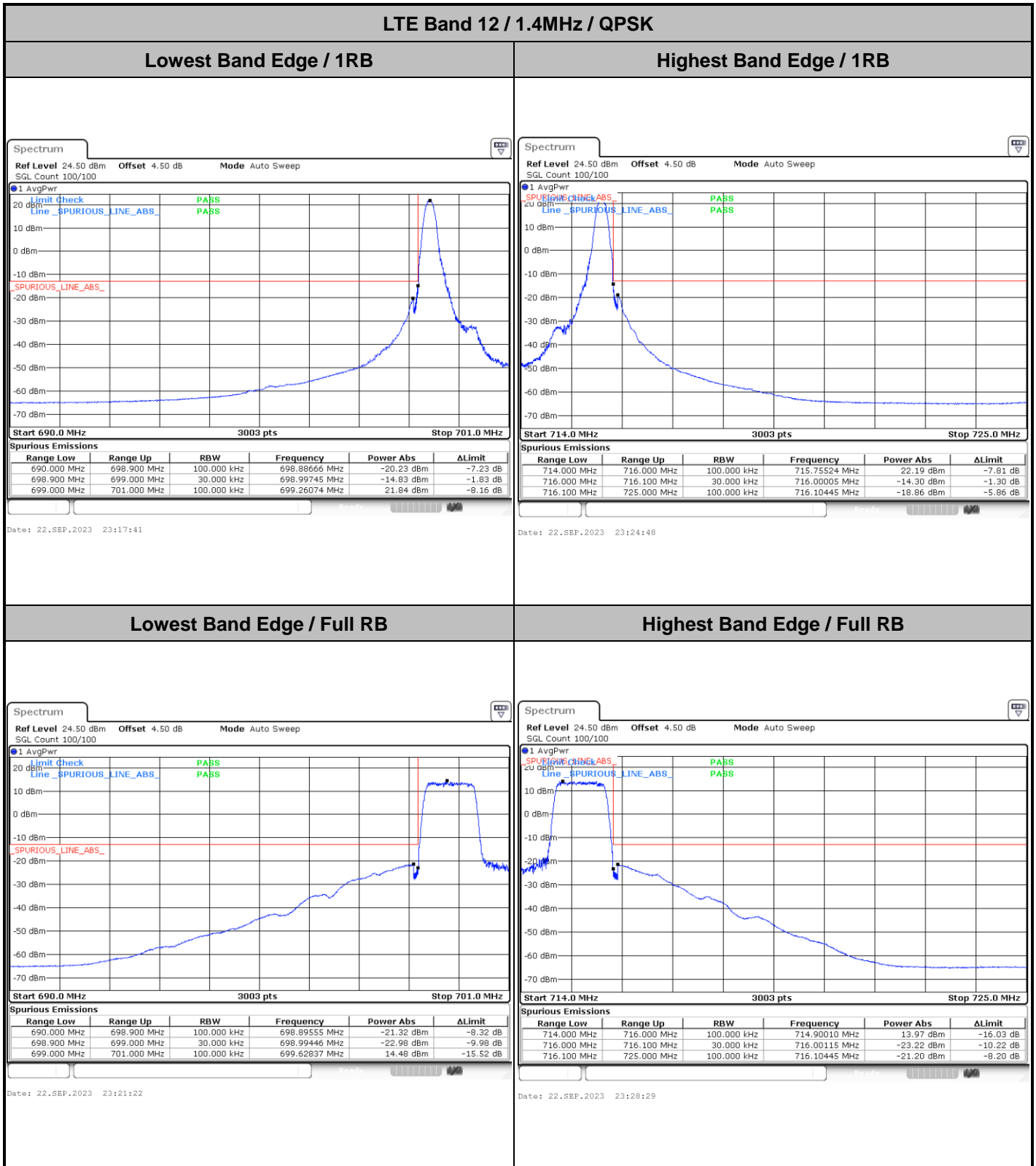




Conducted Band Edge

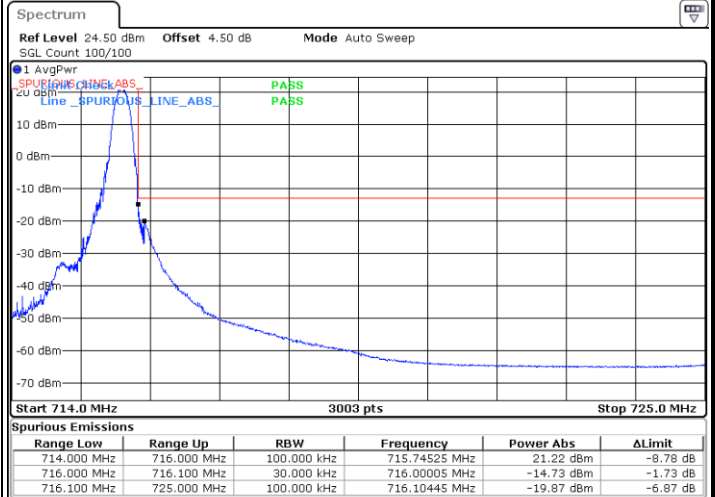




LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

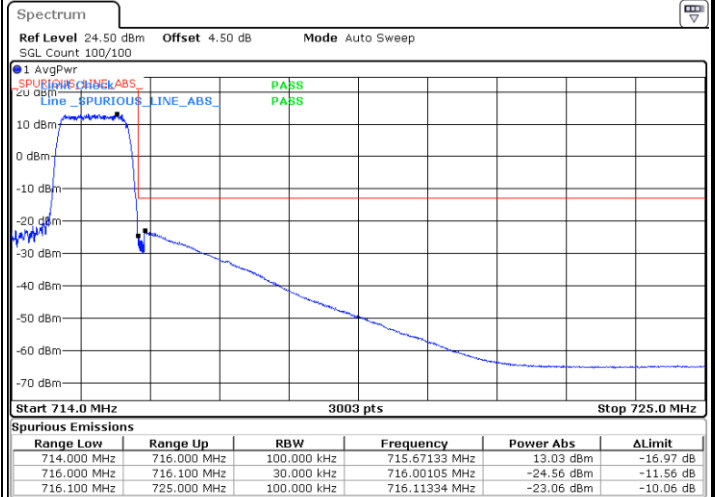
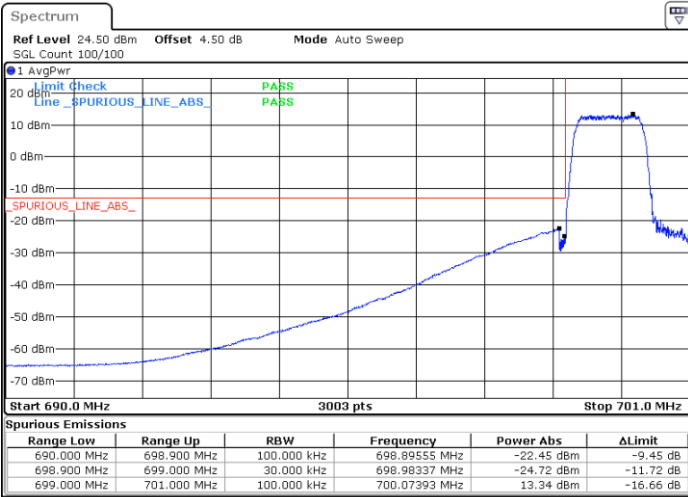


Date: 22.SEP.2023 23:18:25

Date: 22.SEP.2023 23:25:32

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 22.SEP.2023 23:20:38

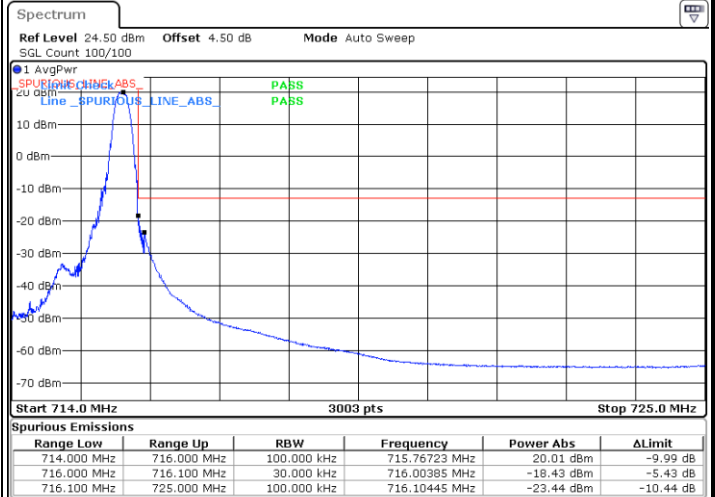
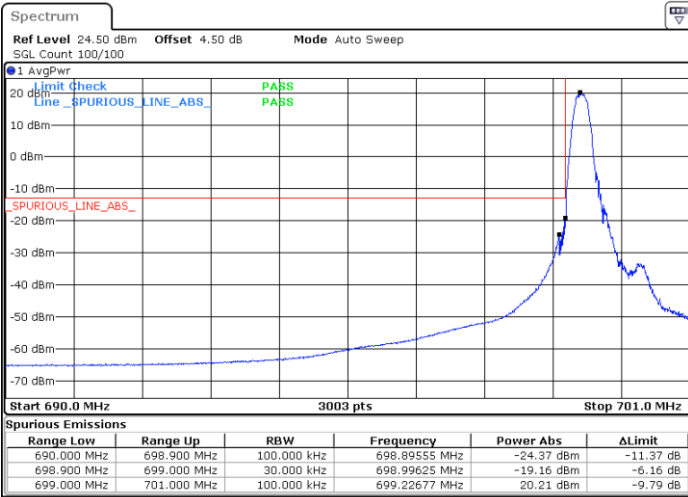
Date: 22.SEP.2023 23:27:45



LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

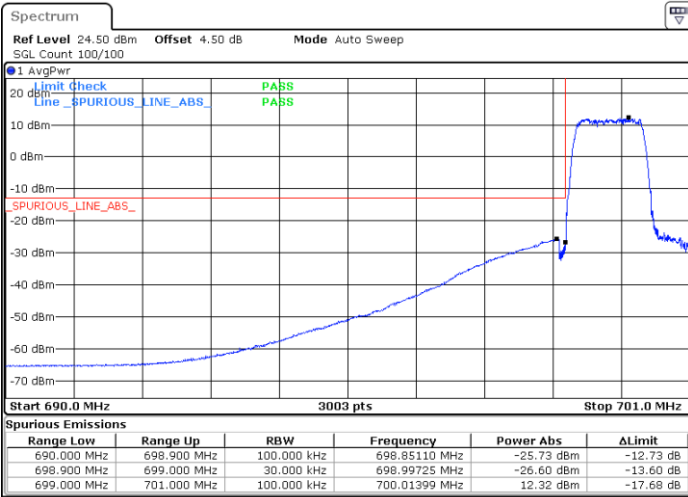


Date: 22.SEP.2023 23:19:09

Date: 22.SEP.2023 23:26:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



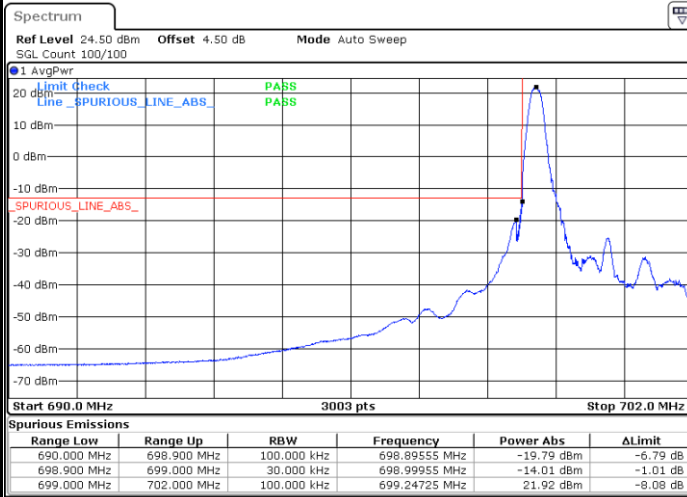
Date: 22.SEP.2023 23:19:53

Date: 22.SEP.2023 23:27:01



LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



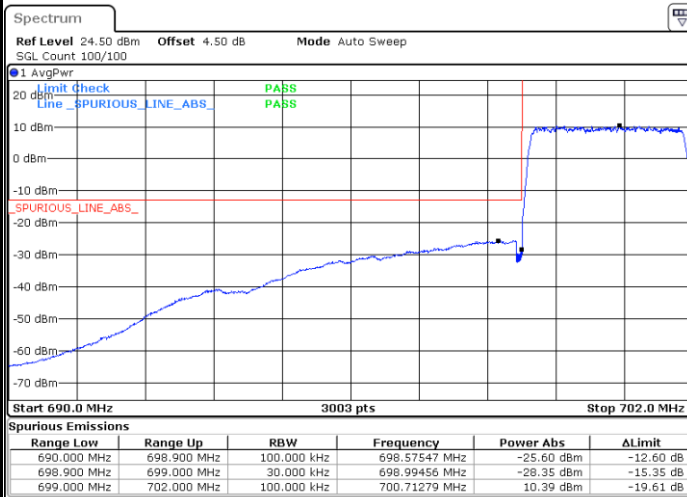
Date: 22.SEP.2023 23:30:35

Highest Band Edge / 1 RB



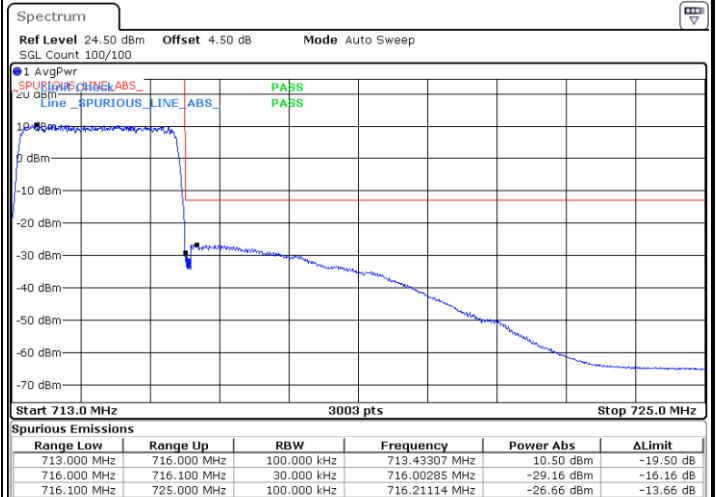
Date: 29.SEP.2023 01:07:20

Lowest Band Edge / Full RB



Date: 22.SEP.2023 23:34:15

Highest Band Edge / Full RB

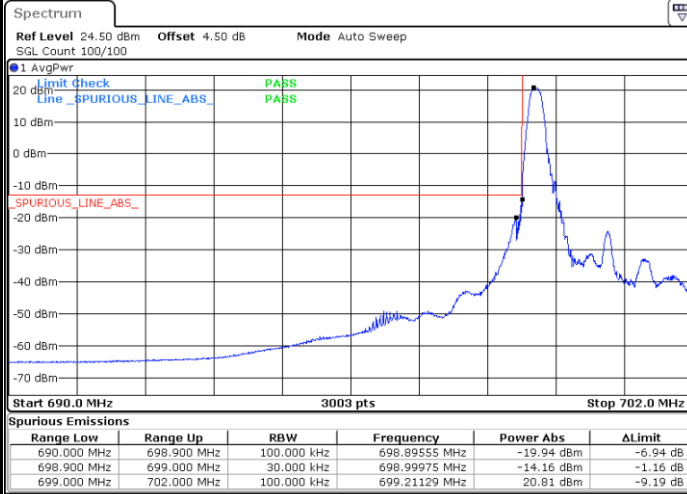


Date: 22.SEP.2023 23:41:21



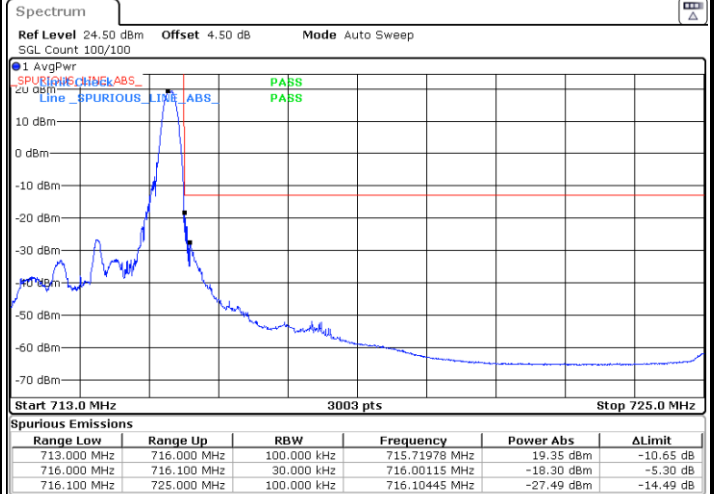
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



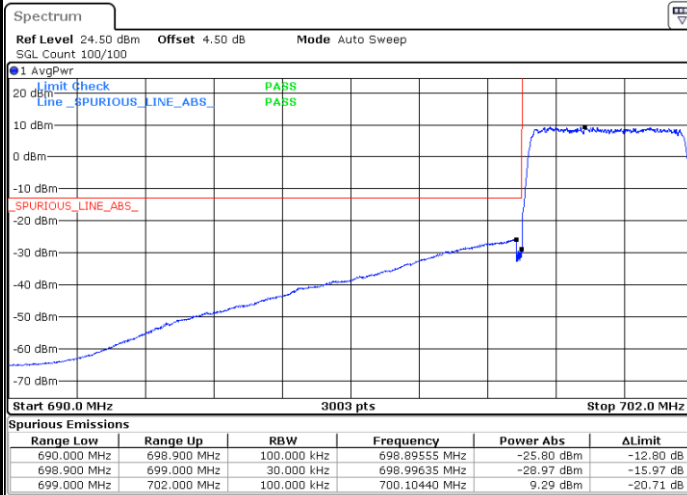
Date: 22.SEP.2023 23:31:19

Highest Band Edge / 1 RB



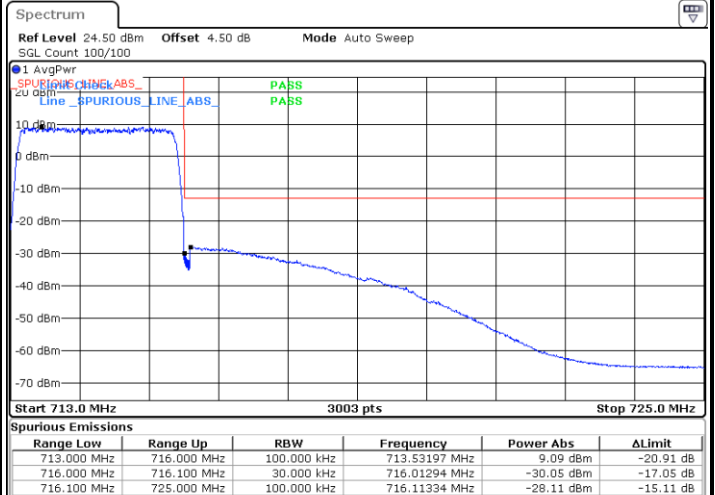
Date: 29.SEP.2023 01:08:11

Lowest Band Edge / Full RB



Date: 22.SEP.2023 23:33:31

Highest Band Edge / Full RB

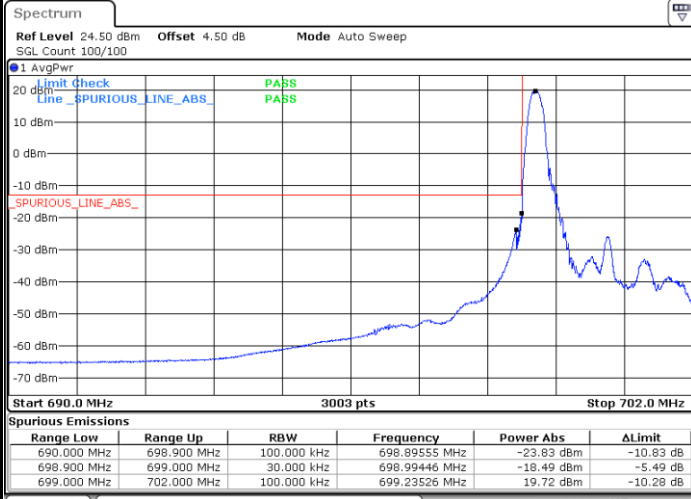


Date: 22.SEP.2023 23:40:37



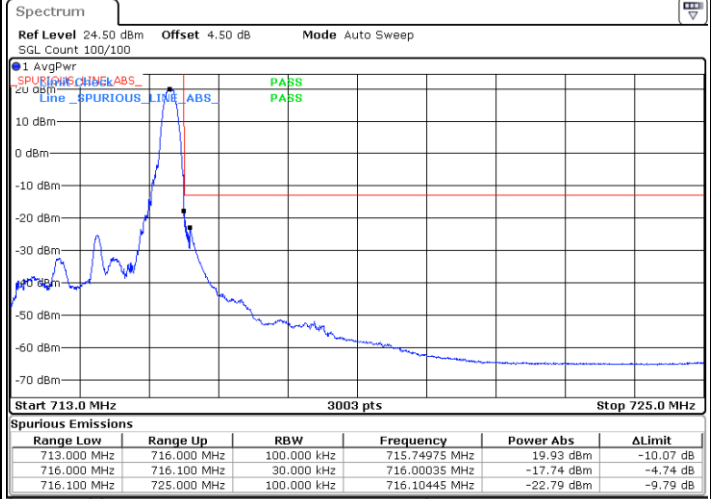
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



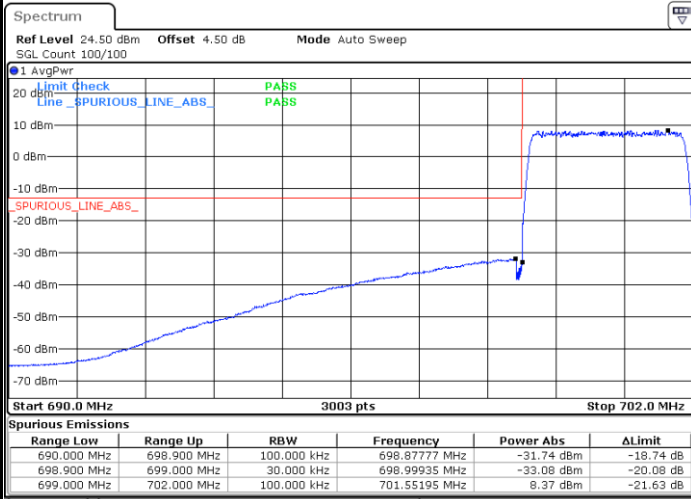
Date: 22.SEP.2023 23:32:03

Highest Band Edge / 1 RB



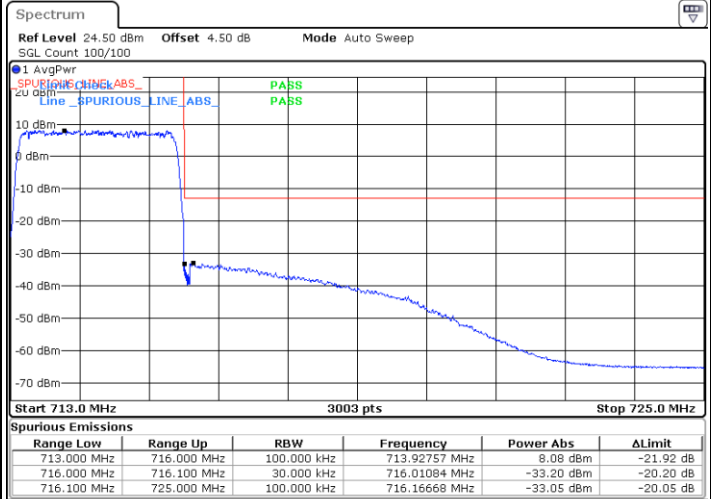
Date: 22.SEP.2023 23:39:09

Lowest Band Edge / Full RB



Date: 22.SEP.2023 23:32:47

Highest Band Edge / Full RB

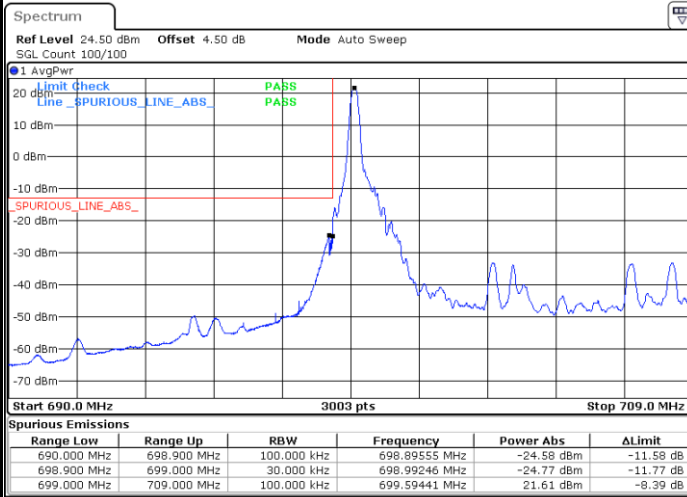


Date: 22.SEP.2023 23:39:53



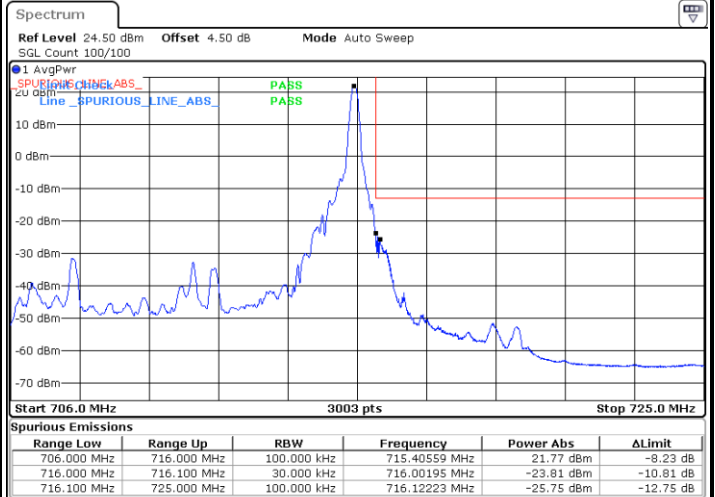
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



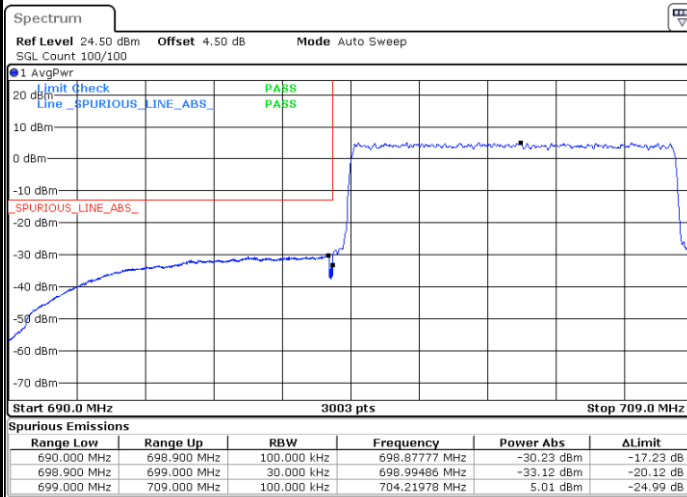
Date: 22.SEP.2023 23:56:20

Highest Band Edge / 1 RB



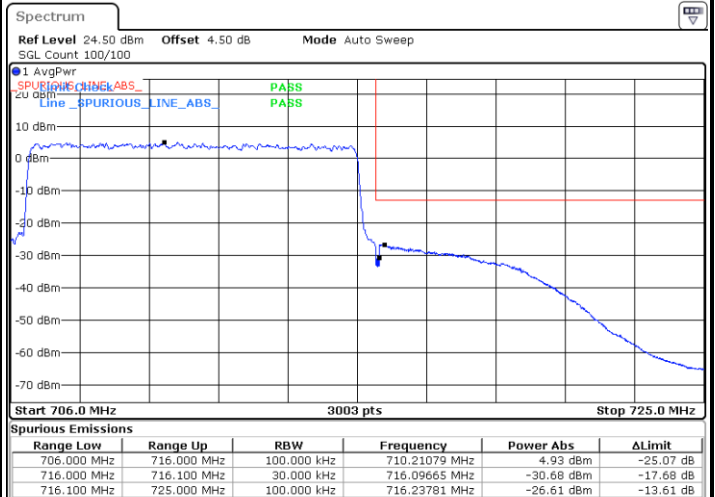
Date: 23.SEP.2023 00:03:27

Lowest Band Edge / Full RB



Date: 23.SEP.2023 00:00:01

Highest Band Edge / Full RB

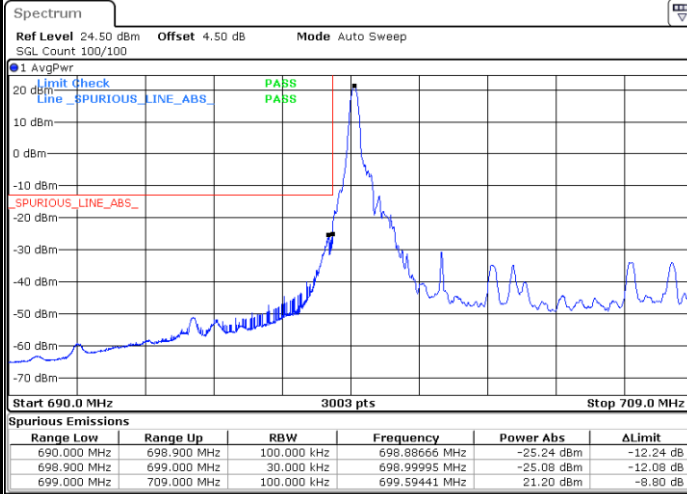


Date: 23.SEP.2023 00:07:08



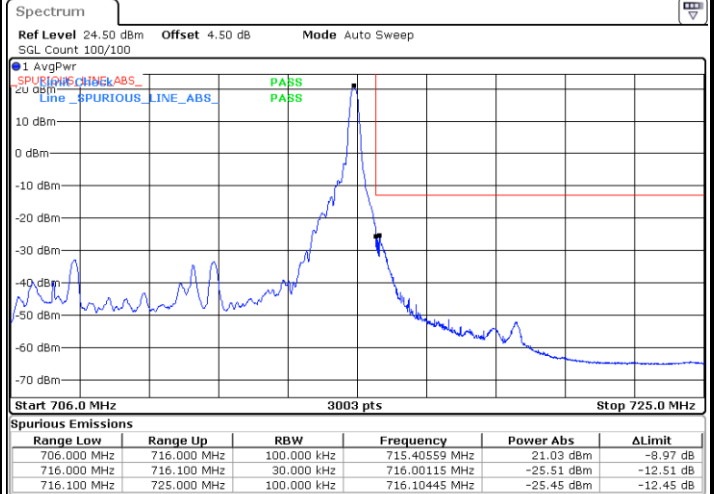
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



