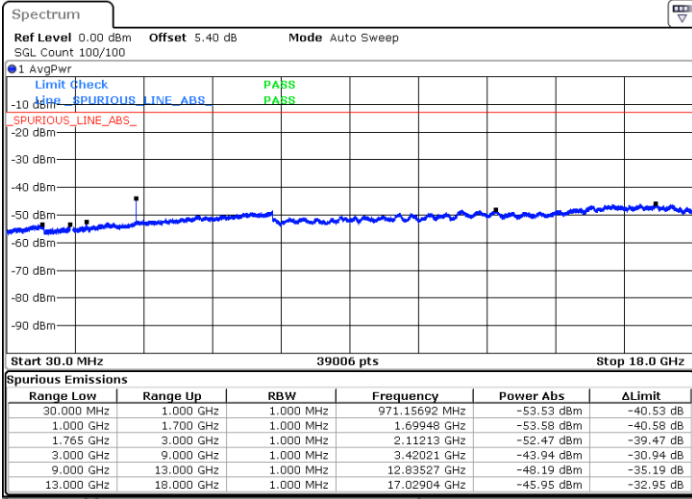




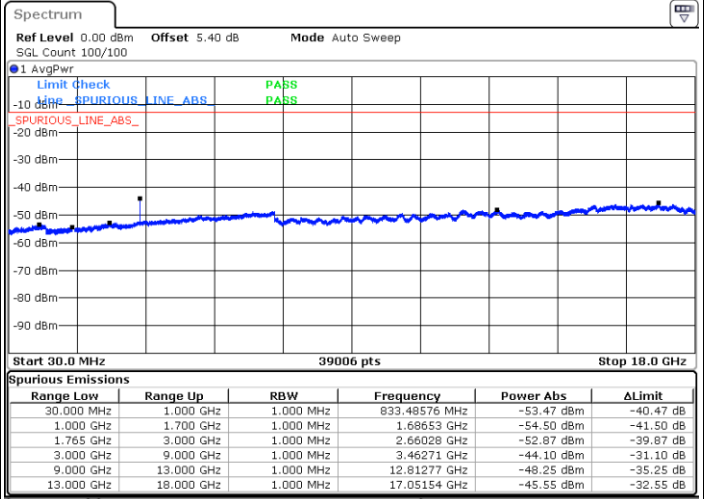
LTE Band 4 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

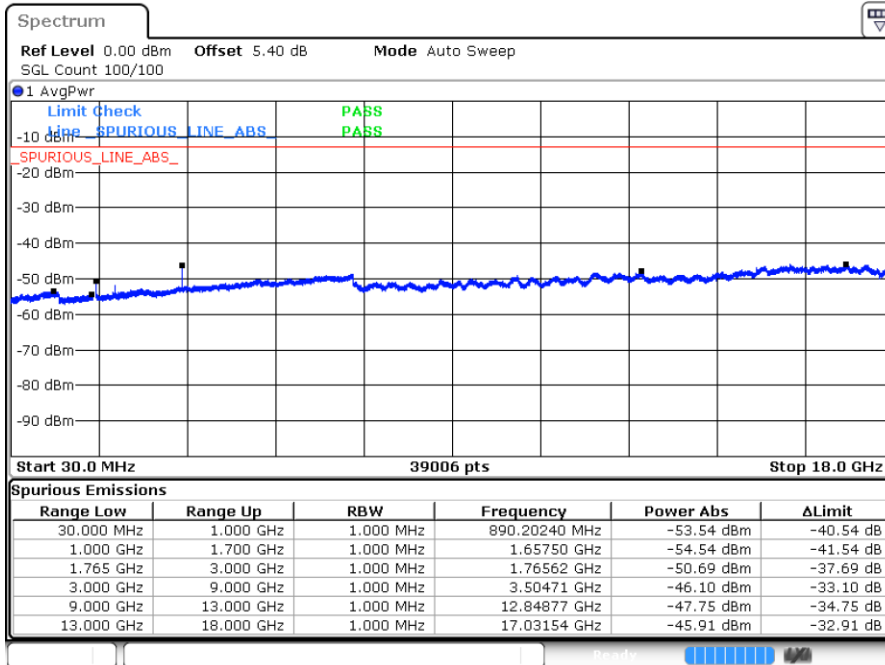


Date: 7 JUL 2022 22:14:07



Date: 7 JUL 2022 22:25:26

Highest Channel / QPSK



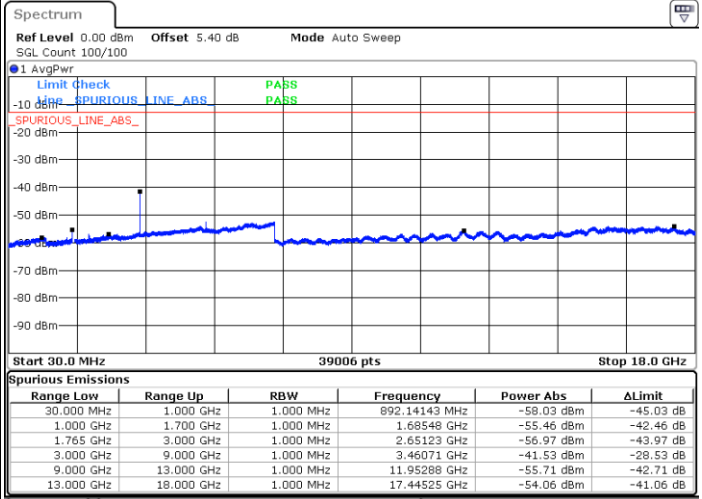
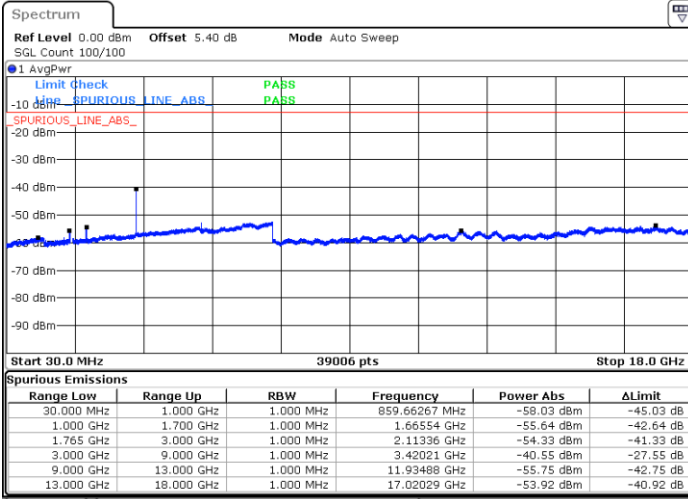
Date: 7 JUL 2022 22:26:46



LTE Band 4 / 5MHz

Lowest Channel / QPSK

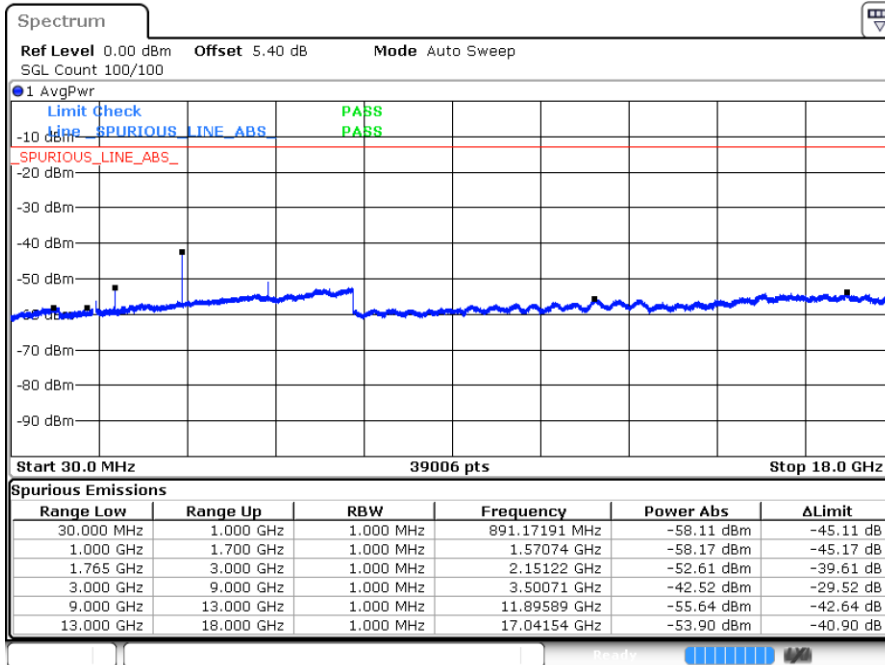
Middle Channel / QPSK



Date: 7 JUL 2022 22:38:05

Date: 7 JUL 2022 22:49:24

Highest Channel / QPSK

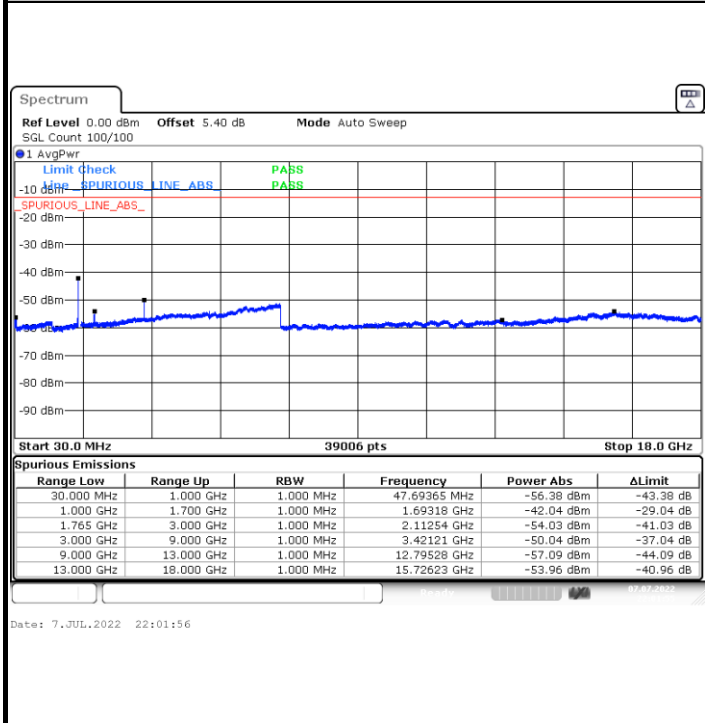


Date: 7 JUL 2022 22:50:44

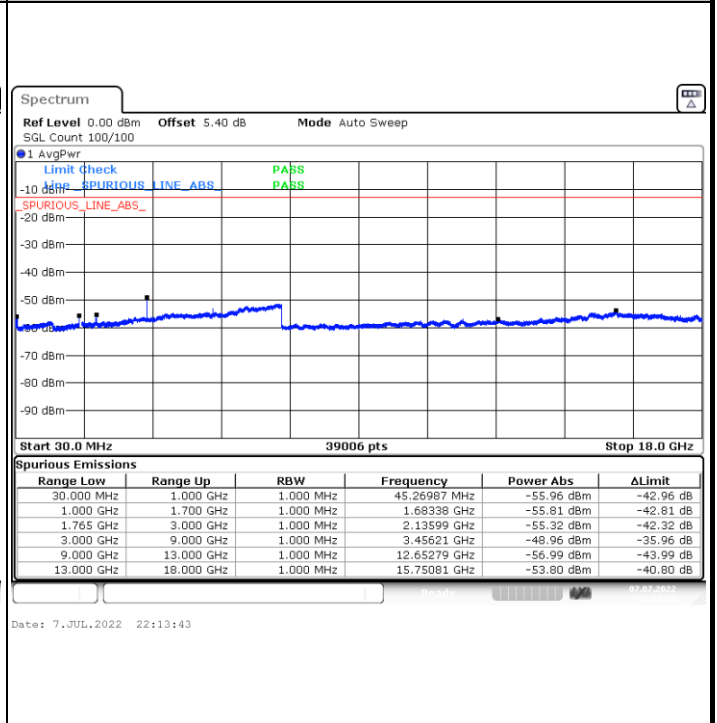


**LTE Band 4 / 10MHz**

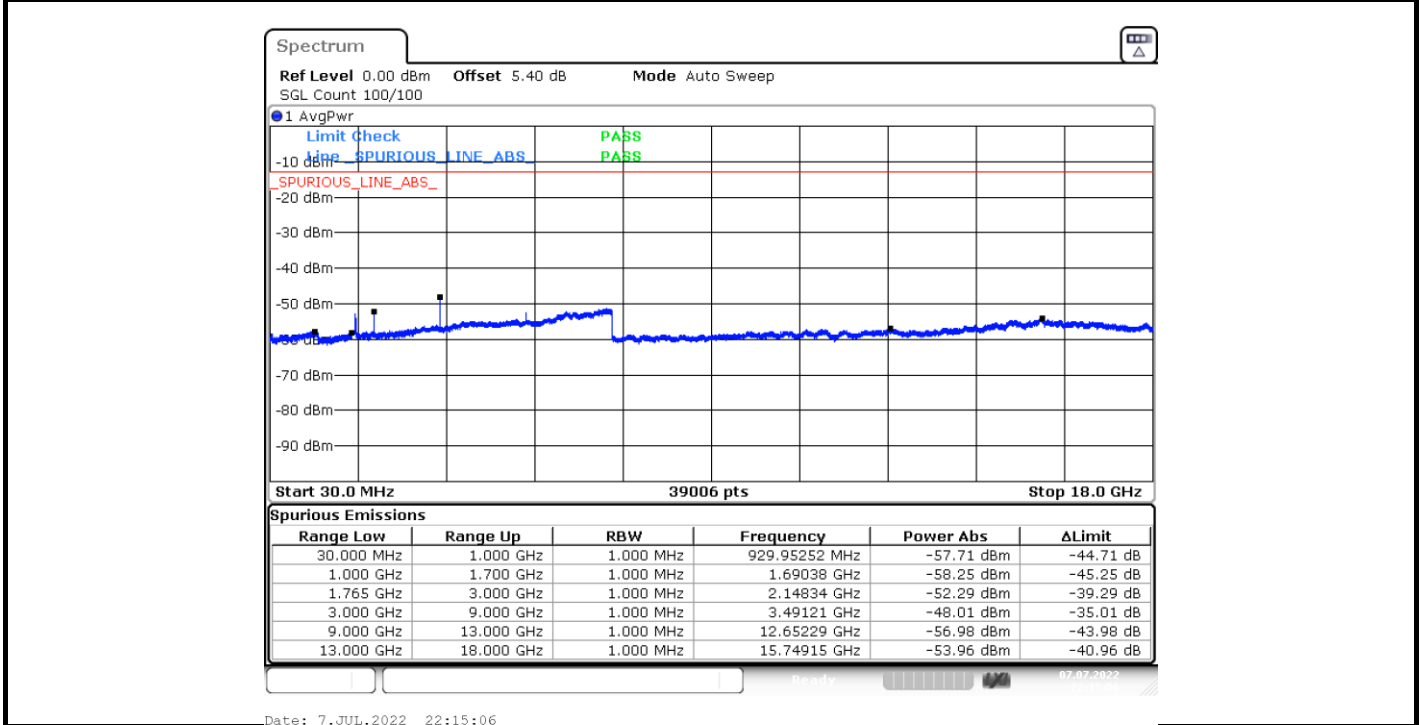
**Lowest Channel / QPSK**



**Middle Channel / QPSK**



**Highest Channel / QPSK**

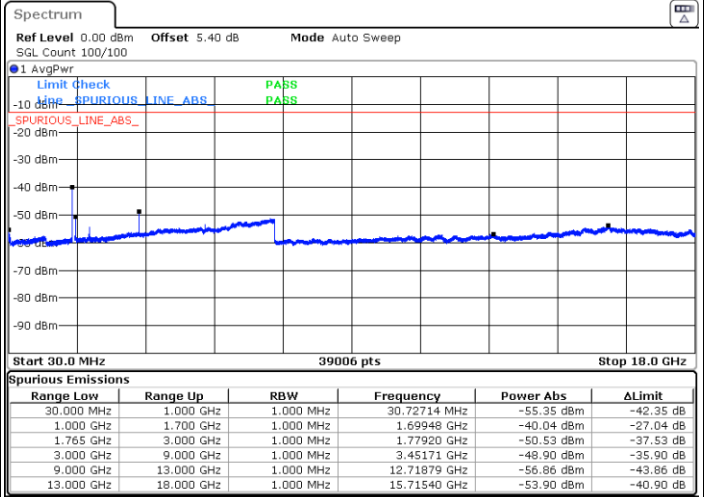
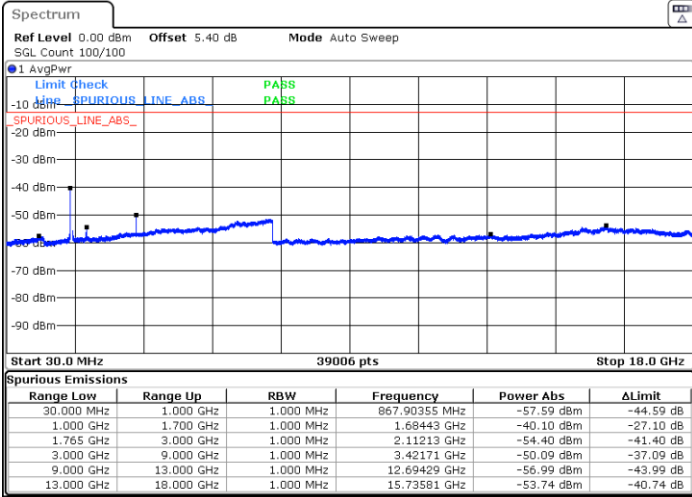




