

Appendix for 7A_N2A

Product Name: Smart Phone

Model No: K50

Appendix A: Average Power Output

Test Result

Band	SC S	Bandwidth h	Modulation	Channel	RB Config	Power (dBm)	Power Class	Verdict
DC_7A_n2A	15	5+5	DFT-QPSK	M+L	Outer_Full	22.25	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+L	Inner_Full	23.17	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+L	Edge_1RB_Left	22.40	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+L	Edge_1RB_Right	22.21	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+L	Outer_Full	21.30	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+L	Inner_Full	22.26	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+L	Edge_1RB_Left	21.35	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+L	Edge_1RB_Right	21.40	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+M	Outer_Full	20.90	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+M	Inner_Full	21.87	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+M	Edge_1RB_Left	21.06	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+M	Edge_1RB_Right	20.85	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+M	Outer_Full	20.87	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+M	Inner_Full	20.87	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+M	Edge_1RB_Left	20.27	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+M	Edge_1RB_Right	20.08	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+H	Outer_Full	20.48	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+H	Inner_Full	20.42	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+H	Edge_1RB_Left	20.65	PC3	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+H	Edge_1RB_Right	20.43	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+H	Outer_Full	20.55	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+H	Inner_Full	20.42	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+H	Edge_1RB_Left	20.83	PC3	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+H	Edge_1RB_Right	20.64	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+L	Outer_Full	22.11	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+L	Inner_Full	23.18	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+L	Edge_1RB_Left	22.30	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+L	Edge_1RB_Right	21.91	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+L	Outer_Full	21.10	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+L	Inner_Full	22.12	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+L	Edge_1RB_Left	21.56	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+L	Edge_1RB_Right	21.10	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+M	Outer_Full	20.88	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+M	Inner_Full	21.87	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+M	Edge_1RB_Left	21.19	PC3	PASS

DC_7A_n2A	15	5+10	DFT-QPSK	M+M	Edge_1RB_Right	20.72	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+M	Outer_Full	20.83	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+M	Inner_Full	20.86	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+M	Edge_1RB_Left	20.40	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+M	Edge_1RB_Right	20.90	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+H	Outer_Full	20.61	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+H	Inner_Full	20.66	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+H	Edge_1RB_Left	20.97	PC3	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+H	Edge_1RB_Right	20.43	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+H	Outer_Full	20.60	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+H	Inner_Full	20.61	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+H	Edge_1RB_Left	20.24	PC3	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+H	Edge_1RB_Right	20.04	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+L	Outer_Full	22.01	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+L	Inner_Full	22.94	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+L	Edge_1RB_Left	22.12	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+L	Edge_1RB_Right	21.72	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+L	Outer_Full	20.98	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+L	Inner_Full	22.00	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+L	Edge_1RB_Left	21.07	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+L	Edge_1RB_Right	20.24	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+M	Outer_Full	20.90	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+M	Inner_Full	21.80	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+M	Edge_1RB_Left	21.28	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+M	Edge_1RB_Right	20.60	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+M	Outer_Full	20.90	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+M	Inner_Full	20.88	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+M	Edge_1RB_Left	20.49	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+M	Edge_1RB_Right	20.37	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+H	Outer_Full	20.83	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+H	Inner_Full	20.86	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+H	Edge_1RB_Left	20.20	PC3	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+H	Edge_1RB_Right	20.42	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+H	Outer_Full	20.79	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+H	Inner_Full	20.78	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+H	Edge_1RB_Left	20.96	PC3	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+H	Edge_1RB_Right	20.62	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+L	Outer_Full	21.95	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+L	Inner_Full	23.24	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+L	Edge_1RB_Left	22.17	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+L	Edge_1RB_Right	21.48	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+L	Outer_Full	20.94	PC3	PASS

