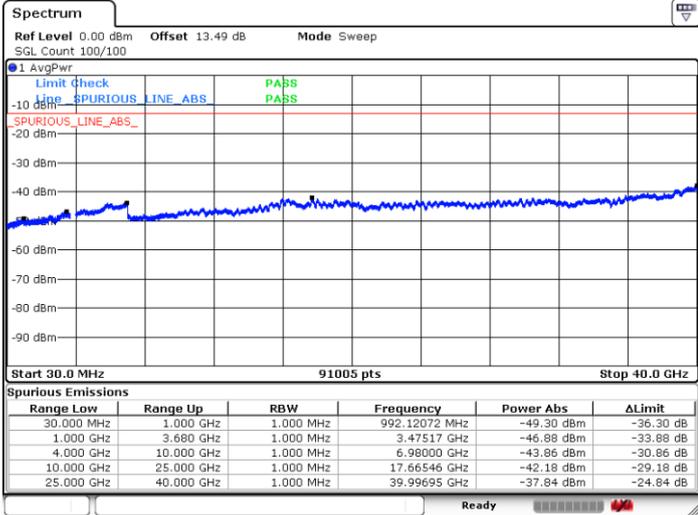




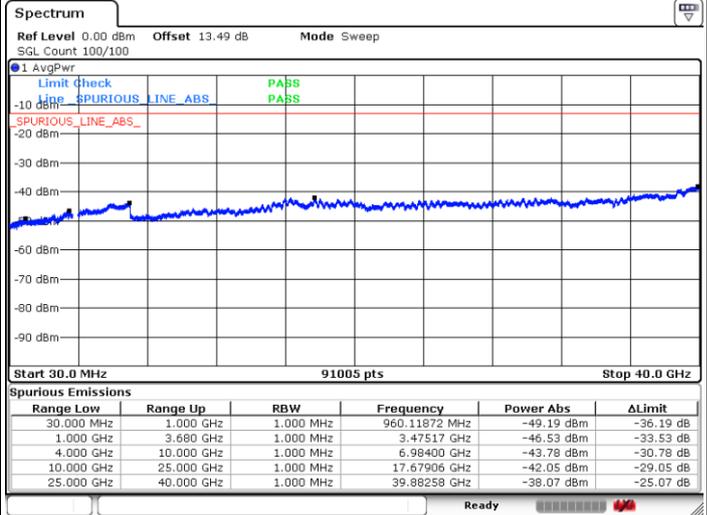
FR1 n77 / 40MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

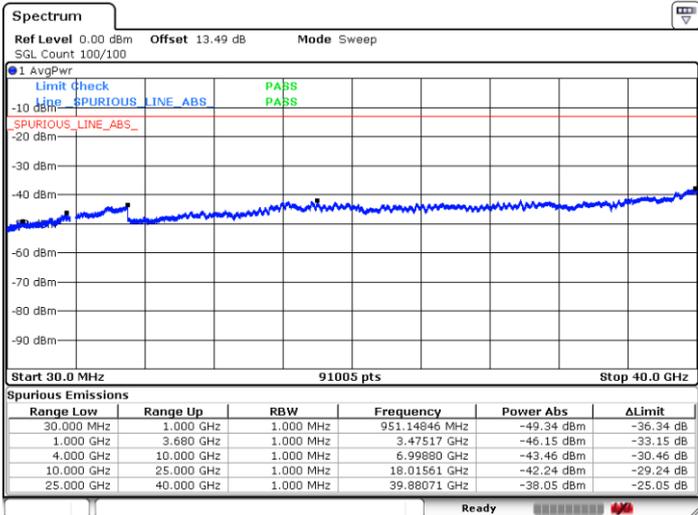


Date: 26.JAN.2021 15:34:57



Date: 26.JAN.2021 15:36:08

Highest Channel / 1RB1



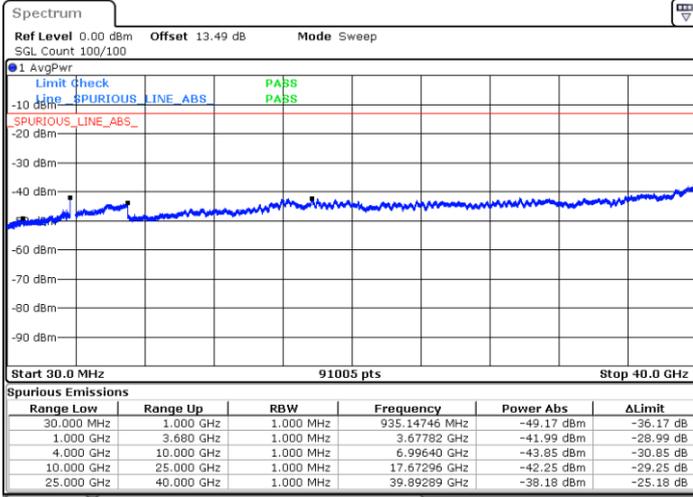
Date: 26.JAN.2021 15:37:17



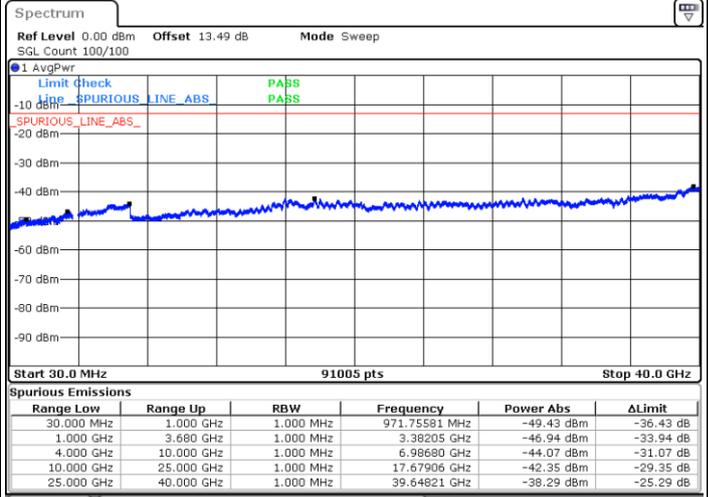
FR1 n77 / 50MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

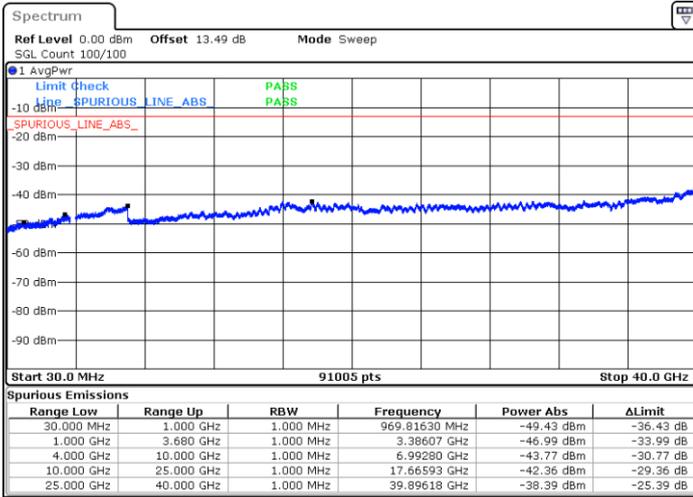


Date: 30.JAN.2021 14:20:10



Date: 30.JAN.2021 14:22:35

Highest Channel / 1RB1



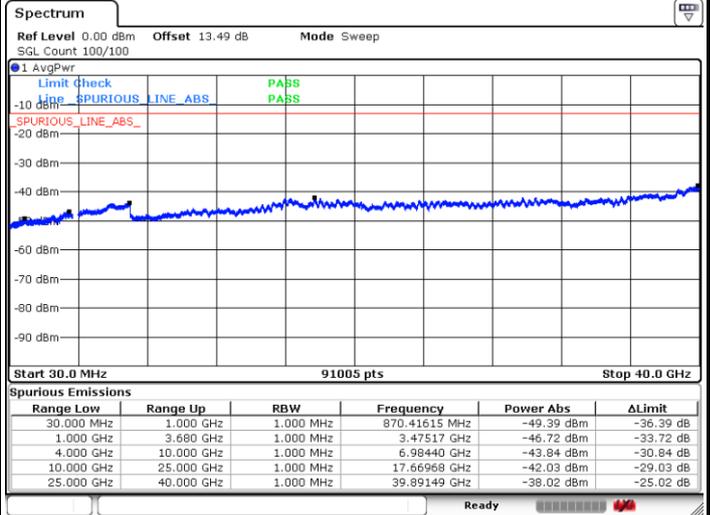
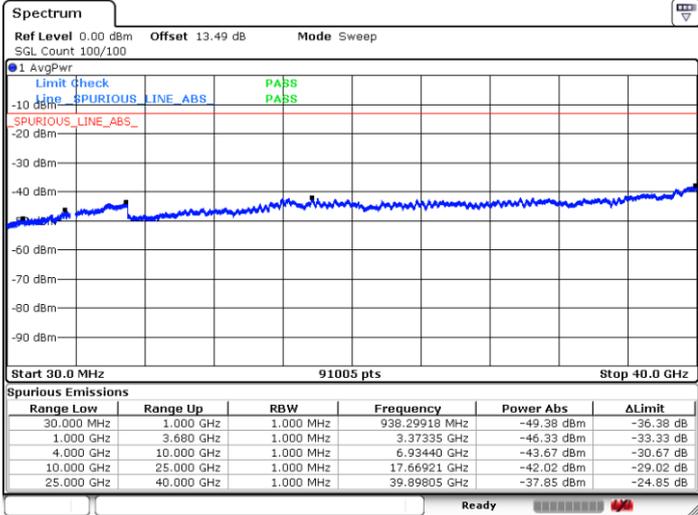
Date: 30.JAN.2021 14:24:01



