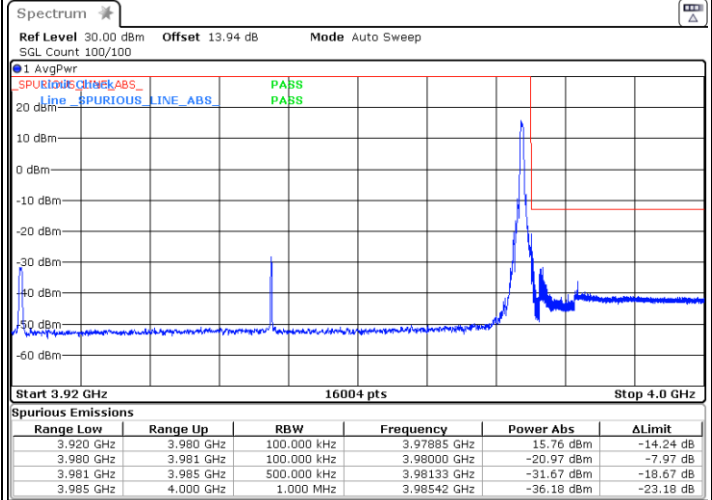
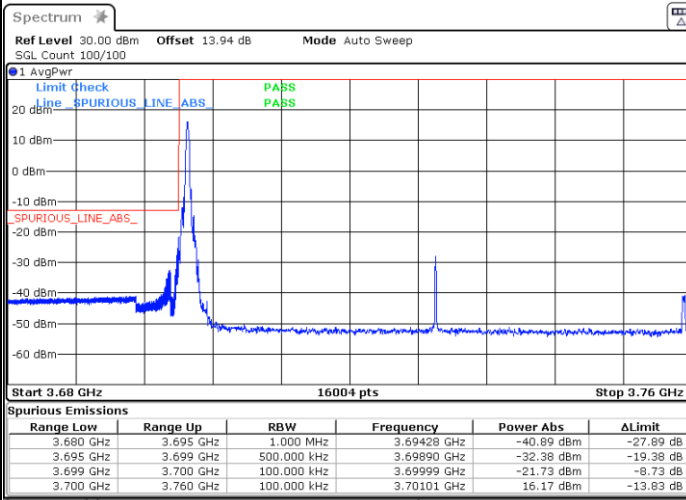




FR1 n77 / 60MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

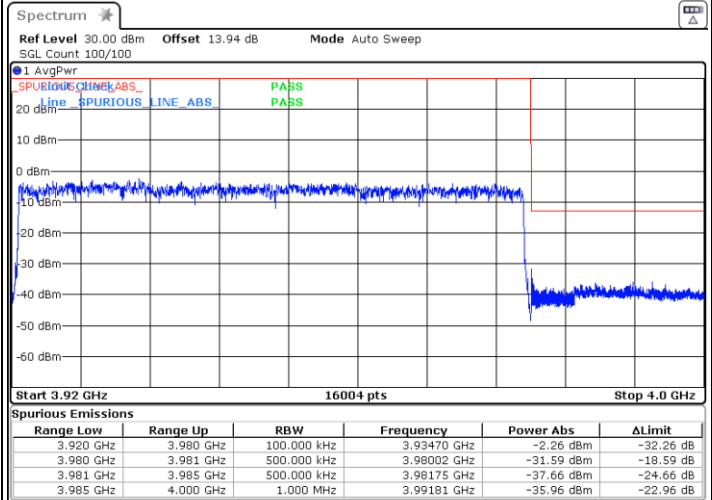
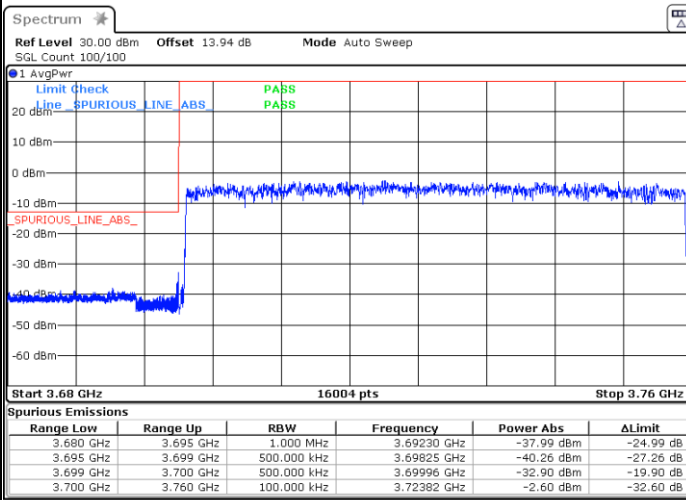


Date: 4.FEB.2021 11:18:31

Date: 4.FEB.2021 11:22:44

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 11:20:19

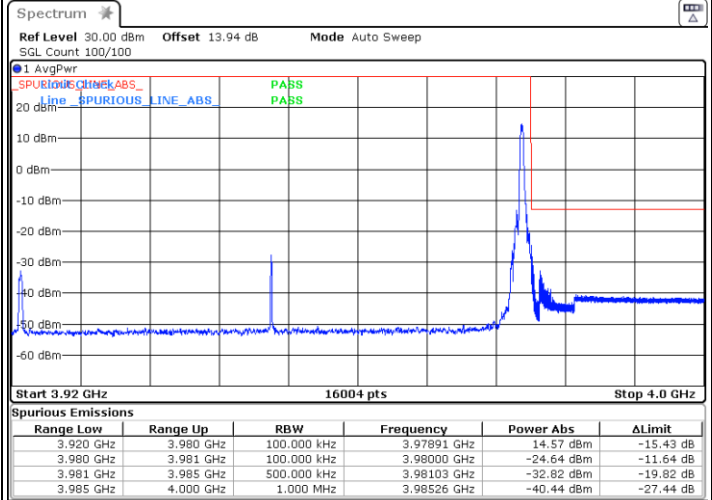
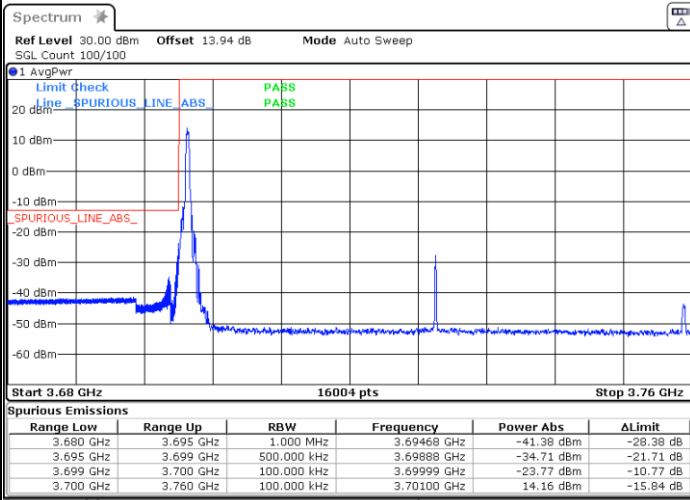
Date: 4.FEB.2021 11:25:49



FR1 n77 / 60MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

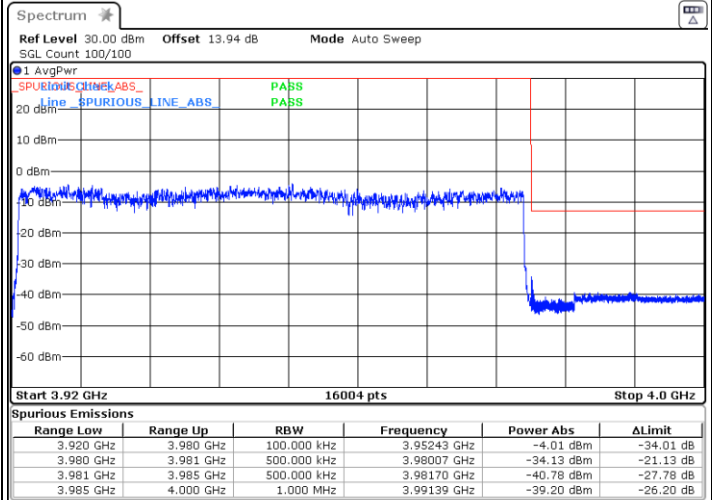
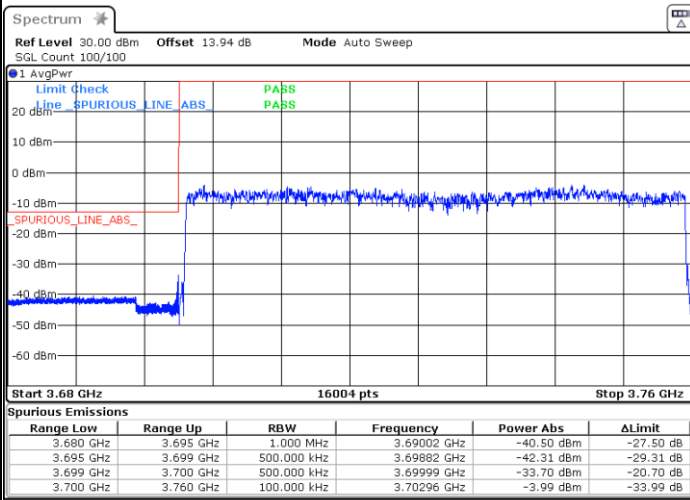


