

Appendix Test Data for BLE (Conducted Measurement)

Product Name: Wireless Keyboard

Trade Mark: Keychron

Test Model: Q4 HE

FCC ID: 2BGKB-Q4HE

Environmental Conditions

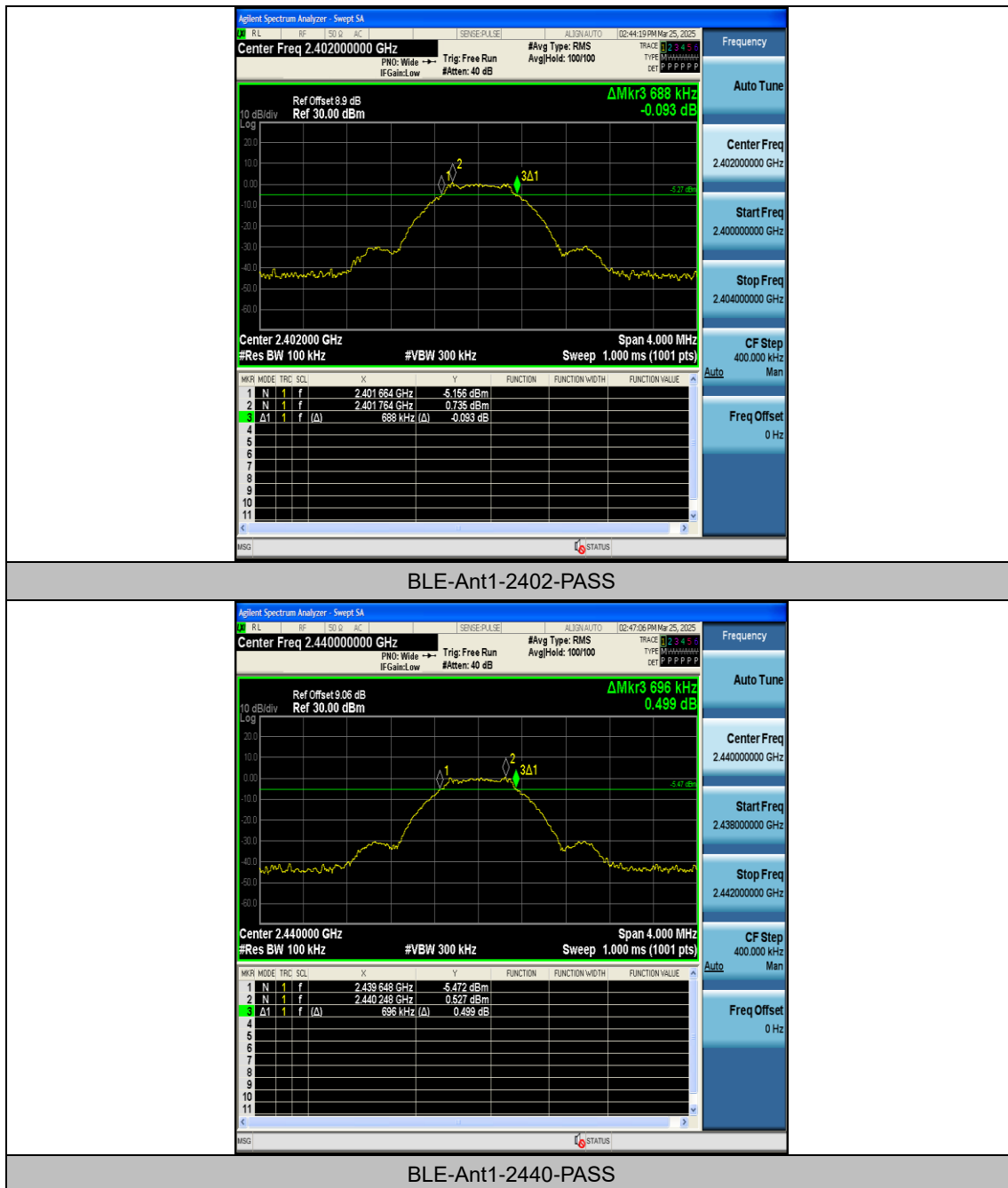
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

