

Appendix: Bluetooth LE

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Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.696	2401.640	2402.336	0.5	PASS
BLE_1M	Ant1	2440	0.688	2439.648	2440.336	0.5	PASS
BLE_1M	Ant1	2480	0.660	2479.668	2480.328	0.5	PASS
BLE_2M	Ant1	2402	1.136	2401.408	2402.544	0.5	PASS
BLE_2M	Ant1	2440	1.136	2439.440	2440.576	0.5	PASS
BLE_2M	Ant1	2480	1.136	2479.420	2480.556	0.5	PASS

Test Graphs





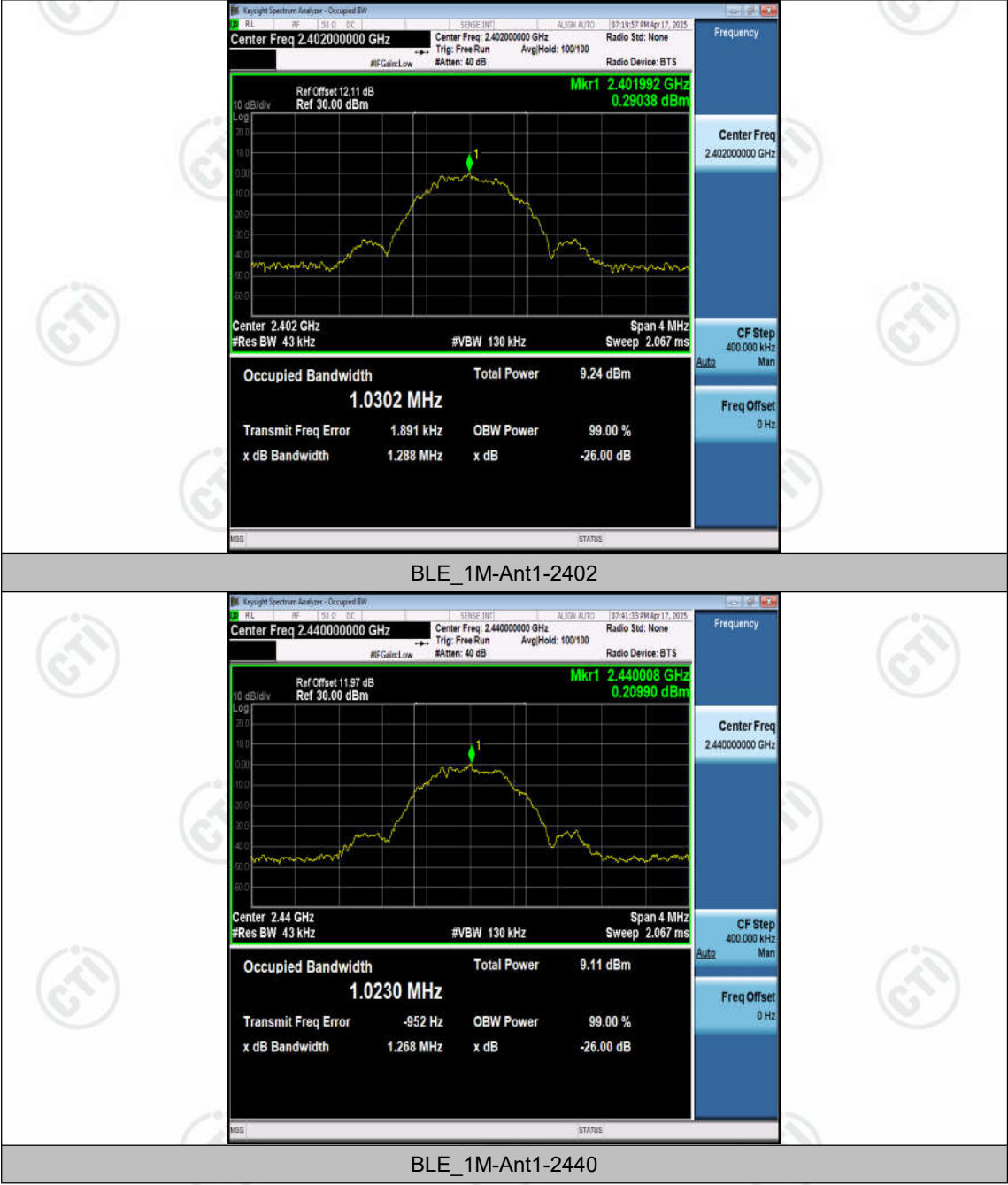


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.0302	2401.4868	2402.5170	---	---
BLE_1M	Ant1	2440	1.0230	2439.4876	2440.5106	---	---
BLE_1M	Ant1	2480	1.0262	2479.4868	2480.5130	---	---
BLE_2M	Ant1	2402	2.0429	2400.9927	2403.0356	---	---
BLE_2M	Ant1	2440	2.0433	2438.9908	2441.0341	---	---
BLE_2M	Ant1	2480	2.0391	2478.9926	2481.0317	---	---

