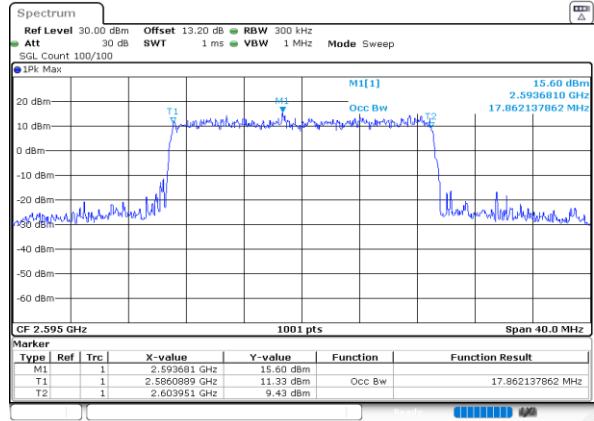
LTE Band 38

Middle Channel / 15MHz / 64QAM



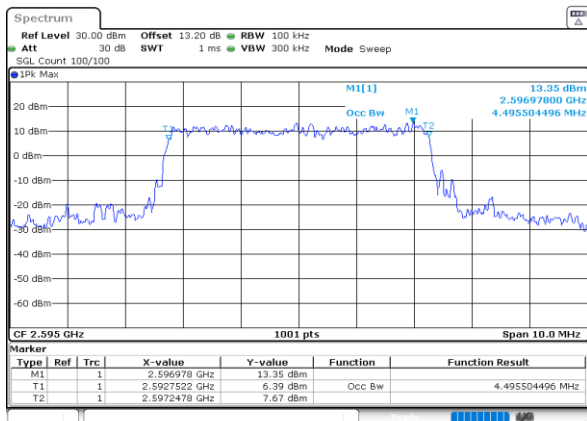
Date: 27.DEC.2023 20:10:21

Middle Channel / 20MHz / 64QAM



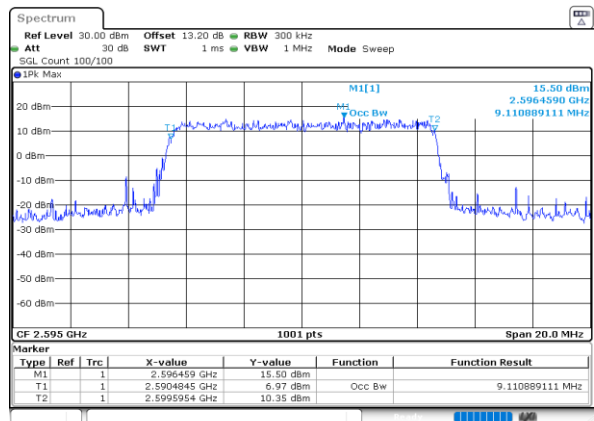
Date: 27.DEC.2023 20:11:08

Middle Channel / 5MHz / 256QAM



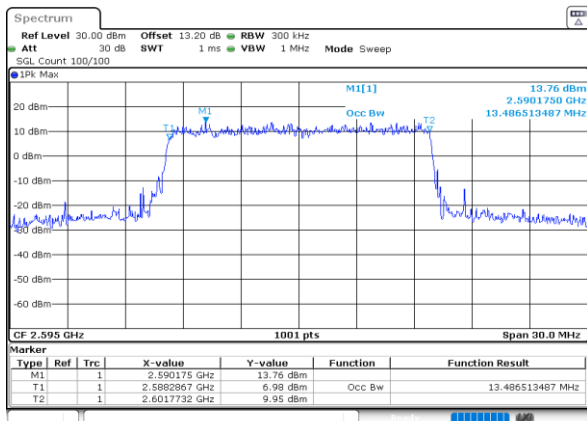
Date: 27.DEC.2023 20:13:05

Middle Channel / 10MHz / 256QAM



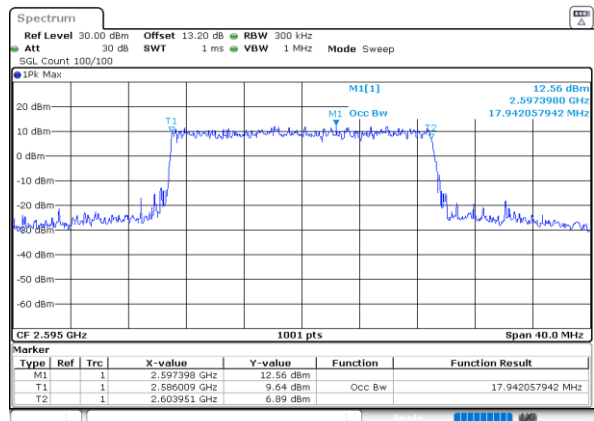
Date: 27.DEC.2023 20:13:51

Middle Channel / 15MHz / 256QAM



Date: 27.DEC.2023 20:14:38

Middle Channel / 20MHz / 256QAM



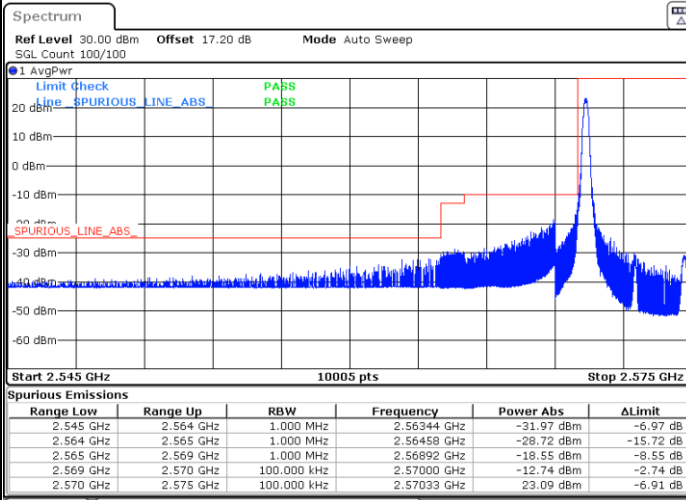
Date: 27.DEC.2023 20:15:24



Conducted Band Edge

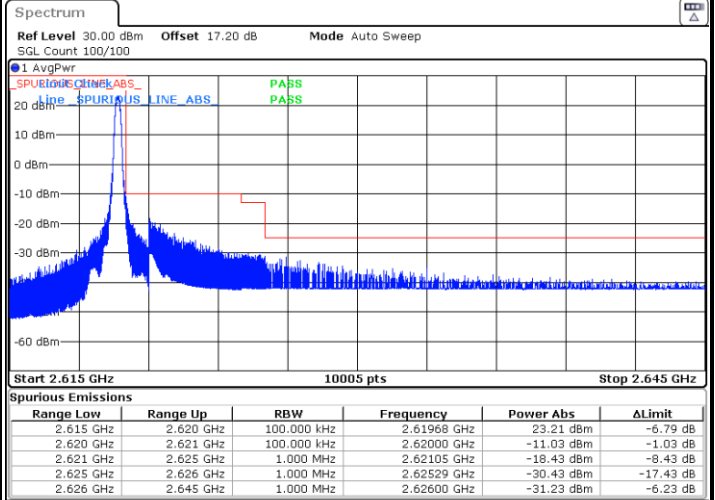
LTE Band 38 / 5MHz / QPSK

Lowest Band Edge / 1 RB



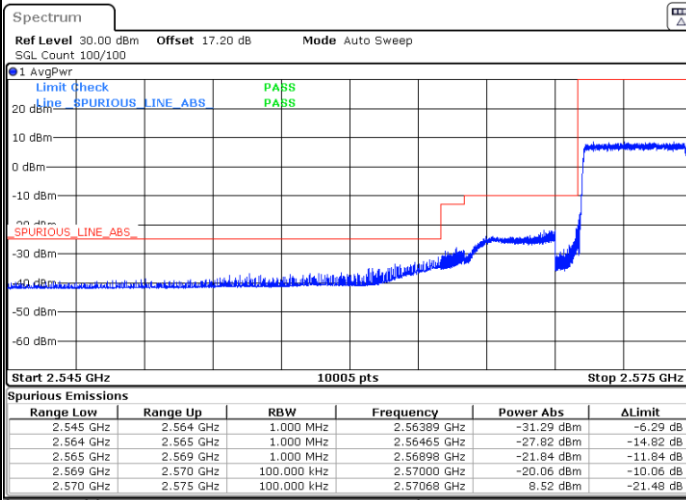
Date: 27.DEC.2023 19:19:37

Highest Band Edge / 1 RB



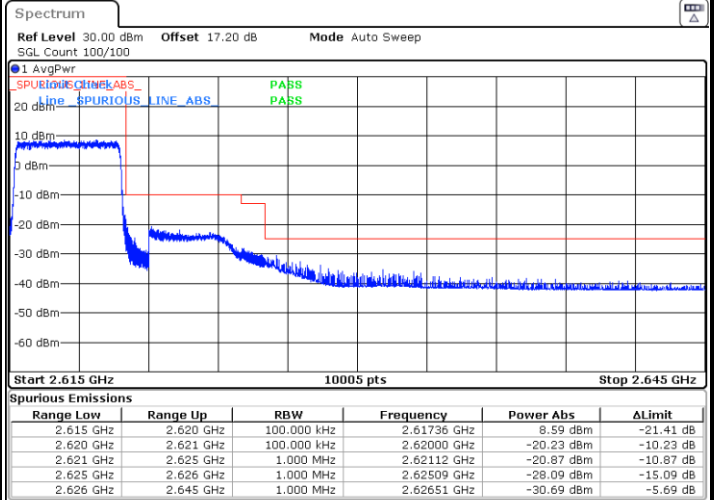
Date: 27.DEC.2023 19:24:52

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:21:22

Highest Band Edge / Full RB

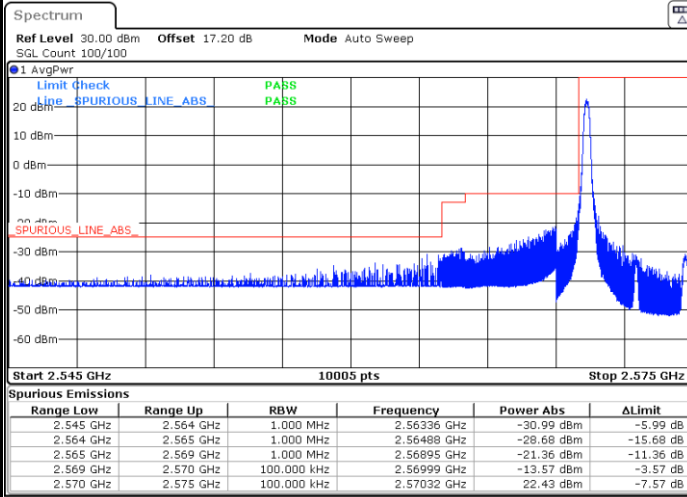


