

FCC Appendix RF Test Data for BLE

FCC ID : 2BURY-ZM01

Company : Renqiu Zhongdi Electric Appliance Co., Ltd.

EUT : parking heater

Model Number : ZM01

Report No. : CTA26010600401

Reviewed By : Eric Wang

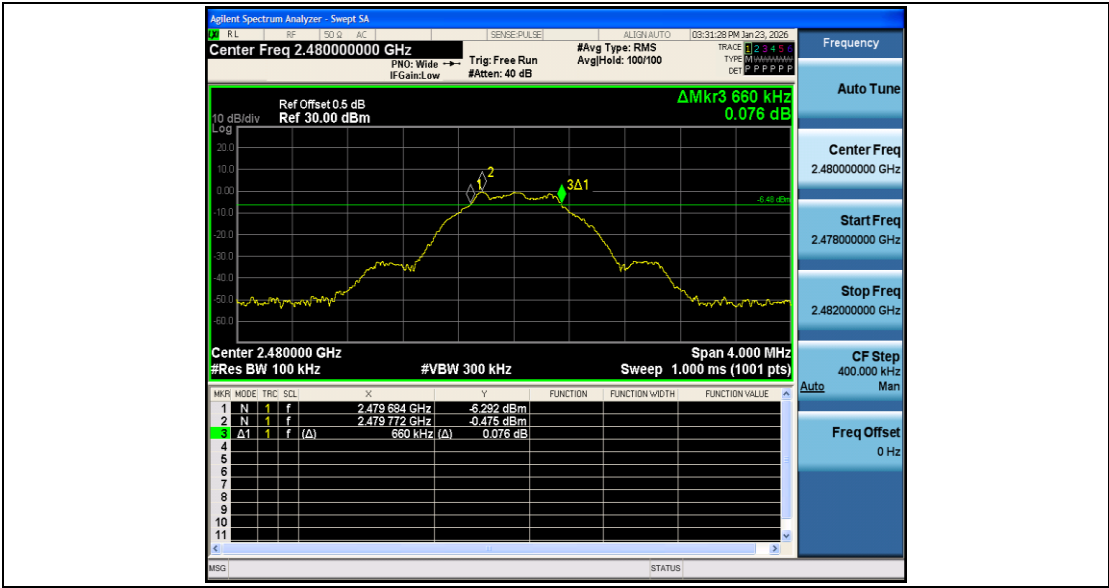
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.640	2401.700	2402.340	0.5	PASS
		2440	0.652	2439.692	2440.344	0.5	PASS
		2480	0.660	2479.684	2480.344	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	1.0060	2401.5221	2402.5281	---	---
		2440	1.0035	2439.5242	2440.5277	---	---
		2480	1.0078	2479.5200	2480.5278	---	---

Test Graphs

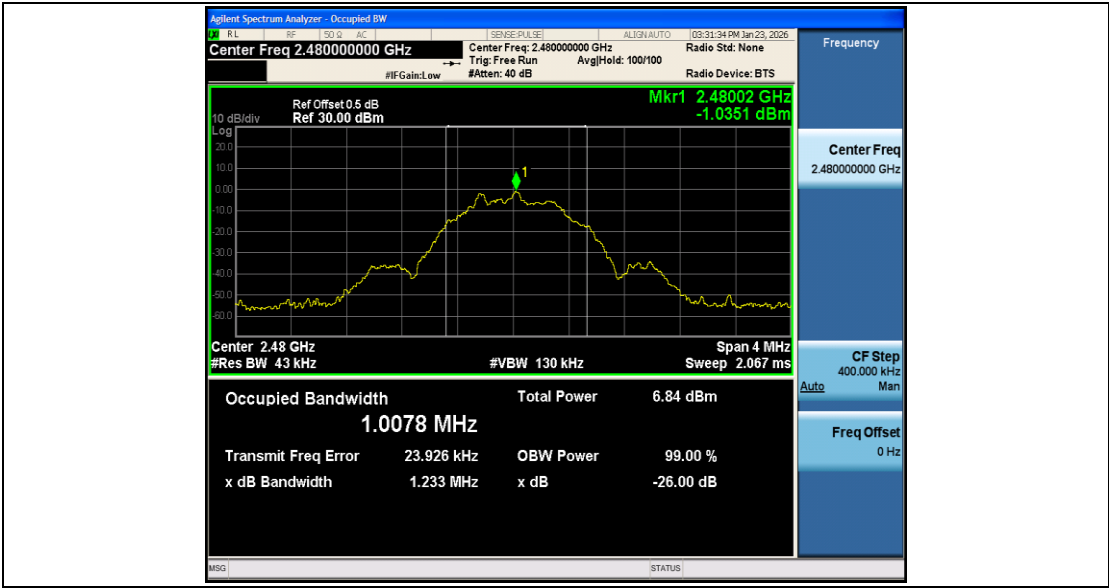
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



