Appendix Test Data

Report No.:	1815C40037012501	Test Sample No.:	1-2-2
Start Test Date:	2024.08.26	Finish Test Date:	2024.08.26
Test Engineer:	Joker Huang	Auditor:	Justin Feng
Temperature:	25.3℃	Relative Humidity:	48%
Pressure:	101kPa		

Appendix A: 6dB Bandwidth

Test Result

TestMode	Antenna	Frequency[MHz]	6dB BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.708	2401.668	2402.376	0.5	PASS
BLE_1M	Ant1	2440	0.712	2439.664	2440.376	0.5	PASS
BLE_1M	Ant1	2480	0.712	2479.668	2480.380	0.5	PASS
BLE_2M	Ant1	2402	1.144	2401.444	2402.588	0.5	PASS
BLE_2M	Ant1	2440	1.292	2439.376	2440.668	0.5	PASS
BLE_2M	Ant1	2480	1.268	2479.380	2480.648	0.5	PASS

Test Graphs

BLE_1M-Ant1-2402-PASS

BLE_1M-Ant1-2440-PASS

BLE_1M-Ant1-2480-PASS

BLE_2M-Ant1-2402-PASS

BLE_2M-Ant1-2440-PASS

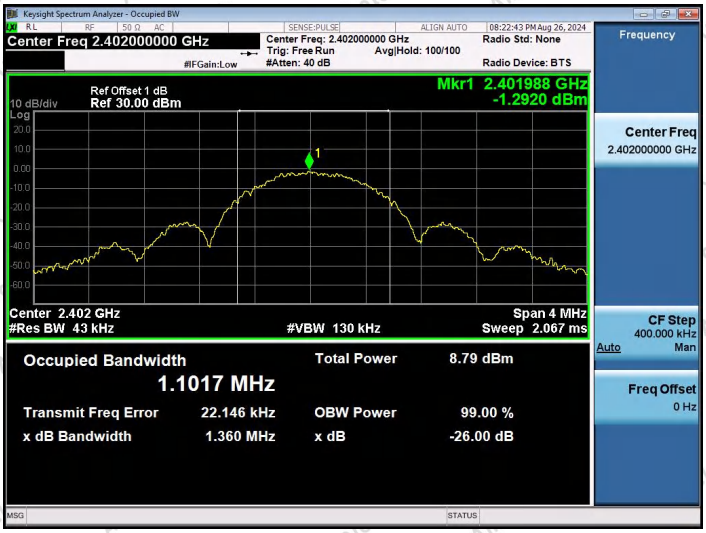
BLE_2M-Ant1-2480-PASS

Appendix B: 99% Occupied Bandwidth

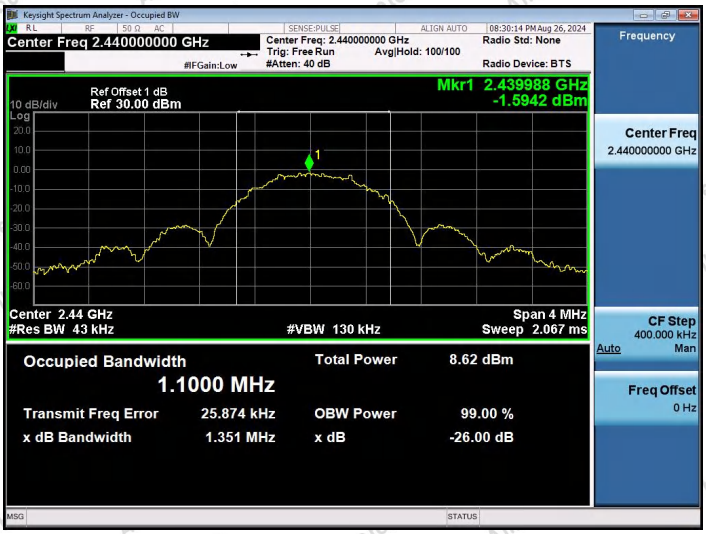
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.1017	2401.4713	2402.5730	---	---
BLE_1M	Ant1	2440	1.1000	2439.4759	2440.5759	---	---
BLE_1M	Ant1	2480	1.0991	2479.4776	2480.5767	---	---
BLE_2M	Ant1	2402	2.0924	2400.9775	2403.0699	---	---
BLE_2M	Ant1	2440	2.0717	2438.9879	2441.0596	---	---
BLE_2M	Ant1	2480	2.0708	2478.9792	2481.0500	---	---

