

FCC Appendix RF Test Data for BLE

FCC ID : 2A5ZU-BTL308

Company : Shenzhen Baojia Battery Technology Co.,Ltd.

EUT : PLAYBULB Sphere

Model Number : BTL308

Report No. : CTA25112802501

Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.624	2401.696	2402.320	0.5	PASS
		2440	0.632	2439.692	2440.324	0.5	PASS
		2480	0.648	2479.688	2480.336	0.5	PASS

Test Graphs



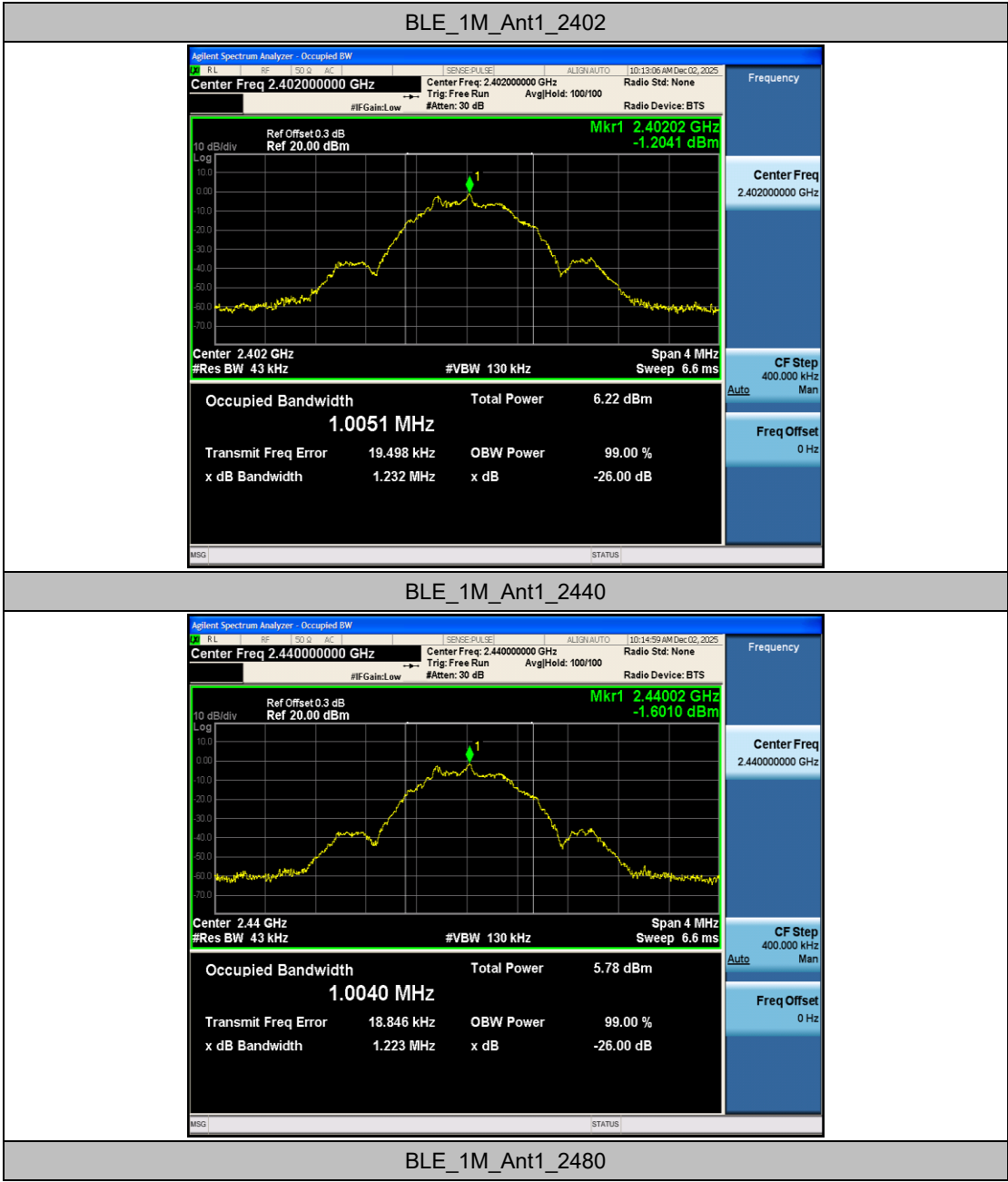


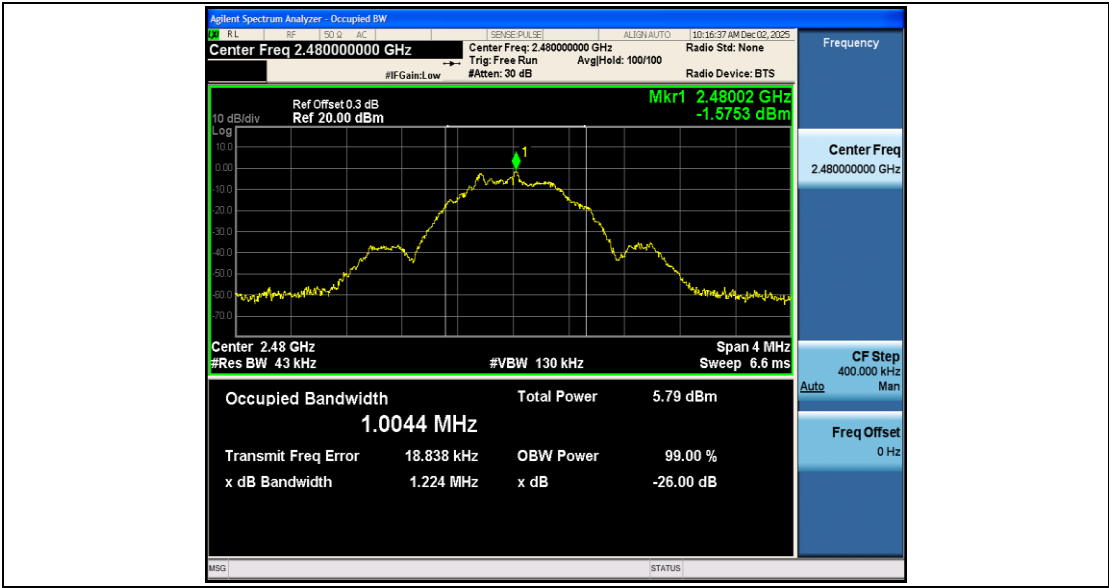
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0051	2401.5170	2402.5221	---	---
		2440	1.0040	2439.5169	2440.5209	---	---
		2480	1.0044	2479.5166	2480.5210	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

