

FCC Appendix RF Test Data for BLE

FCC ID : 2BX4Z-AF-JZSB-FBA

Company : shenzhenshiyalianfengkejiyouxiangongsi

EUT : Trackball Mouse

Model Number : AF-JZSB-FBA

Report No. : CTA26082600101

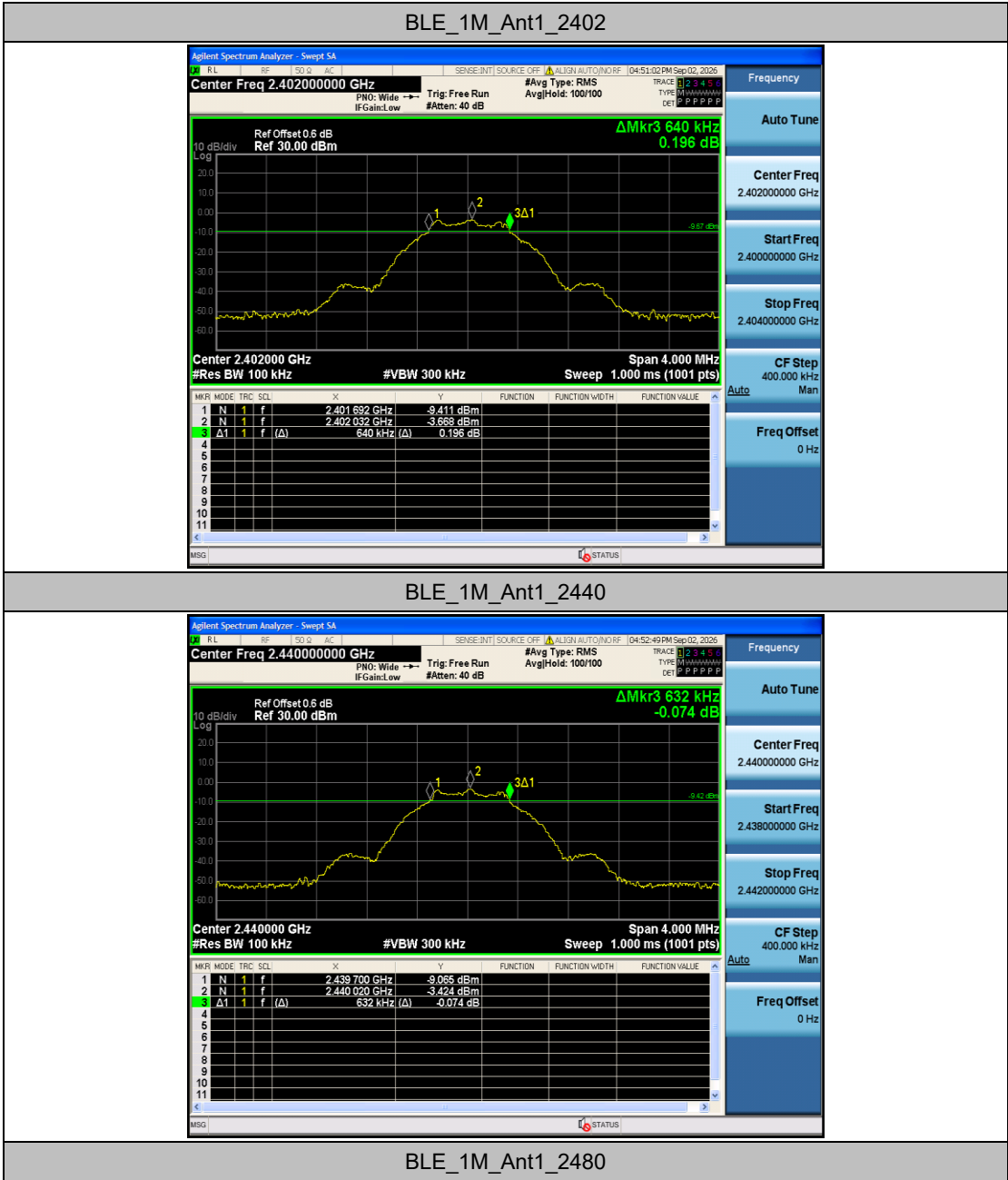
Reviewed By : Eric Wang

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	0.632	2439.700	2440.332	0.5	PASS
		2480	0.640	2479.692	2480.332	0.5	PASS

