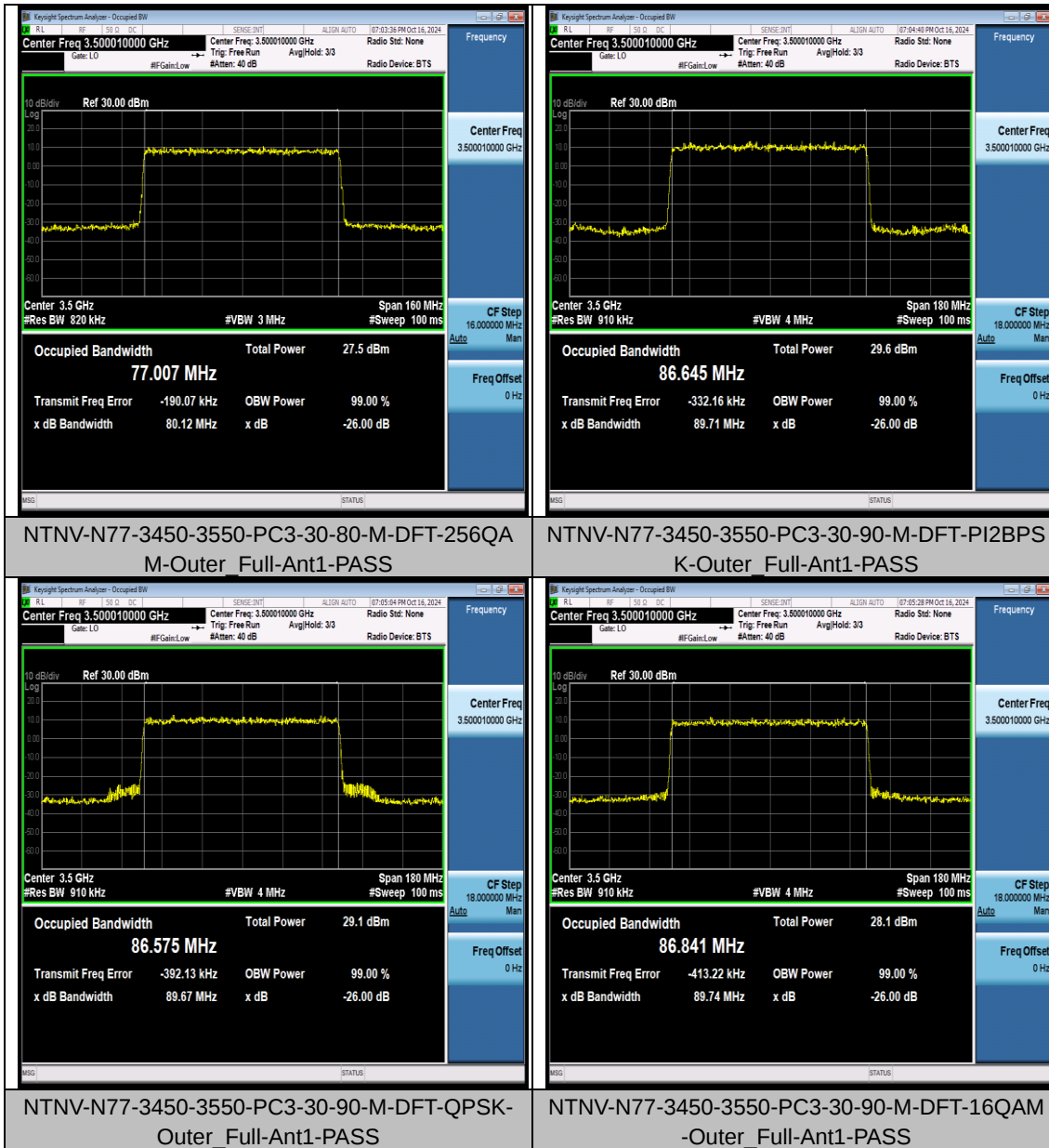




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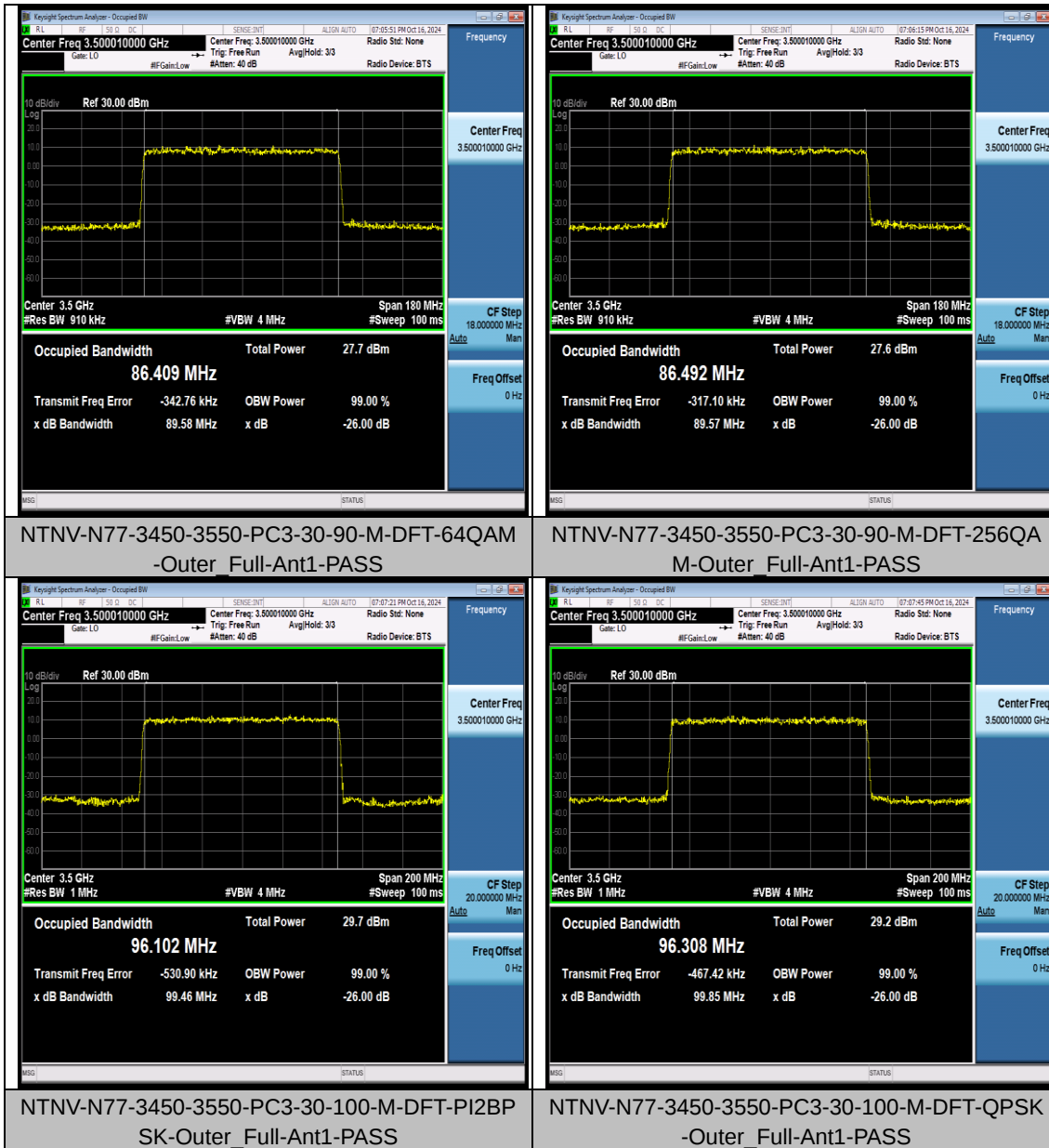
Reference No.: W7L-P24090006RF01





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VERITAS

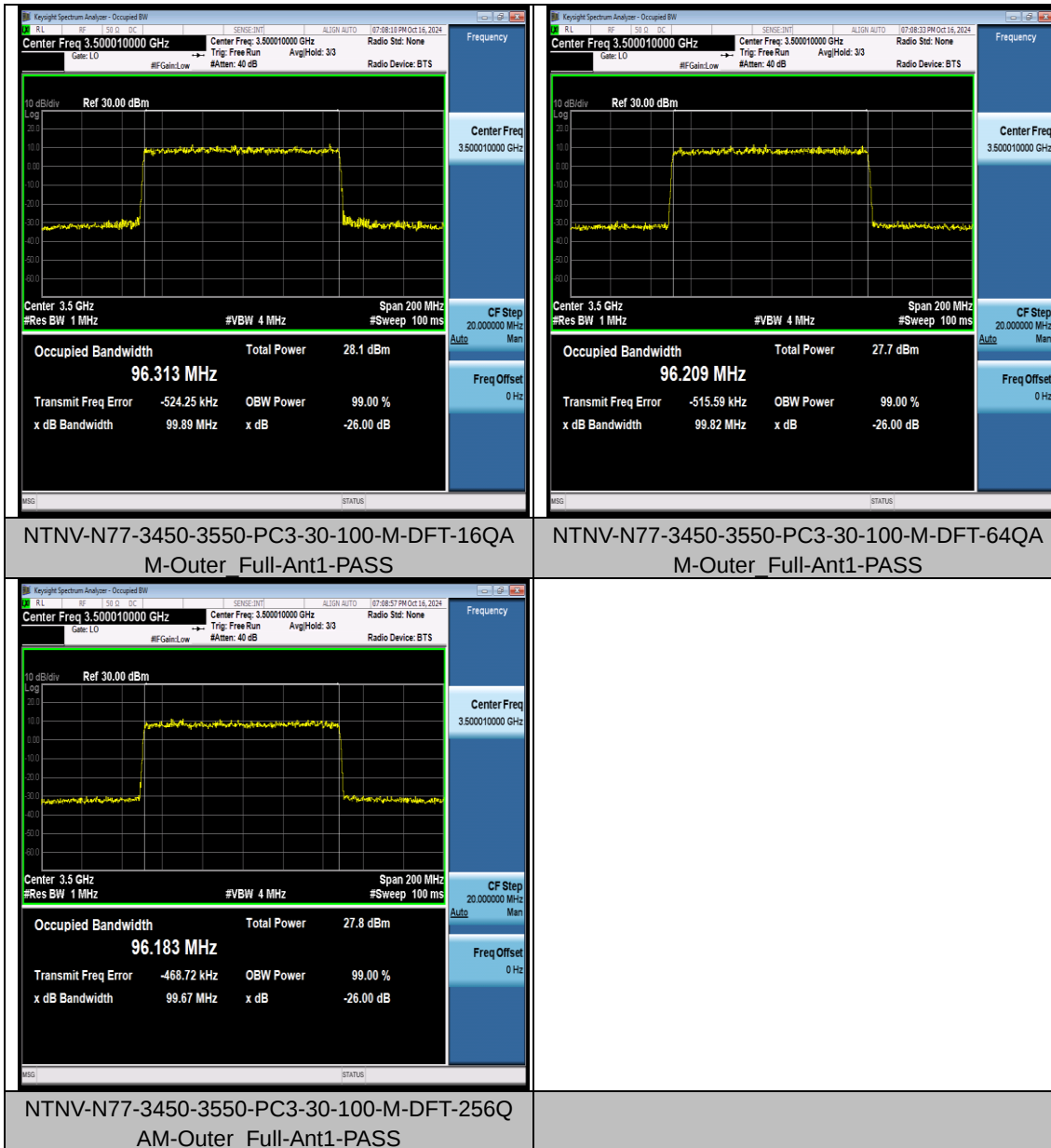
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VERITAS