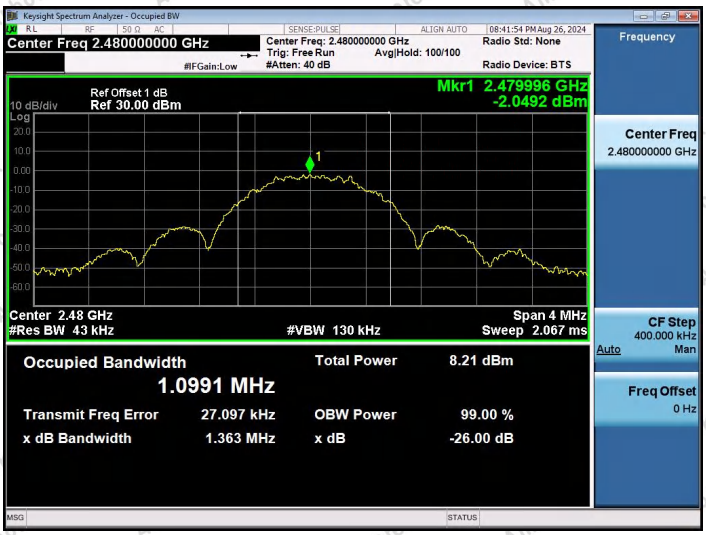
Test Graphs



BLE_1M-Ant1-2402



BLE_1M-Ant1-2440



BLE_1M-Ant1-2480

BLE_2M-Ant1-2402

BLE_2M-Ant1-2440

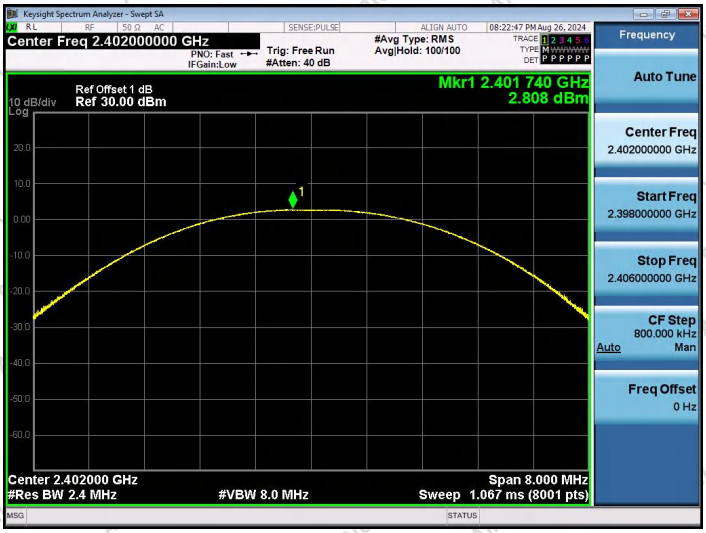
BLE_2M-Ant1-2480

Appendix C: Maximum conducted output power

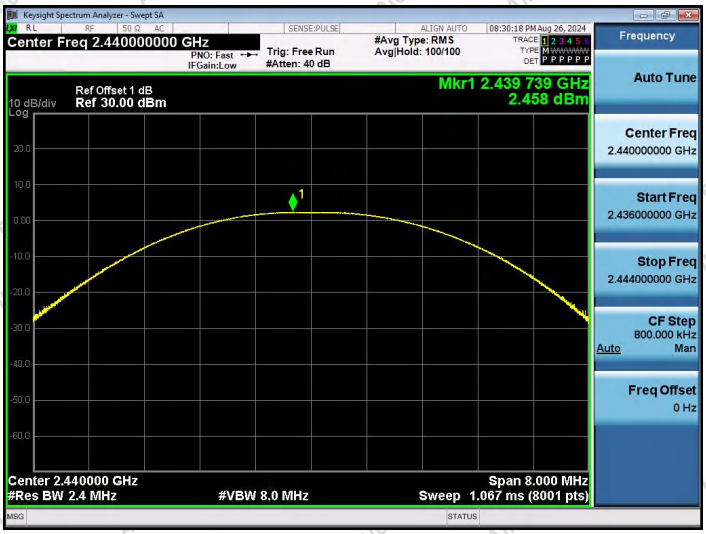
Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	2.81	≤30	PASS
BLE_1M	Ant1	2440	2.46	≤30	PASS
BLE_1M	Ant1	2480	1.90	≤30	PASS
BLE_2M	Ant1	2402	**3.06**	≤30	PASS
BLE_2M	Ant1	2440	2.84	≤30	PASS
BLE_2M	Ant1	2480	1.99	≤30	PASS

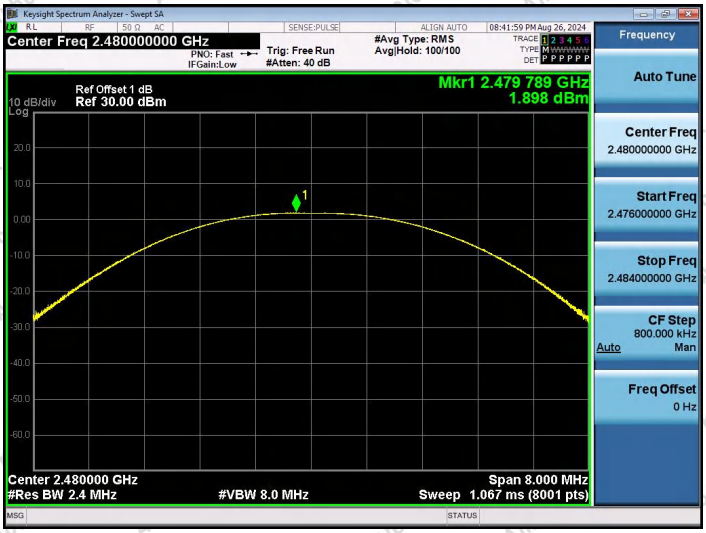
Test Graphs Peak



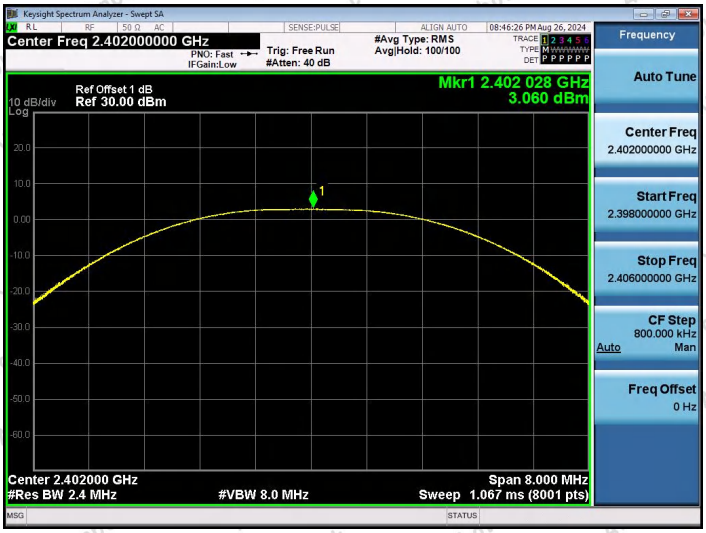
BLE_1M-Ant1-2402-PASS



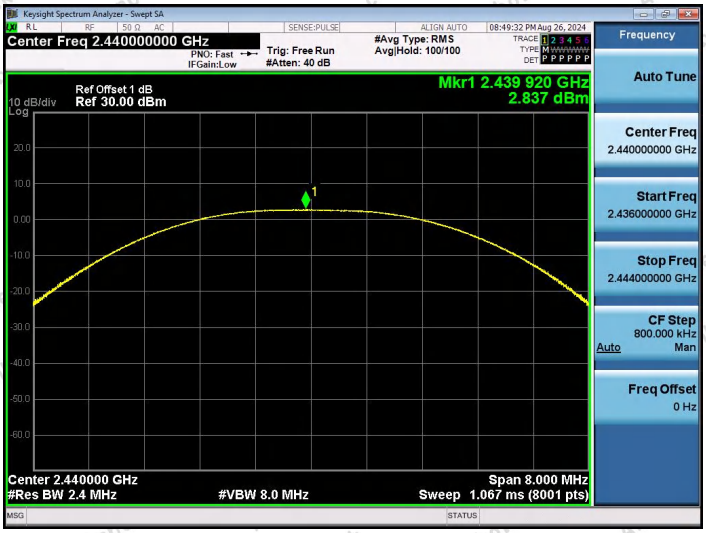
BLE_1M-Ant1-2440-PASS



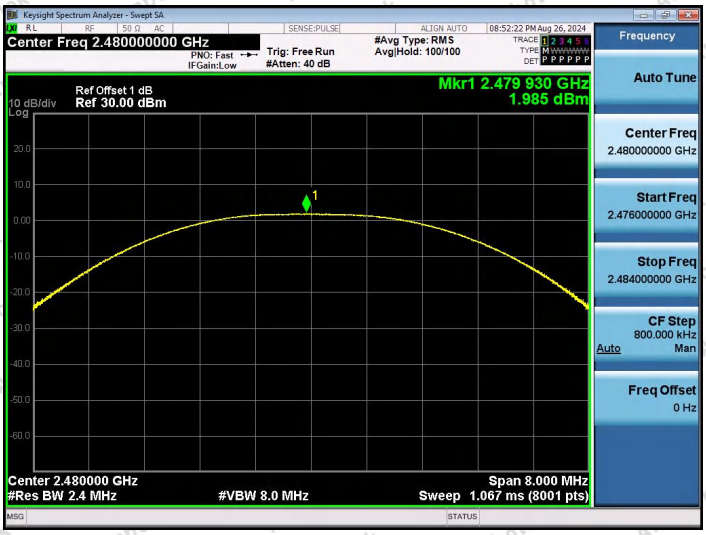
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