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	0.37	≤30	PASS
		2440	0.05	≤30	PASS
		2480	0.02	≤30	PASS

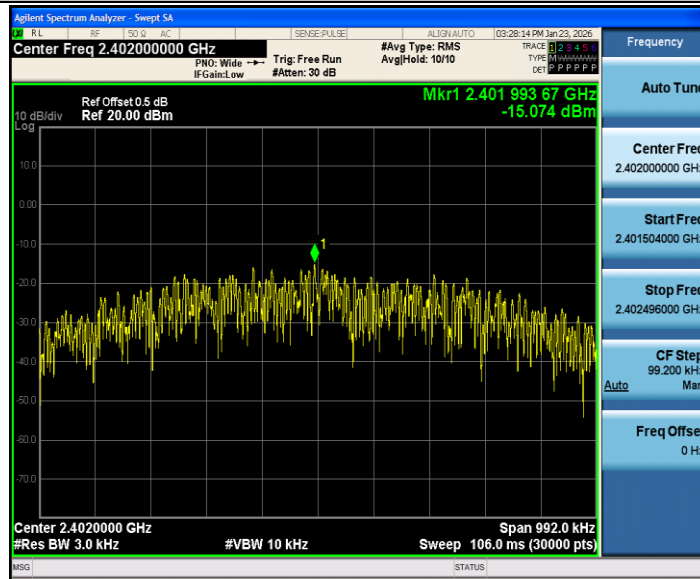
Appendix D: Maximum power spectral density

Test Result

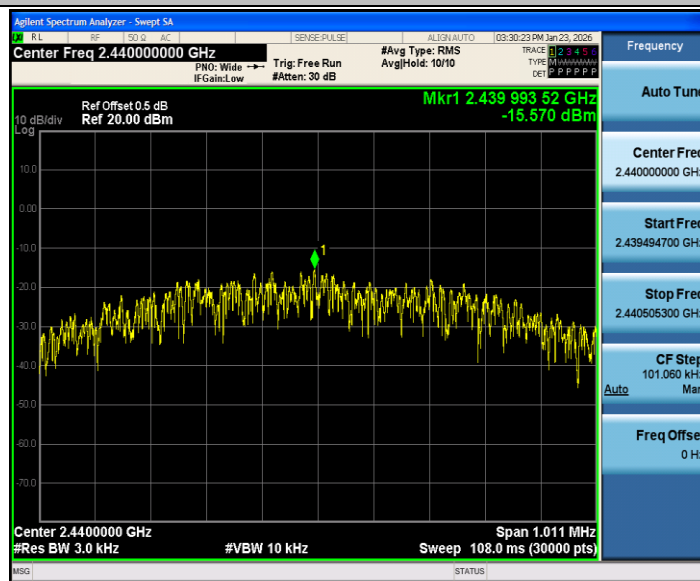
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.07	≤8.00	PASS
		2440	-15.57	≤8.00	PASS
		2480	-15.58	≤8.00	PASS

