

Appendix: Bluetooth LE

Contents

Appendix A: DTS Bandwidth..... 3

 Test Result.....3

 Test Graphs.....4

Appendix B: Occupied Channel Bandwidth..... 7

 Test Result.....7

 Test Graphs.....8

Appendix C: Maximum conducted output power..... 11

 Test Result.....11

 Test Graphs.....12

Appendix D: Maximum power spectral density..... 15

 Test Result.....15

 Test Graphs.....16

Appendix E: Band edge measurements..... 19

 Test Result.....19

 Test Graphs.....20

Appendix F: Conducted Spurious Emission..... 22

 Test Result.....22

 Test Graphs.....23

Appendix G: Duty Cycle..... 32

 Test Result.....32

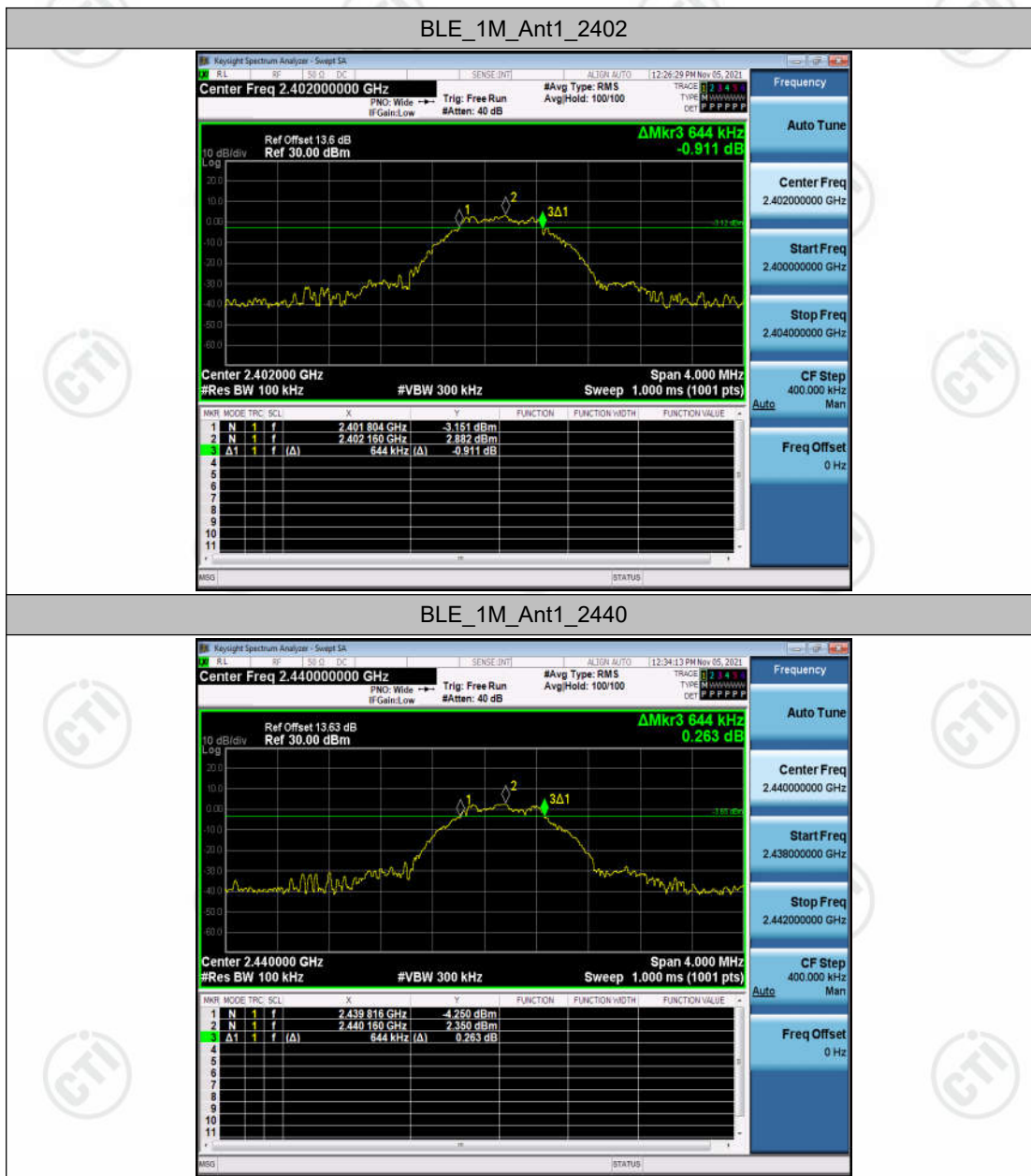
 Test Graphs.....33

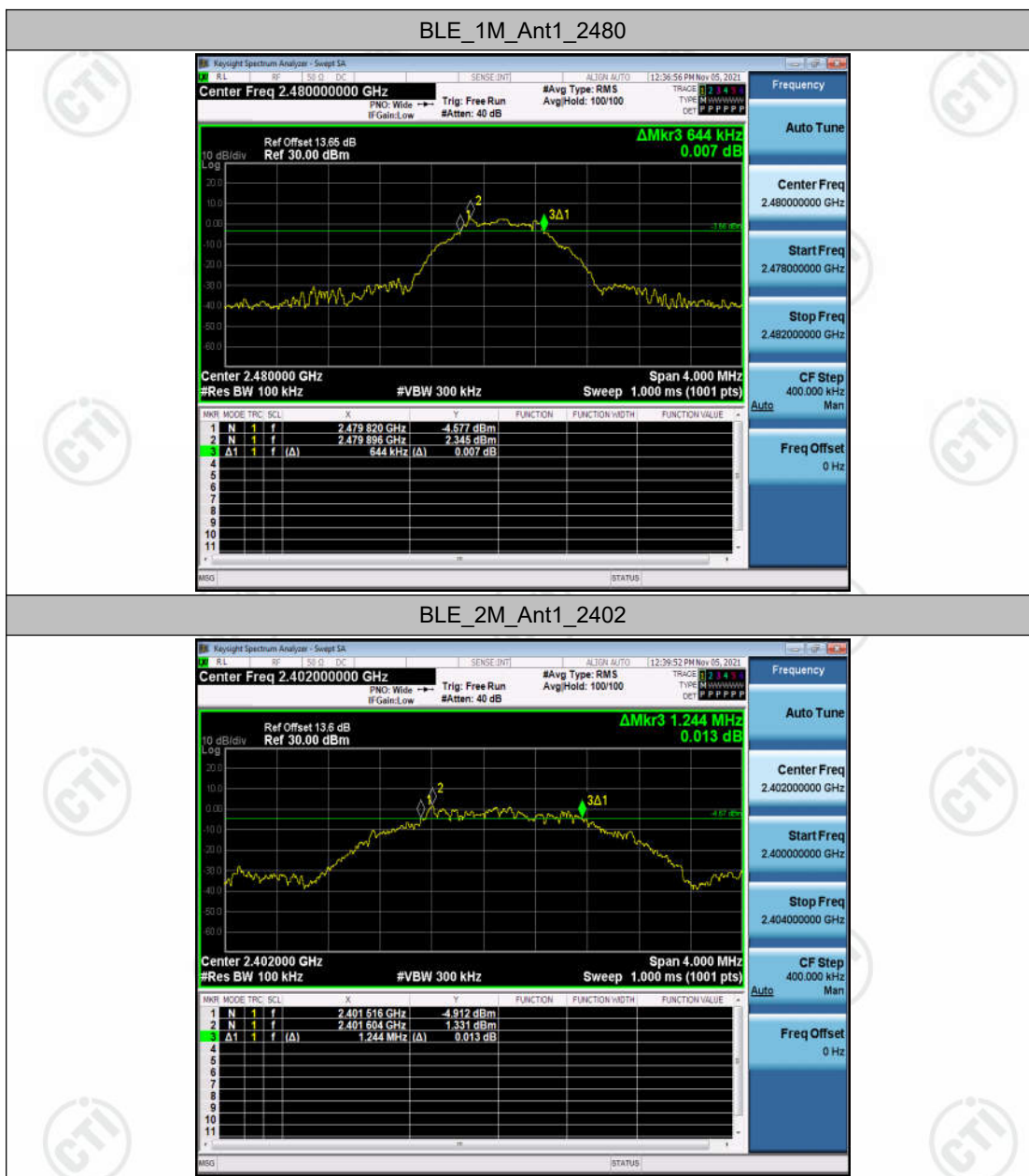
Appendix A: DTS Bandwidth

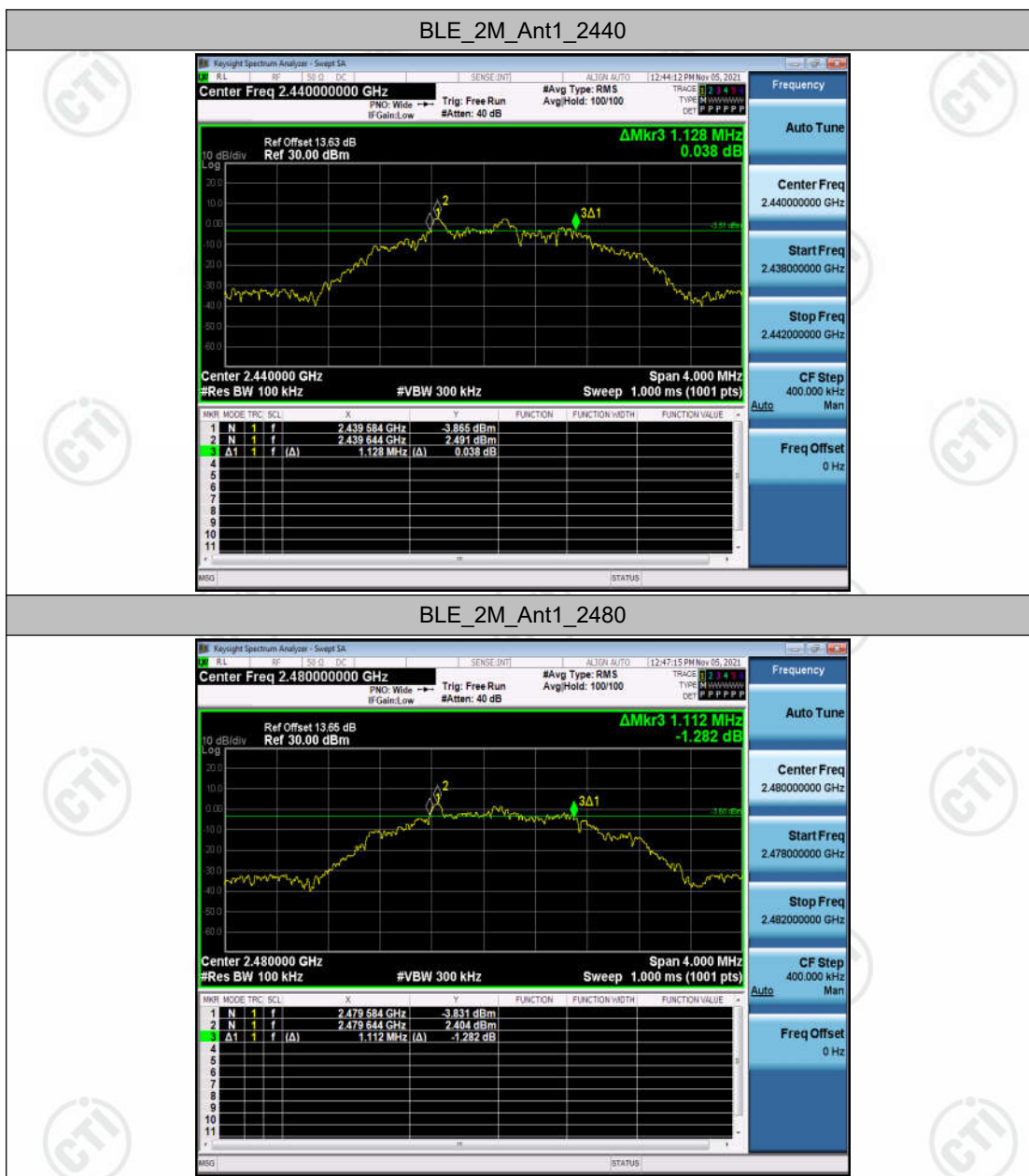
Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.644	2401.804	2402.448	0.5	PASS
		2440	0.644	2439.816	2440.460	0.5	PASS
		2480	0.644	2479.820	2480.464	0.5	PASS
BLE_2M	Ant1	2402	1.244	2401.516	2402.760	0.5	PASS
		2440	1.128	2439.584	2440.712	0.5	PASS
		2480	1.112	2479.584	2480.696	0.5	PASS

