Appendix Test Data

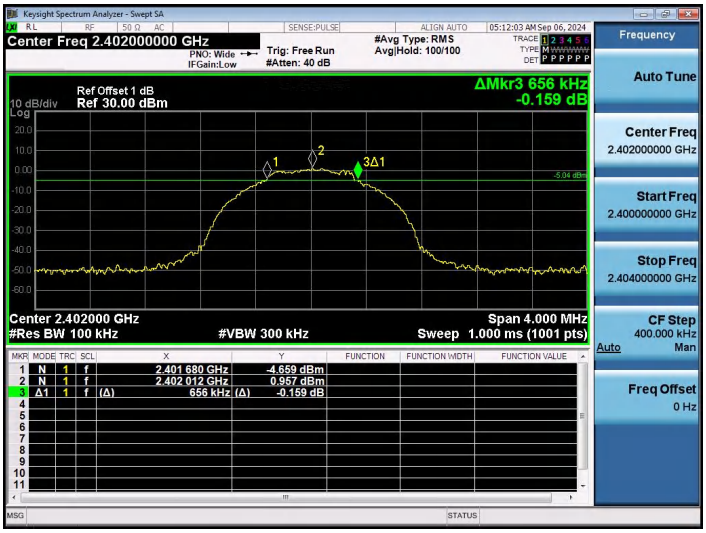
Report No.:	1812C40053112501	Test Sample No.:	1-2-2
Start Test Date:	2024.09.06	Finish Test Date:	2024.09.06
Test Engineer:	Joker Huang	Auditor:	Justin Feng
Temperature:	25.3℃	Relative Humidity:	48%
Pressure:	101kPa		

Appendix A: 6dB Bandwidth

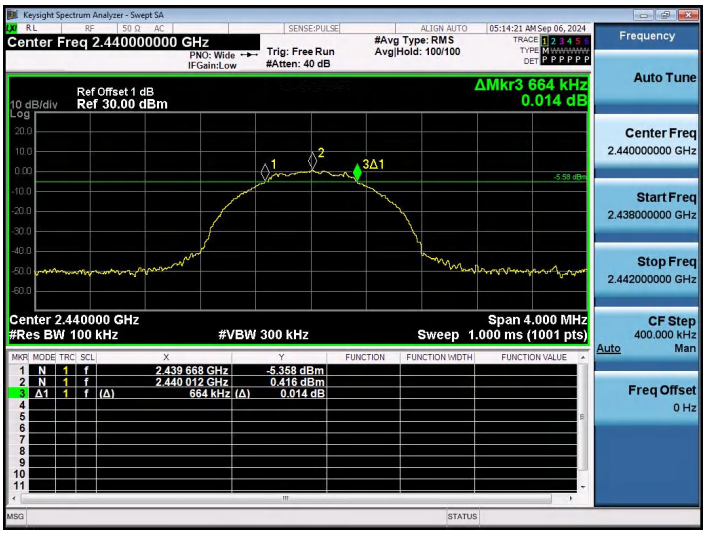
Test Result

TestMode	Antenna	Frequency[MHz]	6dB BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.680	2402.336	0.5	PASS
BLE_1M	Ant1	2440	0.664	2439.668	2440.332	0.5	PASS
BLE_1M	Ant1	2480	0.668	2479.668	2480.336	0.5	PASS
BLE_2M	Ant1	2402	1.348	2401.328	2402.676	0.5	PASS
BLE_2M	Ant1	2440	1.328	2439.332	2440.660	0.5	PASS
BLE_2M	Ant1	2480	1.336	2479.328	2480.664	0.5	PASS

