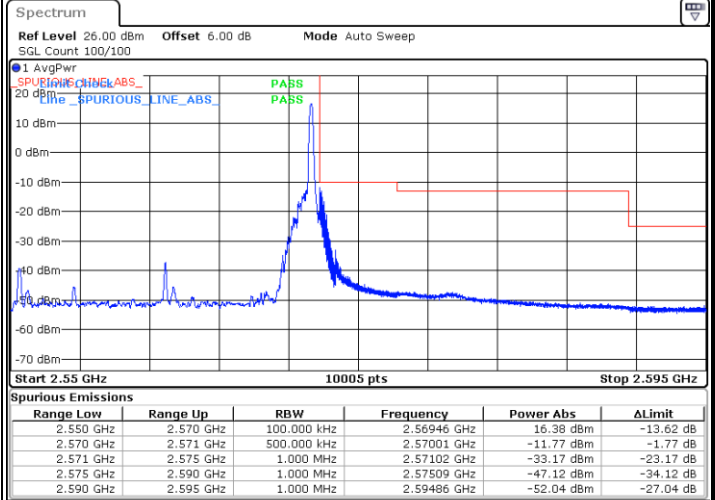
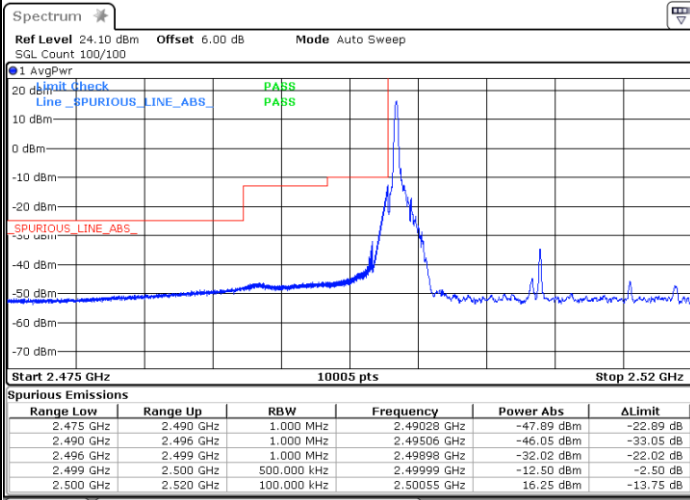




FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX

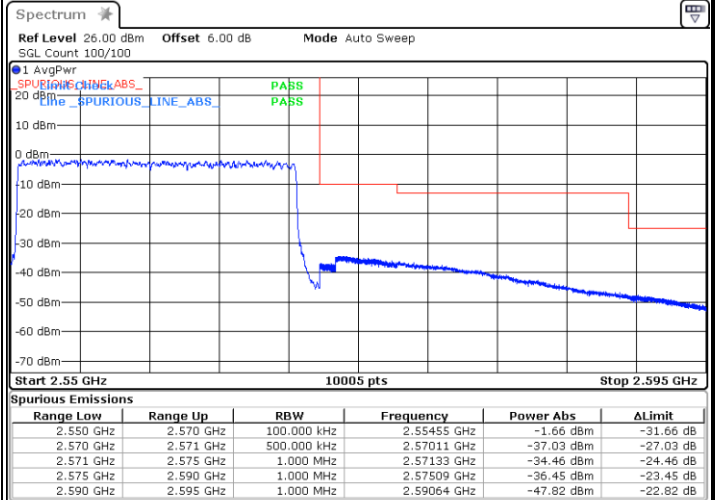
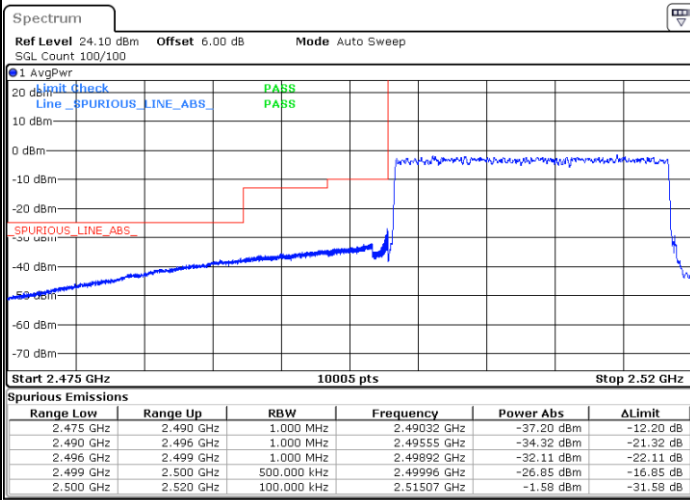


Date: 15.FEB.2022 02:13:38

Date: 15.FEB.2022 02:39:58

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 02:10:58

Date: 15.FEB.2022 02:36:12

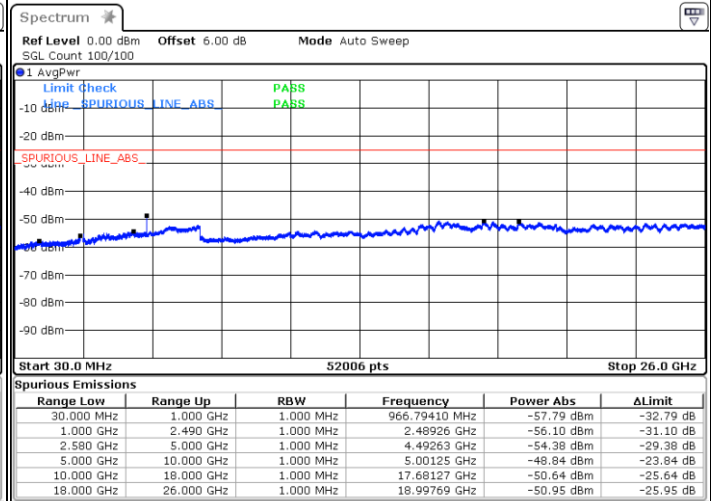
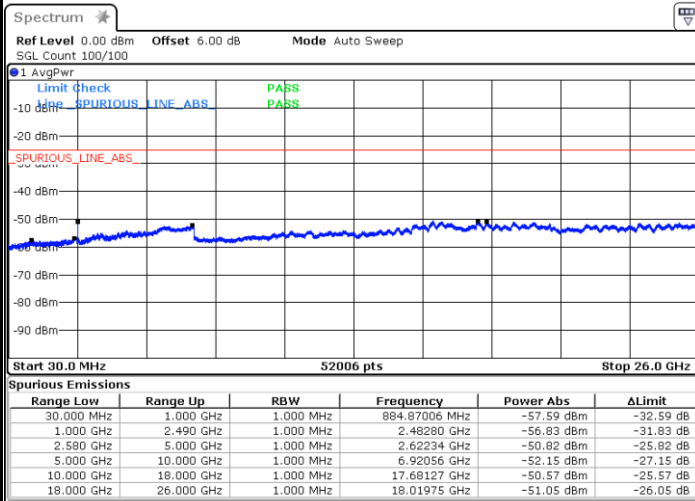


# Conducted Spurious Emission

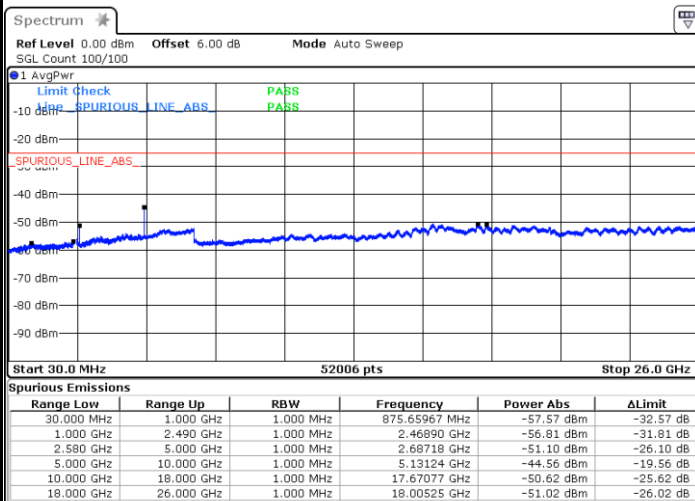
FR1 n7 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1



Highest Channel / 1RB1

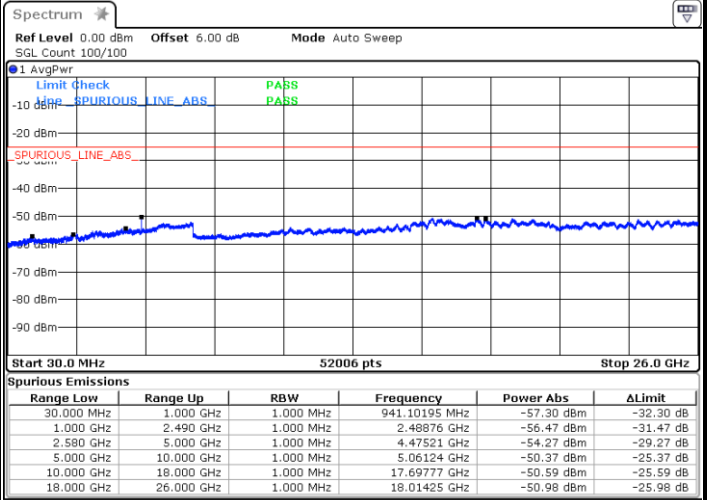
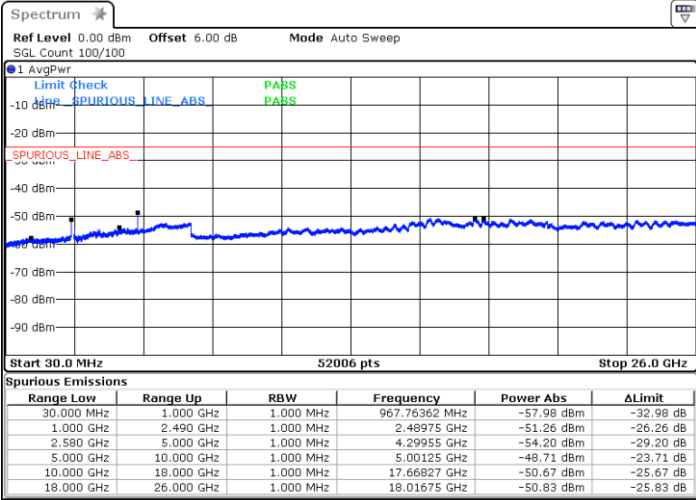




FR1 n7 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

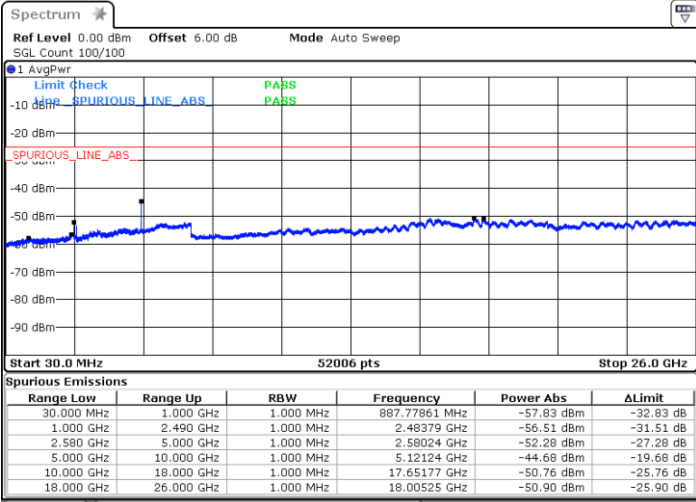
Middle Channel / 1RB1



Date: 15.FEB.2022 01:22:15

Date: 15.FEB.2022 01:24:10

Highest Channel / 1RB1



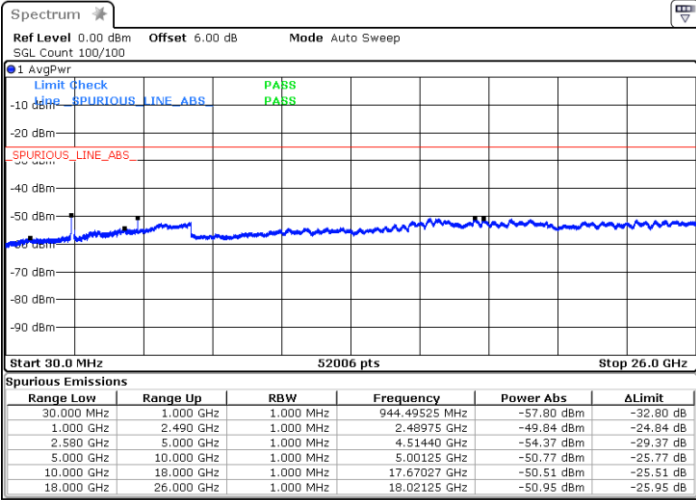
Date: 15.FEB.2022 01:26:05



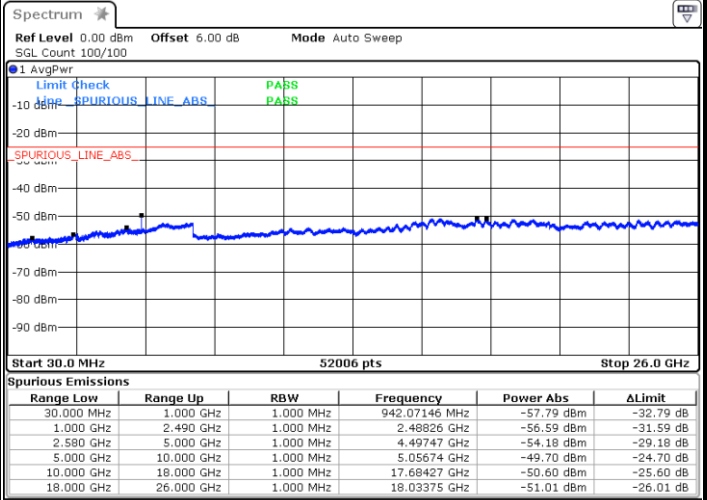
FR1 n7 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

