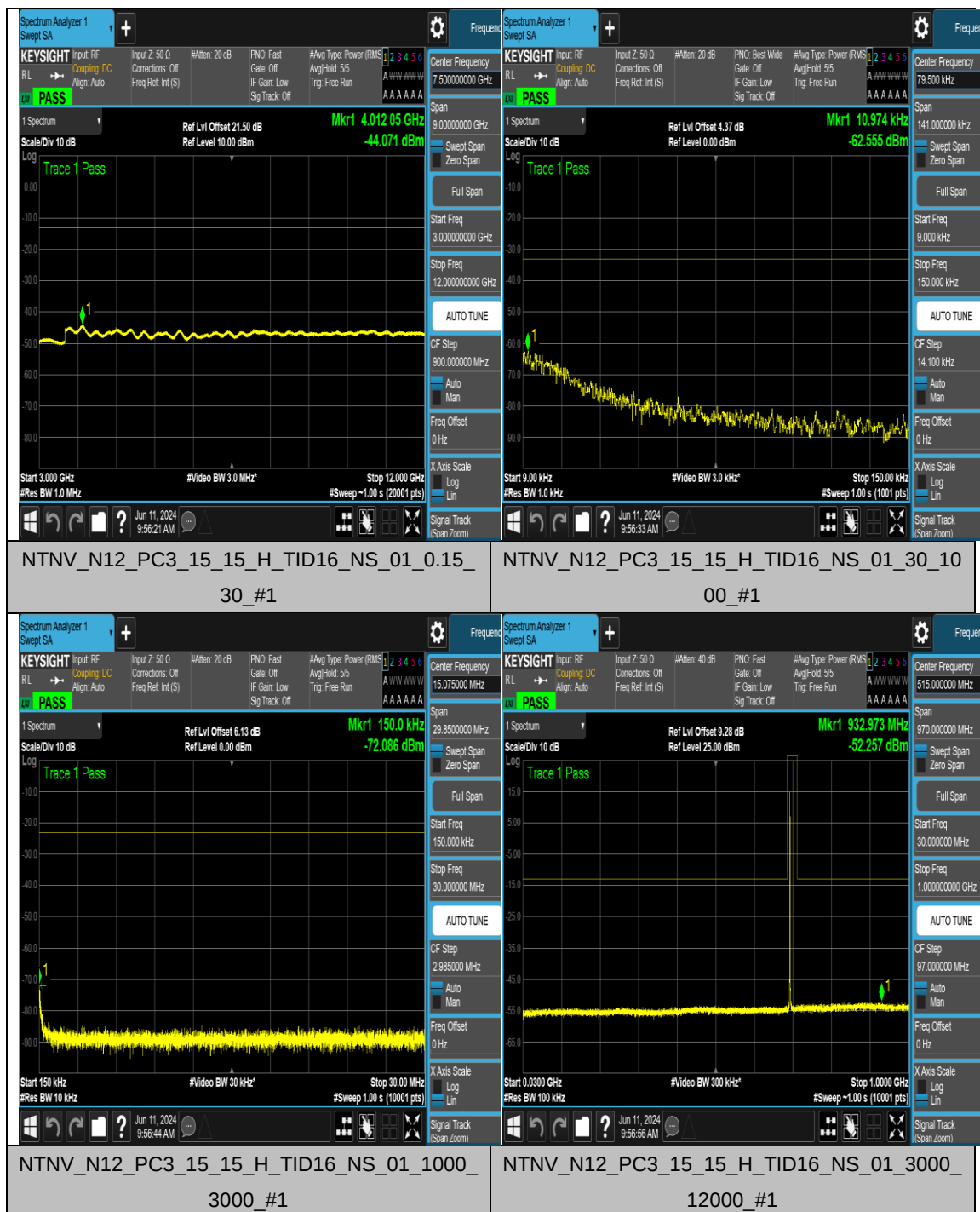
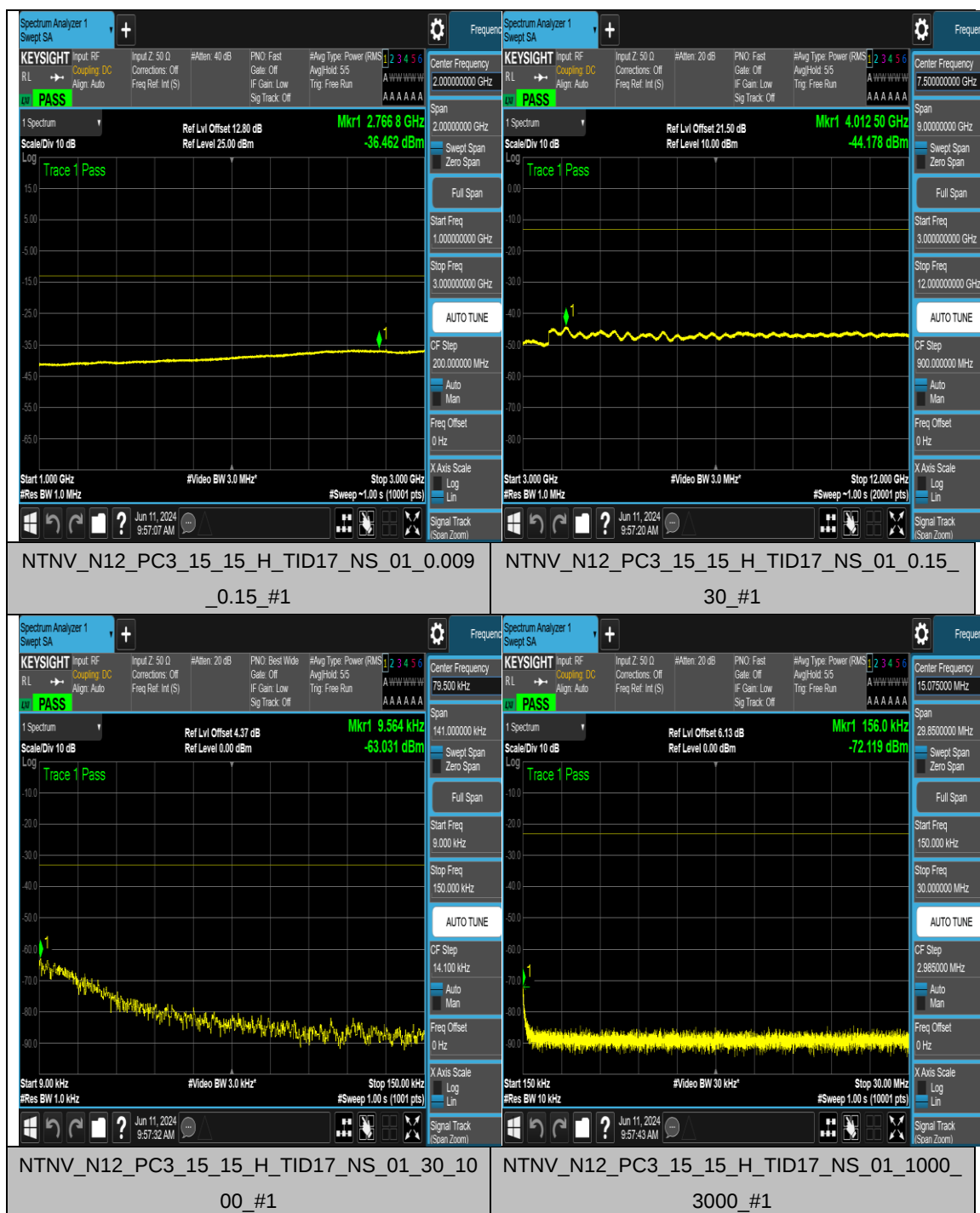
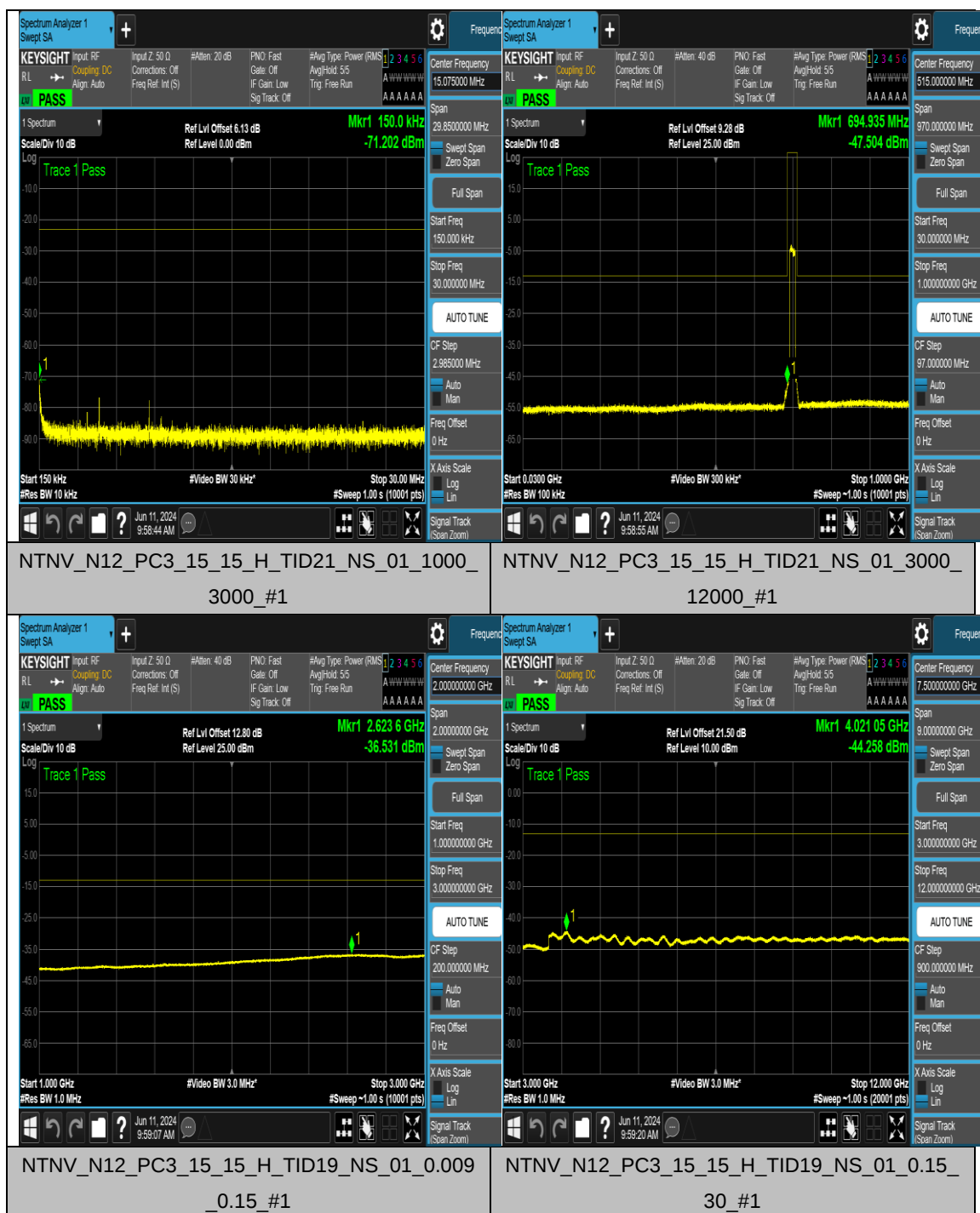
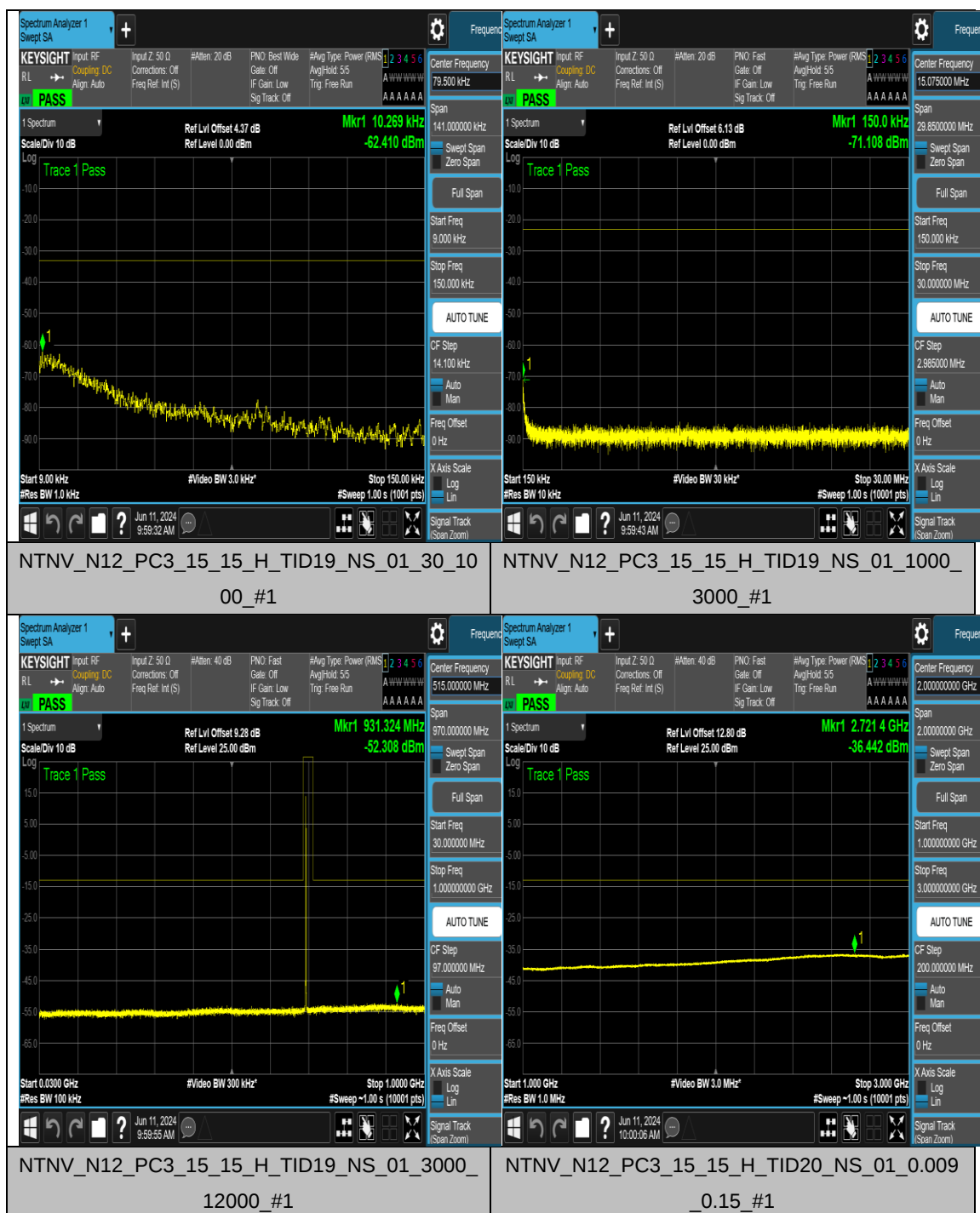


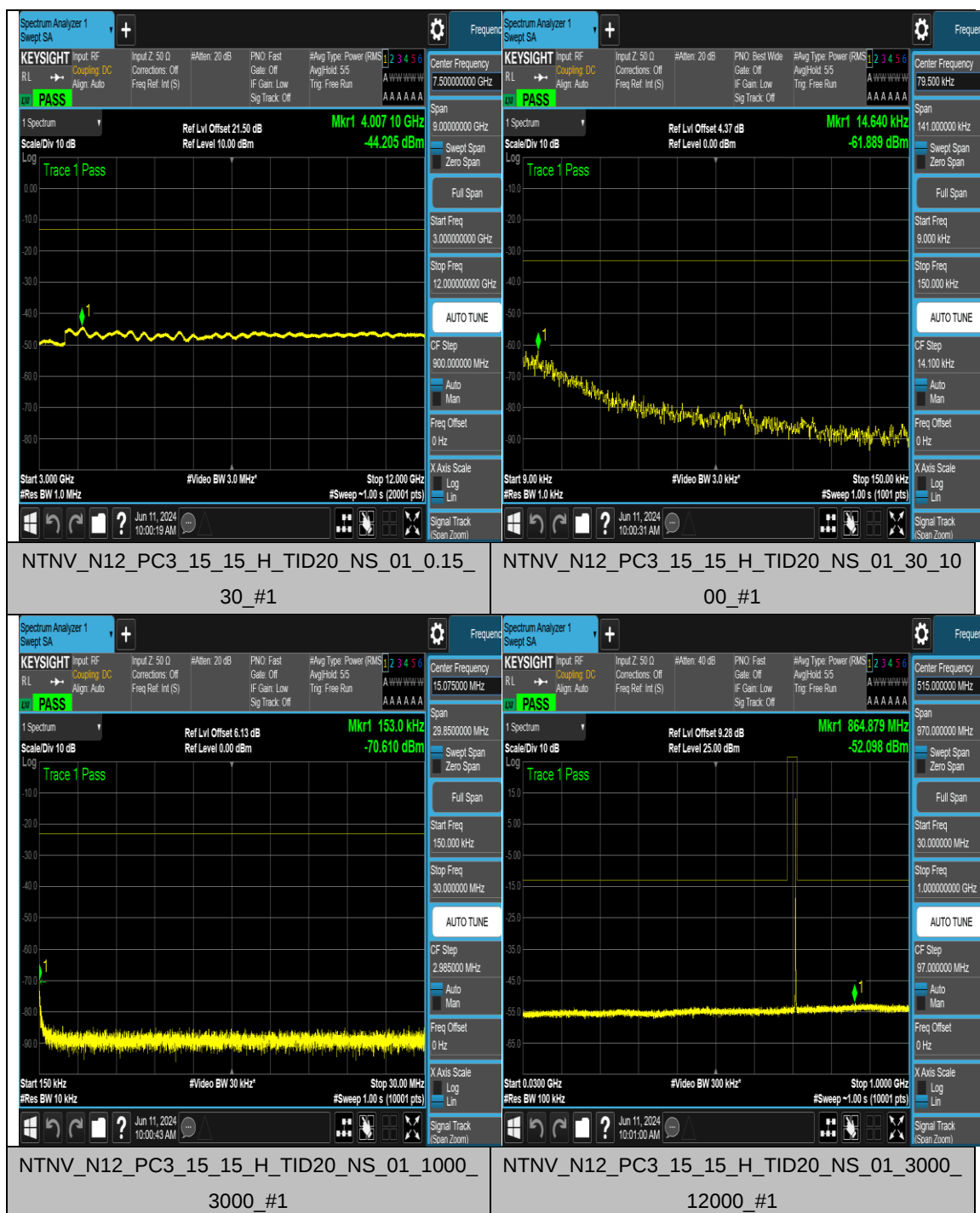


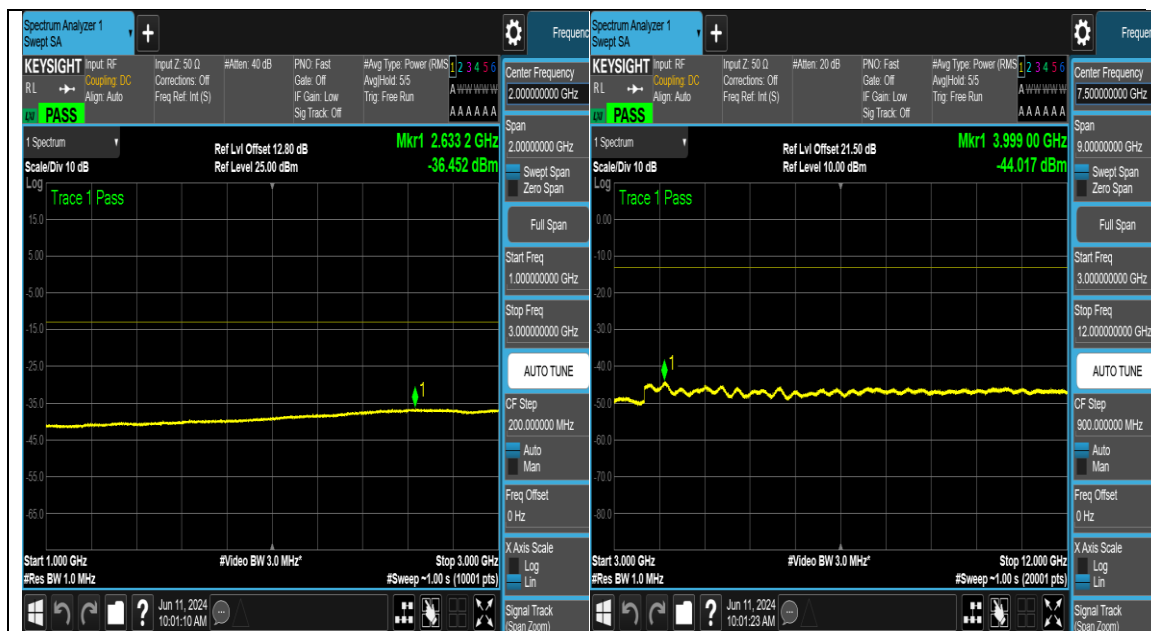












Appendix F: Frequency Stability for SA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
N12	15	5	DFT-QPSK	L	Outer_Full	VL	NT	-0.48	0.00	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	VN	NT	-0.50	0.00	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	VH	NT	-0.45	0.00	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	VL	NT	-0.48	0.00	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	VN	NT	-0.09	0.00	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	VH	NT	-0.70	0.00	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	VL	NT	-0.05	0.00	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	VN	NT	-0.06	0.00	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	VH	NT	-0.07	0.00	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	VL	NT	-0.08	0.00	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	VN	NT	0.00	0.00	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	VH	NT	-0.20	0.00	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	VL	NT	-0.32	0.00	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	VN	NT	-0.51	0.00	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	VH	NT	-0.90	0.00	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	VL	NT	-0.18	0.00	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	VN	NT	0.20	0.00	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	VH	NT	0.18	0.00	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	VL	NT	0.28	0.00	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	VN	NT	-1.19	0.00	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	VH	NT	-1.08	0.00	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	VL	NT	-0.60	0.00	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	VN	NT	-0.27	0.00	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	VH	NT	-0.52	0.00	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	