



**BUREAU
VERITAS**

Reference No.: W7L-231218W001RF11

N77-3700-3980	30	60	CP-QPSK	H	Edge_1RB_Left	1000	40000	-22.01	-13	PASS
N77-3700-3980	30	100	CP-QPSK	L	Edge_1RB_Left	30	1000	-45.23	-13	PASS
N77-3700-3980	30	100	CP-QPSK	L	Edge_1RB_Left	1000	40000	-22.06	-13	PASS
N77-3700-3980	30	100	CP-QPSK	M	Edge_1RB_Left	30	1000	-44.87	-13	PASS
N77-3700-3980	30	100	CP-QPSK	M	Edge_1RB_Left	1000	40000	-22.29	-13	PASS
N77-3700-3980	30	100	CP-QPSK	H	Edge_1RB_Left	30	1000	-44.88	-13	PASS
N77-3700-3980	30	100	CP-QPSK	H	Edge_1RB_Left	1000	40000	-22.35	-13	PASS

**Test Result-ANT1**

Band	SCS	Bandwidth	Modulation	Channel	RB Config	StartFreq	StopFreq	Result	Limit	Verdict
N77-3700-3980	30	20	CP-QPSK	L	Edge_1RB_Left	30	1000	-45.24	-13	PASS
N77-3700-3980	30	20	CP-QPSK	L	Edge_1RB_Left	1000	40000	-21.95	-13	PASS
N77-3700-3980	30	20	CP-QPSK	M	Edge_1RB_Left	30	1000	-45.16	-13	PASS
N77-3700-3980	30	20	CP-QPSK	M	Edge_1RB_Left	1000	40000	-22.25	-13	PASS
N77-3700-3980	30	20	CP-QPSK	H	Edge_1RB_Left	30	1000	-45.11	-13	PASS
N77-3700-3980	30	20	CP-QPSK	H	Edge_1RB_Left	1000	40000	-22.46	-13	PASS
N77-3700-3980	30	60	CP-QPSK	L	Edge_1RB_Left	30	1000	-45.27	-13	PASS
N77-3700-3980	30	60	CP-QPSK	L	Edge_1RB_Left	1000	40000	-22.38	-13	PASS
N77-3700-3980	30	60	CP-QPSK	M	Edge_1RB_Left	30	1000	-45.13	-13	PASS
N77-3700-3980	30	60	CP-QPSK	M	Edge_1RB_Left	1000	40000	-22.47	-13	PASS
N77-3700-3980	30	60	CP-QPSK	H	Edge_1RB_Left	30	1000	-45.15	-13	PASS
N77-3700-3980	30	60	CP-QPSK	H	Edge_1RB_Left	1000	40000	-22.35	-13	PASS



**BUREAU
VERITAS**

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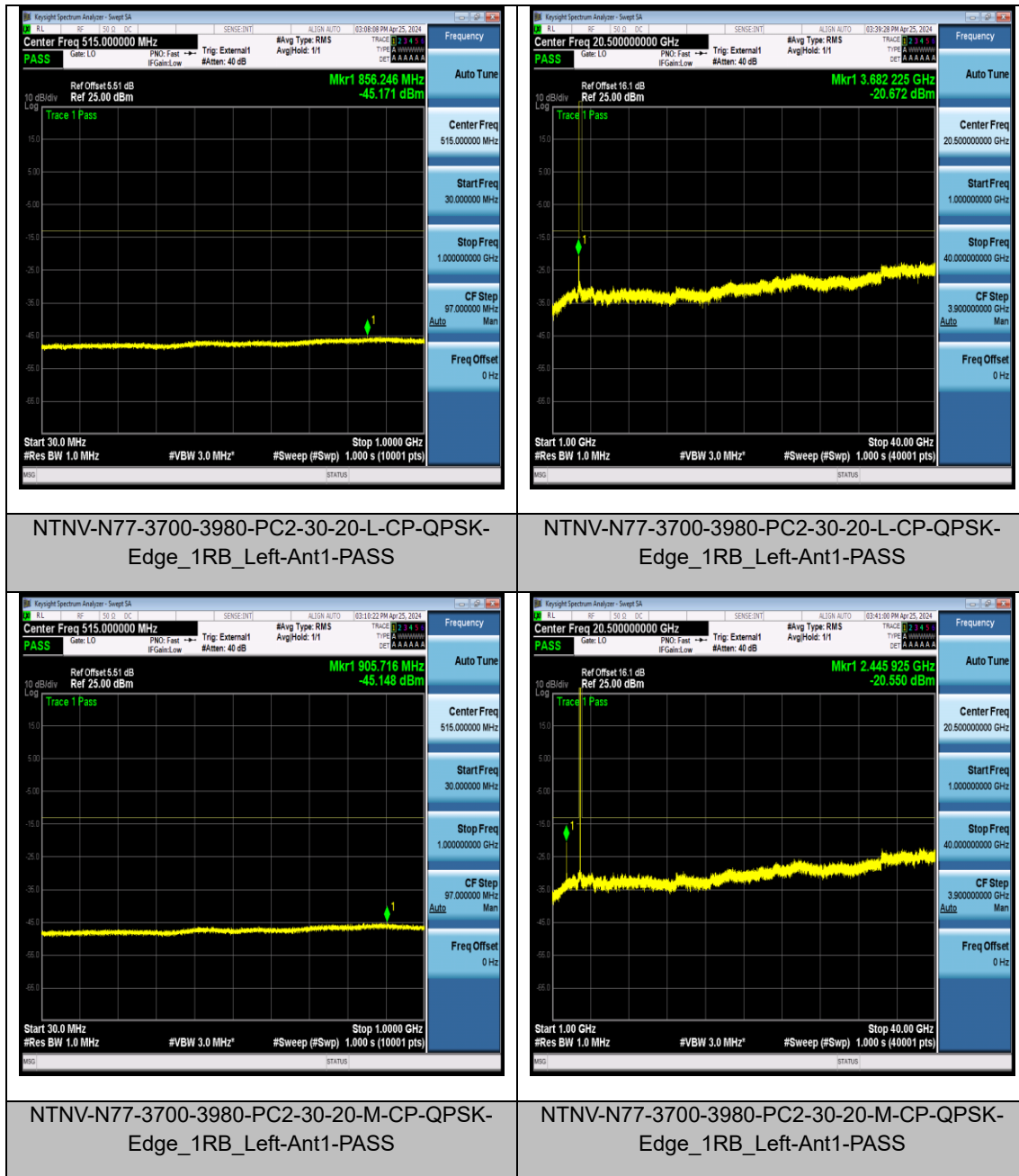
N77-3700-3980	30	100	CP-QPSK	L	Edge_1RB_Left	30	1000	-45.02	-13	PASS
N77-3700-3980	30	100	CP-QPSK	L	Edge_1RB_Left	1000	40000	-22.26	-13	PASS
N77-3700-3980	30	100	CP-QPSK	M	Edge_1RB_Left	30	1000	-44.76	-13	PASS
N77-3700-3980	30	100	CP-QPSK	M	Edge_1RB_Left	1000	40000	-22.12	-13	PASS
N77-3700-3980	30	100	CP-QPSK	H	Edge_1RB_Left	30	1000	-44.80	-13	PASS
N77-3700-3980	30	100	CP-QPSK	H	Edge_1RB_Left	1000	40000	-22.31	-13	PASS



