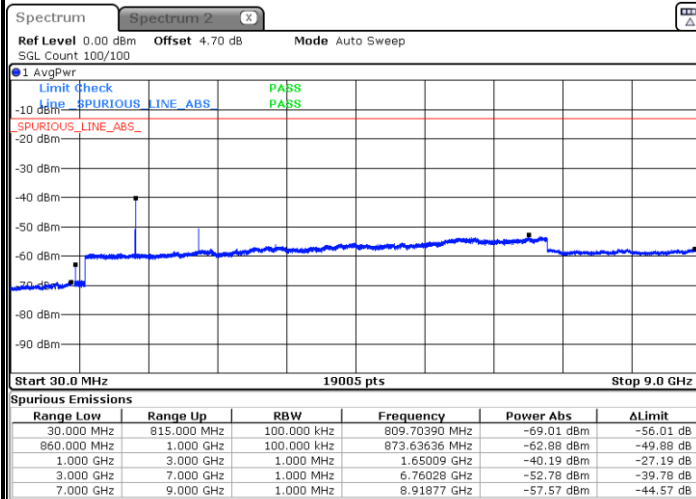




Conducted Spurious Emission

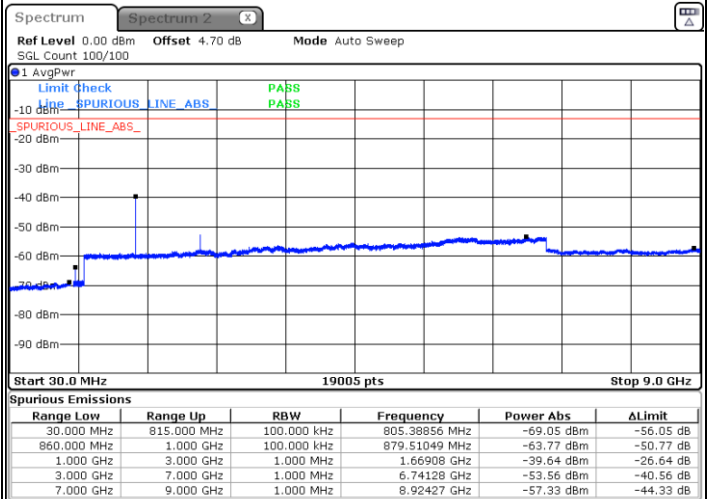
FR1 n5 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



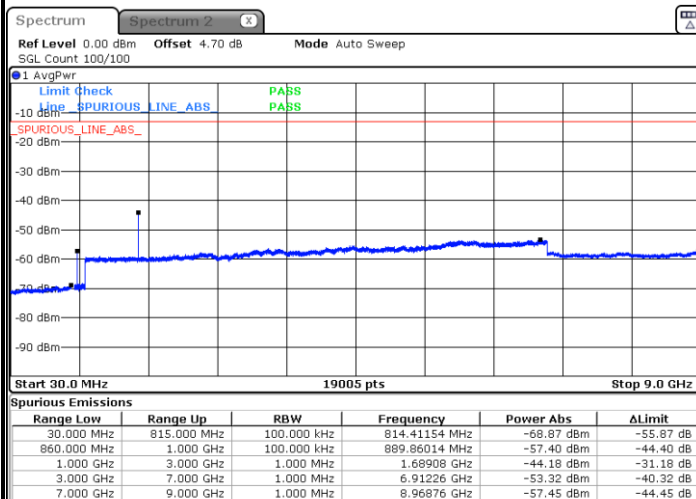
Date: 13.FEB.2022 12:14:15

Middle Channel / 1RB1



Date: 13.FEB.2022 12:15:31

Highest Channel / 1RB1

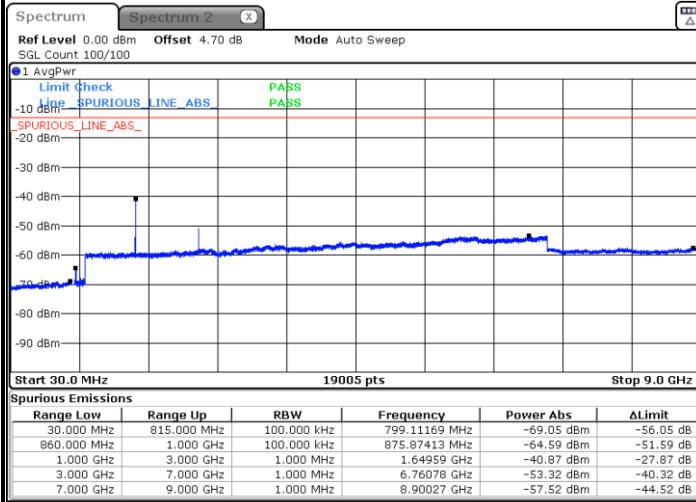


Date: 13.FEB.2022 12:16:32



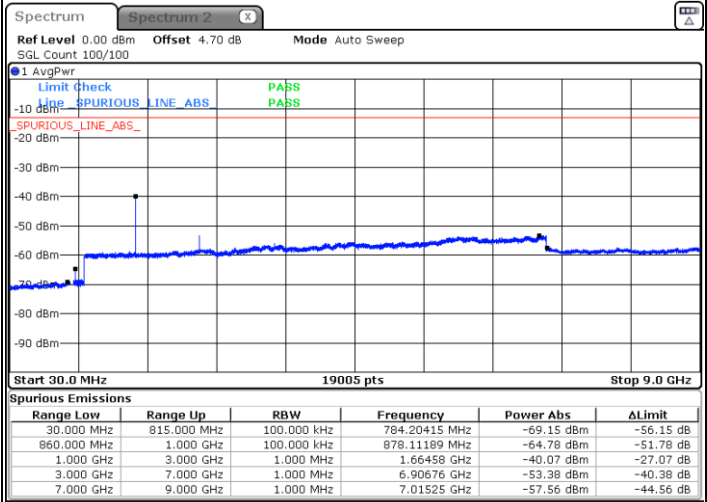
FR1 n5/ 10MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



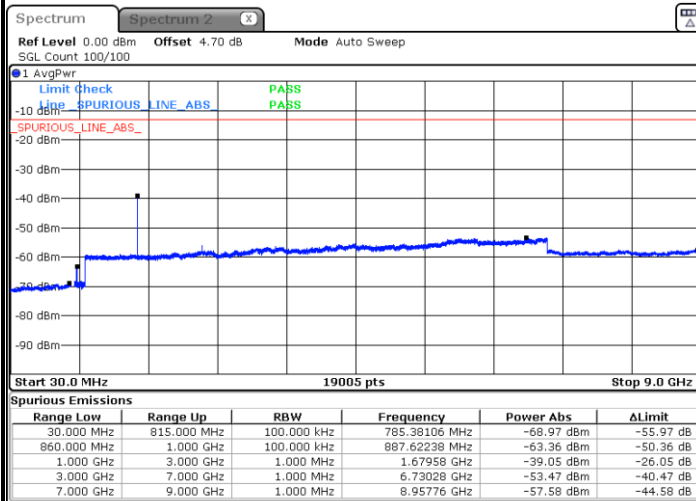
Date: 13.FEB.2022 12:40:51

Middle Channel / 1RB1



Date: 13.FEB.2022 12:42:17

Highest Channel / 1RB1

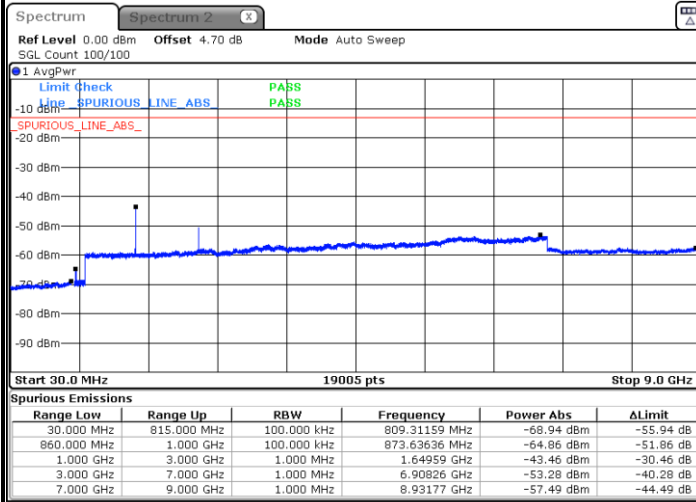


Date: 13.FEB.2022 12:43:38



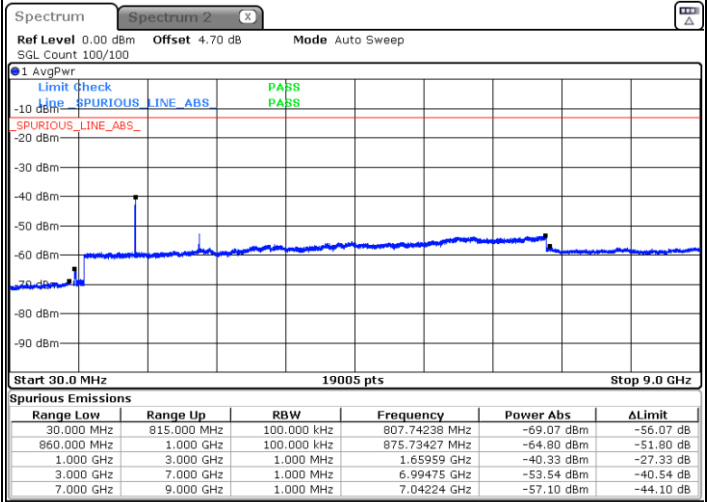
FR1 n5 / 15MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



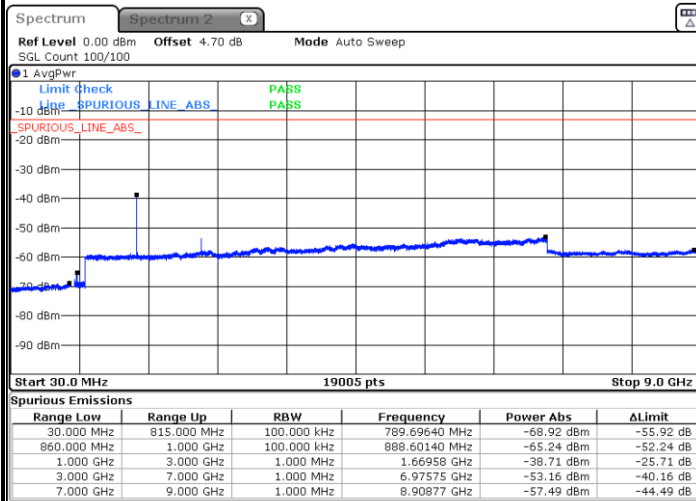
Date: 13.FEB.2022 13:16:34

Middle Channel / 1RB1



Date: 13.FEB.2022 13:18:17

Highest Channel / 1RB1

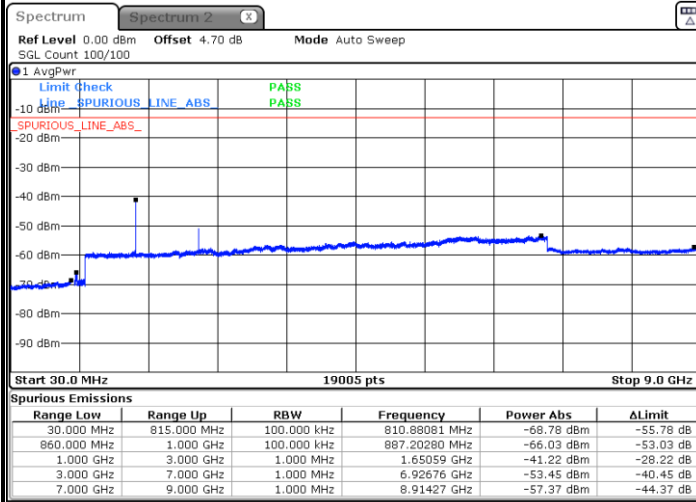


Date: 13.FEB.2022 13:19:16



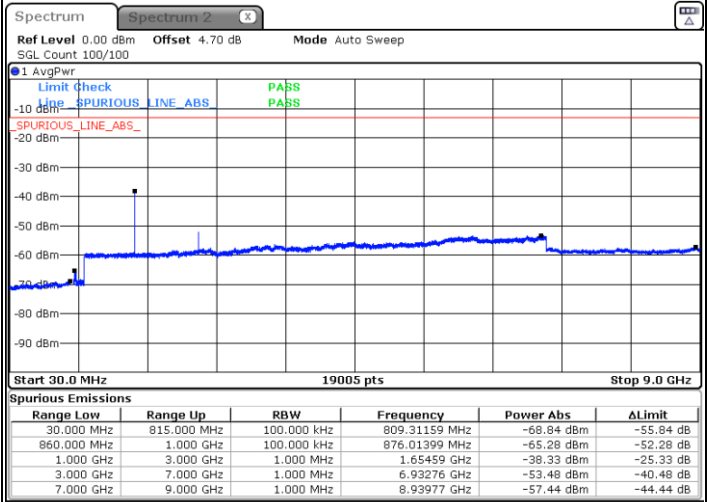
FR1 n5 / 20MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1



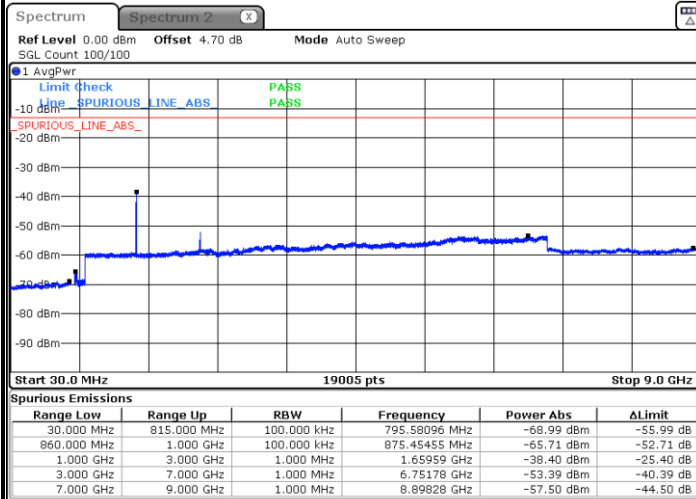
Date: 13.FEB.2022 13:39:48

Middle Channel / 1RB1



Date: 13.FEB.2022 13:41:25

Highest Channel / 1RB1



Date: 13.FEB.2022 13:42:17

Frequency Stability

Test Conditions		FR1 n5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0012	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0031	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0018	
-20	Normal Voltage	0.0034	
-30	Normal Voltage	0.0024	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0035	
20	Battery End Point	0.0053	

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.