BLE_2M-Ant1-2480-PASS

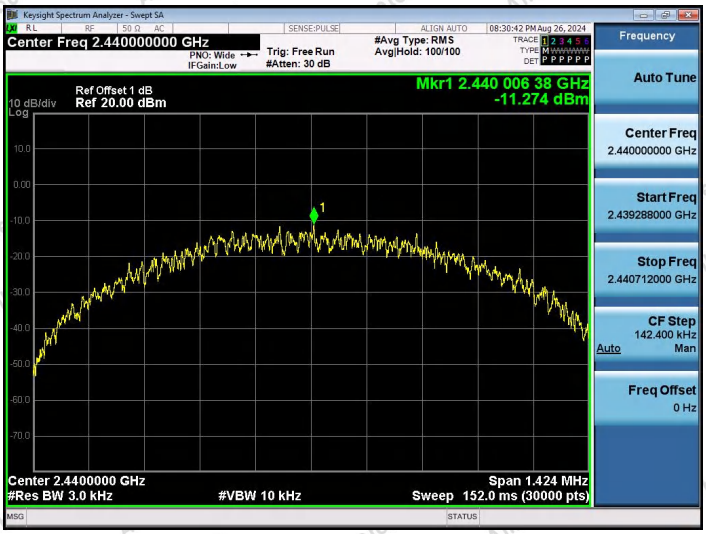
Appendix D: Maximum power spectral density

Test Result

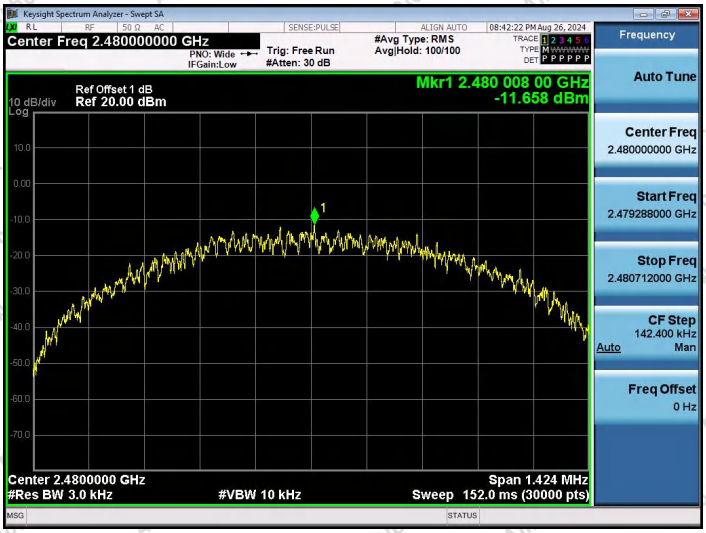
TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.08	≤8.00	PASS
BLE_1M	Ant1	2440	-11.27	≤8.00	PASS
BLE_1M	Ant1	2480	-11.66	≤8.00	PASS
BLE_2M	Ant1	2402	-12.79	≤8.00	PASS
BLE_2M	Ant1	2440	-13.07	≤8.00	PASS
BLE_2M	Ant1	2480	-13.90	≤8.00	PASS

Test Graphs

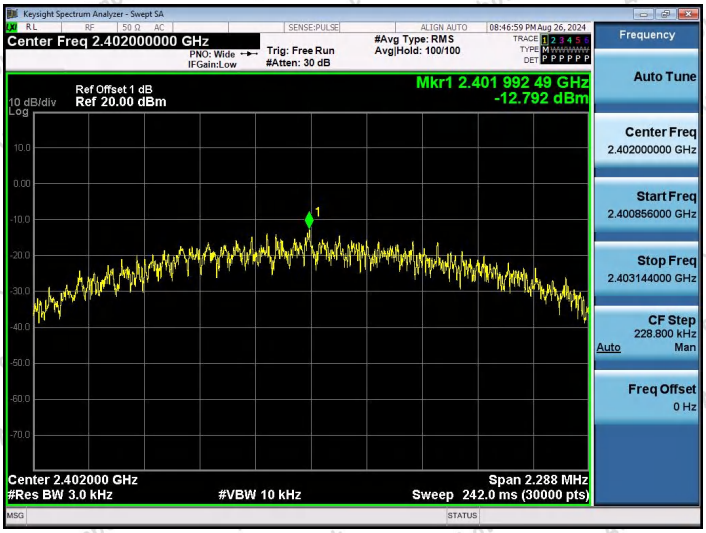
BLE_1M-Ant1-2402-PASS



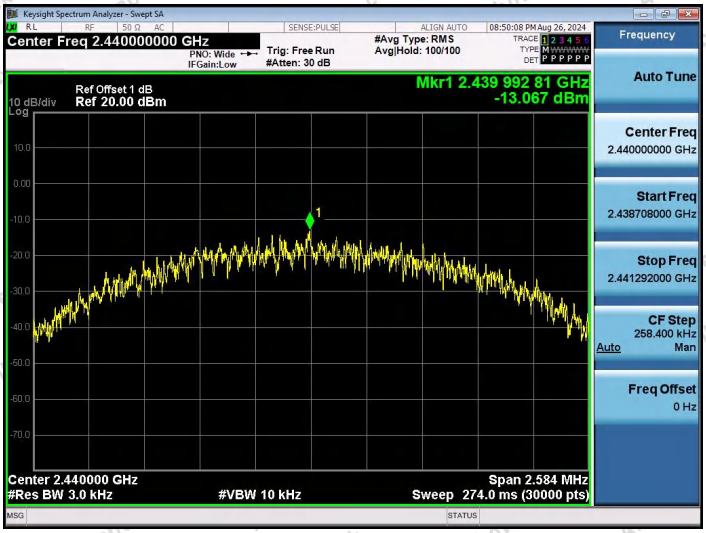
BLE_1M-Ant1-2440-PASS



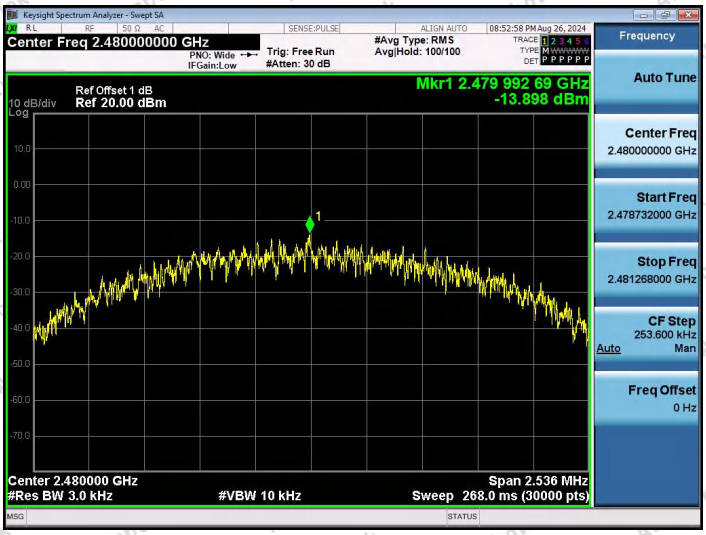
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



