Appendix: 2.4G

Contents

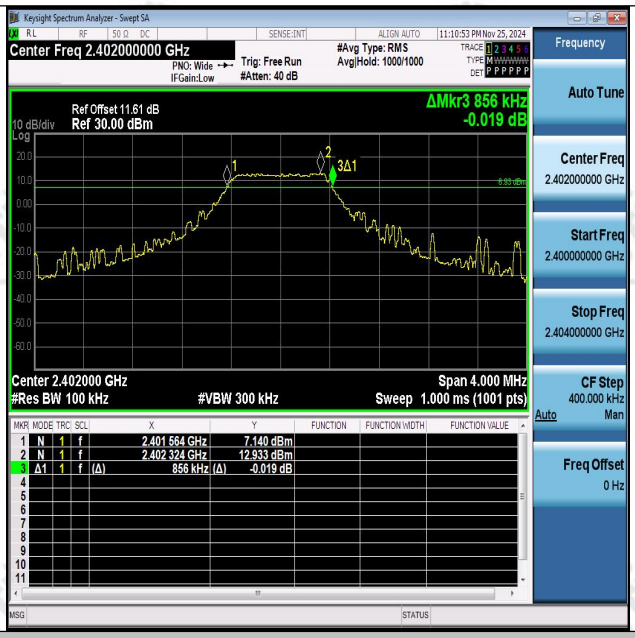
Appendix A: DTS Bandwidth 3
Test Result 3
Test Graphs 4
Appendix B: Occupied Channel Bandwidth 6
Test Result 6
Test Graphs 7
Appendix C: Maximum conducted output power 9
Test Result Peak 9
Test Graphs Peak 10
Appendix D: Maximum power spectral density 12
Test Result 12
Test Graphs 13
Appendix E: Band edge measurements 15
Test Result 15
Test Graphs 16
Appendix F: Conducted Spurious Emission 17
Test Result 17
Test Graphs 18
Appendix G: Duty Cycle 23
Test Result 23
Test Graphs 24

Appendix A: DTS Bandwidth

Test Result

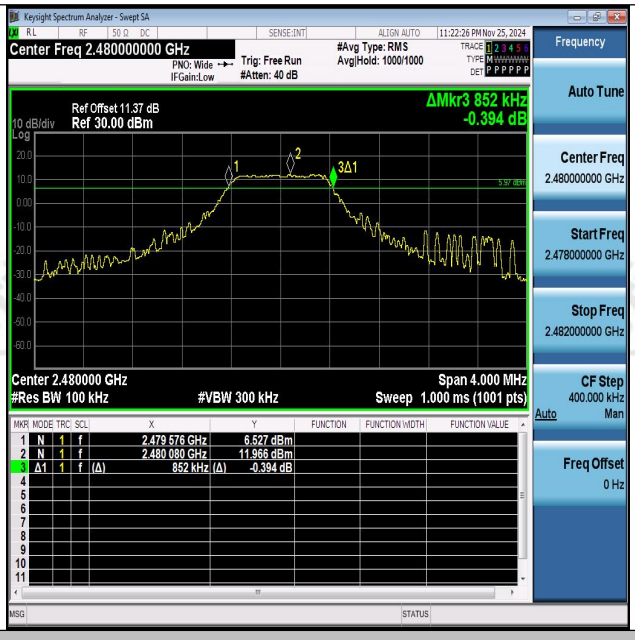
TestMode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
FLRC	Ant1	2402	0.856	2401.564	2402.420	0.5	PASS
FLRC	Ant1	2441	0.852	2440.568	2441.420	0.5	PASS
FLRC	Ant1	2480	0.852	2479.576	2480.428	0.5	PASS

