

Appendix RF Test Data for BLE

FCC ID : 2AYHJ-S201

Company : Dongguan Nuoyifan Technology Co.,Ltd.

EUT : Wireless Controller

Model Number : S201

Report No. : CTA25080100301

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	0.644	2401.692	2402.336	0.5	PASS
		2440	0.636	2439.696	2440.332	0.5	PASS
		2480	0.656	2479.684	2480.340	0.5	PASS

Test Graphs



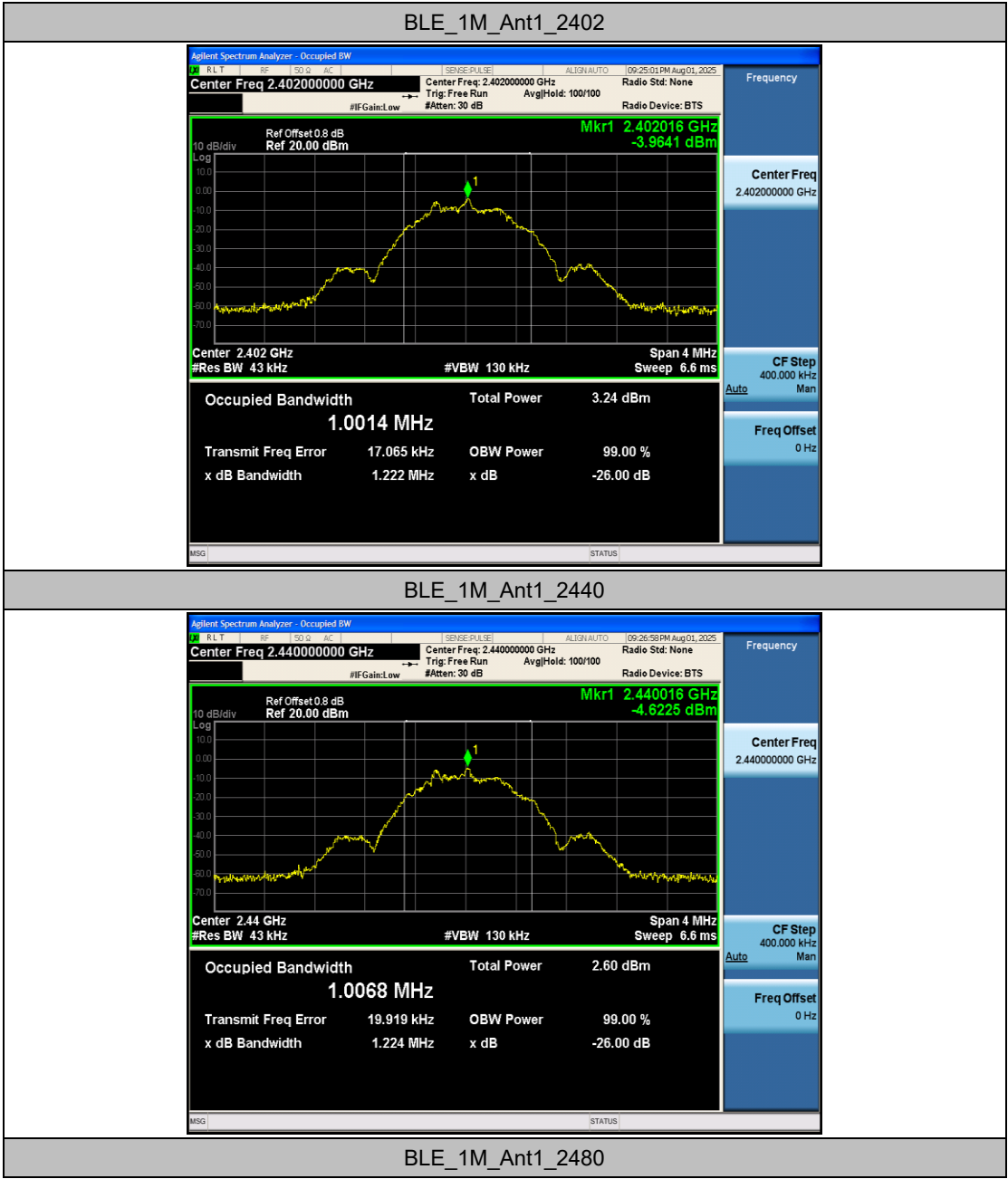


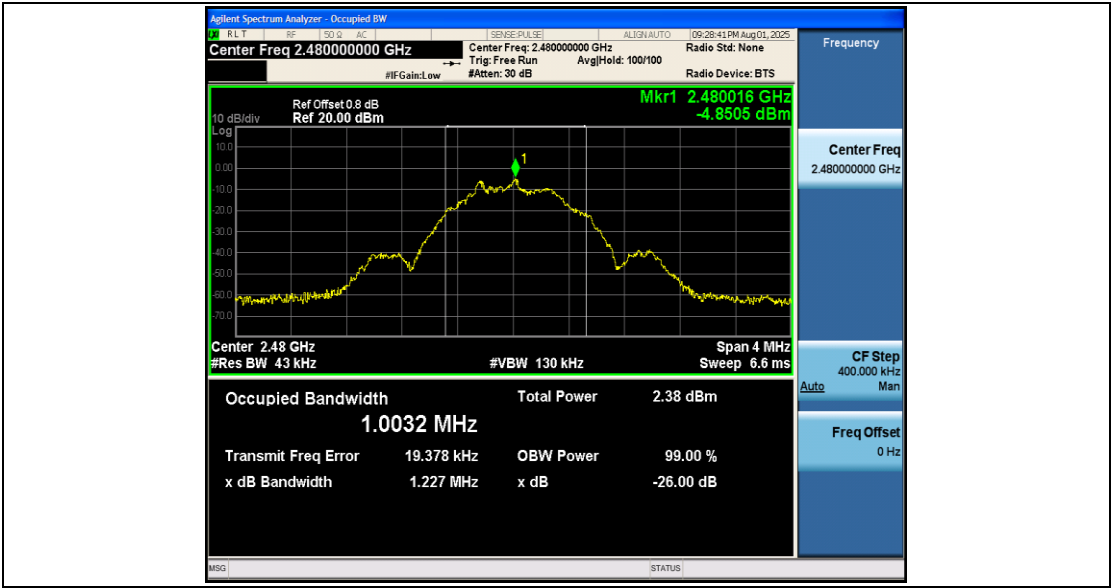
