

Appendix for 12A_N77A_3450-3550MHz

Product Name: CSX8

Model No: LGT-08QA-2301

Appendix A: Average Power Output Data for NSA

Test Result

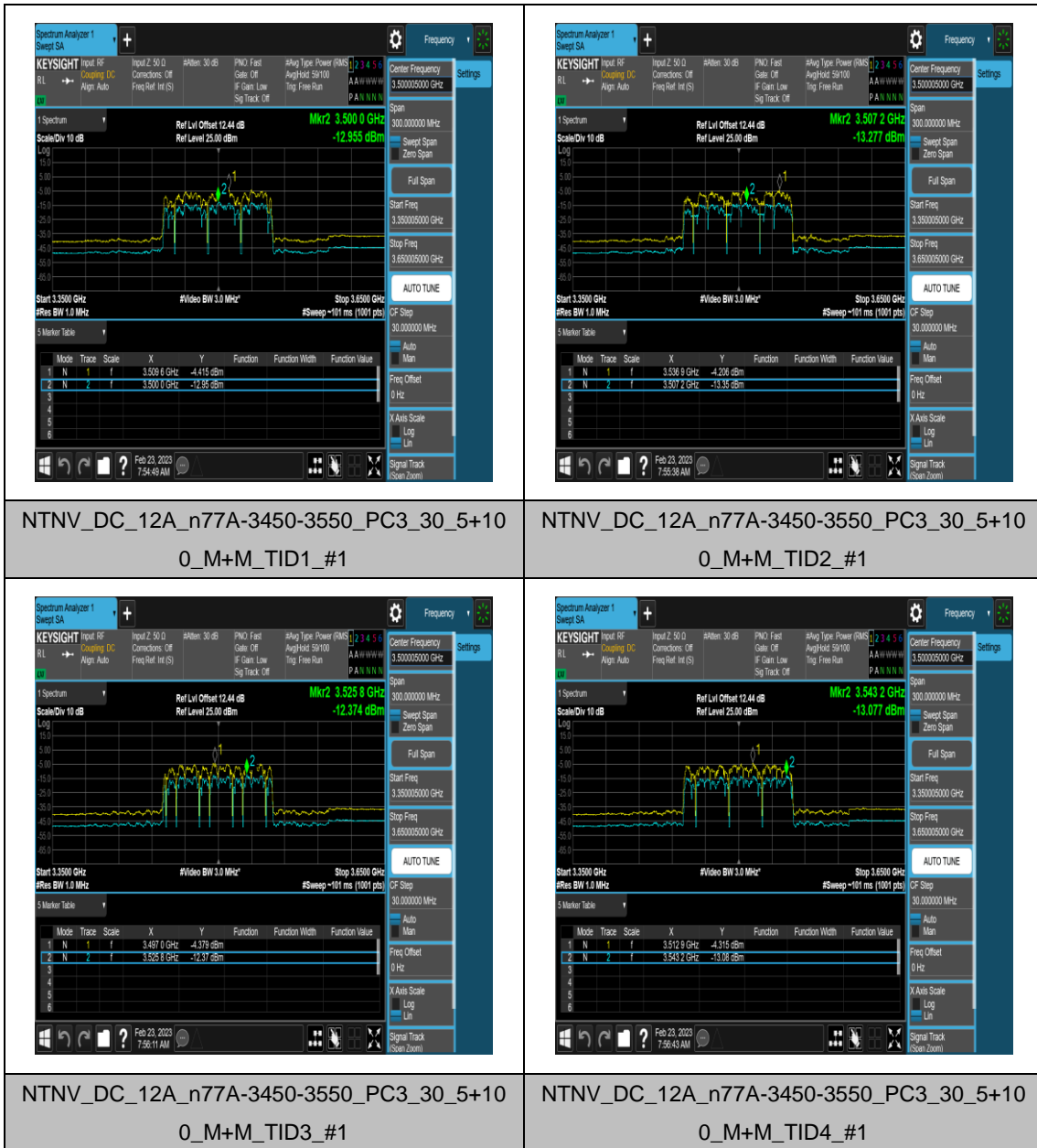
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Power (dBm)	Power Class	Verdict
DC_12A_n77A-3450-3550	30	5+100	DFT-QPSK	M+M	Edge_1RB_Left	22.73	PC3	PASS
DC_12A_n77A-3450-3550	30	5+100	DFT-QPSK	M+M	Edge_1RB_Right	22.38	PC3	PASS
DC_12A_n77A-3450-3550	30	5+100	DFT-QPSK	M+M	Outer_Full	23.87	PC3	PASS
DC_12A_n77A-3450-3550	30	5+100	DFT-QPSK	M+M	Inner_Full	23.91	PC3	PASS
DC_12A_n77A-3450-3550	30	5+100	CP-QPSK	M+M	Edge_1RB_Left	22.53	PC3	PASS
DC_12A_n77A-3450-3550	30	5+100	CP-QPSK	M+M	Edge_1RB_Right	22.54	PC3	PASS
DC_12A_n77A-3450-3550	30	5+100	CP-QPSK	M+M	Outer_Full	23.74	PC3	PASS
DC_12A_n77A-3450-3550	30	5+100	CP-QPSK	M+M	Inner_Full	23.81	PC3	PASS

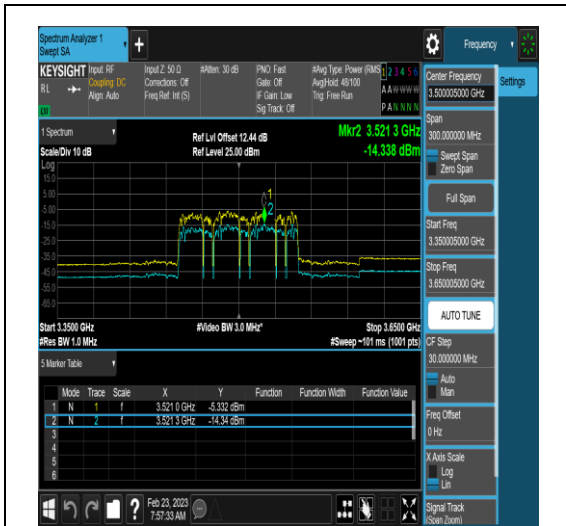
Peak-to-Average Ratio(PAPR)