Test Graphs





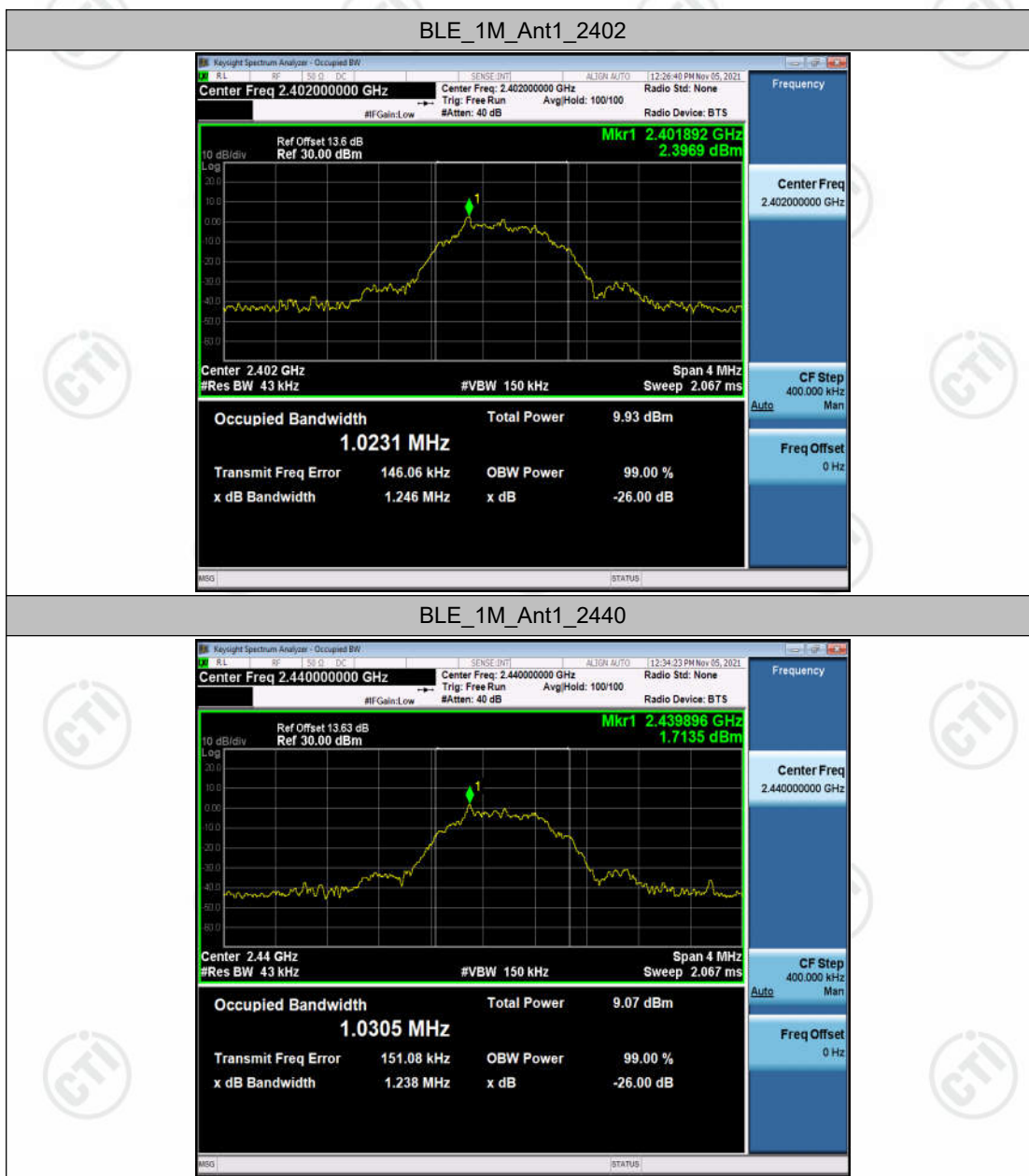


Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0231	2401.635	2402.658	---	PASS
		2440	1.0305	2439.636	2440.666	---	PASS
		2480	1.0090	2479.650	2480.659	---	PASS
BLE_2M	Ant1	2402	2.0211	2401.150	2403.172	---	PASS
		2440	2.0252	2439.149	2441.174	---	PASS
		2480	2.0265	2479.150	2481.176	---	PASS

Test Graphs





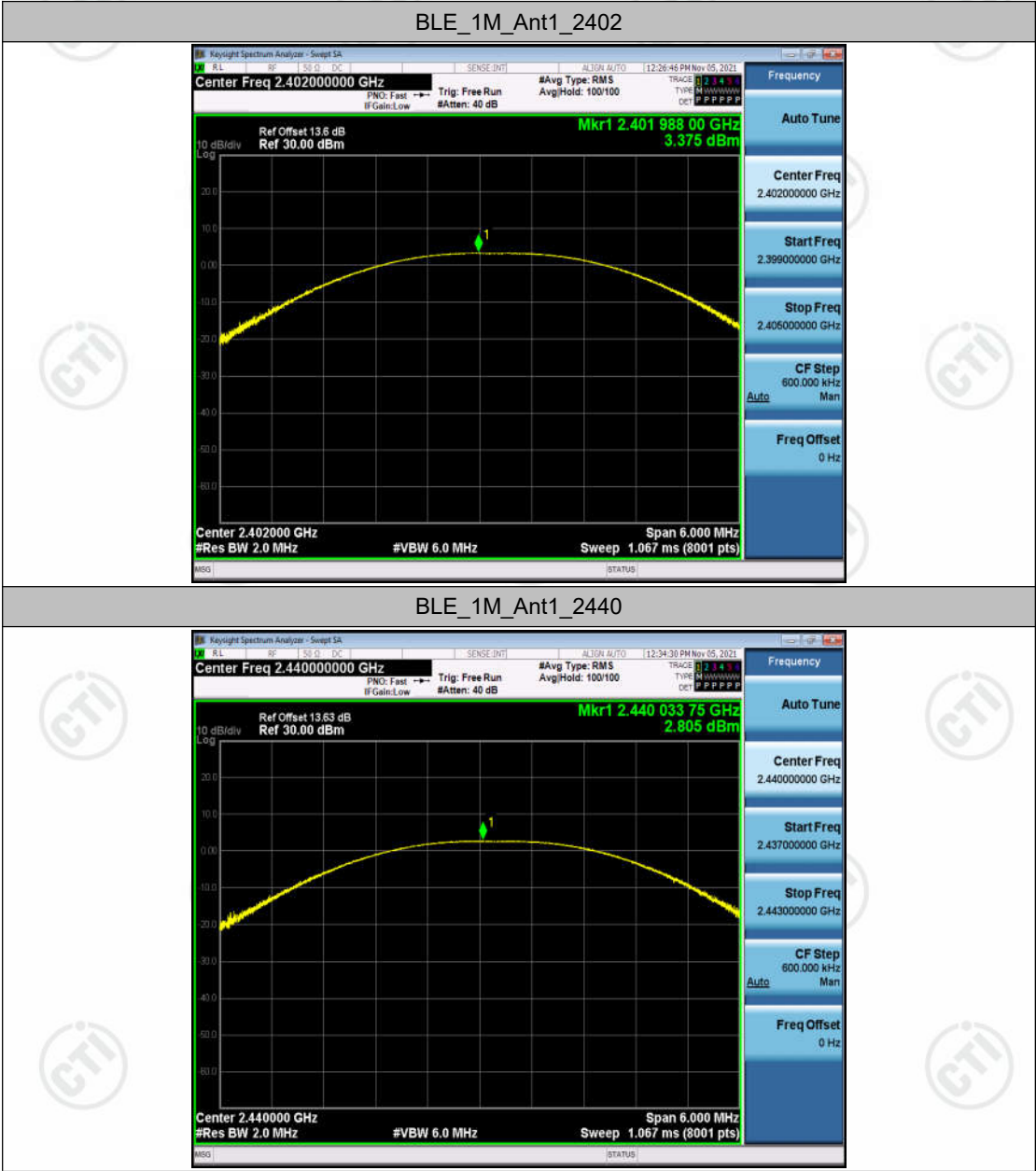


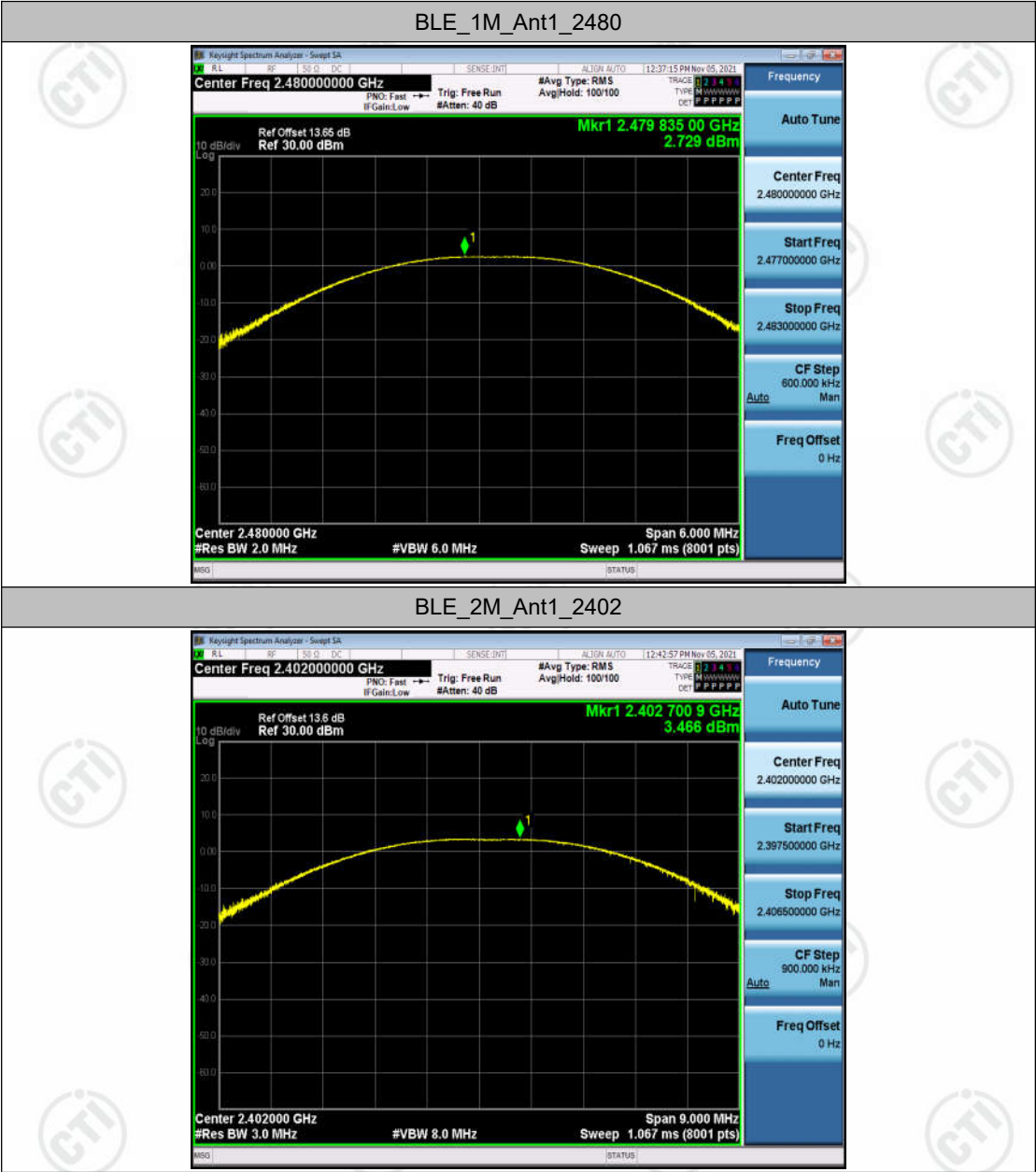
Appendix C: Maximum conducted output power

