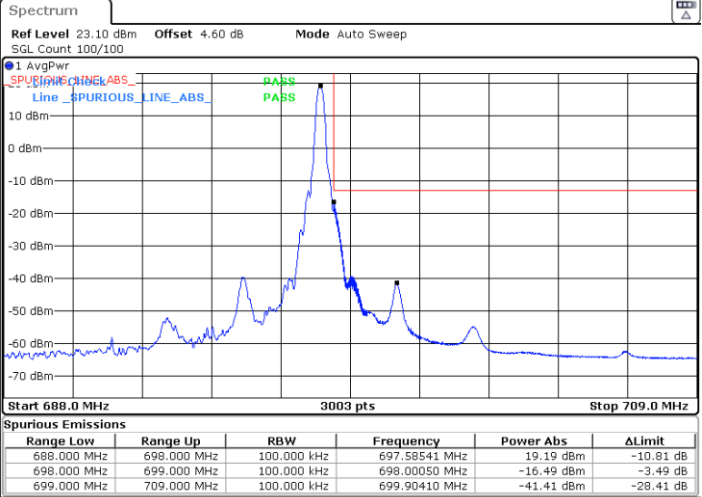
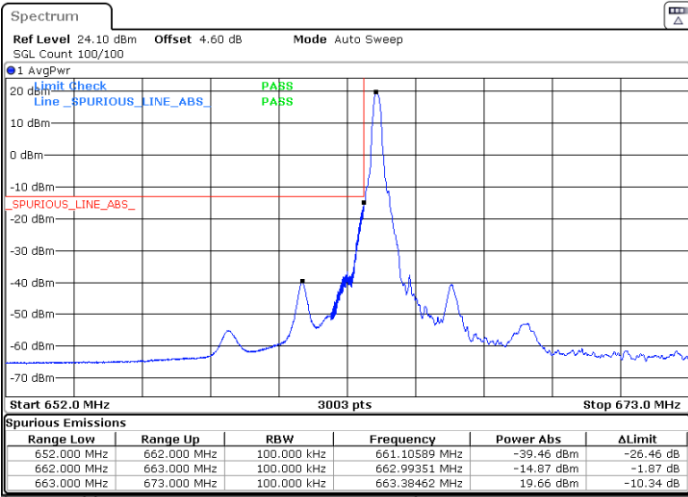




FR1 n71 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

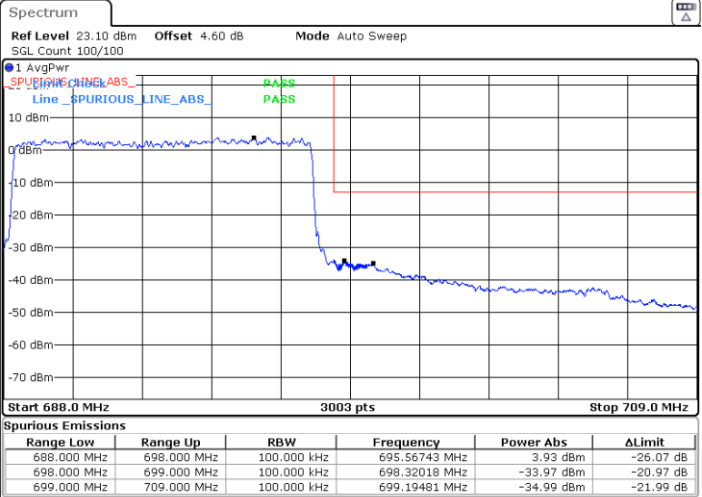
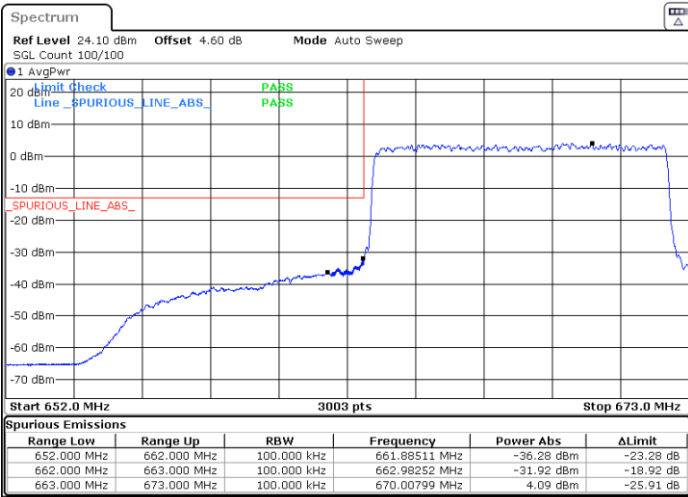


Date: 8 JUN 2022 10:04:44

Date: 8 JUN 2022 10:08:39

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8 JUN 2022 10:06:19

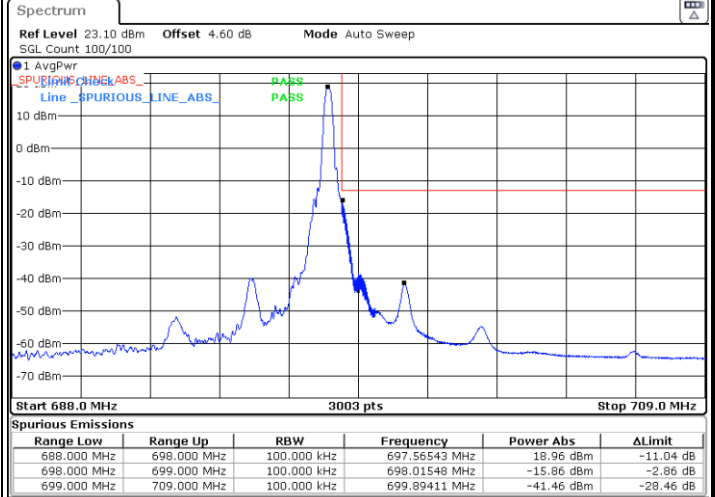
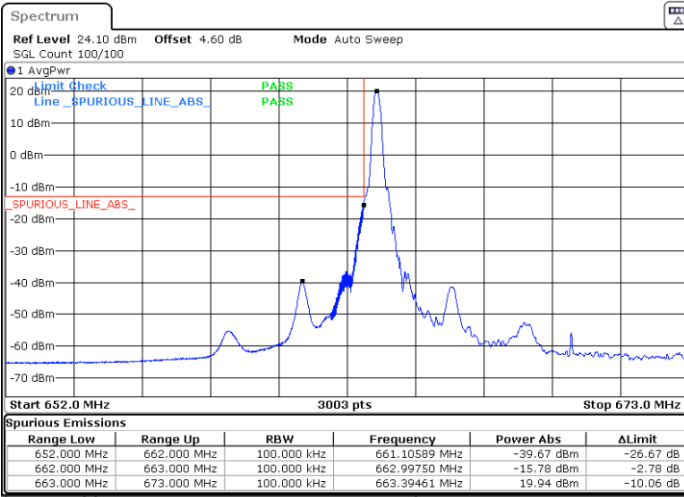
Date: 8 JUN 2022 10:10:50



FR1 n71 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

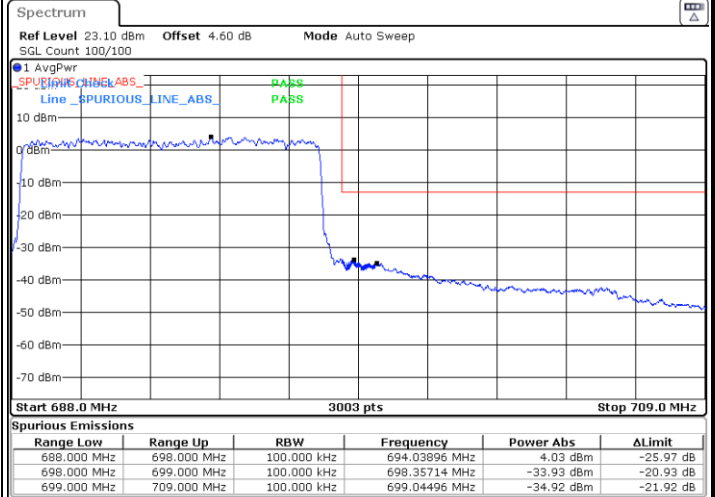
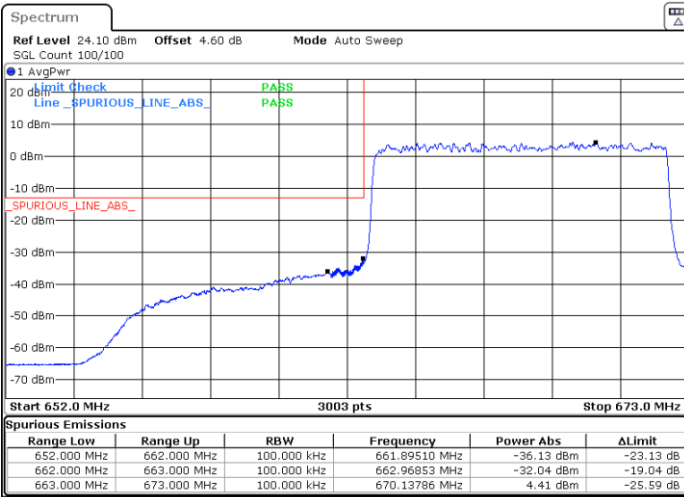


Date: 8 JUN.2022 10:05:26

Date: 8 JUN.2022 10:09:58

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8 JUN.2022 10:07:21

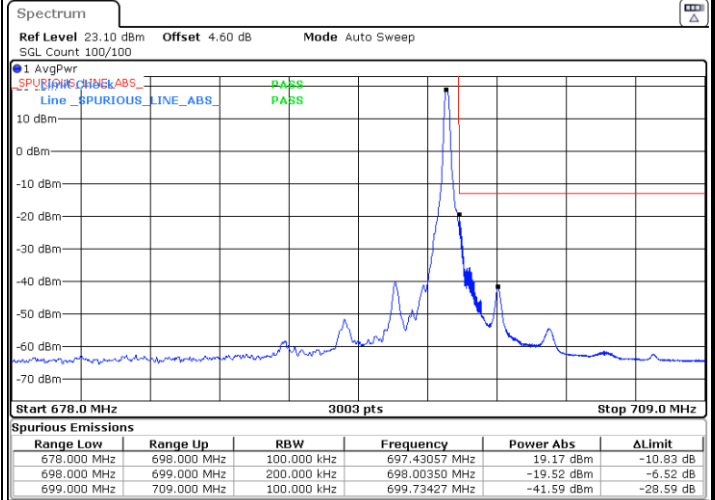
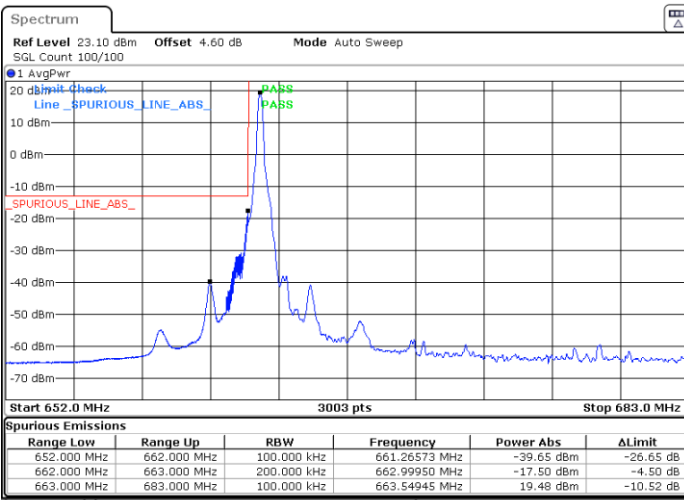
Date: 8 JUN.2022 10:11:34



FR1 n71 / 20MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

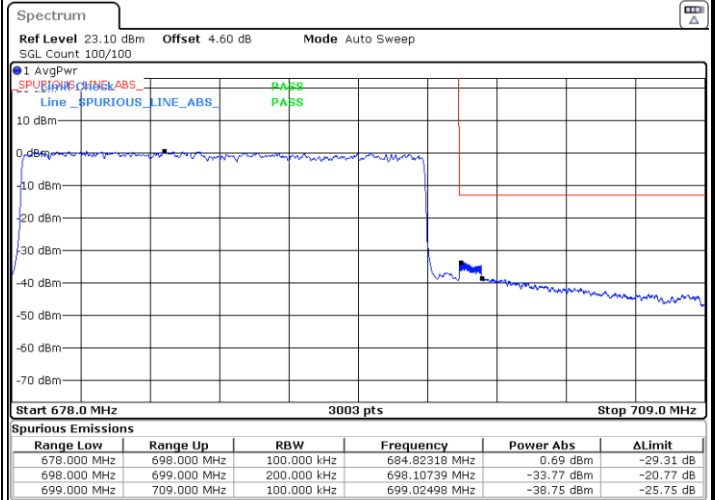
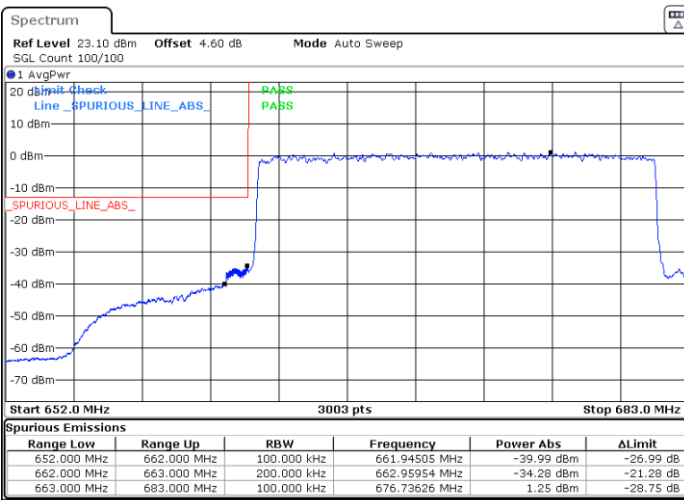