Test Graphs



BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2441-PASS



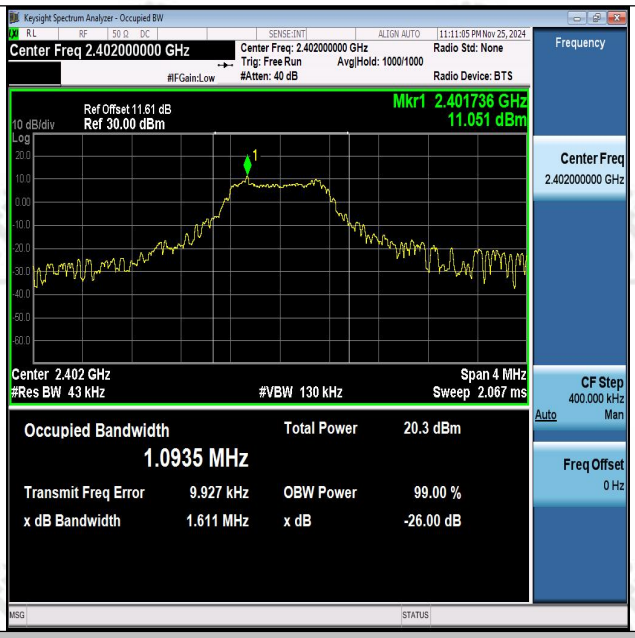
BLE_1M-Ant1-2480-PASS

Appendix B: Occupied Channel Bandwidth

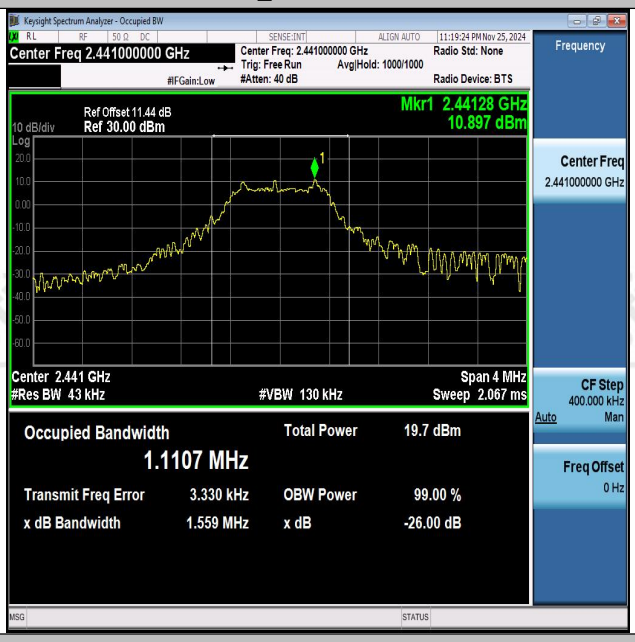
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
FLRC	Ant1	2402	1.0935	2401.4632	2402.5567	---	---
FLRC	Ant1	2441	1.1107	2440.4480	2441.5587	---	---
FLRC	Ant1	2480	1.1292	2479.4421	2480.5713	---	---

