

FCC Appendix RF Test Data for BLE

FCC ID : 2BXIY-Q-006-0104

Company : Shenzhen Beiyaochen Technology Co.,Ltd.

EUT : APP Aike Multi-functional Aircraft Cup Set

Model Number : Q-006-0104

Report No. : CTA26072203901

Reviewed By : Eric Wang

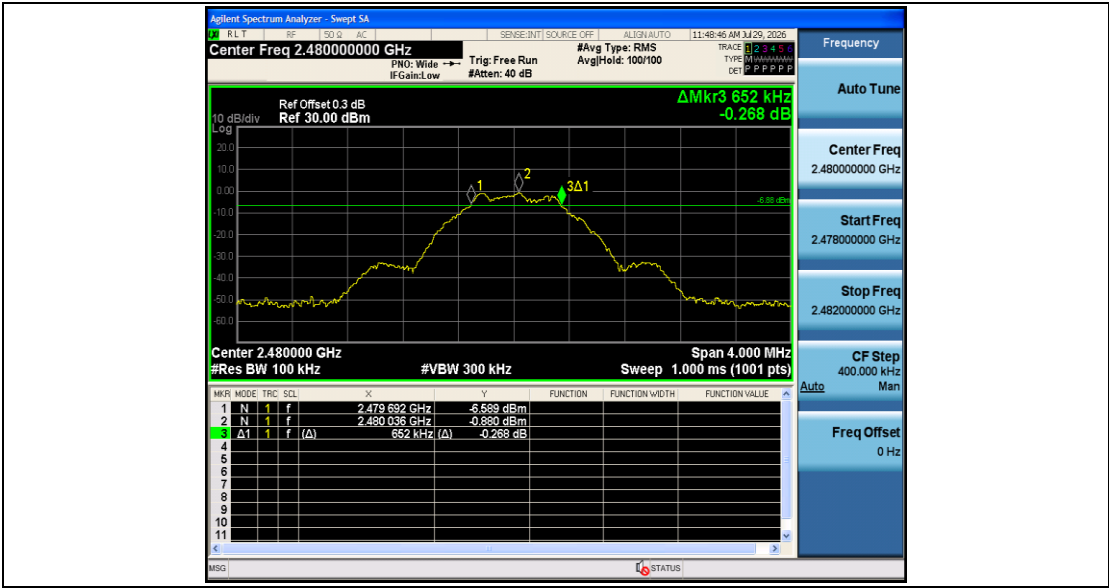
Appendix A: DTS Bandwidth

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	0.656	2439.684	2440.340	0.5	PASS
		2480	0.652	2479.692	2480.344	0.5	PASS