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0014	2401.5164	2402.5178	---	---
		2440	1.0068	2439.5165	2440.5233	---	---
		2480	1.0032	2479.5178	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	-2.82	≤30	PASS
		2440	-3.44	≤30	PASS
		2480	-3.65	≤30	PASS

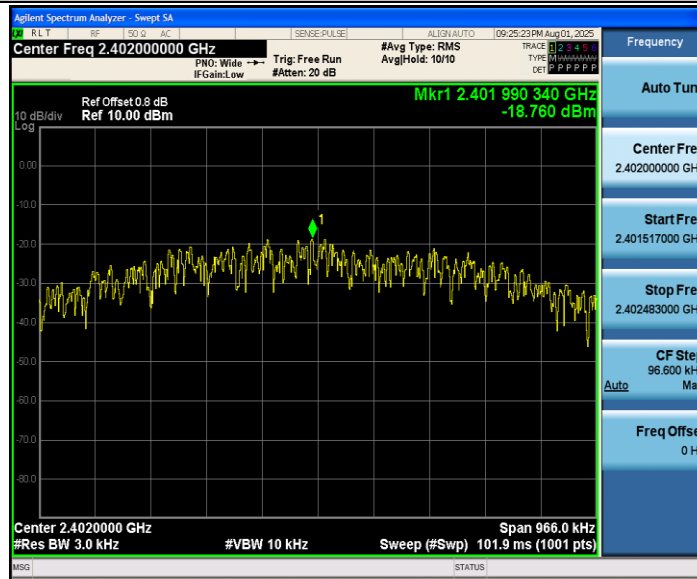
Appendix D: Maximum power spectral density

Test Result

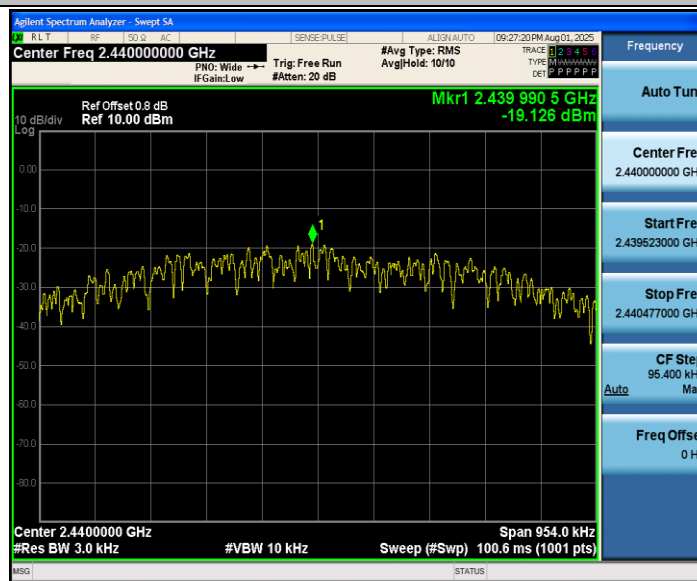
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.76	≤8.00	PASS
		2440	-19.13	≤8.00	PASS
		2480	-19.43	≤8.00	PASS

