

FCC Appendix RF Test Data for BLE

FCC ID : 2AZW2-T50MPLUS

Company : Beijing Supvan Information Technology Co., Ltd.

EUT : Label Printer

Model Number : T50M Plus

Report No. : CTA26041604501

Reviewed By : Eric Wang

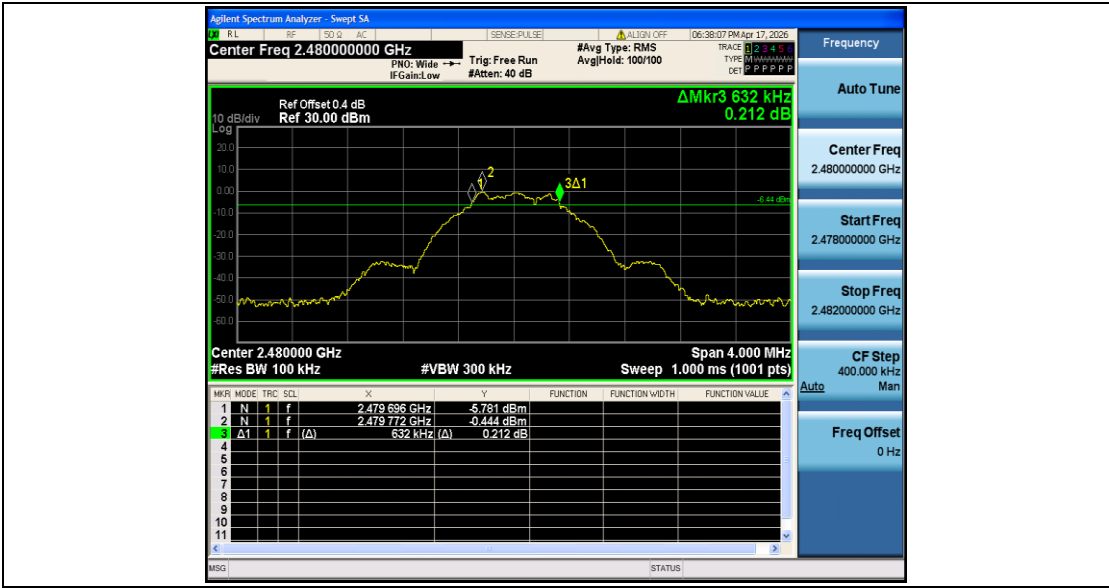
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.644	2401.696	2402.340	0.5	PASS
		2440	0.648	2439.696	2440.344	0.5	PASS
		2480	0.632	2479.696	2480.328	0.5	PASS