VL	NT	0.40	0.00	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	VN	NT	-0.72	0.00	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	VH	NT	-0.99	0.00	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	VL	NT	0.03	0.00	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	VN	NT	-0.04	0.00	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	VH	NT	0.27	0.00	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	VL	NT	-3.57	-0.01	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	VN	NT	-1.21	0.00	PASS

N12	15	10	DFT-QPSK	H	Outer_Full	VH	NT	-0.46	0.00	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	VL	NT	-0.94	0.00	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	VN	NT	-0.48	0.00	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	VH	NT	-0.01	0.00	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	VL	NT	-6.50	-0.01	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	VN	NT	-3.73	-0.01	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	VH	NT	-3.67	-0.01	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	VL	NT	-3.85	-0.01	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	VN	NT	-3.53	0.00	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	VH	NT	-4.01	-0.01	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	VL	NT	-3.43	0.00	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	VN	NT	-3.77	-0.01	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	VH	NT	-3.80	-0.01	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	VL	NT	-4.46	-0.01	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	VN	NT	-4.36	-0.01	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	VH	NT	-4.55	-0.01	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	VL	NT	-3.57	-0.01	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	VN	NT	-3.98	-0.01	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	VH	NT	-3.91	-0.01	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	VL	NT	-4.01	-0.01	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	VN	NT	-4.66	-0.01	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	VH	NT	-4.39	-0.01	PASS

