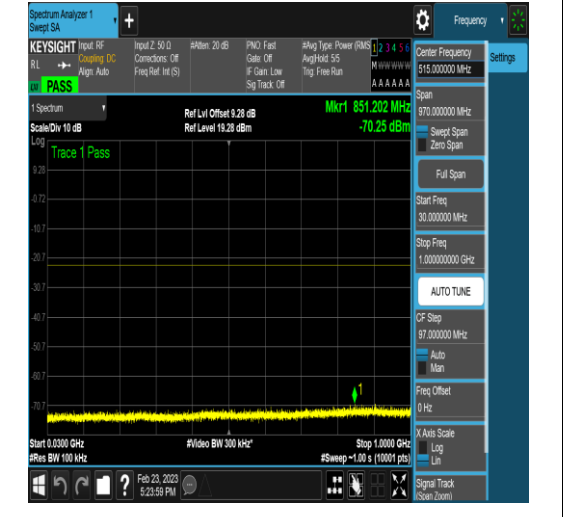
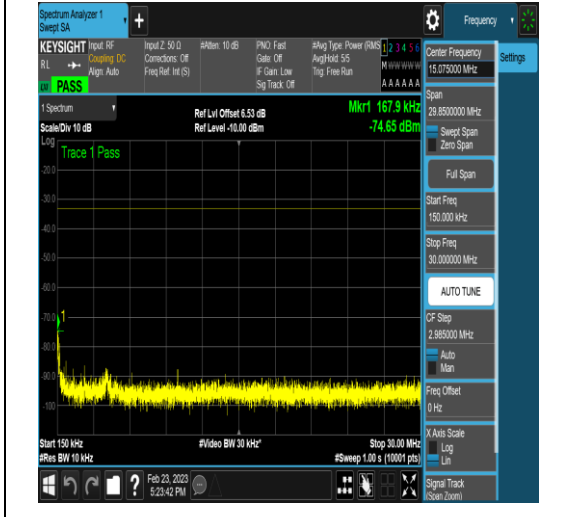


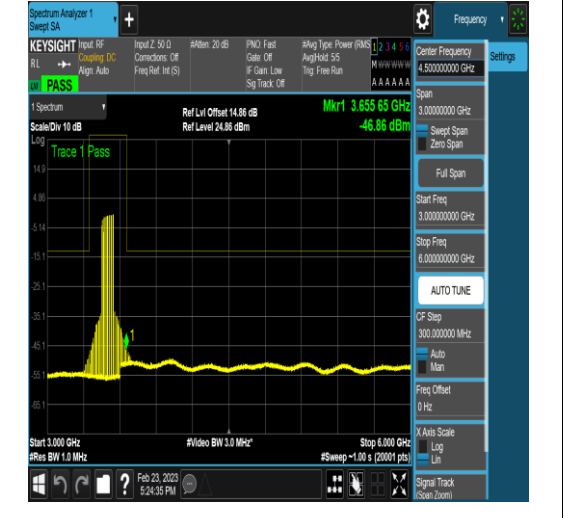
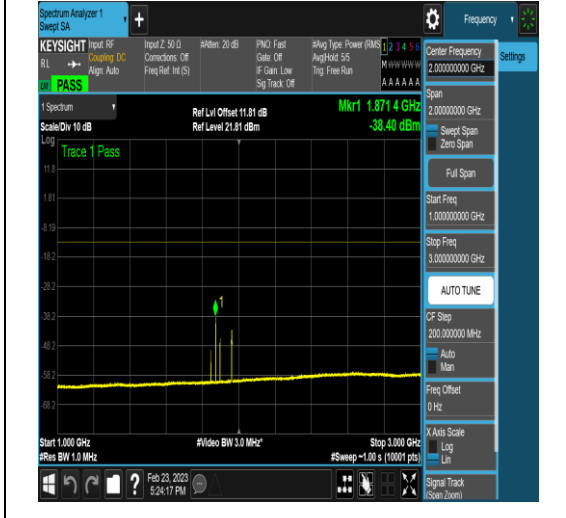
NTNV_DC_2A_n78A-3450-3550_PC3_30_5+100
 _M+H_TID17_N/A_26000_40000_#1

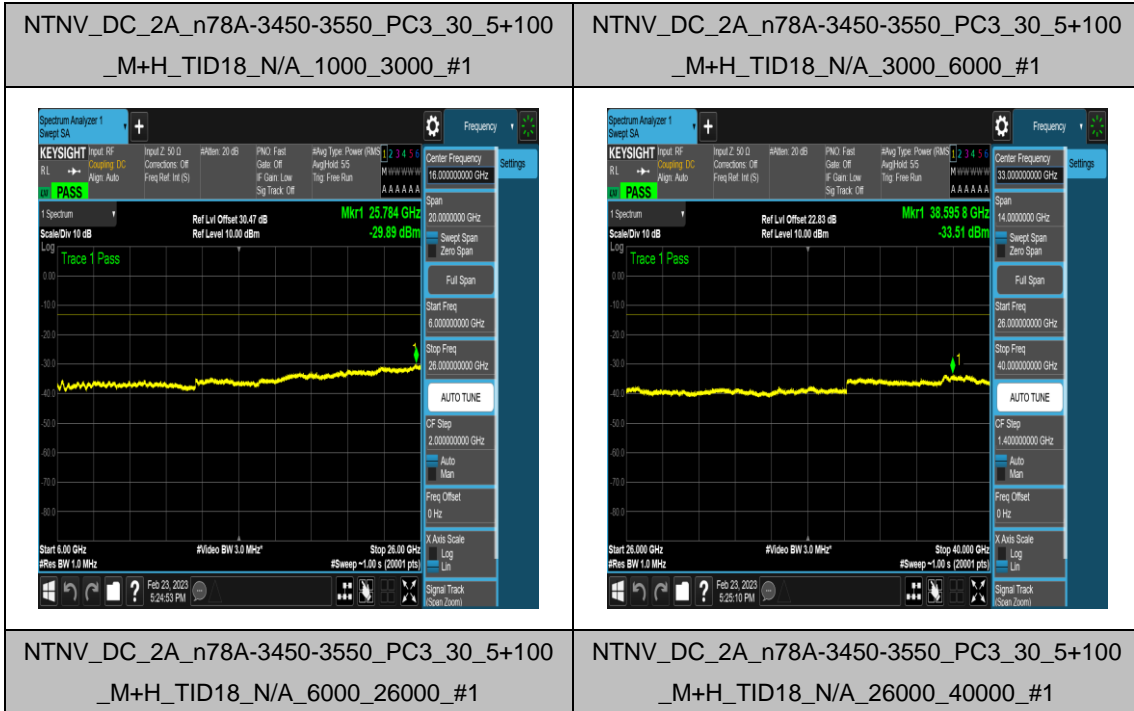
NTNV_DC_2A_n78A-3450-3550_PC3_30_5+100
 _M+H_TID18_N/A_0.009_0.15_#1