Date: 27.DEC.2023 19:23:07



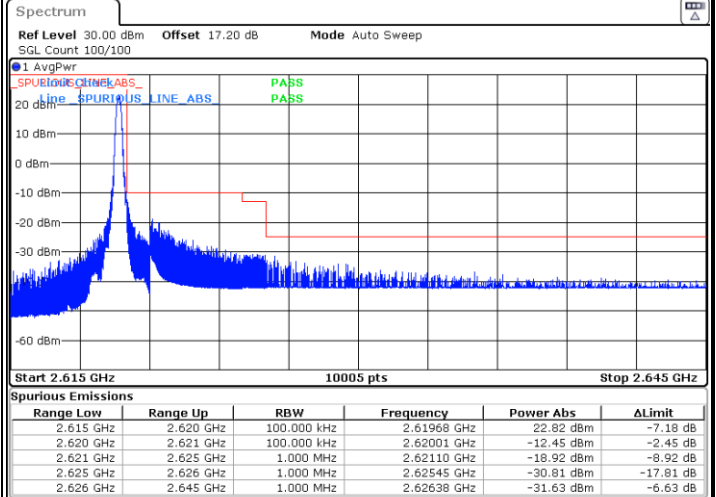
LTE Band 38 / 5MHz / 16QAM

Lowest Band Edge / 1RB



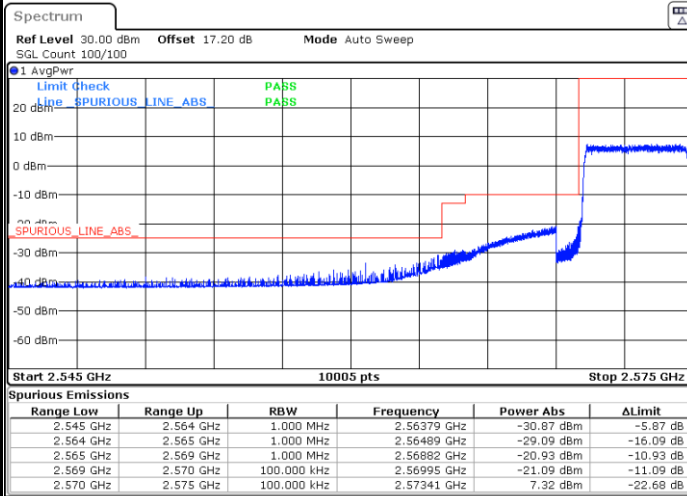
Date: 27.DEC.2023 19:20:29

Highest Band Edge / 1 RB



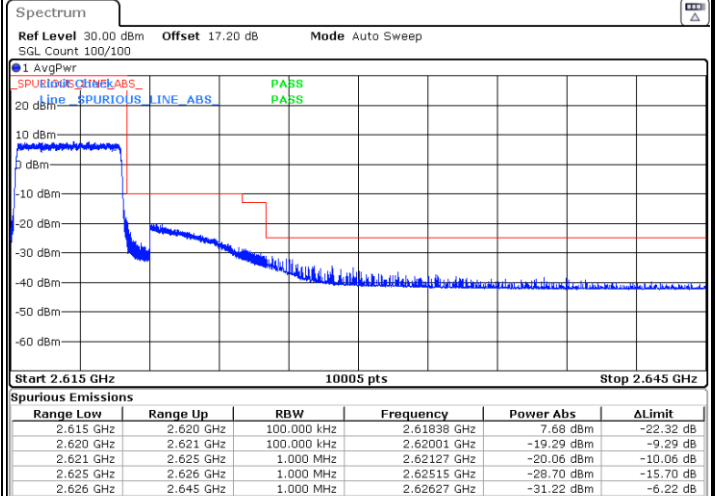
Date: 27.DEC.2023 19:25:44

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:22:14

Highest Band Edge / Full RB

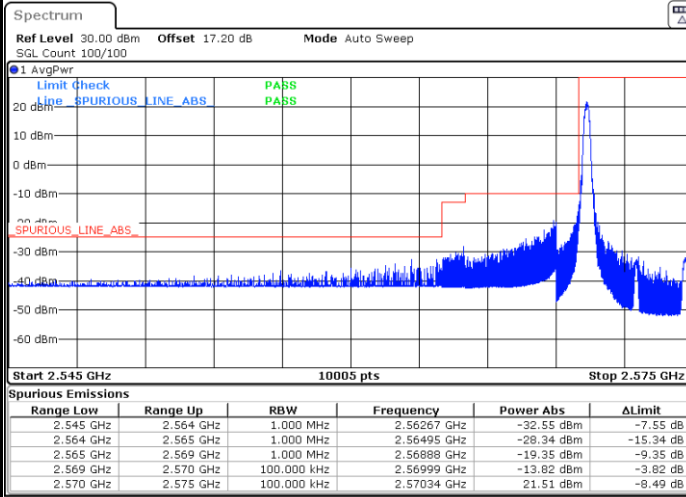


Date: 27.DEC.2023 19:23:59



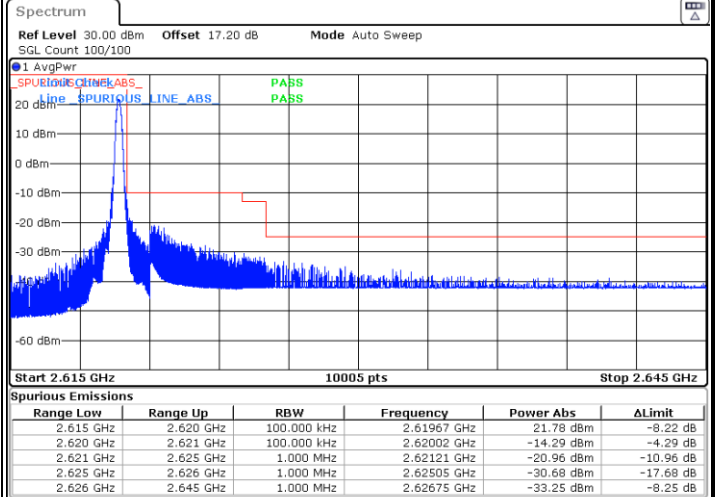
LTE Band 38 / 5MHz / 64QAM

Lowest Band Edge / 1RB



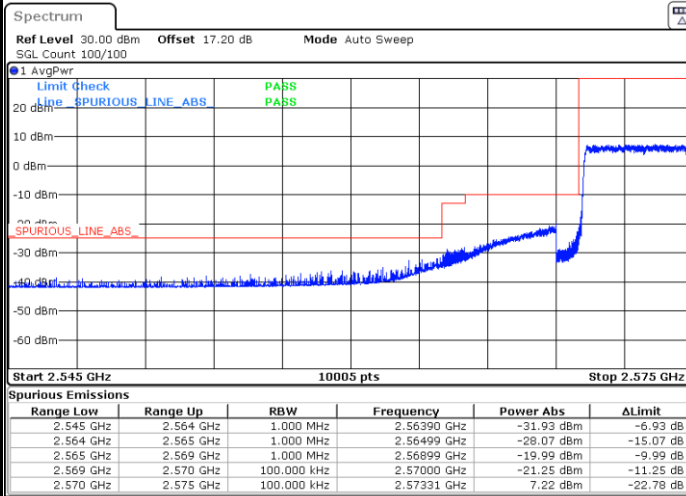
Date: 27.DEC.2023 19:26:36

Highest Band Edge / 1 RB



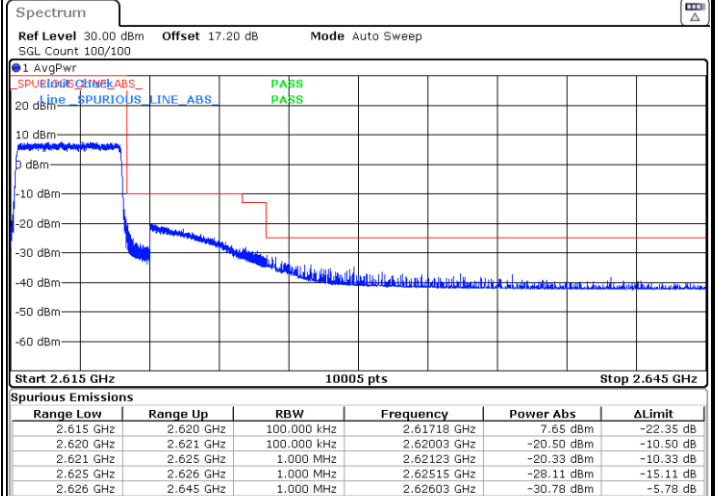
Date: 27.DEC.2023 19:29:14

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:27:29

Highest Band Edge / Full RB

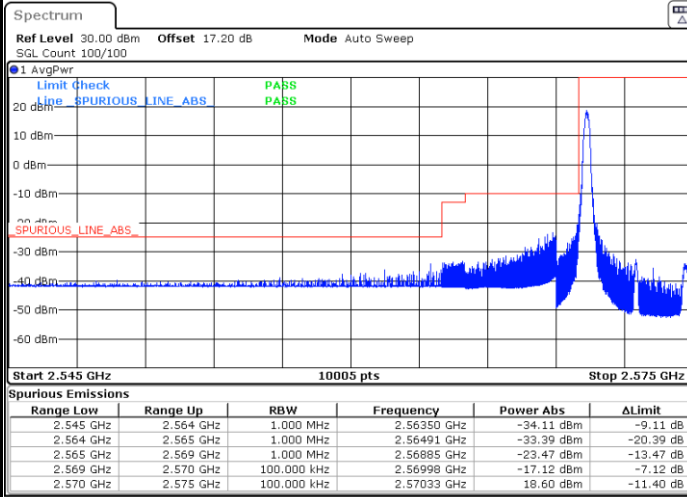


Date: 27.DEC.2023 19:28:21



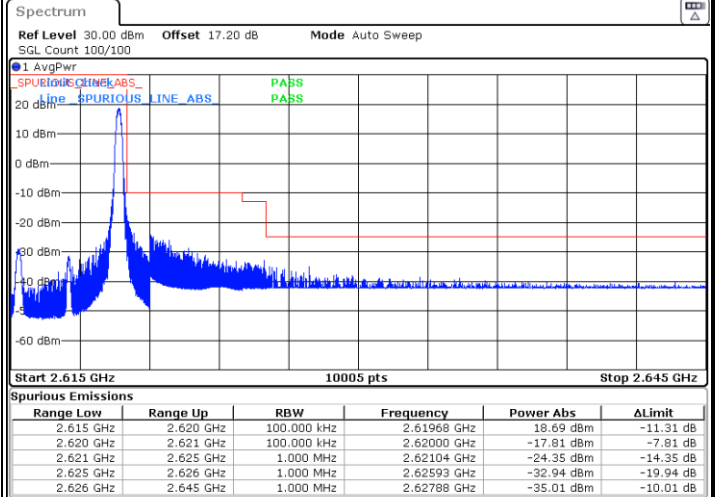
LTE Band 38 / 5MHz / 256QAM

Lowest Band Edge / 1RB



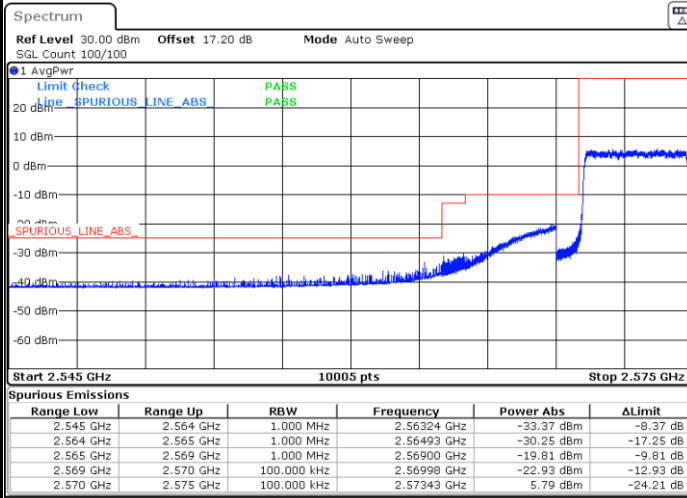
Date: 27.DEC.2023 19:50:18

