

FCC Appendix RF Test Data for BLE

FCC ID : 2BRR7-MPAK100

Company : ICAD Holdings LLC

EUT : Bluetooth Party Speaker

Model Number : YM17

Report No. : CTA26070600801

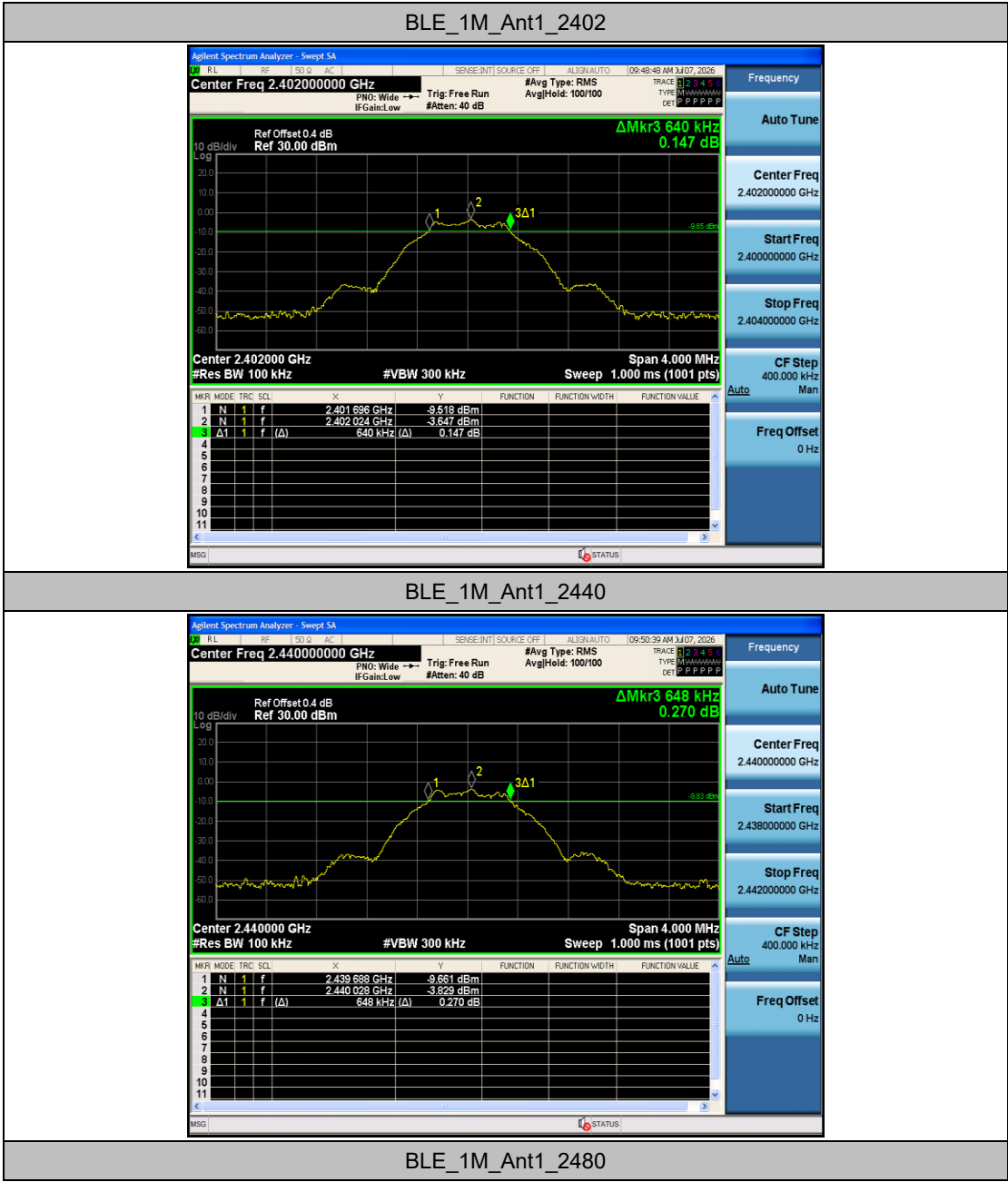
Reviewed By : Eric Wang

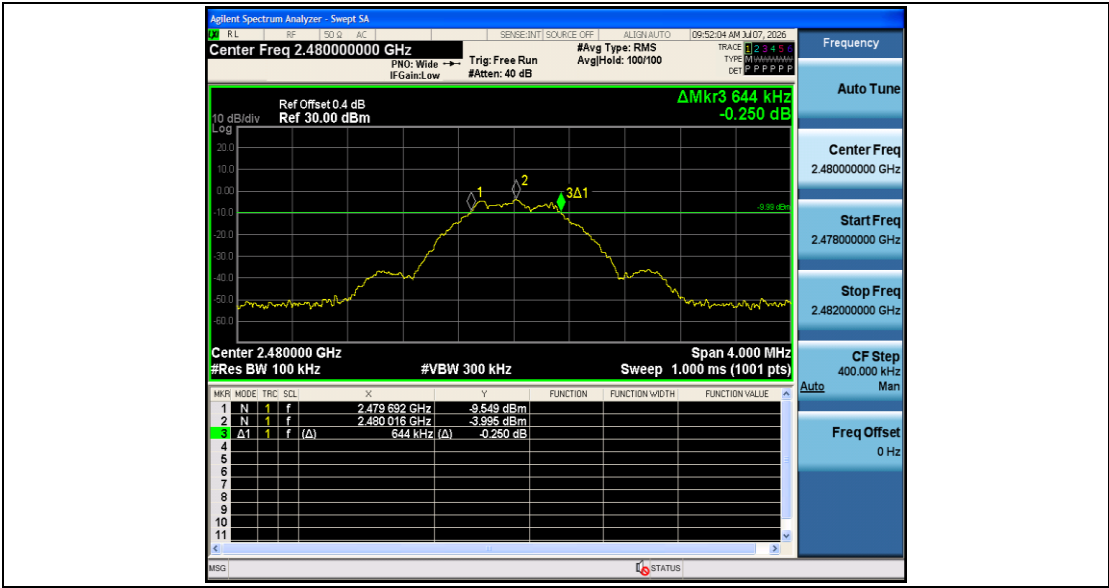
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.640	2401.696	2402.336	0.5	PASS
