

Appendix Test Data for BLE (Conducted Measurement)

Product Name: Wireless Mechanical Keyboard

Trade Mark: Keychron

Test Model: Q6 MAX

FCC ID: 2ASF4-Q6MAX

Environmental Conditions

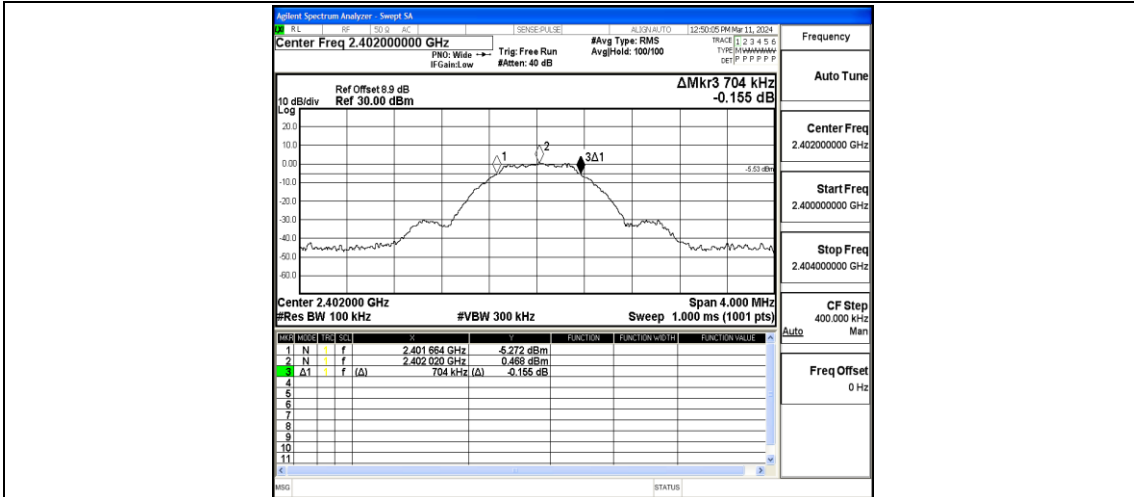
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

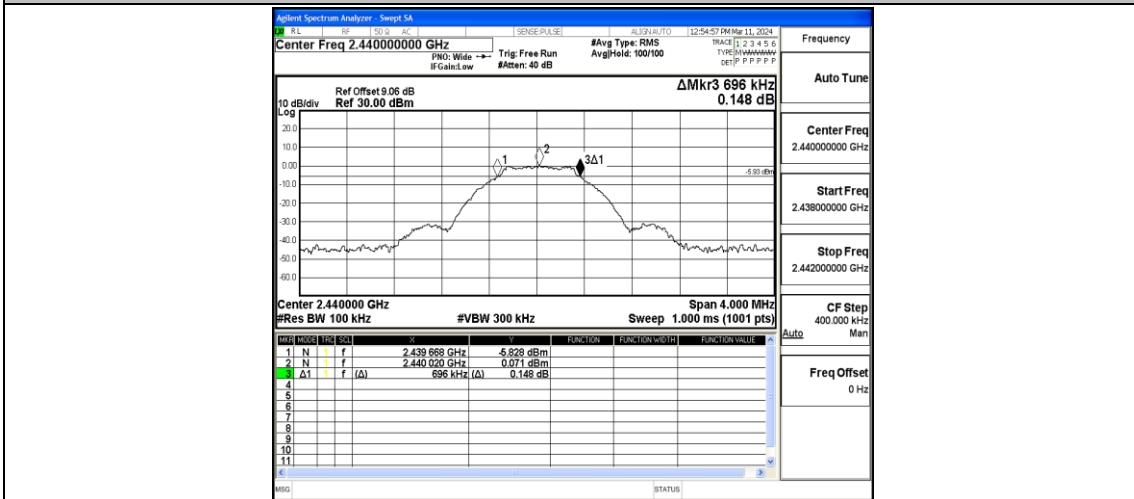
Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.704	2401.664	2402.368	0.5	PASS
BLE_1M	Ant1	2440	0.696	2439.668	2440.364	0.5	PASS
BLE_1M	Ant1	2480	0.668	2479.676	2480.344	0.5	PASS