Test Result

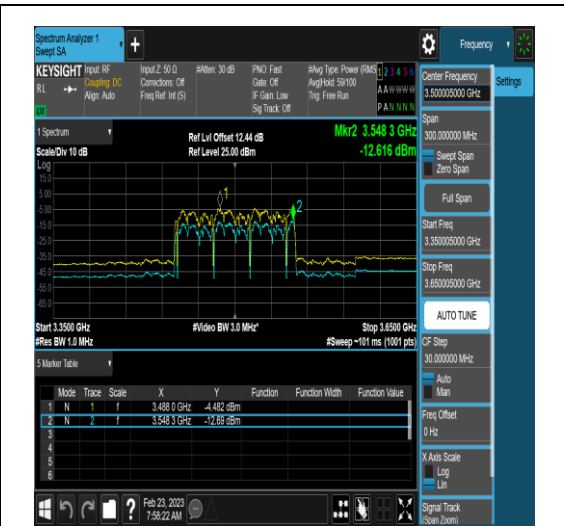
Band	SC S	Bandw idth	Modulatio n	Chan nel	RB Config	DutyC ycle	Fact or	Res ult	Li mit	Verd ict
DC_12A_n77A-34 50-3550	30	5+100	DFT-PI2B PSK	M+M	Outer_ Full	100%	0.00	8.82	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	DFT-QPS K	M+M	Outer_ Full	100%	0.00	9.07	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	DFT-16Q AM	M+M	Outer_ Full	100%	0.00	8.55	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	DFT-64Q AM	M+M	Outer_ Full	100%	0.00	8.76	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	DFT-256 QAM	M+M	Outer_ Full	100%	0.00	9.01	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	CP-QPS K	M+M	Outer_ Full	100%	0.00	8.20	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	CP-16QA M	M+M	Outer_ Full	100%	0.00	9.21	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	CP-64QA M	M+M	Outer_ Full	100%	0.00	8.88	≤1 3	PAS S
DC_12A_n77A-34 50-3550	30	5+100	CP-256Q AM	M+M	Outer_ Full	100%	0.00	8.71	≤1 3	PAS S

Test Graphs





NTNV_DC_12A_n77A-3450-3550_PC3_30_5+10
 0_M+M_TID5_#1



NTNV_DC_12A_n77A-3450-3550_PC3_30_5+10
 0_M+M_TID6_#1



NTNV_DC_12A_n77A-3450-3550_PC3_30_5+10
 0_M+M_TID7_#1



NTNV_DC_12A_n77A-3450-3550_PC3_30_5+10
 0_M+M_TID8_#1



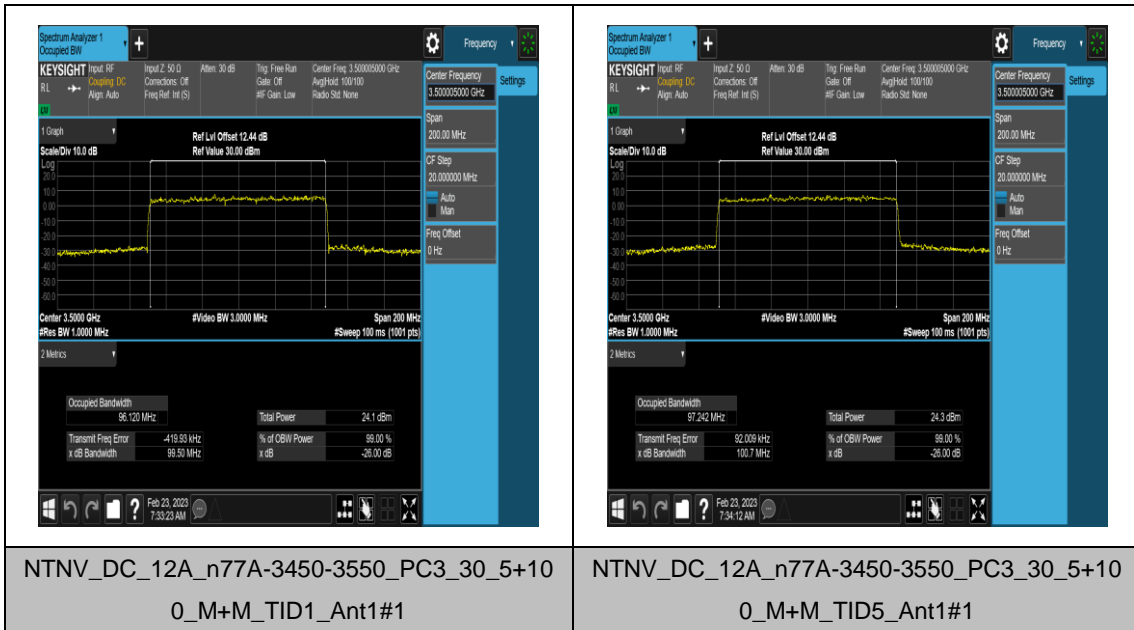
NTNV_DC_12A_n77A-3450-3550_PC3_30_5+10 0_M+M_TID9_#1	
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Appendix C: 26dB Bandwidth and Occupied Bandwidth for NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
DC_12A_n77A-3450-3550	30	5+100	DFT-QPSK	M+M	Outer_Full	96.120	99.50	PASS
DC_12A_n77A-3450-3550	30	5+100	CP-QPSK	M+M	Outer_Full	97.242	100.7	PASS