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Test Graphs-Ant7



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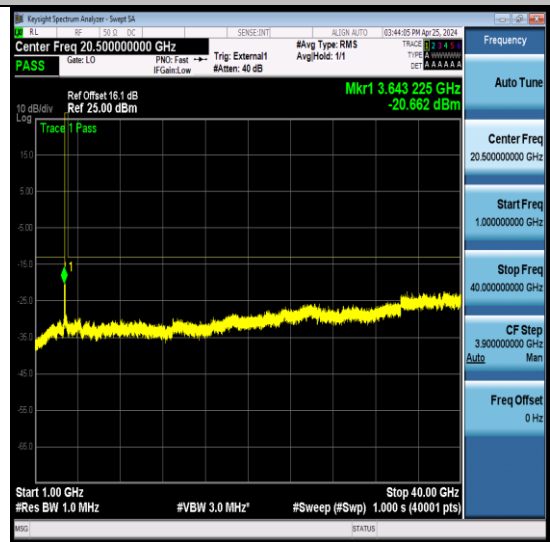
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Edge_1RB_Left-Ant1-PASS



NTN-N77-3700-3980-PC2-30-60-L-CP-QPSK-
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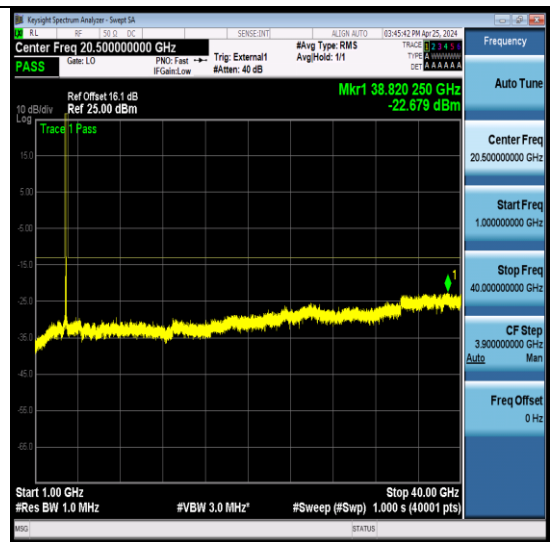


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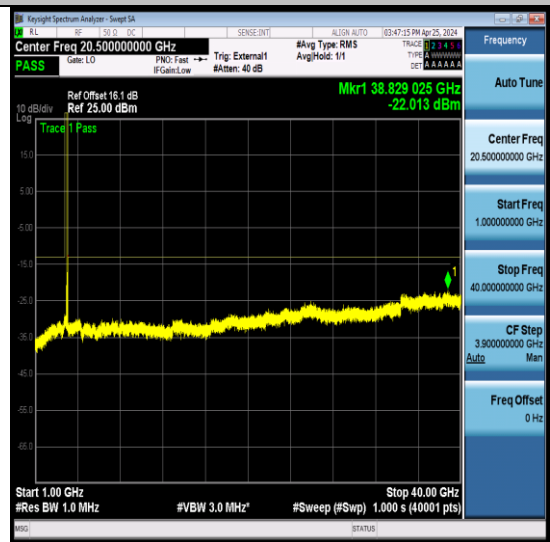
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Edge_1RB_Left-Ant1-PASS