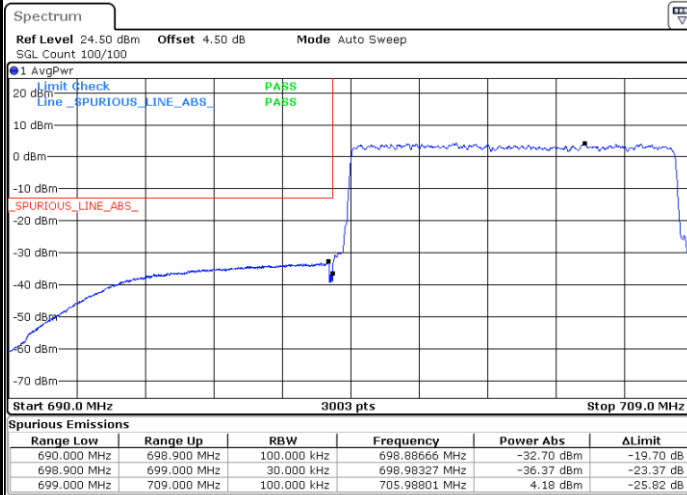
Date: 22.SEP.2023 23:57:04

Highest Band Edge / 1 RB



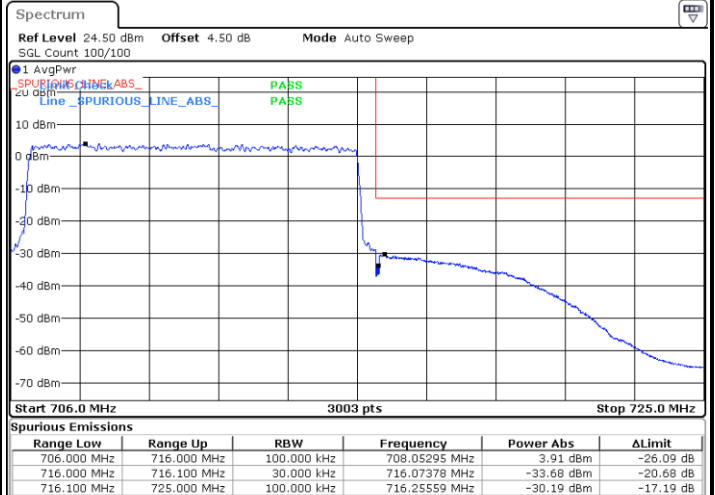
Date: 23.SEP.2023 00:04:11

Lowest Band Edge / Full RB



Date: 22.SEP.2023 23:59:17

Highest Band Edge / Full RB

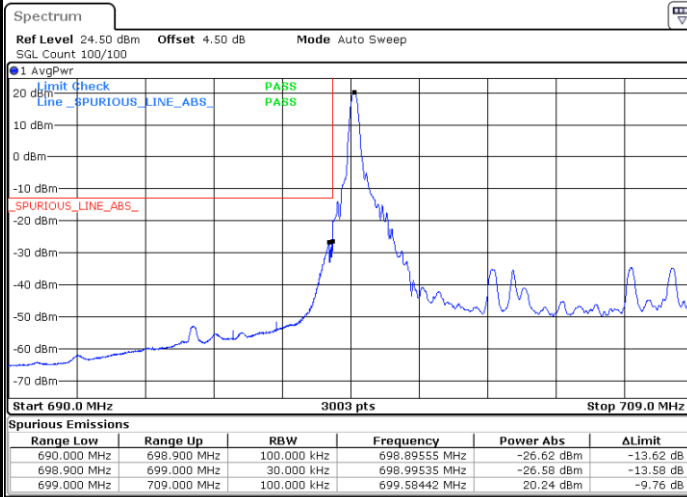


Date: 23.SEP.2023 00:06:24



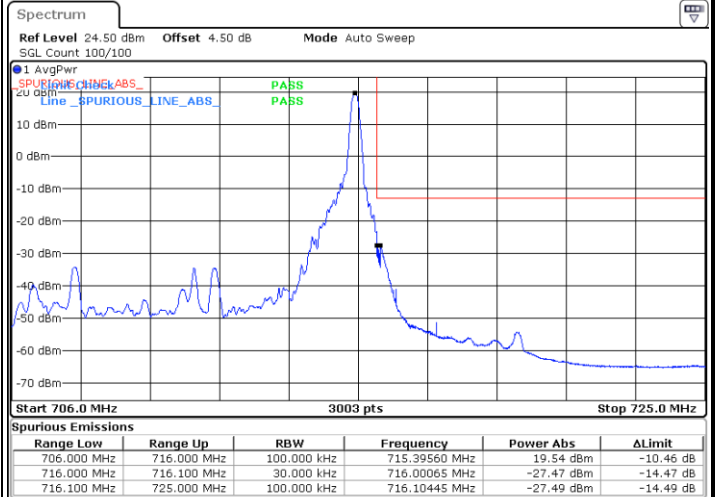
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



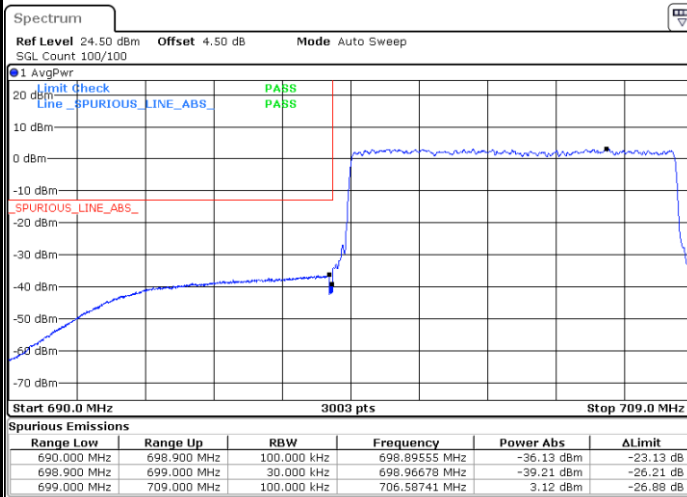
Date: 22.SEP.2023 23:57:48

Highest Band Edge / 1 RB



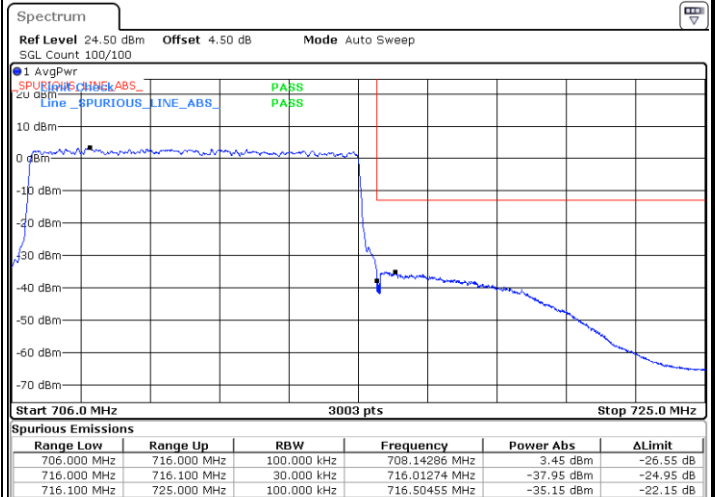
Date: 23.SEP.2023 00:04:56

Lowest Band Edge / Full RB



Date: 22.SEP.2023 23:58:32

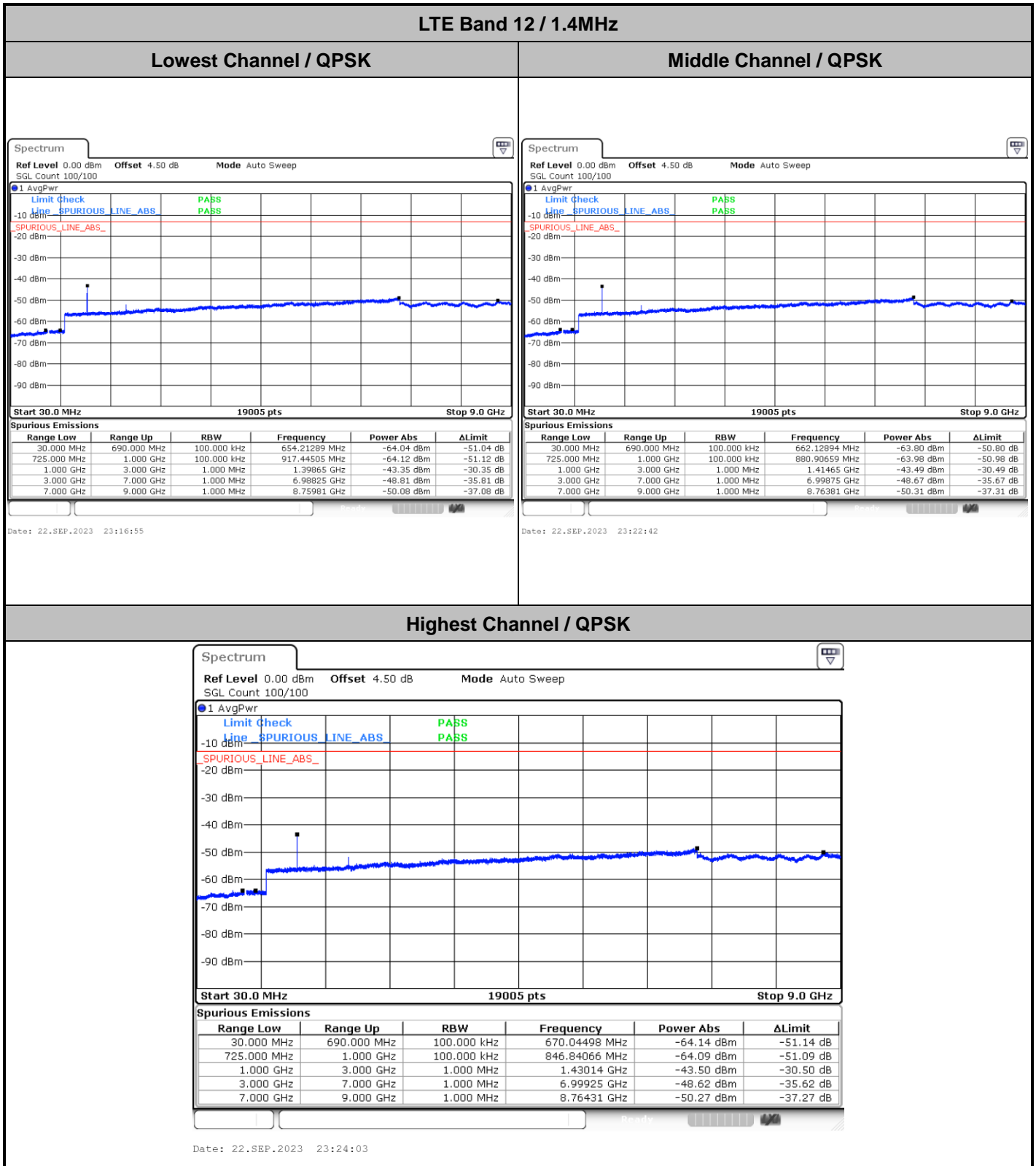
Highest Band Edge / Full RB



Date: 23.SEP.2023 00:05:40



Conducted Spurious Emission

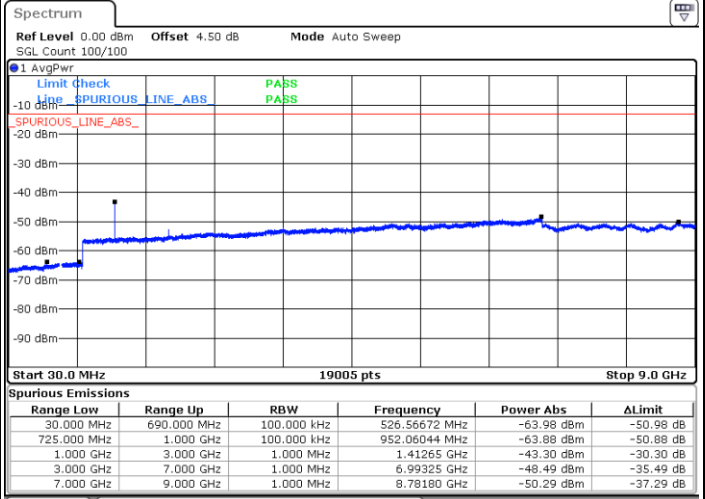
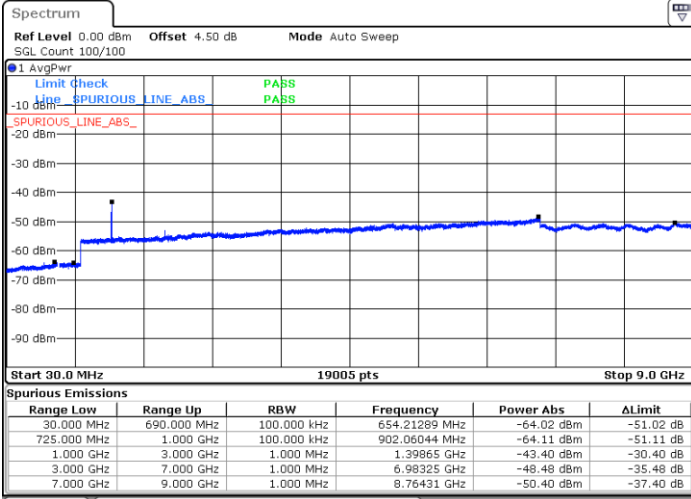