Date: 8 JUN.2022 10:12:53

Date: 8 JUN.2022 10:16:56

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8 JUN.2022 10:14:41

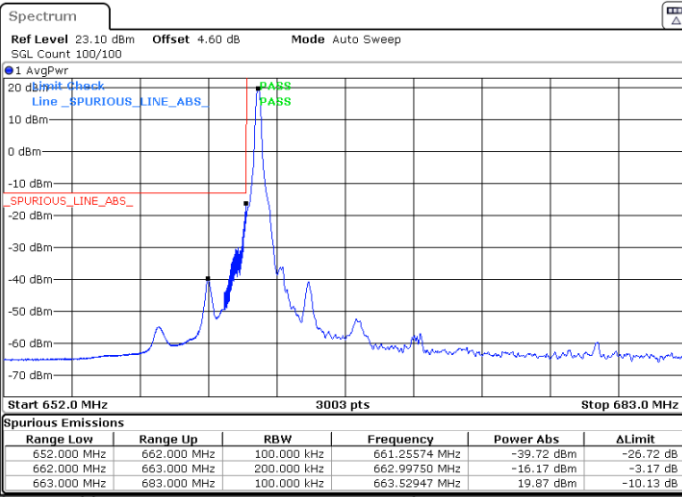
Date: 8 JUN.2022 10:20:33



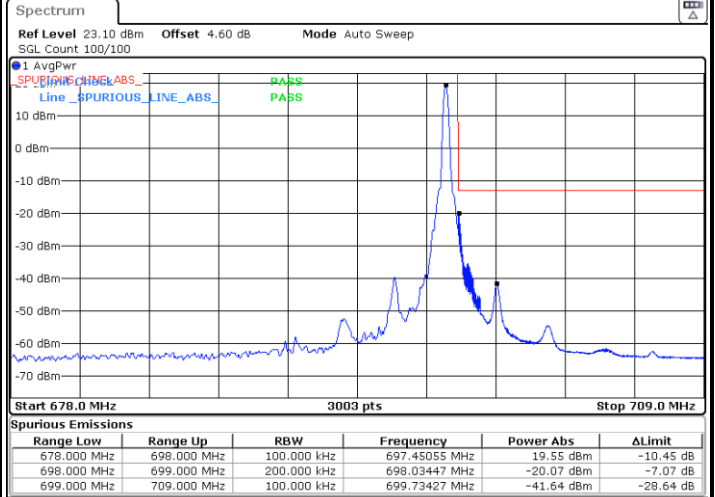
FR1 n71 / 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



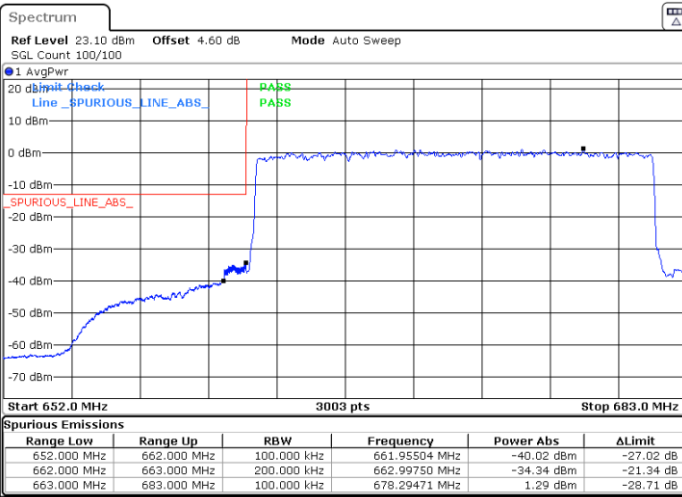
Date: 8 JUN.2022 10:13:43



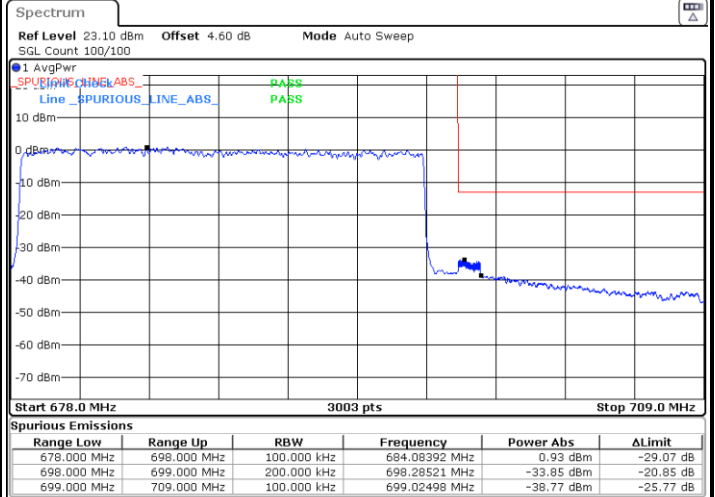
Date: 8 JUN.2022 10:19:23

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 8 JUN.2022 10:15:23



Date: 8 JUN.2022 10:21:20

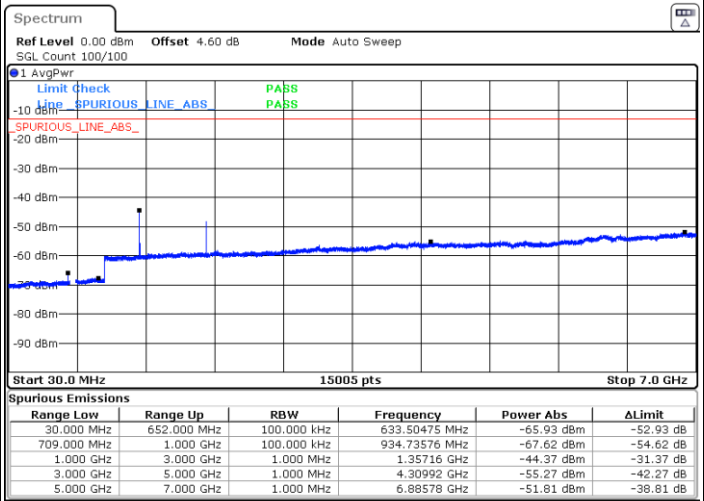
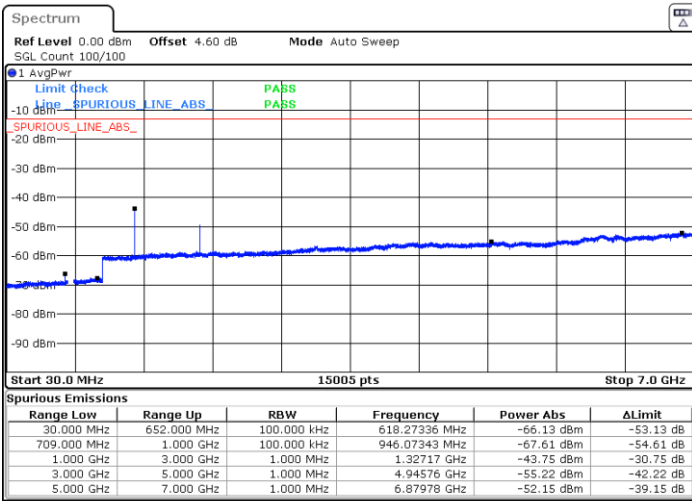


# Conducted Spurious Emission

FR1 n71 / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

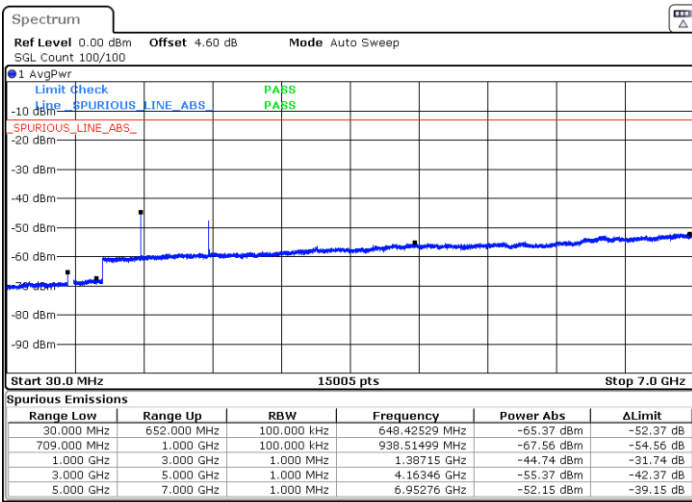
Middle Channel / 1RB1



Date: 8 JUN.2022 11:19:24

Date: 8 JUN.2022 11:20:35

Highest Channel / 1RB1



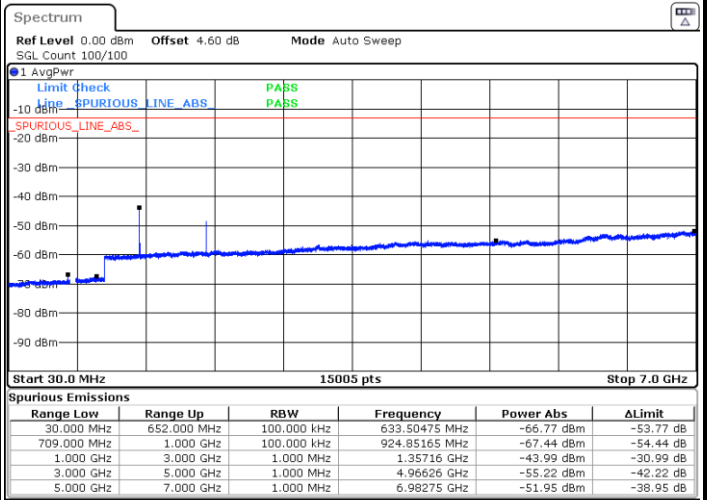
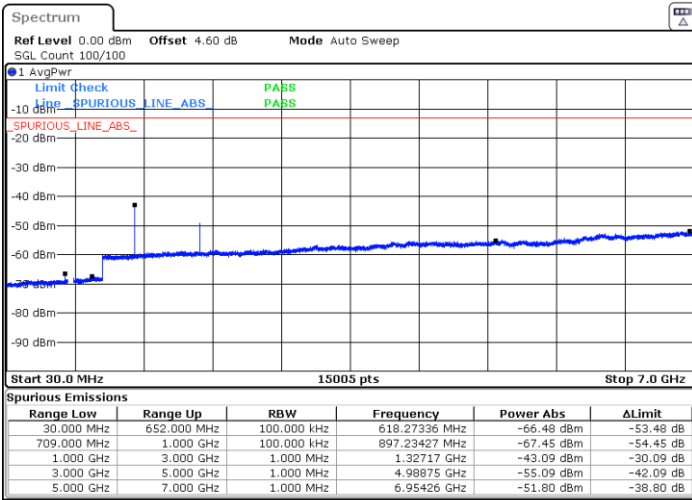
Date: 8 JUN.2022 11:21:55



FR1 n71 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

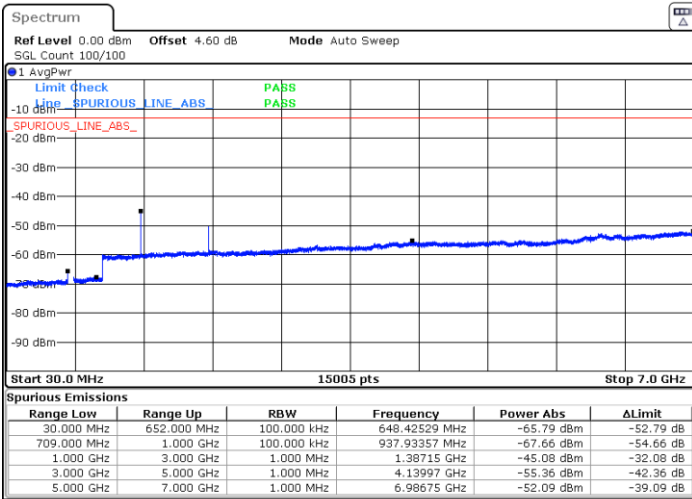
Middle Channel / 1RB1



Date: 8 JUN 2022 11:19:59

Date: 8 JUN 2022 11:21:03

Highest Channel / 1RB1



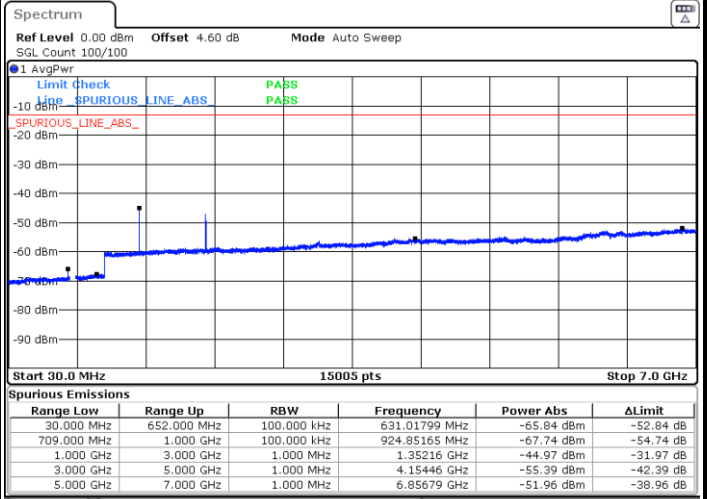
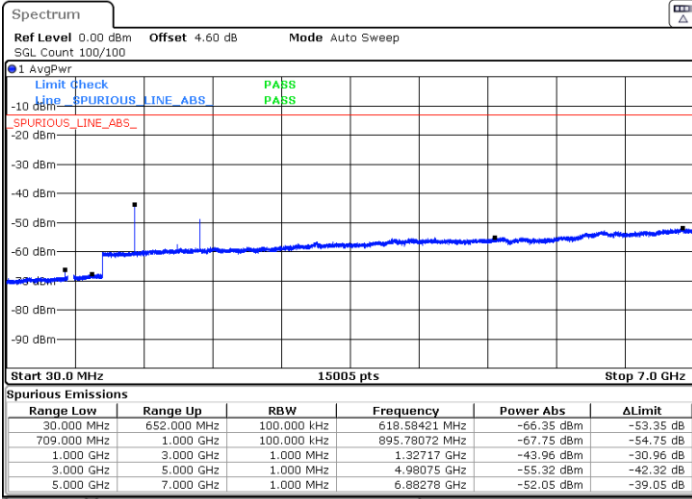
Date: 8 JUN 2022 11:22:21



