

Appendix: 2.4G Wi-Fi

Contents

Appendix A: DTS Bandwidth 3

 Test Result 3

 Test Graphs 4

Appendix B: Occupied Channel Bandwidth22

 Test Result 22

 Test Graphs 23

Appendix C: Maximum conducted output power41

 Test Result 41

Appendix D: Maximum power spectral density 43

 Test Result 43

 Test Graphs 45

Appendix E: Band edge measurements 75

 Test Result 75

 Test Graphs 76

Appendix F: Conducted Spurious Emission 88

 Test Result 88

 Test Graphs 91

Appendix G: Duty Cycle 145

 Test Result 145

 Test Graphs 147

Appendix A: DTS Bandwidth

Test Result

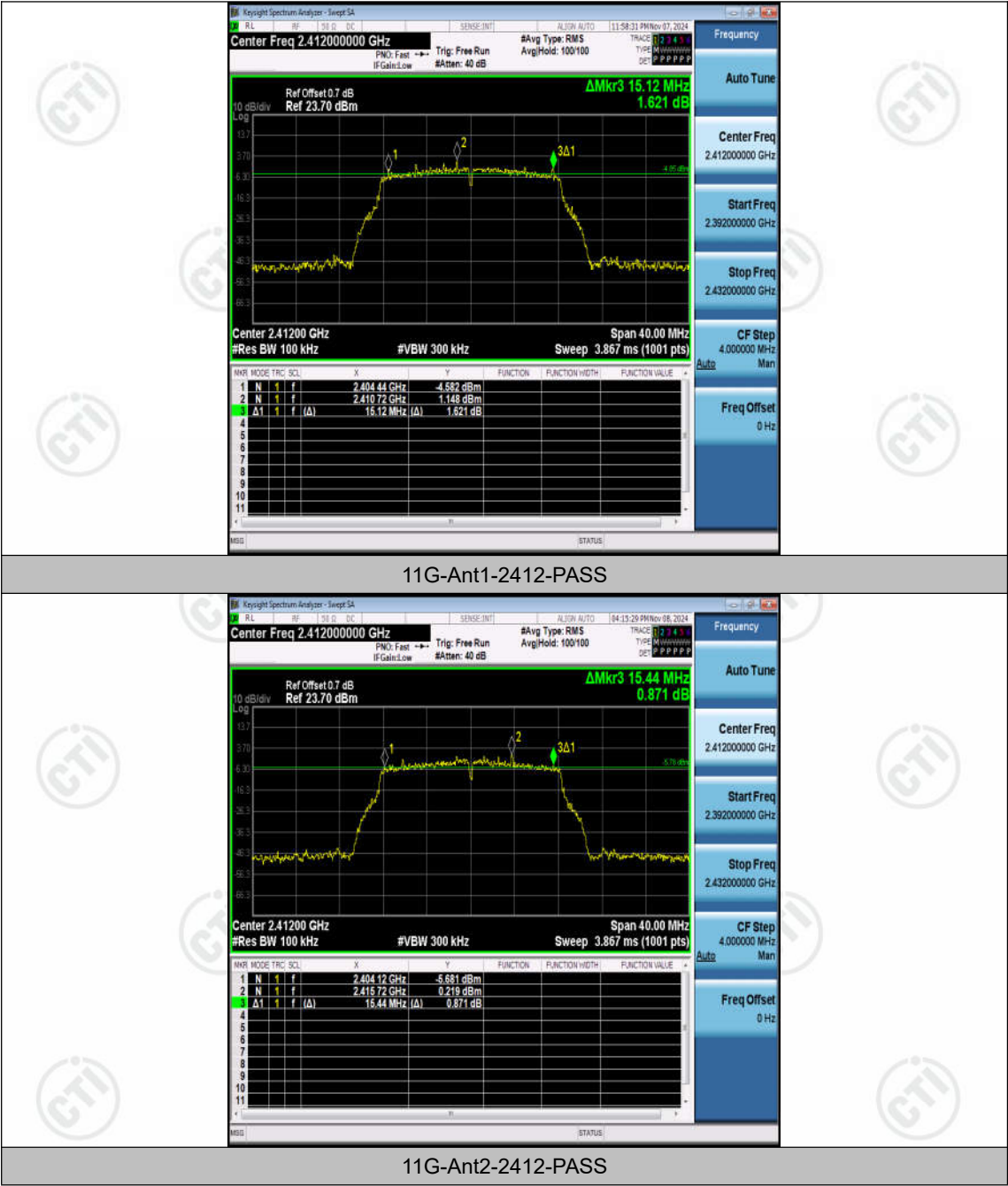
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	8.080	2407.960	2416.040	0.5	PASS
11B	Ant2	2412	7.040	2408.480	2415.520	0.5	PASS
11B	Ant1	2437	7.040	2433.520	2440.560	0.5	PASS
11B	Ant2	2437	7.000	2433.520	2440.520	0.5	PASS
11B	Ant1	2462	7.520	2458.000	2465.520	0.5	PASS
11B	Ant2	2462	7.560	2457.960	2465.520	0.5	PASS
11G	Ant1	2412	15.120	2404.440	2419.560	0.5	PASS
11G	Ant2	2412	15.440	2404.120	2419.560	0.5	PASS
11G	Ant1	2437	16.000	2428.880	2444.880	0.5	PASS
11G	Ant2	2437	16.320	2428.840	2445.160	0.5	PASS
11G	Ant1	2462	14.040	2454.480	2468.520	0.5	PASS
11G	Ant2	2462	15.440	2454.080	2469.520	0.5	PASS
11N20SISO	Ant1	2412	15.120	2404.440	2419.560	0.5	PASS
11N20SISO	Ant2	2412	15.040	2404.440	2419.480	0.5	PASS
11N20SISO	Ant1	2437	15.840	2428.640	2444.480	0.5	PASS
11N20SISO	Ant2	2437	17.320	2428.440	2445.760	0.5	PASS
11N20SISO	Ant1	2462	16.480	2453.880	2470.360	0.5	PASS
11N20SISO	Ant2	2462	15.080	2454.440	2469.520	0.5	PASS
11N40SISO	Ant1	2422	35.120	2404.480	2439.600	0.5	PASS
11N40SISO	Ant2	2422	33.840	2404.480	2438.320	0.5	PASS
11N40SISO	Ant1	2437	35.040	2419.480	2454.520	0.5	PASS
11N40SISO	Ant2	2437	35.040	2419.480	2454.520	0.5	PASS
11N40SISO	Ant1	2452	32.560	2435.680	2468.240	0.5	PASS
11N40SISO	Ant2	2452	35.040	2434.480	2469.520	0.5	PASS
11AX20SISO	Ant1	2412	17.720	2403.680	2421.400	0.5	PASS
11AX20SISO	Ant2	2412	16.080	2404.440	2420.520	0.5	PASS
11AX20SISO	Ant1	2437	15.120	2429.400	2444.520	0.5	PASS
11AX20SISO	Ant2	2437	15.000	2429.280	2444.280	0.5	PASS
11AX20SISO	Ant1	2462	17.480	2453.280	2470.760	0.5	PASS
11AX20SISO	Ant2	2462	16.800	2452.640	2469.440	0.5	PASS
11AX40SISO	Ant1	2422	36.240	2404.480	2440.720	0.5	PASS
11AX40SISO	Ant2	2422	36.880	2403.680	2440.560	0.5	PASS
11AX40SISO	Ant1	2437	36.800	2418.200	2455.000	0.5	PASS
11AX40SISO	Ant2	2437	36.240	2419.480	2455.720	0.5	PASS
11AX40SISO	Ant1	2452	36.880	2433.120	2470.000	0.5	PASS
11AX40SISO	Ant2	2452	35.520	2434.000	2469.520	0.5	PASS