Test Graphs



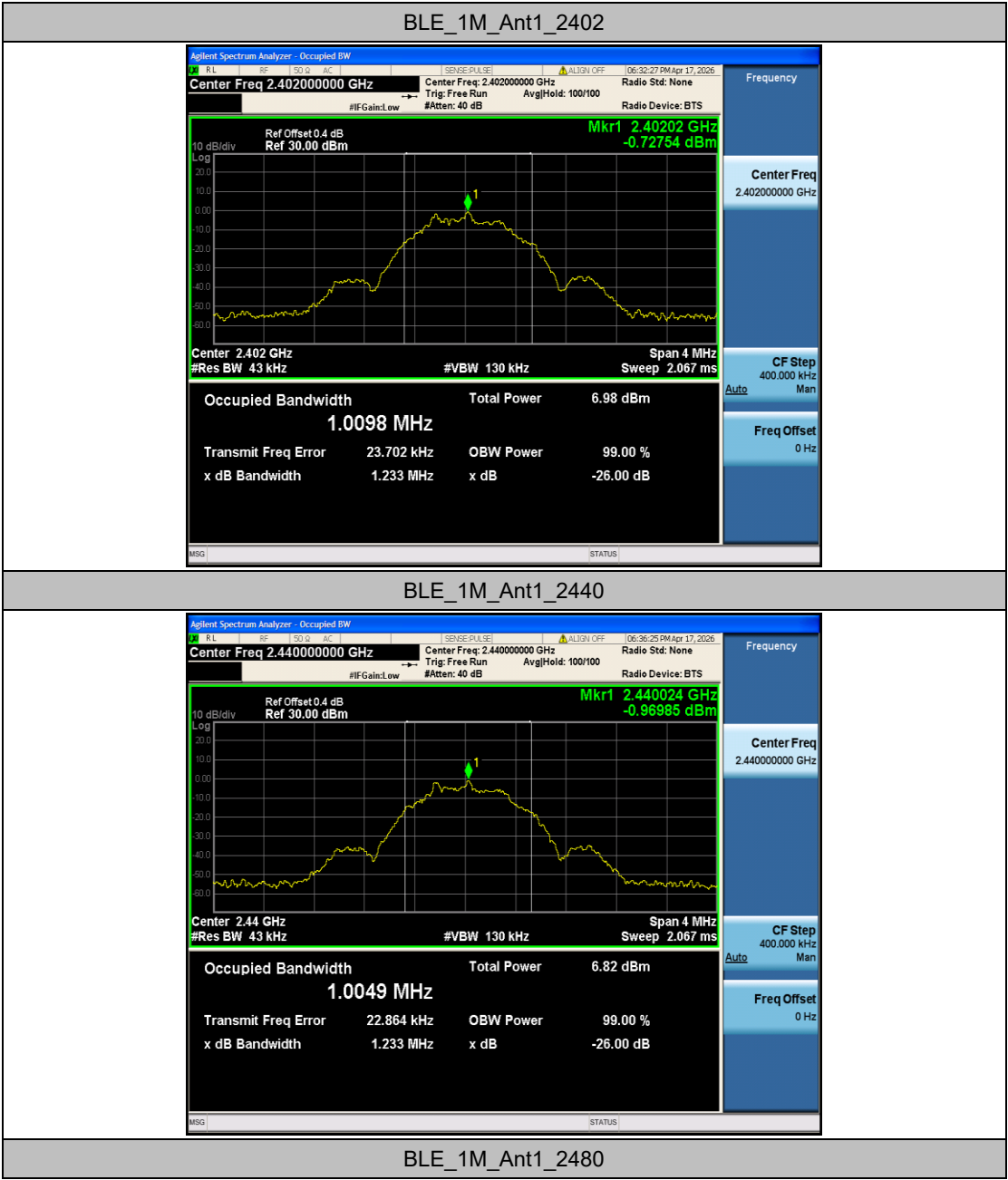


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0098	2401.5188	2402.5286	---	---
		2440	1.0049	2439.5204	2440.5253	---	---
		2480	1.0100	2479.5193	2480.5293	---	---

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	0.34	≤30	PASS
		2440	0.07	≤30	PASS
		2480	0.11	≤30	PASS

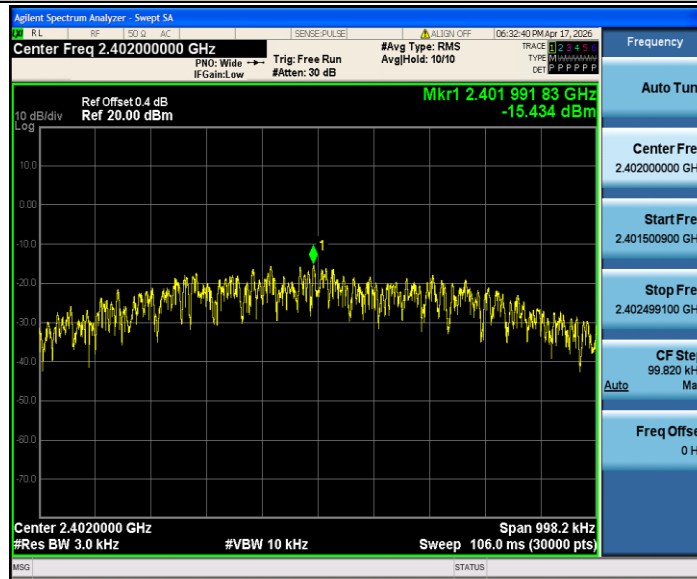
Appendix D: Maximum power spectral density

Test Result

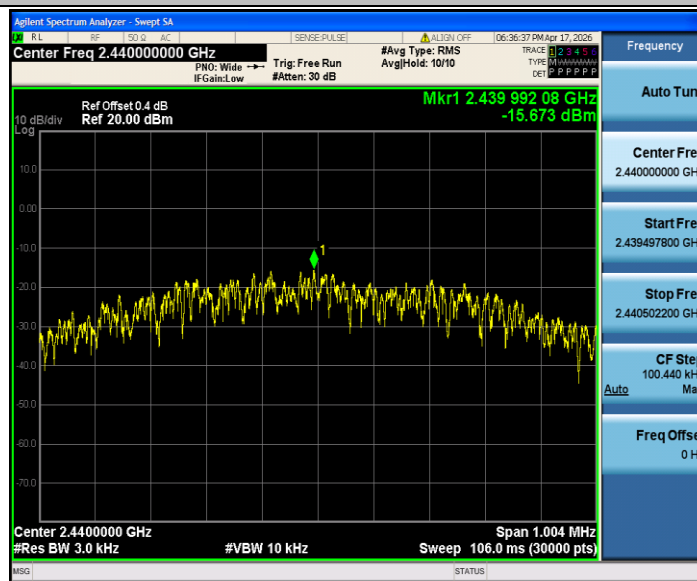
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.43	≤8.00	PASS
		2440	-15.67	≤8.00	PASS
		2480	-15.80	≤8.00	PASS