FR1 n71 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

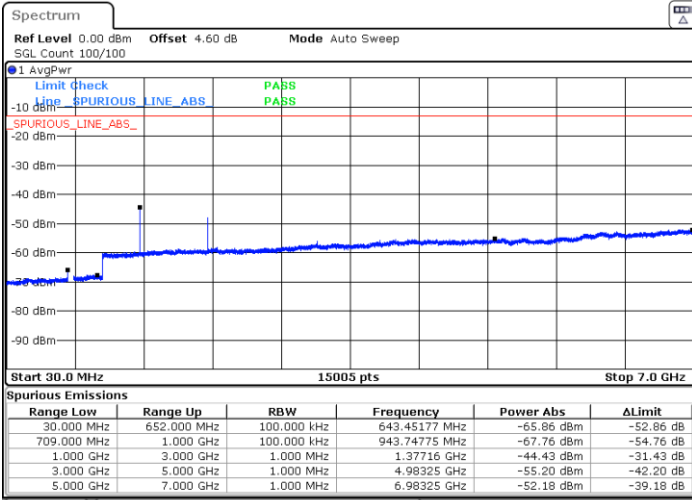
Middle Channel / 1RB1



Date: 8 JUN. 2022 10:29:20

Date: 8 JUN. 2022 10:30:55

Highest Channel / 1RB1



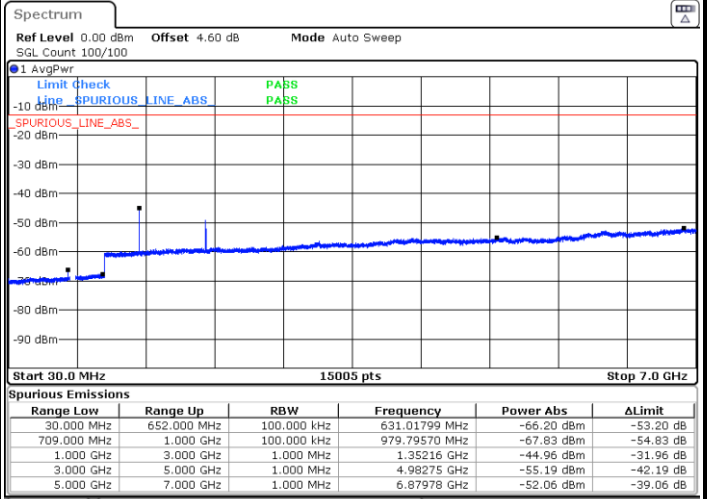
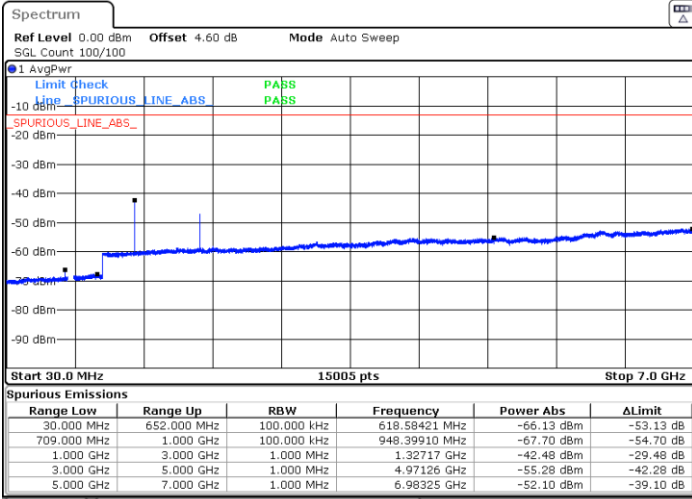
Date: 8 JUN. 2022 10:32:35



FR1 n71 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

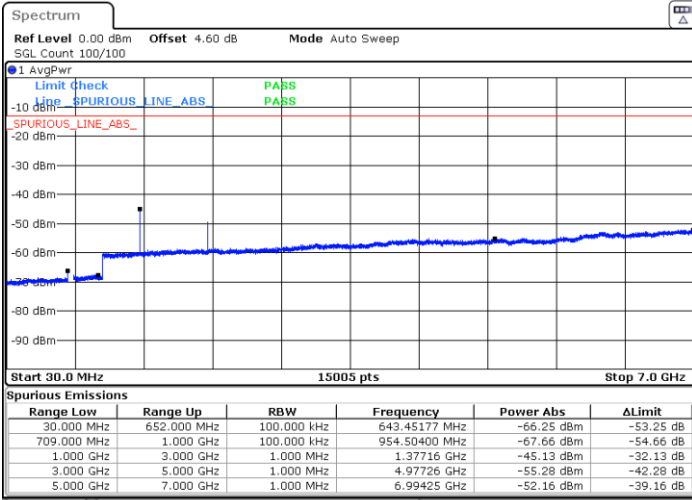
Middle Channel / 1RB1



Date: 8 JUN. 2022 10:29:52

Date: 8 JUN. 2022 10:31:28

Highest Channel / 1RB1



Date: 8 JUN. 2022 10:33:08

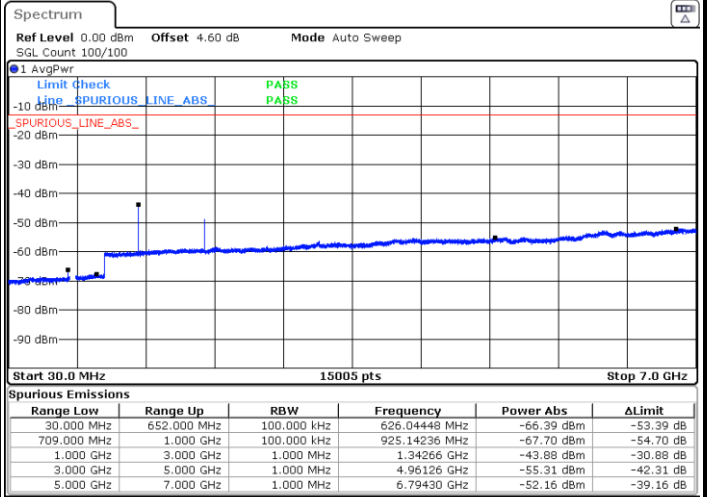
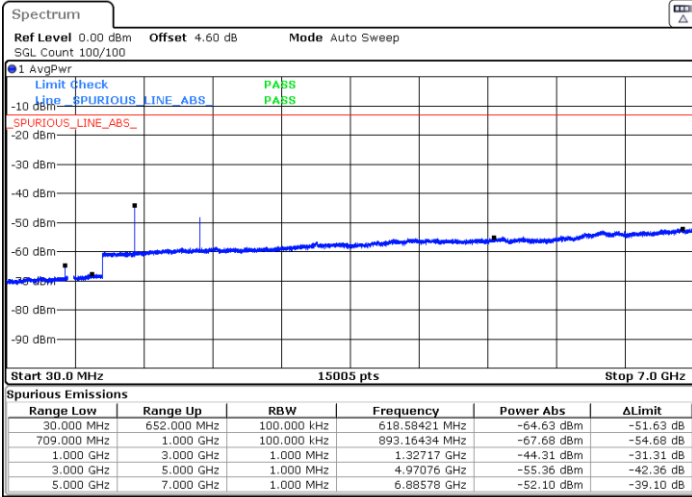




FR1 n71 / 20MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

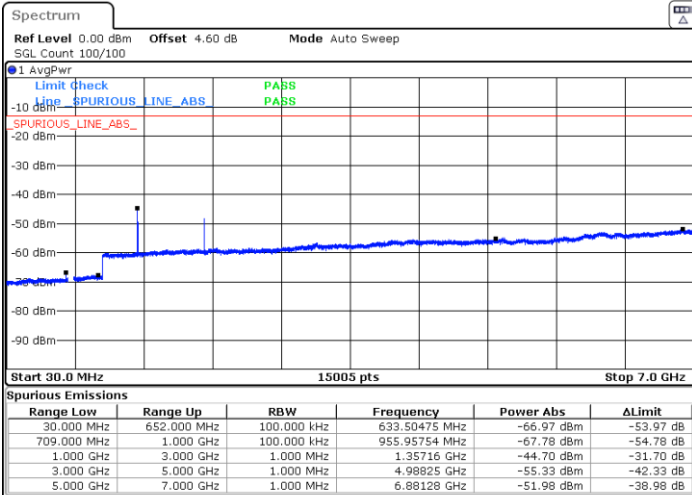
Middle Channel / 1RB1



Date: 8 JUN. 2022 10:27:04

Date: 8 JUN. 2022 10:24:53

Highest Channel / 1RB1



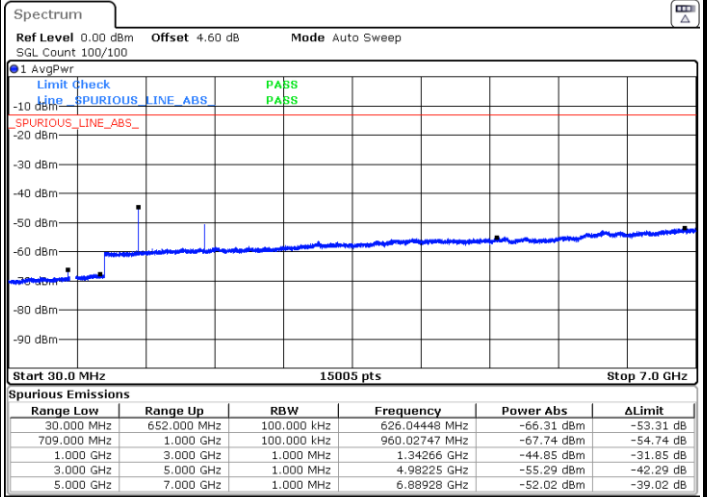
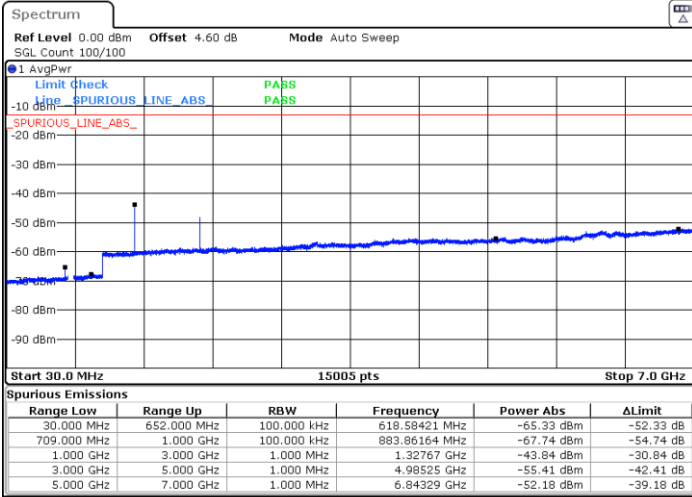
Date: 8 JUN. 2022 10:22:35



FR1 n71 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

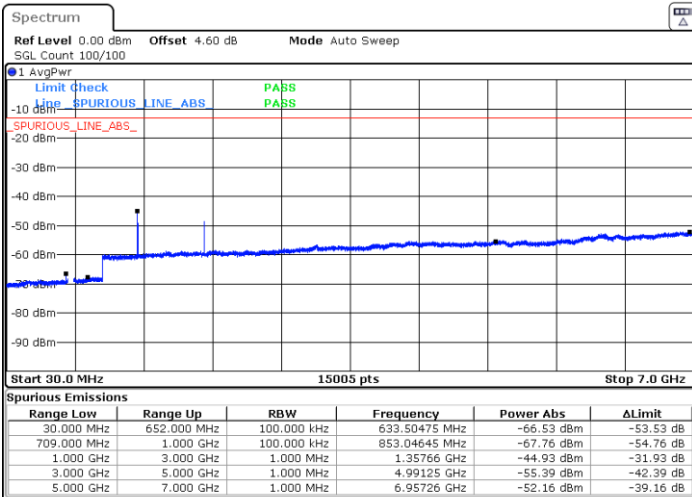
Middle Channel / 1RB1



Date: 8 JUN. 2022 10:27:46

Date: 8 JUN. 2022 10:25:19

Highest Channel / 1RB1



Date: 8 JUN. 2022 10:23:25



Frequency Stability

Test Conditions		FR1 n71 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0028	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0035	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0017	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0024	
-20	Normal Voltage	0.0029	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0021	
20	Battery End Point	0.0018	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.55 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

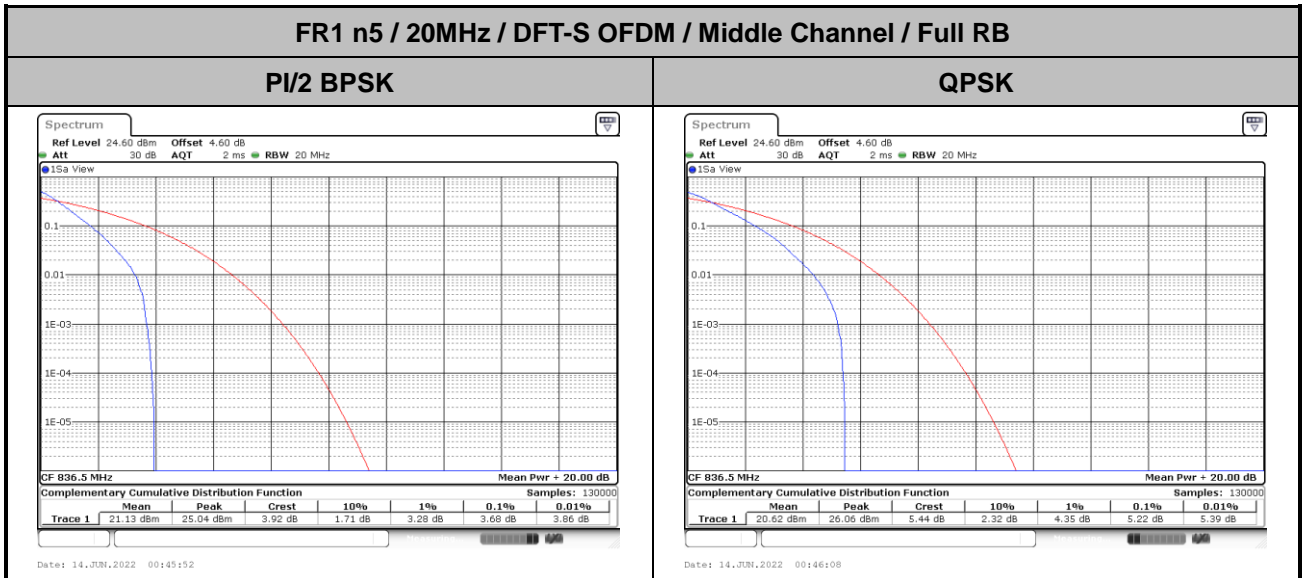


# Other PA

## FR1 12A\_n5

### Peak-to-Average Ratio

Mode	FR1 n5 / 20MHz / DFT-S OFDM					
Mod.	BPSK	QPSK				Limit: 13dB
RB Size	FULL	FULL				Result
Middle CH	3.68	5.22				PASS





