

Appendix Test Data for BLE (Conducted Measurement)

Product Name: SPNNING BIKE

Trade Mark: yesoul

Test Model: YS-BA6

FCC ID: 2A3YB-YSBA6

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_1M	Ant1	2402	0.572	2401.740	2402.312	0.5	PASS
BLE_1M	Ant1	2440	0.640	2439.744	2440.384	0.5	PASS
BLE_1M	Ant1	2480	0.588	2479.756	2480.344	0.5	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





Appendix B: Occupied Channel Bandwidth

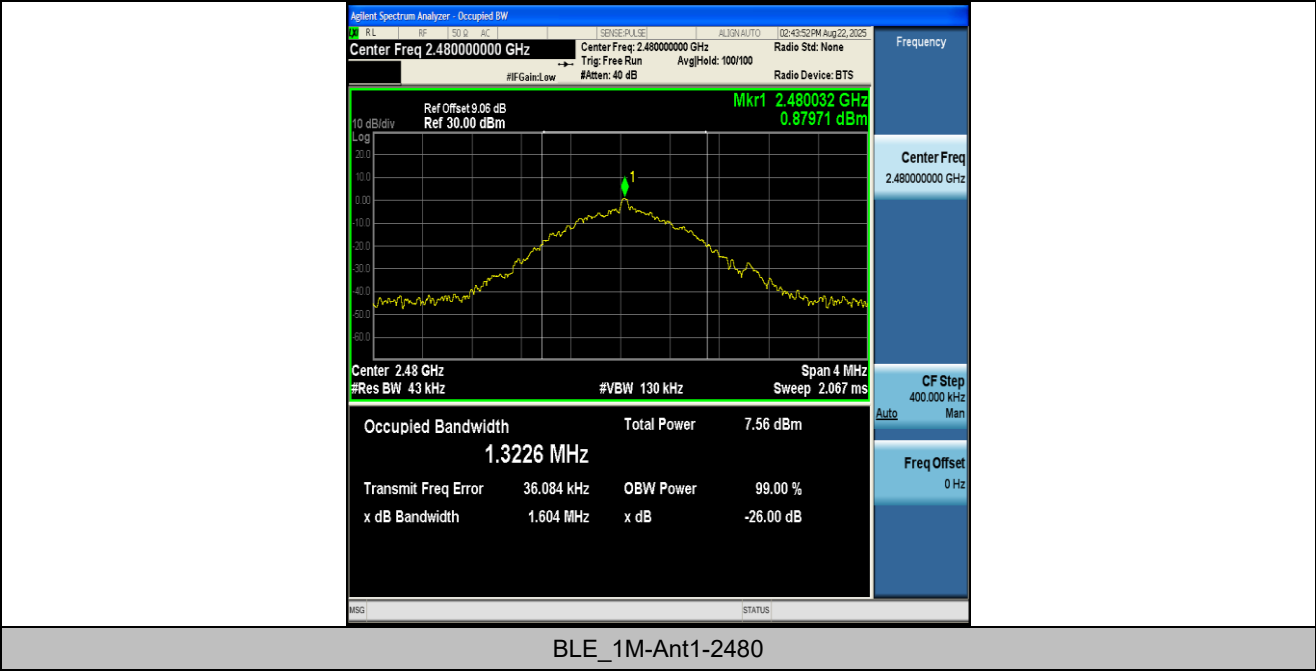
Test Result

Test Mode	Antenna	Frequency [MHz]	OCB [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
BLE_1M	Ant1	2402	1.3305	2401.3734	2402.7039	---	---
BLE_1M	Ant1	2440	1.3264	2439.3786	2440.7050	---	---
BLE_1M	Ant1	2480	1.3226	2479.3748	2480.6974	---	---

