

Appendix Test Data for BLE (Conducted Measurement)

Product Name: SMART WATCH

Trade Mark: XINJI

Test Model: N/A

FCC ID: 2AE8V-G2PLUS

Environmental Conditions

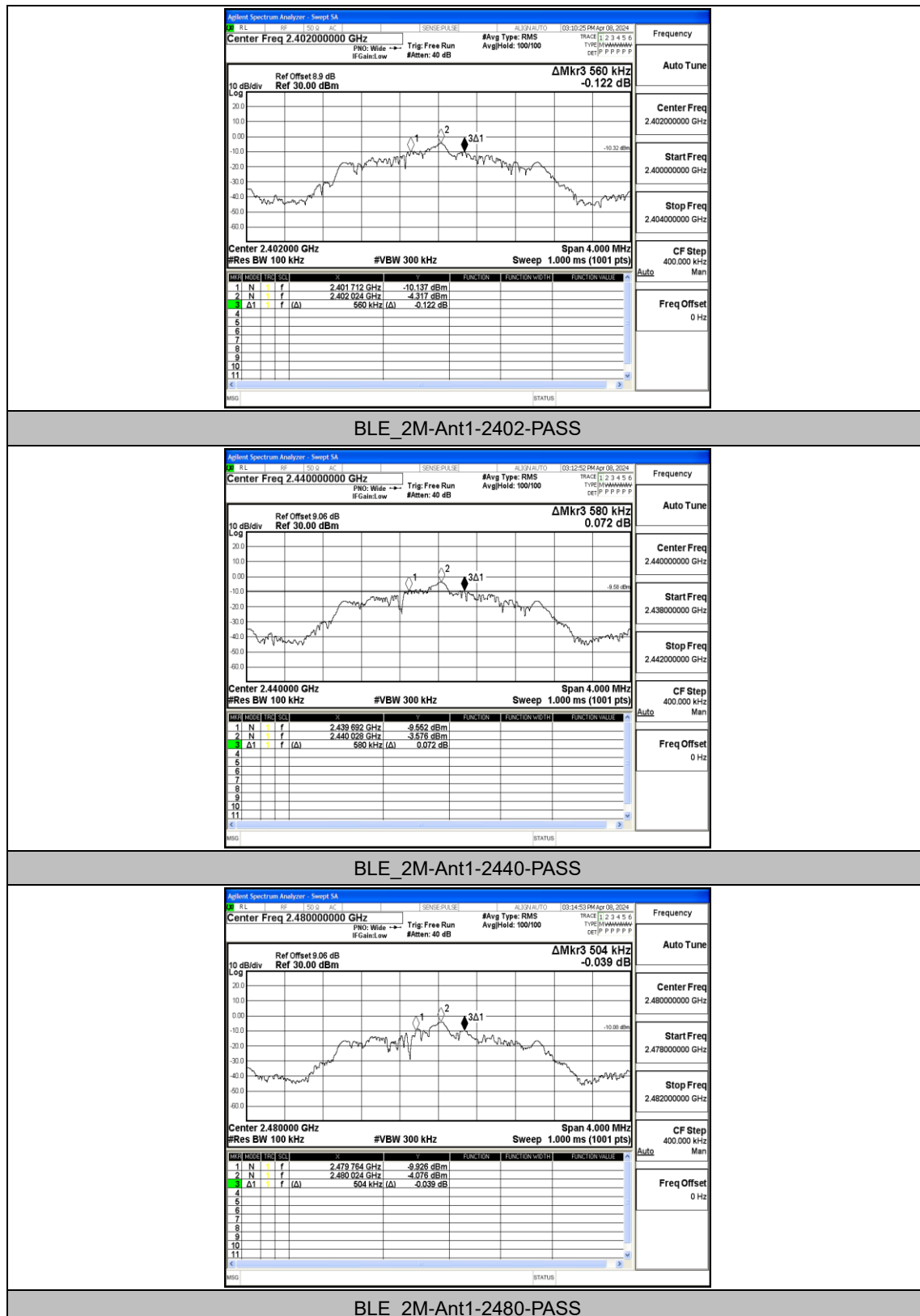
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_2M	Ant1	2402	0.560	2401.712	2402.272	0.5	PASS
BLE_2M	Ant1	2440	0.580	2439.692	2440.272	0.5	PASS
BLE_2M	Ant1	2480	0.504	2479.764	2480.268	0.5	PASS

