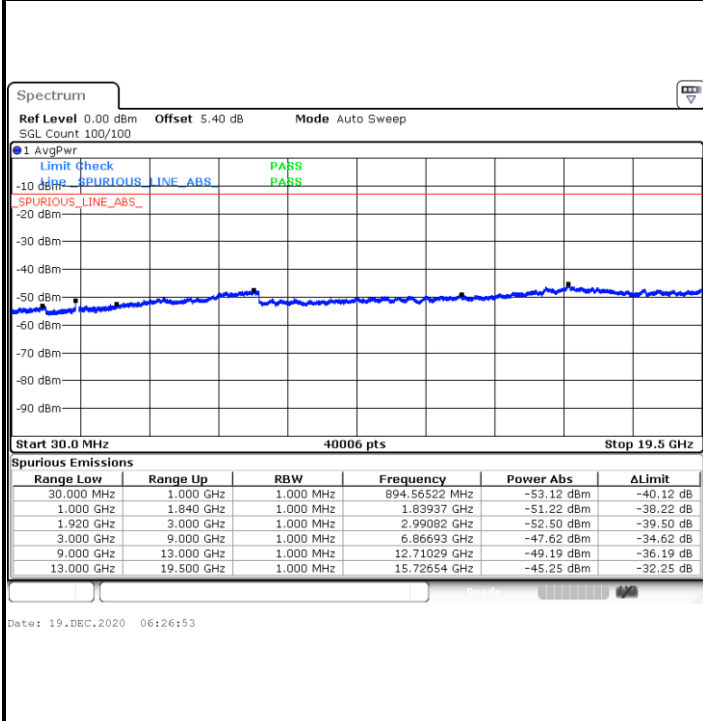


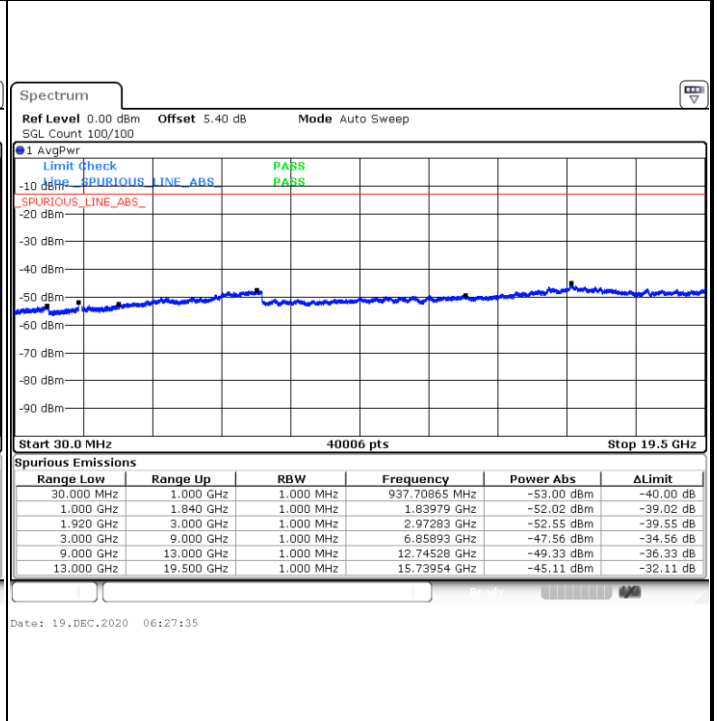


**LTE Band 2 / 15MHz**

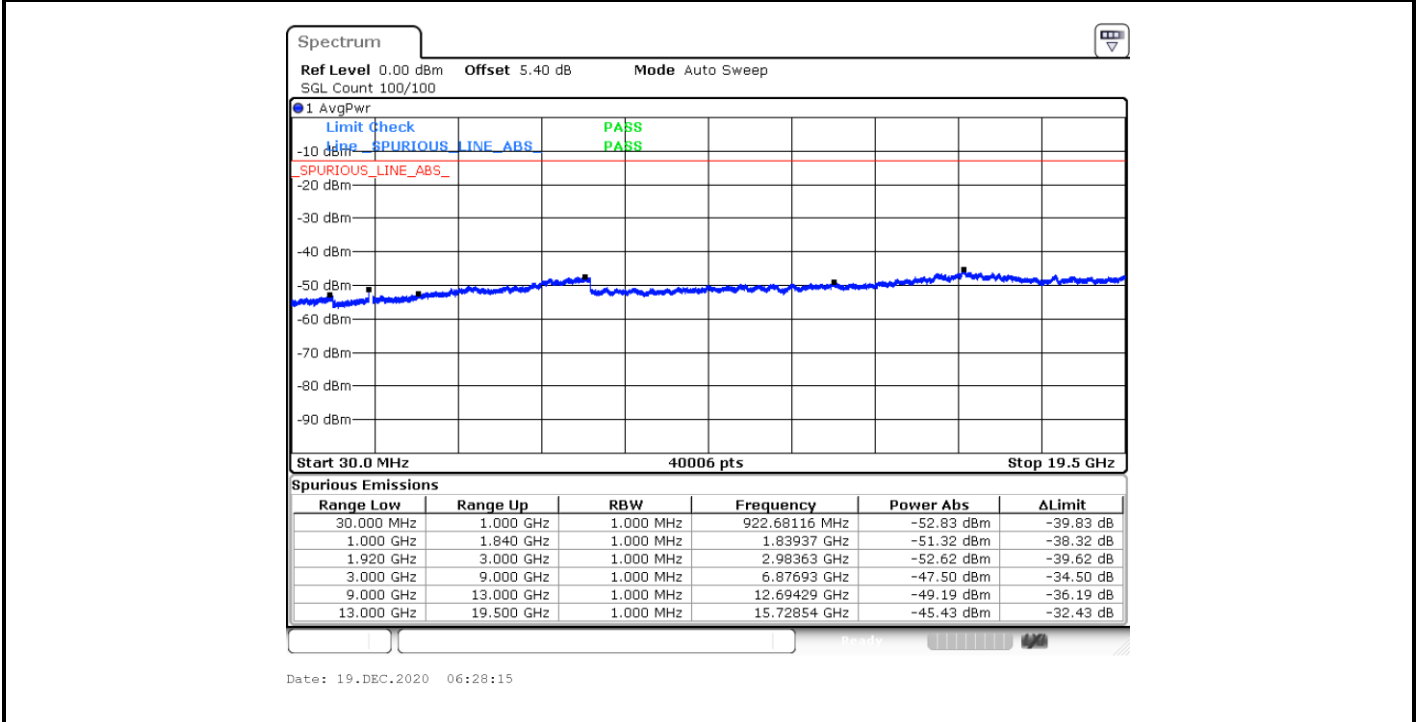
**Lowest Channel / QPSK**



**Middle Channel / QPSK**



**Highest Channel / QPSK**

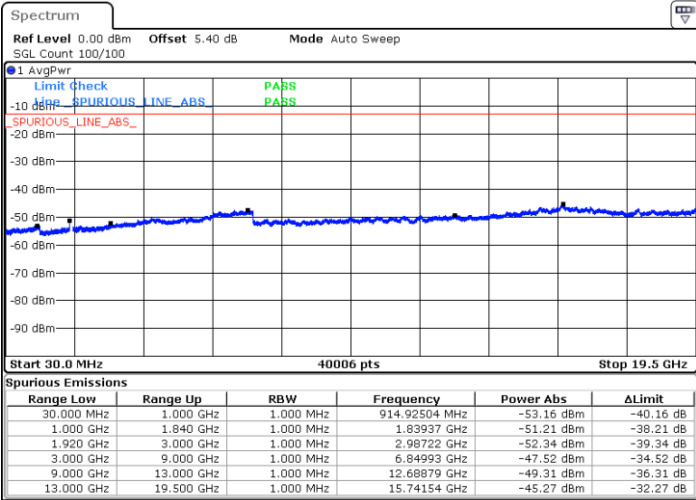




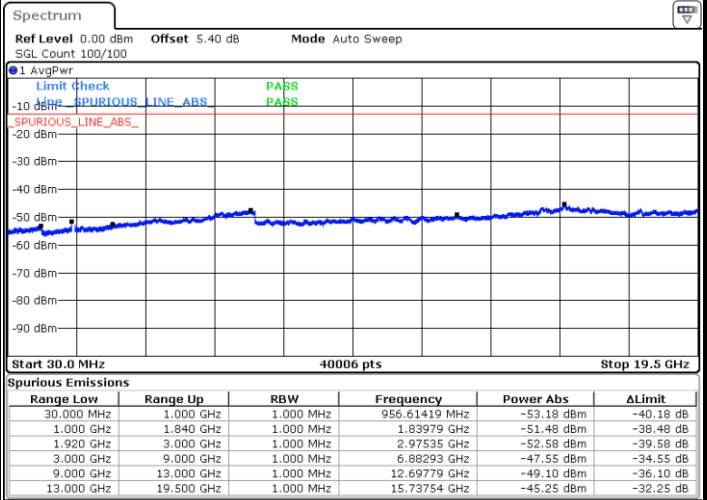
LTE Band 2 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

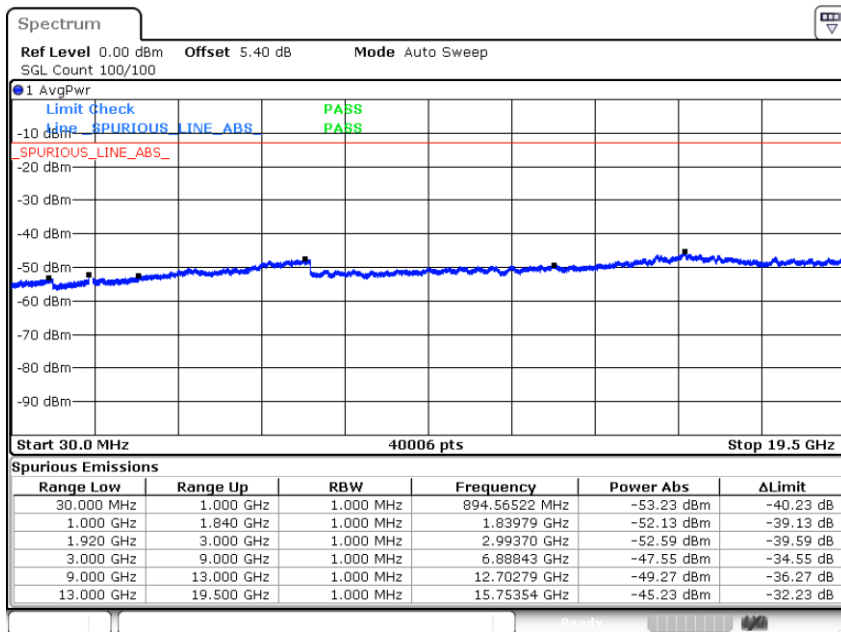


Date: 19.DEC.2020 06:26:10



Date: 19.DEC.2020 06:25:25

Highest Channel / QPSK



Date: 19.DEC.2020 06:24:10



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0034	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0009	
-10	Normal Voltage	0.0016	
-20	Normal Voltage	0.0024	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

Note:

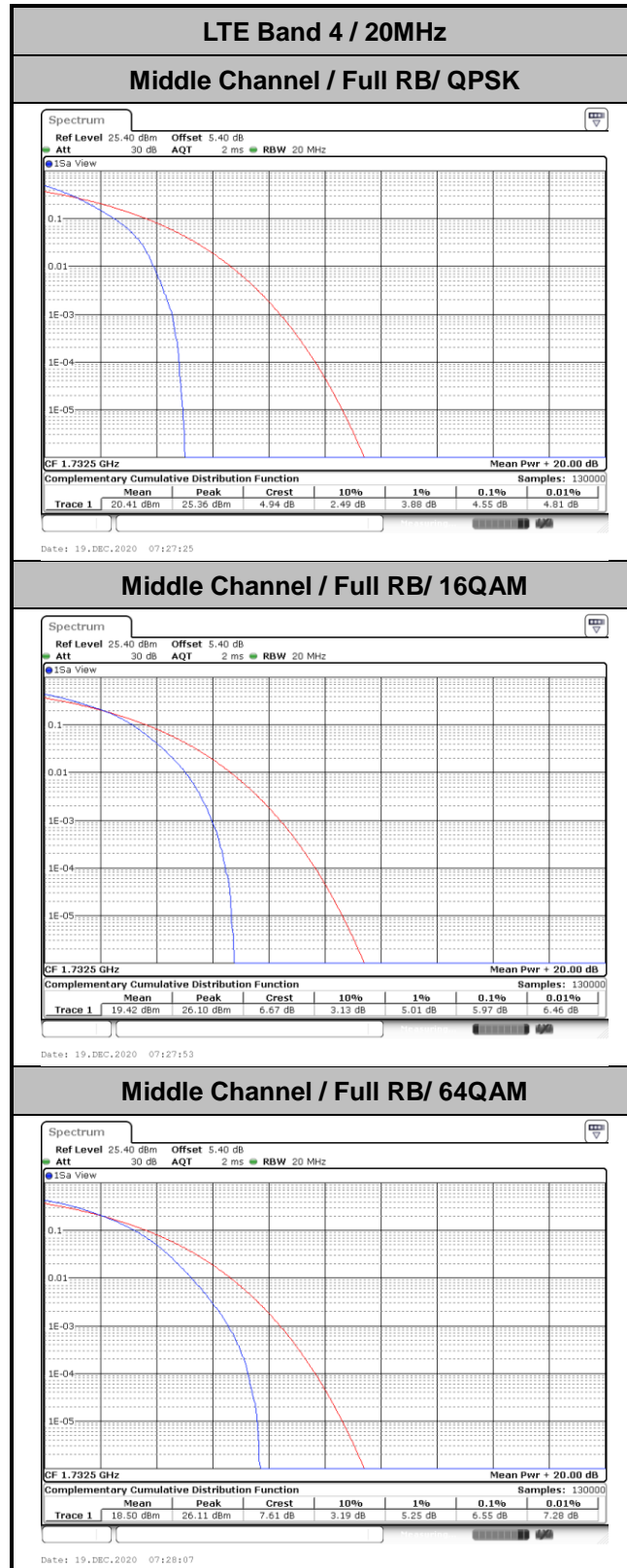
1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 4

### Peak-to-Average Ratio

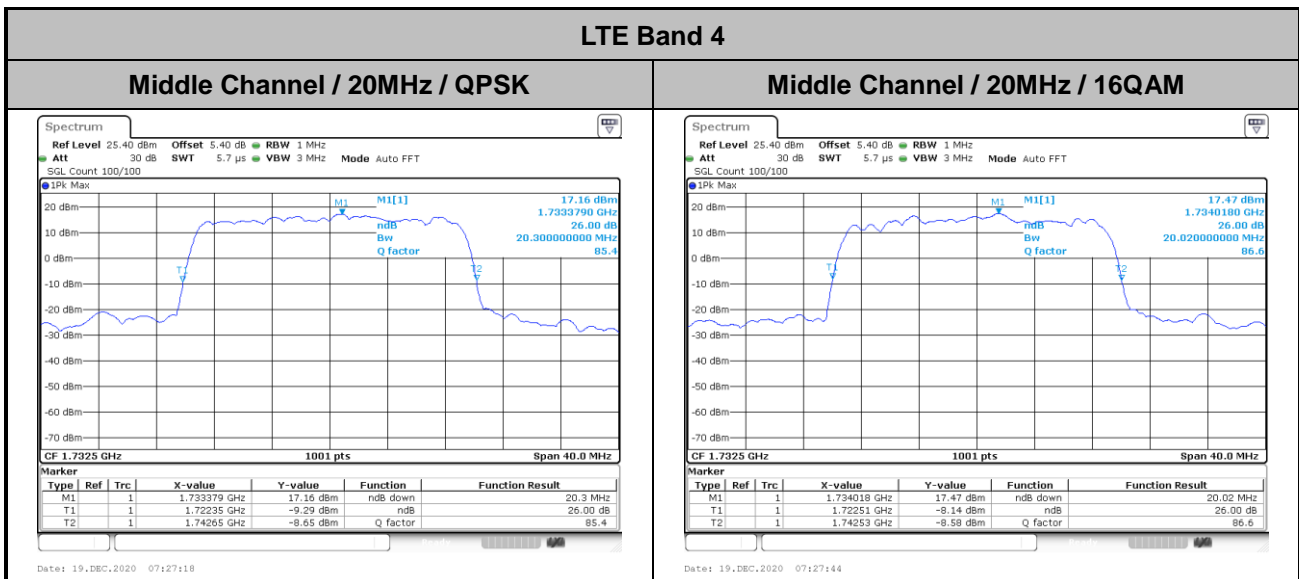
Mode	LTE Band 4 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.55	5.97	6.55	<b>PASS</b>