FR1 n77 / 60MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

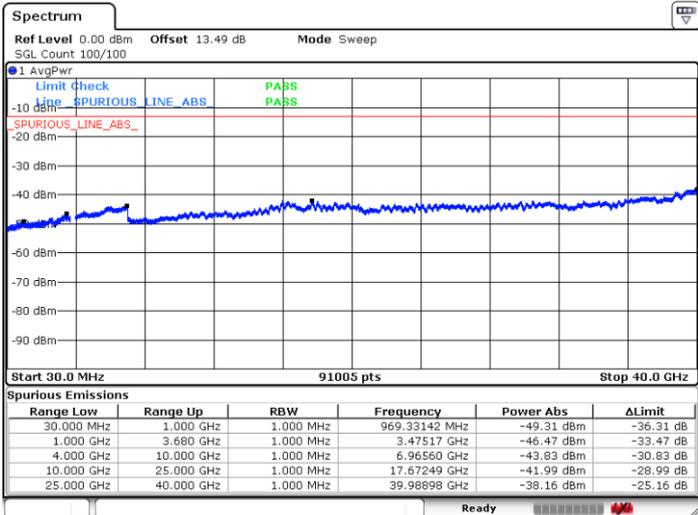
Middle Channel / 1RB1



Date: 26.JAN.2021 15:38:43

Date: 26.JAN.2021 15:40:00

Highest Channel / 1RB1



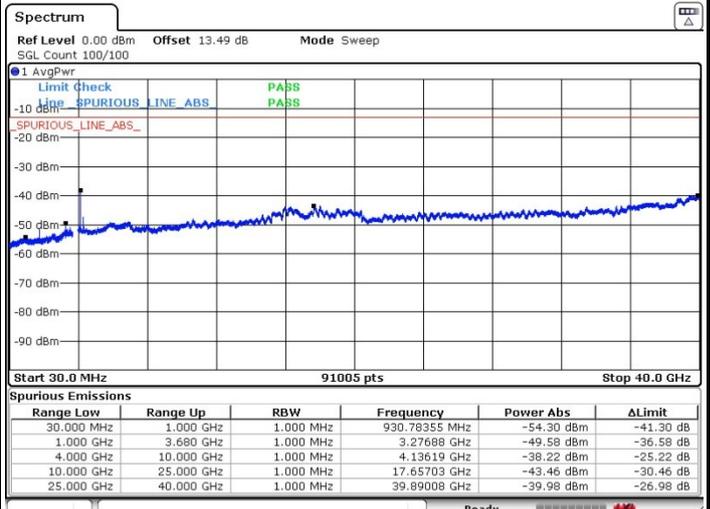
Date: 26.JAN.2021 15:41:19



FR1 n77 / 70MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1



Date: 1.FEB.2021 11:06:27

Date: 1.FEB.2021 11:07:59

Highest Channel / 1RB1



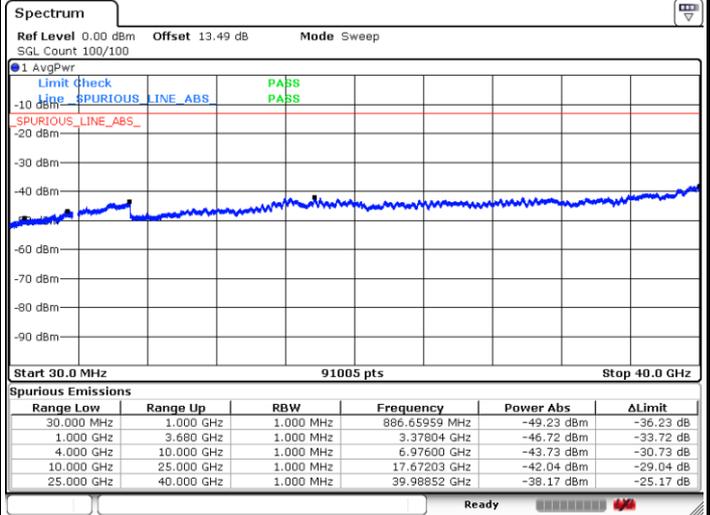
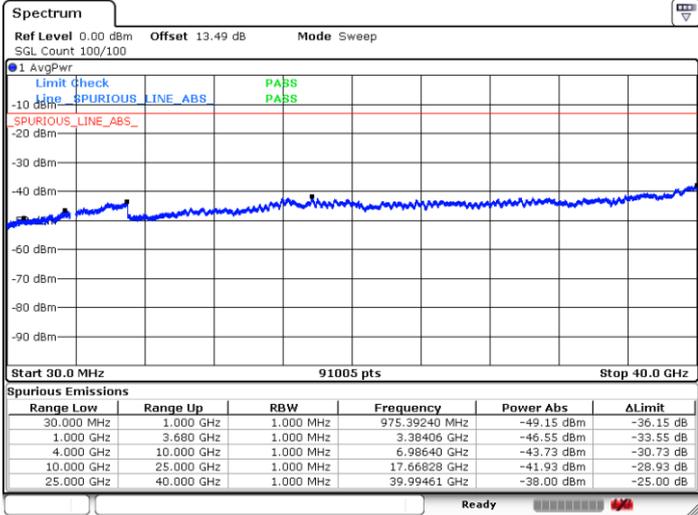
Date: 1.FEB.2021 11:09:10



FR1 n77 / 80MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

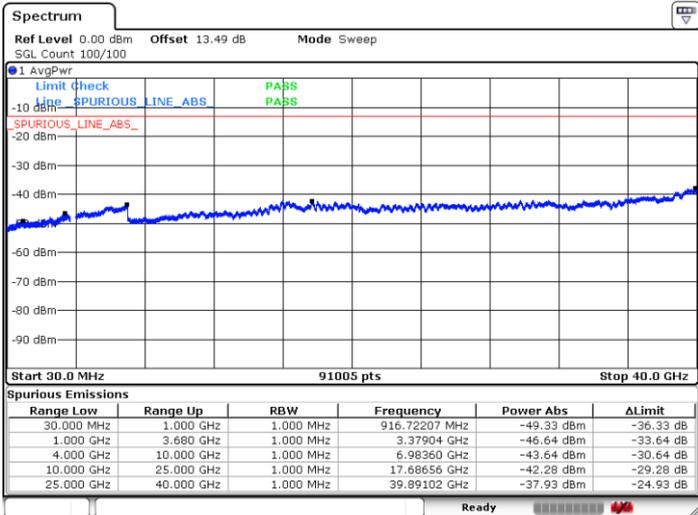
Middle Channel / 1RB1



Date: 26.JAN.2021 15:42:28

Date: 26.JAN.2021 15:43:34

Highest Channel / 1RB1



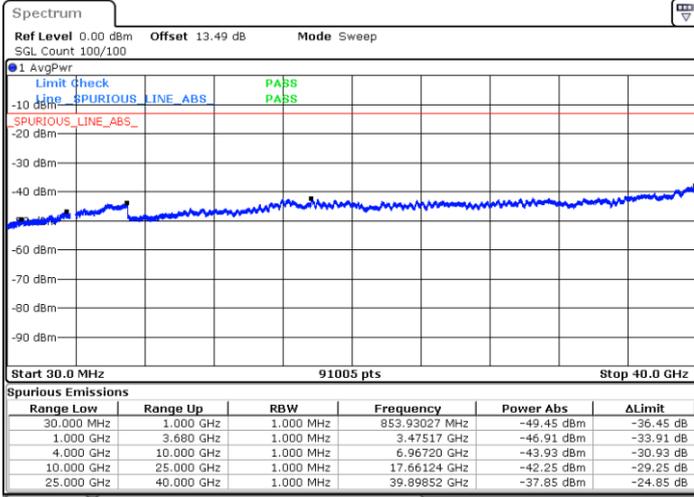
Date: 26.JAN.2021 15:44:53



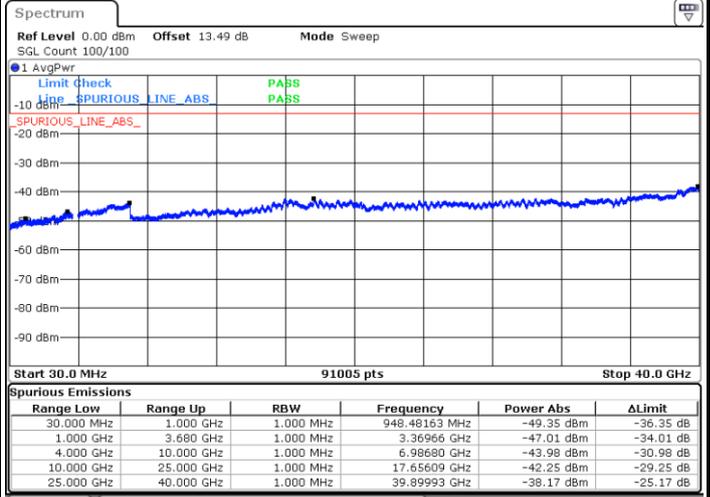
FR1 n77 / 90MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

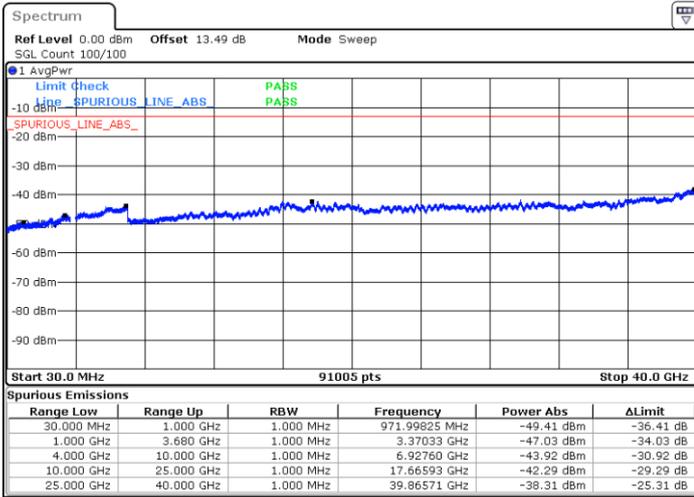


Date: 1.FEB.2021 03:19:39



Date: 1.FEB.2021 03:20:54

Highest Channel / 1RB1



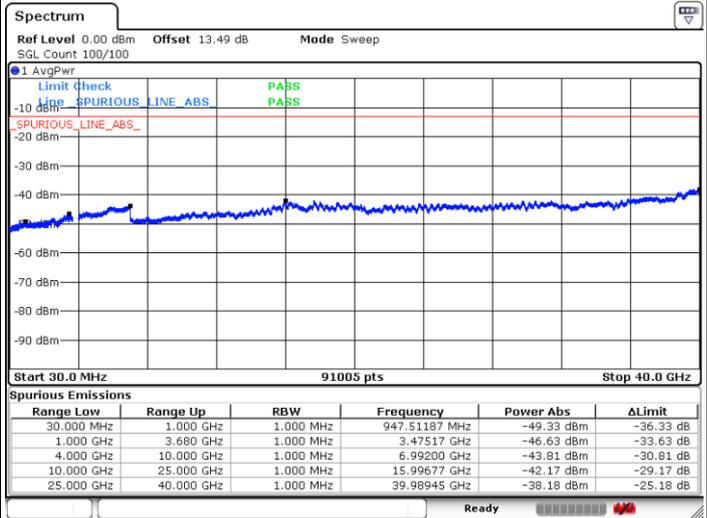
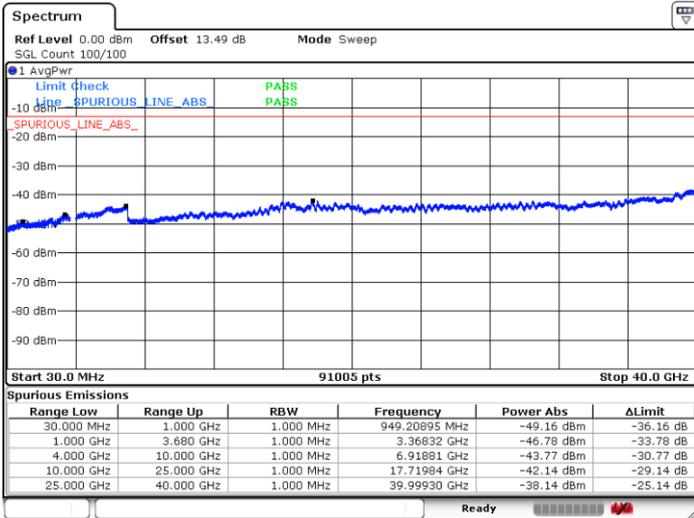
Date: 1.FEB.2021 03:22:01



FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

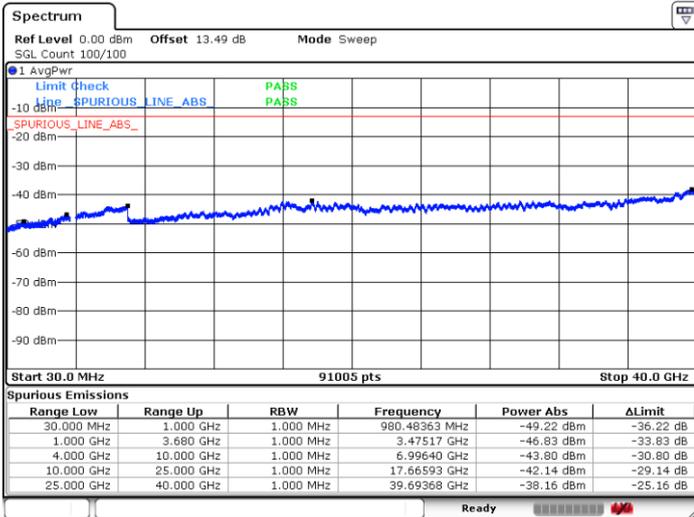
Middle Channel / 1RB1



Date: 26.JAN.2021 15:46:13

Date: 26.JAN.2021 15:47:32

Highest Channel / 1RB1



Date: 26.JAN.2021 15:48:47



Frequency Stability

Test Conditions		FR1 n77 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 100MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0016	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0002	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0008	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0022	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0021	

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.

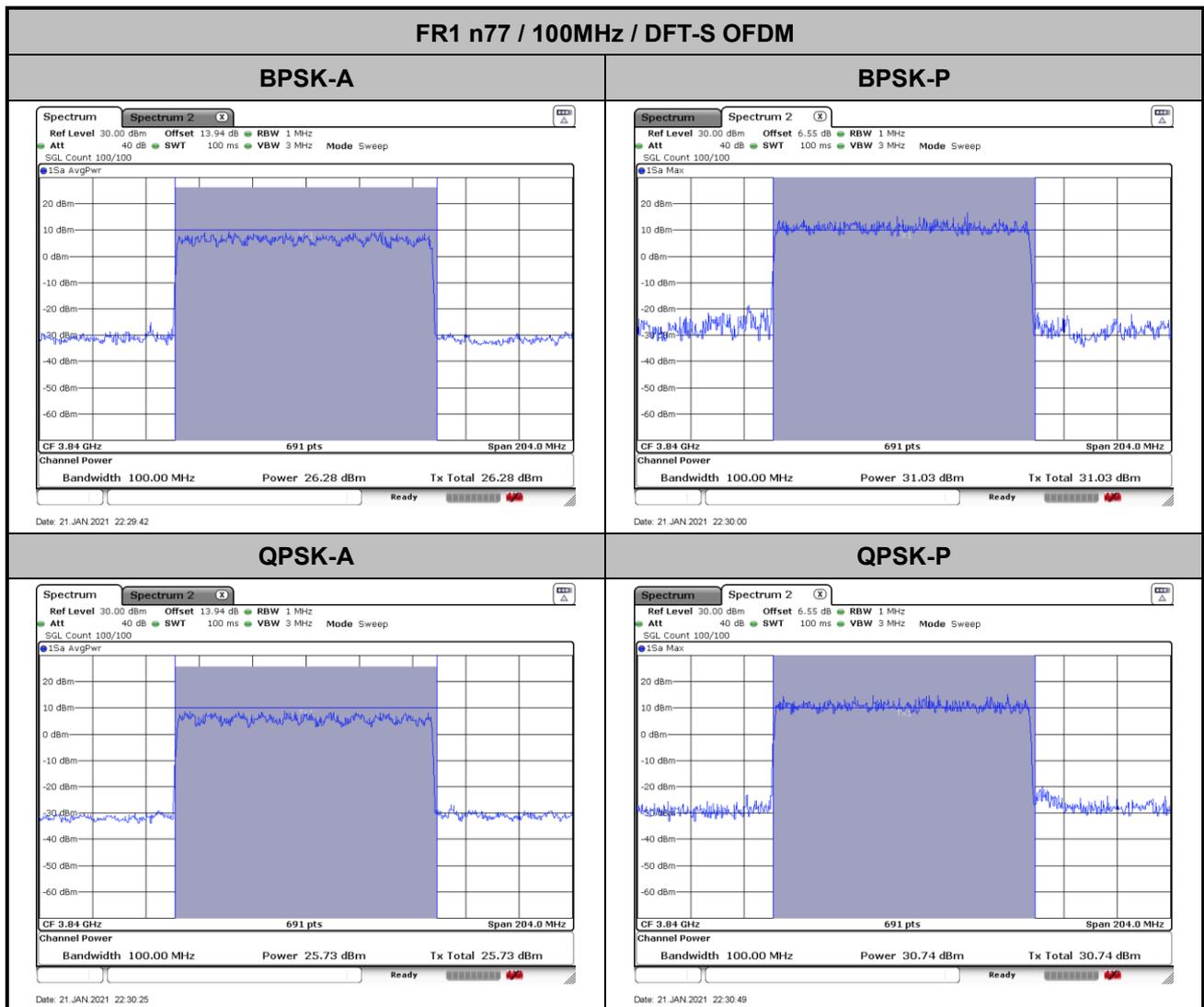


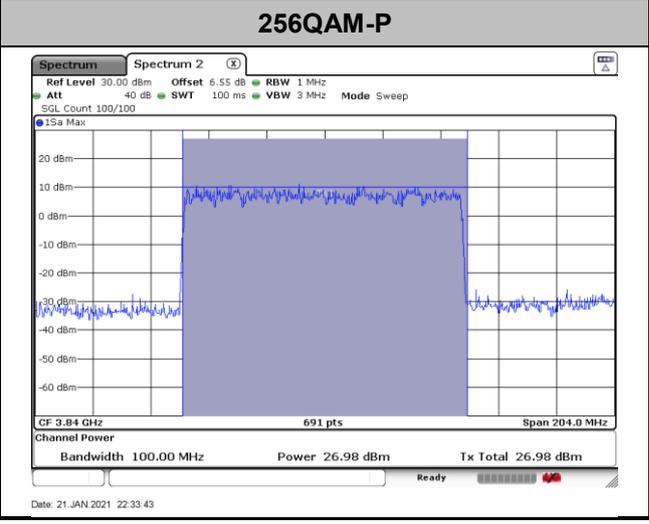
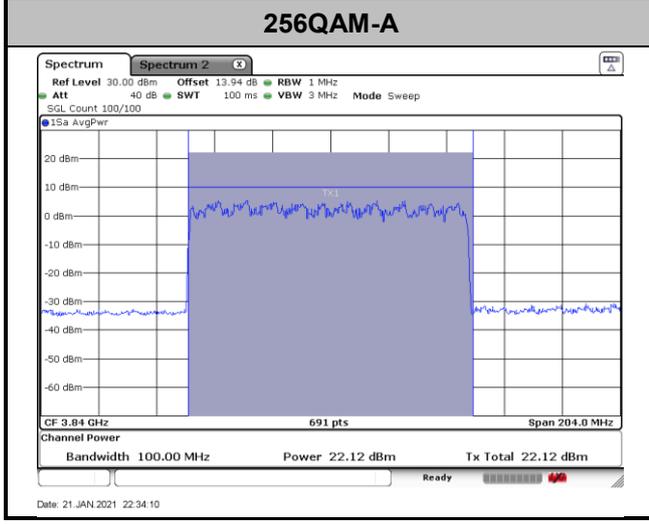
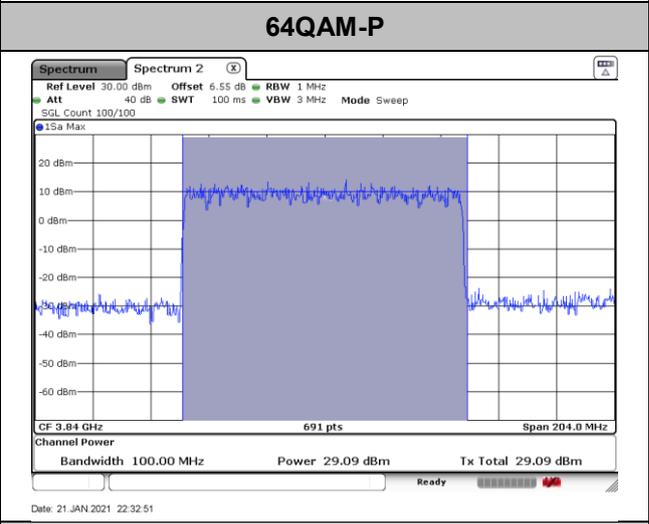
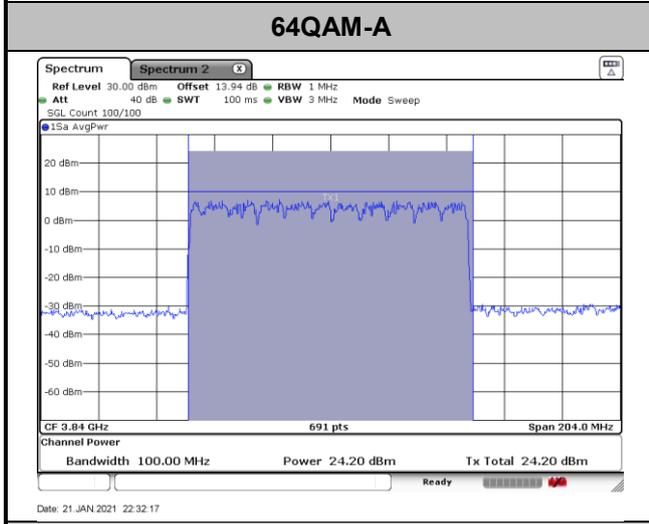
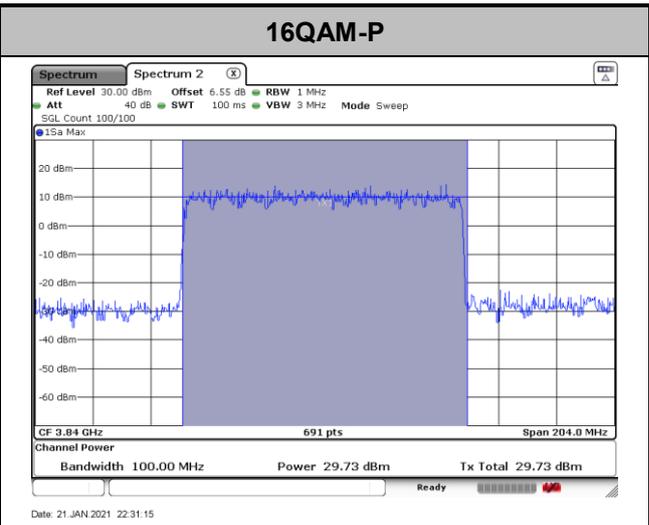
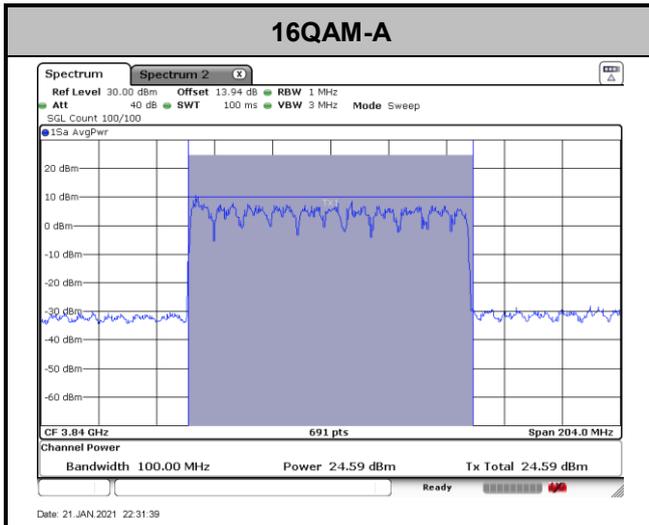
# 5G NR n77 Ant.8 for PA

