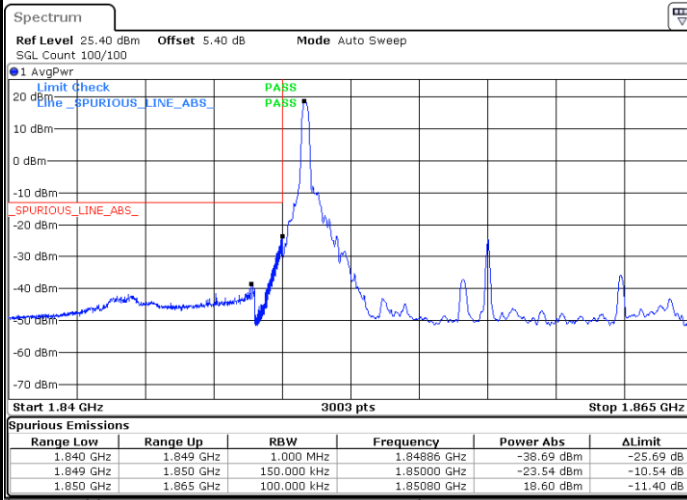




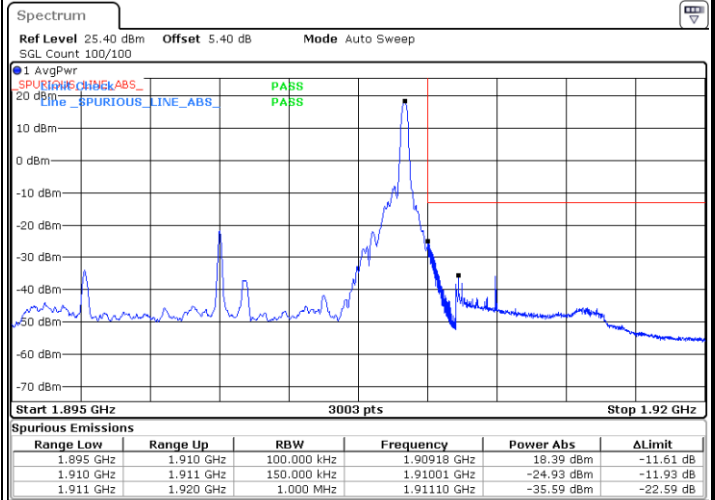
LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



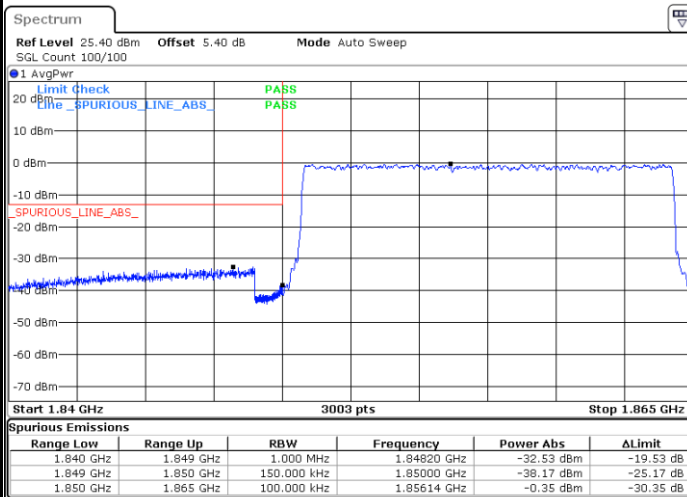
Date: 27 JUN.2023 23:53:45

Highest Band Edge / 1 RB



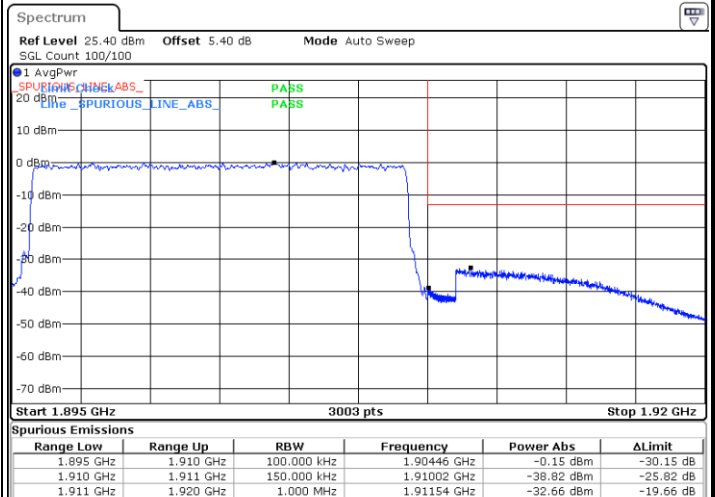
Date: 28 JUN.2023 00:01:28

Lowest Band Edge / Full RB



Date: 27 JUN.2023 23:56:15

Highest Band Edge / Full RB

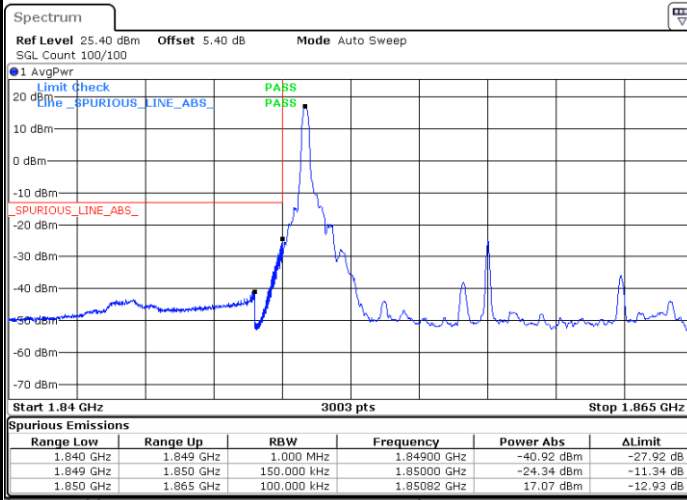


Date: 28 JUN.2023 00:03:57



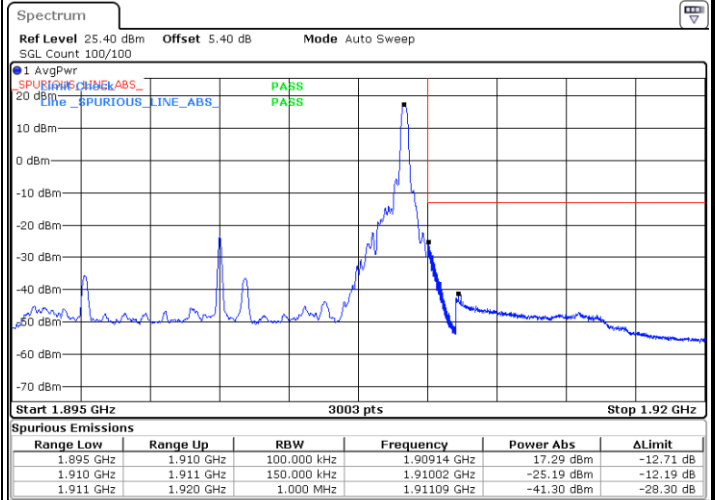
LTE Band 2 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



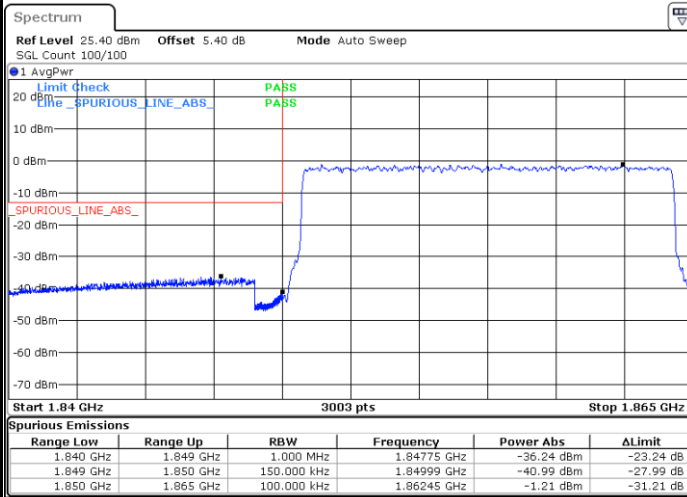
Date: 27 JUN.2023 23:54:35

Highest Band Edge / 1 RB



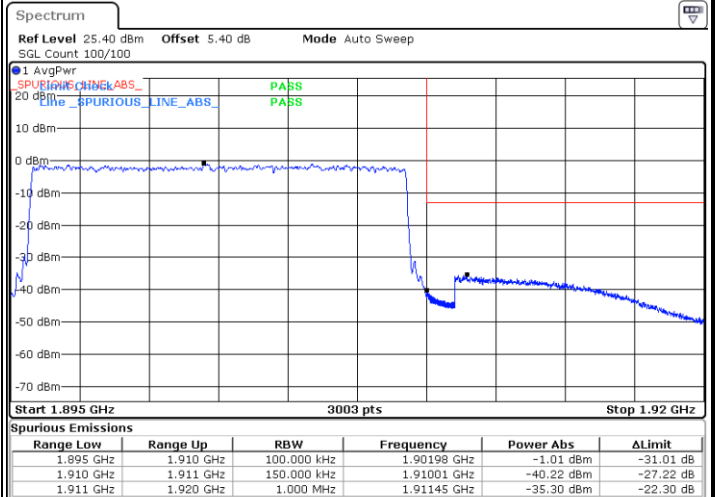
Date: 28 JUN.2023 00:02:17

Lowest Band Edge / Full RB



Date: 27 JUN.2023 23:55:25

Highest Band Edge / Full RB

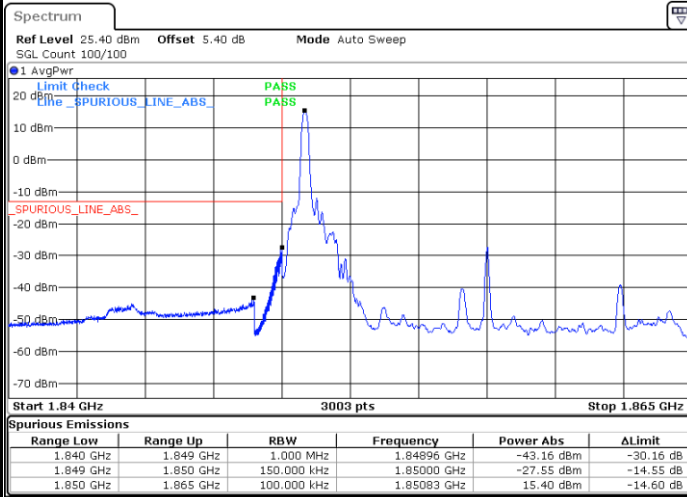


Date: 28 JUN.2023 00:03:07



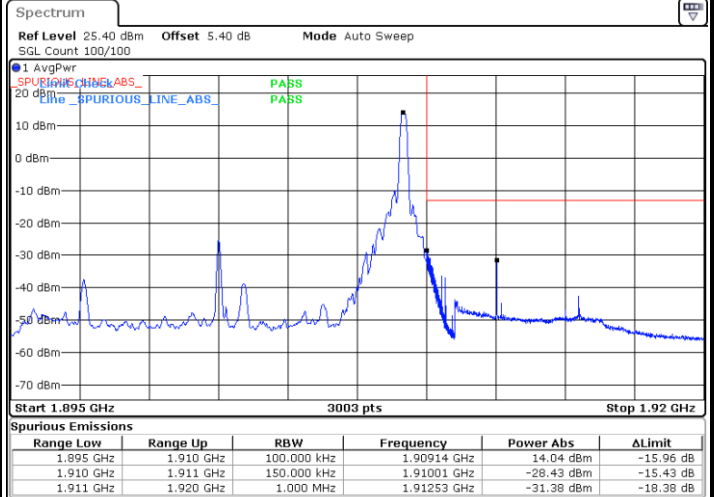
LTE Band 2 / 15MHz / 256QAM

Lowest Band Edge / 1 RB



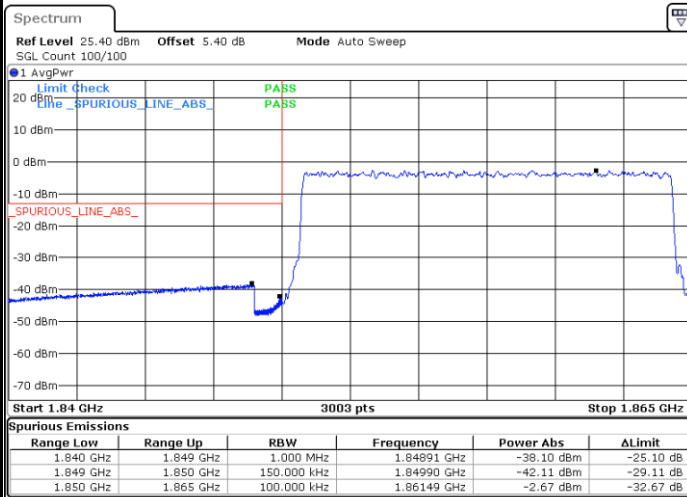
Date: 21.JUL.2023 09:17:24

Highest Band Edge / 1 RB



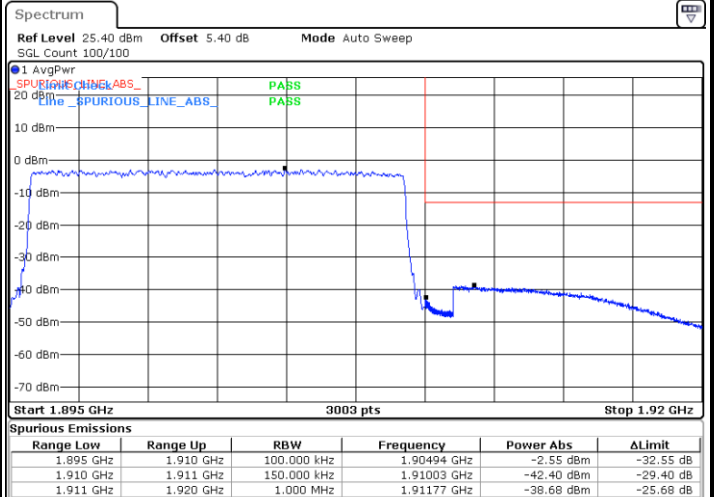
Date: 21.JUL.2023 09:25:14

Lowest Band Edge / Full RB



Date: 21.JUL.2023 09:21:14

Highest Band Edge / Full RB

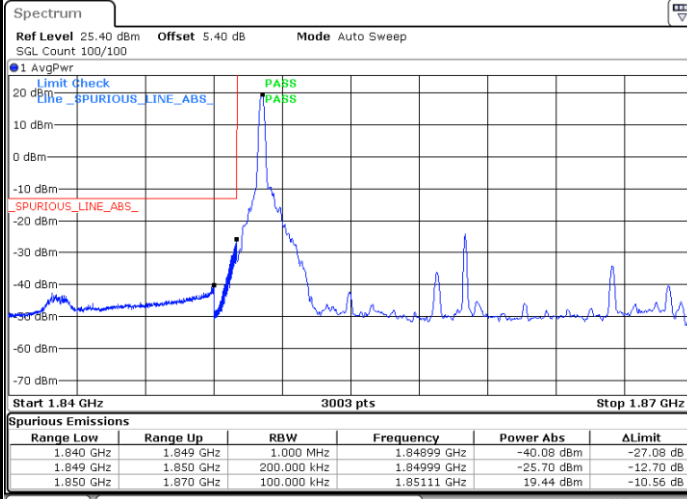


Date: 21.JUL.2023 09:24:08



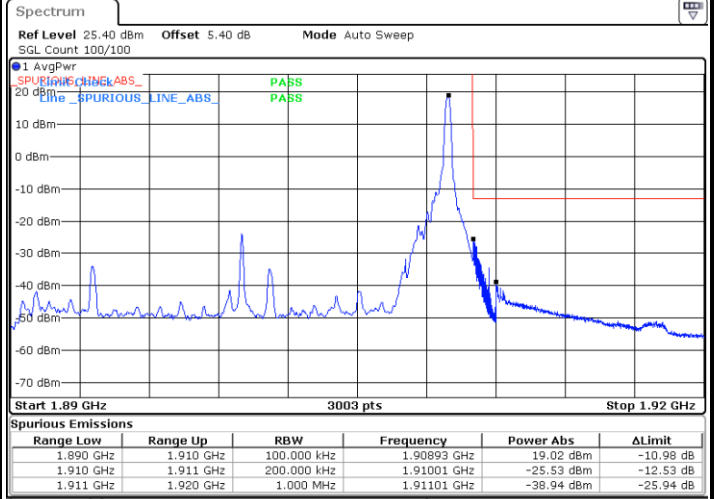
LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB



