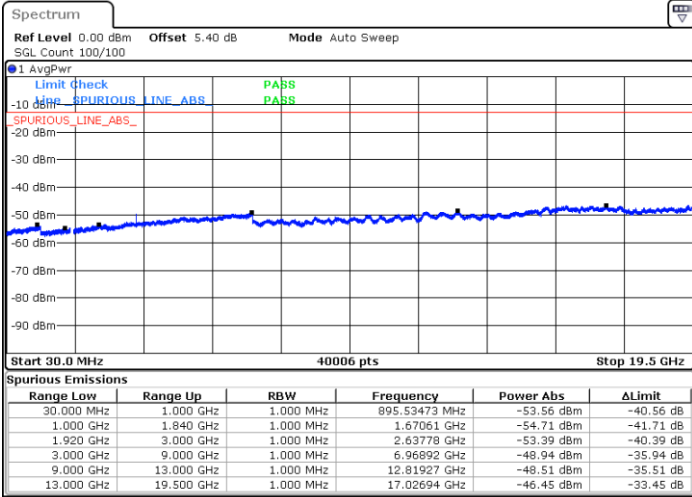




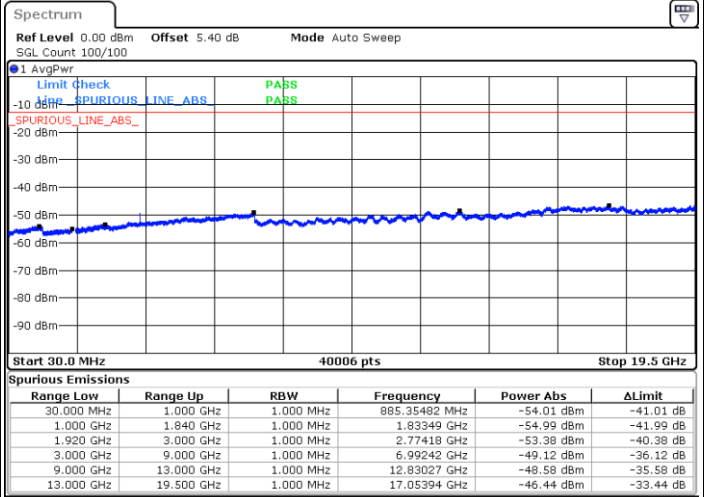
LTE Band 2 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

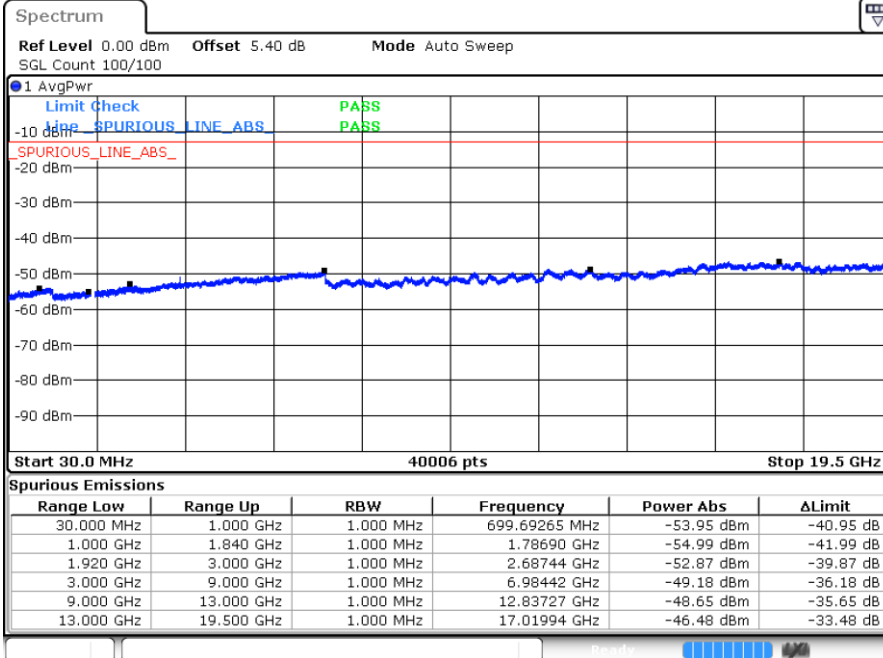


Date: 8 SEP.2022 11:19:59



Date: 8 SEP.2022 11:28:11

Highest Channel / QPSK



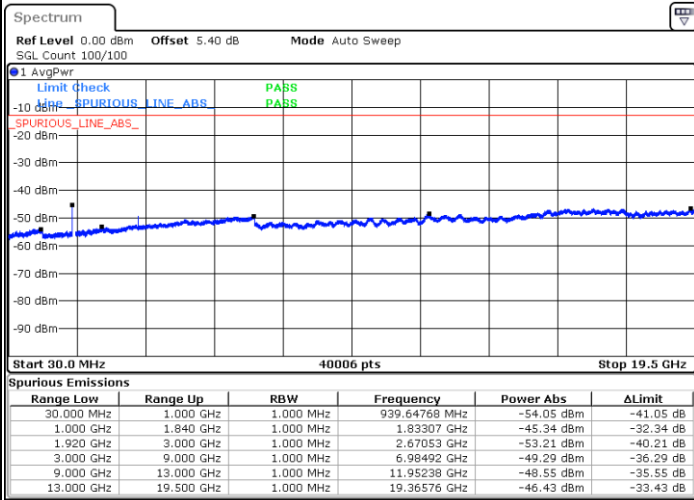
Date: 8 SEP.2022 11:30:14



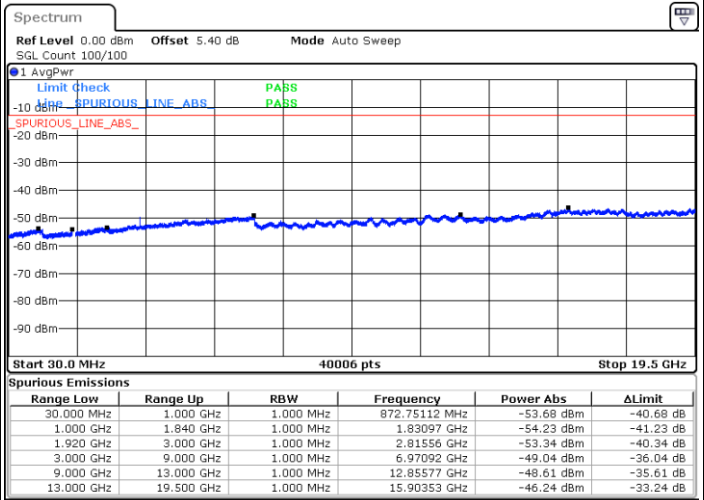
LTE Band 2 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

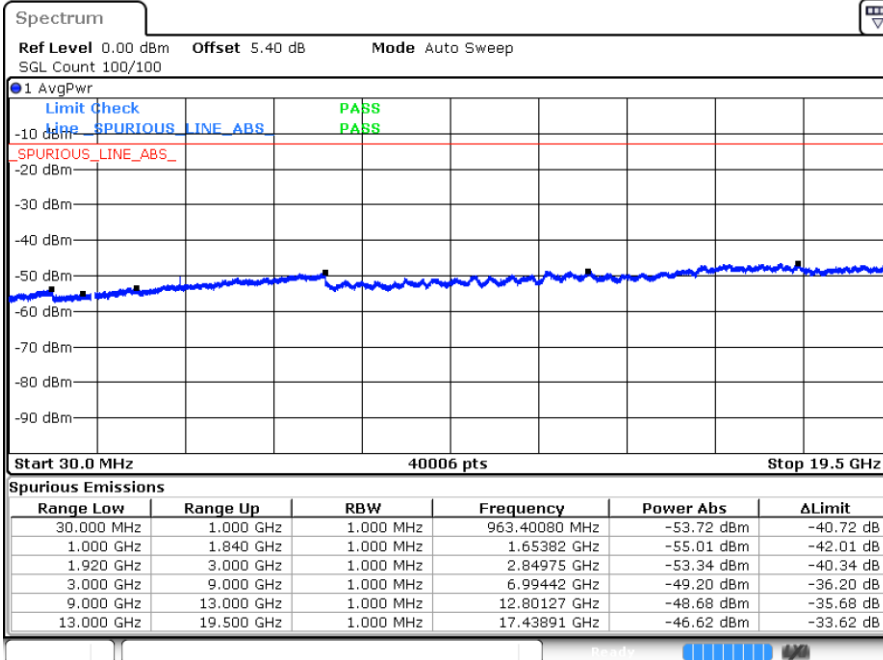


Date: 8 SEP.2022 11:47:00



Date: 8 SEP.2022 11:42:28

Highest Channel / QPSK



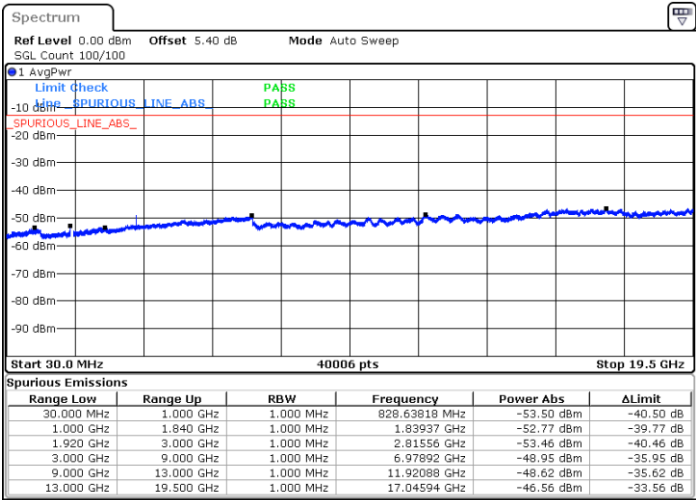
Date: 8 SEP.2022 12:13:06



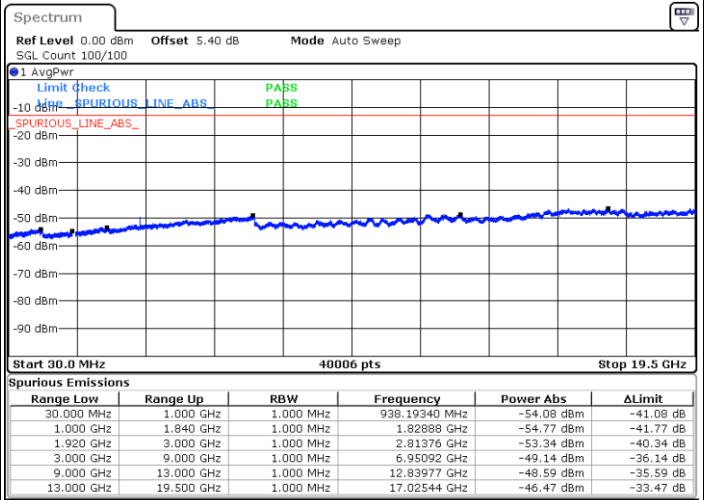
LTE Band 2 / 15MHz

Lowest Channel / QPSK

Middle Channel / QPSK

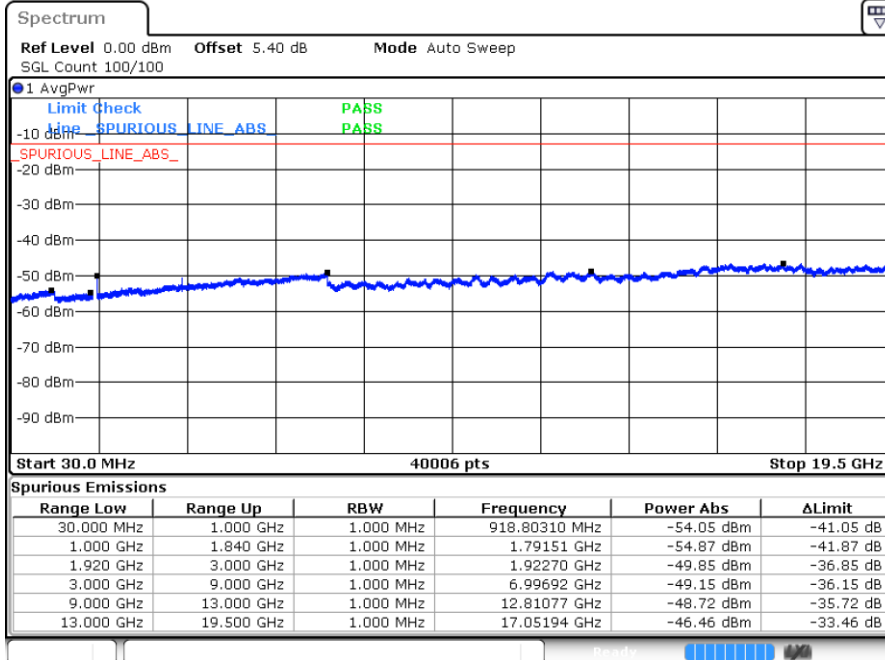


Date: 8 SEP.2022 12:16:04



Date: 8 SEP.2022 12:14:49

Highest Channel / QPSK



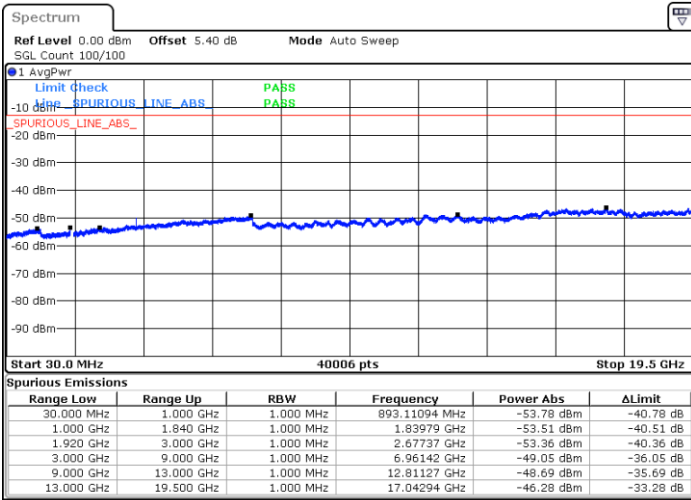
Date: 8 SEP.2022 12:29:11



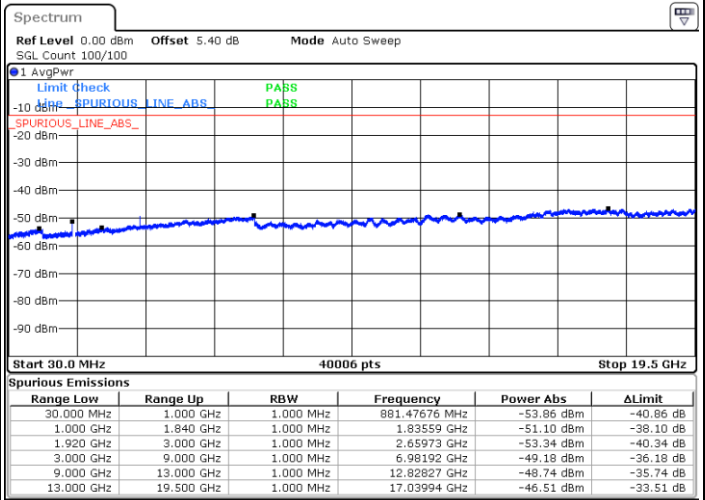
LTE Band 2 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

