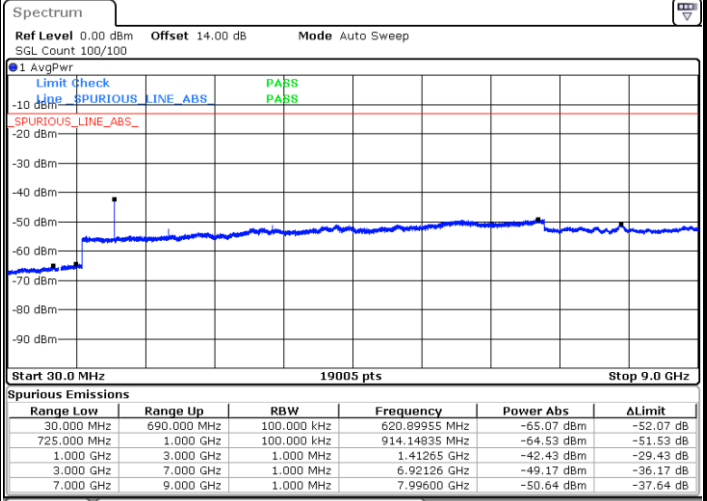
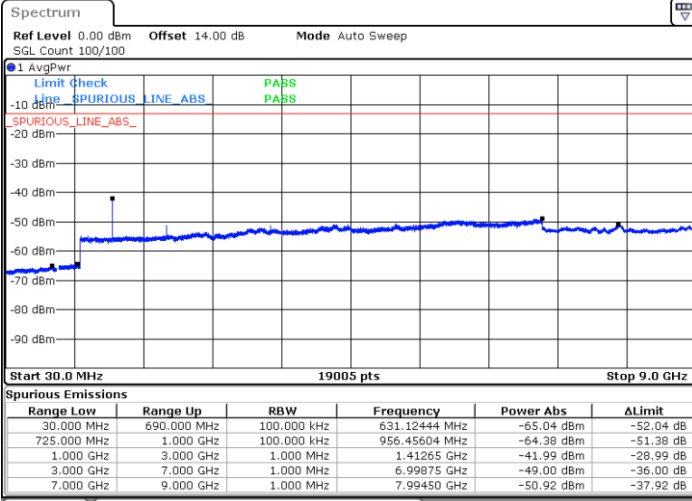




LTE Band 12 / 3MHz

Middle Channel / QPSK

Middle Channel / 16QAM

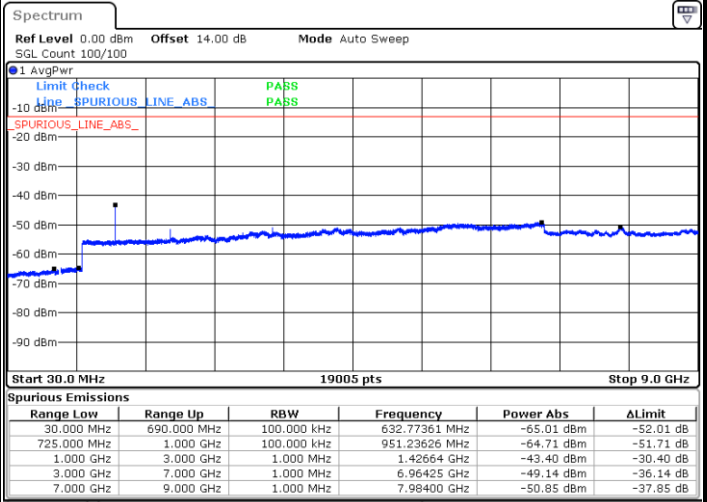
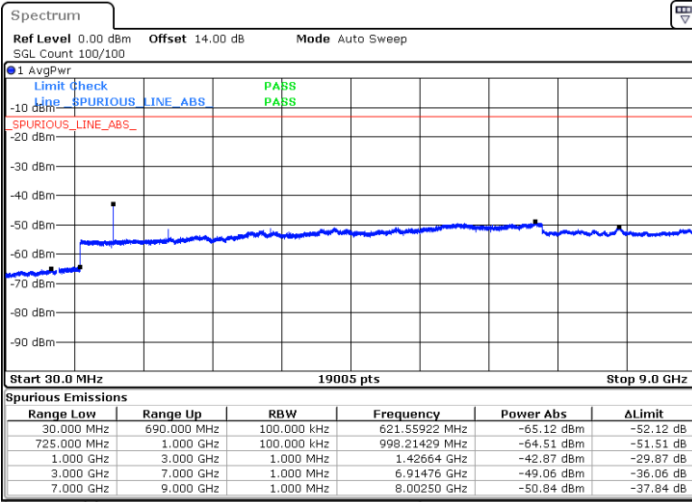


Date: 10.MAR.2023 00:53:15

Date: 10.MAR.2023 00:52:13

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 10.MAR.2023 01:00:49

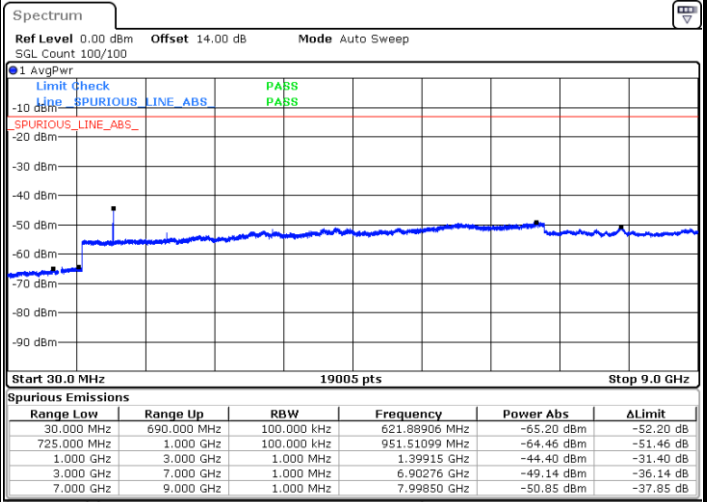
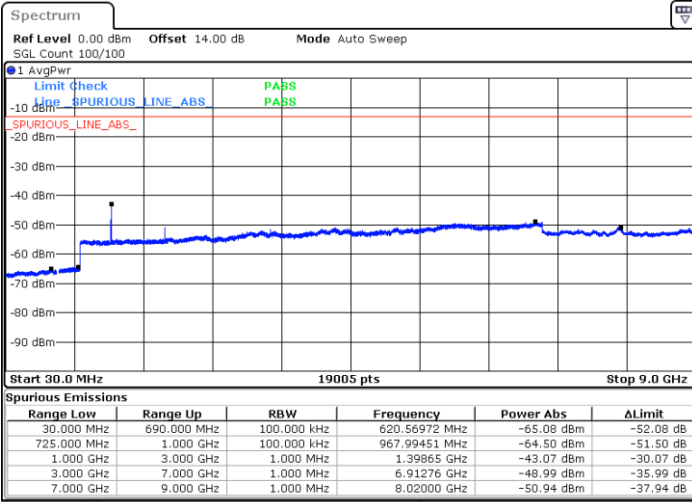
Date: 10.MAR.2023 01:01:52



LTE Band 12 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

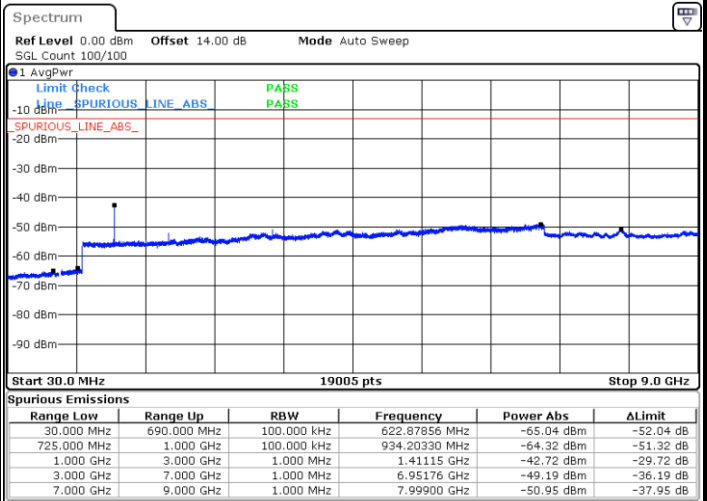
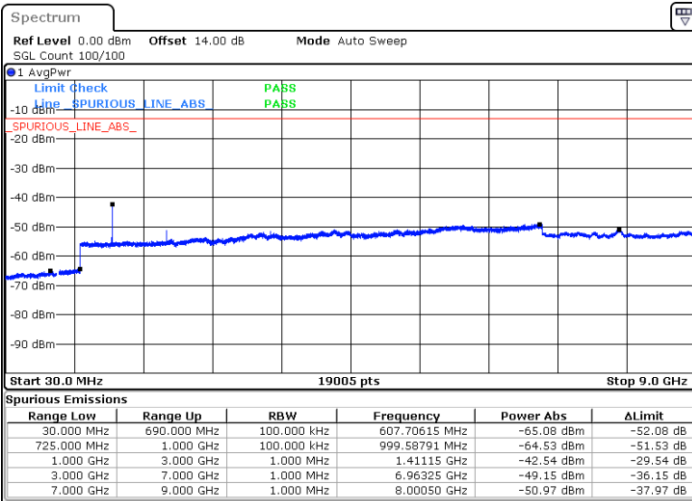


Date: 10.MAR.2023 01:28:56

Date: 10.MAR.2023 01:30:00

Middle Channel / QPSK

Middle Channel / 16QAM



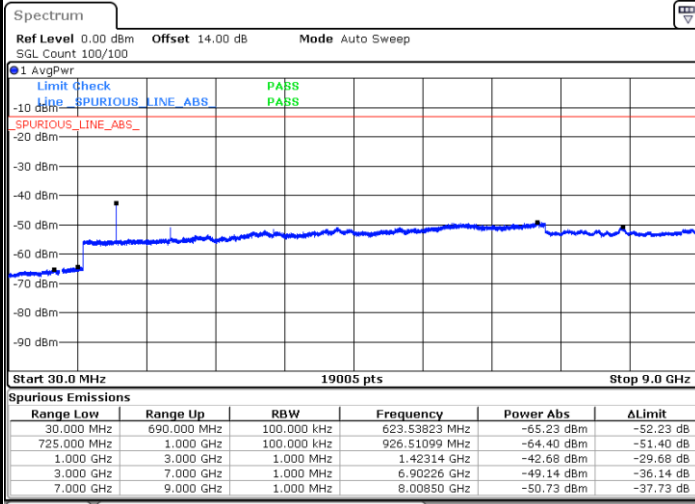
Date: 10.MAR.2023 01:33:32

Date: 10.MAR.2023 01:32:29



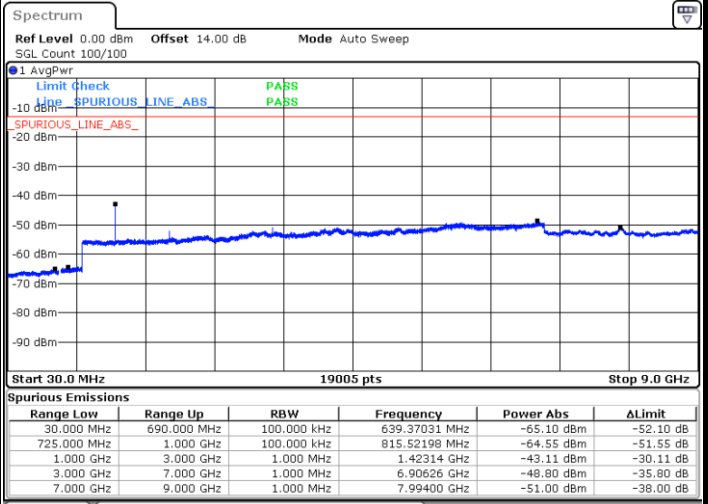
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 10.MAR.2023 01:42:09