LTE Band 4 / 15MHz

Lowest Channel / QPSK

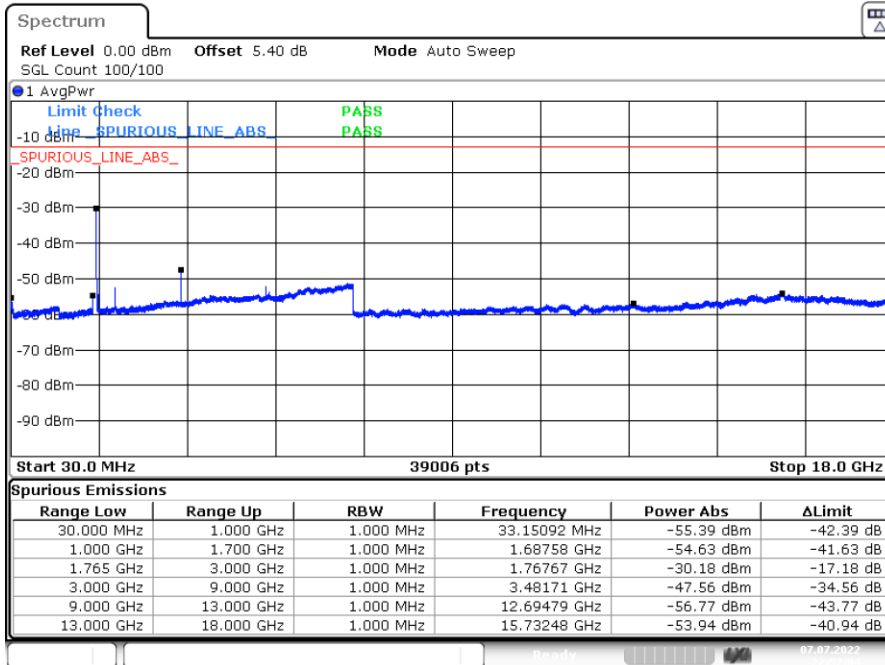
Middle Channel / QPSK



Date: 7.JUL.2022 22:31:33

Date: 7.JUL.2022 22:50:42

Highest Channel / QPSK



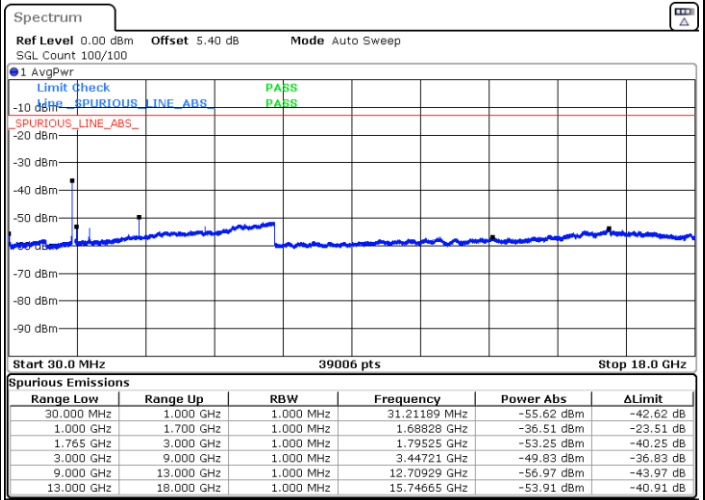
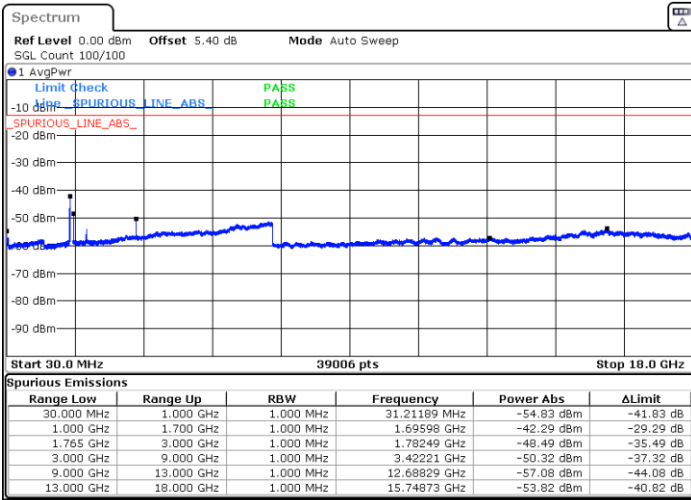
Date: 7.JUL.2022 22:52:04



LTE Band 4 / 20MHz

Lowest Channel / QPSK

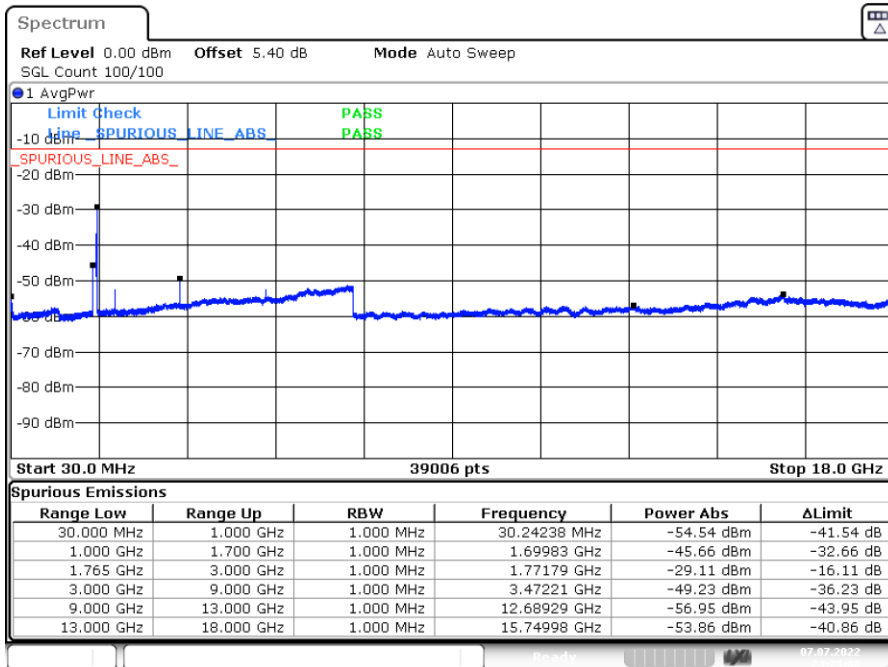
Middle Channel / QPSK



Date: 7.JUL.2022 23:11:55

Date: 7.JUL.2022 23:23:45

Highest Channel / QPSK



Date: 7.JUL.2022 23:25:08



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0021	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0009	
0	Normal Voltage	0.0014	
-10	Normal Voltage	0.0026	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0024	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

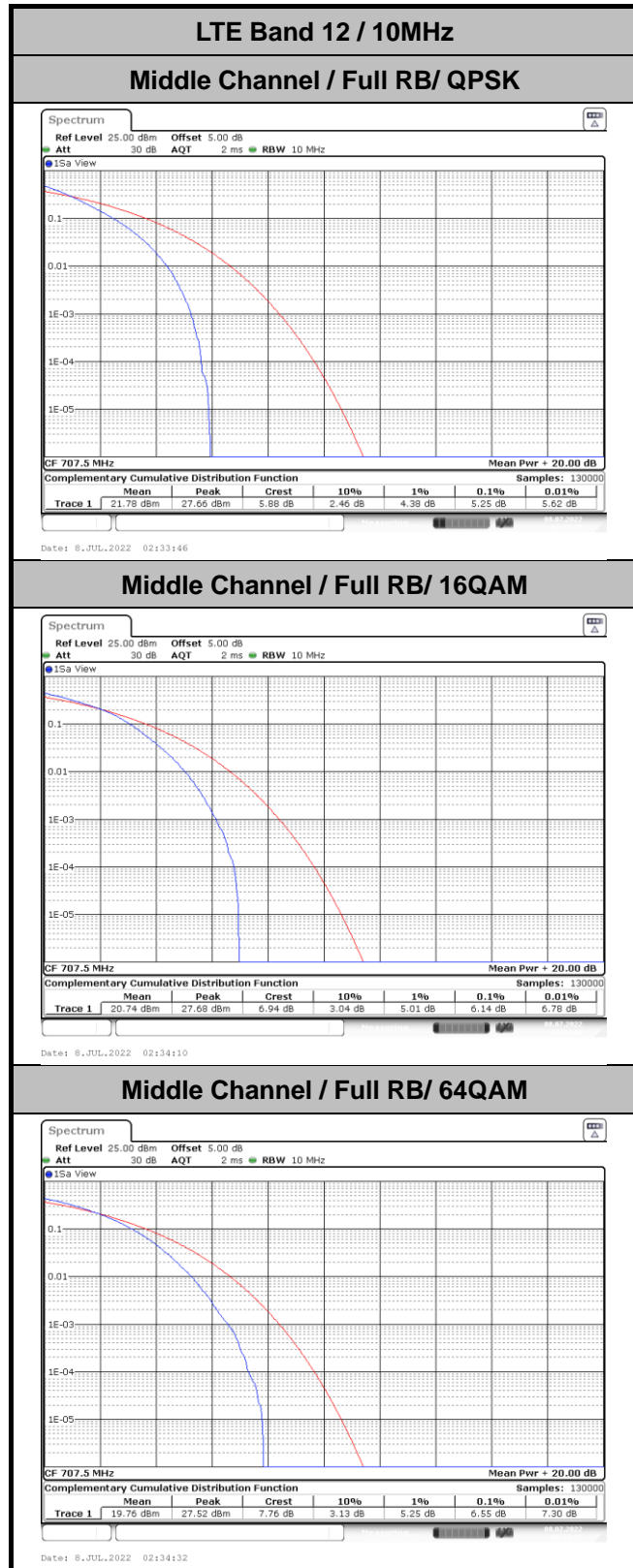
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 12

### Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.25	6.14	6.55	<b>PASS</b>

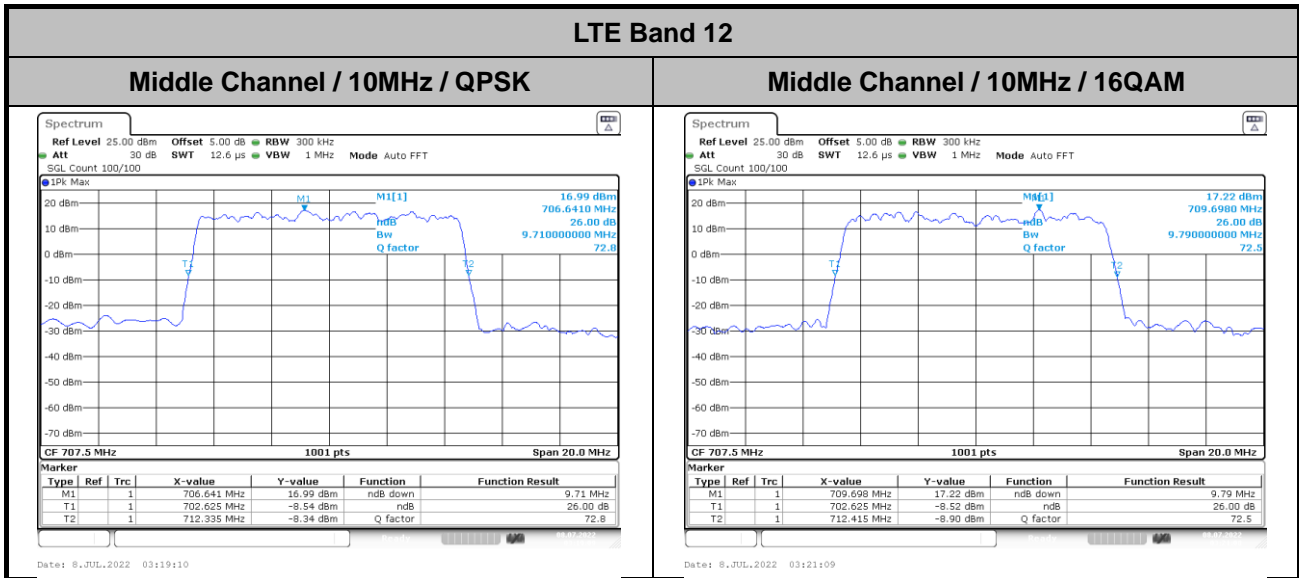






**26dB Bandwidth**

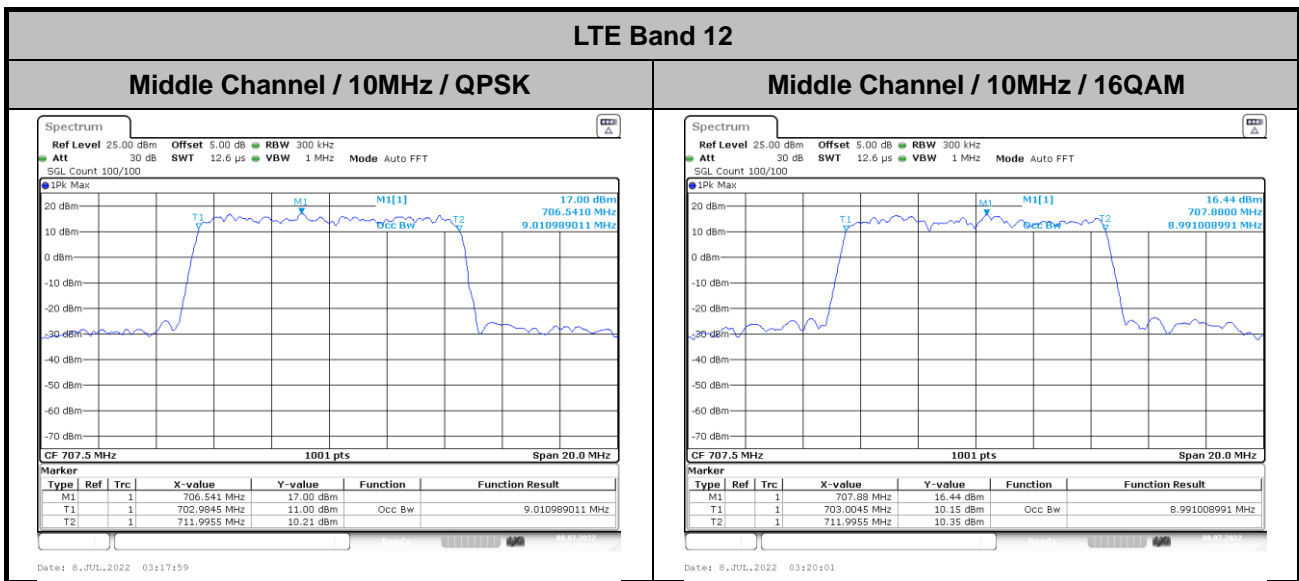
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.71	9.79





