

Appendix for N7

Product Name: 5G Indoor CPE

Model No: TITAN 5000

Appendix A: Average Power Output Data

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Power (dBm)	Power Class	Verdict
N7	15	5	DFT-QPSK	L	Outer_Full	22.91	PC3	PASS
N7	15	5	DFT-QPSK	L	Inner_Full	23.85	PC3	PASS
N7	15	5	DFT-QPSK	L	Edge_1RB_Left	22.79	PC3	PASS
N7	15	5	DFT-QPSK	L	Edge_1RB_Right	22.82	PC3	PASS
N7	15	5	DFT-16QAM	L	Outer_Full	21.99	PC3	PASS
N7	15	5	DFT-16QAM	L	Inner_Full	22.88	PC3	PASS
N7	15	5	DFT-16QAM	L	Edge_1RB_Left	21.87	PC3	PASS
N7	15	5	DFT-16QAM	L	Edge_1RB_Right	21.96	PC3	PASS
N7	15	5	DFT-QPSK	M	Outer_Full	23.04	PC3	PASS
N7	15	5	DFT-QPSK	M	Inner_Full	24.01	PC3	PASS
N7	15	5	DFT-QPSK	M	Edge_1RB_Left	22.90	PC3	PASS
N7	15	5	DFT-QPSK	M	Edge_1RB_Right	22.92	PC3	PASS
N7	15	5	DFT-16QAM	M	Outer_Full	22.14	PC3	PASS
N7	15	5	DFT-16QAM	M	Inner_Full	22.96	PC3	PASS
N7	15	5	DFT-16QAM	M	Edge_1RB_Left	21.98	PC3	PASS
N7	15	5	DFT-16QAM	M	Edge_1RB_Right	22.08	PC3	PASS
N7	15	5	DFT-QPSK	H	Outer_Full	23.07	PC3	PASS
N7	15	5	DFT-QPSK	H	Inner_Full	24.04	PC3	PASS
N7	15	5	DFT-QPSK	H	Edge_1RB_Left	22.94	PC3	PASS
N7	15	5	DFT-QPSK	H	Edge_1RB_Right	23.07	PC3	PASS
N7	15	5	DFT-16QAM	H	Outer_Full	22.17	PC3	PASS
N7	15	5	DFT-16QAM	H	Inner_Full	23.03	PC3	PASS
N7	15	5	DFT-16QAM	H	Edge_1RB_Left	22.01	PC3	PASS
N7	15	5	DFT-16QAM	H	Edge_1RB_Right	22.37	PC3	PASS
N7	15	10	DFT-QPSK	L	Outer_Full	22.94	PC3	PASS
N7	15	10	DFT-QPSK	L	Inner_Full	23.83	PC3	PASS
N7	15	10	DFT-QPSK	L	Edge_1RB_Left	22.81	PC3	PASS
N7	15	10	DFT-QPSK	L	Edge_1RB_Right	22.82	PC3	PASS
N7	15	10	DFT-16QAM	L	Outer_Full	21.90	PC3	PASS
N7	15	10	DFT-16QAM	L	Inner_Full	22.99	PC3	PASS
N7	15	10	DFT-16QAM	L	Edge_1RB_Left	21.88	PC3	PASS
N7	15	10	DFT-16QAM	L	Edge_1RB_Right	21.91	PC3	PASS
N7	15	10	DFT-QPSK	M	Outer_Full	23.05	PC3	PASS
N7	15	10	DFT-QPSK	M	Inner_Full	23.99	PC3	PASS

N7	15	10	DFT-QPSK	M	Edge_1RB_Left	22.80	PC3	PASS
N7	15	10	DFT-QPSK	M	Edge_1RB_Right	22.89	PC3	PASS
N7	15	10	DFT-16QAM	M	Outer_Full	22.01	PC3	PASS
N7	15	10	DFT-16QAM	M	Inner_Full	23.11	PC3	PASS
N7	15	10	DFT-16QAM	M	Edge_1RB_Left	21.99	PC3	PASS
N7	15	10	DFT-16QAM	M	Edge_1RB_Right	22.08	PC3	PASS
N7	15	10	DFT-QPSK	H	Outer_Full	23.05	PC3	PASS
N7	15	10	DFT-QPSK	H	Inner_Full	24.06	PC3	PASS
N7	15	10	DFT-QPSK	H	Edge_1RB_Left	22.82	PC3	PASS
N7	15	10	DFT-QPSK	H	Edge_1RB_Right	22.97	PC3	PASS
N7	15	10	DFT-16QAM	H	Outer_Full	22.12	PC3	PASS
N7	15	10	DFT-16QAM	H	Inner_Full	23.09	PC3	PASS
N7	15	10	DFT-16QAM	H	Edge_1RB_Left	22.27	PC3	PASS
N7	15	10	DFT-16QAM	H	Edge_1RB_Right	22.42	PC3	PASS
N7	15	15	DFT-QPSK	L	Outer_Full	23.03	PC3	PASS
N7	15	15	DFT-QPSK	L	Inner_Full	24.09	PC3	PASS
N7	15	15	DFT-QPSK	L	Edge_1RB_Left	22.90	PC3	PASS
N7	15	15	DFT-QPSK	L	Edge_1RB_Right	22.86	PC3	PASS
N7	15	15	DFT-16QAM	L	Outer_Full	22.07	PC3	PASS
N7	15	15	DFT-16QAM	L	Inner_Full	23.01	PC3	PASS
N7	15	15	DFT-16QAM	L	Edge_1RB_Left	22.19	PC3	PASS
N7	15	15	DFT-16QAM	L	Edge_1RB_Right	22.13	PC3	PASS
N7	15	15	DFT-QPSK	M	Outer_Full	23.10	PC3	PASS
N7	15	15	DFT-QPSK	M	Inner_Full	24.14	PC3	PASS
N7	15	15	DFT-QPSK	M	Edge_1RB_Left	22.87	PC3	PASS
N7	15	15	DFT-QPSK	M	Edge_1RB_Right	22.93	PC3	PASS
N7	15	15	DFT-16QAM	M	Outer_Full	22.16	PC3	PASS
N7	15	15	DFT-16QAM	M	Inner_Full	23.07	PC3	PASS
N7	15	15	DFT-16QAM	M	Edge_1RB_Left	22.14	PC3	PASS
N7	15	15	DFT-16QAM	M	Edge_1RB_Right	22.16	PC3	PASS
N7	15	15	DFT-QPSK	H	Outer_Full	23.18	PC3	PASS
N7	15	15	DFT-QPSK	H	Inner_Full	24.24	PC3	PASS
N7	15	15	DFT-QPSK	H	Edge_1RB_Left	23.01	PC3	PASS
N7	15	15	DFT-QPSK	H	Edge_1RB_Right	23.08	PC3	PASS
N7	15	15	DFT-16QAM	H	Outer_Full	22.26	PC3	PASS
N7	15	15	DFT-16QAM	H	Inner_Full	23.25	PC3	PASS
N7	15	15	DFT-16QAM	H	Edge_1RB_Left	22.11	PC3	PASS
N7	15	15	DFT-16QAM	H	Edge_1RB_Right	22.16	PC3	PASS
N7	15	20	DFT-QPSK	L	Outer_Full	23.08	PC3	PASS
N7	15	20	DFT-QPSK	L	Inner_Full	24.05	PC3	PASS
N7	15	20	DFT-QPSK	L	Edge_1RB_Left	22.93	PC3	PASS

