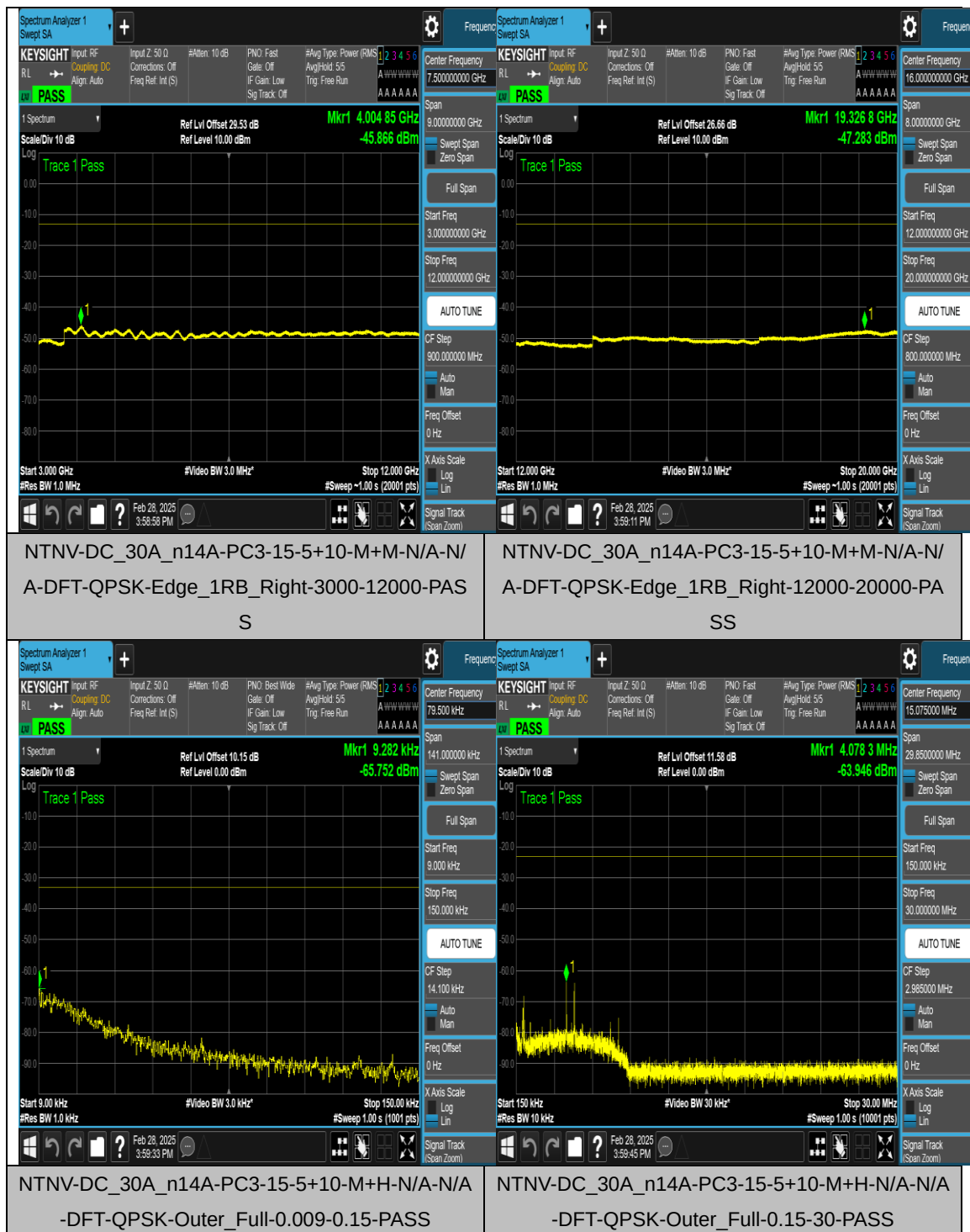
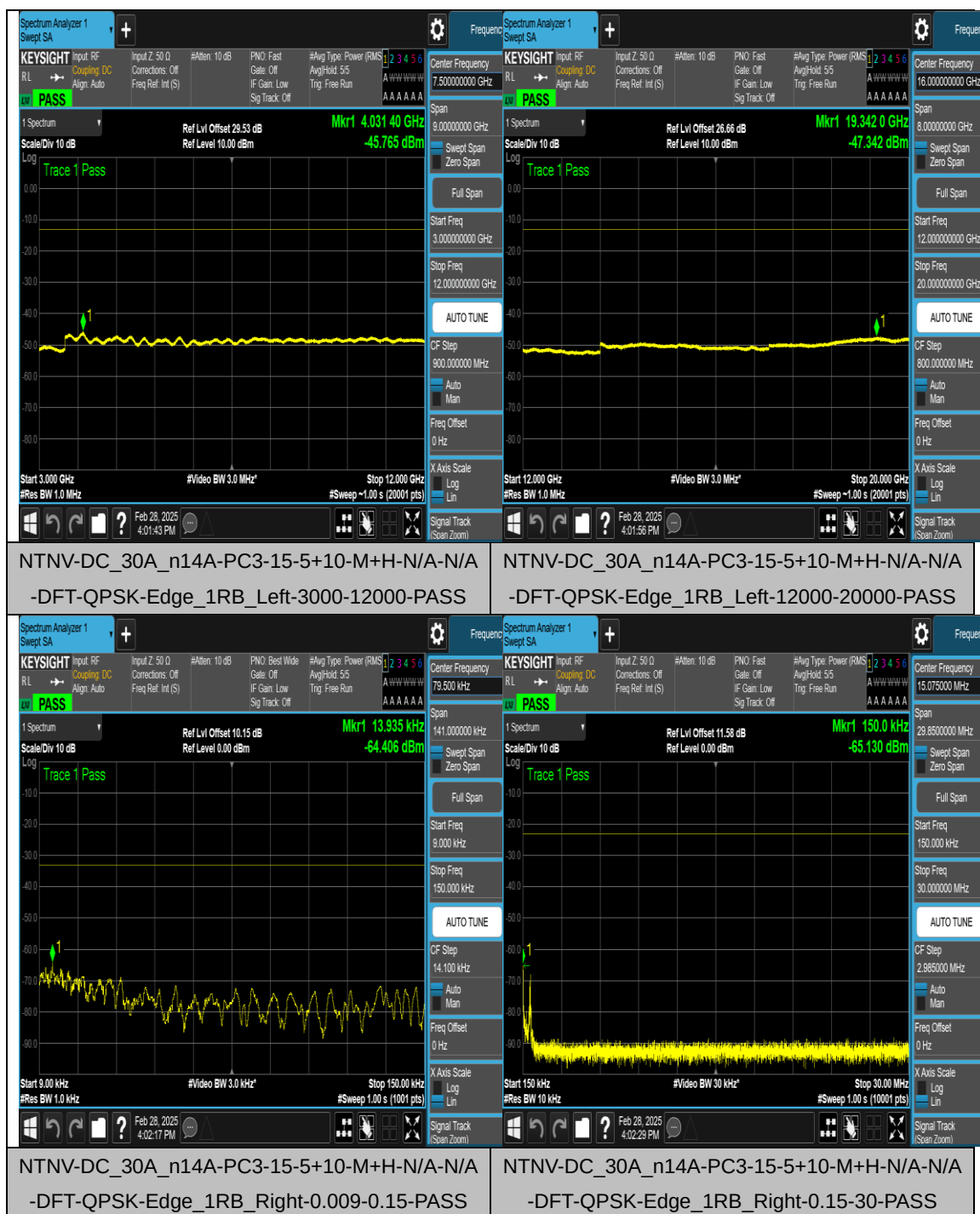