Test Graphs

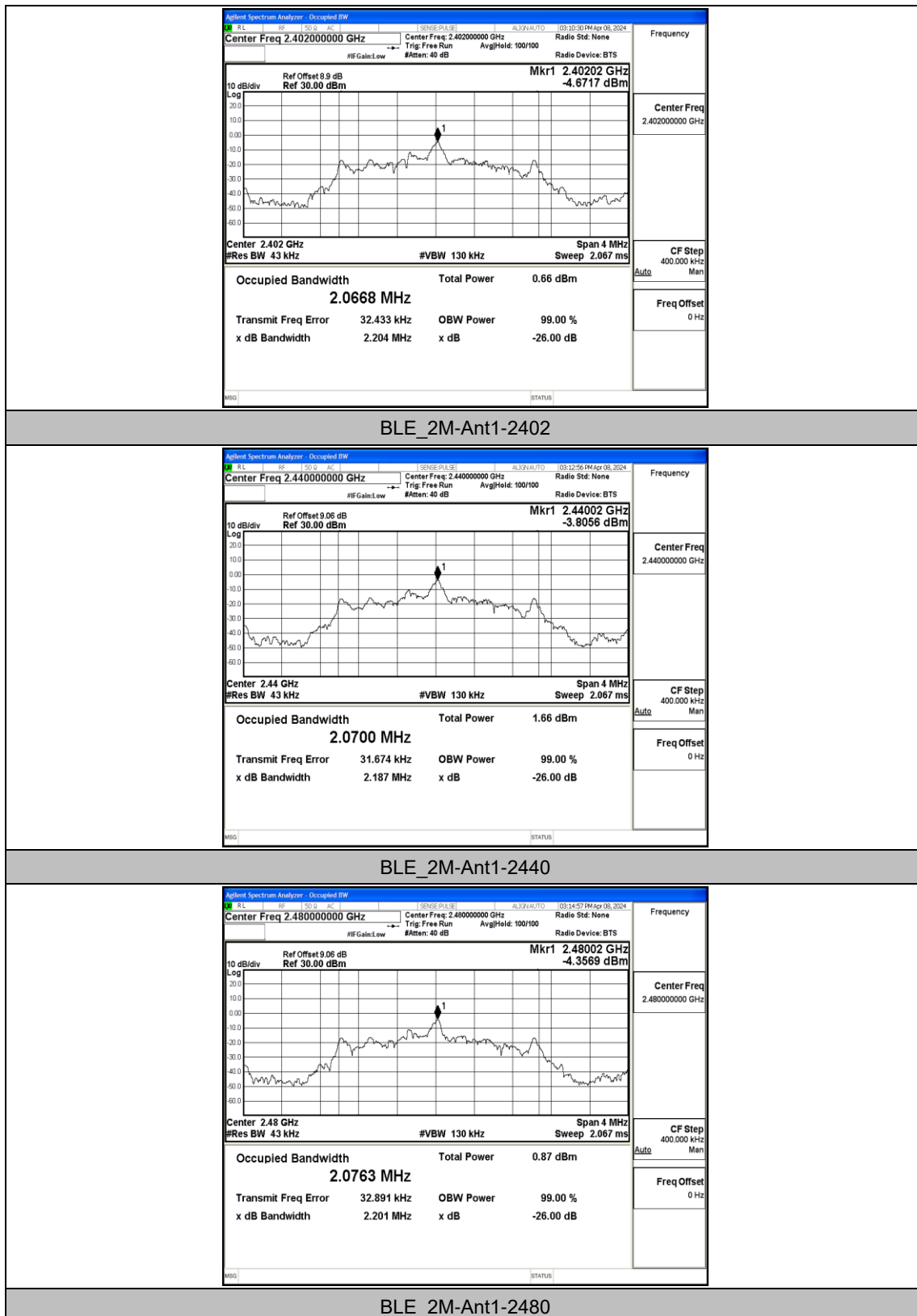


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_2M	Ant1	2402	2.0668	2400.9990	2403.0658	---	---
BLE_2M	Ant1	2440	2.0700	2438.9967	2441.0667	---	---
BLE_2M	Ant1	2480	2.0763	2478.9947	2481.0710	---	---

