

FCC Appendix RF Test Data for BLE

FCC ID : 2BDSK-SHERMAN-P

Company : Guangzhou Coyote Intelligent Equipment Co., Ltd.

EUT : Electric unicycle

Model Number : Sherman-P

Report No. : CTA26091800401

Reviewed By : Eric Wang

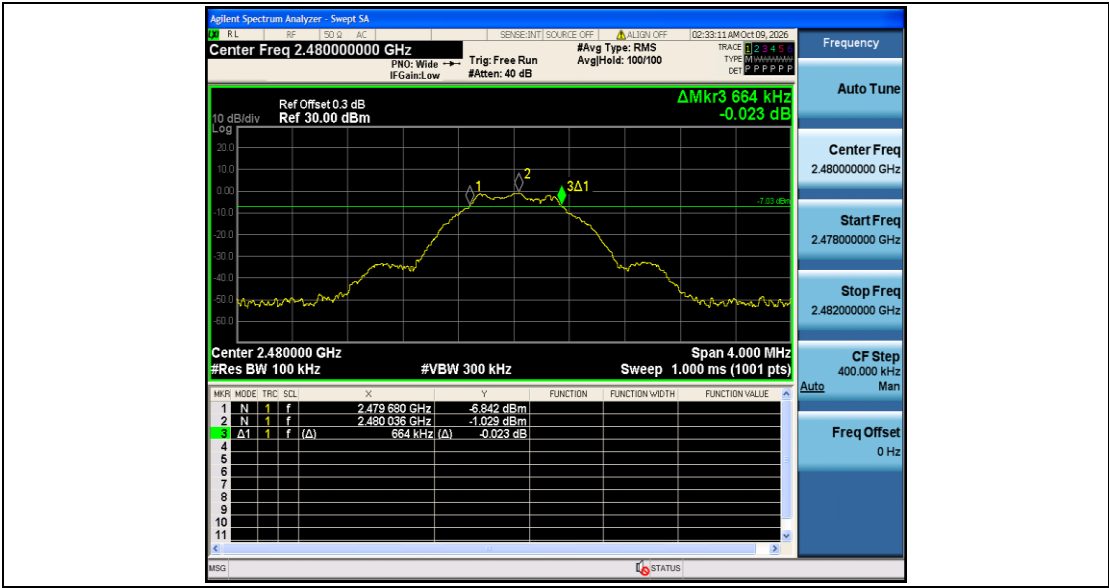
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.640	2401.692	2402.332	0.5	PASS
		2440	0.644	2439.692	2440.336	0.5	PASS
		2480	0.664	2479.680	2480.344	0.5	PASS