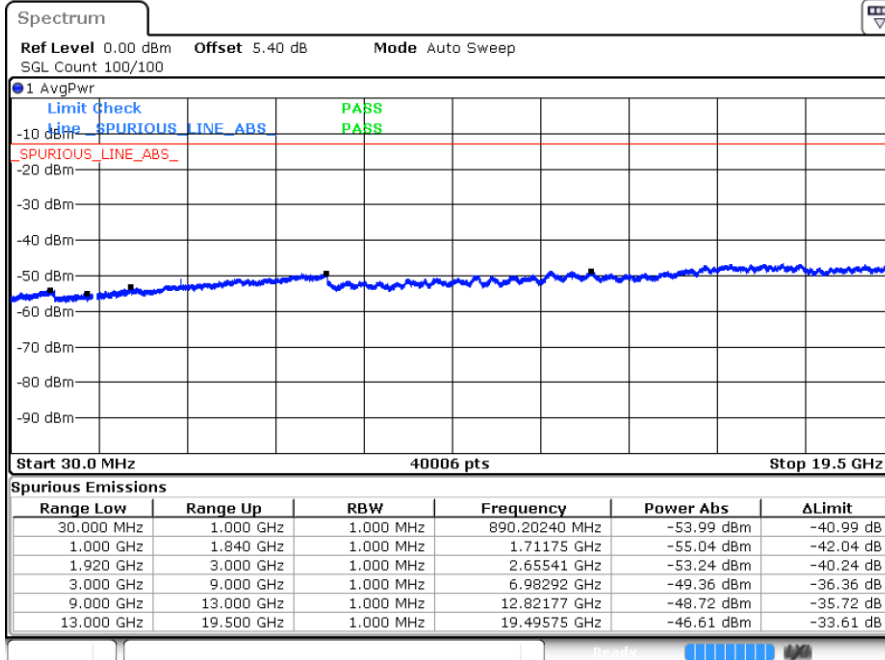


Date: 8 SEP.2022 12:33:10



Date: 8 SEP.2022 12:42:41

Highest Channel / QPSK



Date: 8 SEP.2022 12:45:31



### 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	0.0022	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

**Note:**

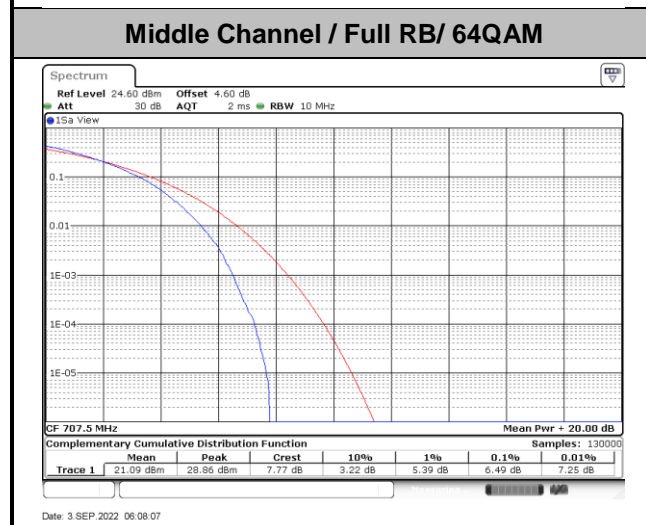
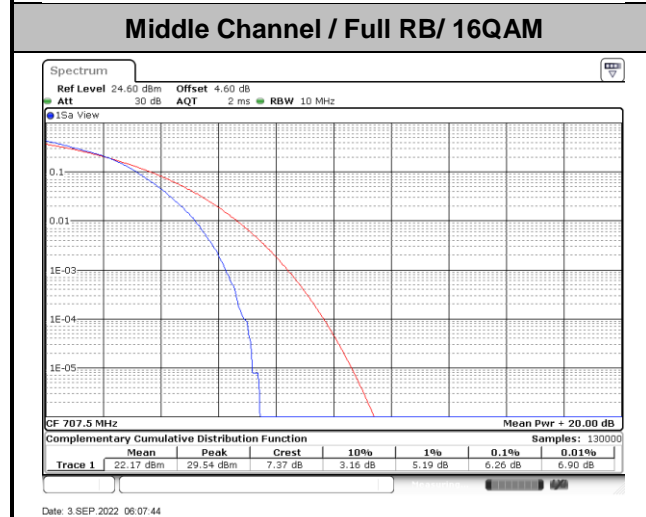
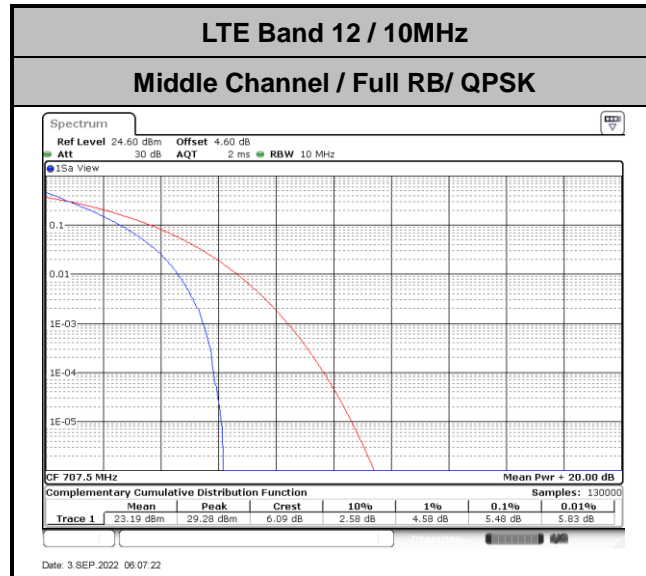
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 12

### Peak-to-Average Ratio

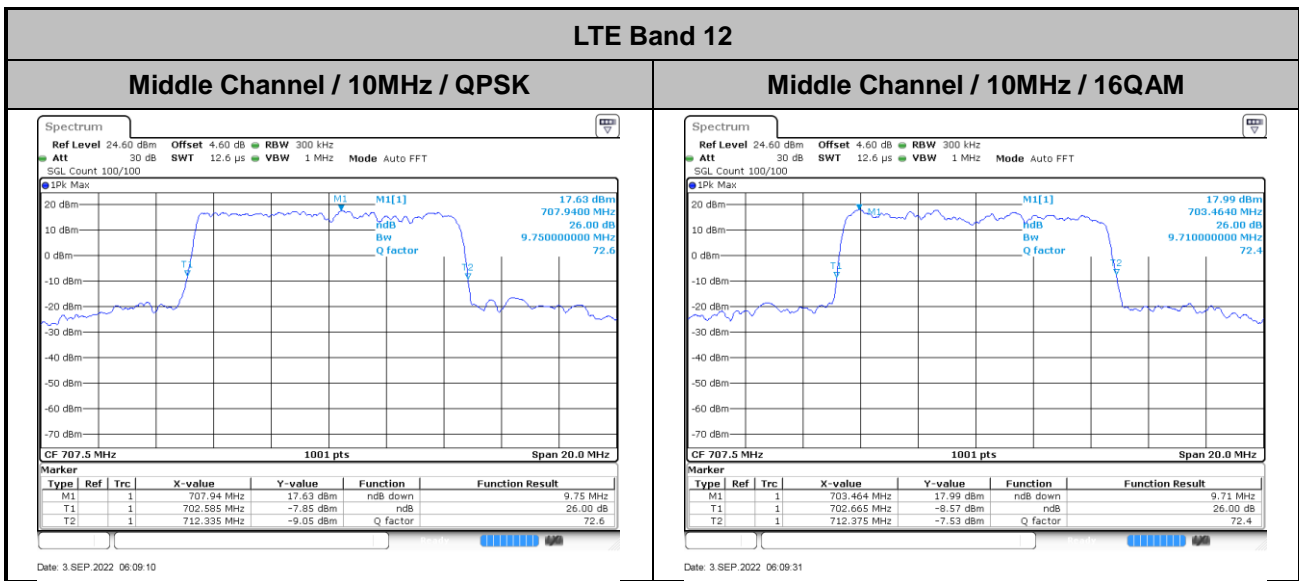
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.48	6.26	6.49	<b>PASS</b>





## 26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.75	9.71

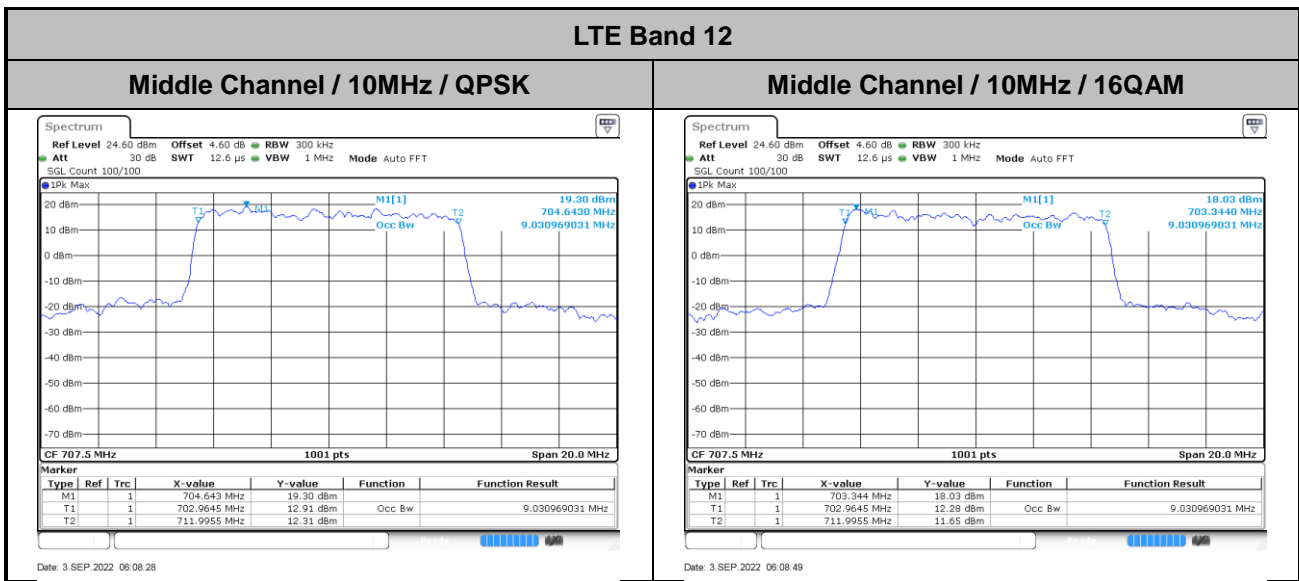






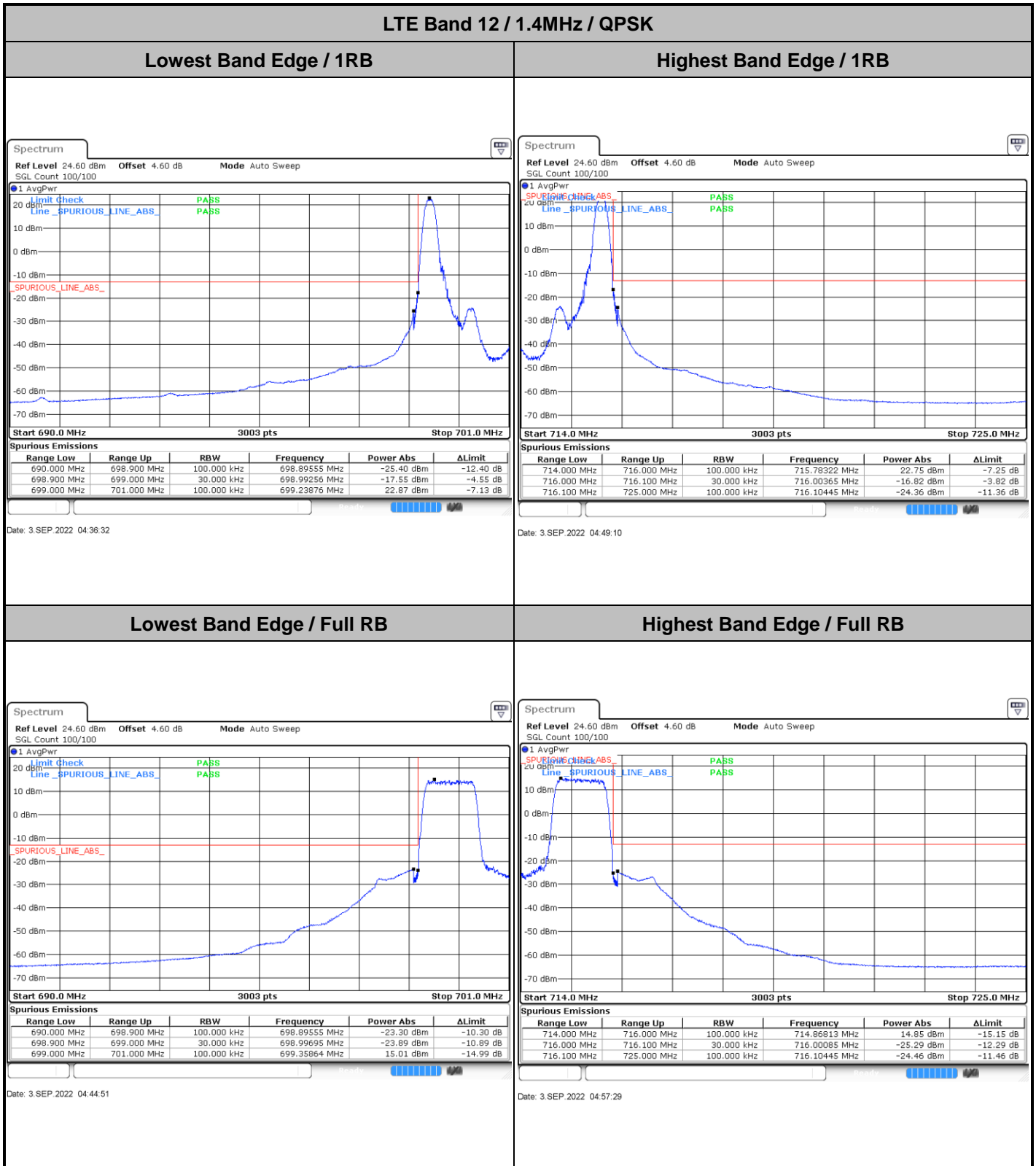
# Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.03





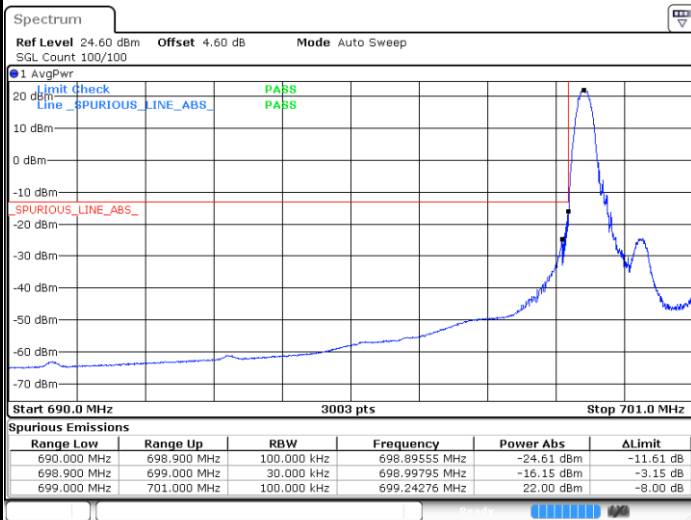
# Conducted Band Edge





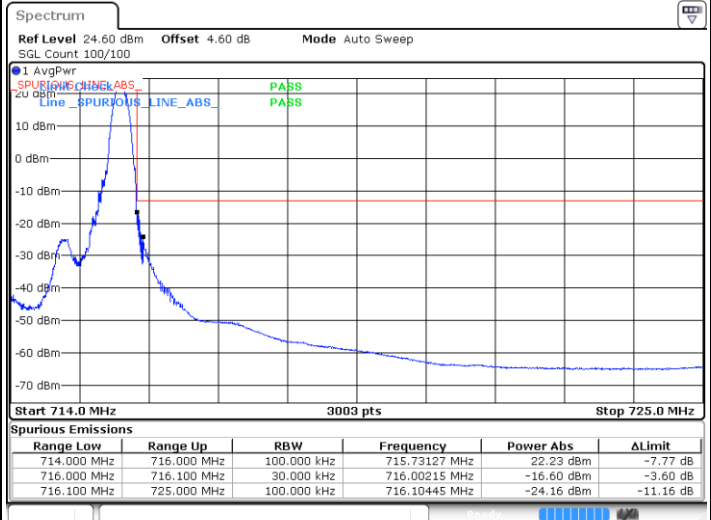
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