Test Graphs

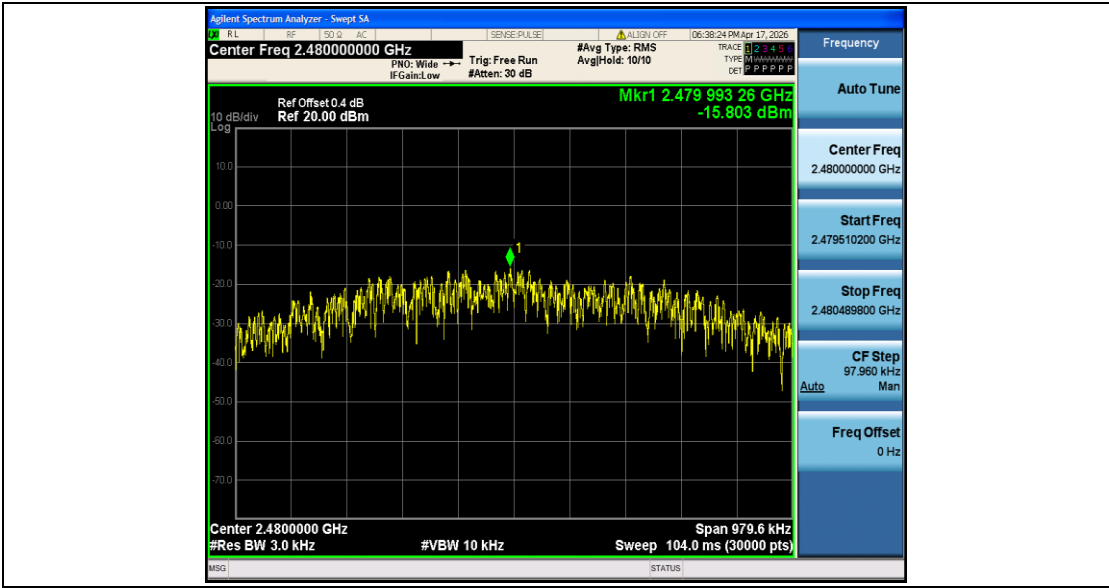
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



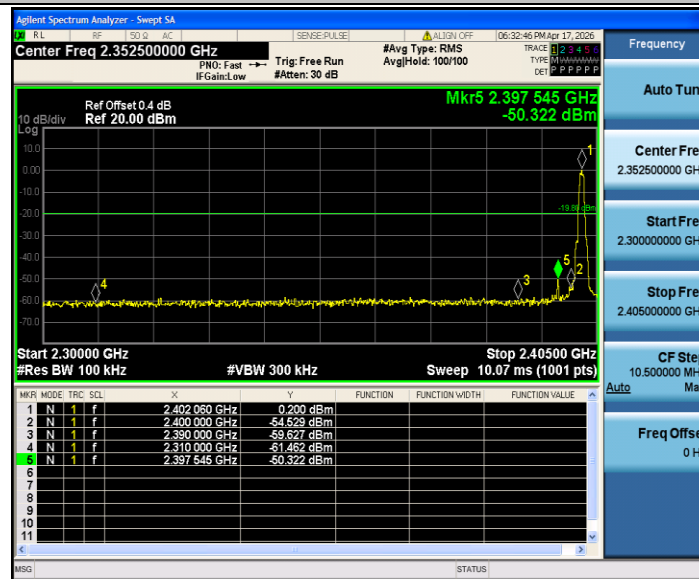
Appendix E: Band edge measurements

Test Result

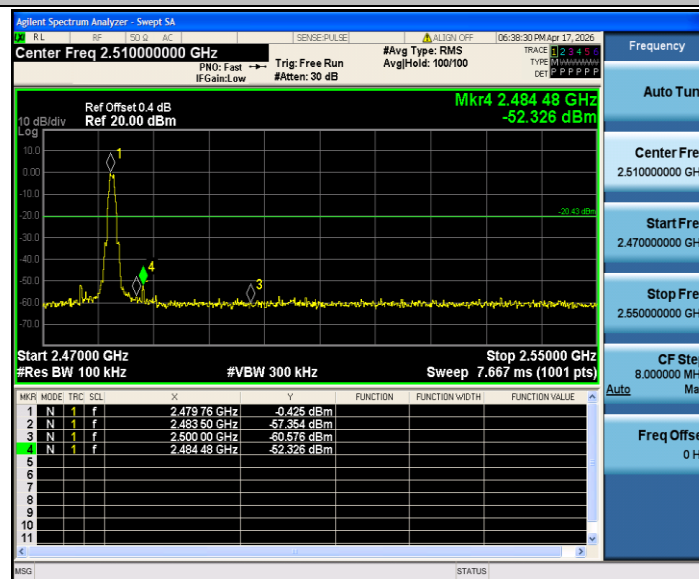
TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.20	-50.32	≤-19.8	PASS
		High	2480	-0.43	-52.33	≤-20.43	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