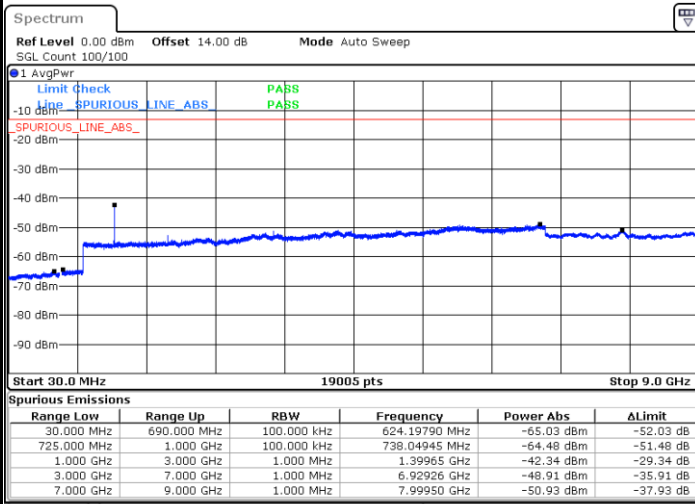
Highest Channel / 16QAM



Date: 10.MAR.2023 01:41:05

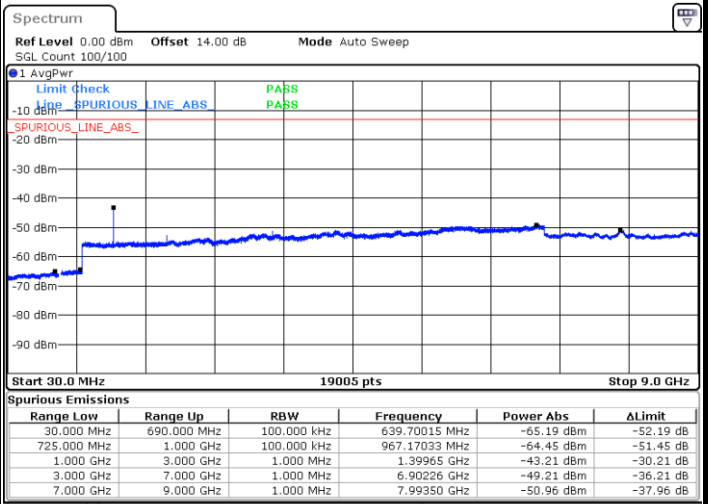
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 10.MAR.2023 01:49:34

Lowest Channel / 16QAM



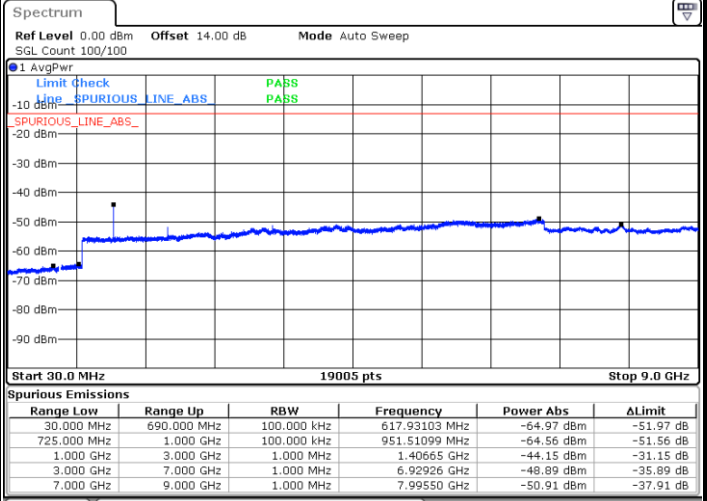
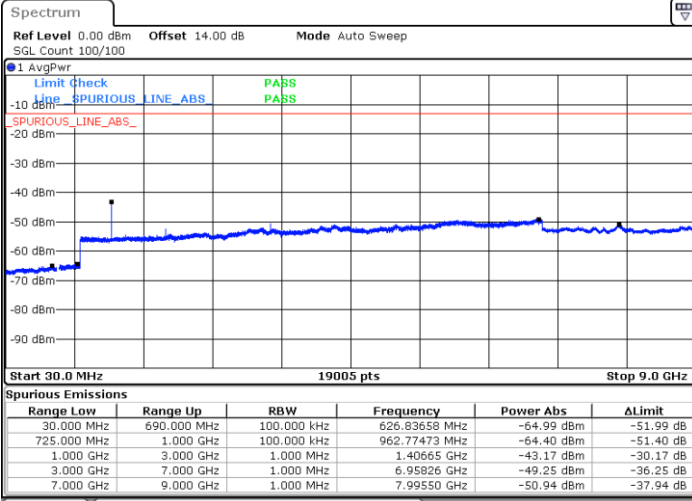
Date: 10.MAR.2023 01:50:37



LTE Band 12 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

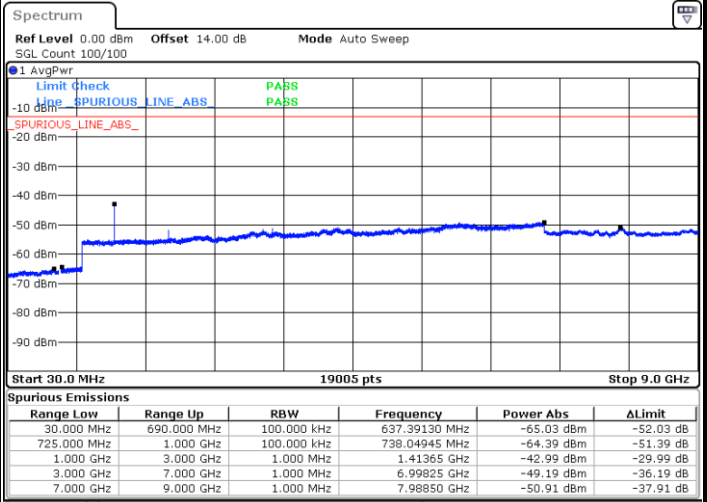
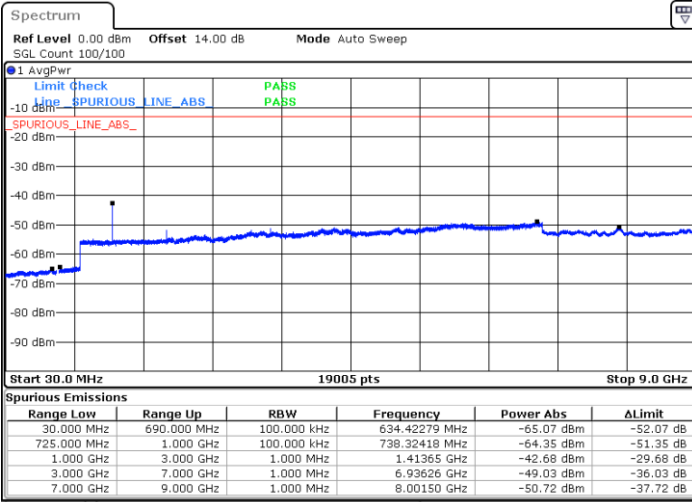


Date: 10.MAR.2023 01:54:09

Date: 10.MAR.2023 01:53:06

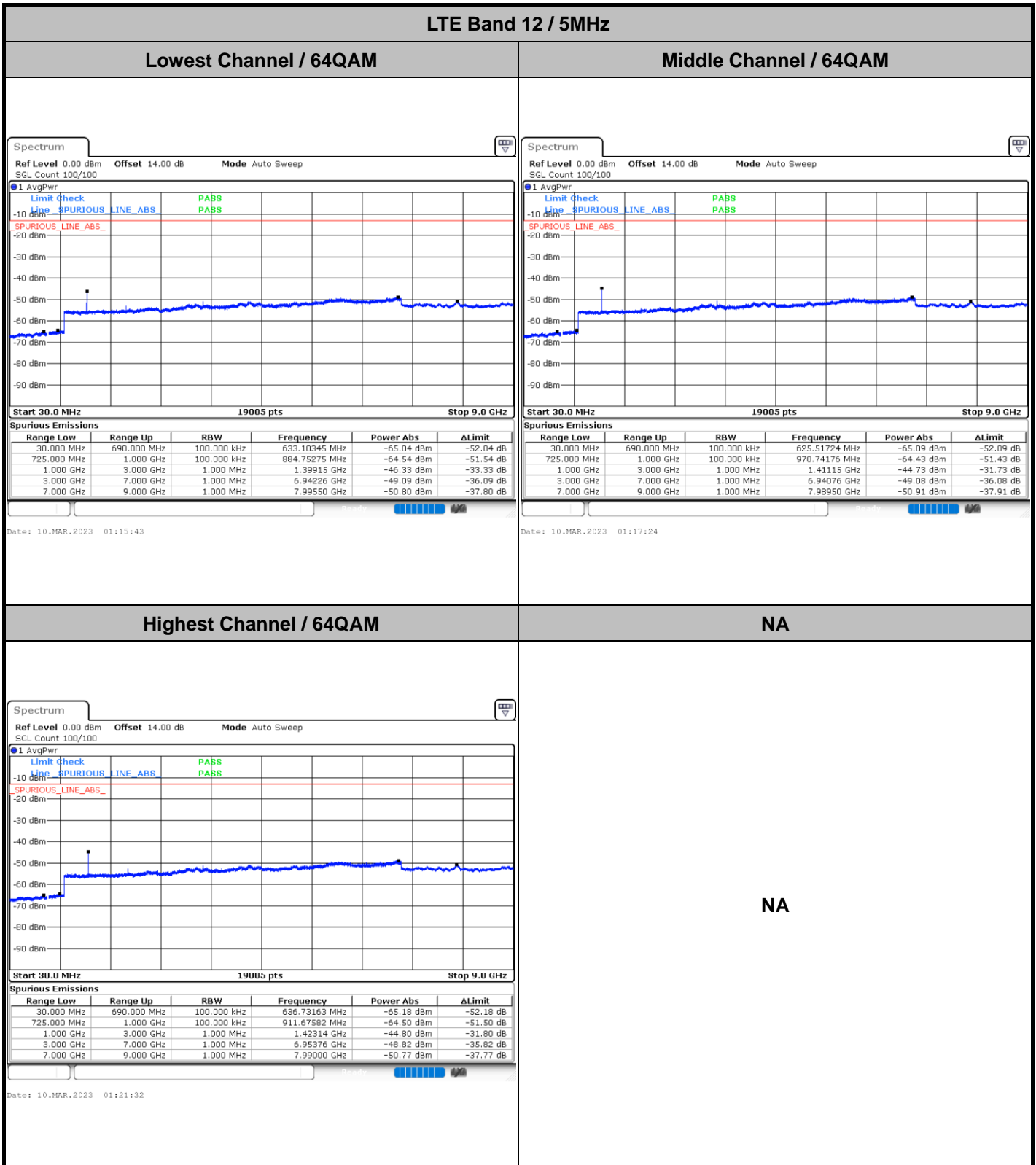
Highest Channel / QPSK

Highest Channel / 16QAM



Date: 10.MAR.2023 02:01:44

Date: 10.MAR.2023 02:02:47

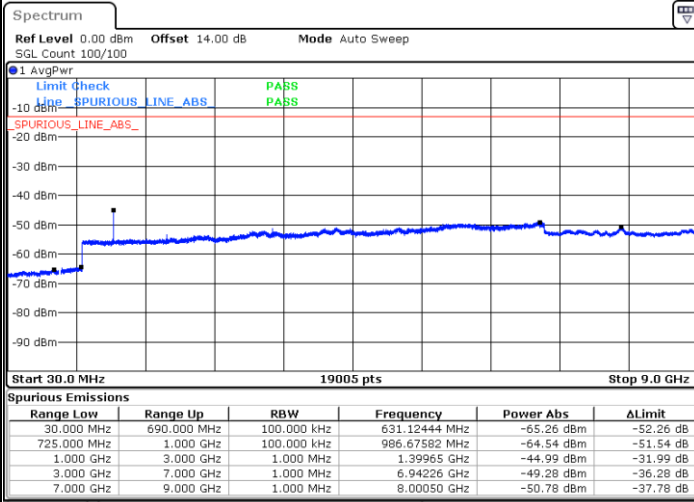




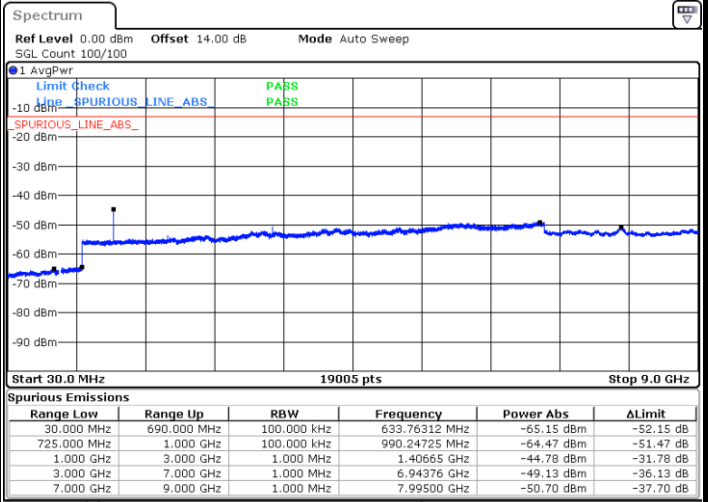
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