Highest Band Edge / 1 RB



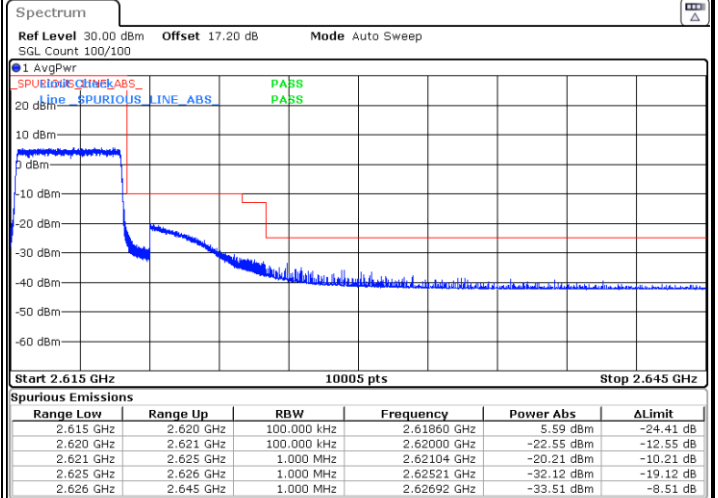
Date: 27.DEC.2023 19:53:02

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:51:13

Highest Band Edge / Full RB

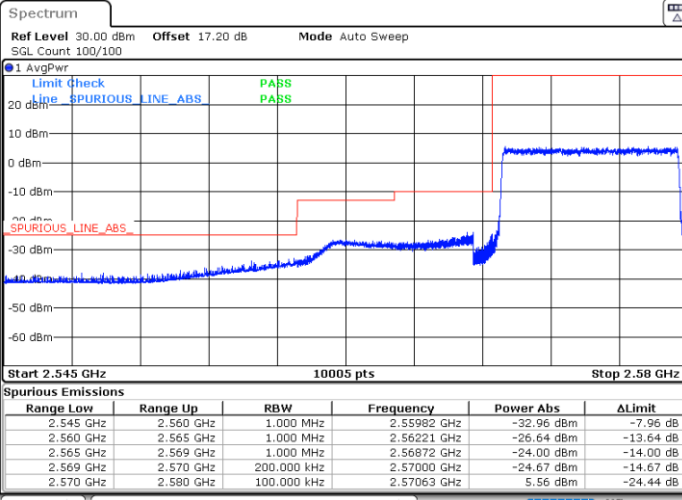


Date: 27.DEC.2023 19:52:08



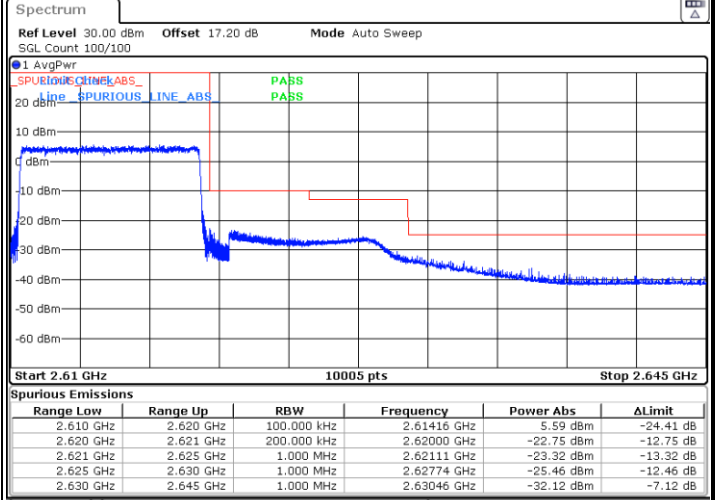
LTE Band 38 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:31:52

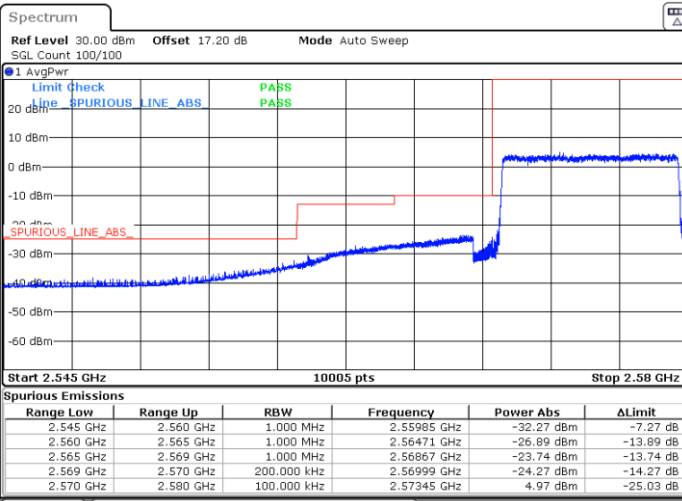
Highest Band Edge / Full RB



Date: 27.DEC.2023 19:33:37

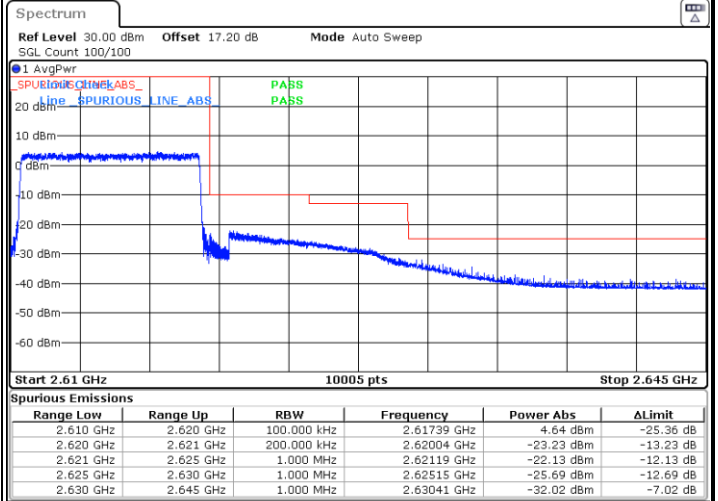
LTE Band 38 / 10MHz / 16QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:32:45

Highest Band Edge / Full RB

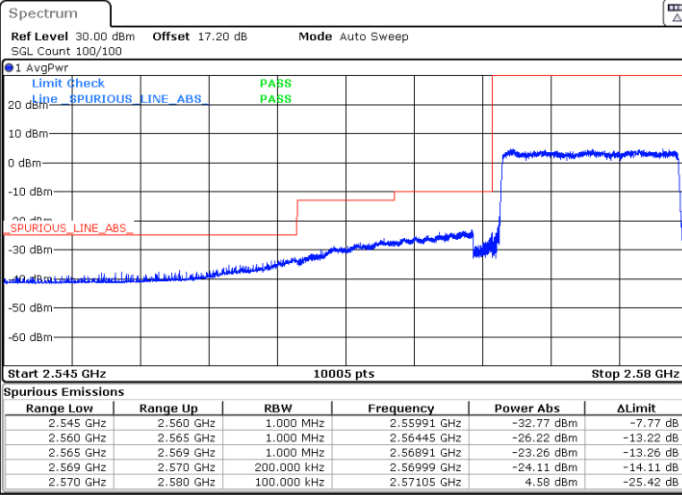


Date: 27.DEC.2023 19:34:29



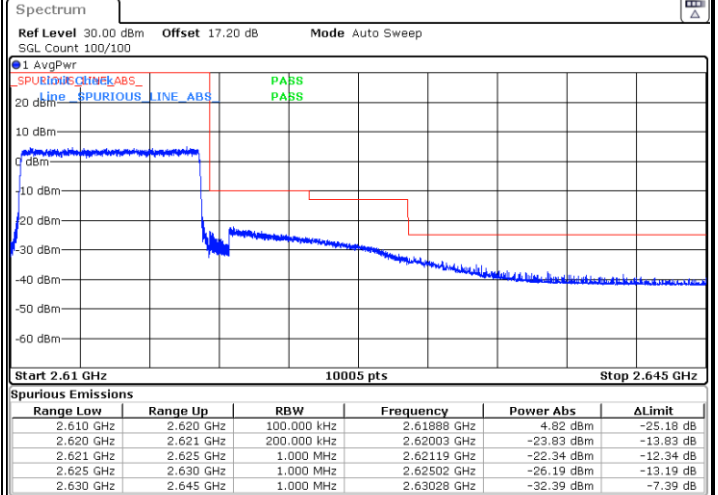
LTE Band 38 / 10MHz / 64QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:30:08

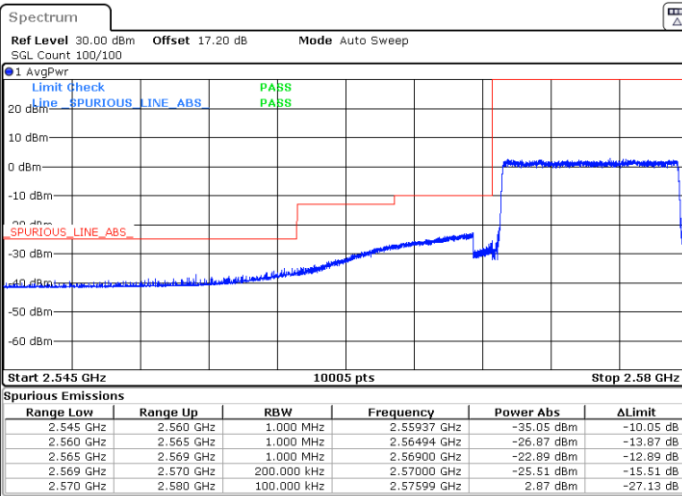
Highest Band Edge / Full RB



Date: 27.DEC.2023 19:31:00

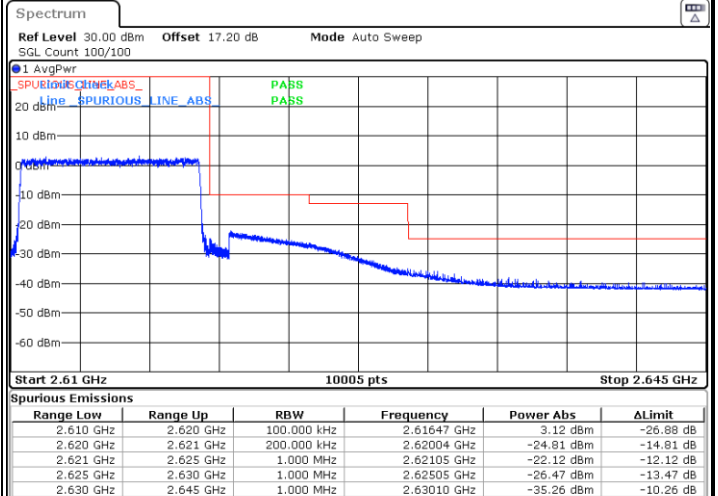
LTE Band 38 / 10MHz / 256QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:53:58