N7	15	20	DFT-QPSK	L	Edge_1RB_Right	22.84	PC3	PASS
N7	15	20	DFT-16QAM	L	Outer_Full	22.07	PC3	PASS
N7	15	20	DFT-16QAM	L	Inner_Full	23.14	PC3	PASS
N7	15	20	DFT-16QAM	L	Edge_1RB_Left	22.10	PC3	PASS
N7	15	20	DFT-16QAM	L	Edge_1RB_Right	21.93	PC3	PASS
N7	15	20	DFT-QPSK	M	Outer_Full	23.09	PC3	PASS
N7	15	20	DFT-QPSK	M	Inner_Full	24.07	PC3	PASS
N7	15	20	DFT-QPSK	M	Edge_1RB_Left	22.79	PC3	PASS
N7	15	20	DFT-QPSK	M	Edge_1RB_Right	22.93	PC3	PASS
N7	15	20	DFT-16QAM	M	Outer_Full	22.07	PC3	PASS
N7	15	20	DFT-16QAM	M	Inner_Full	23.18	PC3	PASS
N7	15	20	DFT-16QAM	M	Edge_1RB_Left	22.34	PC3	PASS
N7	15	20	DFT-16QAM	M	Edge_1RB_Right	22.37	PC3	PASS
N7	15	20	DFT-QPSK	H	Outer_Full	23.14	PC3	PASS
N7	15	20	DFT-QPSK	H	Inner_Full	24.18	PC3	PASS
N7	15	20	DFT-QPSK	H	Edge_1RB_Left	22.86	PC3	PASS
N7	15	20	DFT-QPSK	H	Edge_1RB_Right	23.03	PC3	PASS
N7	15	20	DFT-16QAM	H	Outer_Full	22.24	PC3	PASS
N7	15	20	DFT-16QAM	H	Inner_Full	23.19	PC3	PASS
N7	15	20	DFT-16QAM	H	Edge_1RB_Left	22.40	PC3	PASS
N7	15	20	DFT-16QAM	H	Edge_1RB_Right	22.47	PC3	PASS

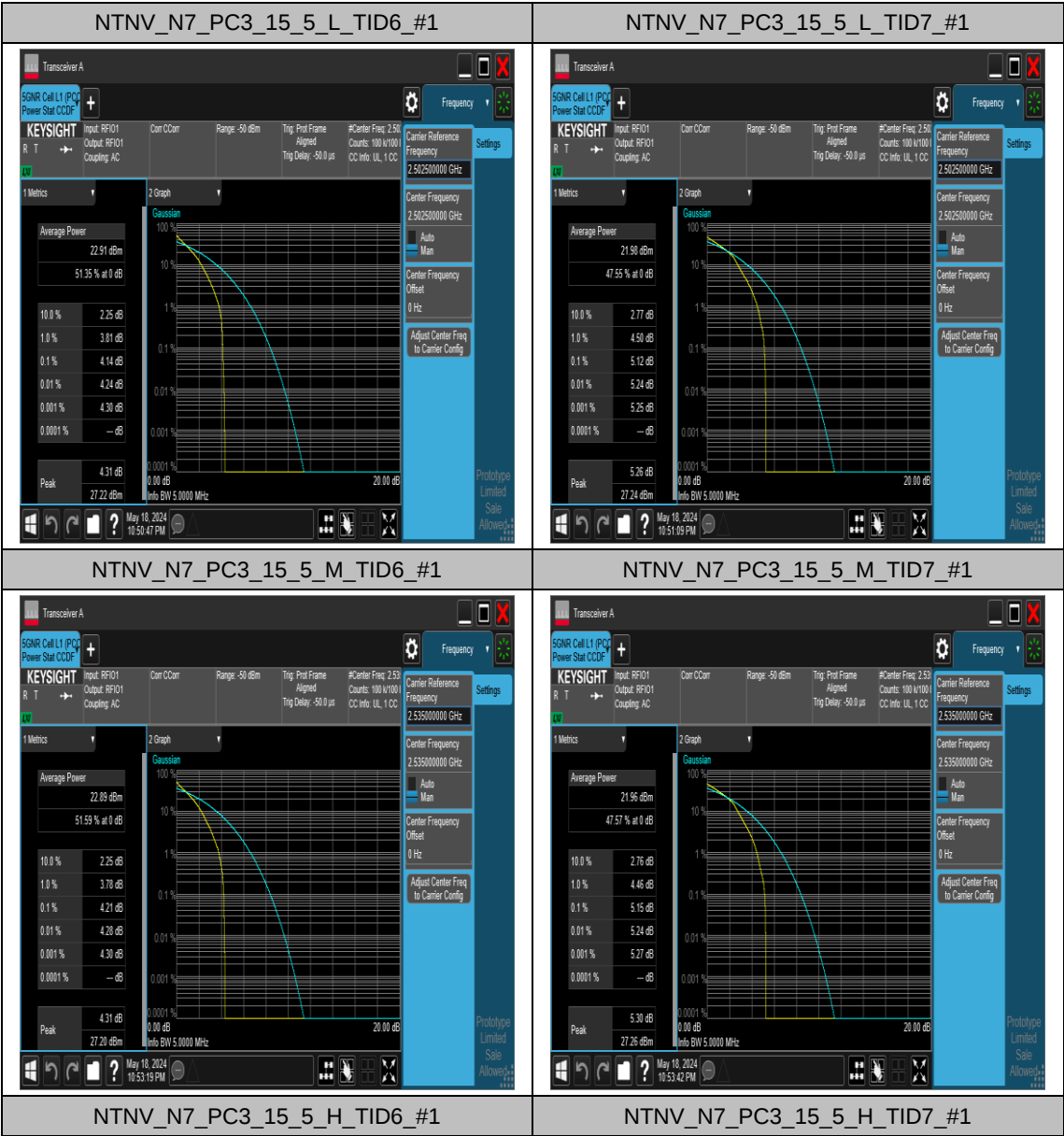
Appendix B: Peak-to-Average Ratio for SA