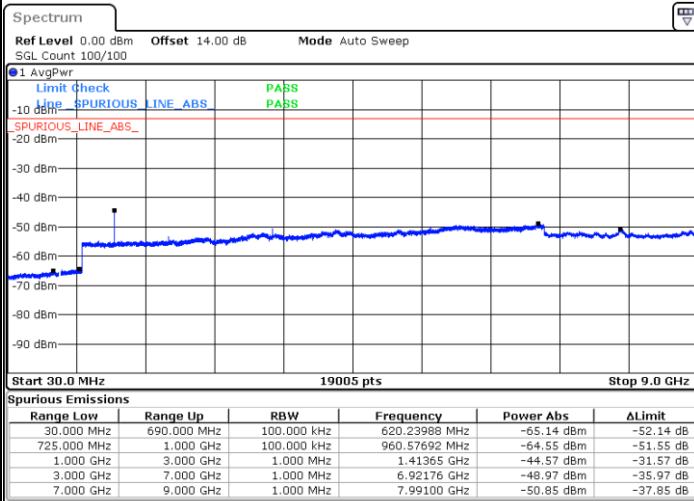
Date: 10.MAR.2023 02:06:47



Date: 10.MAR.2023 02:08:29

Highest Channel / 64QAM

NA



Date: 10.MAR.2023 02:12:39

NA



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0062	PASS
40	Normal Voltage	0.0011	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0065	
0	Normal Voltage	0.0099	
-10	Normal Voltage	0.0013	
-20	Normal Voltage	0.0051	
-30	Normal Voltage	0.0055	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0105	
20	Battery End Point	0.0004	

Note:

1. Normal Voltage =3.91V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

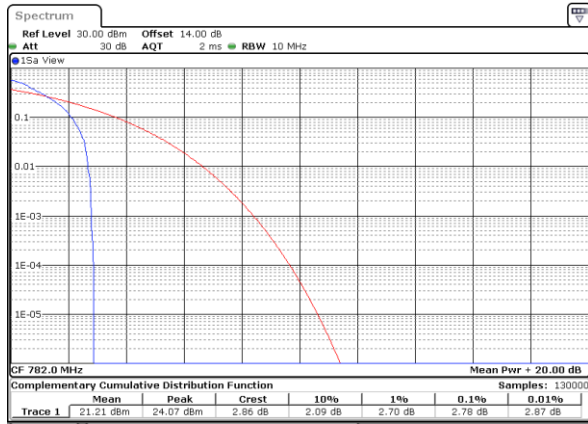
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	2.78	5.22	3.77	5.94	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.58	6.14	-	-	
Highest CH	-	-	-	-	



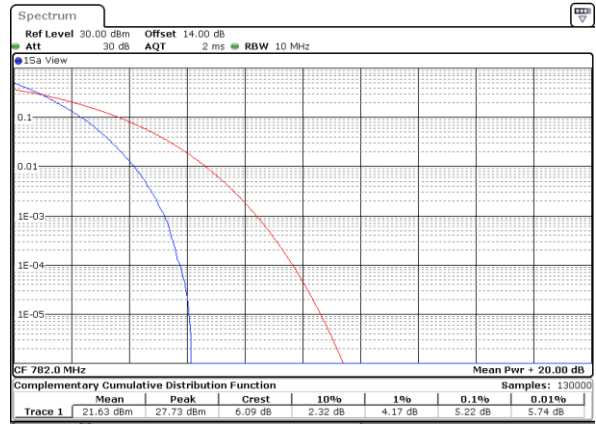
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 10_MAR_2023 09:44:01

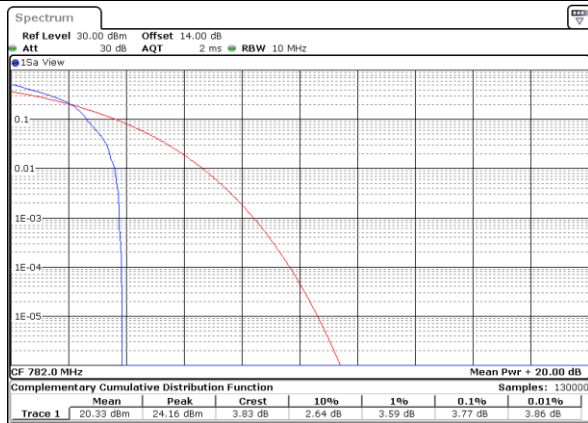
Middle Channel / Full RB



Date: 10_MAR_2023 08:44:26

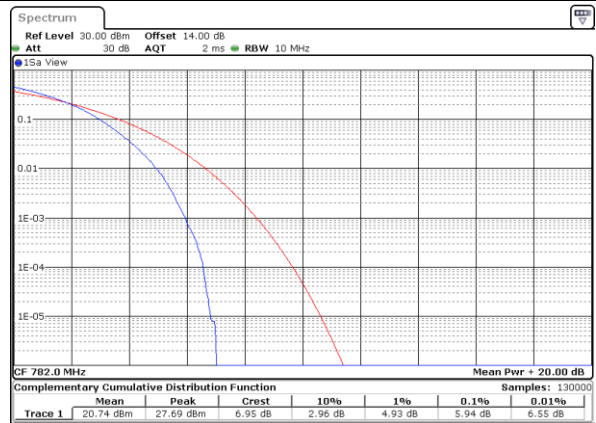
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 10_MAR_2023 09:43:09

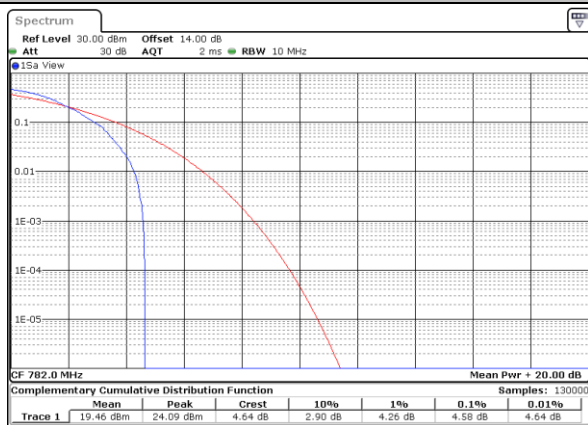
Middle Channel / Full RB



Date: 10_MAR_2023 08:43:35

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 10_MAR_2023 08:42:18

Middle Channel / Full RB



Date: 10_MAR_2023 08:42:44



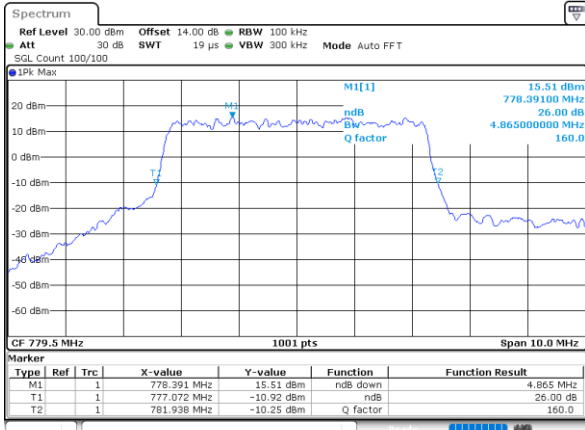
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.87	4.89	-	-	-	-	-	-
Middle CH	-	-	-	-	4.86	4.92	9.71	9.77	-	-	-	-
Highest CH	-	-	-	-	4.89	4.82	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.91	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.87	-	9.75	-	-	-	-	-
Highest CH	-	-	-	-	4.78	-	-	-	-	-	-	-



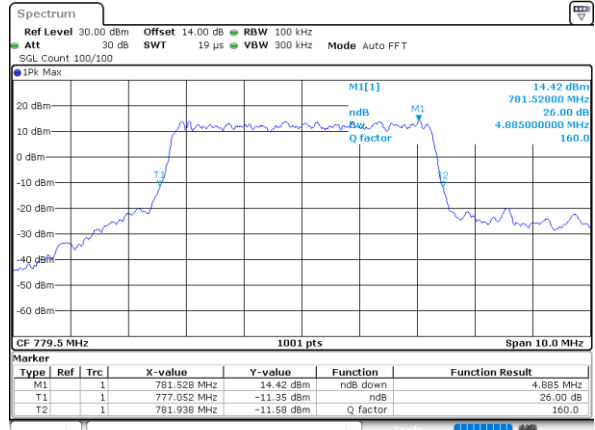
LTE Band 13

Lowest Channel / 5MHz / QPSK



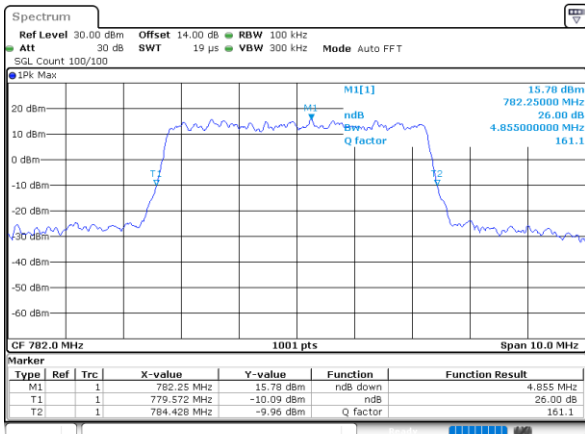
Date: 10_MAR_2023 02:22:00

Lowest Channel / 5MHz / 16QAM



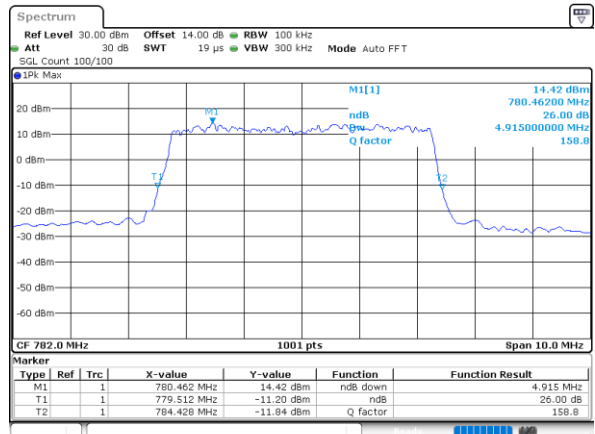
Date: 10_MAR_2023 02:21:36

Middle Channel / 5MHz / QPSK



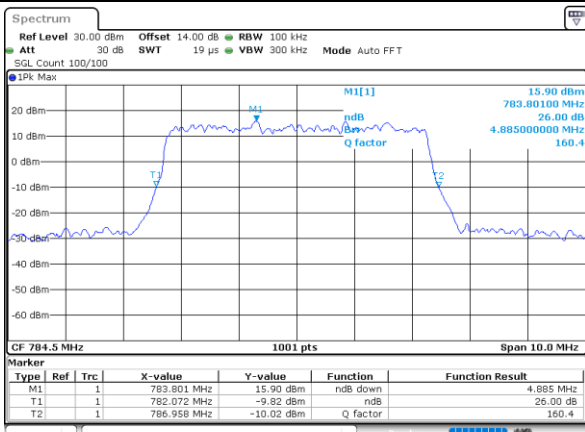
Date: 10_MAR_2023 02:33:50

Middle Channel / 5MHz / 16QAM



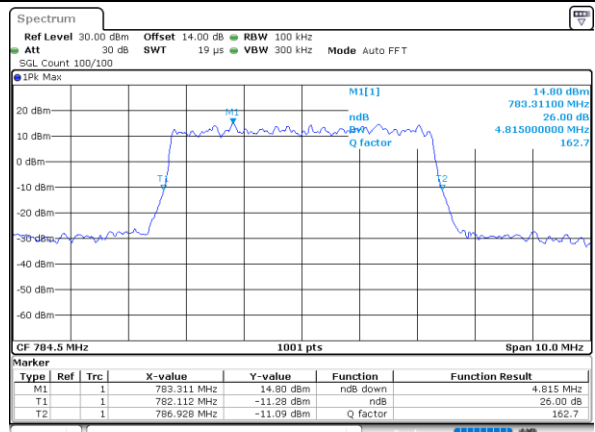
Date: 10_MAR_2023 02:34:13

Highest Channel / 5MHz / QPSK



Date: 10_MAR_2023 02:36:19

Highest Channel / 5MHz / 16QAM

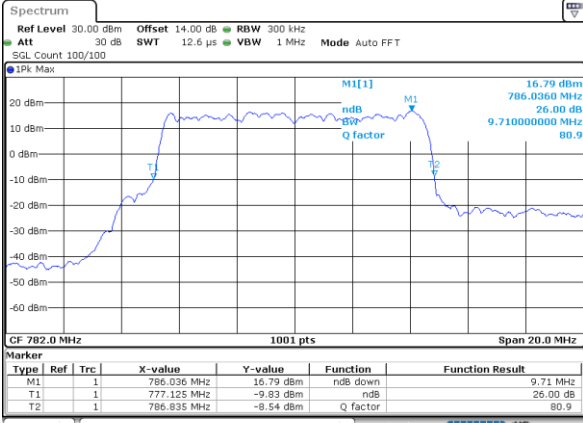


Date: 10_MAR_2023 02:35:55



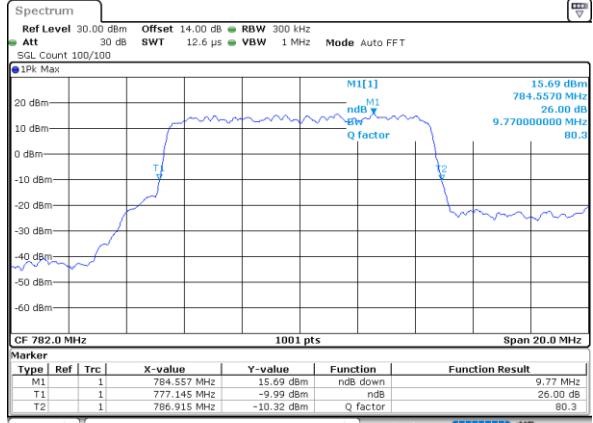
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 10_MAR_2023 02:59:27