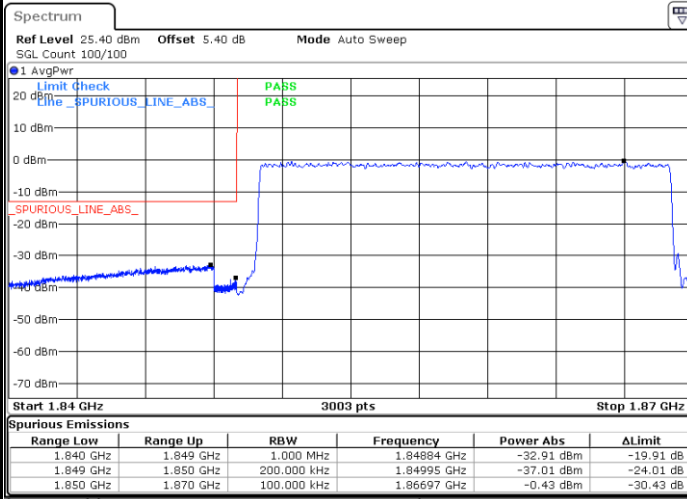
Date: 28 JUN 2023 00:06:59

Highest Band Edge / 1 RB



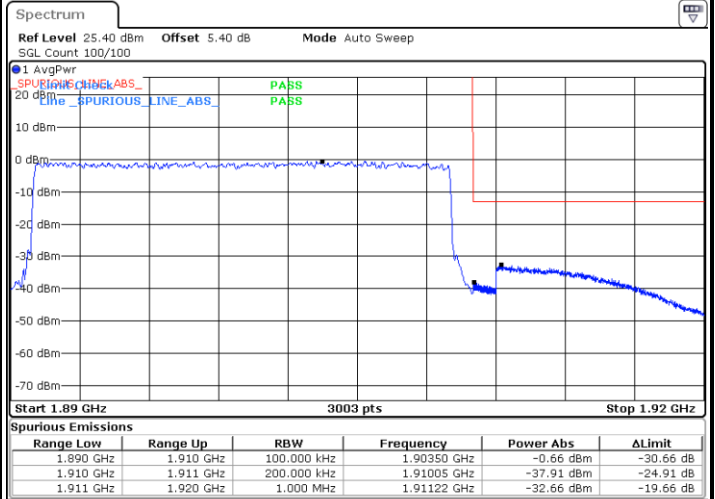
Date: 28 JUN 2023 00:14:42

Lowest Band Edge / Full RB



Date: 28 JUN 2023 00:11:08

Highest Band Edge / Full RB

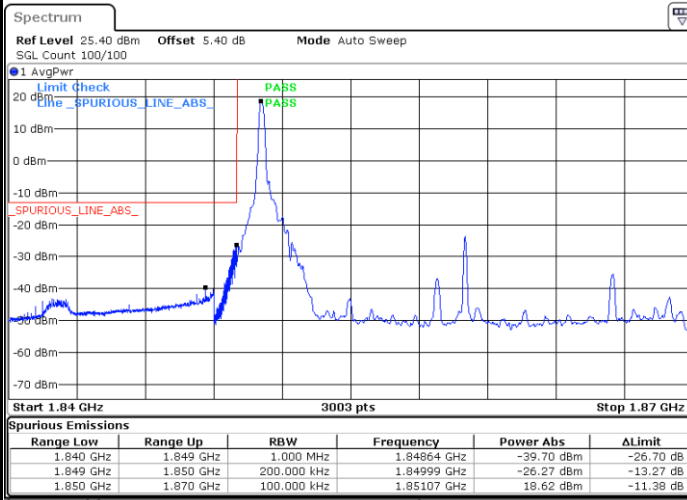


Date: 28 JUN 2023 00:18:51



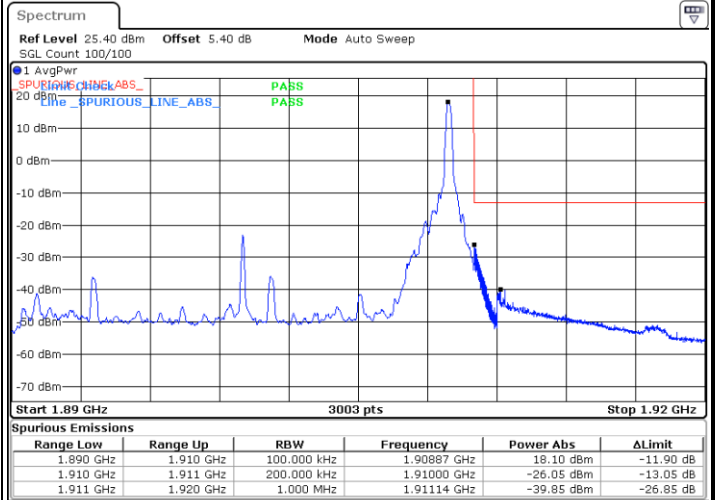
LTE Band 2 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



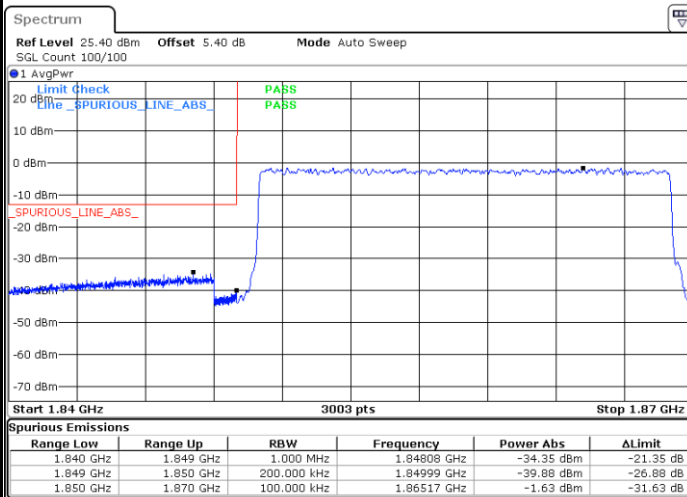
Date: 28.JUN.2023 00:07:49

Highest Band Edge / 1 RB



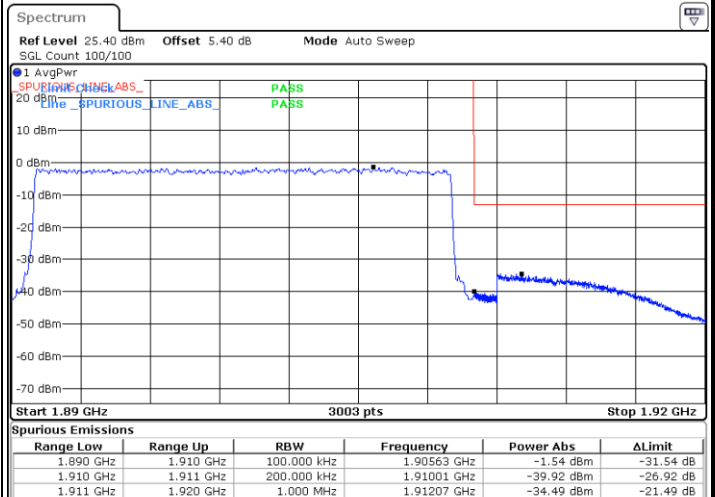
Date: 28.JUN.2023 00:15:31

Lowest Band Edge / Full RB



Date: 28.JUN.2023 00:10:18

Highest Band Edge / Full RB

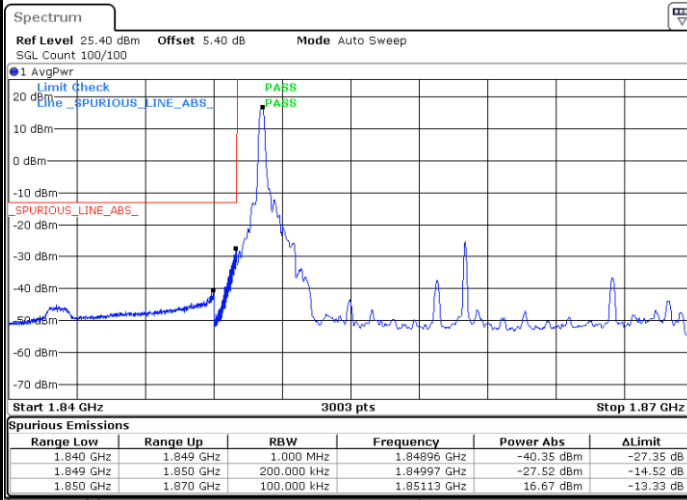


Date: 28.JUN.2023 00:18:01



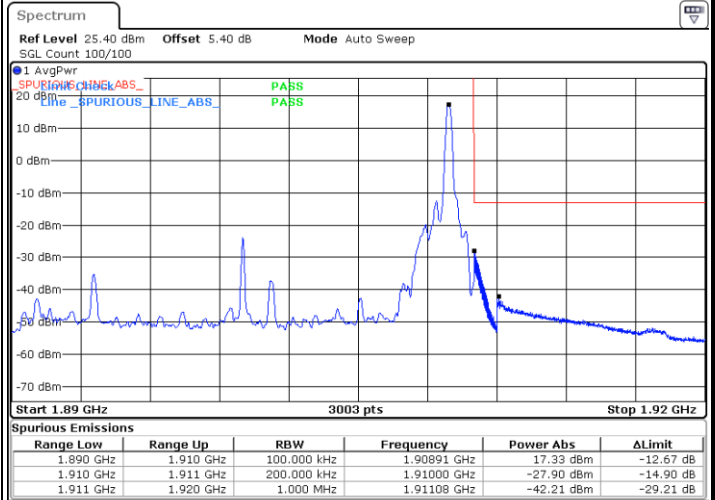
LTE Band 2 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