Frequency Error VS. Temperature

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
N12	15	5	DFT-QPSK	L	Outer_Full	NV	-30	-0.120000	-0.000171	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	-20	-0.640000	-0.000912	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	-10	-0.580000	-0.000827	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	0	-0.340000	-0.000485	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	10	-0.790000	-0.001126	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	20	-0.440000	-0.000627	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	30	-0.330000	-0.000470	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	40	-0.320000	-0.000456	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	50	-0.350000	-0.000499	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	-30	0.120000	0.000171	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	-20	-0.300000	-0.000428	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	-10	-0.060000	-0.000086	PASS

N12	15	5	DFT-16QAM	L	Outer_Full	NV	0	0.090000	0.000128	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	10	0.140000	0.000200	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	20	0.340000	0.000485	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	30	-1.320000	-0.001882	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	40	0.400000	0.000570	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	50	-1.150000	-0.001639	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	-30	-0.100000	-0.000141	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	-20	0.410000	0.000580	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	-10	-0.180000	-0.000254	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	0	0.120000	0.000170	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	10	0.060000	0.000085	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	20	0.370000	0.000523	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	30	0.100000	0.000141	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	40	-0.130000	-0.000184	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	50	0.450000	0.000636	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	-30	-0.140000	-0.000198	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	-20	-0.570000	-0.000806	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	-10	-0.830000	-0.001173	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	0	-0.750000	-0.001060	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	10	-0.330000	-0.000466	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	20	-0.440000	-0.000622	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	30	-0.960000	-0.001357	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	40	-0.500000	-0.000707	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	50	-0.320000	-0.000452	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	-30	-0.830000	-0.001163	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	-20	-0.250000	-0.000350	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	-10	-0.240000	-0.000336	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	0	-1.020000	-0.001430	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	10	-0.700000	-0.000981	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	20	-0.940000	-0.001317	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	30	-0.540000	-0.000757	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	40	-0.250000	-0.000350	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	50	0.070000	0.000098	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	-30	0.470000	0.000659	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	-20	0.200000	0.000280	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	-10	-0.190000	-0.000266	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	0	-0.600000	-0.000841	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	10	-0.470000	-0.000659	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	20	-0.030000	-0.000042	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	30	-0.880000	-0.001233	PASS

