

Appendix RF Test Data for BLE

FCC ID : 2BR4J-POWERAURAE1

Company : power appliance Co., Ltd.

EUT : Bluetooth headset

Model Number : POWER AURA E1

Report No. : CTA25082000901

Reviewed By : Eric Wang

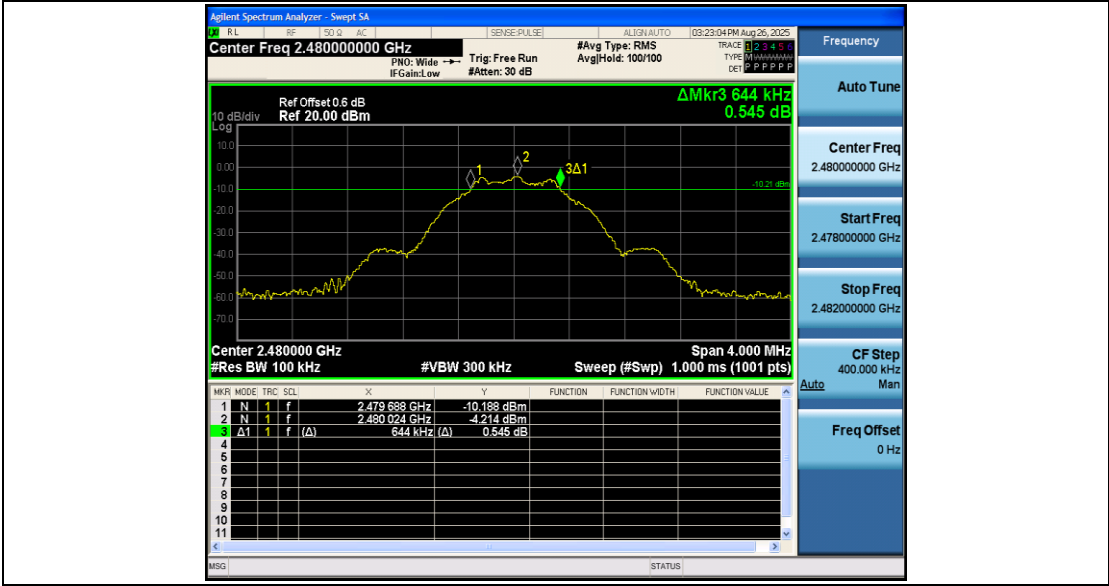
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.648	2401.688	2402.336	0.5	PASS
		2440	0.640	2439.692	2440.332	0.5	PASS
		2480	0.644	2479.688	2480.332	0.5	PASS