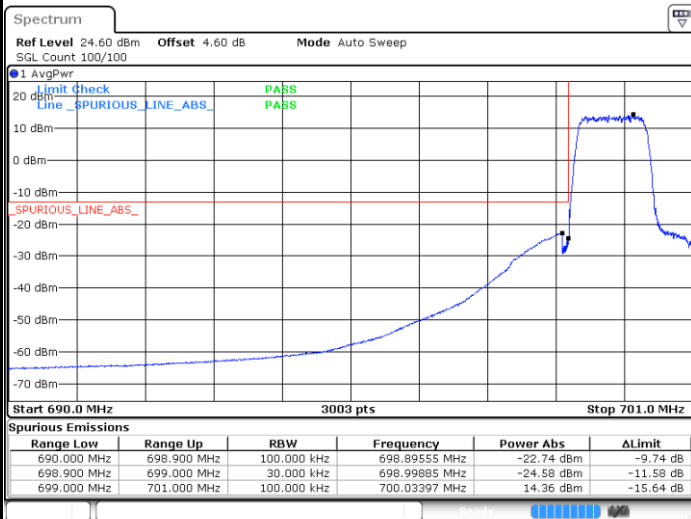
Date: 3 SEP.2022 04:38:12

Highest Band Edge / 1 RB



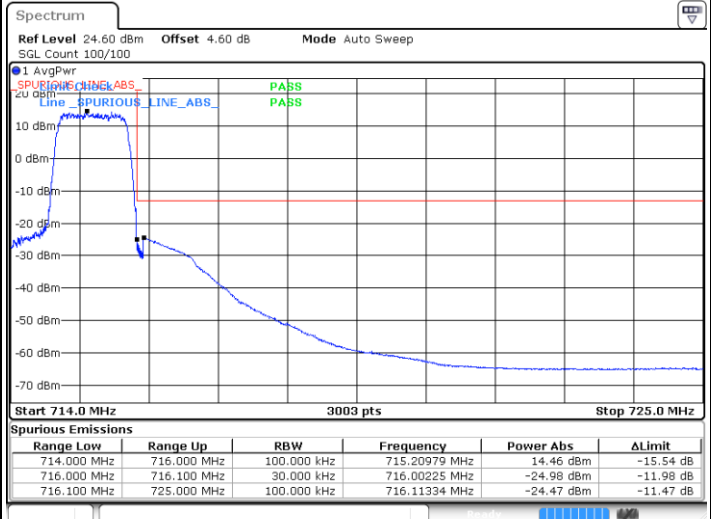
Date: 3 SEP.2022 04:50:50

Lowest Band Edge / Full RB



Date: 3 SEP.2022 04:43:11

Highest Band Edge / Full RB

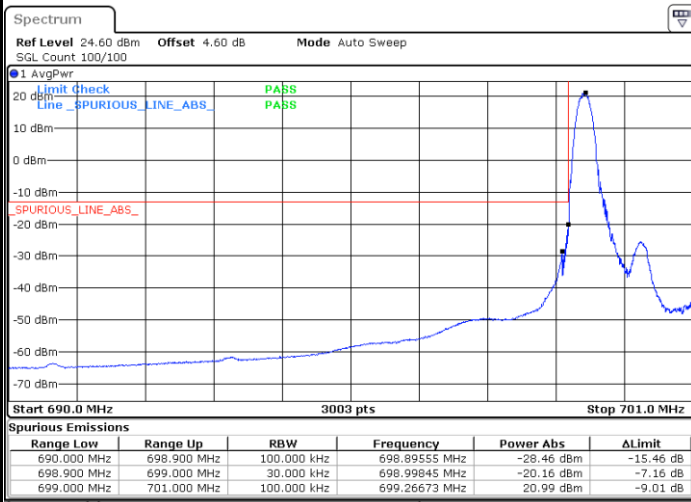


Date: 3 SEP.2022 04:55:49



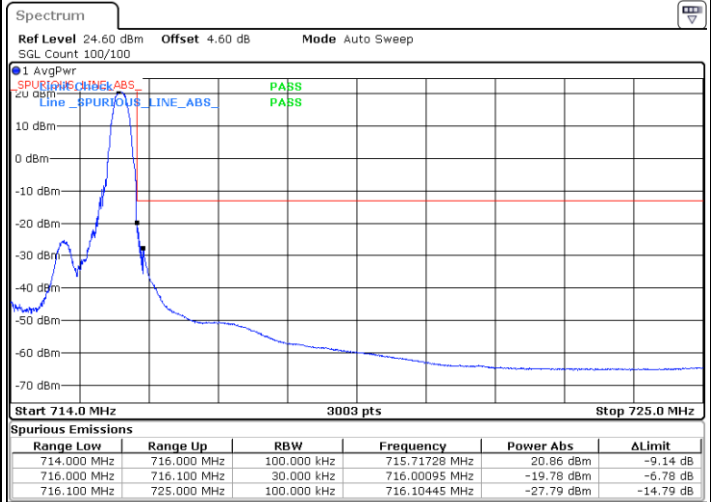
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



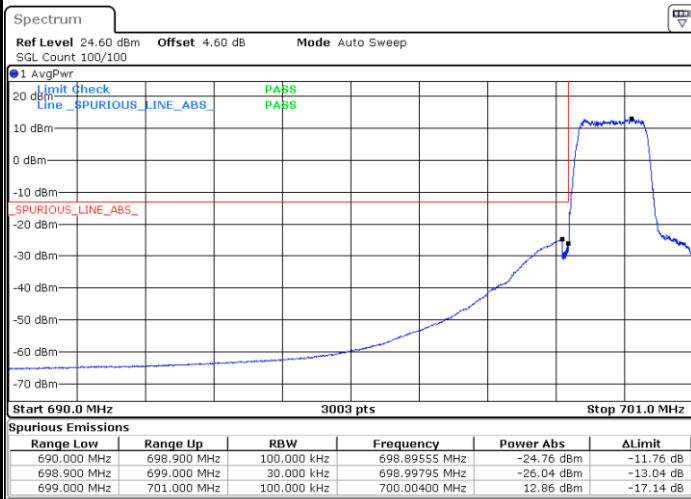
Date: 3 SEP.2022 04:39:51

Highest Band Edge / 1 RB



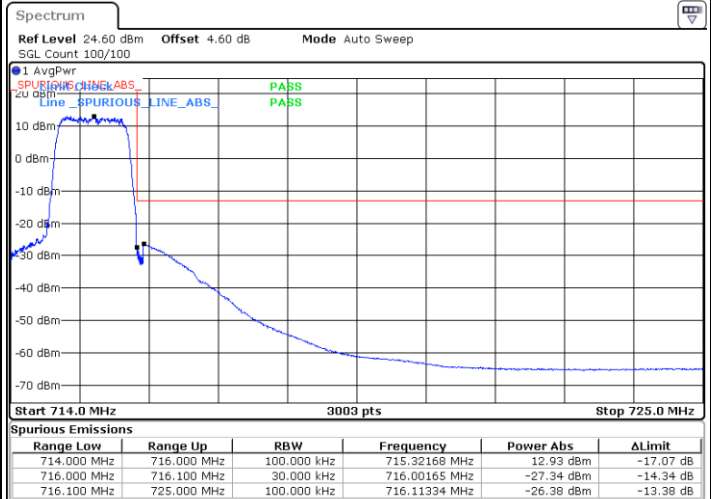
Date: 3 SEP.2022 04:52:29

Lowest Band Edge / Full RB



Date: 3 SEP.2022 04:41:31

Highest Band Edge / Full RB

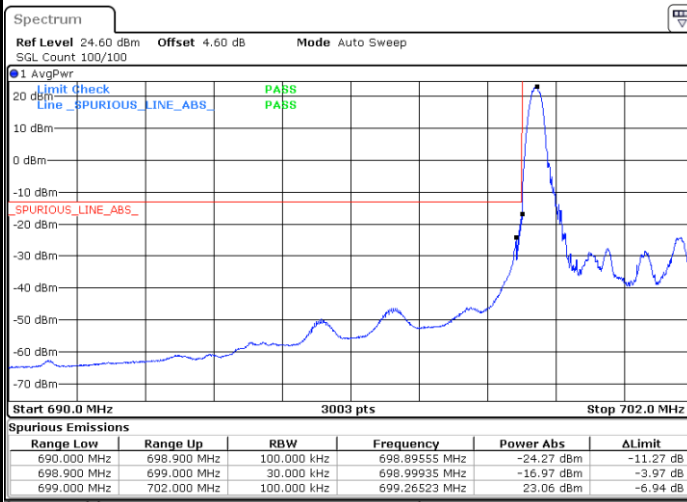


Date: 3 SEP.2022 04:54:09



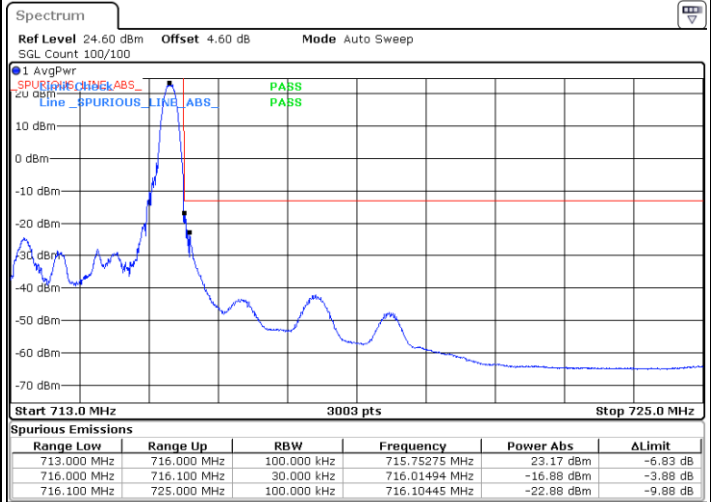
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