Test Graphs





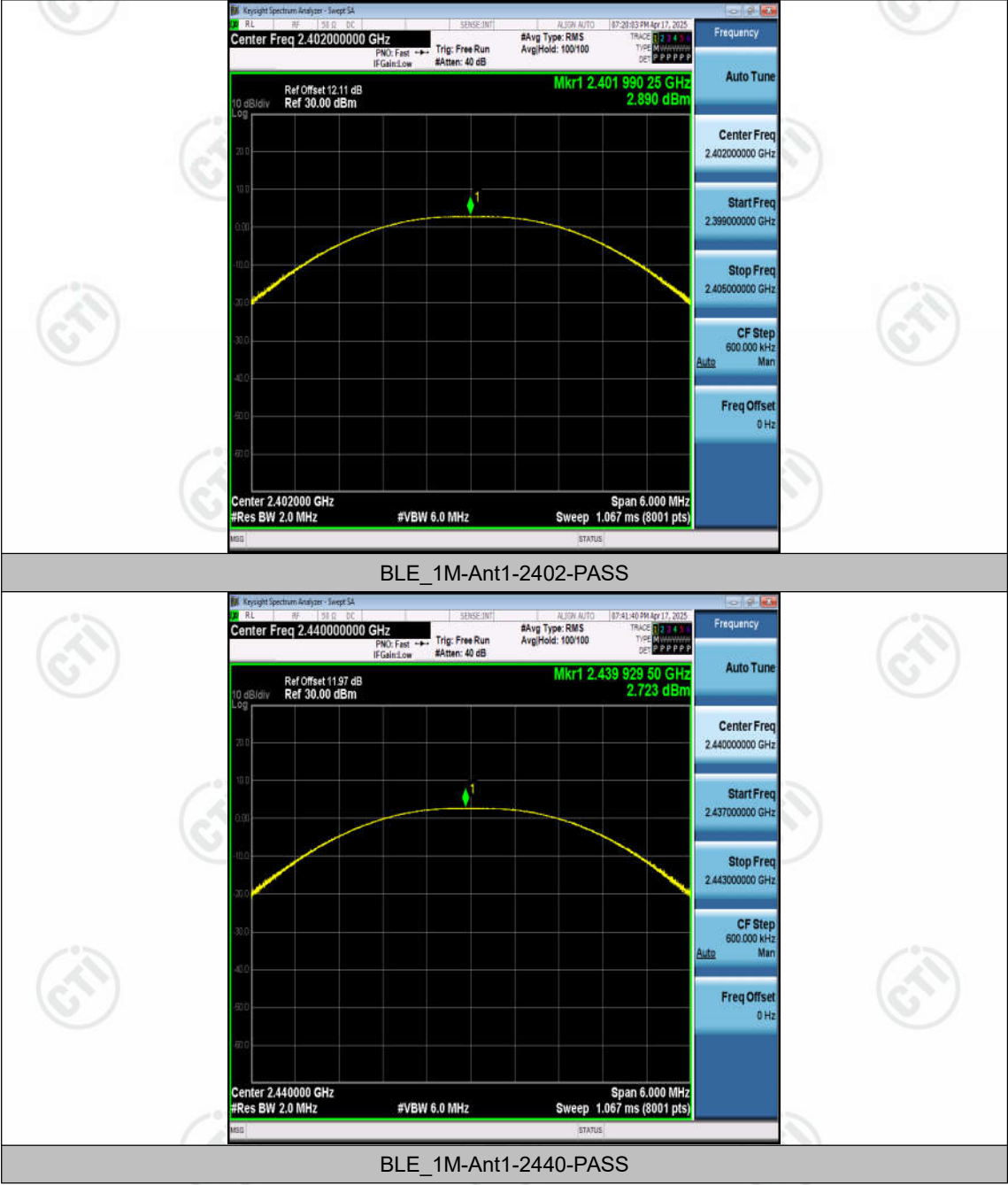


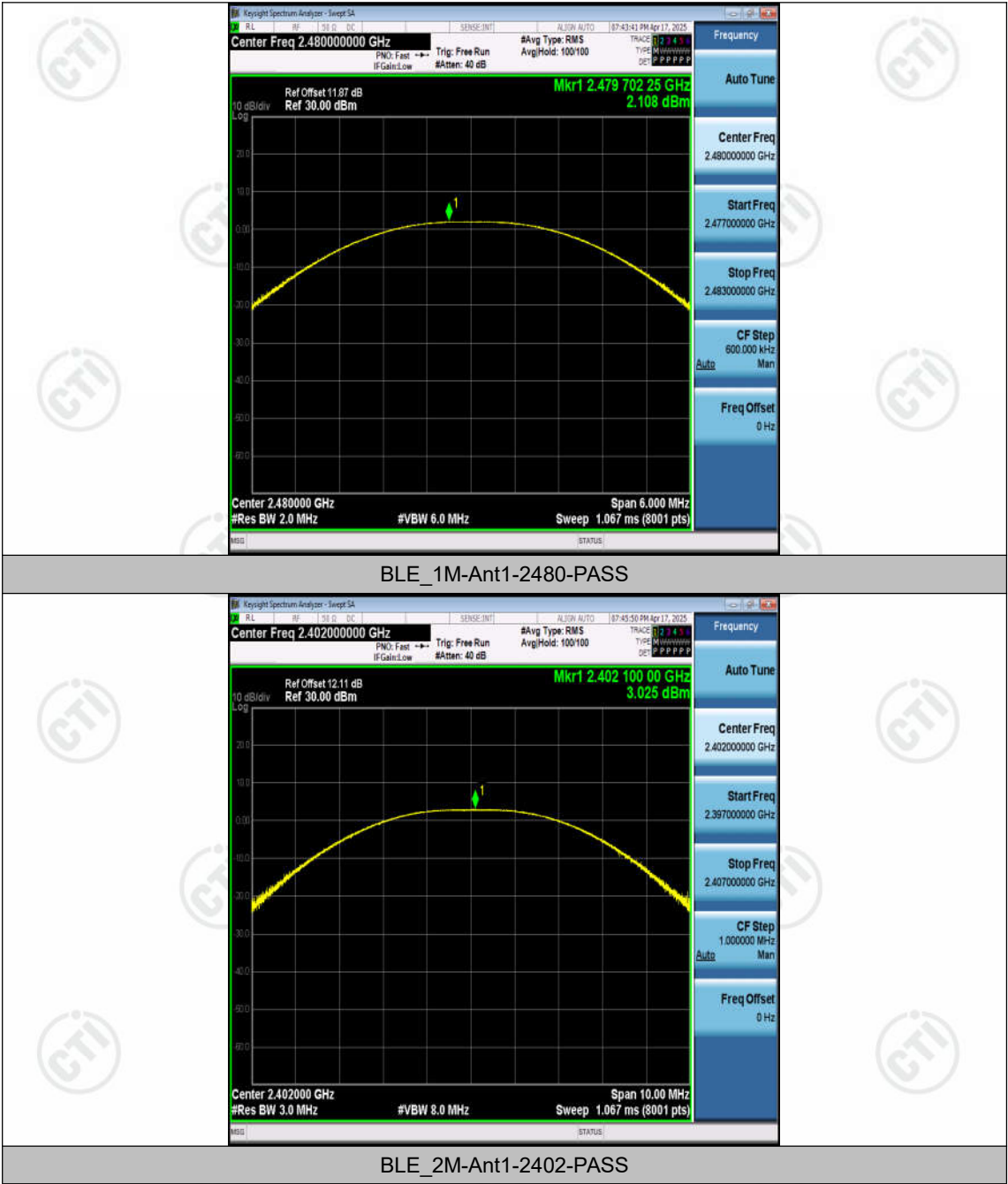
Appendix C: Maximum conducted output power

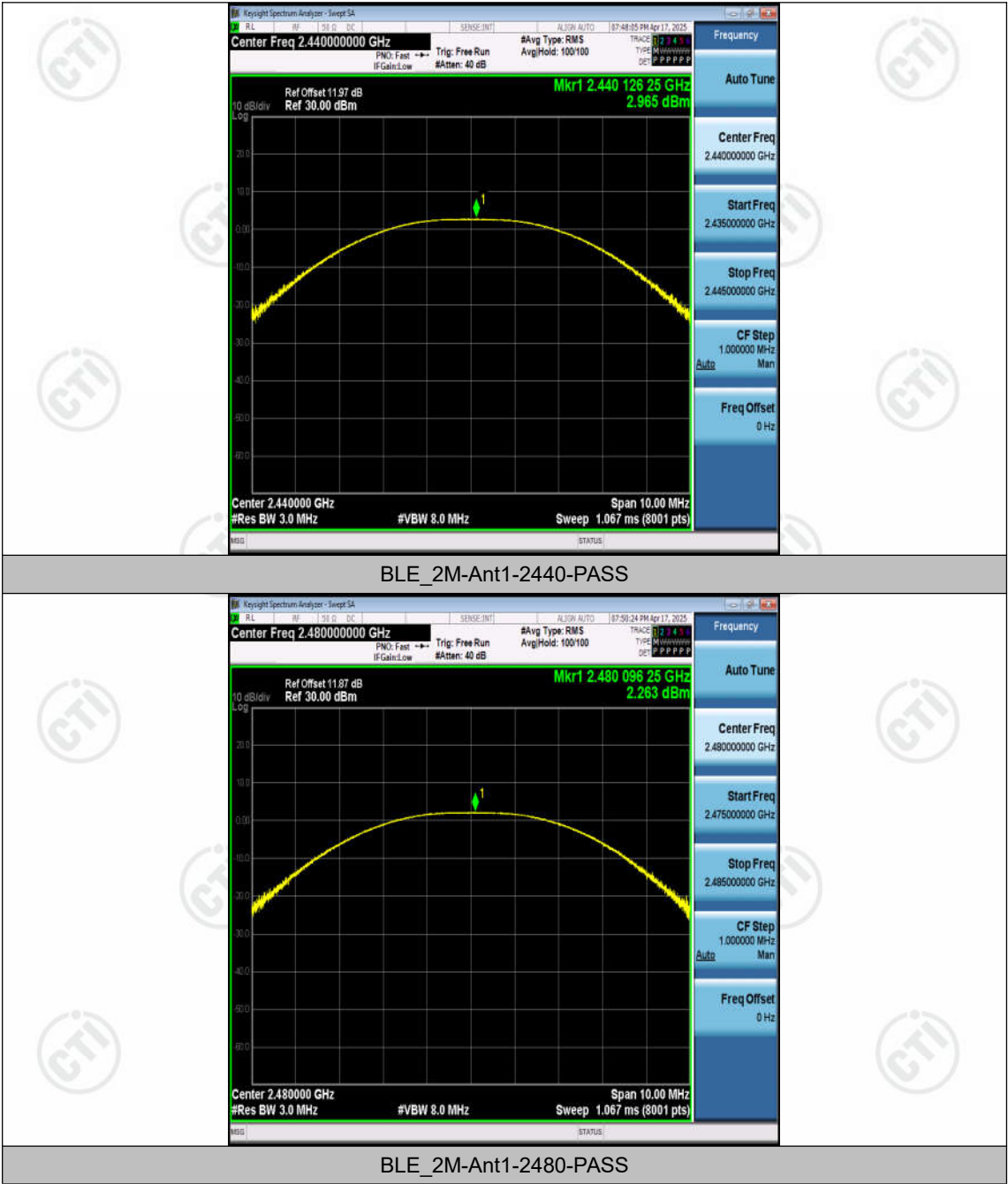
Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.89	≤30	PASS
BLE_1M	Ant1	2440	2.72	≤30	PASS
BLE_1M	Ant1	2480	2.11	≤30	PASS
BLE_2M	Ant1	2402	3.03	≤30	PASS
BLE_2M	Ant1	2440	2.97	≤30	PASS
BLE_2M	Ant1	2480	2.26	≤30	PASS

