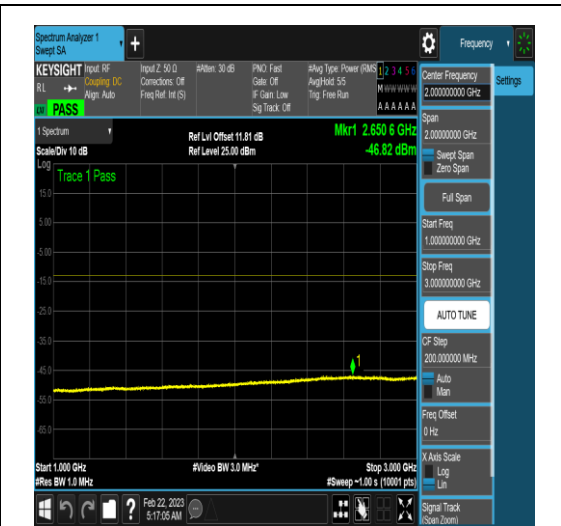
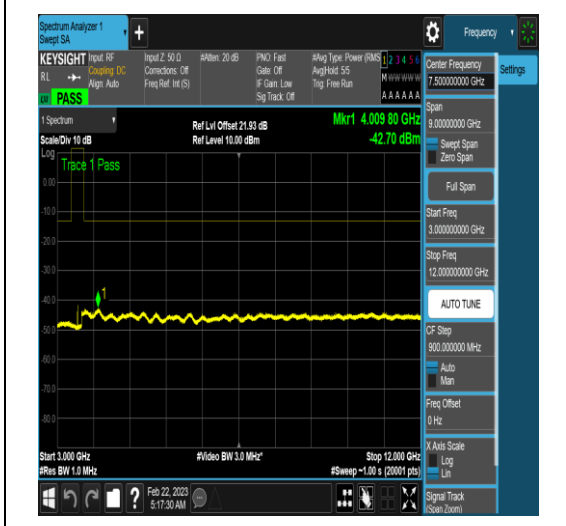


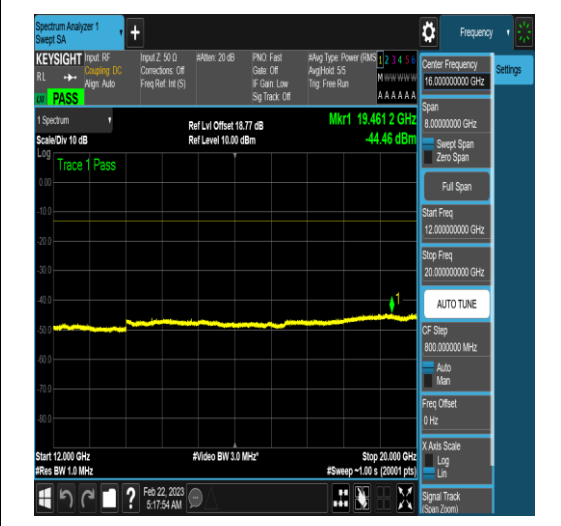
NTNV_N77-3450-3550_PC2_30_100_H_TID6_N/A_30_1000_#1



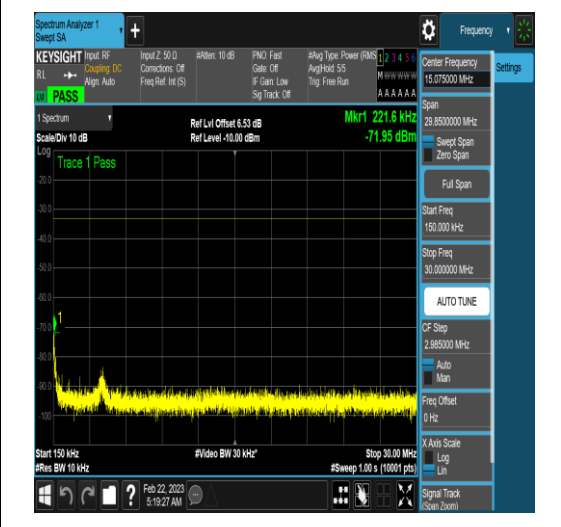
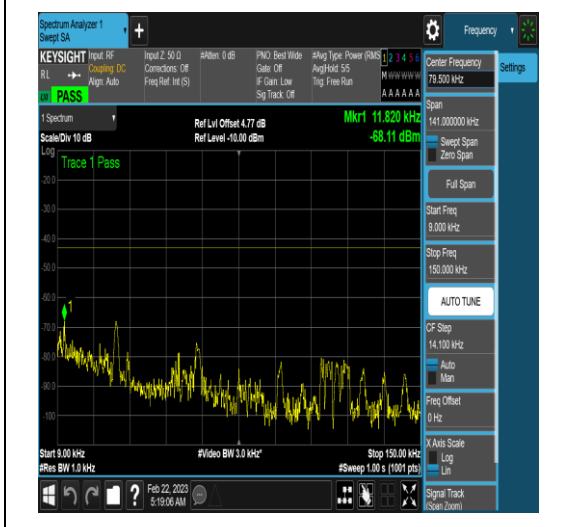
NTNV_N77-3450-3550_PC2_30_100_H_TID6_N/A_1000_3000_#1



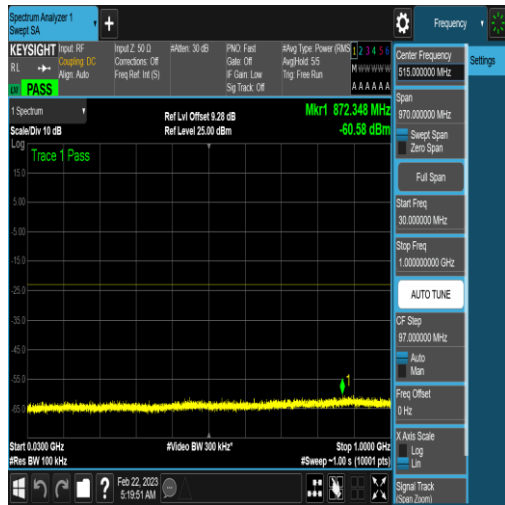
NTNV_N77-3450-3550_PC2_30_100_H_TID6_N/A_3000_12000_#1



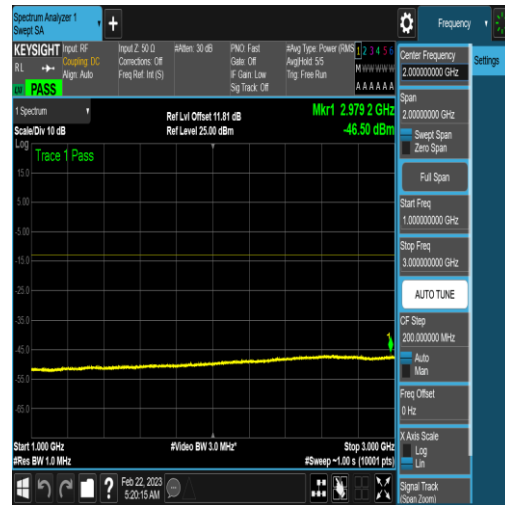
NTNV_N77-3450-3550_PC2_30_100_H_TID6_N/A_12000_20000_#1



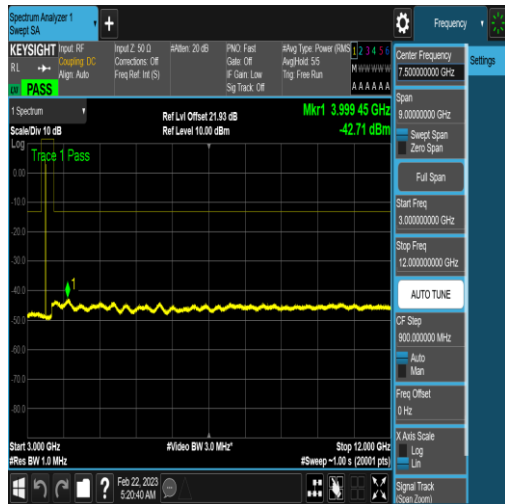
NTNV_N77-3450-3550_PC2_30_100_H_TID16_N
/A_0.009_0.15_#1



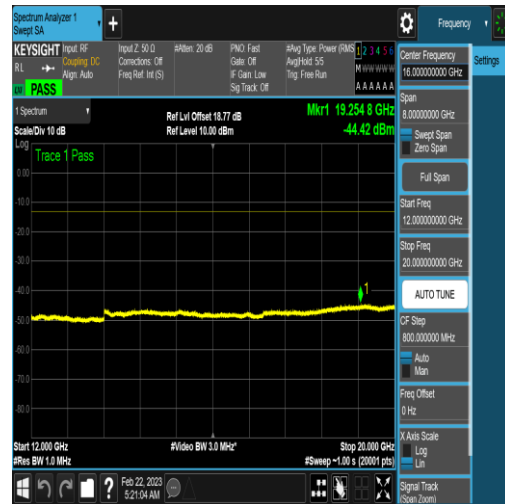
NTNV_N77-3450-3550_PC2_30_100_H_TID16_N
/A_0.15_30_#1