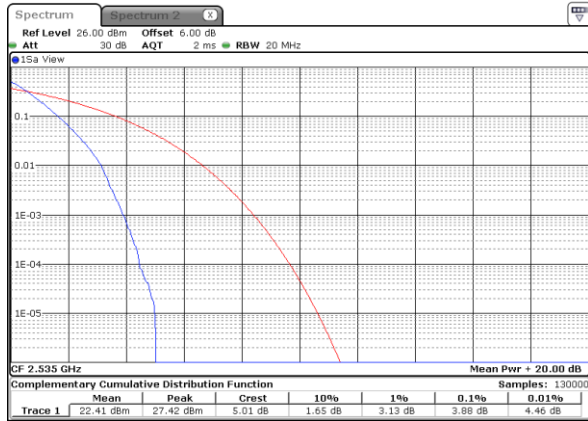
FR1 n7

Peak-to-Average Ratio

Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
					PASS
Middle CH	3.88	5.25	6.09	6.38	
Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
					PASS
Middle CH	6.55				

Middle Channel / Full RB

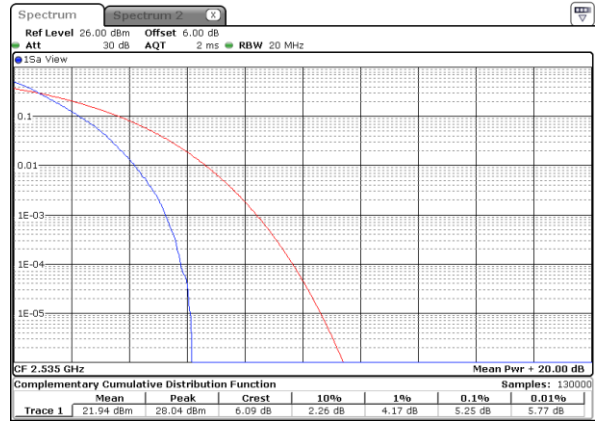
BPSK



Date: 15.FEB.2022 03:11:33

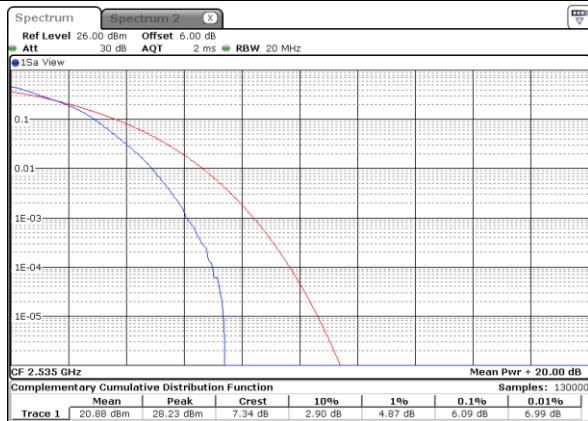
Middle Channel / Full RB

QPSK



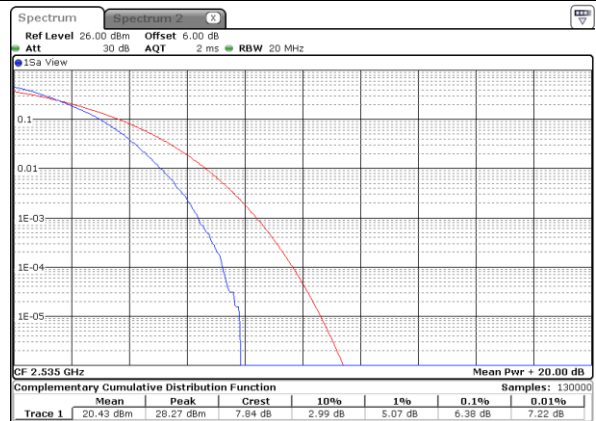
Date: 15.FEB.2022 03:12:17

16QAM



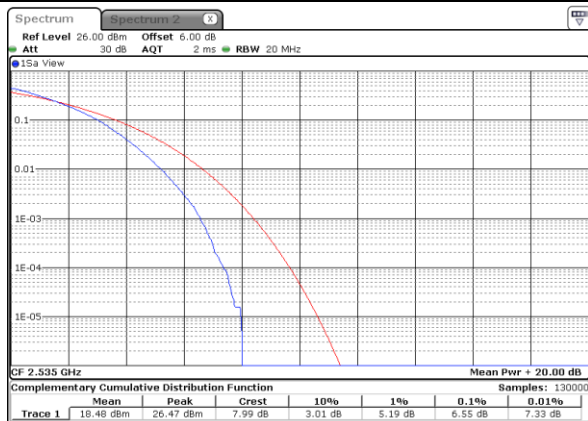
Date: 15.FEB.2022 03:12:52

64QAM



Date: 15.FEB.2022 03:13:21

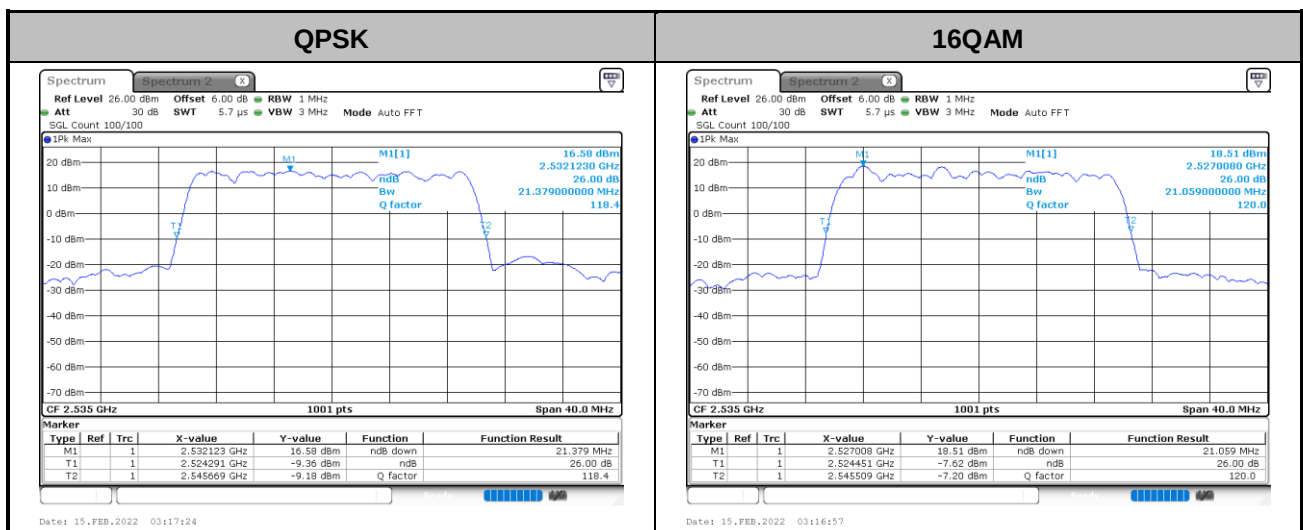
256QAM



Date: 15.FEB.2022 03:14:18

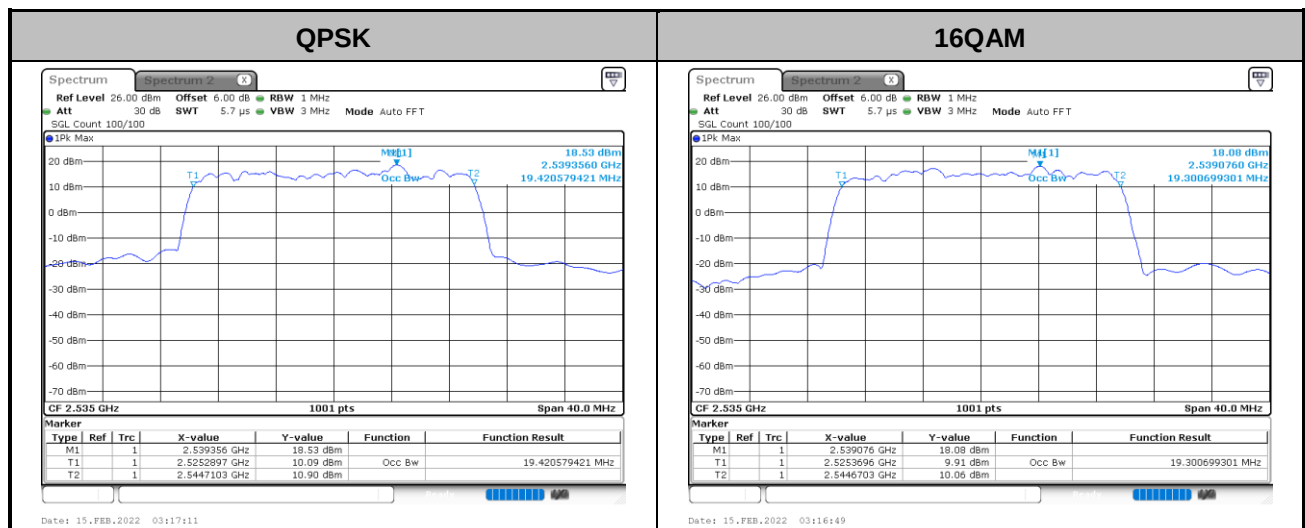
26dB Bandwidth

Mode	FR1 n7 : 26dB BW(MHz) / DFT-S OFDM	
BW	20M	
Mod.	QPSK	16QAM
Middle CH	21.38	21.06



Occupied Bandwidth

Mode	FR1 n7 : 99%OBW(MHz) / DFT-S OFDM	
BW	20M	
Mod.	QPSK	16QAM
Middle CH	19.42	19.30

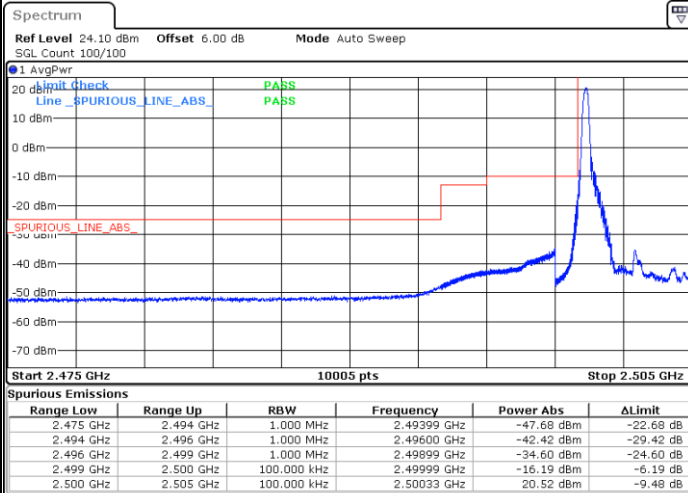


**Conducted Band Edge**

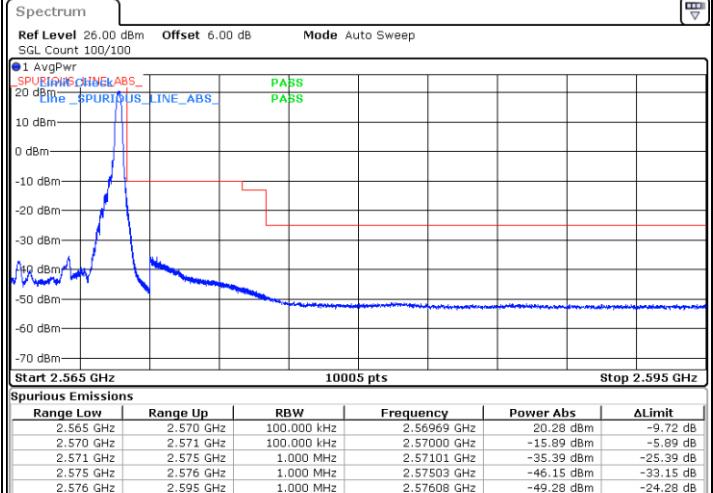
FR1 n7 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



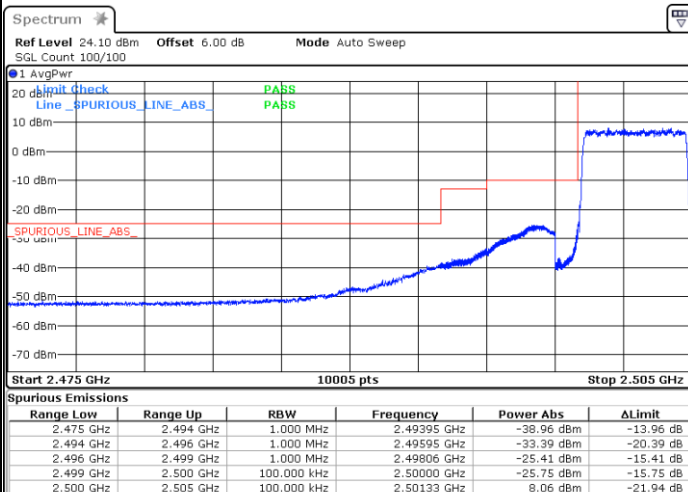
Date: 14.FEB.2022 22:17:00



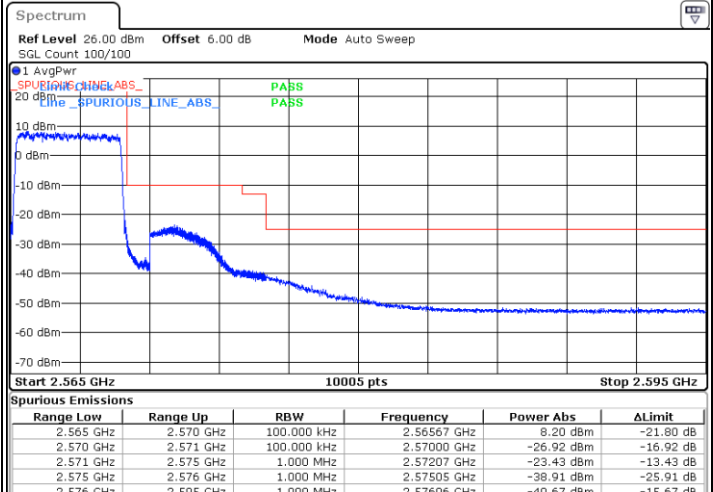
Date: 14.FEB.2022 23:00:24

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 14.FEB.2022 22:11:27



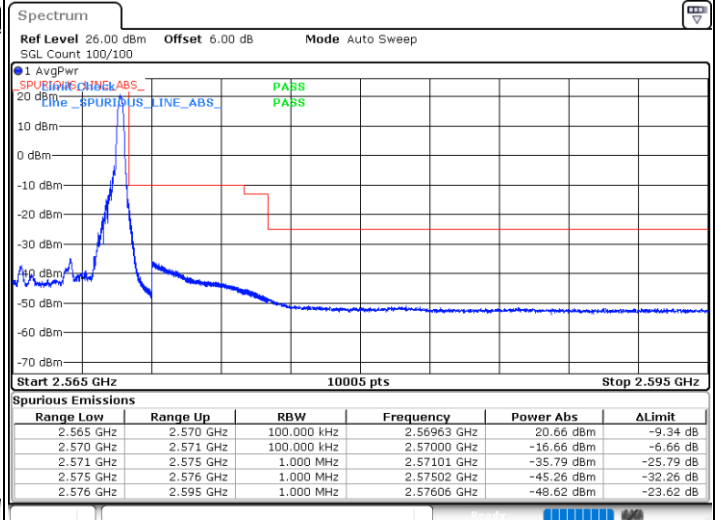
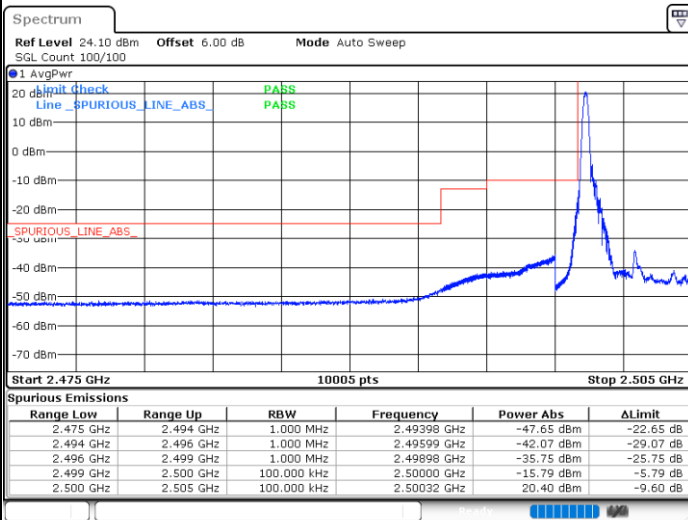
Date: 14.FEB.2022 22:49:49



