

FCC Appendix RF Test Data for BLE

FCC ID : 2BWMX-JK-108XX

Company : Shenzhen Justtide Tech Co.,Ltd.

EUT : Mechanical Keyboard

Model Number : JK-108AB-B0

Report No. : CTA26052901401

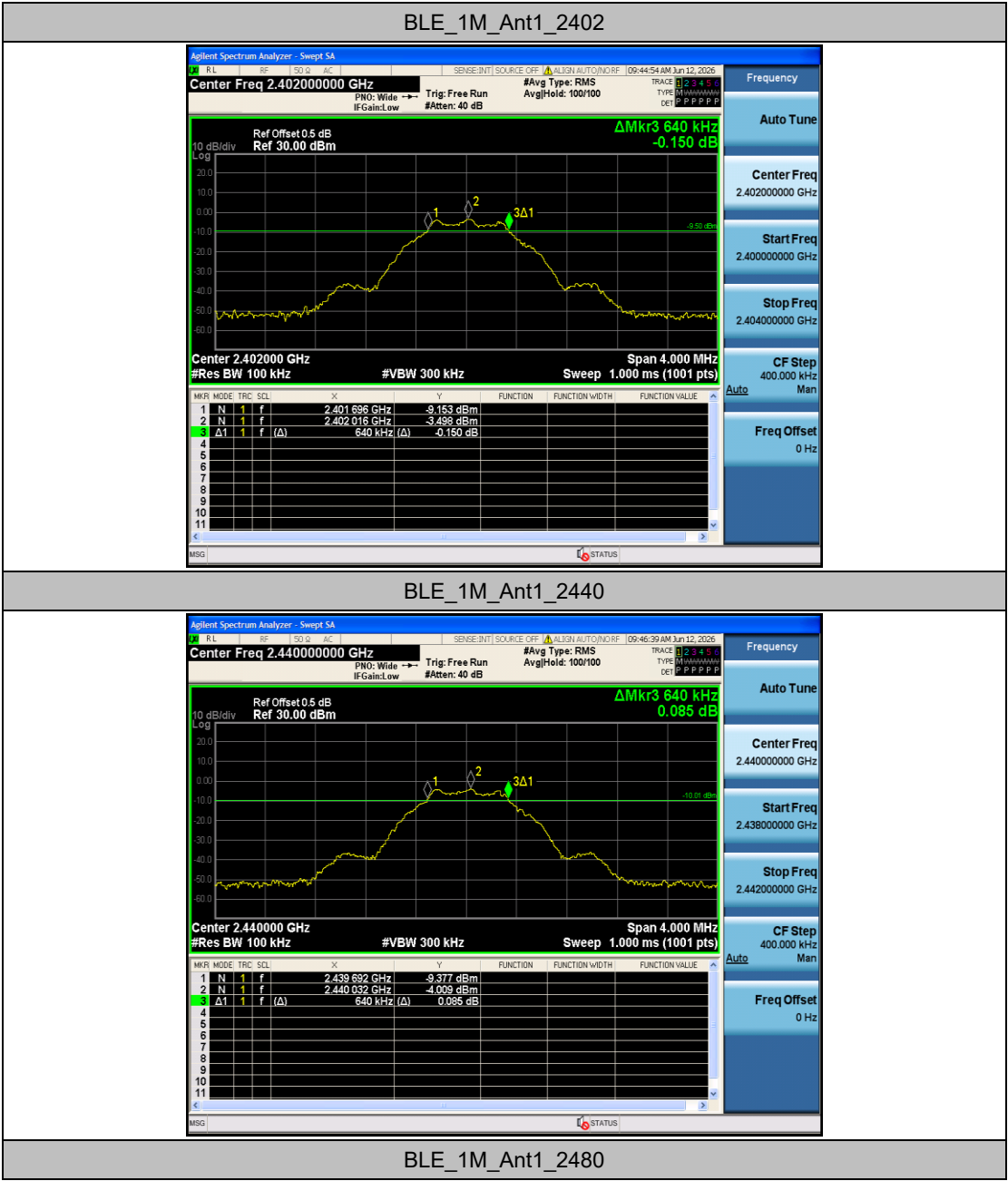
Reviewed By : Eric Wang

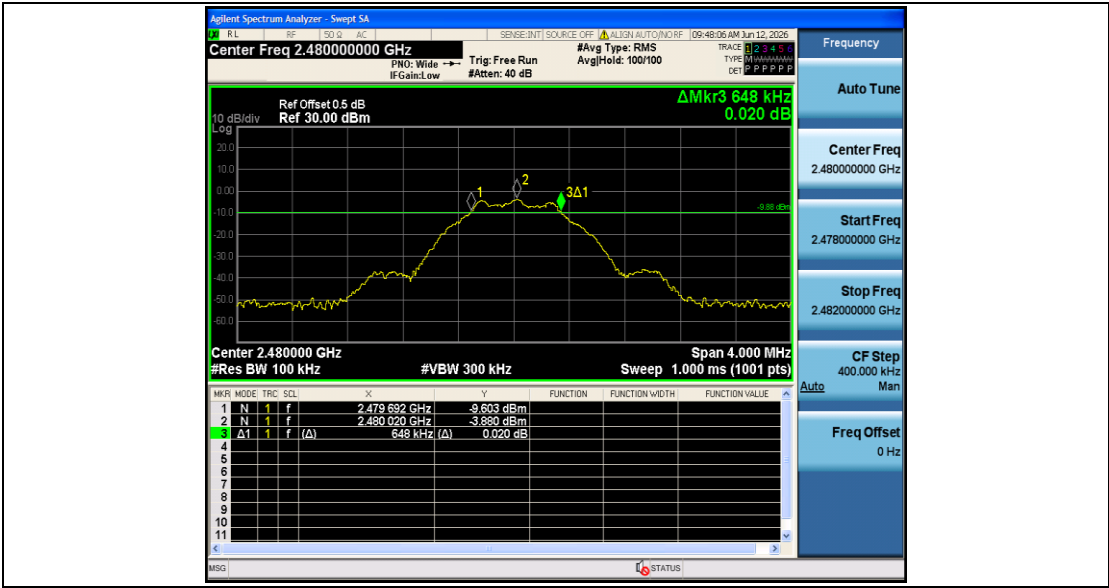
Appendix A: DTS Bandwidth

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	0.640	2439.692	2440.332	0.5	PASS
		2480	0.648	2479.692	2480.340	0.5	PASS