Test Graphs

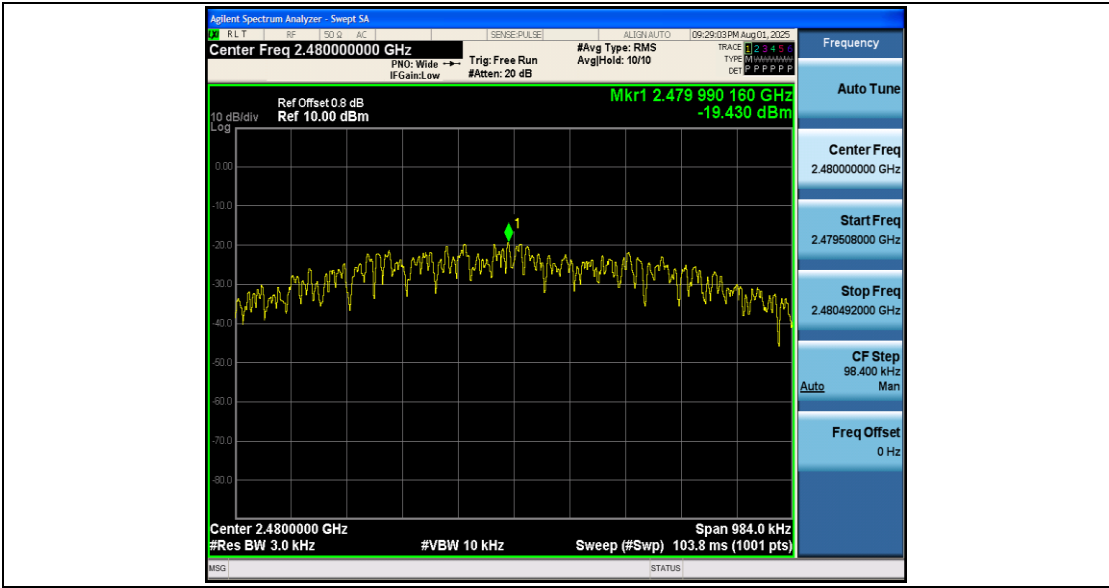
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