LTE Band 12 / 3MHz

Lowest Channel / QPSK

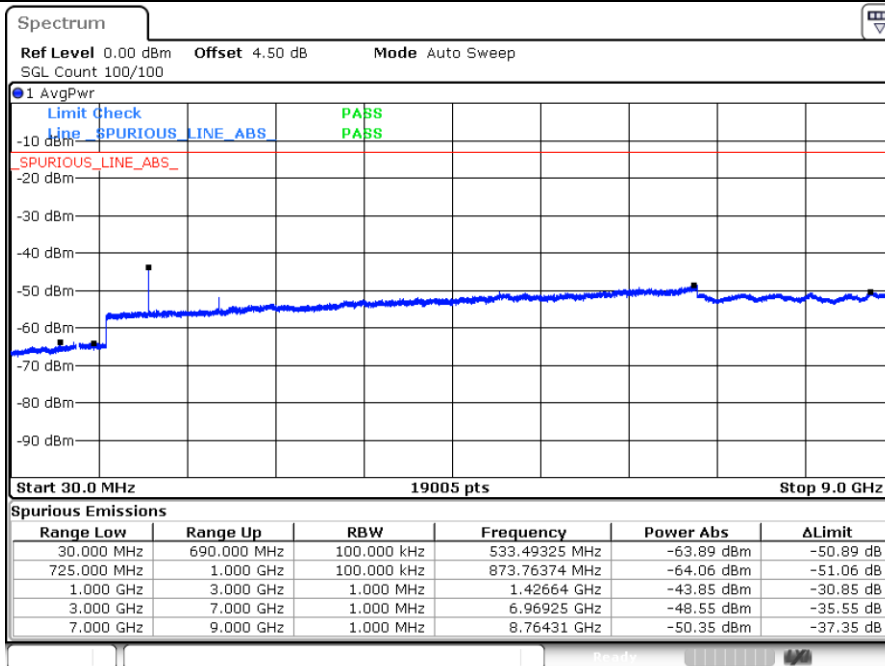
Middle Channel / QPSK



Date: 22.SEP.2023 23:29:50

Date: 22.SEP.2023 23:35:35

Highest Channel / QPSK



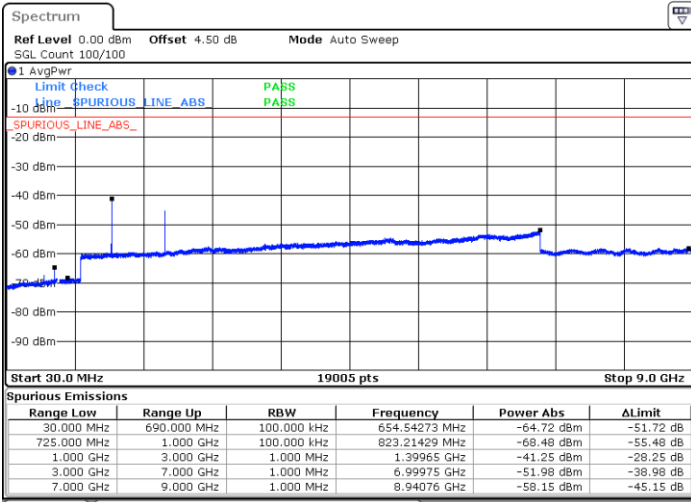
Date: 22.SEP.2023 23:36:56



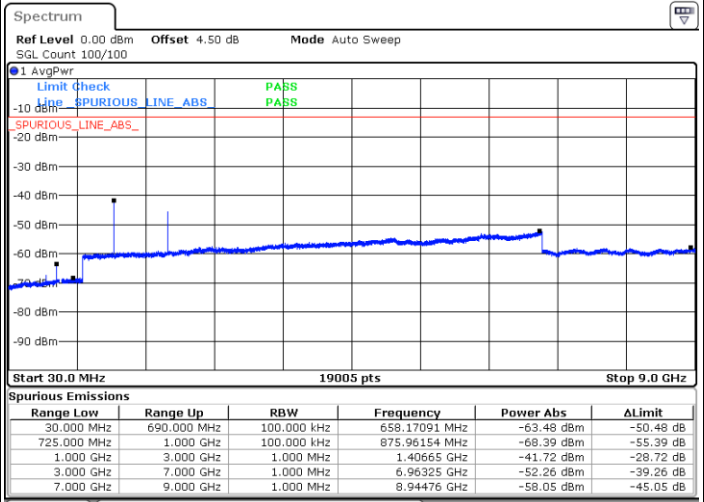
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

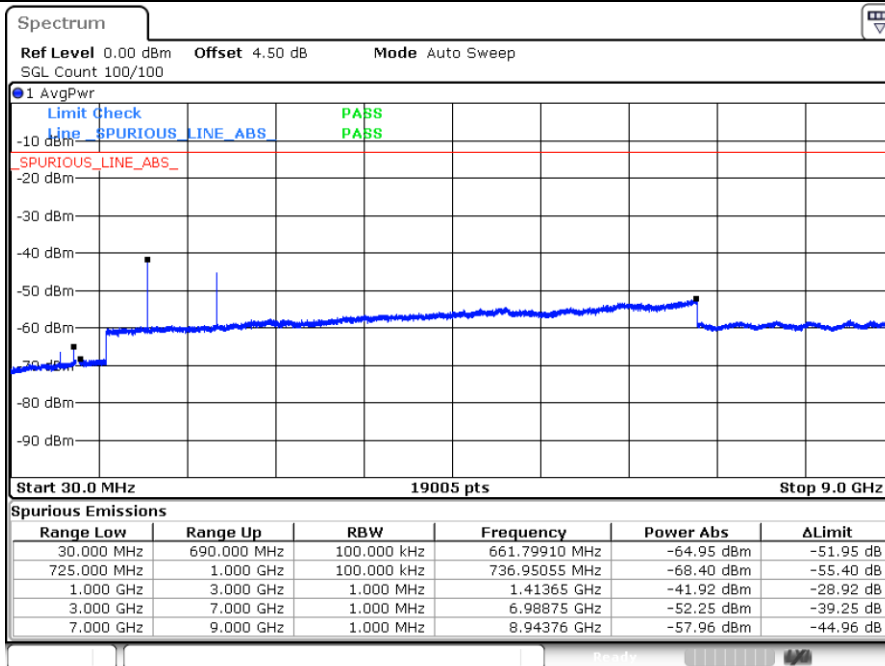


Date: 22.SEP.2023 23:55:36



Date: 23.SEP.2023 00:01:22

Highest Channel / QPSK



Date: 23.SEP.2023 00:02:43



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	0.0022	PASS
40	Normal Voltage	0.0018	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0022	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0008	
20	Battery End Point	0.0014	

Note:

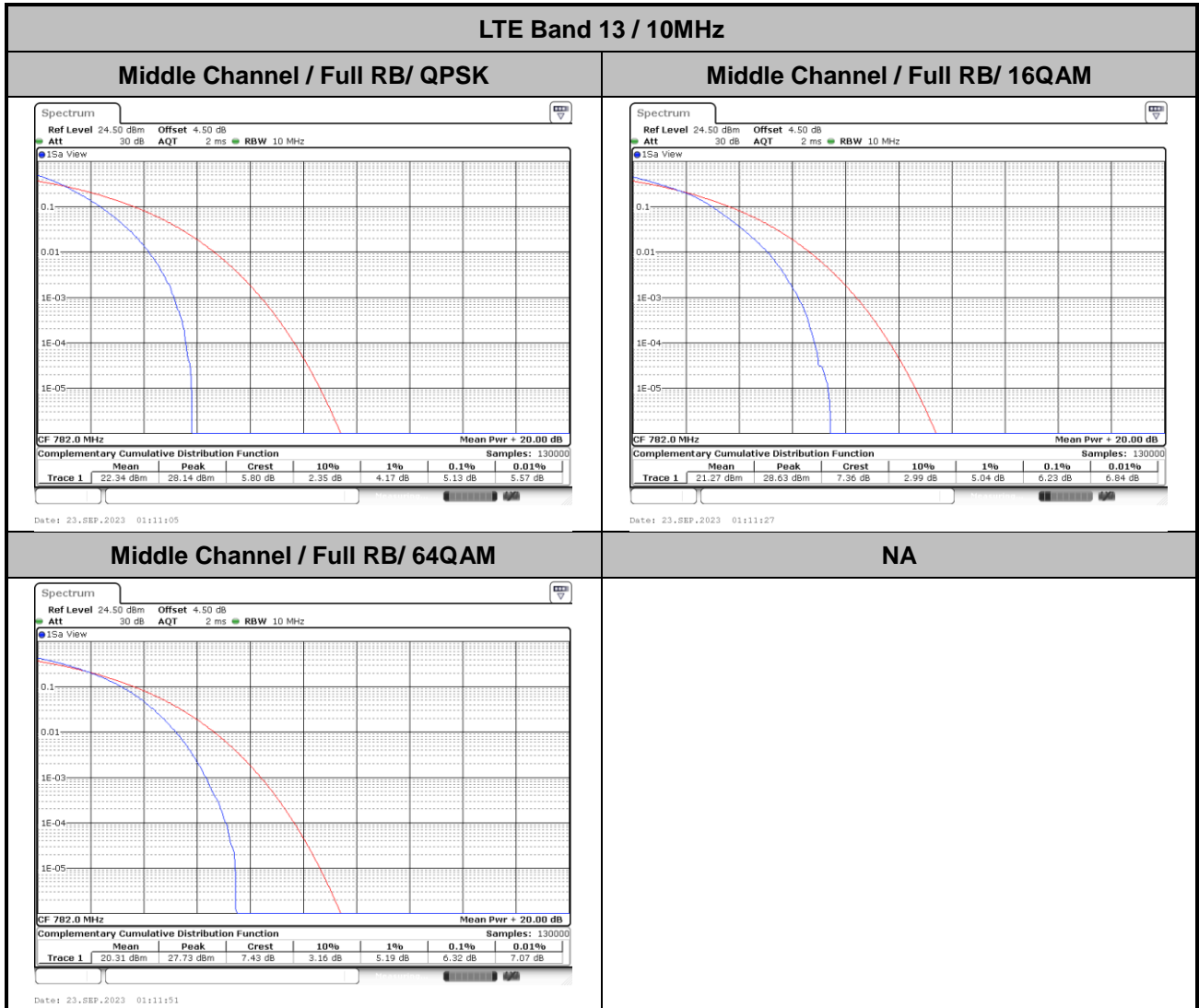
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

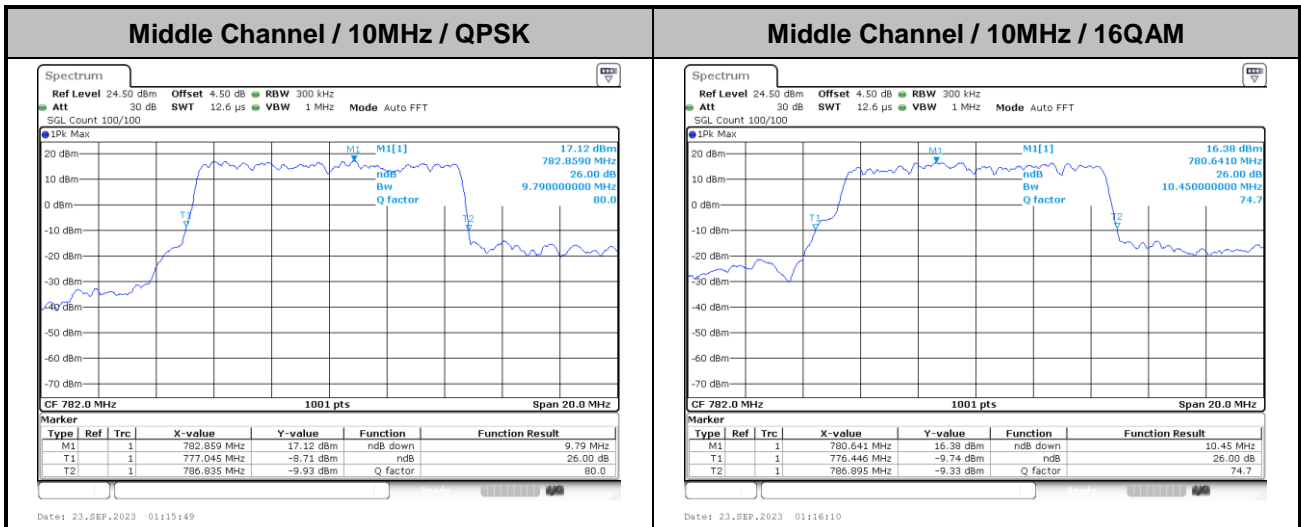
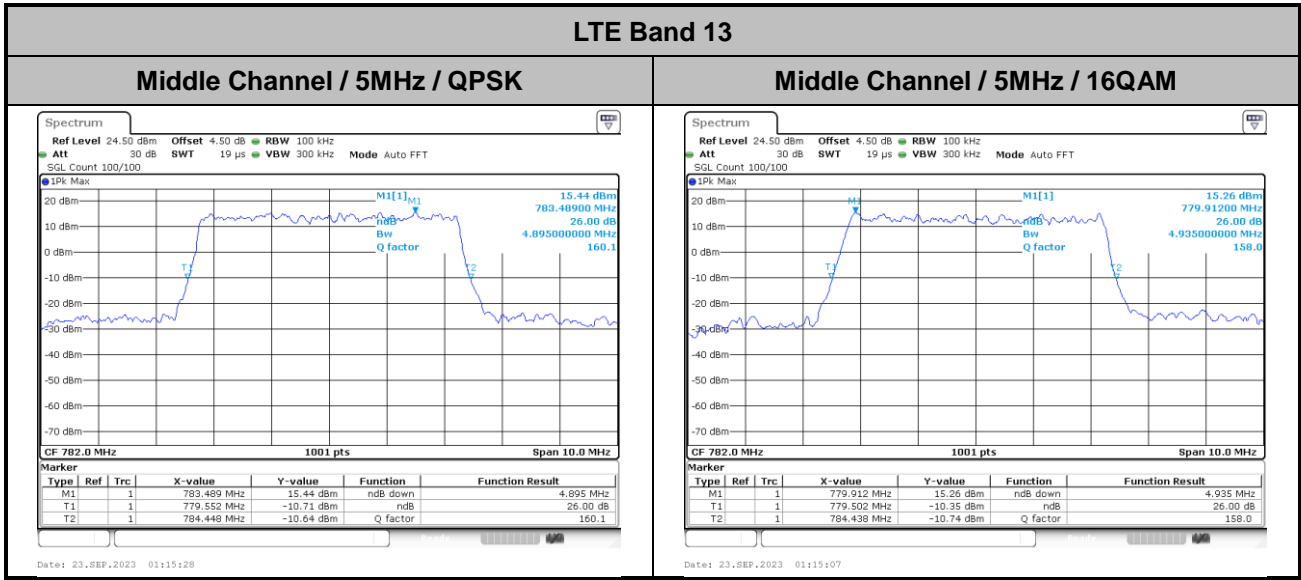
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	-	Limit: 13dB
RB Size	Full RB				Result
Middle CH	5.13	6.23	6.32	-	PASS