Date: 4.FEB.2021 11:18:54

Date: 4.FEB.2021 11:23:06

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 11:20:51

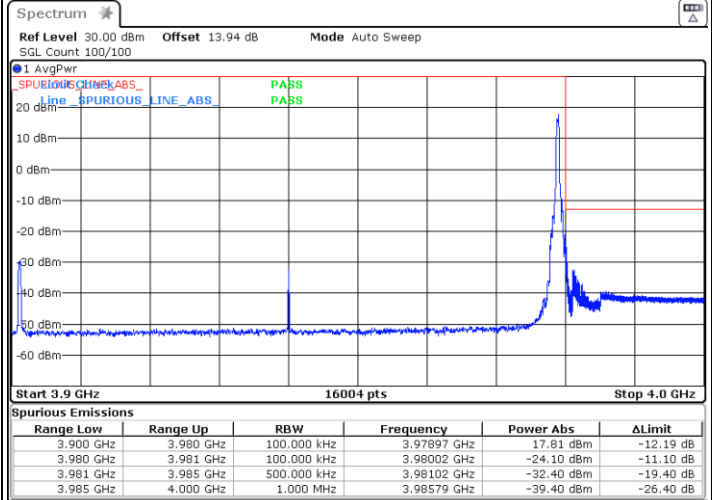
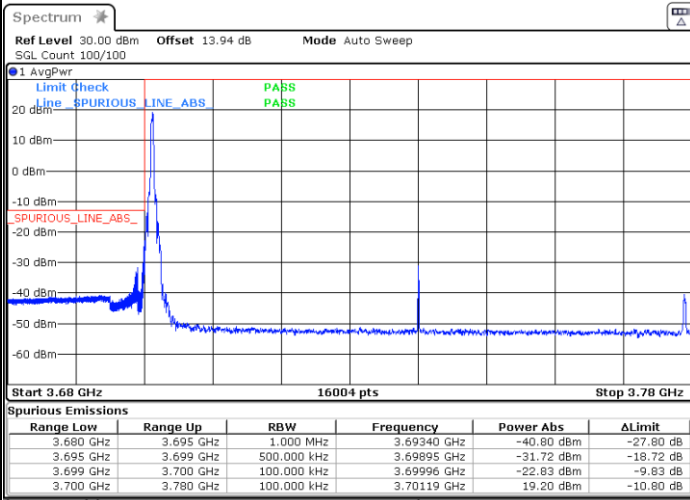
Date: 4.FEB.2021 11:26:07



FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

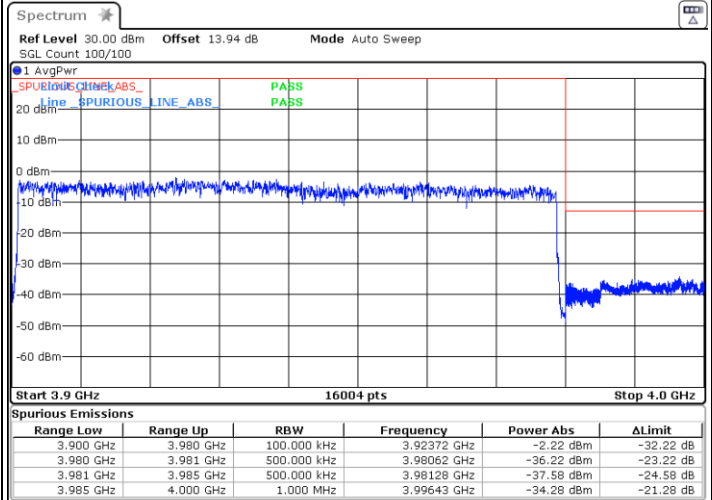
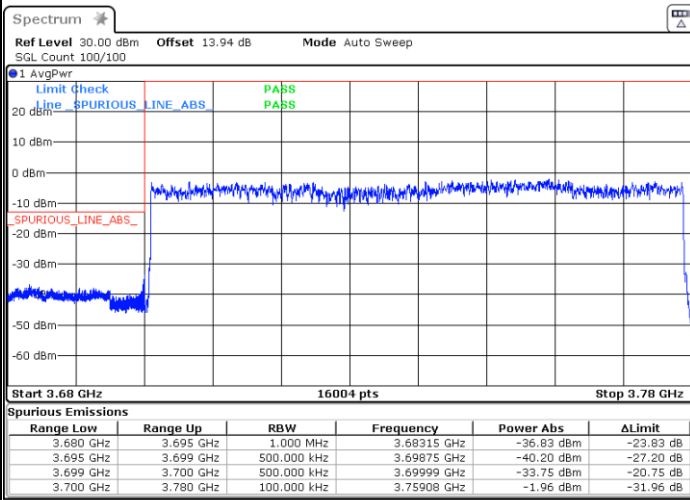


Date: 4.FEB.2021 11:00:02

Date: 4.FEB.2021 11:06:38

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 11:02:25

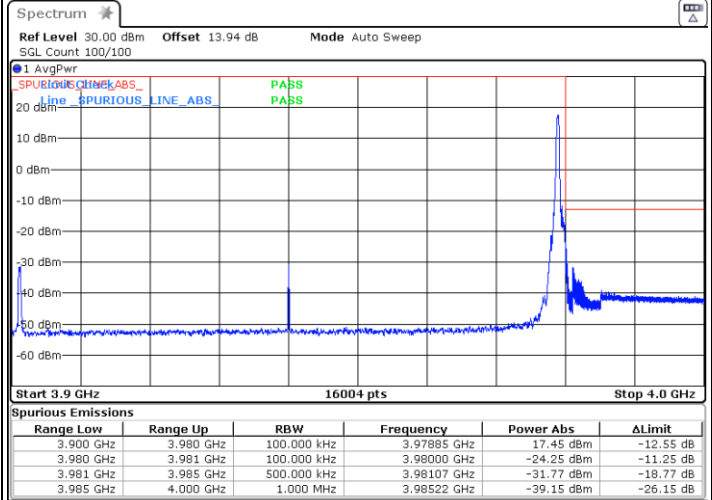
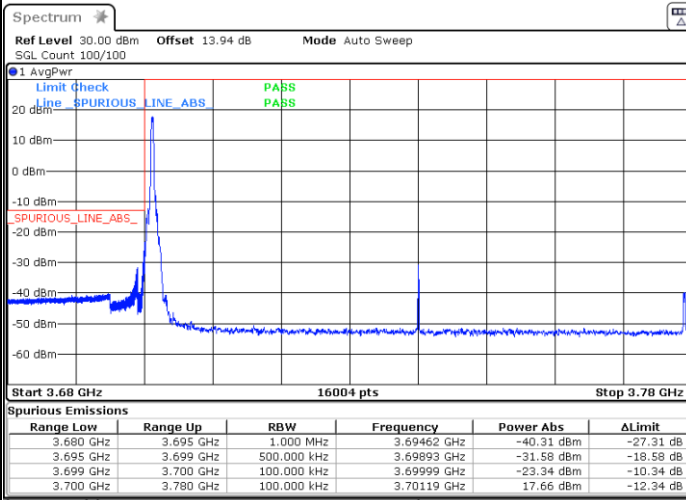
Date: 4.FEB.2021 11:10:13



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

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

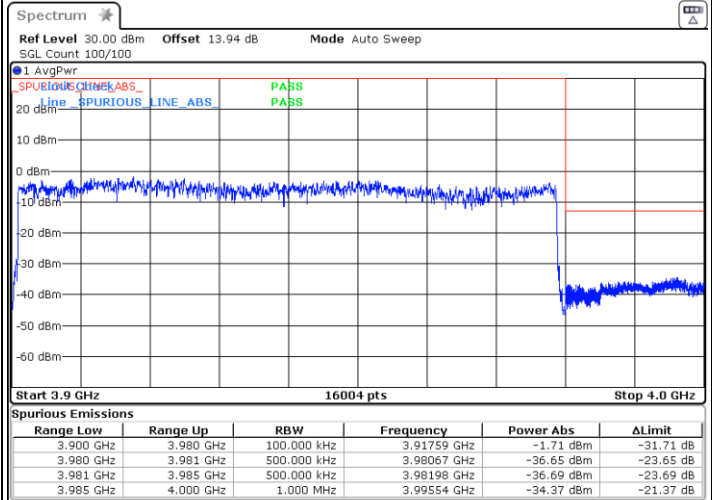
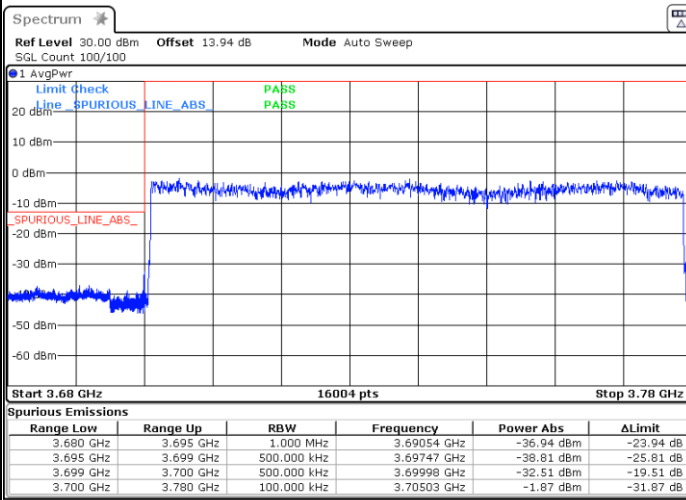


Date: 4.FEB.2021 11:00:30

Date: 4.FEB.2021 11:07:01

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 11:02:54

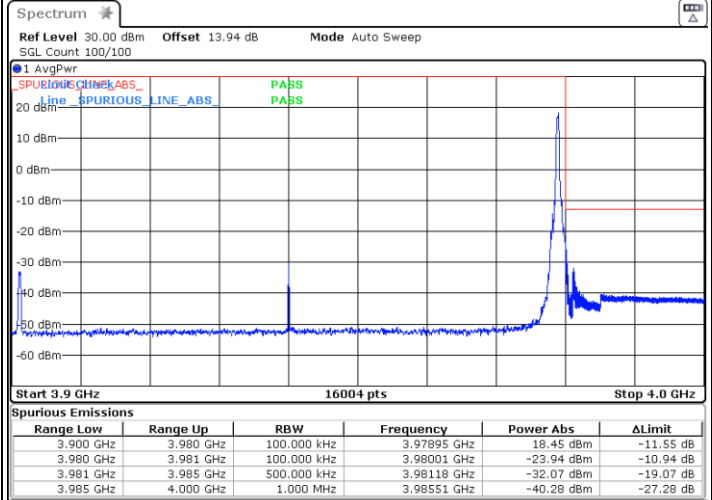
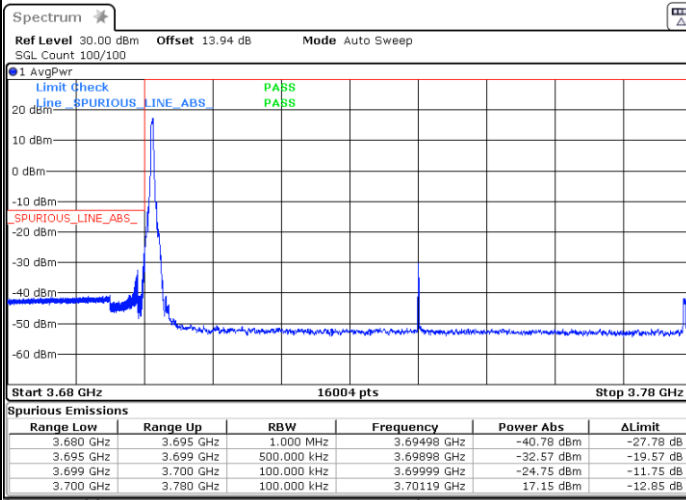
Date: 4.FEB.2021 11:10:29