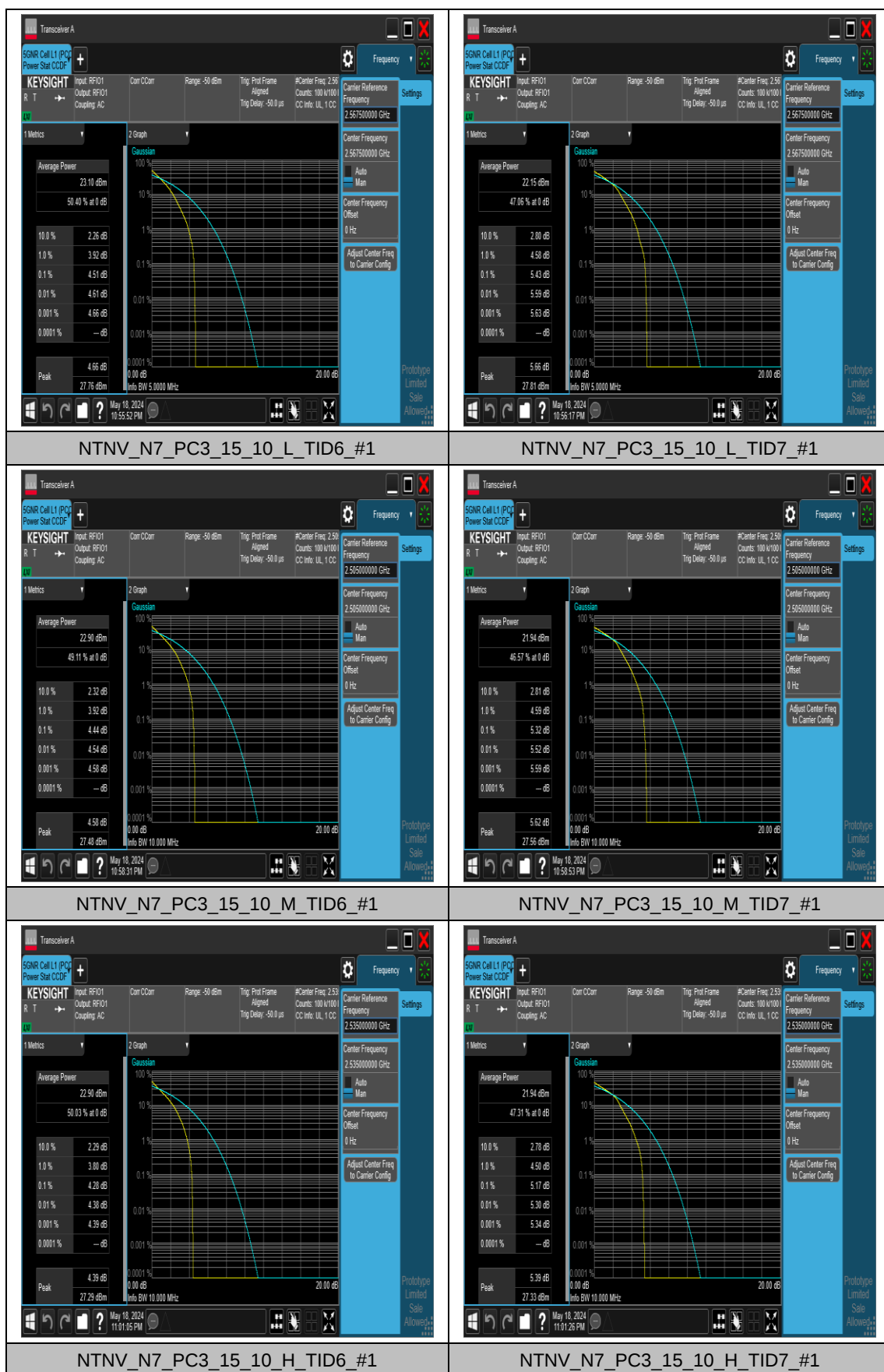
Peak-to-Average Ratio(CCDF)