Test Graphs

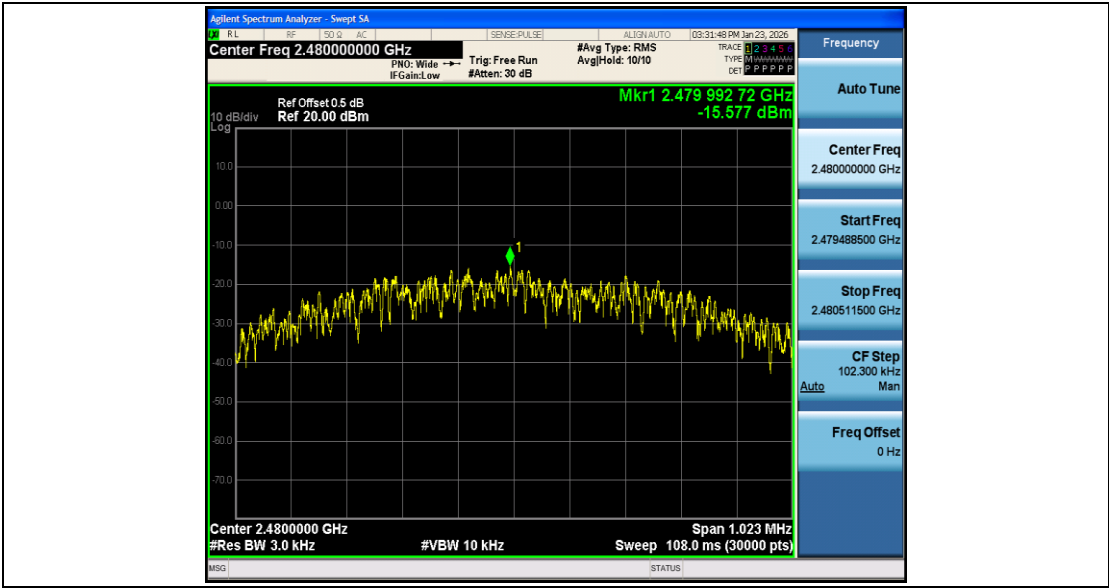
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



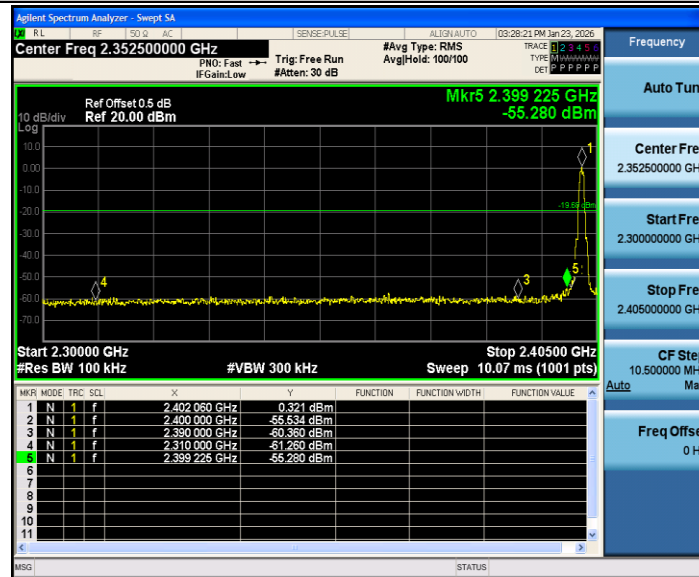
Appendix E: Band edge measurements

Test Result

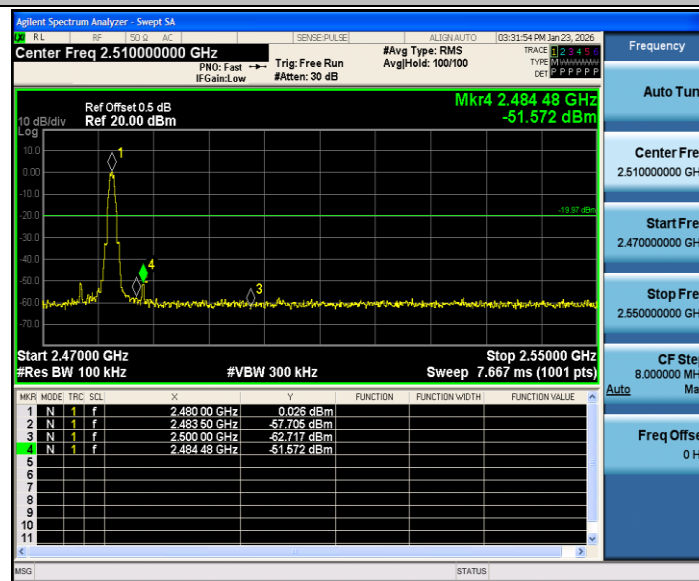
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	0.32	-55.28	≤-19.68	PASS
		High	2480	0.03	-51.57	≤-19.97	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