NTNV_N77-3450-3550_PC2_30_100_H_TID16_N
/A_30_1000_#1

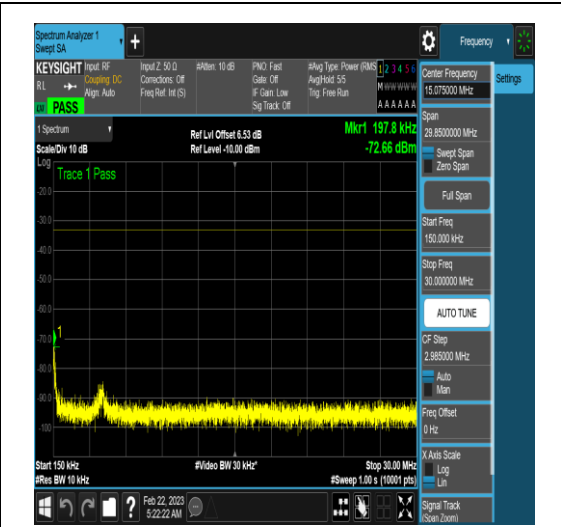
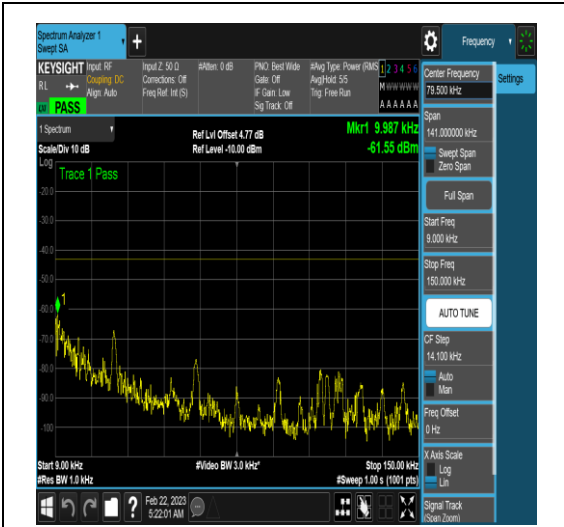


NTNV_N77-3450-3550_PC2_30_100_H_TID16_N
/A_1000_3000_#1



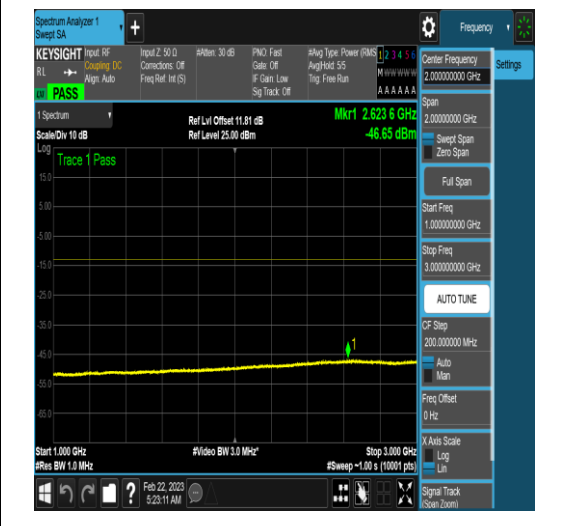
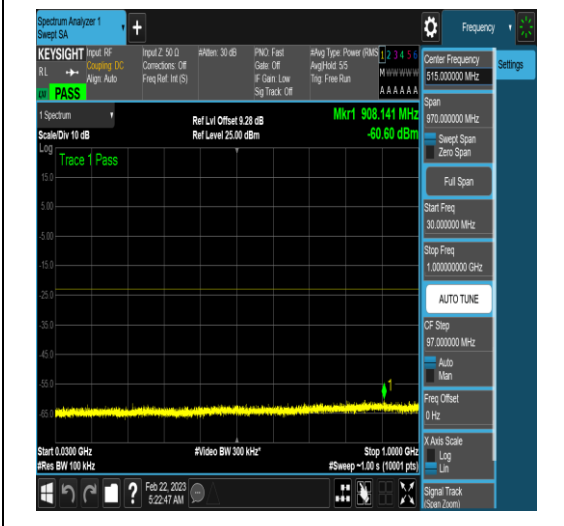
NTNV_N77-3450-3550_PC2_30_100_H_TID16_N
/A_3000_12000_#1

NTNV_N77-3450-3550_PC2_30_100_H_TID16_N
/A_12000_20000_#1



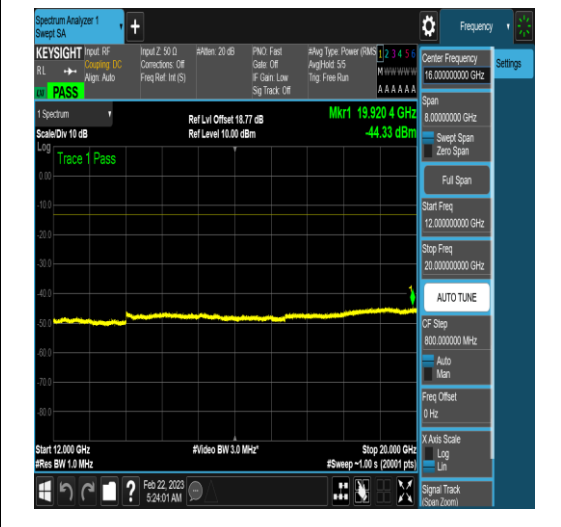
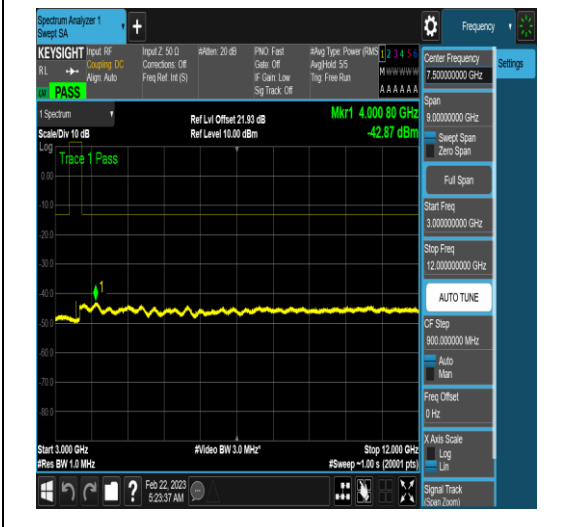
NTNV_N77-3450-3550_PC2_30_100_H_TID17_N
/A_0.009_0.15_#1

NTNV_N77-3450-3550_PC2_30_100_H_TID17_N
/A_0.15_30_#1

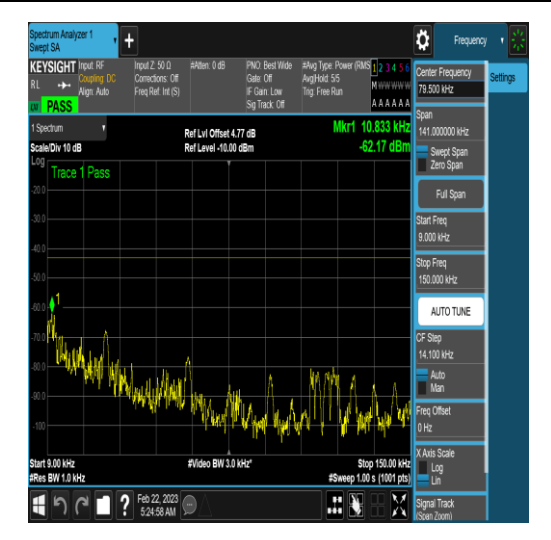


NTNV_N77-3450-3550_PC2_30_100_H_TID17_N
/A_30_1000_#1

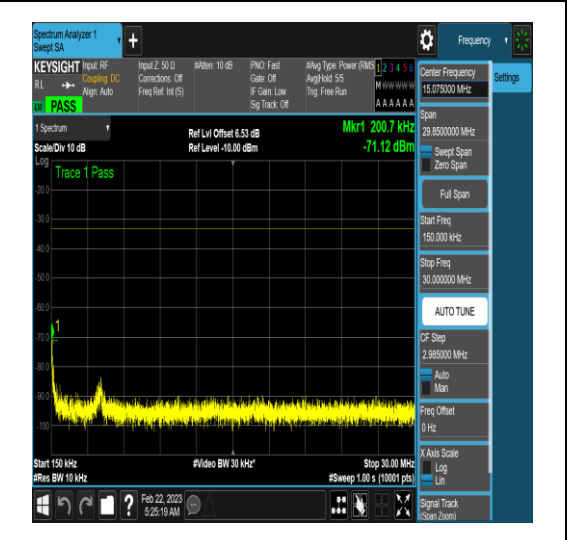
NTNV_N77-3450-3550_PC2_30_100_H_TID17_N
/A_1000_3000_#1