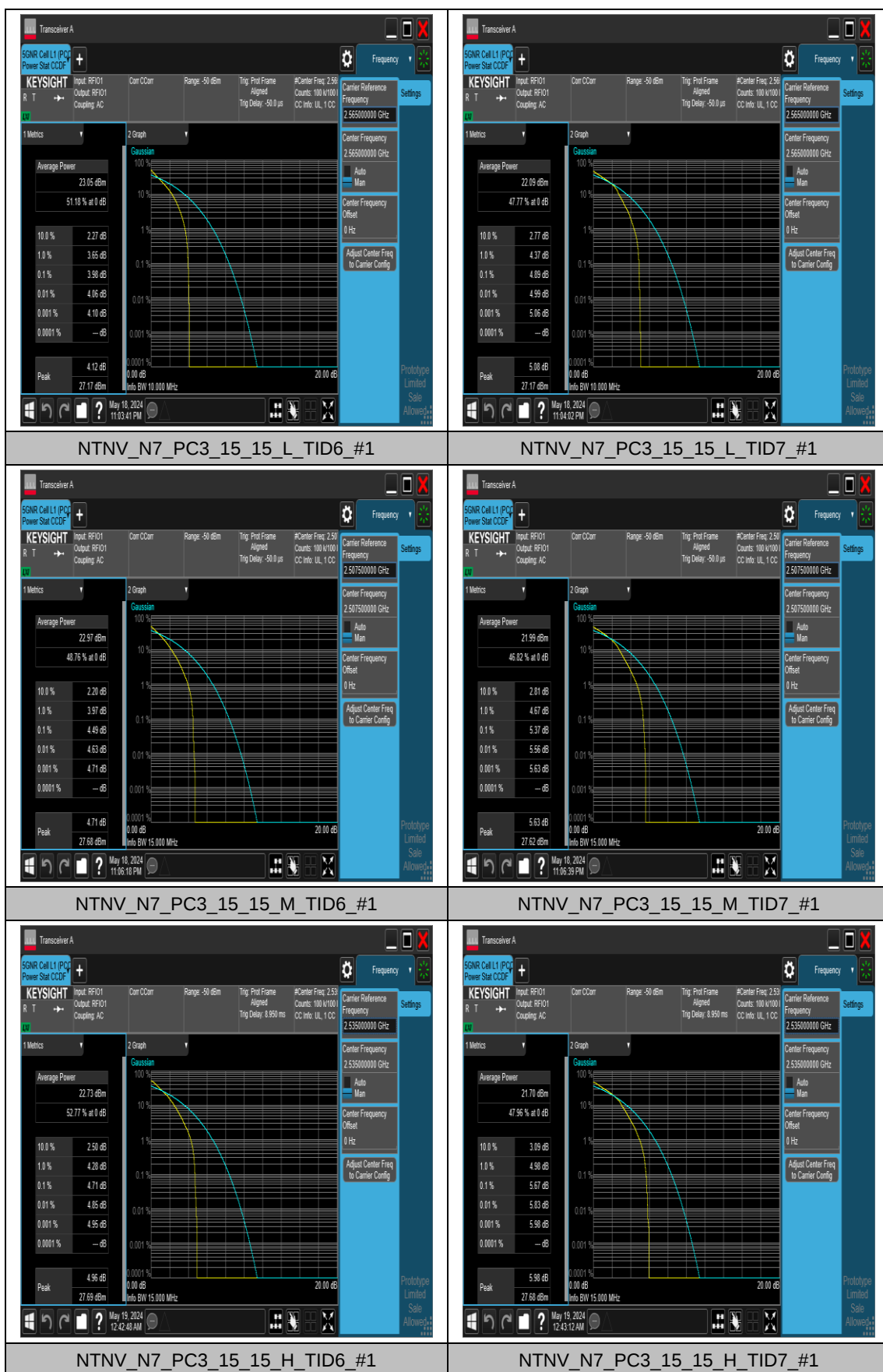
Test Result

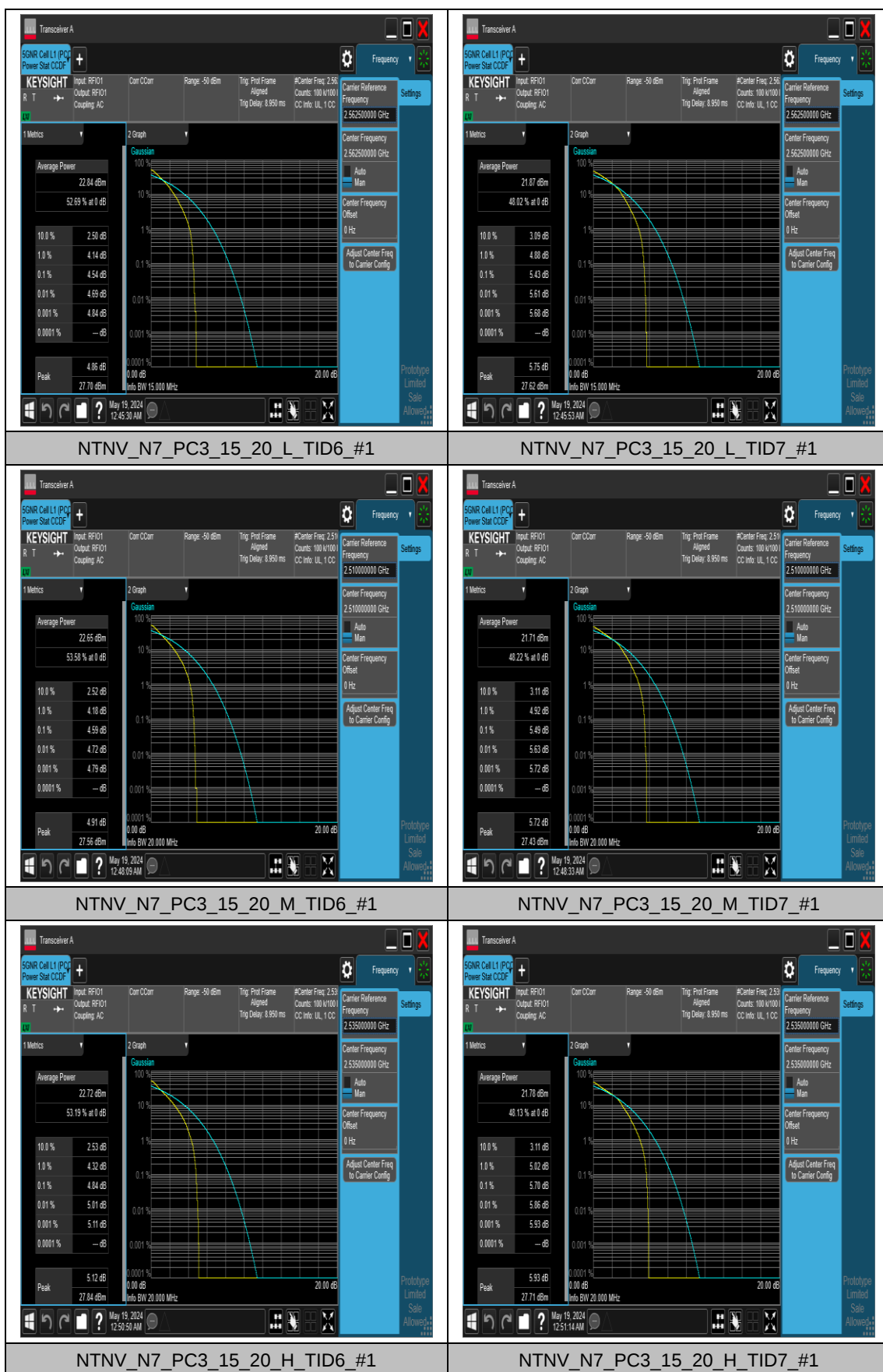
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
N7	15	5	DFT-QPSK	L	Outer_Full	4.14	≤13	PASS
N7	15	5	DFT-16QAM	L	Outer_Full	5.12	≤13	PASS
N7	15	5	DFT-QPSK	M	Outer_Full	4.21	≤13	PASS
N7	15	5	DFT-16QAM	M	Outer_Full	5.15	≤13	PASS
N7	15	5	DFT-QPSK	H	Outer_Full	4.51	≤13	PASS
N7	15	5	DFT-16QAM	H	Outer_Full	5.43	≤13	PASS
N7	15	10	DFT-QPSK	L	Outer_Full	4.44	≤13	PASS
N7	15	10	DFT-16QAM	L	Outer_Full	5.32	≤13	PASS
N7	15	10	DFT-QPSK	M	Outer_Full	4.28	≤13	PASS
N7	15	10	DFT-16QAM	M	Outer_Full	5.17	≤13	PASS
N7	15	10	DFT-QPSK	H	Outer_Full	3.98	≤13	PASS
N7	15	10	DFT-16QAM	H	Outer_Full	4.89	≤13	PASS
N7	15	15	DFT-QPSK	L	Outer_Full	4.49	≤13	PASS
N7	15	15	DFT-16QAM	L	Outer_Full	5.37	≤13	PASS
N7	15	15	DFT-QPSK	M	Outer_Full	4.71	≤13	PASS
N7	15	15	DFT-16QAM	M	Outer_Full	5.67	≤13	PASS
N7	15	15	DFT-QPSK	H	Outer_Full	4.54	≤13	PASS
N7	15	15	DFT-16QAM	H	Outer_Full	5.43	≤13	PASS
N7	15	20	DFT-QPSK	L	Outer_Full	4.59	≤13	PASS
N7	15	20	DFT-16QAM	L	Outer_Full	5.49	≤13	PASS
N7	15	20	DFT-QPSK	M	Outer_Full	4.84	≤13	PASS
N7	15	20	DFT-16QAM	M	Outer_Full	5.70	≤13	PASS
N7	15	20	DFT-QPSK	H	Outer_Full	4.74	≤13	PASS
N7	15	20	DFT-16QAM	H	Outer_Full	5.56	≤13	PASS