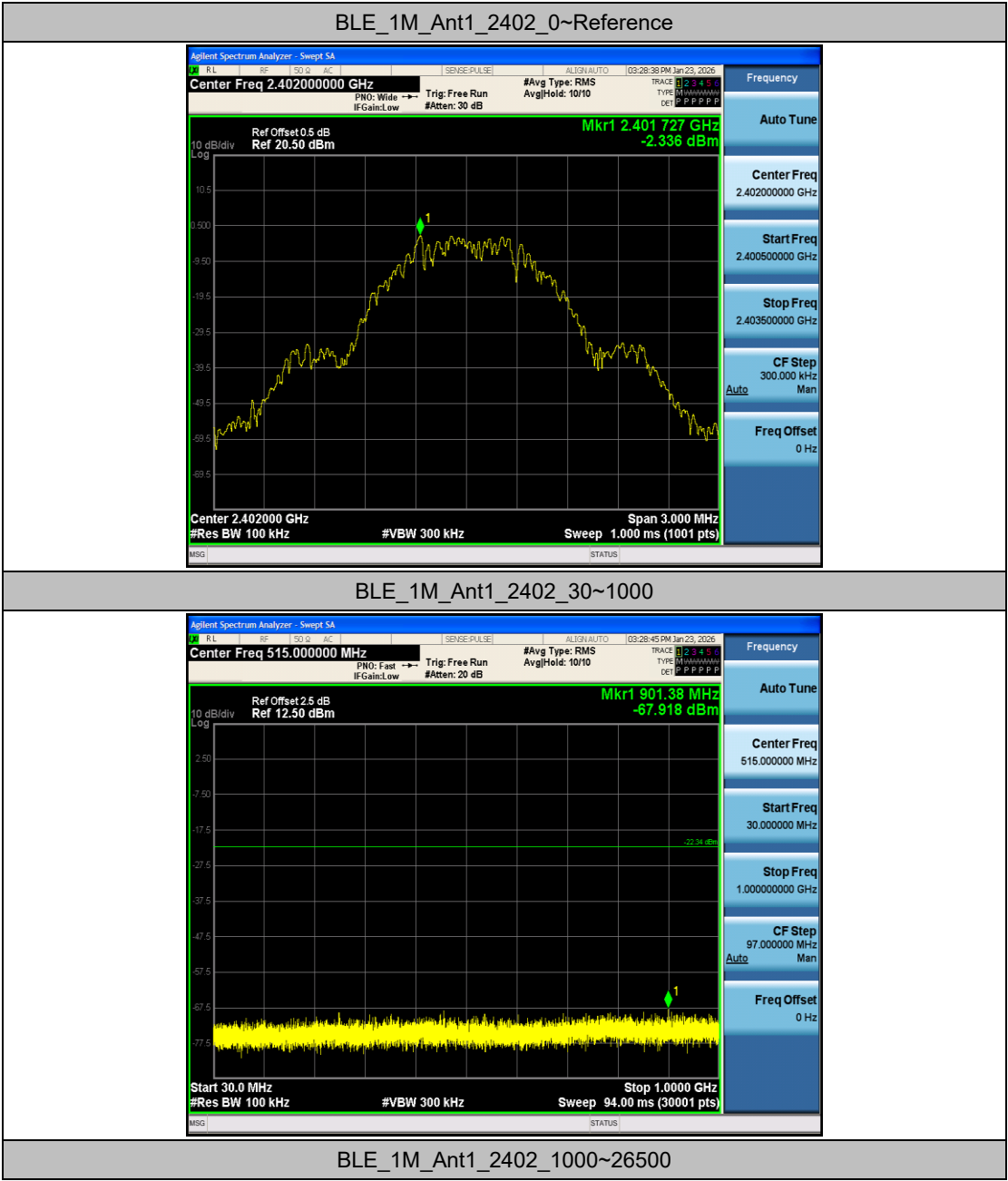


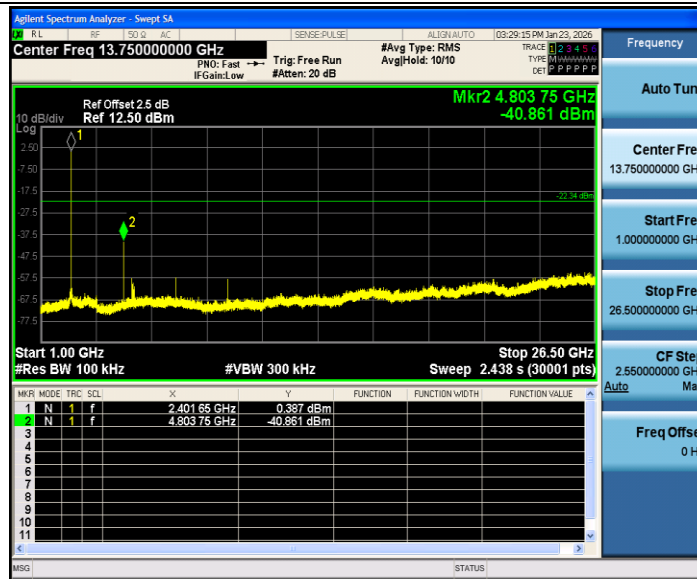
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-2.34	-2.34	---	PASS
			30~1000	-2.34	-67.92	≤-22.34	PASS
			1000~26500	-2.34	-40.86	≤-22.34	PASS
		2440	Reference	-1.50	-1.50	---	PASS
			30~1000	-1.50	-62.97	≤-21.5	PASS
