













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	-36.45	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+L	Outer_Full	VN	NT	-18.57	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+M	Outer_Full	VN	NT	-8.66	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+M	Outer_Full	VN	NT	-8.71	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+H	Outer_Full	VN	NT	11.96	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+H	Outer_Full	VN	NT	-14.10	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+L	Outer_Full	VN	NT	-10.94	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+L	Outer_Full	VN	NT	-13.24	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+M	Outer_Full	VN	NT	-3.59	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+M	Outer_Full	VN	NT	-4.22	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+H	Outer_Full	VN	NT	-27.08	-0.01	PASS
DC_13A	30	5+40	CP-16QAM	M+H	Outer_Full	VN	NT	-34.91	-0.01	PASS

_n77A-3 700-3980										
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+L	Outer_Full	VN	NT	8.85	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+L	Outer_Full	VN	NT	-3.39	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+M	Outer_Full	VN	NT	-13.73	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+M	Outer_Full	VN	NT	-15.35	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+H	Outer_Full	VN	NT	-35.37	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+H	Outer_Full	VN	NT	3.25	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+L	Outer_Full	VN	NT	-23.01	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+L	Outer_Full	VN	NT	-28.29	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+M	Outer_Full	VN	NT	-16.70	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+M	Outer_Full	VN	NT	-11.83	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+H	Outer_Full	VN	NT	-21.28	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+H	Outer_Full	VN	NT	-16.75	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+L	Outer_Full	VN	NT	-8.21	0.00	PASS
DC_13A	30	5+80	CP-16QAM	M+L	Outer_Full	VN	NT	-18.23	0.00	PASS

_n77A-3 700-3980										
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+M	Outer_Full	VN	NT	-5.54	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+M	Outer_Full	VN	NT	5.41	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+H	Outer_Full	VN	NT	-13.37	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+H	Outer_Full	VN	NT	-16.20	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+L	Outer_Full	VN	NT	-25.34	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+L	Outer_Full	VN	NT	-24.67	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+M	Outer_Full	VN	NT	3.65	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+M	Outer_Full	VN	NT	-8.11	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+H	Outer_Full	VN	NT	-19.06	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+H	Outer_Full	VN	NT	6.32	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+L	Outer_Full	VN	NT	-6.84	0.00	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+L	Outer_Full	VN	NT	-23.81	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+M	Outer_Full	VN	NT	10.75	0.00	PASS
DC_13A	30	5+100	CP-16QAM	M+M	Outer_Full	VN	NT	8.95	0.00	PASS

_n77A-3 700-3980										
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+H	Outer_Full	VN	NT	-23.19	-0.01	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+H	Outer_Full	VN	NT	-15.32	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	-10.057229	-0.002711	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+L	Outer_Full	NV	TN	-6.758461	-0.001822	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+M	Outer_Full	NV	TN	0.269455	0.000070	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+M	Outer_Full	NV	TN	17.706957	0.004611	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-QPSK	M+H	Outer_Full	NV	TN	14.200824	0.003577	PASS
DC_13A _n77A-3 700-3980	30	5+20	CP-16QAM	M+H	Outer_Full	NV	TN	2.949750	0.000743	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+L	Outer_Full	NV	TN	-1.329436	-0.000357	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+L	Outer_Full	NV	TN	-6.537737	-0.001757	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+M	Outer_Full	NV	TN	-1.014575	-0.000264	PASS
DC_13A _n77A-3	30	5+40	CP-16QAM	M+M	Outer_Full	NV	TN	11.579778	0.003016	PASS

700-3980										
DC_13A _n77A-3 700-3980	30	5+40	CP-QPSK	M+H	Outer_Full	NV	TN	-18.278996	-0.004616	PASS
DC_13A _n77A-3 700-3980	30	5+40	CP-16QAM	M+H	Outer_Full	NV	TN	-28.889456	-0.007295	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+L	Outer_Full	NV	TN	-7.357311	-0.001975	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+L	Outer_Full	NV	TN	-3.269130	-0.000878	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+M	Outer_Full	NV	TN	-1.448934	-0.000377	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+M	Outer_Full	NV	TN	1.670704	0.000435	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-QPSK	M+H	Outer_Full	NV	TN	-11.024113	-0.002787	PASS
DC_13A _n77A-3 700-3980	30	5+50	CP-16QAM	M+H	Outer_Full	NV	TN	-8.999524	-0.002275	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+L	Outer_Full	NV	TN	-18.503891	-0.004961	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+L	Outer_Full	NV	TN	-1.818063	-0.000487	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+M	Outer_Full	NV	TN	9.904735	0.002579	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-16QAM	M+M	Outer_Full	NV	TN	16.630470	0.004331	PASS
DC_13A _n77A-3 700-3980	30	5+60	CP-QPSK	M+H	Outer_Full	NV	TN	-23.099739	-0.005848	PASS
DC_13A _n77A-3	30	5+60	CP-16QAM	M+H	Outer_Full	NV	TN	-25.957508	-0.006572	PASS

700-3980										
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+L	Outer_Full	NV	TN	-7.779903	-0.002080	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+L	Outer_Full	NV	TN	-15.632751	-0.004180	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+M	Outer_Full	NV	TN	-15.523793	-0.004043	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+M	Outer_Full	NV	TN	-12.166508	-0.003168	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-QPSK	M+H	Outer_Full	NV	TN	-3.682019	-0.000935	PASS
DC_13A _n77A-3 700-3980	30	5+80	CP-16QAM	M+H	Outer_Full	NV	TN	-9.642138	-0.002447	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+L	Outer_Full	NV	TN	-30.433369	-0.008126	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+L	Outer_Full	NV	TN	-11.239980	-0.003001	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+M	Outer_Full	NV	TN	-6.422252	-0.001672	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+M	Outer_Full	NV	TN	3.582723	0.000933	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-QPSK	M+H	Outer_Full	NV	TN	-21.508545	-0.005466	PASS
DC_13A _n77A-3 700-3980	30	5+90	CP-16QAM	M+H	Outer_Full	NV	TN	-4.984099	-0.001267	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+L	Outer_Full	NV	TN	-19.663427	-0.005244	PASS
DC_13A _n77A-3	30	5+100	CP-16QAM	M+L	Outer_Full	NV	TN	-8.565184	-0.002284	PASS

700-3980										
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+M	Outer_Full	NV	TN	-4.470601	-0.001164	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+M	Outer_Full	NV	TN	-7.982891	-0.002079	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-QPSK	M+H	Outer_Full	NV	TN	-8.560839	-0.002178	PASS
DC_13A _n77A-3 700-3980	30	5+100	CP-16QAM	M+H	Outer_Full	NV	TN	2.160695	0.000550	PASS