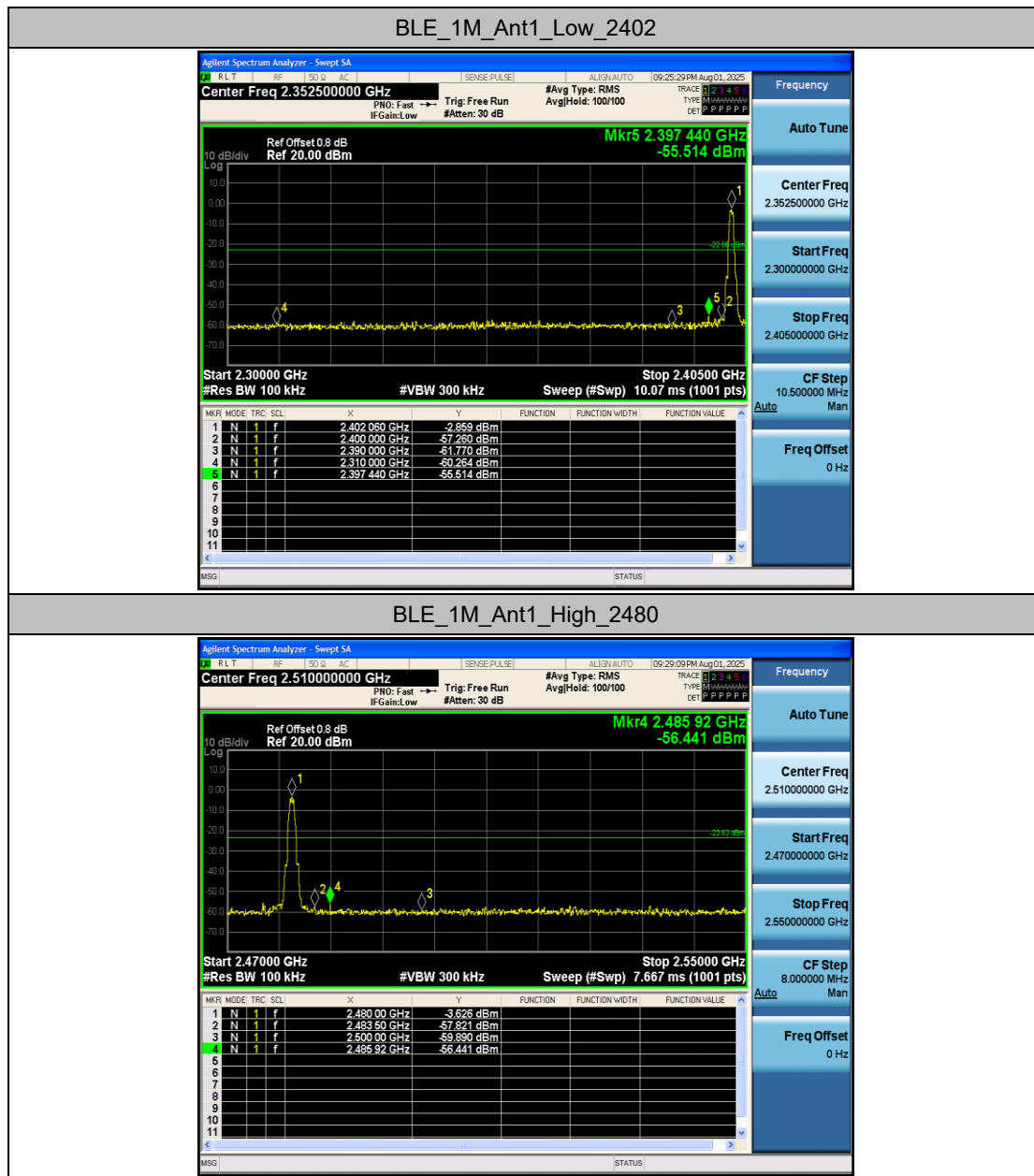


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.86	-55.51	≤ -22.86	PASS
		High	2480	-3.63	-56.44	≤ -23.63	PASS