Highest Band Edge / Full RB

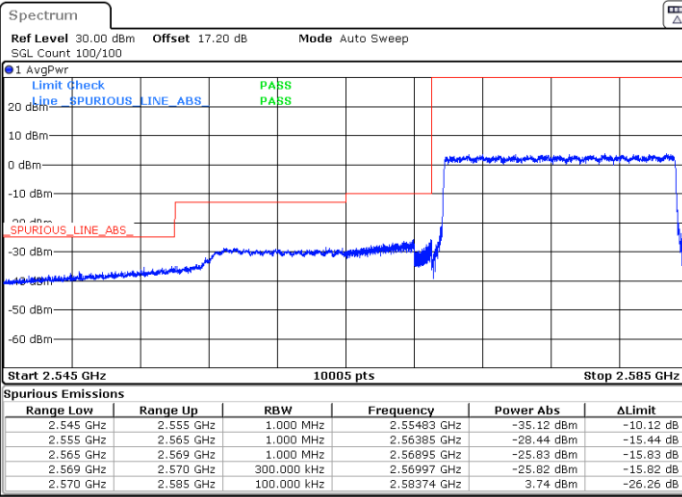


Date: 27.DEC.2023 19:54:52



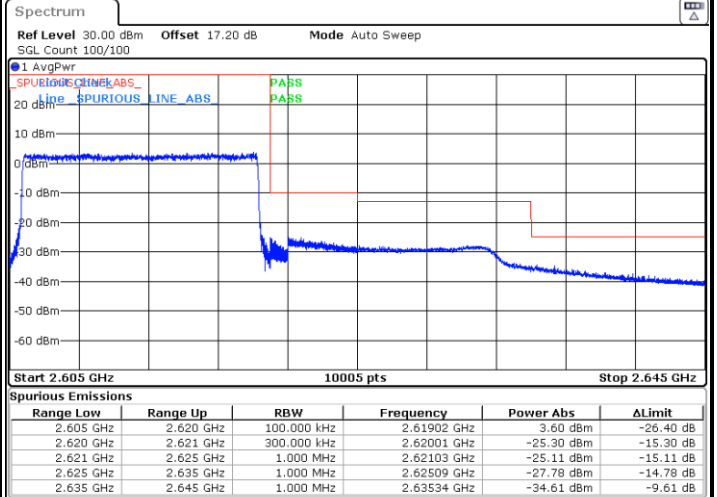
LTE Band 38 / 15MHz / QPSK

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:35:23

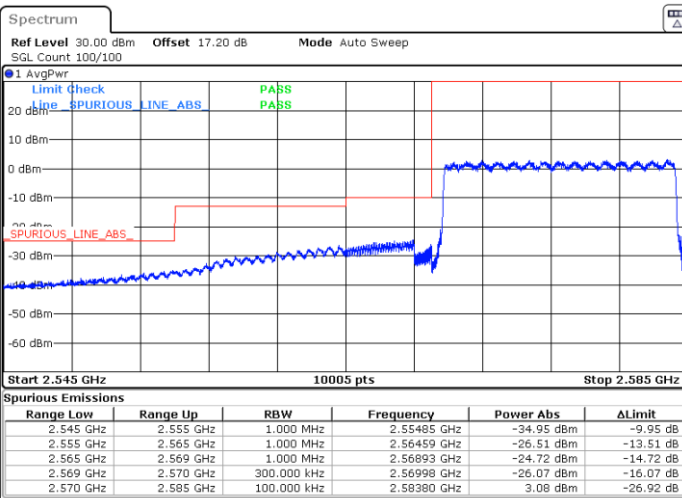
Highest Band Edge / Full RB



Date: 27.DEC.2023 19:37:08

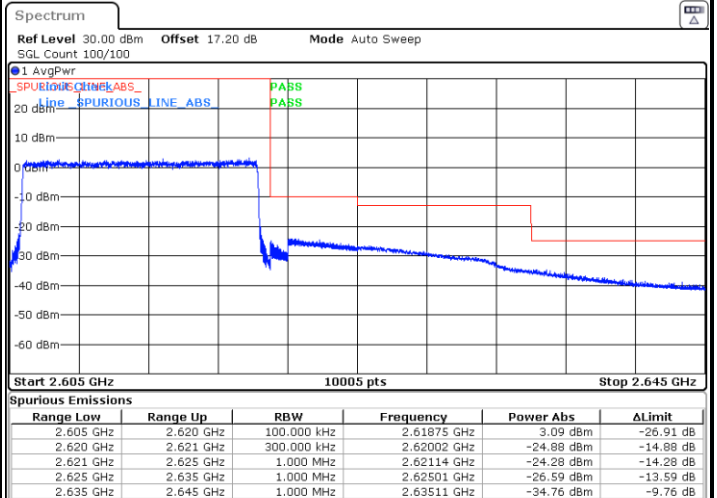
LTE Band 38 / 15MHz / 16QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:36:16

Highest Band Edge / Full RB

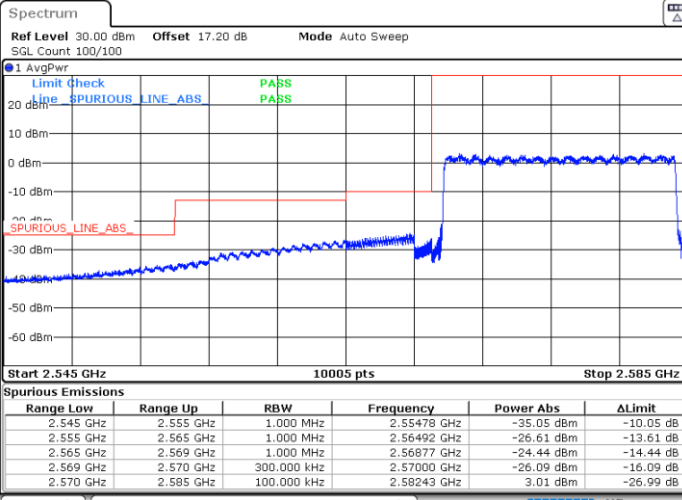


Date: 27.DEC.2023 19:38:01



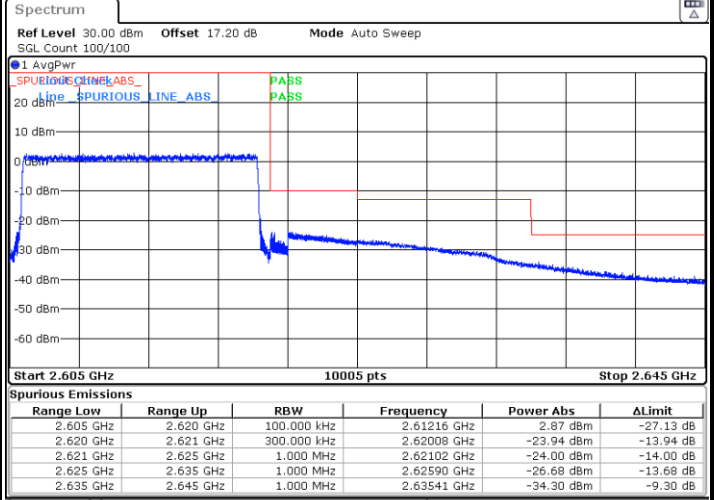
LTE Band 38 / 15MHz / 64QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:38:53

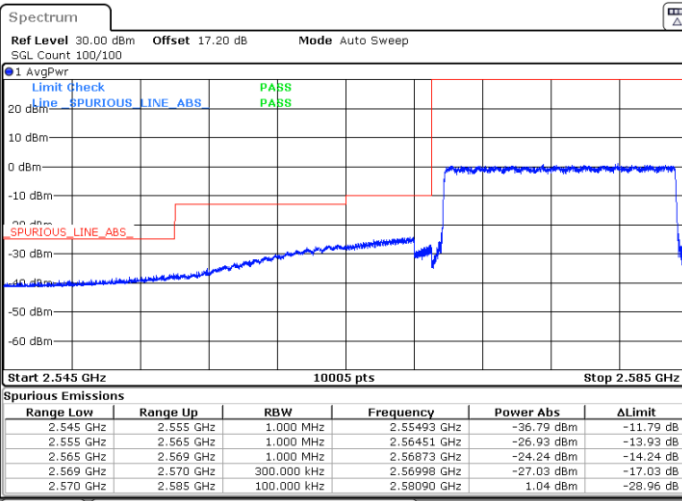
Highest Band Edge / Full RB



Date: 27.DEC.2023 19:39:45

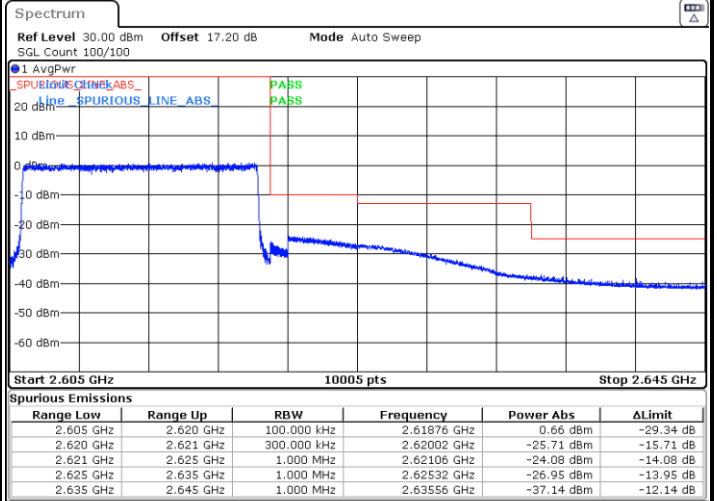
LTE Band 38 / 15MHz / 256QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:55:48

