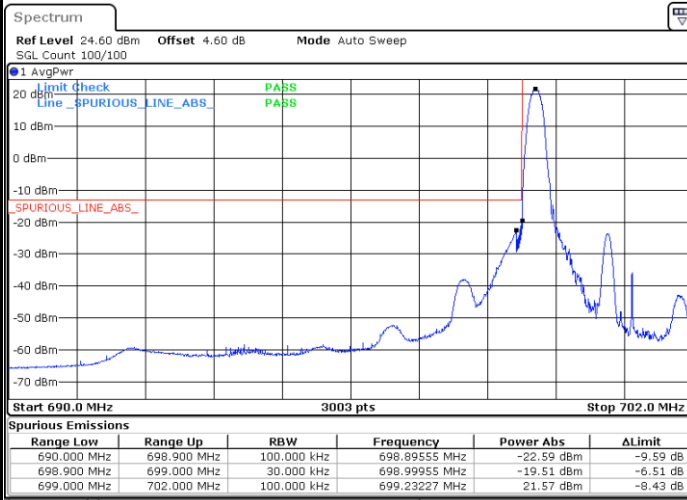




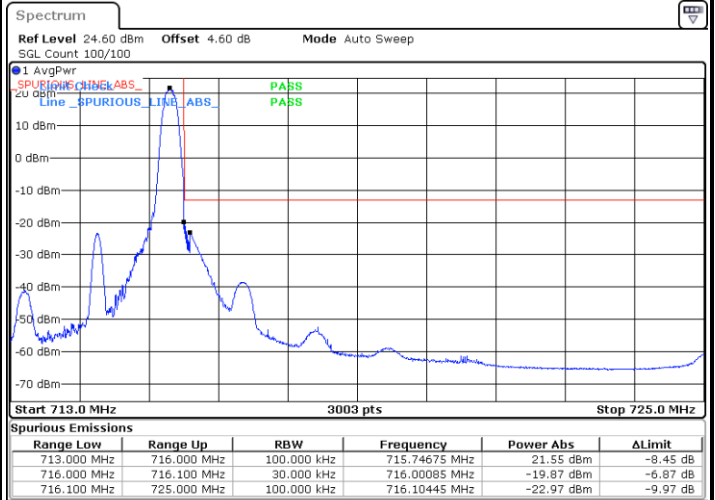
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



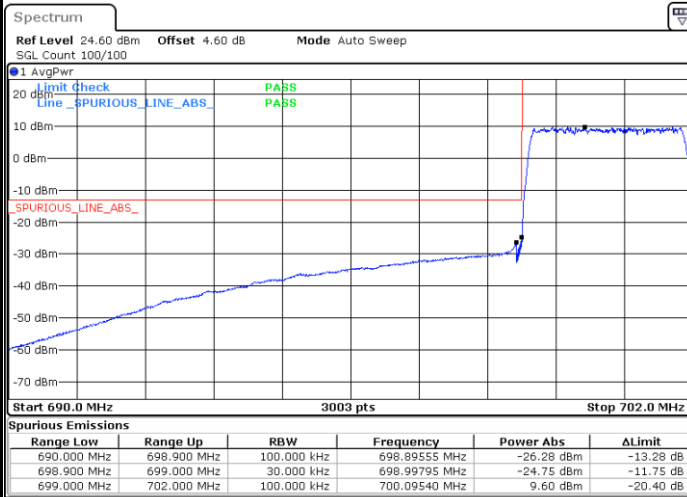
Date: 22.SEP.2022 22:30:18

Highest Band Edge / 1 RB



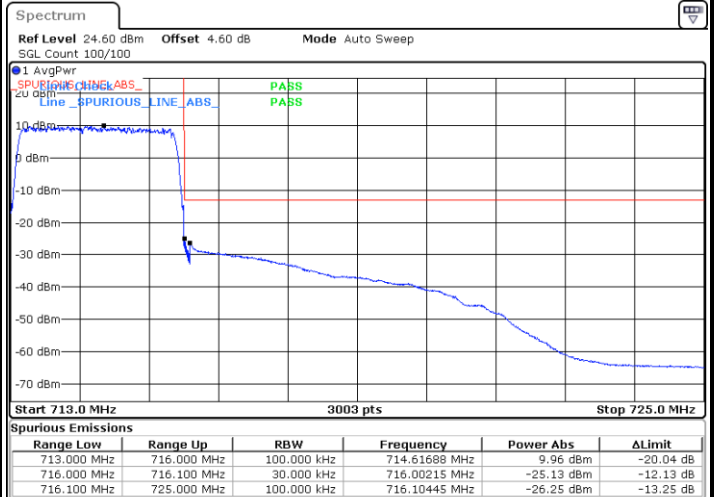
Date: 22.SEP.2022 22:42:56

Lowest Band Edge / Full RB



Date: 22.SEP.2022 22:31:57

Highest Band Edge / Full RB

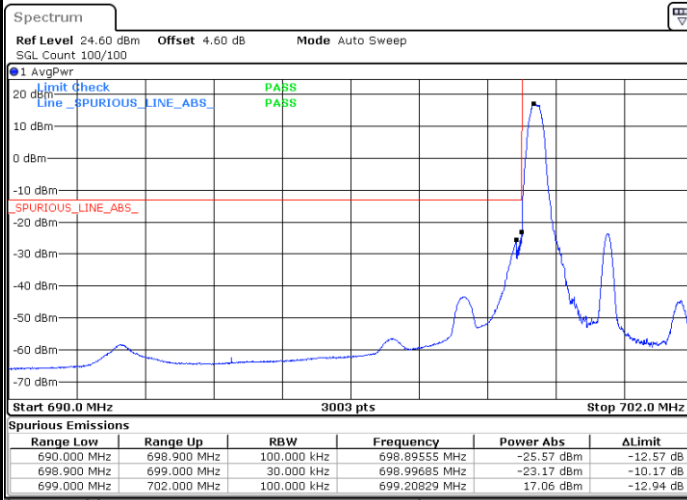


Date: 22.SEP.2022 22:44:36



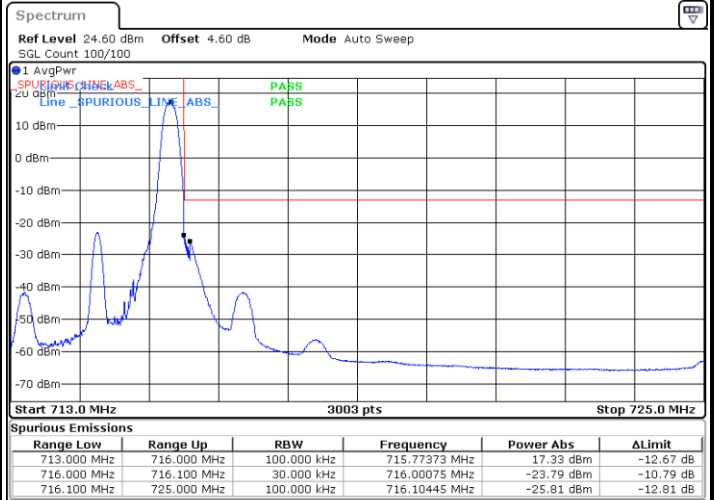
LTE Band 12 / 3MHz / 256QAM

Lowest Band Edge / 1 RB



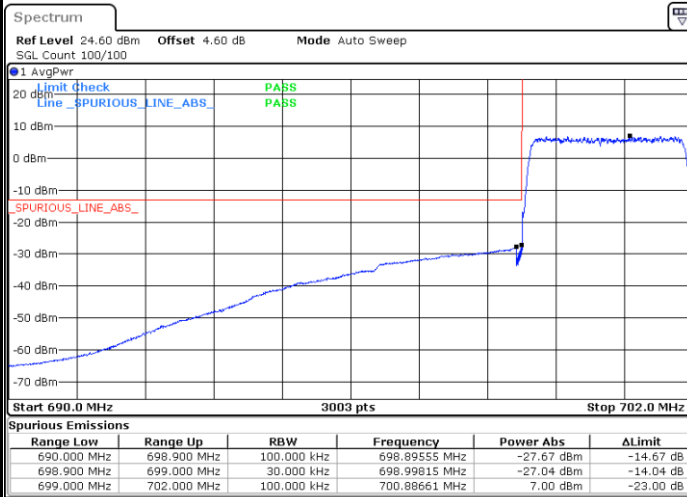
Date: 22.SEP.2022 23:00:02

Highest Band Edge / 1 RB



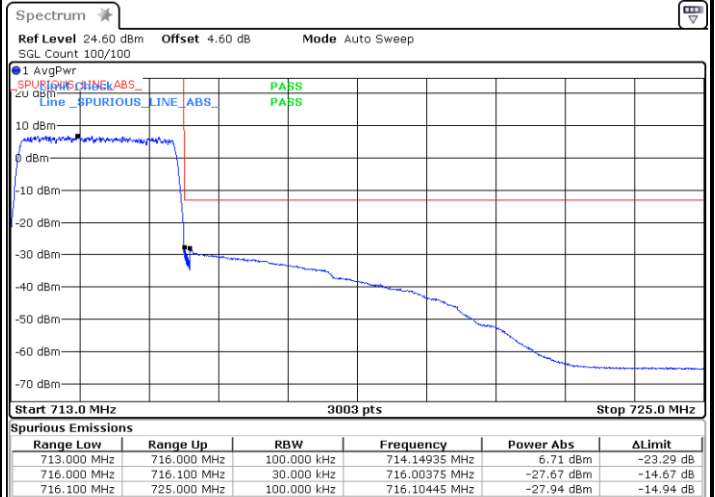
Date: 22.SEP.2022 22:58:25

Lowest Band Edge / Full RB



Date: 22.SEP.2022 23:01:10

Highest Band Edge / Full RB

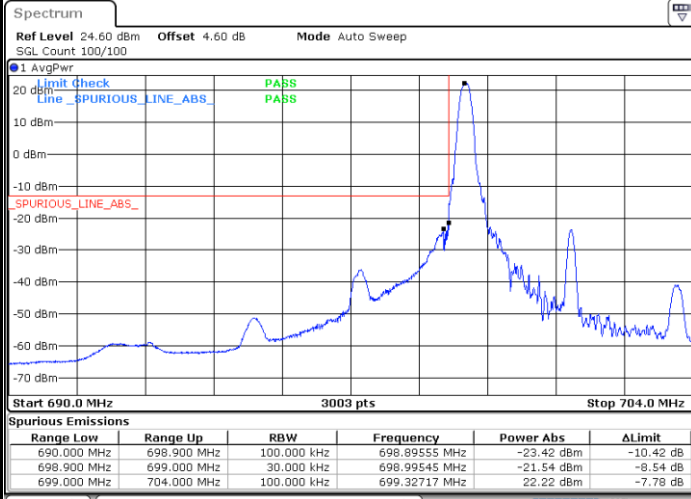


Date: 22.SEP.2022 22:54:19



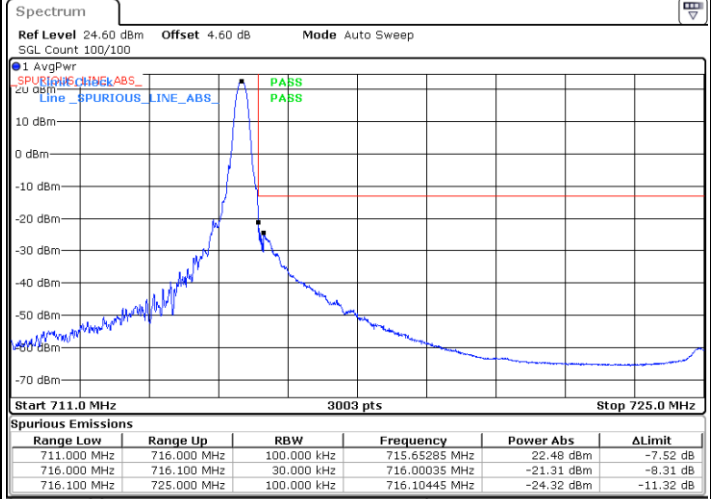
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



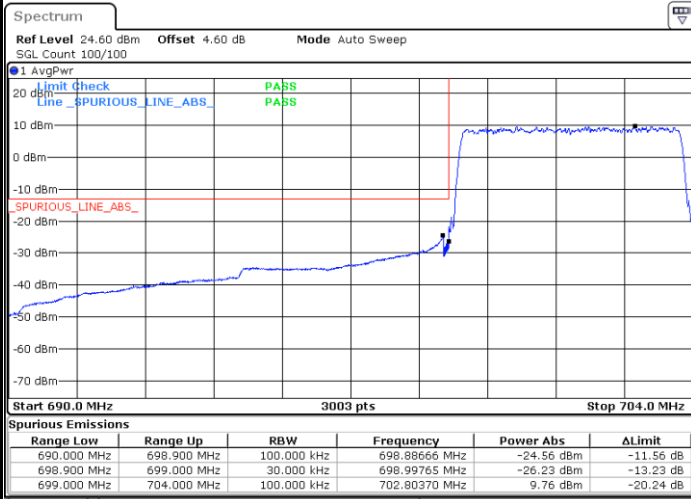
Date: 22.SEP.2022 23:16:29

Highest Band Edge / 1 RB



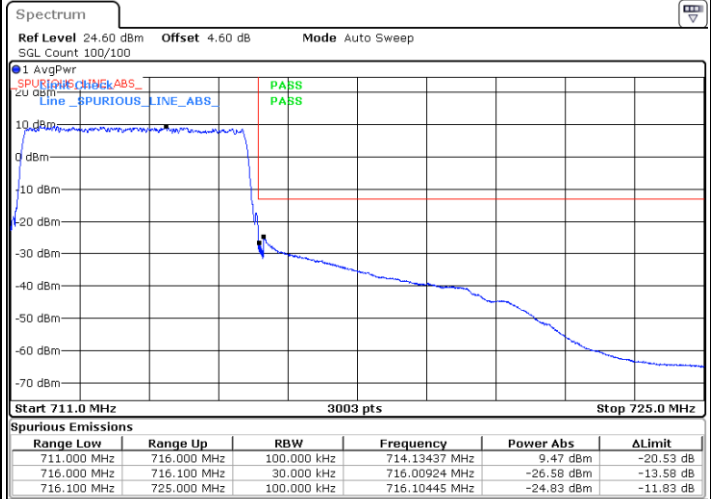
Date: 22.SEP.2022 23:27:13

Lowest Band Edge / Full RB



Date: 22.SEP.2022 23:23:12

Highest Band Edge / Full RB

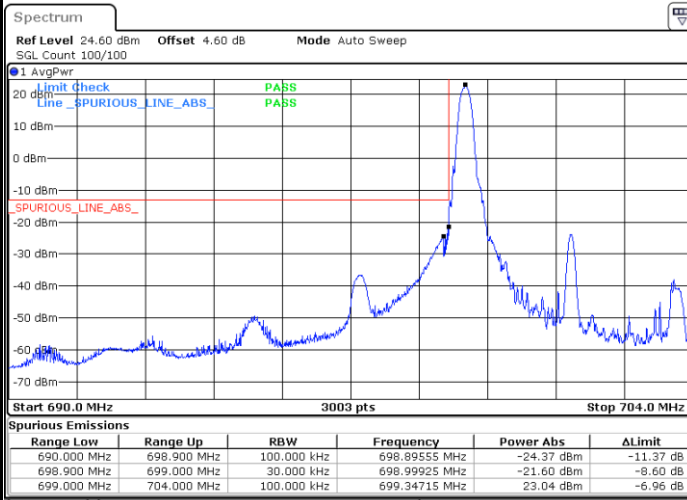


Date: 22.SEP.2022 23:33:58



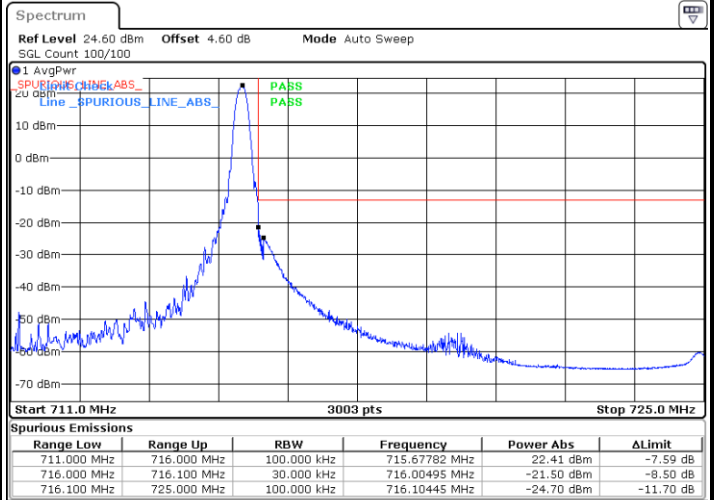
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