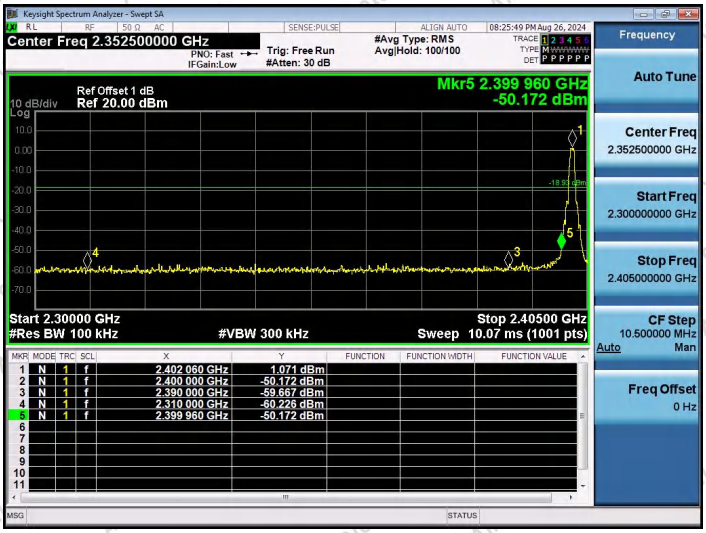
BLE_2M-Ant1-2480-PASS

Appendix E: Band edge measurements

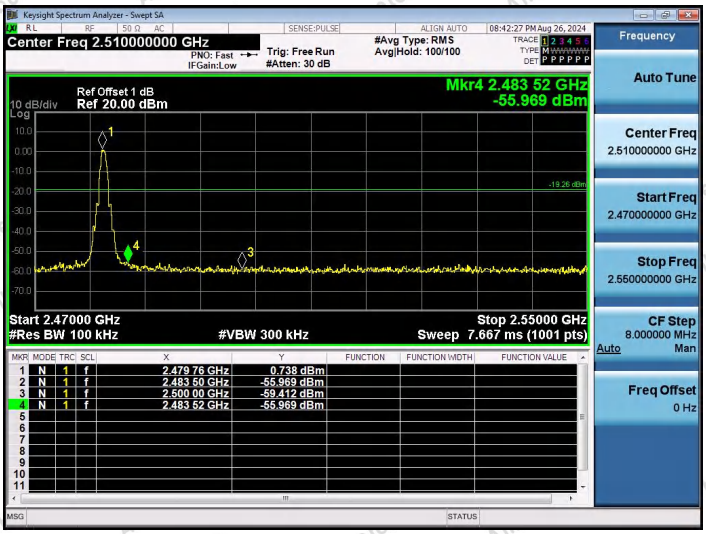
Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.07	-50.17	≤-18.93	PASS
BLE_1M	Ant1	High	2480	0.74	-55.97	≤-19.26	PASS
BLE_2M	Ant1	Low	2402	0.96	-48.68	≤-19.04	PASS
BLE_2M	Ant1	High	2480	-1.29	-55.29	≤-21.29	PASS

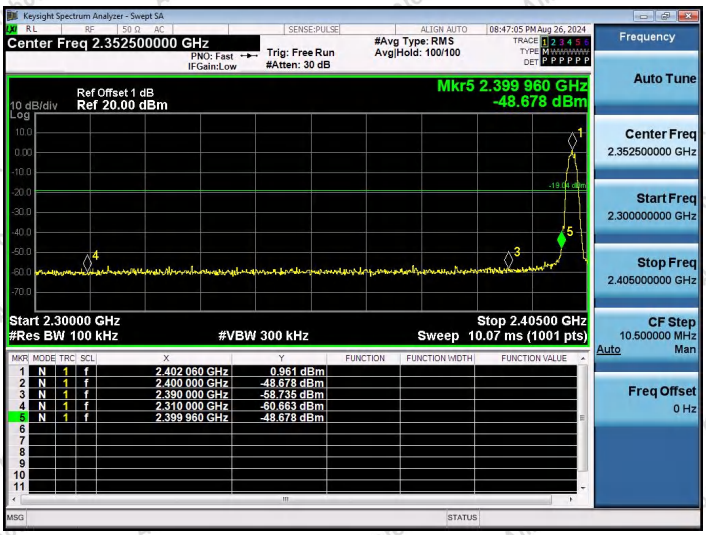
Test Graphs



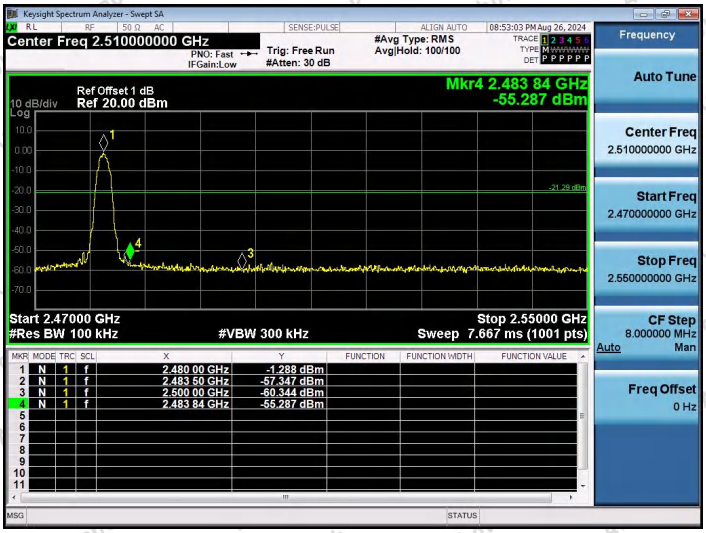
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS

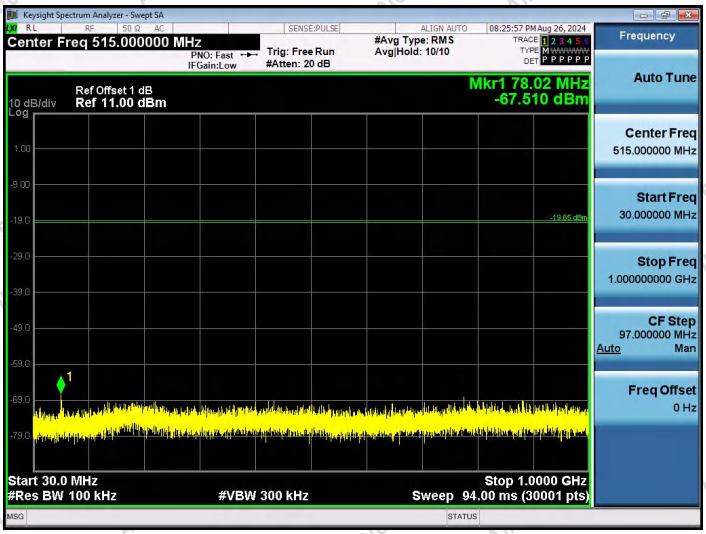
Appendix F: Conducted Spurious Emission

Test Result

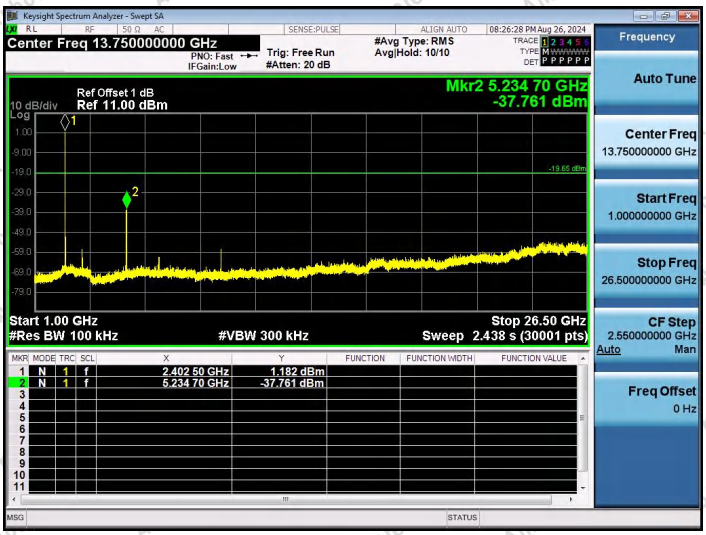
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	0.35	0.35	---	PASS
BLE_1M	Ant1	2402	30~1000	0.35	-67.51	≤-19.65	PASS
BLE_1M	Ant1	2402	1000~26500	0.35	-37.76	≤-19.65	PASS
BLE_1M	Ant1	2440	0~Reference	0.54	0.54	---	PASS
BLE_1M	Ant1	2440	30~1000	0.54	-67.57	≤-19.46	PASS
BLE_1M	Ant1	2440	1000~26500	0.54	-53.51	≤-19.46	PASS
BLE_1M	Ant1	2480	0~Reference	0.47	0.47	---	PASS
BLE_1M	Ant1	2480	30~1000	0.47	-68.46	≤-19.53	PASS
BLE_1M	Ant1	2480	1000~26500	0.47	-44.9	≤-19.53	PASS
BLE_2M	Ant1	2402	0~Reference	0.44	0.44	---	PASS
BLE_2M	Ant1	2402	30~1000	0.44	-68.37	≤-19.56	PASS
BLE_2M	Ant1	2402	1000~26500	0.44	-45.07	≤-19.56	PASS
BLE_2M	Ant1	2440	0~Reference	-1.10	-1.10	---	PASS
BLE_2M	Ant1	2440	30~1000	-1.10	-68.34	≤-21.1	PASS
BLE_2M	Ant1	2440	1000~26500	-1.10	-47.64	≤-21.1	PASS
BLE_2M	Ant1	2480	0~Reference	-2.13	-2.13	---	PASS
BLE_2M	Ant1	2480	30~1000	-2.13	-66.21	≤-22.13	PASS
BLE_2M	Ant1	2480	1000~26500	-2.13	-48.7	≤-22.13	PASS