Test Graphs



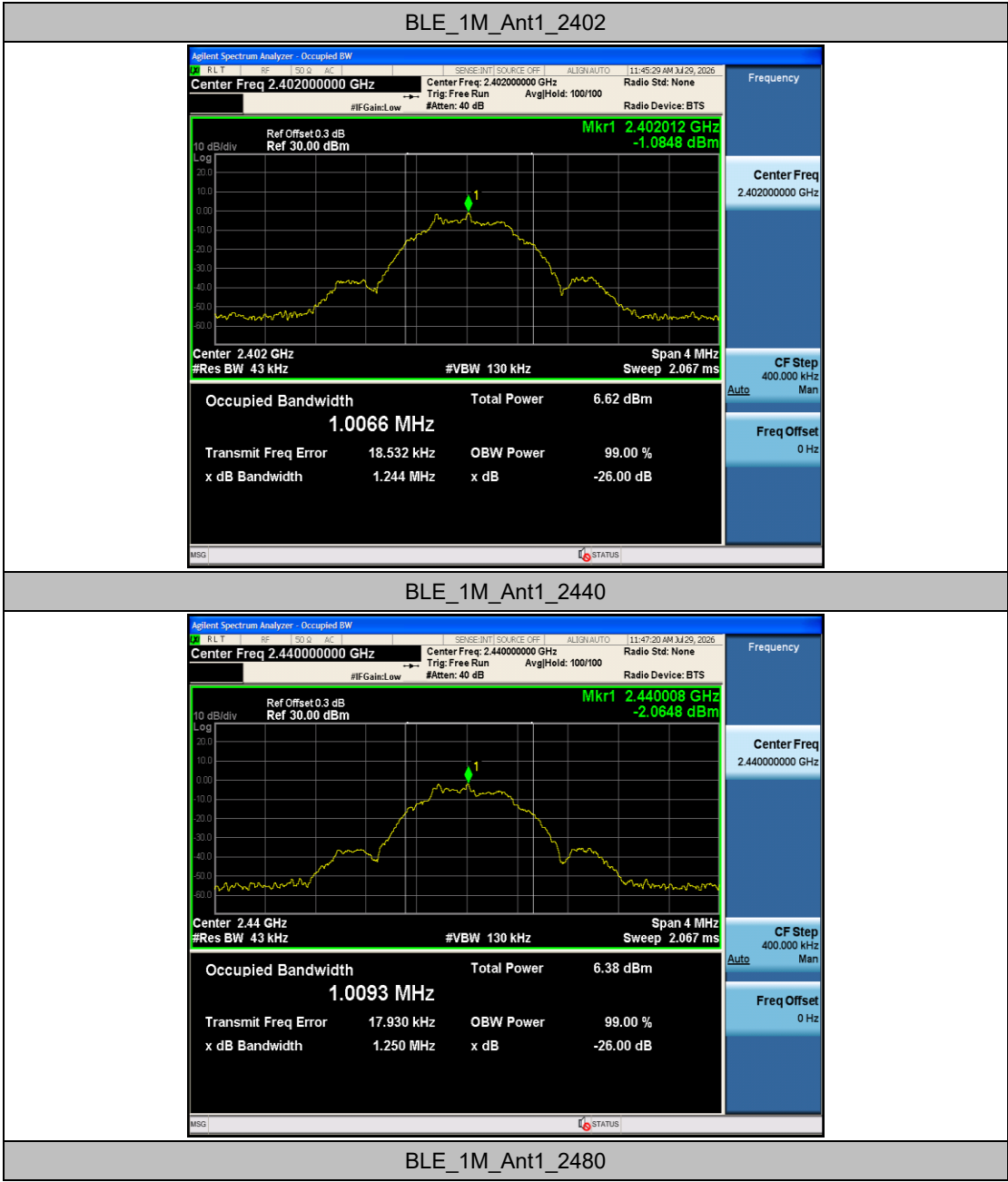


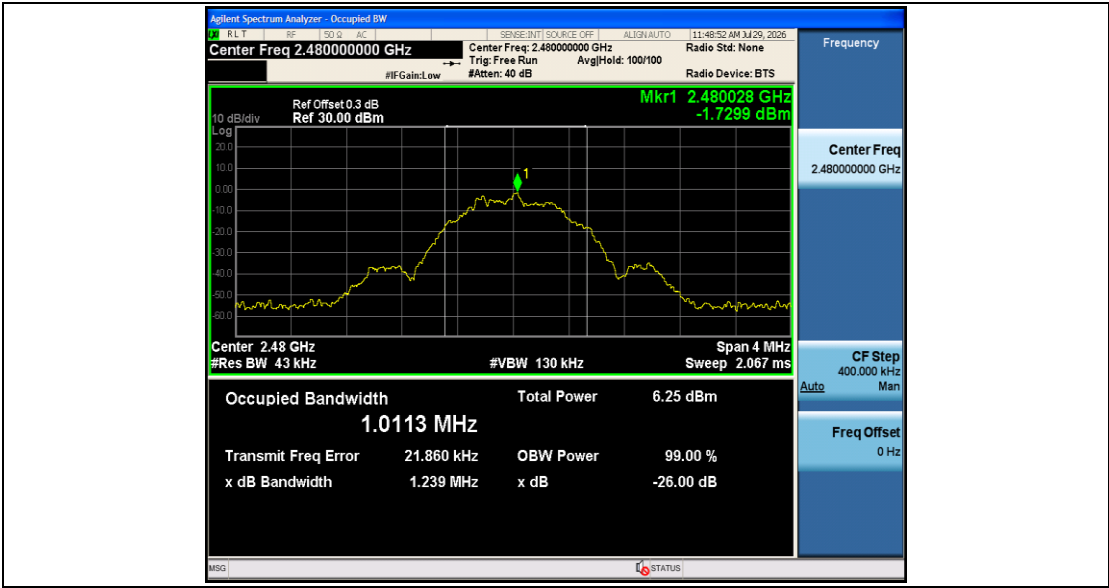
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0066	2401.5152	2402.5218	---	---
		2440	1.0093	2439.5133	2440.5226	---	---
		2480	1.0113	2479.5162	2480.5275	---	---

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	0.03	≤30	PASS
		2440	-0.16	≤30	PASS
		2480	-0.50	≤30	PASS

