

Appendix Test Data for BLE (Conducted Measurement)

Product Name: Set Top Box



Trade Mark: ROBERTS

Test Model: ROBERTS-3PATH

FCC ID: 2BK67-ROBERTS-3PATH

Environmental Conditions

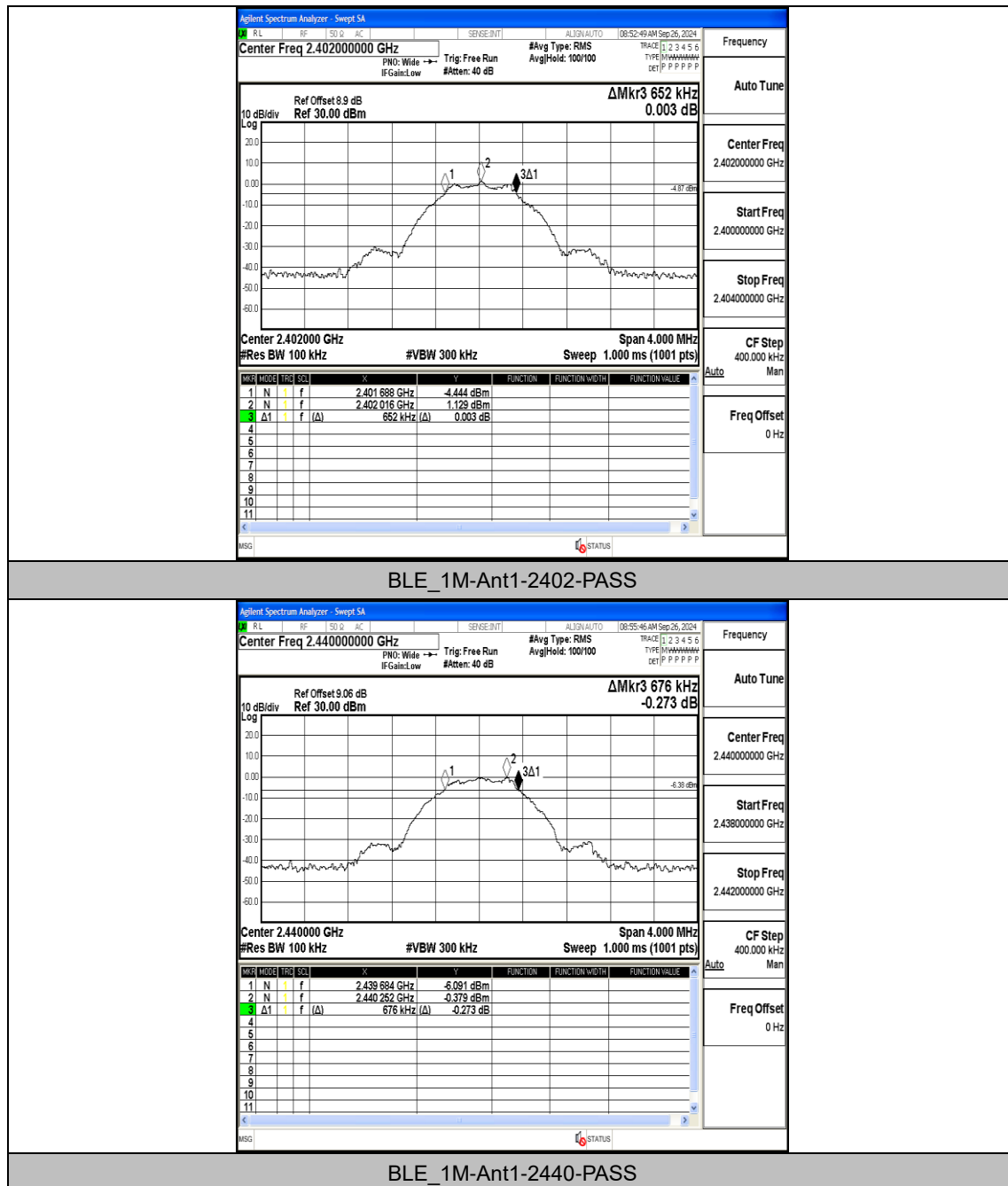
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

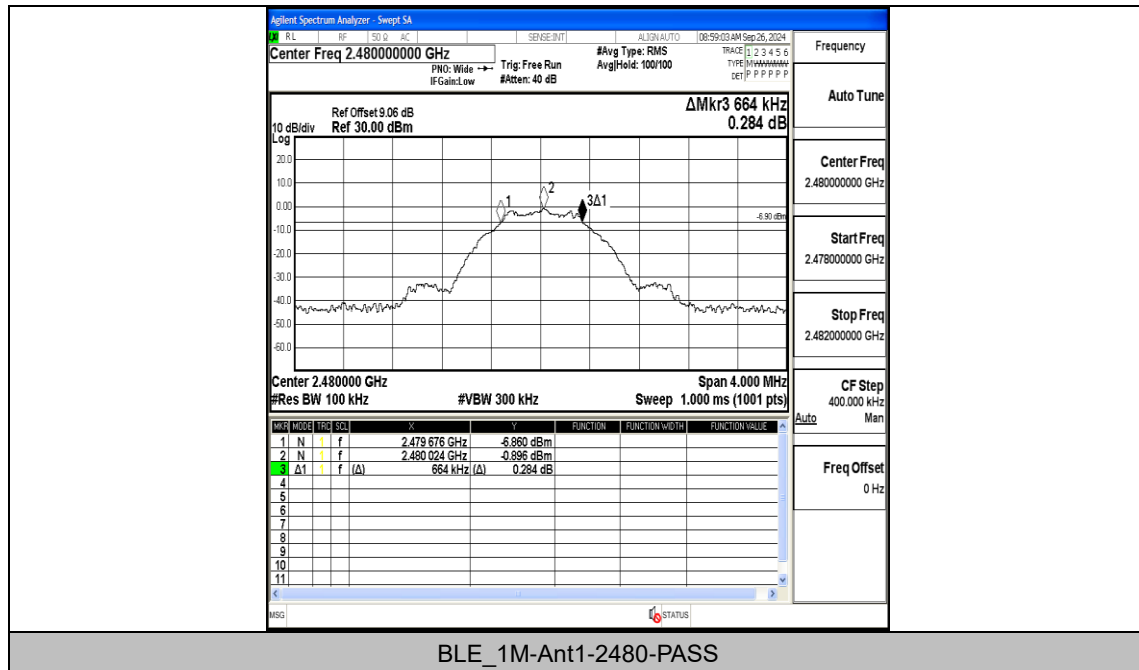
Appendix A: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.688	2402.340	0.5	PASS
BLE_1M	Ant1	2440	0.676	2439.684	2440.360	0.5	PASS
BLE_1M	Ant1	2480	0.664	2479.676	2480.340	0.5	PASS