NTNV_DC_2A_n78A-3450-3550_PC3_30_5+100
 _M+H_TID18_N/A_0.15_30_#1

NTNV_DC_2A_n78A-3450-3550_PC3_30_5+100
 _M+H_TID18_N/A_30_1000_#1





Appendix F: Frequency Stability for NSA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SC S	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation(ppm)	Verdict
DC_2A_n78A-3 450-3550	3 0	5+20	DFT-Q PSK	M+L	Outer _Full	VN	NT	-14.26	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	CP-QP SK	M+L	Outer _Full	VN	NT	-9.70	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	DFT-Q PSK	M+M	Outer _Full	VN	NT	-3.49	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	CP-QP SK	M+M	Outer _Full	VN	NT	3.35	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	DFT-Q PSK	M+H	Outer _Full	VN	NT	-14.07	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	CP-QP SK	M+H	Outer _Full	VN	NT	-3.02	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	DFT-Q PSK	M+L	Outer _Full	VN	NT	2.64	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	CP-QP SK	M+L	Outer _Full	VN	NT	-2.85	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	DFT-Q PSK	M+M	Outer _Full	VN	NT	-3.94	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	CP-QP SK	M+M	Outer _Full	VN	NT	-1.28	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	DFT-Q PSK	M+H	Outer _Full	VN	NT	5.21	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	CP-QP SK	M+H	Outer _Full	VN	NT	-0.40	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	DFT-Q PSK	M+L	Outer _Full	VN	NT	-9.01	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	CP-QP SK	M+L	Outer _Full	VN	NT	-9.55	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	DFT-Q PSK	M+M	Outer _Full	VN	NT	4.07	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	CP-QP SK	M+M	Outer _Full	VN	NT	-4.05	0.00	PAS S
DC_2A_n78A-3	3	5+50	DFT-Q	M+H	Outer	VN	NT	-17.87	-0.01	PAS

450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+50	CP-QP	M+H	Outer	VN	NT	-10.92	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+60	DFT-Q	M+L	Outer	VN	NT	-6.97	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+60	CP-QP	M+L	Outer	VN	NT	11.41	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+60	DFT-Q	M+M	Outer	VN	NT	4.94	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+60	CP-QP	M+M	Outer	VN	NT	-1.33	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+60	DFT-Q	M+H	Outer	VN	NT	-11.89	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+60	CP-QP	M+H	Outer	VN	NT	-27.26	-0.01	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+80	DFT-Q	M+L	Outer	VN	NT	-0.18	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+80	CP-QP	M+L	Outer	VN	NT	-10.95	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+80	DFT-Q	M+M	Outer	VN	NT	-12.33	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+80	CP-QP	M+M	Outer	VN	NT	7.35	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+80	DFT-Q	M+H	Outer	VN	NT	-5.47	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+80	CP-QP	M+H	Outer	VN	NT	1.20	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+90	DFT-Q	M+L	Outer	VN	NT	-14.58	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+90	CP-QP	M+L	Outer	VN	NT	-5.89	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+90	DFT-Q	M+M	Outer	VN	NT	-10.51	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+90	CP-QP	M+M	Outer	VN	NT	-1.16	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+90	DFT-Q	M+H	Outer	VN	NT	-15.10	0.00	PAS
450-3550	0		PSK		_Full					S
DC_2A_n78A-3	3	5+90	CP-QP	M+H	Outer	VN	NT	-16.14	0.00	PAS
450-3550	0		SK		_Full					S
DC_2A_n78A-3	3	5+10	DFT-Q	M+L	Outer	VN	NT	-6.79	0.00	PAS
450-3550	0	0	PSK		_Full					S
DC_2A_n78A-3	3	5+10	CP-QP	M+L	Outer	VN	NT	-11.50	0.00	PAS

450-3550	0	0	SK		_Full					S
DC_2A_n78A-3 450-3550	3 0	5+10 0	DFT-Q PSK	M+M	Outer _Full	VN	NT	-15.32	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	CP-QP SK	M+M	Outer _Full	VN	NT	1.28	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	DFT-Q PSK	M+H	Outer _Full	VN	NT	-15.05	0.00	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	CP-QP SK	M+H	Outer _Full	VN	NT	-4.62	0.00	PAS S

Frequency Error VS. Temperature

Voltage										
Band	SC S	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_2A_n78A-3 450-3550	3 0	5+20	DFT-Q PSK	M+L	Outer _Full	NV	TN	-3.8654 83	-0.001 117	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	CP-QP SK	M+L	Outer _Full	NV	TN	-11.4094 32	-0.003 298	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	DFT-Q PSK	M+M	Outer _Full	NV	TN	-1.2889 53	-0.000 368	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	CP-QP SK	M+M	Outer _Full	NV	TN	-7.0533 57	-0.002 015	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	DFT-Q PSK	M+H	Outer _Full	NV	TN	-5.0509 99	-0.001 427	PAS S
DC_2A_n78A-3 450-3550	3 0	5+20	CP-QP SK	M+H	Outer _Full	NV	TN	-10.878 391	-0.003 073	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	DFT-Q PSK	M+L	Outer _Full	NV	TN	-3.7473 65	-0.001 080	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	CP-QP SK	M+L	Outer _Full	NV	TN	-2.9965 69	-0.000 864	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	DFT-Q PSK	M+M	Outer _Full	NV	TN	-1.2679 42	-0.000 362	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	CP-QP SK	M+M	Outer _Full	NV	TN	-7.3491 81	-0.002 100	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	DFT-Q PSK	M+H	Outer _Full	NV	TN	-19.322 296	-0.005 474	PAS S
DC_2A_n78A-3 450-3550	3 0	5+40	CP-QP SK	M+H	Outer _Full	NV	TN	-7.0499 85	-0.001 997	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	DFT-Q PSK	M+L	Outer _Full	NV	TN	-1.7736 71	-0.000 510	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	CP-QP SK	M+L	Outer _Full	NV	TN	-8.0816 35	-0.002 326	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	DFT-Q PSK	M+M	Outer _Full	NV	TN	-1.11235 2	-0.000 318	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	CP-QP SK	M+M	Outer _Full	NV	TN	-17.847 553	-0.005 099	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	DFT-Q PSK	M+H	Outer _Full	NV	TN	-7.0694 82	-0.002 006	PAS S
DC_2A_n78A-3 450-3550	3 0	5+50	CP-QP SK	M+H	Outer _Full	NV	TN	-6.6423 10	-0.001 884	PAS S