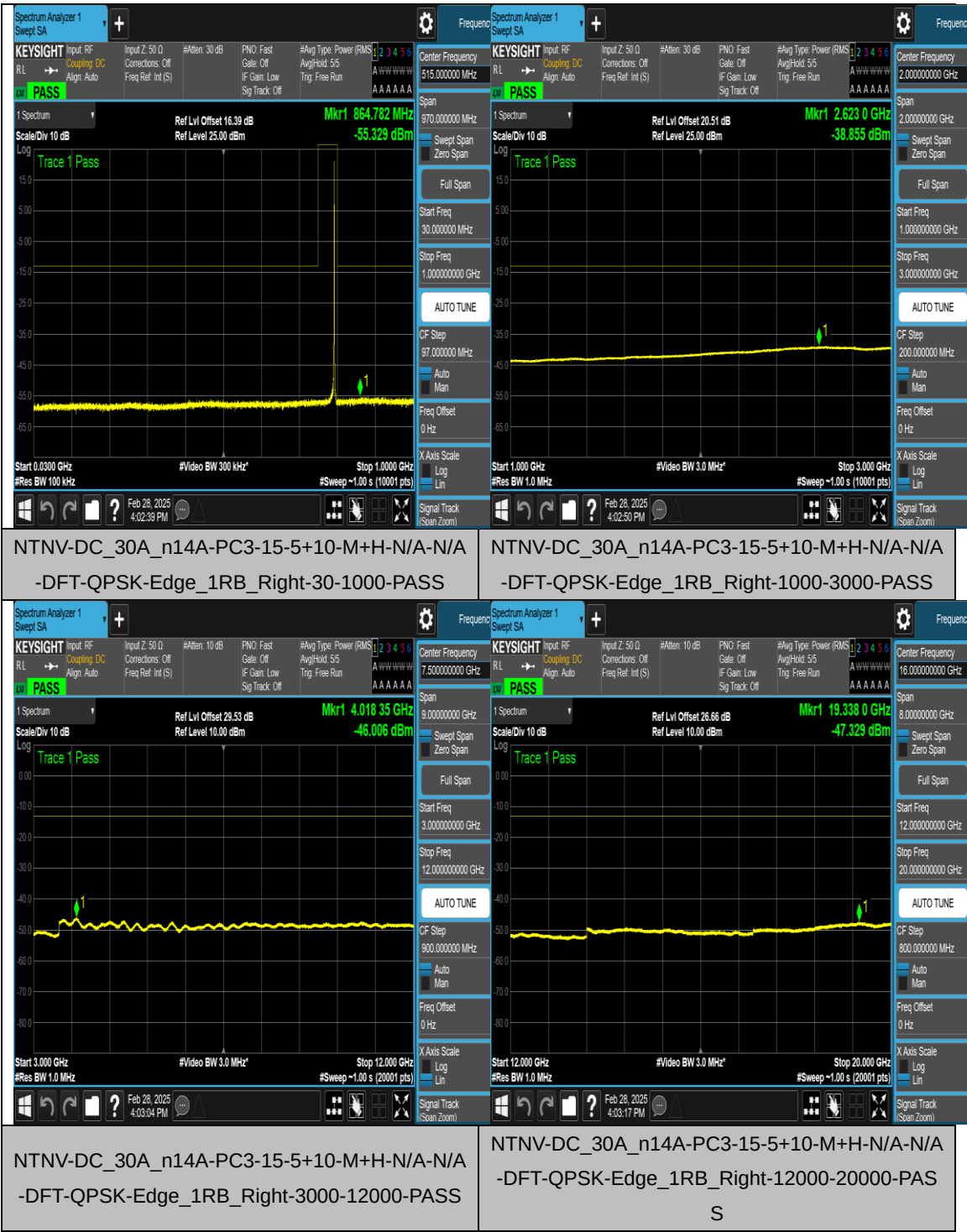












