Appendix Test Data for BLE (Conducted Measurement)

Product Name: MG Flasher Adapter

Trade Mark: /

Test Model: MG-100

FCC ID: 2AWSB-MG100

Environmental Conditions

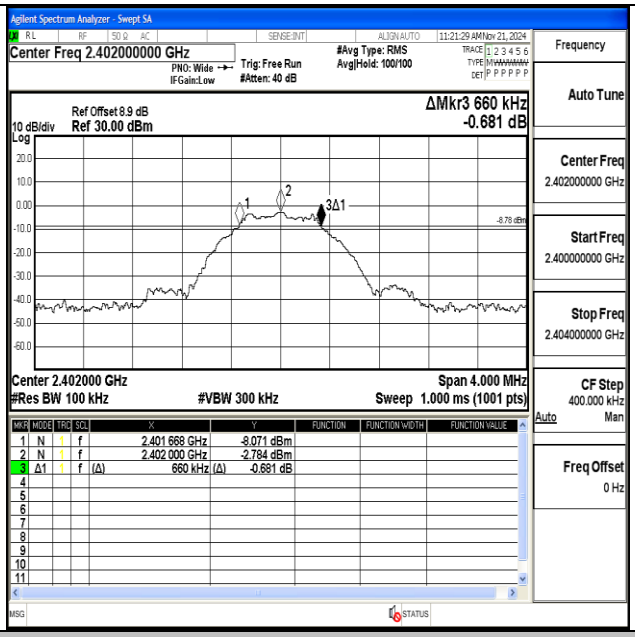
Temperature:	23.5℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

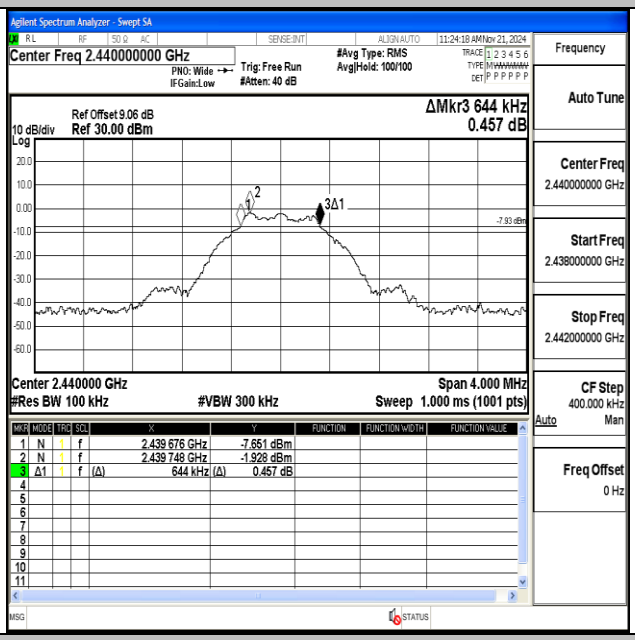
Test Result

Test Mode	Antenna	Frequency [MHz]	DTS BW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	0.660	2401.668	2402.328	0.5	PASS
BLE_1M	Ant1	2440	0.644	2439.676	2440.320	0.5	PASS
BLE_1M	Ant1	2480	0.656	2479.672	2480.328	0.5	PASS