Test Graphs



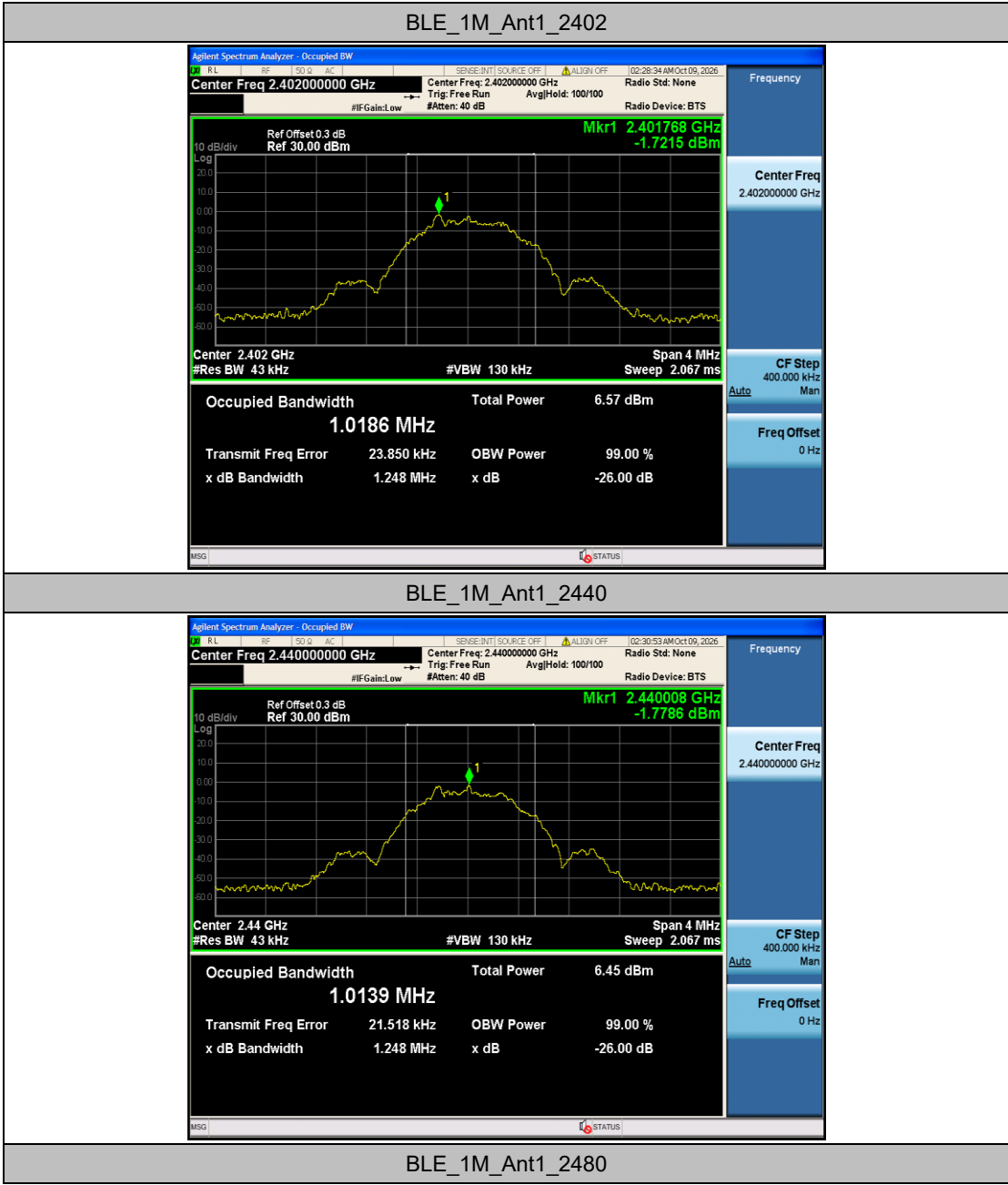


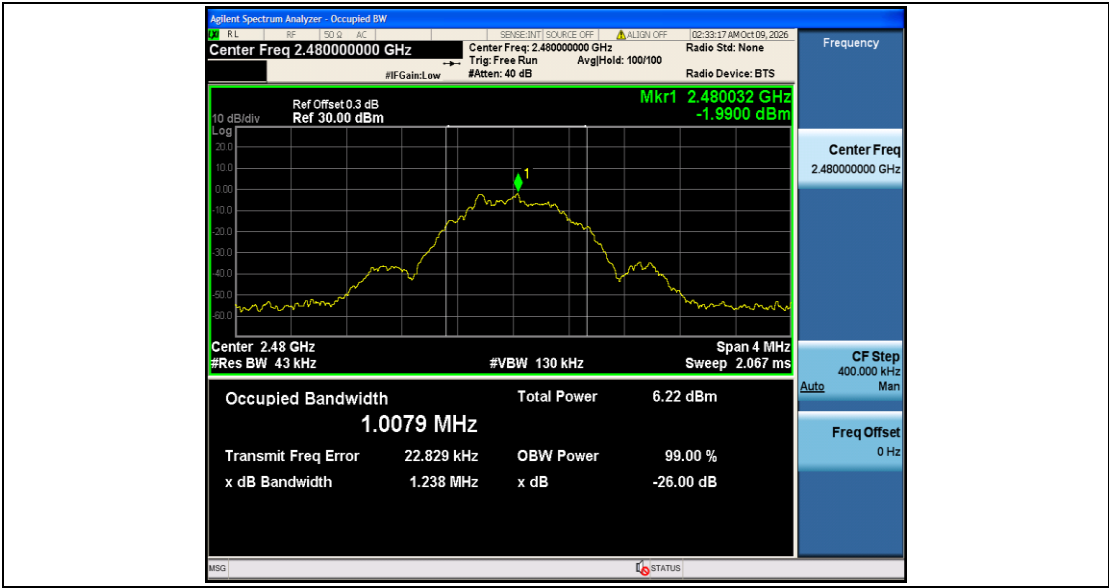
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0186	2401.5146	2402.5332	---	---
		2440	1.0139	2439.5146	2440.5285	---	---
		2480	1.0079	2479.5189	2480.5268	---	---

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	0.08	≤30	PASS
		2440	-0.08	≤30	PASS
		2480	-0.40	≤30	PASS

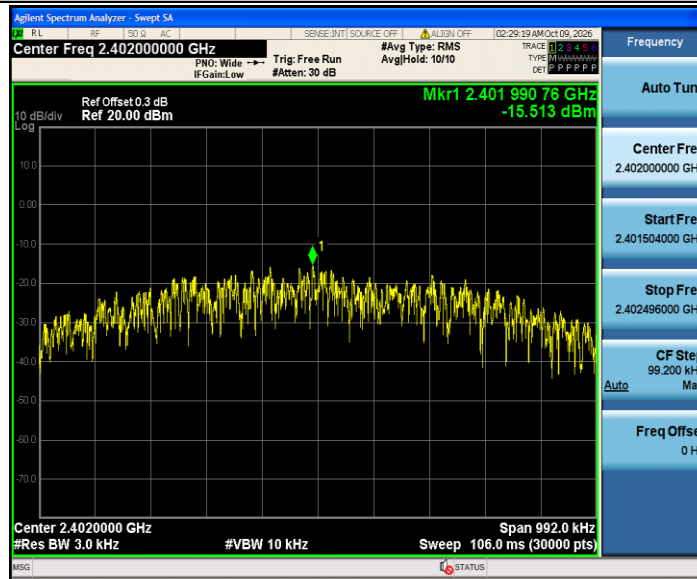
Appendix D: Maximum power spectral density

