

Appendix for 30A_N5A

Product Name: 5G Window CPE

Model No: TITAN 5100

Appendix A: Average Power Output Data

Test Result

Band	SC S	Bandwidth h	Modulation	Channel	RB Config	Power (dBm)	Power Class	Verdict
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Outer_Full	21.60	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Inner_Full	22.52	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Edge_1RB_Left	21.80	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Edge_1RB_Right	21.68	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+L	Outer_Full	20.69	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+L	Inner_Full	21.48	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+L	Edge_1RB_Left	20.29	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+L	Edge_1RB_Right	20.97	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+M	Outer_Full	21.68	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+M	Inner_Full	22.70	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+M	Edge_1RB_Left	21.76	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+M	Edge_1RB_Right	21.95	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+M	Outer_Full	20.75	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+M	Inner_Full	21.68	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+M	Edge_1RB_Left	19.96	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+M	Edge_1RB_Right	21.37	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Outer_Full	22.02	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Inner_Full	23.13	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Edge_1RB_Left	22.14	PC3	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Edge_1RB_Right	22.21	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+H	Outer_Full	21.00	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+H	Inner_Full	22.20	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+H	Edge_1RB_Left	20.89	PC3	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+H	Edge_1RB_Right	21.39	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Outer_Full	21.59	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Inner_Full	22.43	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Edge_1RB_Left	22.10	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Edge_1RB_Right	21.95	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+L	Outer_Full	20.48	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+L	Inner_Full	21.60	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+L	Edge_1RB_Left	20.93	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+L	Edge_1RB_Right	20.31	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+M	Outer_Full	21.72	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+M	Inner_Full	22.64	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+M	Edge_1RB_Left	21.84	PC3	PASS

DC_30A_n5A	15	5+10	DFT-QPSK	M+M	Edge_1RB_Right	22.20	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+M	Outer_Full	20.77	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+M	Inner_Full	21.71	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+M	Edge_1RB_Left	20.43	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+M	Edge_1RB_Right	21.07	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Outer_Full	22.14	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Inner_Full	23.17	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Edge_1RB_Left	21.92	PC3	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Edge_1RB_Right	22.13	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+H	Outer_Full	21.17	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+H	Inner_Full	22.34	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+H	Edge_1RB_Left	21.19	PC3	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+H	Edge_1RB_Right	21.10	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Outer_Full	21.71	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Inner_Full	22.65	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Edge_1RB_Left	21.94	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Edge_1RB_Right	22.08	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+L	Outer_Full	20.73	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+L	Inner_Full	21.73	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+L	Edge_1RB_Left	21.12	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+L	Edge_1RB_Right	20.97	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+M	Outer_Full	21.98	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+M	Inner_Full	22.78	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+M	Edge_1RB_Left	21.58	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+M	Edge_1RB_Right	22.26	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+M	Outer_Full	20.86	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+M	Inner_Full	21.72	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+M	Edge_1RB_Left	20.54	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+M	Edge_1RB_Right	21.06	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Outer_Full	22.16	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Inner_Full	23.20	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Edge_1RB_Left	21.73	PC3	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Edge_1RB_Right	21.94	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+H	Outer_Full	21.23	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+H	Inner_Full	22.28	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+H	Edge_1RB_Left	20.46	PC3	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+H	Edge_1RB_Right	20.56	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Outer_Full	21.94	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Inner_Full	22.75	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Edge_1RB_Left	21.87	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Edge_1RB_Right	22.16	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+L	Outer_Full	20.88	PC3	PASS

DC_30A_n5A	15	5+20	DFT-16QAM	M+L	Inner_Full	21.71	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+L	Edge_1RB_Left	20.67	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+L	Edge_1RB_Right	21.13	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+M	Outer_Full	21.89	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+M	Inner_Full	22.77	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+M	Edge_1RB_Left	21.47	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+M	Edge_1RB_Right	21.93	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+M	Outer_Full	20.95	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+M	Inner_Full	21.84	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+M	Edge_1RB_Left	20.54	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+M	Edge_1RB_Right	20.60	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Outer_Full	22.15	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Inner_Full	23.15	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Edge_1RB_Left	21.74	PC3	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Edge_1RB_Right	21.91	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+H	Outer_Full	20.93	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+H	Inner_Full	22.05	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+H	Edge_1RB_Left	20.66	PC3	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+H	Edge_1RB_Right	21.08	PC3	PASS

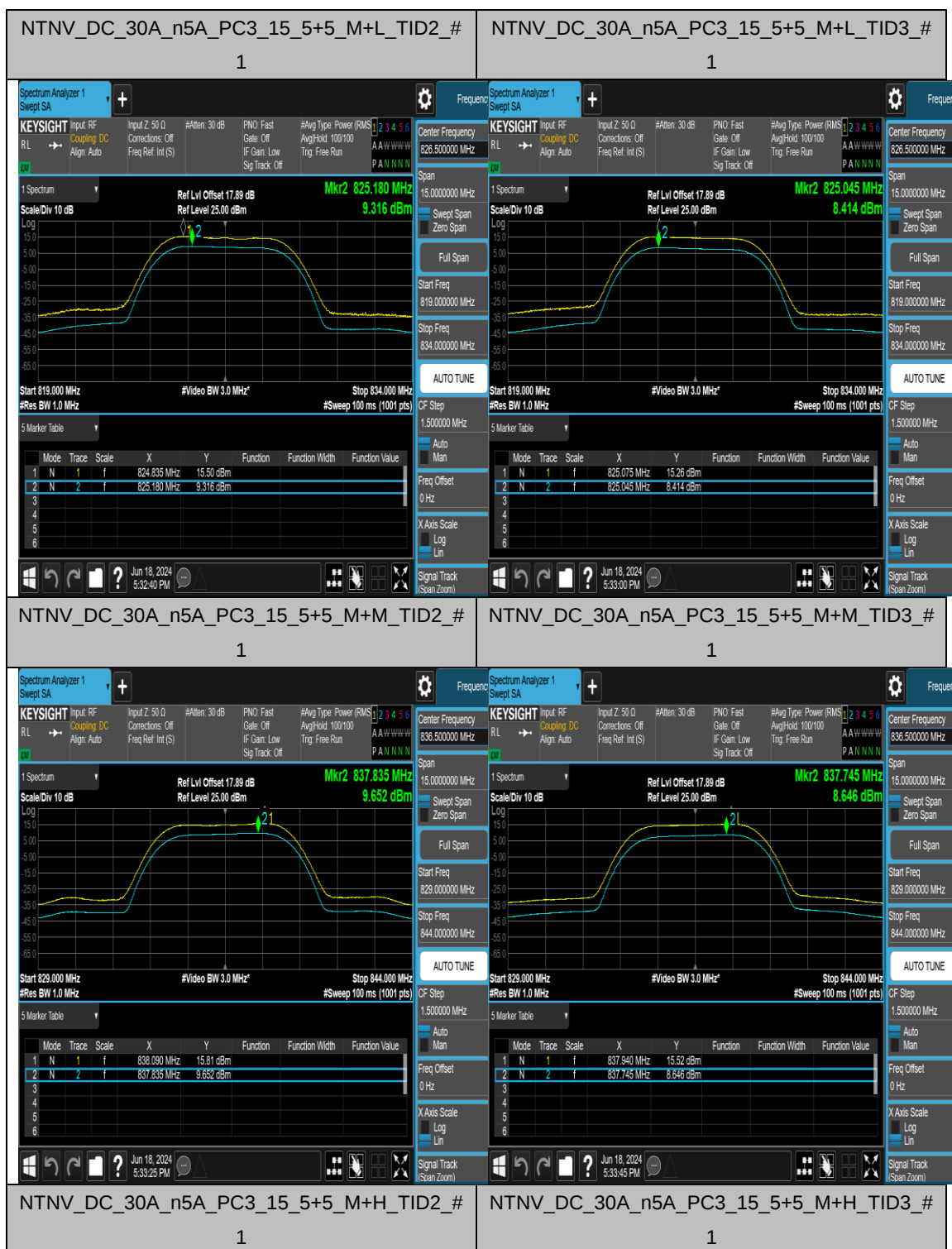
Appendix B: Peak-to-Average Ratio for NSA

