

FCC Appendix RF Test Data for BLE

FCC ID : 2BUD4-LC08

Company : Henan Ligan Qicheyongpin Youxiangongsi

EUT : Bluetooth remote shutter

Model Number : LC08

Report No. : CTA26010400901

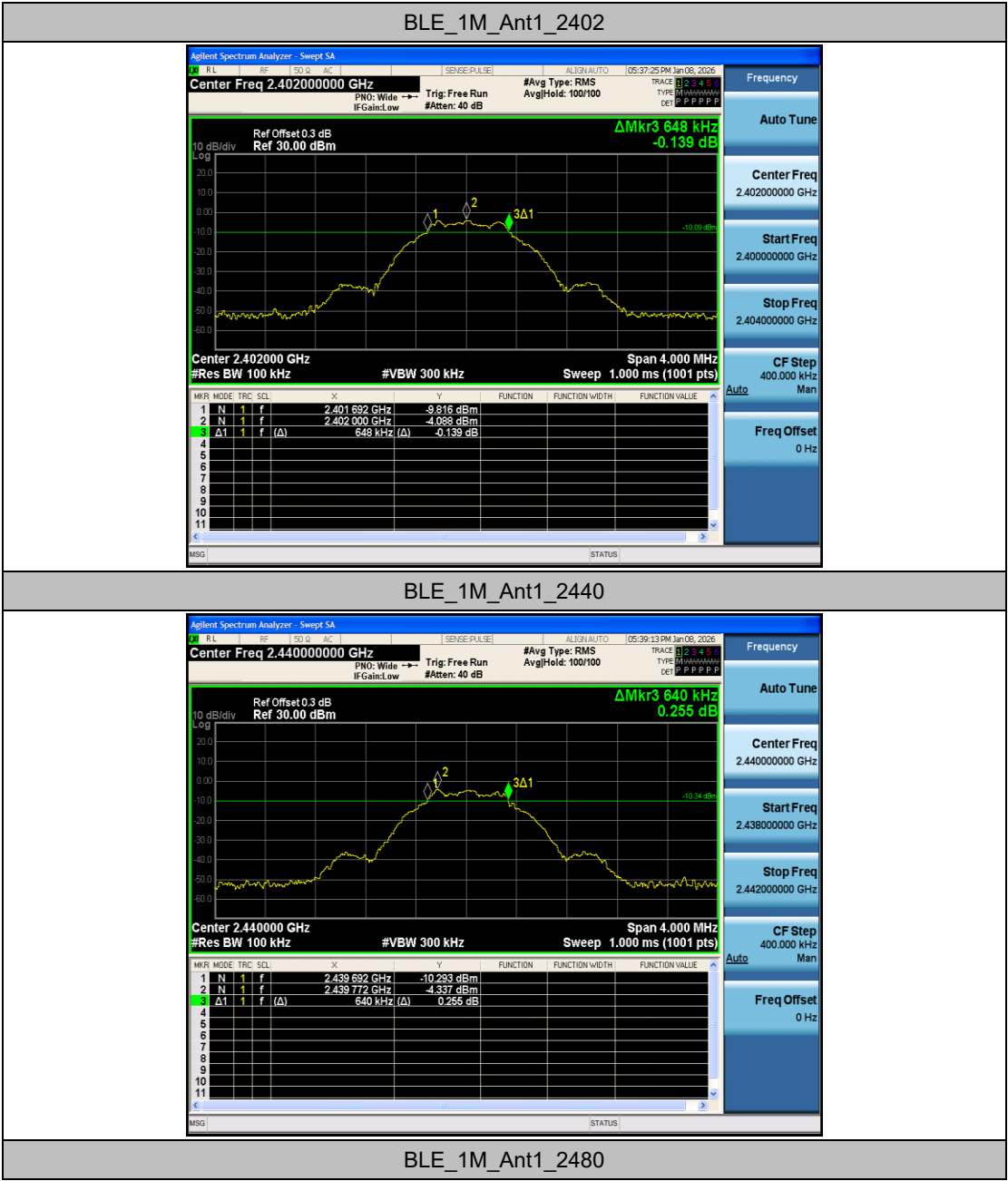
Reviewed By : Eric Wang

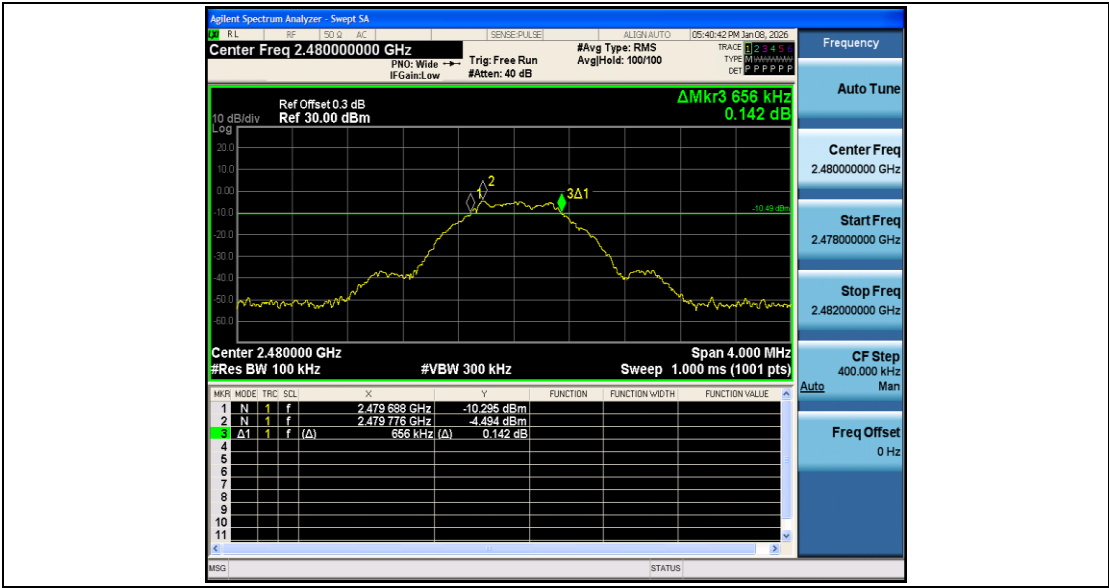
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.648	2401.692	2402.340	0.5	PASS
		2440	0.640	2439.692	2440.332	0.5	PASS
		2480	0.656	2479.688	2480.344	0.5	PASS

