

Appendix for 12A_N77A 3450-3550MHz

Product Name: Zenius08

Model No: GMT-08QA-2301

Appendix A: Average Power Output Data for NSA

Test Result

Band	SC S	Bandwidth h	Modulation	Channel	RB Config	Power (dBm)	Power Class	Verdict
DC_12A_n77A-3 450-3550	30	5+100	DFT-QPSK	M+M	Edge_1RB_Left	22.32	PC3	PASS
DC_12A_n77A-3 450-3550	30	5+100	DFT-QPSK	M+M	Edge_1RB_Right	21.34	PC3	PASS
DC_12A_n77A-3 450-3550	30	5+100	DFT-QPSK	M+M	Outer_Full	23.82	PC3	PASS
DC_12A_n77A-3 450-3550	30	5+100	DFT-QPSK	M+M	Inner_Full	23.84	PC3	PASS
DC_12A_n77A-3 450-3550	30	5+100	CP-QPSK	M+M	Edge_1RB_Left	22.39	PC3	PASS
DC_12A_n77A-3 450-3550	30	5+100	CP-QPSK	M+M	Edge_1RB_Right	21.72	PC3	PASS
DC_12A_n77A-3 450-3550	30	5+100	CP-QPSK	M+M	Outer_Full	23.02	PC3	PASS
DC_12A_n77A-3 450-3550	30	5+100	CP-QPSK	M+M	Inner_Full	24.00	PC3	PASS

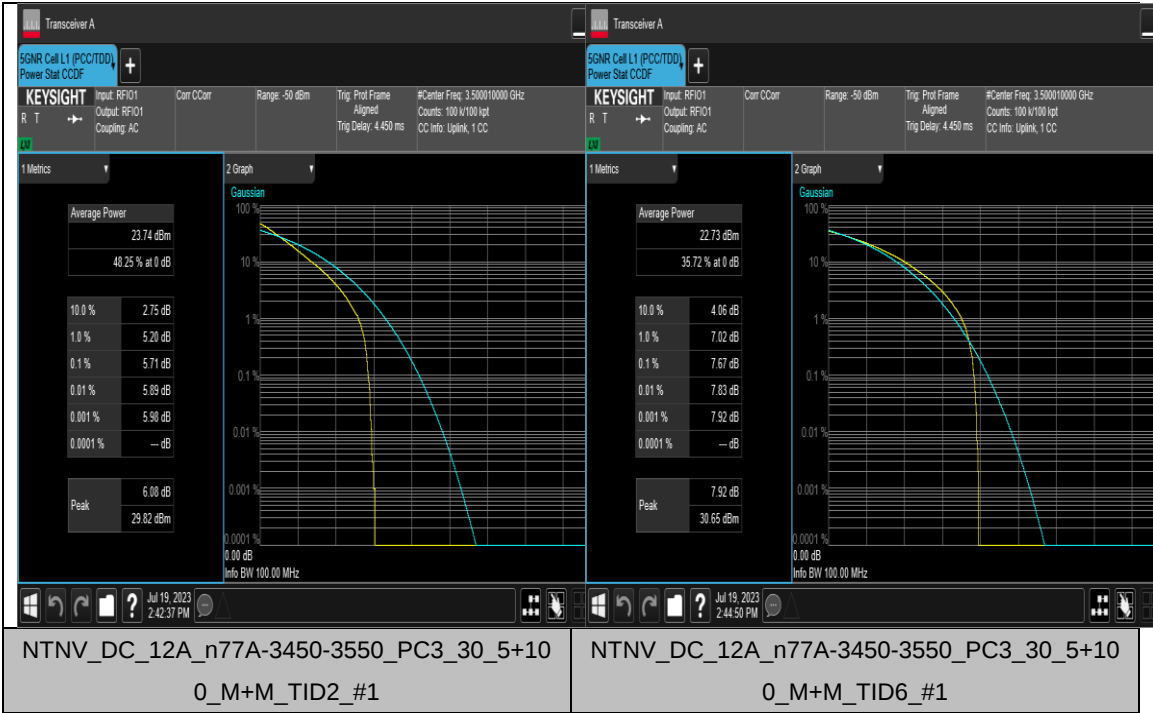
Appendix B: Peak-to-Average Ratio for NSA

Peak-to-Average Ratio(CCDF)

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
DC_12A_n 77A-3450-3 550	30	5+100	DFT-QPSK	M+M	Outer_Full	5.71	≤13	PASS
DC_12A_n 77A-3450-3 550	30	5+100	CP-QPSK	M+M	Outer_Full	7.67	≤13	PASS