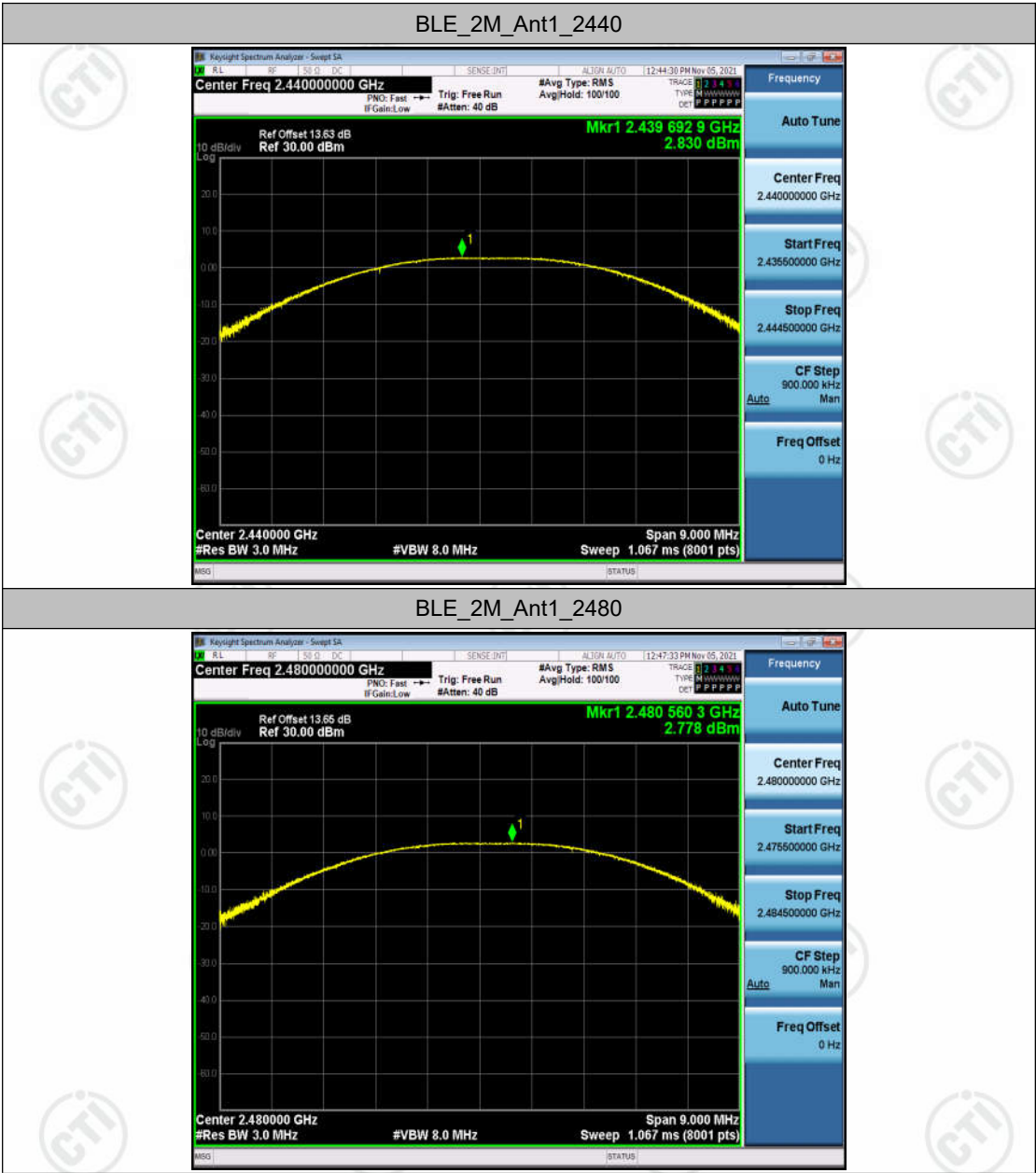
Test Result

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	3.38	<=30	PASS
		2440	2.81	<=30	PASS
		2480	2.73	<=30	PASS
BLE_2M	Ant1	2402	3.47	<=30	PASS
		2440	2.83	<=30	PASS
		2480	2.78	<=30	PASS

Test Graphs





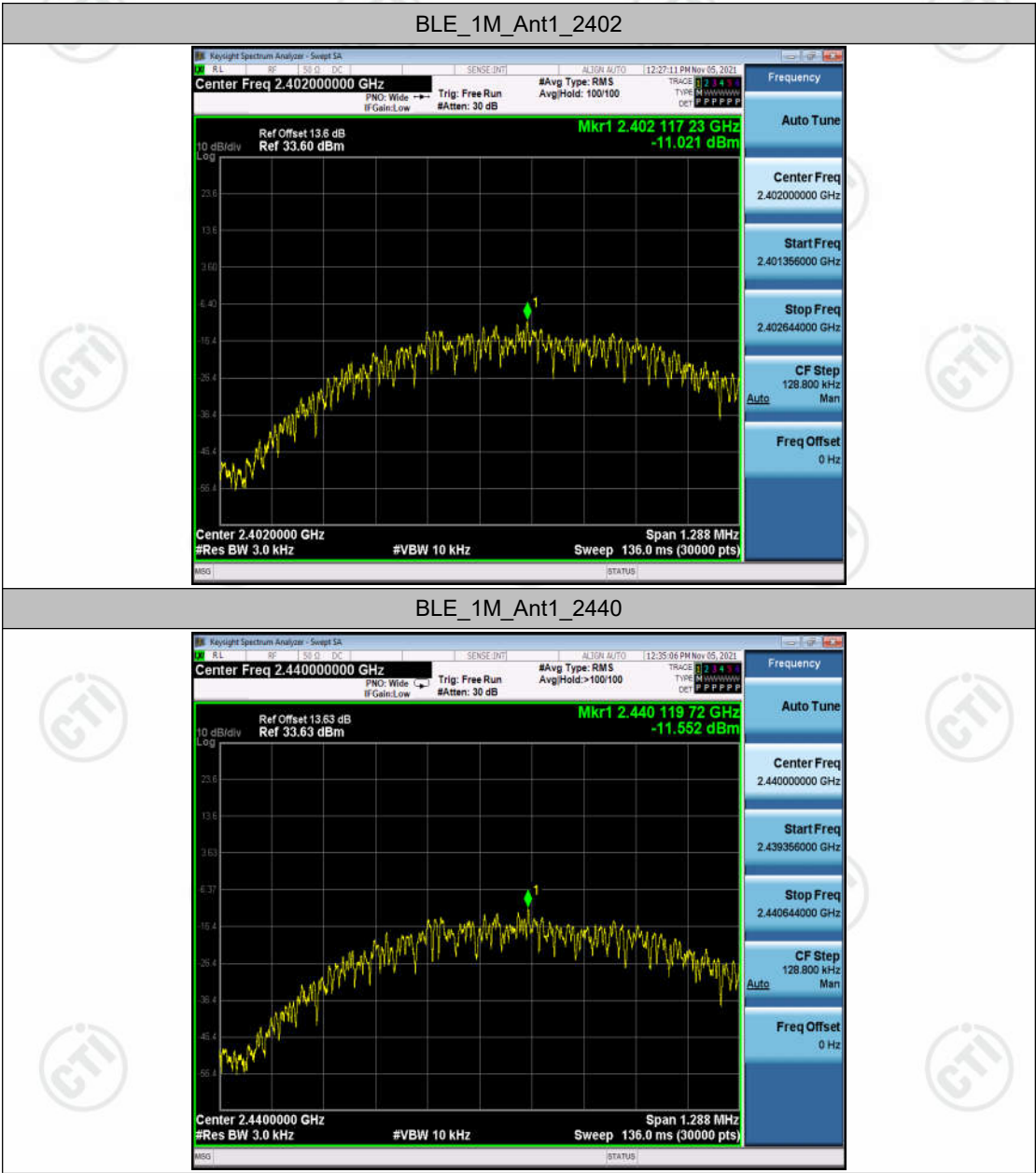


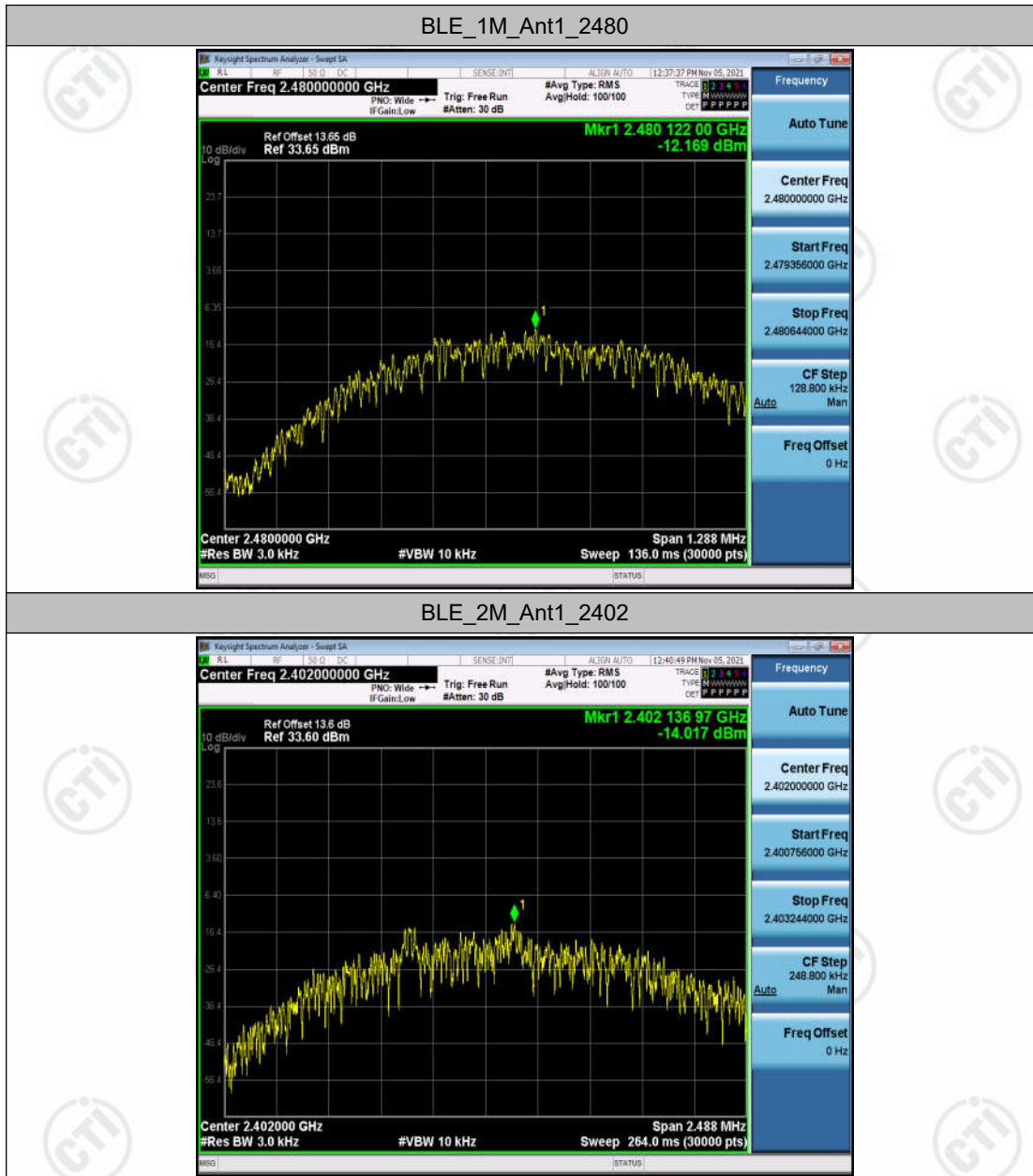
Appendix D: Maximum power spectral density