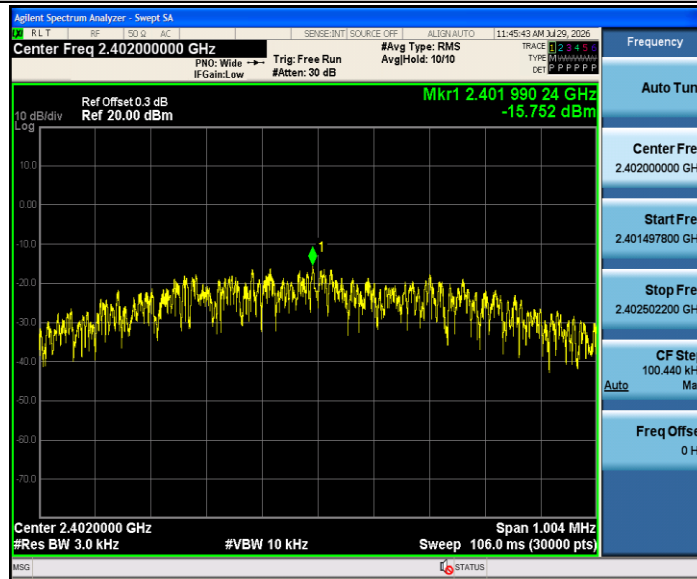
Appendix D: Maximum power spectral density

Test Result

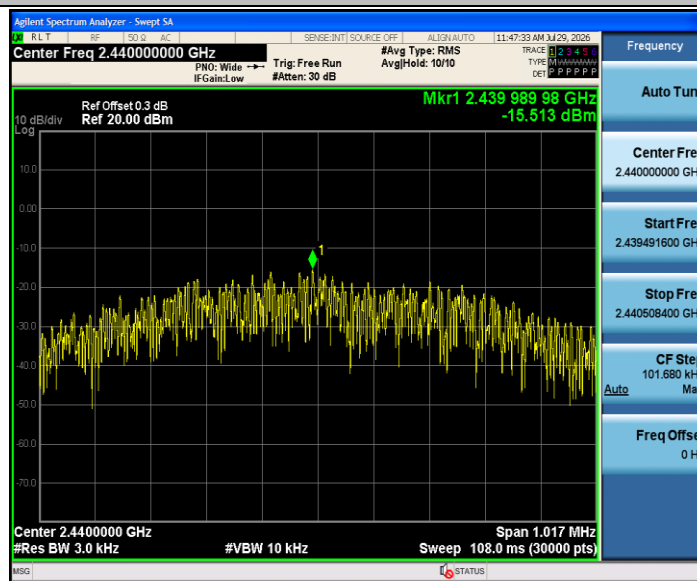
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.75	≤8.00	PASS
		2440	-15.51	≤8.00	PASS
		2480	-16.25	≤8.00	PASS

Test Graphs

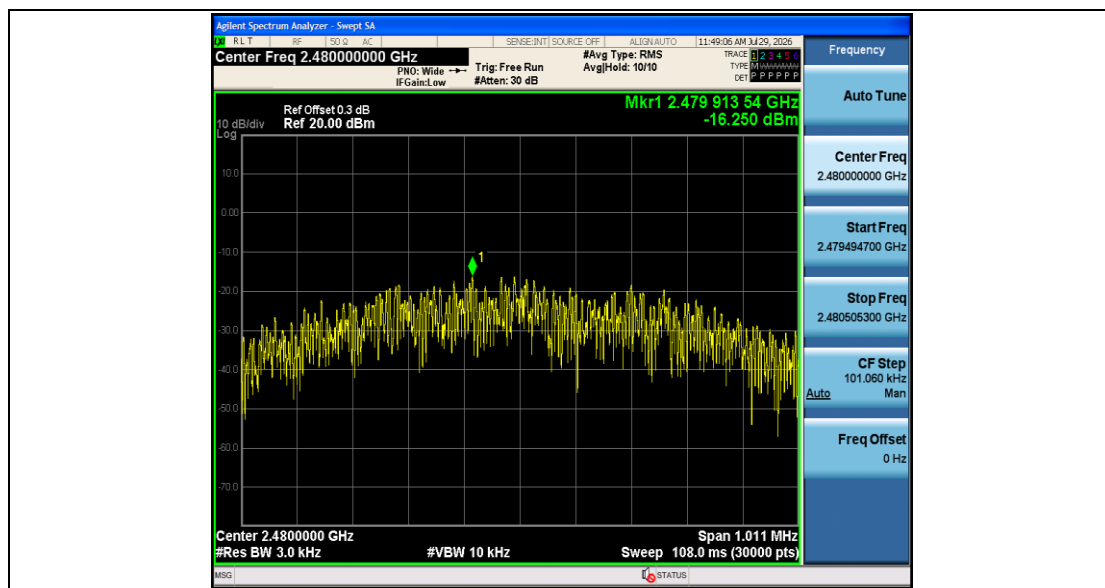
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