DC_7A_n2A	15	5+20	DFT-16QAM	M+L	Inner_Full	21.93	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+L	Edge_1RB_Left	21.59	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+L	Edge_1RB_Right	20.68	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+M	Outer_Full	20.90	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+M	Inner_Full	21.86	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+M	Edge_1RB_Left	21.47	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+M	Edge_1RB_Right	20.55	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+M	Outer_Full	20.89	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+M	Inner_Full	20.80	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+M	Edge_1RB_Left	20.30	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+M	Edge_1RB_Right	20.85	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+H	Outer_Full	20.95	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+H	Inner_Full	20.98	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+H	Edge_1RB_Left	20.43	PC3	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+H	Edge_1RB_Right	20.52	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+H	Outer_Full	20.92	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+H	Inner_Full	20.91	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+H	Edge_1RB_Left	20.61	PC3	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+H	Edge_1RB_Right	20.17	PC3	PASS

Appendix B: Peak-to-Average Ratio for NSA

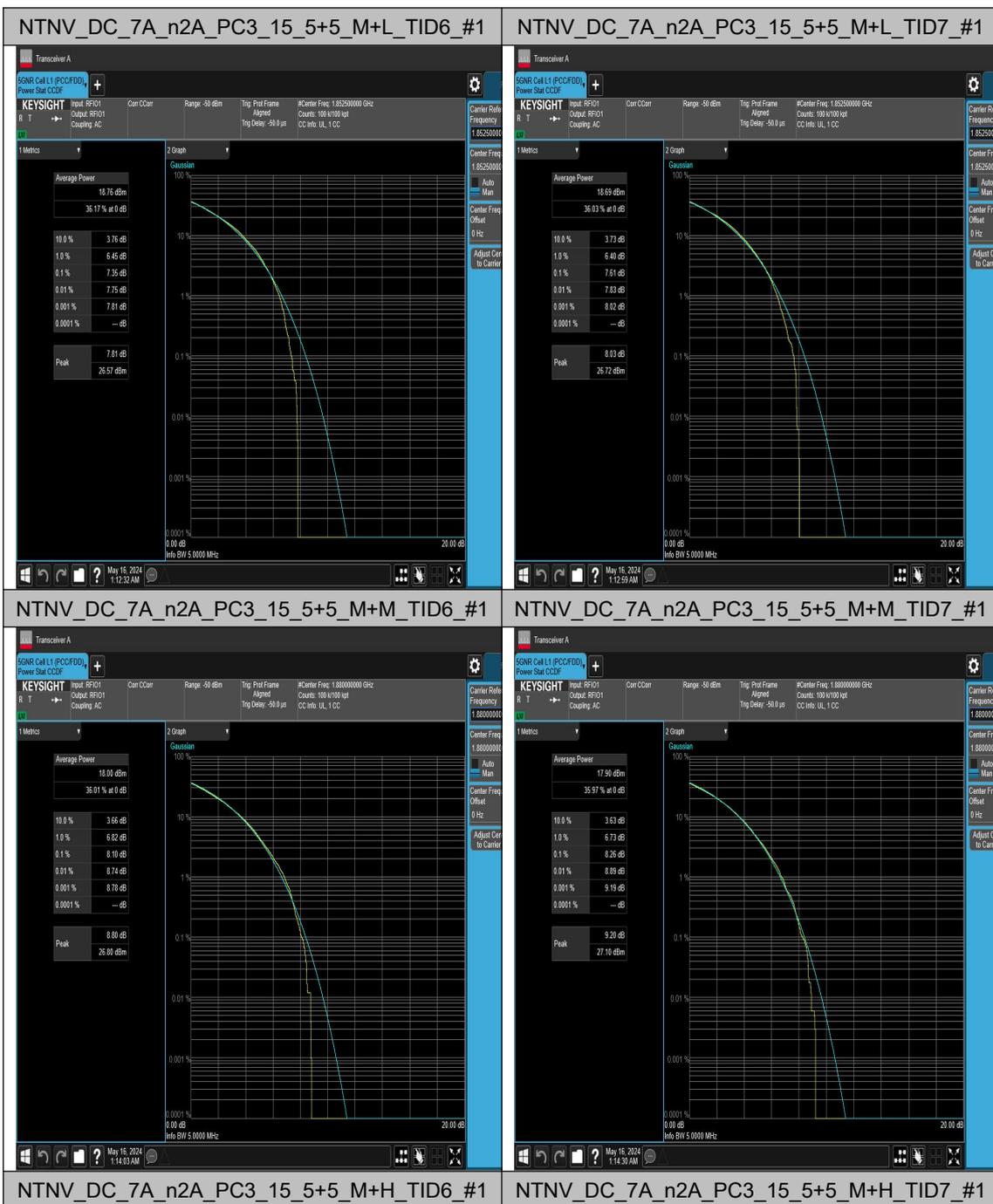
Peak-to-Average Ratio(CCDF)