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

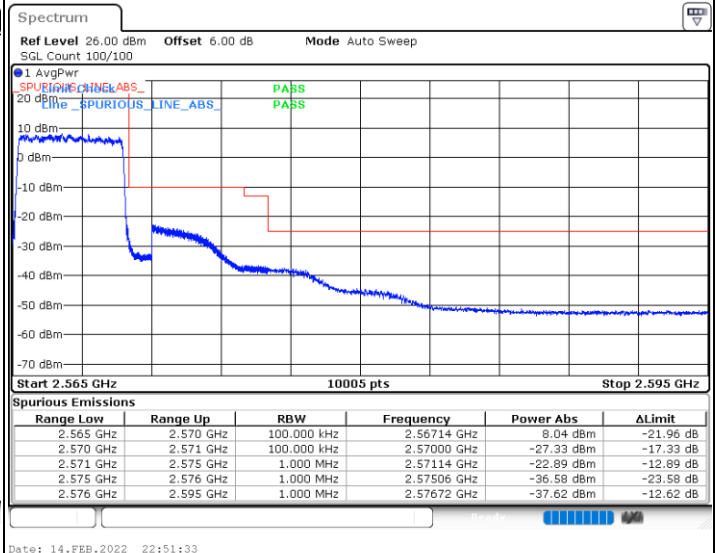
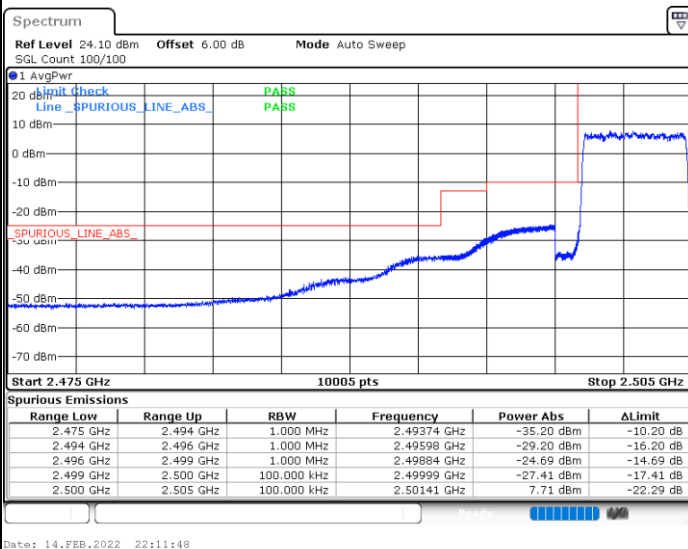
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

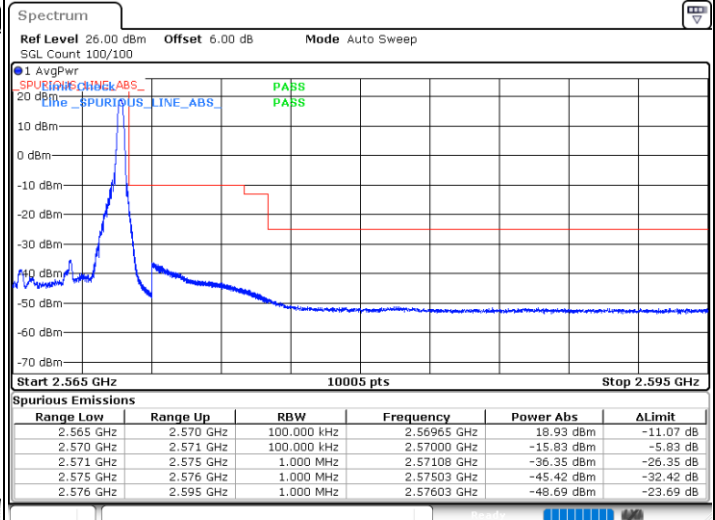
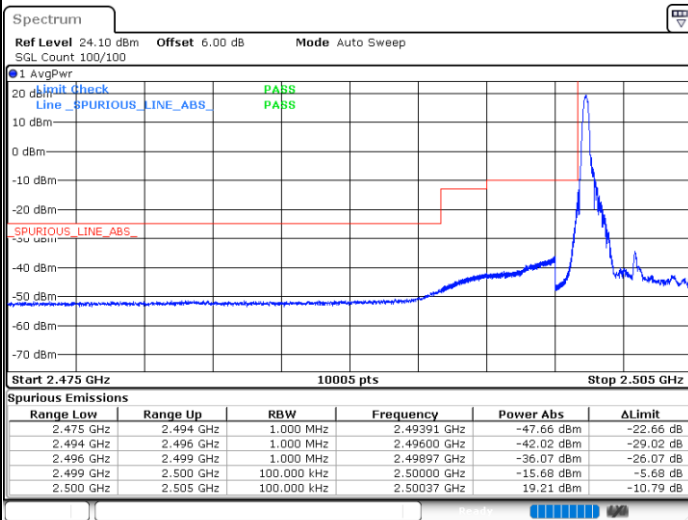




FR1 n7 / 5MHz / DFT-S OFDM / 16Q

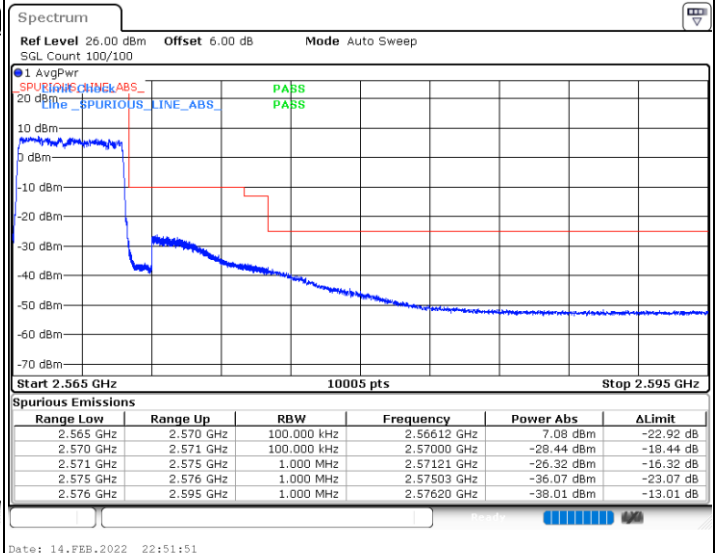
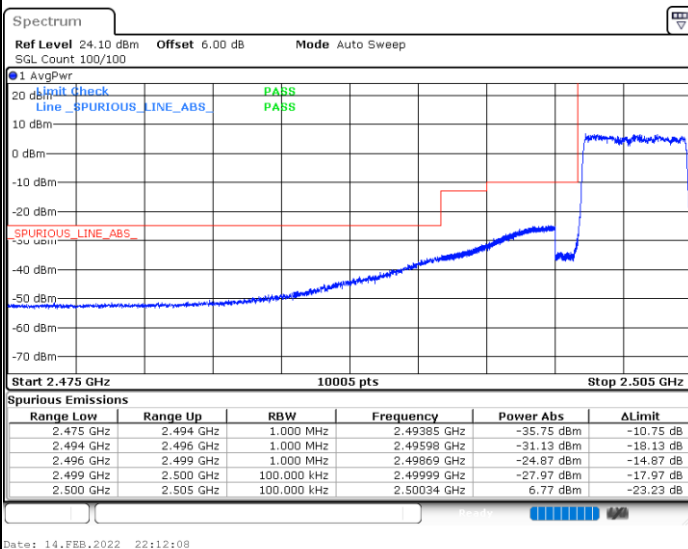
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

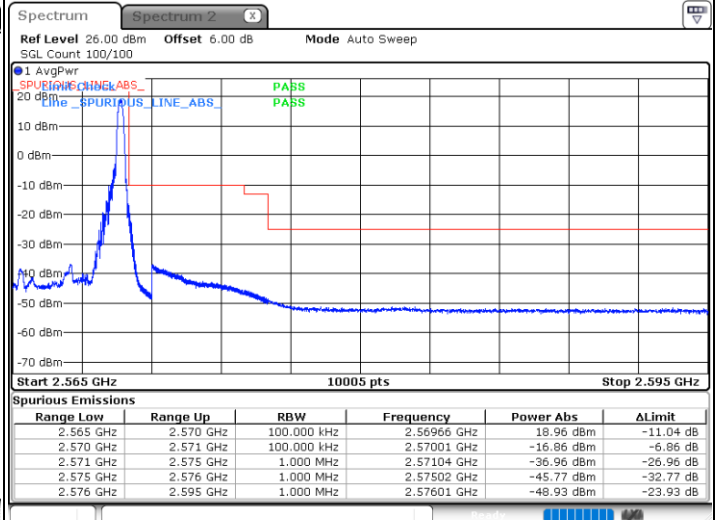
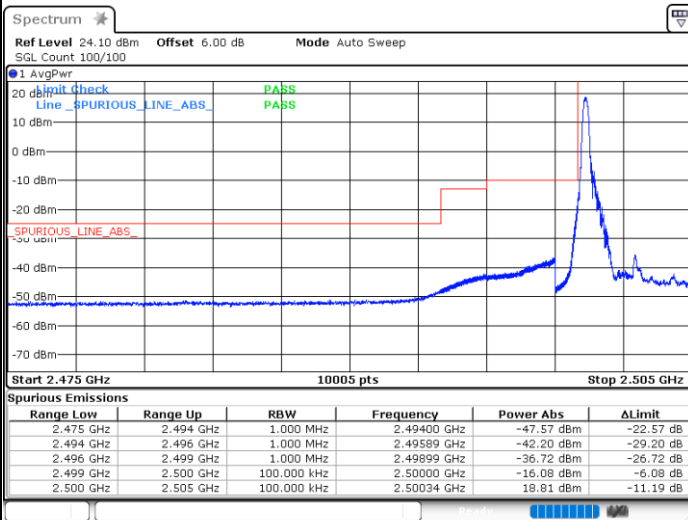




FR1 n7 / 5MHz / DFT-S OFDM / 64Q

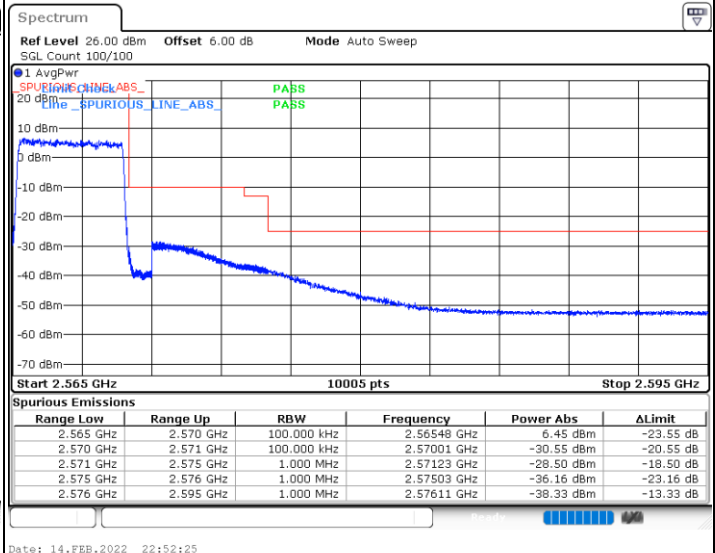
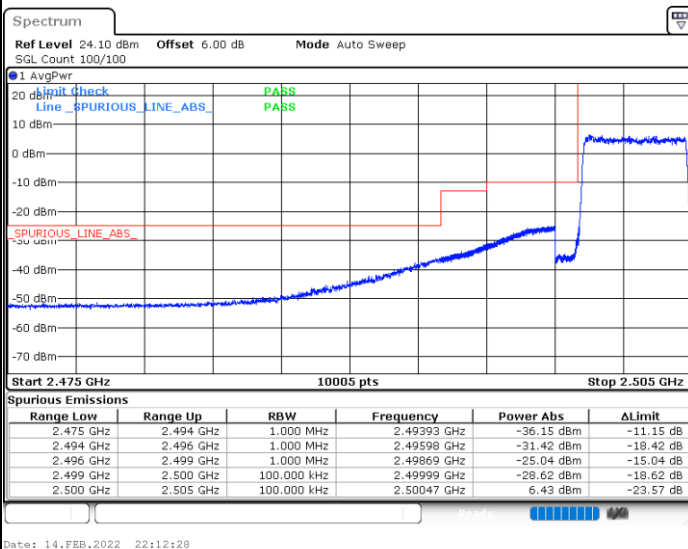
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

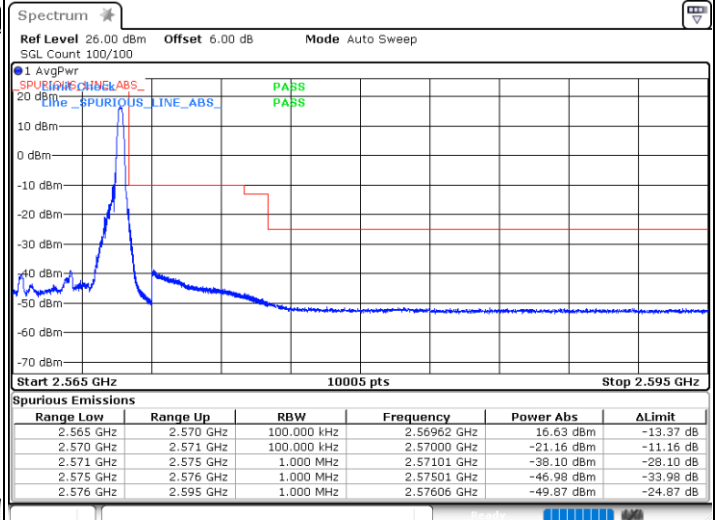
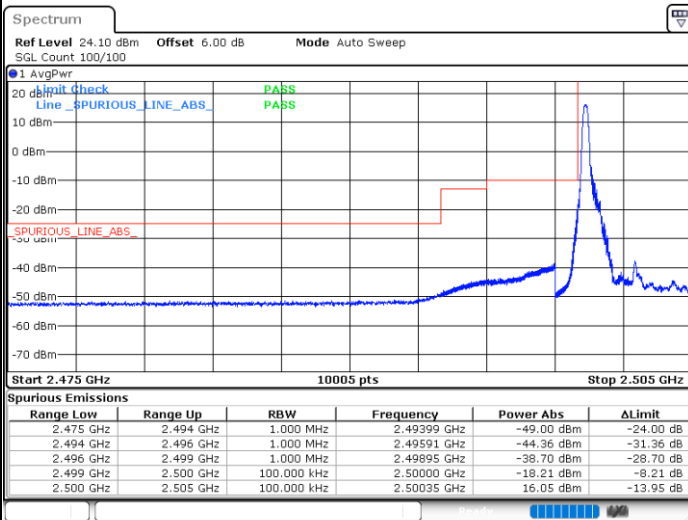