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





BLE_1M-Ant1-2480

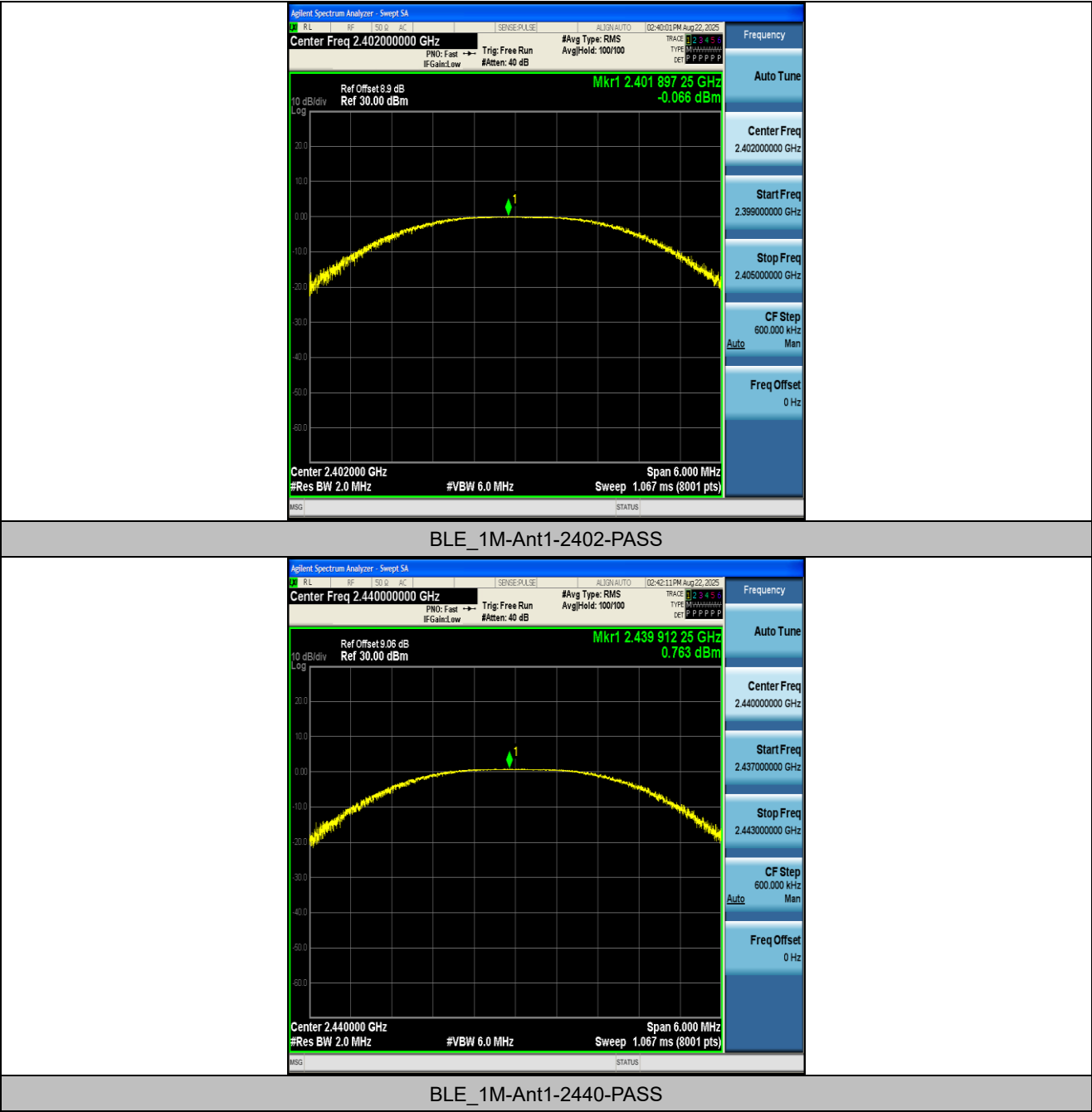
Appendix C: Maximum peak conducted output power