Test Graphs

BLE_1M-Ant1-2402-0~Reference-PASS

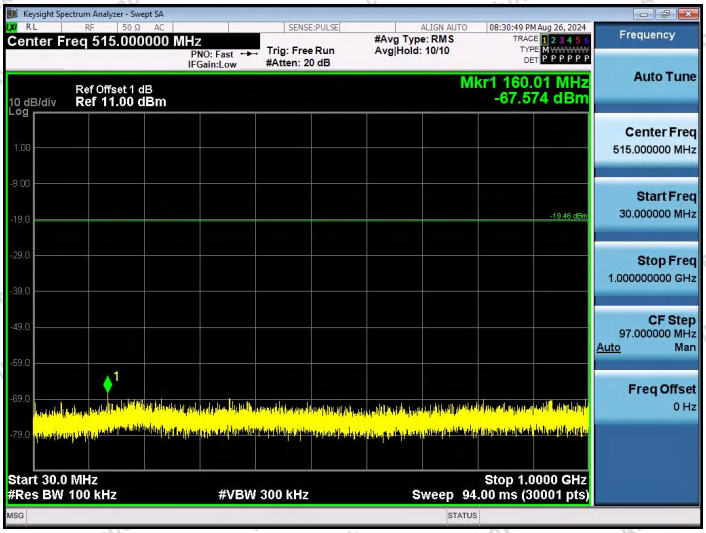


BLE_1M-Ant1-2402-30~1000-PASS

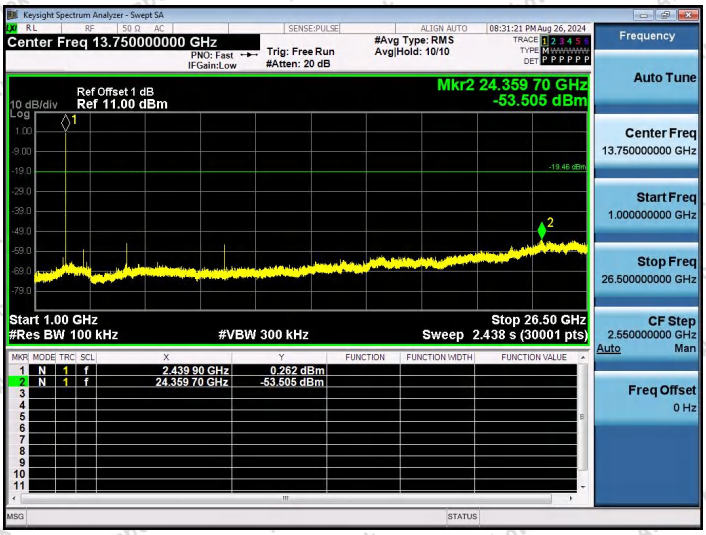


BLE_1M-Ant1-2402-1000~26500-PASS

BLE_1M-Ant1-2440-0~Reference-PASS

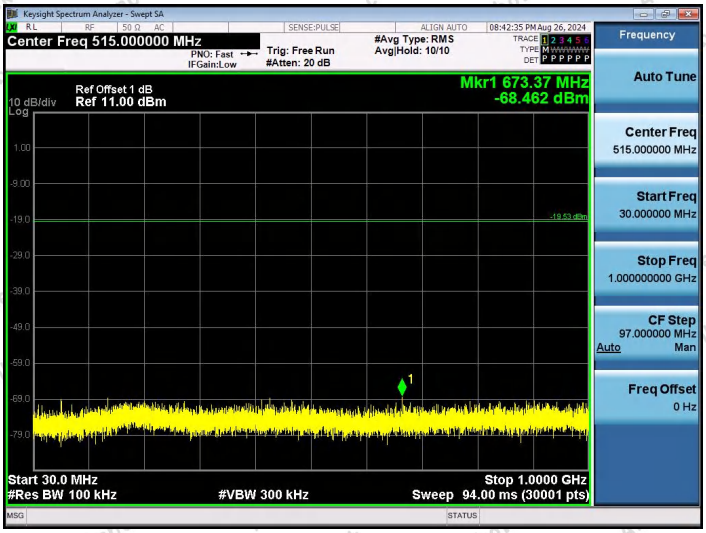


BLE_1M-Ant1-2440-30~1000-PASS

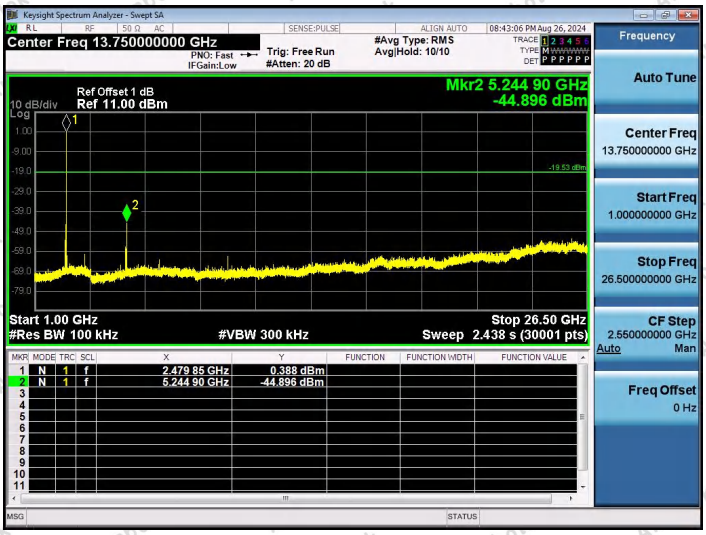


BLE_1M-Ant1-2440-1000~26500-PASS

BLE_1M-Ant1-2480-0~Reference-PASS

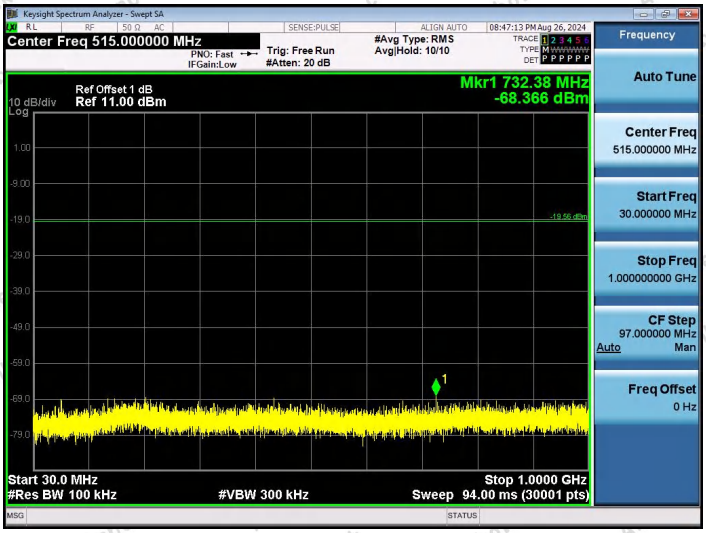


BLE_1M-Ant1-2480-30~1000-PASS

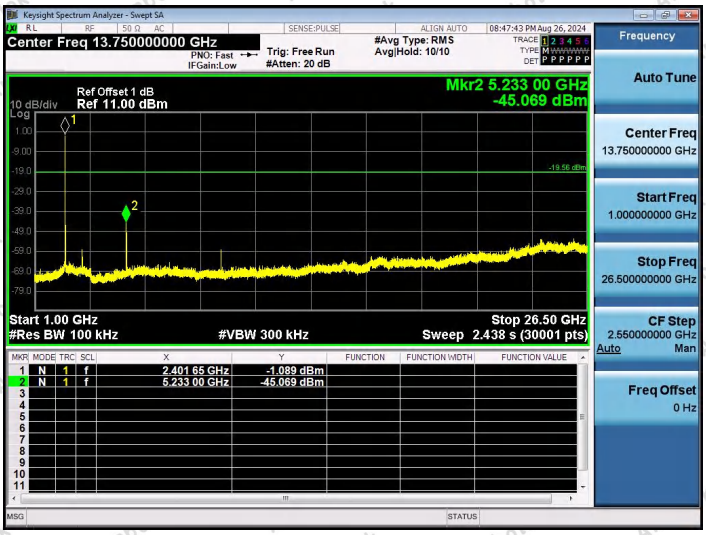


BLE_1M-Ant1-2480-1000~26500-PASS

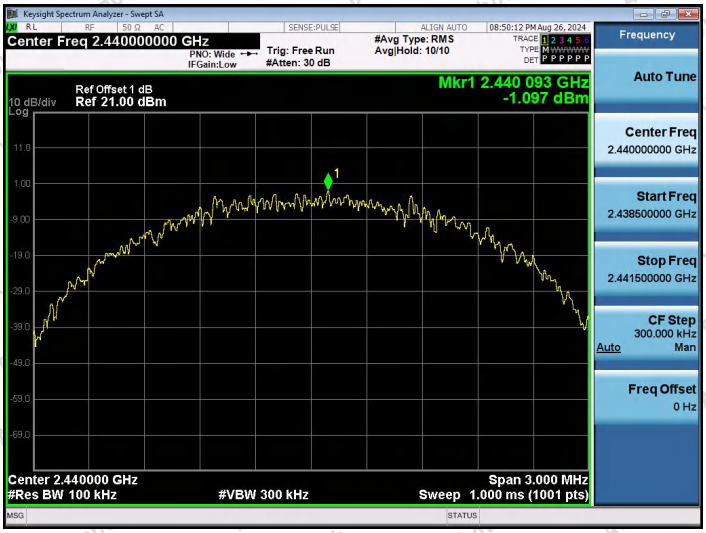