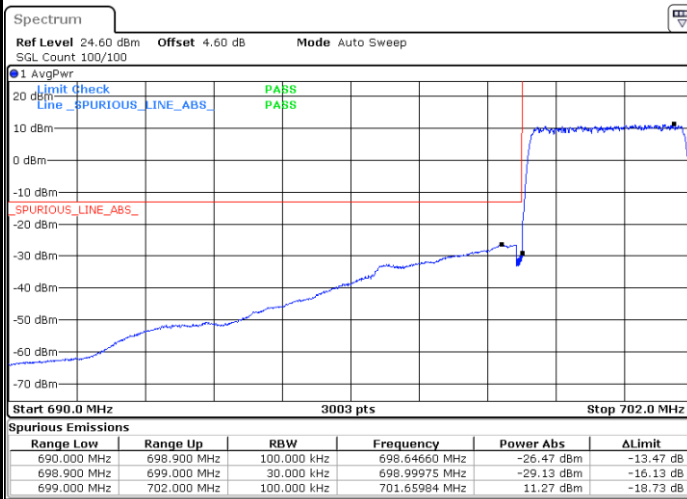
Date: 3 SEP.2022 05:00:29

Highest Band Edge / 1 RB



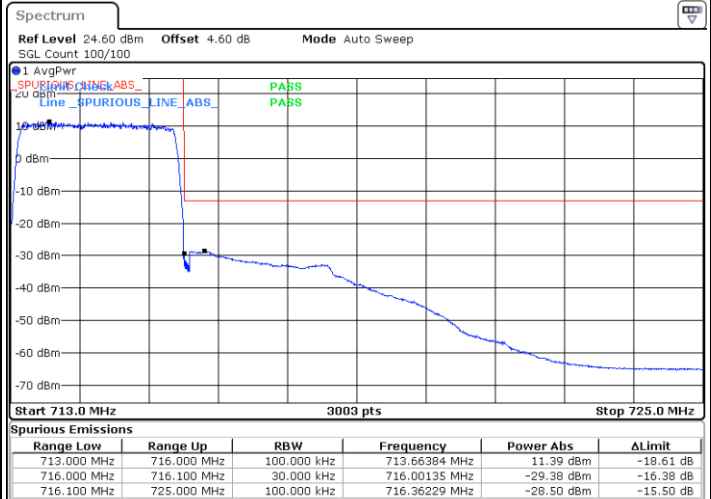
Date: 3 SEP.2022 05:20:27

Lowest Band Edge / Full RB



Date: 3 SEP.2022 05:16:27

Highest Band Edge / Full RB

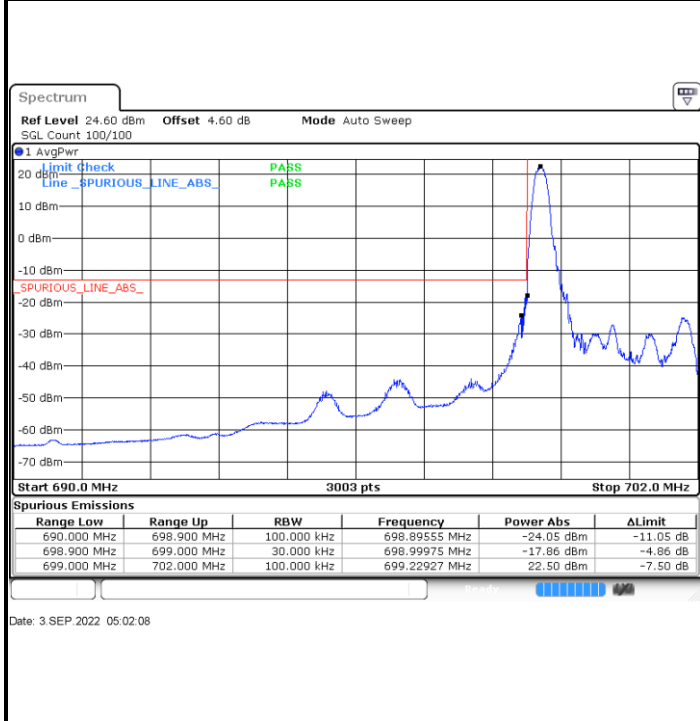


Date: 3 SEP.2022 05:27:05

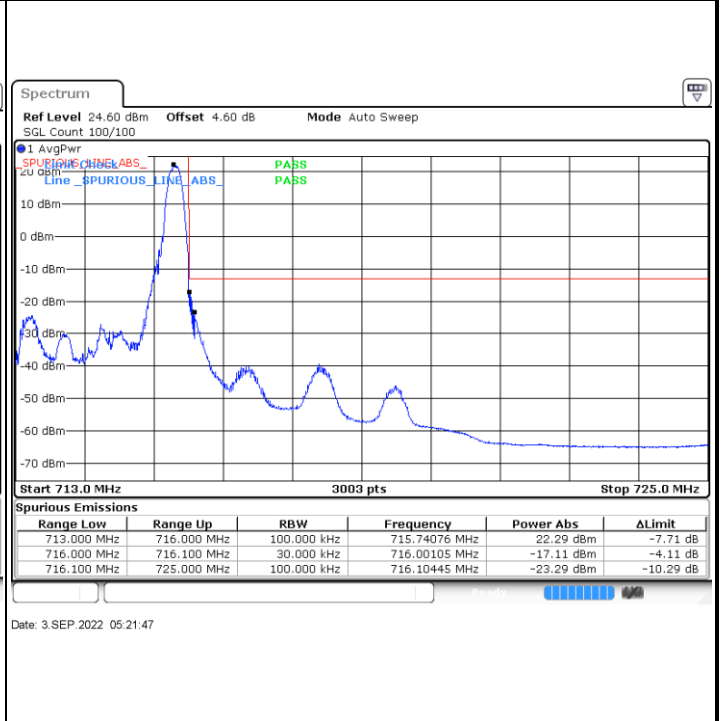


**LTE Band 12 / 3MHz / 16QAM**

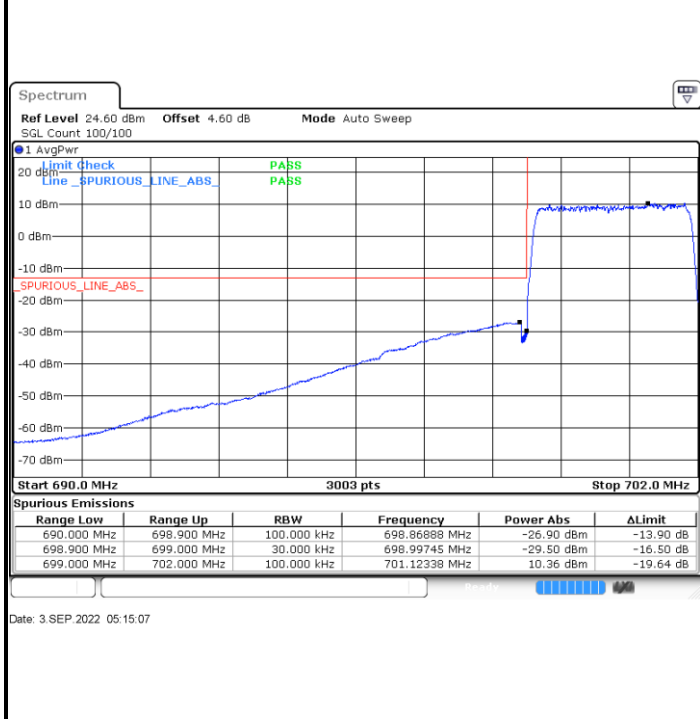
**Lowest Band Edge / 1 RB**



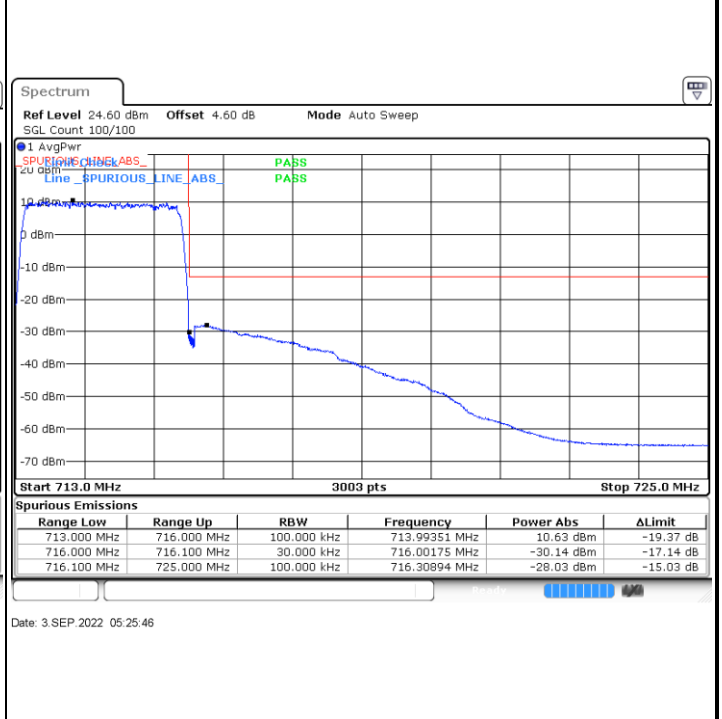
**Highest Band Edge / 1 RB**



**Lowest Band Edge / Full RB**



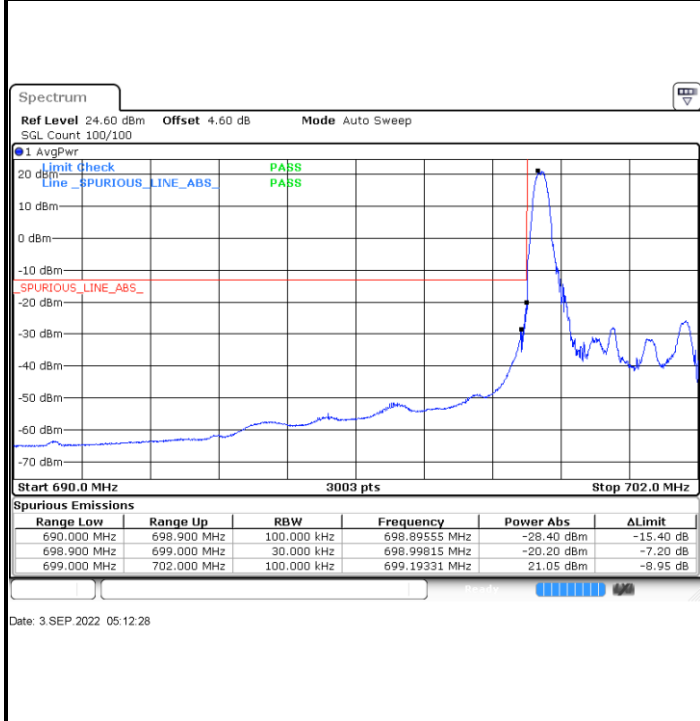
**Highest Band Edge / Full RB**



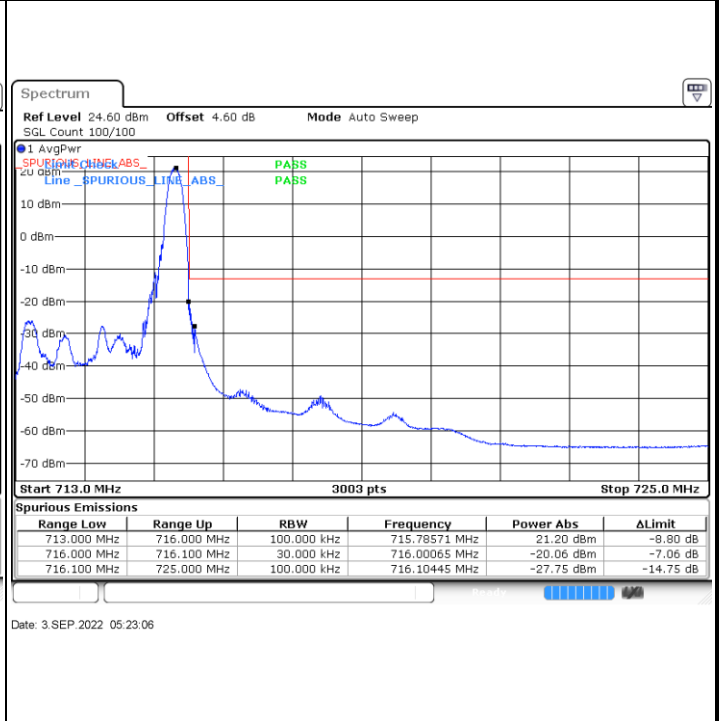


**LTE Band 12 / 3MHz / 64QAM**

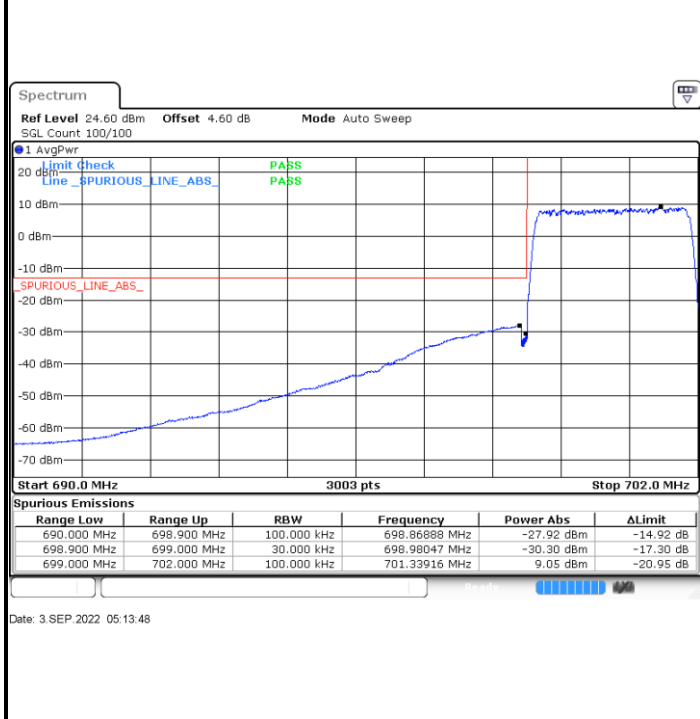
**Lowest Band Edge / 1 RB**



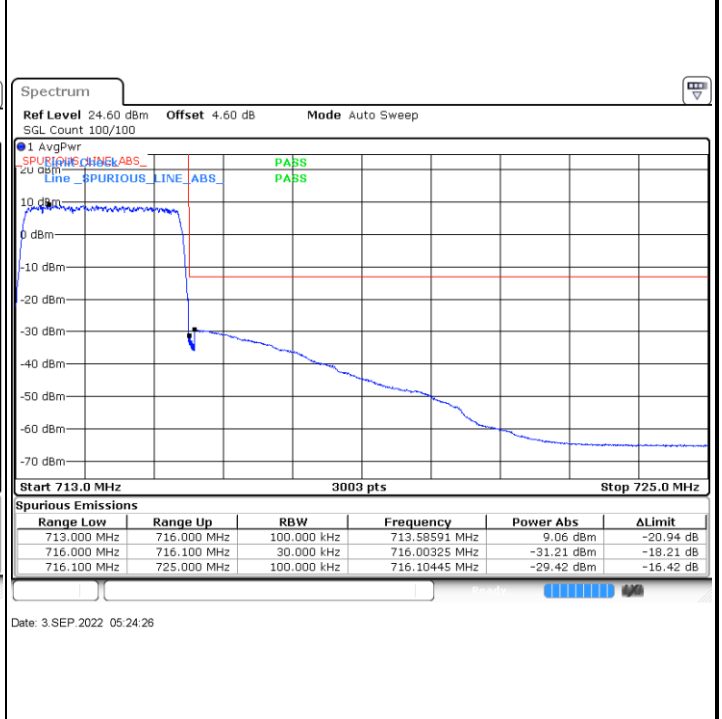
**Highest Band Edge / 1 RB**



**Lowest Band Edge / Full RB**



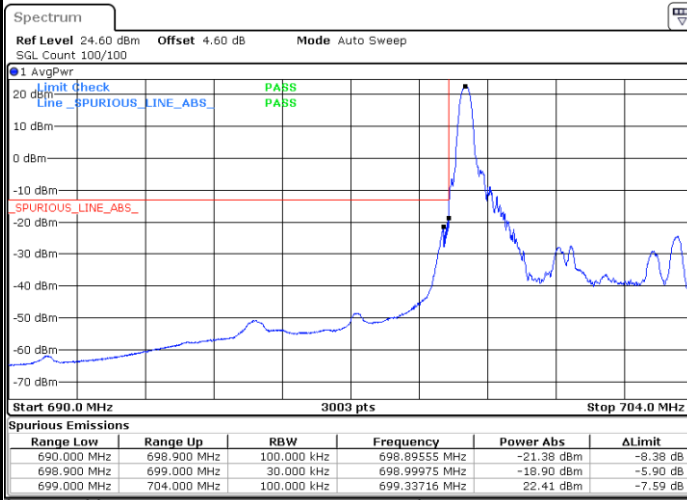
**Highest Band Edge / Full RB**





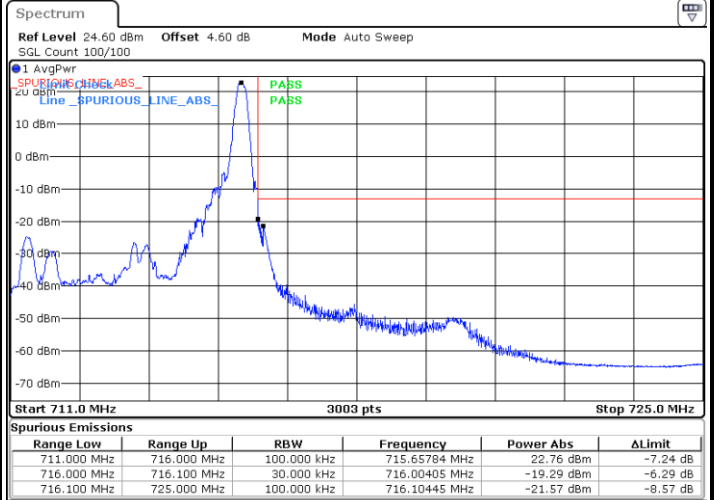
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



