

FCC Appendix RF Test Data for BLE

FCC ID : 2A5ZU-BTA900M

Company : Shenzhen Baojia Battery Technology Co.,Ltd.

EUT : miffy humidifier

Model Number : BTA900M

Report No. : CTA26013100201

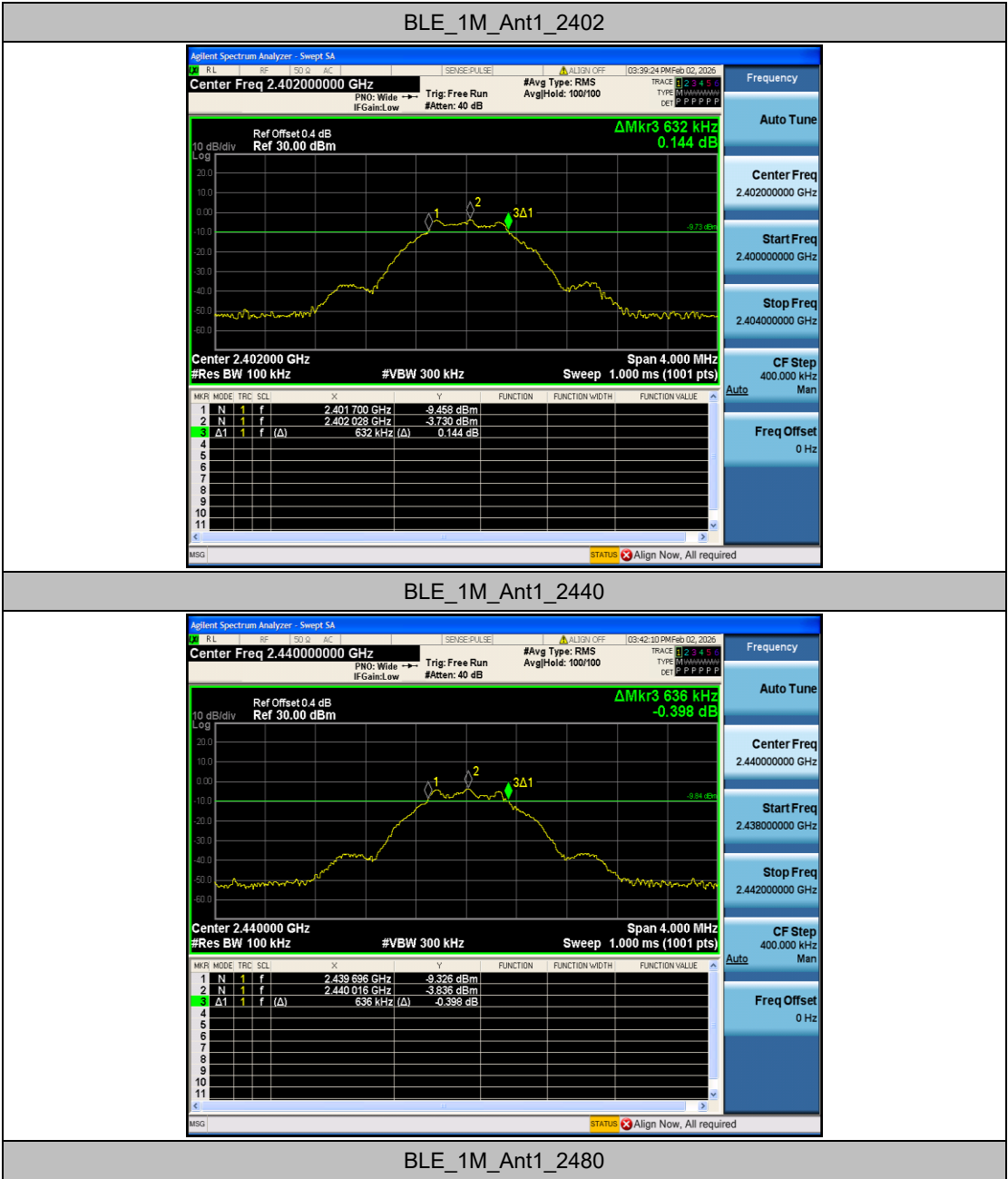
Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.632	2401.700	2402.332	0.5	PASS
		2440	0.636	2439.696	2440.332	0.5	PASS
		2480	0.620	2479.700	2480.320	0.5	PASS