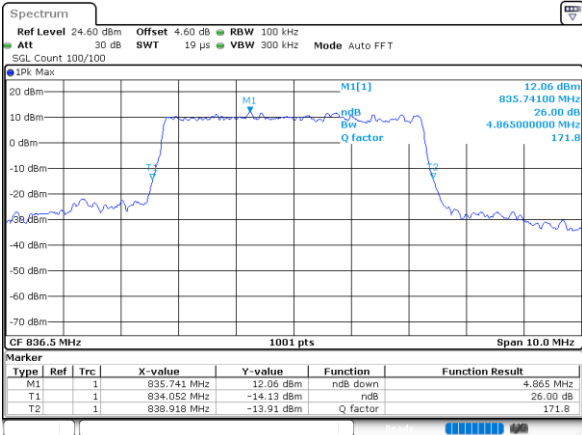
**26dB Bandwidth**

Mode	FR1 n5 : 26dBW (MHz) / CP OFDM			
<b>BW</b>	<b>5M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	4.87	4.92	5.00	4.93
<b>BW</b>	<b>10M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	10.01	10.13	10.17	10.09
<b>BW</b>	<b>15M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	14.05	14.93	14.93	14.87
<b>BW</b>	<b>20M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	21.30	21.26	21.50	21.14



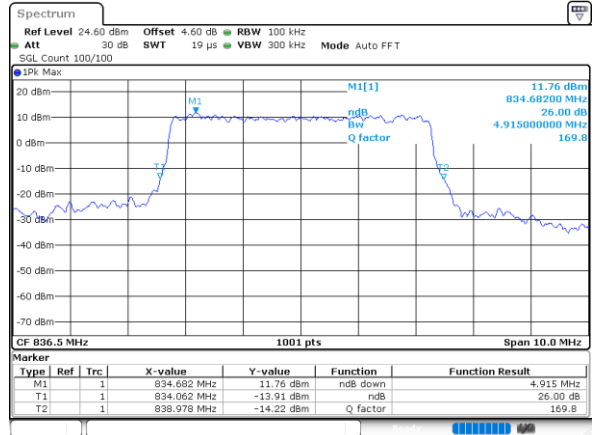
FR1 n5 / 5MHz / CP / Middle Channel / Full RB

QPSK



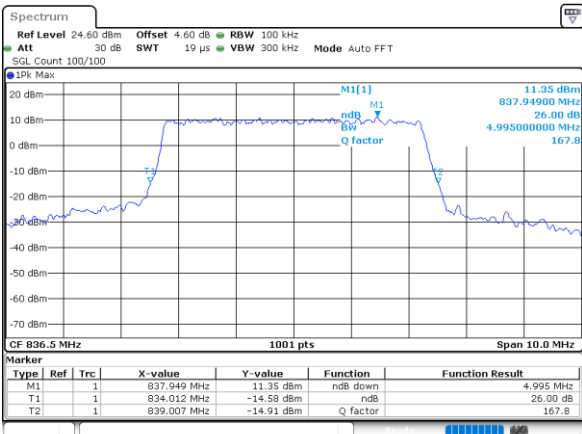
Date: 13 JUN 2022 23:37:24

16QAM



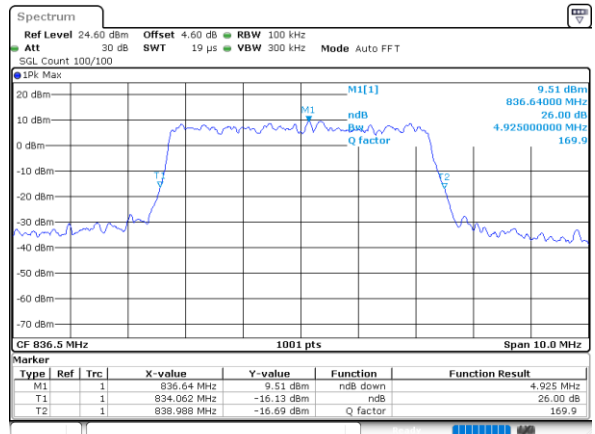
Date: 13 JUN 2022 23:37:41

64QAM



Date: 13 JUN 2022 23:38:01

256QAM

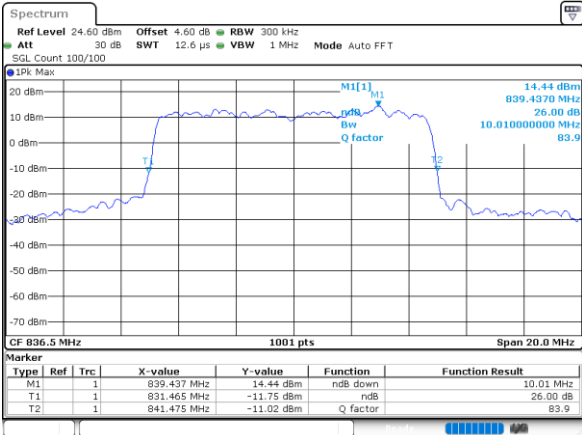


Date: 13 JUN 2022 23:38:23



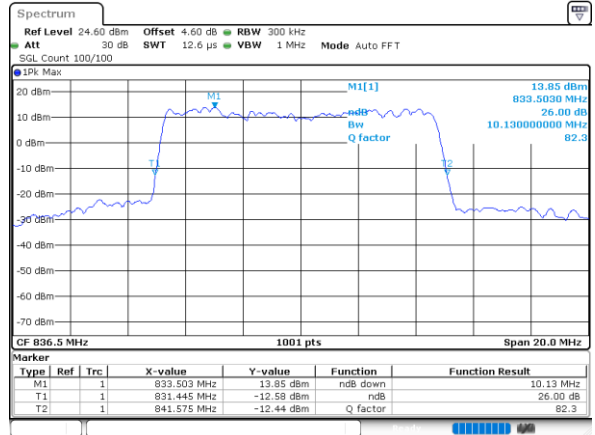
FR1 n5 / 10MHz / CP / Middle Channel / Full RB

QPSK



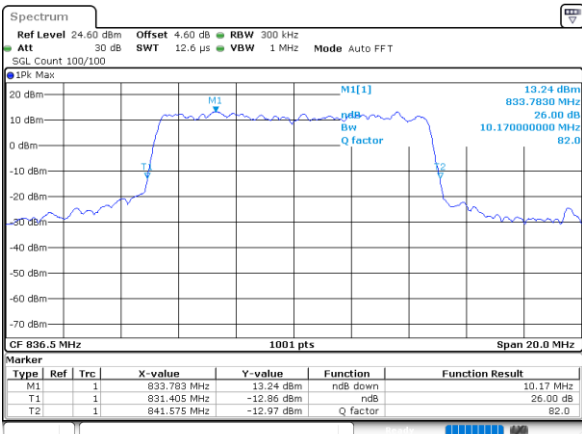
Date: 14 JUN 2022 00:10:50

16QAM



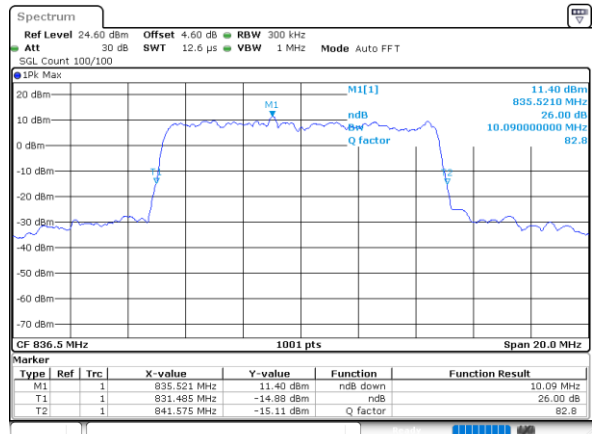
Date: 14 JUN 2022 00:11:10

64QAM



Date: 14 JUN 2022 00:11:34

256QAM

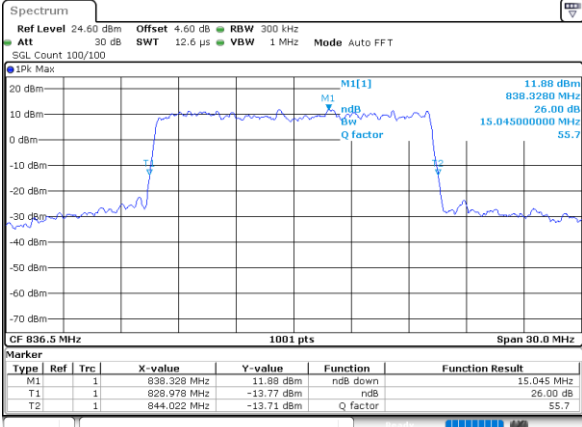


Date: 14 JUN 2022 00:12:00



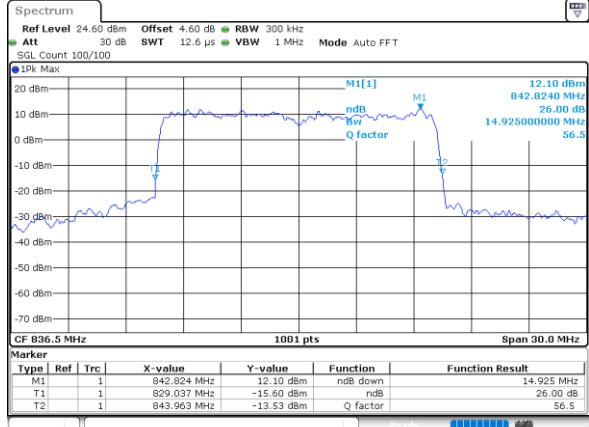
FR1 n5 / 15MHz / CP / Middle Channel / Full RB

QPSK



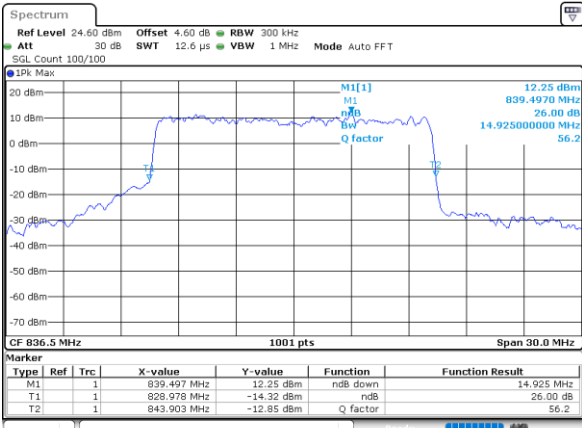
Date: 14 JUN 2022 00:20:49

16QAM



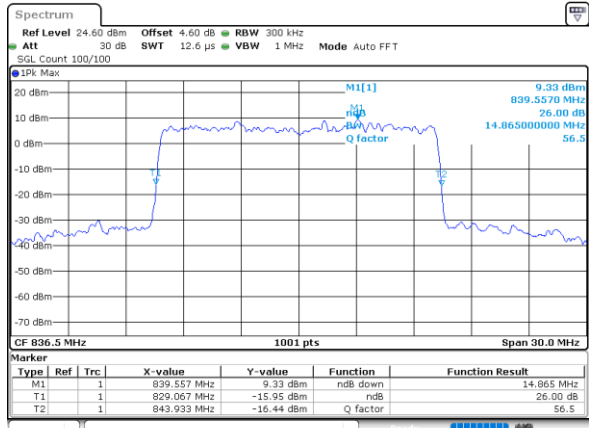
Date: 14 JUN 2022 00:21:14

64QAM



Date: 14 JUN 2022 00:21:35

256QAM



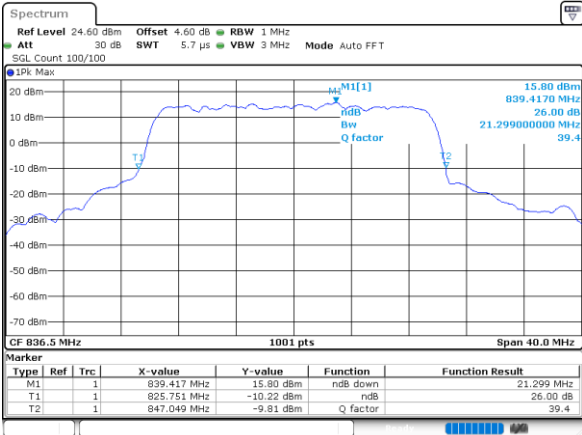
Date: 14 JUN 2022 00:22:00





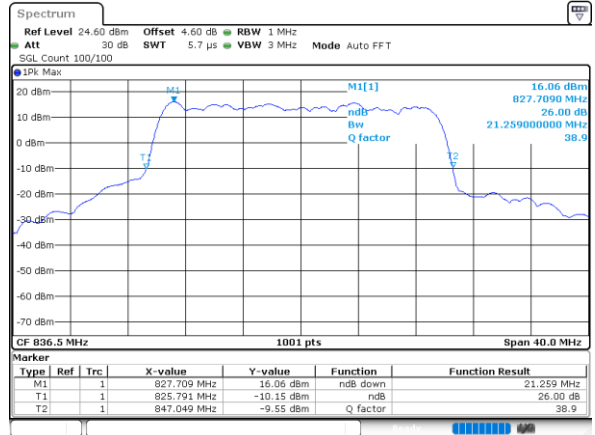
FR1 n5 / 20MHz / CP / Middle Channel / Full RB