Test Graphs

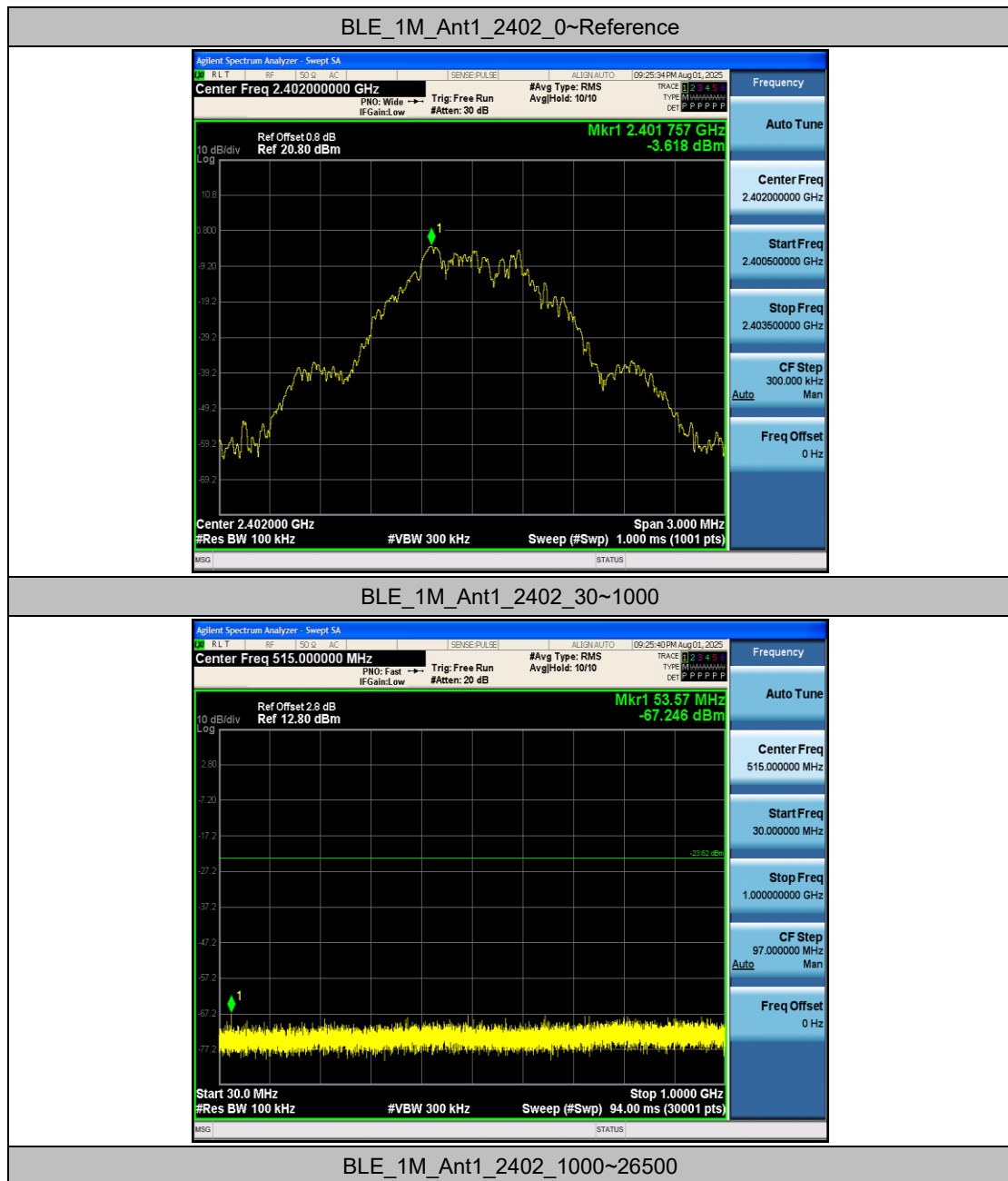


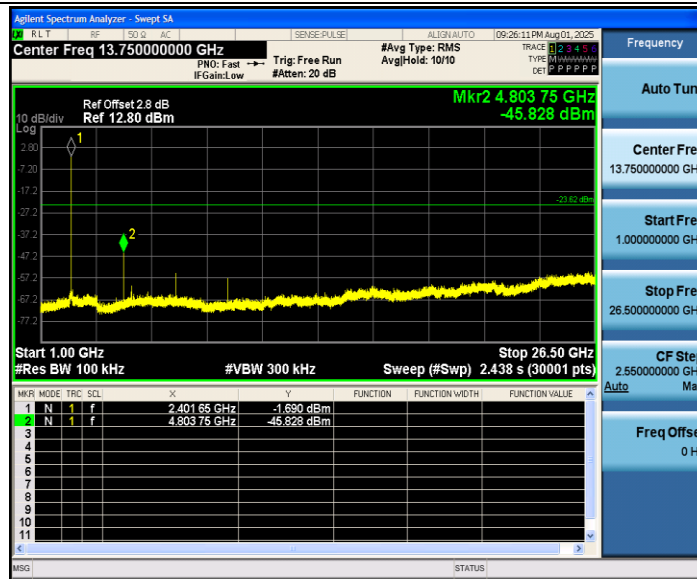
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.62	-3.62	---	PASS
			30~1000	-3.62	-67.25	≤-23.62	PASS
			1000~26500	-3.62	-45.83	≤-23.62	PASS
		2440	Reference	-3.64	-3.64	---	PASS
			30~1000	-3.64	-67.47	≤-23.64	PASS
			1000~26500	-3.64	-46.66	≤-23.64	PASS
		2480	Reference	-4.31	-4.31	---	PASS
			30~1000	-4.31	-67.56	≤-24.31	PASS
			1000~26500	-4.31	-49.26	≤-24.31	PASS