Test Graphs





Appendix B: Occupied Channel Bandwidth

Test Result

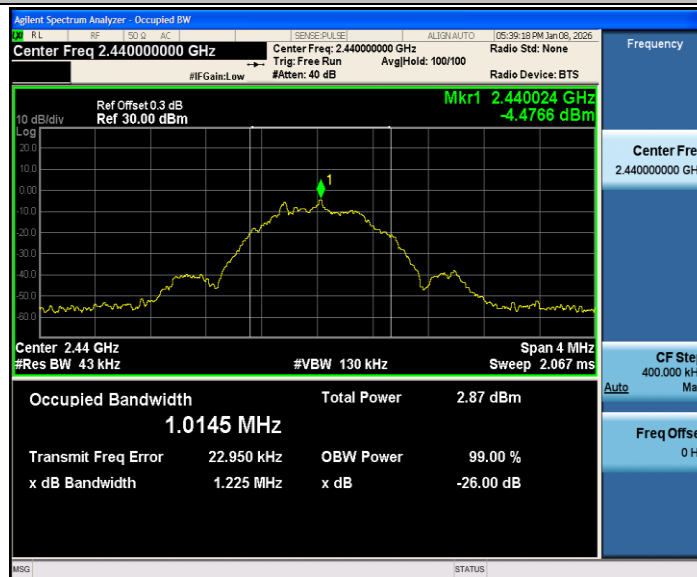
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0067	2401.5215	2402.5282	---	---
		2440	1.0145	2439.5157	2440.5302	---	---
		2480	1.0117	2479.5193	2480.5310	---	---

Test Graphs

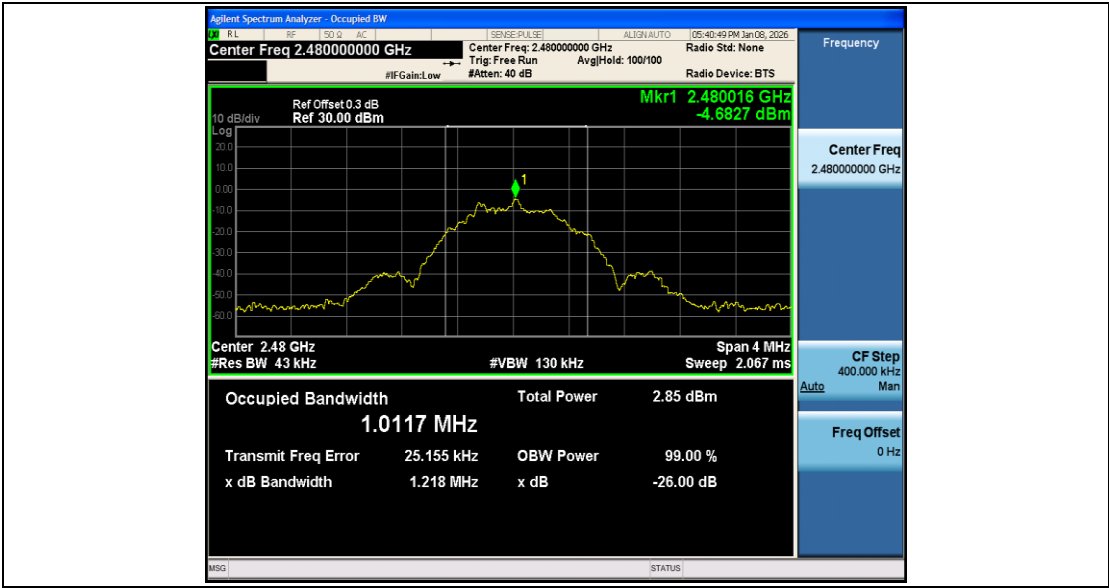
BLE_1M_Ant1_2402



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	-3.31	≤30	PASS
		2440	-3.64	≤30	PASS
		2480	-3.69	≤30	PASS

