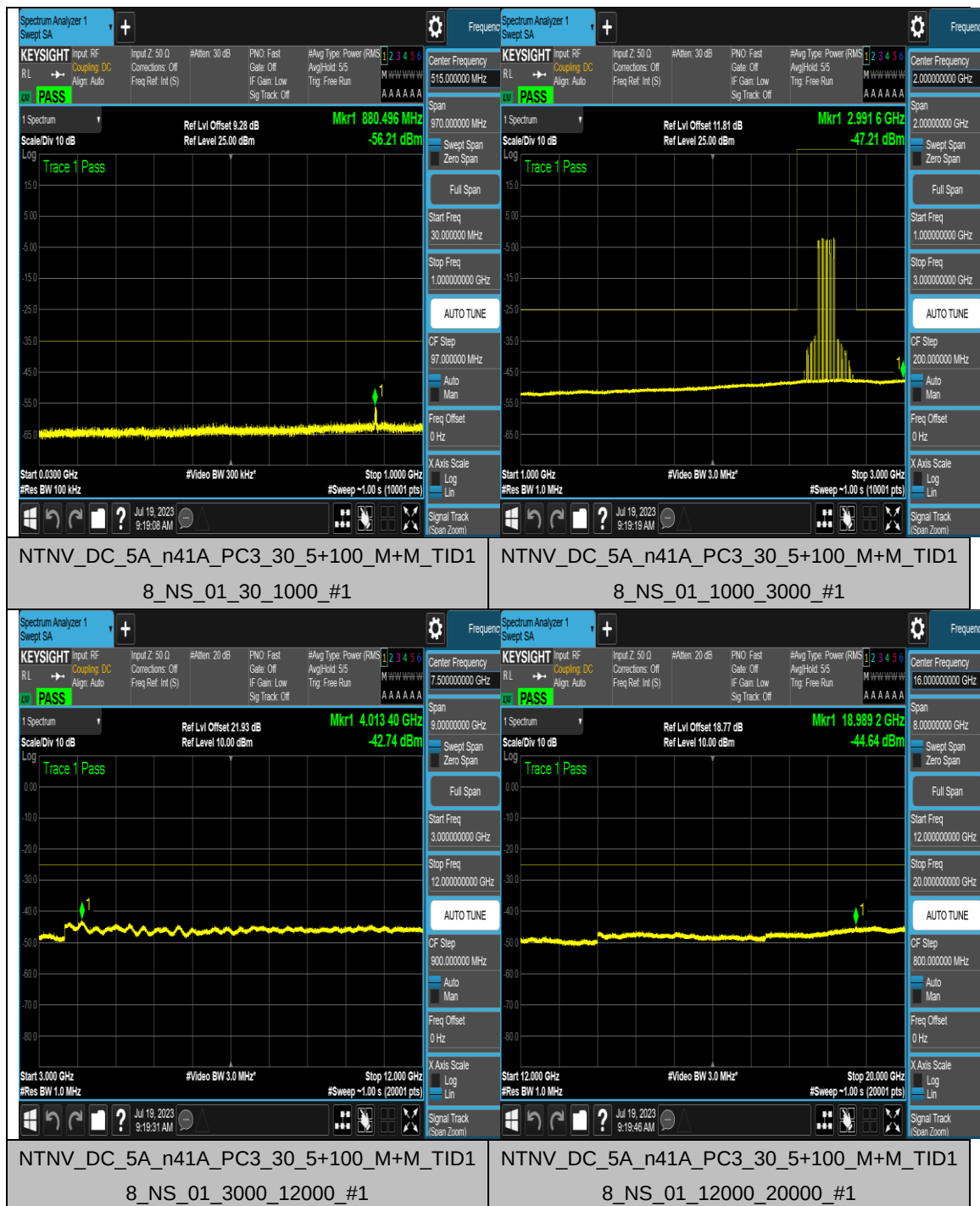
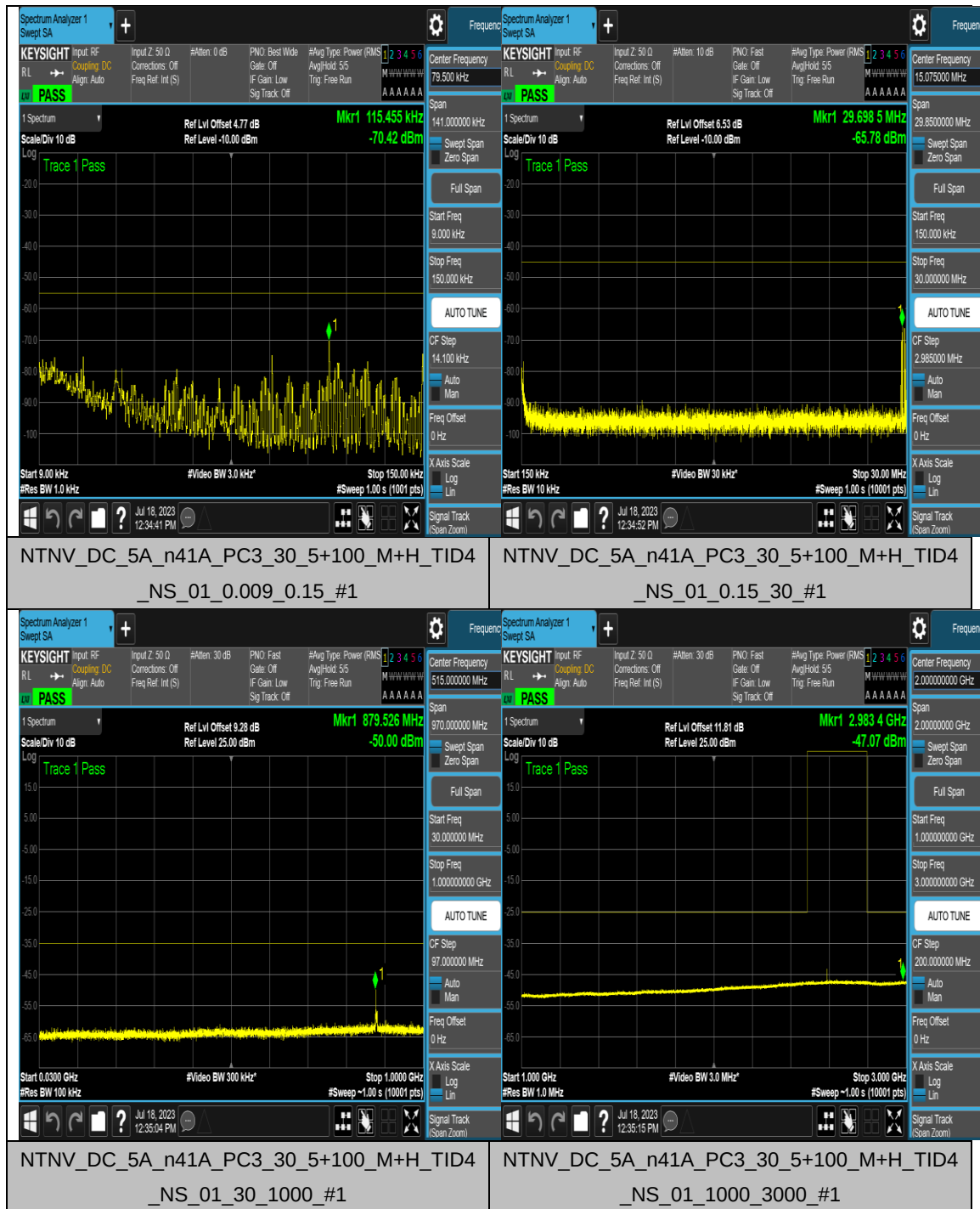
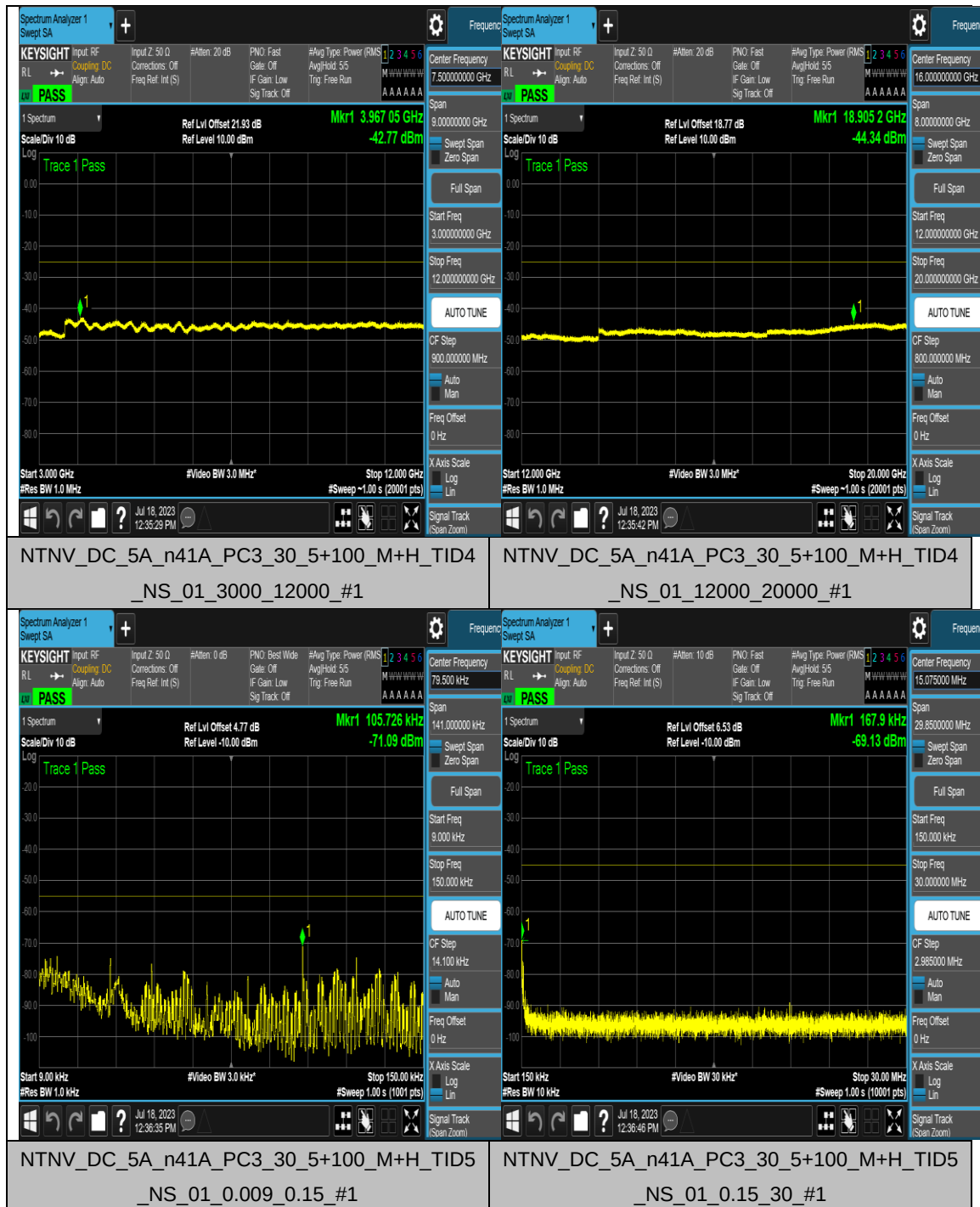
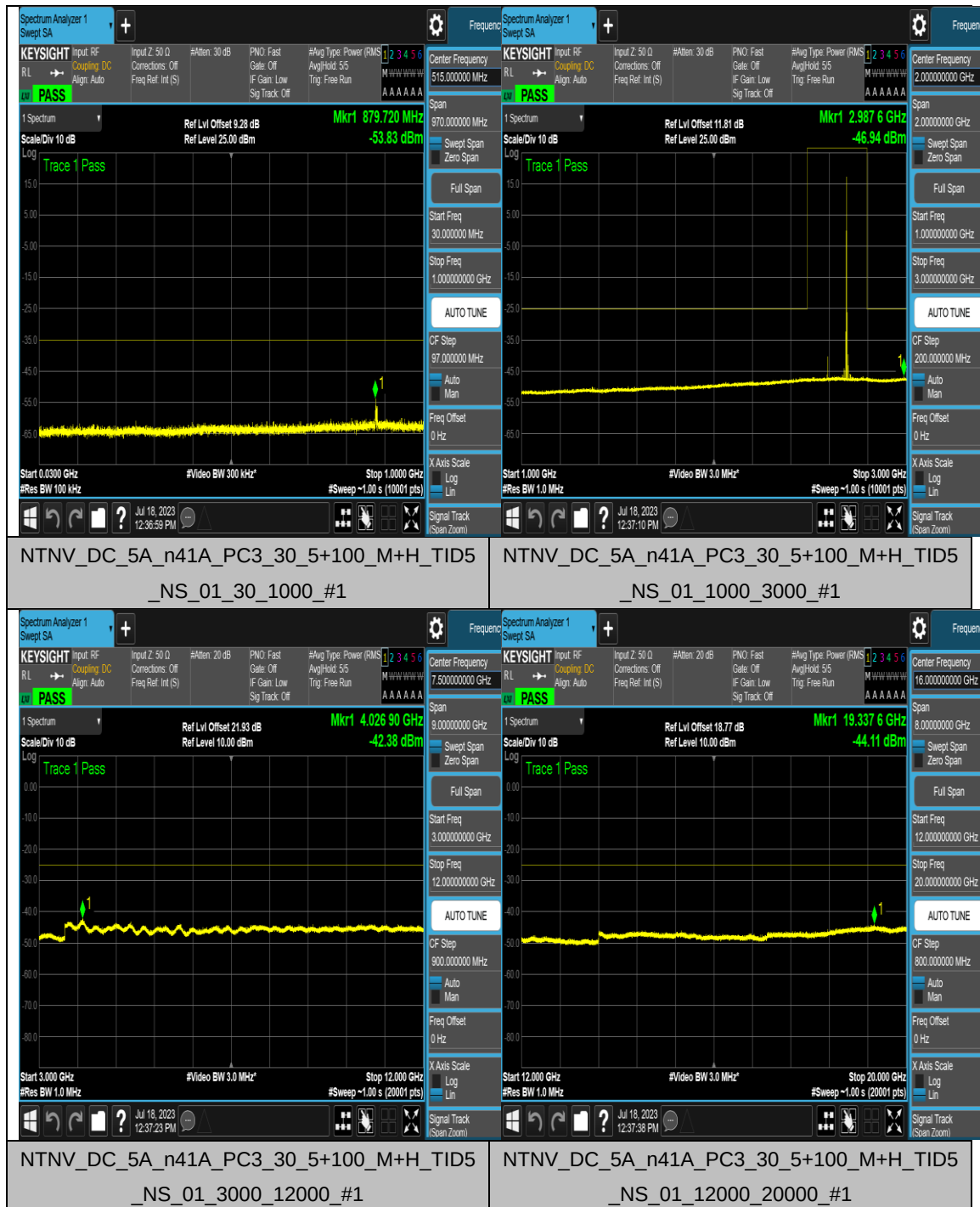
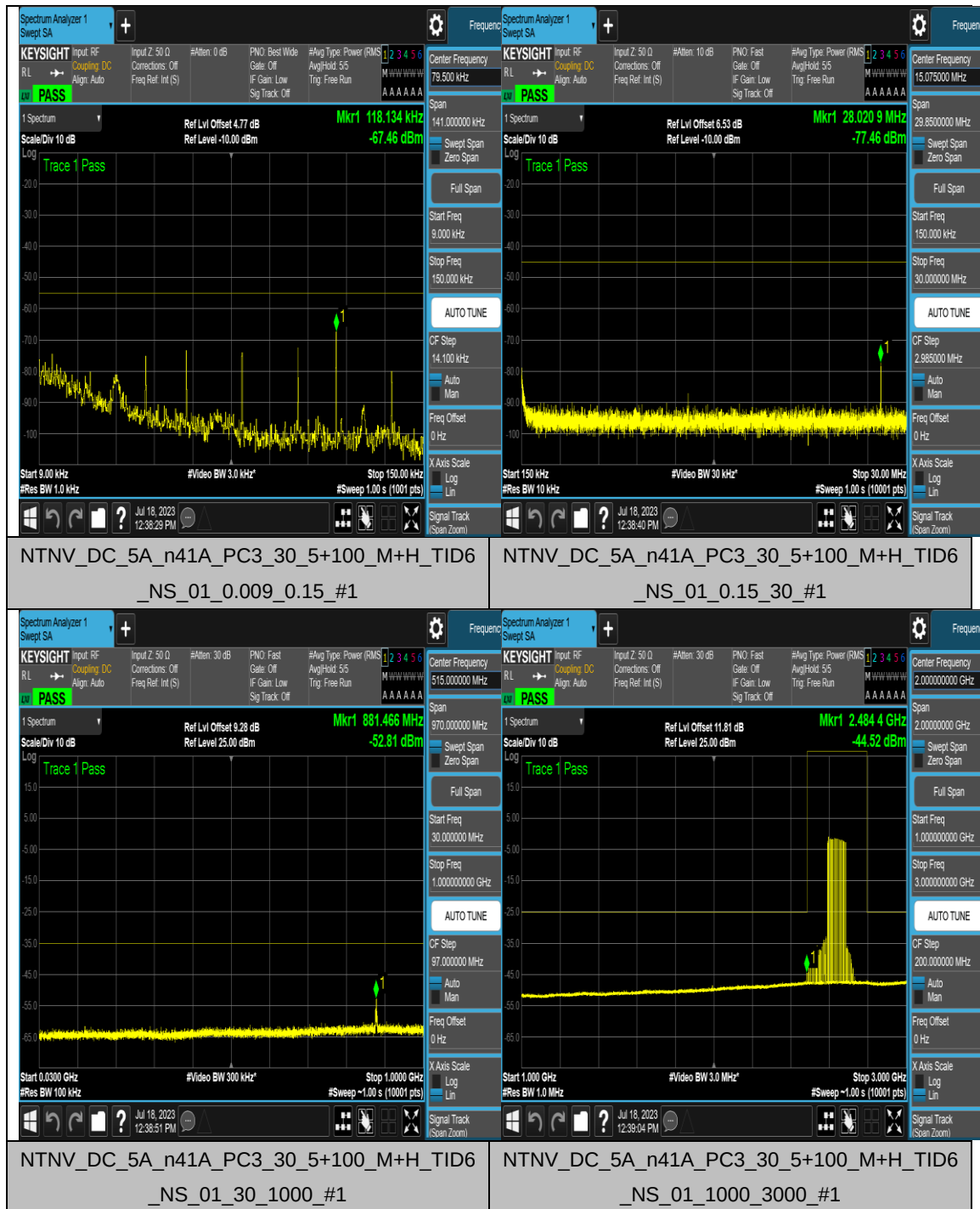


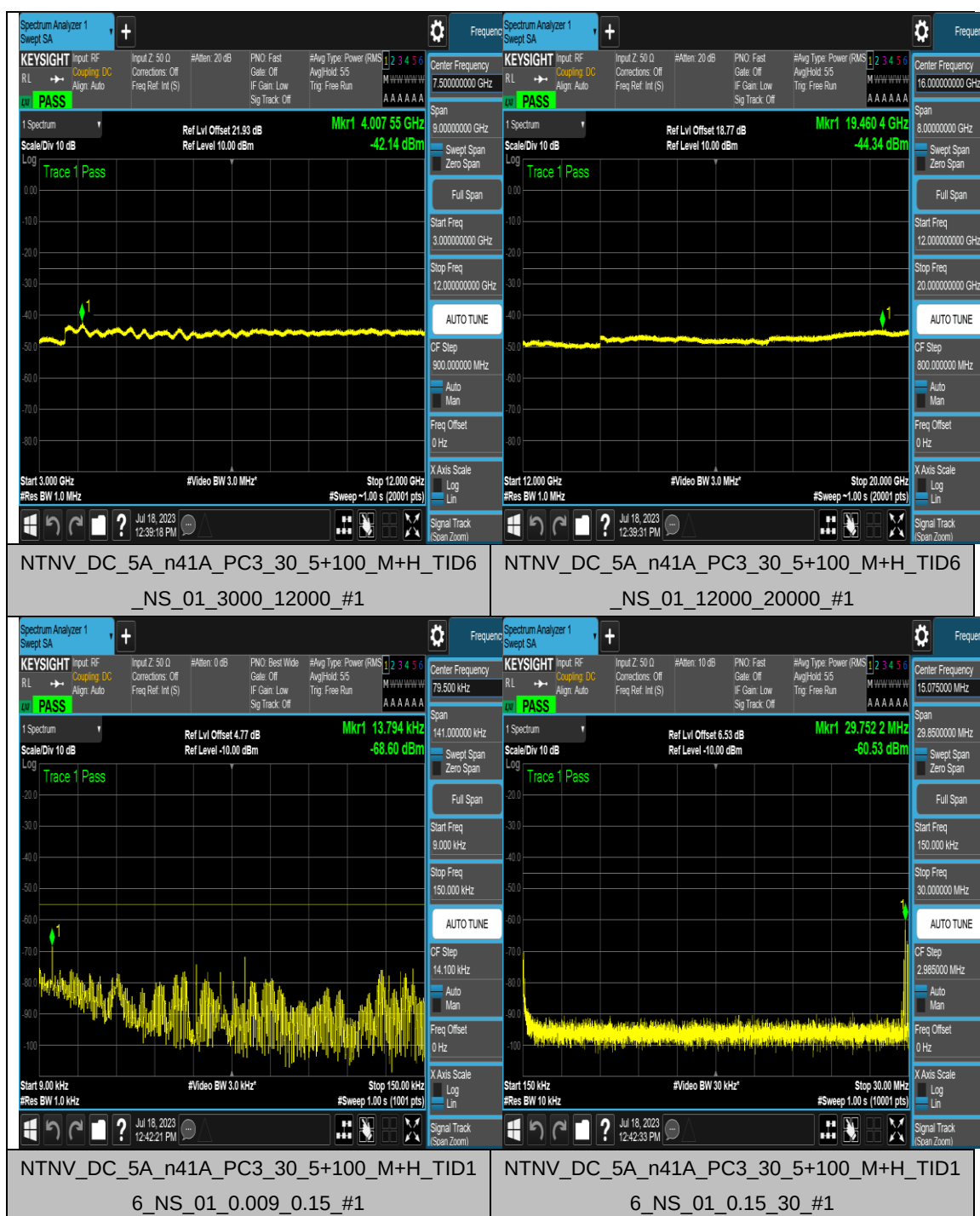




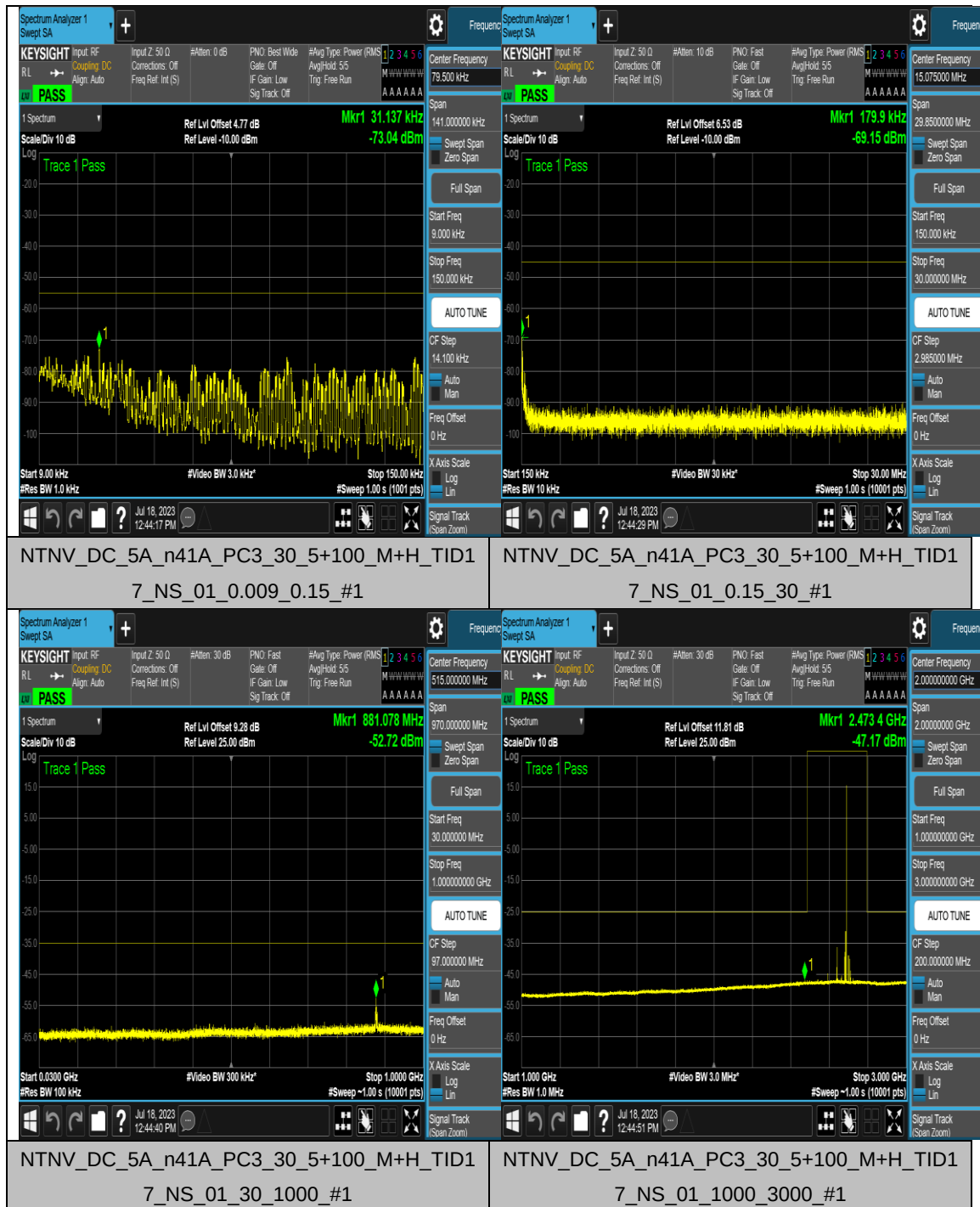


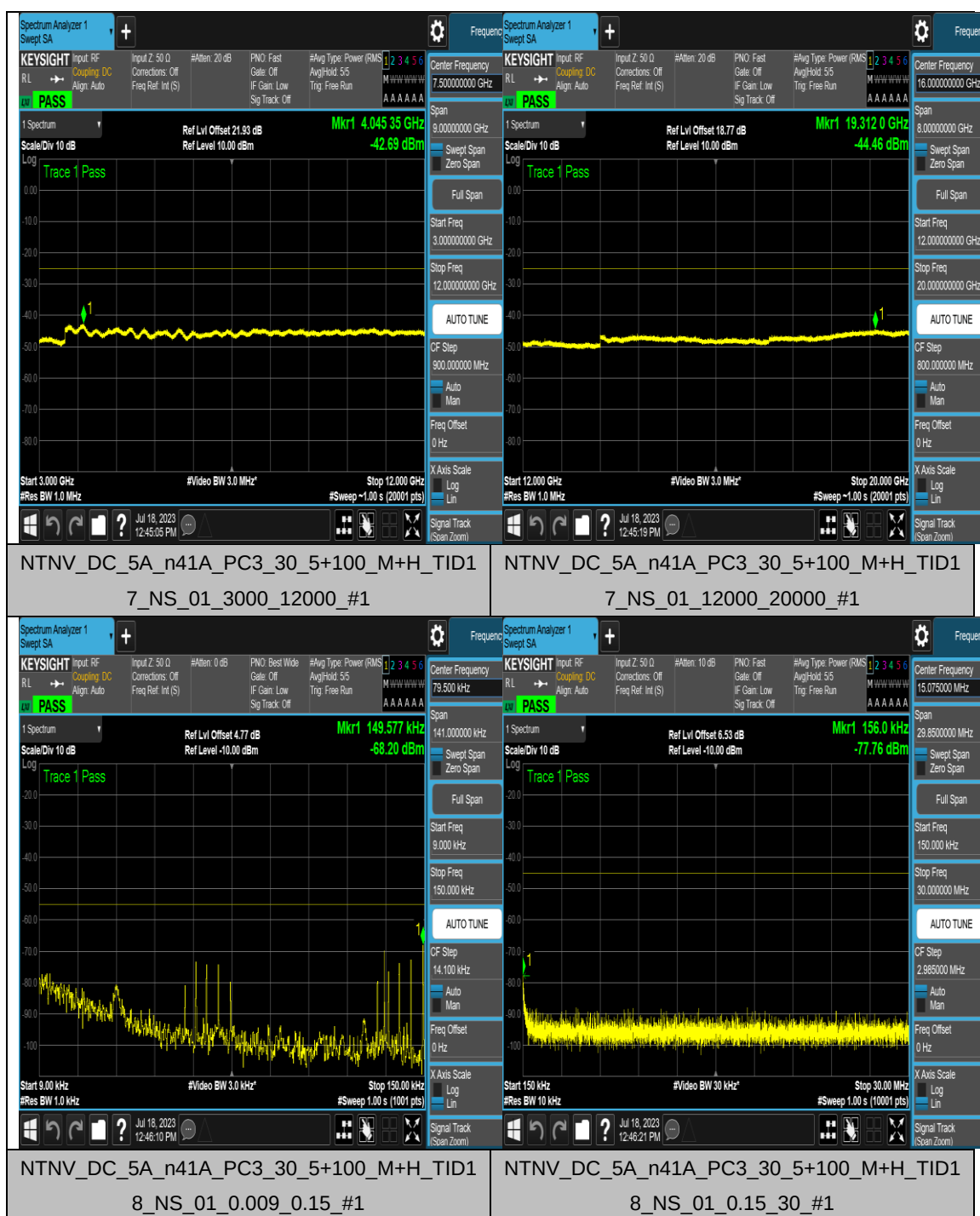


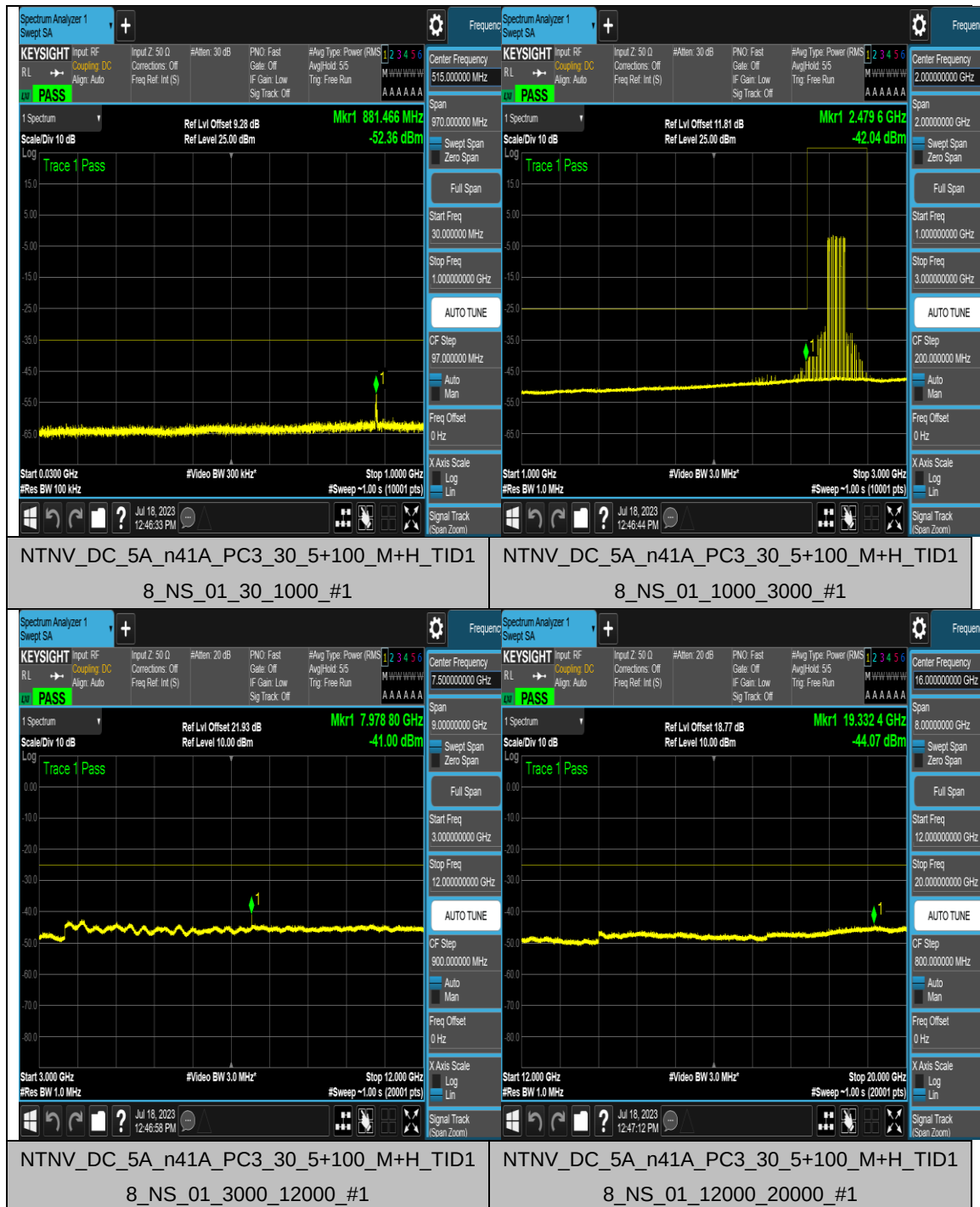












Appendix F: Frequency Stability for NSA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_5A_n41A	30	5+20	DFT-QPSK	M+L	Outer_Full	VN	NT	1.83	0.00	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+L	Outer_Full	VN	NT	-3.75	0.00	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+M	Outer_Full	VN	NT	-4.77	0.00	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+M	