Test Graphs

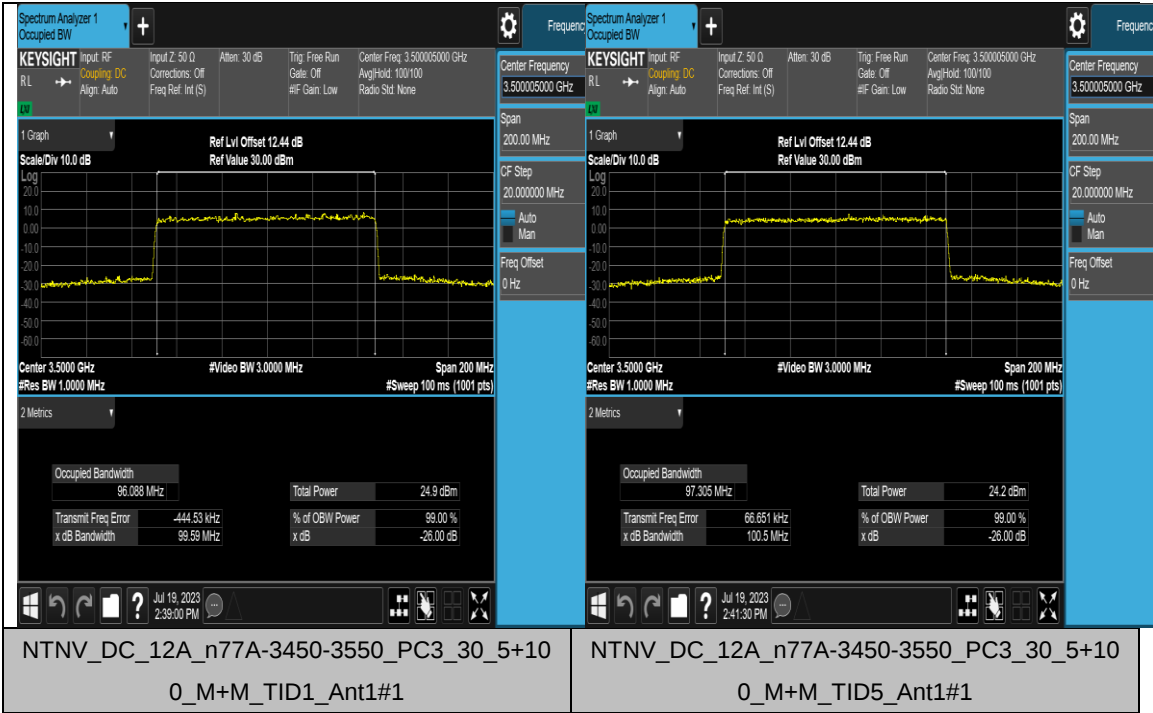


Appendix C: 26dB Bandwidth and Occupied Bandwidth for NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
DC_12A_n77A-3450-3 550	30	5+100	DFT-QPSK	M+M	Outer_Full	96.088	99.59	PASS
DC_12A_n77A-3450-3 550	30	5+100	CP-QPSK	M+M	Outer_Full	97.305	100.5	PASS

Test Graphs

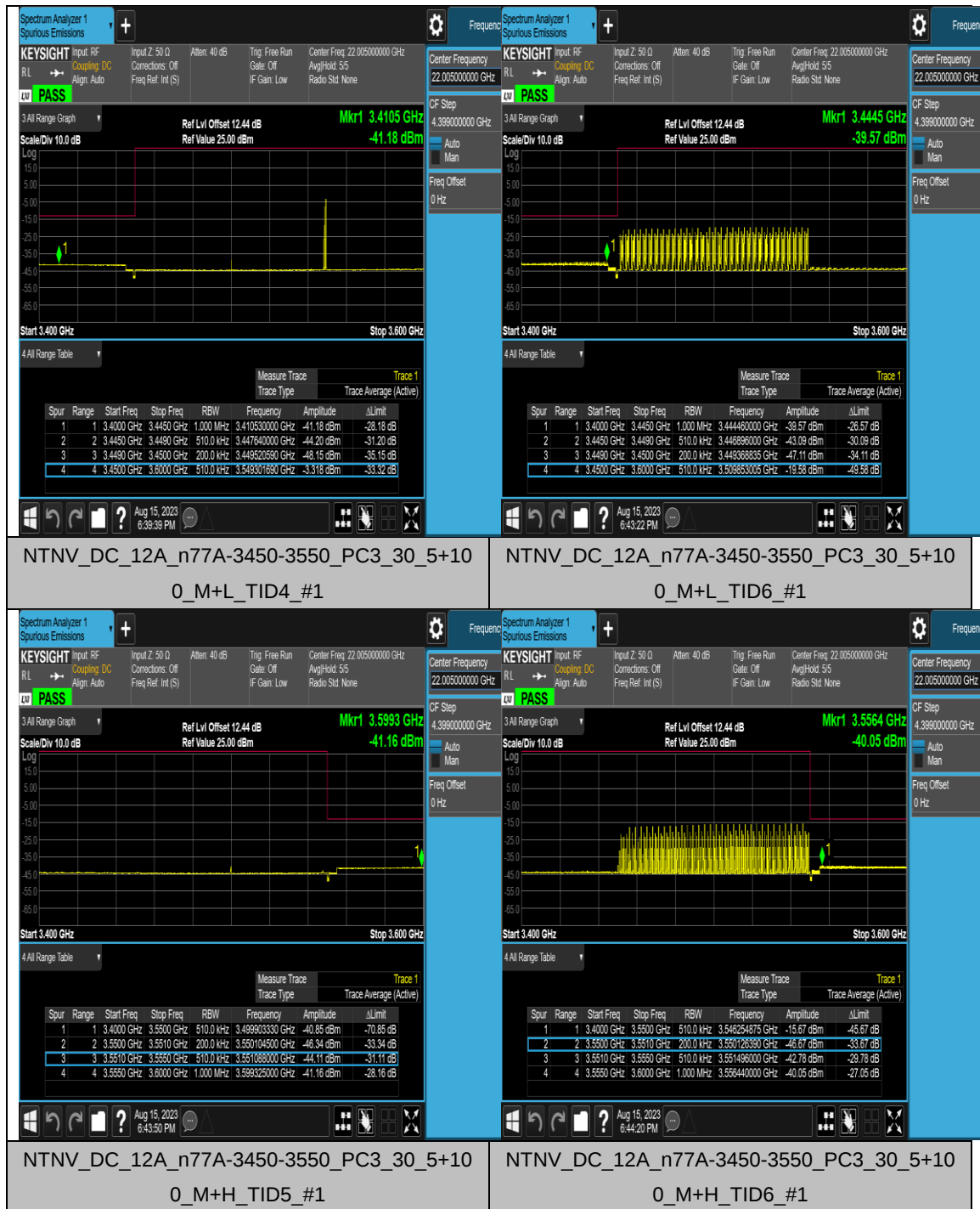


Appendix D: Band Edge for NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
DC_12A_n77A-3450-3 550	30	5+100	CP-QPSK	M+L	Edge_1RB_Left	see graph	PASS
DC_12A_n77A-3450-3 550	30	5+100	CP-QPSK	M+L	Outer_Full	see graph	PASS
DC_12A_n77A-3450-3 550	30	5+100	CP-QPSK	M+H	Edge_1RB_Right	see graph	PASS
DC_12A_n77A-3450-3 550	30	5+100	CP-QPSK	M+H	Outer_Full	see graph	PASS