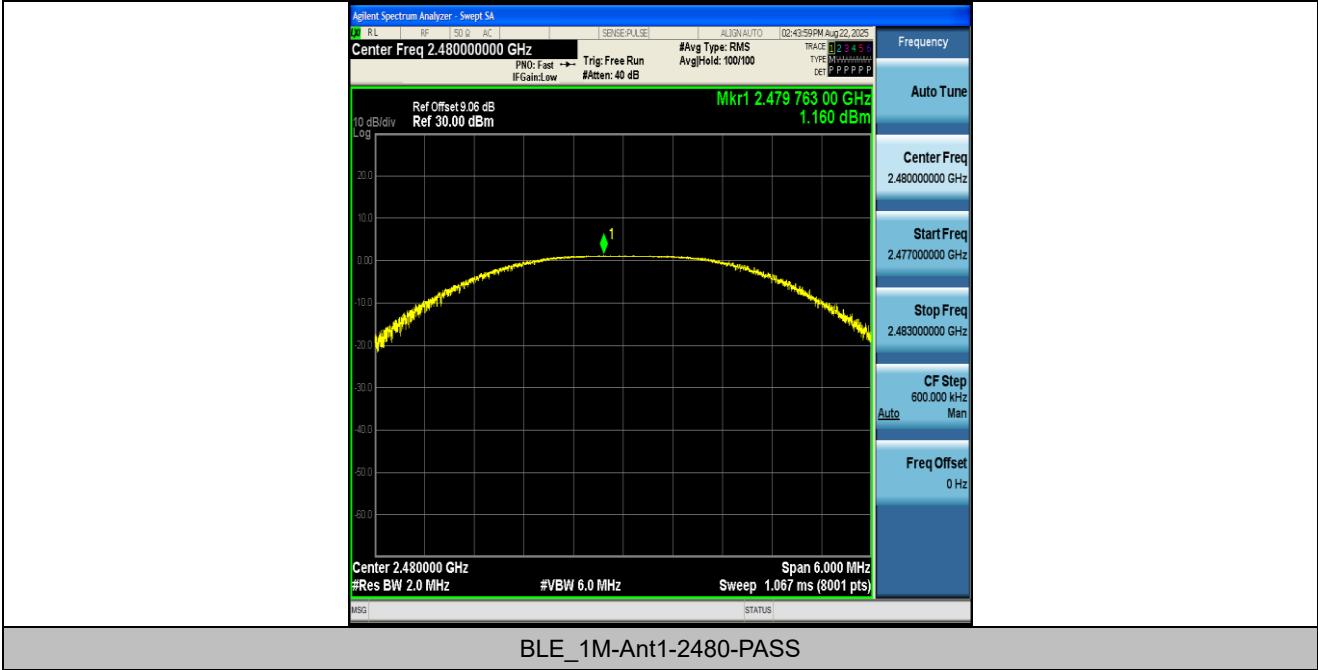
Test Result Peak

Test Mode	Antenna	Frequency [MHz]	Conducted Peak Power [dBm]	Conducted Limit [dBm]	Verdict
BLE_1M	Ant1	2402	-0.07	≤30	PASS
BLE_1M	Ant1	2440	0.76	≤30	PASS
BLE_1M	Ant1	2480	1.16	≤30	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs Peak





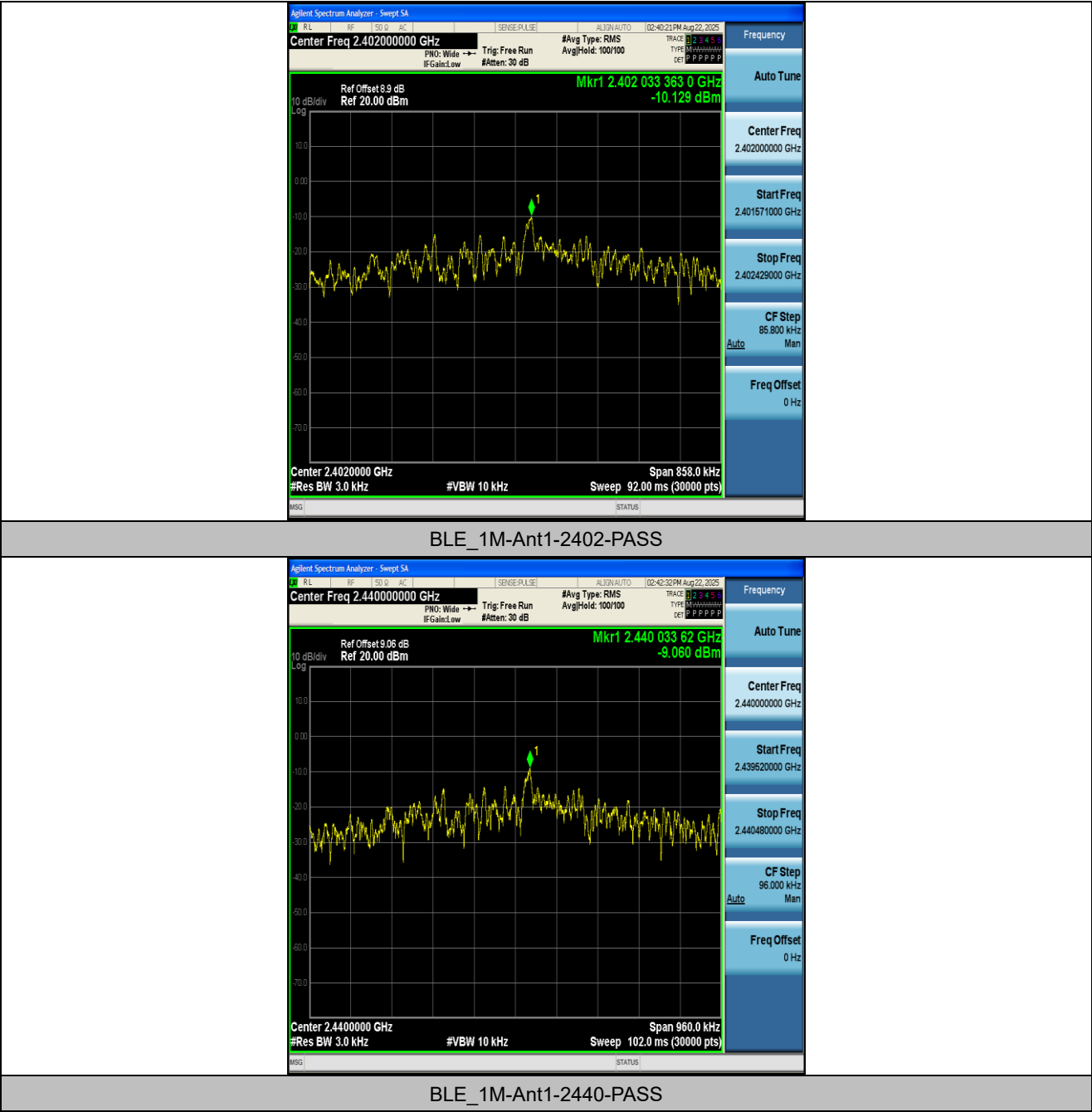
Appendix D: Maximum peak power spectral density