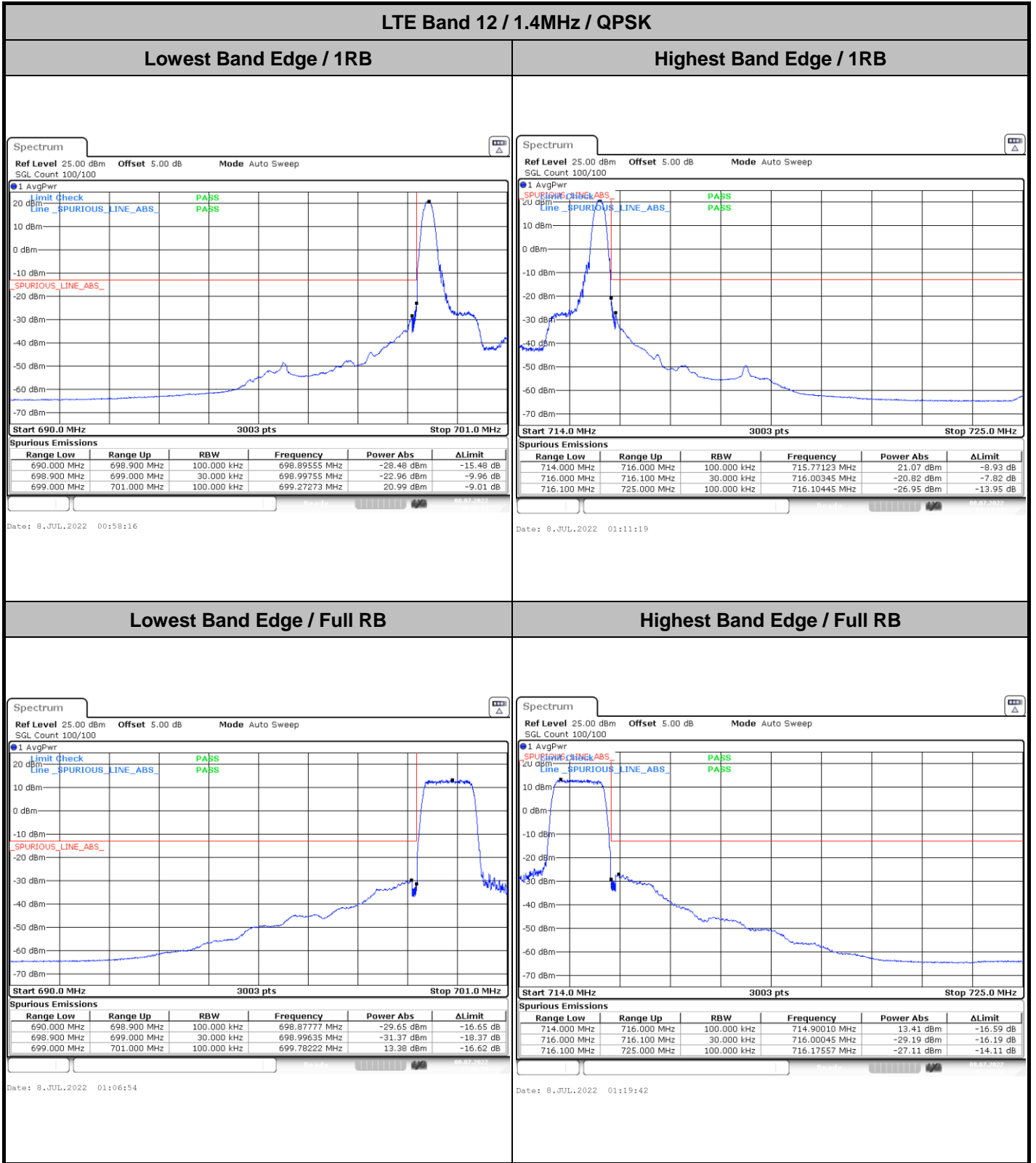
# Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	8.99





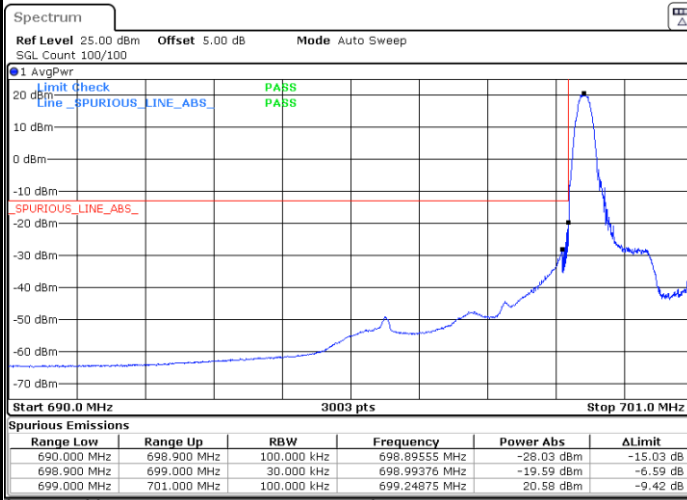
# Conducted Band Edge





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



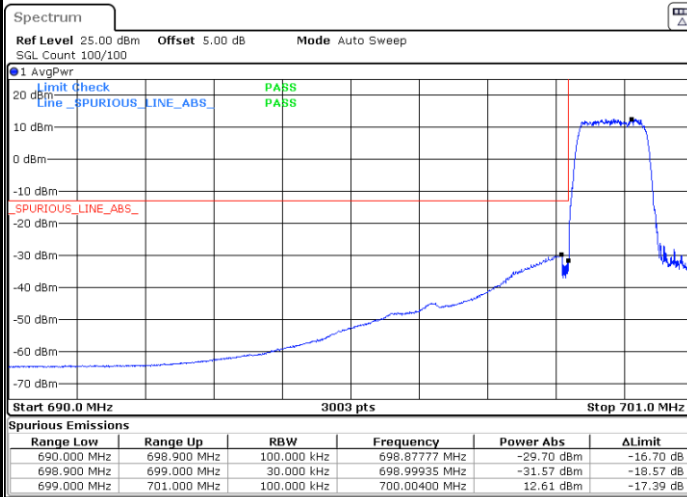
Date: 8.JUL.2022 00:59:59

Highest Band Edge / 1 RB



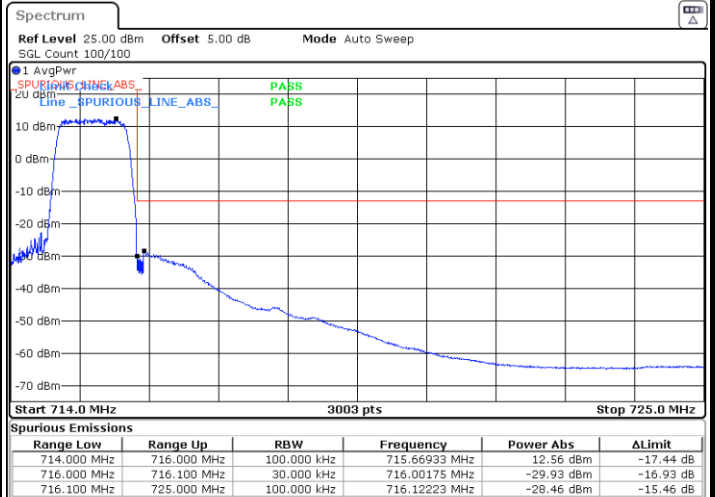
Date: 8.JUL.2022 01:13:00

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:05:11

Highest Band Edge / Full RB



Date: 8.JUL.2022 01:18:02



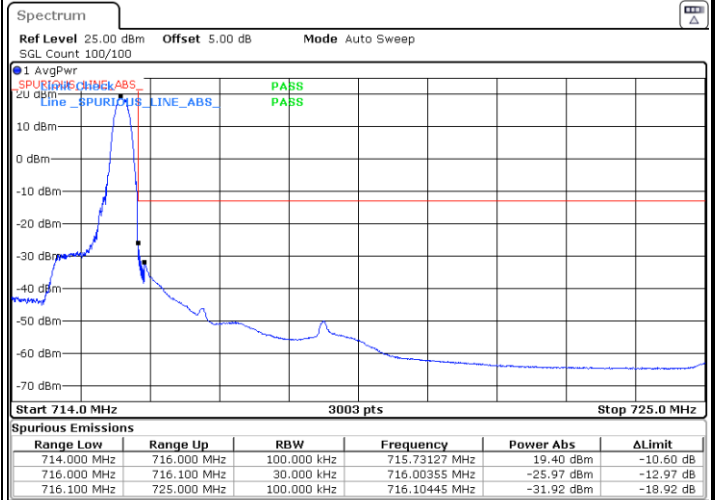
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



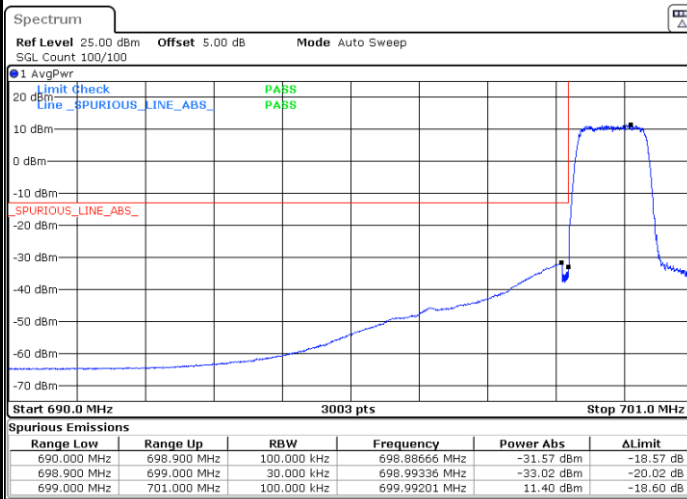
Date: 8.JUL.2022 01:01:43

Highest Band Edge / 1 RB



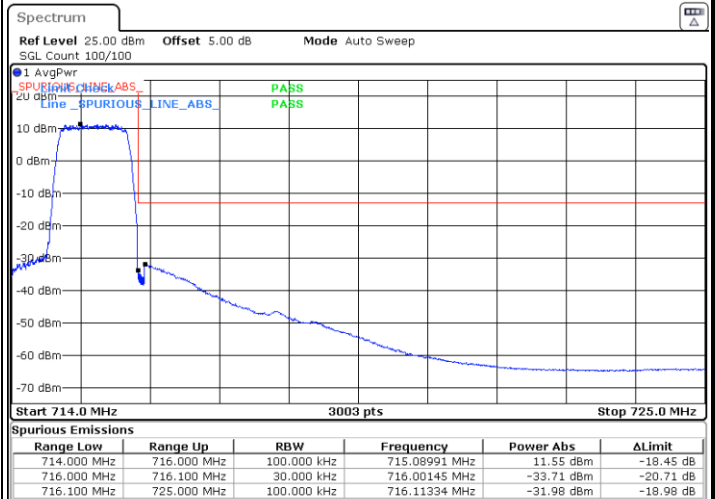
Date: 8.JUL.2022 01:14:40

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:03:27

Highest Band Edge / Full RB

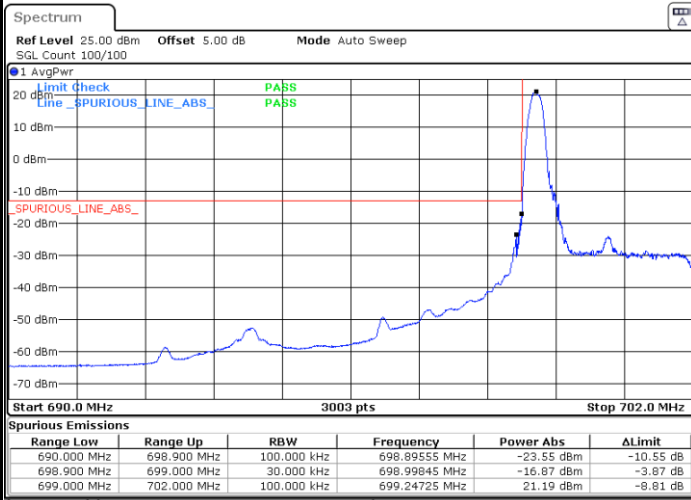


Date: 8.JUL.2022 01:16:21



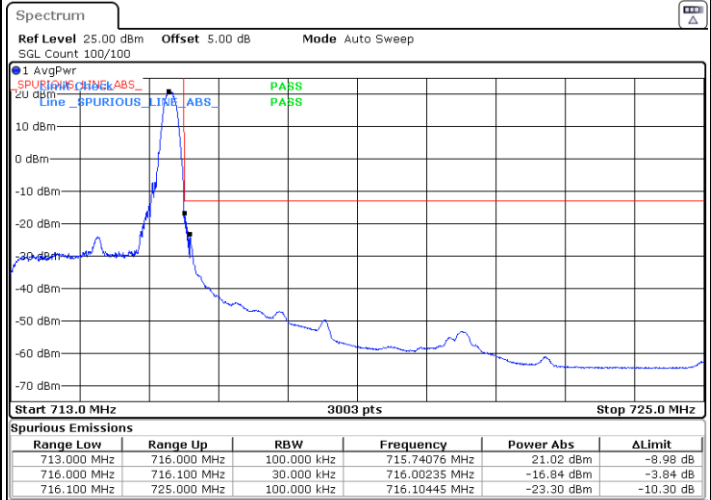
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