Test Graphs



BLE_1M-Ant1-2402



BLE_1M-Ant1-2441

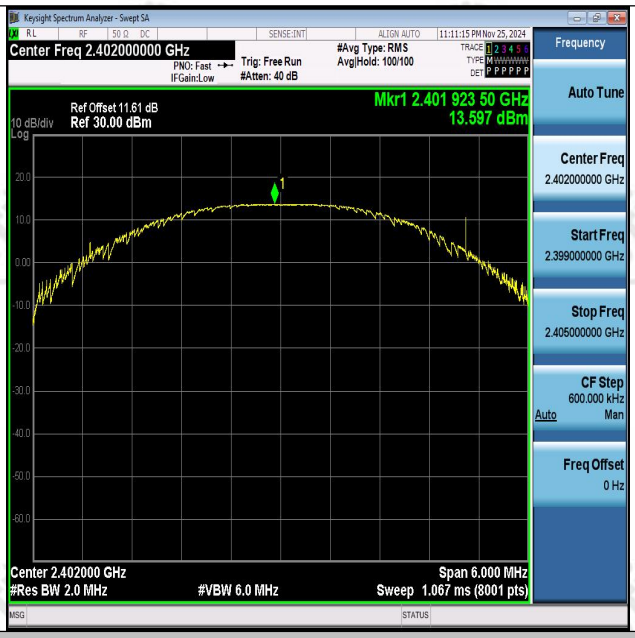
BLE_1M-Ant1-2480

Appendix C: Maximum conducted output power

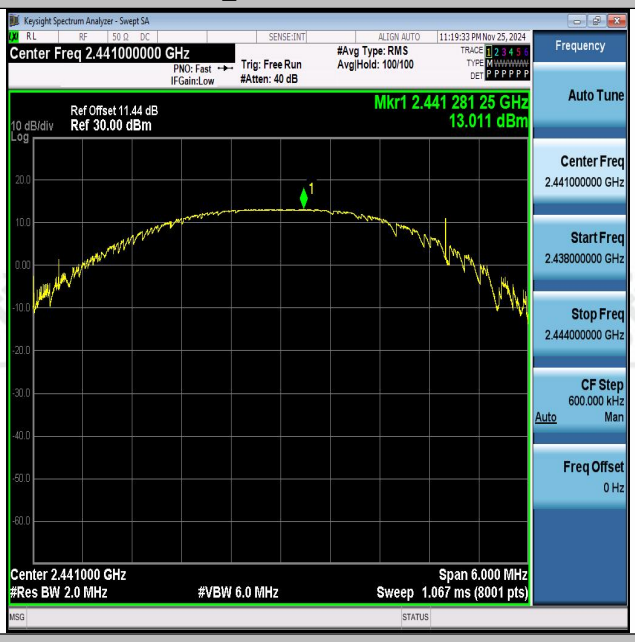
Test Result Peak

TestMode	Antenna	Frequency [MHz]	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
FLRC	Ant1	2402	**13.60**	≤30	PASS
FLRC	Ant1	2441	13.01	≤30	PASS
FLRC	Ant1	2480	12.79	≤30	PASS