Test Graphs



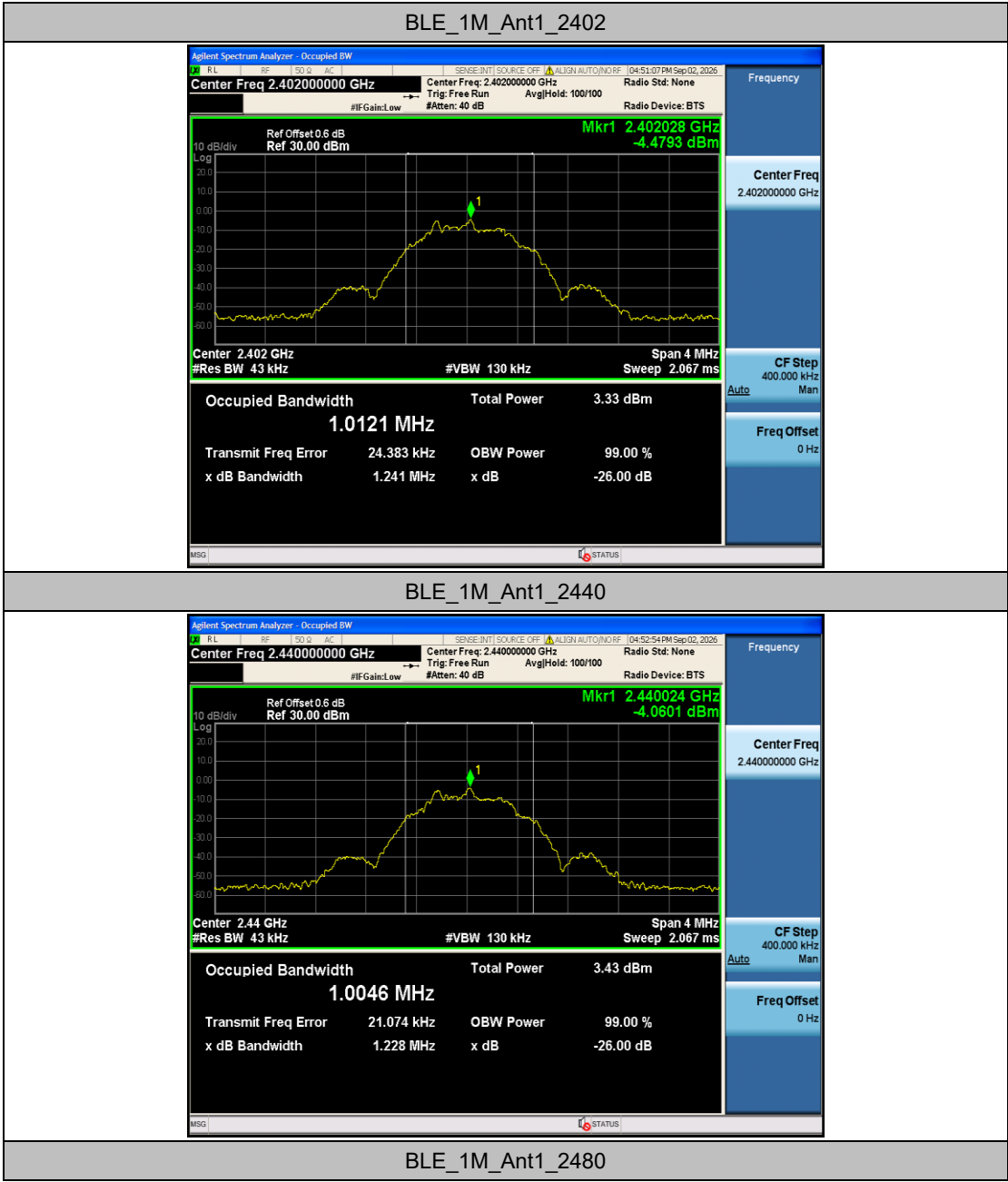


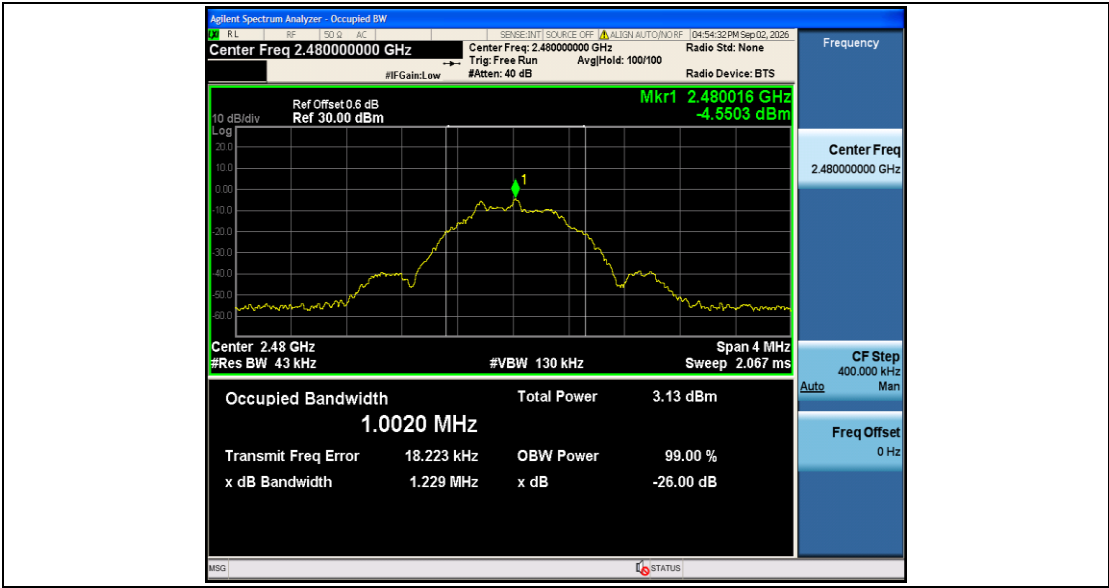
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0121	2401.5183	2402.5304	---	---
		2440	1.0046	2439.5188	2440.5234	---	---
		2480	1.0020	2479.5172	2480.5192	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