		2440	0.648	2439.688	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	1.0059	2401.5194	2402.5253	---	---
		2440	1.0089	2439.5183	2440.5272	---	---
		2480	1.0131	2479.5172	2480.5303	---	---

Test Graphs

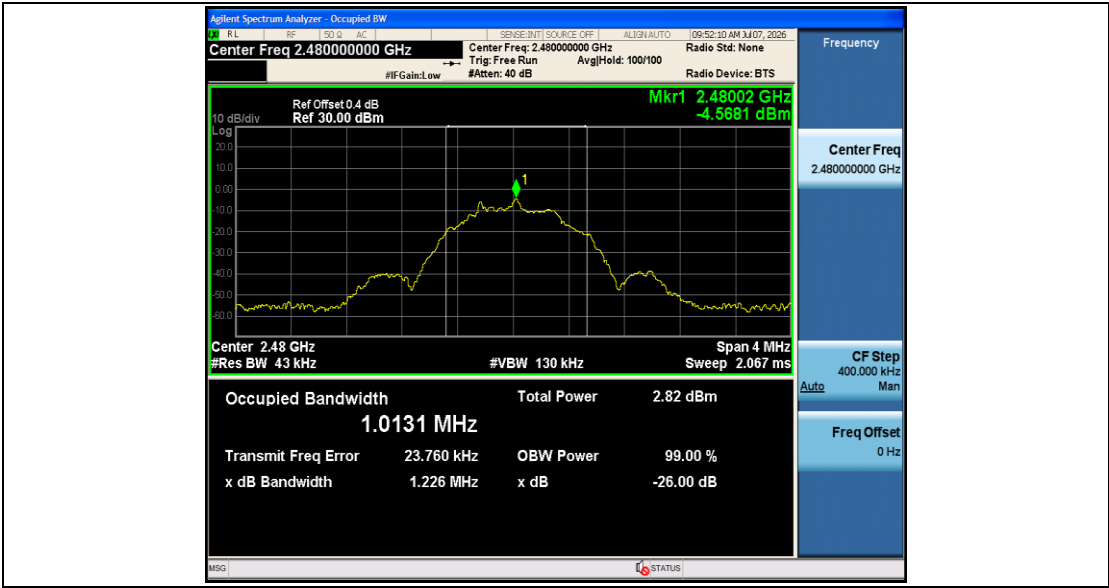
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