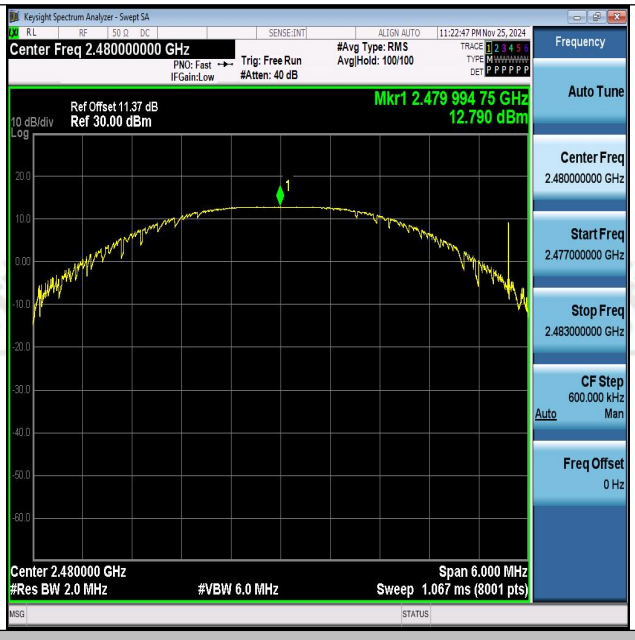
Test Graphs Peak



BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2441-PASS



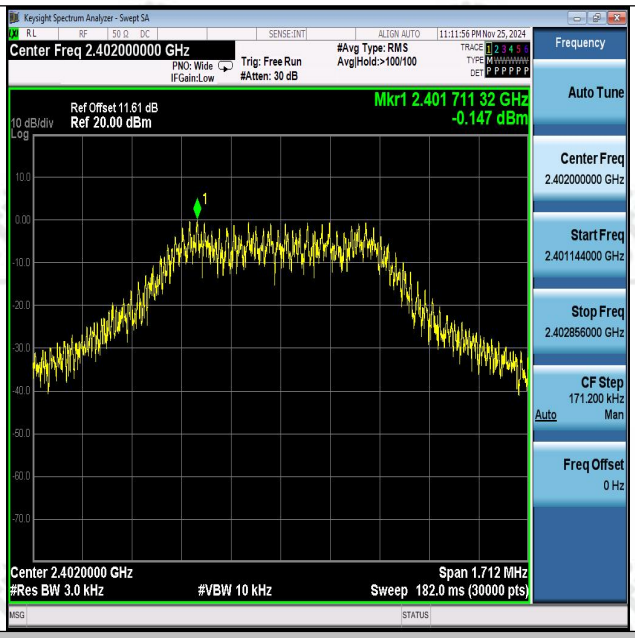
BLE_1M-Ant1-2480-PASS

Appendix D: Maximum power spectral density

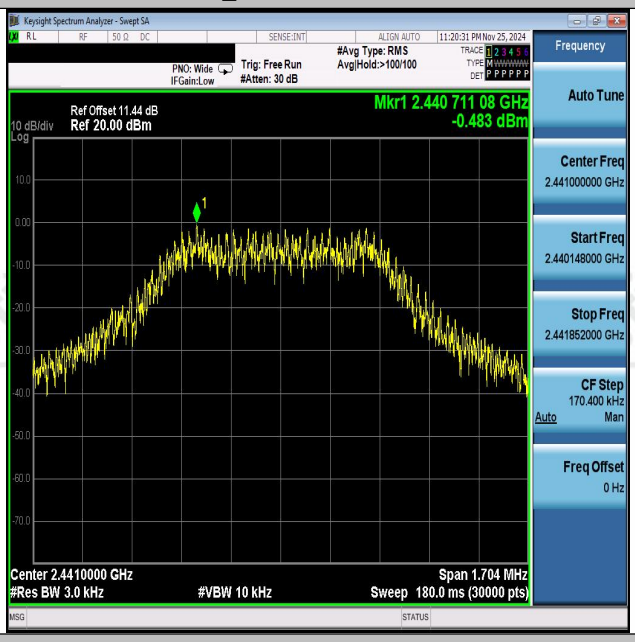
Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
FLRC	Ant1	2402	-0.15	≤8.00	PASS
FLRC	Ant1	2441	-0.48	≤8.00	PASS
FLRC	Ant1	2480	-1.18	≤8.00	PASS