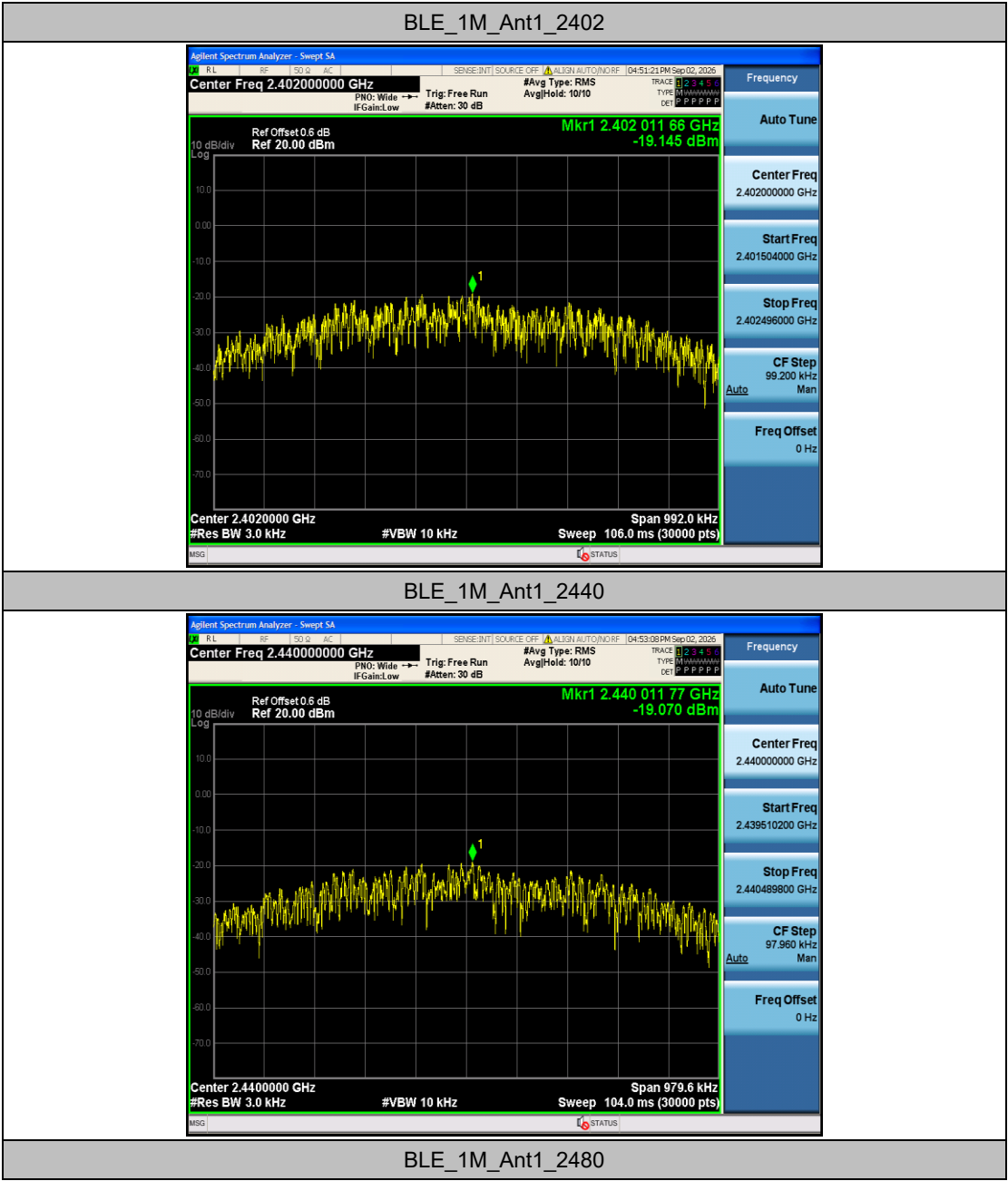
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.20	≤30	PASS
		2440	-3.25	≤30	PASS
		2480	-3.51	≤30	PASS

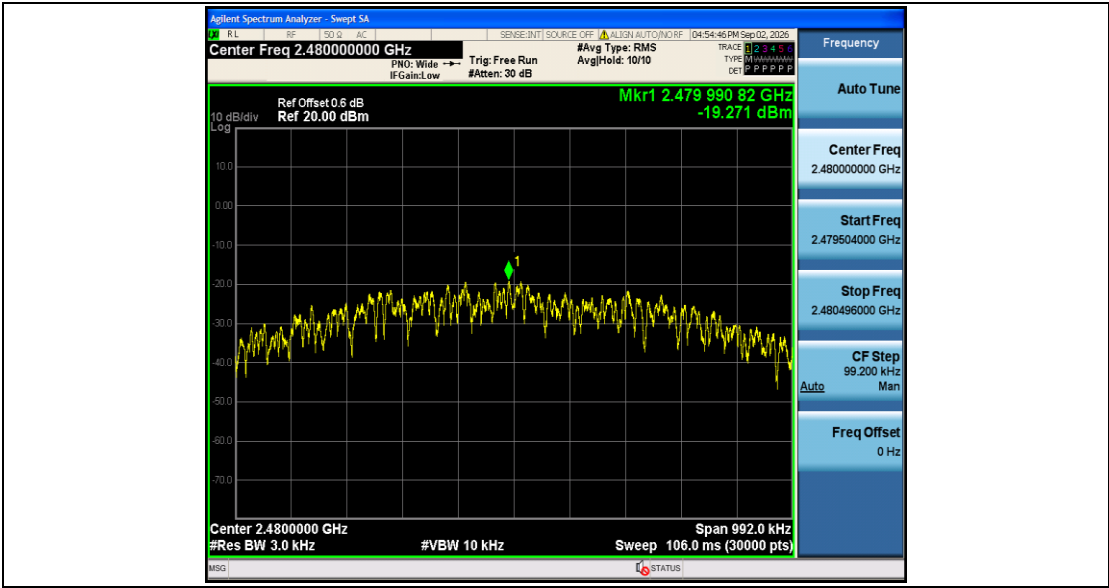
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.15	≤8.00	PASS
		2440	-19.07	≤8.00	PASS
		2480	-19.27	≤8.00	PASS