Peak-to-Average Ratio(PAPR)

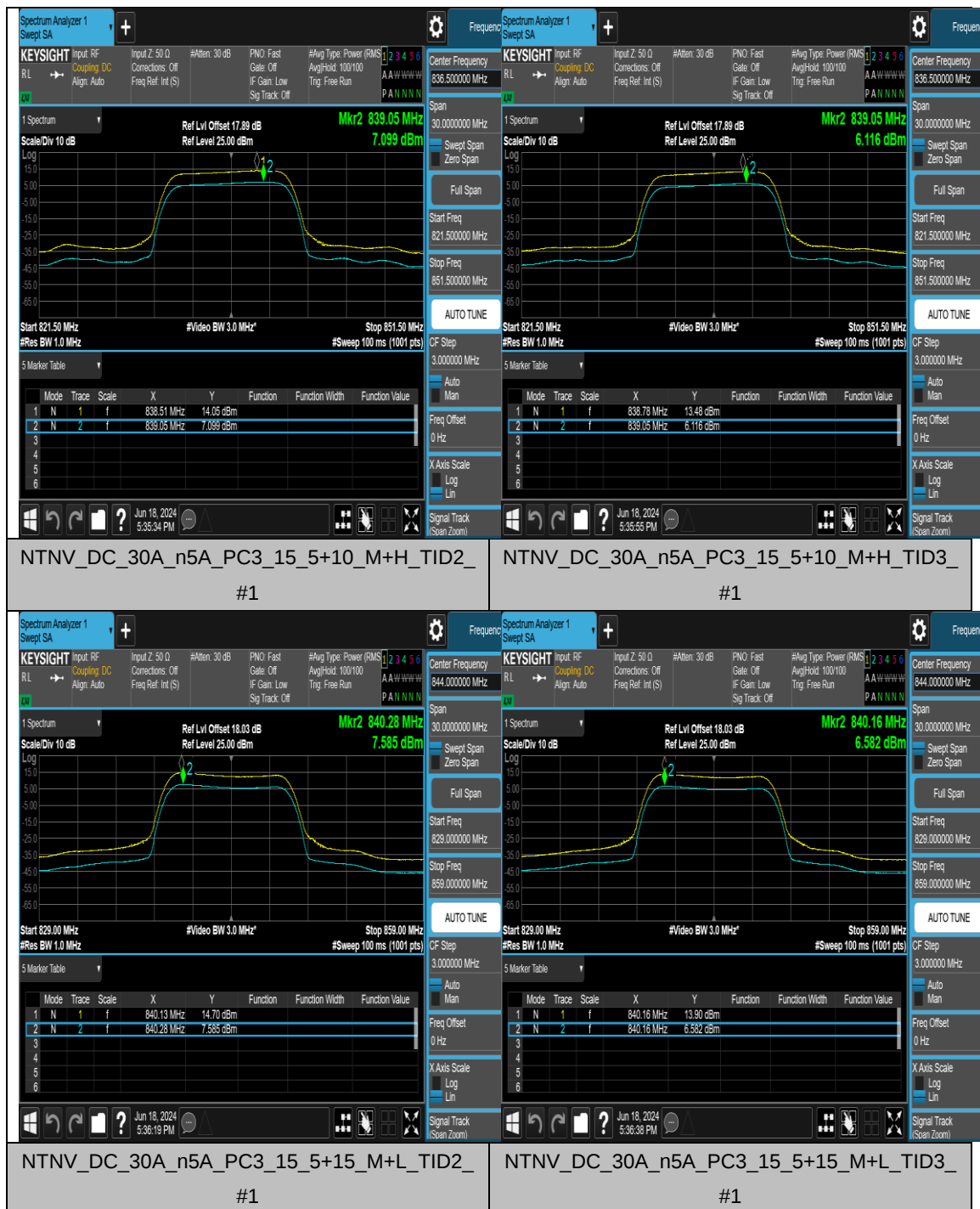
Test Result

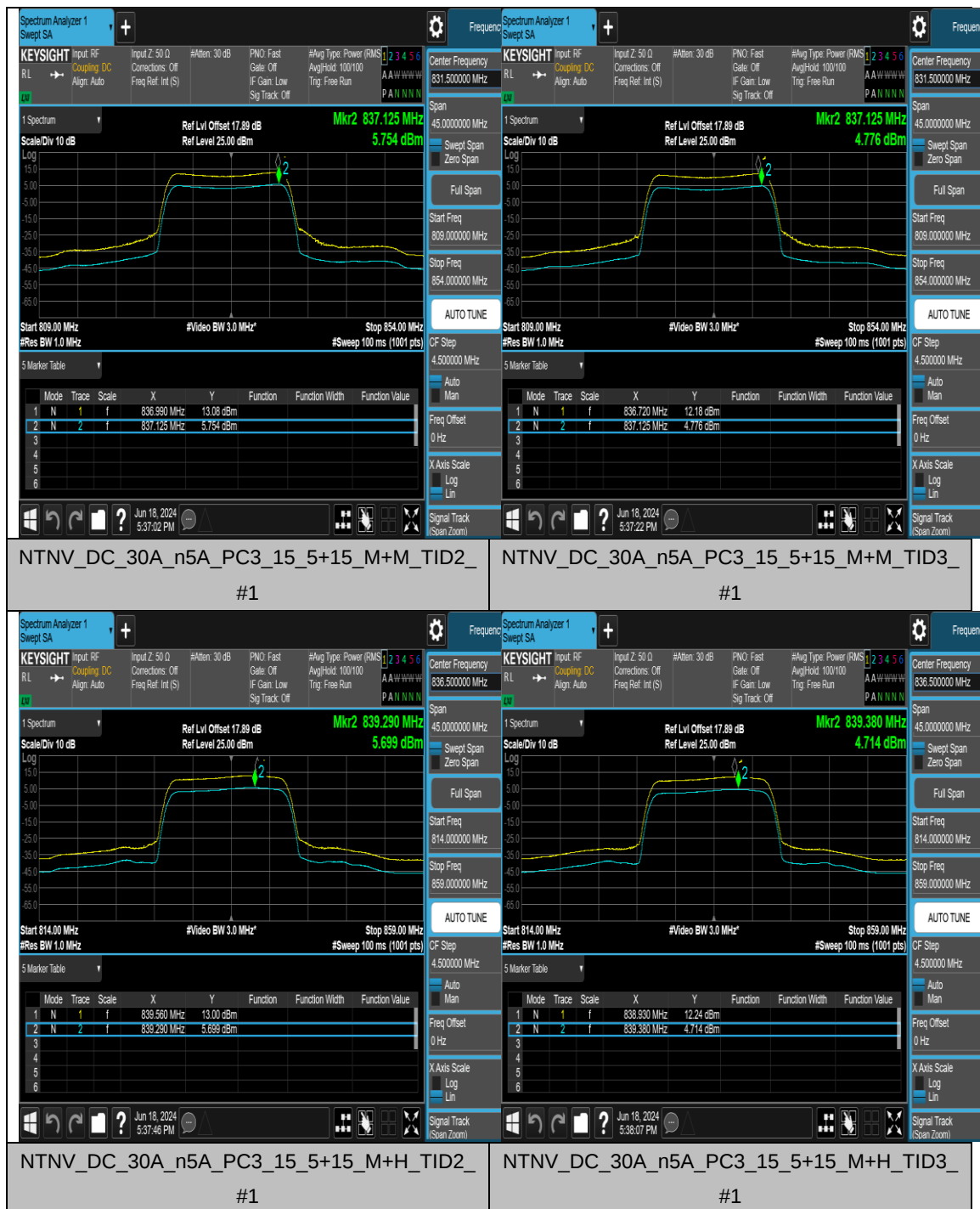
Band	SCS	Bandwidth	Modulation	Channel	RB Config	DutyCycle	Factor	Result	Limit	Verdict
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Outer_Full	100%	0.00	6.18	≤13	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+L	Outer_Full	100%	0.00	6.85	≤13	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+M	Outer_Full	100%	0.00	6.16	≤13	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+M	Outer_Full	100%	0.00	6.87	≤13	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Outer_Full	100%	0.00	6.19	≤13	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+H	Outer_Full	100%	0.00	6.98	≤13	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Outer_Full	100%	0.00	7.03	≤13	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+L	Outer_Full	100%	0.00	7.34	≤13	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+M	Outer_Full	100%	0.00	6.95	≤13	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+M	Outer_Full	100%	0.00	7.36	≤13	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.11	≤13	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+H	Outer_Full	100%	0.00	7.33	≤13	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Outer_Full	100%	0.00	7.33	≤13	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+L	Outer_Full	100%	0.00	7.40	≤13	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+M	Outer_Full	100%	0.00	7.30	≤13	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+M	Outer_Full	100%	0.00	7.53	≤13	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.33	≤13	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+H	Outer_Full	100%	0.00	7.58	≤13	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Outer_Full	100%	0.00	7.54	≤13	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+L	Outer_Full	100%	0.00	7.56	≤13	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+M	Outer_Full	100%	0.00	7.49	≤13	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+M	Outer_Full	100%	0.00	7.64	≤13	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.48	≤13	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+H	Outer_Full	100%	0.00	7.71	≤13	PASS