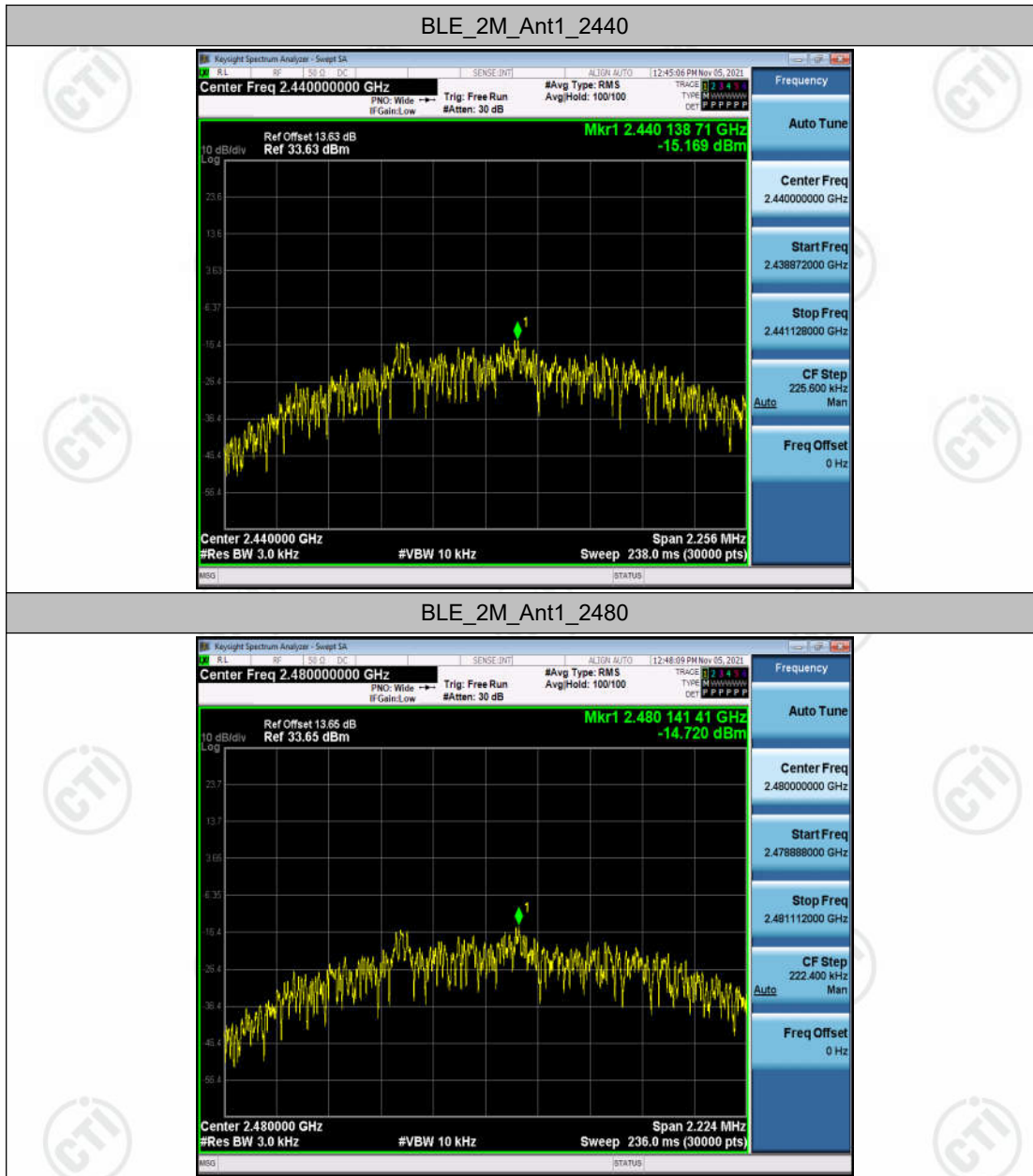
Test Result

Test Mode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.02	<=8	PASS
		2440	-11.55	<=8	PASS
		2480	-12.17	<=8	PASS
BLE_2M	Ant1	2402	-14.02	<=8	PASS
		2440	-15.17	<=8	PASS
		2480	-14.72	<=8	PASS

Test Graphs





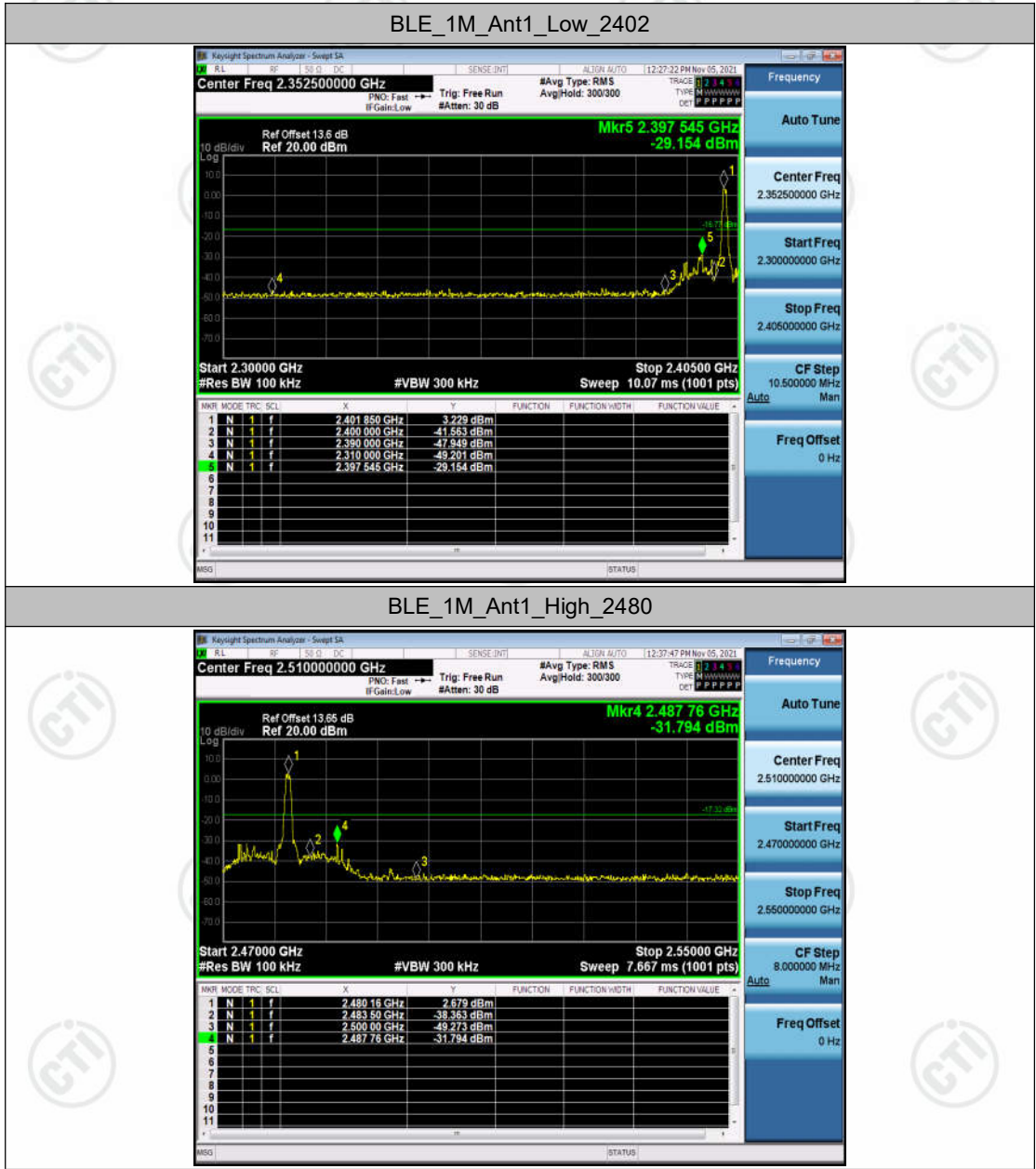


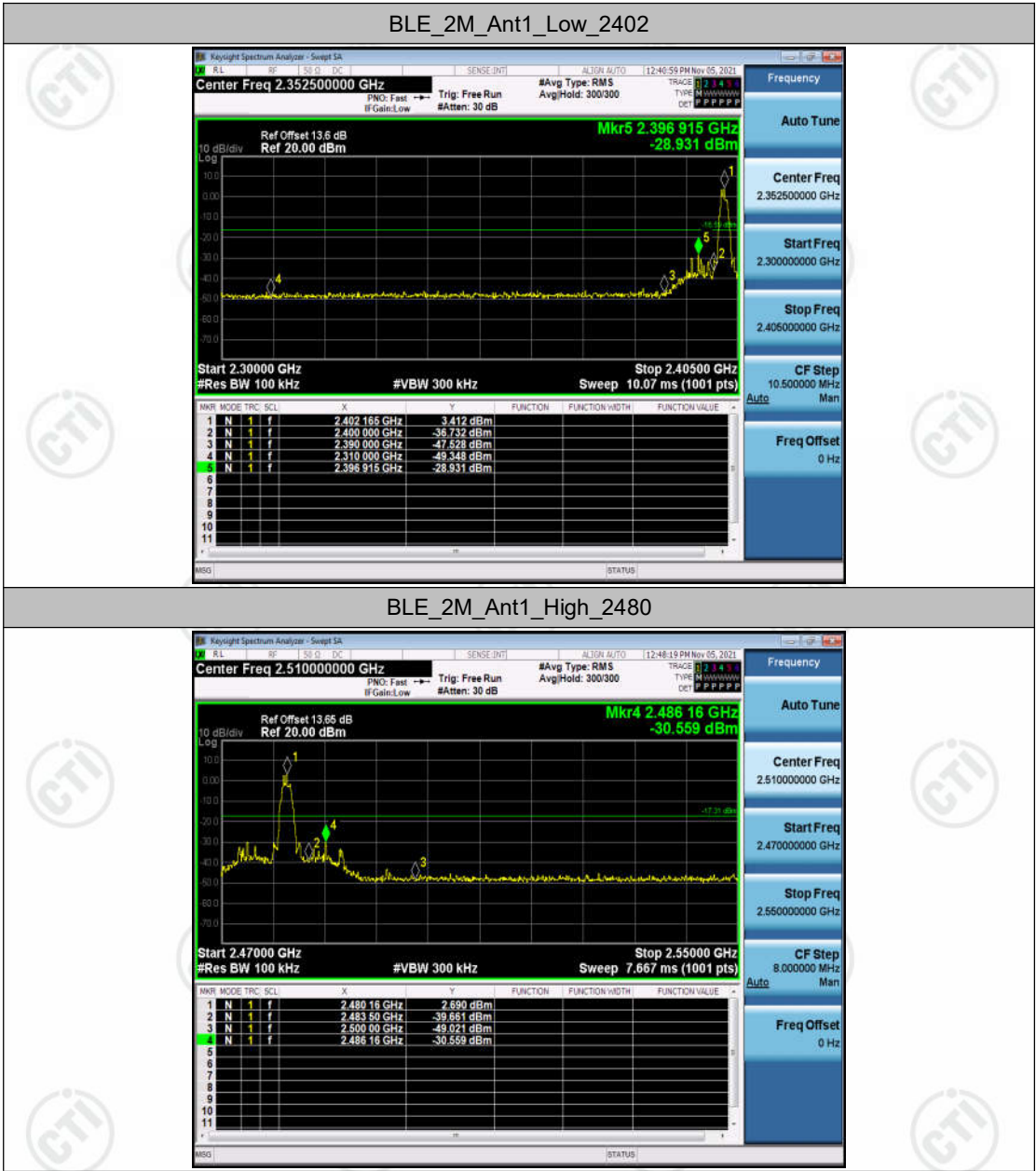
Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch Name	Channel	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	3.23	-29.15	<=-16.77	PASS
		High	2480	2.68	-31.79	<=-17.32	PASS
BLE_2M	Ant1	Low	2402	3.41	-28.93	<=-16.59	PASS
		High	2480	2.69	-30.56	<=-17.31	PASS

