

Appendix Test Data for BLE (Conducted Measurement)

Product Name: Wireless Keyboard

Trade Mark: Keychron

Test Model: K4 HE

FCC ID: 2BGKB-K4HE

Environmental Conditions

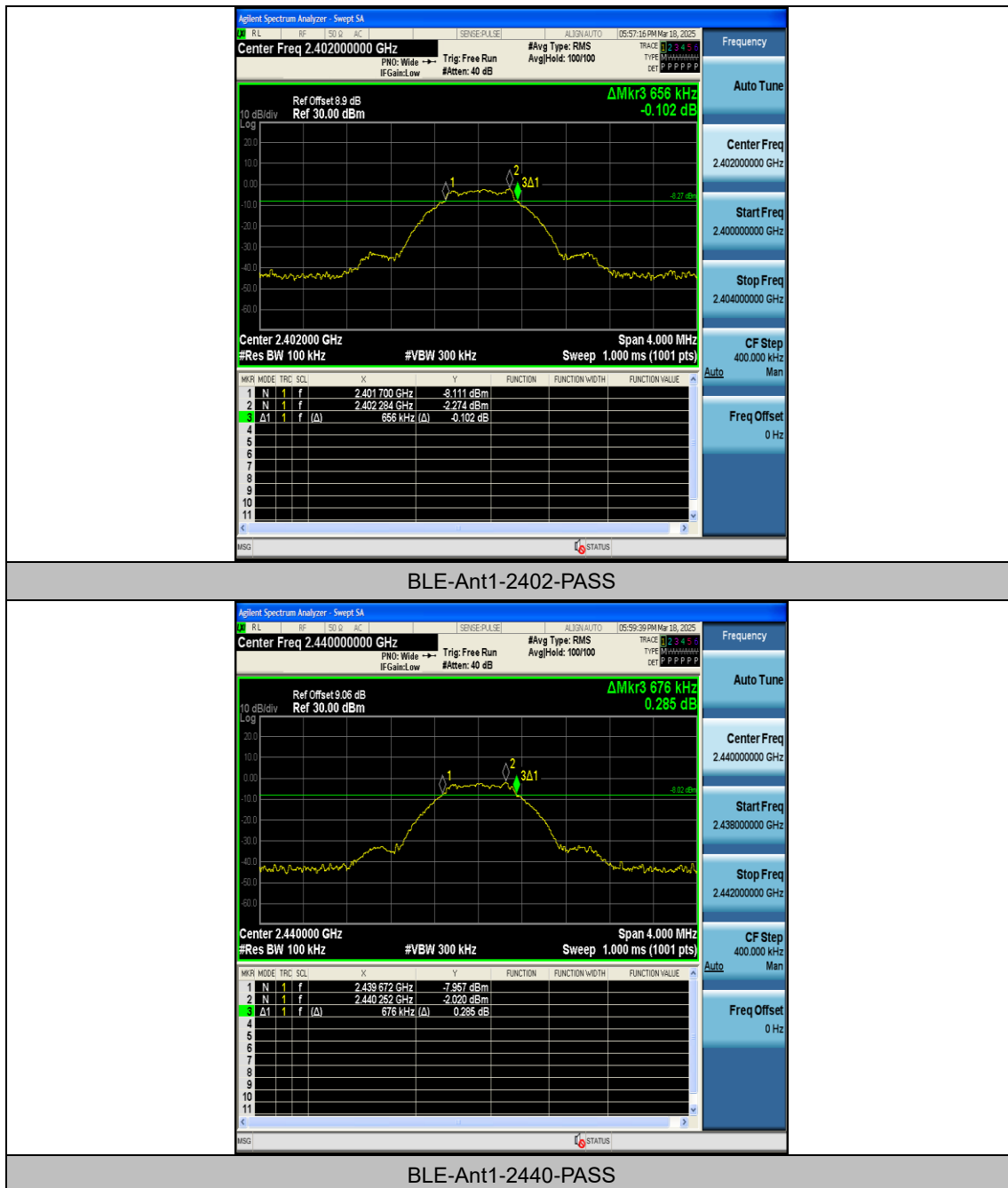
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Max Zhang
NOTE	N/A

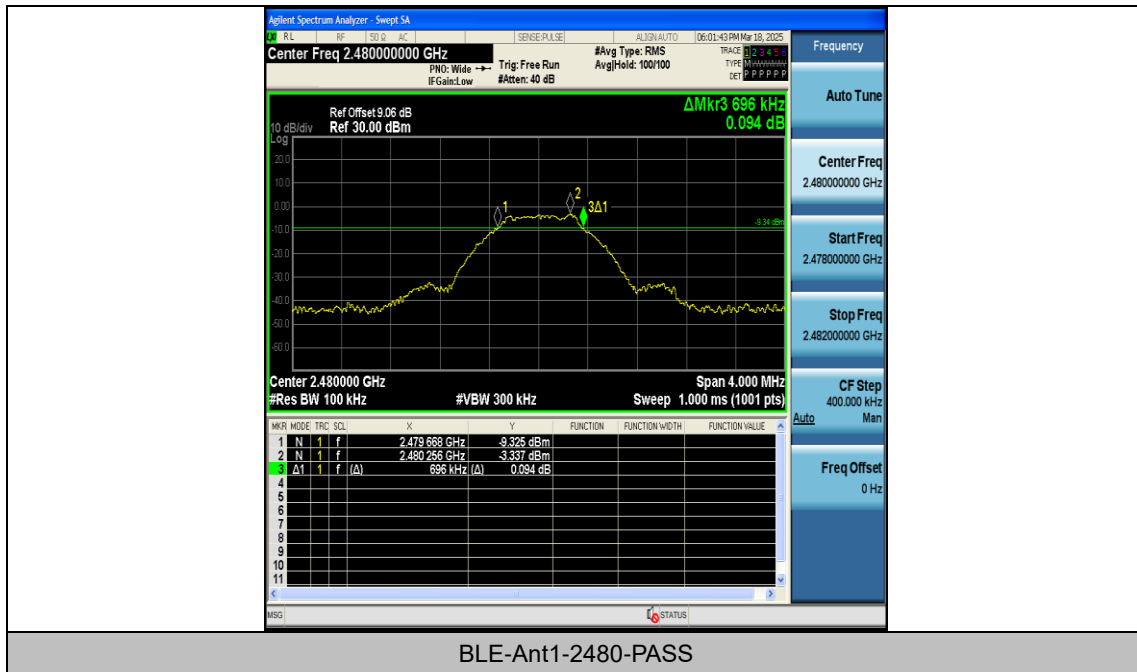
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE	Ant1	2402	0.656	2401.700	2402.356	0.5	PASS
BLE	Ant1	2440	0.676	2439.672	2440.348	0.5	PASS
BLE	Ant1	2480	0.696	2479.668	2480.364	0.5	PASS