QPSK



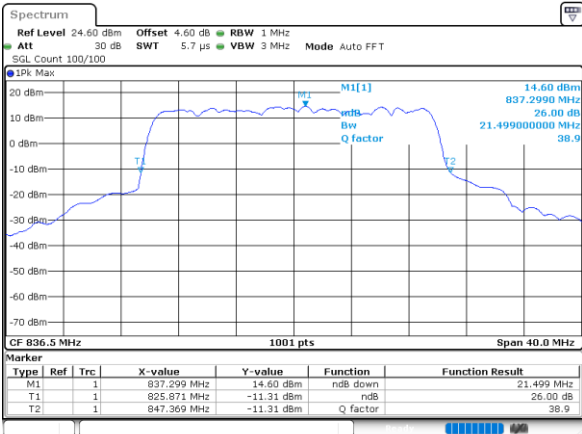
Date: 14 JUN 2022 00:23:14

16QAM



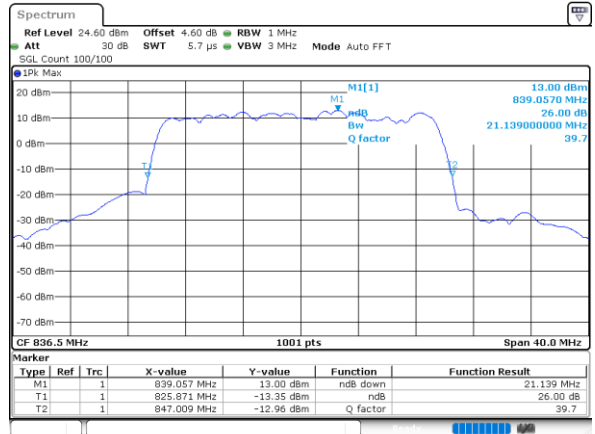
Date: 14 JUN 2022 00:23:56

64QAM



Date: 14 JUN 2022 00:24:15

256QAM



Date: 14 JUN 2022 00:25:52



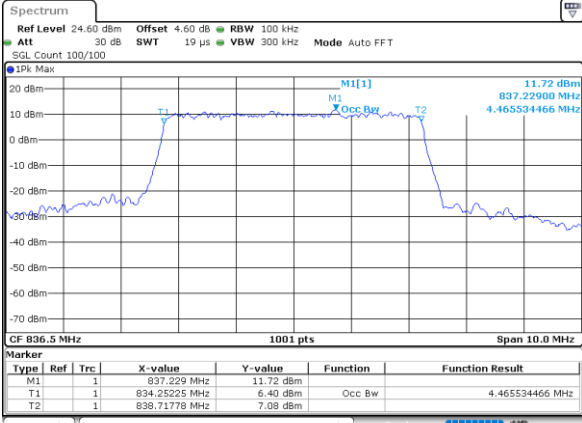
**Occupied Bandwidth**

Mode	FR1 n5 : 99%OBW (MHz) / CP OFDM			
<b>BW</b>	<b>5M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	4.47	4.50	4.50	4.49
<b>BW</b>	<b>10M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	9.35	9.33	9.35	9.39
<b>BW</b>	<b>15M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	14.18	14.09	14.21	14.15
<b>BW</b>	<b>20M</b>			
<b>Mod.</b>	<b>QPSK</b>	<b>16QAM</b>	<b>64QAM</b>	<b>256QAM</b>
<b>Middle CH</b>	19.22	19.54	19.34	19.26



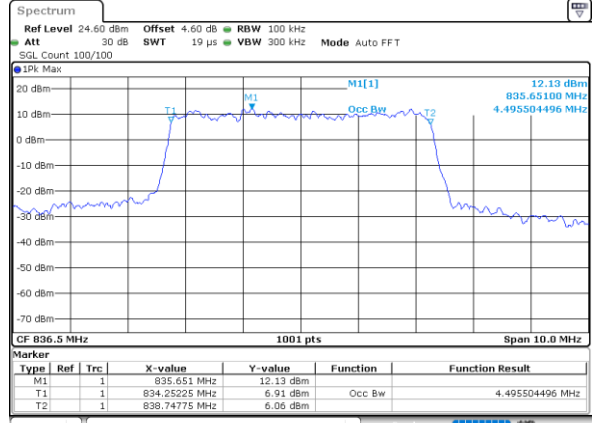
FR1 n5 / 5MHz / CP / Middle Channel / Full RB

QPSK



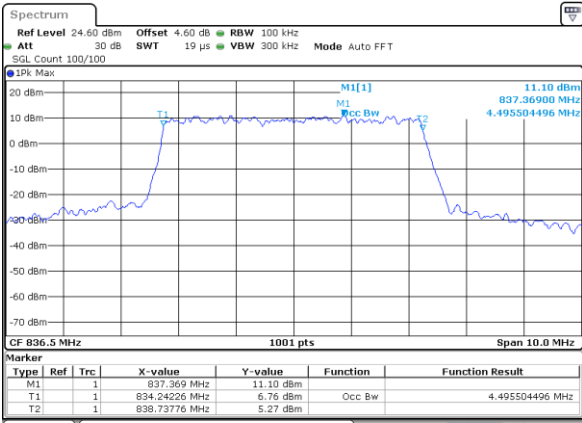
Date: 13 JUN 2022 23:37:30

16QAM



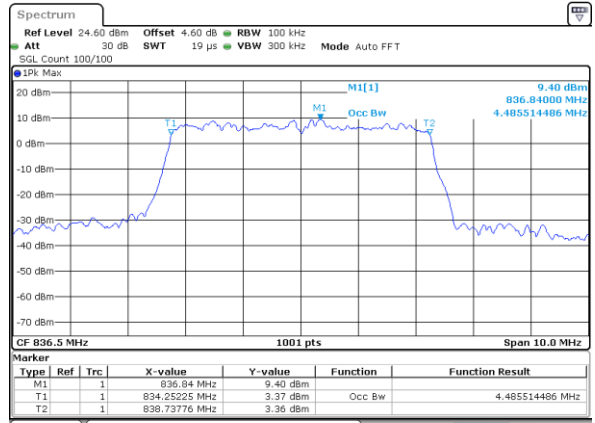
Date: 13 JUN 2022 23:37:48

64QAM



Date: 13 JUN 2022 23:38:08

256QAM

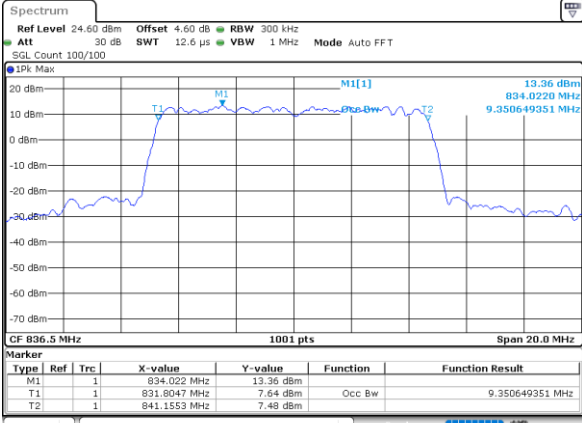


Date: 13 JUN 2022 23:38:29



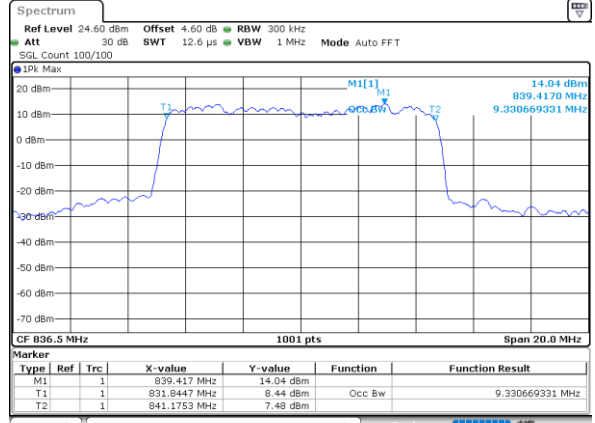
FR1 n5 / 10MHz / CP / Middle Channel / Full RB

QPSK



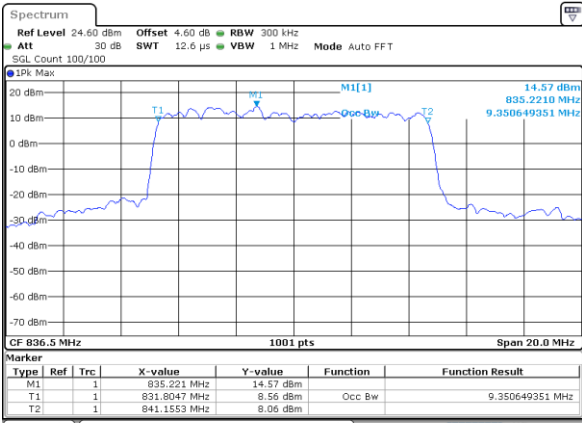
Date: 14 JUN 2022 00:10:55

16QAM



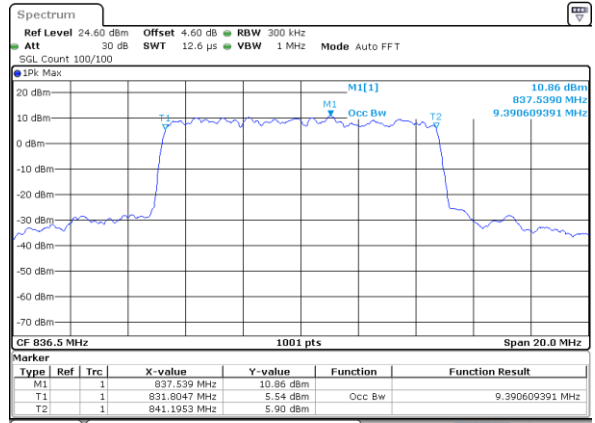
Date: 14 JUN 2022 00:11:15

64QAM



Date: 14 JUN 2022 00:11:41

256QAM

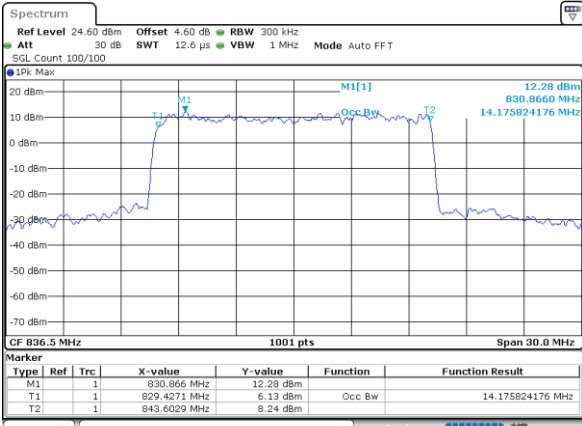


Date: 14 JUN 2022 00:12:29



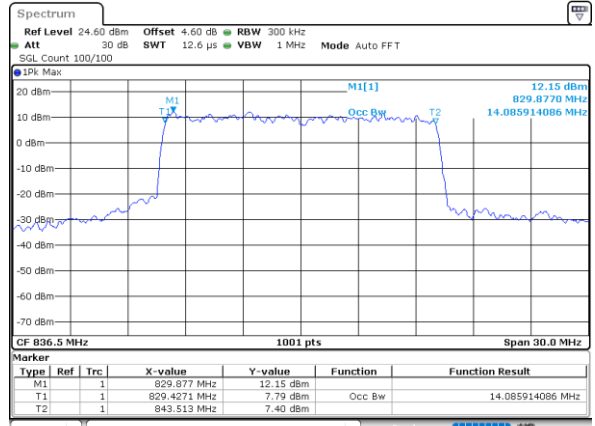
FR1 n5 / 15MHz / CP / Middle Channel / Full RB

QPSK



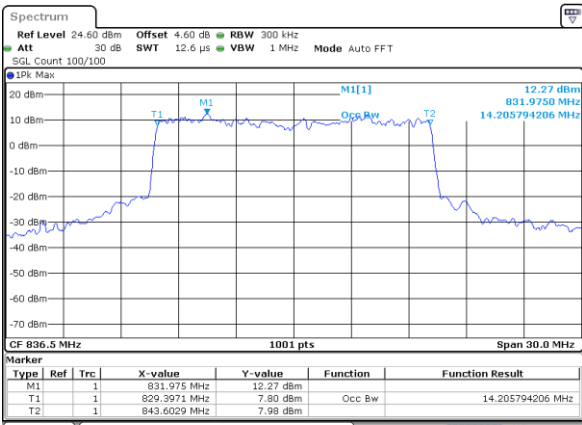
Date: 14 JUN 2022 00:20:55

16QAM



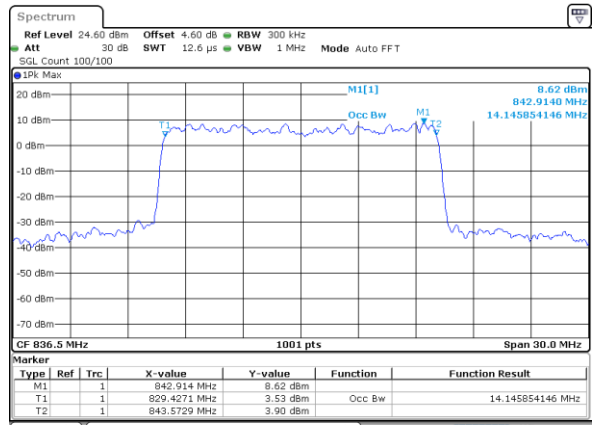
Date: 14 JUN 2022 00:21:22

64QAM



Date: 14 JUN 2022 00:21:44

256QAM

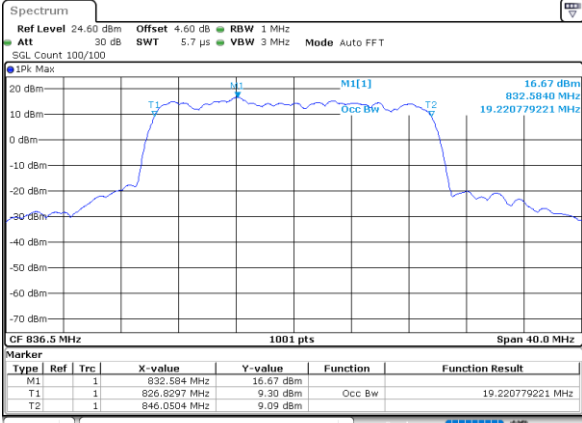


Date: 14 JUN 2022 00:22:06



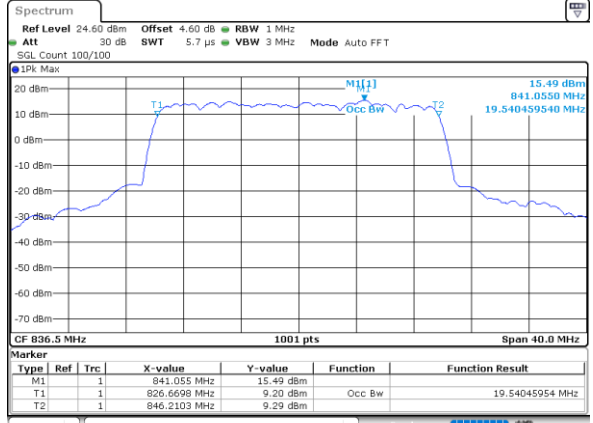
FR1 n5 / 20MHz / CP / Middle Channel / Full RB