## 26dB Bandwidth

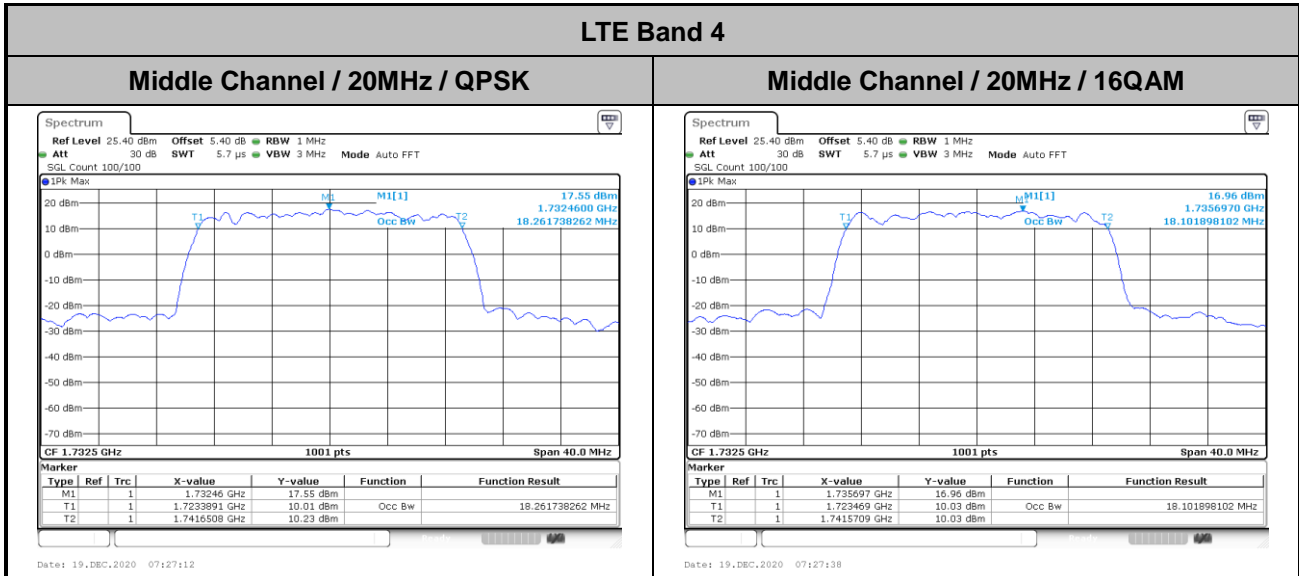
<b>Mode</b>	<b>LTE Band 4 : 26dB BW(MHz)</b>	
<b>BW</b>	<b>20MHz</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	20.30	20.02





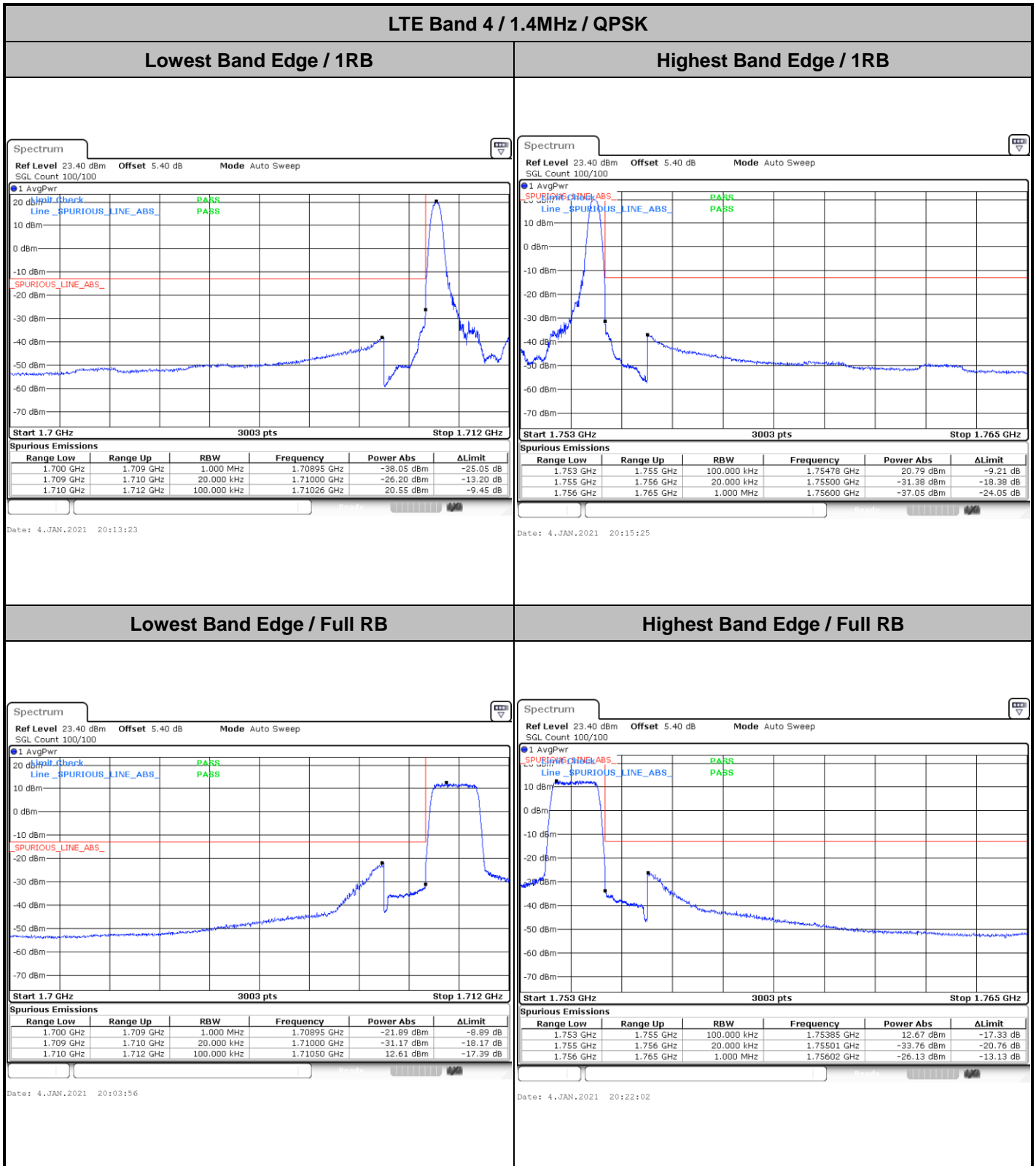
# Occupied Bandwidth

Mode	LTE Band 4 : 99%OBW(MHz)	
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	18.26	18.10





# Conducted Band Edge

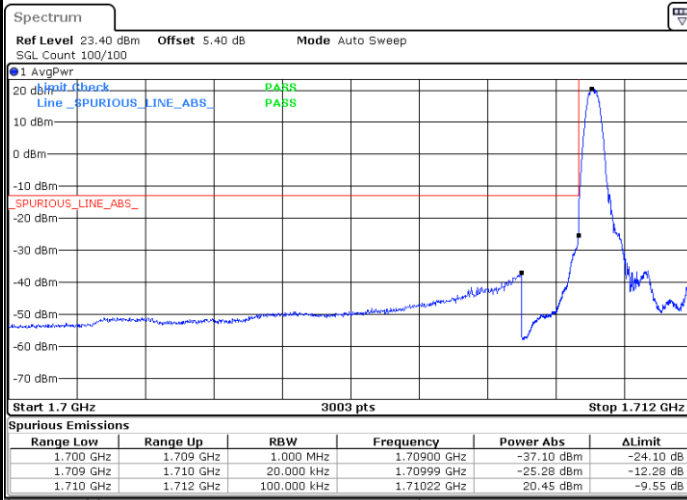






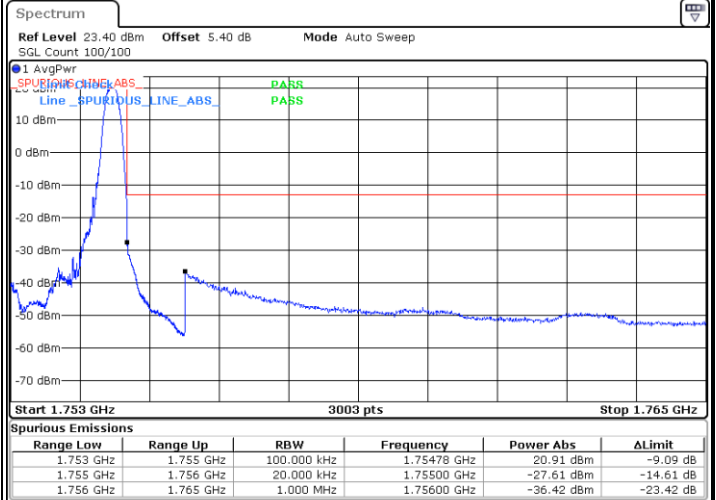
LTE Band 4 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



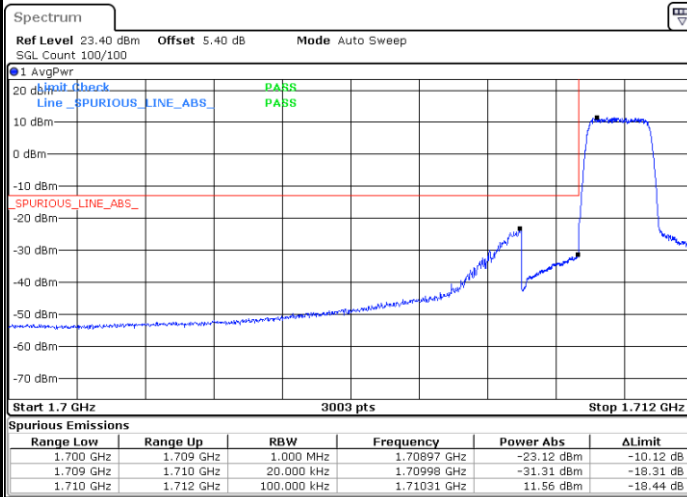
Date: 4.JAN.2021 20:12:10

Highest Band Edge / 1 RB



Date: 4.JAN.2021 20:16:45

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:05:24

Highest Band Edge / Full RB

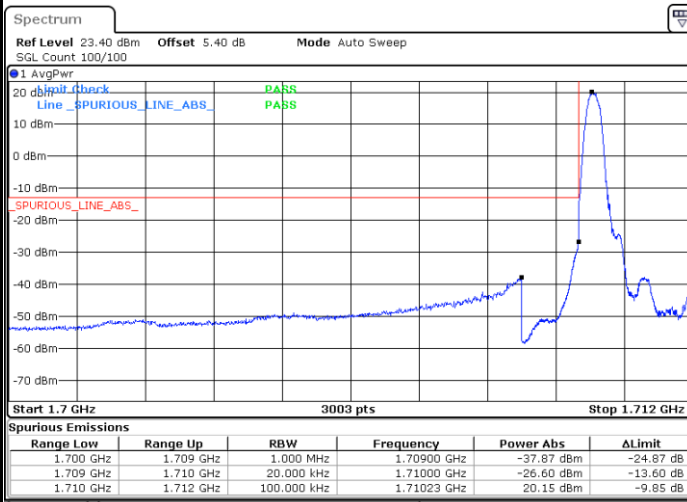


Date: 4.JAN.2021 20:20:46



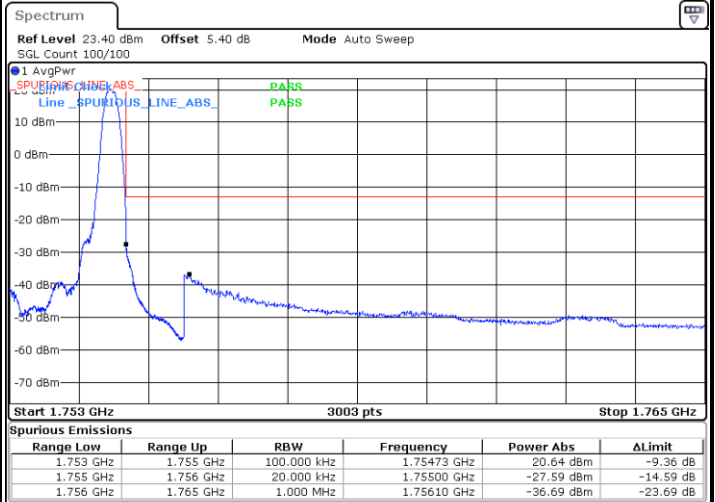
LTE Band 4 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



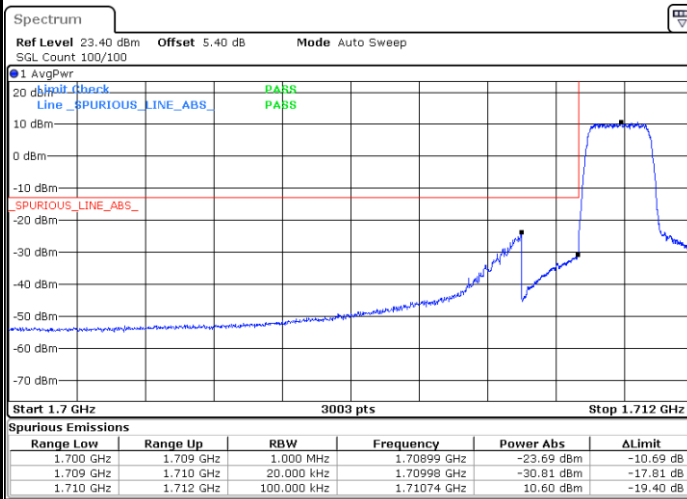
Date: 4.JAN.2021 20:10:55

Highest Band Edge / 1 RB



Date: 4.JAN.2021 20:18:03

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:09:26

Highest Band Edge / Full RB

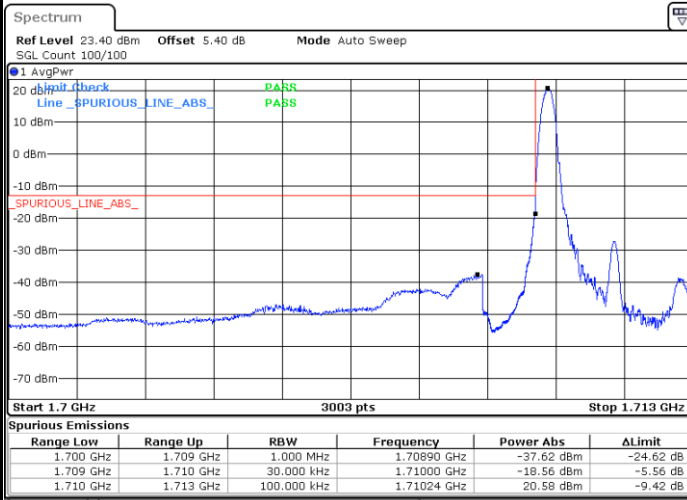


Date: 4.JAN.2021 20:19:33



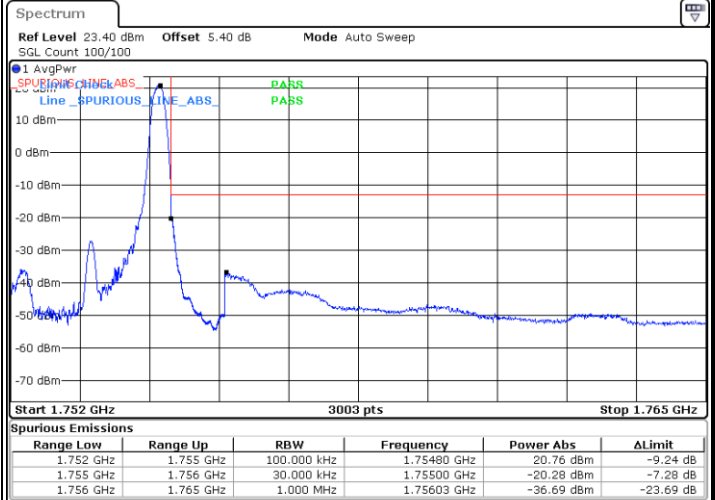
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