DC_2A_n78A-3 450-3550	3 0	5+60	DFT-Q PSK	M+L	Outer _Full	NV	TN	4.49626 8	0.001 292	PAS S
DC_2A_n78A-3 450-3550	3 0	5+60	CP-QP SK	M+L	Outer _Full	NV	TN	-11.6337 59	-0.003 343	PAS S
DC_2A_n78A-3 450-3550	3 0	5+60	DFT-Q PSK	M+M	Outer _Full	NV	TN	-12.186 919	-0.003 482	PAS S
DC_2A_n78A-3 450-3550	3 0	5+60	CP-QP SK	M+M	Outer _Full	NV	TN	-13.507 624	-0.003 859	PAS S
DC_2A_n78A-3 450-3550	3 0	5+60	DFT-Q PSK	M+H	Outer _Full	NV	TN	2.23551 2	0.000 635	PAS S
DC_2A_n78A-3 450-3550	3 0	5+60	CP-QP SK	M+H	Outer _Full	NV	TN	-3.5140 31	-0.000 998	PAS S
DC_2A_n78A-3 450-3550	3 0	5+80	DFT-Q PSK	M+L	Outer _Full	NV	TN	-7.6353 55	-0.002 188	PAS S
DC_2A_n78A-3 450-3550	3 0	5+80	CP-QP SK	M+L	Outer _Full	NV	TN	-6.6751 82	-0.001 913	PAS S
DC_2A_n78A-3 450-3550	3 0	5+80	DFT-Q PSK	M+M	Outer _Full	NV	TN	21.4825 25	0.006 138	PAS S
DC_2A_n78A-3 450-3550	3 0	5+80	CP-QP SK	M+M	Outer _Full	NV	TN	9.27556 3	0.002 650	PAS S
DC_2A_n78A-3 450-3550	3 0	5+80	DFT-Q PSK	M+H	Outer _Full	NV	TN	3.85855 8	0.001 099	PAS S
DC_2A_n78A-3 450-3550	3 0	5+80	CP-QP SK	M+H	Outer _Full	NV	TN	-10.660 363	-0.003 037	PAS S
DC_2A_n78A-3 450-3550	3 0	5+90	DFT-Q PSK	M+L	Outer _Full	NV	TN	-17.185 583	-0.004 917	PAS S
DC_2A_n78A-3 450-3550	3 0	5+90	CP-QP SK	M+L	Outer _Full	NV	TN	-3.2171 94	-0.000 921	PAS S
DC_2A_n78A-3 450-3550	3 0	5+90	DFT-Q PSK	M+M	Outer _Full	NV	TN	-9.0372 66	-0.002 582	PAS S
DC_2A_n78A-3 450-3550	3 0	5+90	CP-QP SK	M+M	Outer _Full	NV	TN	17.1670 99	0.004 905	PAS S
DC_2A_n78A-3 450-3550	3 0	5+90	DFT-Q PSK	M+H	Outer _Full	NV	TN	-4.9525 49	-0.001 413	PAS S
DC_2A_n78A-3 450-3550	3 0	5+90	CP-QP SK	M+H	Outer _Full	NV	TN	-2.2376 79	-0.000 638	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	DFT-Q PSK	M+L	Outer _Full	NV	TN	-12.287 290	-0.003 511	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	CP-QP SK	M+L	Outer _Full	NV	TN	-7.5186 79	-0.002 148	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	DFT-Q PSK	M+M	Outer _Full	NV	TN	1.09043 7	0.000 312	PAS S

DC_2A_n78A-3 450-3550	3 0	5+10 0	CP-QP SK	M+M	Outer _Full	NV	TN	-5.0059 02	-0.001 430	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	DFT-Q PSK	M+H	Outer _Full	NV	TN	-3.5883 06	-0.001 025	PAS S
DC_2A_n78A-3 450-3550	3 0	5+10 0	CP-QP SK	M+H	Outer _Full	NV	TN	-6.1096 43	-0.001 746	PAS S