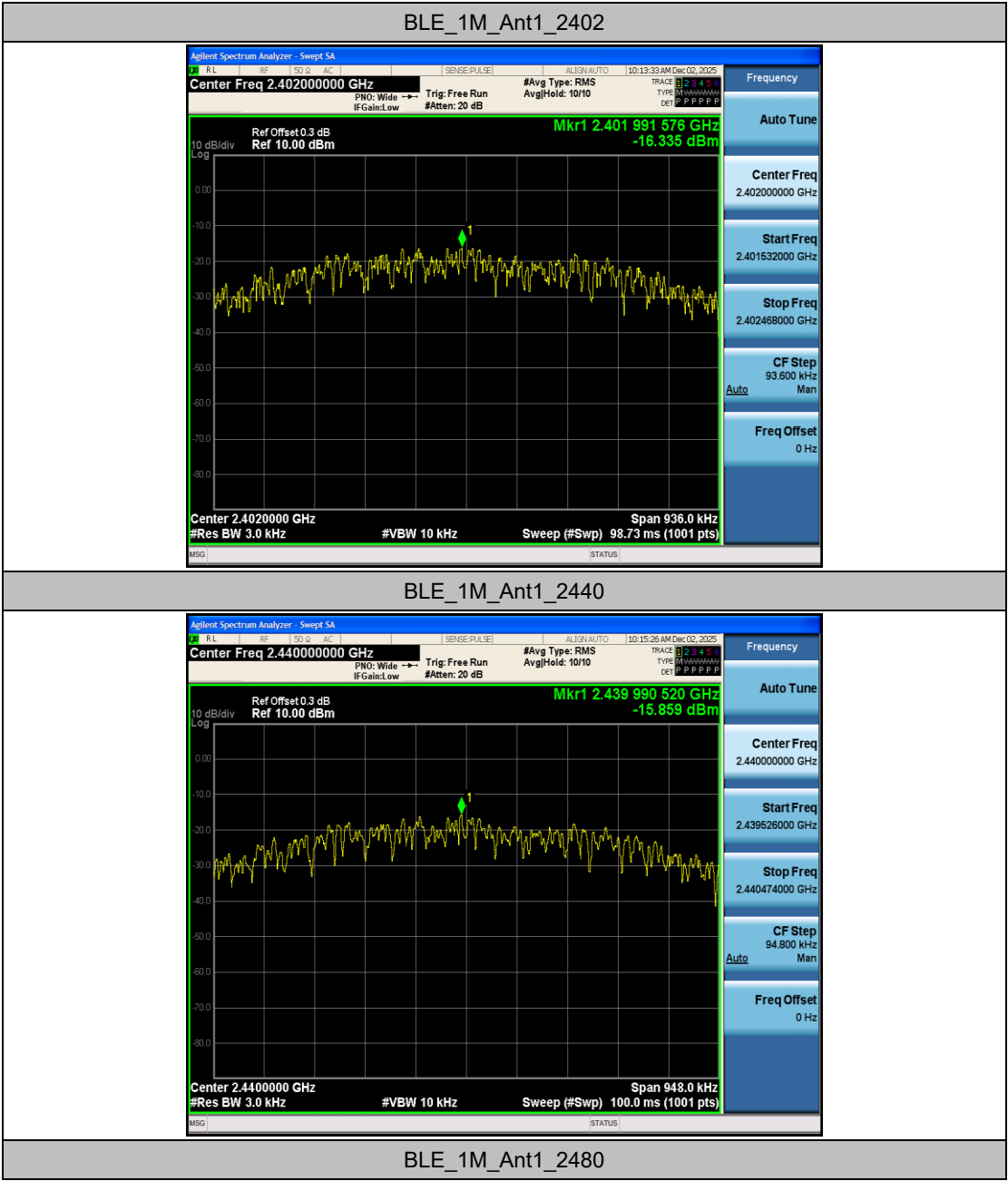
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.03	≤30	PASS
		2440	-0.35	≤30	PASS
		2480	-0.38	≤30	PASS