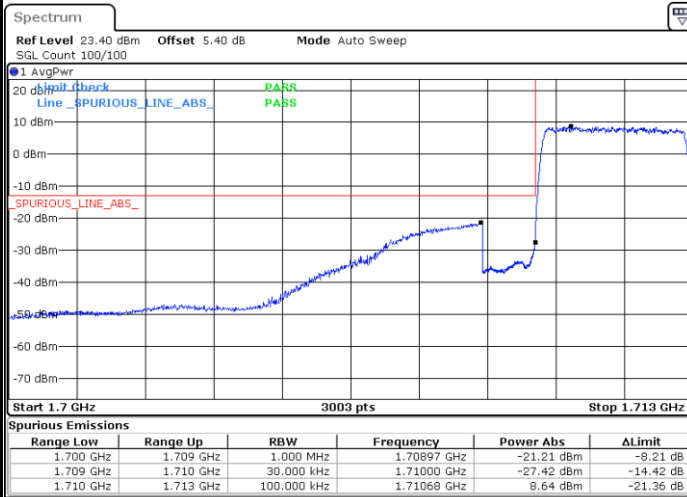
Date: 4.JAN.2021 20:29:57

Highest Band Edge / 1 RB



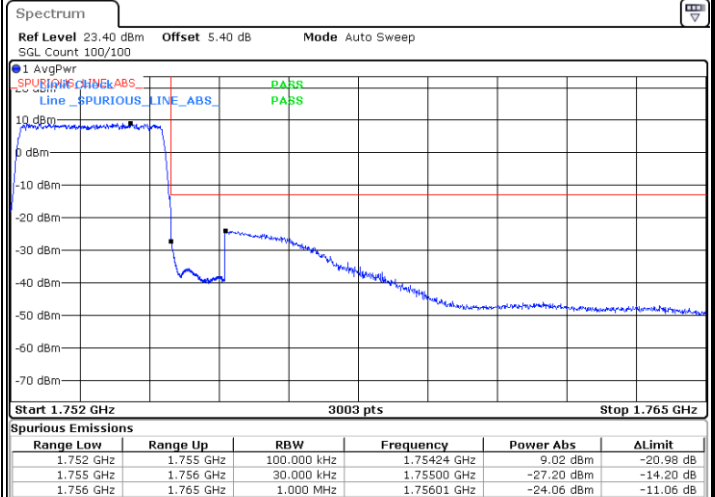
Date: 4.JAN.2021 20:31:10

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:26:10

Highest Band Edge / Full RB

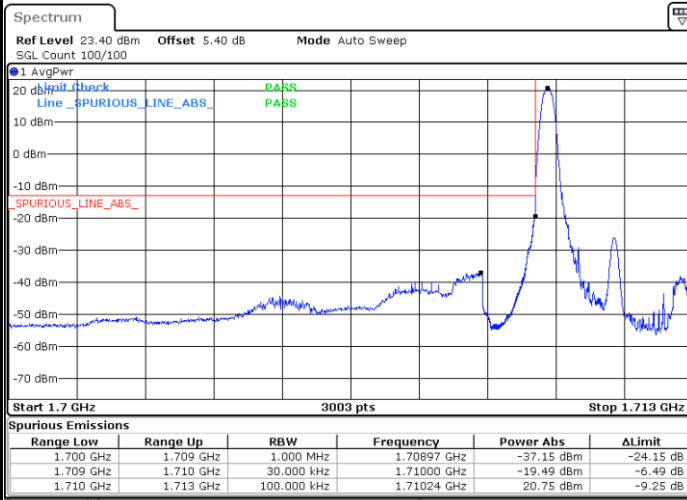


Date: 4.JAN.2021 20:35:55



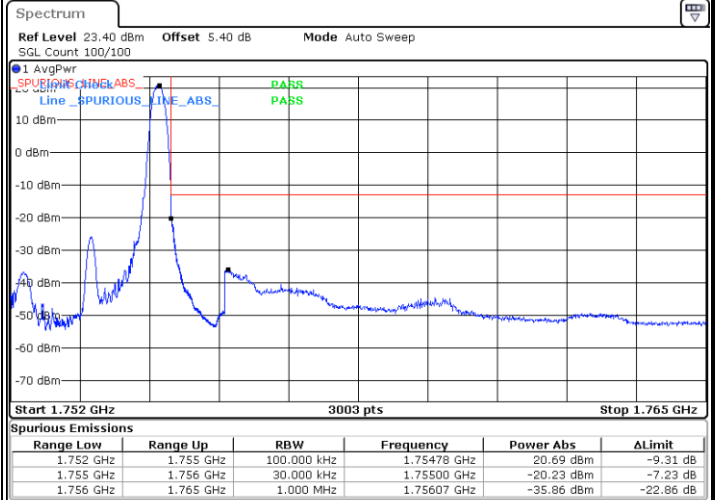
LTE Band 4 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



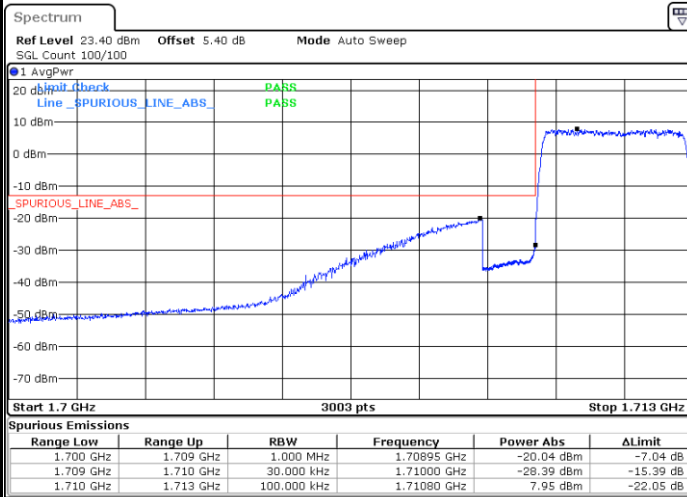
Date: 4.JAN.2021 20:29:15

Highest Band Edge / 1 RB



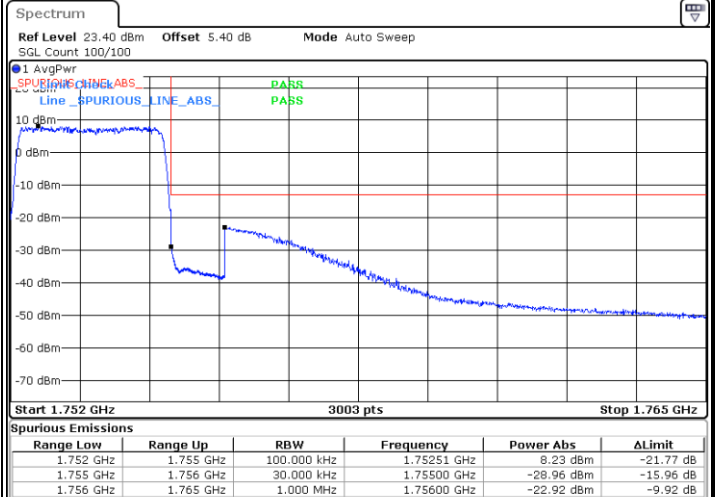
Date: 4.JAN.2021 20:31:54

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:26:52

Highest Band Edge / Full RB

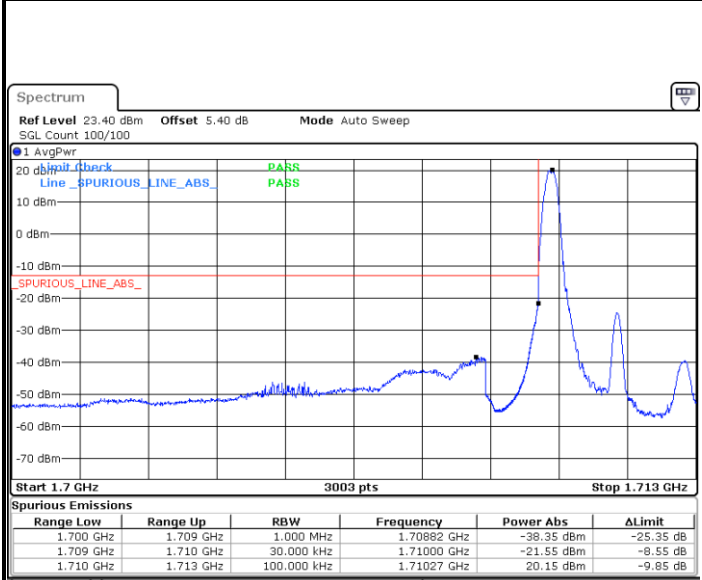


Date: 4.JAN.2021 20:35:14



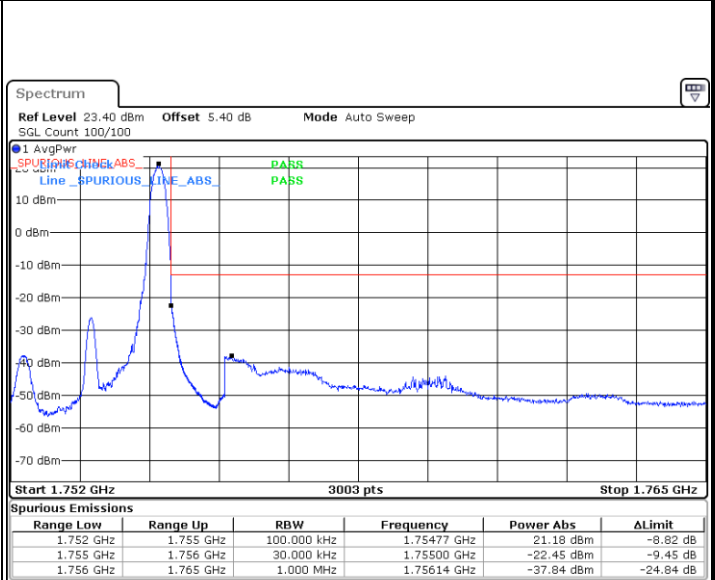
LTE Band 4 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



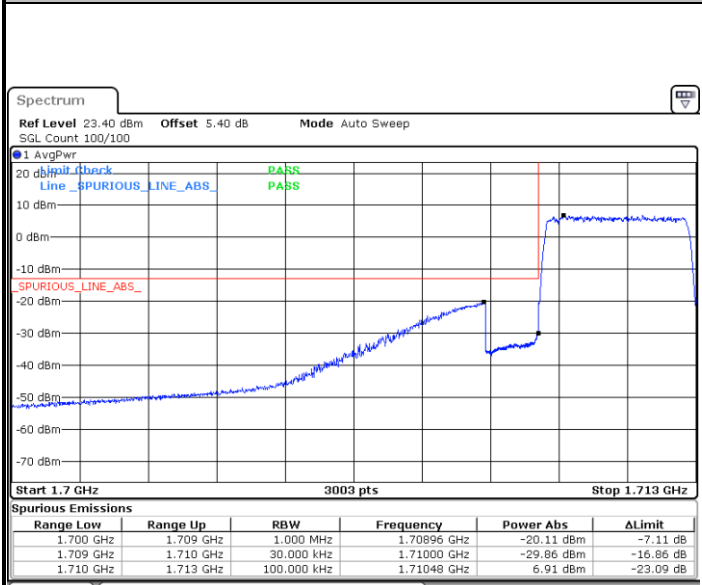
Date: 4.JAN.2021 20:28:28

Highest Band Edge / 1 RB



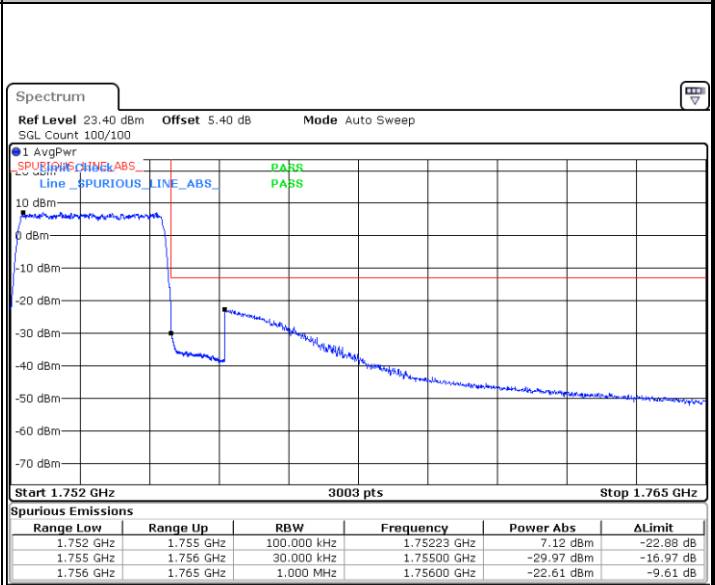
Date: 4.JAN.2021 20:33:03

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:27:37

Highest Band Edge / Full RB

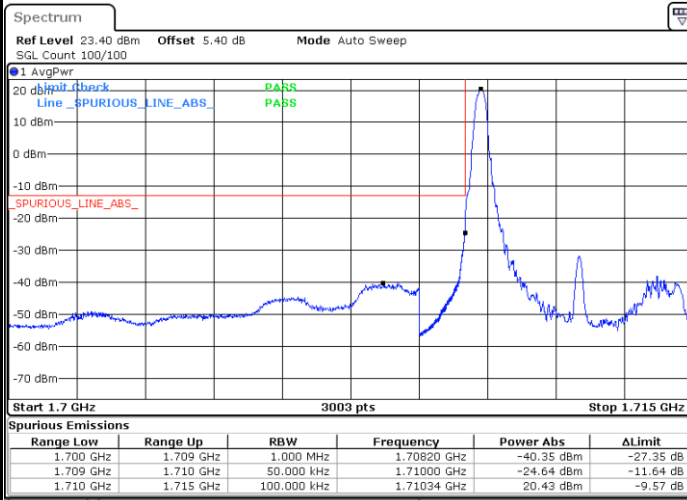


Date: 4.JAN.2021 20:34:11



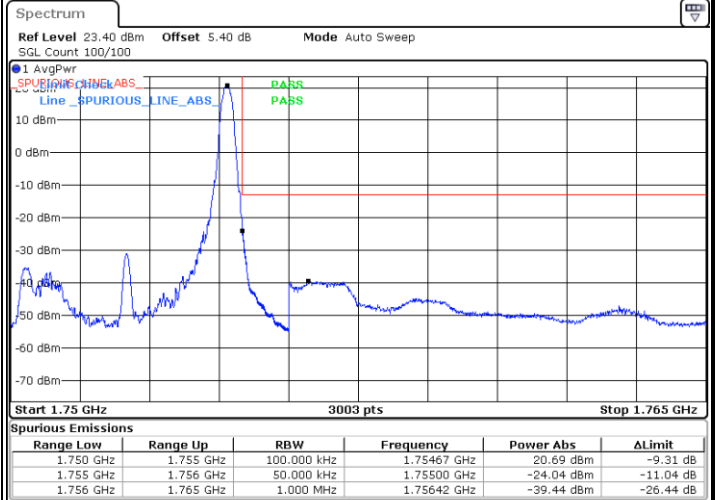
LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB



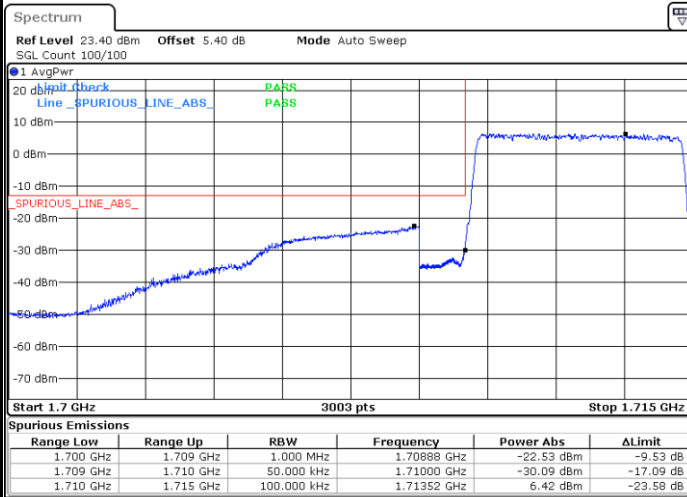
Date: 4.JAN.2021 20:40:16

Highest Band Edge / 1 RB



Date: 4.JAN.2021 20:42:19

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:37:48

Highest Band Edge / Full RB

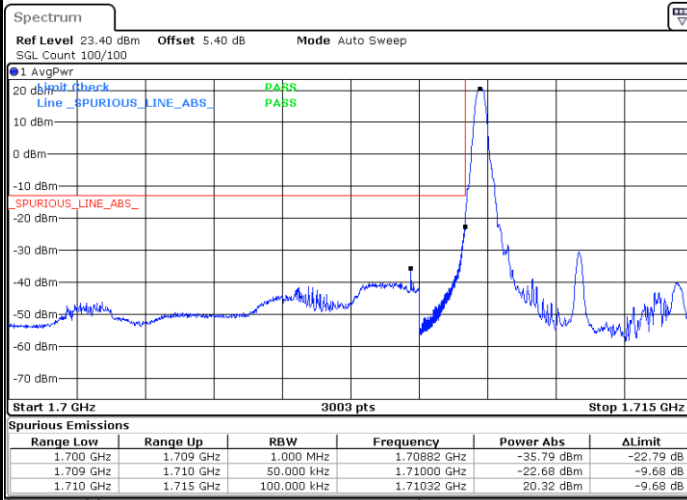


Date: 4.JAN.2021 20:45:13



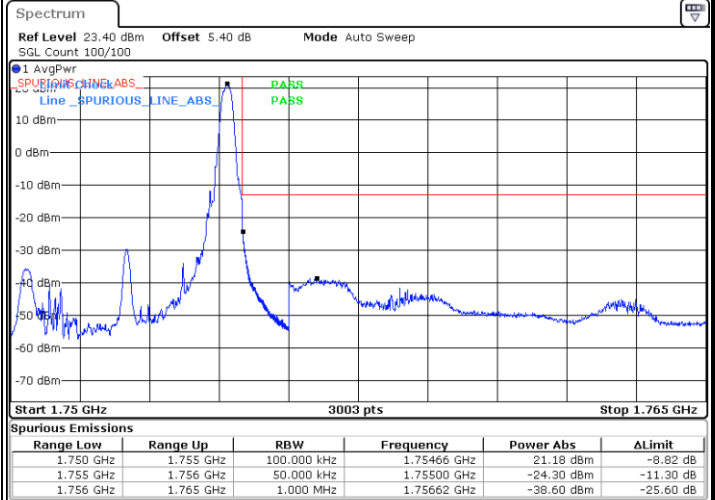
LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / 1RB