Test Graphs



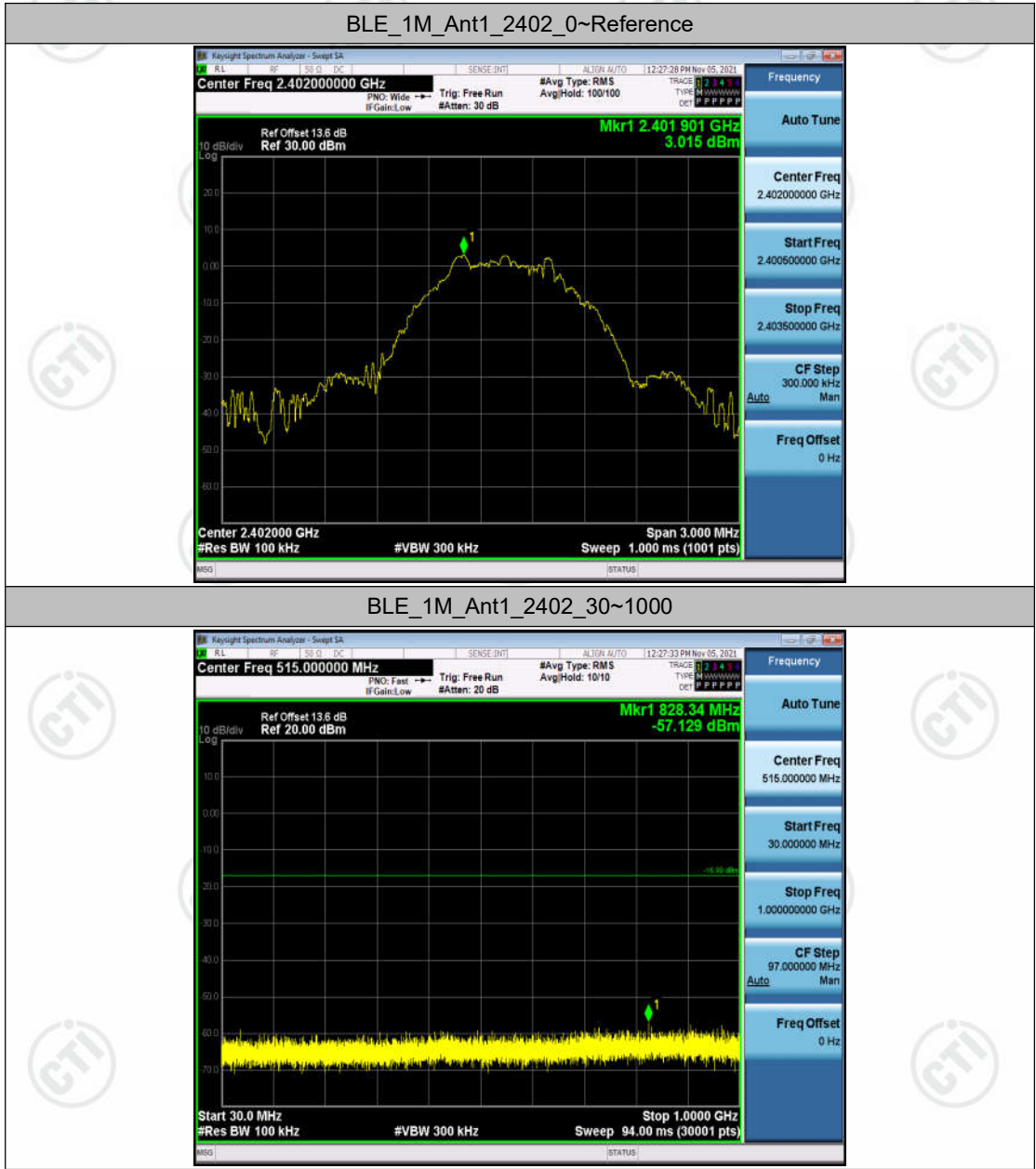


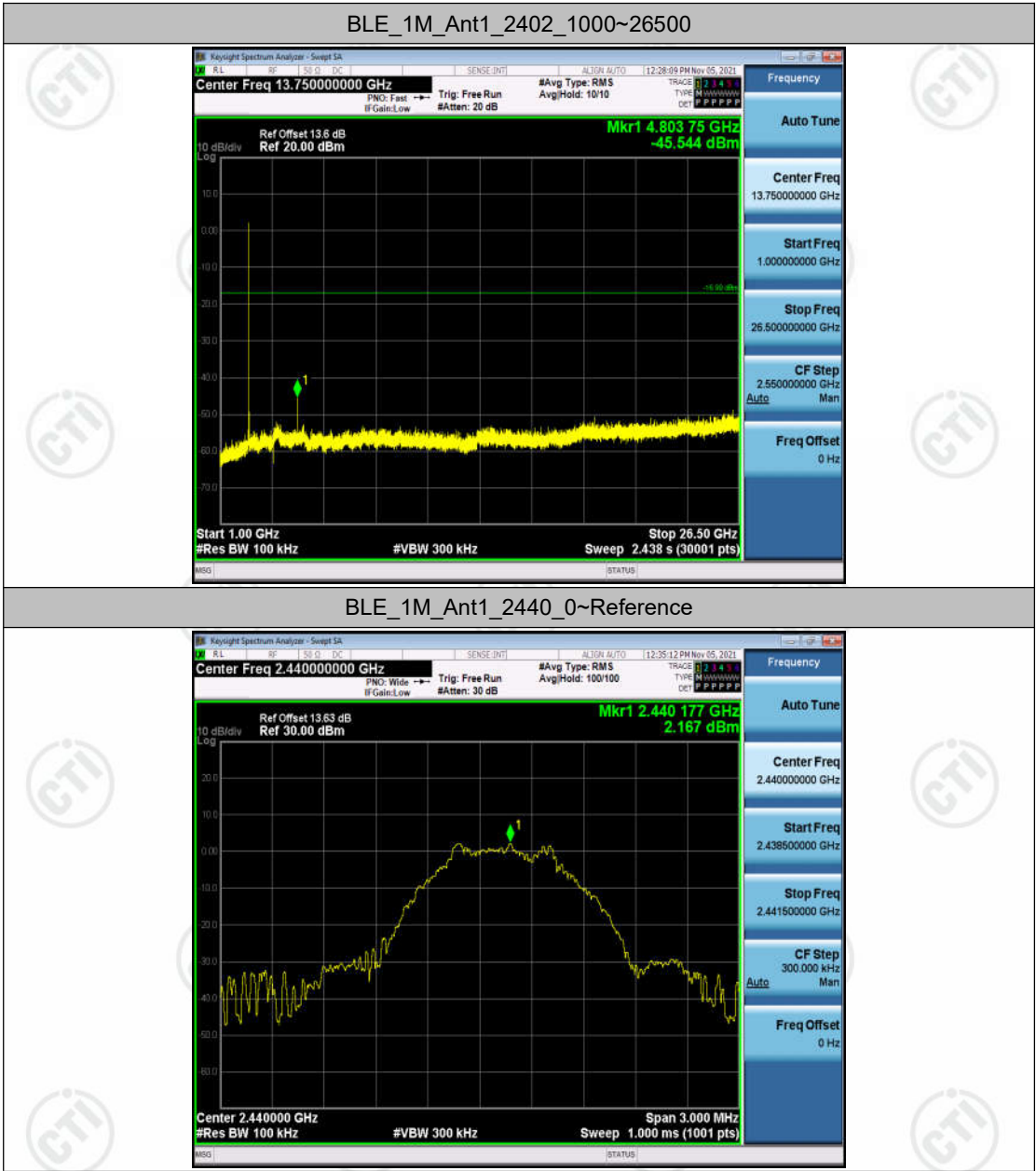
Appendix F: Conducted Spurious Emission

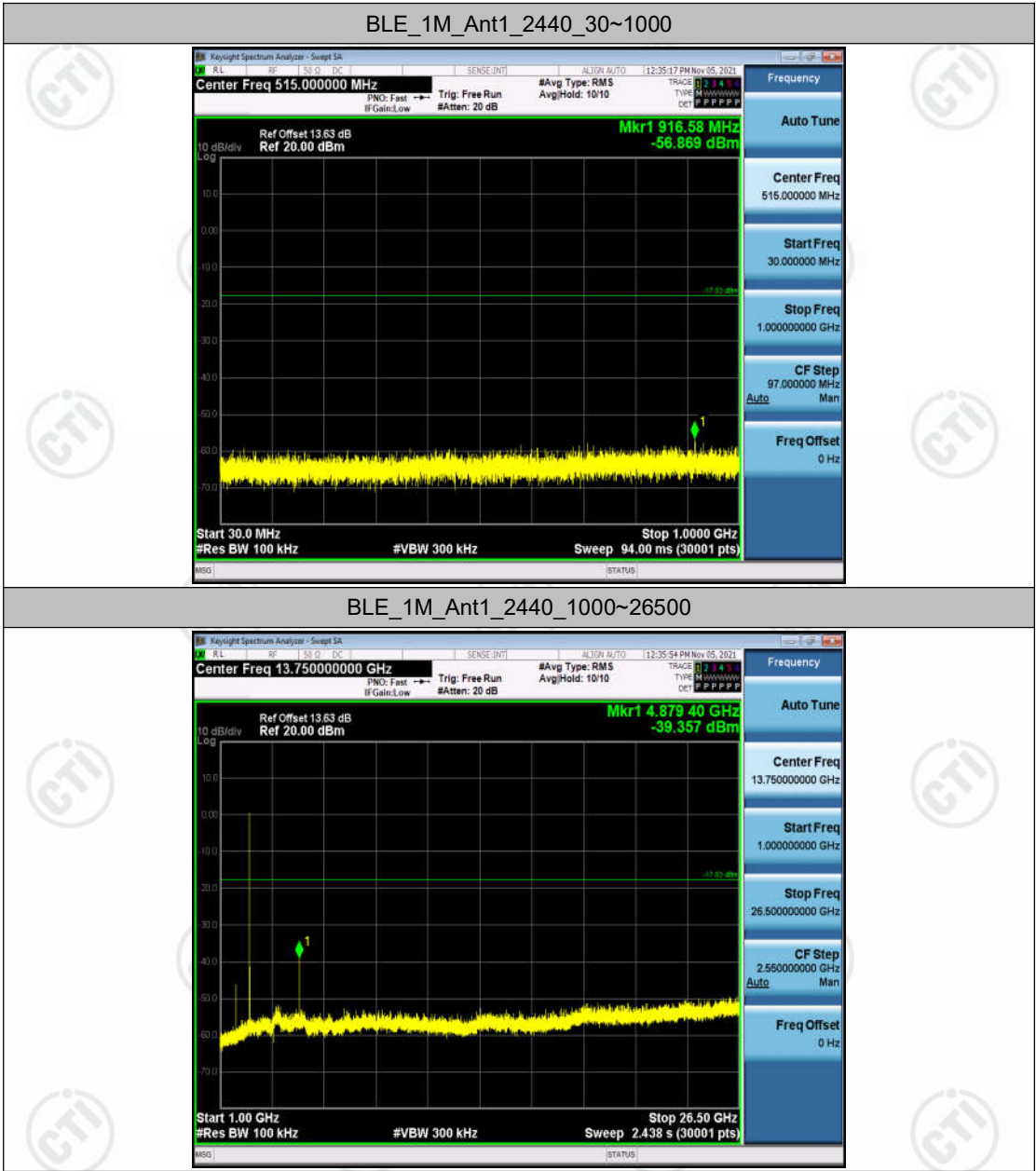
Test Result

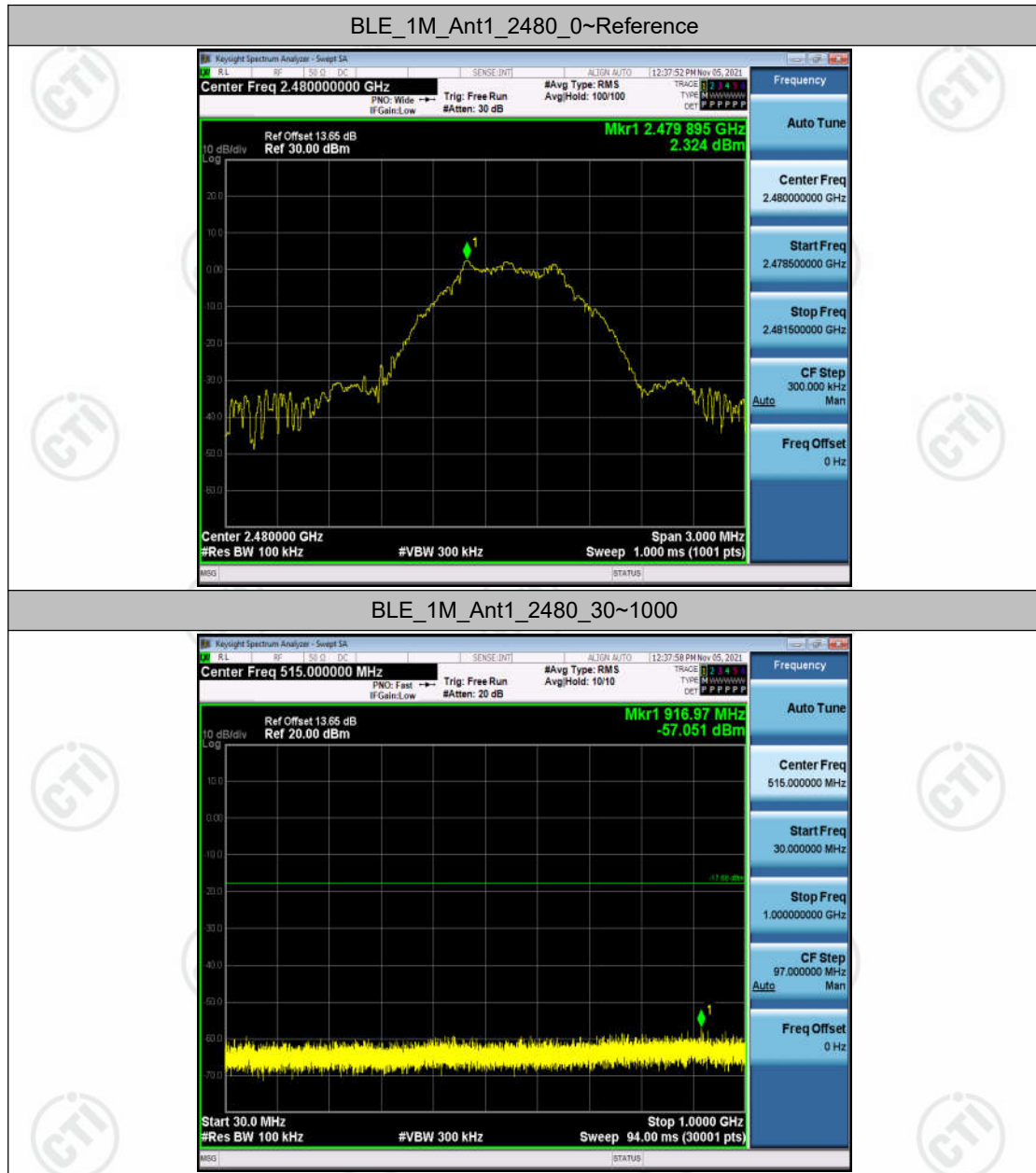
Test Mode	Antenna	Channel	Freq Range [MHz]	Ref Level [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	3.02	3.02	---	PASS
			30~1000	---	-57.129	<=-16.985	PASS
			1000~26500	---	-45.544	<=-16.985	PASS
		2440	Reference	2.17	2.17	---	PASS
			30~1000	---	-56.869	<=-17.833	PASS
			1000~26500	---	-39.357	<=-17.833	PASS
		2480	Reference	2.32	2.32	---	PASS
			30~1000	---	-57.051	<=-17.676	PASS
			1000~26500	---	-39.776	<=-17.676	PASS
BLE_2M	Ant1	2402	Reference	3.01	3.01	---	PASS
			30~1000	---	-57.323	<=-16.991	PASS
			1000~26500	---	-41.195	<=-16.991	PASS
		2440	Reference	2.45	2.45	---	PASS
			30~1000	---	-48.089	<=-17.547	PASS
			1000~26500	---	-36.678	<=-17.547	PASS
		2480	Reference	2.31	2.31	---	PASS
			30~1000	---	-57.362	<=-17.692	PASS
			1000~26500	---	-36.782	<=-17.692	PASS

