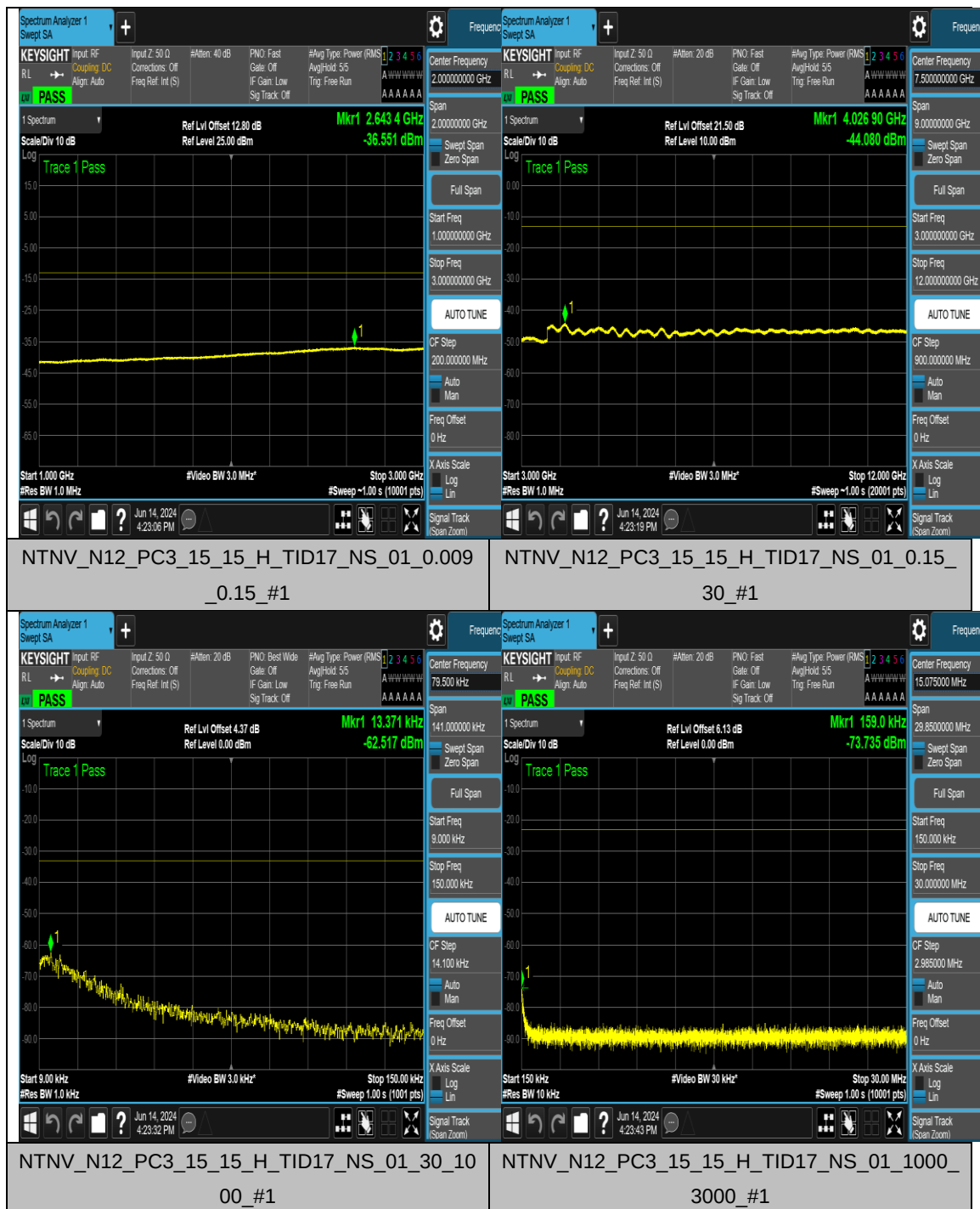
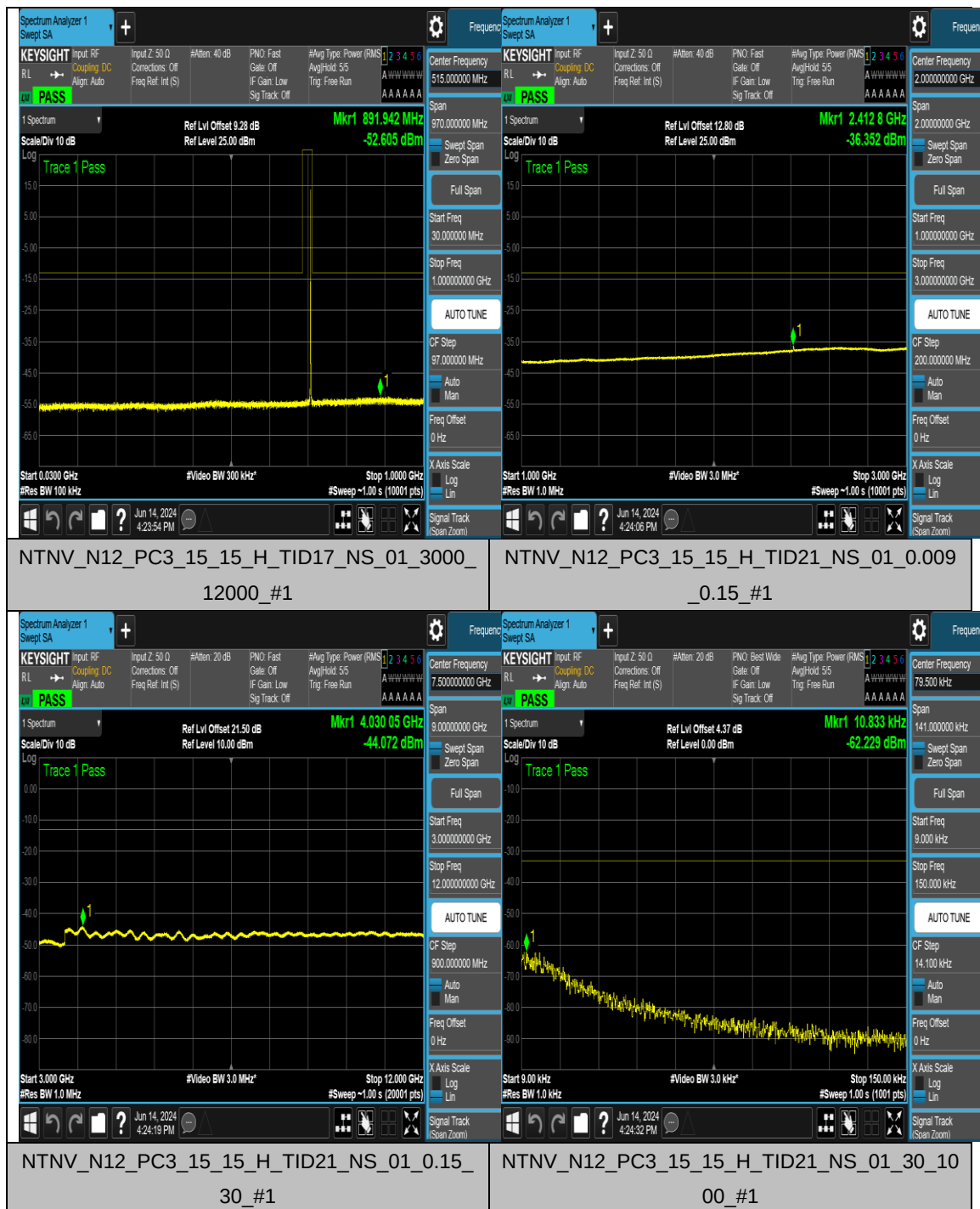
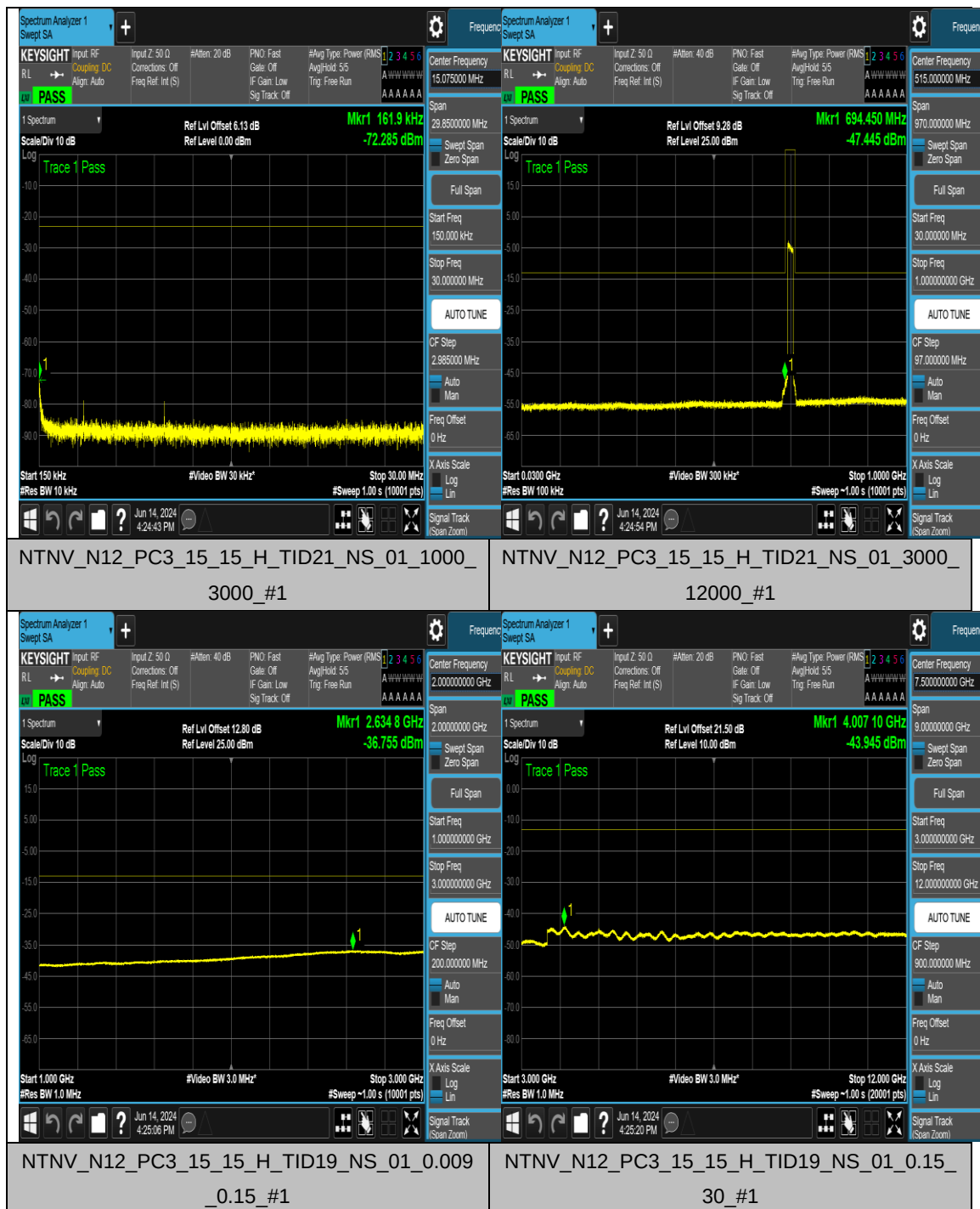
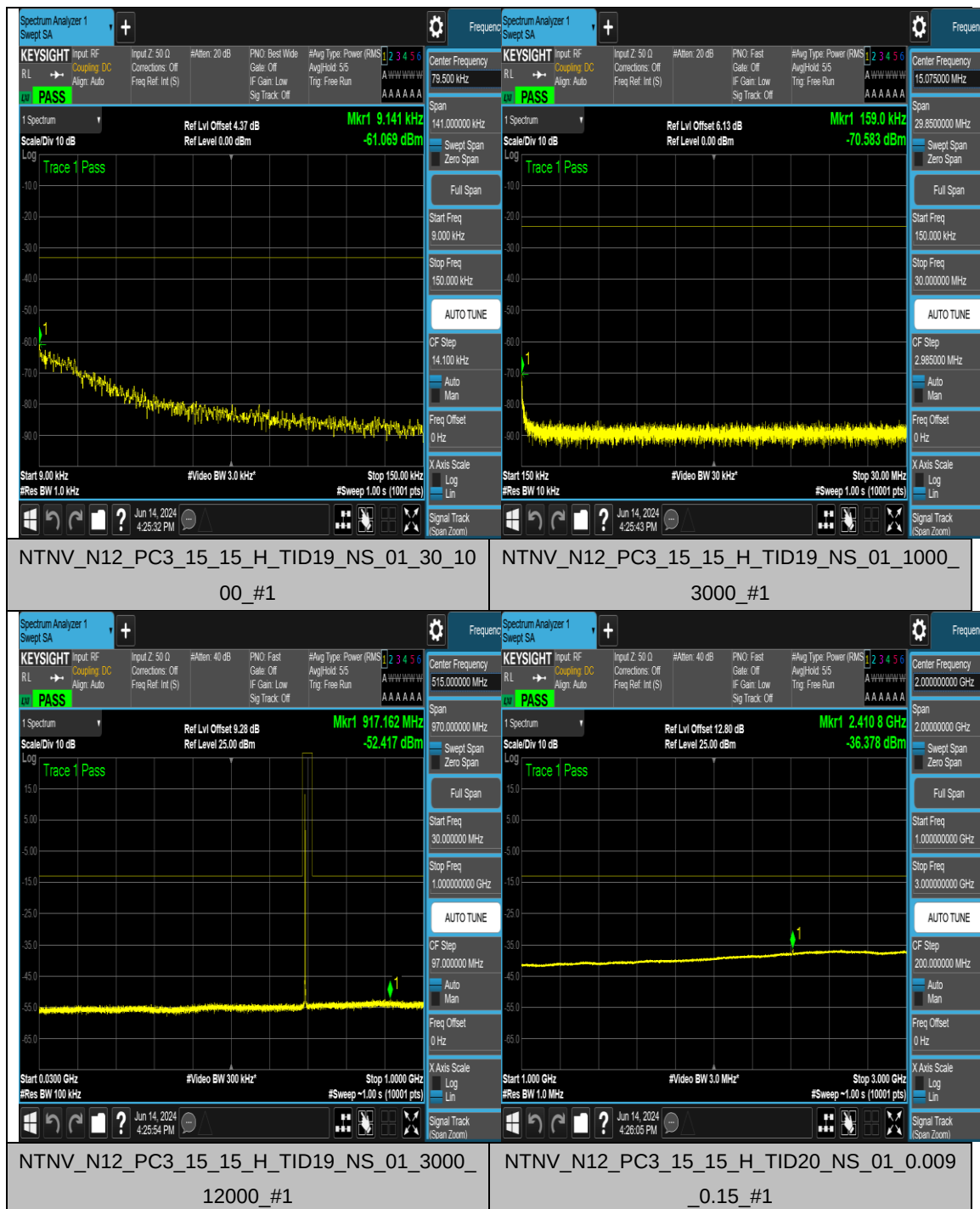
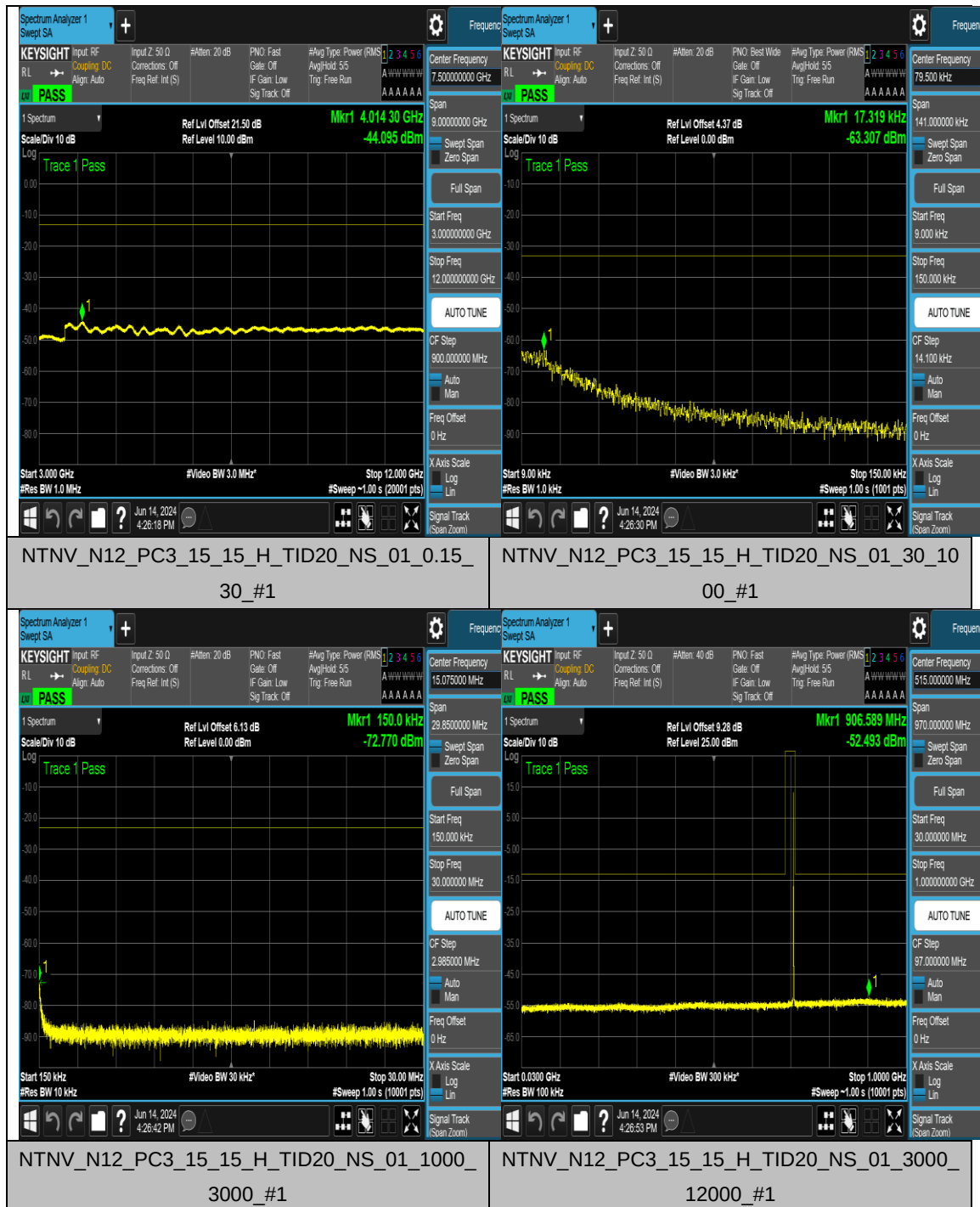














Appendix F: Frequency Stability for SA

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	17.000000	0.024234	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	VN	NT	5.000000	0.007128	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	VH	NT	6.000000	0.008553	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	VL	NT	19.000000	0.027085	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	VN	NT	19.000000	0.027085	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	VH	NT	18.000000	0.025659	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	VL	NT	15.000000	0.021201	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	VN	NT	13.000000	0.018375	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	VH	NT	12.000000	0.016961	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	VL	NT	3.000000	0.004240	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	VN	NT	13.000000	0.018375	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	VH	NT	11.000000	0.015548	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	VL	NT	4.000000	0.005606	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	VN	NT	5.000000	0.007008	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	VH	NT	11.000000	0.015417	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	VL	NT	6.000000	0.008409	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	VN	NT	1.000000	0.001402	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	VH	NT	3.000000	0.004205	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	VL	NT	10.000000	0.014205	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	VN	NT	2.000000	0.002841	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	VH	NT	4.000000	0.005682	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	VL	NT	6.000000	0.008523	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	VN	NT	4.000000	0.005682	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	VH	NT	6.000000	0.008523	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	VL	NT	11.000000	0.015548	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	VN	NT	9.000000	0.012721	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	VH	