

Appendix for WIFI 2.4GHz

Product Name: Rugged handheld

Model No: UA60

Appendix A: DTS Bandwidth

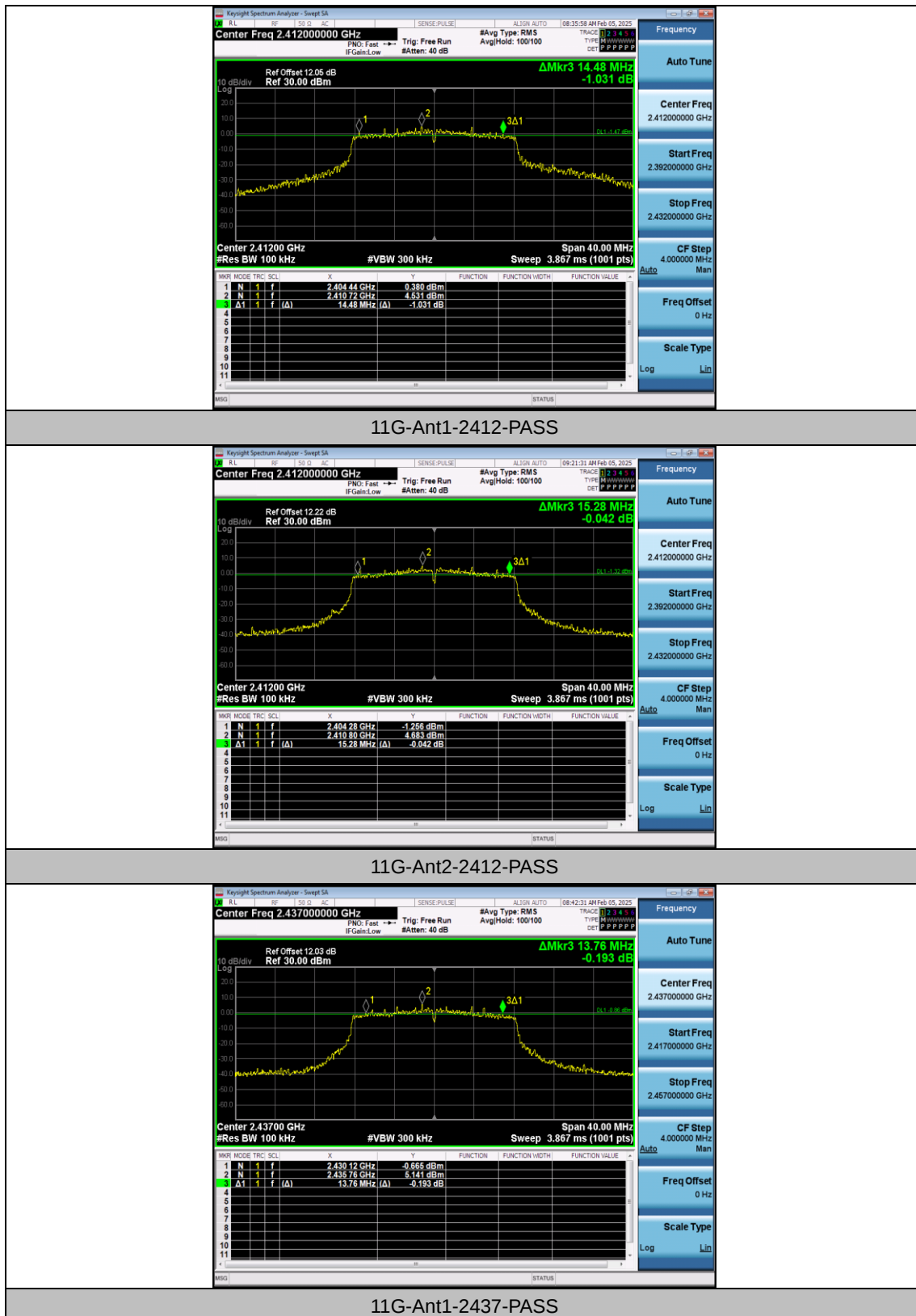
Test Result

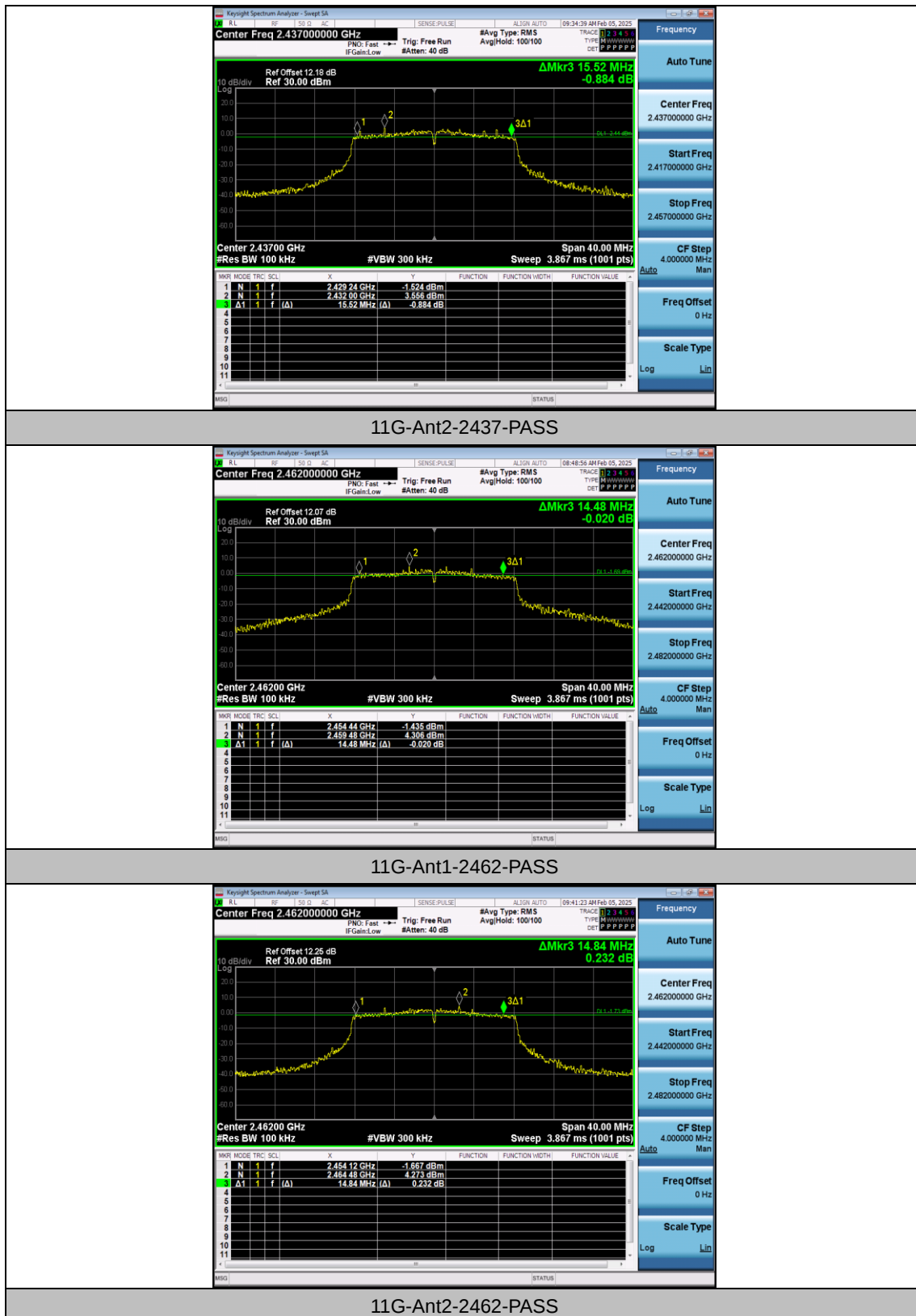
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.040	2408.000	2416.040	0.5	PASS
11B	Ant2	2412	8.040	2408.000	2416.040	0.5	PASS
11B	Ant1	2437	8.080	2432.960	2441.040	0.5	PASS
11B	Ant2	2437	8.080	2432.960	2441.040	0.5	PASS
11B	Ant1	2462	8.520	2457.520	2466.040	0.5	PASS
11B	Ant2	2462	8.080	2457.960	2466.040	0.5	PASS
11G	Ant1	2412	14.480	2404.440	2418.920	0.5	PASS
11G	Ant2	2412	15.280	2404.280	2419.560	0.5	PASS
11G	Ant1	2437	13.760	2430.120	2443.880	0.5	PASS
11G	Ant2	2437	15.520	2429.240	2444.760	0.5	PASS
11G	Ant1	2462	14.480	2454.440	2468.920	0.5	PASS
11G	Ant2	2462	14.840	2454.120	2468.960	0.5	PASS
11N20MIMO	Ant1	2412	15.000	2404.520	2419.520	0.5	PASS
11N20MIMO	Ant2	2412	16.920	2403.480	2420.400	0.5	PASS
11N20MIMO	Ant1	2437	16.640	2428.520	2445.160	0.5	PASS
11N20MIMO	Ant2	2437	17.120	2428.640	2445.760	0.5	PASS
11N20MIMO	Ant1	2462	14.440	2453.880	2468.320	0.5	PASS
11N20MIMO	Ant2	2462	13.720	2455.760	2469.480	0.5	PASS
11N40MIMO	Ant1	2422	35.040	2404.480	2439.520	0.5	PASS
11N40MIMO	Ant2	2422	30.880	2405.760	2436.640	0.5	PASS
11N40MIMO	Ant1	2437	35.200	2419.320	2454.520	0.5	PASS
11N40MIMO	Ant2	2437	34.160	2420.360	2454.520	0.5	PASS
11N40MIMO	Ant1	2452	35.040	2434.480	2469.520	0.5	PASS
11N40MIMO	Ant2	2452	31.360	2436.960	2468.320	0.5	PASS

