

Appendix for 5A_N38A

Product Name: 5G Indoor CPE

Model No: TITAN 5000

Appendix A: Average Power Output Data

Test Result

Band	SC S	Bandwidth h	Modulation	Channel	RB Config	Power (dBm)	Power Class	Verdict
DC_5A_n38A	30	5+10	DFT-QPSK	M+L	Outer_Full	21.50	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+L	Inner_Full	22.54	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+L	Edge_1RB_Left	21.54	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+L	Edge_1RB_Right	21.34	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+L	Outer_Full	20.53	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+L	Inner_Full	21.47	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+L	Edge_1RB_Left	20.09	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+L	Edge_1RB_Right	20.39	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+M	Outer_Full	20.90	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+M	Inner_Full	21.84	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+M	Edge_1RB_Left	20.65	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+M	Edge_1RB_Right	20.72	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+M	Outer_Full	19.76	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+M	Inner_Full	20.83	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+M	Edge_1RB_Left	19.70	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+M	Edge_1RB_Right	19.61	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+H	Outer_Full	21.28	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+H	Inner_Full	22.27	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+H	Edge_1RB_Left	21.33	PC3	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+H	Edge_1RB_Right	21.19	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+H	Outer_Full	20.46	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+H	Inner_Full	21.23	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+H	Edge_1RB_Left	20.14	PC3	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+H	Edge_1RB_Right	20.45	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+L	Outer_Full	21.53	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+L	Inner_Full	22.58	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+L	Edge_1RB_Left	21.33	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+L	Edge_1RB_Right	21.16	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+L	Outer_Full	20.55	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+L	Inner_Full	21.60	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+L	Edge_1RB_Left	20.51	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+L	Edge_1RB_Right	20.61	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+M	Outer_Full	21.09	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+M	Inner_Full	22.06	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+M	Edge_1RB_Left	21.06	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+M	Edge_1RB_Right	21.15	PC3	PASS

DC_5A_n38A	30	5+15	DFT-16QAM	M+M	Outer_Full	20.13	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+M	Inner_Full	21.06	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+M	Edge_1RB_Left	20.00	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+M	Edge_1RB_Right	20.34	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+H	Outer_Full	21.40	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+H	Inner_Full	22.42	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+H	Edge_1RB_Left	21.31	PC3	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+H	Edge_1RB_Right	21.12	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+H	Outer_Full	20.36	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+H	Inner_Full	21.36	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+H	Edge_1RB_Left	20.43	PC3	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+H	Edge_1RB_Right	20.01	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+L	Outer_Full	21.46	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+L	Inner_Full	22.35	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+L	Edge_1RB_Left	21.36	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+L	Edge_1RB_Right	21.13	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+L	Outer_Full	20.35	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+L	Inner_Full	21.46	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+L	Edge_1RB_Left	20.47	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+L	Edge_1RB_Right	19.87	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+M	Outer_Full	21.04	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+M	Inner_Full	22.07	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+M	Edge_1RB_Left	20.97	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+M	Edge_1RB_Right	21.24	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+M	Outer_Full	20.09	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+M	Inner_Full	21.15	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+M	Edge_1RB_Left	20.05	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+M	Edge_1RB_Right	20.46	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+H	Outer_Full	21.27	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+H	Inner_Full	22.34	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+H	Edge_1RB_Left	21.21	PC3	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+H	Edge_1RB_Right	21.17	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+H	Outer_Full	20.23	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+H	Inner_Full	21.27	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+H	Edge_1RB_Left	20.29	PC3	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+H	Edge_1RB_Right	20.20	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+L	Outer_Full	21.23	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+L	Inner_Full	22.31	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+L	Edge_1RB_Left	21.23	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+L	Edge_1RB_Right	21.10	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+L	Outer_Full	20.21	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+L	Inner_Full	21.40	PC3	PASS