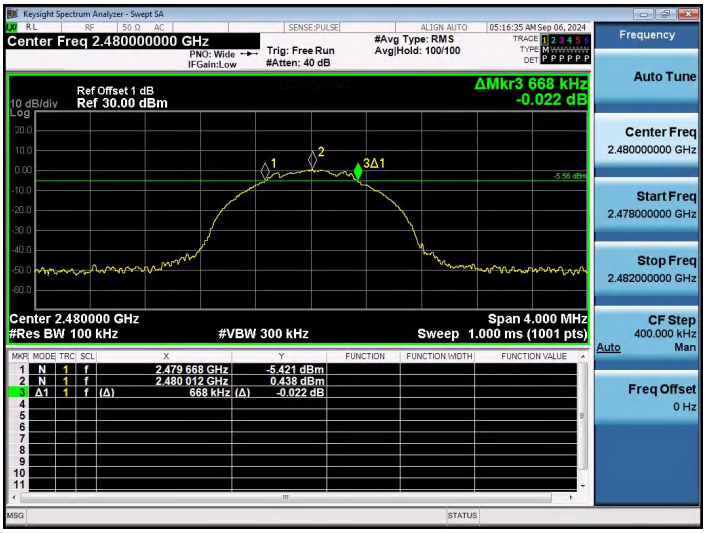
Test Graphs



BLE_1M-Ant1-2402-PASS



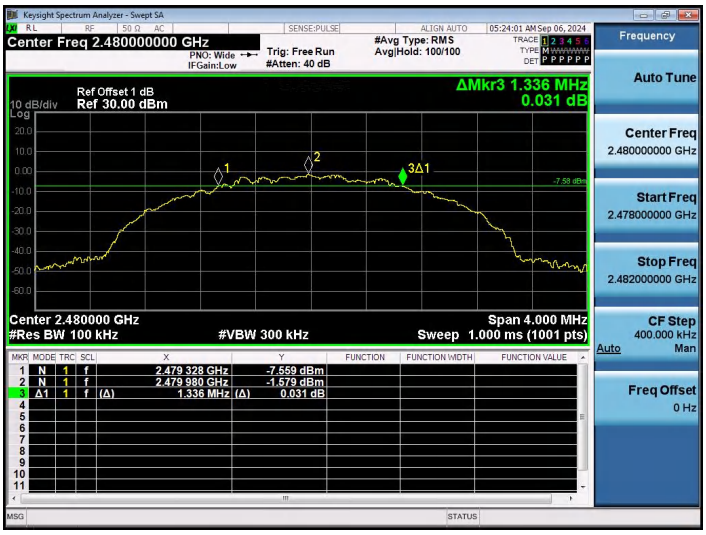
BLE_1M-Ant1-2440-PASS



BLE_1M-Ant1-2480-PASS

BLE_2M-Ant1-2402-PASS

BLE_2M-Ant1-2440-PASS



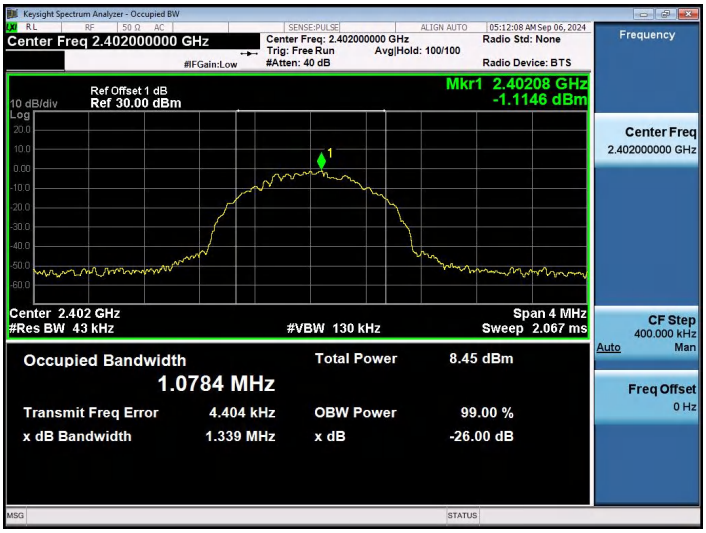
BLE_2M-Ant1-2480-PASS

Appendix B: 99% Occupied Bandwidth

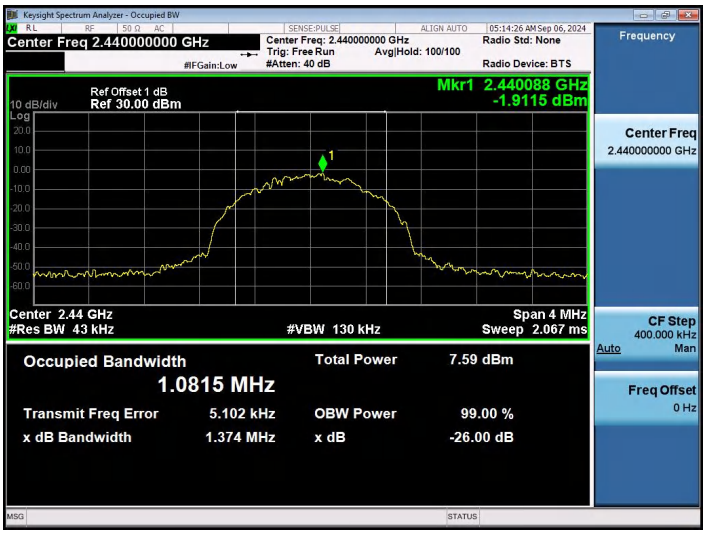
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0784	2401.4652	2402.5436	---	---
BLE_1M	Ant1	2440	1.0815	2439.4644	2440.5459	---	---
BLE_1M	Ant1	2480	1.0763	2479.4680	2480.5443	---	---
BLE_2M	Ant1	2402	2.1366	2400.9453	2403.0819	---	---
BLE_2M	Ant1	2440	2.1366	2438.9454	2441.0820	---	---
BLE_2M	Ant1	2480	2.1420	2478.9435	2481.0855	---	---