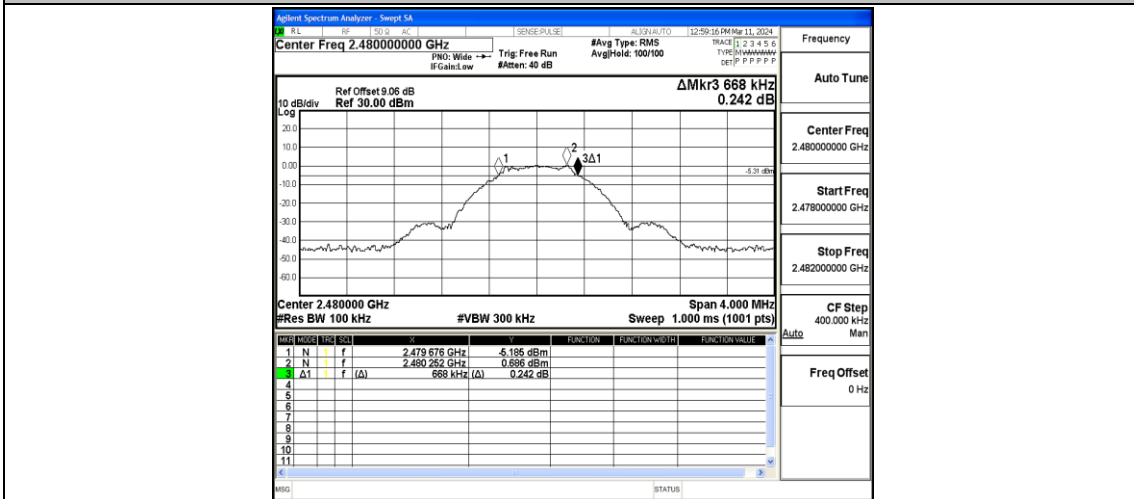
Test Graphs



BLE_1M-Ant1-240-PASS



BLE_1M-Ant1-244-PASS



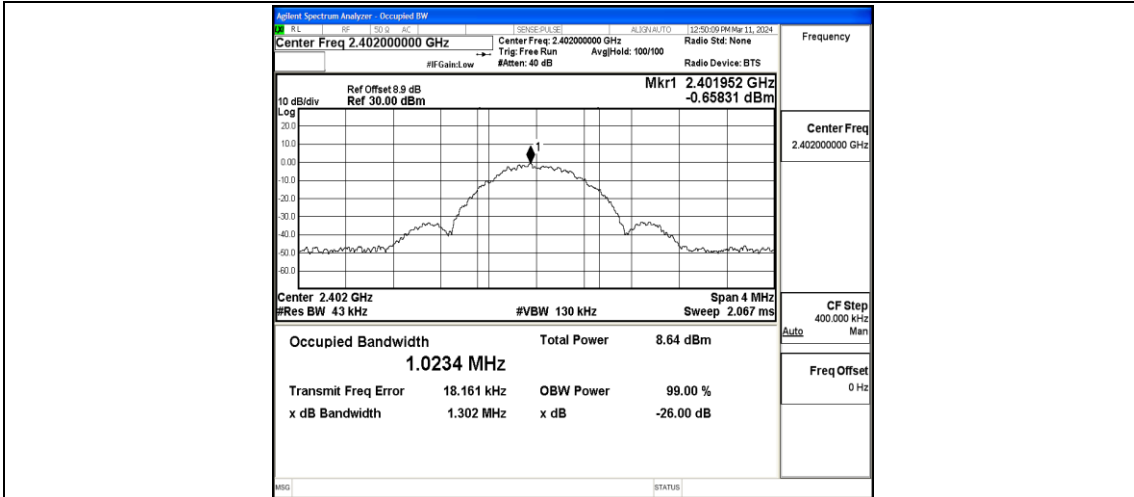
BLE_1M-Ant1-2480-PASS

Appendix B: Occupied Channel Bandwidth

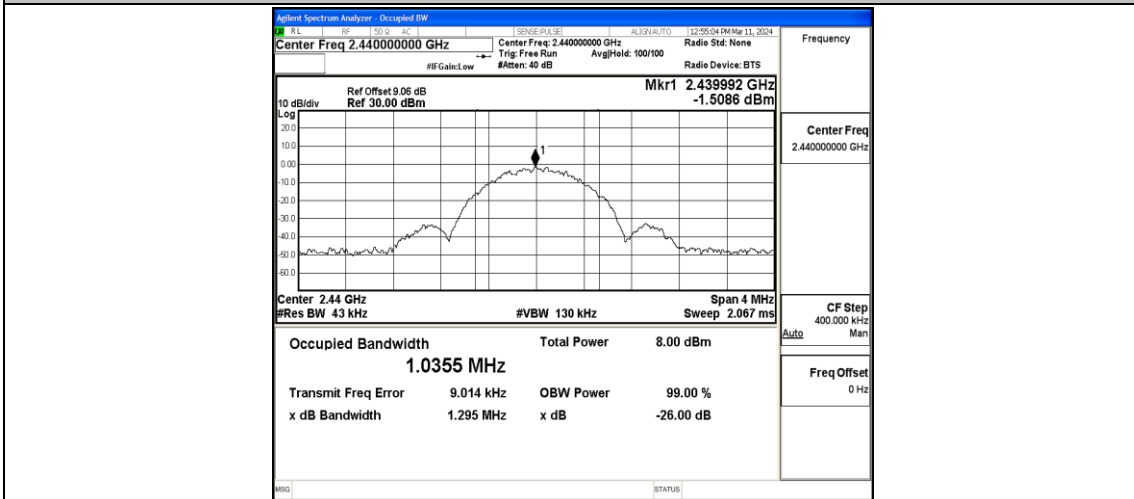
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0234	2401.5065	2402.5299	---	---
BLE_1M	Ant1	2440	1.0355	2439.4913	2440.5268	---	---
BLE_1M	Ant1	2480	1.0298	2479.4959	2480.5257	---	---