Test Graphs



Appendix E: Conducted Spurious Emission for NSA

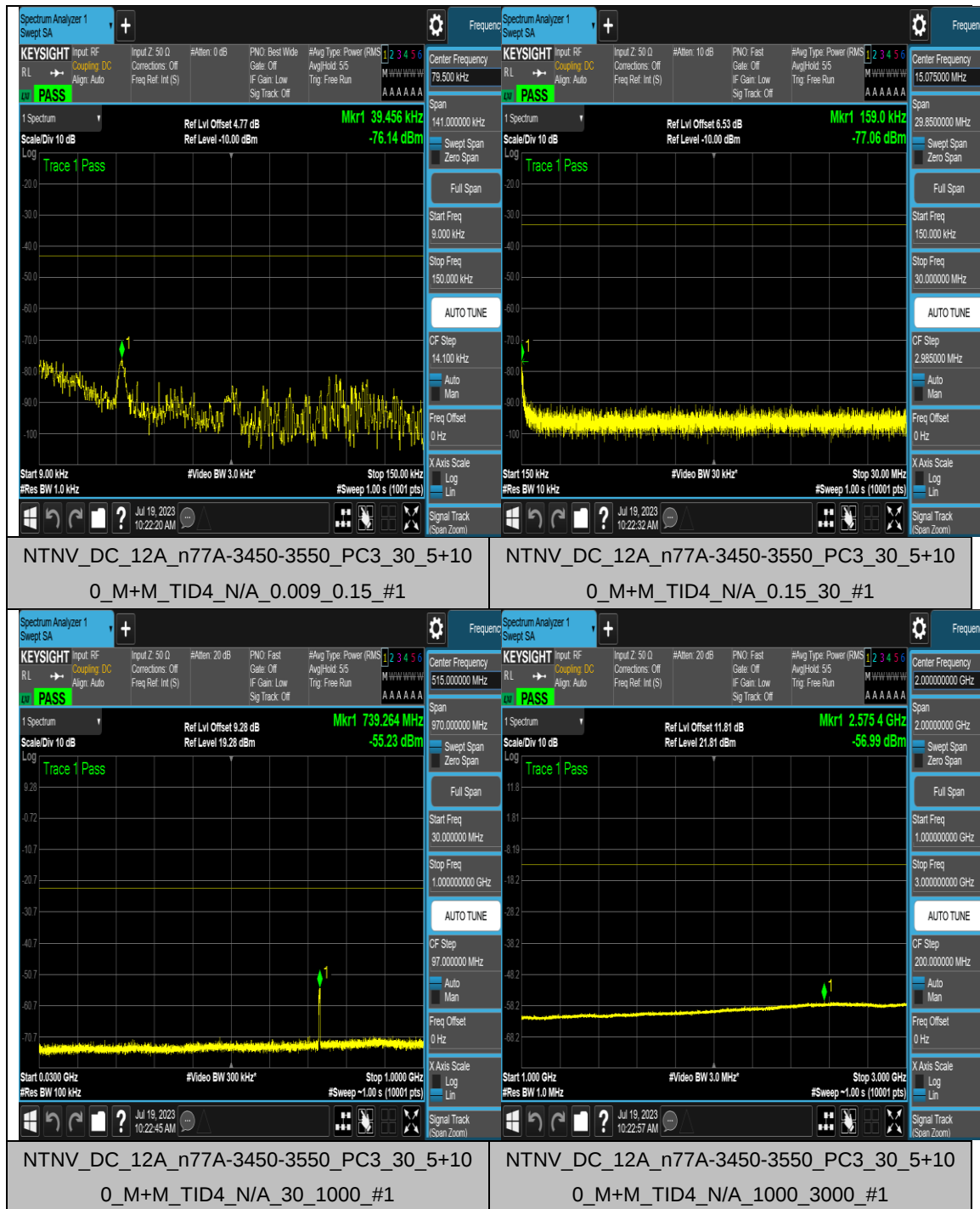
Test Result

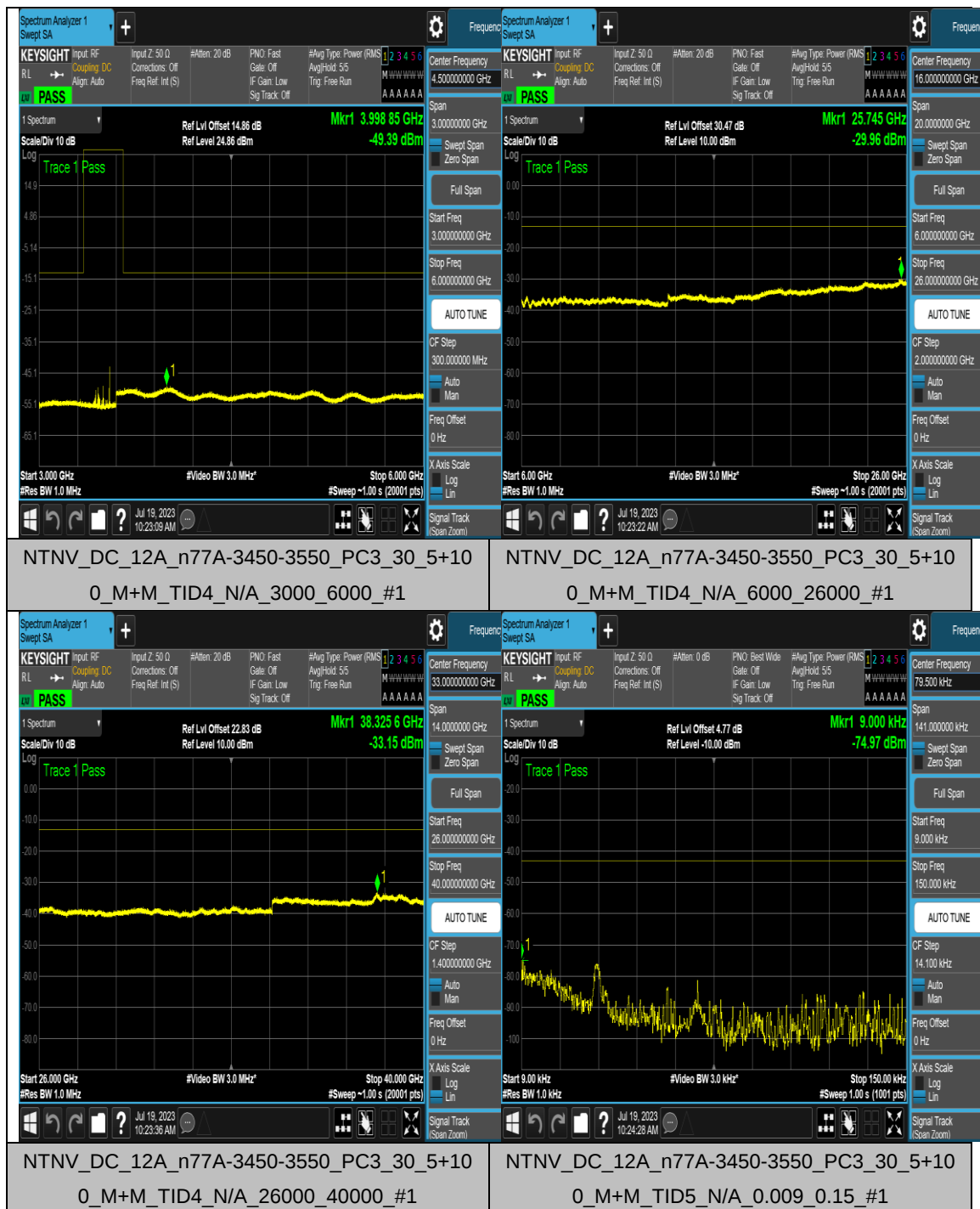
Band	SC S	Band width	Modulation	Chan nel	RB Config	StartFreq	StopFreq	Result	Limit	Verdict
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Left	0.009	0.15	-76.14	-43	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Left	0.15	30	-77.06	-33	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Left	30	1000	-55.23	-23	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Left	1000	3000	-56.99	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Left	3000	6000	-49.39	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Left	6000	26000	-29.96	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Left	26000	40000	-33.15	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Right	0.009	0.15	-74.97	-43	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Right	0.15	30	-75.68	-33	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Right	30	1000	-48.35	-23	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Right	1000	3000	-56.98	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Right	3000	6000	-49.45	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Right	6000	26000	-29.83	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Edge_1RB_Right	26000	40000	-33.47	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Outer_Full	0.009	0.15	-74.69	-43	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Outer_Full	0.15	30	-76.53	-33	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Outer_Full	30	1000	-54.99	-23	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Outer_Full	1000	3000	-56.93	-13	PASS