Test Result

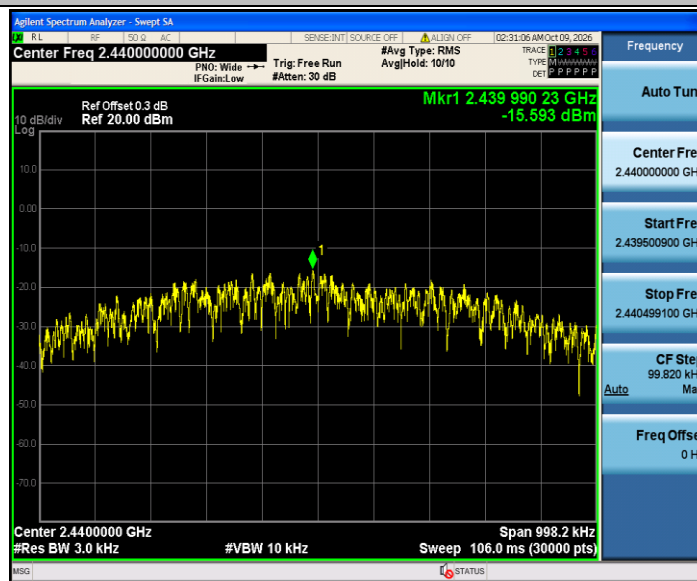
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.51	≤8.00	PASS
		2440	-15.59	≤8.00	PASS
		2480	-16.21	≤8.00	PASS

Test Graphs

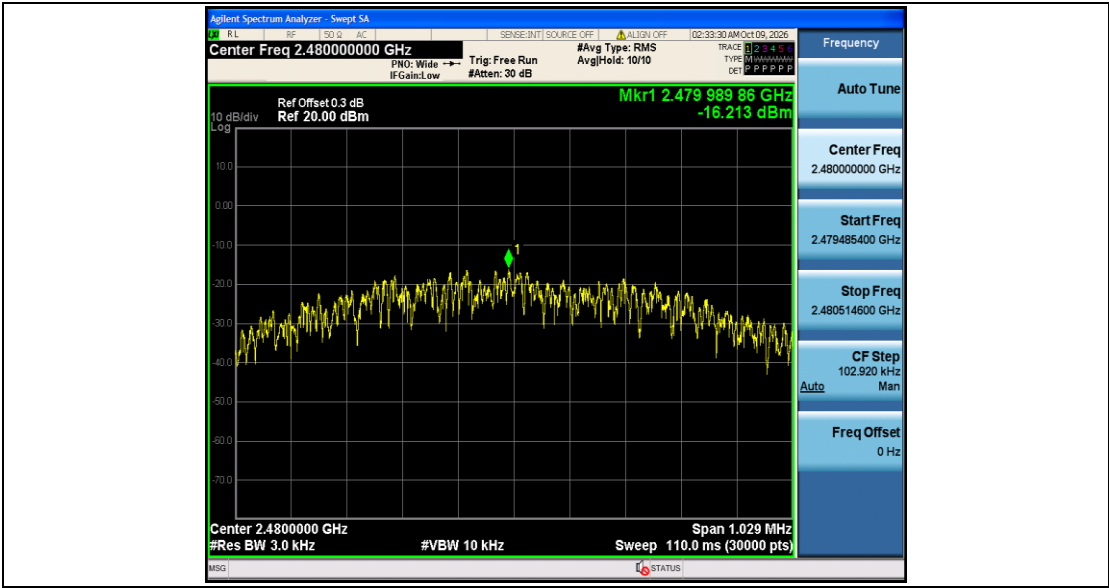
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