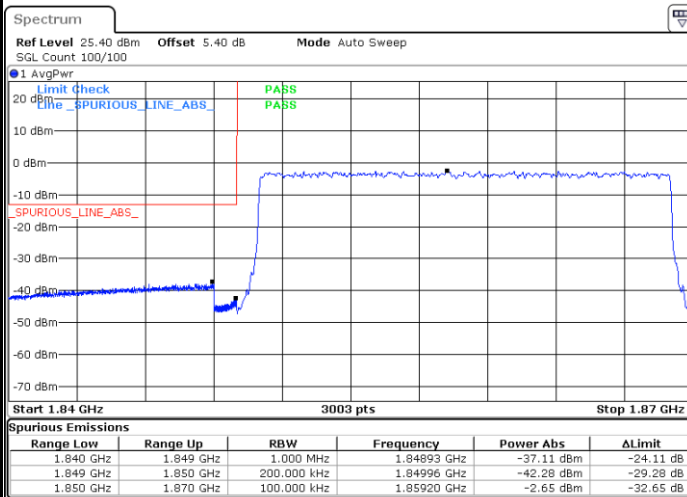
Date: 28.JUN.2023 00:08:39

Highest Band Edge / 1 RB



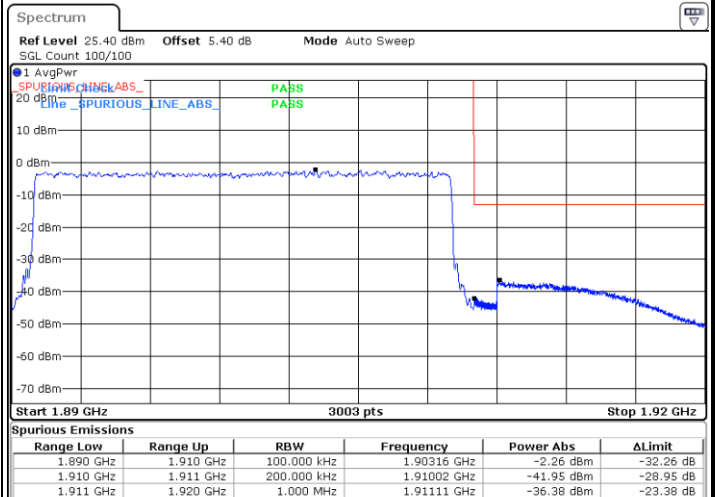
Date: 28.JUN.2023 00:16:21

Lowest Band Edge / Full RB



Date: 28.JUN.2023 00:09:28

Highest Band Edge / Full RB

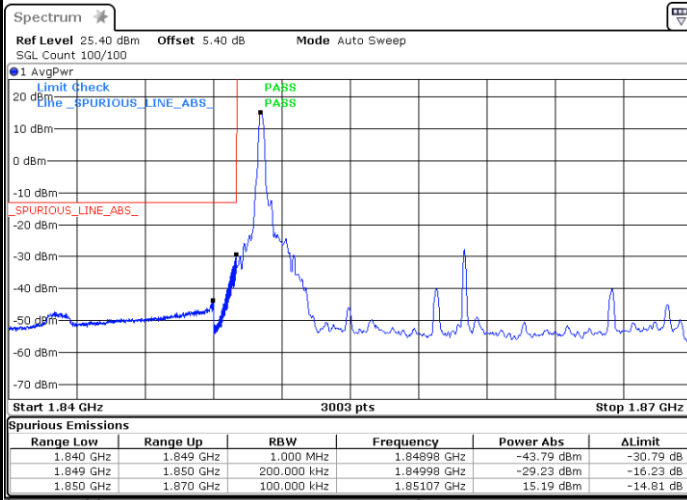


Date: 28.JUN.2023 00:17:11



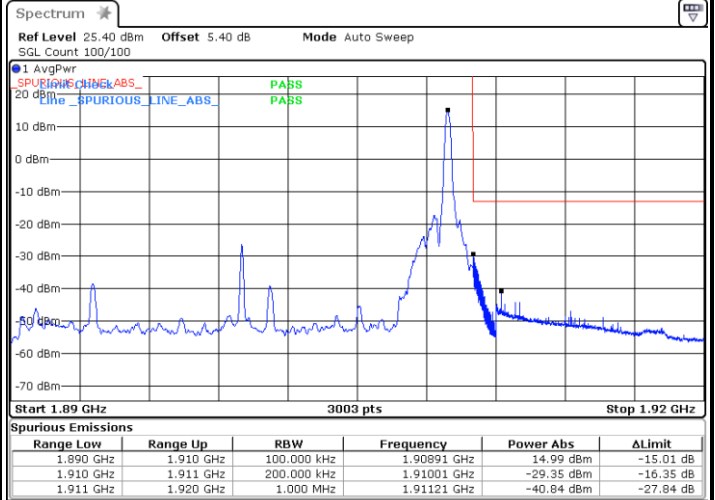
LTE Band 2 / 20MHz / 256QAM

Lowest Band Edge / 1 RB



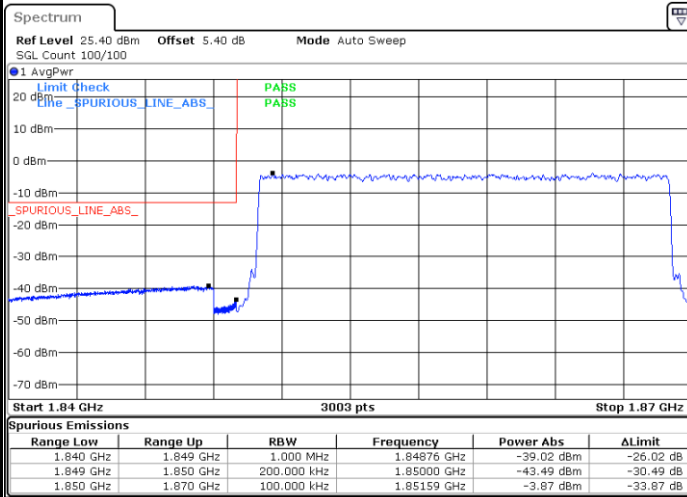
Date: 21.JUL.2023 09:28:55

Highest Band Edge / 1 RB



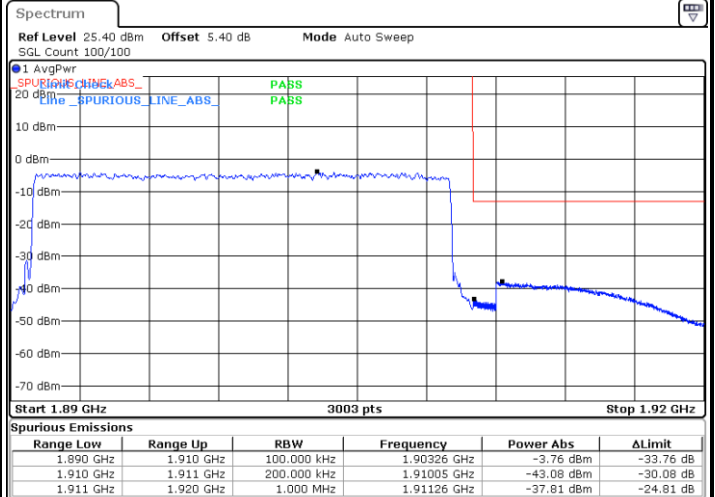
Date: 21.JUL.2023 09:31:43

Lowest Band Edge / Full RB



Date: 21.JUL.2023 09:29:33

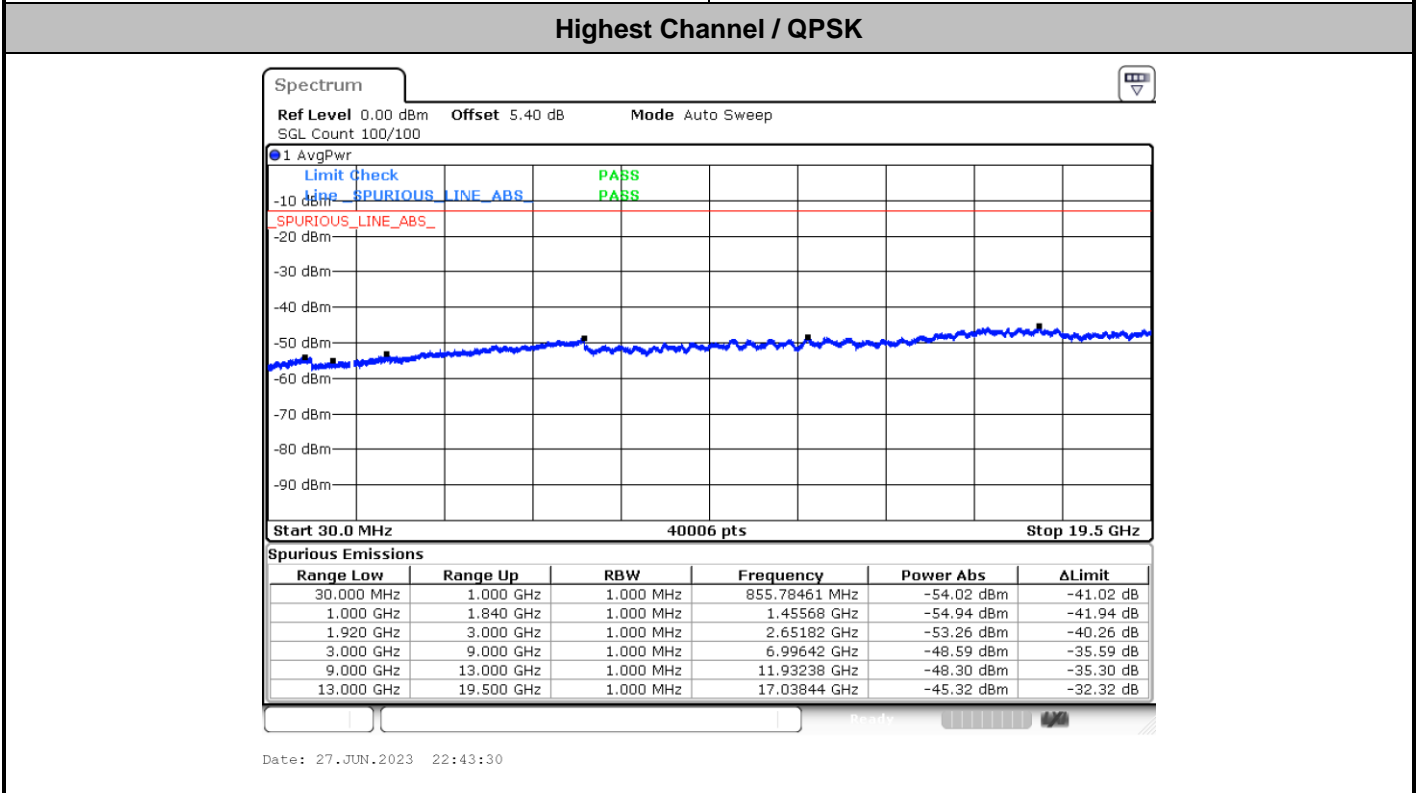
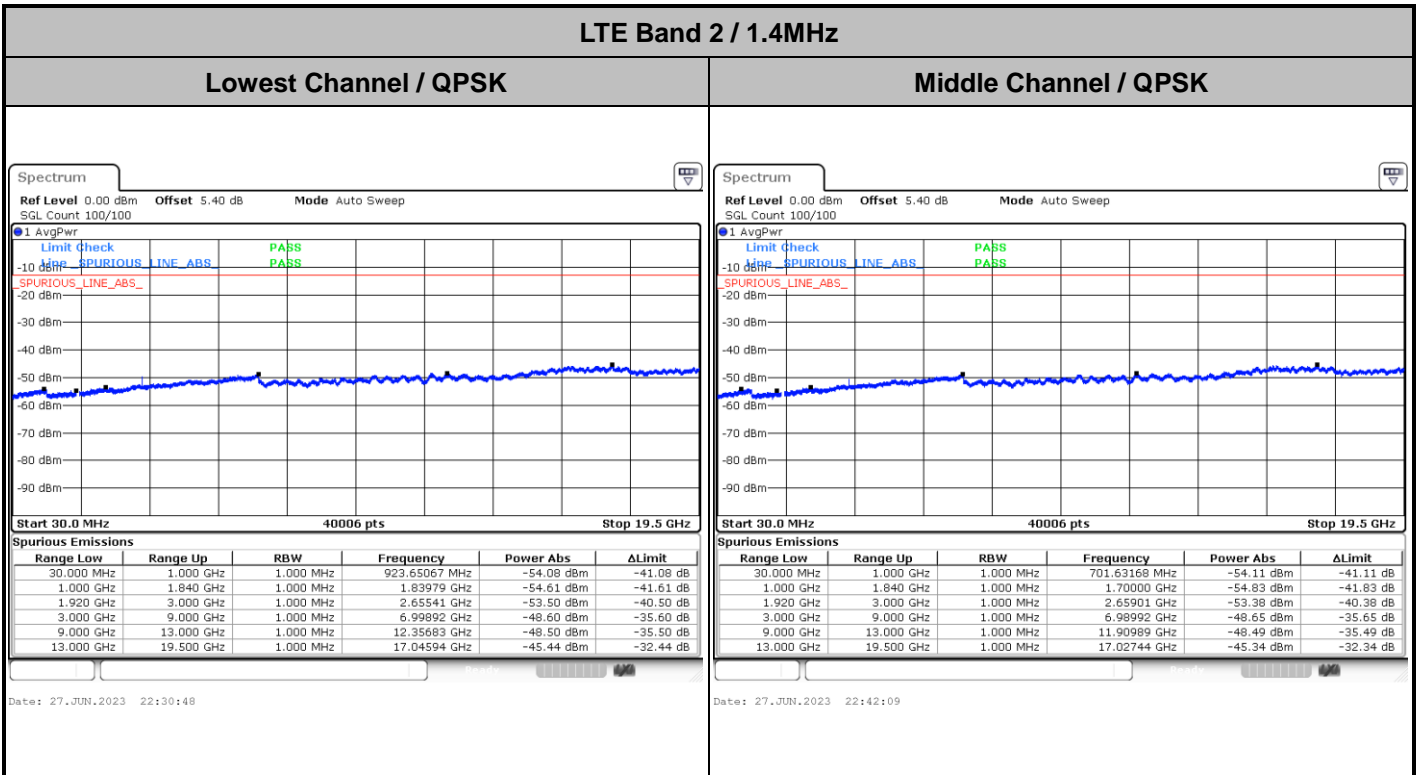
Highest Band Edge / Full RB



Date: 21.JUL.2023 09:30:15



# Conducted Spurious Emission



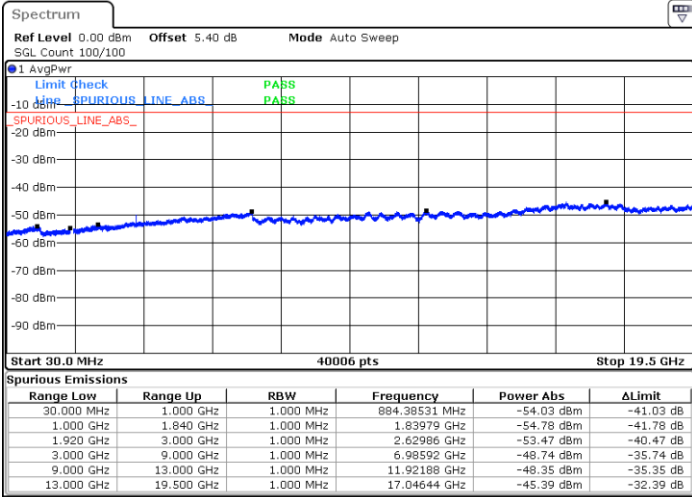




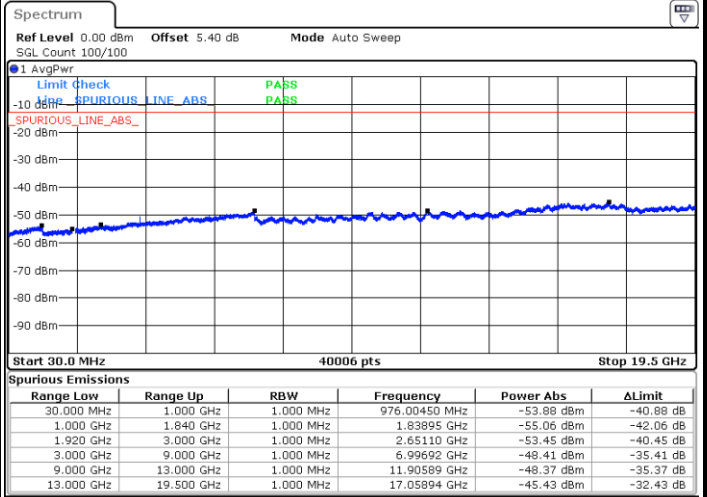
LTE Band 2 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

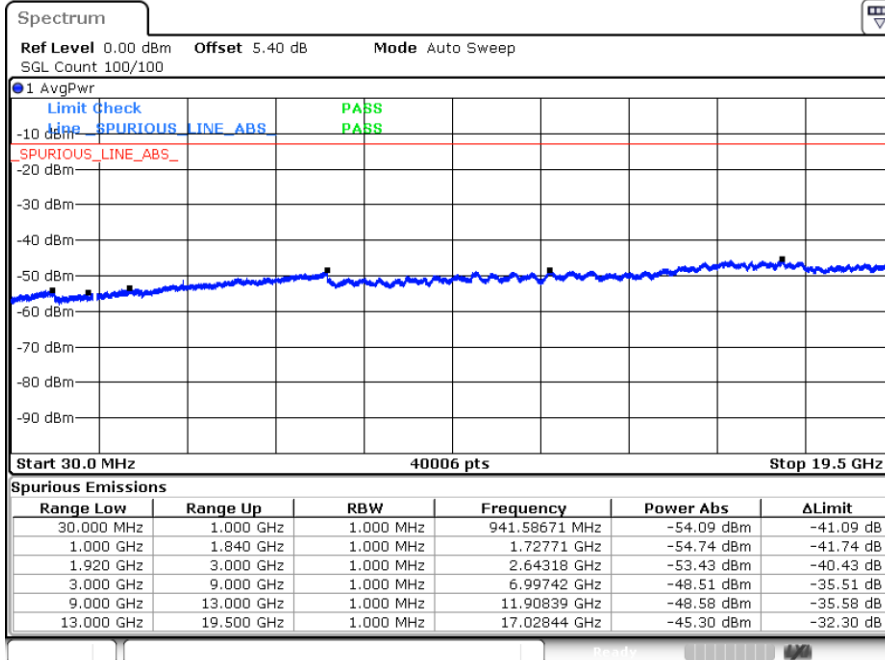


Date: 27.JUN.2023 22:52:56



Date: 27.JUN.2023 23:02:20

Highest Channel / QPSK



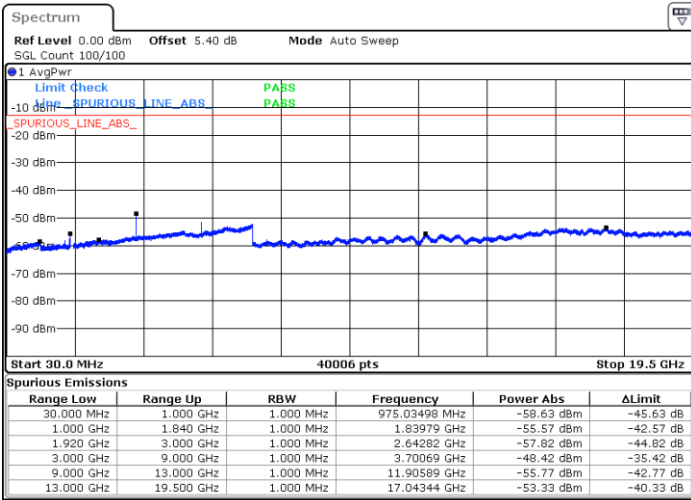
Date: 27.JUN.2023 23:03:42



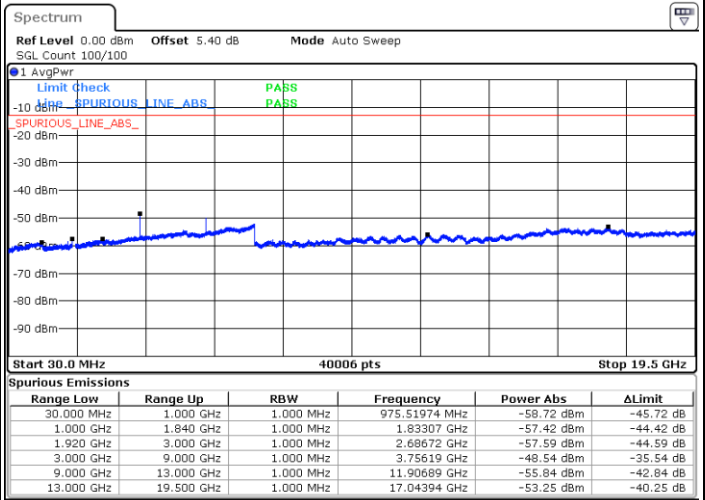
LTE Band 2 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