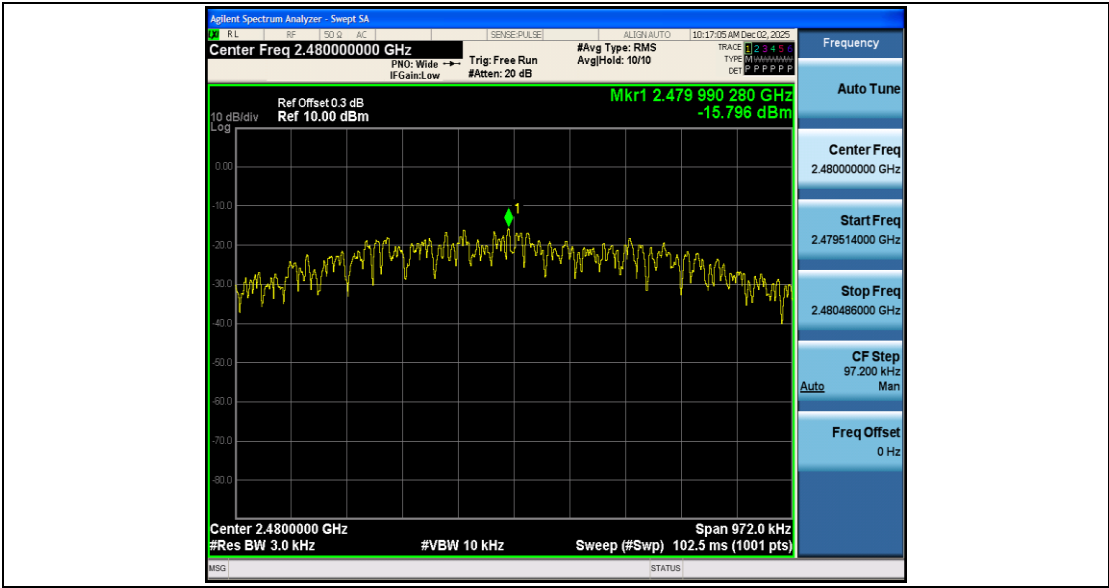
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-16.34	≤8.00	PASS
		2440	-15.86	≤8.00	PASS
		2480	-15.80	≤8.00	PASS