Test Graphs Peak





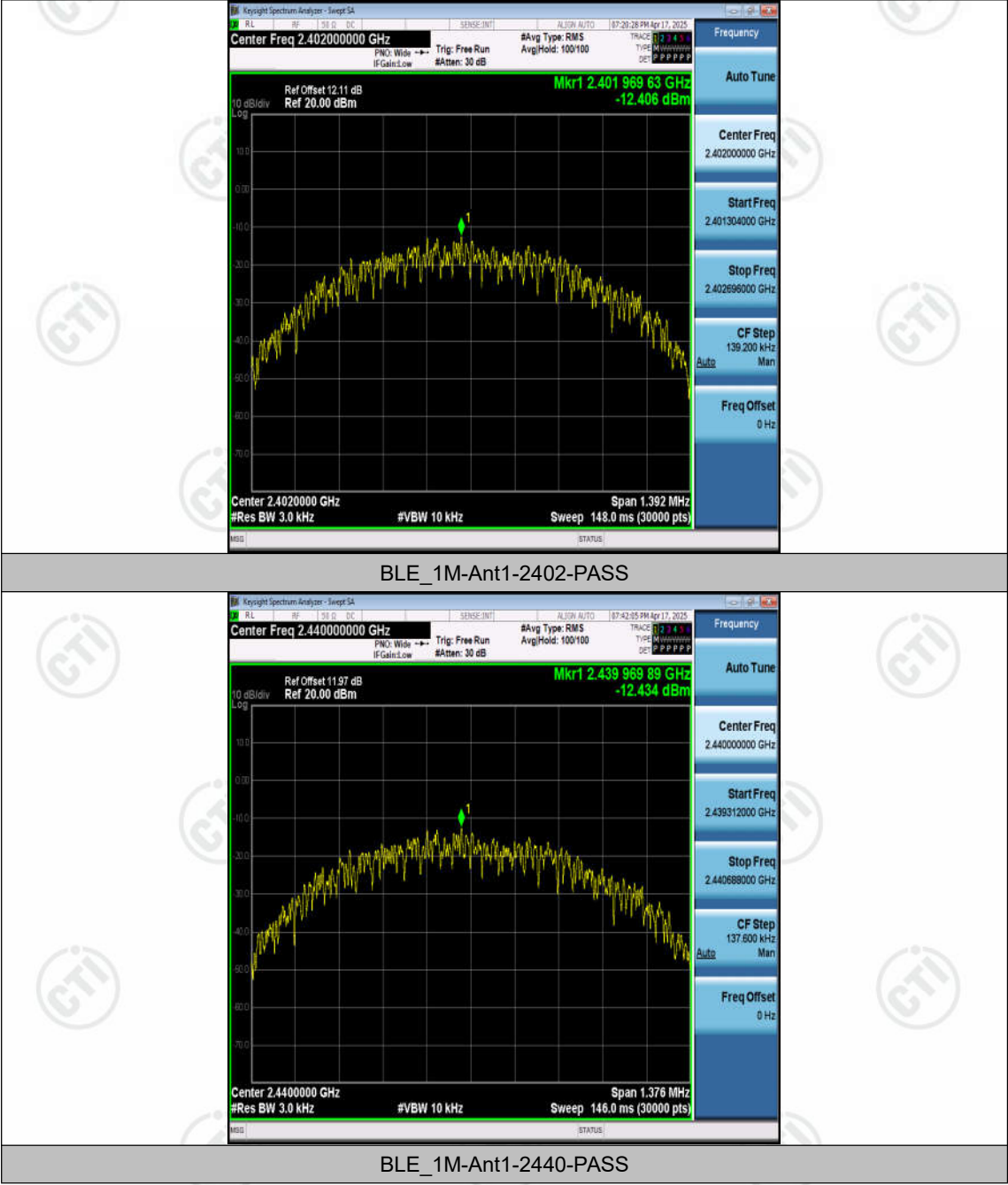


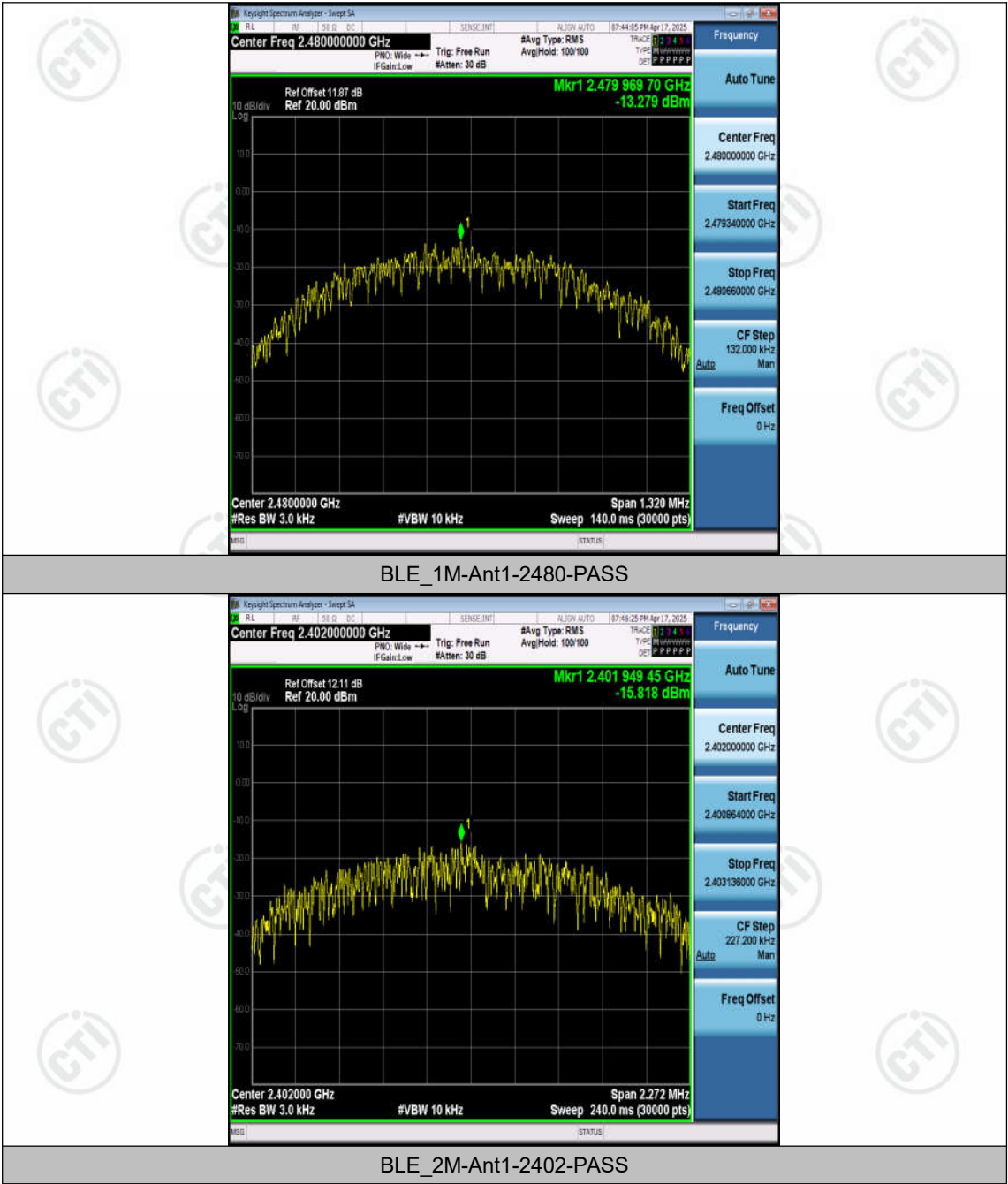
Appendix D: Maximum power spectral density

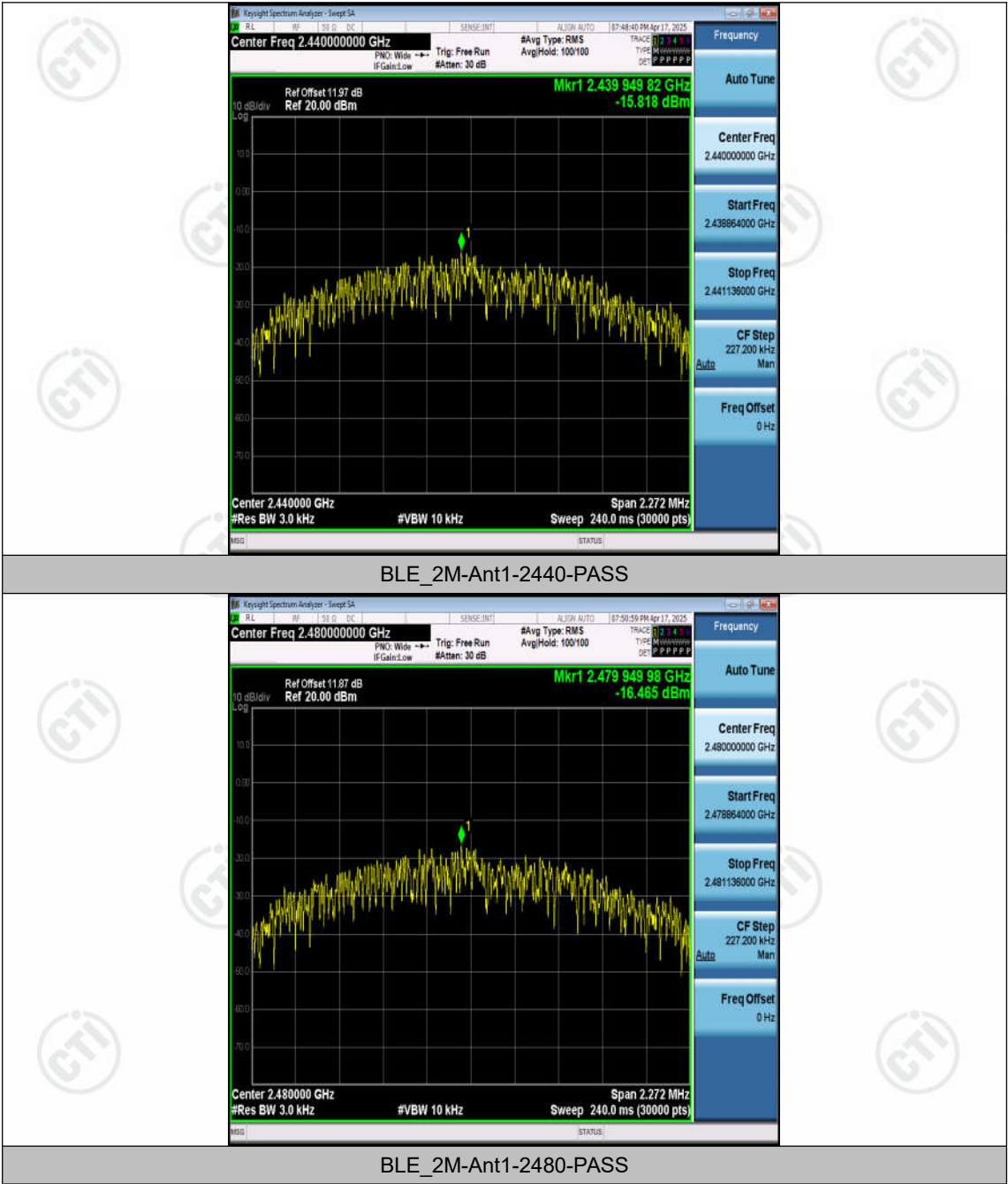
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-12.41	≤8.00	PASS
BLE_1M	Ant1	2440	-12.43	≤8.00	PASS
BLE_1M	Ant1	2480	-13.28	≤8.00	PASS
BLE_2M	Ant1	2402	-15.82	≤8.00	PASS
BLE_2M	Ant1	2440	-15.82	≤8.00	PASS
BLE_2M	Ant1	2480	-16.47	≤8.00	PASS