			1000~26500	-1.50	-40.78	≤-21.5	PASS
		2480	Reference	-0.15	-0.15	---	PASS
			30~1000	-0.15	-67.96	≤-20.15	PASS
			1000~26500	-0.15	-42.84	≤-20.15	PASS

Test Graphs

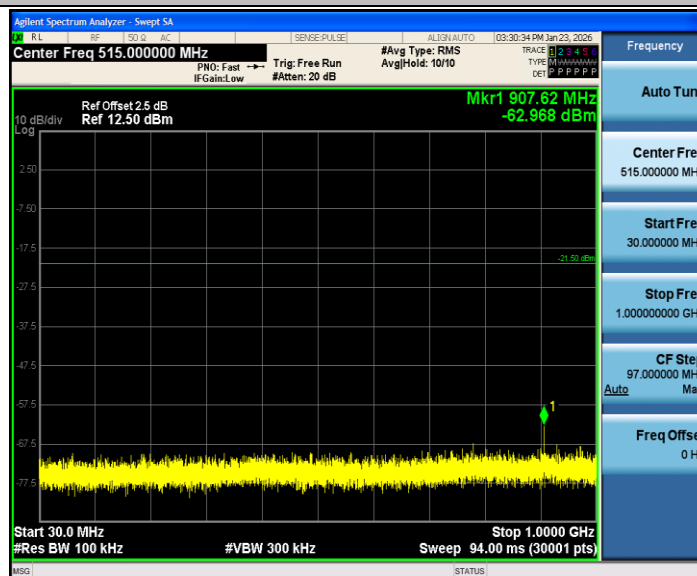




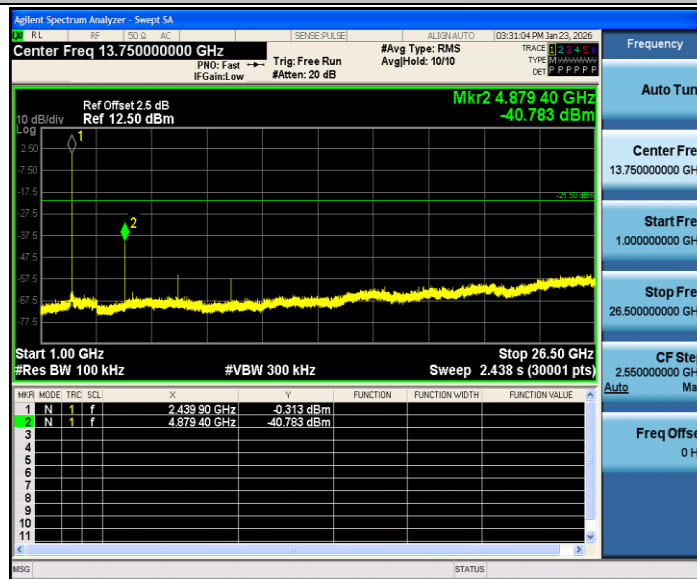
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