Test Graphs



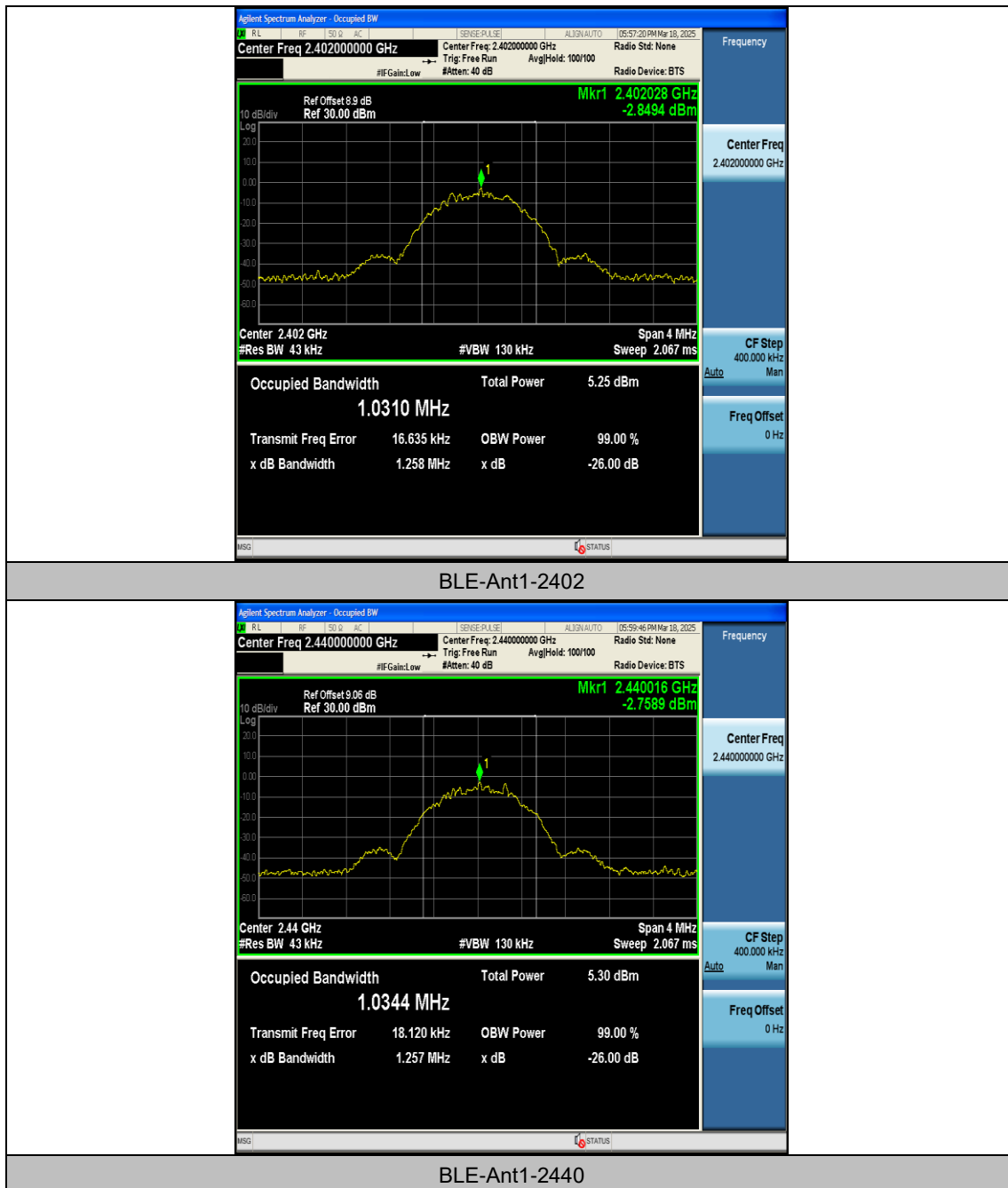


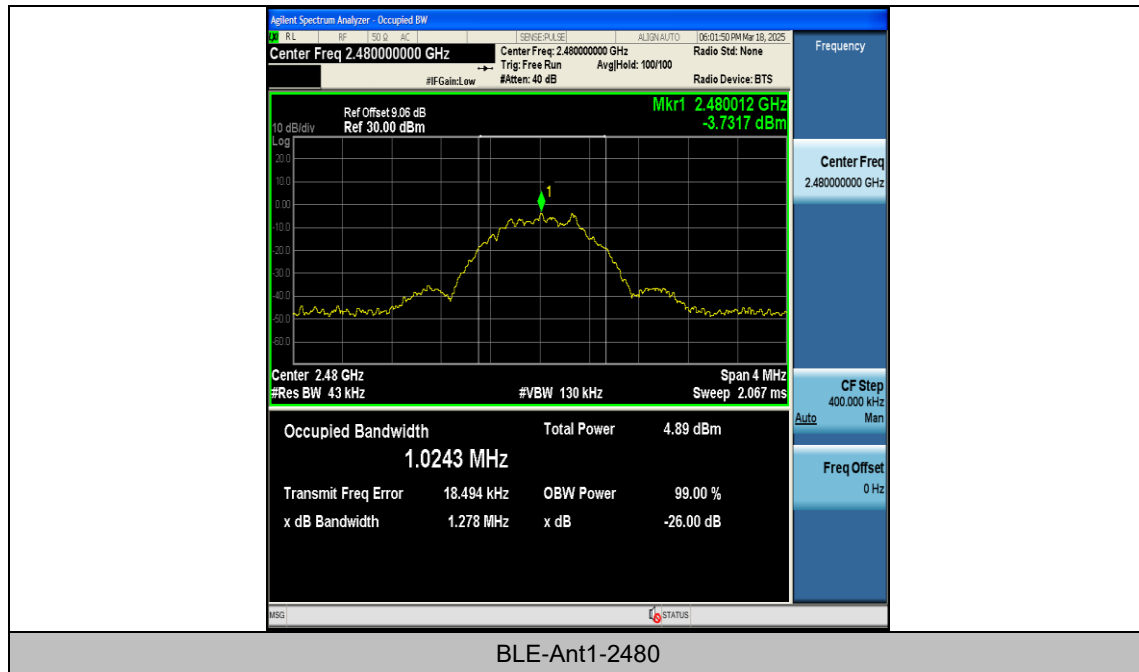
Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE	Ant1	2402	1.0310	2401.5011	2402.5321	---	---
BLE	Ant1	2440	1.0344	2439.5009	2440.5353	---	---
BLE	Ant1	2480	1.0243	2479.5063	2480.5306	---	---