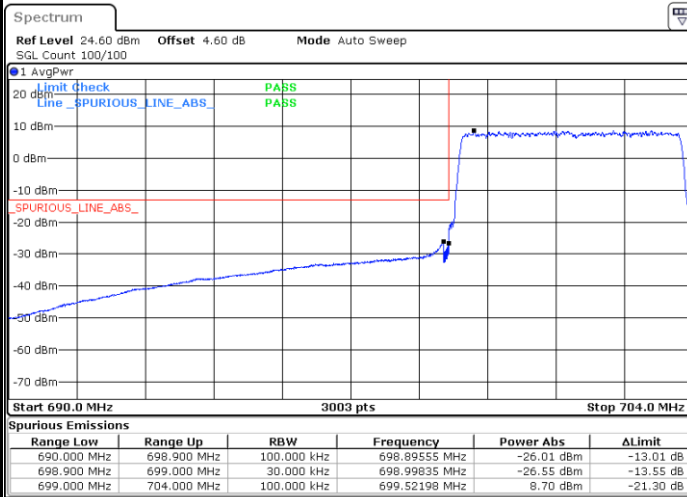
Date: 22.SEP.2022 23:17:49

Highest Band Edge / 1 RB



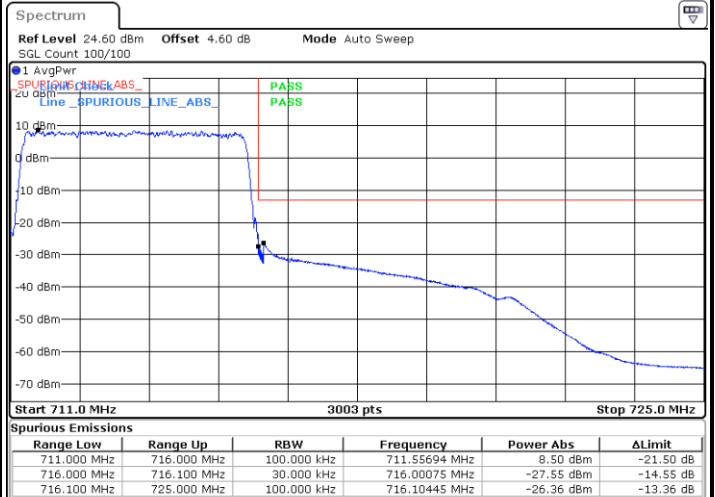
Date: 22.SEP.2022 23:28:33

Lowest Band Edge / Full RB



Date: 22.SEP.2022 23:21:51

Highest Band Edge / Full RB

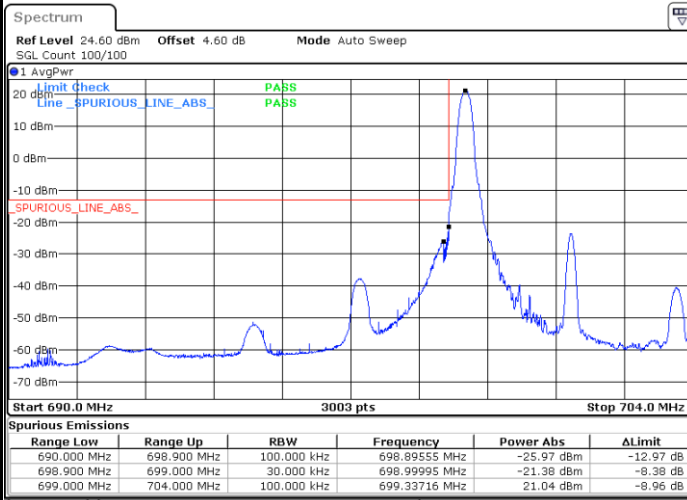


Date: 22.SEP.2022 23:32:38



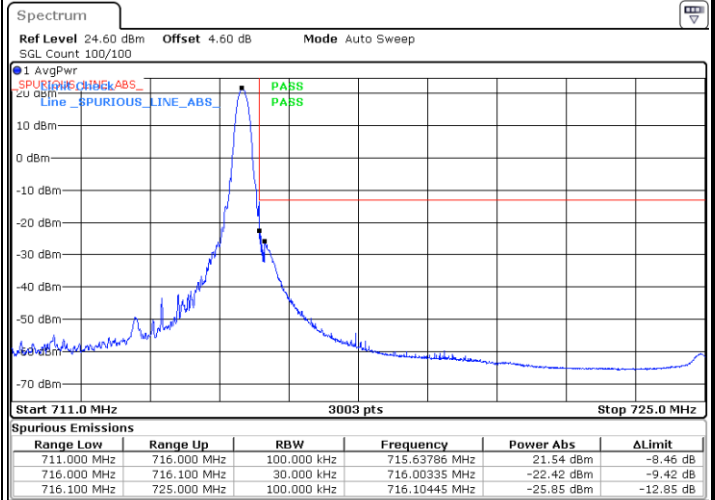
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



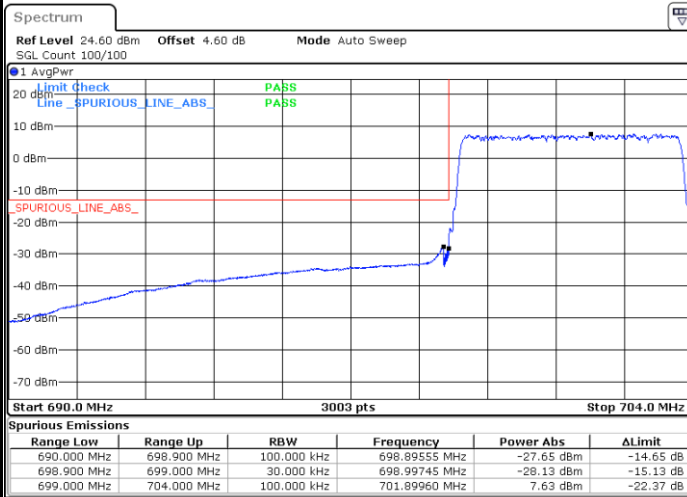
Date: 22.SEP.2022 23:19:10

Highest Band Edge / 1 RB



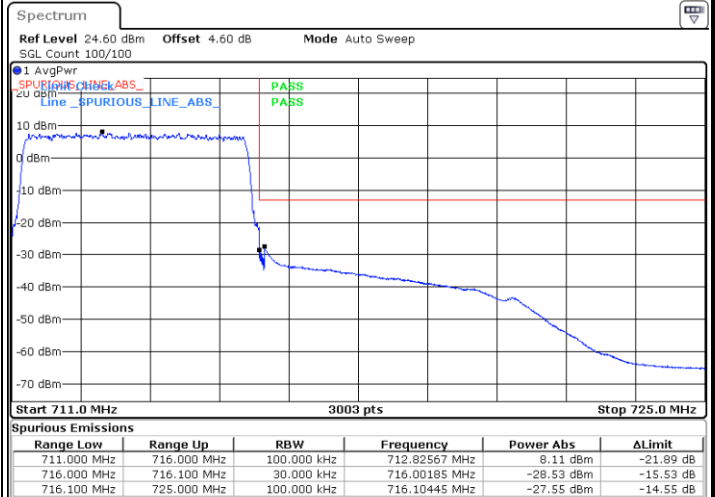
Date: 22.SEP.2022 23:29:57

Lowest Band Edge / Full RB



Date: 22.SEP.2022 23:20:30

Highest Band Edge / Full RB

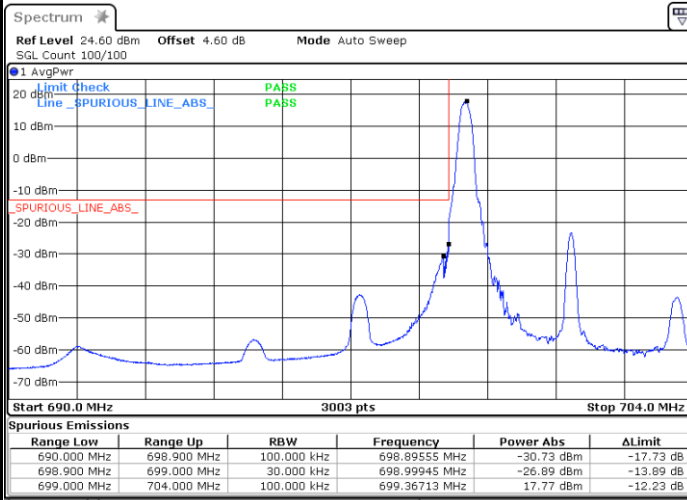


Date: 22.SEP.2022 23:31:17



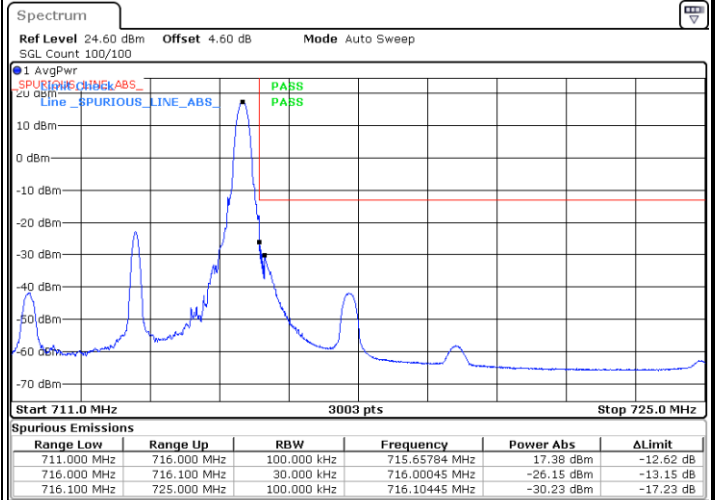
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / 1RB



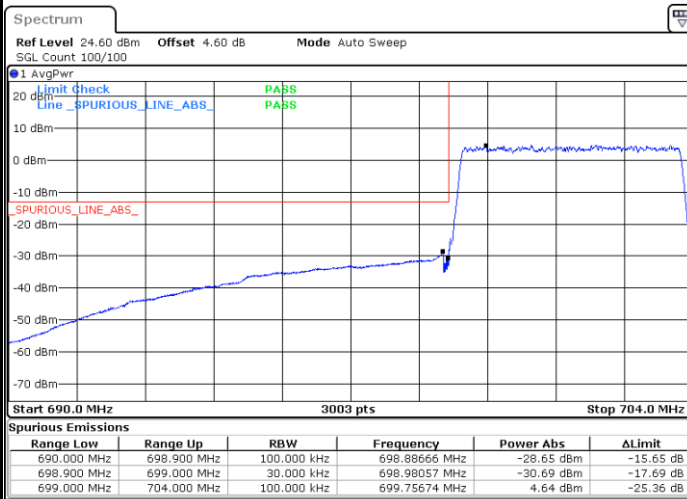
Date: 23.SEP.2022 02:26:18

Highest Band Edge / 1 RB



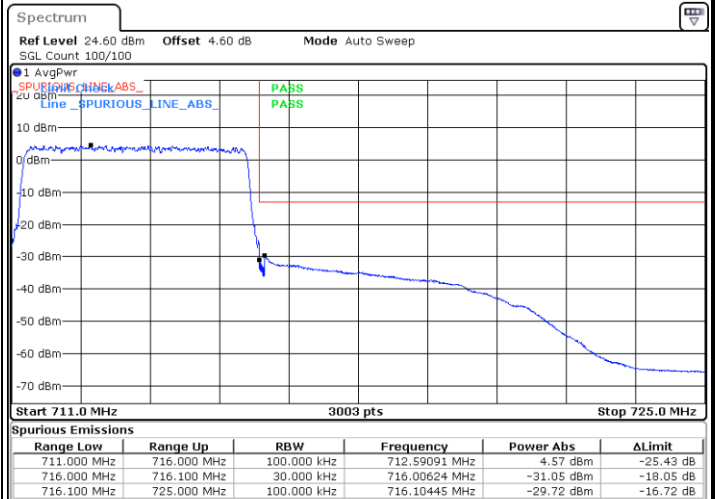
Date: 23.SEP.2022 02:30:34

Lowest Band Edge / Full RB



Date: 23.SEP.2022 02:27:41

Highest Band Edge / Full RB



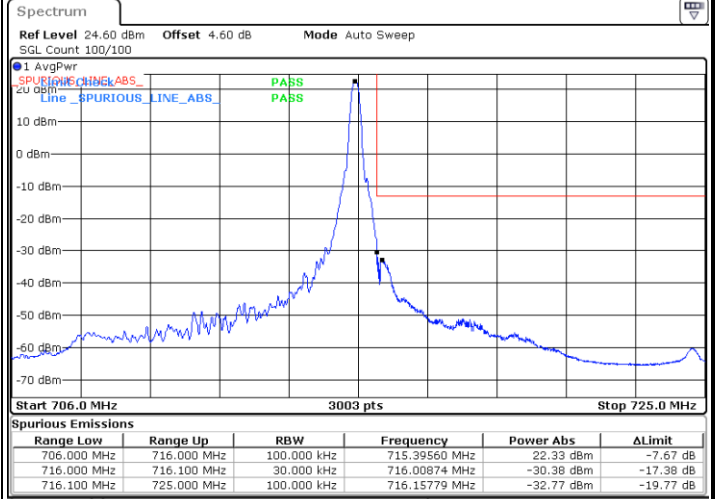
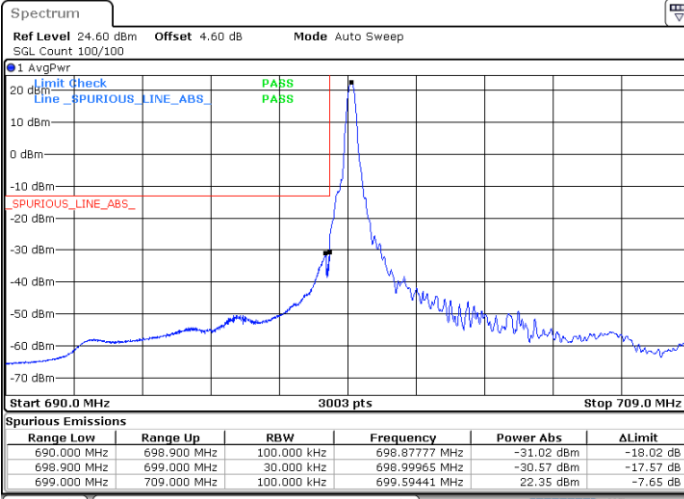
Date: 23.SEP.2022 02:29:02



LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

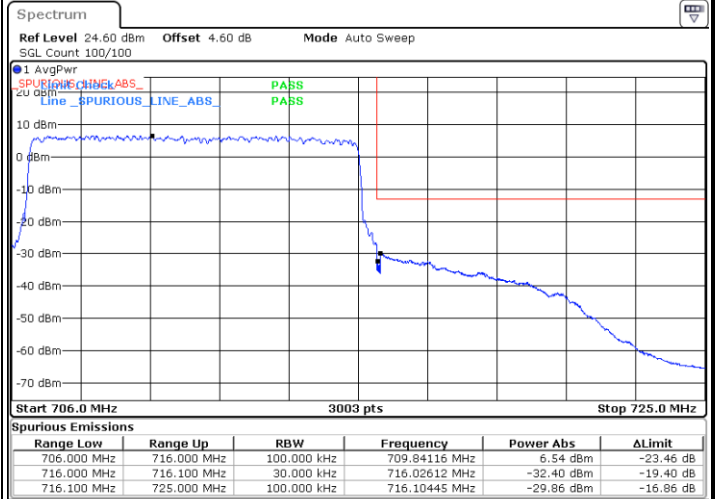
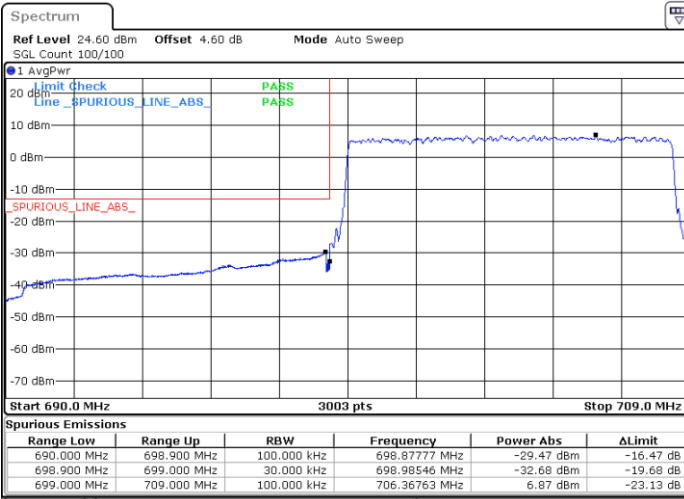


Date: 22.SEP.2022 23:36:43

Date: 22.SEP.2022 23:47:22

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



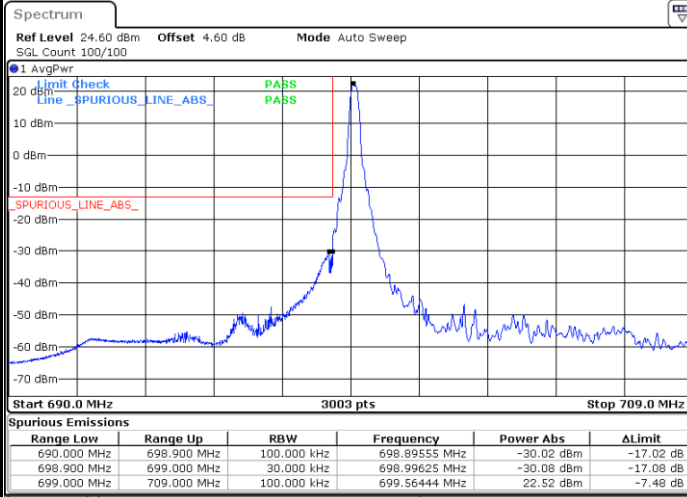
Date: 22.SEP.2022 23:43:23

Date: 22.SEP.2022 23:54:03

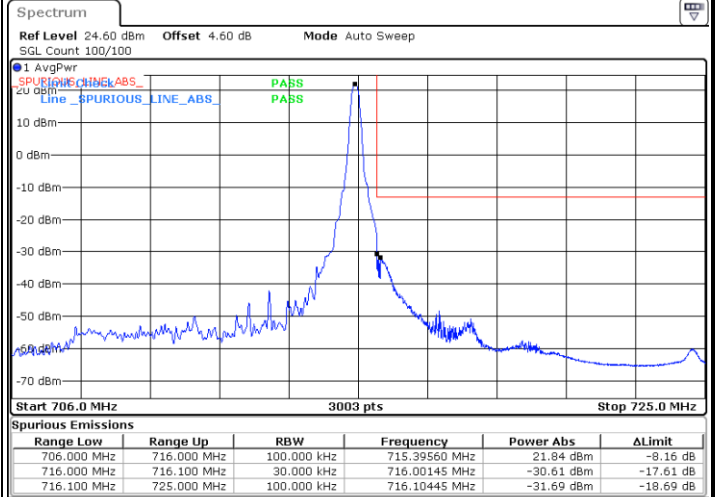


LTE Band 12 / 10MHz / 16QAM

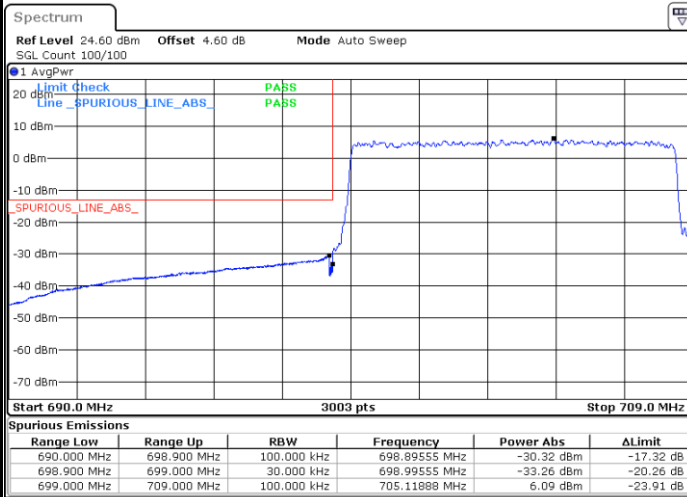
Lowest Band Edge / 1 RB



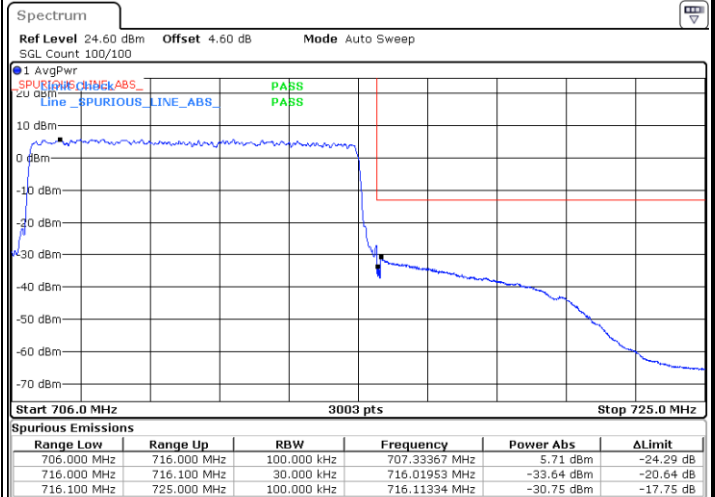
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

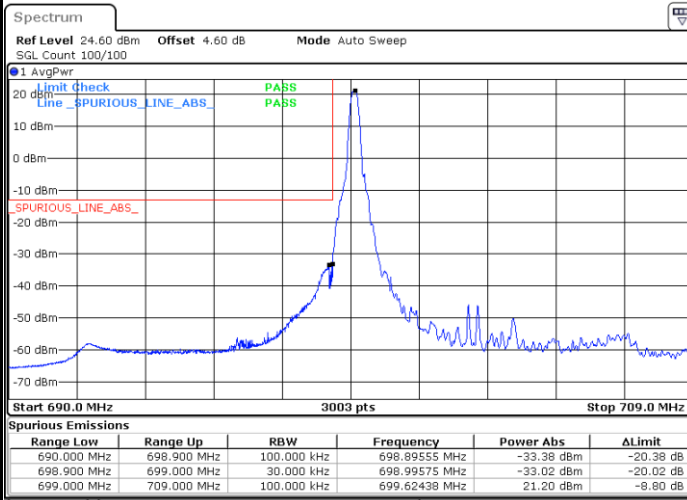






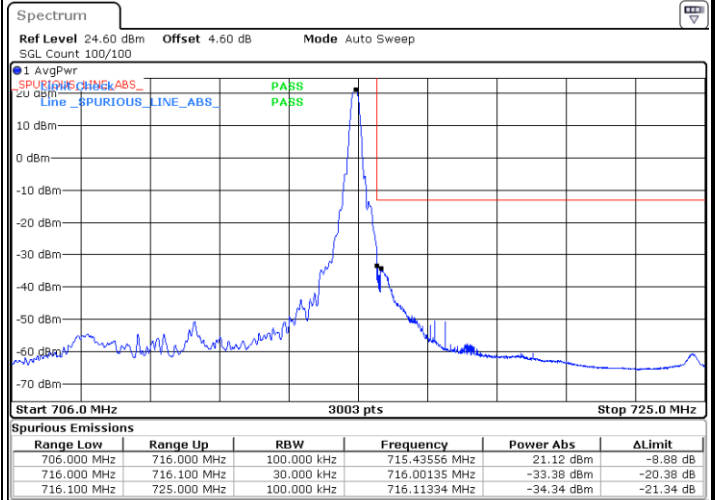
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