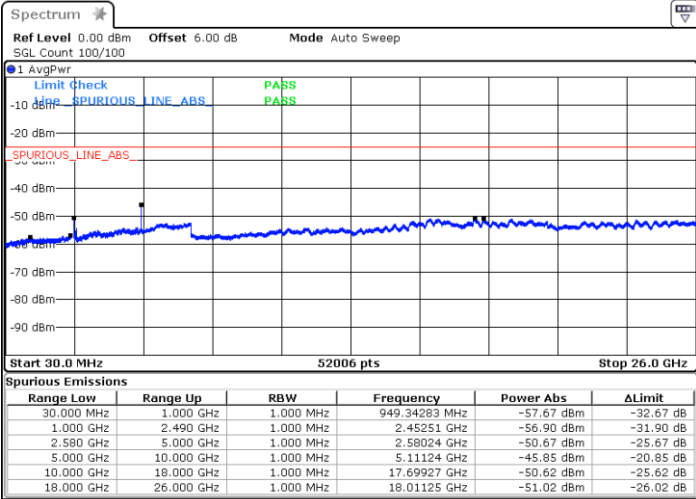


Date: 15.FEB.2022 01:45:25



Date: 15.FEB.2022 01:46:55

Highest Channel / 1RB1



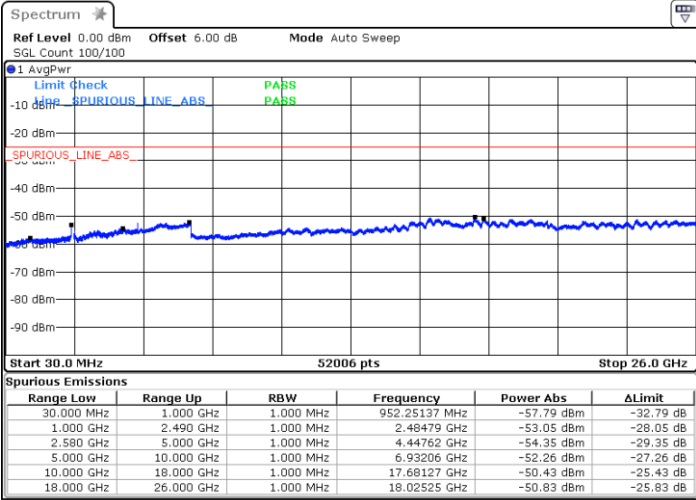
Date: 15.FEB.2022 01:49:41



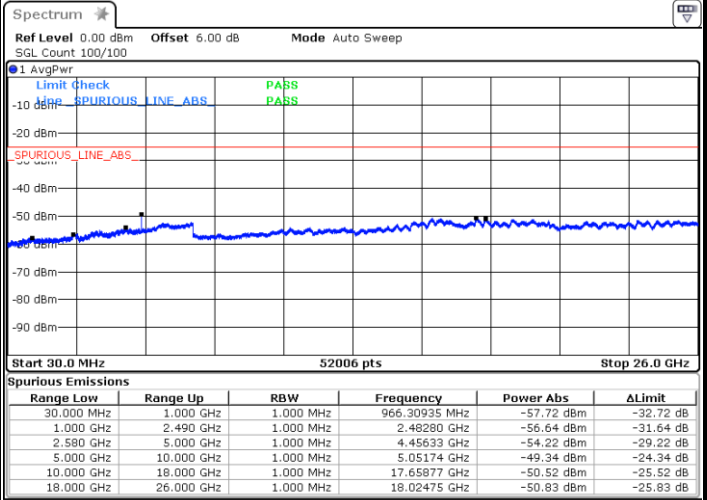
FR1 n7 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

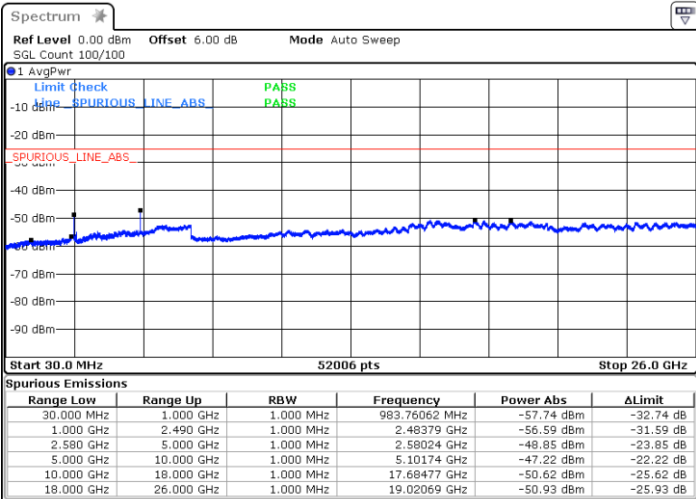


Date: 15.FEB.2022 02:29:31



Date: 15.FEB.2022 02:30:56

Highest Channel / 1RB1



Date: 15.FEB.2022 02:32:17



**Frequency Stability**

Test Conditions		FR1 n7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0005	PASS
40	Normal Voltage	0.0008	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0009	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0012	
20	Battery End Point	0.0023	

**Note:**

- 1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
- 2. Note: The frequency fundamental emissions stay within the authorized frequency block.



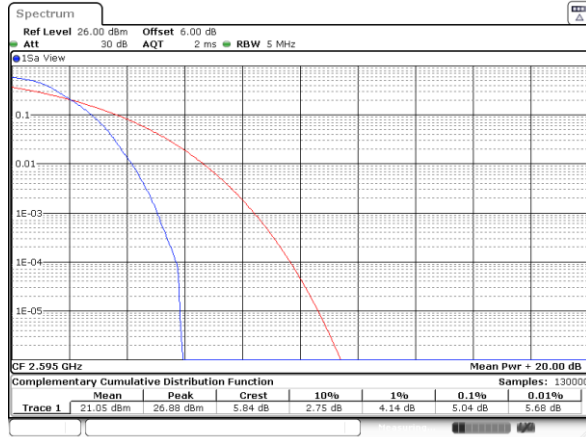
# FR1 n38

## Peak-to-Average Ratio

Mode	FR1 n38 / 5MHz / DFT-S OFDM				
Mod.	5M				Limit: 13dB
RB Size	BPSK	QPSK	16QAM	64QAM	Result
Middle CH	5.04	8.78	6.26	6.49	PASS
RB Size	256QAM				
Middle CH	7.68				

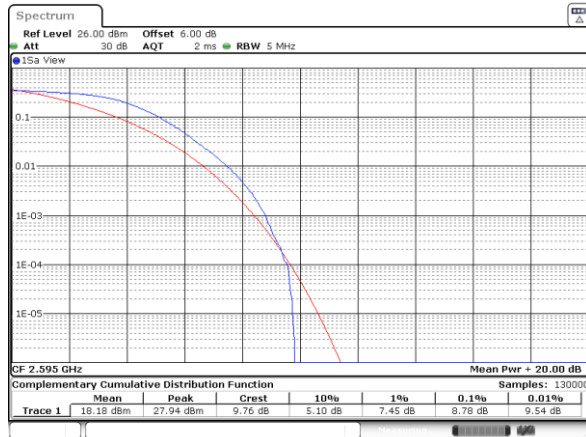


BPSK



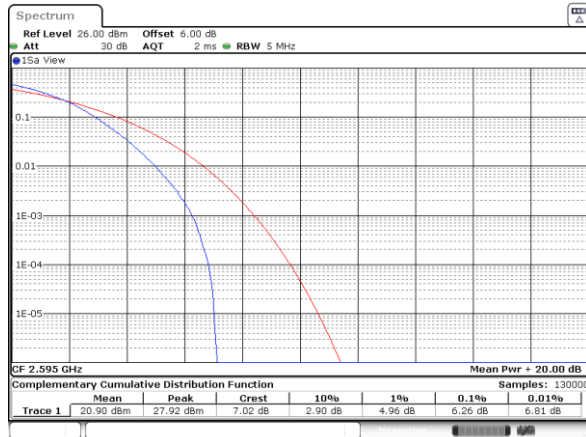
Date: 19.FEB.2022 09:36:39

QPSK



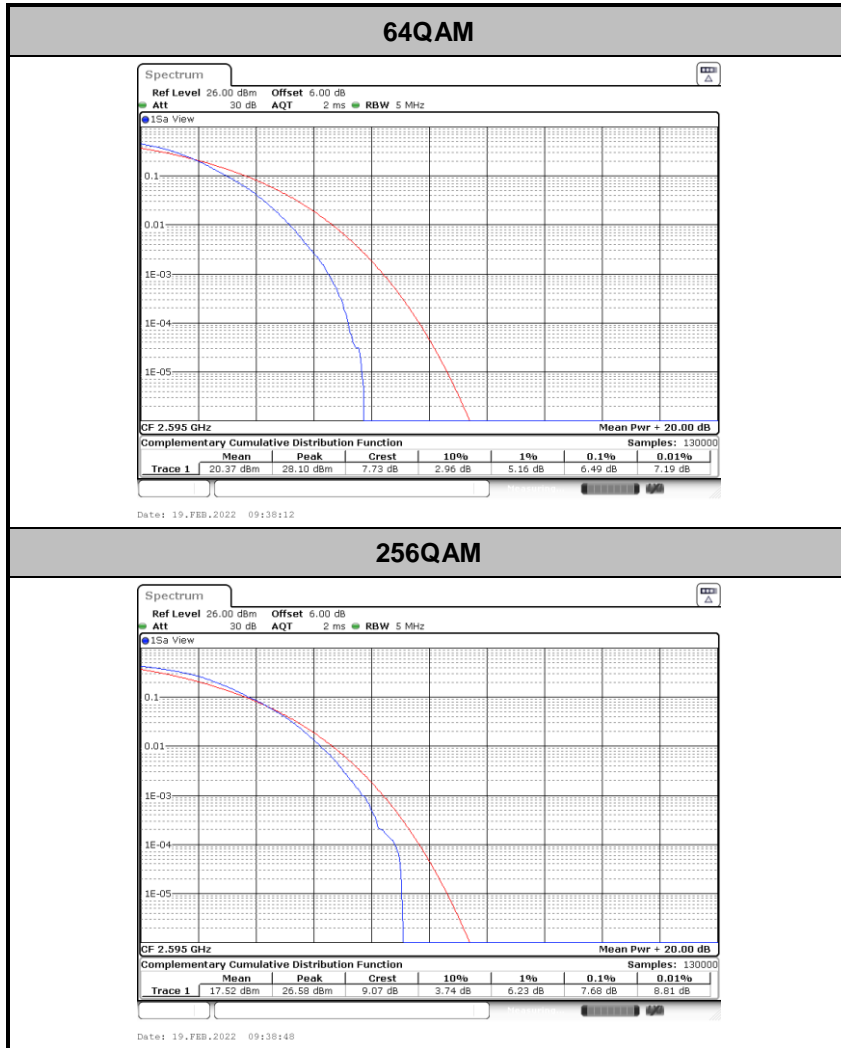
Date: 19.FEB.2022 09:36:54

16QAM



Date: 19.FEB.2022 09:37:10

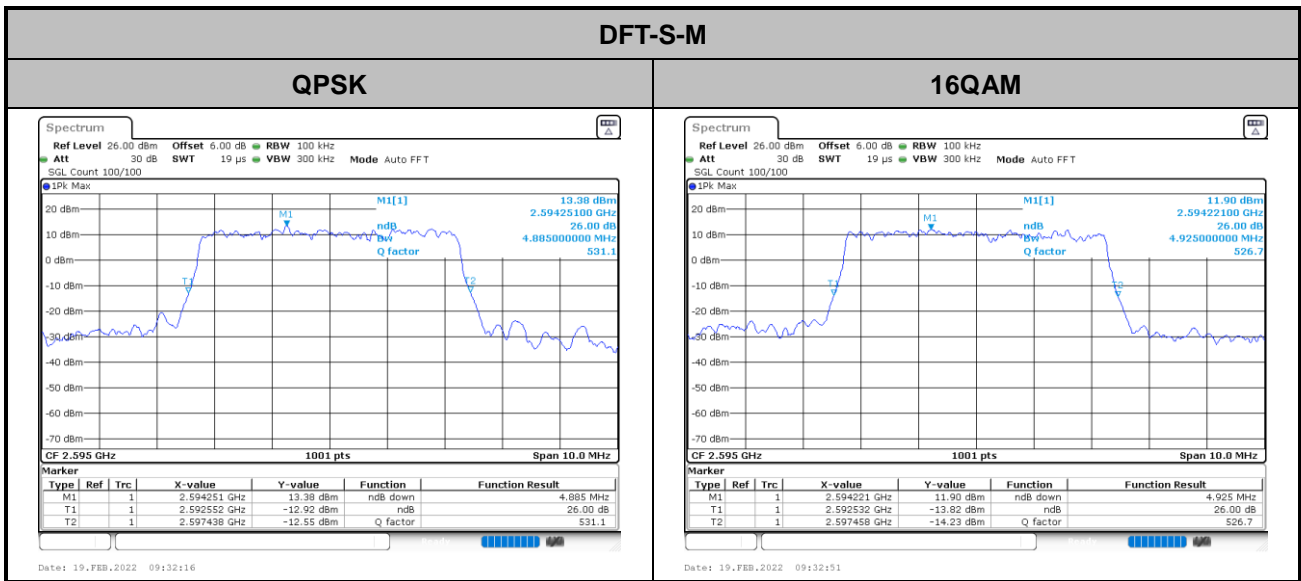






**26dB Bandwidth**

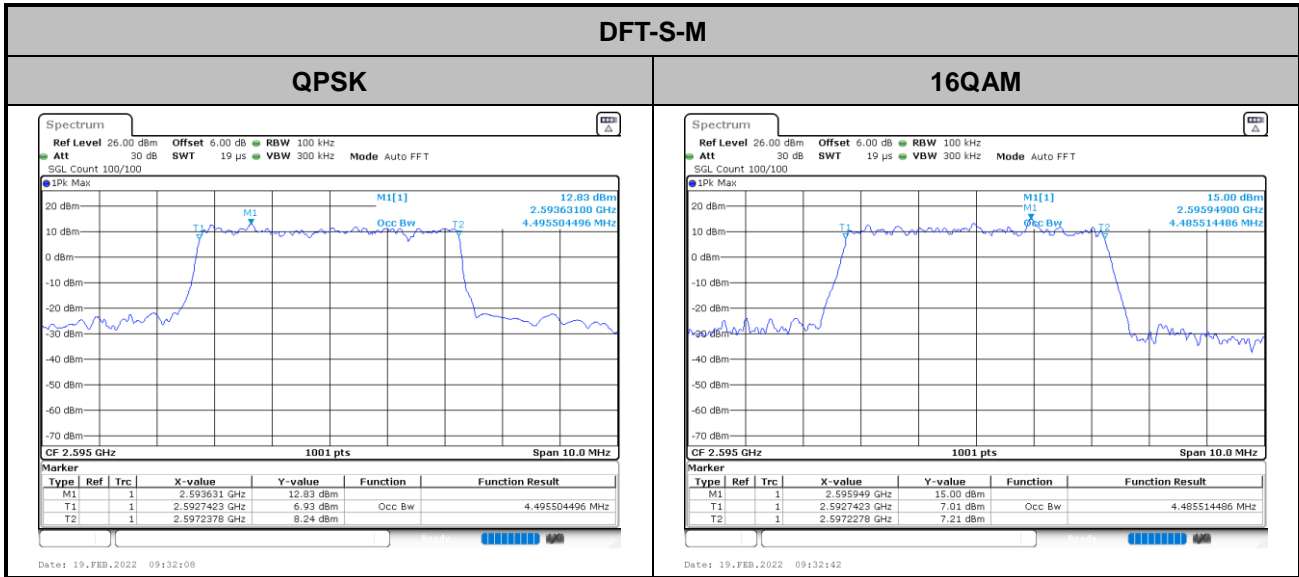
<b>Mode</b>	FR1 n38 : 26dB BW(5MHz) / DFT-S OFDM	
<b>BW</b>	DFT-S	
	<b>QPSK</b>	<b>16QAM</b>
<b>Mod.</b>	4.89	4.93





