

Appendix Test Data for BLE (Conducted Measurement)

Product Name: Wireless Mechanical Keyboard

Trade Mark: Keychron

Test Model: B1 Pro

FCC ID: 2BGKB-B1PRO

Environmental Conditions

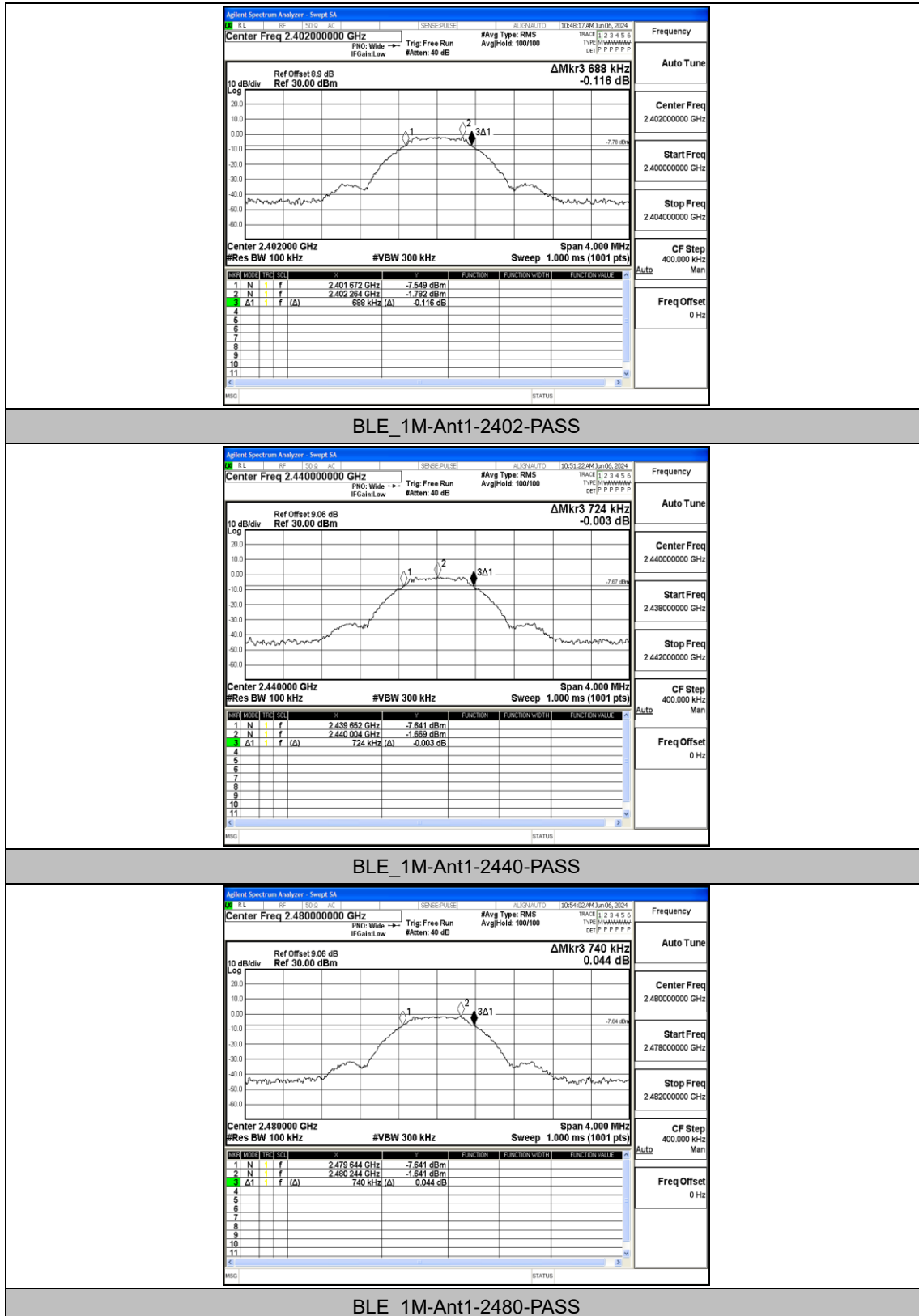
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.688	2401.672	2402.360	0.5	PASS
BLE_1M	Ant1	2440	0.724	2439.652	2440.376	0.5	PASS
BLE_1M	Ant1	2480	0.740	2479.644	2480.384	0.5	PASS