Test Graphs

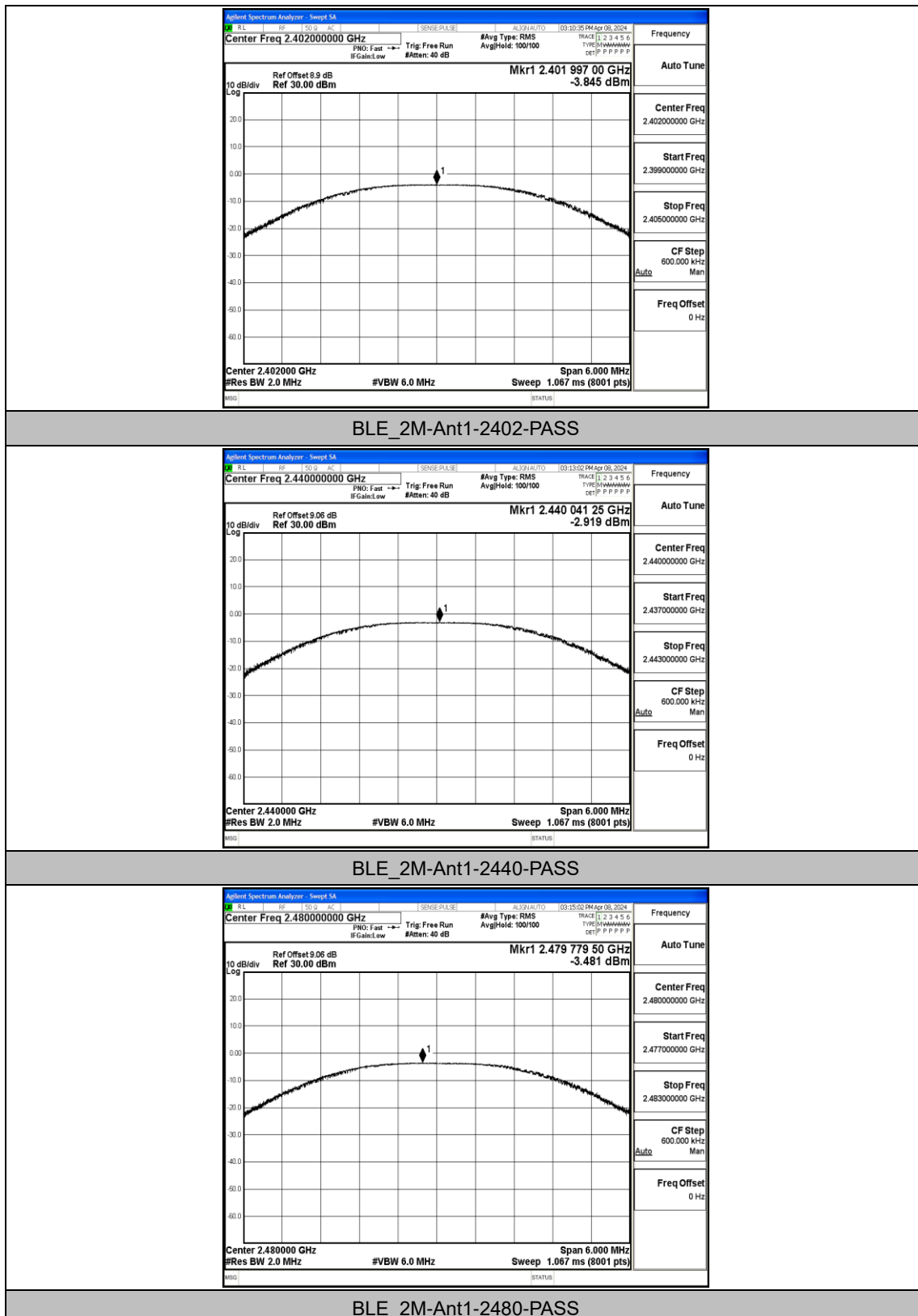


Appendix C: Maximum peak conducted output power

Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_2M	Ant1	2402	-3.85	≤30	PASS
BLE_2M	Ant1	2440	-2.92	≤30	PASS
BLE_2M	Ant1	2480	-3.48	≤30	PASS