# Occupied Bandwidth

<b>Mode</b>	FR1 n38 : OB BW(5MHz) / DFT-S OFDM	
<b>BW</b>	DFT-S	
	<b>QPSK</b>	<b>16QAM</b>
<b>Mod.</b>	4.50	4.49



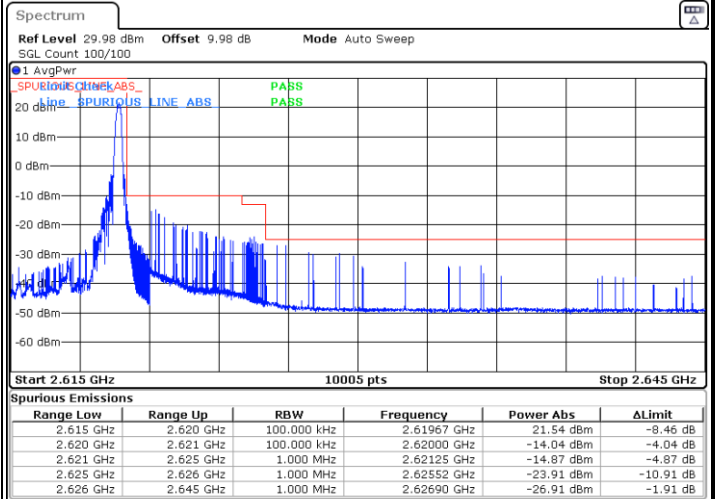
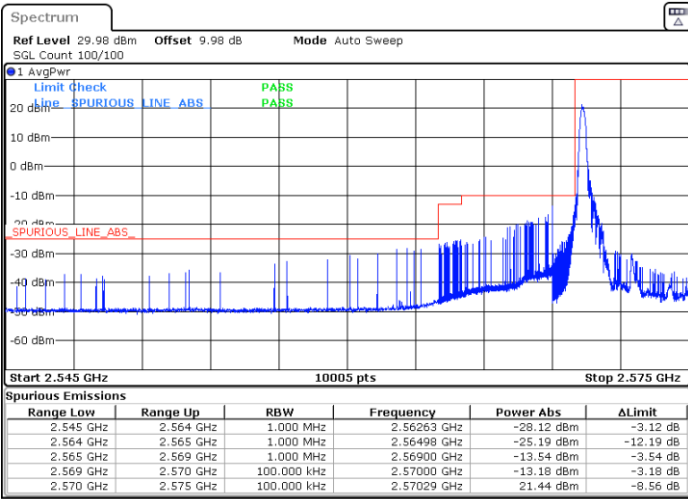


# Conducted Band Edge

FR1 n38 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

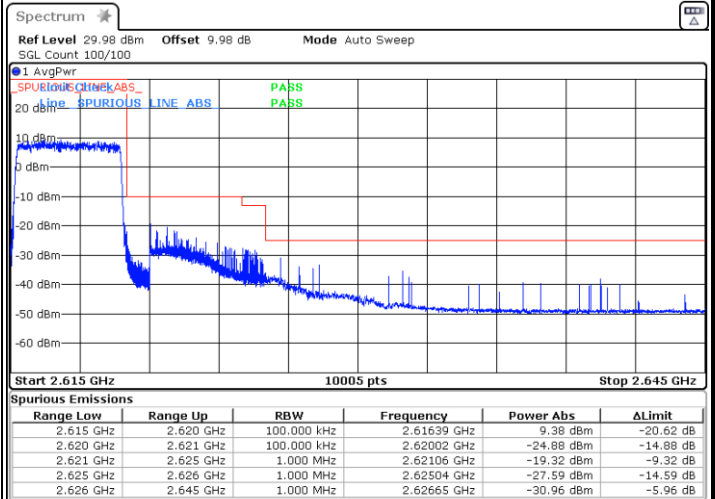
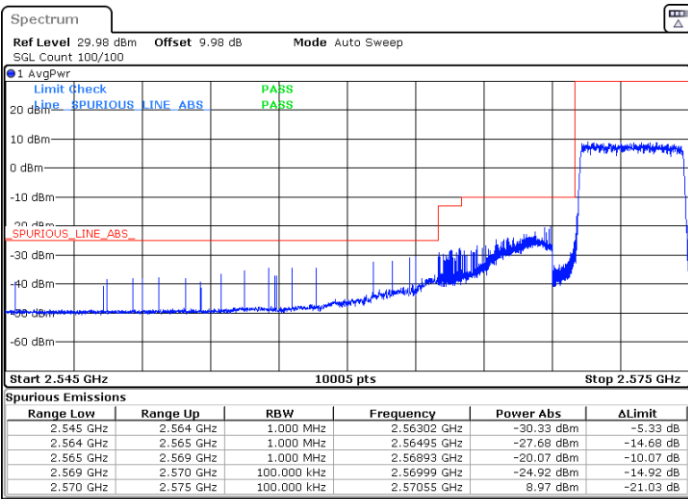


Date: 14.MAR.2022 16:05:09

Date: 14.MAR.2022 16:33:36

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.MAR.2022 16:06:28

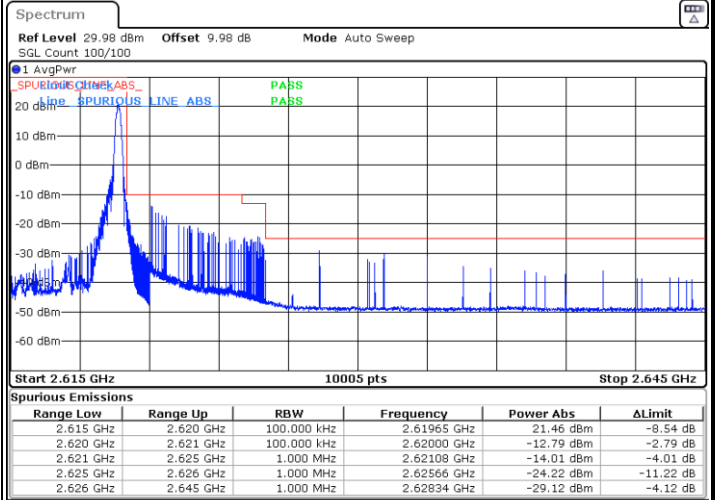
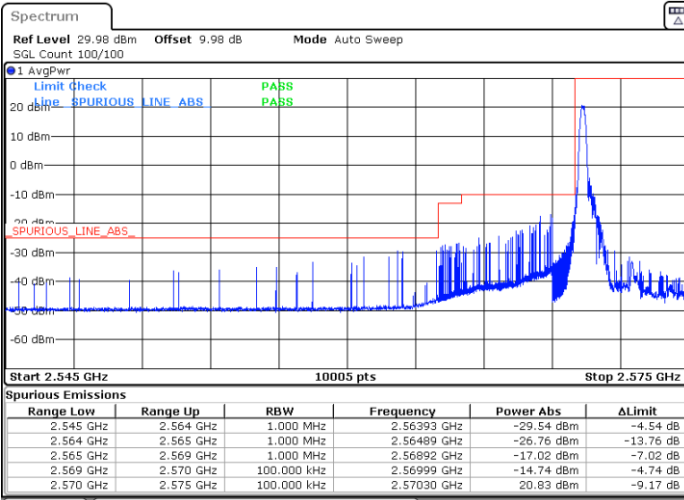
Date: 14.MAR.2022 16:27:09



FR1 n38 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

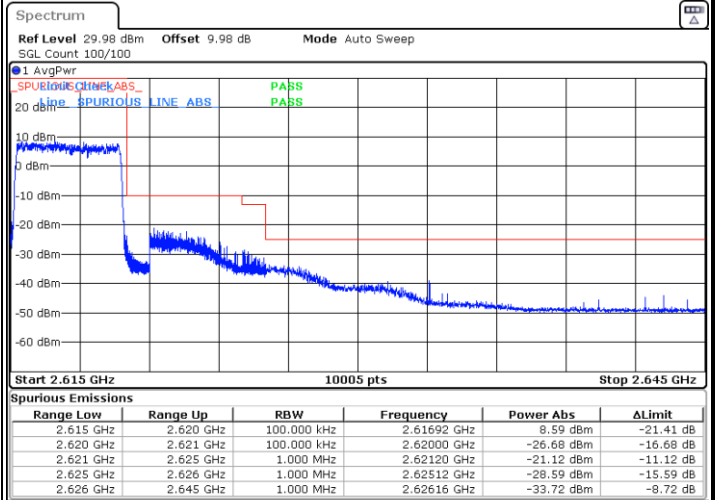
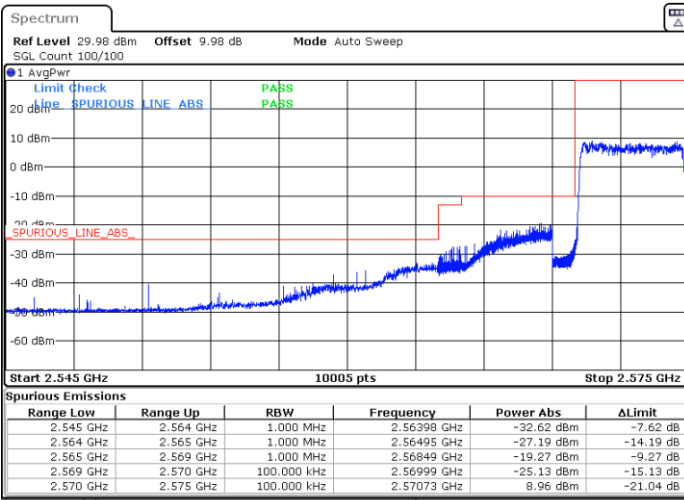


Date: 14.MAR.2022 16:03:41

Date: 14.MAR.2022 16:33:07

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.MAR.2022 16:13:12

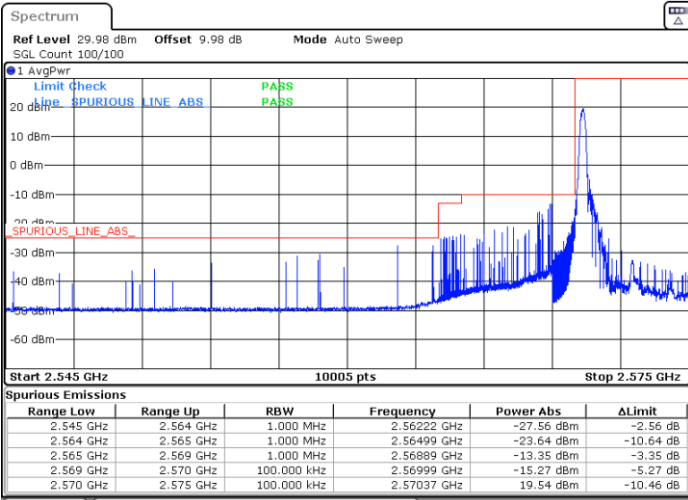
Date: 14.MAR.2022 16:25:28



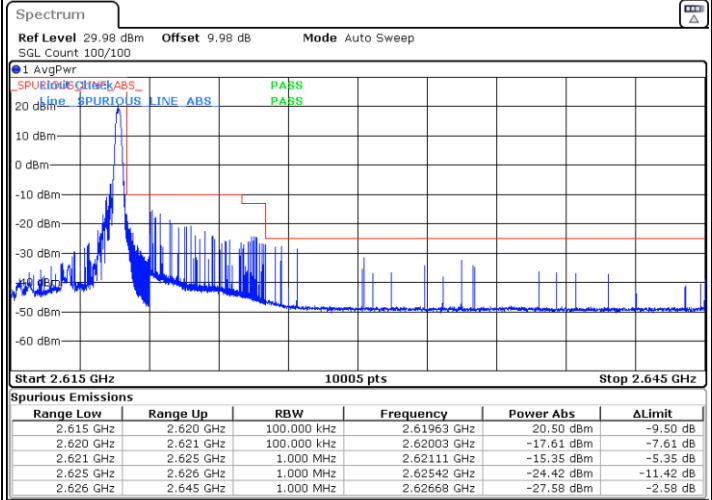
FR1 n38 / 5MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