NTNV-N77-3700-3980-PC2-30-60-H-CP-QPSK-
Edge_1RB_Left-Ant1-PASS



NTNV-N77-3700-3980-PC2-30-60-H-CP-QPSK-
Edge_1RB_Left-Ant1-PASS

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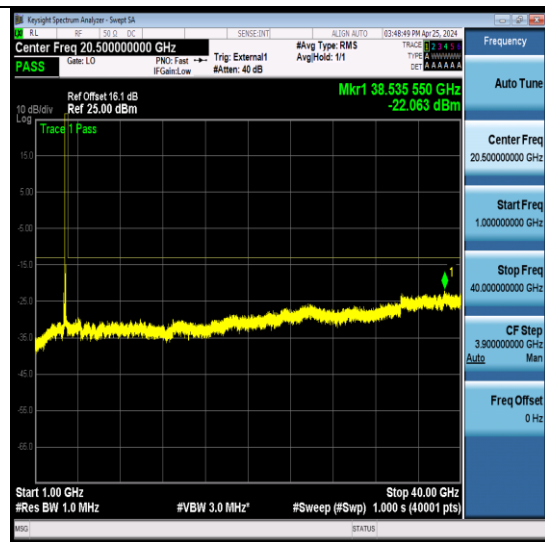


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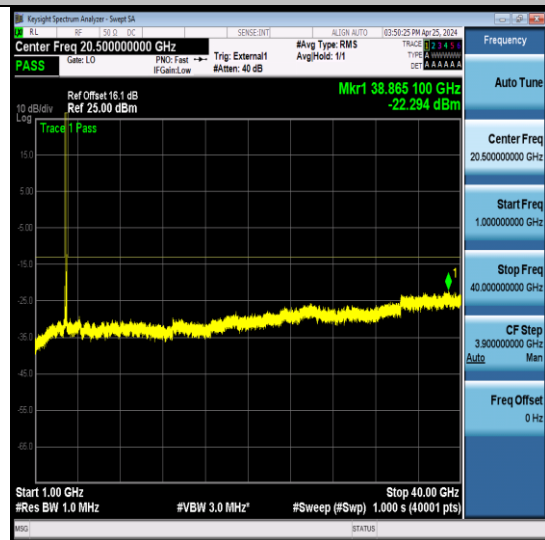
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Edge_1RB_Left-Ant1-PASS



NTNV-N77-3700-3980-PC2-30-100-M-CP-QPSK-
Edge_1RB_Left-Ant1-PASS



NTNV-N77-3700-3980-PC2-30-100-M-CP-QPSK-
Edge_1RB_Left-Ant1-PASS

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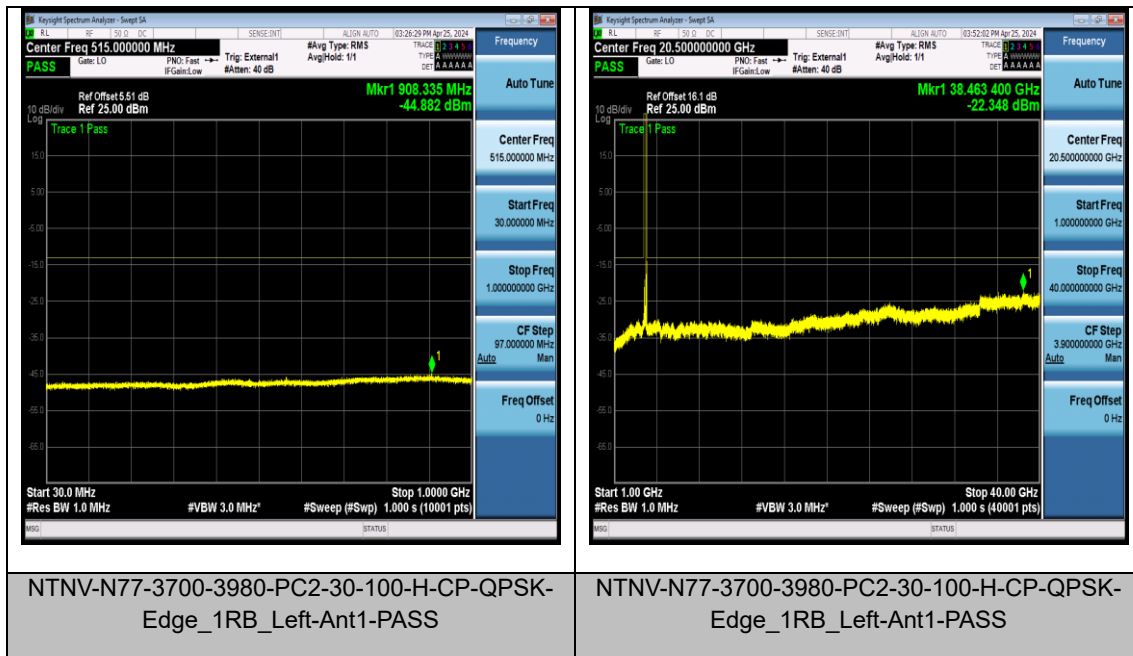
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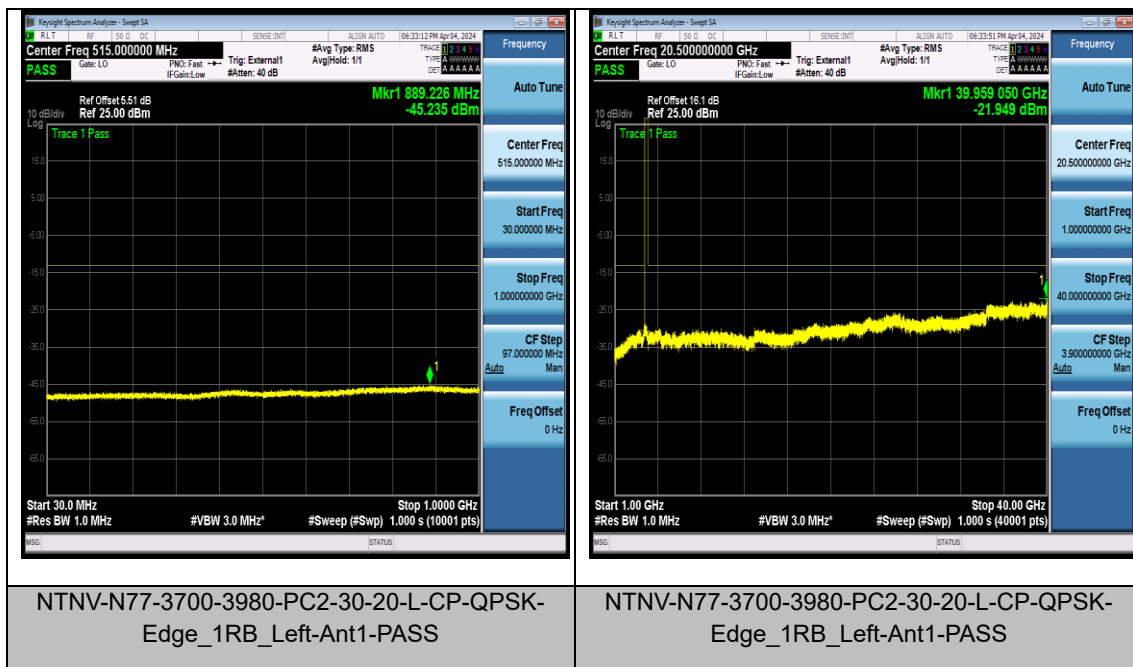