Test Graphs



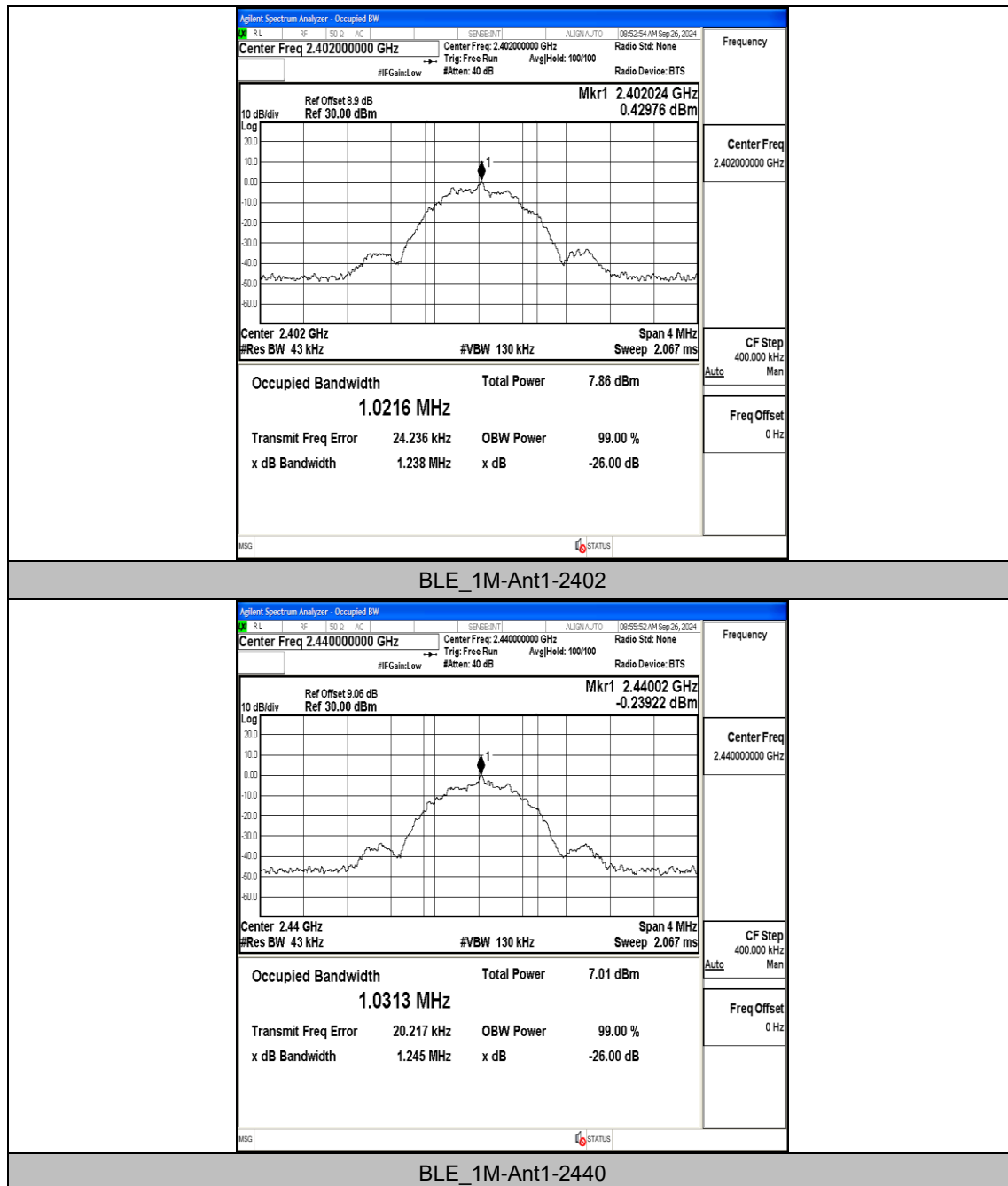


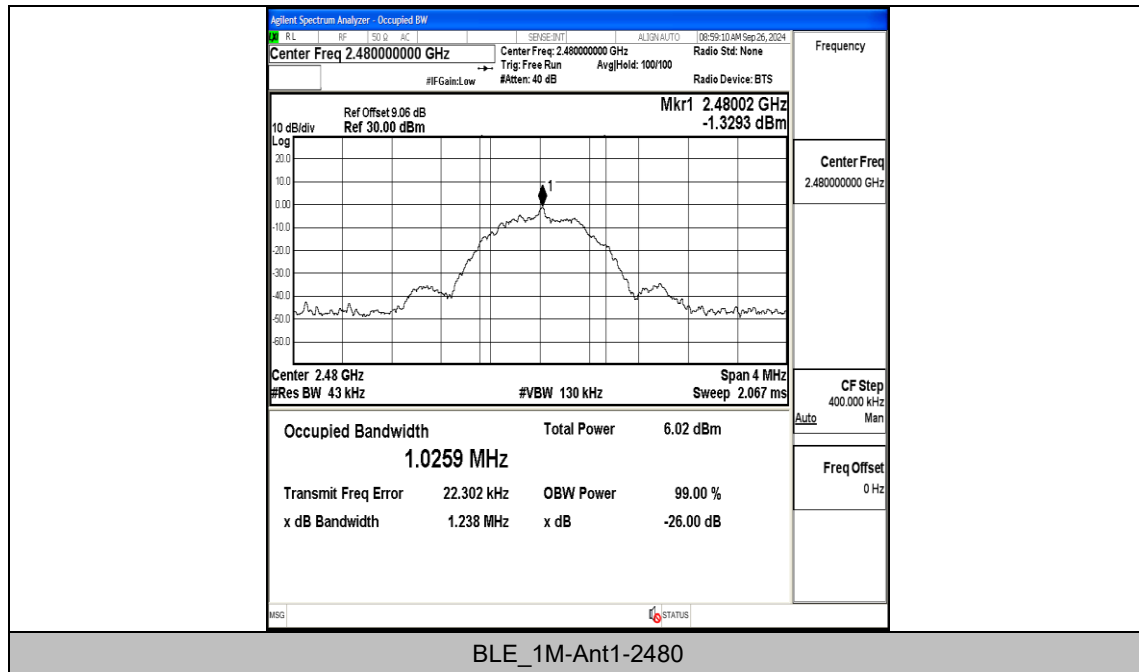
Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.0216	2401.5134	2402.5350	---	---
BLE_1M	Ant1	2440	1.0313	2439.5046	2440.5359	---	---
BLE_1M	Ant1	2480	1.0259	2479.5094	2480.5353	---	---