Test Graphs

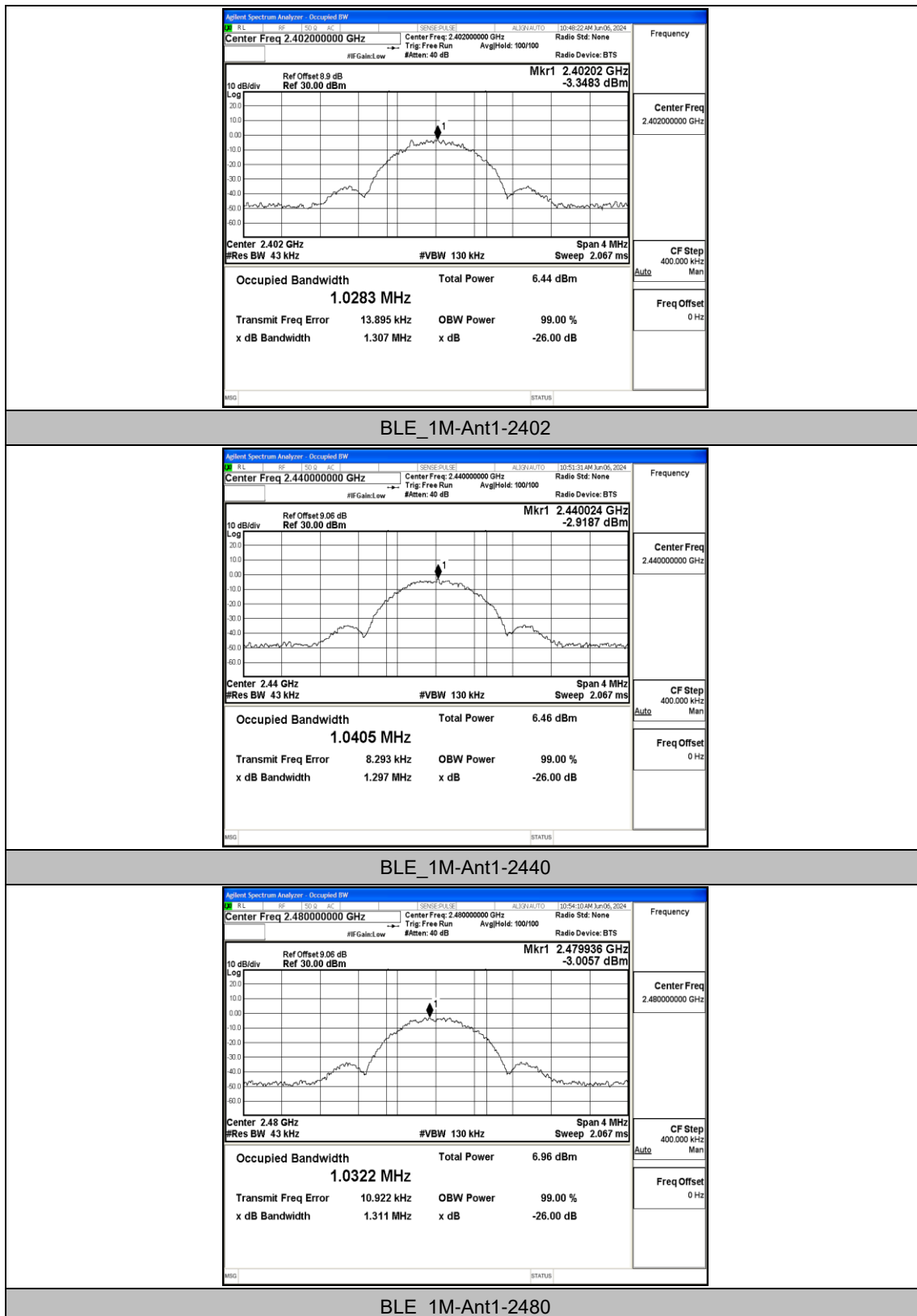


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0283	2401.4998	2402.5281	---	---
BLE_1M	Ant1	2440	1.0405	2439.4880	2440.5285	---	---
BLE_1M	Ant1	2480	1.0322	2479.4948	2480.5270	---	---