Test Graphs



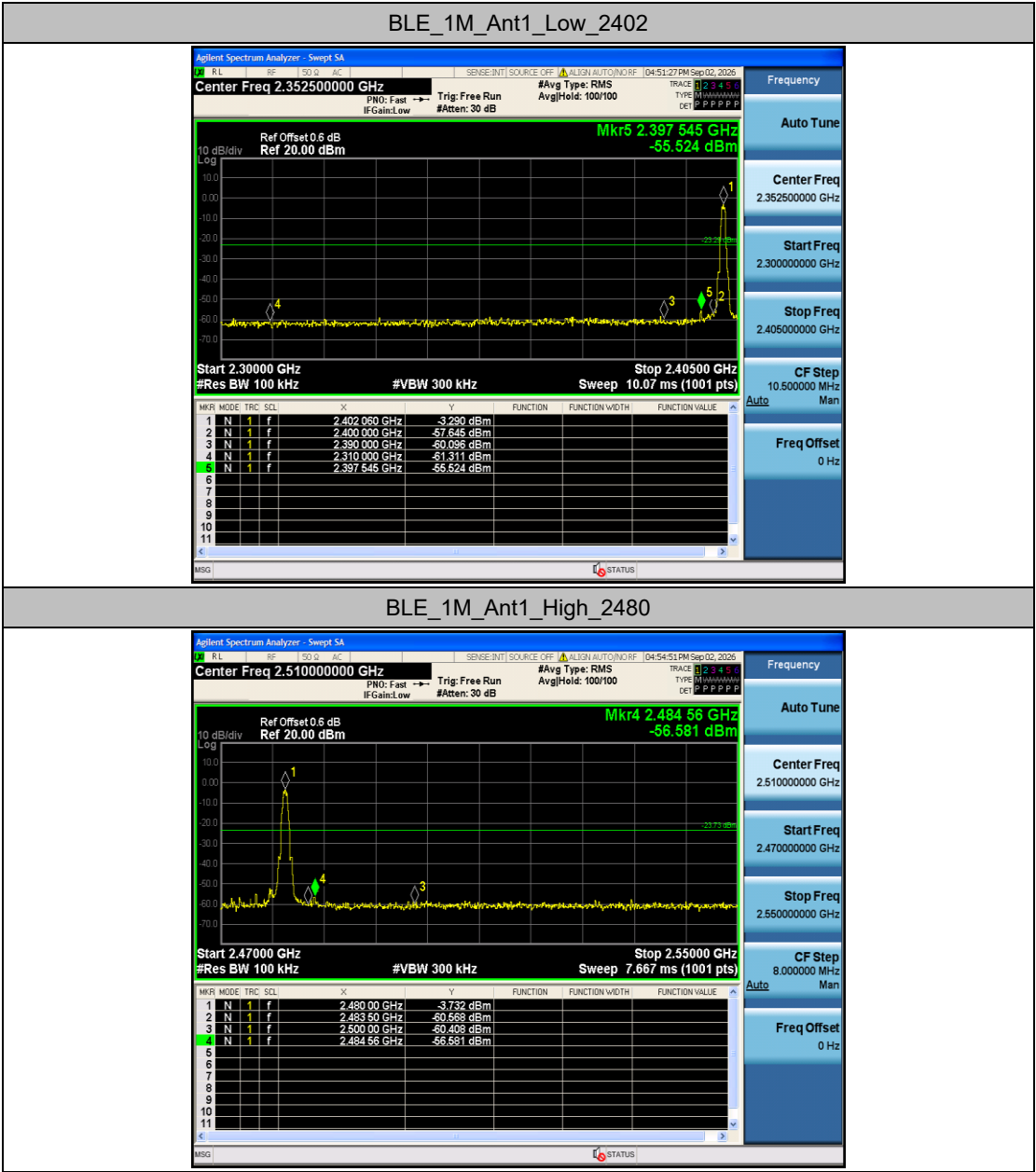


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.29	-55.52	≤-23.29	PASS
		High	2480	-3.73	-56.58	≤-23.73	PASS