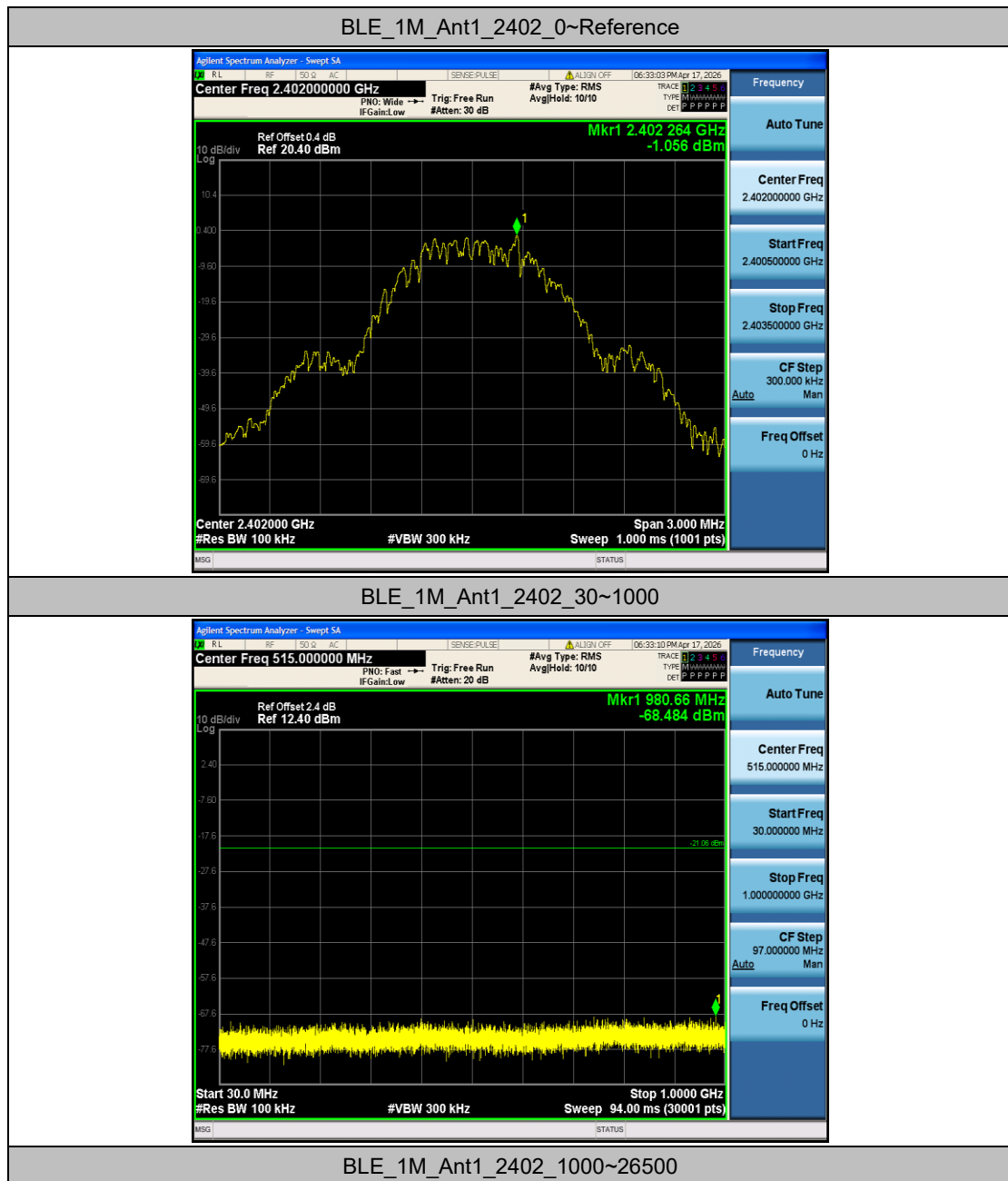


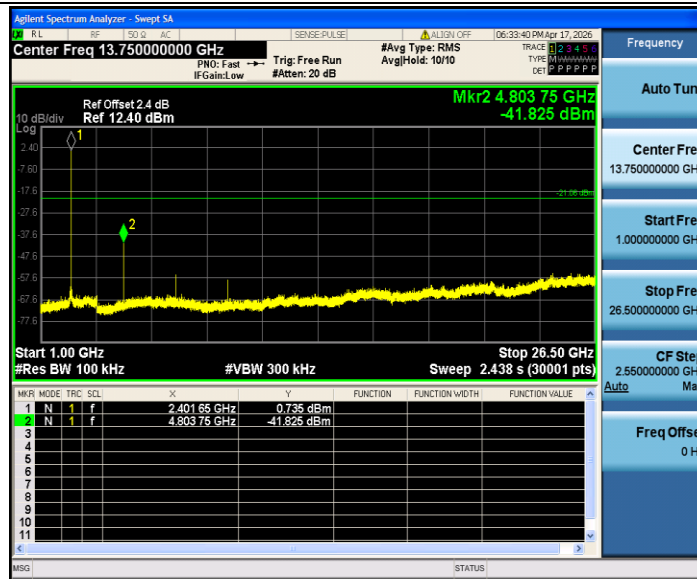
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.06	-1.06	---	PASS
			30~1000	-1.06	-68.48	≤-21.06	PASS
			1000~26500	-1.06	-41.83	≤-21.06	PASS
		2440	Reference	-0.84	-0.84	---	PASS
			30~1000	-0.84	-62.44	≤-20.84	PASS