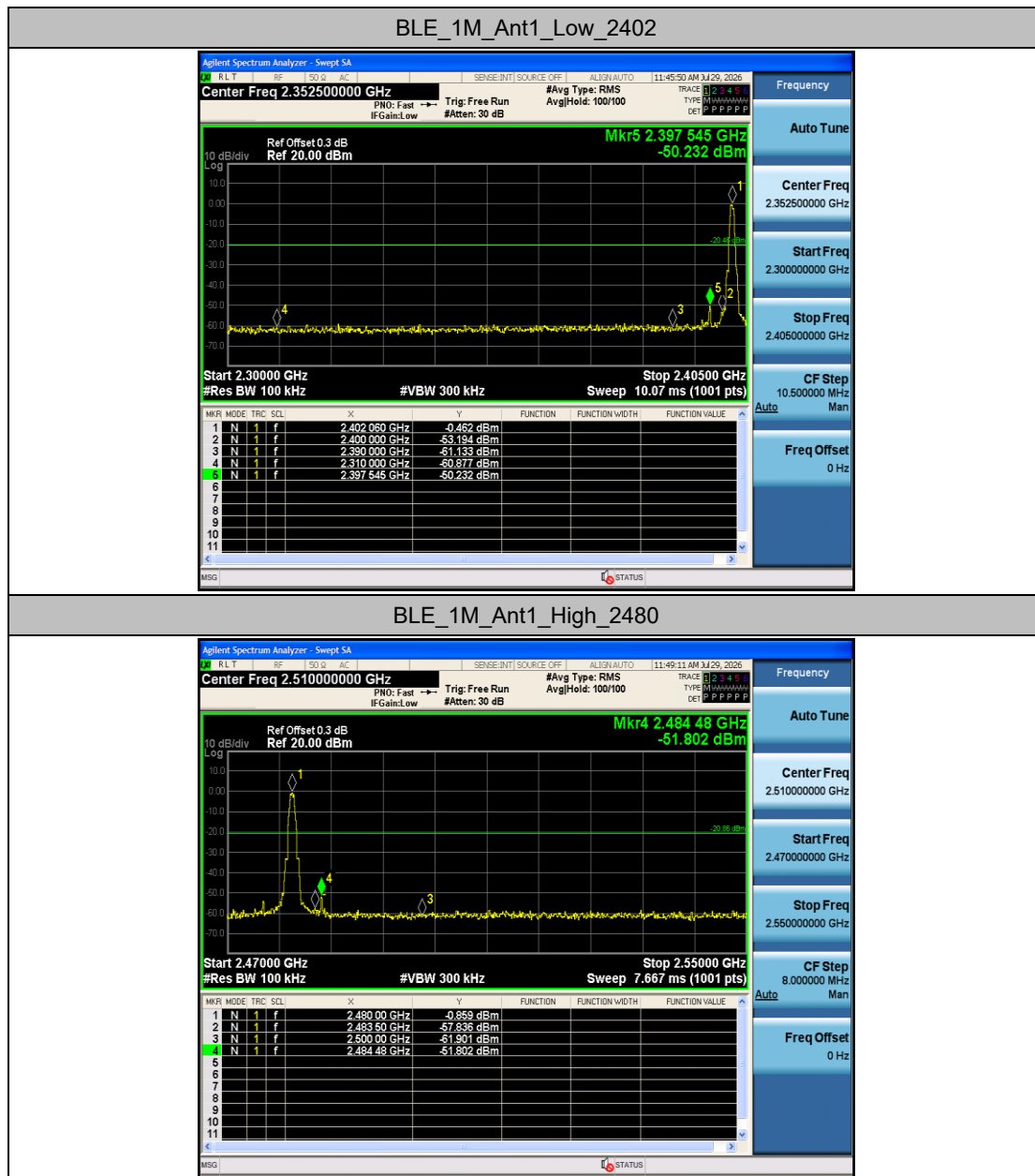


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.46	-50.23	≤-20.46	PASS
		High	2480	-0.86	-51.8	≤-20.86	PASS