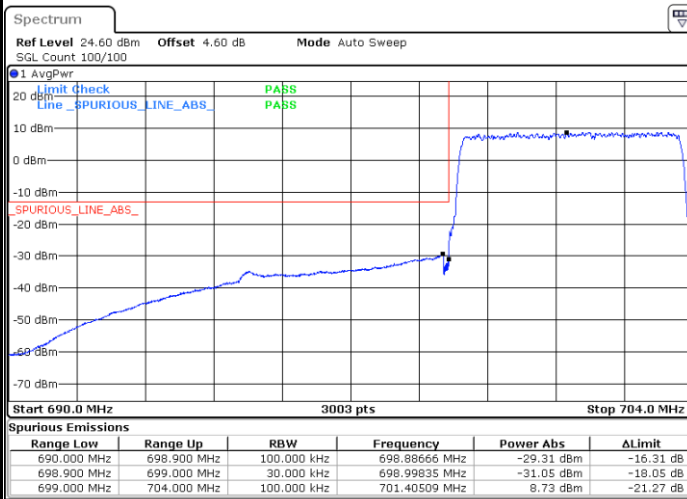
Date: 3 SEP.2022 05:29:45

Highest Band Edge / 1 RB



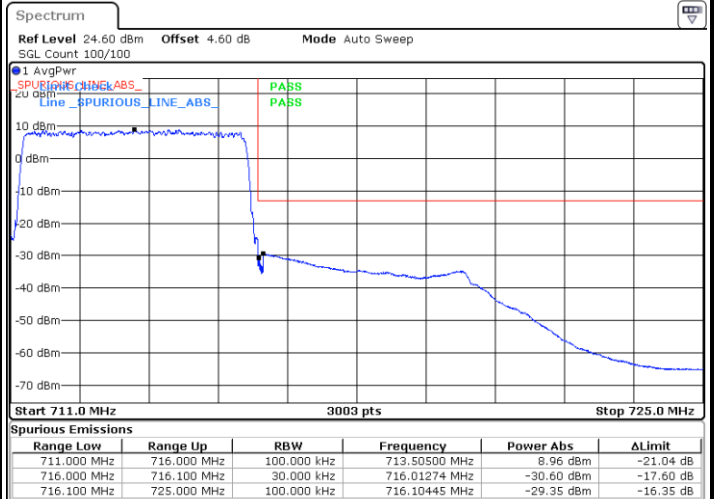
Date: 3 SEP.2022 05:40:24

Lowest Band Edge / Full RB



Date: 3 SEP.2022 05:36:24

Highest Band Edge / Full RB



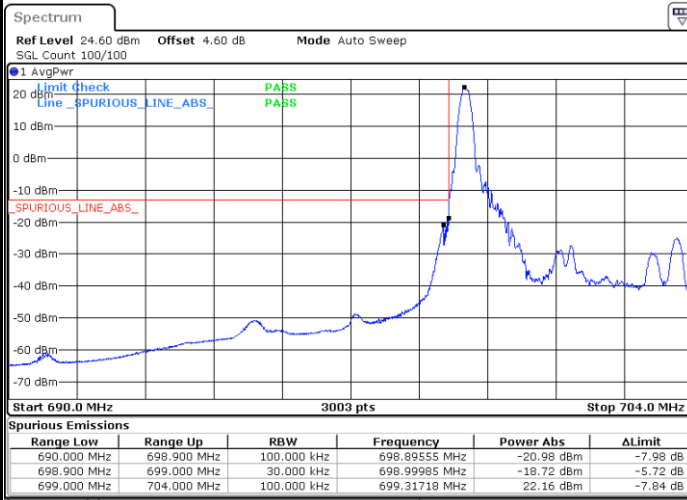
Date: 3 SEP.2022 05:47:02





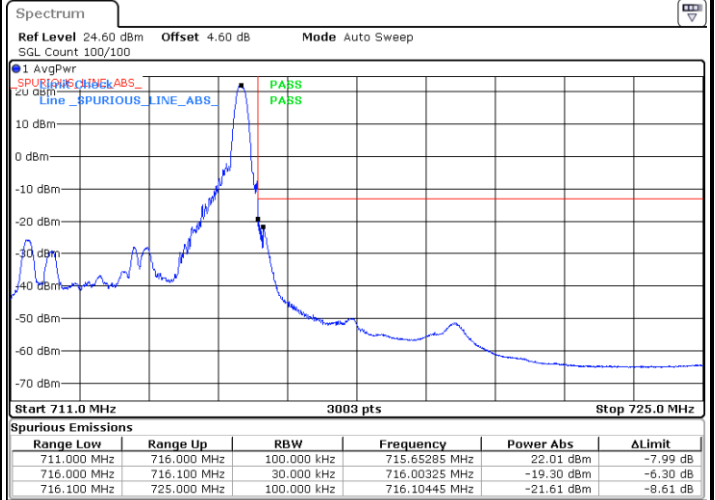
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



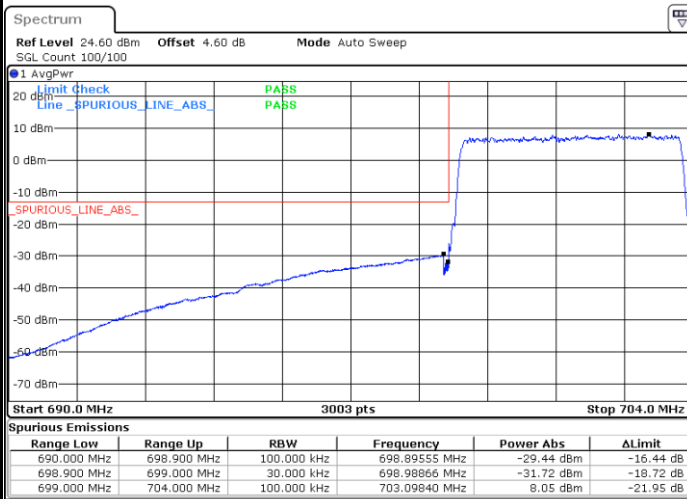
Date: 3 SEP.2022 05:31:05

Highest Band Edge / 1 RB



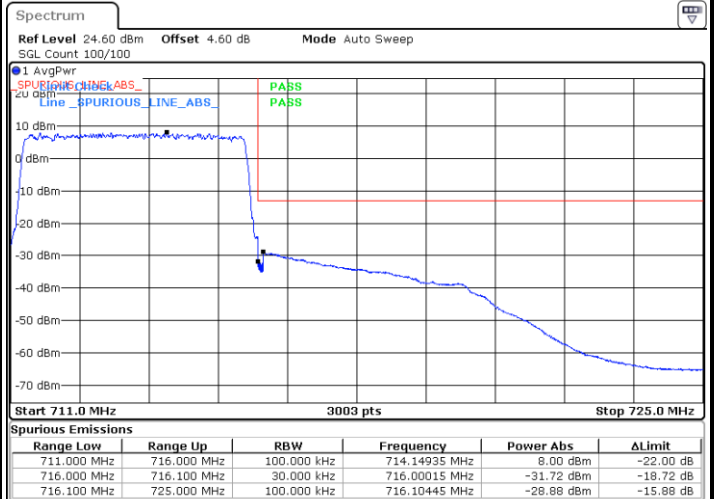
Date: 3 SEP.2022 05:41:43

Lowest Band Edge / Full RB



Date: 3 SEP.2022 05:35:04

Highest Band Edge / Full RB

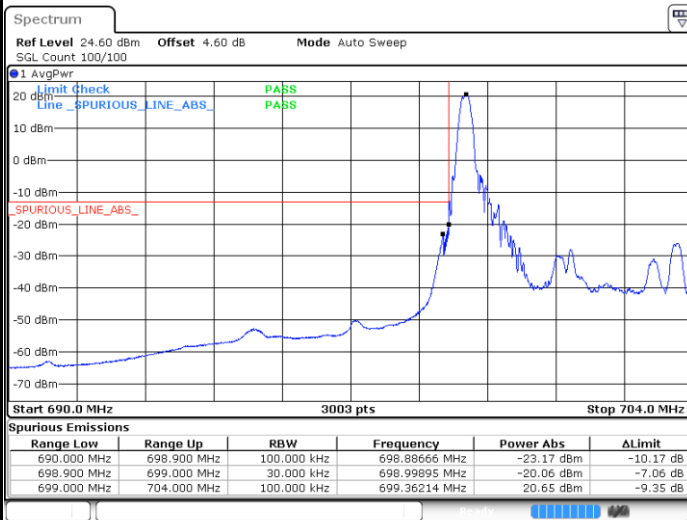


Date: 3 SEP.2022 05:45:43



LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



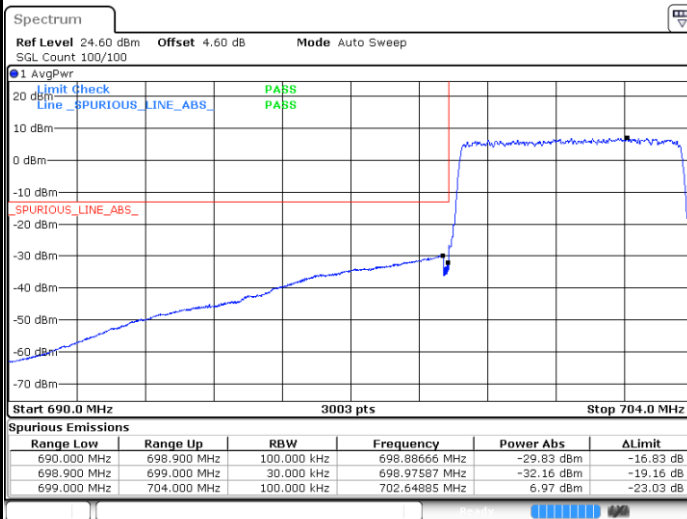
Date: 3 SEP.2022 05:32:25

Highest Band Edge / 1 RB



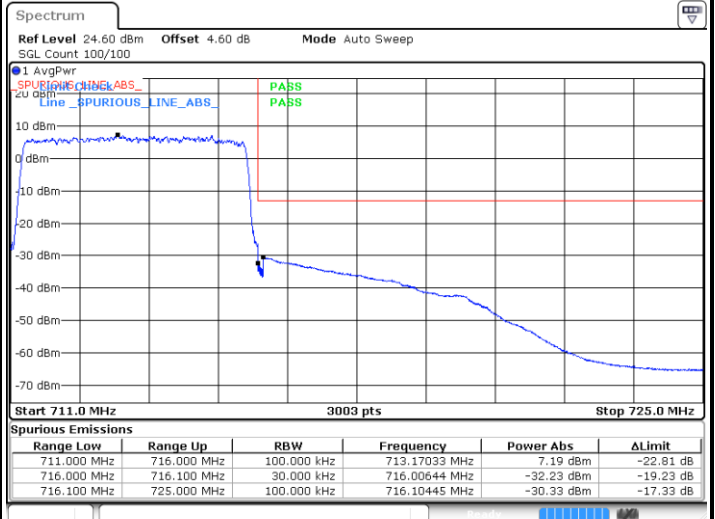
Date: 3 SEP.2022 05:43:03

Lowest Band Edge / Full RB



Date: 3 SEP.2022 05:33:45

Highest Band Edge / Full RB

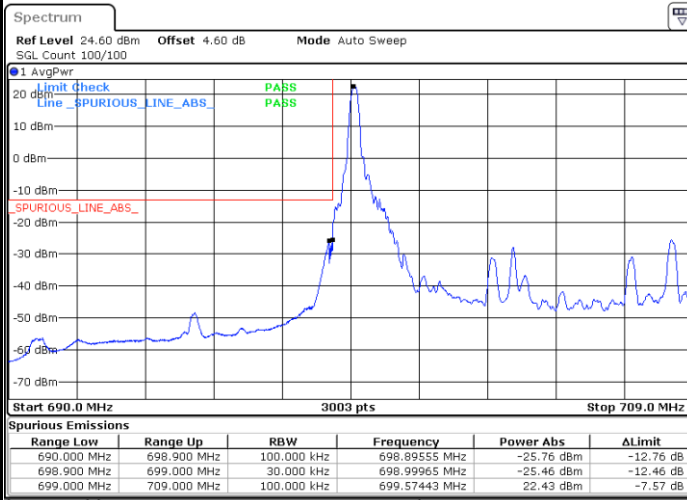


Date: 3 SEP.2022 05:44:23



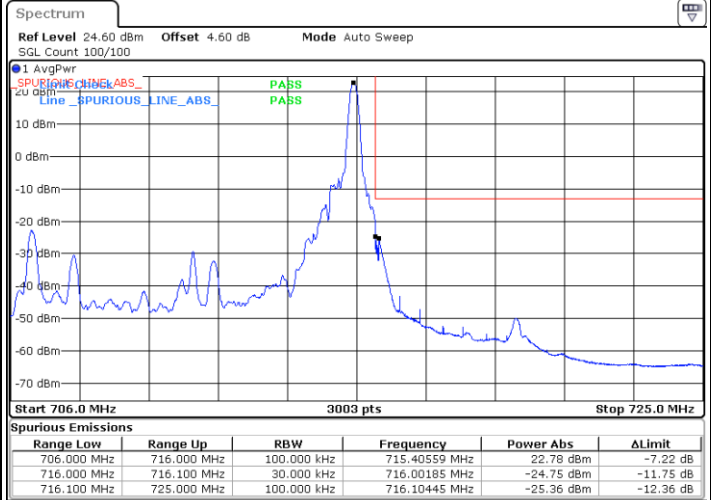
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



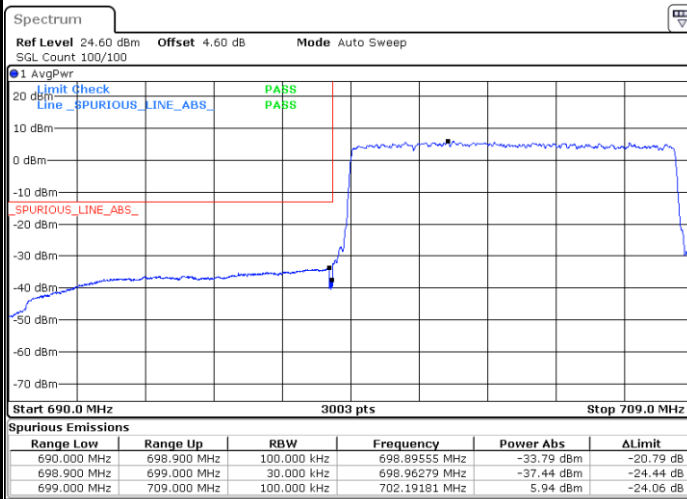
Date: 3 SEP.2022 05:49:43

Highest Band Edge / 1 RB



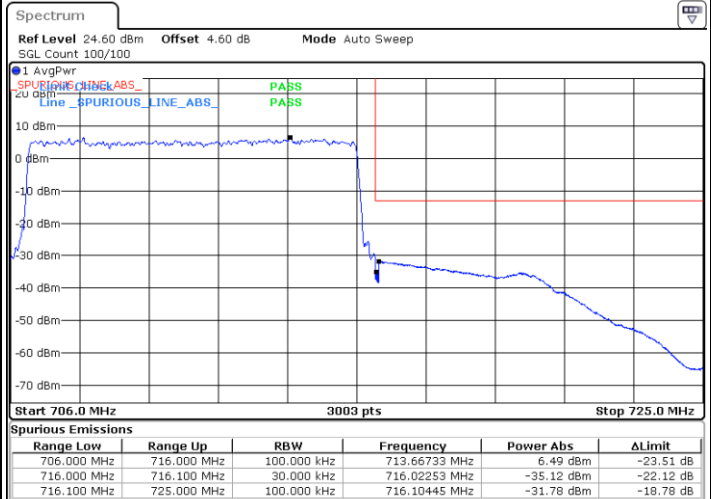
Date: 3 SEP.2022 06:00:21

Lowest Band Edge / Full RB



Date: 3 SEP.2022 05:56:21

Highest Band Edge / Full RB

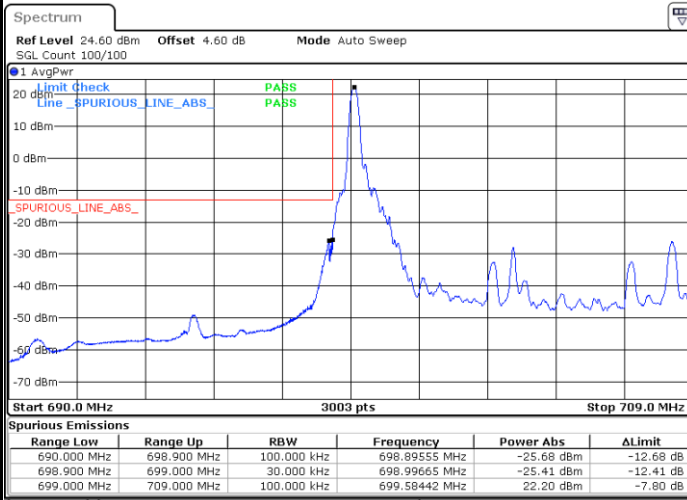


Date: 3 SEP.2022 06:07:00



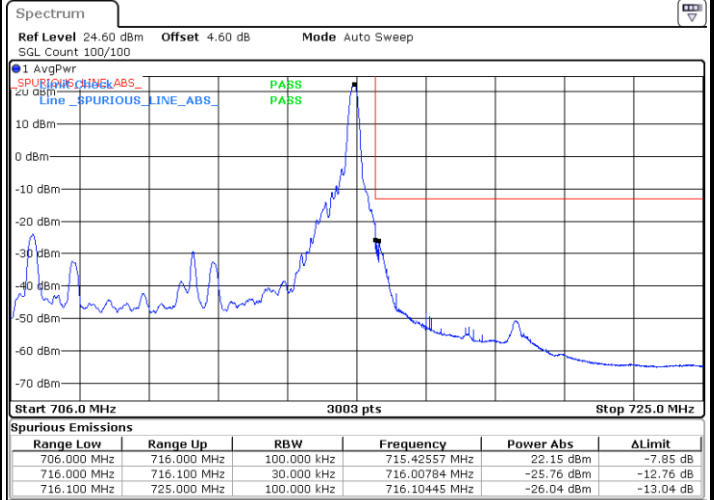
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