			1000~26500	-0.84	-42.32	≤-20.84	PASS
		2480	Reference	-1.72	-1.72	---	PASS
			30~1000	-1.72	-68.47	≤-21.72	PASS
			1000~26500	-1.72	-44.02	≤-21.72	PASS

Test Graphs

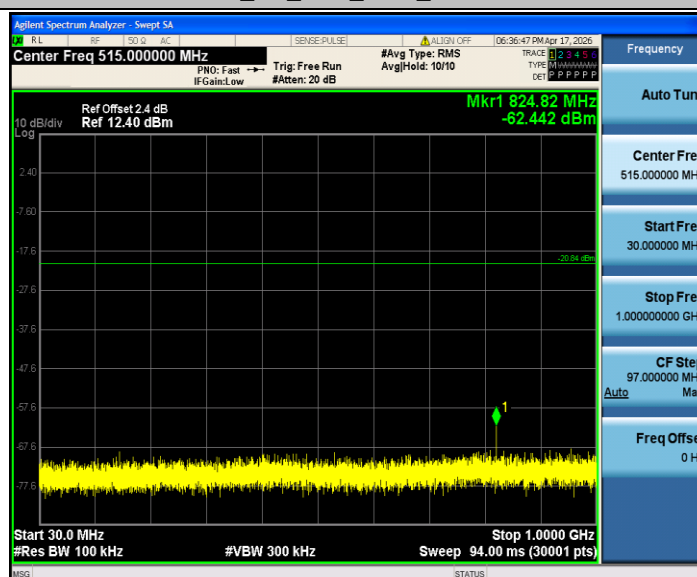




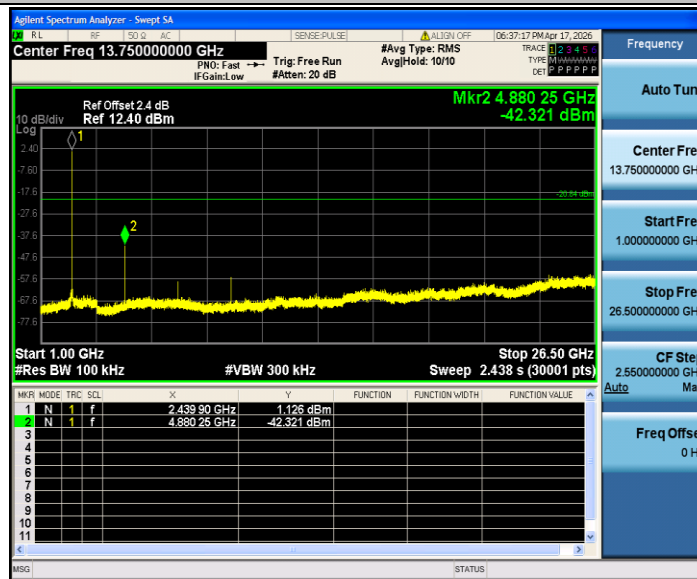
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