Test Graphs



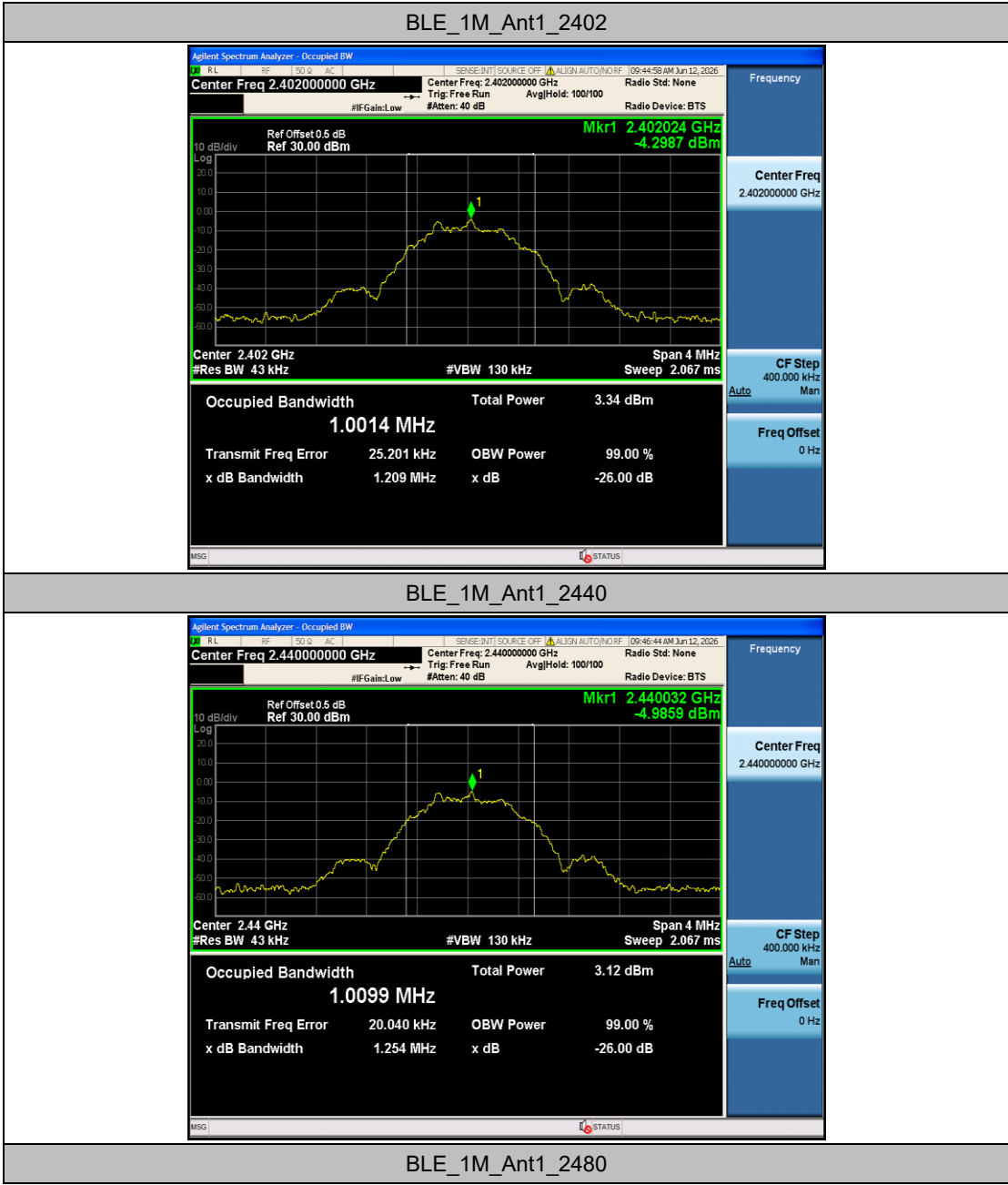


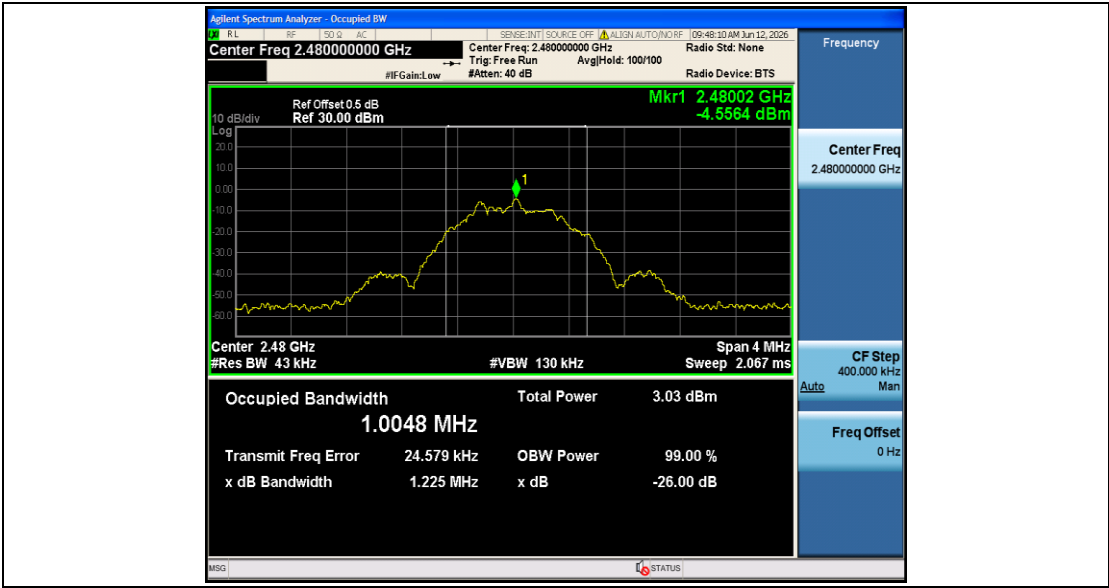
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0014	2401.5245	2402.5259	---	---
		2440	1.0099	2439.5151	2440.5250	---	---
		2480	1.0048	2479.5222	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	-3.32	≤30	PASS
		2440	-3.43	≤30	PASS
		2480	-3.66	≤30	PASS