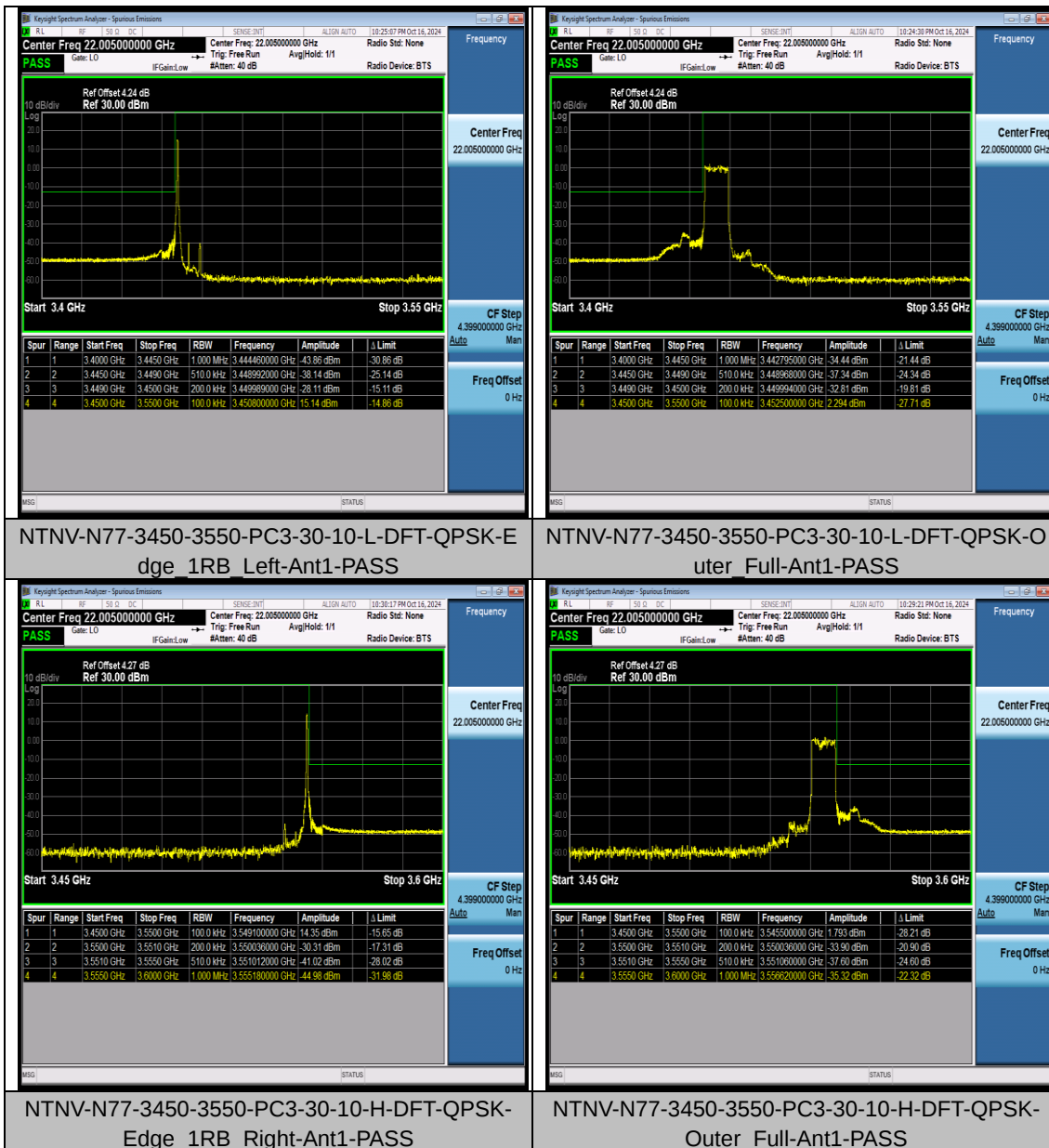
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BAND EDGE FOR SA TEST RESULT

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Verdict
N77-3450-3550	30	10	DFT-QPSK	L	Edge_1RB_Left	-28.11	PASS
N77-3450-3550	30	10	DFT-QPSK	L	Outer_Full	-32.81	PASS
N77-3450-3550	30	10	DFT-QPSK	H	Edge_1RB_Right	-30.31	PASS
N77-3450-3550	30	10	DFT-QPSK	H	Outer_Full	-33.90	PASS
N77-3450-3550	30	60	DFT-QPSK	L	Edge_1RB_Left	-31.35	PASS
N77-3450-3550	30	60	DFT-QPSK	L	Outer_Full	-40.86	PASS
N77-3450-3550	30	60	DFT-QPSK	H	Edge_1RB_Right	-33.38	PASS
N77-3450-3550	30	60	DFT-QPSK	H	Outer_Full	-40.38	PASS
N77-3450-3550	30	100	DFT-QPSK	M	Edge_1RB_Left	-29.48	PASS
N77-3450-3550	30	100	DFT-QPSK	M	Edge_1RB_Right	-33.27	PASS
N77-3450-3550	30	100	DFT-QPSK	M	Outer_Full	-41.76	PASS