Test Graphs



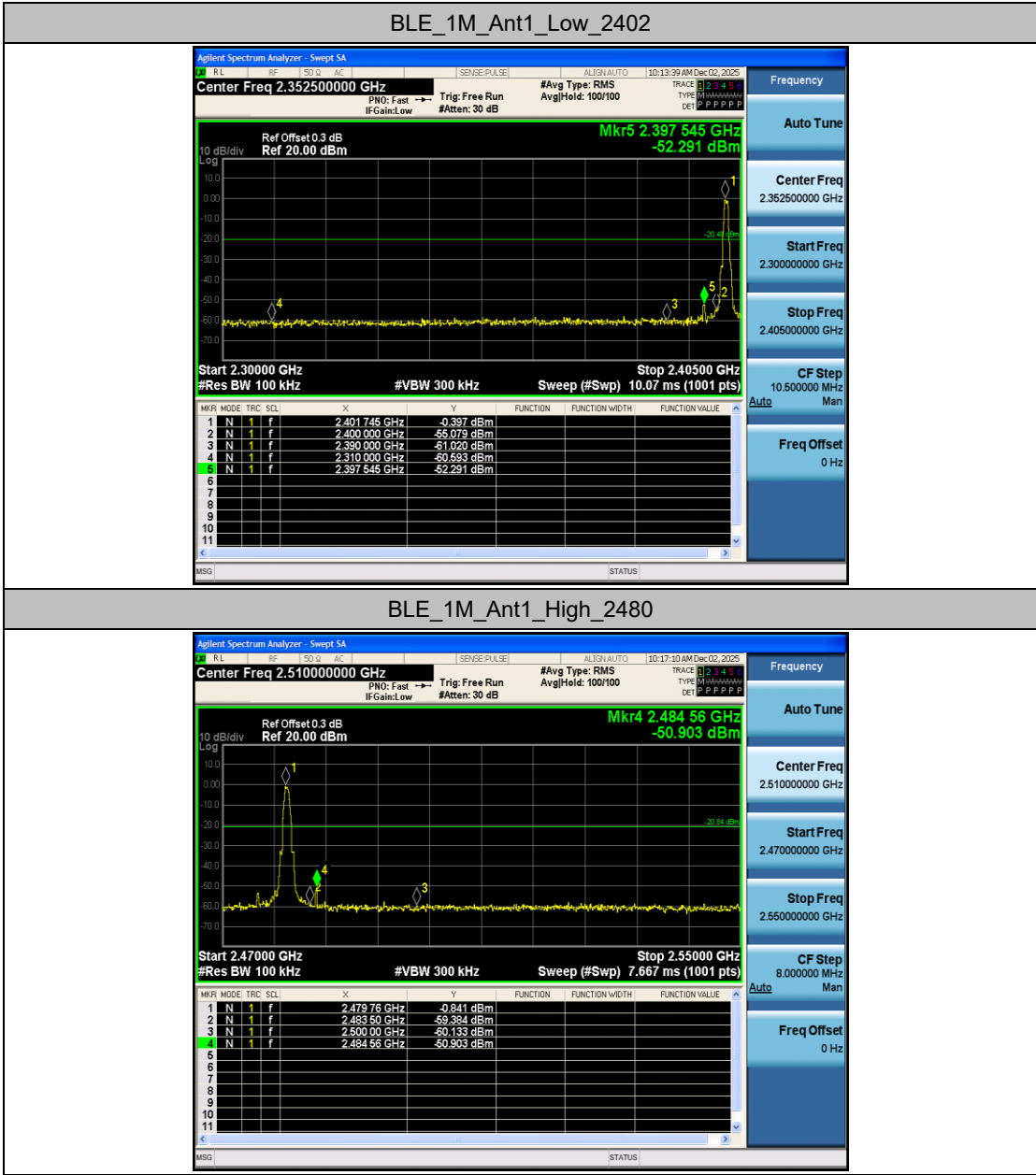


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-0.40	-52.29	≤-20.4	PASS
		High	2480	-0.84	-50.9	≤-20.84	PASS