Test Graphs

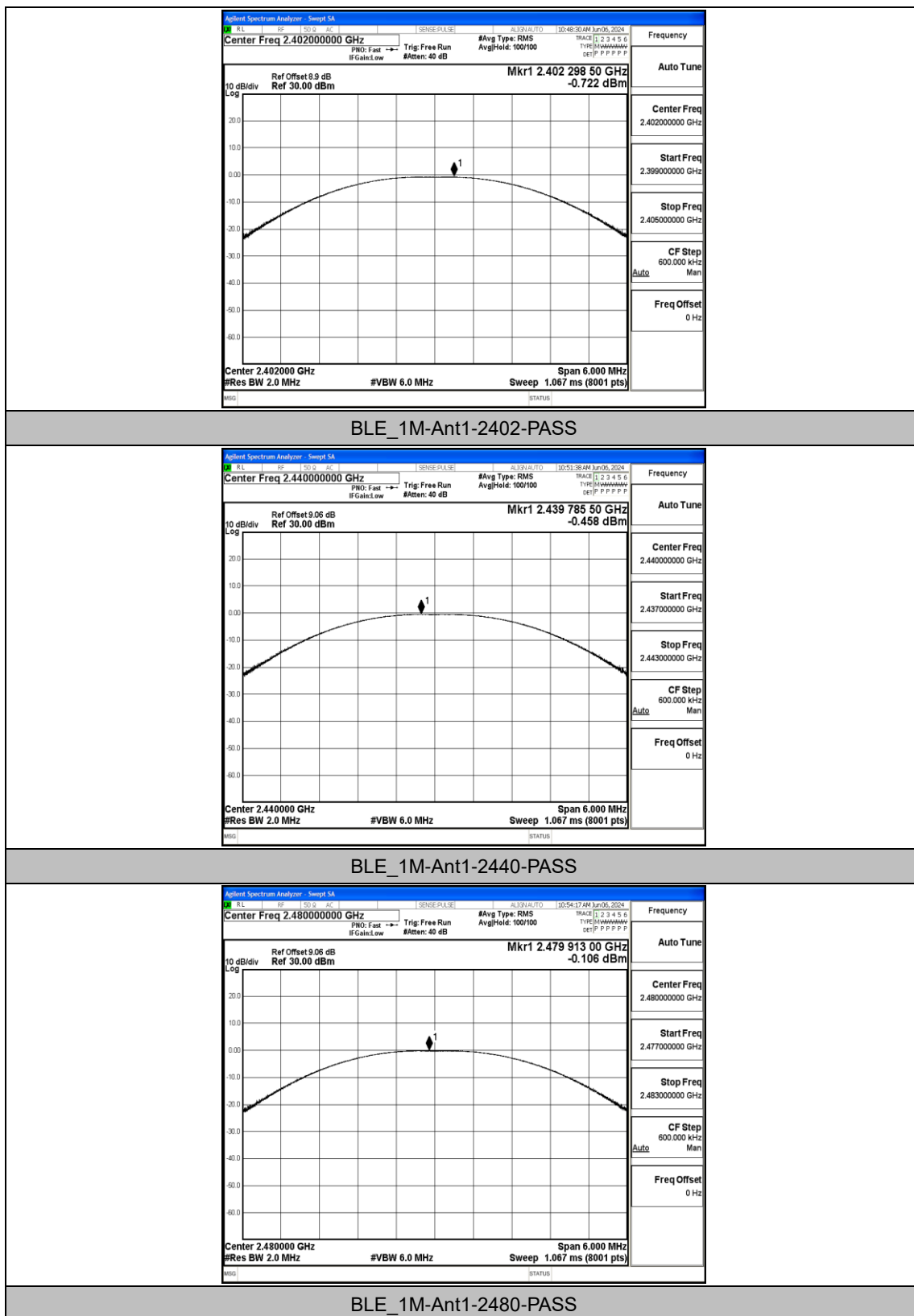


Appendix C: Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.72	≤30	PASS
BLE_1M	Ant1	2440	-0.46	≤30	PASS
BLE_1M	Ant1	2480	-0.11	≤30	PASS

