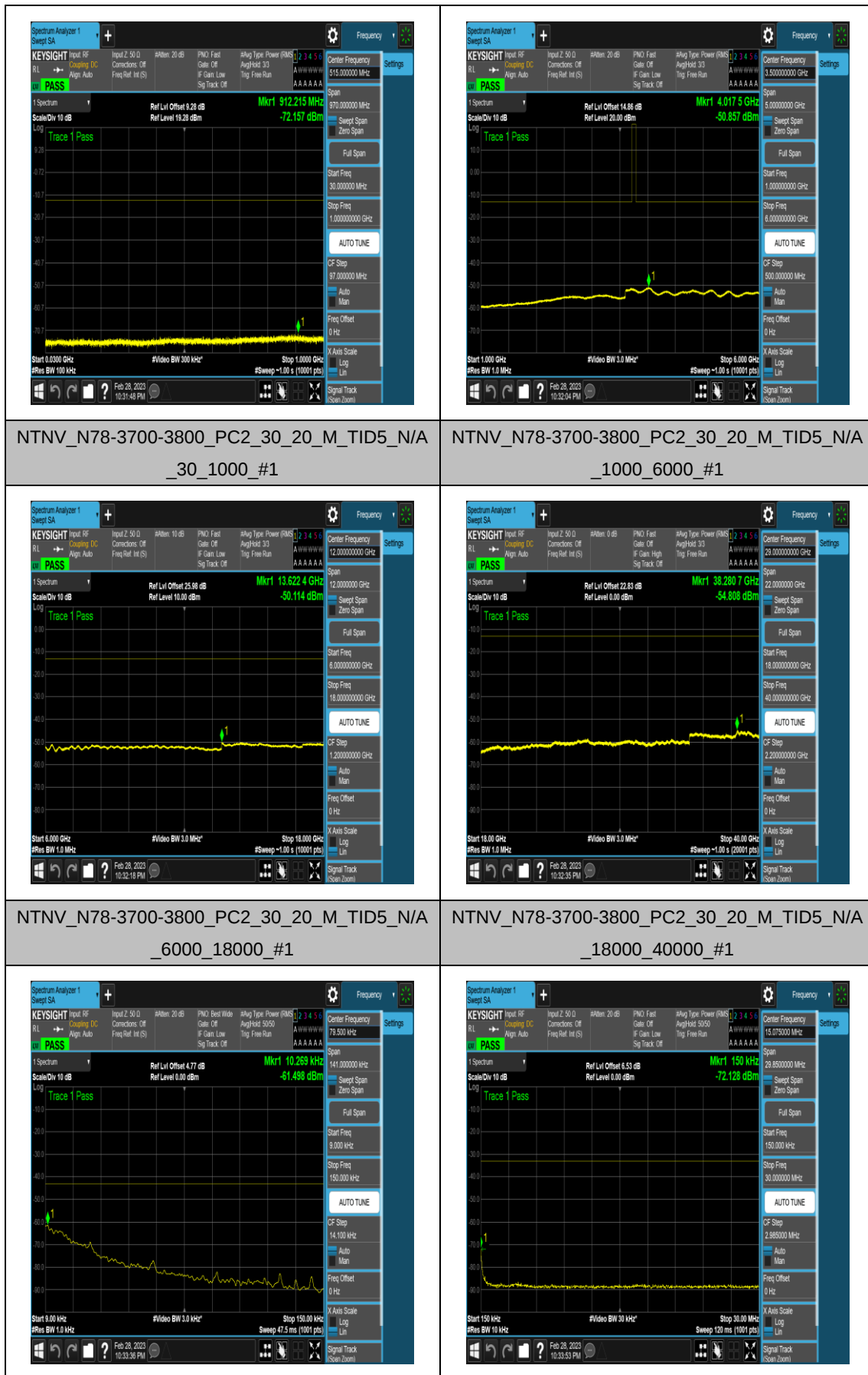
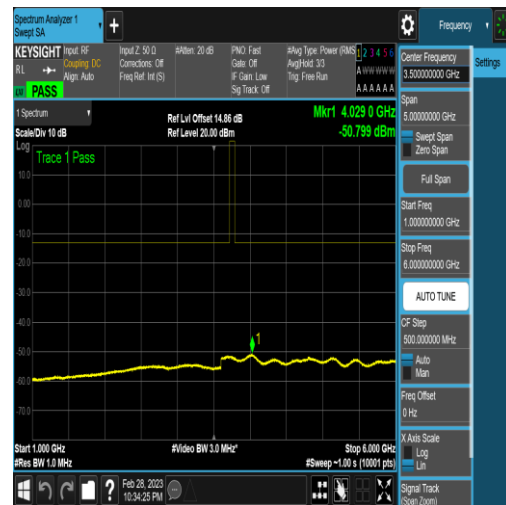
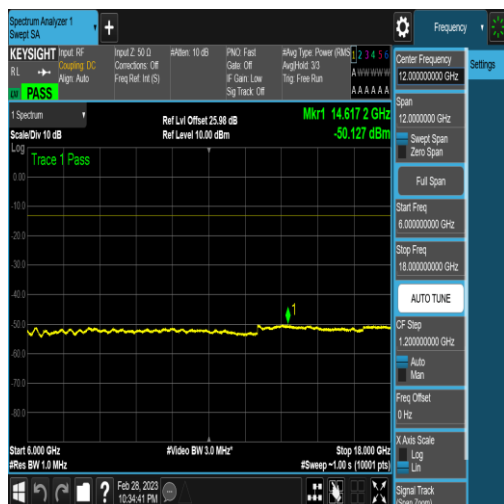