FR1 n77 / 80MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

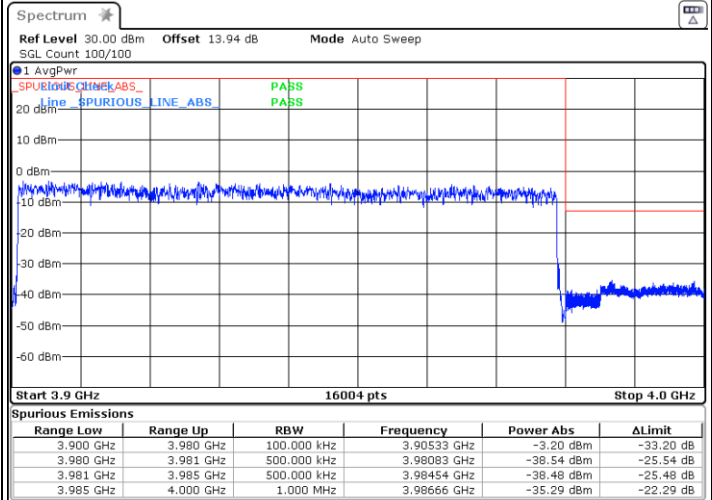
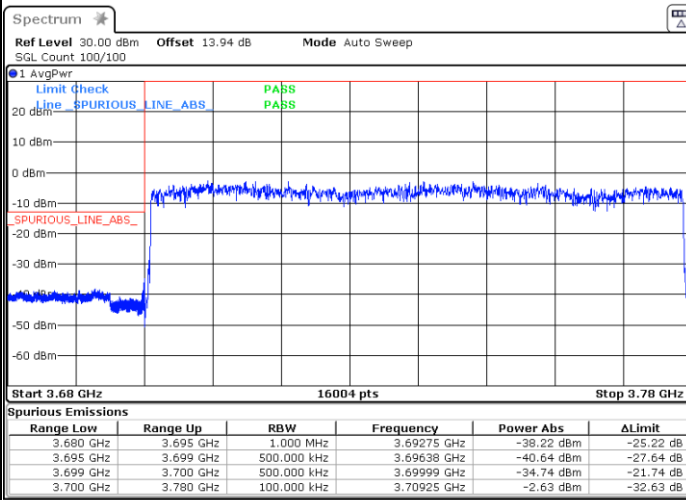


Date: 4.FEB.2021 11:00:59

Date: 4.FEB.2021 11:07:31

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 11:03:11

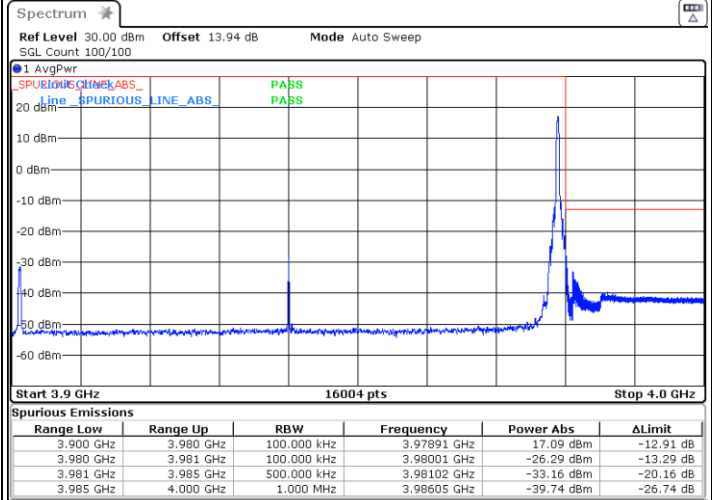
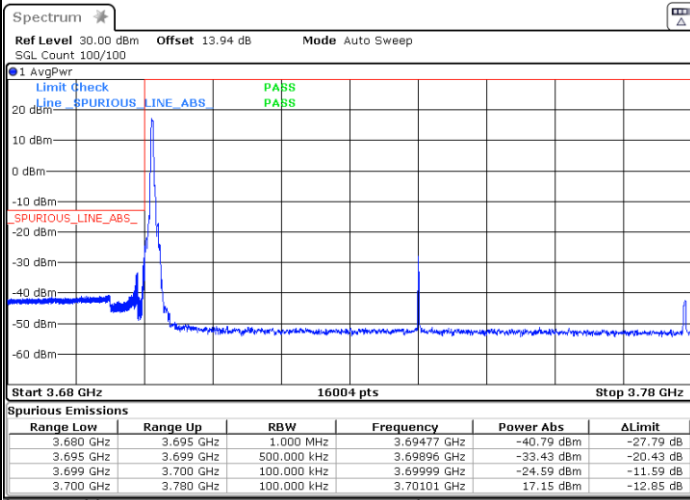
Date: 4.FEB.2021 11:10:50



FR1 n77 / 80MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

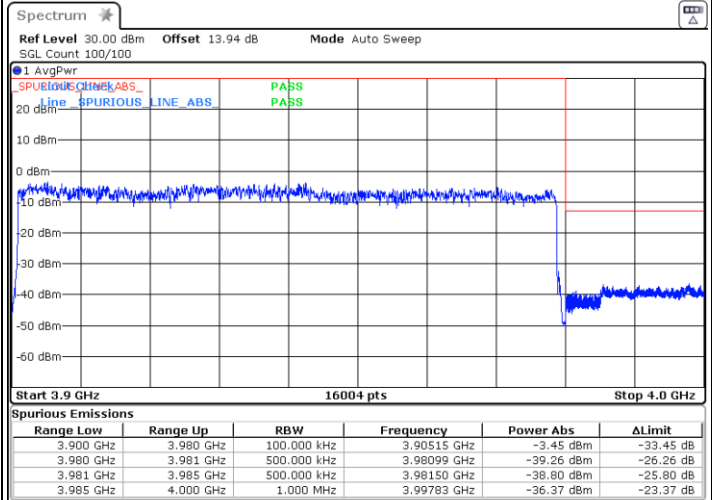
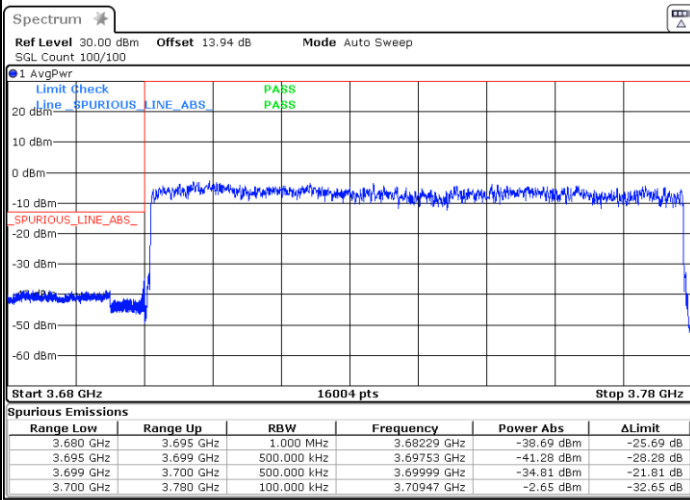


Date: 4.FEB.2021 11:01:22

Date: 4.FEB.2021 11:08:01

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 11:03:29

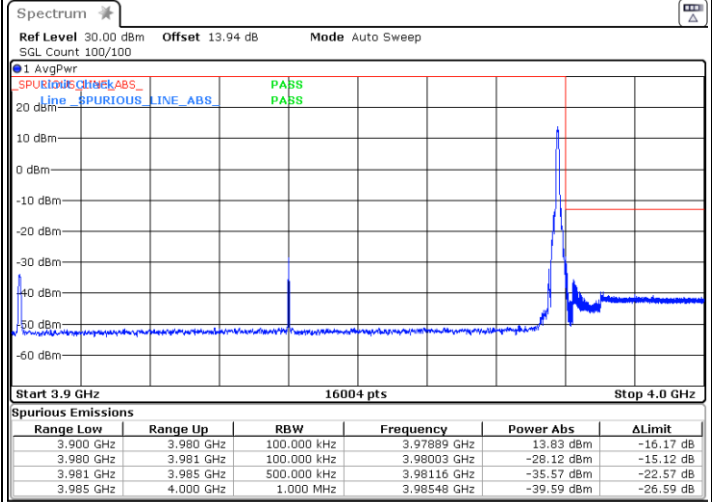
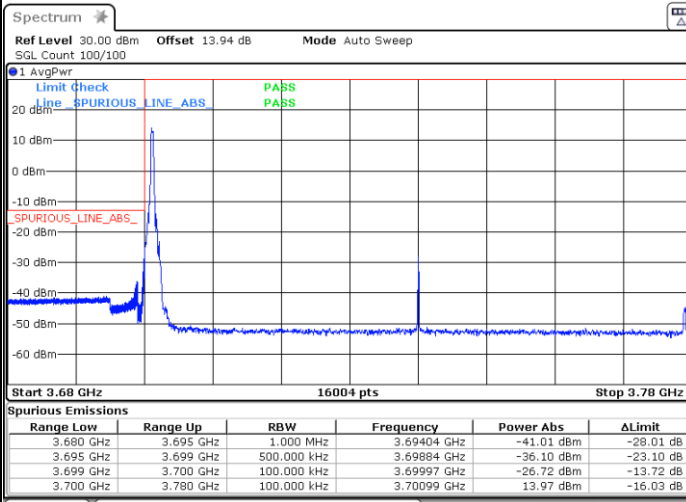
Date: 4.FEB.2021 11:11:08



FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

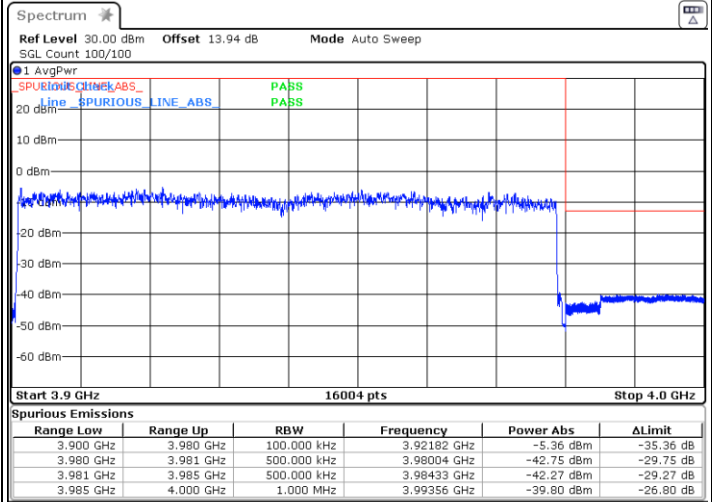
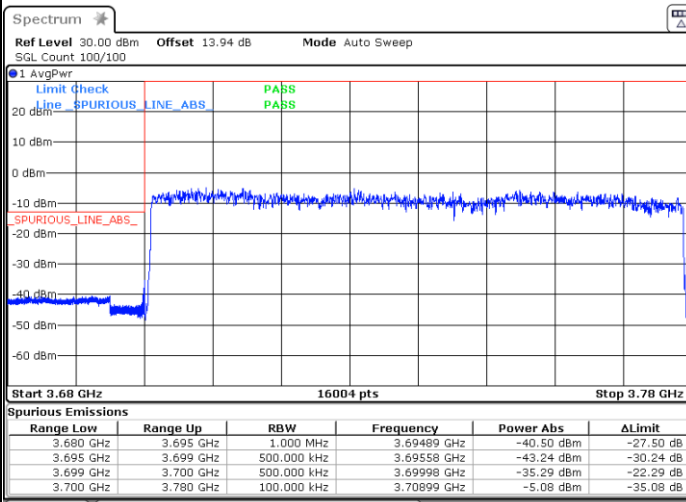


Date: 4.FEB.2021 11:01:54

Date: 4.FEB.2021 11:08:59

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 11:04:12

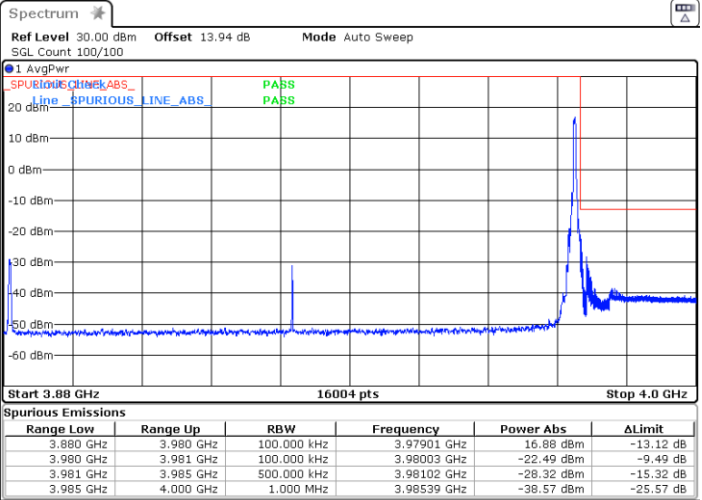
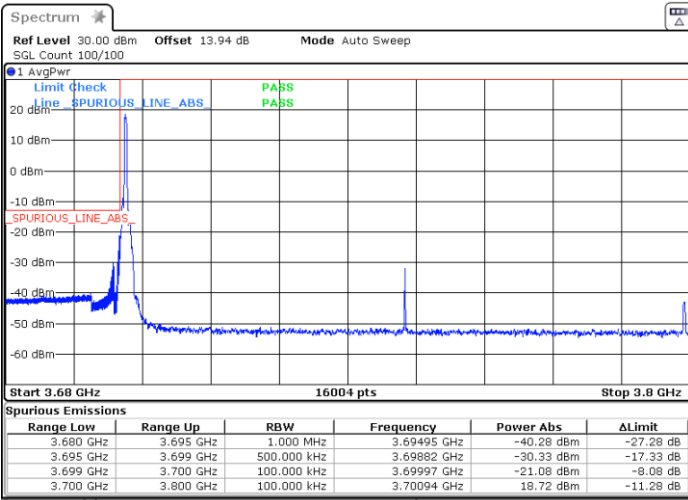
Date: 4.FEB.2021 11:11:51



FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

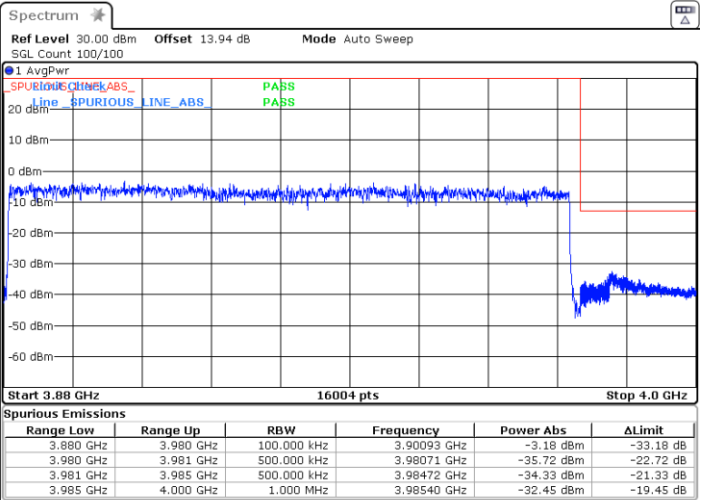
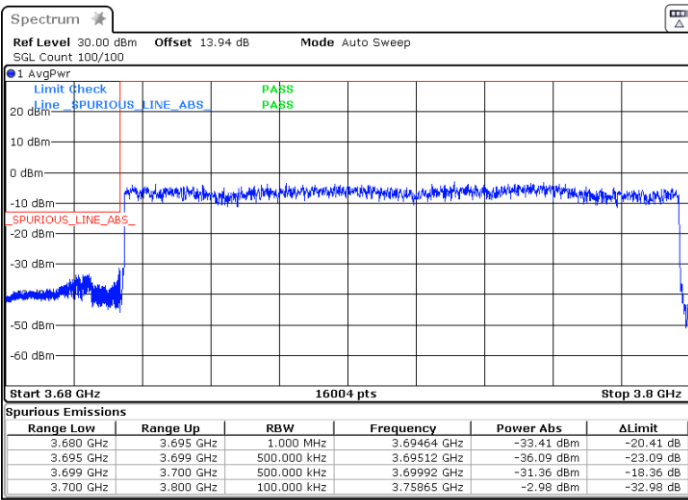


Date: 4.FEB.2021 10:49:03

Date: 4.FEB.2021 10:53:30

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 10:50:51

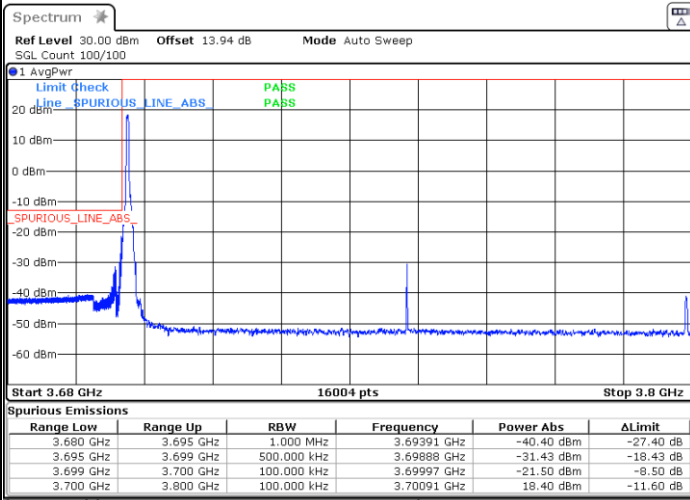
Date: 4.FEB.2021 10:55:22



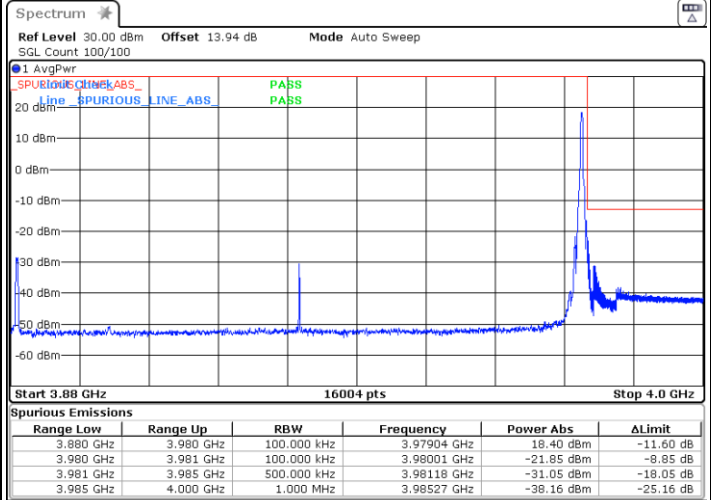
FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