FR1 n7 / 5MHz / DFT-S OFDM / 256Q

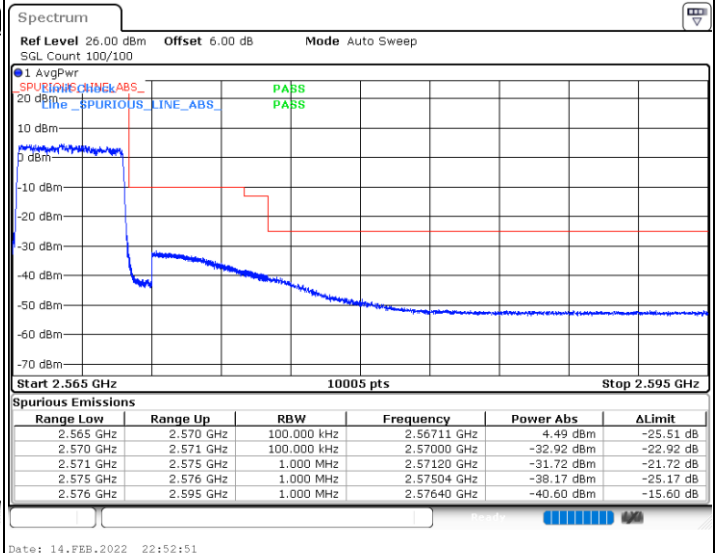
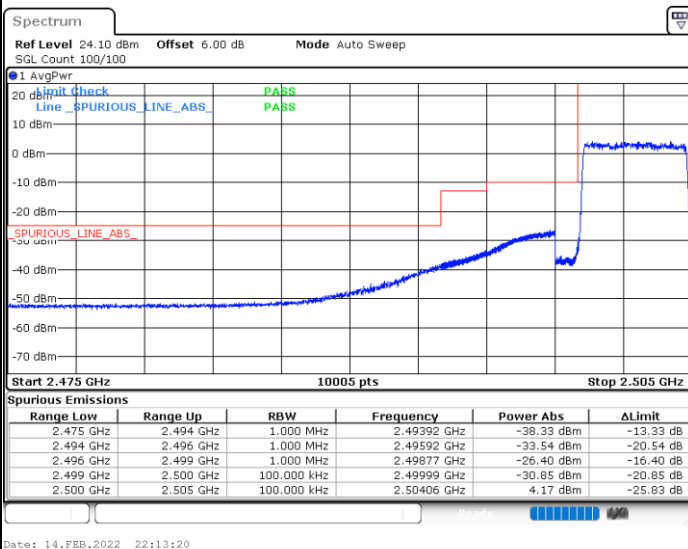
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

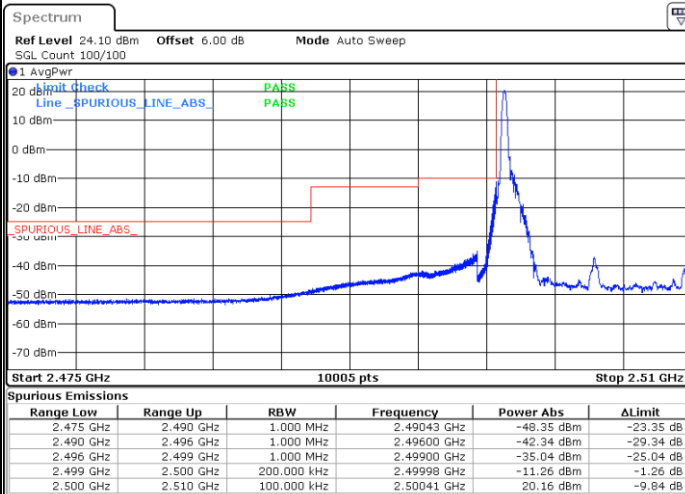




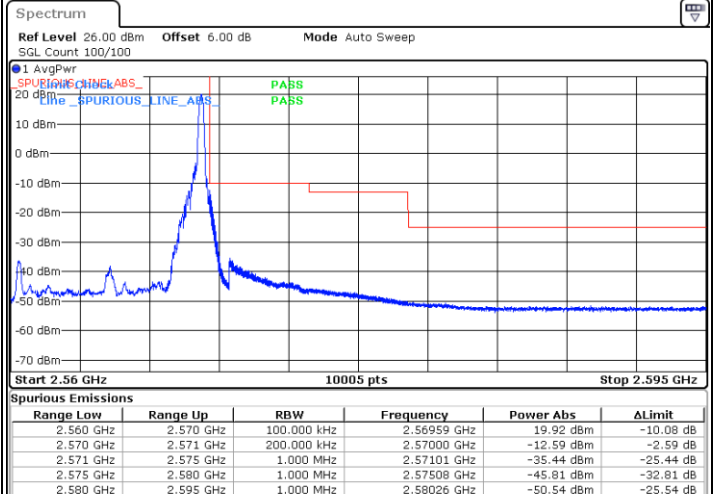
FR1 n7 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



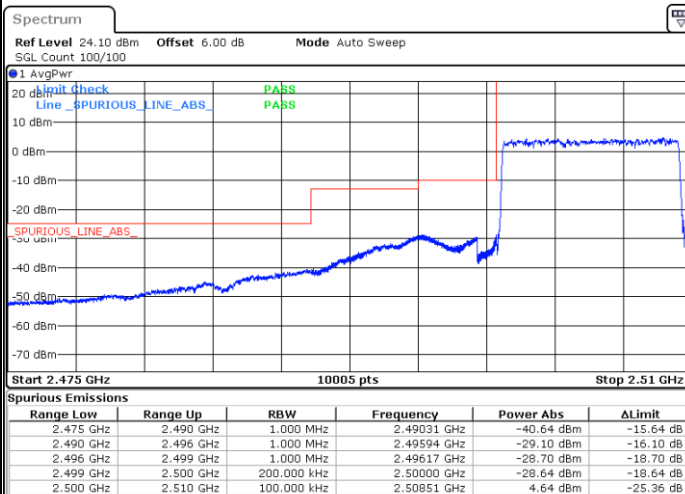
Date: 15.FEB.2022 01:29:13



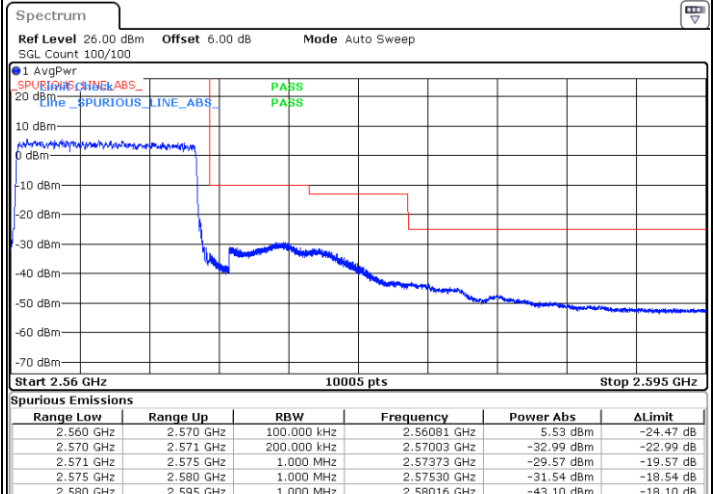
Date: 15.FEB.2022 01:36:21

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:10:52



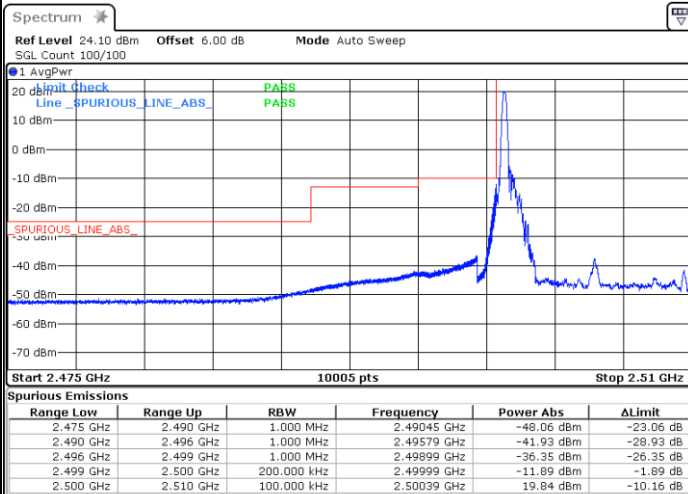
Date: 15.FEB.2022 01:31:54



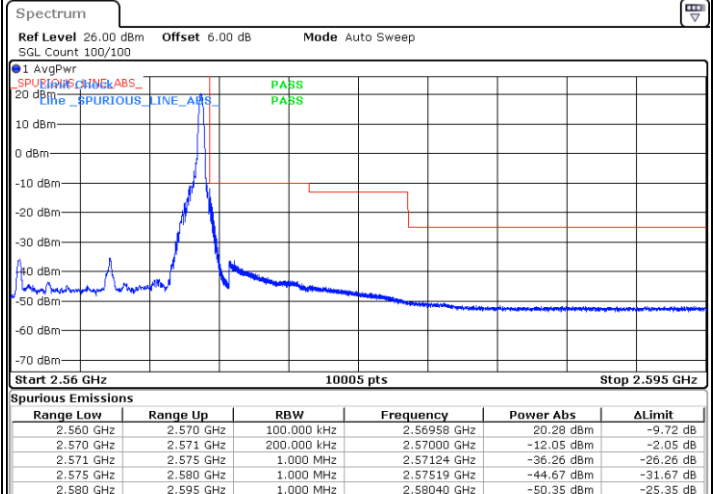
FR1 n7 / 10MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



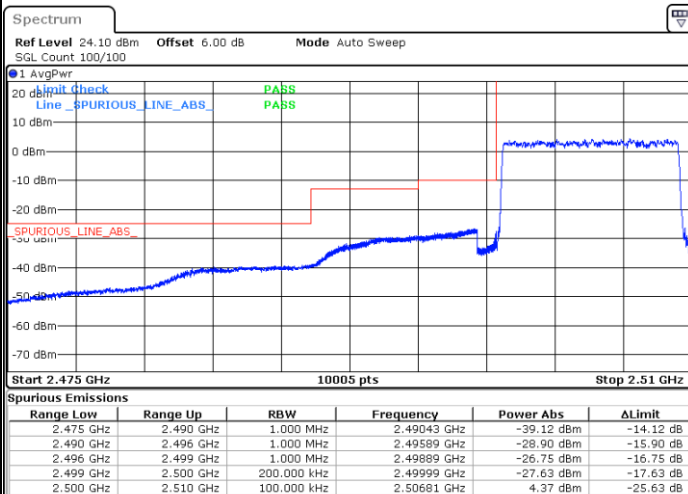
Date: 15.FEB.2022 01:17:54



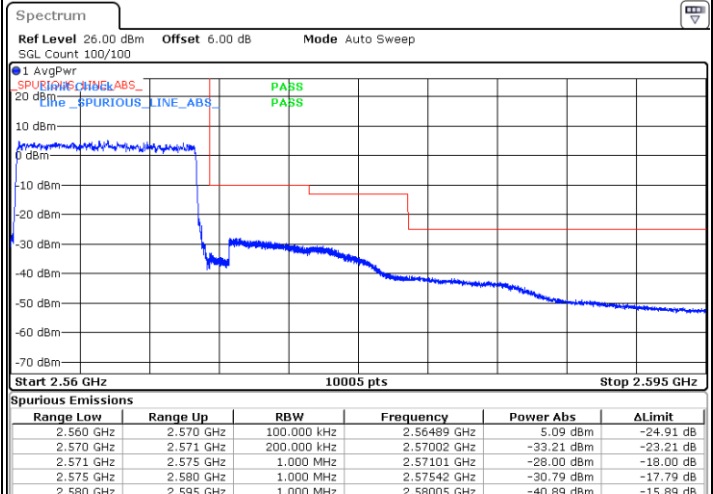
Date: 15.FEB.2022 01:35:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:11:24



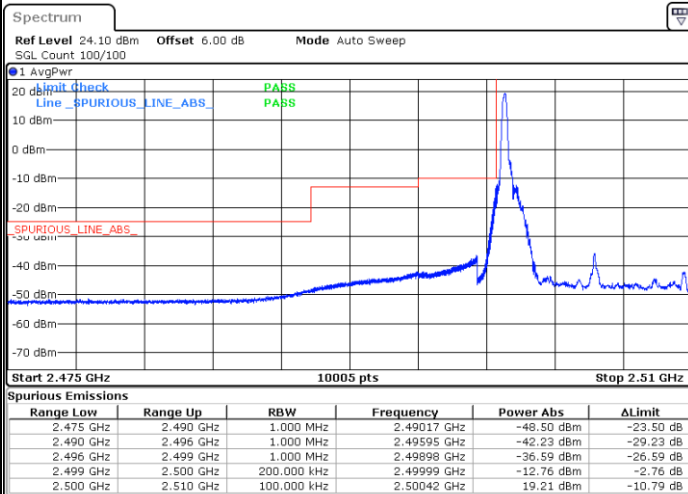
Date: 15.FEB.2022 01:32:23



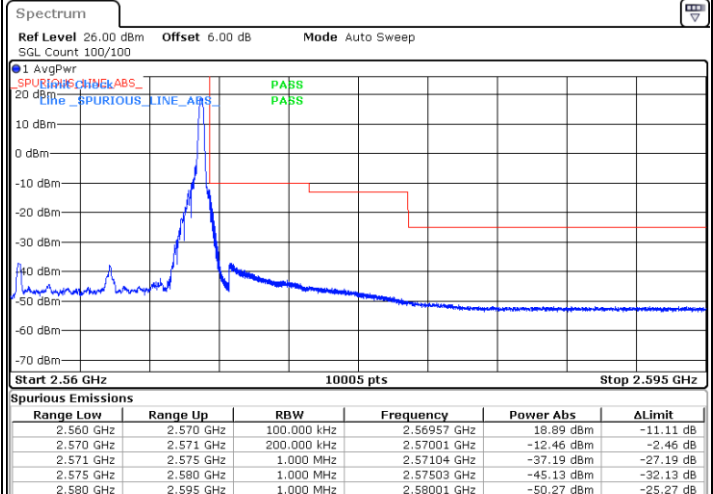
FR1 n7 / 10MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