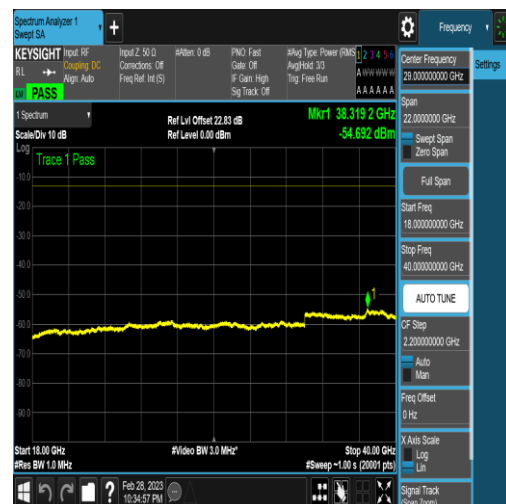
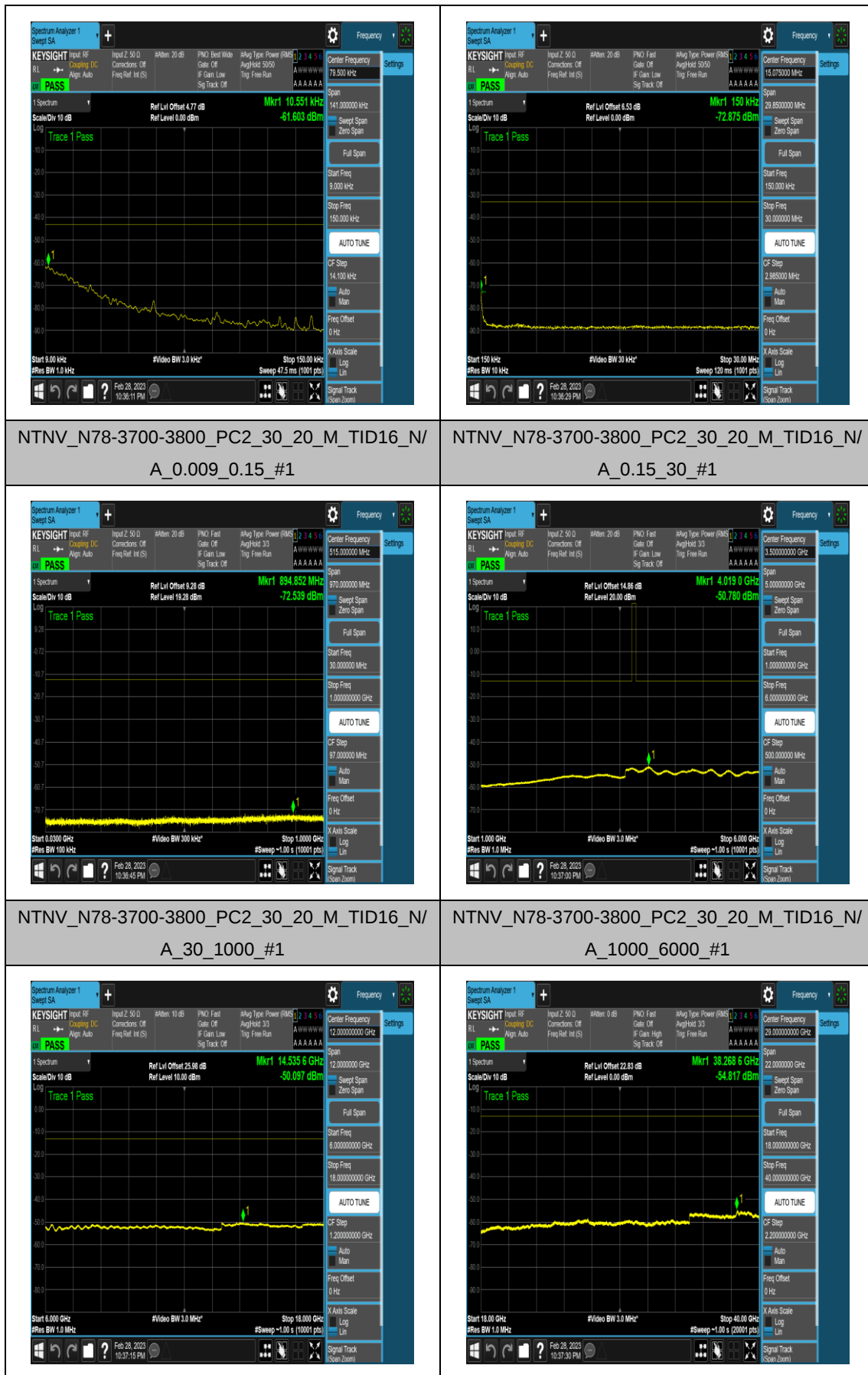
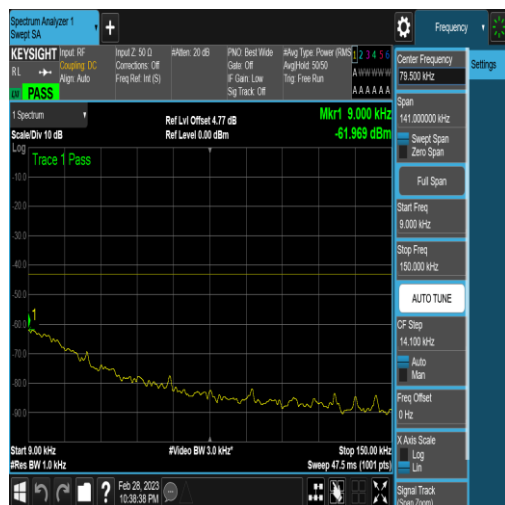