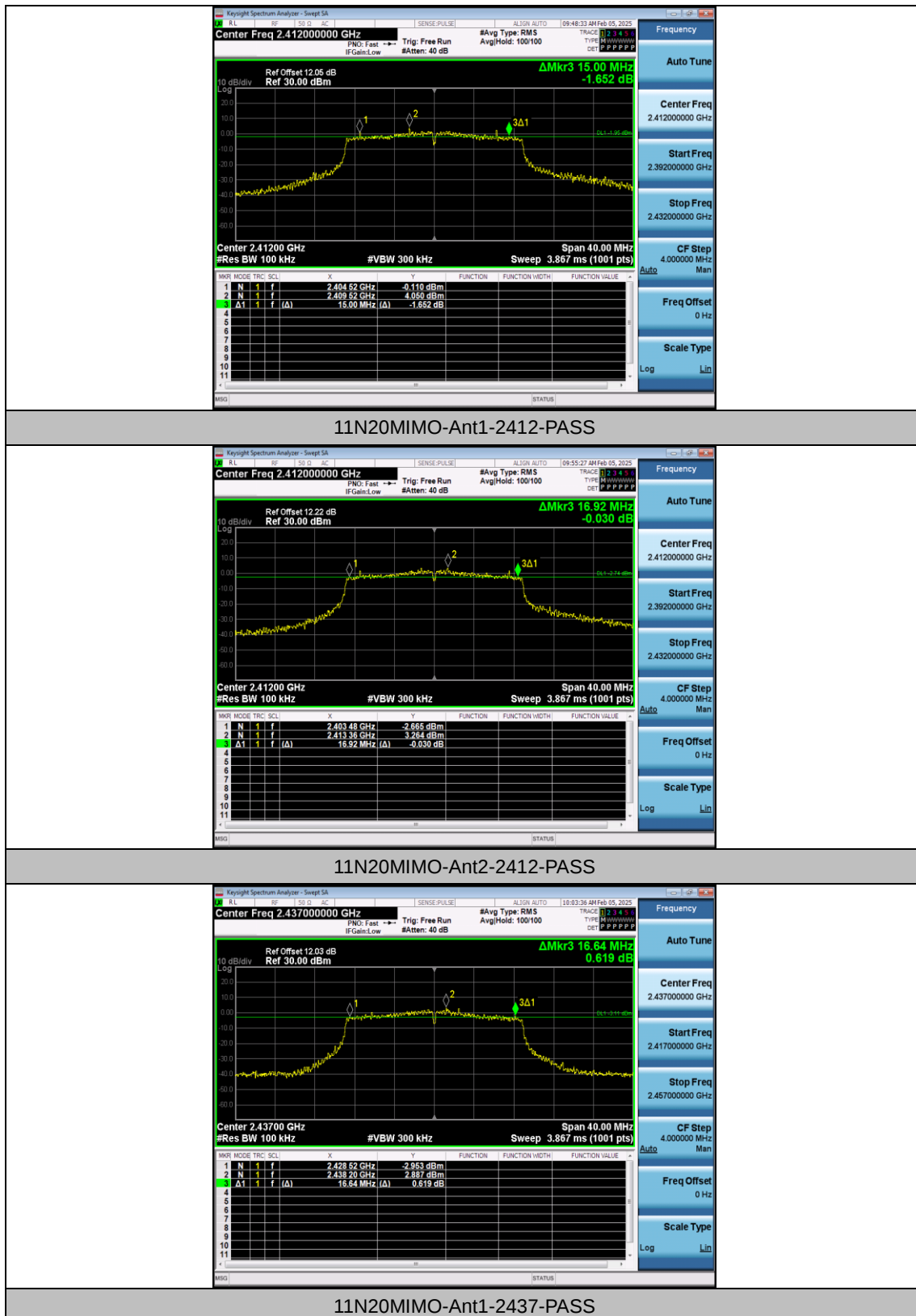
Test Graphs

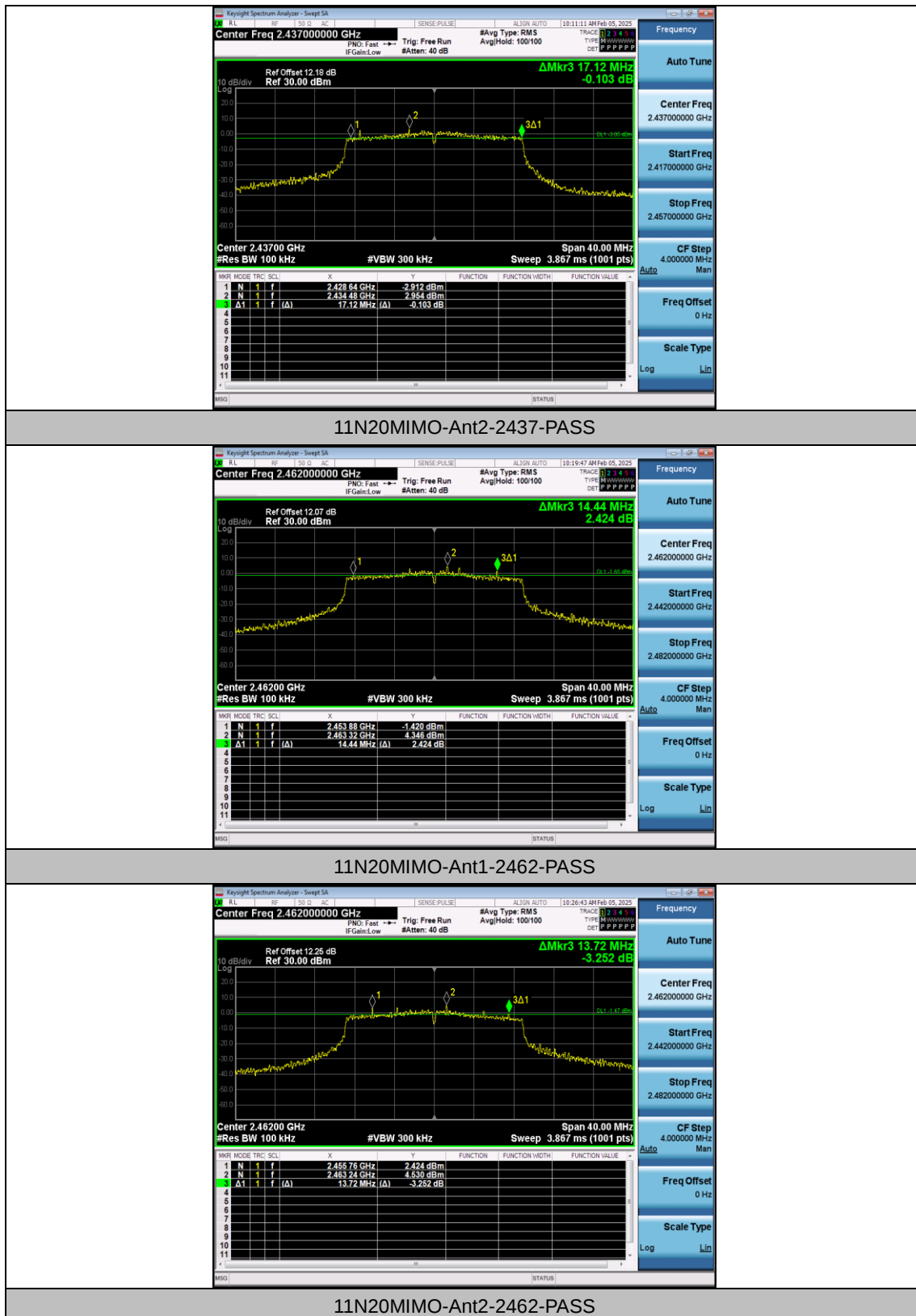


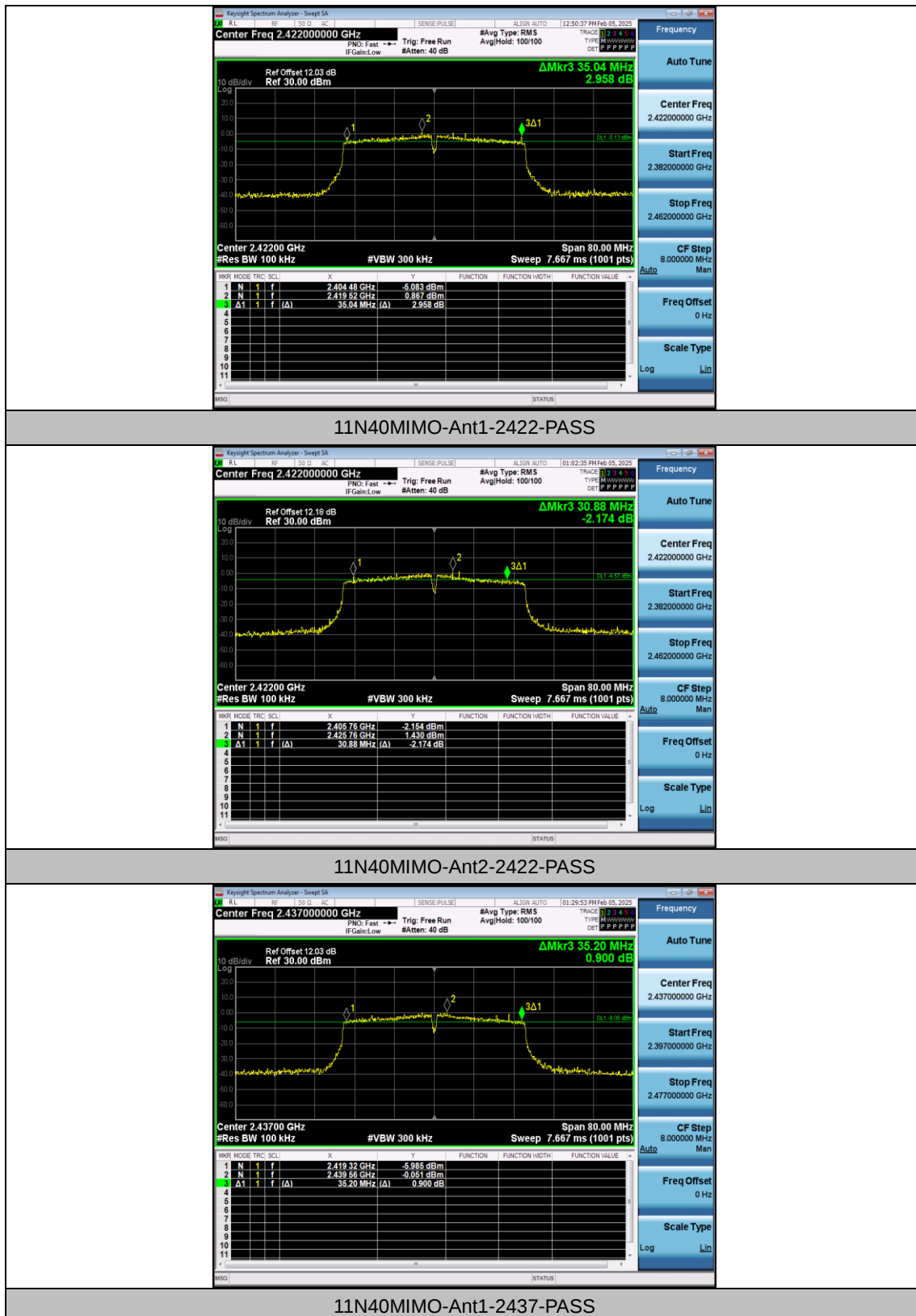


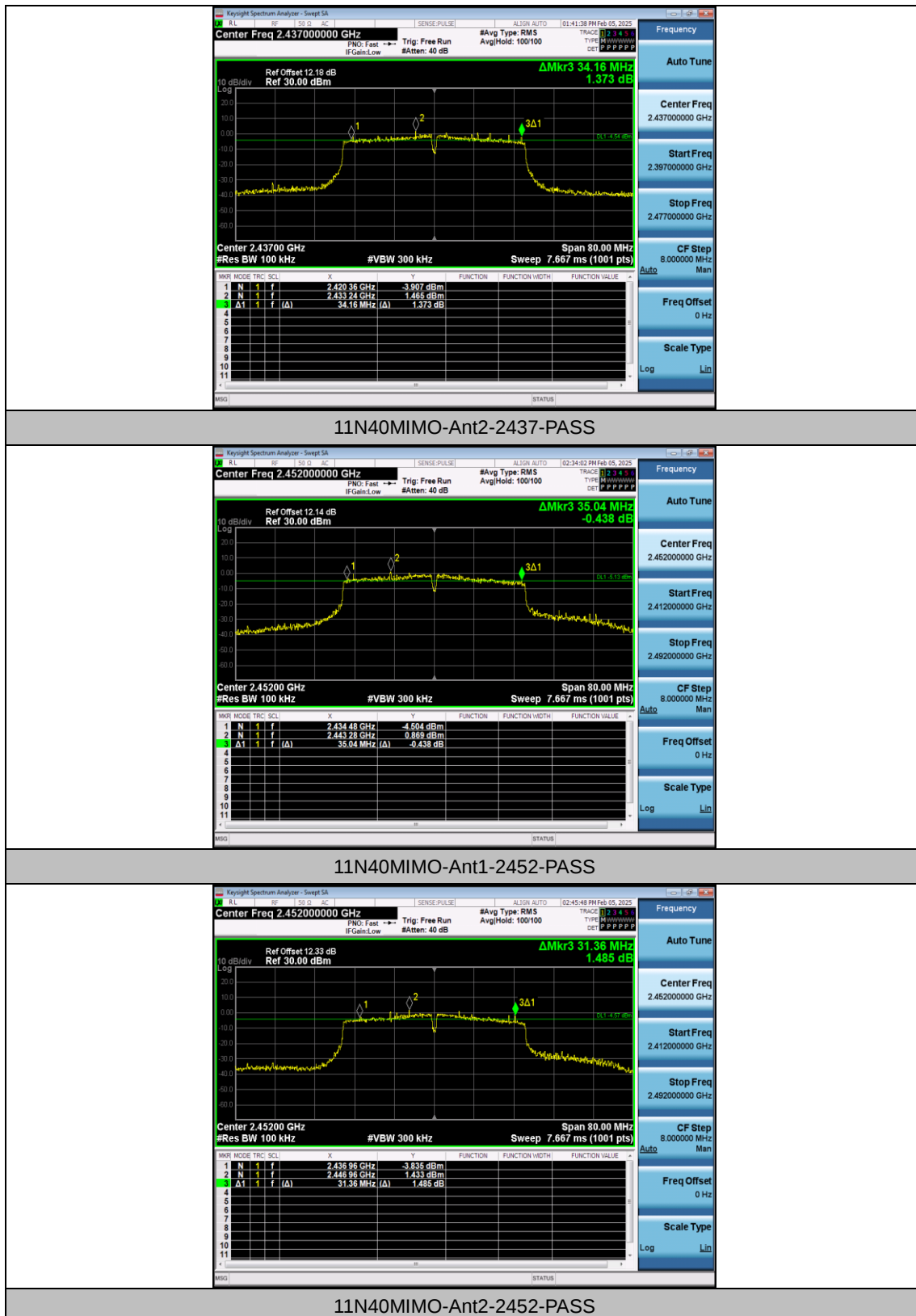












Appendix B: Maximum conducted output power

Test Result Peak

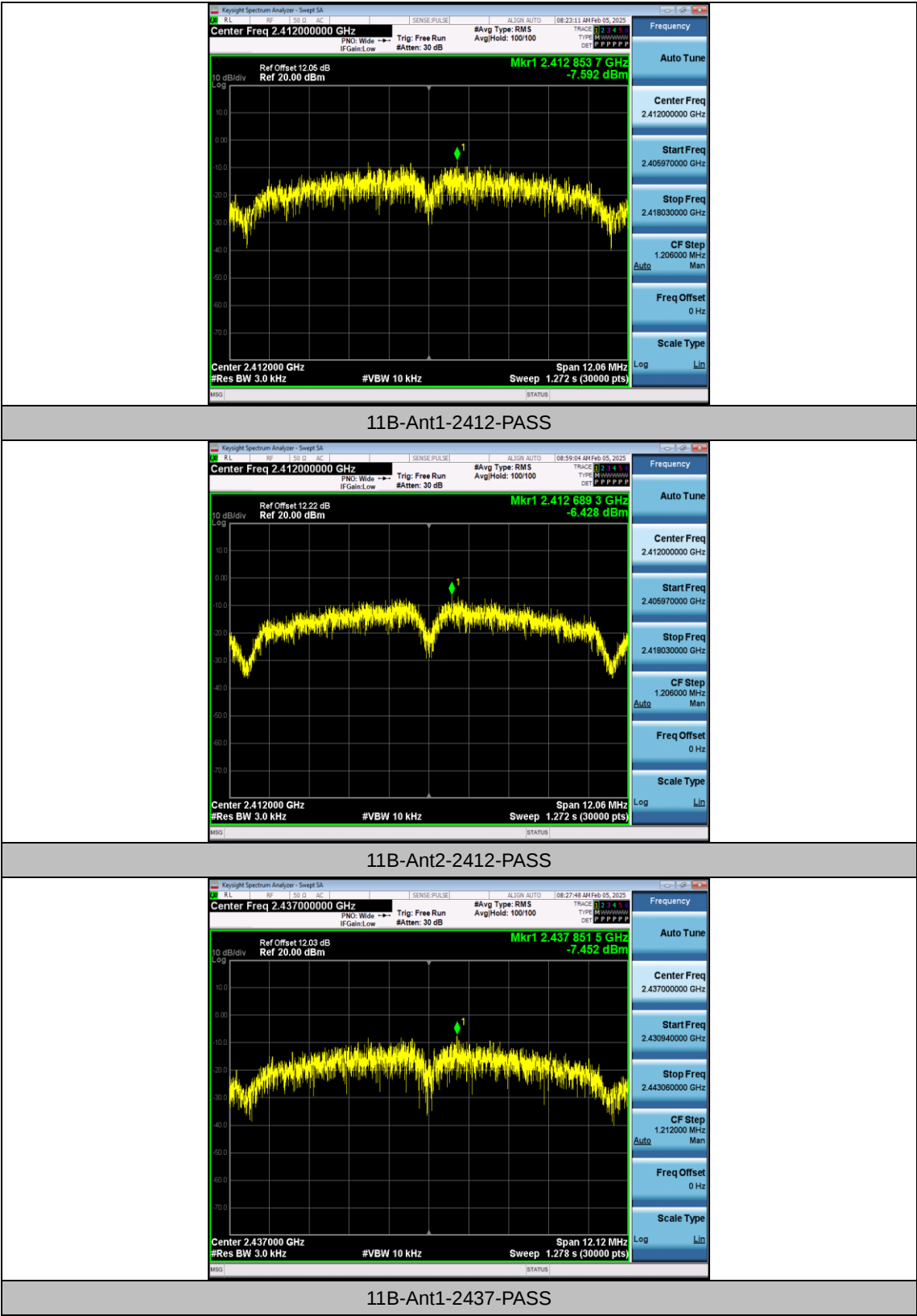
TestMode	Antenna	Frequency [MHz]	Peak Power [dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	15.92	≤30.00	PASS
11B	Ant2	2412	16.33	≤30.00	PASS
11B	Ant1	2437	15.86	≤30.00	PASS