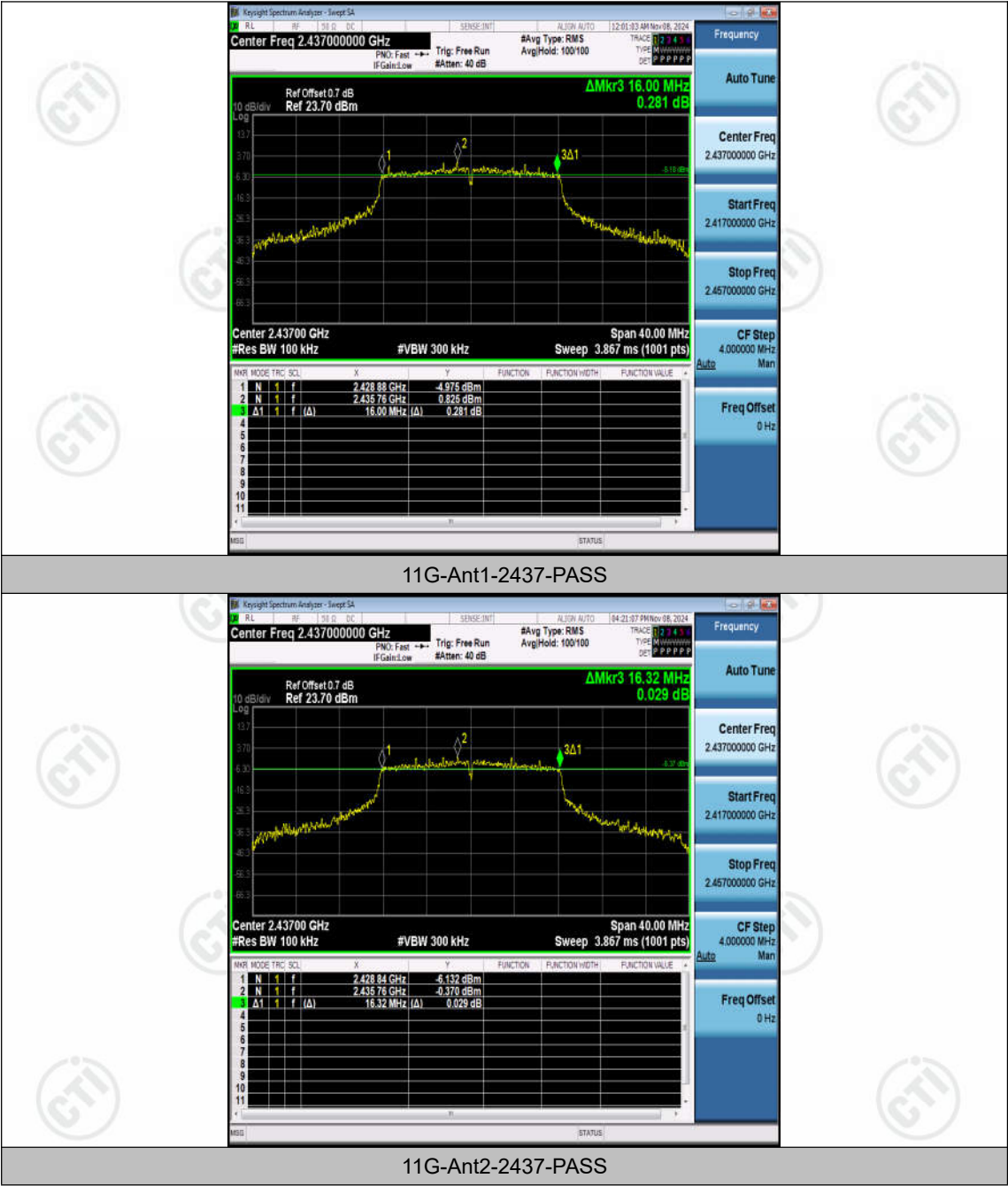
Test Graphs

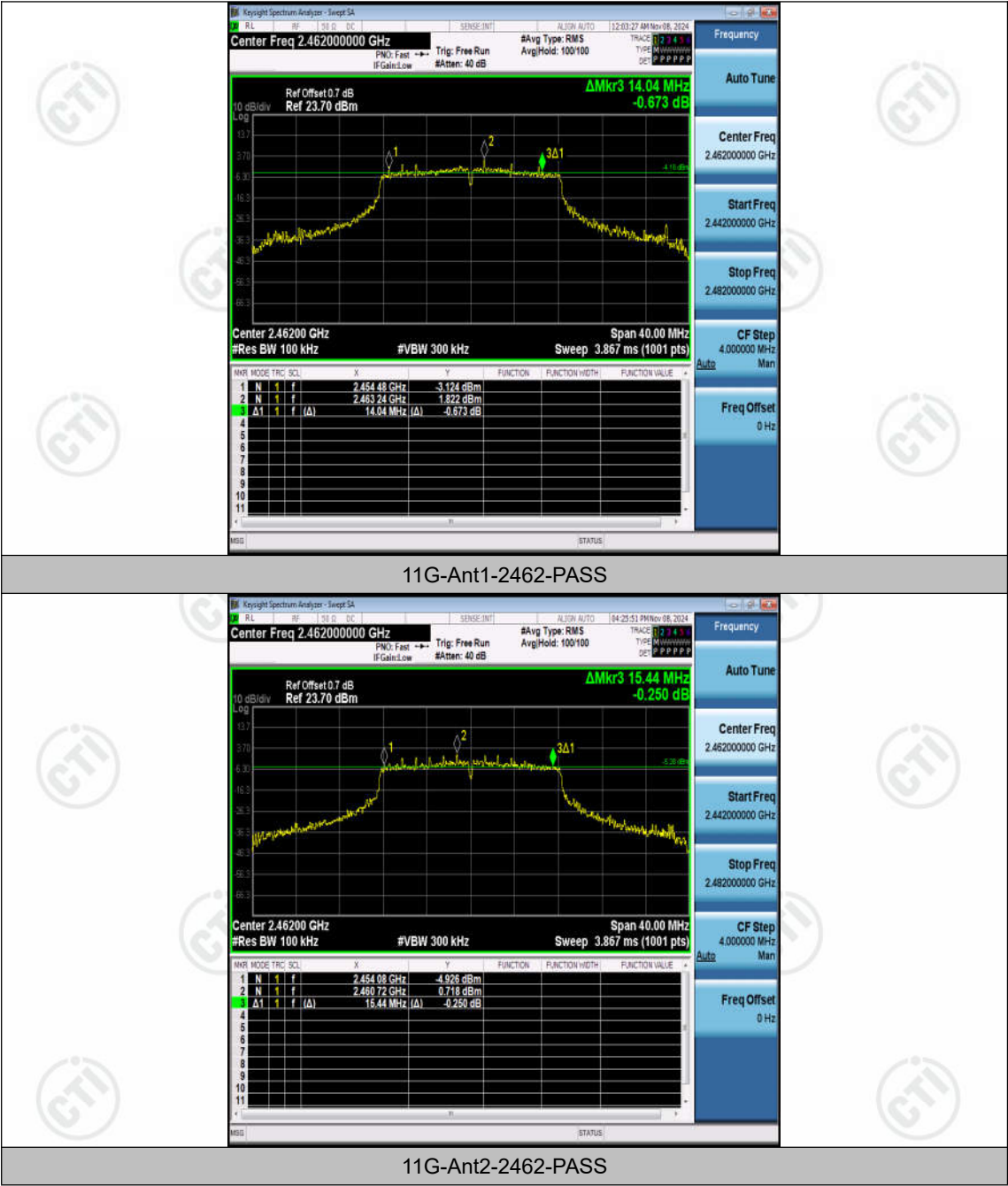


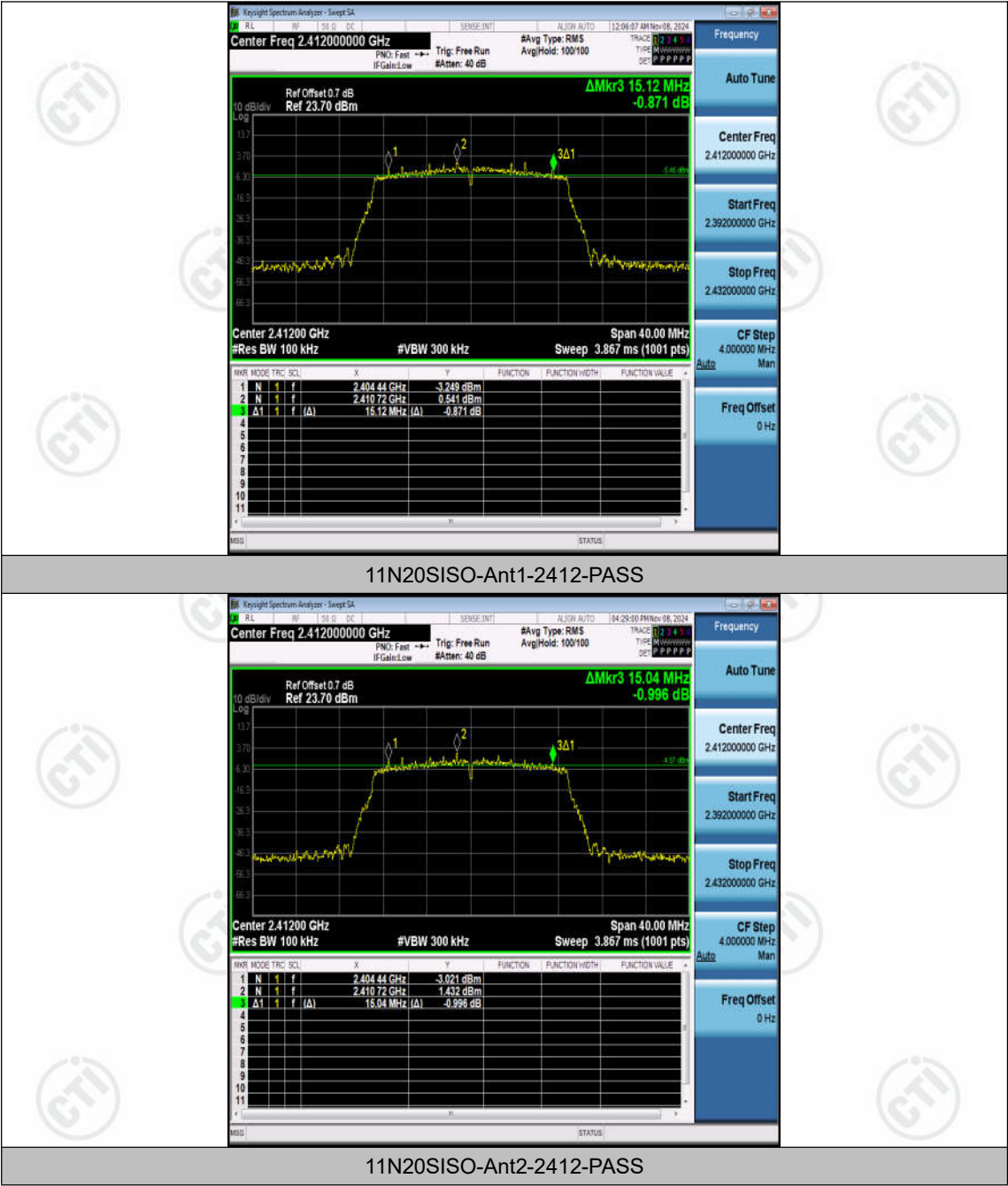


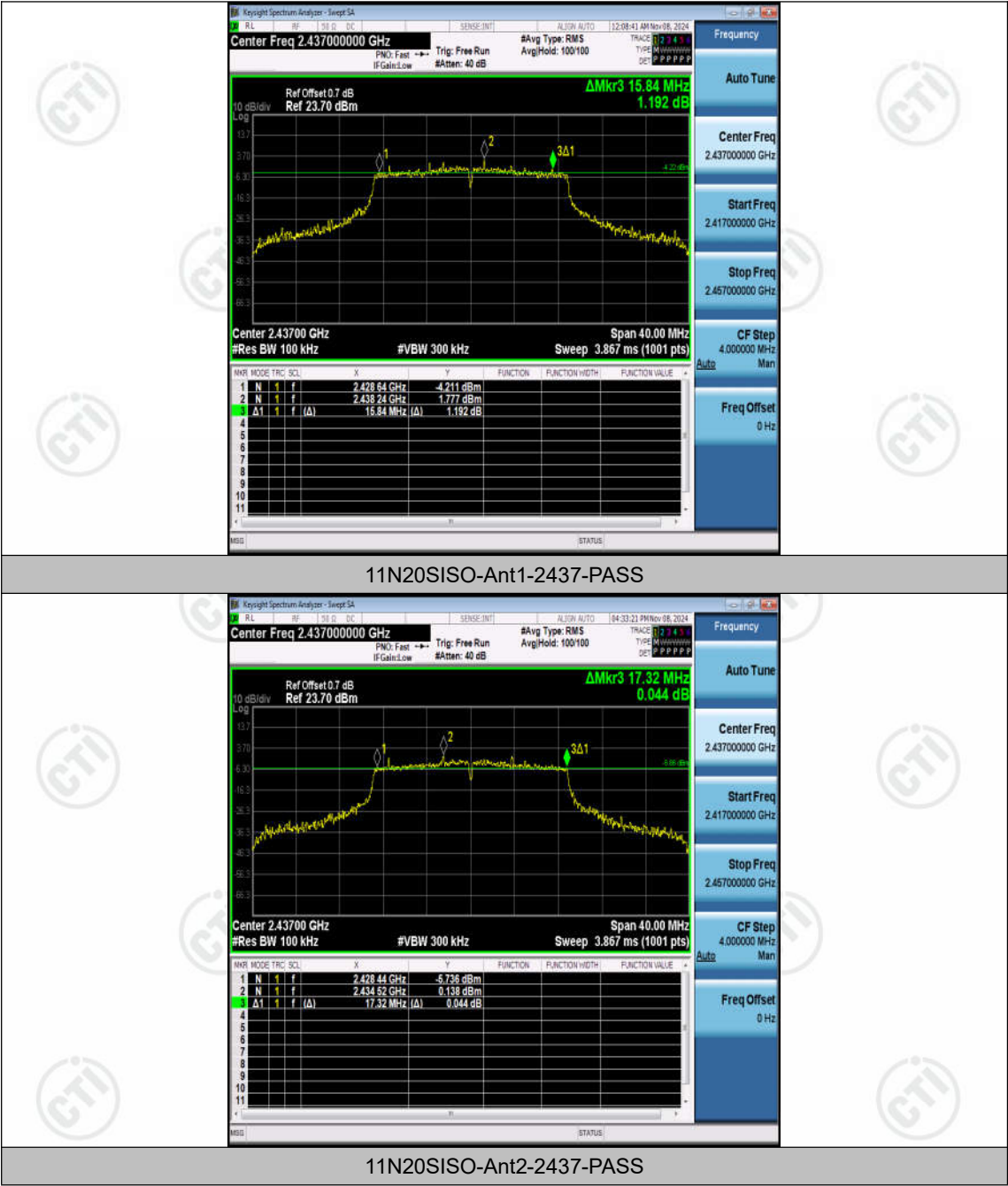


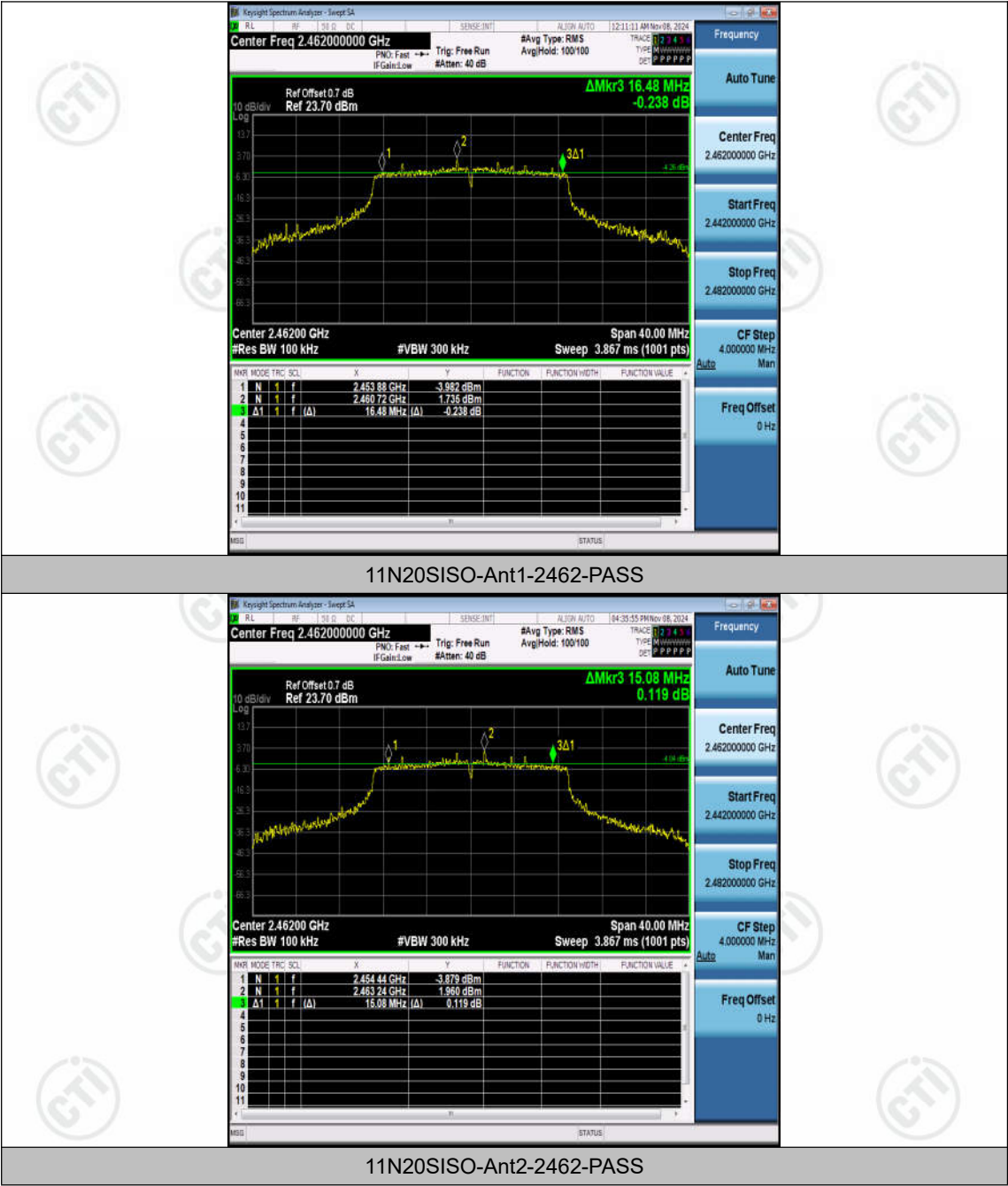


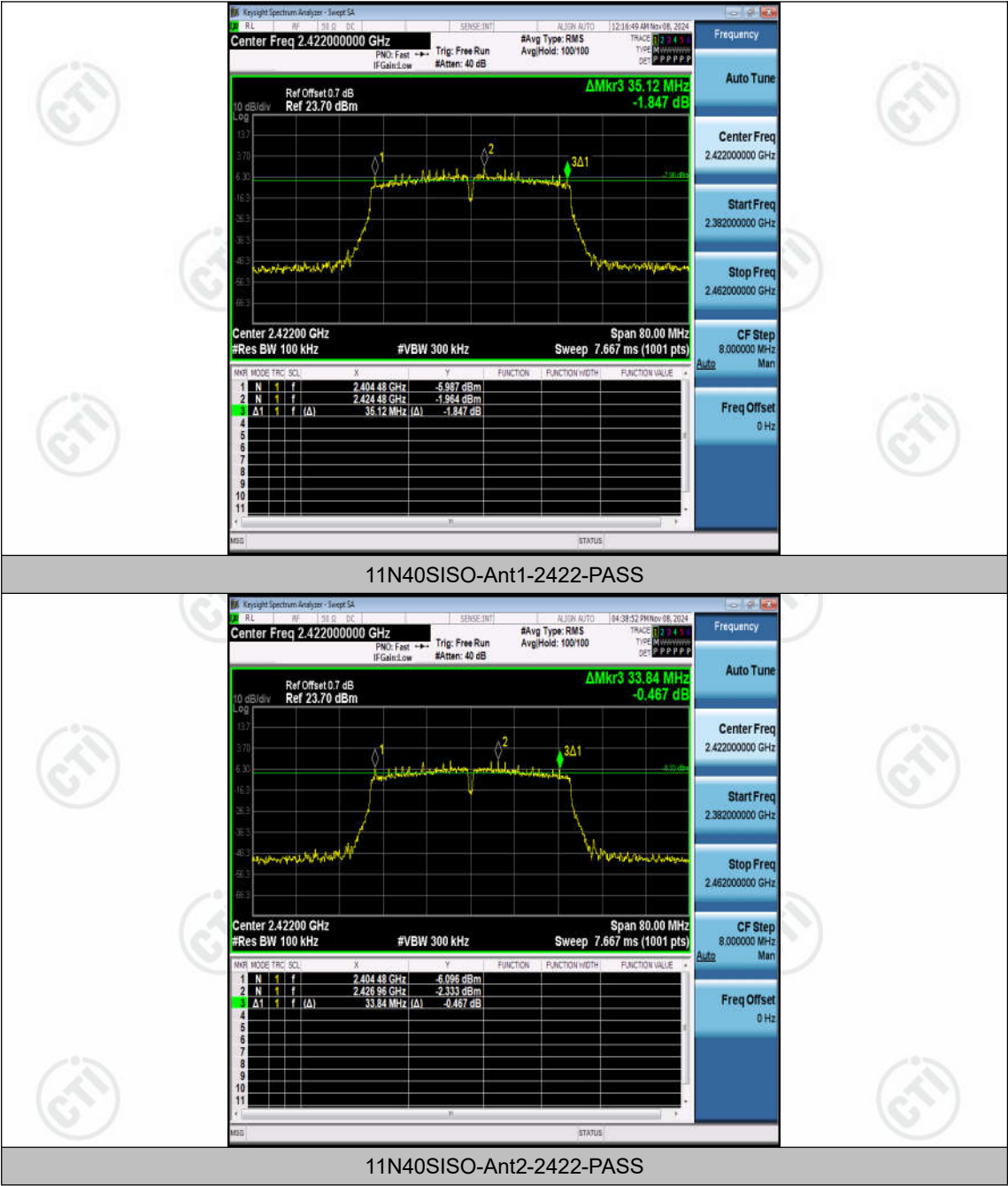


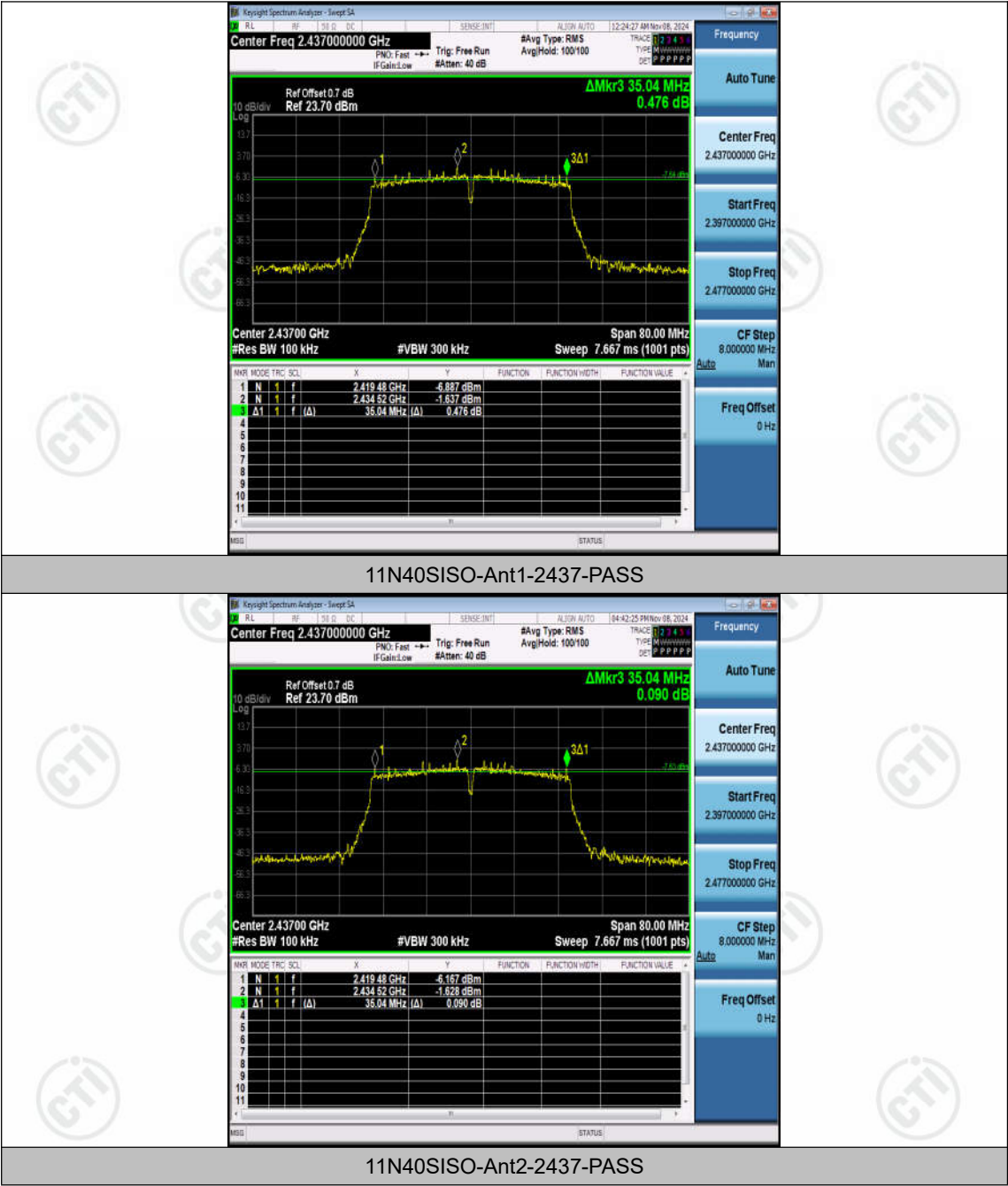


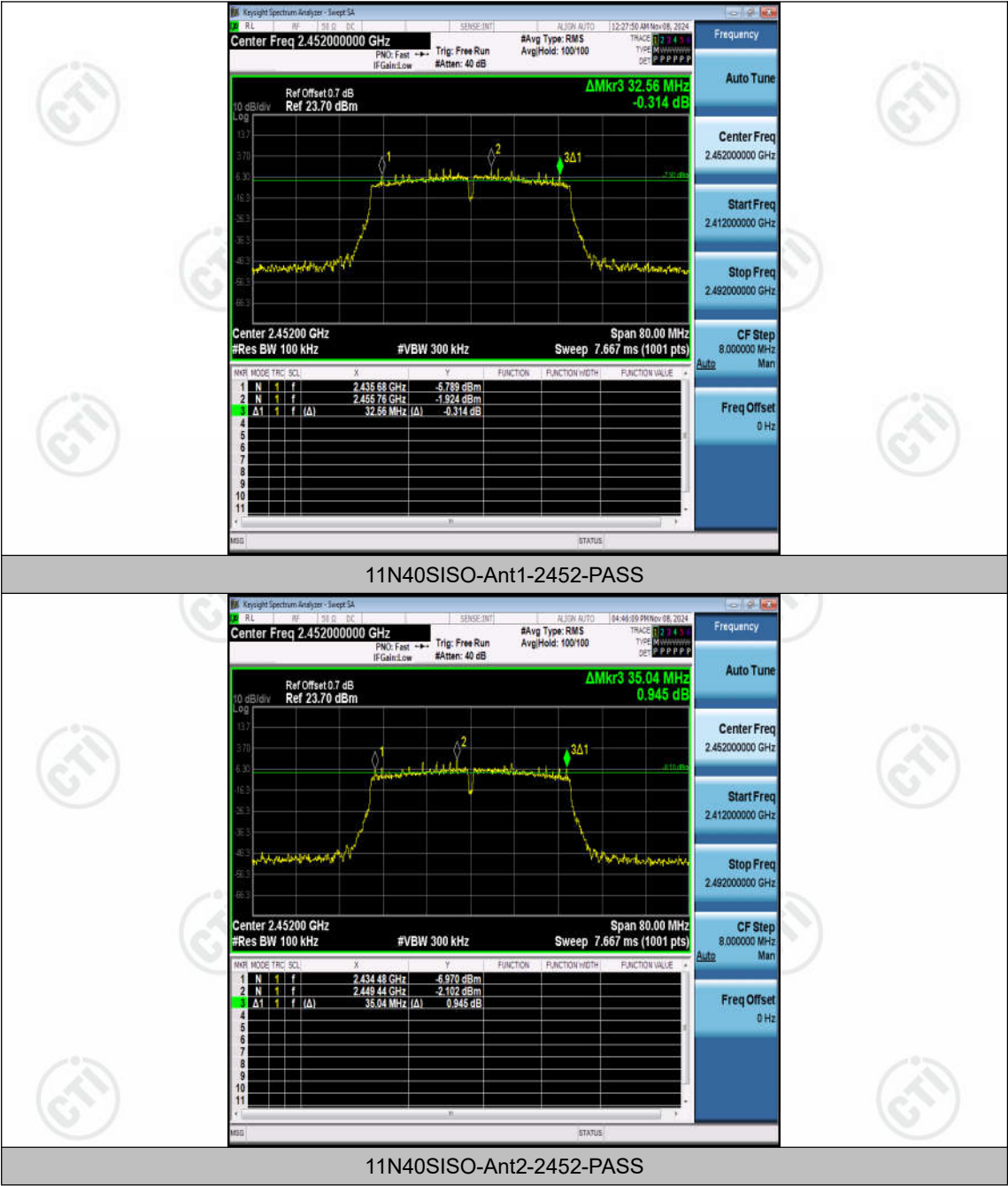


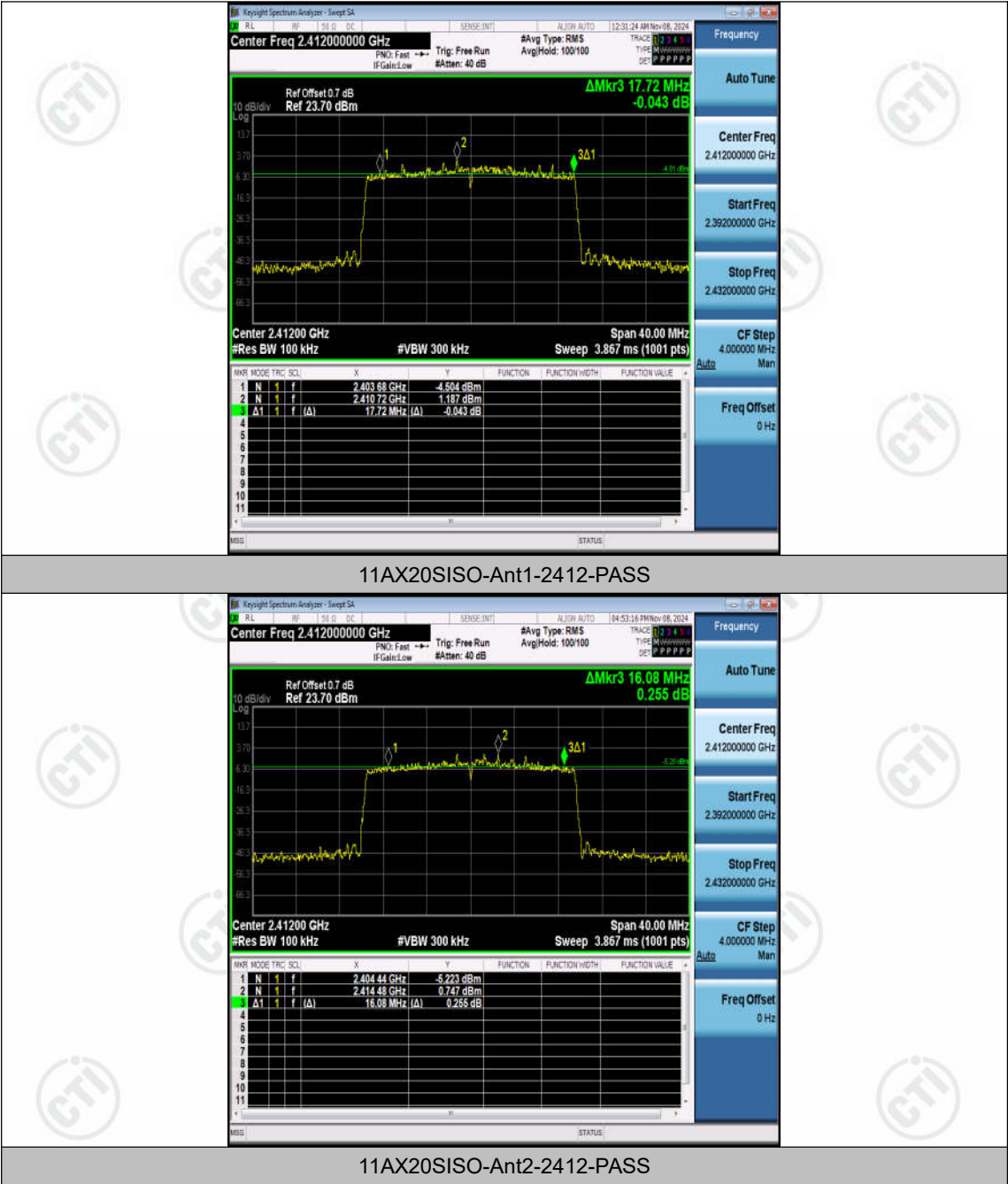


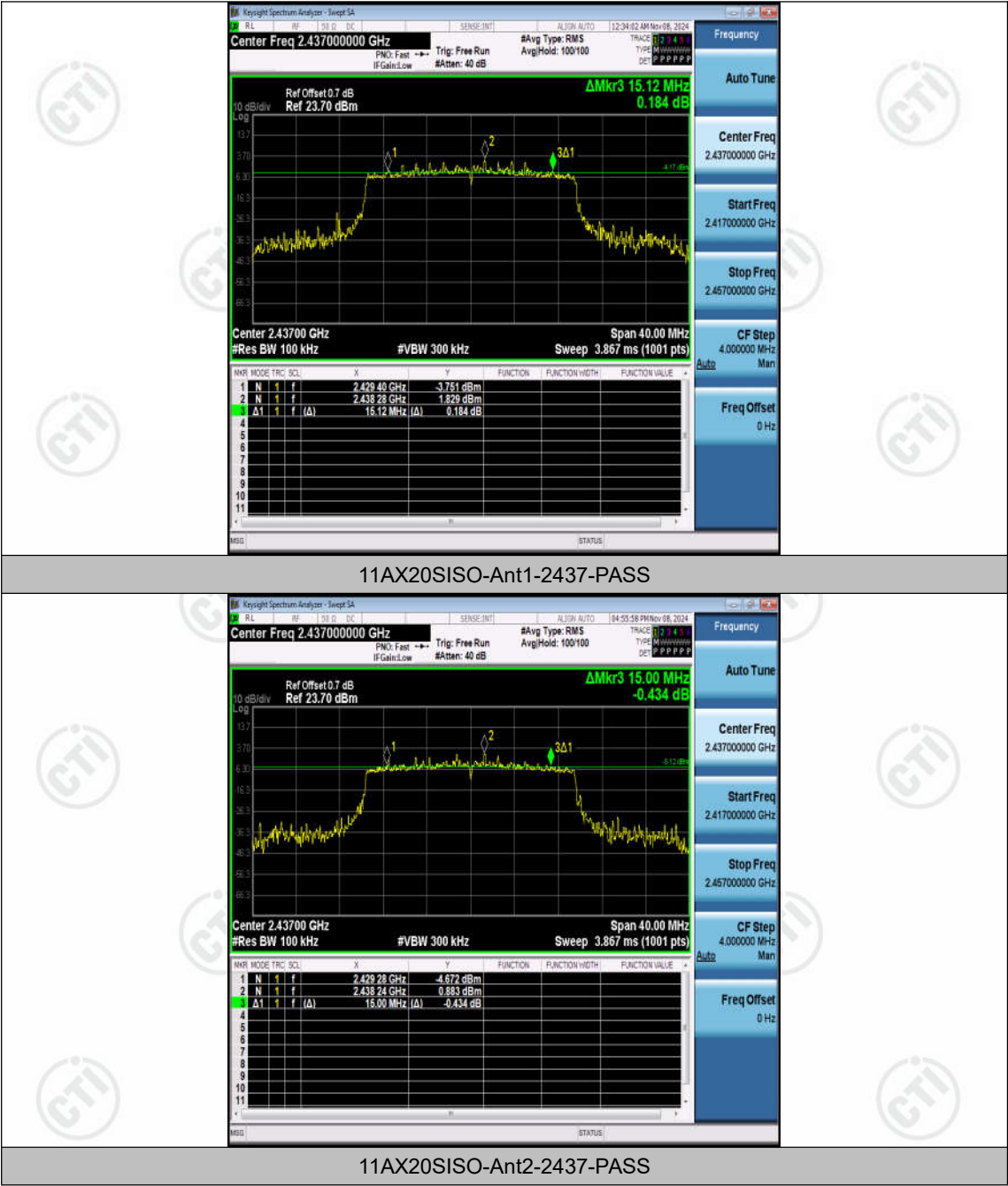


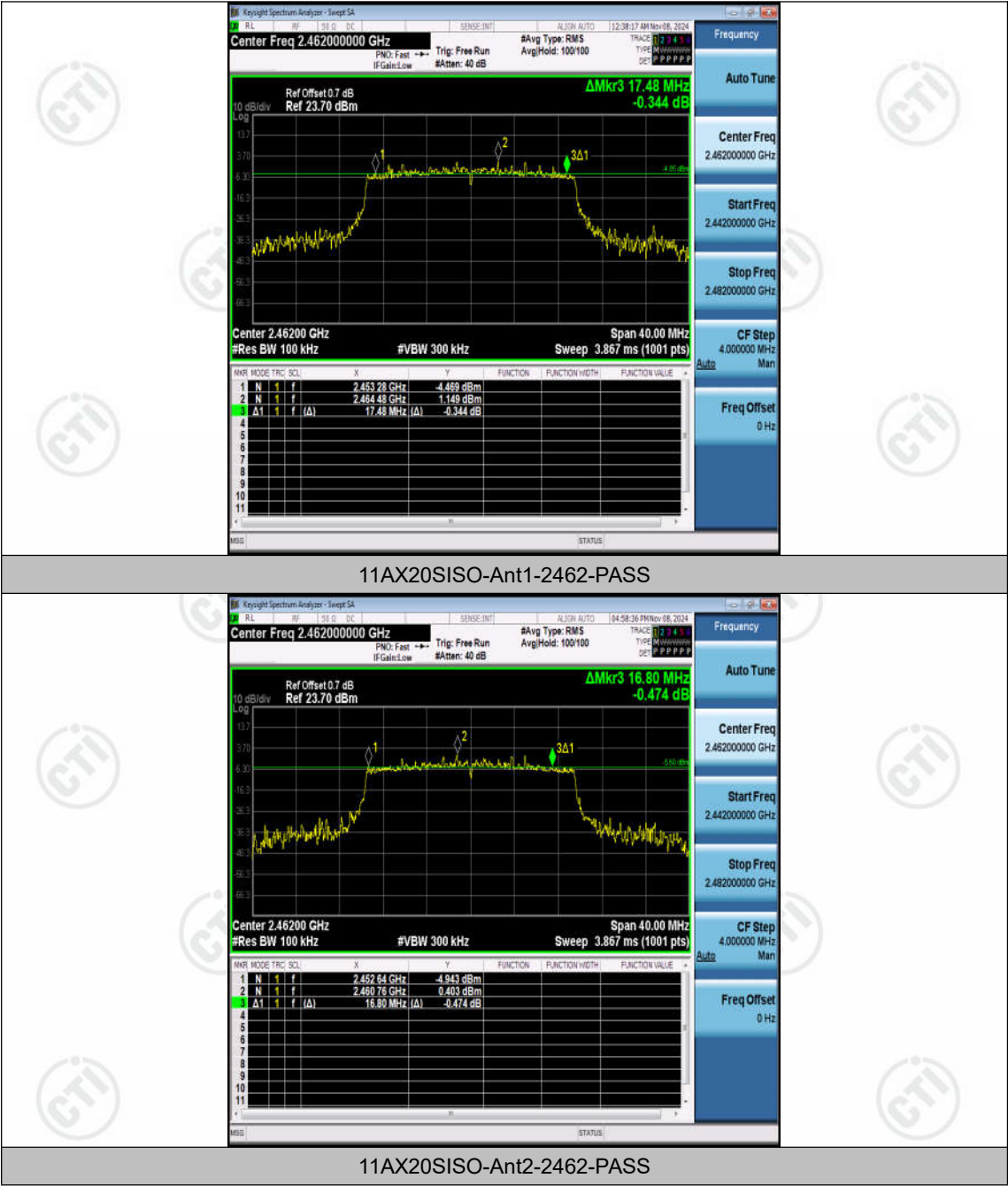


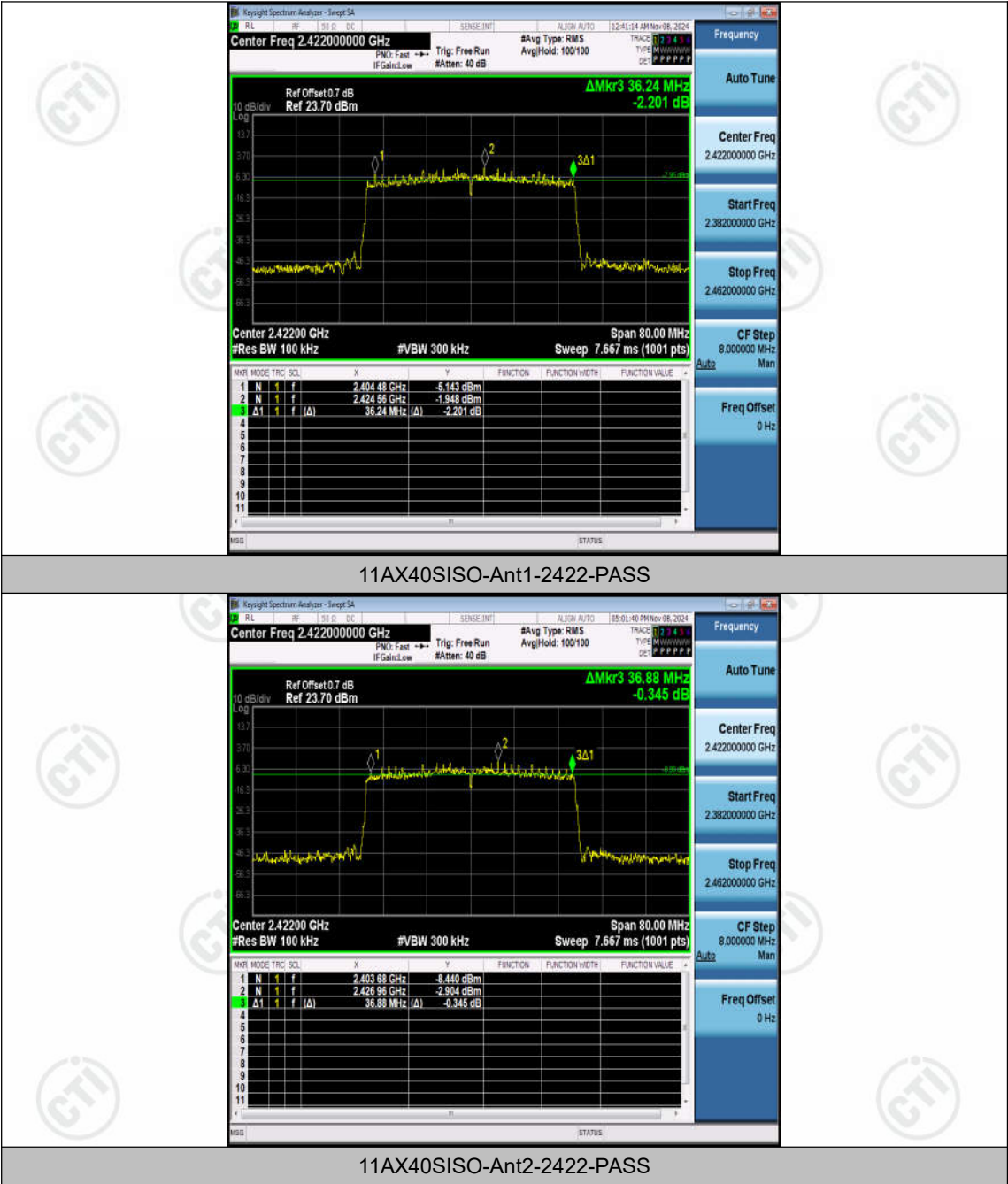


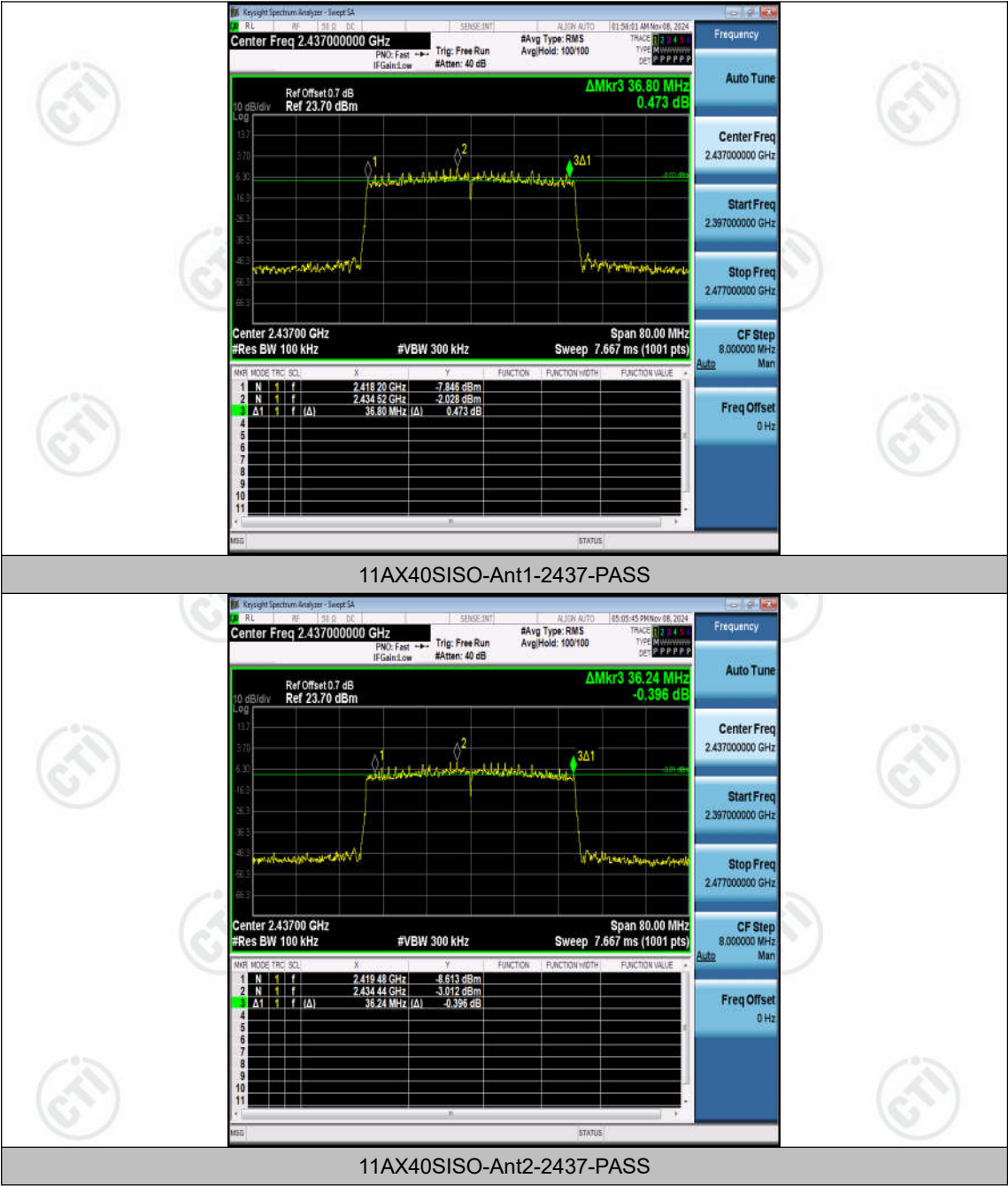


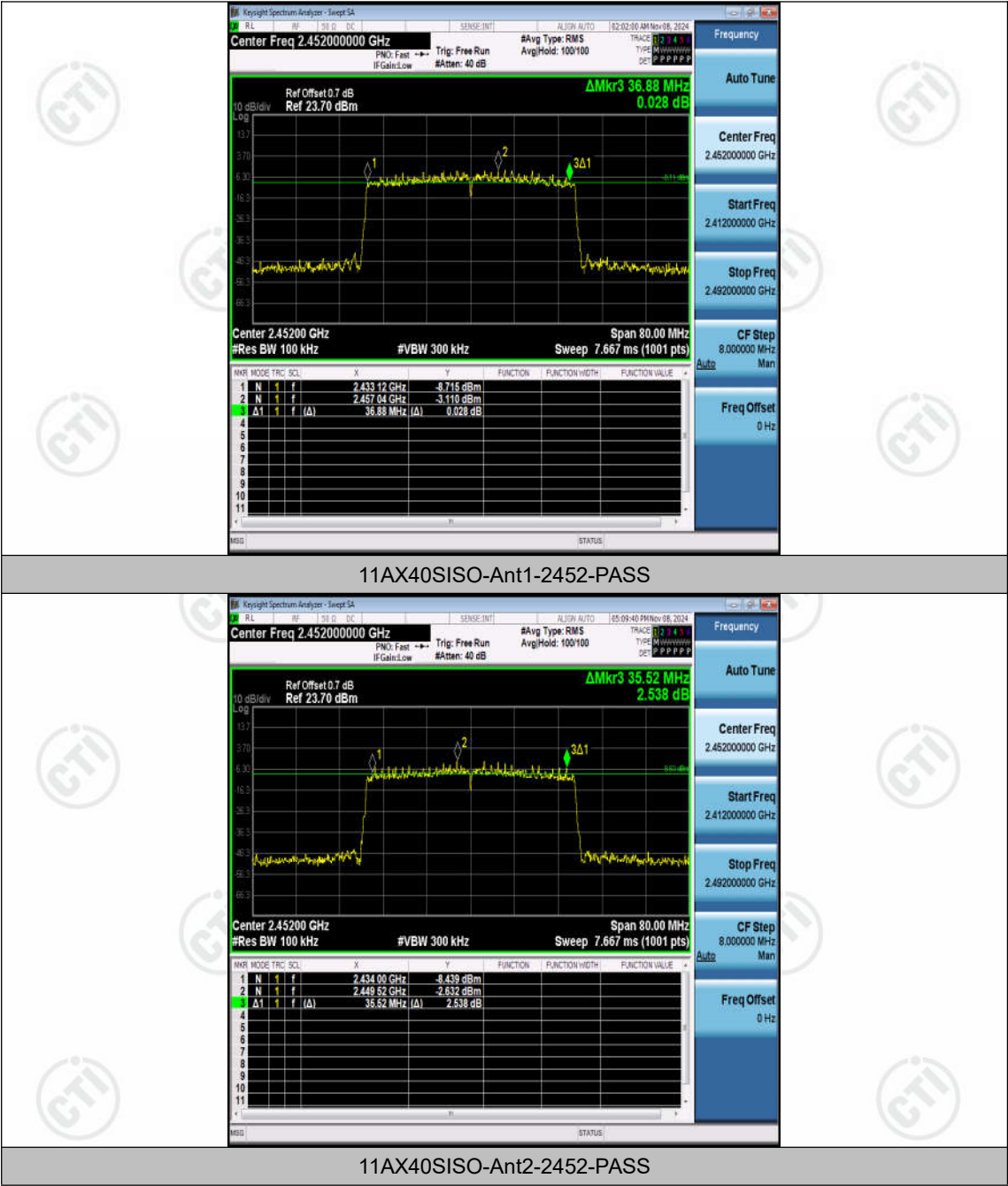












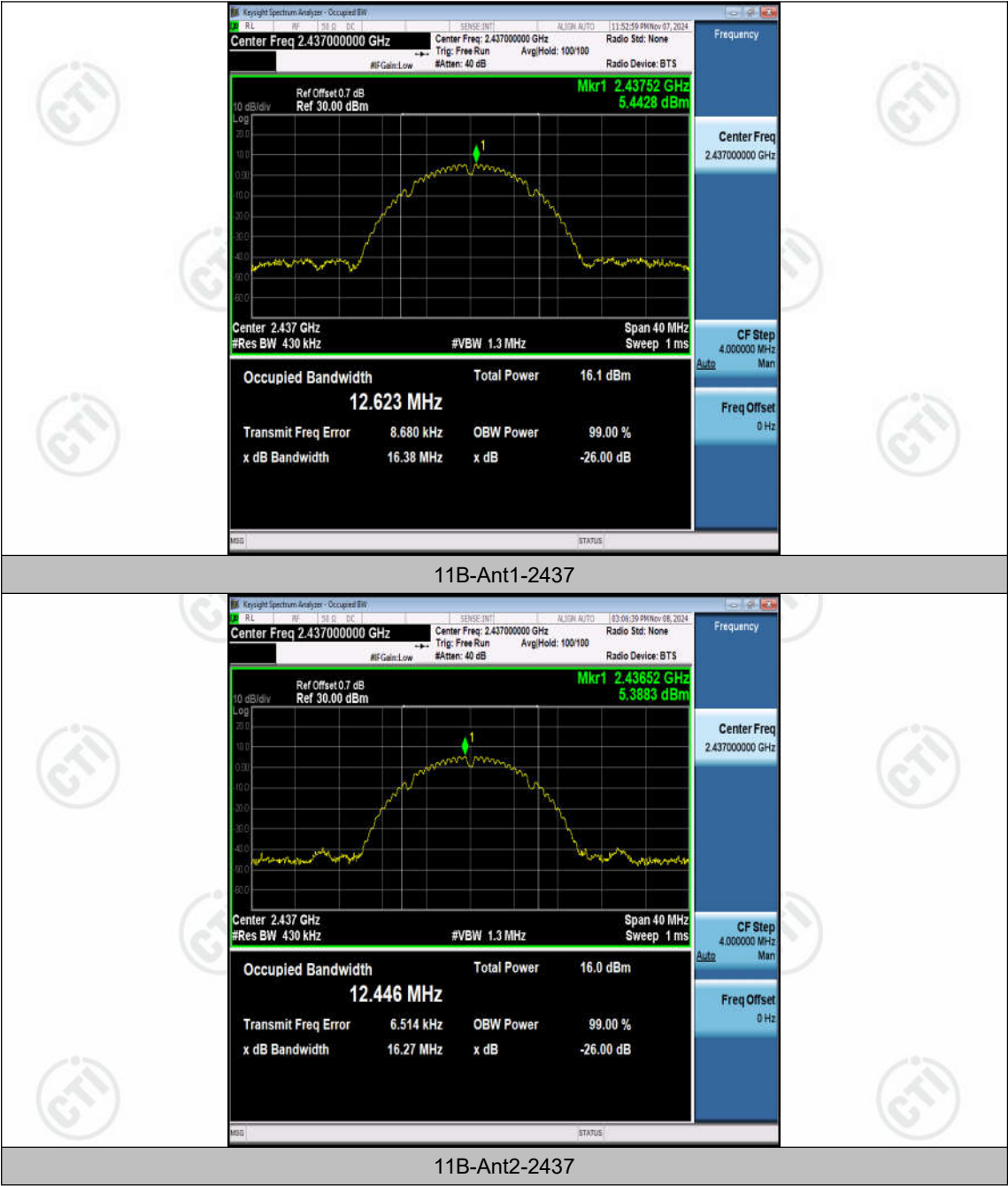
Appendix B: Occupied Channel Bandwidth