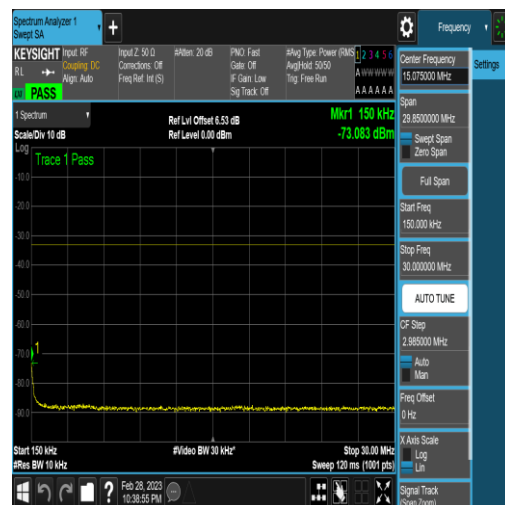
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_18000_40000_#1



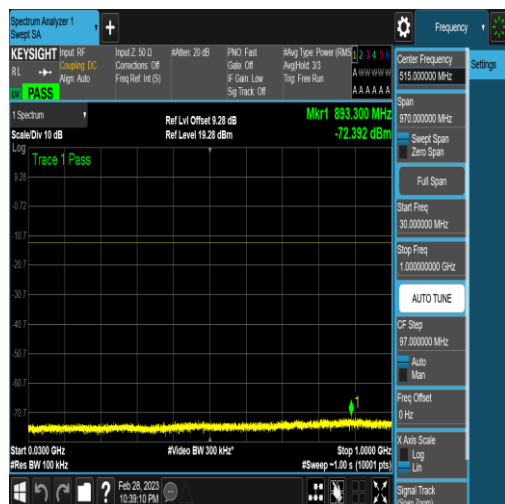
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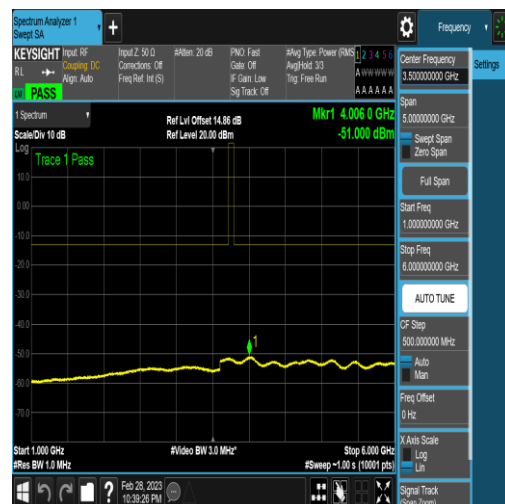
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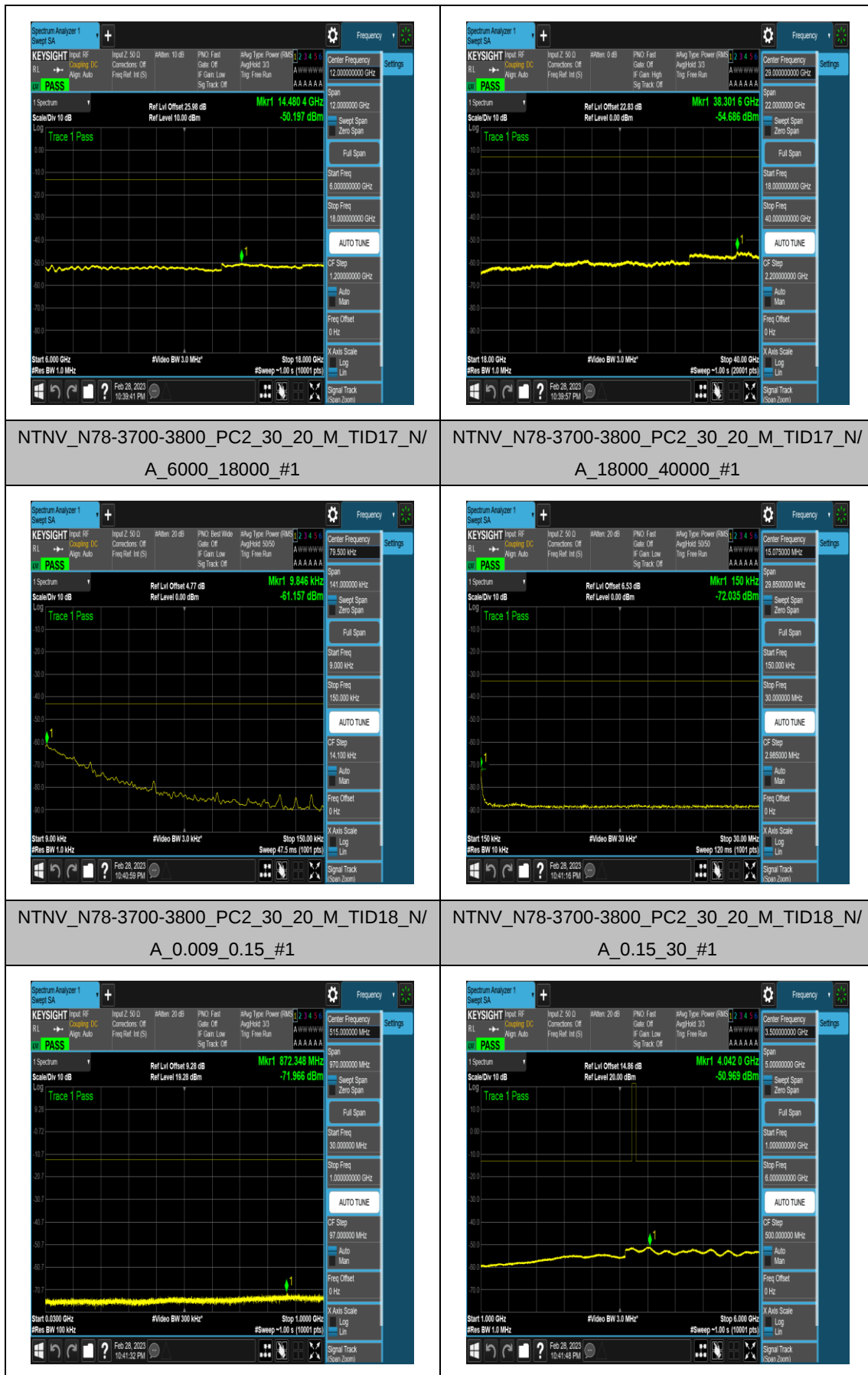


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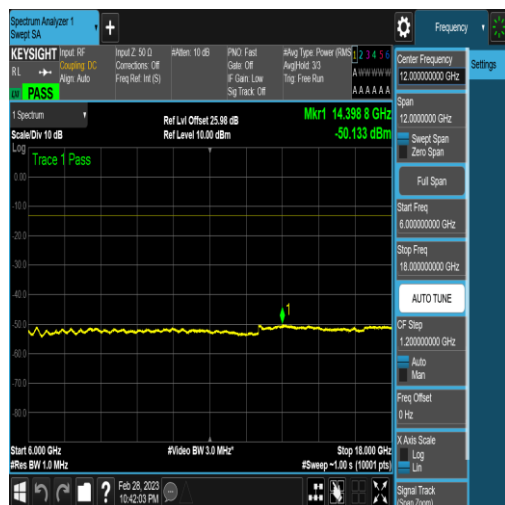


