

FCC Appendix RF Test Data for BLE

FCC ID : 2BN53-AIMB-S1

Company : Shenzhen Huaxinchen Technology Co., Ltd

EUT : AI Smart Glasses With Wi Fi Camera

Model Number : AiMB-S1

Report No. : CTA25120400501

Reviewed By : Eric Wang

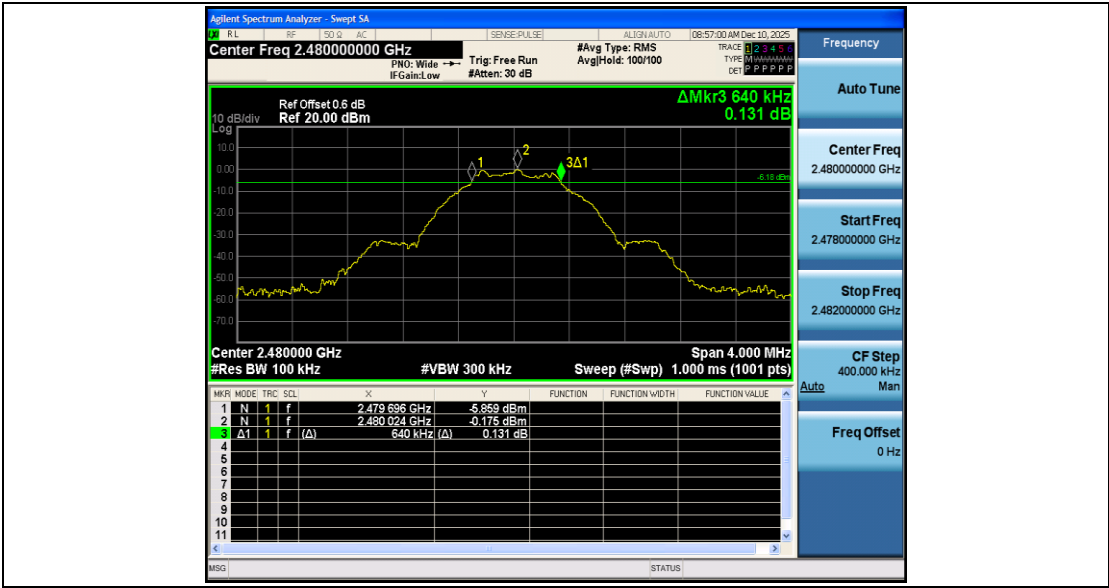
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.680	2402.340	0.5	PASS
		2440	0.640	2439.696	2440.336	0.5	PASS
		2480	0.640	2479.696	2480.336	0.5	PASS