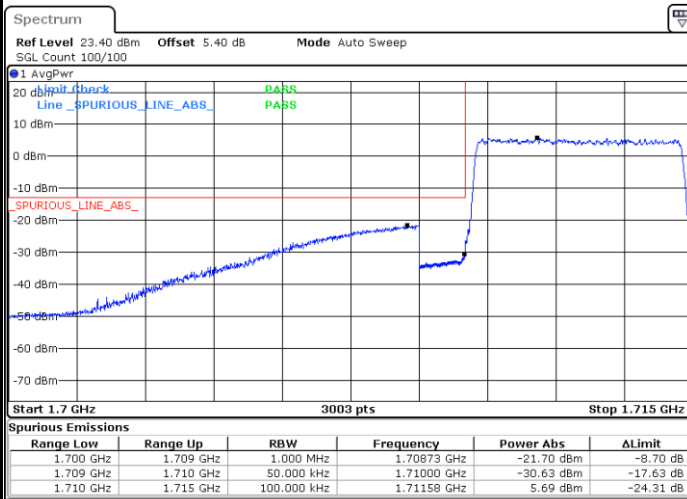
Date: 4.JAN.2021 20:39:40

Highest Band Edge / 1 RB



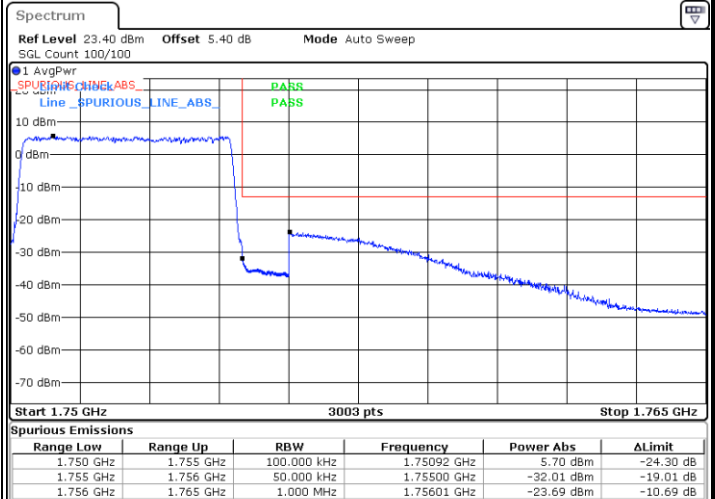
Date: 4.JAN.2021 20:42:53

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:38:14

Highest Band Edge / Full RB

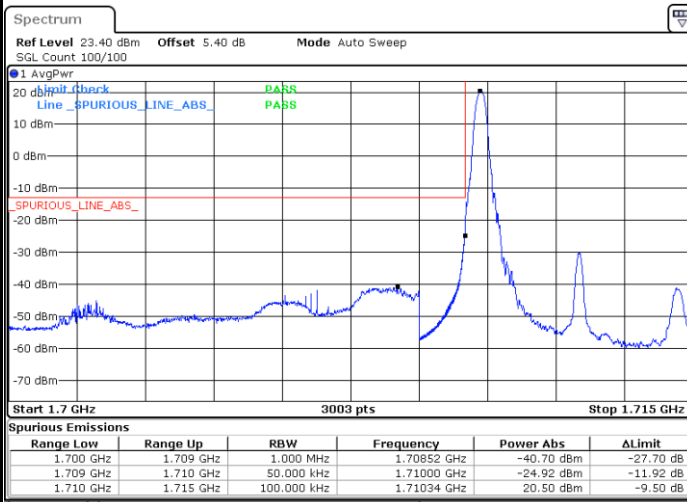


Date: 4.JAN.2021 20:44:29



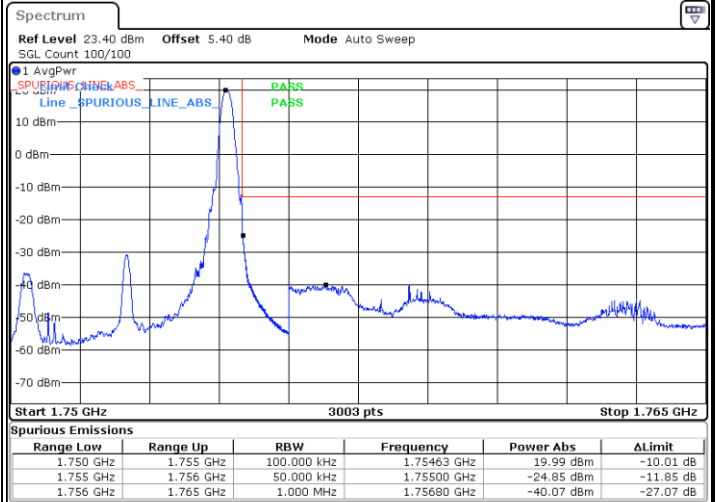
LTE Band 4 / 5MHz / 64QAM

Lowest Band Edge / 1RB



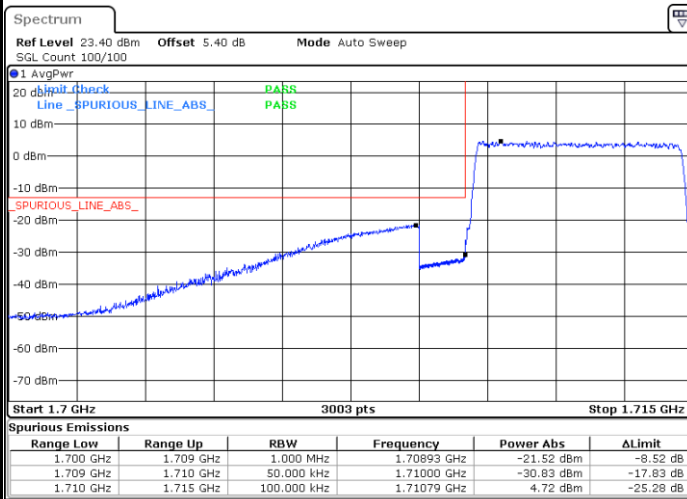
Date: 4.JAN.2021 20:39:13

Highest Band Edge / 1 RB



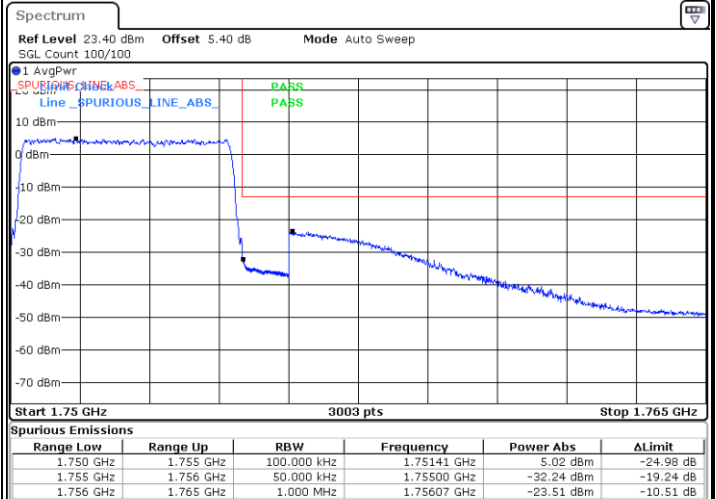
Date: 4.JAN.2021 20:43:19

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:38:40

Highest Band Edge / Full RB



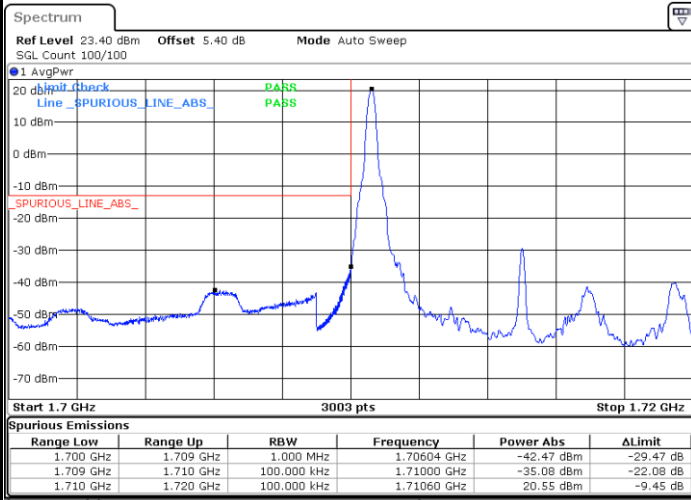
Date: 4.JAN.2021 20:43:55





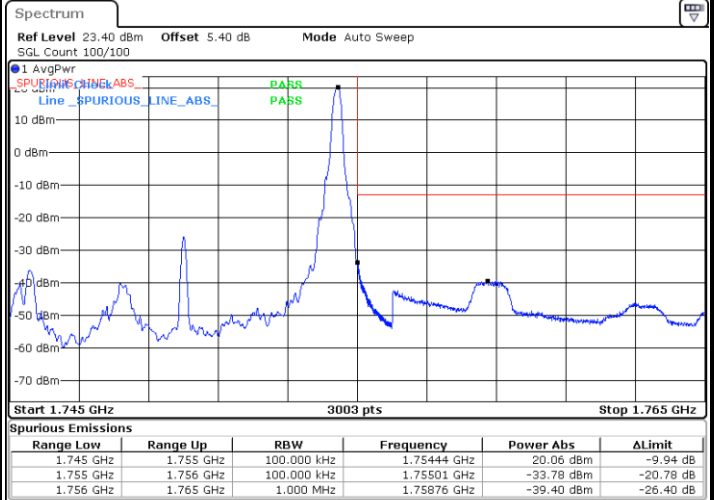
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB



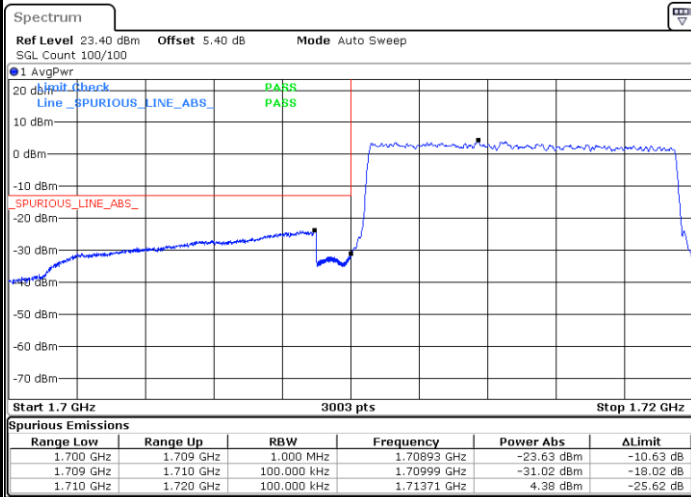
Date: 4.JAN.2021 20:48:56

Highest Band Edge / 1 RB



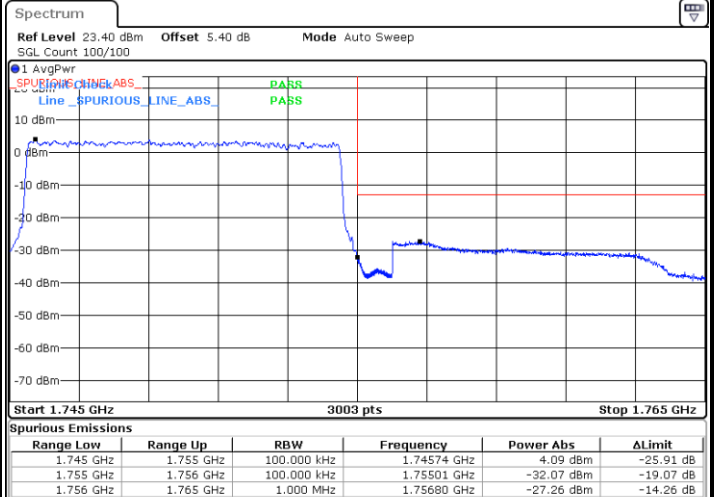
Date: 4.JAN.2021 20:50:27

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:46:46

Highest Band Edge / Full RB

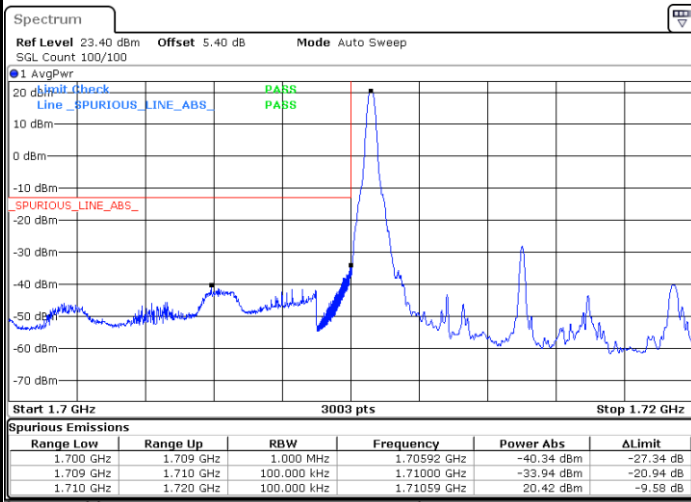


Date: 4.JAN.2021 20:52:51



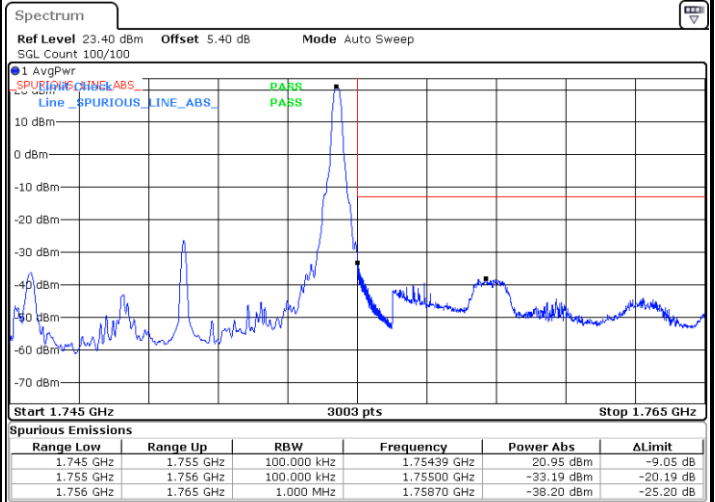
LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



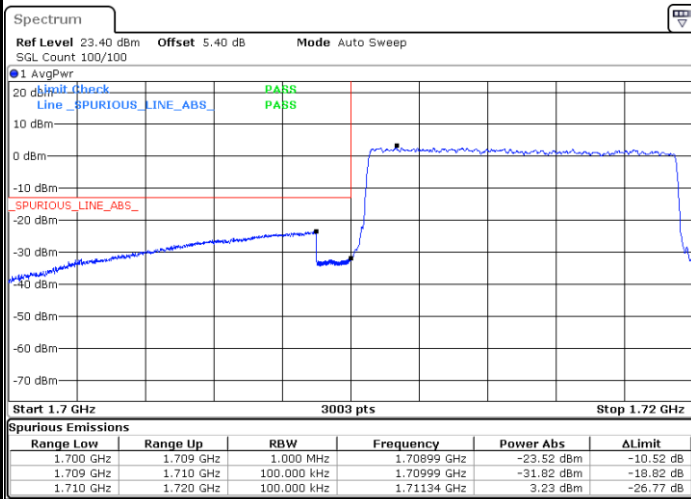
Date: 4.JAN.2021 20:48:35

Highest Band Edge / 1 RB



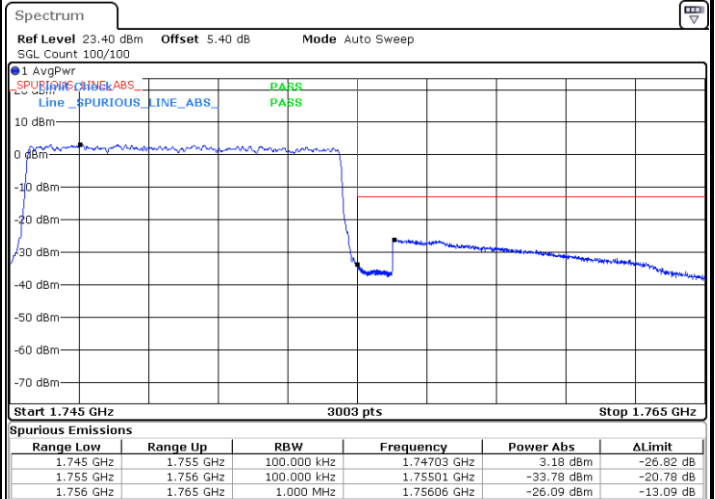
Date: 4.JAN.2021 20:50:48

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:47:07

Highest Band Edge / Full RB

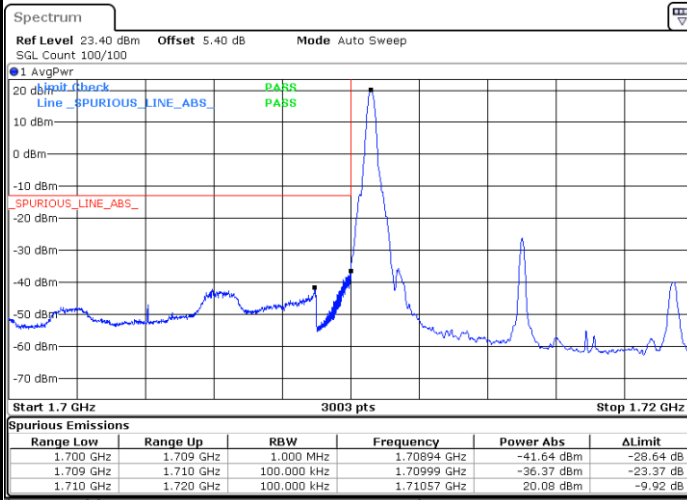


Date: 4.JAN.2021 20:52:18



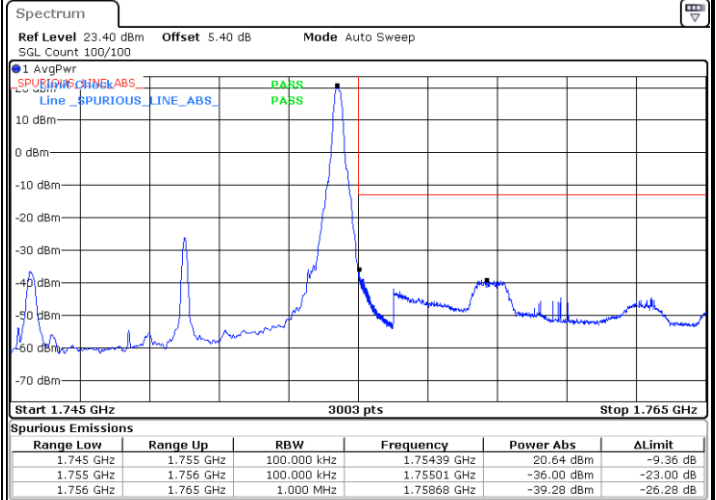
LTE Band 4 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