Test Graphs





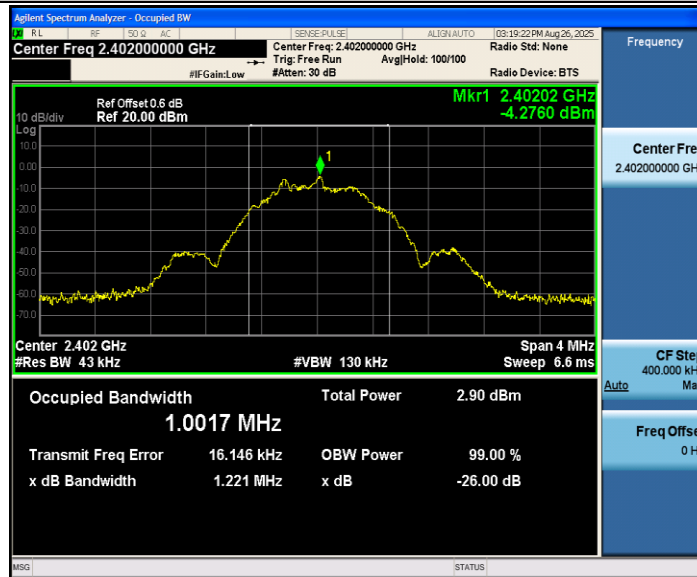
Appendix B: Occupied Channel Bandwidth

Test Result

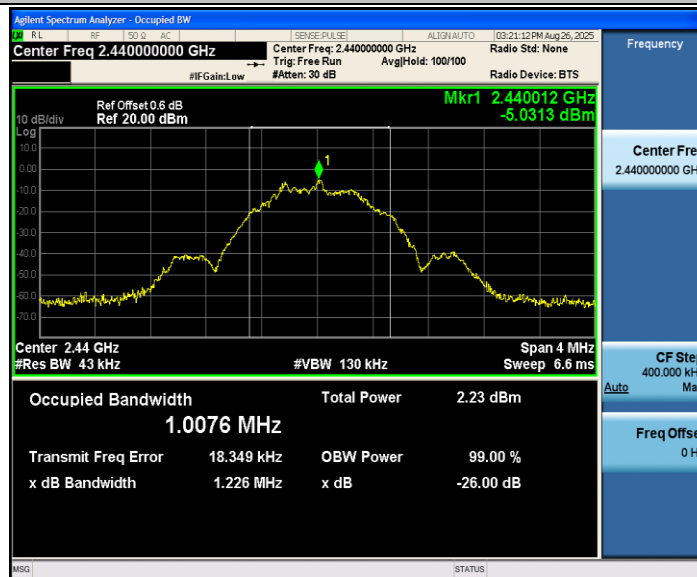
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0017	2401.5153	2402.5170	---	---
		2440	1.0076	2439.5146	2440.5222	---	---
		2480	1.0031	2479.5159	2480.5190	---	---

Test Graphs

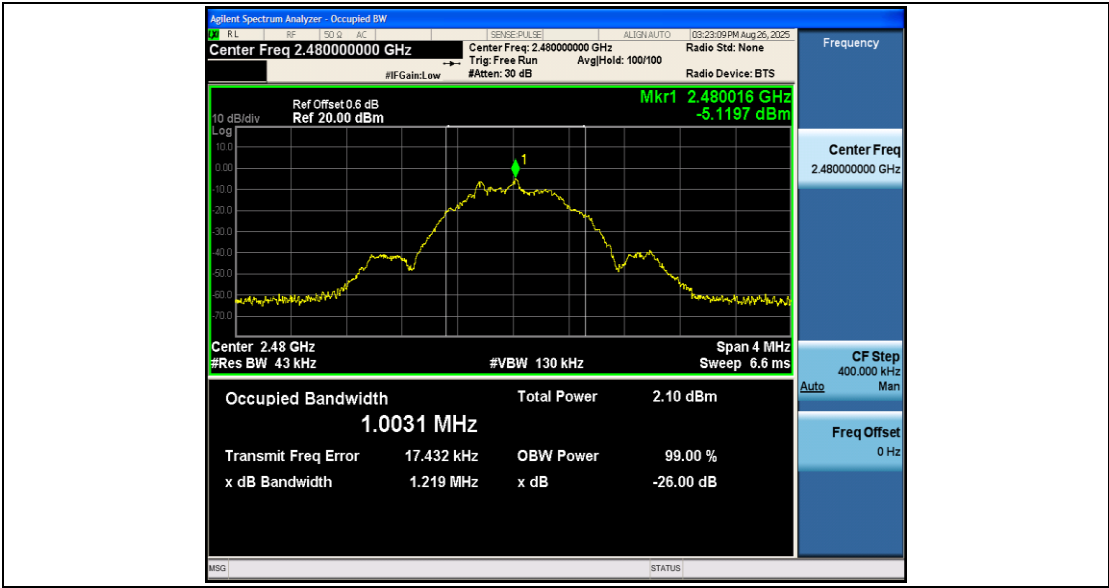
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

Left:

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.23	≤30	PASS
		2440	-3.79	≤30	PASS
		2480	-4.06	≤30	PASS

Right:

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.26	≤30	PASS
		2440	-3.70	≤30	PASS
		2480	-4.02	≤30	PASS