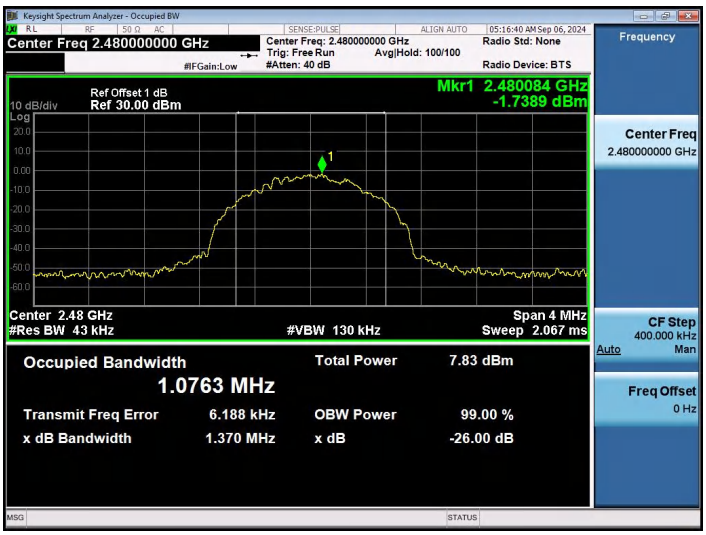
Test Graphs



BLE_1M-Ant1-2402

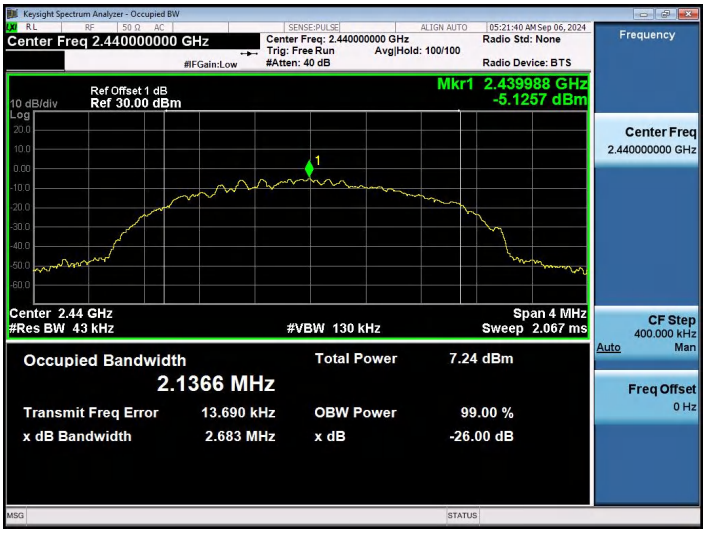


BLE_1M-Ant1-2440



BLE_1M-Ant1-2480

BLE_2M-Ant1-2402



BLE_2M-Ant1-2440

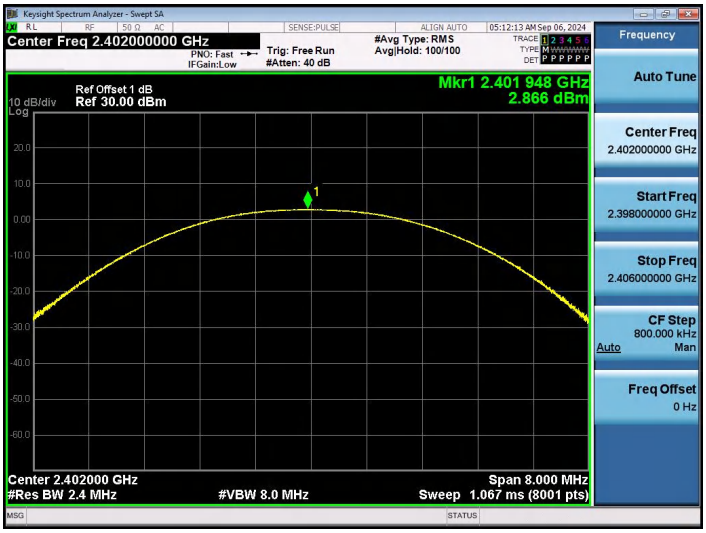
BLE_2M-Ant1-2480

Appendix C: Maximum conducted output power

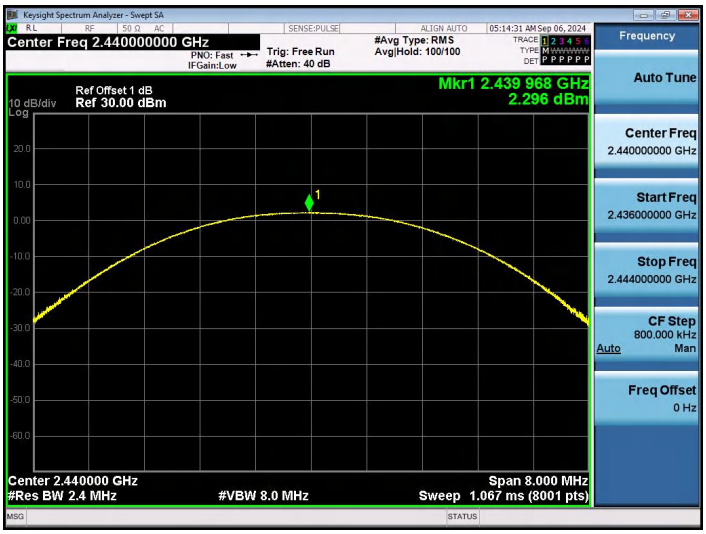
Test Result Peak

TestMode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	**2.87**	≤30	PASS
BLE_1M	Ant1	2440	2.30	≤30	PASS
BLE_1M	Ant1	2480	2.35	≤30	PASS
BLE_2M	Ant1	2402	2.57	≤30	PASS
BLE_2M	Ant1	2440	1.92	≤30	PASS
BLE_2M	Ant1	2480	1.99	≤30	PASS

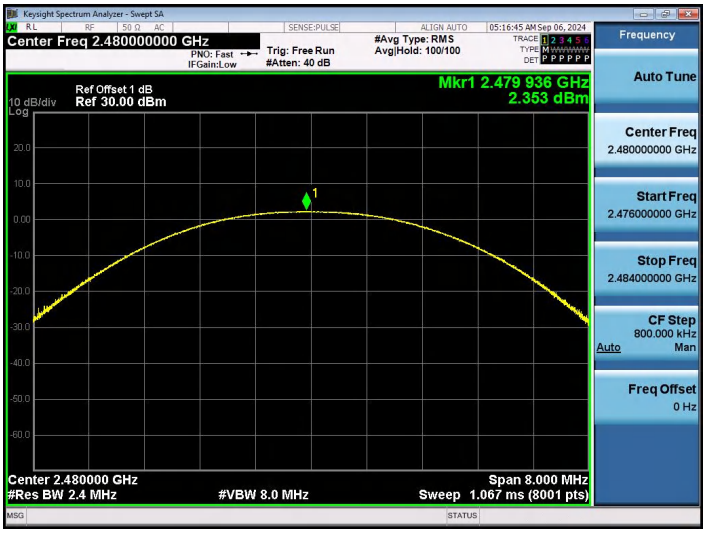
Test Graphs Peak



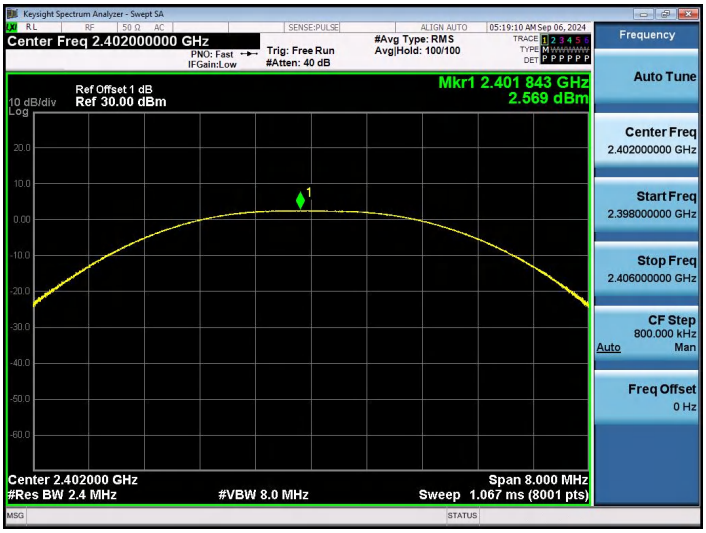
BLE_1M-Ant1-2402-PASS



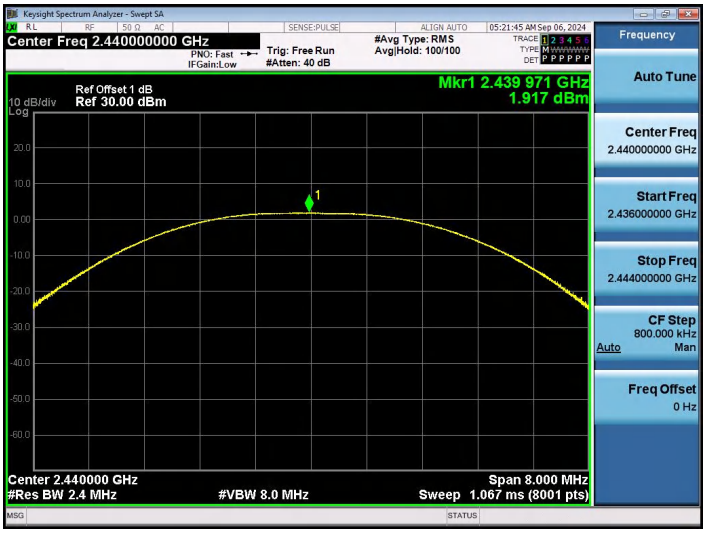
BLE_1M-Ant1-2440-PASS



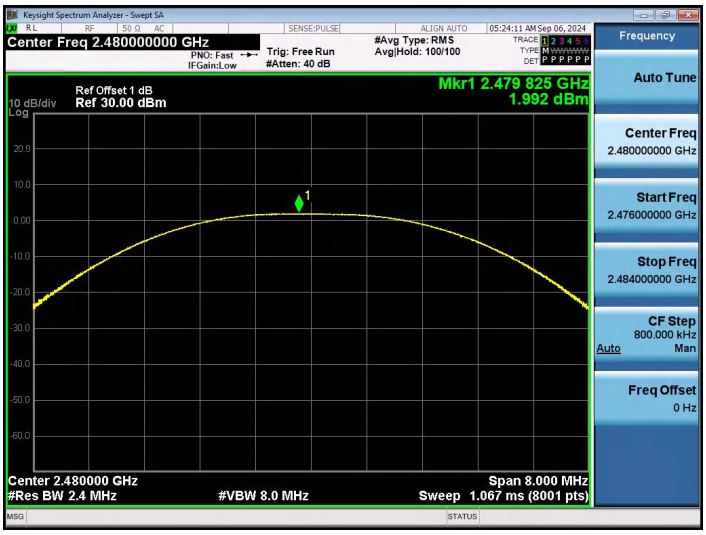
BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2440-PASS