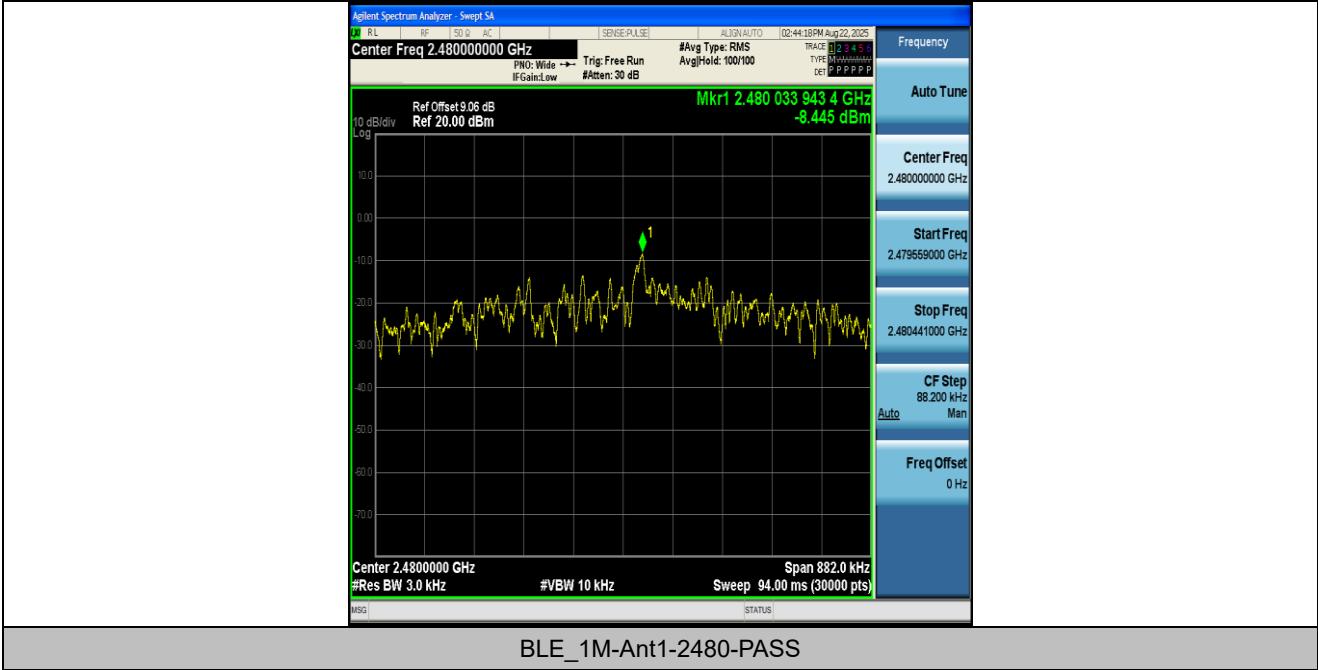
Test Result

Test Mode	Antenna	Frequency [MHz]	Result [dBm/3kHz]	Limit [dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.13	≤8.00	PASS
BLE_1M	Ant1	2440	-9.06	≤8.00	PASS
BLE_1M	Ant1	2480	-8.45	≤8.00	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs