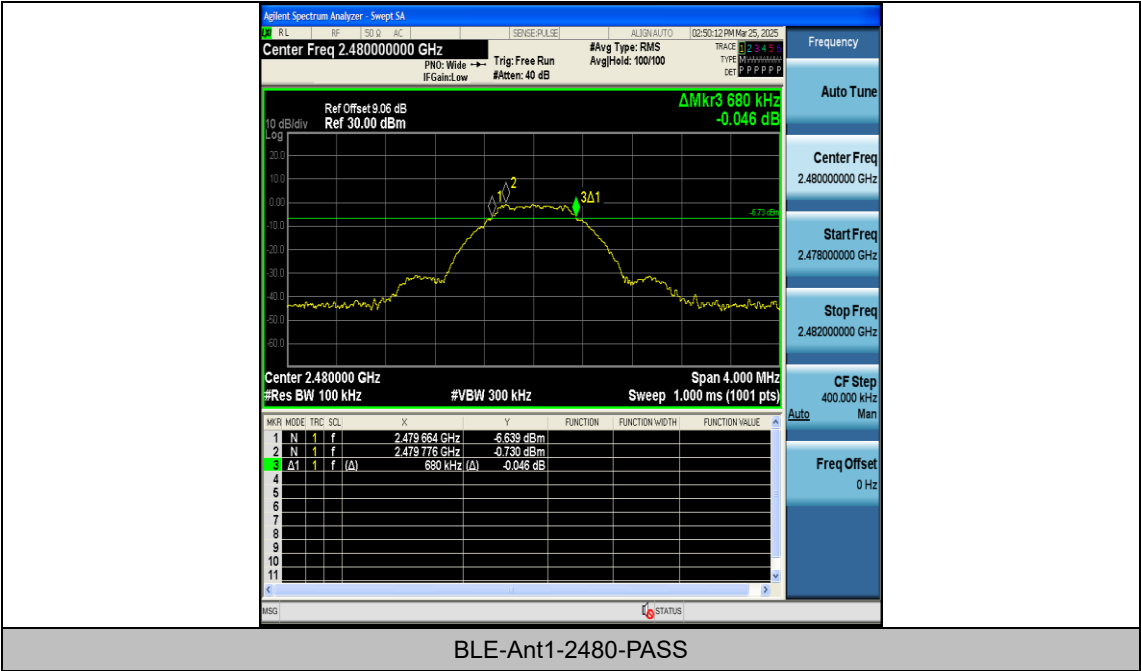
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE	Ant1	2402	0.688	2401.664	2402.352	0.5	PASS
BLE	Ant1	2440	0.696	2439.648	2440.344	0.5	PASS
BLE	Ant1	2480	0.680	2479.664	2480.344	0.5	PASS