Test Graphs









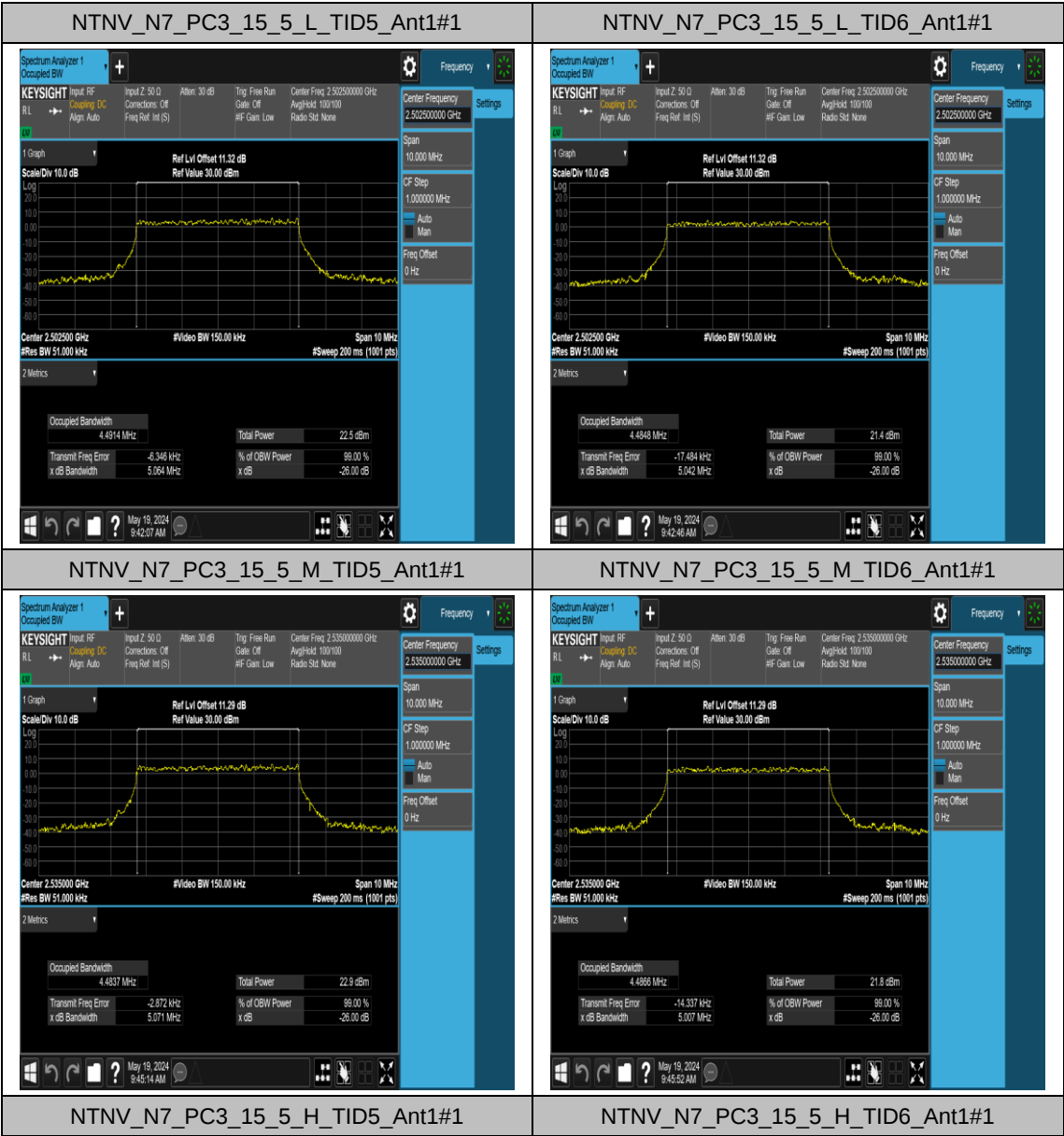


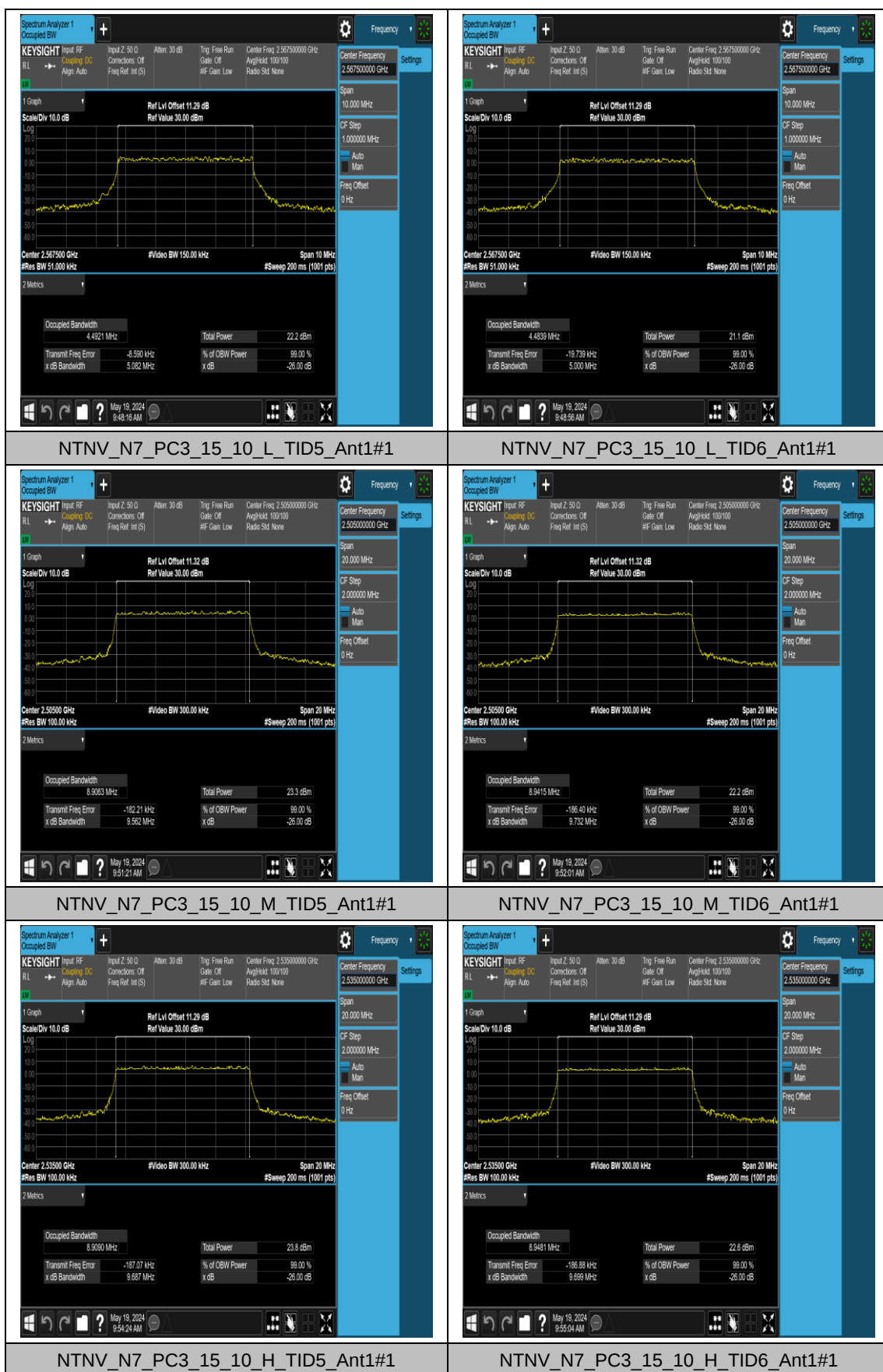
Appendix C: 26dB Bandwidth and Occupied Bandwidth for SA