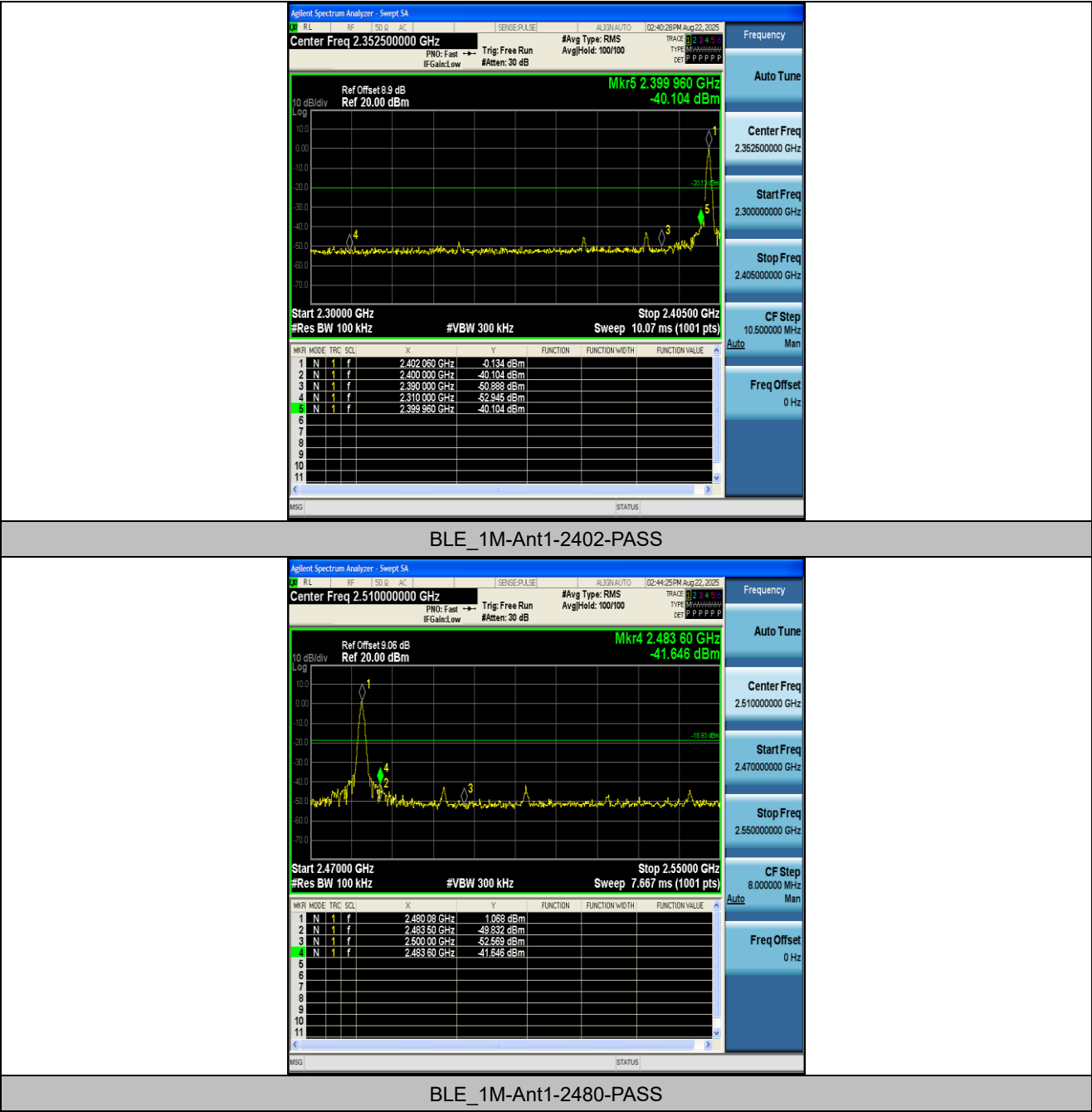
Appendix E: Band edge measurements

Test Result

Test Mode	Antenna	Ch. Name	Frequency [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.13	-40.1	≤ -20.13	PASS
BLE_1M	Ant1	High	2480	1.07	-41.65	≤ -18.93	PASS