Test Graphs



NTNV_DC_12A_n77A-3450-3550_PC3_30_5+10
0_M+M_TID1_Ant1#1

NTNV_DC_12A_n77A-3450-3550_PC3_30_5+10
0_M+M_TID5_Ant1#1

Appendix E: Conducted Spurious Emission for NSA

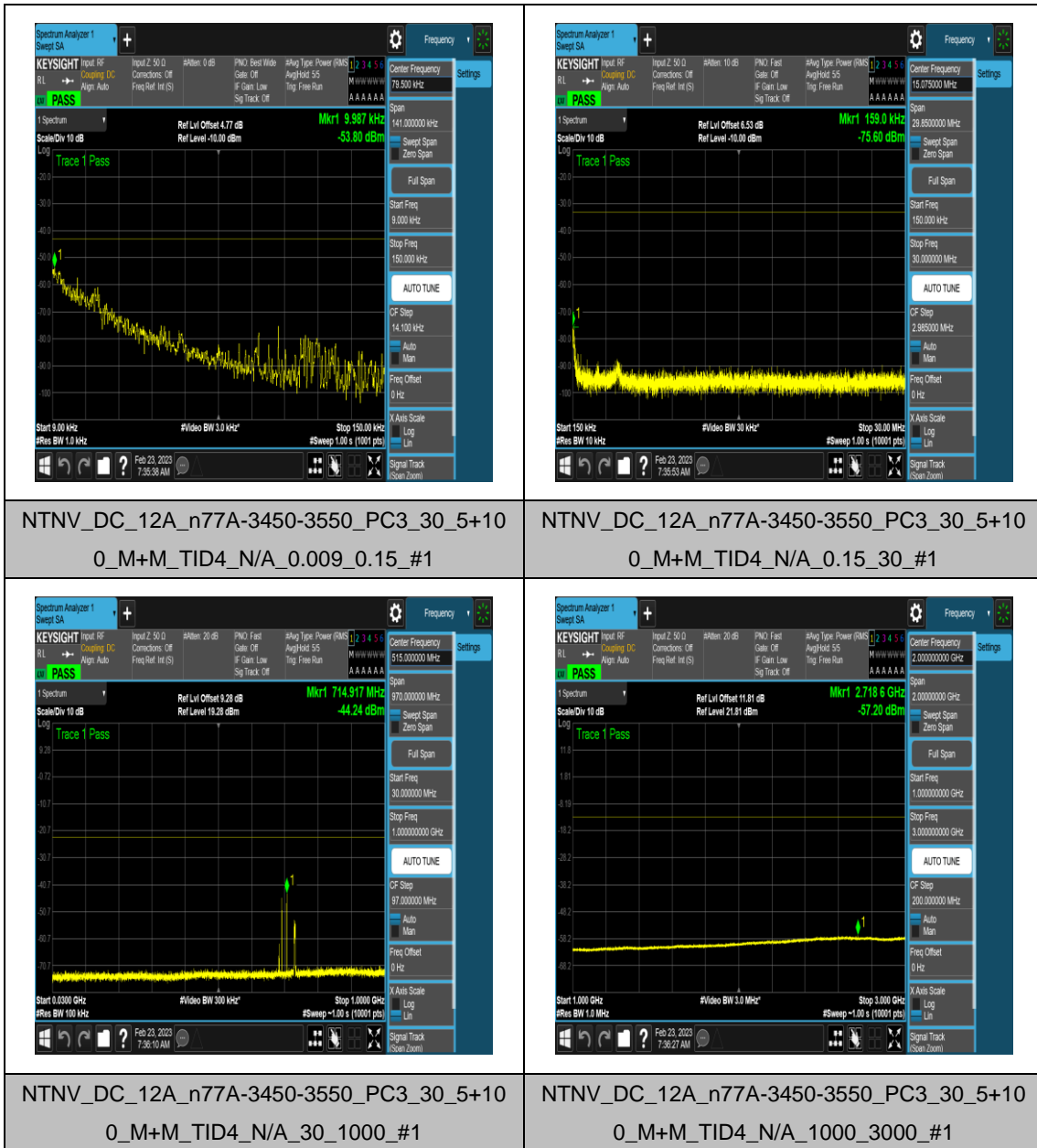
Test Result

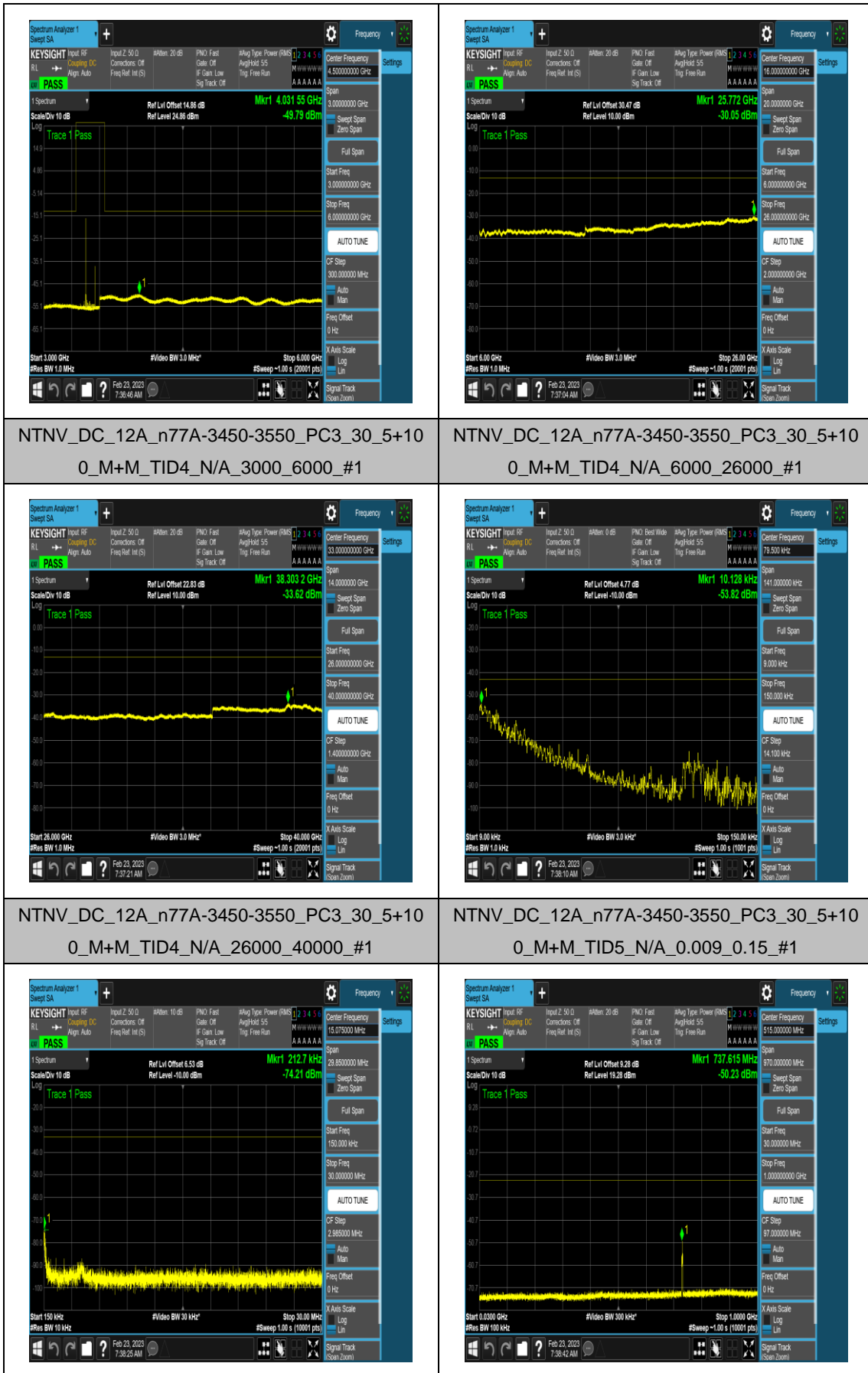
Band	S C S	Bandwidth	Modulation	Channel	RB Config	StartF req	StopF req	Result	Limit	Verdict
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Left	0.009	0.15	-53. 80	-4 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Left	0.15	30	-75. 60	-3 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Left	30	1000	-44. 24	-2 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Left	1000	3000	-57. 20	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Left	3000	6000	-49. 79	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Left	6000	2600 0	-30. 05	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Left	2600 0	4000 0	-33. 62	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Right	0.009	0.15	-53. 82	-4 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Right	0.15	30	-74. 21	-3 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Right	30	1000	-50. 23	-2 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Right	1000	3000	-57. 18	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Right	3000	6000	-49. 70	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Right	6000	2600 0	-30. 08	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Edge_1RB _Right	2600 0	4000 0	-33. 32	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Outer_Full	0.009	0.15	-53. 96	-4 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Outer_Full	0.15	30	-72. 34	-3 3	PAS S
DC_12A_n77A-3	30	5+100	DFT-Q	M+M	Outer_Full	30	1000	-29.	-2	PAS