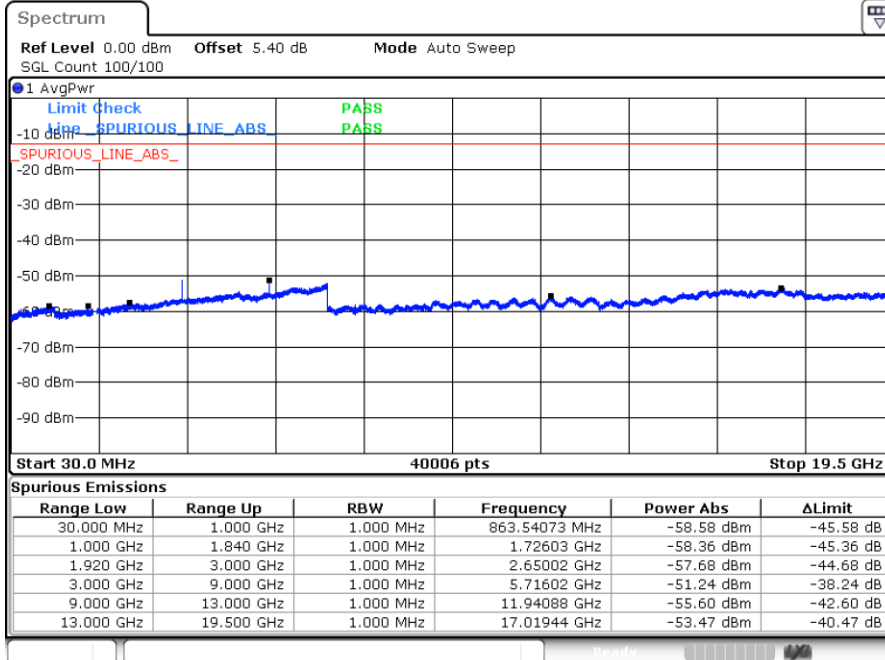


Date: 27.JUN.2023 23:13:06



Date: 27.JUN.2023 23:22:28

Highest Channel / QPSK



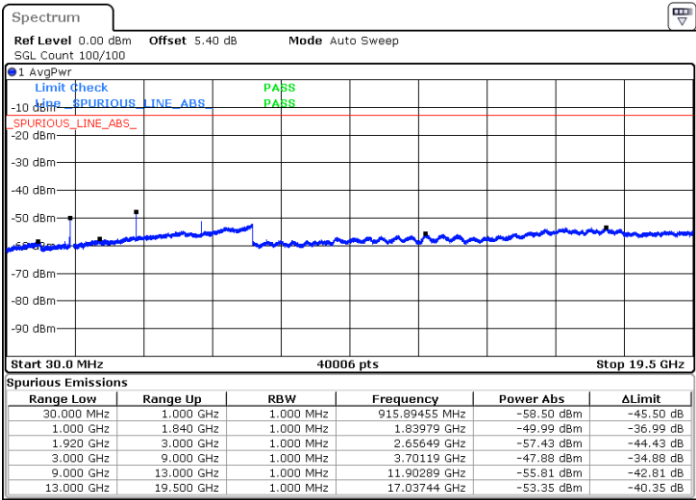
Date: 27.JUN.2023 23:23:50



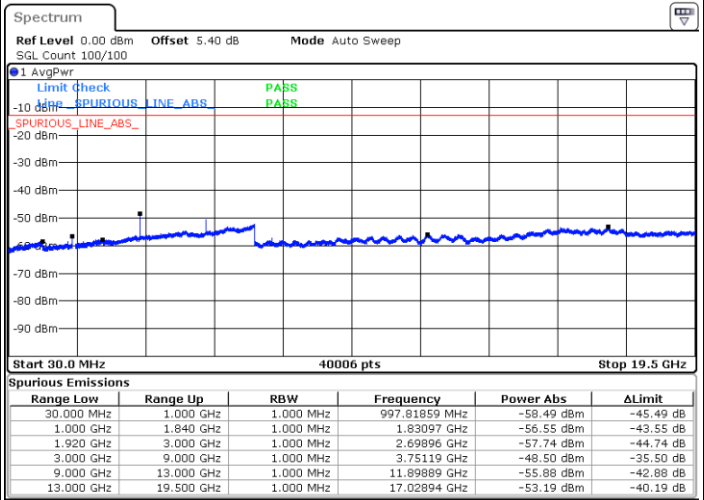
LTE Band 2 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

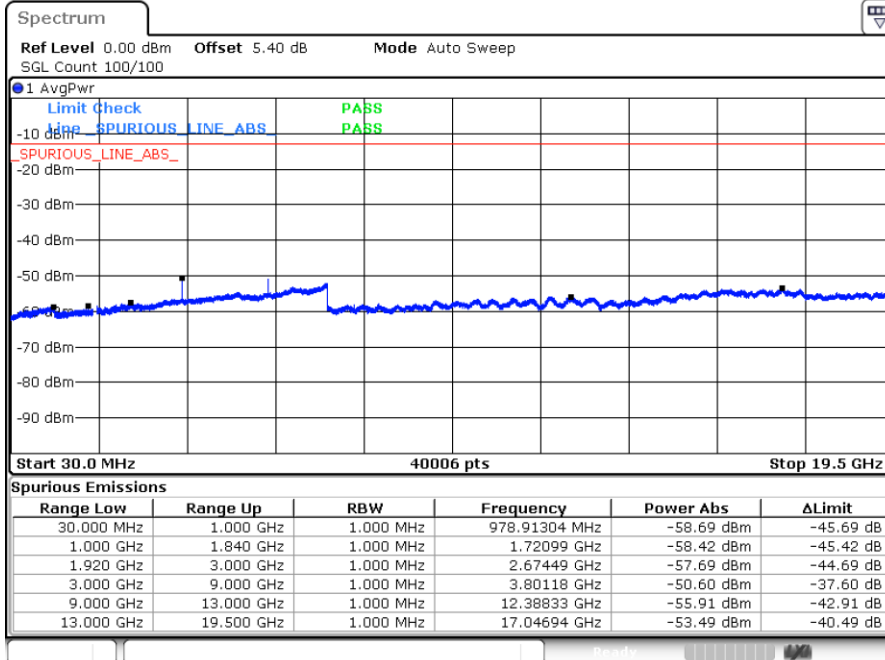


Date: 27.JUN.2023 23:33:14



Date: 27.JUN.2023 23:43:51

Highest Channel / QPSK



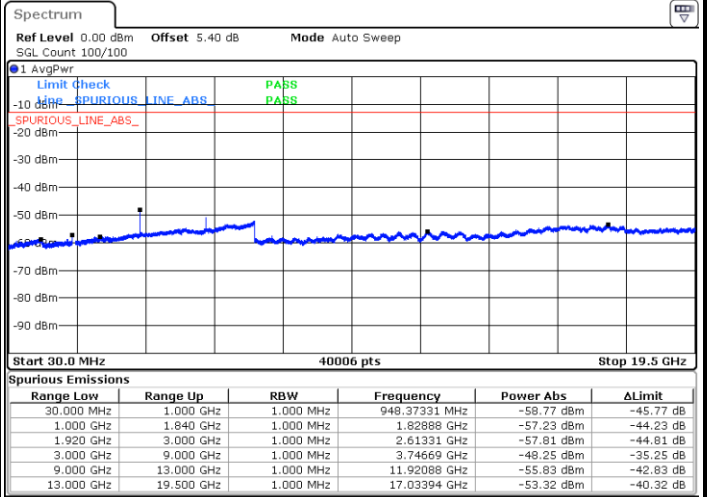
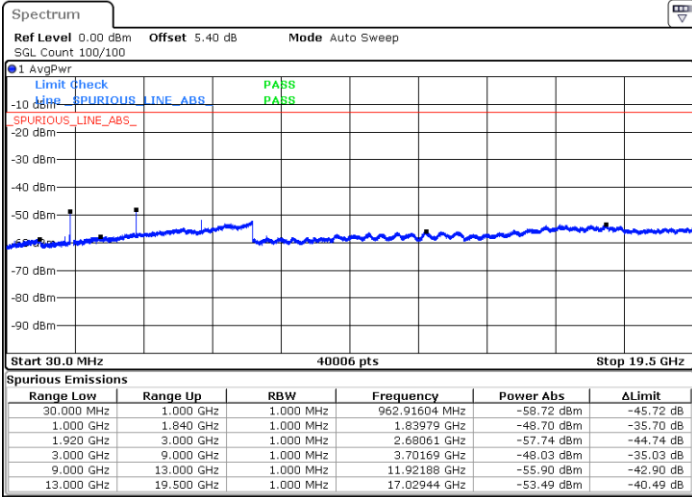
Date: 27.JUN.2023 23:45:13



LTE Band 2 / 15MHz

Lowest Channel / QPSK

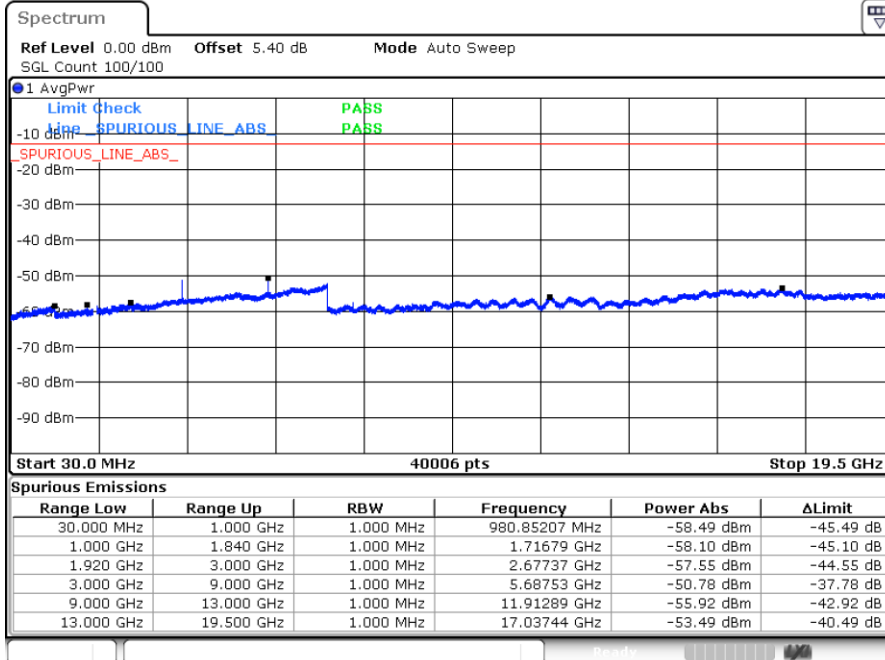
Middle Channel / QPSK



Date: 27.JUN.2023 23:52:05

Date: 27.JUN.2023 23:58:26

Highest Channel / QPSK



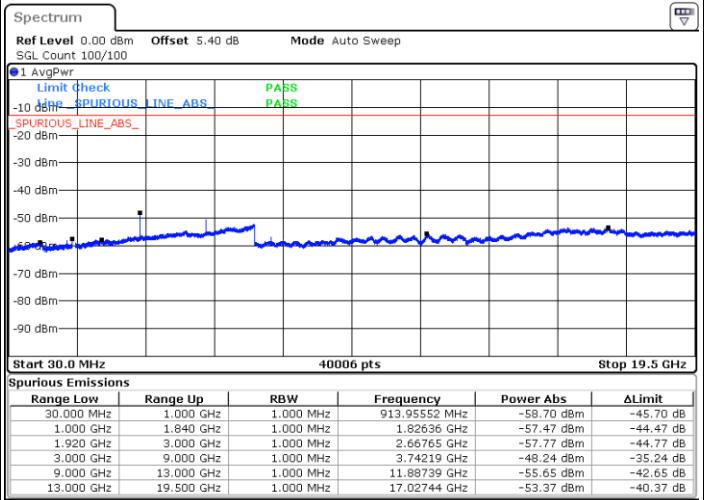
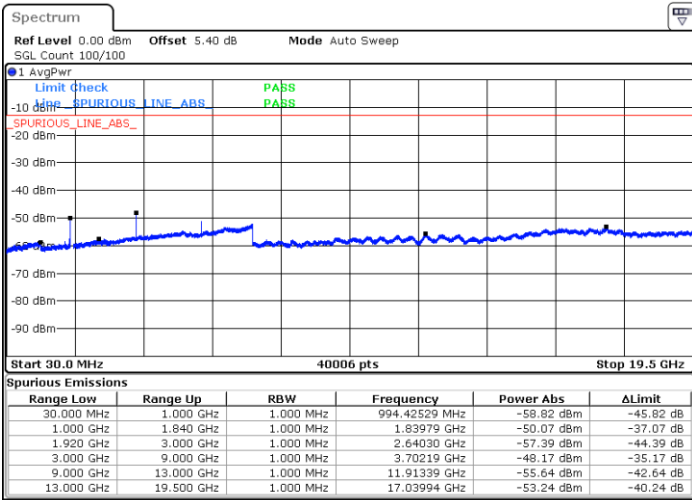
Date: 27.JUN.2023 23:59:48



LTE Band 2 / 20MHz

Lowest Channel / QPSK

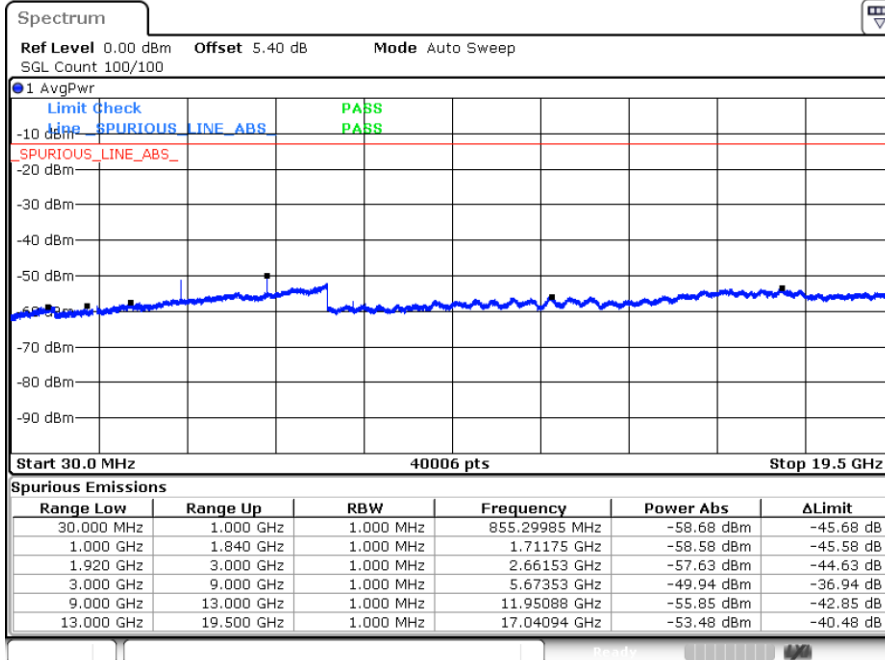
Middle Channel / QPSK



Date: 28.JUN.2023 00:06:09

Date: 28.JUN.2023 00:12:29

Highest Channel / QPSK



Date: 28.JUN.2023 00:13:51



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0012	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0011	