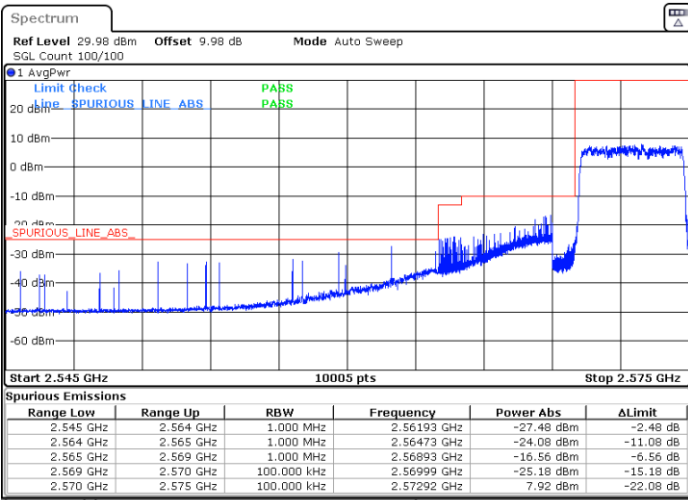
Date: 14.MAR.2022 16:04:01



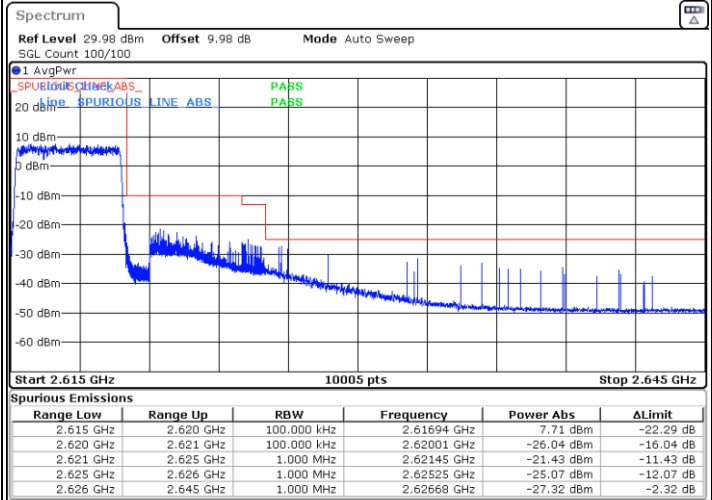
Date: 14.MAR.2022 16:32:47

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.MAR.2022 16:13:36

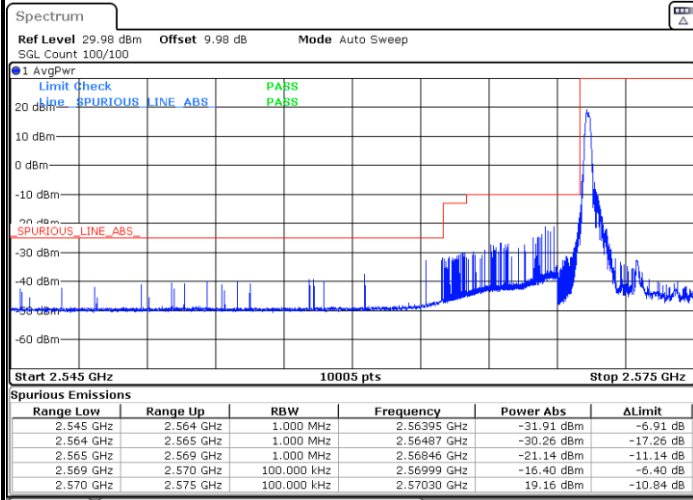


Date: 14.MAR.2022 16:15:12



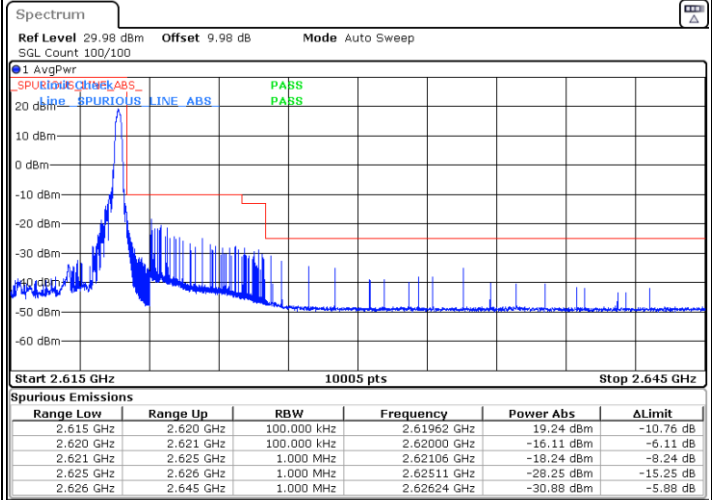
FR1 n38 / 5MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0



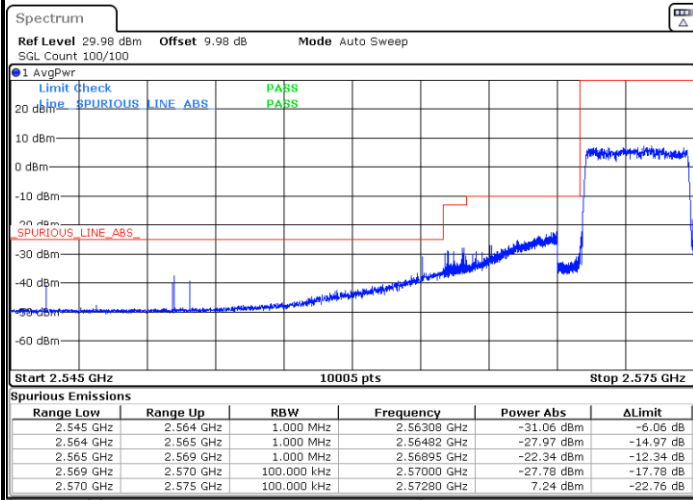
Date: 14.MAR.2022 16:04:41

Highest Band Edge / 1RB24



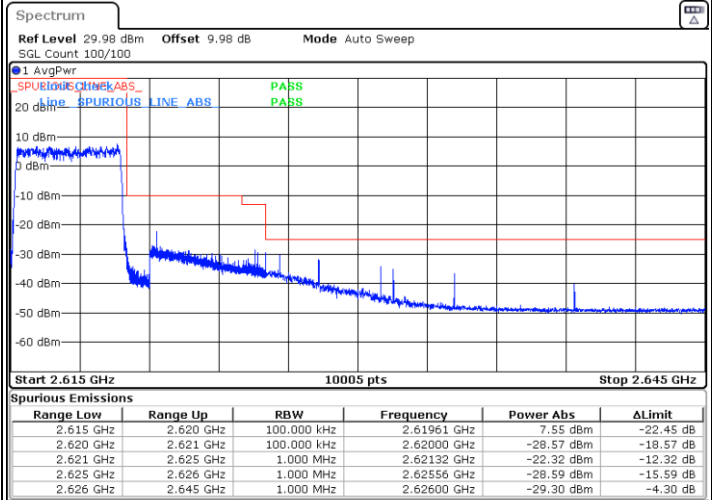
Date: 14.MAR.2022 16:32:26

Lowest Band Edge / Full RB



Date: 14.MAR.2022 16:14:03

Highest Band Edge / Full RB

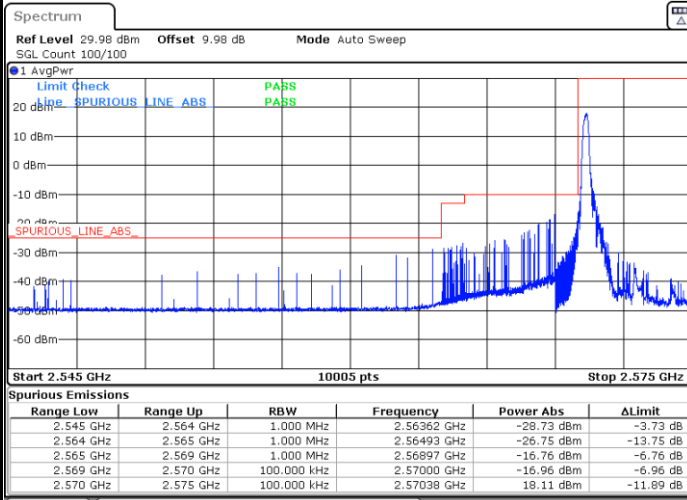


Date: 14.MAR.2022 16:14:53



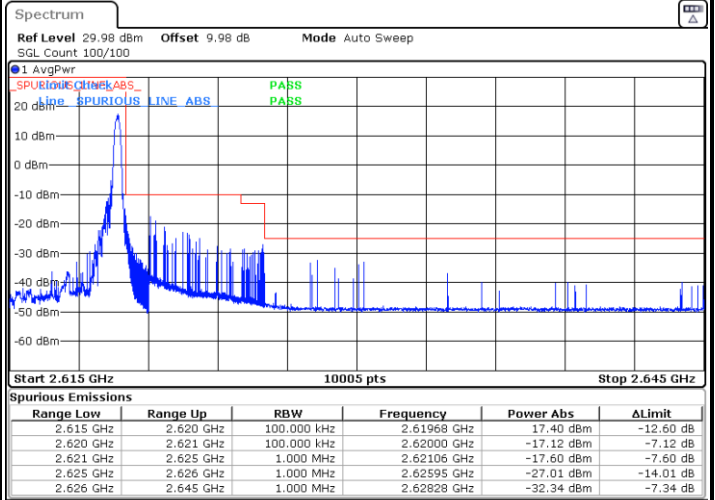
FR1 n38 / 5MHz / DFT-S OFDM / 256Q

Lowest Band Edge / 1RB0



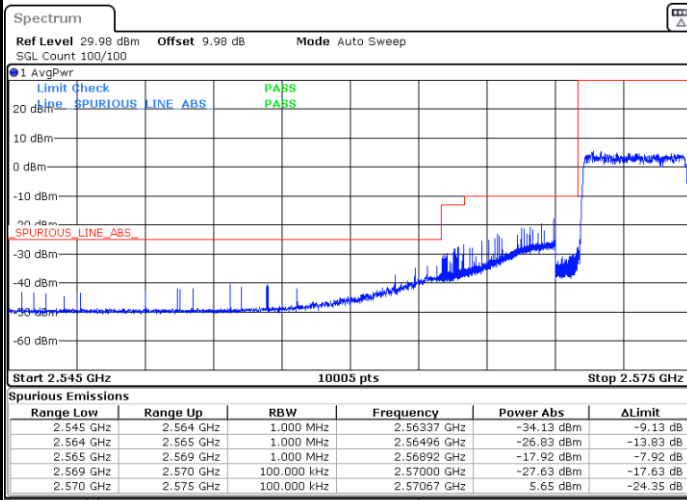
Date: 14.MAR.2022 16:05:34

Highest Band Edge / 1RB24



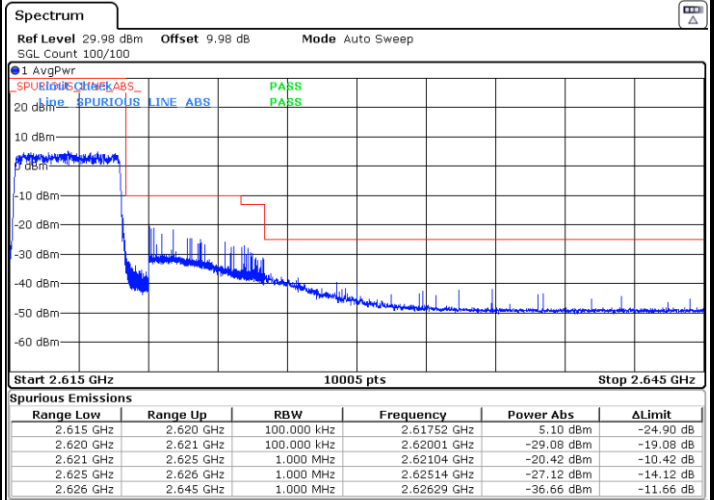
Date: 14.MAR.2022 16:31:25

Lowest Band Edge / Full RB



Date: 14.MAR.2022 16:05:56

Highest Band Edge / Full RB



Date: 14.MAR.2022 17:34:36



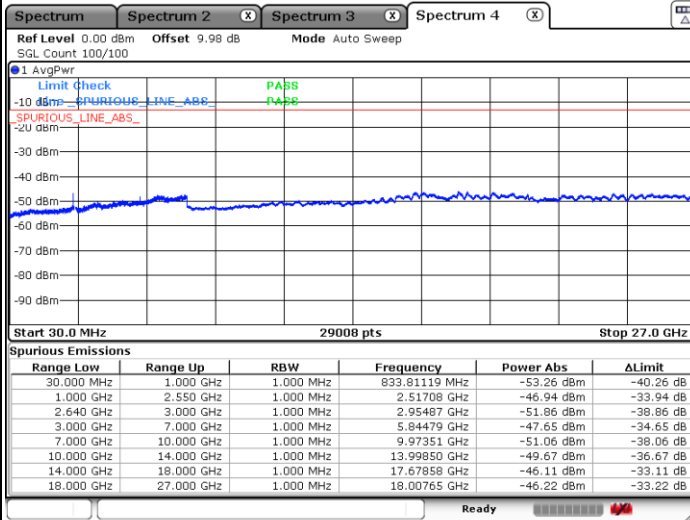


# Conducted Spurious Emission

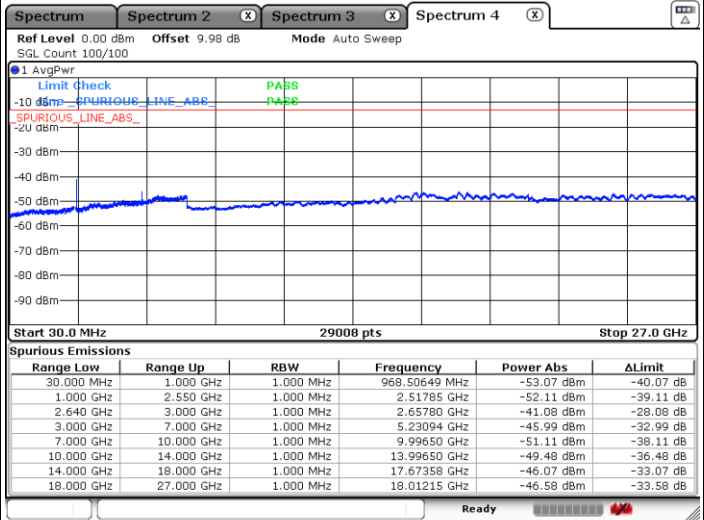
FR1 n38 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

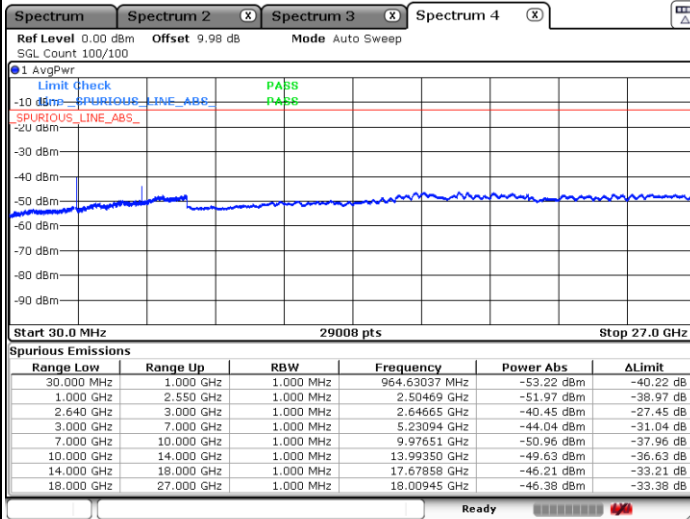


Date: 19.FEB.2022 10:52:27



Date: 19.FEB.2022 10:50:55

Highest Channel / 1RB1



Date: 19.FEB.2022 10:54:00



### Frequency Stability

Test Conditions		FR1 n38 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
5	Normal Voltage	0.0012	
30	Normal Voltage	0.0019	
20(Ref.)	Normal Voltage	0.0036	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0037	
20	Normal Voltage	0.0006	
20	Battery End Point	0.0036	