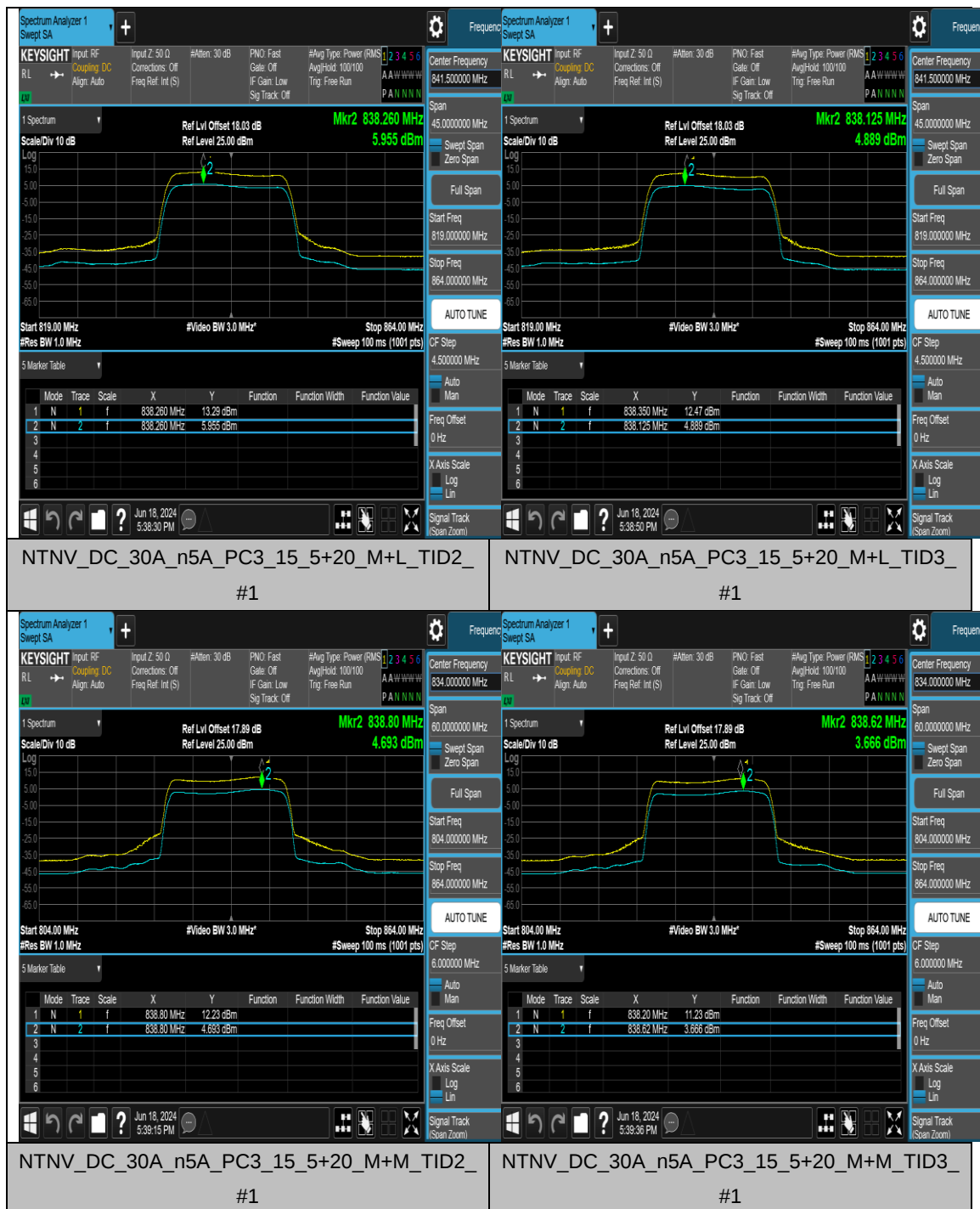
Test Graphs

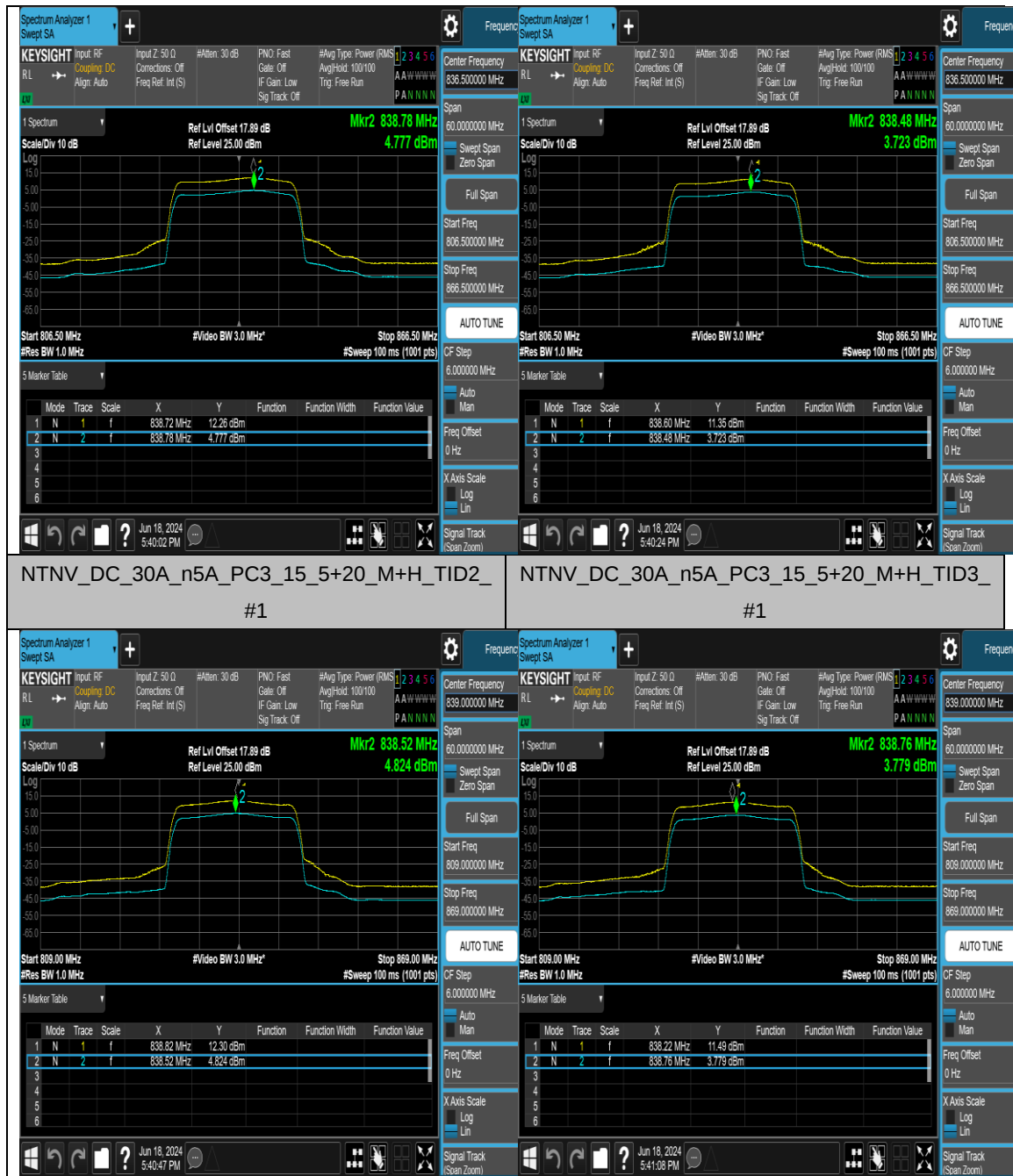