Appendix F: Frequency Stability for NSA

Test Result

Frequency Error VS. Voltage

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	VL	NT	-0.310000	-0.000392	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	VN	NT	-1.310000	-0.001657	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	VH	NT	-0.880000	-0.001113	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	VL	NT	-1.230000	-0.001556	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	VN	NT	-0.600000	-0.000759	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	VH	NT	-0.480000	-0.000607	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	VL	NT	-0.040000	-0.000050	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	VN	NT	-0.520000	-0.000656	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	VH	NT	-1.300000	-0.001639	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	VL	NT	-0.080000	-0.000101	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	VN	NT	-0.120000	-0.000151	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	VH	NT	0.050000	0.000063	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	VL	NT	-1.820000	-0.002288	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	VN	NT	-0.200000	-0.000250	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	VH	NT	-0.370000	-0.000465	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	VL	NT	-0.700000	-0.000880	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	VN	NT	0.160000	0.000201	PASS
DC_30A	15	5+5	DFT-16QAM	M+H	Outer_Full	VH	NT	0.370000	0.000465	PASS

_n14A										
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	VL	NT	0.090000	0.000113	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	VN	NT	0.100000	0.000126	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	VH	NT	0.370000	0.000467	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	VL	NT	-0.320000	-0.000404	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	VN	NT	0.150000	0.000189	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	VH	NT	-0.300000	-0.000378	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	VL	NT	0.670000	0.000845	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	VN	NT	-0.280000	-0.000353	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	VH	NT	-0.960000	-0.001211	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	VL	NT	-0.120000	-0.000151	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	VN	NT	-0.120000	-0.000151	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	VH	NT	-0.370000	-0.000467	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	VL	NT	0.730000	0.000921	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	VN	NT	-0.230000	-0.000290	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	VH	NT	0.550000	0.000694	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	VL	NT	-0.180000	-0.000227	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	VN	NT	-0.500000	-0.000631	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	VH	NT	-0.790000	-0.000995	PASS

Frequency Error VS. Temperature

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_30A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	-30	-0.270000	-0.000342	PASS