**Note:**

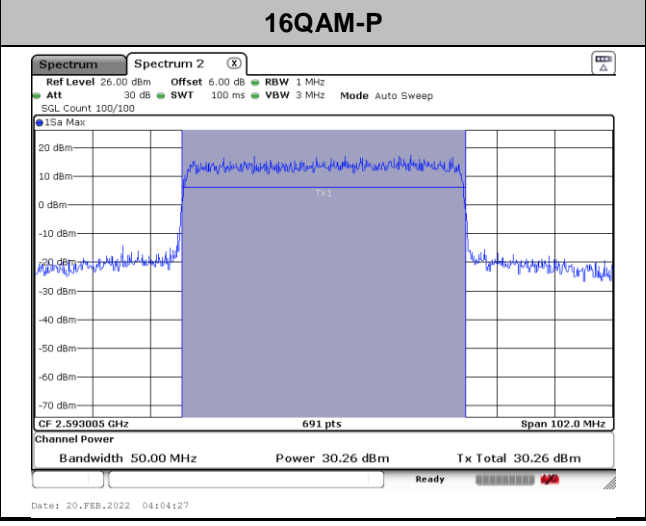
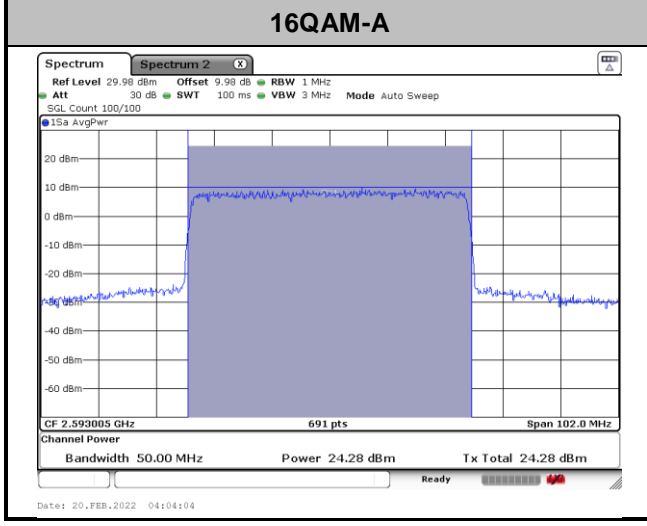
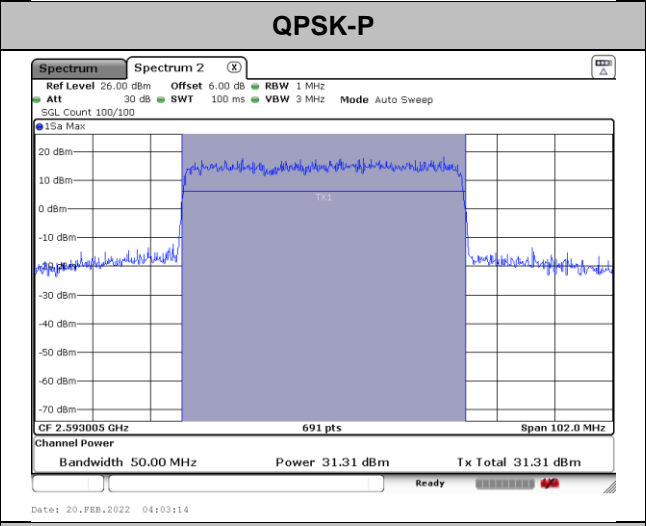
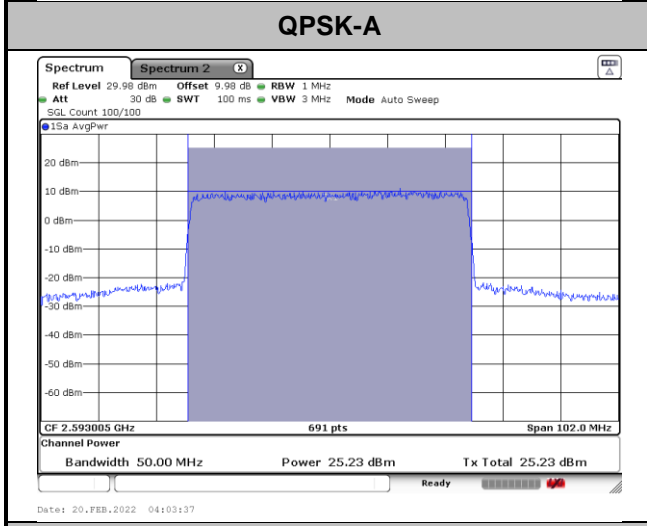
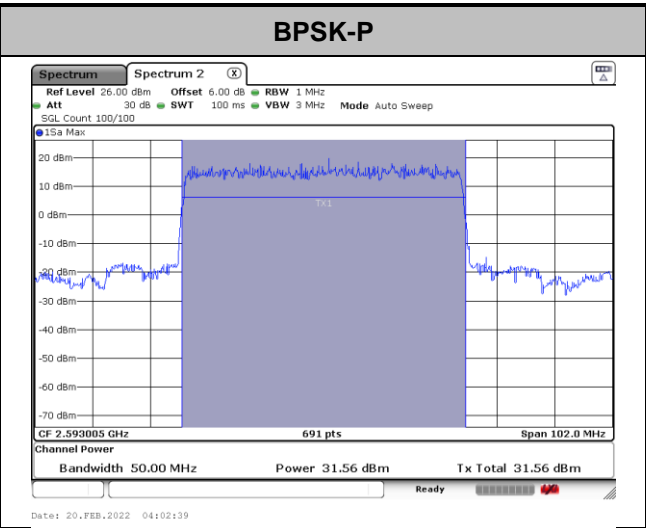
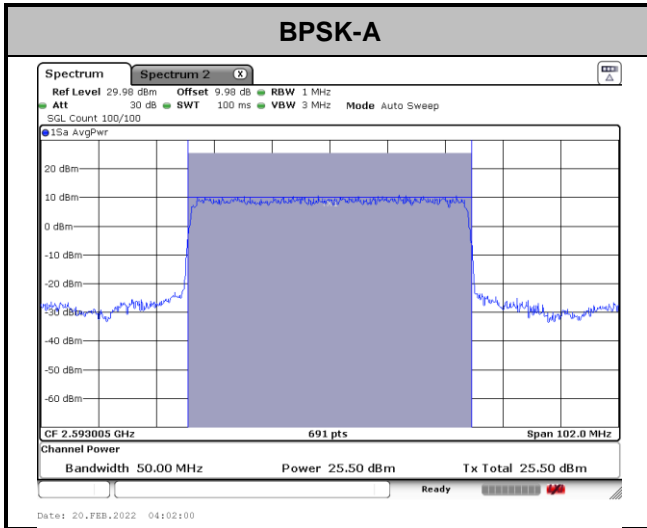
- 1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
- 2. Note: The frequency fundamental emissions stay within the authorized frequency block.

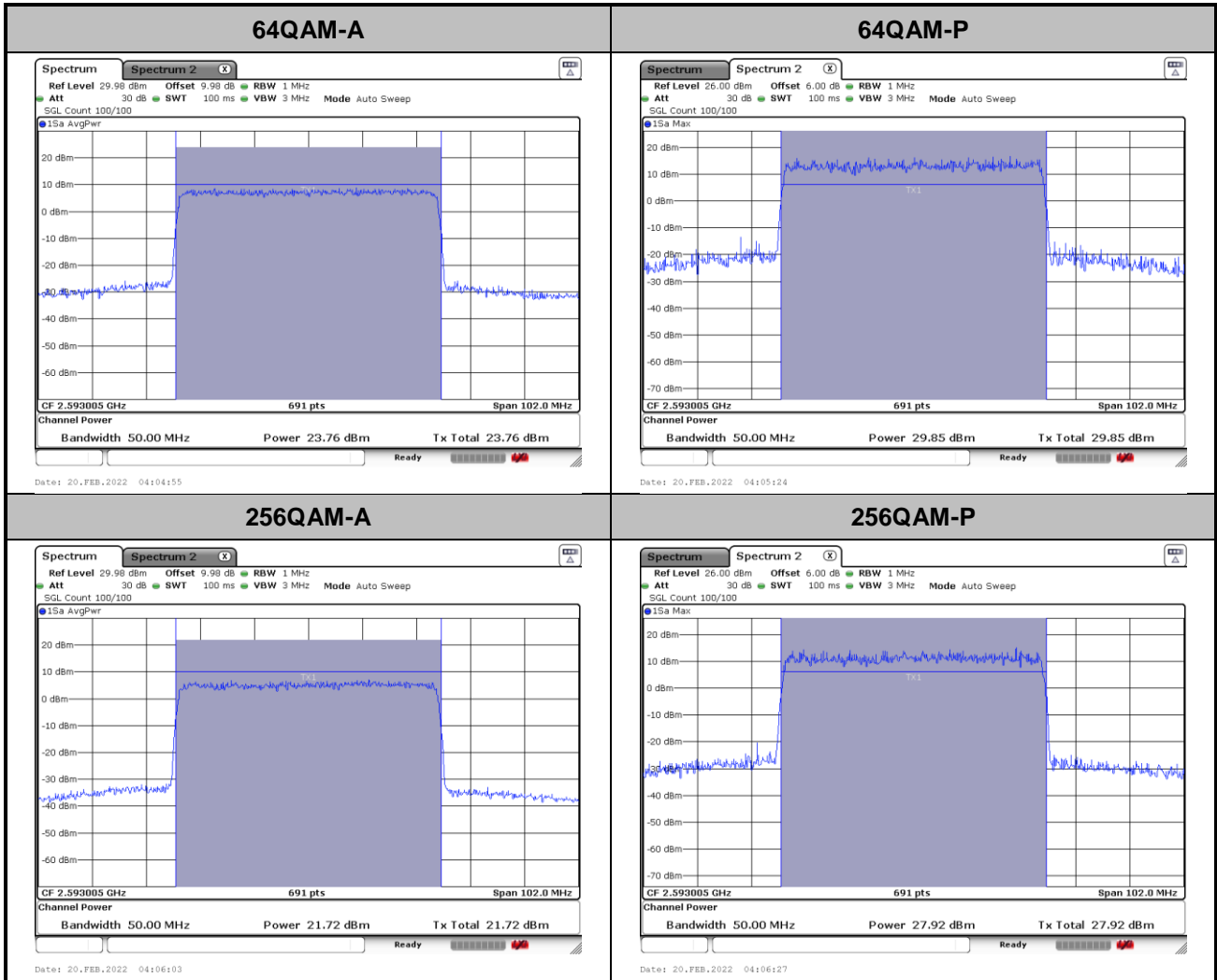


# FR1 n41

## Peak-to-Average Ratio

Mode	FR1 n41 / 50MHz / DFT-S OFDM				
Mod.	50M				Limit: 13dB
RB Size	BPSK	QPSK	16QAM	64QAM	Result
Middle CH	6.06	6.08	5.98	6.09	PASS
RB Size	256QAM				
Middle CH	6.20				

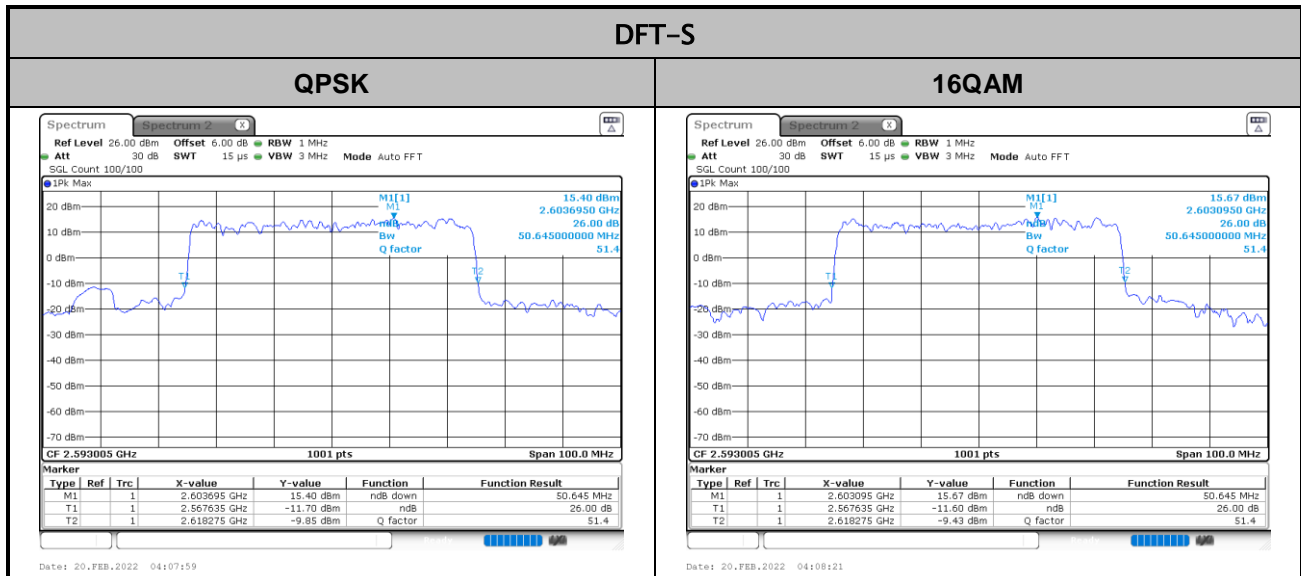






## 26dB Bandwidth

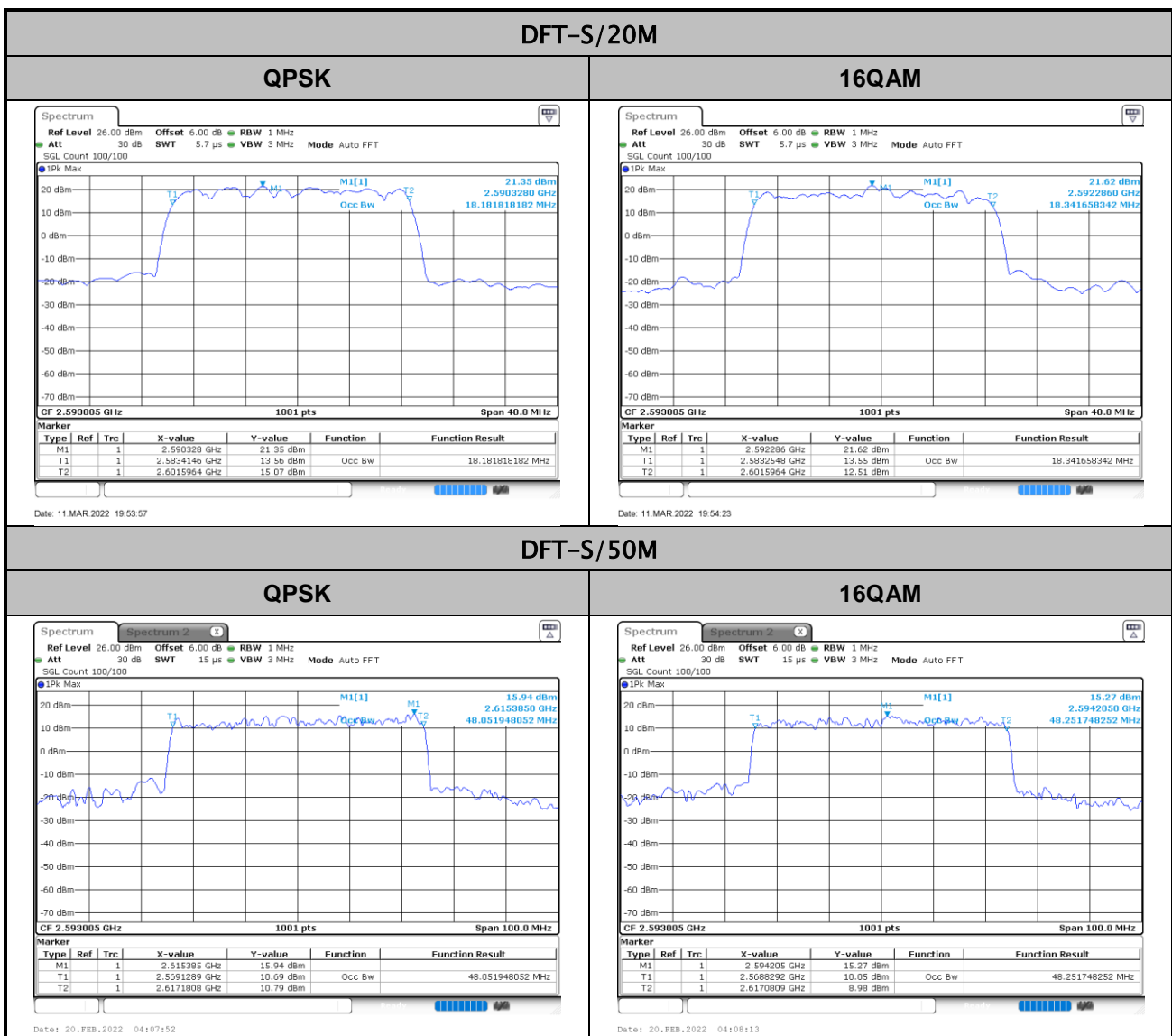
<b>Mode</b>	<b>FR1 n41 : 26dB BW(50MHz) / DFT-S OFDM</b>	
<b>BW</b>	<b>DFT-S</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	50.65	50.65