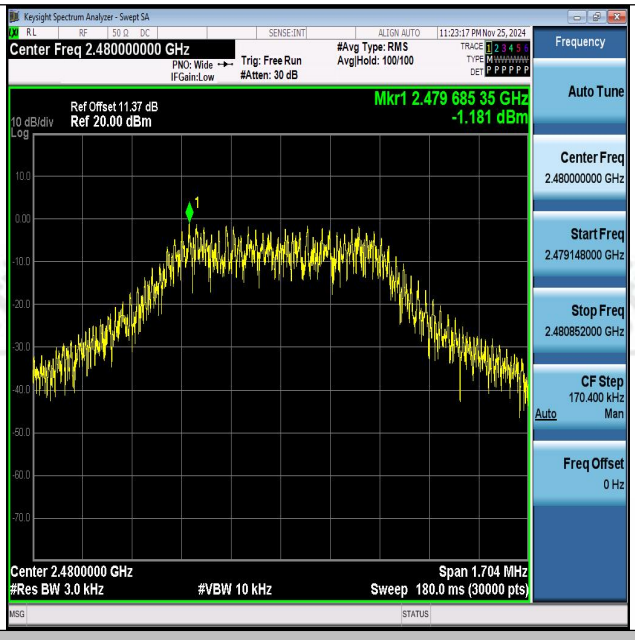
Test Graphs



BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2441-PASS



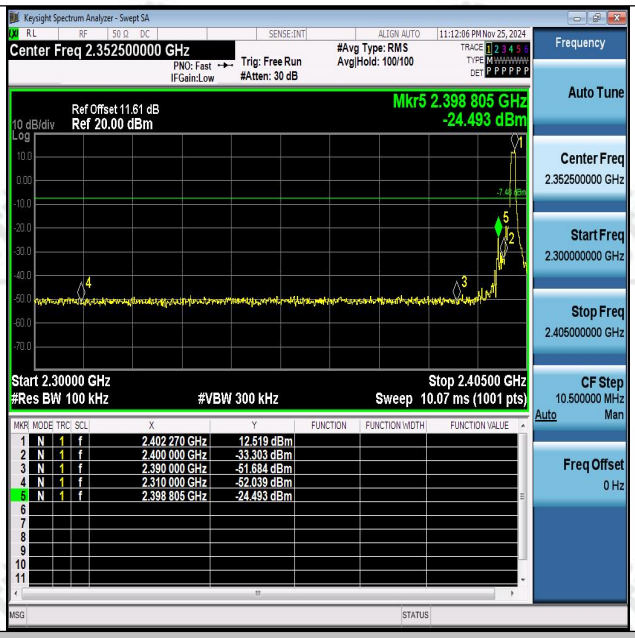
BLE_1M-Ant1-2480-PASS

Appendix E: Band edge measurements

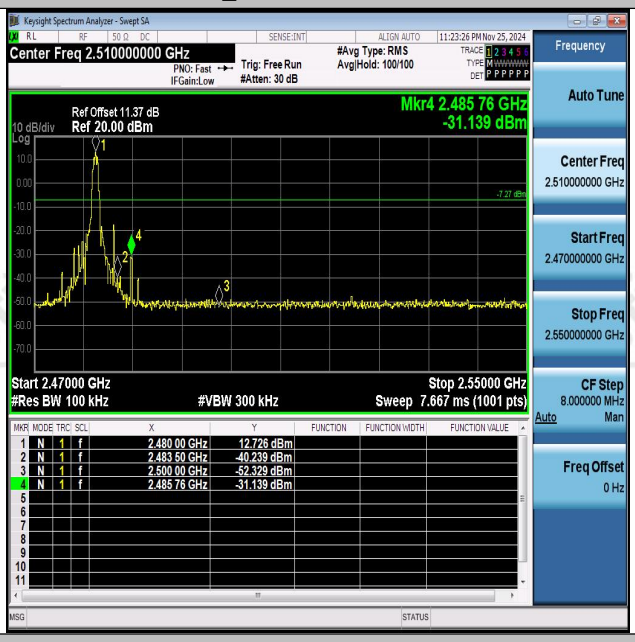
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
FLRC	Ant1	Low	2402	12.52	-24.49	≤-7.48	PASS
FLRC	Ant1	High	2480	12.73	-31.14	≤-7.27	PASS

Test Graphs



BLE_1M-Ant1-2402-PASS



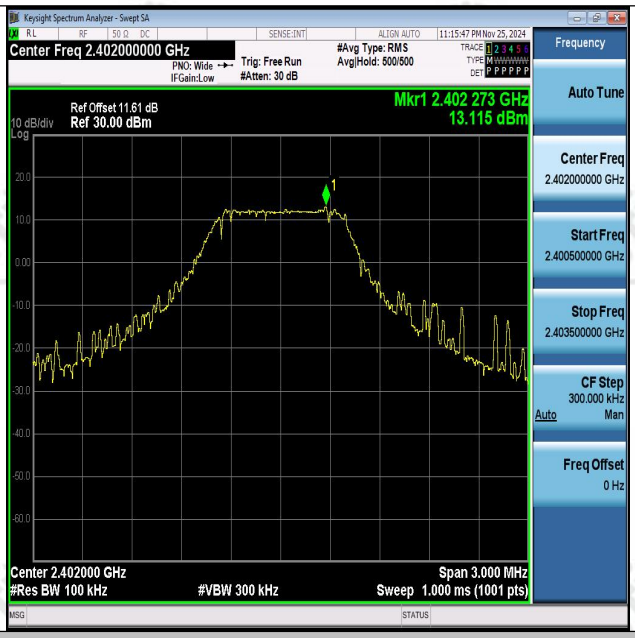
BLE_1M-Ant1-2480-PASS

Appendix F: Conducted Spurious Emission

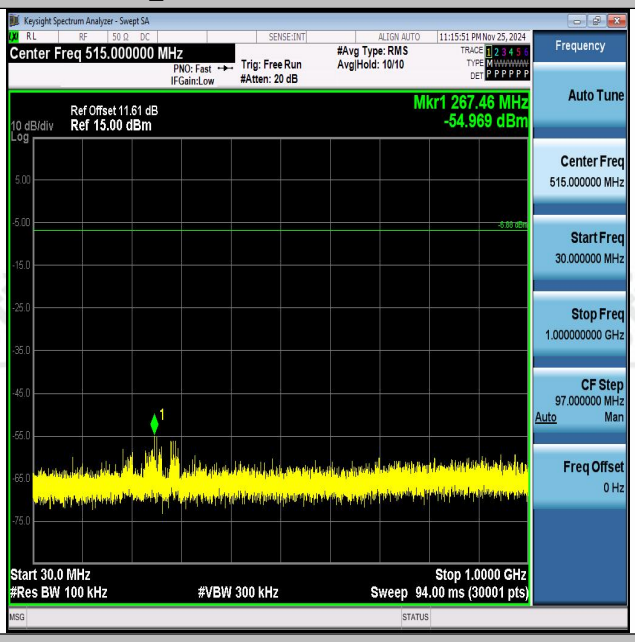
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
FLRC	Ant1	2402	0~Reference	13.12	13.12	---	PASS
FLRC	Ant1	2402	30~1000	13.12	-54.97	≤-6.88	PASS
FLRC	Ant1	2402	1000~26500	13.12	-35.66	≤-6.88	PASS
FLRC	Ant1	2441	0~Reference	12.26	12.26	---	PASS
FLRC	Ant1	2441	30~1000	12.26	-56.56	≤-7.74	PASS
FLRC	Ant1	2441	1000~26500	12.26	-36.44	≤-7.74	PASS
FLRC	Ant1	2480	0~Reference	12.36	12.36	---	PASS
FLRC	Ant1	2480	30~1000	12.36	-54.4	≤-7.64	PASS
FLRC	Ant1	2480	1000~26500	12.36	-37.83	≤-7.64	PASS