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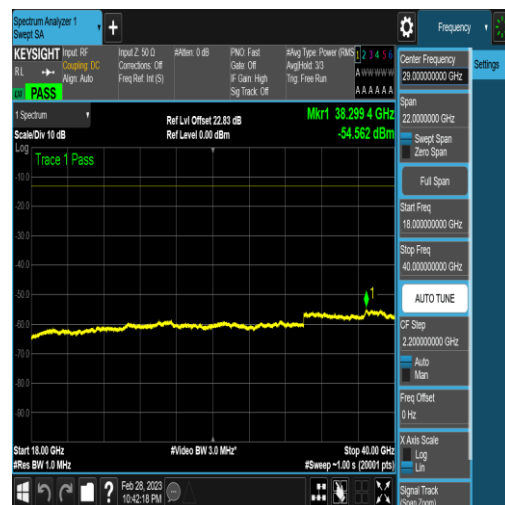
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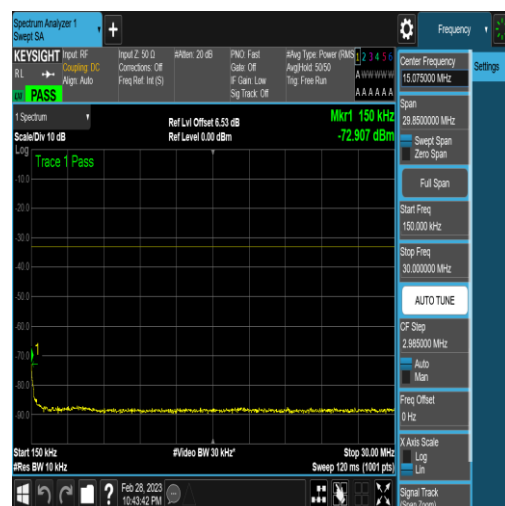
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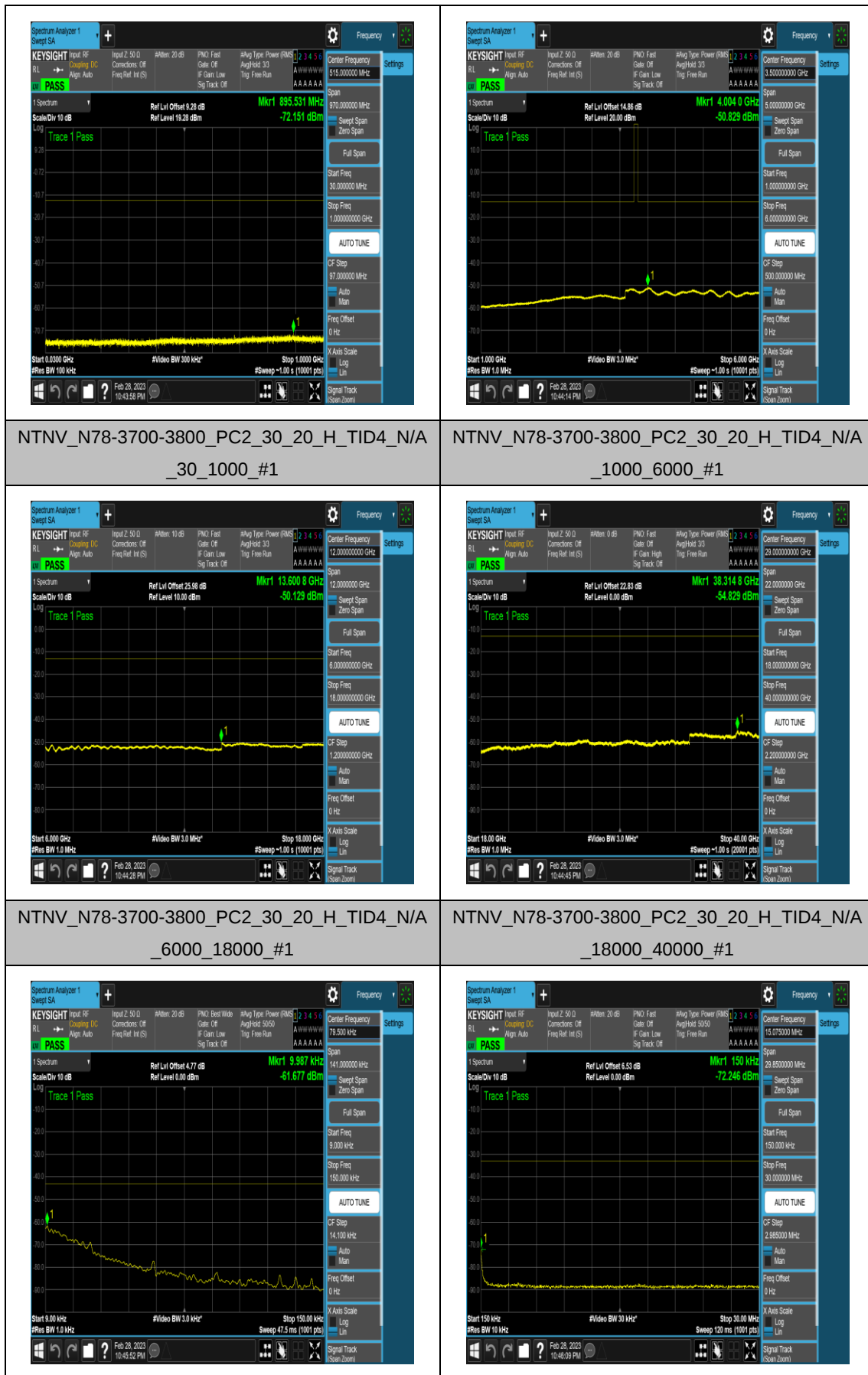


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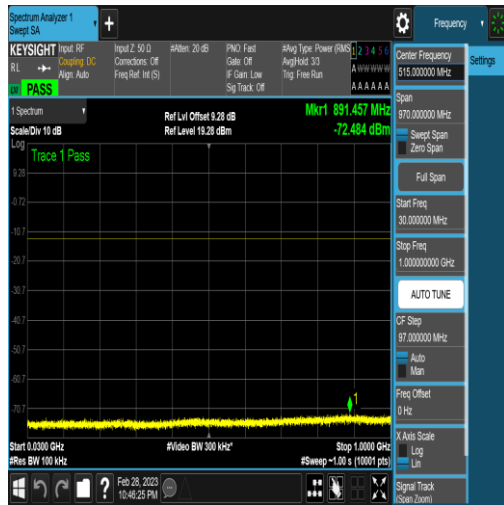