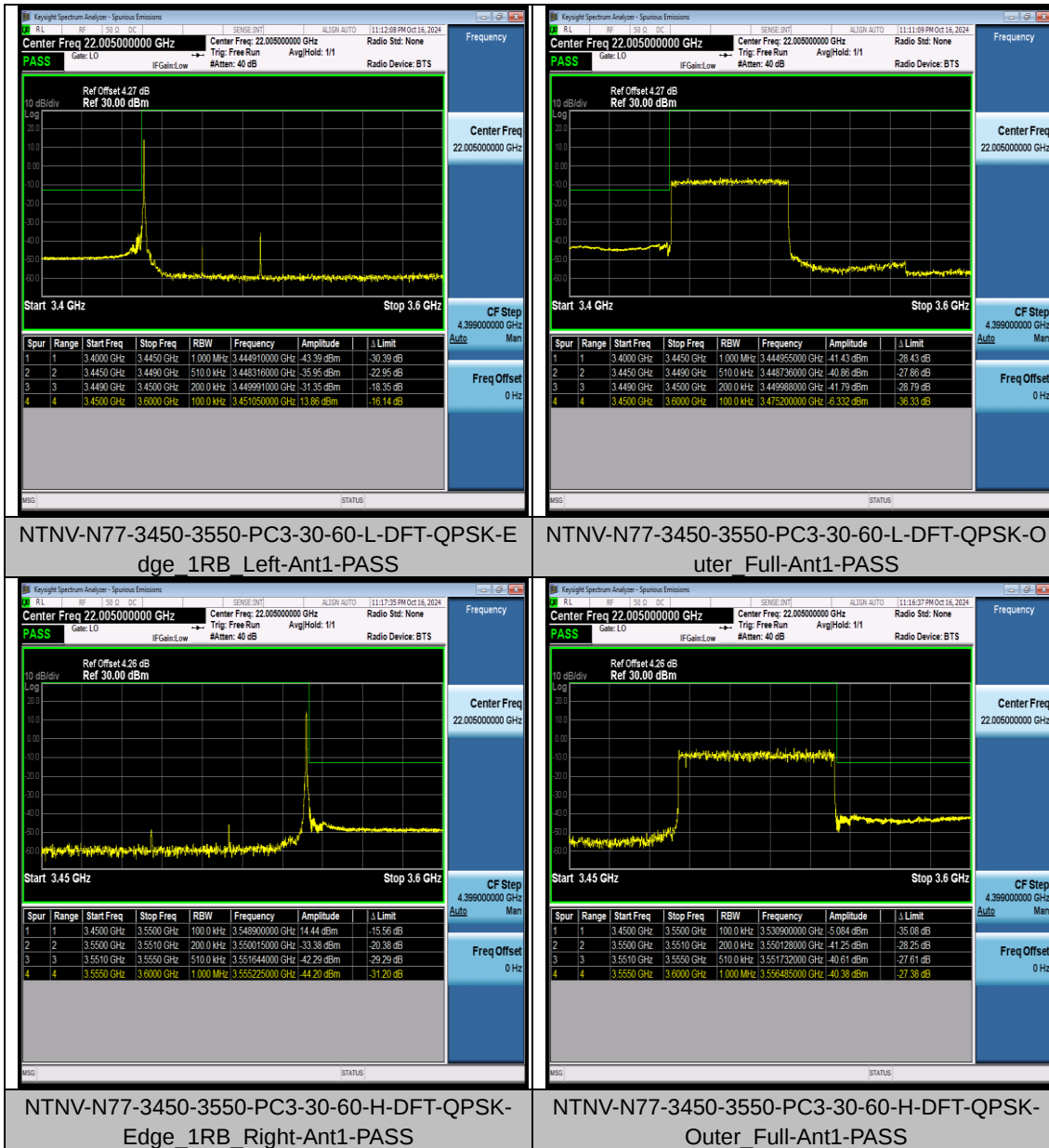
TEST GRAPHS





BUREAU
VERITAS

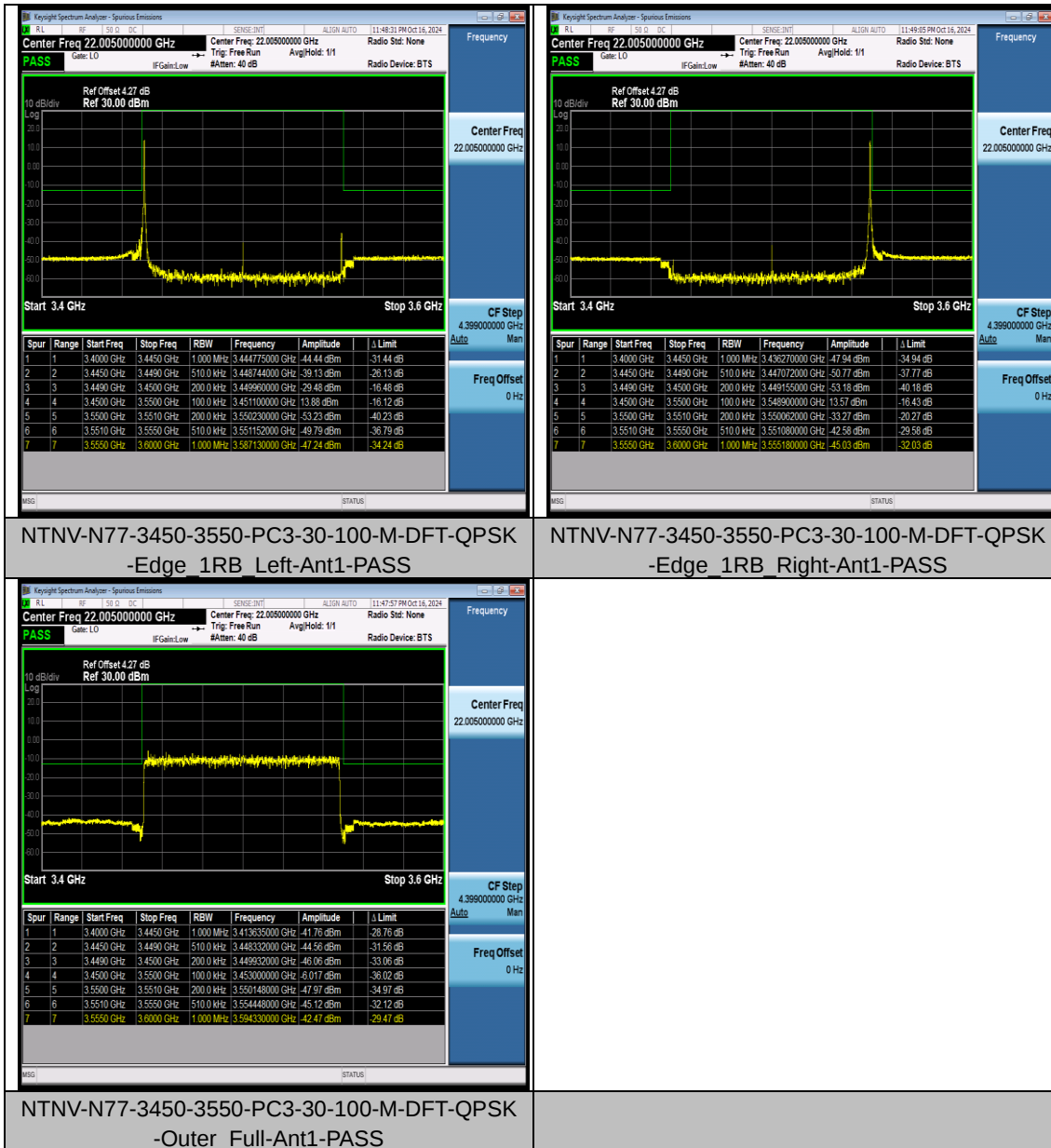
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BUREAU
VERITAS

Reference No.: W7L-P24090006RF01





Reference No.: W7L-P24090006RF01

CONDUCTED SPURIOUS EMISSION FOR SA TEST RESULT

Band	SCS	Bandwidth	Modulation	Channel	RB Config	StartFreq	StopFreq	Result	Limit	Verdict
N77-3 450-35 50	30	10	DFT-QPSK	L	Edge_1RB_Left	30	1000	-48.38	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	L	Edge_1RB_Left	1000	10000	-38.03	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	L	Edge_1RB_Left	10000	20000	-56.94	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	L	Edge_1RB_Left	20000	40000	-45.68	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	M	Edge_1RB_Left	30	1000	-47.85	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	M	Edge_1RB_Left	1000	10000	-37.67	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	M	Edge_1RB_Left	10000	20000	-56.80	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	M	Edge_1RB_Left	20000	40000	-45.94	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	H	Edge_1RB_Left	30	1000	-48.24	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	H	Edge_1RB_Left	1000	10000	-31.10	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	H	Edge_1RB_Left	10000	20000	-56.88	-13	PASS
N77-3 450-35 50	30	10	DFT-QPSK	H	Edge_1RB_Left	20000	40000	-45.58	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	L	Edge_1RB_Left	30	1000	-47.51	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	L	Edge_1RB_Left	1000	10000	-37.93	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	L	Edge_1RB_Left	10000	20000	-56.88	-13	PASS

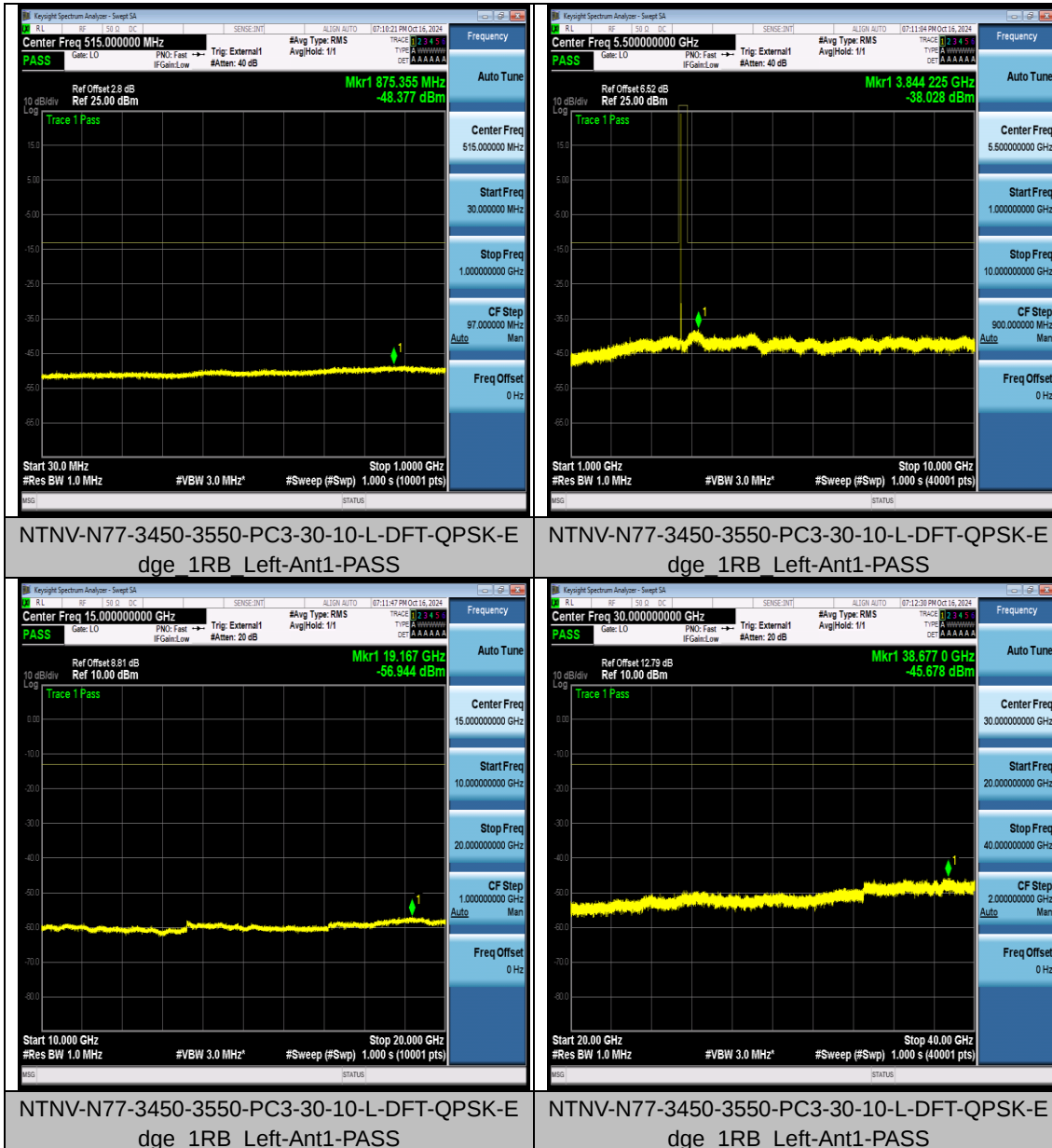


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VERITAS**

Reference No.: W7L-P24090006RF01

N77-3 450-35 50	30	60	DFT-QPSK	L	Edge_1RB_Left	20000	40000	-45.63	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	M	Edge_1RB_Left	30	1000	-47.75	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	M	Edge_1RB_Left	1000	10000	-37.82	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	M	Edge_1RB_Left	10000	20000	-56.82	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	M	Edge_1RB_Left	20000	40000	-45.77	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	H	Edge_1RB_Left	30	1000	-47.69	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	H	Edge_1RB_Left	1000	10000	-38.03	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	H	Edge_1RB_Left	10000	20000	-56.75	-13	PASS
N77-3 450-35 50	30	60	DFT-QPSK	H	Edge_1RB_Left	20000	40000	-45.52	-13	PASS
N77-3 450-35 50	30	100	DFT-QPSK	M	Edge_1RB_Left	30	1000	-47.82	-13	PASS
N77-3 450-35 50	30	100	DFT-QPSK	M	Edge_1RB_Left	1000	10000	-38.26	-13	PASS
N77-3 450-35 50	30	100	DFT-QPSK	M	Edge_1RB_Left	10000	20000	-56.82	-13	PASS
N77-3 450-35 50	30	100	DFT-QPSK	M	Edge_1RB_Left	20000	40000	-45.67	-13	PASS