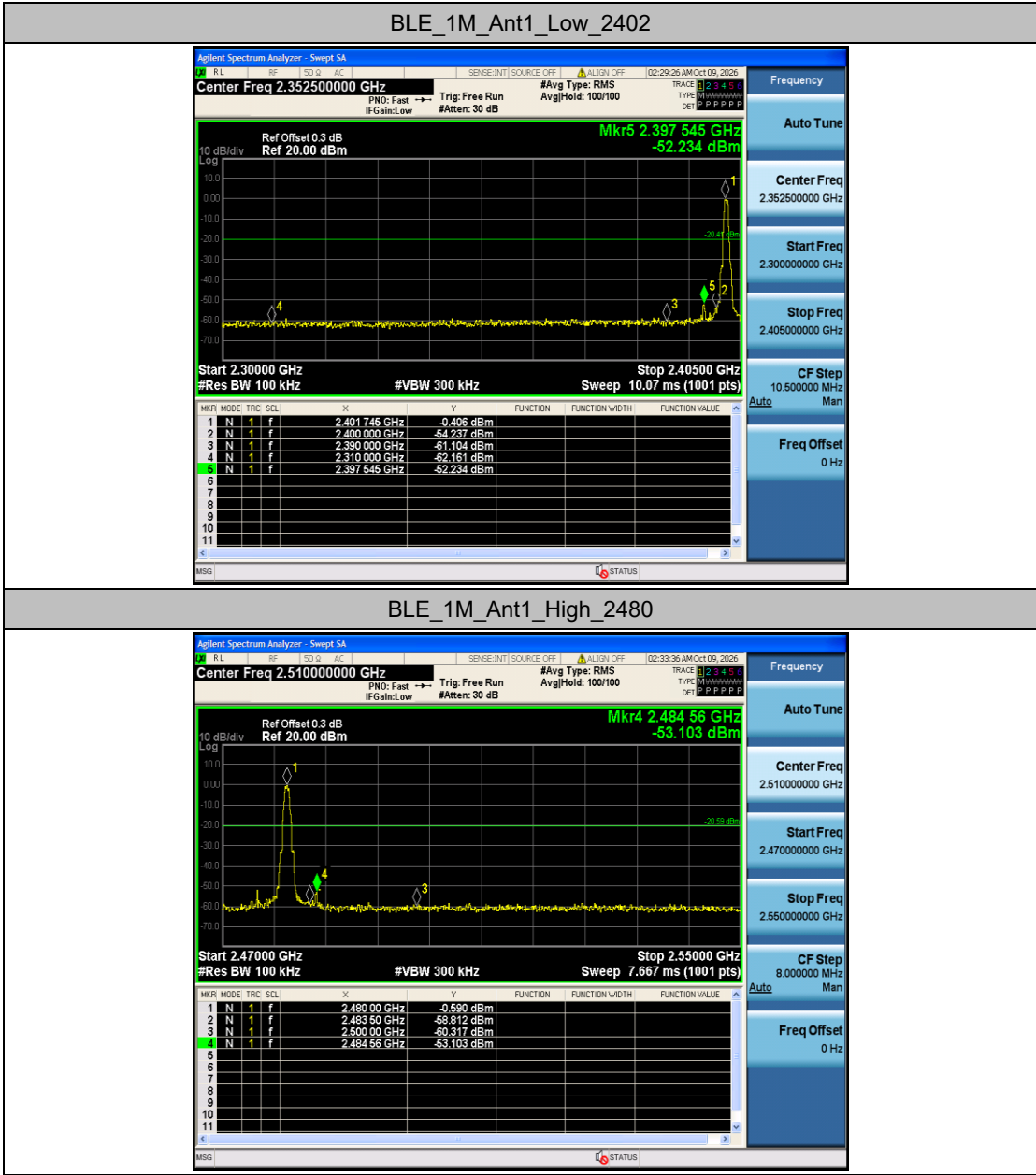


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.41	-52.23	≤-20.41	PASS
		High	2480	-0.59	-53.1	≤-20.59	PASS