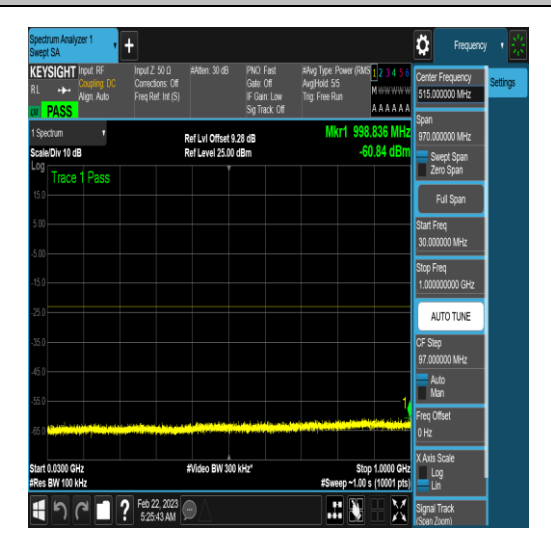
NTNV_N77-3450-3550_PC2_30_100_H_TID17_N
/A_3000_12000_#1



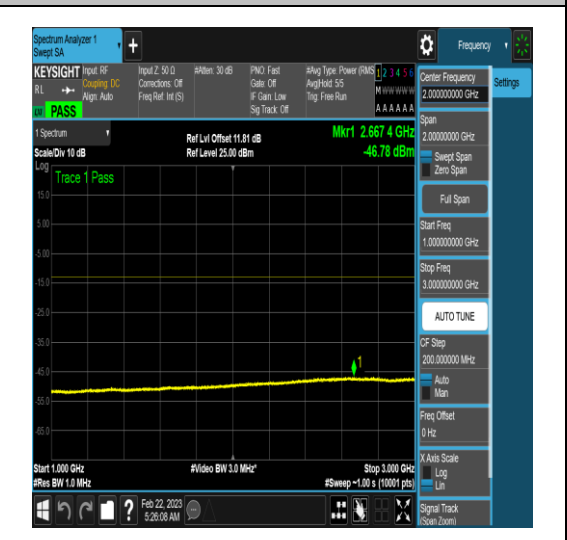
NTNV_N77-3450-3550_PC2_30_100_H_TID17_N
/A_12000_20000_#1



NTNV_N77-3450-3550_PC2_30_100_H_TID18_N
/A_0.009_0.15_#1



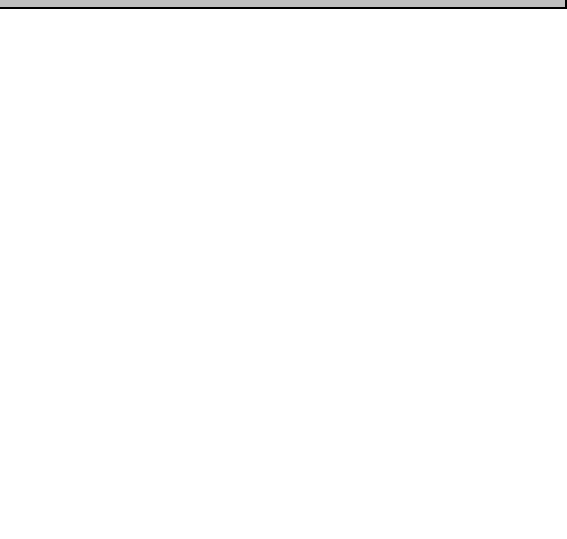
NTNV_N77-3450-3550_PC2_30_100_H_TID18_N
/A_0.15_30_#1

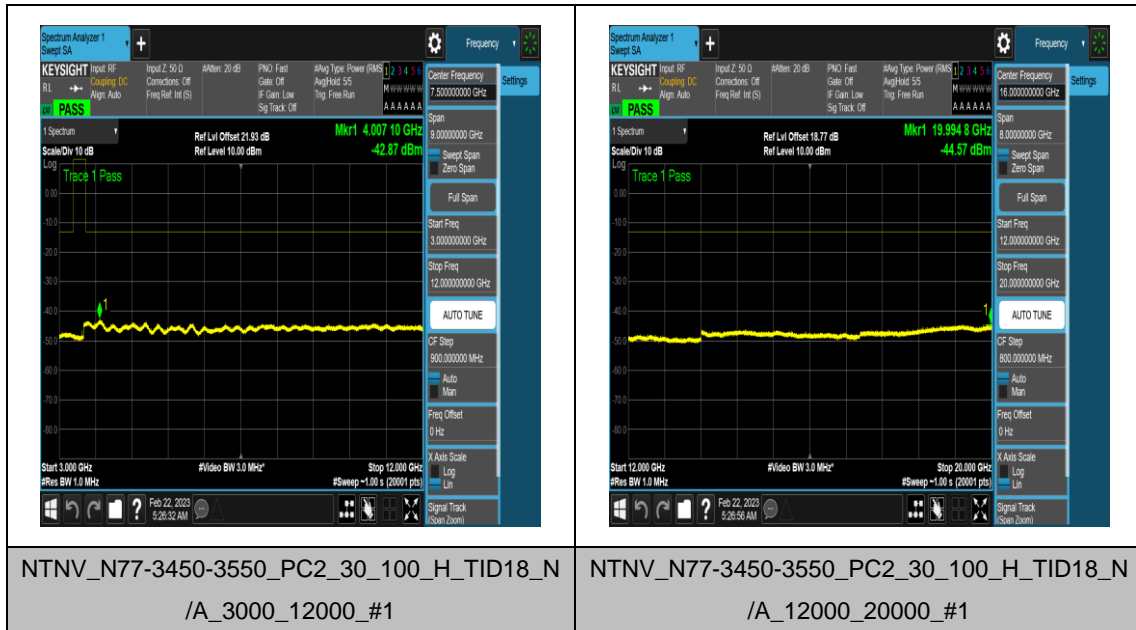


NTNV_N77-3450-3550_PC2_30_100_H_TID18_N
/A_30_1000_#1



NTNV_N77-3450-3550_PC2_30_100_H_TID18_N
/A_1000_3000_#1





Appendix F: Frequency Stability for SA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SC S	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation (Hz)	Deviation (ppm)	Verdict
N77-3450-3550	30	20	DFT-QPSK	L	Outer_Full	VN	NT	0.48	0.00	PASS
N77-3450-3550	30	20	CP-QPSK	L	Outer_Full	VN	NT	-12.17	0.00	PASS
N77-3450-3550	30	20	DFT-QPSK	M	Outer_Full	VN	NT	-2.17	0.00	PASS
N77-3450-3550	30	20	CP-QPSK	M	Outer_Full	VN	NT	0.07	0.00	PASS
N77-3450-3550	30	20	DFT-QPSK	H	Outer_Full	VN	NT	9.77	0.00	PASS
N77-3450-3550	30	20	CP-QPSK	H	Outer_Full	VN	NT	2.30	0.00	PASS
N77-3450-3550	30	40	DFT-QPSK	L	Outer_Full	VN	NT	-13.89	0.00	PASS
N77-3450-3550	30	40	CP-QPSK	L	Outer_Full	VN	NT	-18.34	-0.01	PASS
N77-3450-3550	30	40	DFT-QPSK	M	Outer_Full	VN	NT	-15.88	0.00	PASS
N77-3450-3550	30	40	CP-QPSK	M	Outer_Full	VN	NT	-20.06	-0.01	PASS
N77-3450-3550	30	40	DFT-QPSK	H	Outer_Full	VN	NT	-4.25	0.00	PASS
N77-3450-3550	30	40	CP-QPSK	H	Outer_Full	VN	NT	7.79	0.00	PASS
N77-3450-3550	30	50	DFT-QPSK	L	Outer_Full	VN	NT	-14.41	0.00	PASS
N77-3450-3550	30	50	CP-QPSK	L	Outer_Full	VN	NT	-0.69	0.00	PASS
N77-3450-3550	30	50	DFT-QPSK	M	Outer_Full	VN	NT	-1.67	0.00	PASS
N77-3450-3550	30	50	CP-QPSK	M	Outer_Full	VN	NT	-23.54	-0.01	PASS