11B	Ant2	2437	15.95	≤30.00	PASS
11B	Ant1	2462	15.94	≤30.00	PASS
11B	Ant2	2462	16.00	≤30.00	PASS
11G	Ant1	2412	15.03	≤30.00	PASS
11G	Ant2	2412	15.66	≤30.00	PASS
11G	Ant1	2437	15.09	≤30.00	PASS
11G	Ant2	2437	15.09	≤30.00	PASS
11G	Ant1	2462	15.04	≤30.00	PASS
11G	Ant2	2462	15.34	≤30.00	PASS
11N20MIMO	Ant1	2412	13.83	≤30.00	PASS
11N20MIMO	Ant2	2412	14.04	≤30.00	PASS
11N20MIMO	total	2412	16.95	≤30.00	PASS
11N20MIMO	Ant1	2437	13.80	≤30.00	PASS
11N20MIMO	Ant2	2437	13.88	≤30.00	PASS
11N20MIMO	total	2437	16.85	≤30.00	PASS
11N20MIMO	Ant1	2462	13.94	≤30.00	PASS
11N20MIMO	Ant2	2462	14.36	≤30.00	PASS
11N20MIMO	total	2462	17.17	≤30.00	PASS
11N40MIMO	Ant1	2422	14.62	≤30.00	PASS
11N40MIMO	Ant2	2422	14.39	≤30.00	PASS
11N40MIMO	total	2422	17.52	≤30.00	PASS
11N40MIMO	Ant1	2437	14.73	≤30.00	PASS
11N40MIMO	Ant2	2437	15.26	≤30.00	PASS
11N40MIMO	total	2437	18.01	≤30.00	PASS
11N40MIMO	Ant1	2452	14.65	≤30.00	PASS
11N40MIMO	Ant2	2452	15.03	≤30.00	PASS
11N40MIMO	total	2452	17.85	≤30.00	PASS