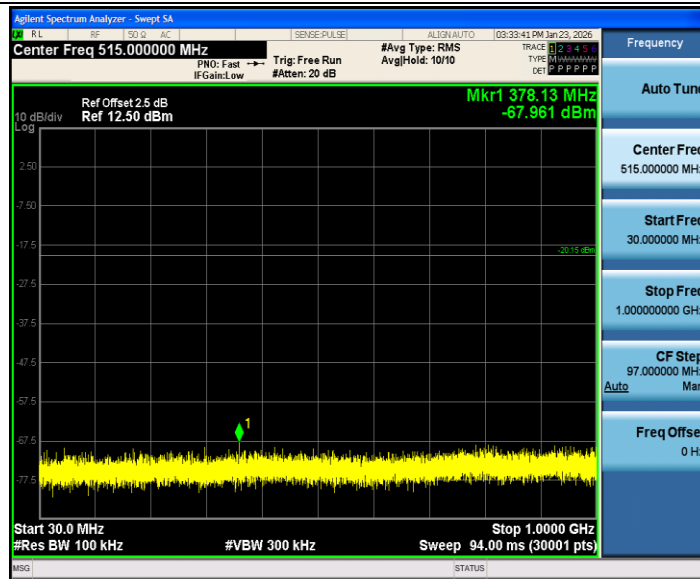
BLE_1M_Ant1_2440_1000~26500



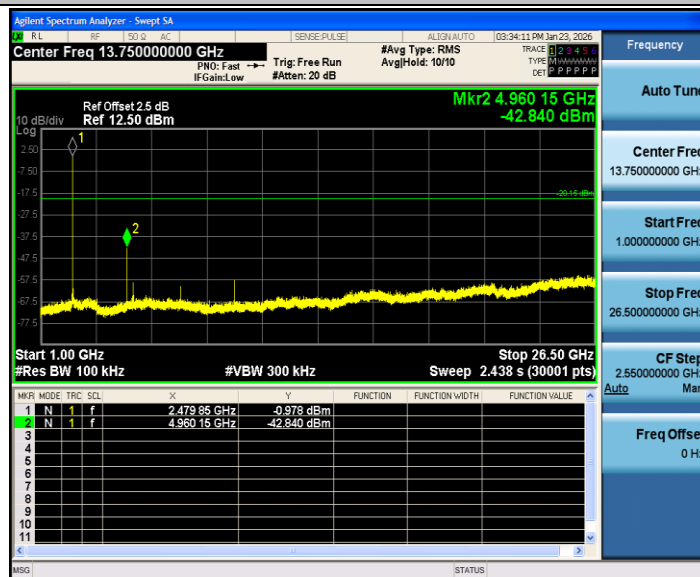
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



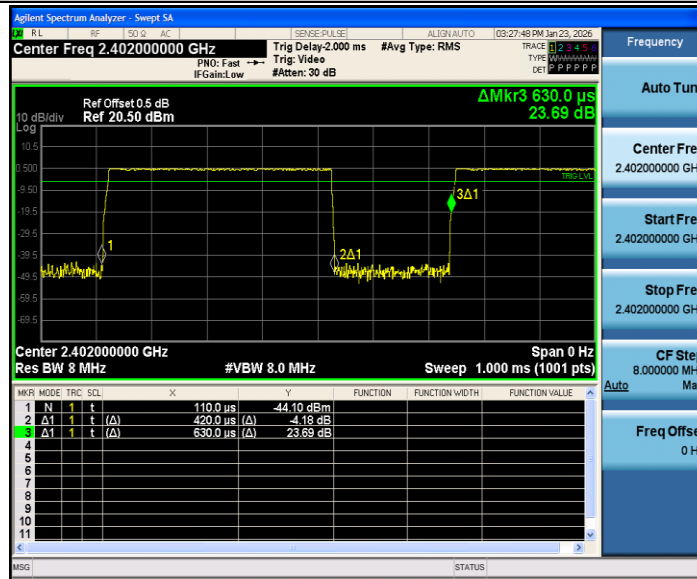
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.42	0.63	0.6667	66.67	1.76	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.42	0.63	0.6667	66.67	1.76	---	---