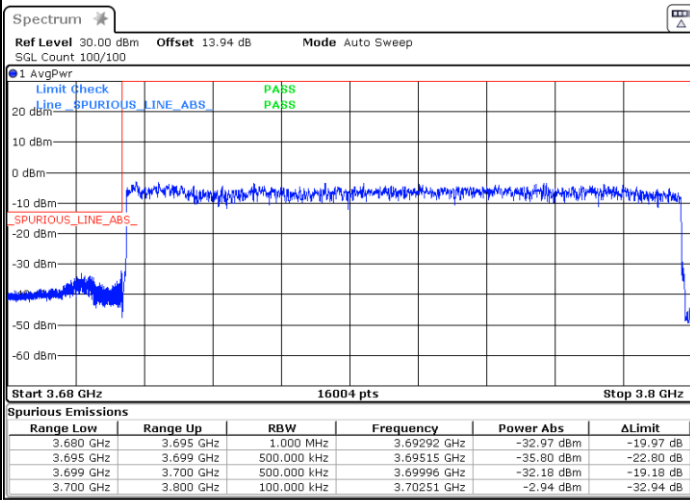
Date: 4.FEB.2021 10:49:22



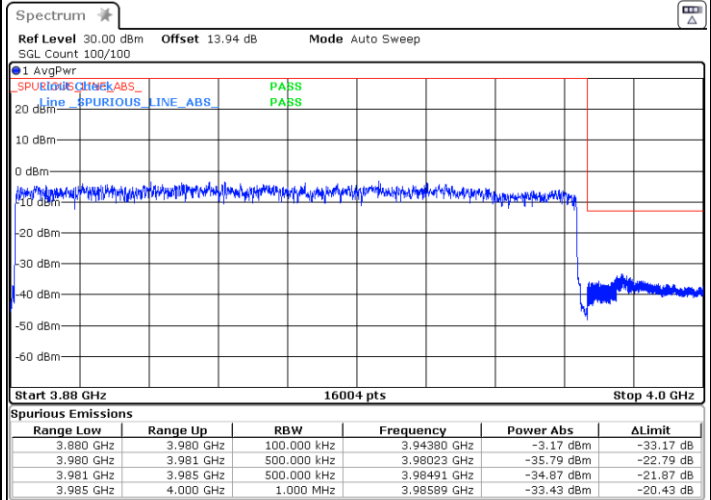
Date: 4.FEB.2021 10:53:50

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 10:51:05



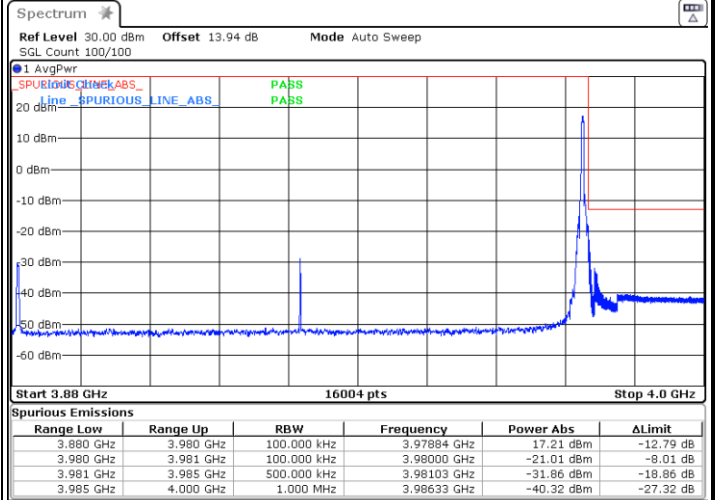
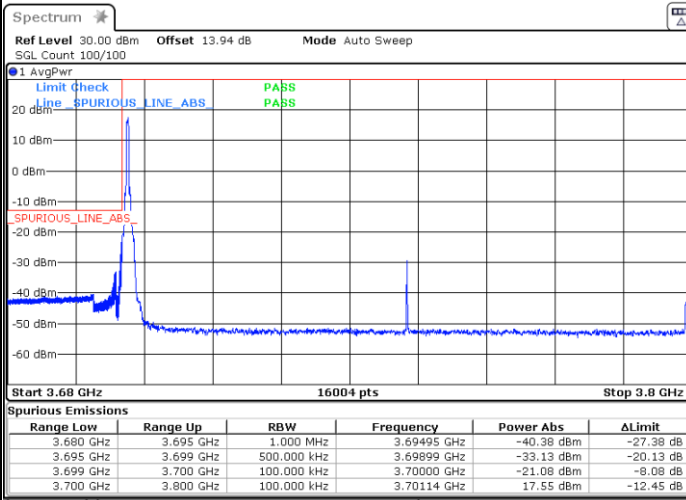
Date: 4.FEB.2021 10:55:43



FR1 n77 / 100MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

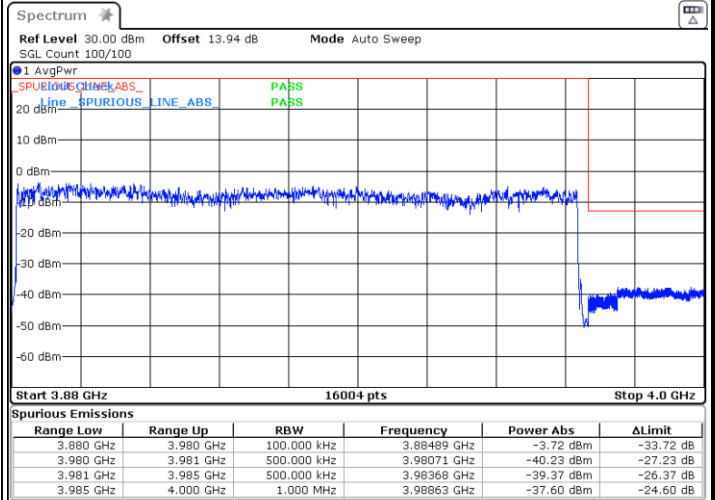
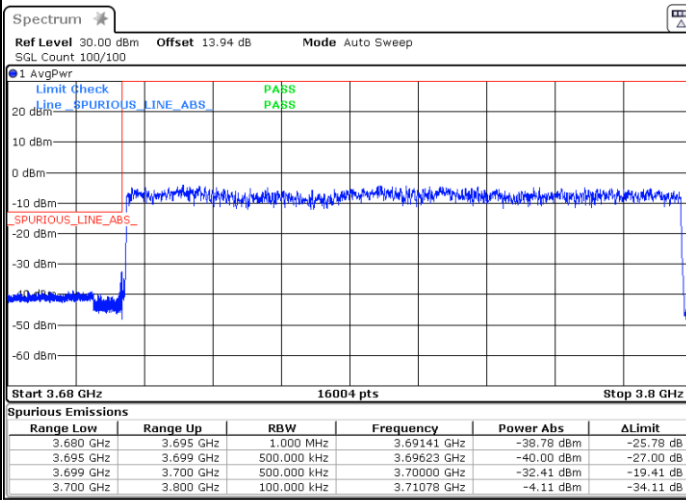


Date: 4.FEB.2021 10:49:45

Date: 4.FEB.2021 10:54:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 10:51:28

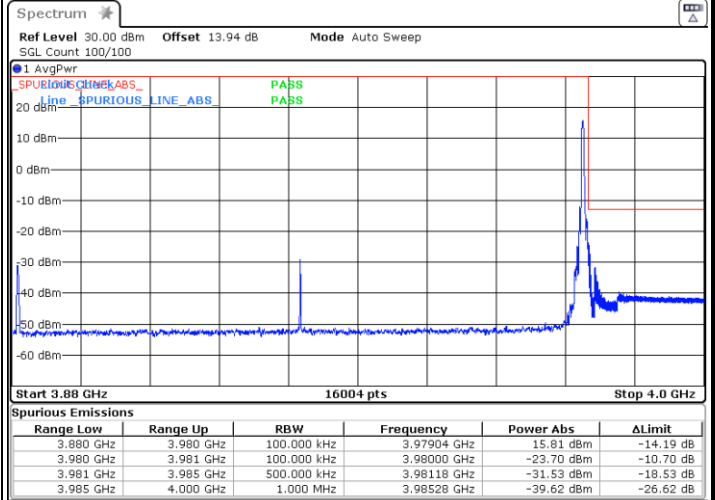
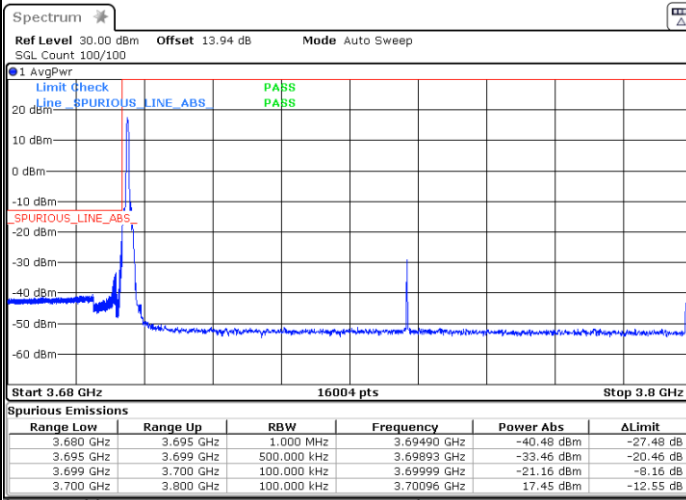
Date: 4.FEB.2021 10:56:02



FR1 n77 / 100MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

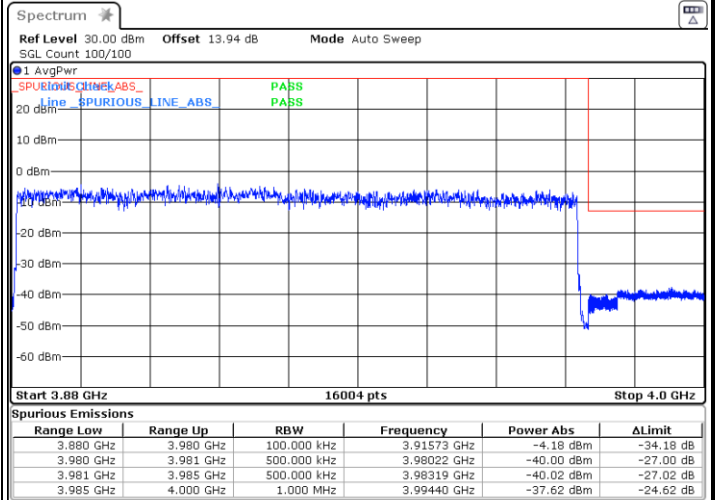
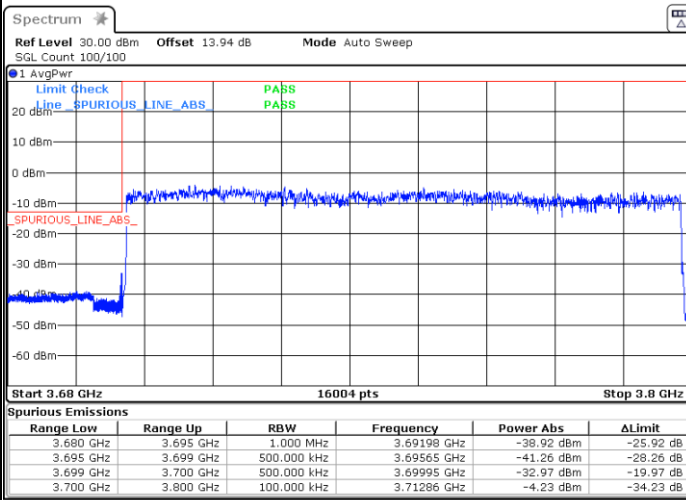