Test Graphs



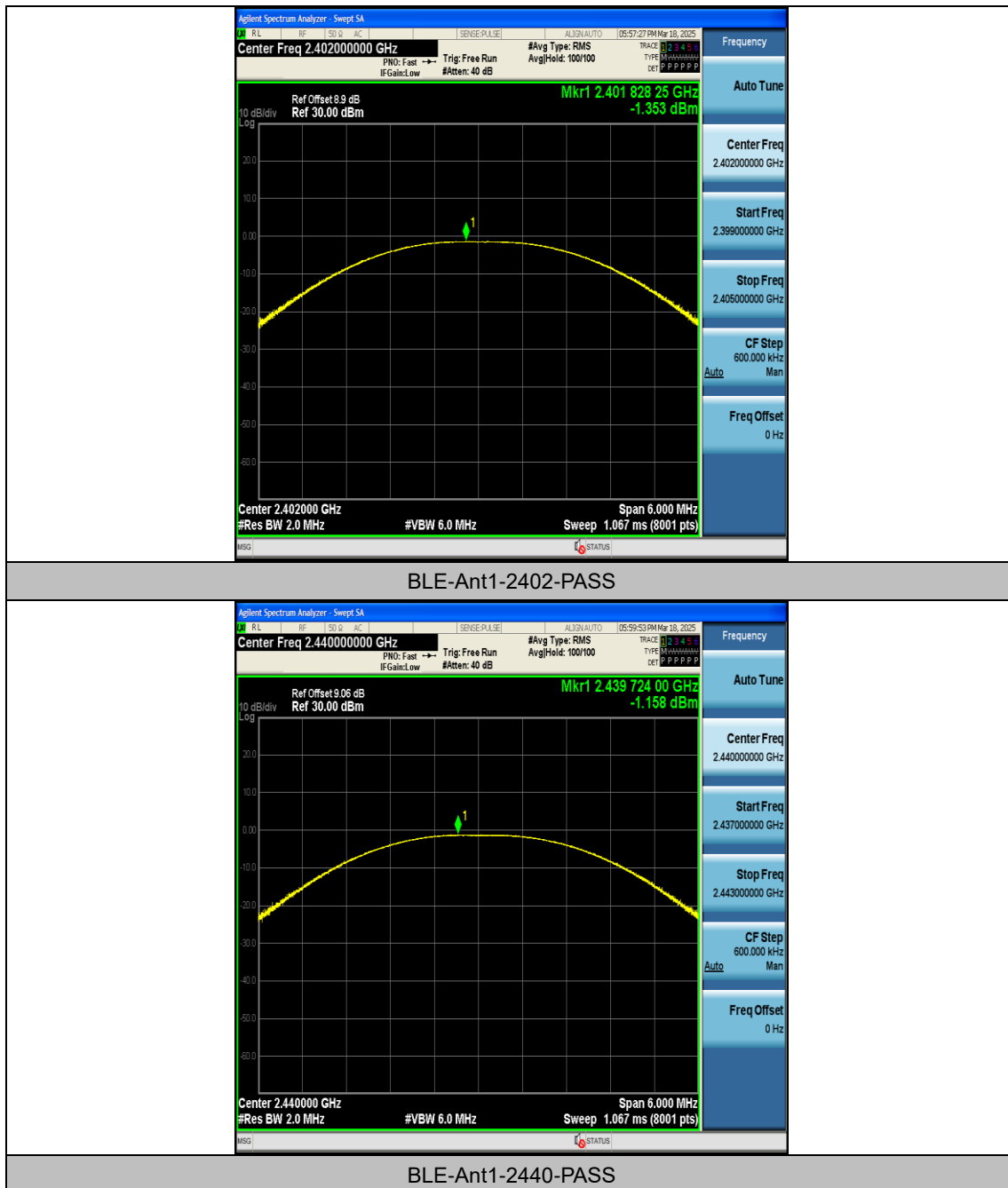


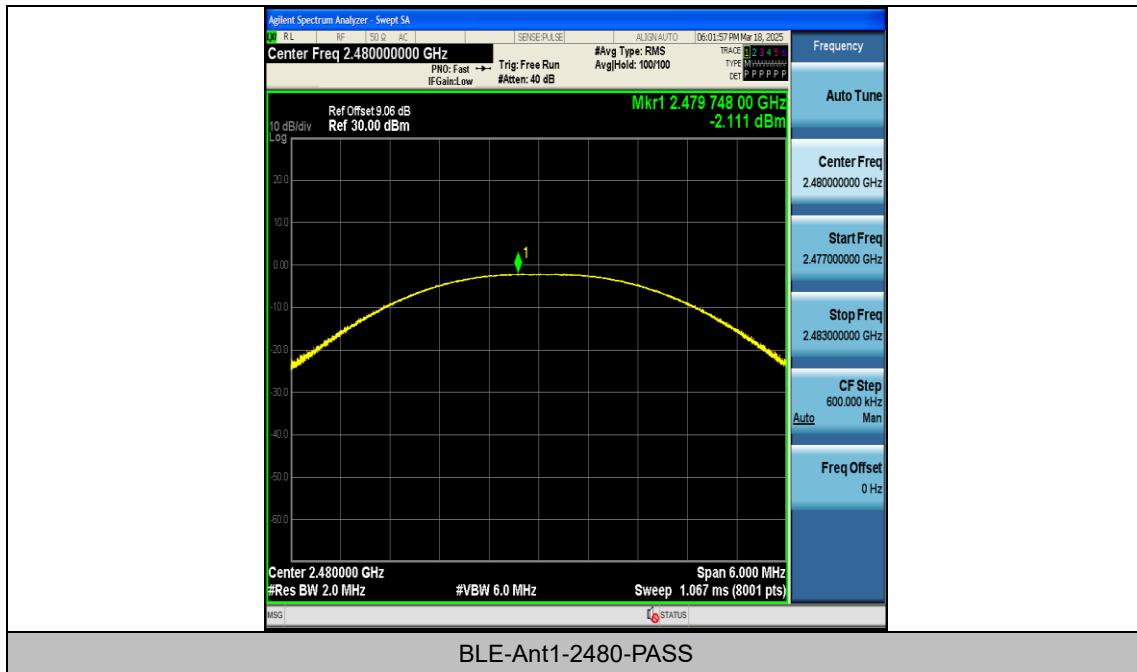
Appendix C: Maximum peak conducted output power

Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE	Ant1	2402	-1.35	≤30	PASS
BLE	Ant1	2440	-1.16	≤30	PASS
BLE	Ant1	2480	-2.11	≤30	PASS