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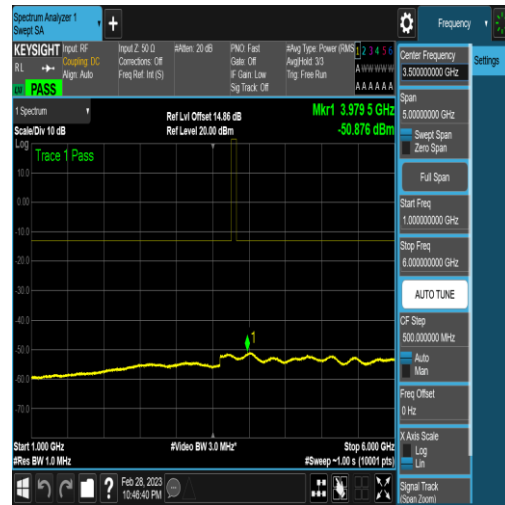
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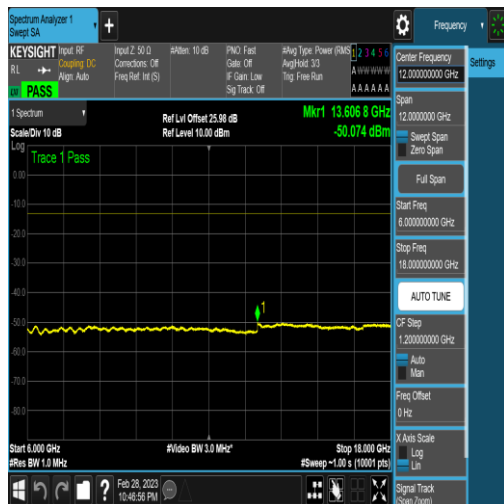
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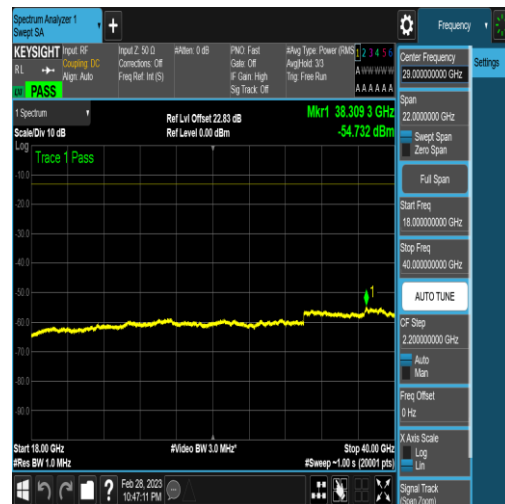
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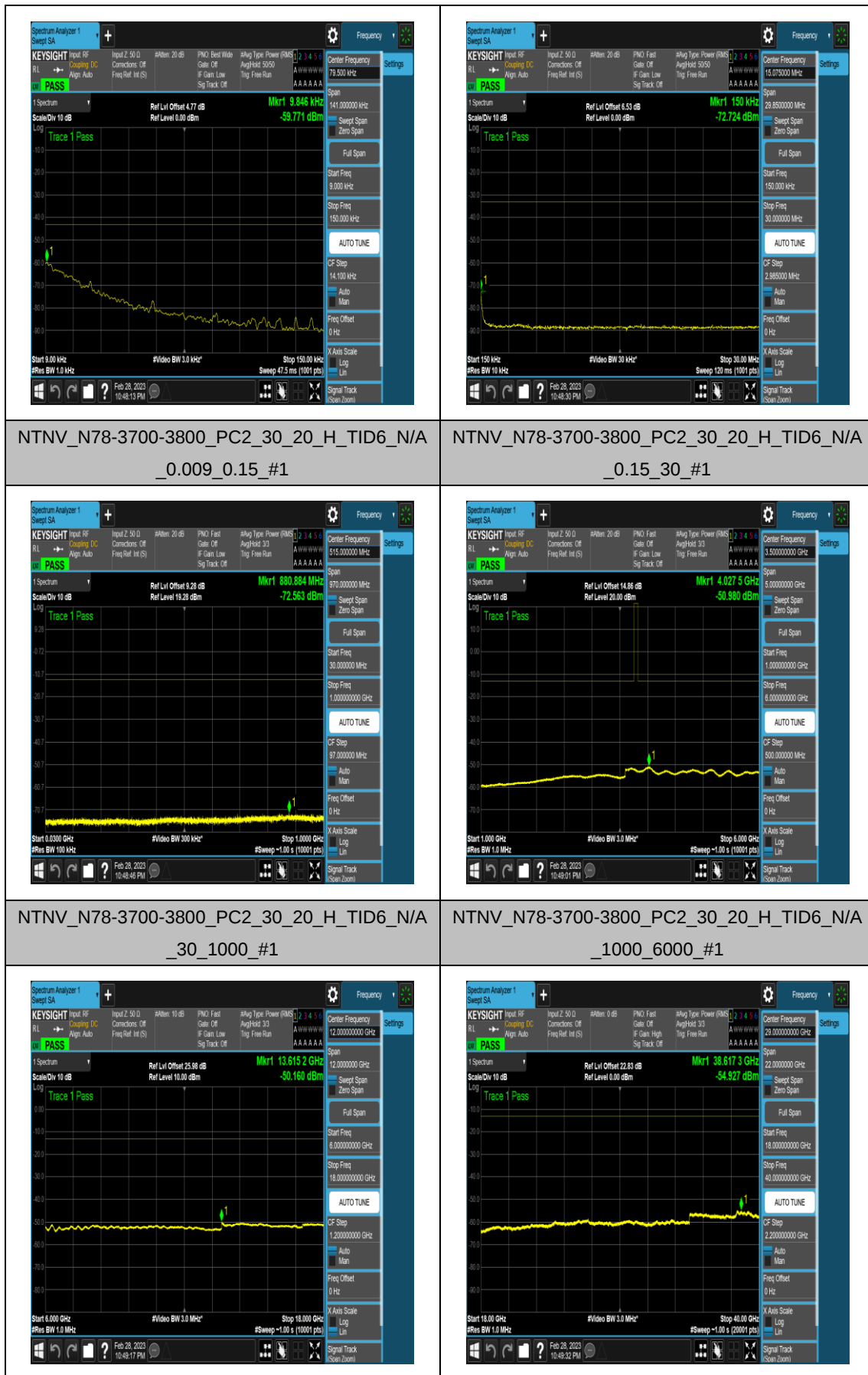


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NTNV_N78-3700-3800_PC2_30_20_H_TID5_N/A
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NTNV_N78-3700-3800_PC2_30_20_H_TID5_N/A
_18000_40000_#1

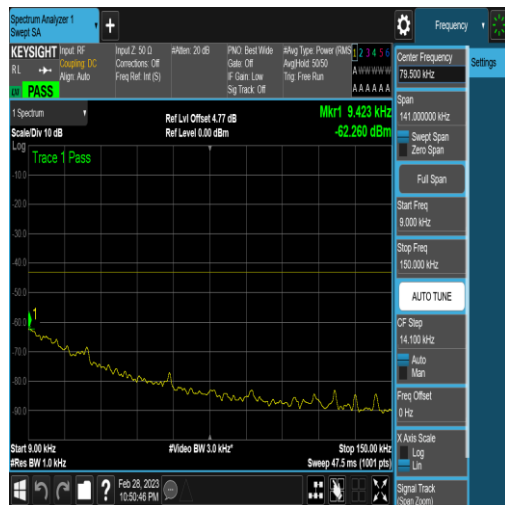
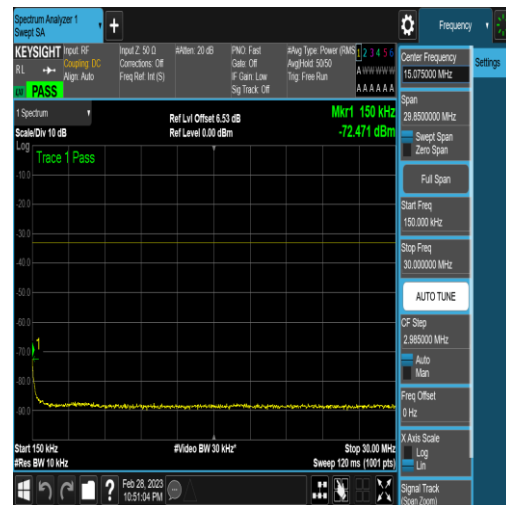
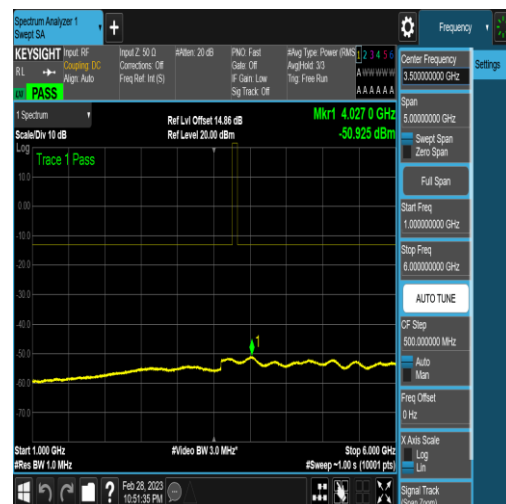