NT	1.000000	0.001413	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	VL	NT	14.000000	0.019788	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	VN	NT	17.000000	0.024028	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	VH	NT	19.000000	0.026855	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	VL	NT	18.000000	0.025316	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	VN	NT	9.000000	0.012658	PASS

N12	15	10	DFT-QPSK	H	Outer_Full	VH	NT	11.000000	0.015471	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	VL	NT	8.000000	0.011252	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	VN	NT	3.000000	0.004219	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	VH	NT	5.000000	0.007032	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	VL	NT	18.000000	0.025478	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	VN	NT	10.000000	0.014154	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	VH	NT	12.000000	0.016985	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	VL	NT	16.000000	0.022647	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	VN	NT	11.000000	0.015570	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	VH	NT	13.000000	0.018401	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	VL	NT	1.000000	0.001413	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	VN	NT	15.000000	0.021201	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	VH	NT	1.000000	0.001413	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	VL	NT	12.000000	0.016961	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	VN	NT	16.000000	0.022615	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	VH	NT	3.000000	0.004240	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	VL	NT	16.000000	0.022583	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	VN	NT	17.000000	0.023994	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	VH	NT	4.000000	0.005646	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	VL	NT	1.000000	0.001411	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	VN	NT	18.000000	0.025406	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	VH	NT	2.000000	0.002823	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	18.000000	0.025659	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	-20	7.000000	0.009979	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	-10	19.000000	