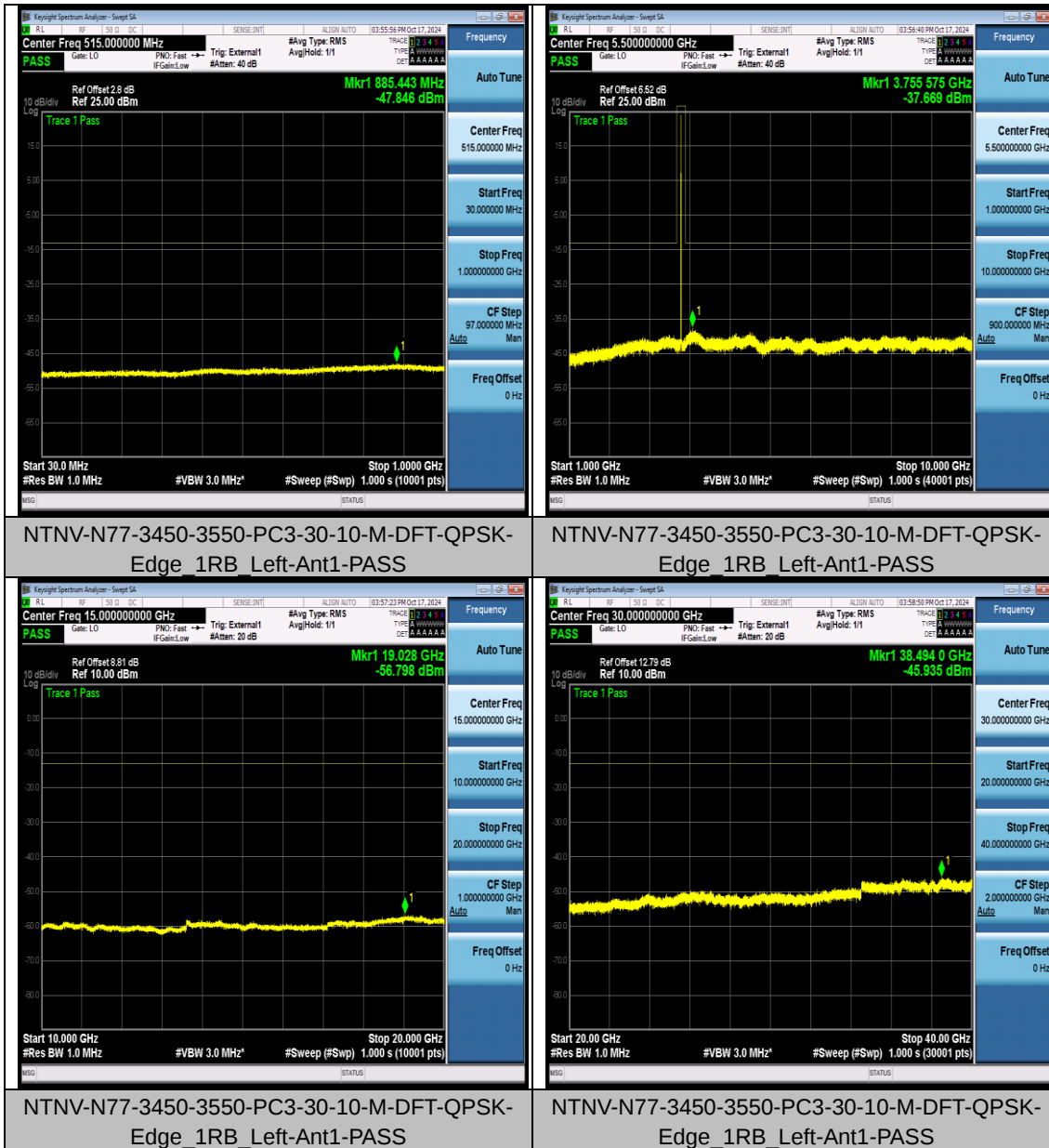
TEST GRAPHS





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VERITAS

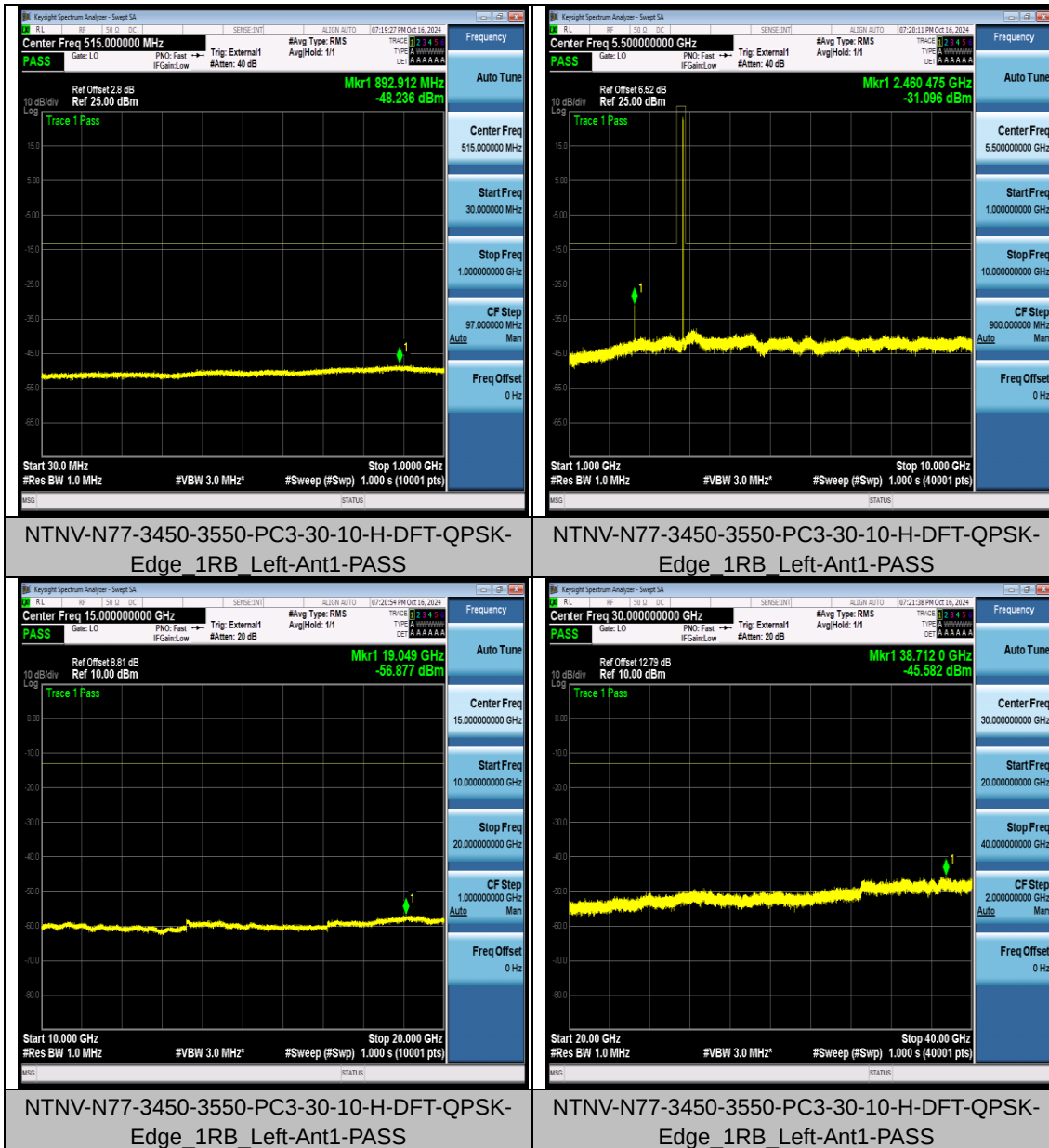
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VERITAS

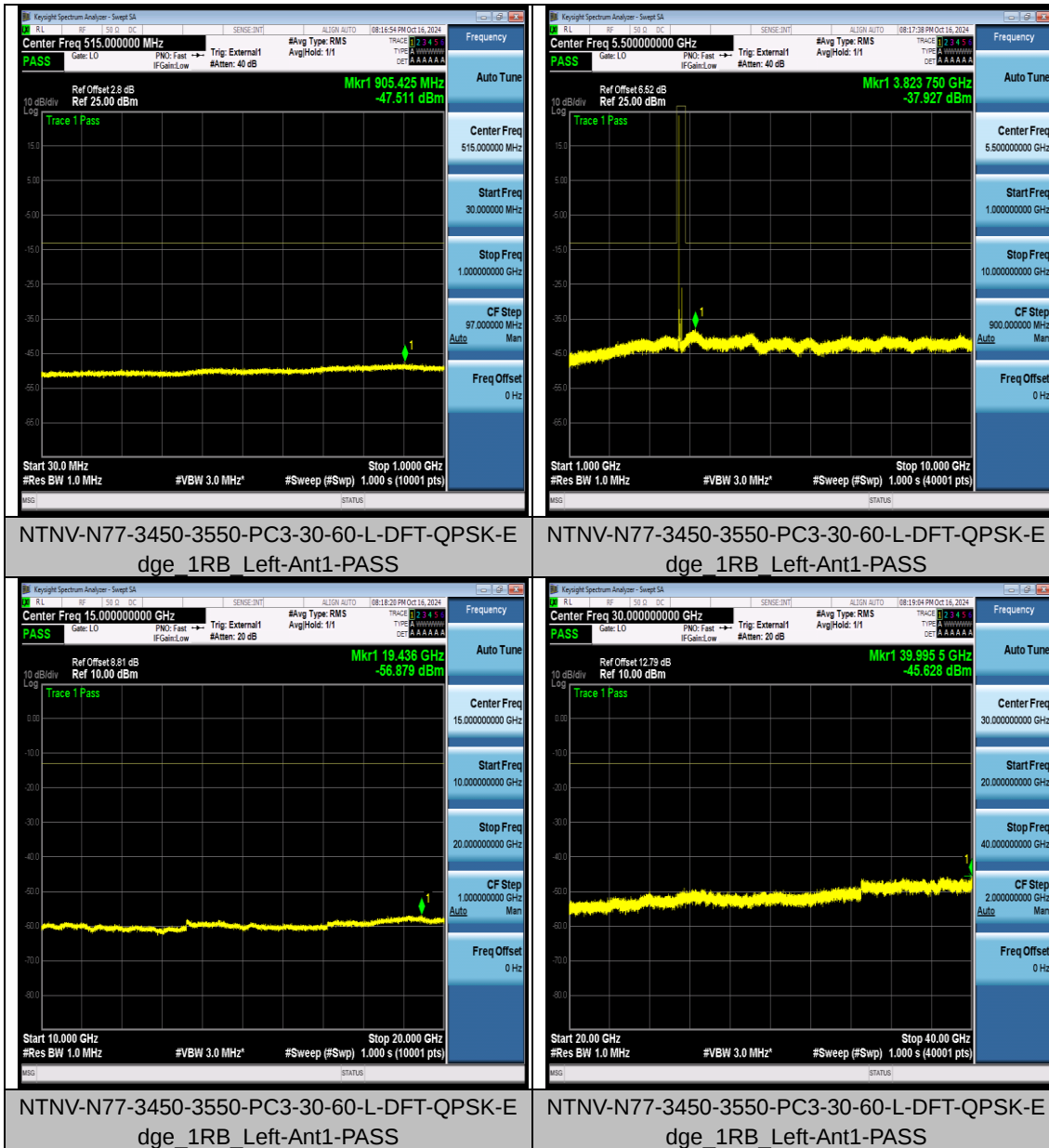
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VERITAS