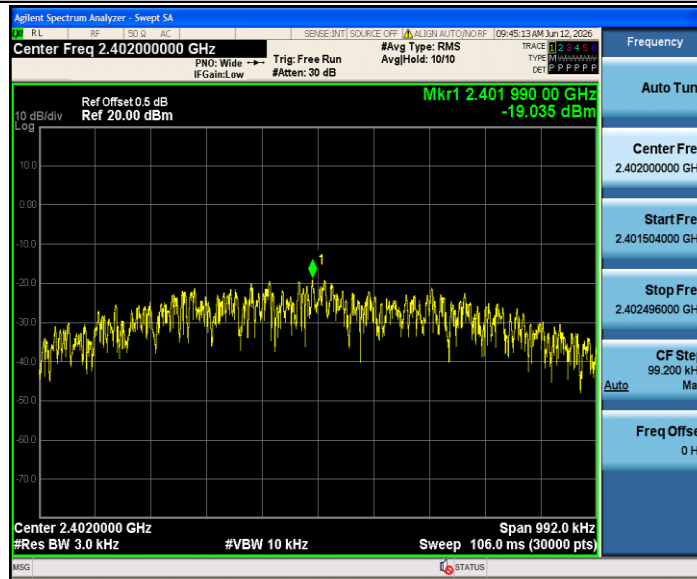
Appendix D: Maximum power spectral density

Test Result

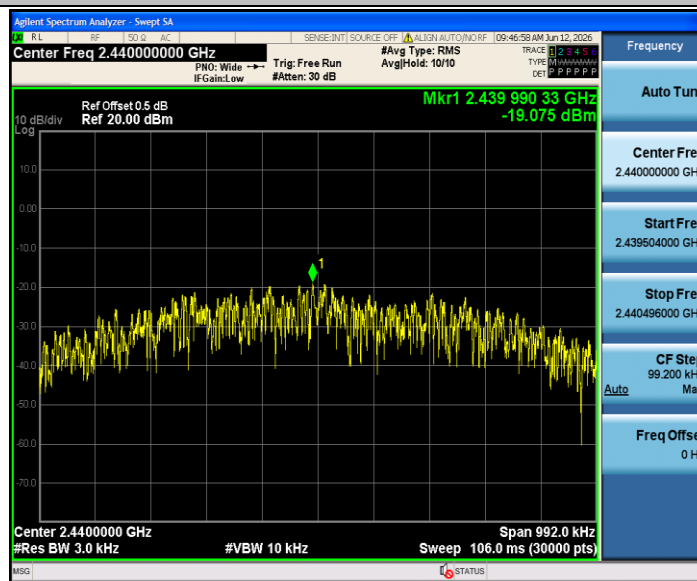
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.04	≤8.00	PASS
		2440	-19.08	≤8.00	PASS
		2480	-19.60	≤8.00	PASS

Test Graphs

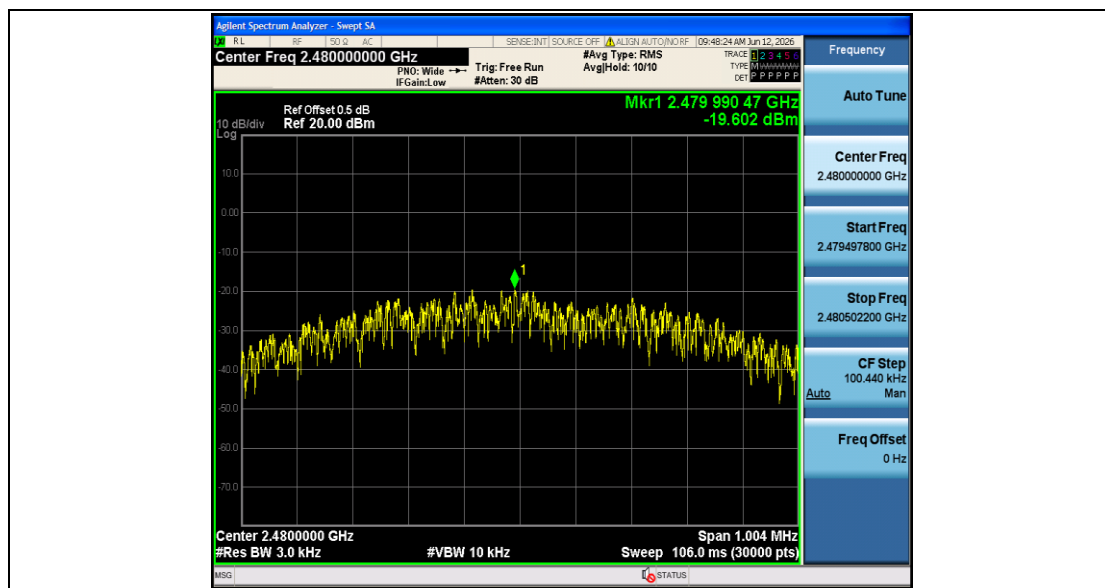
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