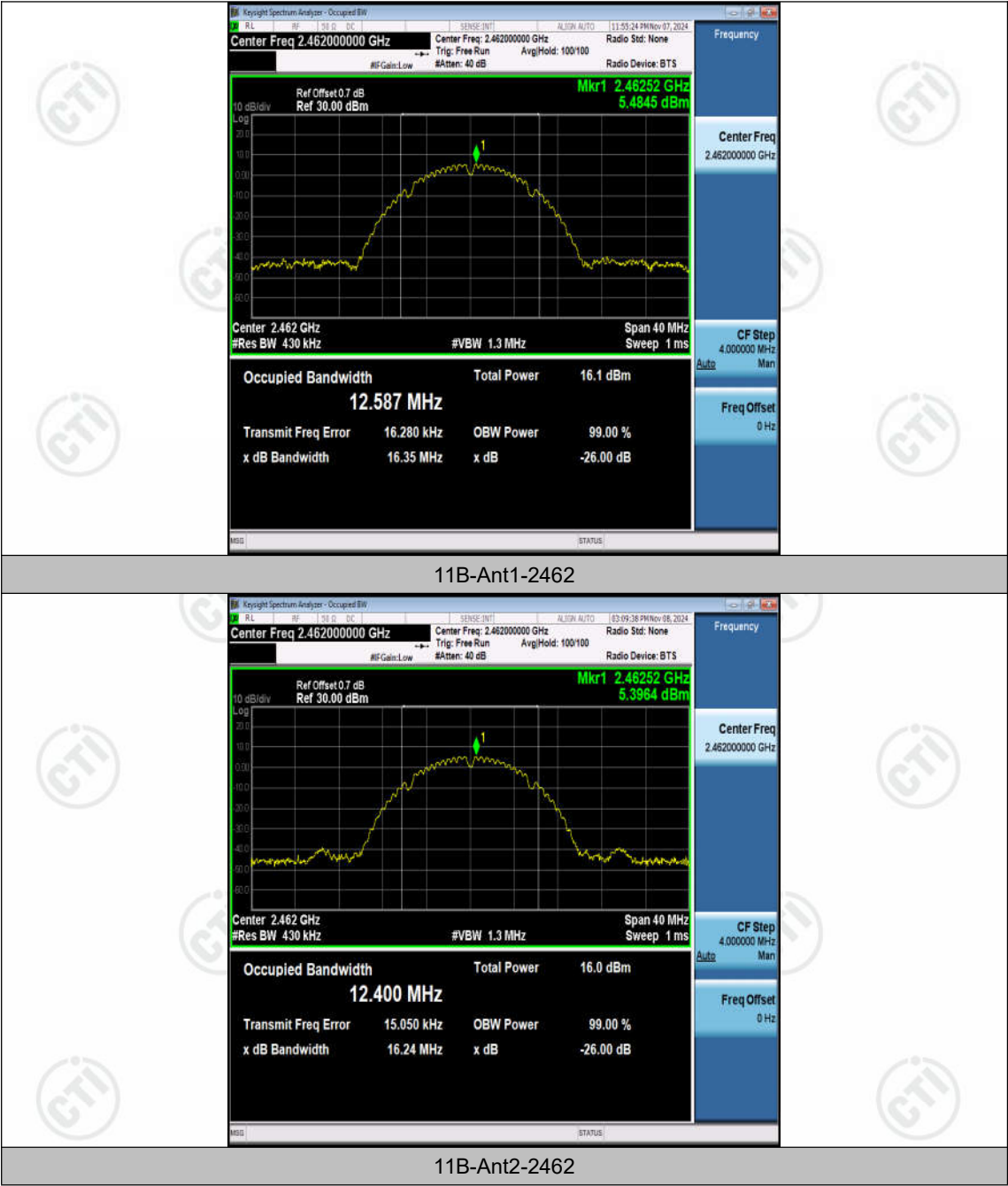
Test Result

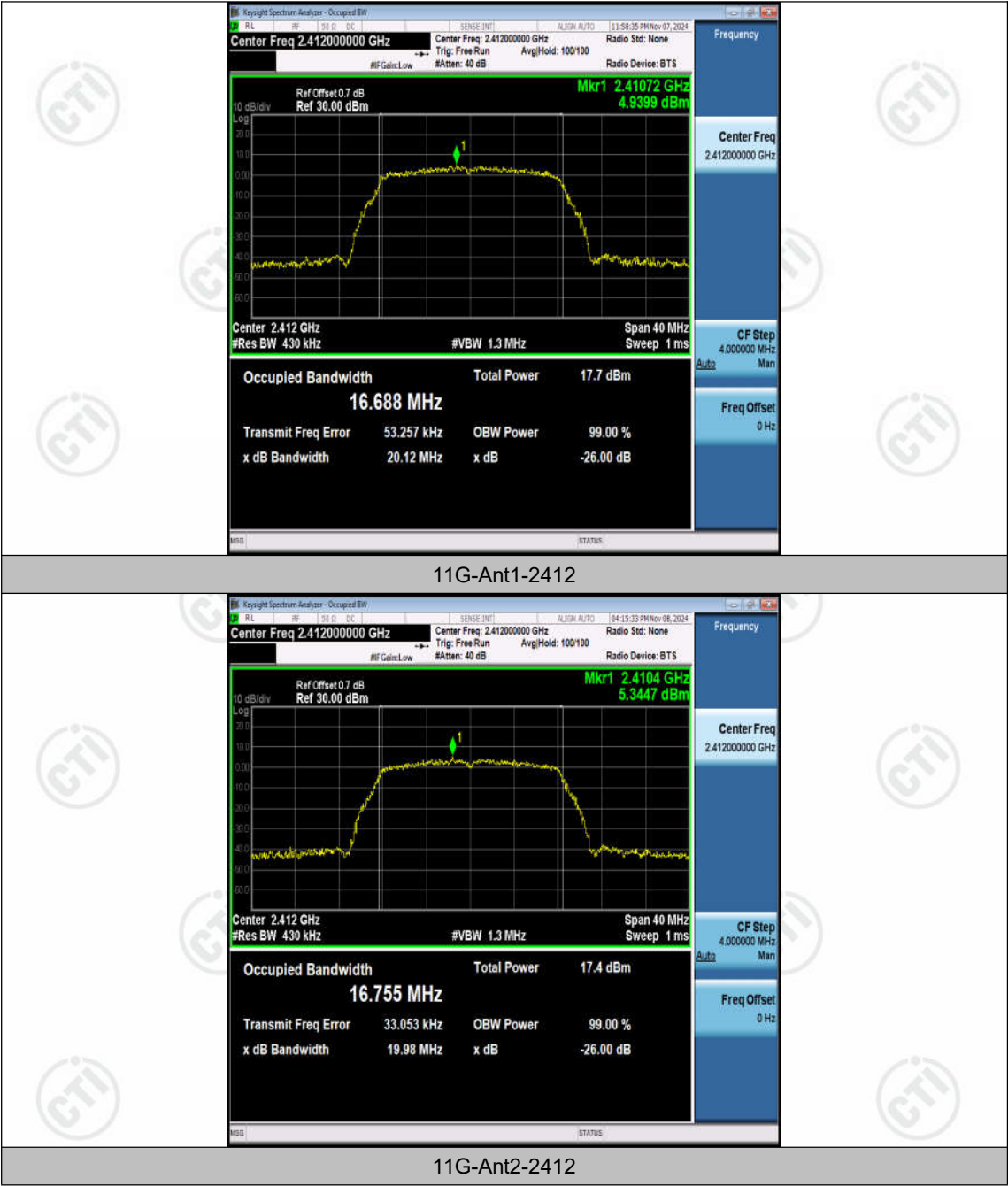
TestMode	Antenna	Channel Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11B	Ant1	2412	12.629	2405.7187	2418.3477	---	---
11B	Ant2	2412	12.455	2405.7081	2418.1631	---	---
11B	Ant1	2437	12.623	2430.6972	2443.3202	---	---
11B	Ant2	2437	12.446	2430.7835	2443.2295	---	---
11B	Ant1	2462	12.587	2455.7228	2468.3098	---	---
11B	Ant2	2462	12.400	2455.8151	2468.2151	---	---
11G	Ant1	2412	16.688	2403.7093	2420.3973	---	---
11G	Ant2	2412	16.755	2403.6556	2420.4106	---	---
11G	Ant1	2437	17.628	2428.1135	2445.7415	---	---
11G	Ant2	2437	17.581	2428.0995	2445.6805	---	---
11G	Ant1	2462	17.447	2453.2236	2470.6706	---	---