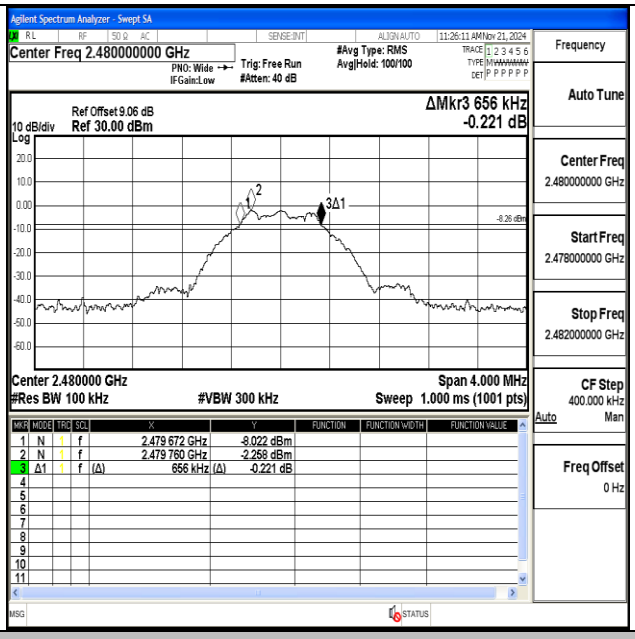
Test Graphs



BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2440-PASS



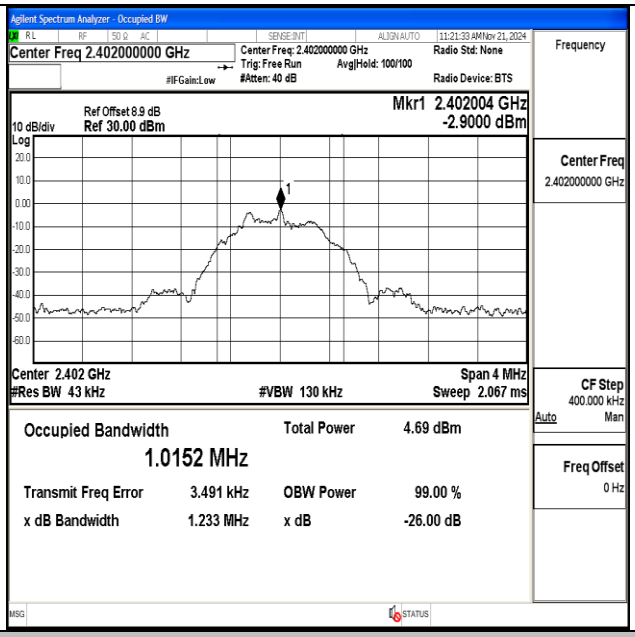
BLE_1M-Ant1-2480-PASS

Appendix B: Occupied Channel Bandwidth

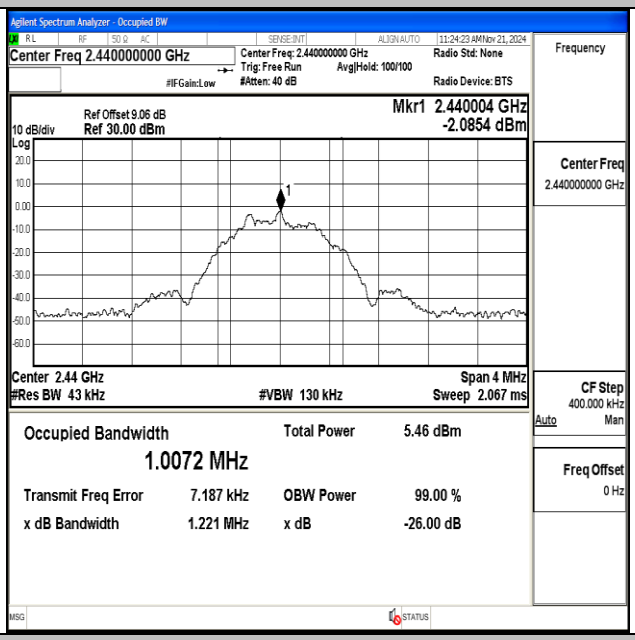
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.0152	2401.4959	2402.5111	---	---
BLE_1M	Ant1	2440	1.0072	2439.5036	2440.5108	---	---
BLE_1M	Ant1	2480	1.0133	2479.4991	2480.5124	---	---