## Peak-to-Average Ratio

Mode	FR1 n77 / 100MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.75	5.01	5.14	4.86	PASS
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	4.89				PASS

Note: PAR=Peak-Average

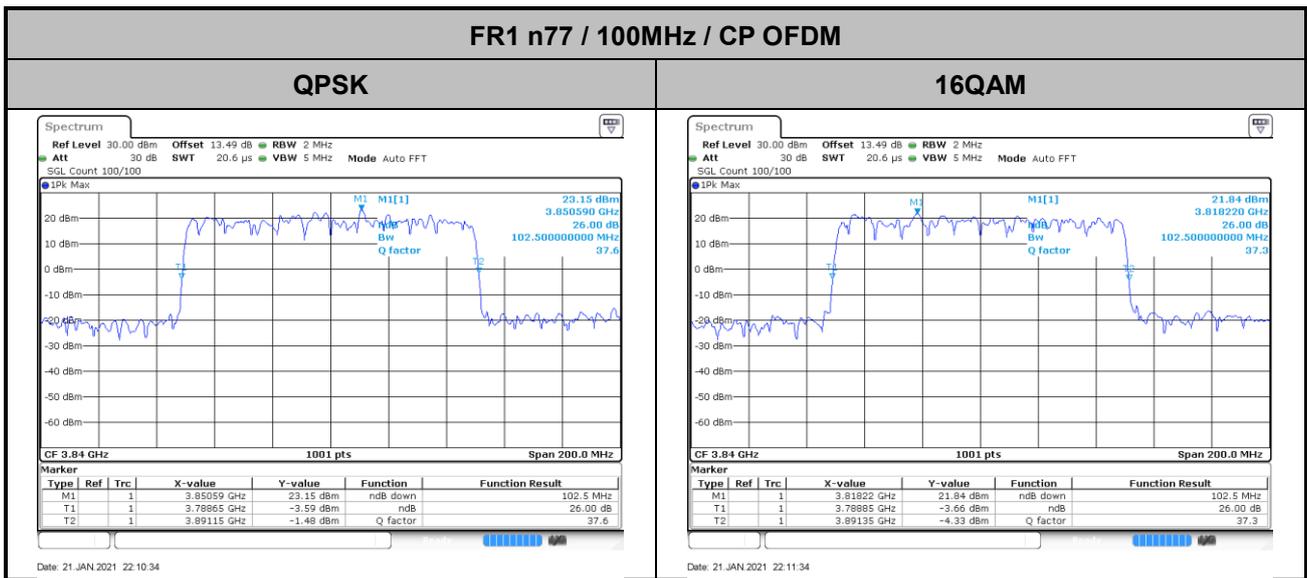






## 26dB Bandwidth

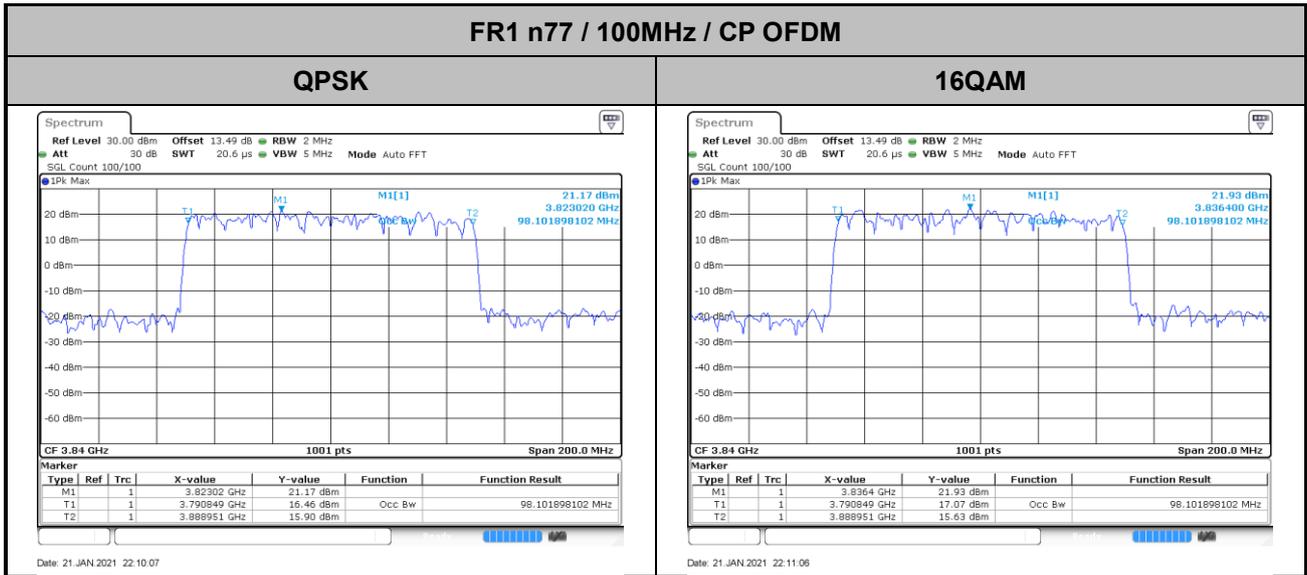
Mode	FR1 n77 : 26dB BW(MHz) / CP OFDM	
BW	100MHz	
Mod.	QPSK	16QAM
Middle CH	102.5	102.5