Test Graphs



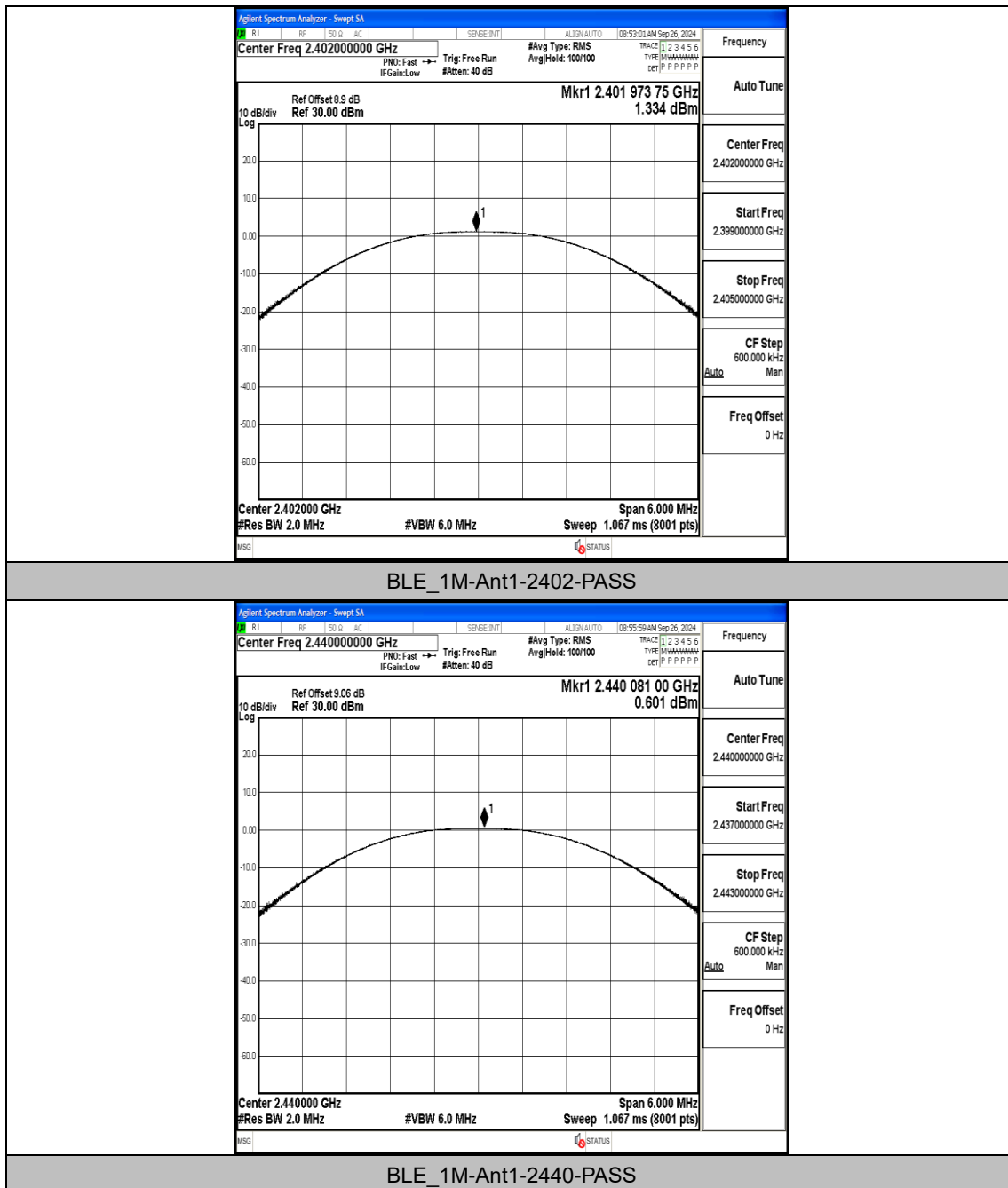


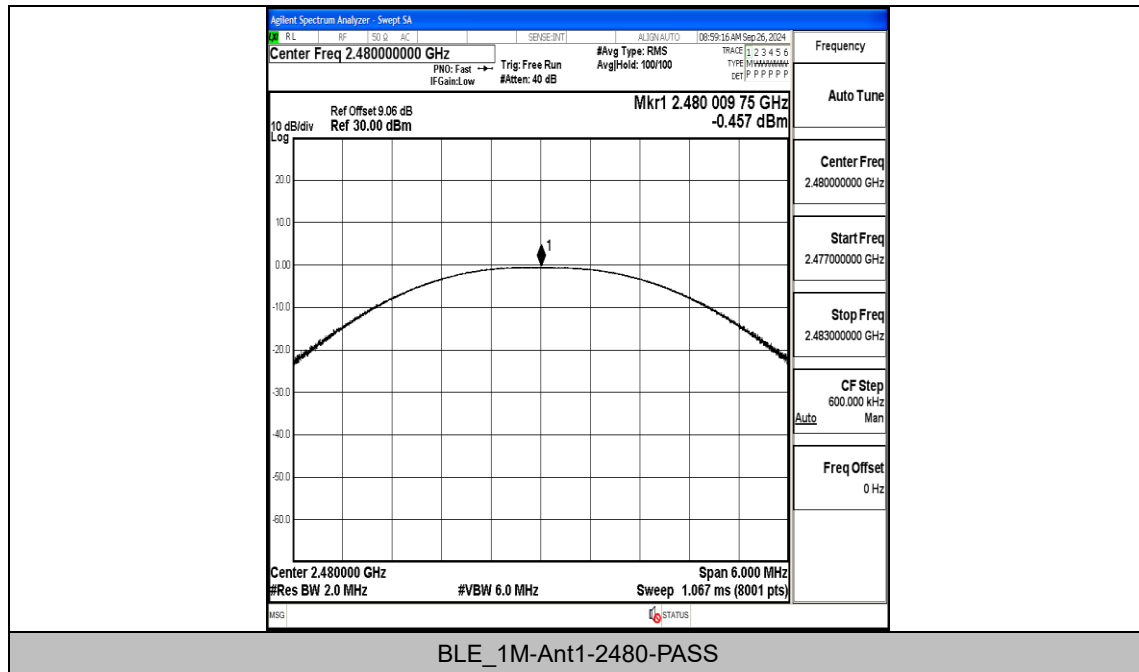
Appendix C: Maximum peak conducted output power

Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE_1M	Ant1	2402	1.33	≤30	PASS
BLE_1M	Ant1	2440	0.60	≤30	PASS
BLE_1M	Ant1	2480	-0.46	≤30	PASS

Test Graphs Peak



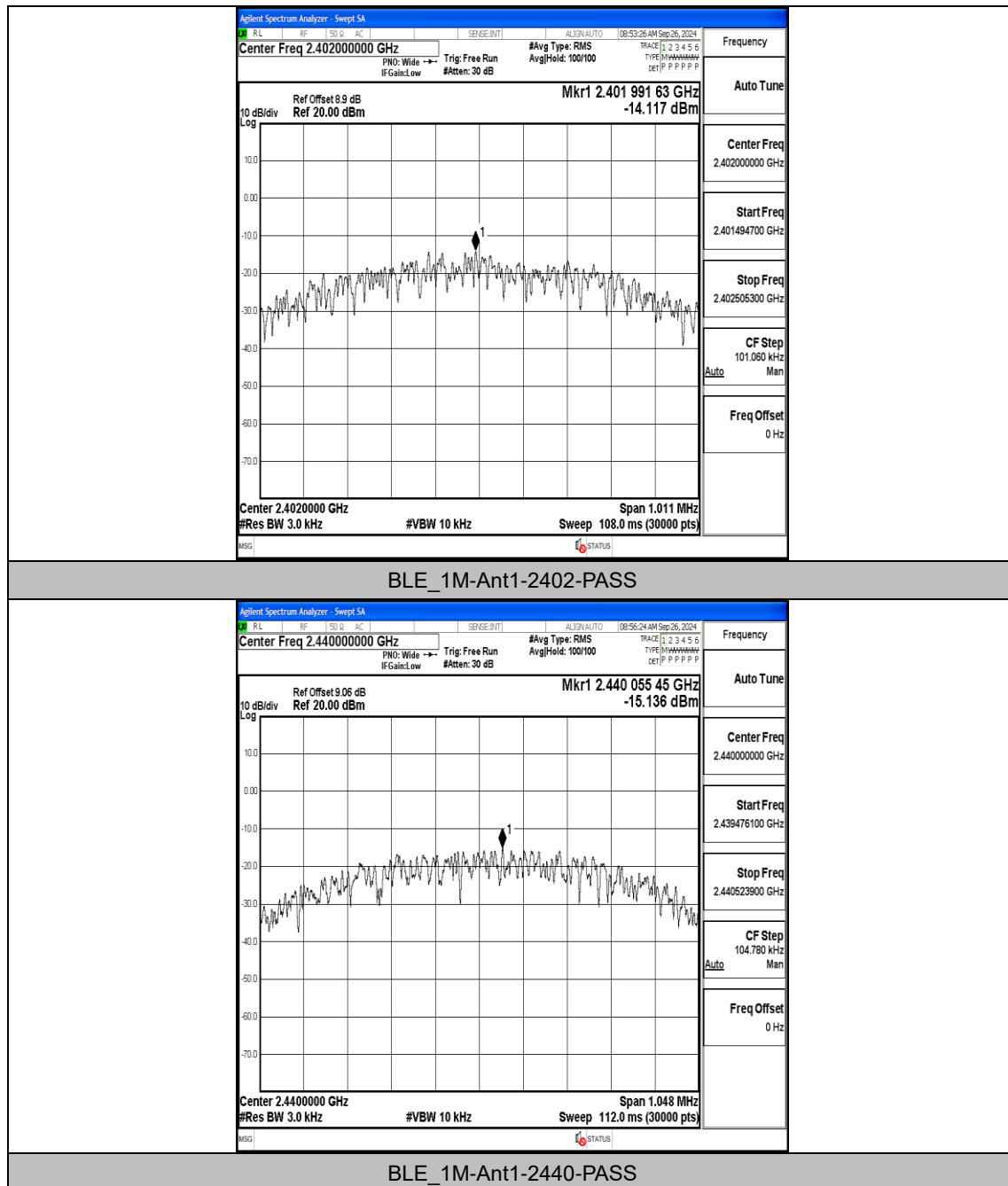


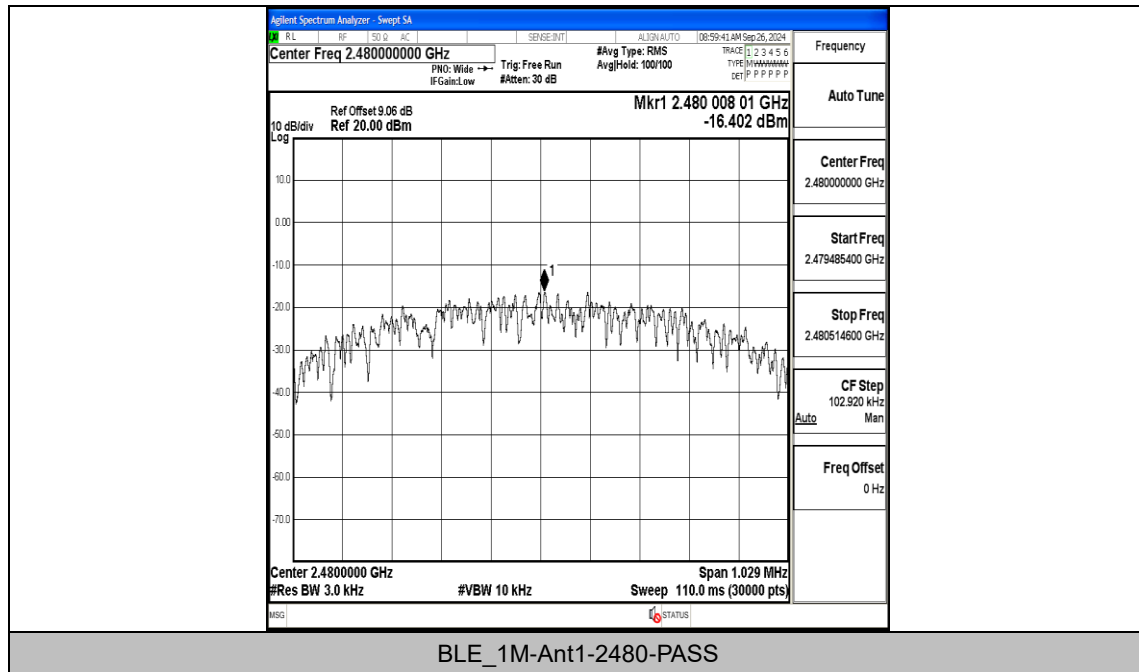
Appendix D: Maximum peak power spectral density

Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.12	≤8.00	PASS
BLE_1M	Ant1	2440	-15.14	≤8.00	PASS
BLE_1M	Ant1	2480	-16.40	≤8.00	PASS

Test Graphs



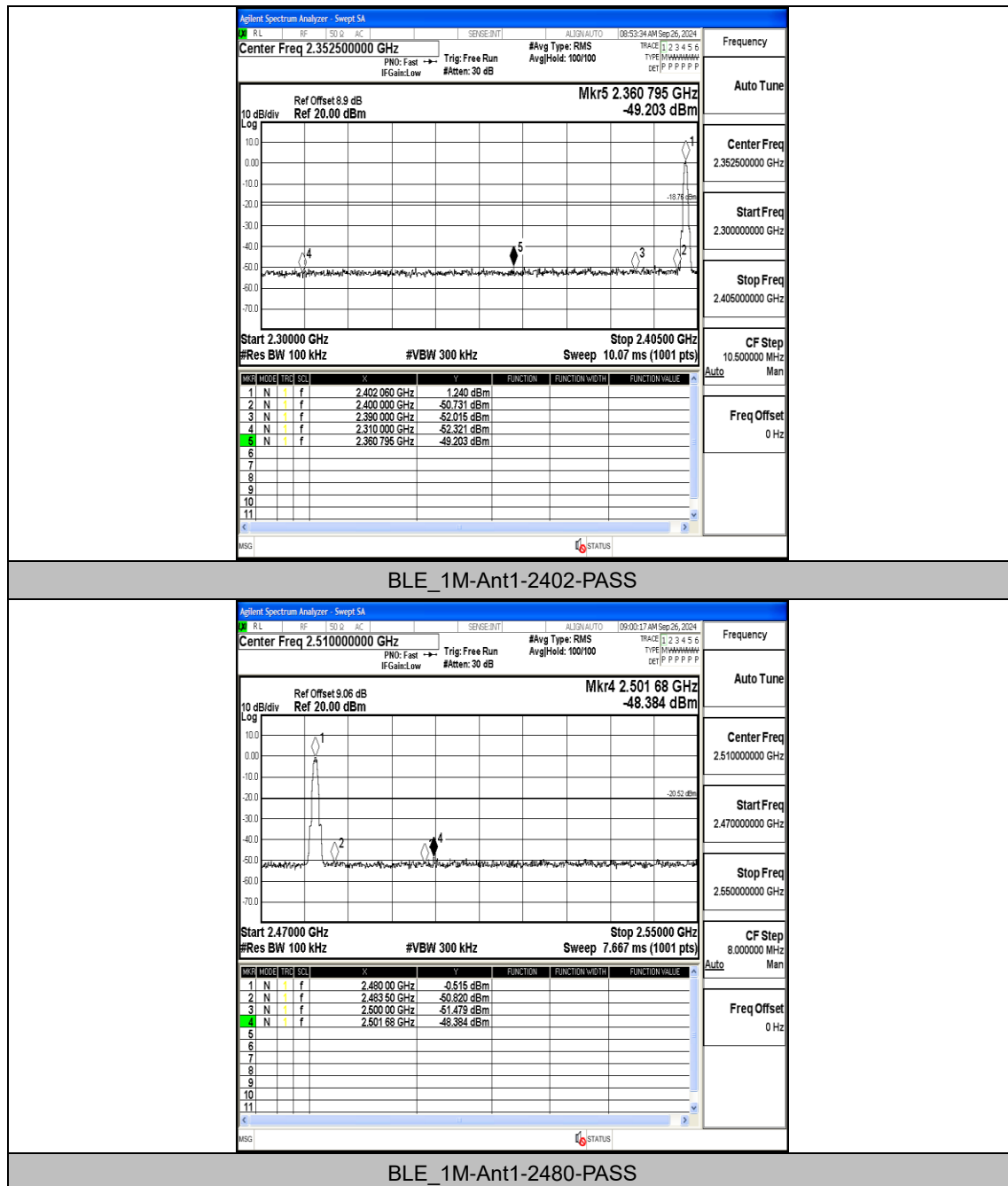


Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.24	-49.2	≤-18.76	PASS
BLE_1M	Ant1	High	2480	-0.52	-48.38	≤-20.52	PASS