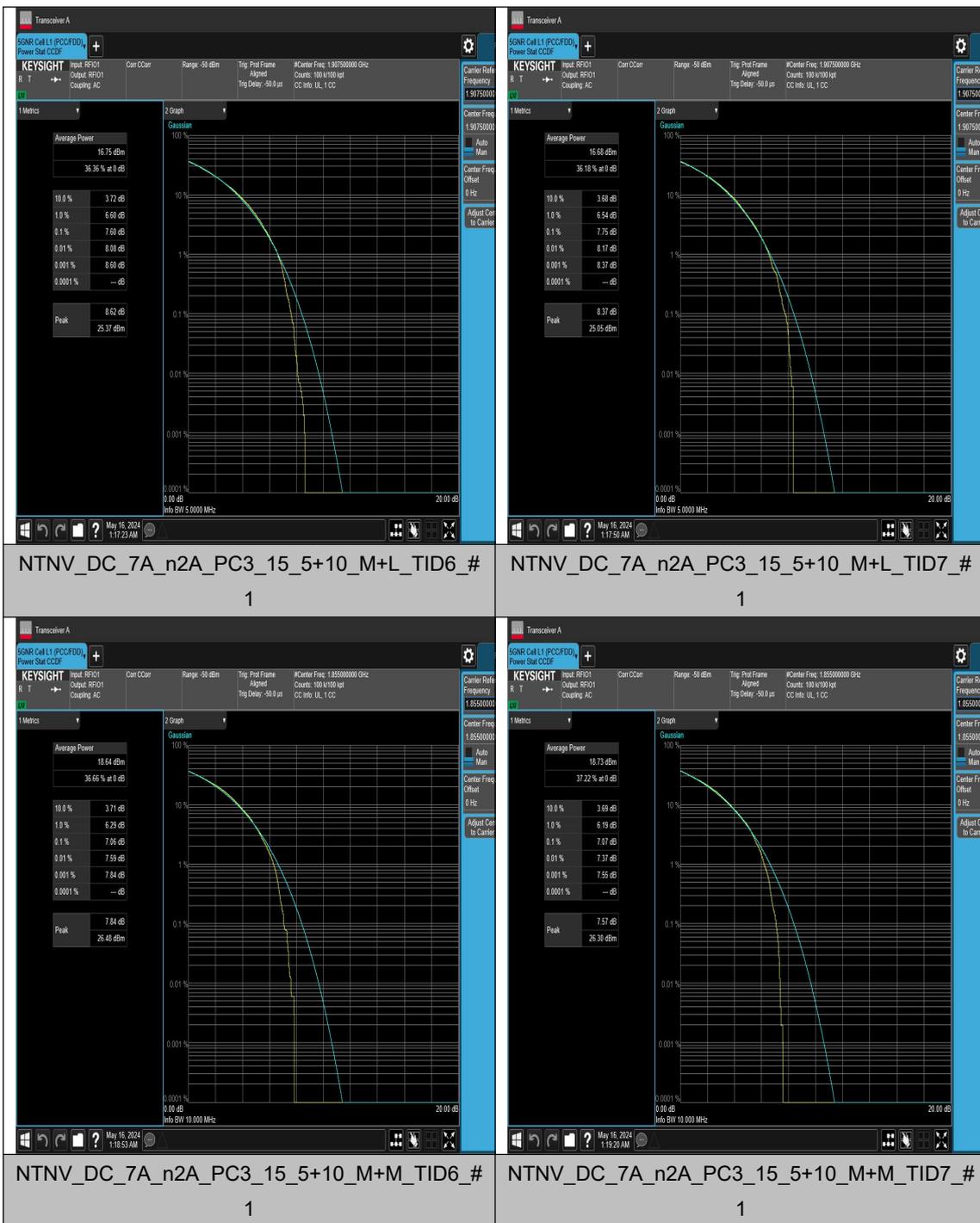
Test Result

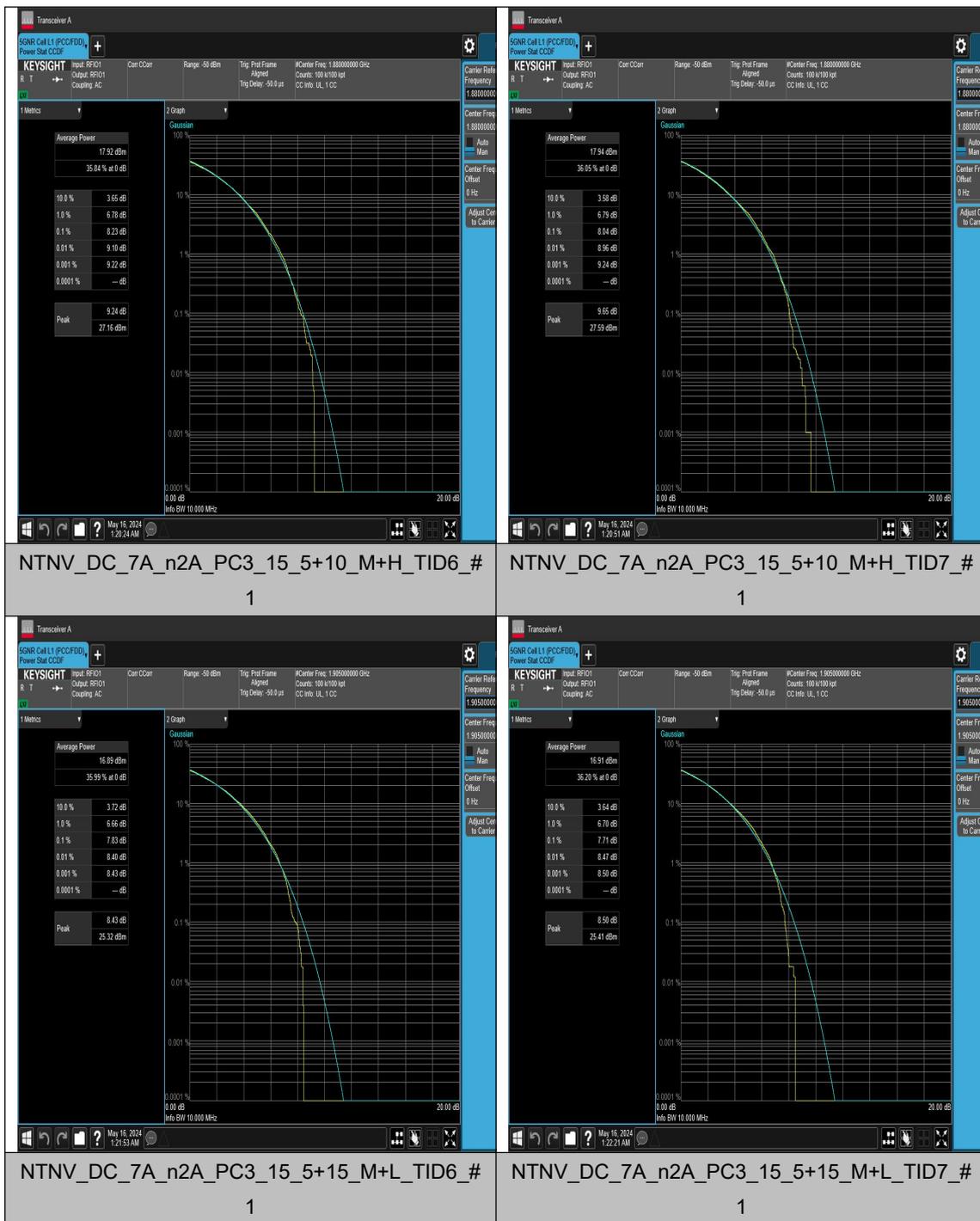
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
DC_7A_n2 A	15	5+5	DFT-QPSK	M+L	Outer_Full	7.35	≤13	PASS
DC_7A_n2 A	15	5+5	DFT-16QAM	M+L	Outer_Full	7.61	≤13	PASS
DC_7A_n2 A	15	5+5	DFT-QPSK	M+M	Outer_Full	8.10	≤13	PASS
DC_7A_n2 A	15	5+5	DFT-16QAM	M+M	Outer_Full	8.26	≤13	PASS