Test Graphs

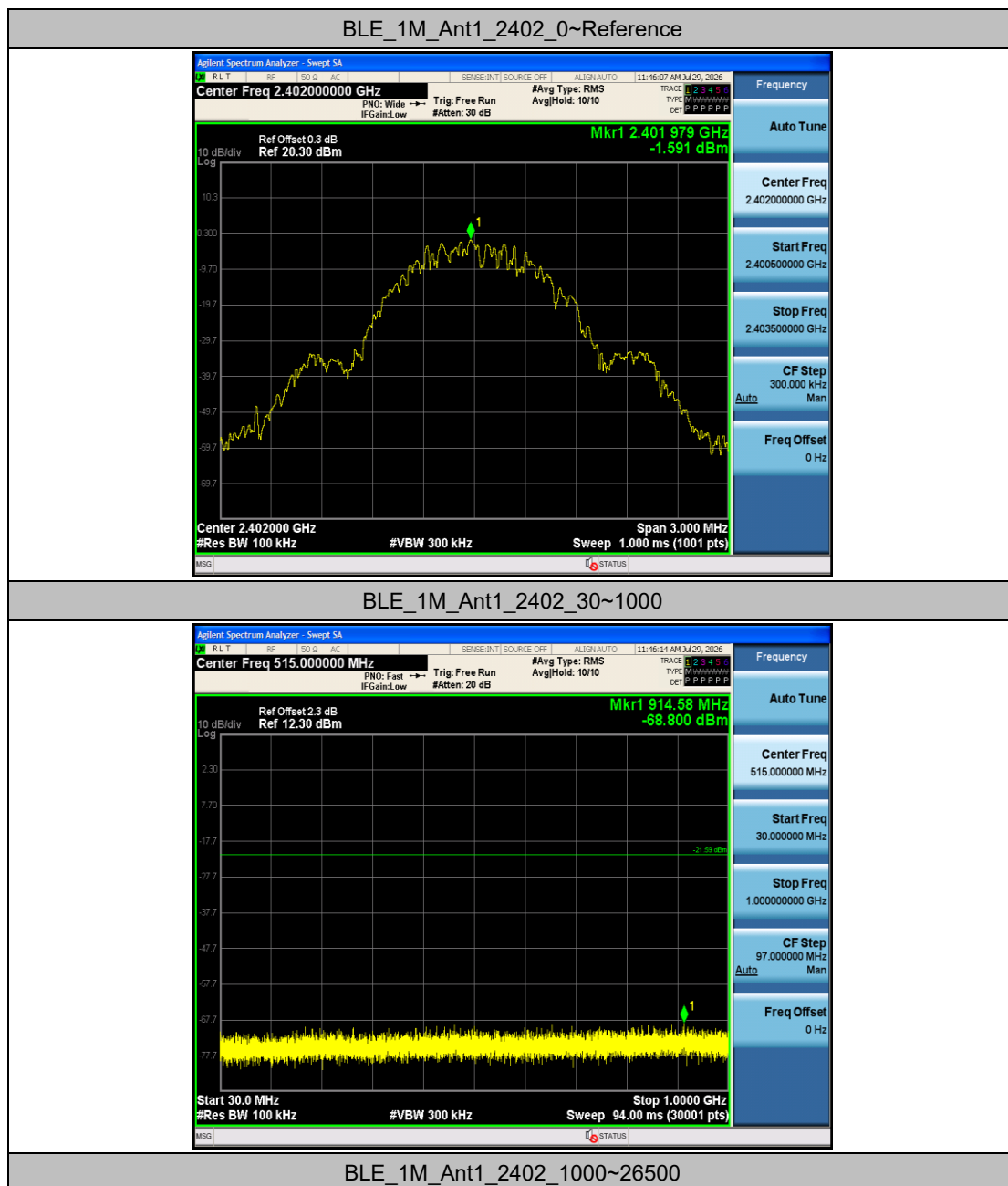


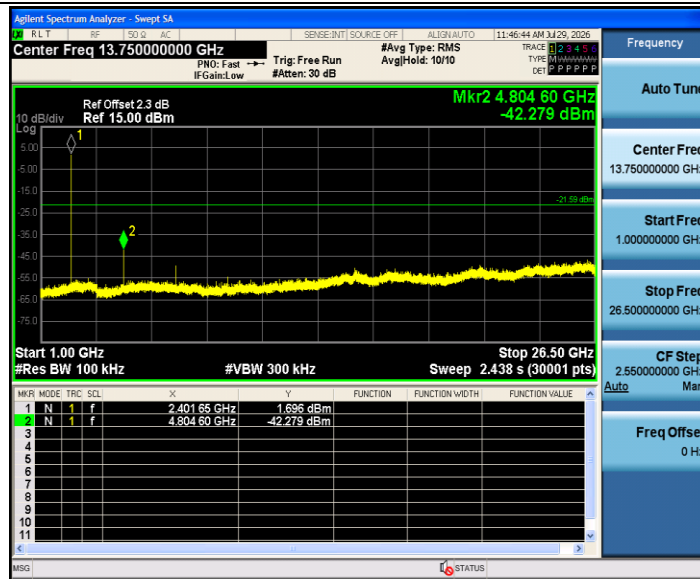
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.59	-1.59	---	PASS
			30~1000	-1.59	-68.8	≤-21.59	PASS
			1000~26500	-1.59	-42.28	≤-21.59	PASS
		2440	Reference	-1.50	-1.50	---	PASS
			30~1000	-1.50	-68.27	≤-21.5	PASS