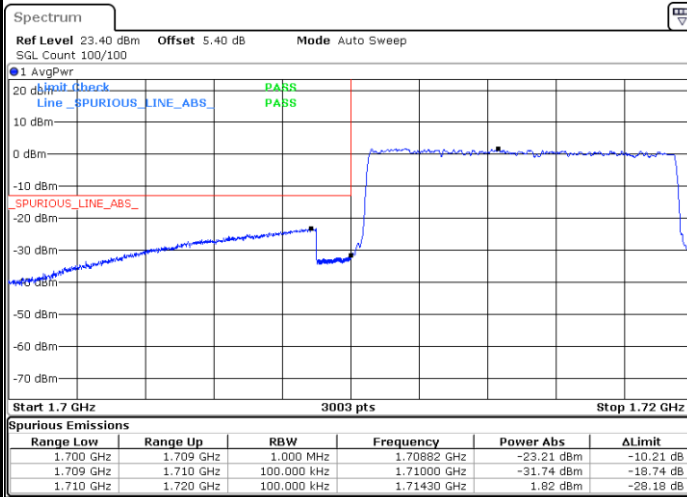
Date: 4.JAN.2021 20:48:05

Highest Band Edge / 1 RB



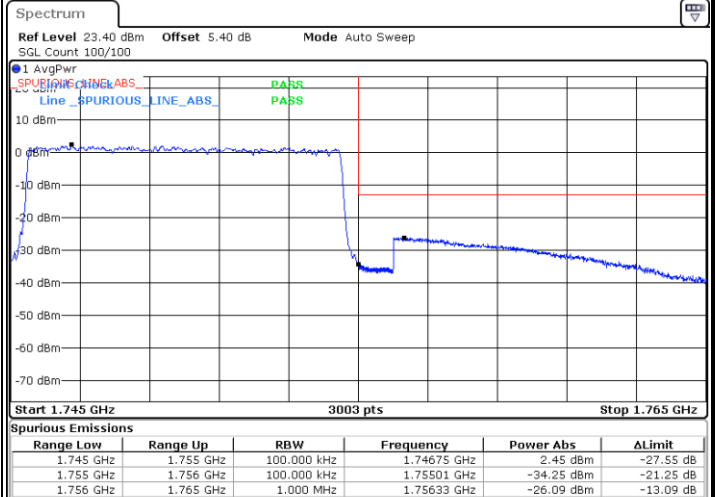
Date: 4.JAN.2021 20:51:22

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:47:38

Highest Band Edge / Full RB

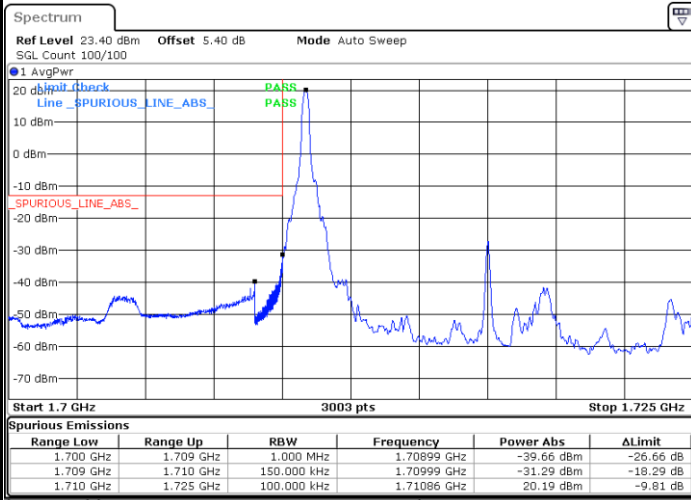


Date: 4.JAN.2021 20:51:54

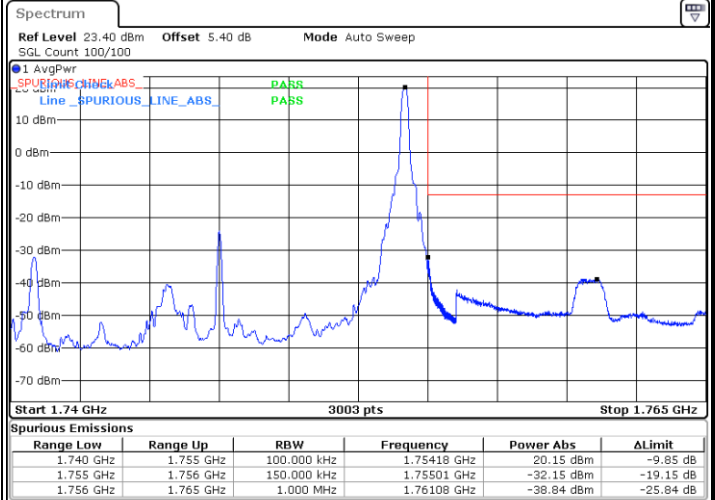


LTE Band 4 / 15MHz / QPSK

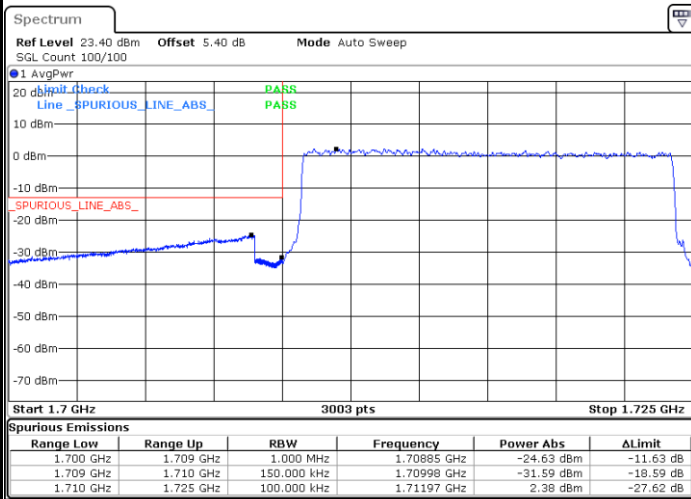
Lowest Band Edge / 1 RB



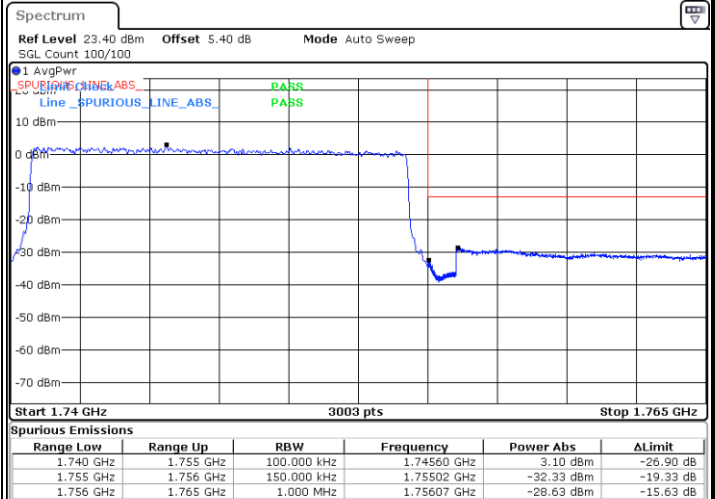
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



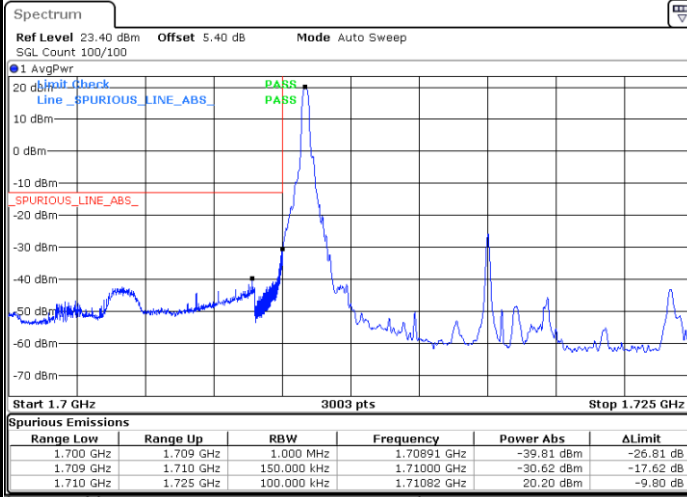
Highest Band Edge / Full RB



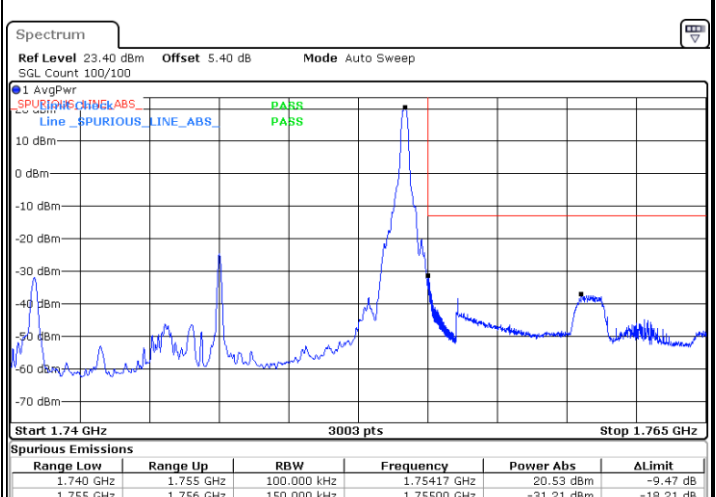


LTE Band 4 / 15MHz / 16QAM

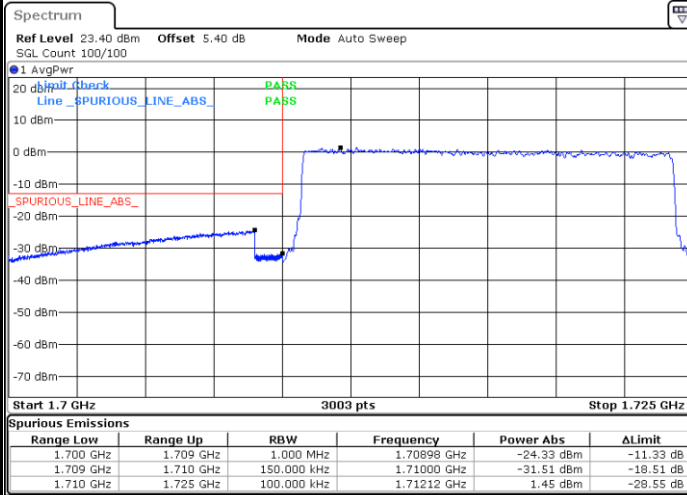
Lowest Band Edge / 1 RB



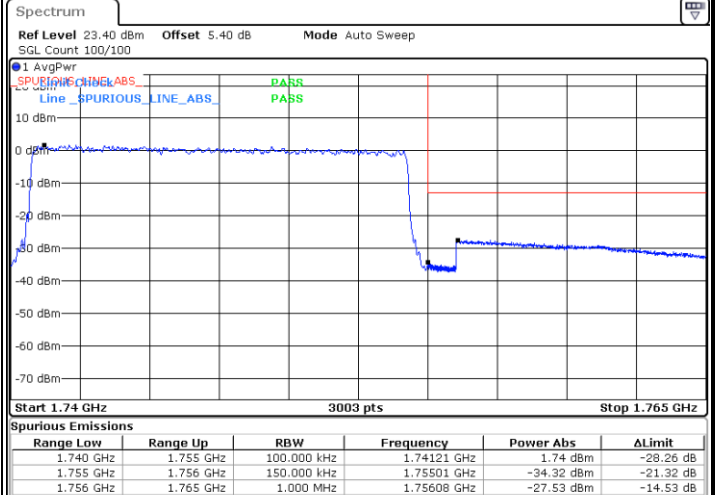
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



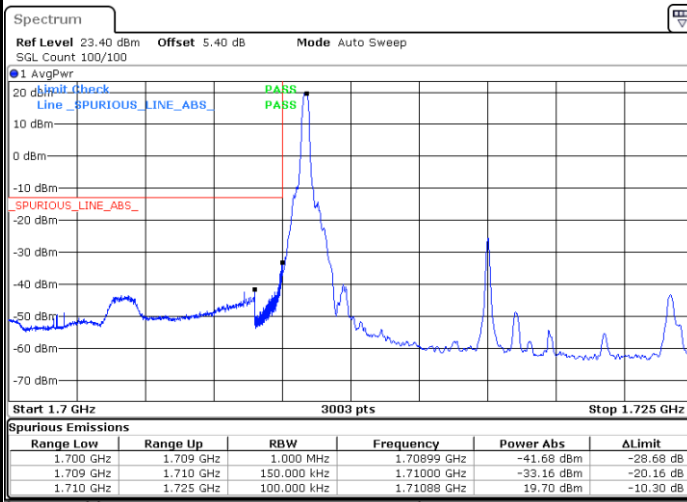
Highest Band Edge / Full RB





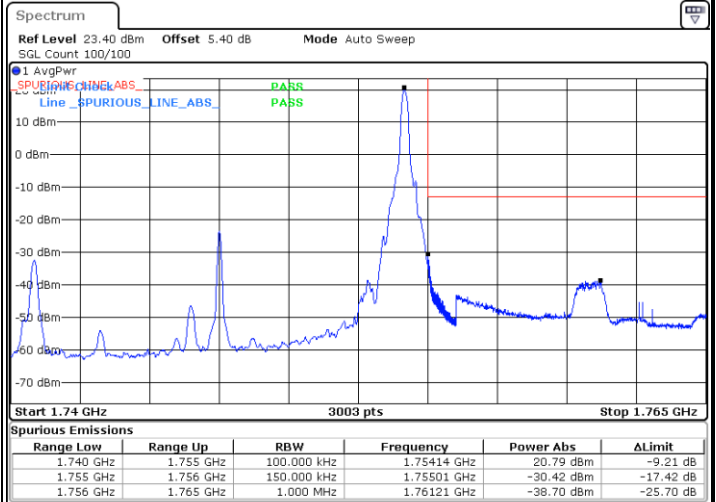
LTE Band 4 / 15MHz / 64QAM

Lowest Band Edge / 1 RB



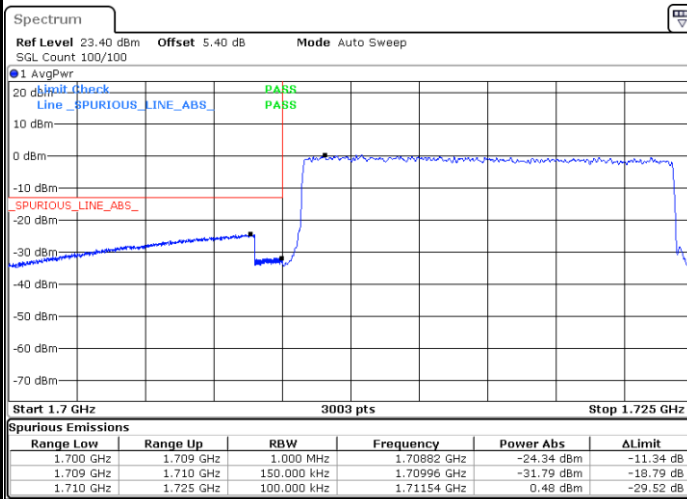
Date: 4.JAN.2021 20:55:59

Highest Band Edge / 1 RB



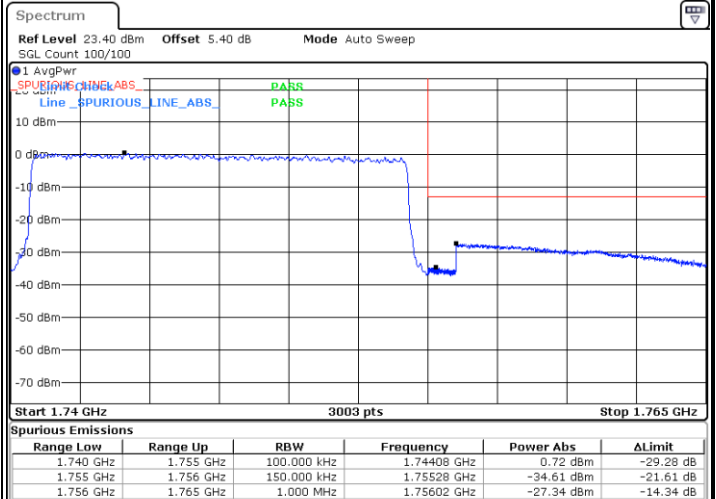
Date: 4.JAN.2021 20:58:23

Lowest Band Edge / Full RB



Date: 4.JAN.2021 20:55:30

Highest Band Edge / Full RB

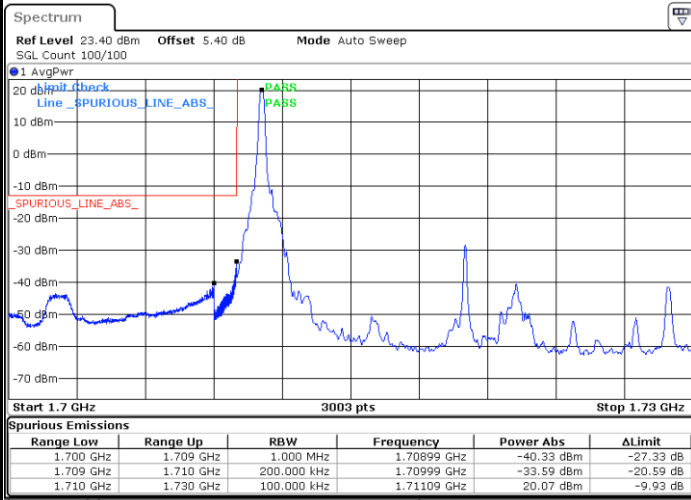


Date: 4.JAN.2021 20:58:52



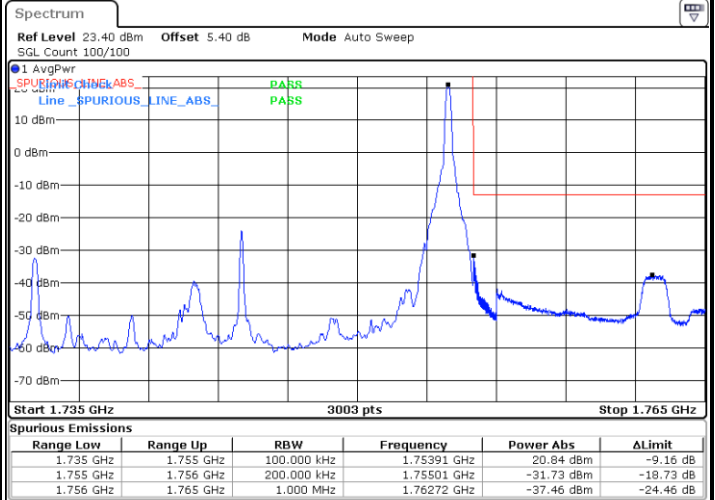
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / 1 RB