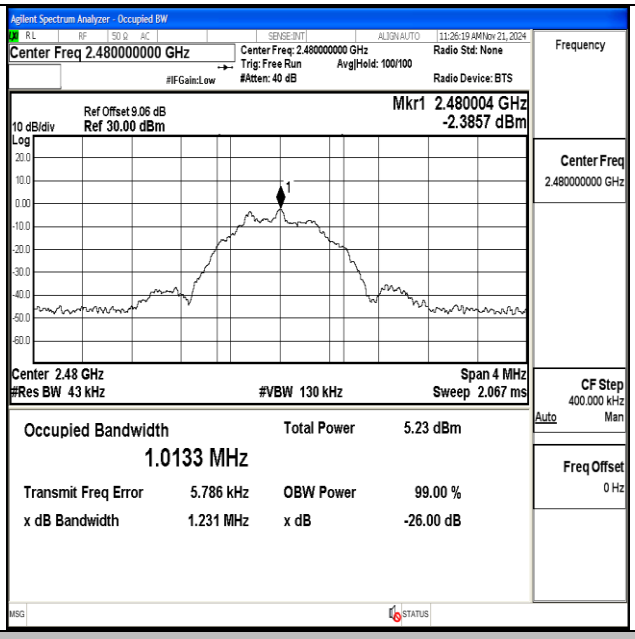
Test Graphs



BLE_1M-Ant1-2402



BLE_1M-Ant1-2440



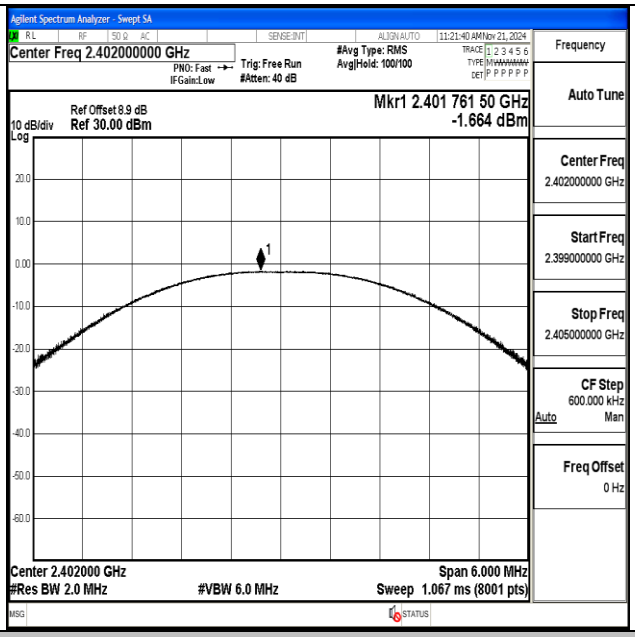
BLE_1M-Ant1-2480

Appendix C: Maximum peak conducted output power

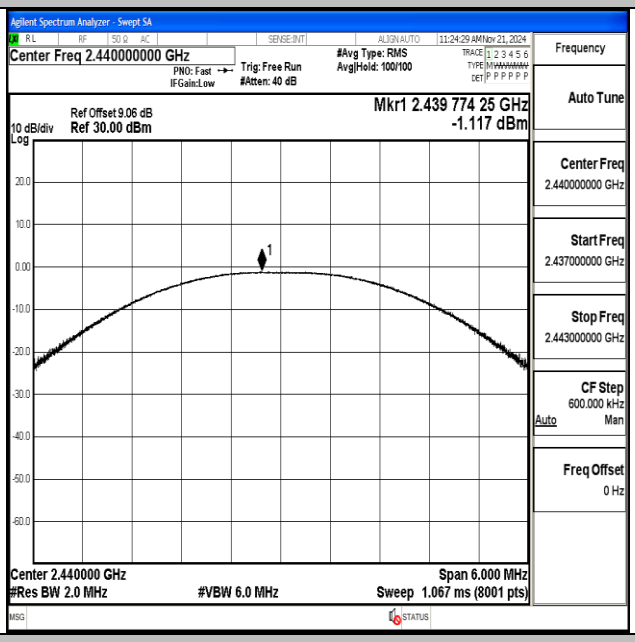
Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE_1M	Ant1	2402	-1.66	≤30	PASS
BLE_1M	Ant1	2440	-1.12	≤30	PASS
BLE_1M	Ant1	2480	-1.31	≤30	PASS