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs



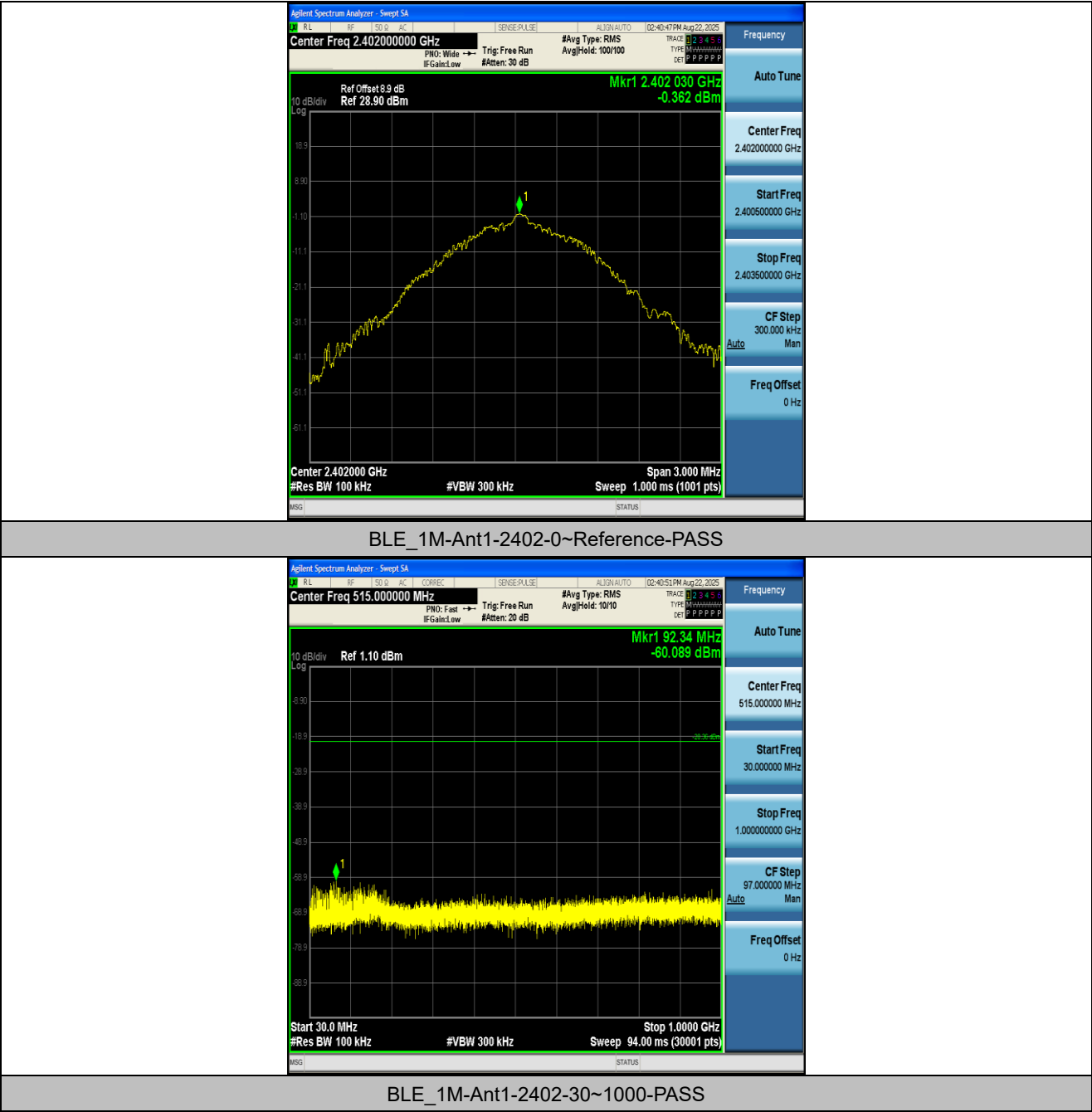
Appendix F: Conducted Spurious Emission

Test Result

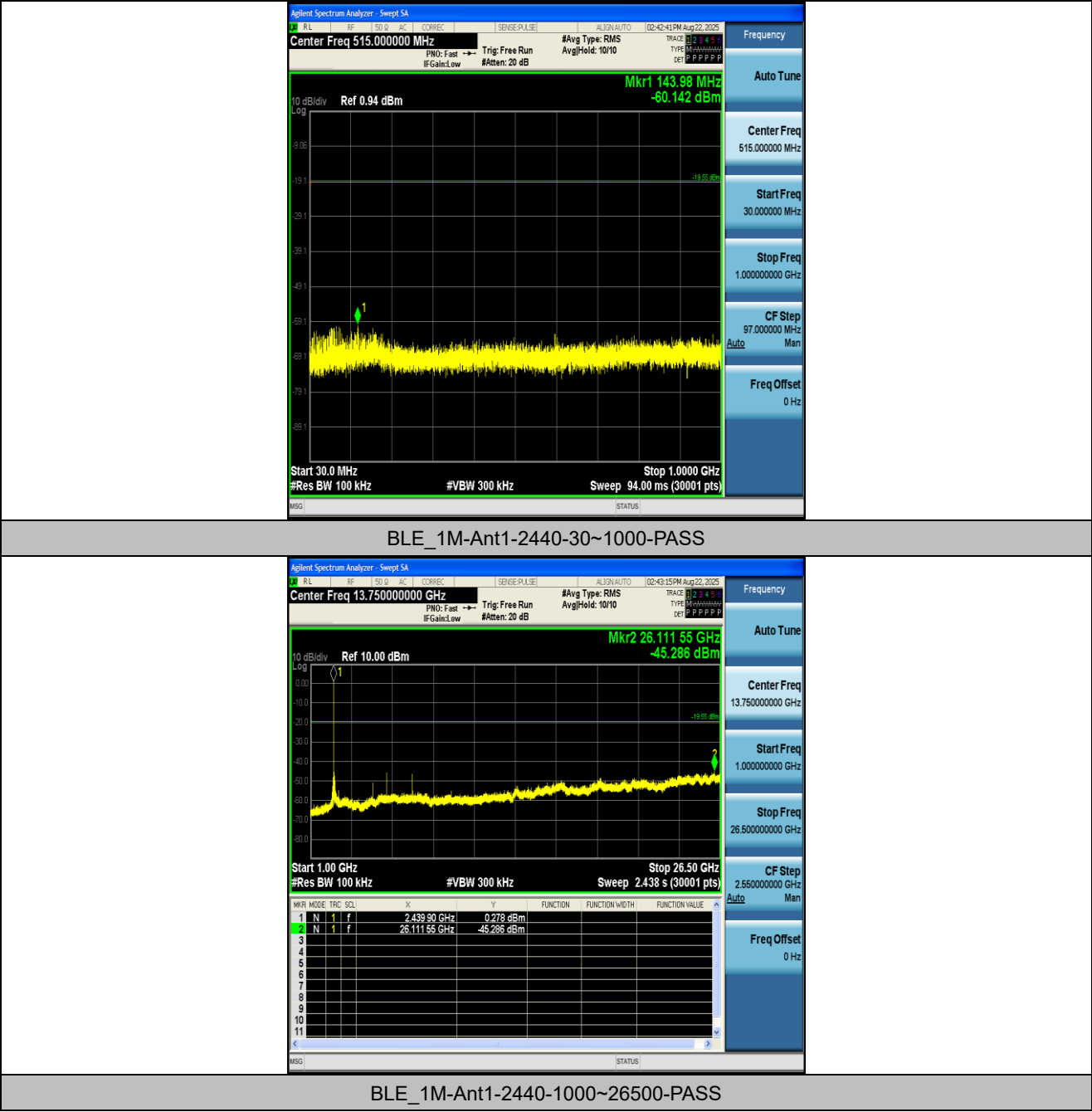
Test Mode	Antenna	Frequency [MHz]	Freq. Range [MHz]	Ref. Level [dBm]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	-0.36	-0.36	---	PASS
BLE_1M	Ant1	2402	30~1000	-0.36	-60.09	≤-20.36	PASS
BLE_1M	Ant1	2402	1000~26500	-0.36	-41.11	≤-20.36	PASS
BLE_1M	Ant1	2440	0~Reference	0.45	0.45	---	PASS
BLE_1M	Ant1	2440	30~1000	0.45	-60.14	≤-19.55	PASS
BLE_1M	Ant1	2440	1000~26500	0.45	-45.29	≤-19.55	PASS
BLE_1M	Ant1	2480	0~Reference	0.93	0.93	---	PASS
BLE_1M	Ant1	2480	30~1000	0.93	-60.2	≤-19.07	PASS
BLE_1M	Ant1	2480	1000~26500	0.93	-43.85	≤-19.07	PASS

