

FCC Appendix RF Test Data

FCC ID : **2BOSS-BLD**

Company: : **Guangzhou Hongliang Technology Co., Ltd**

EUT : **RGB Rock Lights Bluetooth Controller**

Model Number : **BLD_BLE_Controller**

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	0.676	2401.668	2402.344	0.5	PASS
		2440	0.640	2439.688	2440.328	0.5	PASS
		2480	0.660	2479.676	2480.336	0.5	PASS

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

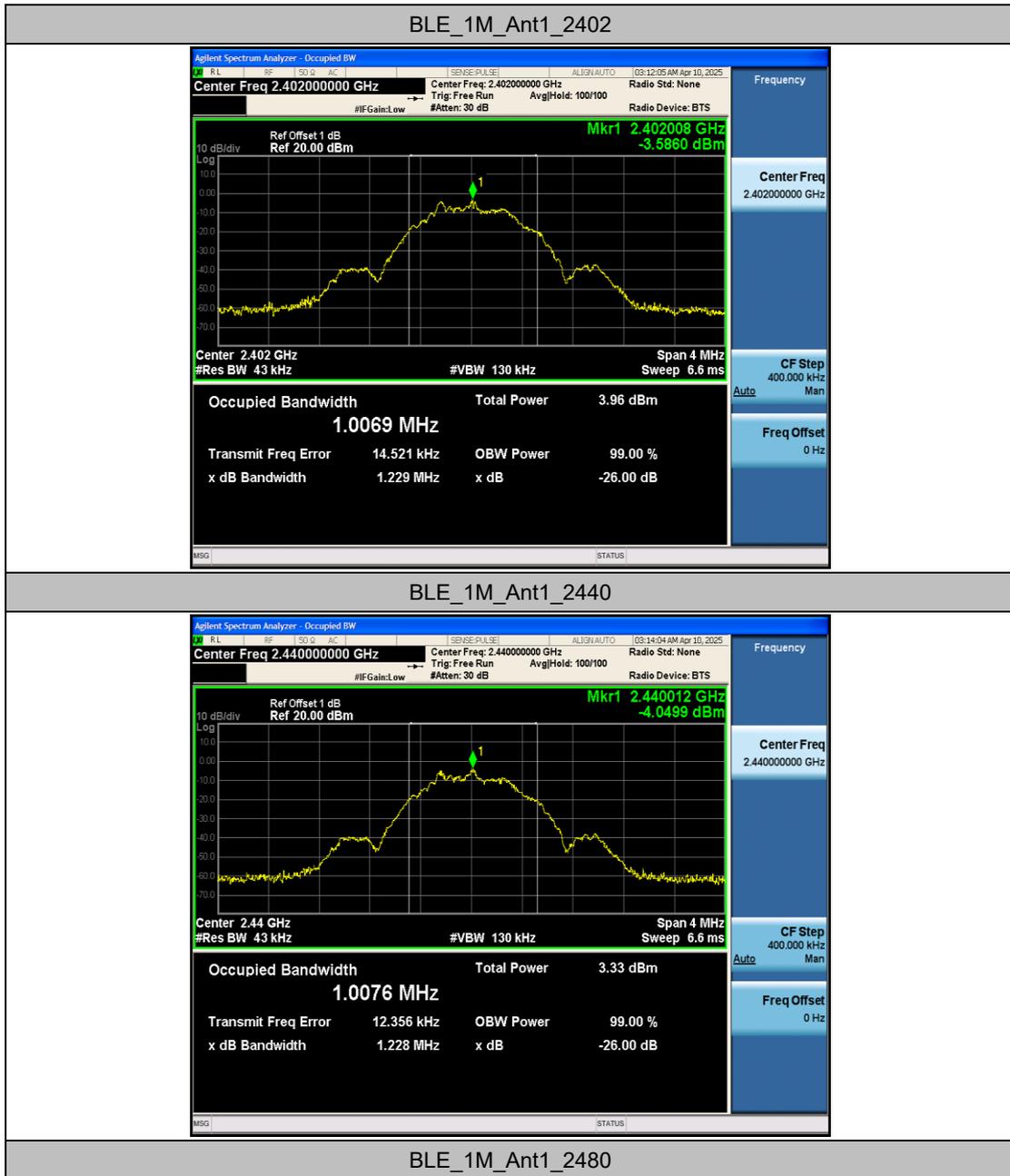


