

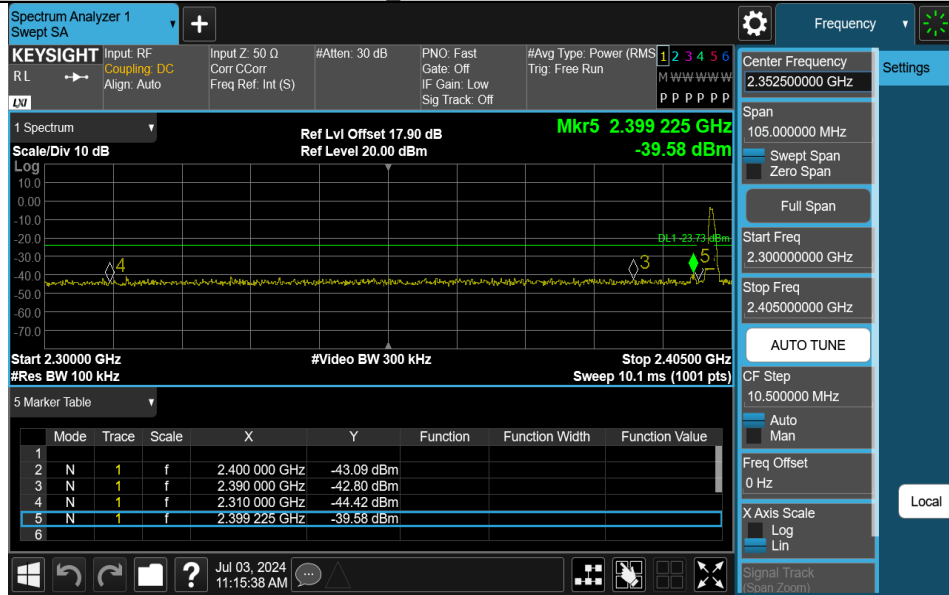
Appendix E: Band edge measurements

Test Result

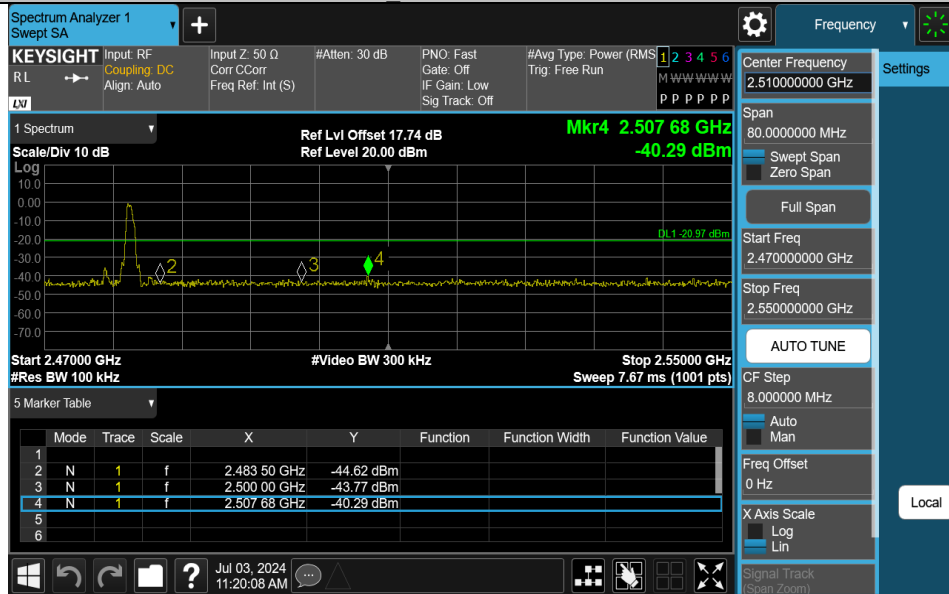
Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-3.73	-39.58	≤ -23.73	PASS
BLE_1M	Ant1	High	2480	-0.97	-40.3	≤ -20.97	PASS
BLE_2M	Ant1	Low	2402	-4.10	-38.39	≤ -24.1	PASS
BLE_2M	Ant1	High	2480	-1.28	-41.21	≤ -21.28	PASS