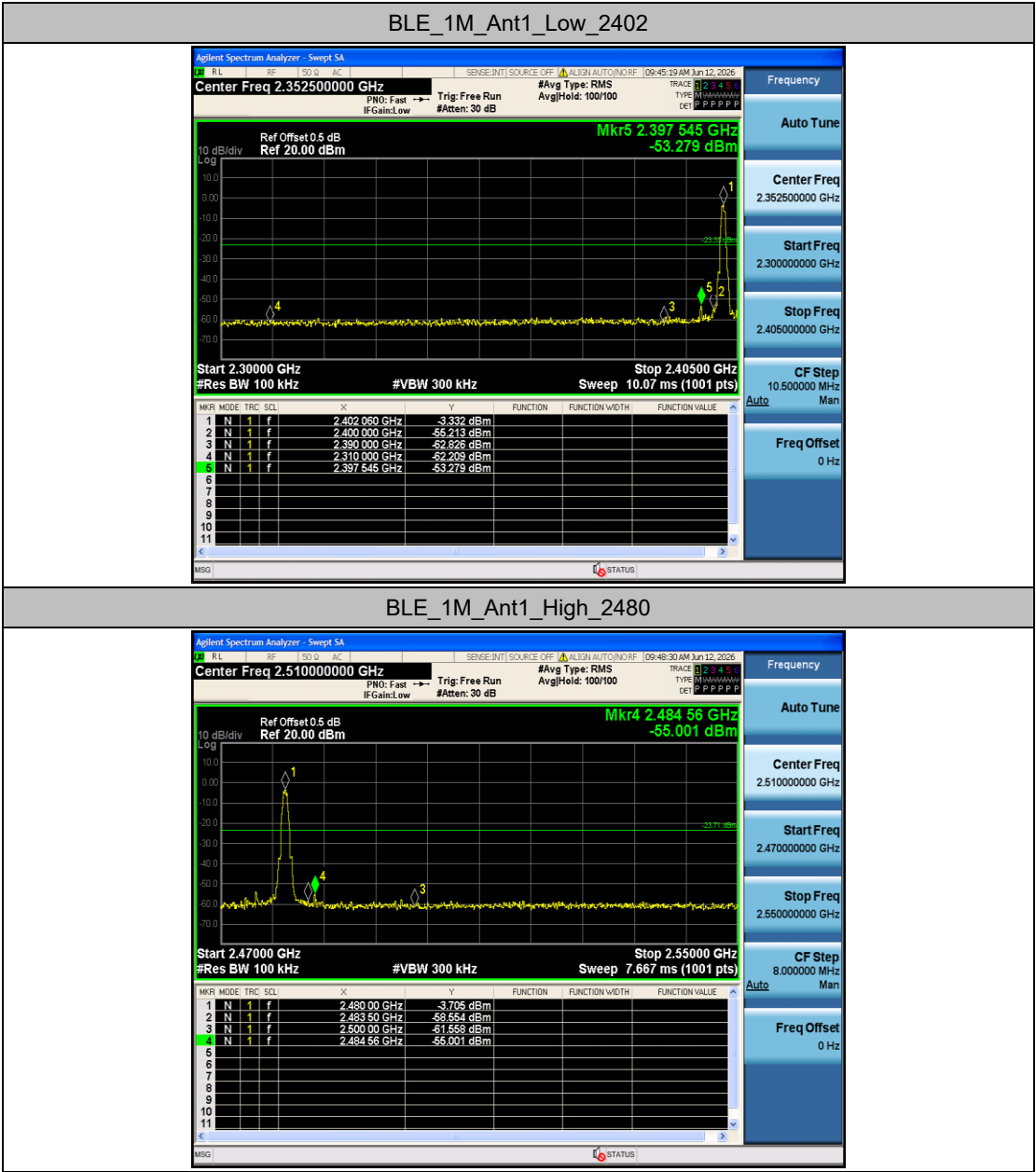


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.33	-53.28	≤-23.33	PASS
		High	2480	-3.71	-55	≤-23.71	PASS