Test Graphs



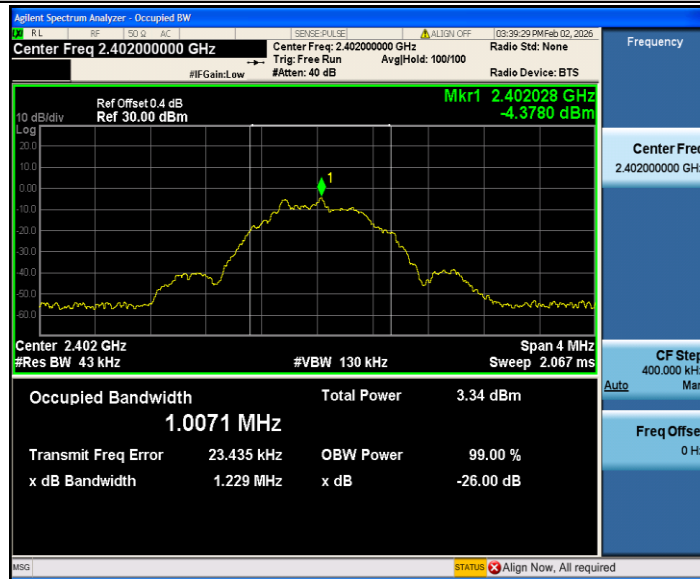
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0071	2401.5199	2402.5270	---	---
		2440	1.0100	2439.5183	2440.5283	---	---
		2480	1.0149	2479.5161	2480.5310	---	---

Test Graphs

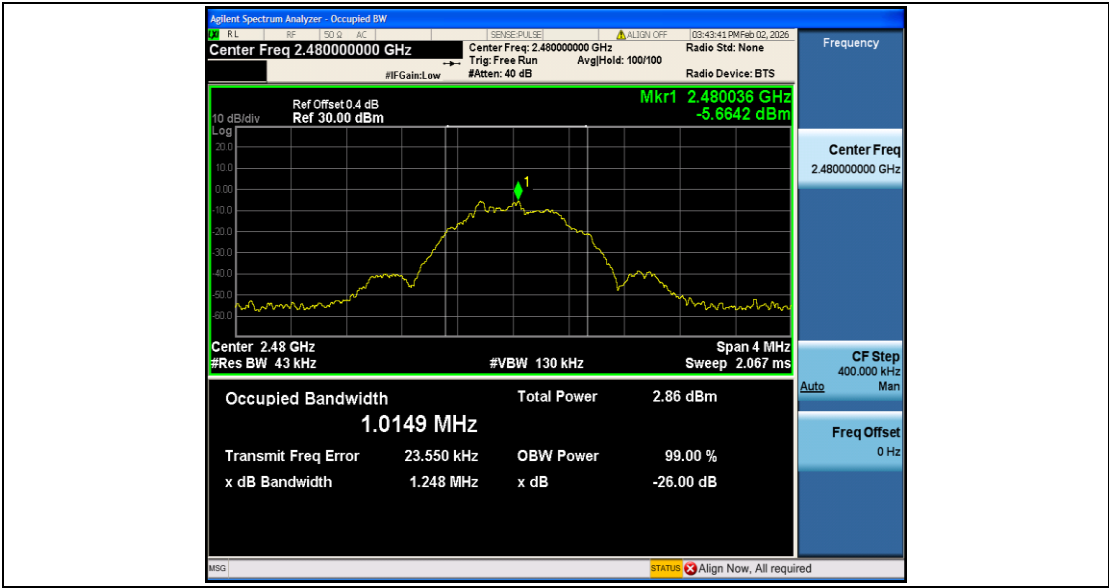
BLE_1M_Ant1_2402



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	-3.29	≤30	PASS
		2440	-3.55	≤30	PASS
		2480	-3.59	≤30	PASS

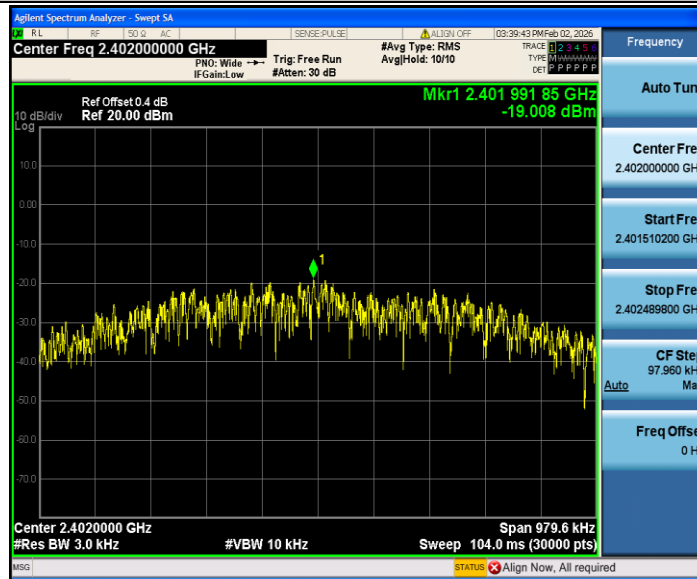
Appendix D: Maximum power spectral density