Test Graphs

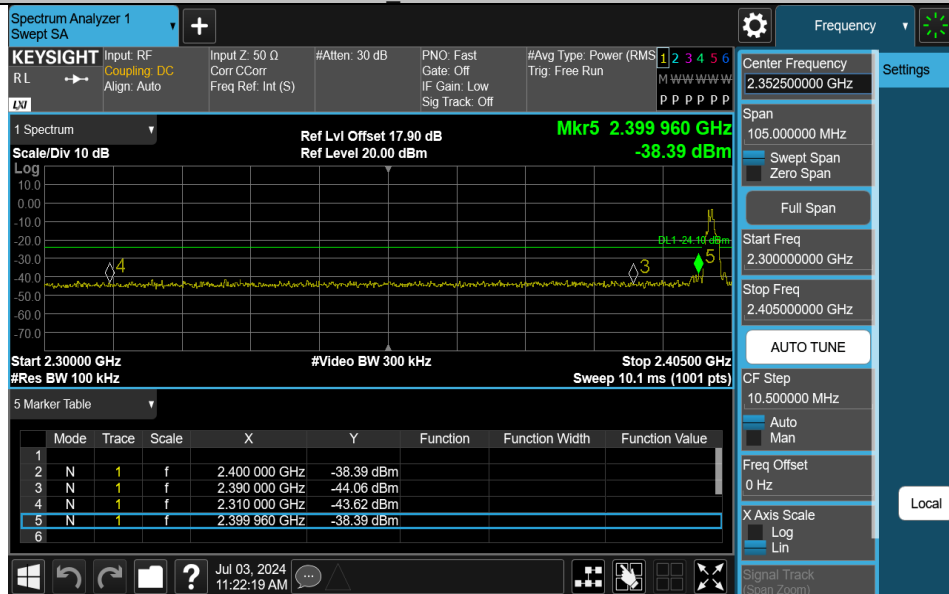
BLE 1M-Ant1-2402-PASS



BLE 1M-Ant1-2480-PASS

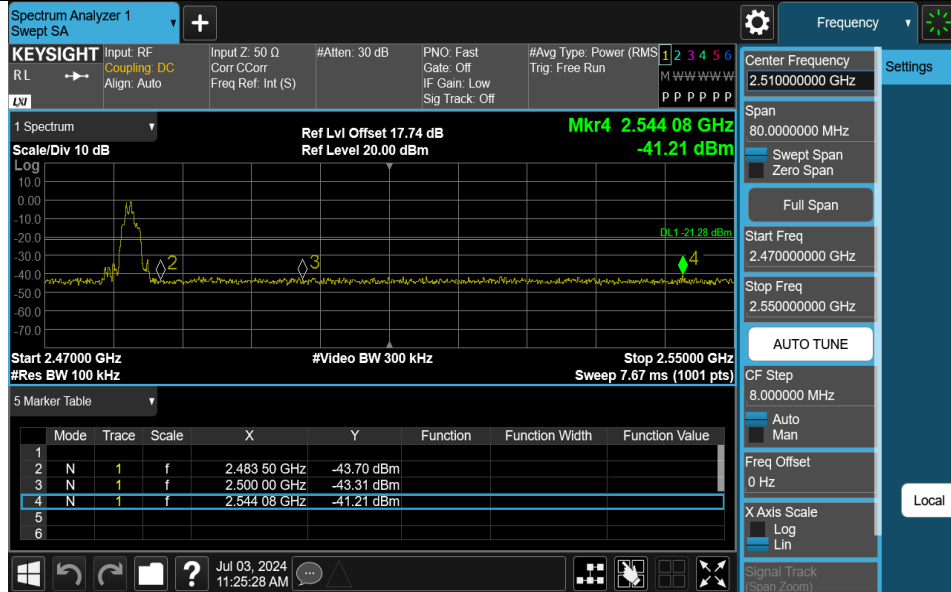


BLE 2M-Ant1-2402-PASS





BLE 2M-Ant1-2480-PASS

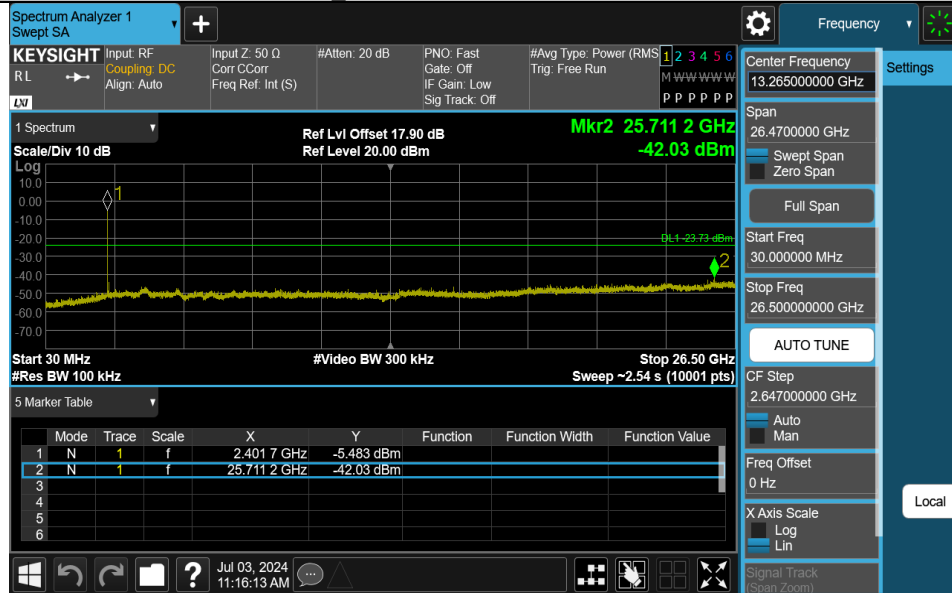


Appendix F: Conducted Spurious Emission Test Result

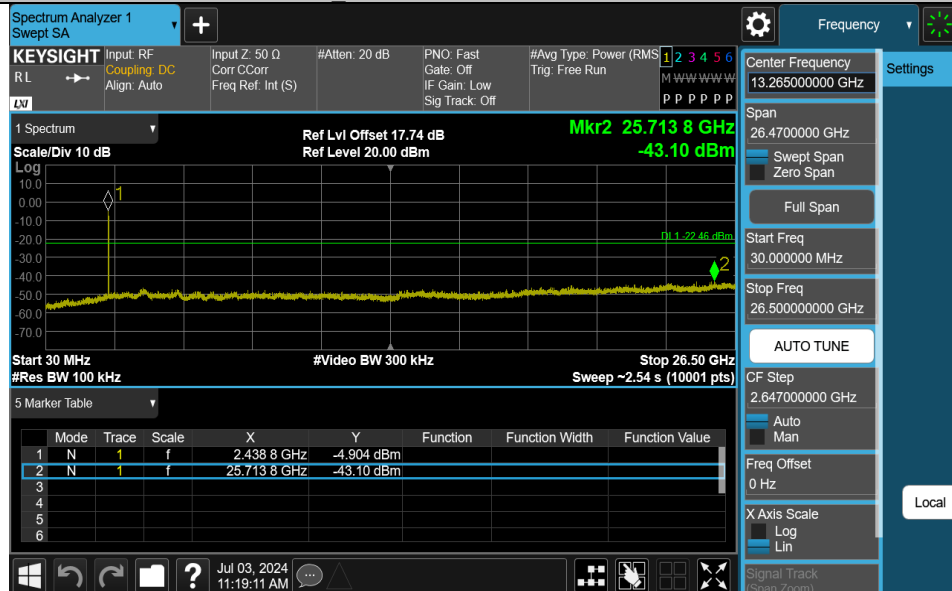
Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~26500	-3.73	-42.03	≤-23.73	PASS
BLE_1M	Ant1	2440	30~26500	-2.46	-43.1	≤-22.46	PASS
BLE_1M	Ant1	2480	30~26500	-0.97	-42.31	≤-20.97	PASS
BLE_2M	Ant1	2402	30~26500	-4.10	-42.83	≤-24.1	PASS
BLE_2M	Ant1	2440	30~26500	-2.79	-43.3	≤-22.79	PASS
BLE_2M	Ant1	2480	30~26500	-1.28	-43.53	≤-21.28	PASS