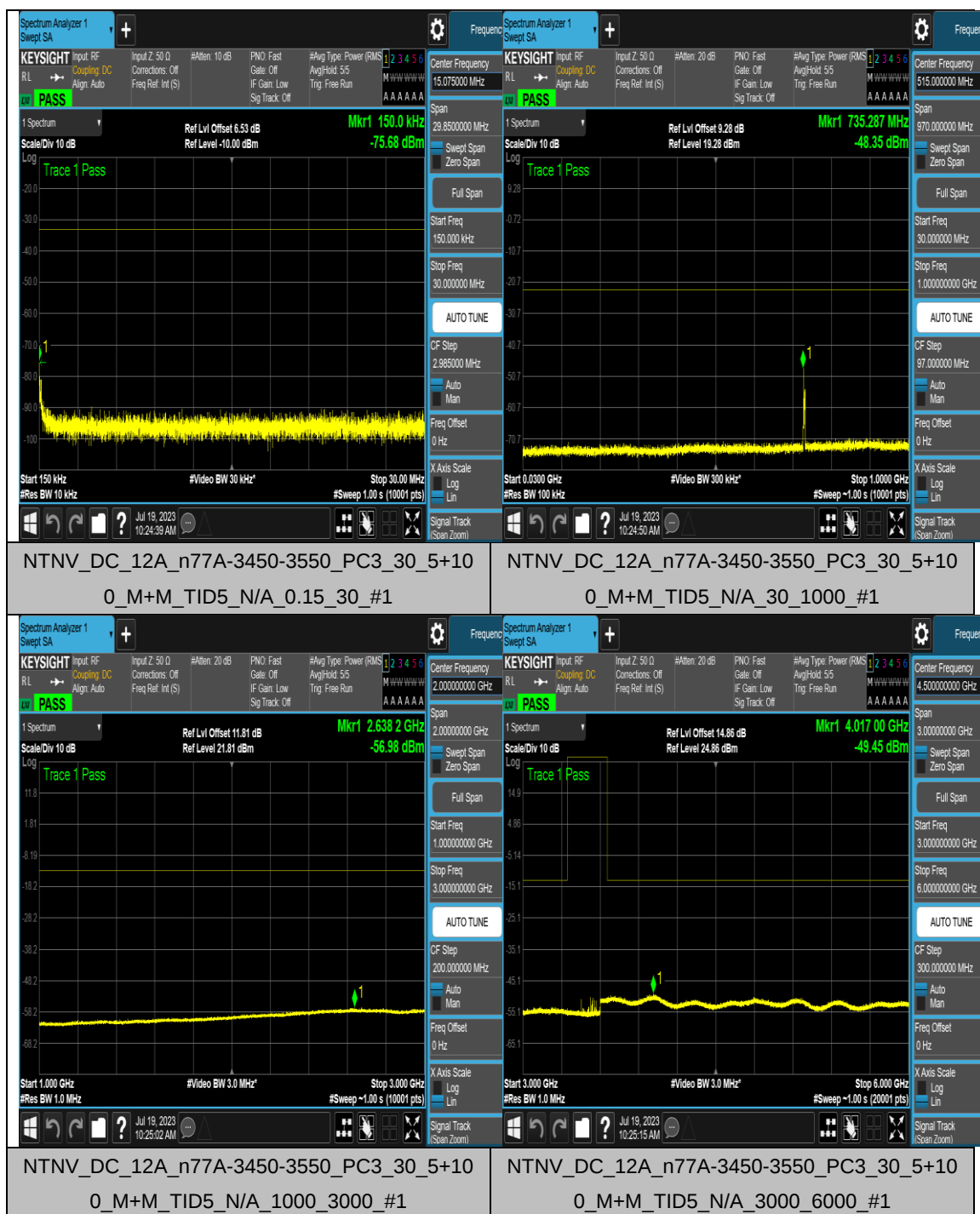
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Outer_Full	3000	6000	-46.37	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Outer_Full	6000	26000	-29.48	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	DFT-QPSK	M+M	Outer_Full	26000	40000	-33.56	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Left	0.009	0.15	-74.11	-43	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Left	0.15	30	-77.79	-33	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Left	30	1000	-55.05	-23	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Left	1000	3000	-56.82	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Left	3000	6000	-49.74	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Left	6000	26000	-30.07	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Left	26000	40000	-33.24	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Right	0.009	0.15	-75.53	-43	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Right	0.15	30	-75.12	-33	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Right	30	1000	-52.33	-23	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Right	1000	3000	-57.06	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Right	3000	6000	-49.72	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Right	6000	26000	-29.71	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Edge_1RB_Right	26000	40000	-33.43	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Outer_Full	0.009	0.15	-75.46	-43	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Outer_Full	0.15	30	-76.14	-33	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Outer_Full	30	1000	-30.58	-23	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Outer_Full	1000	3000	-56.97	-13	PASS