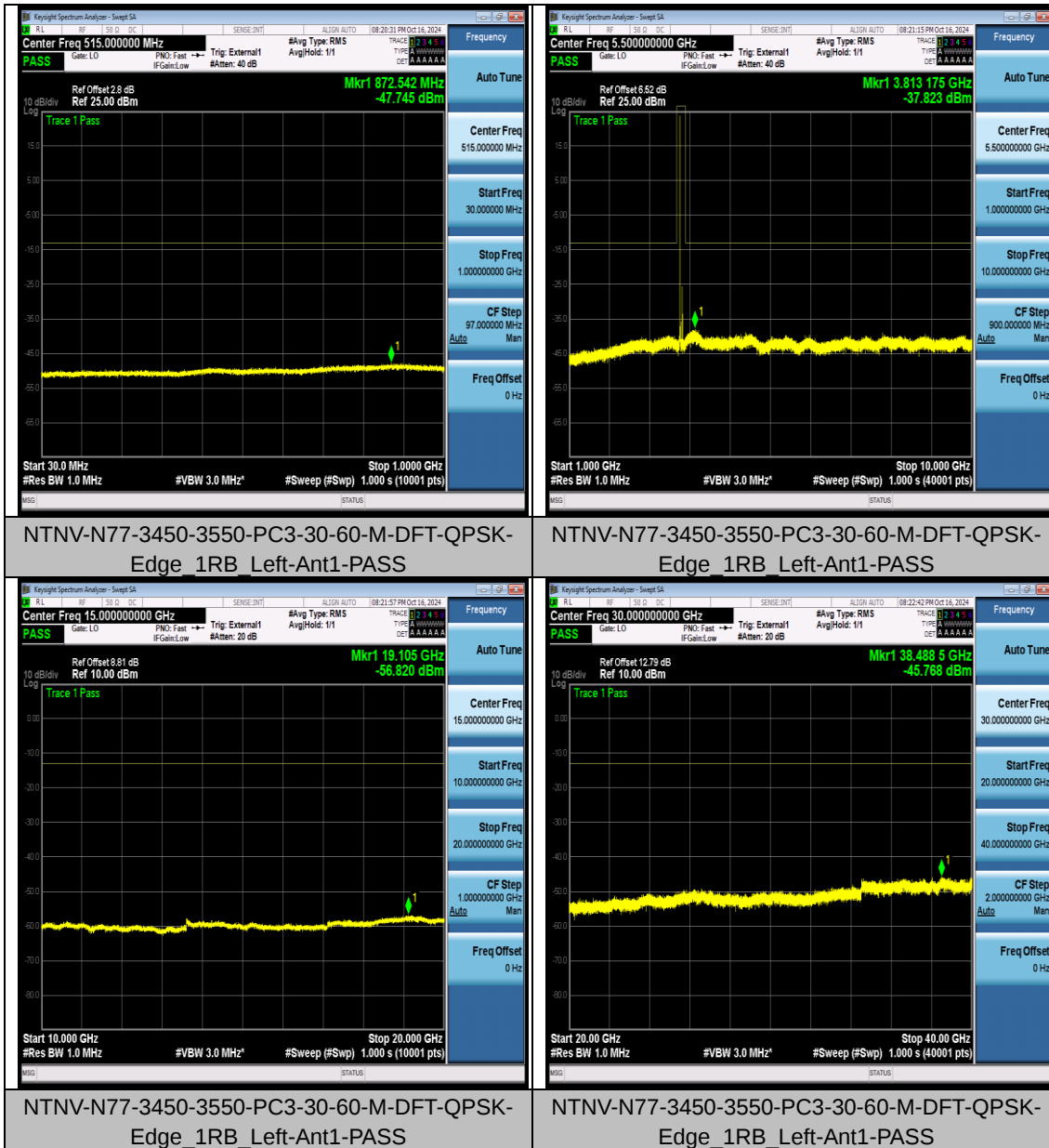
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VERITAS

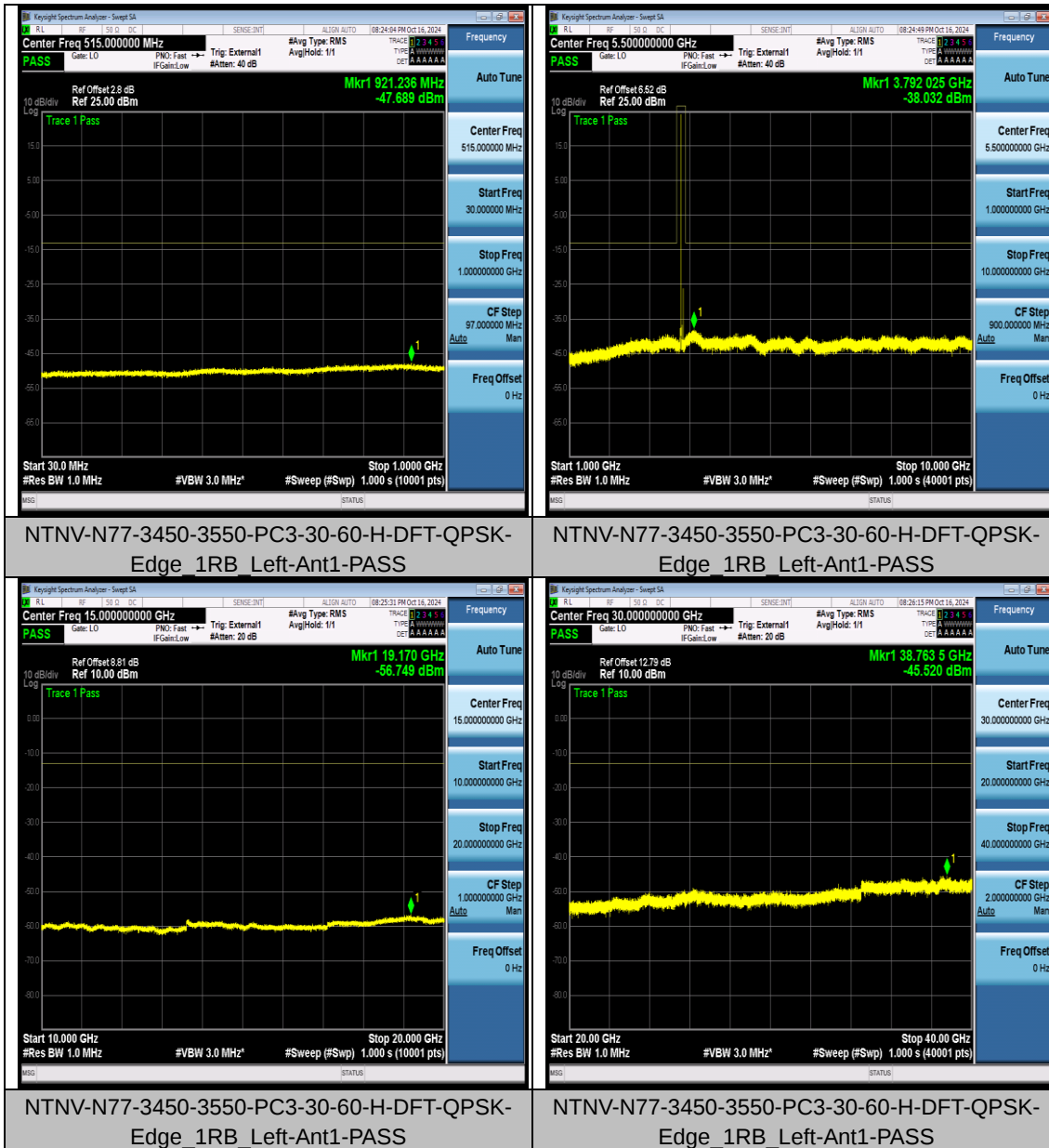
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VERITAS

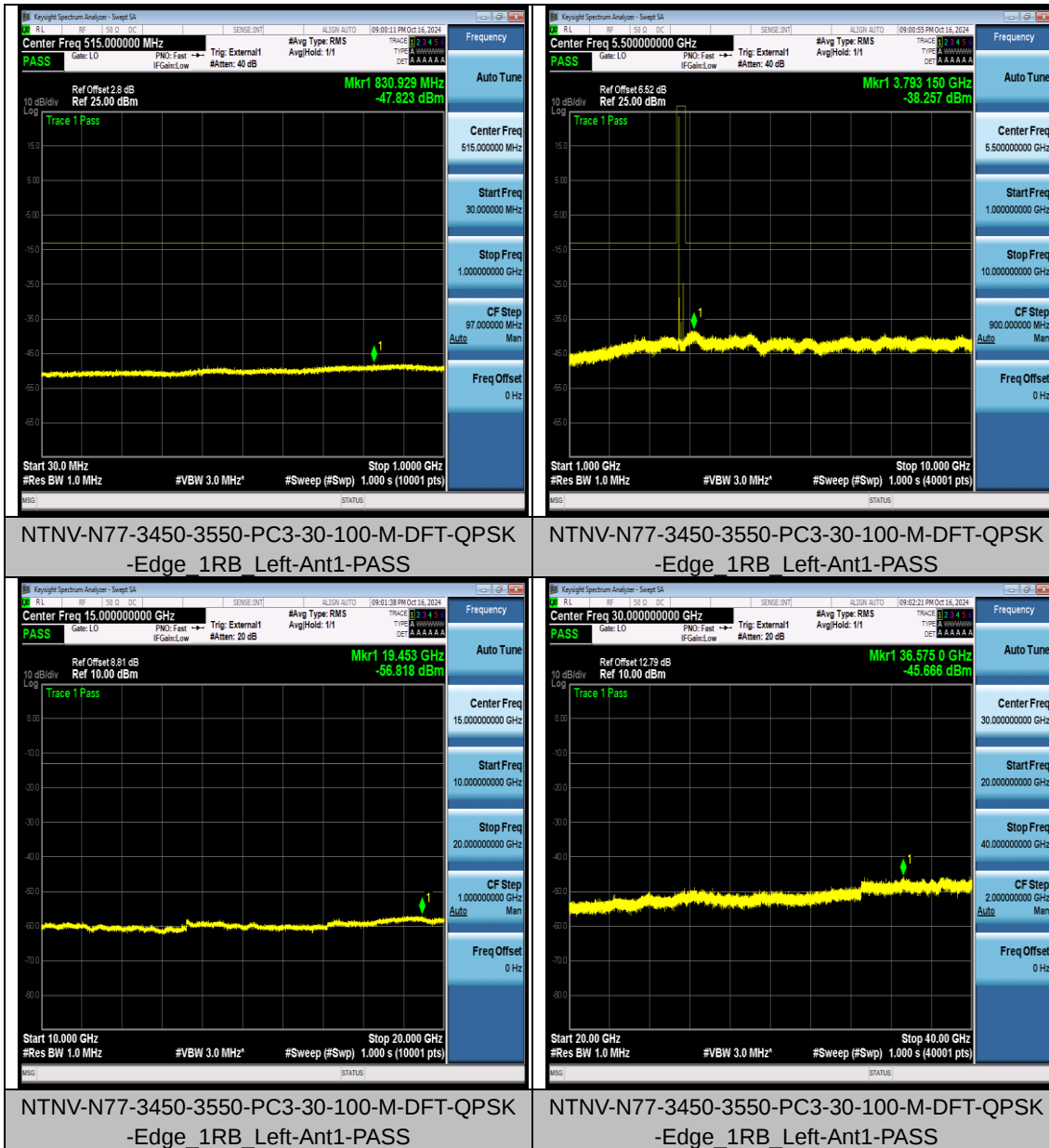
Reference No.: W7L-P24090006RF01





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VERITAS

Reference No.: W7L-P24090006RF01



FREQUENCY STABILITY FOR SA TEST RESULT

Frequency Error VS. Voltage

Voltage										
Band	SC S	Bandwid th	Modulatio n	Chann el	RB Config	Voltag e	Temperatu re	Deviation(H z)	Deviation (ppm)	Verdict
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	VL	NT	-10.522000	-0.00304 1	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	VN	NT	-8.631000	-0.00249 5	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	VH	NT	-5.064000	-0.00146 4	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	-30	-4.995000	-0.00144 4	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	-20	-1.410000	-0.00040 8	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	-10	-12.196000	-0.00352 5	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	0	-6.260000	-0.00180 9	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	10	-8.884000	-0.00256 8	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	20	-12.766000	-0.00369 0	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	30	-9.709000	-0.00280 6	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	40	-6.973000	-0.00201 4	PASS
N77-3450-35 50	30	20	DFT-QPS K	L	Outer_F ull	NV	50	-9.666000	-0.00279 4	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	VL	NT	-2.396000	-0.00068 5	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	VN	NT	-5.256000	-0.00150 2	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	VH	NT	-6.115000	-0.00174 7	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	-30	-4.616000	-0.00131 9	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	-20	-10.428000	-0.00297 9	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	-10	-6.959000	-0.00198 8	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	0	-5.893000	-0.00168 4	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	10	-6.872000	-0.00196 3	PASS