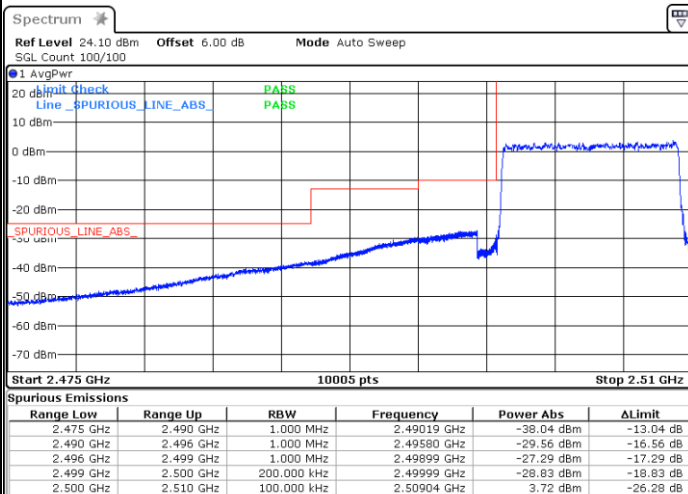
Date: 15.FEB.2022 01:17:20



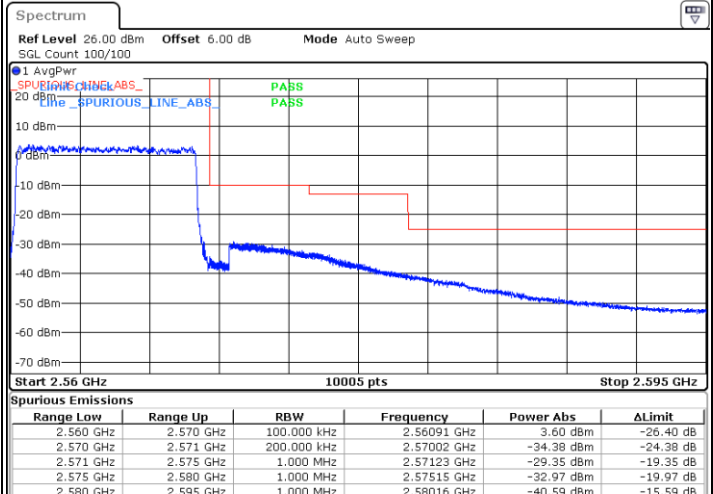
Date: 15.FEB.2022 01:35:28

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:13:15



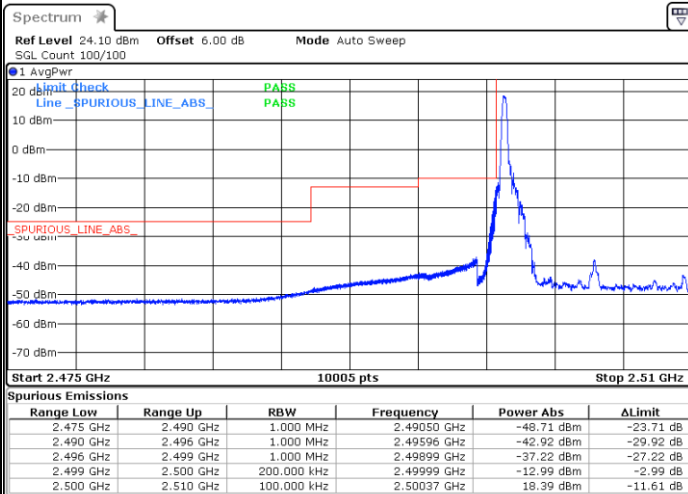
Date: 15.FEB.2022 01:32:41



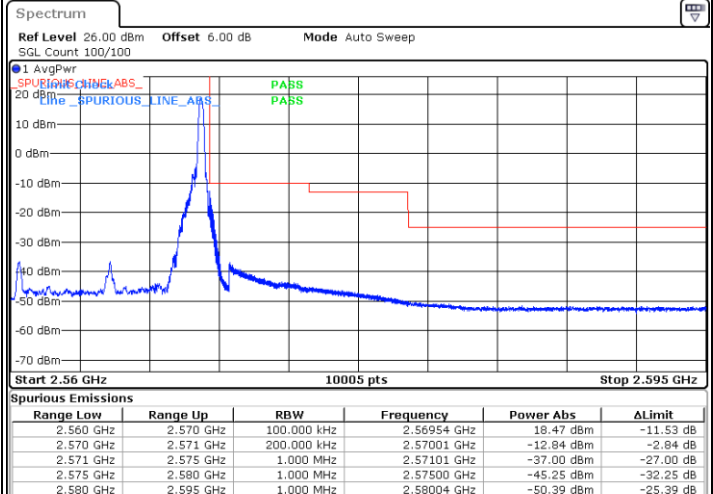
FR1 n7 / 10MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



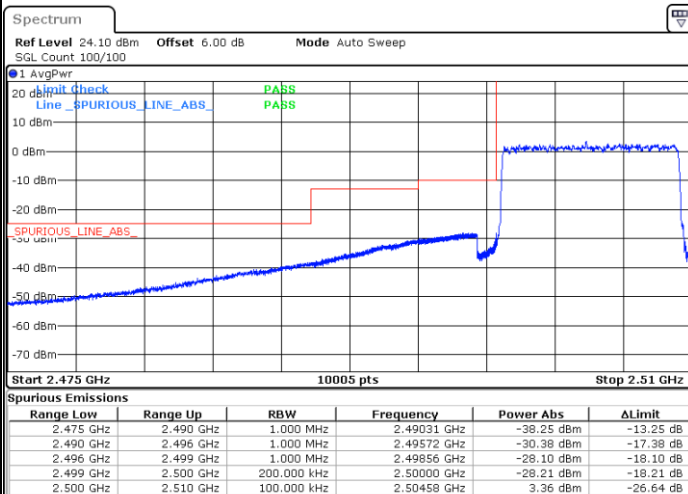
Date: 15.FEB.2022 01:16:50



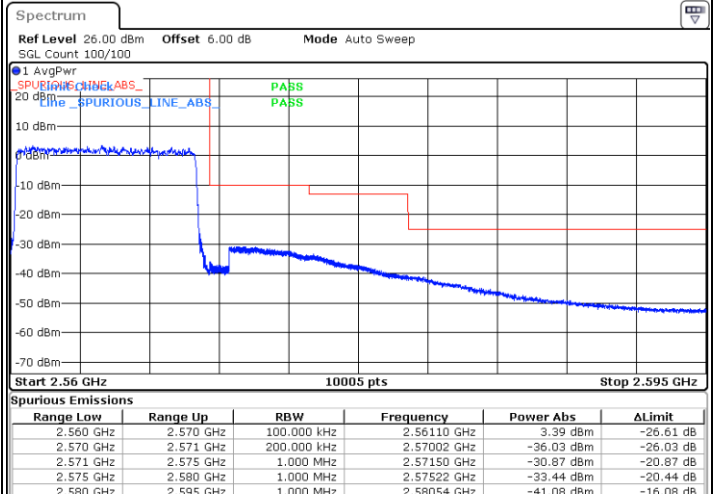
Date: 15.FEB.2022 01:34:54

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:14:02



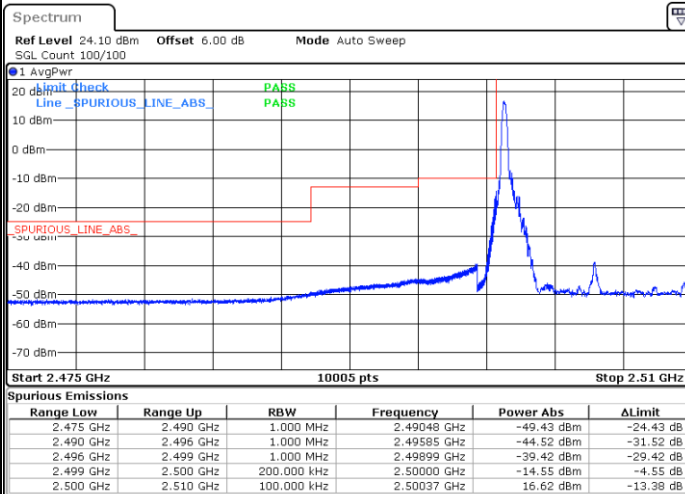
Date: 15.FEB.2022 01:32:58



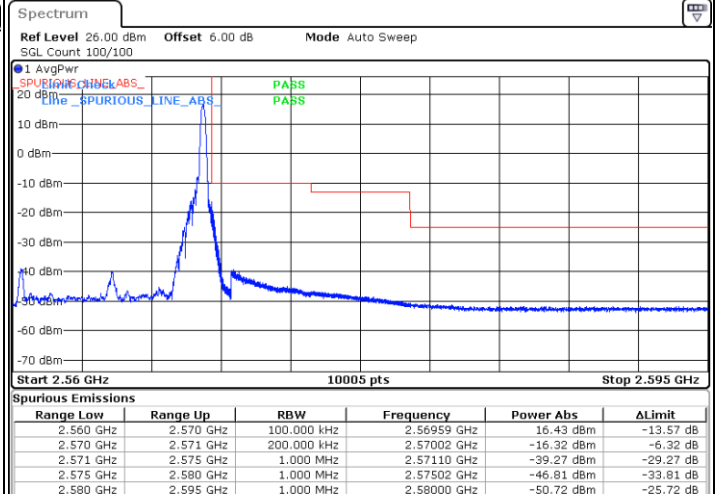
FR1 n7 / 10MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



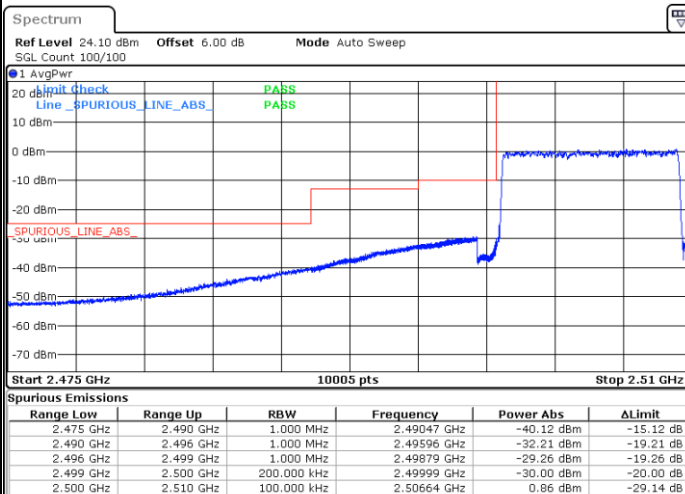
Date: 15.FEB.2022 01:16:09



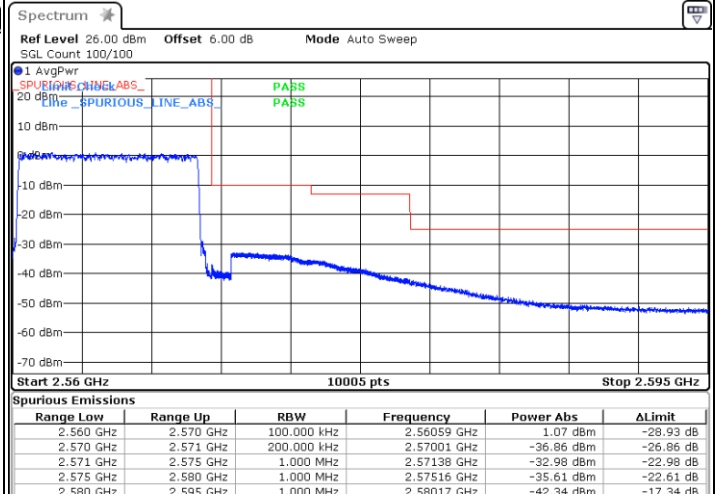
Date: 15.FEB.2022 01:34:35

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:15:03



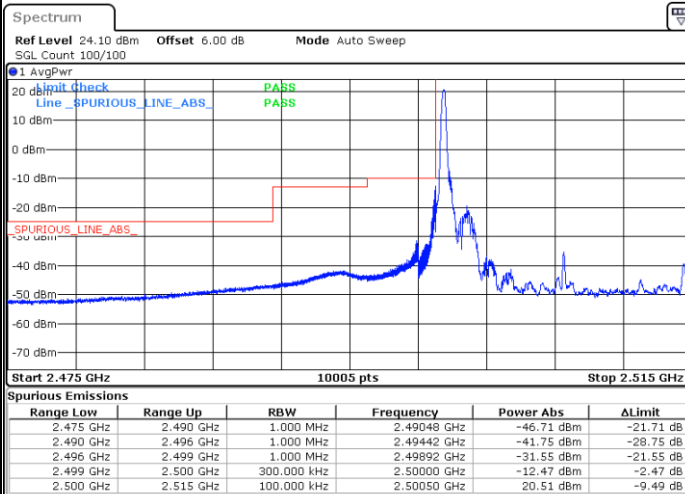
Date: 15.FEB.2022 01:34:07



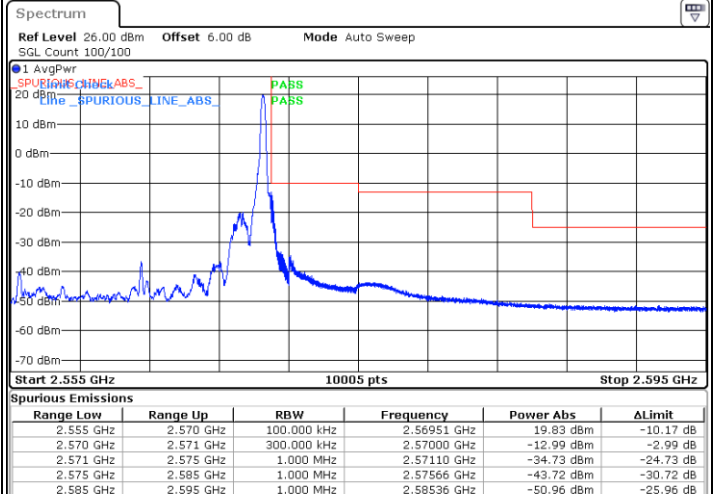
FR1 n7 / 15MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



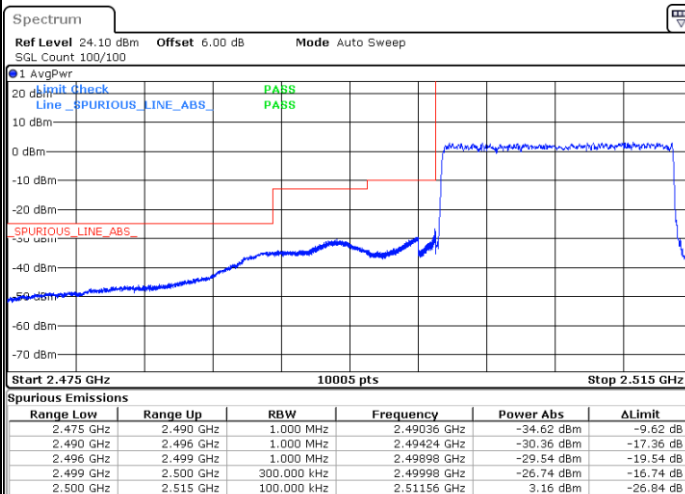
Date: 15.FEB.2022 01:44:07



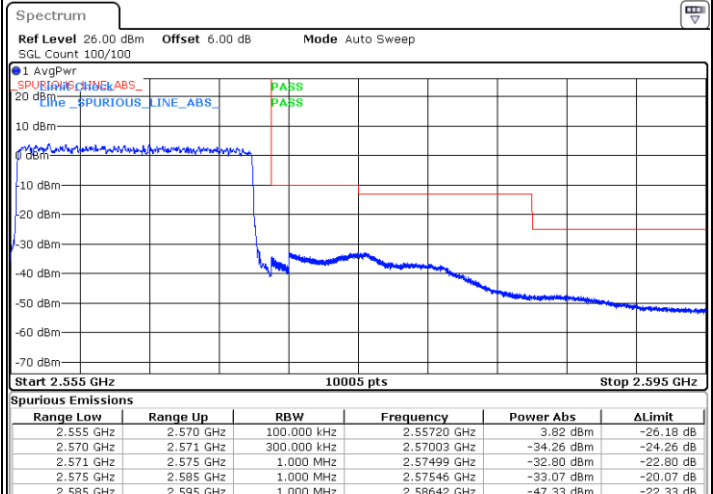
Date: 15.FEB.2022 01:59:42

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:39:19



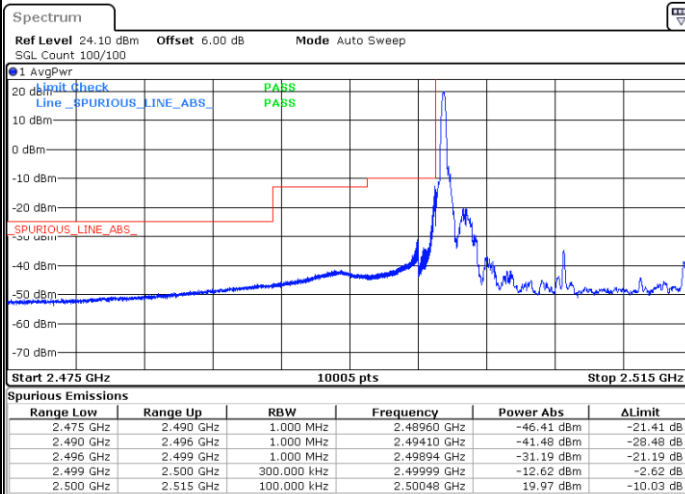
Date: 15.FEB.2022 01:50:59



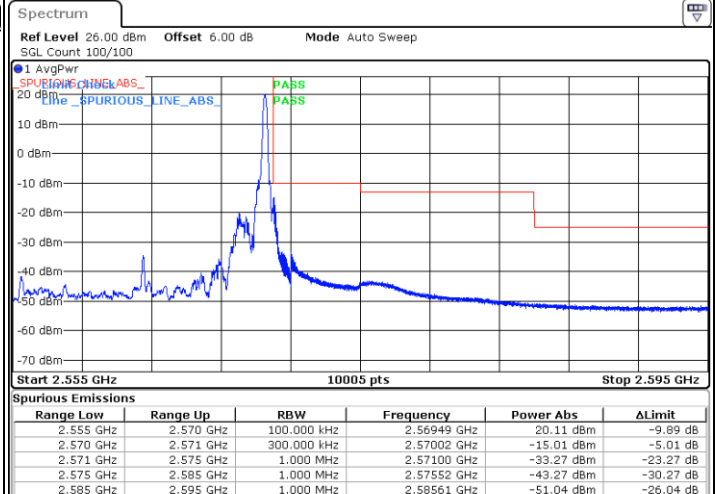
FR1 n7 / 15MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