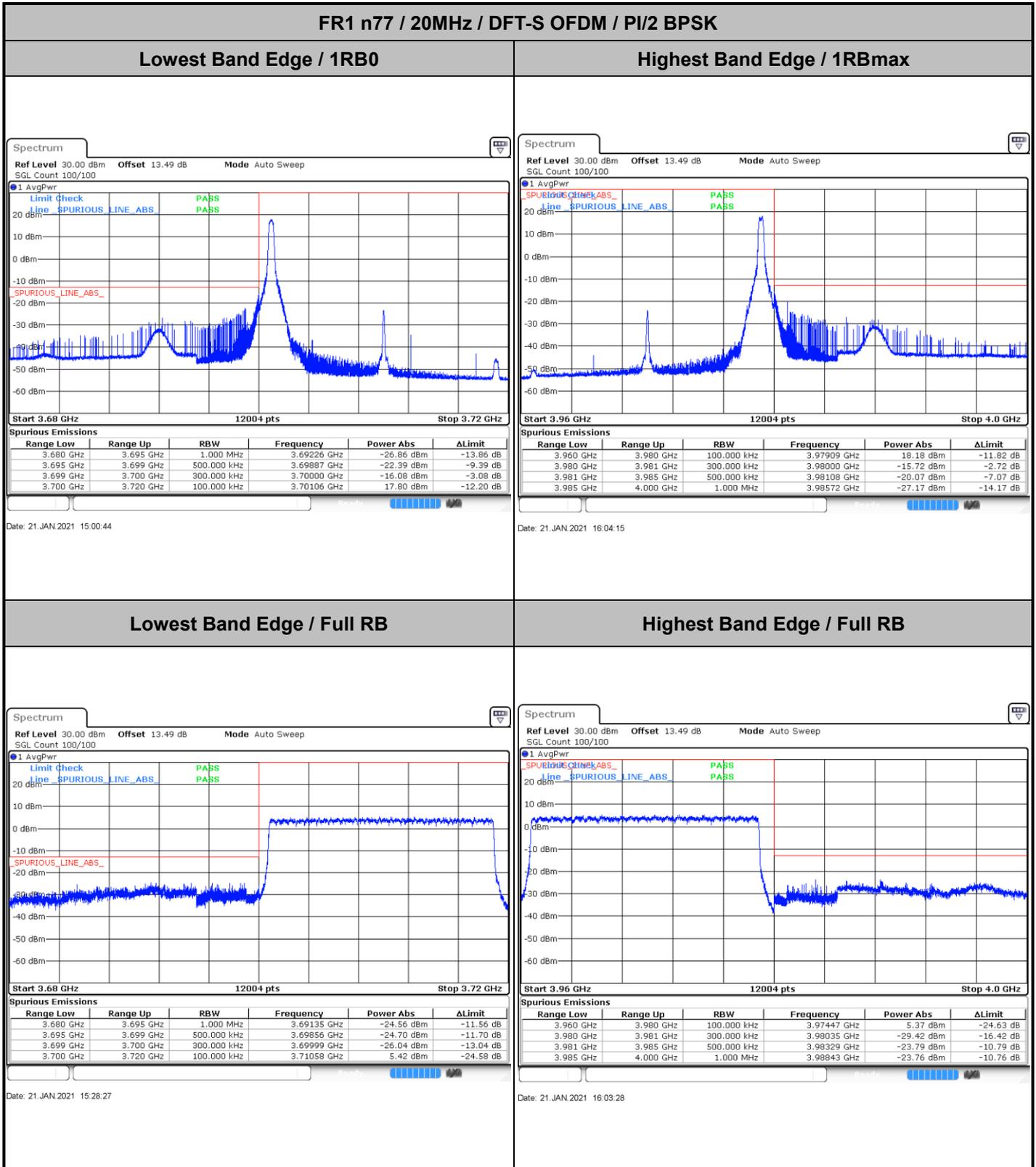
# Occupied Bandwidth

Mode	FR1 n77 : 99%OBW(MHz) / CP OFDM	
BW	100MHz	
Mod.	QPSK	16QAM
Middle CH	98.10	98.10





# Conducted Band Edge

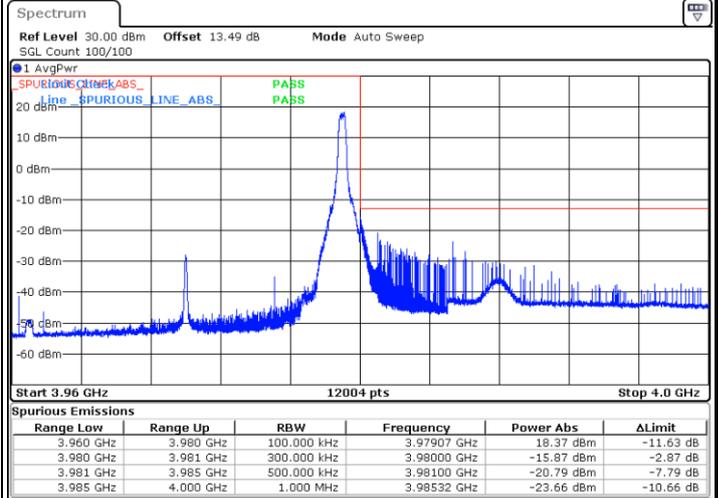
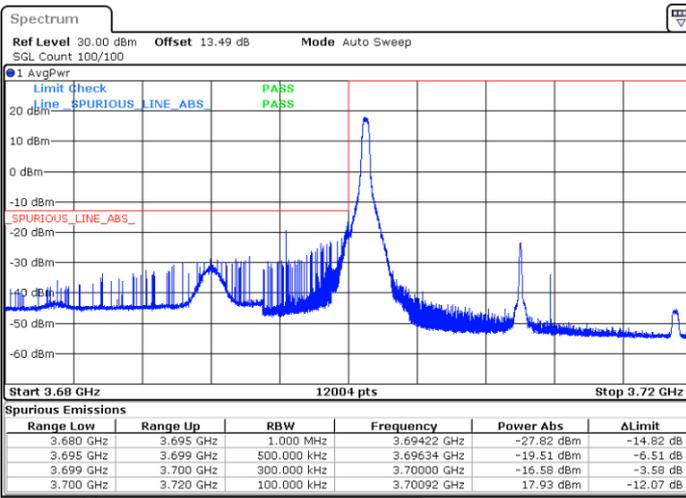




FR1 n77 / 20MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

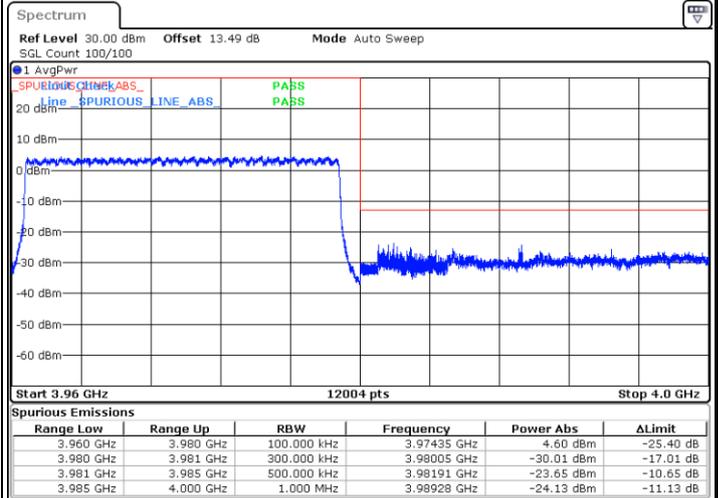
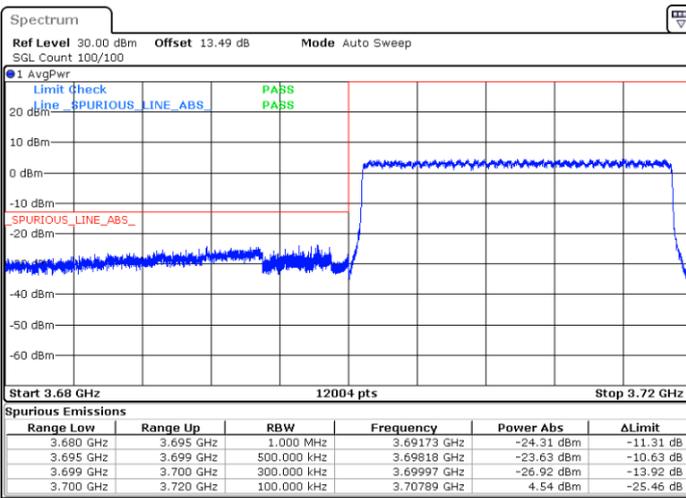


Date: 21 JAN 2021 15:02:36

Date: 21 JAN 2021 15:56:23

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21 JAN 2021 15:29:10

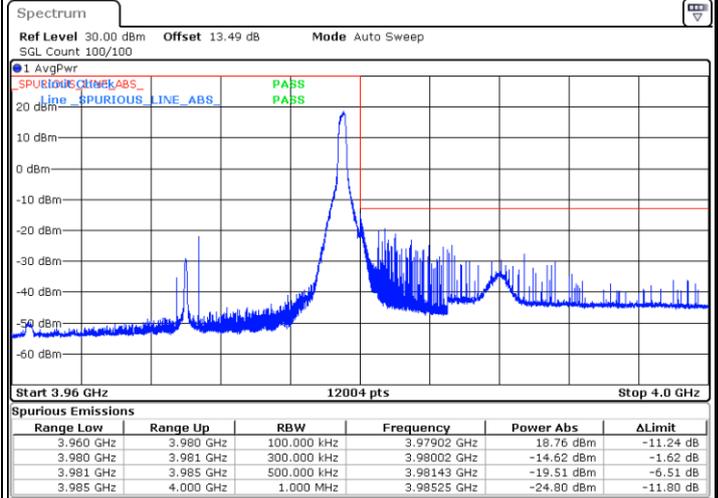
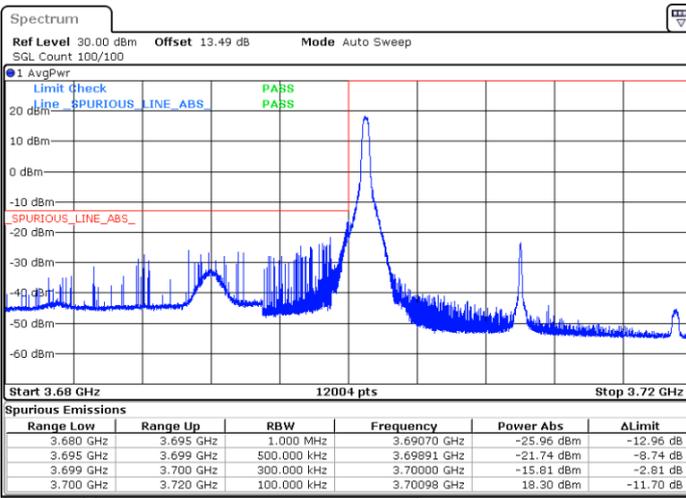
Date: 21 JAN 2021 16:00:11



FR1 n77 / 20MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

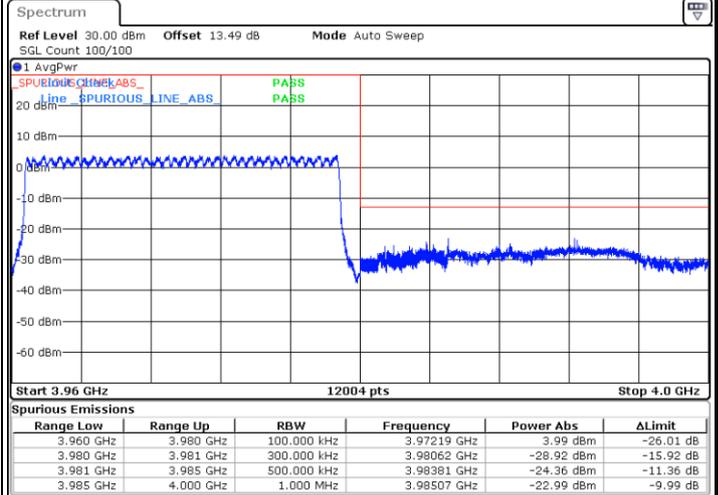
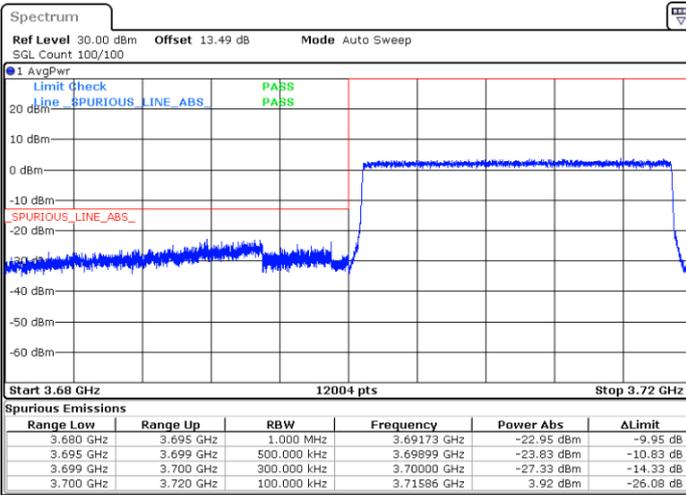