Test Graphs Peak

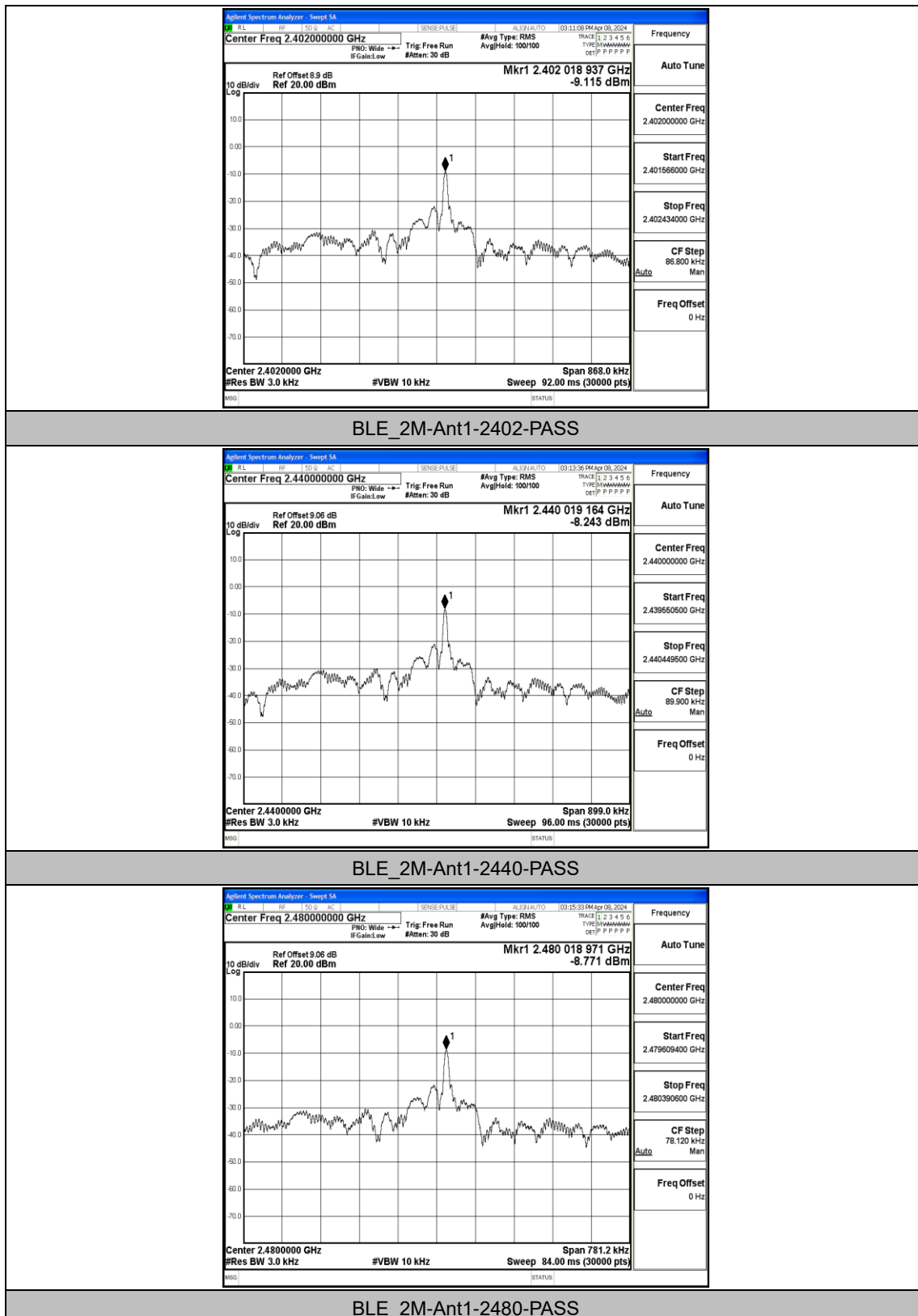


Appendix D: Maximum peak power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_2M	Ant1	2402	-9.12	≤8.00	PASS
BLE_2M	Ant1	2440	-8.24	≤8.00	PASS
BLE_2M	Ant1	2480	-8.77	≤8.00	PASS