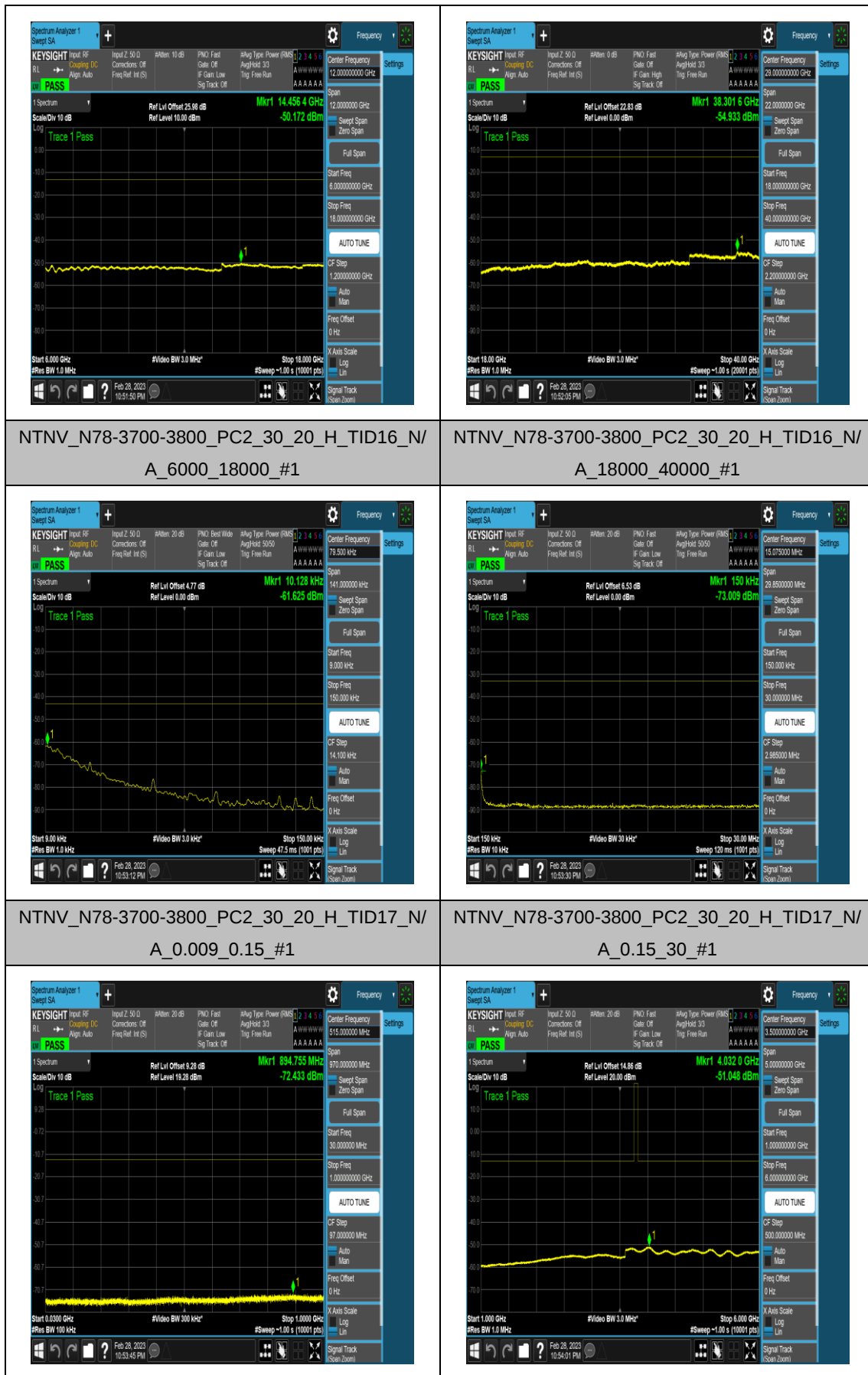
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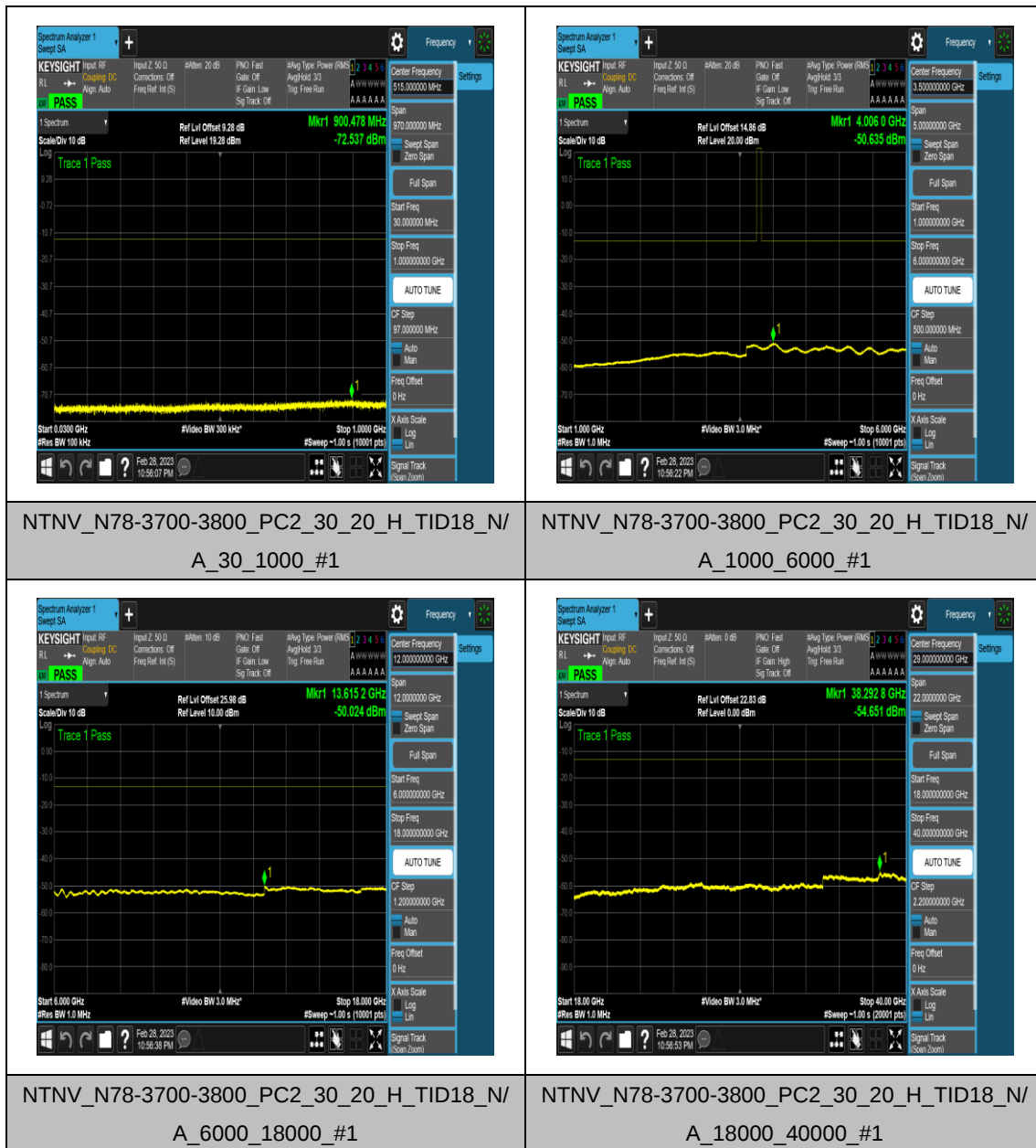
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_1000_6000_#1