Middle Channel / 10MHz / 16QAM



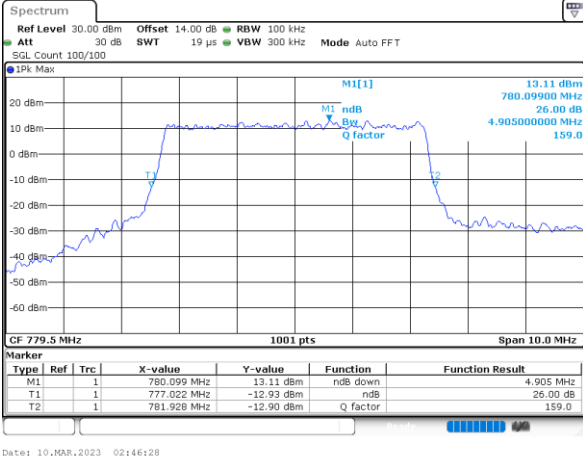
Date: 10_MAR_2023 02:59:03



LTE Band 13

Lowest Channel / 5MHz / 64QAM

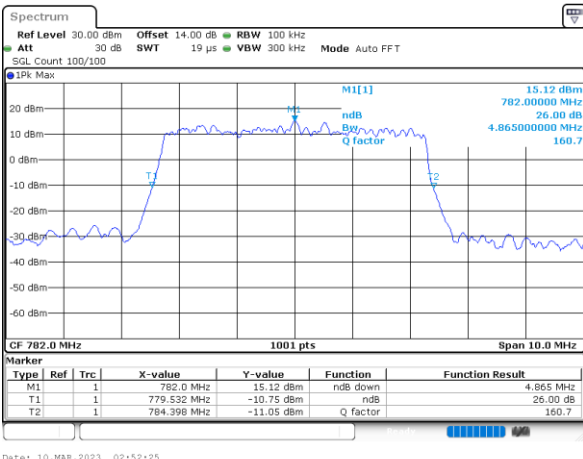
NA



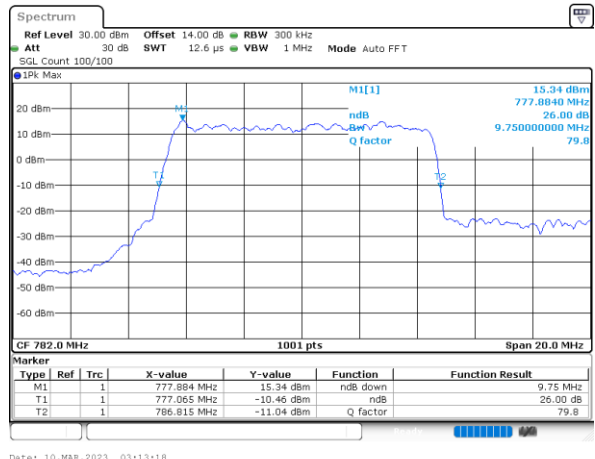
Date: 10_MAR_2023 02:46:20

Middle Channel / 5MHz / 64QAM

Middle Channel / 10MHz / 64QAM



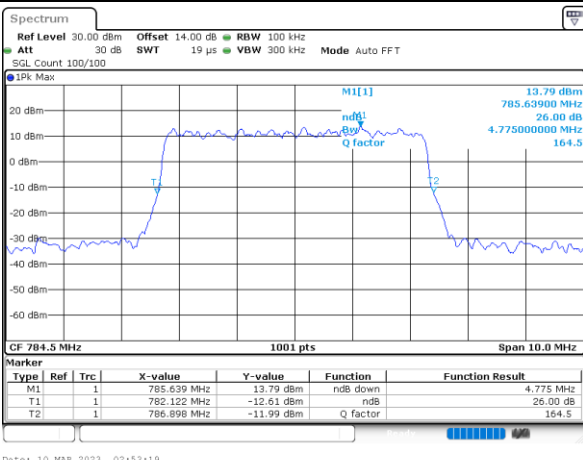
Date: 10_MAR_2023 02:52:25



Date: 10_MAR_2023 03:13:18

Highest Channel / 5MHz / 64QAM

NA



Date: 10_MAR_2023 02:53:19

NA



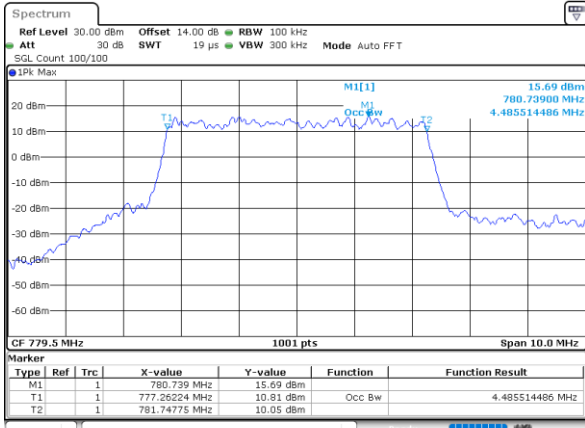
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.47	9.07	9.01	-	-	-	-
Highest CH	-	-	-	-	4.49	4.50	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.51	-	-	-	-	-	-	-



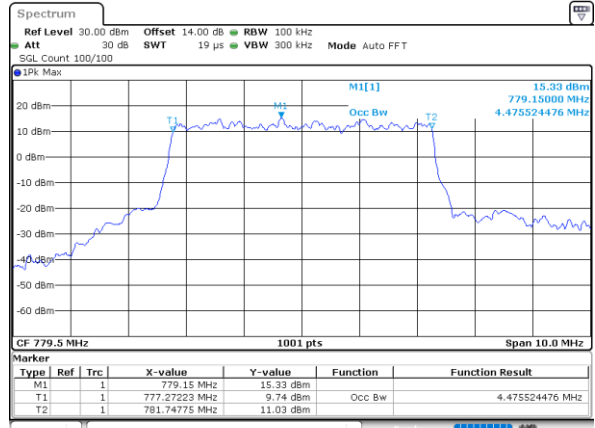
LTE Band 13

Lowest Channel / 5MHz / QPSK



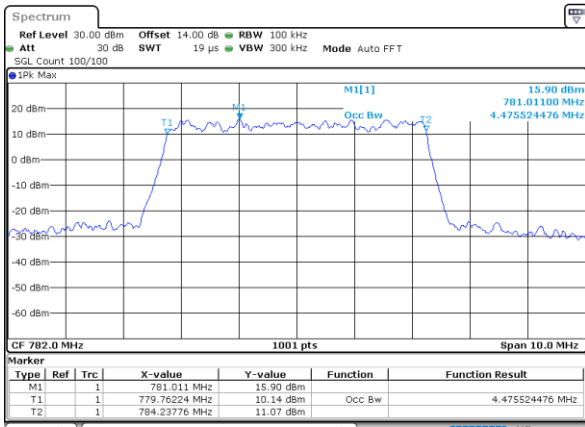
Date: 10_MAR_2023 02:20:57

Lowest Channel / 5MHz / 16QAM



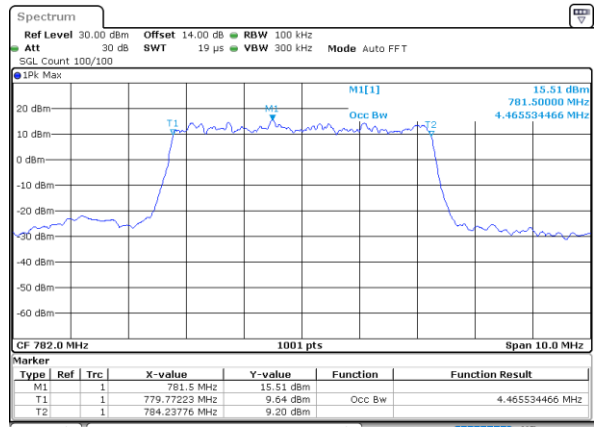
Date: 10_MAR_2023 02:21:21

Middle Channel / 5MHz / QPSK



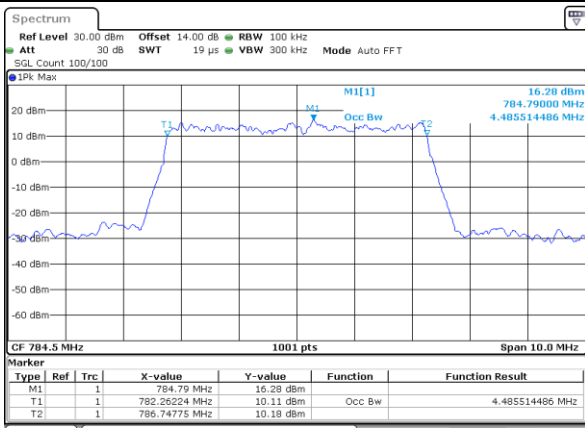
Date: 10_MAR_2023 02:34:52

Middle Channel / 5MHz / 16QAM



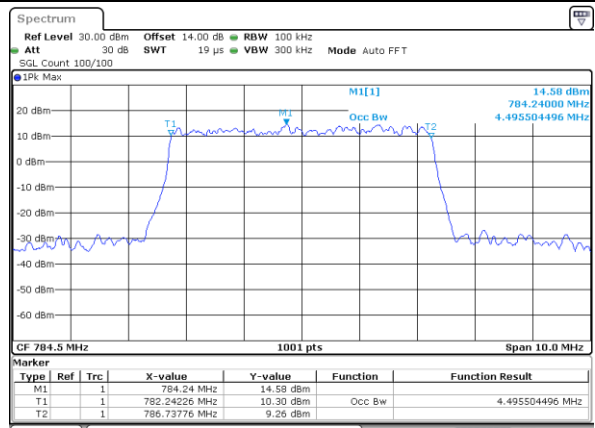
Date: 10_MAR_2023 02:34:28

Highest Channel / 5MHz / QPSK



Date: 10_MAR_2023 02:35:16

Highest Channel / 5MHz / 16QAM

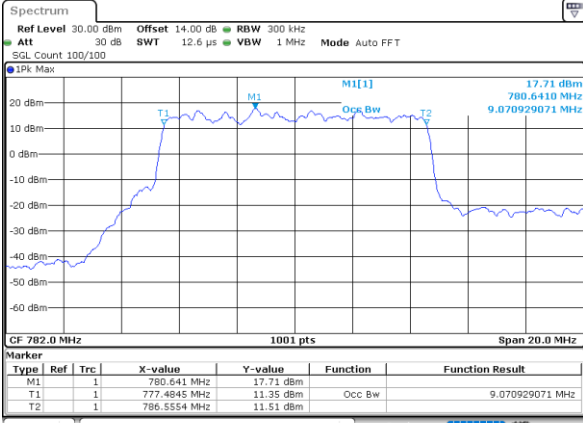


Date: 10_MAR_2023 02:35:40



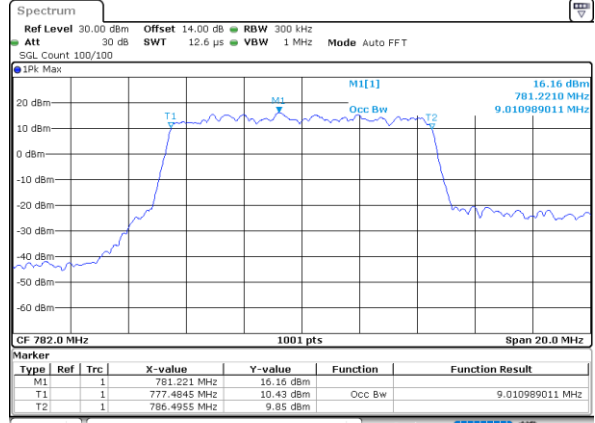
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 10_MAR_2023 02:58:24