Test Graphs

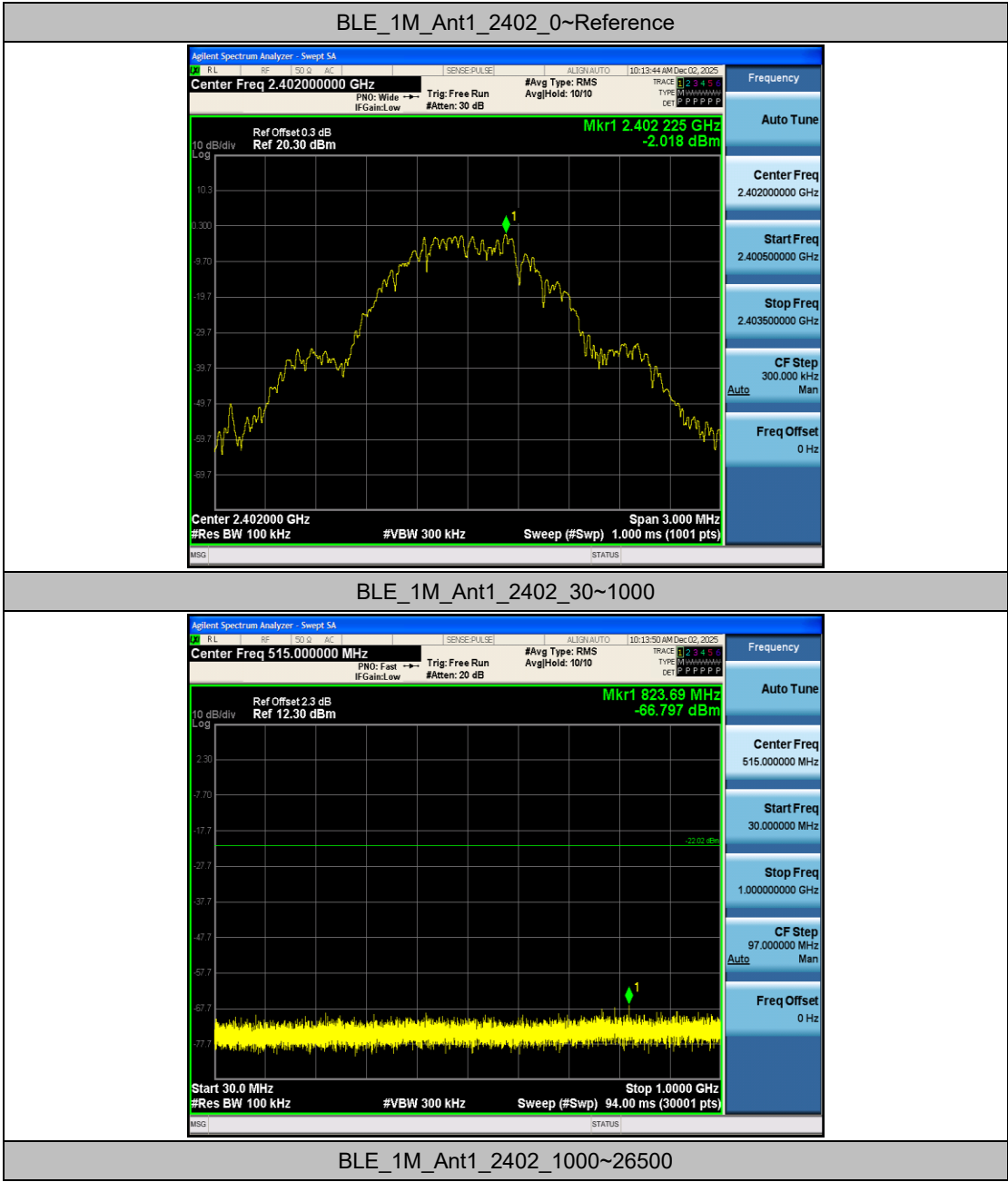


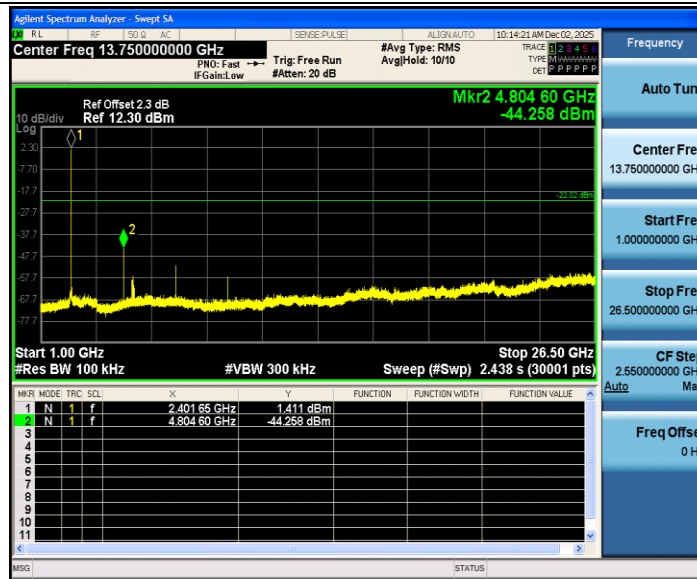
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-2.02	-2.02	---	PASS
			30~1000	-2.02	-66.8	≤-22.02	PASS
			1000~26500	-2.02	-44.26	≤-22.02	PASS
		2440	Reference	-1.98	-1.98	---	PASS
			30~1000	-1.98	-68.23	≤-21.98	PASS
			1000~26500	-1.98	-41.29	≤-21.98	PASS
		2480	Reference	-1.74	-1.74	---	PASS
			30~1000	-1.74	-67.23	≤-21.74	PASS
			1000~26500	-1.74	-44.12	≤-21.74	PASS