Date: 21 JAN 2021 15:03:22

Date: 21 JAN 2021 15:57:03

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



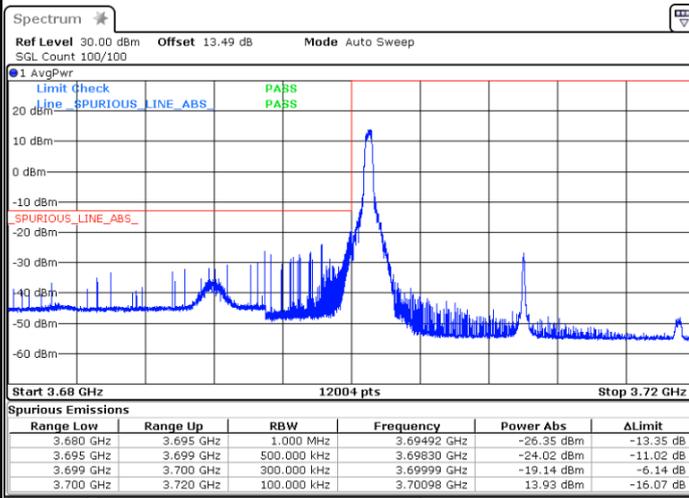
Date: 21 JAN 2021 15:29:50

Date: 21 JAN 2021 16:00:51



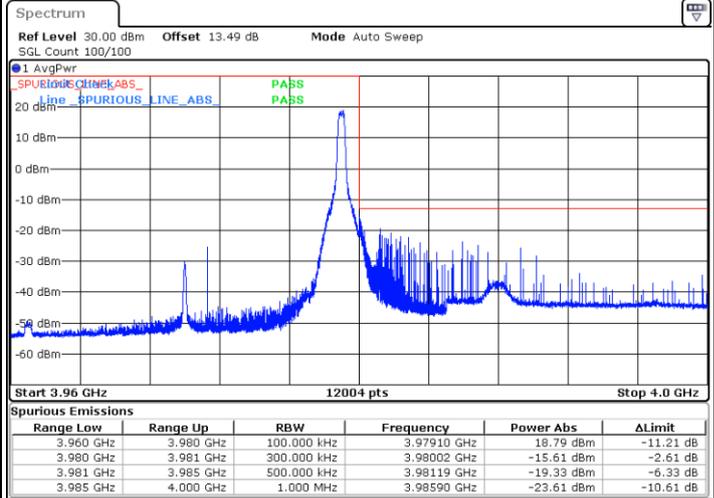
FR1 n77 / 20MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0



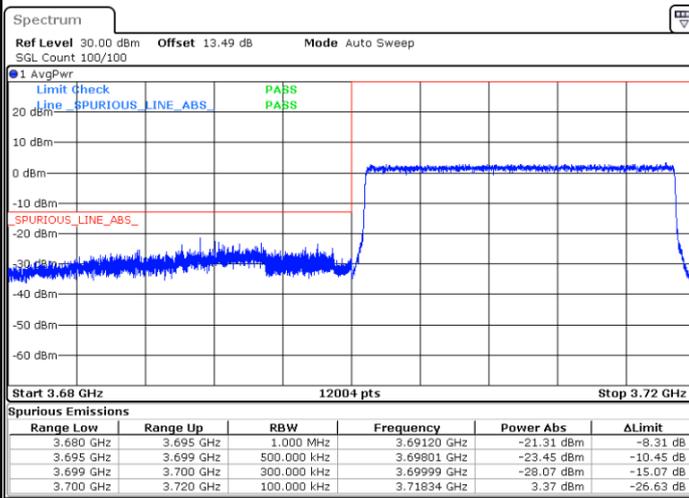
Date: 21 JAN 2021 15:27:18

Highest Band Edge / 1RB24



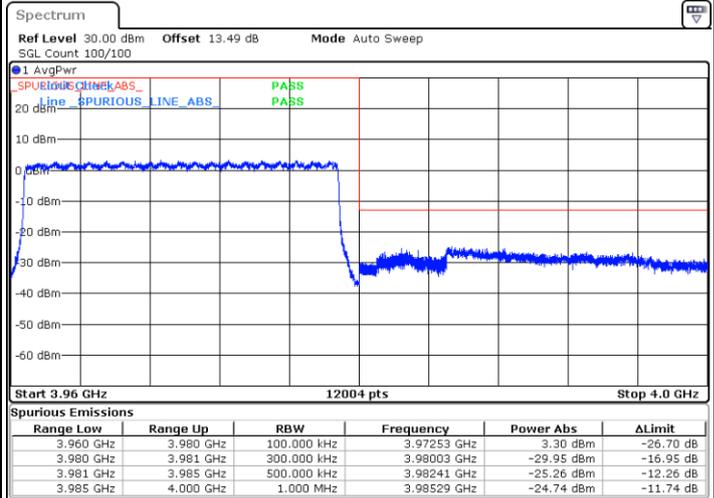
Date: 21 JAN 2021 15:57:43

Lowest Band Edge / Full RB



Date: 21 JAN 2021 15:30:31

Highest Band Edge / Full RB

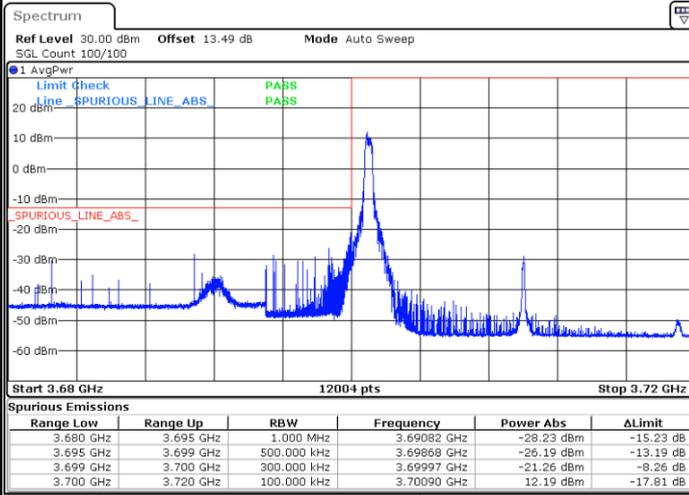


Date: 21 JAN 2021 16:01:32



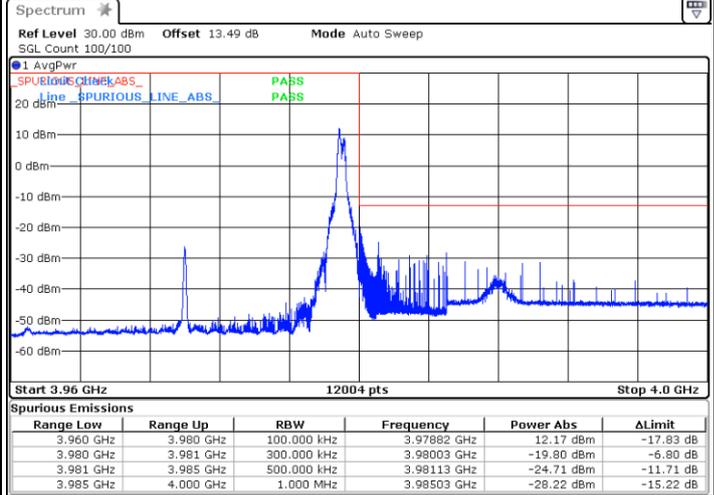
FR1 n77 / 20MHz / DFT-S OFDM / 256Q

Lowest Band Edge / 1RB0



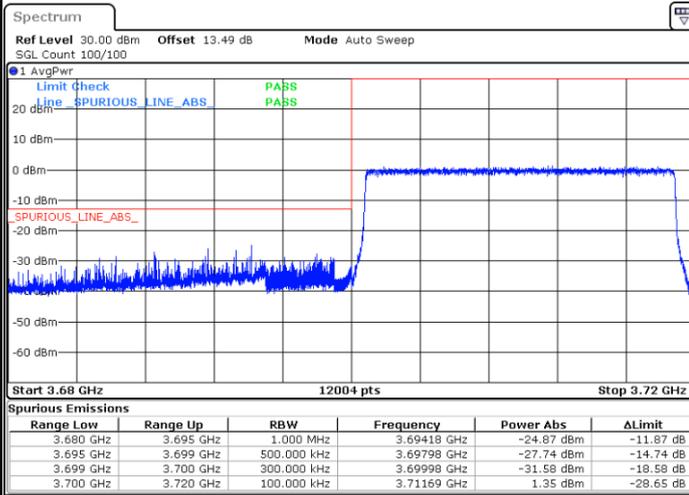
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Highest Band Edge / 1RB24