Test Graphs



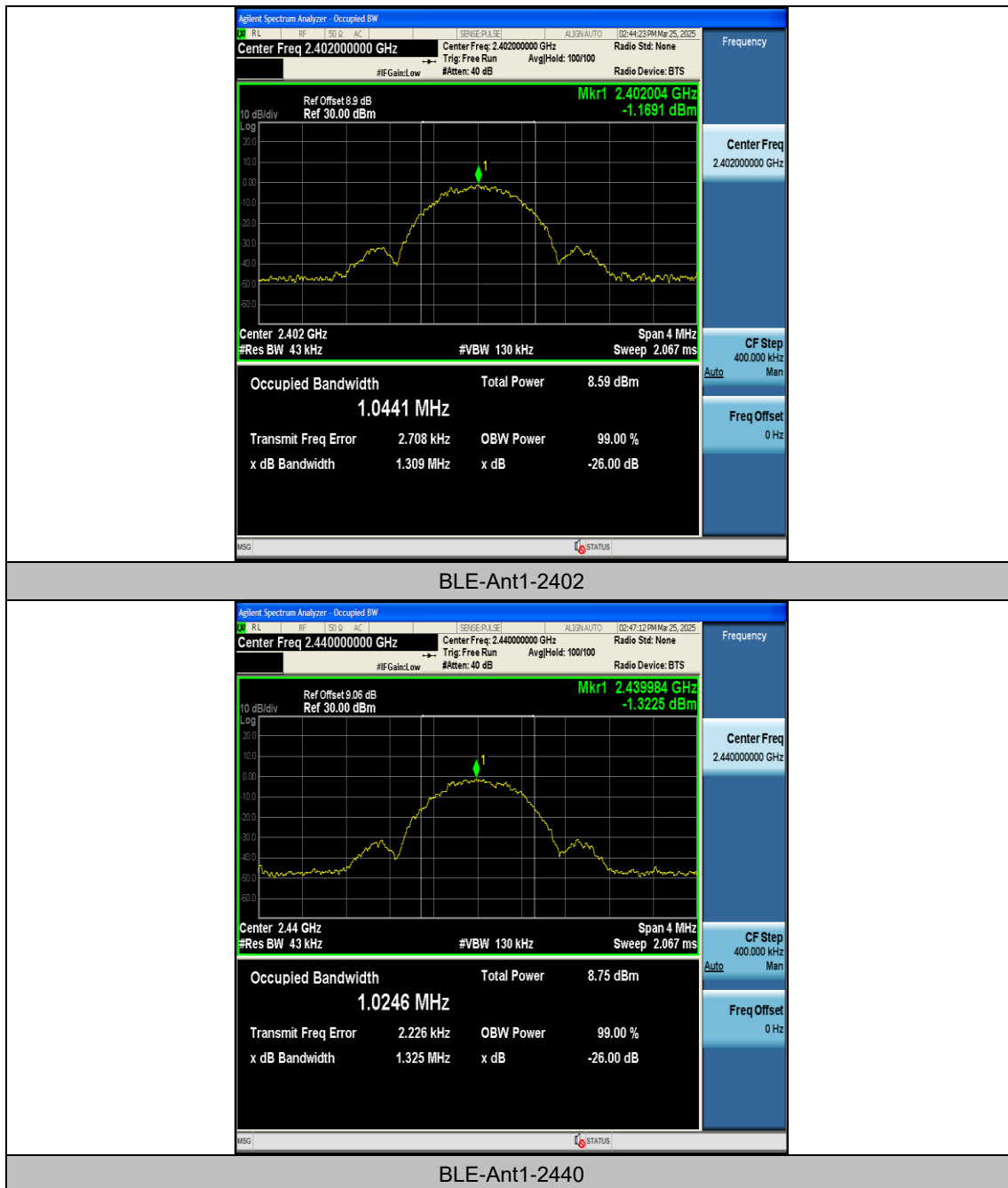


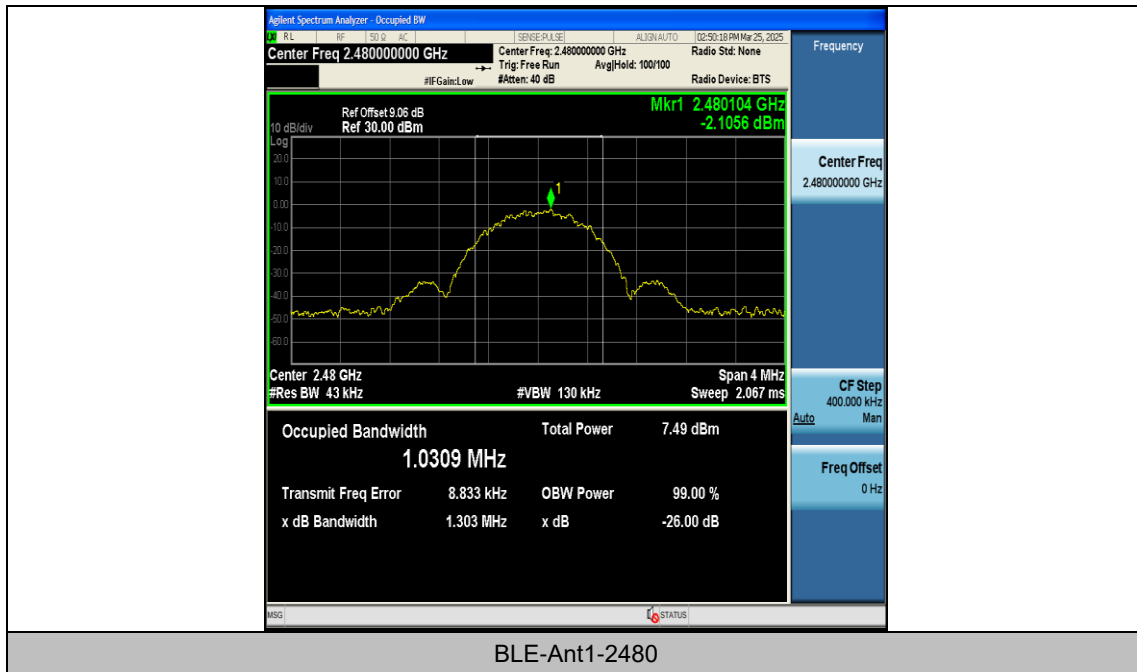
Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE	Ant1	2402	1.0441	2401.4807	2402.5248	---	---
BLE	Ant1	2440	1.0246	2439.4899	2440.5145	---	---
BLE	Ant1	2480	1.0309	2479.4934	2480.5243	---	---