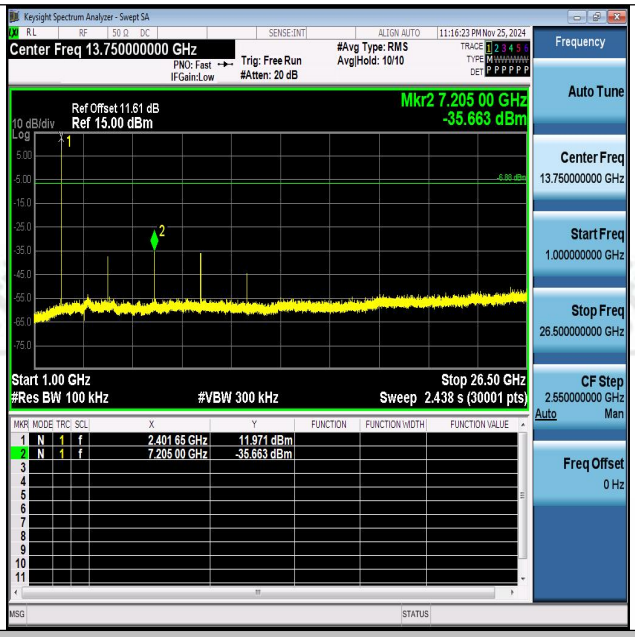
Test Graphs



BLE_1M-Ant1-2402-0~Reference-PASS

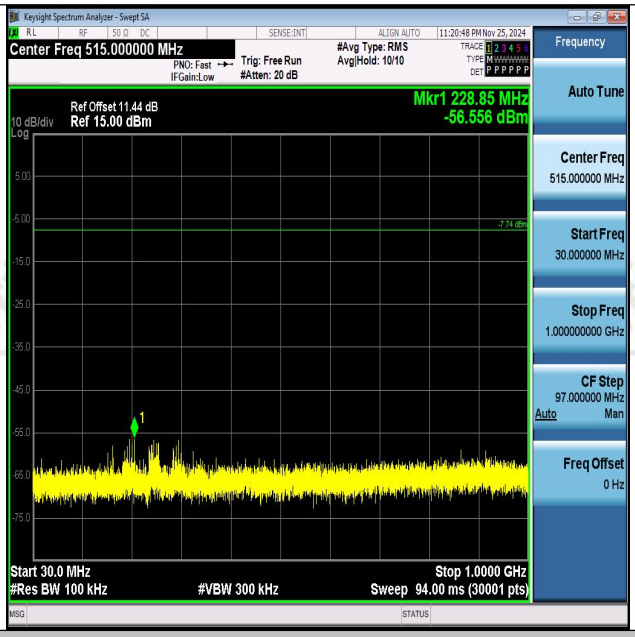


BLE_1M-Ant1-2402-30~1000-PASS

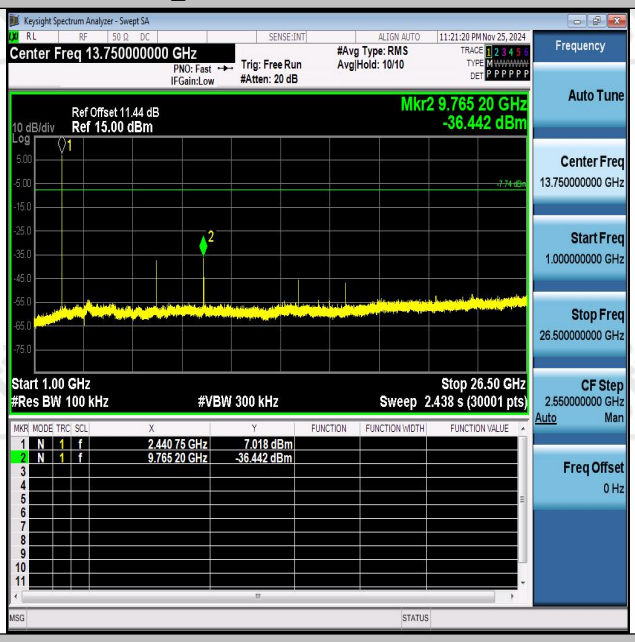


BLE_1M-Ant1-2402-1000~26500-PASS

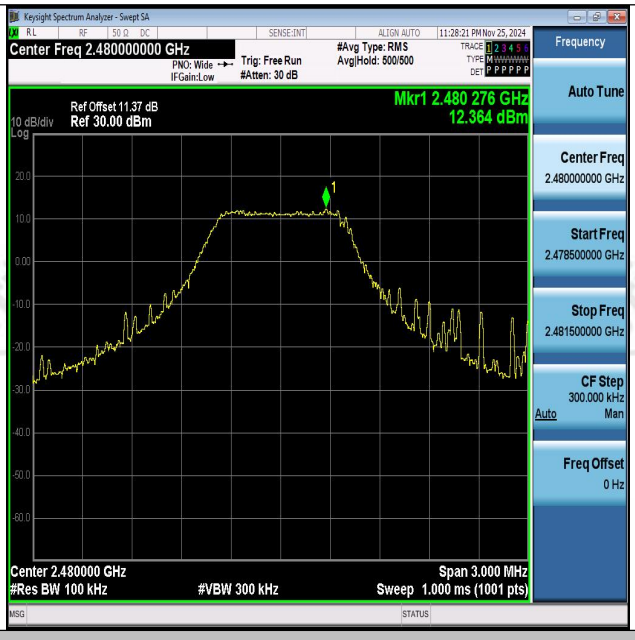
BLE_1M-Ant1-2441-0~Reference-PASS