N12	15	5	DFT-16QAM	H	Outer_Full	NV	40	-0.190000	-0.000266	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	50	-0.440000	-0.000617	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	-30	-0.630000	-0.000895	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	-20	-0.660000	-0.000938	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	-10	-0.900000	-0.001278	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	0	-0.450000	-0.000639	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	10	-0.810000	-0.001151	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	20	-0.490000	-0.000696	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	30	0.240000	0.000341	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	40	0.220000	0.000313	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	50	-0.410000	-0.000582	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	-30	-0.890000	-0.001264	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	-20	-0.370000	-0.000526	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	-10	-0.450000	-0.000639	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	0	-1.060000	-0.001506	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	10	-0.030000	-0.000043	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	20	-0.340000	-0.000483	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	30	0.020000	0.000028	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	40	0.480000	0.000682	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	50	-0.890000	-0.001264	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	-30	-0.310000	-0.000438	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	-20	-0.050000	-0.000071	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	-10	-0.140000	-0.000198	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	0	-0.700000	-0.000989	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	10	-0.820000	-0.001159	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	20	-0.150000	-0.000212	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	30	0.250000	0.000353	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	40	-0.380000	-0.000537	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	50	-0.910000	-0.001286	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	-30	-0.490000	-0.000693	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	-20	-0.340000	-0.000481	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	-10	-0.020000	-0.000028	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	0	-0.400000	-0.000565	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	10	-0.030000	-0.000042	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	20	-0.460000	-0.000650	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	30	-0.170000	-0.000240	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	40	-0.560000	-0.000792	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	50	-1.200000	-0.001696	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	-30	-0.970000	-0.001364	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	-20	-0.980000	-0.001378	PASS

N12	15	10	DFT-QPSK	H	Outer_Full	NV	-10	-0.310000	-0.000436	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	0	-0.620000	-0.000872	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	10	-0.610000	-0.000858	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	20	-0.090000	-0.000127	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	30	-0.700000	-0.000985	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	40	-0.750000	-0.001055	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	50	0.150000	0.000211	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	-30	-0.330000	-0.000464	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	-20	-1.000000	-0.001406	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	-10	-0.480000	-0.000675	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	0	-0.680000	-0.000956	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	10	-0.470000	-0.000661	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	20	-0.780000	-0.001097	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	30	-0.170000	-0.000239	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	40	-0.730000	-0.001027	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	50	-1.310000	-0.001842	