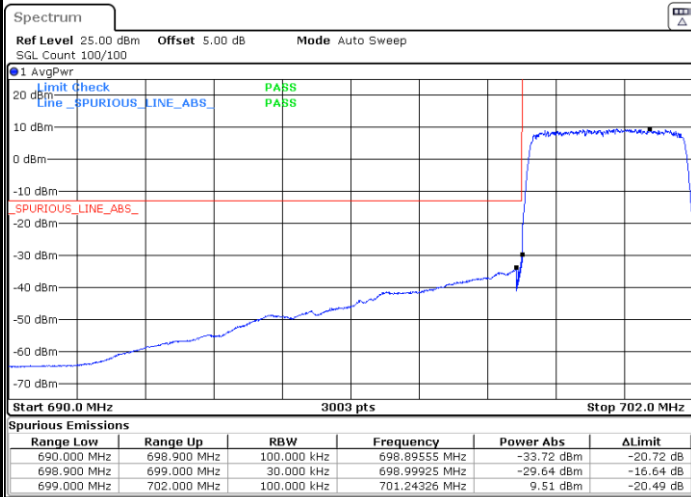
Date: 8.JUL.2022 01:22:49

Highest Band Edge / 1 RB



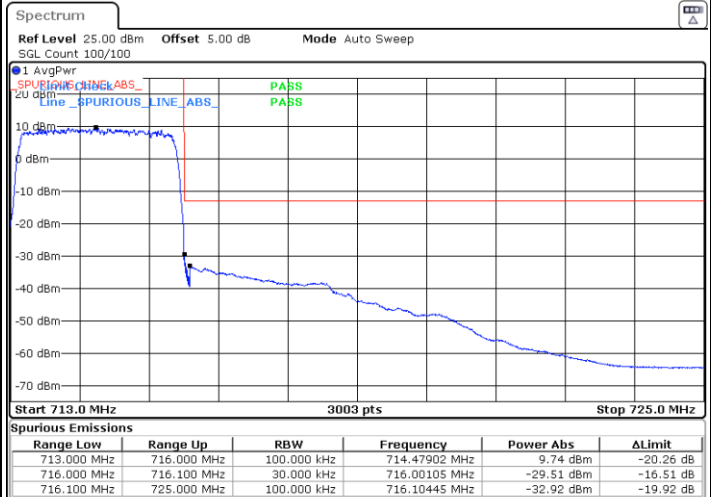
Date: 8.JUL.2022 01:35:52

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:31:28

Highest Band Edge / Full RB

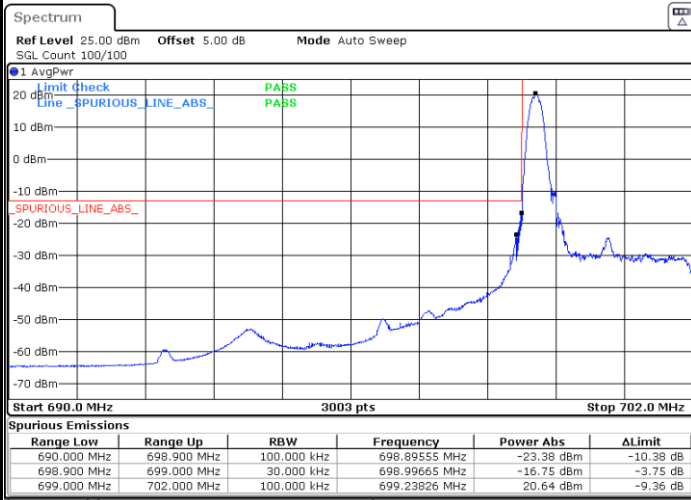


Date: 8.JUL.2022 01:44:16



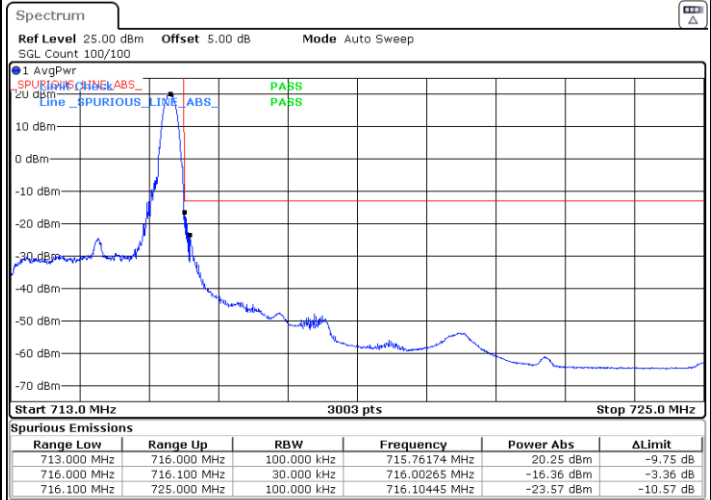
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



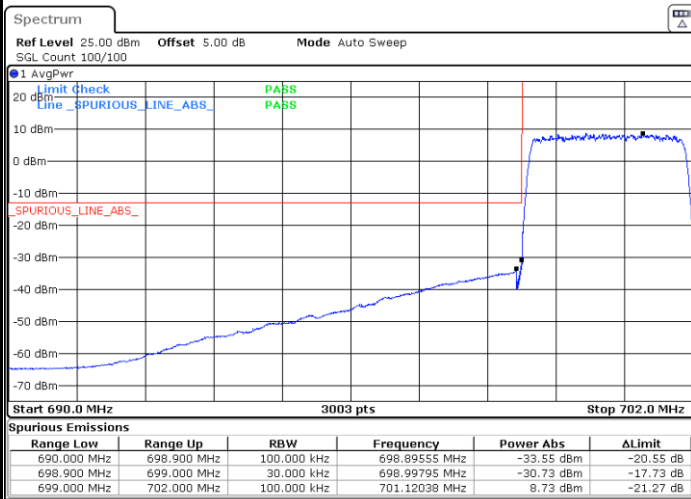
Date: 8.JUL.2022 01:24:32

Highest Band Edge / 1 RB



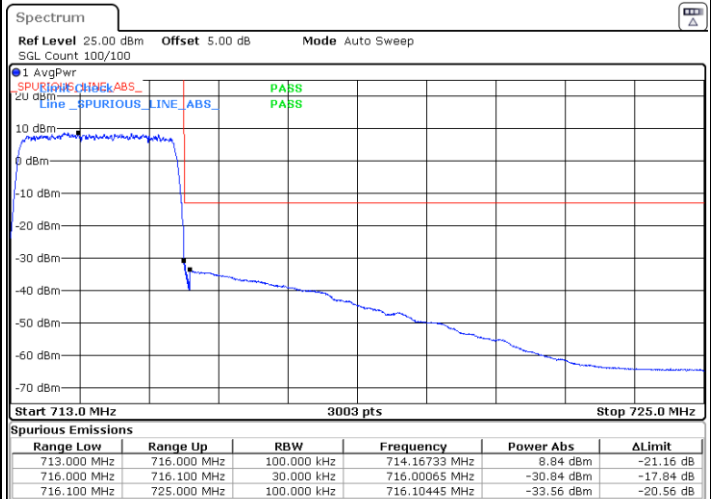
Date: 8.JUL.2022 01:37:32

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:29:44

Highest Band Edge / Full RB

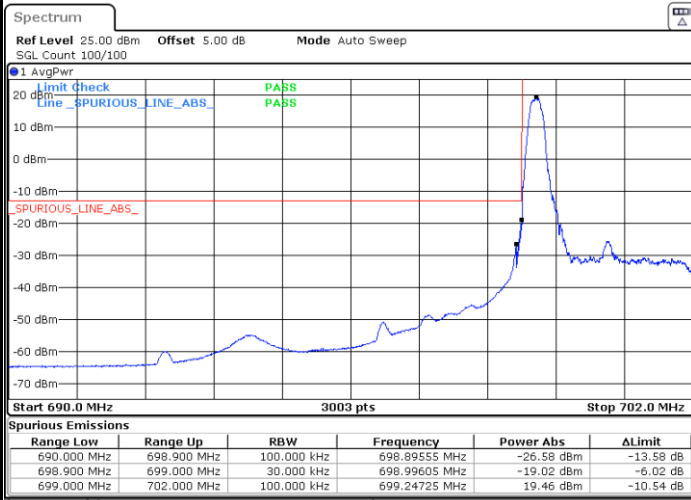


Date: 8.JUL.2022 01:42:35



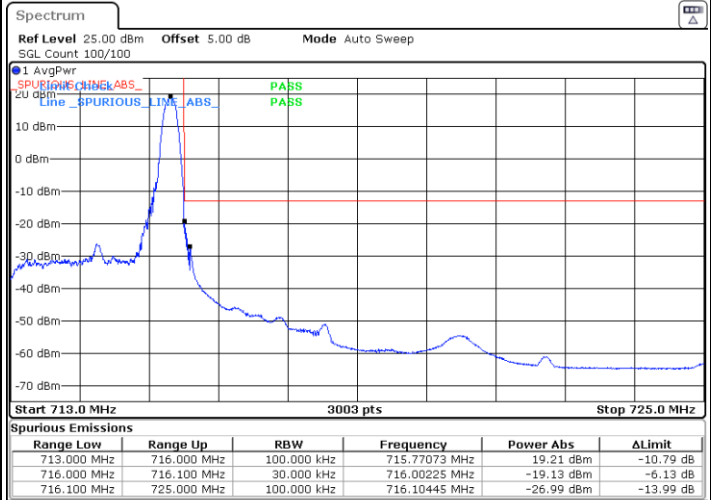
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



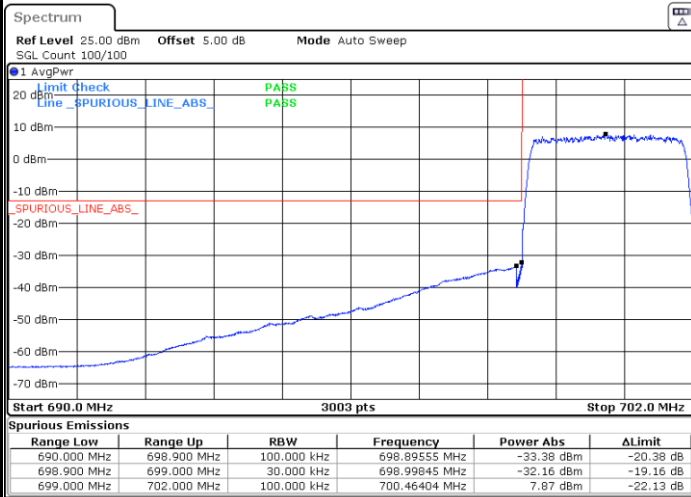
Date: 8.JUL.2022 01:26:16

Highest Band Edge / 1 RB



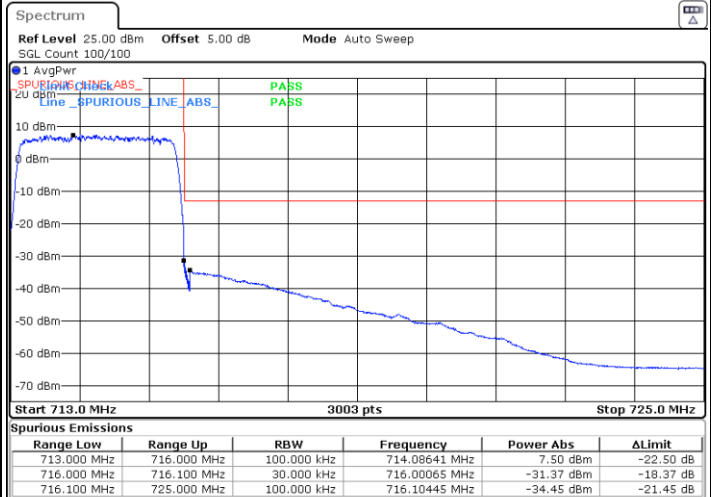
Date: 8.JUL.2022 01:39:13

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:28:00

Highest Band Edge / Full RB



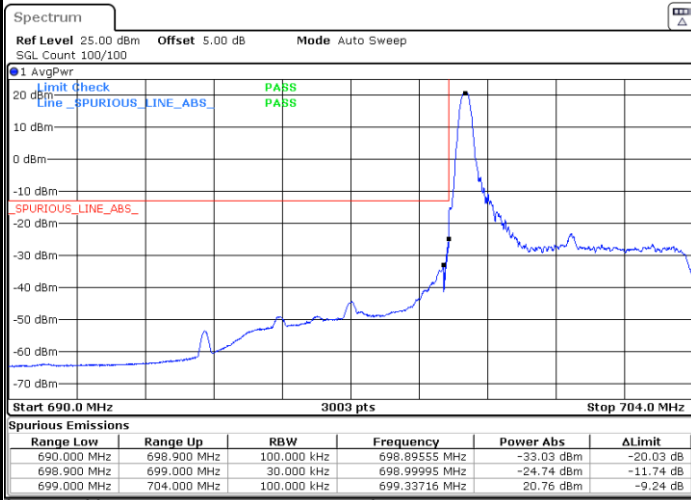
Date: 8.JUL.2022 01:40:54





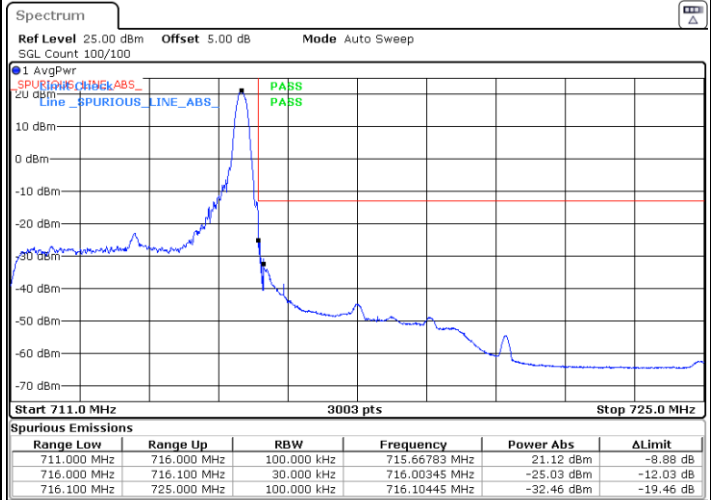
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