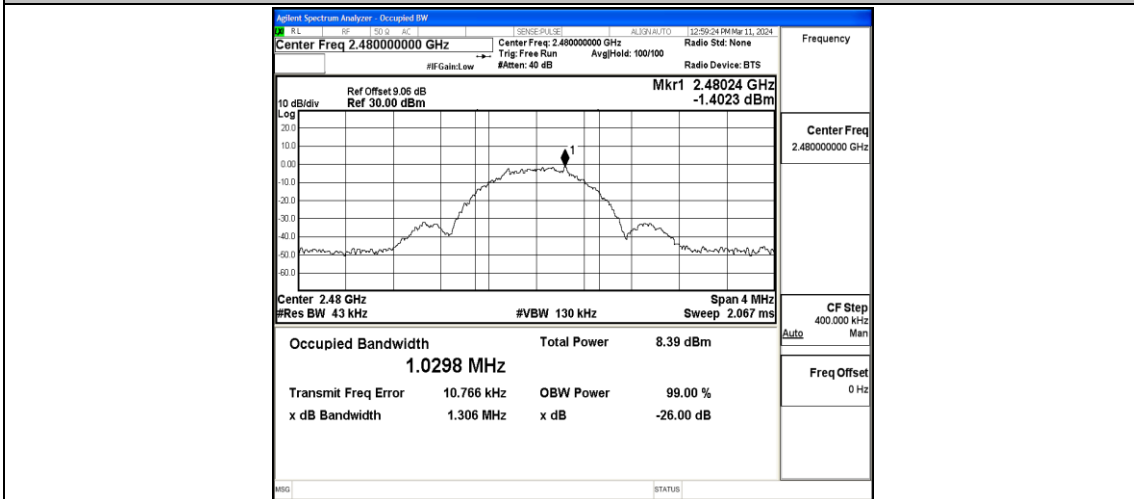
Test Graphs



BLE_1M-Ant1-2402



BLE_1M-Ant1-2440



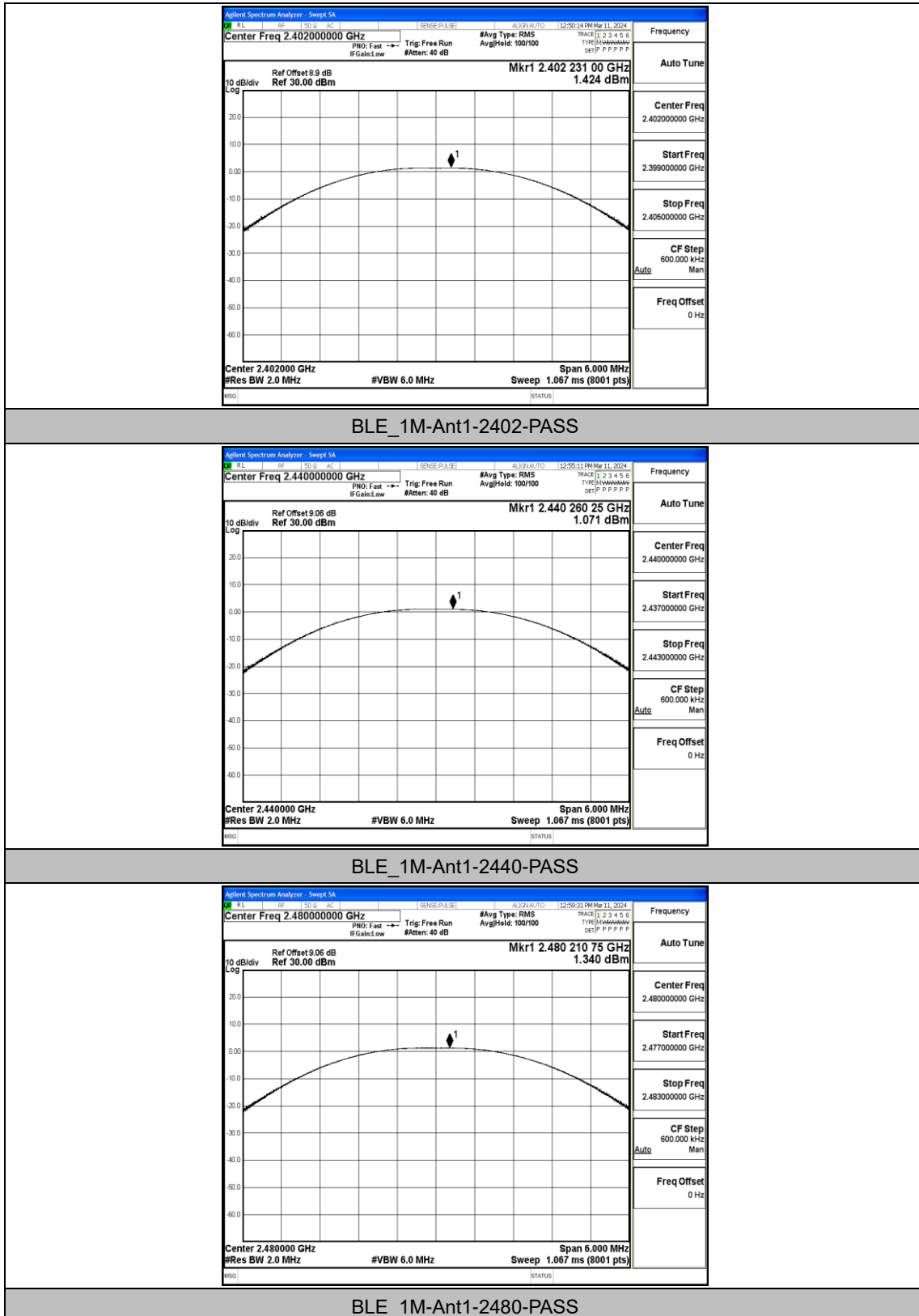
BLE_1M-Ant1-2480

Appendix C: Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	1.42	≤30	PASS
BLE_1M	Ant1	2440	1.07	≤30	PASS
BLE_1M	Ant1	2480	1.34	≤30	PASS

Test Graphs Peak

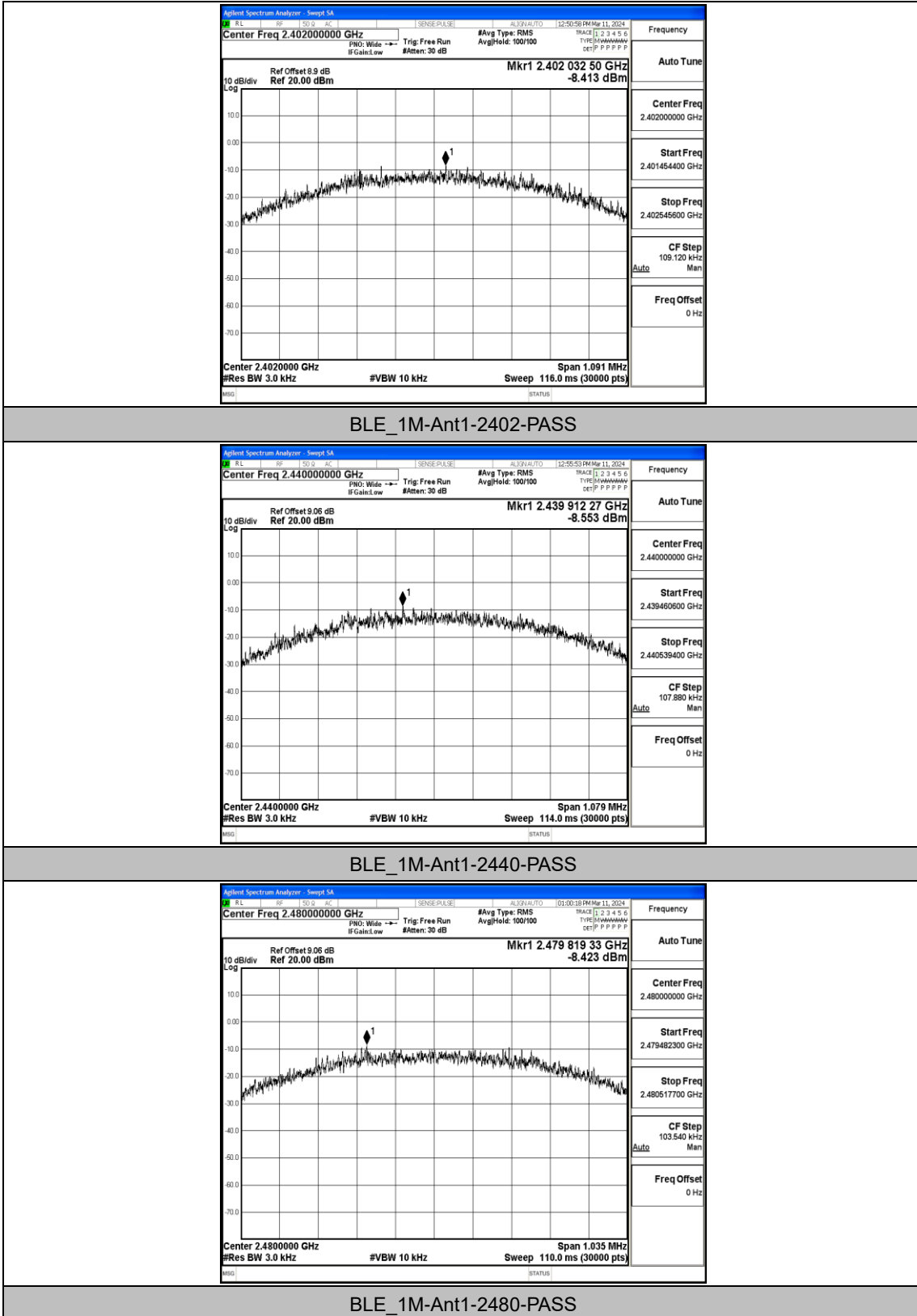


Appendix D: Maximum peak power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-8.41	≤8.00	PASS
BLE_1M	Ant1	2440	-8.55	≤8.00	PASS
BLE_1M	Ant1	2480	-8.42	≤8.00	PASS