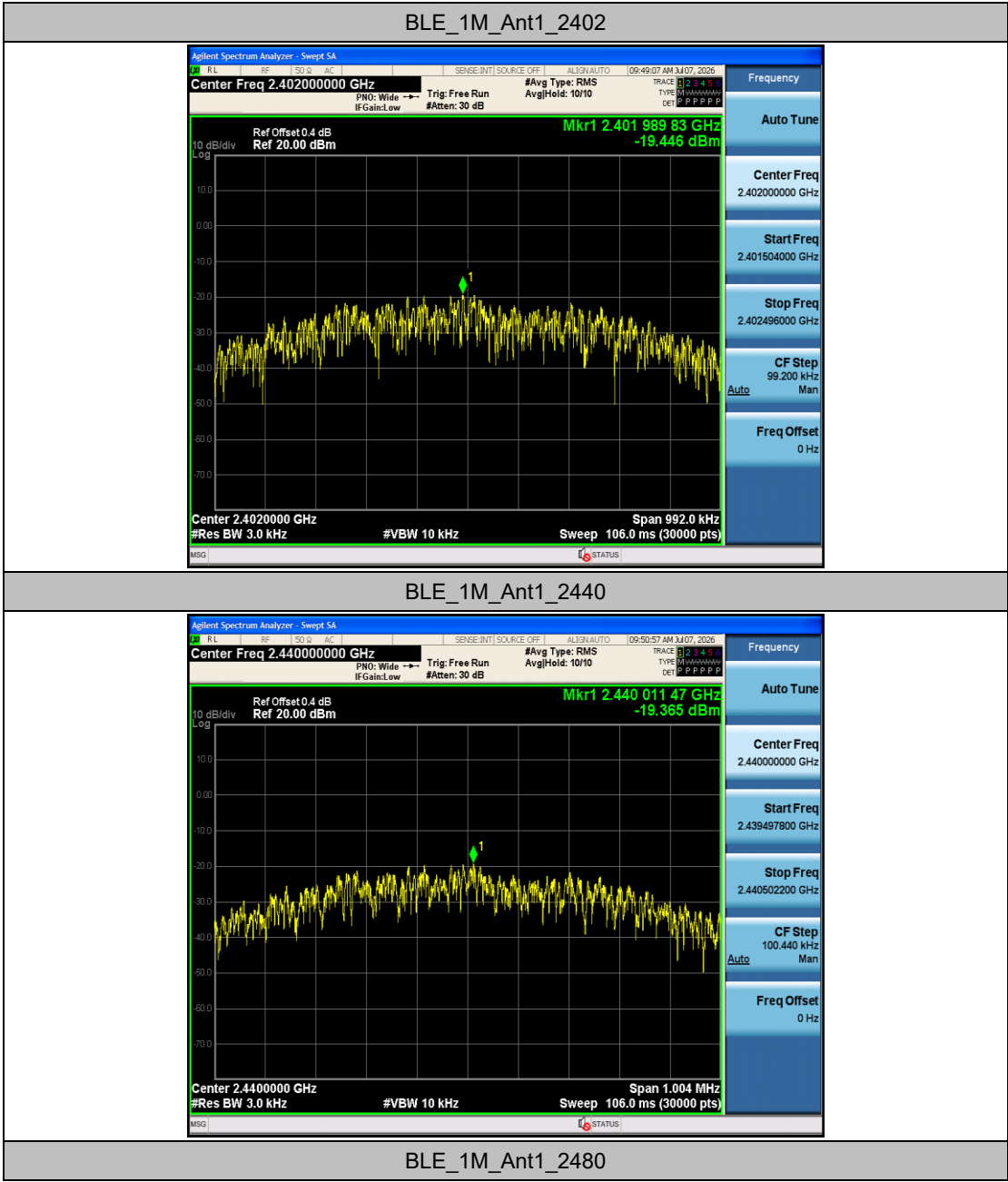
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.44	≤30	PASS
		2440	-3.51	≤30	PASS
		2480	-3.81	≤30	PASS