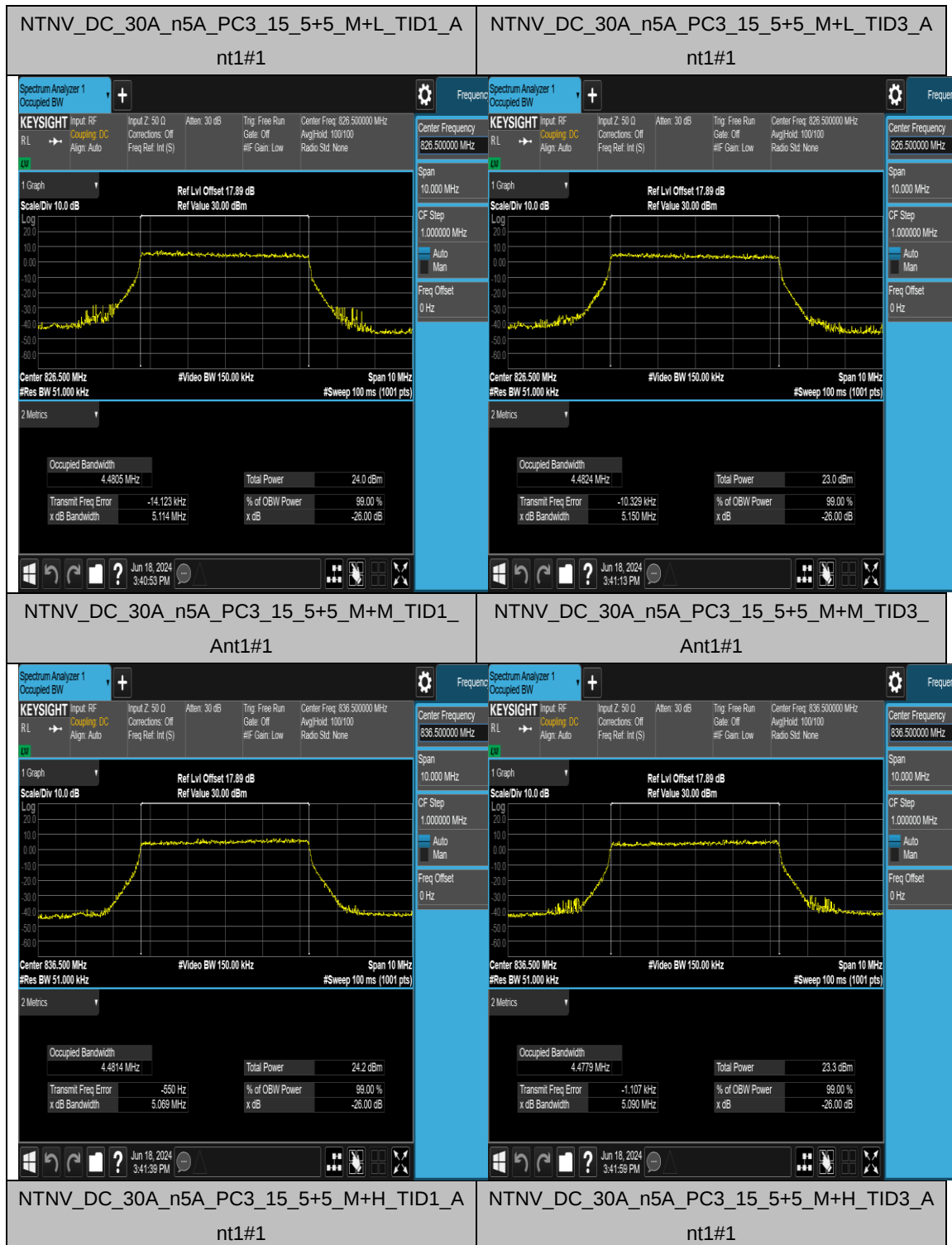
Appendix C: 26dB Bandwidth and Occupied Bandwidth for

