

FCC Appendix RF Test Data for BLE

FCC ID : 2BP5V-PL01

Company : Dong Guan Zhen Ke Technology Co., LTD

EUT : pool thermometer

Model Number : PL01

Report No. : CTA25102401901

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	0.652	2401.684	2402.336	0.5	PASS
		2440	0.648	2439.688	2440.336	0.5	PASS
		2480	0.644	2479.692	2480.336	0.5	PASS

Test Graphs

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

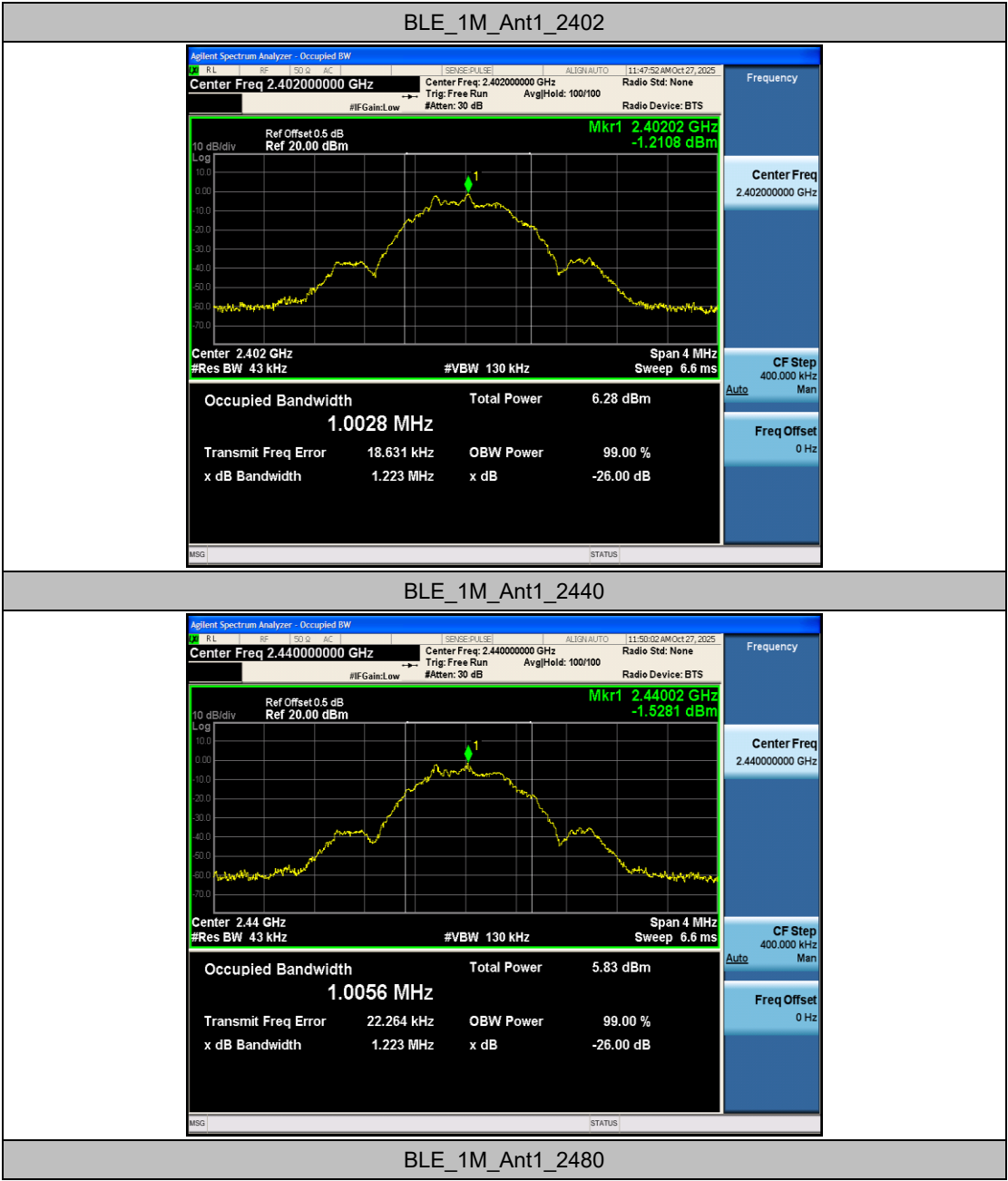


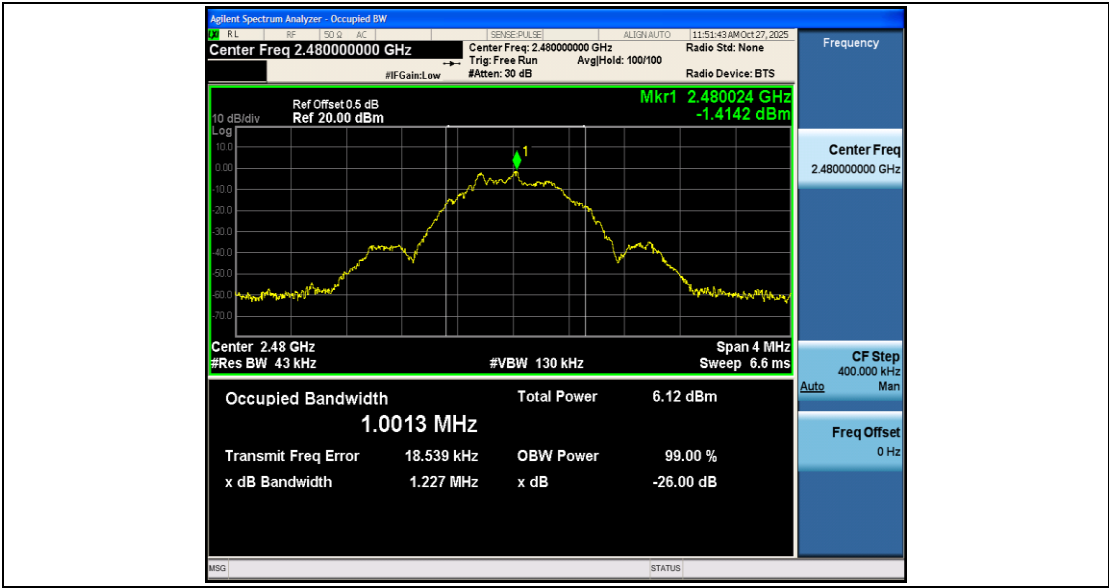
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0028	2401.5172	2402.5200	---	---
		2440	1.0056	2439.5195	2440.5251	---	---
		2480	1.0013	2479.5179	2480.5192	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