Outer_Full	VN	NT	-20.06	-0.01	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+H	Outer_Full	VN	NT	-7.98	0.00	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+H	Outer_Full	VN	NT	-7.48	0.00	PASS
DC_5A_n41A	30	5+30	DFT-QPSK	M+L	Outer_Full	VN	NT	-6.25	0.00	PASS
DC_5A_n41A	30	5+30	CP-QPSK	M+L	Outer_Full	VN	NT	-6.25	0.00	PASS
DC_5A_n41A	30	5+30	DFT-QPSK	M+M	Outer_Full	VN	NT	-11.45	0.00	PASS
DC_5A_n41A	30	5+30	CP-QPSK	M+M	Outer_Full	VN	NT	-9.83	0.00	PASS
DC_5A_n41A	30	5+30	DFT-QPSK	M+H	Outer_Full	VN	NT	-10.91	0.00	PASS
DC_5A_n41A	30	5+30	CP-QPSK	M+H	Outer_Full	VN	NT	-5.38	0.00	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+L	Outer_Full	VN	NT	-12.95	-0.01	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+L	Outer_Full	VN	NT	-13.10	-0.01	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+M	Outer_Full	VN	NT	-5.20	0.00	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+M	Outer_Full	VN	NT	-4.98	0.00	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+H	Outer_Full	VN	NT	-6.18	0.00	PASS

DC_5A_n41A	30	5+40	CP-QPSK	M+H	Outer_Full	VN	NT	-6.80	0.00	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+L	Outer_Full	VN	NT	-12.74	-0.01	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+L	Outer_Full	VN	NT	-4.07	0.00	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+M	Outer_Full	VN	NT	-5.43	0.00	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+M	Outer_Full	VN	NT	-7.66	0.00	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+H	Outer_Full	VN	NT	-6.08	0.00	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+H	Outer_Full	VN	NT	-8.68	0.00	PASS