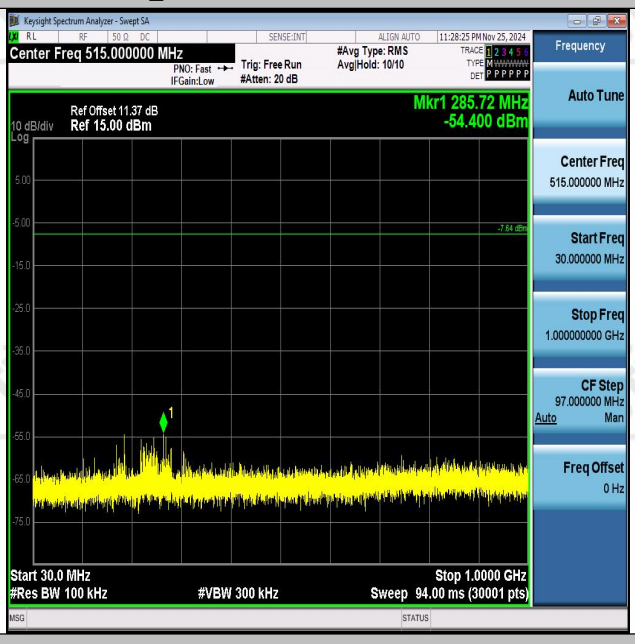
BLE_1M-Ant1-2441-30~1000-PASS



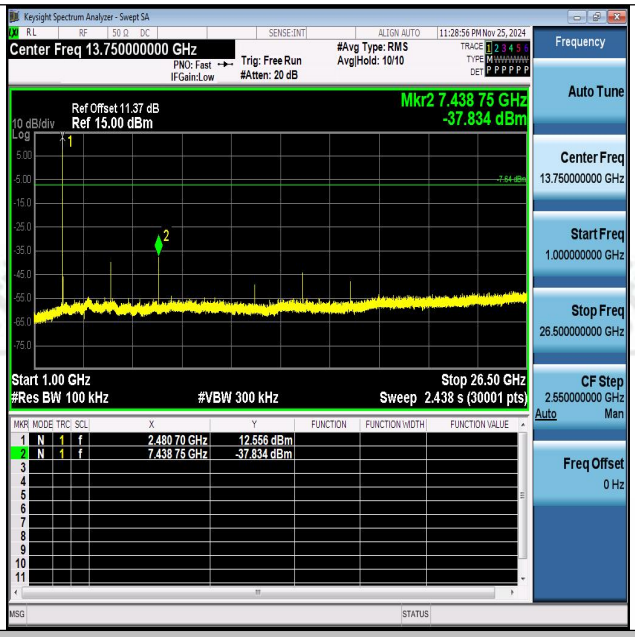
BLE_1M-Ant1-2441-1000~26500-PASS



BLE_1M-Ant1-2480-0~Reference-PASS



BLE_1M-Ant1-2480-30~1000-PASS



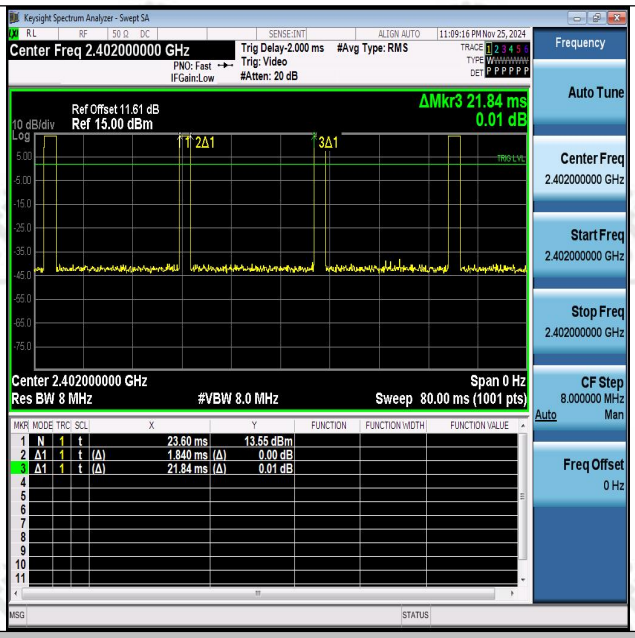
BLE_1M-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