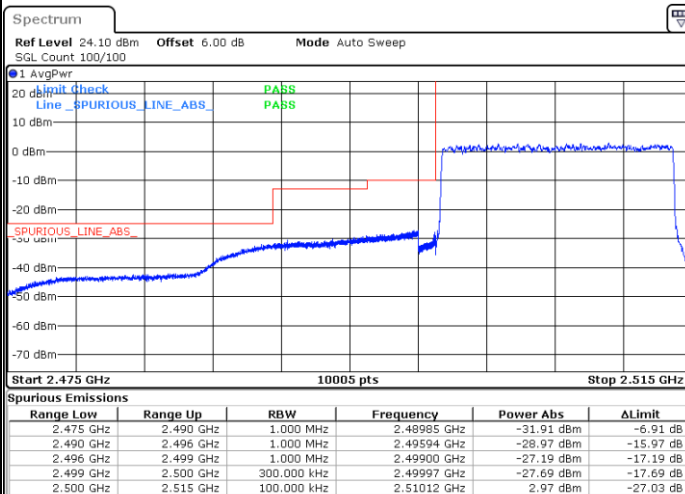
Date: 15.FEB.2022 01:43:34



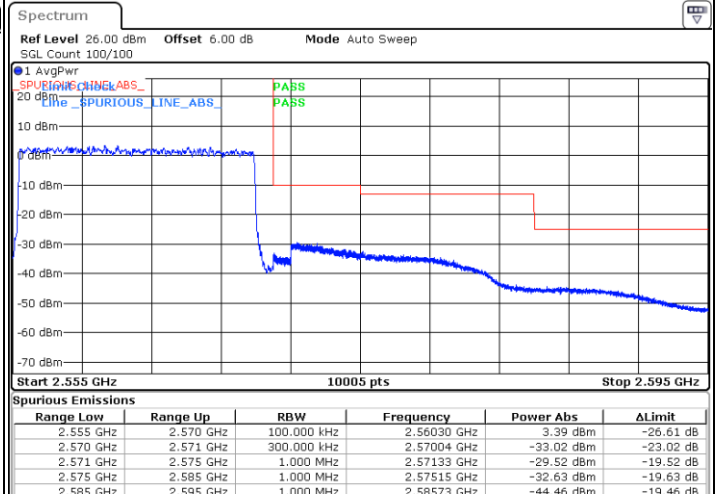
Date: 15.FEB.2022 01:59:11

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:40:10



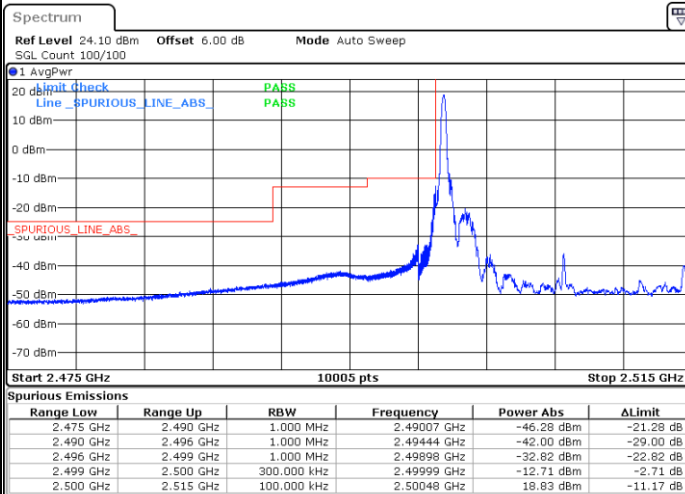
Date: 15.FEB.2022 01:51:49



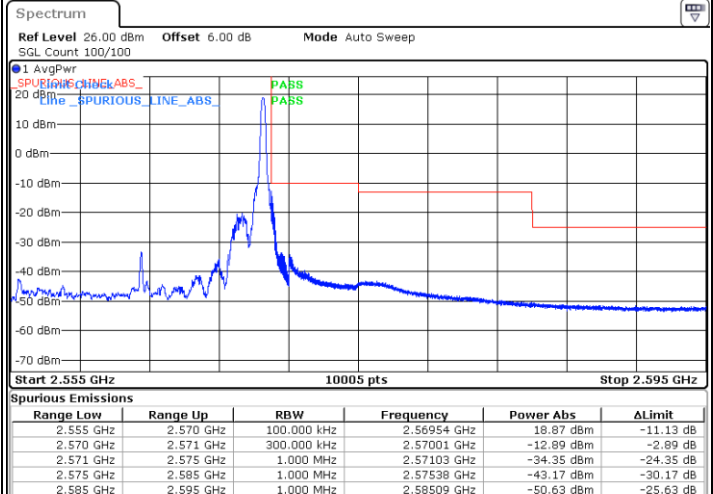
FR1 n7 / 15MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



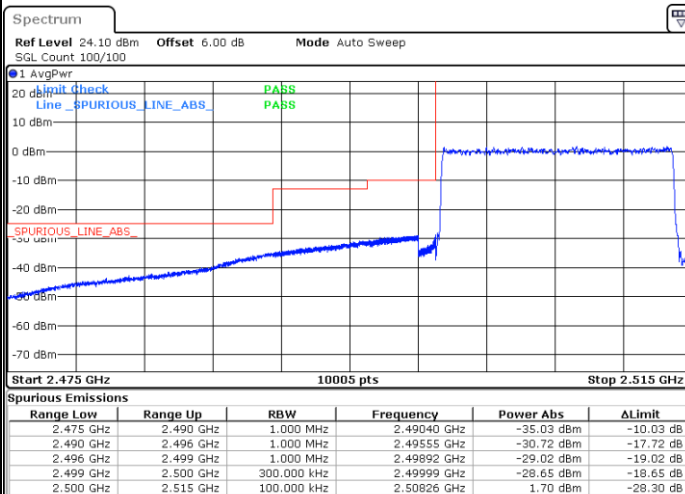
Date: 15.FEB.2022 01:43:04



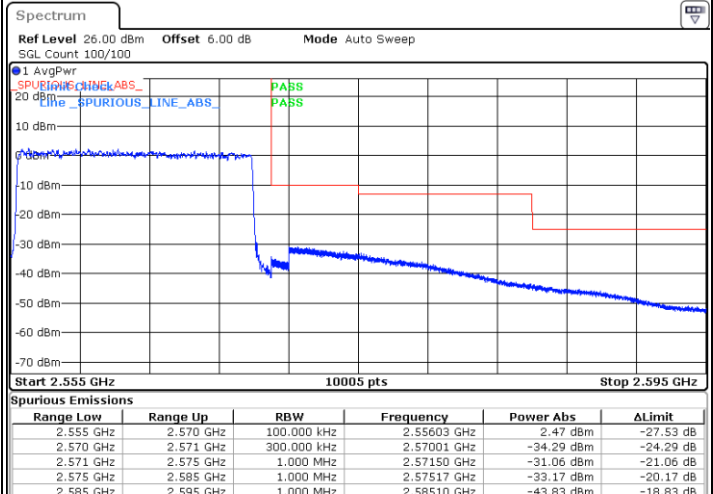
Date: 15.FEB.2022 01:58:46

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:40:49



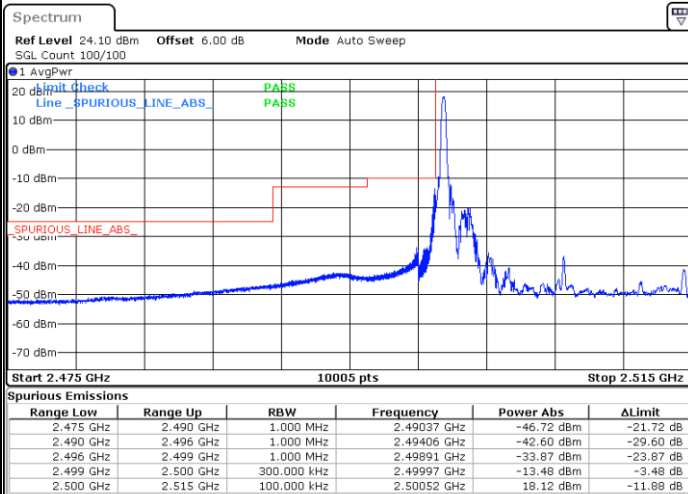
Date: 15.FEB.2022 01:54:40



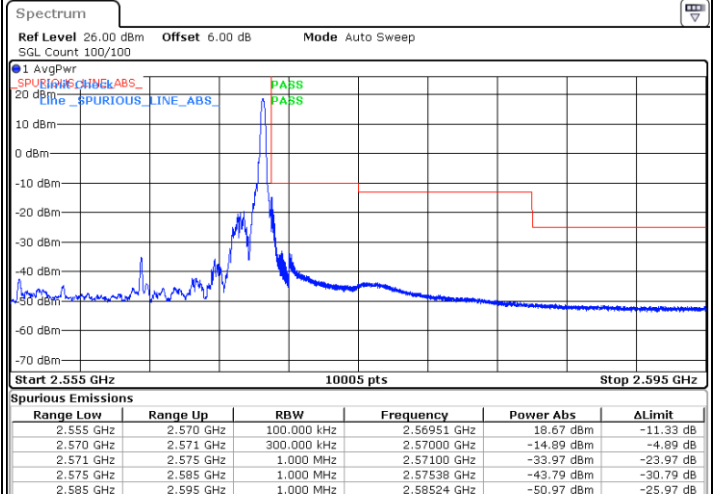
FR1 n7 / 15MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



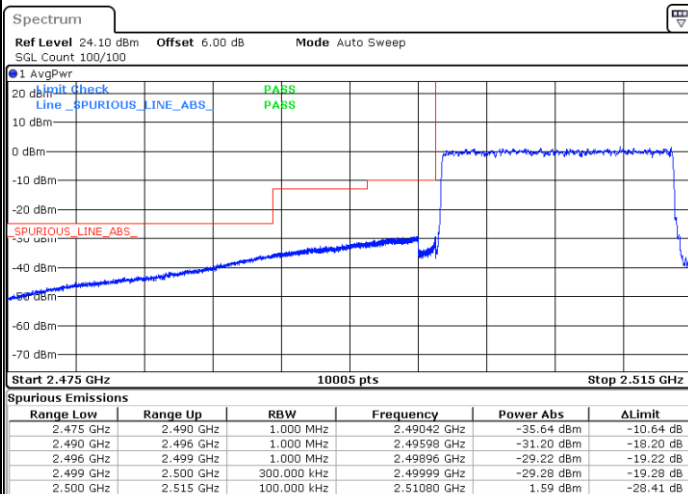
Date: 15.FEB.2022 01:42:44



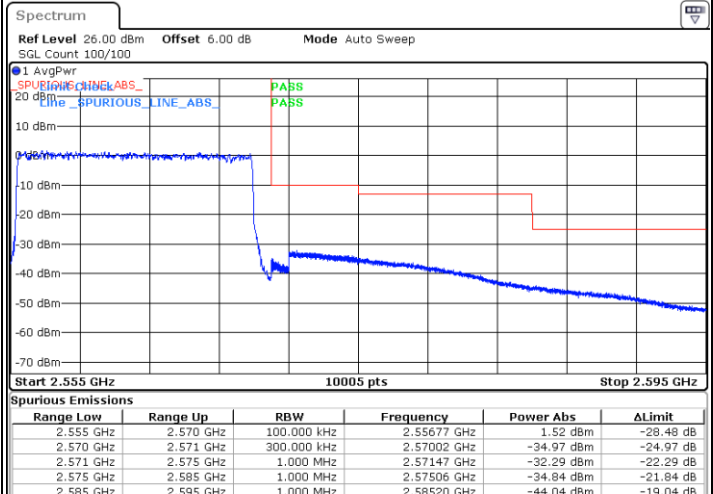
Date: 15.FEB.2022 01:58:29

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:41:09



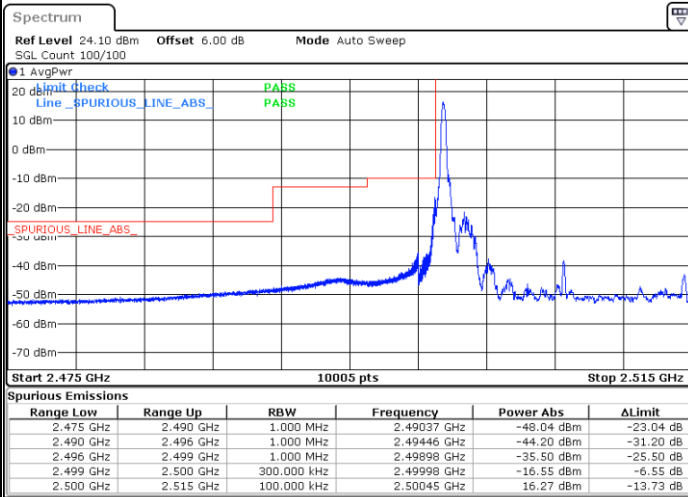
Date: 15.FEB.2022 01:56:26



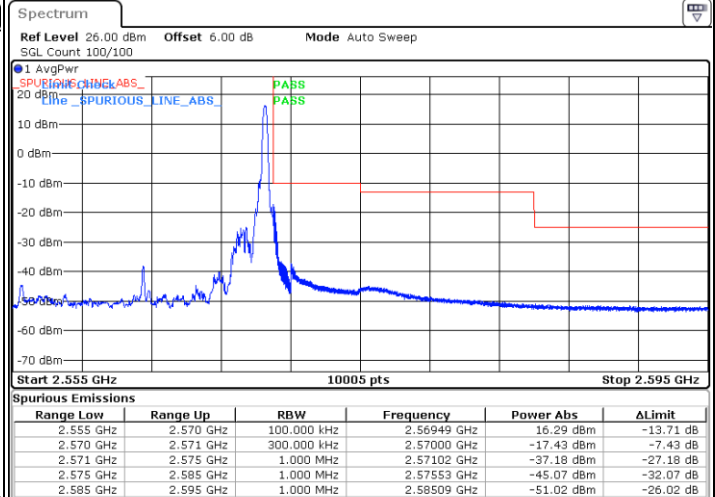
FR1 n7 / 15MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBMAX



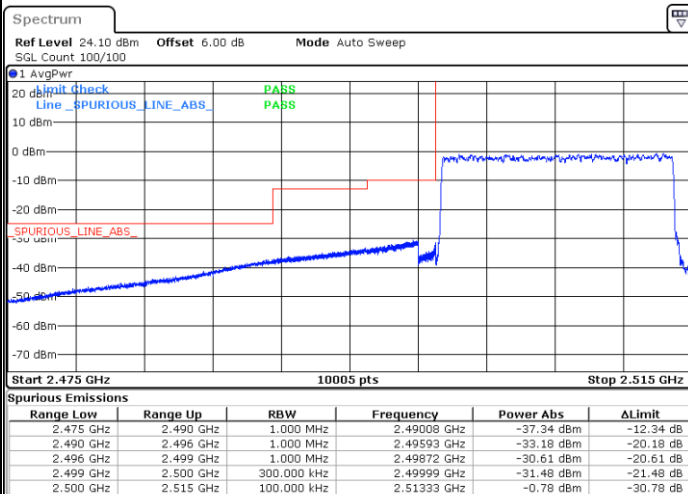
Date: 15.FEB.2022 01:42:19



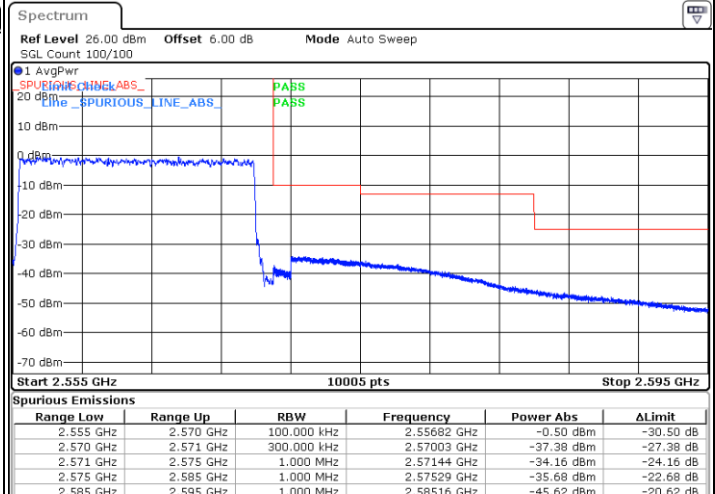
Date: 15.FEB.2022 01:58:10

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 01:41:34



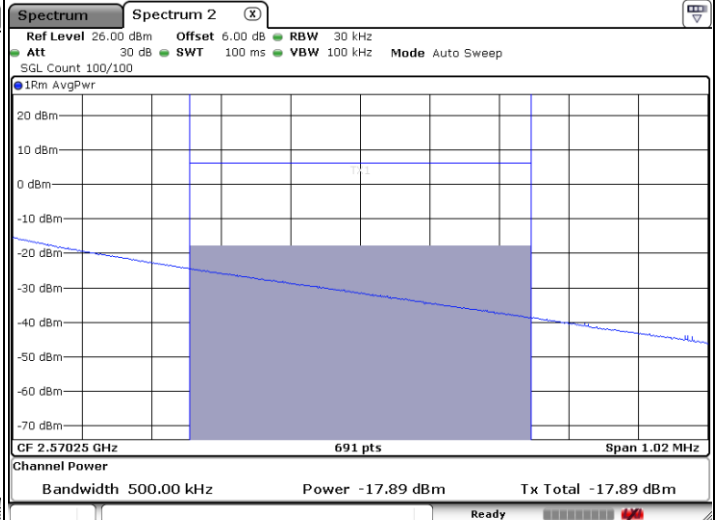
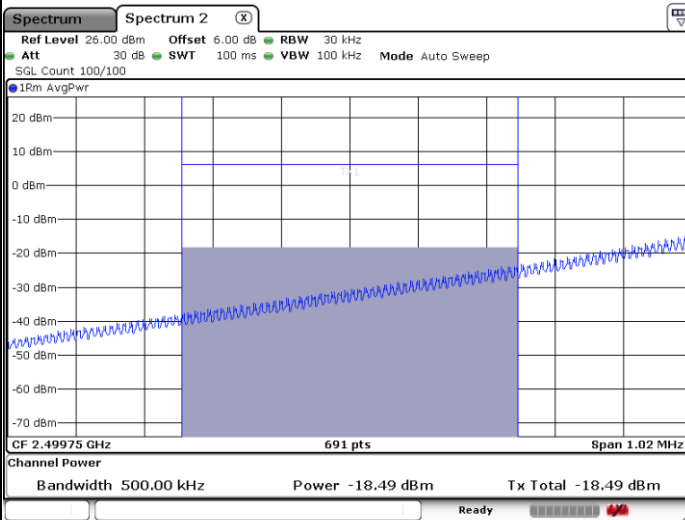
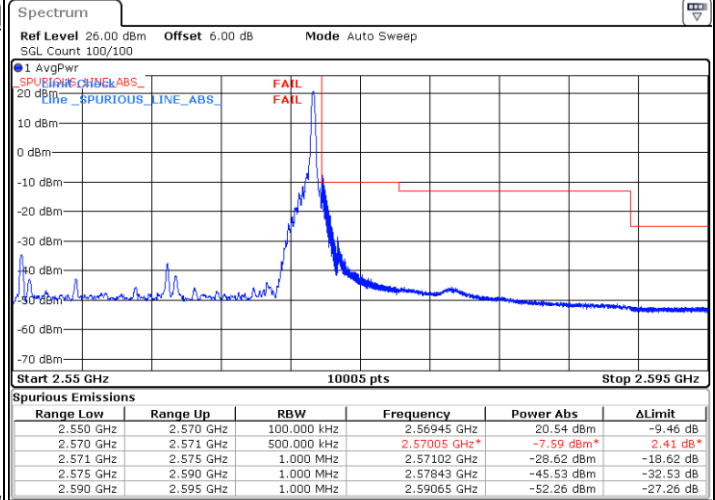
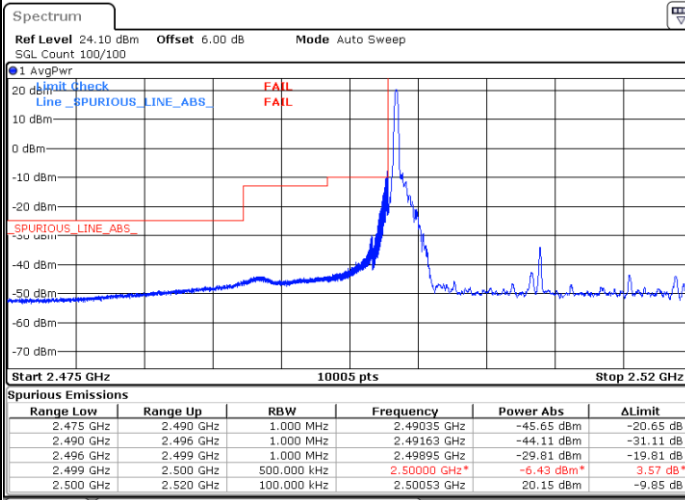
Date: 15.FEB.2022 01:57:07



FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

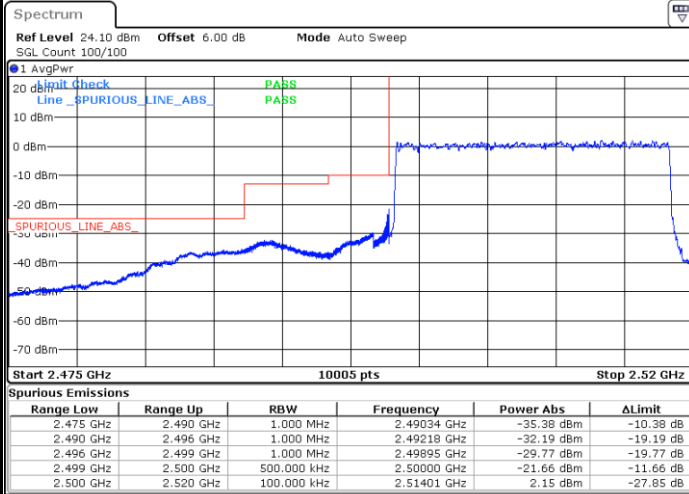
Highest Band Edge / 1RBMAX



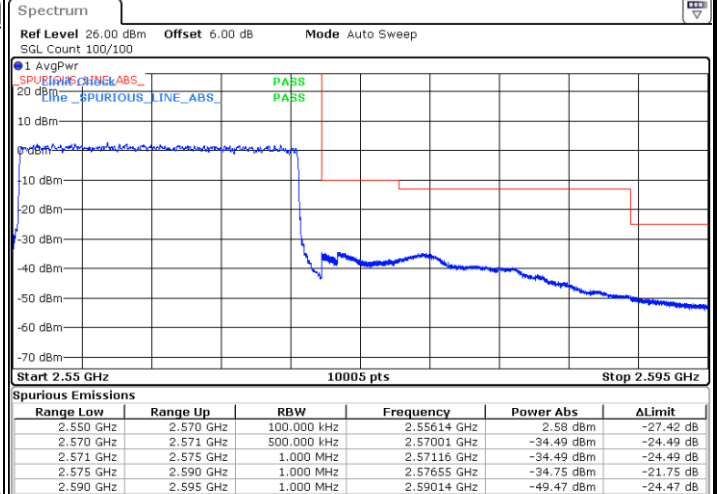


Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 02:08:20



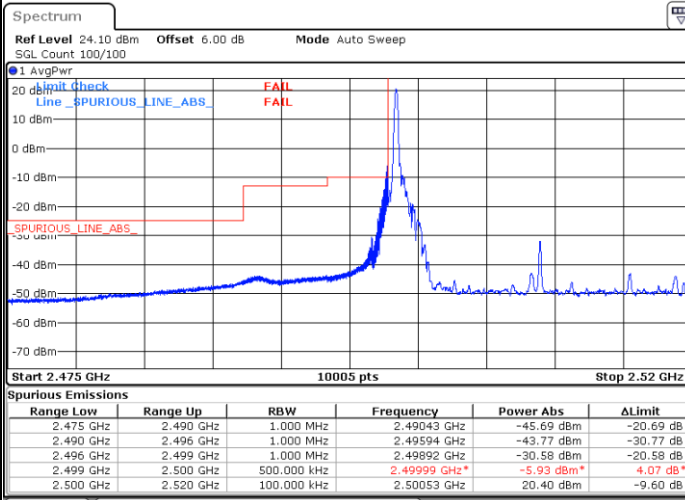
Date: 15.FEB.2022 02:33:04



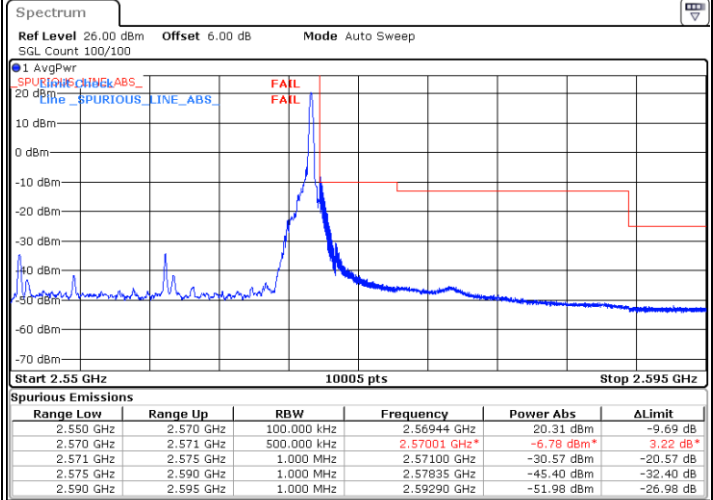
FR1 n7 / 20MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / 1RB0

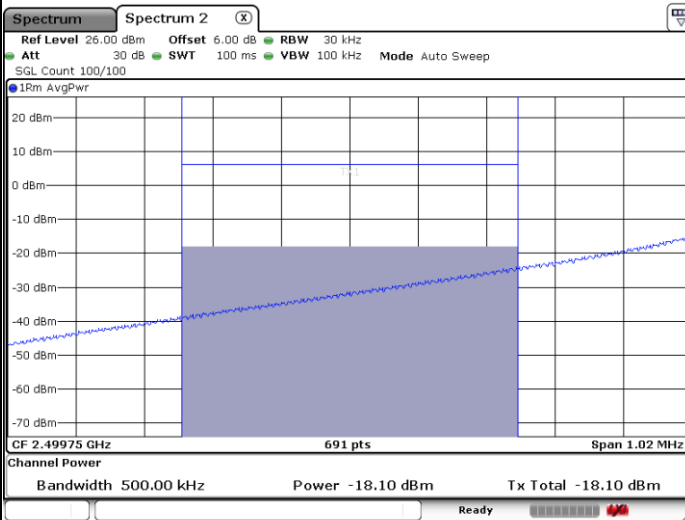
Highest Band Edge / 1RBMAX



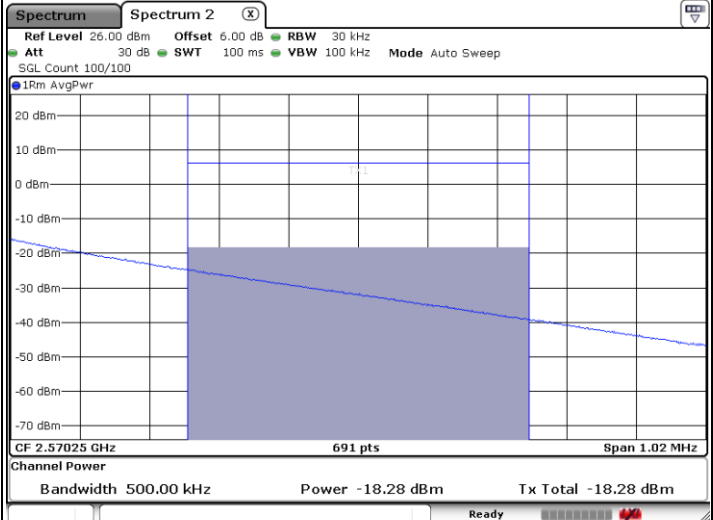
Date: 15.FEB.2022 02:26:38



Date: 15.FEB.2022 02:45:34



Date: 15.FEB.2022 03:09:41

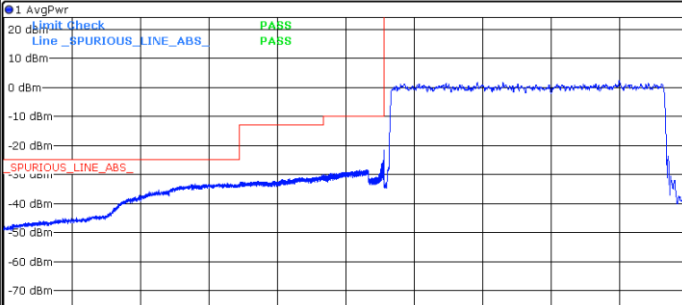


Date: 15.FEB.2022 02:55:16



Lowest Band Edge / Full RB

Spectrum

Ref Level 24.10 dBm Offset 6.00 dB Mode Auto Sweep
SGL Count 100/100

Start 2.475 GHz 10005 pts Stop 2.52 GHz

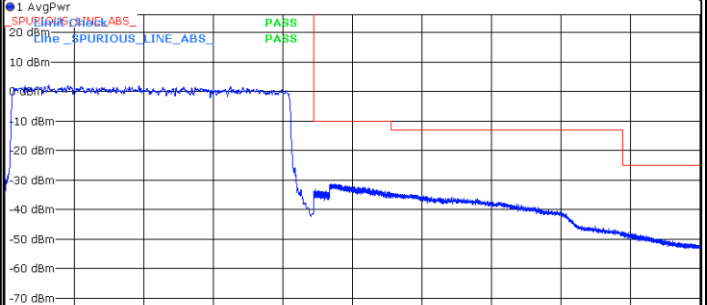
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48971 GHz	-32.81 dBm	-17.81 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49589 GHz	-30.32 dBm	-17.32 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49893 GHz	-28.30 dBm	-18.30 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49999 GHz	-21.68 dBm	-11.68 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.51548 GHz	2.45 dBm	-27.55 dB