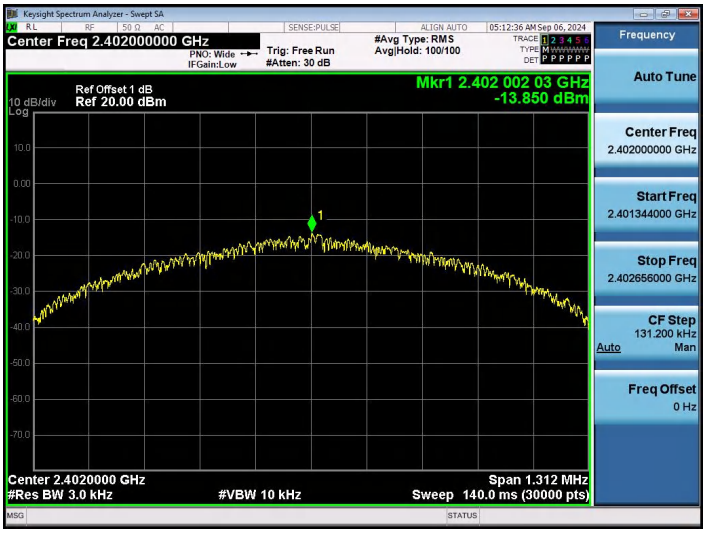
BLE_2M-Ant1-2480-PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-13.85	≤8.00	PASS
BLE_1M	Ant1	2440	-14.34	≤8.00	PASS
BLE_1M	Ant1	2480	-14.07	≤8.00	PASS
BLE_2M	Ant1	2402	-18.95	≤8.00	PASS
BLE_2M	Ant1	2440	-19.12	≤8.00	PASS
BLE_2M	Ant1	2480	-18.99	≤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

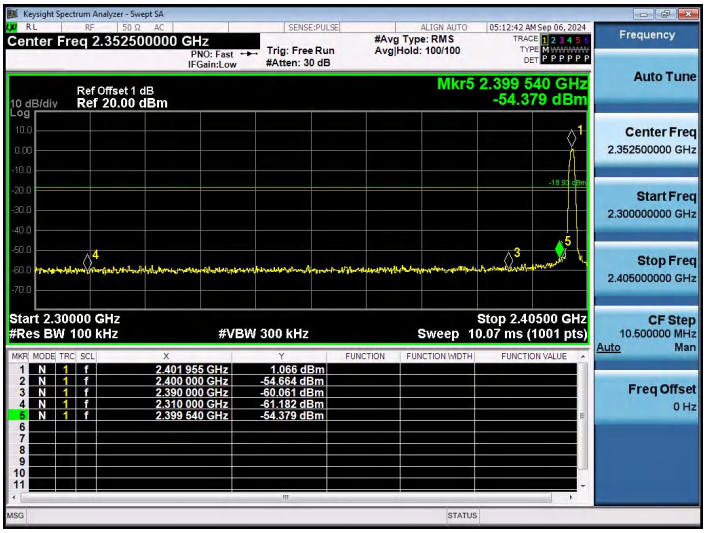
BLE_2M-Ant1-2480-PASS

Appendix E: Band edge measurements

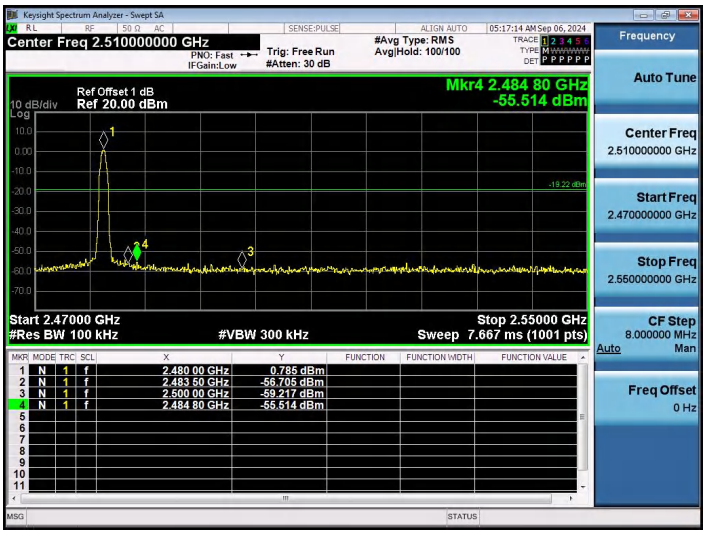
Test Result

TestMode	Antenna	ChName	Frequency [MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	1.07	-54.38	≤-18.93	PASS
BLE_1M	Ant1	High	2480	0.79	-55.51	≤-19.22	PASS
BLE_2M	Ant1	Low	2402	-0.34	-50.3	≤-20.34	PASS
BLE_2M	Ant1	High	2480	-0.90	-55.86	≤-20.9	PASS