26dB Bandwidth

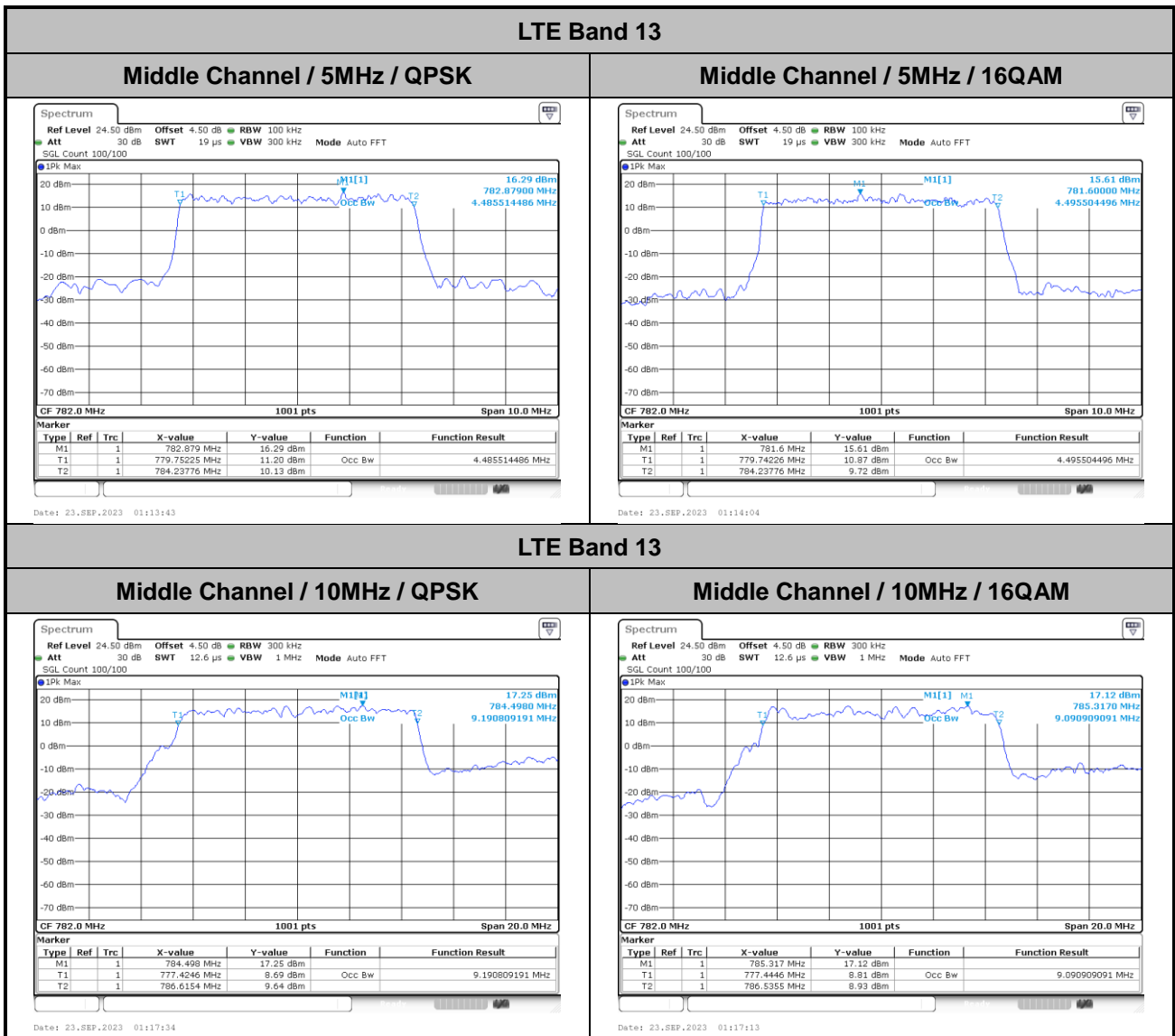
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.90	4.94
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.79	10.45





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.50
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.19	9.09

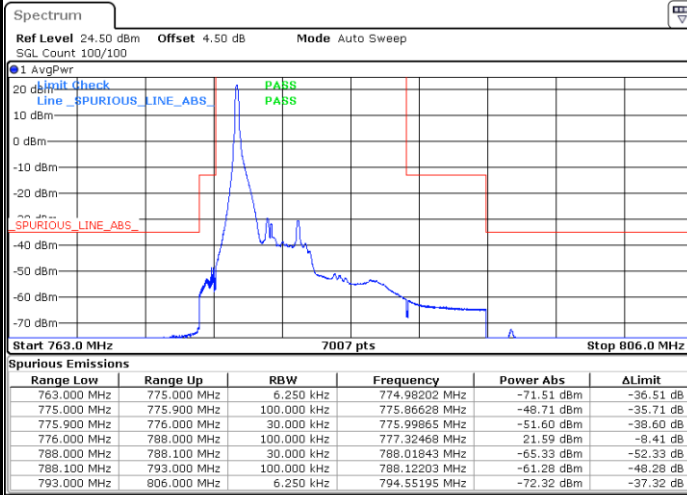




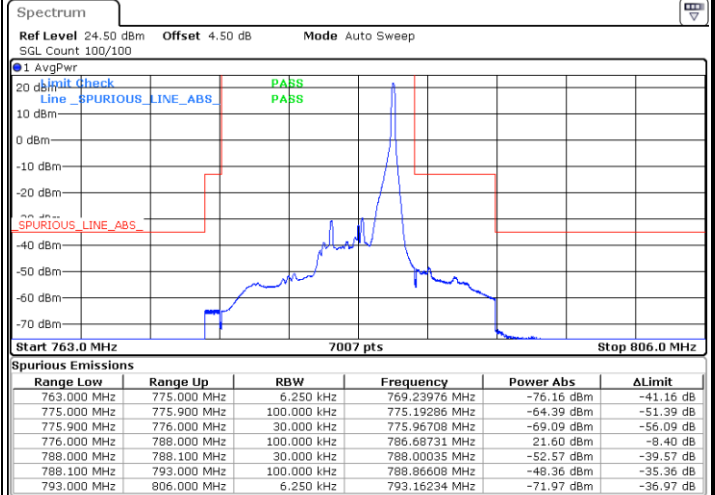
Conducted Band Edge

LTE Band 13 / 5MHz / QPSK

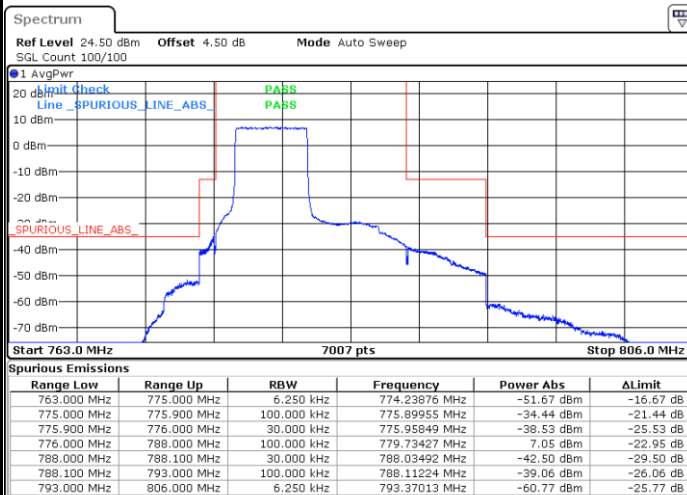
Lowest Band Edge / 1 RB



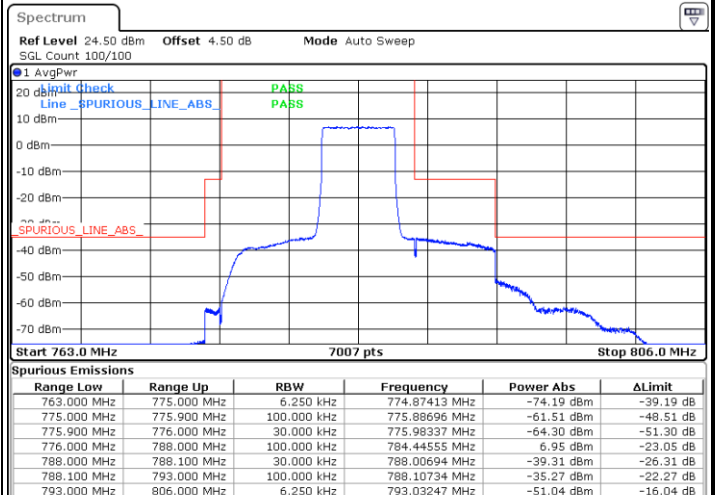
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

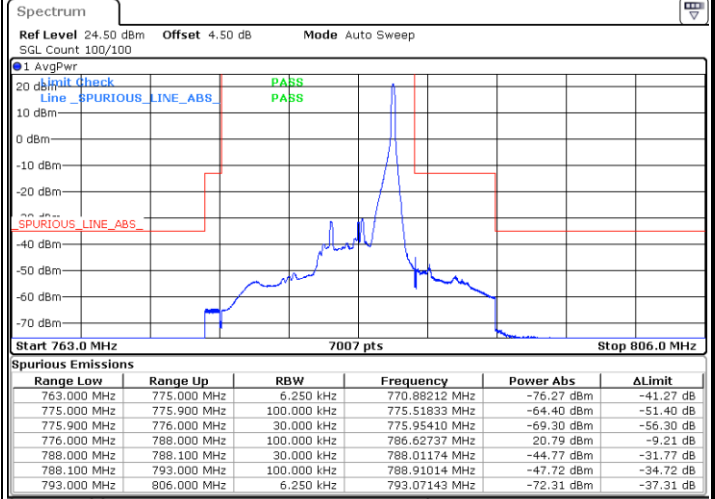
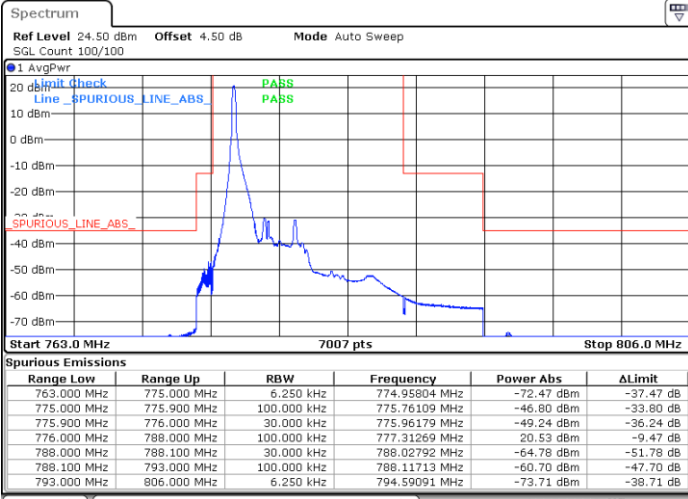




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

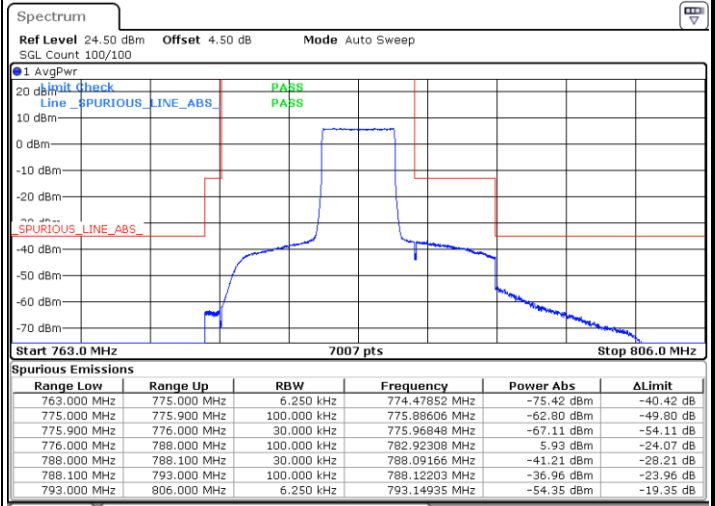
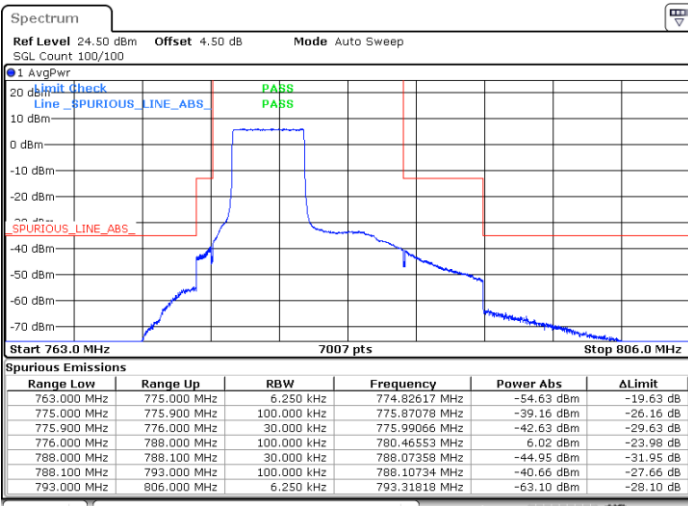