QPSK



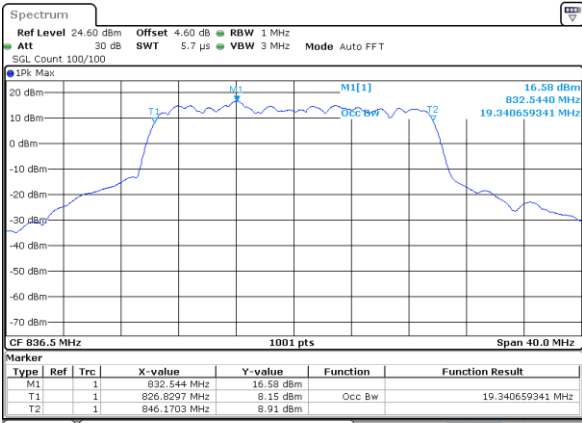
Date: 14 JUN 2022 00:23:42

16QAM



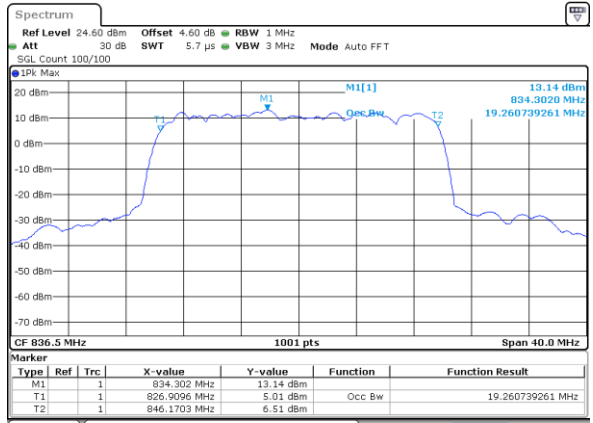
Date: 14 JUN 2022 00:24:03

64QAM



Date: 14 JUN 2022 00:25:30

256QAM



Date: 14 JUN 2022 00:25:59

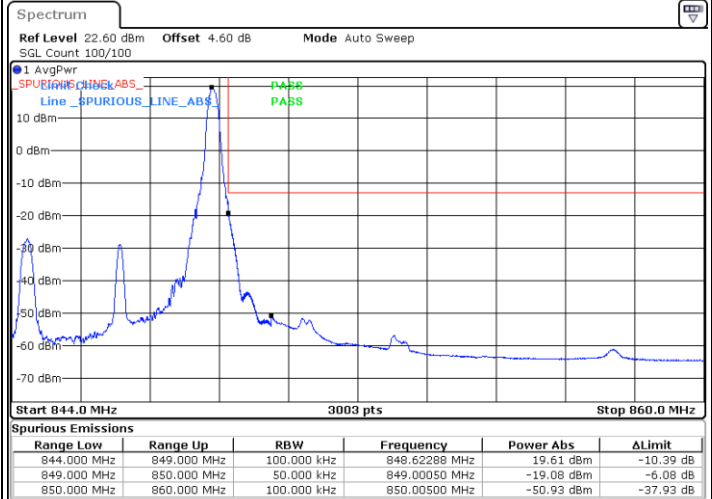
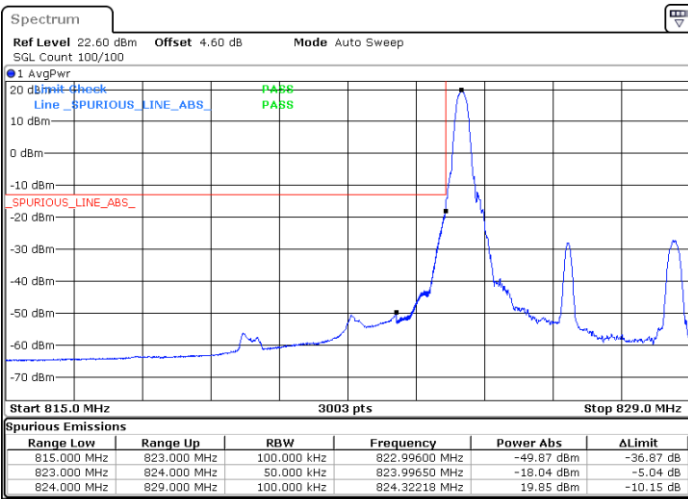


# Conducted Band Edge

FR1 n5 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

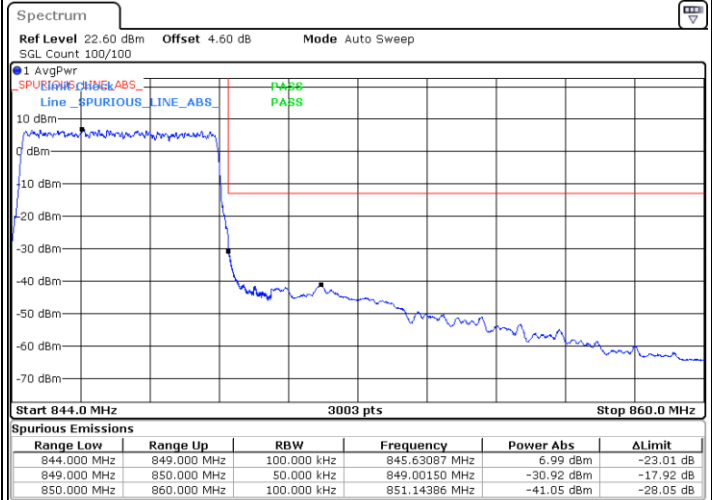
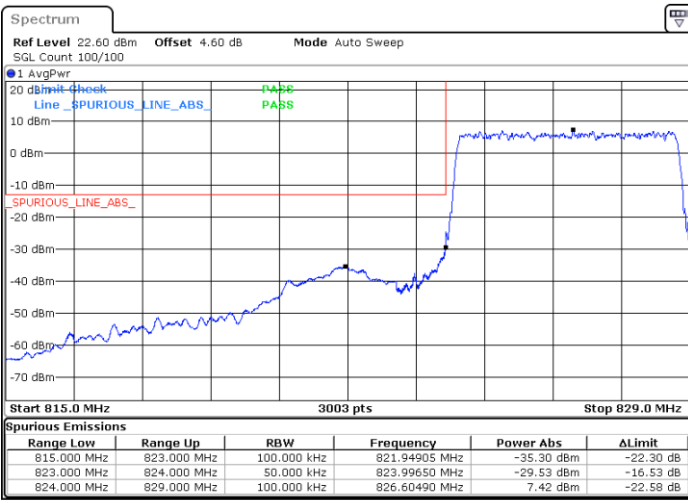


Date: 13 JUN 2022 23:30:25

Date: 13 JUN 2022 23:52:00

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 13 JUN 2022 23:33:00

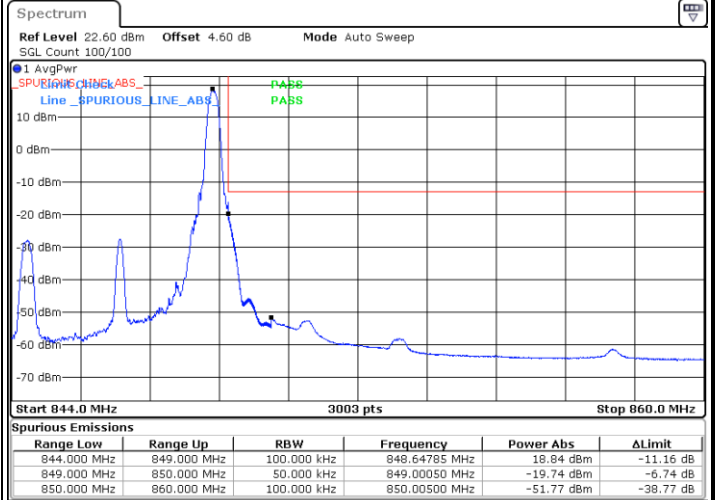
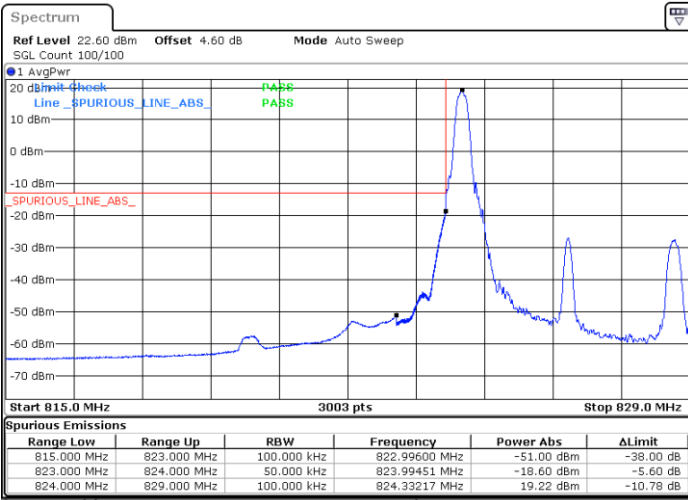
Date: 13 JUN 2022 23:56:55



FR1 n5 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

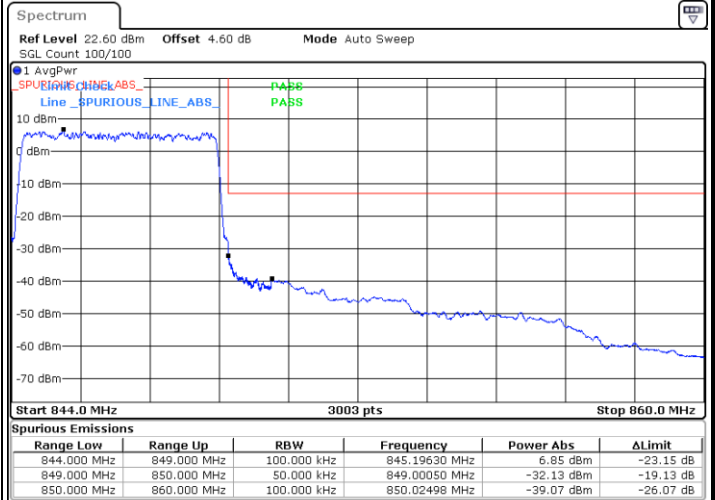
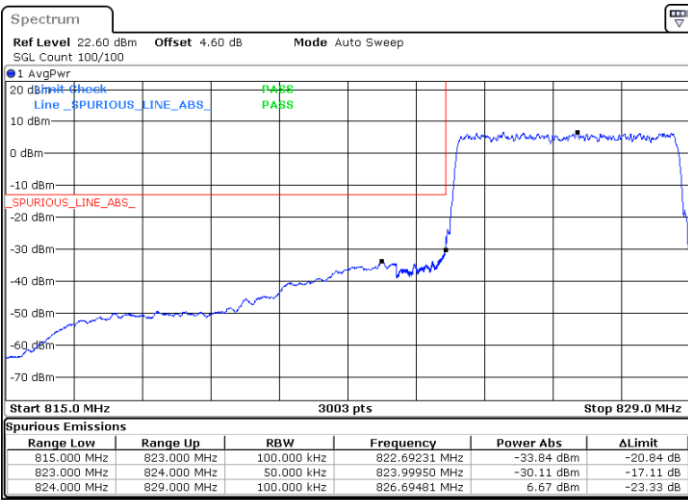


Date: 13 JUN.2022 23:31:18

Date: 13 JUN.2022 23:52:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 13 JUN.2022 23:31:58

Date: 13 JUN.2022 23:57:39

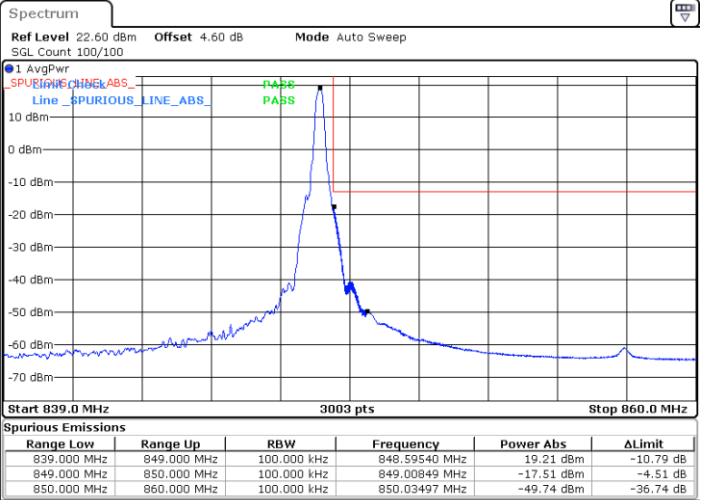
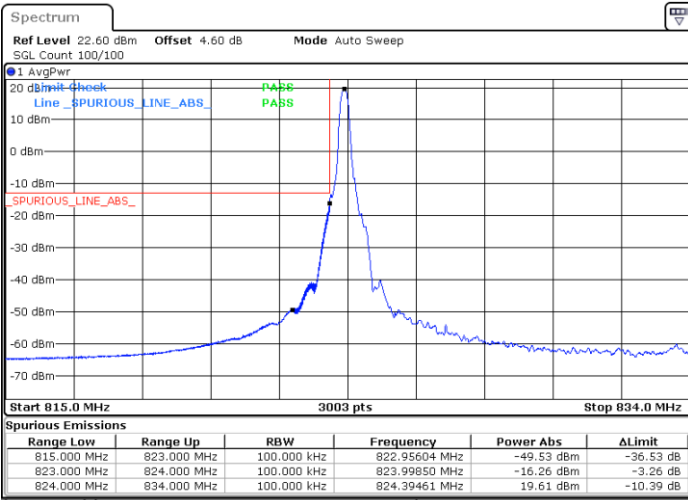




