

FCC Appendix RF Test Data for BLE

FCC ID : 2BXKQ-LB-IVD-111

Company : Ovulation Tracker Inc.

EUT : Ovulation Digital Reader

Model Number : LB-IVD-111

Report No. : CTA26080300101

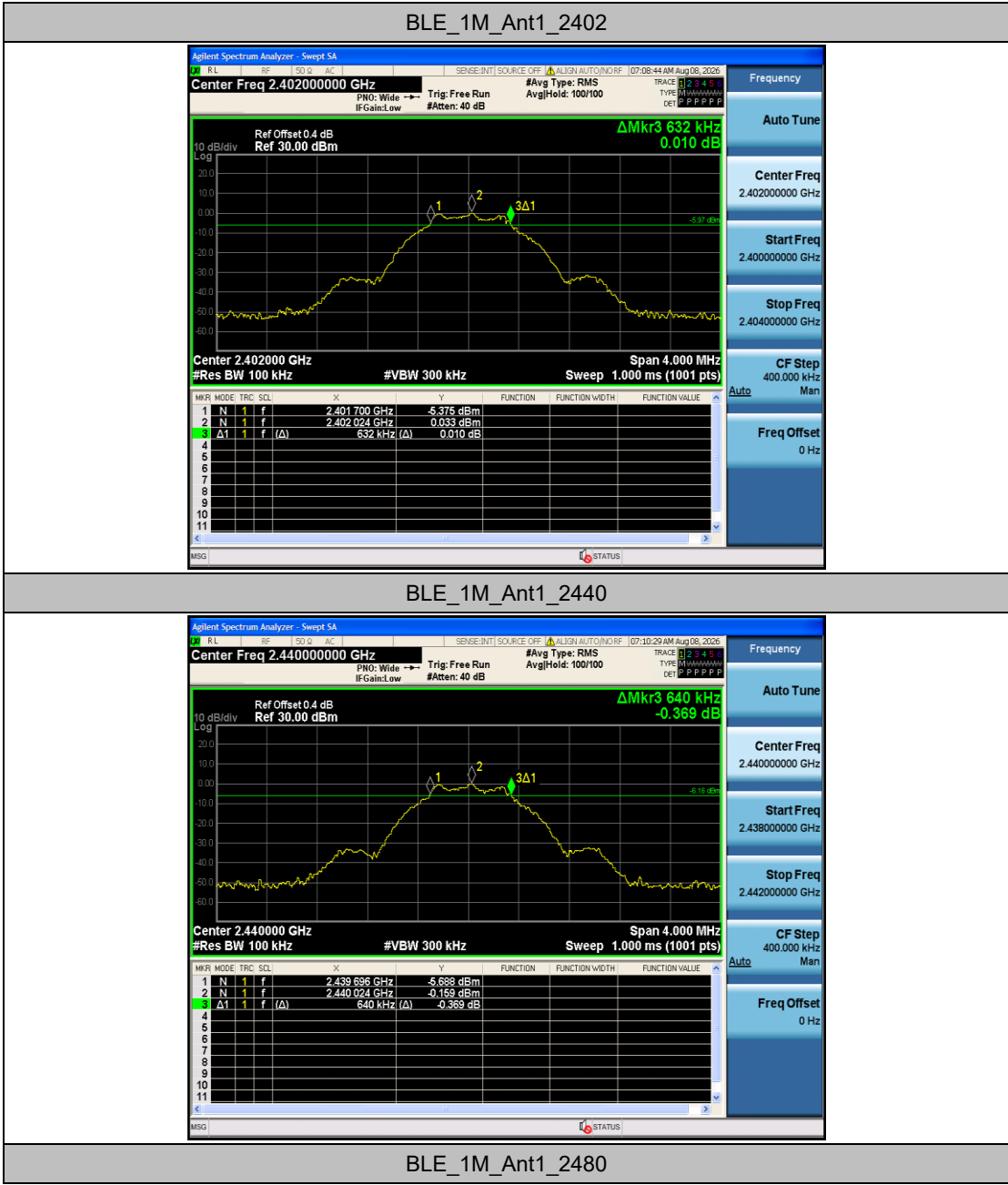
Reviewed By : Eric Wang

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	0.640	2439.696	2440.336	0.5	PASS
		2480	0.644	2479.692	2480.336	0.5	PASS