Date: 23.SEP.2023 00:30:34

Date: 23.SEP.2023 00:44:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.SEP.2023 00:36:04

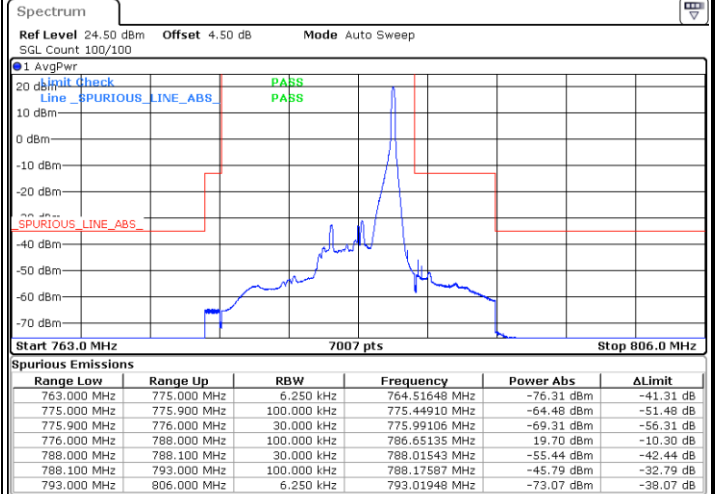
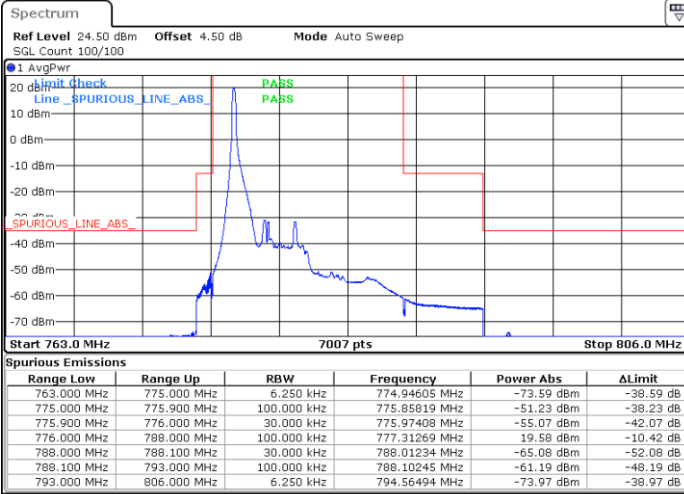
Date: 23.SEP.2023 00:49:44



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

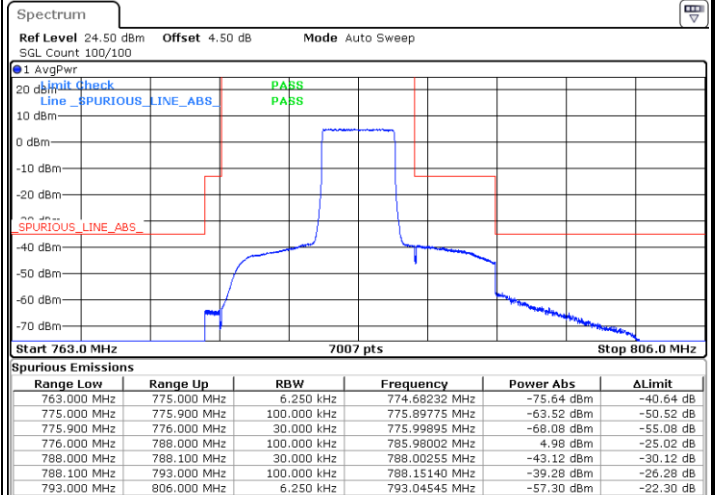
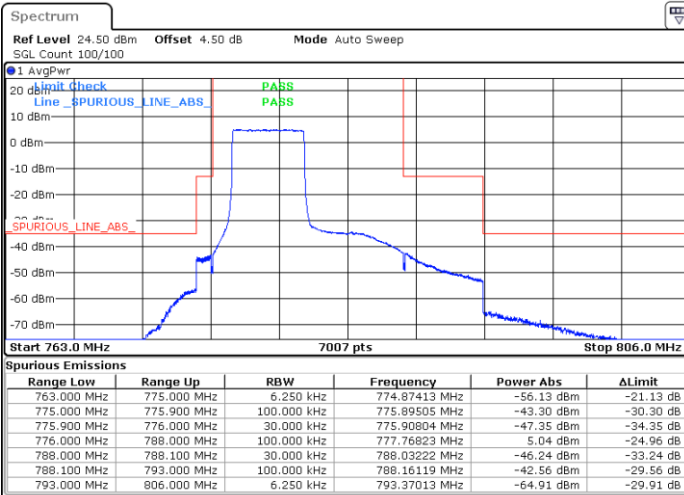


Date: 23.SEP.2023 00:32:24

Date: 23.SEP.2023 00:46:04

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.SEP.2023 00:34:14

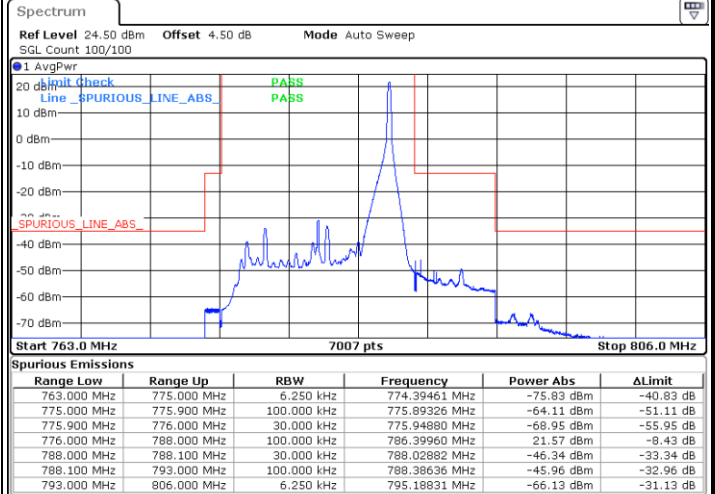
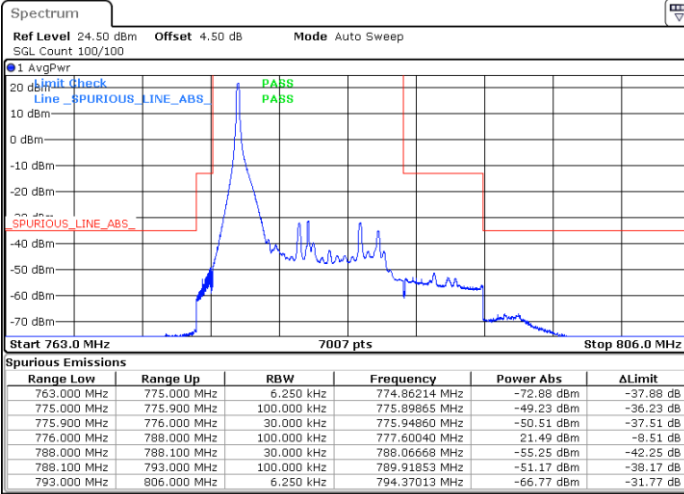
Date: 23.SEP.2023 00:47:54



LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB

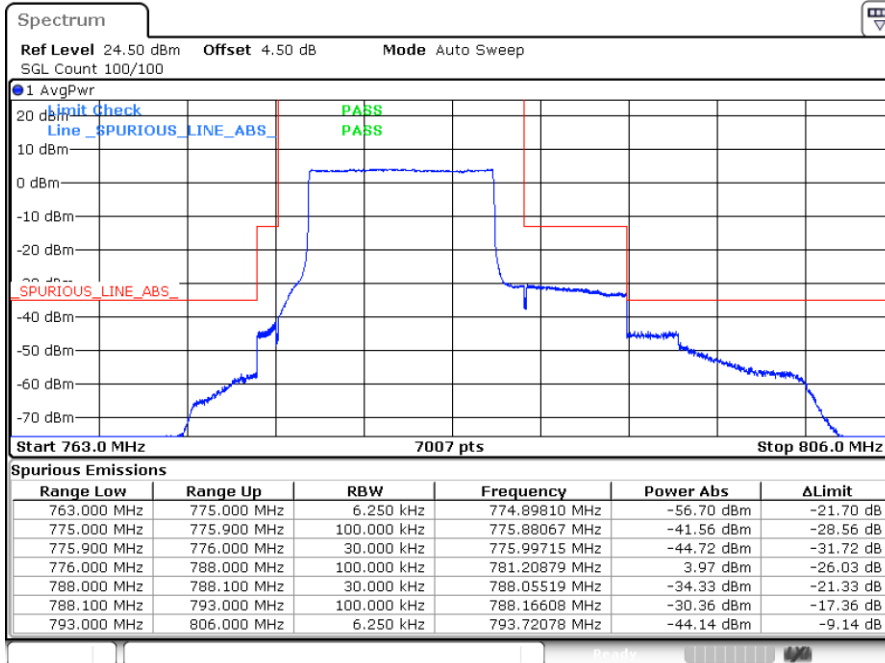
middle Band Edge / 1 RB



Date: 23.SEP.2023 00:54:44

Date: 23.SEP.2023 01:03:51

Middle Band Edge / Full RB

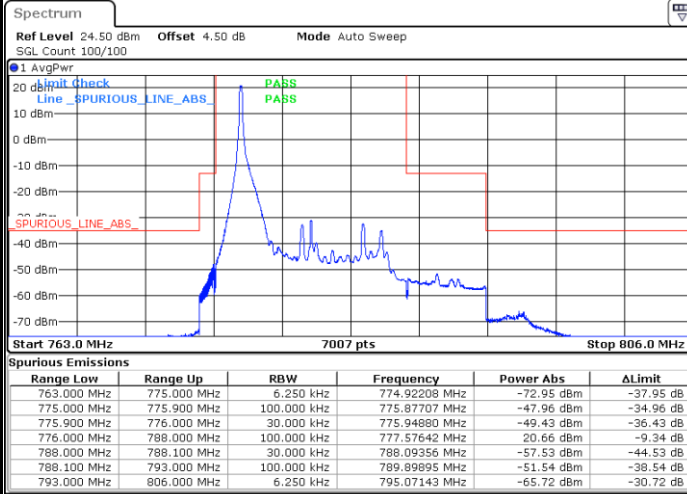


Date: 23.SEP.2023 01:05:41



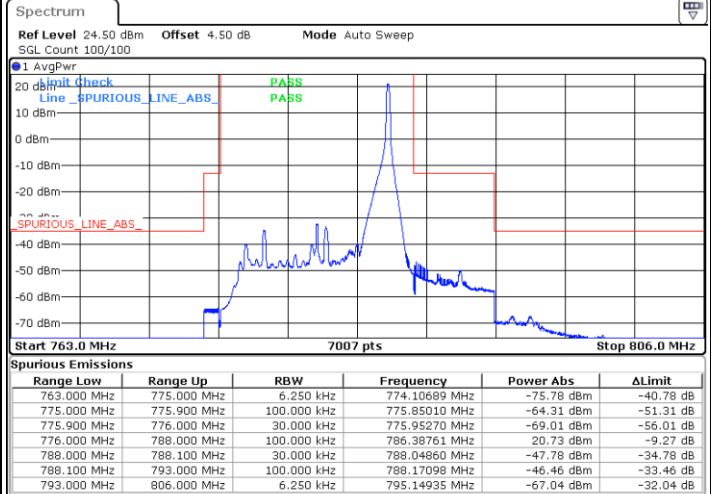
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



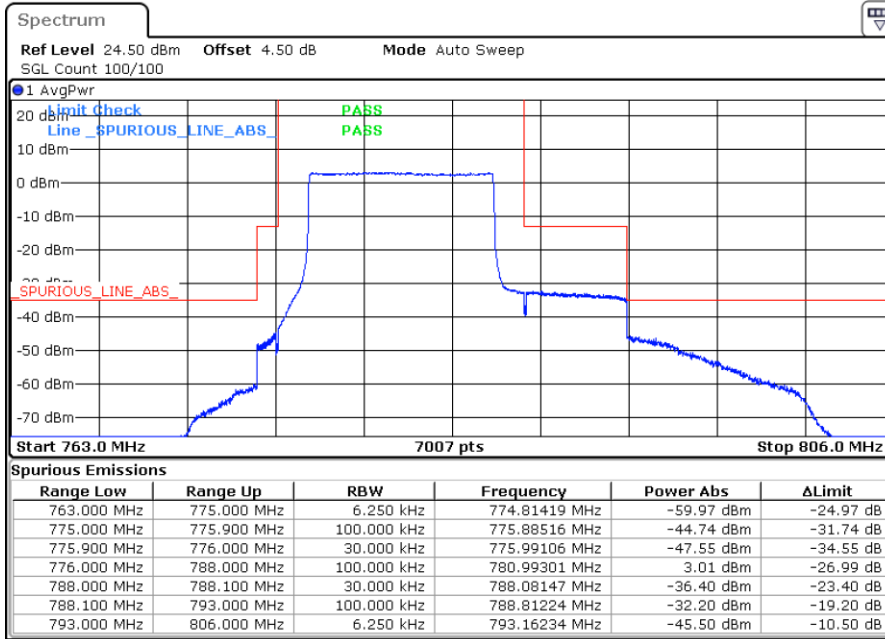
Date: 23.SEP.2023 00:56:34

middle Band Edge / 1 RB



Date: 23.SEP.2023 01:02:02

middle Band Edge / Full RB

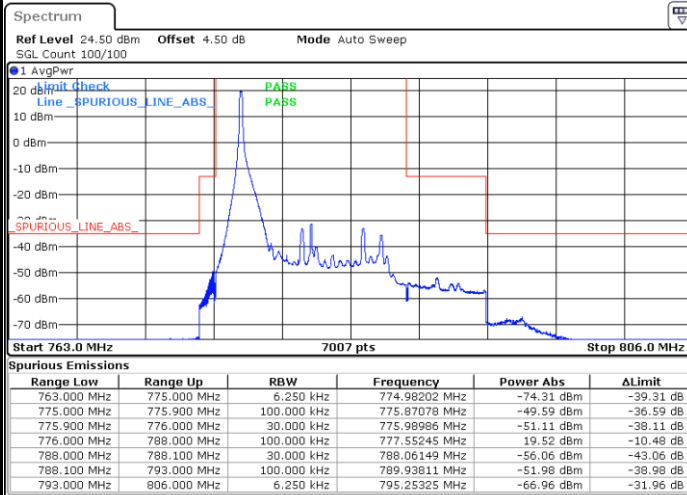


Date: 23.SEP.2023 01:07:30



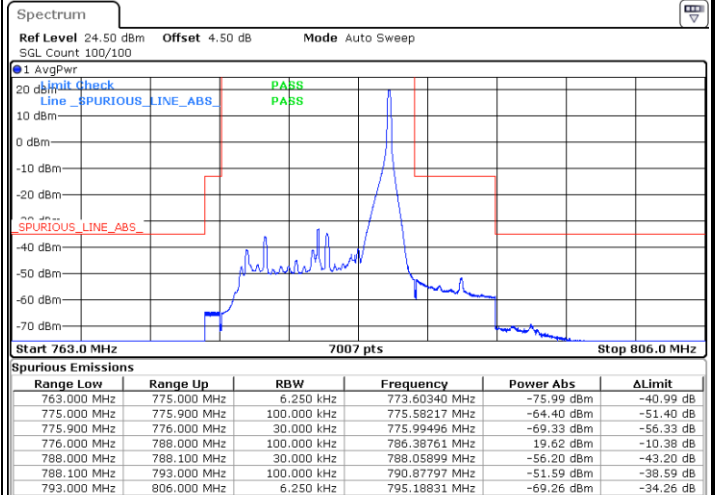
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