Test Graphs

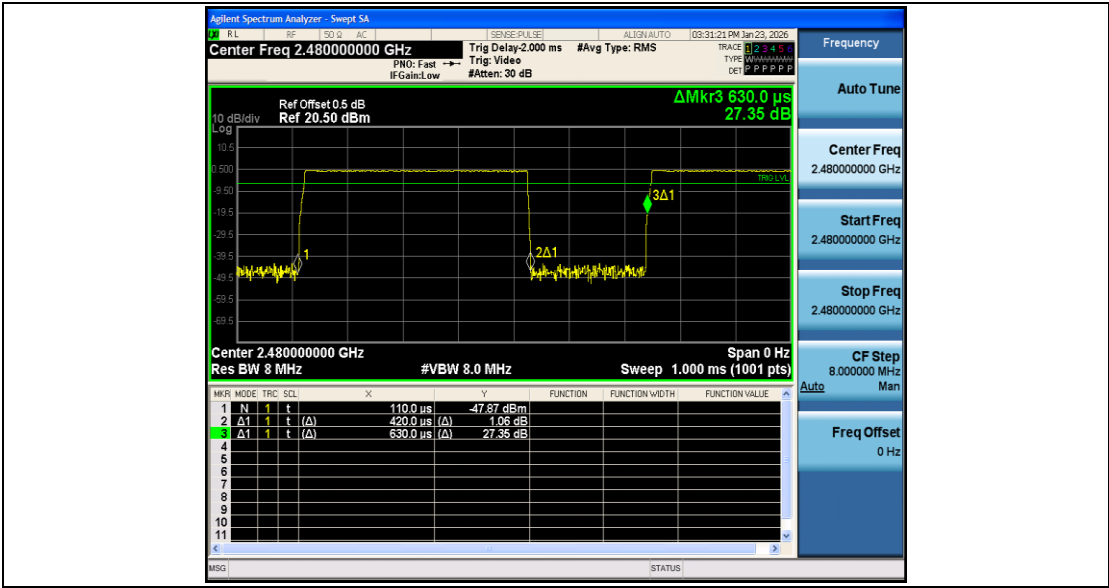
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



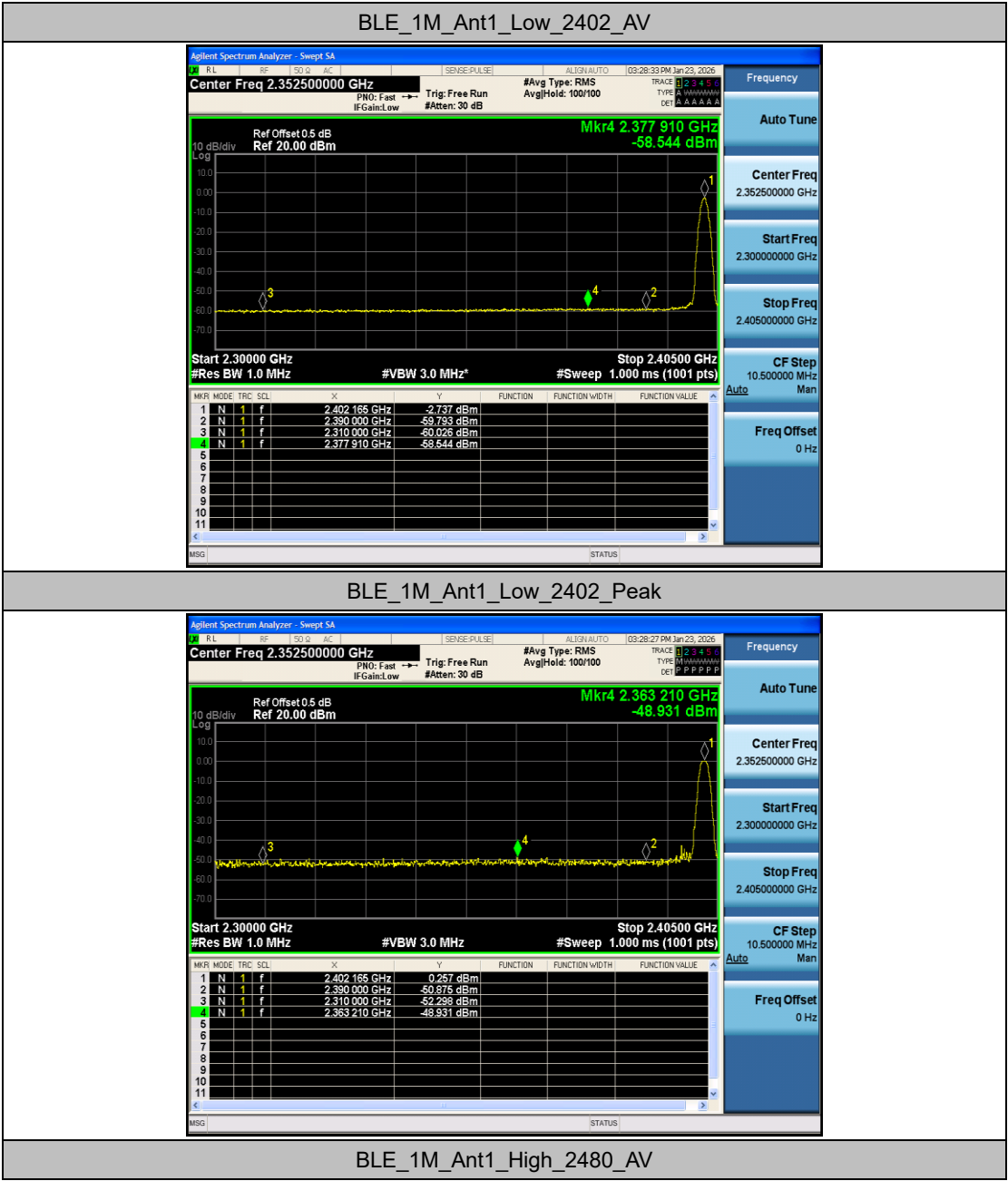
Appendix H: Emissions in Restricted Bands