Test Graphs



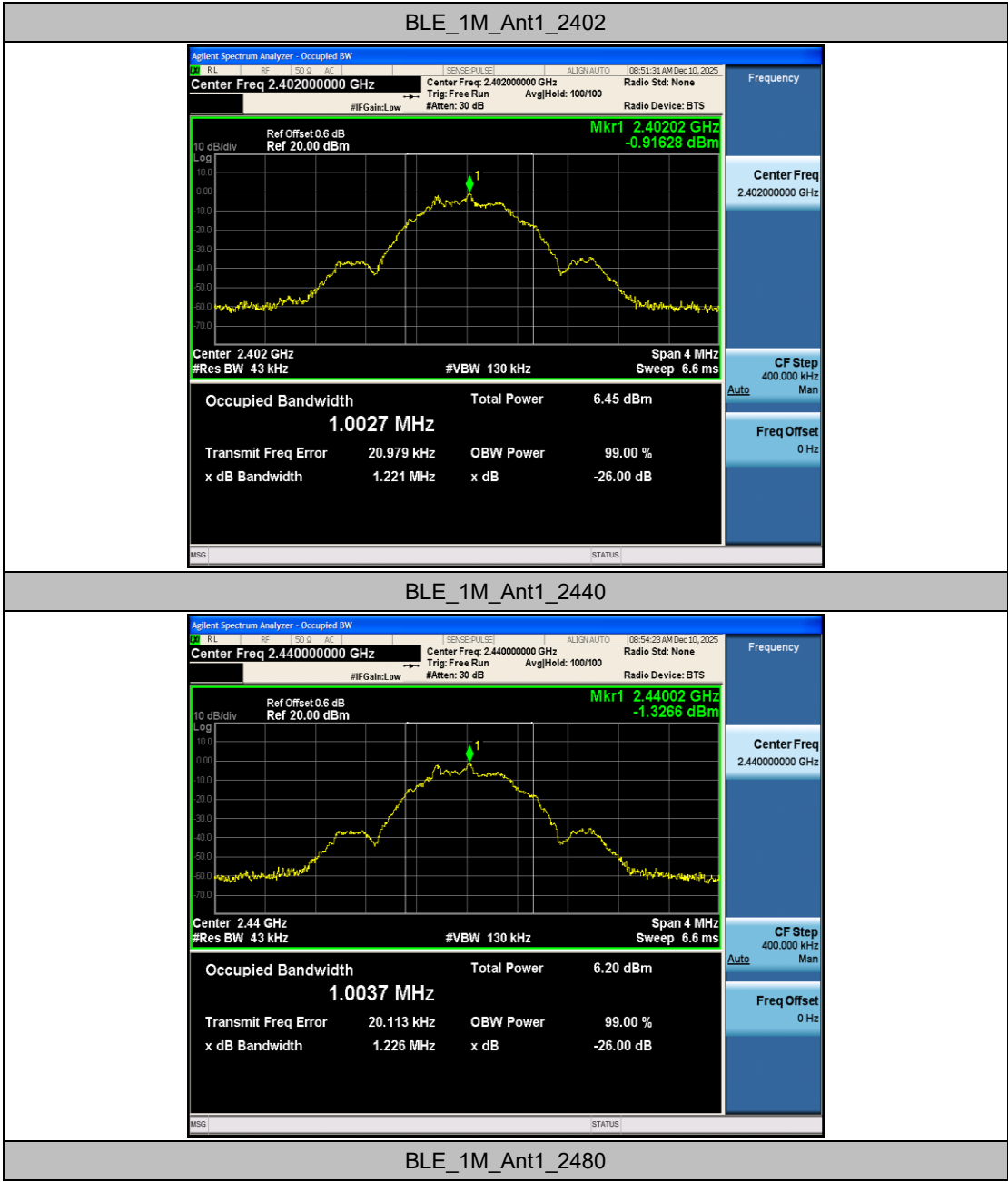


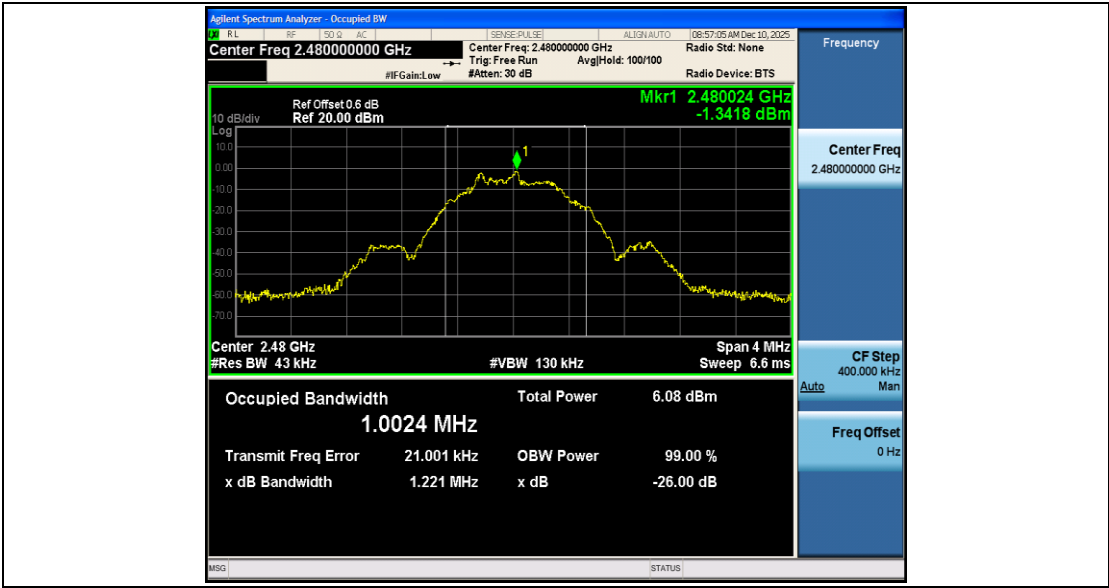
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0027	2401.5196	2402.5223	---	---
		2440	1.0037	2439.5183	2440.5220	---	---
		2480	1.0024	2479.5198	2480.5222	---	---