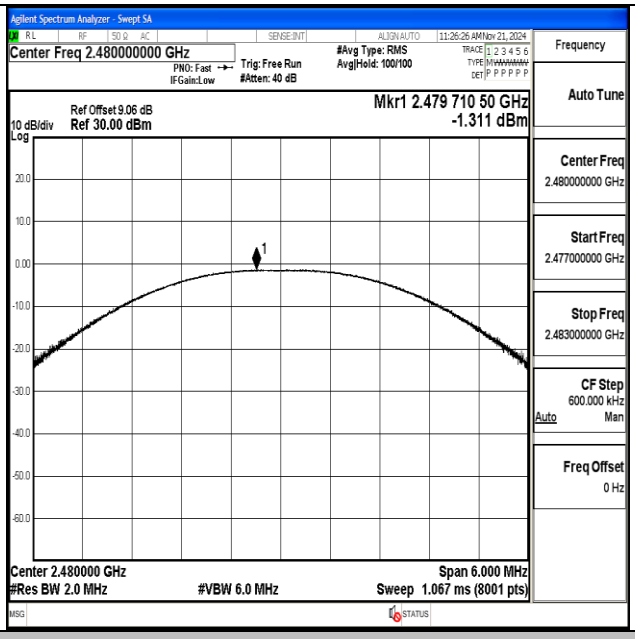
Test Graphs Peak



BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2440-PASS



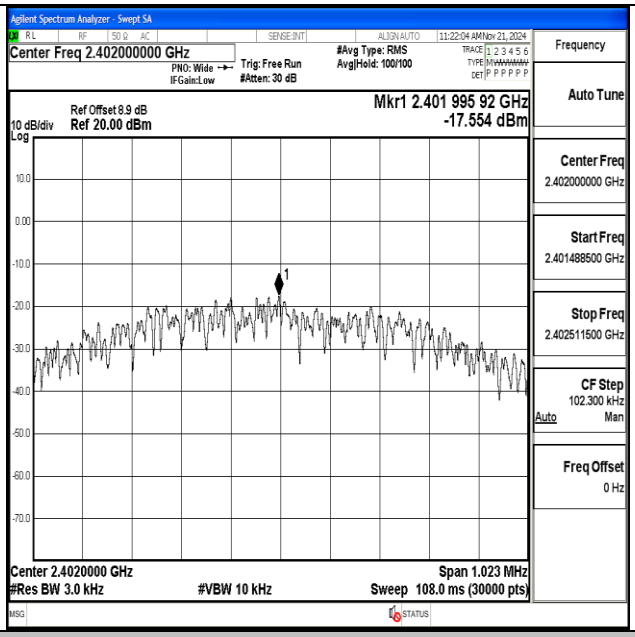
BLE_1M-Ant1-2480-PASS

Appendix D: Maximum peak power spectral density

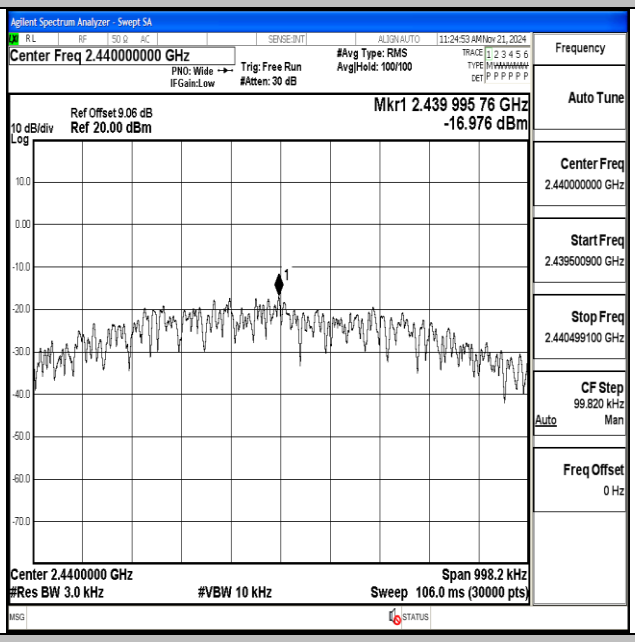
Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.55	≤8.00	PASS
BLE_1M	Ant1	2440	-16.98	≤8.00	PASS
BLE_1M	Ant1	2480	-17.10	≤8.00	PASS