Test Graphs

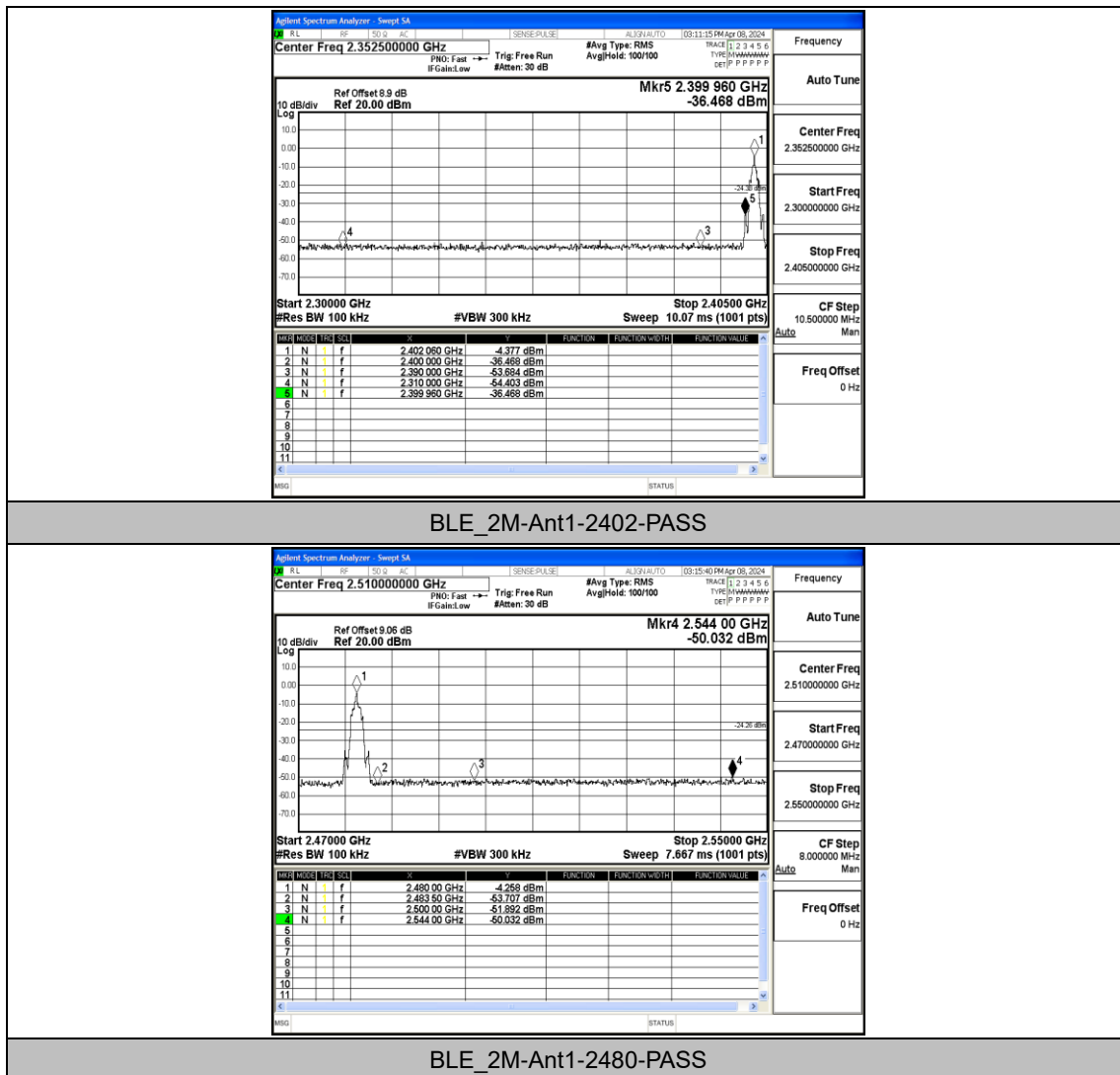


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	Channel	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant1	Low	2402	-4.38	-36.47	≤-24.38	PASS
BLE_2M	Ant1	High	2480	-4.26	-50.03	≤-24.26	PASS