Test Graphs

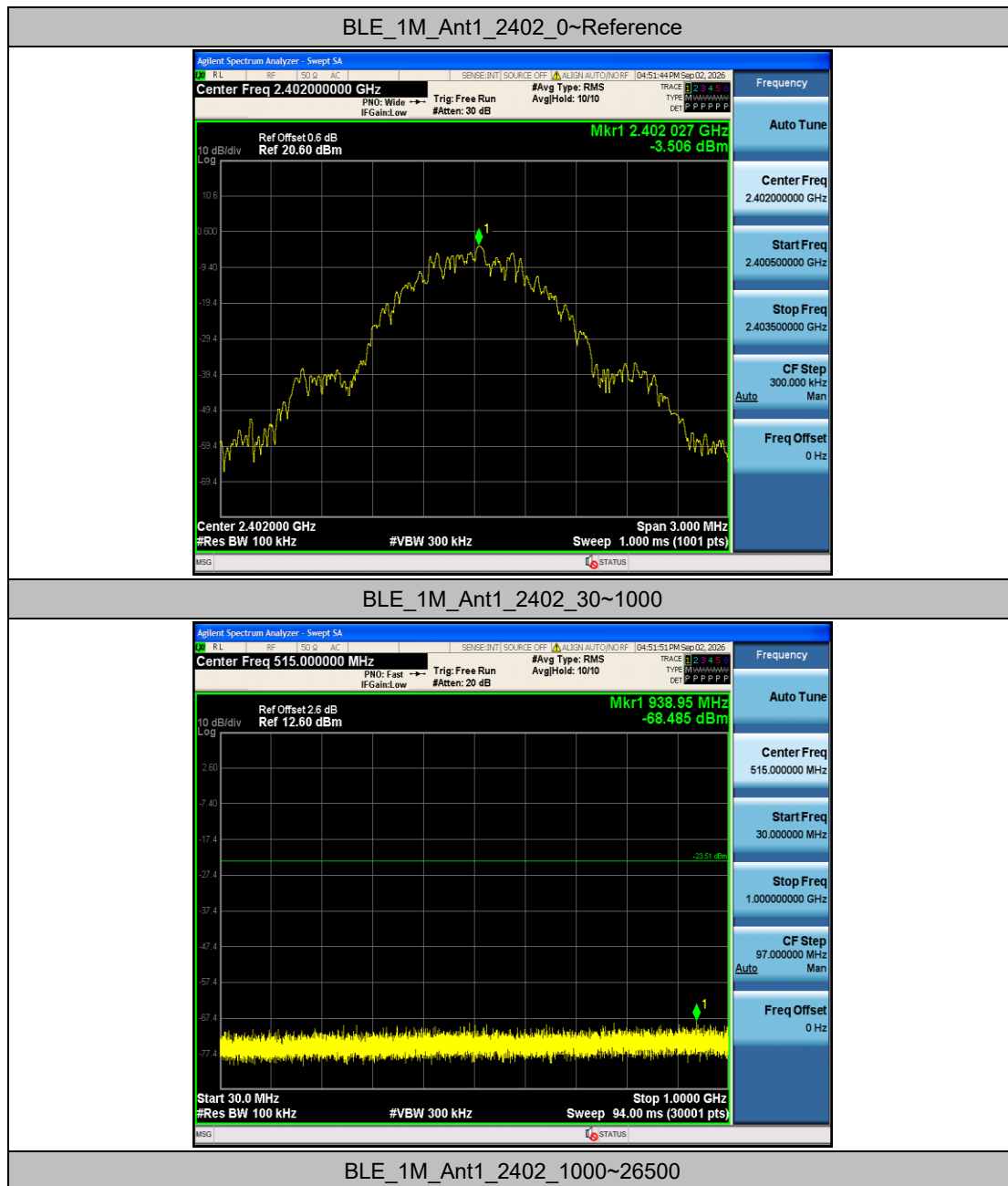


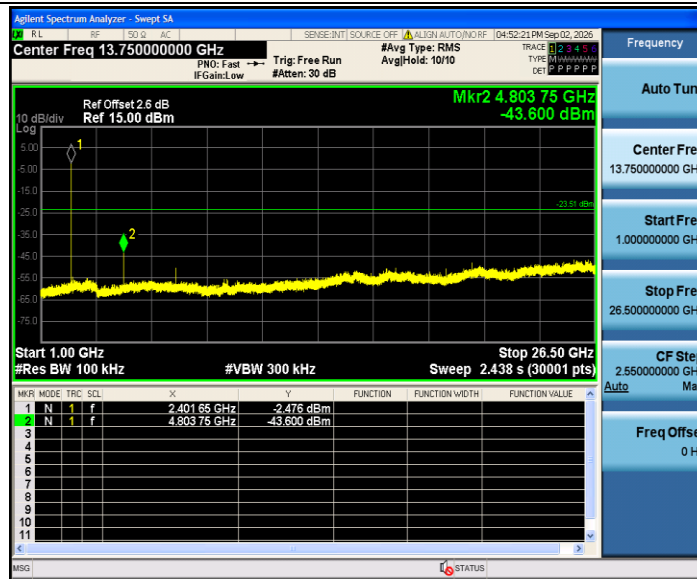
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.51	-3.51	---	PASS
			30~1000	-3.51	-68.49	≤-23.51	PASS
			1000~26500	-3.51	-43.6	≤-23.51	PASS
		2440	Reference	-3.97	-3.97	---	PASS
			30~1000	-3.97	-68.39	≤-23.97	PASS
			1000~26500	-3.97	-46.16	≤-23.97	PASS
		2480	Reference	-5.28	-5.28	---	PASS
			30~1000	-5.28	-68.22	≤-25.28	PASS
			1000~26500	-5.28	-45.81	≤-25.28	PASS