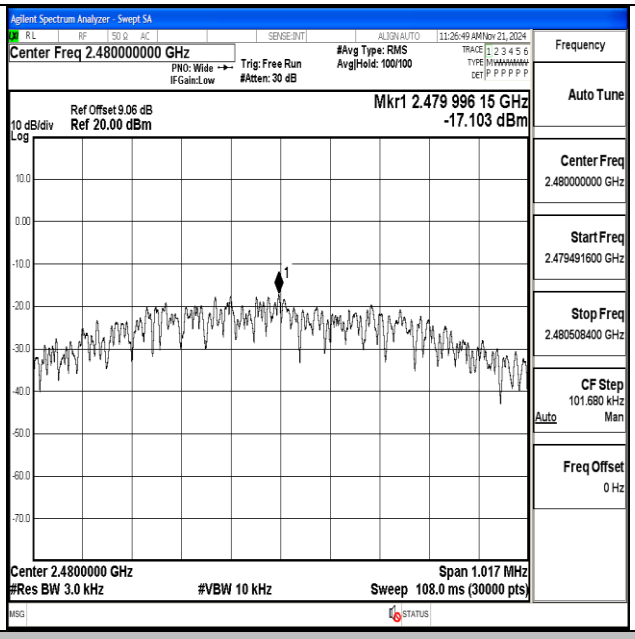
Test Graphs



BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2440-PASS



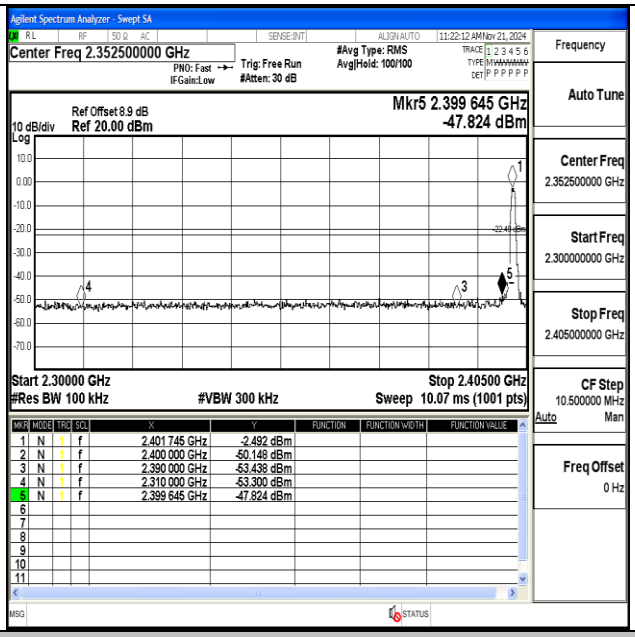
BLE_1M-Ant1-2480-PASS

Appendix E: Band edge measurements

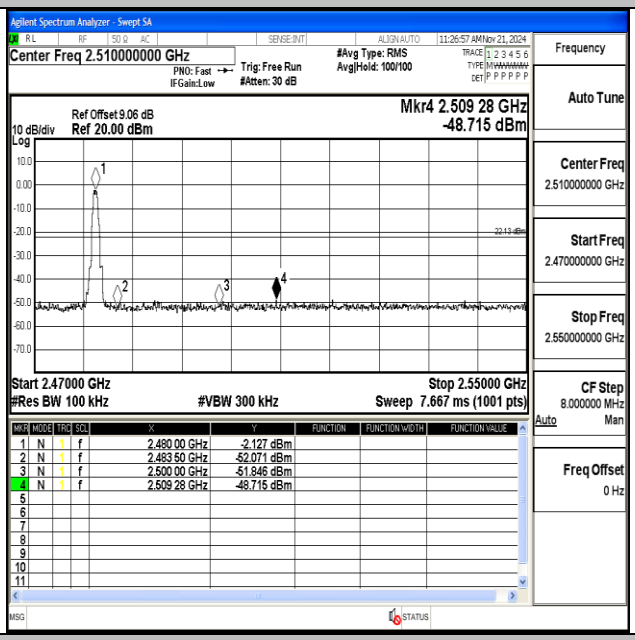
Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.49	-47.82	≤-22.49	PASS
BLE_1M	Ant1	High	2480	-2.13	-48.72	≤-22.13	PASS

Test Graphs



BLE_1M-Ant1-2402-PASS



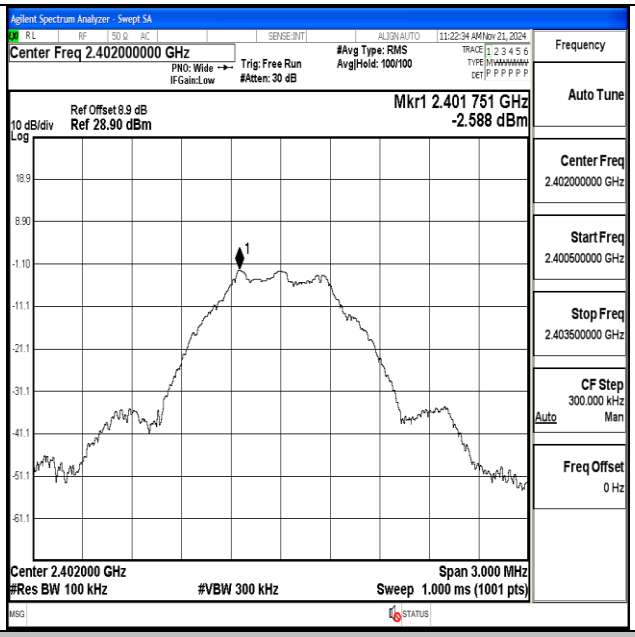
BLE_1M-Ant1-2480-PASS

Appendix F: Conducted Spurious Emission

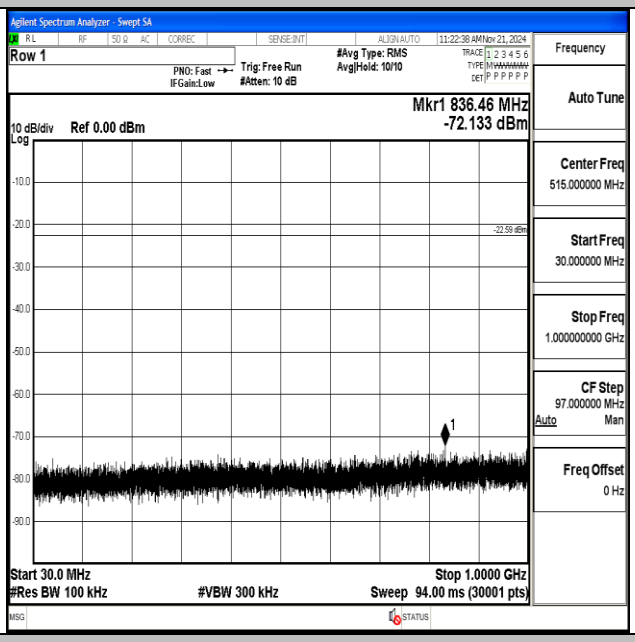
Test Result

Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-2.59	-2.59	---	PASS
BLE_1M	Ant1	2402	30~1000	-2.59	-72.13	≤-22.59	PASS
BLE_1M	Ant1	2402	1000~26500	-2.59	-54.67	≤-22.59	PASS
BLE_1M	Ant1	2440	0~Reference	-2.03	-2.03	---	PASS
BLE_1M	Ant1	2440	30~1000	-2.03	-72.47	≤-22.03	PASS
BLE_1M	Ant1	2440	1000~26500	-2.03	-52.09	≤-22.03	PASS
BLE_1M	Ant1	2480	0~Reference	-2.29	-2.29	---	PASS
BLE_1M	Ant1	2480	30~1000	-2.29	-72.56	≤-22.29	PASS
BLE_1M	Ant1	2480	1000~26500	-2.29	-55.4	≤-22.29	PASS