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	0.32	≤30	PASS
		2440	-0.06	≤30	PASS
		2480	-0.07	≤30	PASS

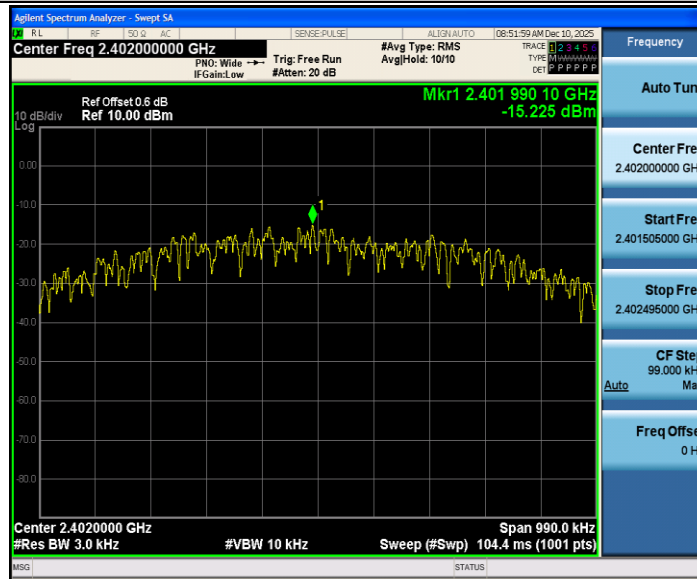
Appendix D: Maximum power spectral density

Test Result

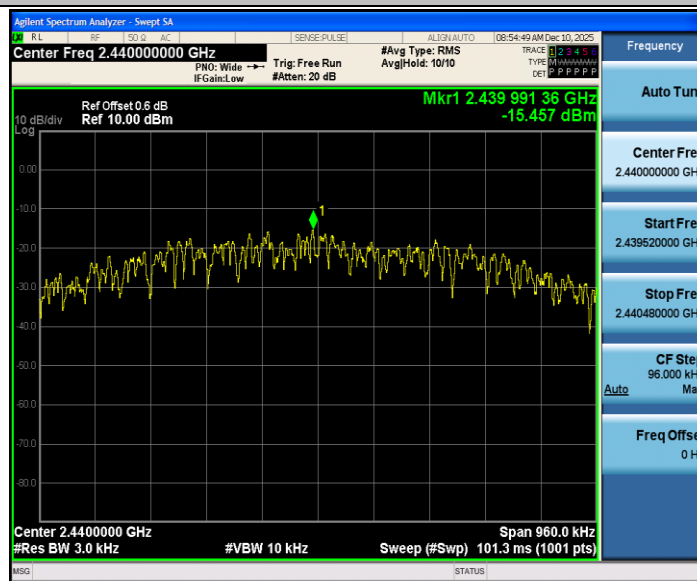
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.23	≤8.00	PASS
		2440	-15.46	≤8.00	PASS
		2480	-16.14	≤8.00	PASS