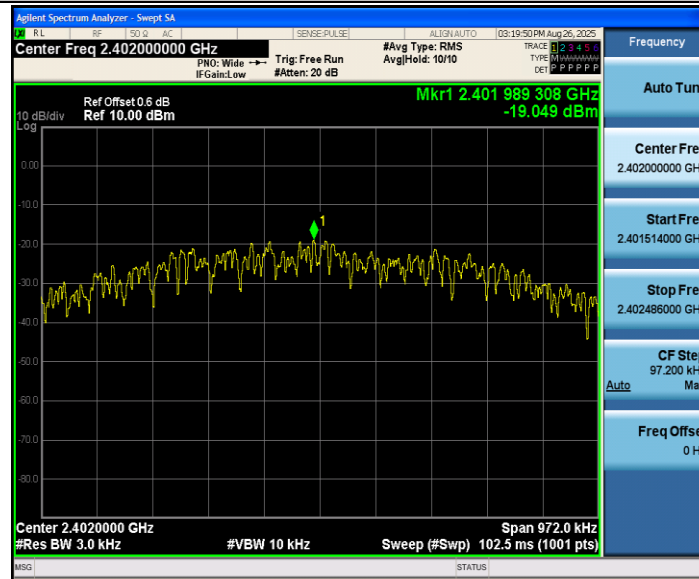
Appendix D: Maximum power spectral density

Test Result

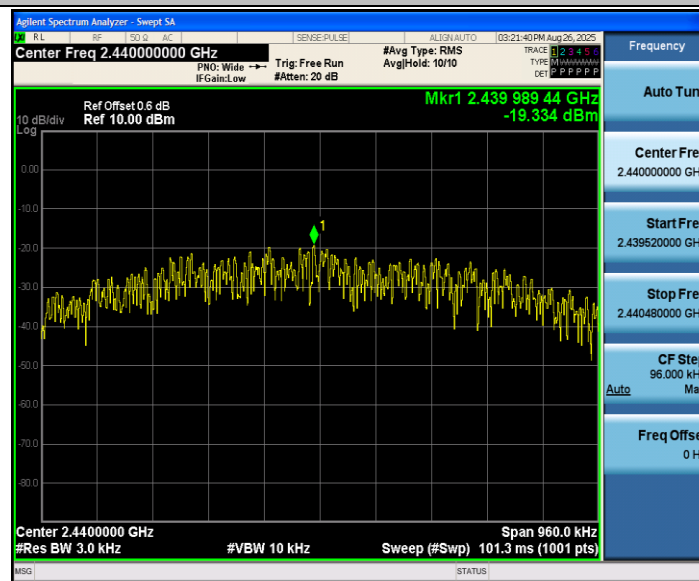
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.05	≤8.00	PASS
		2440	-19.33	≤8.00	PASS
		2480	-20.31	≤8.00	PASS

Test Graphs

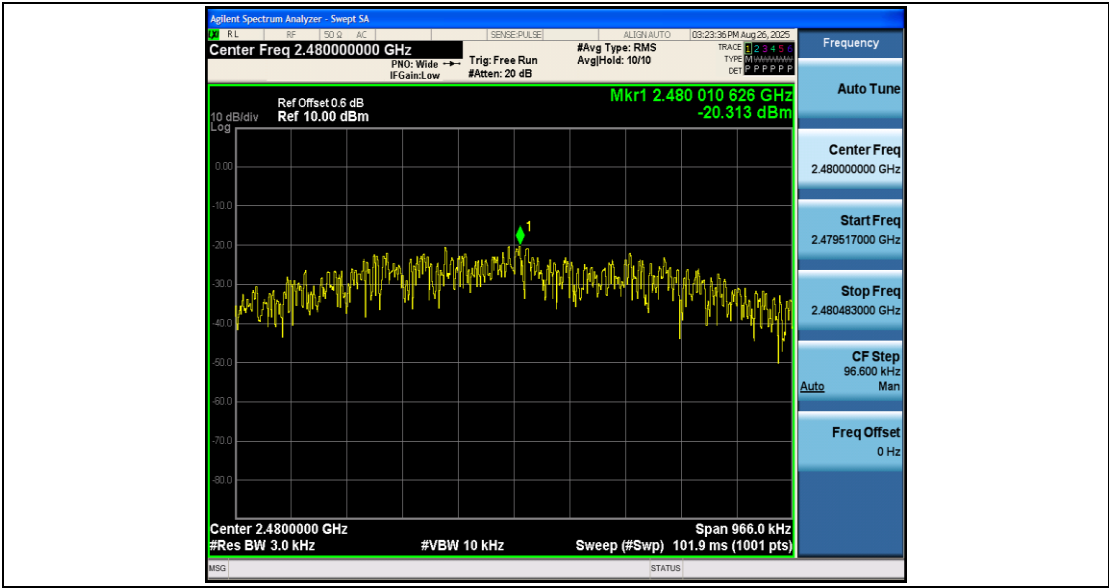
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