0.027085	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	0	5.000000	0.007128	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	10	7.000000	0.009979	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	20	9.000000	0.012830	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	30	1.000000	0.001426	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	40	3.000000	0.004277	PASS
N12	15	5	DFT-QPSK	L	Outer_Full	NV	50	2.000000	0.002851	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	-30	10.000000	0.014255	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	-20	12.000000	0.017106	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	-10	14.000000	0.019957	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	0	16.000000	0.022808	PASS

N12	15	5	DFT-16QAM	L	Outer_Full	NV	10	8.000000	0.011404	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	20	10.000000	0.014255	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	30	12.000000	0.017106	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	40	4.000000	0.005702	PASS
N12	15	5	DFT-16QAM	L	Outer_Full	NV	50	6.000000	0.008553	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	-30	14.000000	0.019788	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	-20	16.000000	0.022615	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	-10	3.000000	0.004240	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	0	16.000000	0.022615	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	10	8.000000	0.011307	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	20	11.000000	0.015548	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	30	9.000000	0.012721	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	40	16.000000	0.022615	PASS
N12	15	5	DFT-QPSK	M	Outer_Full	NV	50	8.000000	0.011307	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	-30	14.000000	0.019788	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	-20	6.000000	0.008481	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	-10	8.000000	0.011307	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	0	7.000000	0.009894	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	10	8.000000	0.011307	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	20	10.000000	0.014134	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	30	2.000000	0.002827	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	40	4.000000	0.005654	PASS