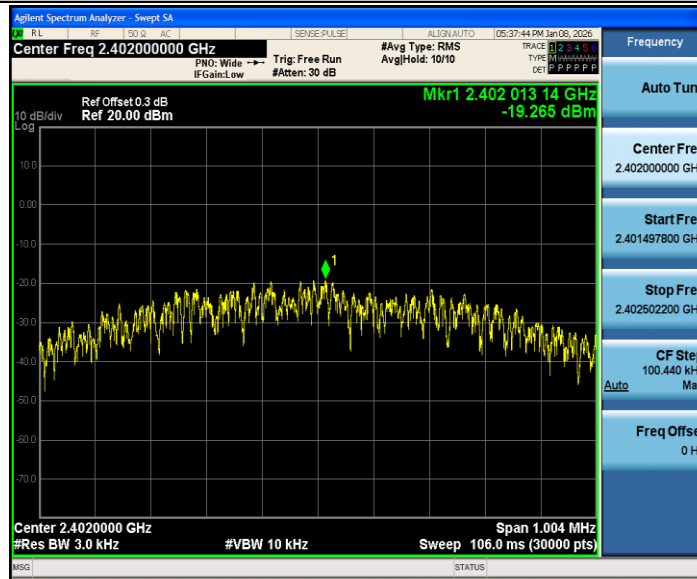
Appendix D: Maximum power spectral density

Test Result

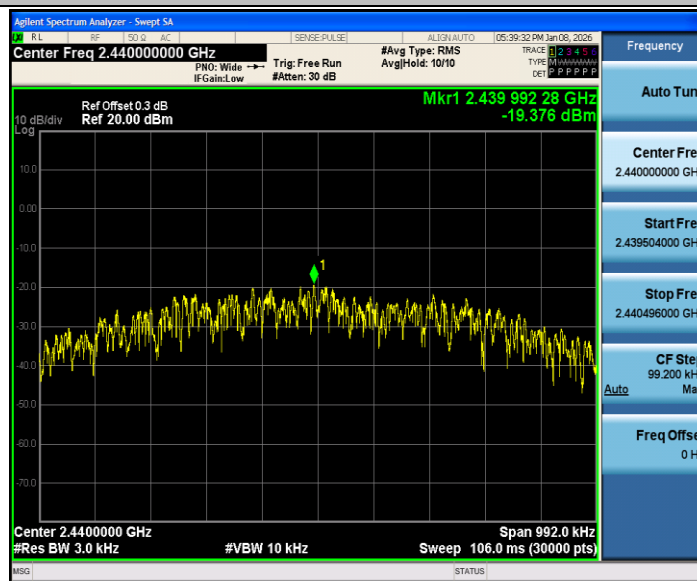
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.27	≤8.00	PASS
		2440	-19.38	≤8.00	PASS
		2480	-19.57	≤8.00	PASS

Test Graphs

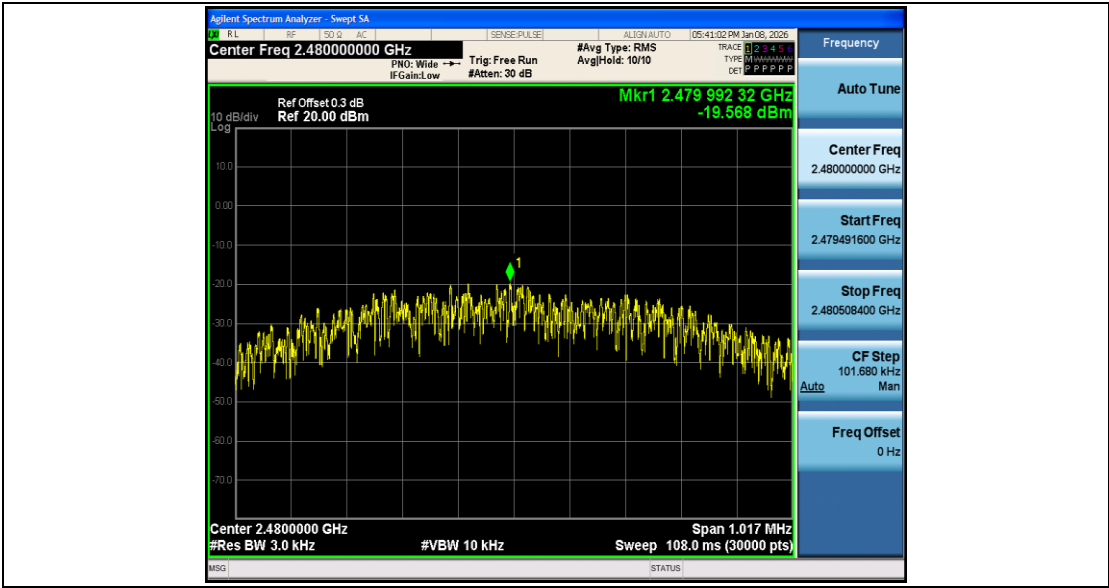
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