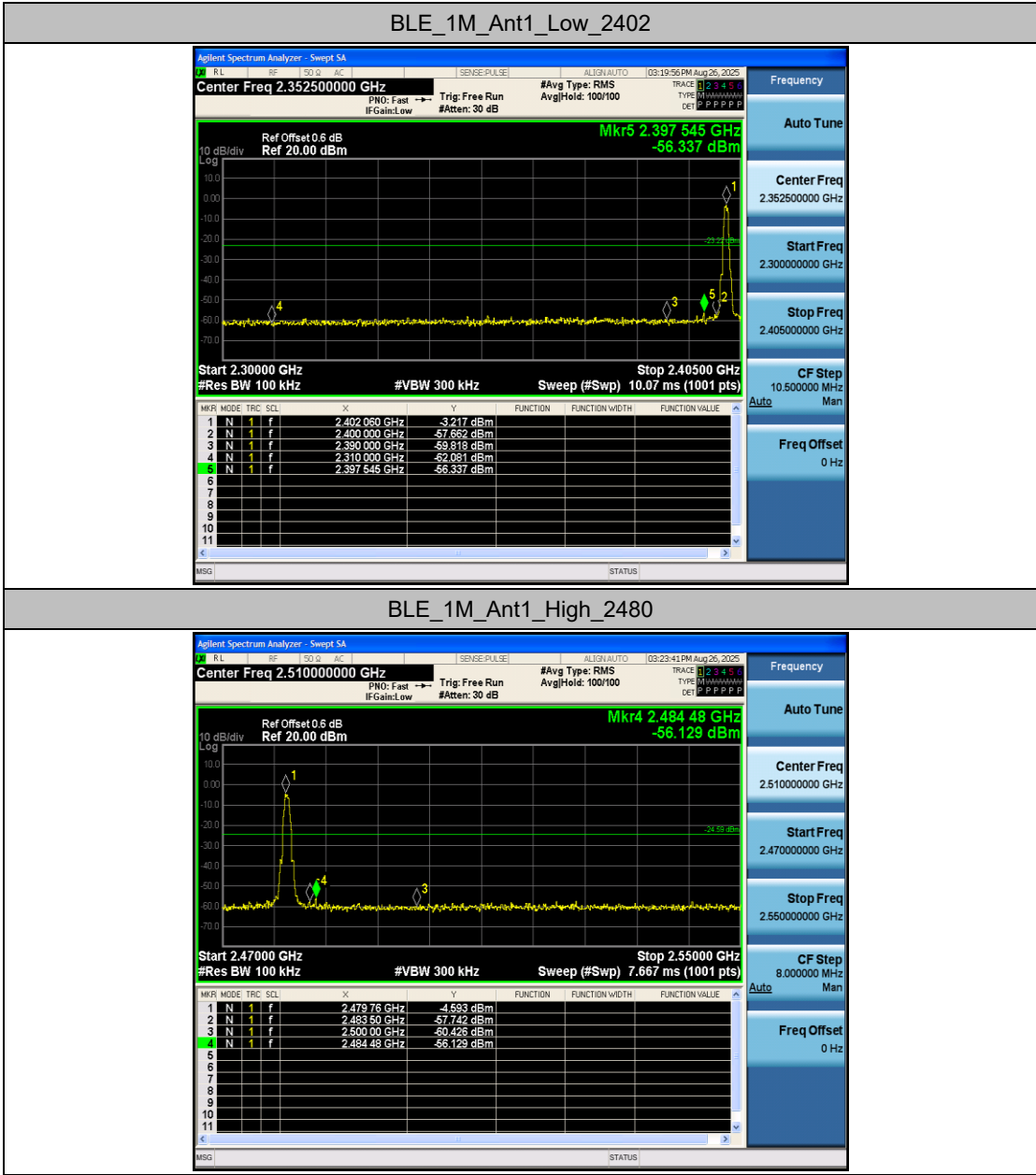


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-3.22	-56.34	≤-23.22	PASS
		High	2480	-4.59	-56.13	≤-24.59	PASS