DC_5A_n38A	30	5+30	DFT-16QAM	M+L	Edge_1RB_Left	20.19	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+L	Edge_1RB_Right	20.02	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+M	Outer_Full	21.23	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+M	Inner_Full	22.04	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+M	Edge_1RB_Left	21.19	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+M	Edge_1RB_Right	21.47	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+M	Outer_Full	20.09	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+M	Inner_Full	21.05	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+M	Edge_1RB_Left	20.17	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+M	Edge_1RB_Right	20.80	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+H	Outer_Full	21.31	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+H	Inner_Full	22.23	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+H	Edge_1RB_Left	21.16	PC3	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+H	Edge_1RB_Right	21.51	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+H	Outer_Full	20.30	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+H	Inner_Full	21.31	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+H	Edge_1RB_Left	20.50	PC3	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+H	Edge_1RB_Right	20.61	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+L	Outer_Full	21.22	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+L	Inner_Full	22.16	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+L	Edge_1RB_Left	21.39	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+L	Edge_1RB_Right	21.58	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+L	Outer_Full	20.32	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+L	Inner_Full	21.19	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+L	Edge_1RB_Left	20.30	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+L	Edge_1RB_Right	20.29	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+M	Outer_Full	21.25	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+M	Inner_Full	22.11	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+M	Edge_1RB_Left	21.02	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+M	Edge_1RB_Right	21.46	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+M	Outer_Full	20.34	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+M	Inner_Full	21.07	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+M	Edge_1RB_Left	20.26	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+M	Edge_1RB_Right	20.32	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+H	Outer_Full	21.34	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+H	Inner_Full	22.24	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+H	Edge_1RB_Left	21.16	PC3	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+H	Edge_1RB_Right	21.40	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+H	Outer_Full	20.24	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+H	Inner_Full	21.06	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+H	Edge_1RB_Left	20.51	PC3	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+H	Edge_1RB_Right	20.29	PC3	PASS

Appendix B: Peak-to-Average Ratio for NSA

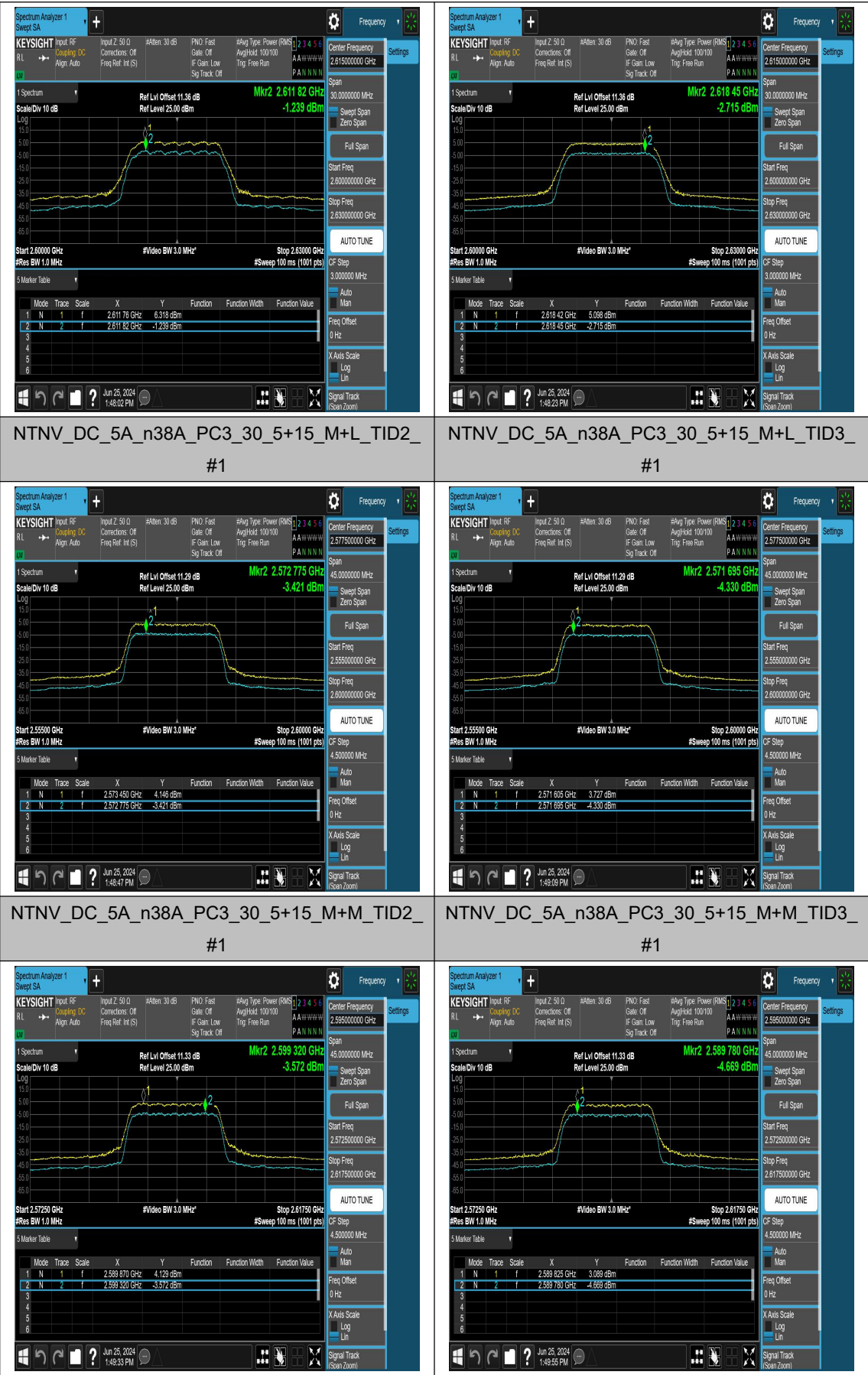
Peak-to-Average Ratio(PAPR)