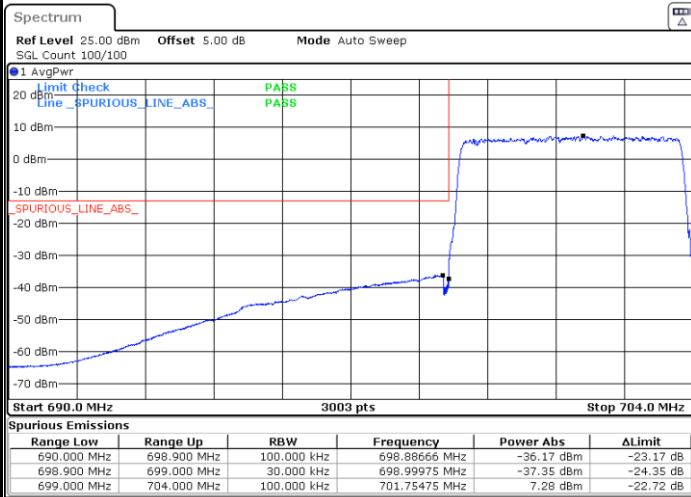
Date: 8.JUL.2022 01:47:23

Highest Band Edge / 1 RB



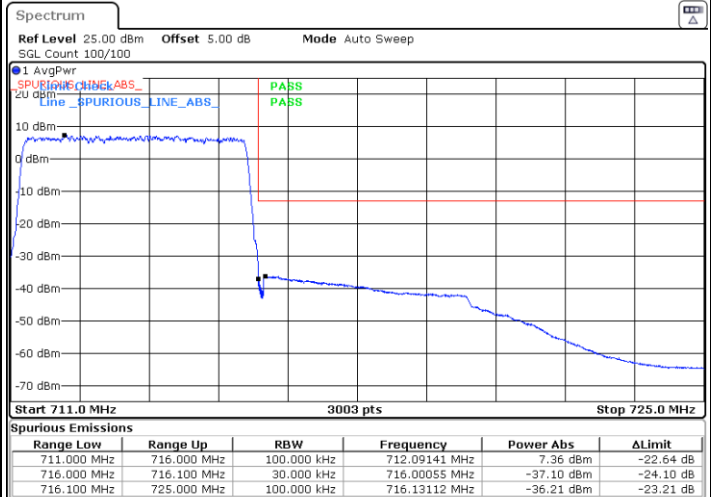
Date: 8.JUL.2022 02:00:26

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:56:02

Highest Band Edge / Full RB

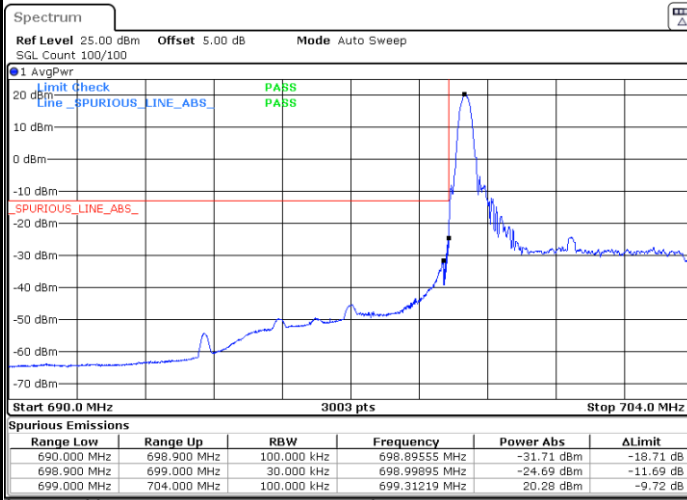


Date: 8.JUL.2022 02:08:50



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



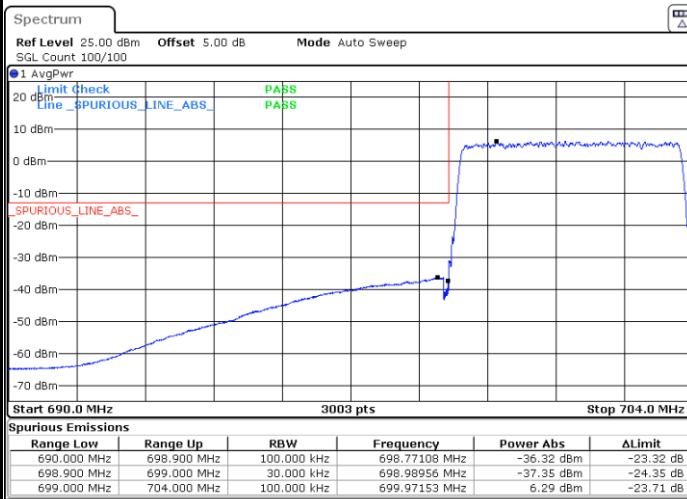
Date: 8.JUL.2022 01:49:07

Highest Band Edge / 1 RB



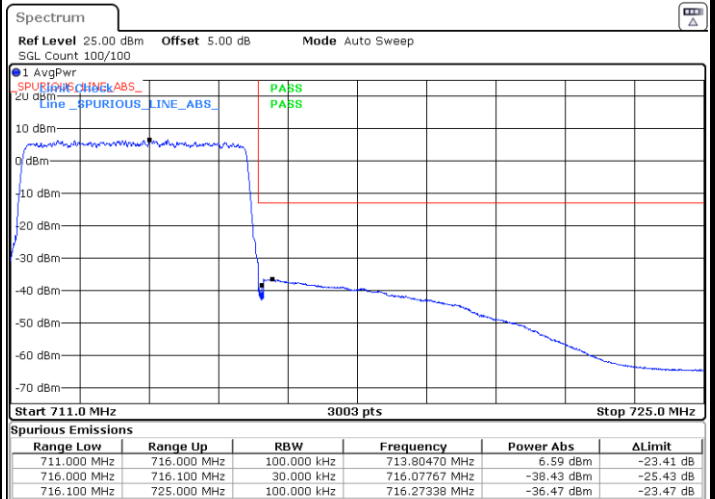
Date: 8.JUL.2022 02:02:07

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:54:18

Highest Band Edge / Full RB

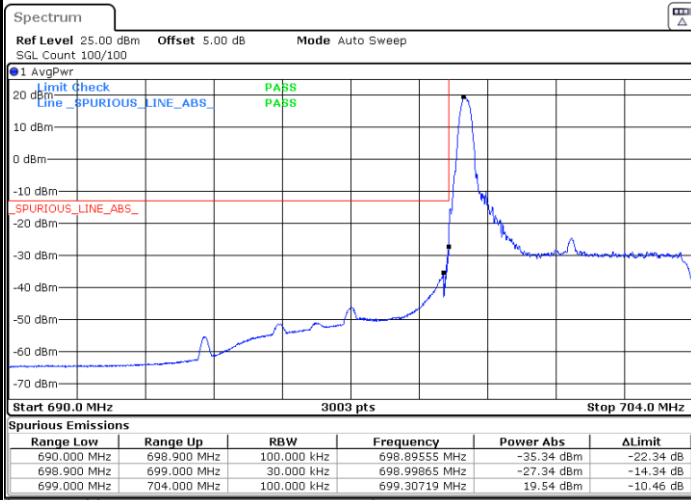


Date: 8.JUL.2022 02:07:09



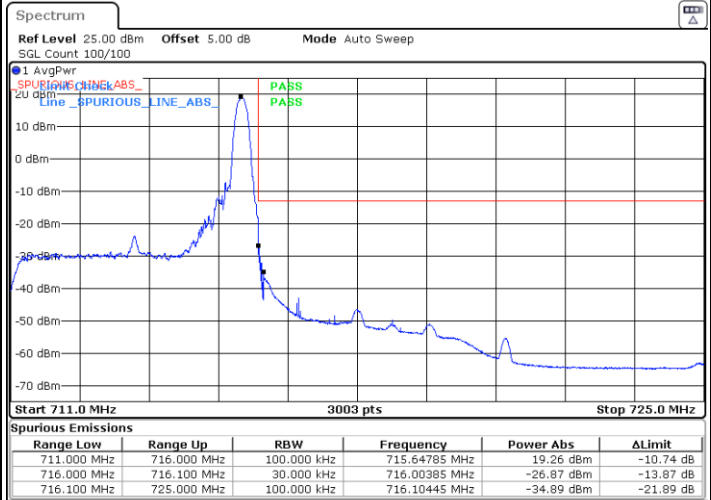
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



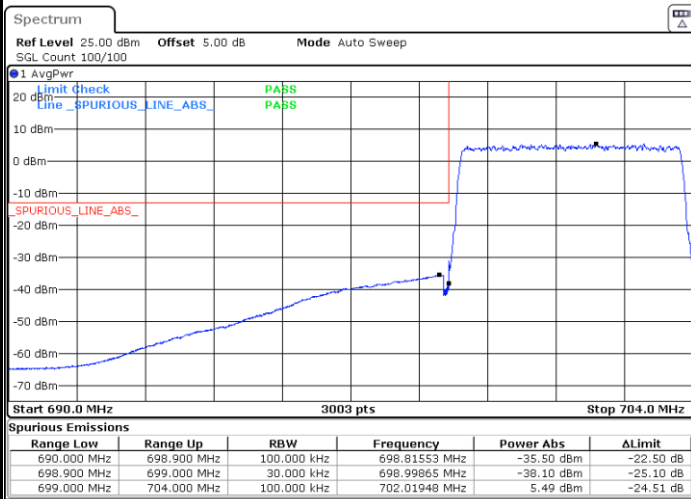
Date: 8.JUL.2022 01:50:51

Highest Band Edge / 1 RB



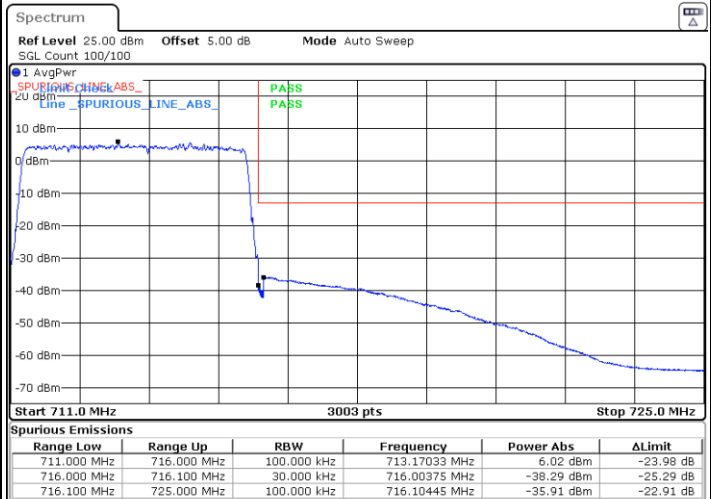
Date: 8.JUL.2022 02:03:48

Lowest Band Edge / Full RB



Date: 8.JUL.2022 01:52:35

Highest Band Edge / Full RB

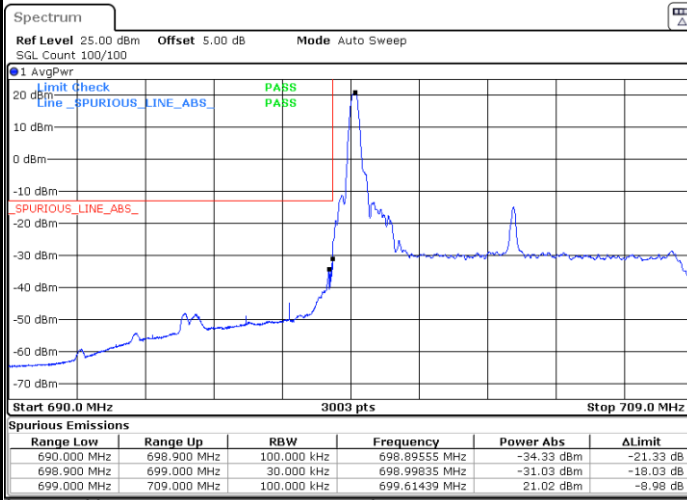


Date: 8.JUL.2022 02:05:28



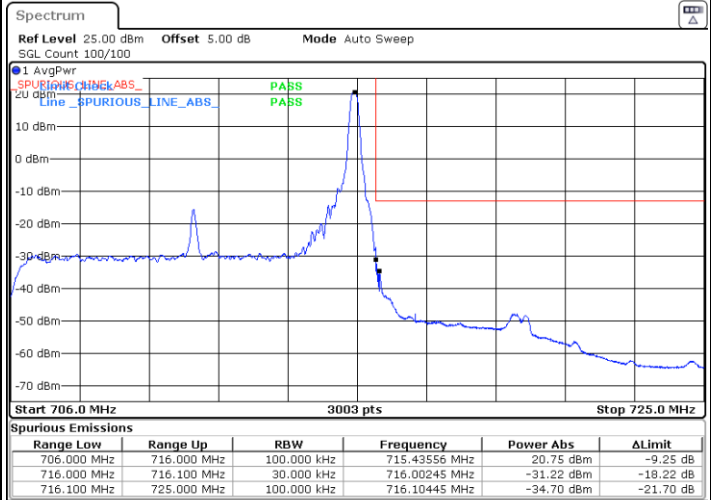
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



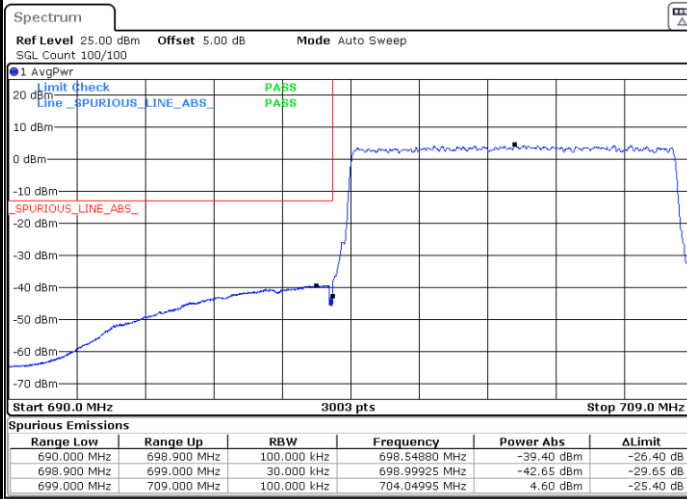
Date: 8.JUL.2022 02:11:57

Highest Band Edge / 1 RB



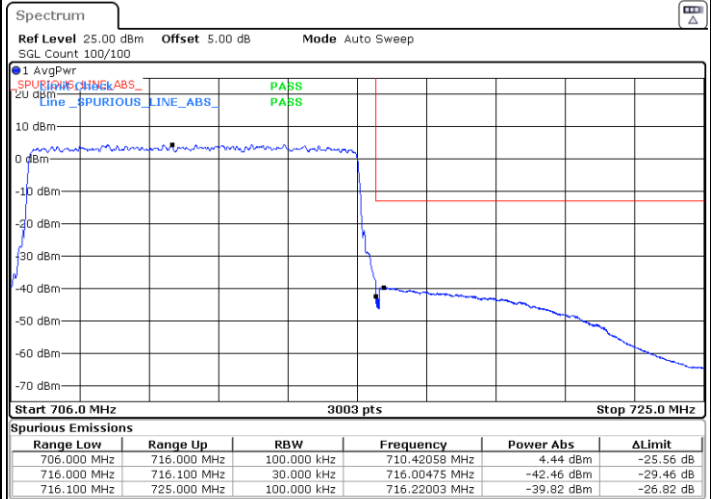
Date: 8.JUL.2022 02:24:59

Lowest Band Edge / Full RB



Date: 8.JUL.2022 02:20:35

Highest Band Edge / Full RB

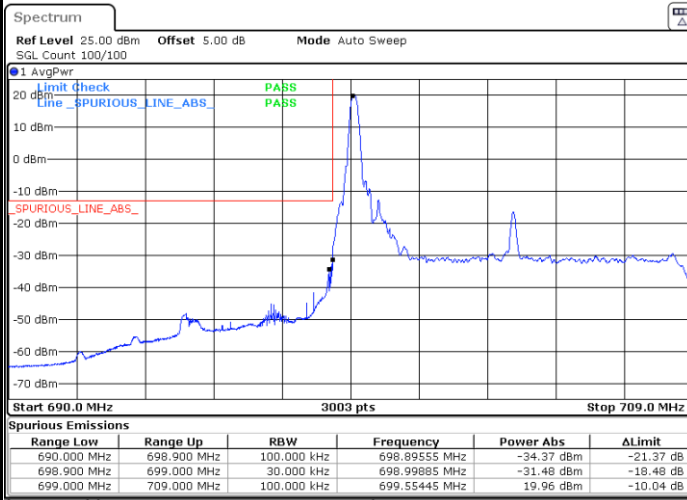


Date: 8.JUL.2022 02:33:24



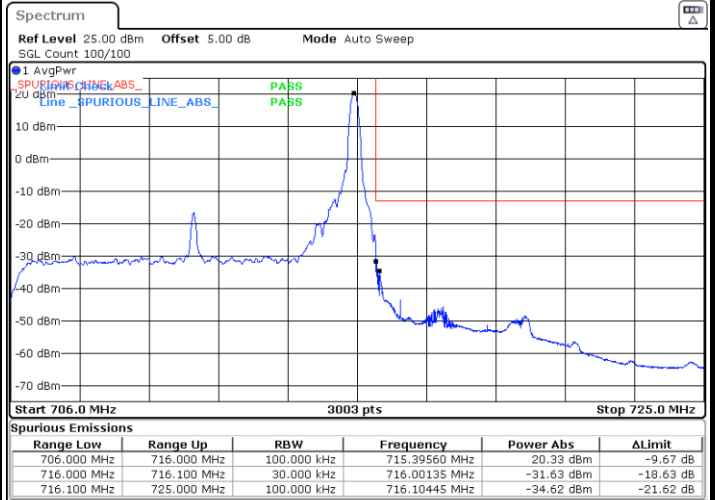
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