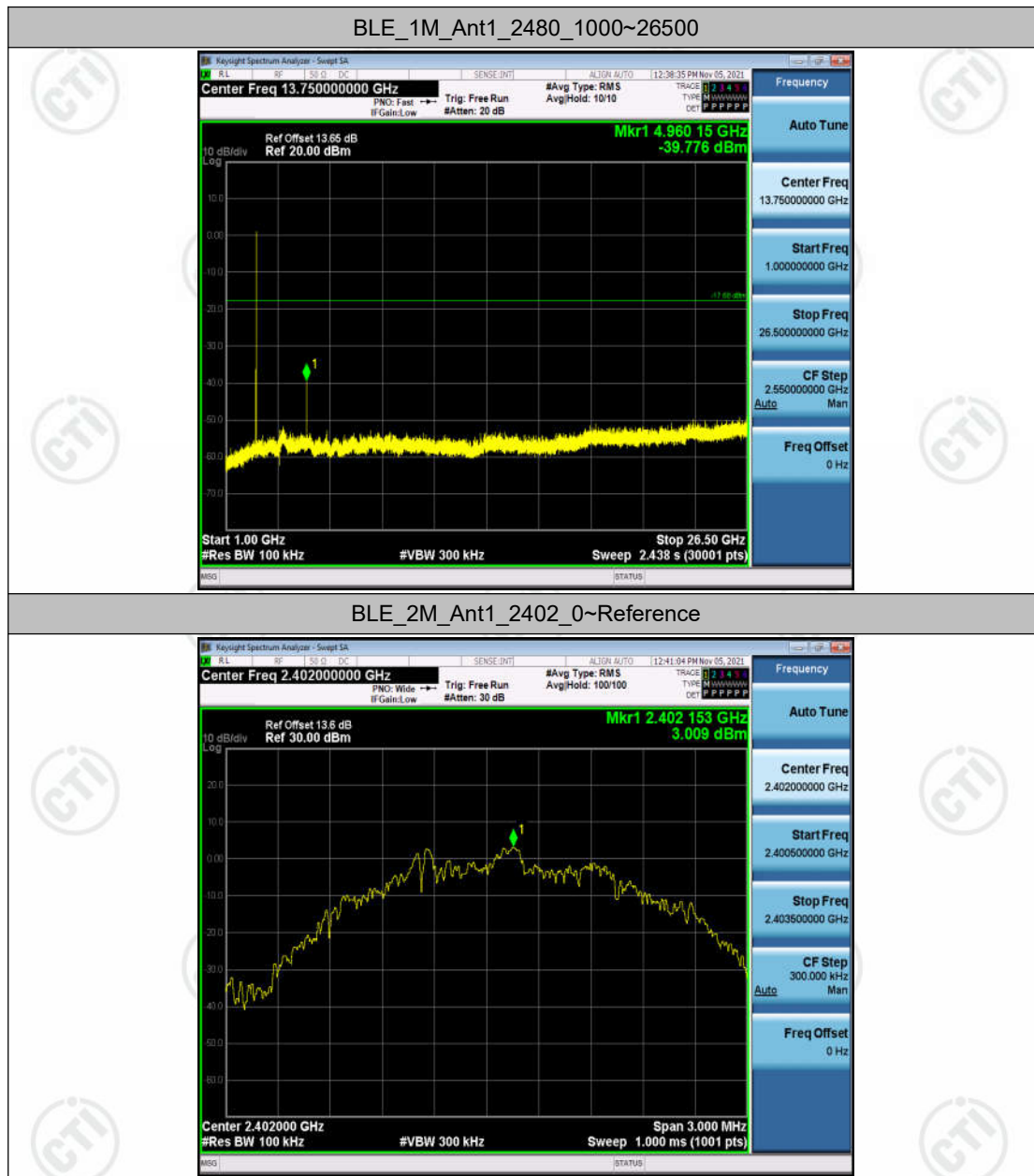
Test Graphs

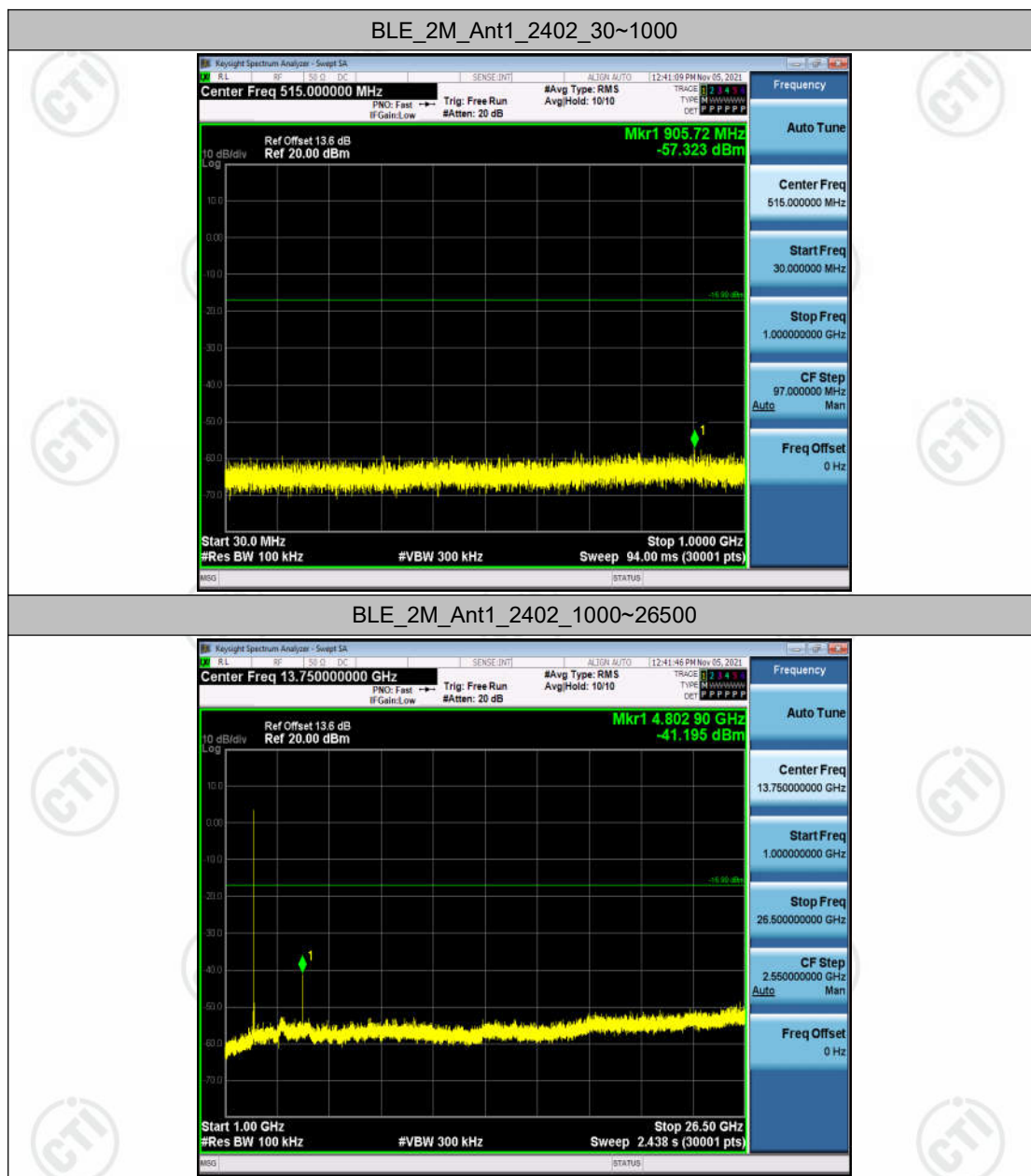


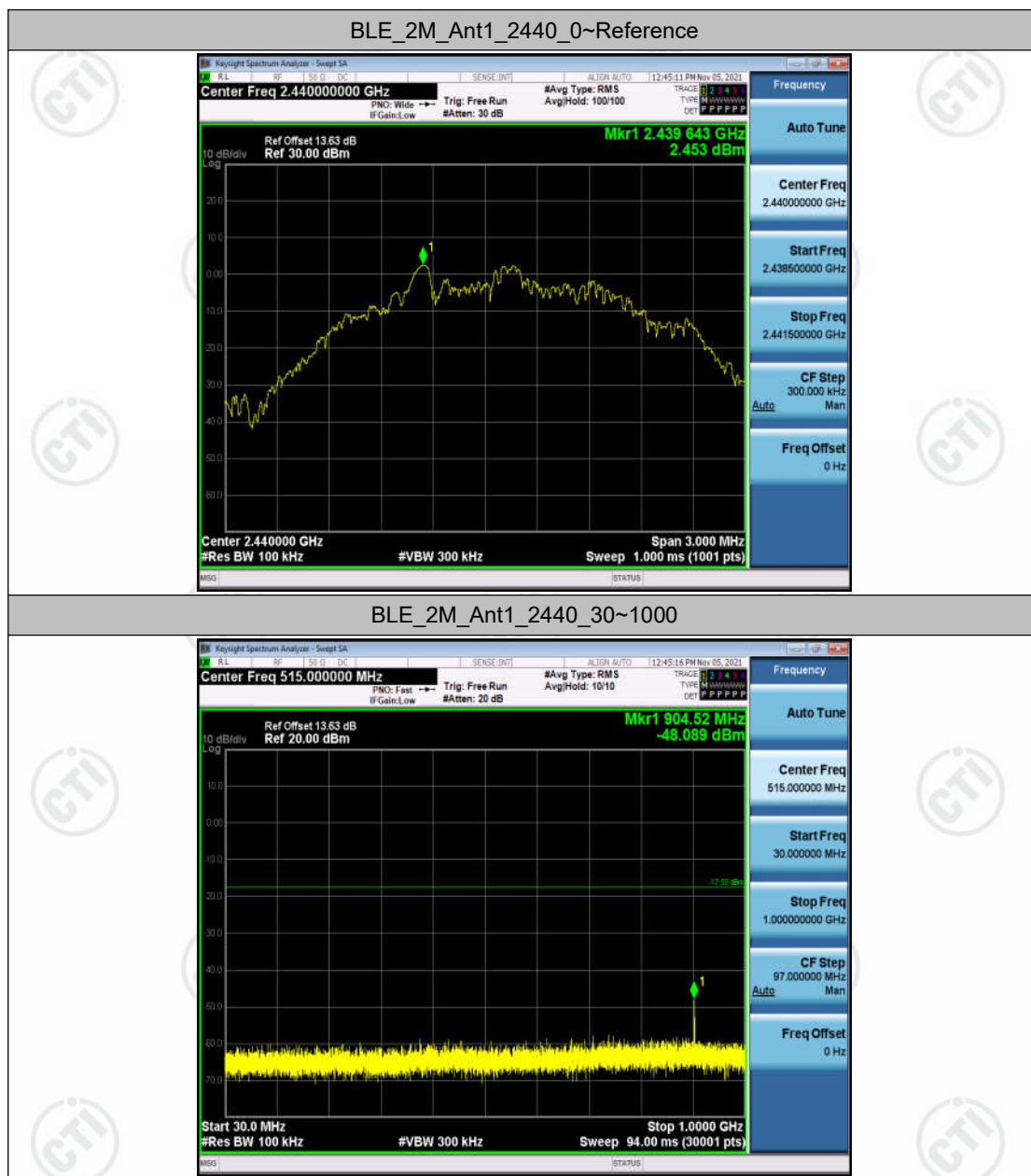


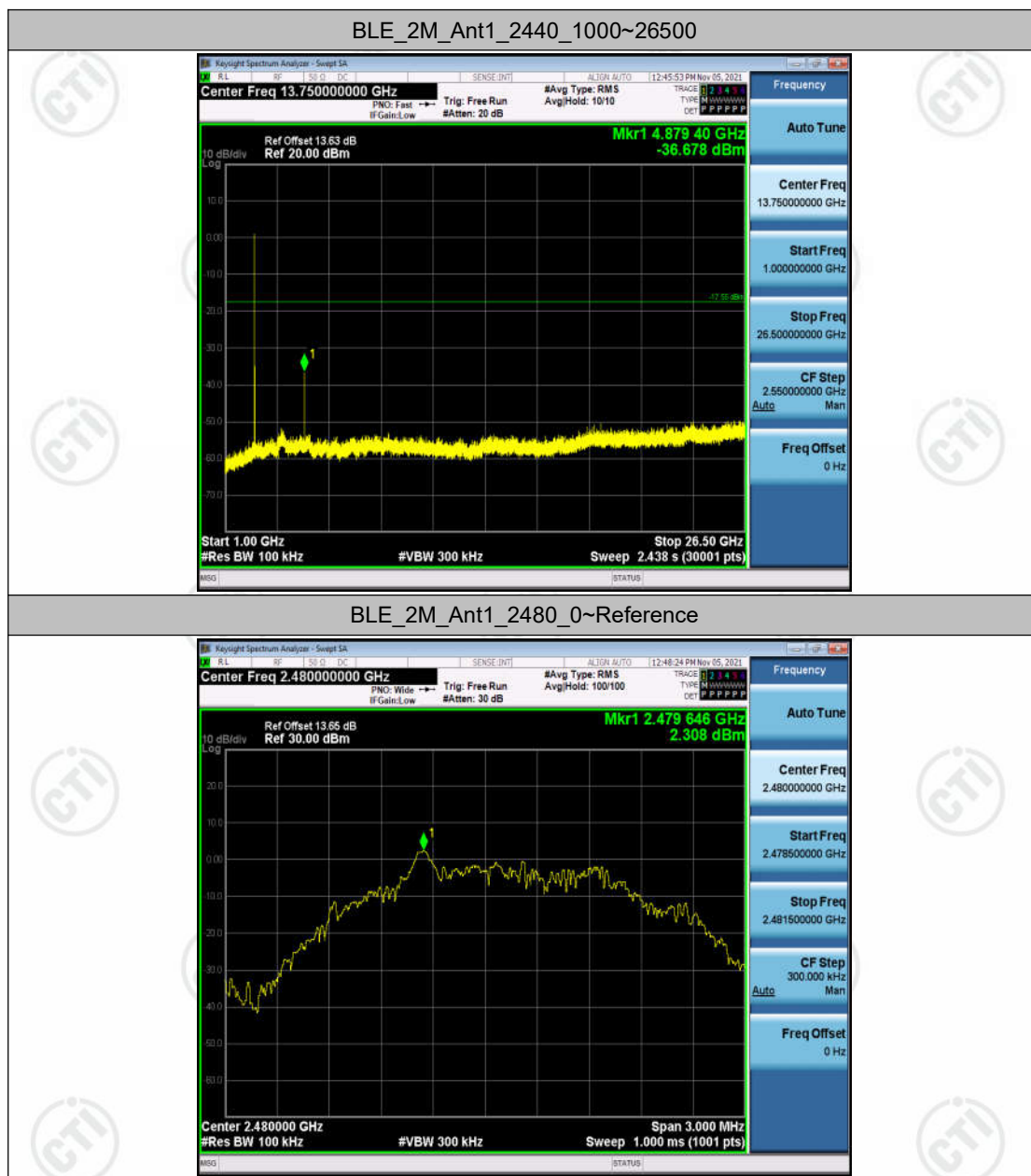


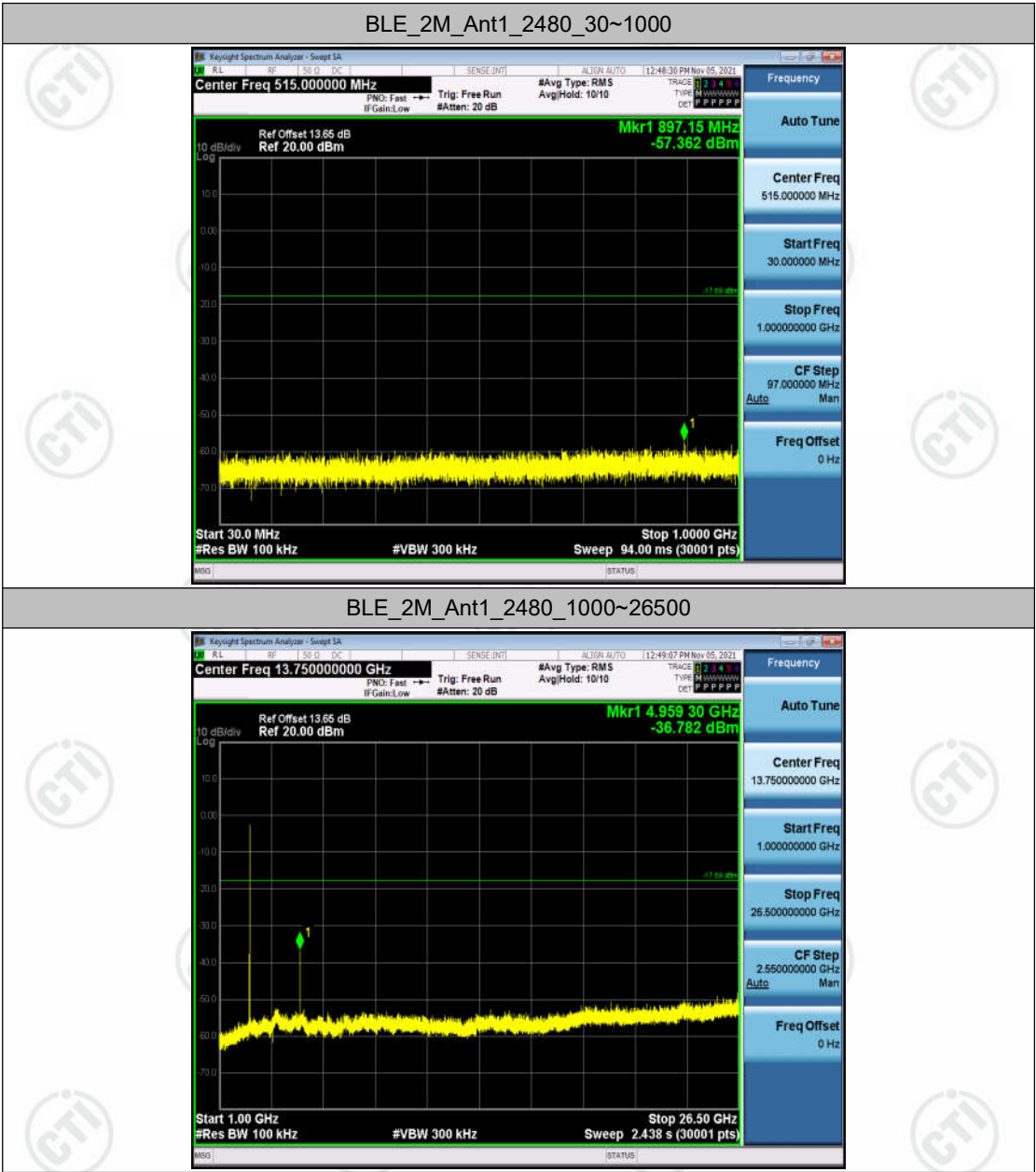