Test Graphs

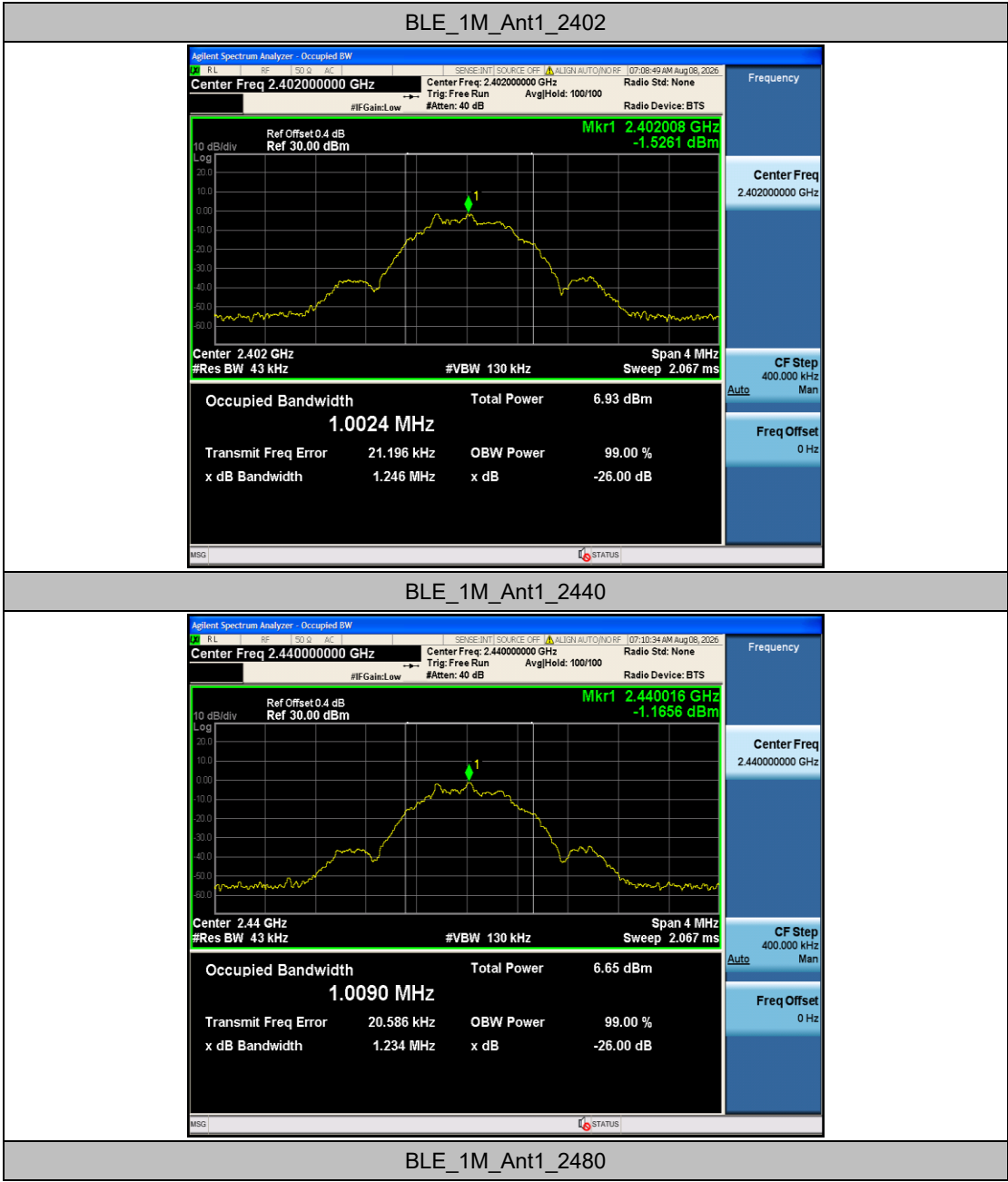


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0024	2401.5200	2402.5224	---	---
		2440	1.0090	2439.5161	2440.5251	---	---
		2480	1.0096	2479.5174	2480.5270	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