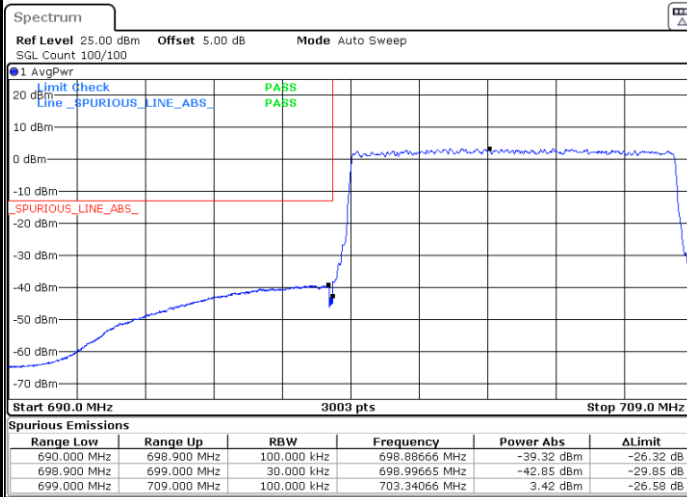
Date: 8.JUL.2022 02:13:40

Highest Band Edge / 1 RB



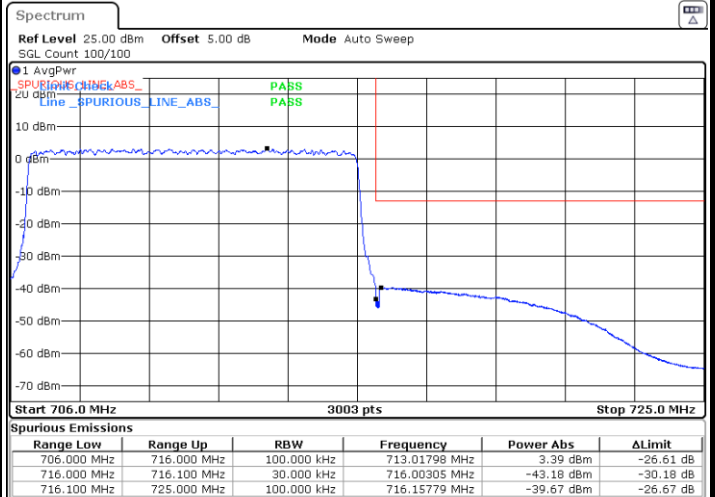
Date: 8.JUL.2022 02:26:40

Lowest Band Edge / Full RB



Date: 8.JUL.2022 02:18:52

Highest Band Edge / Full RB

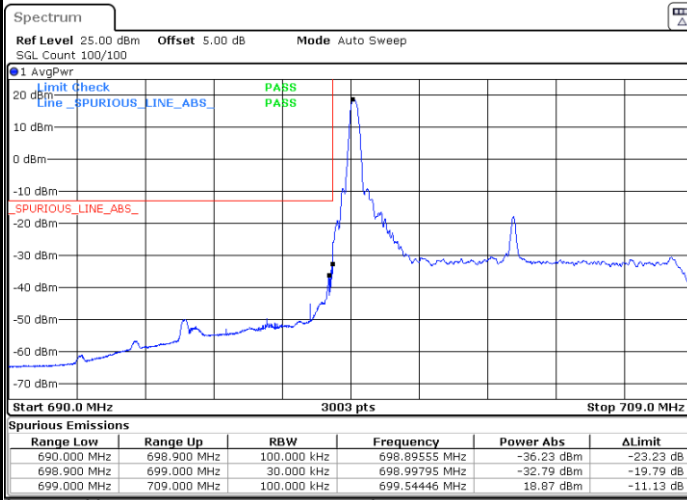


Date: 8.JUL.2022 02:31:43



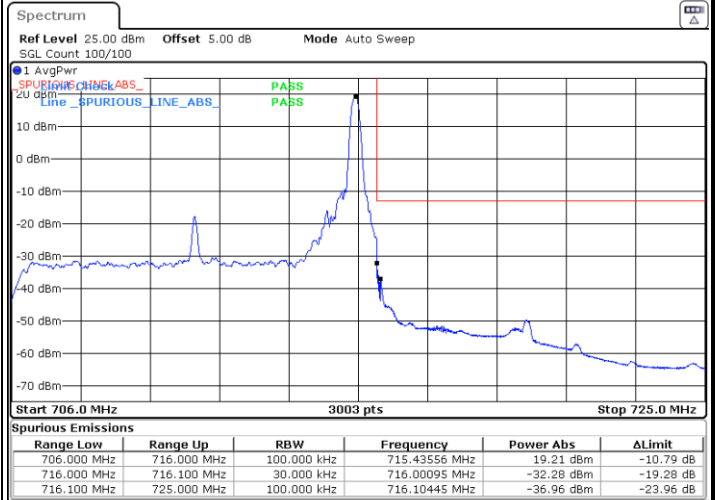
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



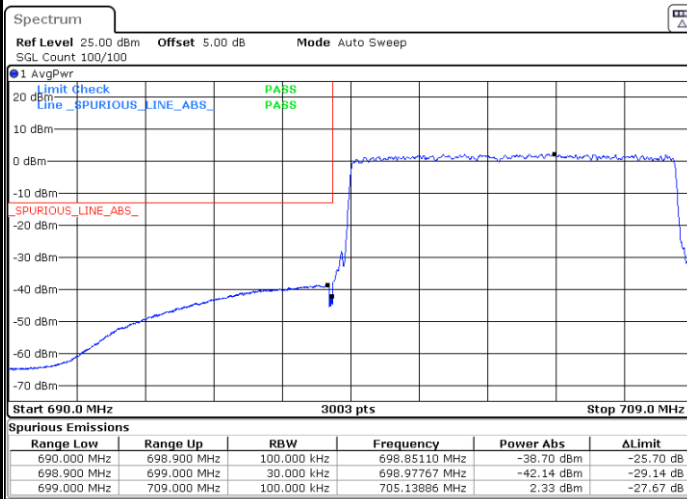
Date: 8.JUL.2022 02:15:24

Highest Band Edge / 1 RB



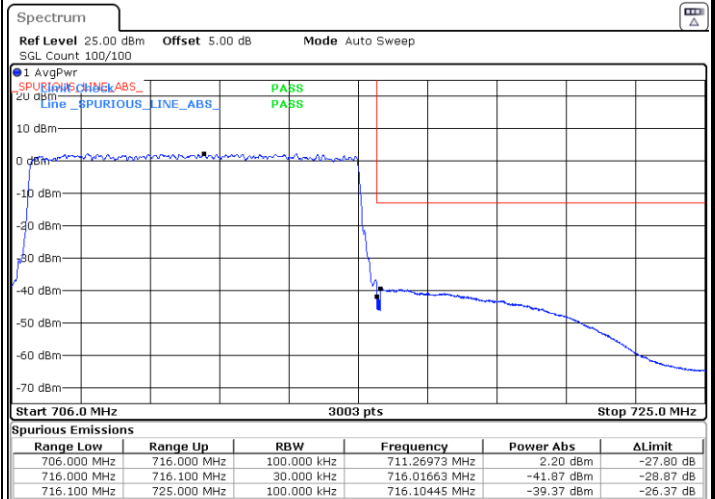
Date: 8.JUL.2022 02:28:21

Lowest Band Edge / Full RB



Date: 8.JUL.2022 02:17:08

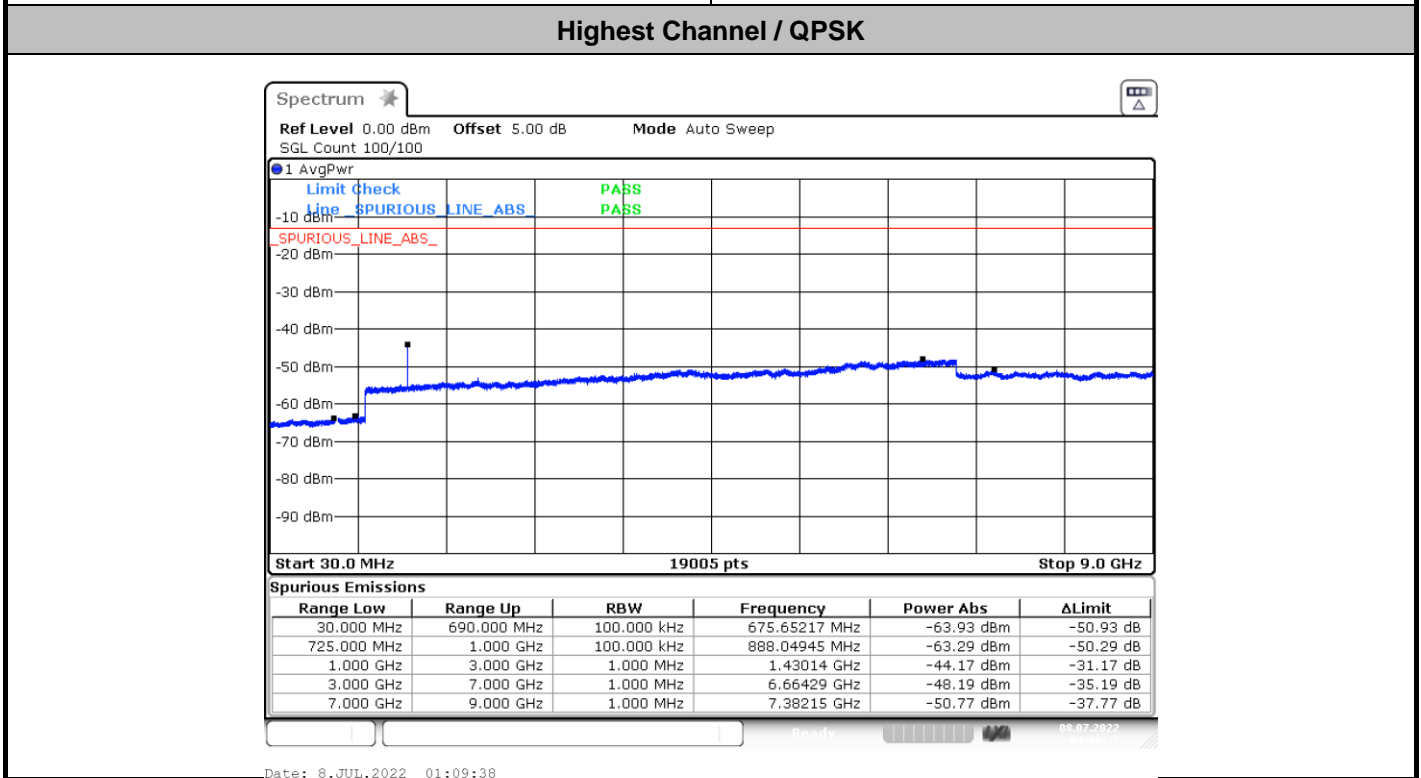
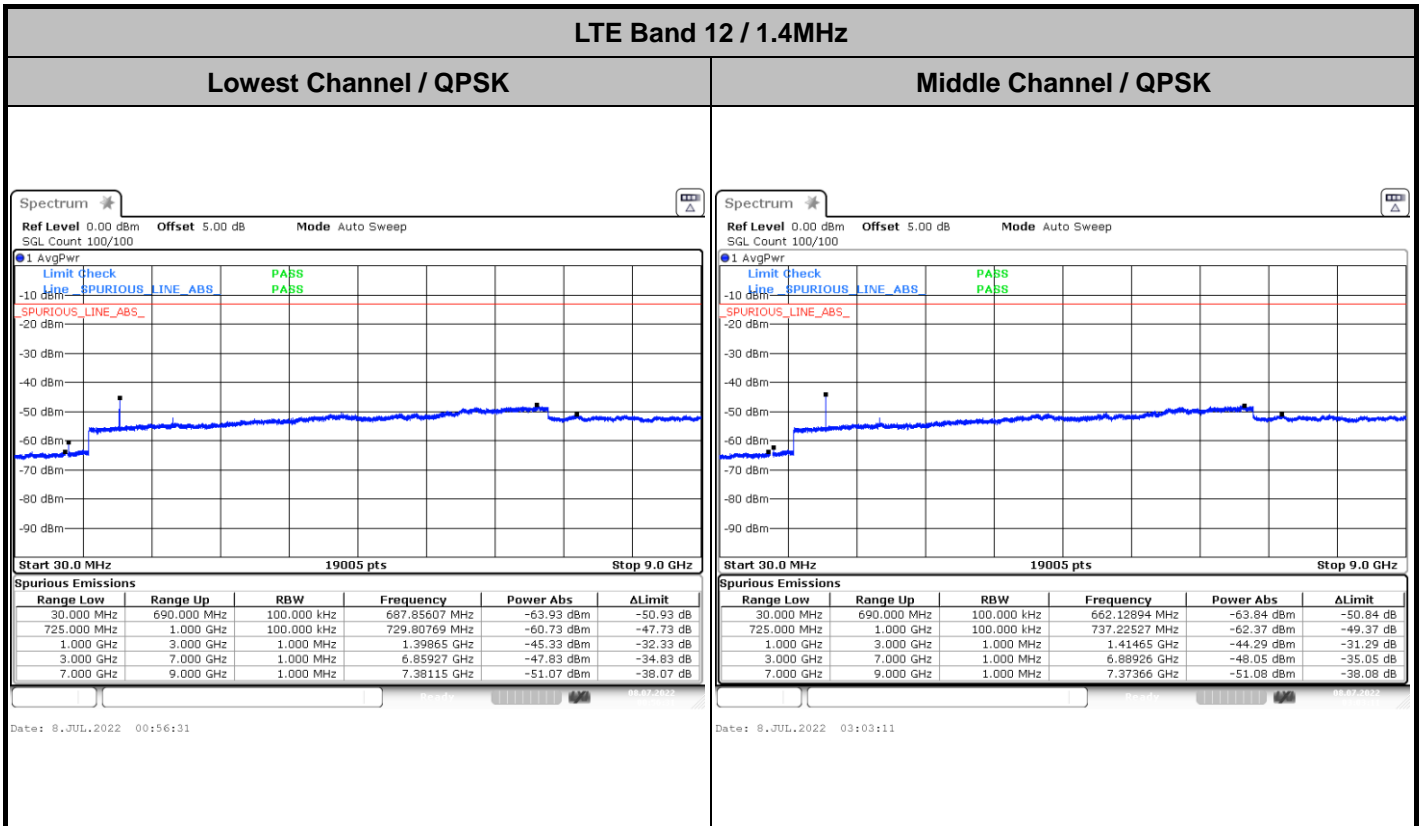
Highest Band Edge / Full RB