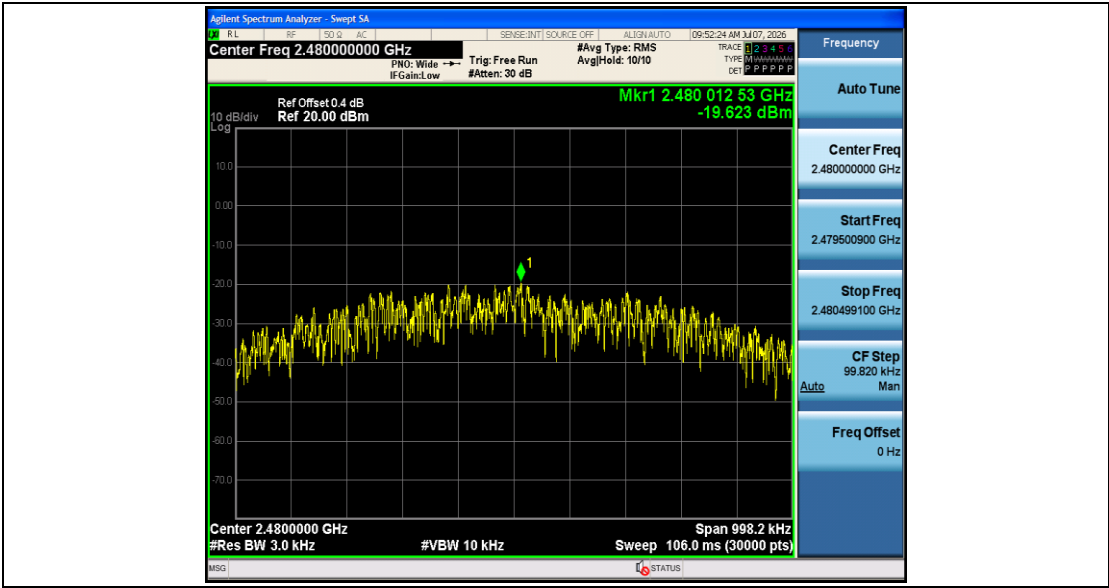
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.45	≤8.00	PASS
		2440	-19.37	≤8.00	PASS
		2480	-19.62	≤8.00	PASS

Test Graphs





Appendix E: Conducted Spurious Emission

Test Result

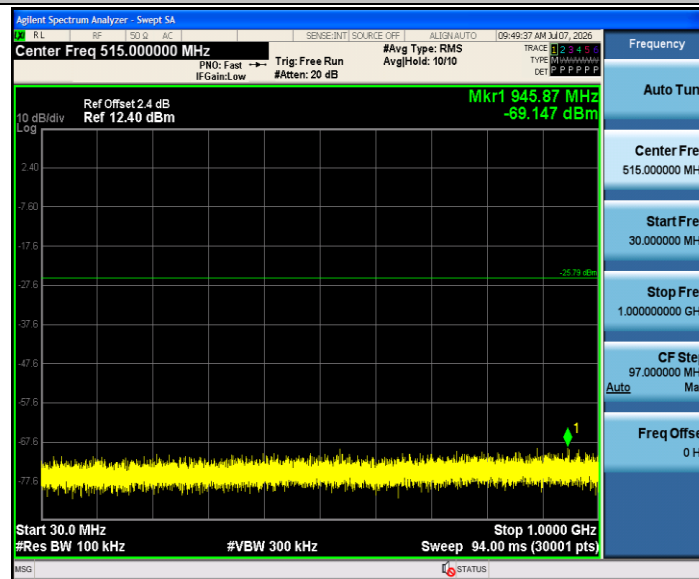
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-5.79	-5.79	---	PASS
			30~1000	-5.79	-69.15	≤-25.79	PASS
			1000~26500	-5.79	-43.07	≤-25.79	PASS
		2440	Reference	-5.41	-5.41	---	PASS
			30~1000	-5.41	-69.33	≤-25.41	PASS
			1000~26500	-5.41	-45.91	≤-25.41	PASS
		2480	Reference	-5.99	-5.99	---	PASS
			30~1000	-5.99	-68.54	≤-25.99	PASS
			1000~26500	-5.99	-45.53	≤-25.99	PASS