450-3550			PSK					70	3	S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Outer_Full	1000	3000	-57. 37	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Outer_Full	3000	6000	-48. 04	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Outer_Full	6000	2600 0	-30. 04	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	DFT-Q PSK	M+M	Outer_Full	2600 0	4000 0	-33. 73	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Left	0.009	0.15	-52. 86	-4 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Left	0.15	30	-75. 15	-3 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Left	30	1000	-53. 12	-2 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Left	1000	3000	-54. 45	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Left	3000	6000	-49. 63	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Left	6000	2600 0	-30. 32	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Left	2600 0	4000 0	-33. 43	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Right	0.009	0.15	-54. 67	-4 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Right	0.15	30	-74. 13	-3 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Right	30	1000	-42. 95	-2 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Right	1000	3000	-48. 41	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Right	3000	6000	-49. 76	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Right	6000	2600 0	-30. 13	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Edge_1RB _Right	2600 0	4000 0	-33. 52	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Outer_Full	0.009	0.15	-53. 29	-4 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Outer_Full	0.15	30	-73. 20	-3 3	PAS S
DC_12A_n77A-3	30	5+100	CP-QP	M+M	Outer_Full	30	1000	-50.	-2	PAS

450-3550			SK					02	3	S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Outer_Full	1000	3000	-57. 31	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Outer_Full	3000	6000	-45. 48	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Outer_Full	6000	2600 0	-29. 76	-1 3	PAS S
DC_12A_n77A-3 450-3550	30	5+100	CP-QP SK	M+M	Outer_Full	2600 0	4000 0	-33. 60	-1 3	PAS S