Test Graphs

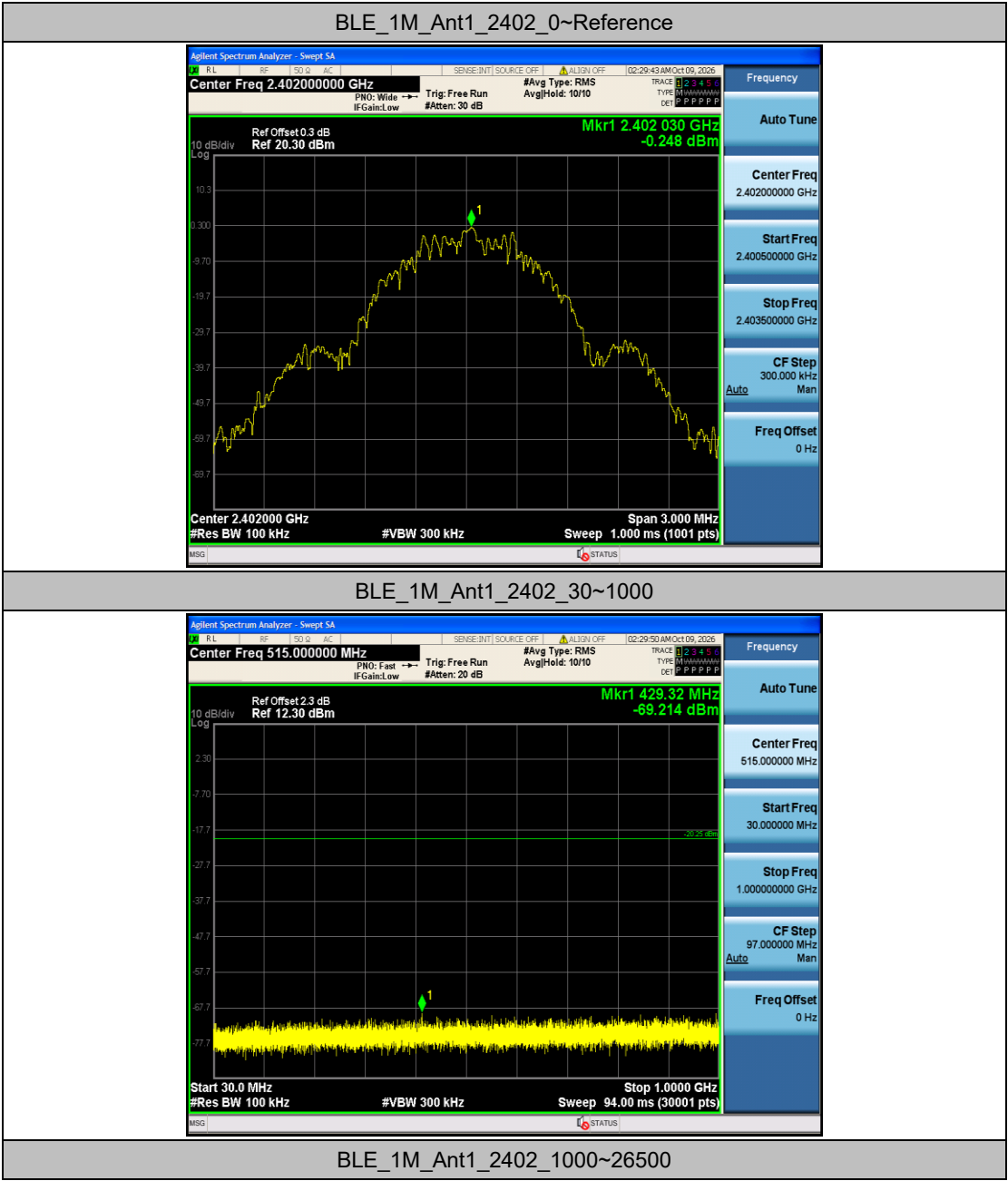


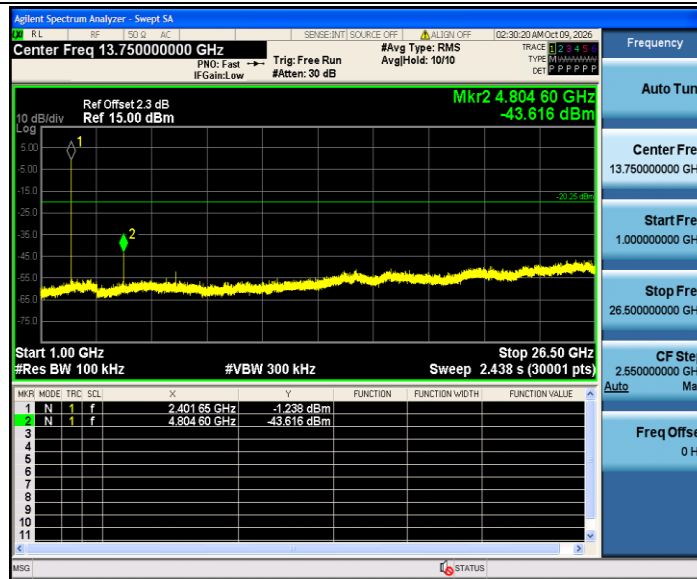
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.25	-0.25	---	PASS
			30~1000	-0.25	-69.21	≤-20.25	PASS
			1000~26500	-0.25	-43.62	≤-20.25	PASS
		2440	Reference	-1.01	-1.01	---	PASS
			30~1000	-1.01	-69.32	≤-21.01	PASS
			1000~26500	-1.01	-45.98	≤-21.01	PASS
		2480	Reference	-1.24	-1.24	---	PASS
			30~1000	-1.24	-68.7	≤-21.24	PASS
			1000~26500	-1.24	-44.13	≤-21.24	PASS

Test Graphs

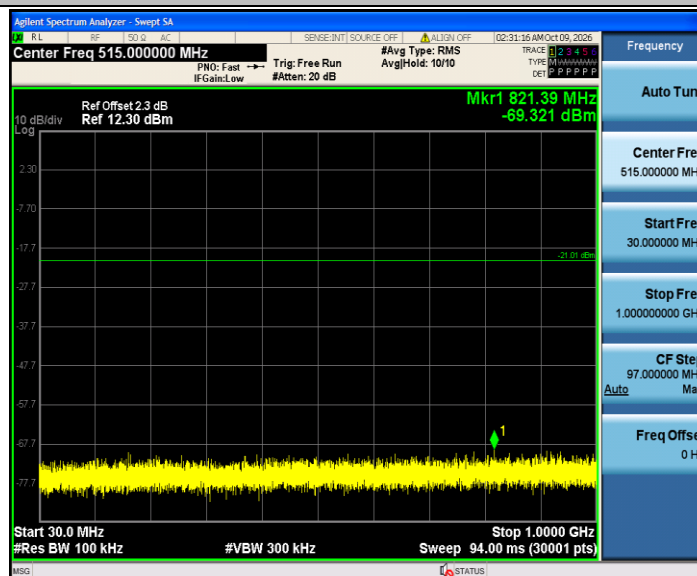




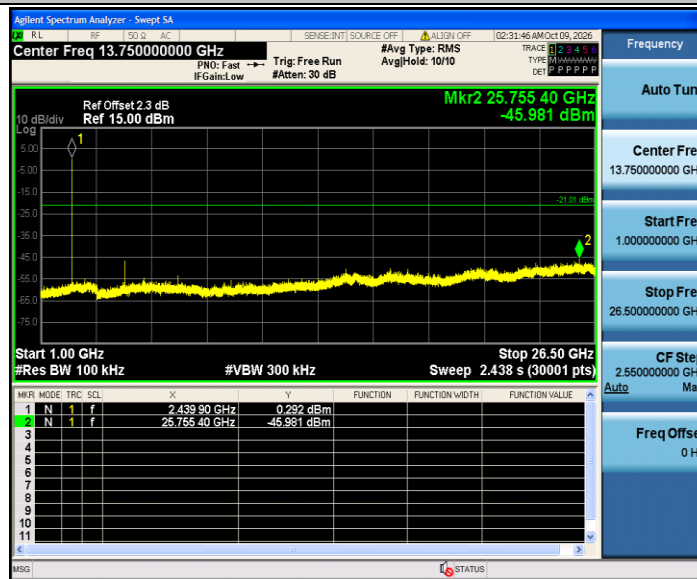
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