Test Graphs

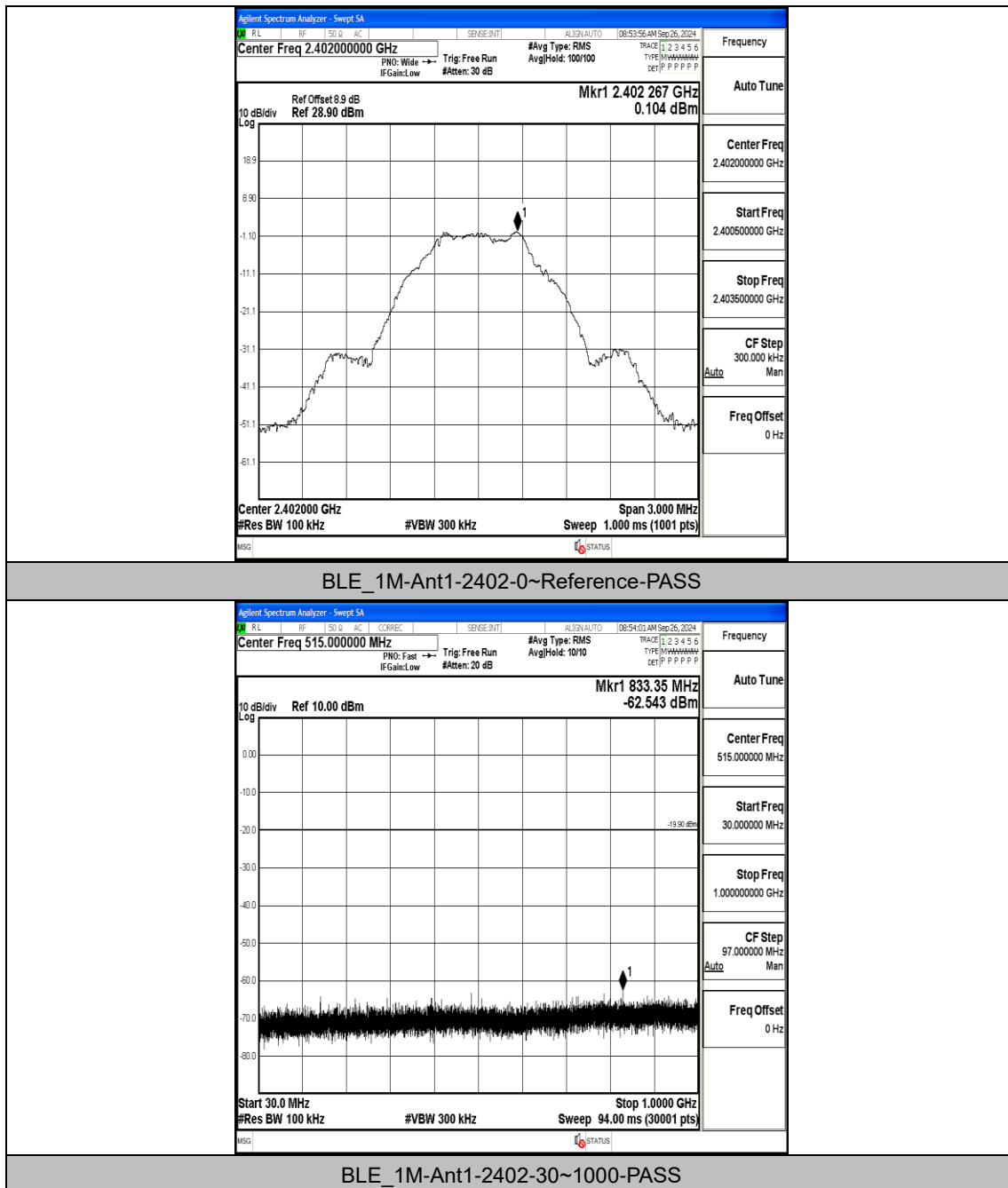


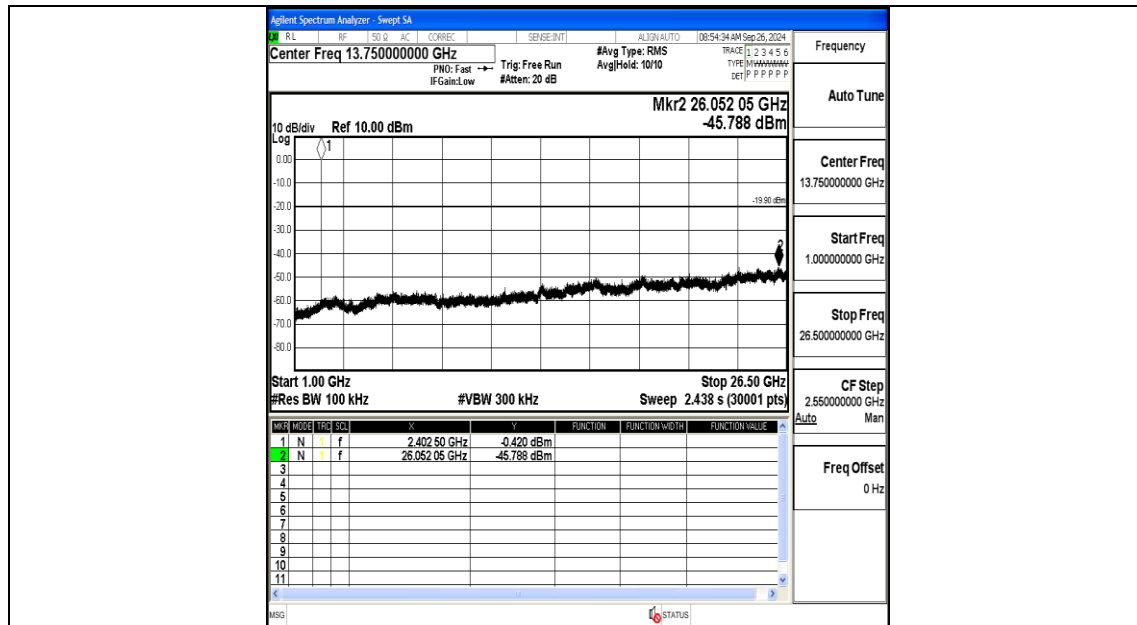
Appendix F: Conducted Spurious Emission

Test Result

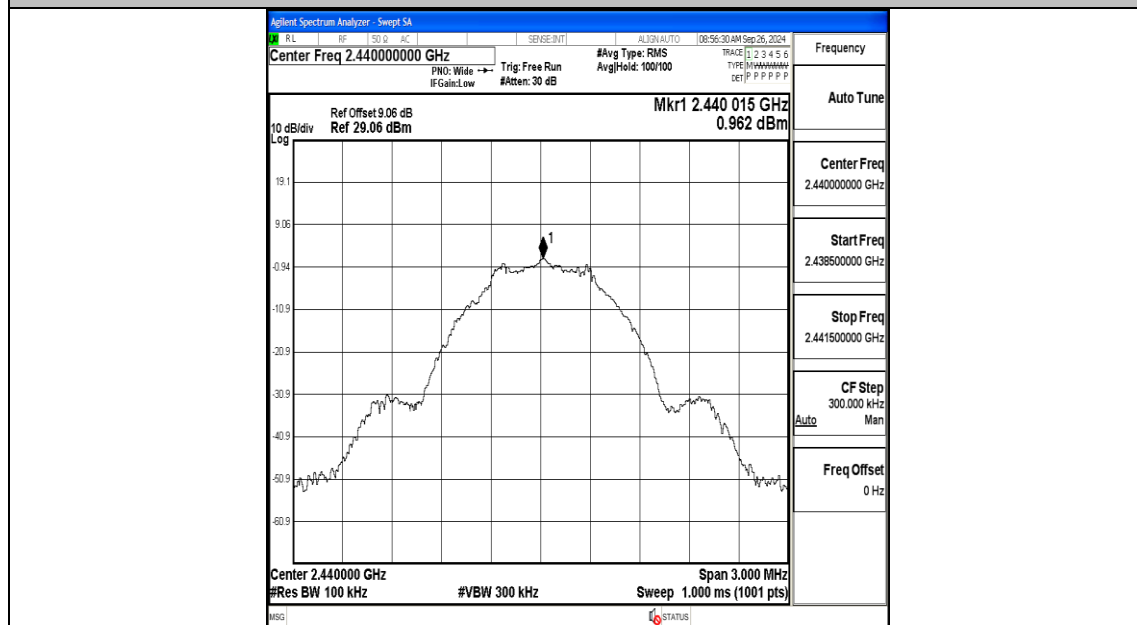
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	0.10	0.10	---	PASS
BLE_1M	Ant1	2402	30~1000	0.10	-62.54	≤-19.9	PASS
BLE_1M	Ant1	2402	1000~26500	0.10	-45.79	≤-19.9	PASS
BLE_1M	Ant1	2440	0~Reference	0.96	0.96	---	PASS
BLE_1M	Ant1	2440	30~1000	0.96	-63.68	≤-19.04	PASS
BLE_1M	Ant1	2440	1000~26500	0.96	-45.04	≤-19.04	PASS
BLE_1M	Ant1	2480	0~Reference	-0.64	-0.64	---	PASS
BLE_1M	Ant1	2480	30~1000	-0.64	-61.24	≤-20.64	PASS
BLE_1M	Ant1	2480	1000~26500	-0.64	-45.26	≤-20.64	PASS