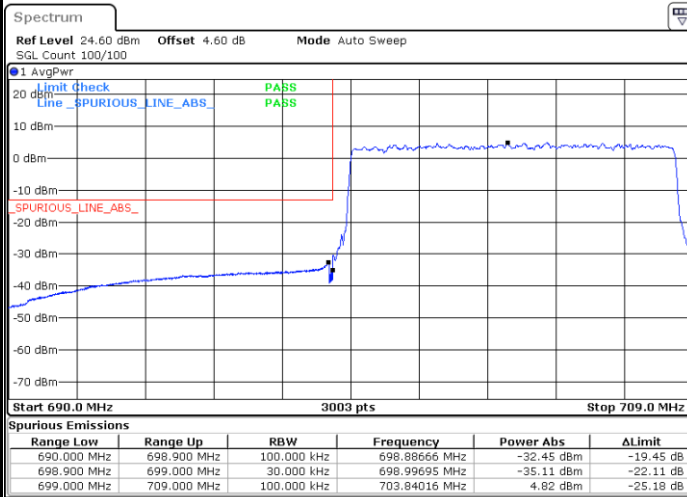
Date: 22.SEP.2022 23:39:23

Highest Band Edge / 1 RB



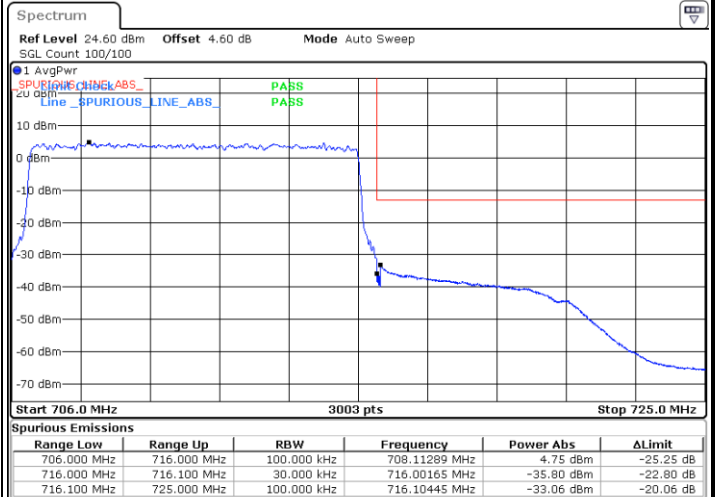
Date: 22.SEP.2022 23:50:02

Lowest Band Edge / Full RB



Date: 22.SEP.2022 23:40:43

Highest Band Edge / Full RB

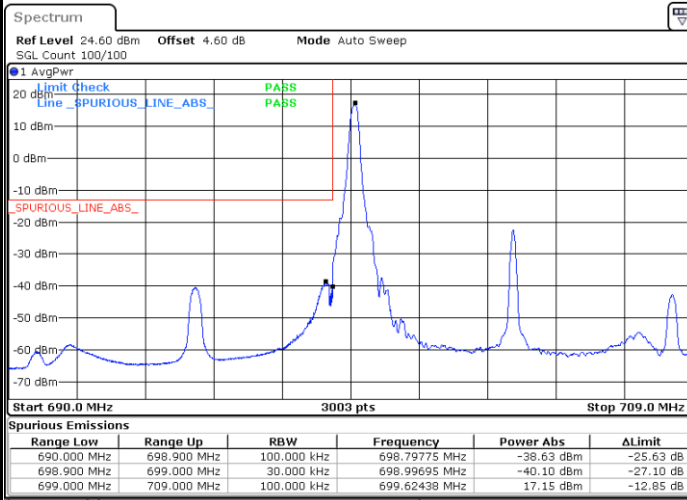


Date: 22.SEP.2022 23:51:22

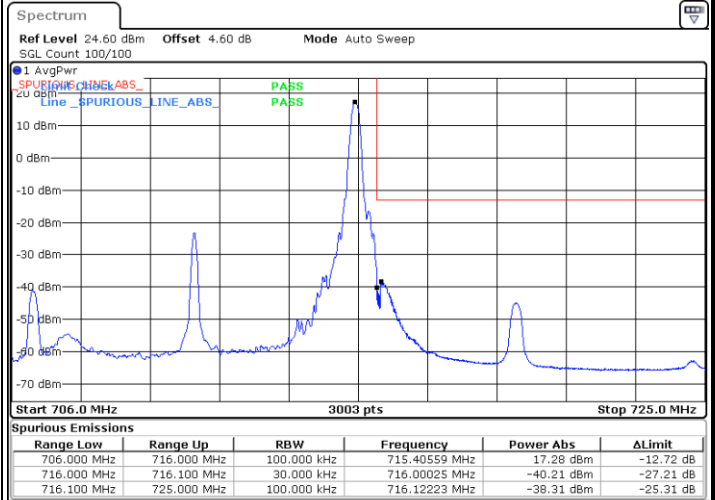


LTE Band 12 / 10MHz / 256QAM

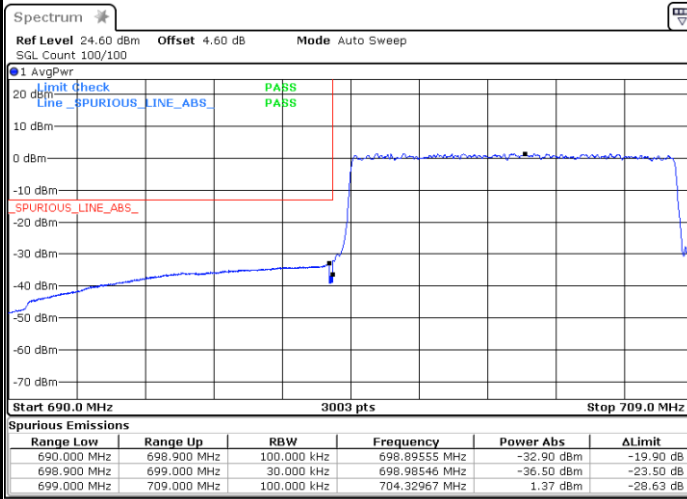
Lowest Band Edge / 1 RB



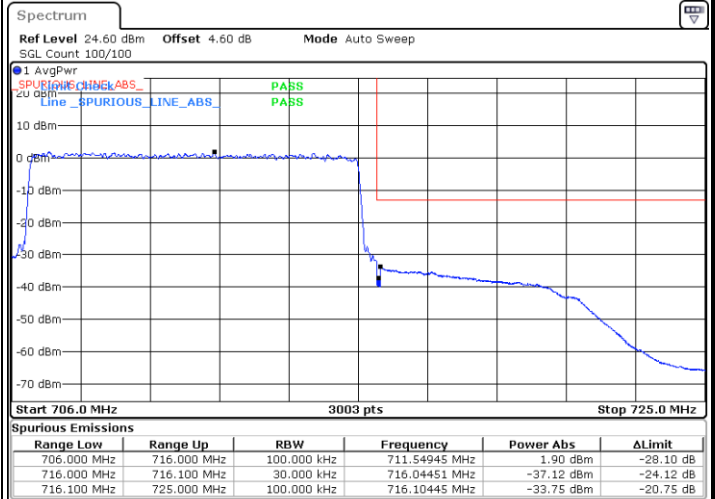
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

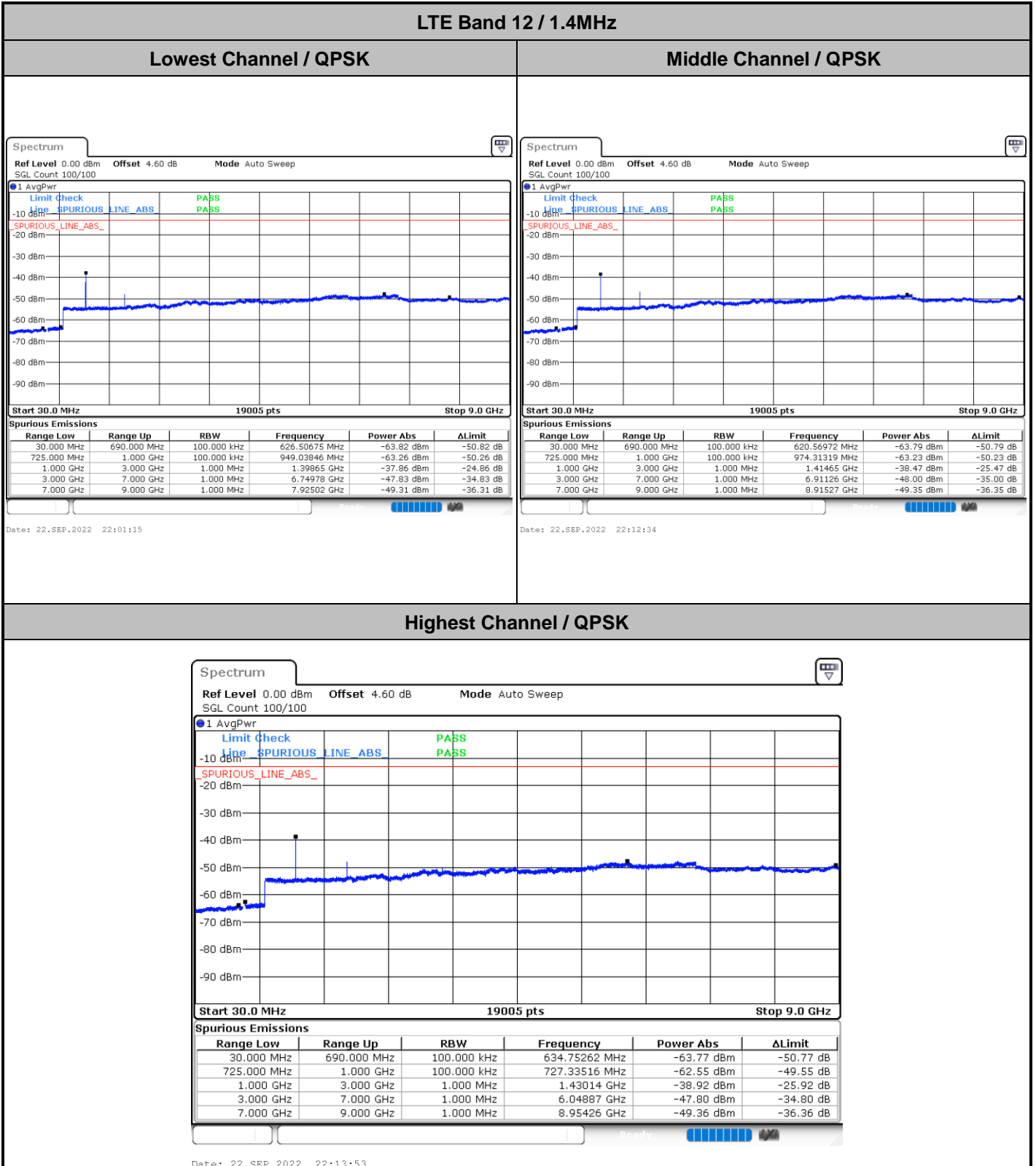


Highest Band Edge / Full RB





# Conducted Spurious Emission

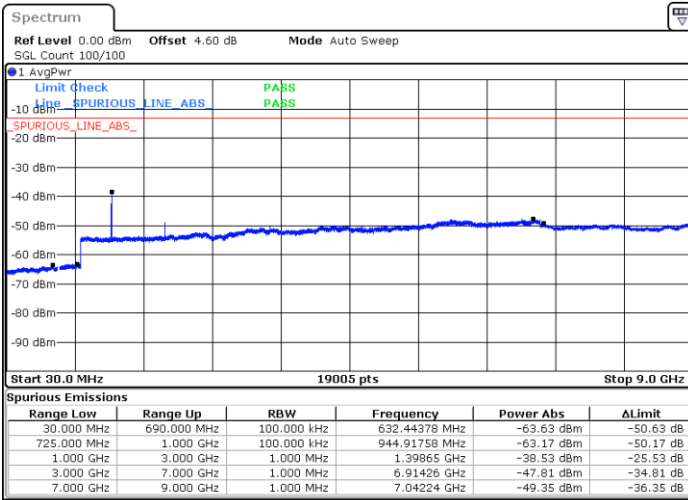




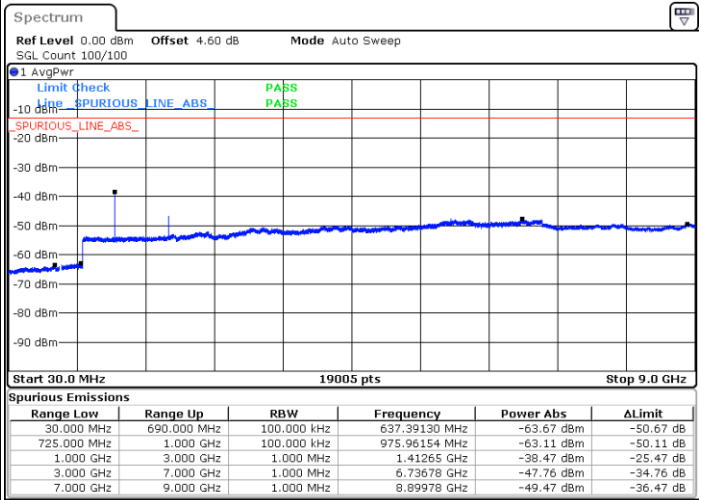
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

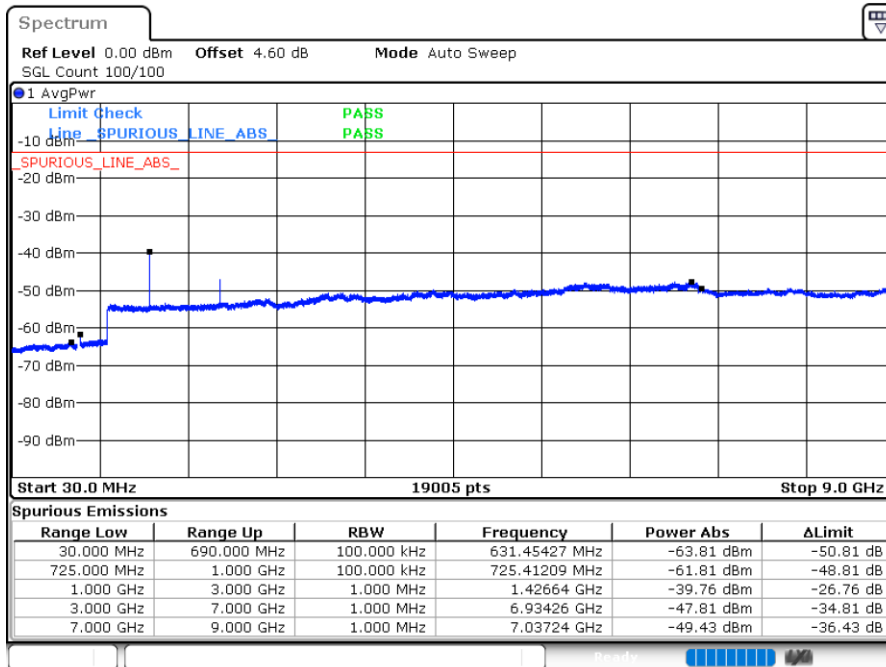


Date: 22.SEP.2022 22:25:18



Date: 22.SEP.2022 22:36:37

Highest Channel / QPSK



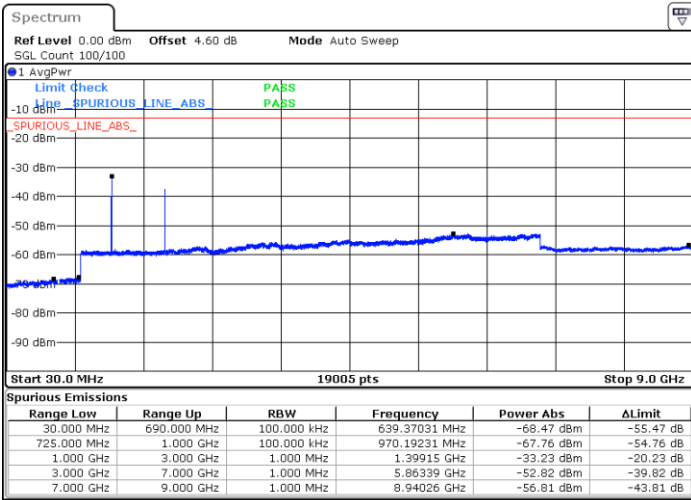
Date: 22.SEP.2022 22:37:56



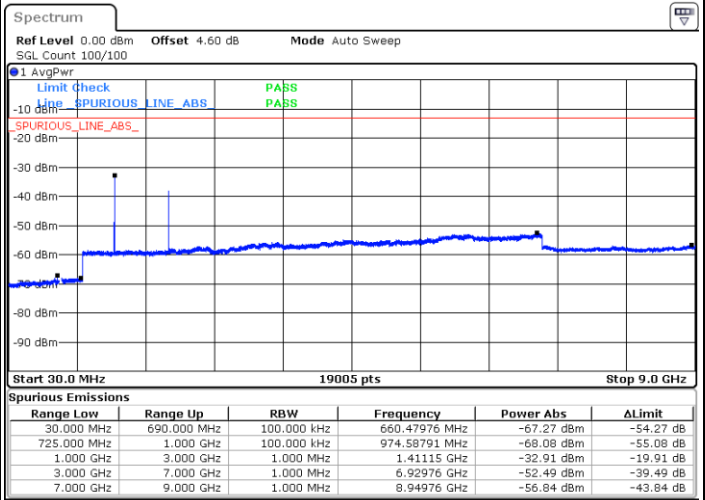
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK