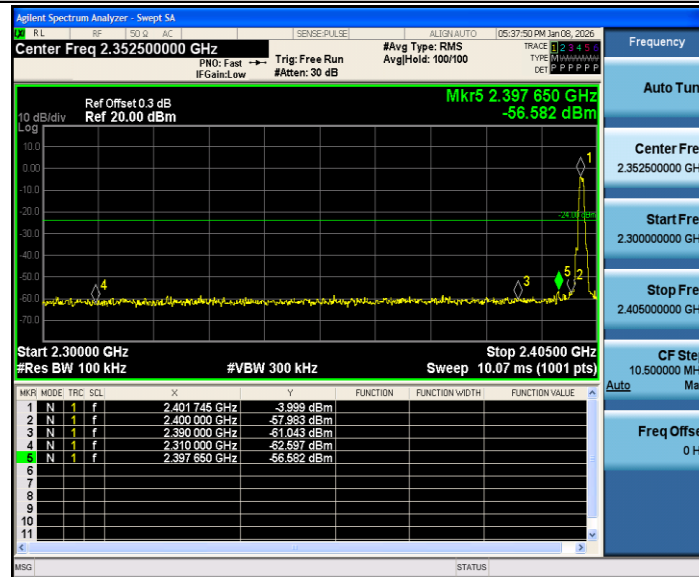
Appendix E: Band edge measurements

Test Result

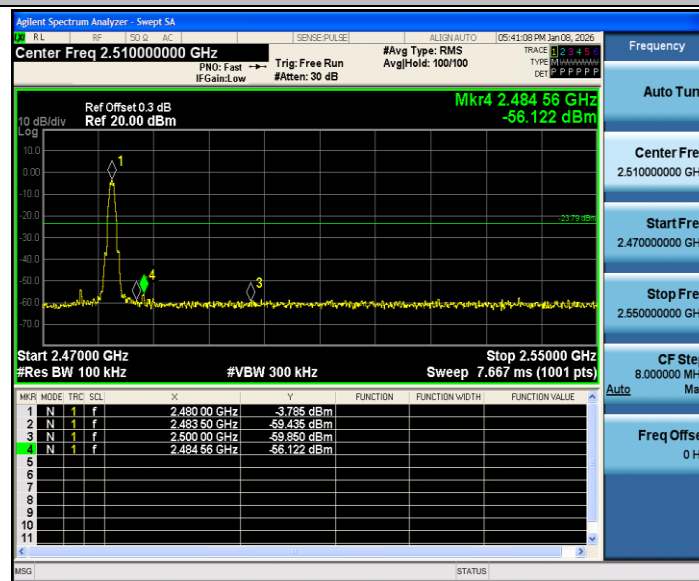
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-4.00	-56.58	≤-24	PASS
		High	2480	-3.79	-56.12	≤-23.79	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