Test Graphs

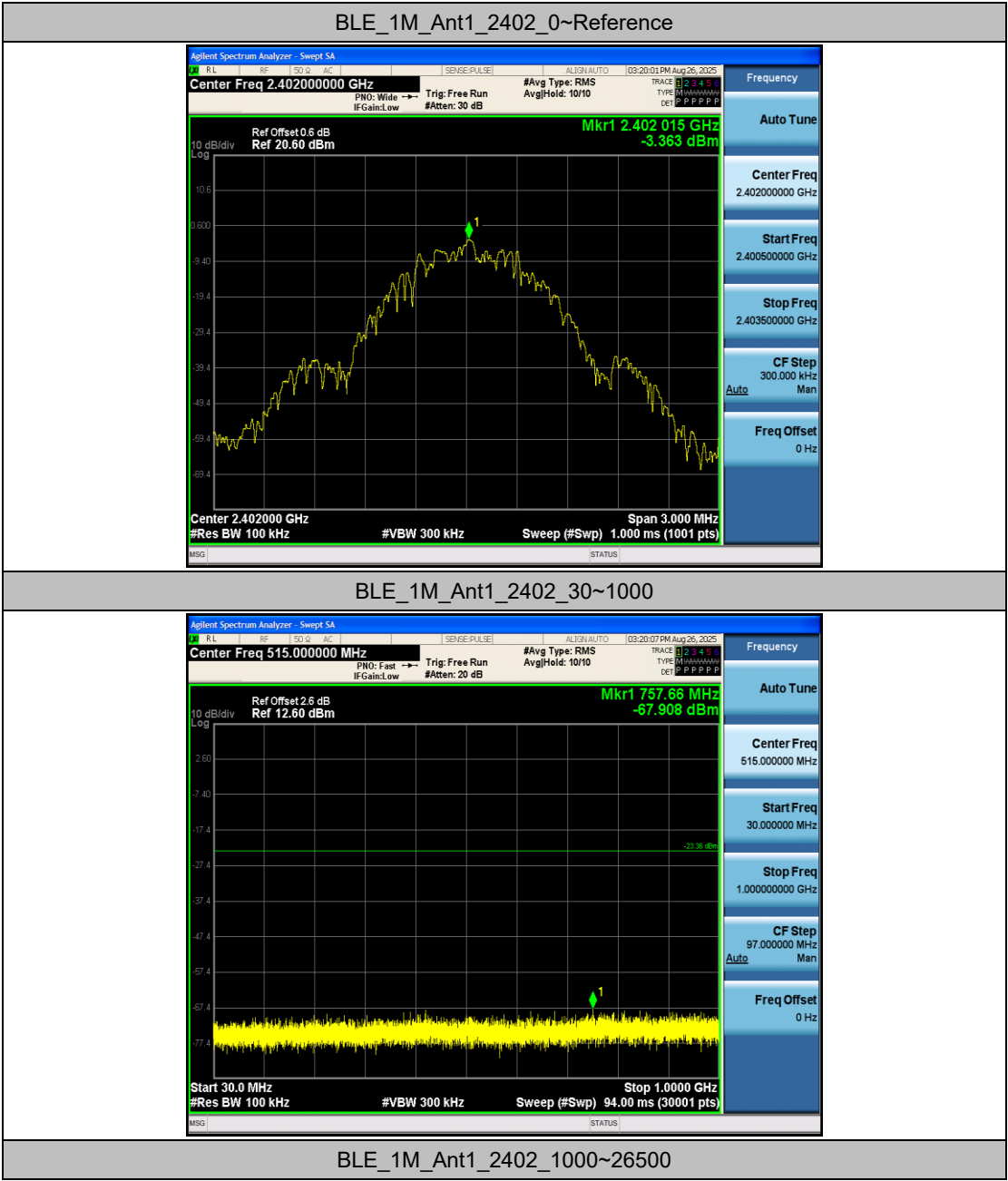


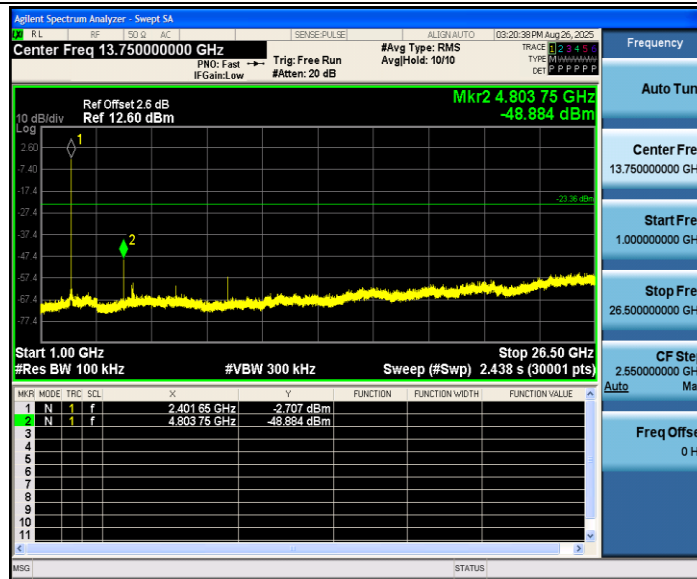
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.36	-3.36	---	PASS
			30~1000	-3.36	-67.91	≤-23.36	PASS
			1000~26500	-3.36	-48.88	≤-23.36	PASS
		2440	Reference	-4.64	-4.64	---	PASS
			30~1000	-4.64	-67.39	≤-24.64	PASS
			1000~26500	-4.64	-49.13	≤-24.64	PASS
		2480	Reference	-4.73	-4.73	---	PASS
			30~1000	-4.73	-67.33	≤-24.73	PASS
			1000~26500	-4.73	-46.09	≤-24.73	PASS