3550			SK		Full					S
N77-3450-3550	30	50	DFT-Q PSK	H	Outer_ Full	VN	NT	-24.78	-0.01	PAS S
N77-3450-3550	30	50	CP-QP SK	H	Outer_ Full	VN	NT	0.55	0.00	PAS S
N77-3450-3550	30	60	DFT-Q PSK	L	Outer_ Full	VN	NT	15.94	0.00	PAS S
N77-3450-3550	30	60	CP-QP SK	L	Outer_ Full	VN	NT	6.30	0.00	PAS S
N77-3450-3550	30	60	DFT-Q PSK	M	Outer_ Full	VN	NT	-28.45	-0.01	PAS S
N77-3450-3550	30	60	CP-QP SK	M	Outer_ Full	VN	NT	12.63	0.00	PAS S
N77-3450-3550	30	60	DFT-Q PSK	H	Outer_ Full	VN	NT	7.11	0.00	PAS S
N77-3450-3550	30	60	CP-QP SK	H	Outer_ Full	VN	NT	-4.78	0.00	PAS S
N77-3450-3550	30	80	DFT-Q PSK	L	Outer_ Full	VN	NT	13.67	0.00	PAS S
N77-3450-3550	30	80	CP-QP SK	L	Outer_ Full	VN	NT	2.15	0.00	PAS S
N77-3450-3550	30	80	DFT-Q PSK	M	Outer_ Full	VN	NT	-26.97	-0.01	PAS S
N77-3450-3550	30	80	CP-QP SK	M	Outer_ Full	VN	NT	-4.21	0.00	PAS S
N77-3450-3550	30	80	DFT-Q PSK	H	Outer_ Full	VN	NT	4.73	0.00	PAS S
N77-3450-3550	30	80	CP-QP SK	H	Outer_ Full	VN	NT	15.17	0.00	PAS S
N77-3450-3550	30	90	DFT-Q PSK	L	Outer_ Full	VN	NT	8.73	0.00	PAS S
N77-3450-3550	30	90	CP-QP SK	L	Outer_ Full	VN	NT	2.70	0.00	PAS S
N77-3450-3550	30	90	DFT-Q PSK	M	Outer_ Full	VN	NT	23.31	0.01	PAS S
N77-3450-3550	30	90	CP-QP SK	M	Outer_ Full	VN	NT	-23.86	-0.01	PAS S
N77-3450-3550	30	90	DFT-Q PSK	H	Outer_ Full	VN	NT	-10.88	0.00	PAS S
N77-3450-3550	30	90	CP-QP SK	H	Outer_ Full	VN	NT	-17.46	0.00	PAS S
N77-3450-3550	30	100	DFT-Q	L	Outer_	VN	NT	19.50	0.01	PAS

3550			PSK		Full					S
N77-3450-3550	30	100	CP-QP SK	L	Outer_ Full	VN	NT	-3.81	0.00	PAS S
N77-3450-3550	30	100	DFT-Q PSK	M	Outer_ Full	VN	NT	10.88	0.00	PAS S
N77-3450-3550	30	100	CP-QP SK	M	Outer_ Full	VN	NT	5.26	0.00	PAS S
N77-3450-3550	30	100	DFT-Q PSK	H	Outer_ Full	VN	NT	-2.23	0.00	PAS S
N77-3450-3550	30	100	CP-QP SK	H	Outer_ Full	VN	NT	-16.23	0.00	PAS S

Frequency Error VS. Temperature

Voltage										
Band	SC S	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation (Hz)	Deviation (ppm)	Verdict
N77-3450-3550	30	20	DFT-QPSK	L	Outer_Full	NV	TN	-20.703485	-0.005984	PASS
N77-3450-3550	30	20	CP-QPSK	L	Outer_Full	NV	TN	0.424222	0.000123	PASS
N77-3450-3550	30	20	DFT-QPSK	M	Outer_Full	NV	TN	19.357224	0.005531	PASS
N77-3450-3550	30	20	CP-QPSK	M	Outer_Full	NV	TN	-12.529851	-0.003580	PASS
N77-3450-3550	30	20	DFT-QPSK	H	Outer_Full	NV	TN	10.963793	0.003097	PASS
N77-3450-3550	30	20	CP-QPSK	H	Outer_Full	NV	TN	-35.888626	-0.010138	PASS
N77-3450-3550	30	40	DFT-QPSK	L	Outer_Full	NV	TN	-1.265899	-0.000365	PASS
N77-3450-3550	30	40	CP-QPSK	L	Outer_Full	NV	TN	-7.549335	-0.002176	PASS
N77-3450-3550	30	40	DFT-QPSK	M	Outer_Full	NV	TN	6.332829	0.001809	PASS
N77-3450-3550	30	40	CP-QPSK	M	Outer_Full	NV	TN	-5.379827	-0.001537	PASS
N77-3450-3550	30	40	DFT-QPSK	H	Outer_Full	NV	TN	7.429850	0.002105	PASS
N77-3450-3550	30	40	CP-QPSK	H	Outer_Full	NV	TN	11.091135	0.003142	PASS
N77-3450-3550	30	50	DFT-QPSK	L	Outer_Full	NV	TN	11.314797	0.003256	PASS
N77-3450-3550	30	50	CP-QPSK	L	Outer_Full	NV	TN	-0.388986	-0.000112	PASS
N77-3450-3550	30	50	DFT-QPSK	M	Outer_Full	NV	TN	-12.041576	-0.003440	PASS
N77-3450-3550	30	50	CP-QPSK	M	Outer_Full	NV	TN	-3.419357	-0.000977	PASS
N77-3450-3550	30	50	DFT-QPSK	H	Outer_Full	NV	TN	-8.168345	-0.002317	PASS
N77-3450-3550	30	50	CP-QPSK	H	Outer_Full	NV	TN	-37.663624	-0.010685	PASS

N77-3450-3550	30	60	DFT-Q PSK	L	Outer_ Full	NV	TN	-16.5565 28	-0.004 758	PAS S
N77-3450-3550	30	60	CP-QP SK	L	Outer_ Full	NV	TN	26.73647 5	0.0076 83	PAS S
N77-3450-3550	30	60	DFT-Q PSK	M	Outer_ Full	NV	TN	-5.88419 2	-0.001 681	PAS S
N77-3450-3550	30	60	CP-QP SK	M	Outer_ Full	NV	TN	23.26838 1	0.0066 48	PAS S
N77-3450-3550	30	60	DFT-Q PSK	H	Outer_ Full	NV	TN	11.23884 7	0.0031 93	PAS S
N77-3450-3550	30	60	CP-QP SK	H	Outer_ Full	NV	TN	-14.7507 12	-0.004 191	PAS S
N77-3450-3550	30	80	DFT-Q PSK	L	Outer_ Full	NV	TN	9.913073	0.0028 40	PAS S
N77-3450-3550	30	80	CP-QP SK	L	Outer_ Full	NV	TN	-5.32434 0	-0.001 526	PAS S
N77-3450-3550	30	80	DFT-Q PSK	M	Outer_ Full	NV	TN	38.02189 6	0.0108 63	PAS S
N77-3450-3550	30	80	CP-QP SK	M	Outer_ Full	NV	TN	12.80842 5	0.0036 60	PAS S
N77-3450-3550	30	80	DFT-Q PSK	H	Outer_ Full	NV	TN	-5.63961 9	-0.001 607	PAS S
N77-3450-3550	30	80	CP-QP SK	H	Outer_ Full	NV	TN	3.897147	0.0011 10	PAS S
N77-3450-3550	30	90	DFT-Q PSK	L	Outer_ Full	NV	TN	-57.3146 13	-0.016 399	PAS S
N77-3450-3550	30	90	CP-QP SK	L	Outer_ Full	NV	TN	-29.2472 34	-0.008 368	PAS S
N77-3450-3550	30	90	DFT-Q PSK	M	Outer_ Full	NV	TN	30.80607 8	0.0088 02	PAS S
N77-3450-3550	30	90	CP-QP SK	M	Outer_ Full	NV	TN	27.48640 1	0.0078 53	PAS S
N77-3450-3550	30	90	DFT-Q PSK	H	Outer_ Full	NV	TN	-33.9424 82	-0.009 684	PAS S
N77-3450-3550	30	90	CP-QP SK	H	Outer_ Full	NV	TN	-12.1980 07	-0.003 480	PAS S
N77-3450-3550	30	100	DFT-Q PSK	L	Outer_ Full	NV	TN	4.066844	0.0011 62	PAS S
N77-3450-3550	30	100	CP-QP SK	L	Outer_ Full	NV	TN	-17.5391 46	-0.005 011	PAS S
N77-3450-3550	30	100	DFT-Q PSK	M	Outer_ Full	NV	TN	-20.0682 30	-0.005 734	PAS S

N77-3450-3550	30	100	CP-QP SK	M	Outer_ Full	NV	TN	-5.86154 5	-0.001 675	PAS S
N77-3450-3550	30	100	DFT-Q PSK	H	Outer_ Full	NV	TN	-25.0015 58	-0.007 143	PAS S
N77-3450-3550	30	100	CP-QP SK	H	Outer_ Full	NV	TN	-3.00238 8	-0.000 858	PAS S