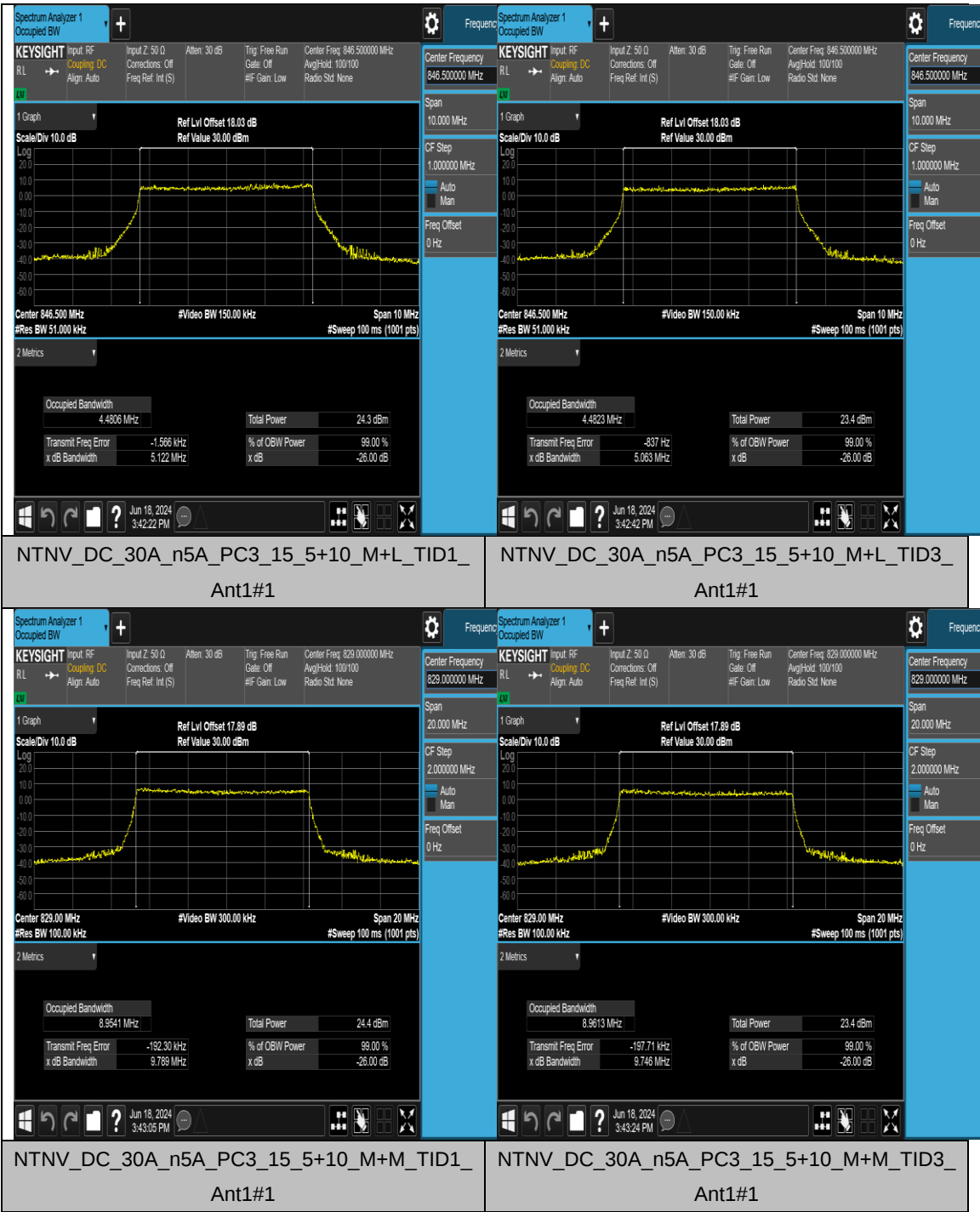
NSA

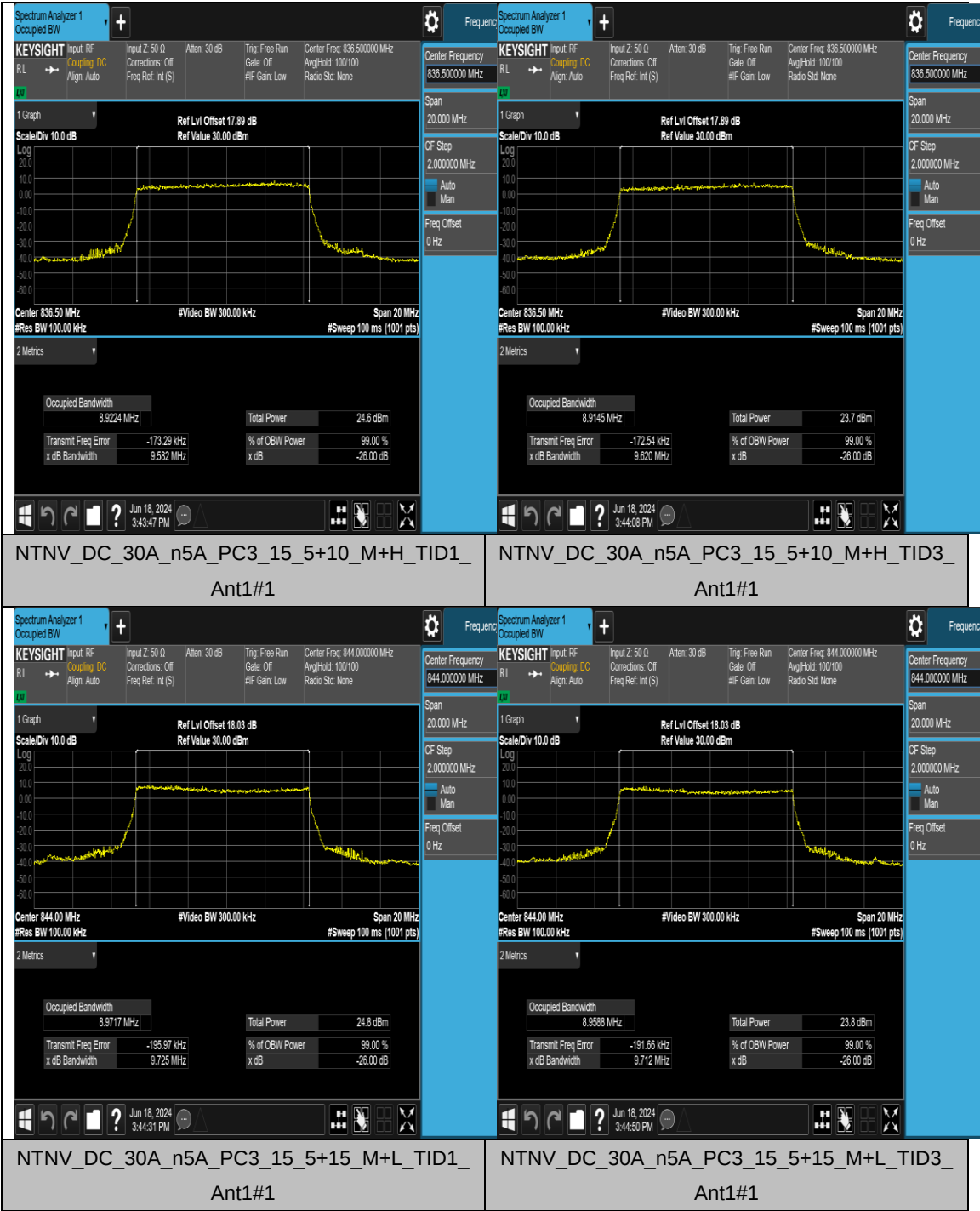
Test Result

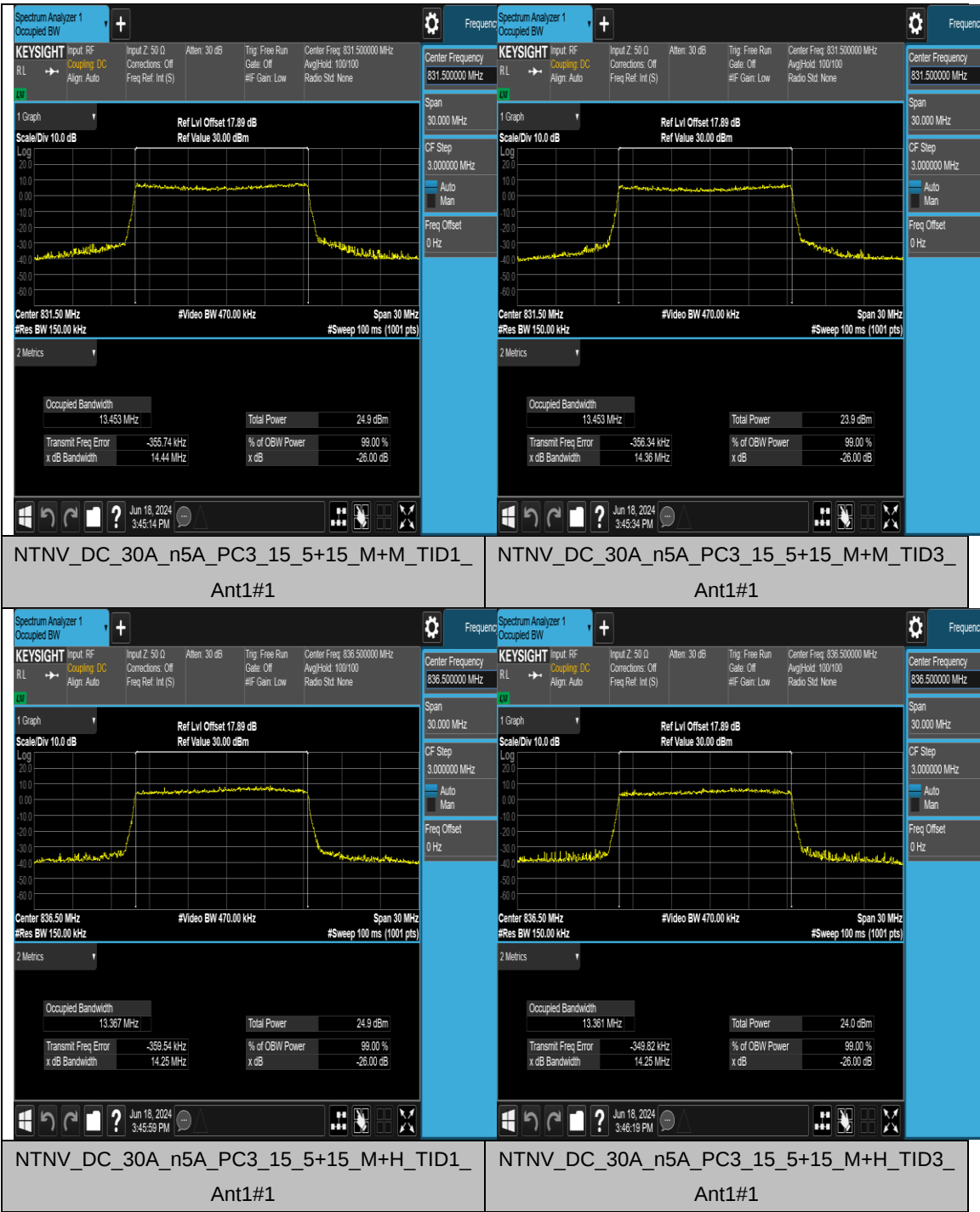
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Outer_Full	4.4805	5.114	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+L	Outer_Full	4.4824	5.150	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+M	Outer_Full	4.4814	5.069	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+M	Outer_Full	4.4779	5.090	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Outer_Full	4.4806	5.122	PASS
DC_30A_n5A	15	5+5	DFT-16QAM	M+H	Outer_Full	4.4823	5.063	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Outer_Full	8.9541	9.789	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+L	Outer_Full	8.9613	9.746	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+M	Outer_Full	8.9224	9.582	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+M	Outer_Full	8.9145	9.620	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Outer_Full	8.9717	9.725	PASS
DC_30A_n5A	15	5+10	DFT-16QAM	M+H	Outer_Full	8.9588	9.712	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Outer_Full	13.453	14.44	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+L	Outer_Full	13.453	14.36	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+M	Outer_Full	13.367	14.25	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+M	Outer_Full	13.361	14.25	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Outer_Full	13.390	14.24	PASS
DC_30A_n5A	15	5+15	DFT-16QAM	M+H	Outer_Full	13.387	14.35	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Outer_Full	17.852	18.83	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+L	Outer_Full	17.864	18.90	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+M	Outer_Full	17.812	18.85	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+M	Outer_Full	17.817	18.78	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Outer_Full	17.808	18.85	PASS
DC_30A_n5A	15	5+20	DFT-16QAM	M+H	Outer_Full	17.788	18.82	PASS