Middle Channel / 10MHz / 16QAM



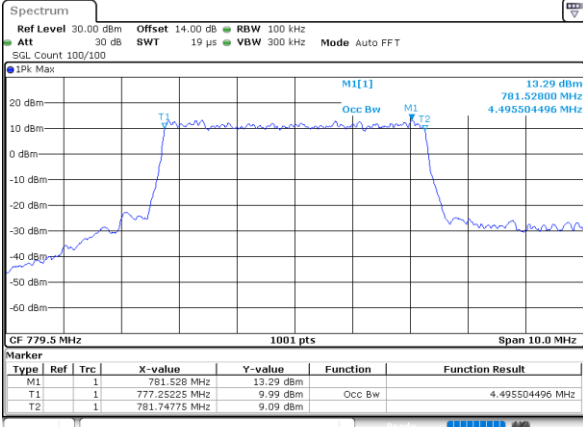
Date: 10_MAR_2023 02:58:49



LTE Band 13

Lowest Channel / 5MHz / 64QAM

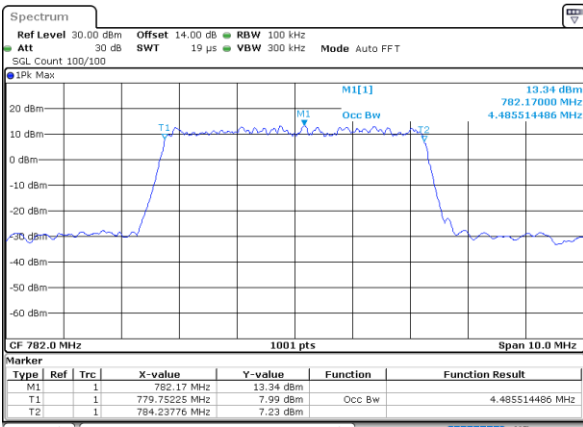
NA



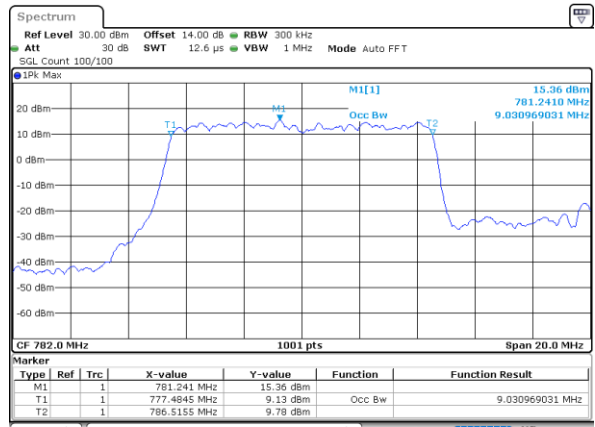
Date: 10_MAR_2023 02:46:14

Middle Channel / 5MHz / 64QAM

Middle Channel / 10MHz / 64QAM



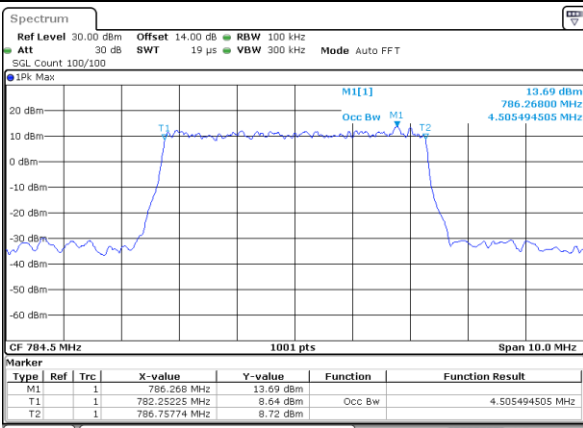
Date: 10_MAR_2023 02:52:40



Date: 10_MAR_2023 03:13:04

Highest Channel / 5MHz / 64QAM

NA

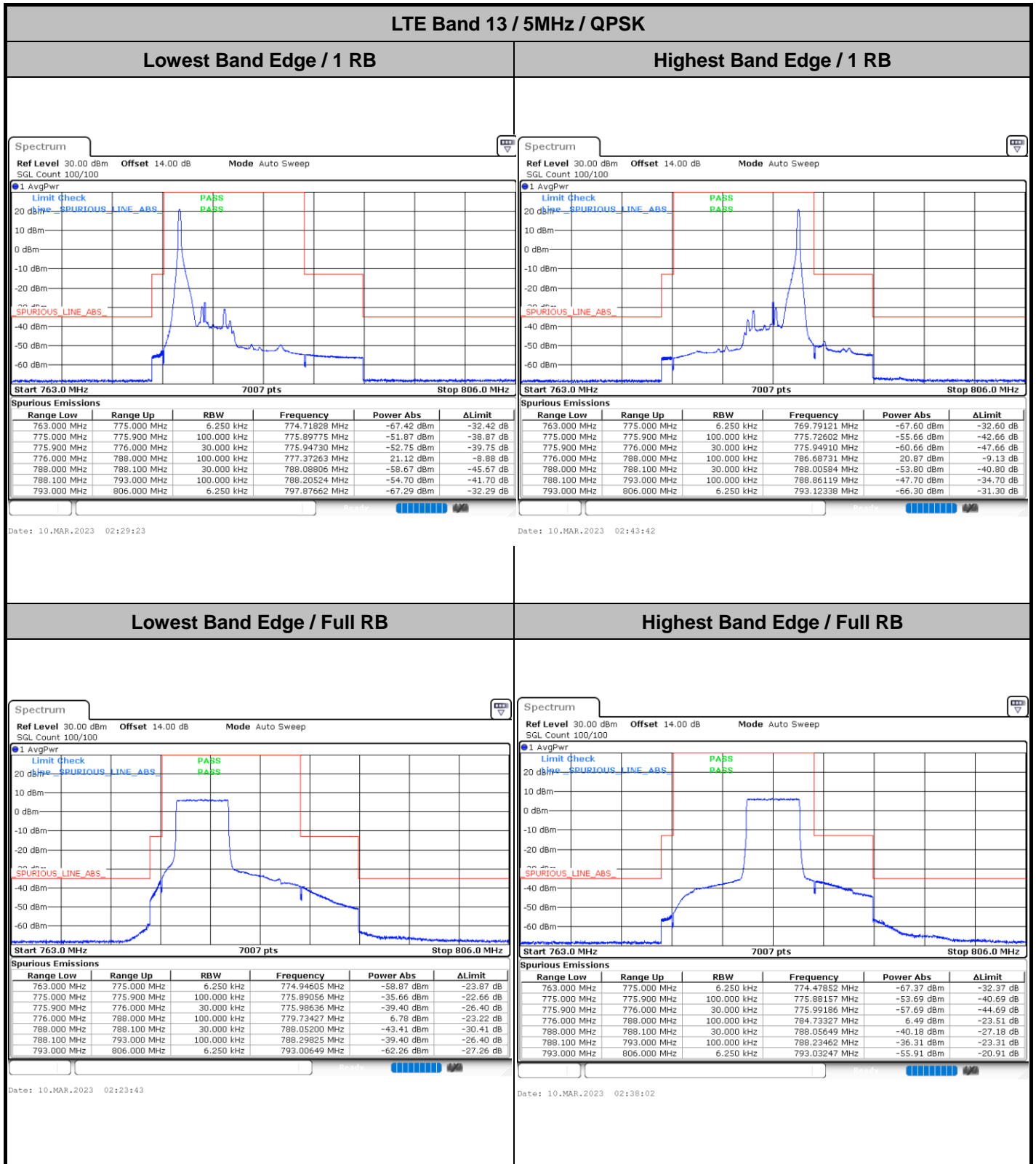


Date: 10_MAR_2023 02:53:04

NA



Conducted Band Edge

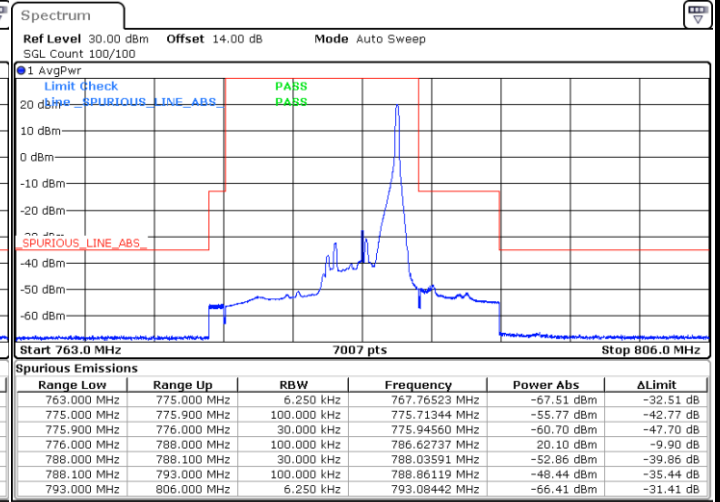
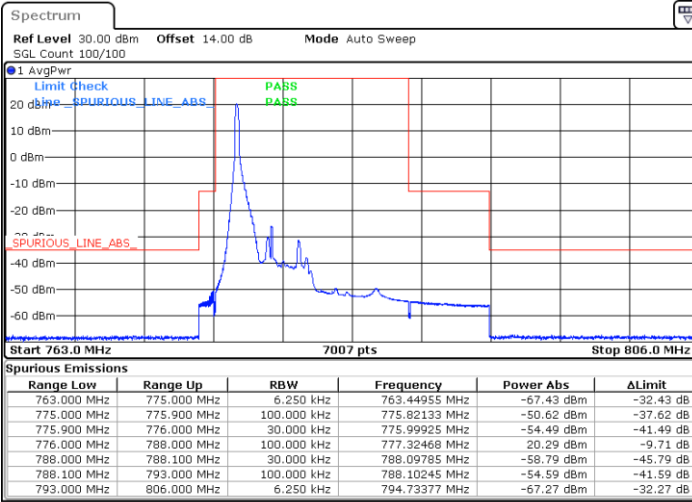




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

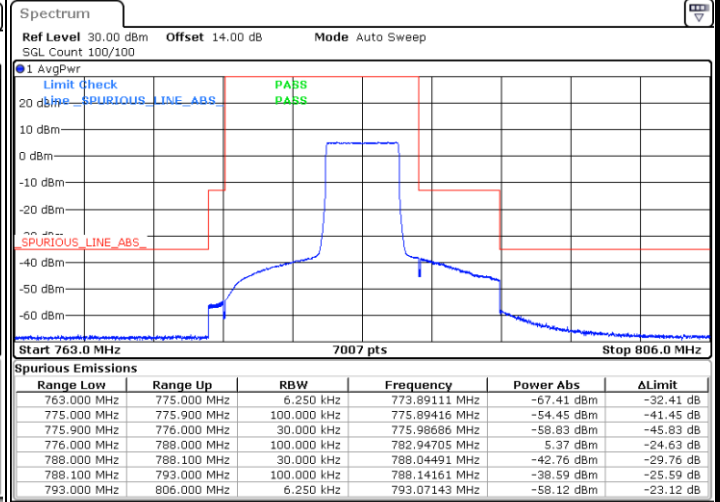
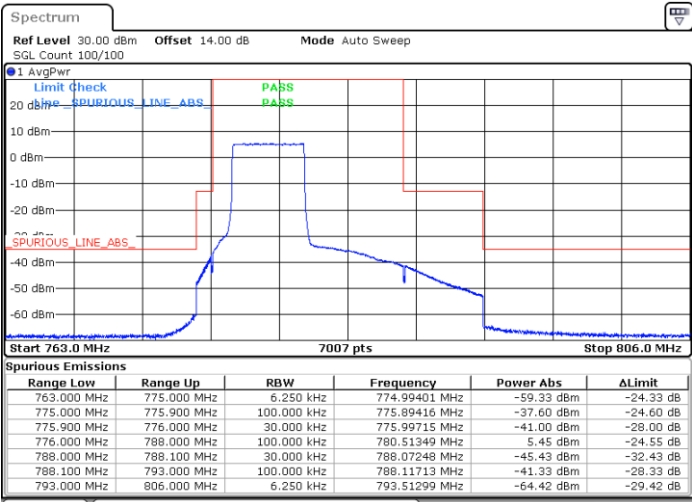