Test Graphs Peak

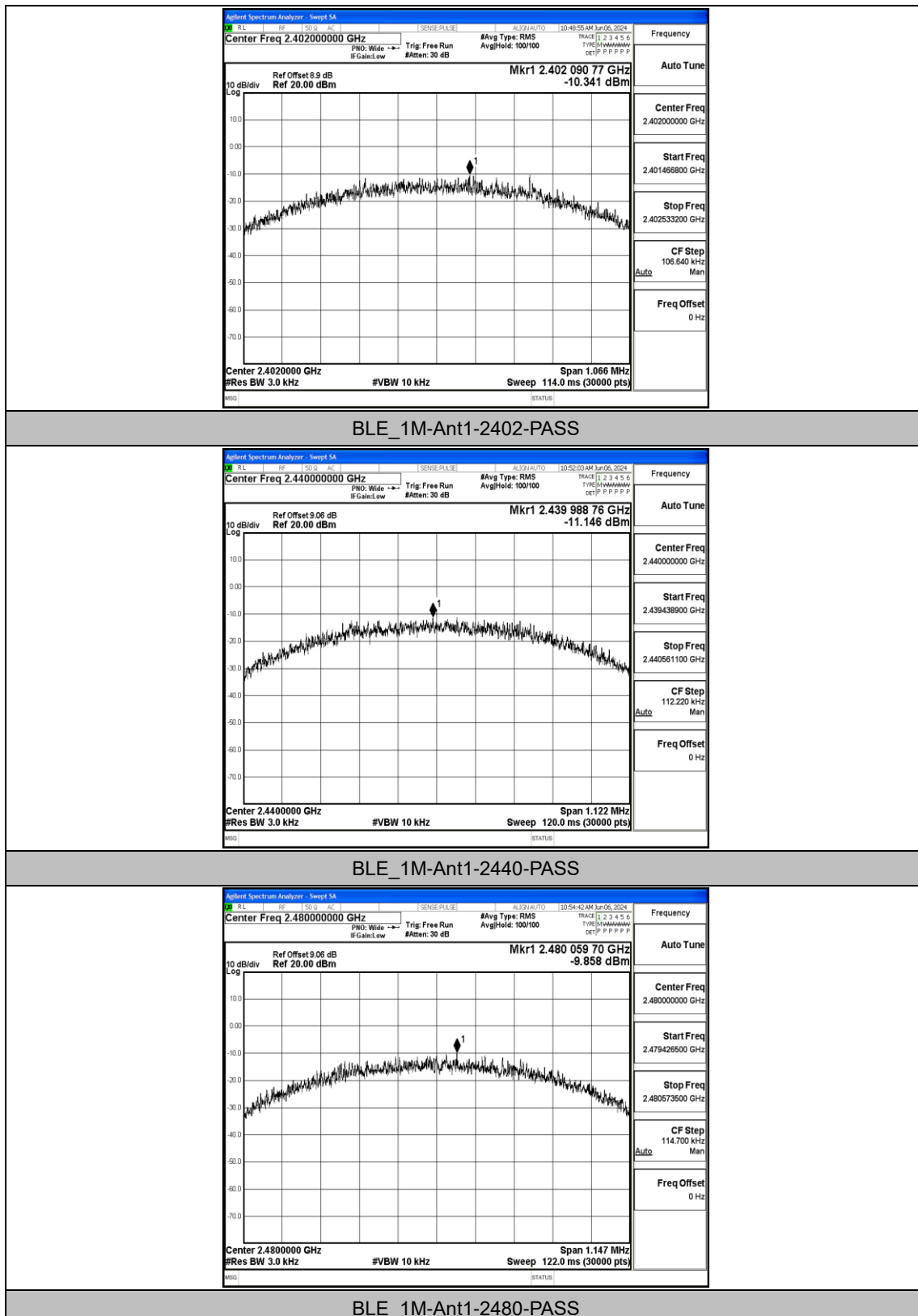


Appendix D: Maximum peak power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.34	≤8.00	PASS
BLE_1M	Ant1	2440	-11.15	≤8.00	PASS
BLE_1M	Ant1	2480	-9.86	≤8.00	PASS