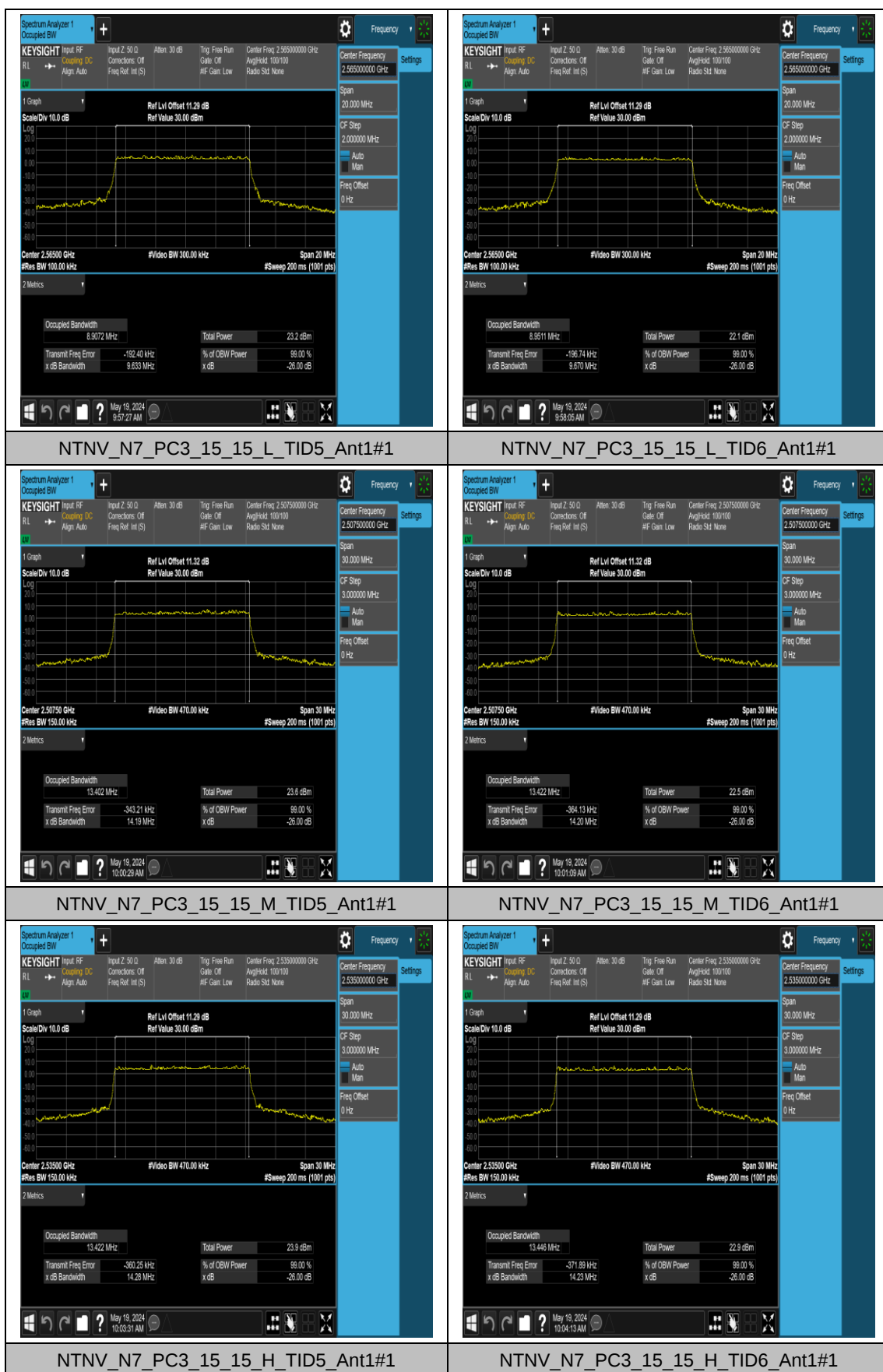
Test Result

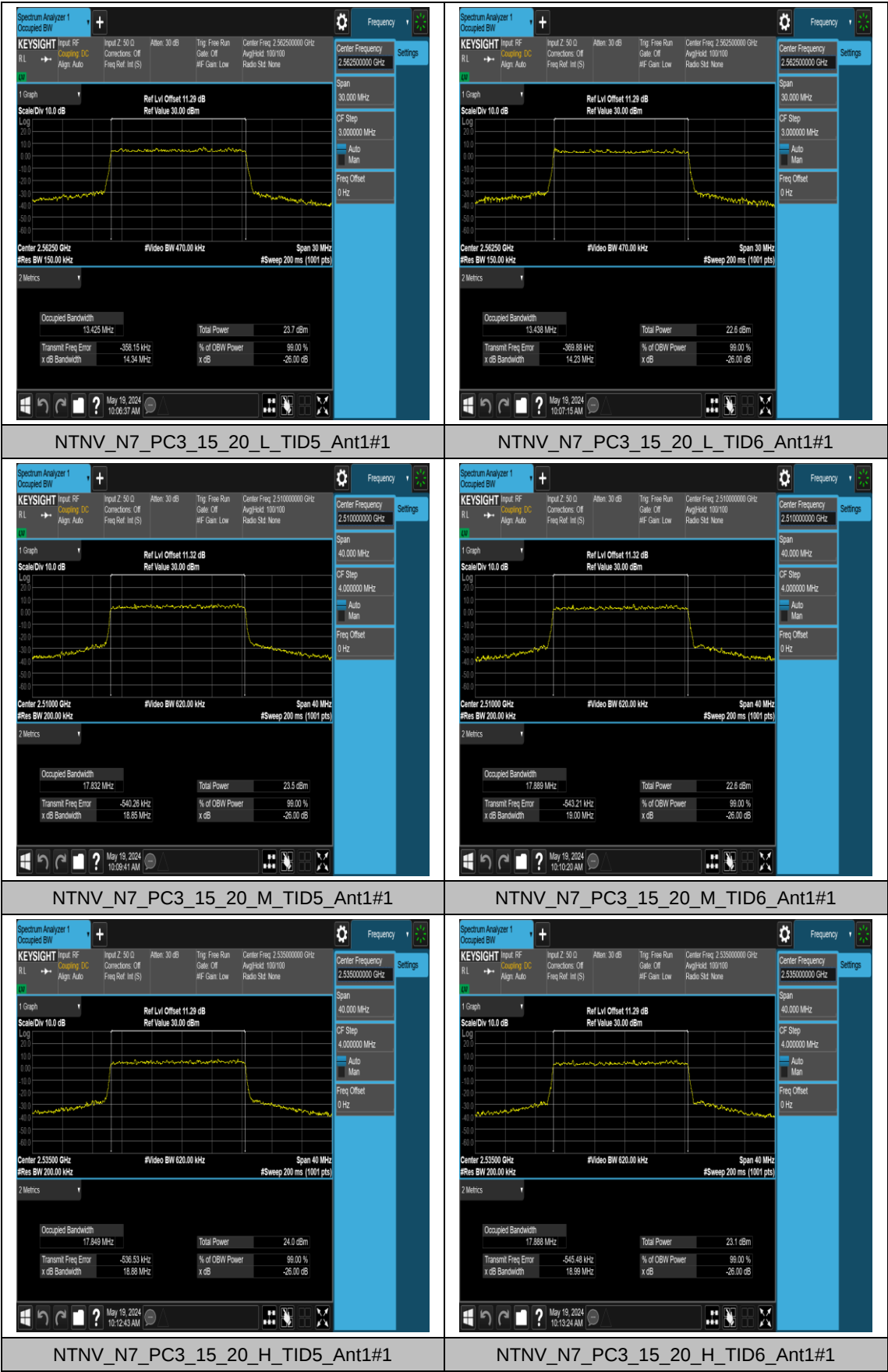
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
N7	15	5	DFT-QPSK	L	Outer_Full	4.4914	5.064	PASS
N7	15	5	DFT-16QAM	L	Outer_Full	4.4848	5.042	PASS
N7	15	5	DFT-QPSK	M	Outer_Full	4.4837	5.071	PASS
N7	15	5	DFT-16QAM	M	Outer_Full	4.4866	5.007	PASS
N7	15	5	DFT-QPSK	H	Outer_Full	4.4921	5.082	PASS
N7	15	5	DFT-16QAM	H	Outer_Full	4.4839	5.000	PASS
N7	15	10	DFT-QPSK	L	Outer_Full	8.9063	9.562	PASS
N7	15	10	DFT-16QAM	L	Outer_Full	8.9415	9.732	PASS
N7	15	10	DFT-QPSK	M	Outer_Full	8.9090	9.687	PASS
N7	15	10	DFT-16QAM	M	Outer_Full	8.9481	9.699	PASS
N7	15	10	DFT-QPSK	H	Outer_Full	8.9072	9.633	PASS
N7	15	10	DFT-16QAM	H	Outer_Full	8.9511	9.670	PASS
N7	15	15	DFT-QPSK	L	Outer_Full	13.402	14.19	PASS
N7	15	15	DFT-16QAM	L	Outer_Full	13.422	14.20	PASS
N7	15	15	DFT-QPSK	M	Outer_Full	13.422	14.28	PASS
N7	15	15	DFT-16QAM	M	Outer_Full	13.446	14.23	PASS
N7	15	15	DFT-QPSK	H	Outer_Full	13.425	14.34	PASS
N7	15	15	DFT-16QAM	H	Outer_Full	13.438	14.23	PASS
N7	15	20	DFT-QPSK	L	Outer_Full	17.832	18.85	PASS
N7	15	20	DFT-16QAM	L	Outer_Full	17.889	19.00	PASS
N7	15	20	DFT-QPSK	M	Outer_Full	17.849	18.88	PASS
N7	15	20	DFT-16QAM	M	Outer_Full	17.888	18.99	PASS
N7	15	20	DFT-QPSK	H	Outer_Full	17.858	18.86	PASS
N7	15	20	DFT-16QAM	H	Outer_Full	17.876	18.83	PASS