Date: 10.MAR.2023 02:27:30

Date: 10.MAR.2023 02:41:49

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 10.MAR.2023 02:25:37

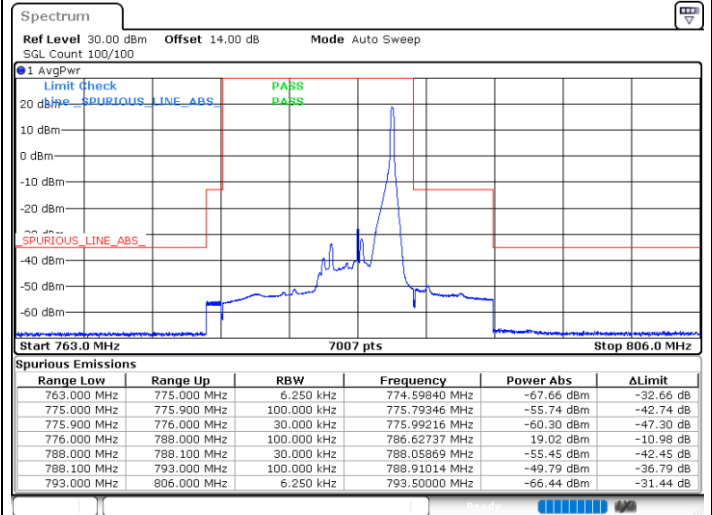
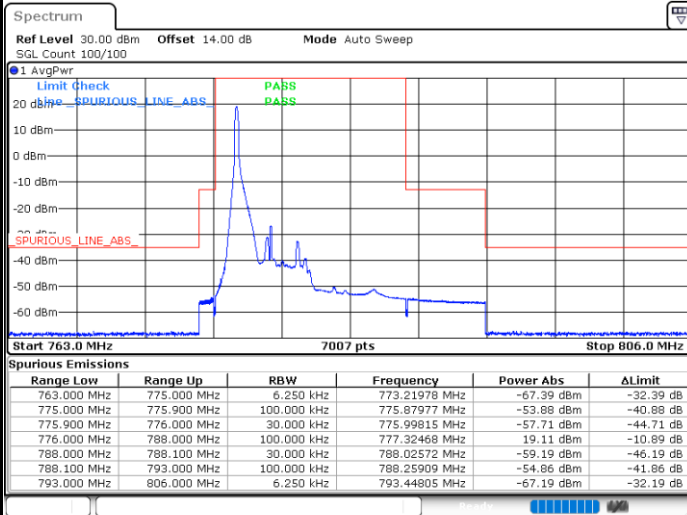
Date: 10.MAR.2023 02:39:55



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

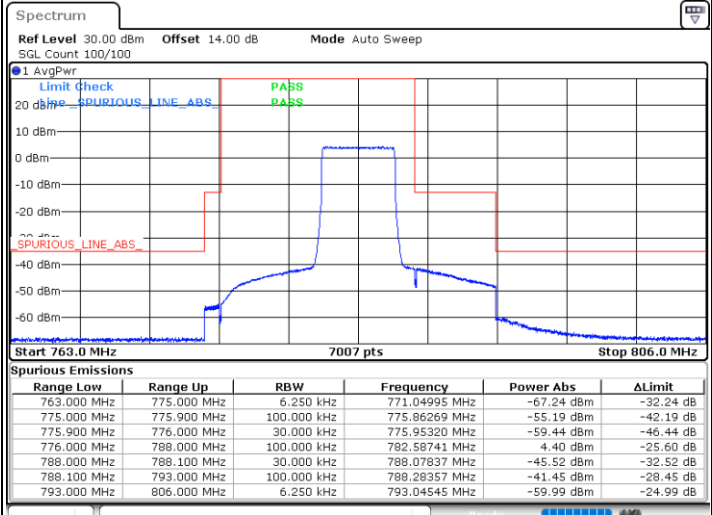
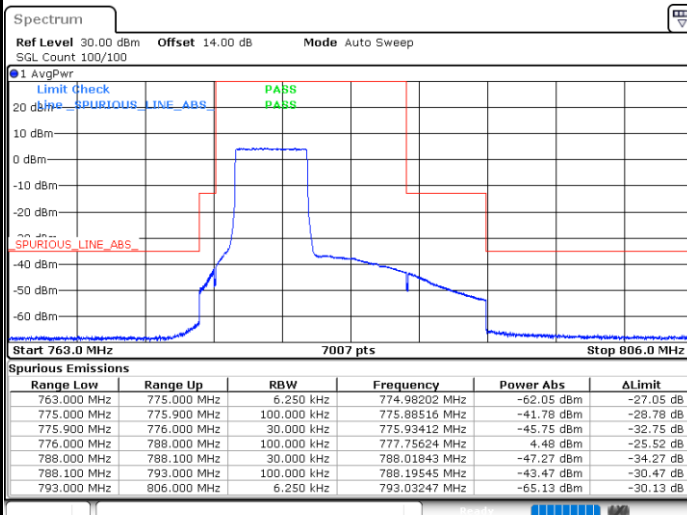


Date: 10.MAR.2023 02:50:05

Date: 10.MAR.2023 02:56:56

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 10.MAR.2023 02:48:11

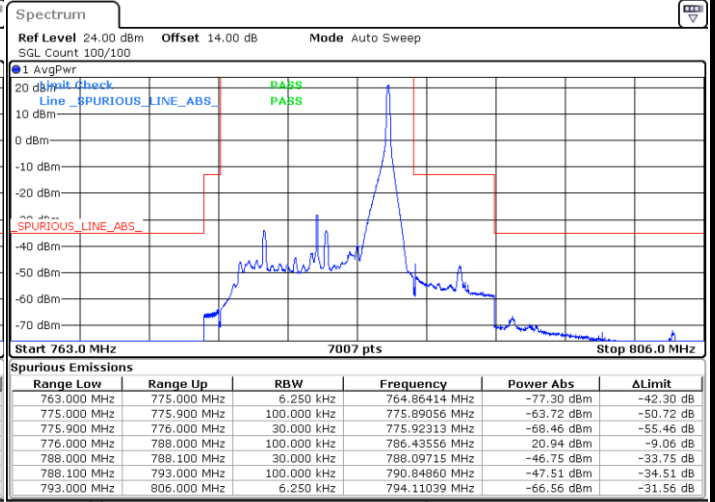
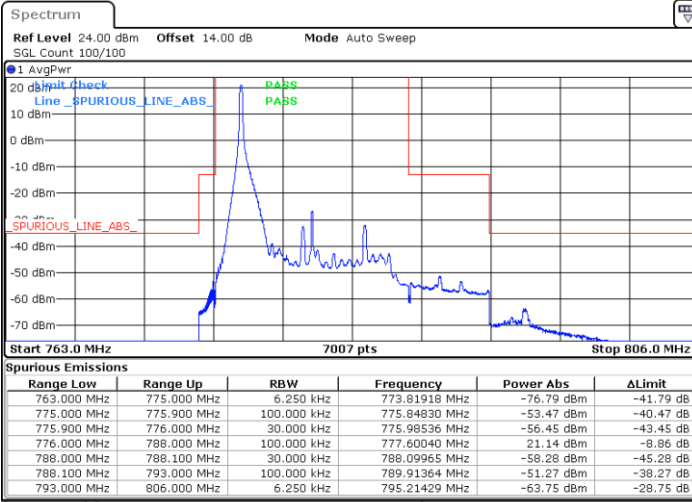
Date: 10.MAR.2023 02:55:02



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

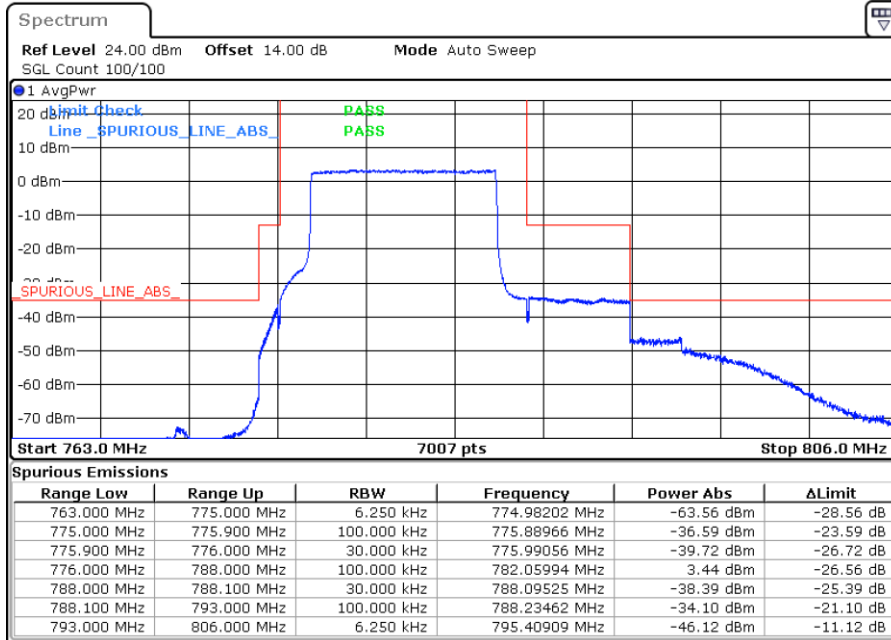
Highest Band Edge / 1 RB



Date: 10.MAR.2023 03:06:48

Date: 10.MAR.2023 03:08:41

Band Edge / Full RB

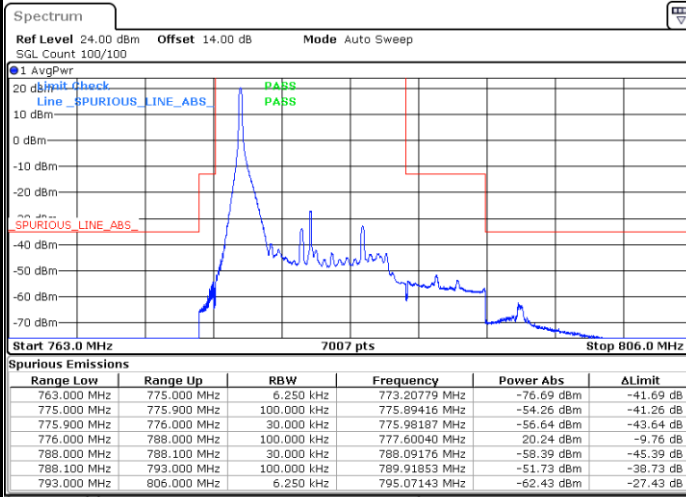


Date: 10.MAR.2023 03:01:10



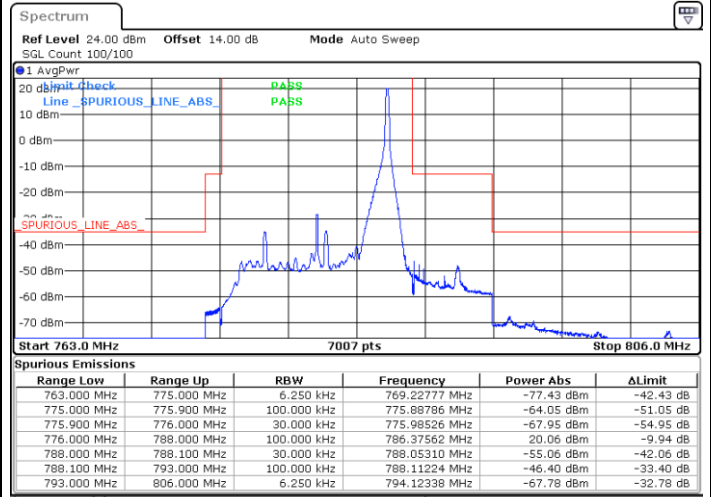
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