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0069	2401.5111	2402.5180	---	---
		2440	1.0076	2439.5086	2440.5162	---	---
		2480	1.0082	2479.5083	2480.5165	---	---

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	-2.24	≤30	PASS
		2440	-2.84	≤30	PASS
		2480	-3.10	≤30	PASS

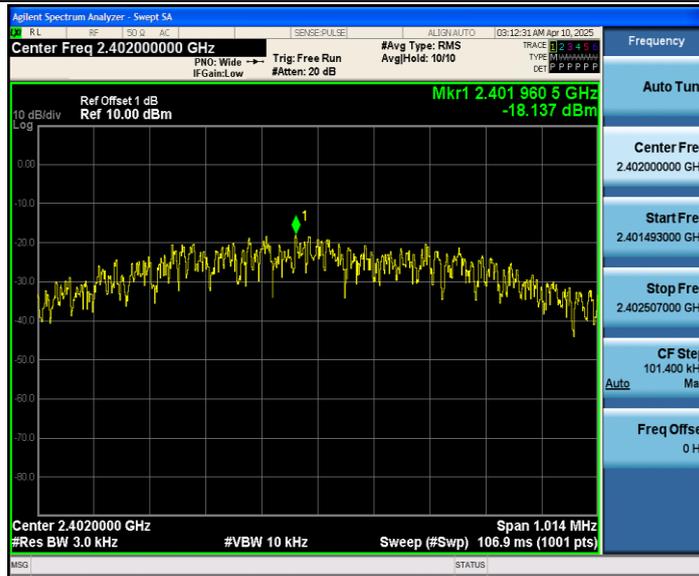
Appendix D: Maximum power spectral density

Test Result

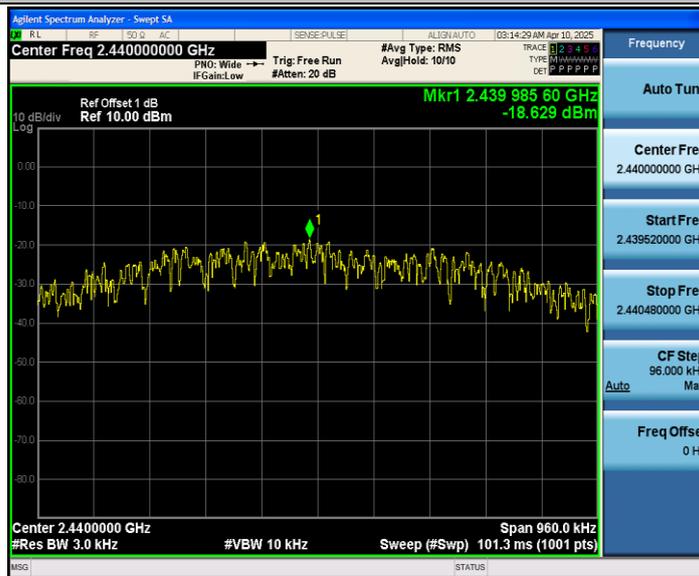
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.14	≤8.00	PASS
		2440	-18.63	≤8.00	PASS
		2480	-18.73	≤8.00	PASS