Test Graphs



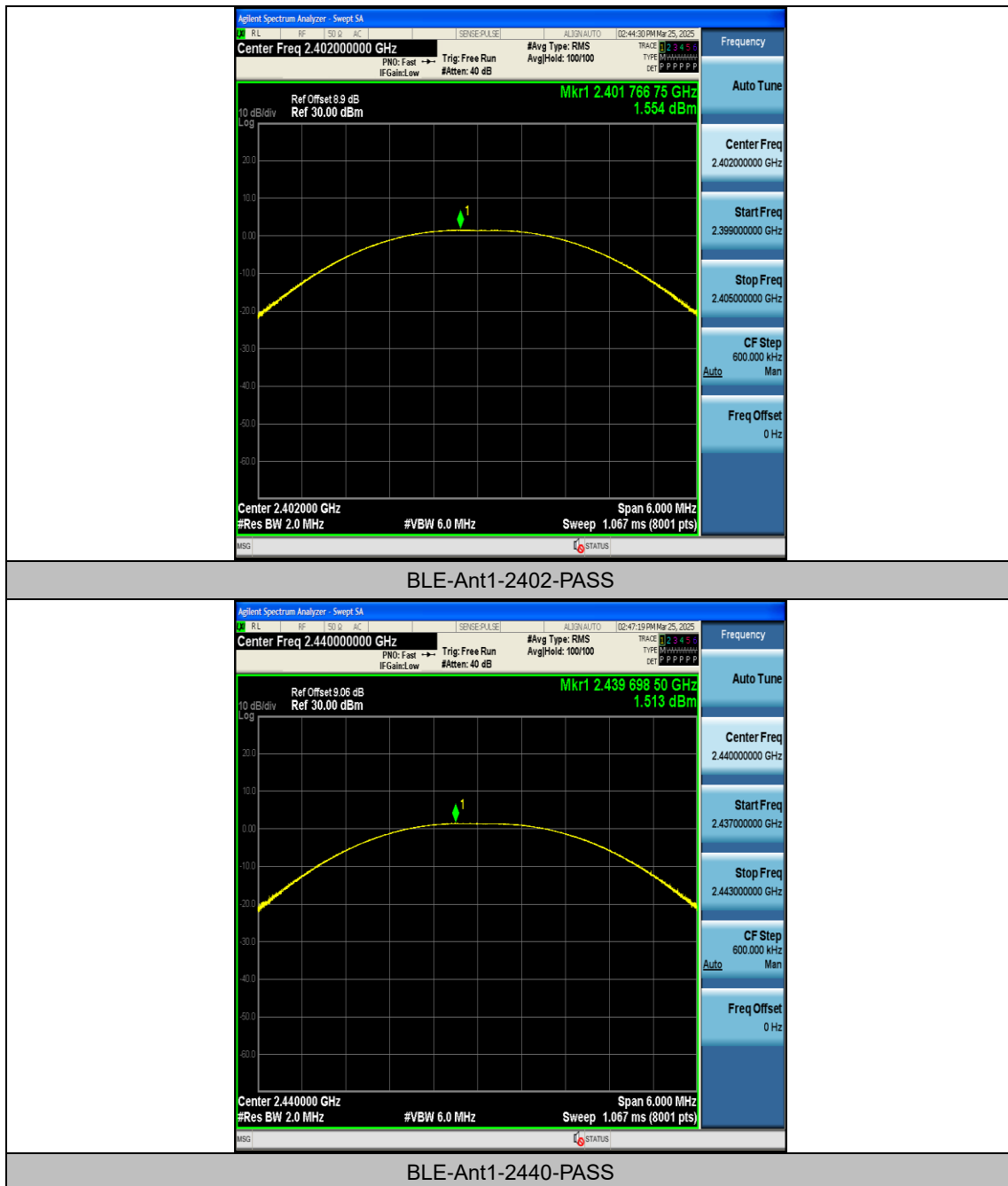


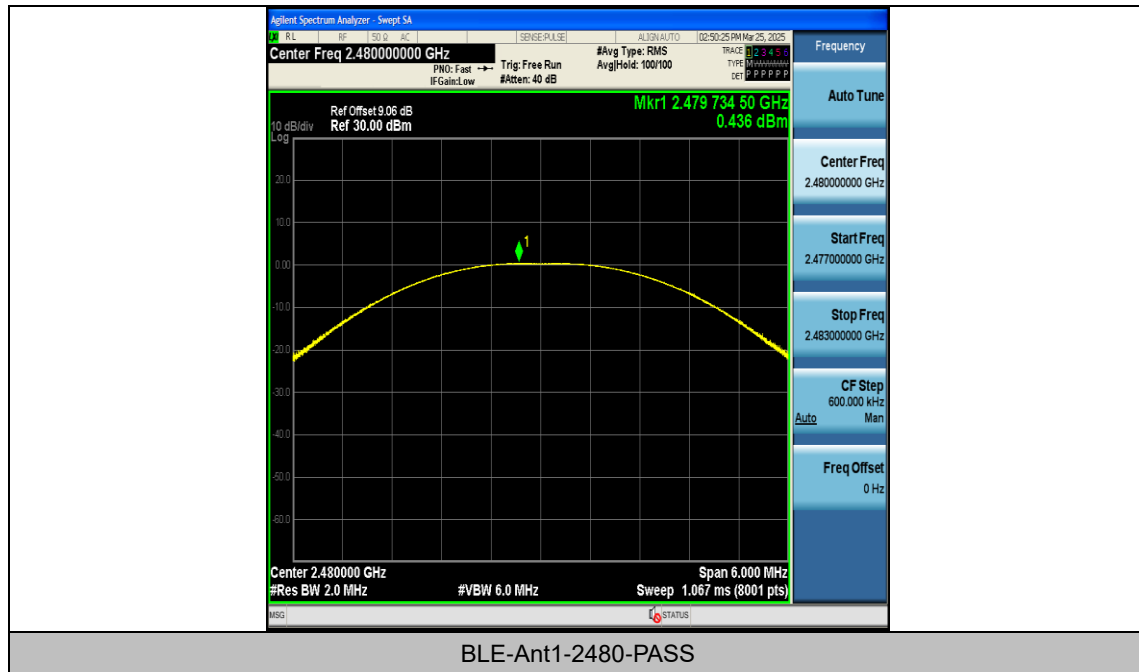
Appendix C: Maximum peak conducted output power

Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE	Ant1	2402	1.55	≤30	PASS
BLE	Ant1	2440	1.51	≤30	PASS
BLE	Ant1	2480	0.44	≤30	PASS