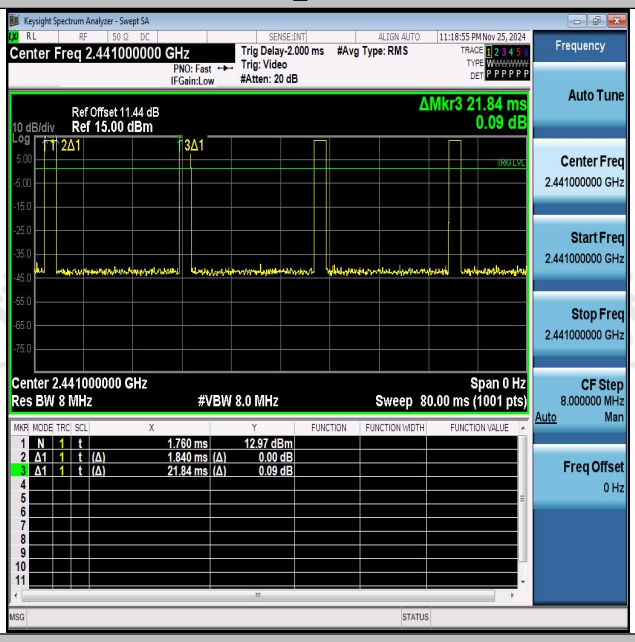
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
FLRC	Ant1	2402	1.84	21.84	8.42	10.75
FLRC	Ant1	2441	1.84	21.84	8.42	10.75
FLRC	Ant1	2480	1.84	21.84	8.42	10.75

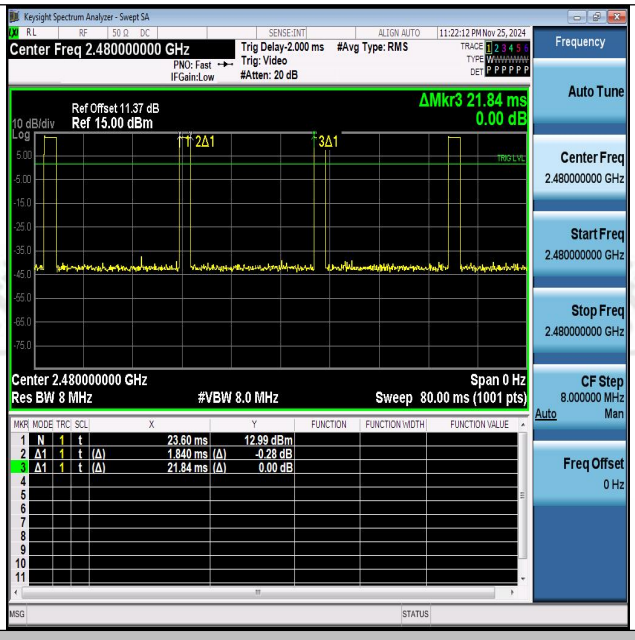
Test Graphs



NTNV-BLE_1M-Ant1-2402



NTNV-BLE_1M-Ant1-2441



NTNV-BLE_1M-Ant1-2480

END OF REPORT