Test Graphs

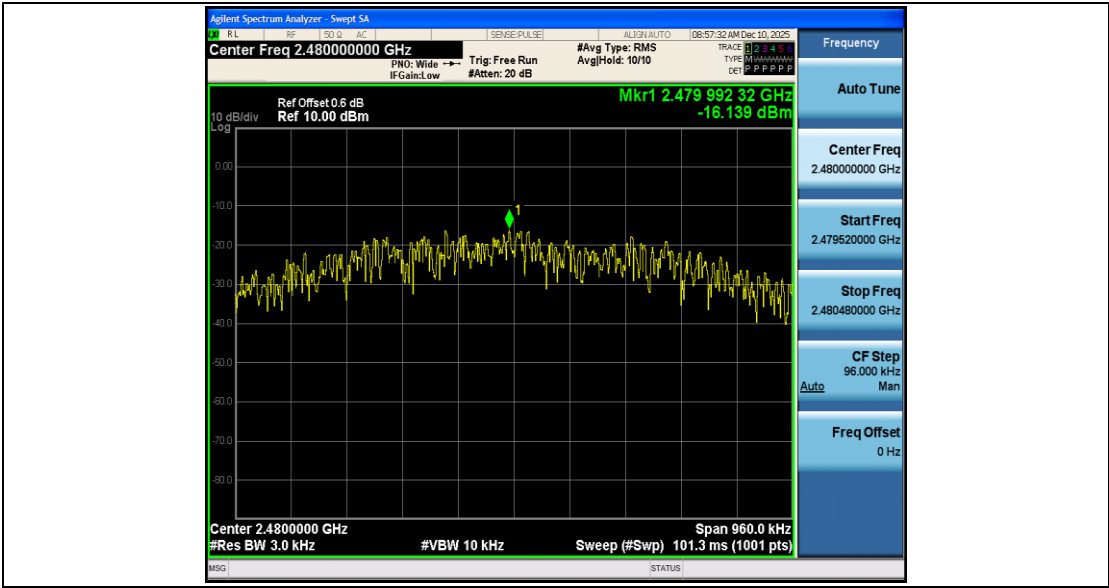
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