Test Graphs Peak



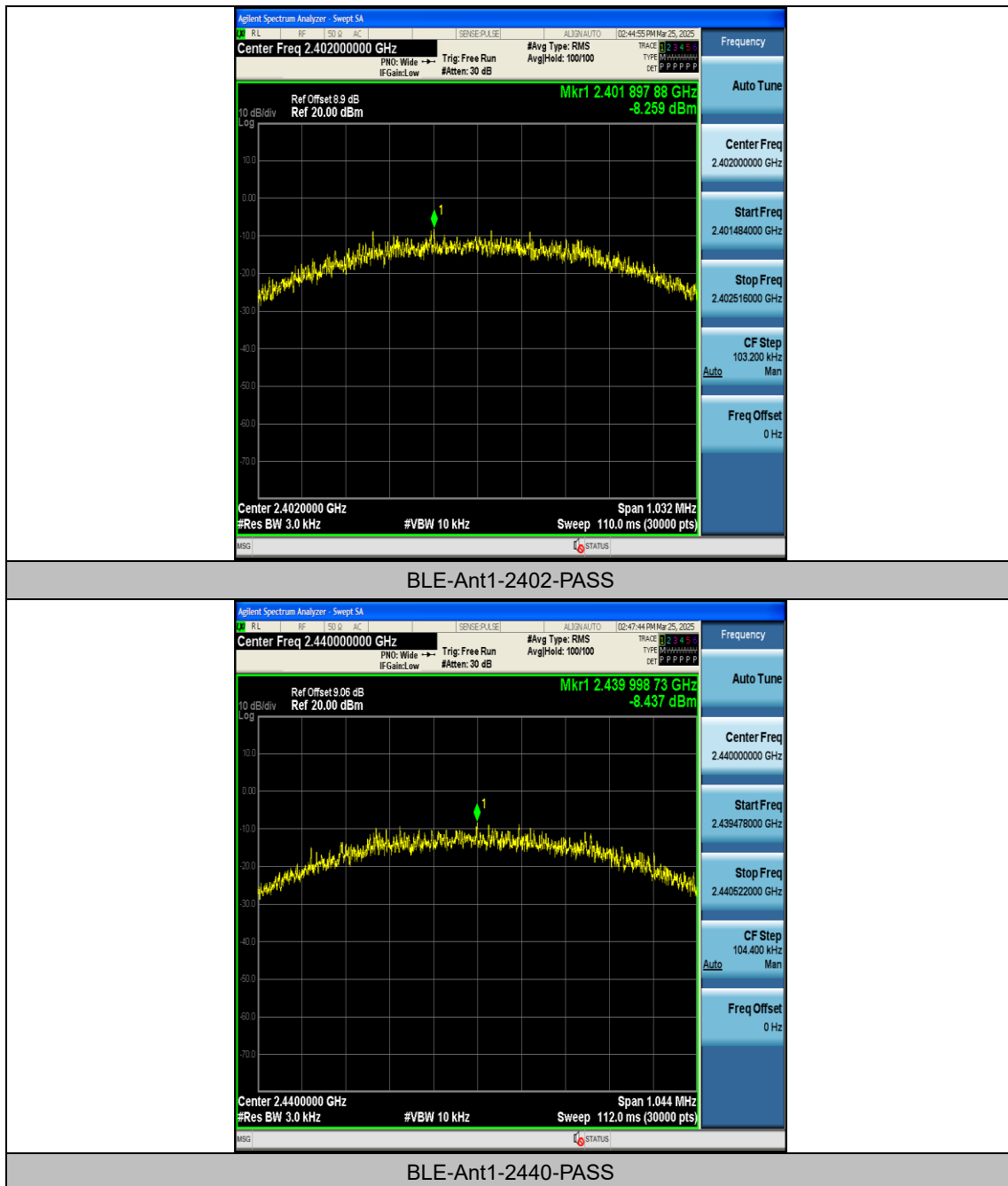


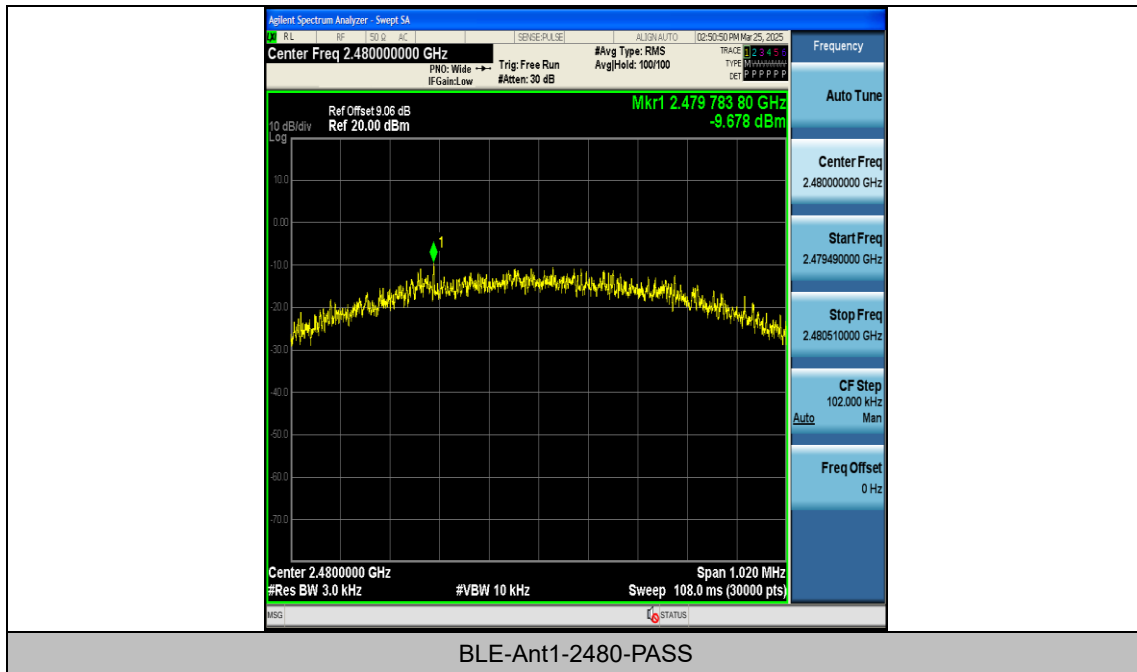
Appendix D: Maximum peak power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE	Ant1	2402	-8.26	≤8.00	PASS
BLE	Ant1	2440	-8.44	≤8.00	PASS
BLE	Ant1	2480	-9.68	≤8.00	PASS