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Test Graphs-Ant1



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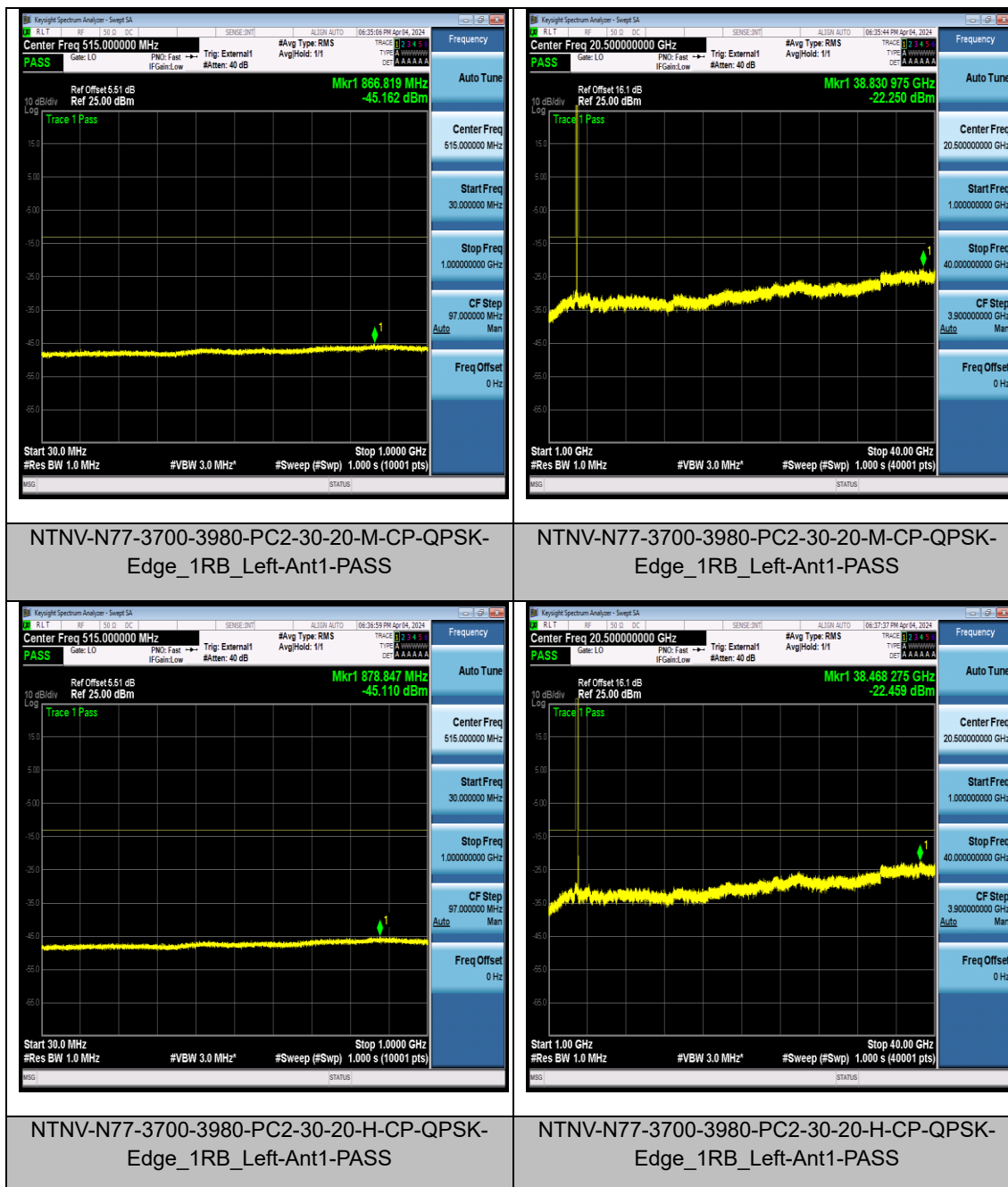
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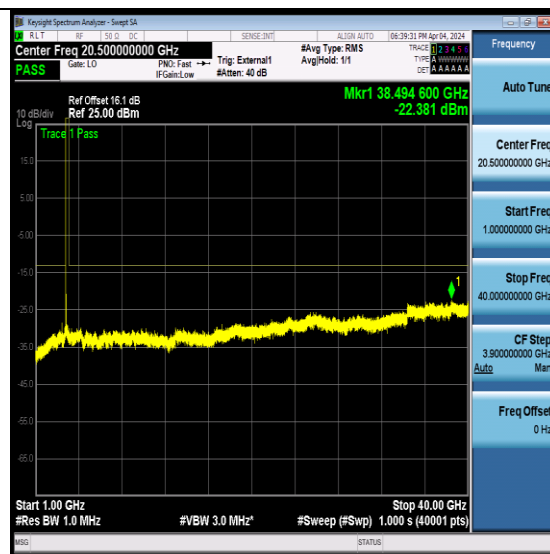