Test Result

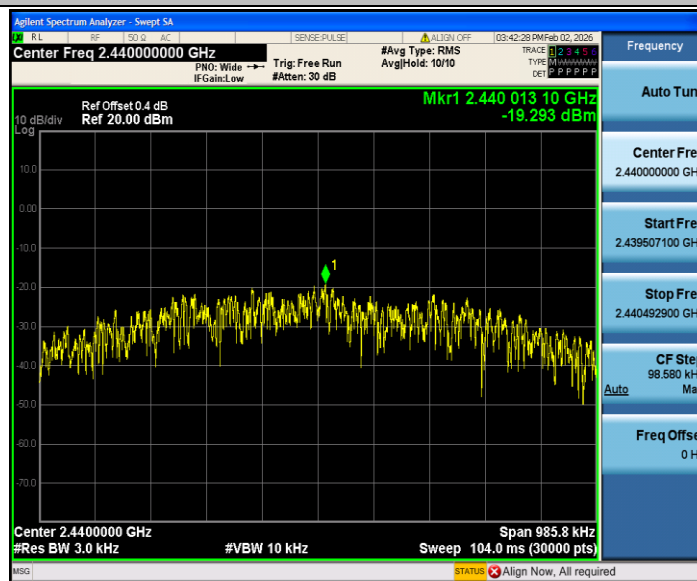
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.01	≤8.00	PASS
		2440	-19.29	≤8.00	PASS
		2480	-19.34	≤8.00	PASS

Test Graphs

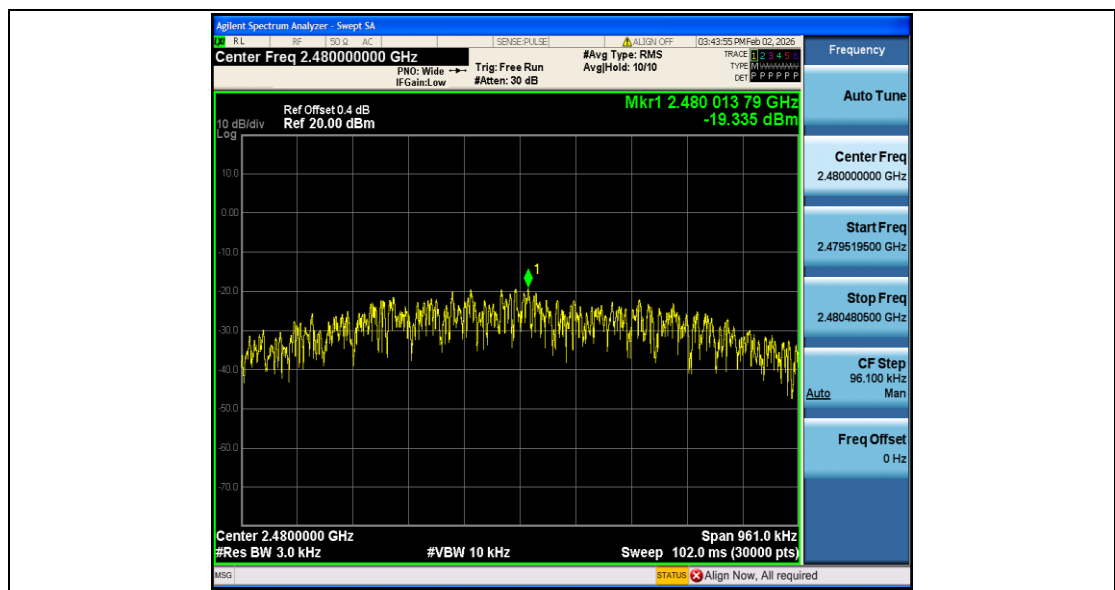
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