Test Graphs Peak



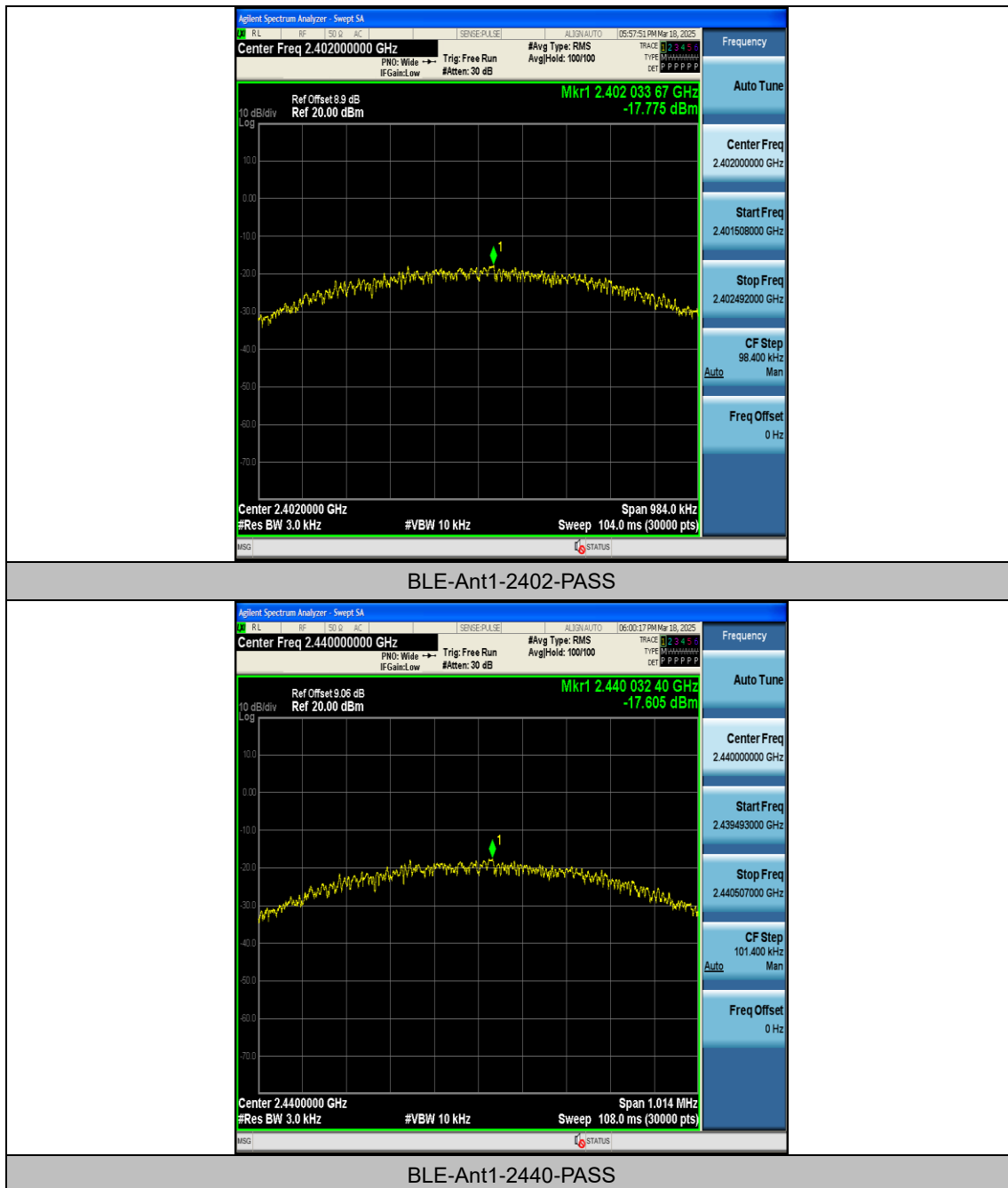


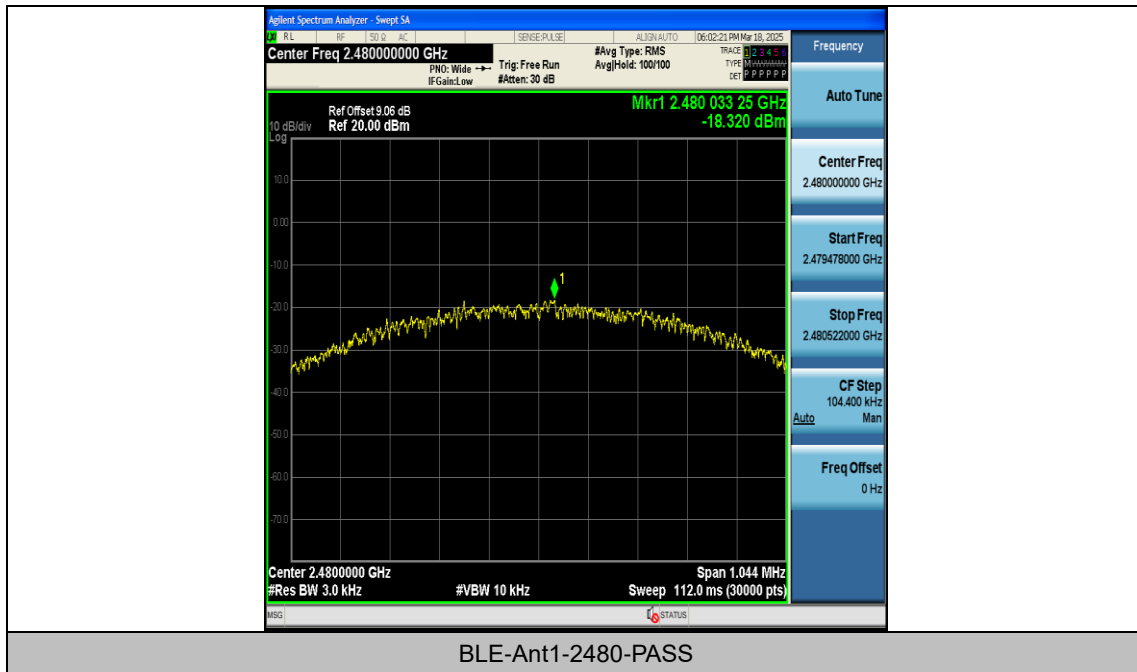
Appendix D: Maximum peak power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE	Ant1	2402	-17.78	≤8.00	PASS
BLE	Ant1	2440	-17.61	≤8.00	PASS
BLE	Ant1	2480	-18.32	≤8.00	PASS