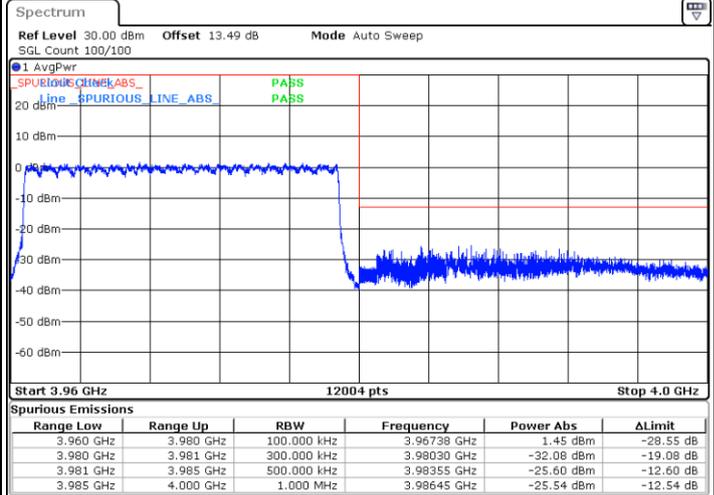
Date: 21 JAN 2021 15:58:57

Lowest Band Edge / Full RB



Date: 21 JAN 2021 15:31:49

Highest Band Edge / Full RB



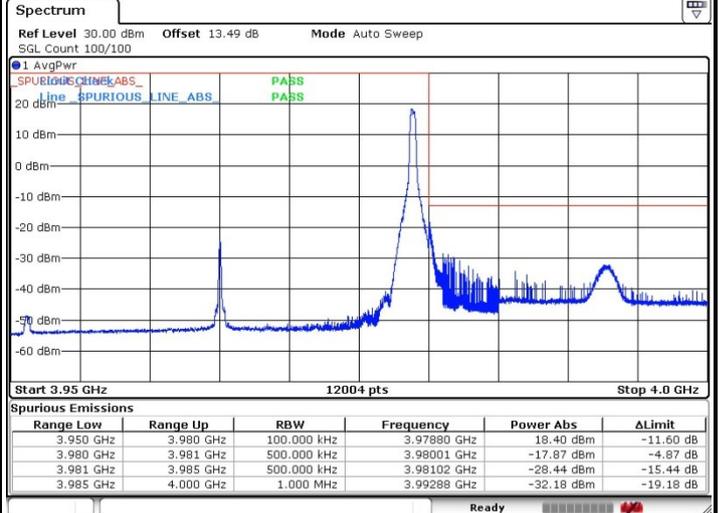
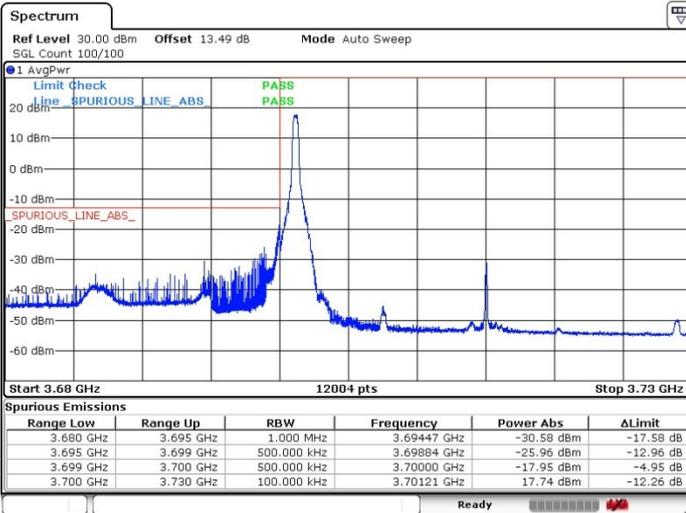
Date: 21 JAN 2021 16:02:11



FR1 n77/ 30MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

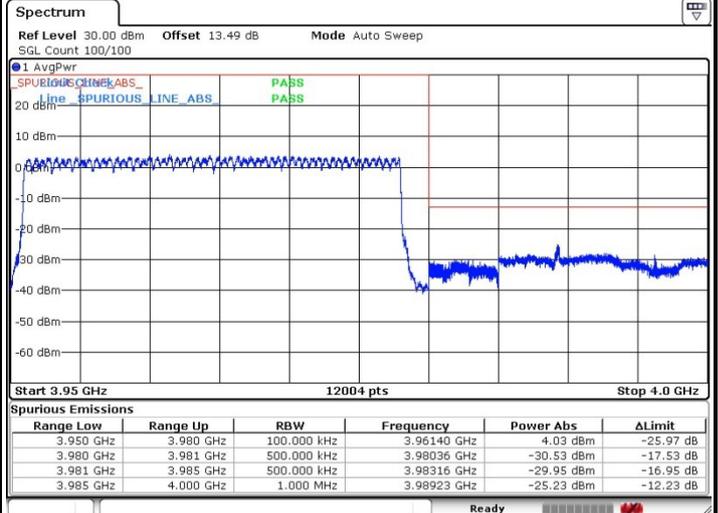
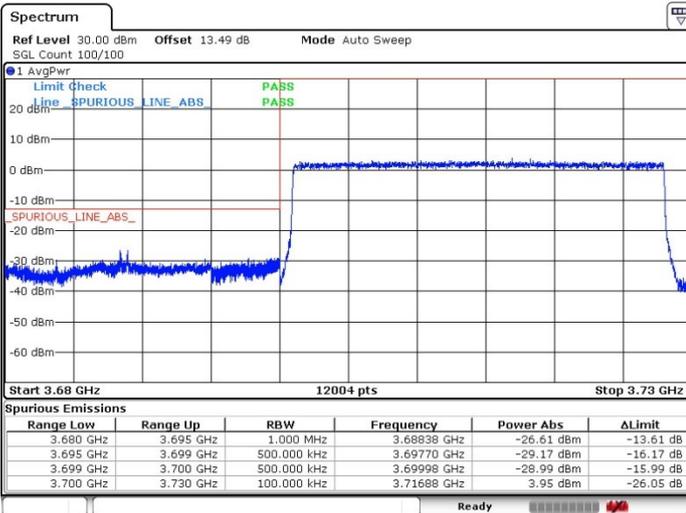


Date: 21 JAN 2021 16:13:18

Date: 21 JAN 2021 16:31:31

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21 JAN 2021 16:13:59

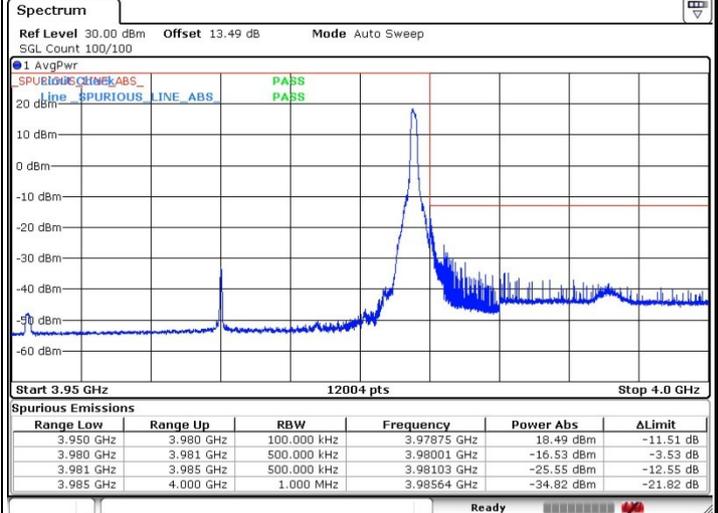
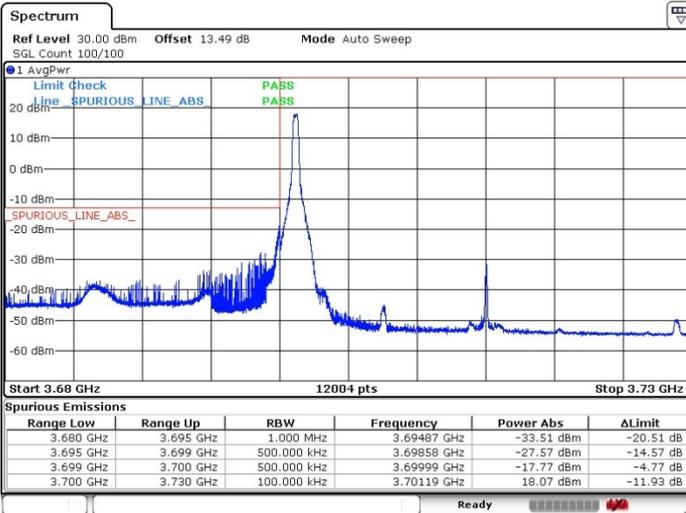
Date: 21 JAN 2021 16:30:43



FR1 n77 / 30MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

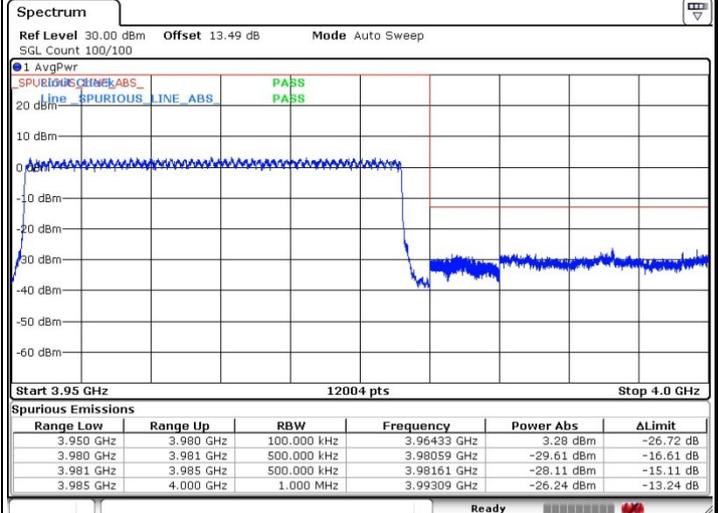
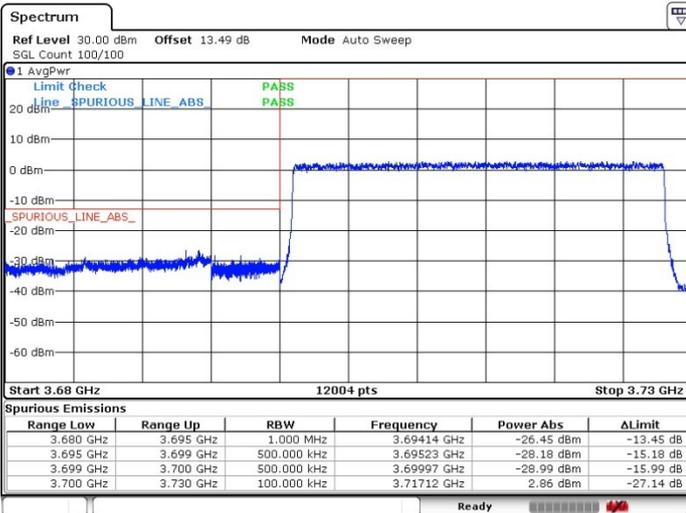