Appendix F: Modulation characteristics for NSA

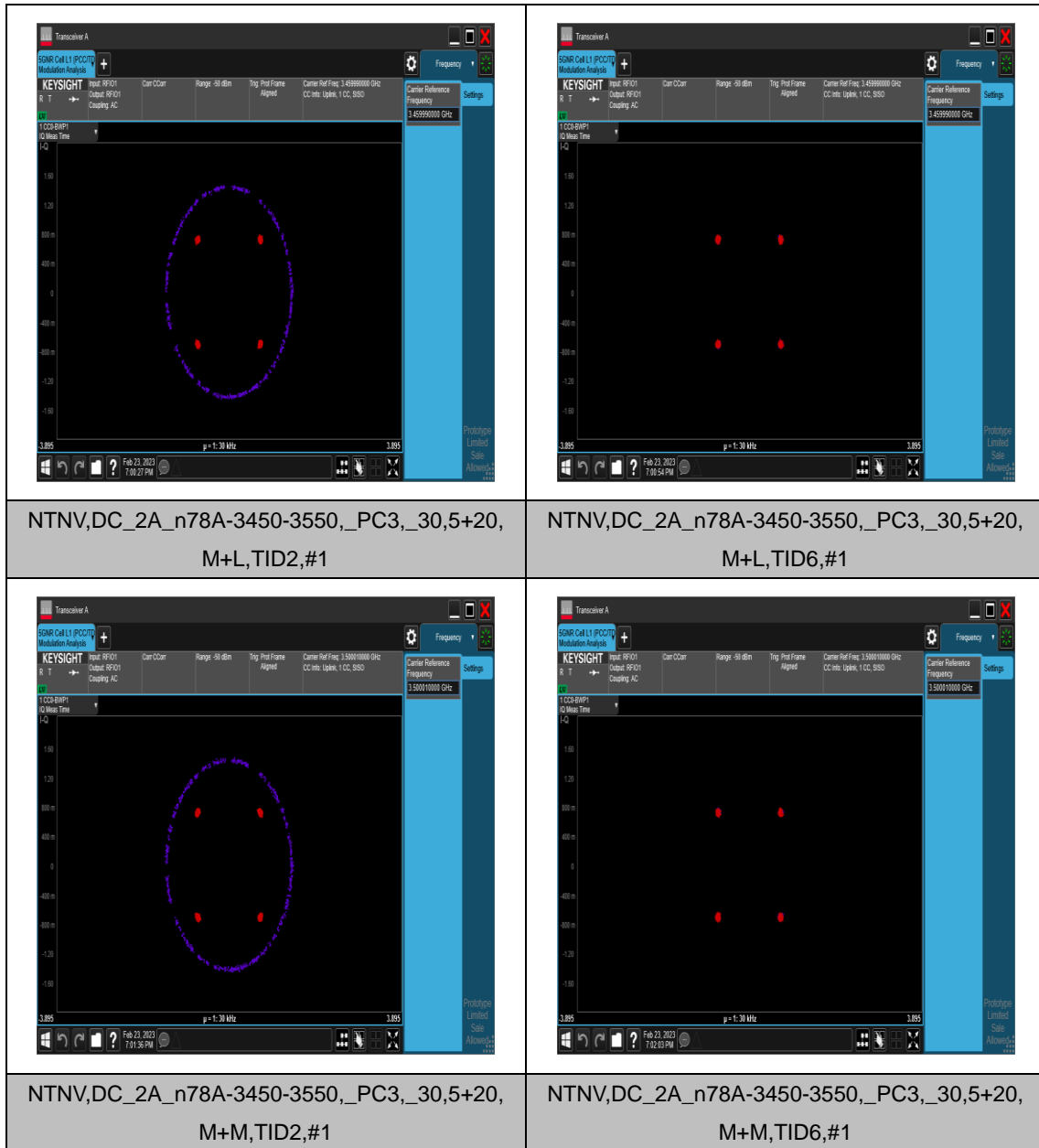
Test Result

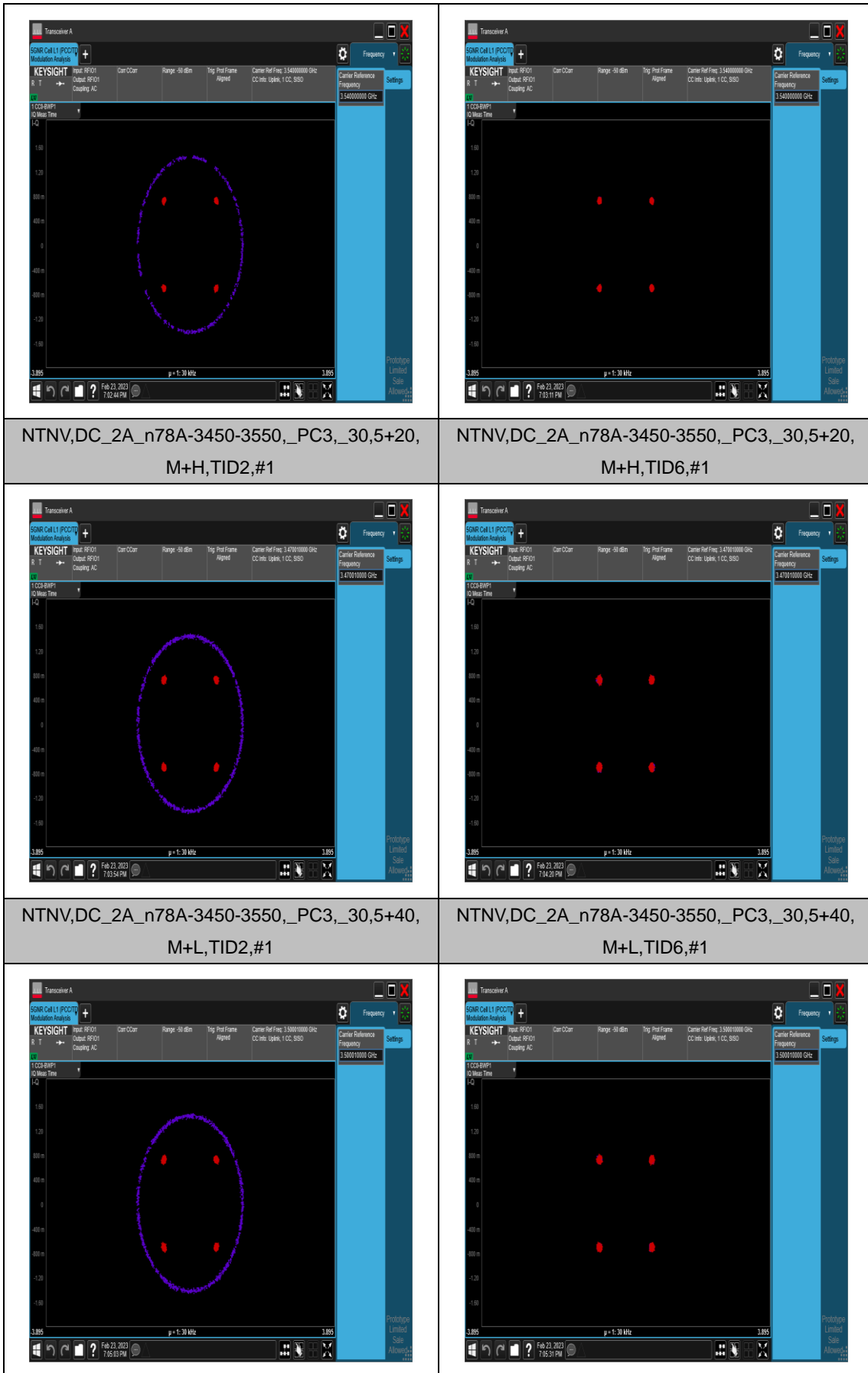
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DC_2A_n78A-3450-3550	30	5+20	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+20	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+20	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+20	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+20	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+40	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+40	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+40	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+40	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+40	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+40	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+50	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+50	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+50	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+50	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+50	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+50	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+60	DFT-QPSK	M+L	Outer_Full	see graph	PASS