FR1 n5 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

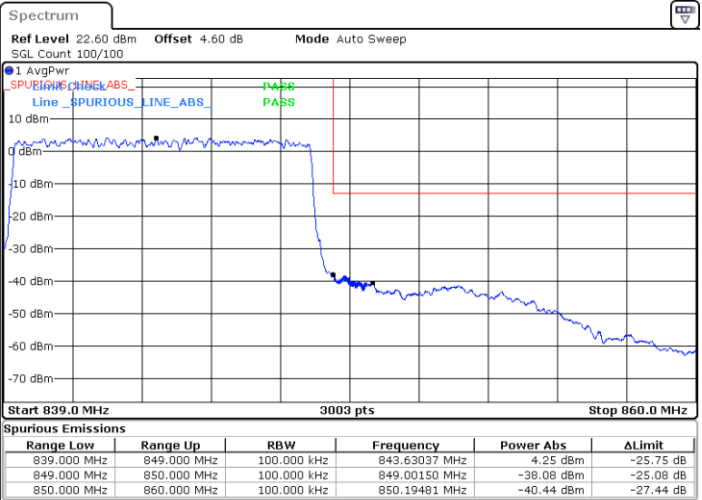
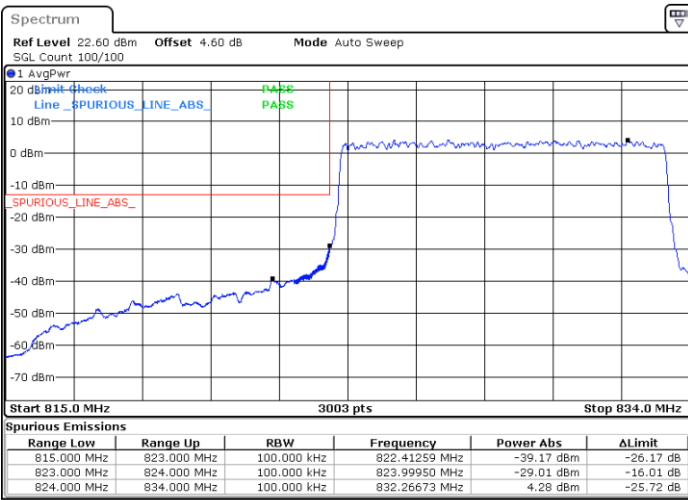


Date: 14.JUN.2022 00:02:04

Date: 14.JUN.2022 00:14:51

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.JUN.2022 00:04:39

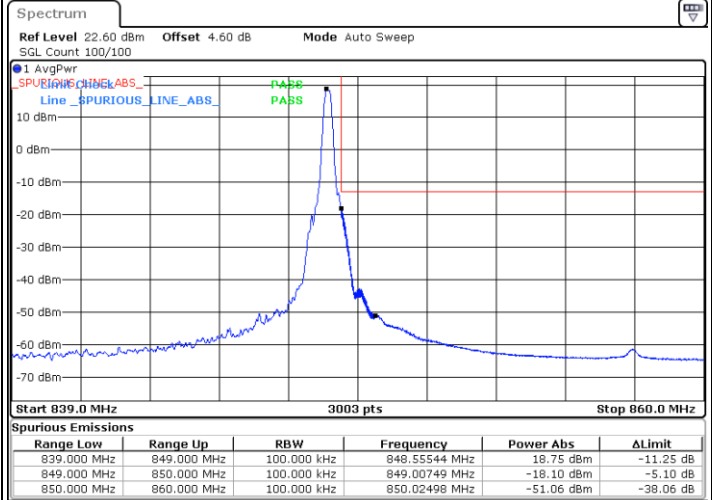
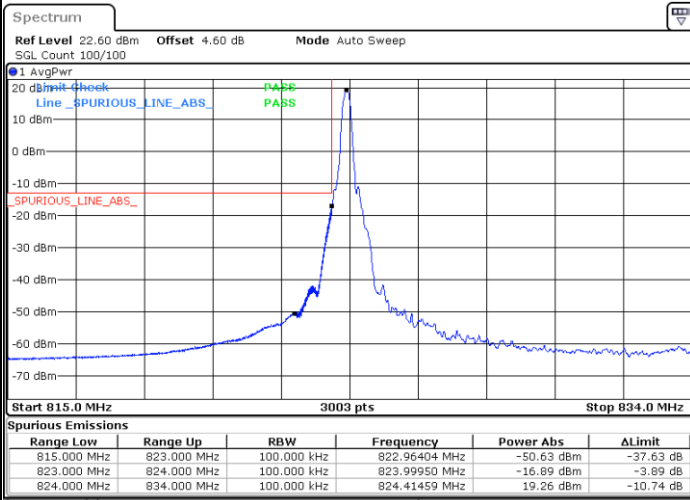
Date: 14.JUN.2022 00:17:57



FR1 n5 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

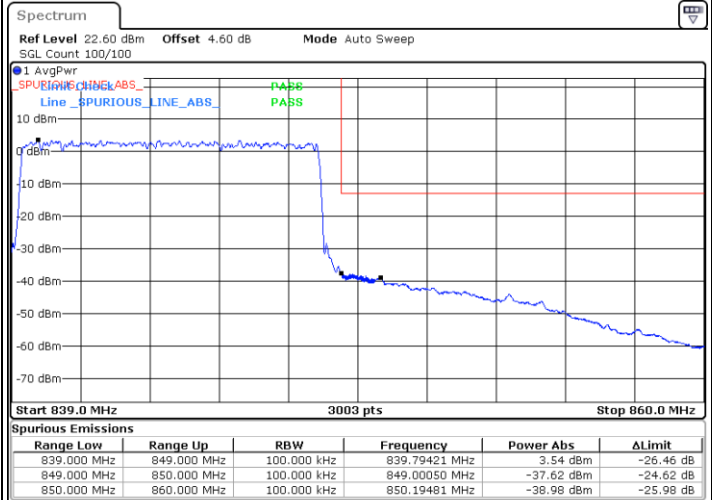
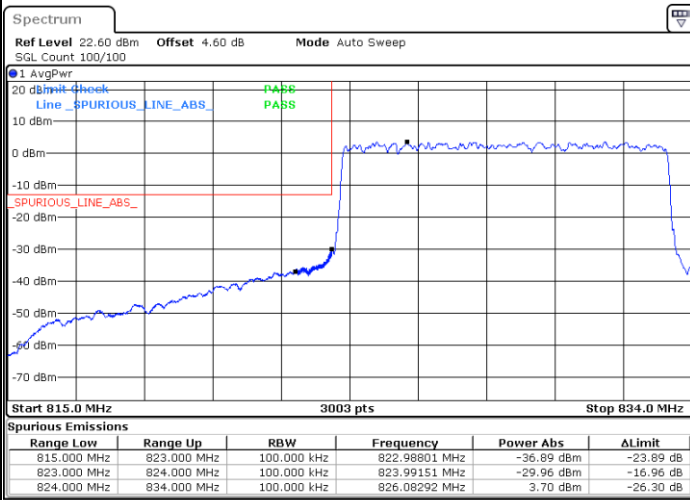


Date: 14.JUN.2022 00:02:43

Date: 14.JUN.2022 00:15:34

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.JUN.2022 00:03:25

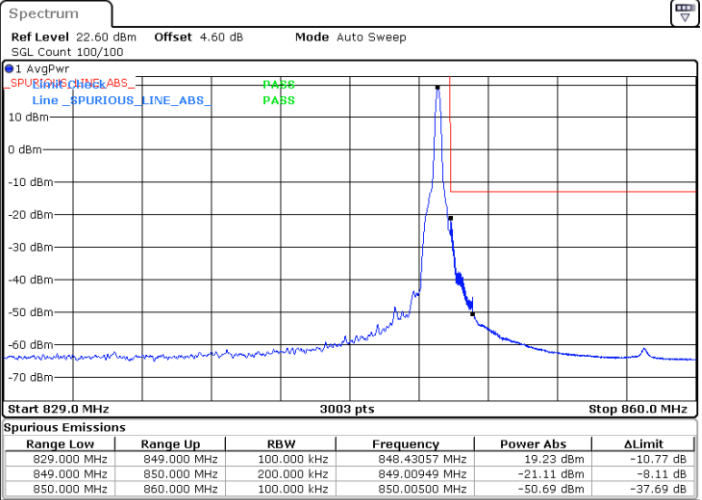
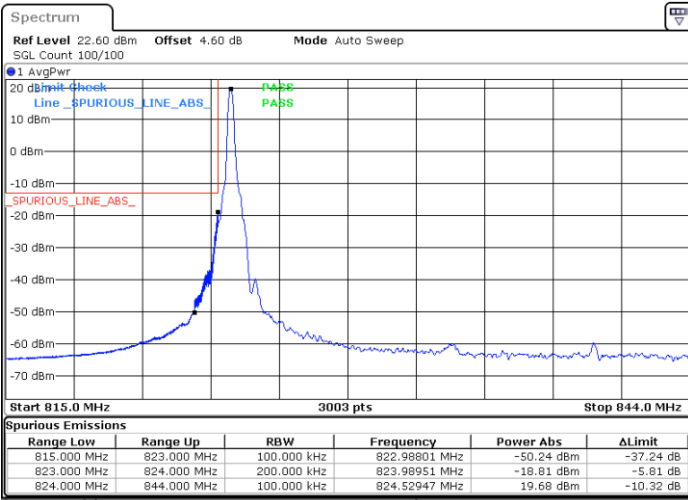
Date: 14.JUN.2022 00:17:11



FR1 n5 / 20MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

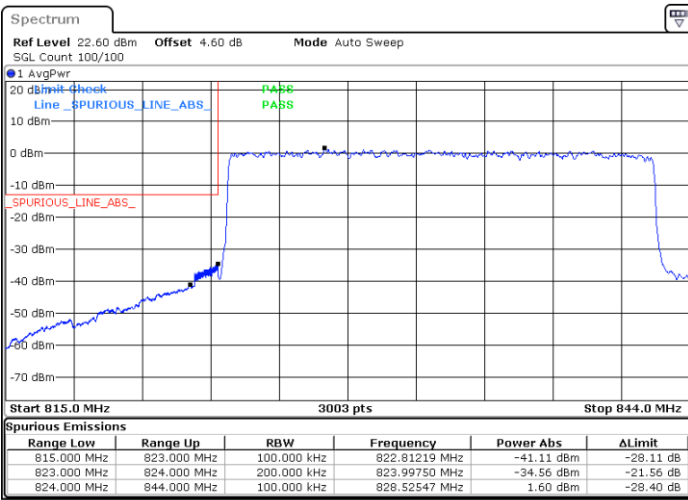


Date: 14.JUN.2022 00:30:59

Date: 14.JUN.2022 00:39:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.JUN.2022 00:32:59

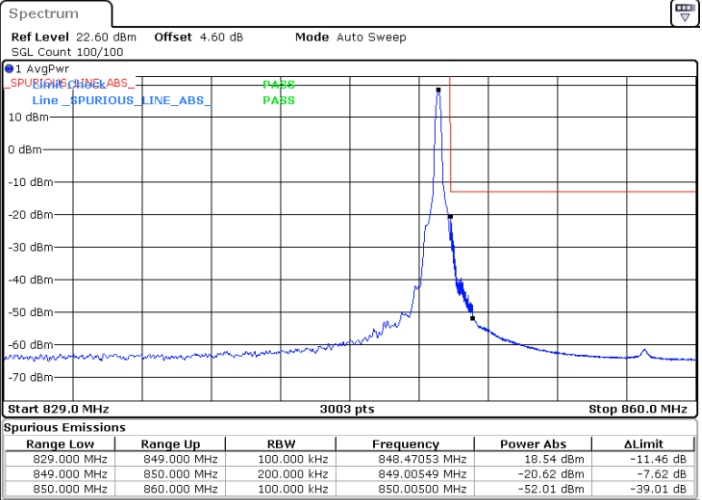
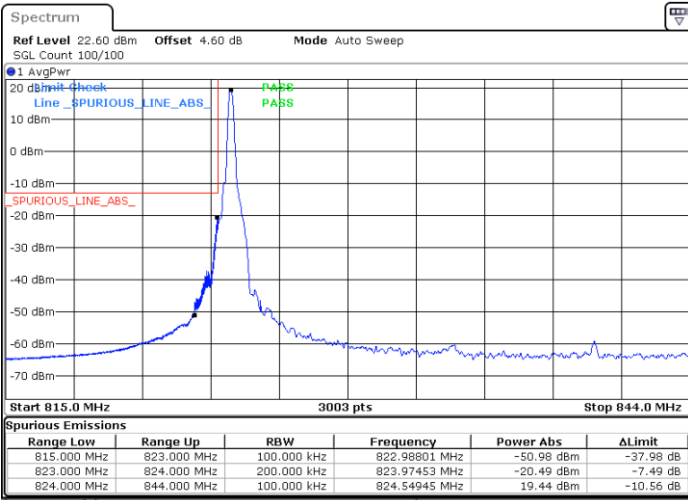
Date: 14.JUN.2022 00:43:16



FR1 n5 / 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

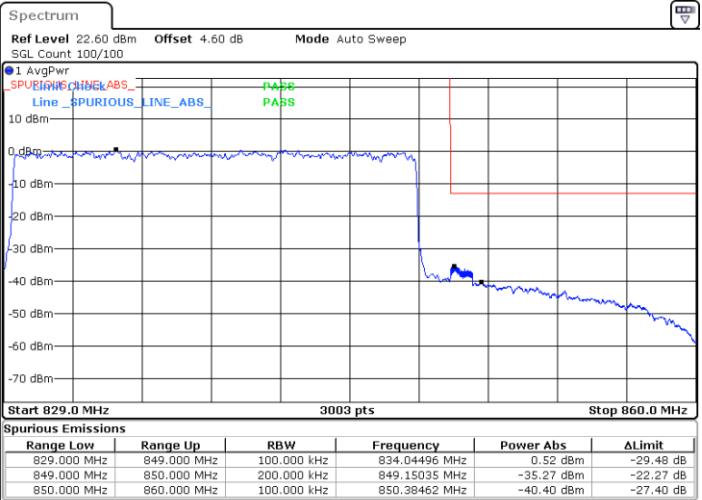
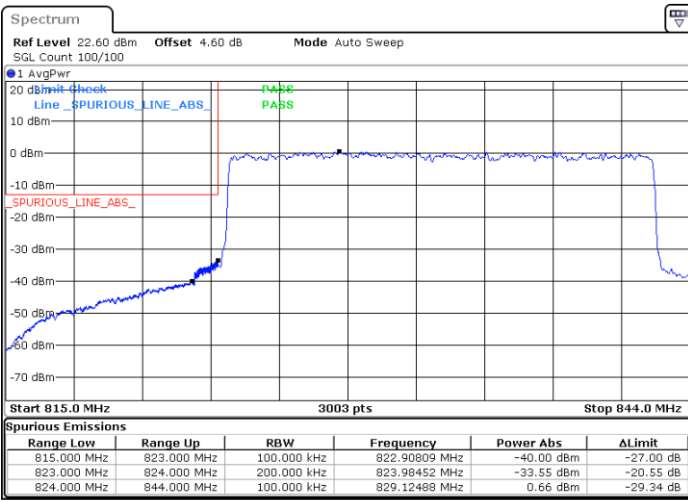