**BUREAU
VERITAS**

Reference No.: W7L-P24090006RF01

N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	20	-3.028000	-0.00086 5	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	30	-6.796000	-0.00194 2	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	40	-10.438000	-0.00298 2	PASS
N77-3450-35 50	30	20	DFT-QPS K	M	Outer_F ull	NV	50	-5.052000	-0.00144 3	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	VL	NT	-2.961000	-0.00083 6	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	VN	NT	-7.704000	-0.00217 6	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	VH	NT	-4.346000	-0.00122 8	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	-30	-6.773000	-0.00191 3	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	-20	-4.088000	-0.00115 5	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	-10	-0.980000	-0.00027 7	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	0	-6.532000	-0.00184 5	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	10	-3.042000	-0.00085 9	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	20	-4.408000	-0.00124 5	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	30	-9.960000	-0.00281 4	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	40	-7.935000	-0.00224 2	PASS
N77-3450-35 50	30	20	DFT-QPS K	H	Outer_F ull	NV	50	-7.959000	-0.00224 8	PASS

SA N77 3450-3550-MIMO

PEAK-TO-AVERAGE RATIO FOR MIMO PEAK-TO-AVERAGE RATIO(CCDF)

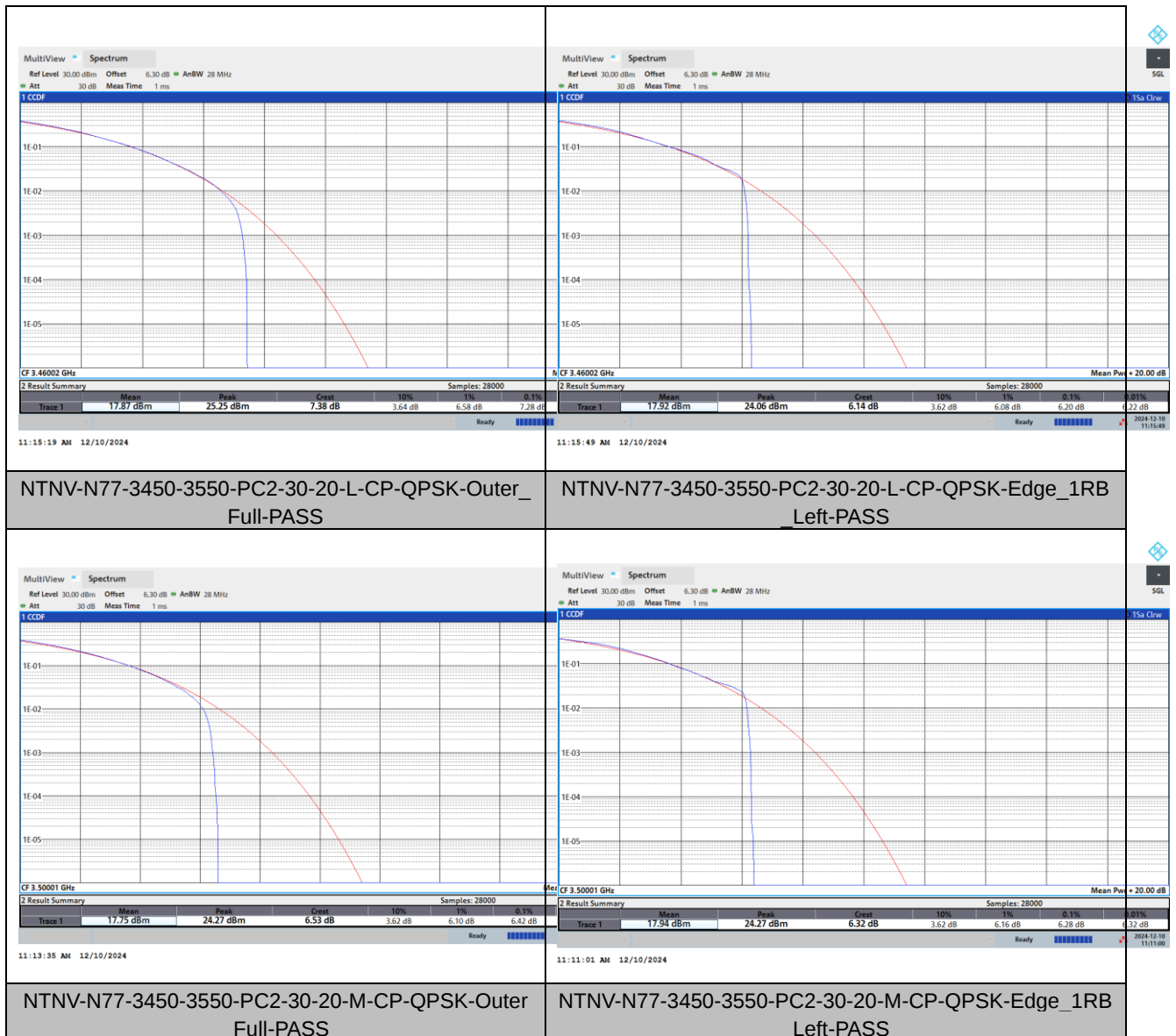
TEST RESULT-ANT A2

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
N77-3450-3550	30	20	CP-QPSK	L	Outer_Full	7.28	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	L	Edge_1RB_Left	6.20	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	M	Outer_Full	6.42	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	M	Edge_1RB_Left	6.28	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	H	Outer_Full	6.64	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	H	Edge_1RB_Left	6.02	≤13	PASS

TEST RESULT-ANT A4

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
N77-3450-3550	30	20	CP-QPSK	L	Outer_Full	6.86	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	L	Edge_1RB_Left	6.86	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	M	Outer_Full	6.90	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	M	Edge_1RB_Left	6.96	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	H	Outer_Full	5.72	≤13	PASS
N77-3450-3550	30	20	CP-QPSK	H	Edge_1RB_Left	5.56	≤13	PASS