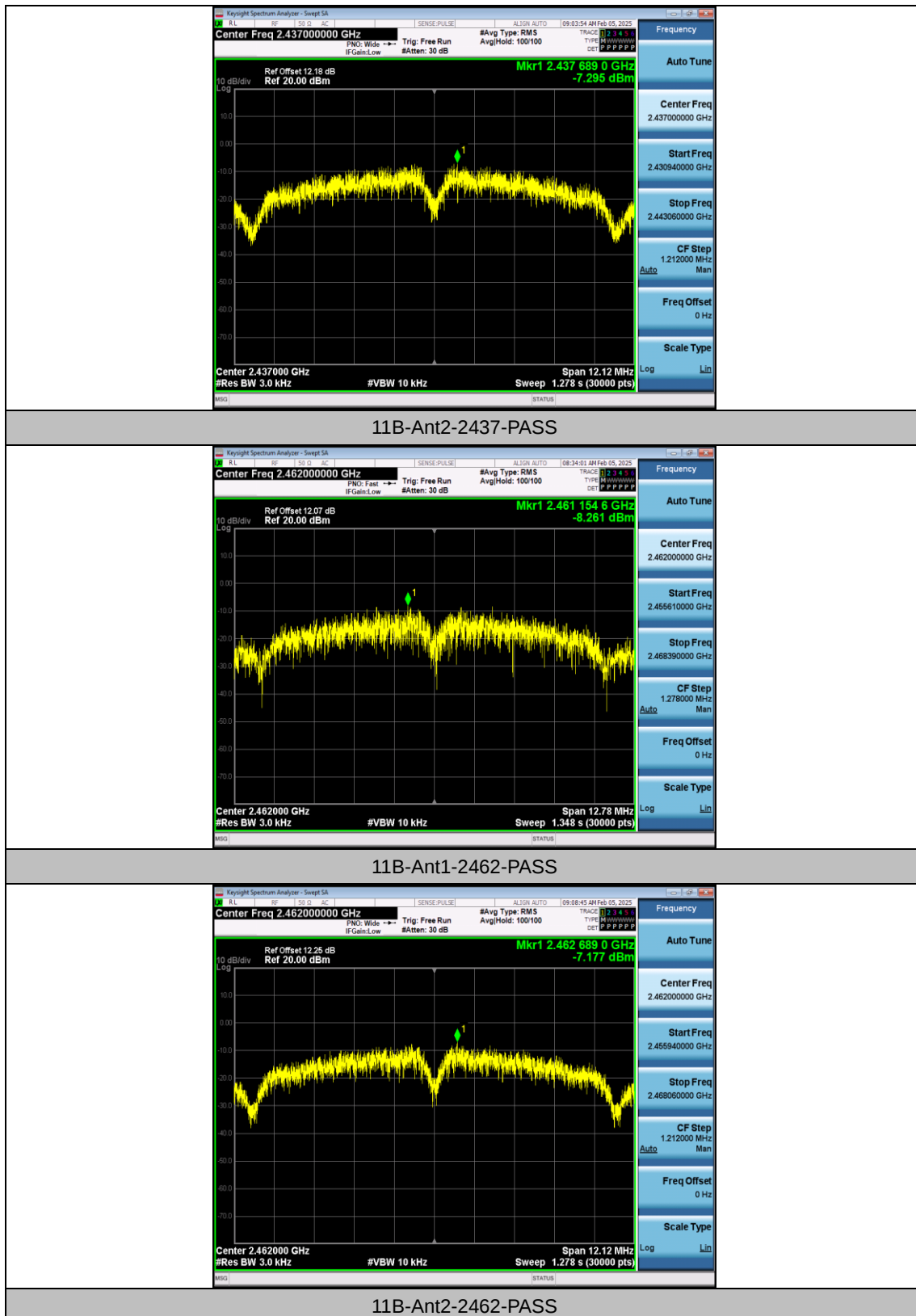
Appendix C: Maximum power spectral density