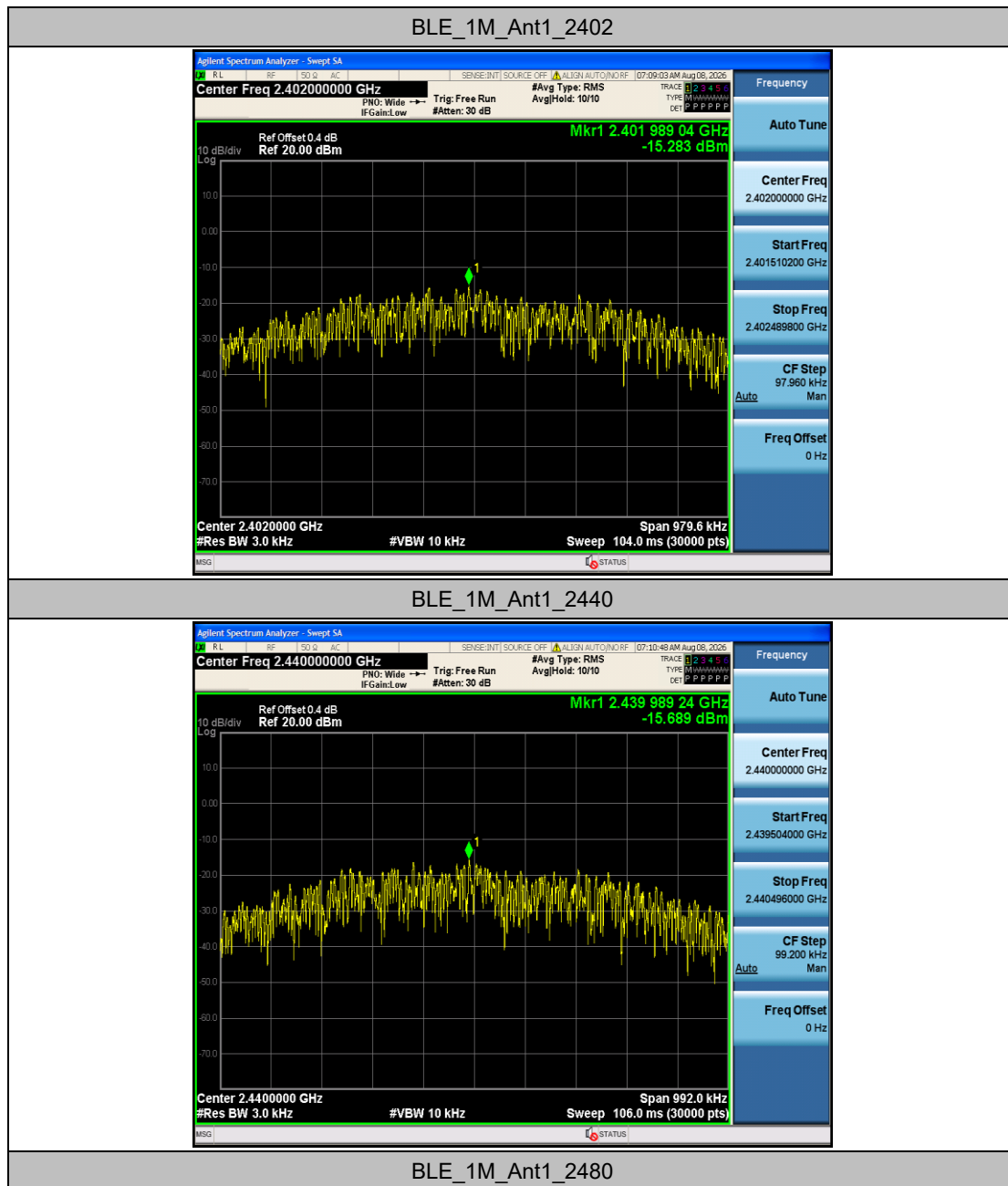
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.19	≤30	PASS
		2440	-0.03	≤30	PASS
		2480	-0.39	≤30	PASS

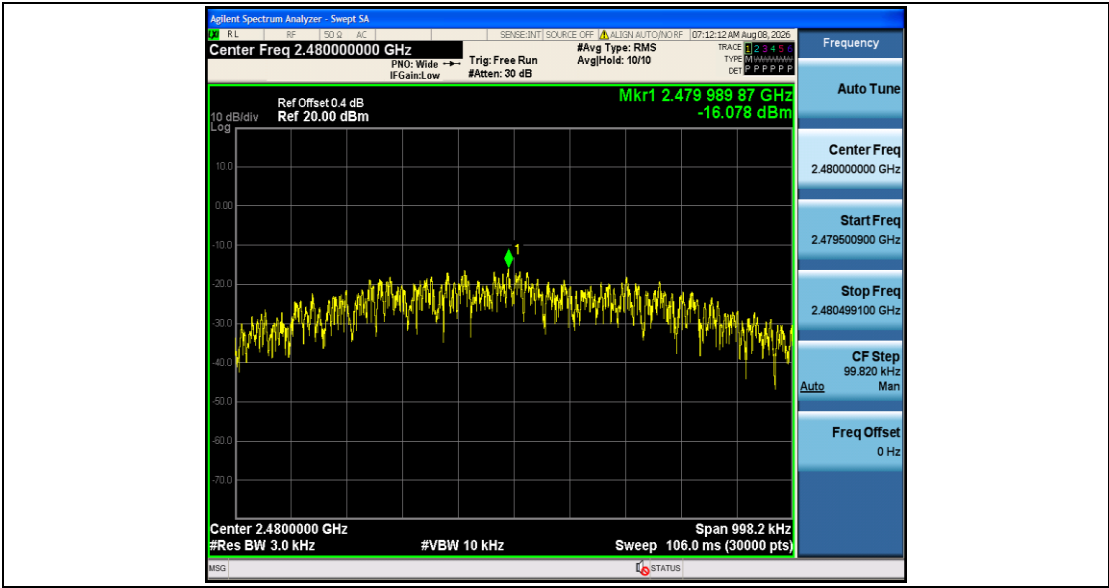
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.28	≤8.00	PASS
		2440	-15.69	≤8.00	PASS
		2480	-16.08	≤8.00	PASS