Highest Band Edge / Full RB



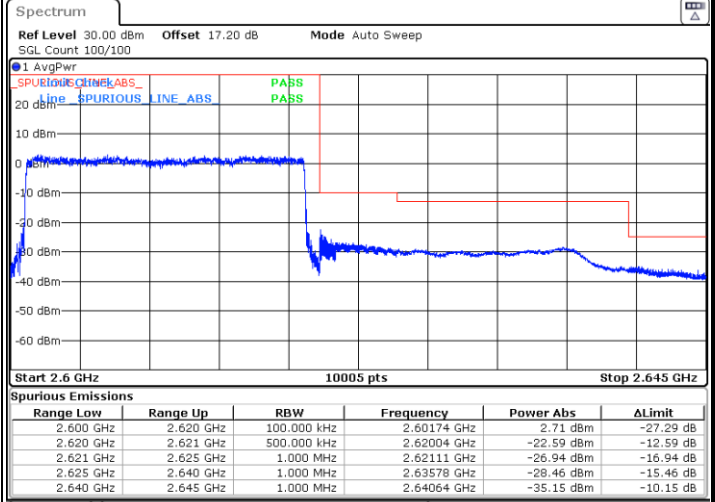
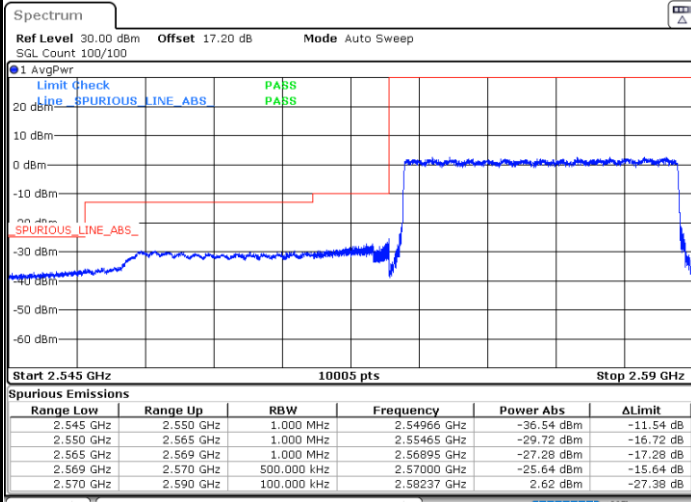
Date: 27.DEC.2023 19:56:42



LTE Band 38 / 20MHz / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



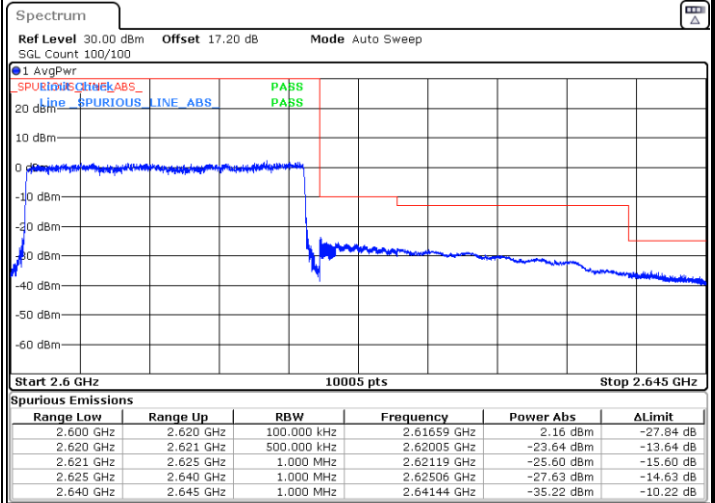
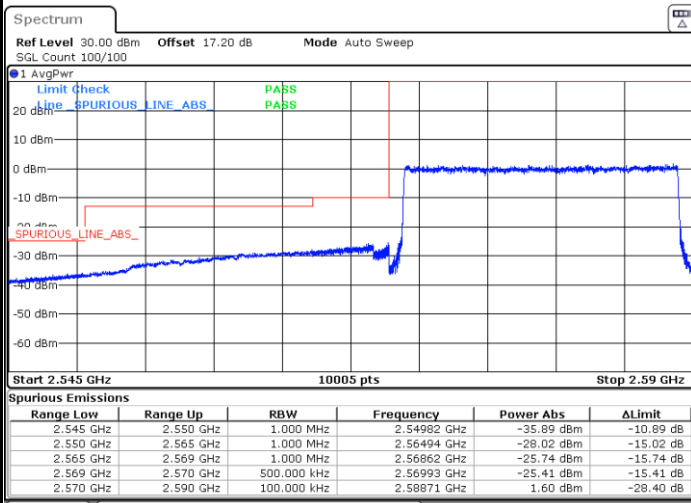
Date: 27.DEC.2023 19:40:39

Date: 27.DEC.2023 19:42:24

LTE Band 38 / 20MHz / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



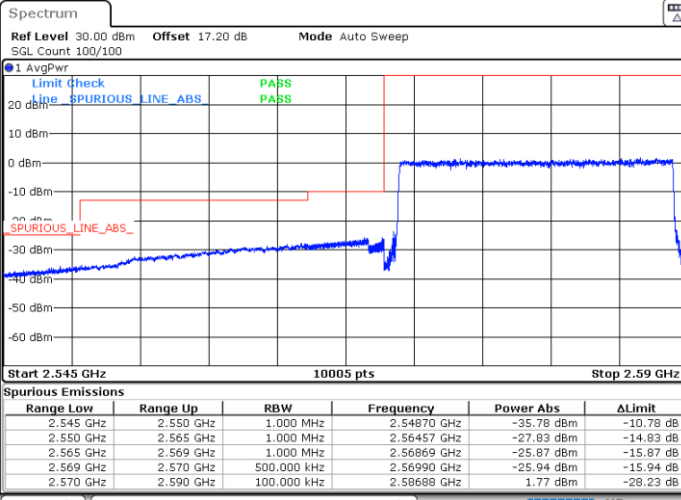
Date: 27.DEC.2023 19:41:32

Date: 28.DEC.2023 04:28:55



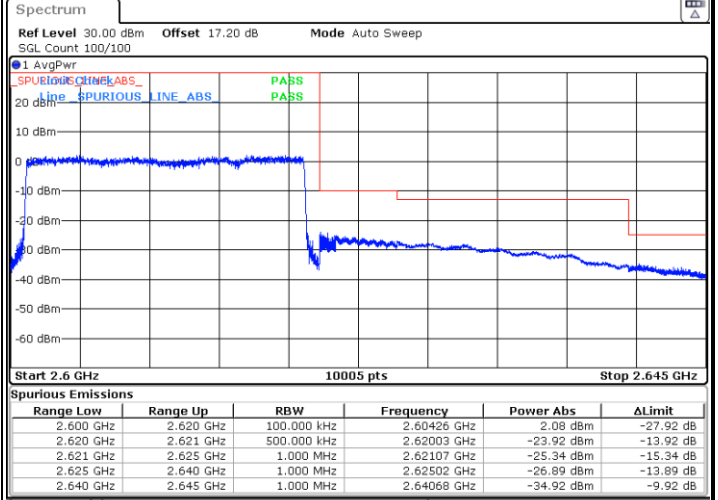
LTE Band 38 / 20MHz / 64QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:44:09

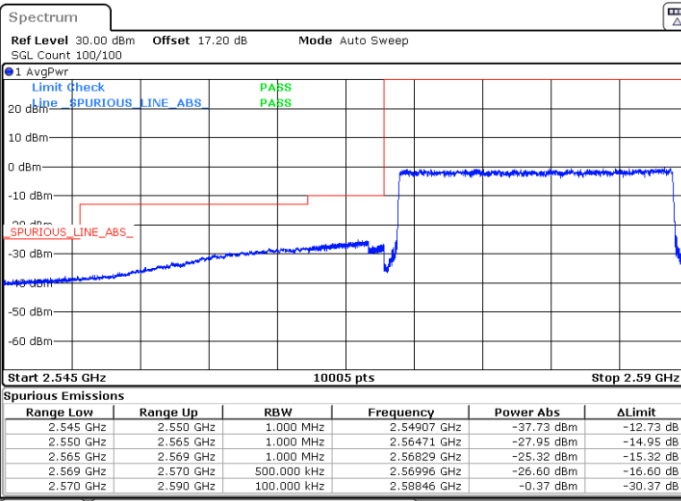
Highest Band Edge / Full RB



Date: 27.DEC.2023 19:45:01

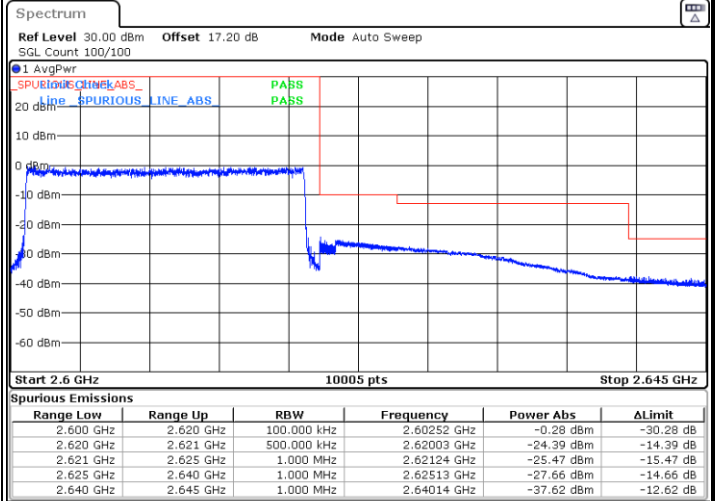
LTE Band 38 / 20MHz / 256QAM

Lowest Band Edge / Full RB



Date: 27.DEC.2023 19:57:38

Highest Band Edge / Full RB



Date: 28.DEC.2023 04:29:51

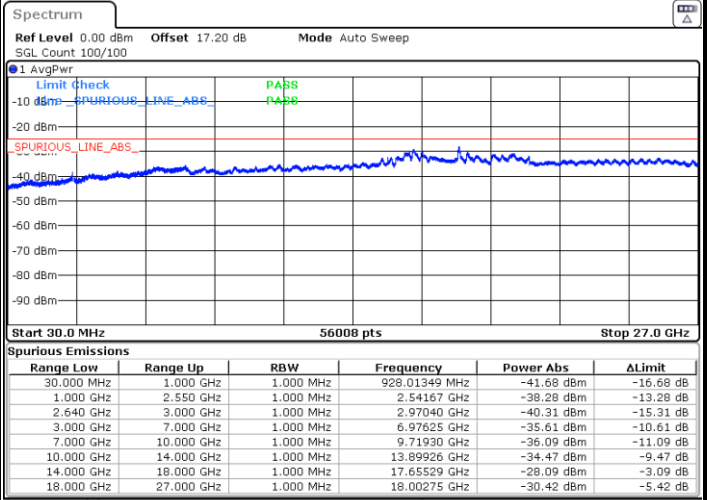
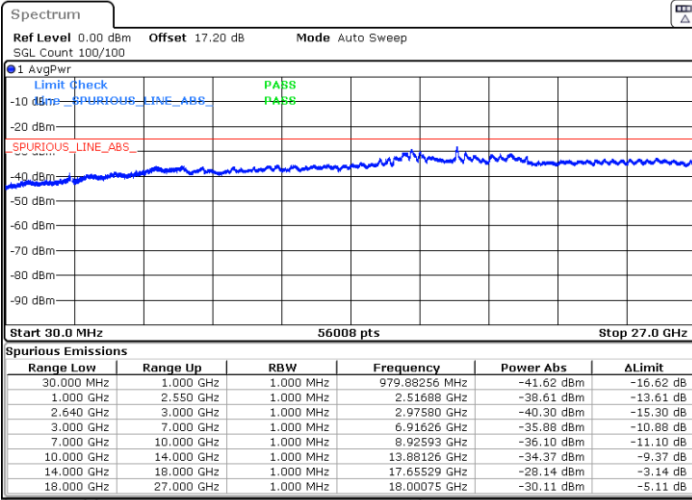