Test Graphs

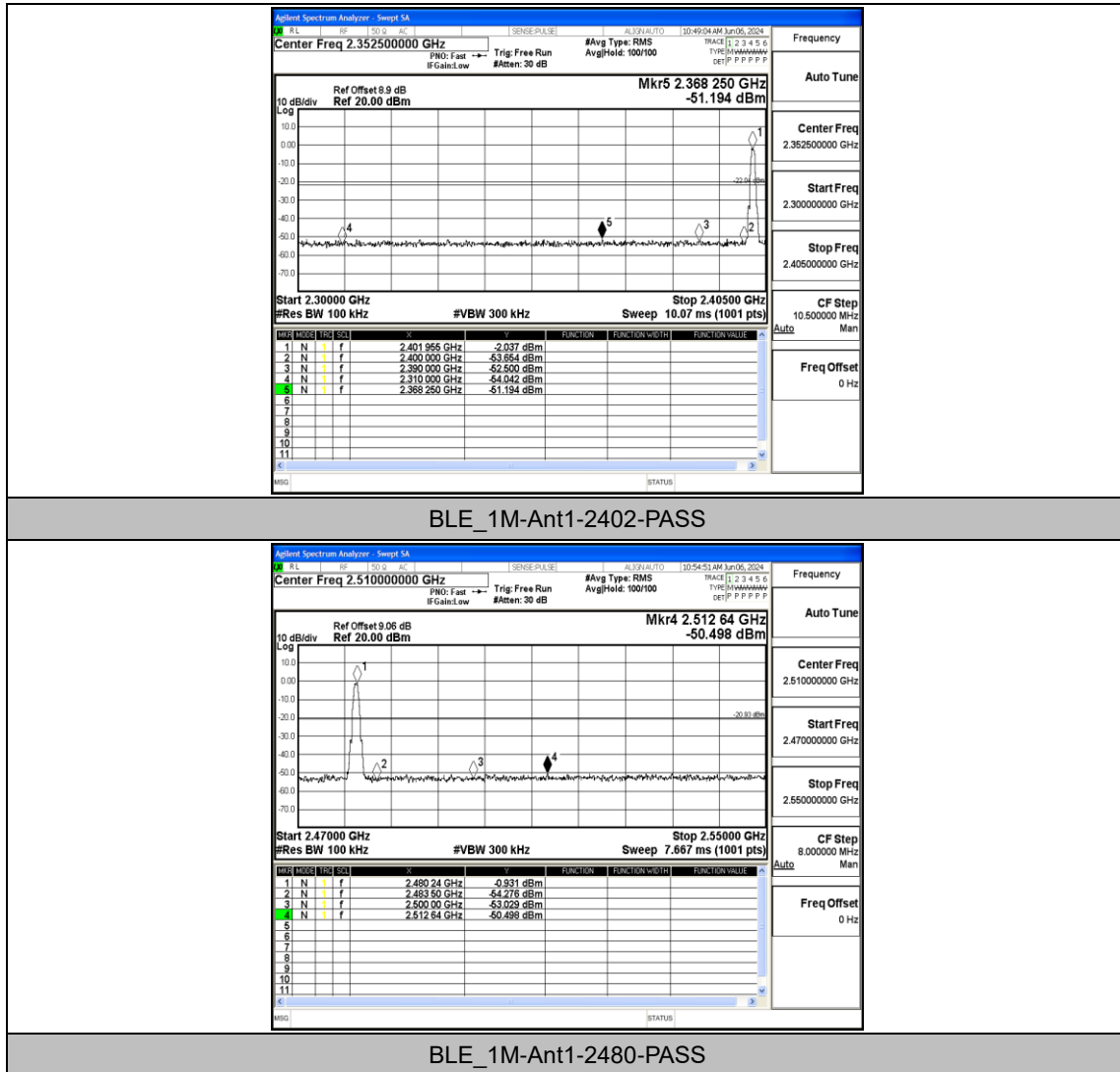


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.04	-51.19	≤-22.04	PASS
BLE_1M	Ant1	High	2480	-0.93	-50.5	≤-20.93	PASS