Date: 21 JAN 2021 16:12:41

Date: 21 JAN 2021 16:22:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 21 JAN 2021 16:14:34

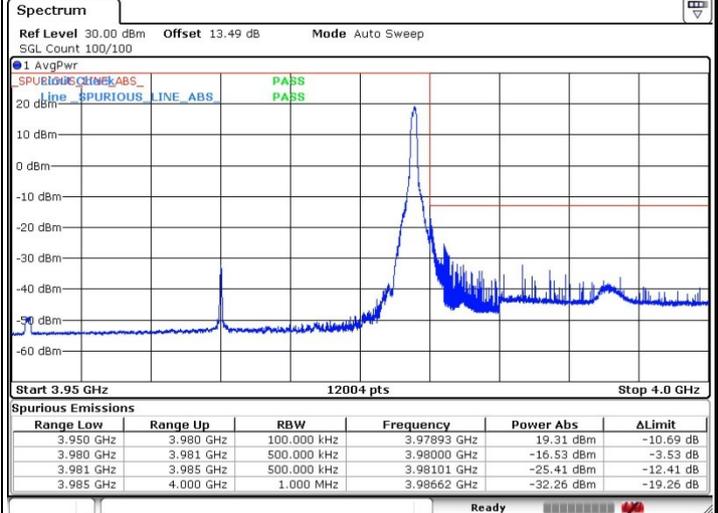
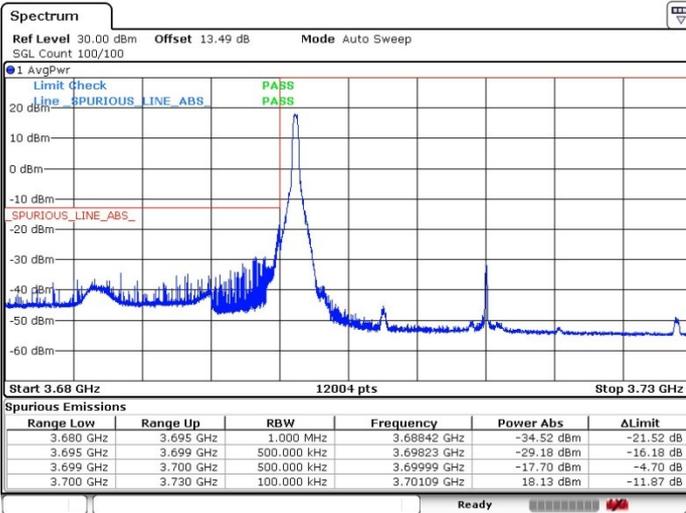
Date: 21 JAN 2021 16:29:22



FR1 n77 / 30MHz / DFT-S OFDM / 16Q

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

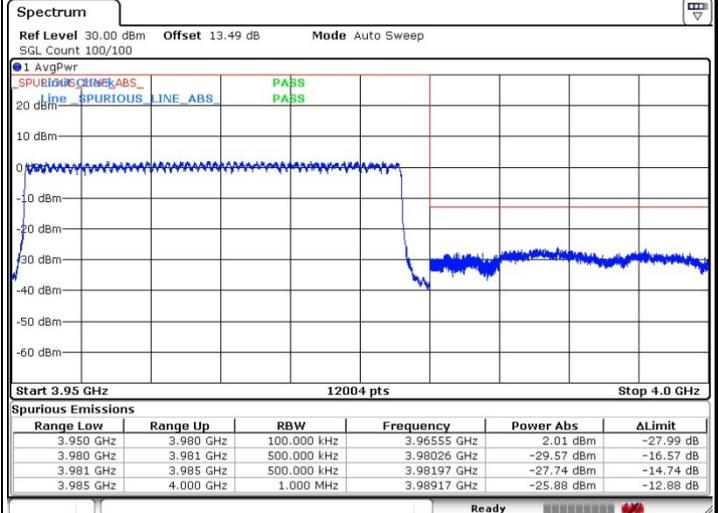
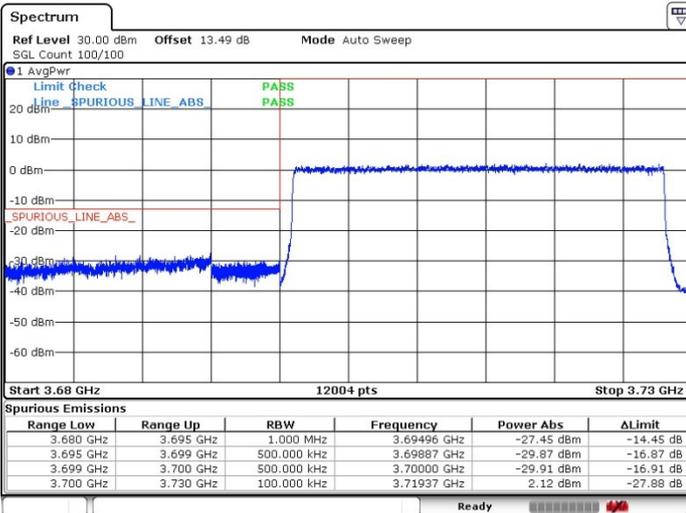


Date: 21 JAN 2021 16:12:01

Date: 21 JAN 2021 16:23:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



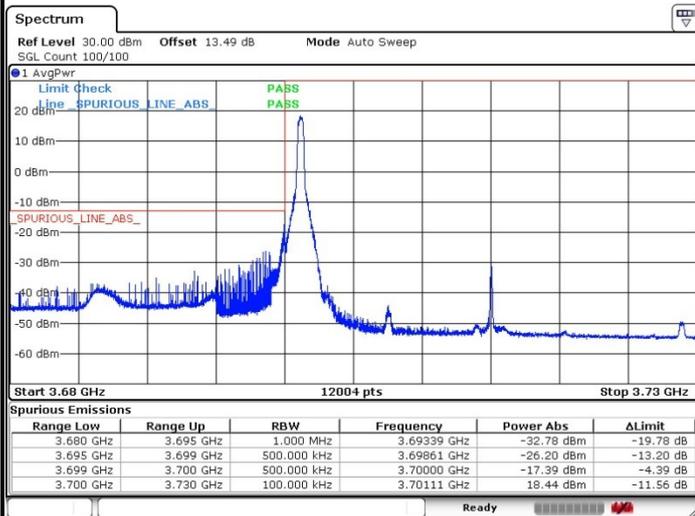
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Date: 21 JAN 2021 16:28:34



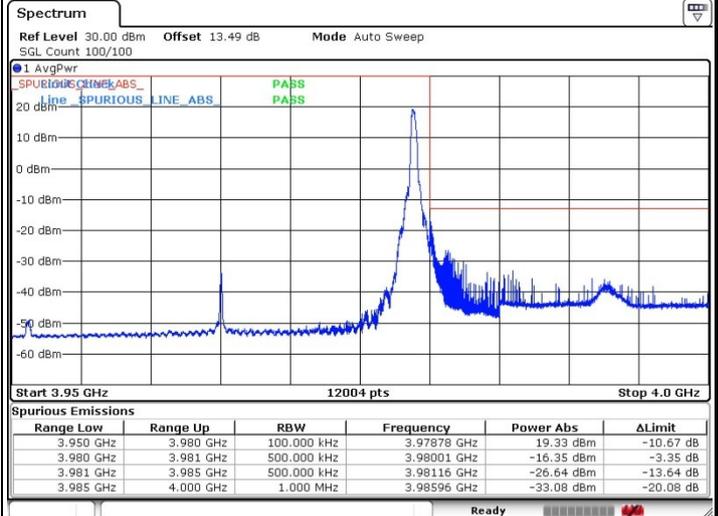
FR1 n77 / 30MHz / DFT-S OFDM / 64Q

Lowest Band Edge / 1RB0



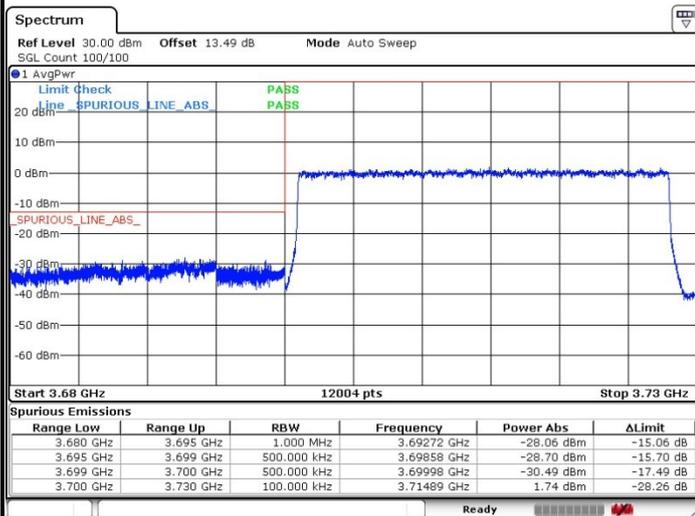
Date: 21 JAN 2021 16:11:15

Highest Band Edge / 1RB24



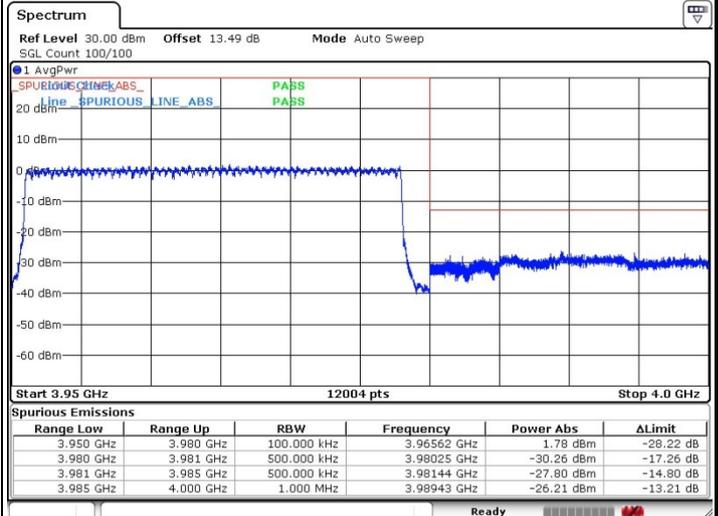
Date: 21 JAN 2021 16:24:05

Lowest Band Edge / Full RB



Date: 21 JAN 2021 16:15:52

Highest Band Edge / Full RB



Date: 21 JAN 2021 16:27:53