11G	Ant2	2462	17.629	2453.1162	2470.7452	---	---
11N20SISO	Ant1	2412	17.714	2403.1587	2420.8727	---	---
11N20SISO	Ant2	2412	17.710	2403.1510	2420.8610	---	---
11N20SISO	Ant1	2437	18.541	2427.7088	2446.2498	---	---
11N20SISO	Ant2	2437	18.589	2427.7052	2446.2942	---	---
11N20SISO	Ant1	2462	18.504	2452.7525	2471.2565	---	---
11N20SISO	Ant2	2462	18.608	2452.6503	2471.2583	---	---
11N40SISO	Ant1	2422	36.023	2404.0553	2440.0783	---	---
11N40SISO	Ant2	2422	36.066	2404.0323	2440.0983	---	---
11N40SISO	Ant1	2437	36.008	2419.0107	2455.0187	---	---
11N40SISO	Ant2	2437	36.170	2418.8799	2455.0499	---	---
11N40SISO	Ant1	2452	36.059	2433.9613	2470.0203	---	---
11N40SISO	Ant2	2452	36.119	2433.9862	2470.1052	---	---
11AX20SISO	Ant1	2412	18.825	2402.6091	2421.4341	---	---
11AX20SISO	Ant2	2412	18.835	2402.6071	2421.4421	---	---
11AX20SISO	Ant1	2437	19.046	2427.5019	2446.5479	---	---
11AX20SISO	Ant2	2437	19.023	2427.4845	2446.5075	---	---
11AX20SISO	Ant1	2462	19.086	2452.4524	2471.5384	---	---
11AX20SISO	Ant2	2462	19.115	2452.4711	2471.5861	---	---
11AX40SISO	Ant1	2422	37.572	2403.2807	2440.8527	---	---
11AX40SISO	Ant2	2422	37.609	2403.2392	2440.8482	---	---
11AX40SISO	Ant1	2437	37.657	2418.2131	2455.8701	---	---
11AX40SISO	Ant2	2437	37.626	2418.1854	2455.8114	---	---
11AX40SISO	Ant1	2452	37.685	2433.1661	2470.8511	---	---
11AX40SISO	Ant2	2452	37.714	2433.1607	2470.8747	---	---