Test Graphs

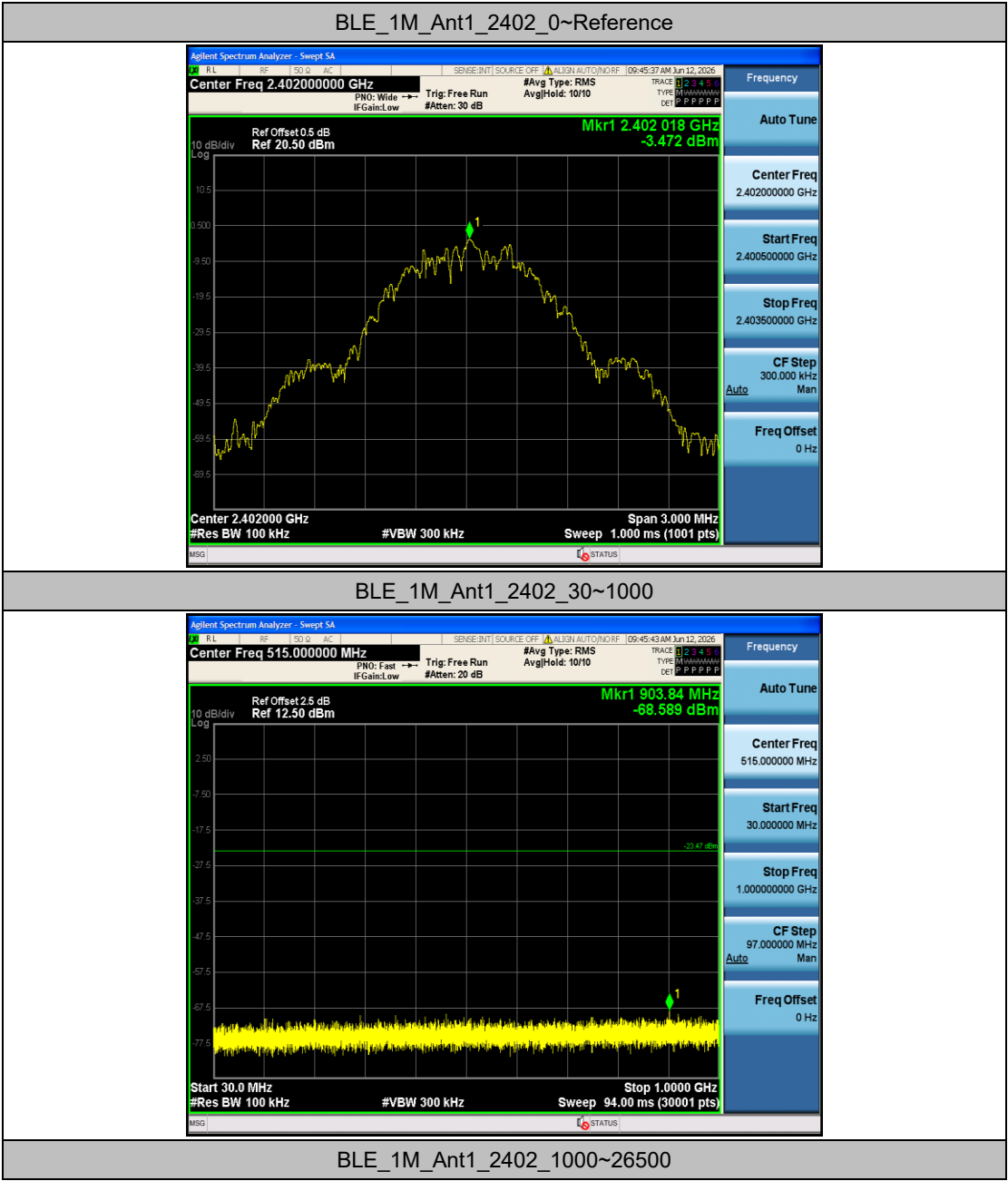


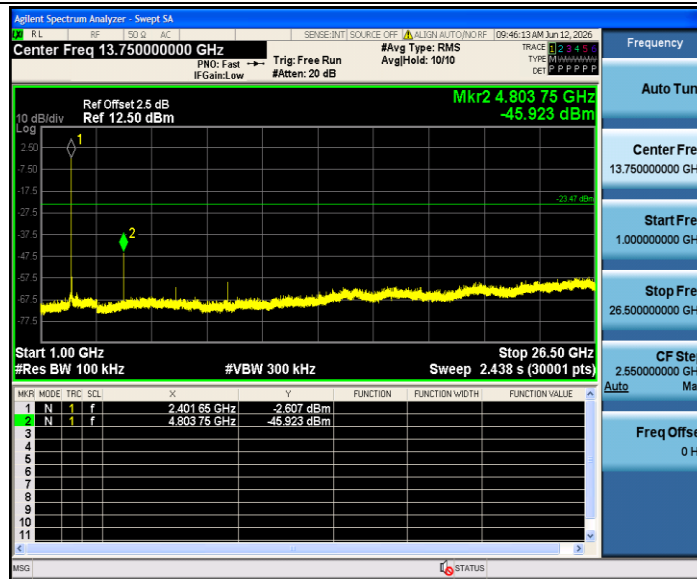
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.47	-3.47	---	PASS
			30~1000	-3.47	-68.59	≤-23.47	PASS
			1000~26500	-3.47	-45.92	≤-23.47	PASS
		2440	Reference	-4.36	-4.36	---	PASS
			30~1000	-4.36	-68.36	≤-24.36	PASS
			1000~26500	-4.36	-47.79	≤-24.36	PASS
		2480	Reference	-5.80	-5.80	---	PASS
			30~1000	-5.80	-68.87	≤-25.8	PASS
			1000~26500	-5.80	-48.78	≤-25.8	PASS