Note:

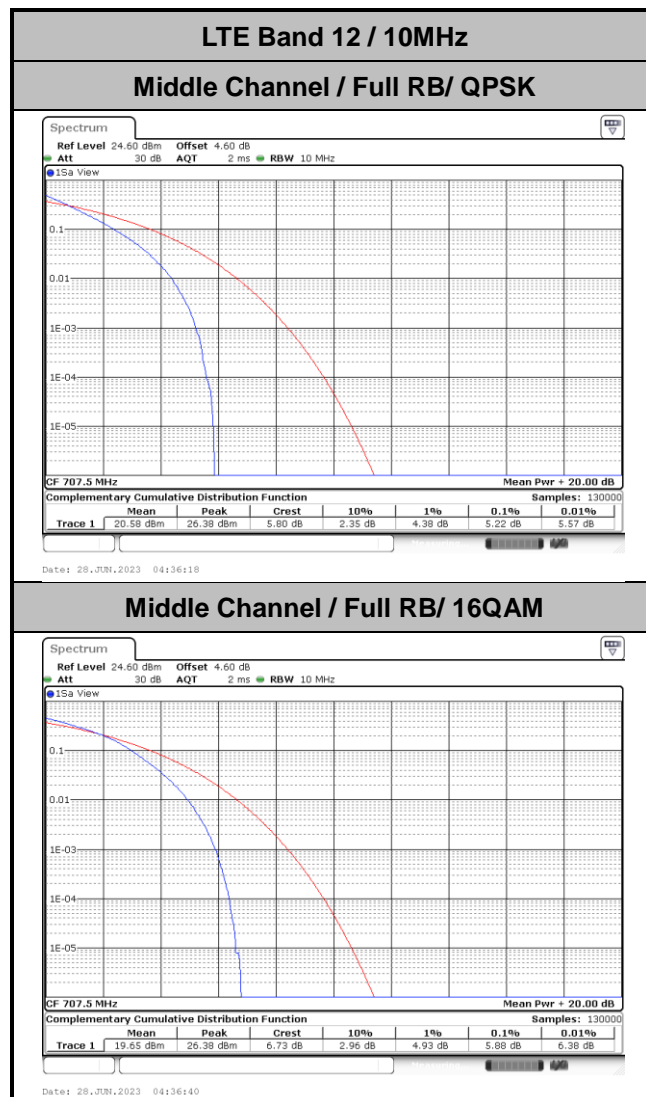
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.5 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

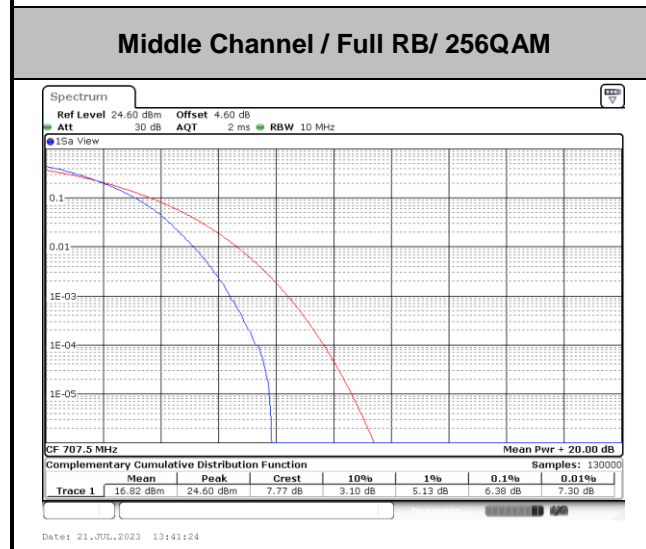
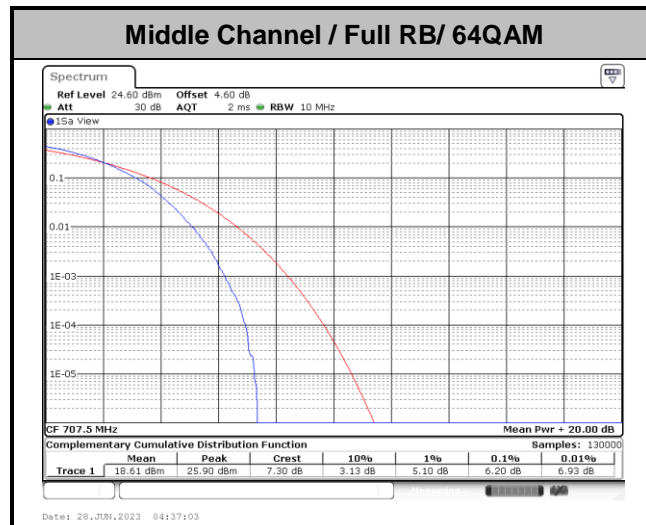


# LTE Band 12

## Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.22	5.88	6.20	6.38	<b>PASS</b>



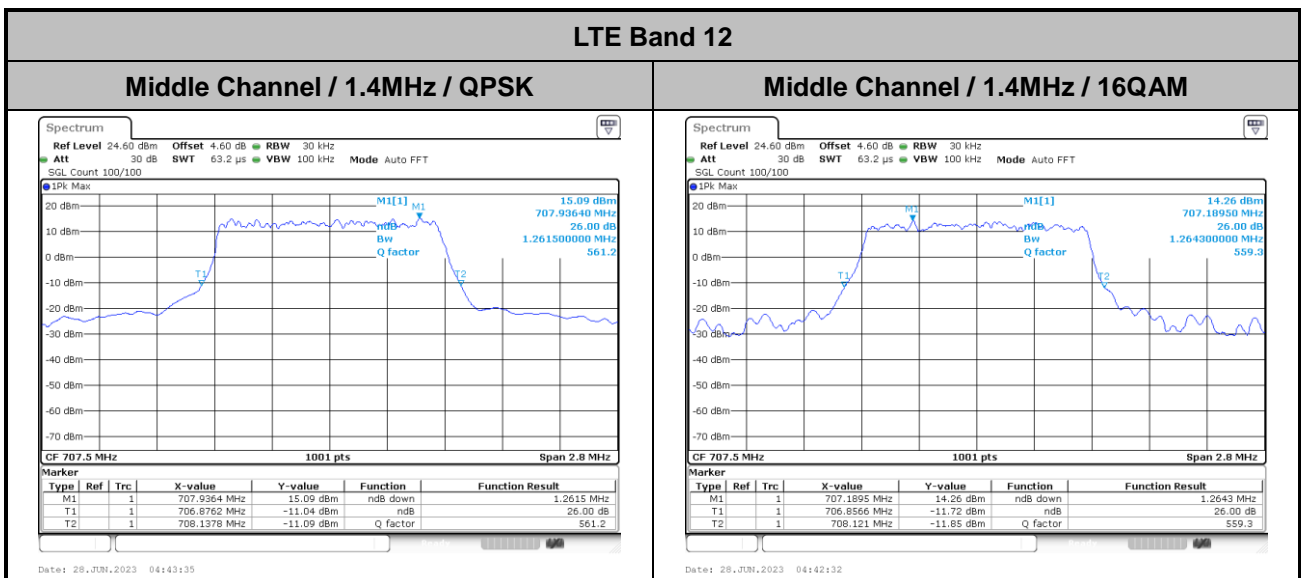






## 26dB Bandwidth

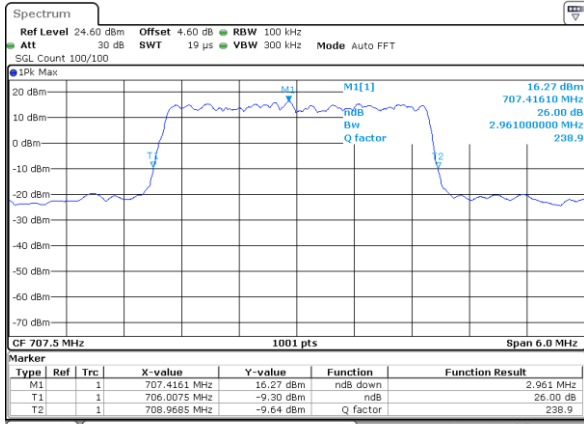
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.26	1.26
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.96	3.00
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.87	4.93
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.71	9.83





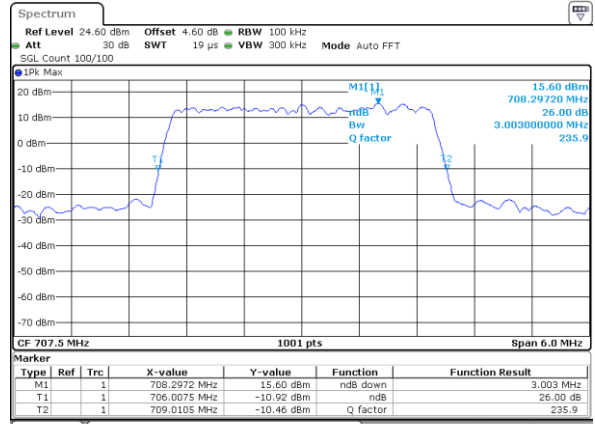
LTE Band 12

Middle Channel / 3MHz / QPSK



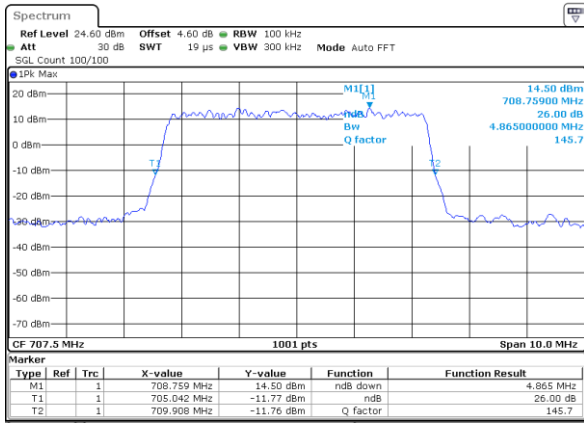
Date: 28 JUN 2023 04:41:07

Middle Channel / 3MHz / 16QAM



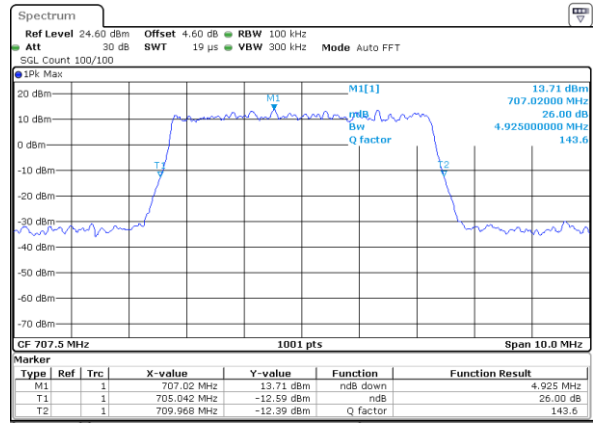
Date: 28 JUN 2023 04:42:11

Middle Channel / 5MHz / QPSK



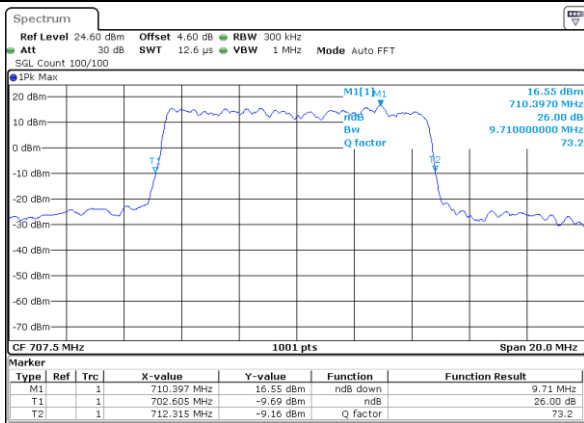
Date: 28 JUN 2023 04:40:46

Middle Channel / 5MHz / 16QAM



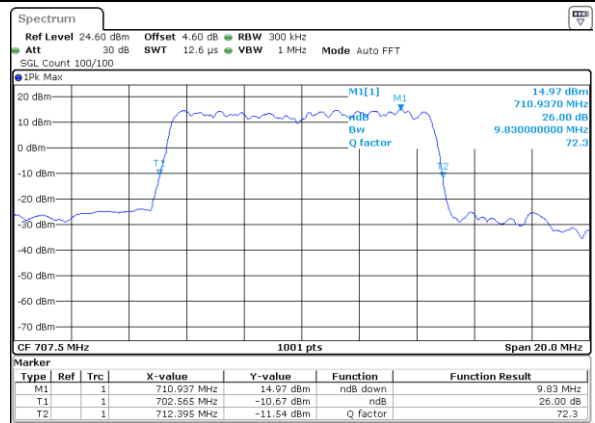
Date: 28 JUN 2023 04:13:43

Middle Channel / 10MHz / QPSK



Date: 28 JUN 2023 04:13:06

Middle Channel / 10MHz / 16QAM

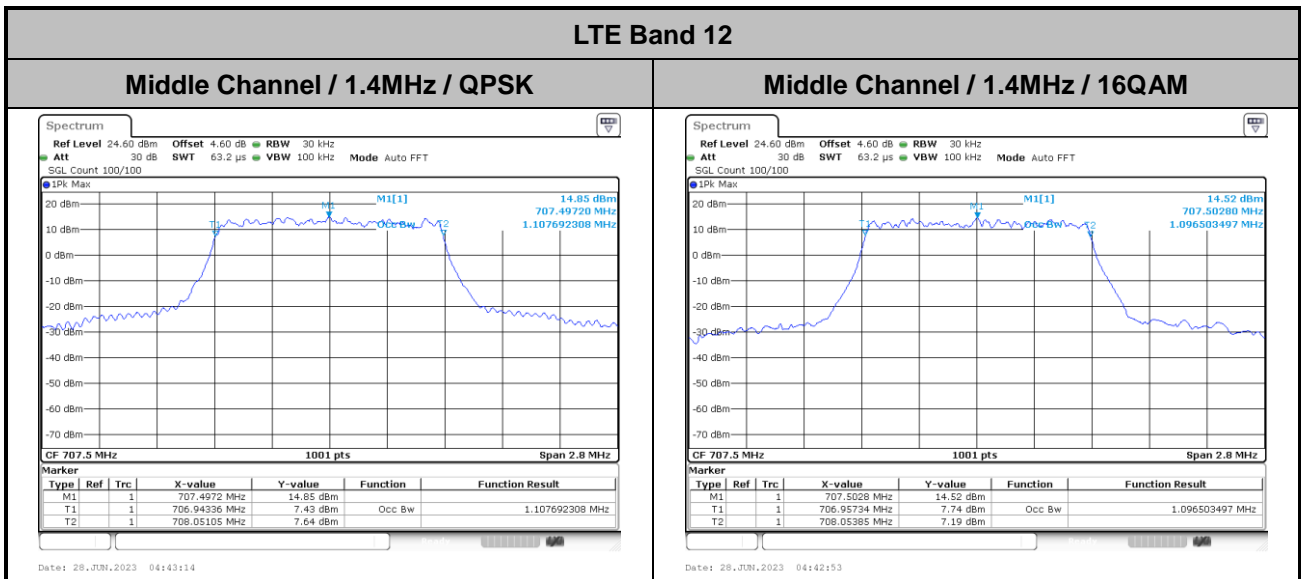


Date: 28 JUN 2023 04:13:27



## Occupied Bandwidth

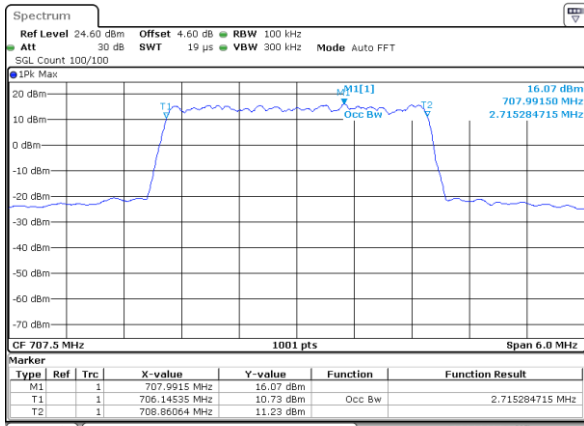
Mode	LTE Band 12 : 99%OBW(MHz)	
<b>BW</b>	<b>1.4MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	1.11	1.10
<b>BW</b>	<b>3MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	2.72	2.72
<b>BW</b>	<b>5MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	4.48	4.49
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.03	8.99