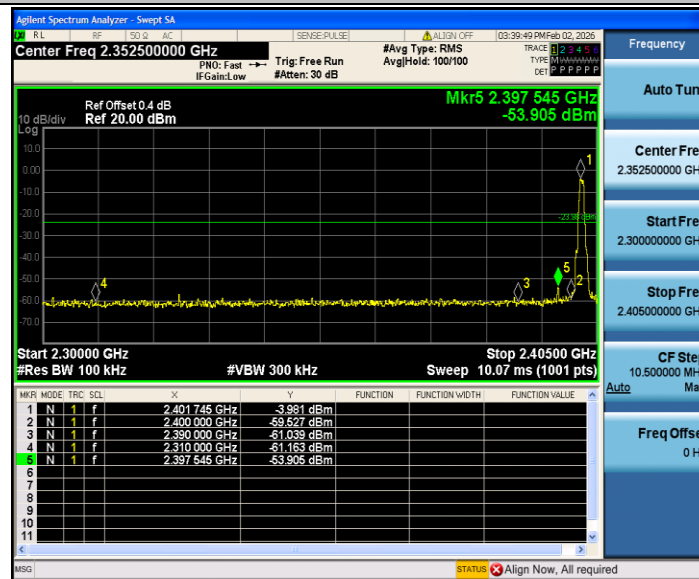
Appendix E: Band edge measurements

Test Result

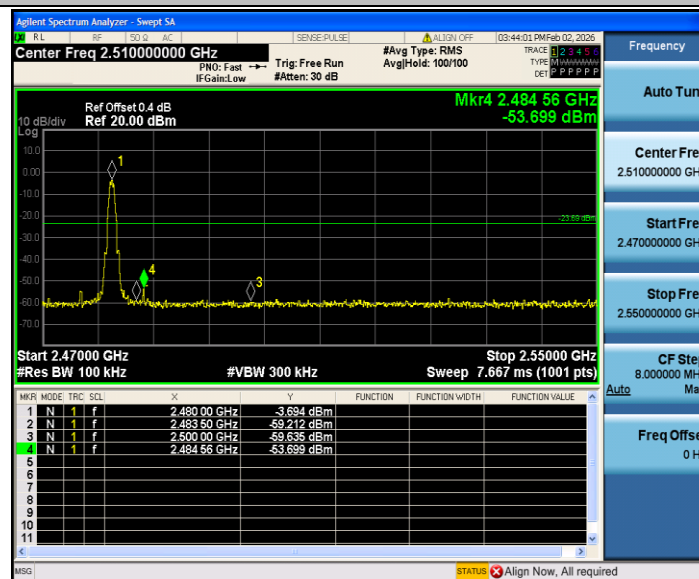
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-3.98	-53.91	≤-23.98	PASS
		High	2480	-3.69	-53.7	≤-23.69	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