Test Graphs

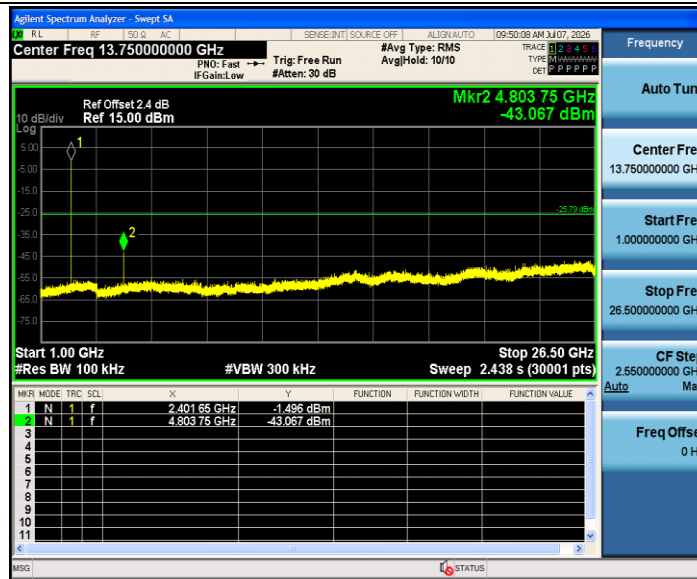
BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



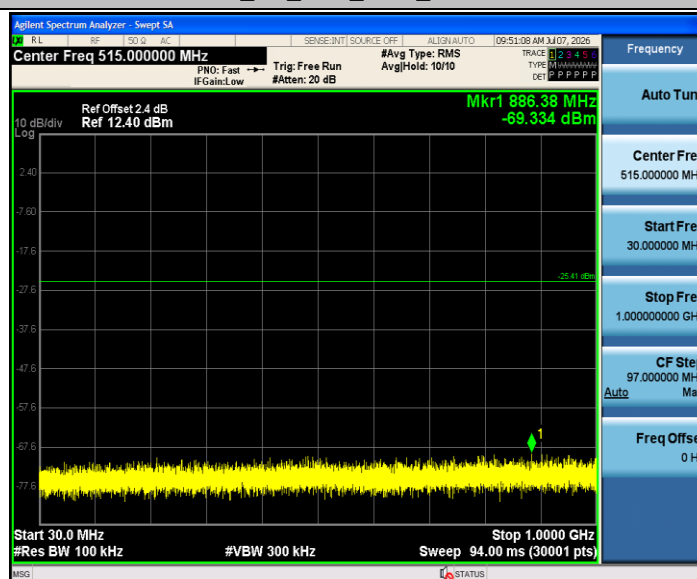
BLE_1M_Ant1_2402_1000~26500



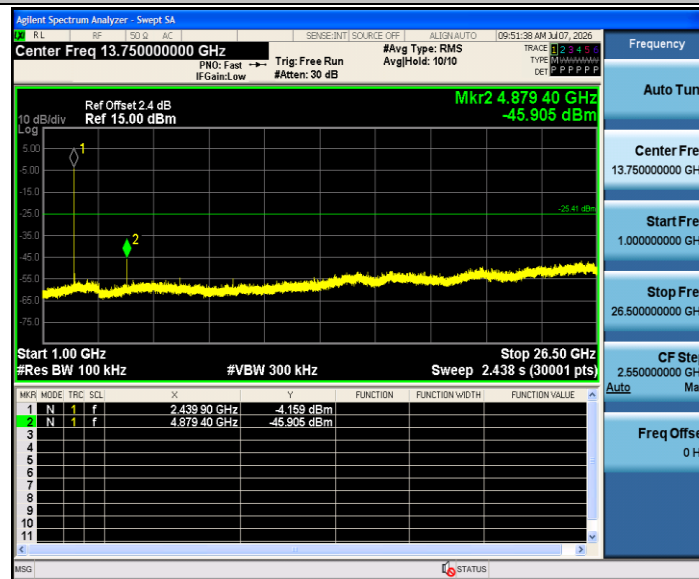
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