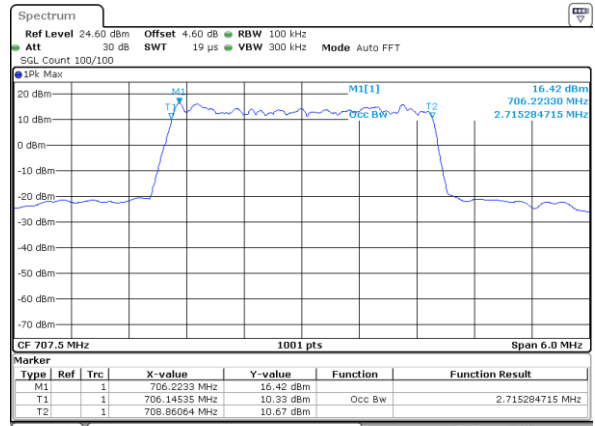
LTE Band 12

Middle Channel / 3MHz / QPSK



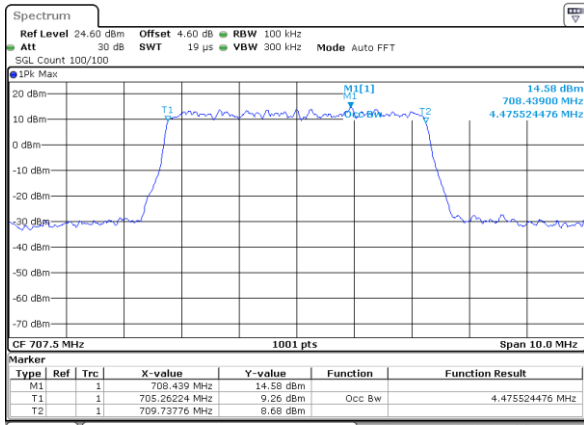
Date: 28 JUN 2023 04:41:28

Middle Channel / 3MHz / 16QAM



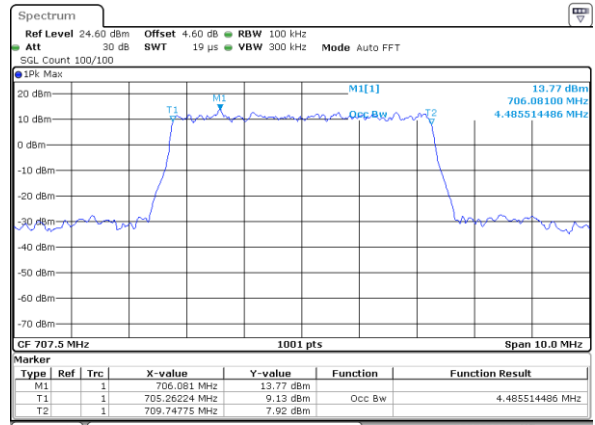
Date: 28 JUN 2023 04:41:50

Middle Channel / 5MHz / QPSK



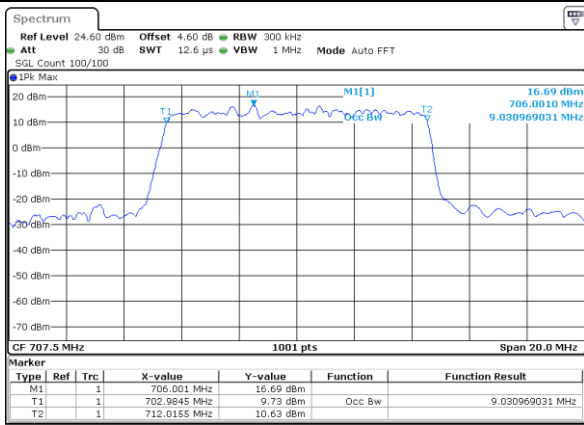
Date: 28 JUN 2023 04:40:25

Middle Channel / 5MHz / 16QAM



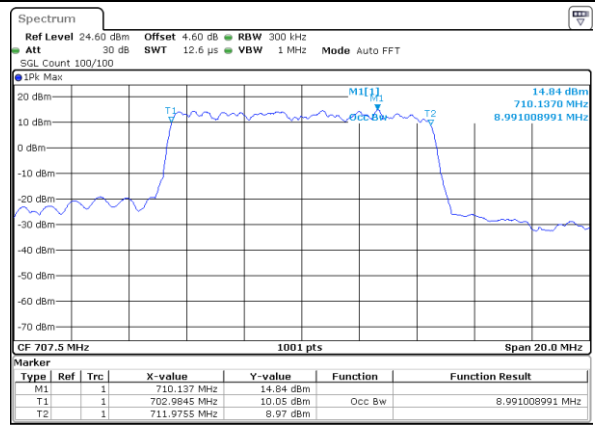
Date: 28 JUN 2023 04:40:04

Middle Channel / 10MHz / QPSK



Date: 28 JUN 2023 04:37:24

Middle Channel / 10MHz / 16QAM



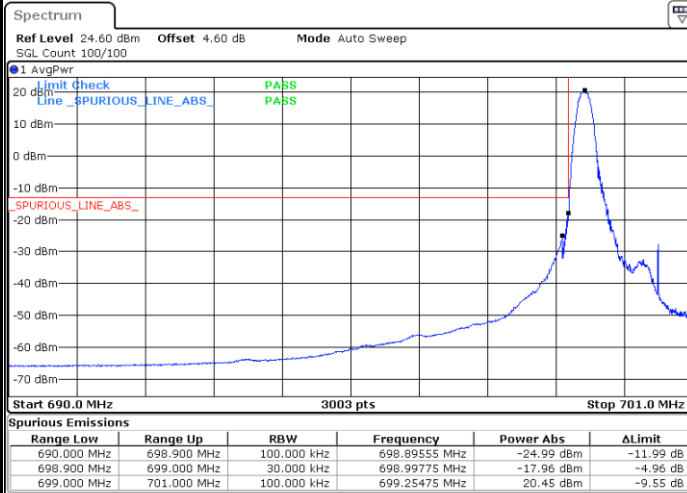
Date: 28 JUN 2023 04:37:45



# Conducted Band Edge

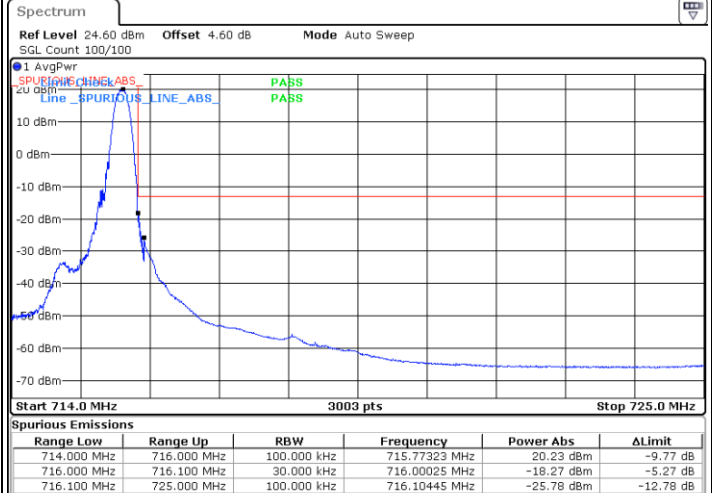
## LTE Band 12 / 1.4MHz / QPSK

### Lowest Band Edge / 1RB



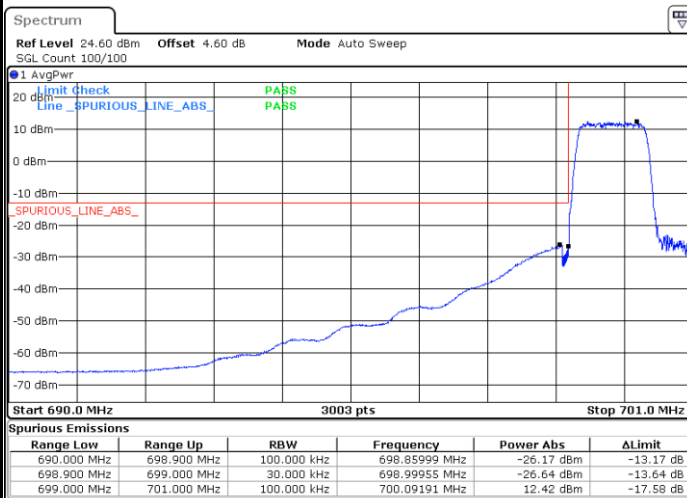
Date: 28 JUN.2023 03:26:56

### Highest Band Edge / 1RB



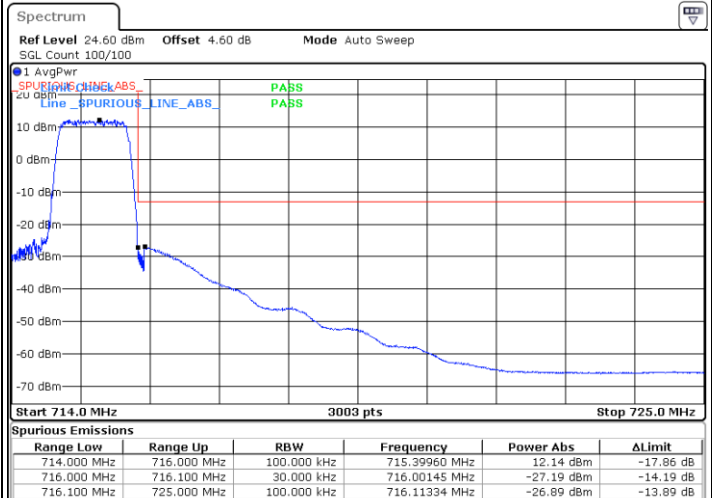
Date: 28 JUN.2023 03:38:08

### Lowest Band Edge / Full RB



Date: 28 JUN.2023 03:34:00

### Highest Band Edge / Full RB

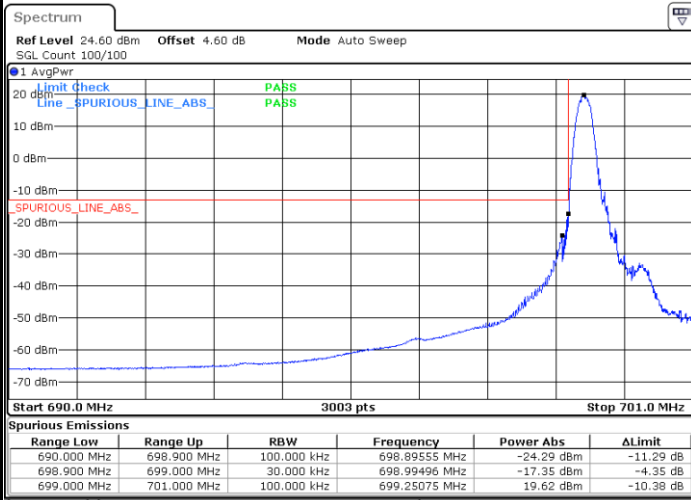


Date: 28 JUN.2023 03:45:12



LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



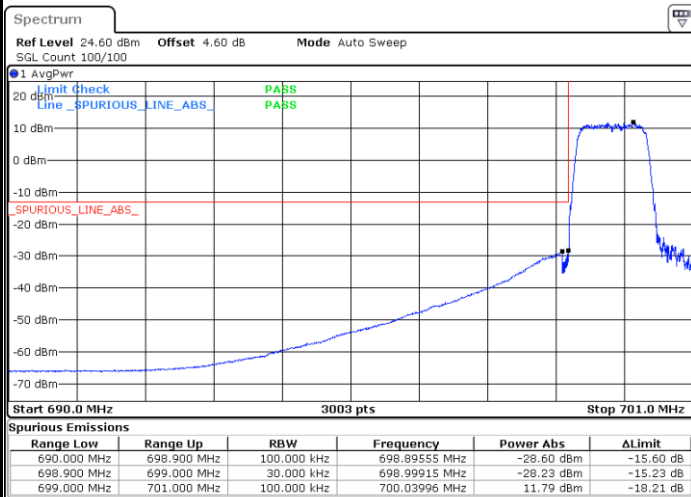
Date: 28 JUN.2023 03:28:21

Highest Band Edge / 1 RB



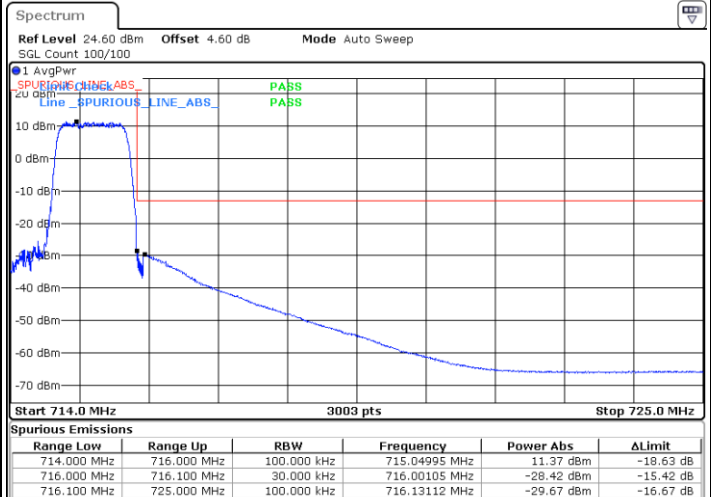
Date: 28 JUN.2023 03:39:33

Lowest Band Edge / Full RB



Date: 28 JUN.2023 03:32:35

Highest Band Edge / Full RB

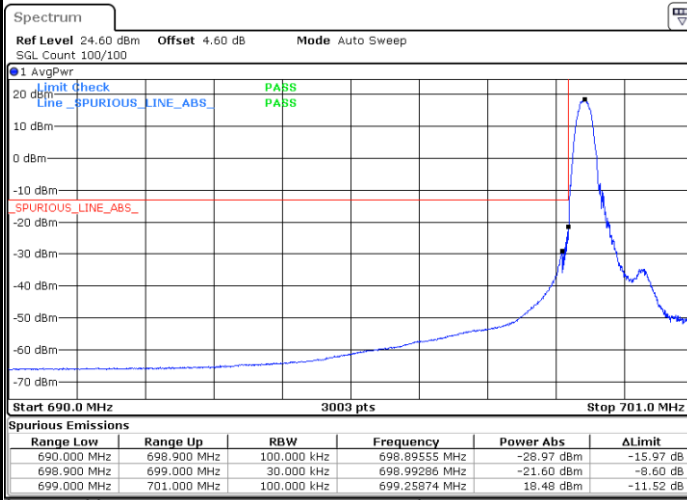


Date: 28 JUN.2023 03:43:48



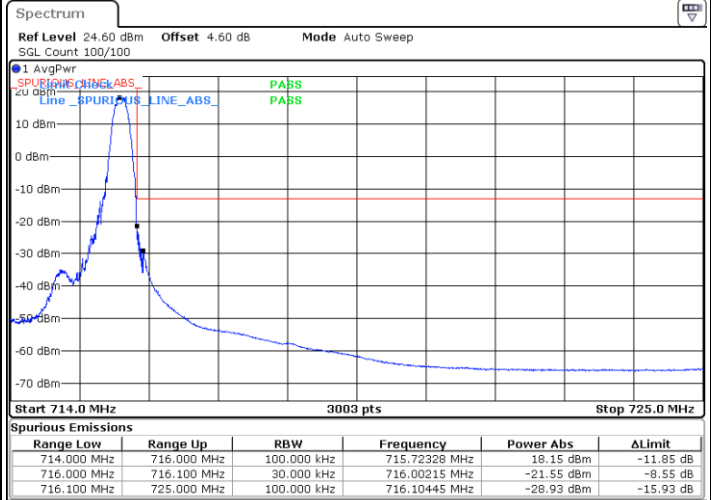
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