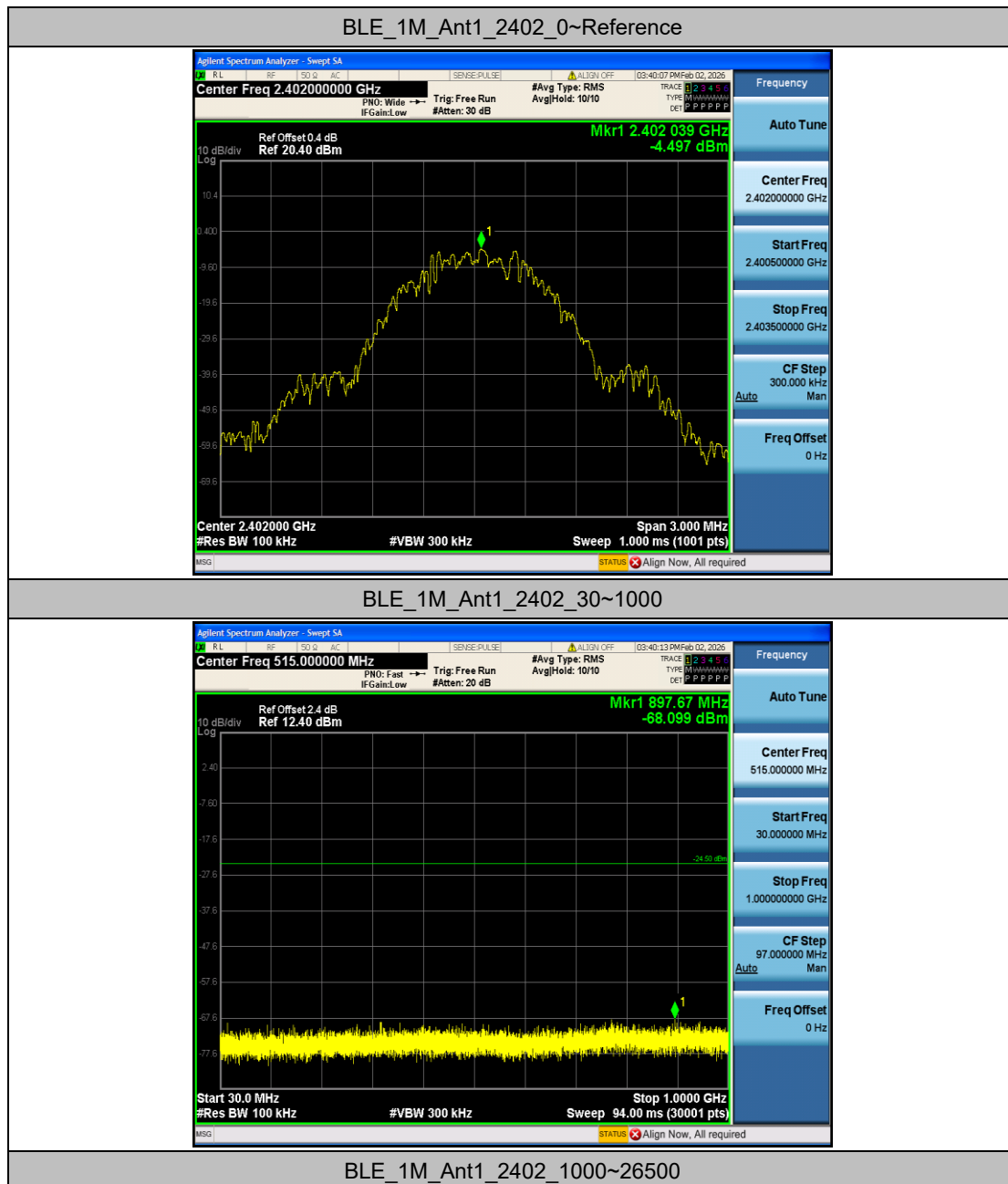


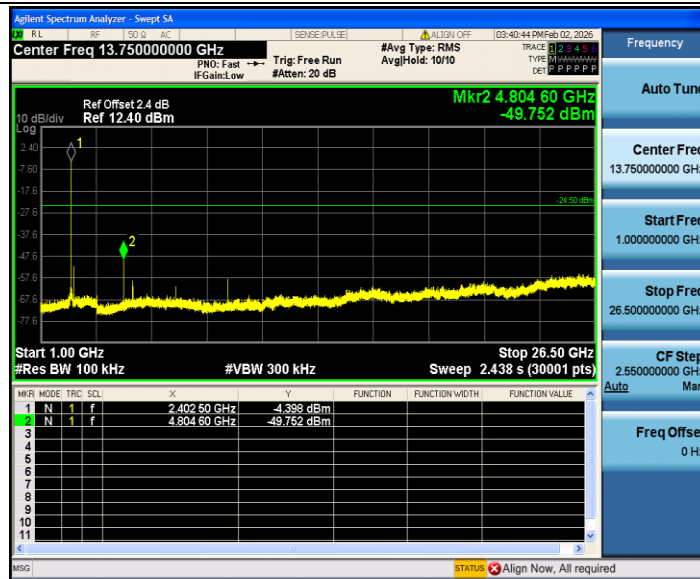
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.50	-4.50	---	PASS
			30~1000	-4.50	-68.1	≤-24.5	PASS
			1000~26500	-4.50	-49.75	≤-24.5	PASS
		2440	Reference	-4.35	-4.35	---	PASS
			30~1000	-4.35	-68.64	≤-24.35	PASS
			1000~26500	-4.35	-49.61	≤-24.35	PASS
		2480	Reference	-4.59	-4.59	---	PASS
			30~1000	-4.59	-67.9	≤-24.59	PASS
			1000~26500	-4.59	-47.84	≤-24.59	PASS

Test Graphs

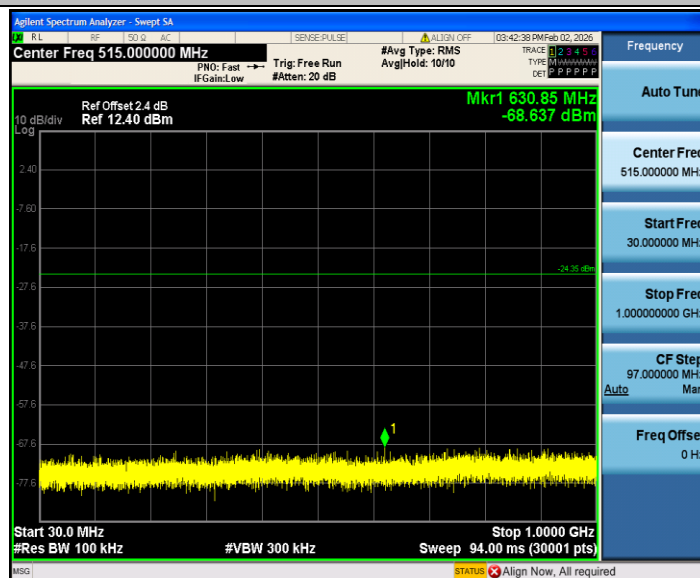




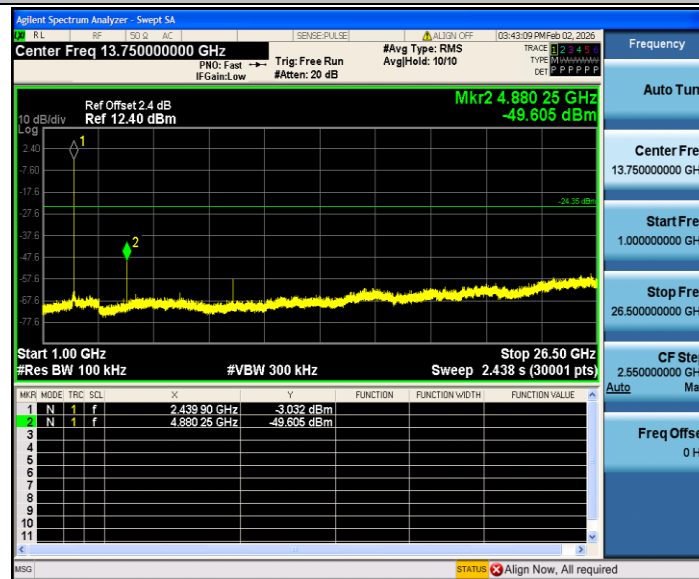
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