			1000~26500	-1.50	-45.79	≤-21.5	PASS
		2480	Reference	-1.87	-1.87	---	PASS
			30~1000	-1.87	-68.78	≤-21.87	PASS
			1000~26500	-1.87	-46.01	≤-21.87	PASS

Test Graphs

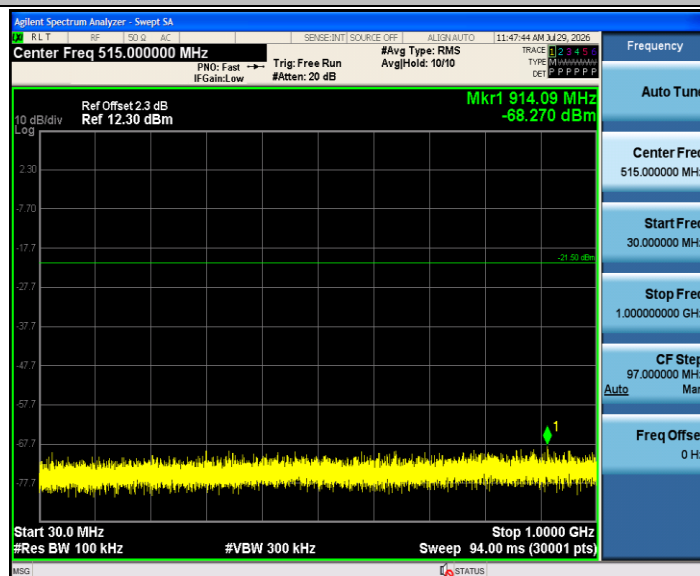




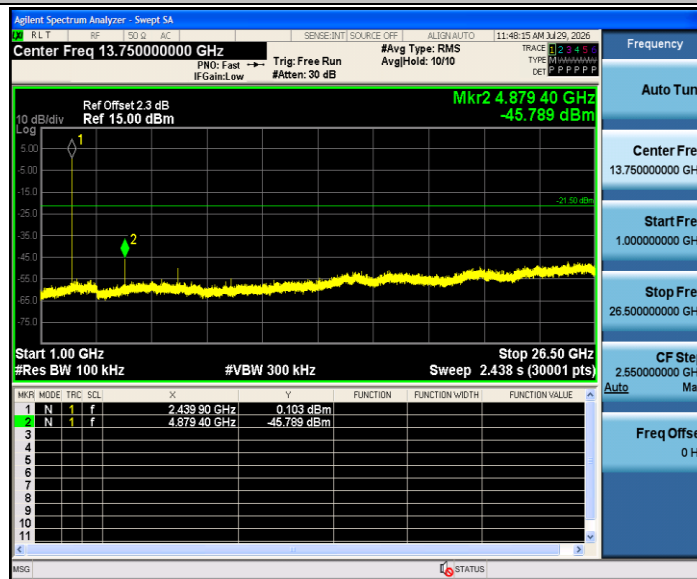
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