Date: 8.JUL.2022 02:30:02



# Conducted Spurious Emission

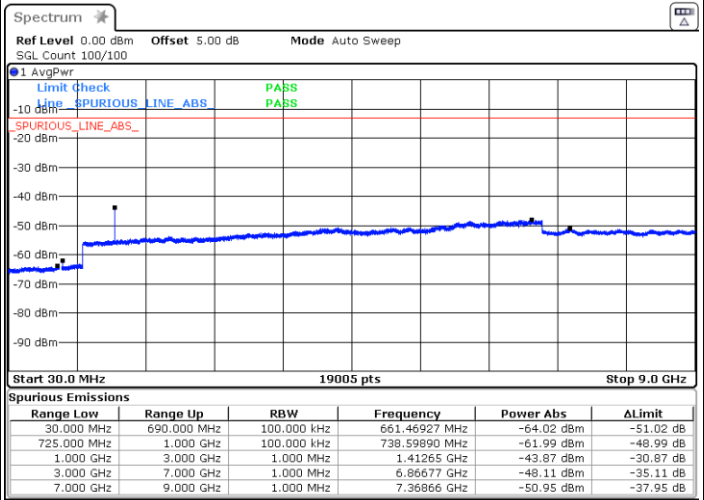
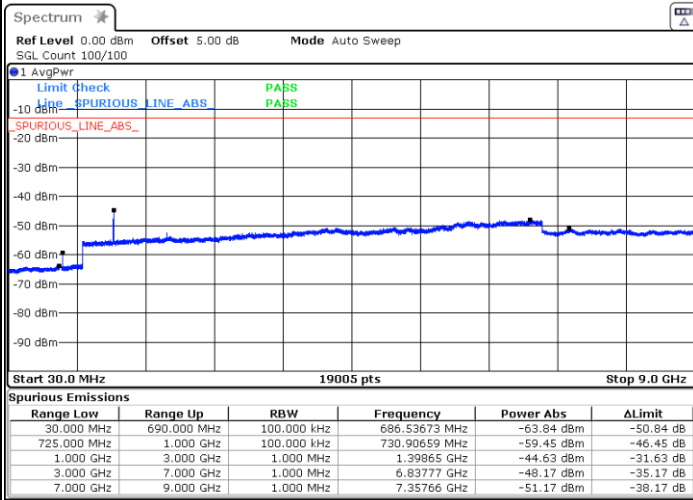




LTE Band 12 / 3MHz

Lowest Channel / QPSK

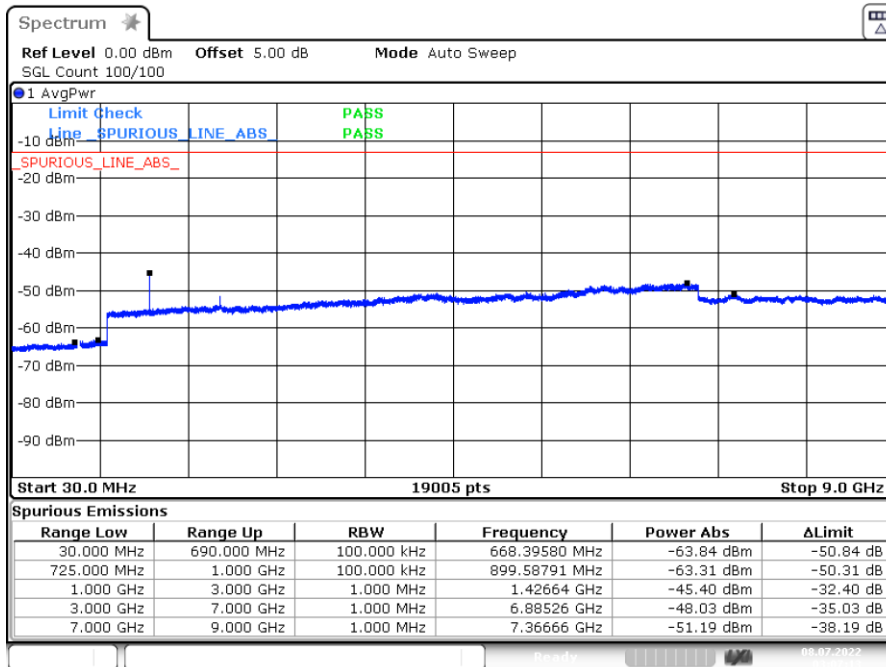
Middle Channel / QPSK



Date: 8.JUL.2022 01:21:05

Date: 8.JUL.2022 03:05:19

Highest Channel / QPSK



Date: 8.JUL.2022 03:07:14

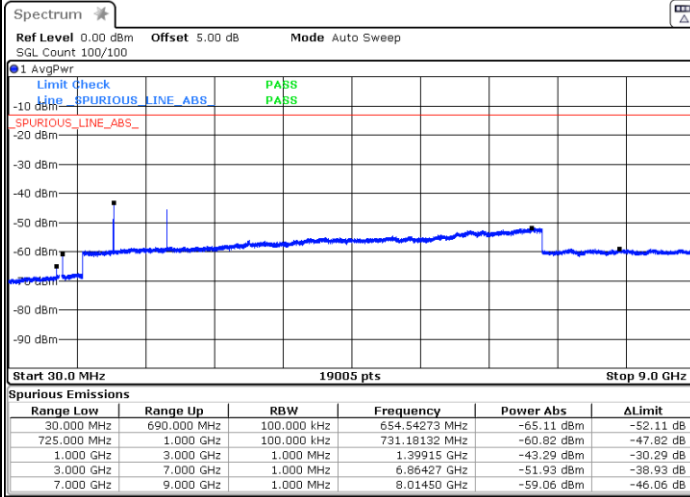




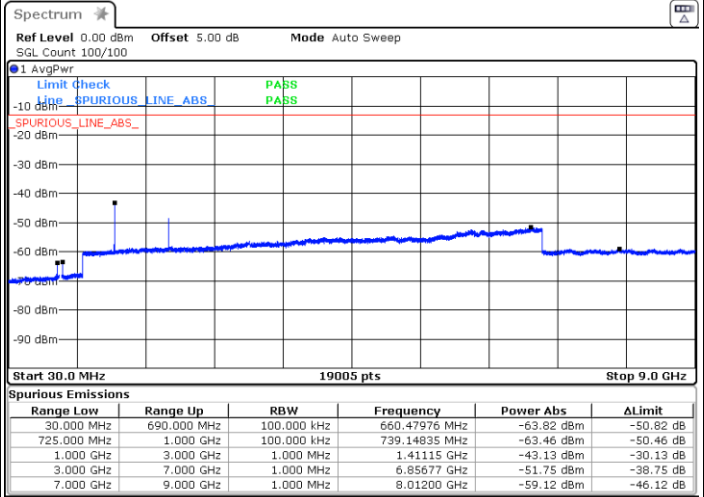
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

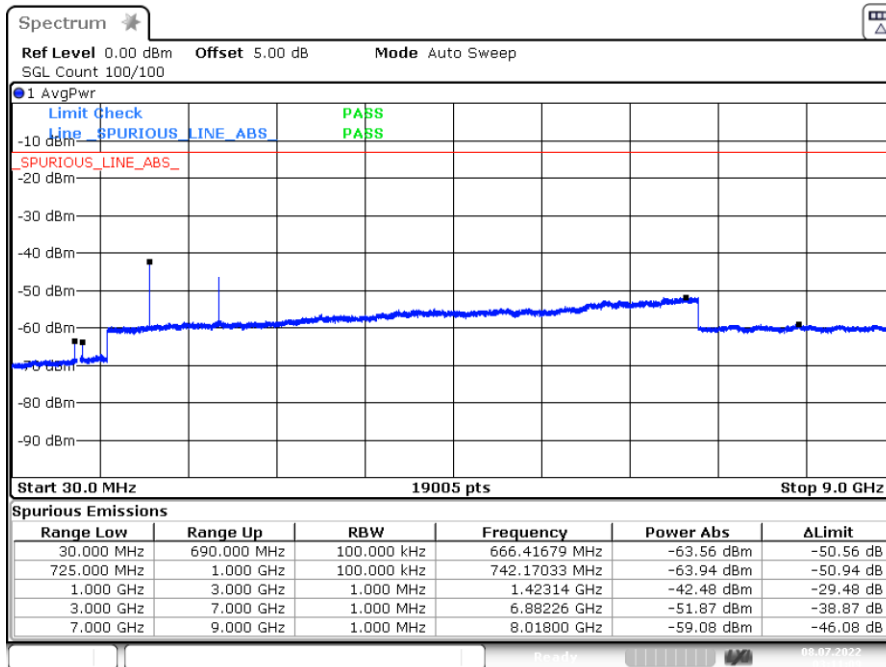


Date: 8.JUL.2022 01:45:39



Date: 8.JUL.2022 03:09:25

Highest Channel / QPSK



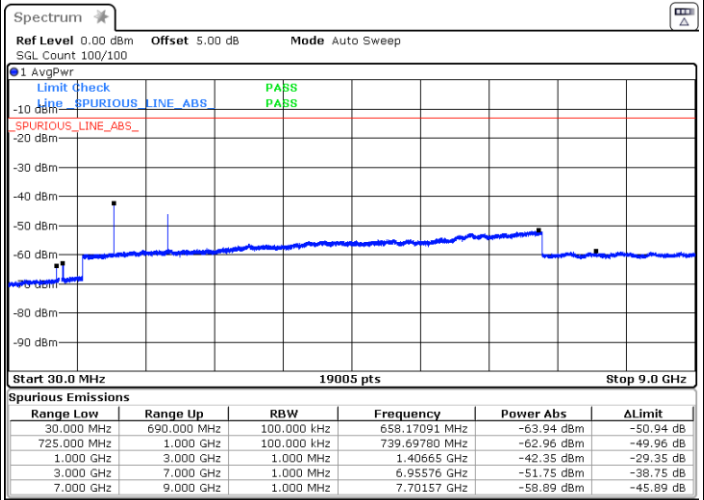
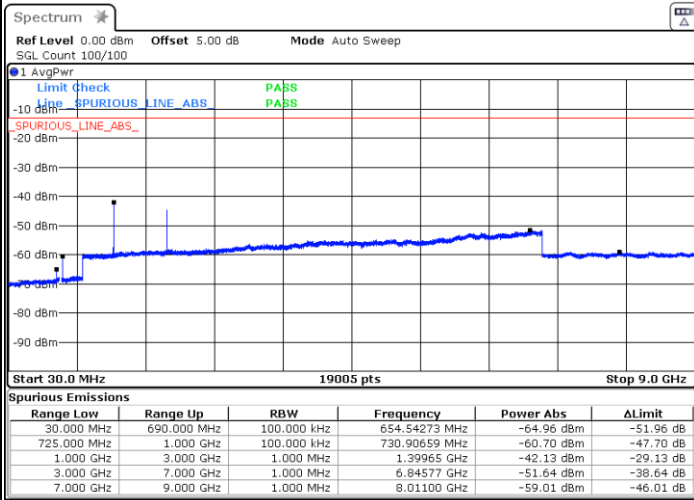
Date: 8.JUL.2022 03:11:09



LTE Band 12 / 10MHz

Lowest Channel / QPSK

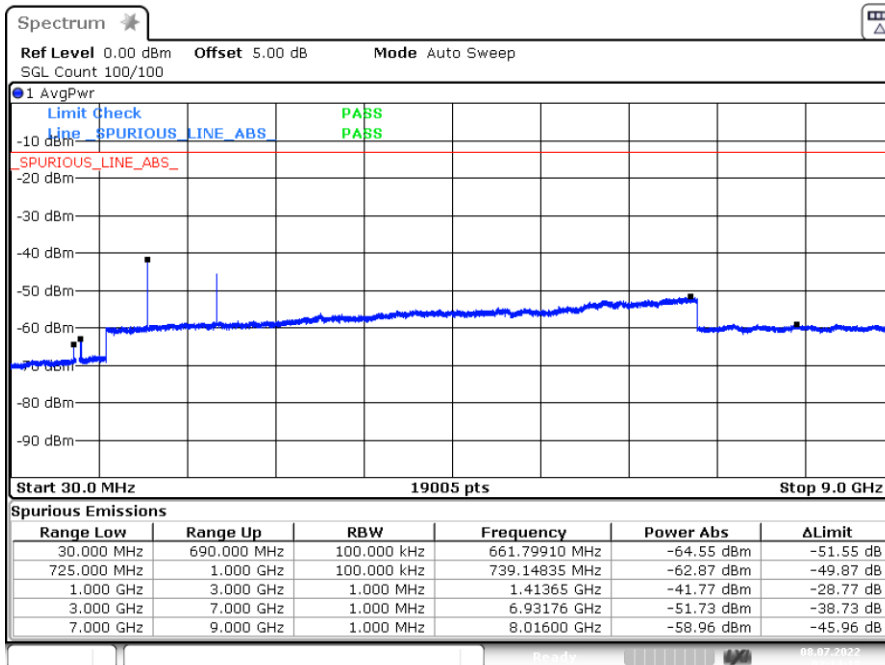
Middle Channel / QPSK



Date: 8.JUL.2022 03:13:10

Date: 8.JUL.2022 03:15:26

Highest Channel / QPSK



Date: 8.JUL.2022 03:14:18



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	0.0031	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0009	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0028	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0027	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

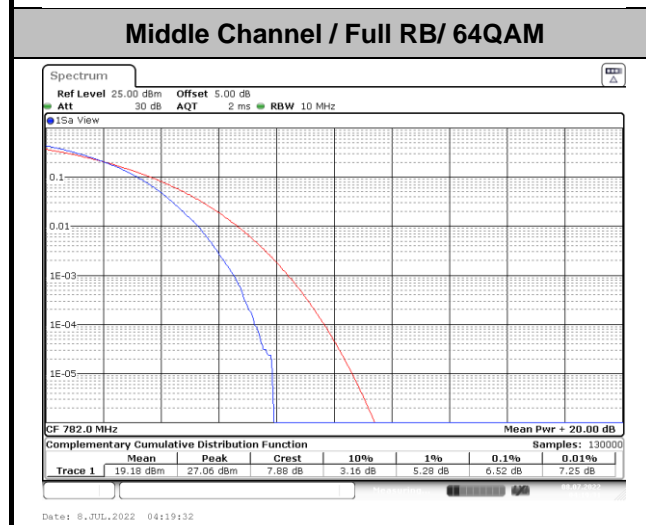
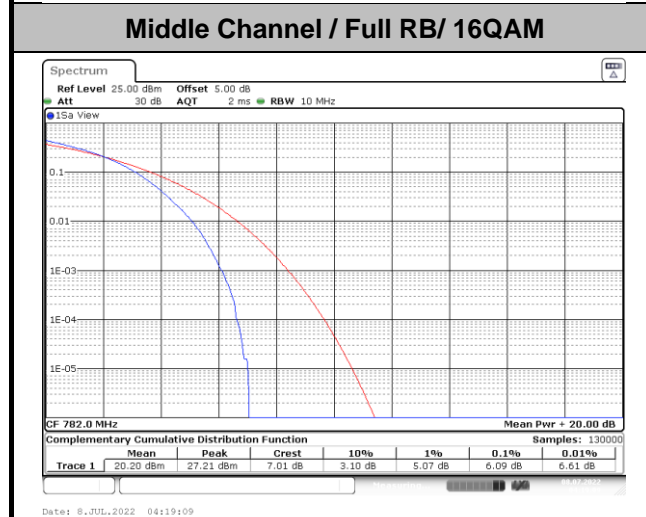
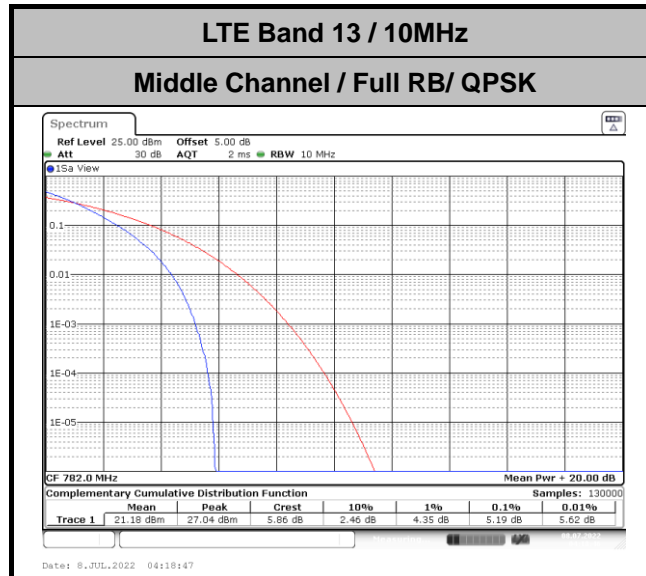
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 13