N12	15	5	DFT-16QAM	M	Outer_Full	NV	50	7.000000	0.009894	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	-30	16.000000	0.022425	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	-20	10.000000	0.014015	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	-10	12.000000	0.016819	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	0	14.000000	0.019622	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	10	13.000000	0.018220	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	20	15.000000	0.021023	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	30	13.000000	0.018220	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	40	15.000000	0.021023	PASS
N12	15	5	DFT-QPSK	H	Outer_Full	NV	50	17.000000	0.023826	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	-30	14.000000	0.019622	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	-20	1.000000	0.001402	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	-10	12.000000	0.016819	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	0	15.000000	0.021023	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	10	4.000000	0.005606	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	20	16.000000	0.022425	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	30	18.000000	0.025228	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	40	4.000000	0.005606	PASS
N12	15	5	DFT-16QAM	H	Outer_Full	NV	50	14.000000	0.019622	PASS

N12	15	10	DFT-QPSK	L	Outer_Full	NV	-30	6.000000	0.008523	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	-20	17.000000	0.024148	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	-10	8.000000	0.011364	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	0	10.000000	0.014205	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	10	2.000000	0.002841	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	20	11.000000	0.015625	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	30	9.000000	0.012784	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	40	11.000000	0.015625	PASS
N12	15	10	DFT-QPSK	L	Outer_Full	NV	50	10.000000	0.014205	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	-30	17.000000	0.024148	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	-20	19.000000	0.026989	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	-10	2.000000	0.002841	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	0	4.000000	0.005682	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	10	6.000000	0.008523	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	20	7.000000	0.009943	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	30	10.000000	0.014205	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	40	8.000000	0.011364	PASS
N12	15	10	DFT-16QAM	L	Outer_Full	NV	50	11.000000	0.015625	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	-30	3.000000	0.004240	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	-20	2.000000	0.002827	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	-10	4.000000	0.005654	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	0	6.000000	0.008481	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	10	8.000000	0.011307	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	20	7.000000	0.009894	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	30	12.000000	0.016961	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	40	18.000000	0.025442	PASS
N12	15	10	DFT-QPSK	M	Outer_Full	NV	50	17.000000	0.024028	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	-30	6.000000	0.008481	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	-20	6.000000	0.008481	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	-10	5.000000	0.007067	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	0	7.000000	0.009894	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	10	9.000000	0.012721	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	20	19.000000	0.026855	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	30	2.000000	0.002827	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	40	1.000000	0.001413	PASS
N12	15	10	DFT-16QAM	M	Outer_Full	NV	50	12.000000	0.016961	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	-30	5.000000	0.007032	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	-20	7.000000	0.009845	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	-10	18.000000	0.025316	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	0	1.000000	0.001406	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	10	10.000000	0.014065	PASS

N12	15	10	DFT-QPSK	H	Outer_Full	NV	20	13.000000	0.018284	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	30	3.000000	0.004219	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	40	14.000000	0.019691	PASS