NTNV_N78-3700-3800_PC2_30_20_H_TID6_N/A
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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
N78-3700-3800	30	20	DFT-QPSK	L	Outer_Full	VN	NT	12.38	0.00	PASS
N78-3700-3800	30	20	CP-QPSK	L	Outer_Full	VN	NT	2.04	0.00	PASS
N78-3700-3800	30	20	DFT-QPSK	M	Outer_Full	VN	NT	-9.32	0.00	PASS
N78-3700-3800	30	20	CP-QPSK	M	Outer_Full	VN	NT	-24.11	-0.01	PASS
N78-3700-3800	30	20	DFT-QPSK	H	Outer_Full	VN	NT	2.80	0.00	PASS
N78-3700-3800	30	20	CP-QPSK	H	Outer_Full	VN	NT	-8.81	0.00	PASS
N78-3700-3800	30	40	DFT-QPSK	L	Outer_Full	VN	NT	7.31	0.00	PASS
N78-3700-3800	30	40	CP-QPSK	L	Outer_Full	VN	NT	0.40	0.00	PASS
N78-3700-3800	30	40	DFT-QPSK	M	Outer_Full	VN	NT	-4.80	0.00	PASS
N78-3700-3800	30	40	CP-QPSK	M	Outer_Full	VN	NT	-4.70	0.00	PASS
N78-3700-3800	30	40	DFT-QPSK	H	Outer_Full	VN	NT	13.14	0.00	PASS
N78-3700-3800	30	40	CP-QPSK	H	Outer_Full	VN	NT	-13.02	0.00	PASS
N78-3700-3800	30	50	DFT-QPSK	L	Outer_Full	VN	NT	22.38	0.01	PASS
N78-3700-3800	30	50	CP-QPSK	L	Outer_Full	VN	NT	-21.57	-0.01	PASS
N78-3700-3800	30	50	DFT-QPSK	M	Outer_Full	VN	NT	-31.39	-0.01	PASS
N78-3700-3800	30	50	CP-QPSK	M	Outer_Full	VN	NT	-26.20	-0.01	PASS

3800			SK		Full					S
N78-3700-3800	30	50	DFT-Q PSK	H	Outer_ Full	VN	NT	-1.38	0.00	PAS S
N78-3700-3800	30	50	CP-QP SK	H	Outer_ Full	VN	NT	12.13	0.00	PAS S
N78-3700-3800	30	60	DFT-Q PSK	L	Outer_ Full	VN	NT	-25.11	-0.01	PAS S
N78-3700-3800	30	60	CP-QP SK	L	Outer_ Full	VN	NT	12.79	0.00	PAS S
N78-3700-3800	30	60	DFT-Q PSK	M	Outer_ Full	VN	NT	13.55	0.00	PAS S
N78-3700-3800	30	60	CP-QP SK	M	Outer_ Full	VN	NT	-7.49	0.00	PAS S
N78-3700-3800	30	60	DFT-Q PSK	H	Outer_ Full	VN	NT	-13.68	0.00	PAS S
N78-3700-3800	30	60	CP-QP SK	H	Outer_ Full	VN	NT	1.96	0.00	PAS S
N78-3700-3800	30	80	DFT-Q PSK	L	Outer_ Full	VN	NT	-25.02	-0.01	PAS S
N78-3700-3800	30	80	CP-QP SK	L	Outer_ Full	VN	NT	19.11	0.01	PAS S
N78-3700-3800	30	80	DFT-Q PSK	M	Outer_ Full	VN	NT	-52.57	-0.01	PAS S
N78-3700-3800	30	80	CP-QP SK	M	Outer_ Full	VN	NT	9.61	0.00	PAS S
N78-3700-3800	30	80	DFT-Q PSK	H	Outer_ Full	VN	NT	-4.86	0.00	PAS S
N78-3700-3800	30	80	CP-QP SK	H	Outer_ Full	VN	NT	-10.38	0.00	PAS S
N78-3700-3800	30	90	DFT-Q PSK	L	Outer_ Full	VN	NT	-14.86	0.00	PAS S
N78-3700-3800	30	90	CP-QP SK	L	Outer_ Full	VN	NT	13.98	0.00	PAS S
N78-3700-3800	30	90	DFT-Q PSK	M	Outer_ Full	VN	NT	-4.12	0.00	PAS S
N78-3700-3800	30	90	CP-QP SK	M	Outer_ Full	VN	NT	-46.60	-0.01	PAS S
N78-3700-3800	30	90	DFT-Q PSK	H	Outer_ Full	VN	NT	-6.52	0.00	PAS S
N78-3700-3800	30	90	CP-QP SK	H	Outer_ Full	VN	NT	-23.33	-0.01	PAS S
N78-3700-3800	30	100	DFT-Q	L	Outer_	VN	NT	22.91	0.01	PAS

3800			PSK		Full					S
N78-3700-3800	30	100	CP-QPSK	L	Outer_Full	VN	NT	21.36	0.01	PASS
N78-3700-3800	30	100	DFT-QPSK	M	Outer_Full	VN	NT	25.77	0.01	PASS
N78-3700-3800	30	100	CP-QPSK	M	Outer_Full	VN	NT	3.85	0.00	PASS
N78-3700-3800	30	100	DFT-QPSK	H	Outer_Full	VN	NT	22.33	0.01	PASS
N78-3700-3800	30	100	CP-QPSK	H	Outer_Full	VN	NT	3.55	0.00	PASS