Test Graphs



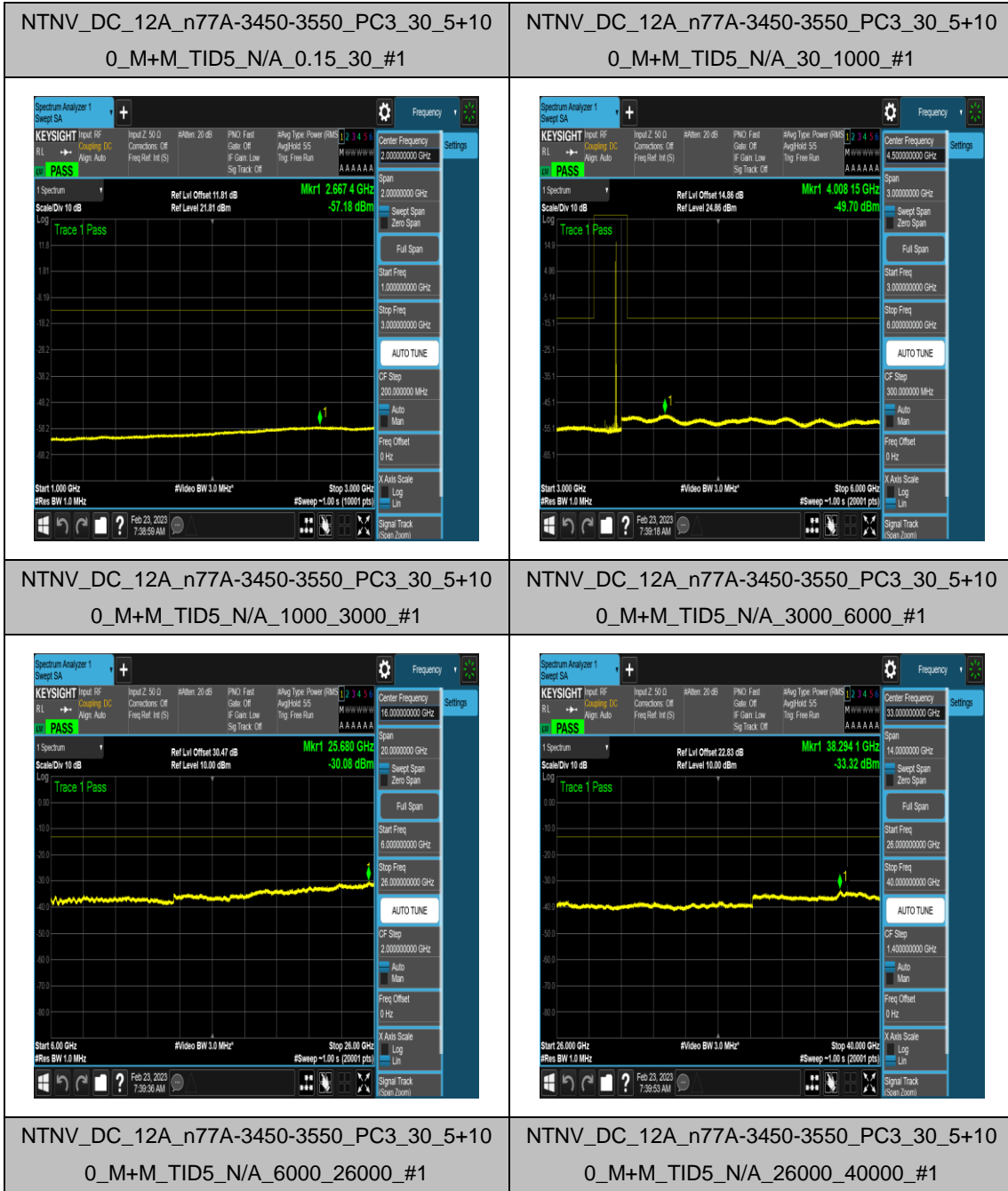


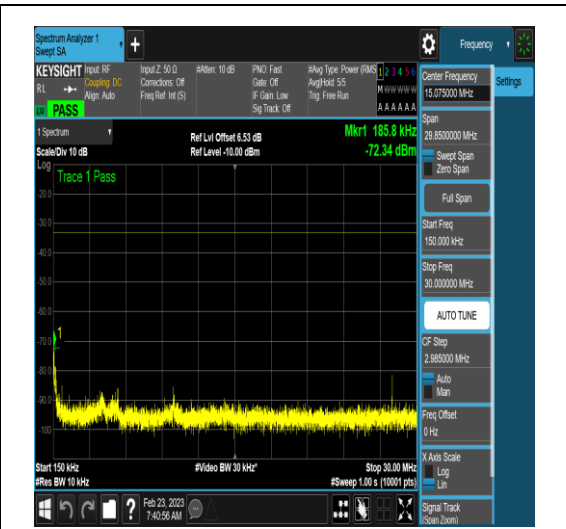
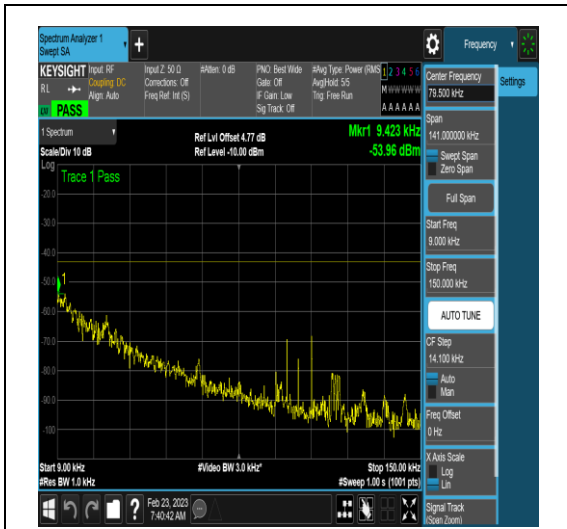
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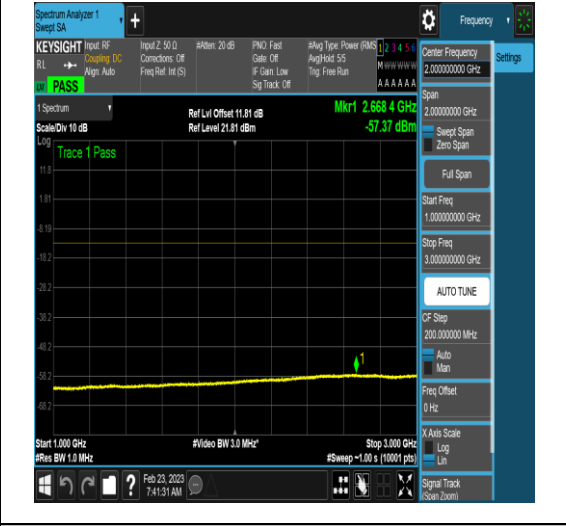
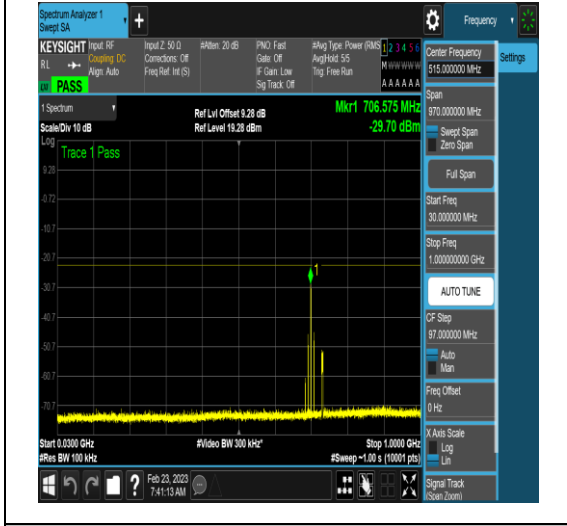