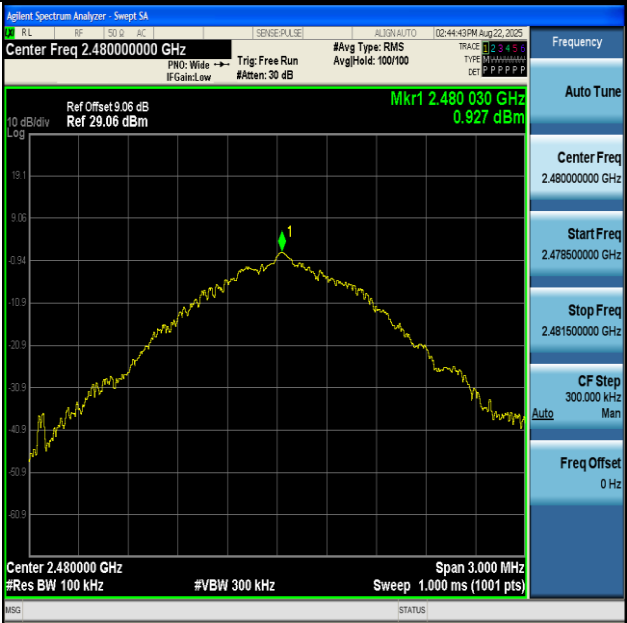
Note: offset(dB) in Reference test plots = cable loss(dB) + attenuator factor(dB); For spurious emissions plots from 30MHz to 26.5GHz, the cable loss and attenuator factors have been set in the 'Input Correction' of the Spectrum Analyzer during the test.

