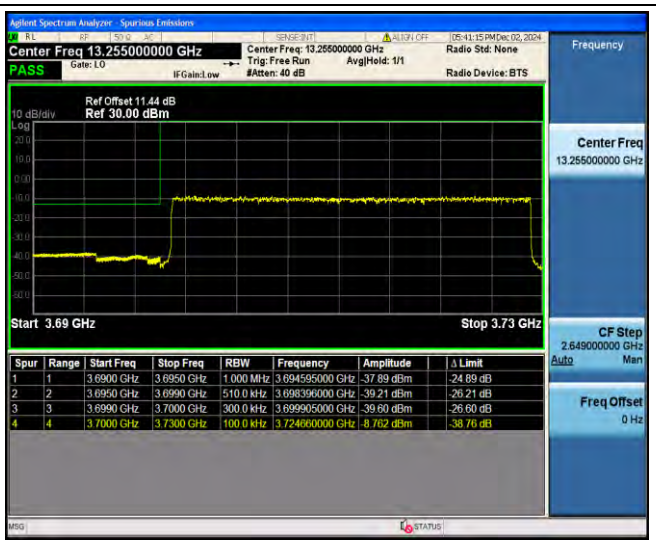

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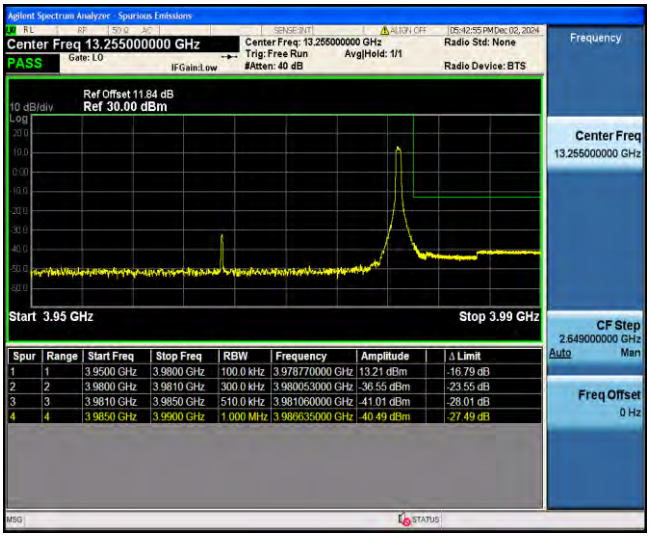

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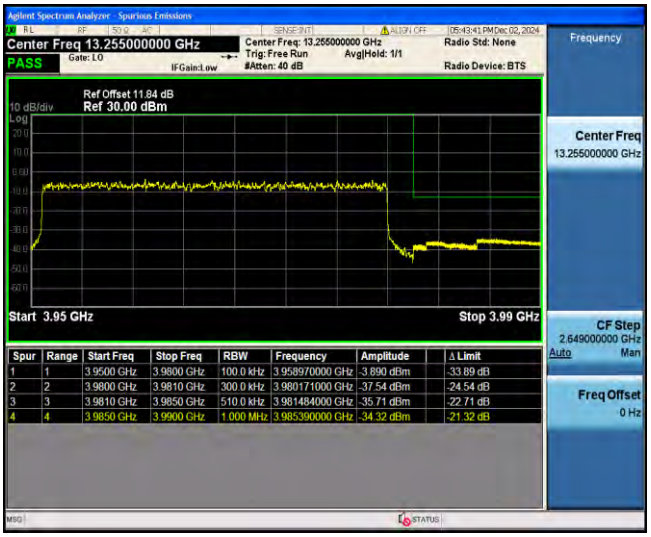

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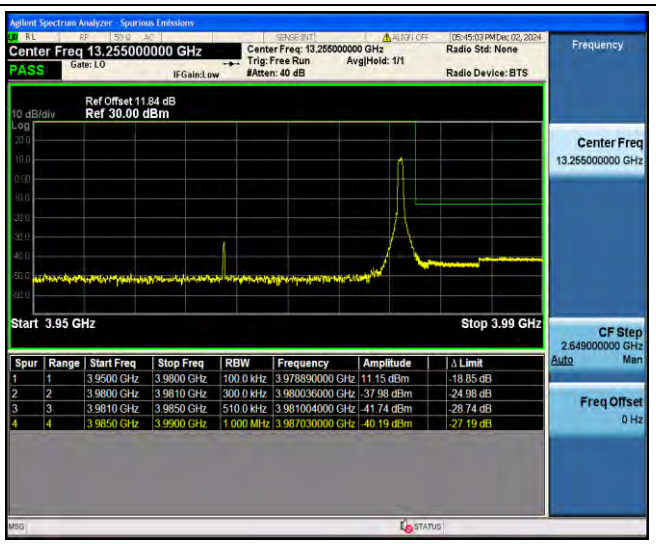

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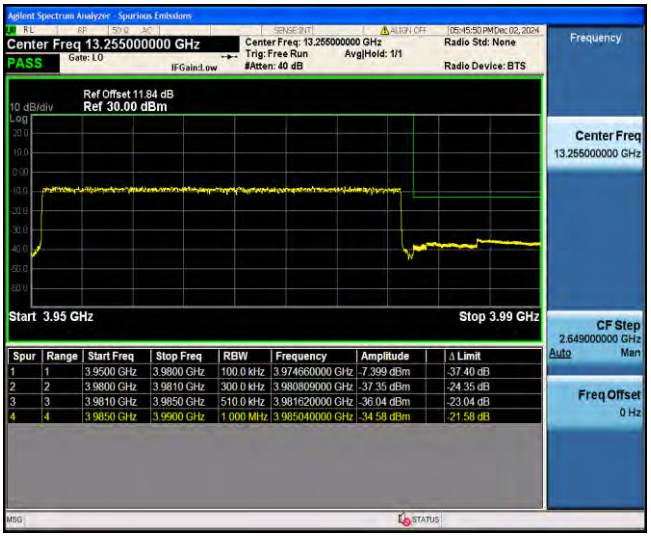

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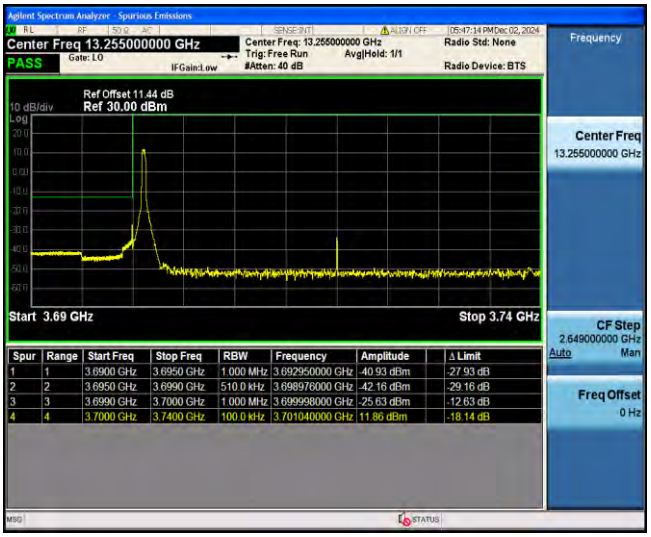

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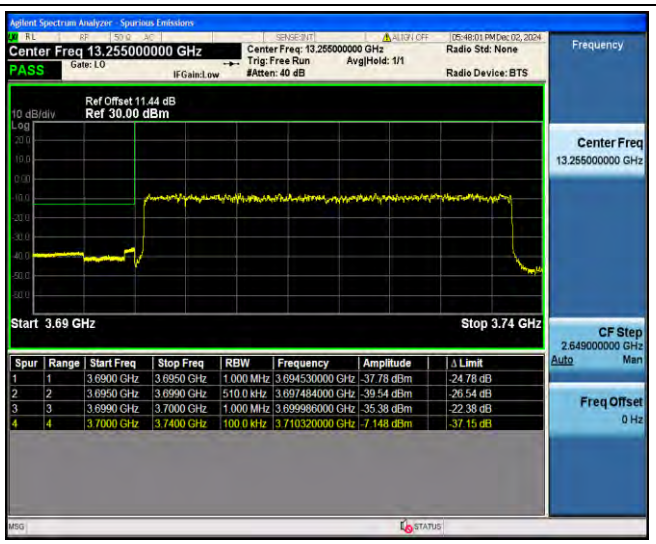
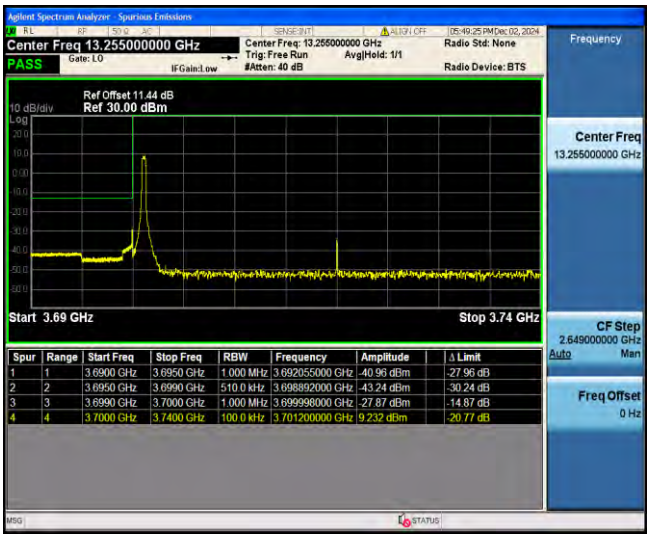
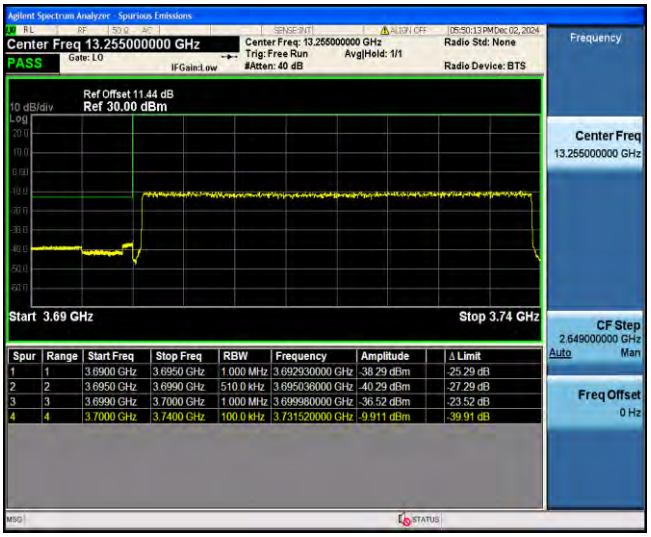


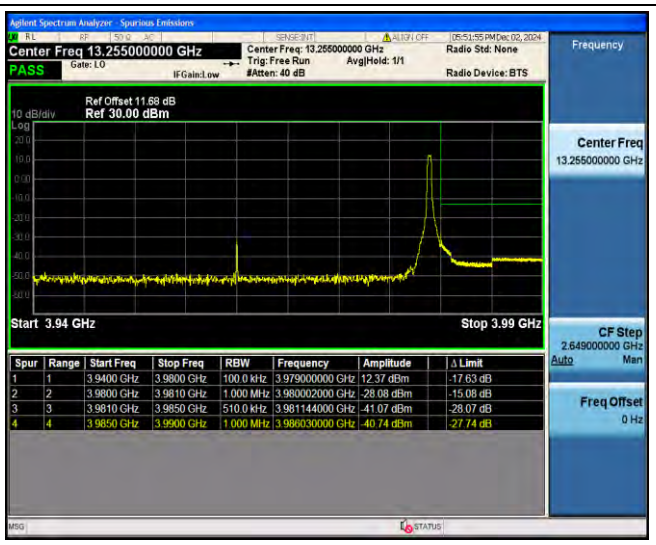
1-N77-3700-3980-PC3-30-40-L-3-DFT-QPSK-Outer_Full-100@0-Ant7-3699.99-22.38--35.38-PASS