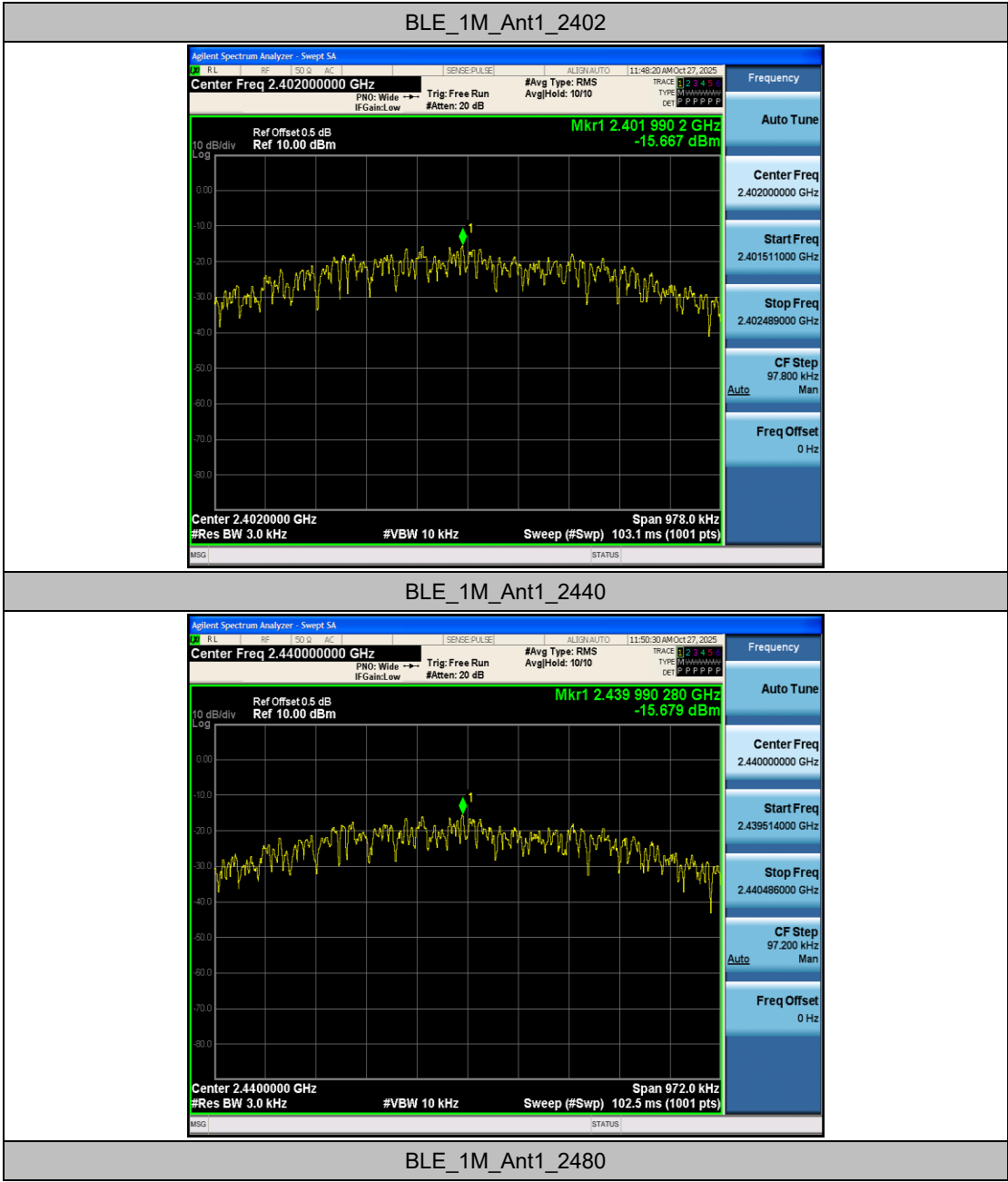
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.02	≤30	PASS
		2440	-0.20	≤30	PASS
		2480	-0.10	≤30	PASS