Date: 15.FEB.2022 02:09:02

Highest Band Edge / Full RB

Spectrum

Ref Level 26.00 dBm Offset 6.00 dB Mode Auto Sweep
SGL Count 100/100

Start 2.55 GHz 10005 pts Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.55283 GHz	1.98 dBm	-28.02 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57010 GHz	-33.23 dBm	-23.23 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57137 GHz	-31.36 dBm	-21.36 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57515 GHz	-34.48 dBm	-21.48 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59006 GHz	-47.68 dBm	-22.68 dB

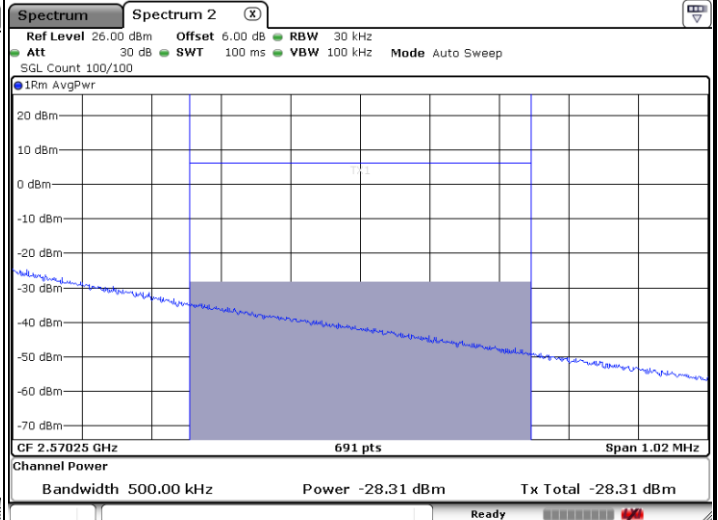
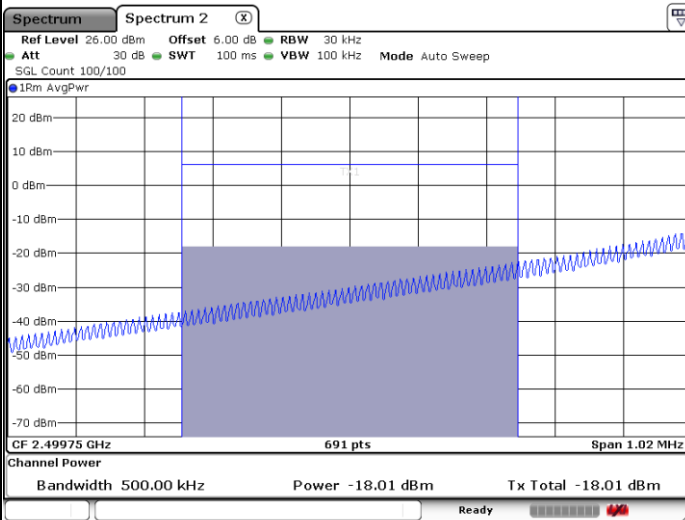
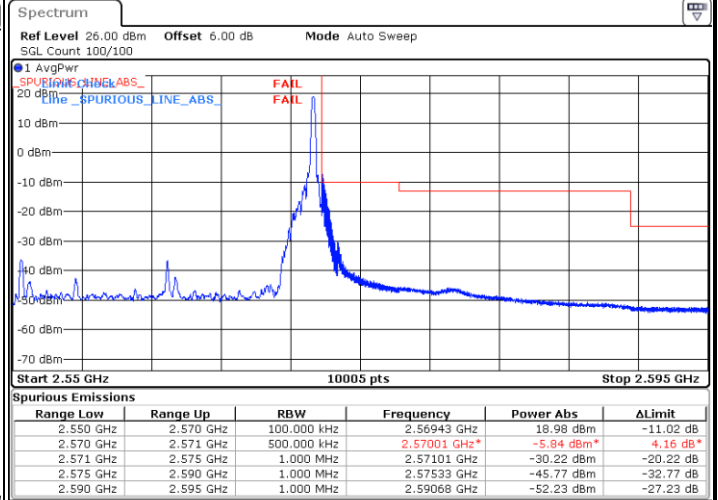
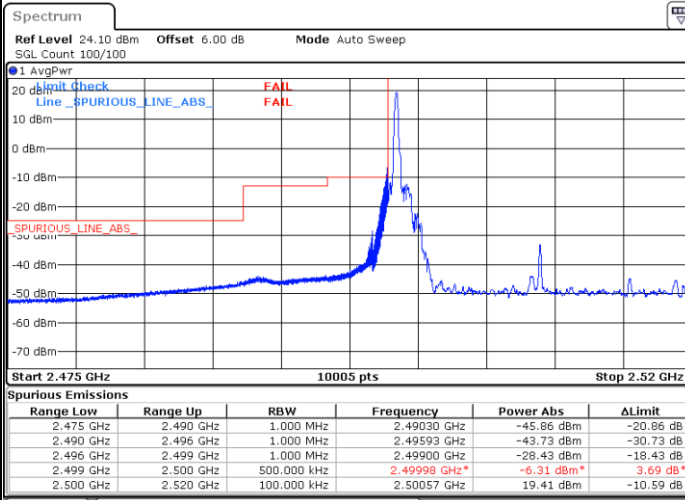
Date: 15.FEB.2022 02:33:22



FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 16QAM

Lowest Band Edge / 1RB0

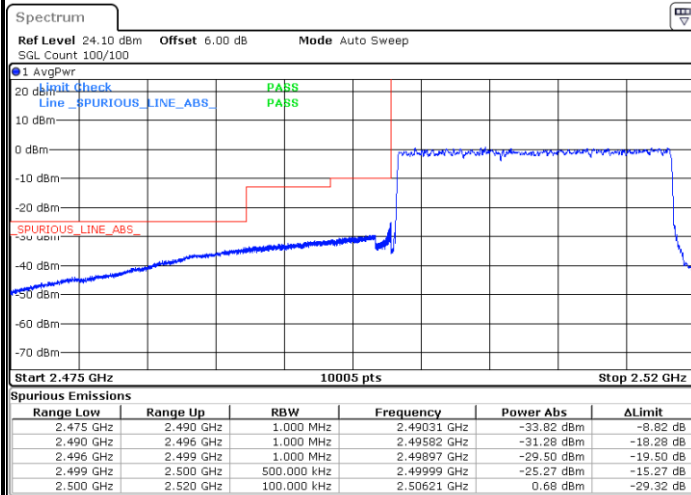
Highest Band Edge / 1RBMAX



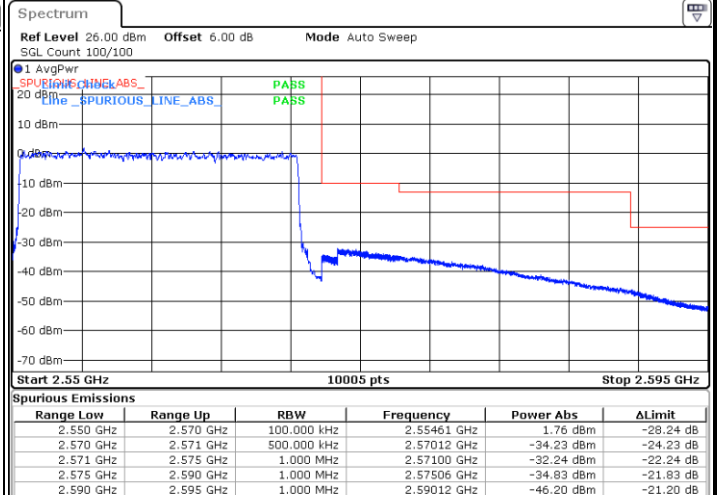


Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 15.FEB.2022 02:09:47



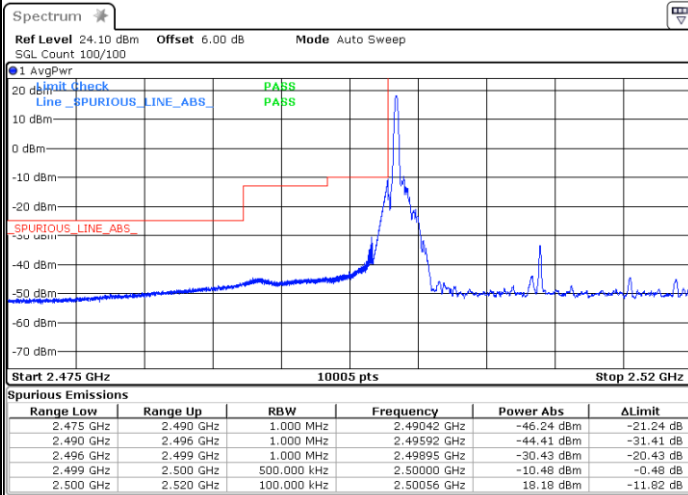
Date: 15.FEB.2022 02:33:43



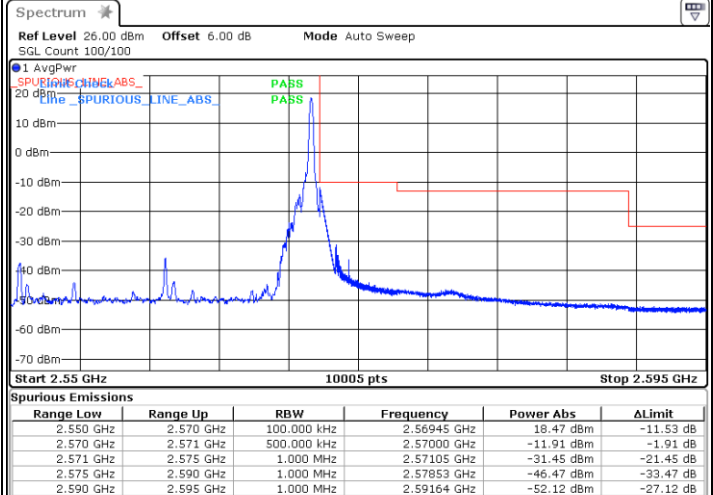
FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 64QAM

Lowest Band Edge / 1RB0

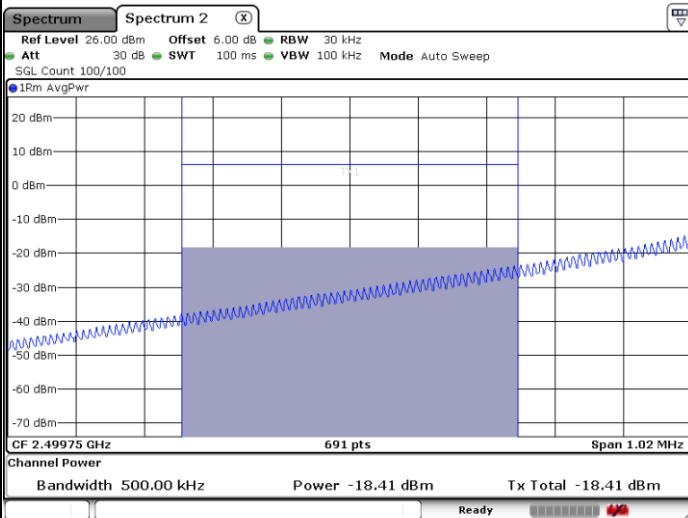
Highest Band Edge / 1RBMAX



Date: 15.FEB.2022 02:25:44



Date: 15.FEB.2022 02:43:07

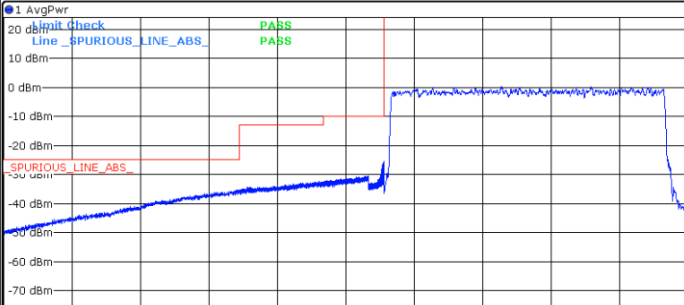


Date: 15.FEB.2022 03:07:27



Lowest Band Edge / Full RB

Spectrum

Ref Level 24.10 dBm Offset 6.00 dB Mode Auto Sweep
SGL Count 100/100

Start 2.475 GHz 10005 pts Stop 2.52 GHz

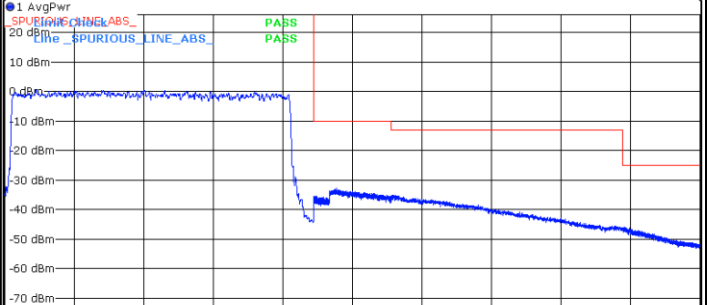
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49036 GHz	-35.30 dBm	-10.30 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49573 GHz	-32.39 dBm	-19.39 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49899 GHz	-30.48 dBm	-20.48 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.49998 GHz	-25.60 dBm	-15.60 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.51363 GHz	0.24 dBm	-29.76 dB

Date: 15.FEB.2022 02:10:16

Highest Band Edge / Full RB

Spectrum

Ref Level 26.00 dBm Offset 6.00 dB Mode Auto Sweep
SGL Count 100/100

Start 2.55 GHz 10005 pts Stop 2.595 GHz

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.55201 GHz	0.57 dBm	-29.43 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.57013 GHz	-35.38 dBm	-25.38 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57146 GHz	-32.95 dBm	-22.95 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.57527 GHz	-35.20 dBm	-22.20 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.59013 GHz	-45.85 dBm	-20.85 dB

Date: 15.FEB.2022 02:34:41