1-N77-3700-3980-PC3-30-40-L-4-CP-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-14.87--27.87-PASS



1-N77-3700-3980-PC3-30-40-L-6-CP-QPSK-Outer_Full-106@0-Ant7-3699.98-23.52--36.52-PASS



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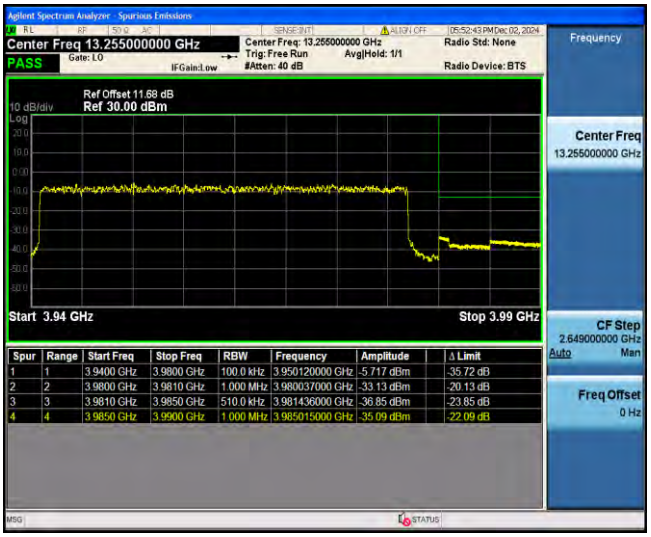

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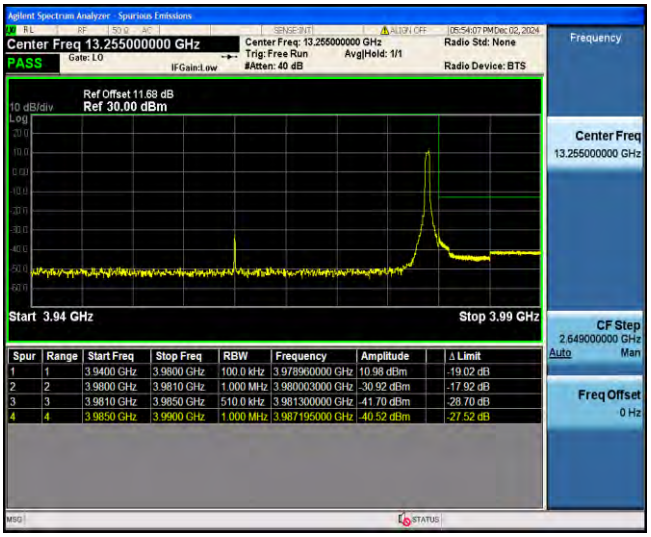

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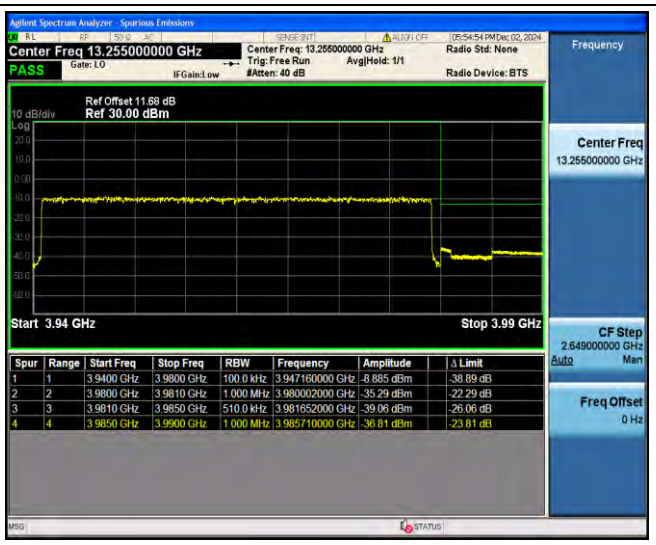

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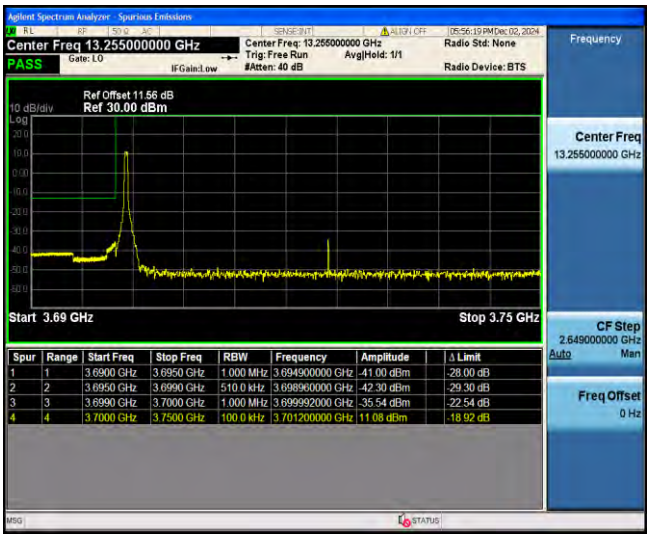

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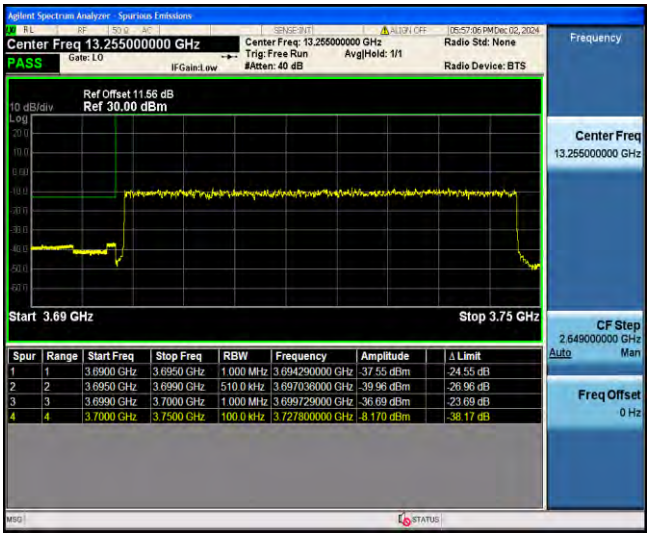

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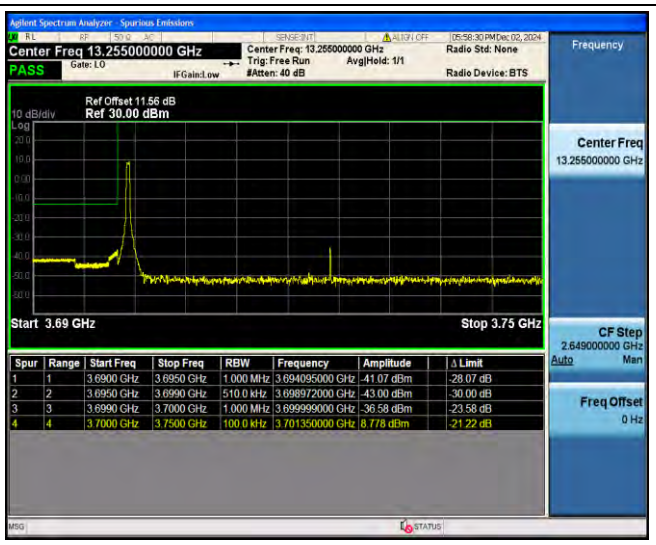
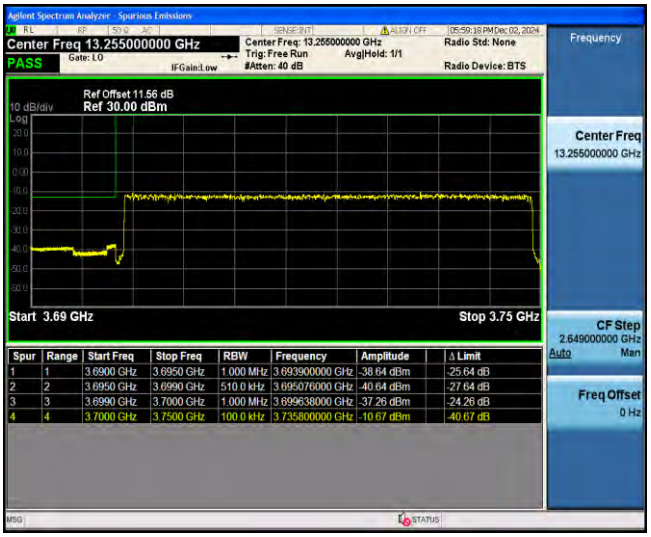


1-N77-3700-3980-PC3-30-50-L-4-CP-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-23.58--36.58-PASS



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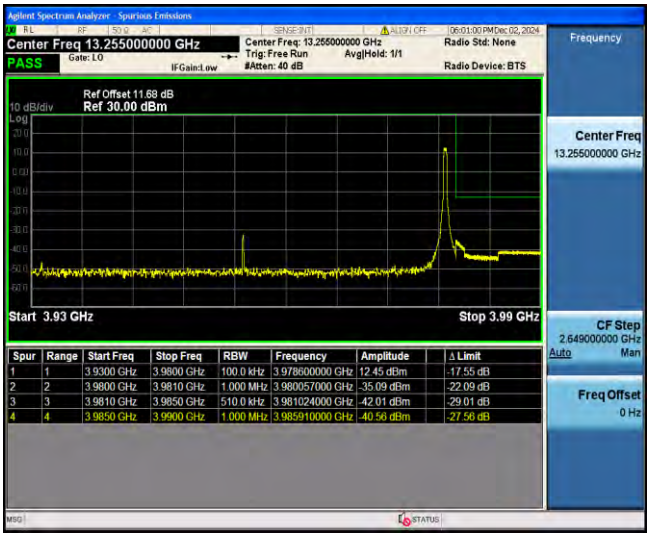
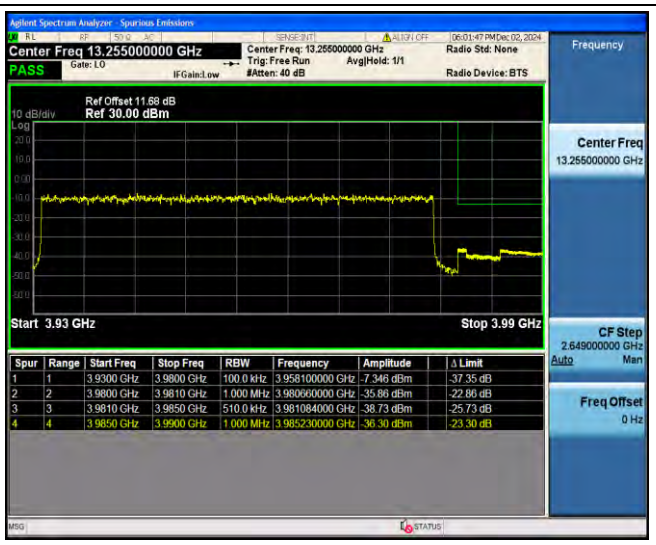


1-N77-3700-3980-PC3-30-50-H-2-DFT-QPSK-Edge_1RB_Right-1@132-Ant7-3980.06-22.09--35.09-PASS