Test Graphs





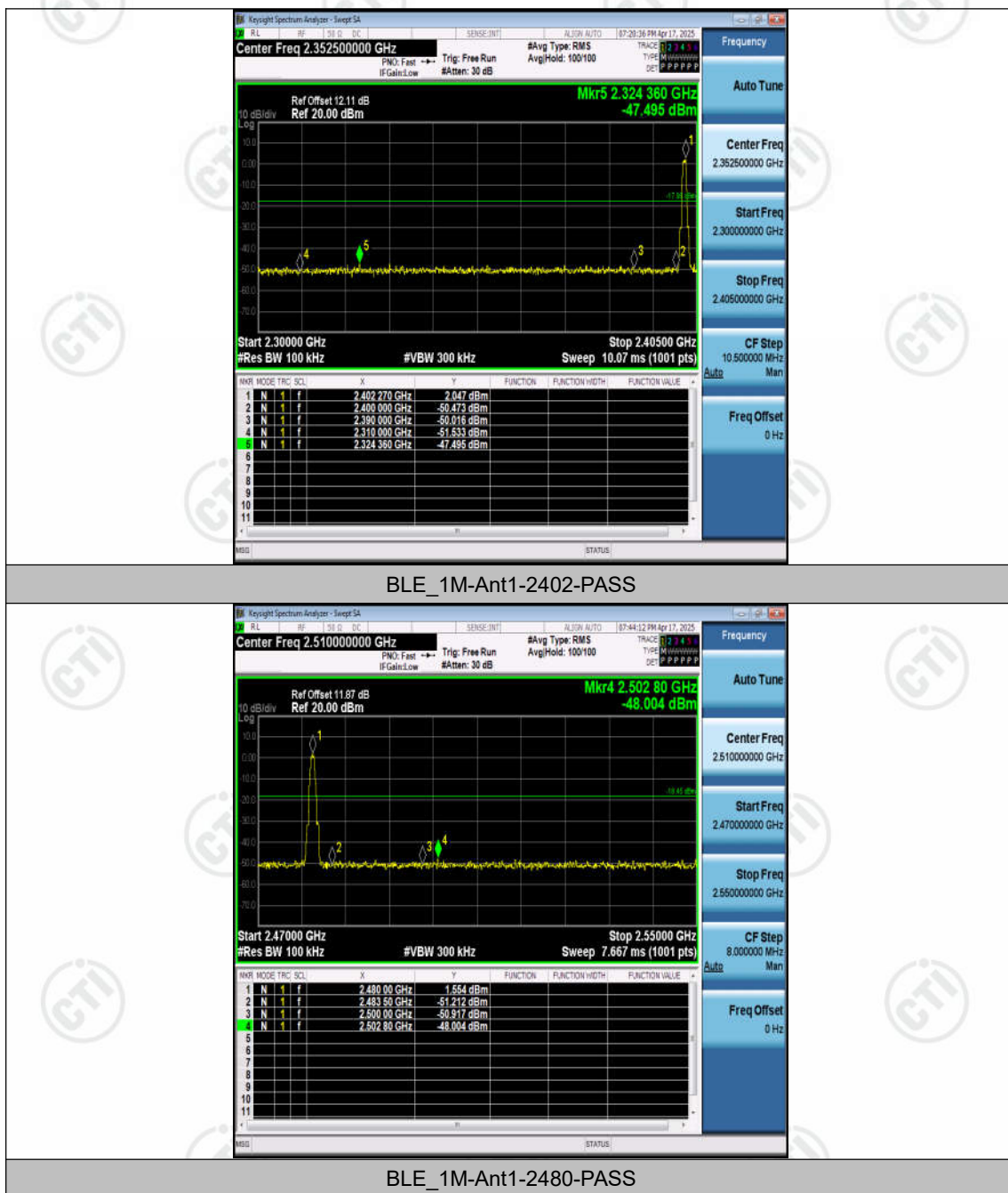


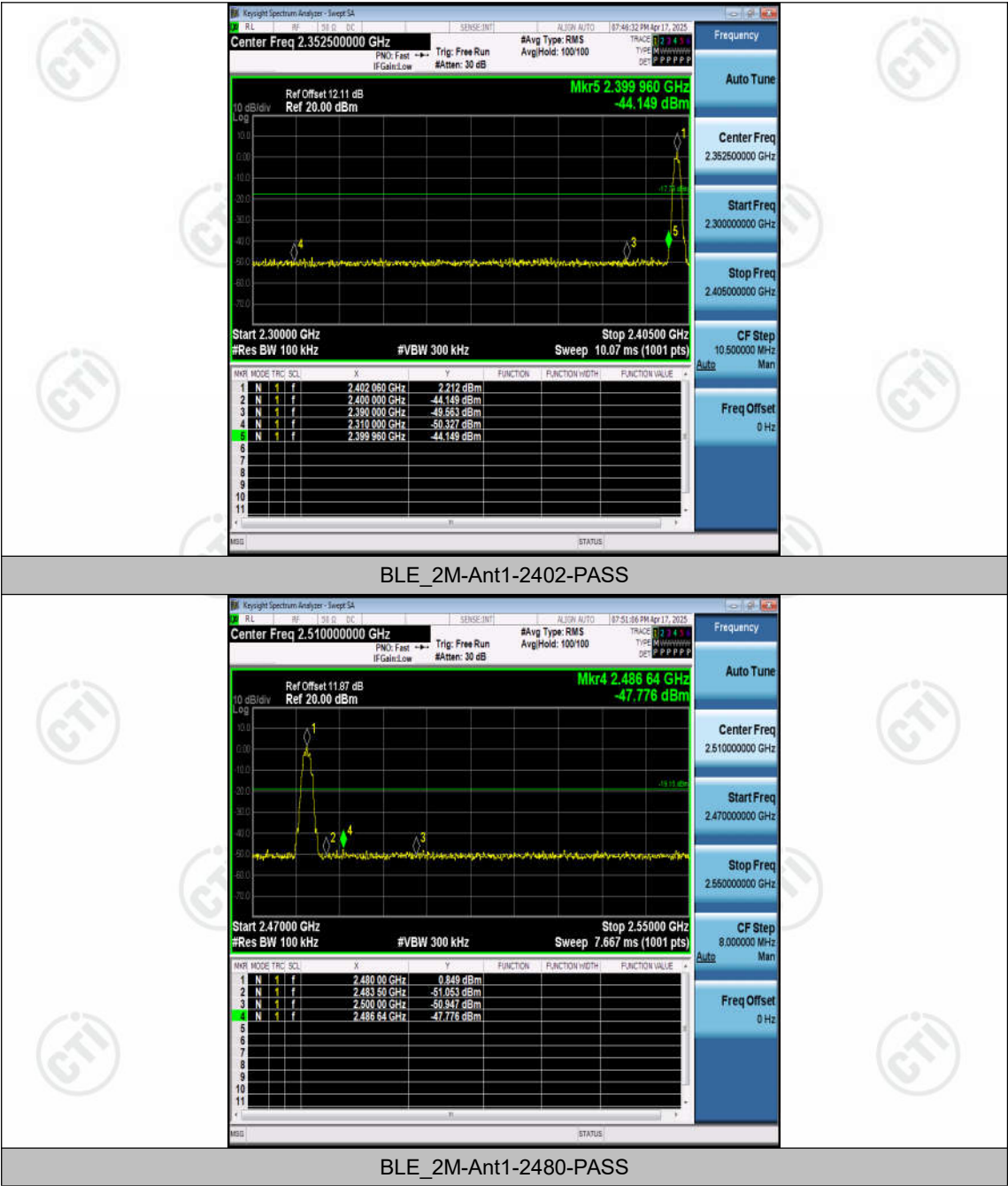
Appendix F: Band edge measurements

Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	2.05	-47.5	≤-17.95	PASS
BLE_1M	Ant1	High	2480	1.55	-48	≤-18.45	PASS
BLE_2M	Ant1	Low	2402	2.21	-44.15	≤-17.79	PASS
BLE_2M	Ant1	High	2480	0.85	-47.78	≤-19.15	PASS