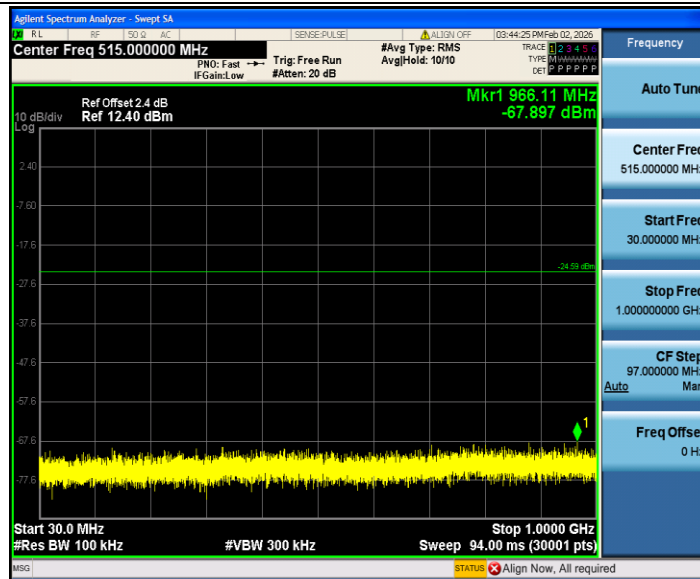
BLE_1M_Ant1_2440_1000~26500



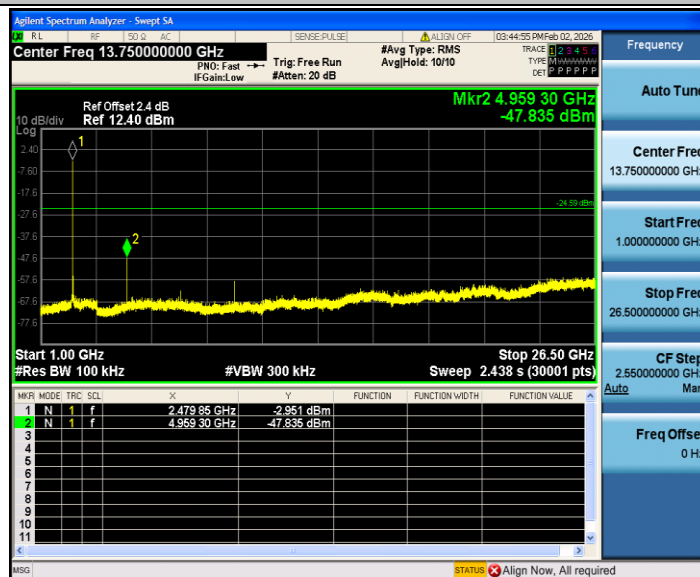
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