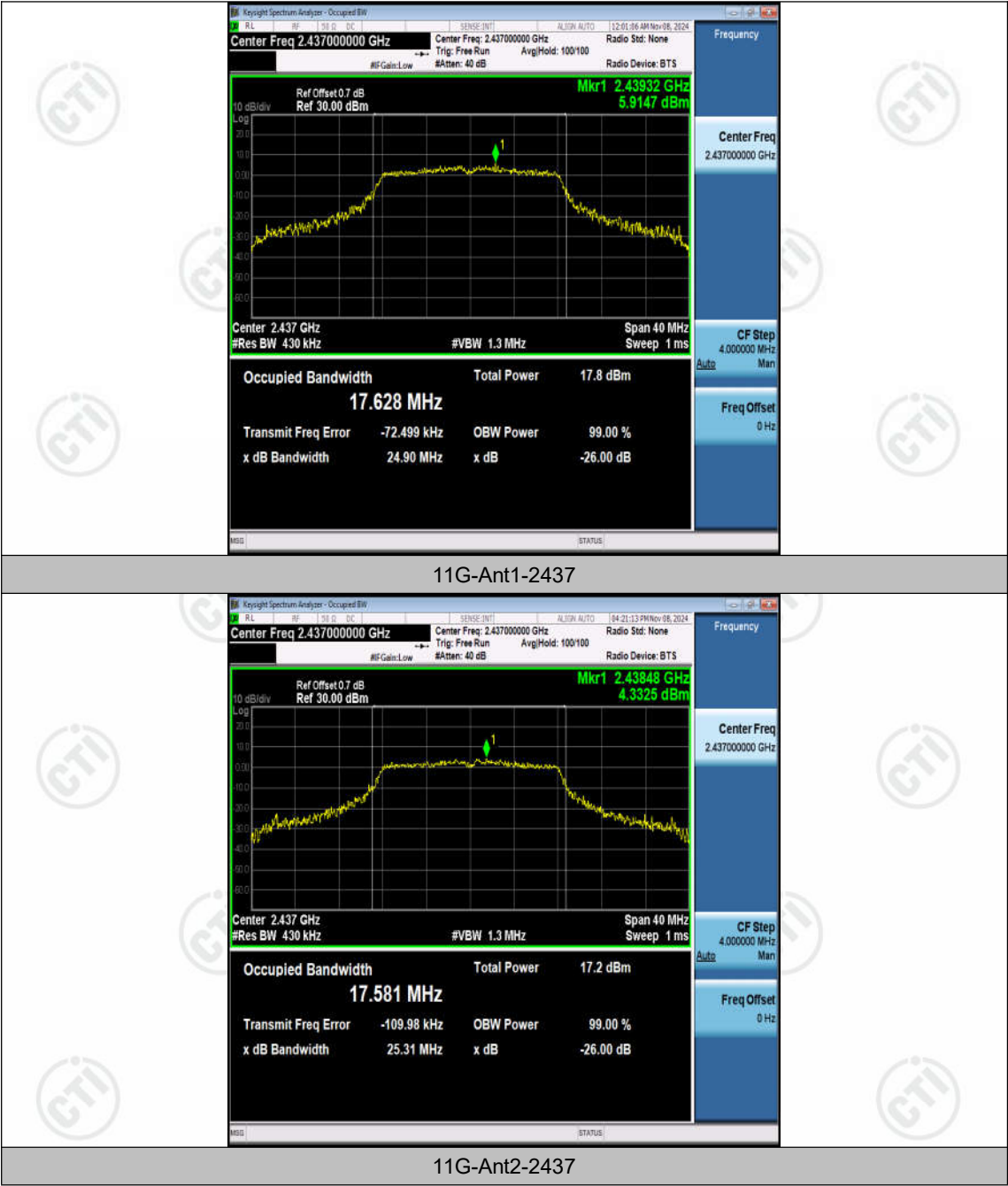
Test Graphs

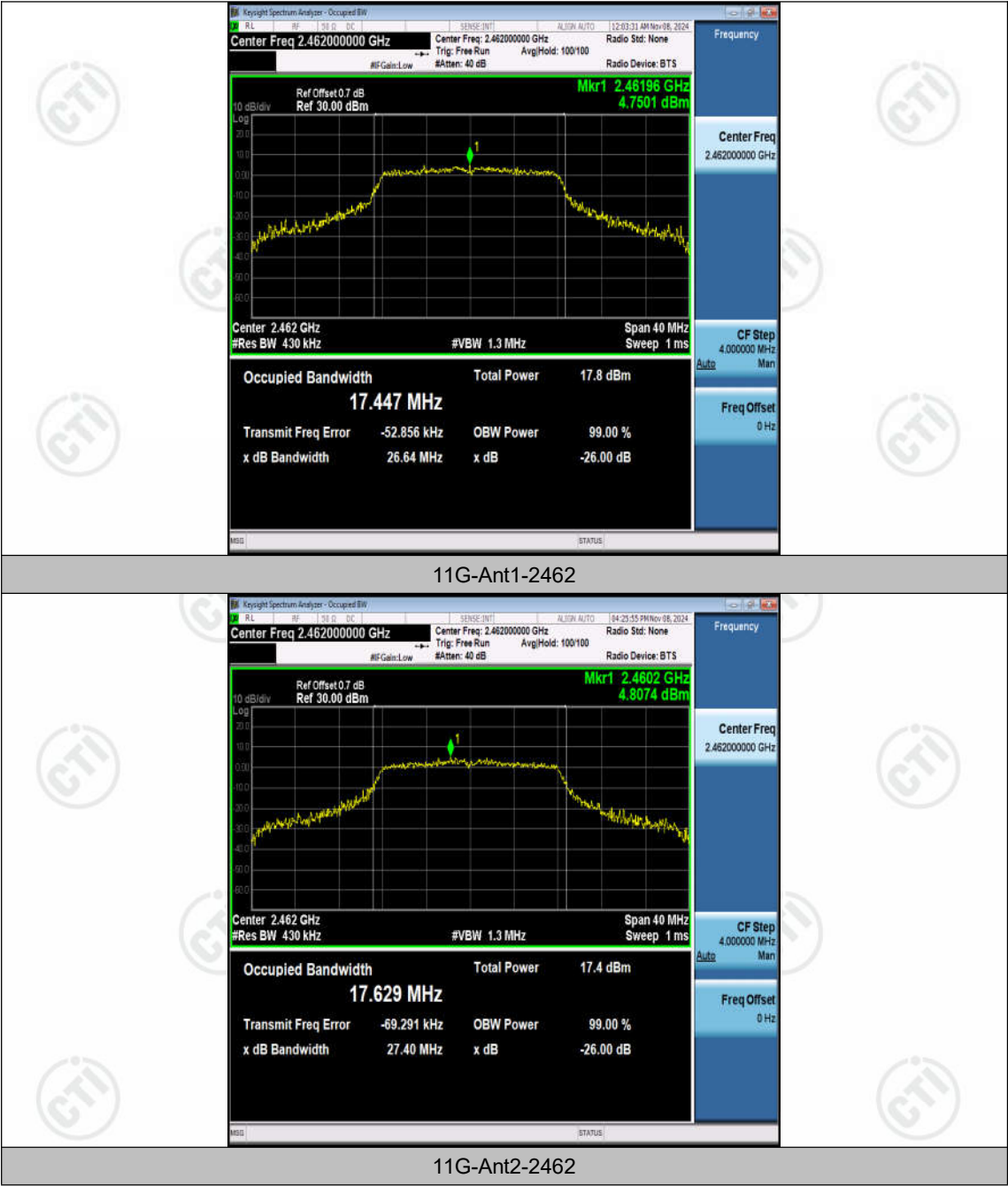


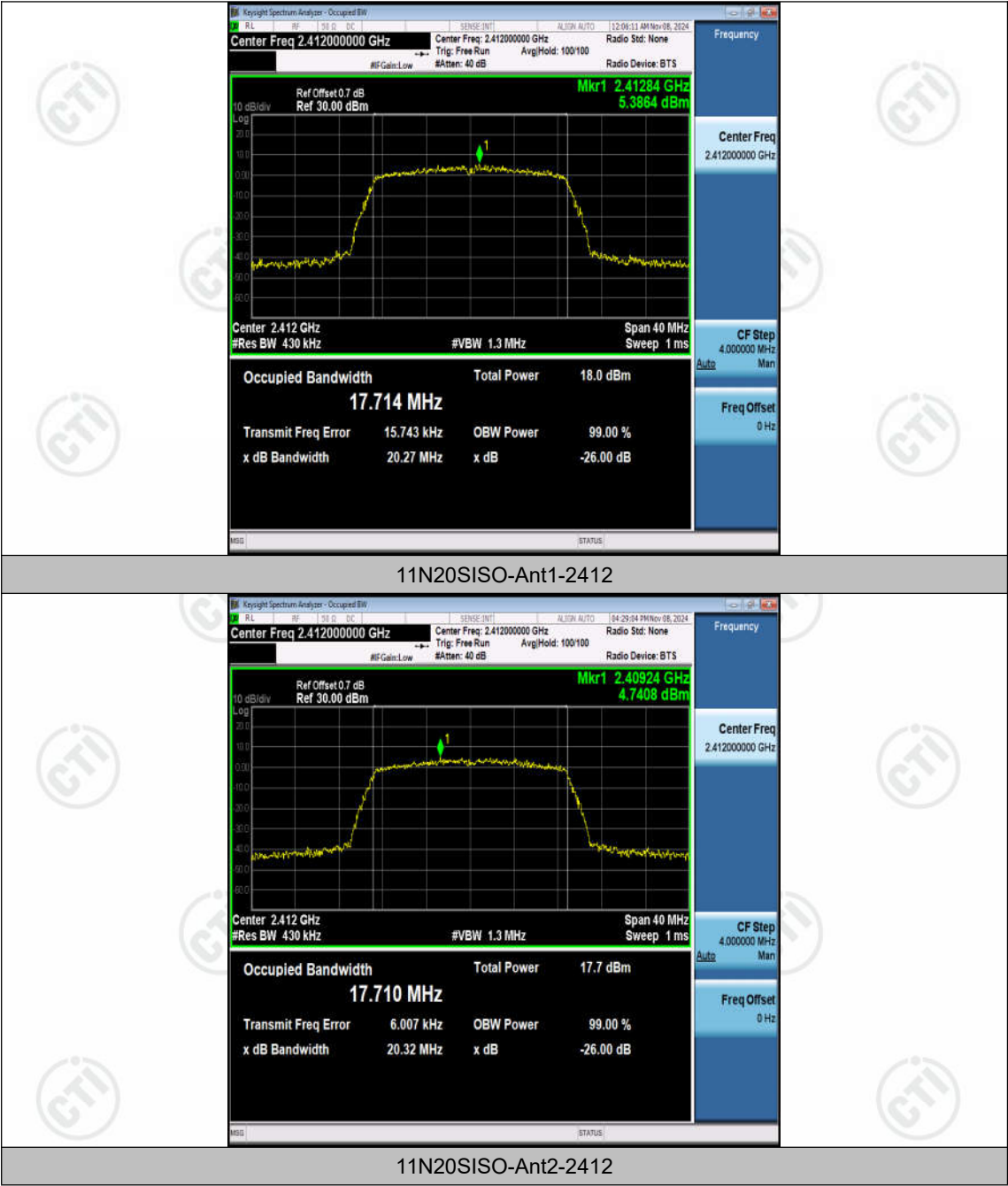


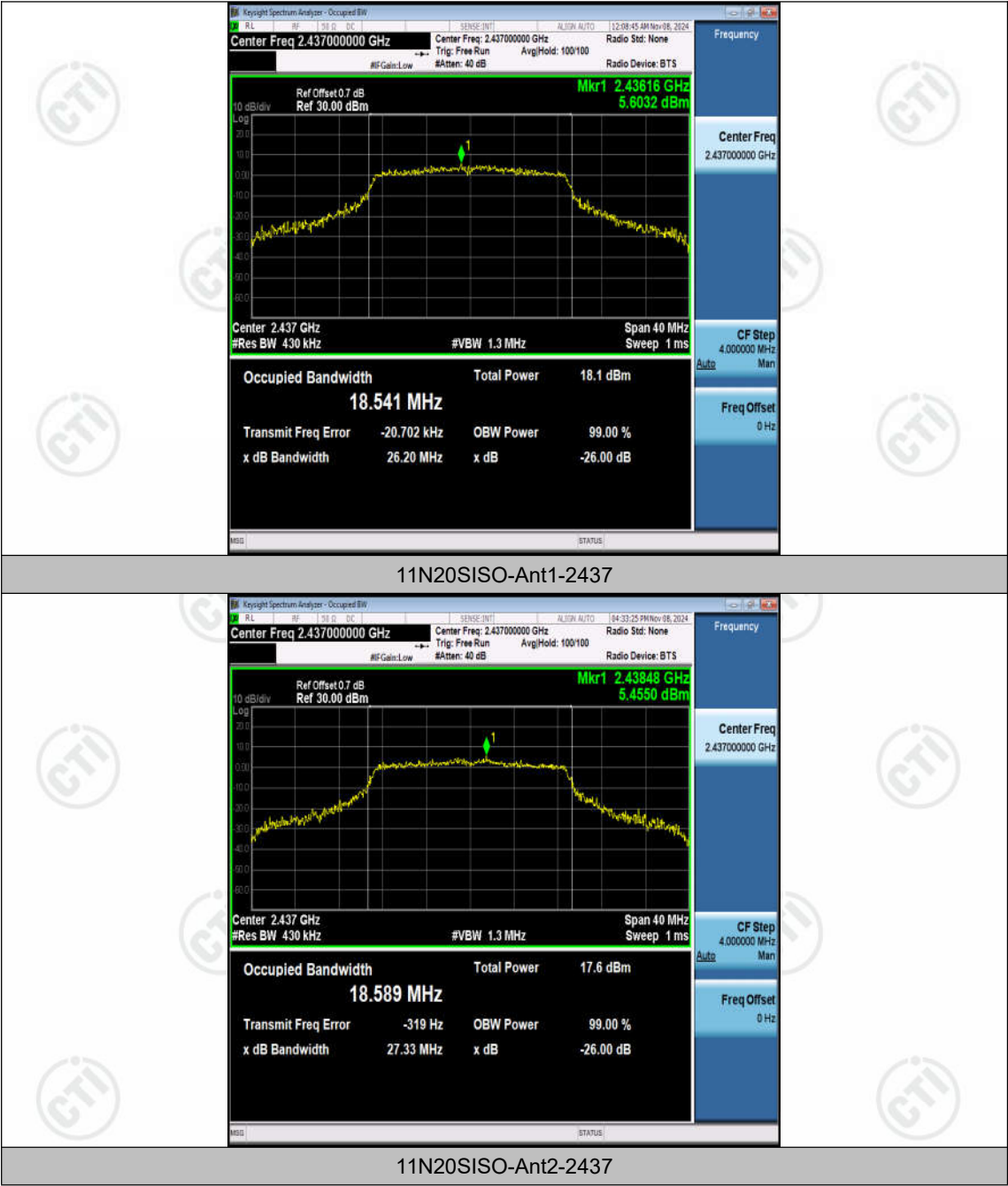


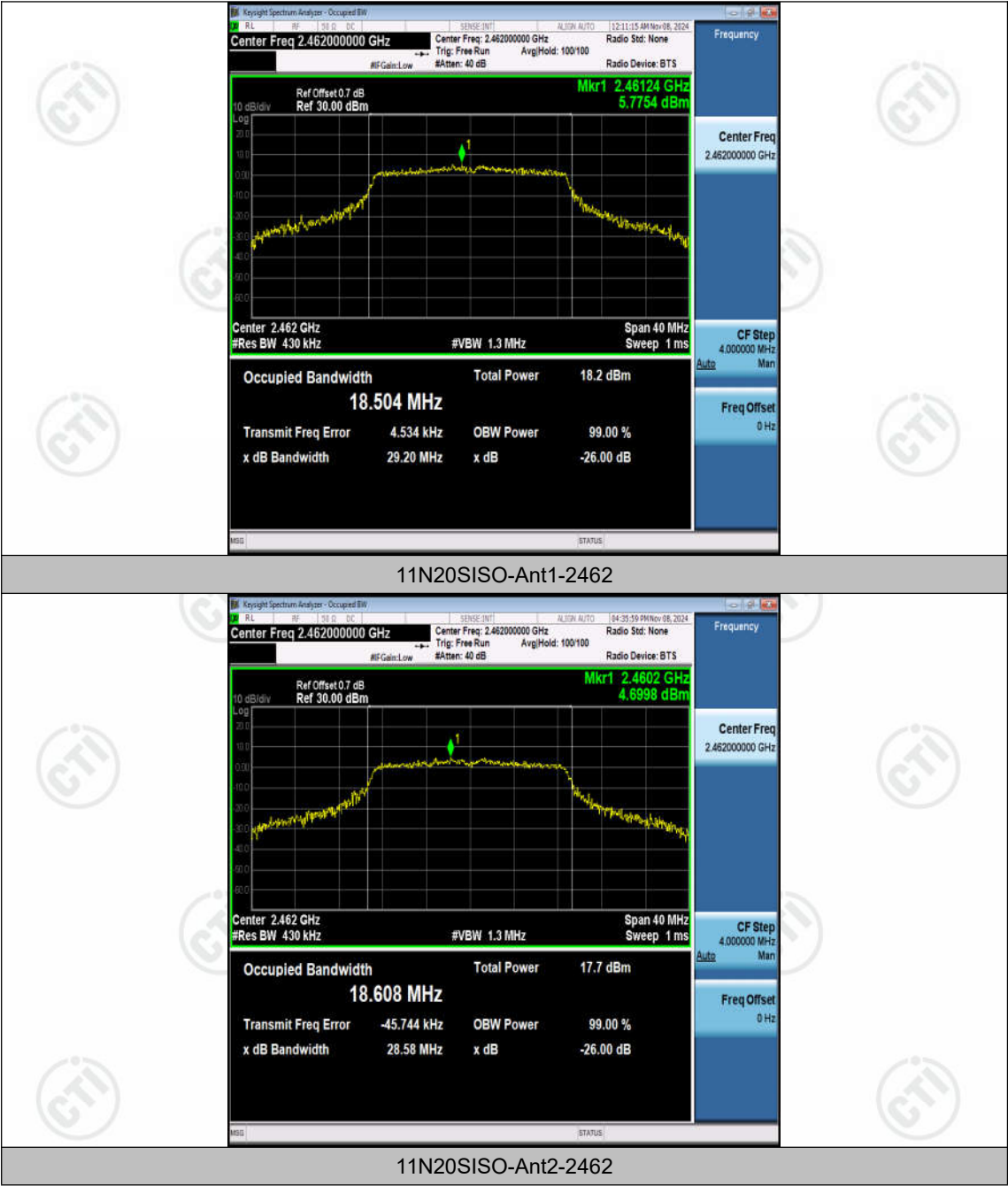


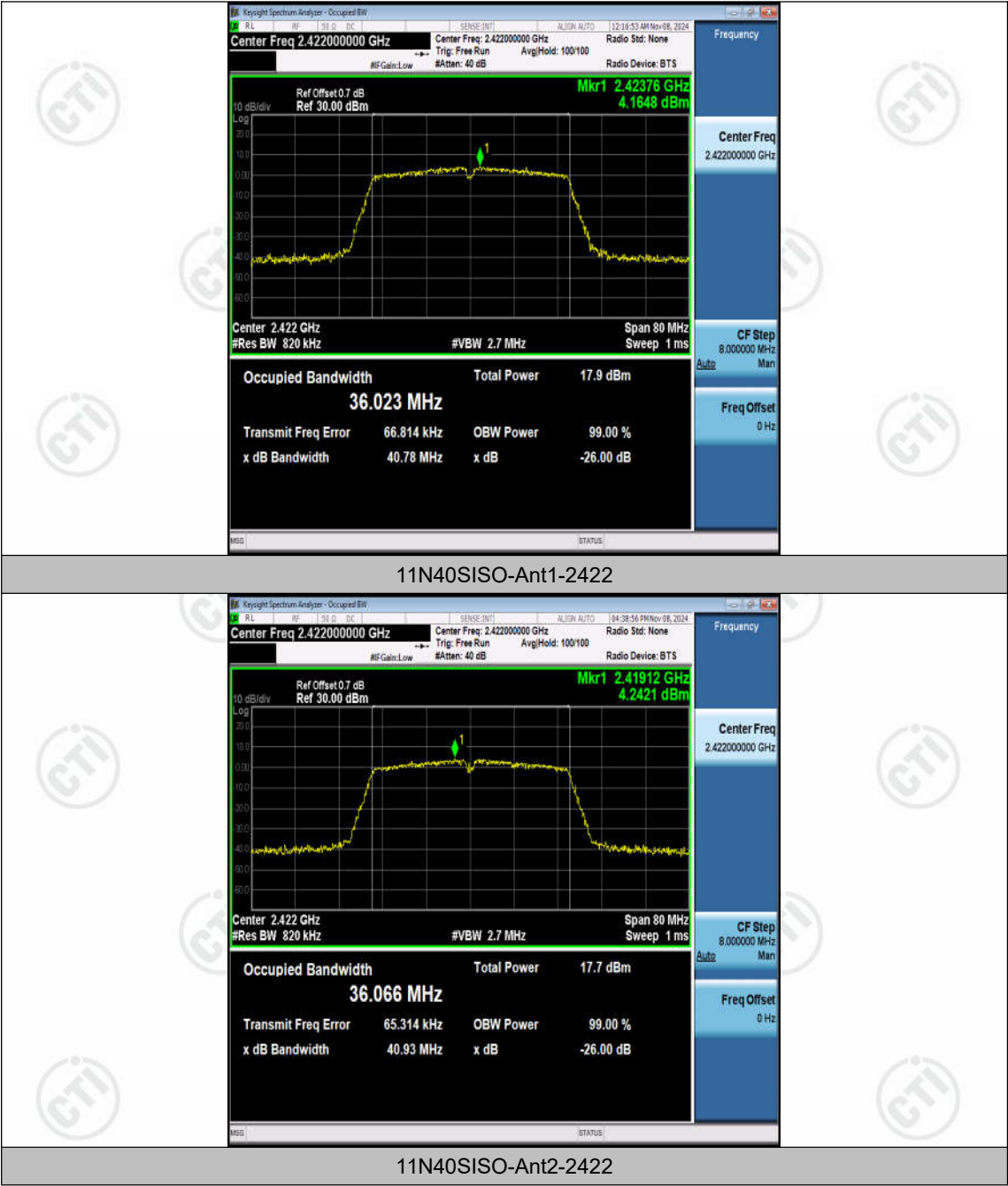


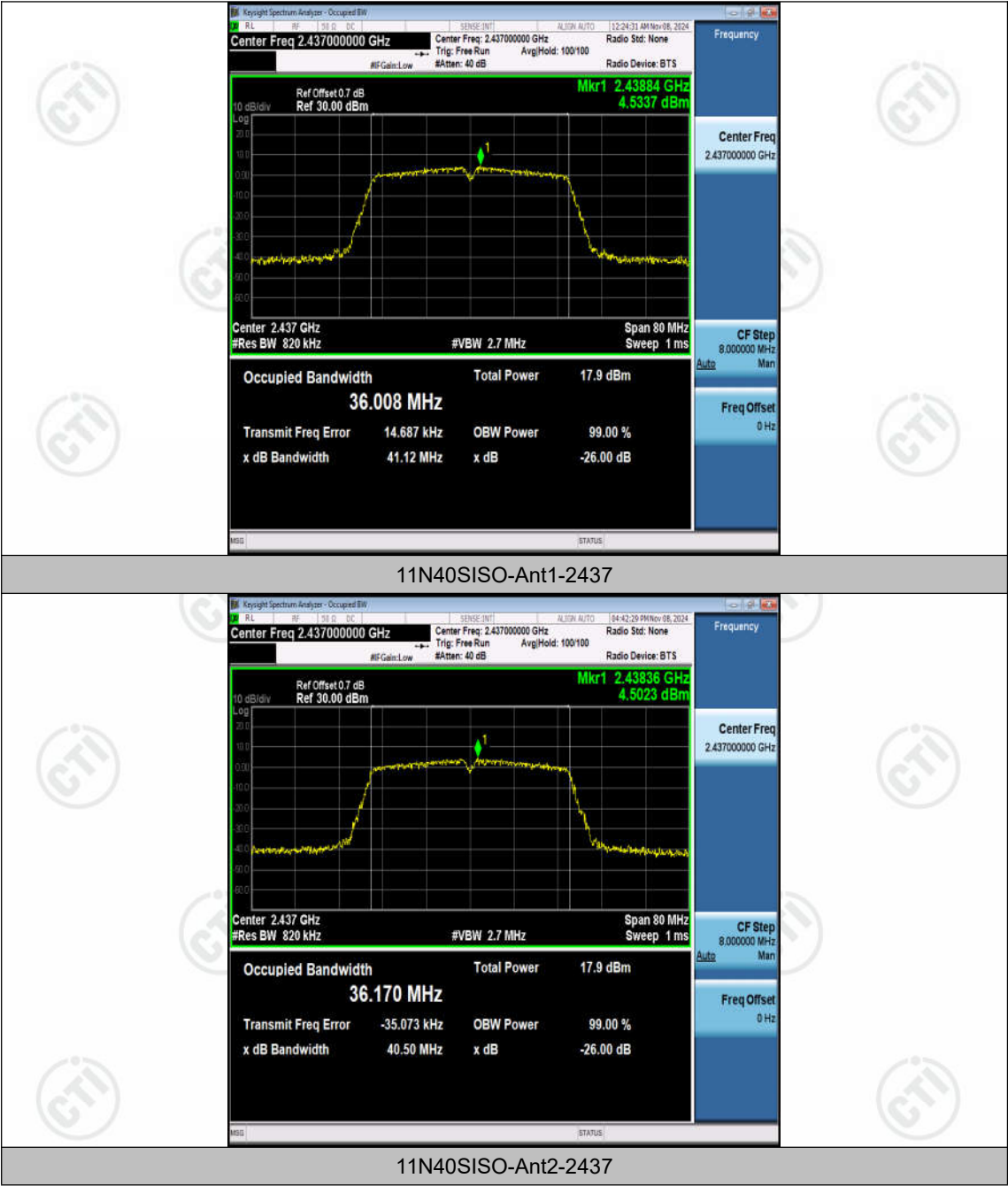


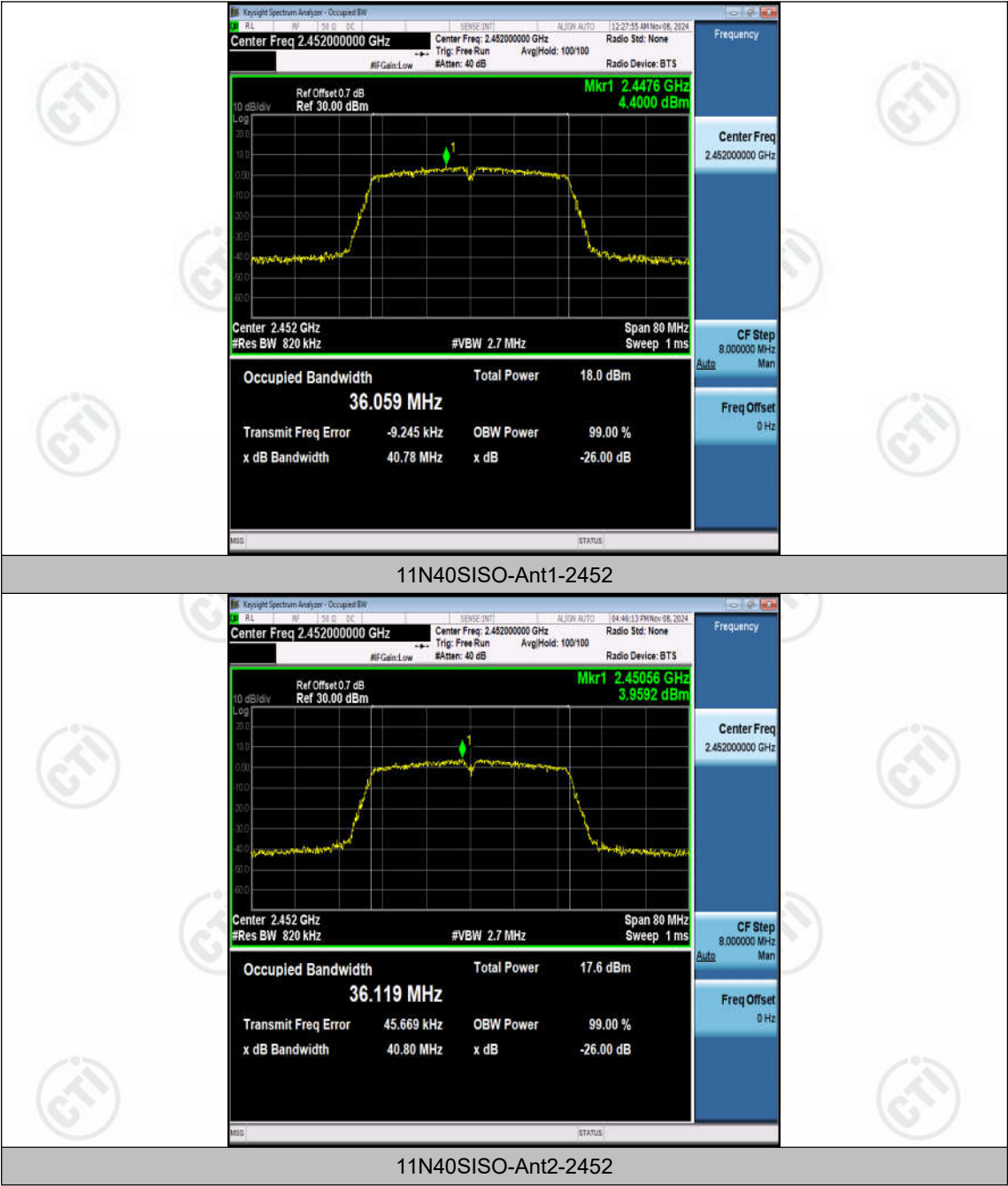


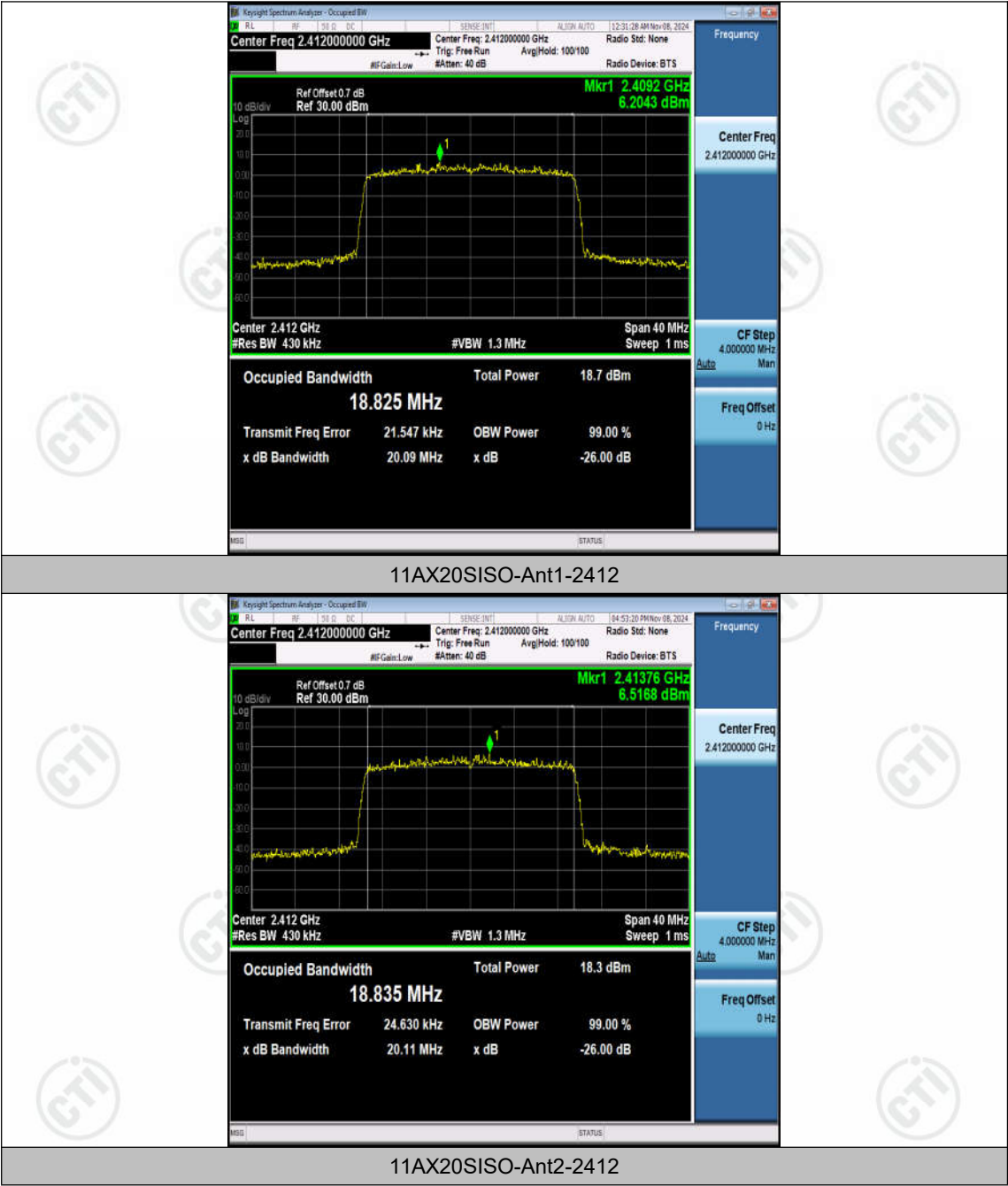


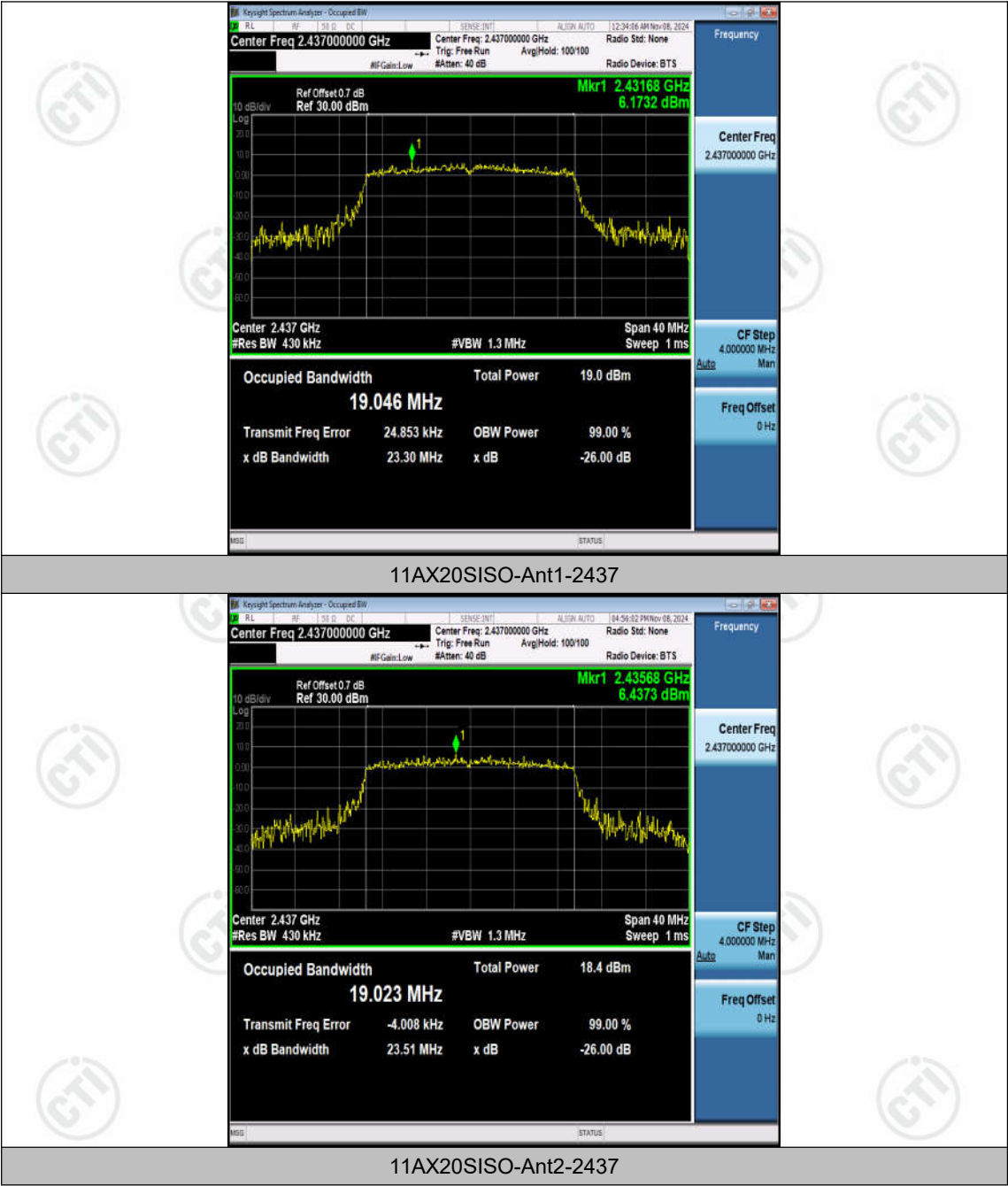


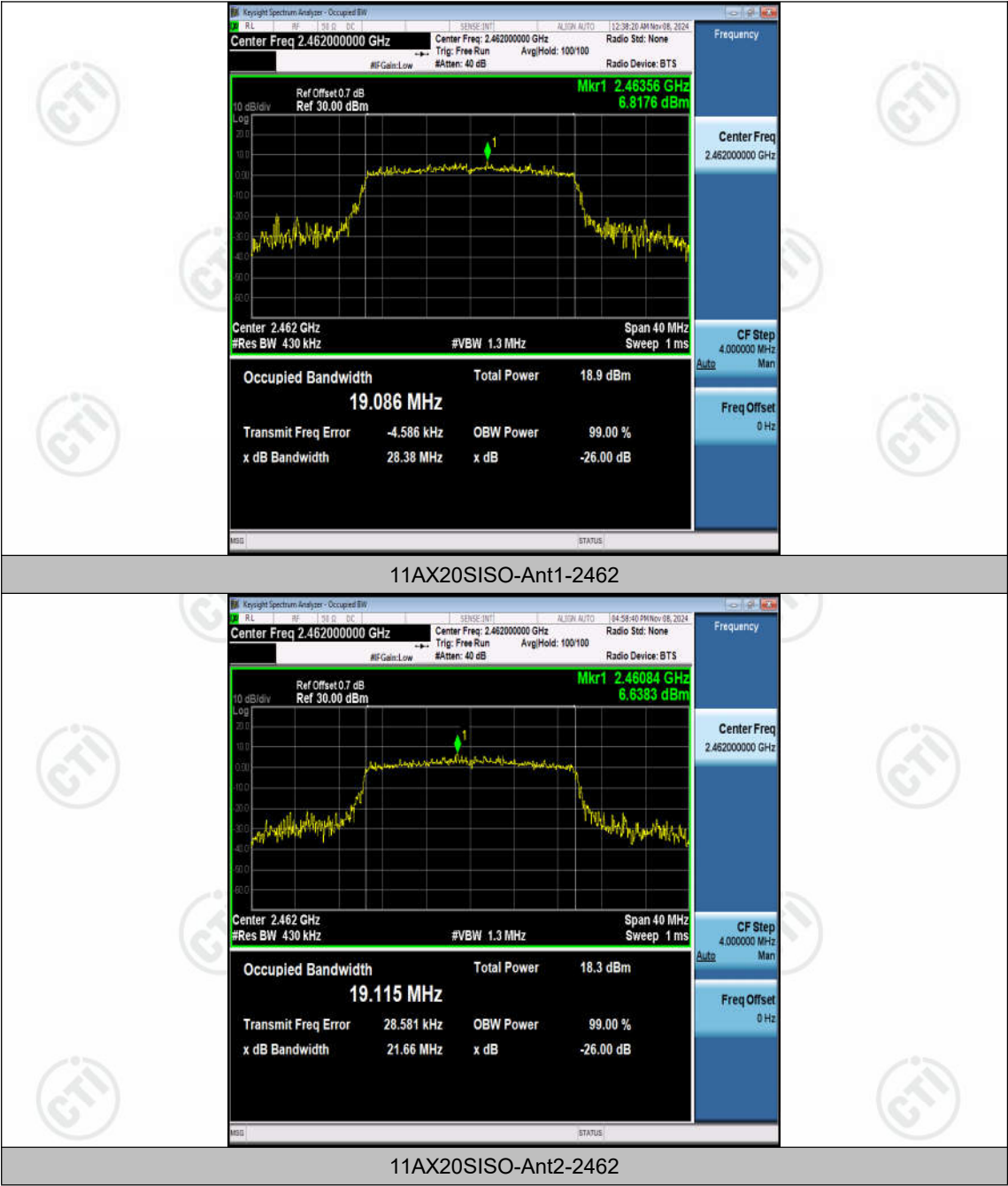


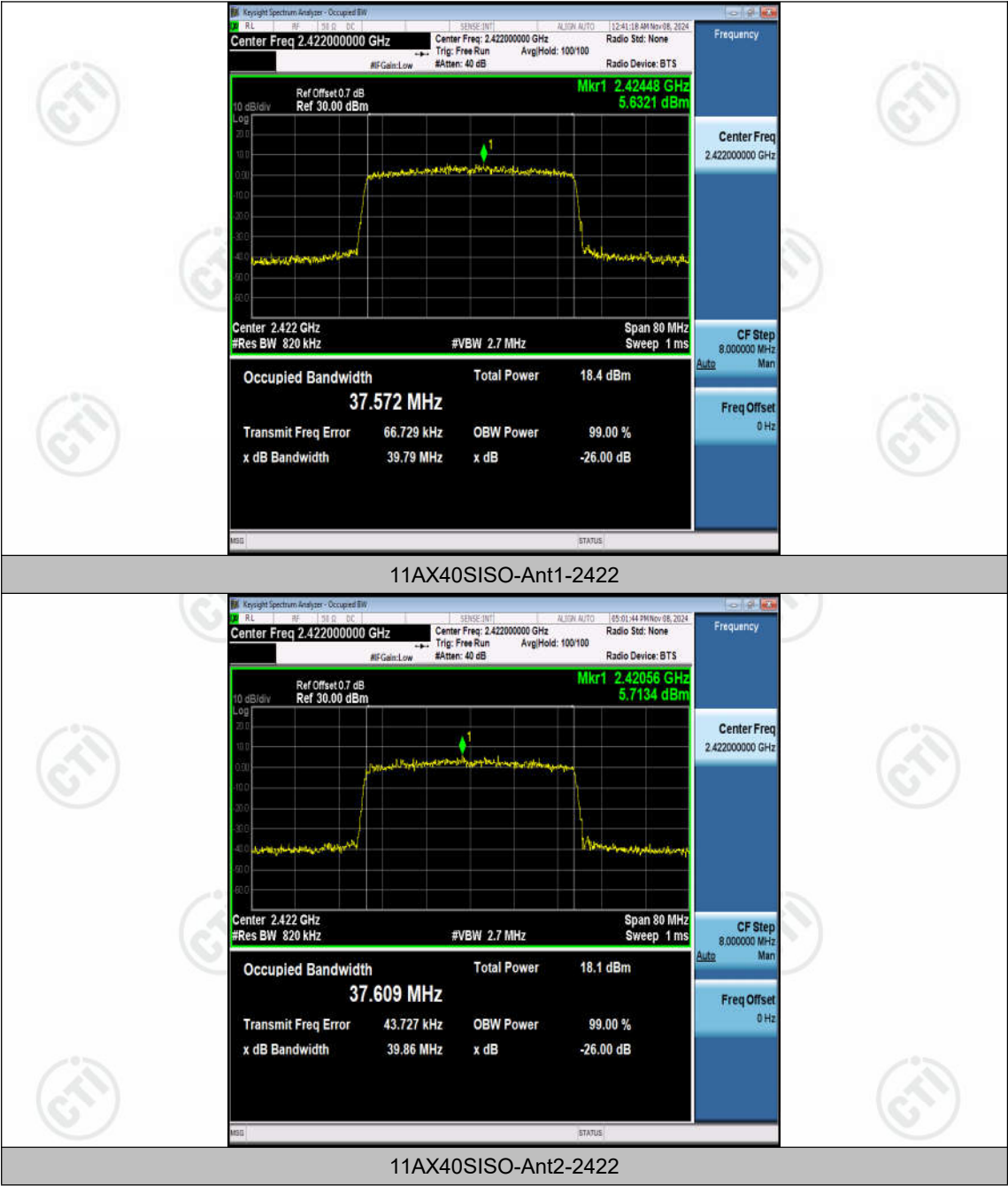


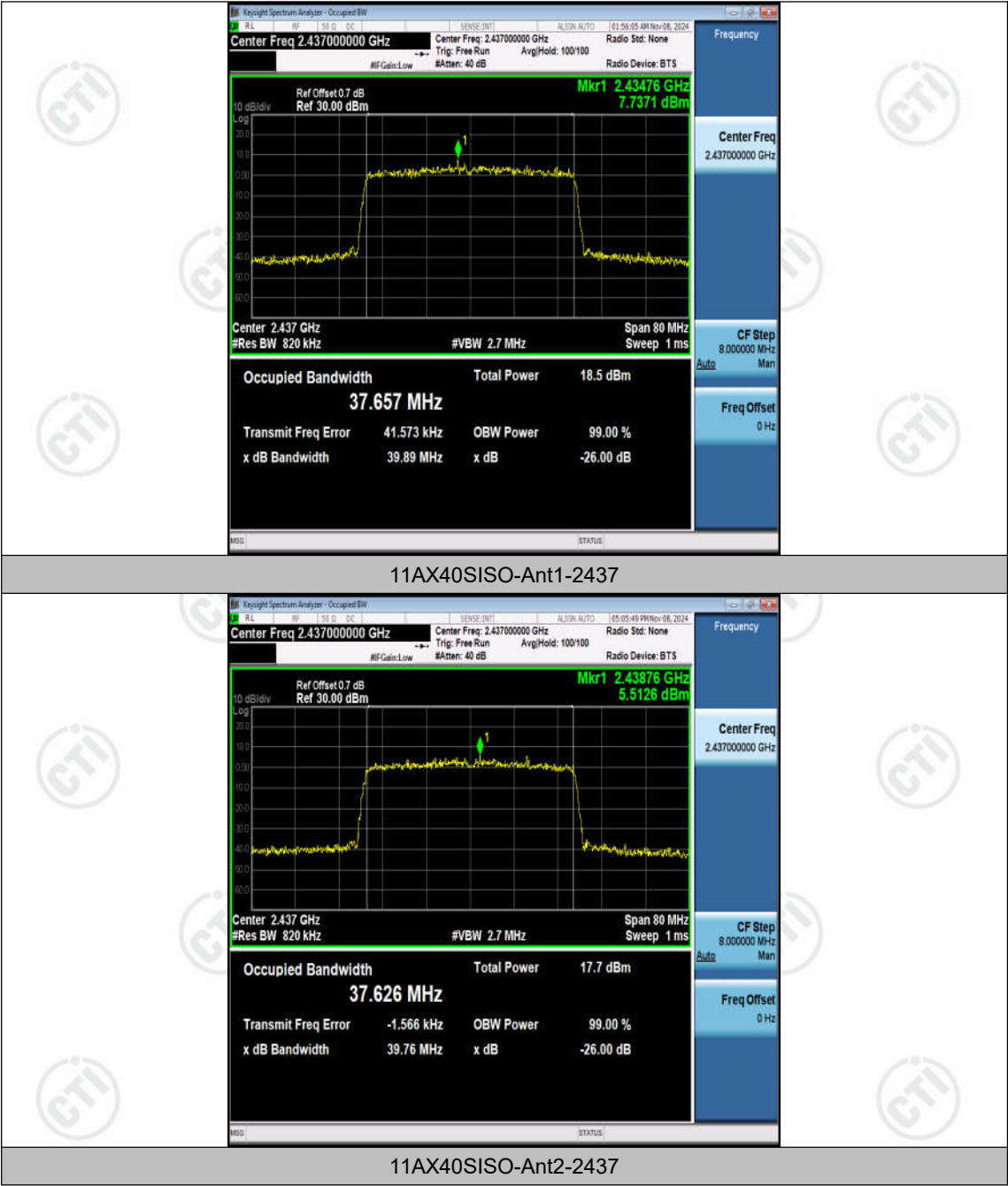


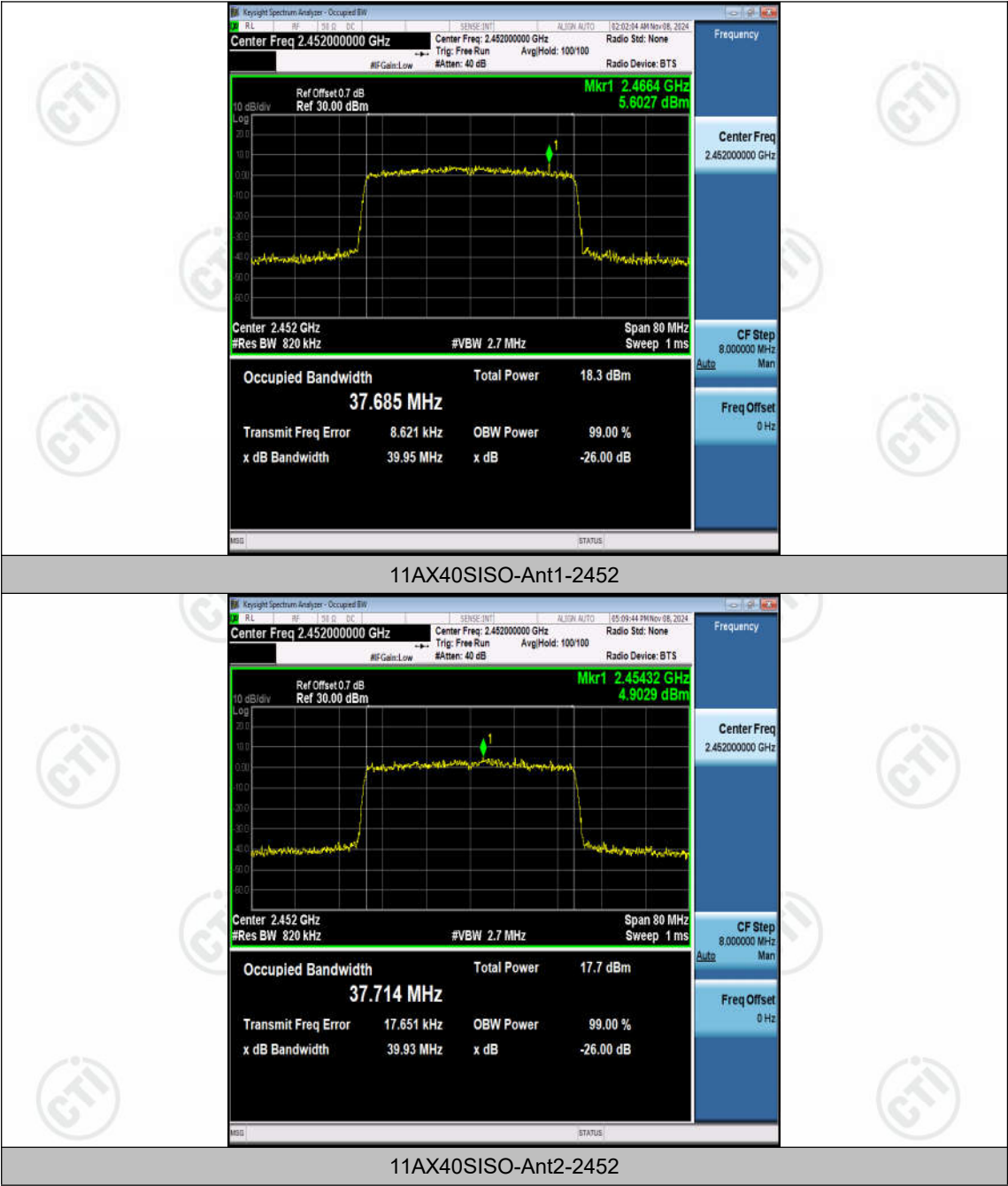












Appendix C: Maximum conducted output power

Test Result

Test Mode	Antenna	Frequency[MHz]	Set Power	Peak Power[dBm]	Conducted Limit[dBm]	Verdict
11B	Ant1	2412	---	13.18	≤30.00	PASS
11B	Ant2	2412	---	13.07	≤30.00	PASS
11B	Ant1	2437	---	13.13	≤30.00	PASS
11B	Ant2	2437	---	13.14	≤30.00	PASS
11B	Ant1	2462	---	13.17	≤30.00	PASS
11B	Ant2	2462	---	12.99	≤30.00	PASS
11G	Ant1	2412	---	11.97	≤30.00	PASS
11G	Ant2	2412	---	11.60	≤30.00	PASS
11G	Ant1	2437	---	11.95	≤30.00	PASS
11G	Ant2	2437	---	11.36	≤30.00	PASS
11G	Ant1	2462	---	11.78	≤30.00	PASS
11G	Ant2	2462	---	11.54	≤30.00	PASS
11N20SISO	Ant1	2412	---	12.34	≤30.00	PASS
11N20SISO	Ant2	2412	---	11.98	≤30.00	PASS
11N20SISO	Ant1	2437	---	12.23	≤30.00	PASS
11N20SISO	Ant2	2437	---	11.72	≤30.00	PASS
11N20SISO	Ant1	2462	---	12.47	≤30.00	PASS
11N20SISO	Ant2	2462	---	12.03	≤30.00	PASS
11N20MIMO	Ant1	2412	---	11.44	≤30.00	PASS
11N20MIMO	Ant2	2412	---	11.52	≤30.00	PASS
11N20MIMO	total	2412	---	14.49	≤30.00	PASS
11N20MIMO	Ant1	2437	---	11.64	≤30.00	PASS
11N20MIMO	Ant2	2437	---	11.84	≤30.00	PASS
11N20MIMO	total	2437	---	14.75	≤30.00	PASS
11N20MIMO	Ant1	2462	---	11.65	≤30.00	PASS
11N20MIMO	Ant2	2462	---	11.56	≤30.00	PASS
11N20MIMO	total	2462	---	14.62	≤30.00	PASS
11N40SISO	Ant1	2422	---	10.81	≤30.00	PASS
11N40SISO	Ant2	2422	---	11.07	≤30.00	PASS
11N40SISO	Ant1	2437	---	11.52	≤30.00	PASS
11N40SISO	Ant2	2437	---	11.61	≤30.00	PASS
11N40SISO	Ant1	2452	---	11.43	≤30.00	PASS
11N40SISO	Ant2	2452	---	11.21	≤30.00	PASS
11N40MIMO	Ant1	2422	---	11.04	≤30.00	PASS
11N40MIMO	Ant2	2422	---	10.62	≤30.00	PASS
11N40MIMO	total	2422	---	13.85	≤30.00	PASS