Test Graphs

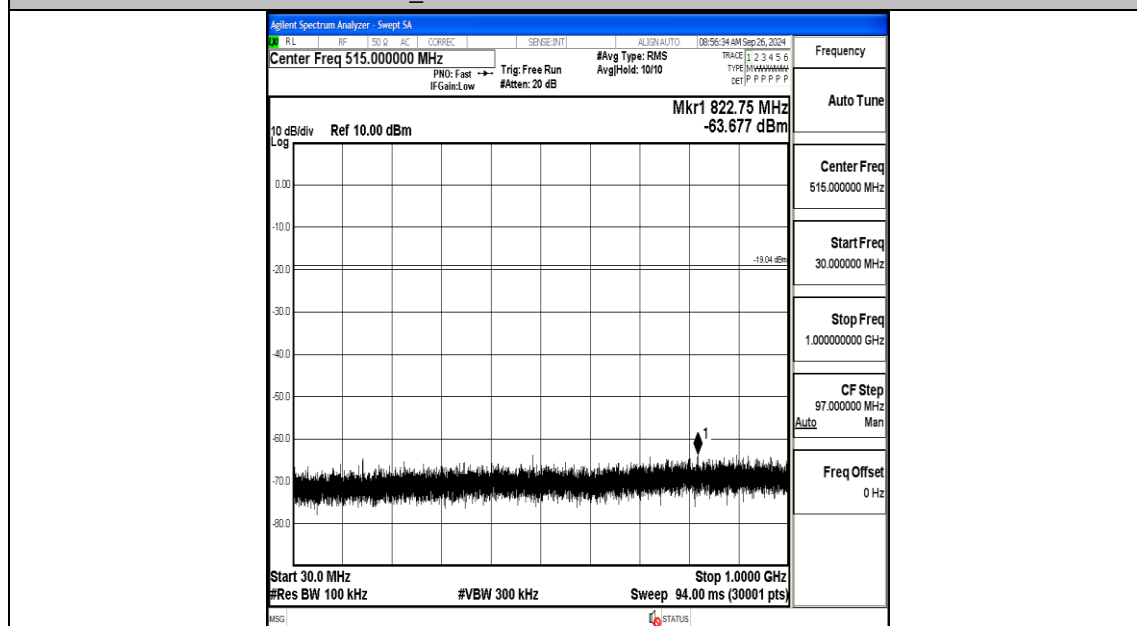




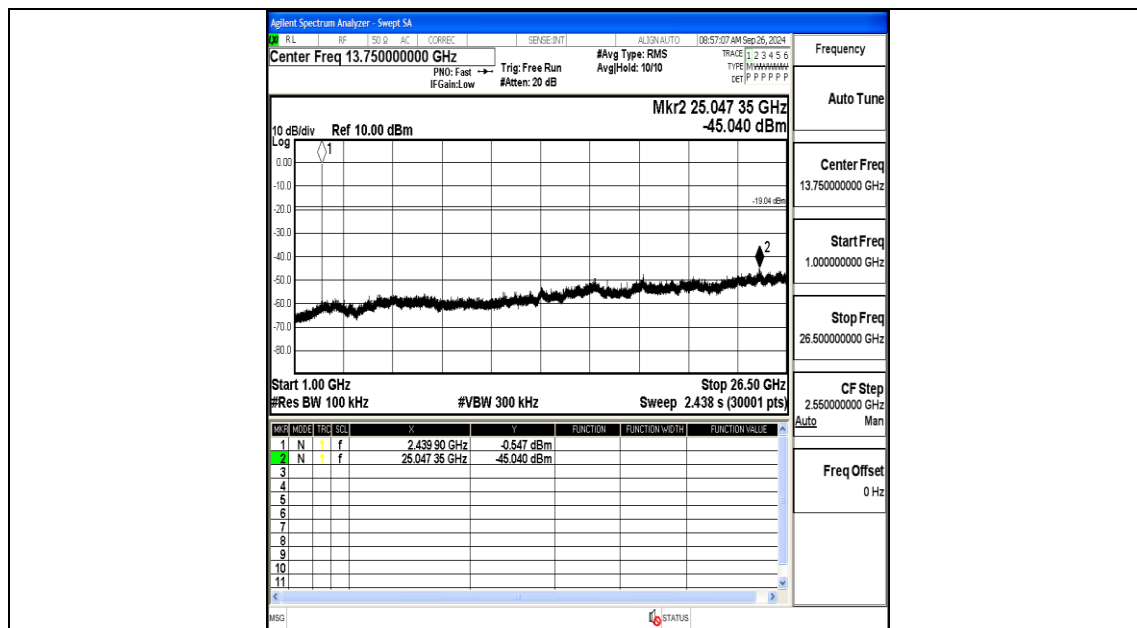
BLE_1M-Ant1-2402-1000~26500-PASS



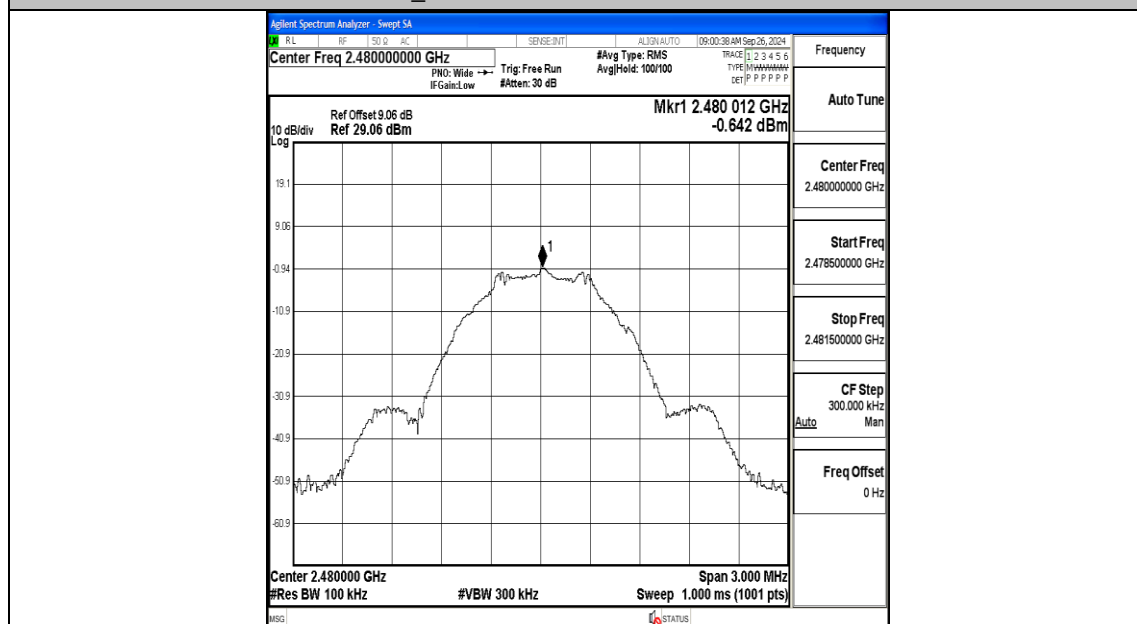
BLE_1M-Ant1-2440-0~Reference-PASS



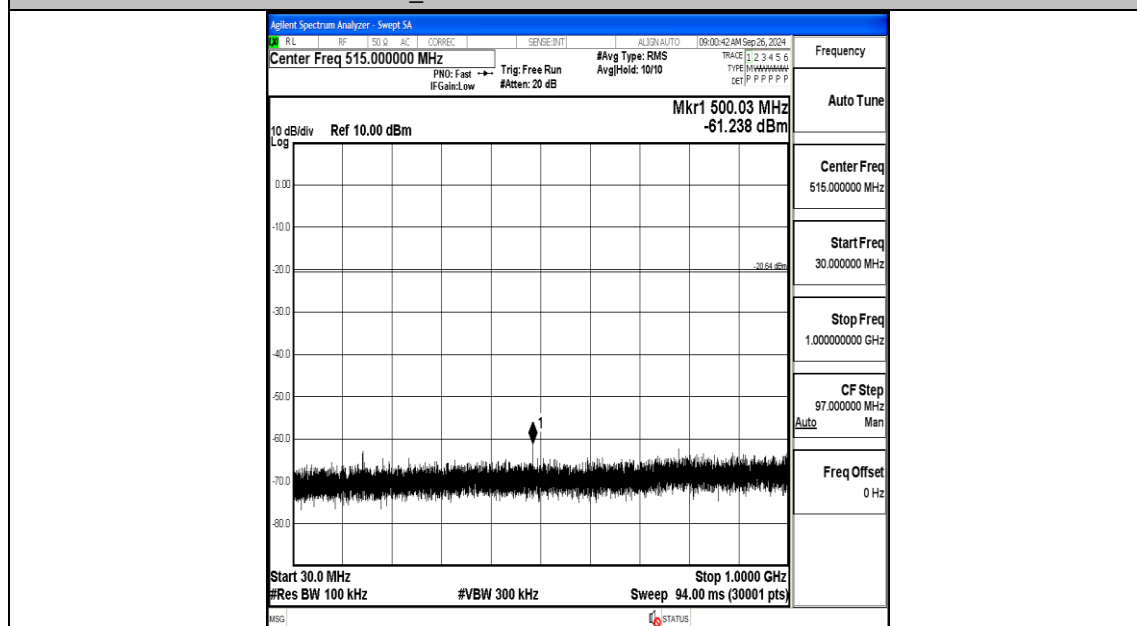
BLE_1M-Ant1-2440-30~1000-PASS



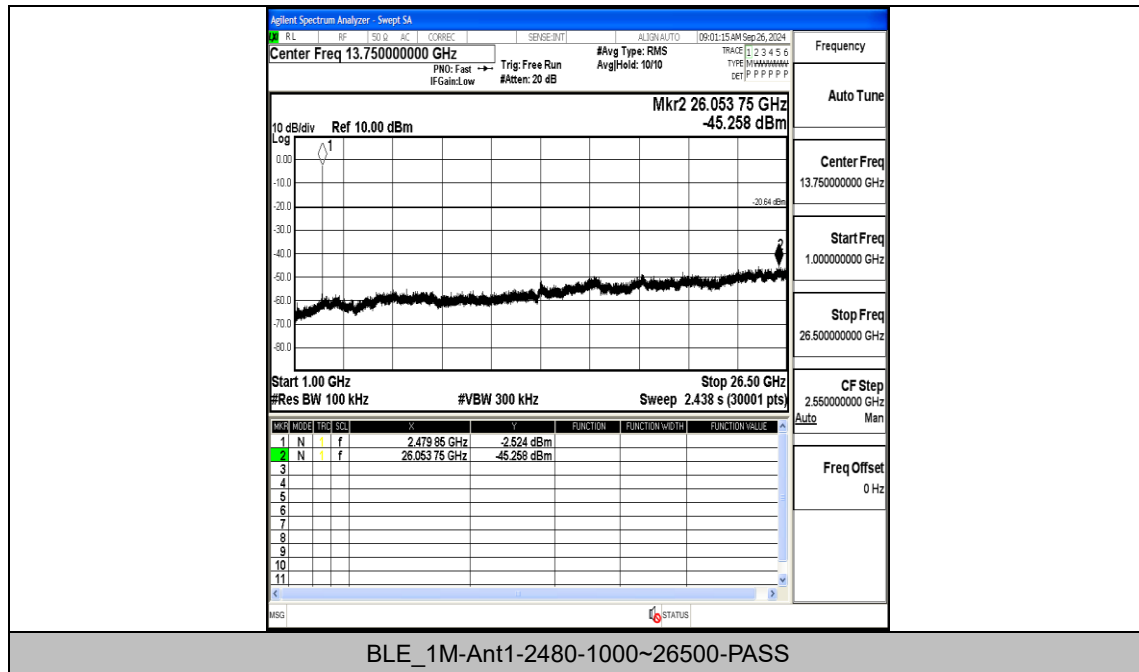
BLE_1M-Ant1-2440-1000~26500-PASS



BLE_1M-Ant1-2480-0~Reference-PASS



BLE_1M-Ant1-2480-30~1000-PASS



Appendix G: Duty Cycle

Test Result

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
BLE_1M	Ant1	2402	0.40	0.63	63.49	1.97
BLE_1M	Ant1	2440	0.39	0.62	62.90	2.01
BLE_1M	Ant1	2480	0.39	0.62	62.90	2.01

Test Graphs