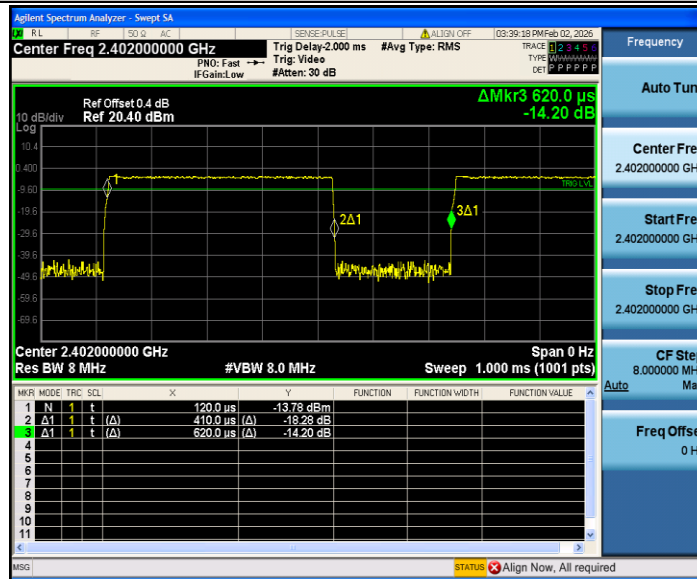
Appendix G: Duty Cycle

Test Result

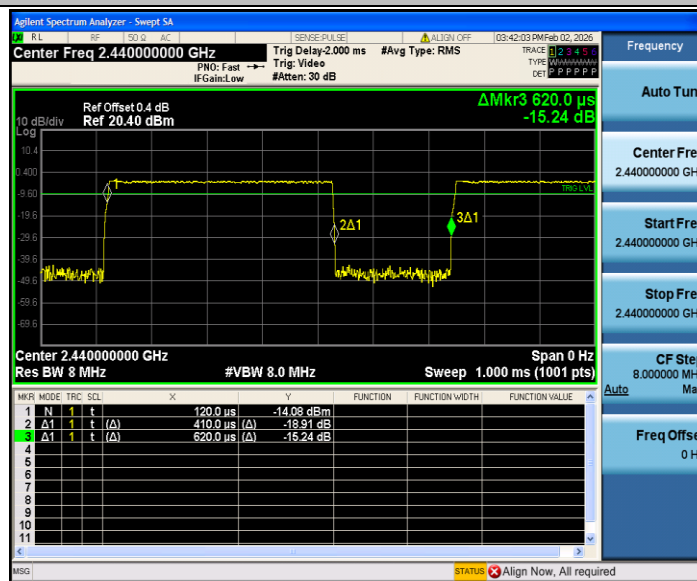
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs

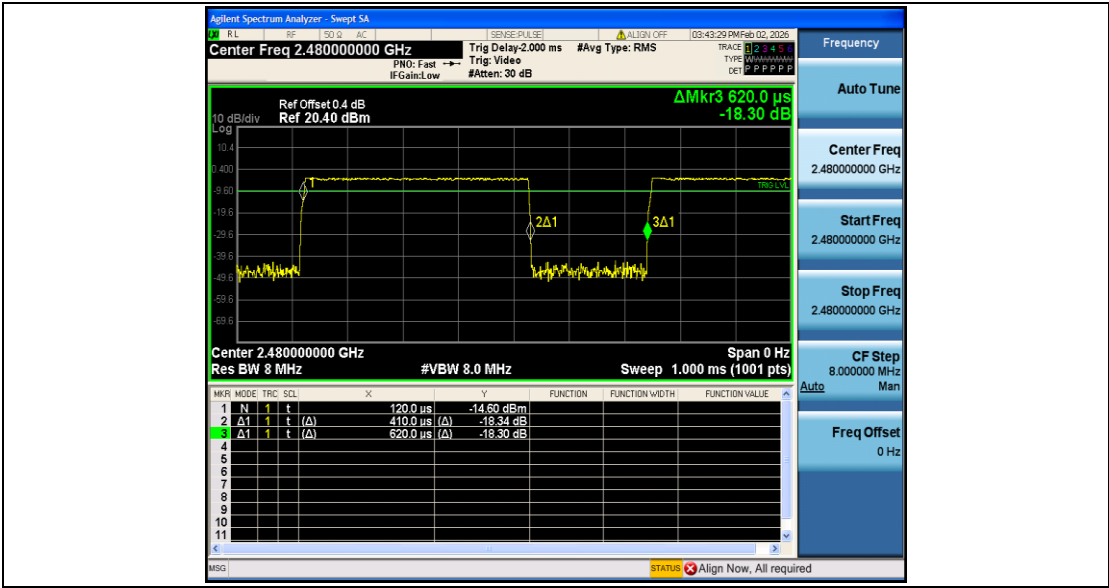
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