Test Graphs

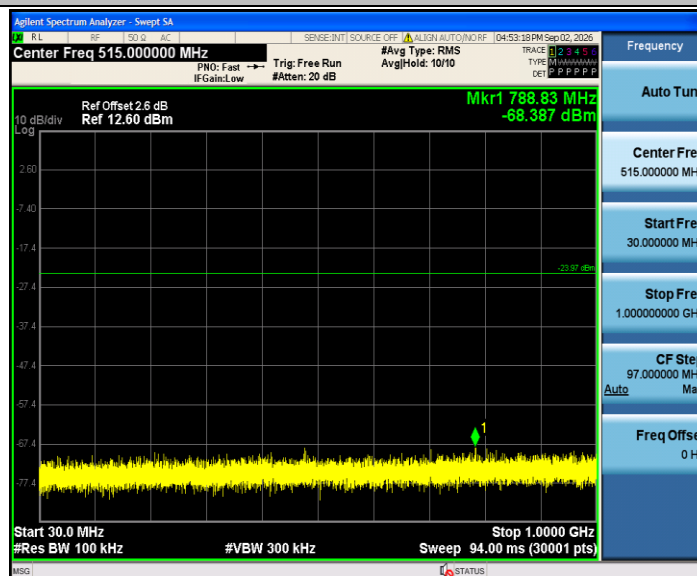




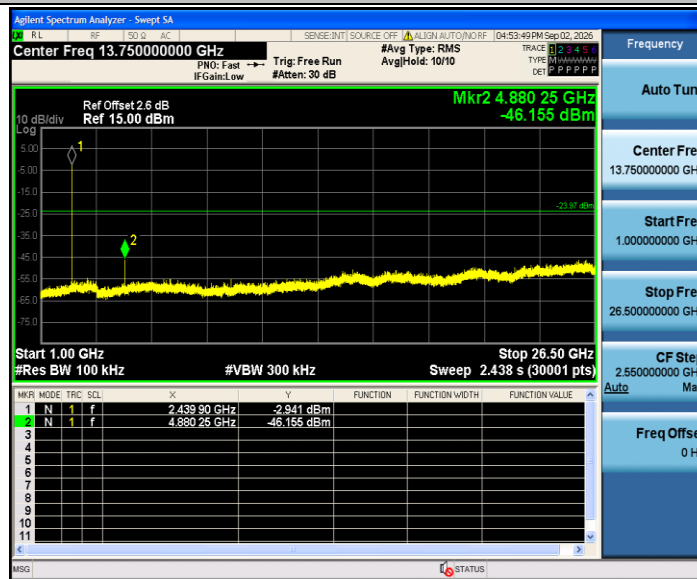
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



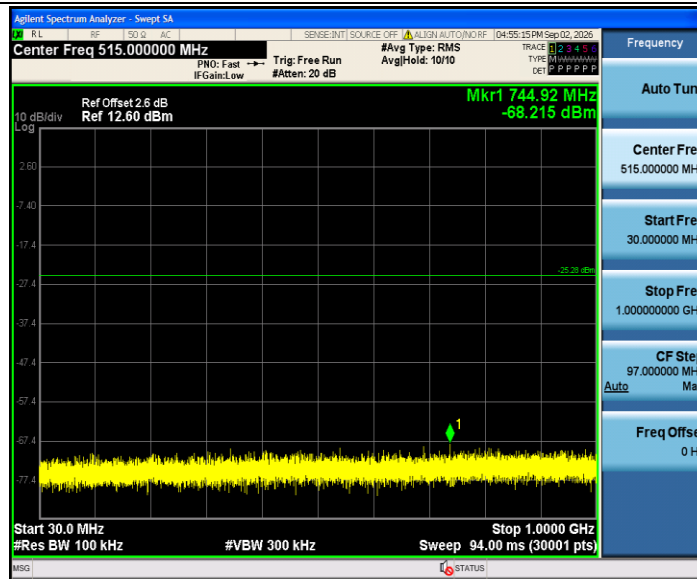
BLE_1M_Ant1_2440_1000~26500



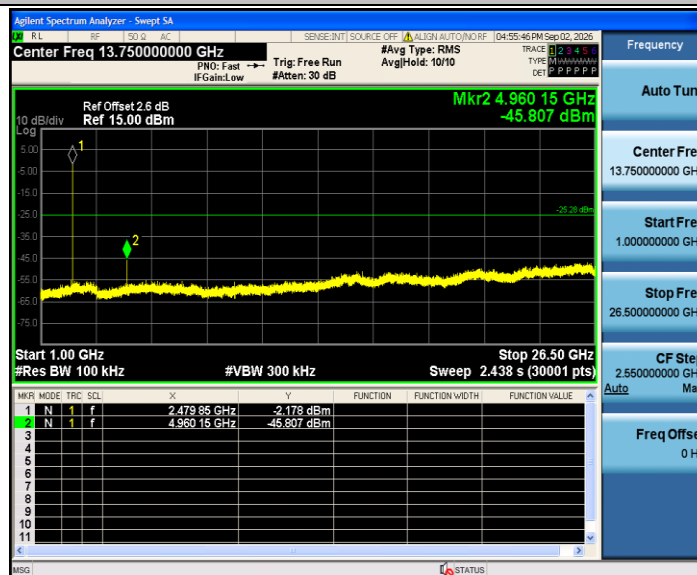
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