Appendix F: Modulation characteristics for SA

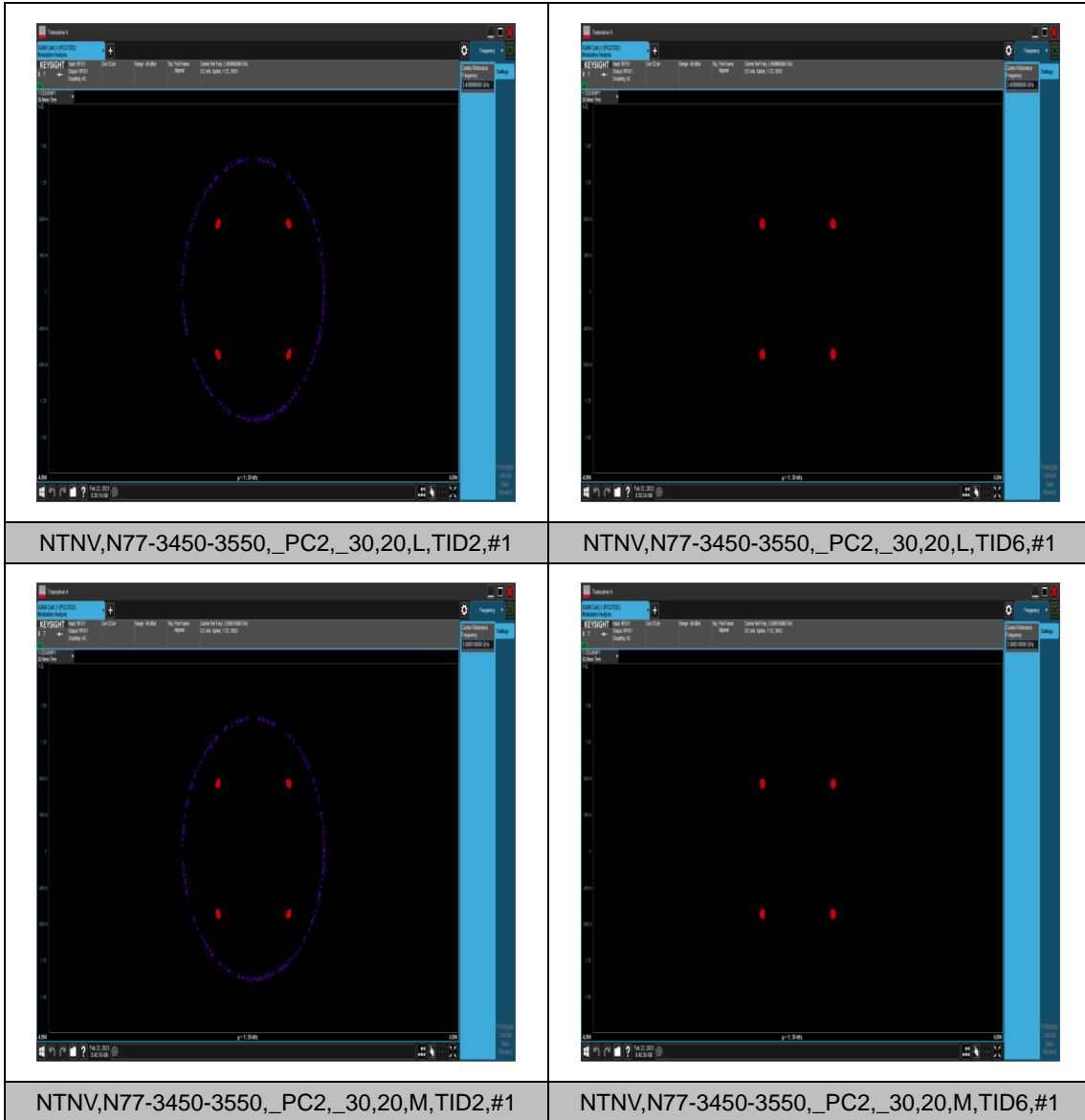
Test Result

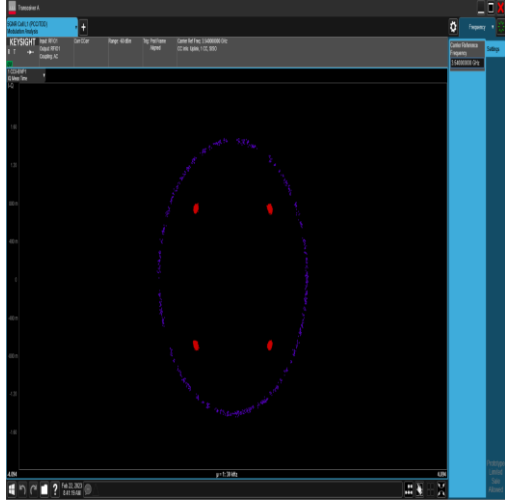
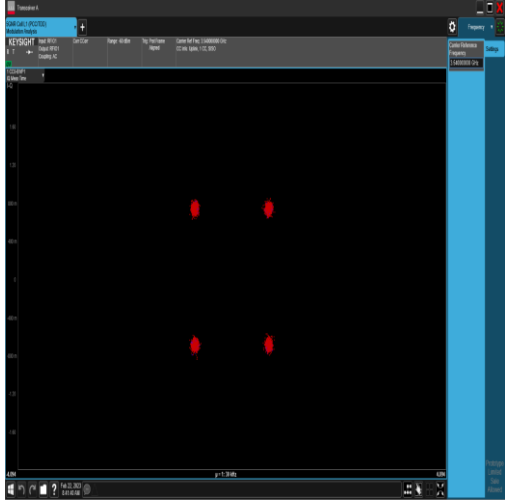
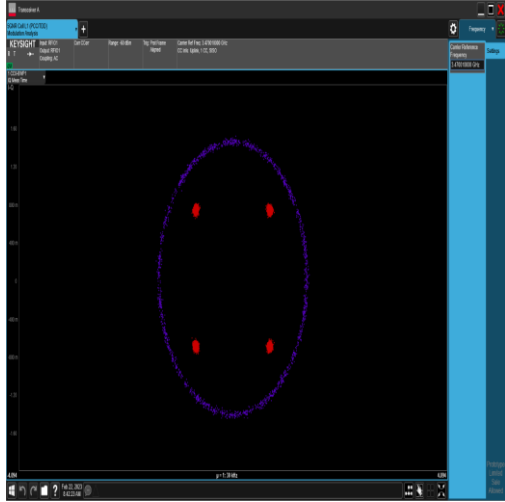
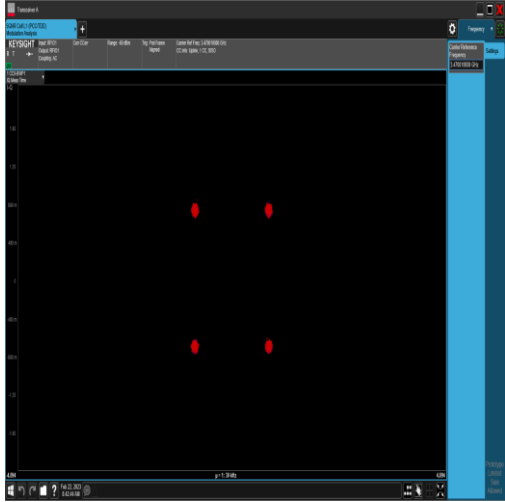
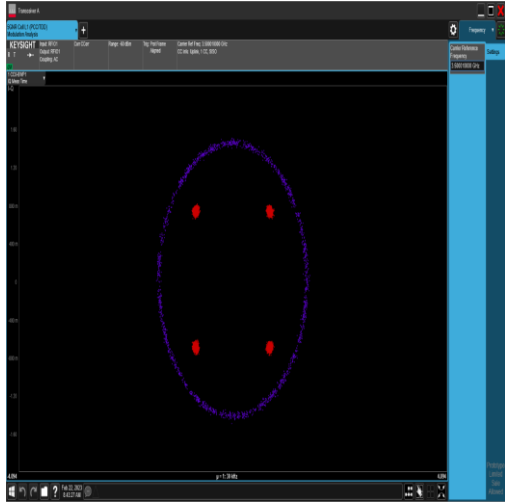
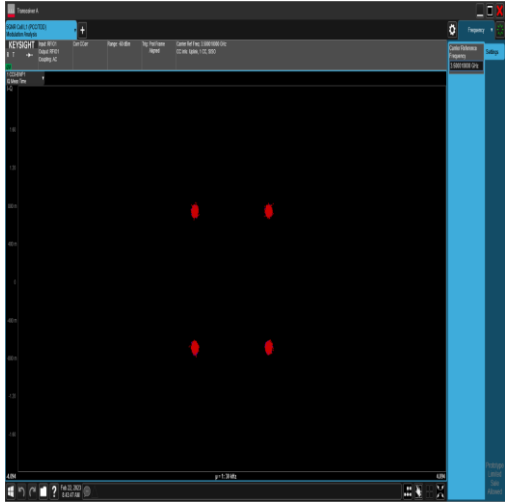
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
N77-3450-3550	30	20	DFT-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	20	CP-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	20	DFT-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	20	CP-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	20	DFT-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	20	CP-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	40	DFT-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	40	CP-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	40	DFT-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	40	CP-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	40	DFT-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	40	CP-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	50	DFT-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	50	CP-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	50	DFT-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	50	CP-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	50	DFT-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	50	CP-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	60	DFT-QPSK	L	Outer_Full	see	PASS