BLE_2M-Ant1-2402-0~Reference-PASS



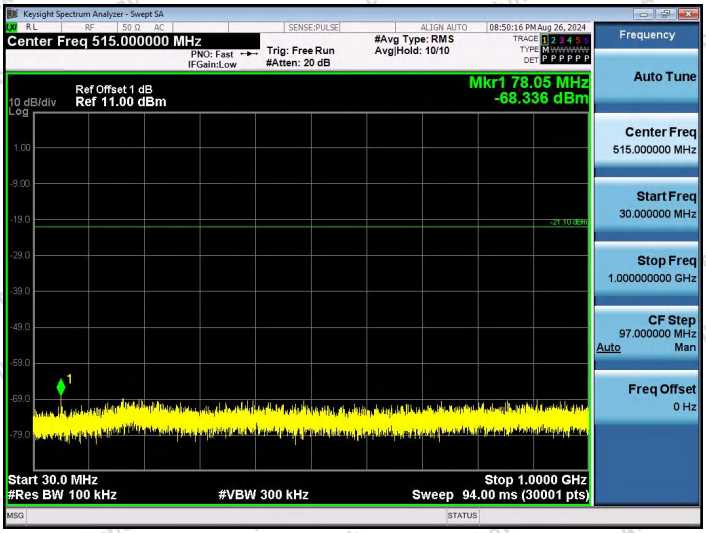
BLE_2M-Ant1-2402-30~1000-PASS



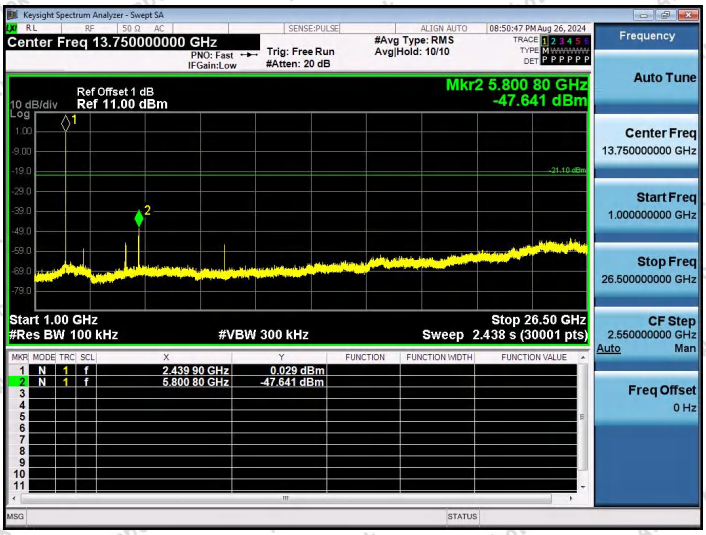
BLE_2M-Ant1-2402-1000~26500-PASS



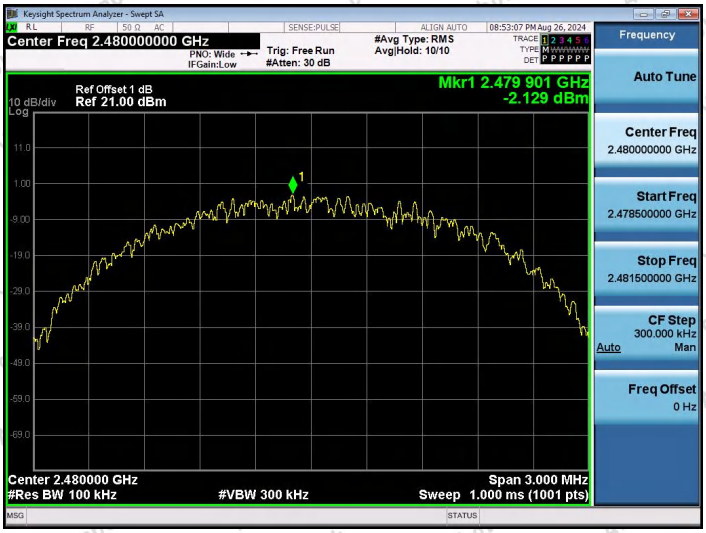
BLE_2M-Ant1-2440-0~Reference-PASS



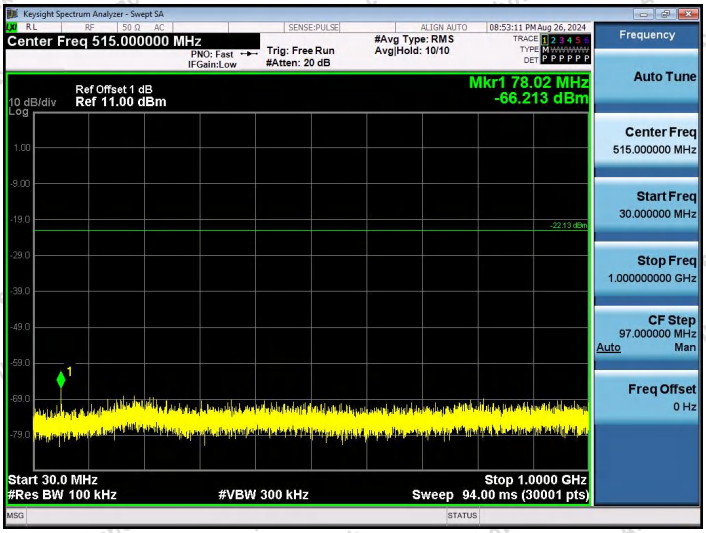
BLE_2M-Ant1-2440-30~1000-PASS



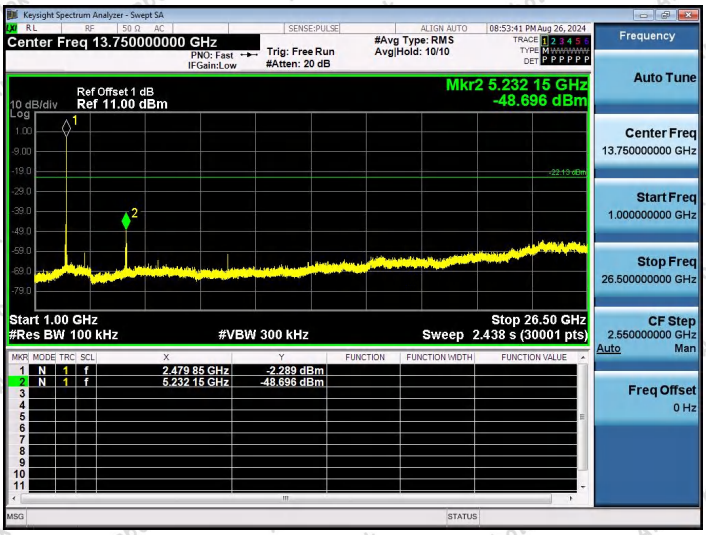
BLE_2M-Ant1-2440-1000~26500-PASS



BLE_2M-Ant1-2480-0~Reference-PASS



BLE_2M-Ant1-2480-30~1000-PASS



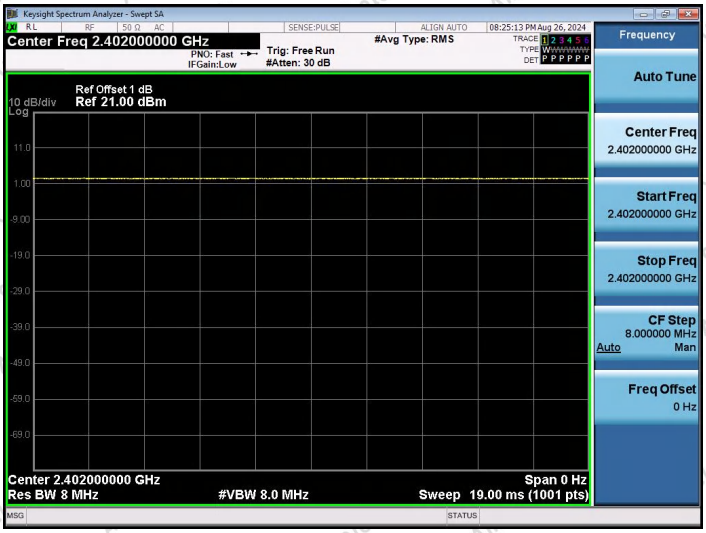
BLE_2M-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