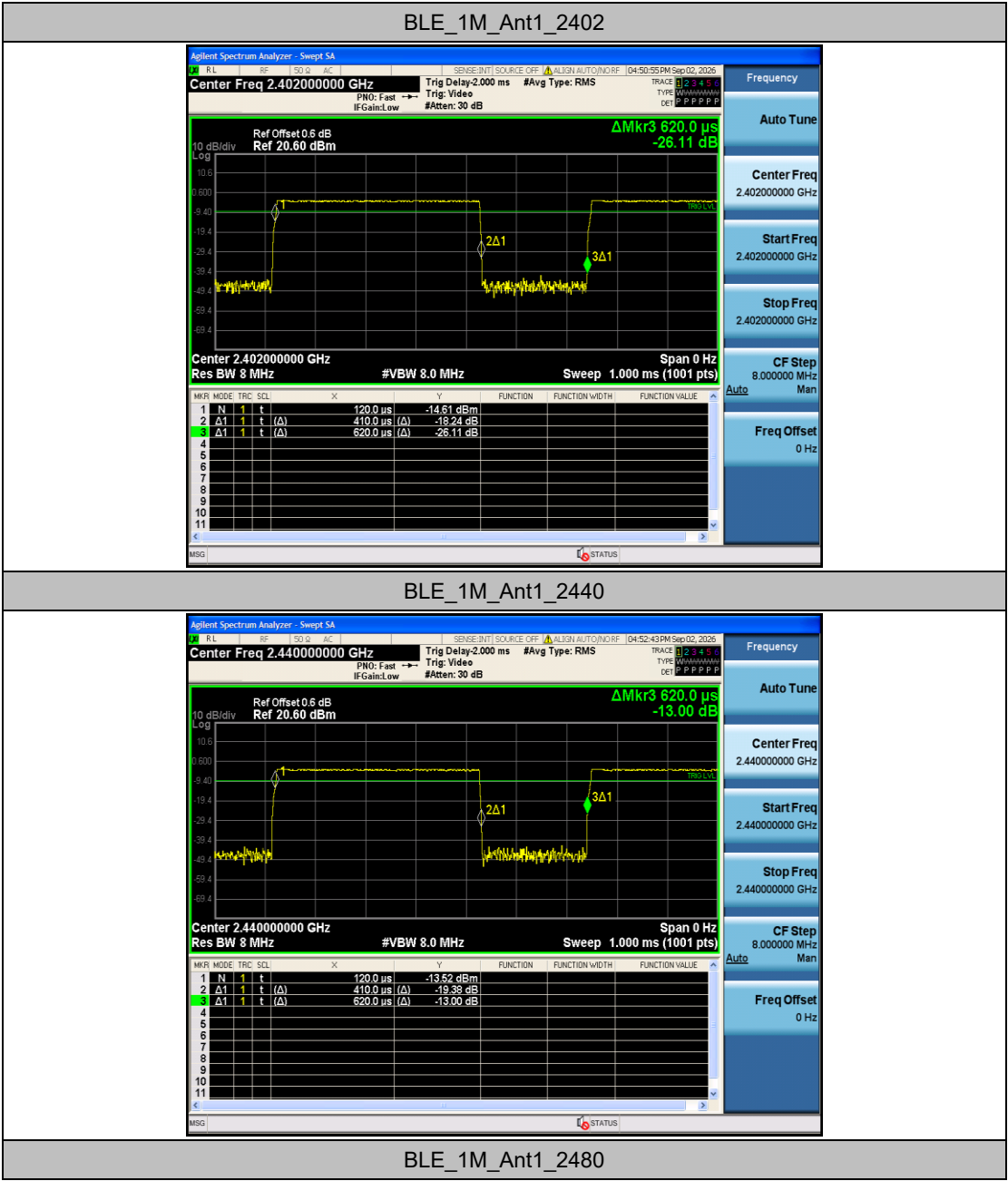


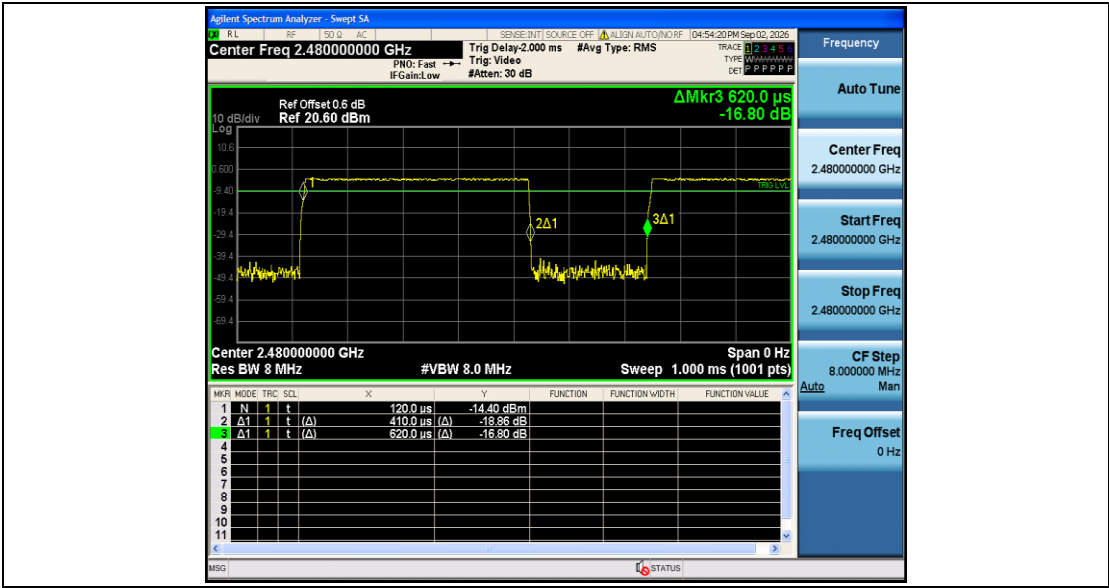
Appendix G: Duty Cycle

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





Appendix H: Emissions in Restricted Bands

Test Result

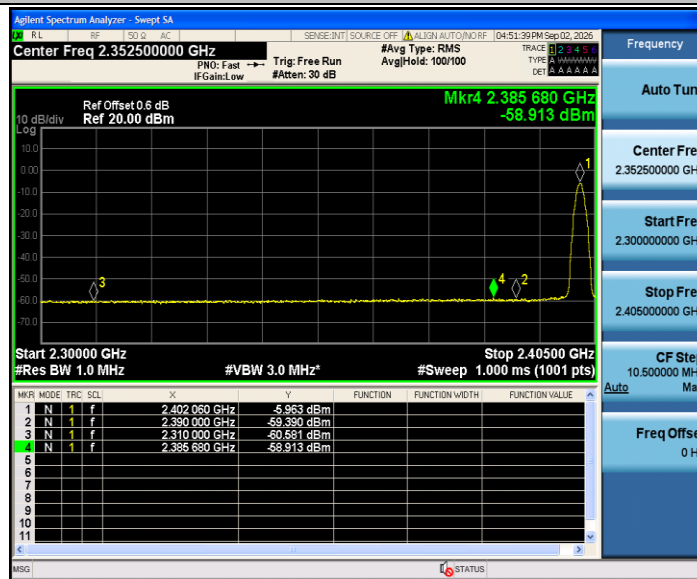
TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.58	2.93	1.80	39.35	≤54	PASS
				AV	2385.680	-58.91	2.93	1.80	41.02	≤54	PASS
				AV	2390.000	-59.39	2.93	1.80	40.54	≤54	PASS
				Peak	2310.000	-52.99	2.93	0.00	45.14	≤74	PASS
				Peak	2365.835	-48.8	2.93	0.00	49.33	≤74	PASS