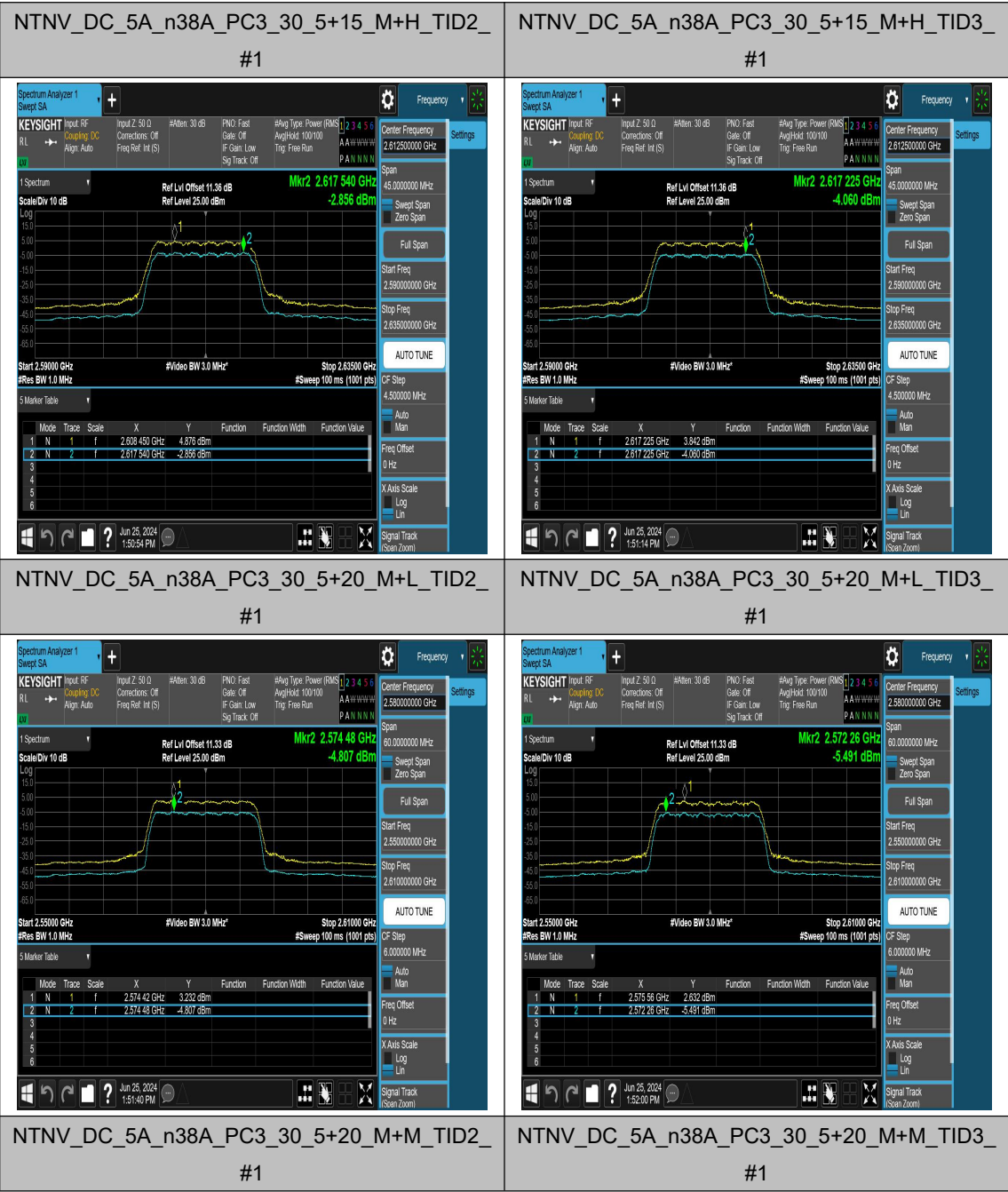
Test Result

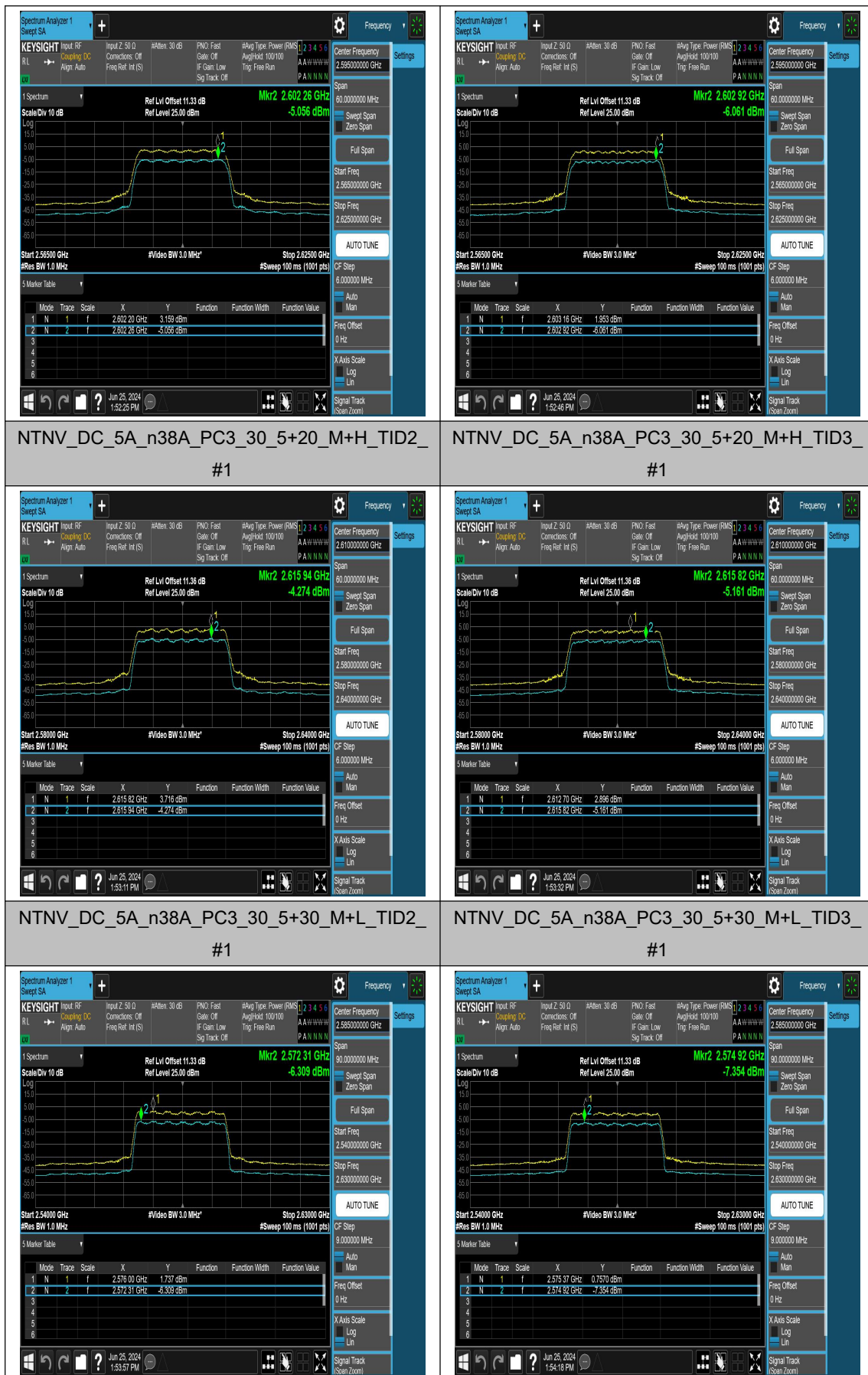
Band	SCS	Bandwidth h	Modulation	Chan nel	RB Config	DutyCy cle	Factor	Result	Limi t	Verdict
DC_5A_n38A	30	5+10	DFT-QPSK	M+L	Outer_Full	100%	0.00	7.21	≤13	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+L	Outer_Full	100%	0.00	7.63	≤13	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+M	Outer_Full	100%	0.00	7.45	≤13	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+M	Outer_Full	100%	0.00	7.88	≤13	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.56	≤13	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+H	Outer_Full	100%	0.00	7.82	≤13	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+L	Outer_Full	100%	0.00	7.57	≤13	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+L	Outer_Full	100%	0.00	8.06	≤13	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+M	Outer_Full	100%	0.00	7.70	≤13	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+M	Outer_Full	100%	0.00	7.76	≤13	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.74	≤13	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+H	Outer_Full	100%	0.00	7.90	≤13	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+L	Outer_Full	100%	0.00	8.04	≤13	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+L	Outer_Full	100%	0.00	8.12	≤13	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+M	Outer_Full	100%	0.00	8.22	≤13	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+M	Outer_Full	100%	0.00	8.01	≤13	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.99	≤13	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+H	Outer_Full	100%	0.00	8.06	≤13	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+L	Outer_Full	100%	0.00	8.05	≤13	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+L	Outer_Full	100%	0.00	8.11	≤13	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+M	Outer_Full	100%	0.00	8.17	≤13	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+M	Outer_Full	100%	0.00	8.03	≤13	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.87	≤13	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+H	Outer_Full	100%	0.00	8.10	≤13	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+L	Outer_Full	100%	0.00	7.99	≤13	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+L	Outer_Full	100%	0.00	8.03	≤13	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+M	Outer_Full	100%	0.00	8.12	≤13	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+M	Outer_Full	100%	0.00	8.36	≤13	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+H	Outer_Full	100%	0.00	7.91	≤13	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+H	Outer_Full	100%	0.00	8.31	≤13	PASS