Date: 14. JUN. 2022 00:31:45

Date: 14. JUN. 2022 00:40:01

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14. JUN. 2022 00:32:24

Date: 14. JUN. 2022 00:40:45

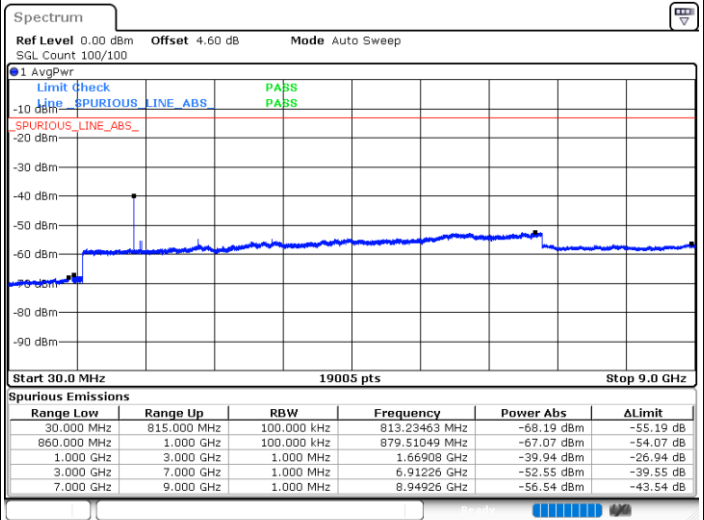
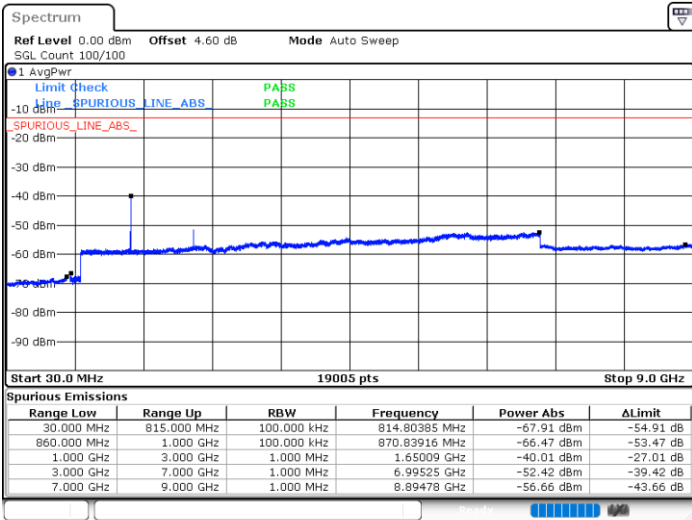


# Conducted Spurious Emission

FR1 n5 / 5MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

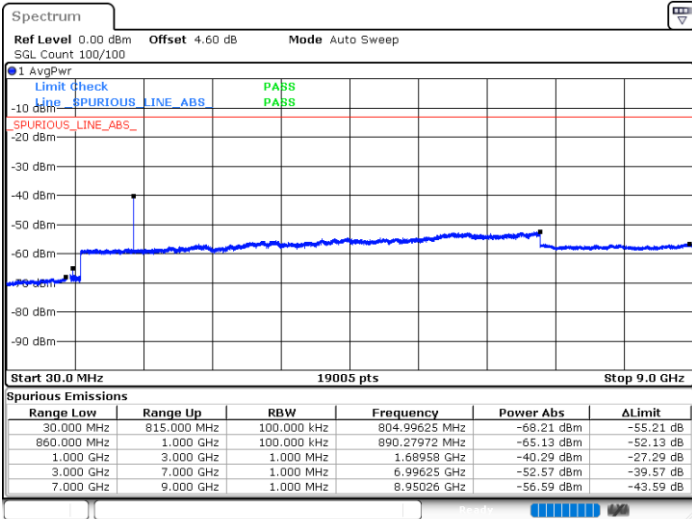
Middle Channel / 1RB1



Date: 13 JUN 2022 23:33:44

Date: 13 JUN 2022 23:36:23

Highest Channel / 1RB1



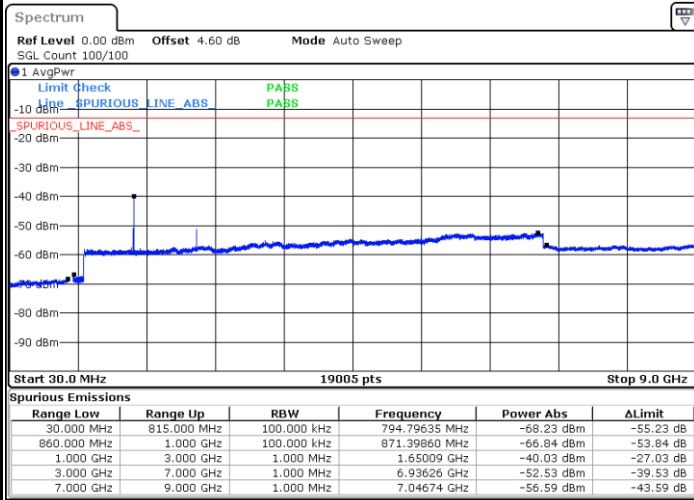
Date: 13 JUN 2022 23:58:23



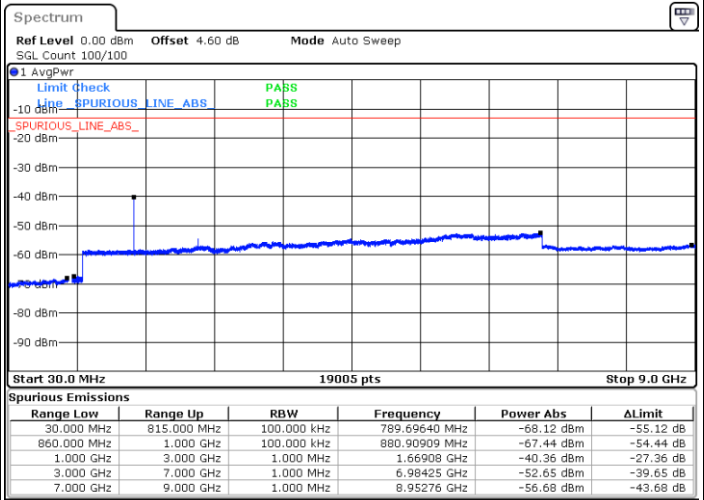
FR1 n5 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

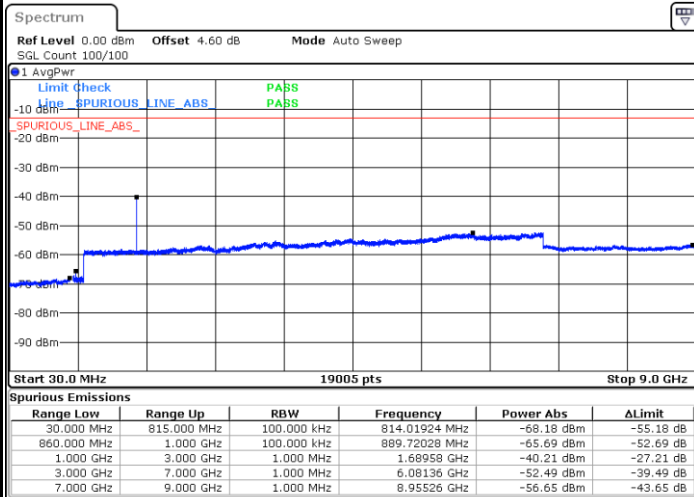


Date: 13 JUN 2022 23:35:24



Date: 13 JUN 2022 23:36:54

Highest Channel / 1RB1



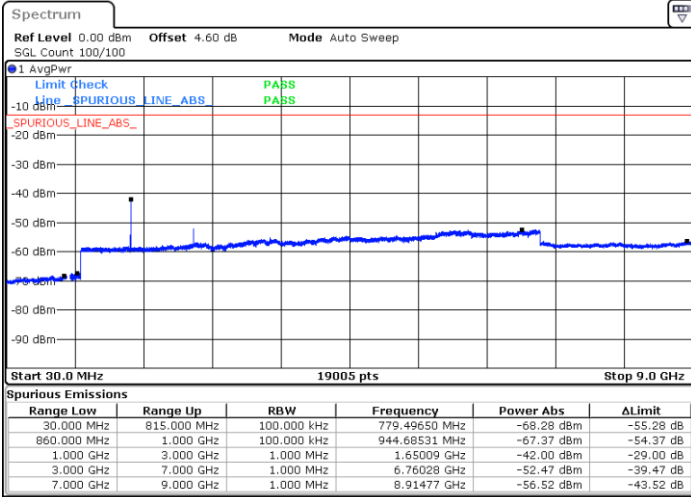
Date: 13 JUN 2022 23:59:30



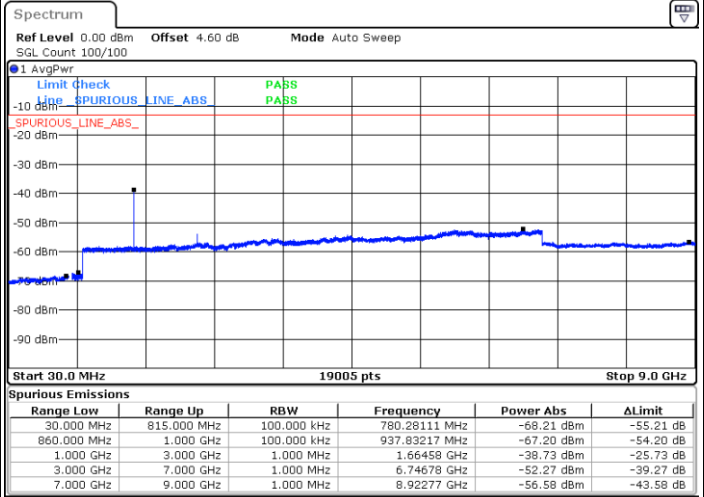
FR1 n5 / 10MHz / DFT-S OFDM / BPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

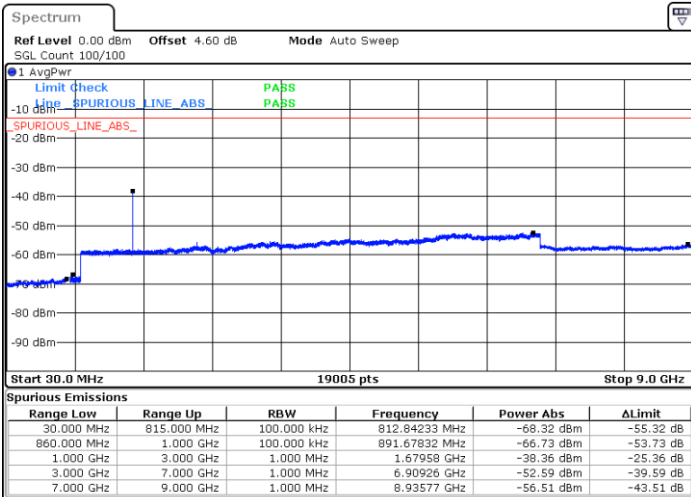


Date: 14. JUN. 2022 00:05:19



Date: 14. JUN. 2022 00:09:29

Highest Channel / 1RB1



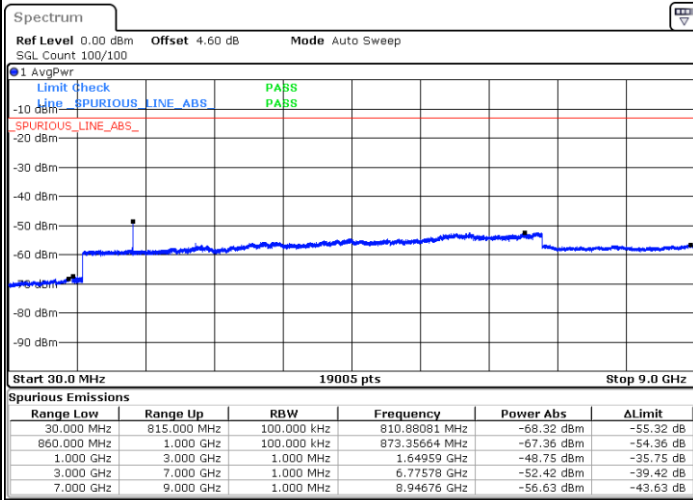
Date: 14. JUN. 2022 00:18:50



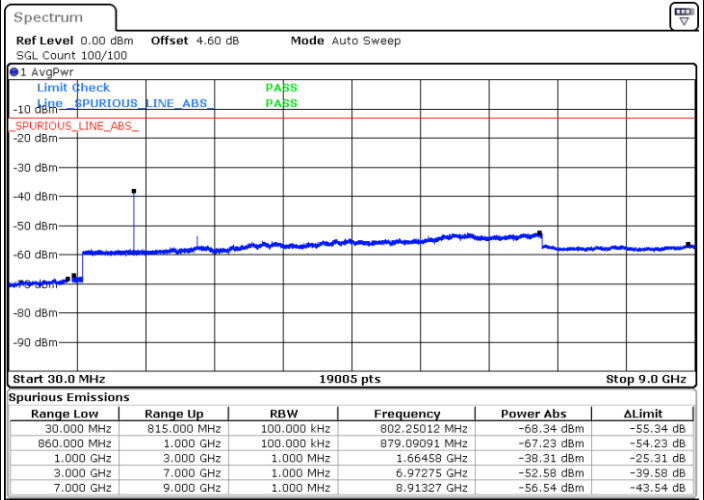
FR1 n5 / 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

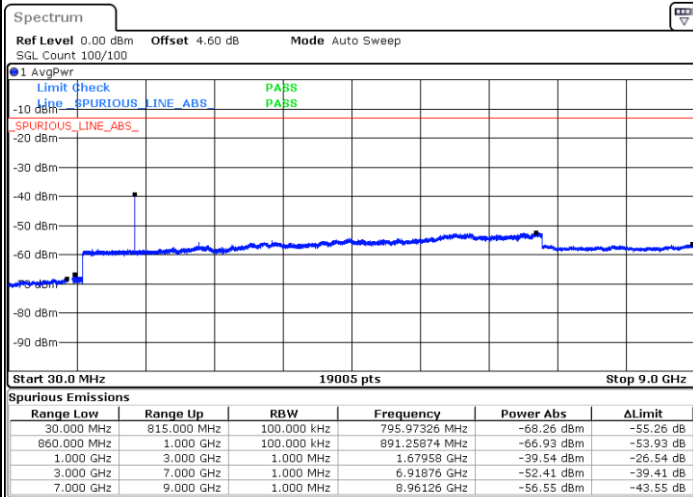


Date: 14. JUN. 2022 00:06:35



Date: 14. JUN. 2022 00:10:06

Highest Channel / 1RB1



Date: 14. JUN. 2022 00:19:56