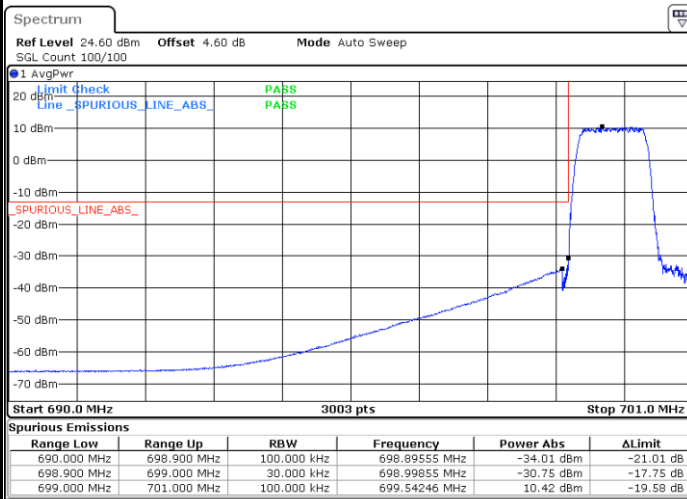
Date: 28 JUN.2023 03:29:46

Highest Band Edge / 1 RB



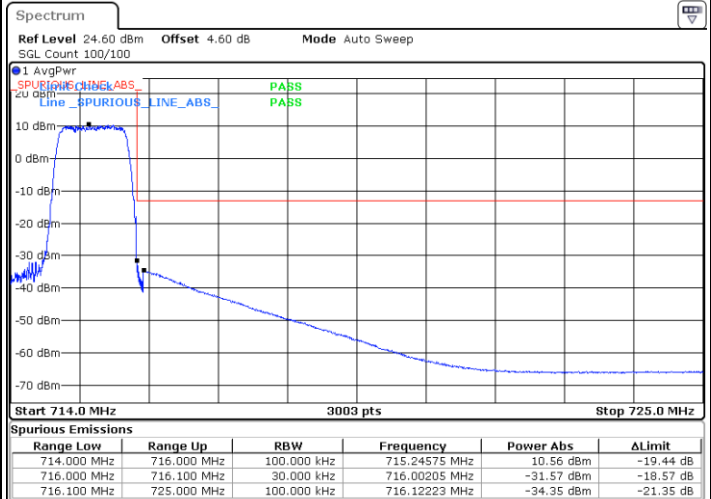
Date: 28 JUN.2023 03:40:58

Lowest Band Edge / Full RB



Date: 28 JUN.2023 03:31:10

Highest Band Edge / Full RB



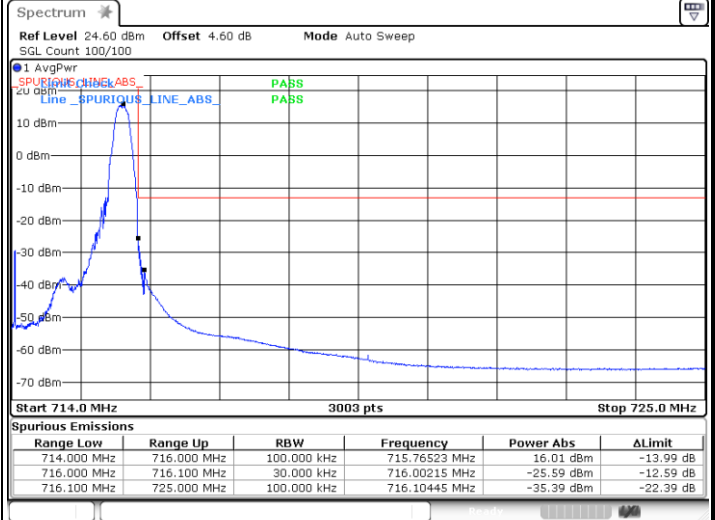
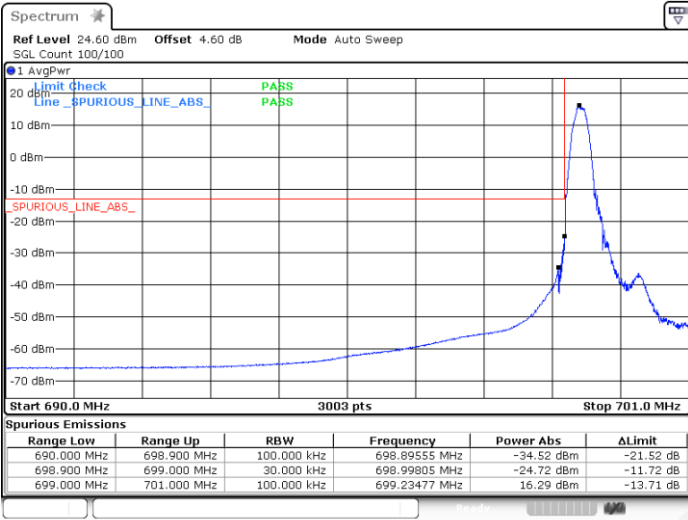
Date: 28 JUN.2023 03:42:23



LTE Band 12 / 1.4MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

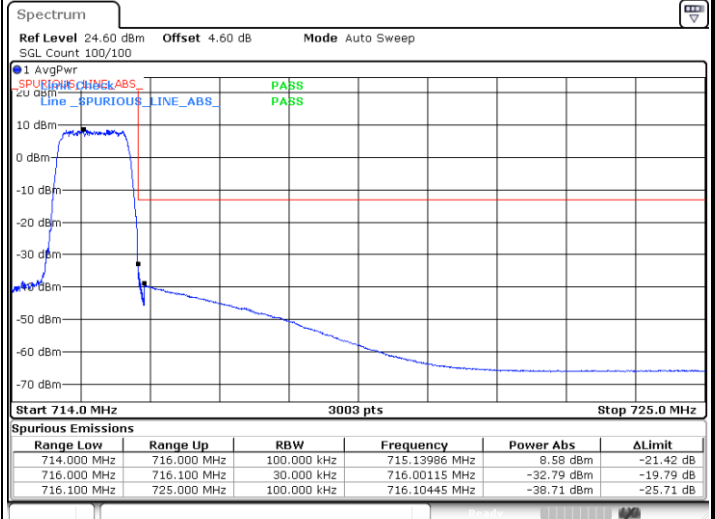
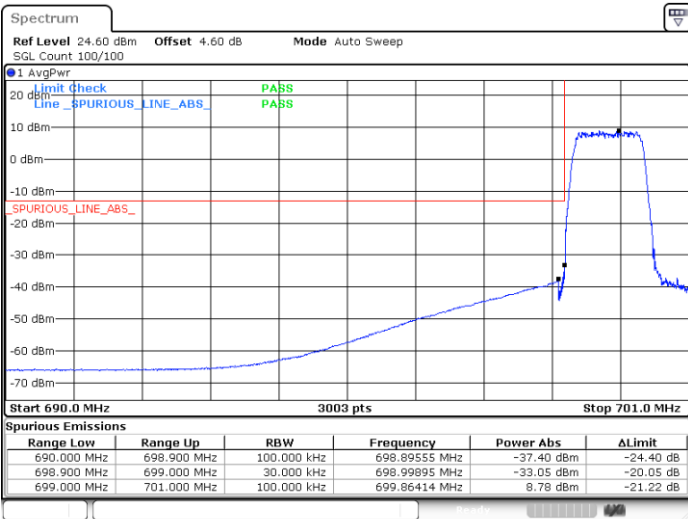


Date: 21.JUL.2023 13:14:57

Date: 21.JUL.2023 13:19:38

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.JUL.2023 13:16:09

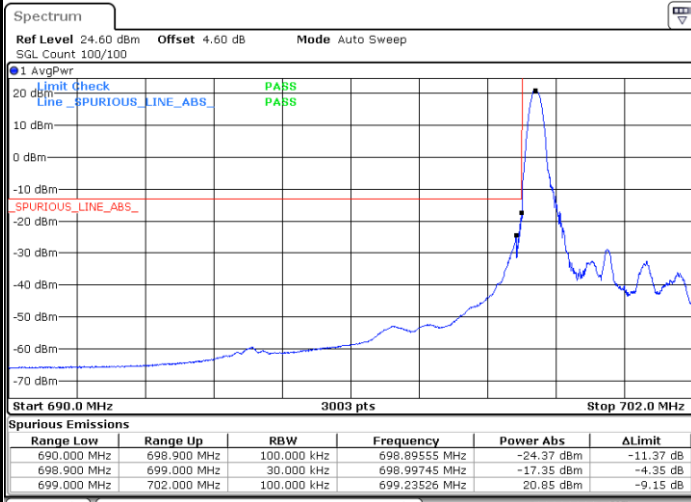
Date: 21.JUL.2023 13:17:39





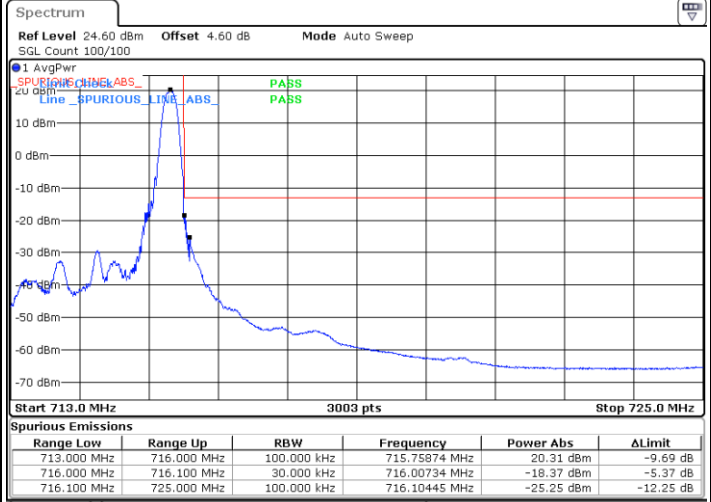
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



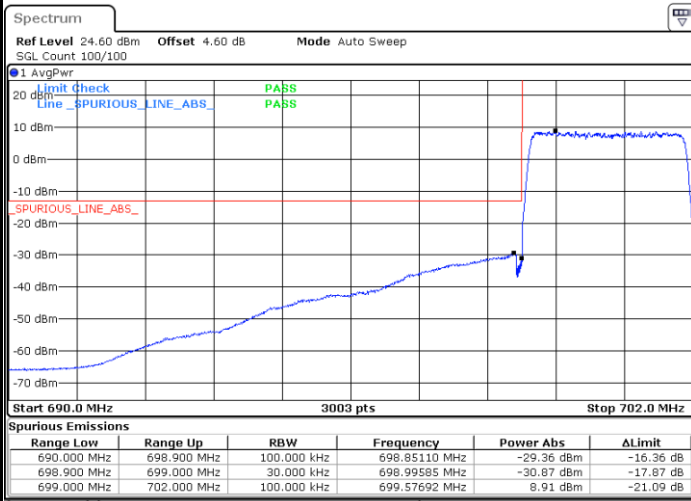
Date: 28 JUN 2023 03:48:00

Highest Band Edge / 1 RB



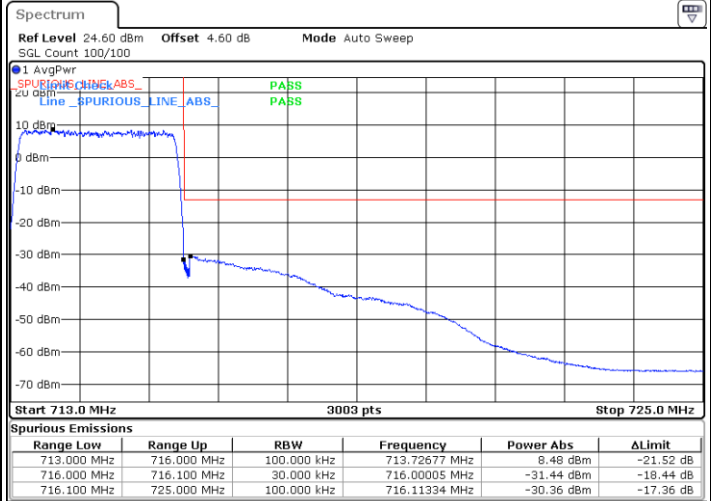
Date: 28 JUN 2023 03:58:47

Lowest Band Edge / Full RB



Date: 28 JUN 2023 03:55:04

Highest Band Edge / Full RB

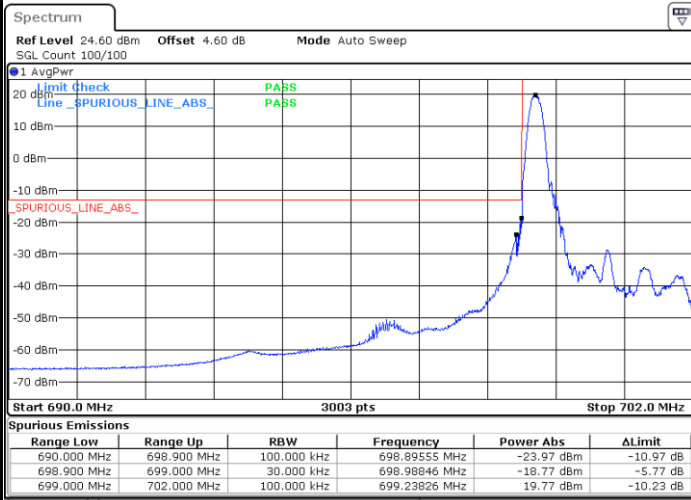


Date: 28 JUN 2023 04:03:46



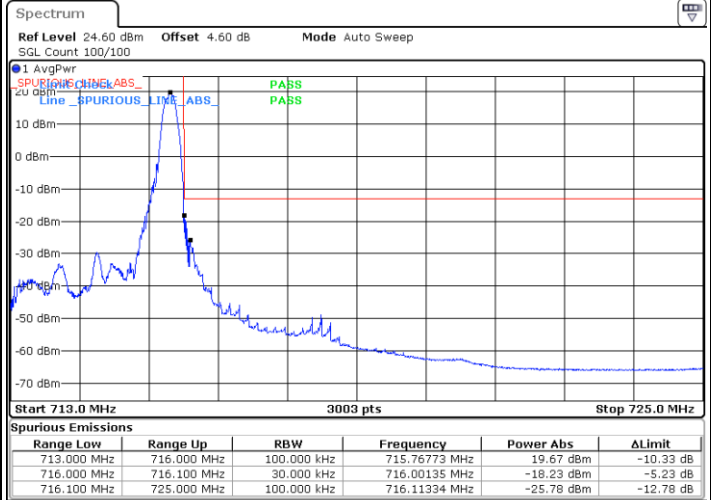
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