Test Graphs

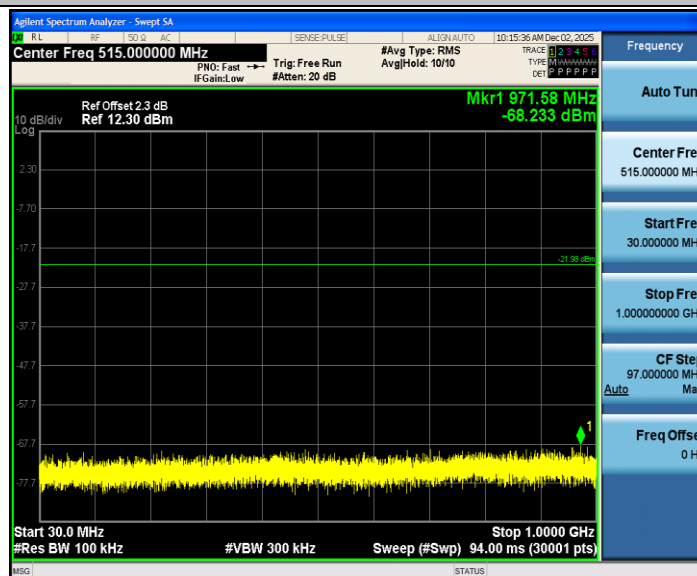




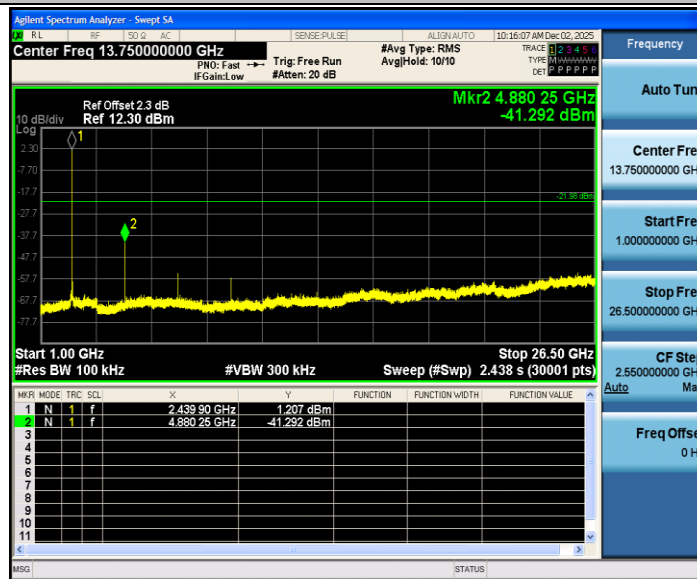
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



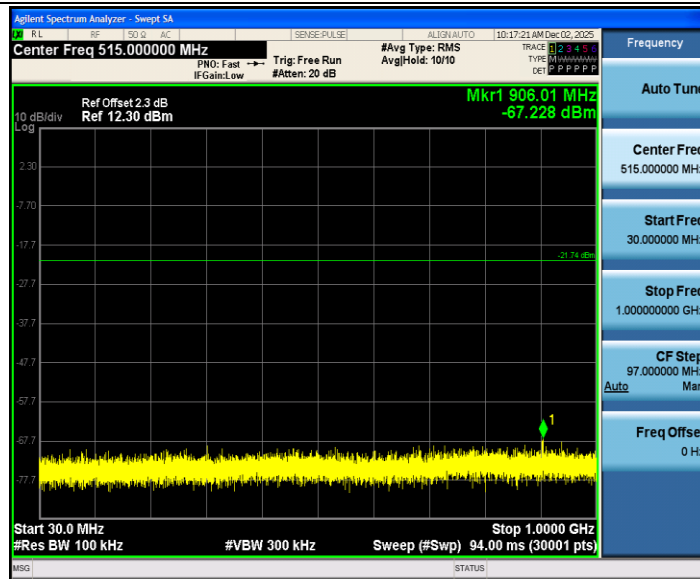
BLE_1M_Ant1_2440_1000~26500



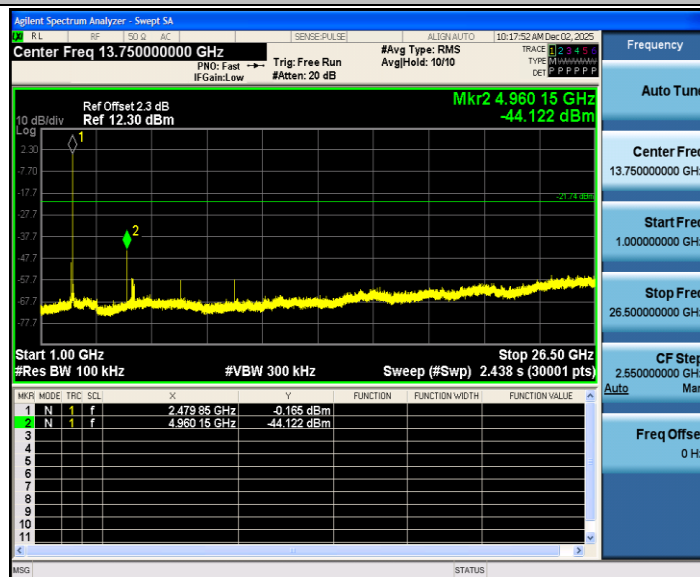
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs