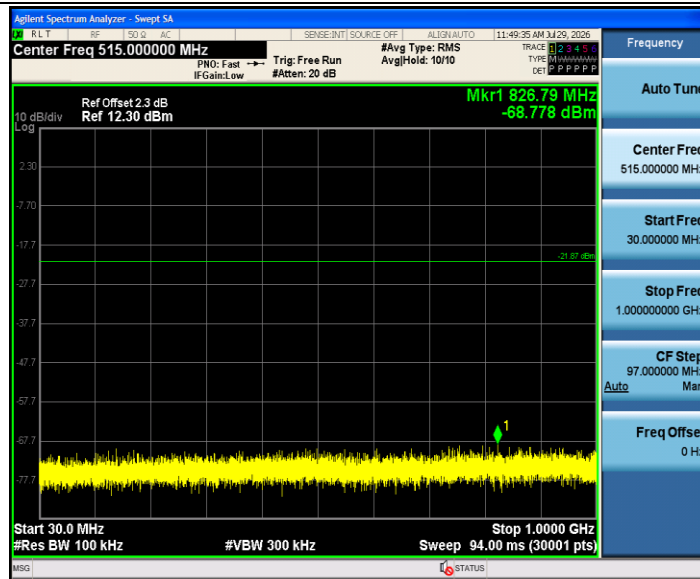
BLE_1M_Ant1_2440_1000~26500



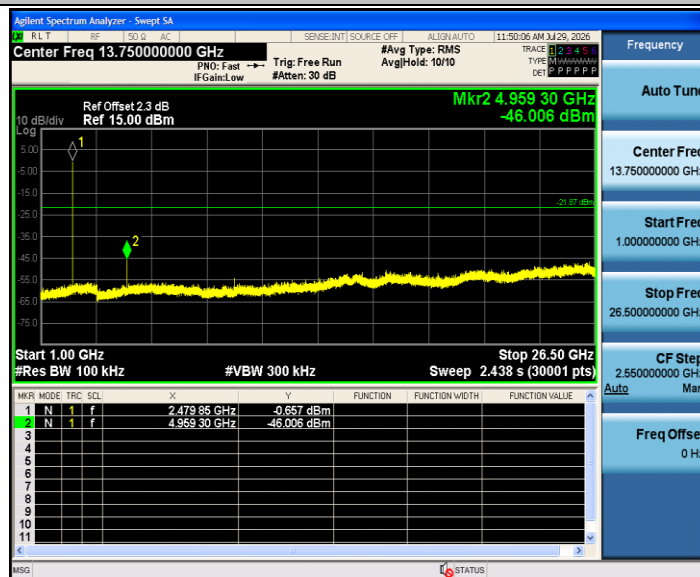
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



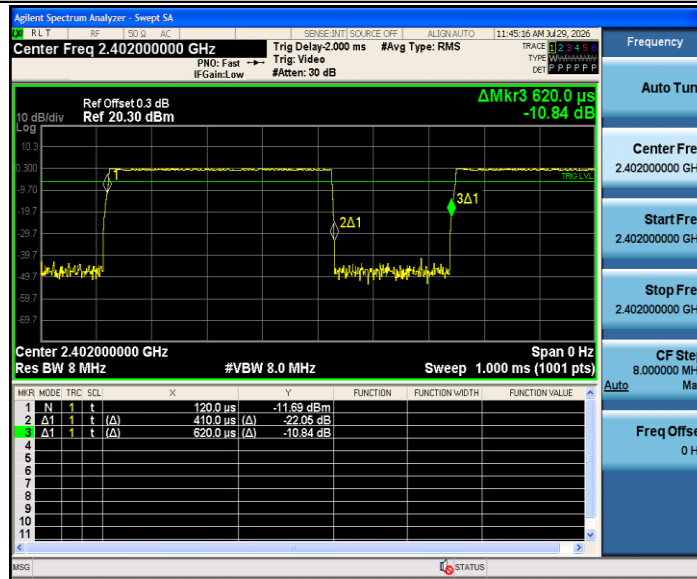
Appendix G: Duty Cycle

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	0.42	0.63	0.6667	66.67	1.76	---	---