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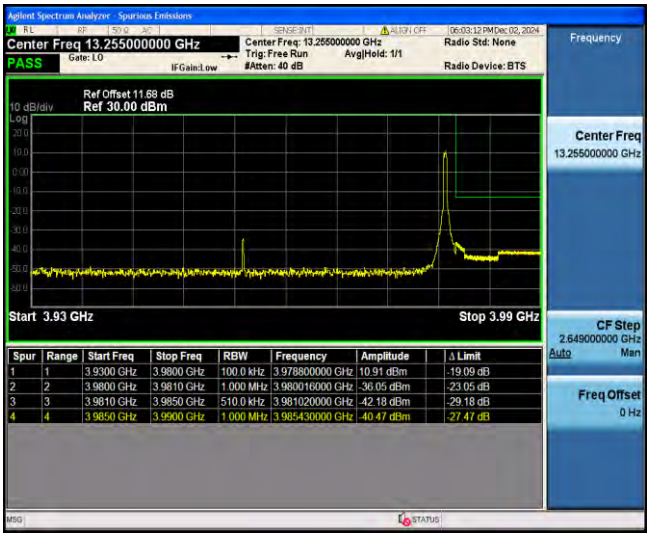
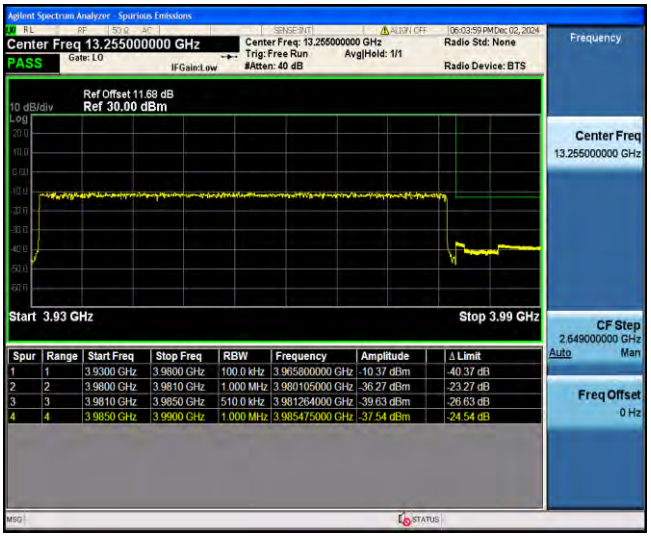


1-N77-3700-3980-PC3-30-50-H-5-CP-QPSK-Edge_1RB_Right-1@132-Ant7-3980.02-23.05--36.05-PASS



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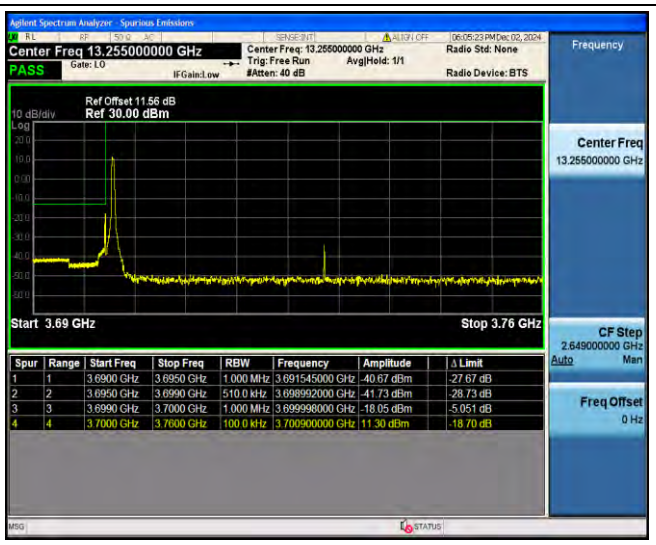
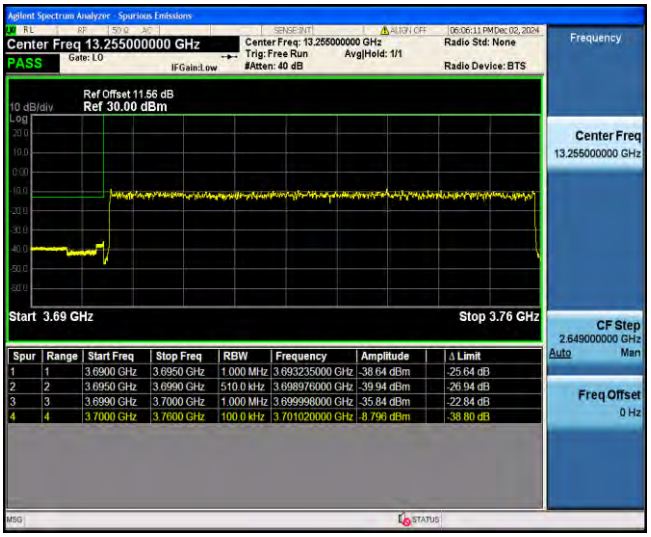


1-N77-3700-3980-PC3-30-60-L-1-DFT-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-5.05--18.05-PASS



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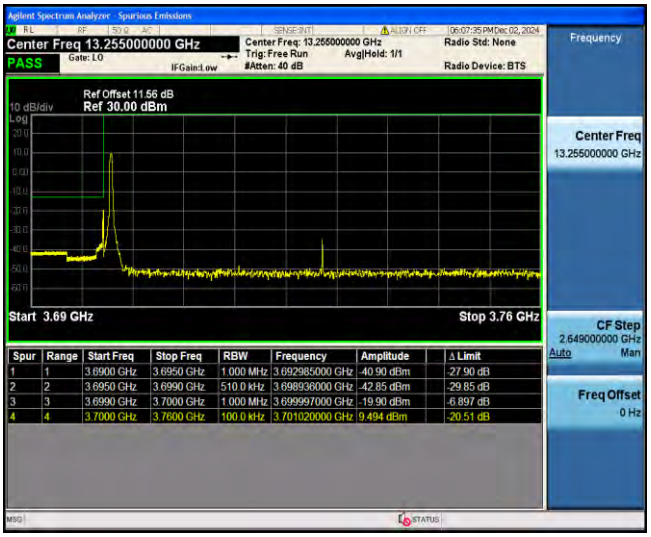
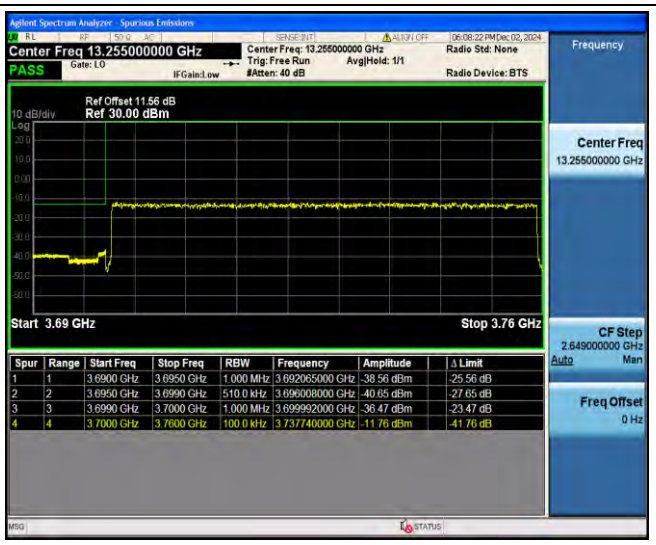
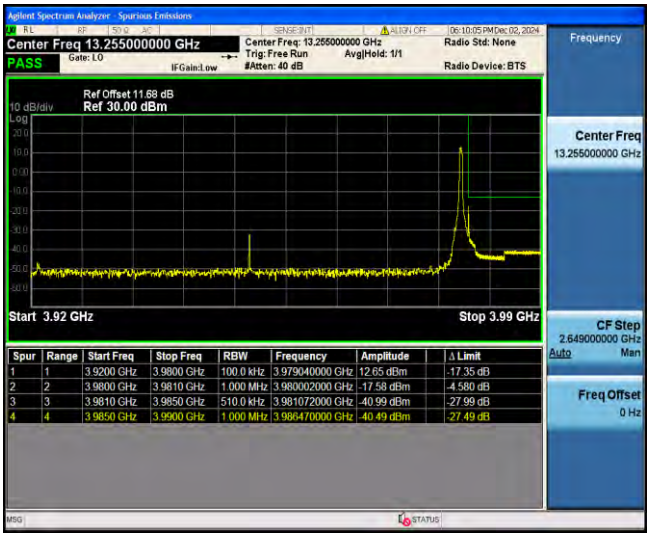


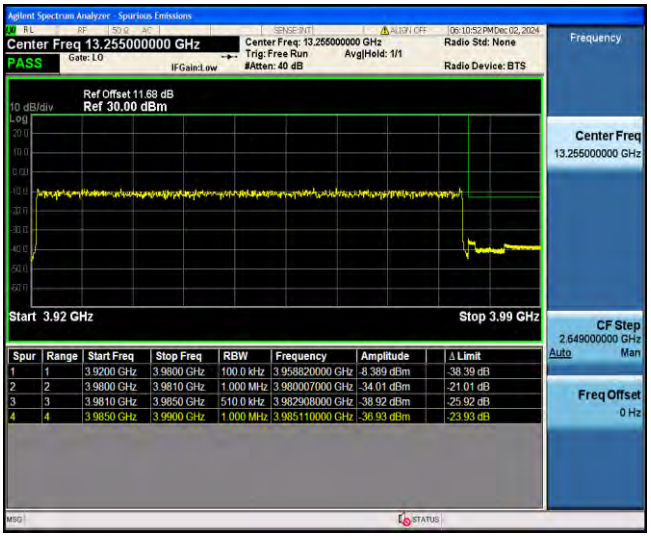
1-N77-3700-3980-PC3-30-60-L-4-CP-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-6.90--19.90-PASS



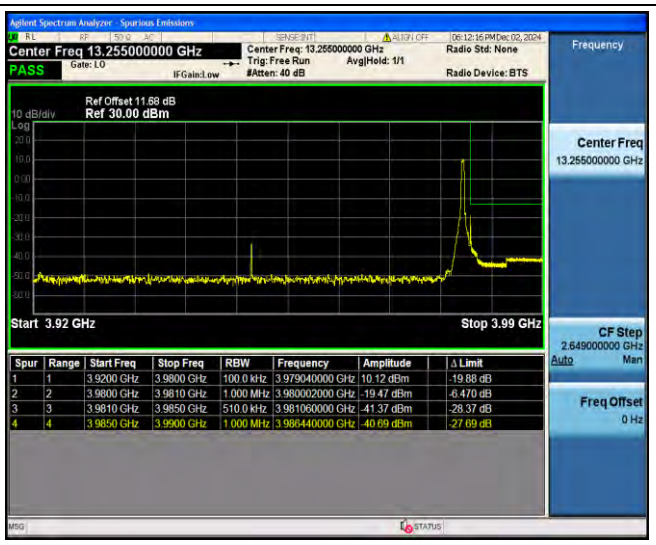
1-N77-3700-3980-PC3-30-60-L-6-CP-QPSK-Outer_Full-162@0-Ant7-3699.99-23.47--36.47-PASS



1-N77-3700-3980-PC3-30-60-H-2-DFT-QPSK-Edge_1RB_Right-1@161-Ant7-3980.00-4.58--17.58-PASS



1-N77-3700-3980-PC3-30-60-H-3-DFT-QPSK-Outer_Full-162@0-Ant7-3980.01-21.01--34.01-PASS