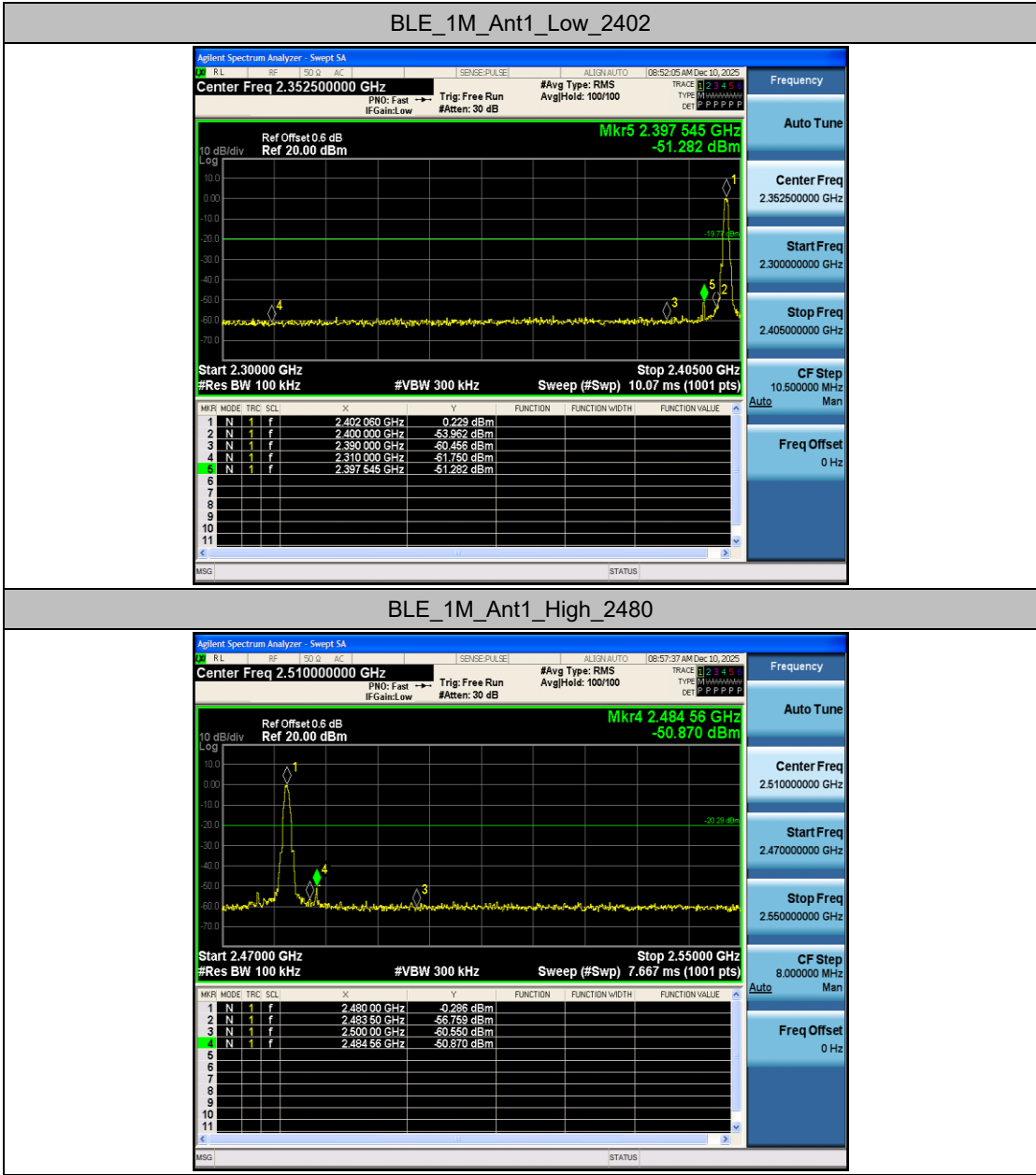


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	0.23	-51.28	≤-19.77	PASS
		High	2480	-0.29	-50.87	≤-20.29	PASS