Test Graphs



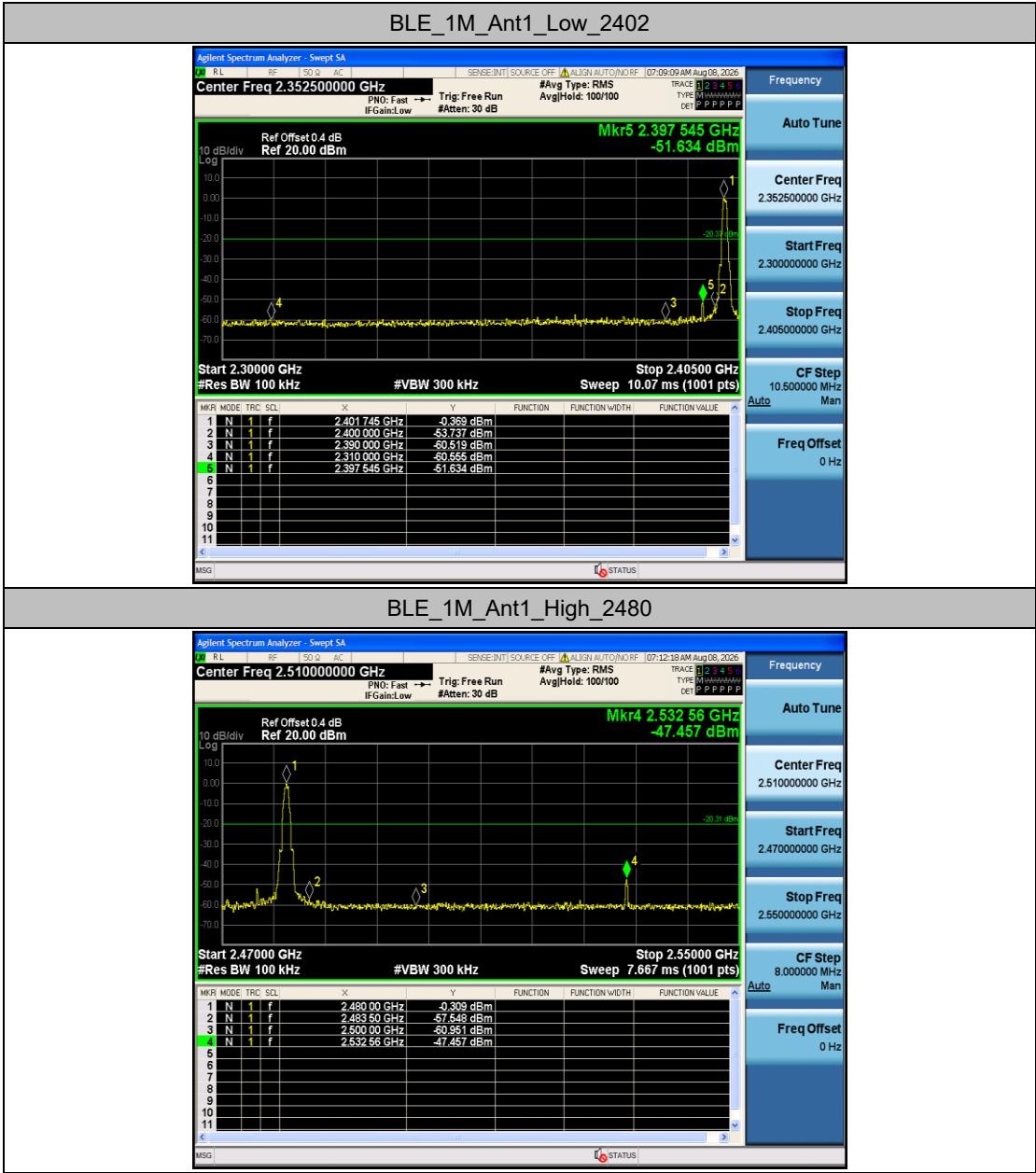


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.37	-51.63	≤-20.37	PASS
		High	2480	-0.31	-47.46	≤-20.31	PASS