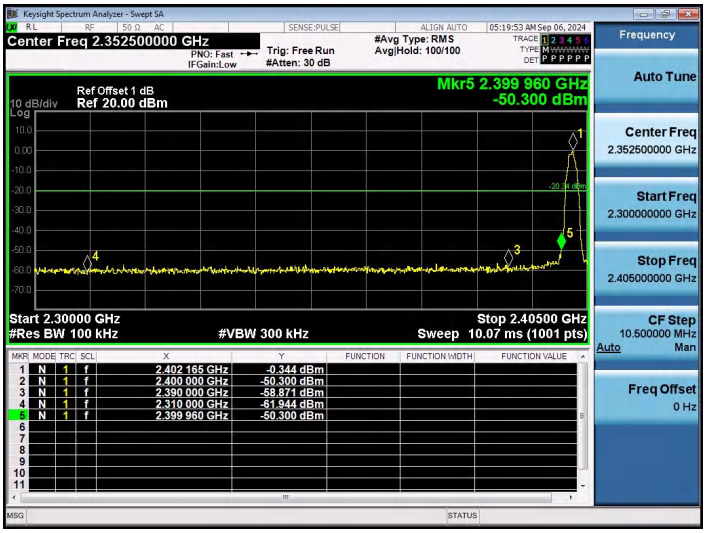
Test Graphs



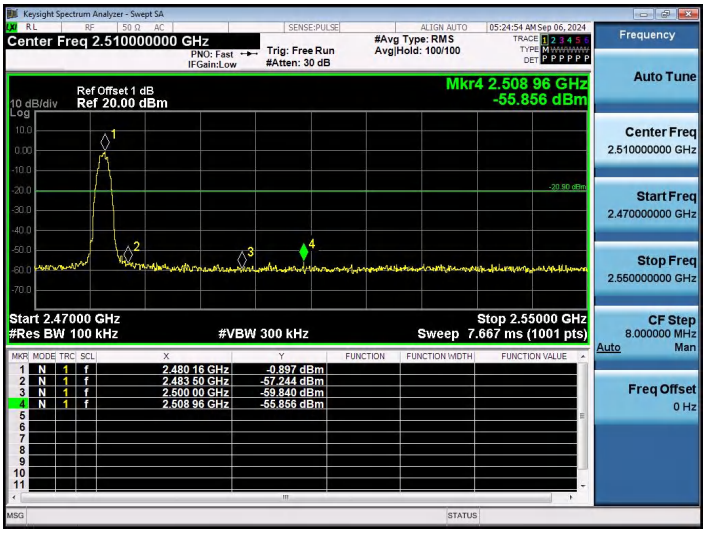
BLE_1M-Ant1-2402-PASS



BLE_1M-Ant1-2480-PASS



BLE_2M-Ant1-2402-PASS



BLE_2M-Ant1-2480-PASS

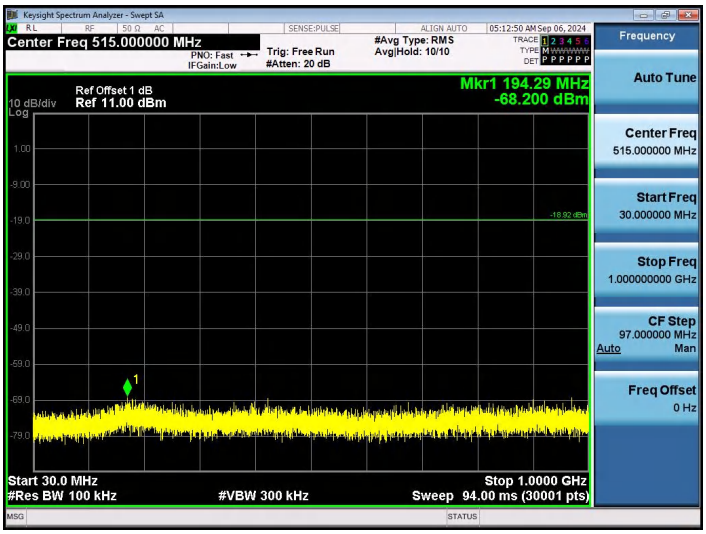
Appendix F: Conducted Spurious Emission

Test Result

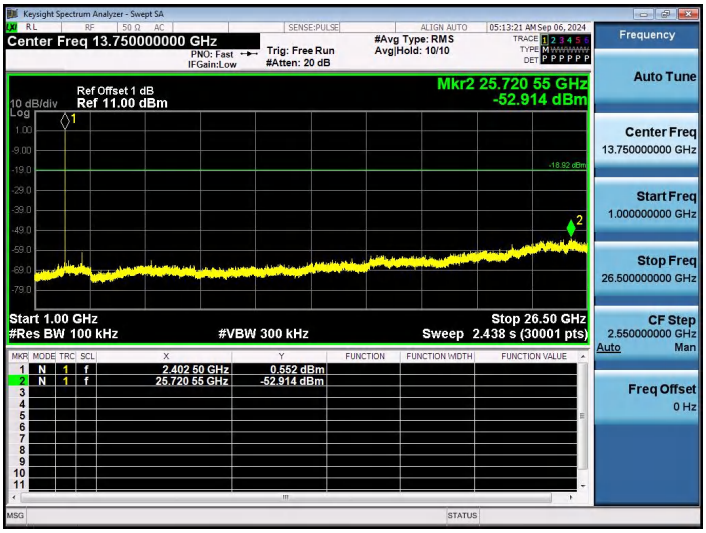
TestMode	Antenna	Frequency [MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0~Reference	1.08	1.08	---	PASS
BLE_1M	Ant1	2402	30~1000	1.08	-68.2	≤-18.92	PASS
BLE_1M	Ant1	2402	1000~26500	1.08	-52.91	≤-18.92	PASS
BLE_1M	Ant1	2440	0~Reference	0.04	0.04	---	PASS
BLE_1M	Ant1	2440	30~1000	0.04	-68.32	≤-19.96	PASS
BLE_1M	Ant1	2440	1000~26500	0.04	-53.01	≤-19.96	PASS
BLE_1M	Ant1	2480	0~Reference	-0.13	-0.13	---	PASS
BLE_1M	Ant1	2480	30~1000	-0.13	-68.66	≤-20.13	PASS
BLE_1M	Ant1	2480	1000~26500	-0.13	-53.75	≤-20.13	PASS
BLE_2M	Ant1	2402	0~Reference	-1.21	-1.21	---	PASS
BLE_2M	Ant1	2402	30~1000	-1.21	-68.33	≤-21.21	PASS
BLE_2M	Ant1	2402	1000~26500	-1.21	-53.39	≤-21.21	PASS
BLE_2M	Ant1	2440	0~Reference	-2.48	-2.48	---	PASS
BLE_2M	Ant1	2440	30~1000	-2.48	-68.57	≤-22.48	PASS
BLE_2M	Ant1	2440	1000~26500	-2.48	-52.67	≤-22.48	PASS
BLE_2M	Ant1	2480	0~Reference	-1.57	-1.57	---	PASS
BLE_2M	Ant1	2480	30~1000	-1.57	-67.82	≤-21.57	PASS
BLE_2M	Ant1	2480	1000~26500	-1.57	-53.57	≤-21.57	PASS