Conducted Spurious Emission

LTE Band 38 / 5MHz

Lowest Channel / QPSK

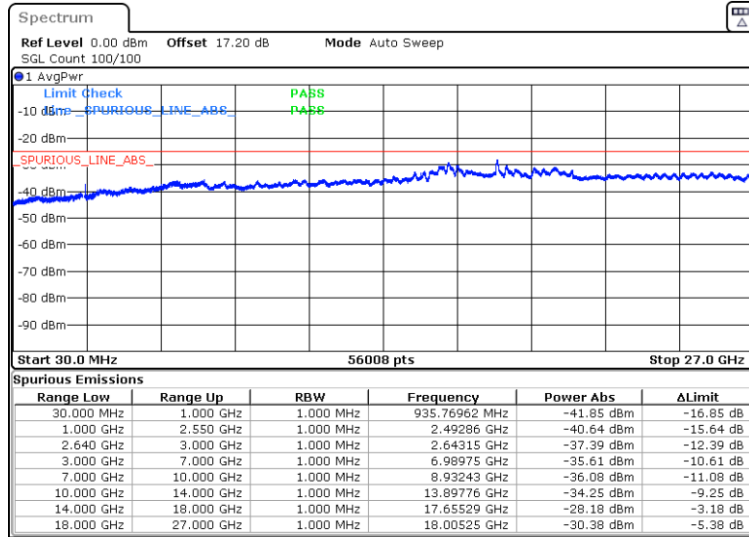
Middle Channel / QPSK



Date: 27.DEC.2023 19:46:15

Date: 27.DEC.2023 19:47:26

Highest Channel / QPSK



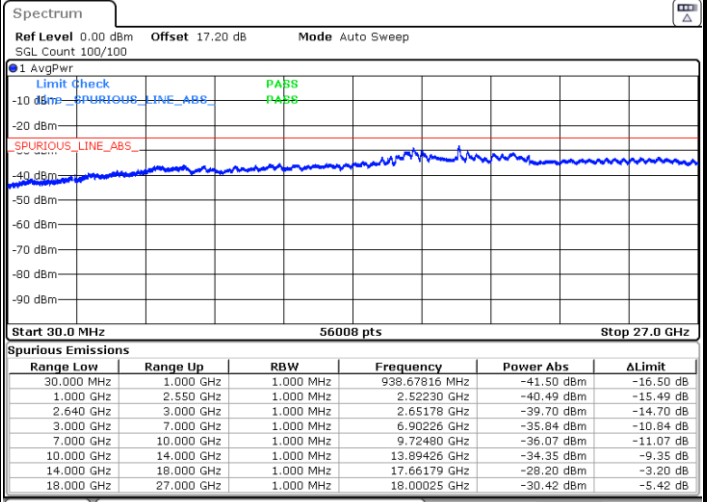
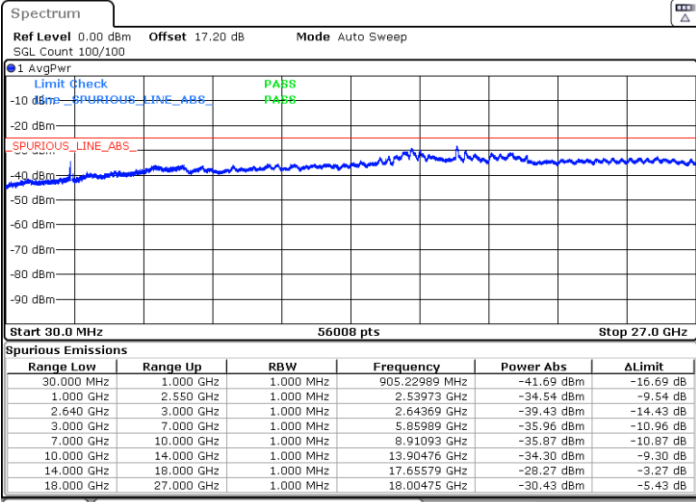
Date: 28.DEC.2023 04:17:46



LTE Band 38 / 10MHz

Lowest Channel / QPSK

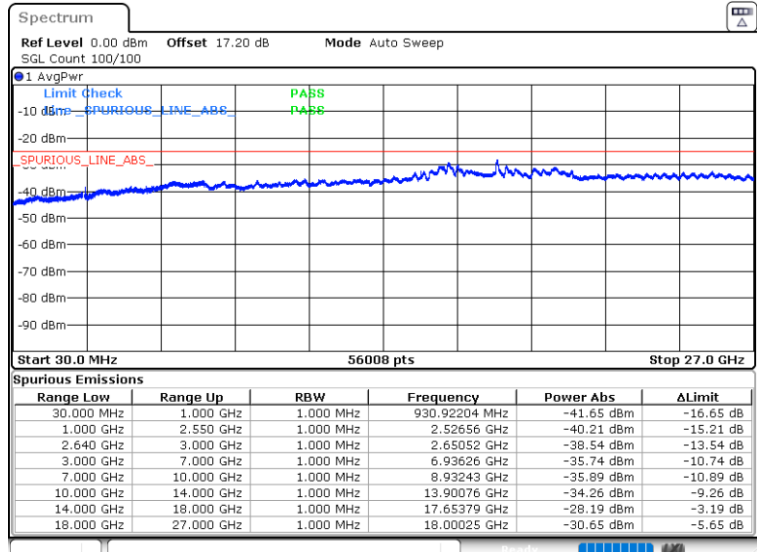
Middle Channel / QPSK



Date: 27.DEC.2023 20:17:23

Date: 27.DEC.2023 20:18:34

Highest Channel / QPSK



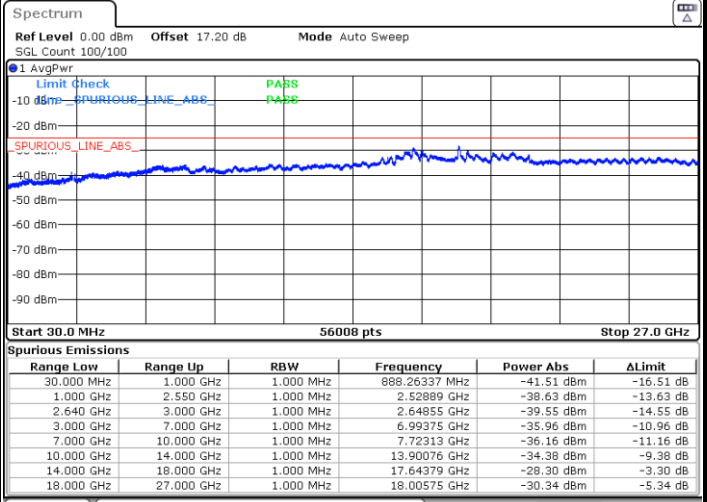
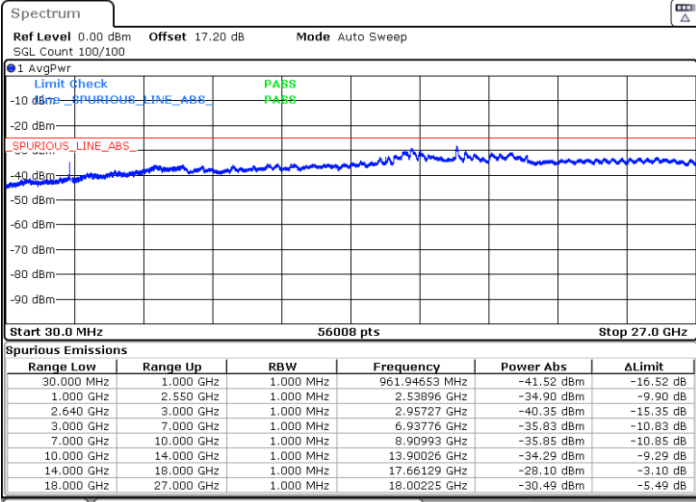
Date: 27.DEC.2023 20:19:45