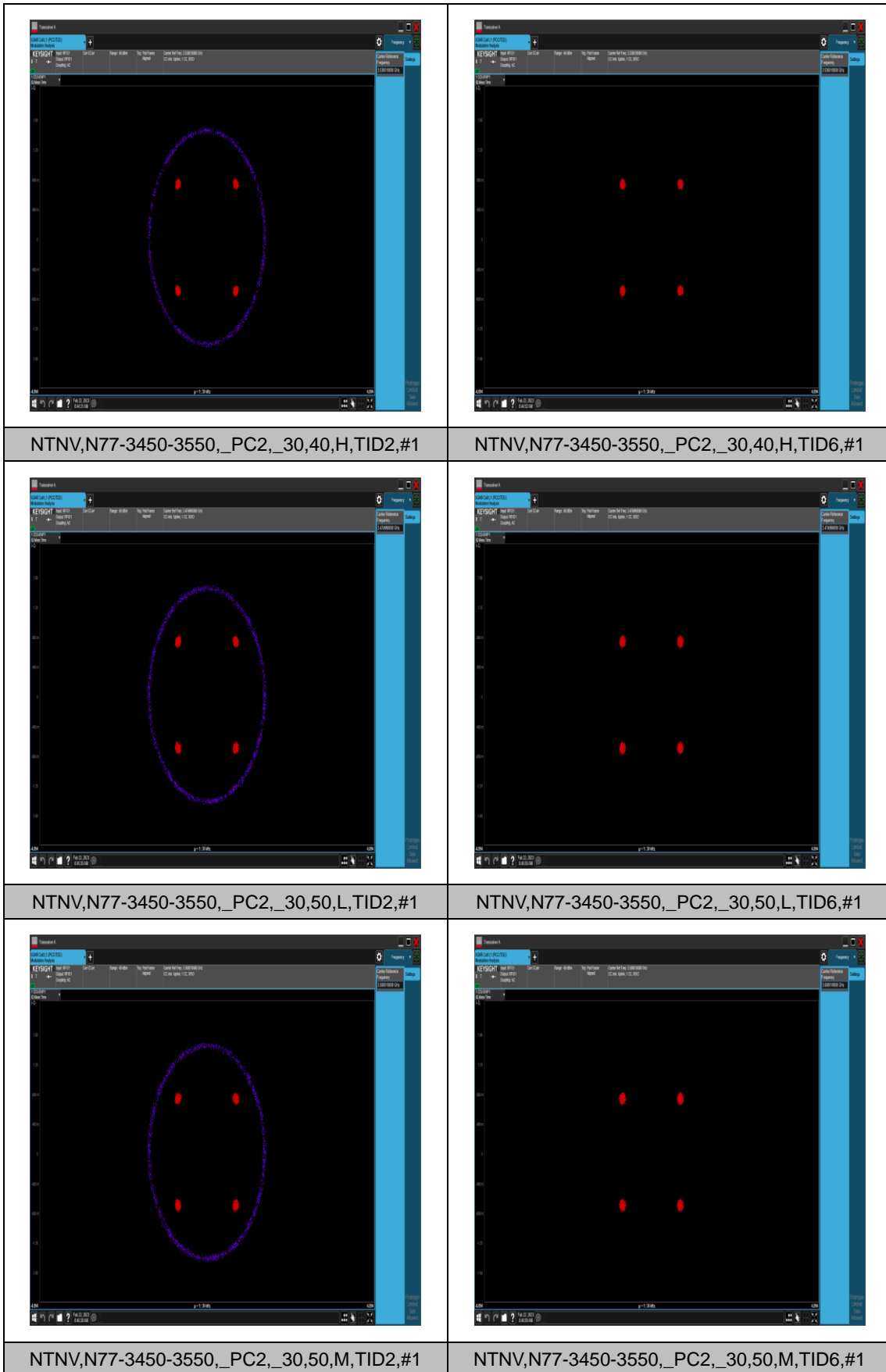
						graph	
N77-3450-3550	30	60	CP-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	60	DFT-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	60	CP-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	60	DFT-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	60	CP-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	80	DFT-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	80	CP-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	80	DFT-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	80	CP-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	80	DFT-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	80	CP-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	90	DFT-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	90	CP-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	90	DFT-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	90	CP-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	90	DFT-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	90	CP-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	100	DFT-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	100	CP-QPSK	L	Outer_Full	see graph	PASS
N77-3450-3550	30	100	DFT-QPSK	M	Outer_Full	see graph	PASS
N77-3450-3550	30	100	CP-QPSK	M	Outer_Full	see graph	PASS

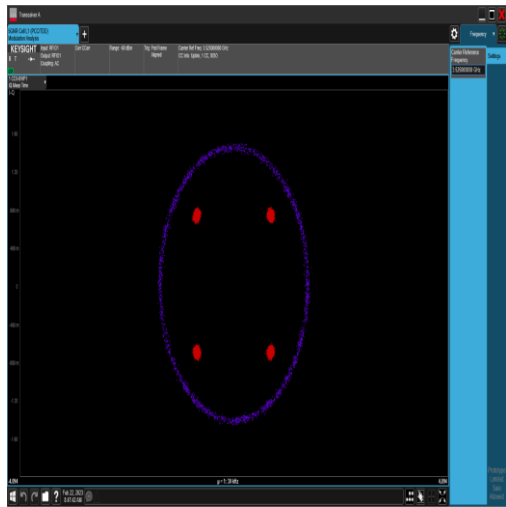
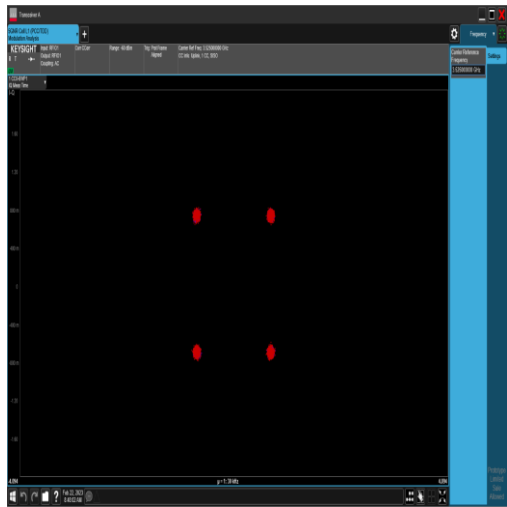
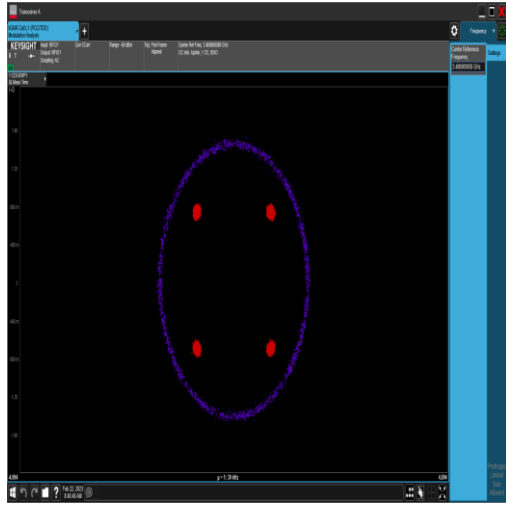
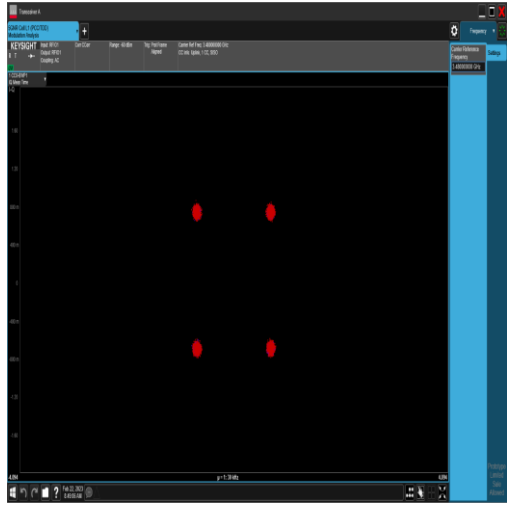
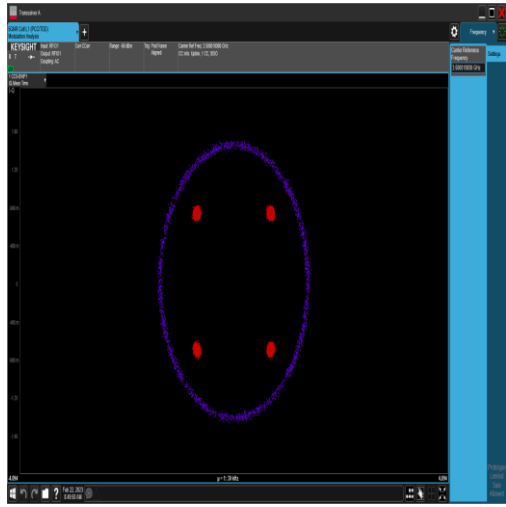
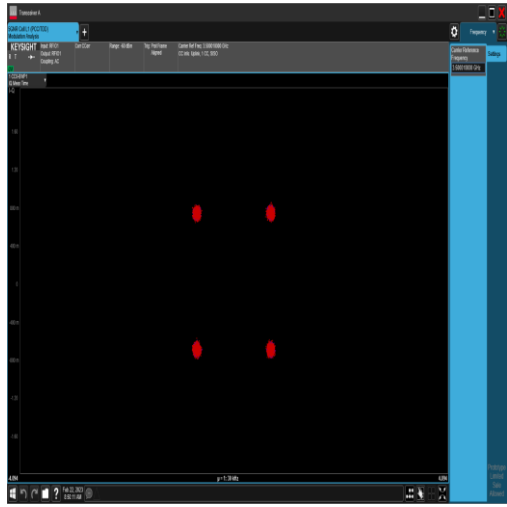
						graph	
N77-3450-3550	30	100	DFT-QPSK	H	Outer_Full	see graph	PASS
N77-3450-3550	30	100	CP-QPSK	H	Outer_Full	see graph	PASS