Test Graphs

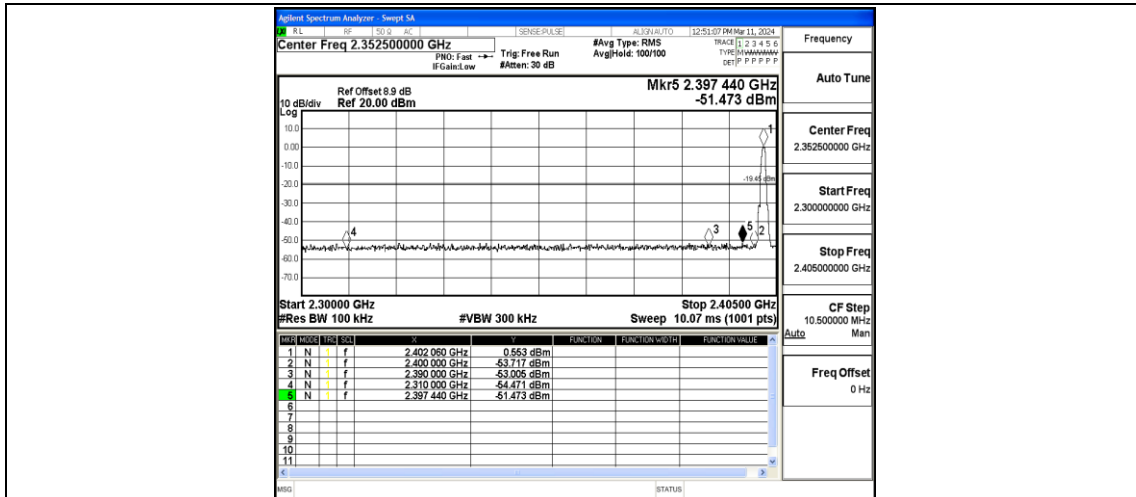


Appendix E: Band edge measurements

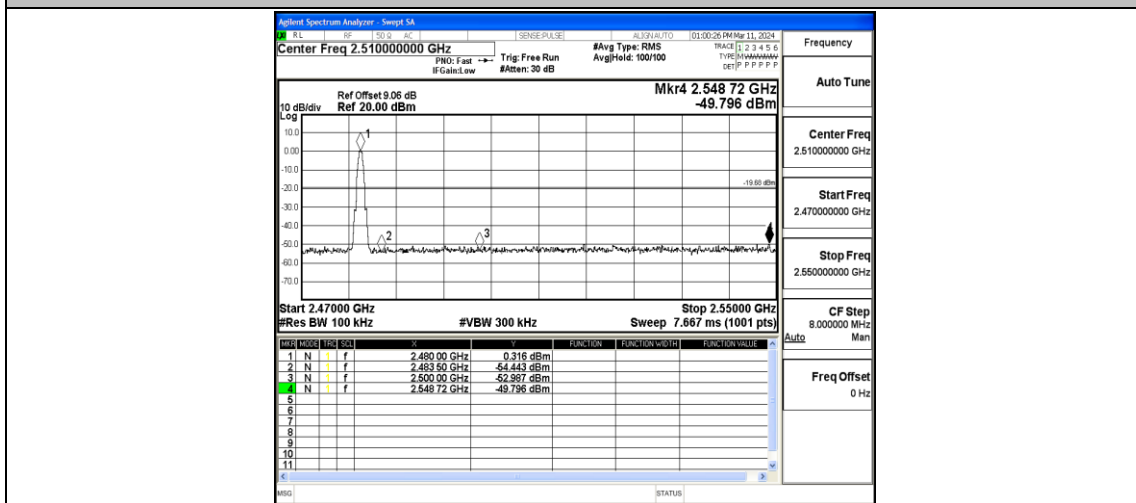
Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.55	-51.47	≤-19.45	PASS
BLE_1M	Ant1	High	2480	0.32	-49.8	≤-19.68	PASS