N12	15	10	DFT-QPSK	H	Outer_Full	NV	50	9.000000	0.012658	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	-30	7.000000	0.009845	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	-20	18.000000	0.025316	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	-10	2.000000	0.002813	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	0	4.000000	0.005626	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	10	3.000000	0.004219	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	20	5.000000	0.007032	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	30	1.000000	0.001406	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	40	3.000000	0.004219	PASS
N12	15	10	DFT-16QAM	H	Outer_Full	NV	50	2.000000	0.002813	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	-30	14.000000	0.019816	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	-20	8.000000	0.011323	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	-10	7.000000	0.009908	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	0	3.000000	0.004246	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	10	5.000000	0.007077	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	20	7.000000	0.009908	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	30	19.000000	0.026893	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	40	5.000000	0.007077	PASS
N12	15	15	DFT-QPSK	L	Outer_Full	NV	50	5.000000	0.007077	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	-30	12.000000	0.016985	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	-20	10.000000	0.014154	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	-10	12.000000	0.016985	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	0	11.000000	0.015570	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	10	13.000000	0.018401	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	20	15.000000	0.021231	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	30	12.000000	0.016985	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	40	11.000000	0.015570	PASS
N12	15	15	DFT-16QAM	L	Outer_Full	NV	50	13.000000	0.018401	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	-30	19.000000	0.026855	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	-20	6.000000	0.008481	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	-10	8.000000	0.011307	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	0	18.000000	0.025442	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	10	17.000000	0.024028	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	20	19.000000	0.026855	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	30	2.000000	0.002827	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	40	1.000000	0.001413	PASS