Test Graphs

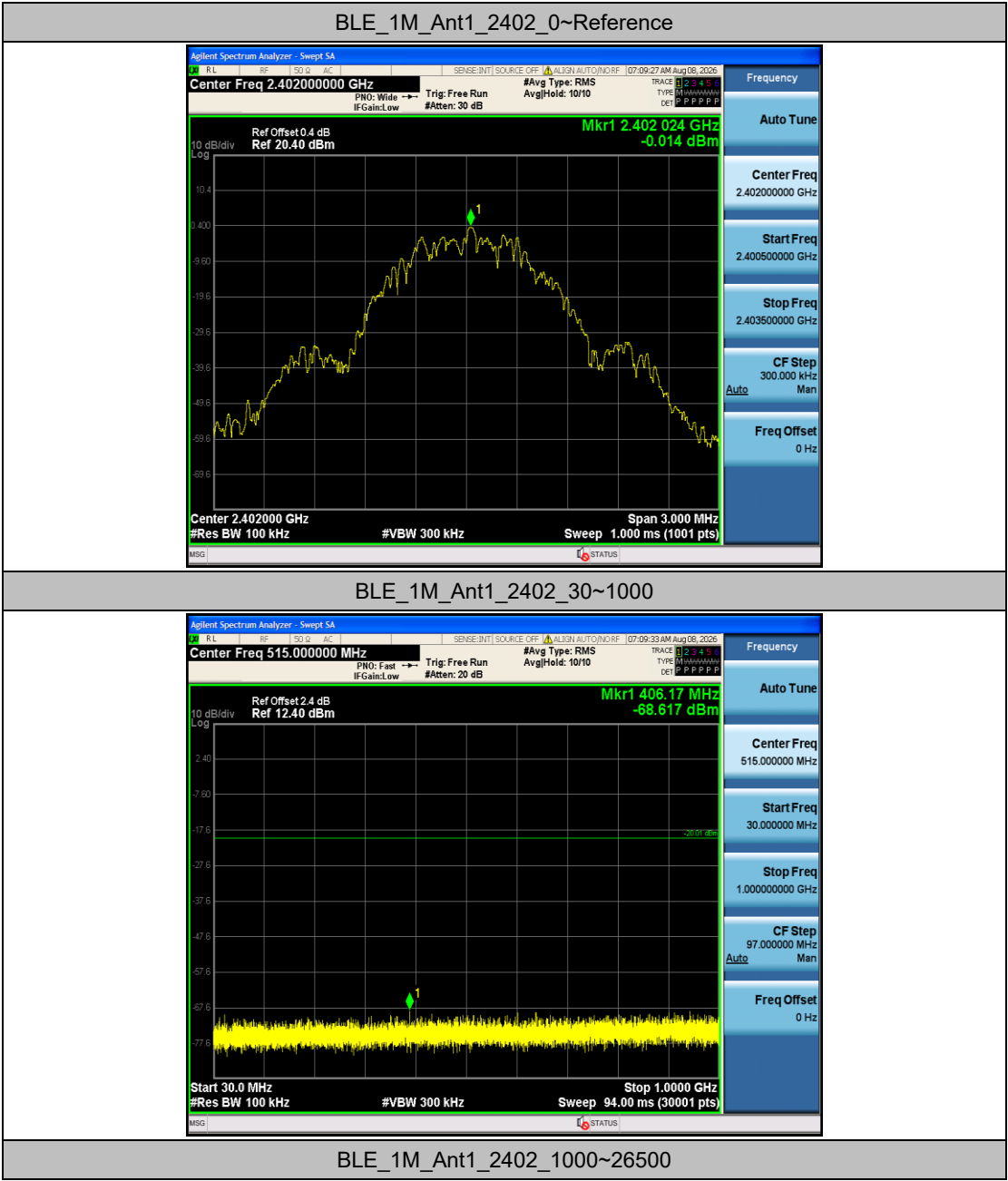


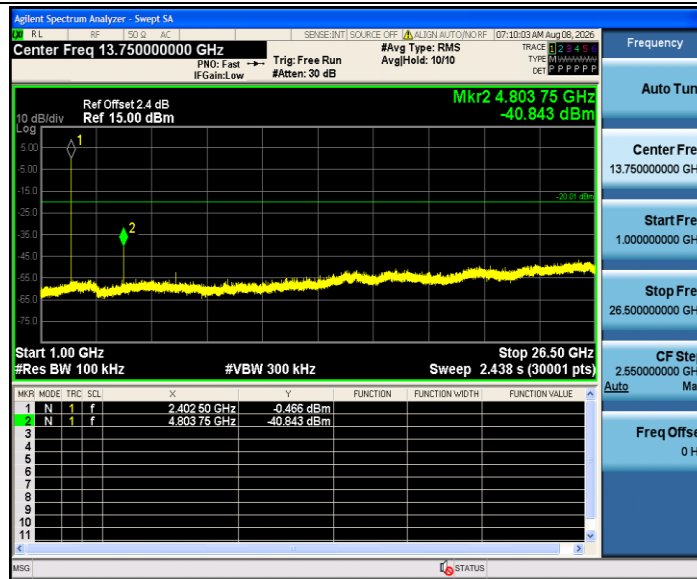
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.01	-0.01	---	PASS
			30~1000	-0.01	-68.62	≤-20.01	PASS
			1000~26500	-0.01	-40.84	≤-20.01	PASS
		2440	Reference	-1.83	-1.83	---	PASS
			30~1000	-1.83	-68.09	≤-21.83	PASS
			1000~26500	-1.83	-41.21	≤-21.83	PASS
		2480	Reference	-0.67	-0.67	---	PASS
			30~1000	-0.67	-68.77	≤-20.67	PASS
			1000~26500	-0.67	-44	≤-20.67	PASS