Test Graphs

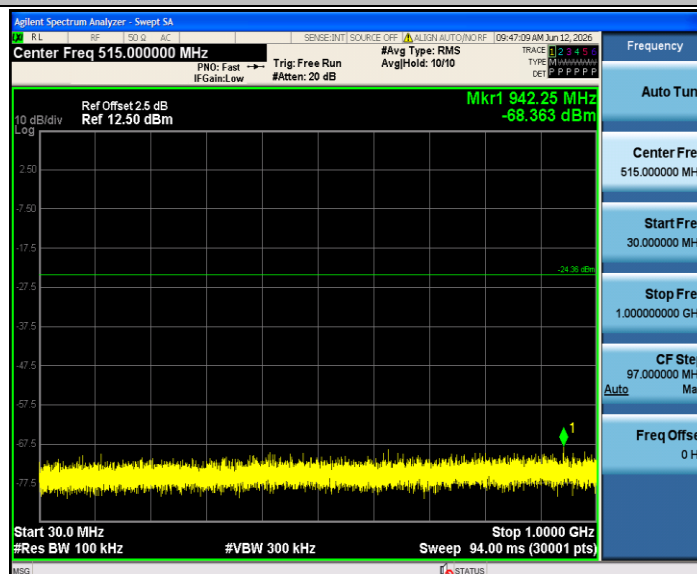




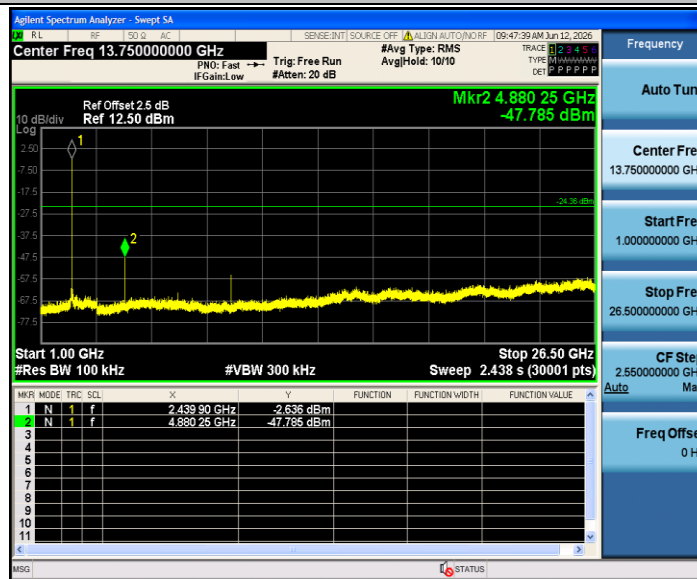
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



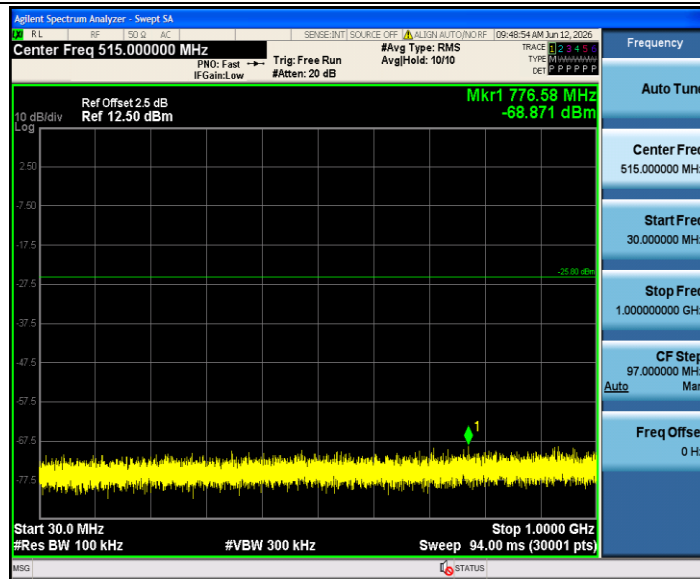
BLE_1M_Ant1_2440_1000~26500



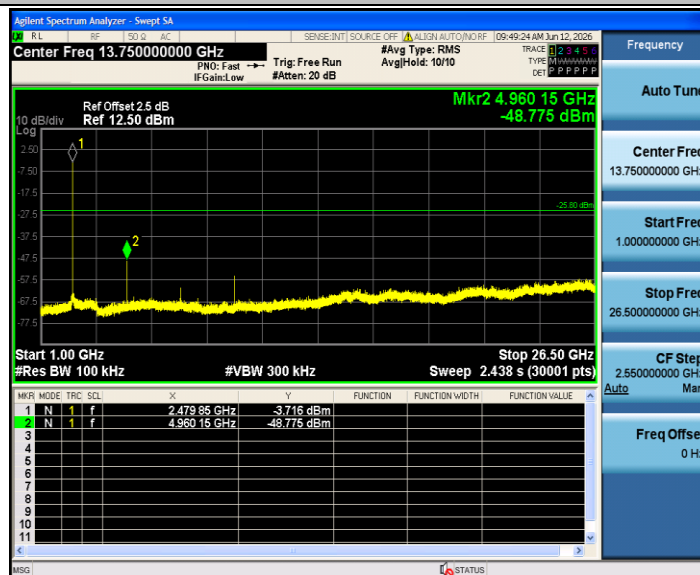
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