Date: 4.FEB.2021 10:50:06

Date: 4.FEB.2021 10:54:38

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 10:51:45

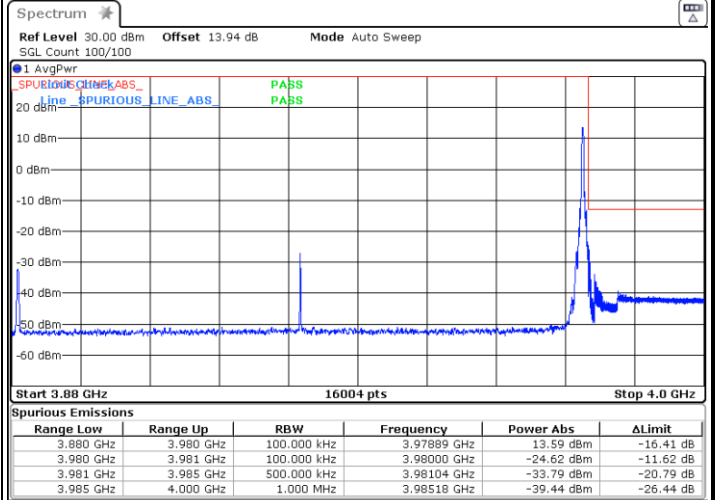
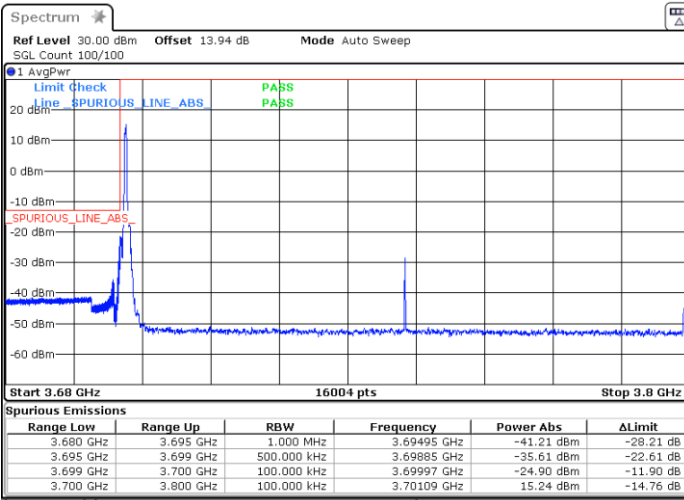
Date: 4.FEB.2021 10:56:19



FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

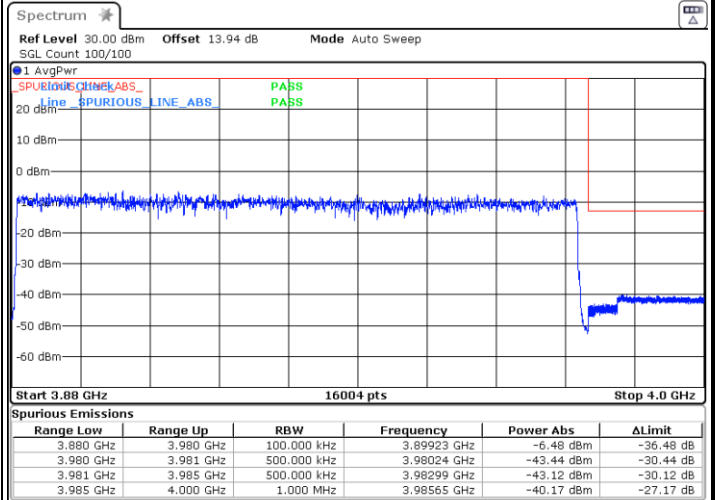
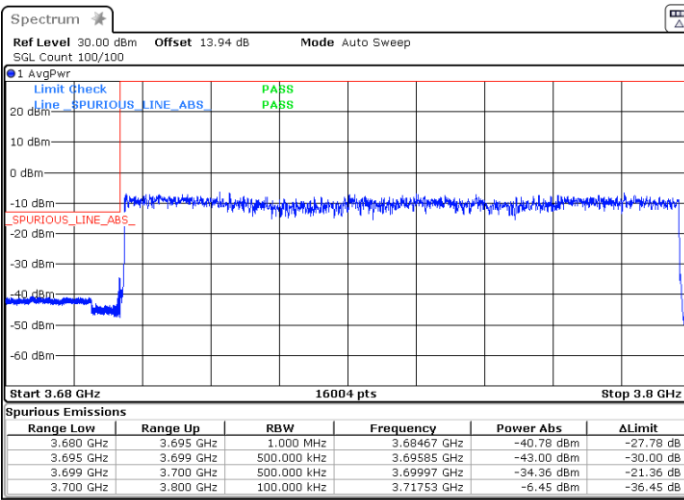


Date: 4.FEB.2021 10:50:27

Date: 4.FEB.2021 10:55:00

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 4.FEB.2021 10:52:04

Date: 4.FEB.2021 10:57:15

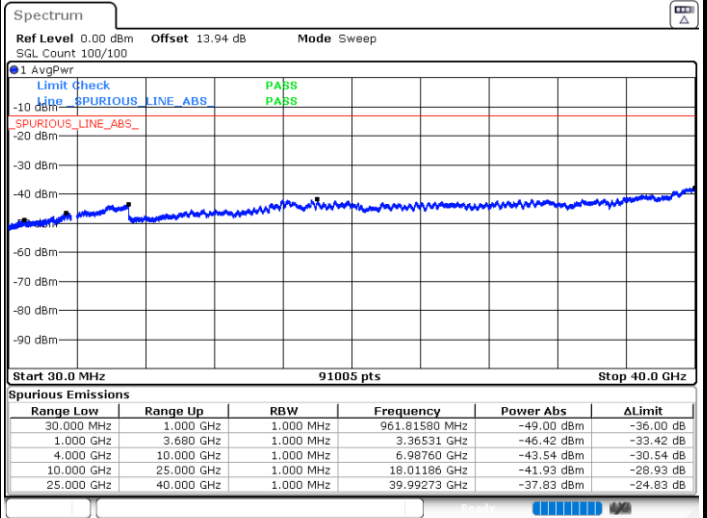
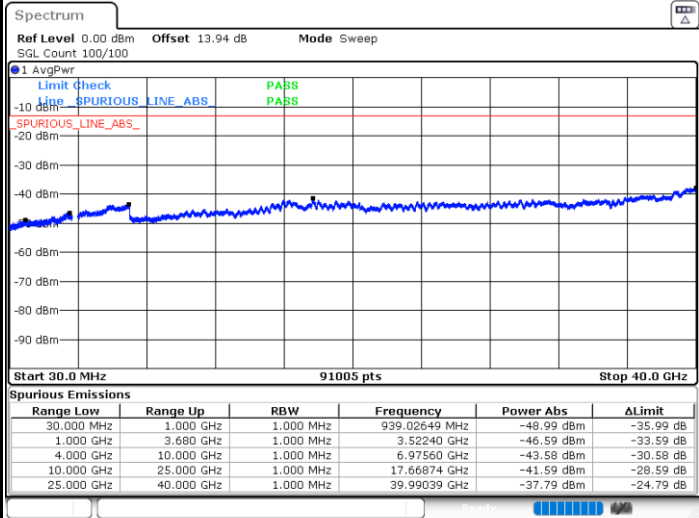