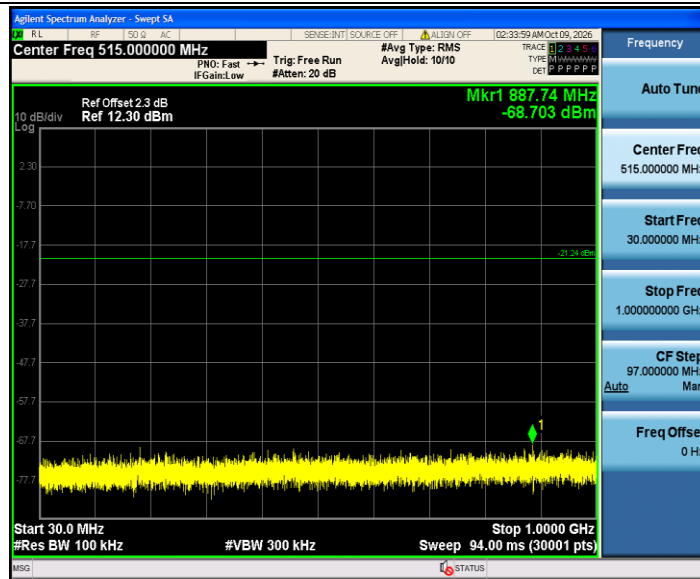
BLE_1M_Ant1_2440_1000~26500



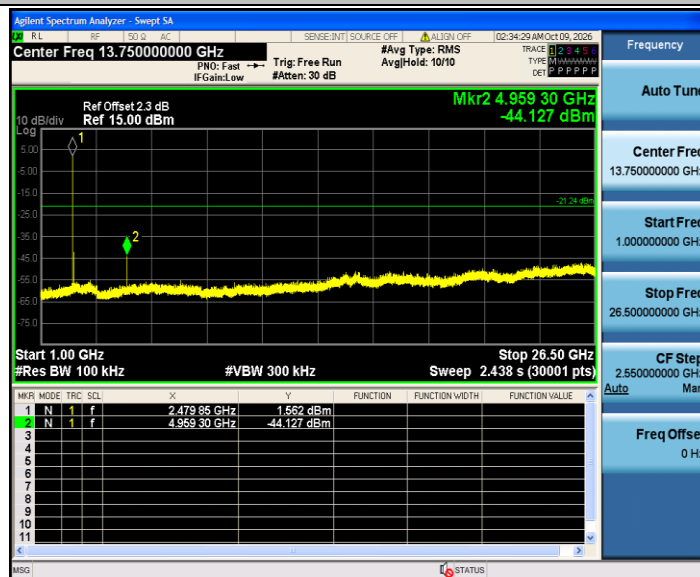
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