Test Graphs

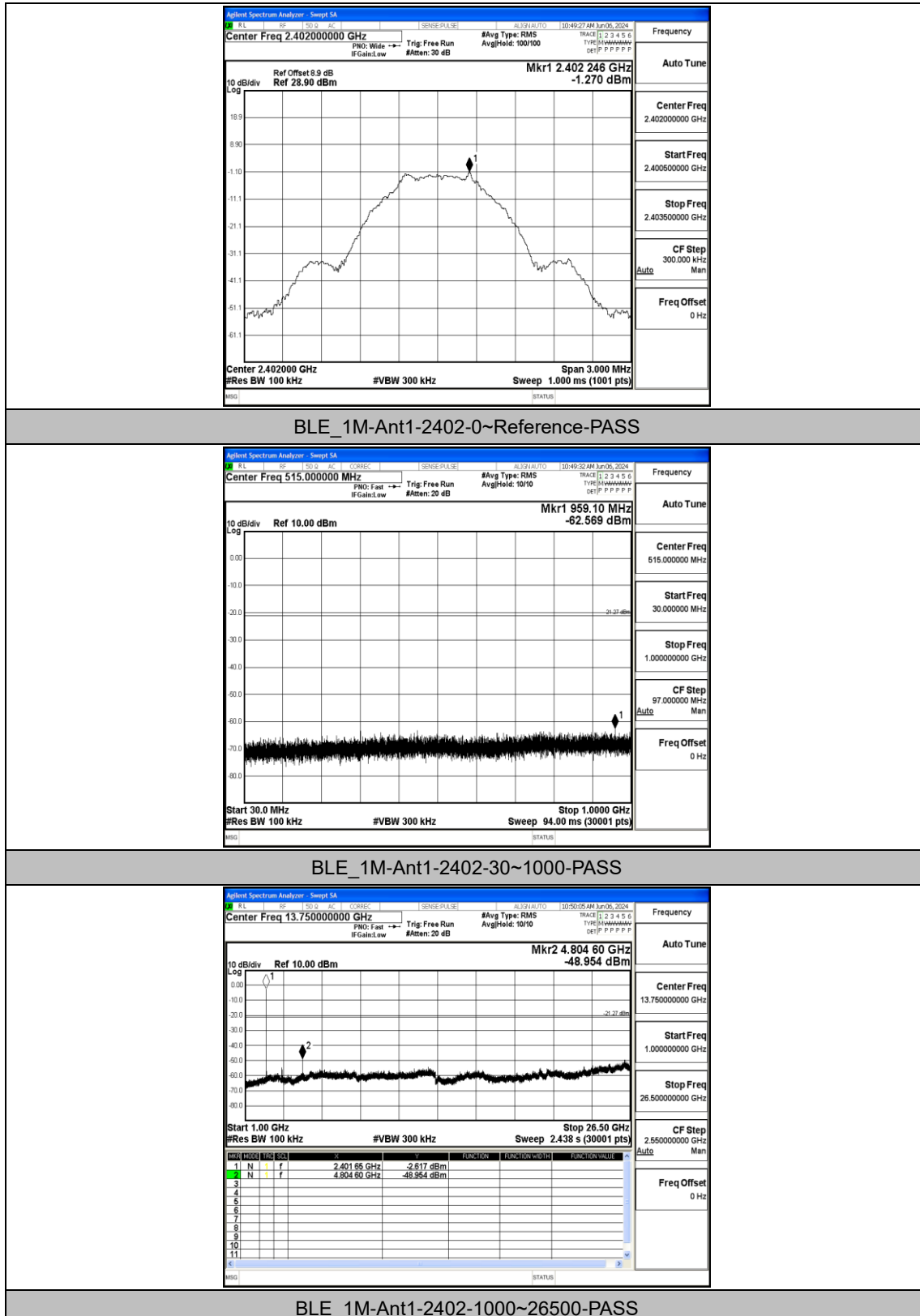


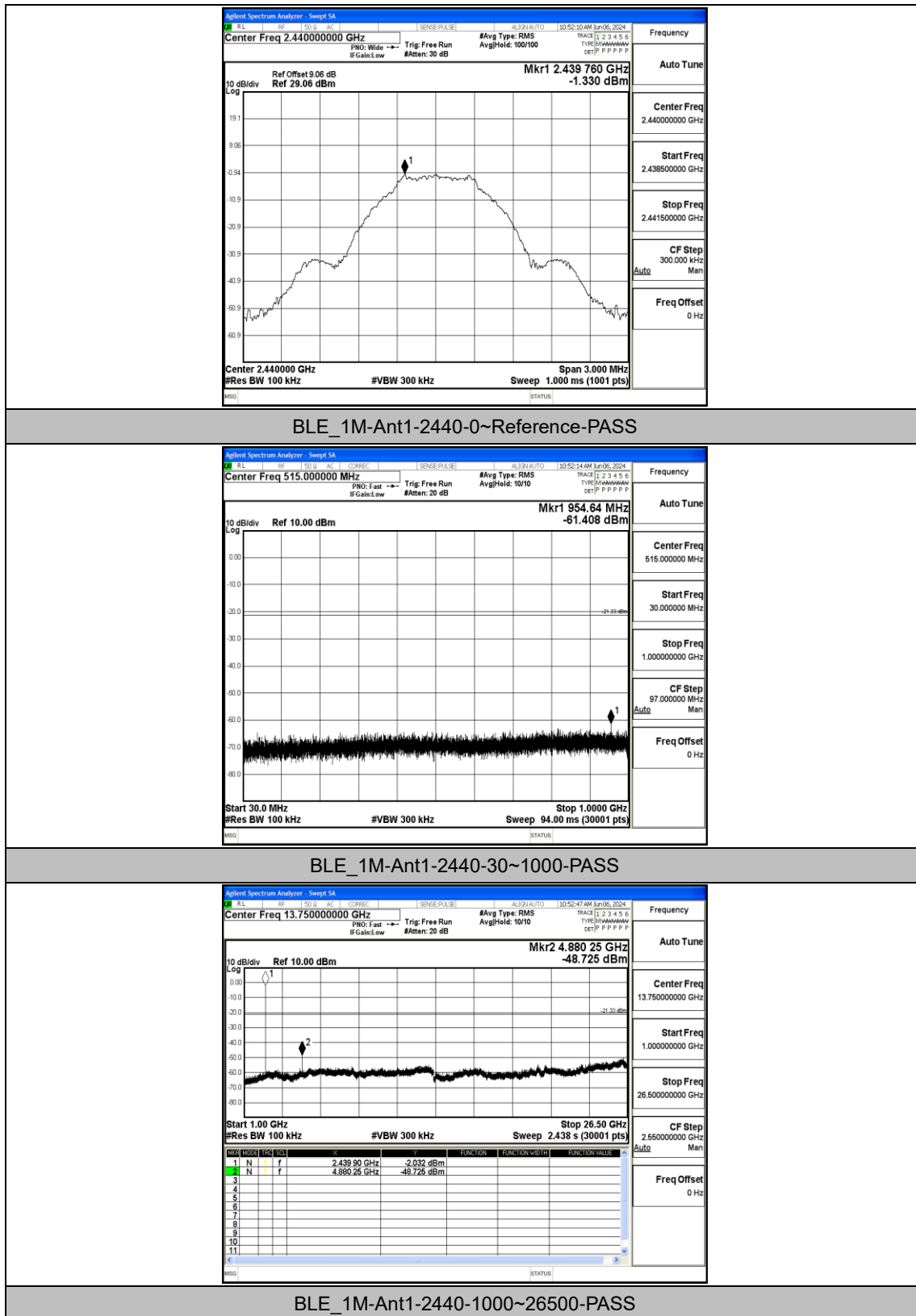
Appendix F: Conducted Spurious Emission

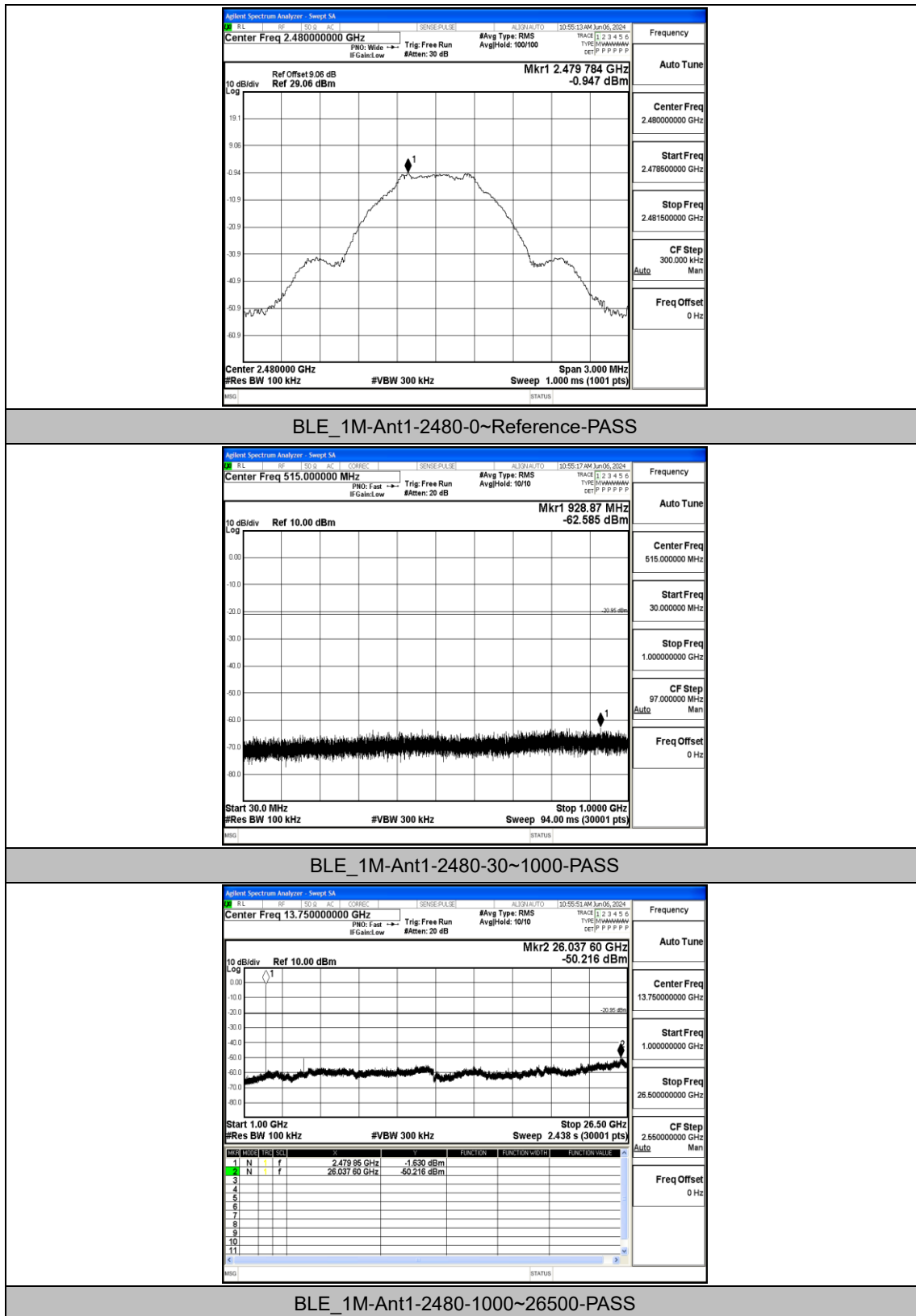
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-1.27	-1.27	---	PASS
BLE_1M	Ant1	2402	30~1000	-1.27	-62.57	≤-21.27	PASS
BLE_1M	Ant1	2402	1000~26500	-1.27	-48.95	≤-21.27	PASS
BLE_1M	Ant1	2440	0~Reference	-1.33	-1.33	---	PASS
BLE_1M	Ant1	2440	30~1000	-1.33	-61.41	≤-21.33	PASS
BLE_1M	Ant1	2440	1000~26500	-1.33	-48.73	≤-21.33	PASS
BLE_1M	Ant1	2480	0~Reference	-0.95	-0.95	---	PASS
BLE_1M	Ant1	2480	30~1000	-0.95	-62.59	≤-20.95	PASS
BLE_1M	Ant1	2480	1000~26500	-0.95	-50.22	≤-20.95	PASS