Test Graphs



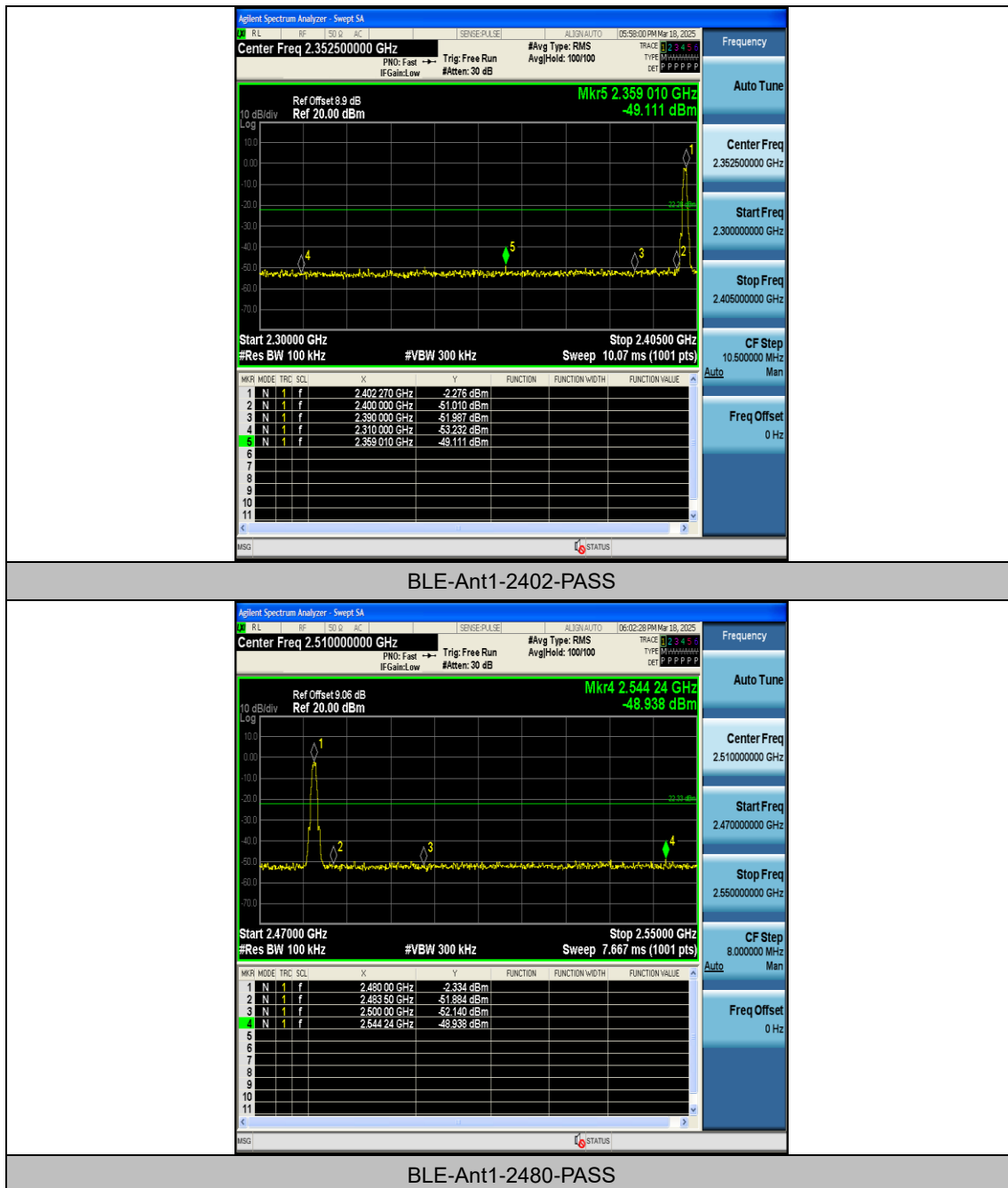


Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE	Ant1	Low	2402	-2.28	-49.11	≤ -22.28	PASS
BLE	Ant1	High	2480	-2.33	-48.94	≤ -22.33	PASS