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	-30	-3.660000	-0.005180	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	-20	-3.930000	-0.005563	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	-10	-4.040000	-0.005718	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	0	-4.470000	-0.006327	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	10	-3.660000	-0.005180	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	20	-3.740000	-0.005294	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	30	-3.800000	-0.005379	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	40	-4.400000	-0.006228	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	50	-4.370000	-0.006185	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	-30	-4.020000	-0.005690	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	-20	-4.580000	-0.006483	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	-10	-3.580000	-0.005067	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	0	-3.760000	-0.005322	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	10	-4.130000	-0.005846	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	20	-4.450000	-0.006299	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	30	-4.240000	-0.006001	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	40	-3.450000	-0.004883	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	50	-3.540000	-0.005011	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	-30	-3.650000	-0.005159	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	-20	-4.160000	-0.005880	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	-10	-3.720000	-0.005258	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	0	-4.030000	-0.005696	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	10	-4.300000	-0.006078	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	20	-3.770000	-0.005329	PASS

N12	15	15	DFT-QPSK	M	Outer_Full	NV	30	-4.440000	-0.006276	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	40	-3.650000	-0.005159	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	50	-4.320000	-0.006106	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	-30	-3.700000	-0.005230	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	-20	-4.000000	-0.005654	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	-10	-3.700000	-0.005230	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	0	-4.110000	-0.005809	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	10	-4.610000	-0.006516	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	20	-4.400000	-0.006219	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	30	-4.600000	-0.006502	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	40	-3.610000	-0.005102	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	50	-3.530000	-0.004989	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	-30	-3.990000	-0.005632	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	-20	-4.270000	-0.006027	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	-10	-3.950000	-0.005575	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	0	-4.530000	-0.006394	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	10	-4.100000	-0.005787	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	20	-4.260000	-0.006013	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	30	-4.550000	-0.006422	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	40	-4.180000	-0.005900	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	50	-3.640000	-0.005138	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	-30	-3.840000	-0.005420	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	-20	-4.100000	-0.005787	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	-10	-4.190000	-0.005914	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	0	-4.020000	-0.005674	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	10	-4.510000	-0.006366	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	20	-3.360000	-0.004742	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	30	-3.500000	-0.004940	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	40	-3.900000	-0.005505	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	50	-3.490000	-0.004926	PASS