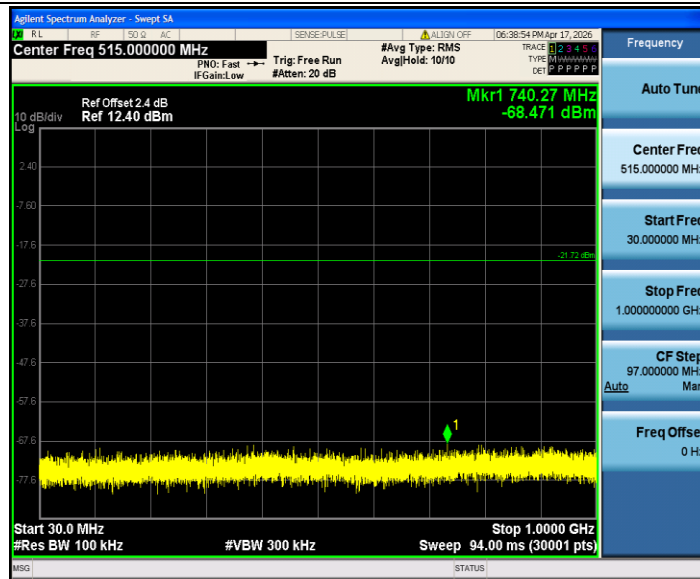
BLE_1M_Ant1_2440_1000~26500



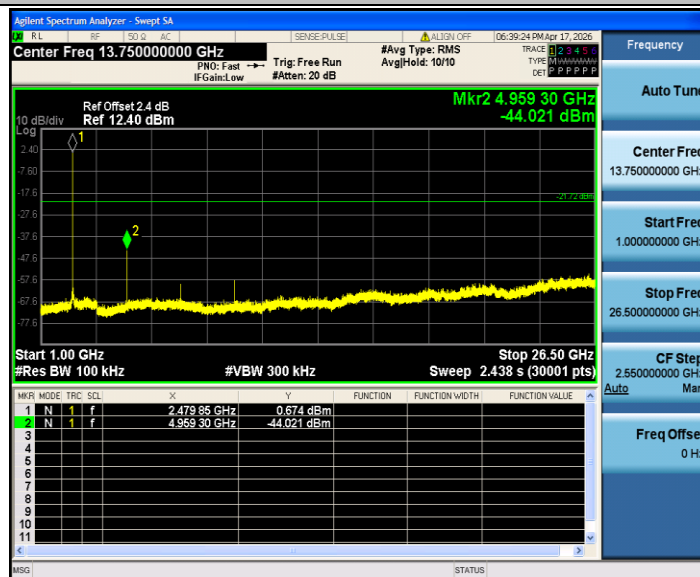
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