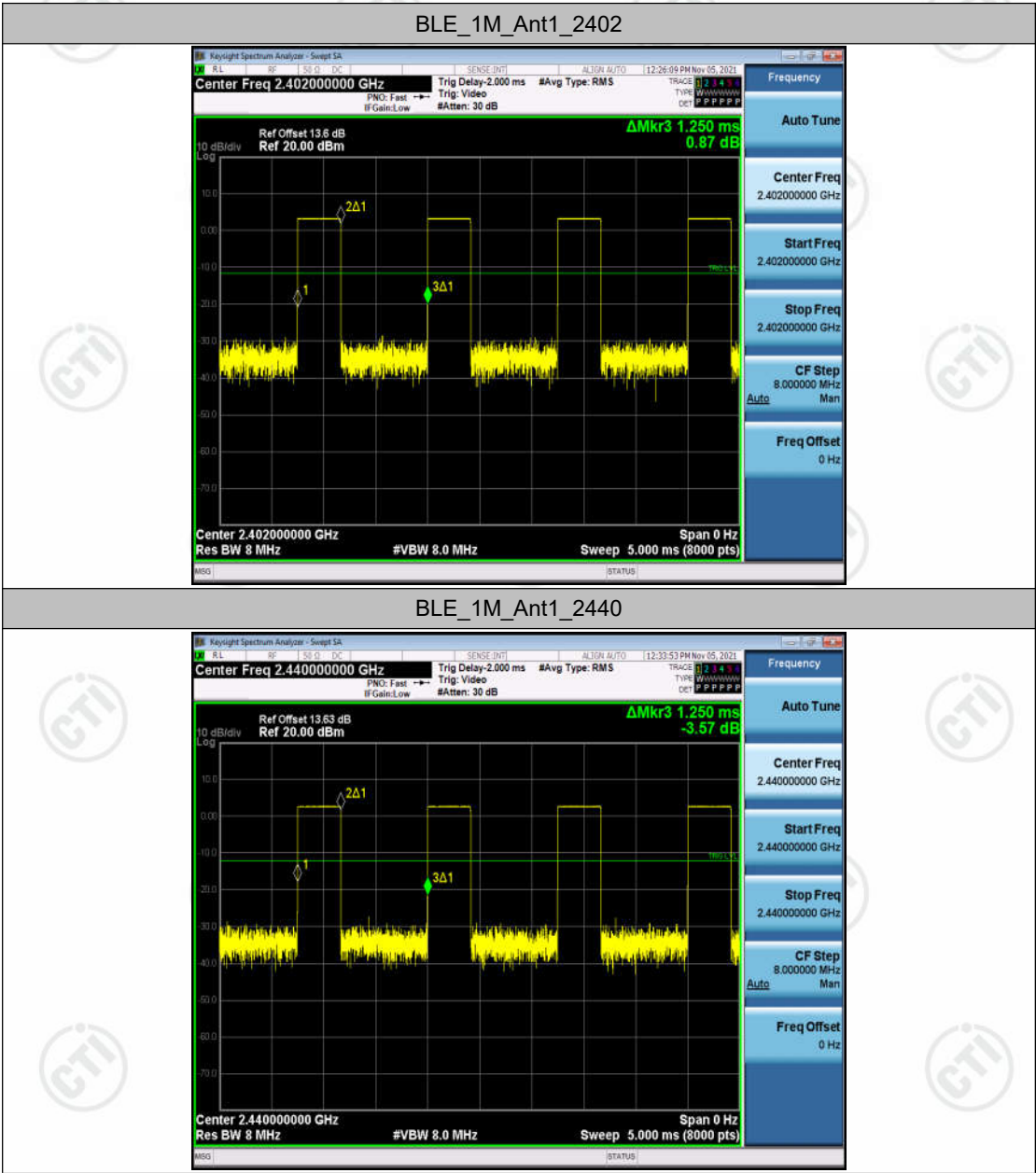


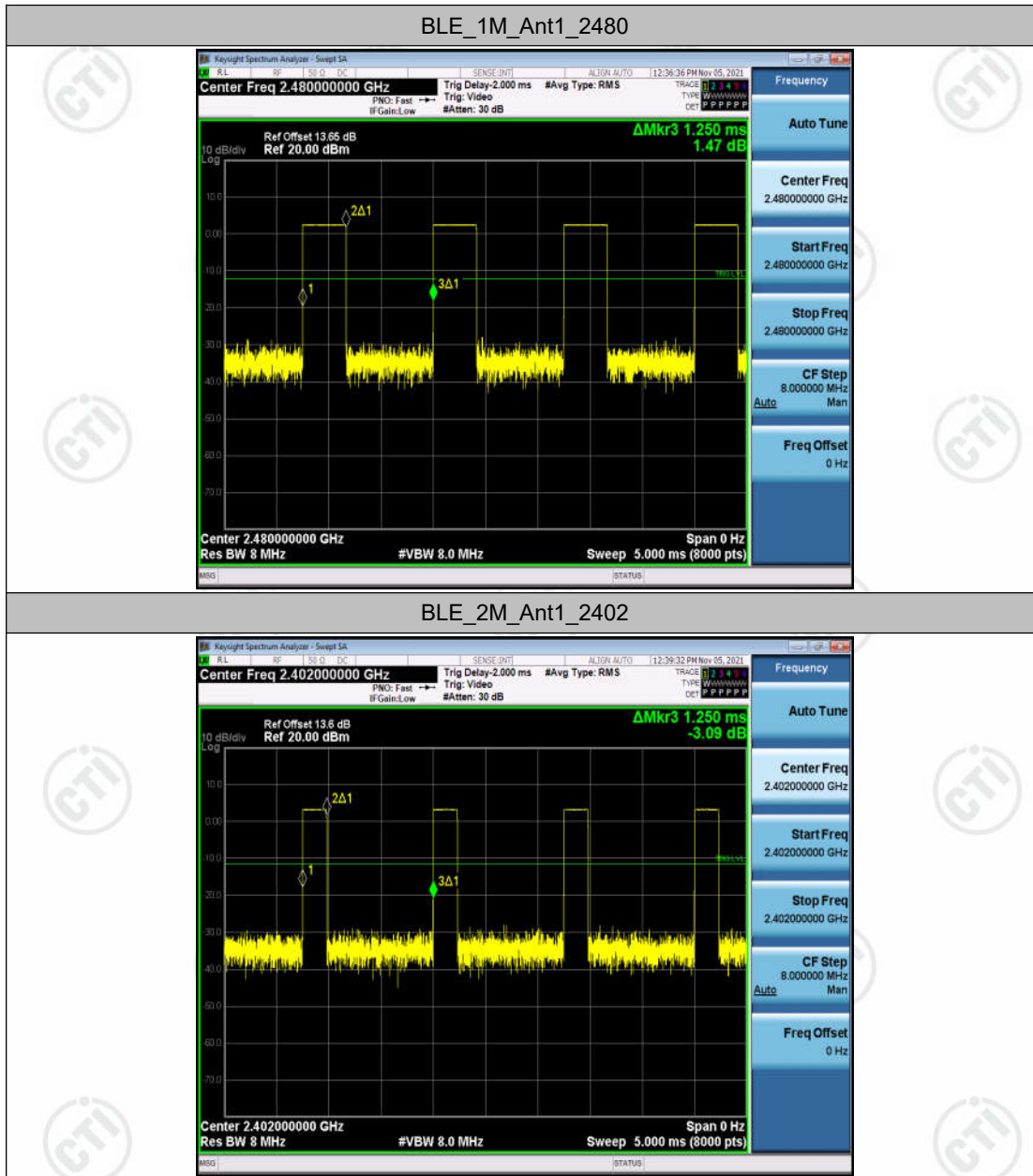
Appendix G: Duty Cycle

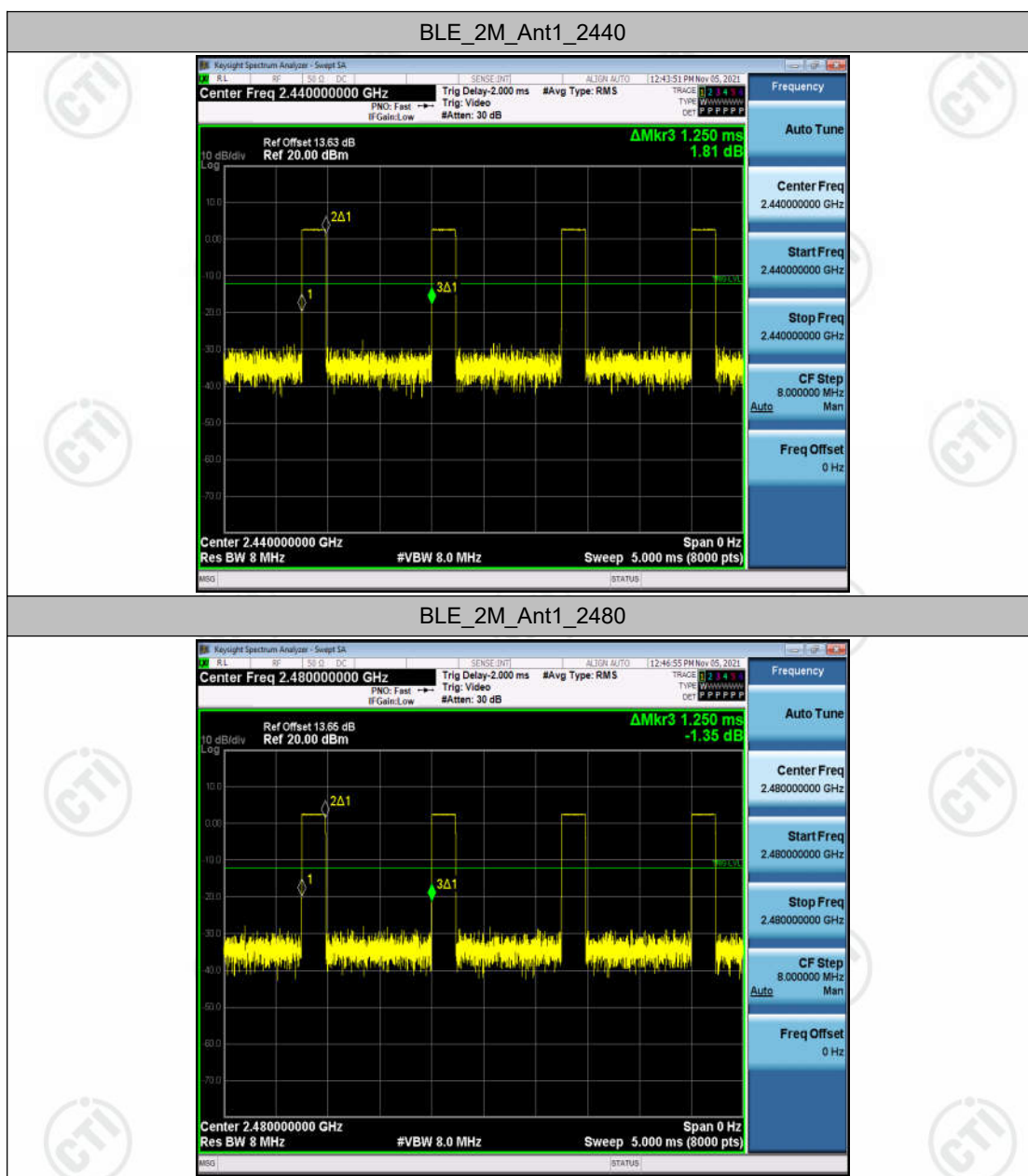
Test Result

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
BLE_1M	Ant1	2402	0.42	1.25	33.25	---	PASS
		2440	0.42	1.25	33.22	---	PASS
		2480	0.42	1.25	33.20	---	PASS
BLE_2M	Ant1	2402	0.23	1.25	18.51	---	PASS
		2440	0.23	1.25	18.50	---	PASS
		2480	0.23	1.25	18.50	---	PASS

Test Graphs







*** End of Report ***