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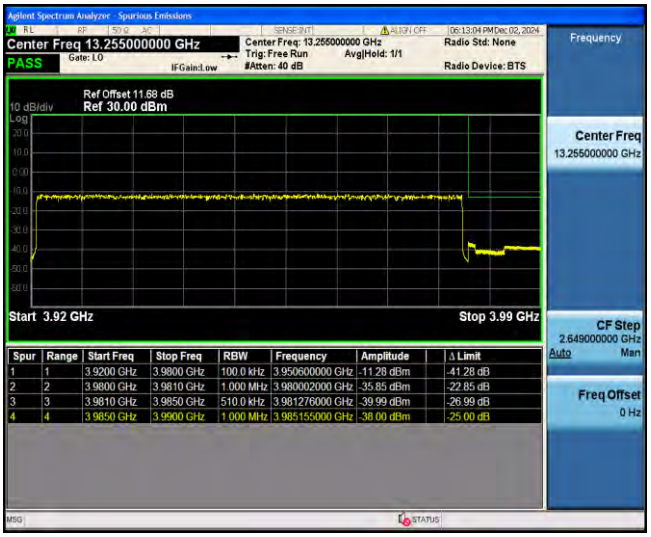

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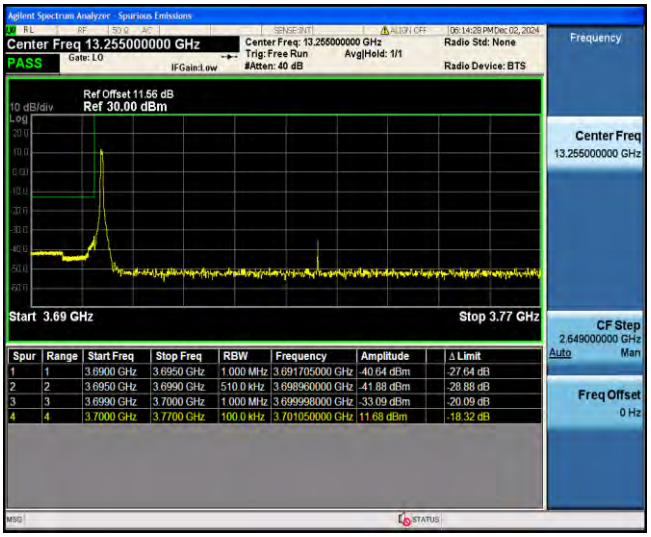
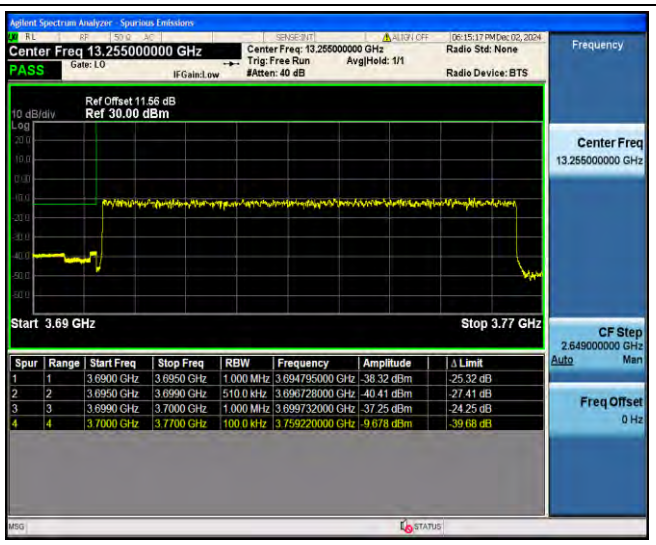


1-N77-3700-3980-PC3-30-70-L-1-DFT-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-20.09--33.09-PASS



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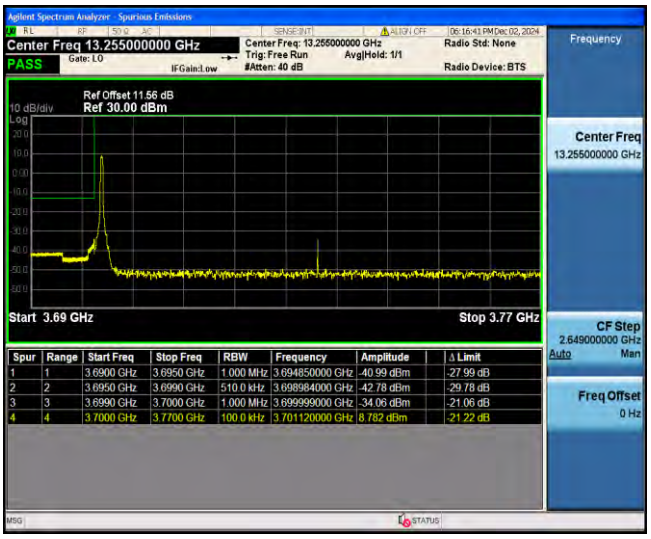

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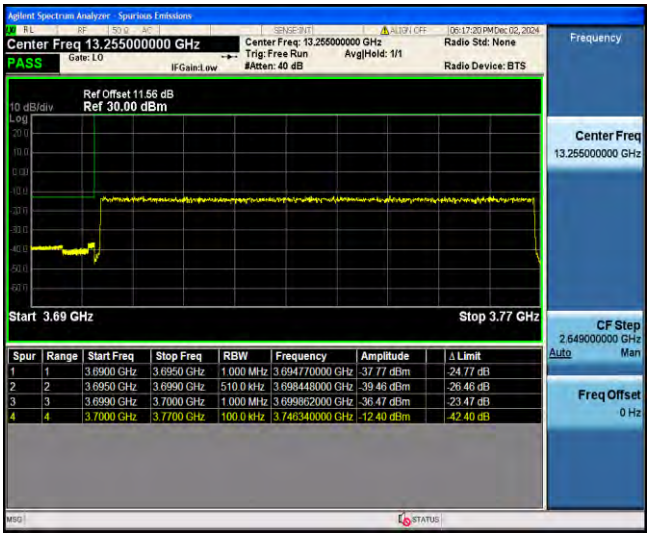

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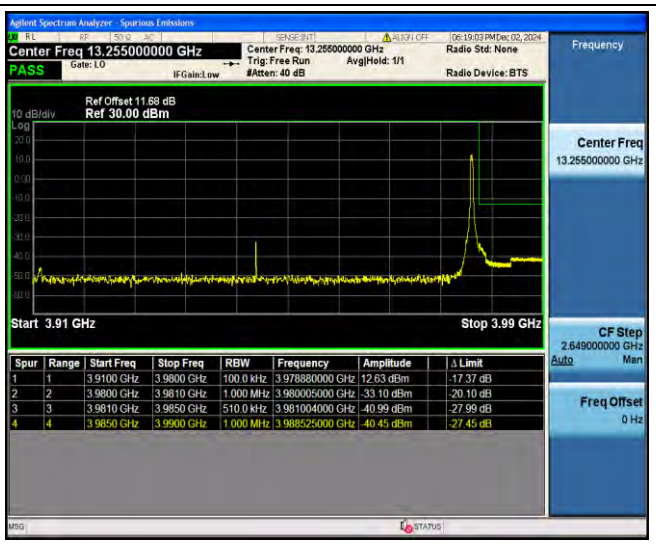
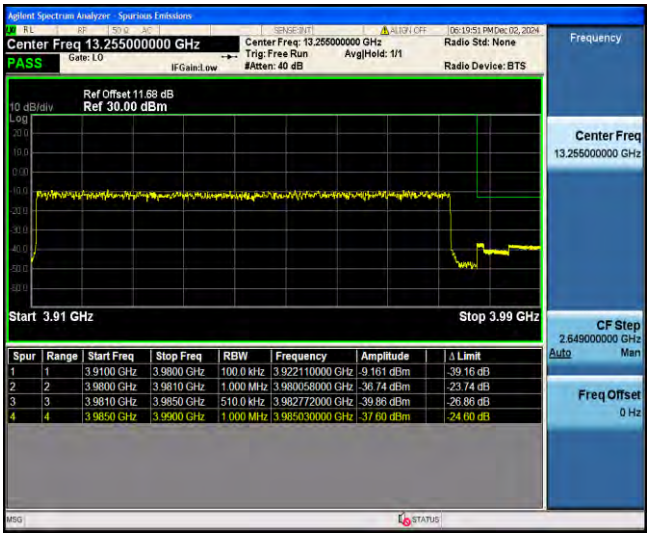


1-N77-3700-3980-PC3-30-70-H-2-DFT-QPSK-Edge_1RB_Right-1@188-Ant7-3980.01-20.10--33.10-PASS



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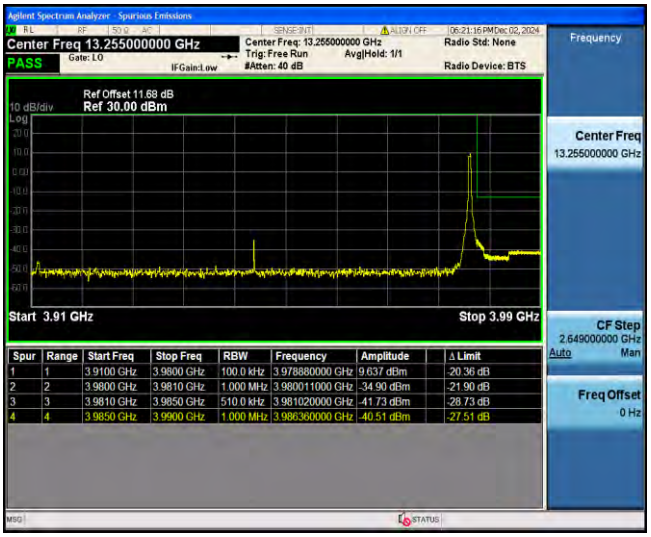

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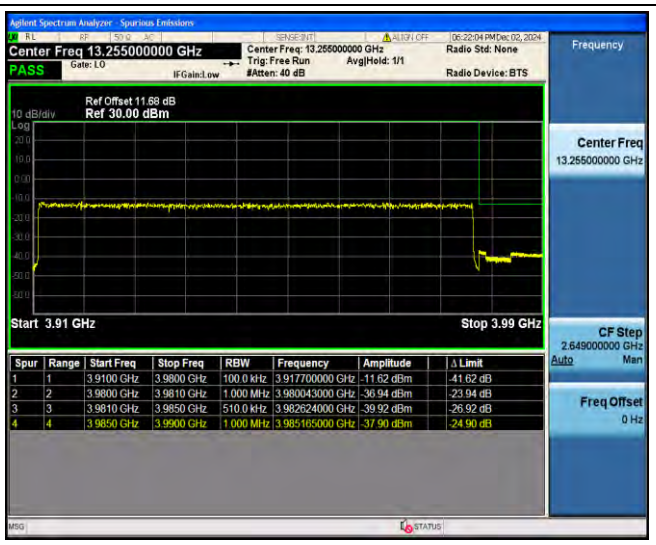