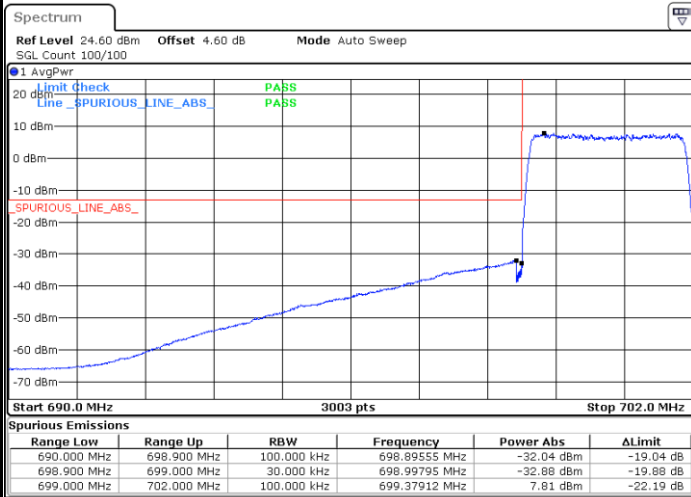
Date: 28 JUN 2023 03:49:25

Highest Band Edge / 1 RB



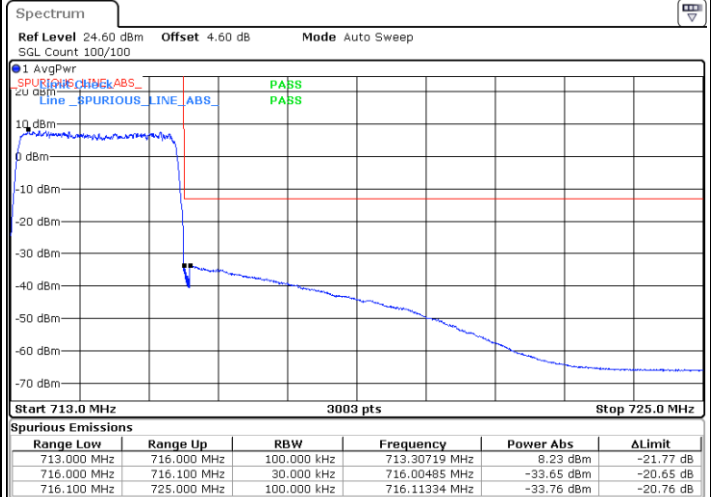
Date: 28 JUN 2023 03:59:47

Lowest Band Edge / Full RB



Date: 28 JUN 2023 03:53:39

Highest Band Edge / Full RB

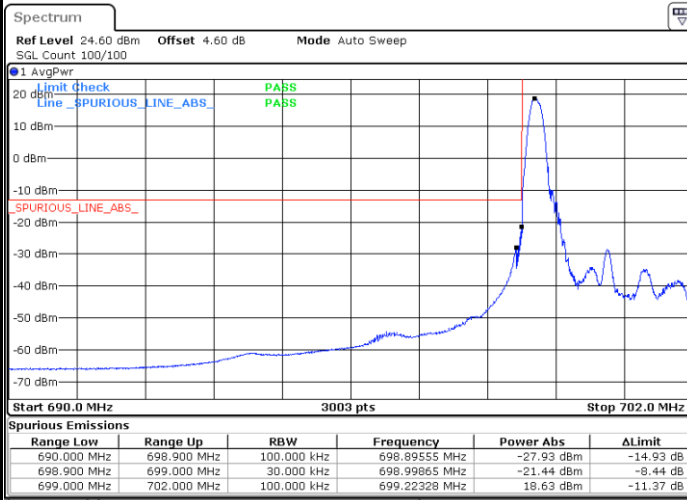


Date: 28 JUN 2023 04:02:46



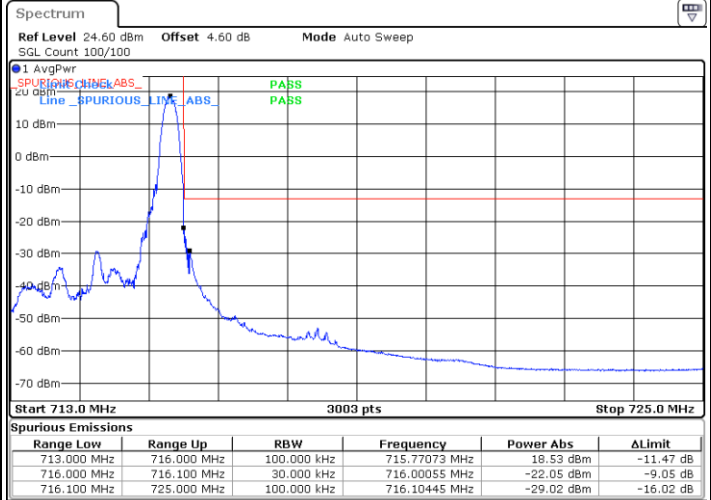
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



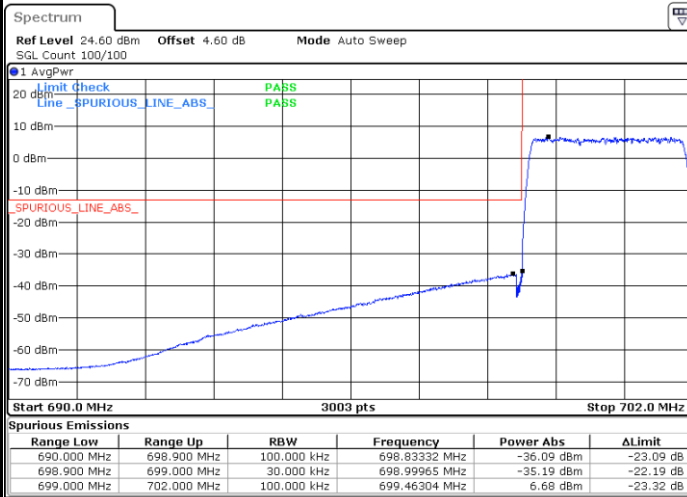
Date: 28.JUN.2023 03:50:49

Highest Band Edge / 1 RB



Date: 28.JUN.2023 04:00:47

Lowest Band Edge / Full RB



Date: 28.JUN.2023 03:52:14

Highest Band Edge / Full RB



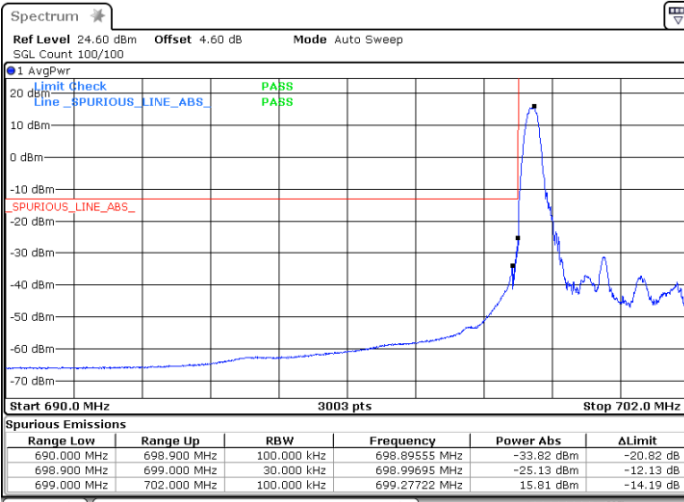
Date: 28.JUN.2023 04:01:46



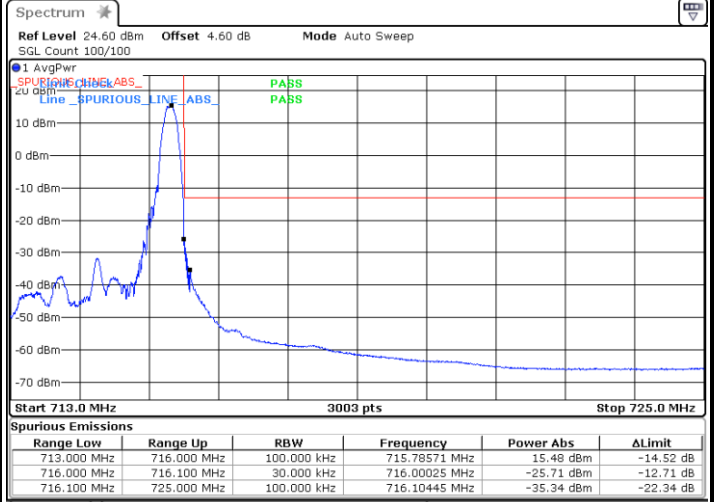
LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB



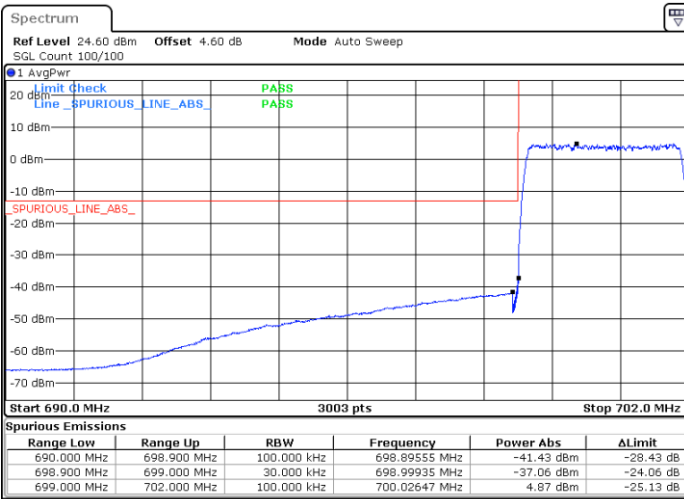
Date: 21.JUL.2023 13:22:06



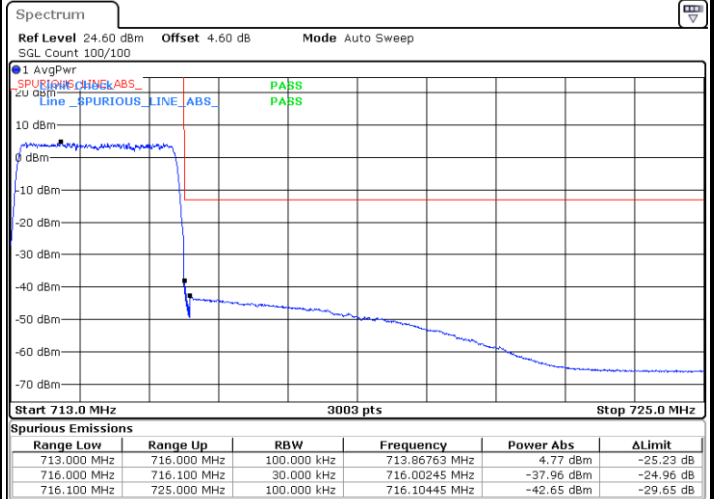
Date: 21.JUL.2023 13:27:29

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21.JUL.2023 13:23:11

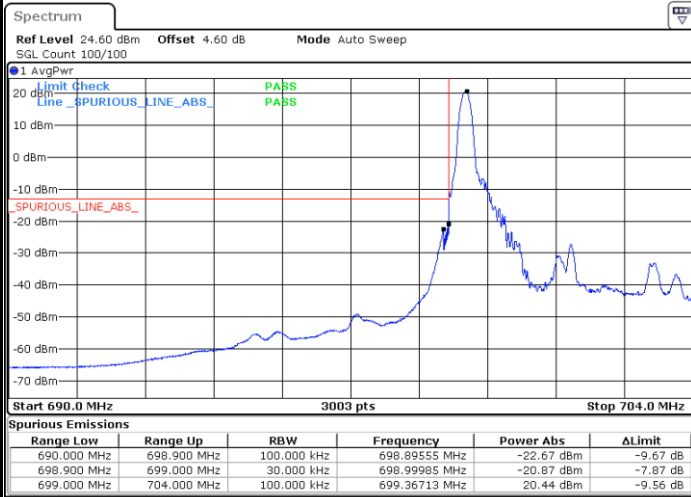


Date: 21.JUL.2023 13:25:38



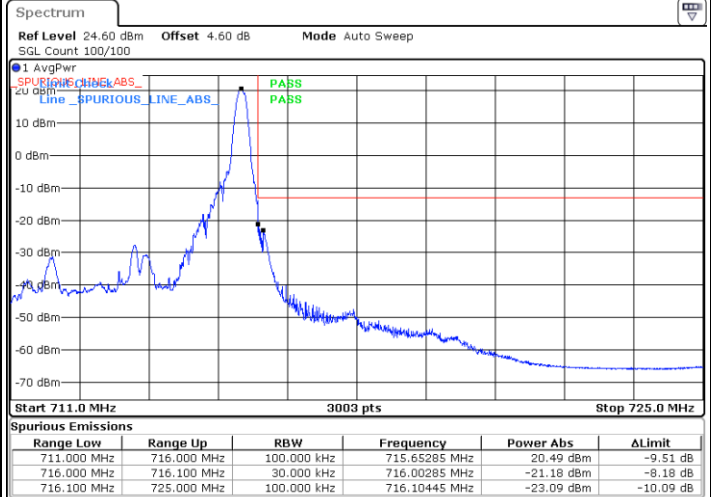
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



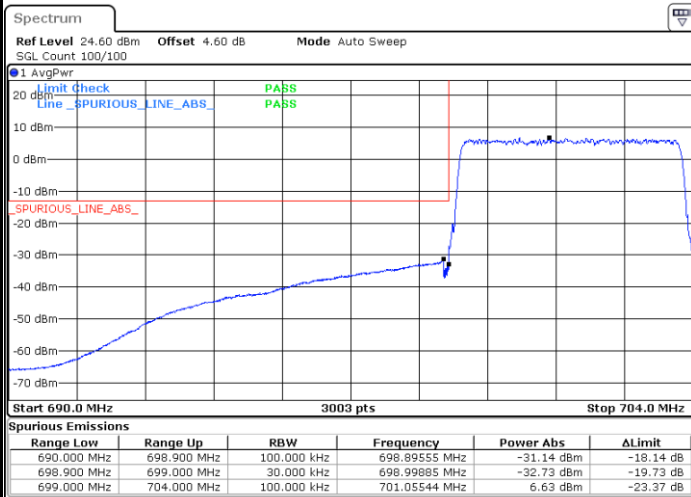
Date: 28.JUN.2023 04:06:08

Highest Band Edge / 1 RB



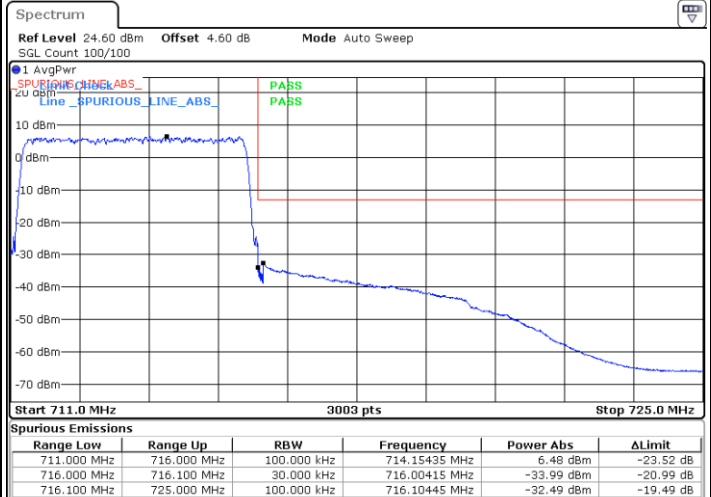
Date: 28.JUN.2023 04:14:51

Lowest Band Edge / Full RB



Date: 28.JUN.2023 04:11:07

Highest Band Edge / Full RB



Date: 28.JUN.2023 04:19:50