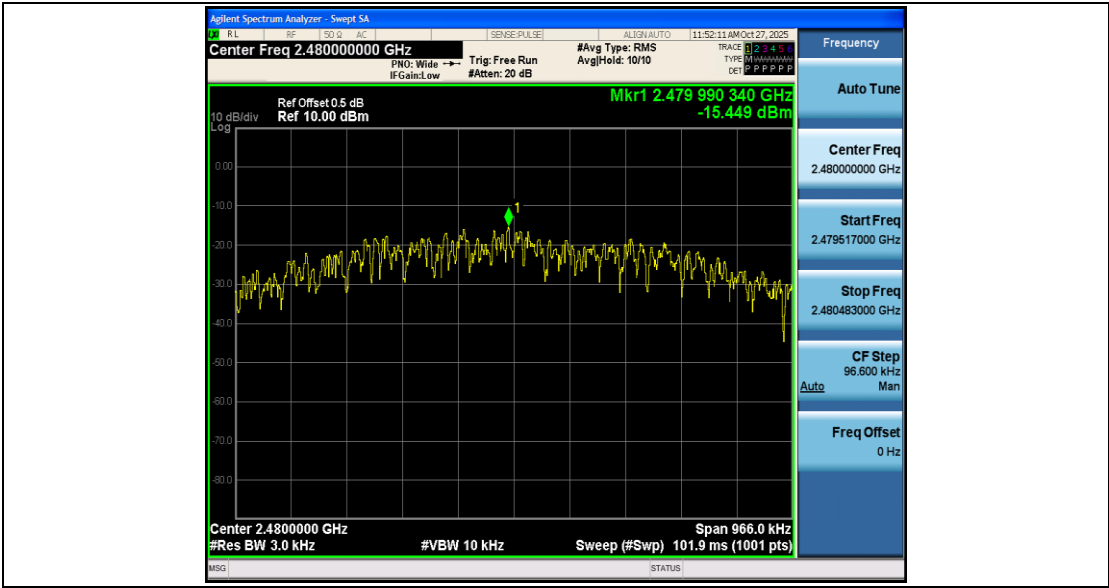
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.67	≤8.00	PASS
		2440	-15.68	≤8.00	PASS
		2480	-15.45	≤8.00	PASS