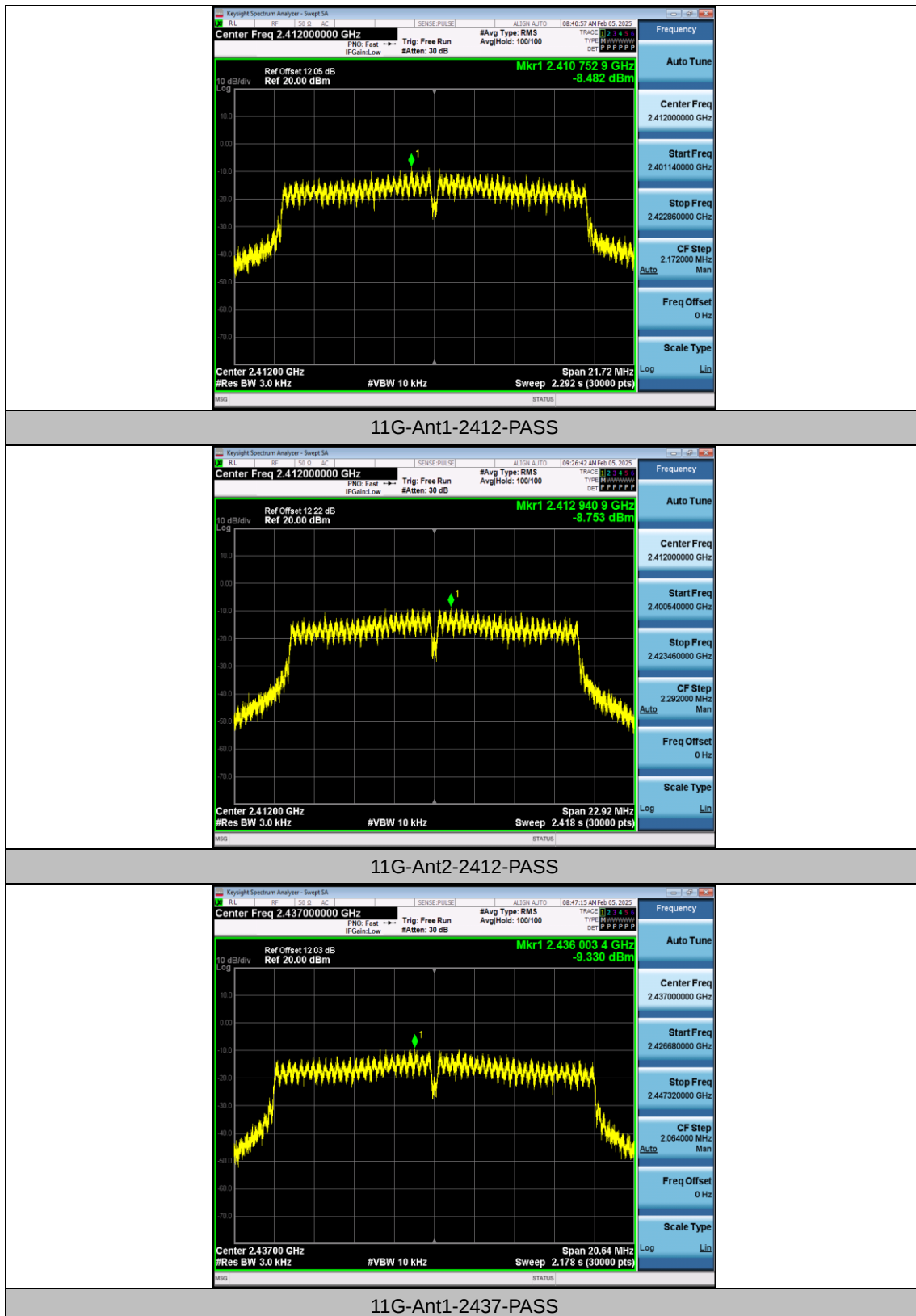
Test Result

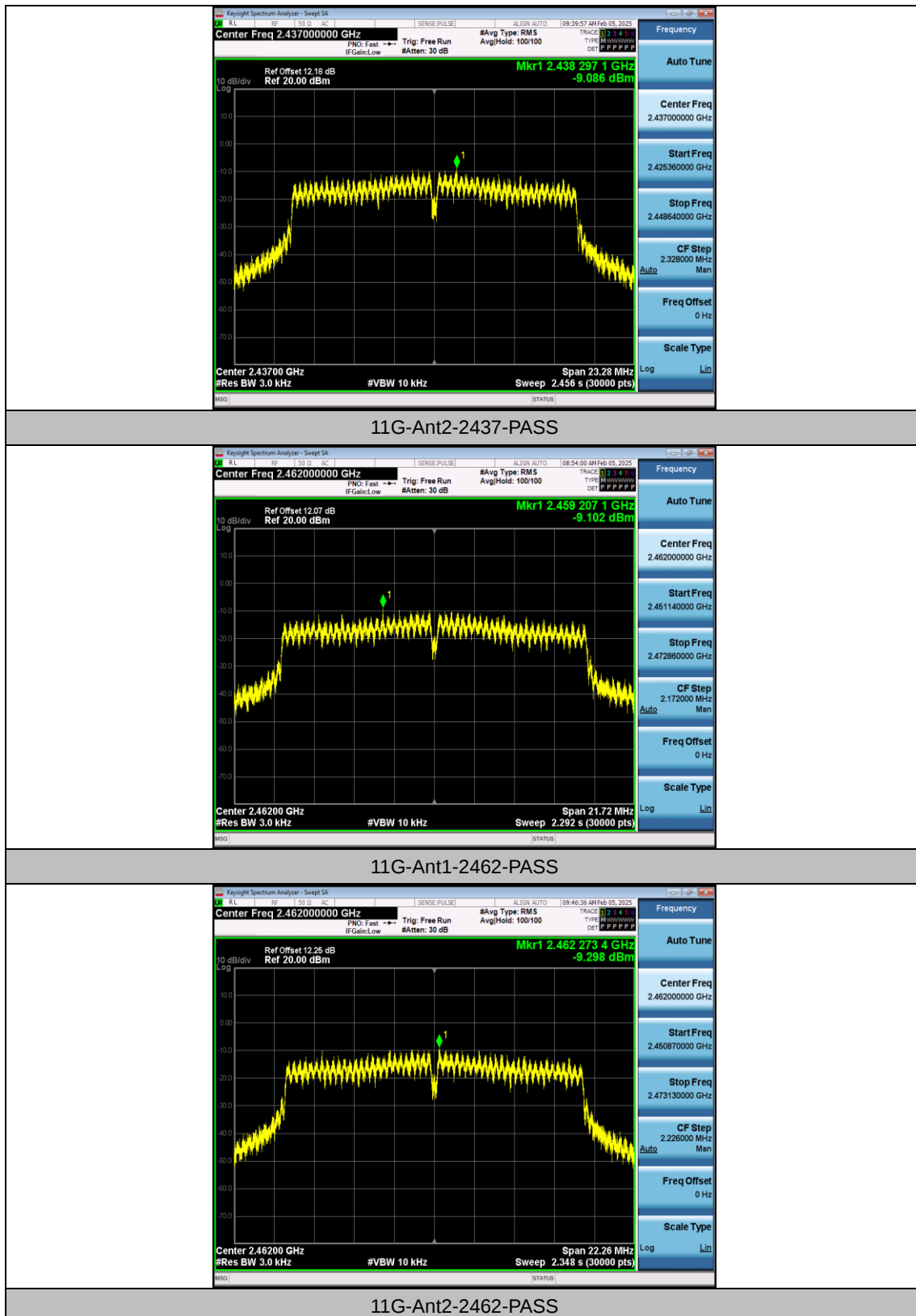
TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-7.59	≤8.00	PASS
11B	Ant2	2412	-6.43	≤8.00	PASS
11B	Ant1	2437	-7.45	≤8.00	PASS
11B	Ant2	2437	-7.30	≤8.00	PASS
11B	Ant1	2462	-8.26	≤8.00	PASS
11B	Ant2	2462	-7.18	≤8.00	PASS
11G	Ant1	2412	-8.48	≤8.00	PASS
11G	Ant2	2412	-8.75	≤8.00	PASS
11G	Ant1	2437	-9.33	≤8.00	PASS
11G	Ant2	2437	-9.09	≤8.00	PASS
11G	Ant1	2462	-9.10	≤8.00	PASS
11G	Ant2	2462	-9.30	≤8.00	PASS
11N20MIMO	Ant1	2412	-7.99	≤8.00	PASS
11N20MIMO	Ant2	2412	-8.13	≤8.00	PASS
11N20MIMO	total	2412	-5.05	≤8.00	PASS
11N20MIMO	Ant1	2437	-8.47	≤8.00	PASS
11N20MIMO	Ant2	2437	-8.03	≤8.00	PASS
11N20MIMO	total	2437	-5.23	≤8.00	PASS
11N20MIMO	Ant1	2462	-8.34	≤8.00	PASS
11N20MIMO	Ant2	2462	-8.37	≤8.00	PASS
11N20MIMO	total	2462	-5.34	≤8.00	PASS
11N40MIMO	Ant1	2422	-11.02	≤8.00	PASS
11N40MIMO	Ant2	2422	-10.87	≤8.00	PASS
11N40MIMO	total	2422	-7.93	≤8.00	PASS
11N40MIMO	Ant1	2437	-10.87	≤8.00	PASS
11N40MIMO	Ant2	2437	-10.82	≤8.00	PASS
11N40MIMO	total	2437	-7.83	≤8.00	PASS
11N40MIMO	Ant1	2452	-11.03	≤8.00	PASS
11N40MIMO	Ant2	2452	-10.79	≤8.00	PASS
11N40MIMO	total	2452	-7.90	≤8.00	PASS