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

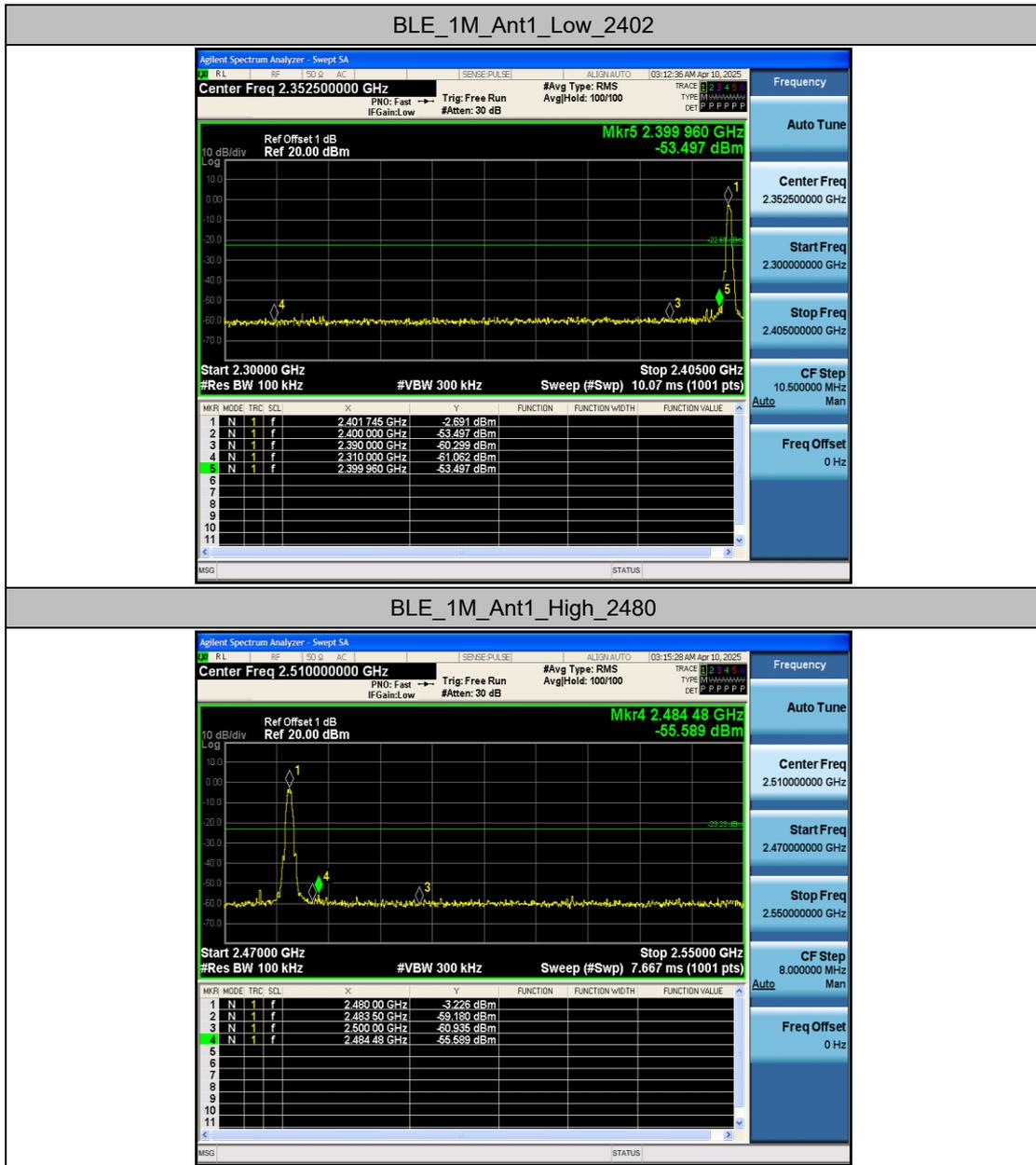


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.69	-53.5	≤-22.69	PASS
		High	2480	-3.23	-55.59	≤-23.23	PASS