Test Graphs

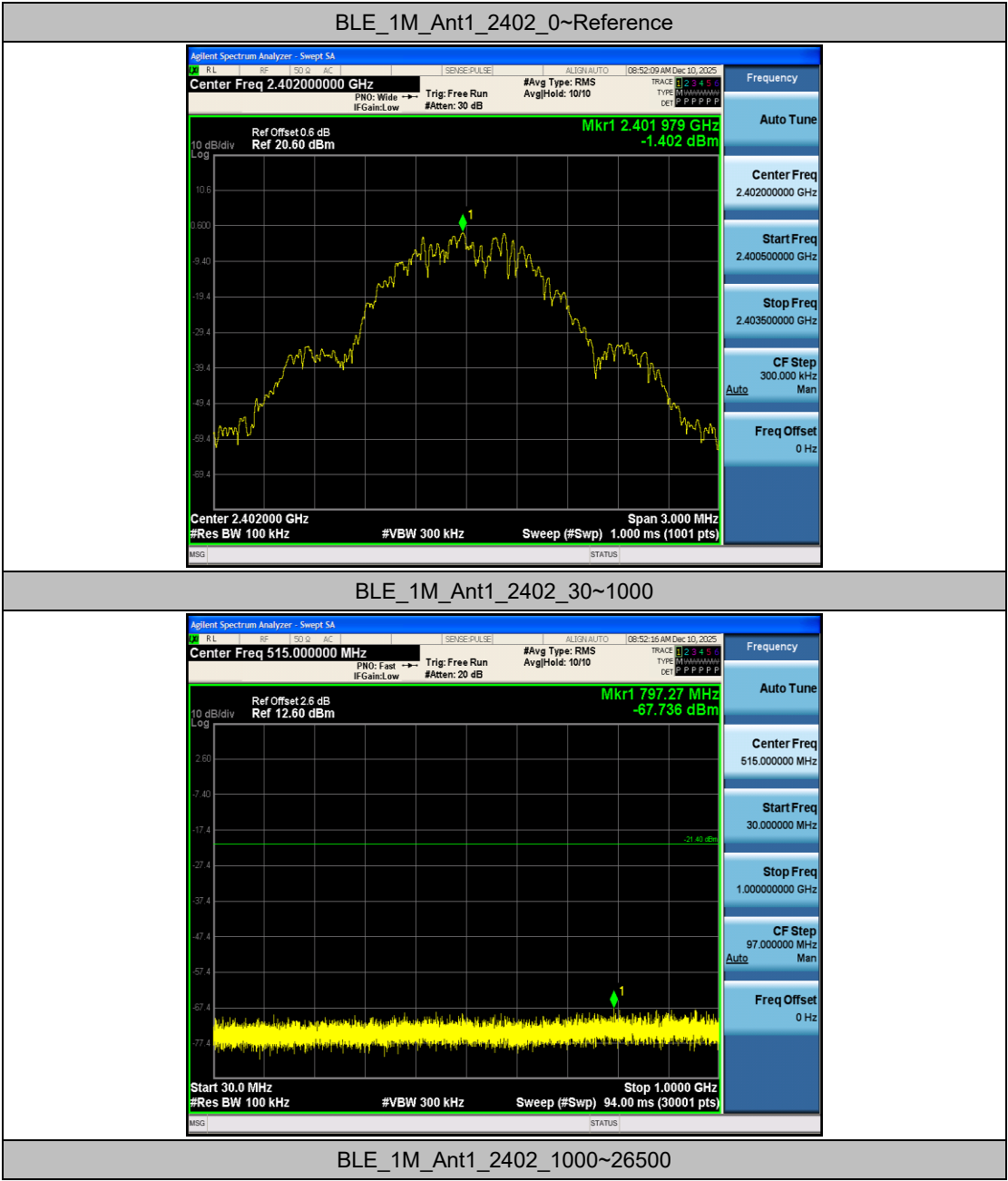


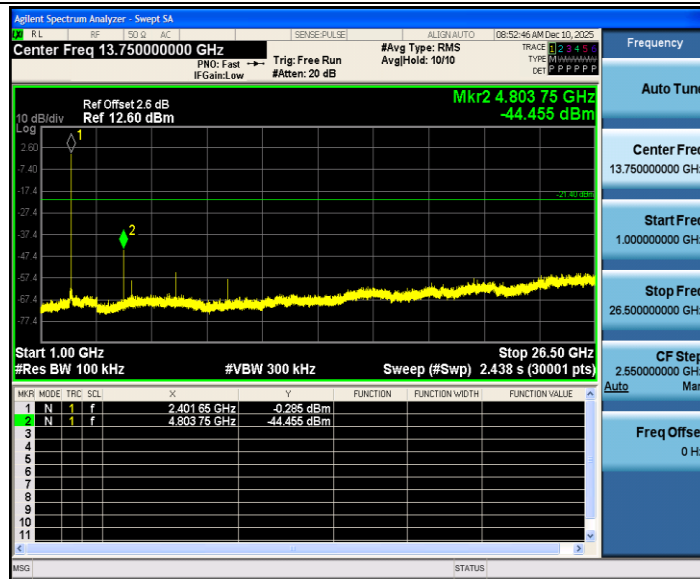
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.40	-1.40	---	PASS
			30~1000	-1.40	-67.74	≤-21.4	PASS
			1000~26500	-1.40	-44.46	≤-21.4	PASS
		2440	Reference	-0.77	-0.77	---	PASS
			30~1000	-0.77	-66.88	≤-20.77	PASS
			1000~26500	-0.77	-43.74	≤-20.77	PASS
		2480	Reference	-1.48	-1.48	---	PASS
			30~1000	-1.48	-68.16	≤-21.48	PASS
			1000~26500	-1.48	-42.93	≤-21.48	PASS