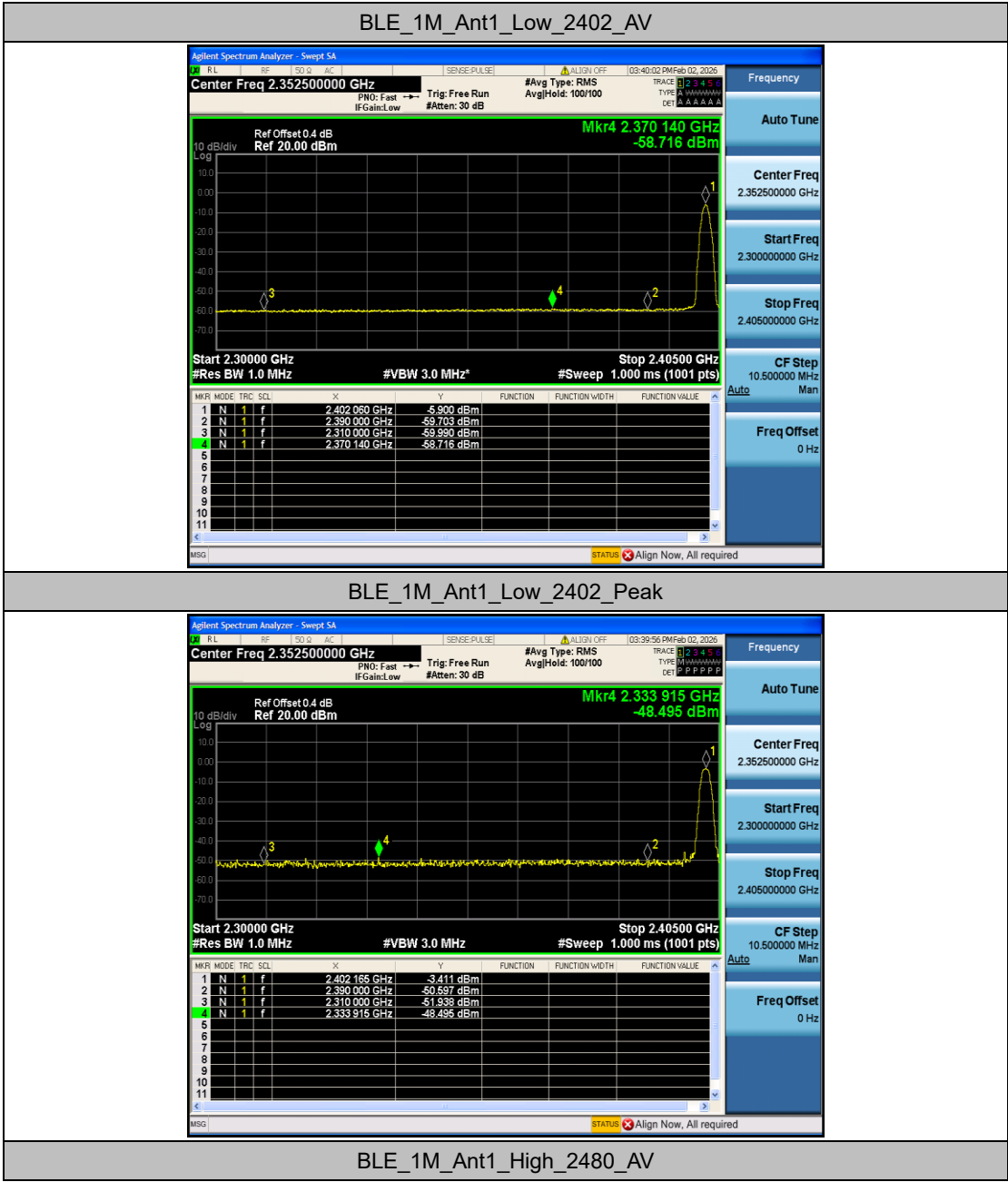
Appendix H: Emissions in Restricted Bands

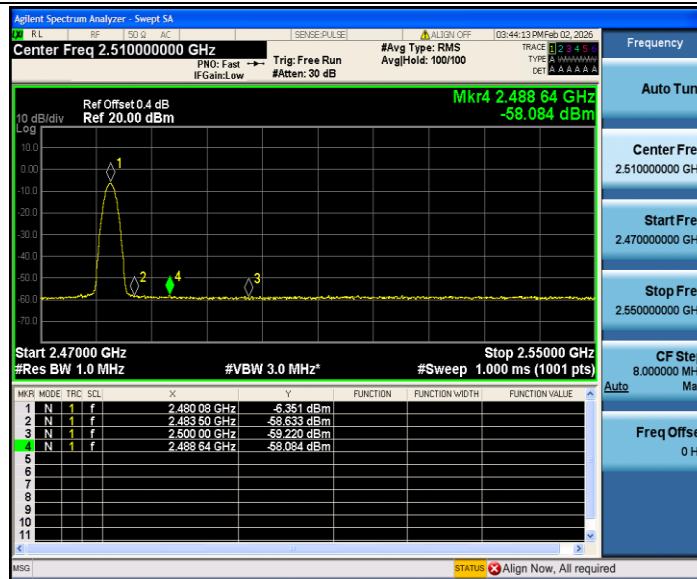
Test Result

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	-59.99	2.00	1.80	39.01	≤54	PASS
				AV	2370.140	-58.72	2.00	1.80	40.28	≤54	PASS
				AV	2390.000	-59.7	2.00	1.80	39.30	≤54	PASS
				Peak	2310.000	-51.94	2.00	0.00	45.26	≤74	PASS
				Peak	2333.915	-48.49	2.00	0.00	48.71	≤74	PASS
				Peak	2390.000	-50.6	2.00	0.00	46.60	≤74	PASS
		High	2480	AV	2483.500	-58.63	2.00	1.80	40.37	≤54	PASS
				AV	2488.640	-58.08	2.00	1.80	40.92	≤54	PASS
				AV	2500.000	-59.22	2.00	1.80	39.78	≤54	PASS
				Peak	2483.500	-48.48	2.00	0.00	48.72	≤74	PASS
				Peak	2484.880	-47.85	2.00	0.00	49.35	≤74	PASS
				Peak	2500.000	-51.19	2.00	0.00	46.01	≤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