Test Graphs

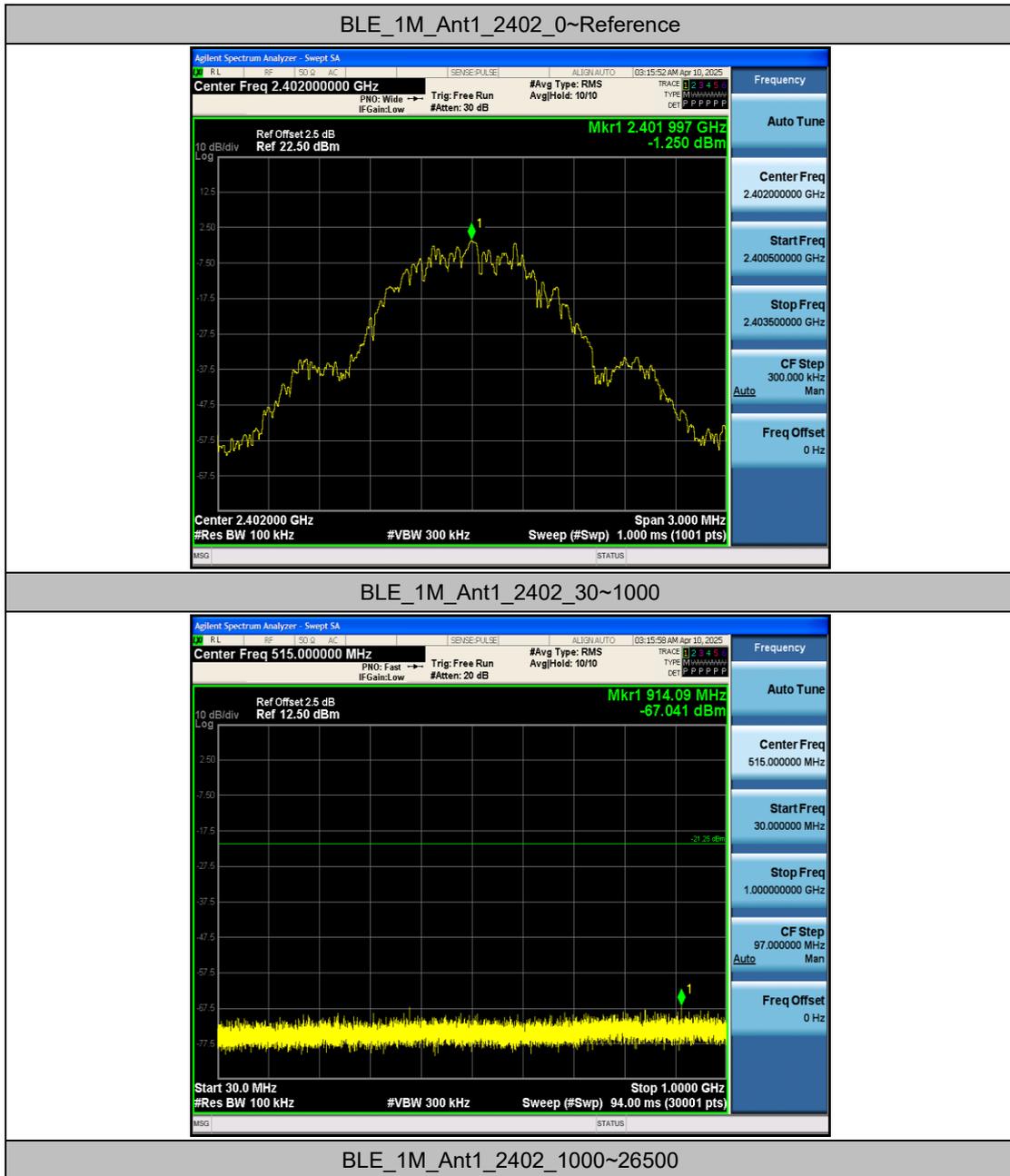

BLE_1M_Ant1_High_2480

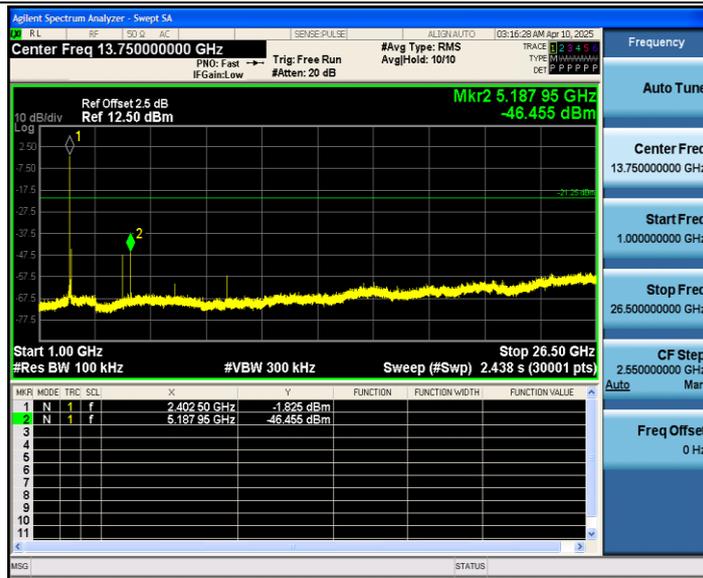
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.25	-1.25	---	PASS
			30~1000	-1.25	-67.04	≤-21.25	PASS
			1000~26500	-1.25	-46.46	≤-21.25	PASS
		2440	Reference	-1.73	-1.73	---	PASS
			30~1000	-1.73	-68.29	≤-21.73	PASS
			1000~26500	-1.73	-45.58	≤-21.73	PASS
		2480	Reference	-2.37	-2.37	---	PASS
			30~1000	-2.37	-67.97	≤-22.37	PASS
			1000~26500	-2.37	-49.11	≤-22.37	PASS