Test Graphs



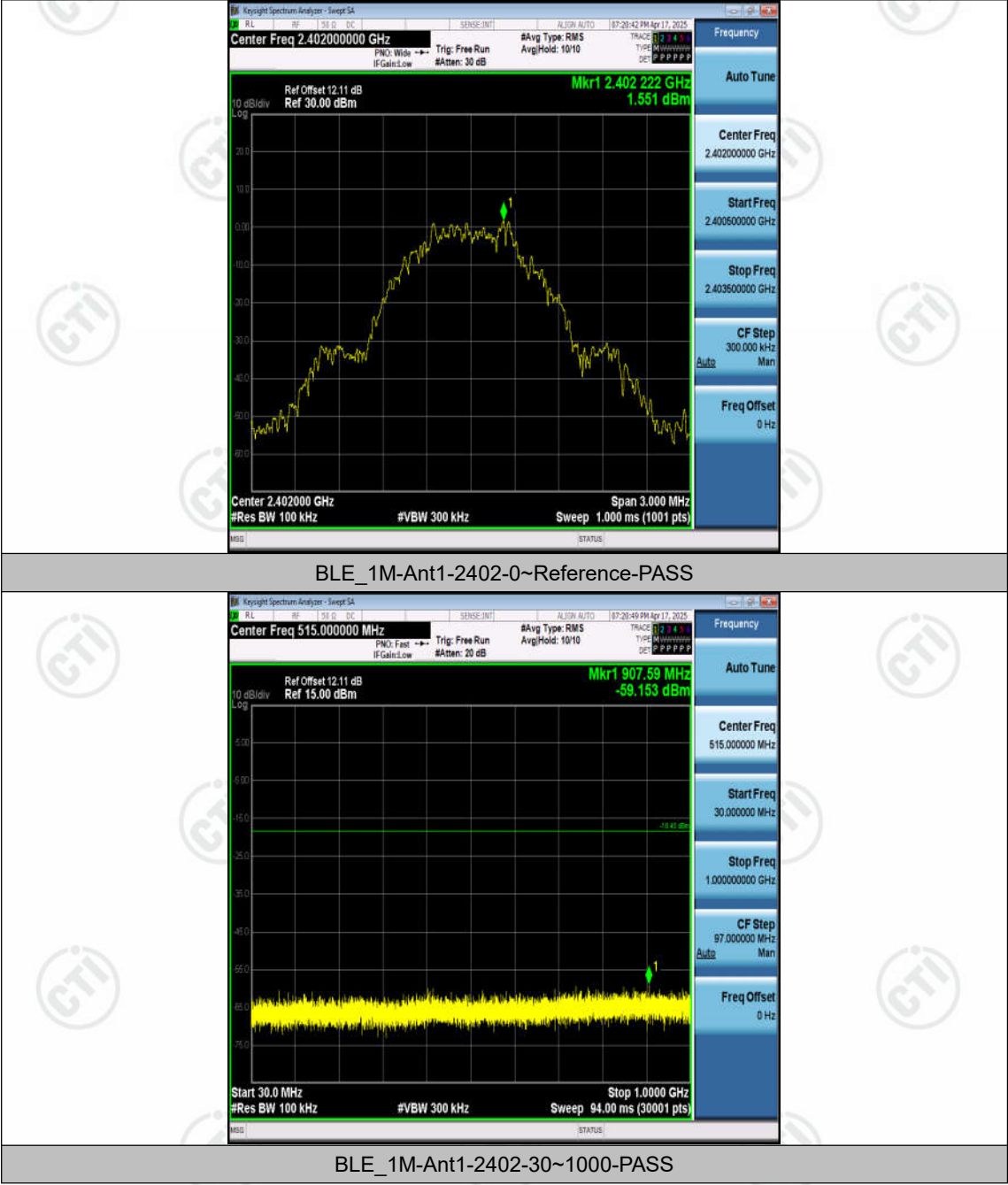


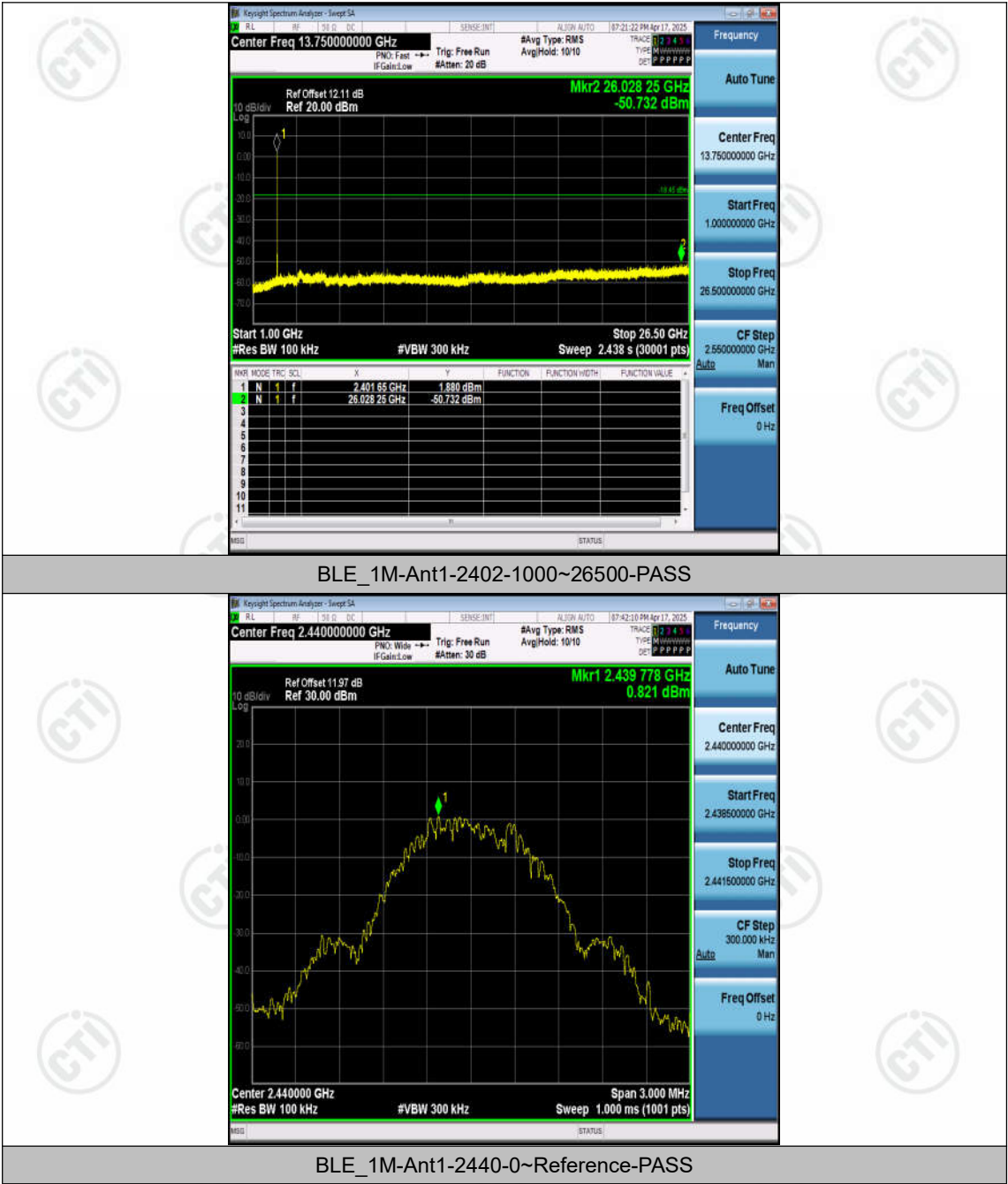
Appendix G: Conducted Spurious Emission

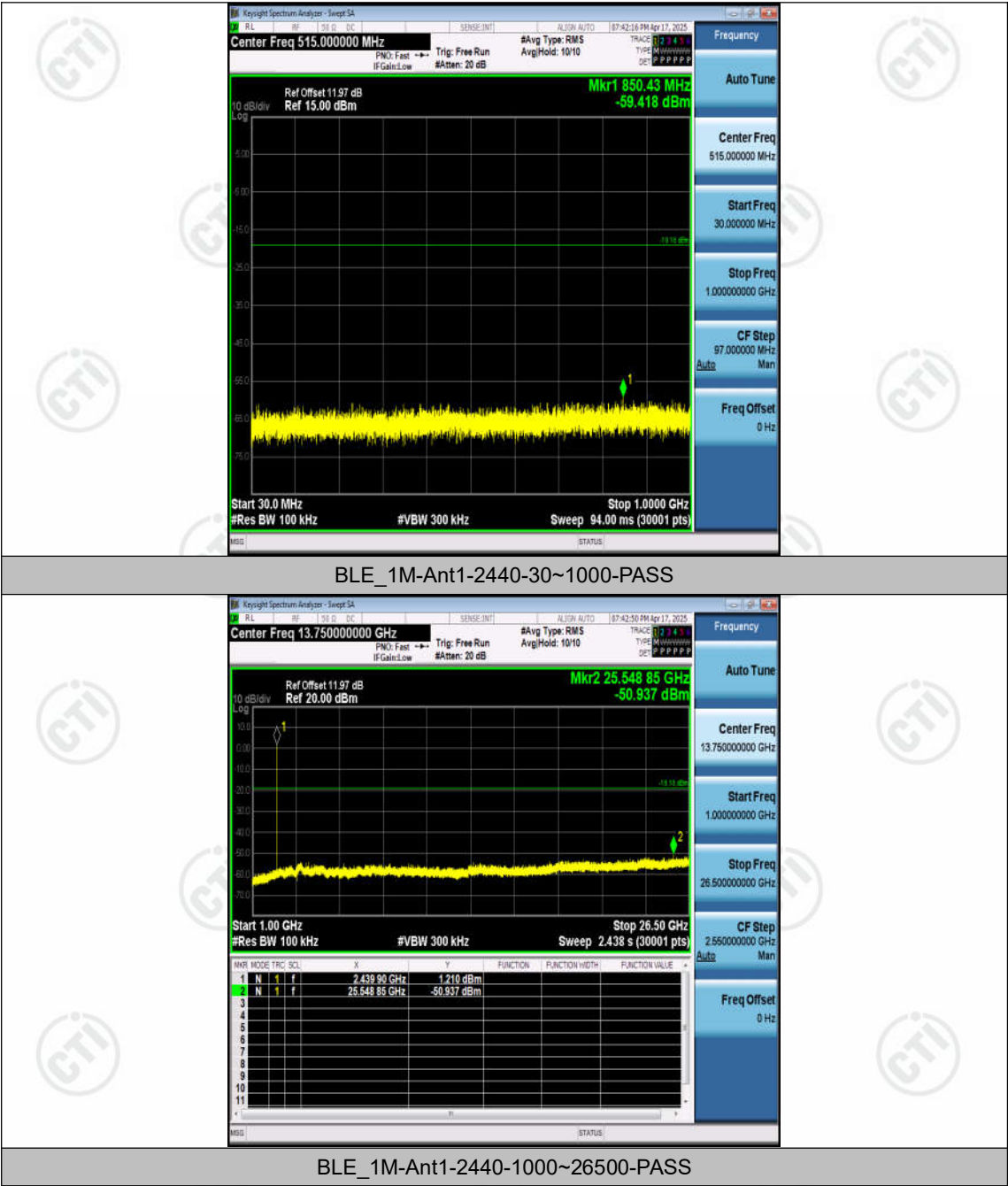
Test Result

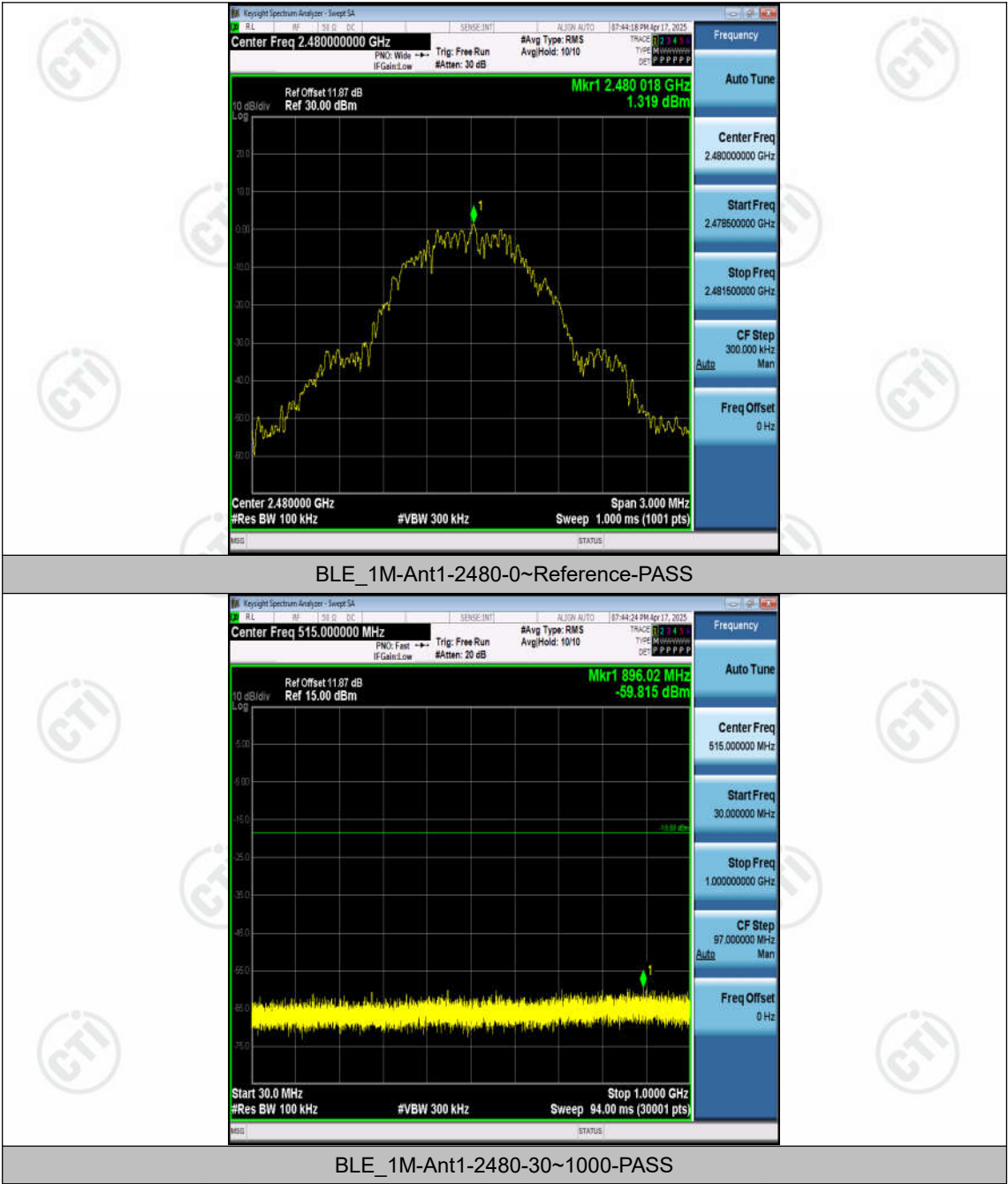
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	1.55	1.55	---	PASS
BLE_1M	Ant1	2402	30~1000	1.55	-59.15	≤-18.45	PASS
BLE_1M	Ant1	2402	1000~26500	1.55	-50.73	≤-18.45	PASS
BLE_1M	Ant1	2440	0~Reference	0.82	0.82	---	PASS
BLE_1M	Ant1	2440	30~1000	0.82	-59.42	≤-19.18	PASS
BLE_1M	Ant1	2440	1000~26500	0.82	-50.94	≤-19.18	PASS
BLE_1M	Ant1	2480	0~Reference	1.32	1.32	---	PASS
BLE_1M	Ant1	2480	30~1000	1.32	-59.82	≤-18.68	PASS
BLE_1M	Ant1	2480	1000~26500	1.32	-51.11	≤-18.68	PASS
BLE_2M	Ant1	2402	0~Reference	1.06	1.06	---	PASS
BLE_2M	Ant1	2402	30~1000	1.06	-58.66	≤-18.94	PASS
BLE_2M	Ant1	2402	1000~26500	1.06	-50.95	≤-18.94	PASS
BLE_2M	Ant1	2440	0~Reference	1.99	1.99	---	PASS
BLE_2M	Ant1	2440	30~1000	1.99	-59.45	≤-18.01	PASS
BLE_2M	Ant1	2440	1000~26500	1.99	-50.14	≤-18.01	PASS
BLE_2M	Ant1	2480	0~Reference	0.32	0.32	---	PASS
BLE_2M	Ant1	2480	30~1000	0.32	-59.49	≤-19.68	PASS
BLE_2M	Ant1	2480	1000~26500	0.32	-51.65	≤-19.68	PASS