LTE Band 38 / 15MHz

Lowest Channel / QPSK

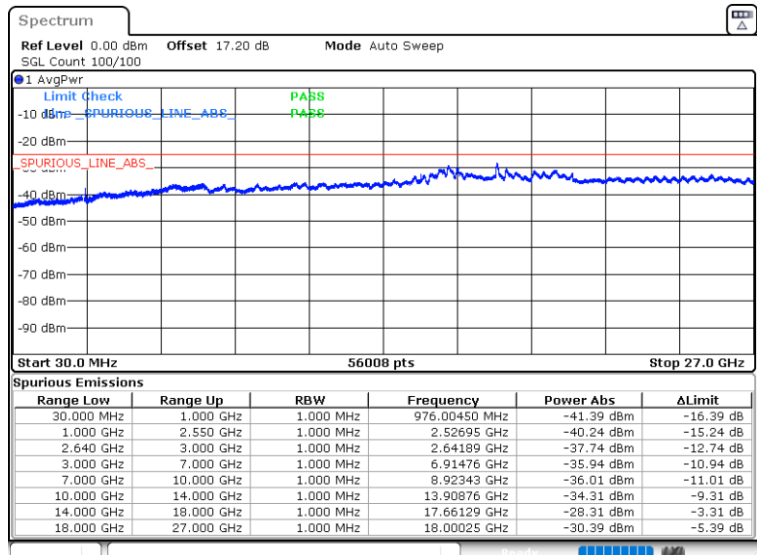
Middle Channel / QPSK



Date: 27.DEC.2023 20:20:59

Date: 27.DEC.2023 20:22:10

Highest Channel / QPSK

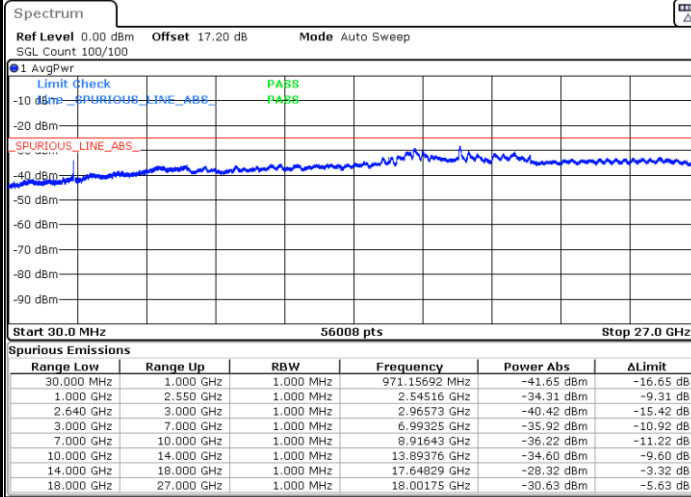


Date: 28.DEC.2023 04:23:47



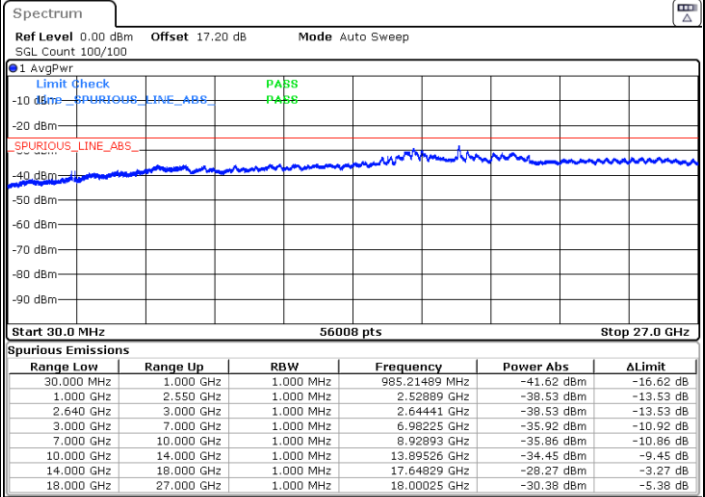
LTE Band 38 / 20MHz

Lowest Channel / QPSK



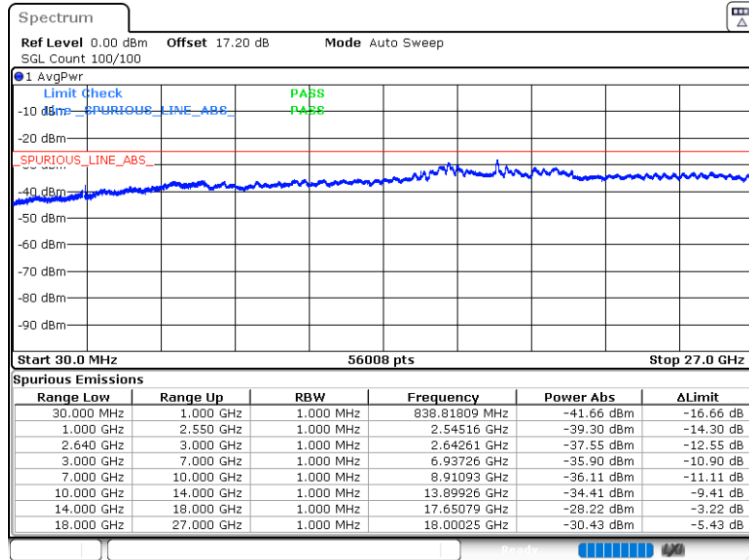
Date: 28.DEC.2023 04:42:13

Middle Channel / QPSK



Date: 27.DEC.2023 20:25:46

Highest Channel / QPSK



Date: 27.DEC.2023 20:26:57



Frequency Stability

Test Conditions		LTE Band 38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0011	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

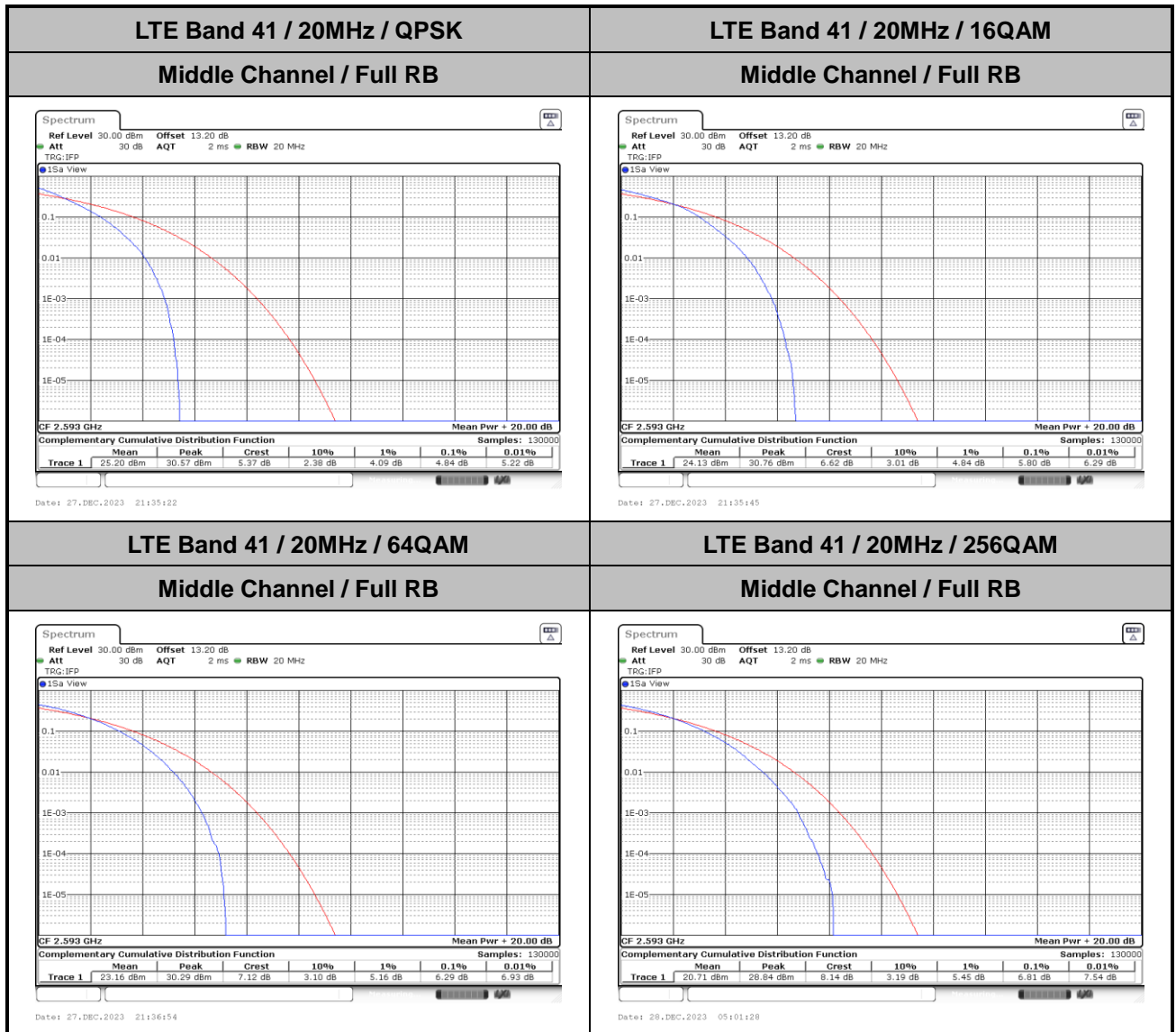
- 1. Normal Voltage = 3.8 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.2 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41(HPUE)

Peak-to-Average Ratio

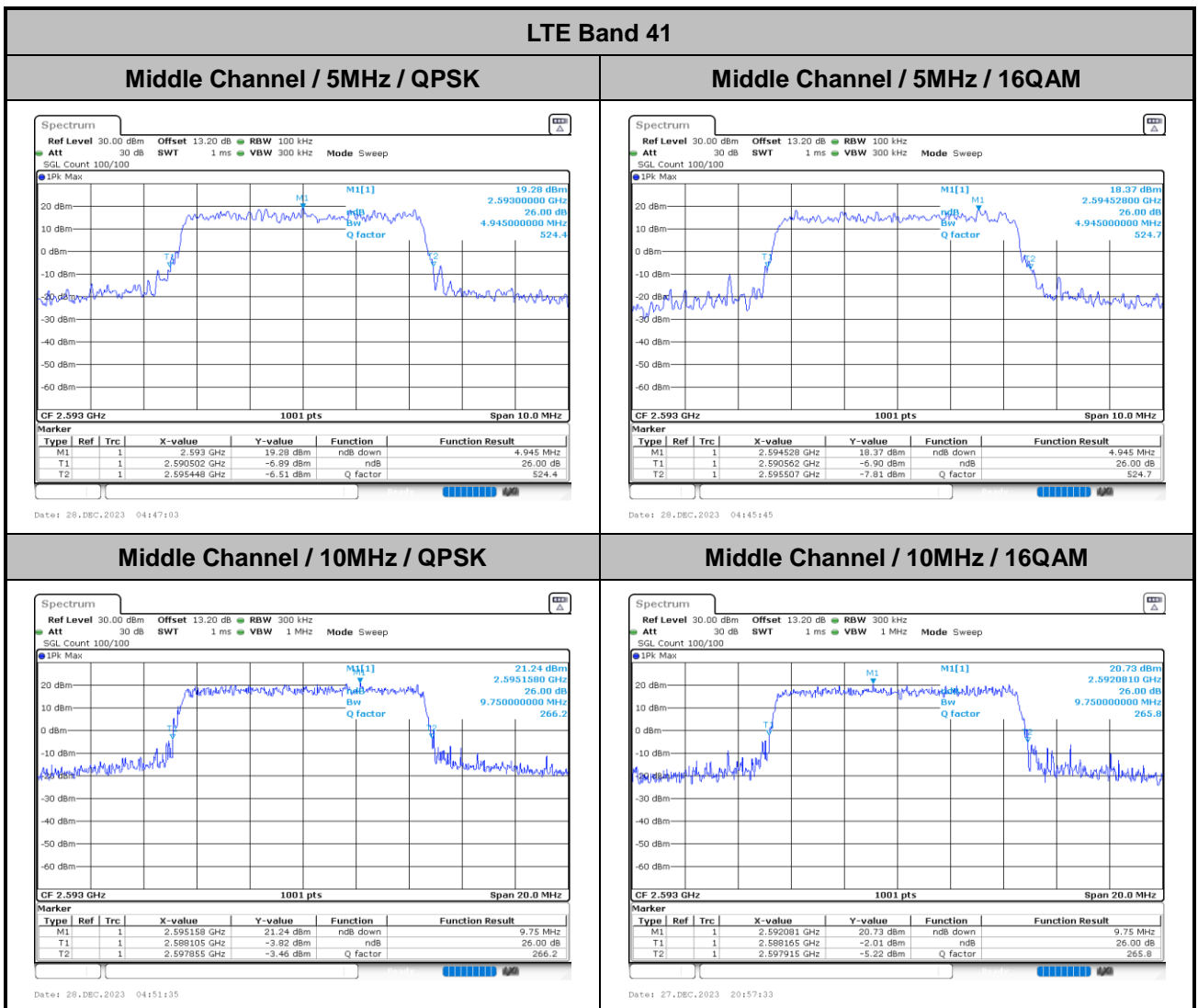
Mode	LTE Band 41 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.84	5.80	6.29	6.81	PASS