Test Graphs

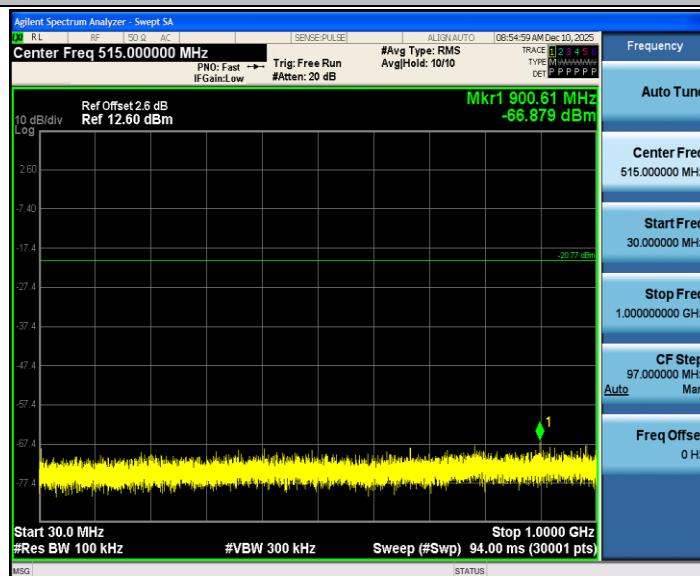




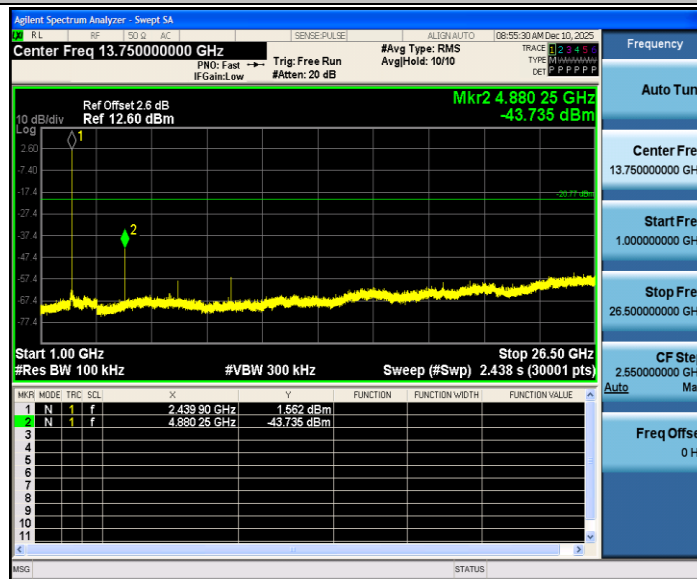
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



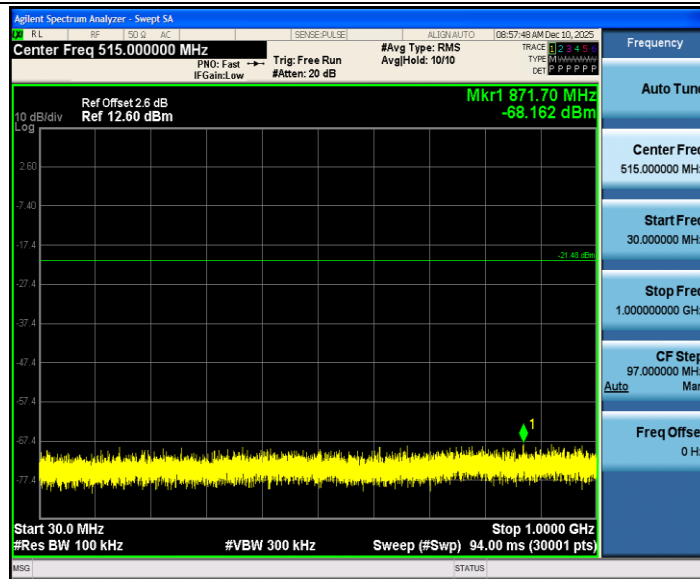
BLE_1M_Ant1_2440_1000~26500



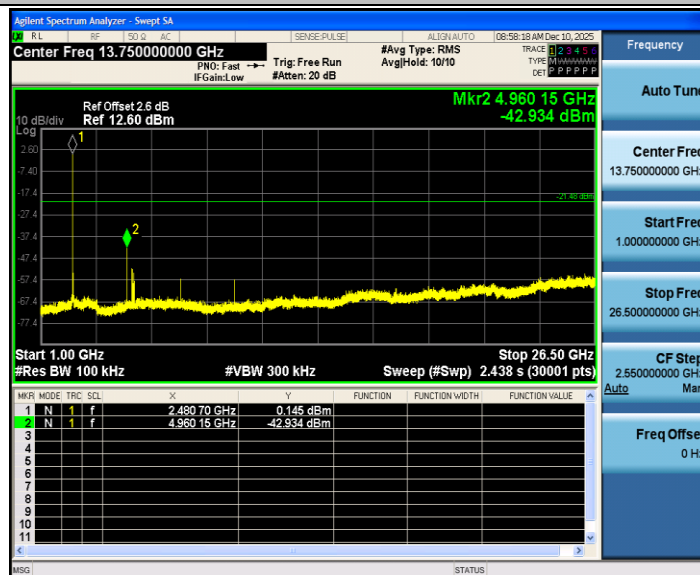
BLE_1M_Ant1_2480_0~Reference



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