11N40MIMO	Ant1	2437	---	10.77	≤30.00	PASS
11N40MIMO	Ant2	2437	---	10.85	≤30.00	PASS
11N40MIMO	total	2437	---	13.82	≤30.00	PASS
11N40MIMO	Ant1	2452	---	11.38	≤30.00	PASS
11N40MIMO	Ant2	2452	---	11.08	≤30.00	PASS
11N40MIMO	total	2452	---	14.24	≤30.00	PASS
11AX20SISO	Ant1	2412	---	12.50	≤30.00	PASS
11AX20SISO	Ant2	2412	---	11.50	≤30.00	PASS
11AX20SISO	Ant1	2437	---	12.13	≤30.00	PASS
11AX20SISO	Ant2	2437	---	11.89	≤30.00	PASS
11AX20SISO	Ant1	2462	---	12.65	≤30.00	PASS
11AX20SISO	Ant2	2462	---	11.93	≤30.00	PASS
11AX20MIMO	Ant1	2412	---	10.69	≤30.00	PASS
11AX20MIMO	Ant2	2412	---	11.62	≤30.00	PASS
11AX20MIMO	total	2412	---	14.64	≤30.00	PASS
11AX20MIMO	Ant1	2437	---	11.93	≤30.00	PASS
11AX20MIMO	Ant2	2437	---	11.92	≤30.00	PASS
11AX20MIMO	total	2437	---	14.94	≤30.00	PASS
11AX20MIMO	Ant1	2462	---	11.88	≤30.00	PASS
11AX20MIMO	Ant2	2462	---	11.60	≤30.00	PASS
11AX20MIMO	total	2462	---	14.75	≤30.00	PASS
11AX40SISO	Ant1	2422	---	11.98	≤30.00	PASS
11AX40SISO	Ant2	2422	---	11.30	≤30.00	PASS
11AX40SISO	Ant1	2437	---	11.96	≤30.00	PASS
11AX40SISO	Ant2	2437	---	11.48	≤30.00	PASS
11AX40SISO	Ant1	2452	---	11.70	≤30.00	PASS
11AX40SISO	Ant2	2452	---	10.95	≤30.00	PASS
11AX40MIMO	Ant1	2422	---	11.04	≤30.00	PASS
11AX40MIMO	Ant2	2422	---	10.62	≤30.00	PASS
11AX40MIMO	total	2422	---	13.85	≤30.00	PASS
11AX40MIMO	Ant1	2437	---	10.92	≤30.00	PASS
11AX40MIMO	Ant2	2437	---	10.83	≤30.00	PASS
11AX40MIMO	total	2437	---	13.89	≤30.00	PASS
11AX40MIMO	Ant1	2452	---	10.99	≤30.00	PASS
11AX40MIMO	Ant2	2452	---	10.59	≤30.00	PASS
11AX40MIMO	total	2452	---	13.80	≤30.00	PASS

Note:Peak Power[dBm] has been added Duty Cycle Factor[dB];

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
11B	Ant1	2412	-15.56	≤8.00	PASS
11B	Ant2	2412	-15.87	≤8.00	PASS
11B	Ant1	2437	-15.59	≤8.00	PASS
11B	Ant2	2437	-14.74	≤8.00	PASS
11B	Ant1	2462	-15.25	≤8.00	PASS
11B	Ant2	2462	-15.80	≤8.00	PASS
11G	Ant1	2412	-18.42	≤8.00	PASS
11G	Ant2	2412	-18.84	≤8.00	PASS
11G	Ant1	2437	-17.53	≤8.00	PASS
11G	Ant2	2437	-19.52	≤8.00	PASS
11G	Ant1	2462	-18.34	≤8.00	PASS
11G	Ant2	2462	-19.06	≤8.00	PASS
11N20SISO	Ant1	2412	-18.03	≤8.00	PASS
11N20SISO	Ant2	2412	-17.49	≤8.00	PASS
11N20SISO	Ant1	2437	-19.25	≤8.00	PASS