DC_7A_n2 A	15	5+5	DFT-QPSK	M+H	Outer_Full	7.60	≤13	PASS
DC_7A_n2 A	15	5+5	DFT-16QAM	M+H	Outer_Full	7.75	≤13	PASS
DC_7A_n2 A	15	5+10	DFT-QPSK	M+L	Outer_Full	7.06	≤13	PASS
DC_7A_n2 A	15	5+10	DFT-16QAM	M+L	Outer_Full	7.07	≤13	PASS
DC_7A_n2 A	15	5+10	DFT-QPSK	M+M	Outer_Full	8.23	≤13	PASS
DC_7A_n2 A	15	5+10	DFT-16QAM	M+M	Outer_Full	8.04	≤13	PASS
DC_7A_n2 A	15	5+10	DFT-QPSK	M+H	Outer_Full	7.83	≤13	PASS
DC_7A_n2 A	15	5+10	DFT-16QAM	M+H	Outer_Full	7.71	≤13	PASS
DC_7A_n2 A	15	5+15	DFT-QPSK	M+L	Outer_Full	6.94	≤13	PASS
DC_7A_n2 A	15	5+15	DFT-16QAM	M+L	Outer_Full	7.17	≤13	PASS
DC_7A_n2 A	15	5+15	DFT-QPSK	M+M	Outer_Full	7.98	≤13	PASS
DC_7A_n2 A	15	5+15	DFT-16QAM	M+M	Outer_Full	8.16	≤13	PASS
DC_7A_n2 A	15	5+15	DFT-QPSK	M+H	Outer_Full	7.90	≤13	PASS