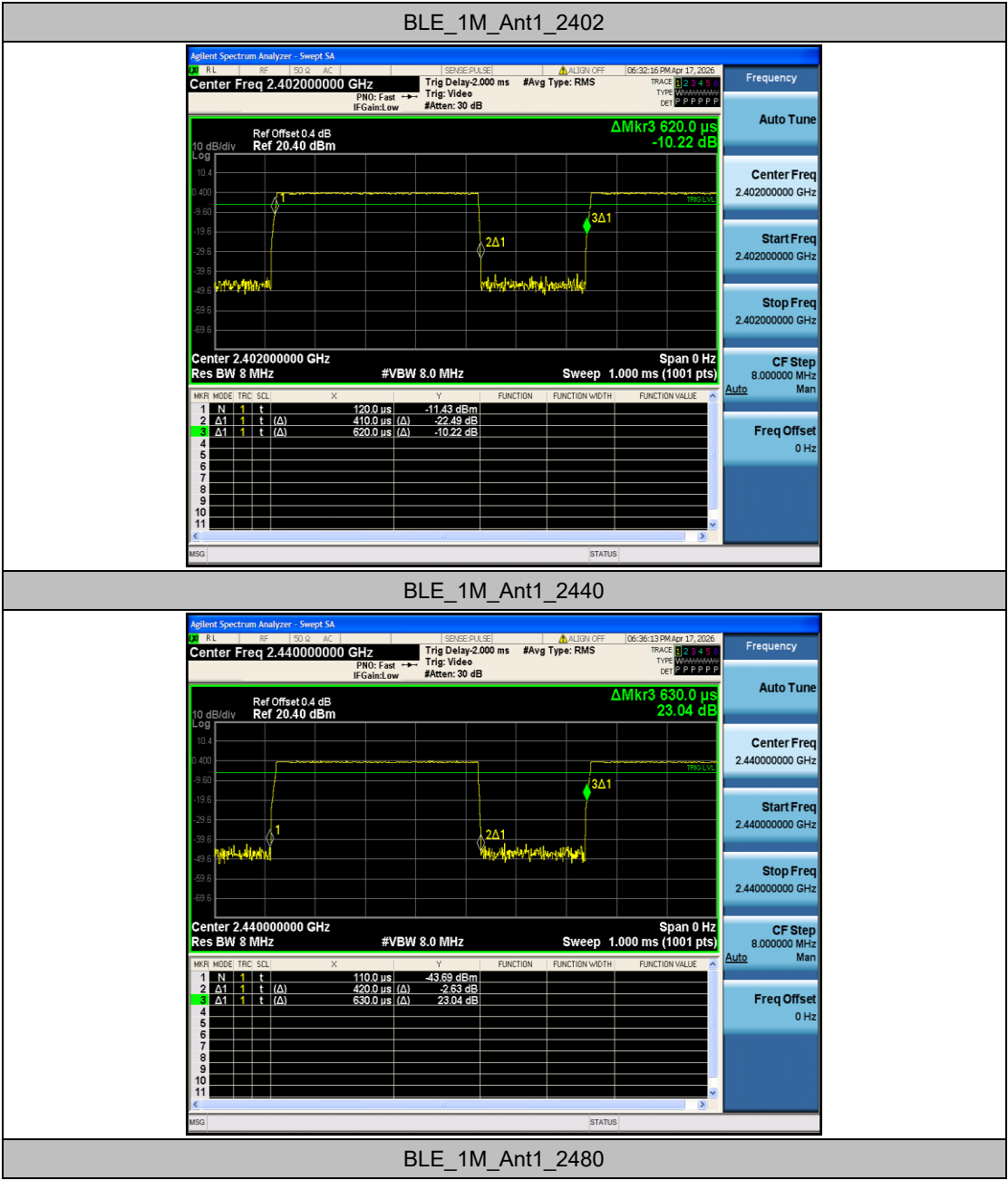


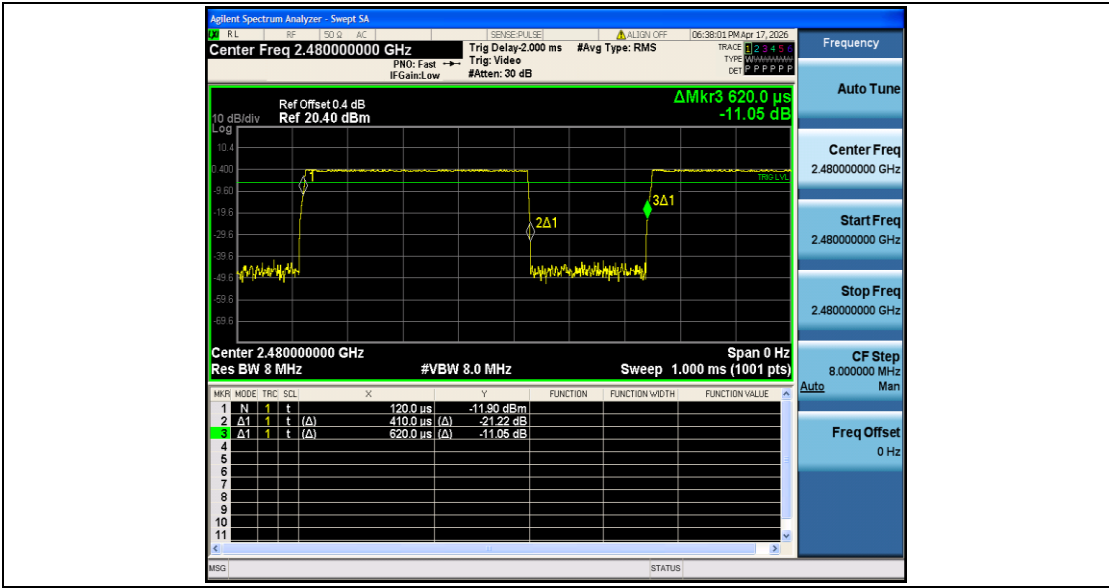
Appendix G: Duty Cycle

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	0.42	0.63	0.6667	66.67	1.76	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs