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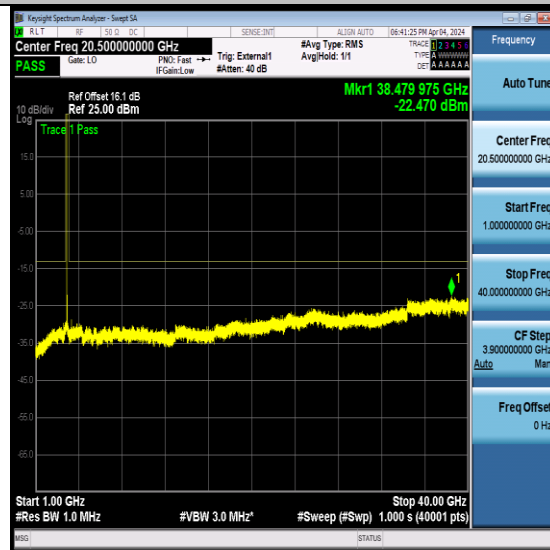
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NTN-N77-3700-3980-PC2-30-60-L-CP-QPSK-
Edge_1RB_Left-Ant1-PASS



NTN-N77-3700-3980-PC2-30-60-M-CP-QPSK-
Edge_1RB_Left-Ant1-PASS



NTN-N77-3700-3980-PC2-30-60-M-CP-QPSK-
Edge_1RB_Left-Ant1-PASS

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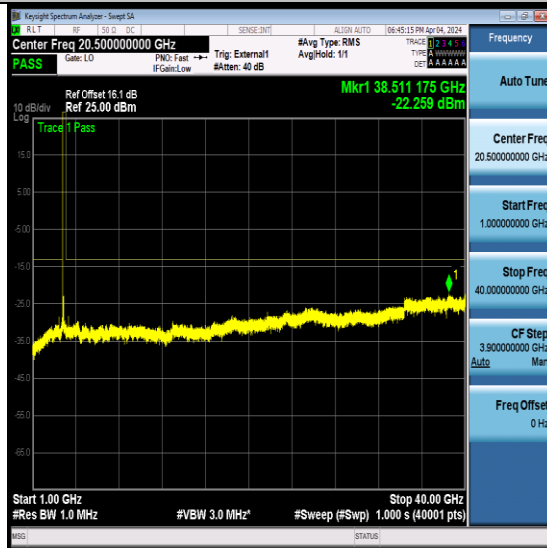
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Edge_1RB_Left-Ant1-PASS