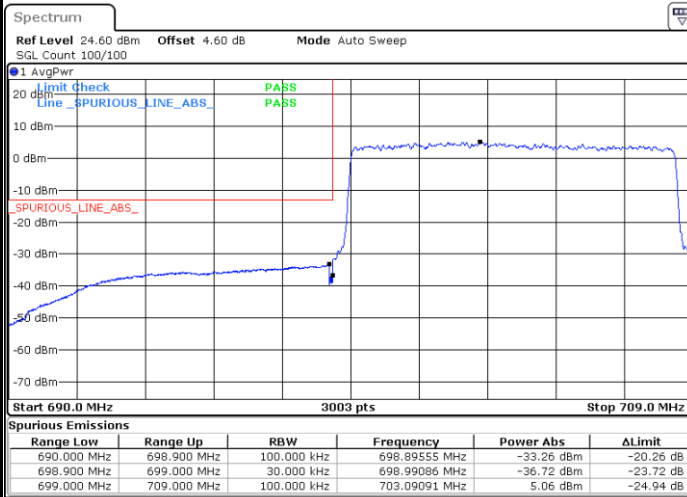
Date: 3 SEP. 2022 05:51:03

Highest Band Edge / 1 RB



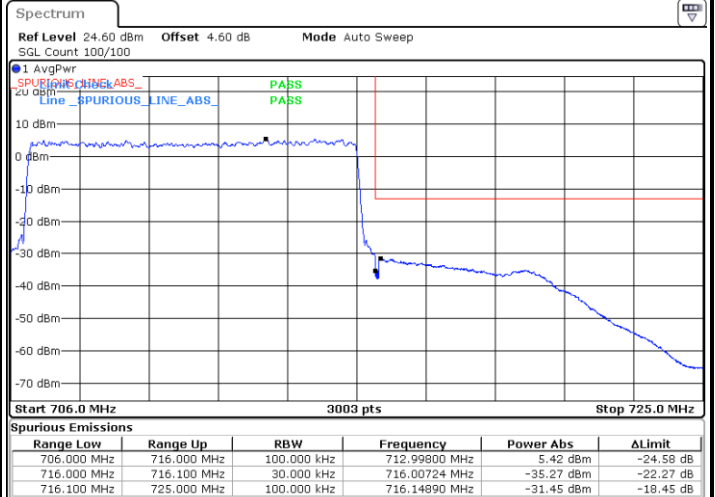
Date: 3 SEP. 2022 06:01:41

Lowest Band Edge / Full RB



Date: 3 SEP. 2022 05:55:02

Highest Band Edge / Full RB

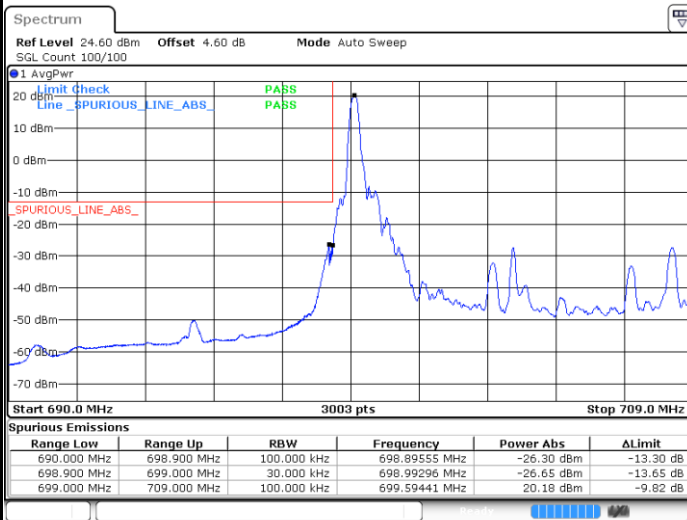


Date: 3 SEP. 2022 06:05:40



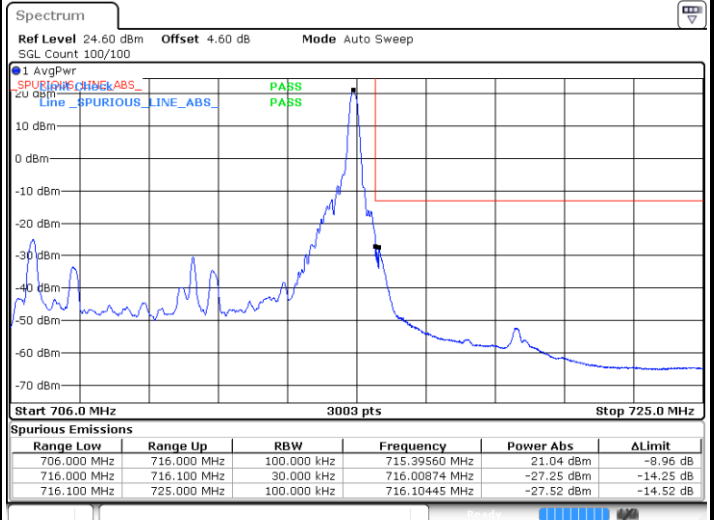
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



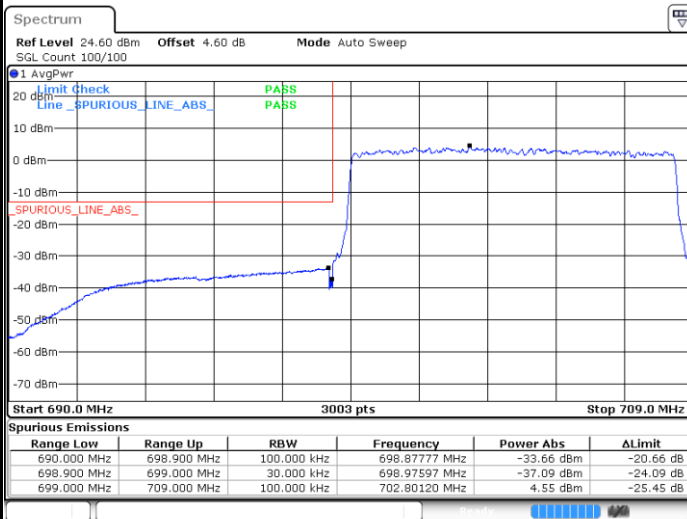
Date: 3 SEP. 2022 05:52:22

Highest Band Edge / 1 RB



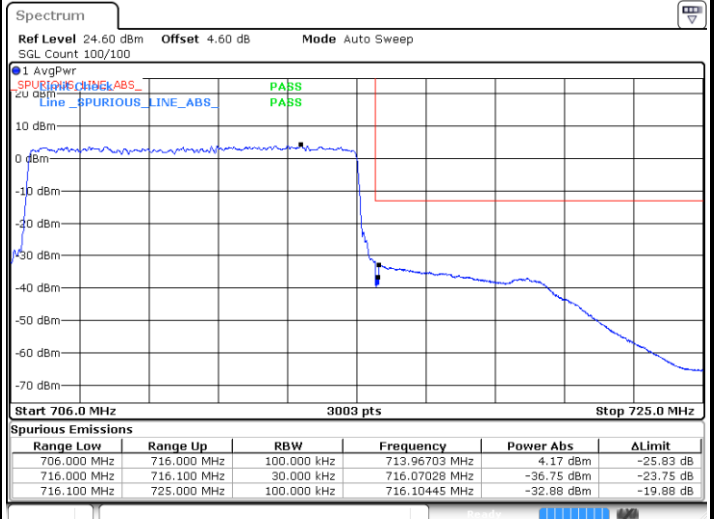
Date: 3 SEP. 2022 06:03:00

Lowest Band Edge / Full RB



Date: 3 SEP. 2022 05:53:42

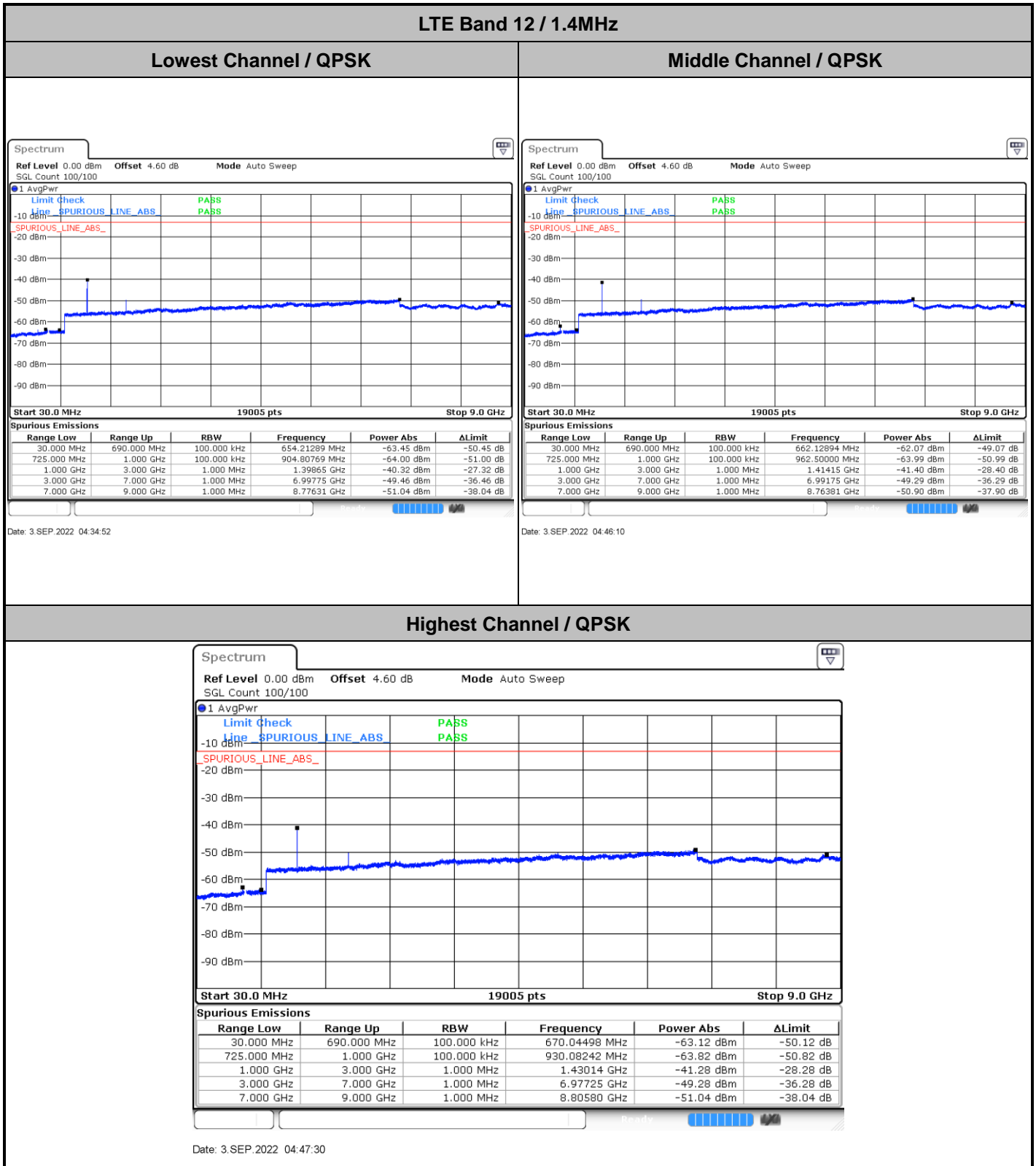
Highest Band Edge / Full RB



Date: 3 SEP. 2022 06:04:20



# Conducted Spurious Emission

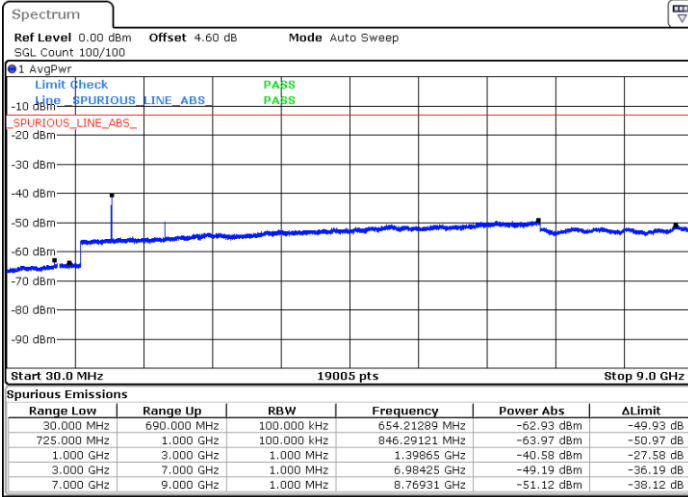




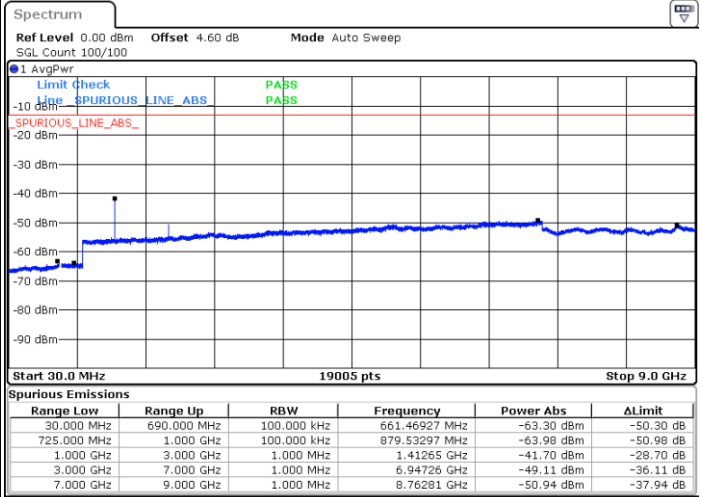
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