Test Graphs

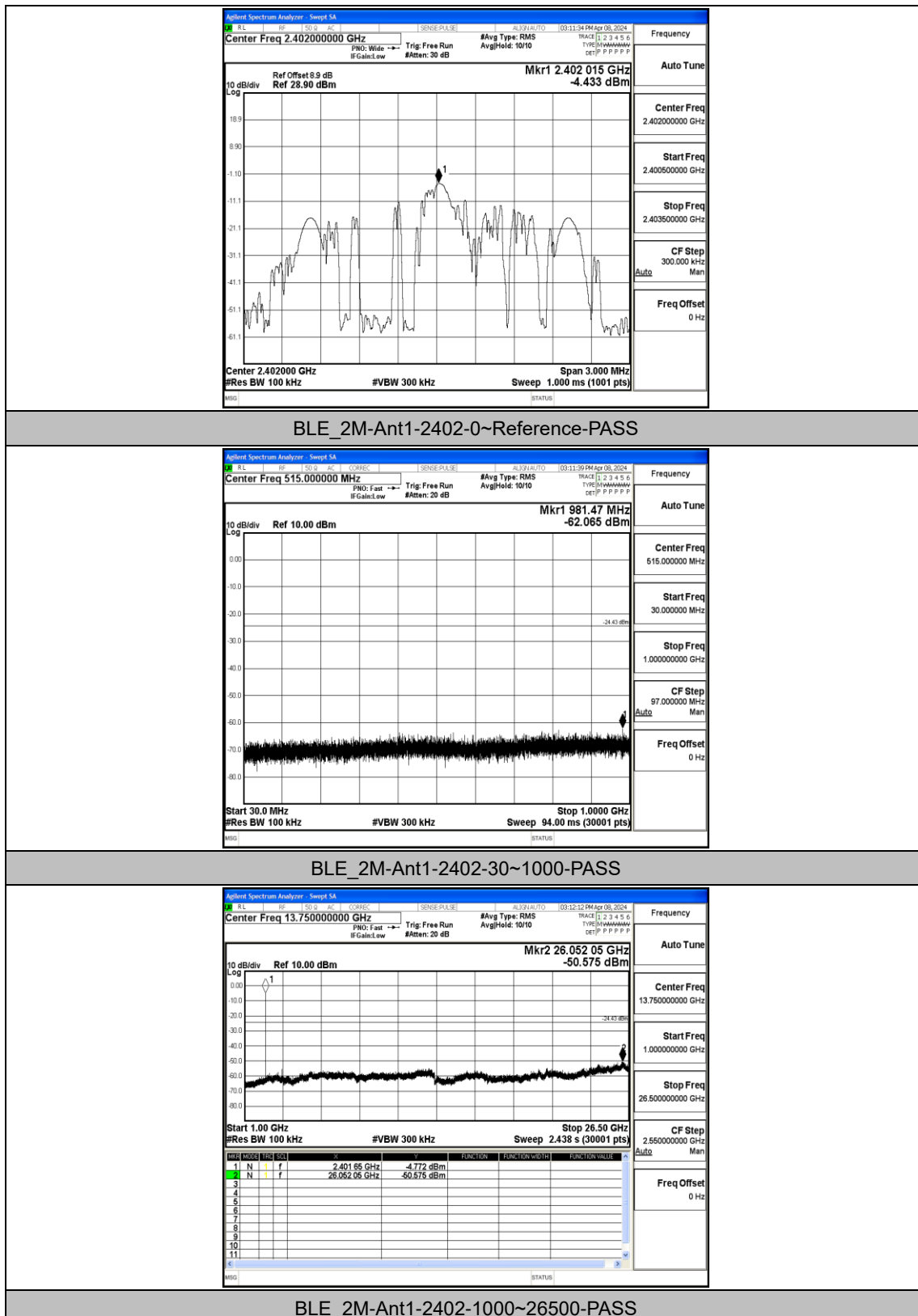


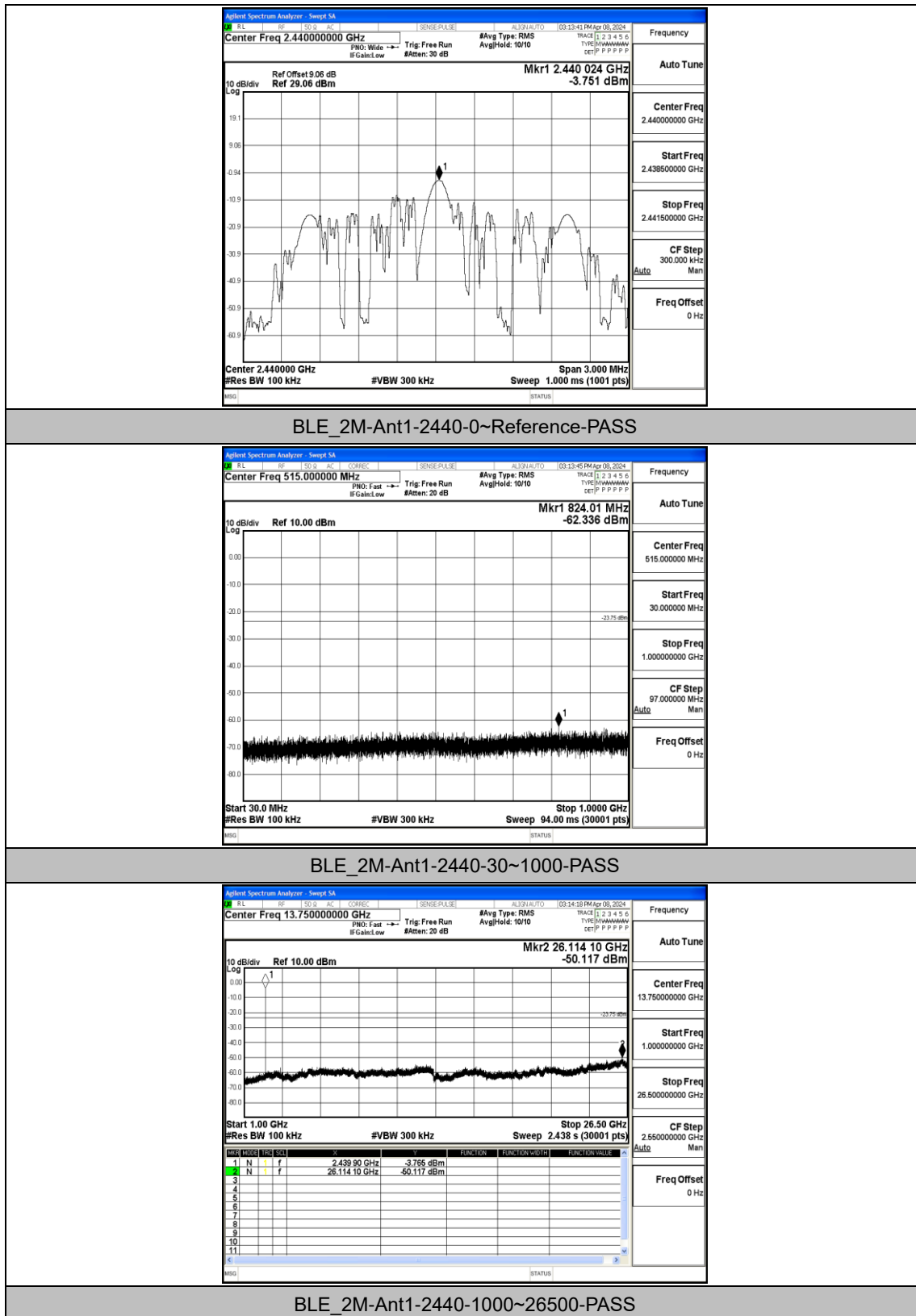
Appendix F: Conducted Spurious Emission

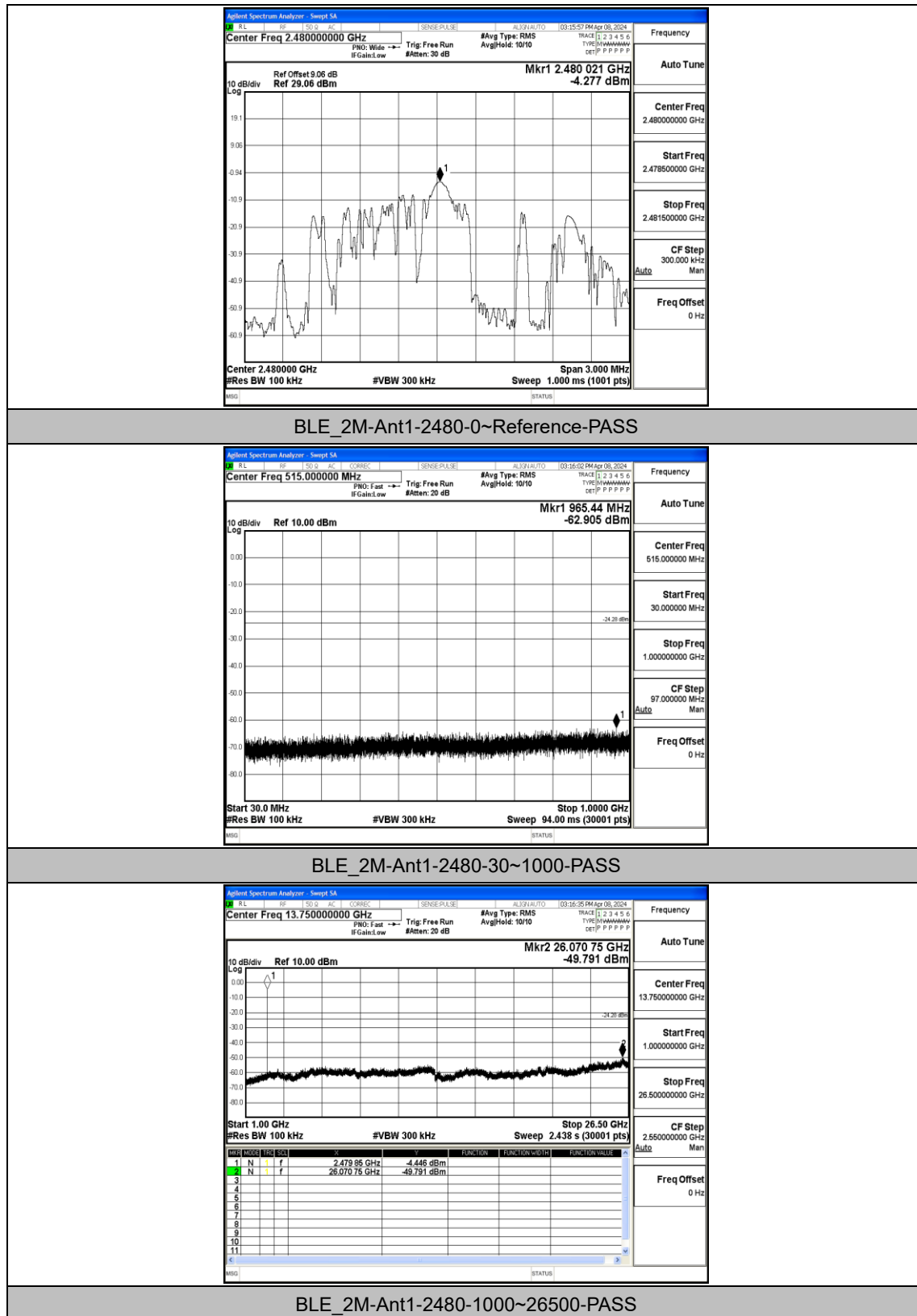
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_2M	Ant1	2402	0~Reference	-4.43	-4.43	---	PASS
BLE_2M	Ant1	2402	30~1000	-4.43	-62.07	≤-24.43	PASS
BLE_2M	Ant1	2402	1000~26500	-4.43	-50.58	≤-24.43	PASS
BLE_2M	Ant1	2440	0~Reference	-3.75	-3.75	---	PASS
BLE_2M	Ant1	2440	30~1000	-3.75	-62.34	≤-23.75	PASS
BLE_2M	Ant1	2440	1000~26500	-3.75	-50.12	≤-23.75	PASS
BLE_2M	Ant1	2480	0~Reference	-4.28	-4.28	---	PASS
BLE_2M	Ant1	2480	30~1000	-4.28	-62.91	≤-24.28	PASS
BLE_2M	Ant1	2480	1000~26500	-4.28	-49.79	≤-24.28	PASS