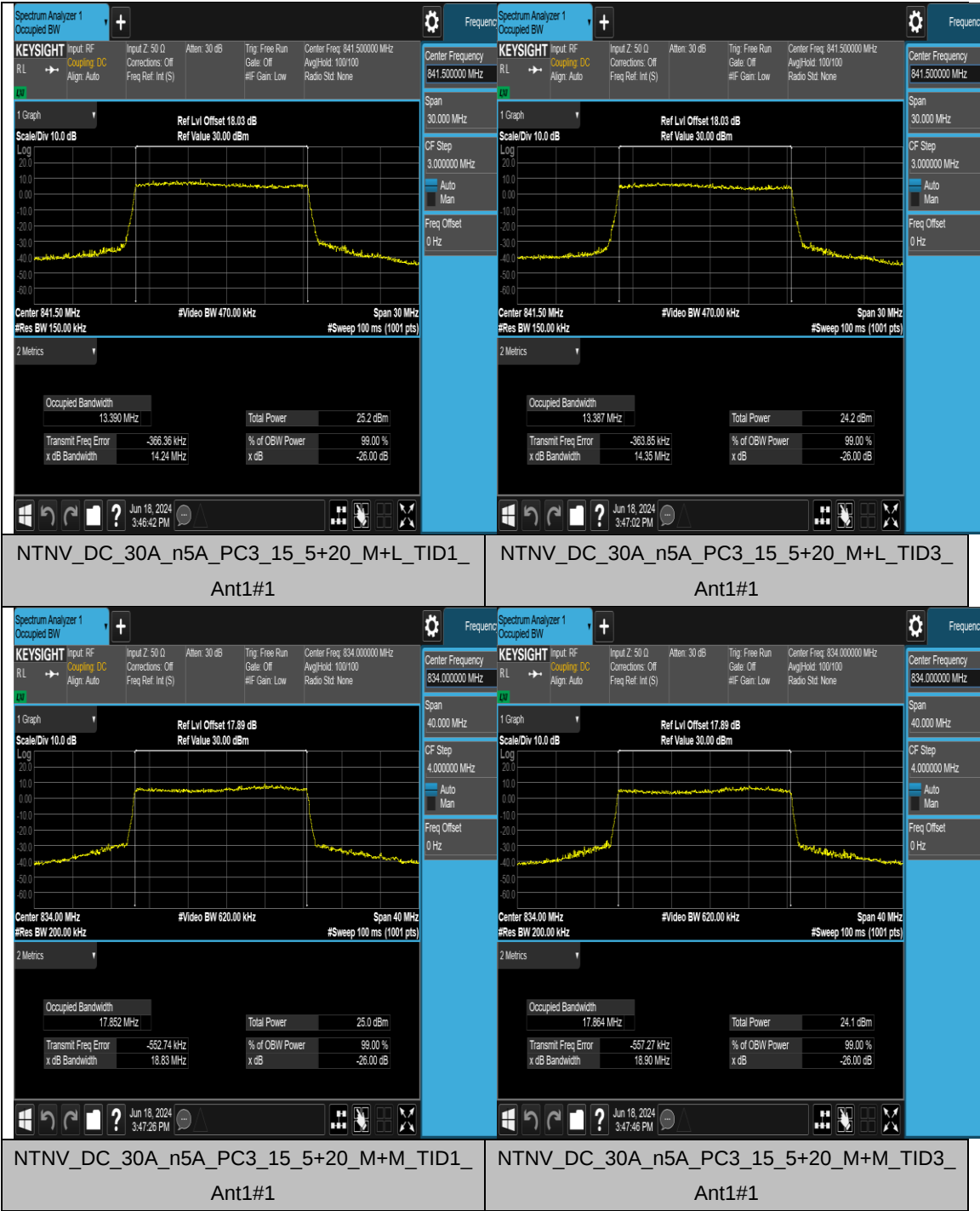
Test Graphs

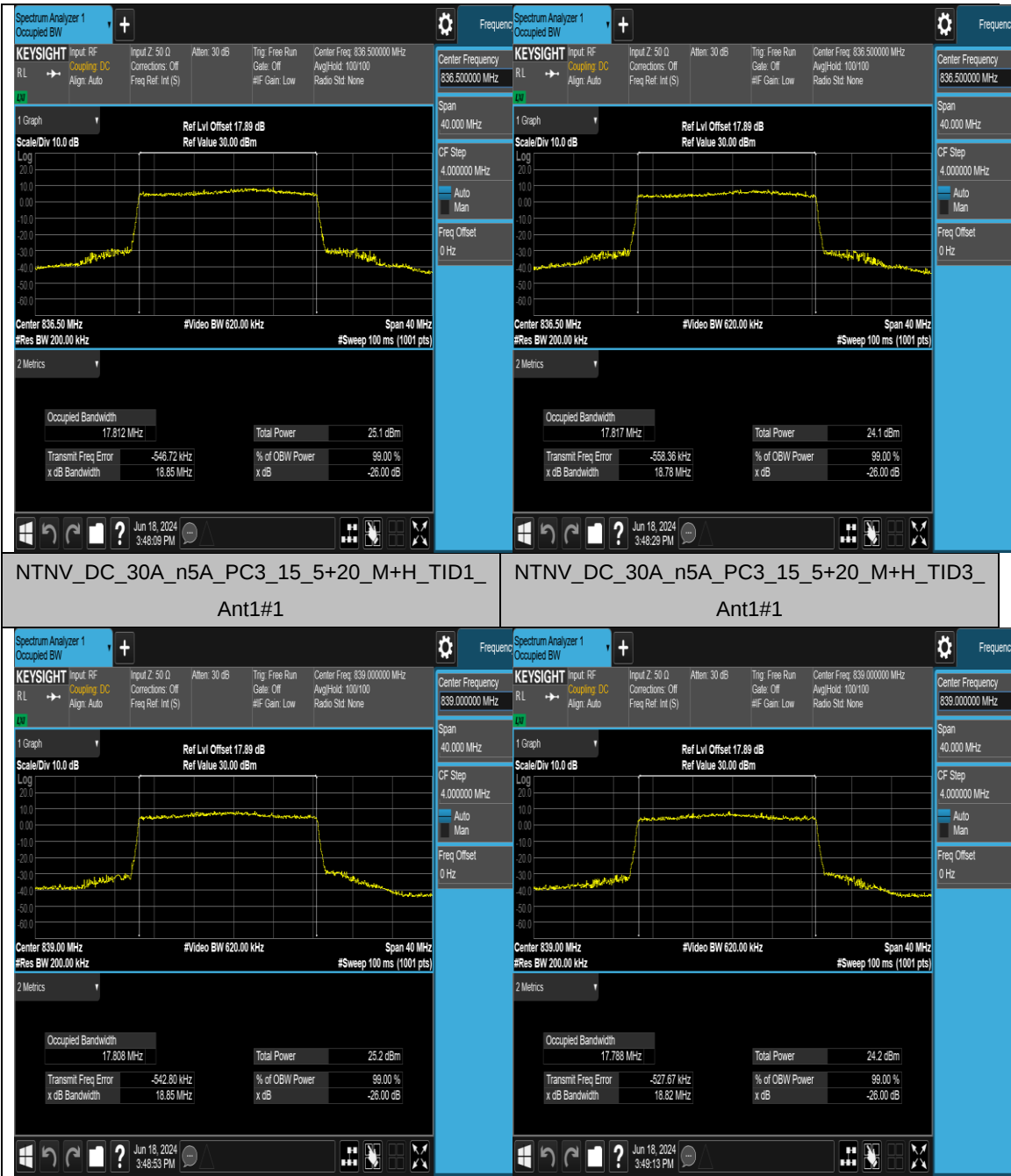












Appendix D: Band Edge for NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Verdict
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Outer_Full	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+L	Edge_1RB_Left	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Outer_Full	PASS
DC_30A_n5A	15	5+5	DFT-QPSK	M+H	Edge_1RB_Right	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Outer_Full	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+L	Edge_1RB_Left	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Outer_Full	PASS
DC_30A_n5A	15	5+10	DFT-QPSK	M+H	Edge_1RB_Right	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Outer_Full	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+L	Edge_1RB_Left	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Outer_Full	PASS
DC_30A_n5A	15	5+15	DFT-QPSK	M+H	Edge_1RB_Right	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Outer_Full	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+L	Edge_1RB_Left	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Outer_Full	PASS
DC_30A_n5A	15	5+20	DFT-QPSK	M+H	Edge_1RB_Right	PASS

Test Graphs