N12	15	15	DFT-QPSK	M	Outer_Full	NV	50	2.000000	0.002827	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	-30	5.000000	0.007067	PASS

N12	15	15	DFT-16QAM	M	Outer_Full	NV	-20	6.000000	0.008481	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	-10	5.000000	0.007067	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	0	7.000000	0.009894	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	10	5.000000	0.007067	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	20	16.000000	0.022615	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	30	5.000000	0.007067	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	40	4.000000	0.005654	PASS
N12	15	15	DFT-16QAM	M	Outer_Full	NV	50	6.000000	0.008481	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	-30	15.000000	0.021171	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	-20	14.000000	0.019760	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	-10	16.000000	0.022583	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	0	18.000000	0.025406	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	10	11.000000	0.015526	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	20	8.000000	0.011291	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	30	10.000000	0.014114	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	40	2.000000	0.002823	PASS
N12	15	15	DFT-QPSK	H	Outer_Full	NV	50	11.000000	0.015526	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	-30	4.000000	0.005646	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	-20	3.000000	0.004234	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	-10	17.000000	0.023994	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	0	7.000000	0.009880	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	10	5.000000	0.007057	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	20	16.000000	0.022583	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	30	19.000000	0.026817	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	40	6.000000	0.008469	PASS
N12	15	15	DFT-16QAM	H	Outer_Full	NV	50	15.000000	0.021171	PASS