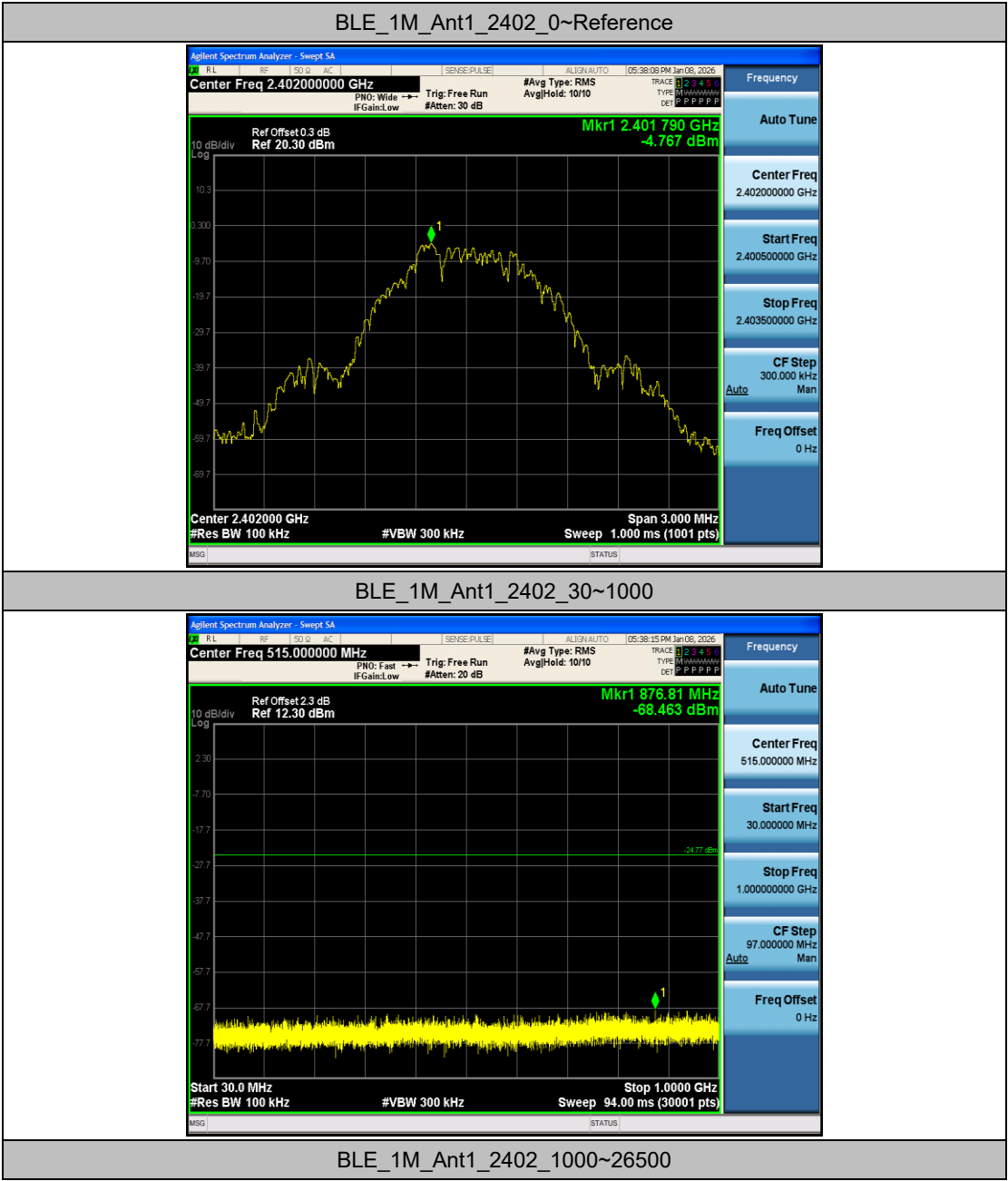


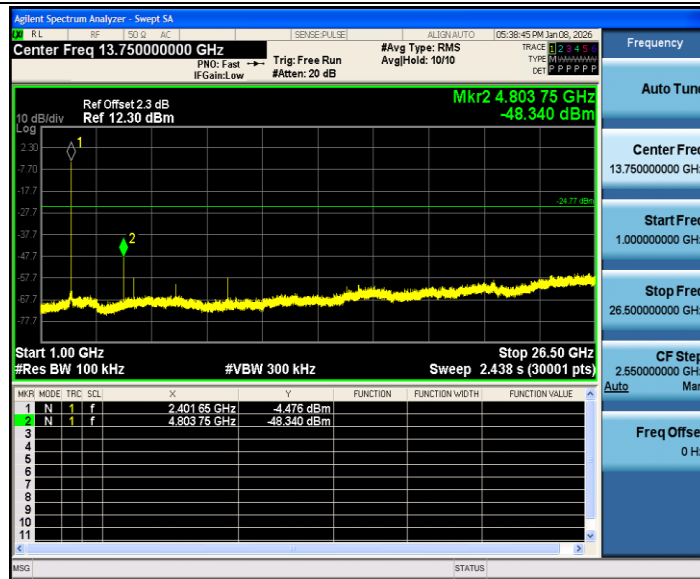
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.77	-4.77	---	PASS
			30~1000	-4.77	-68.46	≤-24.77	PASS
			1000~26500	-4.77	-48.34	≤-24.77	PASS
		2440	Reference	-4.48	-4.48	---	PASS
			30~1000	-4.48	-68.1	≤-24.48	PASS
			1000~26500	-4.48	-49.74	≤-24.48	PASS
		2480	Reference	-5.20	-5.20	---	PASS
			30~1000	-5.20	-68.11	≤-25.2	PASS
			1000~26500	-5.20	-47.38	≤-25.2	PASS

Test Graphs

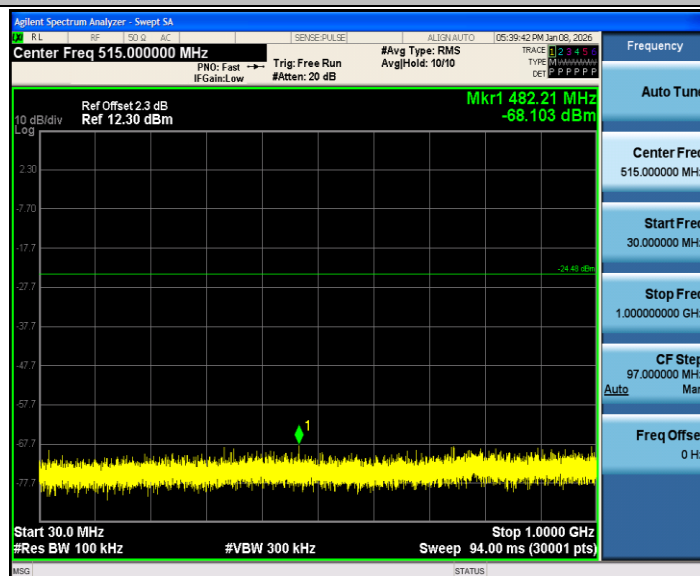




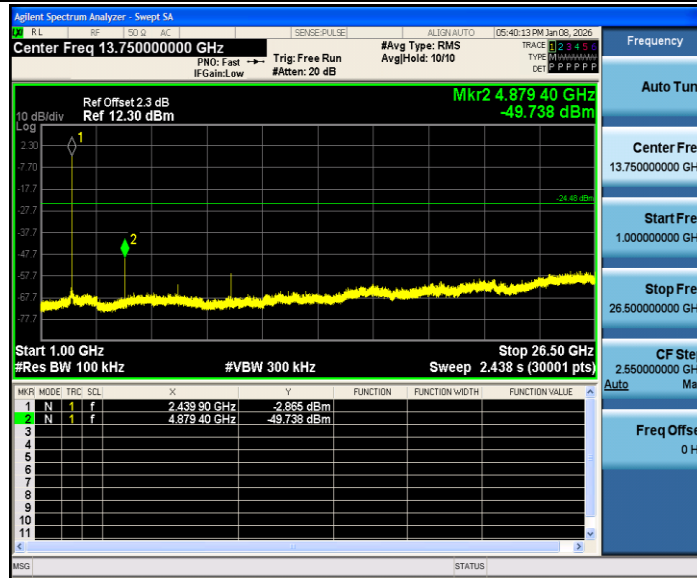
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