Test Graphs

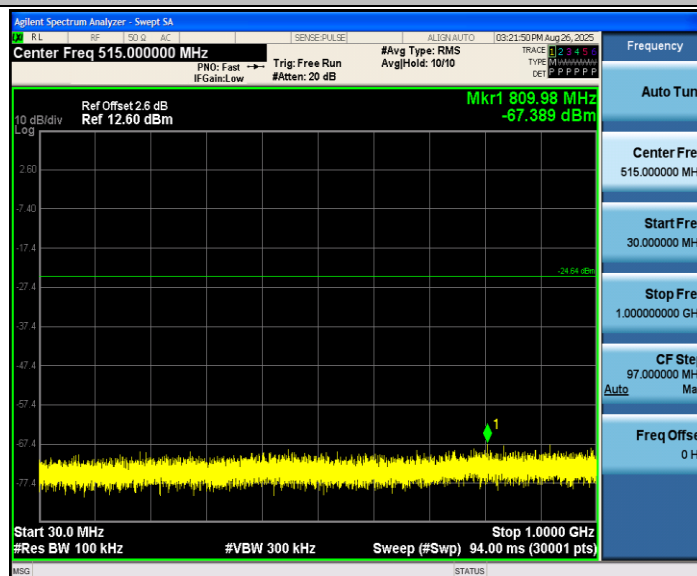




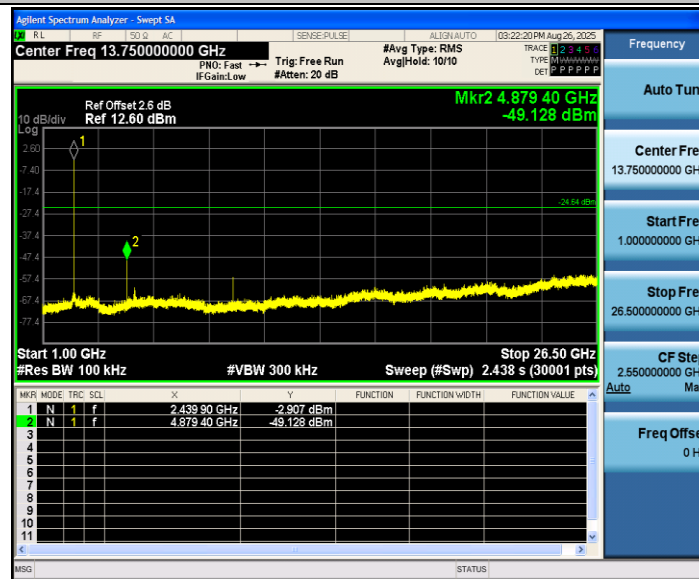
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



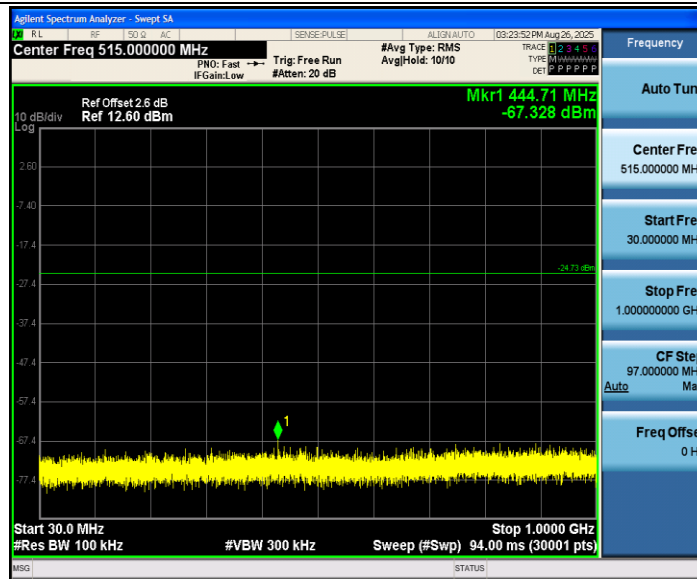
BLE_1M_Ant1_2440_1000~26500



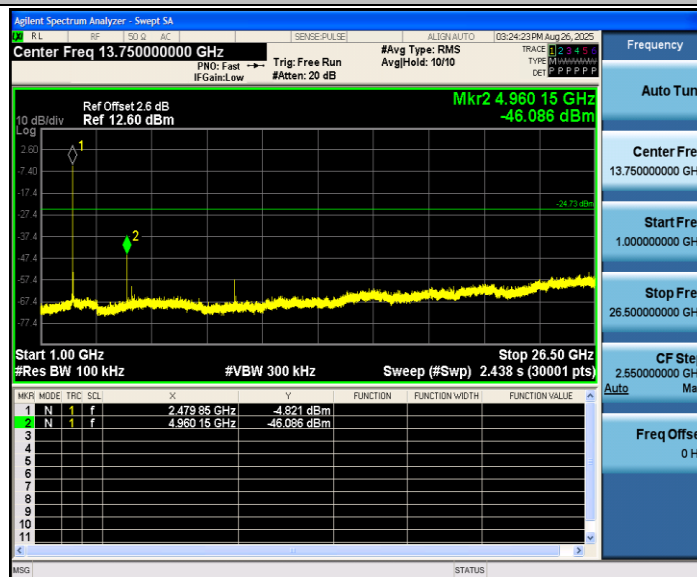
BLE_1M_Ant1_2480_0~Reference



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