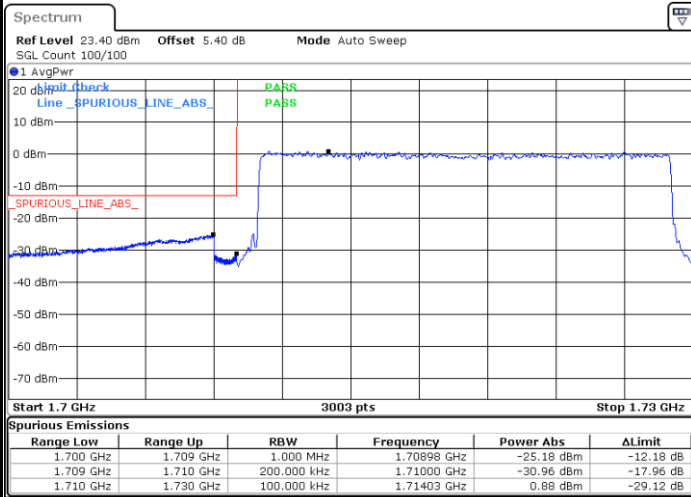
Date: 4.JAN.2021 21:05:49

Highest Band Edge / 1 RB



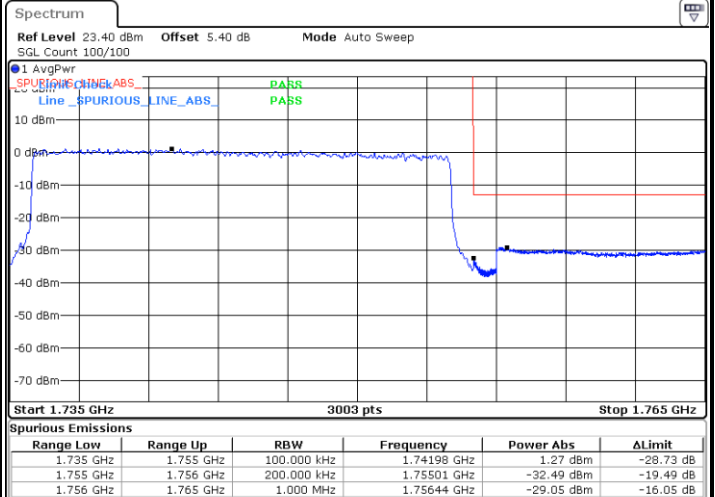
Date: 4.JAN.2021 21:08:04

Lowest Band Edge / Full RB



Date: 4.JAN.2021 21:00:55

Highest Band Edge / Full RB

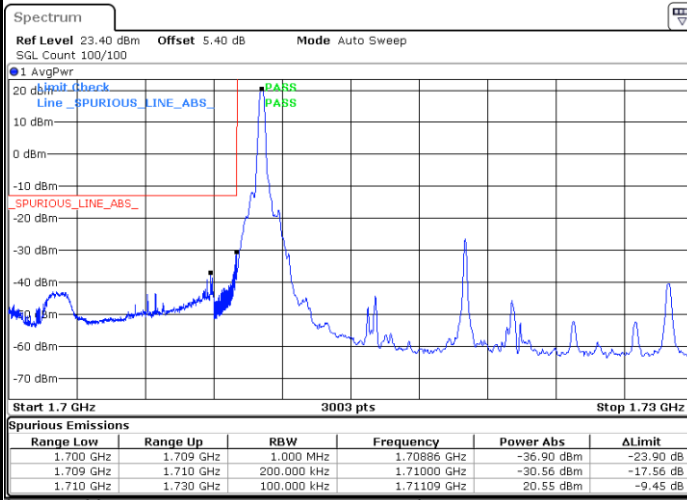


Date: 4.JAN.2021 21:10:05



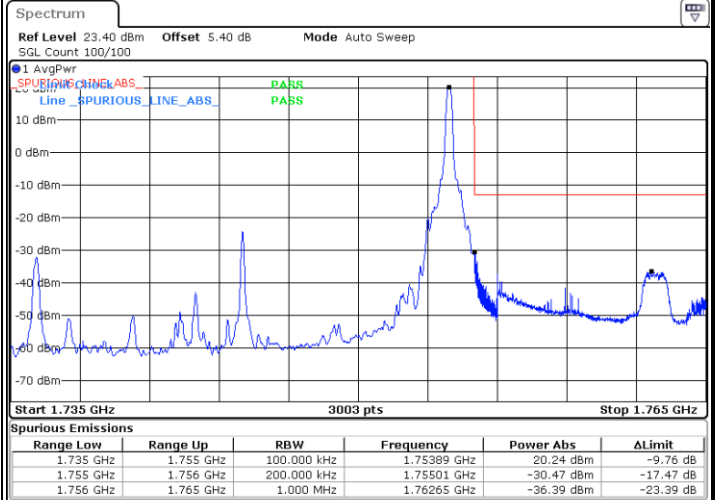
LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



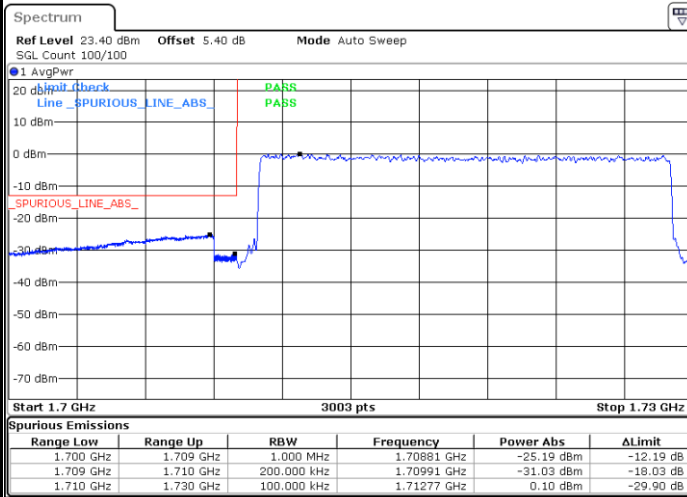
Date: 4.JAN.2021 21:05:29

Highest Band Edge / 1 RB



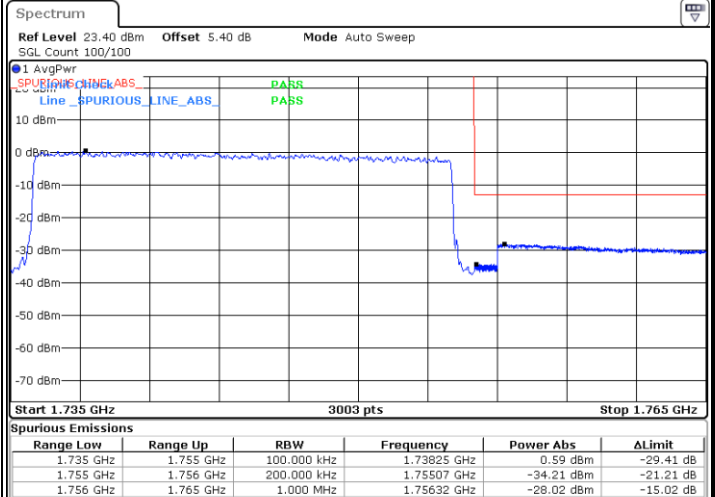
Date: 4.JAN.2021 21:08:26

Lowest Band Edge / Full RB



Date: 4.JAN.2021 21:03:47

Highest Band Edge / Full RB



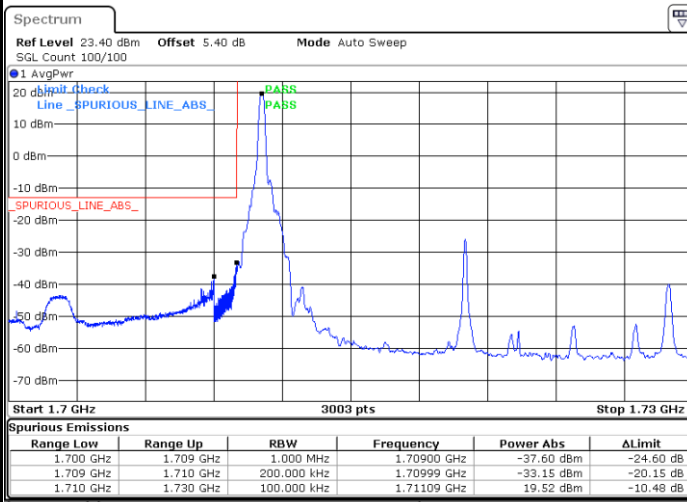
Date: 4.JAN.2021 21:09:44





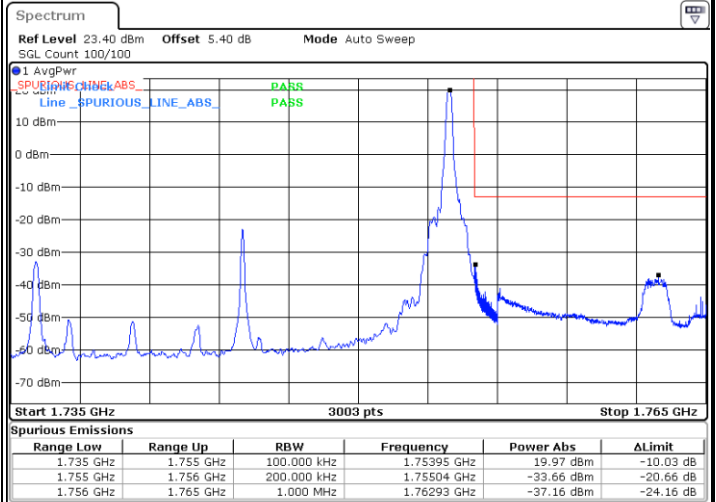
LTE Band 4 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