26dB Bandwidth

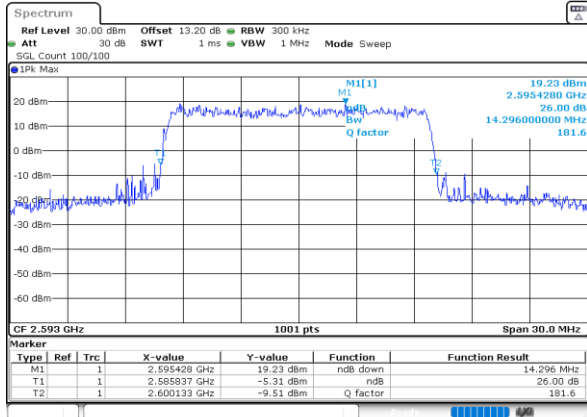
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.94	4.94	9.75	9.75	14.29	14.20	18.86	18.78
Mode	LTE Band 41 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	-	-	-	-	4.86	4.90	9.81	9.71	14.44	14.17	19.10	18.74





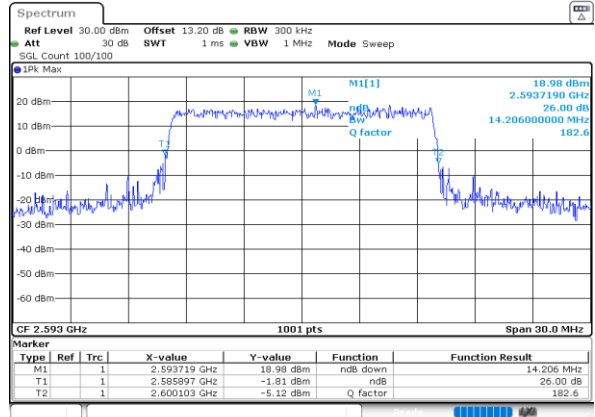
LTE Band 41

Middle Channel / 15MHz / QPSK



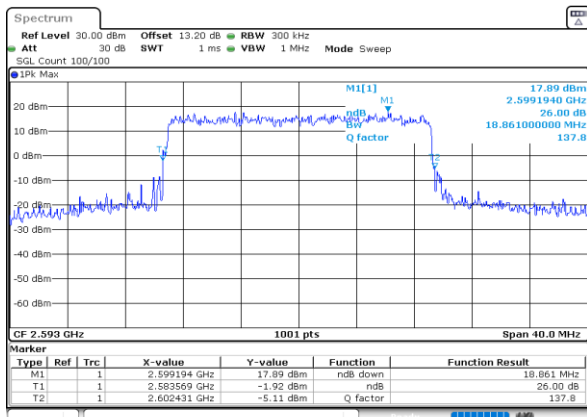
Date: 28 DEC 2023 04:57:28

Middle Channel / 15MHz / 16QAM



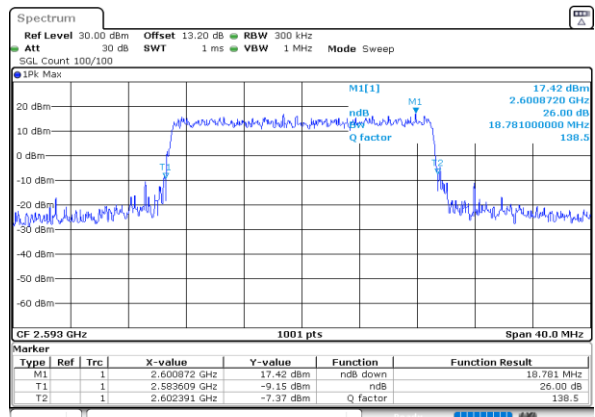
Date: 27 DEC 2023 21:20:08

Middle Channel / 20MHz / QPSK



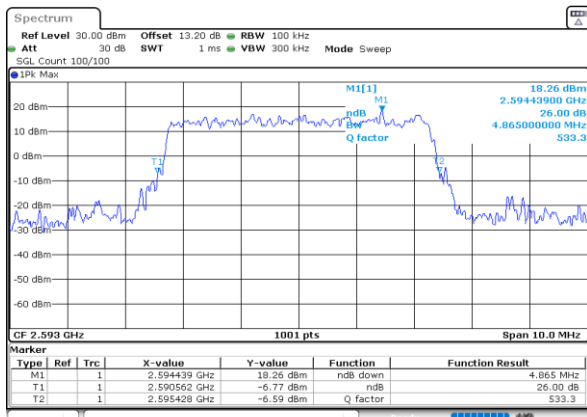
Date: 28 DEC 2023 04:59:04

Middle Channel / 20MHz / 16QAM



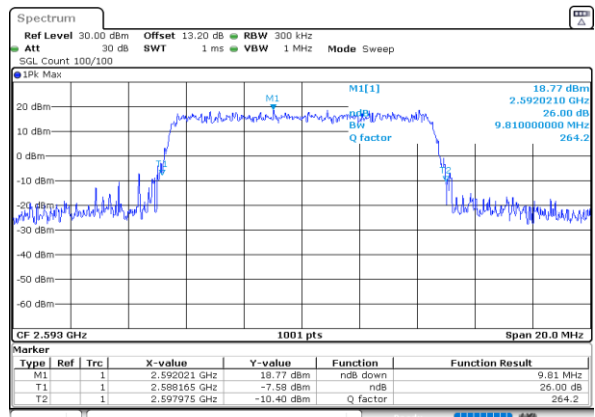
Date: 28 DEC 2023 04:59:48

Middle Channel / 5MHz / 64QAM



Date: 28 DEC 2023 04:46:12

Middle Channel / 10MHz / 64QAM

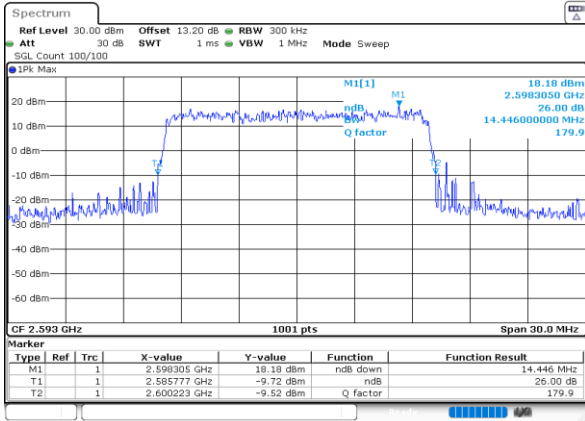


Date: 28 DEC 2023 04:52:25



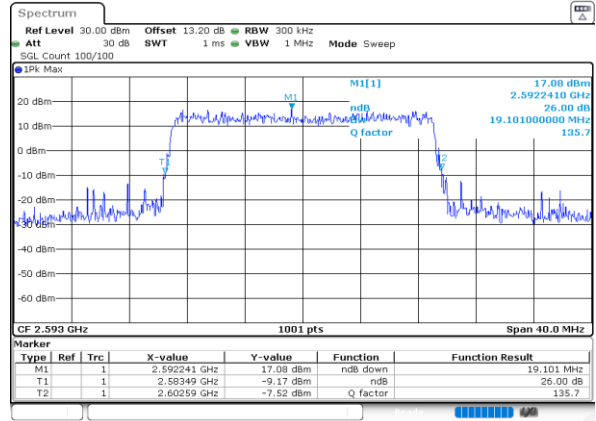
LTE Band 41

Middle Channel / 15MHz / 64QAM



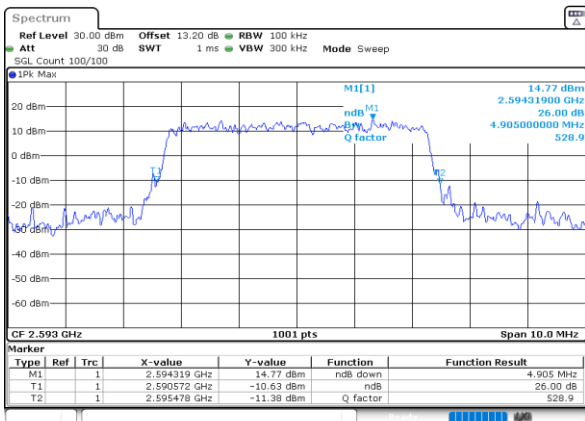
Date: 27 DEC 2023 21:20:53

Middle Channel / 20MHz / 64QAM



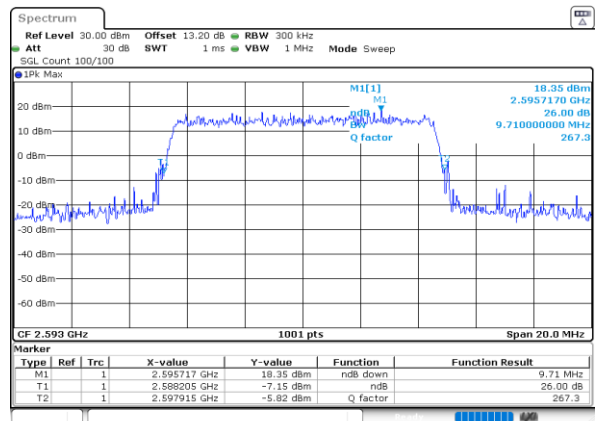
Date: 27 DEC 2023 21:19:19

Middle Channel / 5MHz / 256QAM



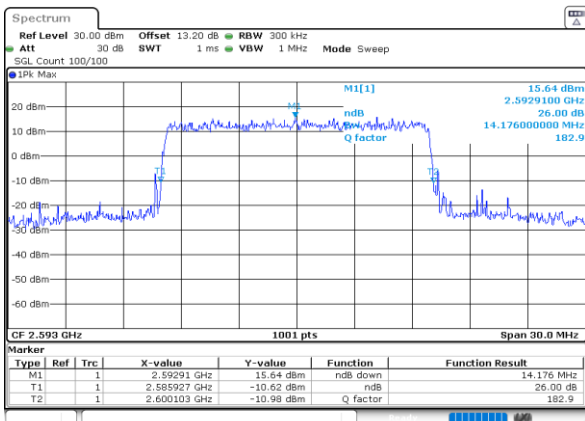
Date: 28 DEC 2023 04:46:36

Middle Channel / 10MHz / 256QAM



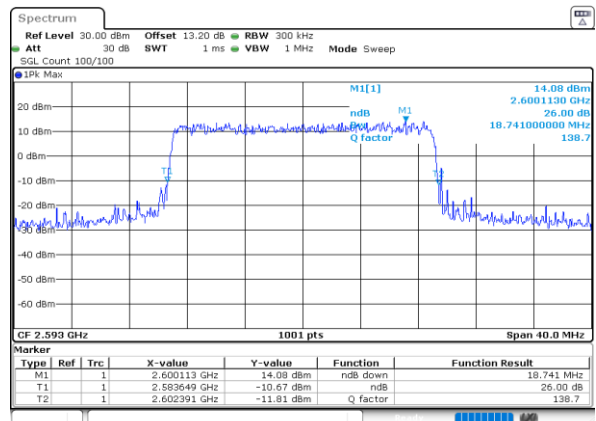
Date: 27 DEC 2023 20:59:03

Middle Channel / 15MHz / 256QAM



Date: 27 DEC 2023 21:21:38

Middle Channel / 20MHz / 256QAM



Date: 27 DEC 2023 21:18:47