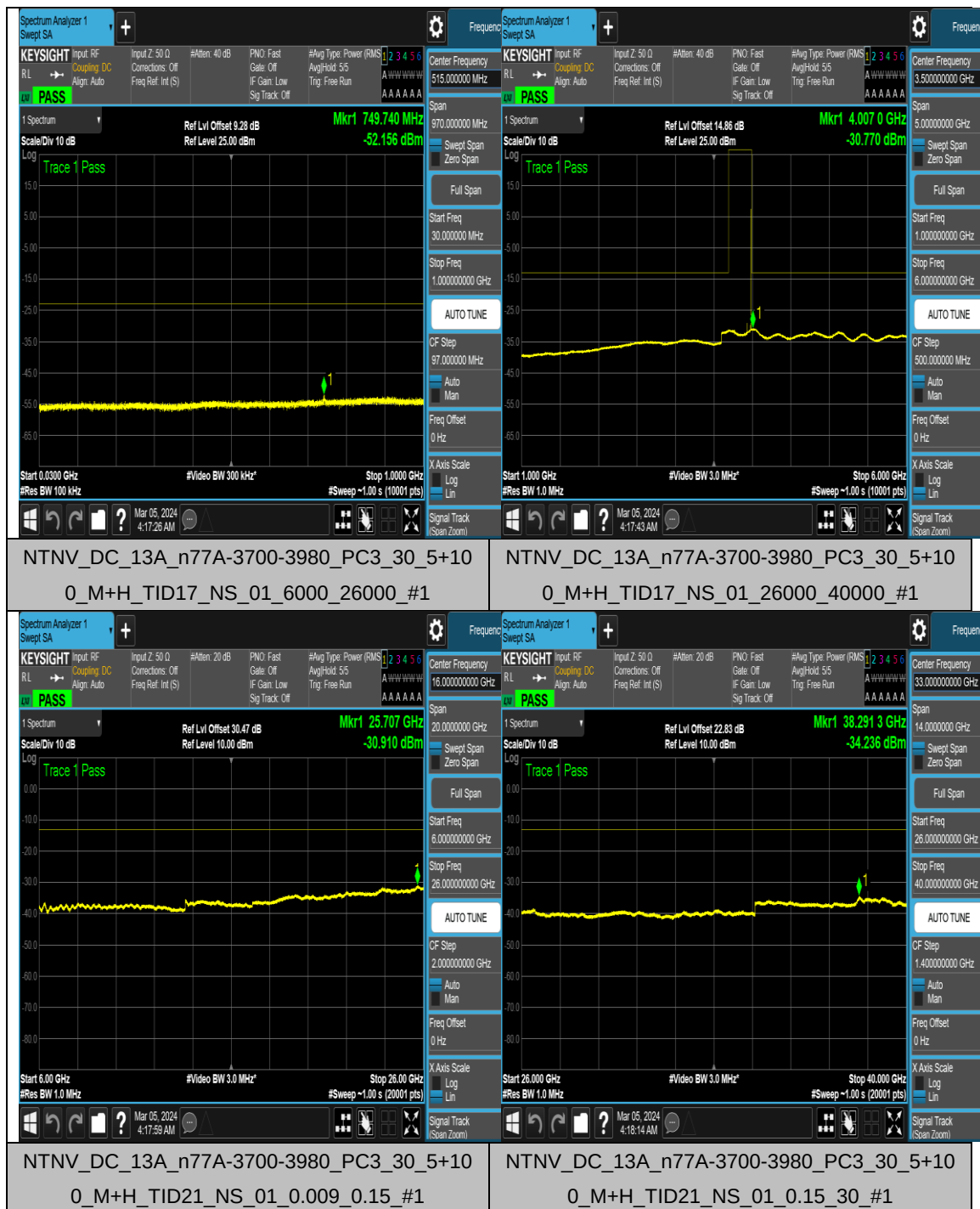
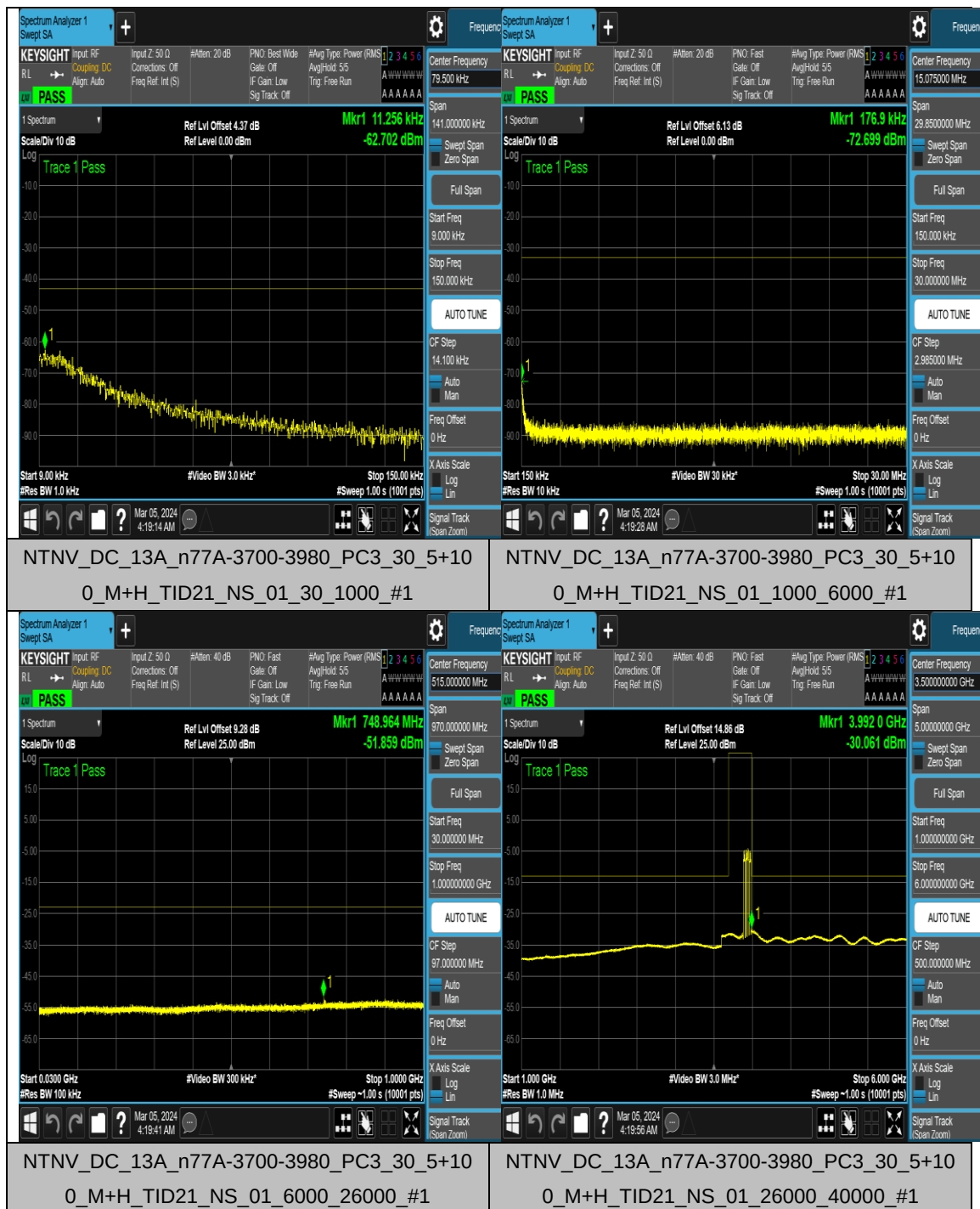
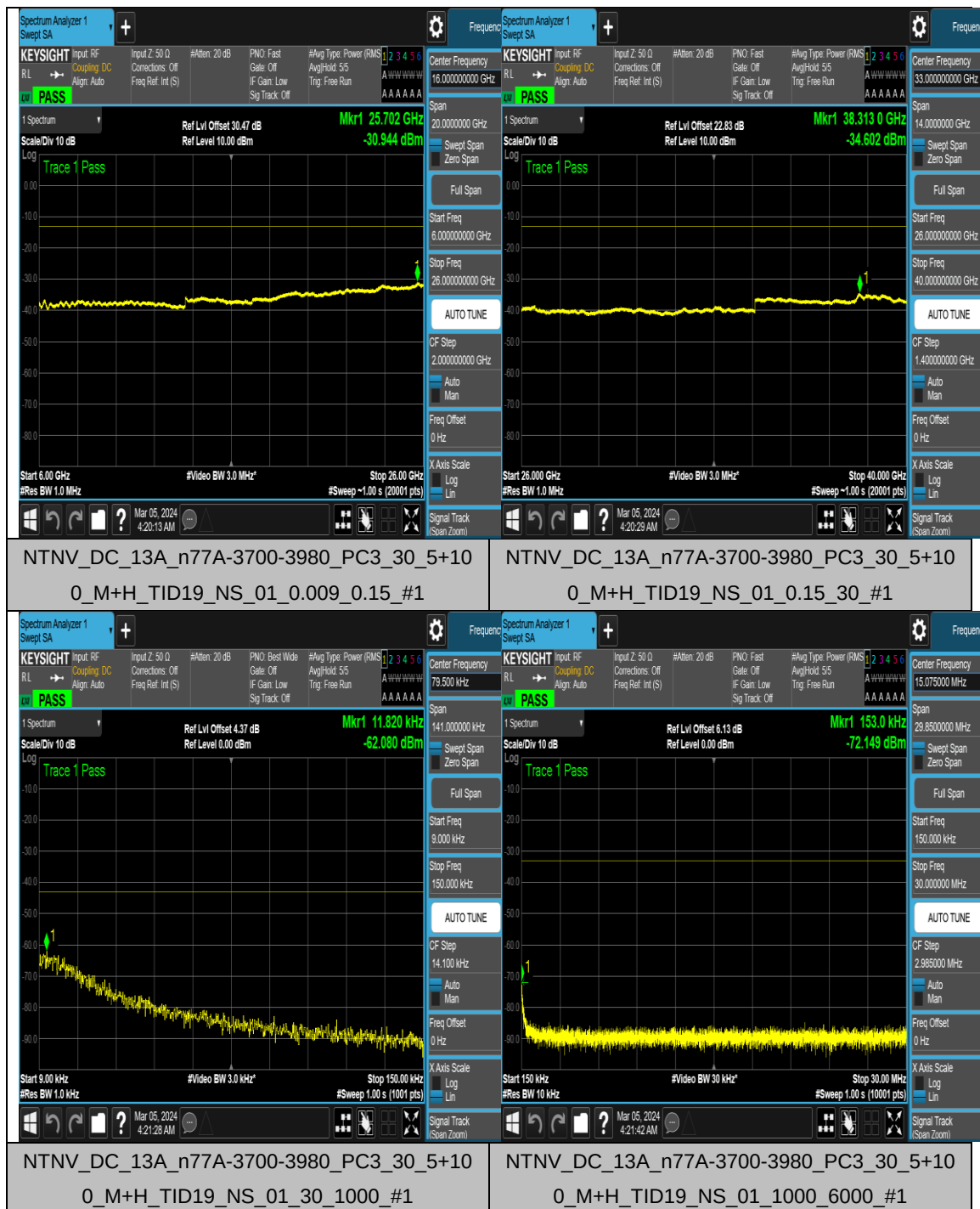
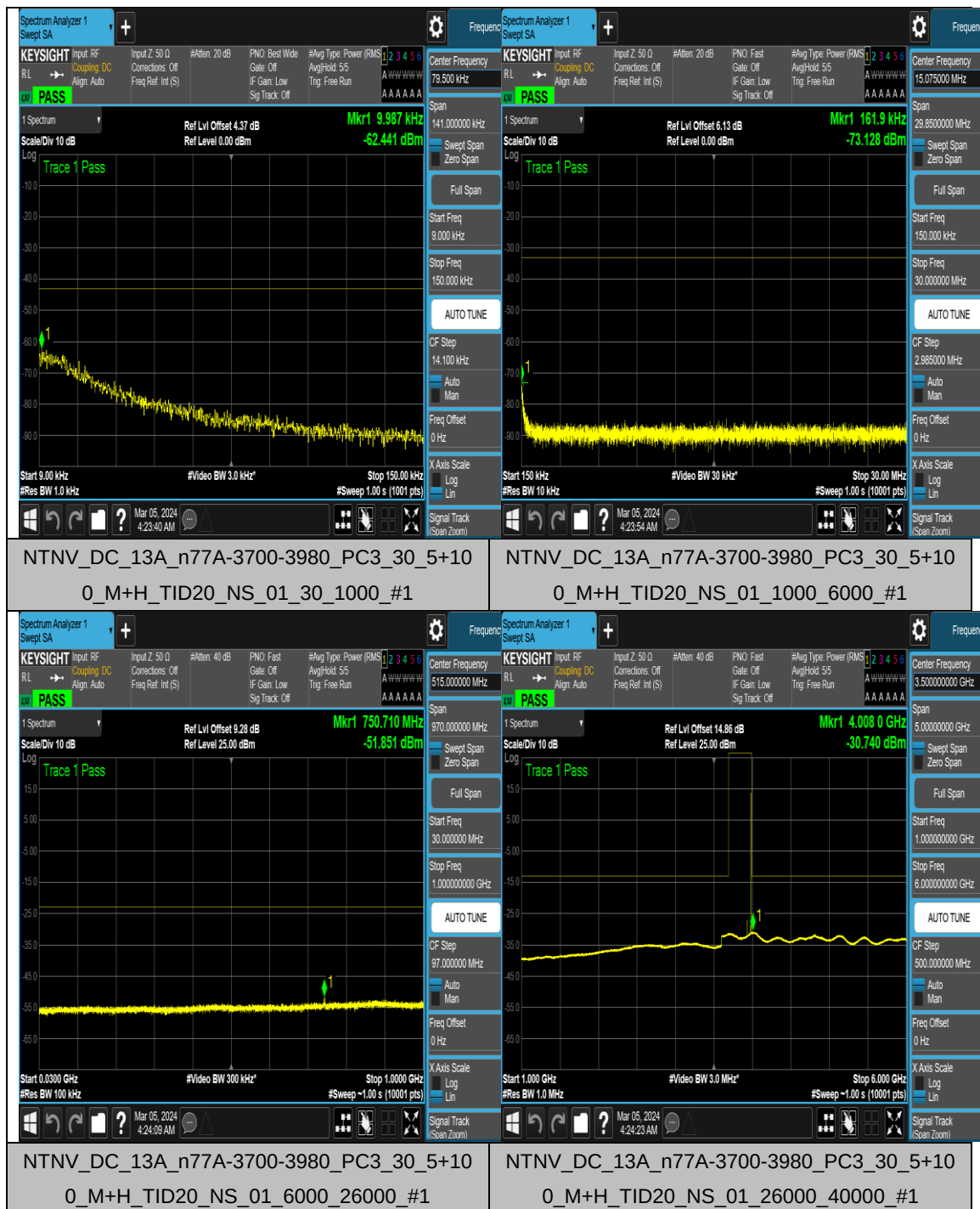


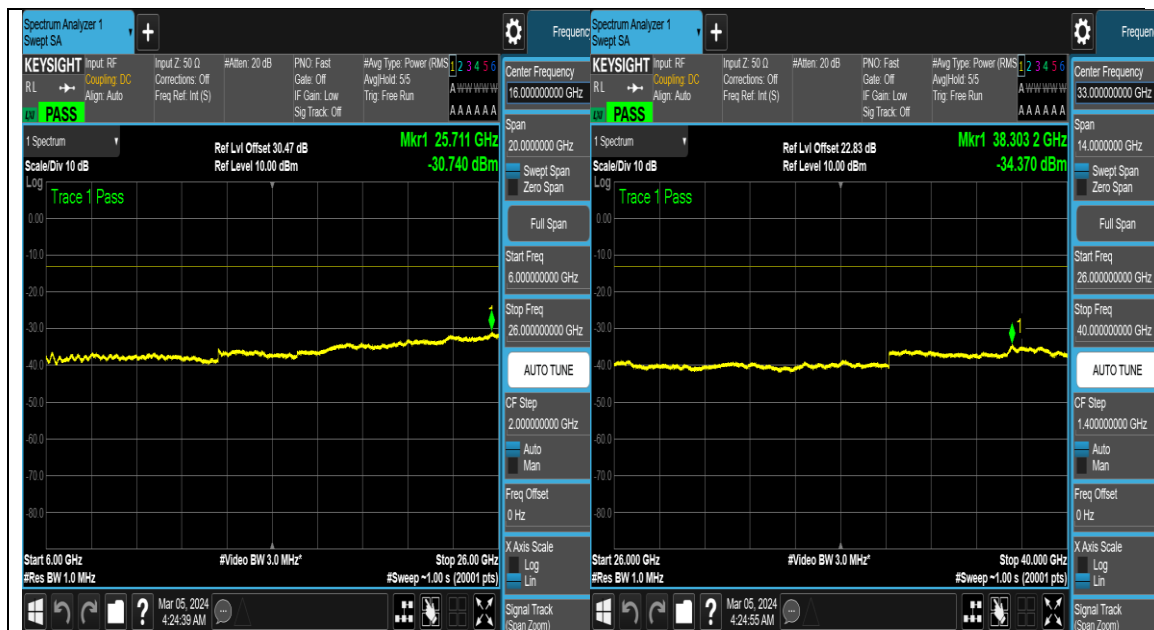












Appendix F: Frequency Stability for NSA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+L	Outer_Full	VN	NT	-12.38	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+L	Outer_Full	VN	NT	-17.70	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+M	Outer_Full	VN	NT	-3.94	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+M	Outer_Full	VN	NT	7.38	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+H	Outer_Full	VN	NT	0.44	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+H	Outer_Full	VN	NT	-5.22	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+L	Outer_Full	VN	NT	-23.63	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+L	Outer_Full	VN	NT	-23.12	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+M	Outer_Full	VN	NT	2.16	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+M	Outer_Full	VN	NT	2.29	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+H	Outer_Full	VN	NT	-10.24	0.00	PASS
DC_13A	30	5+40	CP-16QAM	M+H	Outer_Full	VN	NT	-4.18	0.00	PASS

_n77A-3 700-3980										