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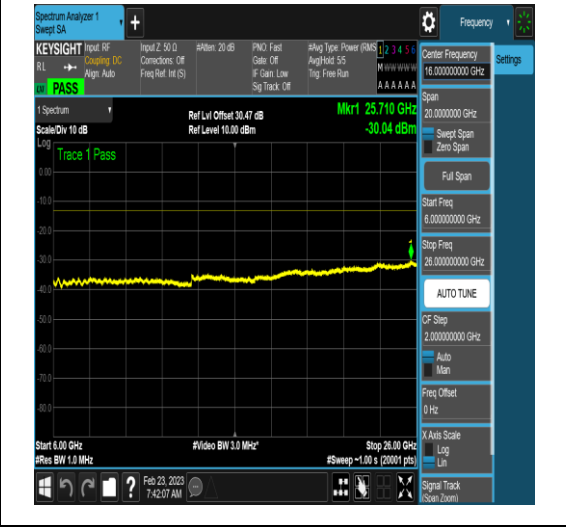
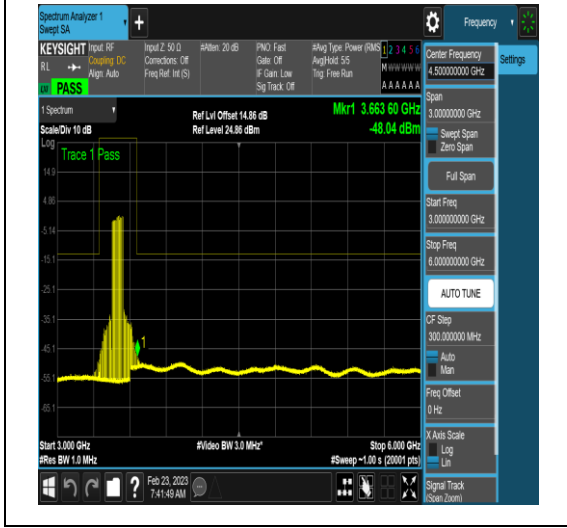
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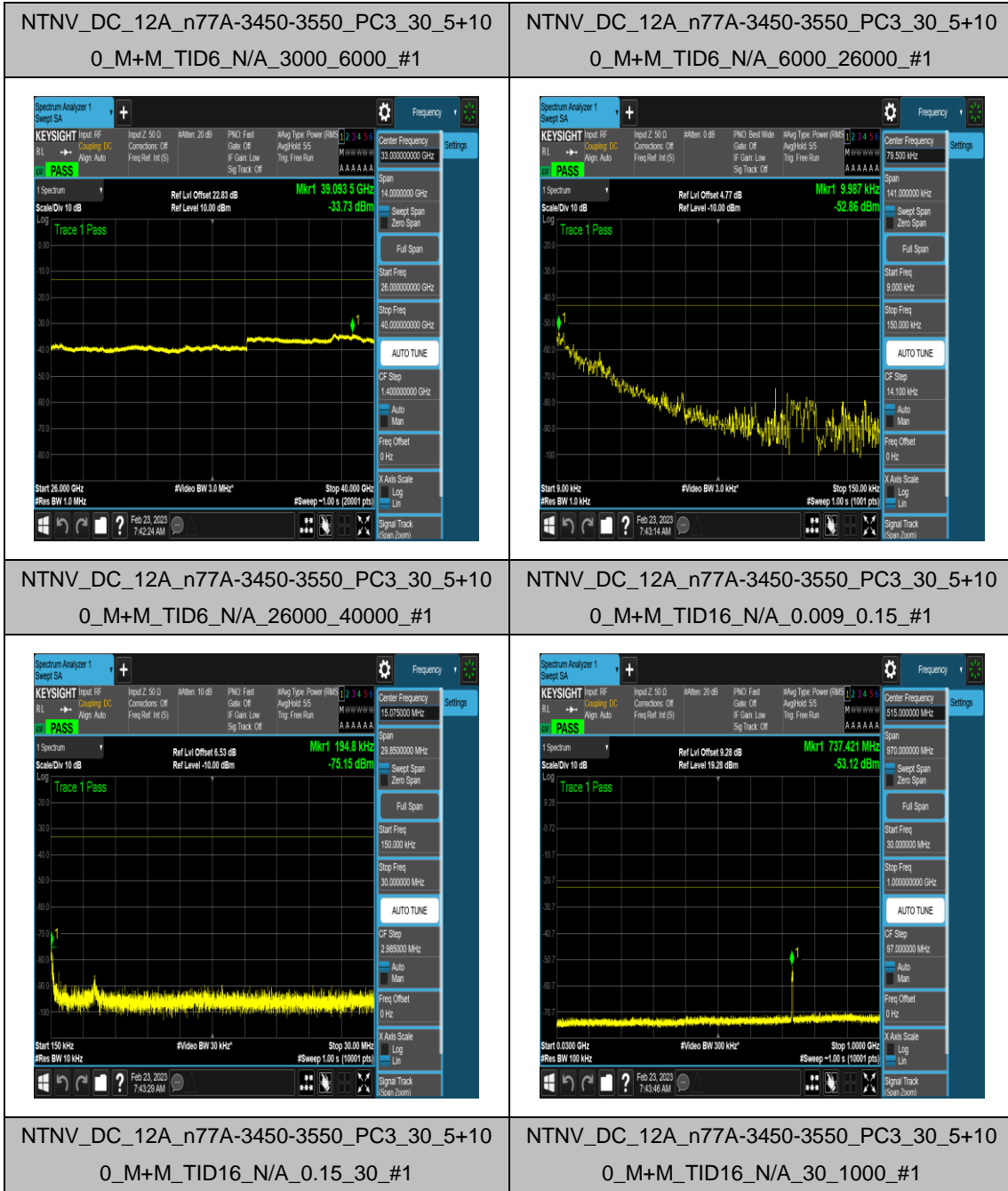
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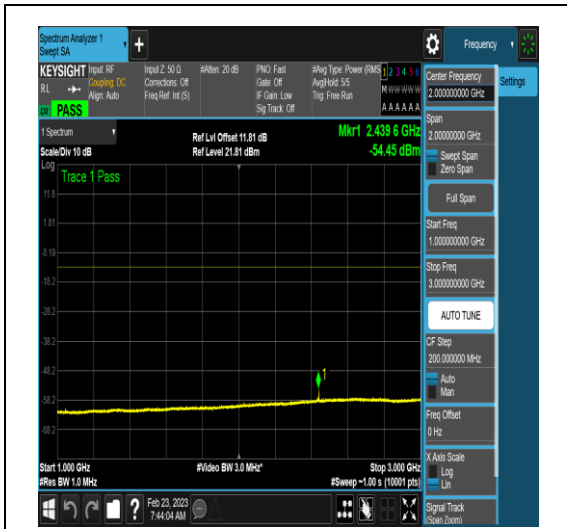