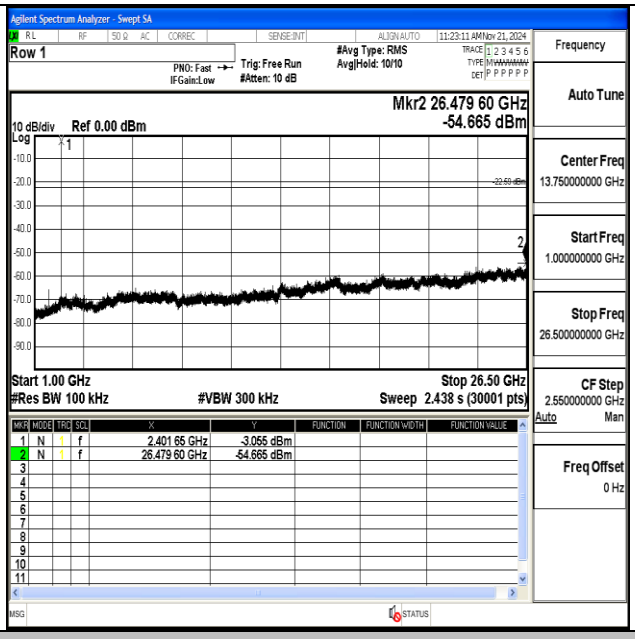
Test Graphs



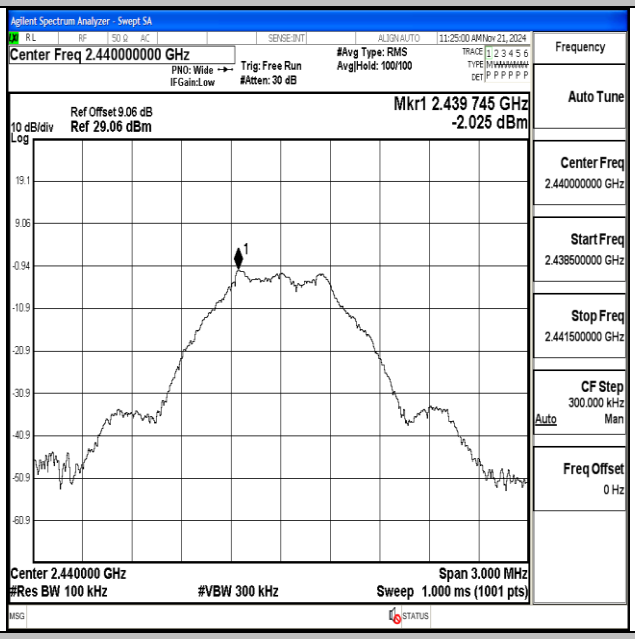
BLE_1M-Ant1-2402-0~Reference-PASS



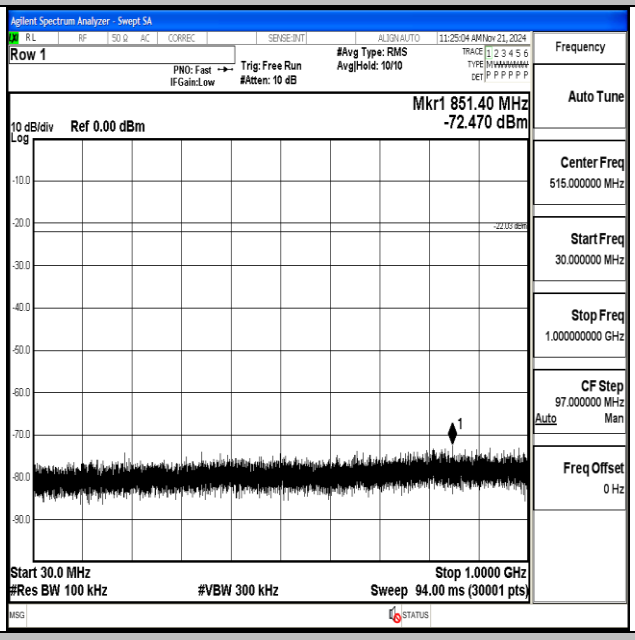
BLE_1M-Ant1-2402-30~1000-PASS



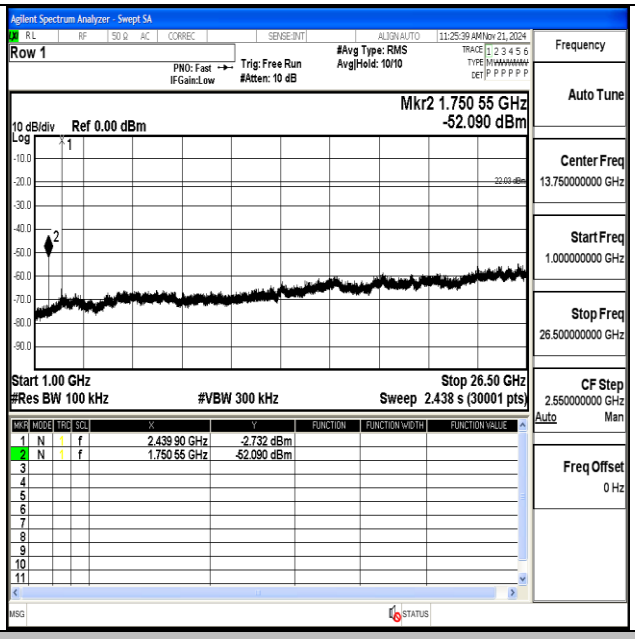
BLE_1M-Ant1-2402-1000~26500-PASS



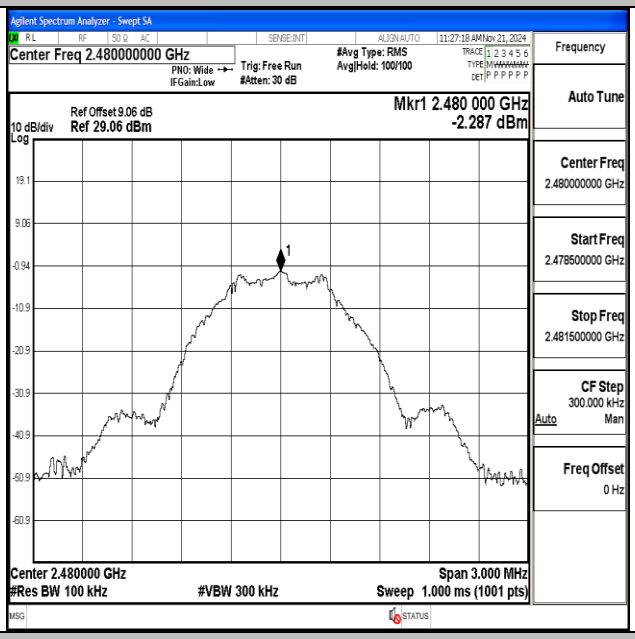
BLE_1M-Ant1-2440-0~Reference-PASS