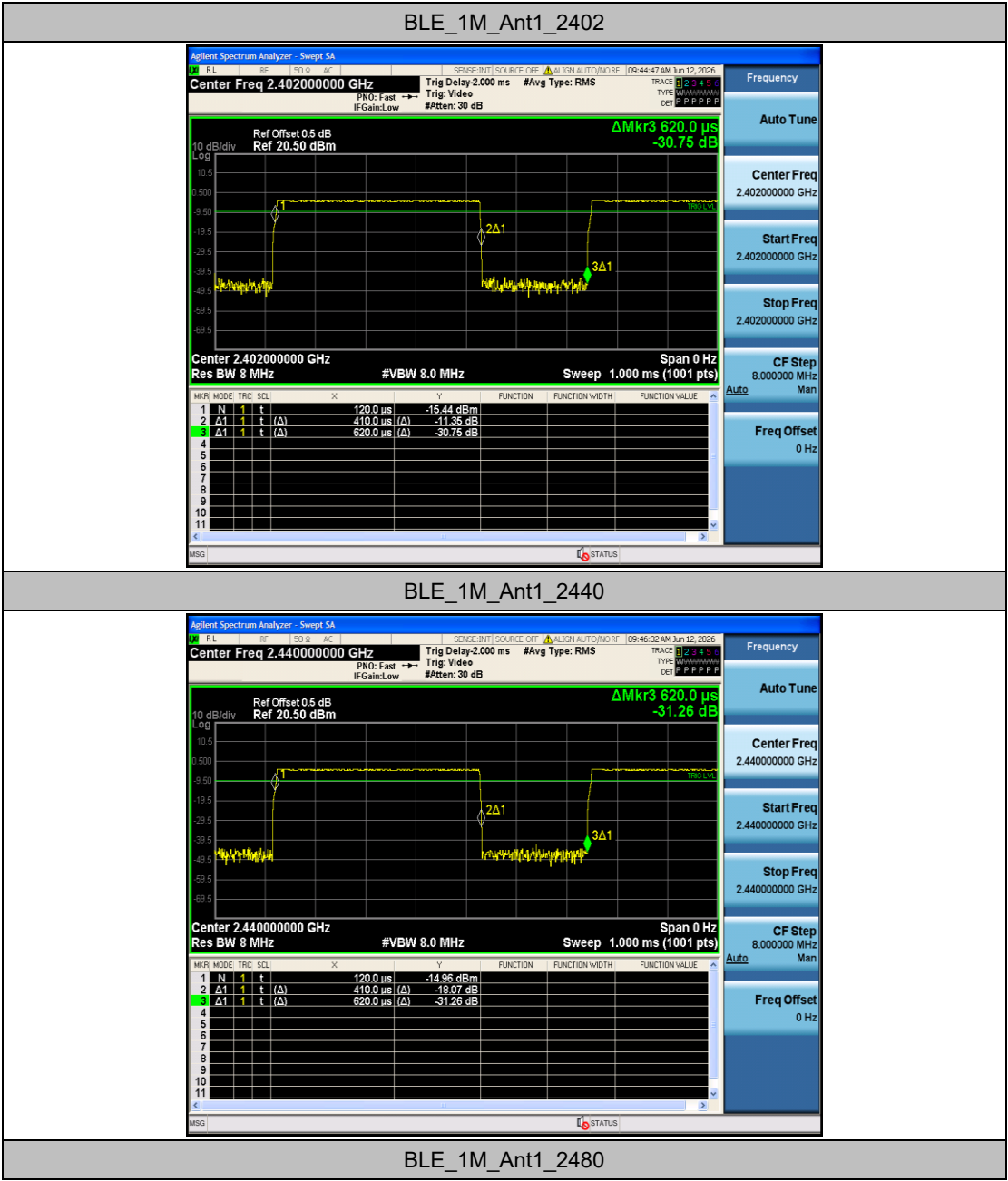


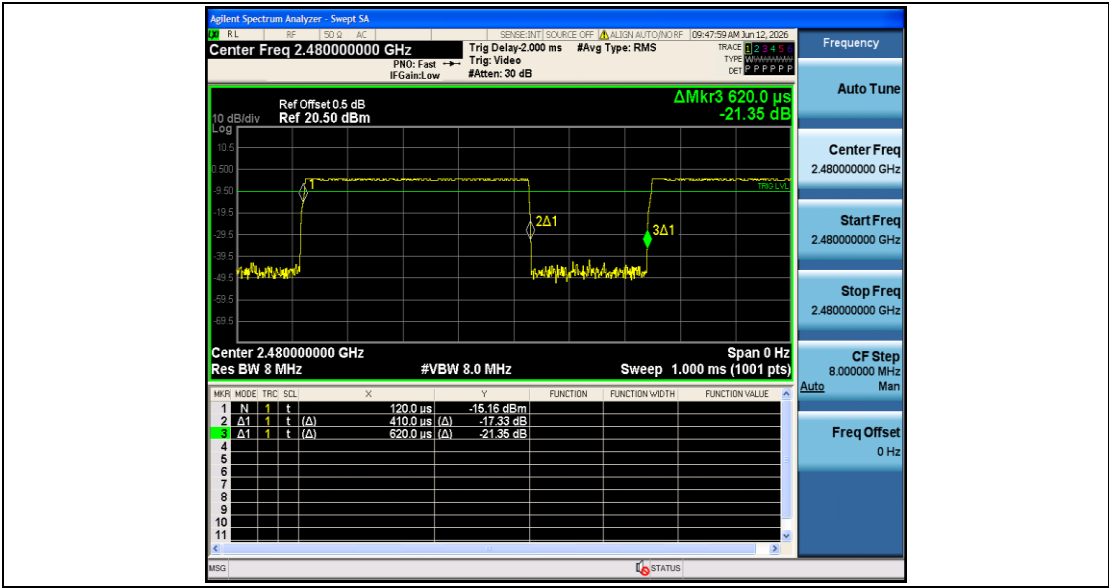
Appendix G: Duty Cycle

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

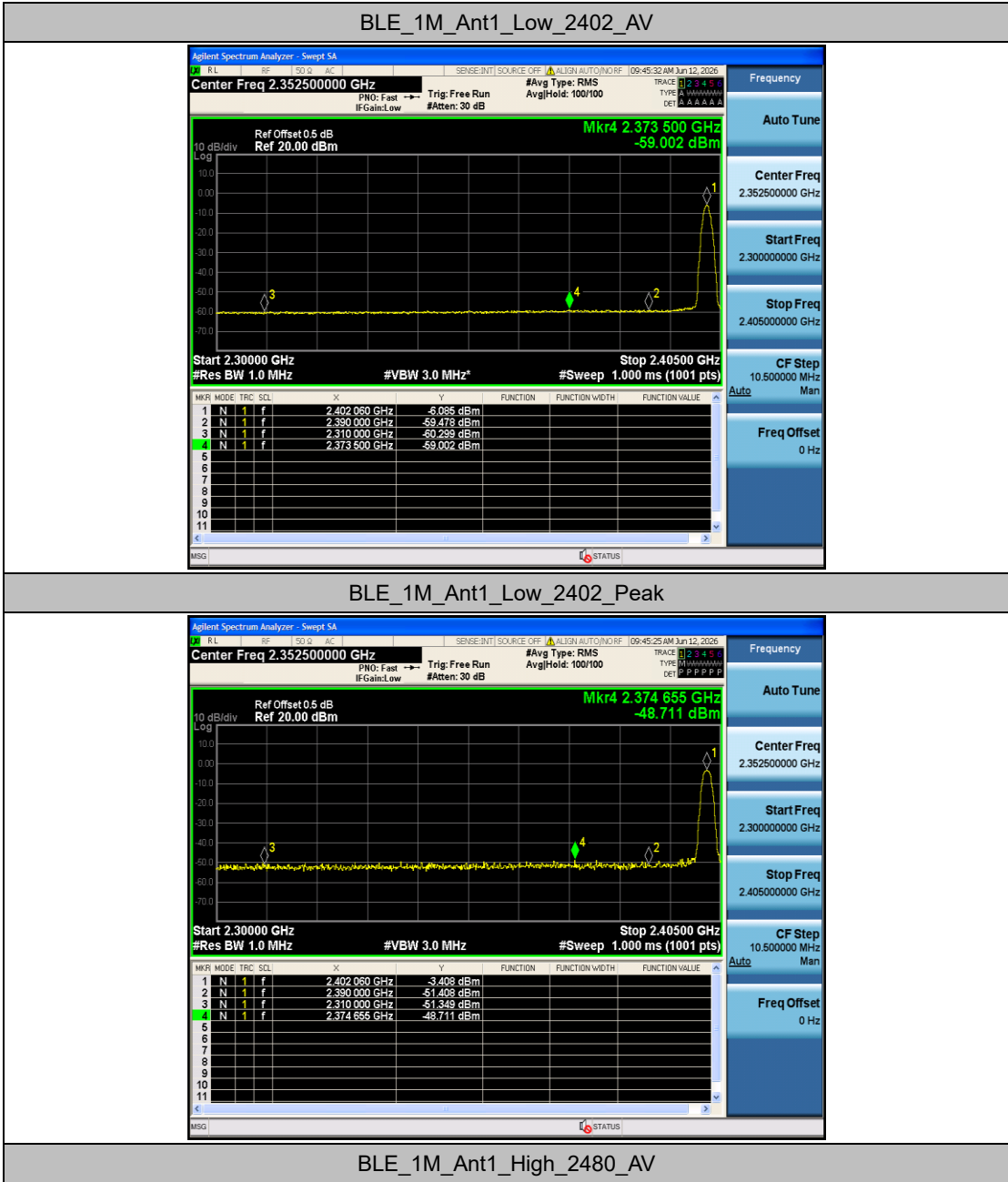
Test Result

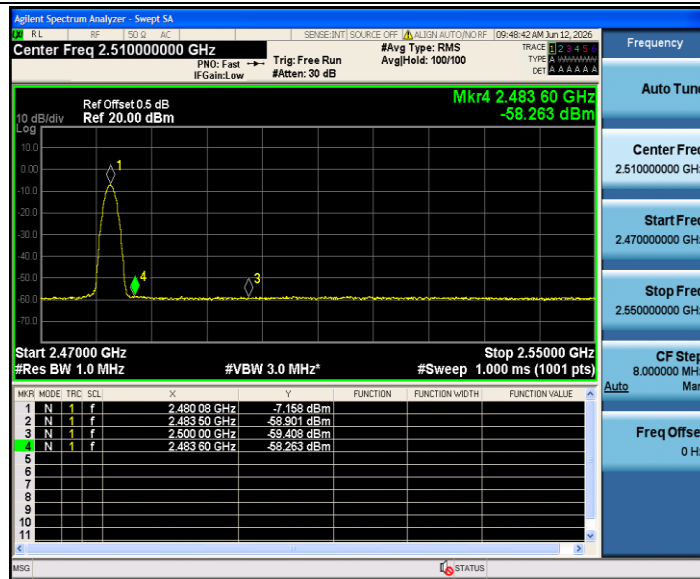
TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.3	2.59	1.80	39.29	≤54	PASS
				AV	2373.500	-59	2.59	1.80	40.59	≤54	PASS
				AV	2390.000	-59.48	2.59	1.80	40.11	≤54	PASS
				Peak	2310.000	-51.35	2.59	0.00	46.44	≤74	PASS
				Peak	2374.655	-48.71	2.59	0.00	49.08	≤74	PASS
				Peak	2390.000	-51.41	2.59	0.00	46.38	≤74	PASS
		High	2480	AV	2483.500	-58.9	2.59	1.80	40.69	≤54	PASS
				AV	2483.600	-58.26	2.59	1.80	41.33	≤54	PASS
				AV	2500.000	-59.41	2.59	1.80	40.18	≤54	PASS
				Peak	2483.500	-49.84	2.59	0.00	47.95	≤74	PASS
				Peak	2484.400	-45.79	2.59	0.00	52.00	≤74	PASS
				Peak	2500.000	-50.34	2.59	0.00	47.45	≤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_High_2480_Peak