Test Graphs



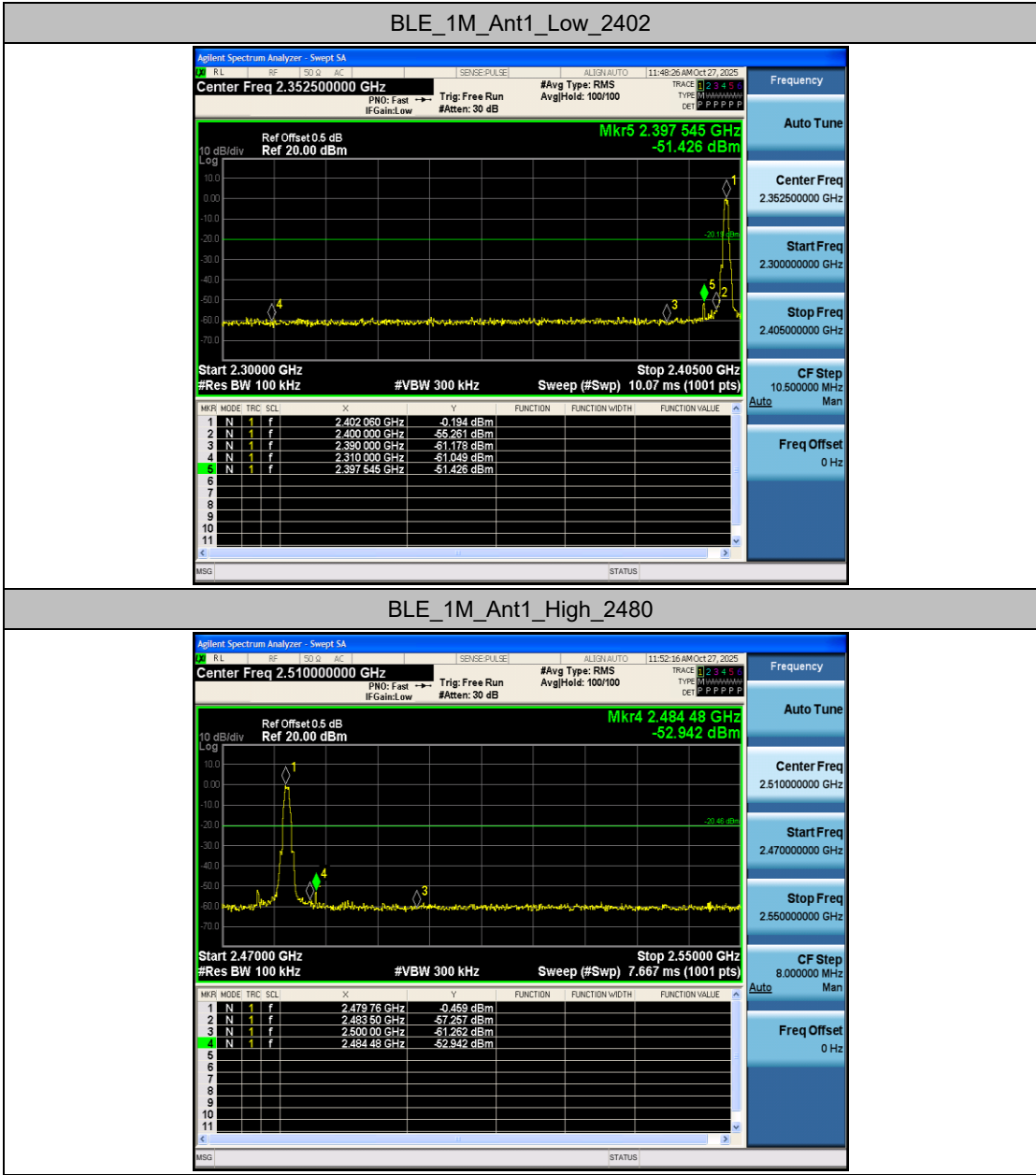


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-0.19	-51.43	≤-20.19	PASS
		High	2480	-0.46	-52.94	≤-20.46	PASS