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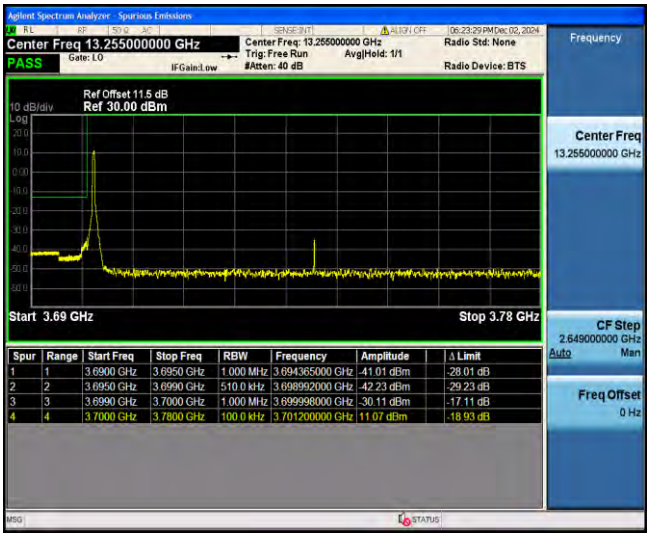
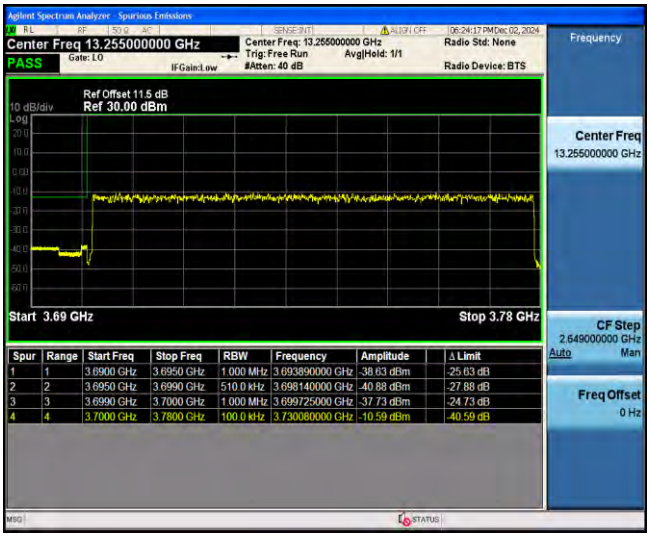


1-N77-3700-3980-PC3-30-80-L-1-DFT-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-17.11--30.11-PASS



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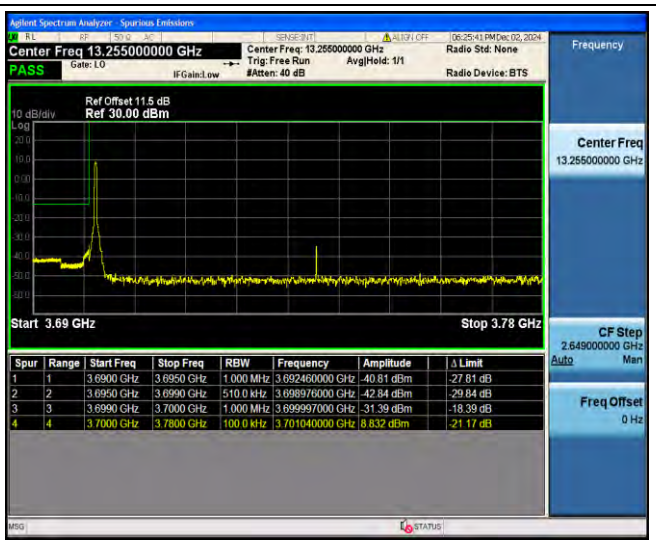

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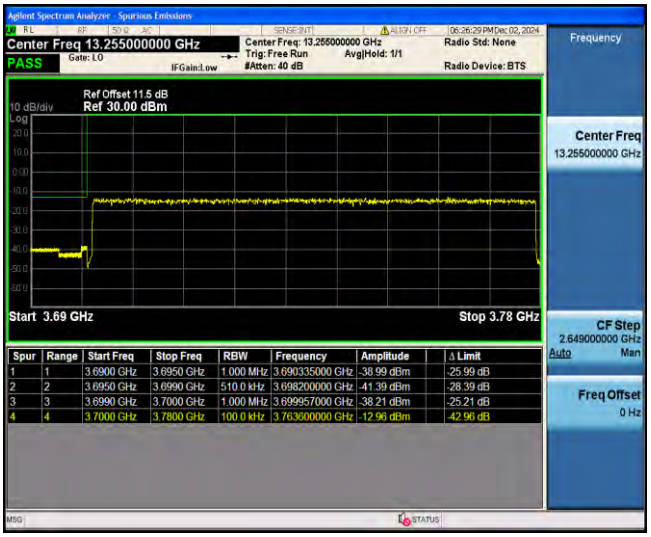

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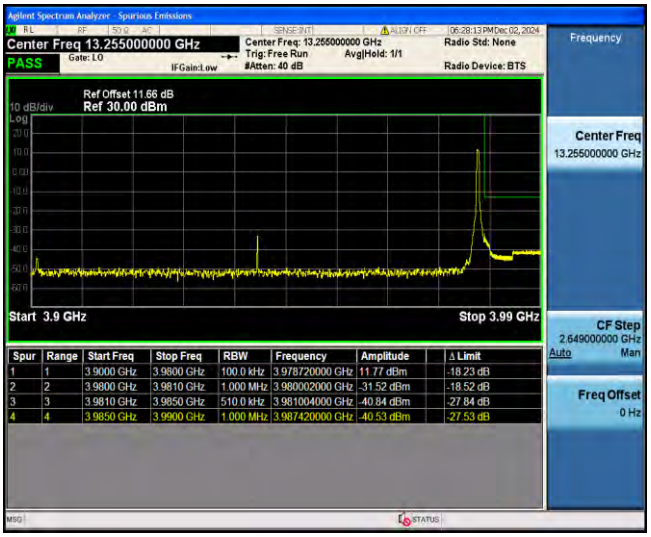
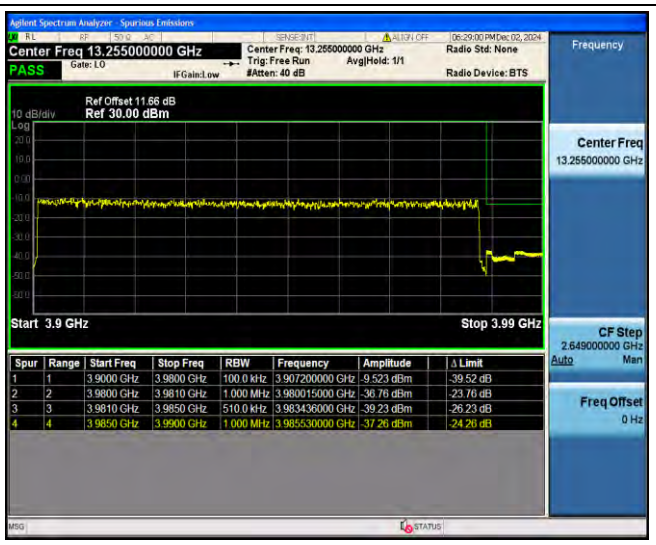
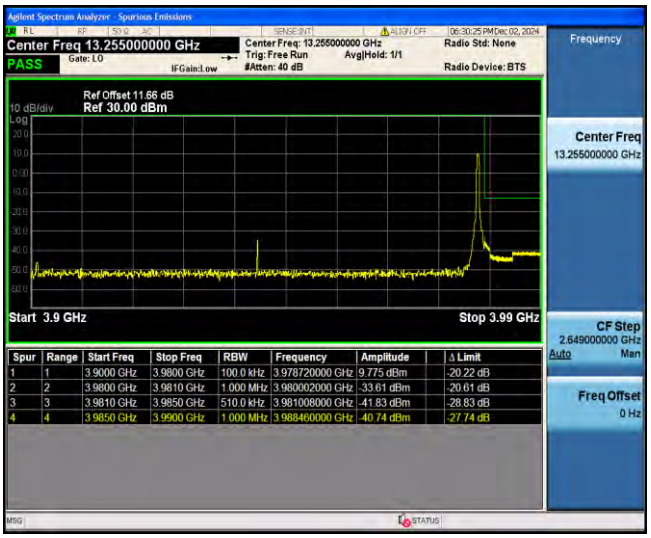


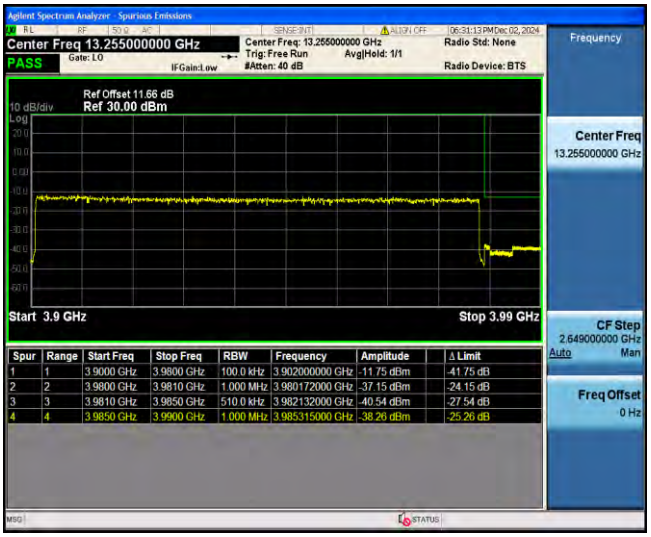
1-N77-3700-3980-PC3-30-80-H-2-DFT-QPSK-Edge_1RB_Right-1@216-Ant7-3980.00-18.52--31.52-PASS



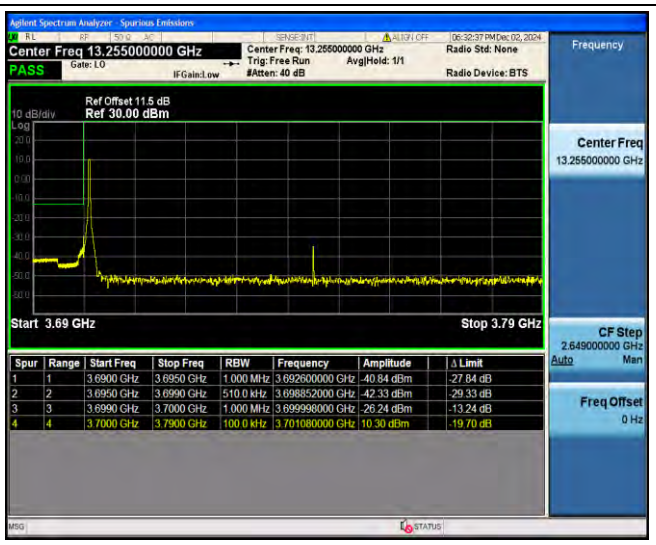
1-N77-3700-3980-PC3-30-80-H-3-DFT-QPSK-Outer_Full-216@0-Ant7-3980.02-23.76--36.76-PASS



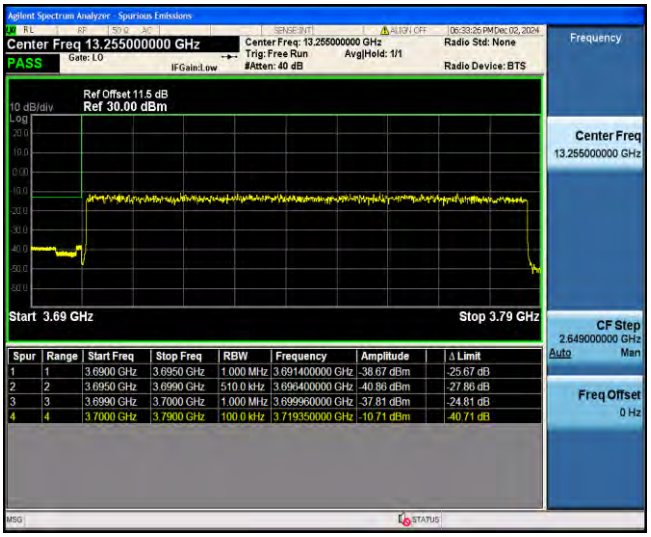
1-N77-3700-3980-PC3-30-80-H-5-CP-QPSK-Edge_1RB_Right-1@216-Ant7-3980.00-20.61--33.61-PASS