Test Graphs

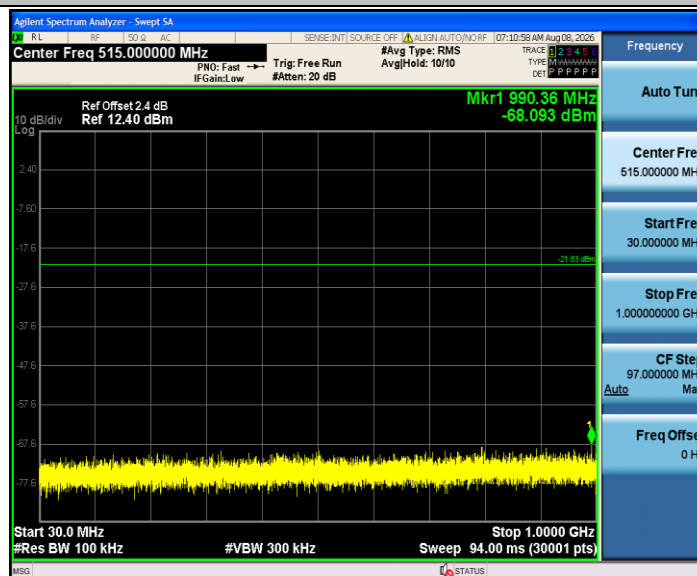




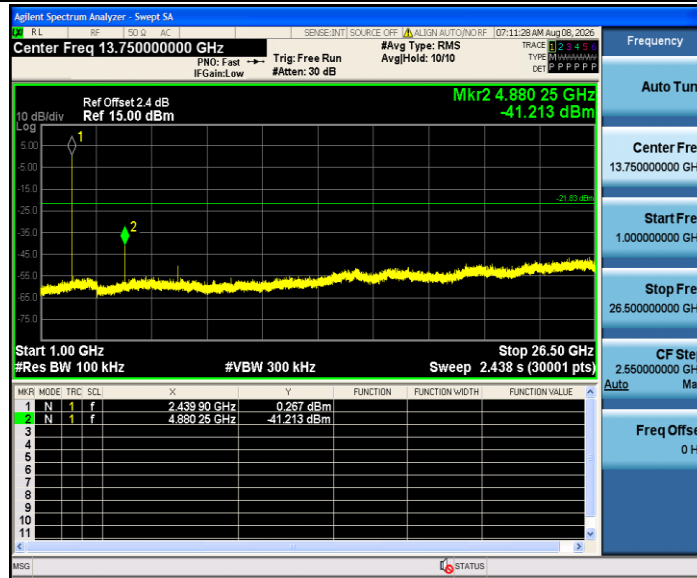
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



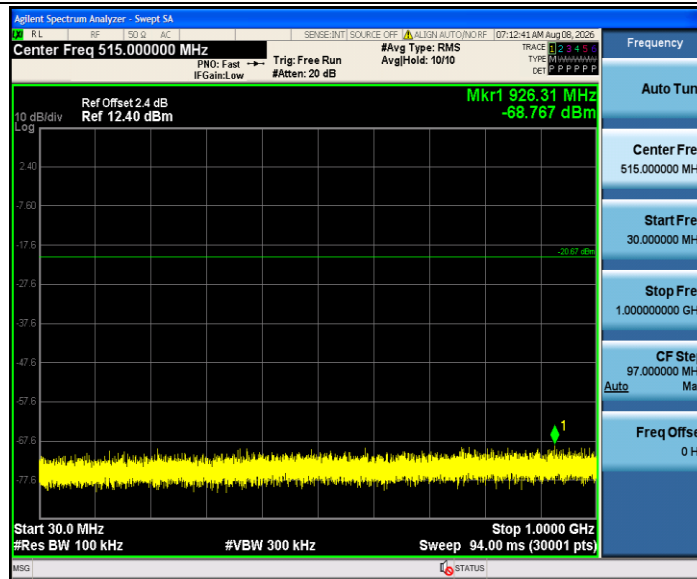
BLE_1M_Ant1_2440_1000~26500



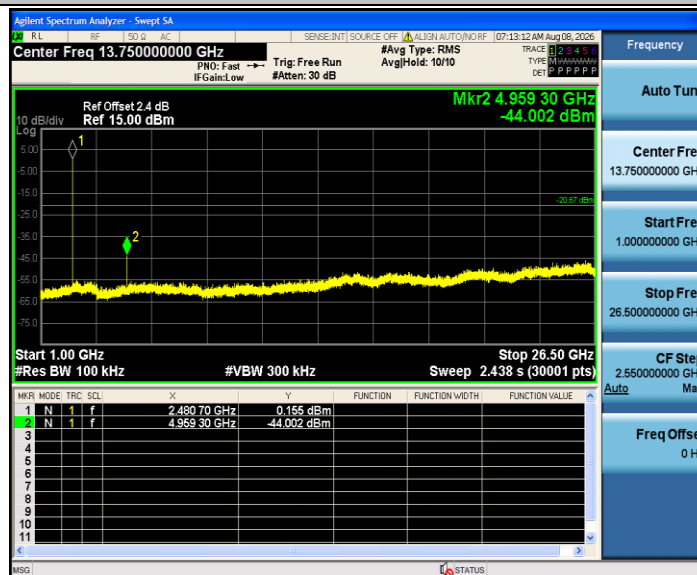
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