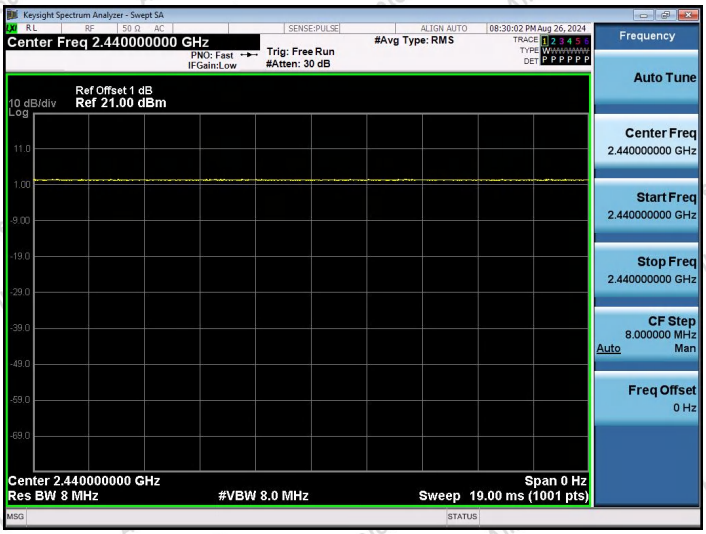
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2402	0.00	0.00	100.00	0.00
BLE_1M	Ant1	2440	0.00	0.00	100.00	0.00
BLE_1M	Ant1	2480	0.00	0.00	100.00	0.00
BLE_2M	Ant1	2402	11.00	11.00	100.00	0.00
BLE_2M	Ant1	2440	19.00	19.00	100.00	0.00
BLE_2M	Ant1	2480	19.00	19.00	100.00	0.00

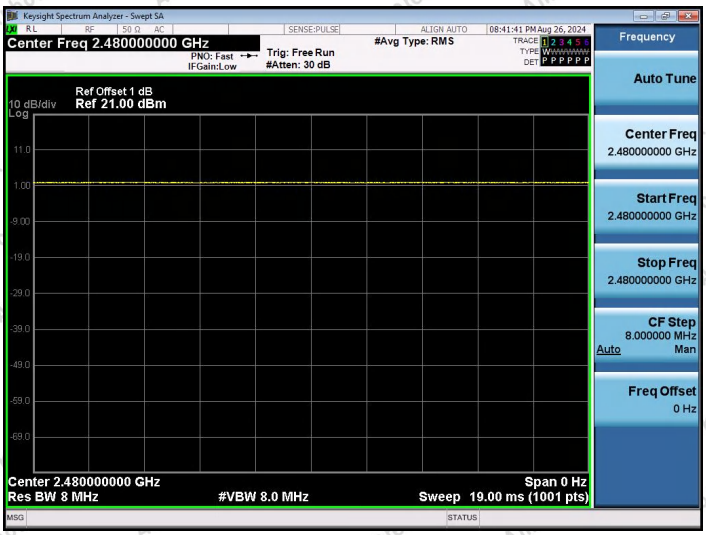
Test Graphs



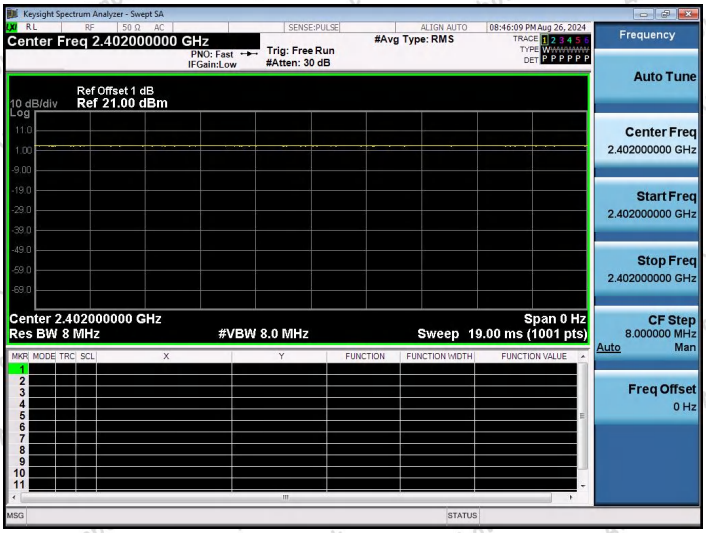
NTNV-BLE_1M-Ant1-2402



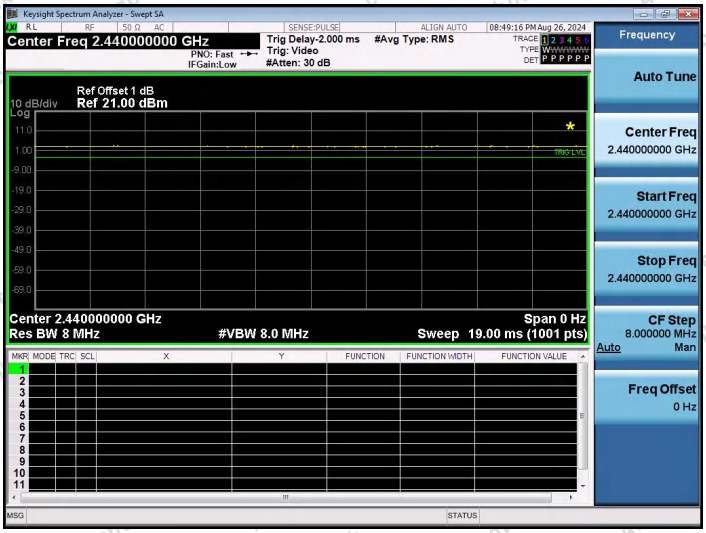
NTNV-BLE_1M-Ant1-2440



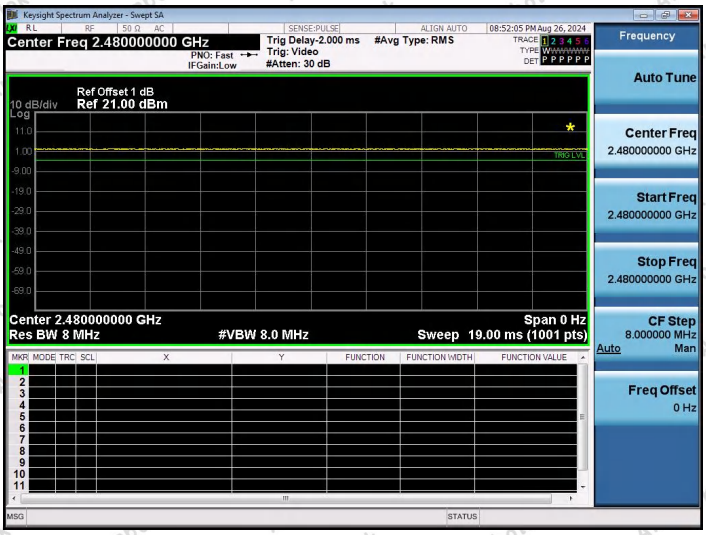
NTNV-BLE_1M-Ant1-2480



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440



NTNV-BLE_2M-Ant1-2480

---End---