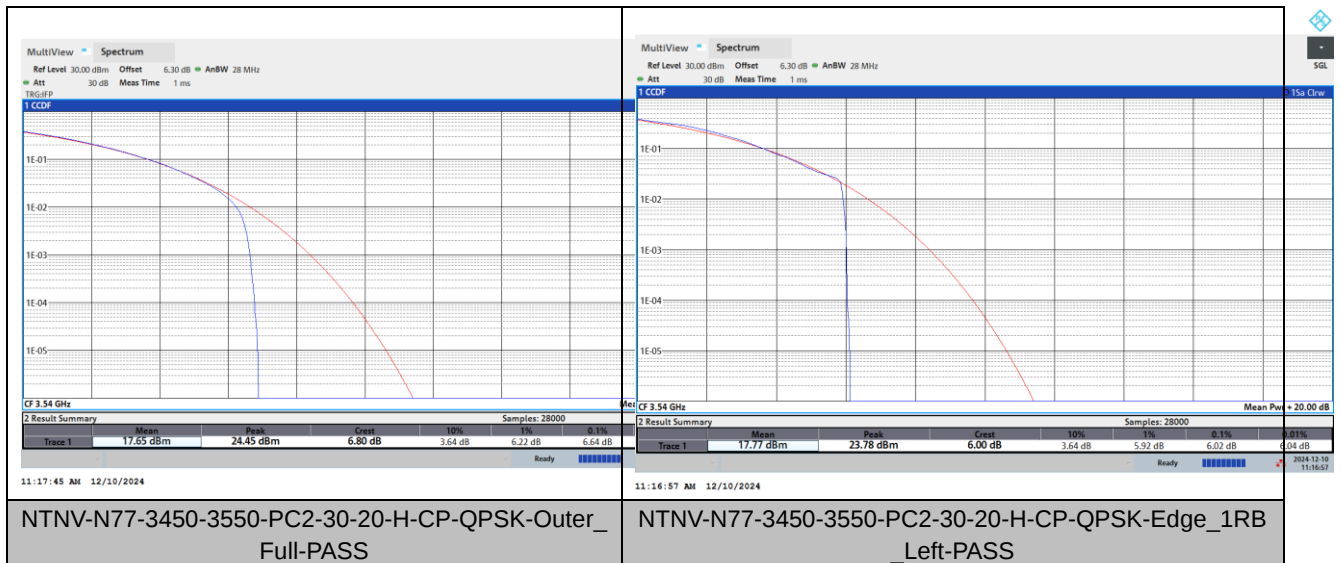
TEST GRAPHS-ANT A2



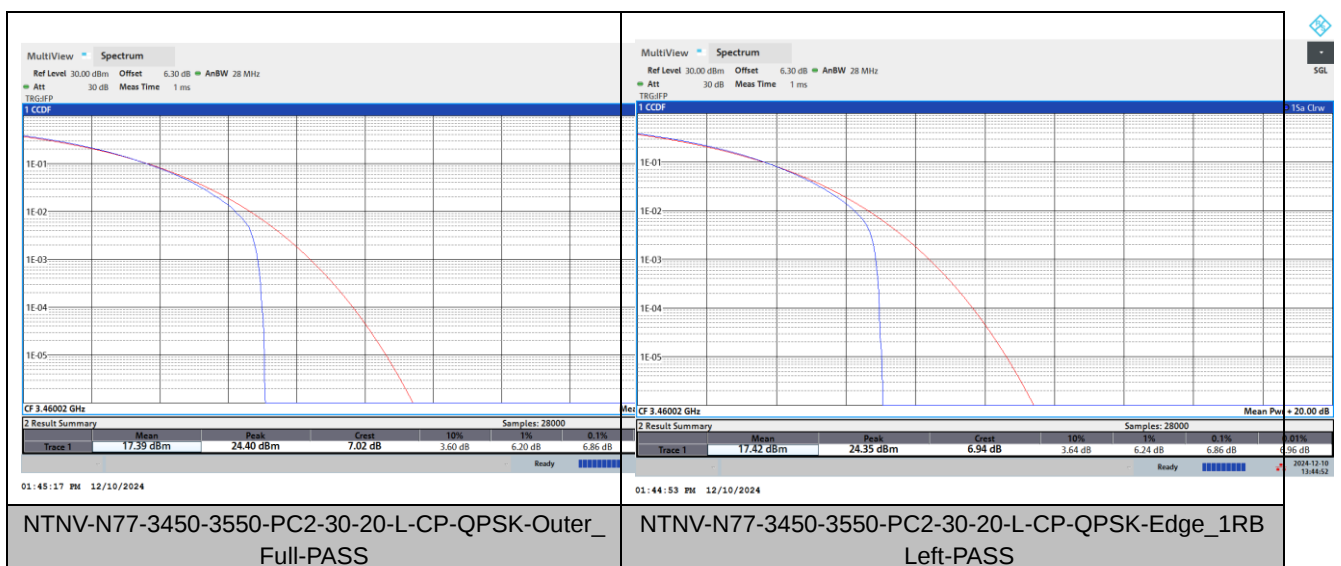


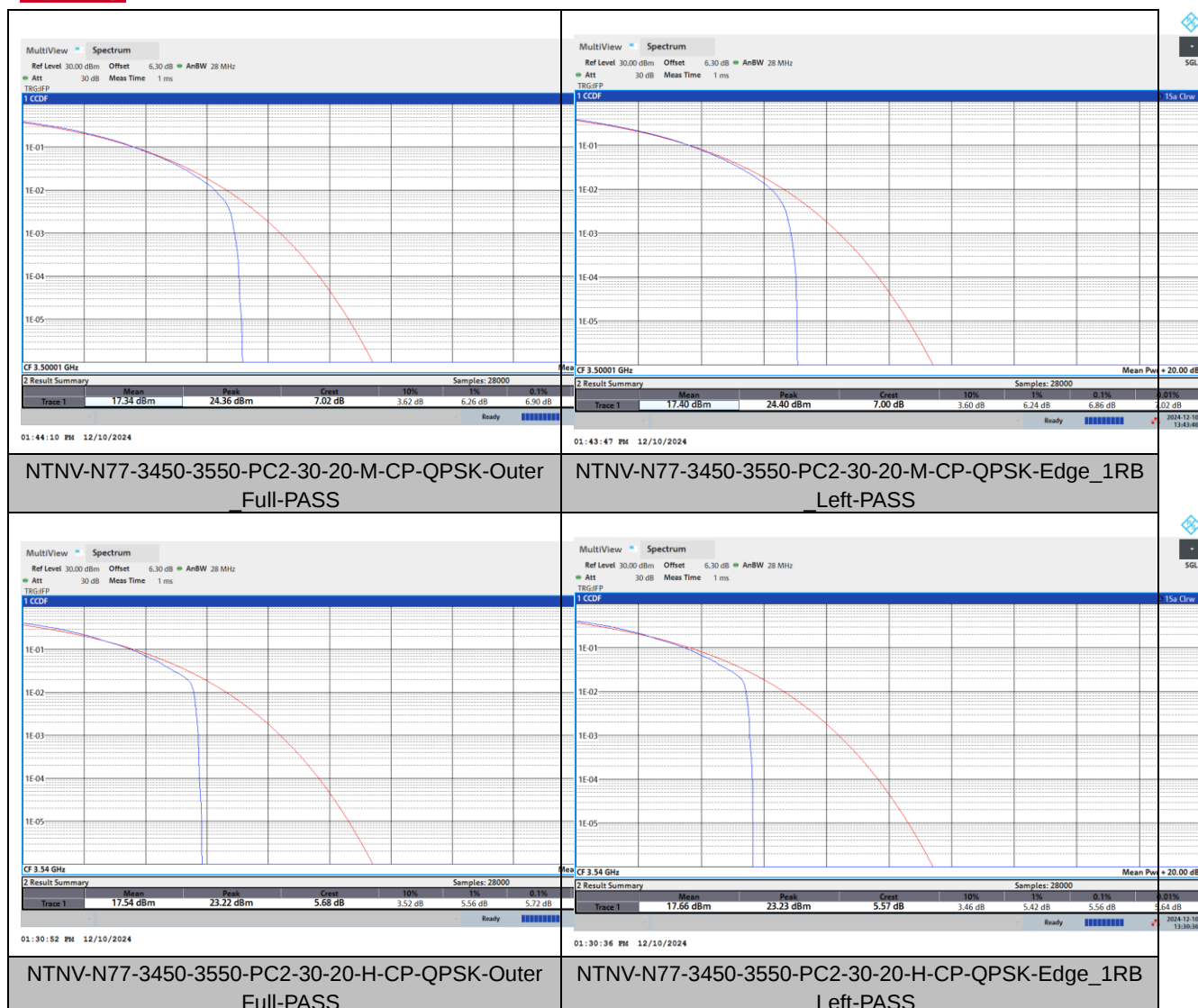
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VERITAS

Reference No.: W7L-P24090006RF01



TEST GRAPHS-ANT A4







Reference No.: W7L-P24090006RF01

26DB BANDWIDTH AND OCCUPIED BANDWIDTH FOR MIMO TEST RESULT-ANT A2

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
N77-3450 -3550	30	10	CP-QPSK	M	Outer_Full	8.6058	9.987	PASS
N77-3450 -3550	30	10	CP-16QAM	M	Outer_Full	8.5947	9.709	PASS
N77-3450 -3550	30	10	CP-64QAM	M	Outer_Full	8.6170	9.806	PASS
N77-3450 -3550	30	10	CP-256QAM	M	Outer_Full	8.5895	9.714	PASS
N77-3450 -3550	30	15	CP-QPSK	M	Outer_Full	13.548	14.80	PASS
N77-3450 -3550	30	15	CP-16QAM	M	Outer_Full	13.562	14.83	PASS
N77-3450 -3550	30	15	CP-64QAM	M	Outer_Full	13.548	14.84	PASS
N77-3450 -3550	30	15	CP-256QAM	M	Outer_Full	13.577	14.49	PASS
N77-3450 -3550	30	20	CP-QPSK	M	Outer_Full	18.182	19.57	PASS
N77-3450 -3550	30	20	CP-16QAM	M	Outer_Full	18.233	19.49	PASS
N77-3450 -3550	30	20	CP-64QAM	M	Outer_Full	18.173	19.44	PASS
N77-3450 -3550	30	20	CP-256QAM	M	Outer_Full	18.180	19.39	PASS
N77-3450 -3550	30	30	CP-QPSK	M	Outer_Full	27.826	29.74	PASS
N77-3450 -3550	30	30	CP-16QAM	M	Outer_Full	27.808	29.71	PASS
N77-3450 -3550	30	30	CP-64QAM	M	Outer_Full	27.834	29.72	PASS
N77-3450 -3550	30	30	CP-256QAM	M	Outer_Full	27.776	29.51	PASS
N77-3450 -3550	30	40	CP-QPSK	M	Outer_Full	37.704	39.73	PASS
N77-3450 -3550	30	40	CP-16QAM	M	Outer_Full	37.757	39.75	PASS
N77-3450 -3550	30	40	CP-64QAM	M	Outer_Full	37.822	39.82	PASS
N77-3450 -3550	30	40	CP-256QAM	M	Outer_Full	37.779	39.55	PASS
N77-3450 -3550	30	50	CP-QPSK	M	Outer_Full	47.379	49.81	PASS
N77-3450 -3550	30	50	CP-16QAM	M	Outer_Full	47.470	49.70	PASS
N77-3450	30	50	CP-64QAM	M	Outer_Full	47.412	49.50	PASS



**BUREAU
VERITAS**

Reference No.: W7L-P24090006RF01

-3550								
N77-3450 -3550	30	50	CP-256QAM	M	Outer_Full	47.404	49.68	PASS
N77-3450 -3550	30	60	CP-QPSK	M	Outer_Full	57.755	60.34	PASS
N77-3450 -3550	30	60	CP-16QAM	M	Outer_Full	57.707	60.21	PASS
N77-3450 -3550	30	60	CP-64QAM	M	Outer_Full	57.693	60.26	PASS
N77-3450 -3550	30	60	CP-256QAM	M	Outer_Full	57.723	60.30	PASS
N77-3450 -3550	30	70	CP-QPSK	M	Outer_Full	67.414	70.06	PASS
N77-3450 -3550	30	70	CP-16QAM	M	Outer_Full	67.503	70.10	PASS
N77-3450 -3550	30	70	CP-64QAM	M	Outer_Full	67.397	70.18	PASS
N77-3450 -3550	30	70	CP-256QAM	M	Outer_Full	67.447	70.18	PASS
N77-3450 -3550	30	80	CP-QPSK	M	Outer_Full	77.251	80.41	PASS
N77-3450 -3550	30	80	CP-16QAM	M	Outer_Full	77.240	80.38	PASS
N77-3450 -3550	30	80	CP-64QAM	M	Outer_Full	77.215	80.31	PASS
N77-3450 -3550	30	80	CP-256QAM	M	Outer_Full	77.175	80.15	PASS
N77-3450 -3550	30	90	CP-QPSK	M	Outer_Full	87.233	90.26	PASS
N77-3450 -3550	30	90	CP-16QAM	M	Outer_Full	87.325	90.26	PASS
N77-3450 -3550	30	90	CP-64QAM	M	Outer_Full	87.359	90.66	PASS
N77-3450 -3550	30	90	CP-256QAM	M	Outer_Full	87.444	90.54	PASS
N77-3450 -3550	30	100	CP-QPSK	M	Outer_Full	97.206	100.4	PASS
N77-3450 -3550	30	100	CP-16QAM	M	Outer_Full	97.187	100.4	PASS
N77-3450 -3550	30	100	CP-64QAM	M	Outer_Full	97.287	100.5	PASS
N77-3450 -3550	30	100	CP-256QAM	M	Outer_Full	97.185	100.7	PASS

TEST RESULT-ANT A4

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result (99%)	Result (26dB)	Verdict
N77-3450-3550	30	10	CP-QPSK	M	Outer_Full	8.5825	9.823	PASS
N77-3450-3550	30	10	CP-16QAM	M	Outer_Full	8.5934	9.901	PASS
N77-3450-3550	30	10	CP-64QAM	M	Outer_Full	8.5739	9.734	PASS
N77-3450-3550	30	10	CP-256QAM	M	Outer_Full	8.5586	9.651	PASS
N77-3450-3550	30	15	CP-QPSK	M	Outer_Full	13.621	15.00	PASS
N77-3450-3550	30	15	CP-16QAM	M	Outer_Full	13.562	14.74	PASS
N77-3450-3550	30	15	CP-64QAM	M	Outer_Full	13.560	15.05	PASS
N77-3450-3550	30	15	CP-256QAM	M	Outer_Full	13.580	14.86	PASS
N77-3450-3550	30	20	CP-QPSK	M	Outer_Full	18.201	19.64	PASS
N77-3450-3550	30	20	CP-16QAM	M	Outer_Full	18.165	19.56	PASS
N77-3450-3550	30	20	CP-64QAM	M	Outer_Full	18.194	19.73	PASS
N77-3450-3550	30	20	CP-256QAM	M	Outer_Full	18.179	19.61	PASS
N77-3450-3550	30	30	CP-QPSK	M	Outer_Full	27.841	29.63	PASS
N77-3450-3550	30	30	CP-16QAM	M	Outer_Full	27.814	29.45	PASS
N77-3450-3550	30	30	CP-64QAM	M	Outer_Full	27.849	29.64	PASS
N77-3450-3550	30	30	CP-256QAM	M	Outer_Full	27.759	29.41	PASS
N77-3450-3550	30	40	CP-QPSK	M	Outer_Full	37.821	39.98	PASS
N77-3450-3550	30	40	CP-16QAM	M	Outer_Full	37.820	39.94	PASS
N77-3450-3550	30	40	CP-64QAM	M	Outer_Full	37.737	39.87	PASS
N77-3450-3550	30	40	CP-256QAM	M	Outer_Full	37.824	39.99	PASS
N77-3450-3550	30	50	CP-QPSK	M	Outer_Full	47.448	49.81	PASS
N77-3450-3550	30	50	CP-16QAM	M	Outer_Full	47.489	49.64	PASS
N77-3450-3550	30	50	CP-64QAM	M	Outer_Full	47.429	49.71	PASS
N77-3450-3550	30	50	CP-256QAM	M	Outer_Full	47.465	49.65	PASS