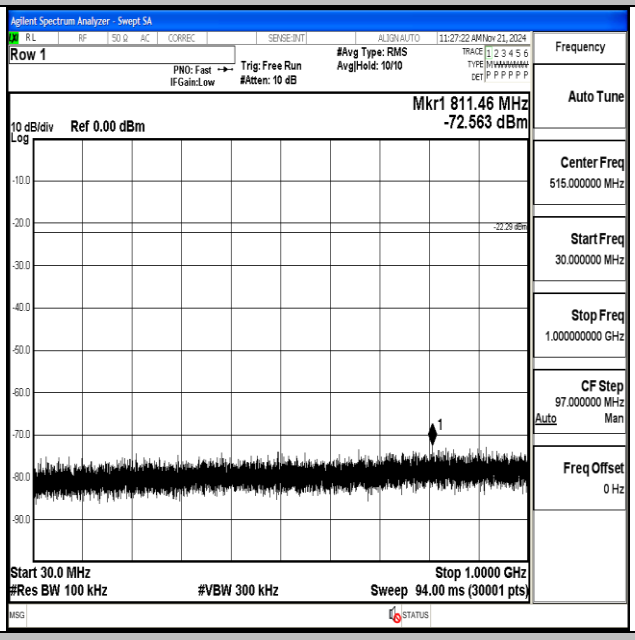
BLE_1M-Ant1-2440-30~1000-PASS



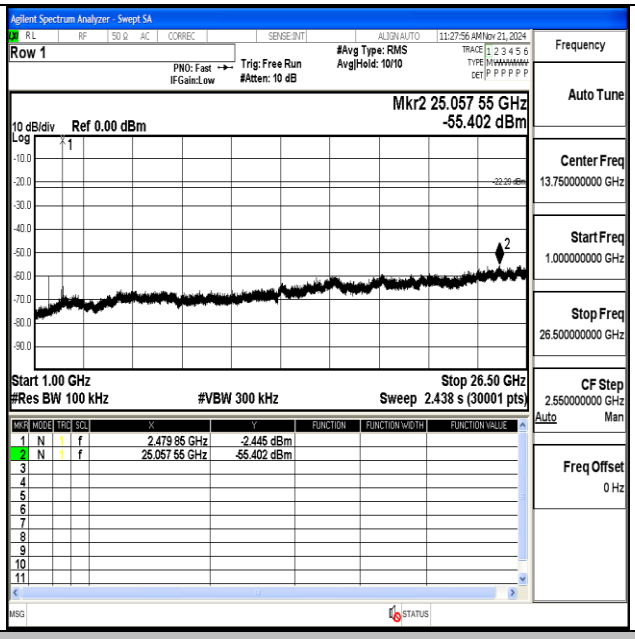
BLE_1M-Ant1-2440-1000~26500-PASS



BLE_1M-Ant1-2480-0~Reference-PASS



BLE_1M-Ant1-2480-30~1000-PASS



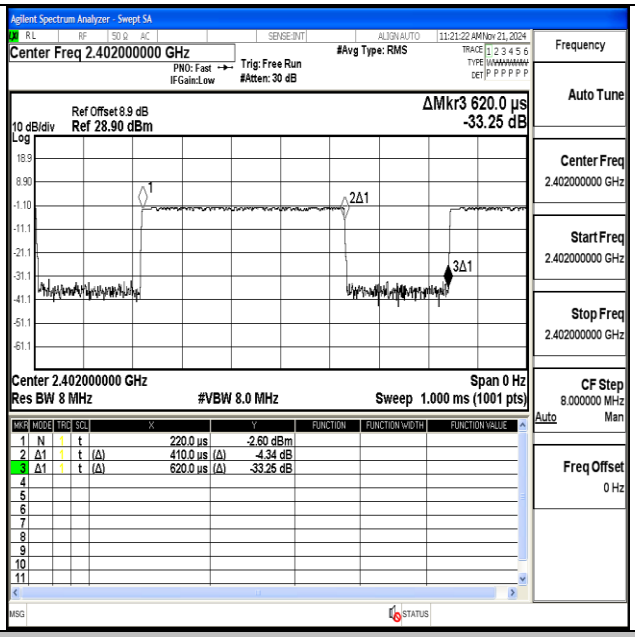
BLE_1M-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