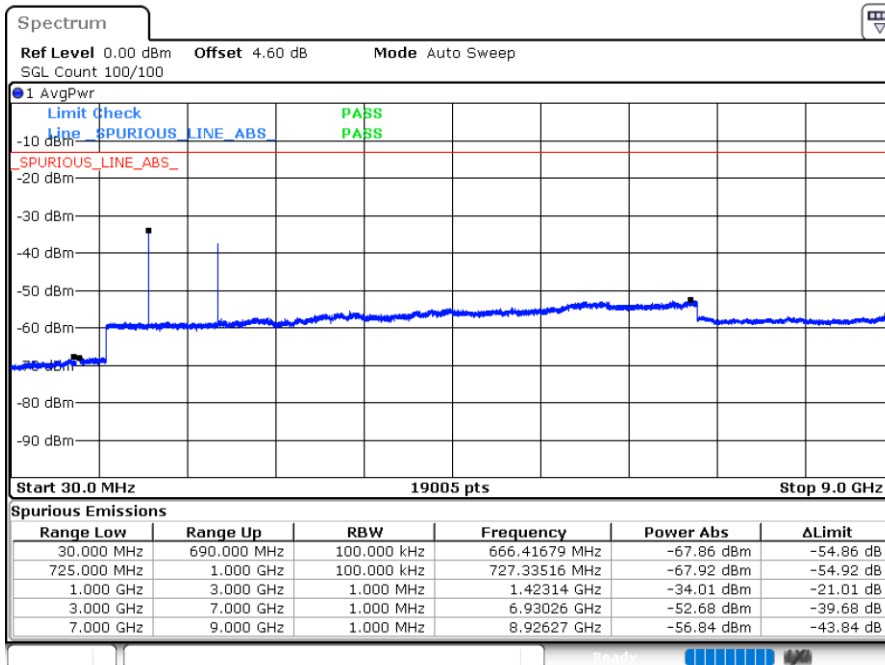


Date: 22.SEP.2022 23:15:09



Date: 22.SEP.2022 23:24:33

Highest Channel / QPSK



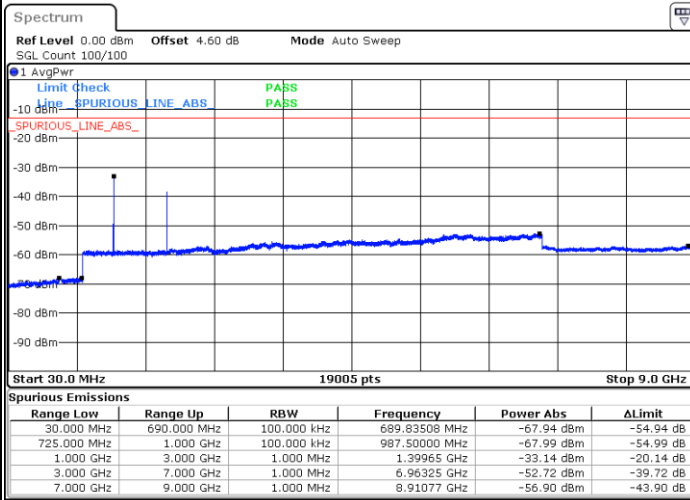
Date: 22.SEP.2022 23:25:52



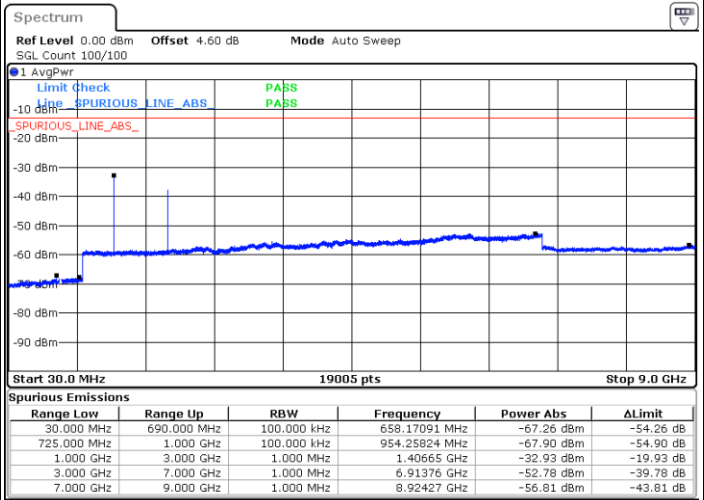
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

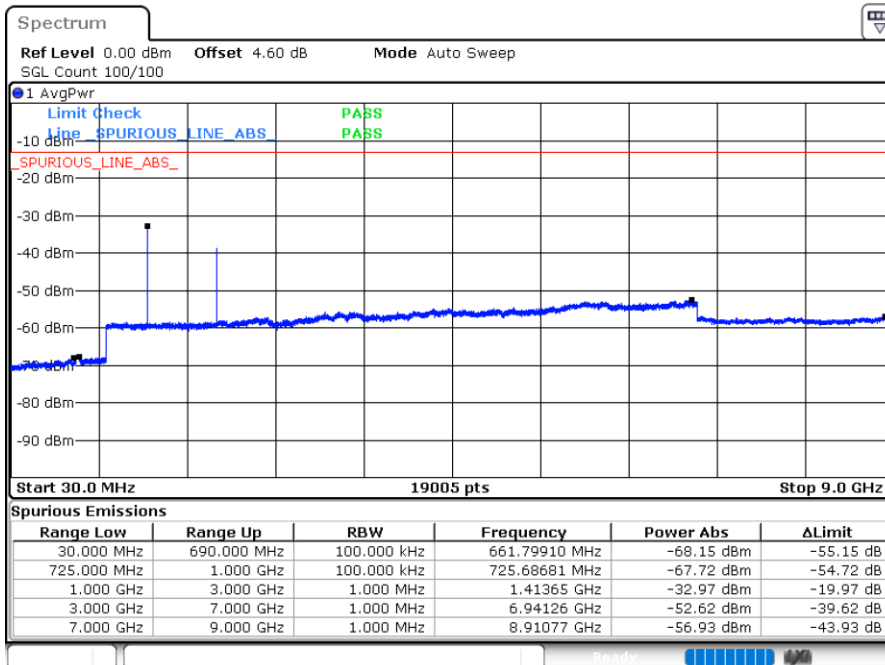


Date: 22.SEP.2022 23:35:18



Date: 22.SEP.2022 23:44:42

Highest Channel / QPSK



Date: 22.SEP.2022 23:46:02



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	0.0016	
30	Normal Voltage	0.0014	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0019	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0031	
20	Maximum Voltage	0.0019	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0013	

Note:

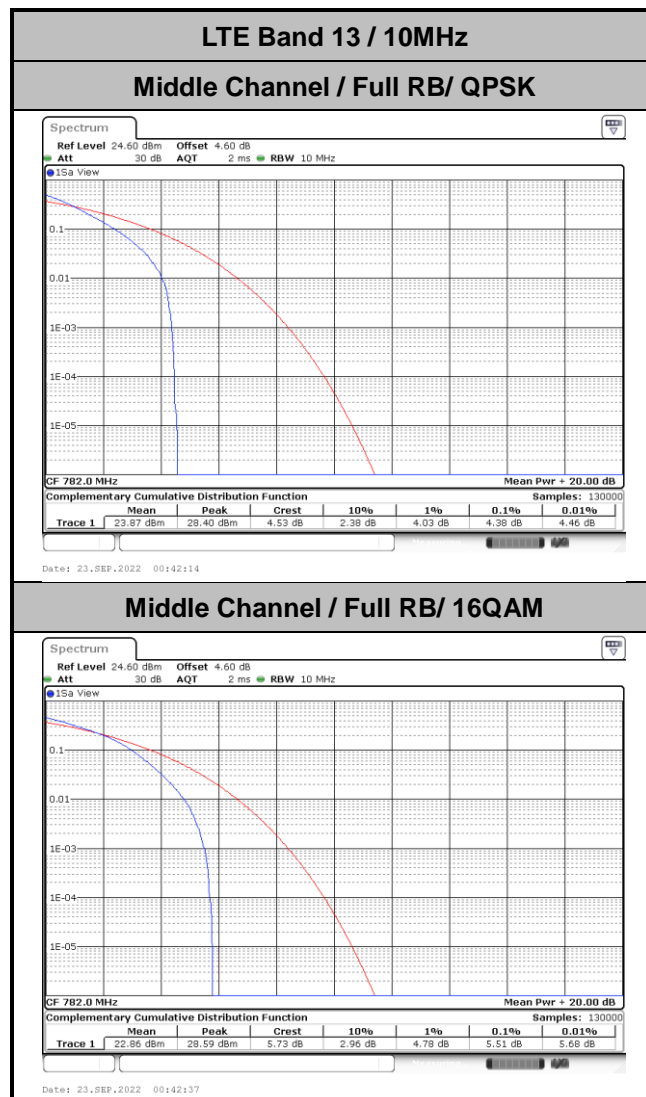
- 3. Normal Voltage =3.88 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.27 V.
- 4. Note: The frequency fundamental emissions stay within the authorized frequency block.



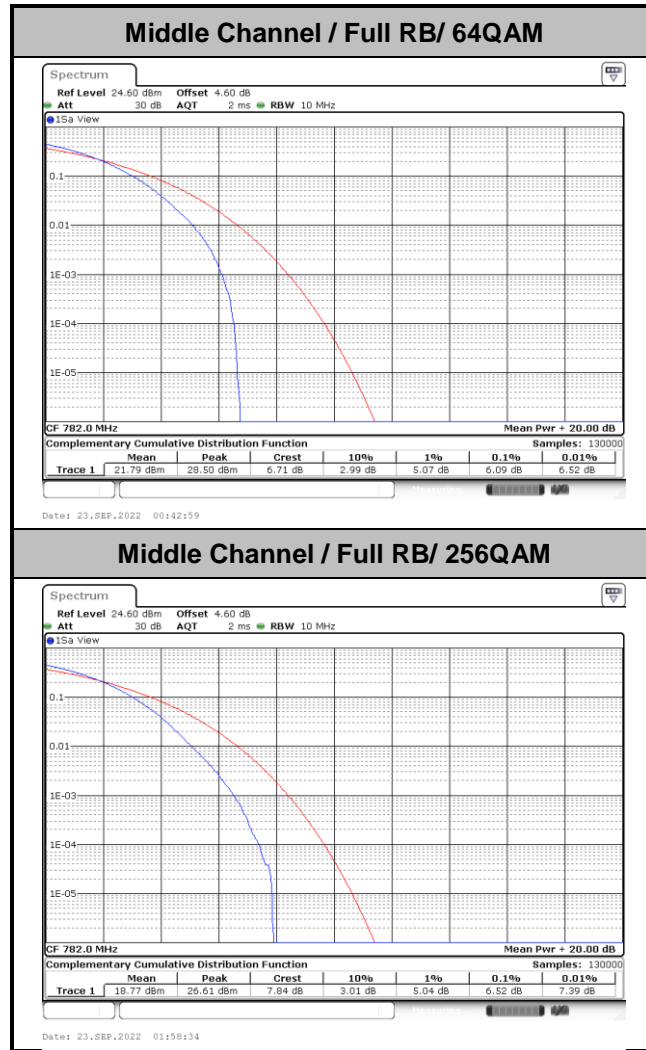
# LTE Band 13

## Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.38	5.51	6.09	6.52	PASS



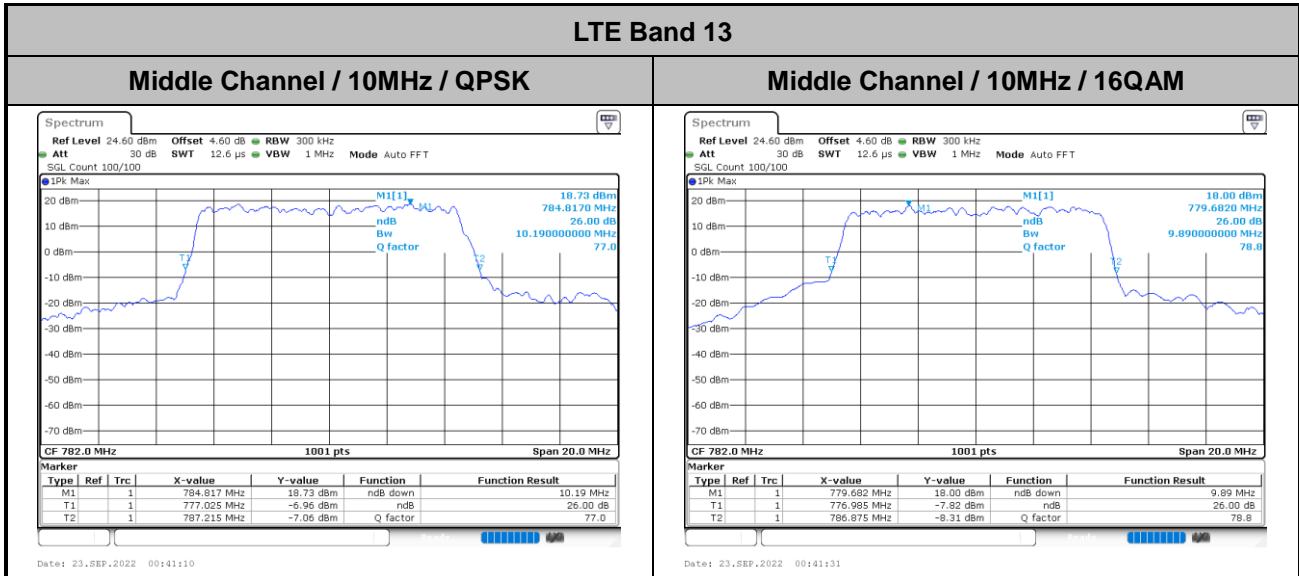






## 26dB Bandwidth

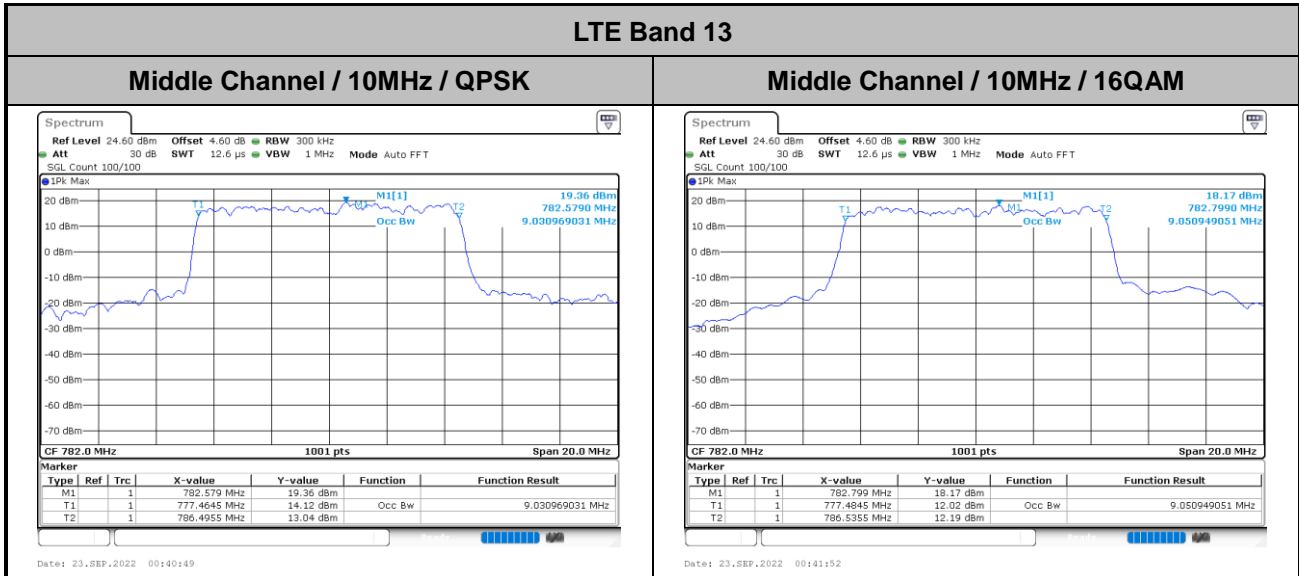
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	10.19	9.89





# Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.03	9.05

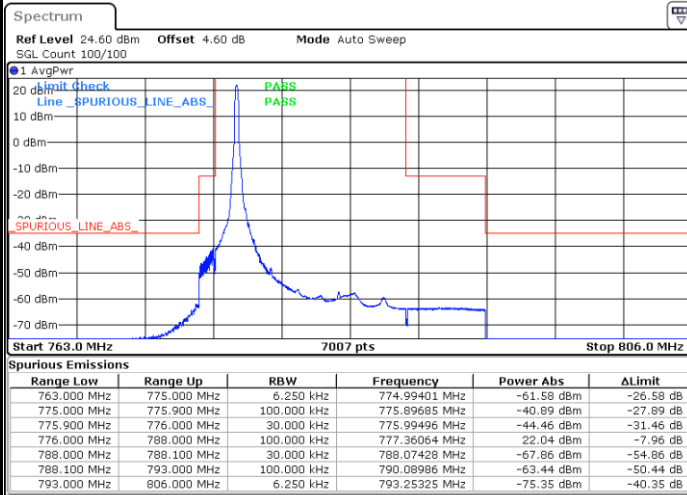




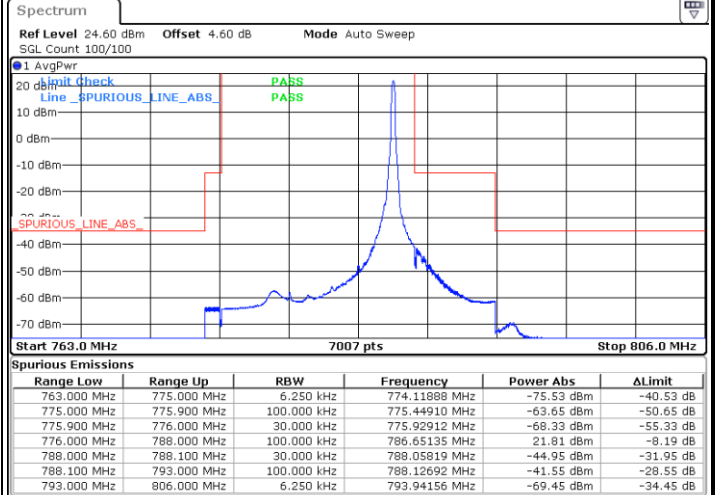
# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

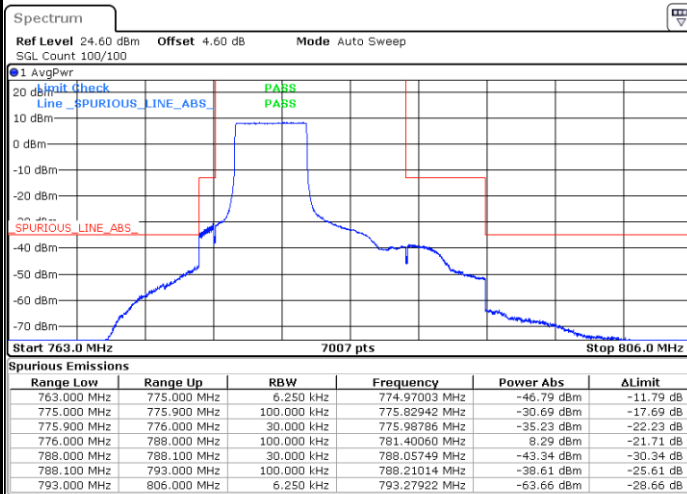
### Lowest Band Edge / 1 RB



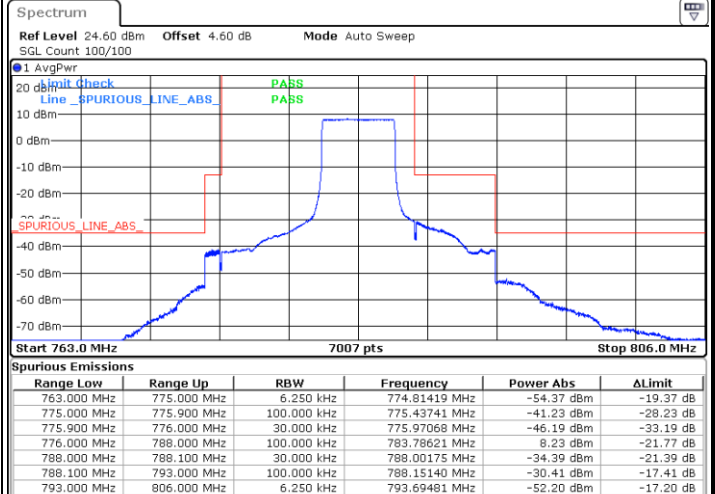
### Highest Band Edge / 1 RB



### Lowest Band Edge / Full RB



### Highest Band Edge / Full RB

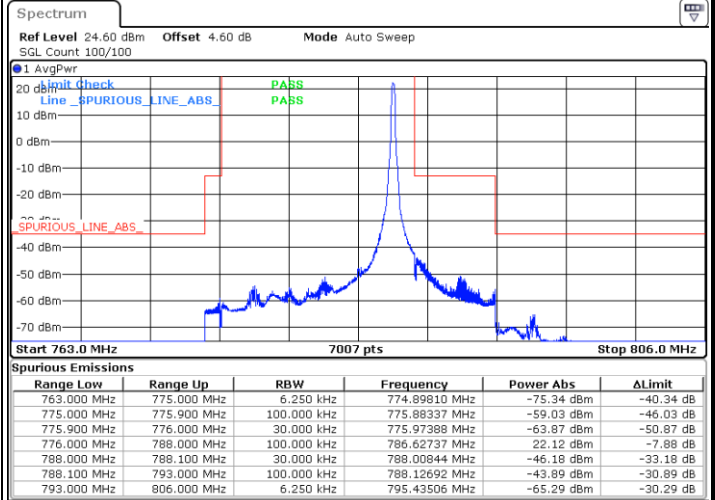
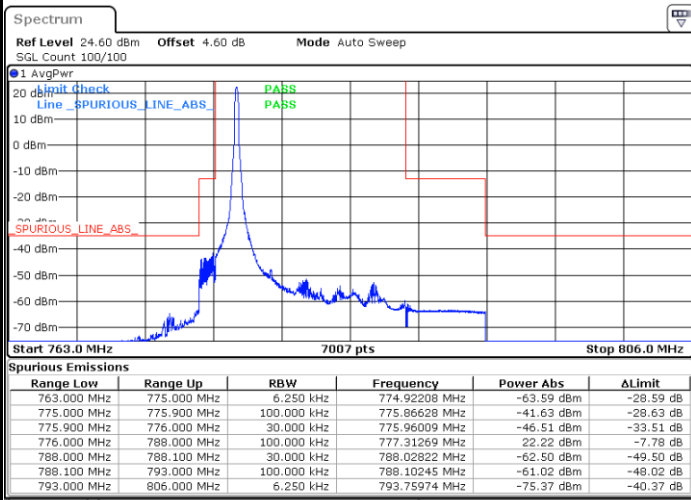




LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

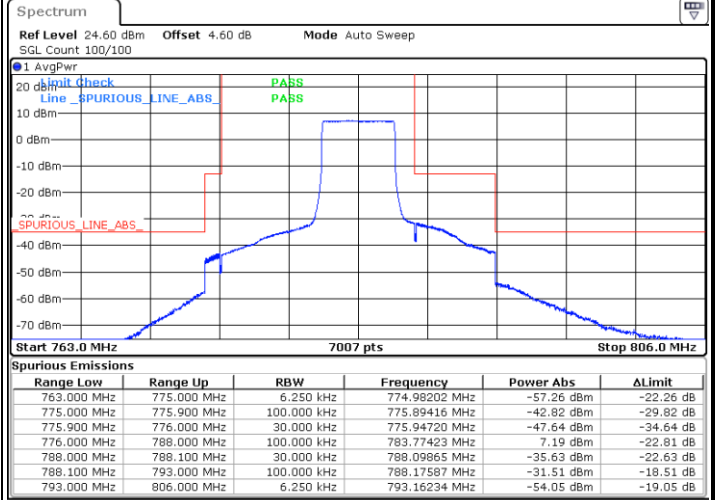
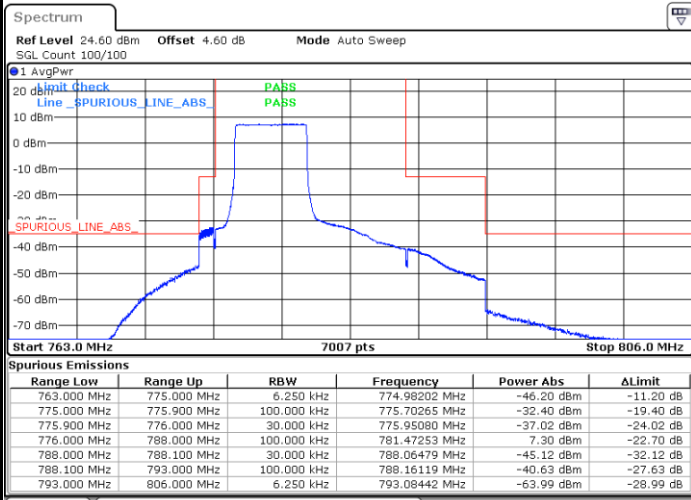


Date: 23.SEP.2022 00:00:17

Date: 23.SEP.2022 00:15:20

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.SEP.2022 00:05:50

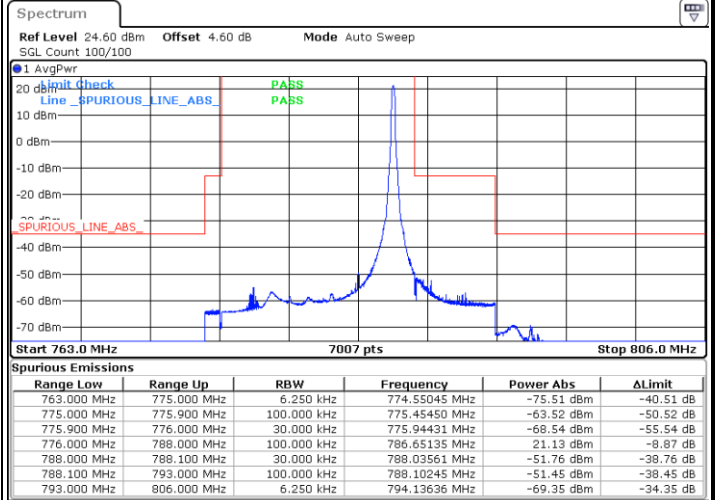
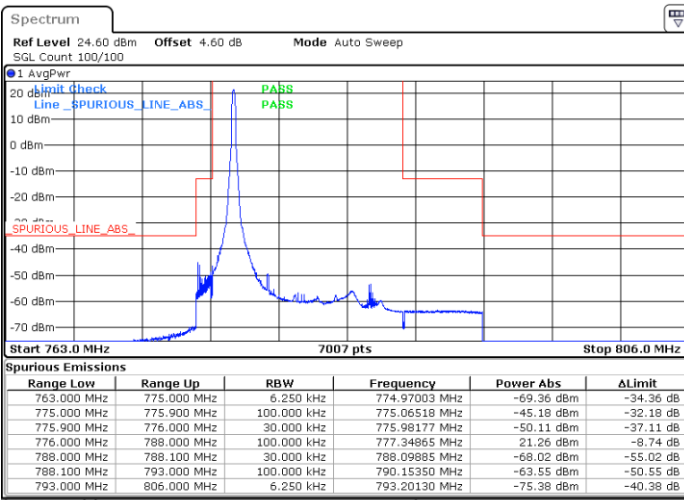
Date: 23.SEP.2022 00:20:50



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

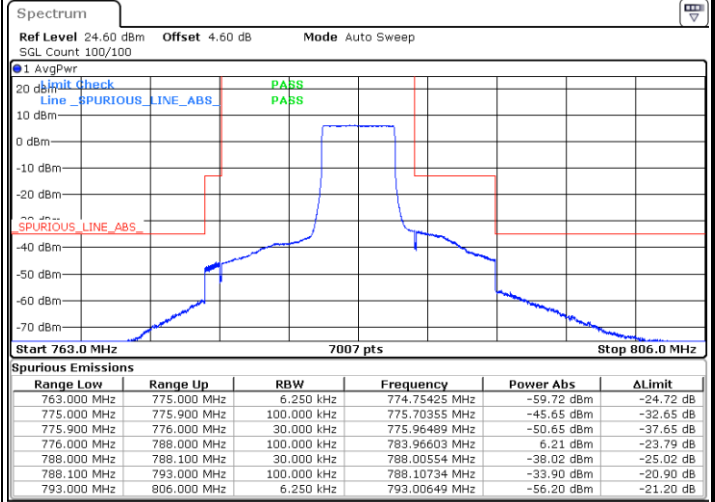
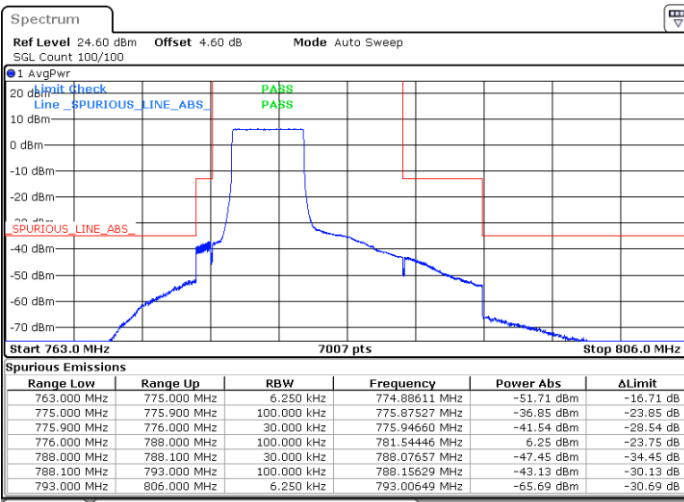


Date: 23.SEP.2022 00:02:07

Date: 23.SEP.2022 00:17:10

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.SEP.2022 00:03:57

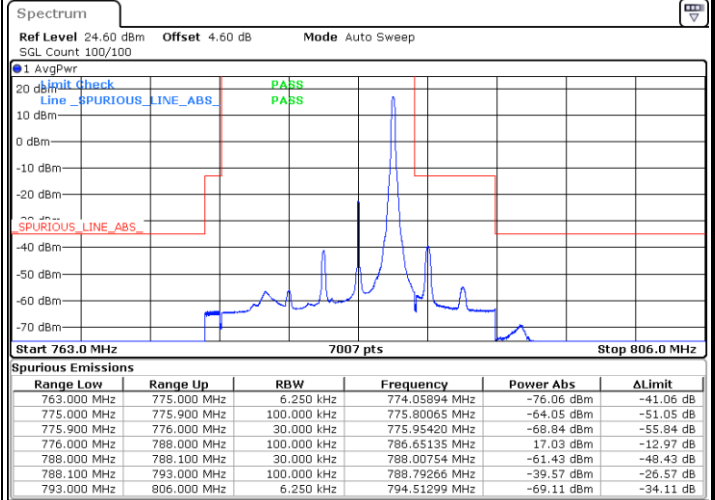
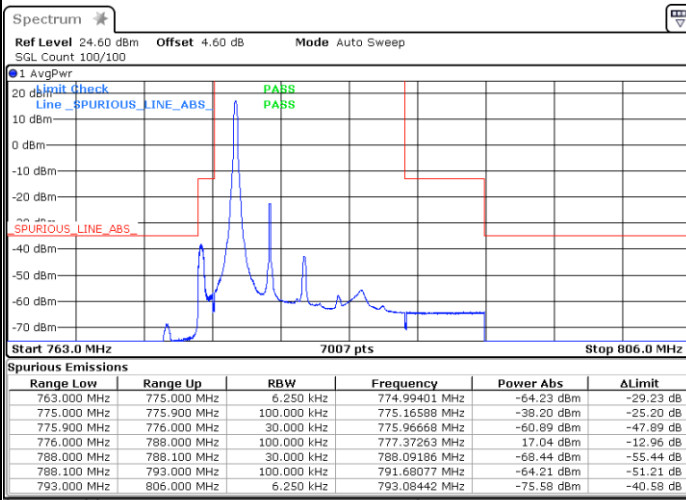
Date: 23.SEP.2022 00:19:00



LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

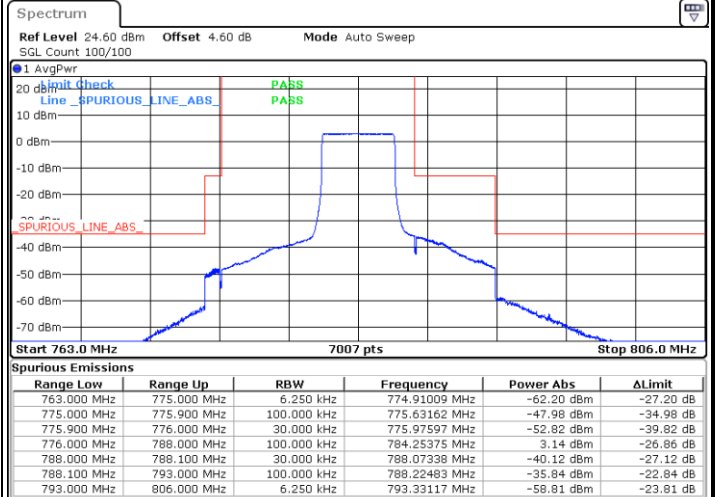
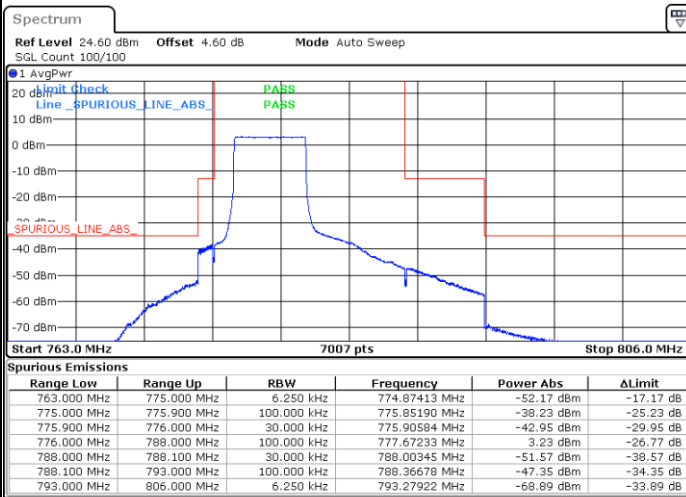


Date: 23.SEP.2022 02:15:00

Date: 23.SEP.2022 02:19:07

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 23.SEP.2022 02:13:06

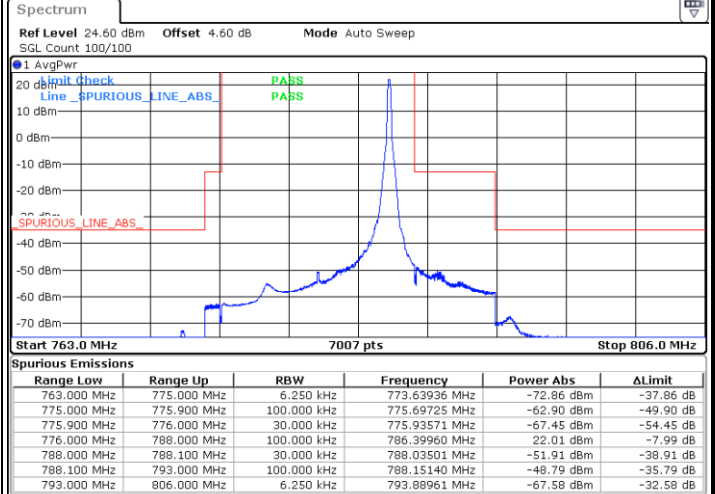
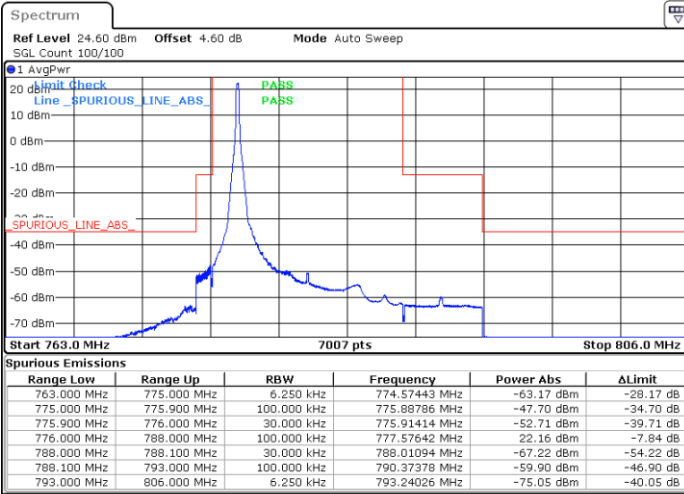
Date: 23.SEP.2022 02:20:34



LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB

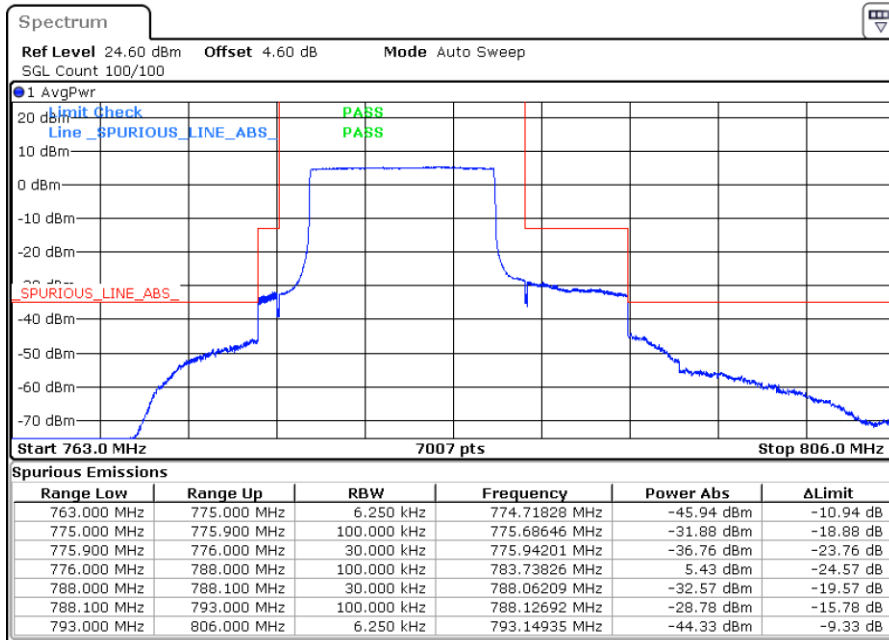
middle Band Edge / 1 RB



Date: 23\_SEP\_2022 00:33:41

Date: 23\_SEP\_2022 00:36:49

Middle Band Edge / Full RB



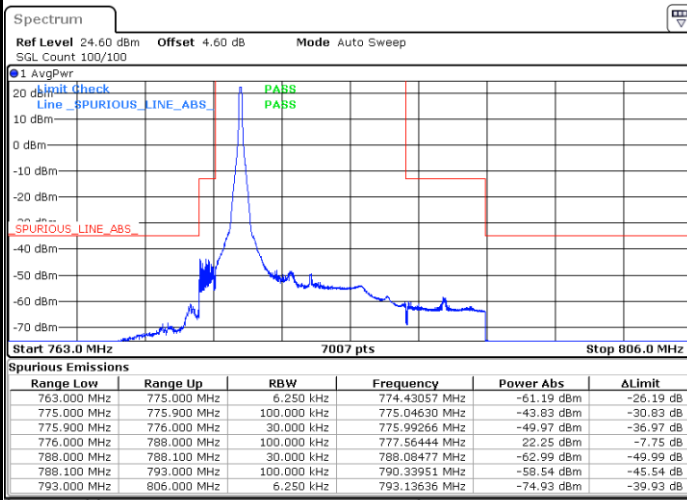
Date: 23\_SEP\_2022 00:24:30





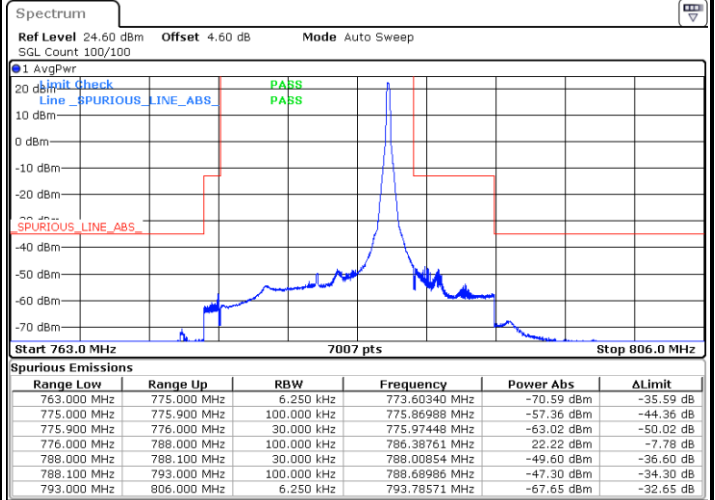
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



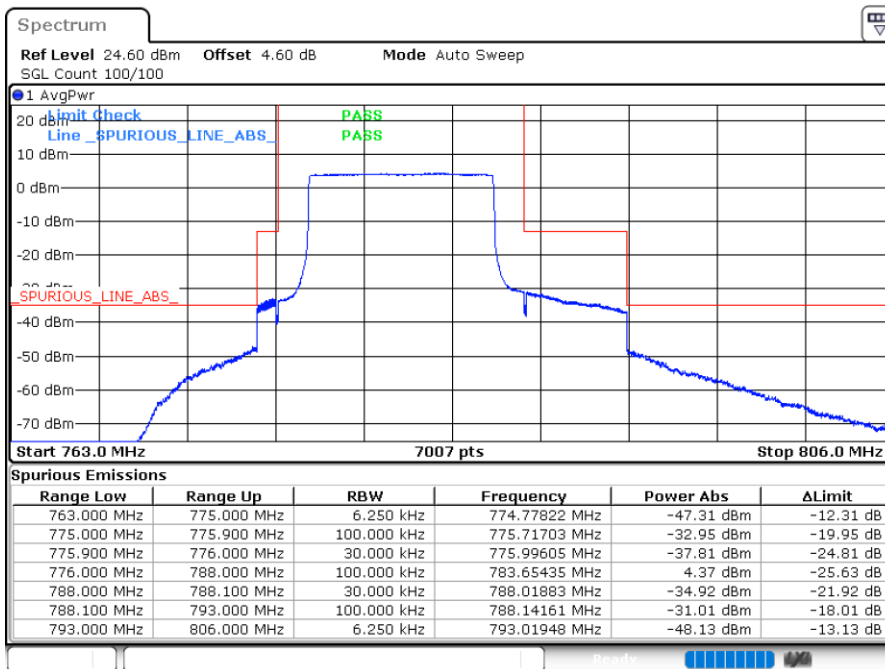
Date: 23.SEP.2022 00:31:52

middle Band Edge / 1 RB



Date: 23.SEP.2022 00:38:38

middle Band Edge / Full RB

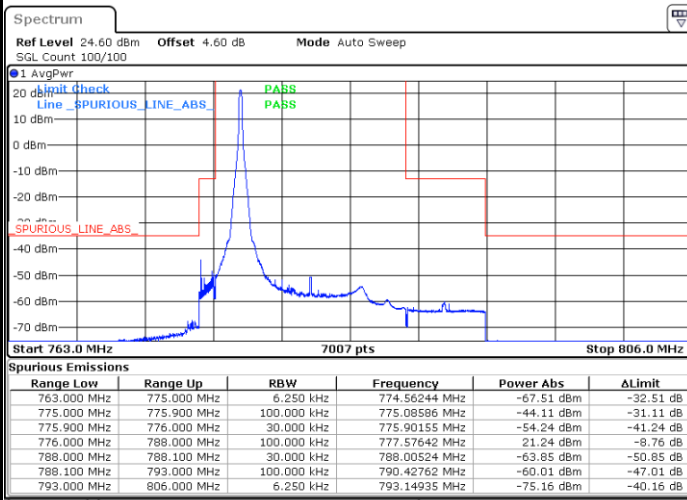


Date: 23.SEP.2022 00:26:20



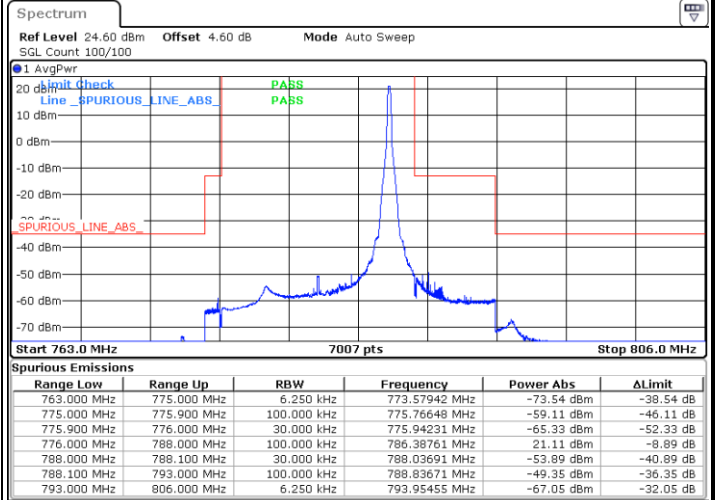
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