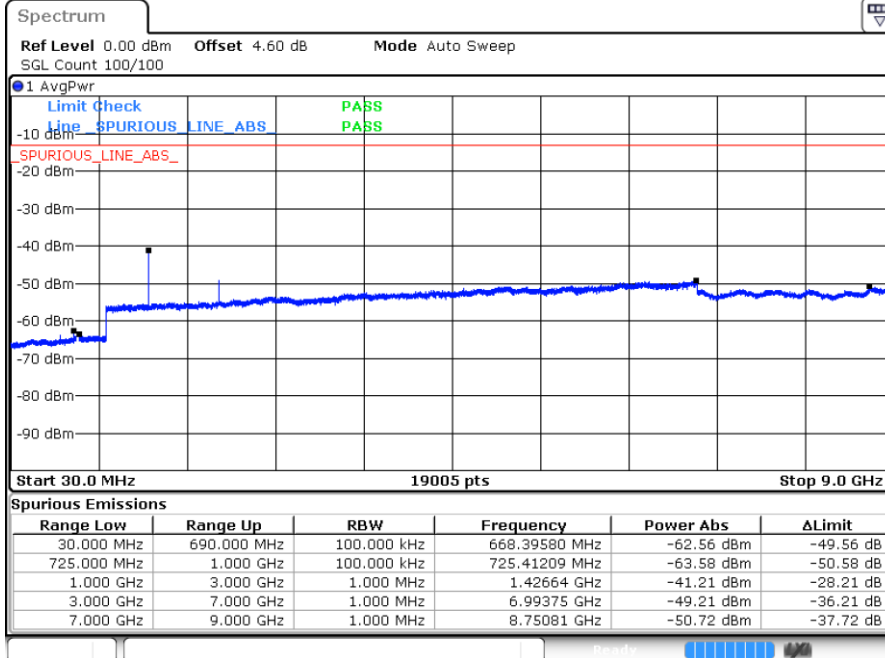


Date: 3.SEP.2022 04:58:49



Date: 3.SEP.2022 05:17:47

Highest Channel / QPSK



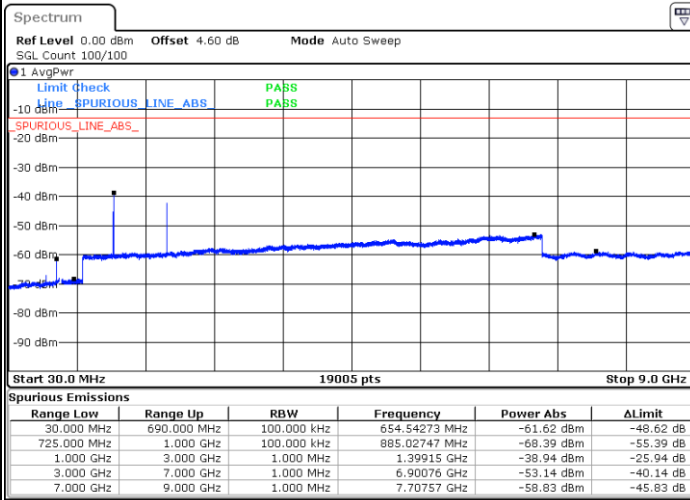
Date: 3.SEP.2022 05:19:07



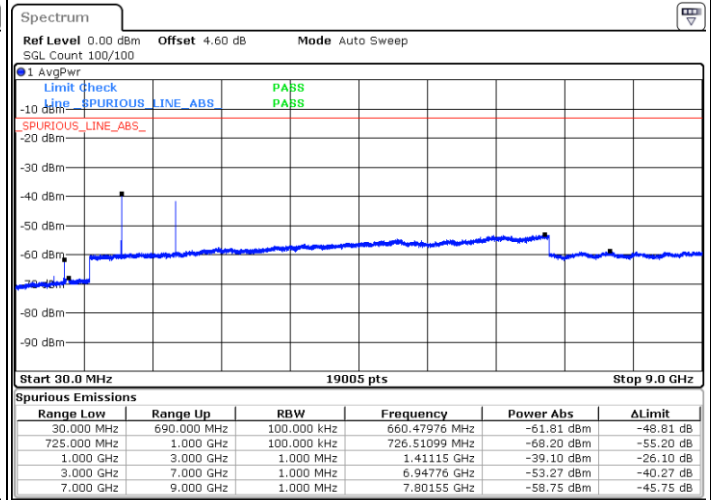
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

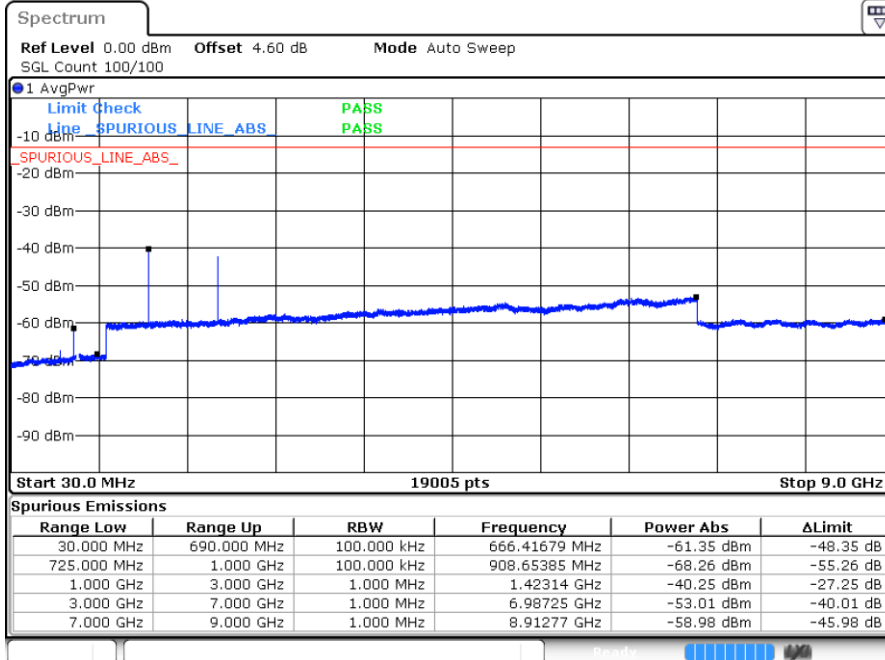


Date: 3.SEP.2022 05:28:26



Date: 3.SEP.2022 05:37:44

Highest Channel / QPSK



Date: 3.SEP.2022 05:39:04

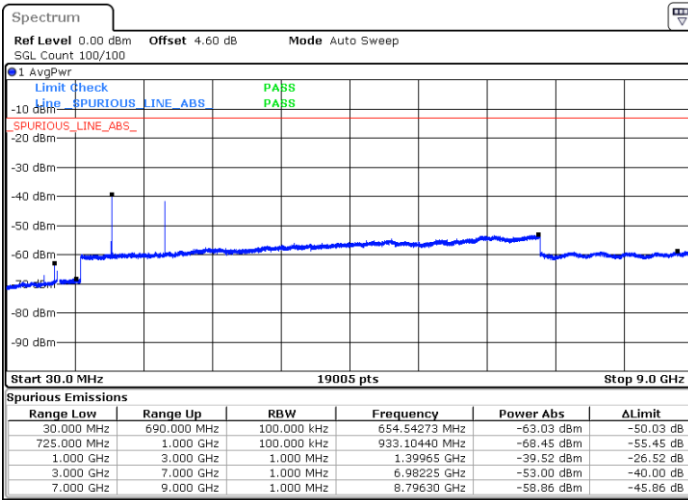




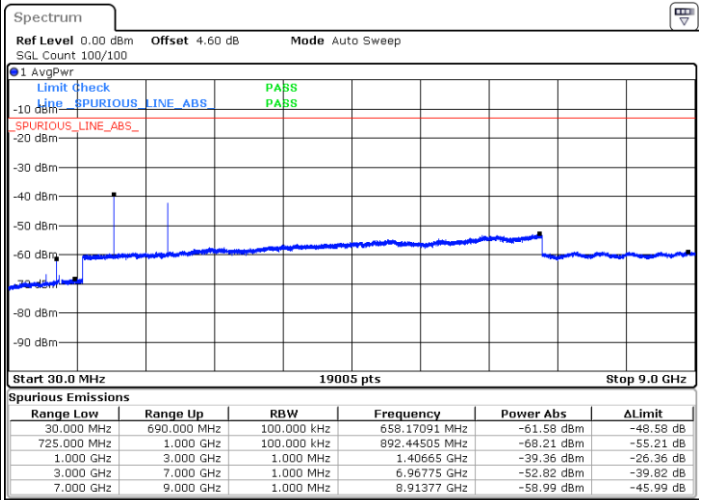
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

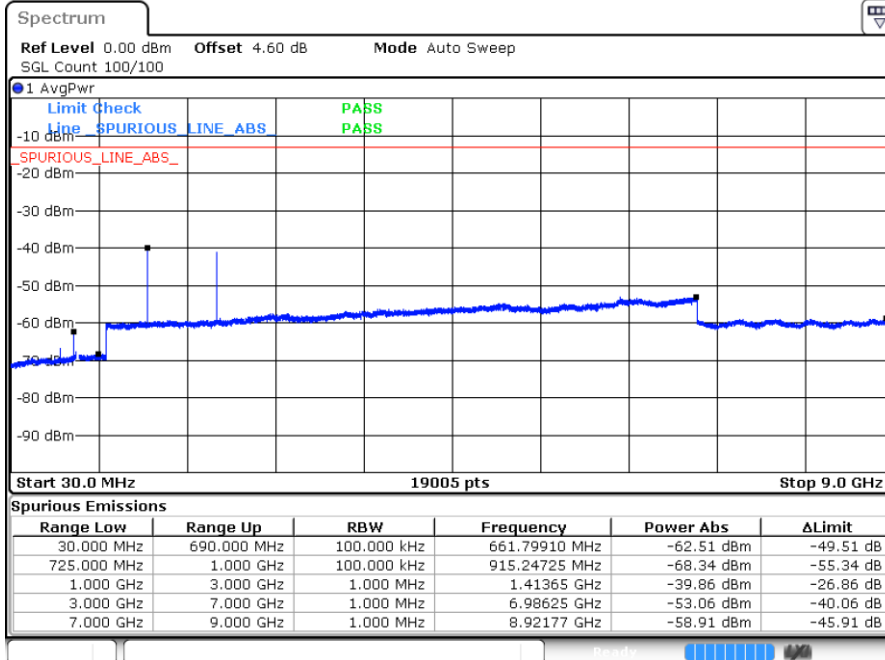


Date: 3.SEP.2022 05:48:23



Date: 3.SEP.2022 05:57:41

Highest Channel / QPSK



Date: 3.SEP.2022 05:59:01



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	0.0028	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0017	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0014	

Note:

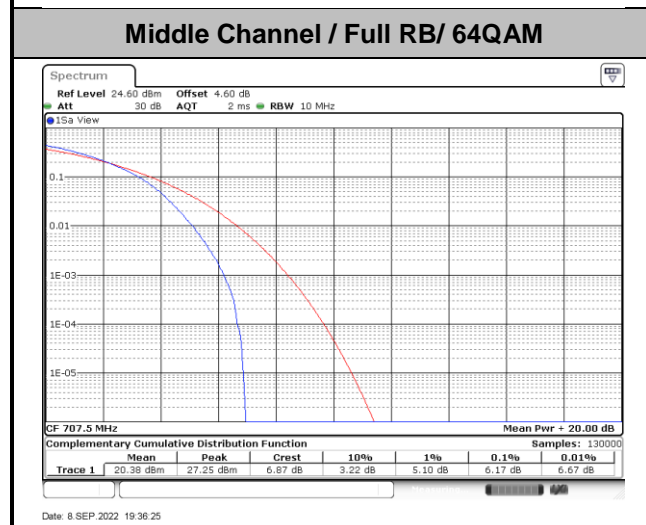
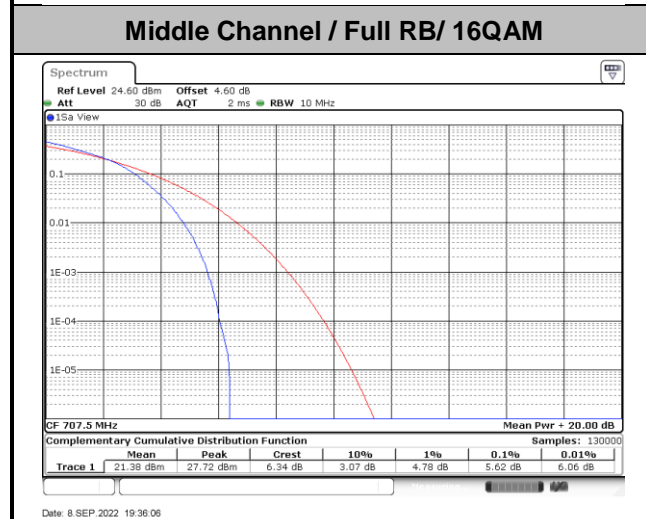
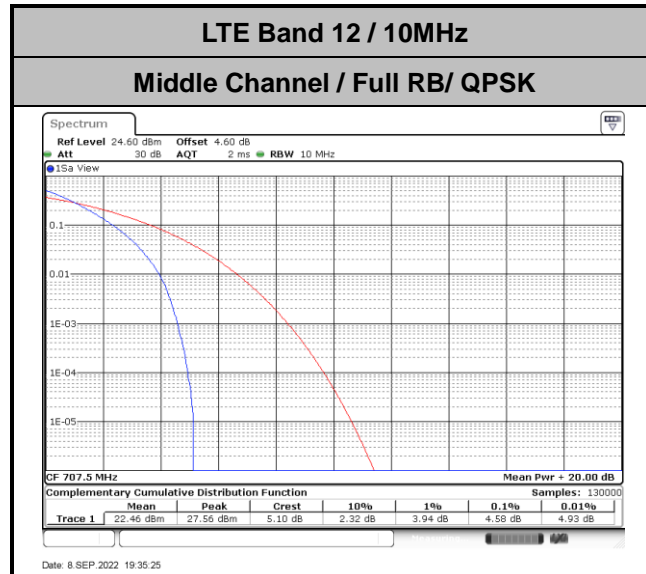
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 12 Other PA

### Peak-to-Average Ratio

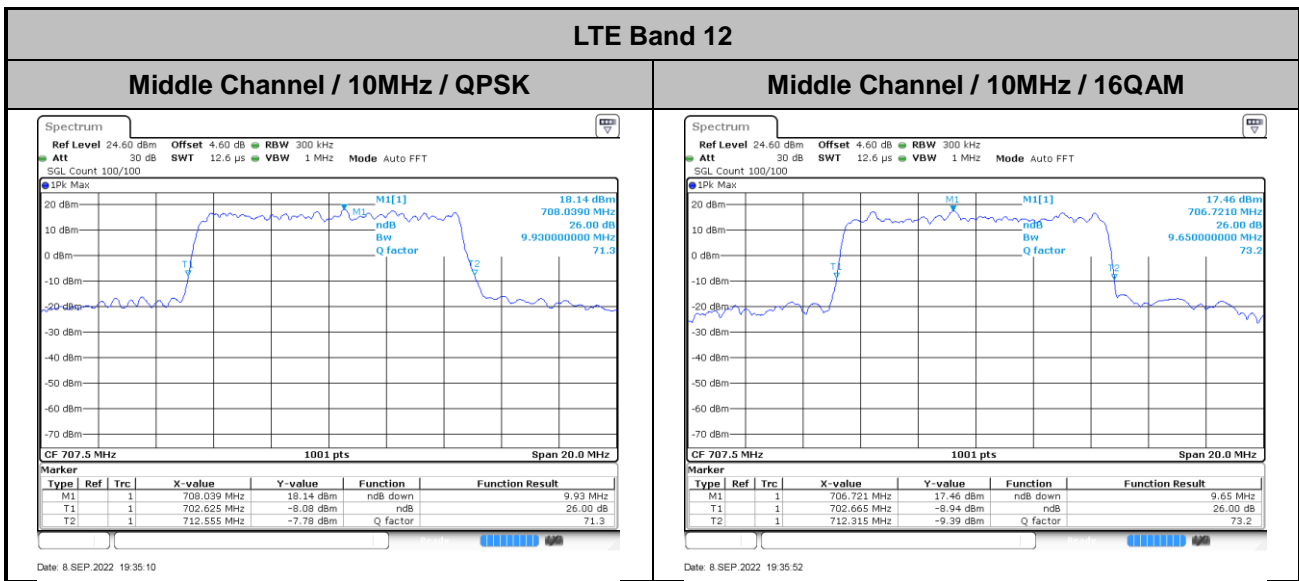
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.58	5.62	6.17	<b>PASS</b>