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+L	Outer_Full	VN	NT	-4.77	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+L	Outer_Full	VN	NT	17.32	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+M	Outer_Full	VN	NT	-1.95	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+M	Outer_Full	VN	NT	-2.43	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+H	Outer_Full	VN	NT	-3.77	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+H	Outer_Full	VN	NT	-22.02	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+L	Outer_Full	VN	NT	0.53	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+L	Outer_Full	VN	NT	-18.31	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+M	Outer_Full	VN	NT	-4.65	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+M	Outer_Full	VN	NT	10.24	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+H	Outer_Full	VN	NT	-31.18	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+H	Outer_Full	VN	NT	-19.07	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+L	Outer_Full	VN	NT	-17.63	0.00	PASS
DC_13A	30	5+80	CP-16QAM	M+L	Outer_Full	VN	NT	0.45	0.00	PASS

_n77A-3 700-3980										
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+M	Outer_Full	VN	NT	-4.88	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+M	Outer_Full	VN	NT	-4.66	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+H	Outer_Full	VN	NT	-30.22	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+H	Outer_Full	VN	NT	-24.38	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+L	Outer_Full	VN	NT	-13.51	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+L	Outer_Full	VN	NT	-31.79	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+M	Outer_Full	VN	NT	-2.46	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+M	Outer_Full	VN	NT	13.19	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+H	Outer_Full	VN	NT	-21.01	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+H	Outer_Full	VN	NT	-12.29	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+L	Outer_Full	VN	NT	-10.15	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+L	Outer_Full	VN	NT	-2.09	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+M	Outer_Full	VN	NT	19.97	0.01	PASS
DC_13A	30	5+100	CP-16QAM	M+M	Outer_Full	VN	NT	4.79	0.00	PASS

_n77A-3 700-3980										
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+H	Outer_Full	VN	NT	-31.72	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+H	Outer_Full	VN	NT	-9.10	0.00	PASS

Frequency Error VS. Temperature