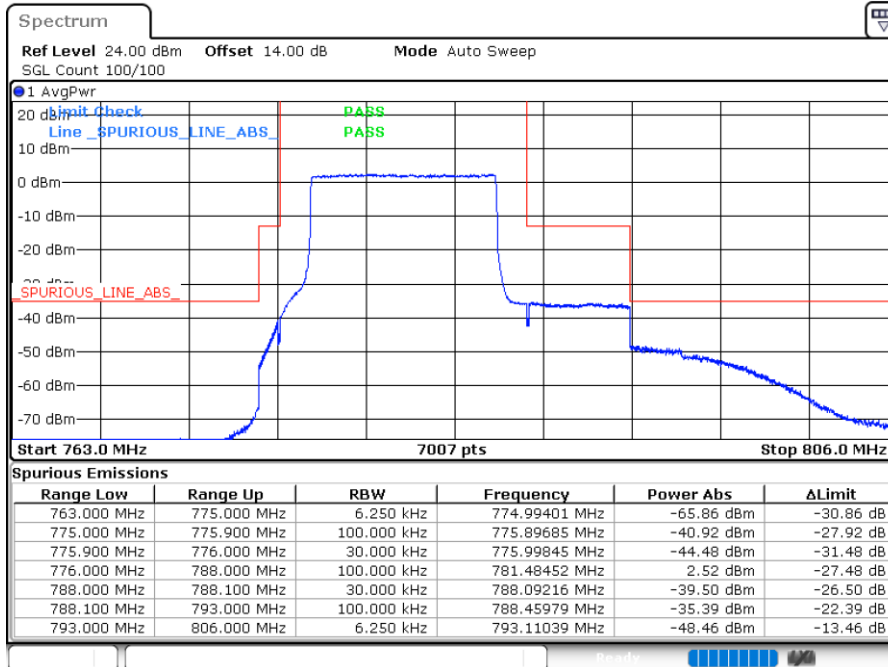
Date: 10.MAR.2023 03:04:55

Highest Band Edge / 1 RB



Date: 10.MAR.2023 03:10:34

Band Edge / Full RB



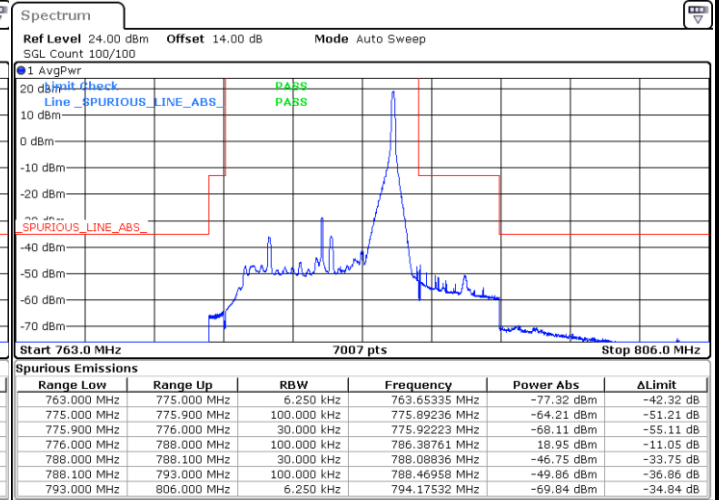
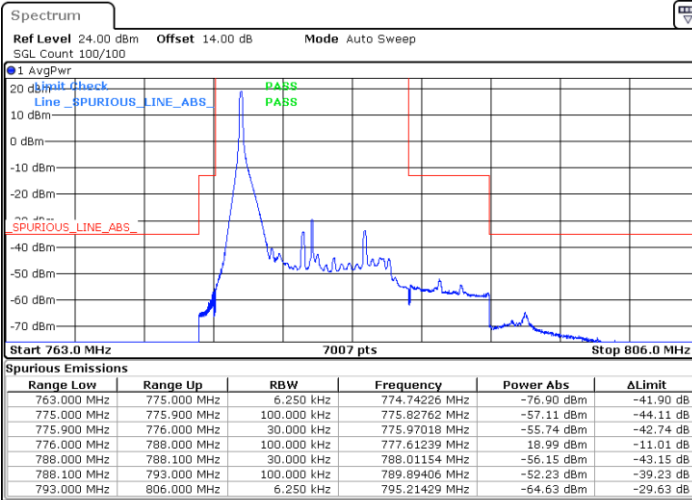
Date: 10.MAR.2023 03:03:03



LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

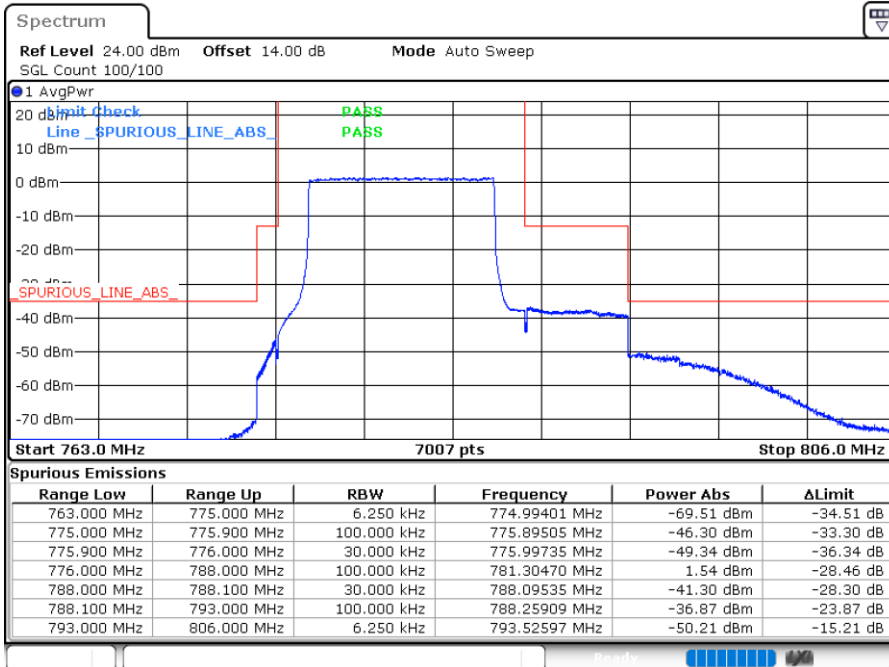
Highest Band Edge / 1 RB



Date: 10.MAR.2023 08:39:07

Date: 10.MAR.2023 08:40:59

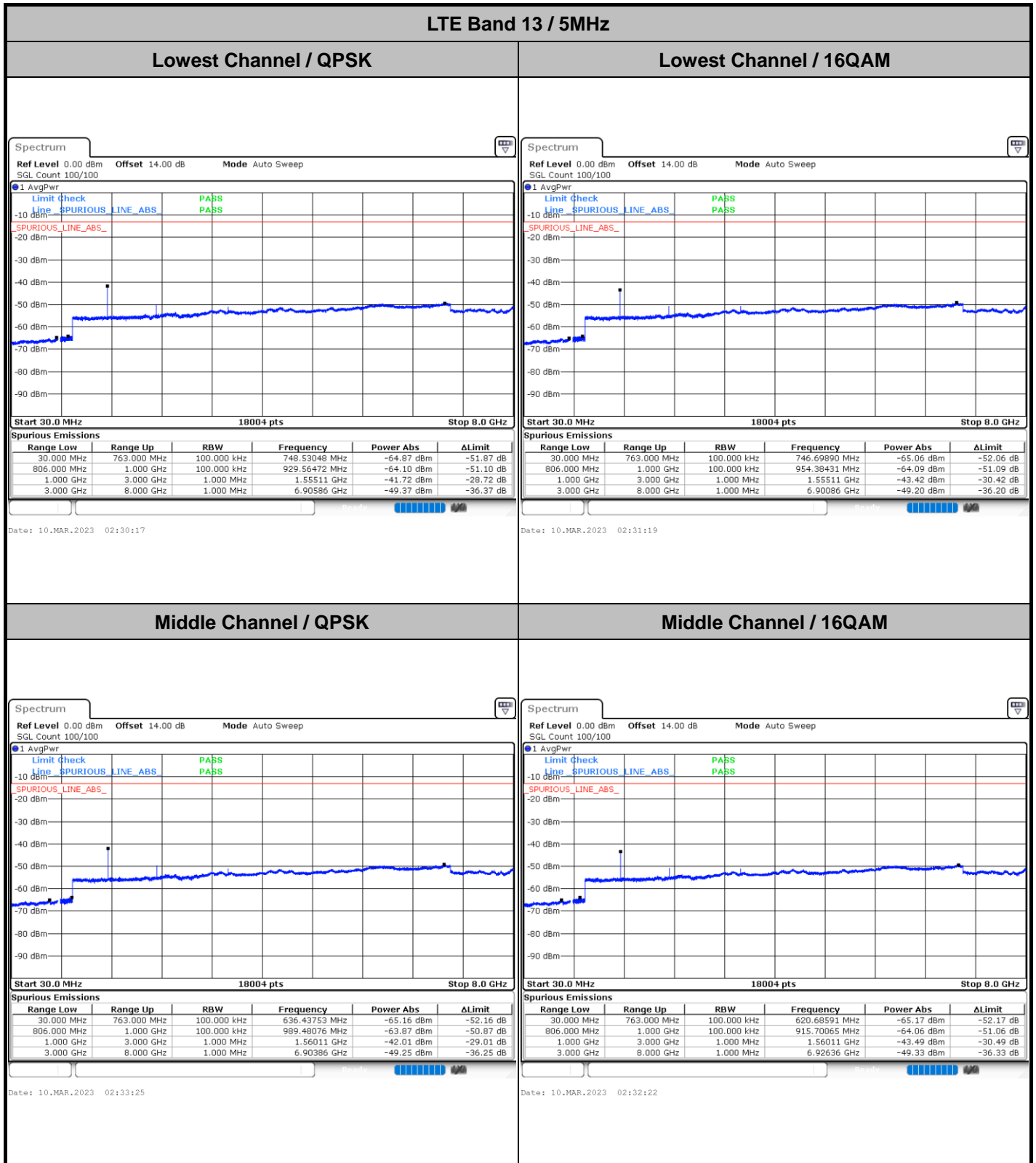
Band Edge / Full RB



Date: 10.MAR.2023 08:37:14



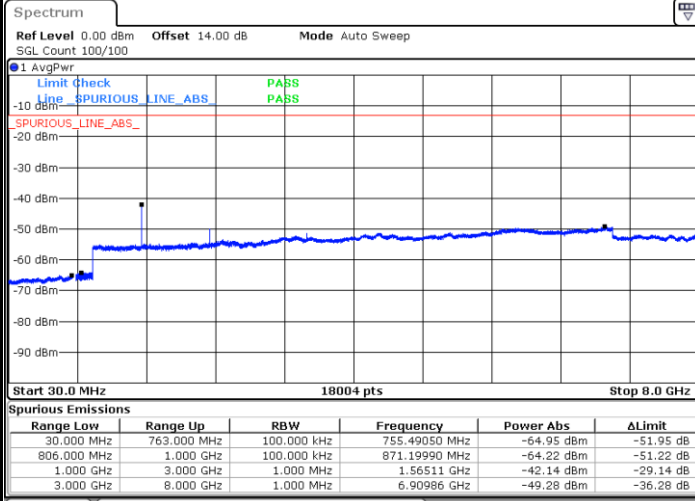
Conducted Spurious Emission





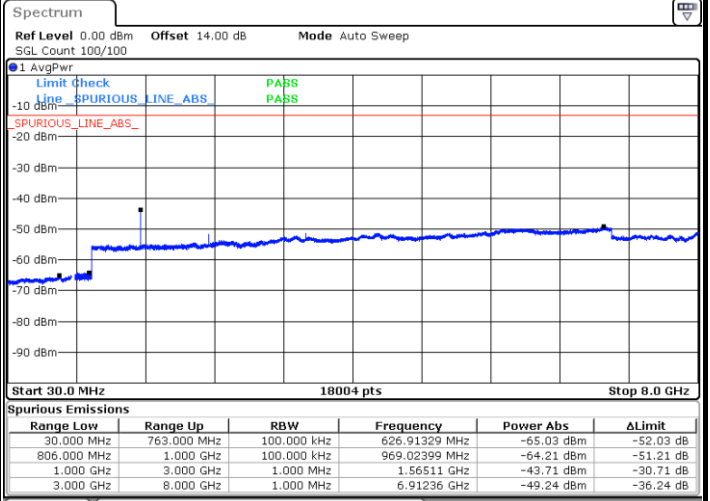
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 10.MAR.2023 02:44:45