Test Graphs

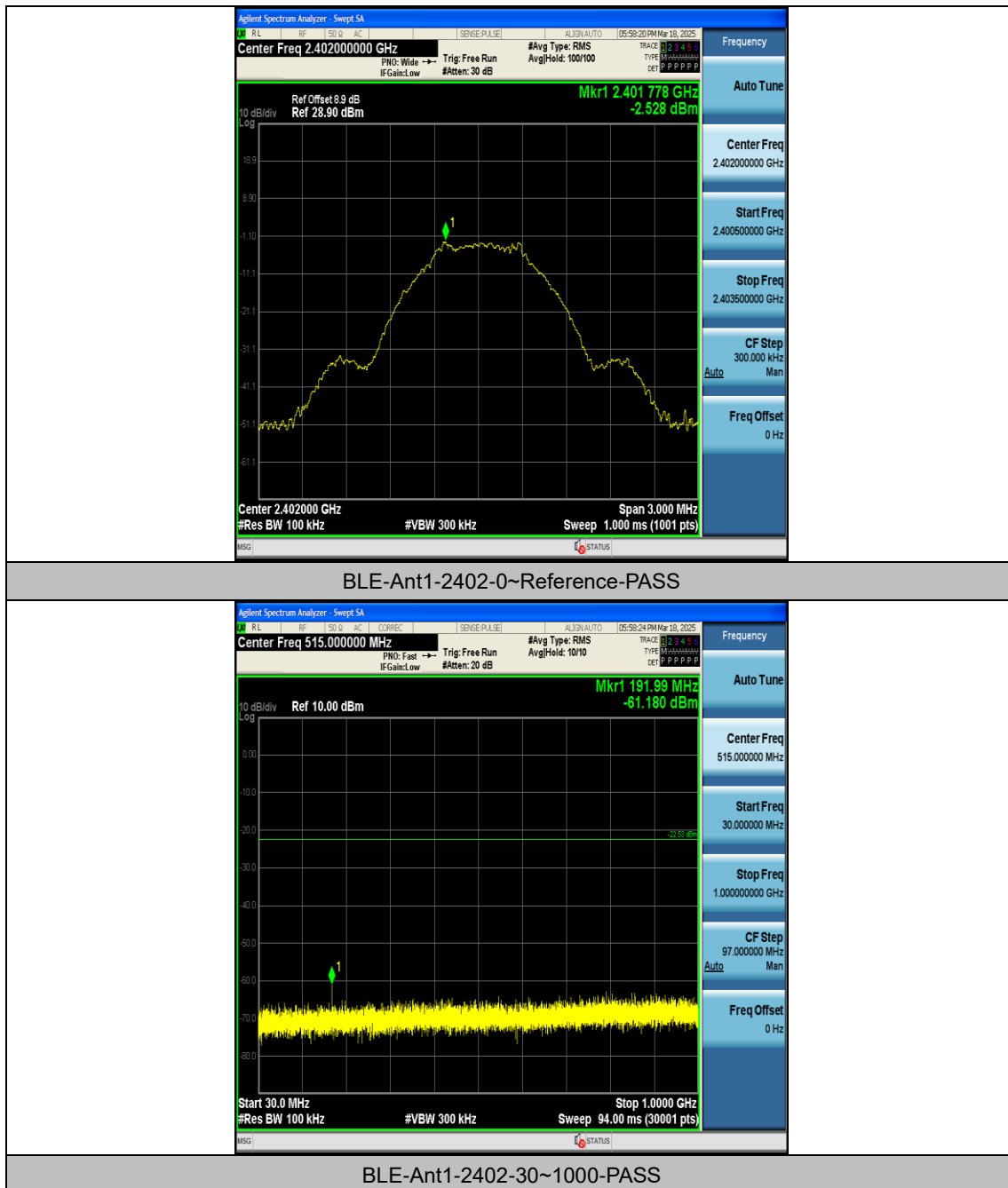


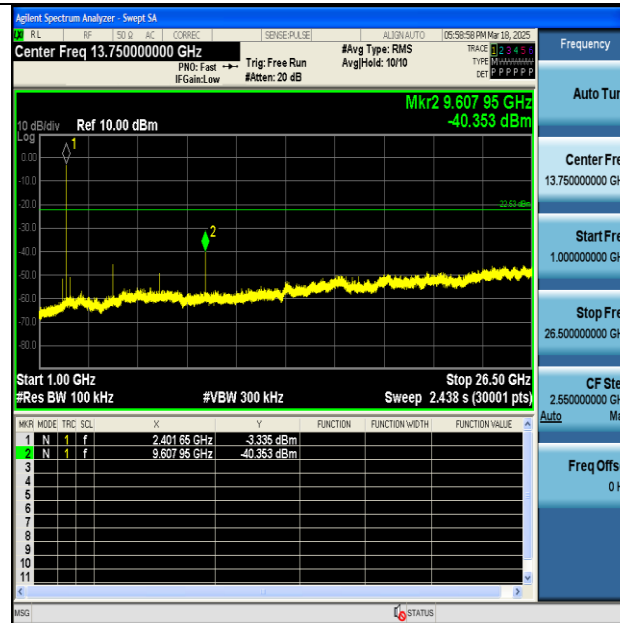
Appendix F: Conducted Spurious Emission

Test Result

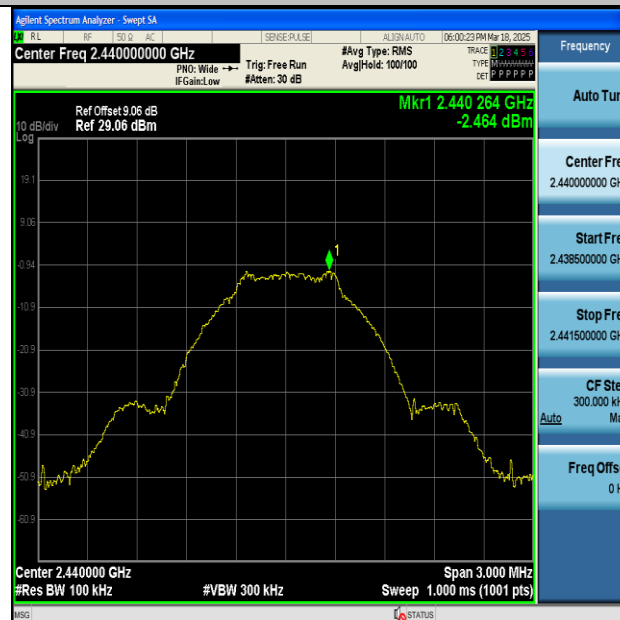
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE	Ant1	2402	0~Reference	-2.53	-2.53	---	PASS
BLE	Ant1	2402	30~1000	-2.53	-61.18	≤ -22.53	PASS
BLE	Ant1	2402	1000~26500	-2.53	-40.35	≤ -22.53	PASS
BLE	Ant1	2440	0~Reference	-2.46	-2.46	---	PASS
BLE	Ant1	2440	30~1000	-2.46	-60.49	≤ -22.46	PASS
BLE	Ant1	2440	1000~26500	-2.46	-38.16	≤ -22.46	PASS
BLE	Ant1	2480	0~Reference	-2.52	-2.52	---	PASS
BLE	Ant1	2480	30~1000	-2.52	-59.49	≤ -22.52	PASS
BLE	Ant1	2480	1000~26500	-2.52	-40.98	≤ -22.52	PASS