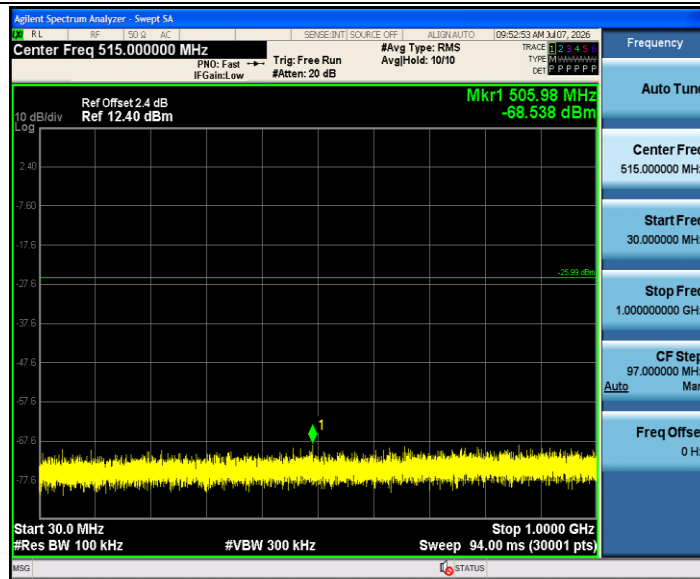
BLE_1M_Ant1_2440_1000~26500



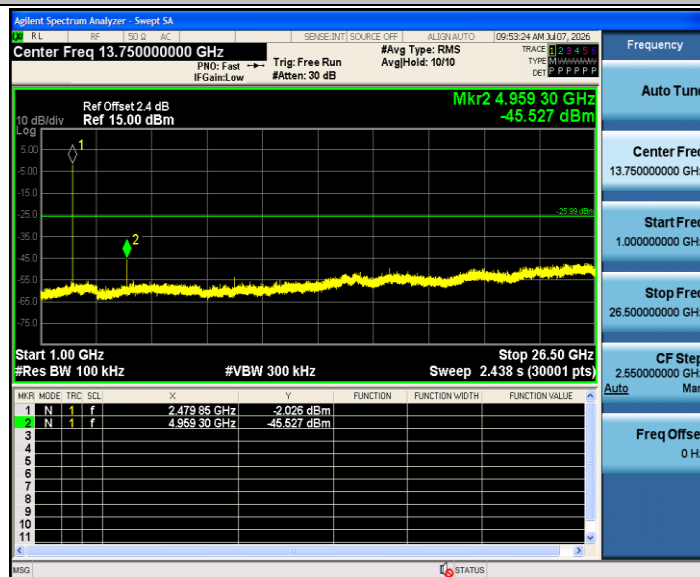
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