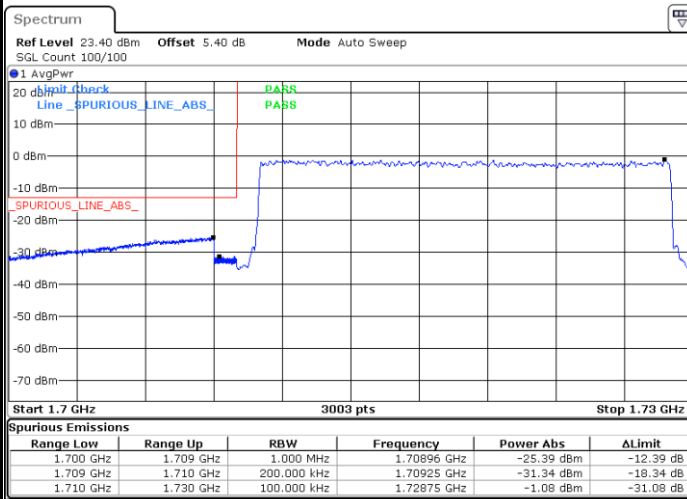
Date: 4.JAN.2021 21:05:09

Highest Band Edge / 1 RB



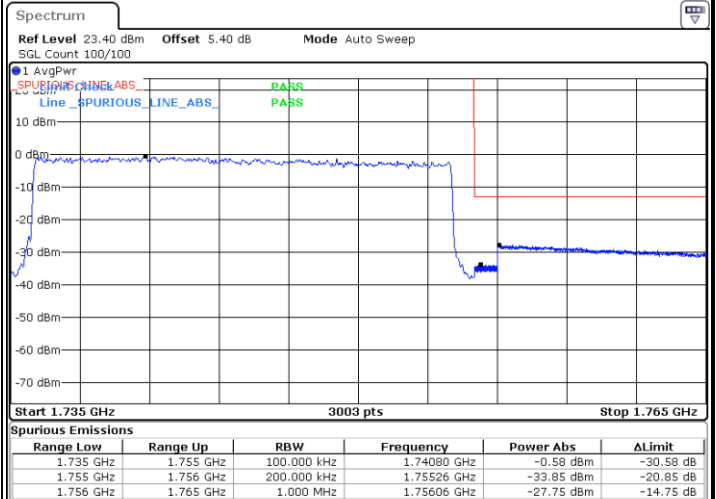
Date: 4.JAN.2021 21:08:52

Lowest Band Edge / Full RB



Date: 4.JAN.2021 21:04:39

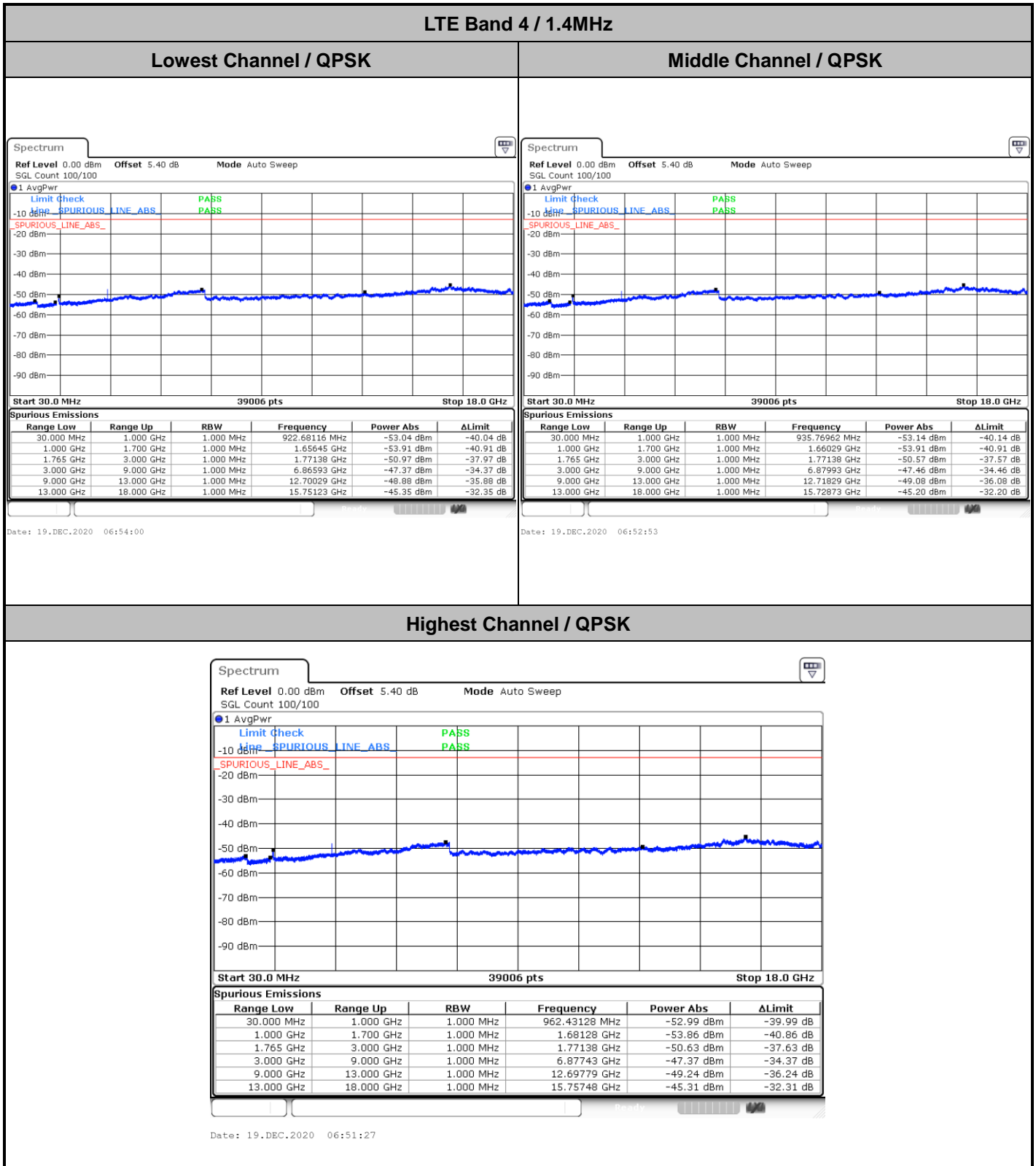
Highest Band Edge / Full RB



Date: 4.JAN.2021 21:09:18



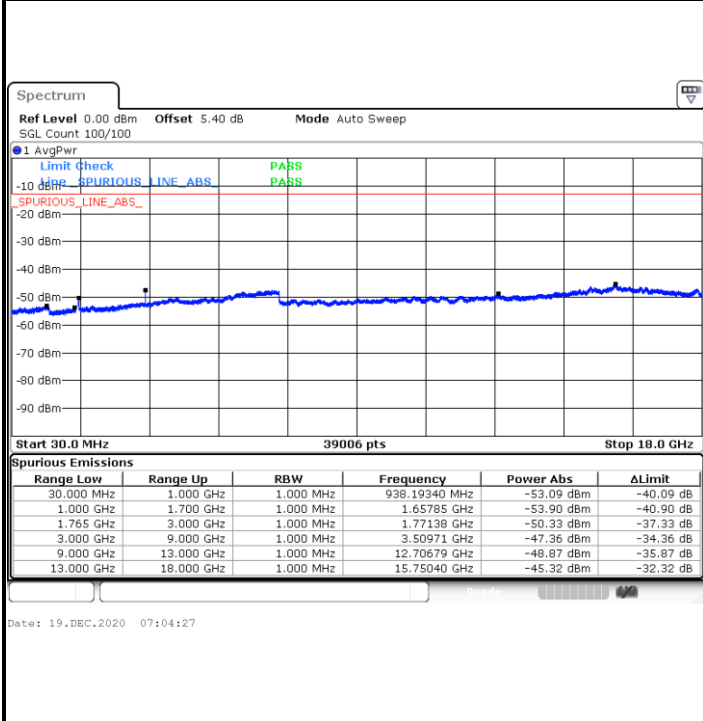
# Conducted Spurious Emission



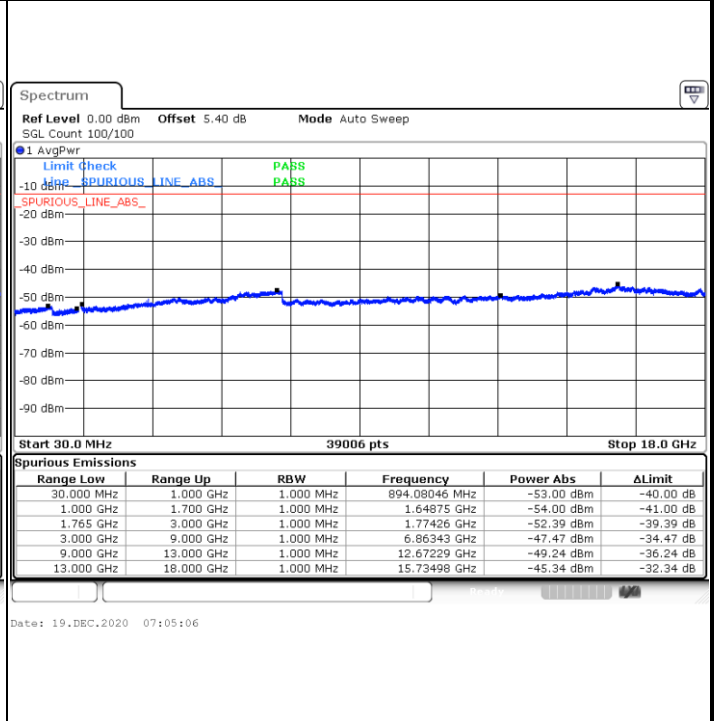


**LTE Band 4 / 3MHz**

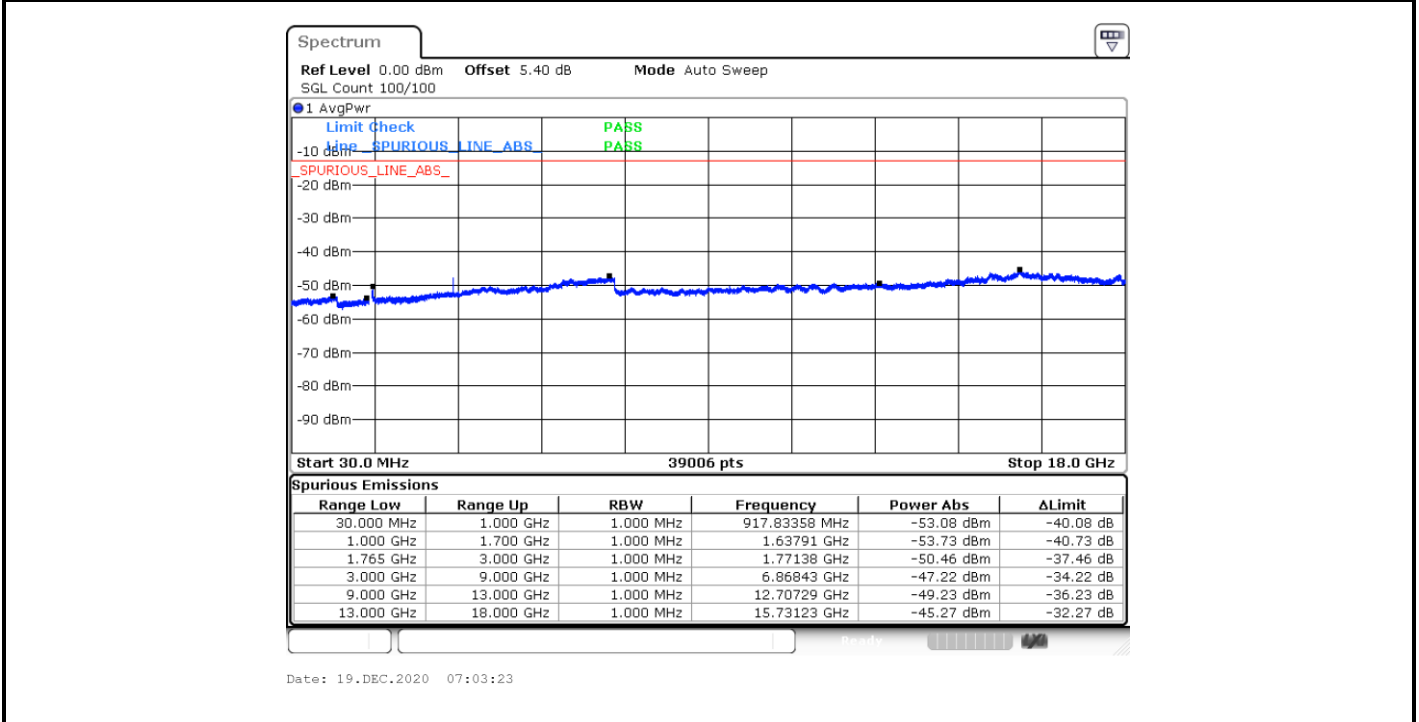
**Lowest Channel / QPSK**



**Middle Channel / QPSK**



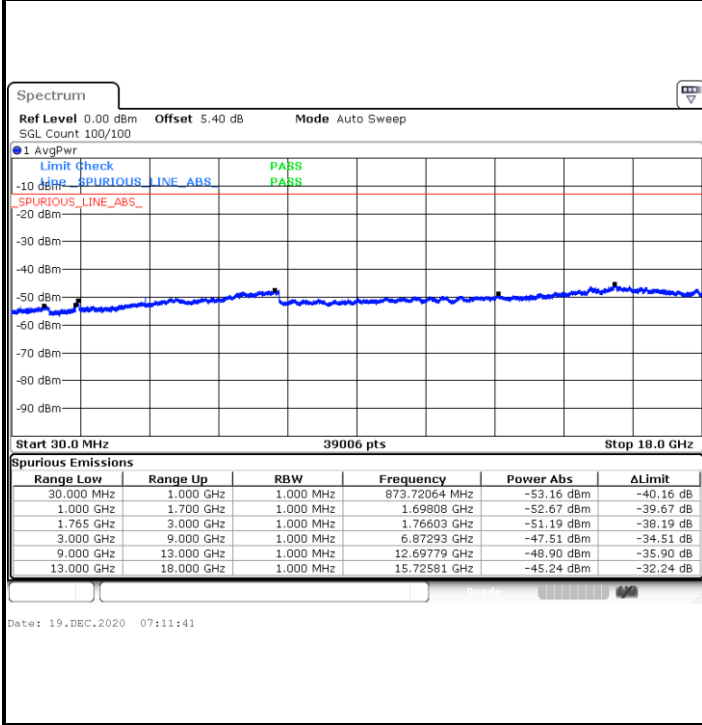
**Highest Channel / QPSK**



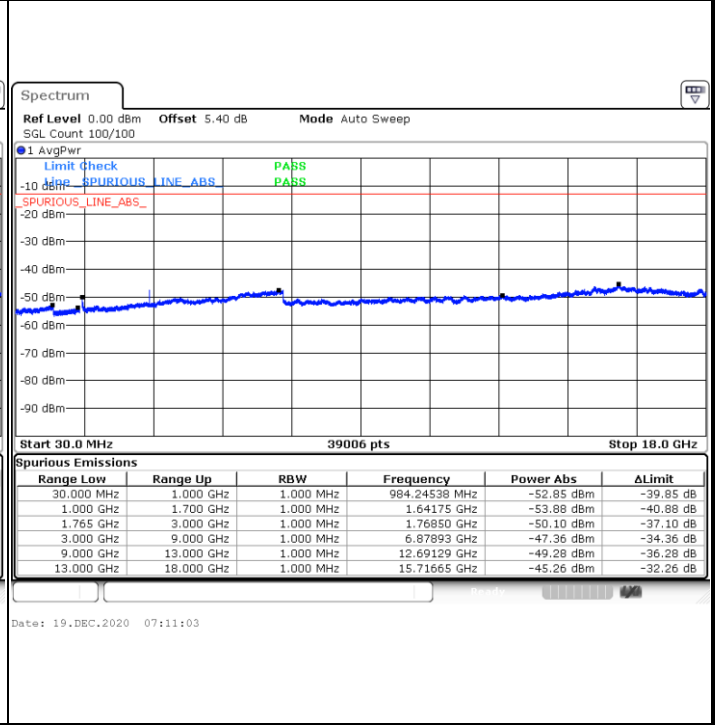


**LTE Band 4 / 5MHz**

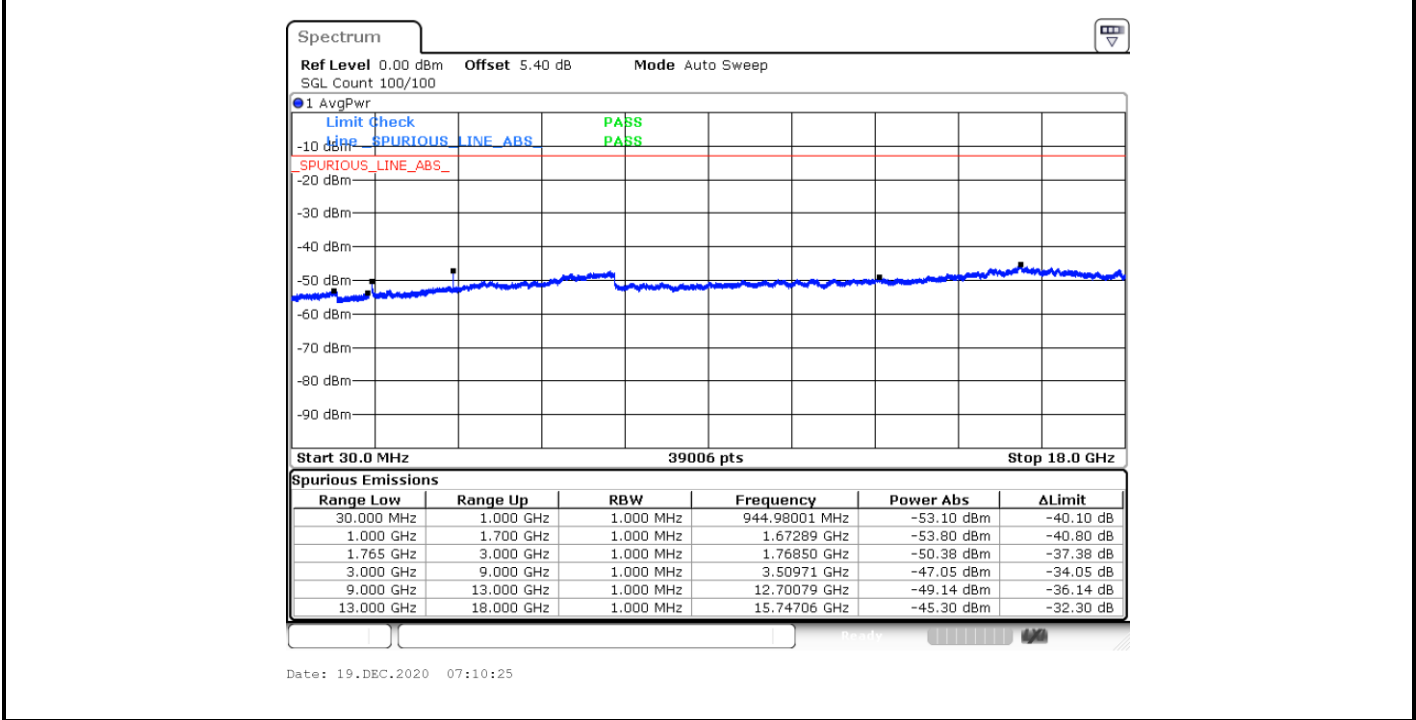
**Lowest Channel / QPSK**



**Middle Channel / QPSK**



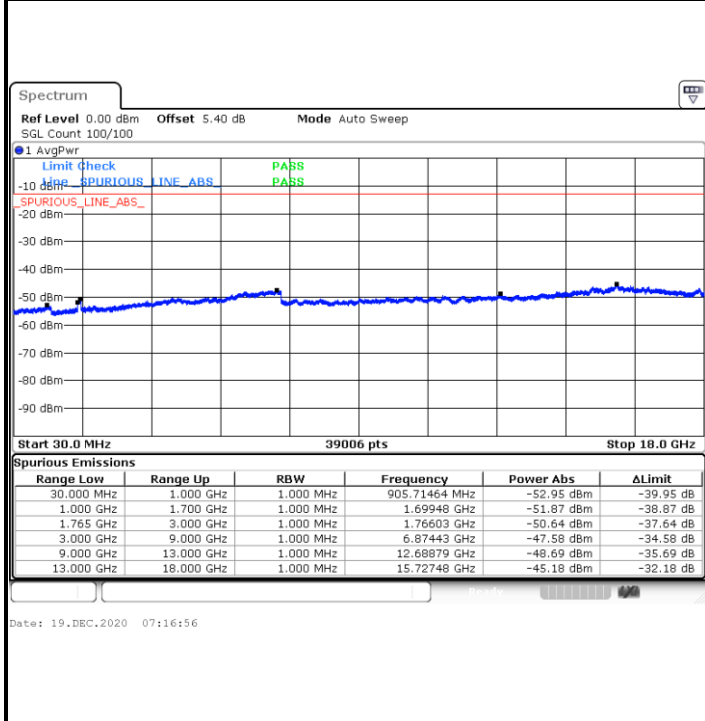
**Highest Channel / QPSK**



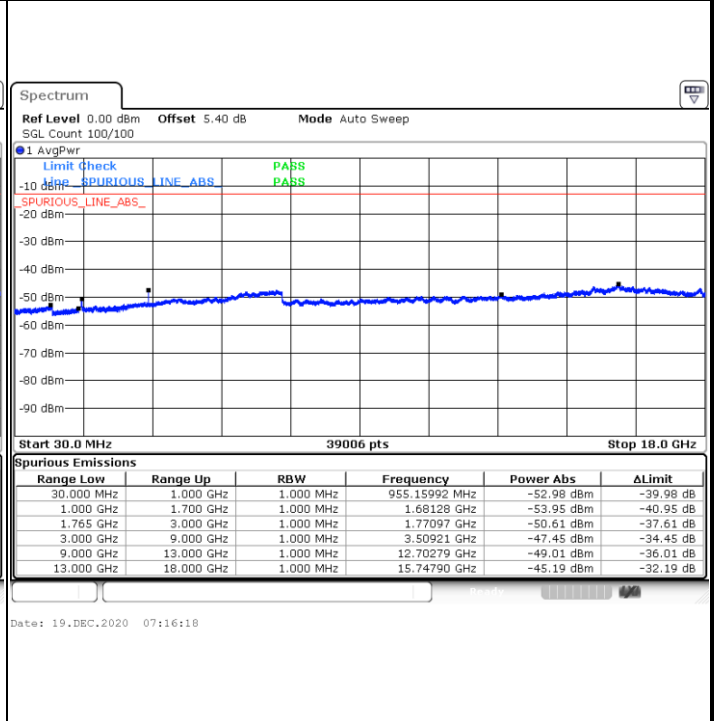