Test Graphs



BLE_1M-Ant1-2402-PASS



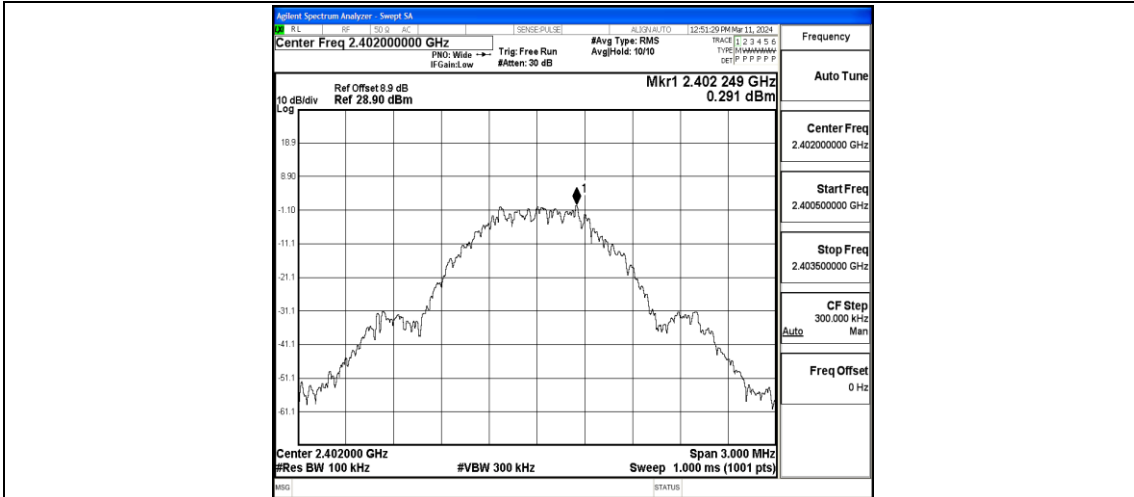
BLE_1M-Ant1-2480-PASS

Appendix F: Conducted Spurious Emission

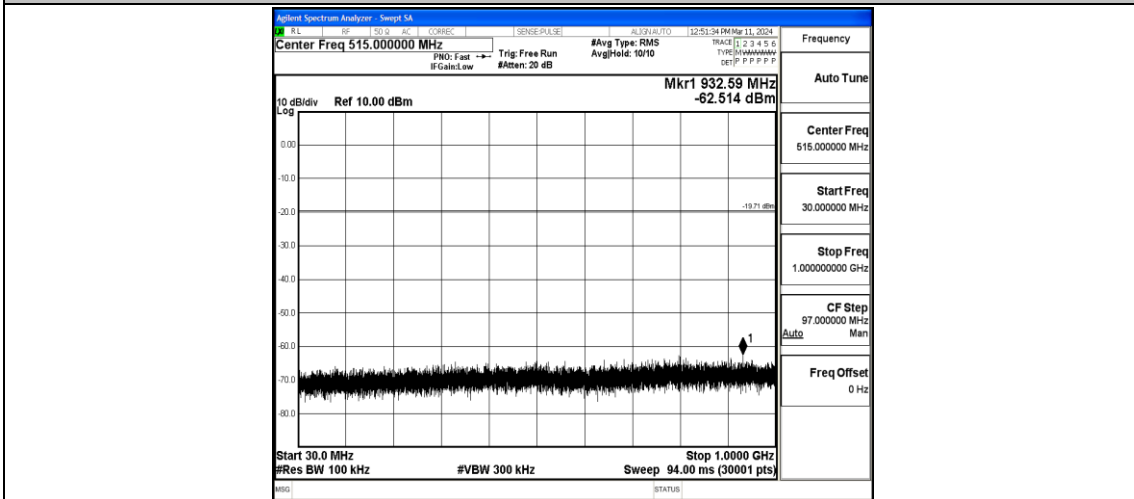
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	0.29	0.29	---	PASS
BLE_1M	Ant1	2402	30~1000	0.29	-62.51	≤-19.71	PASS
BLE_1M	Ant1	2402	1000~26500	0.29	-42.15	≤-19.71	PASS
BLE_1M	Ant1	2440	0~Reference	-0.86	-0.86	---	PASS
BLE_1M	Ant1	2440	30~1000	-0.86	-63.45	≤-20.86	PASS
BLE_1M	Ant1	2440	1000~26500	-0.86	-44.41	≤-20.86	PASS
BLE_1M	Ant1	2480	0~Reference	-0.50	-0.50	---	PASS
BLE_1M	Ant1	2480	30~1000	-0.50	-62.95	≤-20.5	PASS
BLE_1M	Ant1	2480	1000~26500	-0.50	-43.24	≤-20.5	PASS