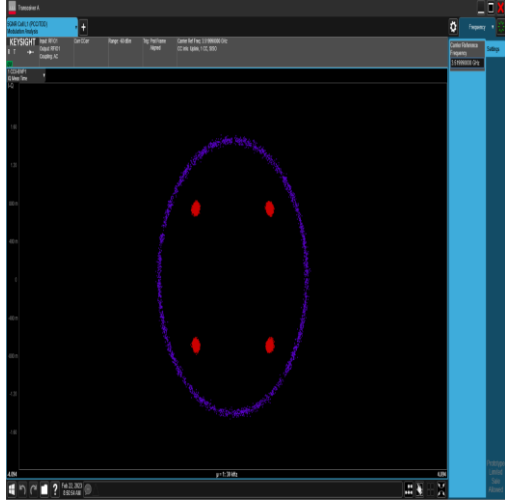
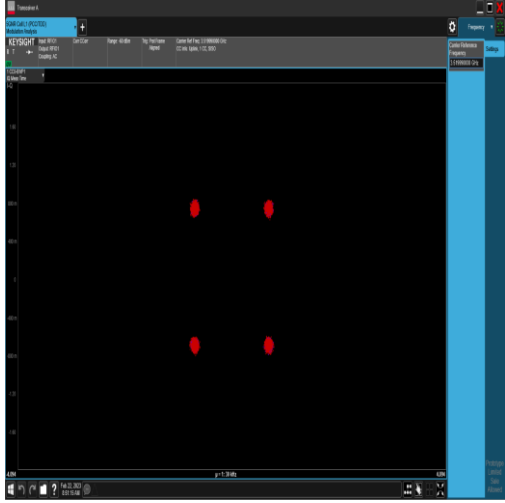
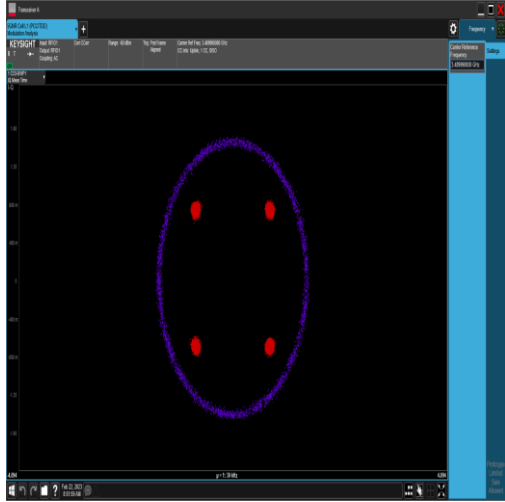
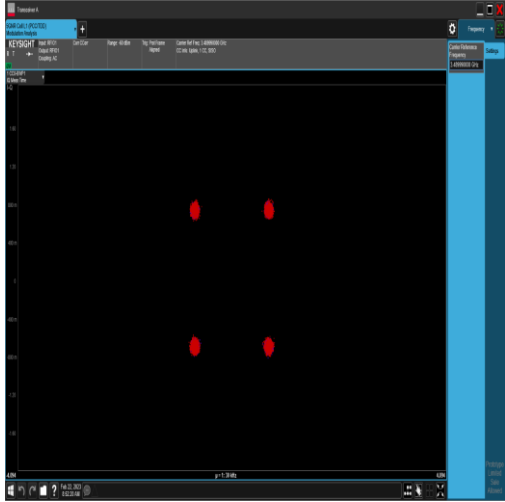
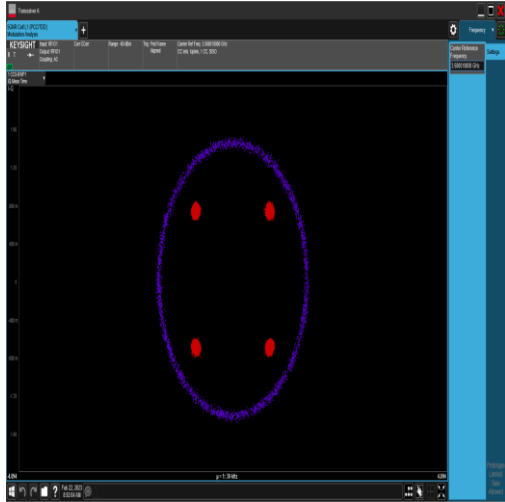
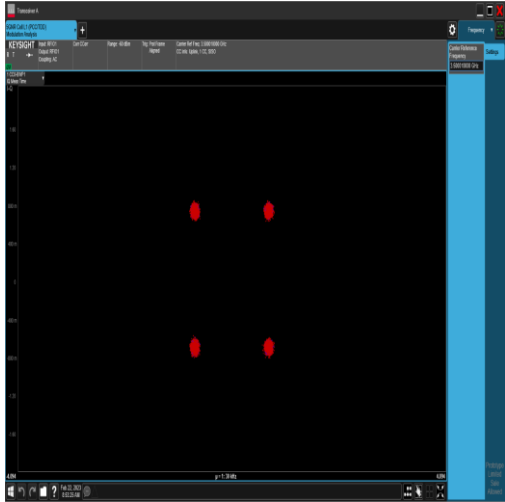
Test Graphs

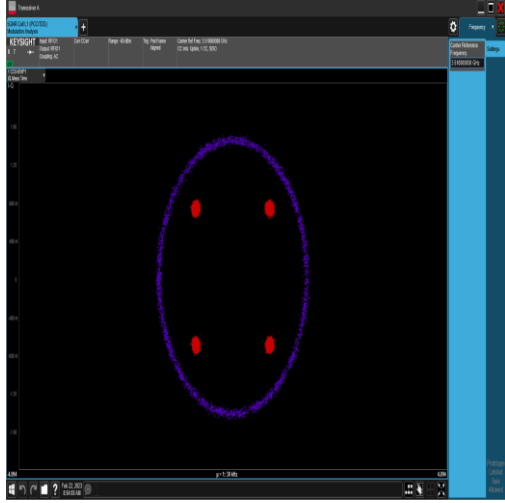
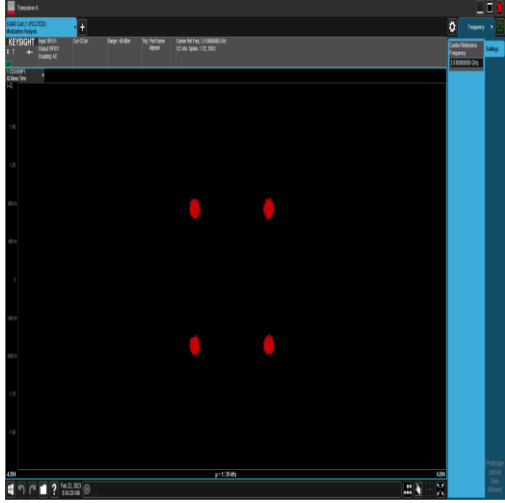
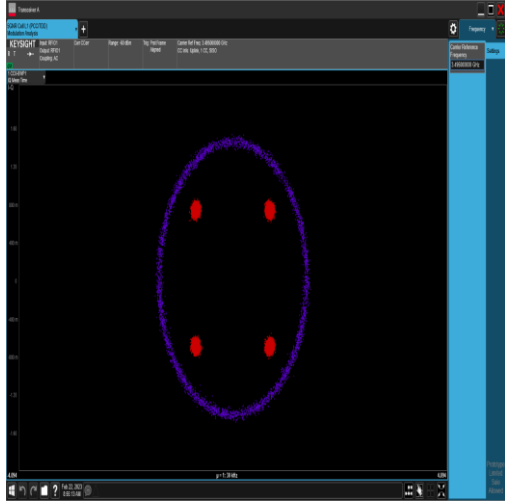
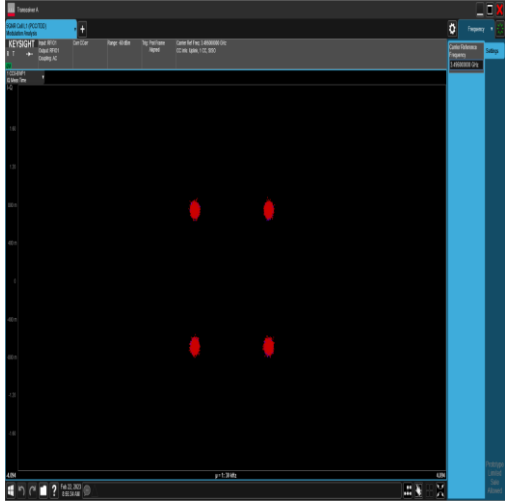
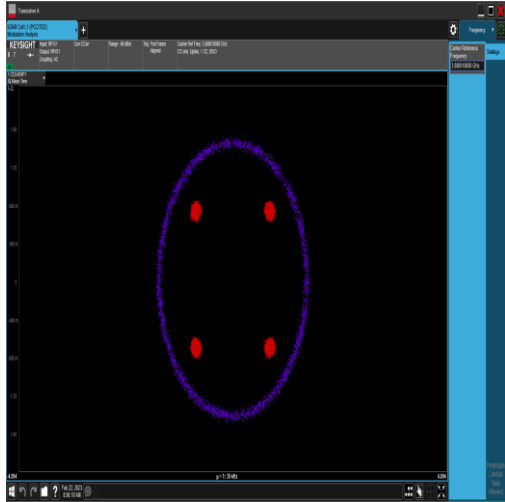
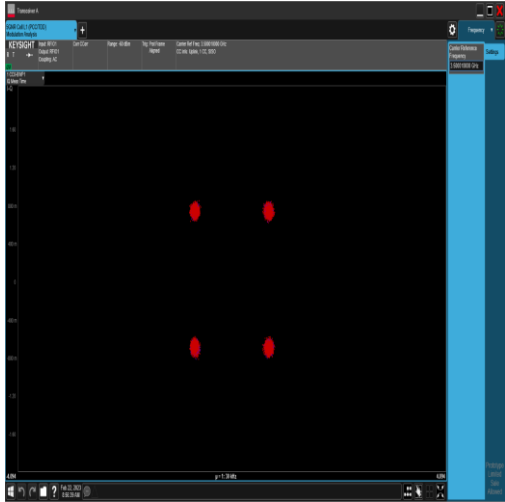