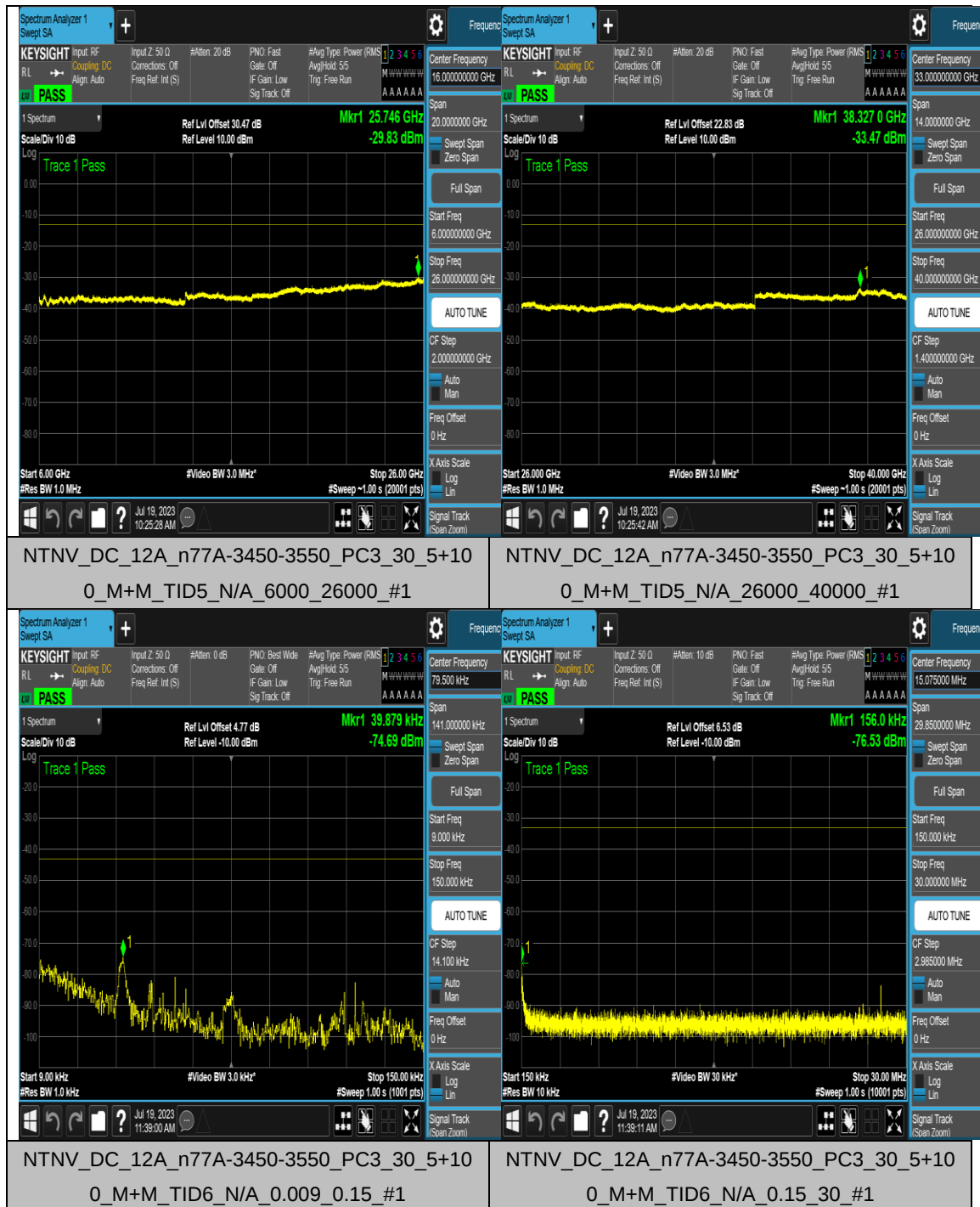
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Outer_Full	3000	6000	-46.49	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Outer_Full	6000	26000	-30.08	-13	PASS
DC_12A_n77A -3450-3550	30	5+10 0	CP-QPSK	M+M	Outer_Full	26000	40000	-33.21	-13	PASS