Test Graphs

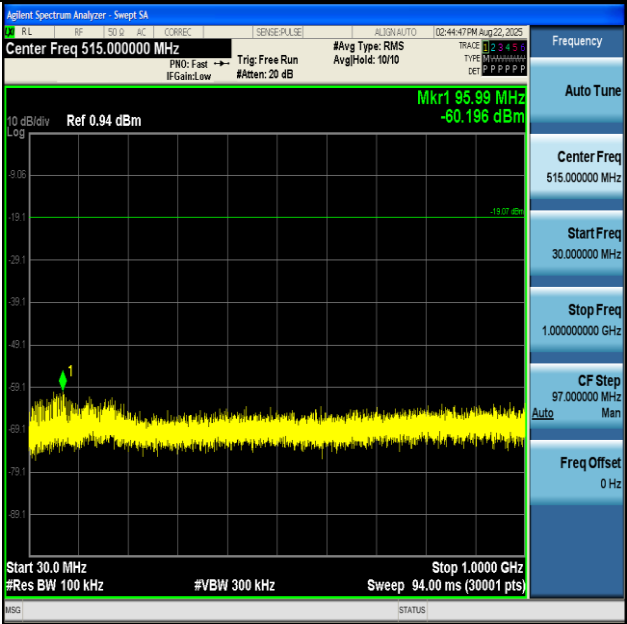




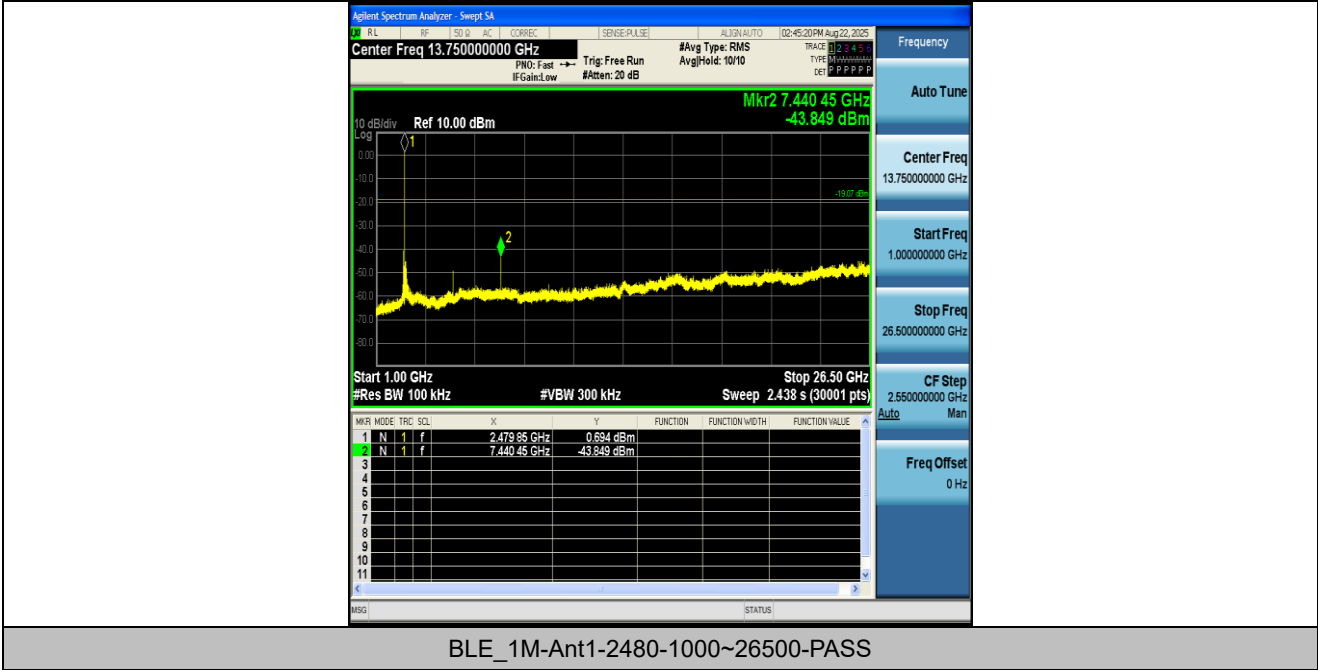




BLE_1M-Ant1-2480-0~Reference-PASS



BLE_1M-Ant1-2480-30~1000-PASS



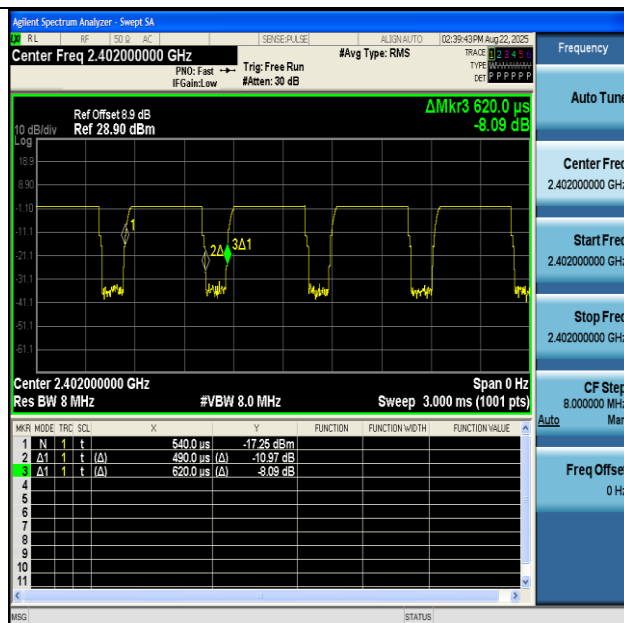
Appendix G: Duty Cycle

Test Result

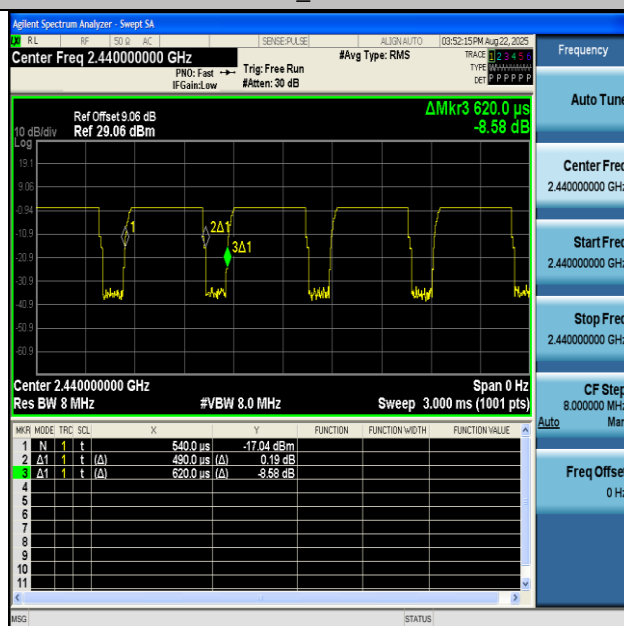
Test Mode	Antenna	Frequency [MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]
BLE_1M	Ant1	2402	0.49	0.62	79.03	1.02
BLE_1M	Ant1	2440	0.49	0.62	79.03	1.02
BLE_1M	Ant1	2480	0.48	0.62	77.42	1.11

Note: offset(dB) = cable loss(dB) + attenuator factor(dB)

Test Graphs



NTNV-BLE_1M-Ant1-2402



NTNV-BLE 1M-Ant1-2440