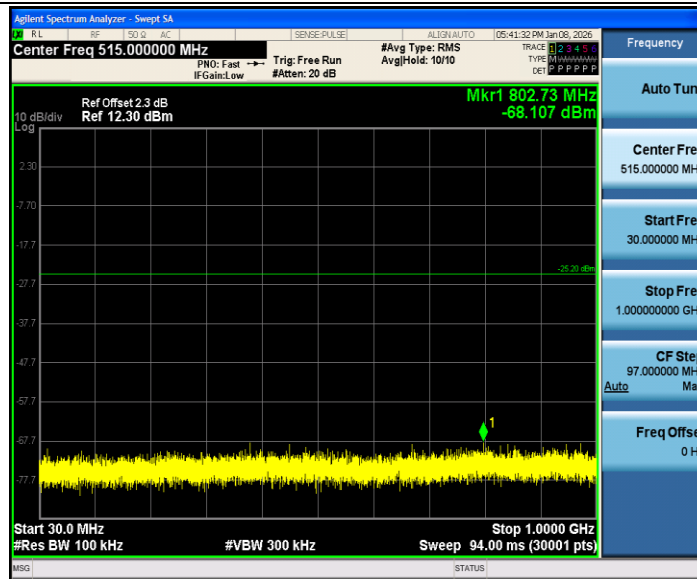
BLE_1M_Ant1_2440_1000~26500



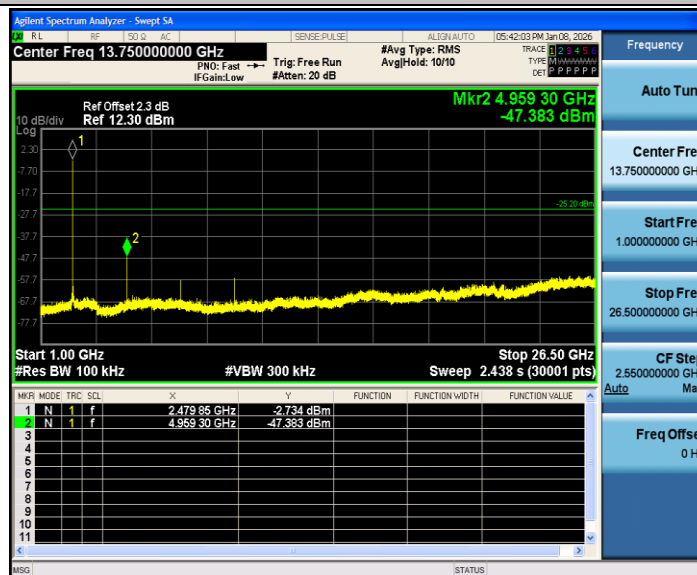
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