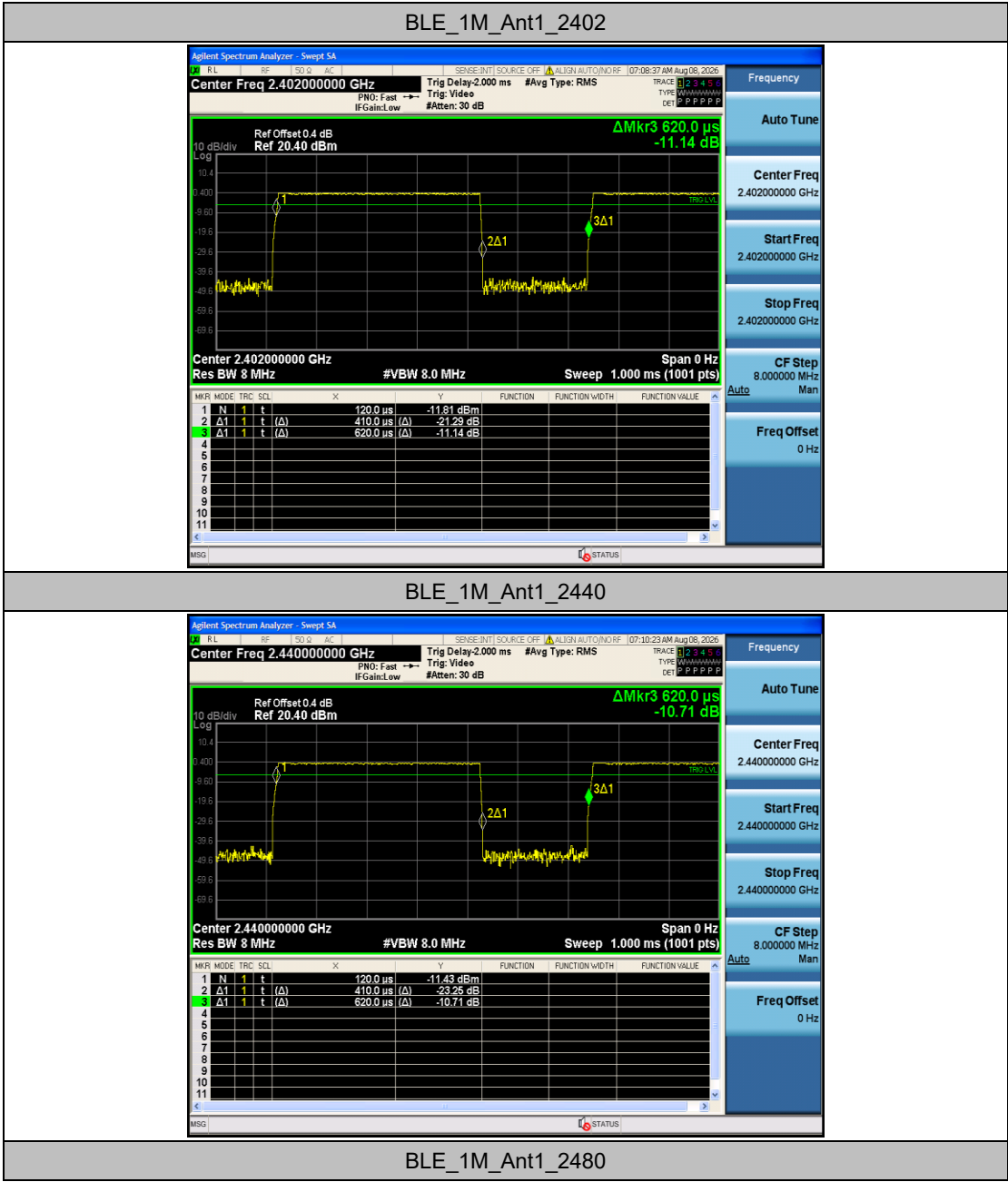


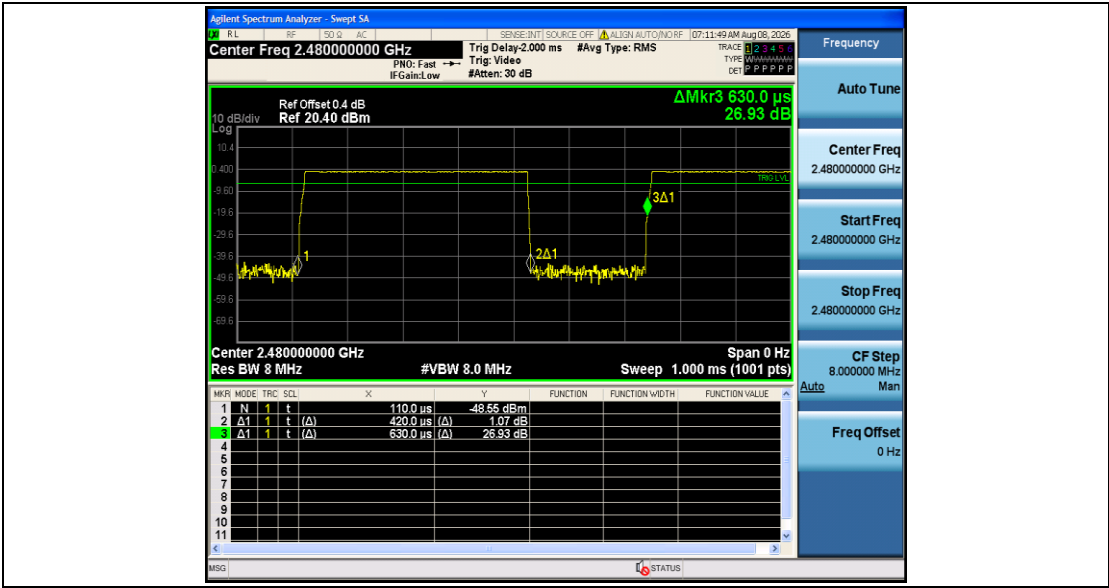
Appendix G: Duty Cycle

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	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	-60.72	2.00	1.80	38.28	≤54	PASS
				AV	2355.755	-59.05	2.00	1.80	39.95	≤54	PASS
				AV	2390.000	-59.72	2.00	1.80	39.28	≤54	PASS
				Peak	2310.000	-51.47	2.00	0.00	45.73	≤74	PASS
				Peak	2378.960	-49.17	2.00	0.00	48.03	≤74	PASS
				Peak	2390.000	-50.97	2.00	0.00	46.23	≤74	PASS