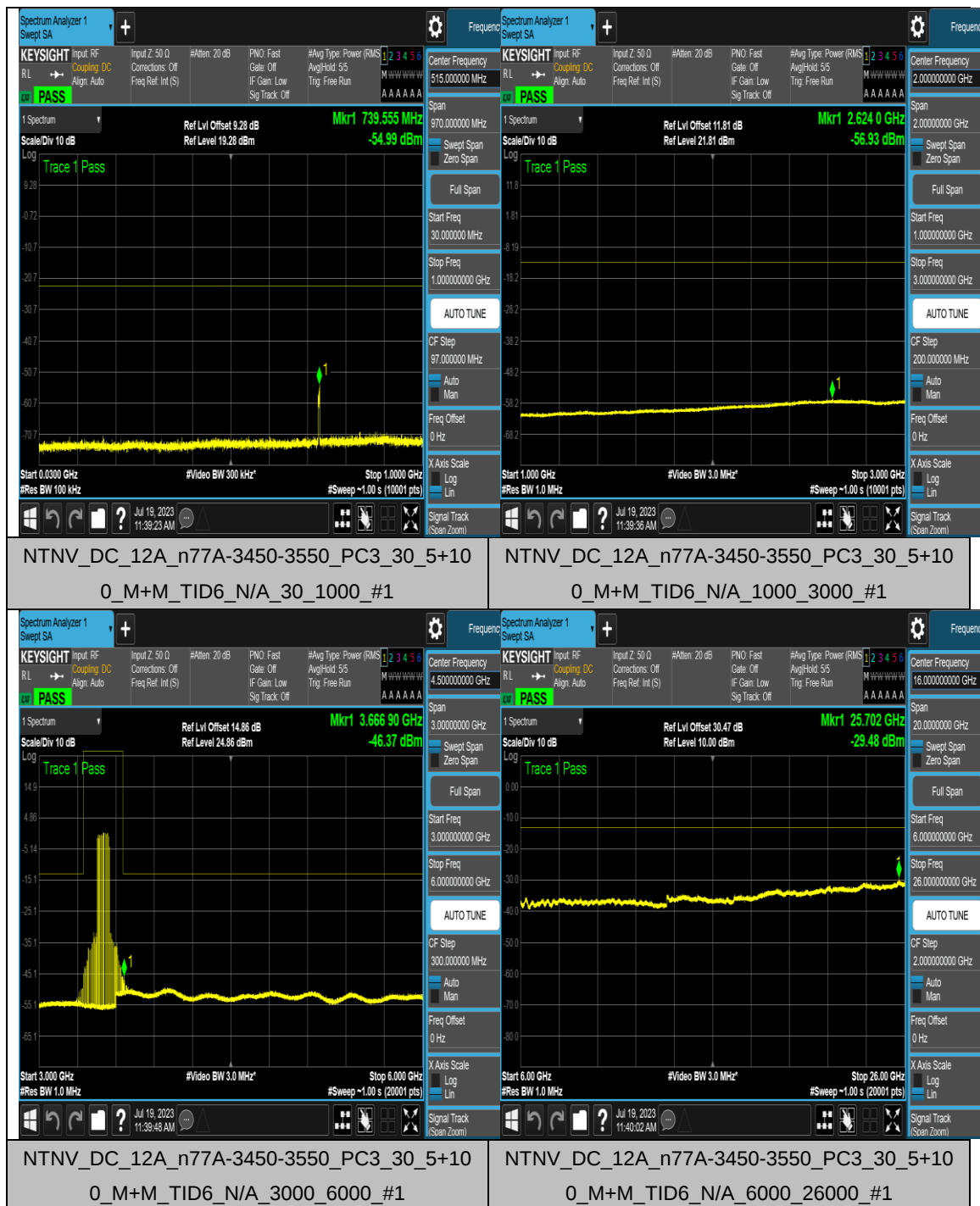
Test Graphs

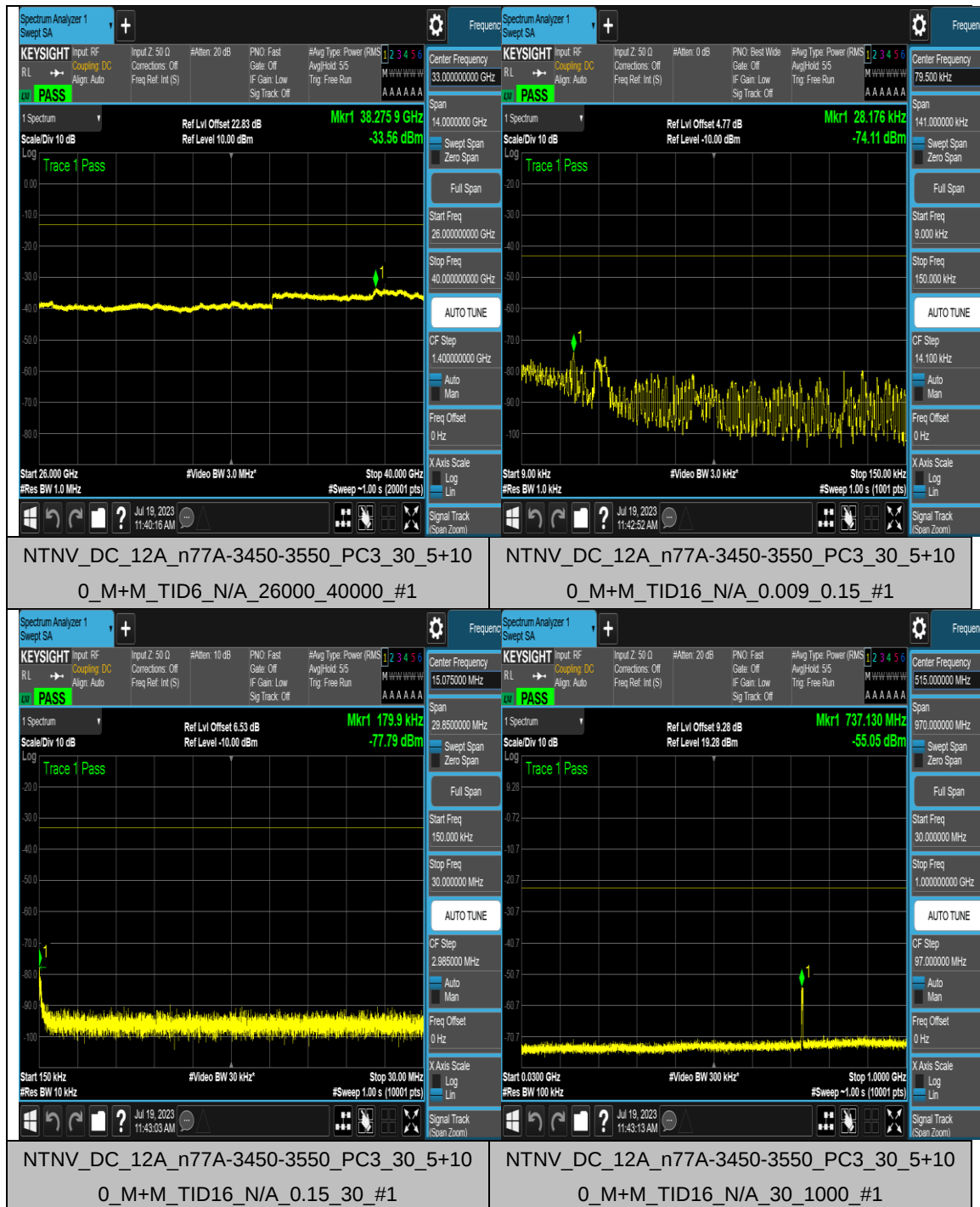




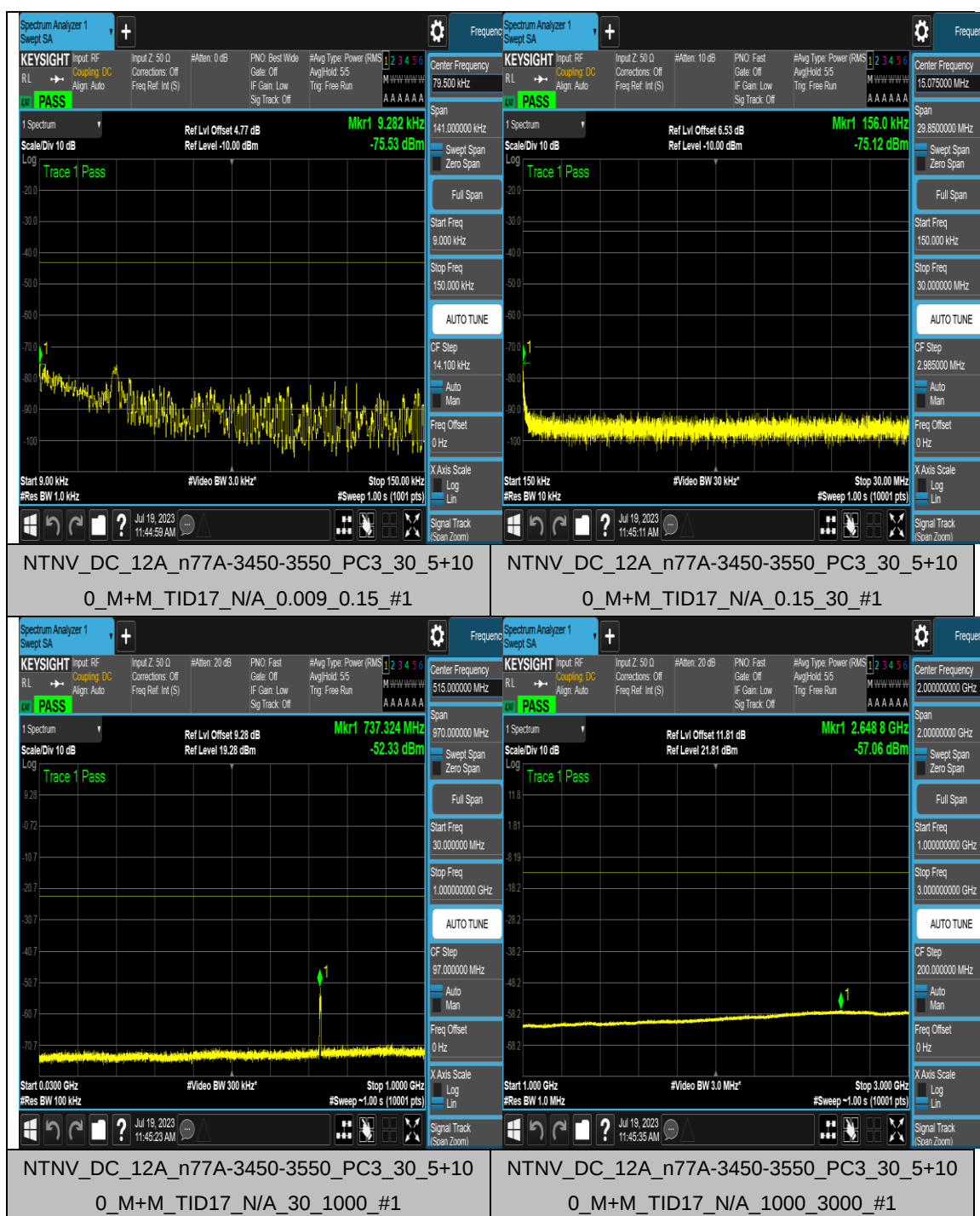


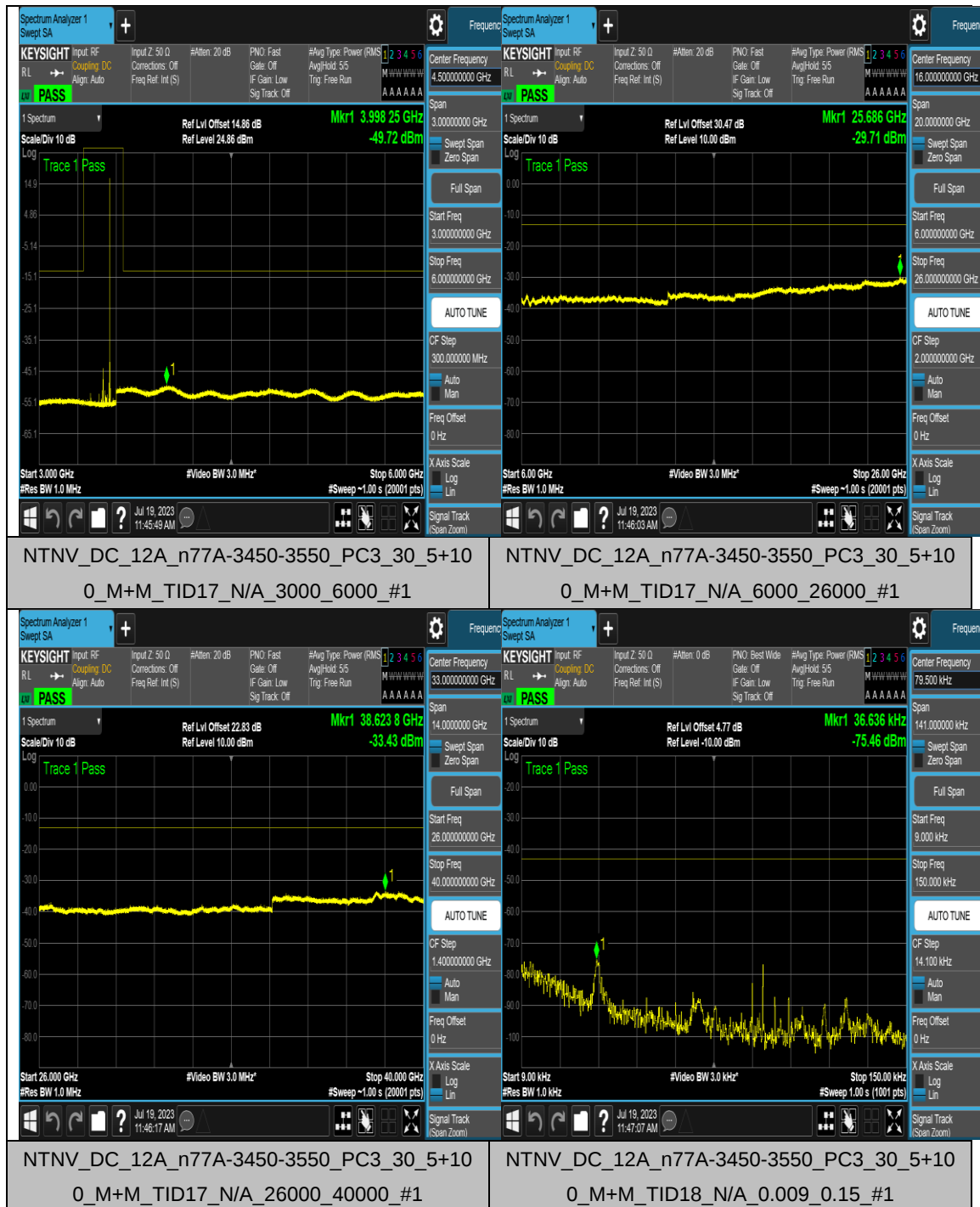


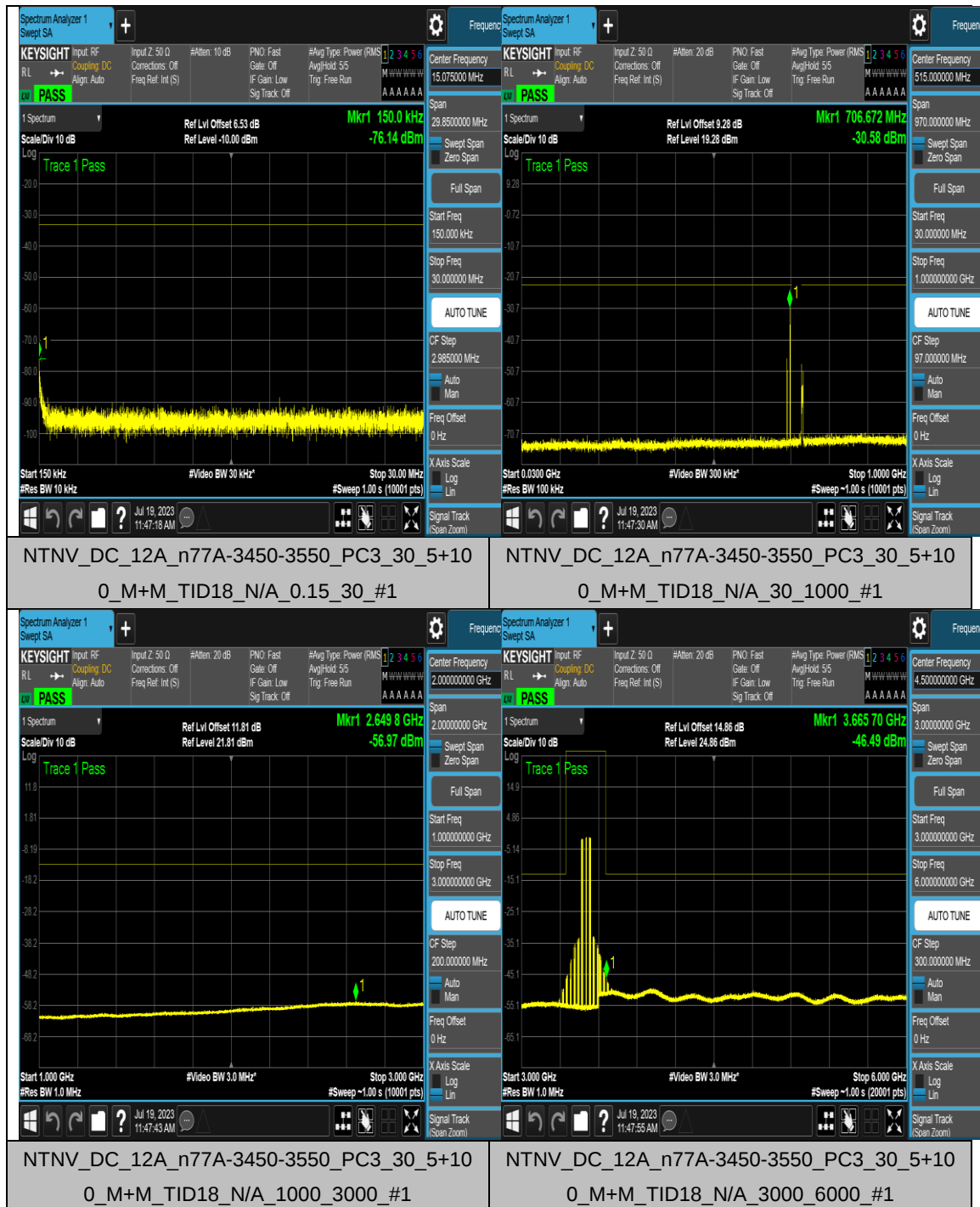


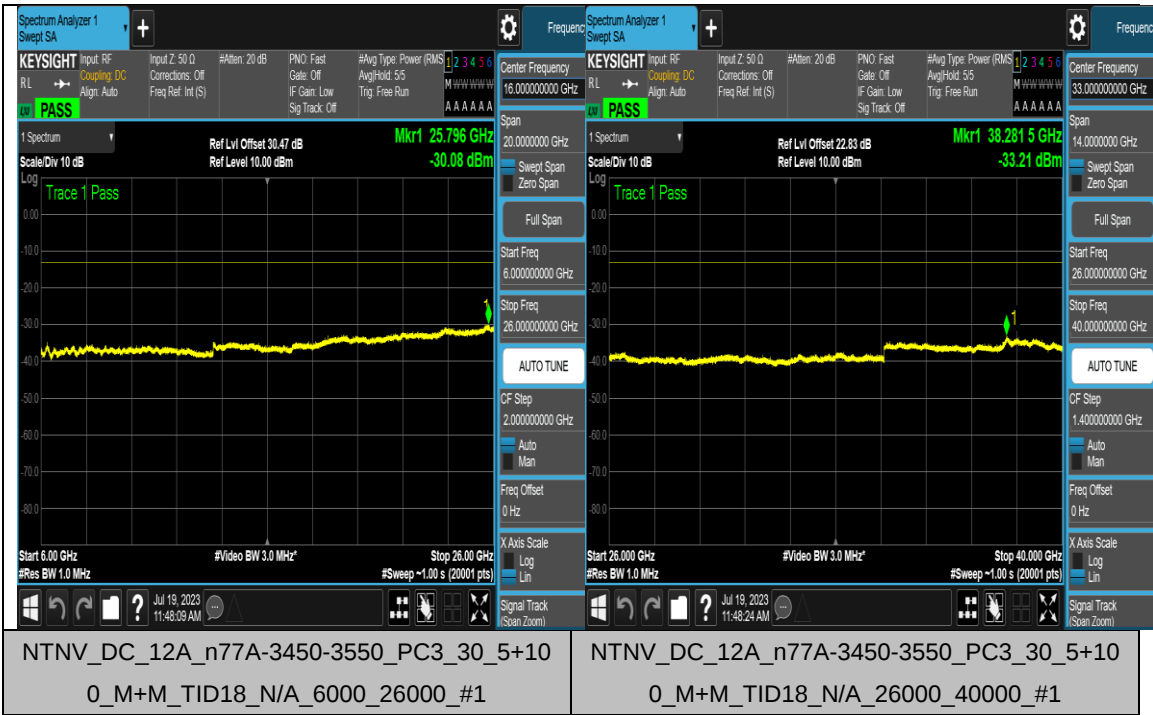












Appendix F: Frequency Stability for NSA

Test Result

Frequency Error VS. Voltage

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_12A_n77A-3 450-3550	30	5+100	DFT-QPSK	M+M	Outer_Full	VN	NT	-11.91	0.00	PASS
DC_12A_n77A-3 450-3550	30	5+100	CP-QPSK	M+M	Outer_Full	VN	NT	-7.51	0.00	PASS

Frequency Error VS. Temperature

Voltage										
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation(Hz)	Deviation (ppm)	Verdict
DC_12A_n77A-3 450-3550	30	5+100	DFT-QPSK	M+M	Outer_Full	NV	TN	-4.044639	-0.001156	PASS
DC_12A_n77A-3 450-3550	30	5+100	CP-QPSK	M+M	Outer_Full	NV	TN	1.581857	0.000452	PASS

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