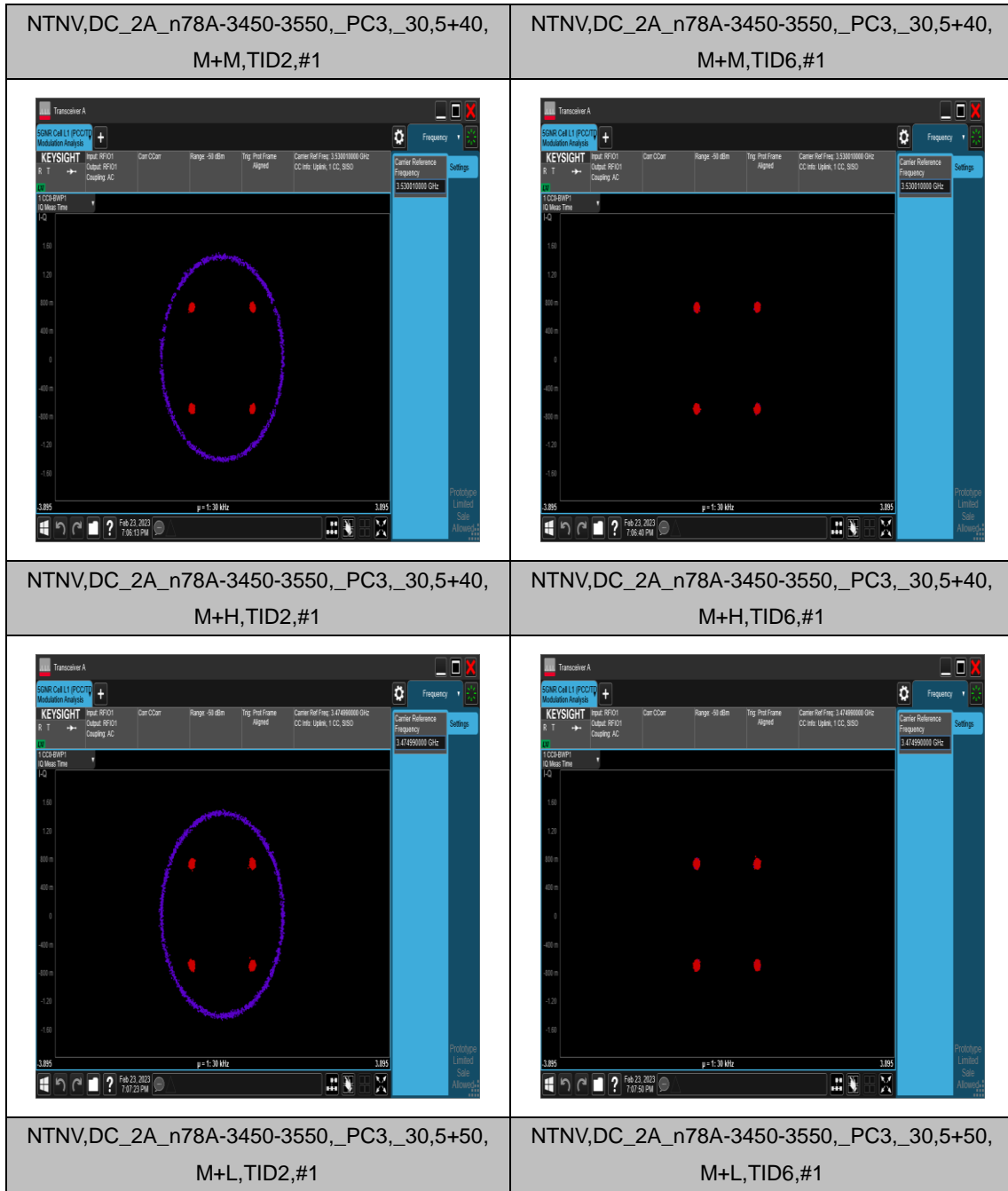
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DC_2A_n78A-3450-3550	30	5+60	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+60	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+60	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+60	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+60	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+80	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+80	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+80	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+80	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+80	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+80	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+90	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+90	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+90	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+90	CP-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+90	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+90	CP-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+100	DFT-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+100	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+100	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+100	CP-QPSK	M+M	Outer_Full	see graph	PASS

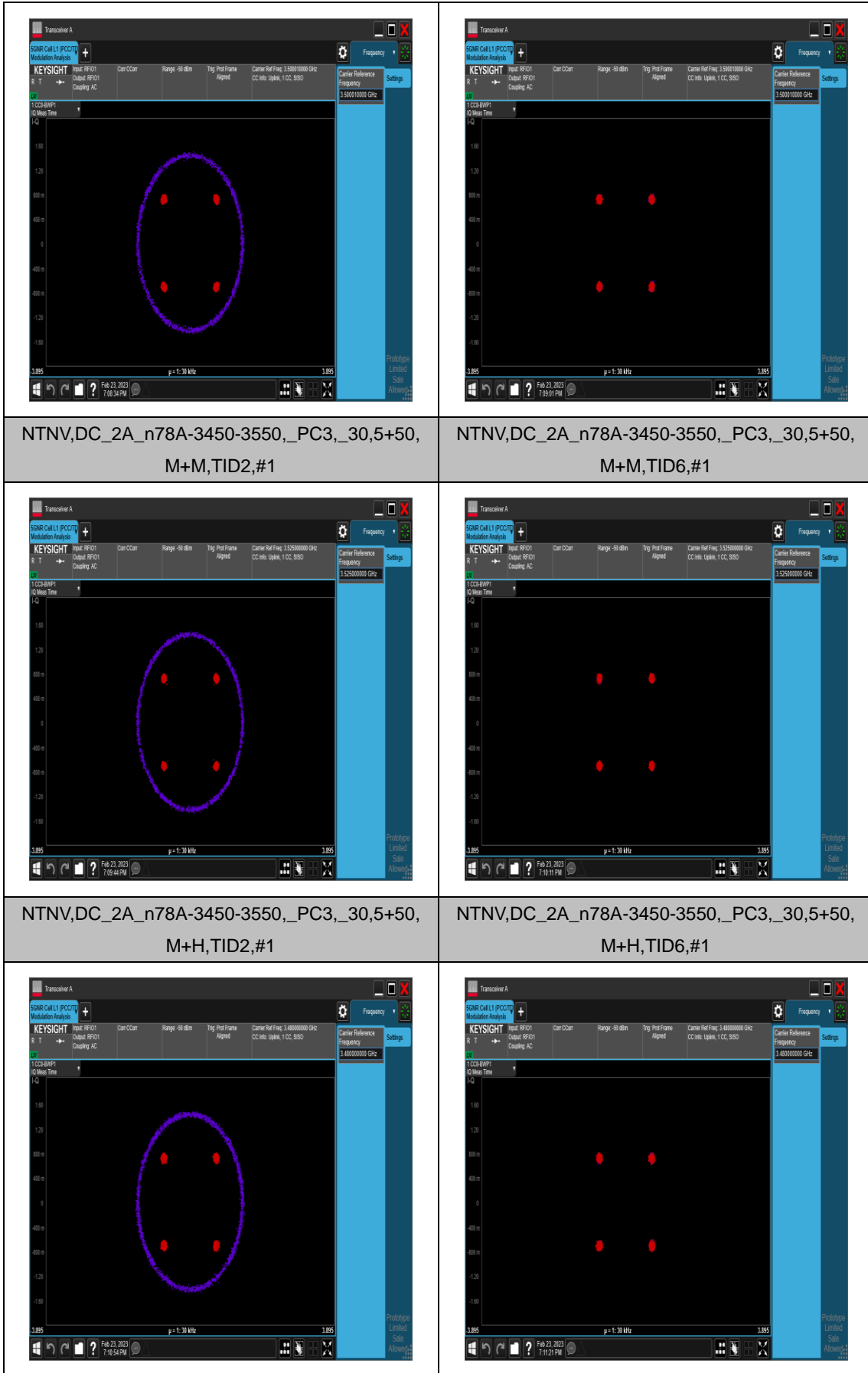
						graph	
DC_2A_n78A-3450-3550	30	5+100	DFT-QPSK	M+H	Outer_Full	see graph	PASS
DC_2A_n78A-3450-3550	30	5+100	CP-QPSK	M+H	Outer_Full	see graph	PASS