Test Graphs











Appendix D: Band Edge for SA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Margin	Verdict
N7	15	5	DFT-QPSK	L	Outer_Full	-52.19	27.19	PASS
N7	15	5	DFT-QPSK	L	Edge_1RB_Left	-52.26	27.26	PASS
N7	15	5	DFT-16QAM	L	Outer_Full	-52.31	27.31	PASS
N7	15	5	DFT-16QAM	L	Edge_1RB_Left	-52.34	27.34	PASS
N7	15	5	DFT-QPSK	H	Outer_Full	-50.74	25.74	PASS
N7	15	5	DFT-QPSK	H	Edge_1RB_Right	-52.13	27.13	PASS
N7	15	5	DFT-16QAM	H	Outer_Full	-51.04	26.04	PASS
N7	15	5	DFT-16QAM	H	Edge_1RB_Right	-52.21	27.21	PASS
N7	15	10	DFT-QPSK	L	Outer_Full	-50.70	25.70	PASS
N7	15	10	DFT-QPSK	L	Edge_1RB_Left	-52.33	27.33	PASS
N7	15	10	DFT-16QAM	L	Outer_Full	-51.12	26.12	PASS
N7	15	10	DFT-16QAM	L	Edge_1RB_Left	-52.36	27.36	PASS
N7	15	10	DFT-QPSK	H	Outer_Full	-49.81	24.81	PASS
N7	15	10	DFT-QPSK	H	Edge_1RB_Right	-52.21	27.21	PASS
N7	15	10	DFT-16QAM	H	Outer_Full	-50.56	25.56	PASS
N7	15	10	DFT-16QAM	H	Edge_1RB_Right	-52.20	27.20	PASS
N7	15	15	DFT-QPSK	L	Outer_Full	-47.97	22.97	PASS
N7	15	15	DFT-QPSK	L	Edge_1RB_Left	-37.13	27.13	PASS
N7	15	15	DFT-16QAM	L	Outer_Full	-49.46	24.46	PASS
N7	15	15	DFT-16QAM	L	Edge_1RB_Left	-52.33	27.33	PASS
N7	15	15	DFT-QPSK	H	Outer_Full	-52.16	27.16	PASS
N7	15	15	DFT-QPSK	H	Edge_1RB_Right	-52.42	27.42	PASS
N7	15	15	DFT-16QAM	H	Outer_Full	-52.26	27.26	PASS
N7	15	15	DFT-16QAM	H	Edge_1RB_Right	-52.38	27.38	PASS
N7	15	20	DFT-QPSK	L	Outer_Full	-45.67	20.67	PASS
N7	15	20	DFT-QPSK	L	Edge_1RB_Left	-37.24	27.14	PASS
N7	15	20	DFT-16QAM	L	Outer_Full	-47.34	22.34	PASS
N7	15	20	DFT-16QAM	L	Edge_1RB_Left	-52.30	27.30	PASS
N7	15	20	DFT-QPSK	H	Outer_Full	-52.38	27.38	PASS
N7	15	20	DFT-QPSK	H	Edge_1RB_Right	-52.38	27.38	PASS
N7	15	20	DFT-16QAM	H	Outer_Full	-52.37	27.37	PASS
N7	15	20	DFT-16QAM	H	Edge_1RB_Right	-52.39	27.39	PASS

Test Graphs