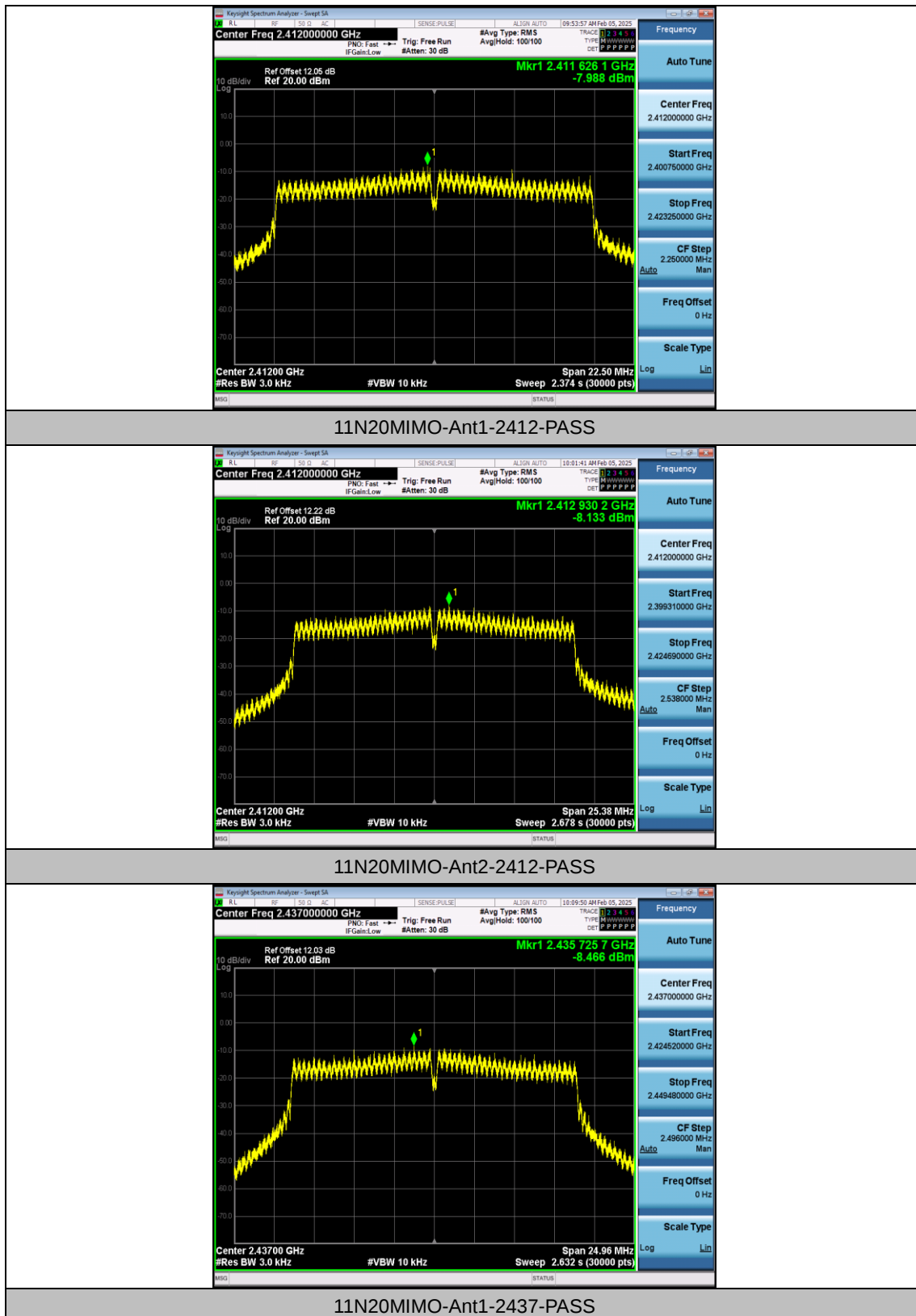
Test Graphs

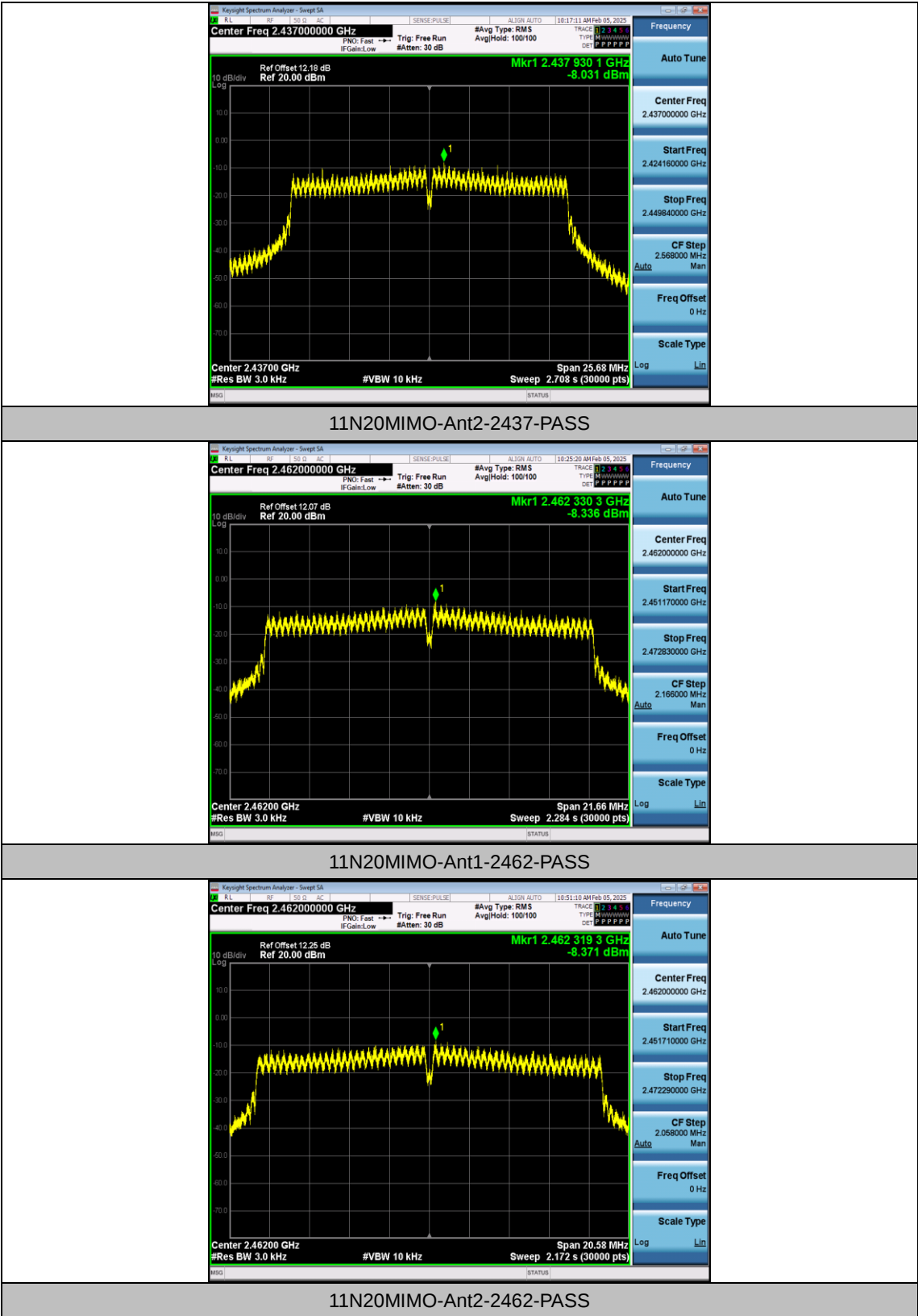


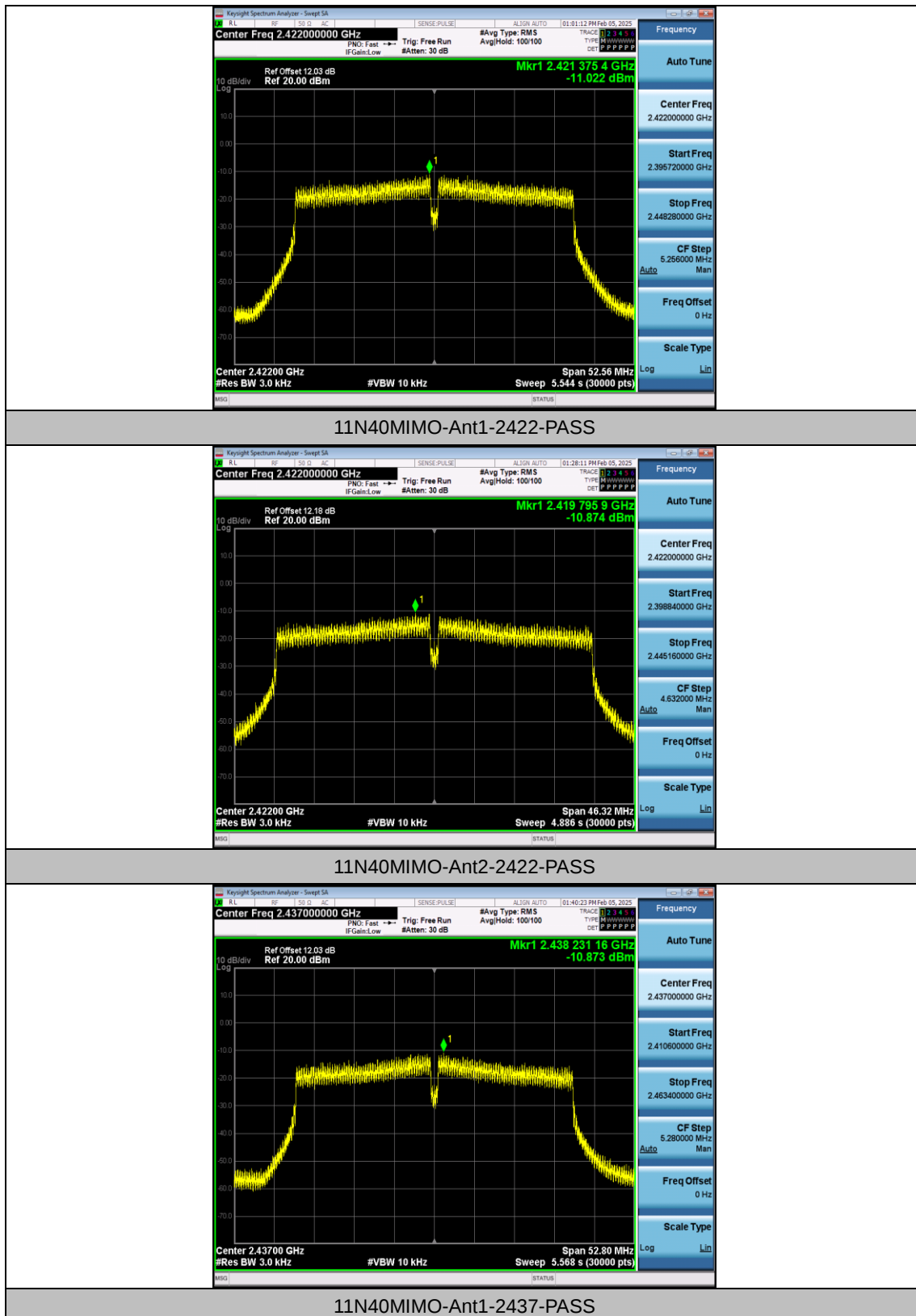


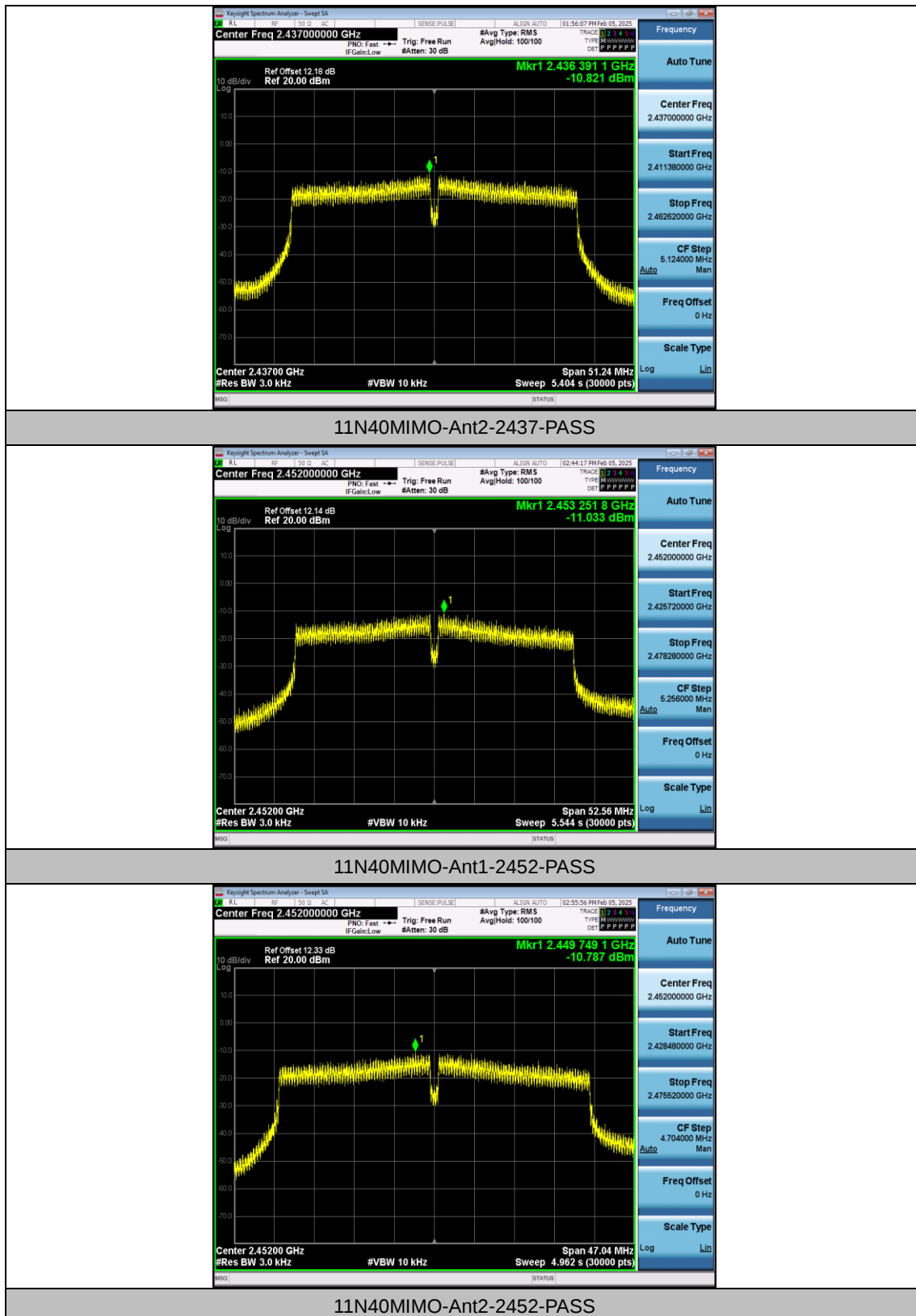












Appendix D: Reference level measurement

Test Result

TestMode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
11B	Ant1	2412	2412.60	6.81
11B	Ant2	2412	2411.02	8.24
11B	Ant1	2437	2437.53	6.40
11B	Ant2	2437	2438.02	7.69
11B	Ant1	2462	2461.51	6.15
11B	Ant2	2462	2462.99	7.00
11G	Ant1	2412	2409.48	4.08
11G	Ant2	2412	2410.74	5.98
11G	Ant1	2437	2434.52	4.49
11G	Ant2	2437	2435.74	5.60
11G	Ant1	2462	2460.76	5.19
11G	Ant2	2462	2464.52	4.98
11N20MIMO	Ant1	2412	2409.50	3.83
11N20MIMO	Ant2	2412	2413.22	3.04
11N20MIMO	Ant1	2437	2432.03	2.37
11N20MIMO	Ant2	2437	2438.31	5.18
11N20MIMO	Ant1	2462	2459.49	3.18
11N20MIMO	Ant2	2462	2464.49	3.95
11N40MIMO	Ant1	2422	2419.48	0.44
11N40MIMO	Ant2	2422	2419.50	1.88
11N40MIMO	Ant1	2437	2432.04	1.94
11N40MIMO	Ant2	2437	2448.27	0.95
11N40MIMO	Ant1	2452	2454.52	1.16
11N40MIMO	Ant2	2452	2457.03	0.37

Test Graphs