NTN-N77-3700-3980-PC2-30-100-L-CP-QPSK-
Edge_1RB_Left-Ant1-PASS

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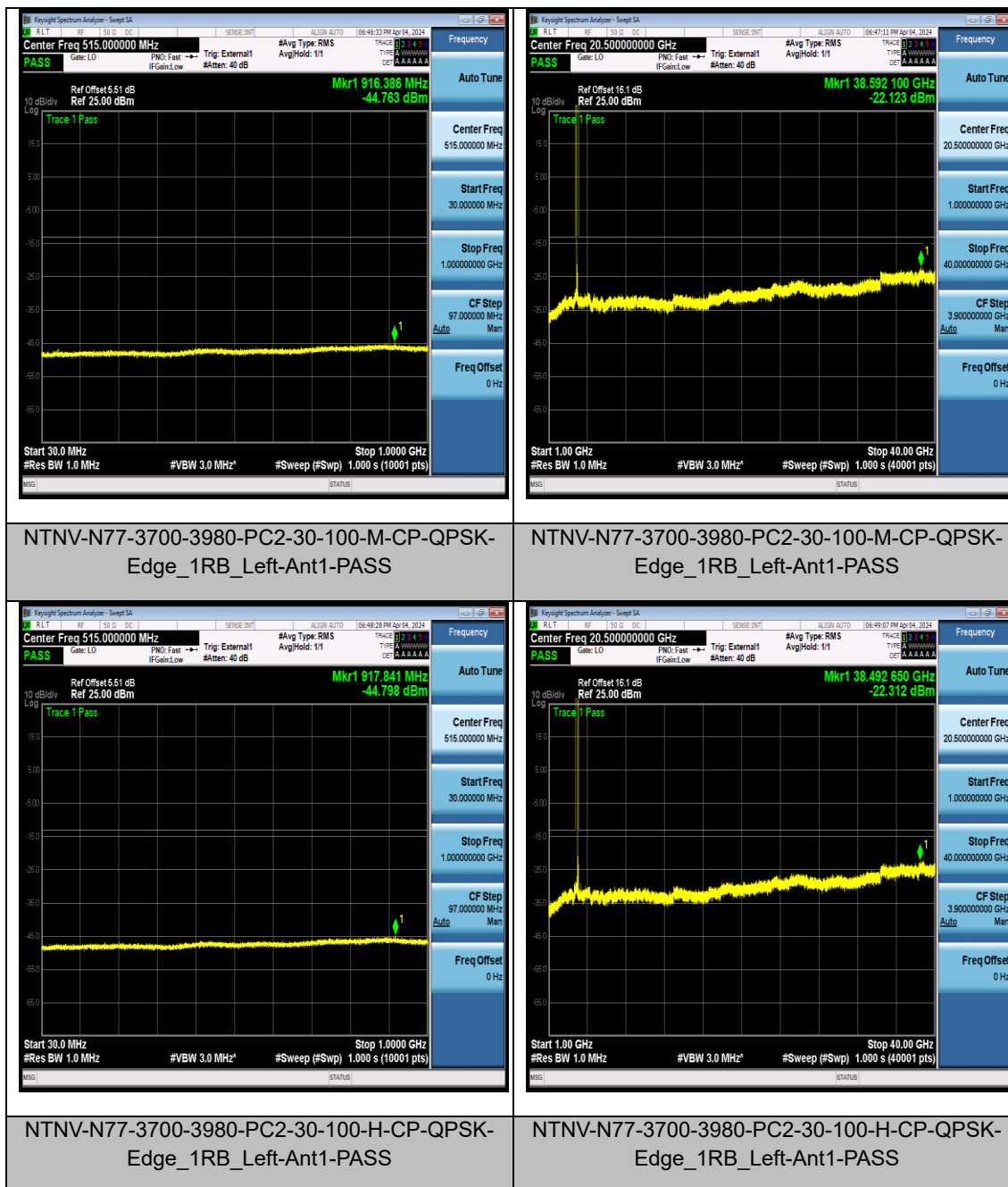
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Frequency Stability

Test Result-Ant7

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation (Hz)	Deviation (ppm)	Verdict
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	VL	NT	10.000000	0.002695	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	VN	NT	5.000000	0.001348	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	VH	NT	3.000000	0.000809	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	-30	14.000000	0.003774	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	-20	19.000000	0.005121	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	-10	15.000000	0.004042	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	0	3.000000	0.000809	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	10	8.000000	0.002156	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	20	3.000000	0.000809	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	30	11.000000	0.002965	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	40	9.000000	0.002426	PASS



N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	50	8.000000	0.002156	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	VL	NT	19.000000	0.004948	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	VN	NT	6.000000	0.001563	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	VH	NT	4.000000	0.001042	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	-30	12.000000	0.003125	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	-20	10.000000	0.002604	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	-10	1.000000	0.000260	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	0	9.000000	0.002344	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	10	7.000000	0.001823	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	20	9.000000	0.002344	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	30	17.000000	0.004427	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	40	15.000000	0.003906	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	50	3.000000	0.000781	PASS



N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	VL	NT	3.000000	0.000756	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	VN	NT	5.000000	0.001259	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	VH	NT	3.000000	0.000756	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	-30	14.000000	0.003526	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	-20	6.000000	0.001511	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	-10	4.000000	0.001008	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	0	6.000000	0.001511	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	10	8.000000	0.002014	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	20	15.000000	0.003778	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	30	11.000000	0.002771	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	40	2.000000	0.000504	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	50	16.000000	0.004029	PASS

**Test Result-Ant1**

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Voltage	Temperature	Deviation (Hz)	Deviation (ppm)	Verdict
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	VL	NT	5.000000	0.001348	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	VN	NT	3.000000	0.000809	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	VH	NT	17.000000	0.004582	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	-30	15.000000	0.004042	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	-20	4.000000	0.001078	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	-10	2.000000	0.000539	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	0	16.000000	0.004313	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	10	9.000000	0.002426	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	20	7.000000	0.001887	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	30	15.000000	0.004042	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	40	6.000000	0.001617	PASS
N77-3700-3980	30	20	CP-QPSK	L	Outer_Full	NV	50	14.000000	0.003774	PASS