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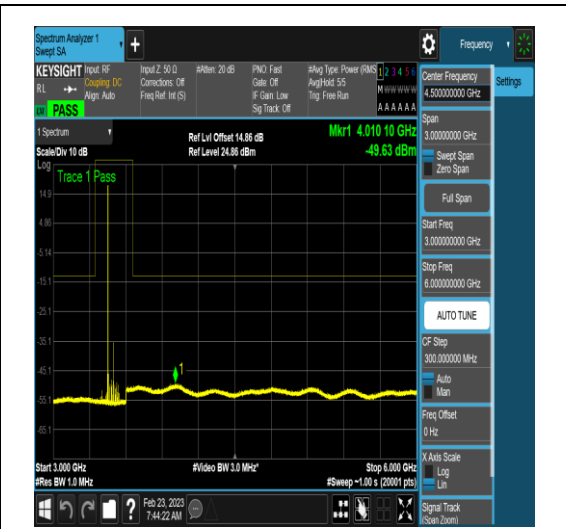
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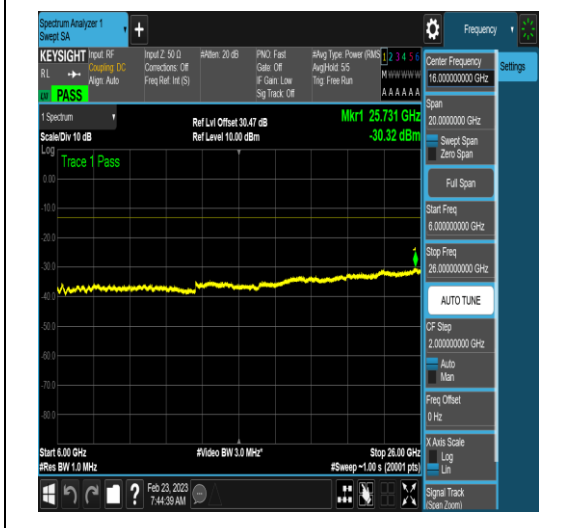




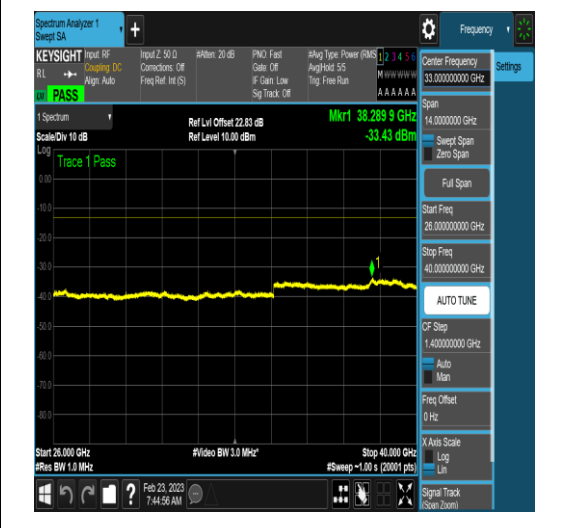
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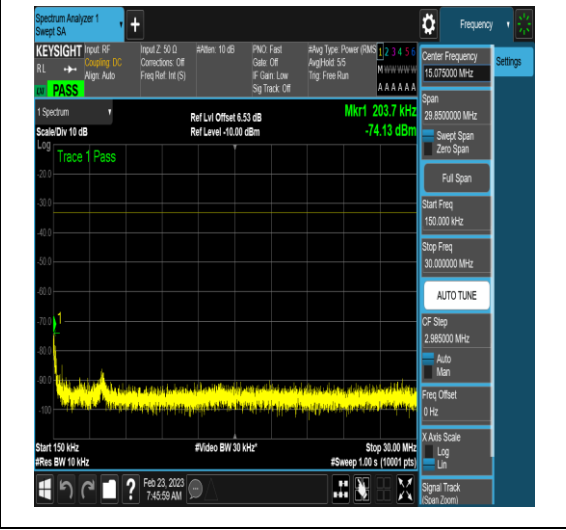
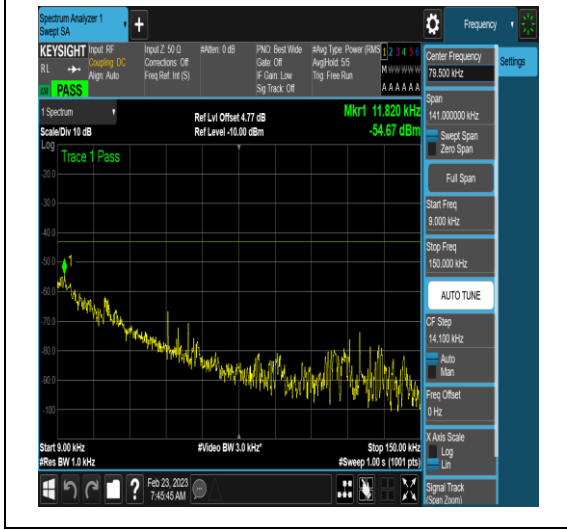
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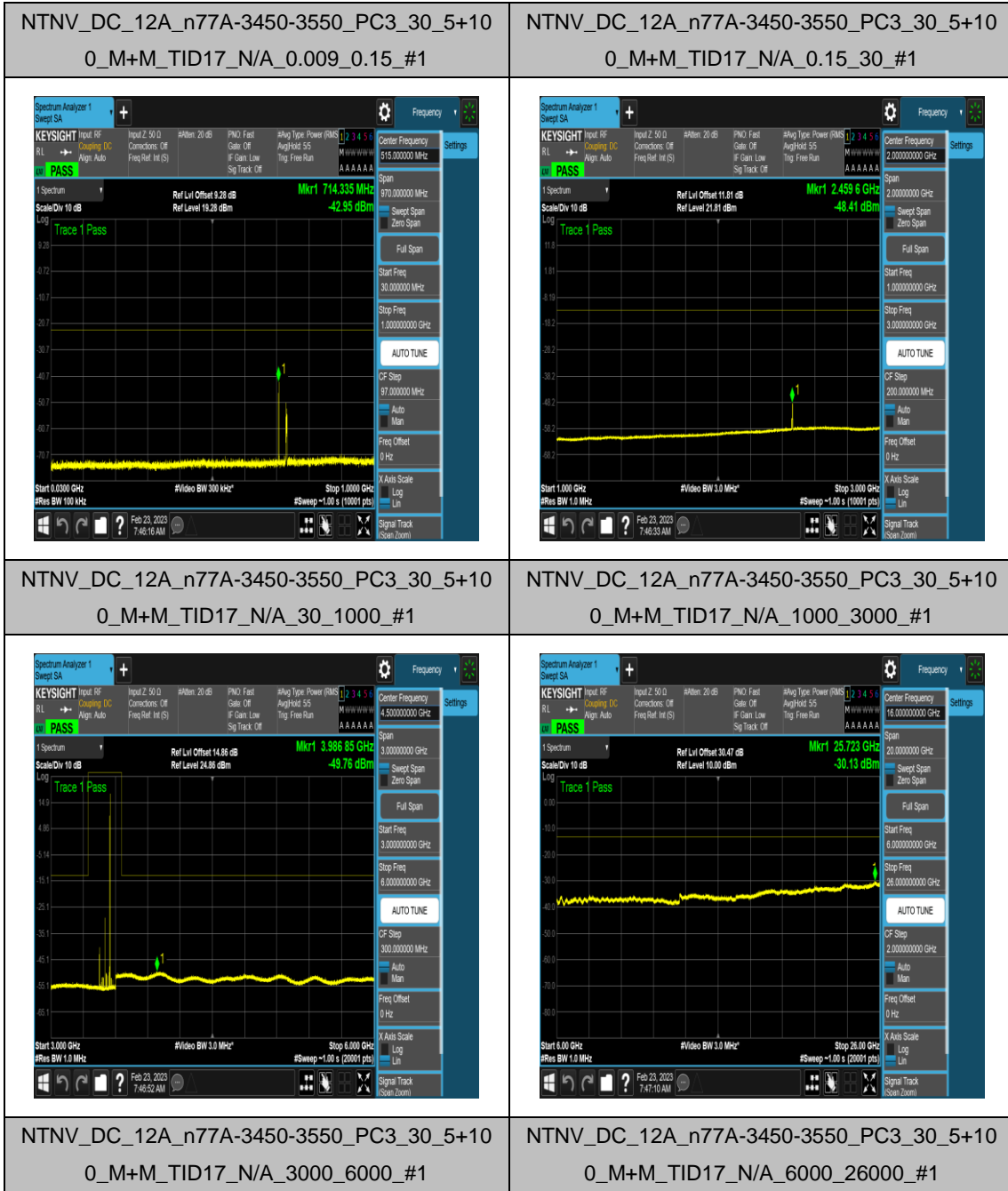