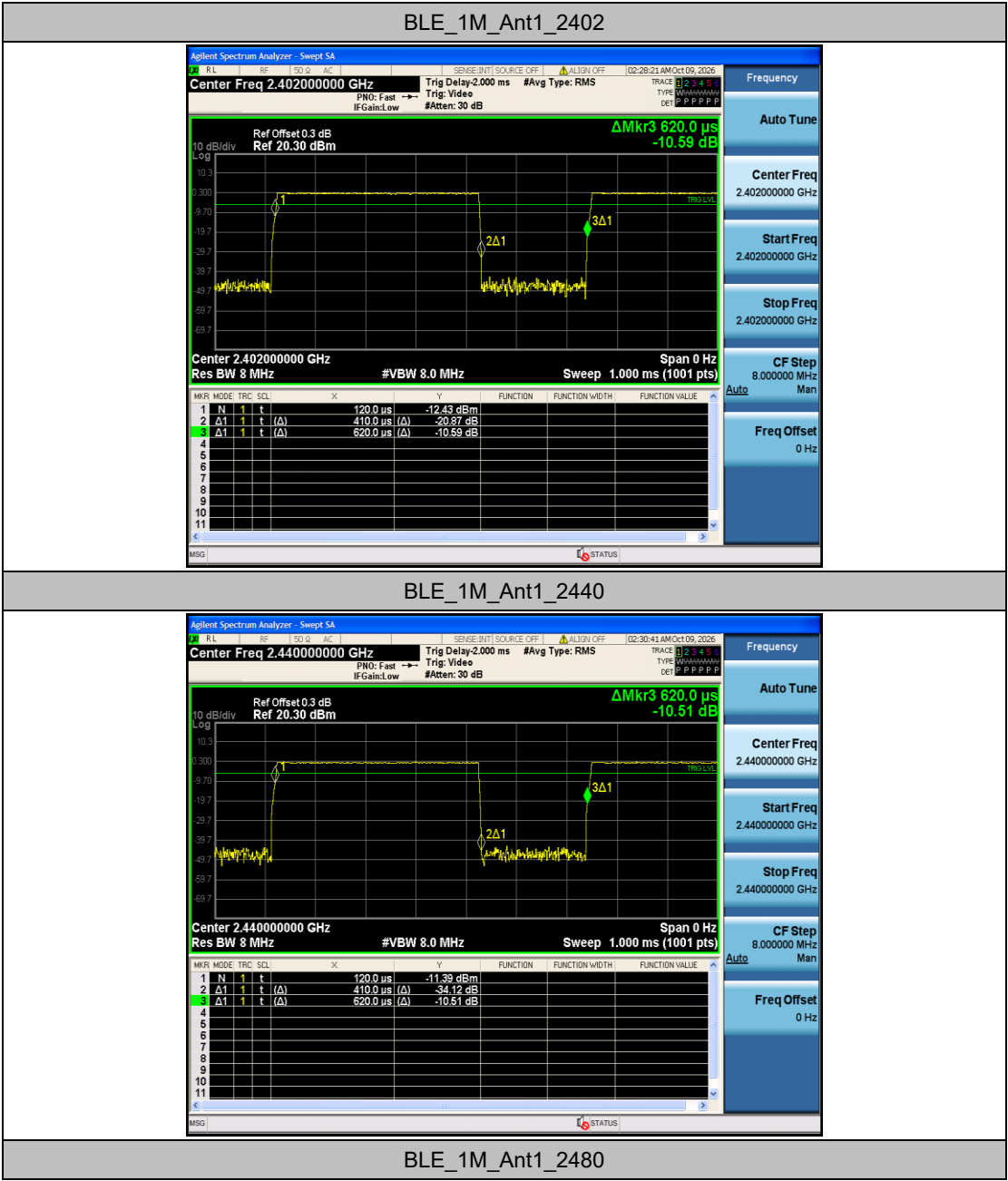


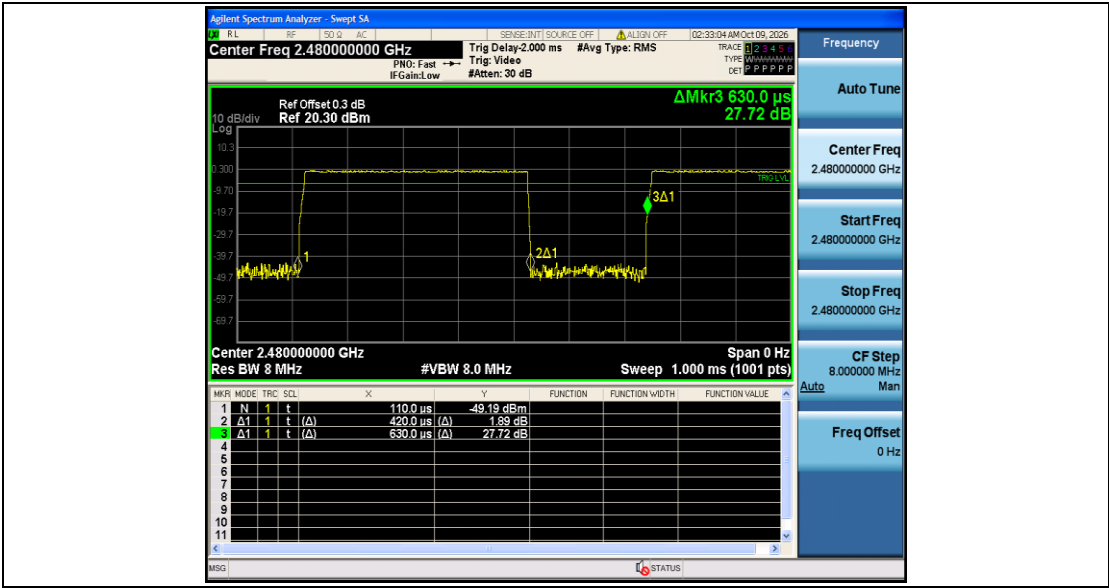
Appendix G: Duty Cycle

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





Appendix H: Emissions in Restricted Bands

Test Result

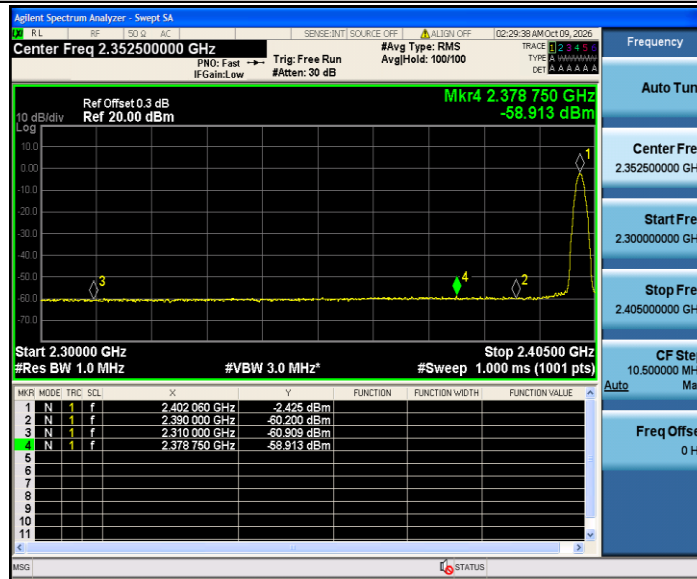
TestMode	Antenna	ChName	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.91	2.00	1.80	38.09	≤54	PASS
				AV	2378.750	-58.91	2.00	1.80	40.09	≤54	PASS
				AV	2390.000	-60.2	2.00	1.80	38.80	≤54	PASS
				Peak	2310.000	-52.01	2.00	0.00	45.19	≤74	PASS
				Peak	2387.570	-49.33	2.00	0.00	47.87	≤74	PASS