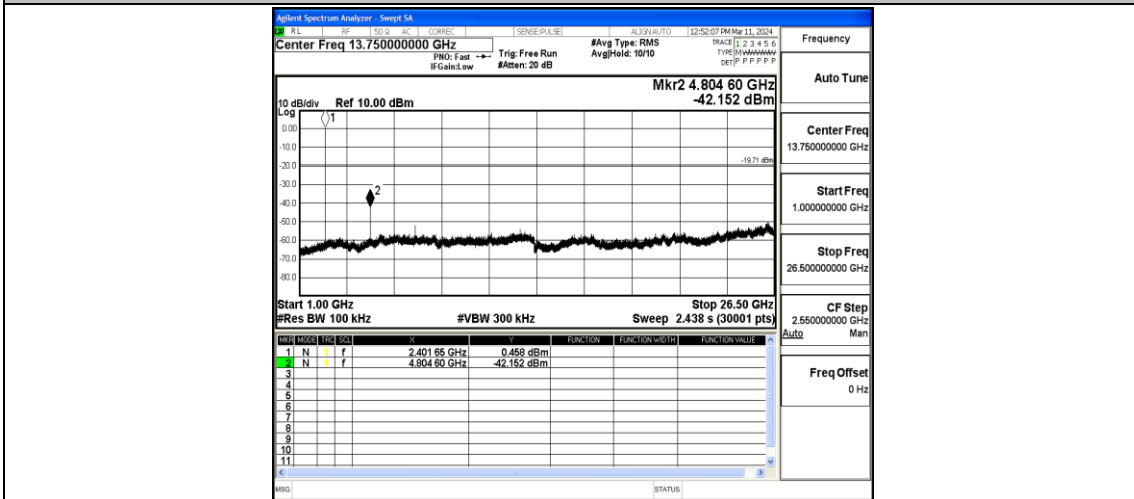
Test Graphs



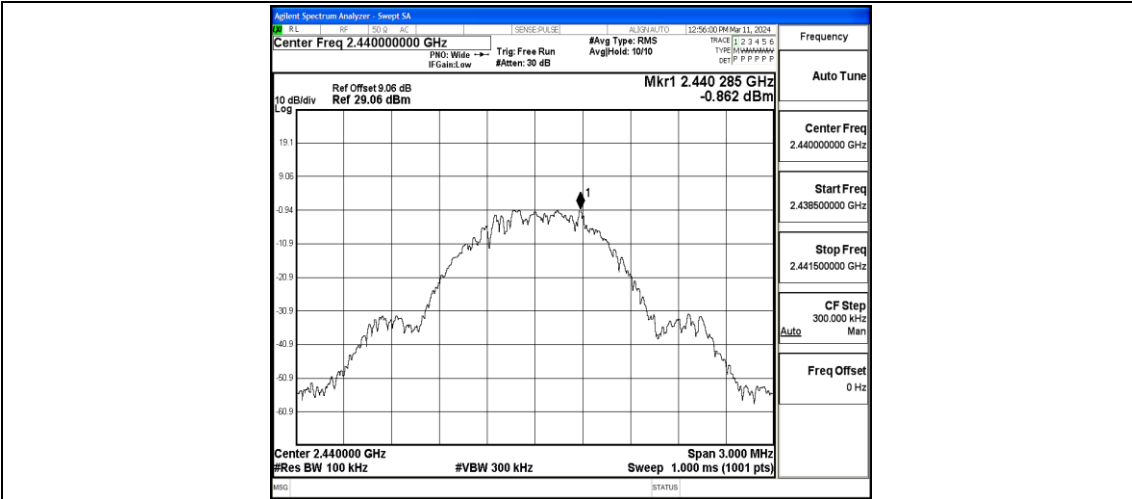
BLE_1M-Ant1-2402-0~Reference-PASS



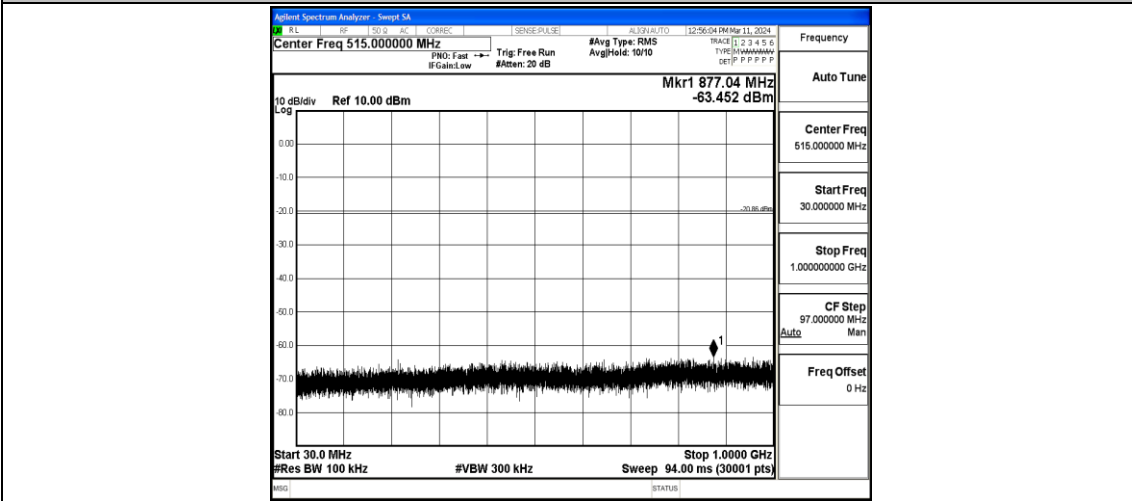
BLE_1M-Ant1-2402-30~1000-PASS



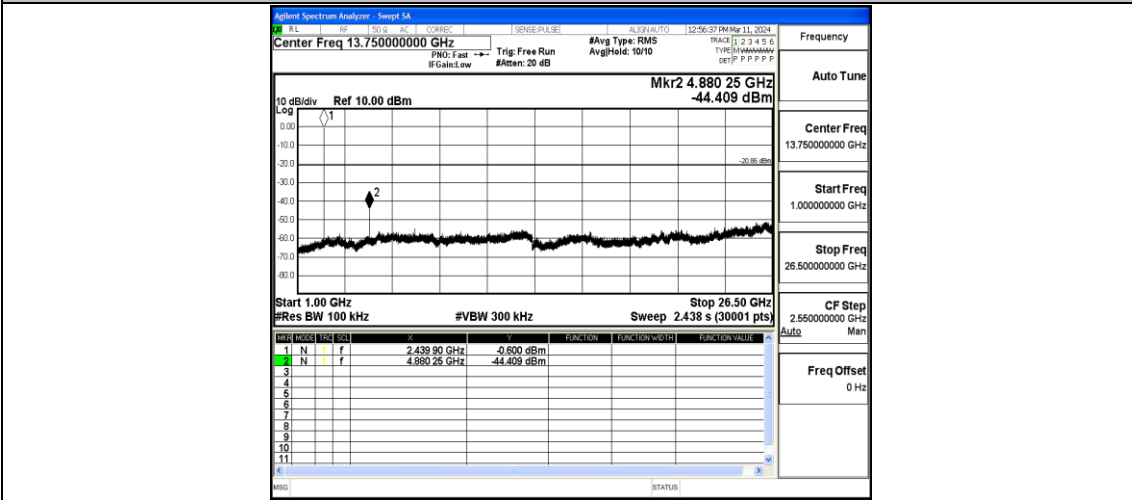
BLE_1M-Ant1-2402-1000~26500-PASS



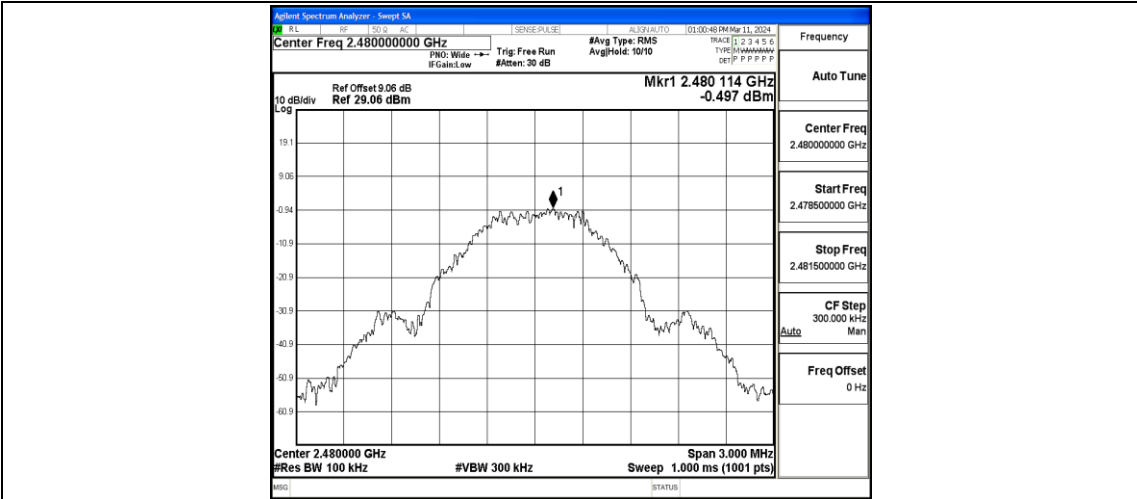
BLE_1M-Ant1-2440-0~Reference-PASS



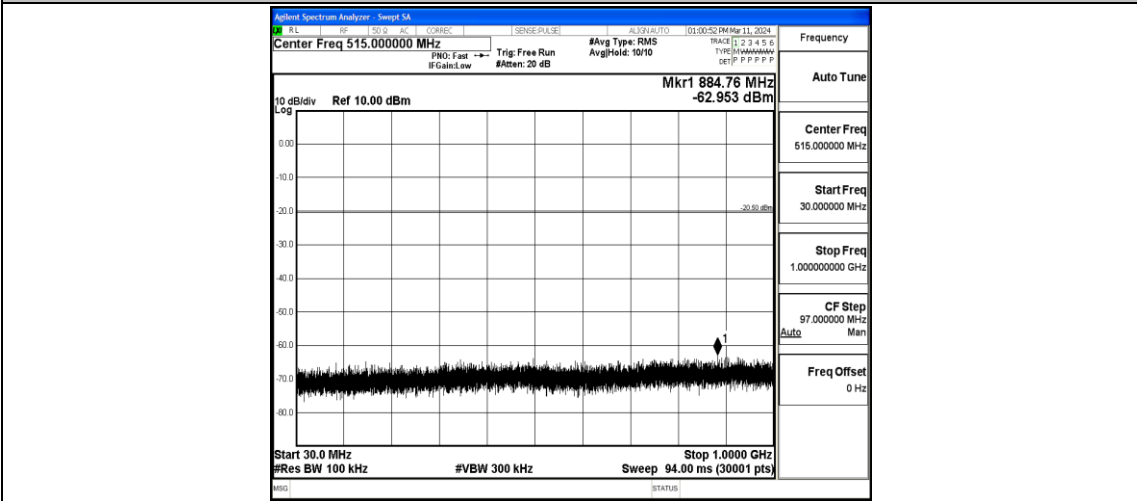
BLE_1M-Ant1-2440-30~1000-PASS