_n14A										
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	-20	-1.600000	-0.002024	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	-10	-0.360000	-0.000455	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	0	-0.140000	-0.000177	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	10	-0.120000	-0.000152	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	20	0.320000	0.000405	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	30	-0.910000	-0.001151	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	40	0.070000	0.000089	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+L	Outer_Full	NV	50	-0.930000	-0.001176	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	-30	-0.450000	-0.000569	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	-20	0.020000	0.000025	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	-10	-0.290000	-0.000367	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	0	-0.670000	-0.000848	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	10	-0.520000	-0.000658	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	20	-0.880000	-0.001113	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	30	-0.790000	-0.000999	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	40	-0.780000	-0.000987	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+L	Outer_Full	NV	50	-0.340000	-0.000430	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	-30	-0.540000	-0.000681	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	-20	-1.700000	-0.002144	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	-10	-1.050000	-0.001324	PASS
DC_30A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	0	-0.500000	-0.000631	PASS

_n14A										
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	10	-1.030000	-0.001299	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	20	-0.320000	-0.000404	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	30	0.760000	0.000958	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	40	-0.280000	-0.000353	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+M	Outer_Full	NV	50	-1.420000	-0.001791	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	-30	0.330000	0.000416	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	-20	-0.490000	-0.000618	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	-10	-0.850000	-0.001072	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	0	-0.820000	-0.001034	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	10	-0.260000	-0.000328	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	20	-0.870000	-0.001097	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	30	-0.690000	-0.000870	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	40	-0.410000	-0.000517	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+M	Outer_Full	NV	50	-0.160000	-0.000202	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	-30	-0.220000	-0.000277	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	-20	1.000000	0.001257	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	-10	-0.010000	-0.000013	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	0	-0.600000	-0.000754	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	10	0.320000	0.000402	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	20	-0.380000	-0.000478	PASS
DC_30A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	30	-0.490000	-0.000616	PASS

_n14A										
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	40	0.210000	0.000264	PASS
DC_30A_n14A	15	5+5	DFT-QPSK	M+H	Outer_Full	NV	50	0.310000	0.000390	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	-30	0.130000	0.000163	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	-20	-0.510000	-0.000641	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	-10	0.950000	0.001194	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	0	-0.310000	-0.000390	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	10	-1.500000	-0.001886	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	20	-1.070000	-0.001345	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	30	-0.270000	-0.000339	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	40	-2.310000	-0.002904	PASS
DC_30A_n14A	15	5+5	DFT-16QAM	M+H	Outer_Full	NV	50	-0.420000	-0.000528	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	-30	-0.280000	-0.000353	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	-20	-0.090000	-0.000113	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	-10	0.550000	0.000694	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	0	-0.420000	-0.000530	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	10	-1.020000	-0.001286	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	20	-0.300000	-0.000378	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	30	-0.070000	-0.000088	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	40	0.540000	0.000681	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+L	Outer_Full	NV	50	-0.170000	-0.000214	PASS
DC_30A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	-30	-0.210000	-0.000265	PASS

_n14A										
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	-20	-0.290000	-0.000366	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	-10	-0.910000	-0.001148	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	0	0.380000	0.000479	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	10	-0.380000	-0.000479	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	20	0.020000	0.000025	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	30	0.250000	0.000315	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	40	-1.470000	-0.001854	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+L	Outer_Full	NV	50	-0.250000	-0.000315	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	-30	0.580000	0.000731	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	-20	0.330000	0.000416	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	-10	-0.430000	-0.000542	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	0	0.020000	0.000025	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	10	0.260000	0.000328	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	20	-1.120000	-0.001412	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	30	0.300000	0.000378	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	40	1.340000	0.001690	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+M	Outer_Full	NV	50	0.290000	0.000366	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	-30	-0.420000	-0.000530	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	-20	-0.280000	-0.000353	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	-10	-0.050000	-0.000063	PASS
DC_30A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	0	-0.640000	-0.000807	PASS

_n14A										
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	10	-0.460000	-0.000580	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	20	-0.150000	-0.000189	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	30	0.130000	0.000164	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	40	-0.590000	-0.000744	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+M	Outer_Full	NV	50	0.680000	0.000858	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	-30	-0.610000	-0.000769	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	-20	-0.550000	-0.000694	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	-10	-1.250000	-0.001576	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	0	-0.350000	-0.000441	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	10	0.270000	0.000340	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	20	0.230000	0.000290	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	30	-0.740000	-0.000933	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	40	-0.720000	-0.000908	PASS
DC_30A_n14A	15	5+10	DFT-QPSK	M+H	Outer_Full	NV	50	-0.610000	-0.000769	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	-30	-0.730000	-0.000921	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	-20	-0.210000	-0.000265	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	-10	-0.800000	-0.001008	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	0	-0.720000	-0.000908	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	10	-0.500000	-0.000631	PASS
DC_30A_n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	20	0.080000	0.000101	PASS
DC_30A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	30	0.390000	0.000492	PASS

_n14A										
DC_30A _n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	40	-0.410000	-0.000517	PASS
DC_30A _n14A	15	5+10	DFT-16QAM	M+H	Outer_Full	NV	50	-0.240000	-0.000303	PASS