Conducted Spurious Emission

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

Lowest Channel / 1RB1

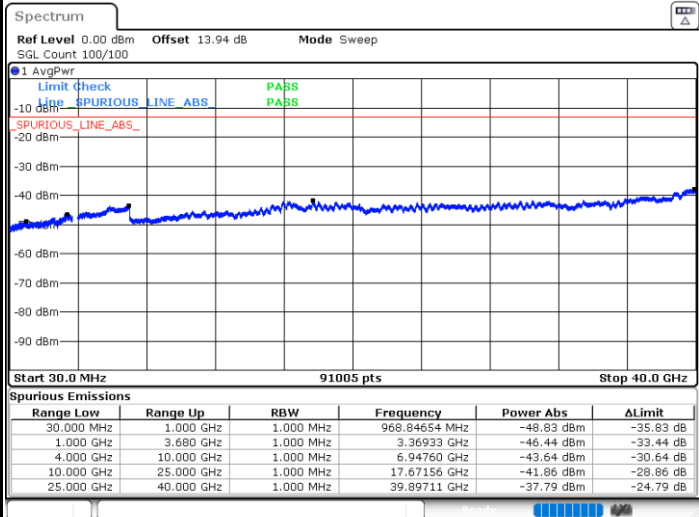
Middle Channel / 1RB1



Date: 4.FEB.2021 12:10:21

Date: 4.FEB.2021 12:12:04

Highest Channel / 1RB1



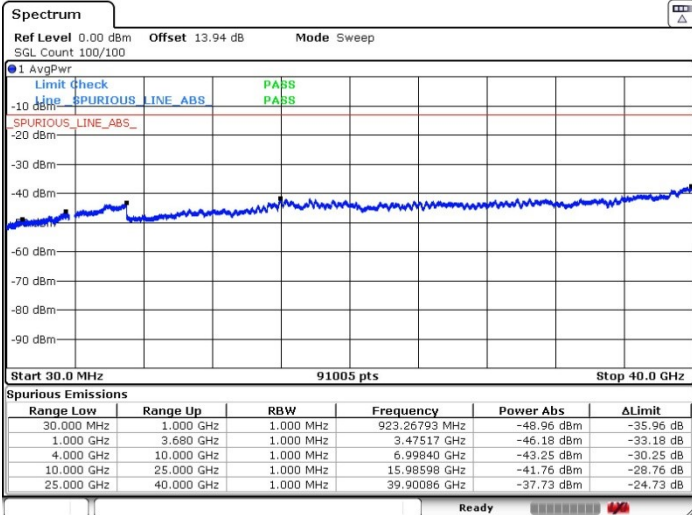
Date: 4.FEB.2021 12:13:46



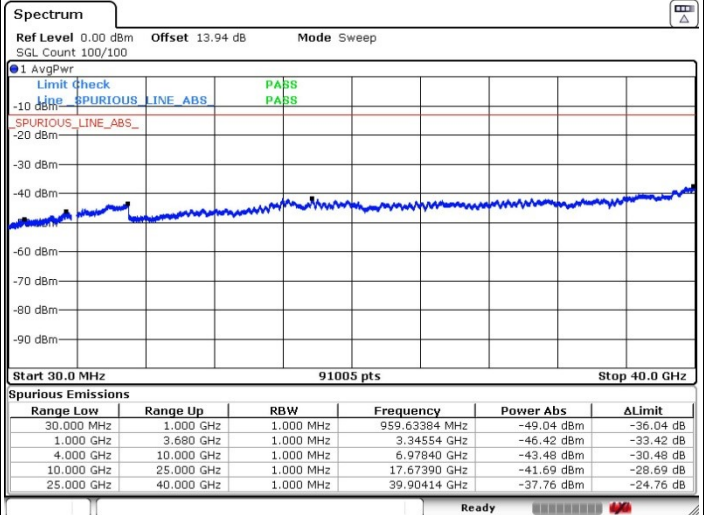
FR1 n77 / 30MHz / DFT-S OFDM / QPSK

Lowest Channel / 1RB1

Middle Channel / 1RB1

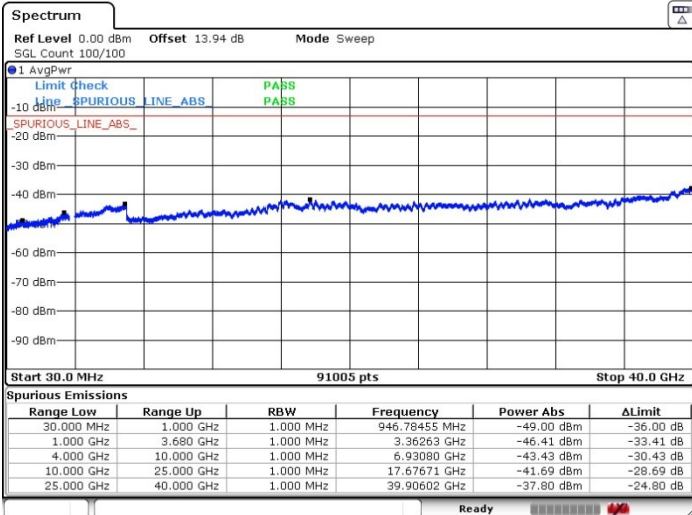


Date: 4.FEB.2021 12:16:14



Date: 4.FEB.2021 12:17:22

Highest Channel / 1RB1



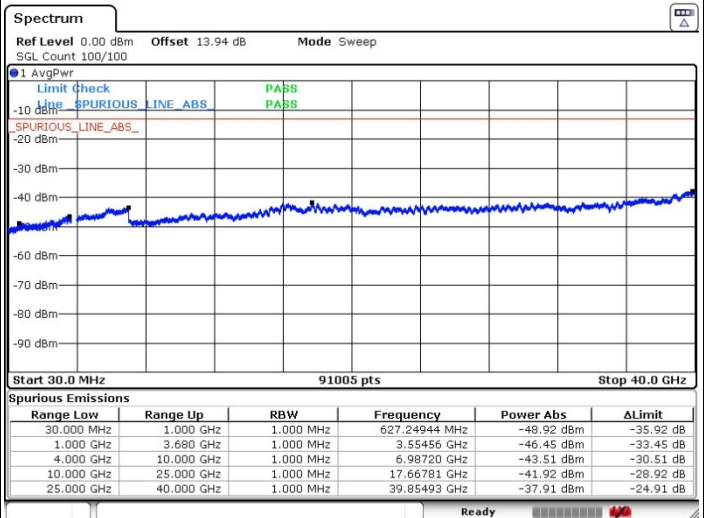
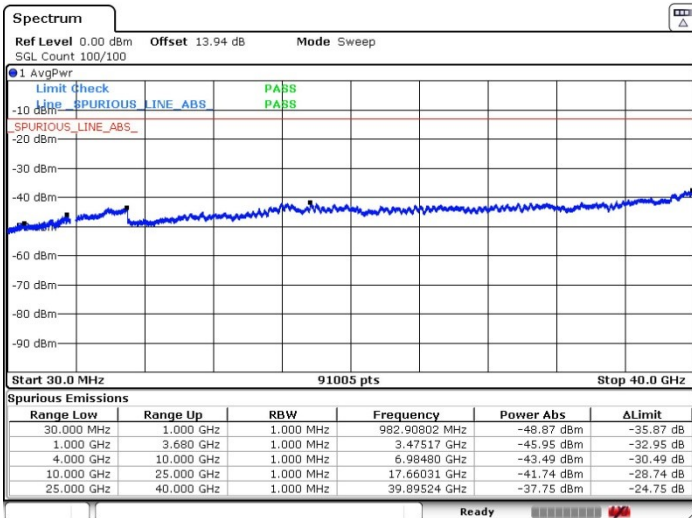
Date: 4.FEB.2021 12:18:39



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

Lowest Channel / 1RB1

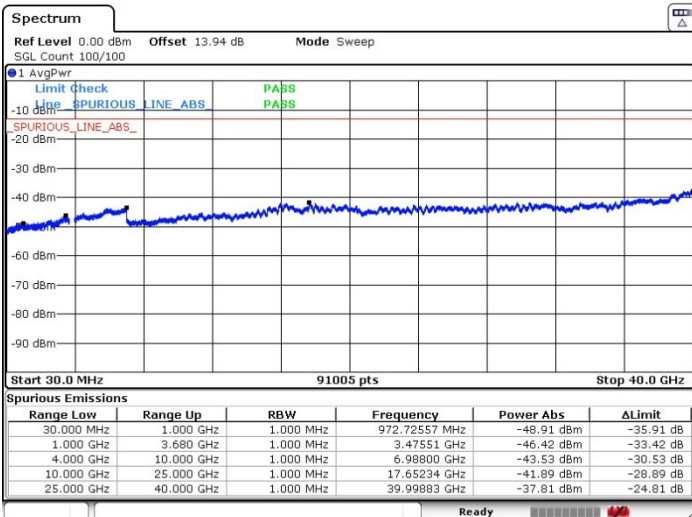
Middle Channel / 1RB1



Date: 4.FEB.2021 12:19:43

Date: 4.FEB.2021 12:20:49

Highest Channel / 1RB1



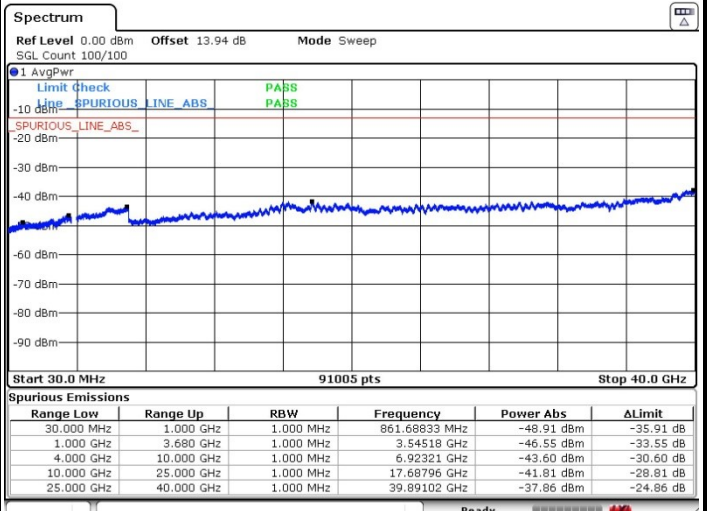
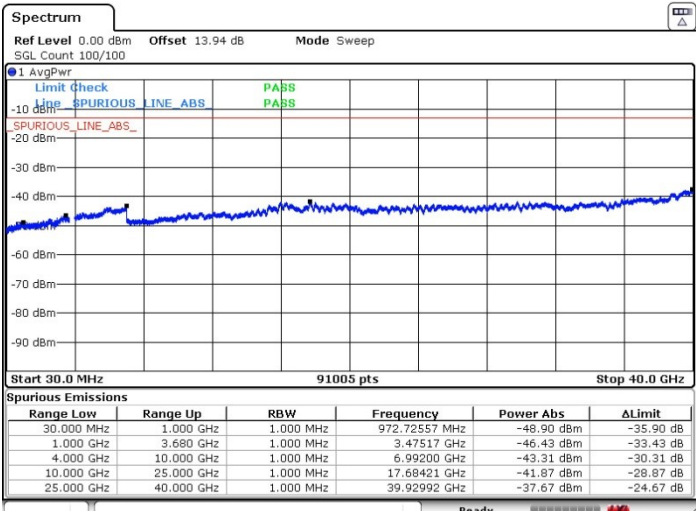
Date: 4.FEB.2021 12:21:58