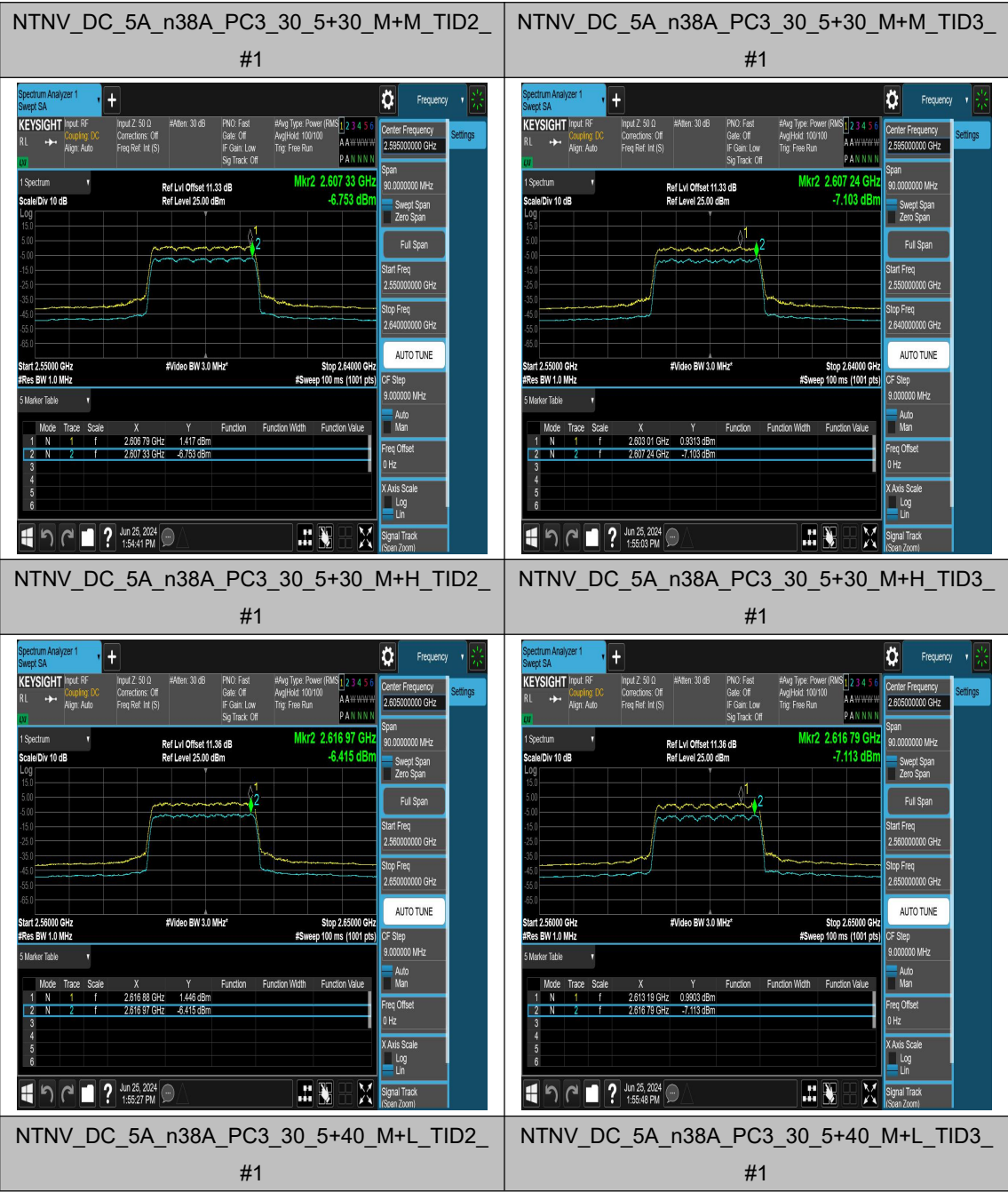
Test Graphs

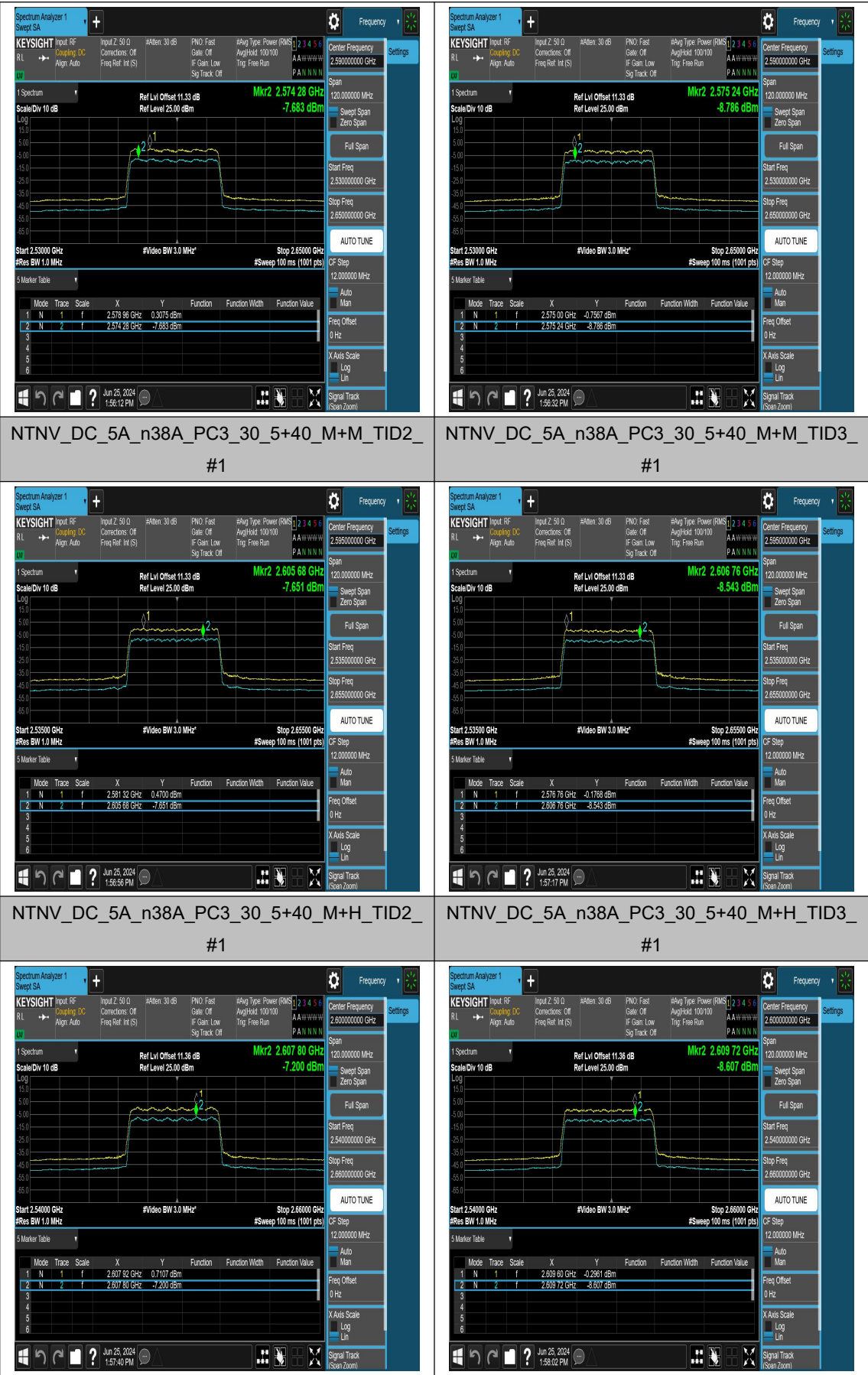












Appendix C: 26dB Bandwidth and Occupied Bandwidth for NSA

Test Result

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
DC_5A_n38A	30	5+10	DFT-QPSK	M+L	Outer_Full	8.6104	9.651	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+L	Outer_Full	8.6034	9.803	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+M	Outer_Full	8.5954	9.737	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+M	Outer_Full	8.6055	9.737	PASS
DC_5A_n38A	30	5+10	DFT-QPSK	M+H	Outer_Full	8.5867	9.785	PASS
DC_5A_n38A	30	5+10	DFT-16QAM	M+H	Outer_Full	8.6061	9.863	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+L	Outer_Full	12.883	14.15	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+L	Outer_Full	12.884	14.13	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+M	Outer_Full	12.894	14.22	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+M	Outer_Full	12.906	14.30	PASS
DC_5A_n38A	30	5+15	DFT-QPSK	M+H	Outer_Full	12.889	14.22	PASS