Test Graphs

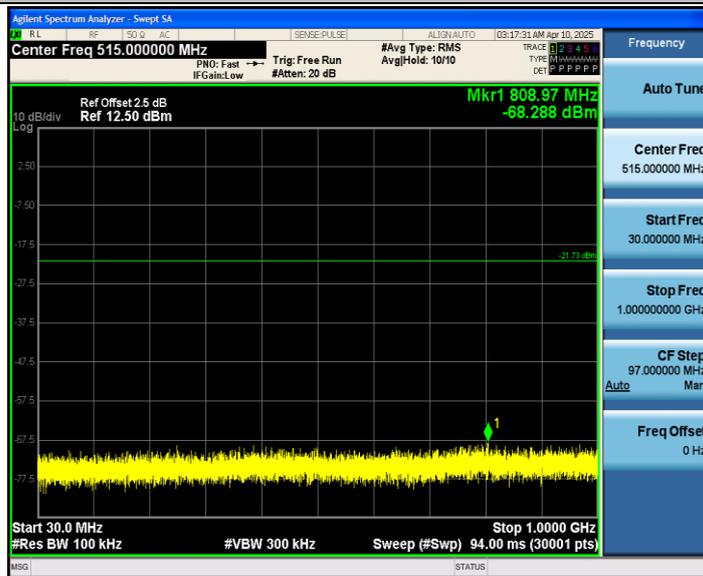




BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



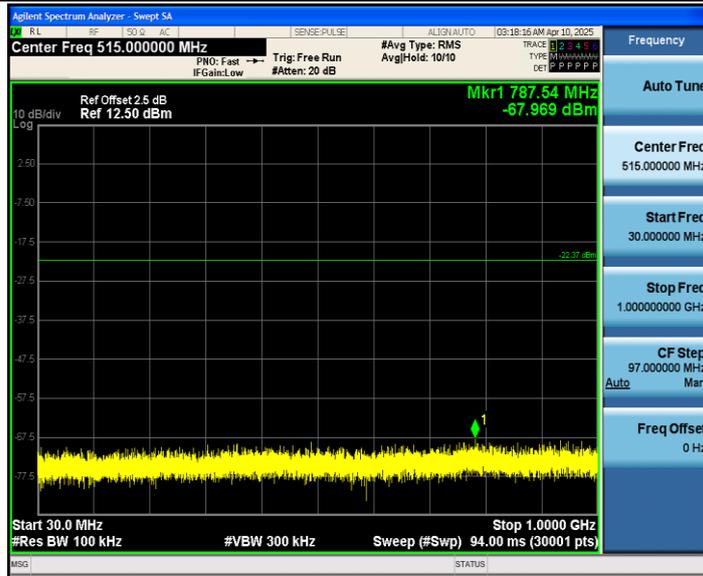
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



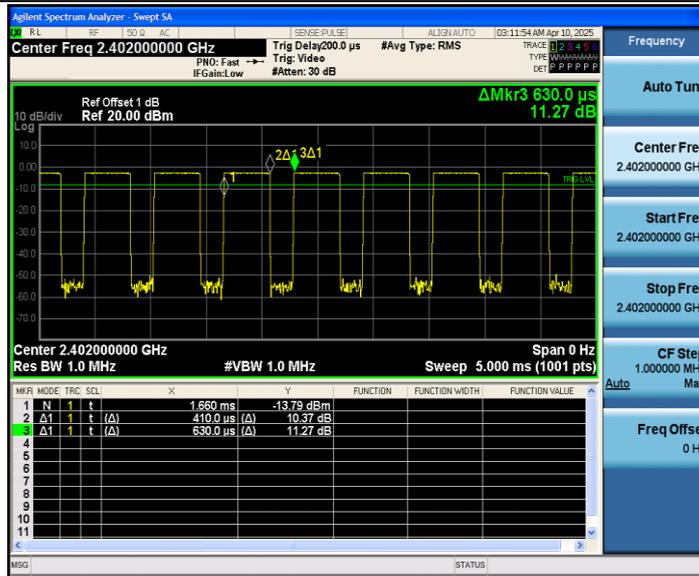
Appendix G: Duty Cycle

Test Result

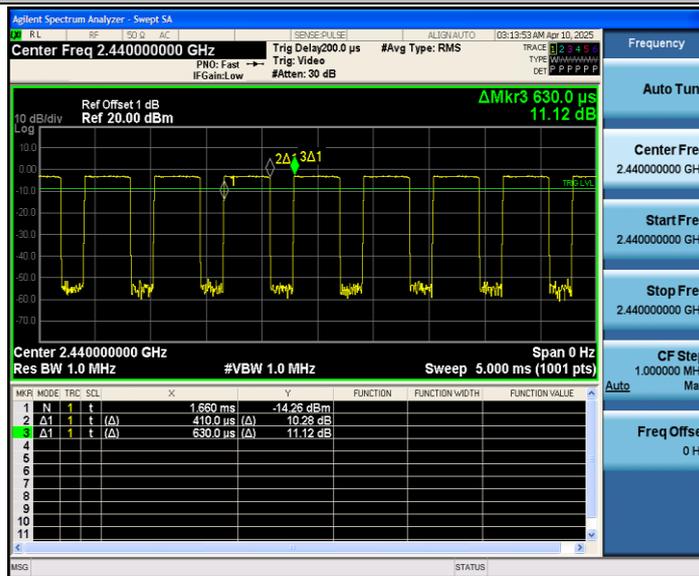
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.63	0.6508	65.08	1.87	---	---
		2440	0.41	0.63	0.6508	65.08	1.87	---	---
		2480	0.41	0.63	0.6508	65.08	1.87	---	---

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