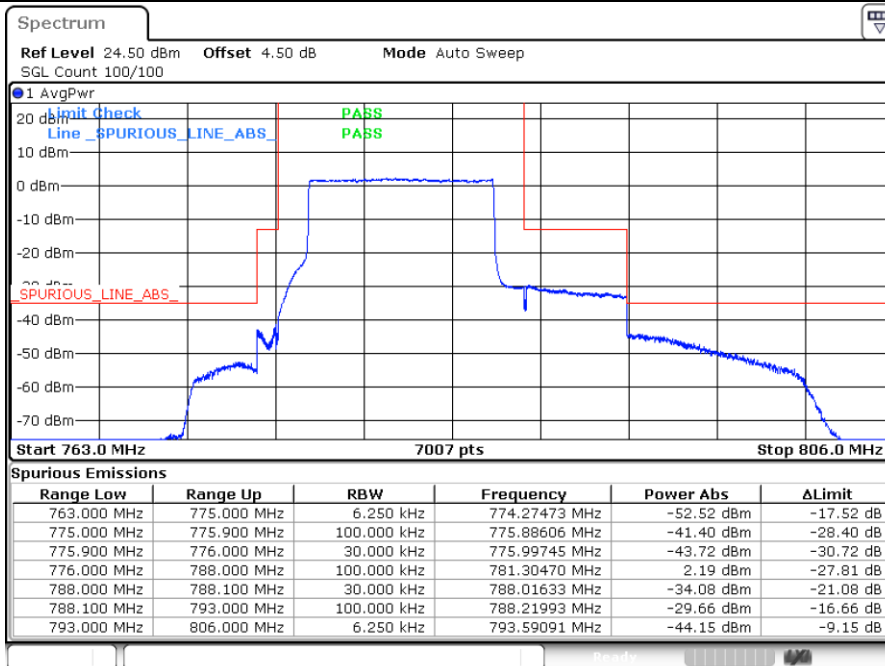
Date: 23.SEP.2023 00:58:23

middle Band Edge / 1 RB



Date: 23.SEP.2023 01:00:12

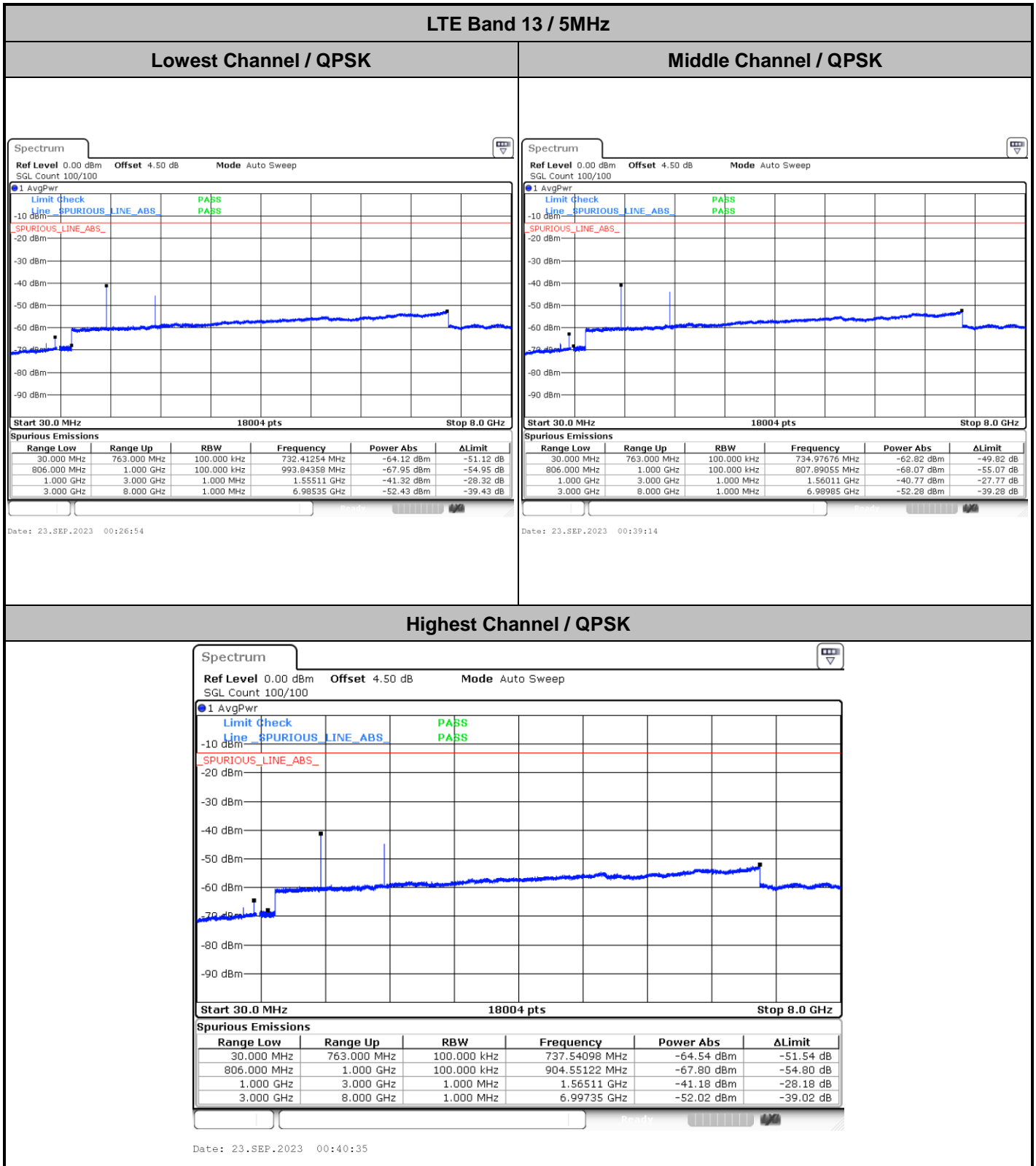
middle Band Edge / Full RB



Date: 23.SEP.2023 01:09:19



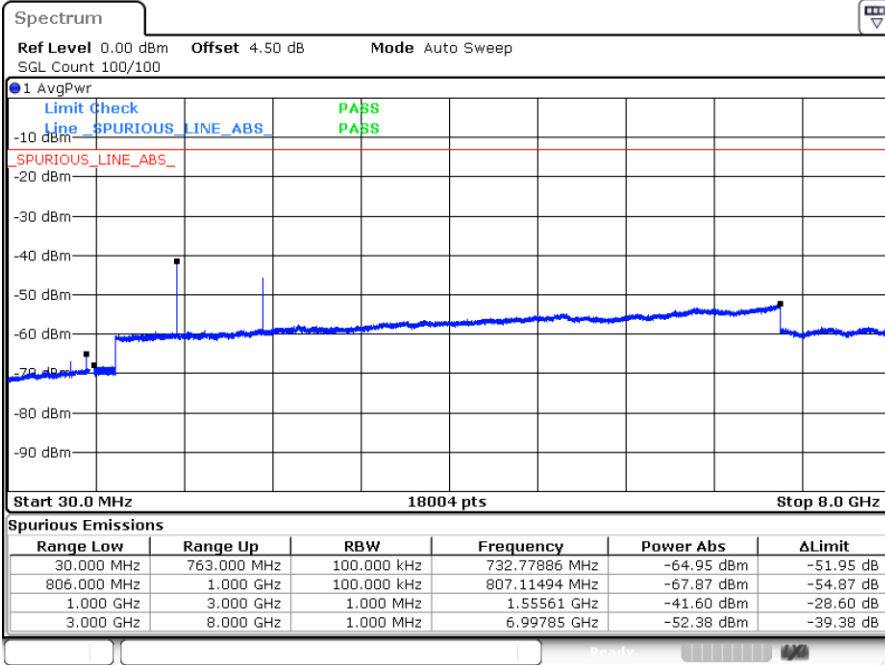
Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 23.SEP.2023 00:52:55



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	0.0013	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0025	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0016	
0	Normal Voltage	0.0011	
-10	Normal Voltage	0.0027	
-20	Normal Voltage	0.0009	
-30	Normal Voltage	0.0012	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0018	
20	Battery End Point	0.0024	

Note:

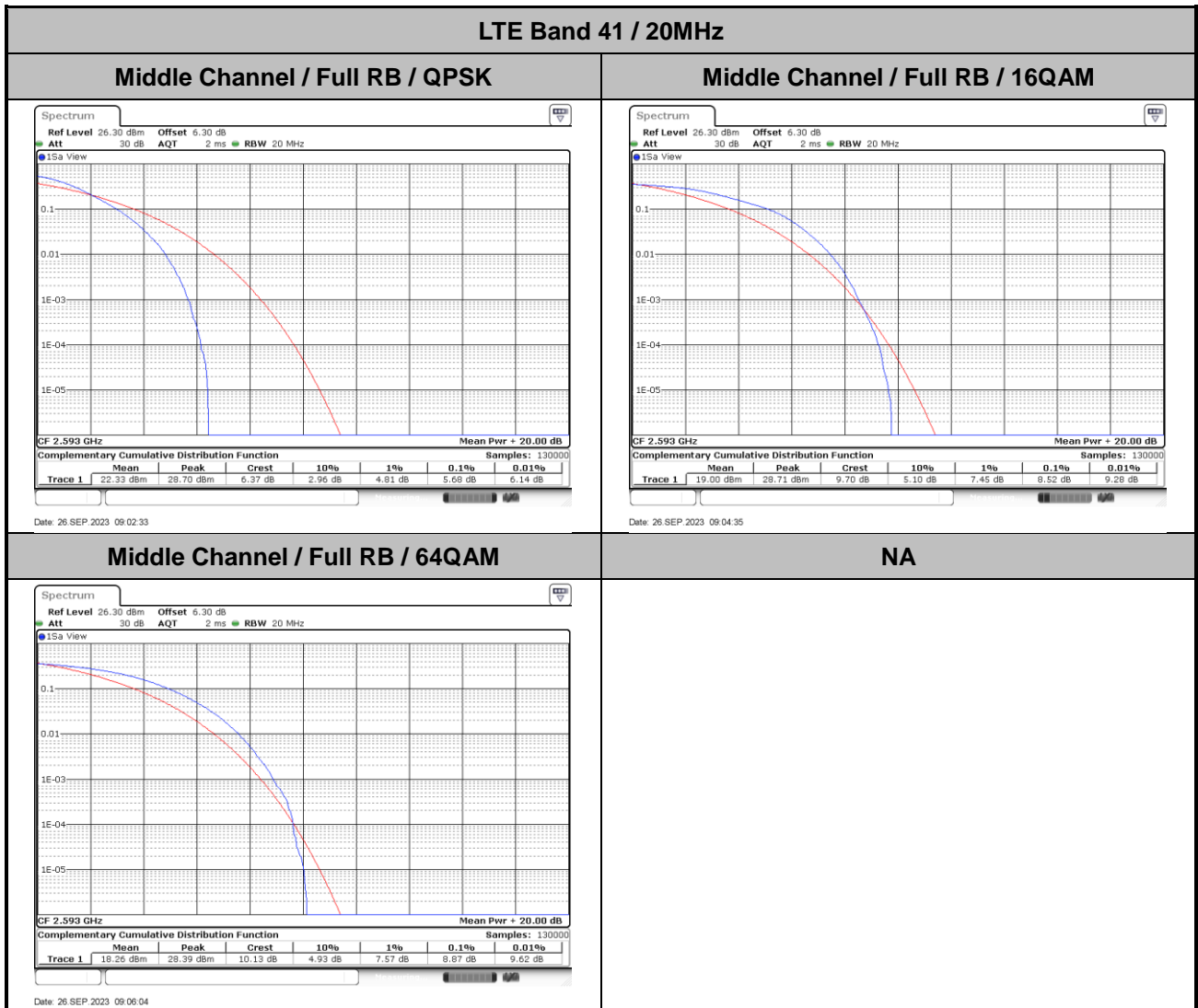
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

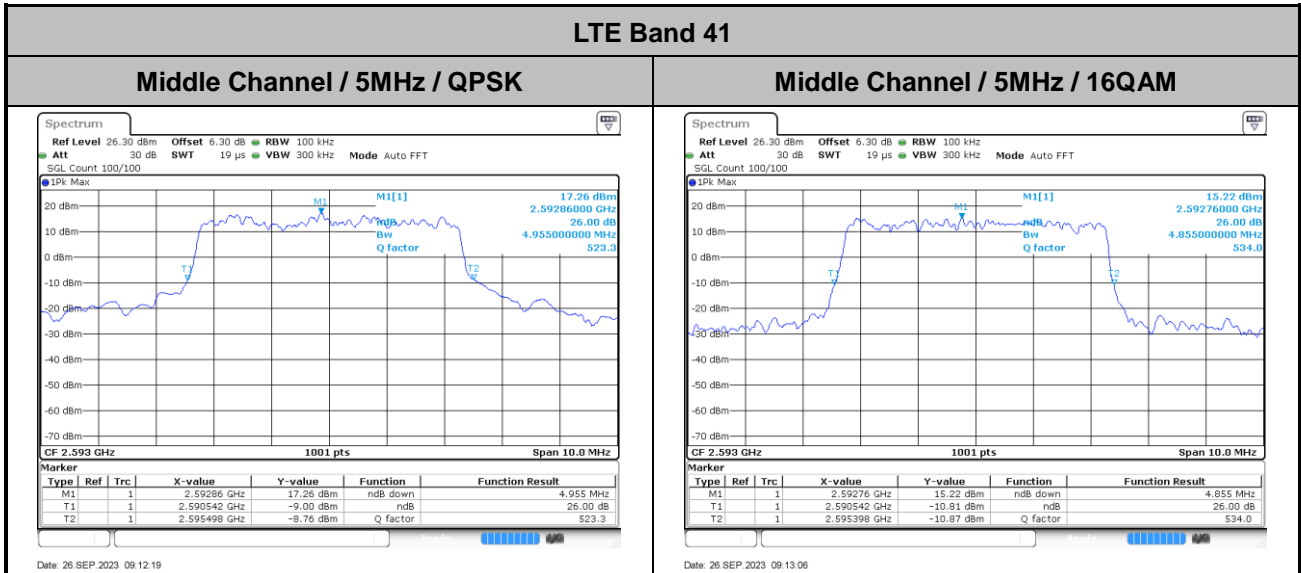
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.68	8.52	8.87	PASS