Test Graphs

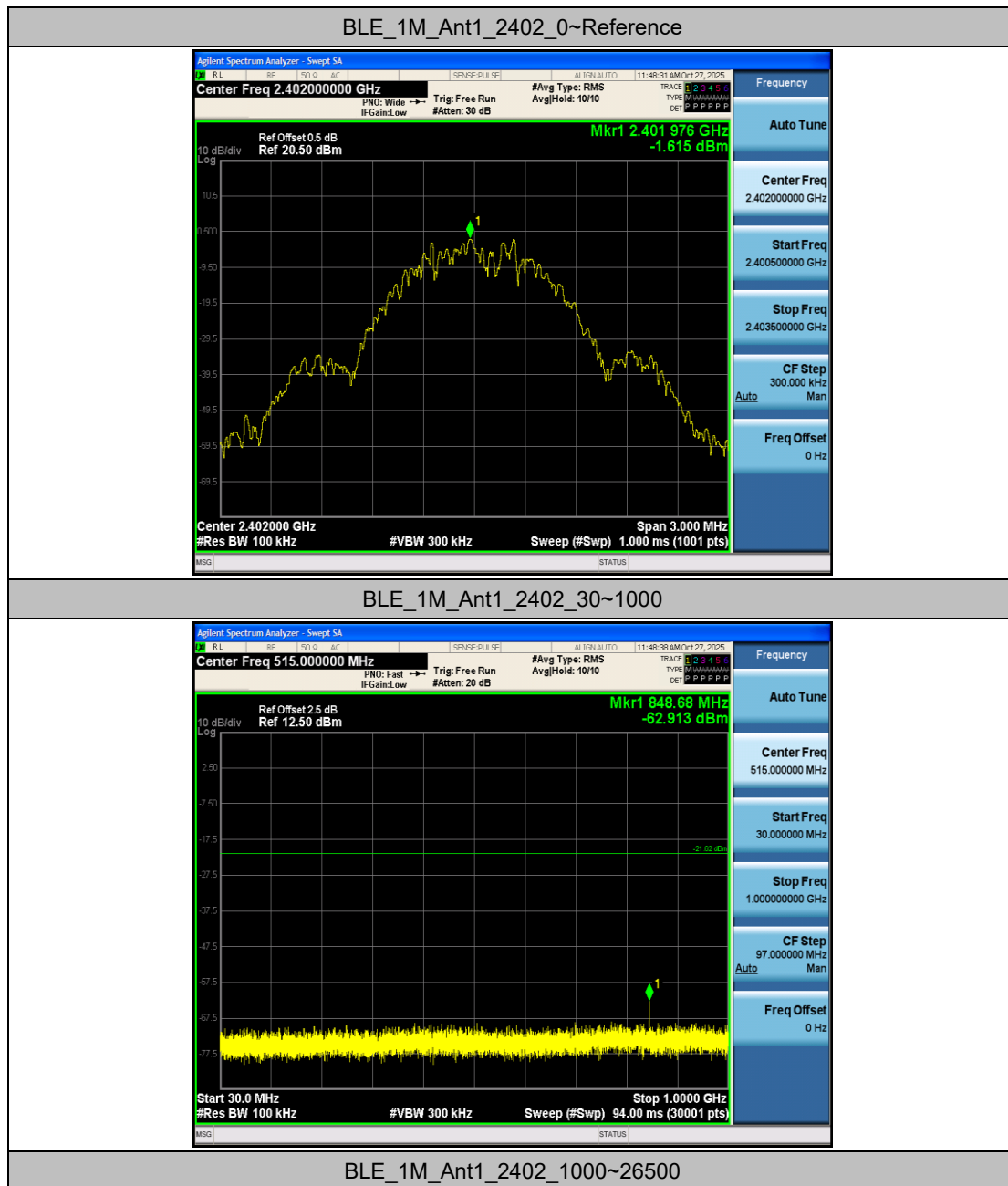


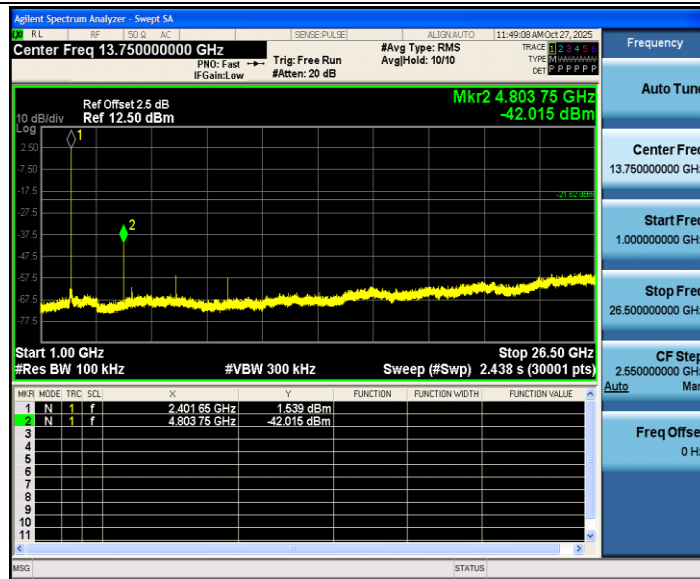
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.62	-1.62	---	PASS
			30~1000	-1.62	-62.91	≤-21.62	PASS
			1000~26500	-1.62	-42.02	≤-21.62	PASS
		2440	Reference	-0.51	-0.51	---	PASS
			30~1000	-0.51	-67.47	≤-20.51	PASS
			1000~26500	-0.51	-42.27	≤-20.51	PASS
		2480	Reference	-1.28	-1.28	---	PASS
			30~1000	-1.28	-67.49	≤-21.28	PASS
			1000~26500	-1.28	-43.86	≤-21.28	PASS