Test Graphs

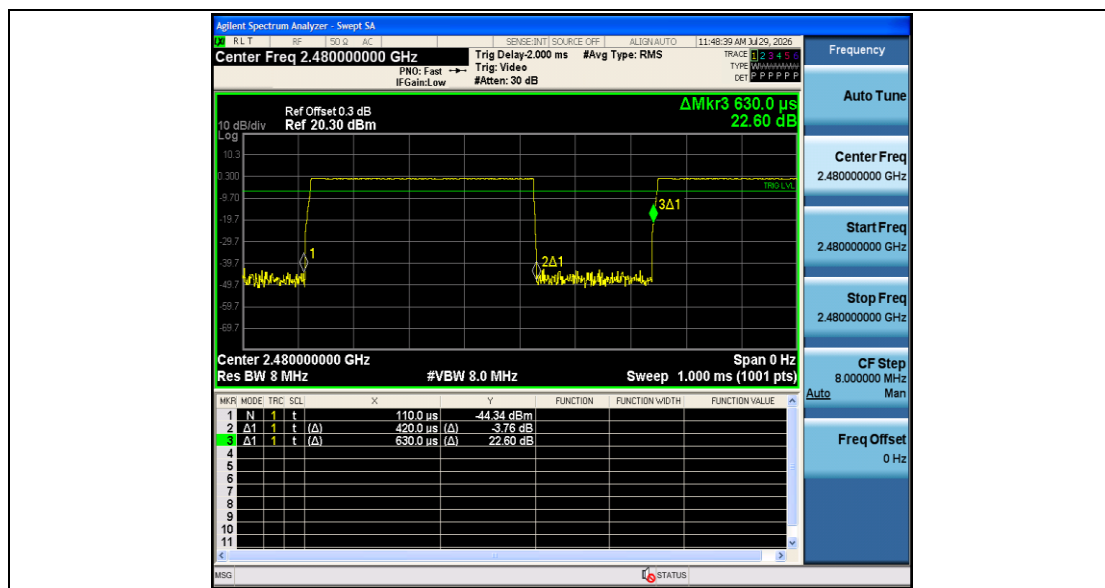
BLE_1M_Ant1_2402



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	-60.71	2.499	1.80	38.789	≤54	PASS
				AV	2375.075	-59.1	2.499	1.80	40.399	≤54	PASS
				AV	2390.000	-60.29	2.499	1.80	39.209	≤54	PASS
				Peak	2310.000	-52.94	2.499	0.00	44.759	≤74	PASS
				Peak	2384.525	-49.39	2.499	0.00	48.309	≤74	PASS
				Peak	2390.000	-51.15	2.499	0.00	46.549	≤74	PASS
		High	2480	AV	2483.500	-57.76	2.499	1.76	41.699	≤54	PASS
				AV	2484.080	-57.66	2.499	1.76	41.799	≤54	PASS
				AV	2500.000	-59.34	2.499	1.76	40.119	≤54	PASS
				Peak	2483.500	-49.12	2.499	0.00	48.579	≤74	PASS
				Peak	2484.880	-45.39	2.499	0.00	52.309	≤74	PASS
				Peak	2500.000	-52.01	2.499	0.00	45.689	≤74	PASS

Note:

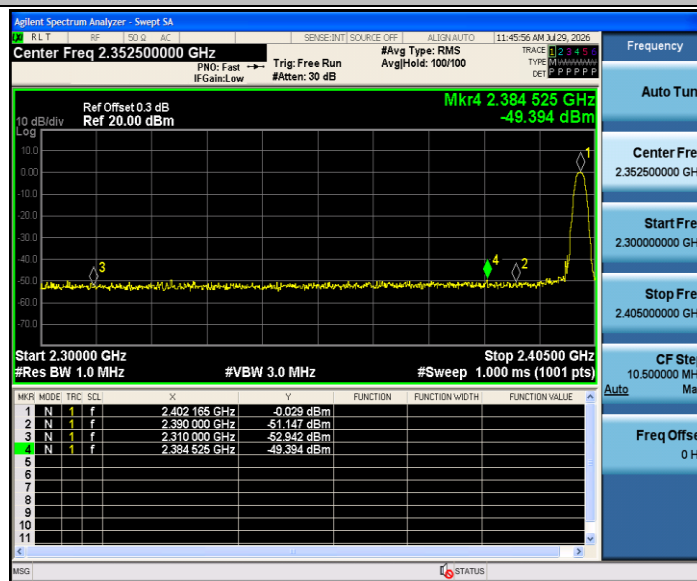
1. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

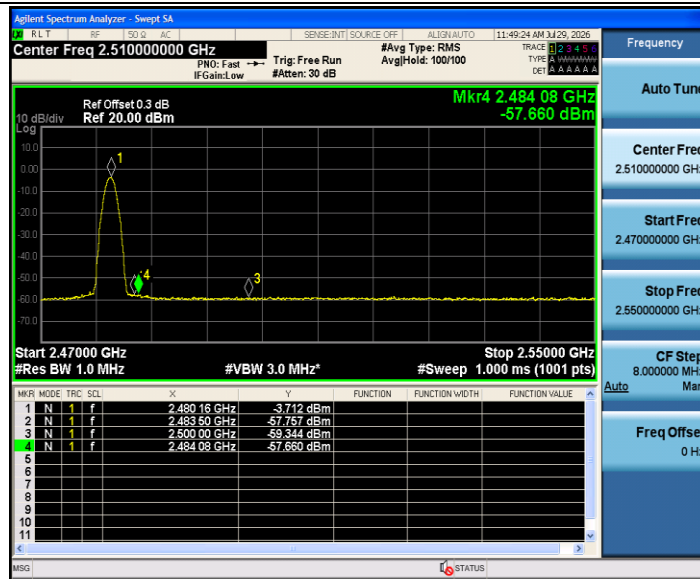
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