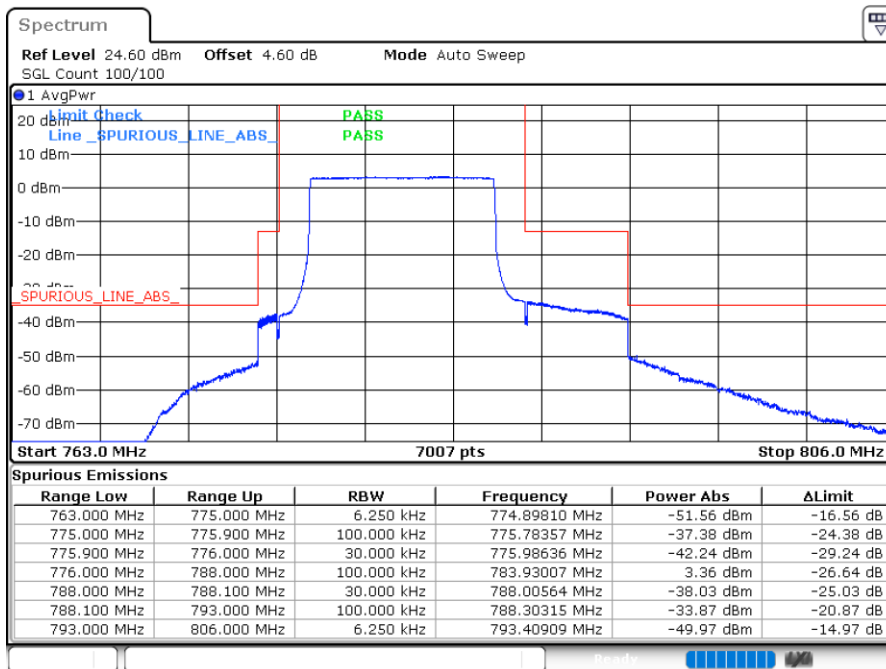
Date: 23.SEP.2022 00:29:59

middle Band Edge / 1 RB



Date: 23.SEP.2022 00:40:28

middle Band Edge / Full RB



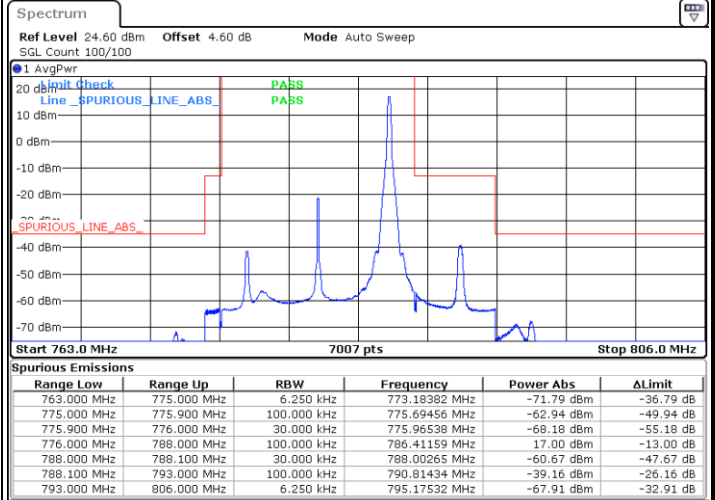
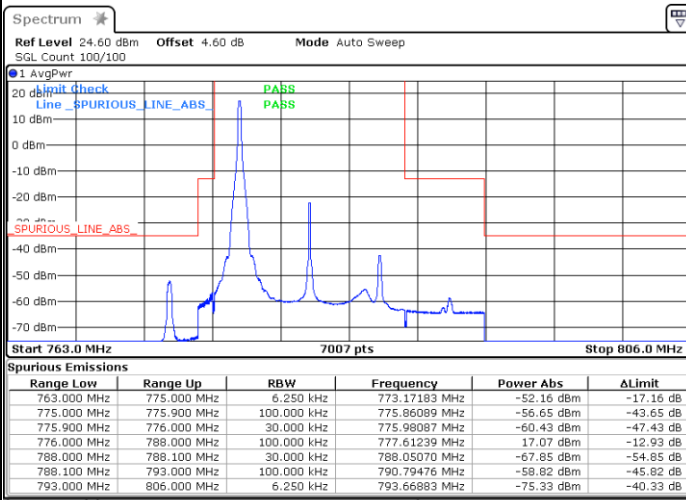
Date: 23.SEP.2022 00:28:09



LTE Band 13 / 10MHz /256QAM

middle Band Edge / 1 RB

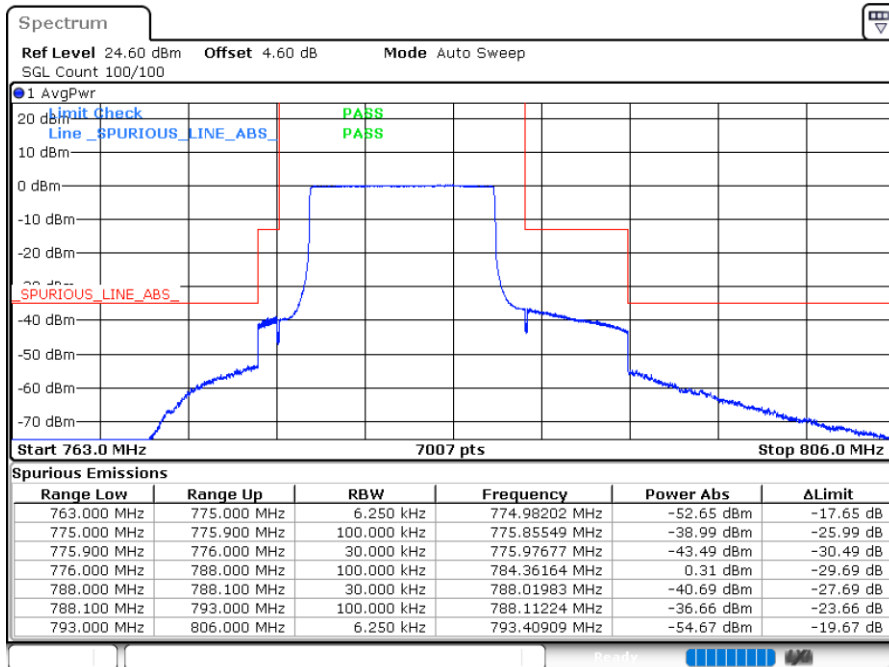
middle Band Edge / 1 RB



Date: 23.SEP.2022 02:06:47

Date: 23.SEP.2022 02:08:55

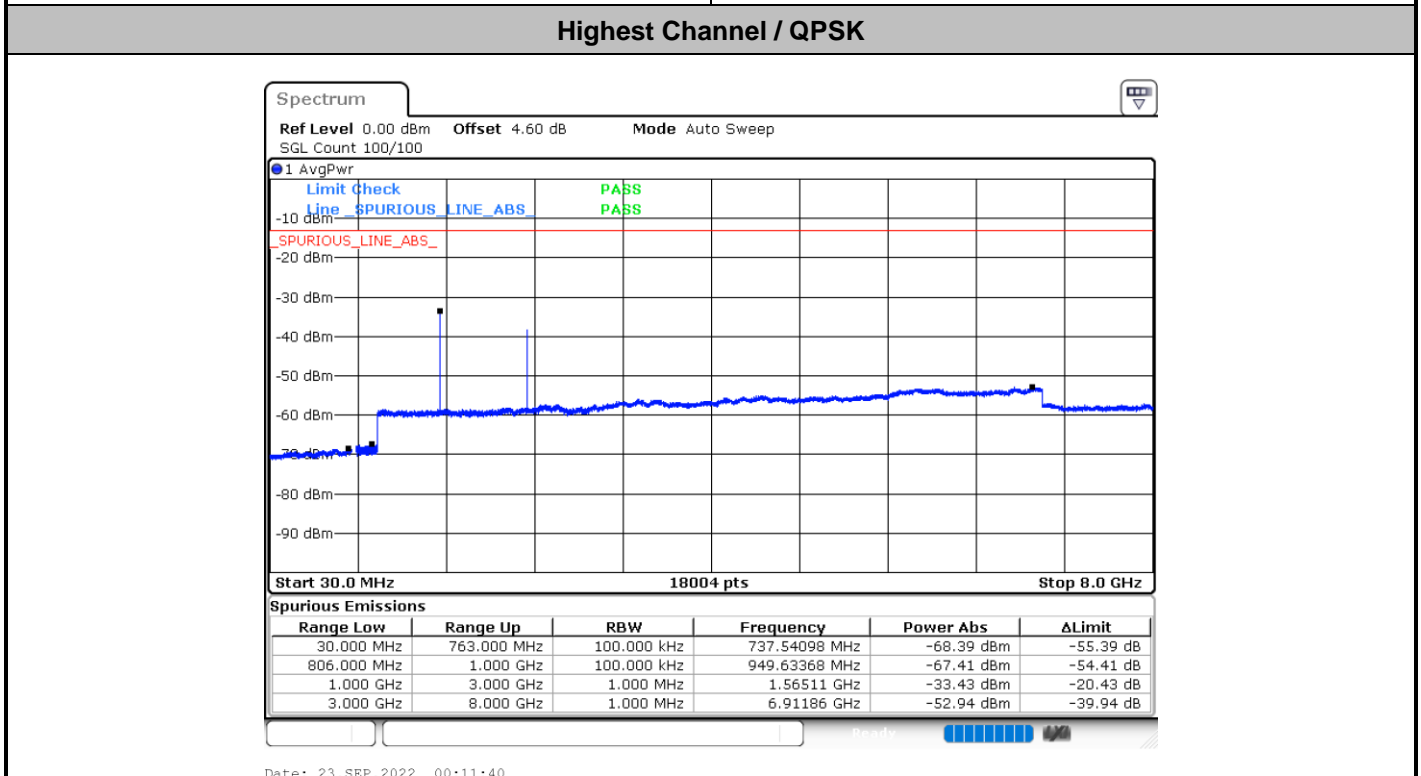
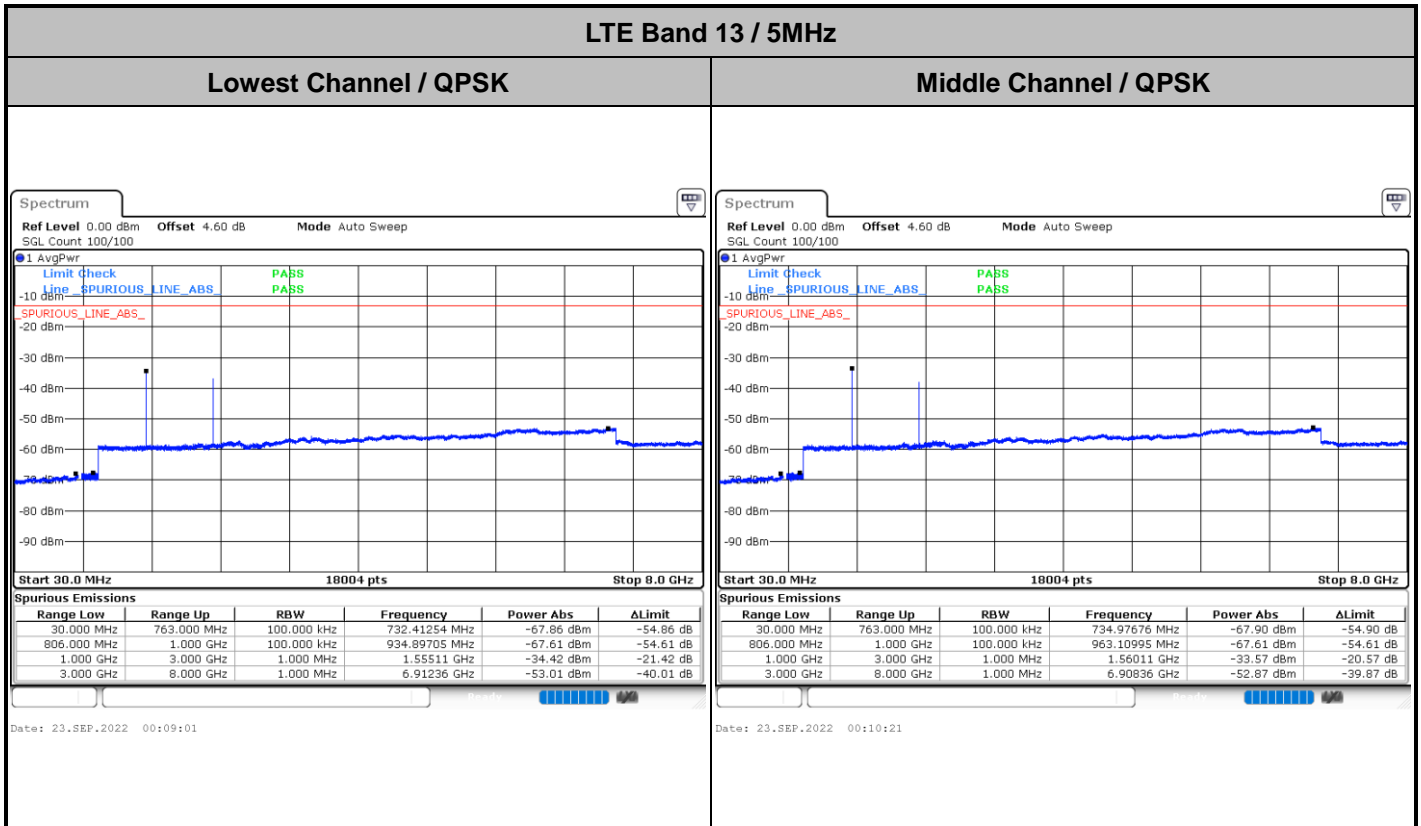
middle Band Edge / Full RB



Date: 23.SEP.2022 02:10:42



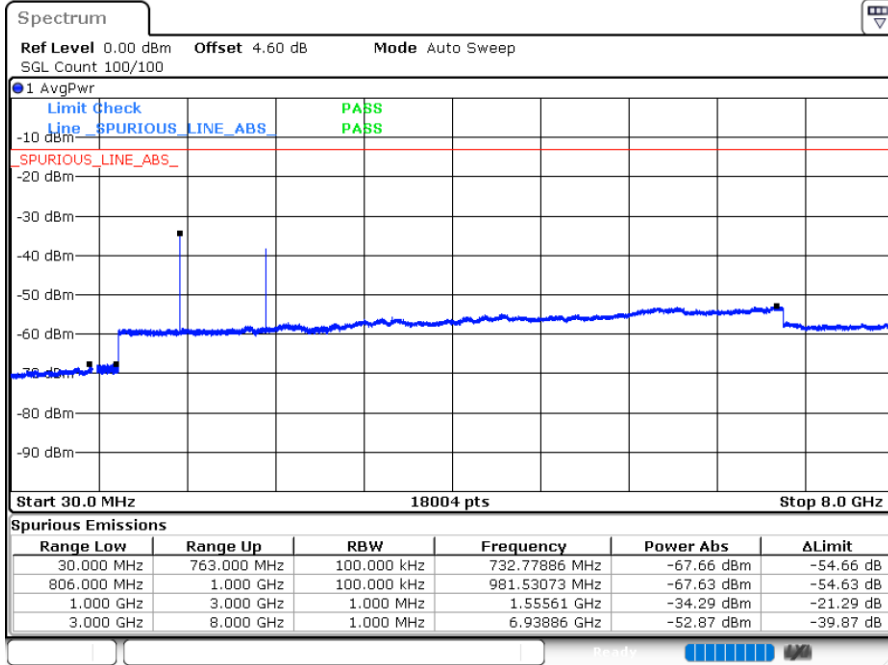
# Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 23 SEP 2022 00:35:00



### 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	0.0026	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0023	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0009	
20	Battery End Point	0.0011	

**Note:**

1. Normal Voltage =3.88 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.27 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.