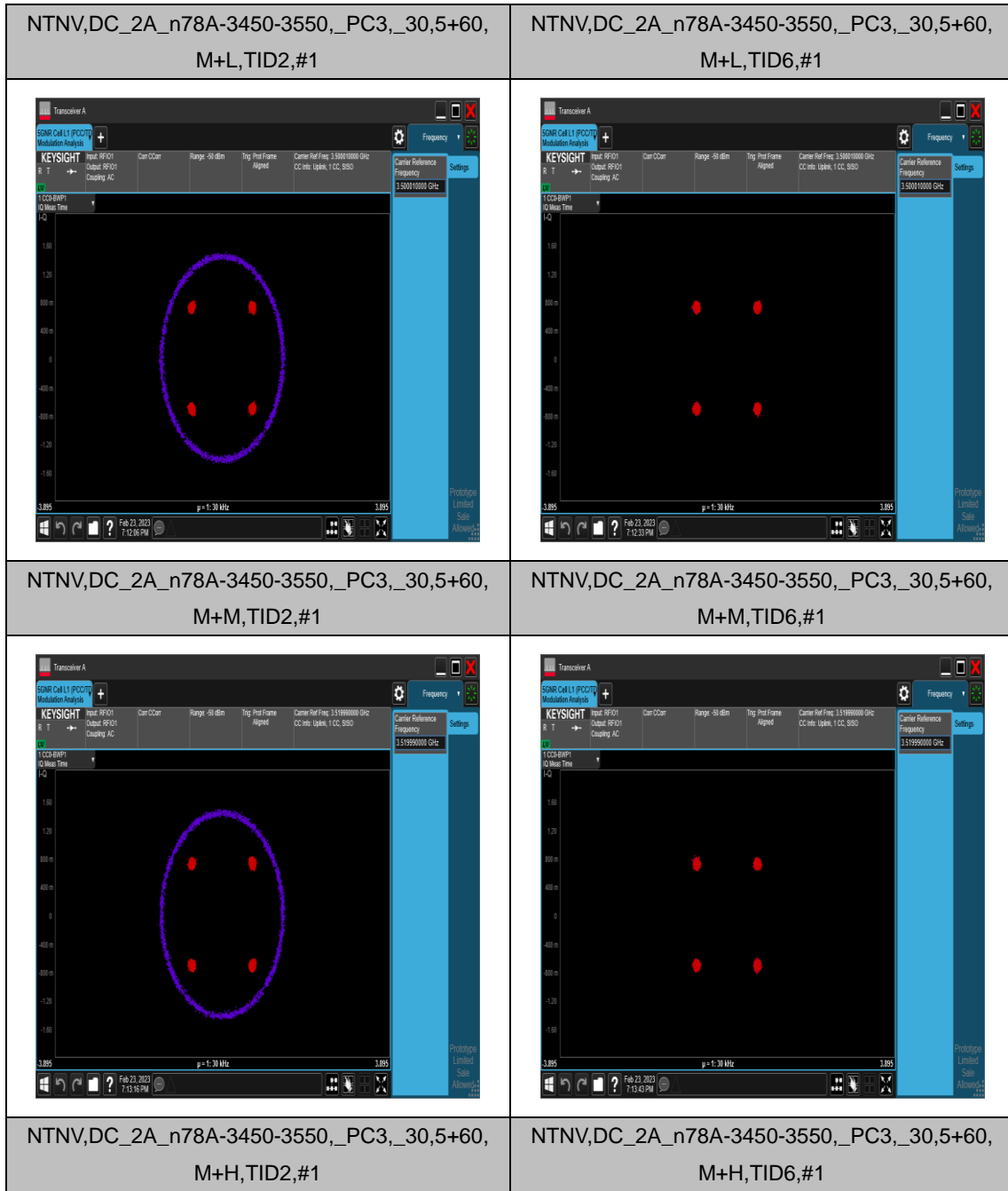
Test Graphs

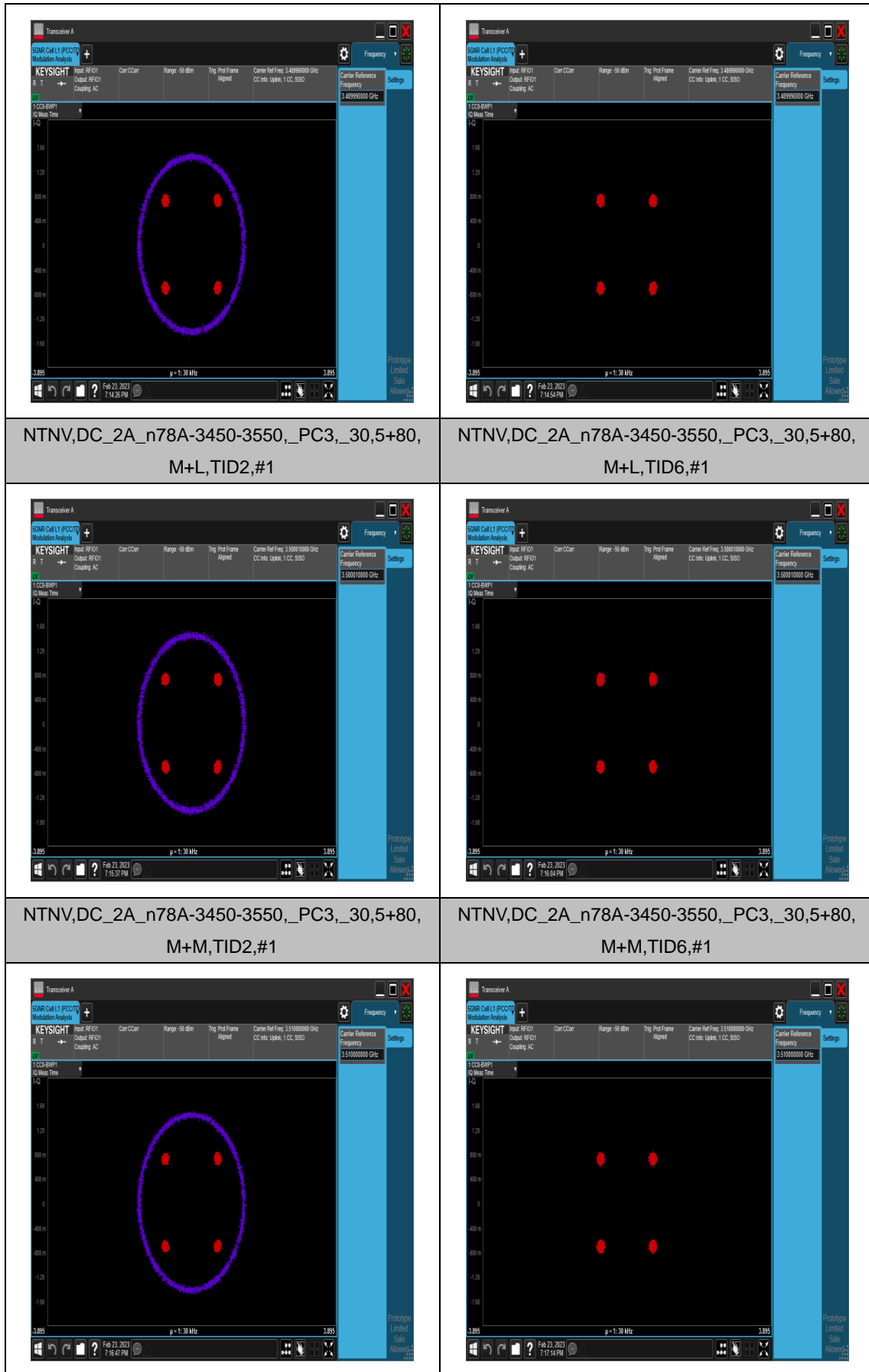


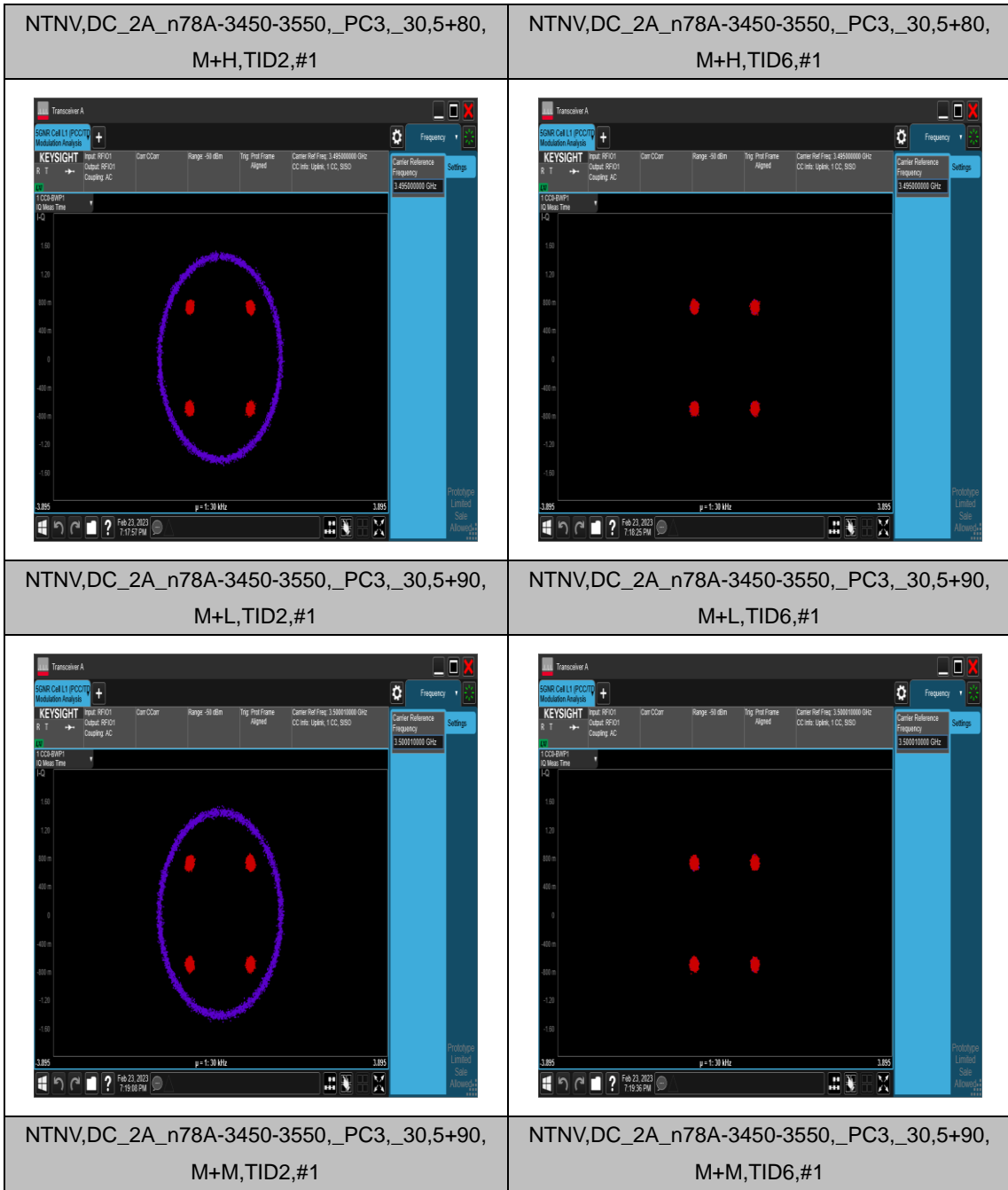


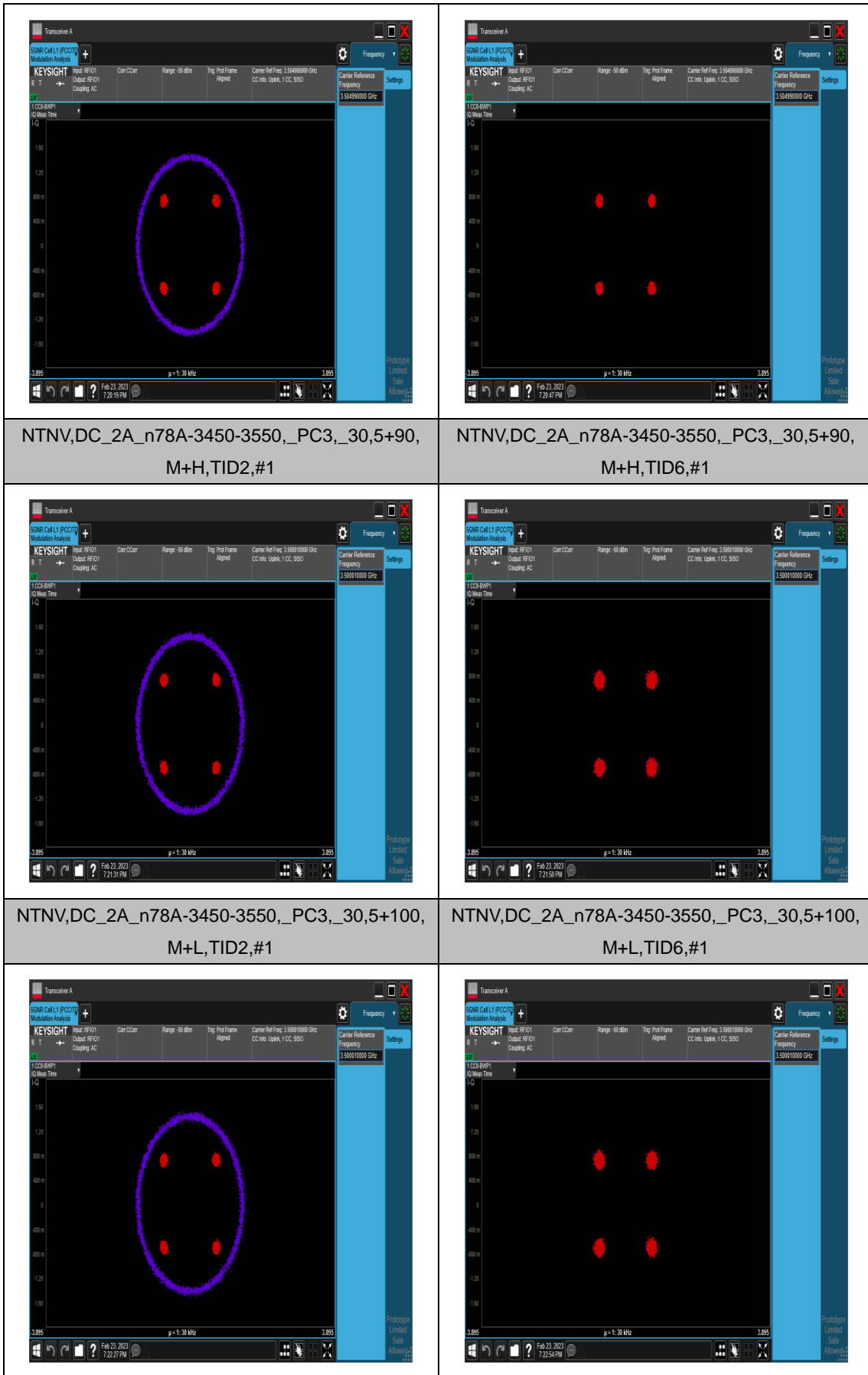