Frequency Error VS. Temperature

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation (Hz)	Deviation (ppm)	Verdict
N78-3700-3800	30	20	DFT-QPSK	L	Outer_Full	NV	TN	22.768112	0.006137	PASS
N78-3700-3800	30	20	CP-QPSK	L	Outer_Full	NV	TN	-0.407117	-0.000110	PASS
N78-3700-3800	30	20	DFT-QPSK	M	Outer_Full	NV	TN	5.529846	0.001475	PASS
N78-3700-3800	30	20	CP-QPSK	M	Outer_Full	NV	TN	25.167515	0.006711	PASS
N78-3700-3800	30	20	DFT-QPSK	H	Outer_Full	NV	TN	6.832220	0.001803	PASS
N78-3700-3800	30	20	CP-QPSK	H	Outer_Full	NV	TN	-10.548592	-0.002783	PASS
N78-3700-3800	30	40	DFT-QPSK	L	Outer_Full	NV	TN	3.719068	0.001000	PASS
N78-3700-3800	30	40	CP-QPSK	L	Outer_Full	NV	TN	-0.871742	-0.000234	PASS
N78-3700-3800	30	40	DFT-QPSK	M	Outer_Full	NV	TN	-13.373945	-0.003566	PASS
N78-3700-3800	30	40	CP-QPSK	M	Outer_Full	NV	TN	-8.740380	-0.002331	PASS
N78-3700-3800	30	40	DFT-QPSK	H	Outer_Full	NV	TN	-2.215361	-0.000586	PASS
N78-3700-3800	30	40	CP-QPSK	H	Outer_Full	NV	TN	-4.372712	-0.001157	PASS

N78-3700-3800	30	50	DFT-Q PSK	L	Outer_ Full	NV	TN	28.37669 0	0.0076 18	PAS S
N78-3700-3800	30	50	CP-QP SK	L	Outer_ Full	NV	TN	-4.29607 9	-0.001 153	PAS S
N78-3700-3800	30	50	DFT-Q PSK	M	Outer_ Full	NV	TN	-15.0695 28	-0.004 019	PAS S
N78-3700-3800	30	50	CP-QP SK	M	Outer_ Full	NV	TN	5.840231	0.0015 57	PAS S
N78-3700-3800	30	50	DFT-Q PSK	H	Outer_ Full	NV	TN	10.74299 0	0.0028 46	PAS S
N78-3700-3800	30	50	CP-QP SK	H	Outer_ Full	NV	TN	-0.75206 6	-0.000 199	PAS S
N78-3700-3800	30	60	DFT-Q PSK	L	Outer_ Full	NV	TN	2.966823	0.0007 95	PAS S
N78-3700-3800	30	60	CP-QP SK	L	Outer_ Full	NV	TN	-34.4961 01	-0.009 248	PAS S
N78-3700-3800	30	60	DFT-Q PSK	M	Outer_ Full	NV	TN	-1.10054 2	-0.000 293	PAS S
N78-3700-3800	30	60	CP-QP SK	M	Outer_ Full	NV	TN	11.64483 5	0.0031 05	PAS S
N78-3700-3800	30	60	DFT-Q PSK	H	Outer_ Full	NV	TN	14.93296 0	0.0039 61	PAS S
N78-3700-3800	30	60	CP-QP SK	H	Outer_ Full	NV	TN	-25.8169 44	-0.006 848	PAS S
N78-3700-3800	30	80	DFT-Q PSK	L	Outer_ Full	NV	TN	-1.31301 8	-0.000 351	PAS S
N78-3700-3800	30	80	CP-QP SK	L	Outer_ Full	NV	TN	21.43115 4	0.0057 30	PAS S
N78-3700-3800	30	80	DFT-Q PSK	M	Outer_ Full	NV	TN	-37.5519 33	-0.010 014	PAS S
N78-3700-3800	30	80	CP-QP SK	M	Outer_ Full	NV	TN	2.004339	0.0005 34	PAS S
N78-3700-3800	30	80	DFT-Q PSK	H	Outer_ Full	NV	TN	-2.79151 5	-0.000 742	PAS S
N78-3700-3800	30	80	CP-QP SK	H	Outer_ Full	NV	TN	5.510574	0.0014 66	PAS S
N78-3700-3800	30	90	DFT-Q PSK	L	Outer_ Full	NV	TN	-18.9754 33	-0.005 067	PAS S
N78-3700-3800	30	90	CP-QP SK	L	Outer_ Full	NV	TN	11.29071 0	0.0030 15	PAS S
N78-3700-3800	30	90	DFT-Q PSK	M	Outer_ Full	NV	TN	-33.9766 50	-0.009 060	PAS S

N78-3700-3800	30	90	CP-QP SK	M	Outer_ Full	NV	TN	-21.1915 82	-0.005 651	PAS S
N78-3700-3800	30	90	DFT-Q PSK	H	Outer_ Full	NV	TN	-5.92643 1	-0.001 578	PAS S
N78-3700-3800	30	90	CP-QP SK	H	Outer_ Full	NV	TN	-32.0467 26	-0.008 534	PAS S
N78-3700-3800	30	100	DFT-Q PSK	L	Outer_ Full	NV	TN	-6.50526 0	-0.001 735	PAS S
N78-3700-3800	30	100	CP-QP SK	L	Outer_ Full	NV	TN	40.95094 7	0.0109 20	PAS S
N78-3700-3800	30	100	DFT-Q PSK	M	Outer_ Full	NV	TN	18.57564 2	0.0049 54	PAS S
N78-3700-3800	30	100	CP-QP SK	M	Outer_ Full	NV	TN	-6.46669 1	-0.001 724	PAS S
N78-3700-3800	30	100	DFT-Q PSK	H	Outer_ Full	NV	TN	-1.94867 1	-0.000 520	PAS S
N78-3700-3800	30	100	CP-QP SK	H	Outer_ Full	NV	TN	8.511851	0.0022 70	PAS S

Appendix F: Modulation characteristics for SA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
N78-3700-3800	30	20	DFT-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	20	CP-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	20	DFT-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	20	CP-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	20	DFT-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	20	CP-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	40	DFT-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	40	CP-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	40	DFT-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	40	CP-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	40	DFT-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	40	CP-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	50	DFT-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	50	CP-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	50	DFT-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	50	CP-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	50	DFT-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	50	CP-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	60	DFT-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	60	CP-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	60	DFT-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	60	CP-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	60	DFT-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	60	CP-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	80	DFT-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	80	CP-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	80	DFT-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	80	CP-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	80	DFT-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	80	CP-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	90	DFT-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	90	CP-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	90	DFT-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	90	CP-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	90	DFT-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	90	CP-QPSK	H	Outer_Full	see graph	PASS

N78-3700-3800	30	100	DFT-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	100	CP-QPSK	L	Outer_Full	see graph	PASS
N78-3700-3800	30	100	DFT-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	100	CP-QPSK	M	Outer_Full	see graph	PASS
N78-3700-3800	30	100	DFT-QPSK	H	Outer_Full	see graph	PASS
N78-3700-3800	30	100	CP-QPSK	H	Outer_Full	see graph	PASS

Test Graphs