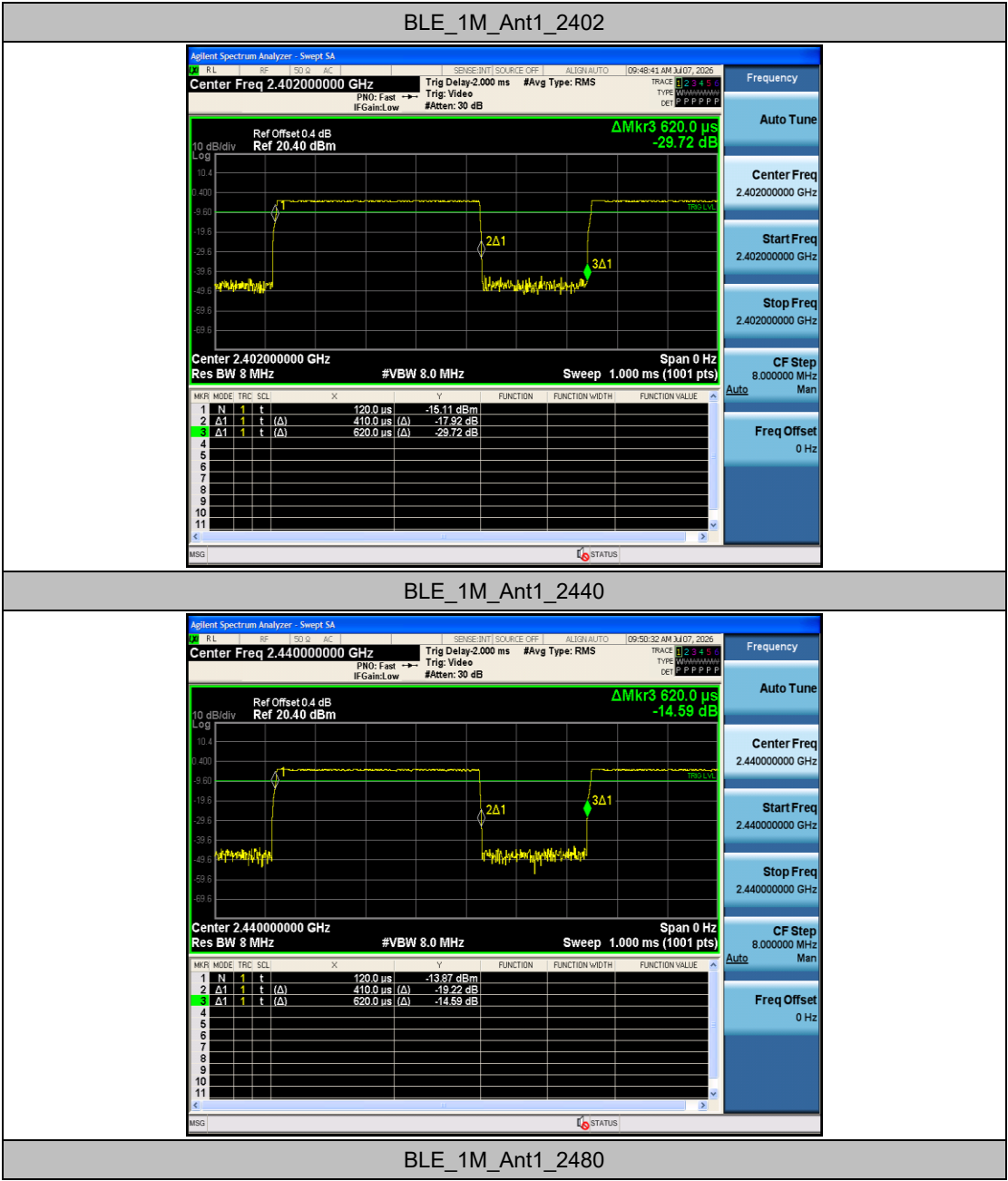


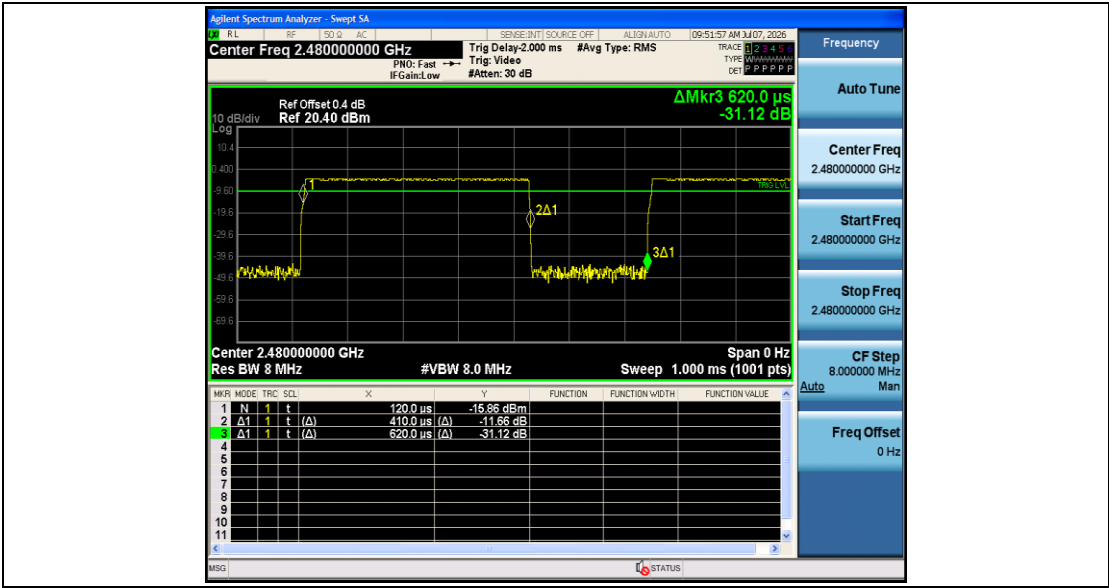
Appendix F: Duty Cycle

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





Appendix G: Emissions in Restricted Bands

Test Result

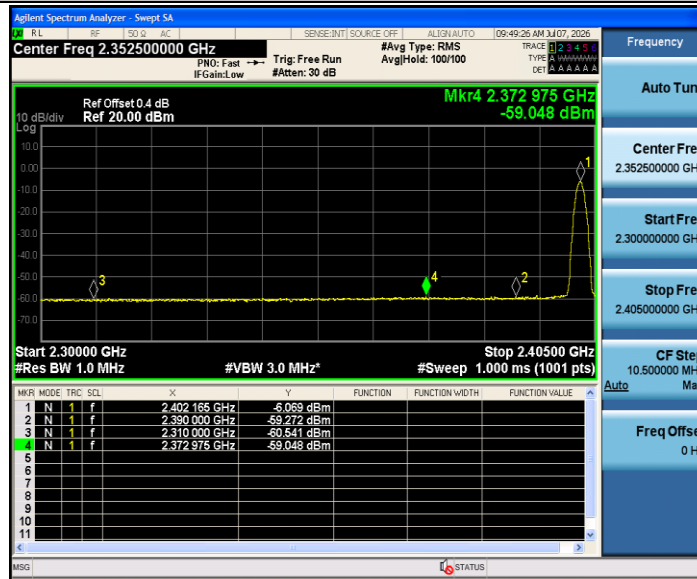
TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.54	2.499	1.80	38.959	≤54	PASS
				AV	2372.975	-59.05	2.499	1.80	40.449	≤54	PASS
				AV	2390.000	-59.27	2.499	1.80	40.229	≤54	PASS
				Peak	2310.000	-53.1	2.499	0.00	44.599	≤74	PASS
				Peak	2377.280	-49.18	2.499	0.00	48.519	≤74	PASS