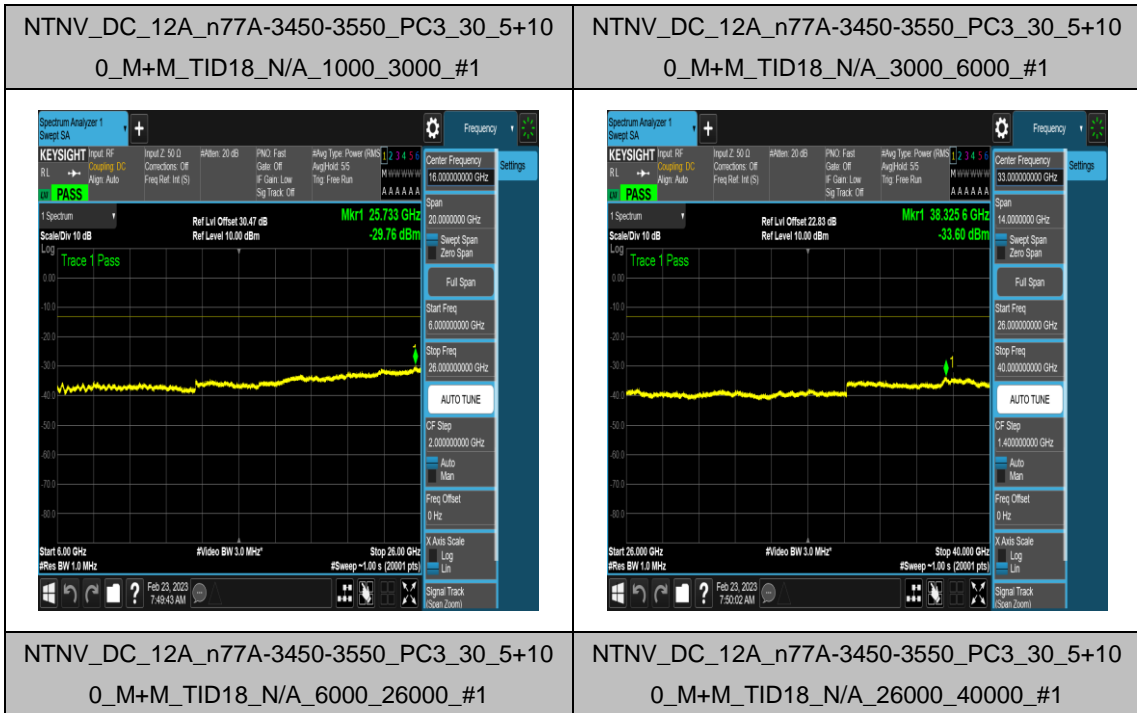
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Appendix F: Frequency Stability for NSA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SC S	Bandw idth	Modulat ion	Cha nnel	RB Config	Volt age	Temper ature	Deviatio n(Hz)	Deviat ion (ppm)	Ver dict
DC_12A_n77A-3 450-3550	3 0	5+10 0	DFT-Q PSK	M+M	Outer _Full	VN	NT	-12.77	0.00	PAS S
DC_12A_n77A-3 450-3550	3 0	5+10 0	CP-QP SK	M+M	Outer _Full	VN	NT	5.15	0.00	PAS S

Frequency Error VS. Temperature

Voltage										
Band	SC S	Bandw idth	Modulat ion	Cha nnel	RB Config	Volt age	Temper ature	Deviatio n(Hz)	Deviat ion (ppm)	Ver dict
DC_12A_n77A- 3450-3550	3 0	5+10 0	DFT-Q PSK	M+M	Outer _Full	NV	TN	-7.2031 61	-0.002 058	PAS S
DC_12A_n77A- 3450-3550	3 0	5+10 0	CP-QP SK	M+M	Outer _Full	NV	TN	-0.9463 91	-0.000 270	PAS S

Appendix F: Modulation characteristics for NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
DC_12A_n77A-3450-3550	30	5+100	DFT-QPSK	M+M	Outer_Full	see graph	PASS
DC_12A_n77A-3450-3550	30	5+100	CP-QPSK	M+M	Outer_Full	see graph	PASS

Test Graphs