Test Graphs

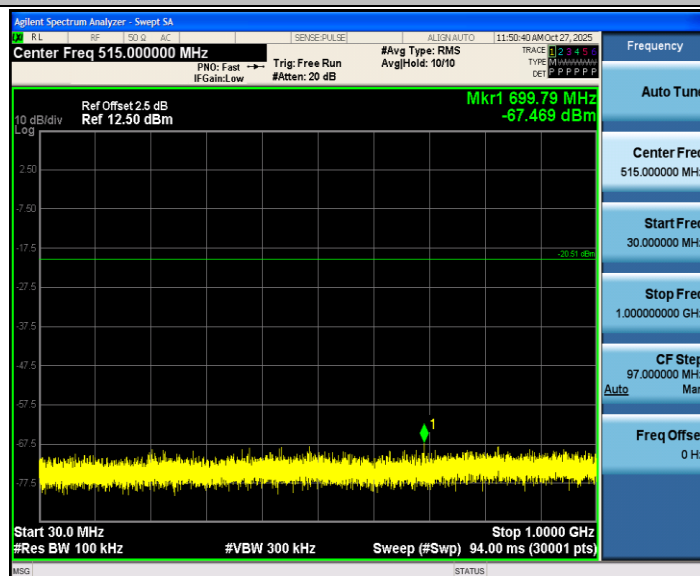




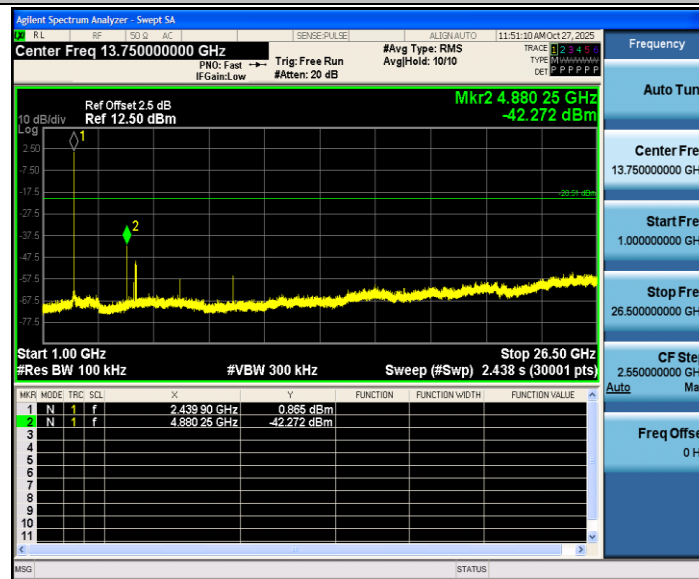
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



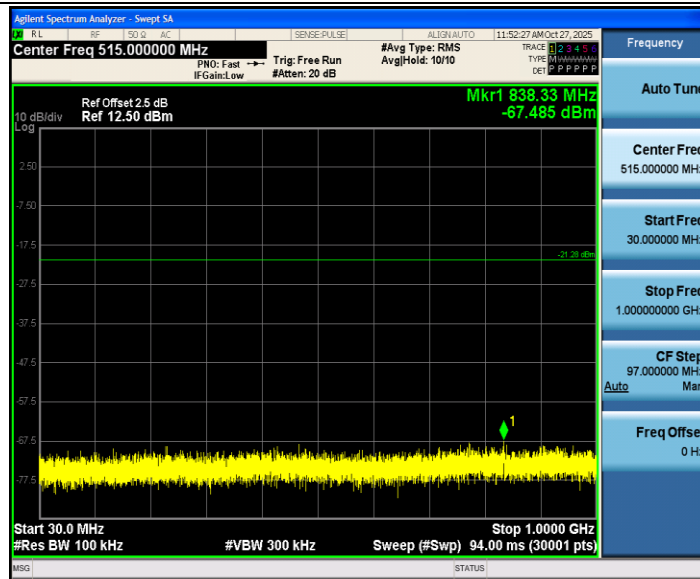
BLE_1M_Ant1_2440_1000~26500



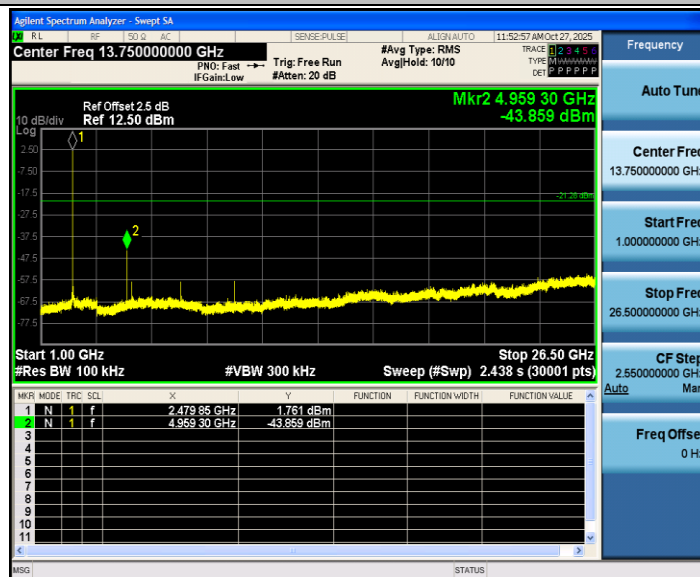
BLE_1M_Ant1_2480_0~Reference



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