11N20SISO	Ant2	2437	-18.75	≤8.00	PASS
11N20SISO	Ant1	2462	-18.11	≤8.00	PASS
11N20SISO	Ant2	2462	-19.00	≤8.00	PASS
11N20MIMO	Ant1	2412	-19.15	≤8.00	PASS
11N20MIMO	Ant2	2412	-19.14	≤8.00	PASS
11N20MIMO	total	2412	-16.13	≤8.00	PASS
11N20MIMO	Ant1	2437	-18.68	≤8.00	PASS
11N20MIMO	Ant1	2462	-19.56	≤8.00	PASS
11N20MIMO	Ant2	2462	-19.20	≤8.00	PASS
11N20MIMO	total	2462	-16.37	≤8.00	PASS
11N40SISO	Ant1	2422	-21.21	≤8.00	PASS
11N40SISO	Ant2	2422	-22.87	≤8.00	PASS
11N40SISO	Ant1	2437	-21.71	≤8.00	PASS
11N40SISO	Ant2	2437	-21.93	≤8.00	PASS
11N40SISO	Ant1	2452	-21.03	≤8.00	PASS
11N40SISO	Ant2	2452	-20.53	≤8.00	PASS
11N40MIMO	Ant1	2422	-22.24	≤8.00	PASS
11N40MIMO	Ant2	2422	-21.89	≤8.00	PASS
11N40MIMO	total	2422	-19.05	≤8.00	PASS
11N40MIMO	Ant1	2437	-21.52	≤8.00	PASS
11N40MIMO	Ant2	2437	-21.41	≤8.00	PASS
11N40MIMO	total	2437	-18.45	≤8.00	PASS

11N40MIMO	Ant1	2452	-20.43	≤8.00	PASS
11N40MIMO	Ant2	2452	-22.79	≤8.00	PASS
11N40MIMO	total	2452	-18.44	≤8.00	PASS
11AX20SISO	Ant1	2412	-18.00	≤8.00	PASS
11AX20SISO	Ant2	2412	-19.22	≤8.00	PASS
11AX20SISO	Ant1	2437	-18.75	≤8.00	PASS
11AX20SISO	Ant2	2437	-18.42	≤8.00	PASS
11AX20SISO	Ant1	2462	-17.35	≤8.00	PASS
11AX20SISO	Ant2	2462	-19.00	≤8.00	PASS
11AX20MIMO	Ant1	2412	-20.16	≤8.00	PASS
11AX20MIMO	Ant2	2412	-16.81	≤8.00	PASS
11AX20MIMO	total	2412	-14.80	≤8.00	PASS
11AX20MIMO	Ant1	2437	-19.14	≤8.00	PASS
11AX20MIMO	Ant2	2437	-17.34	≤8.00	PASS
11AX20MIMO	total	2437	-15.14	≤8.00	PASS
11AX20MIMO	Ant1	2462	-18.83	≤8.00	PASS
11AX20MIMO	Ant2	2462	-17.77	≤8.00	PASS
11AX20MIMO	total	2462	-15.26	≤8.00	PASS
11AX40SISO	Ant1	2422	-21.27	≤8.00	PASS
11AX40SISO	Ant2	2422	-20.00	≤8.00	PASS
11AX40SISO	Ant1	2437	-21.96	≤8.00	PASS
11AX40SISO	Ant2	2437	-21.35	≤8.00	PASS
11AX40SISO	Ant1	2452	-21.41	≤8.00	PASS
11AX40SISO	Ant2	2452	-21.86	≤8.00	PASS
11AX40MIMO	Ant1	2422	-20.41	≤8.00	PASS
11AX40MIMO	Ant2	2422	-21.64	≤8.00	PASS
11AX40MIMO	total	2422	-17.97	≤8.00	PASS
11AX40MIMO	Ant1	2437	-20.85	≤8.00	PASS
11AX40MIMO	Ant2	2437	-20.25	≤8.00	PASS
11AX40MIMO	total	2437	-17.53	≤8.00	PASS
11AX40MIMO	Ant1	2452	-21.07	≤8.00	PASS
11AX40MIMO	Ant2	2452	-19.81	≤8.00	PASS
11AX40MIMO	total	2452	-17.38	≤8.00	PASS

Note:Result[dBm/3-100kHz] has been added Duty Cycle Factor[dB];

Test Graphs