		High	2480	AV	2483.500	-57.39	2.00	1.76	41.57	≤54	PASS
				AV	2484.720	-56.42	2.00	1.76	42.54	≤54	PASS
				AV	2500.000	-59.19	2.00	1.76	39.77	≤54	PASS
				Peak	2483.500	-48.32	2.00	0.00	48.88	≤74	PASS
				Peak	2484.400	-43.11	2.00	0.00	54.09	≤74	PASS
				Peak	2500.000	-51.07	2.00	0.00	46.13	≤74	PASS

Note:

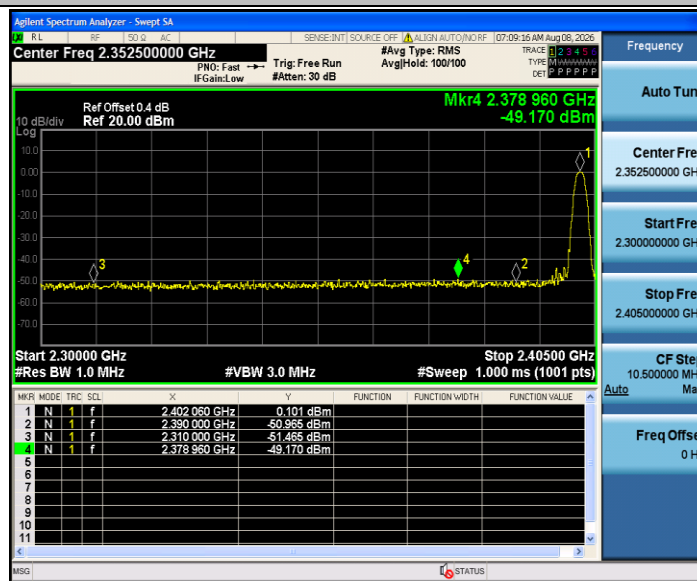
1. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

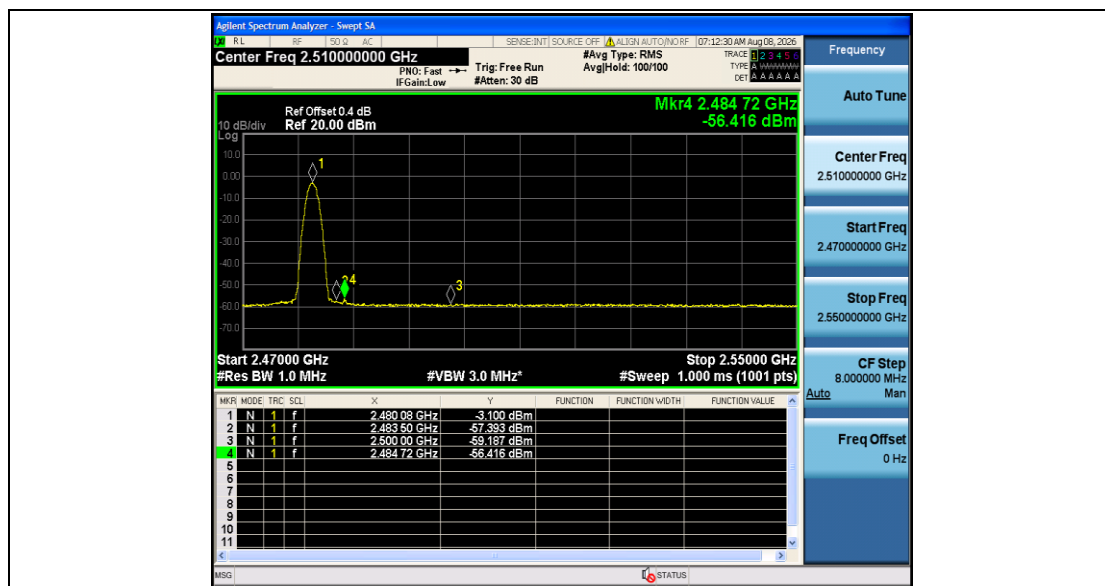
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