Test Graphs





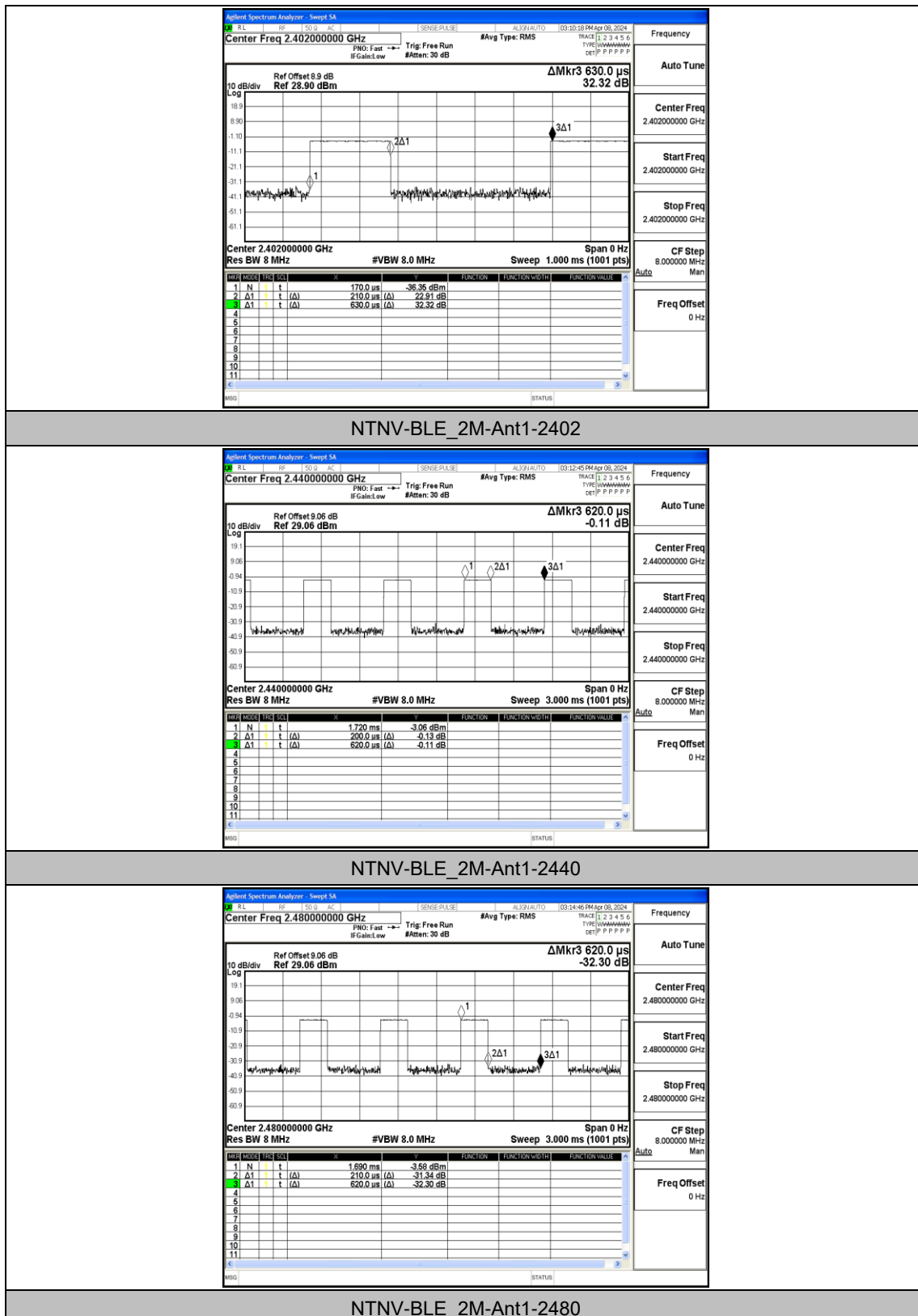


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_2M	Ant1	2402	0.21	0.63	33.33	4.77
BLE_2M	Ant1	2440	0.20	0.62	32.26	4.91
BLE_2M	Ant1	2480	0.21	0.62	33.87	4.70

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_2M	Ant1	Low	2402	Peak	2390.000	-51.24	≤-21.20	43.96	≤74	PASS
BLE_2M	Ant1	Low	2402	Peak	2310.000	-52.91	≤-21.20	42.29	≤74	PASS
BLE_2M	Ant1	Low	2402	Peak	2351.660	-48.52	≤-21.20	46.68	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2390.000	-55.74	≤-41.20	39.46	≤54	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-55.42	≤-41.20	39.78	≤54	PASS
BLE_2M	Ant1	Low	2402	AV	2389.040	-54.56	≤-41.20	40.64	≤54	PASS
BLE_2M	Ant1	High	2480	Peak	2483.500	-46.7	≤-21.20	48.50	≤74	PASS
BLE_2M	Ant1	High	2480	Peak	2500.000	-51.13	≤-21.20	44.07	≤74	PASS
BLE_2M	Ant1	High	2480	Peak	2483.520	-46.7	≤-21.20	48.50	≤74	PASS
BLE_2M	Ant1	High	2480	AV	2483.500	-53.73	≤-41.20	41.47	≤54	PASS
BLE_2M	Ant1	High	2480	AV	2500.000	-54.96	≤-41.20	40.24	≤54	PASS
BLE_2M	Ant1	High	2480	AV	2483.520	-53.73	≤-41.20	41.47	≤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