DC_5A_n41A	30	5+100	DFT-QPSK	M+L	Outer_Full	VN	NT	-4.26	0.00	PASS
DC_5A_n41A	30	5+100	CP-QPSK	M+L	Outer_Full	VN	NT	-3.00	0.00	PASS
DC_5A_n41A	30	5+100	DFT-QPSK	M+M	Outer_Full	VN	NT	-0.36	0.00	PASS
DC_5A_n41A	30	5+100	CP-QPSK	M+M	Outer_Full	VN	NT	-5.63	0.00	PASS
DC_5A_n41A	30	5+100	DFT-QPSK	M+H	Outer_Full	VN	NT	-7.04	0.00	PASS
DC_5A_n41A	30	5+100	CP-QPSK	M+H	Outer_Full	VN	NT	-14.96	-0.01	PASS

Frequency Error VS. Temperature

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_5A_n41A	30	5+20	DFT-QPSK	M+L	Outer_Full	NV	TN	-13.081801	-0.005220	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+L	Outer_Full	NV	TN	-8.613914	-0.003437	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+M	Outer_Full	NV	TN	-3.011856	-0.001162	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+M	Outer_Full	NV	TN	-11.532819	-0.004448	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+H	Outer_Full	NV	TN	-11.152792	-0.004162	PASS

DC_5A_n41A	30	5+20	CP-QPSK	M+H	Outer_Full	NV	TN	-6.286569	-0.002346	PASS
DC_5A_n41A	30	5+30	DFT-QPSK	M+L	Outer_Full	NV	TN	-8.012542	-0.003191	PASS
DC_5A_n41A	30	5+30	CP-QPSK	M+L	Outer_Full	NV	TN	-2.415346	-0.000962	PASS
DC_5A_n41A	30	5+30	DFT-QPSK	M+M	Outer_Full	NV	TN	-2.447699	-0.000944	PASS
DC_5A_n41A	30	5+30	CP-QPSK	M+M	Outer_Full	NV	TN	-11.685726	-0.004507	PASS
DC_5A_n41A	30	5+30	DFT-QPSK	M+H	Outer_Full	NV	TN	-16.504341	-0.006170	PASS