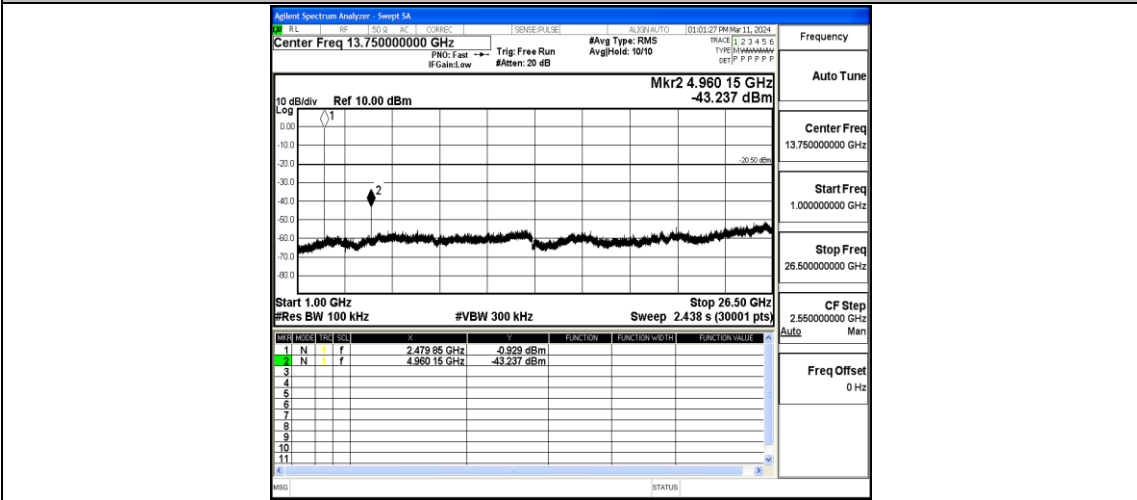
BLE_1M-Ant1-2440-1000~26500-PASS



BLE_1M-Ant1-2480-0~Reference-PASS



BLE_1M-Ant1-2480-30~1000-PASS



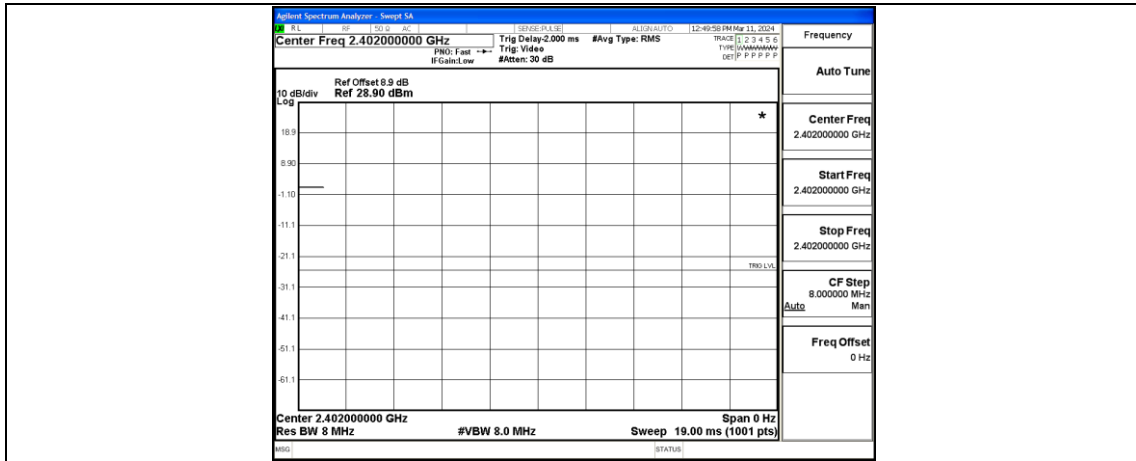
BLE_1M-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

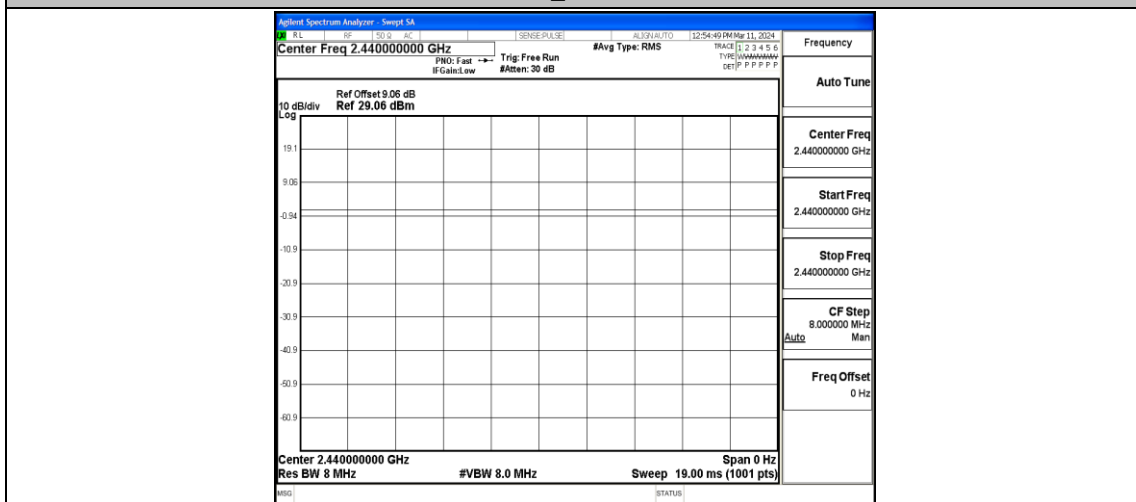
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]
BLE_1M	Ant1	2402	19.00	19.00	100
BLE_1M	Ant1	2440	19.00	19.00	100
BLE_1M	Ant1	2480	19.00	19.00	100