Test Graphs

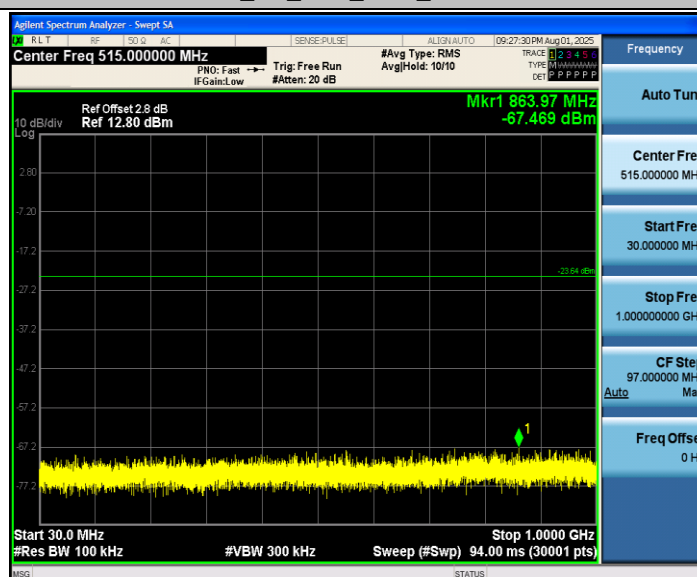




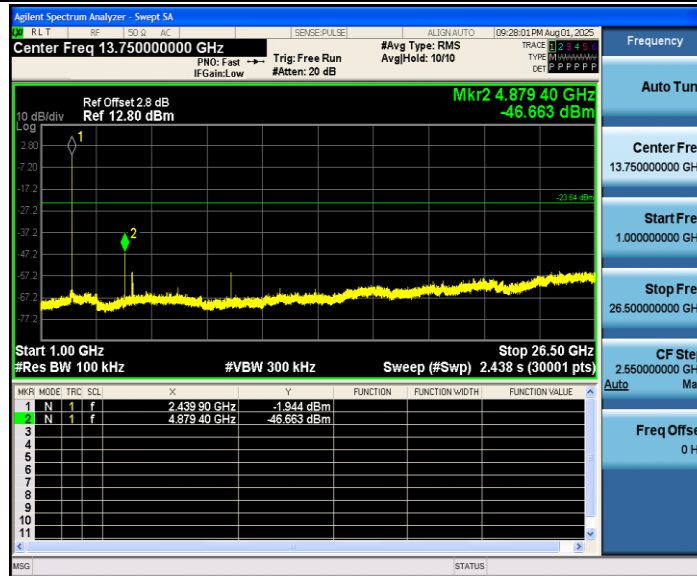
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



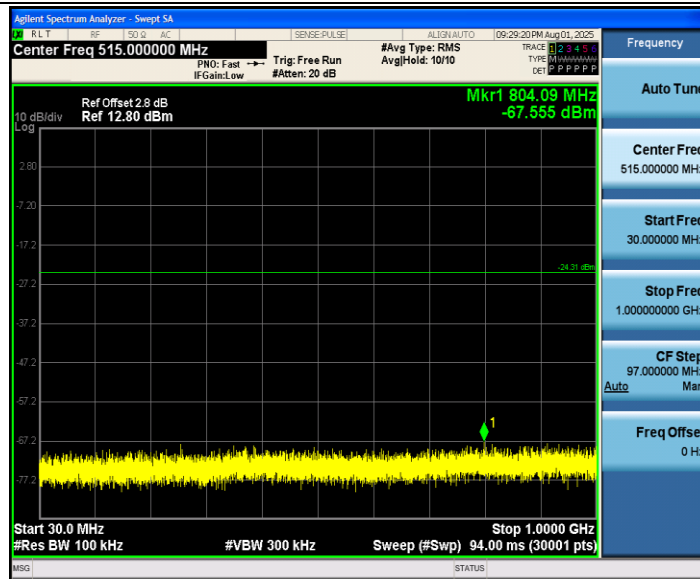
BLE_1M_Ant1_2440_1000~26500



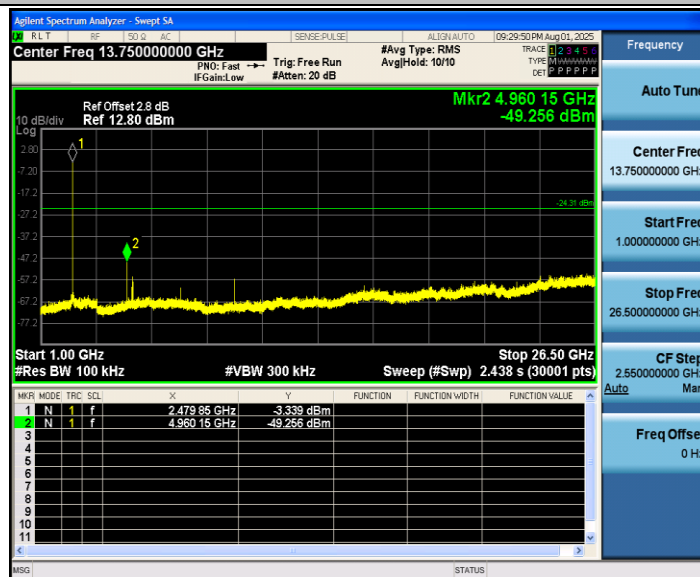
BLE_1M_Ant1_2480_0~Reference



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