N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	VL	NT	1.000000	0.000260	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	VN	NT	6.000000	0.001563	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	VH	NT	13.000000	0.003385	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	-30	5.000000	0.001302	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	-20	19.000000	0.004948	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	-10	10.000000	0.002604	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	0	18.000000	0.004688	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	10	10.000000	0.002604	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	20	5.000000	0.001302	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	30	12.000000	0.003125	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	40	11.000000	0.002865	PASS
N77-3700-3980	30	20	CP-QPSK	M	Outer_Full	NV	50	13.000000	0.003385	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	VL	NT	2.000000	0.000504	PASS



N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	VN	NT	16.000000	0.004029	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	VH	NT	18.000000	0.004534	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	-30	1.000000	0.000252	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	-20	18.000000	0.004534	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	-10	7.000000	0.001763	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	0	5.000000	0.001259	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	10	12.000000	0.003023	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	20	19.000000	0.004786	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	30	14.000000	0.003526	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	40	13.000000	0.003275	PASS
N77-3700-3980	30	20	CP-QPSK	H	Outer_Full	NV	50	1.000000	0.000252	PASS



N78_UL_MIMO_3450-3550

Peak-to-Average Ratio(CCDF)

Test Result-Ant7

Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
N78-3450-3550	30	20	CP-QPSK	L	Outer_Full	8.11	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	L	Edge_1RB_Left	6.19	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	M	Outer_Full	8.32	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	M	Edge_1RB_Left	6.16	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	H	Outer_Full	7.32	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	H	Edge_1RB_Left	6.35	≤13	PASS

Test Result-Ant1

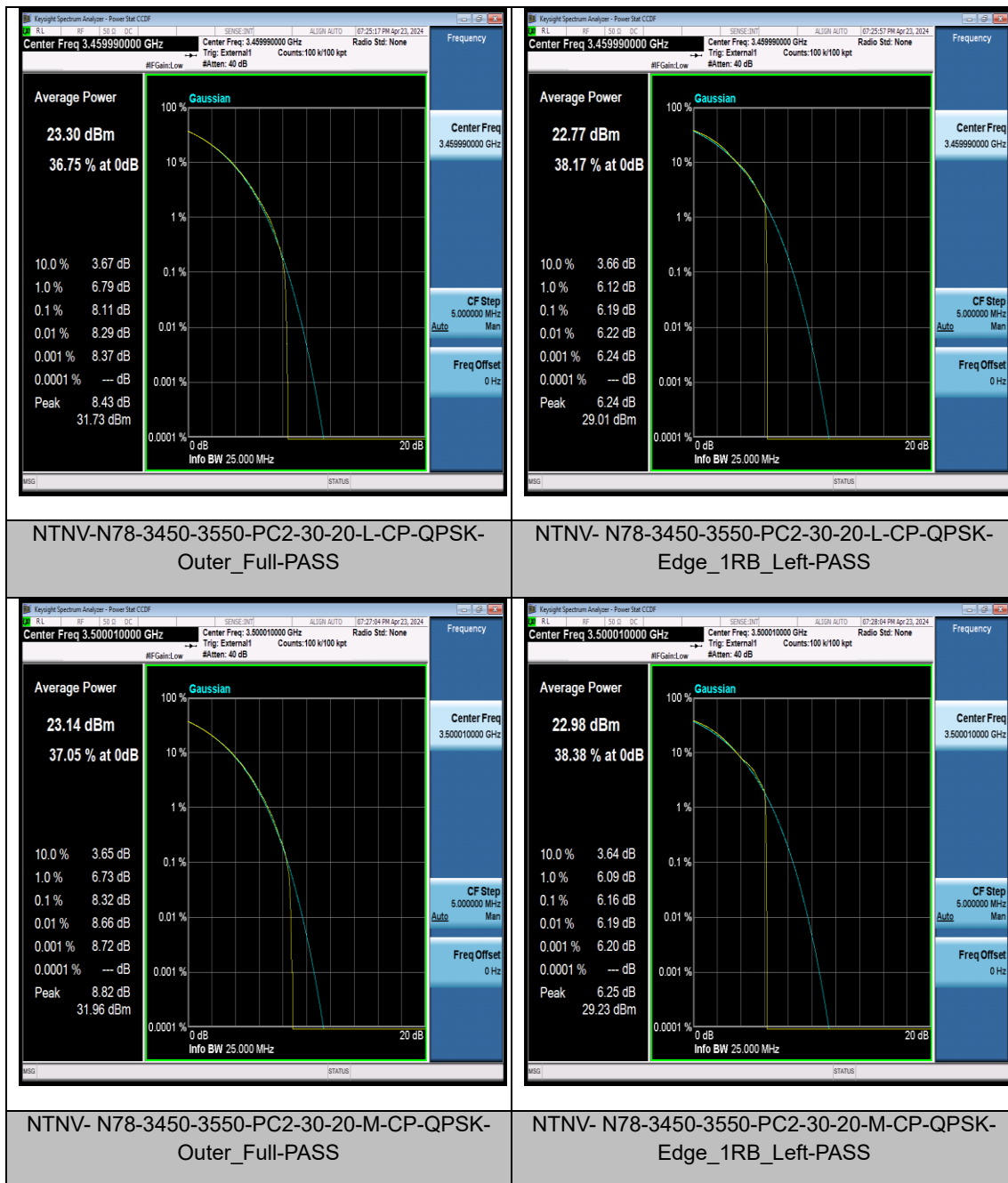
Band	SCS	Bandwidth	Modulation	Channel	RB Config	Result	Limit	Verdict
N78-3450-3550	30	20	CP-QPSK	L	Outer_Full	8.10	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	L	Edge_1RB_Left	6.67	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	M	Outer_Full	7.71	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	M	Edge_1RB_Left	5.85	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	H	Outer_Full	7.25	≤13	PASS
N78-3450-3550	30	20	CP-QPSK	H	Edge_1RB_Left	7.34	≤13	PASS