DC_5A_n38A	30	5+15	DFT-16QAM	M+H	Outer_Full	12.875	14.10	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+L	Outer_Full	17.873	19.15	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+L	Outer_Full	17.884	19.45	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+M	Outer_Full	17.877	19.48	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+M	Outer_Full	17.864	19.26	PASS
DC_5A_n38A	30	5+20	DFT-QPSK	M+H	Outer_Full	17.880	19.48	PASS
DC_5A_n38A	30	5+20	DFT-16QAM	M+H	Outer_Full	17.859	19.27	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+L	Outer_Full	26.829	28.64	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+L	Outer_Full	26.841	28.72	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+M	Outer_Full	26.817	28.64	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+M	Outer_Full	26.837	28.61	PASS
DC_5A_n38A	30	5+30	DFT-QPSK	M+H	Outer_Full	26.801	28.43	PASS
DC_5A_n38A	30	5+30	DFT-16QAM	M+H	Outer_Full	26.819	28.60	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+L	Outer_Full	35.783	37.86	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+L	Outer_Full	35.682	37.85	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+M	Outer_Full	35.713	37.87	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+M	Outer_Full	35.769	37.78	PASS
DC_5A_n38A	30	5+40	DFT-QPSK	M+H	Outer_Full	35.729	37.69	PASS
DC_5A_n38A	30	5+40	DFT-16QAM	M+H	Outer_Full	35.720	37.85	PASS