Test Graphs

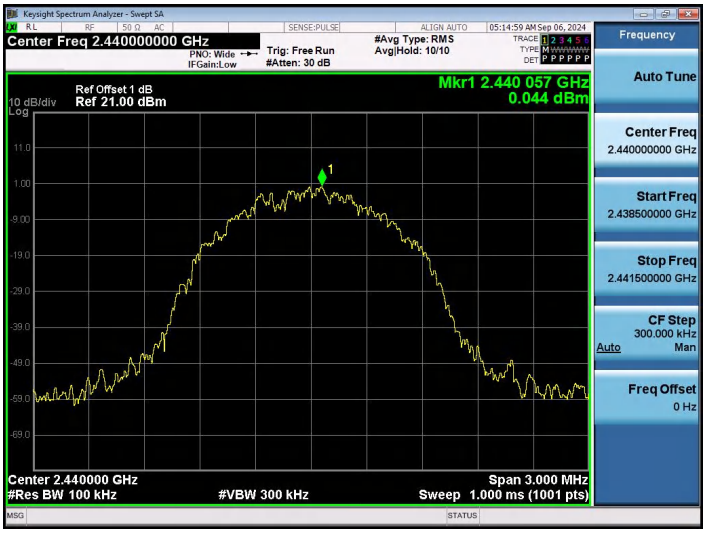
BLE_1M-Ant1-2402-0~Reference-PASS



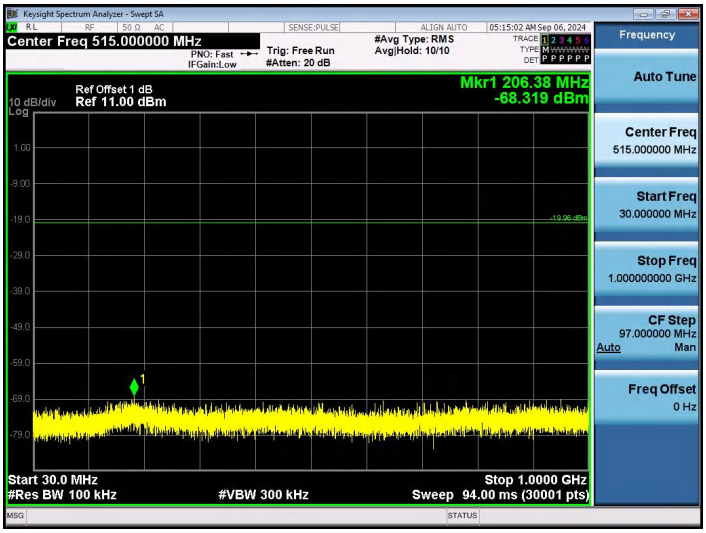
BLE_1M-Ant1-2402-30~1000-PASS



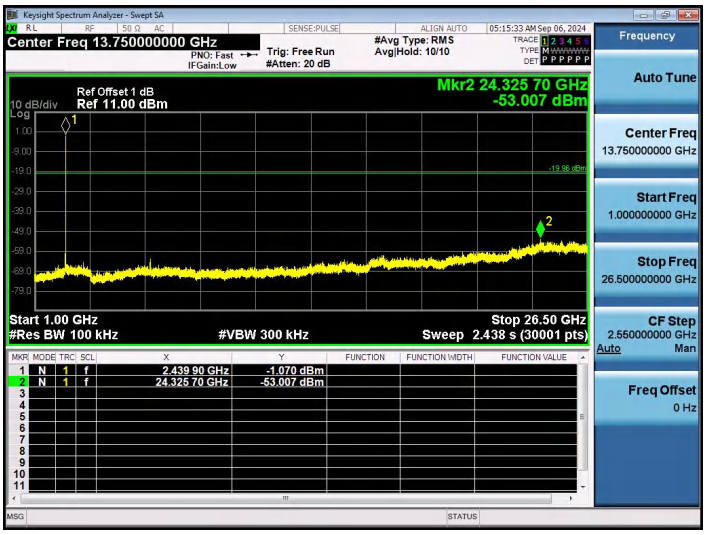
BLE_1M-Ant1-2402-1000~26500-PASS



BLE_1M-Ant1-2440-0~Reference-PASS

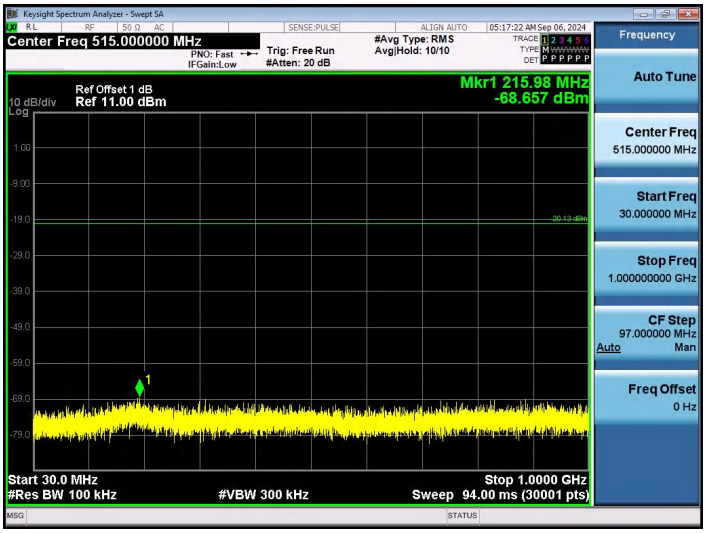


BLE_1M-Ant1-2440-30~1000-PASS

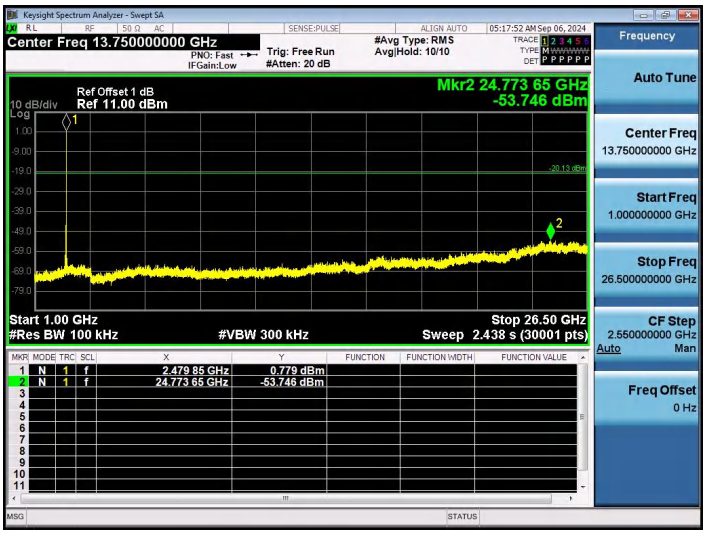


BLE_1M-Ant1-2440-1000~26500-PASS

BLE_1M-Ant1-2480-0~Reference-PASS

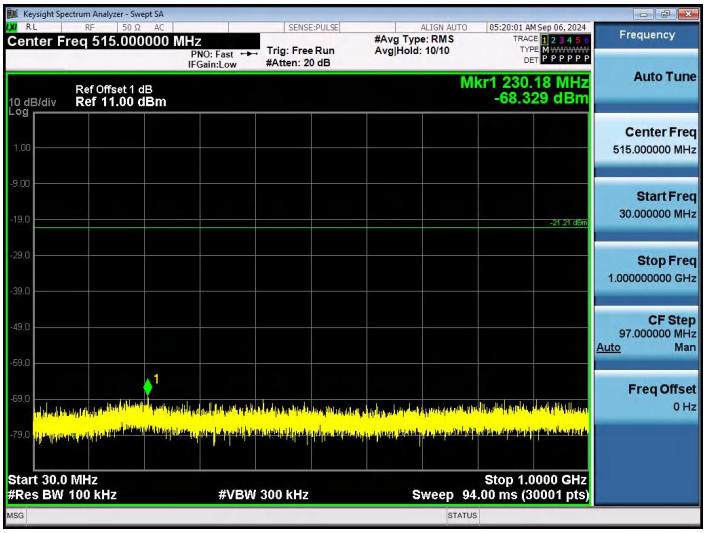


BLE_1M-Ant1-2480-30~1000-PASS