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Test Graphs-Ant7



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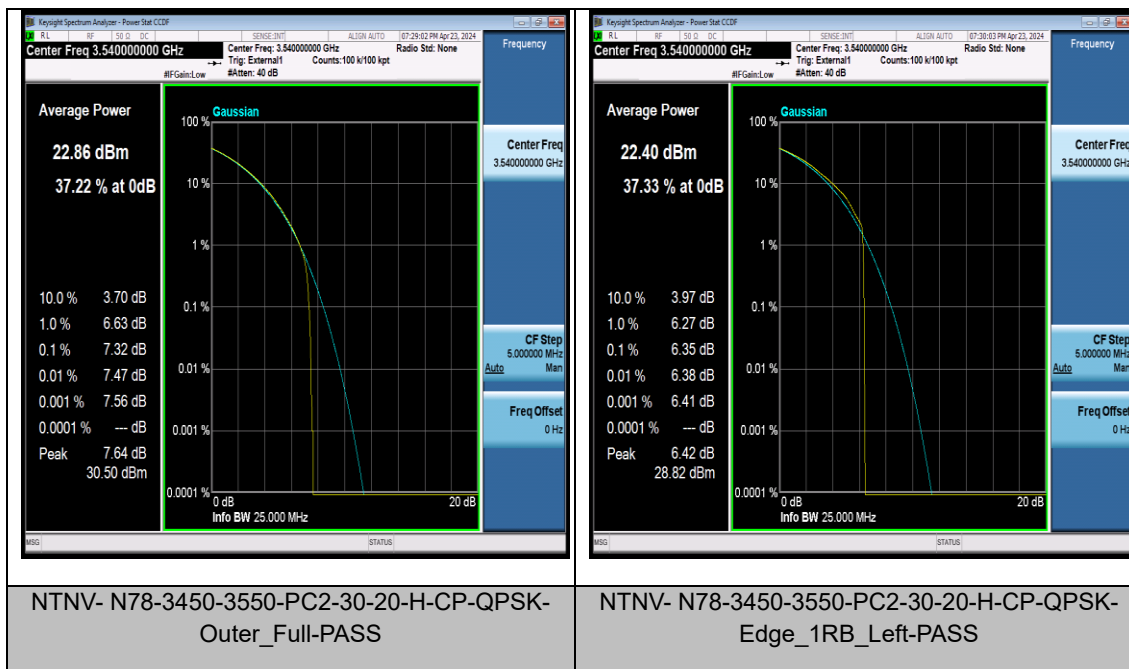
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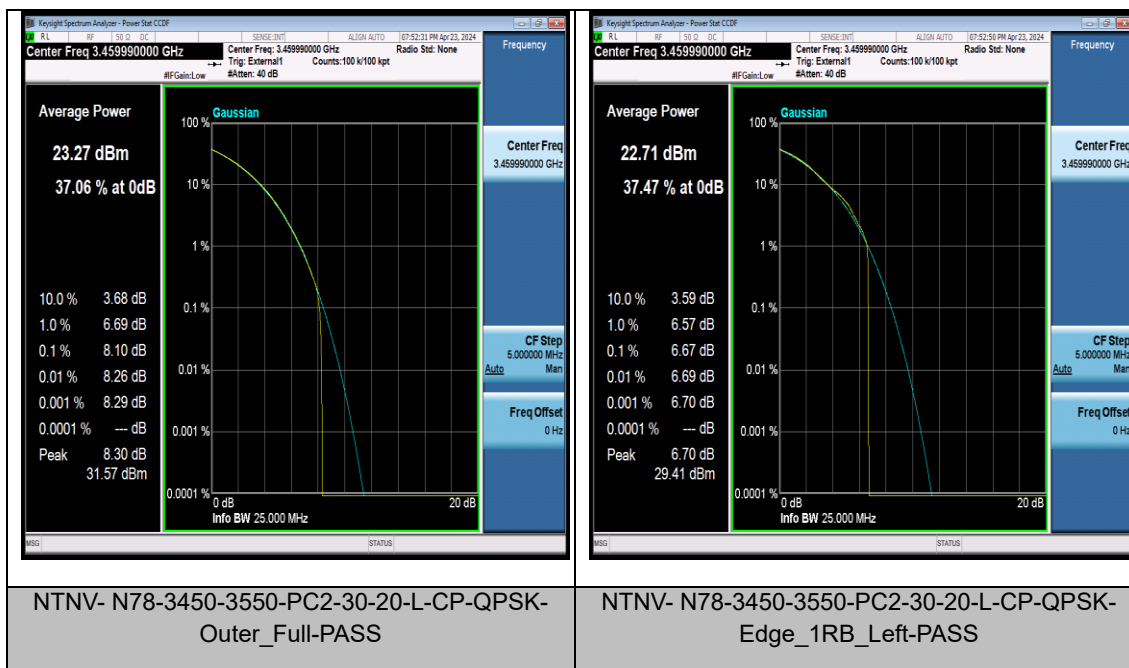


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Test Graphs-Ant1



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