# Occupied Bandwidth

<b>Mode</b>	<b>FR1 n41 : OB BW(MHz) / DFT-S OFDM</b>	
<b>BW</b>	<b>DFT-S/20M</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	18.18	18.34
<b>BW</b>	<b>DFT-S/50M</b>	
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>
<b>Middle CH</b>	48.05	48.25



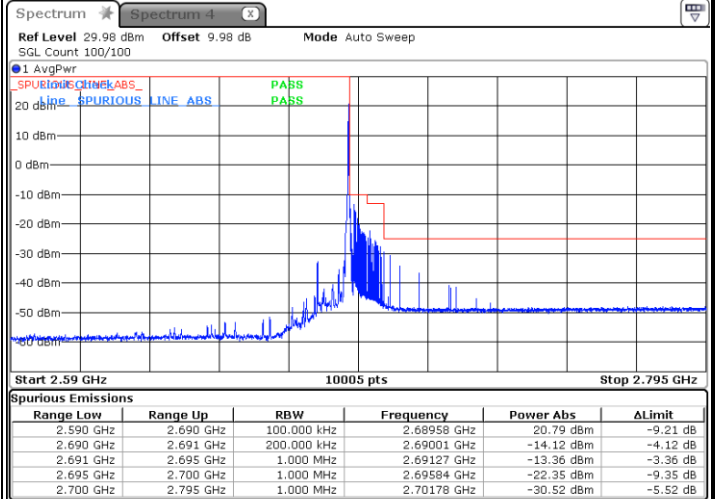
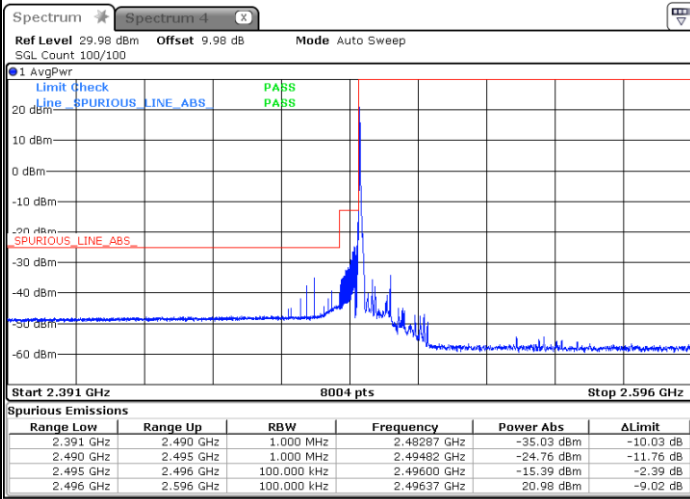


# Conducted Band Edge

FR1 n41 / 10MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

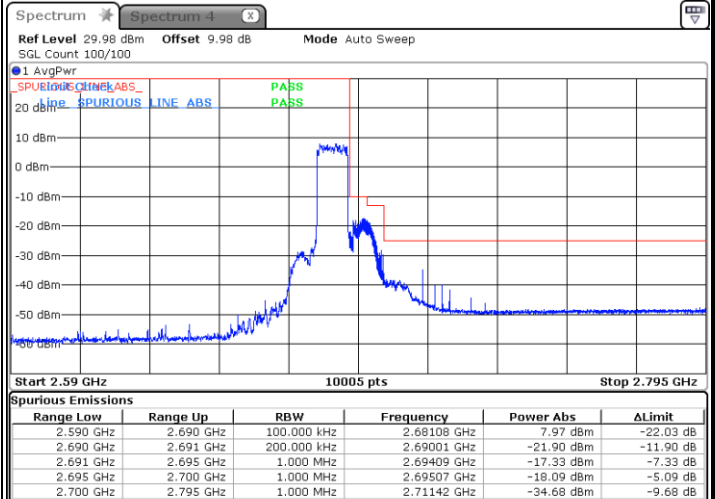
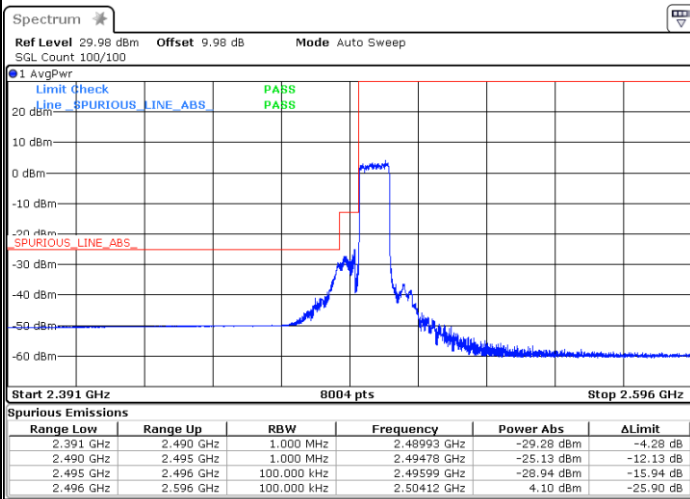


Date: 19.FEB.2022 22:11:13

Date: 19.FEB.2022 21:47:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1.MAR.2022 09:58:29

Date: 19.FEB.2022 21:36:34

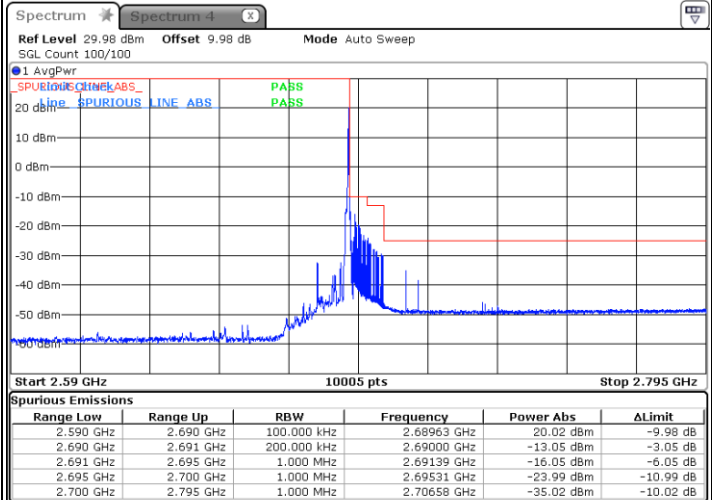
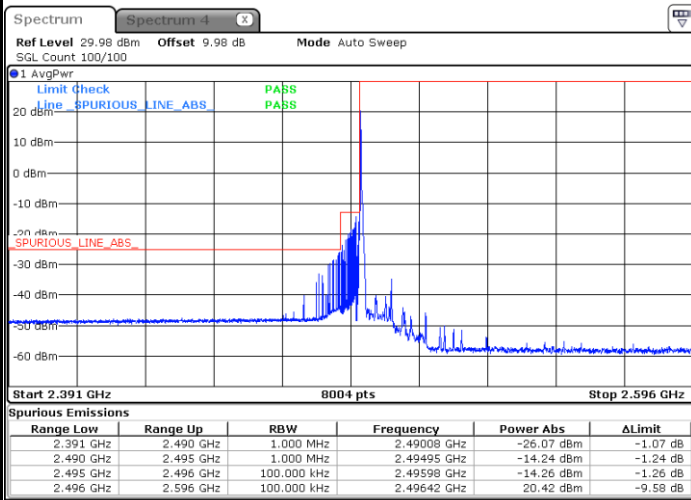




FR1 n41 / 10MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

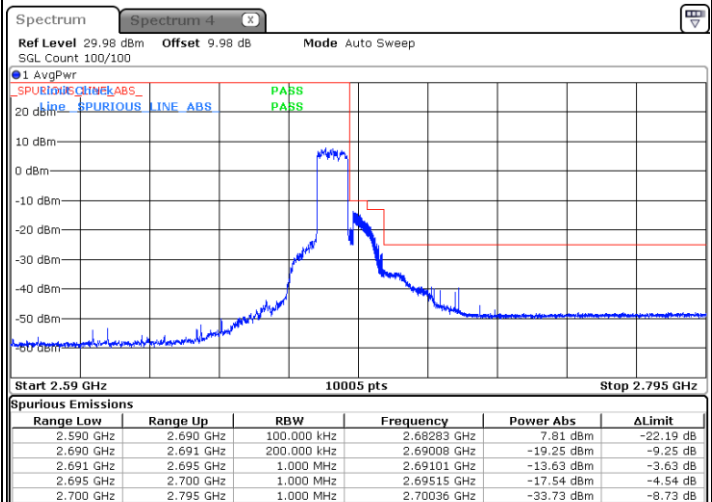
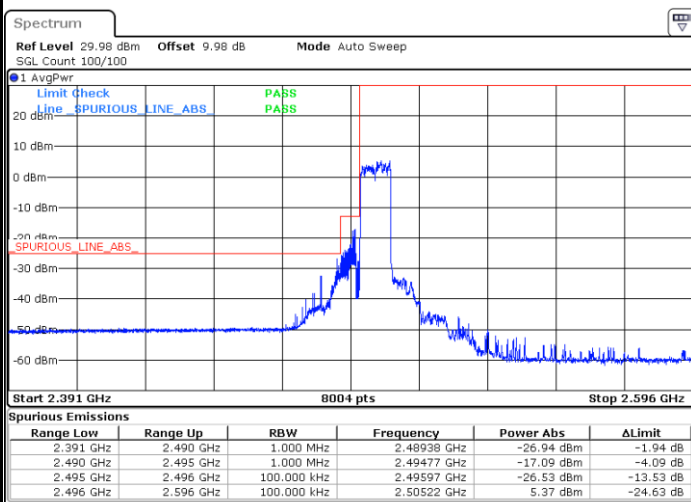


Date: 19.FEB.2022 22:10:26

Date: 19.FEB.2022 21:46:43

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1 MAR 2022 09:58:58

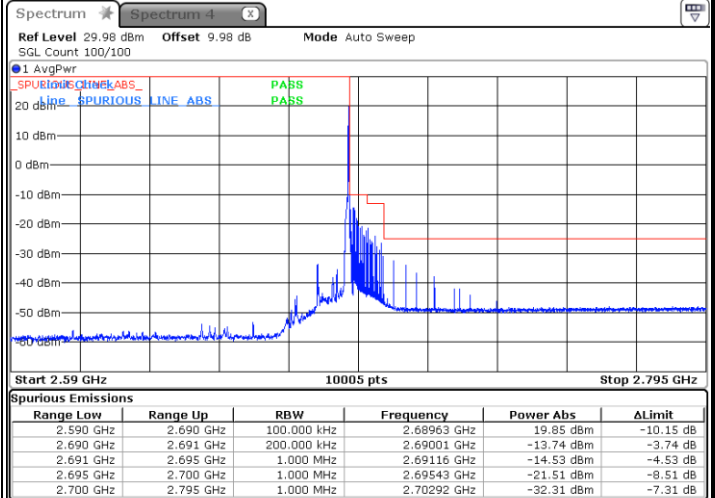
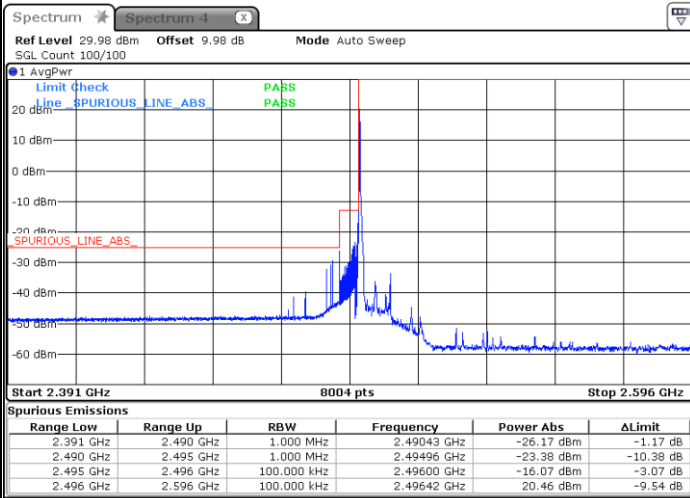
Date: 19.FEB.2022 21:37:28