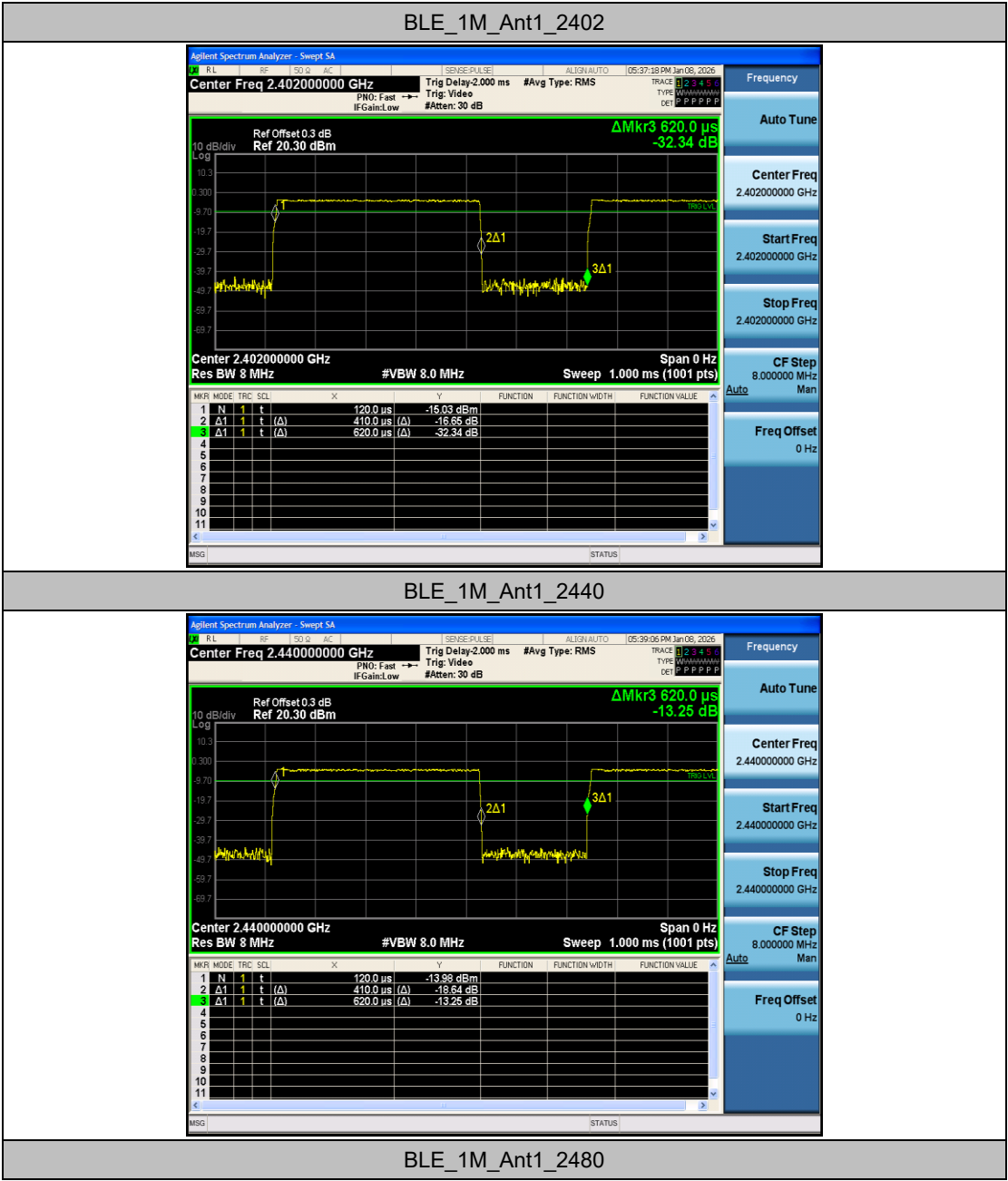


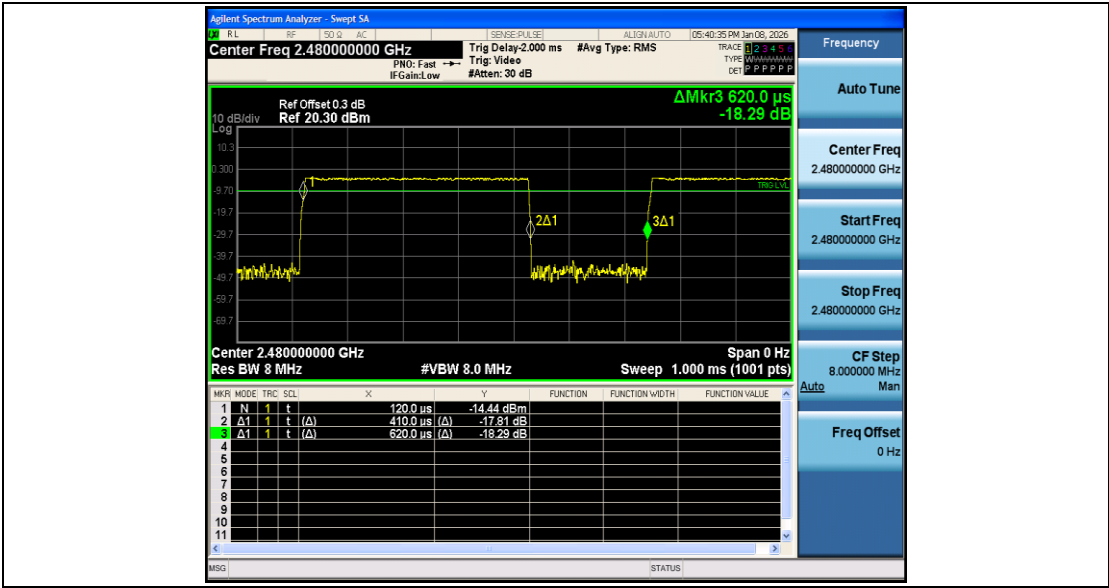
Appendix G: Duty Cycle

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





Appendix H: Emissions in Restricted Bands

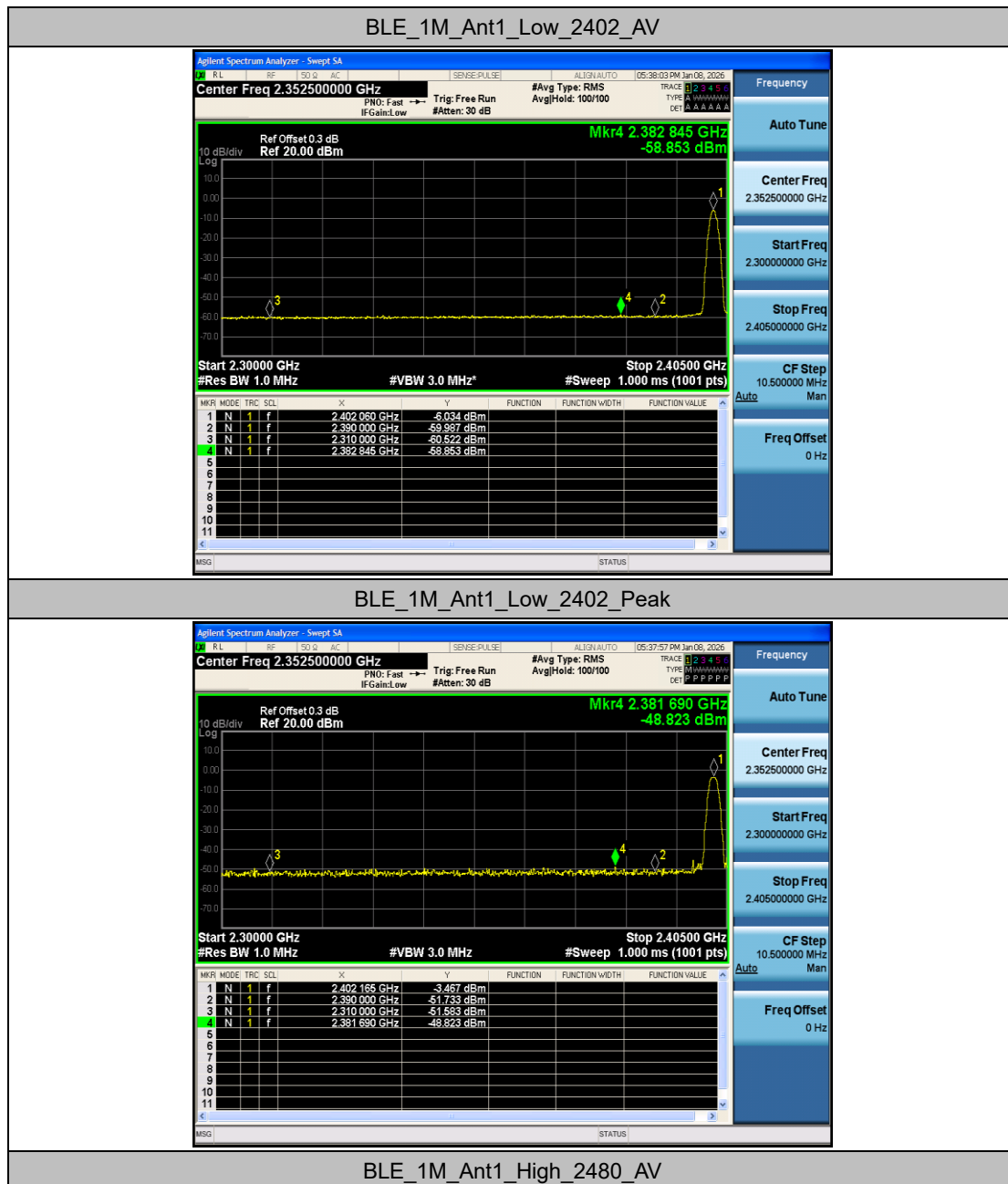
Test Result

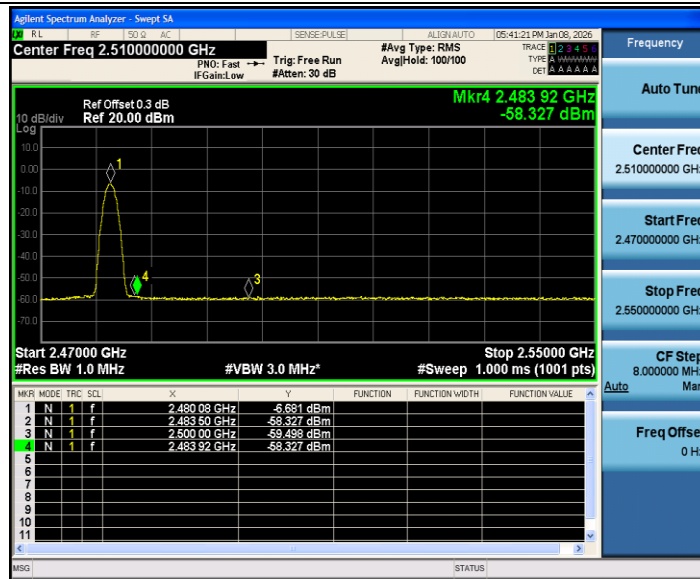
TestMode	Antenna	Channel Name	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.52	4.41	1.80	40.89	≤54	PASS
				AV	2382.845	-58.85	4.41	1.80	42.56	≤54	PASS
				AV	2390.000	-59.99	4.41	1.80	41.42	≤54	PASS
				Peak	2310.000	-51.58	4.41	0.00	48.03	≤74	PASS
				Peak	2381.690	-48.82	4.41	0.00	50.79	≤74	PASS
				Peak	2390.000	-51.73	4.41	0.00	47.88	≤74	PASS
		High	2480	AV	2483.500	-58.33	4.41	1.80	43.08	≤54	PASS
				AV	2483.920	-58.33	4.41	1.80	43.08	≤54	PASS
				AV	2500.000	-59.5	4.41	1.80	41.91	≤54	PASS
				Peak	2483.500	-49.67	4.41	0.00	49.94	≤74	PASS
				Peak	2484.960	-47.21	4.41	0.00	52.4	≤74	PASS
				Peak	2500.000	-51.32	4.41	0.00	48.29	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. 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