				Peak	2390.000	-49.84	2.499	0.00	47.859	≤74	PASS
		High	2480	AV	2483.500	-58.32	2.499	1.80	41.179	≤54	PASS
				AV	2483.520	-58.32	2.499	1.80	41.179	≤54	PASS
				AV	2500.000	-59.2	2.499	1.80	40.299	≤54	PASS
				Peak	2483.500	-50.89	2.499	0.00	46.809	≤74	PASS
				Peak	2484.240	-46.41	2.499	0.00	51.289	≤74	PASS
				Peak	2500.000	-51.81	2.499	0.00	45.889	≤74	PASS

Note:

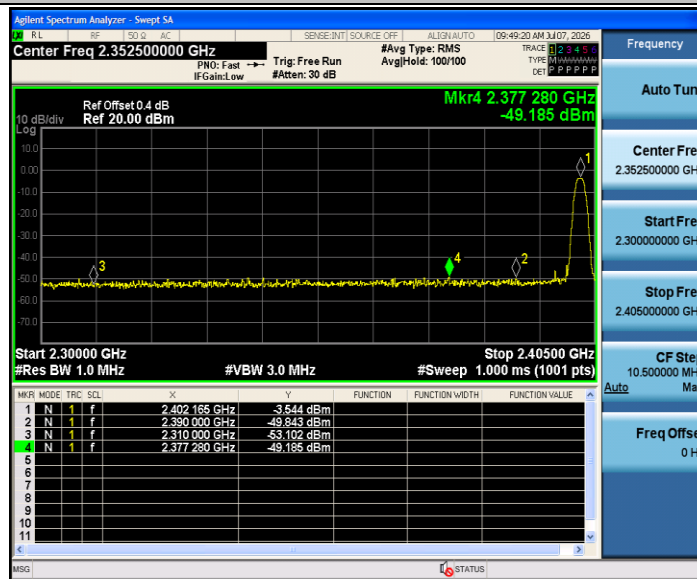
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

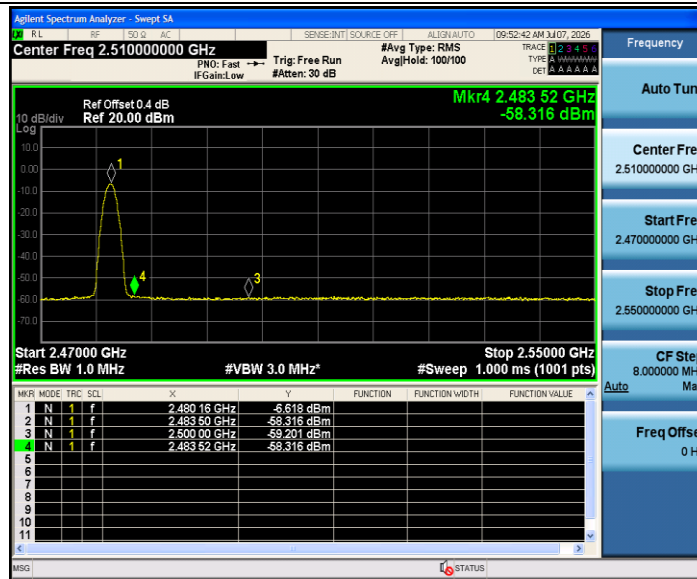
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