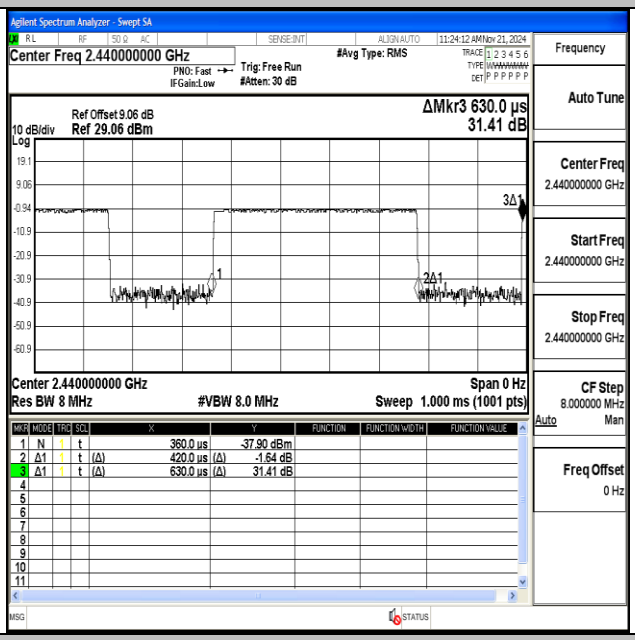
Test Result

Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
BLE_1M	Ant1	2402	0.41	0.62	66.13	1.80
BLE_1M	Ant1	2440	0.42	0.63	66.67	1.76
BLE_1M	Ant1	2480	0.42	0.63	66.67	1.76

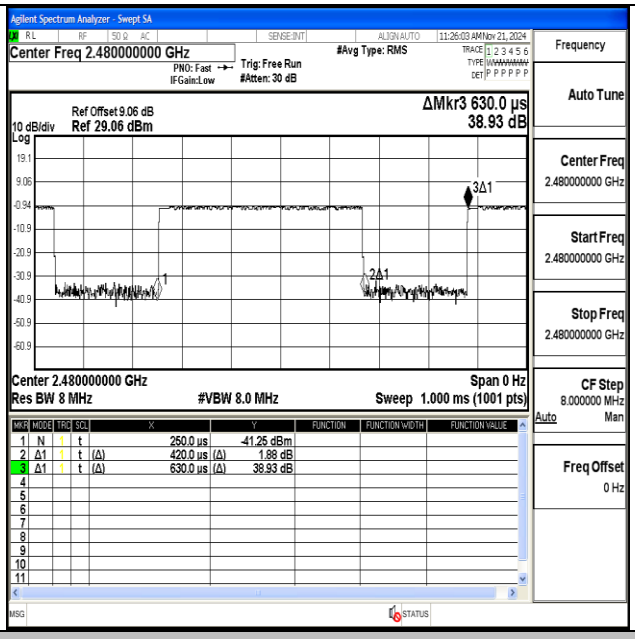
Test Graphs



NTNV-BLE_1M-Ant1-2402



NTNV-BLE_1M-Ant1-2440



NTNV-BLE_1M-Ant1-2480