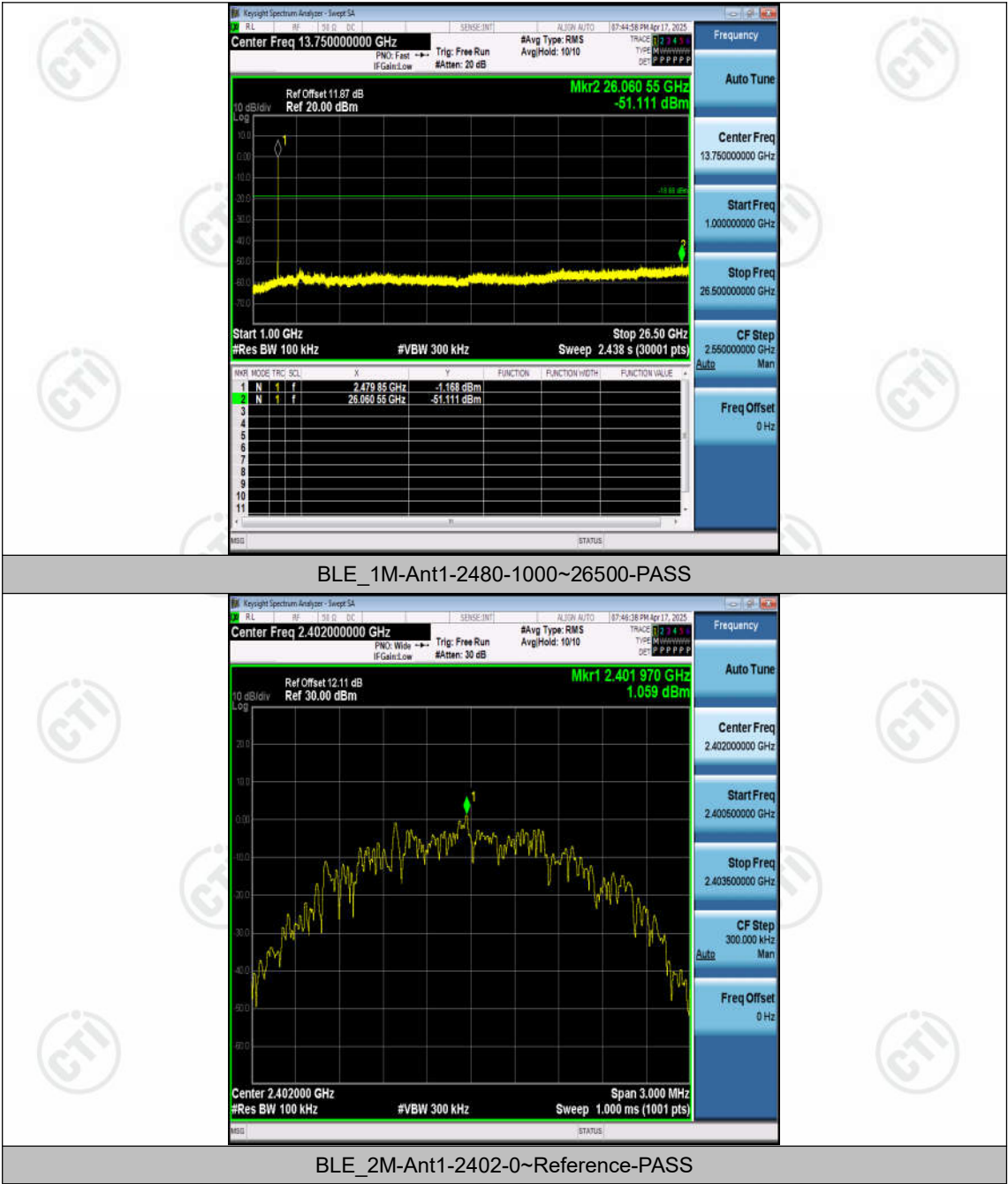
Test Graphs

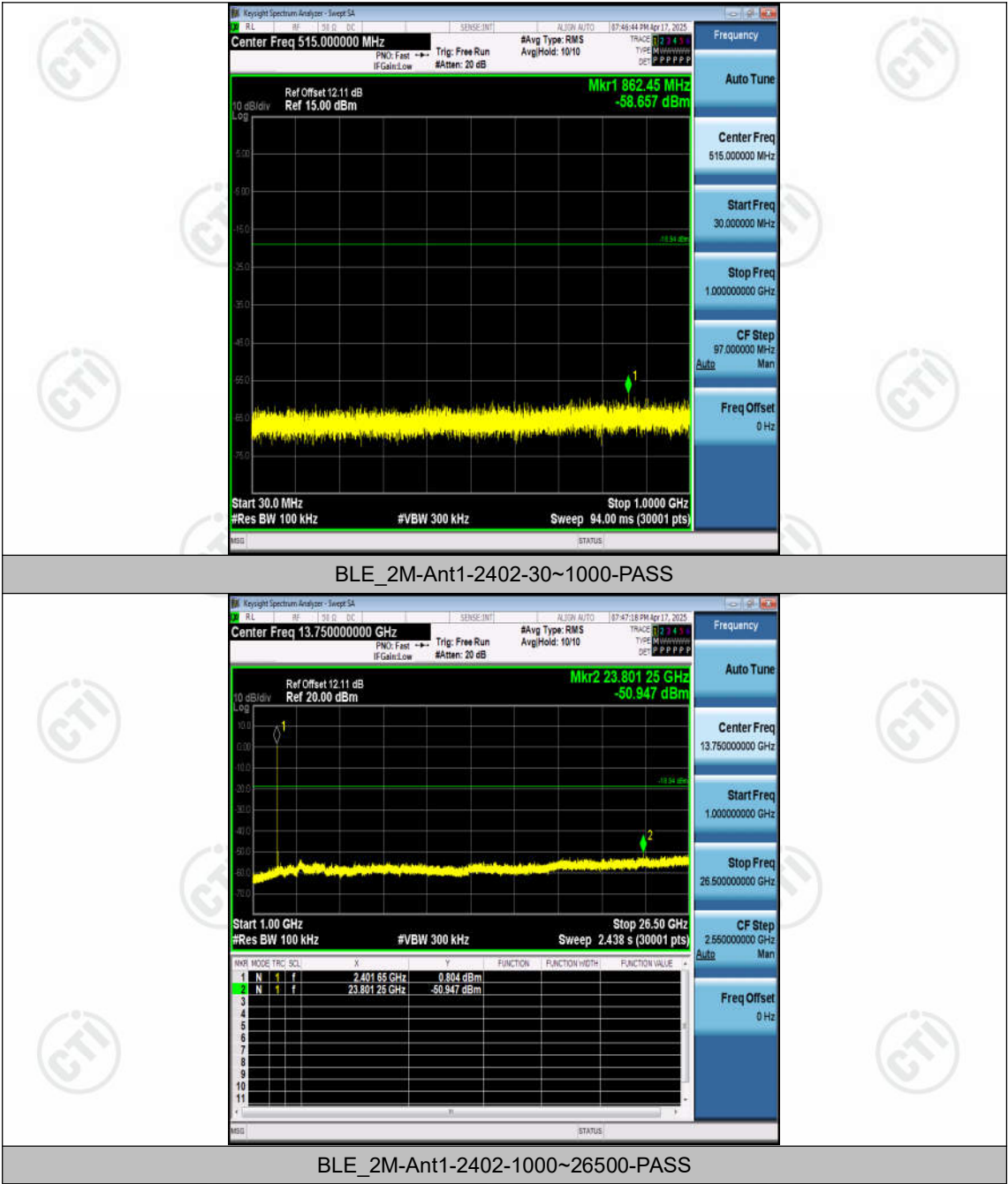


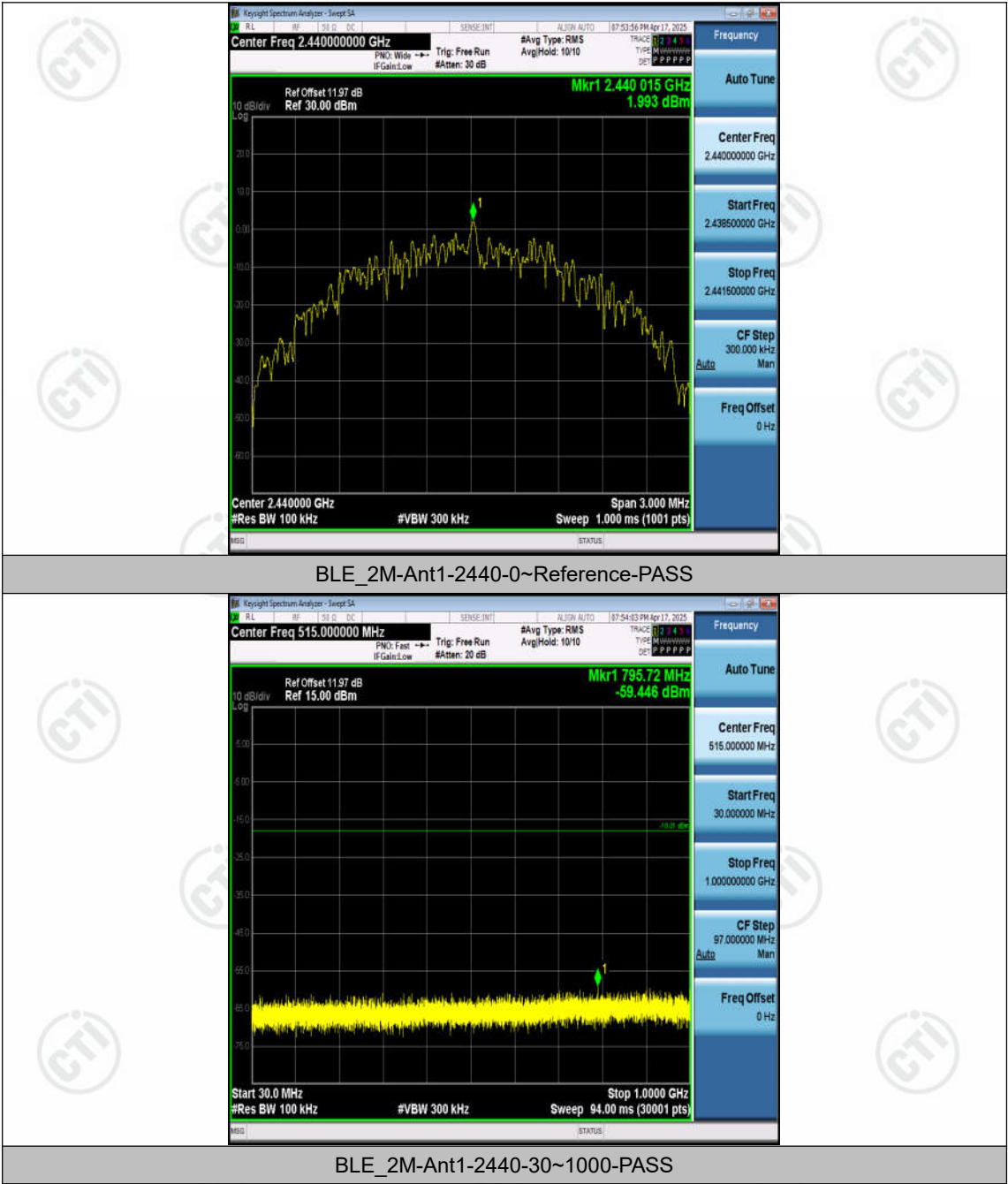


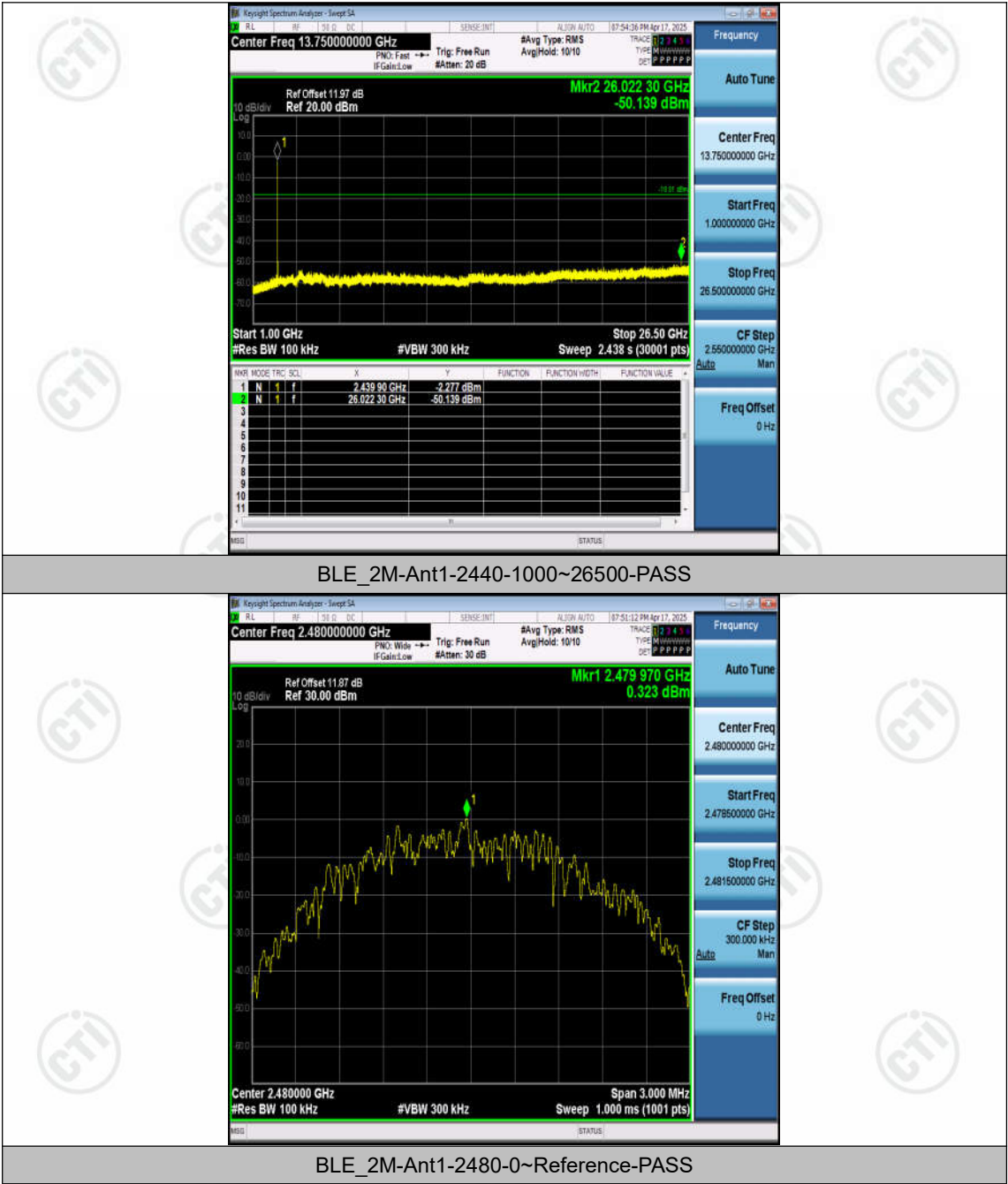


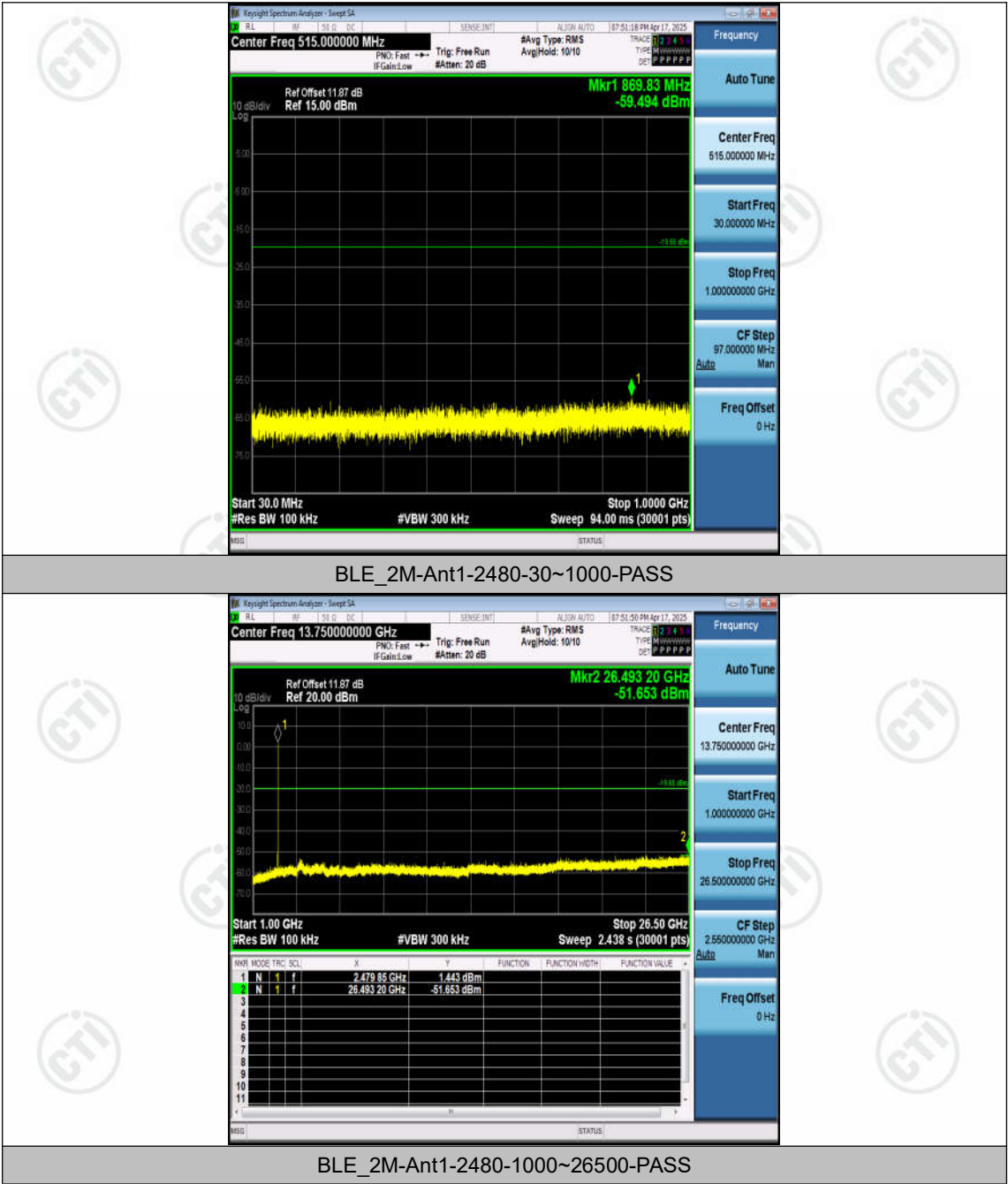