Test Graphs



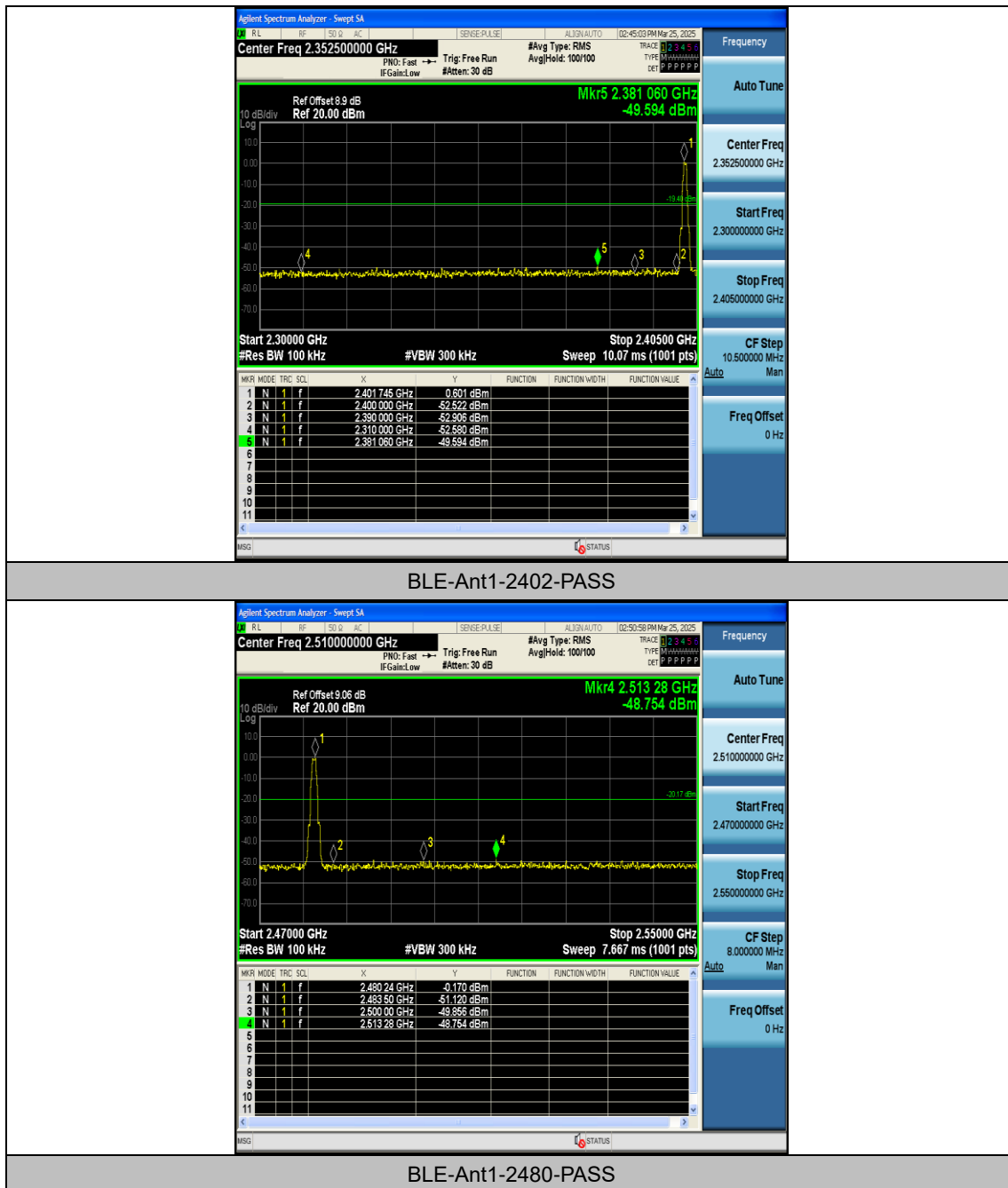


Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE	Ant1	Low	2402	0.60	-49.59	≤ -19.4	PASS
BLE	Ant1	High	2480	-0.17	-48.75	≤ -20.17	PASS