26dB Bandwidth

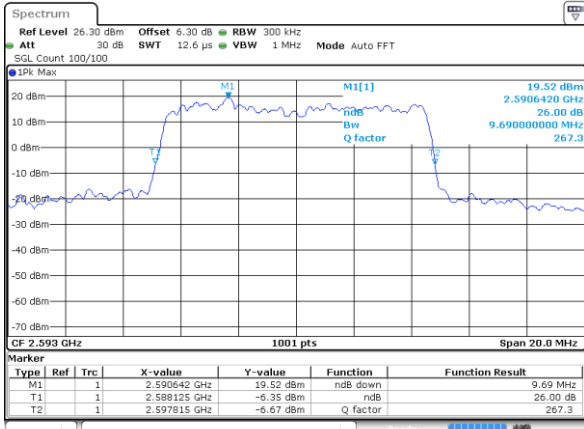
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.96	4.86
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.69	9.63
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.45	14.12
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.62	18.94





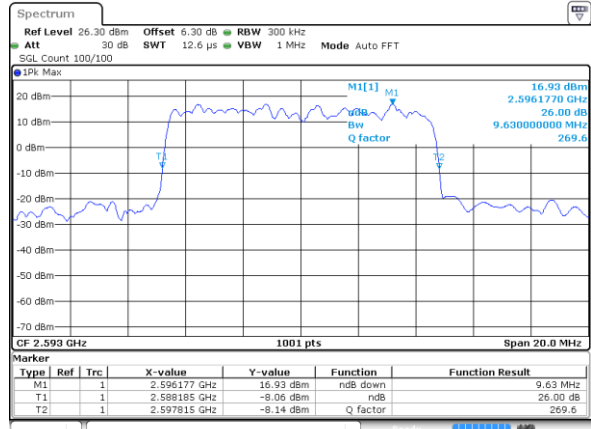
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 26 SEP 2023 09:10:57

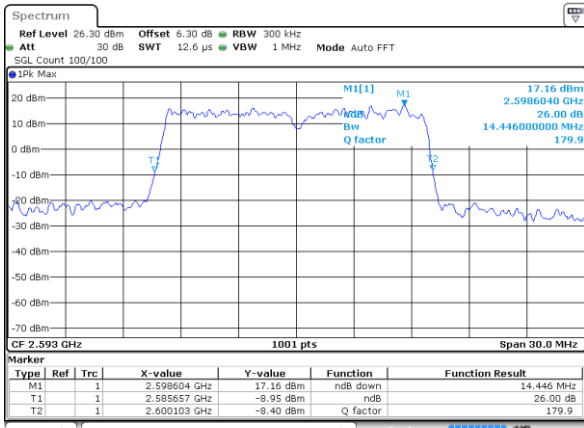
Middle Channel / 10MHz / 16QAM



Date: 26 SEP 2023 09:10:04

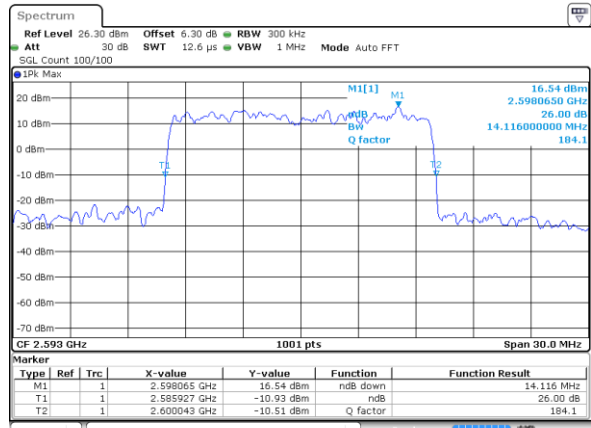
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 26 SEP 2023 09:07:25

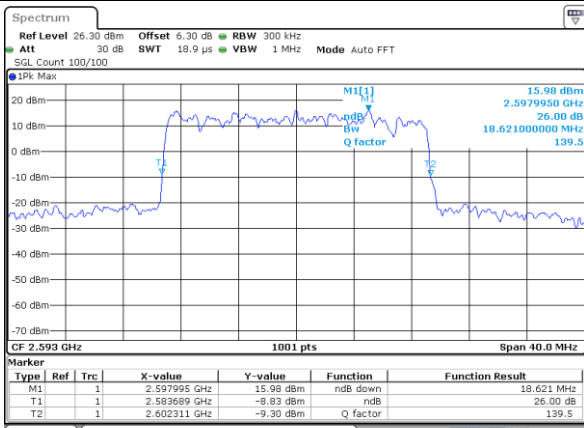
Middle Channel / 15MHz / 16QAM



Date: 26 SEP 2023 09:08:55

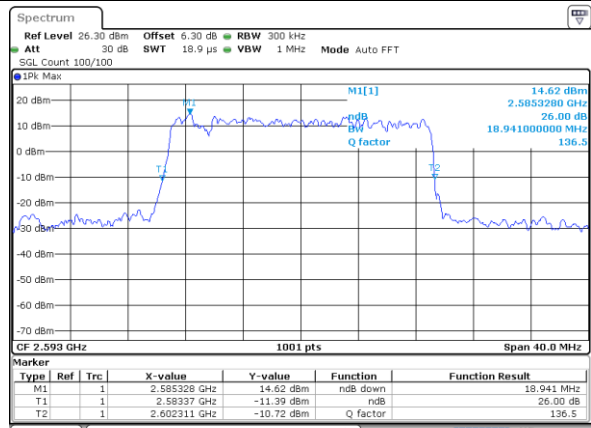
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 26 SEP 2023 09:03:27

Middle Channel / 20MHz / 16QAM

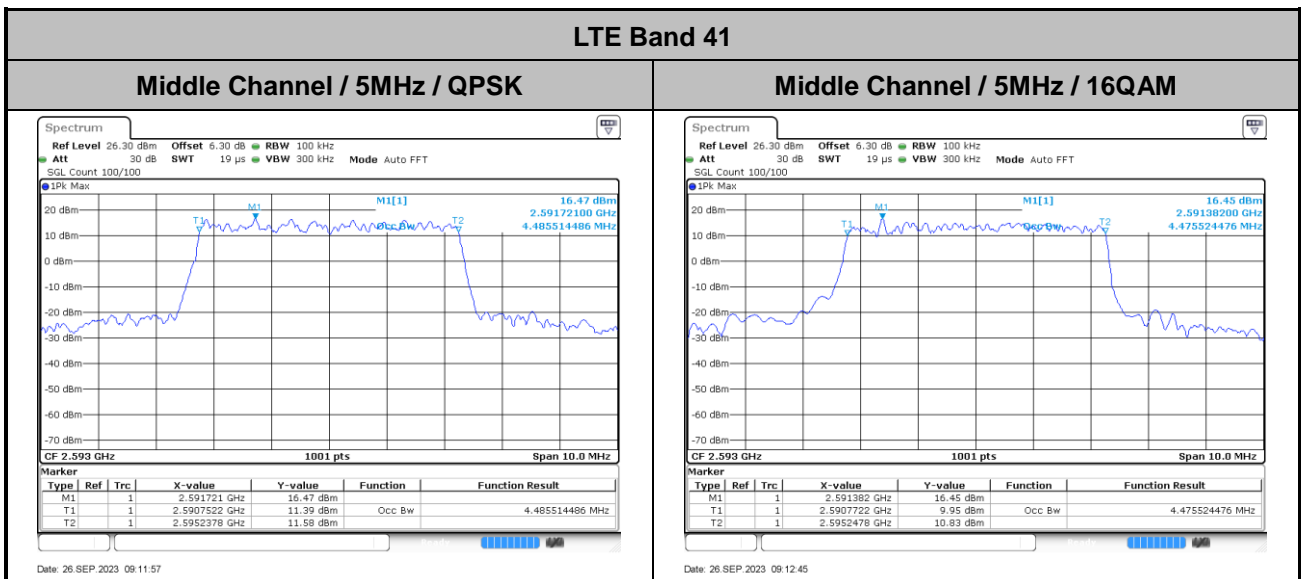


Date: 26 SEP 2023 09:05:21



Occupied Bandwidth

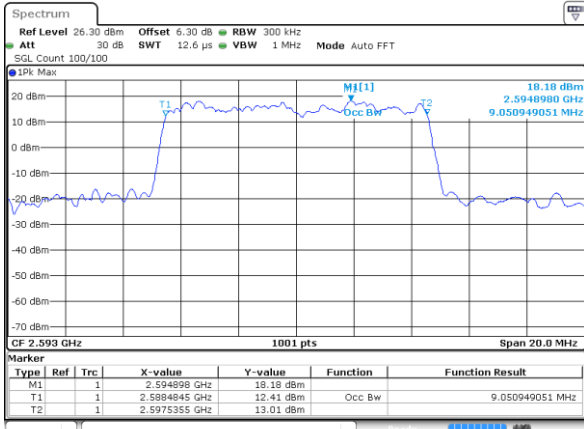
Mode	LTE Band 41 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.49	4.48
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	9.03
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.49	13.46
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.86	17.94





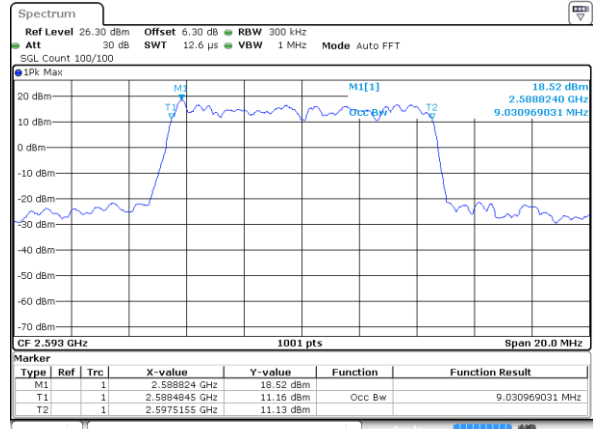
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 26 SEP 2023 09:10:34

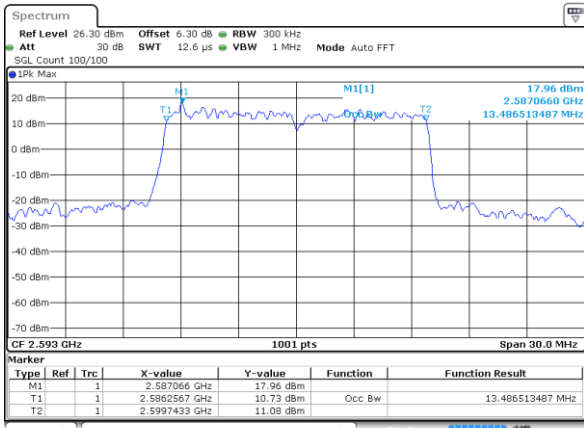
Middle Channel / 10MHz / 16QAM



Date: 26 SEP 2023 09:09:40

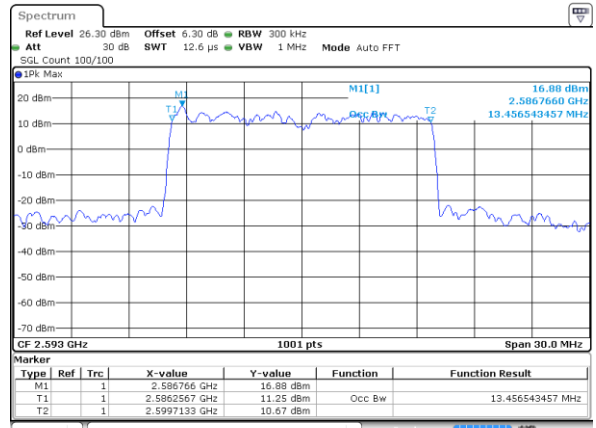
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 26 SEP 2023 09:07:01

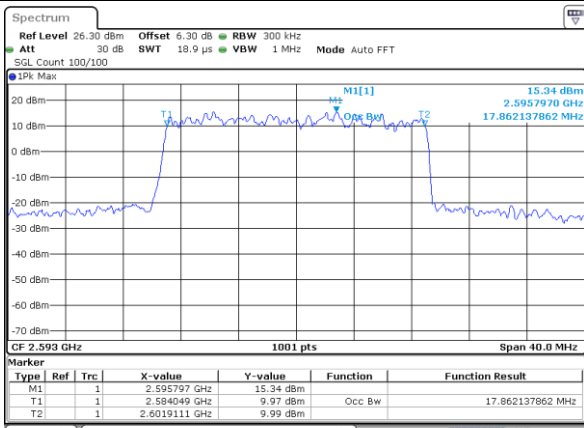
Middle Channel / 15MHz / 16QAM



Date: 26 SEP 2023 09:07:51

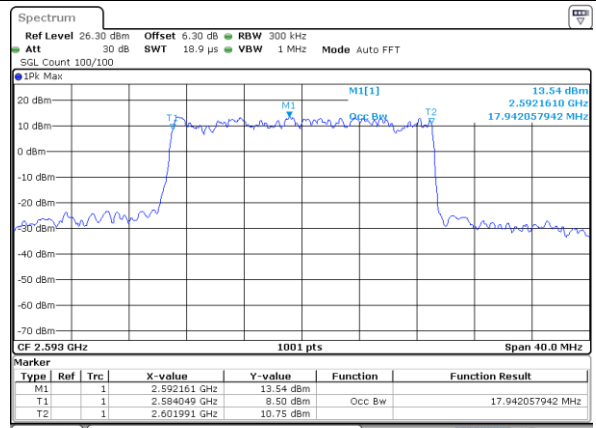
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 26 SEP 2023 09:03:00

Middle Channel / 20MHz / 16QAM



Date: 26 SEP 2023 09:04:58