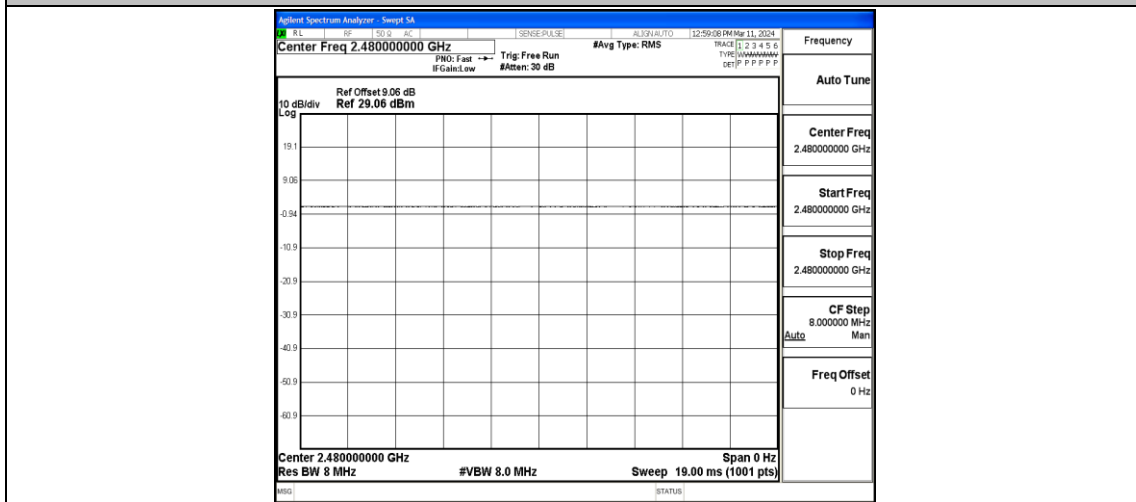
Test Graphs



NTNV-BLE_1M-Ant1-2402



NTNV-BLE_1M-Ant1-2440



NTNV-BLE_1M-Ant1-2480

Appendix H: Emissions in Restricted Bands

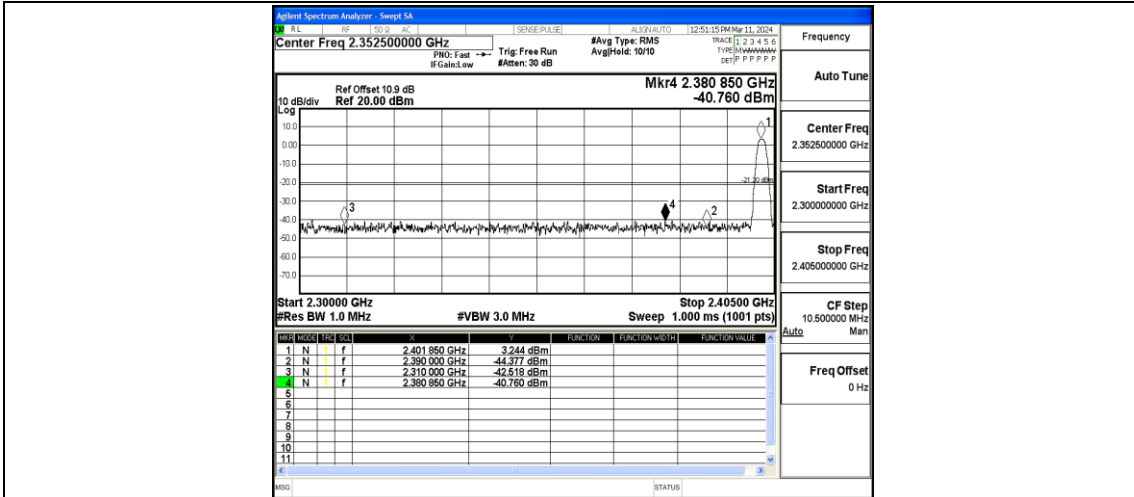
Test Result

TestMode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	Peak	2390.000	-44.38	≤-21.20	50.82	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2310.000	-42.52	≤-21.20	52.68	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2380.850	-40.76	≤-21.20	54.44	≤74	PASS
BLE_1M	Ant1	Low	2402	AV	2390.000	-50.69	≤-41.20	44.51	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2310.000	-50.58	≤-41.20	44.62	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2369.195	-49.6	≤-41.20	45.60	≤54	PASS
BLE_1M	Ant1	High	2480	Peak	2483.500	-40.73	≤-21.20	54.47	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2500.000	-44.72	≤-21.20	50.48	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2495.920	-39.36	≤-21.20	55.84	≤74	PASS
BLE_1M	Ant1	High	2480	AV	2483.500	-50.29	≤-41.20	44.91	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2500.000	-49.49	≤-41.20	45.71	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2498.880	-48.76	≤-41.20	46.44	≤54	PASS

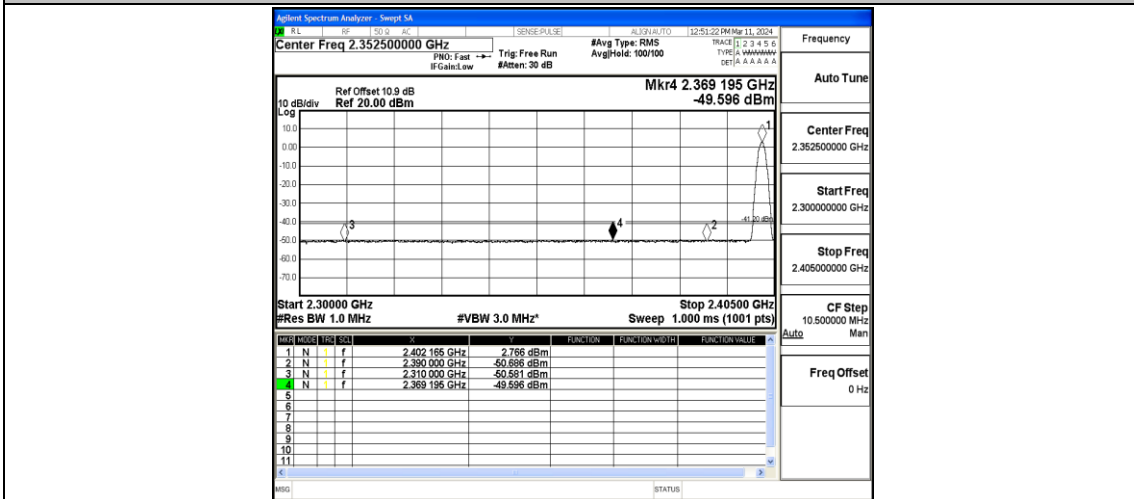
Note:

1. The Antenna Gain is compensated in the graph.
2. 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.

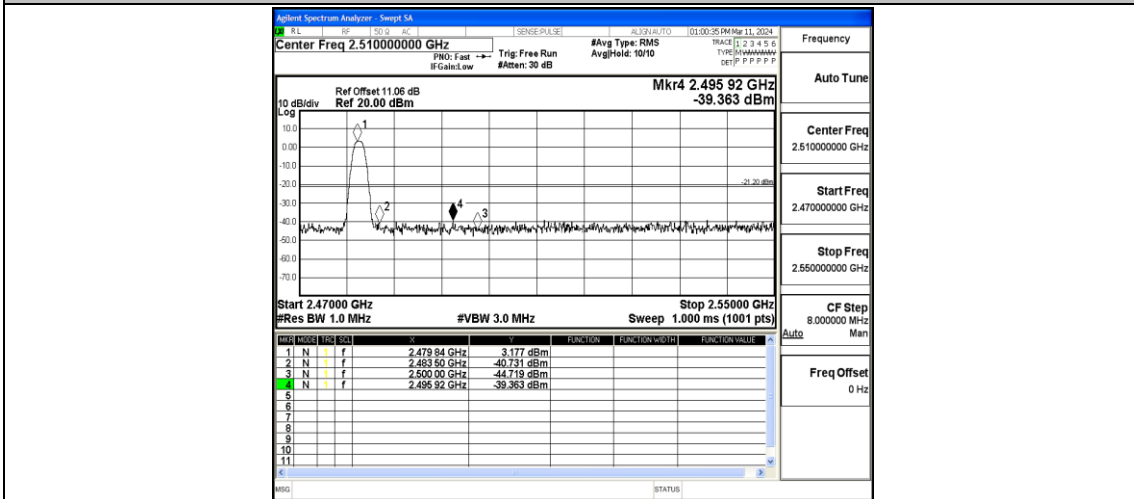
Test Graphs



BLE_1M-Ant1-240-PASS



BLE_1M-Ant1-240-PASS



BLE_1M-Ant1-2480-PASS