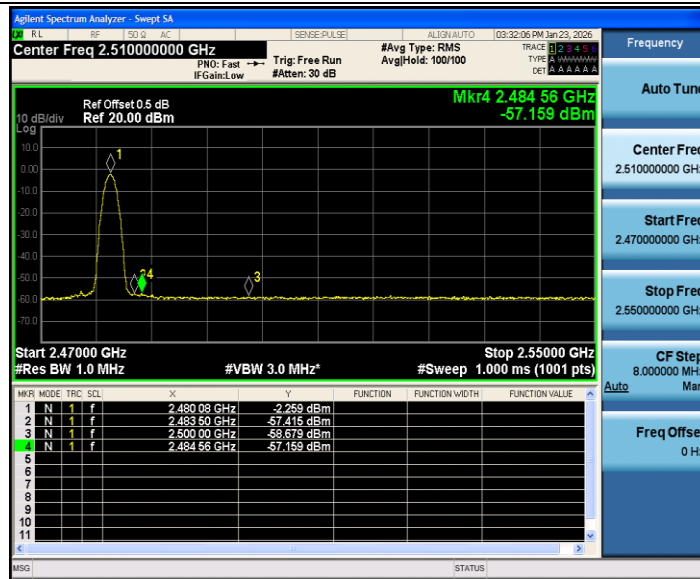
Test Result

TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.03	2.00	1.76	38.93	≤54	PASS
				AV	2377.910	-58.54	2.00	1.76	40.42	≤54	PASS
				AV	2390.000	-59.79	2.00	1.76	39.17	≤54	PASS
				Peak	2310.000	-52.3	2.00	0.00	44.90	≤74	PASS
				Peak	2363.210	-48.93	2.00	0.00	48.27	≤74	PASS
				Peak	2390.000	-50.88	2.00	0.00	46.32	≤74	PASS
		High	2480	AV	2483.500	-57.42	2.00	1.76	41.54	≤54	PASS
				AV	2484.560	-57.16	2.00	1.76	41.80	≤54	PASS
				AV	2500.000	-58.68	2.00	1.76	40.28	≤54	PASS
				Peak	2483.500	-48.57	2.00	0.00	48.63	≤74	PASS
				Peak	2484.800	-43.48	2.00	0.00	53.72	≤74	PASS
				Peak	2500.000	-51.86	2.00	0.00	45.34	≤74	PASS

Note: The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





BLE_1M_Ant1_High_2480_Peak