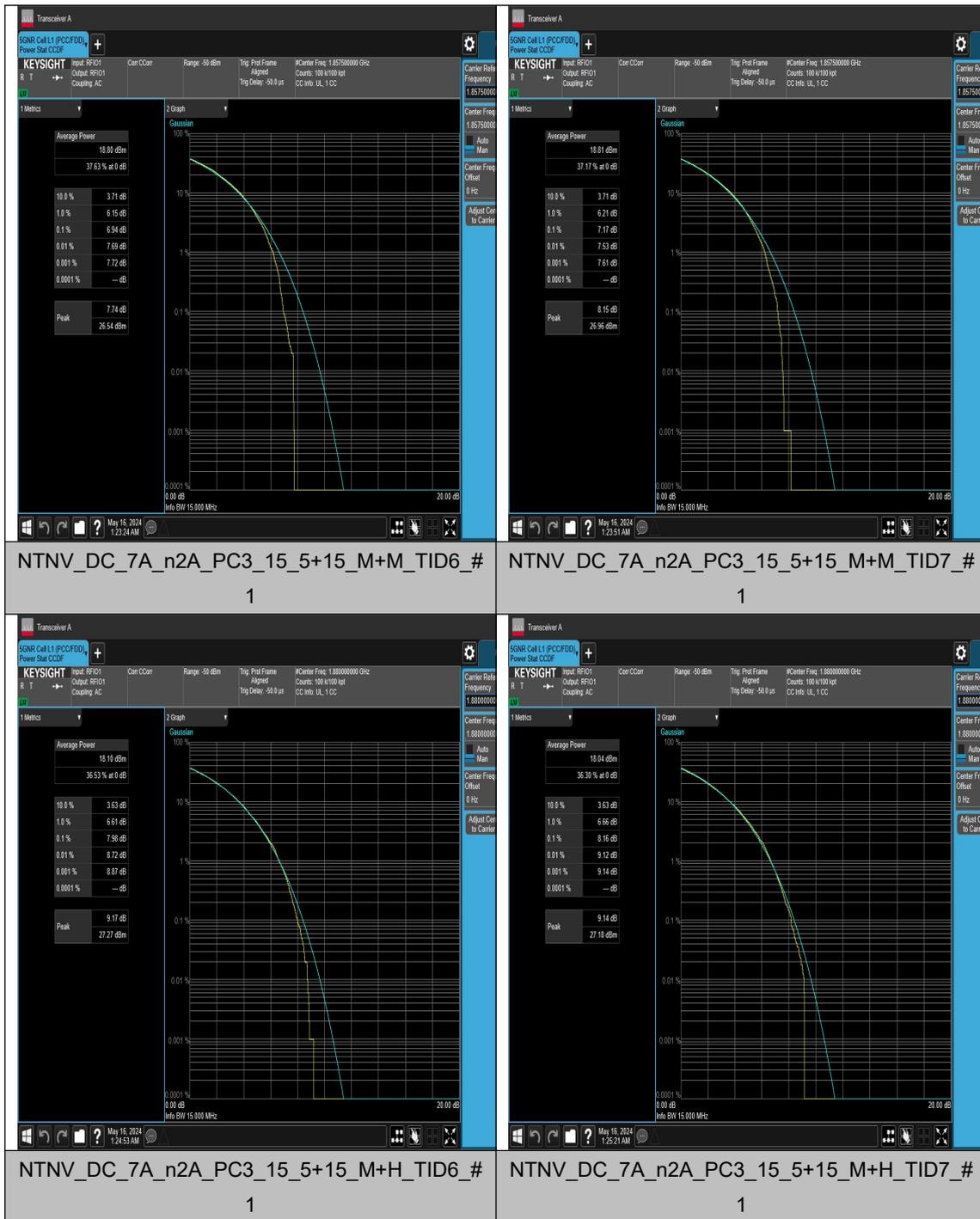
DC_7A_n2 A	15	5+15	DFT-16QAM	M+H	Outer_Full	8.00	≤13	PASS
DC_7A_n2 A	15	5+20	DFT-QPSK	M+L	Outer_Full	7.38	≤13	PASS
DC_7A_n2 A	15	5+20	DFT-16QAM	M+L	Outer_Full	7.34	≤13	PASS
DC_7A_n2 A	15	5+20	DFT-QPSK	M+M	Outer_Full	8.07	≤13	PASS
DC_7A_n2 A	15	5+20	DFT-16QAM	M+M	Outer_Full	8.02	≤13	PASS
DC_7A_n2 A	15	5+20	DFT-QPSK	M+H	Outer_Full	7.76	≤13	PASS
DC_7A_n2 A	15	5+20	DFT-16QAM	M+H	Outer_Full	7.88	≤13	PASS