Test Graphs

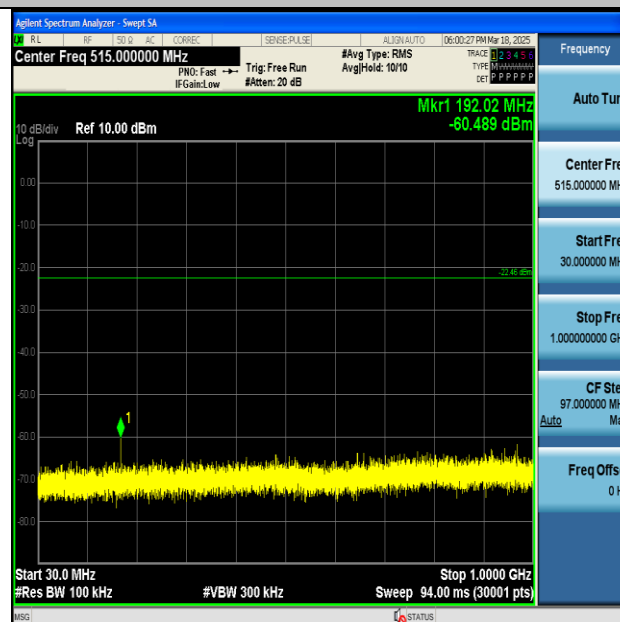




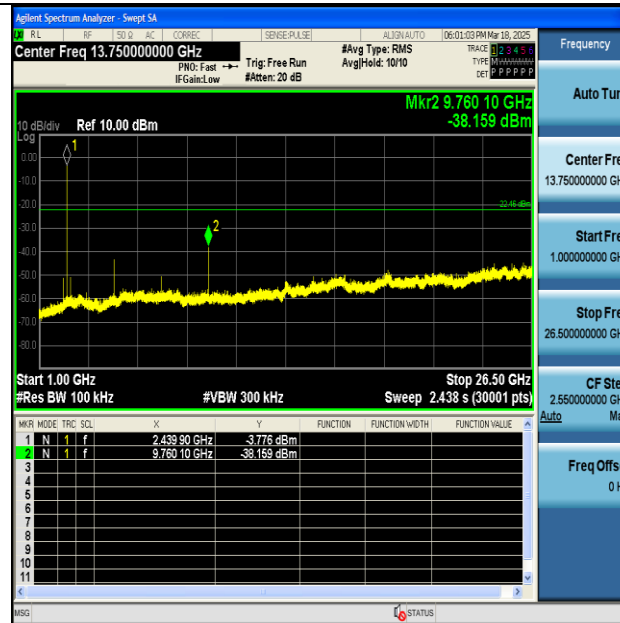
BLE-Ant1-2402-1000~26500-PASS



BLE-Ant1-2440-0~Reference-PASS



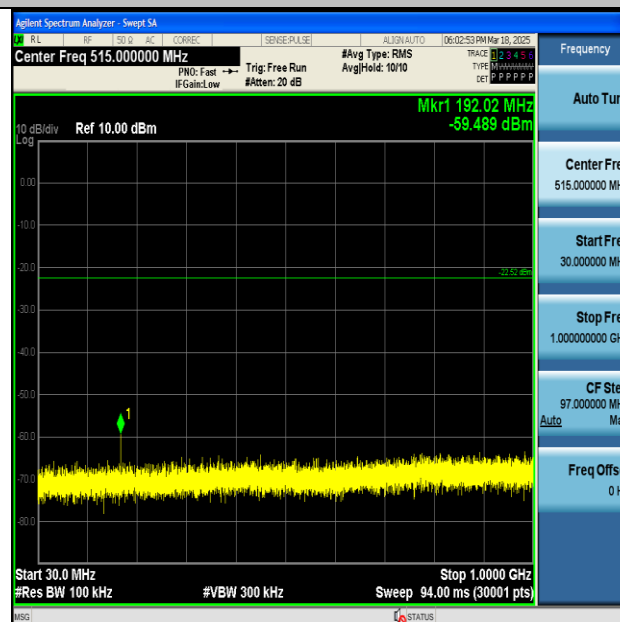
BLE-Ant1-2440-30~1000-PASS



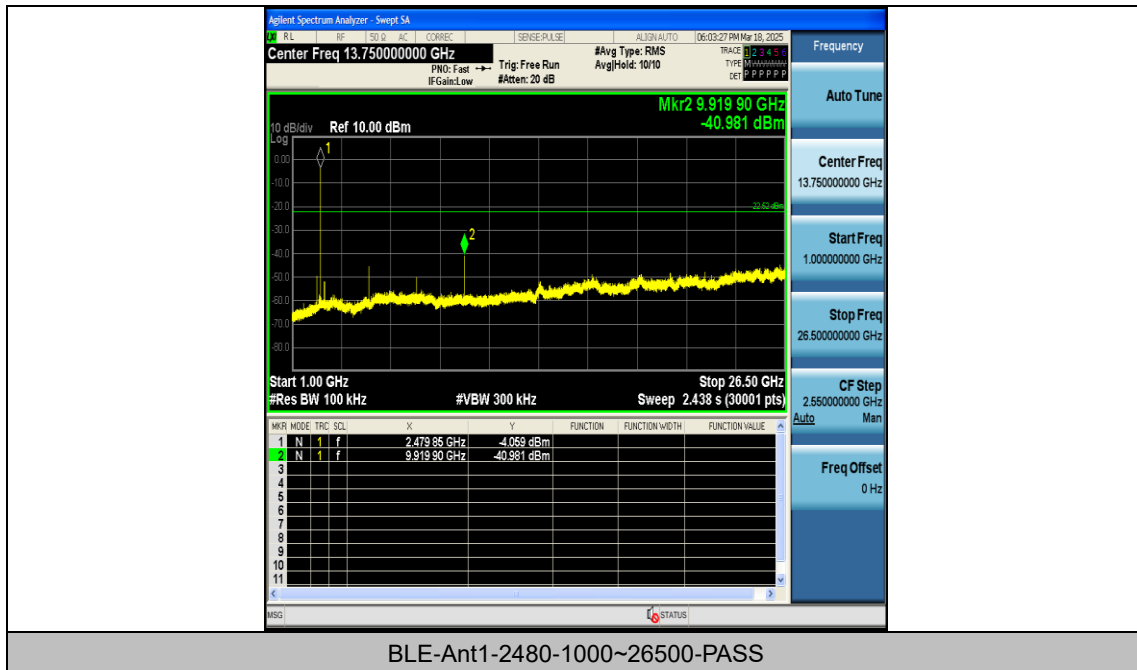
BLE-Ant1-2440-1000~26500-PASS



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