Test Graphs





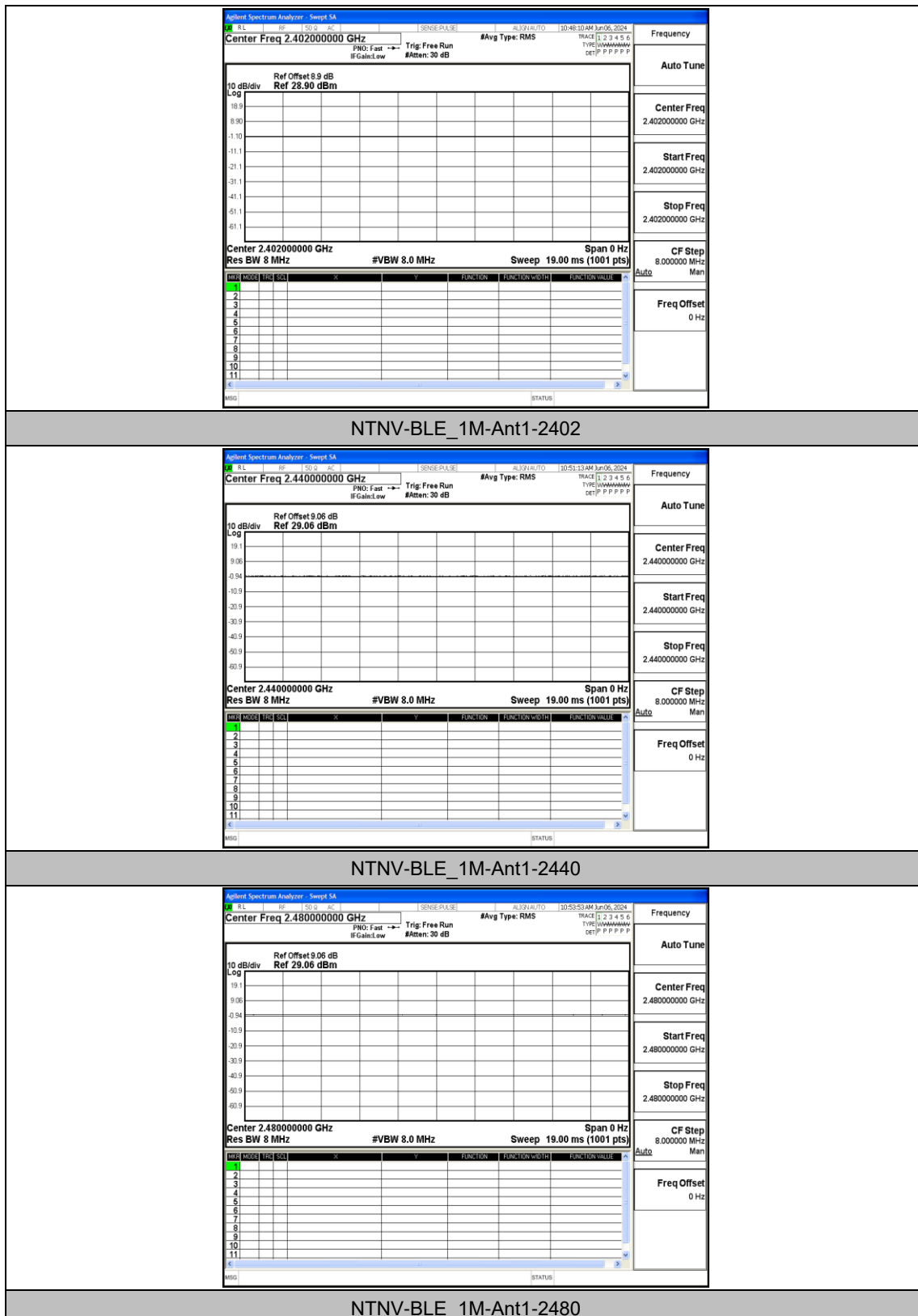


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	19.00	19.00	100.00	0.00
BLE_1M	Ant1	2440	19.00	19.00	100.00	0.00
BLE_1M	Ant1	2480	19.00	19.00	100.00	0.00

Test Graphs



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	-54.2	≤-21.20	41.00	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2310.000	-55.45	≤-21.20	39.75	≤74	PASS
BLE_1M	Ant1	Low	2402	Peak	2373.290	-49.6	≤-21.20	45.60	≤74	PASS
BLE_1M	Ant1	Low	2402	AV	2390.000	-60.17	≤-41.20	35.03	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.48	≤-41.20	34.72	≤54	PASS
BLE_1M	Ant1	Low	2402	AV	2370.035	-59.38	≤-41.20	35.82	≤54	PASS
BLE_1M	Ant1	High	2480	Peak	2483.500	-55.28	≤-21.20	39.92	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2500.000	-52.65	≤-21.20	42.55	≤74	PASS
BLE_1M	Ant1	High	2480	Peak	2492.560	-49	≤-21.20	46.20	≤74	PASS
BLE_1M	Ant1	High	2480	AV	2483.500	-59.14	≤-41.20	36.06	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2500.000	-59.27	≤-41.20	35.93	≤54	PASS
BLE_1M	Ant1	High	2480	AV	2499.920	-58.57	≤-41.20	36.63	≤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