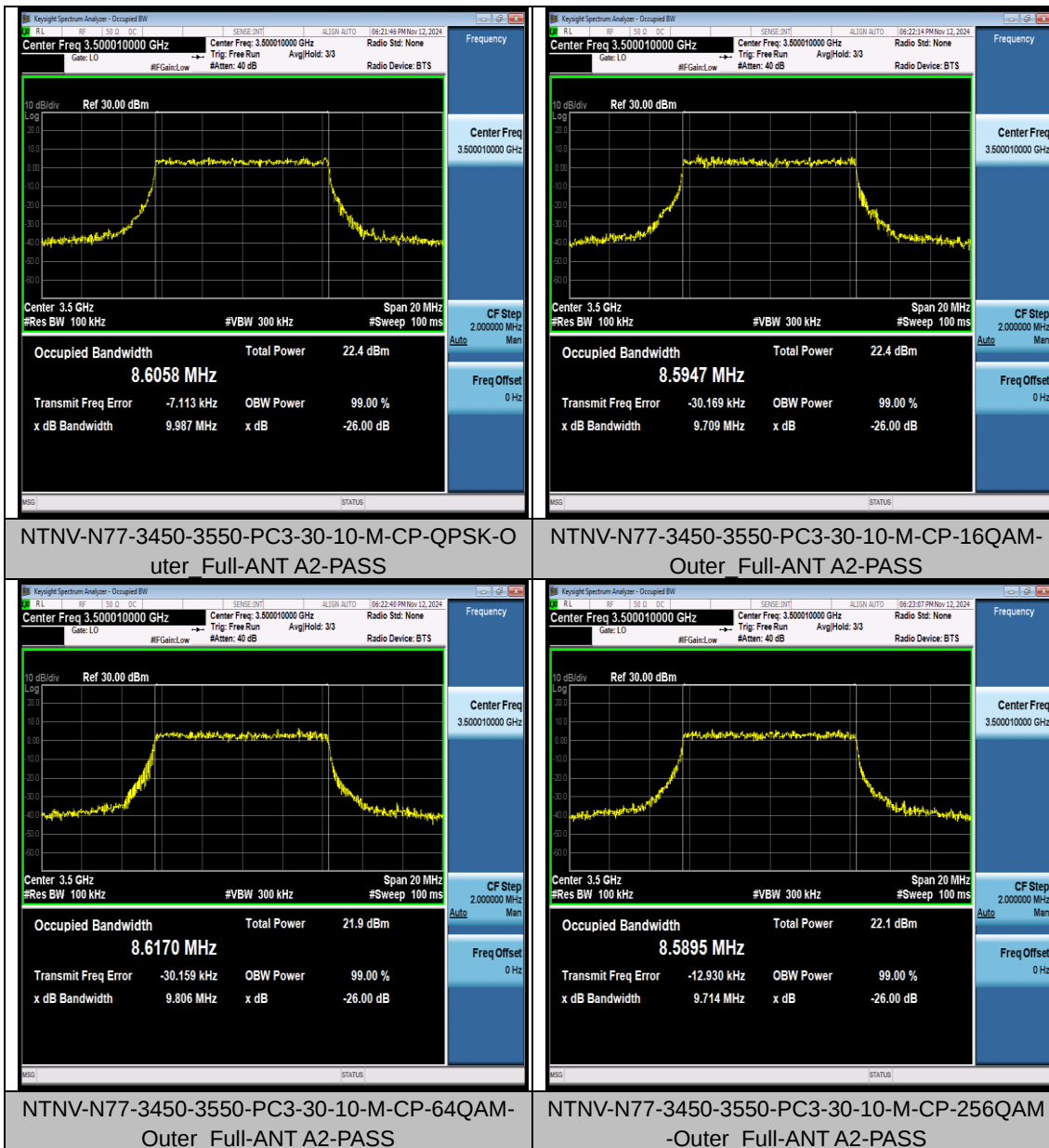


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N77-3450 -3550	30	60	CP-QPSK	M	Outer_Full	57.737	60.29	PASS
N77-3450 -3550	30	60	CP-16QAM	M	Outer_Full	57.755	60.33	PASS
N77-3450 -3550	30	60	CP-64QAM	M	Outer_Full	57.717	60.10	PASS
N77-3450 -3550	30	60	CP-256QAM	M	Outer_Full	57.638	60.06	PASS
N77-3450 -3550	30	70	CP-QPSK	M	Outer_Full	67.388	70.11	PASS
N77-3450 -3550	30	70	CP-16QAM	M	Outer_Full	67.414	70.05	PASS
N77-3450 -3550	30	70	CP-64QAM	M	Outer_Full	67.391	70.05	PASS
N77-3450 -3550	30	70	CP-256QAM	M	Outer_Full	67.337	69.95	PASS
N77-3450 -3550	30	80	CP-QPSK	M	Outer_Full	77.476	80.39	PASS
N77-3450 -3550	30	80	CP-16QAM	M	Outer_Full	77.199	80.17	PASS
N77-3450 -3550	30	80	CP-64QAM	M	Outer_Full	77.301	80.07	PASS
N77-3450 -3550	30	80	CP-256QAM	M	Outer_Full	77.290	80.20	PASS
N77-3450 -3550	30	90	CP-QPSK	M	Outer_Full	87.244	90.50	PASS
N77-3450 -3550	30	90	CP-16QAM	M	Outer_Full	87.276	90.48	PASS
N77-3450 -3550	30	90	CP-64QAM	M	Outer_Full	87.224	90.47	PASS
N77-3450 -3550	30	90	CP-256QAM	M	Outer_Full	87.188	90.43	PASS
N77-3450 -3550	30	100	CP-QPSK	M	Outer_Full	97.246	100.5	PASS
N77-3450 -3550	30	100	CP-16QAM	M	Outer_Full	97.396	100.6	PASS
N77-3450 -3550	30	100	CP-64QAM	M	Outer_Full	97.401	100.6	PASS
N77-3450 -3550	30	100	CP-256QAM	M	Outer_Full	97.391	100.7	PASS

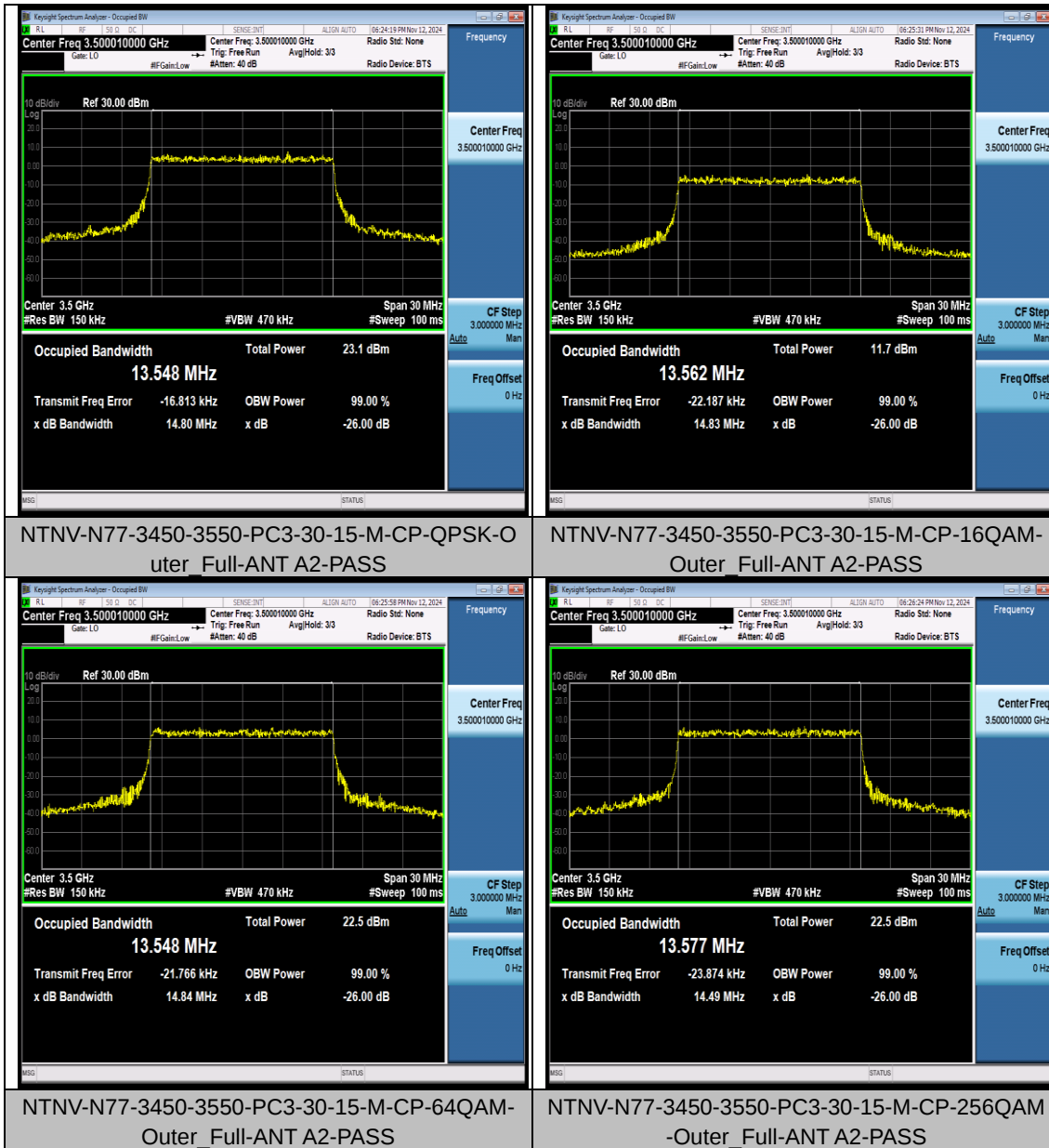
TEST GRAPHS-ANT A2





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