DC_5A_n41A	30	5+30	CP-QPSK	M+H	Outer_Full	NV	TN	-16.637663	-0.006220	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+L	Outer_Full	NV	TN	-5.363909	-0.002132	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+L	Outer_Full	NV	TN	-12.018364	-0.004777	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+M	Outer_Full	NV	TN	-8.153270	-0.003144	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+M	Outer_Full	NV	TN	-6.489208	-0.002503	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+H	Outer_Full	NV	TN	-4.938027	-0.001849	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+H	Outer_Full	NV	TN	-13.787917	-0.005164	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+L	Outer_Full	NV	TN	-5.249838	-0.002078	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+L	Outer_Full	NV	TN	-8.858913	-0.003507	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+M	Outer_Full	NV	TN	-5.963269	-0.002300	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+M	Outer_Full	NV	TN	-11.621194	-0.004482	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+H	Outer_Full	NV	TN	-7.015982	-0.002638	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+H	Outer_Full	NV	TN	-7.893500	-0.002968	PASS
DC_5A_n41A	30	5+100	DFT-QPSK	M+L	Outer_Full	NV	TN	-11.852836	-0.004655	PASS
DC_5A_n41A	30	5+100	CP-QPSK	M+L	Outer_Full	NV	TN	-7.946021	-0.003121	PASS

DC_5A_ n41A	30	5+100	DFT-QPSK	M+M	Outer_Full	NV	TN	-7.267283	-0.002803	PASS
DC_5A_ n41A	30	5+100	CP-QPSK	M+M	Outer_Full	NV	TN	-5.863739	-0.002261	PASS
DC_5A_ n41A	30	5+100	DFT-QPSK	M+H	Outer_Full	NV	TN	-16.294615	-0.006172	PASS
DC_5A_ n41A	30	5+100	CP-QPSK	M+H	Outer_Full	NV	TN	-6.365909	-0.002411	PASS

Appendix F: Modulation characteristics for NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
DC_5A_n41A	30	5+20	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+20	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+40	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+60	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+100	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+100	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+100	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+100	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+100	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_5A_n41A	30	5+100	CP-QPSK	M+H	Outer_Full	see graph	PASS

Test Graphs