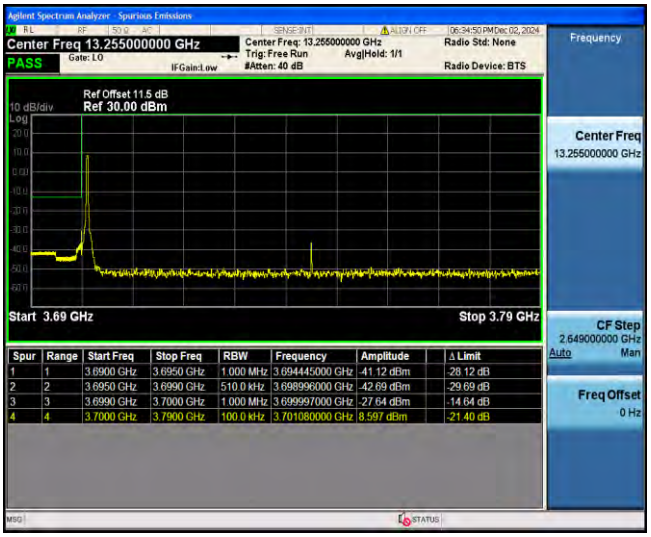
1-N77-3700-3980-PC3-30-80-H-6-CP-QPSK-Outer_Full-217@0-Ant7-3980.17-24.15--37.15-PASS



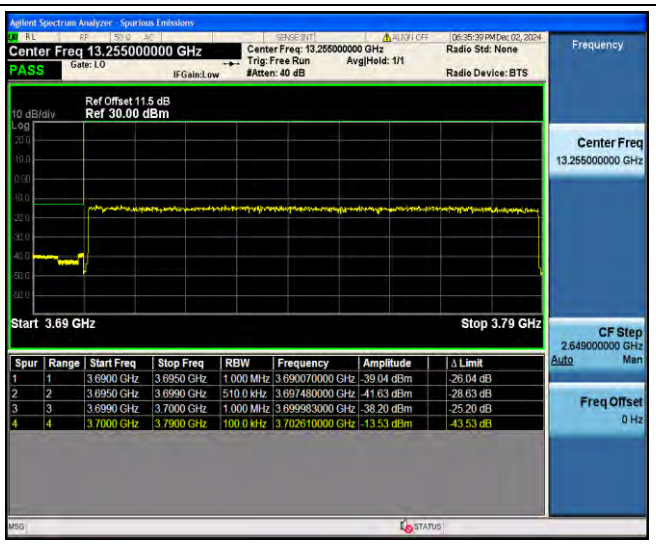
1-N77-3700-3980-PC3-30-90-L-1-DFT-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-13.24--26.24-PASS



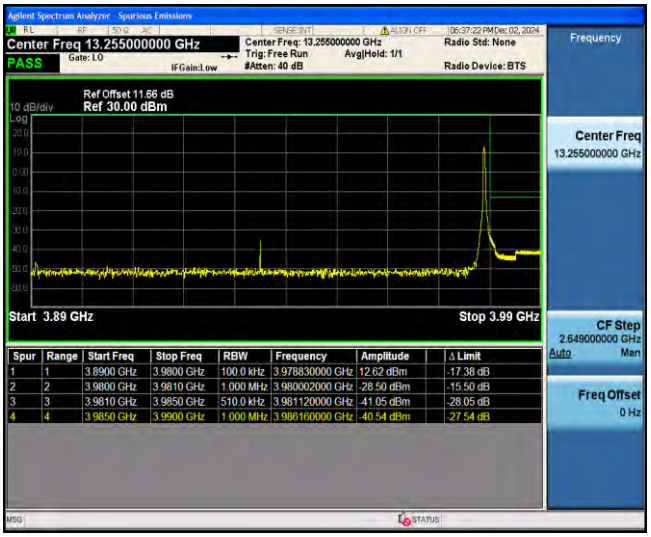
1-N77-3700-3980-PC3-30-90-L-3-DFT-QPSK-Outer_Full-240@0-Ant7-3699.96-24.81--37.81-PASS



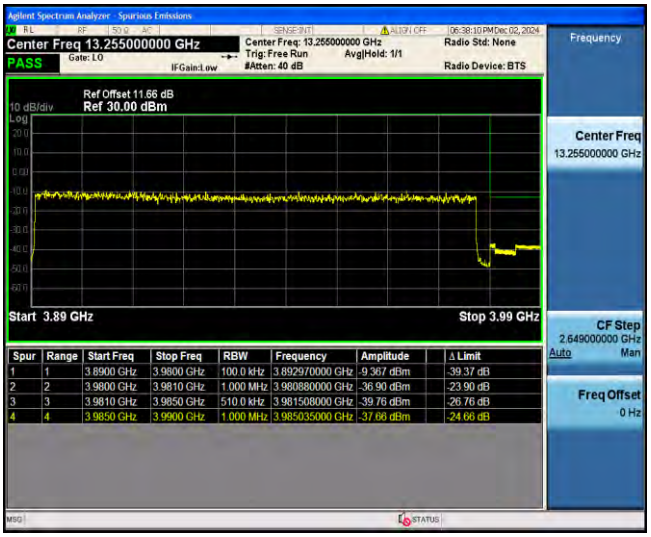
1-N77-3700-3980-PC3-30-90-L-4-CP-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-14.64--27.64-PASS



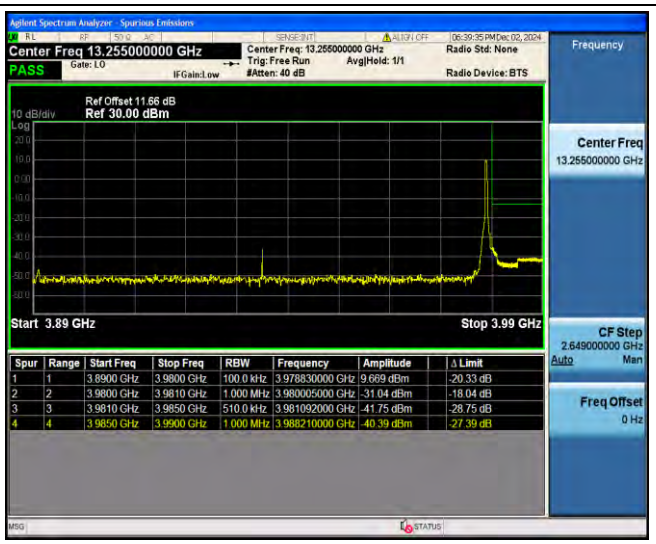
1-N77-3700-3980-PC3-30-90-L-6-CP-QPSK-Outer_Full-245@0-Ant7-3699.98-25.20--38.20-PASS



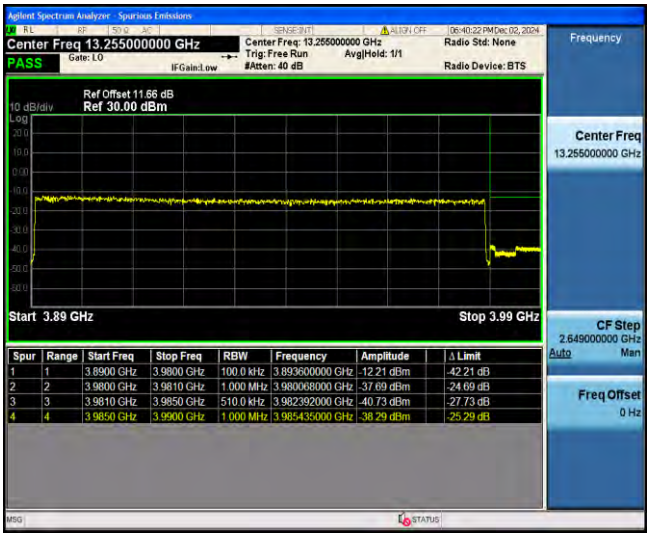
1-N77-3700-3980-PC3-30-90-H-2-DFT-QPSK-Edge_1RB_Right-1@244-Ant7-3980.00-15.50--28.50-PASS



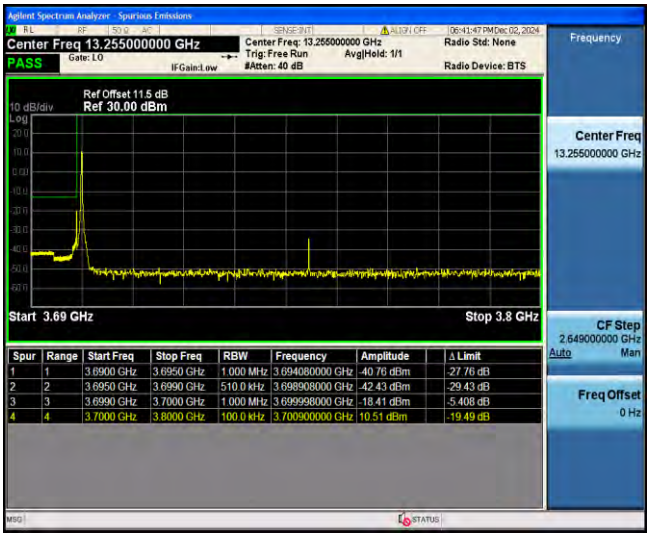
1-N77-3700-3980-PC3-30-90-H-3-DFT-QPSK-Outer_Full-240@0-Ant7-3980.88-23.90--36.90-PASS



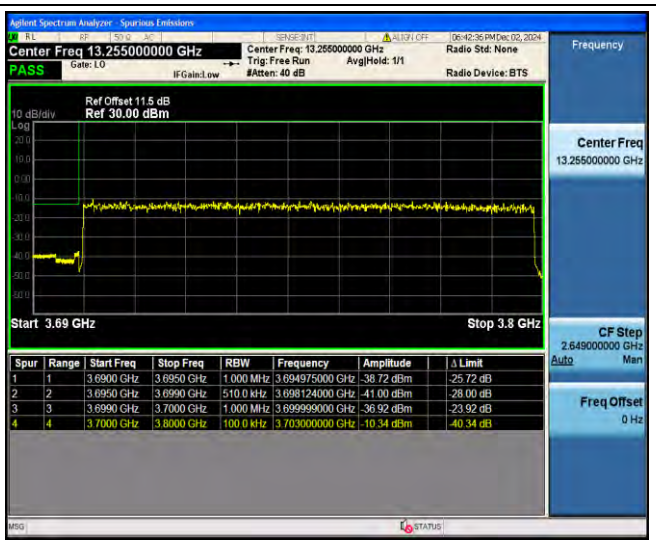
1-N77-3700-3980-PC3-30-90-H-5-CP-QPSK-Edge_1RB_Right-1@244-Ant7-3980.01-18.04--31.04-PASS



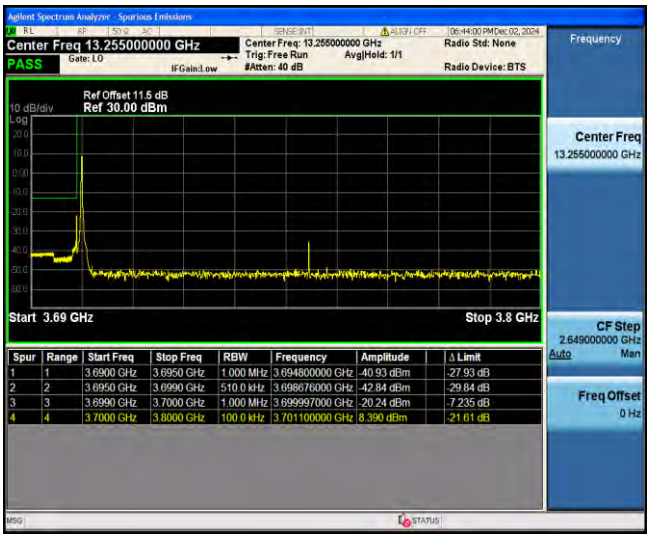
1-N77-3700-3980-PC3-30-90-H-6-CP-QPSK-Outer_Full-245@0-Ant7-3980.07-24.69--37.69-PASS