FR1 n41 / 10MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

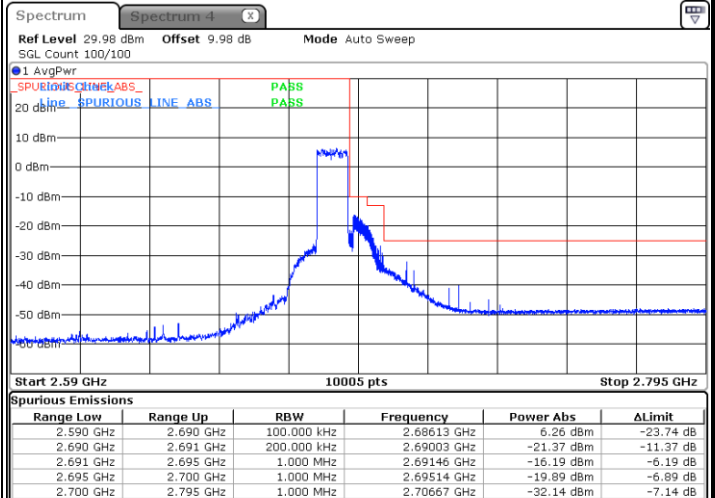
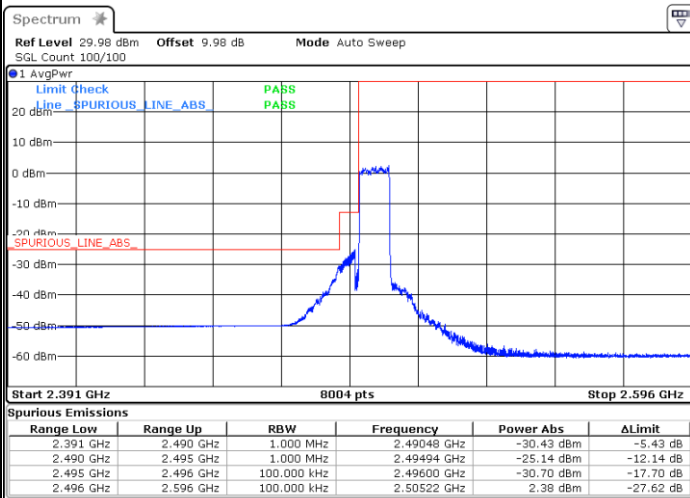


Date: 19.FEB.2022 22:09:46

Date: 19.FEB.2022 21:45:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



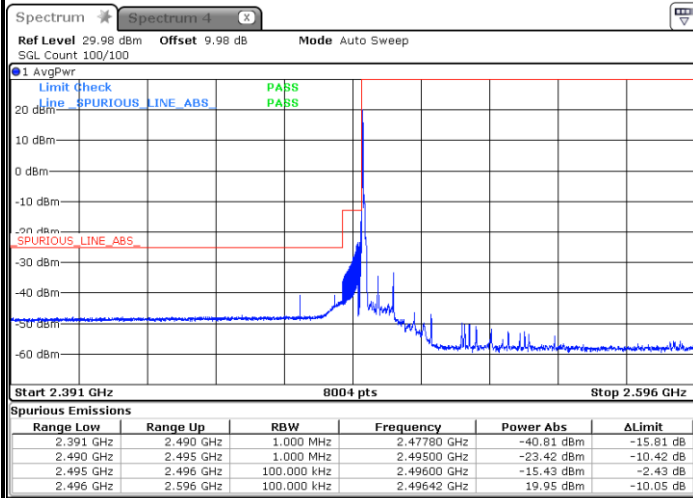
Date: 1.MAR.2022 10:00:52

Date: 19.FEB.2022 21:38:05



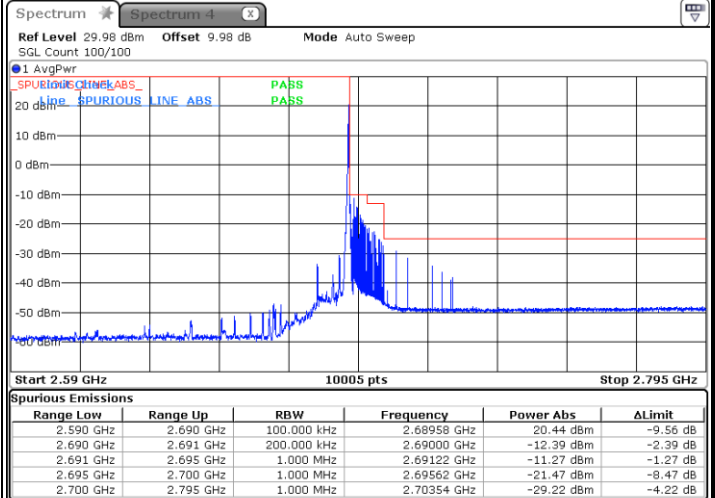
FR1 n41 / 10MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0



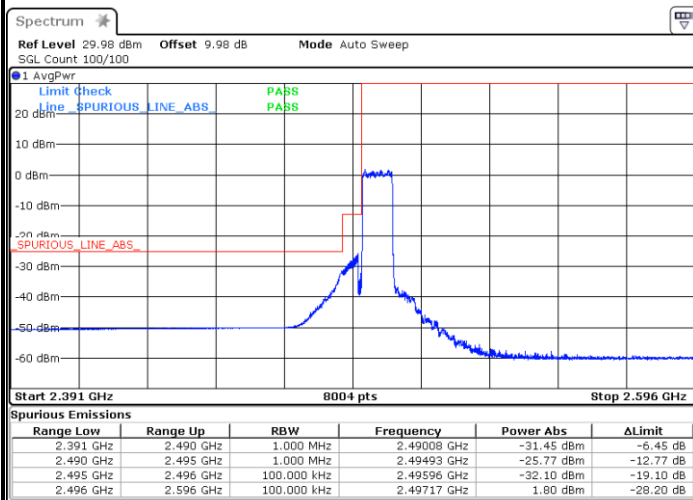
Date: 19.FEB.2022 22:09:05

Highest Band Edge / 1RB24



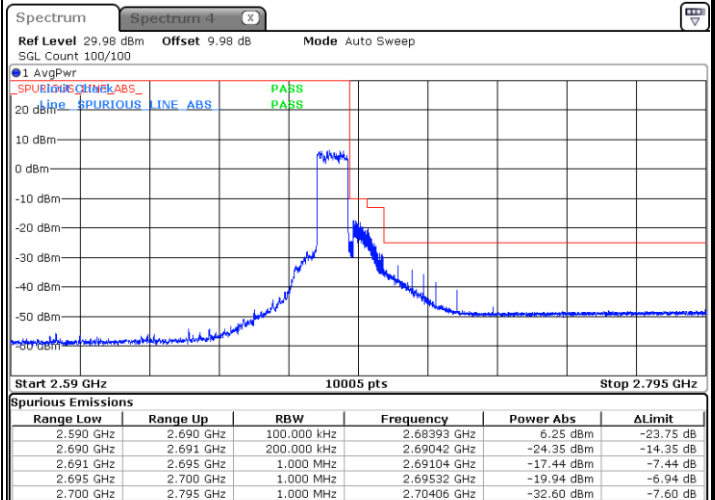
Date: 19.FEB.2022 21:44:54

Lowest Band Edge / Full RB



Date: 1.MAR.2022 10:03:20

Highest Band Edge / Full RB

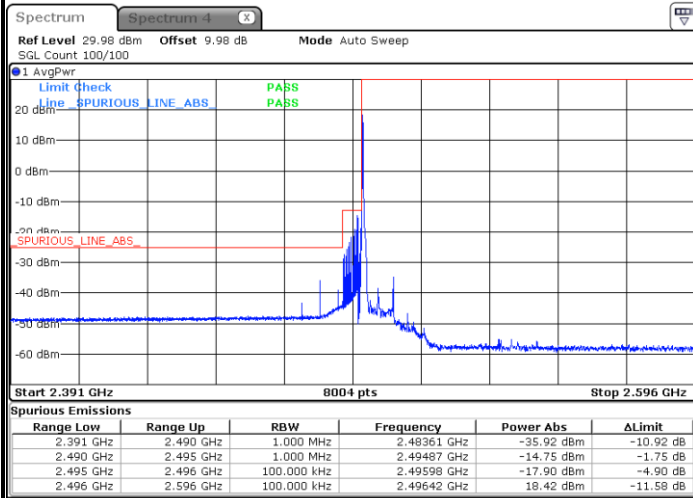


Date: 19.FEB.2022 21:38:23

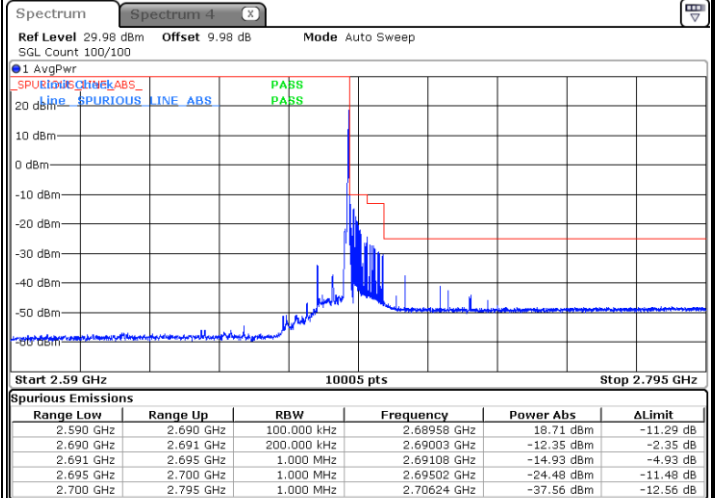


FR1 n41 / 10MHz / DFT-S OFDM / 256Q

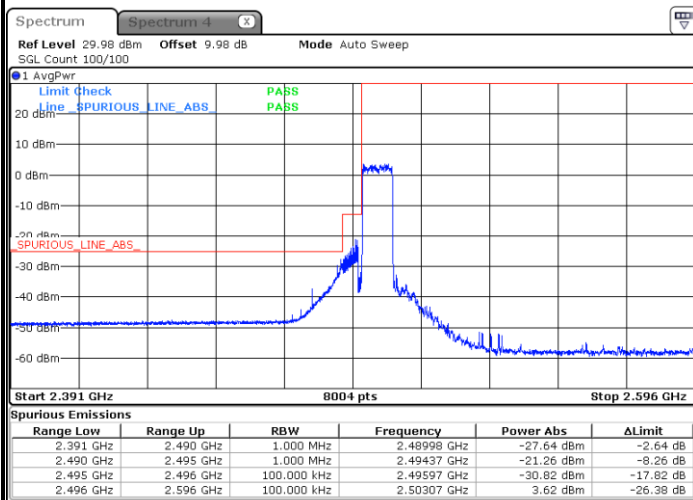
Lowest Band Edge / 1RB0



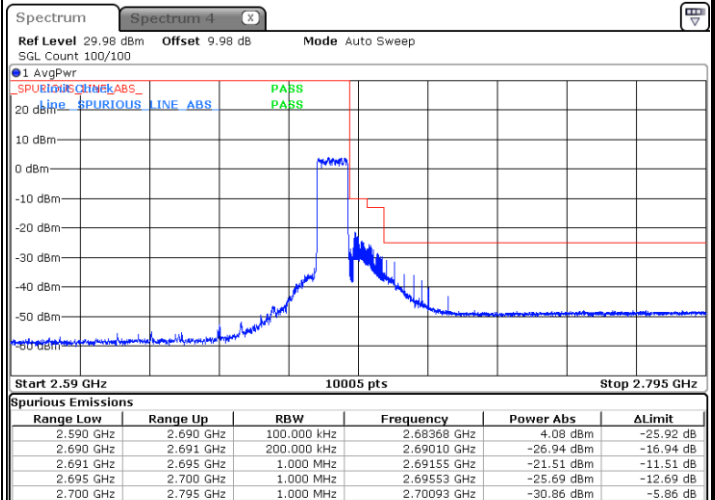
Highest Band Edge / 1RB24



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

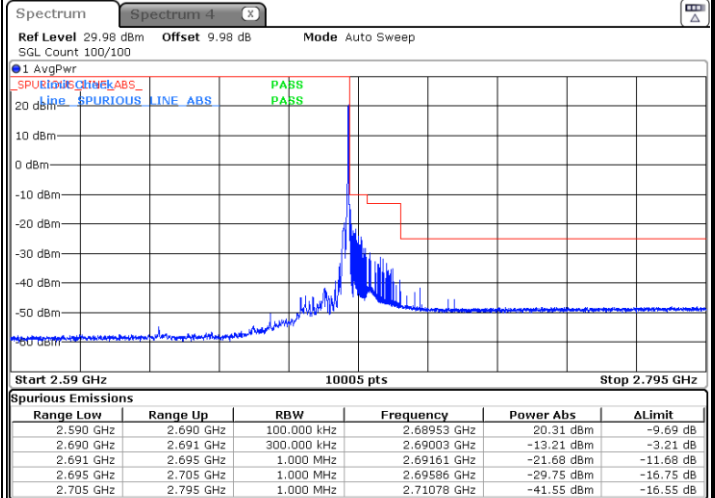
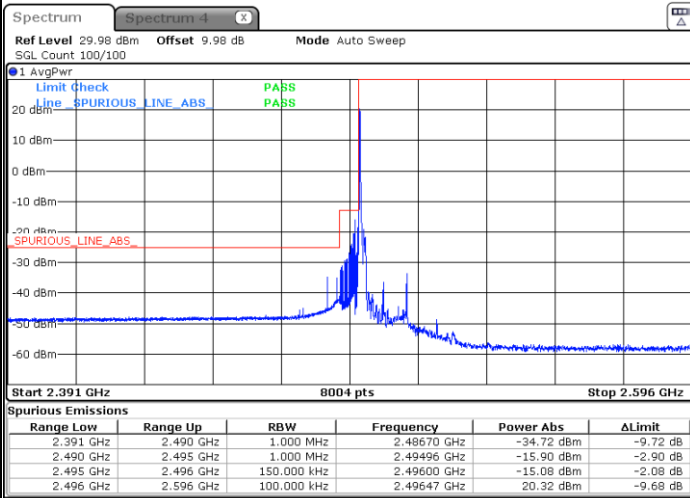