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+L	Outer_Full	NV	TN	-19.069296	-0.005140	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+L	Outer_Full	NV	TN	-7.048826	-0.001900	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+M	Outer_Full	NV	TN	14.196454	0.003697	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+M	Outer_Full	NV	TN	12.161068	0.003167	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+H	Outer_Full	NV	TN	-3.861172	-0.000973	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+H	Outer_Full	NV	TN	-10.635341	-0.002679	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+L	Outer_Full	NV	TN	-12.800380	-0.003441	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+L	Outer_Full	NV	TN	-9.677439	-0.002601	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+M	Outer_Full	NV	TN	7.606859	0.001981	PASS
DC_13A _n77A-3	30	5+40	CP-16QAM	M+M	Outer_Full	NV	TN	-8.722878	-0.002272	PASS

700-3980										
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+H	Outer_Full	NV	TN	-14.090176	-0.003558	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+H	Outer_Full	NV	TN	-24.824383	-0.006269	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+L	Outer_Full	NV	TN	-11.828188	-0.003175	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+L	Outer_Full	NV	TN	-7.843310	-0.002106	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+M	Outer_Full	NV	TN	5.207612	0.001356	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+M	Outer_Full	NV	TN	-6.850554	-0.001784	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+H	Outer_Full	NV	TN	-6.418066	-0.001623	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+H	Outer_Full	NV	TN	-11.289288	-0.002854	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+L	Outer_Full	NV	TN	-29.077869	-0.007796	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+L	Outer_Full	NV	TN	-35.096912	-0.009409	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+M	Outer_Full	NV	TN	9.171578	0.002388	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+M	Outer_Full	NV	TN	-5.122845	-0.001334	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+H	Outer_Full	NV	TN	-29.578289	-0.007488	PASS
DC_13A _n77A-3	30	5+60	CP-16QAM	M+H	Outer_Full	NV	TN	-35.463707	-0.008978	PASS

700-3980										
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+L	Outer_Full	NV	TN	-24.145914	-0.006456	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+L	Outer_Full	NV	TN	3.119772	0.000834	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+M	Outer_Full	NV	TN	14.263018	0.003714	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+M	Outer_Full	NV	TN	-5.602076	-0.001459	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+H	Outer_Full	NV	TN	-12.408296	-0.003149	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+H	Outer_Full	NV	TN	-21.598238	-0.005482	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+L	Outer_Full	NV	TN	-11.635090	-0.003107	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+L	Outer_Full	NV	TN	-26.177216	-0.006990	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+M	Outer_Full	NV	TN	14.375812	0.003744	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+M	Outer_Full	NV	TN	13.048904	0.003398	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+H	Outer_Full	NV	TN	9.641062	0.002450	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+H	Outer_Full	NV	TN	-9.890640	-0.002514	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+L	Outer_Full	NV	TN	-8.485687	-0.002263	PASS
DC_13A _n77A-3	30	5+100	CP-16QAM	M+L	Outer_Full	NV	TN	-4.359161	-0.001162	PASS

700-3980										
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+M	Outer_Full	NV	TN	10.377302	0.002702	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+M	Outer_Full	NV	TN	17.025217	0.004434	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+H	Outer_Full	NV	TN	-7.129273	-0.001814	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+H	Outer_Full	NV	TN	-17.649466	-0.004491	PASS