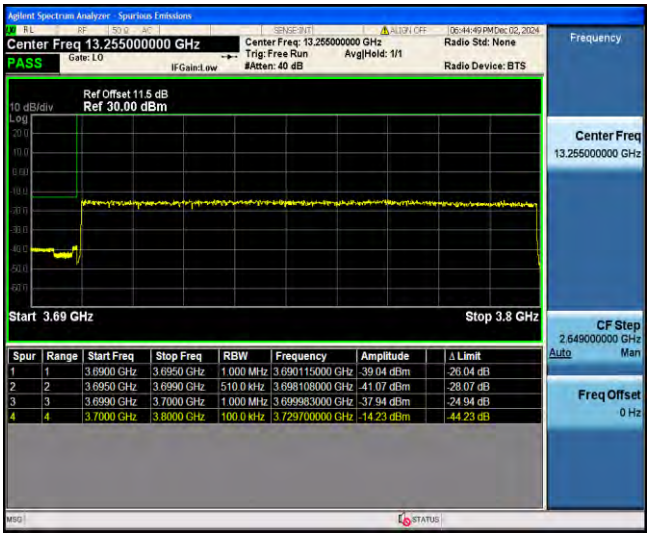
1-N77-3700-3980-PC3-30-100-L-1-DFT-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-5.41--18.41-PASS



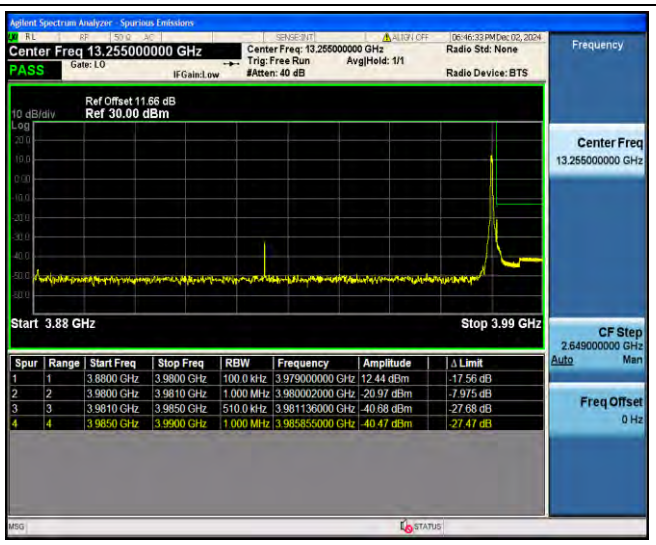
1-N77-3700-3980-PC3-30-100-L-3-DFT-QPSK-Outer_Full-270@0-Ant7-3700.00-23.92--36.92-PASS



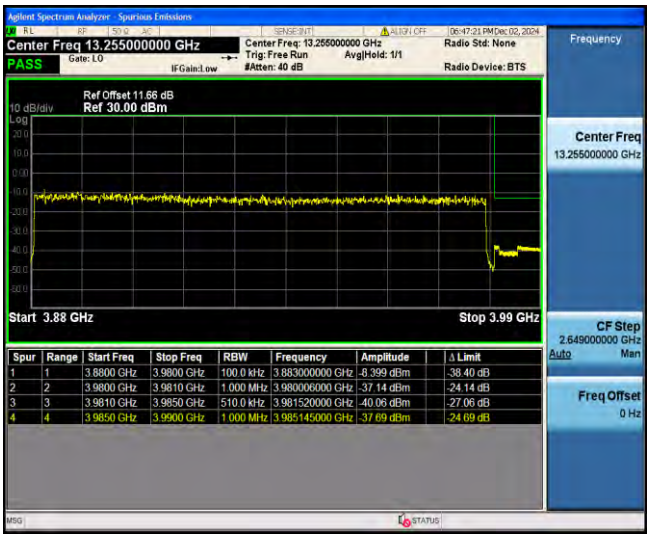
1-N77-3700-3980-PC3-30-100-L-4-CP-QPSK-Edge_1RB_Left-1@0-Ant7-3700.00-7.24--20.24-PASS



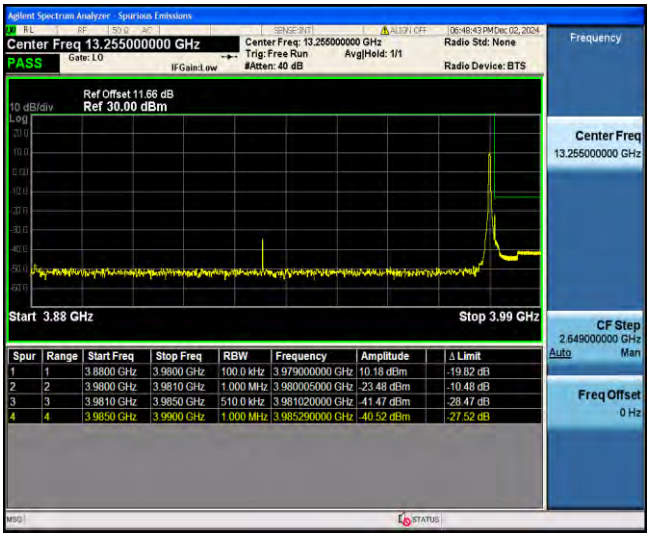
1-N77-3700-3980-PC3-30-100-L-6-CP-QPSK-Outer_Full-273@0-Ant7-3699.98-24.94--37.94-PASS



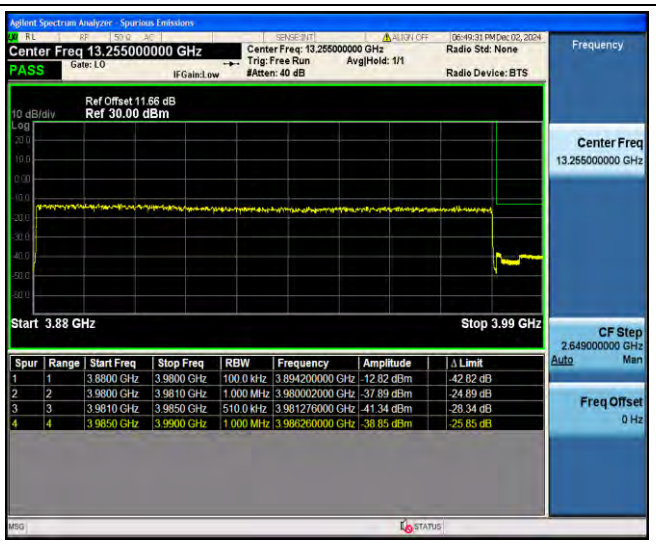
1-N77-3700-3980-PC3-30-100-H-2-DFT-QPSK-Edge_1RB_Right-1@272-Ant7-3980.00-7.97--20.97-PASS



1-N77-3700-3980-PC3-30-100-H-3-DFT-QPSK-Outer_Full-270@0-Ant7-3980.01-24.14--37.14-PASS



1-N77-3700-3980-PC3-30-100-H-5-CP-QPSK-Edge_1RB_Right-1@272-Ant7-3980.01-10.48--23.48-PASS



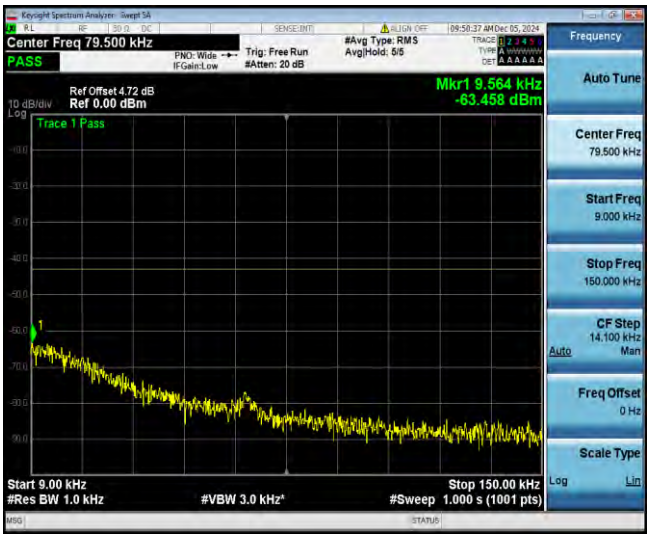
1-N77-3700-3980-PC3-30-100-H-6-CP-QPSK-Outer_Full-273@0-Ant7-3980.00-24.89--37.89-PASS

Conducted Spurious Emission for SA

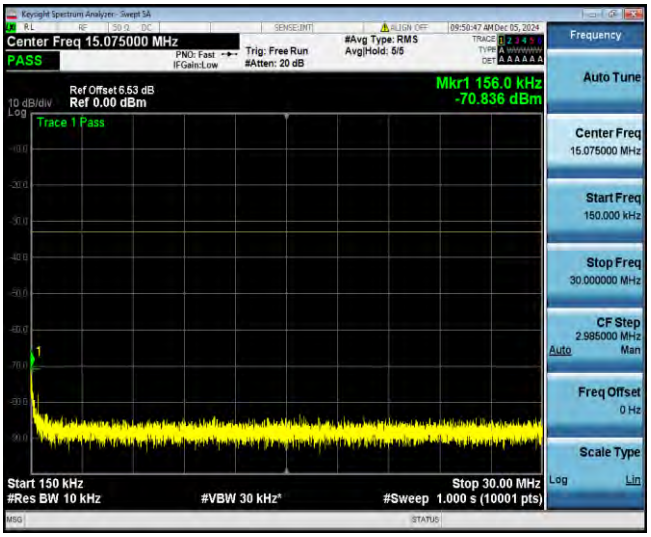
Test Result

Band	SCS	Bandwidth	Modulation	Channel	StartFreq	StopFreq	RB Config	Result (dBm)	Limit (dBm)	Verdict
N77-3700-3980	30	100	DFT-QPSK	L	0.009	0.15	1@0	-63.46	-43	PASS
N77-3700-3980	30	100	DFT-QPSK	L	0.15	30	1@0	-70.84	-33	PASS
N77-3700-3980	30	100	DFT-QPSK	L	30	1000	1@0	-56.66	-23	PASS
N77-3700-3980	30	100	DFT-QPSK	L	1000	6000	1@0	-36.98	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	L	6000	26000	1@0	-33.33	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	L	26000	40000	1@0	-37.13	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	M	0.009	0.15	1@0	-62.44	-43	PASS
N77-3700-3980	30	100	DFT-QPSK	M	0.15	30	1@0	-72.05	-33	PASS
N77-3700-3980	30	100	DFT-QPSK	M	30	1000	1@0	-56.28	-23	PASS
N77-3700-3980	30	100	DFT-QPSK	M	1000	6000	1@0	-37.02	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	M	6000	26000	1@0	-33.61	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	M	26000	40000	1@0	-37.05	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	H	0.009	0.15	1@0	-61.92	-43	PASS
N77-3700-3980	30	100	DFT-QPSK	H	0.15	30	1@0	-71.21	-33	PASS
N77-3700-3980	30	100	DFT-QPSK	H	30	1000	1@0	-56.16	-23	PASS
N77-3700-3980	30	100	DFT-QPSK	H	1000	6000	1@0	-36.96	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	H	6000	26000	1@0	-33.55	-13	PASS
N77-3700-3980	30	100	DFT-QPSK	H	26000	40000	1@0	-37.09	-13	PASS