FR1 n41 /15MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

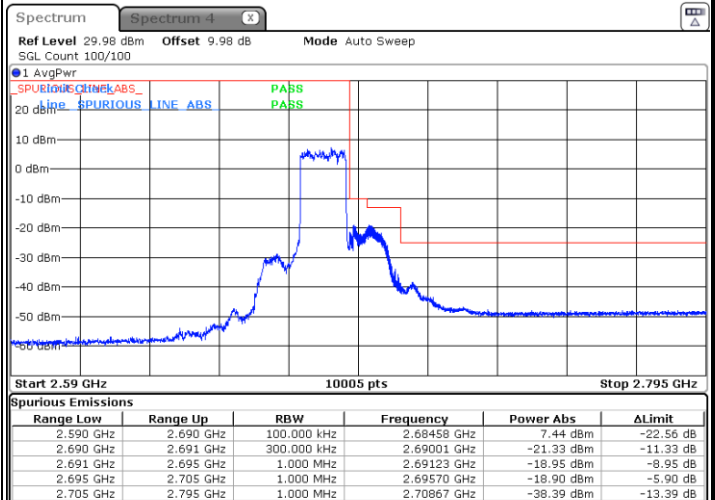
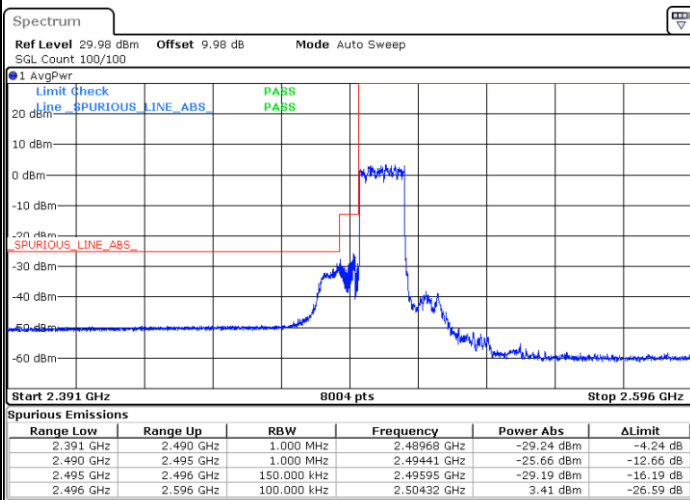


Date: 19.FEB.2022 22:30:09

Date: 19.FEB.2022 22:46:55

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1.MAR.2022 10:05:48

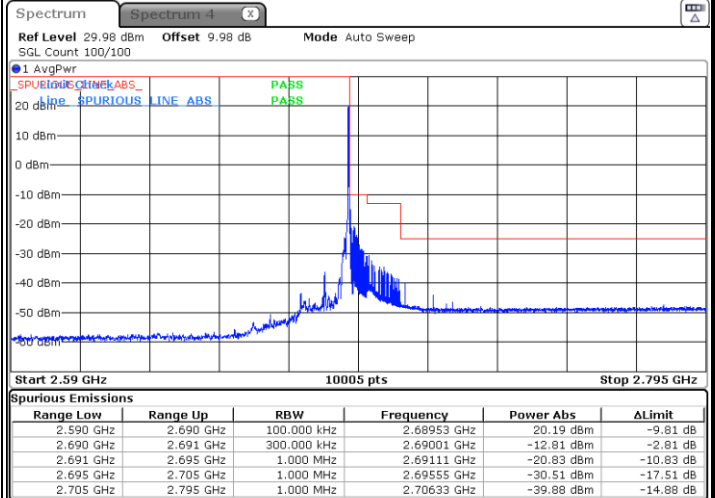
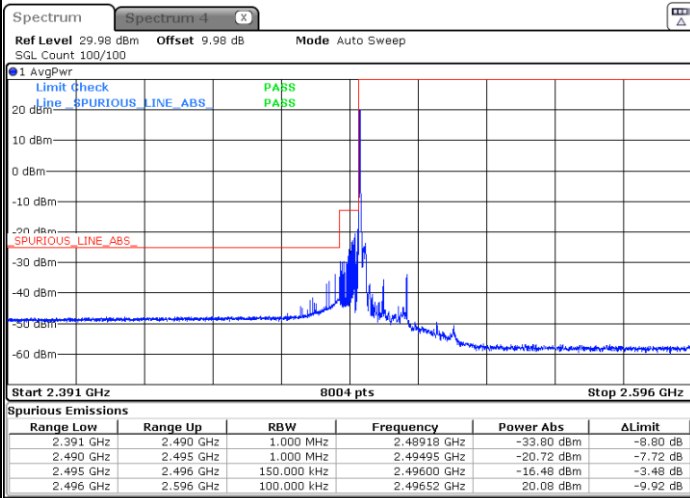
Date: 19.FEB.2022 22:42:18



FR1 n41 / 15MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

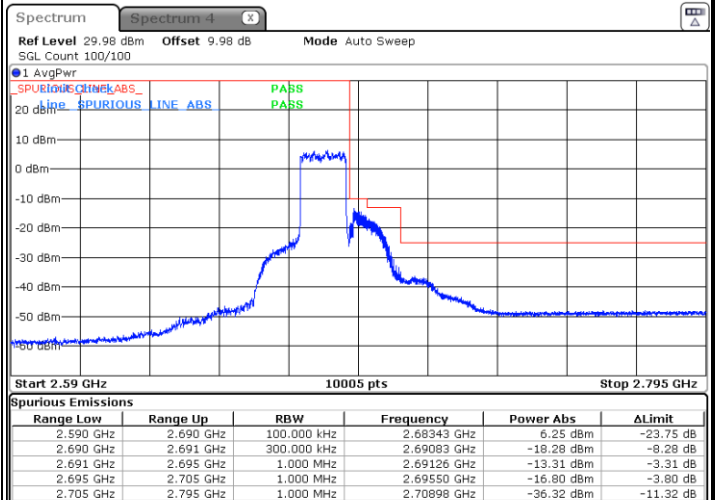


Date: 19.FEB.2022 22:29:45

Date: 19.FEB.2022 22:46:33

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 1.MAR.2022 10:05:30

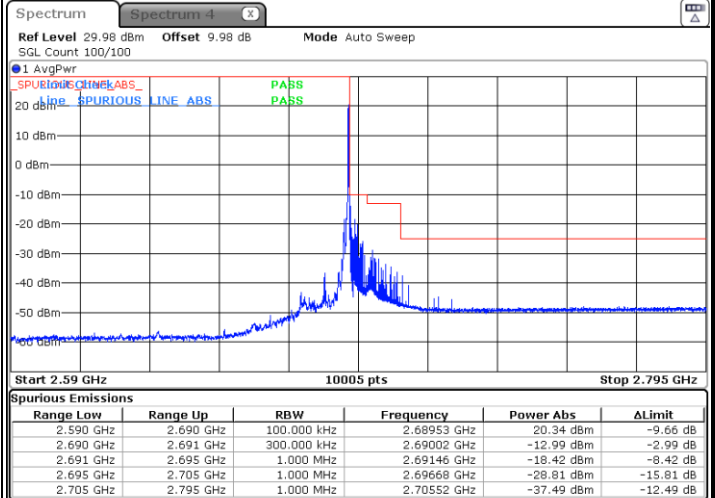
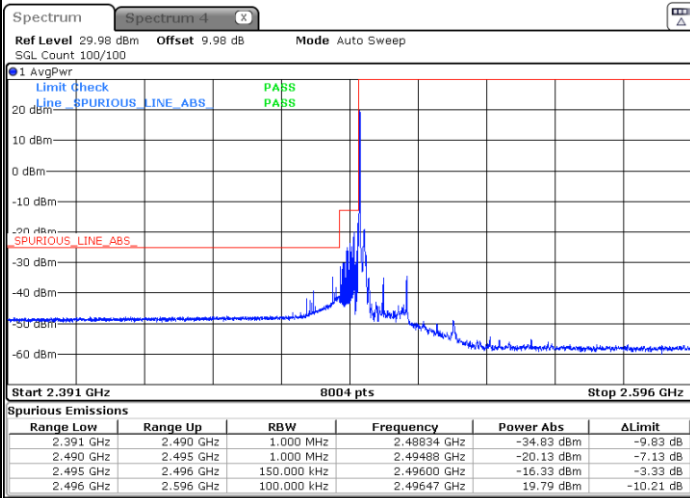
Date: 19.FEB.2022 22:43:22



FR1 n41 / 15MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

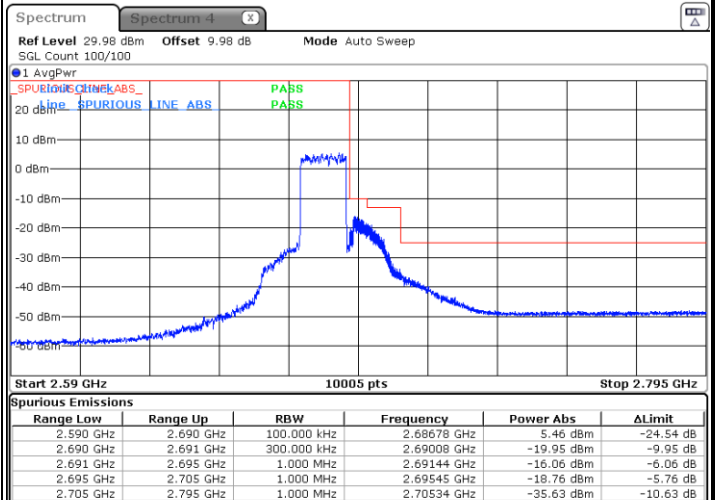
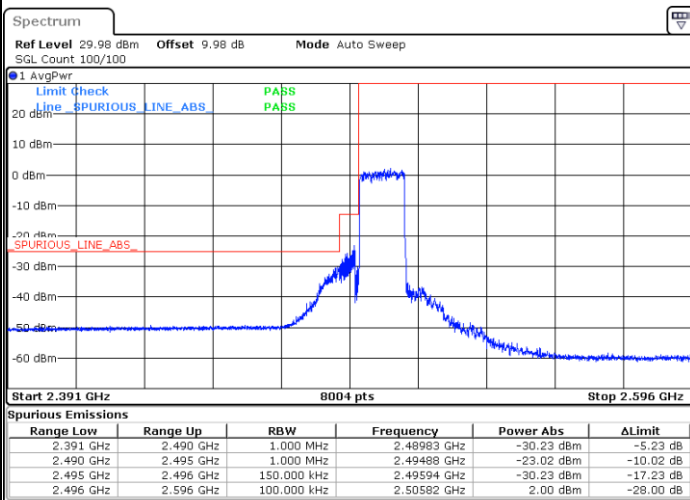


Date: 19.FEB.2022 22:29:26

Date: 19.FEB.2022 22:46:14

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



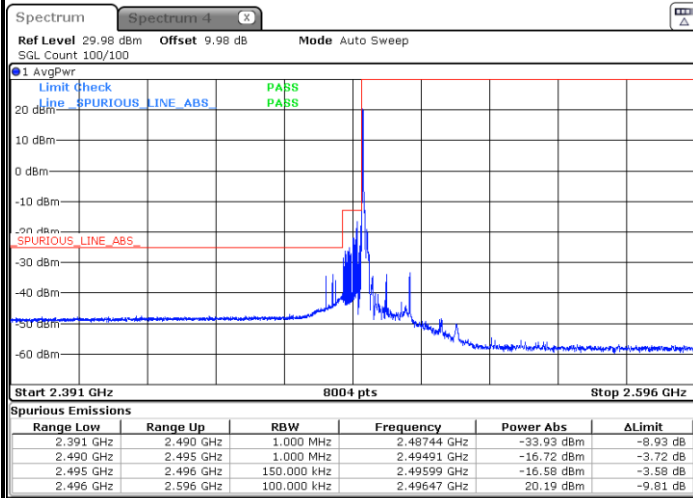
Date: 1.MAR.2022 10:05:11

Date: 19.FEB.2022 22:43:43



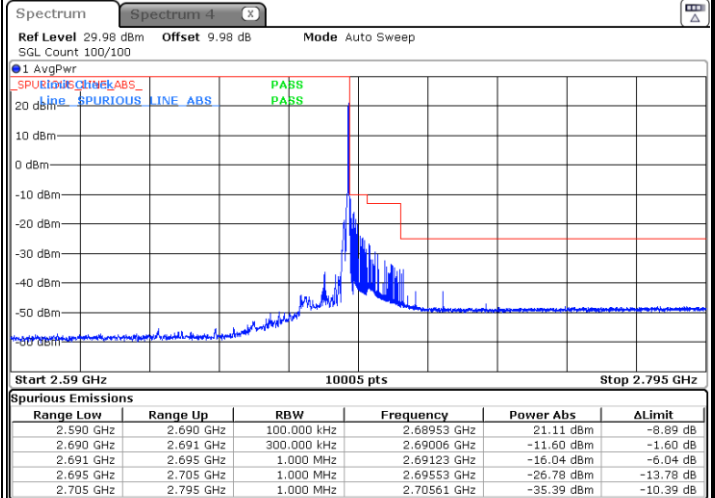
FR1 n41 / 15MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0



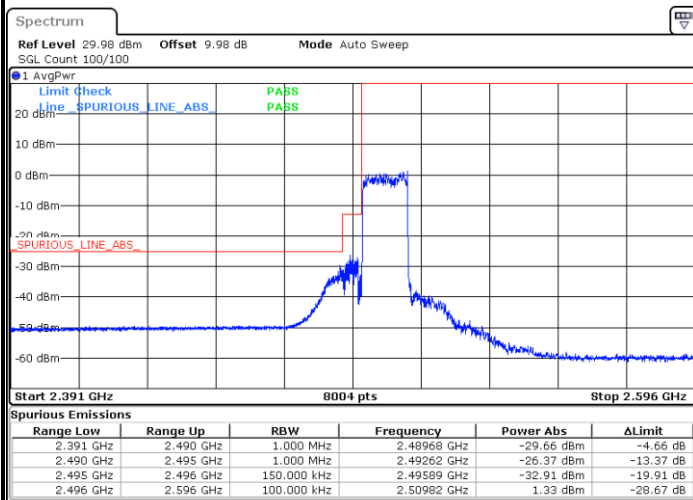
Date: 19.FEB.2022 22:29:06

Highest Band Edge / 1RB24



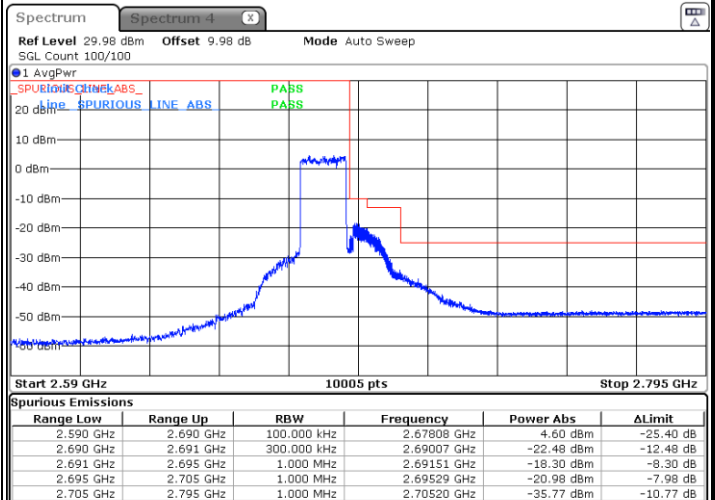
Date: 19.FEB.2022 22:45:55

Lowest Band Edge / Full RB



Date: 1.MAR.2022 10:04:08

Highest Band Edge / Full RB



Date: 19.FEB.2022 22:44:01