				Peak	2390.000	-50.42	2.93	0.00	47.71	≤74	PASS
		High	2480	AV	2483.500	-59.1	2.93	1.80	40.83	≤54	PASS
				AV	2484.640	-58.04	2.93	1.80	41.89	≤54	PASS
				AV	2500.000	-59.6	2.93	1.80	40.33	≤54	PASS
				Peak	2483.500	-51.15	2.93	0.00	46.98	≤74	PASS
				Peak	2484.160	-46.82	2.93	0.00	51.31	≤74	PASS
				Peak	2500.000	-51.37	2.93	0.00	46.76	≤74	PASS

Note:

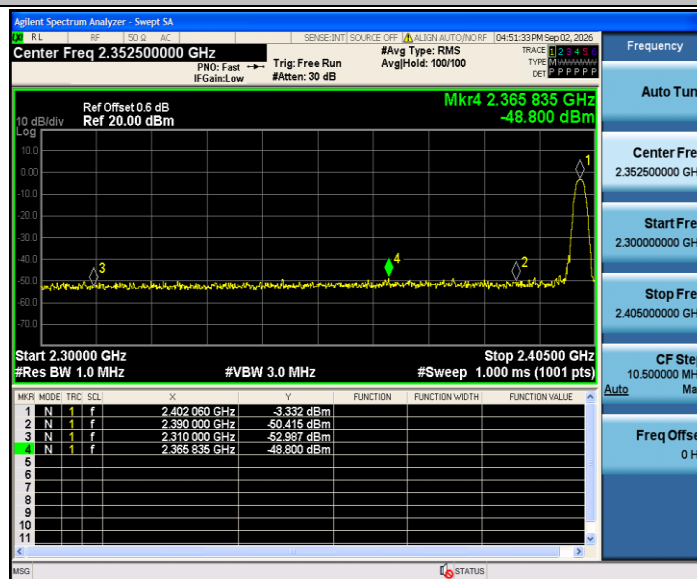
1. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

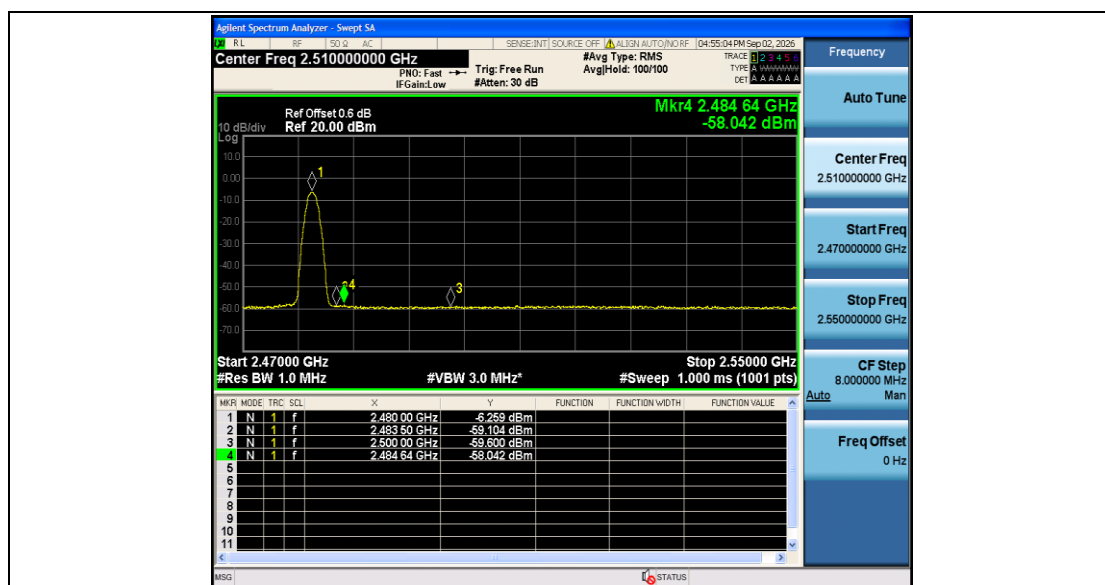
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