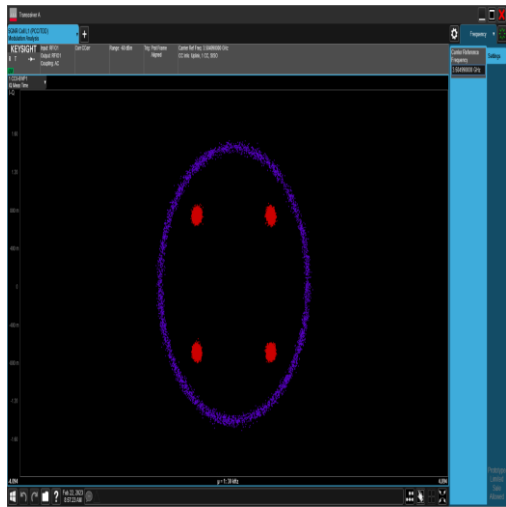
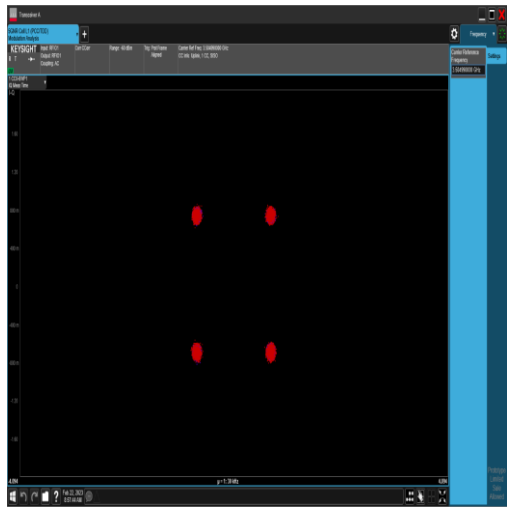
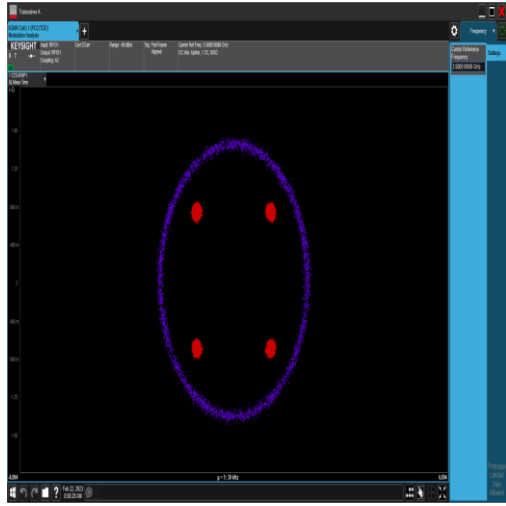
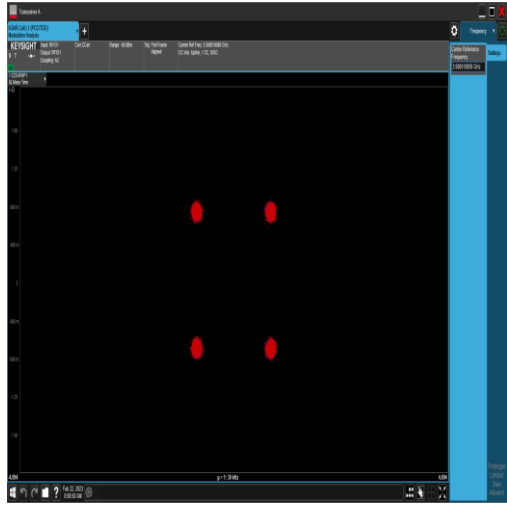
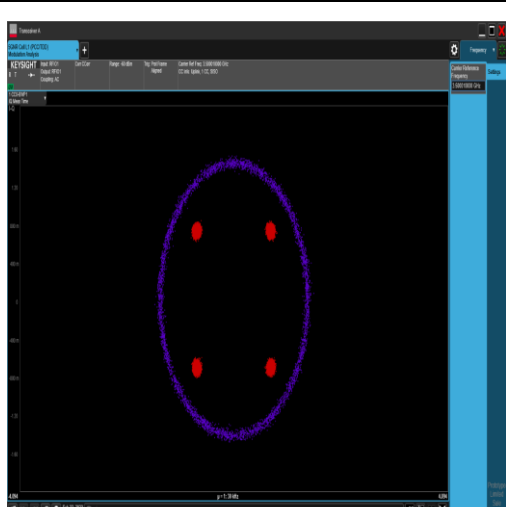
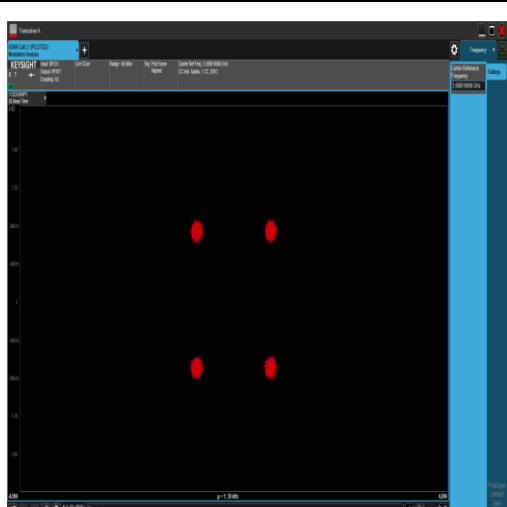
	
NTNV,N77-3450-3550,_PC2,_30,20,H,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,20,H,TID6,#1
	
NTNV,N77-3450-3550,_PC2,_30,40,L,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,40,L,TID6,#1
	
NTNV,N77-3450-3550,_PC2,_30,40,M,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,40,M,TID6,#1



	
<p>NTNV,N77-3450-3550,_PC2,_30,50,H,TID2,#1</p>	<p>NTNV,N77-3450-3550,_PC2,_30,50,H,TID6,#1</p>
	
<p>NTNV,N77-3450-3550,_PC2,_30,60,L,TID2,#1</p>	<p>NTNV,N77-3450-3550,_PC2,_30,60,L,TID6,#1</p>
	
<p>NTNV,N77-3450-3550,_PC2,_30,60,M,TID2,#1</p>	<p>NTNV,N77-3450-3550,_PC2,_30,60,M,TID6,#1</p>

	
NTNV,N77-3450-3550,_PC2,_30,60,H,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,60,H,TID6,#1
	
NTNV,N77-3450-3550,_PC2,_30,80,L,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,80,L,TID6,#1
	
NTNV,N77-3450-3550,_PC2,_30,80,M,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,80,M,TID6,#1

	
NTNV,N77-3450-3550,_PC2,_30,80,H,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,80,H,TID6,#1
	
NTNV,N77-3450-3550,_PC2,_30,90,L,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,90,L,TID6,#1
	
NTNV,N77-3450-3550,_PC2,_30,90,M,TID2,#1	NTNV,N77-3450-3550,_PC2,_30,90,M,TID6,#1

	
<p>N77-3450-3550,_PC2,_30,90,H,TID2,#1</p>	<p>N77-3450-3550,_PC2,_30,90,H,TID6,#1</p>
	
<p>N77-3450-3550,_PC2,_30,100,L,TID2,#1</p>	<p>N77-3450-3550,_PC2,_30,100,L,TID6,#1</p>
	
<p>N77-3450-3550,_PC2,_30,100,M,TID2,#1</p>	<p>N77-3450-3550,_PC2,_30,100,M,TID6,#1</p>