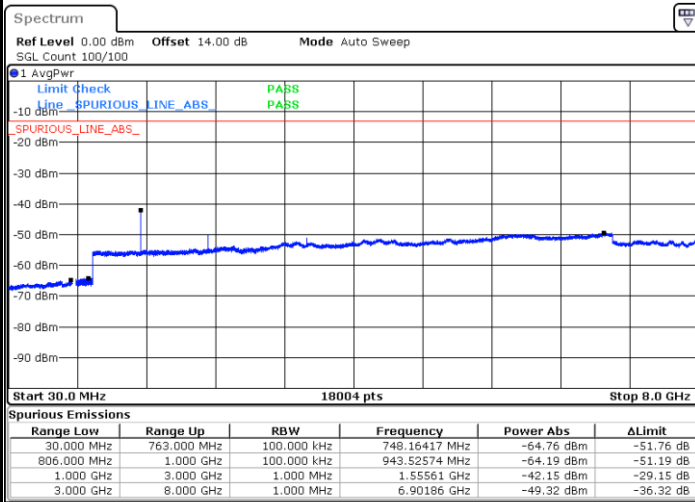
Highest Channel / 16QAM



Date: 10.MAR.2023 02:45:48

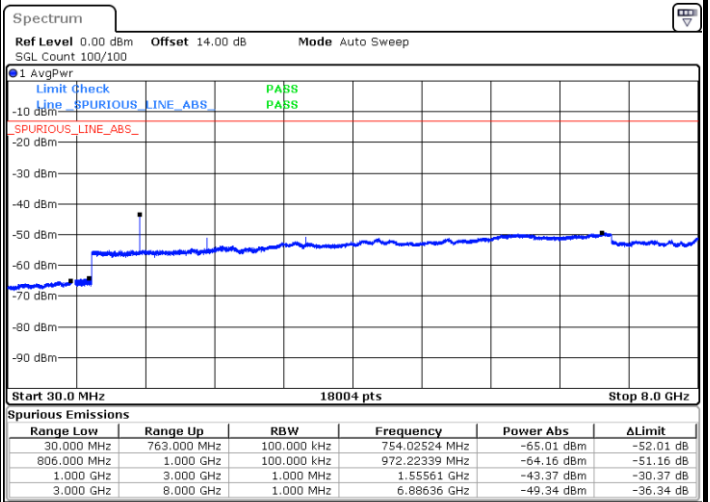
LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 10.MAR.2023 03:12:39

Middle Channel / 16QAM



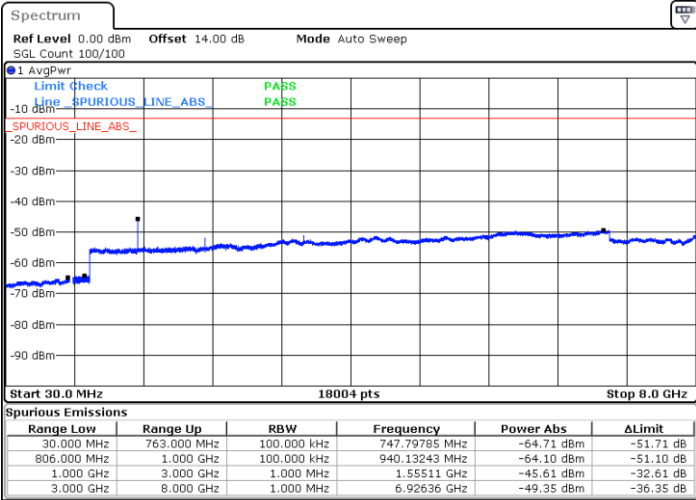
Date: 10.MAR.2023 03:11:36



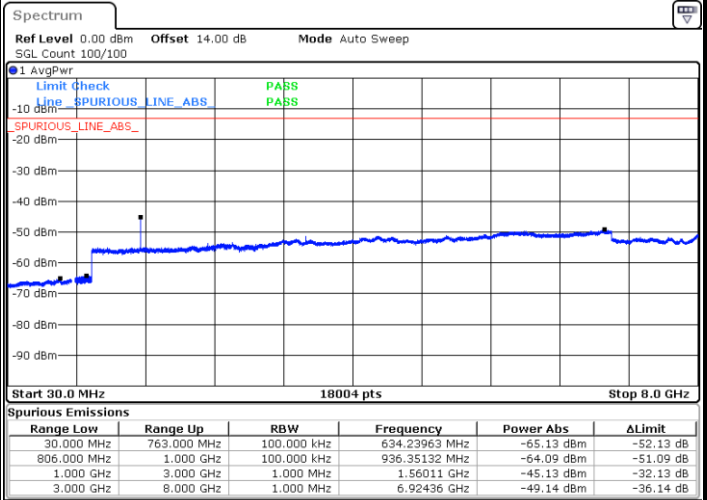
LTE Band 13 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM



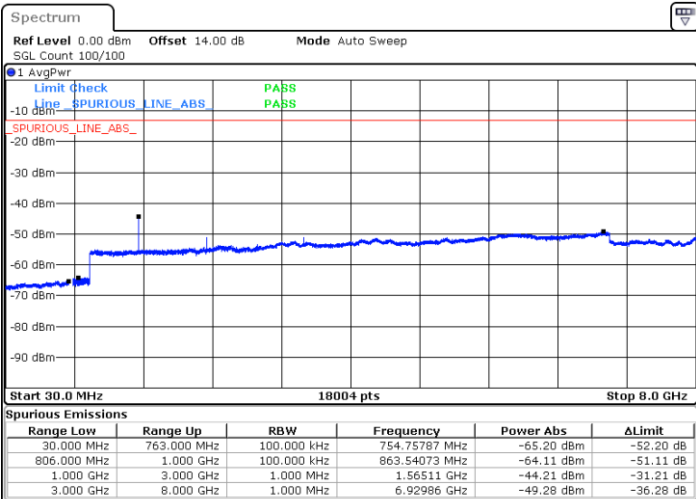
Date: 10.MAR.2023 02:50:59



Date: 10.MAR.2023 02:52:01

Highest Channel / 64QAM

NA



Date: 10.MAR.2023 02:57:59

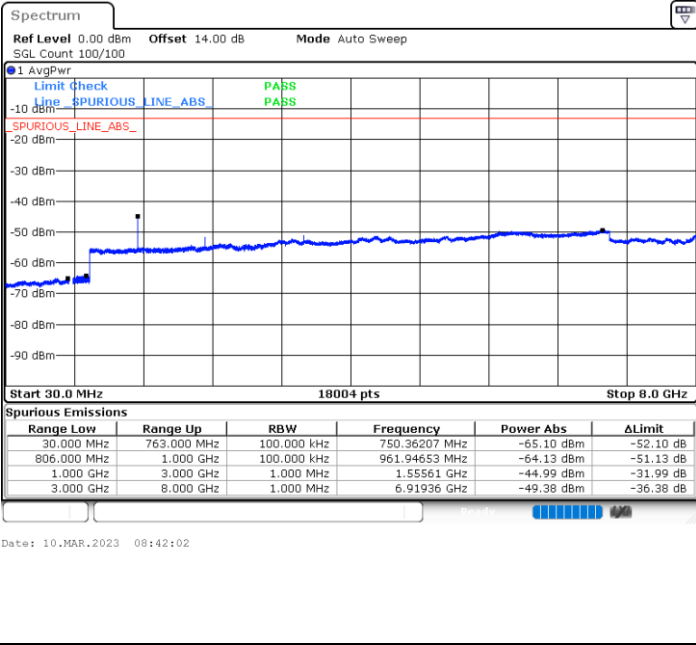
NA



LTE Band 13 / 10MHz

Middle Channel / 64QAM

NA



NA



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	0.0037	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0063	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0038	
0	Normal Voltage	0.0028	
-10	Normal Voltage	0.0052	
-20	Normal Voltage	0.0087	
-30	Normal Voltage	0.0032	
20	Maximum Voltage	0.0040	
20	Normal Voltage	0.0014	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.91V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 71

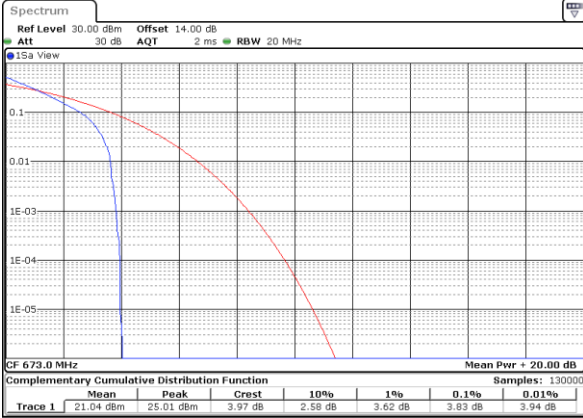
Peak-to-Average Ratio

Mode	LTE Band 71 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.83	5.25	4.70	6.09	PASS
Middle CH	4.03	5.36	5.16	6.17	
Highest CH	4.43	5.22	5.59	6.12	
Mode	LTE Band 71 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.45	6.35	-	-	PASS
Middle CH	5.54	6.46	-	-	
Highest CH	6.38	6.38	-	-	



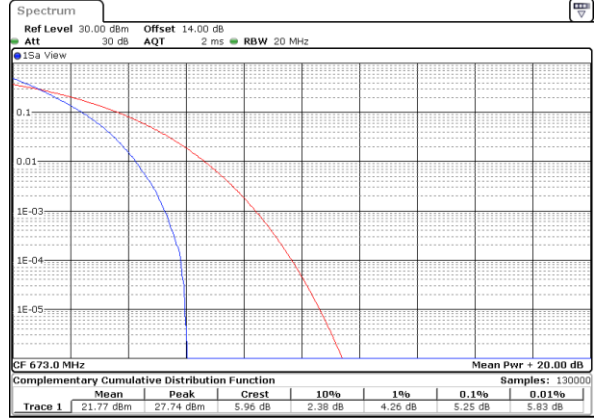
LTE Band 71 / 20MHz / QPSK

Lowest Channel / 1RB



Date: 10_MAR.2023 12:53:05

Lowest Channel / Full RB



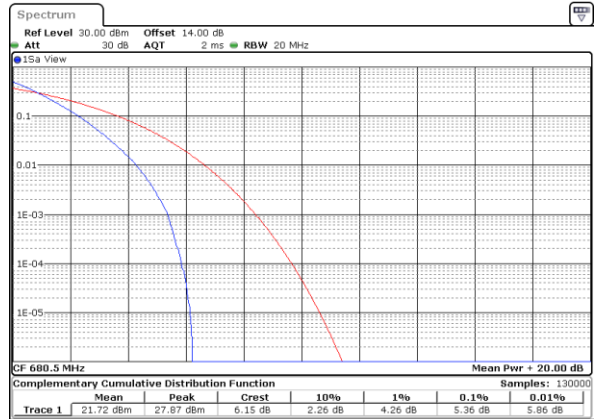
Date: 10_MAR.2023 12:53:32

Middle Channel / 1RB



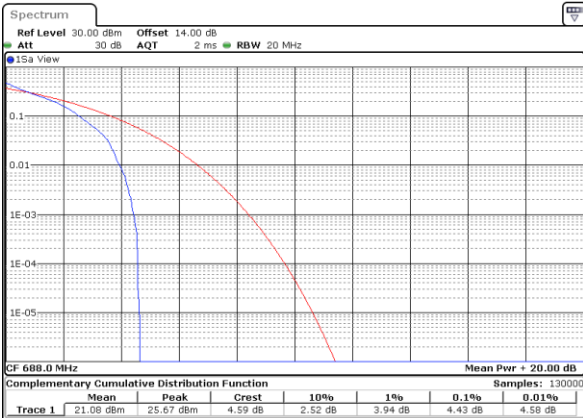
Date: 10_MAR.2023 12:53:57

Middle Channel / Full RB



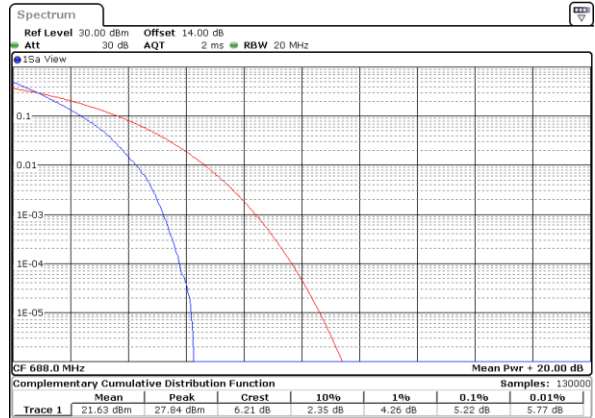
Date: 10_MAR.2023 12:54:23

Highest Channel / 1RB



Date: 10_MAR.2023 12:54:49

Highest Channel / Full RB



Date: 10_MAR.2023 12:55:16