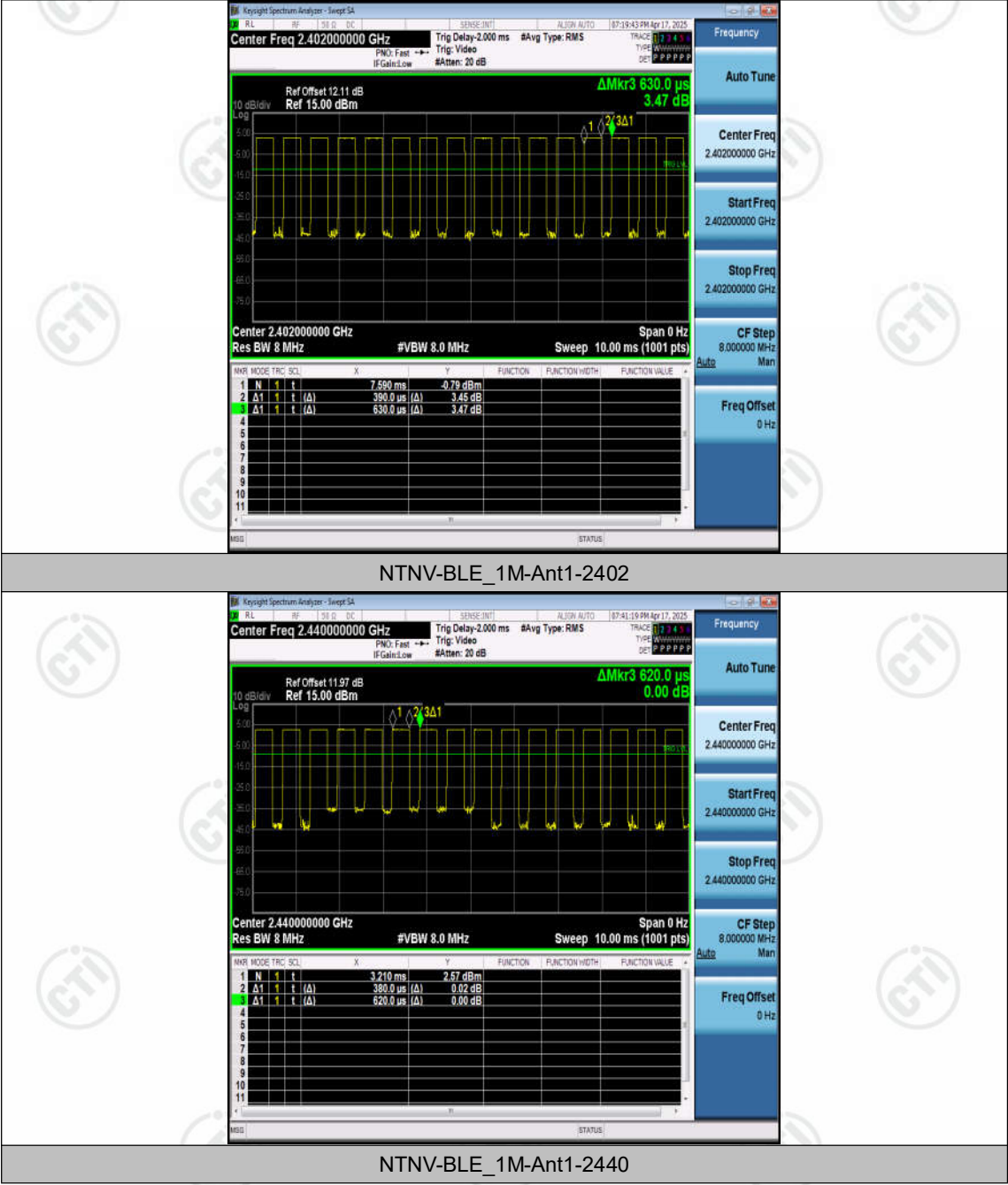


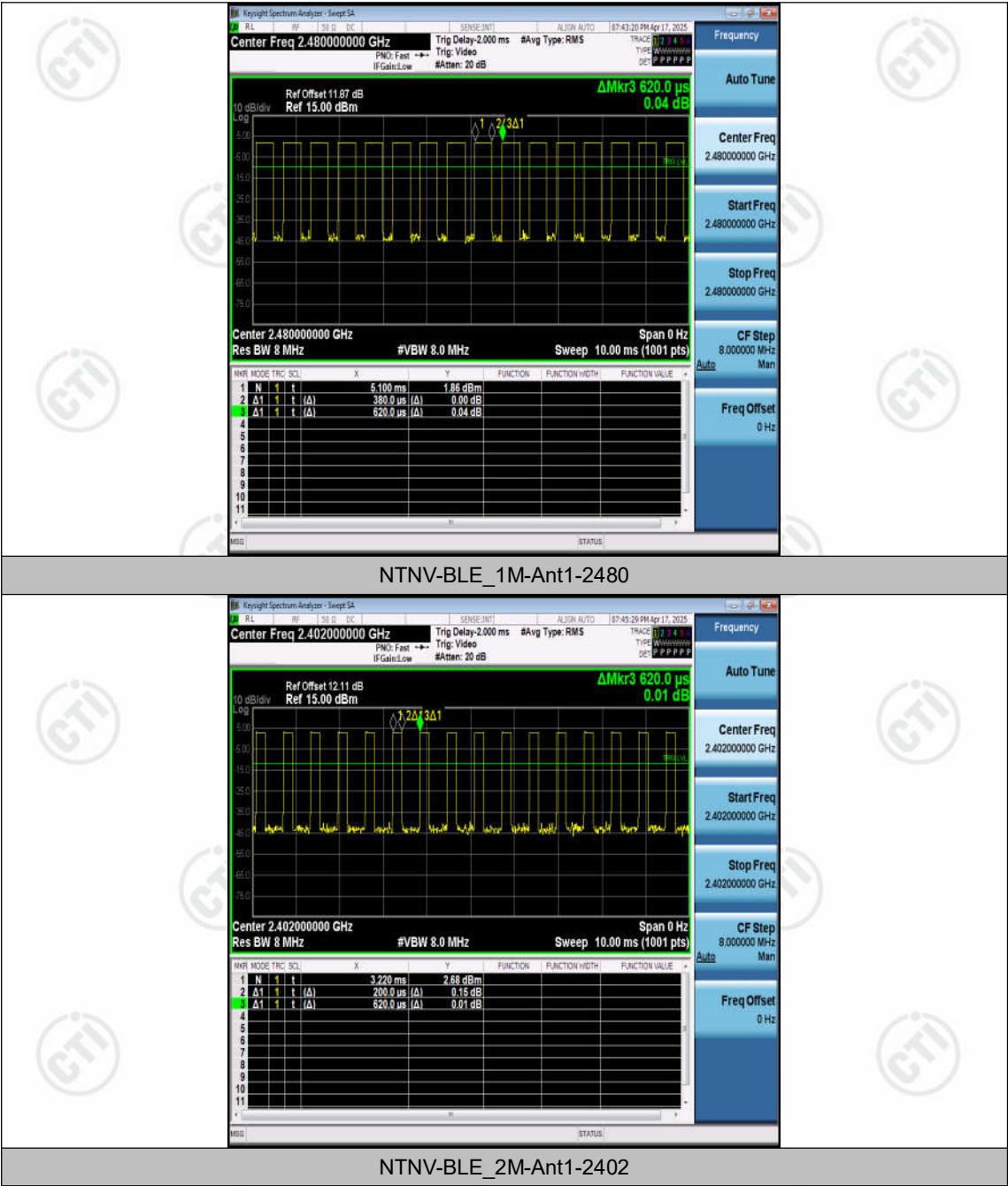
Appendix H: Duty Cycle

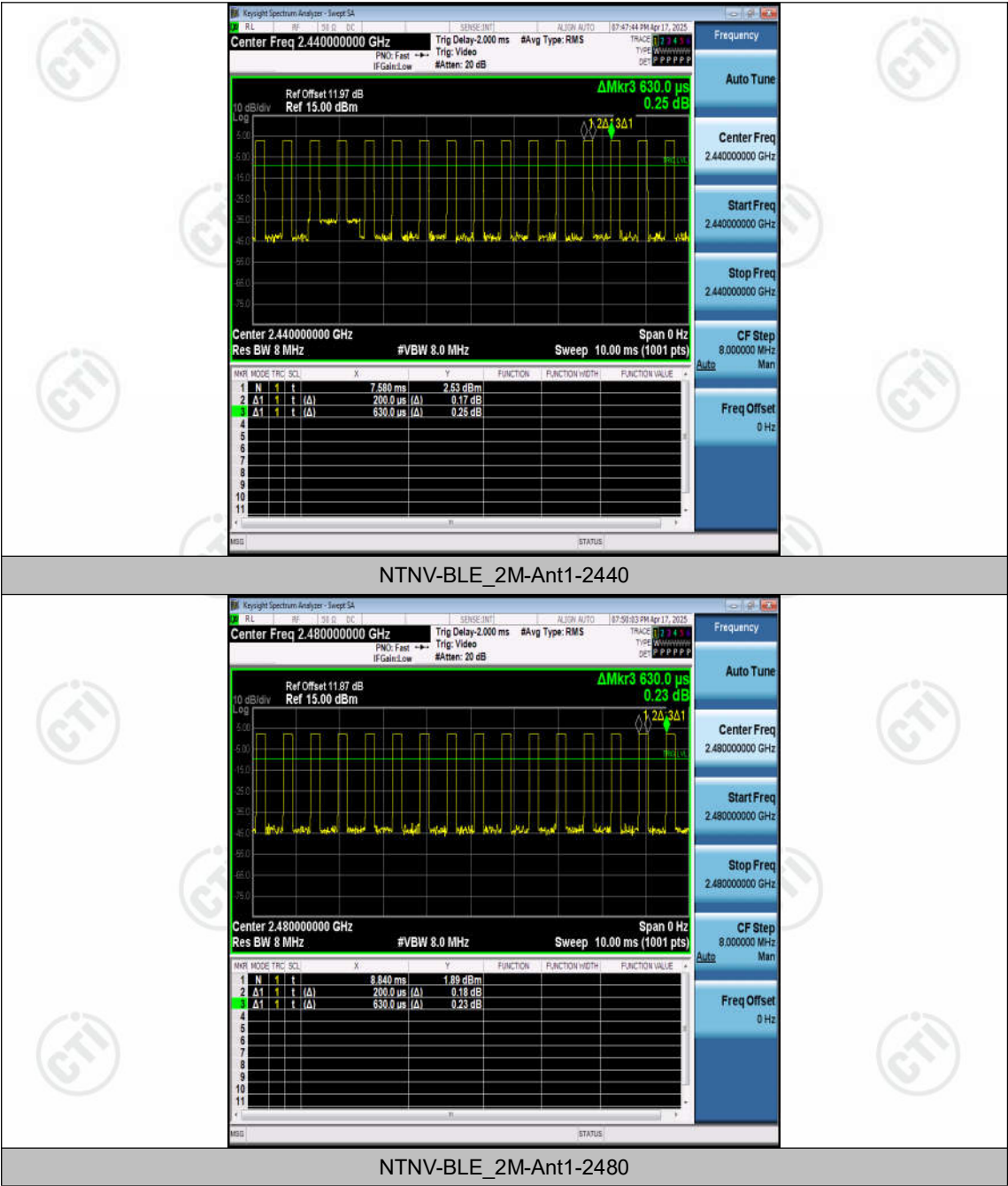
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.39	0.63	61.90	2.08
BLE_1M	Ant1	2440	0.38	0.62	61.29	2.13
BLE_1M	Ant1	2480	0.38	0.62	61.29	2.13
BLE_2M	Ant1	2402	0.20	0.62	32.26	4.91
BLE_2M	Ant1	2440	0.20	0.63	31.75	4.98
BLE_2M	Ant1	2480	0.20	0.63	31.75	4.98

Test Graphs







*** End of Report ***