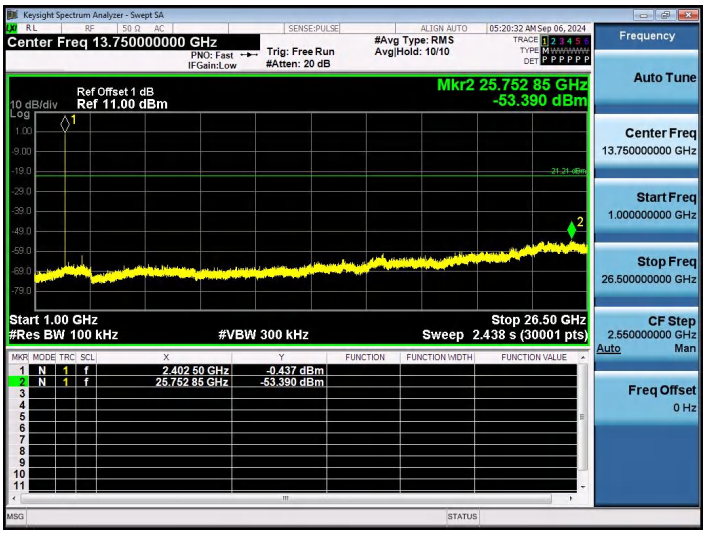


BLE_1M-Ant1-2480-1000~26500-PASS

BLE_2M-Ant1-2402-0~Reference-PASS

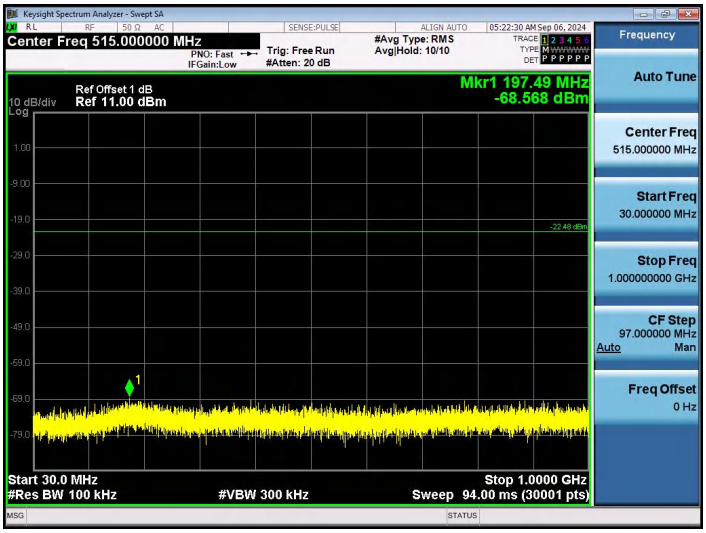


BLE_2M-Ant1-2402-30~1000-PASS

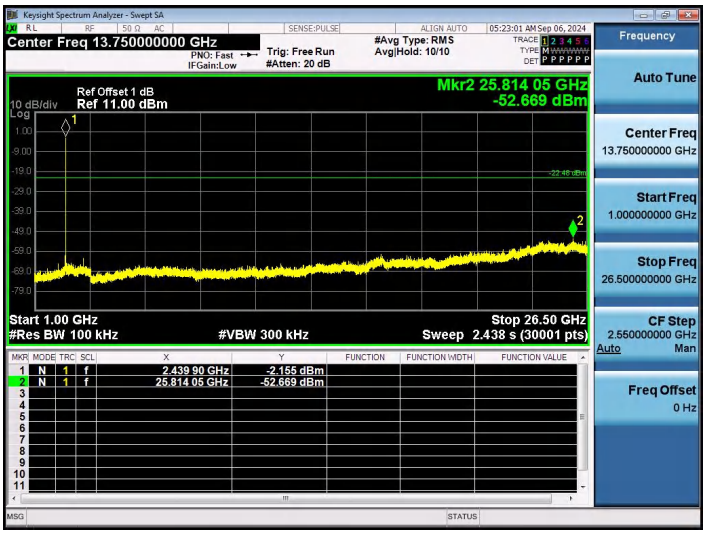


BLE_2M-Ant1-2402-1000~26500-PASS

BLE_2M-Ant1-2440-0~Reference-PASS

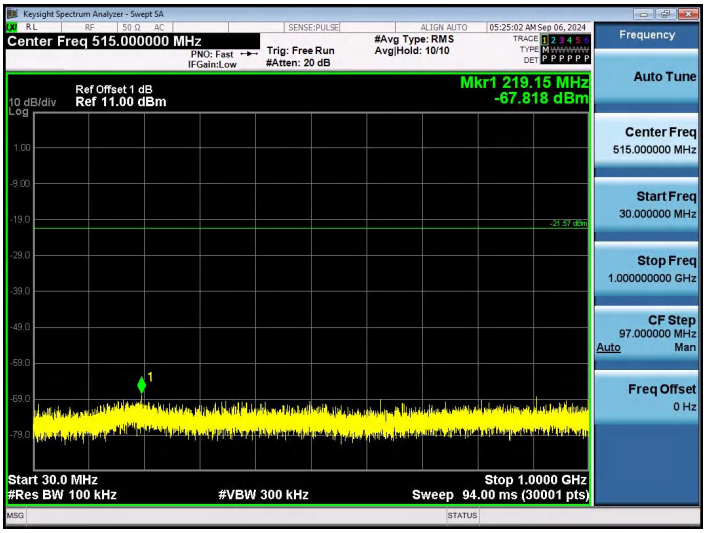


BLE_2M-Ant1-2440-30~1000-PASS

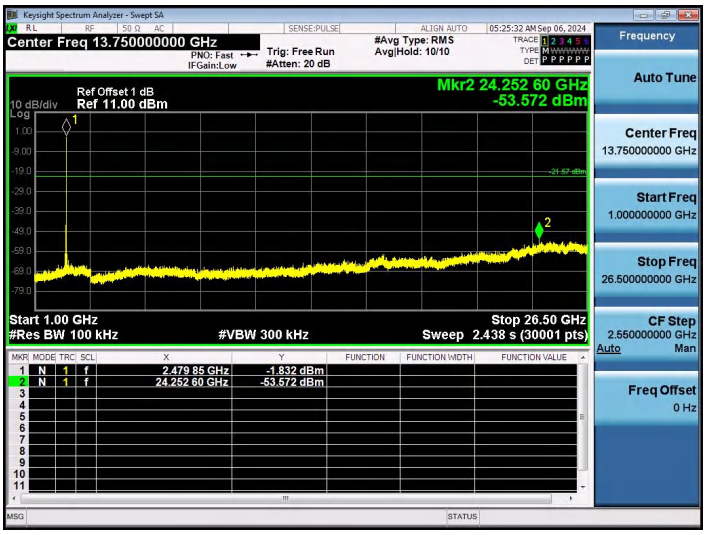


BLE_2M-Ant1-2440-1000~26500-PASS

BLE_2M-Ant1-2480-0~Reference-PASS



BLE_2M-Ant1-2480-30~1000-PASS