Appendix H: Emissions in Restricted Bands

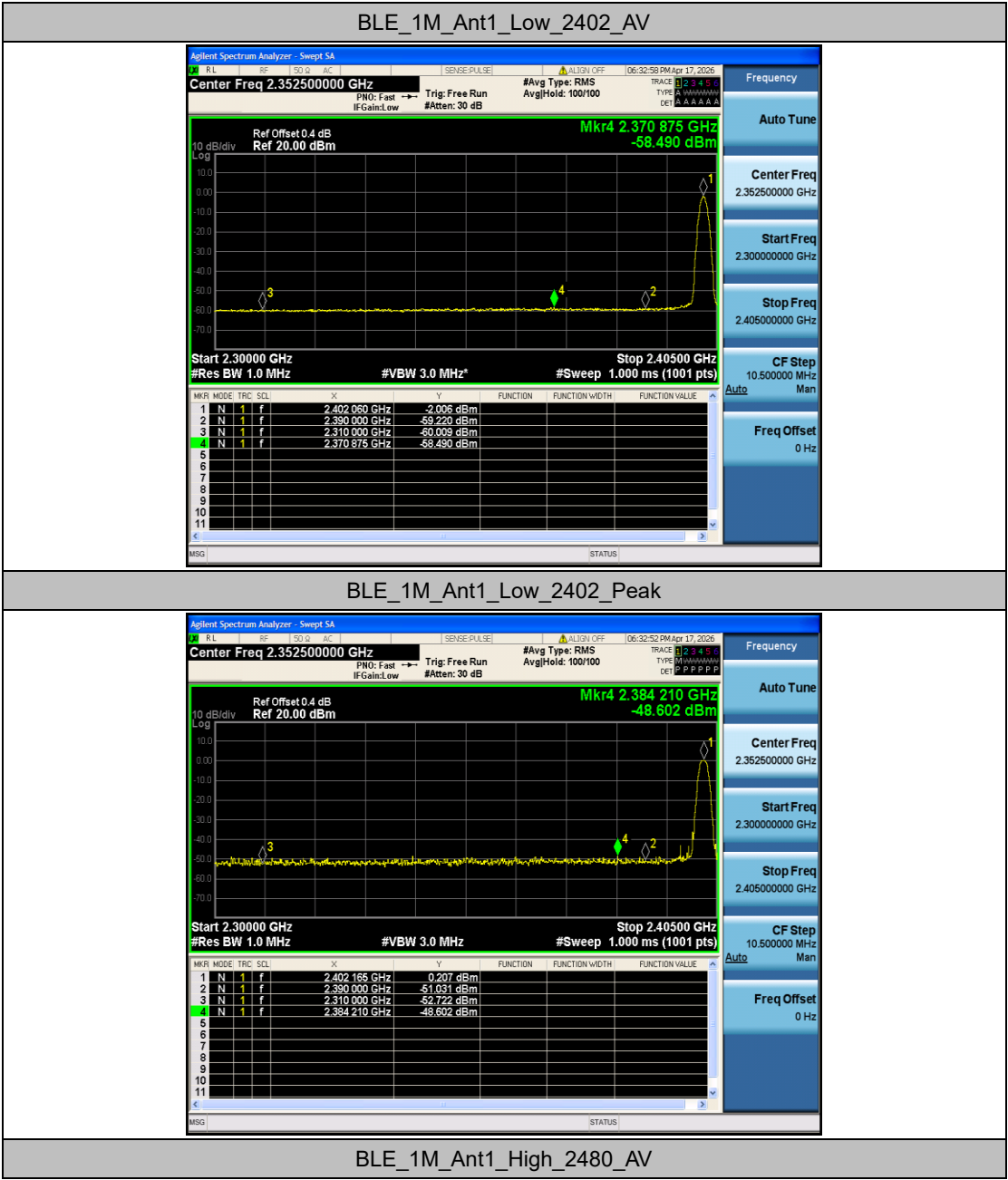
Test Result

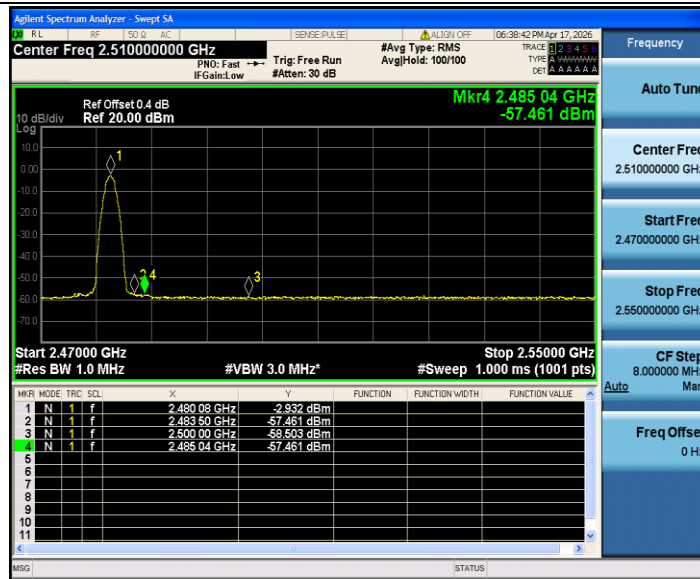
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.01	2.00	1.80	38.99	≤54	PASS
				AV	2370.875	-58.49	2.00	1.80	40.51	≤54	PASS
				AV	2390.000	-59.22	2.00	1.80	39.78	≤54	PASS
				Peak	2310.000	-52.72	2.00	0.00	44.48	≤74	PASS
				Peak	2384.210	-48.6	2.00	0.00	48.60	≤74	PASS
				Peak	2390.000	-51.03	2.00	0.00	46.17	≤74	PASS
		High	2480	AV	2483.500	-57.46	2.00	1.80	41.54	≤54	PASS
				AV	2485.040	-57.46	2.00	1.80	41.54	≤54	PASS
				AV	2500.000	-58.5	2.00	1.80	40.50	≤54	PASS
				Peak	2483.500	-50.1	2.00	0.00	47.10	≤74	PASS
				Peak	2486.320	-46.77	2.00	0.00	50.43	≤74	PASS
				Peak	2500.000	-51.25	2.00	0.00	45.95	≤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