				Peak	2390.000	-51.83	2.00	0.00	45.37	≤74	PASS
		High	2480	AV	2483.500	-57.79	2.00	1.76	41.17	≤54	PASS
				AV	2483.600	-57.03	2.00	1.76	41.93	≤54	PASS
				AV	2500.000	-59.15	2.00	1.76	39.81	≤54	PASS
				Peak	2483.500	-49.26	2.00	0.00	47.94	≤74	PASS
				Peak	2484.240	-45.7	2.00	0.00	51.50	≤74	PASS
				Peak	2500.000	-51.99	2.00	0.00	45.21	≤74	PASS

Note:

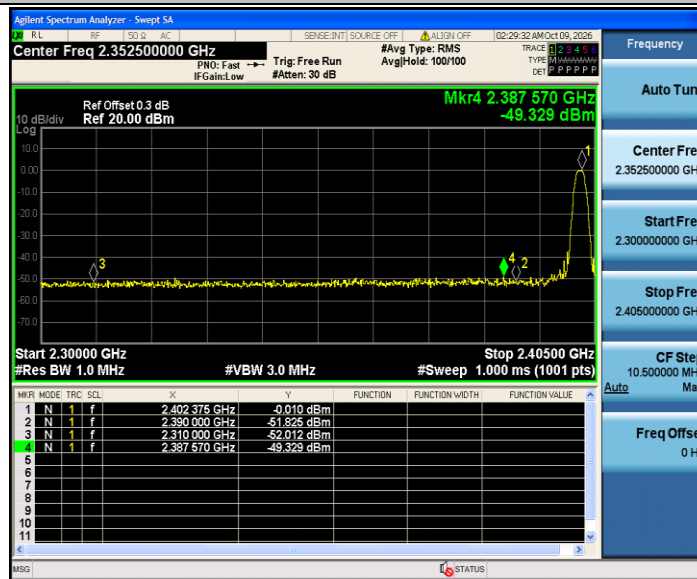
The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

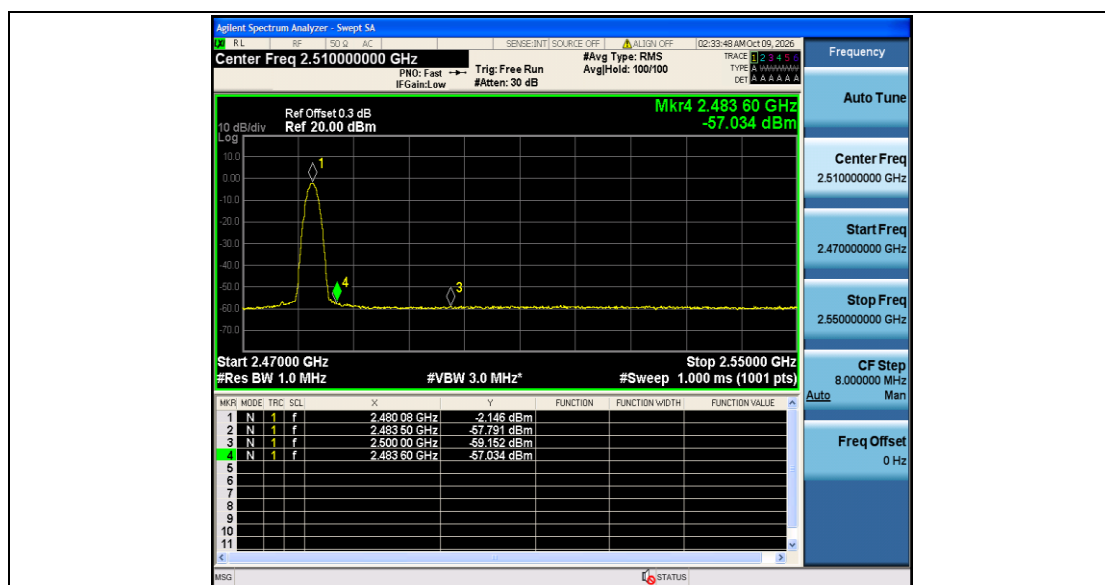
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