Test Graphs

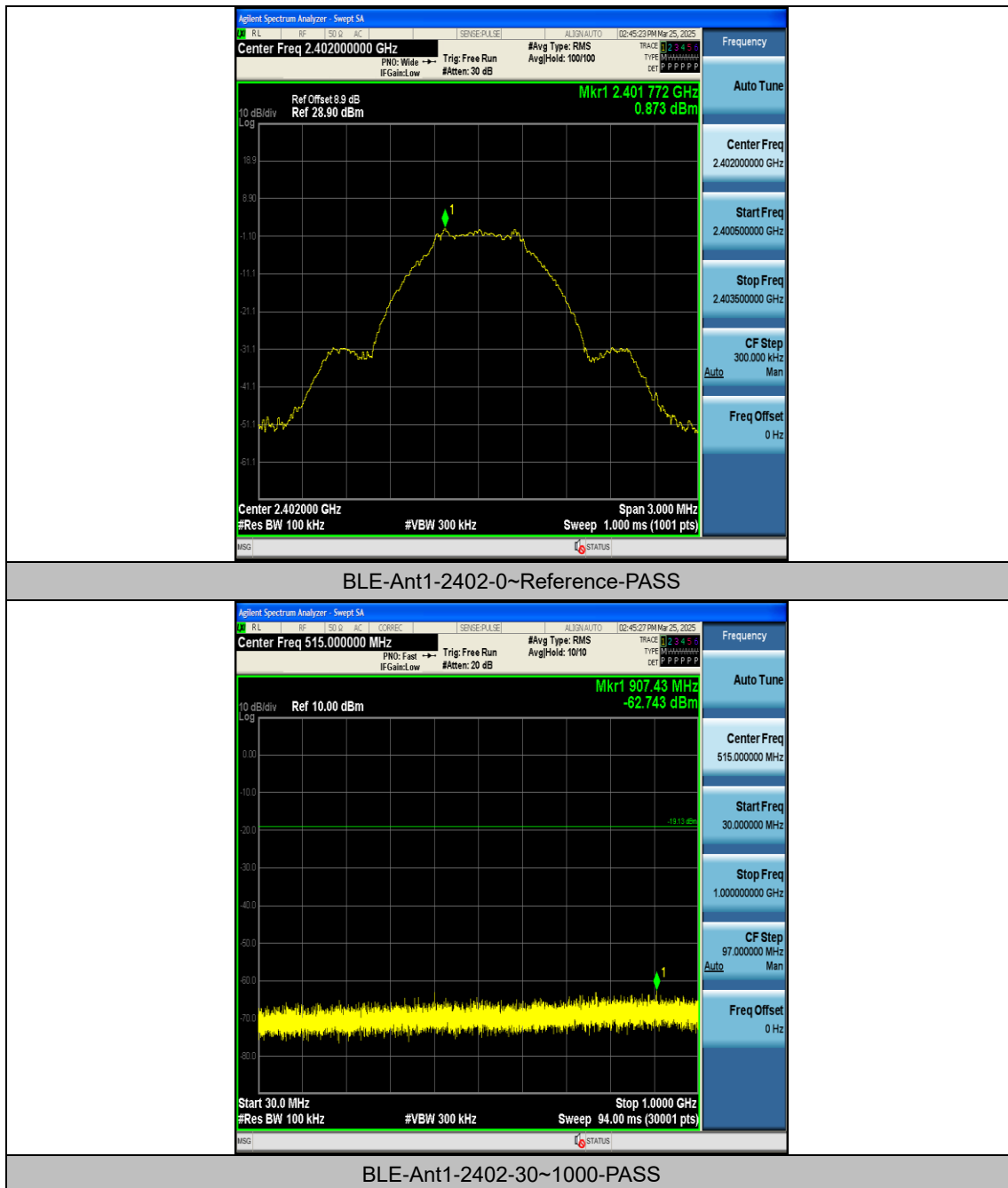


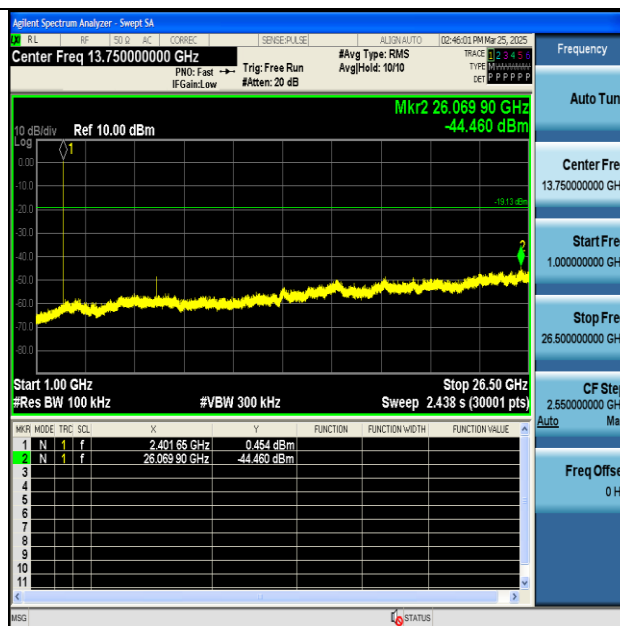
Appendix F: Conducted Spurious Emission

Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE	Ant1	2402	0~Reference	0.87	0.87	---	PASS
BLE	Ant1	2402	30~1000	0.87	-62.74	≤-19.13	PASS
BLE	Ant1	2402	1000~26500	0.87	-44.46	≤-19.13	PASS
BLE	Ant1	2440	0~Reference	0.72	0.72	---	PASS
BLE	Ant1	2440	30~1000	0.72	-62.62	≤-19.28	PASS
BLE	Ant1	2440	1000~26500	0.72	-45.4	≤-19.28	PASS
BLE	Ant1	2480	0~Reference	-0.12	-0.12	---	PASS
BLE	Ant1	2480	30~1000	-0.12	-62.34	≤-20.12	PASS
BLE	Ant1	2480	1000~26500	-0.12	-45.11	≤-20.12	PASS