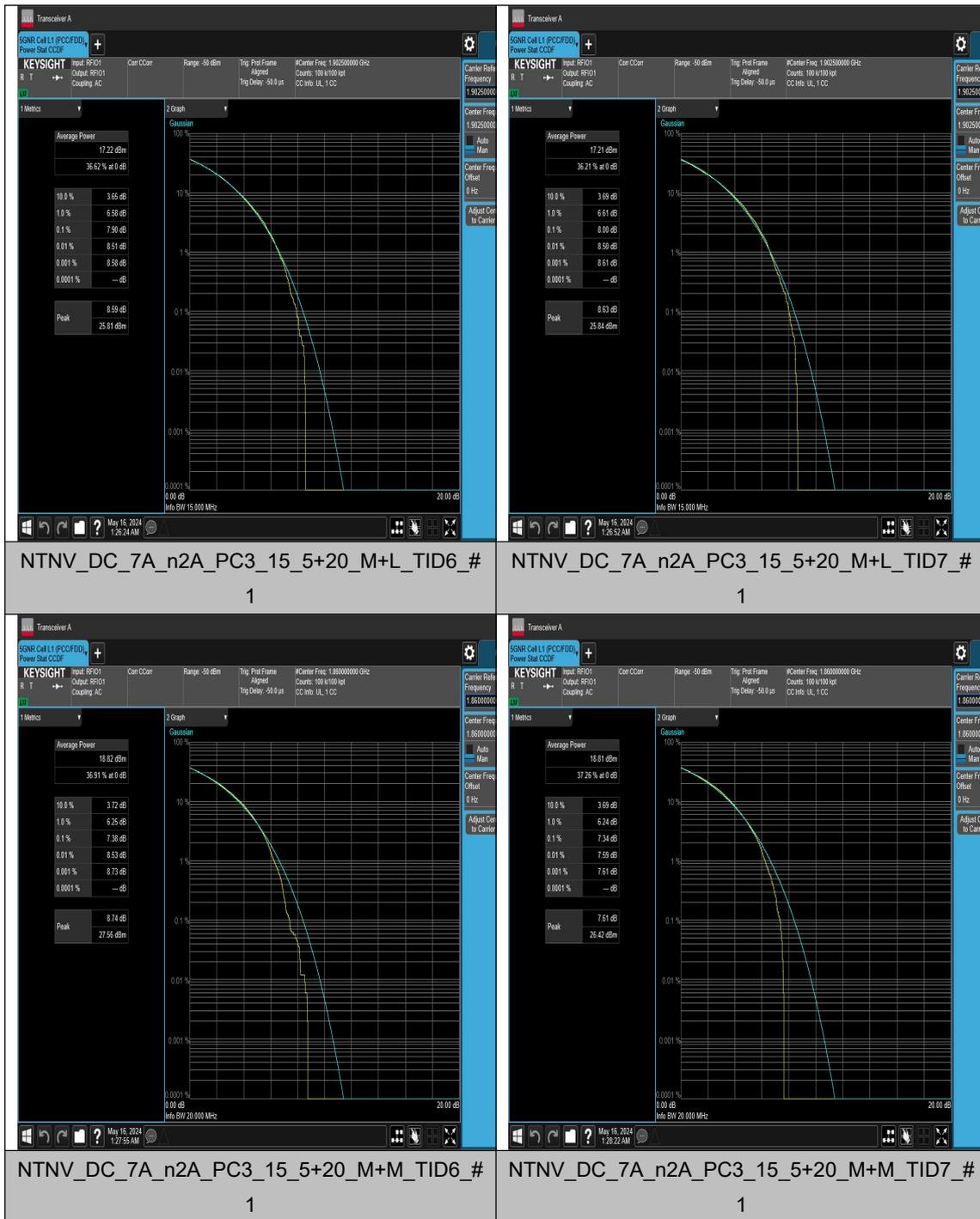
Test Graphs

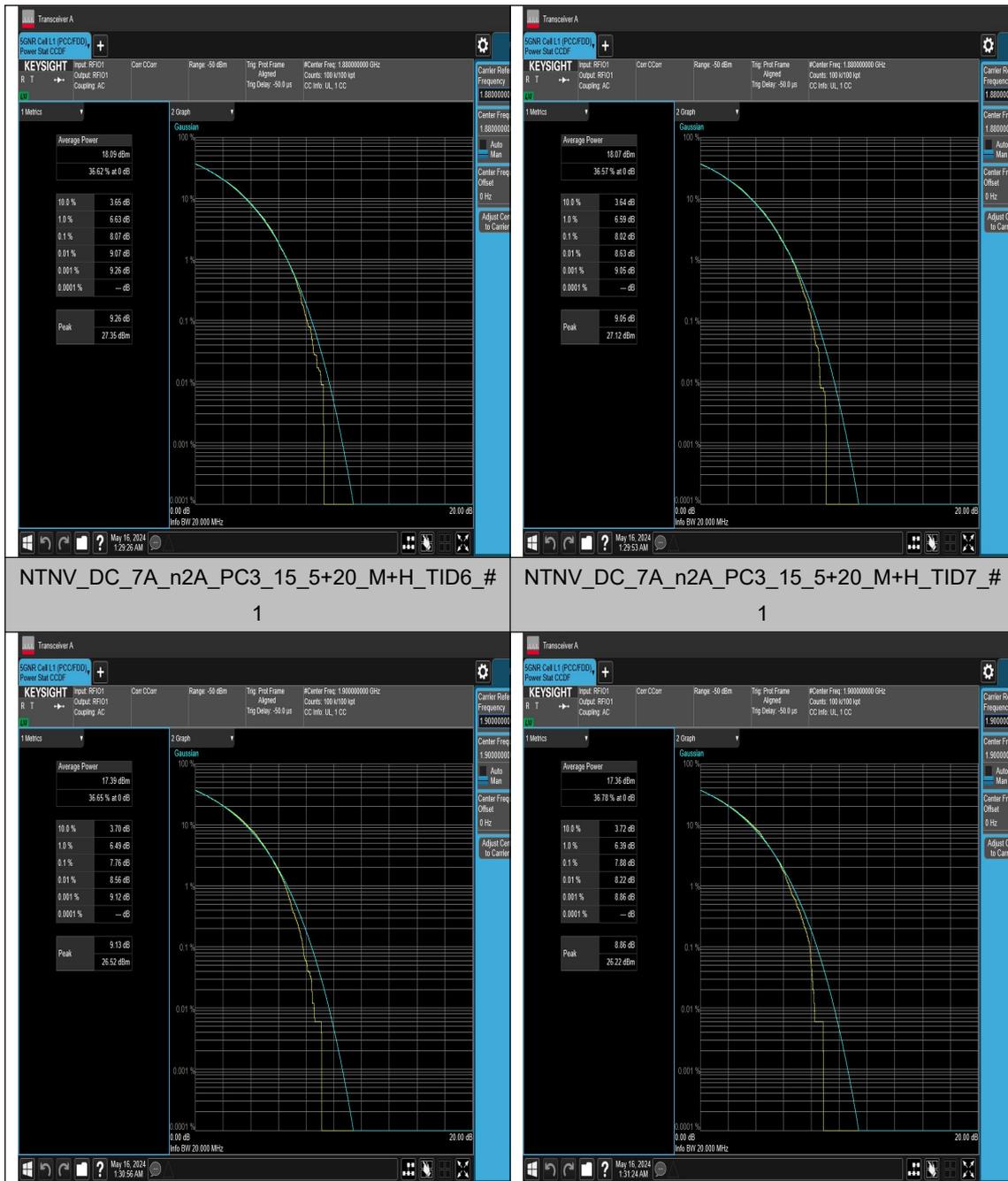












Appendix C: 26dB Bandwidth and Occupied Bandwidth for

NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
DC_7A_n2A	15	5+5	DFT-QPSK	M+L	Outer_Full	4.4682	4.871	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+L	Outer_Full	4.4734	4.870	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+M	Outer_Full	4.4740	4.839	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+M	Outer_Full	4.4702	4.846	PASS
DC_7A_n2A	15	5+5	DFT-QPSK	M+H	Outer_Full	4.4733	4.831	PASS
DC_7A_n2A	15	5+5	DFT-16QAM	M+H	Outer_Full	4.4646	4.835	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+L	Outer_Full	9.2846	9.790	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+L	Outer_Full	9.2989	9.806	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+M	Outer_Full	9.2701	9.768	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+M	Outer_Full	9.2918	9.773	PASS
DC_7A_n2A	15	5+10	DFT-QPSK	M+H	Outer_Full	9.2657	9.755	PASS
DC_7A_n2A	15	5+10	DFT-16QAM	M+H	Outer_Full	9.2884	9.763	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+L	Outer_Full	14.081	14.70	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+L	Outer_Full	14.112	14.68	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+M	Outer_Full	14.081	14.73	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+M	Outer_Full	14.102	14.72	PASS
DC_7A_n2A	15	5+15	DFT-QPSK	M+H	Outer_Full	14.095	14.72	PASS
DC_7A_n2A	15	5+15	DFT-16QAM	M+H	Outer_Full	14.096	14.72	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+L	Outer_Full	18.943	19.80	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+L	Outer_Full	18.884	19.73	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+M	Outer_Full	18.911	19.78	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+M	Outer_Full	18.883	19.72	PASS
DC_7A_n2A	15	5+20	DFT-QPSK	M+H	Outer_Full	18.934	19.78	PASS
DC_7A_n2A	15	5+20	DFT-16QAM	M+H	Outer_Full	18.910	19.71	PASS

Test Graphs