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

Lowest Channel / 1RB1

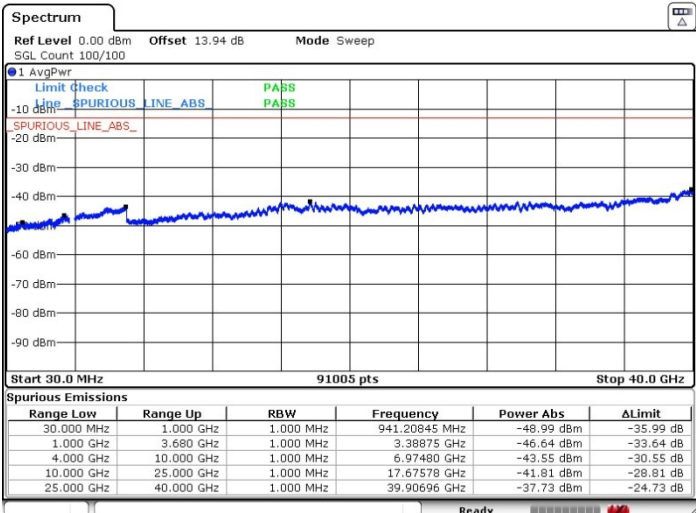
Middle Channel / 1RB1



Date: 4.FEB.2021 12:23:04

Date: 4.FEB.2021 12:24:14

Highest Channel / 1RB1



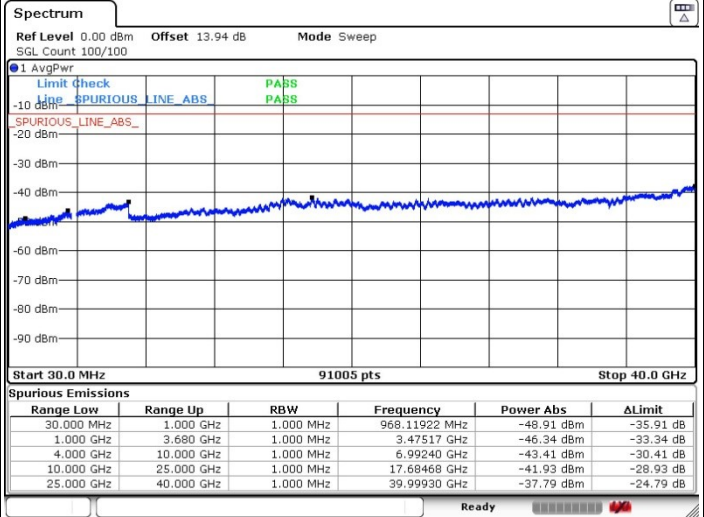
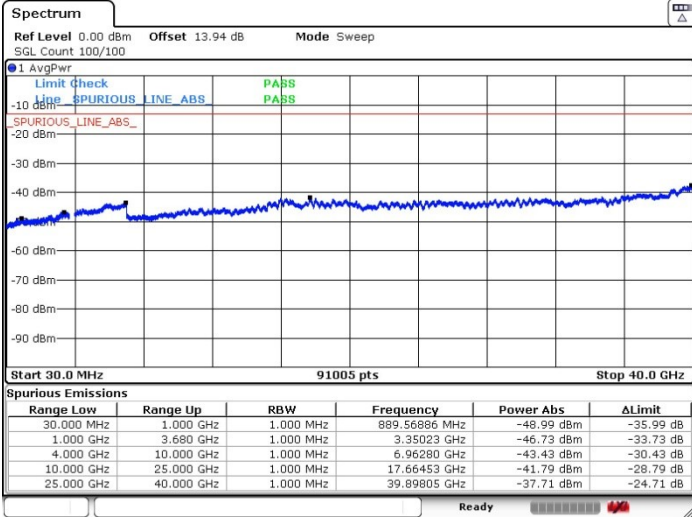
Date: 4.FEB.2021 12:25:24



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

Lowest Channel / 1RB1

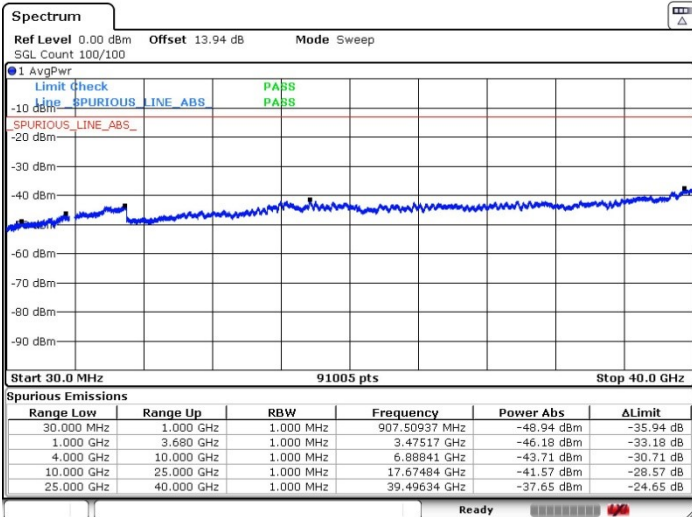
Middle Channel / 1RB1



Date: 4.FEB.2021 12:27:41

Date: 4.FEB.2021 12:30:16

Highest Channel / 1RB1



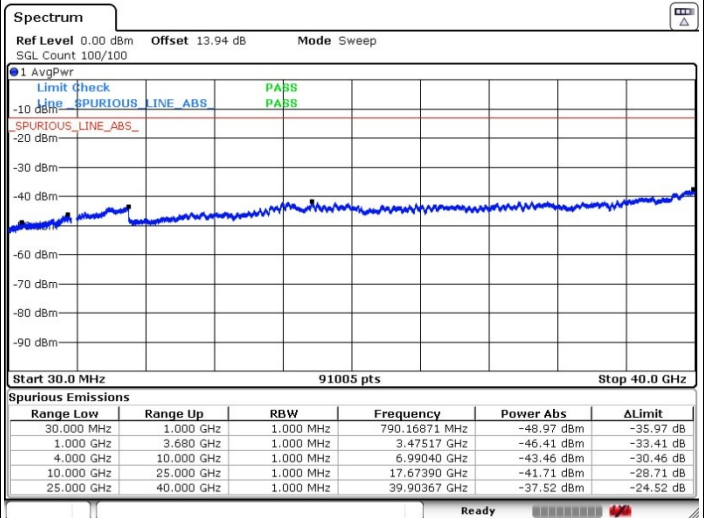
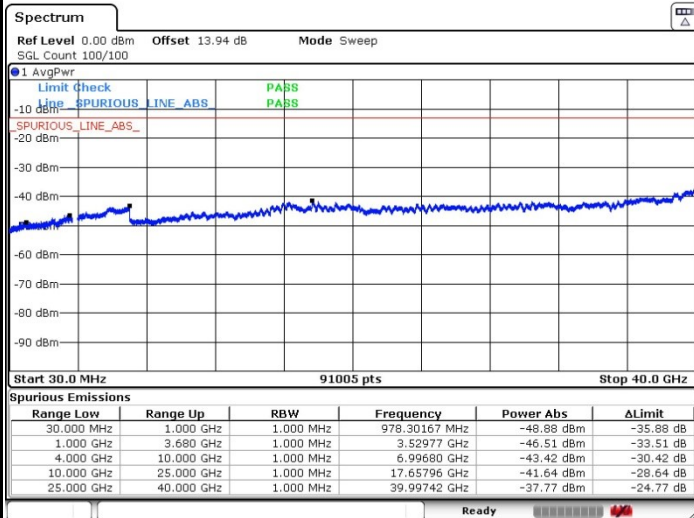
Date: 4.FEB.2021 12:32:34



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

Lowest Channel / 1RB1

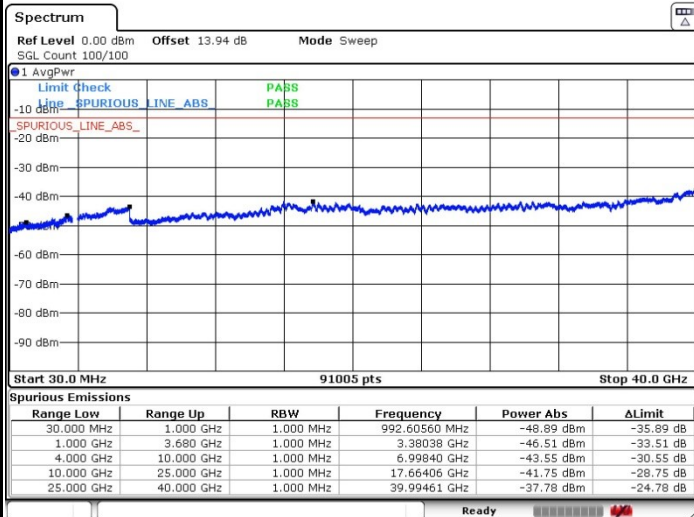
Middle Channel / 1RB1



Date: 4.FEB.2021 12:34:39

Date: 4.FEB.2021 12:35:45

Highest Channel / 1RB1



Date: 4.FEB.2021 12:36:52



Frequency Stability

Test Conditions		FR1 n77 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 100MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0023	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0025	
-10	Normal Voltage	0.0025	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0033	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0028	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.4 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

EN-DC_7A_n5A / LTE 20MHz + NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1656	-64.88	-13	-51.88	-71.85	1.58	10.70	H
	2482	-60.19	-13	-47.19	-68.44	2.102	12.50	H
	3312	-59.33	-13	-46.33	-68.22	2.856	13.90	H
	1656	-63.97	-13	-50.97	-70.94	1.58	10.70	V
	2482	-58.53	-13	-45.53	-66.78	2.10	12.50	V
	3312	-59.11	-13	-46.11	-68.00	2.86	13.90	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_66A_n7A / LTE 20MHz + NR 20MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5052	-53.69	-25	-28.69	-63.90	3.03	13.24	H
	7576	-59.83	-25	-34.83	-69.28	3.56	13.01	H
	10100	-47.59	-25	-22.59	-57.11	3.92	13.44	H
	12630	-54.73	-25	-29.73	-64.65	4.44	14.36	H
	5052	-54.81	-25	-29.81	-65.02	3.03	13.24	V
	7576	-60.36	-25	-35.36	-69.81	3.56	13.01	V
	10100	-50.93	-25	-25.93	-60.45	3.92	13.44	V
	12630	-54.74	-25	-29.74	-64.66	4.44	14.36	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_41A_n77A / LTE 20MHz + NR 100MHz / QPSK DFT-s-OFDM								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7590	-60.49	-13	-47.49	-70.97	2.76	13.24	H
	11388	-57.33	-13	-44.33	-66.92	3.42	13.01	H
	15180	-56.60	-13	-43.60	-66.21	3.83	13.44	H
	7590	-60.26	-13	-47.26	-70.70	2.80	13.24	V
	11388	-56.81	-13	-43.81	-66.36	3.46	13.01	V
	15180	-56.30	-13	-43.30	-65.86	3.88	13.44	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.