Test Graphs



1-N77-3700-3980-PC3-30-100-L-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-0.009-0.15-Ant7-0.01--63.46--43-PASS



1-N77-3700-3980-PC3-30-100-L-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-0.15-30-Ant7-0.16--70.84--33-PASS

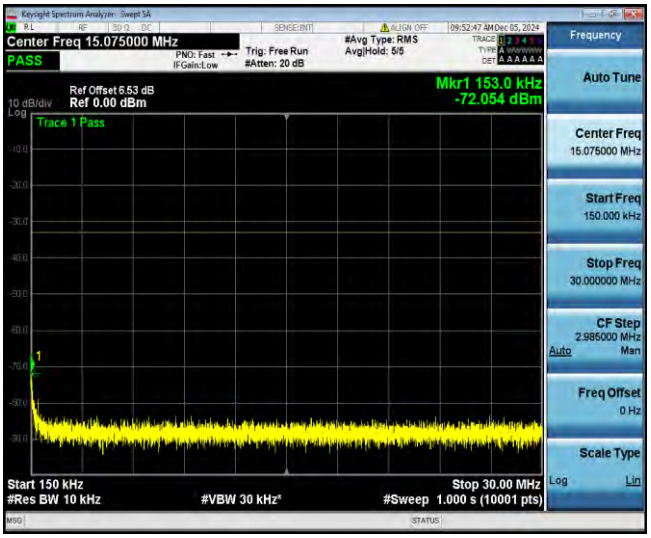
1-N77-3700-3980-PC3-30-100-L-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-30-1000-Ant7-906.20--56.66--23-PASS

1-N77-3700-3980-PC3-30-100-L-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-1000-6000-Ant7-3685.50--36.98--13-PASS

1-N77-3700-3980-PC3-30-100-L-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-6000-26000-Ant7-25606.00--33.33--13-PASS

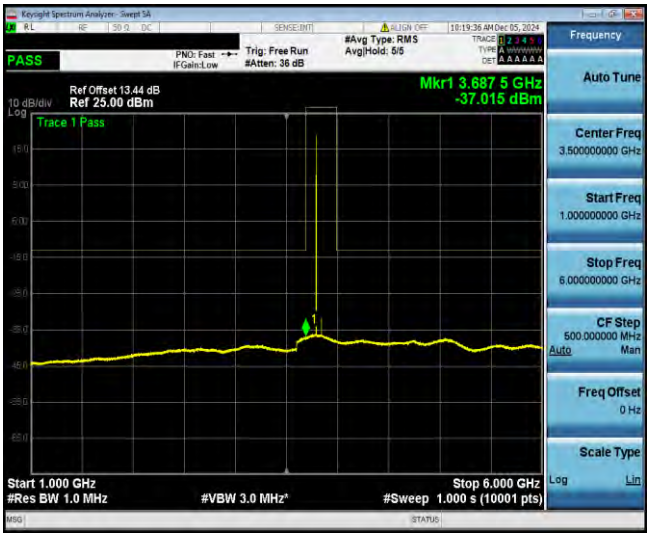
1-N77-3700-3980-PC3-30-100-L-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-26000-40000-Ant7-38910.10--37.13--13-PASS

1-N77-3700-3980-PC3-30-100-M-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-0.009-0.15-Ant7-0.01--62.44--43-PASS



1-N77-3700-3980-PC3-30-100-M-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-0.15-30-Ant7-0.15--72.05--33-PASS

1-N77-3700-3980-PC3-30-100-M-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-30-1000-Ant7-865.17--56.28--23-PASS

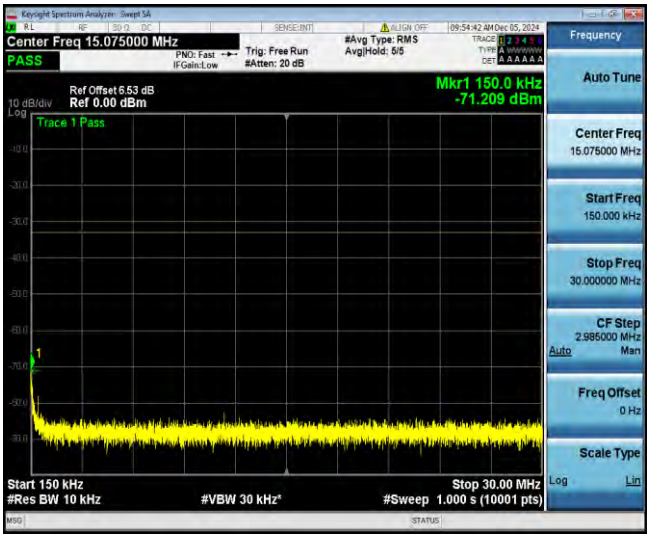


1-N77-3700-3980-PC3-30-100-M-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-1000-6000-Ant7-3672.50--37.02--13-PASS

1-N77-3700-3980-PC3-30-100-M-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-6000-26000-Ant7-25712.00--33.61--13-PASS

1-N77-3700-3980-PC3-30-100-M-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-26000-40000-Ant7-38924.80--37.05--13-PASS

1-N77-3700-3980-PC3-30-100-H-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-0.009-0.15-Ant7-0.01--61.92--43-PASS



1-N77-3700-3980-PC3-30-100-H-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-0.15-30-Ant7-0.15--71.21--33-PASS

1-N77-3700-3980-PC3-30-100-H-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-30-1000-Ant7-905.33--56.16--23-PASS

1-N77-3700-3980-PC3-30-100-H-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-1000-6000-Ant7-3683.00--36.96--13-PASS

1-N77-3700-3980-PC3-30-100-H-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-6000-26000-Ant7-25616.00--33.55--13-PASS

1-N77-3700-3980-PC3-30-100-H-1-NS_01-DFT-QPSK-Edge_1RB_Left-1@0-26000-40000-Ant7-38908.70--37.09--13-PASS

Frequency Stability for SA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage (Vdc)	Temperature(℃)	Deviation(Hz)	Deviation (ppm)	Verdict
N77-3700-3980	30	100	DFT-QPSK	M	270@0	HV	NT	-3.57	-0.00093	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	NT	5.79	0.00151	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	LV	NT	-2.11	-0.00055	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	HV	NT	-3.38	-0.00088	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	NT	-2.48	-0.00065	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	LV	NT	-2.82	-0.00073	PASS

Frequency Error VS. Temperature

Temperature										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage (Vdc)	Temperature(℃)	Deviation(Hz)	Deviation (ppm)	Verdict
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	50	-5.268000	-0.001372	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	-20	-0.045000	-0.000012	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	-10	-0.819000	-0.000213	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	0	-1.343000	-0.000350	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	10	1.892000	0.000493	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	20	-4.303000	-0.001121	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	30	-5.106000	-0.001330	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	-30	-0.862000	-0.000224	PASS
N77-3700-3980	30	100	DFT-QPSK	M	270@0	NV	40	-2.283000	-0.000595	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	50	-3.473000	-0.000904	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	-20	-5.775000	-0.001504	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	-10	-3.948000	-0.001028	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	0	-0.431000	-0.000112	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	10	-6.229000	-0.001622	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	20	-0.212000	-0.000055	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	30	-2.853000	-0.000743	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	40	-3.419000	-0.000890	PASS
N77-3700-3980	30	100	CP-QPSK	M	273@0	NV	-30	-7.087000	-0.001846	PASS

Field Strength of Spurious Radiation

NR N77b(3700-3980MHz) ANT5-Low channel, Modulation: QPSK, Bandwidth:100MHz, 1RB#1								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7410.0	-59.44	-13	-46.44	-66.13	4.94	11.63	Horizontal	Pass
11115.0	-55.16	-13	-42.16	-62.61	5.81	13.26	Horizontal	Pass
14820.0	-54.17	-13	-41.17	-61.73	6.92	14.48	Horizontal	Pass
7410.0	-58.36	-13	-45.36	-65.05	4.94	11.63	Vertical	Pass
11115.0	-55.47	-13	-42.47	-62.92	5.81	13.26	Vertical	Pass
14820.0	-54.09	-13	-41.09	-61.65	6.92	14.48	Vertical	Pass

NR N77b(3700-3980MHz) ANT5-Middle channel, Modulation: QPSK, Bandwidth:100MHz, 1RB#1								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7590.0	-60.29	-13	-47.29	-67.19	4.95	11.85	Horizontal	Pass
11385.0	-55.96	-13	-42.96	-63.35	5.86	13.25	Horizontal	Pass
15180.0	-54.76	-13	-41.76	-62.09	7.09	14.42	Horizontal	Pass
7590.0	-60.3	-13	-47.3	-67.2	4.95	11.85	Vertical	Pass
11385.0	-55.92	-13	-42.92	-63.31	5.86	13.25	Vertical	Pass
15180.0	-54.77	-13	-41.77	-62.1	7.09	14.42	Vertical	Pass

NR N77b(3700-3980MHz) ANT5-High channel, Modulation: QPSK, Bandwidth:100MHz, 1RB#1								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
7770.0	-59.62	-13	-46.62	-66.72	4.96	12.06	Horizontal	Pass
11655.0	-55.95	-13	-42.95	-63.3	5.9	13.25	Horizontal	Pass
15540.0	-53.81	-13	-40.81	-60.91	7.12	14.22	Horizontal	Pass
7770.0	-59.53	-13	-46.53	-66.63	4.96	12.06	Vertical	Pass
11655.0	-55.67	-13	-42.67	-63.02	5.9	13.25	Vertical	Pass
15540.0	-53.64	-13	-40.64	-60.74	7.12	14.22	Vertical	Pass

NSA_2A_n77A 3700-3980-Low channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
7410.0	-59.77	-13	-46.77	-66.46	4.94	11.63	Horizontal	Pass
11115.0	-55.33	-13	-42.33	-62.78	5.81	13.26	Horizontal	Pass
14820.0	-54.44	-13	-41.44	-62.0	6.92	14.48	Horizontal	Pass
7410.0	-59.61	-13	-46.61	-66.3	4.94	11.63	Vertical	Pass
11115.0	-55.35	-13	-42.35	-62.8	5.81	13.26	Vertical	Pass
14820.0	-54.61	-13	-41.61	-62.17	6.92	14.48	Vertical	Pass

NSA_2A_n77A 3700-3980-Middle channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
7590.0	-59.75	-13	-46.75	-66.65	4.95	11.85	Horizontal	Pass
11385.0	-55.85	-13	-42.85	-63.24	5.86	13.25	Horizontal	Pass
15180.0	-54.66	-13	-41.66	-61.99	7.09	14.42	Horizontal	Pass
7590.0	-59.63	-13	-46.63	-66.53	4.95	11.85	Vertical	Pass
11385.0	-56.02	-13	-43.02	-63.41	5.86	13.25	Vertical	Pass
15180.0	-54.54	-13	-41.54	-61.87	7.09	14.42	Vertical	Pass

NSA_2A_n77A 3700-3980-High channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
7770.0	-59.65	-13	-46.65	-66.75	4.96	12.06	Horizontal	Pass
11655.0	-55.62	-13	-42.62	-62.97	5.9	13.25	Horizontal	Pass
15540.0	-53.81	-13	-40.81	-60.91	7.12	14.22	Horizontal	Pass
7770.0	-59.41	-13	-46.41	-66.51	4.96	12.06	Vertical	Pass
11655.0	-55.49	-13	-42.49	-62.84	5.9	13.25	Vertical	Pass
15540.0	-53.83	-13	-40.83	-60.93	7.12	14.22	Vertical	Pass