## 26dB Bandwidth

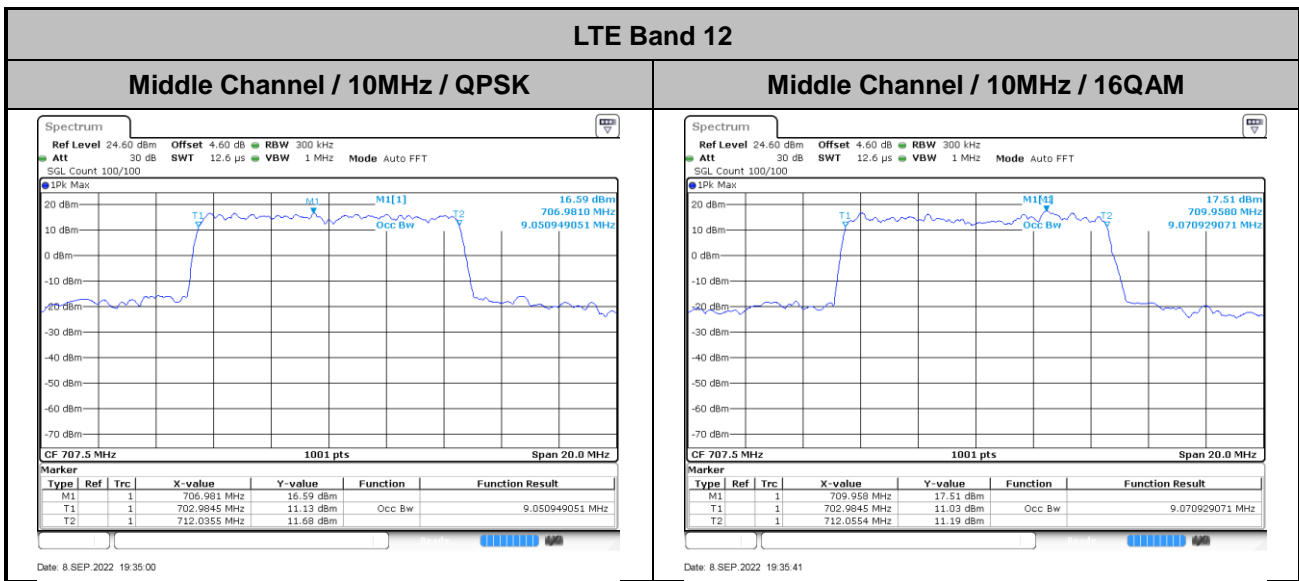
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.93	9.65





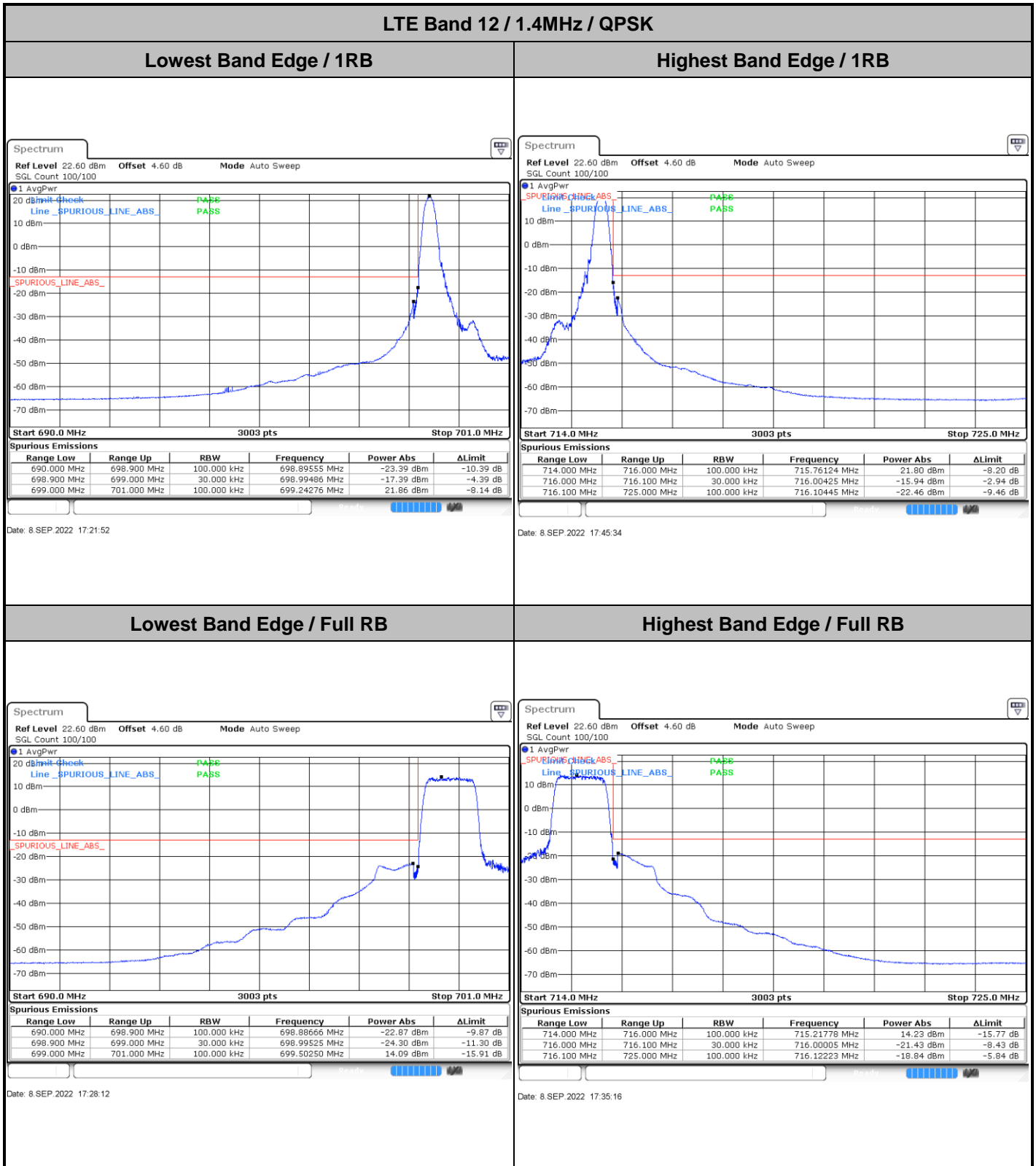
## Occupied Bandwidth

<b>Mode</b>	<b>LTE Band 12 : 99%OBW(MHz)</b>	
<b>BW</b>	<b>10MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	9.05	9.07





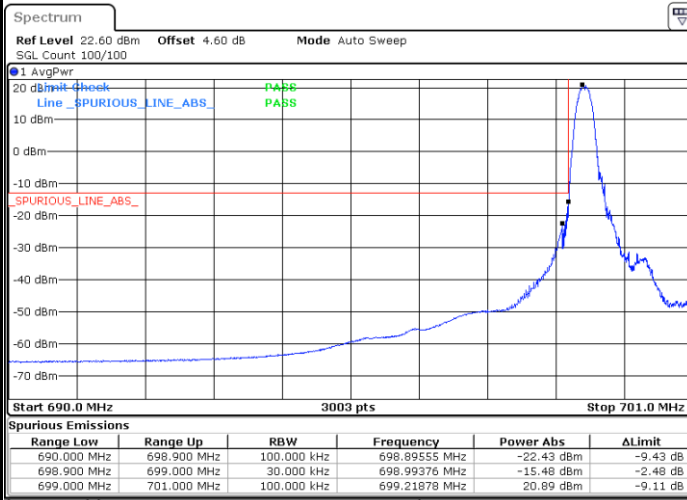
# Conducted Band Edge





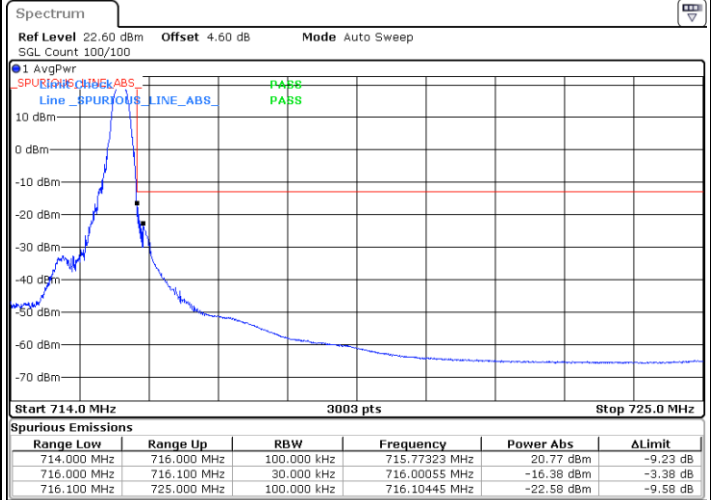
LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



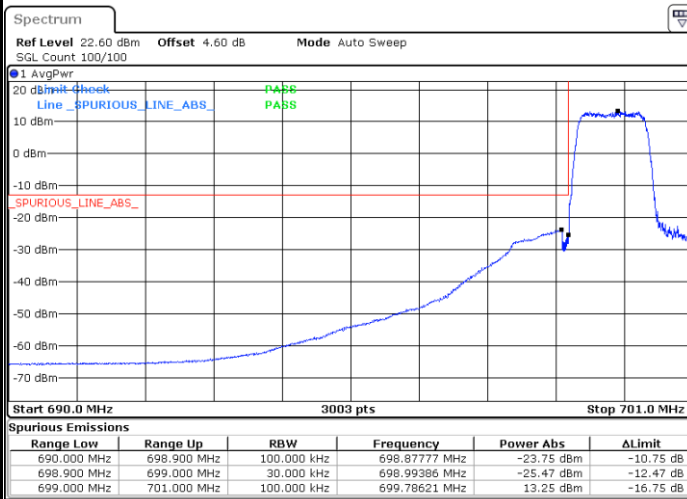
Date: 8 SEP.2022 17:22:59

Highest Band Edge / 1 RB



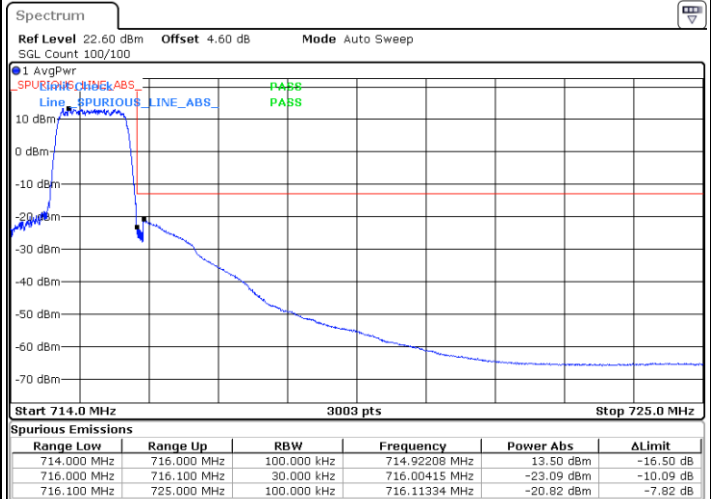
Date: 8 SEP.2022 17:43:52

Lowest Band Edge / Full RB



Date: 8 SEP.2022 17:26:42

Highest Band Edge / Full RB



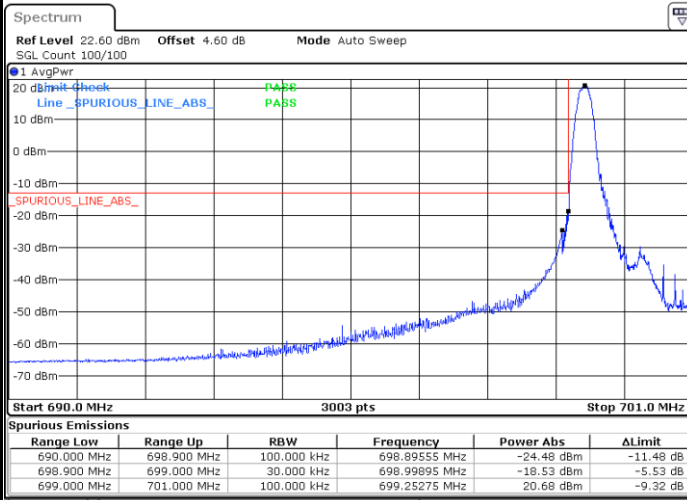
Date: 8 SEP.2022 17:36:19





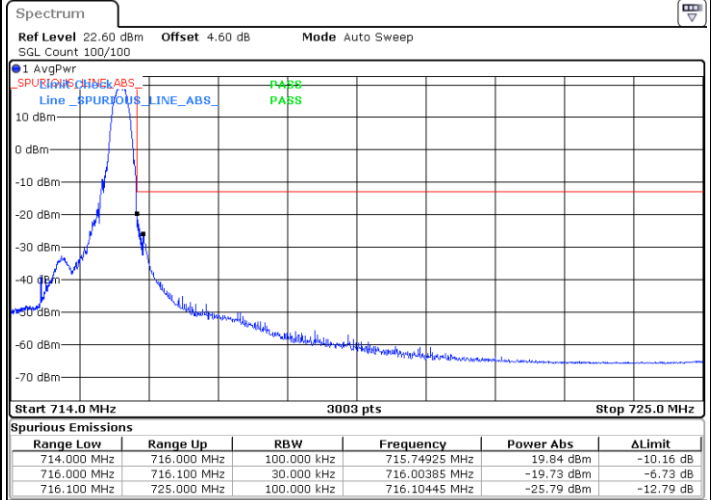
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



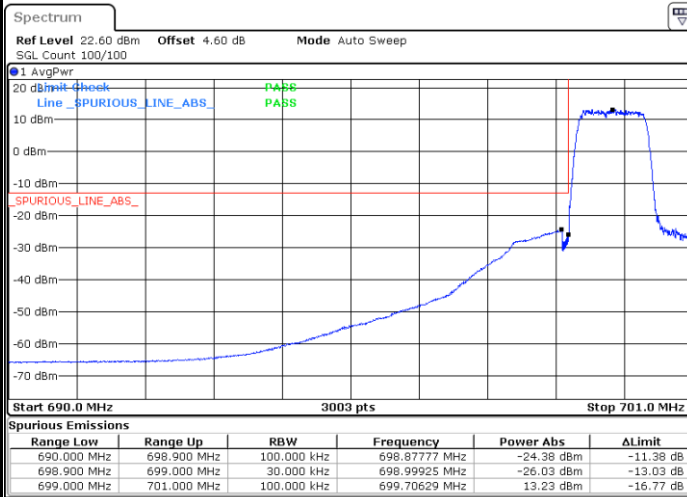
Date: 8 SEP.2022 17:24:58

Highest Band Edge / 1 RB



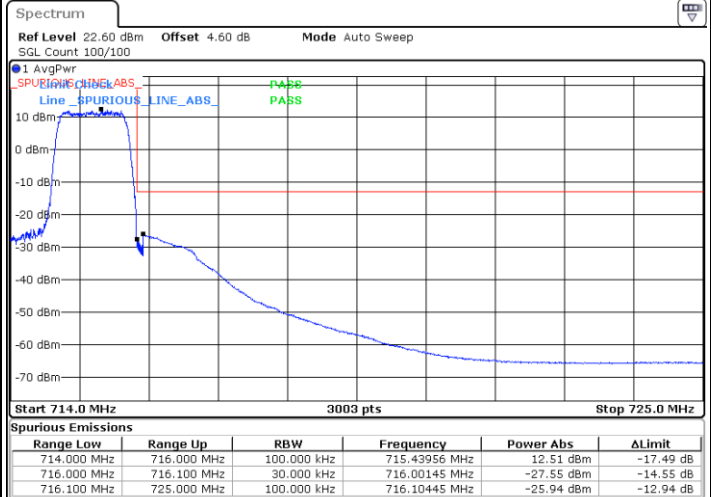
Date: 8 SEP.2022 17:41:29

Lowest Band Edge / Full RB



Date: 8 SEP.2022 17:25:49

Highest Band Edge / Full RB



Date: 8 SEP.2022 17:39:08