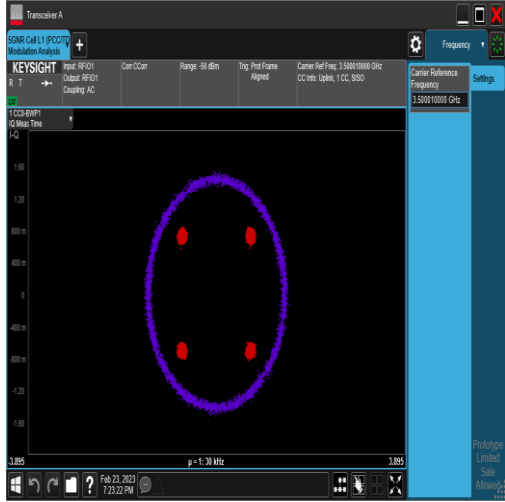
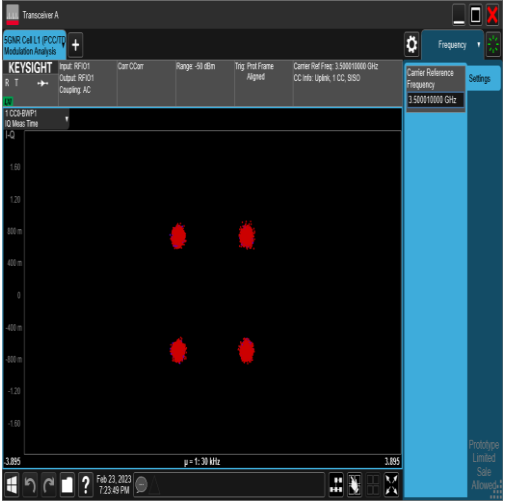










NTNV,DC_2A_n78A-3450-3550,_PC3,_30,5+100, M+M,TID2,#1	NTNV,DC_2A_n78A-3450-3550,_PC3,_30,5+100, M+M,TID6,#1
	
NTNV,DC_2A_n78A-3450-3550,_PC3,_30,5+100, M+H,TID2,#1	NTNV,DC_2A_n78A-3450-3550,_PC3,_30,5+100, M+H,TID6,#1