Test Graphs

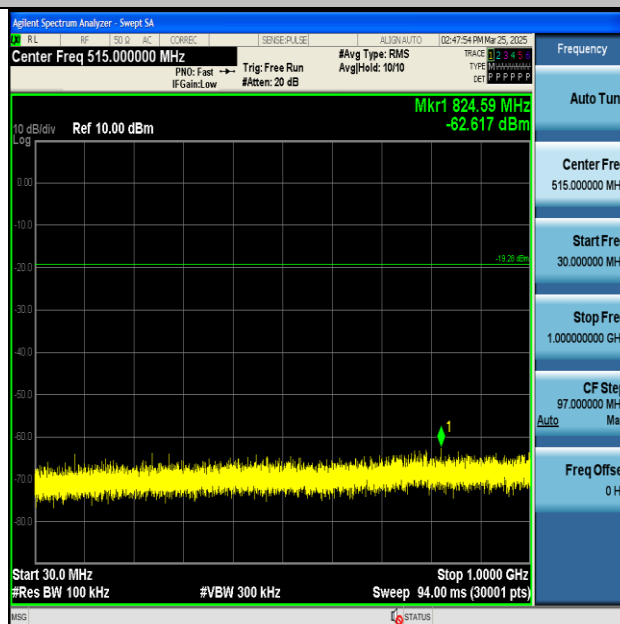




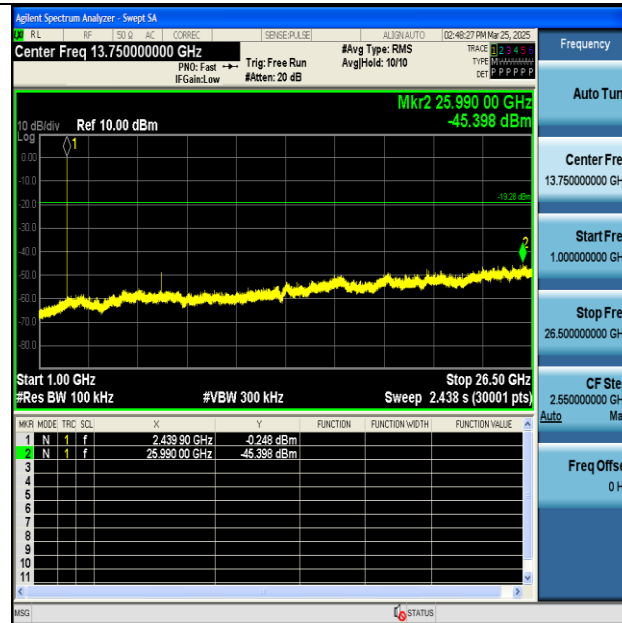
BLE-Ant1-2402-1000~26500-PASS



BLE-Ant1-2440-0~Reference-PASS



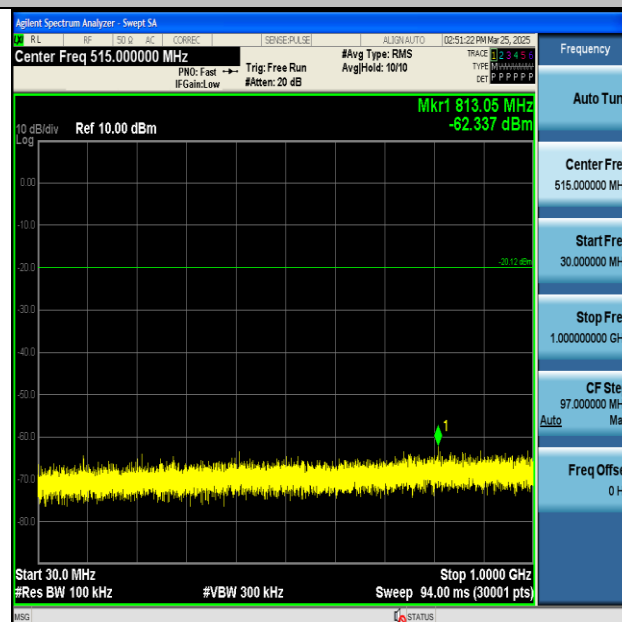
BLE-Ant1-2440-30~1000-PASS



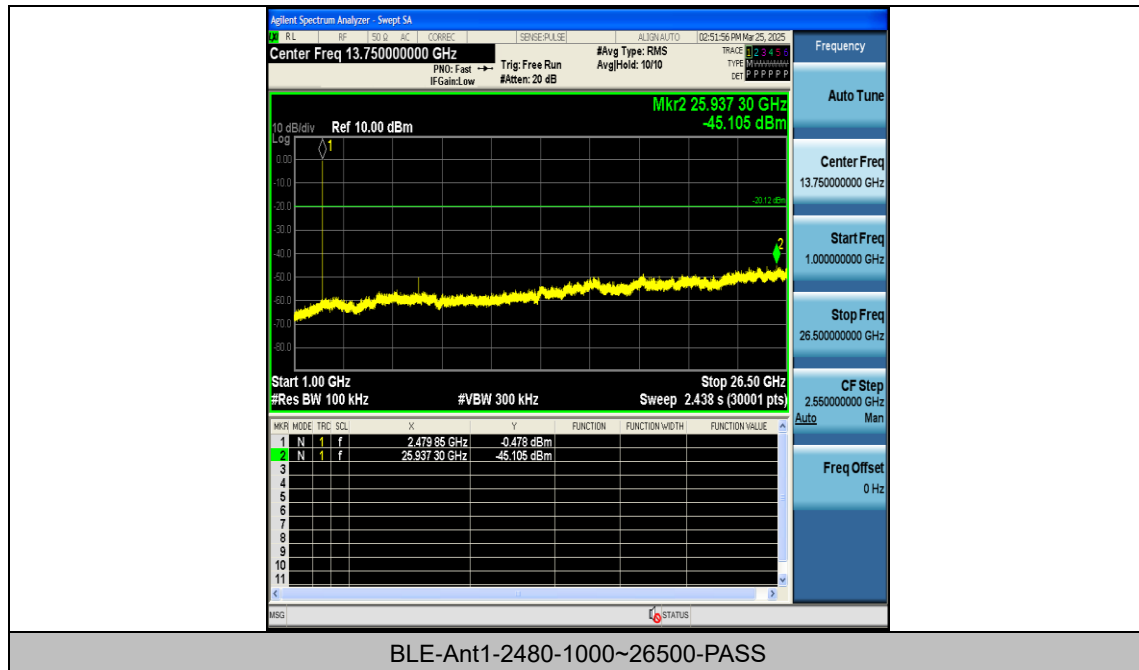
BLE-Ant1-2440-1000~26500-PASS



BLE-Ant1-2480-0~Reference-PASS



BLE-Ant1-2480-30~1000-PASS



Appendix G: Duty Cycle

Test Result

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

Test Graphs