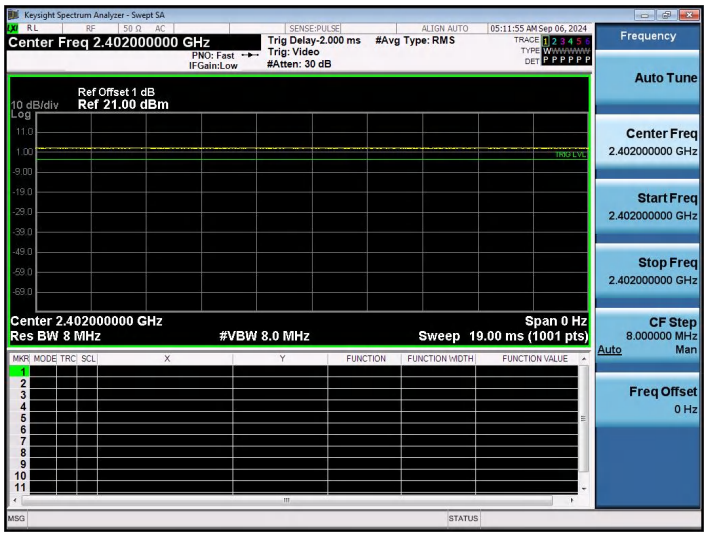
BLE_2M-Ant1-2480-1000~26500-PASS

Appendix G: Duty Cycle

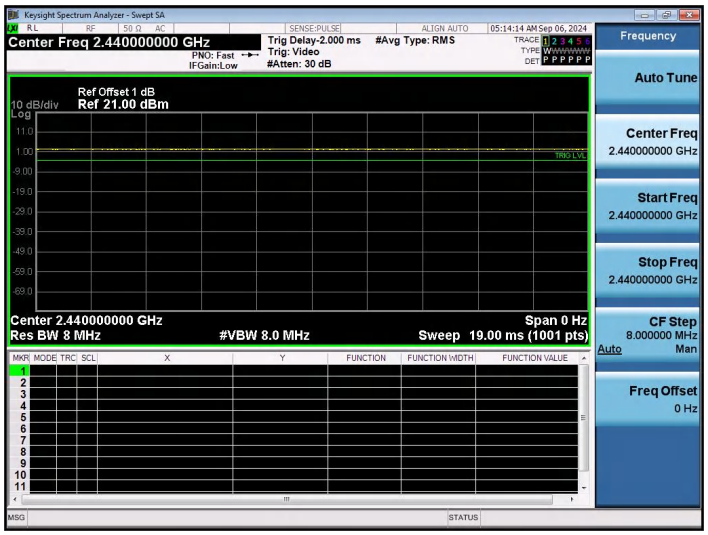
Test Result

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

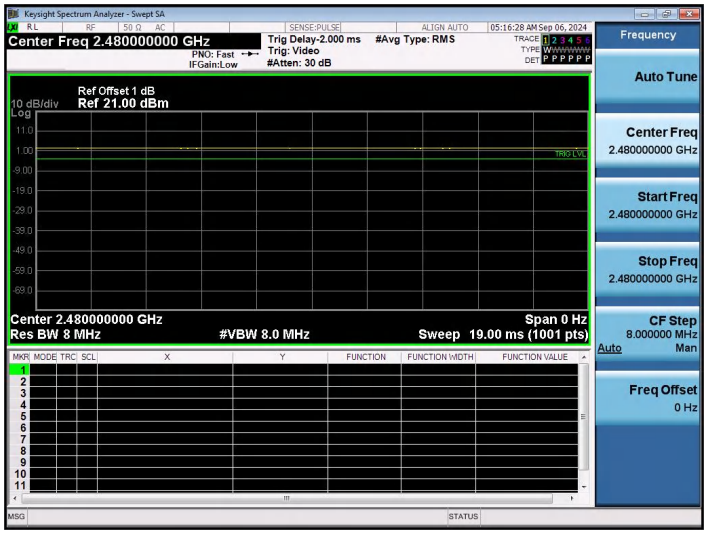
Test Graphs



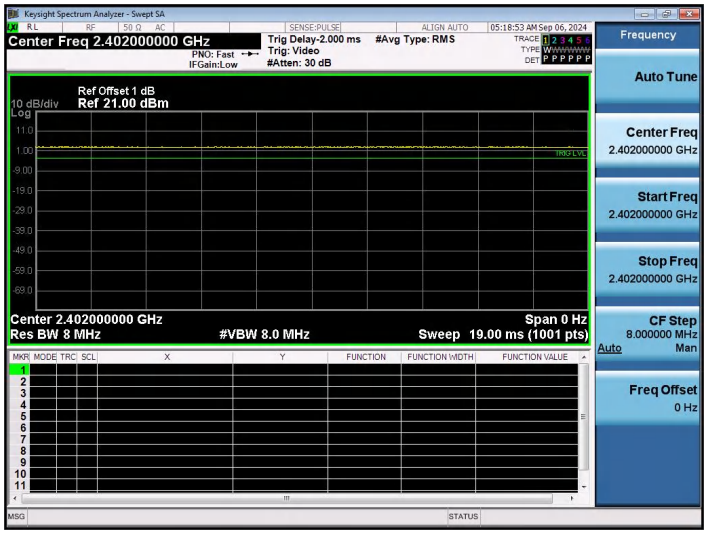
NTNV-BLE_1M-Ant1-2402



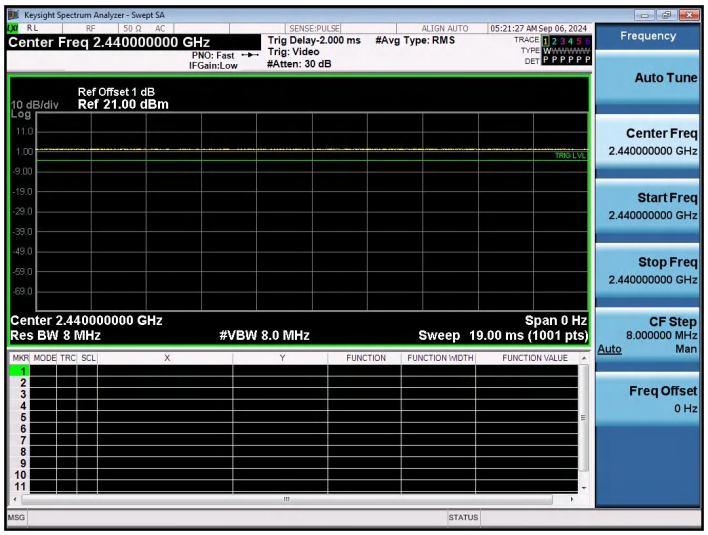
NTNV-BLE_1M-Ant1-2440



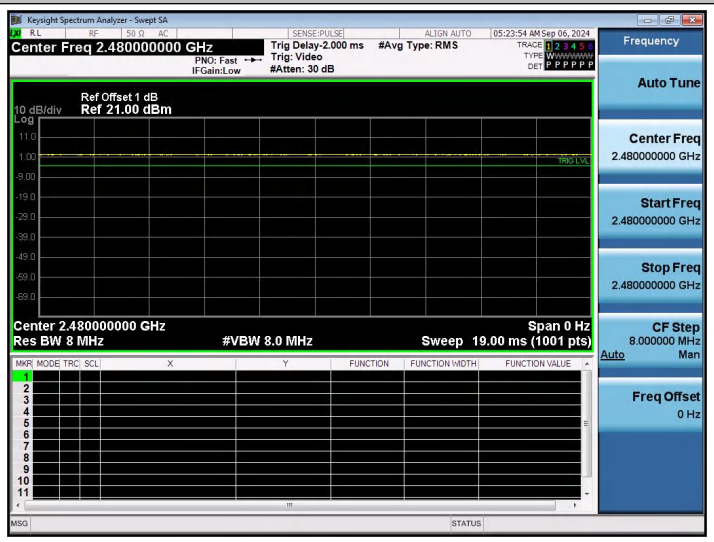
NTNV-BLE_1M-Ant1-2480



NTNV-BLE_2M-Ant1-2402



NTNV-BLE_2M-Ant1-2440



NTNV-BLE_2M-Ant1-2480

---End---