**LTE Band 4 / 10MHz**

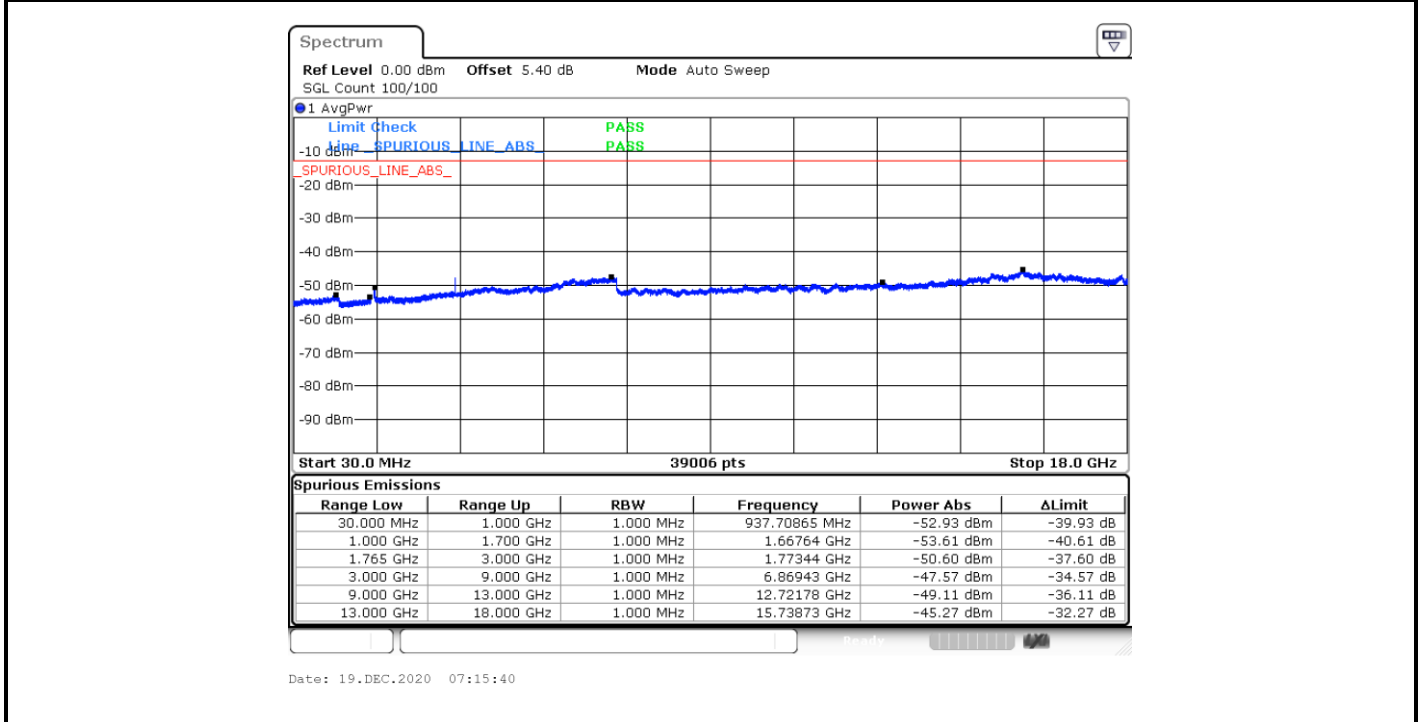
**Lowest Channel / QPSK**



**Middle Channel / QPSK**



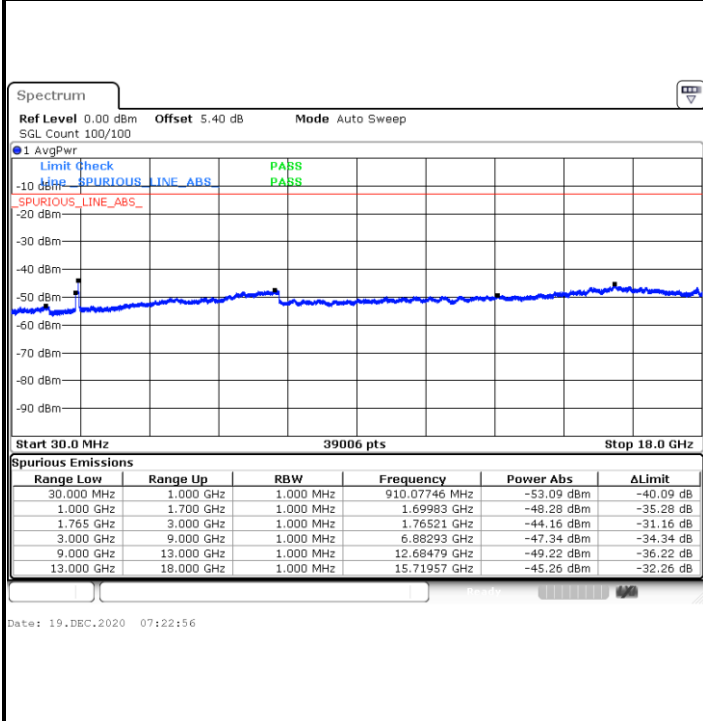
**Highest Channel / QPSK**



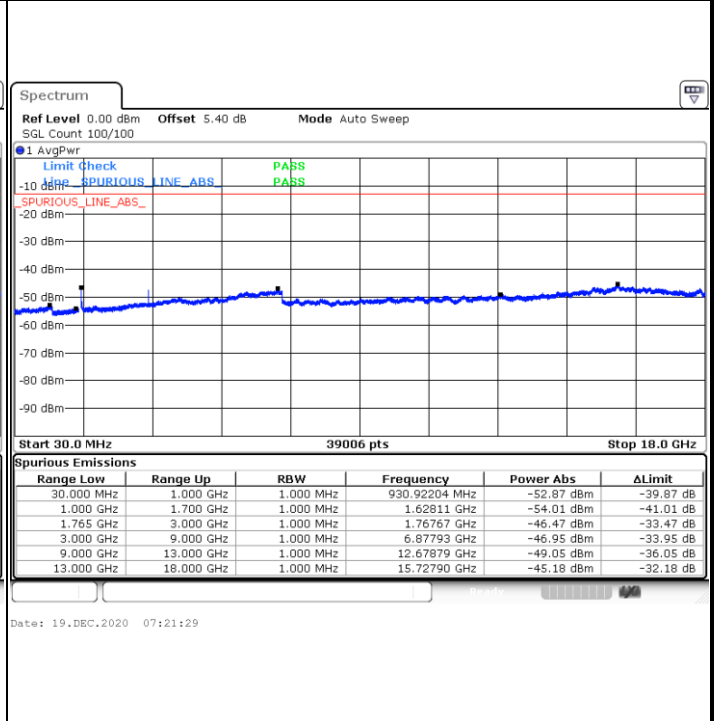


**LTE Band 4 / 15MHz**

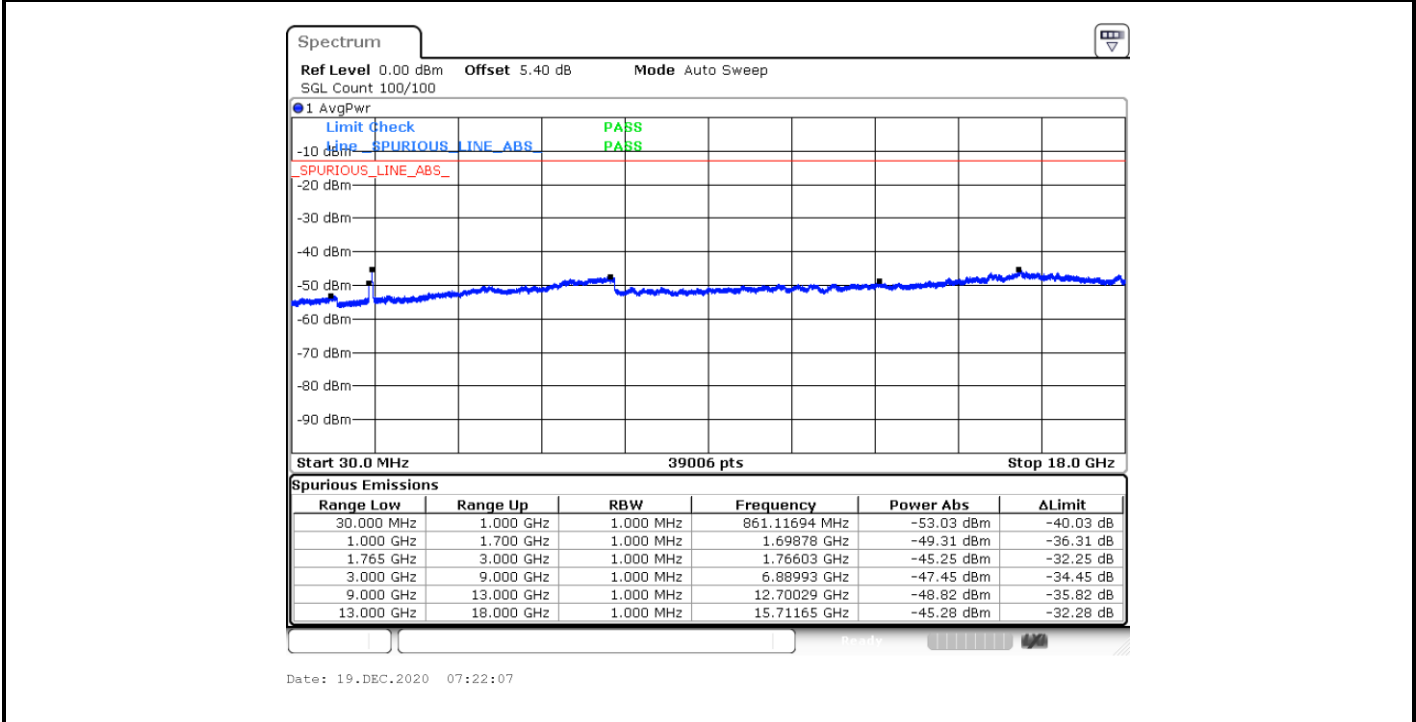
**Lowest Channel / QPSK**



**Middle Channel / QPSK**



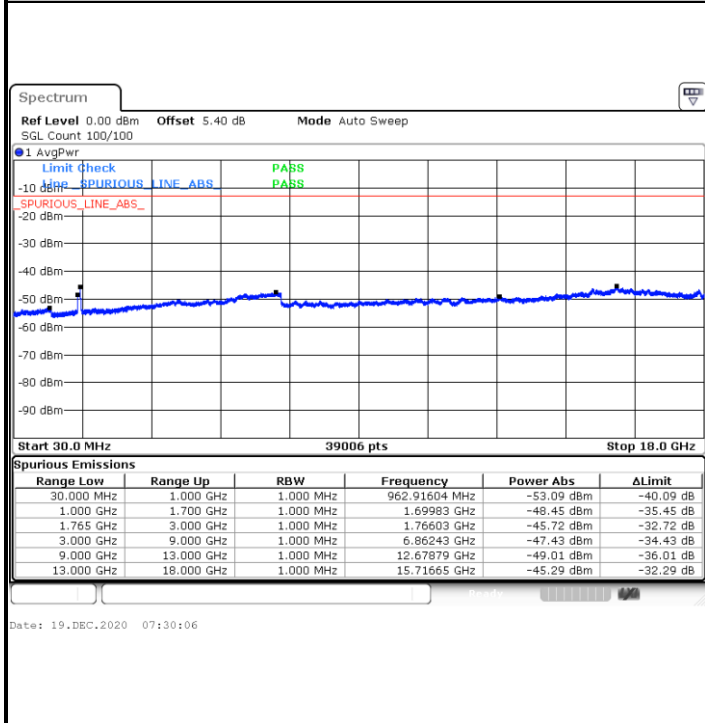
**Highest Channel / QPSK**



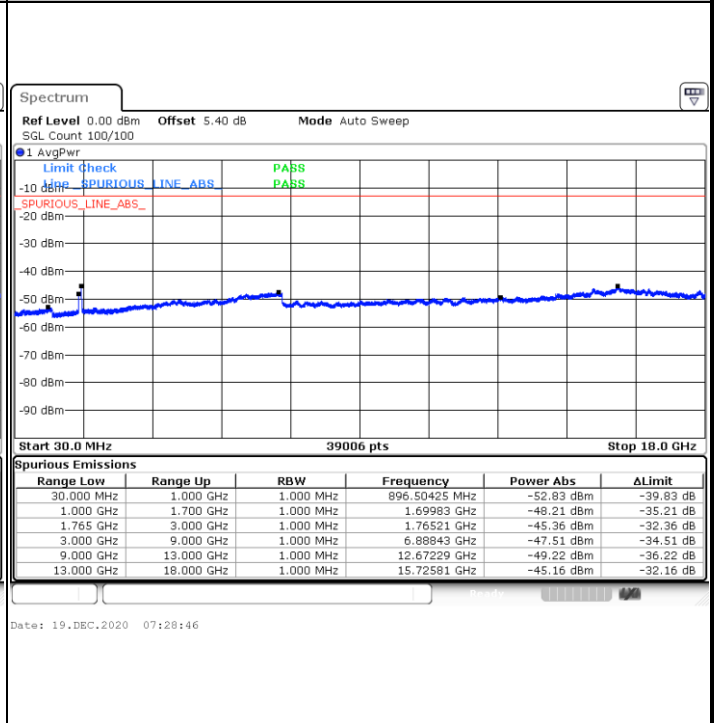


**LTE Band 4 / 20MHz**

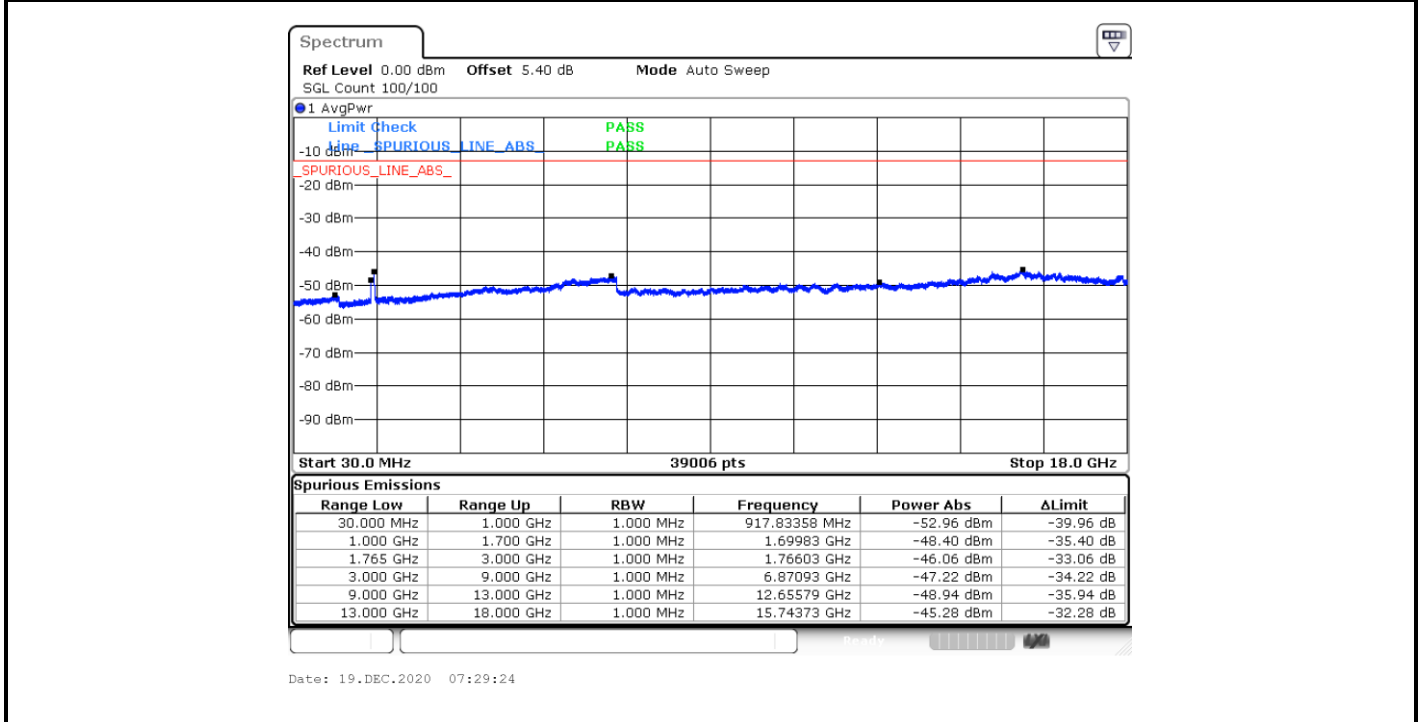
**Lowest Channel / QPSK**



**Middle Channel / QPSK**



**Highest Channel / QPSK**





Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0026	PASS
40	Normal Voltage	0.0023	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.





## LTE Band 26

### Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Low CH	4.49	5.33	5.36	<b>PASS</b>