### Peak-to-Average Ratio

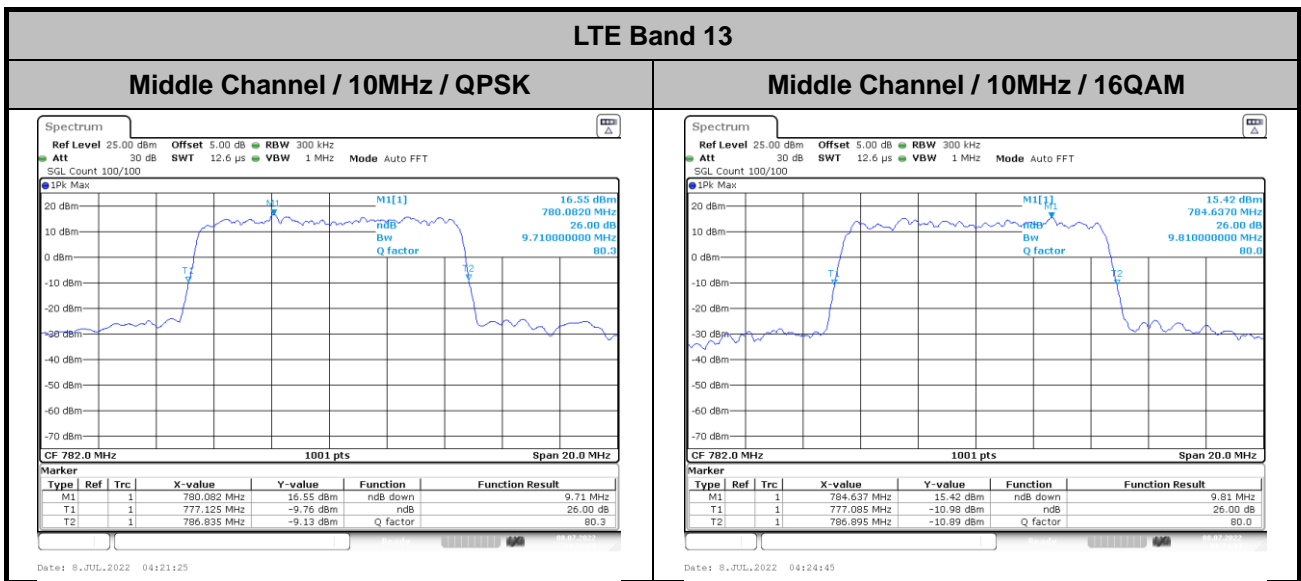
Mode	LTE Band 13 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.19	6.09	6.52	<b>PASS</b>





## 26dB Bandwidth

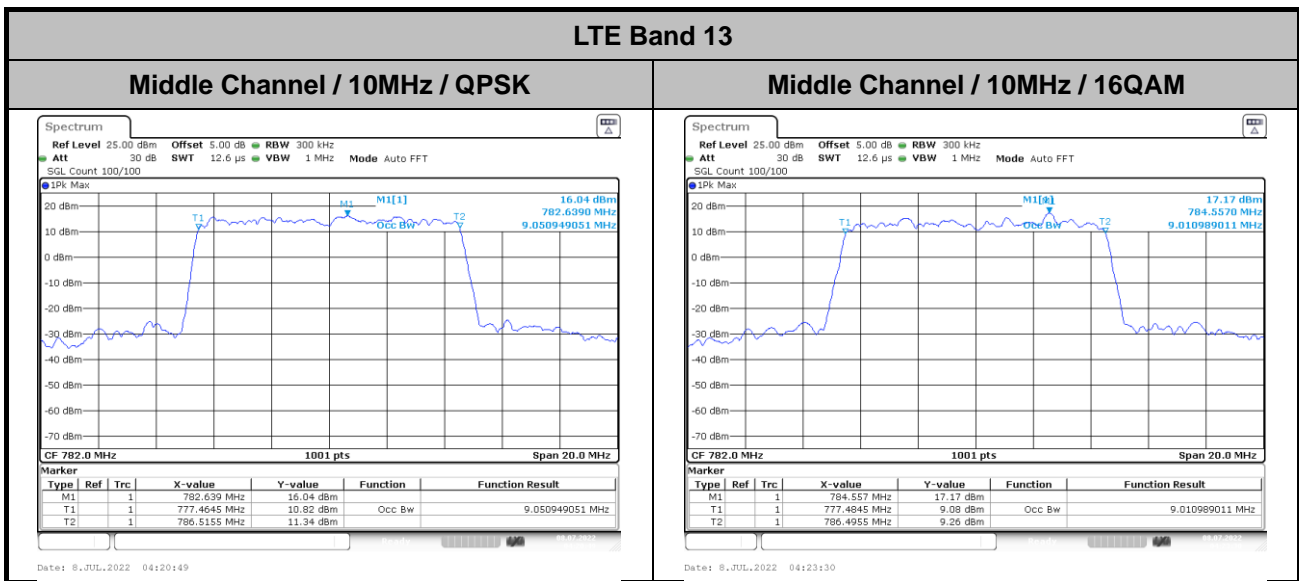
<b>Mode</b>	<b>LTE Band 13 : 26dB BW(MHz)</b>	
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.71	9.81





# Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	9.01

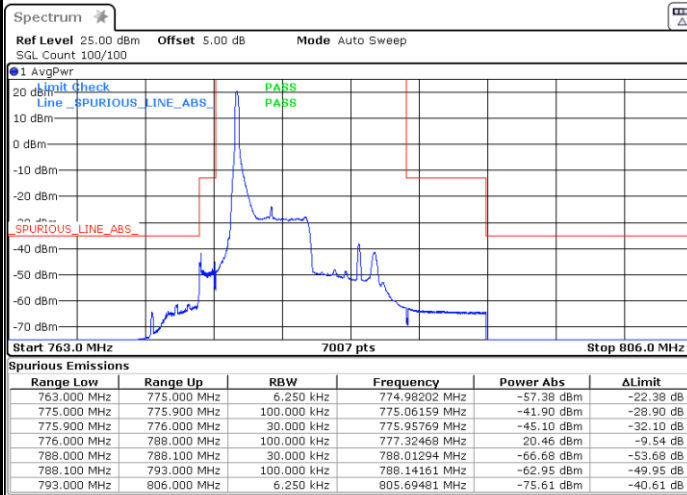




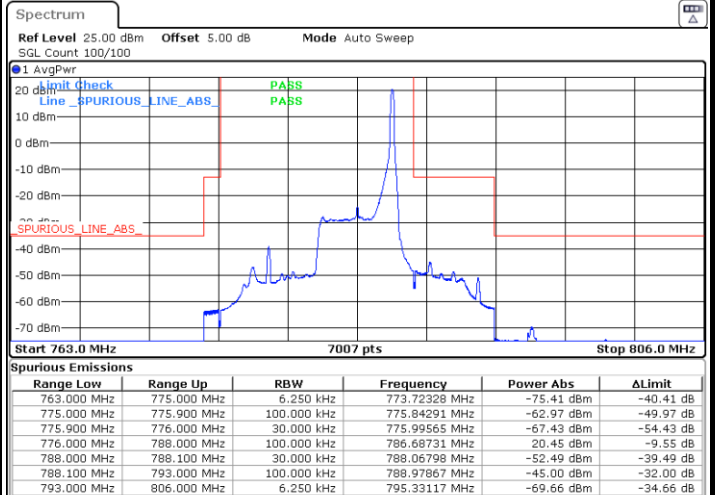
# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

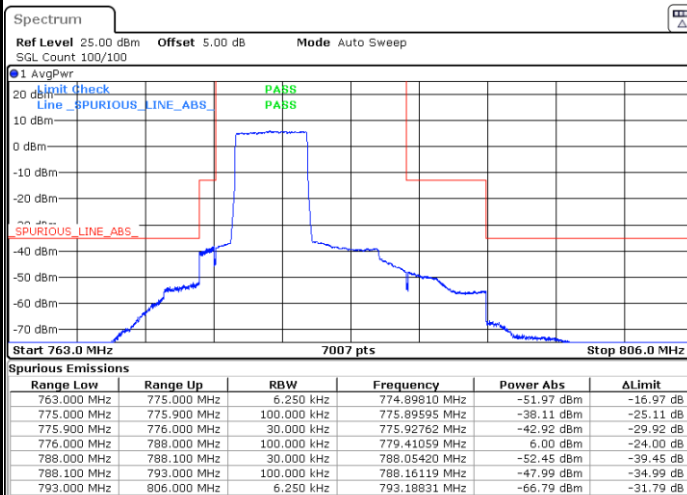
### Lowest Band Edge / 1 RB



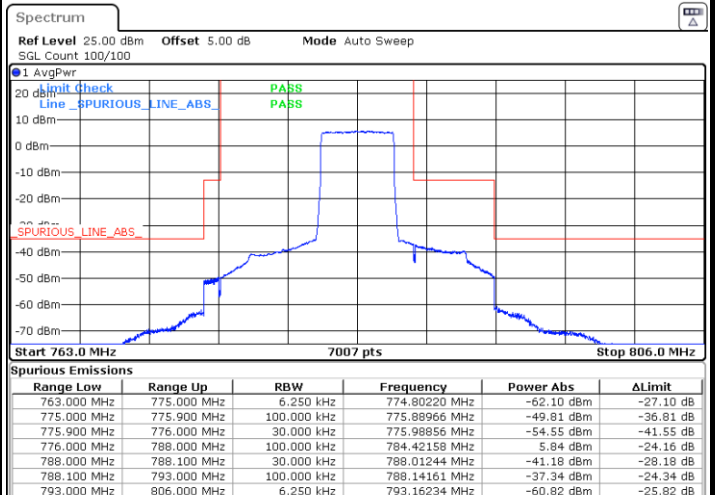
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



### Highest Band Edge / Full RB



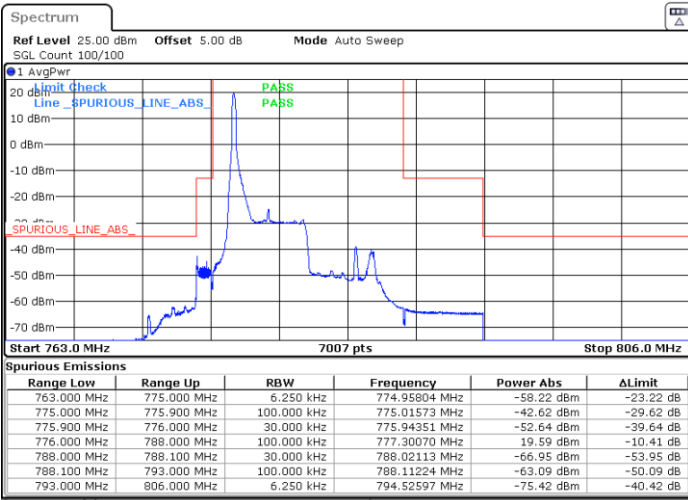




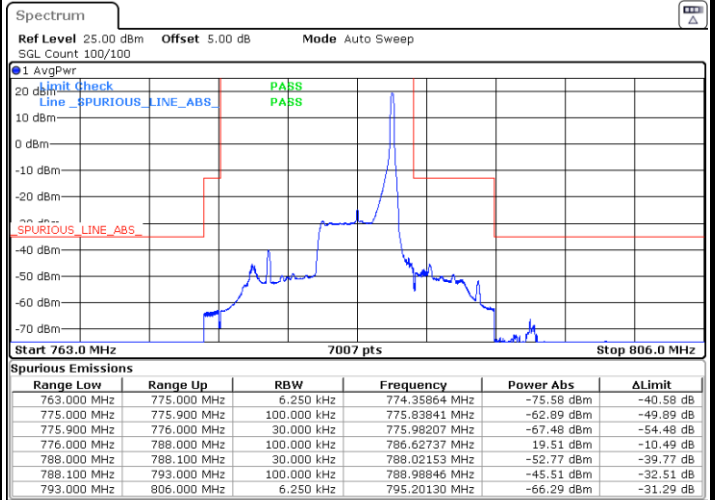
LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



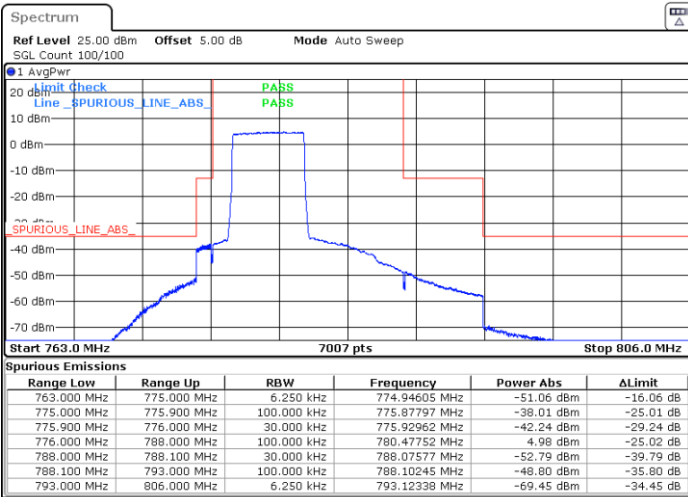
Date: 8.JUL.2022 03:34:29



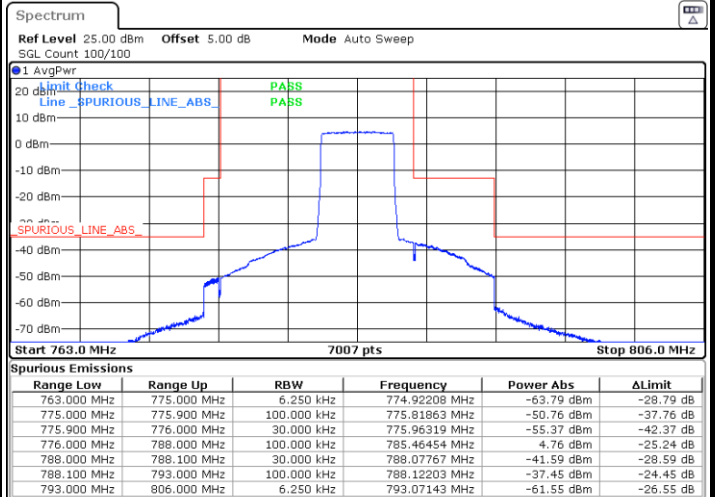
Date: 8.JUL.2022 03:46:43

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8.JUL.2022 03:40:01



Date: 8.JUL.2022 03:52:15