Test Graphs

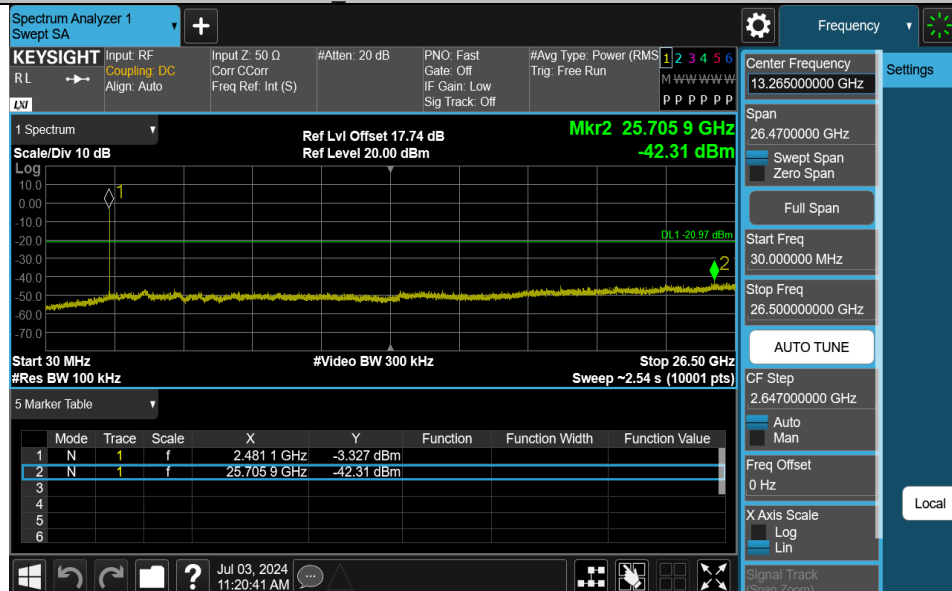
BLE 1M-Ant1-2402-30~26500-PASS



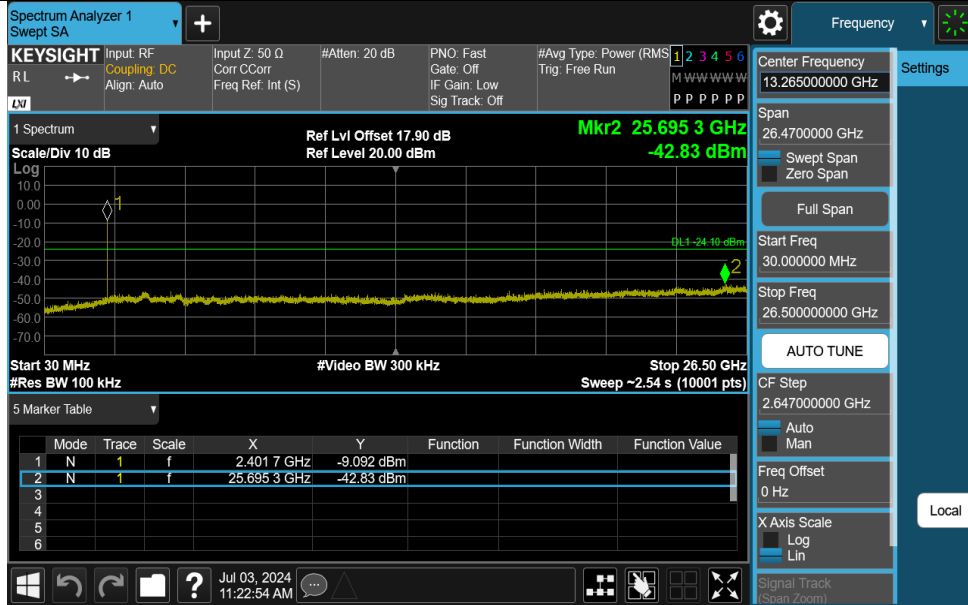
BLE 1M-Ant1-2440-30~26500-PASS



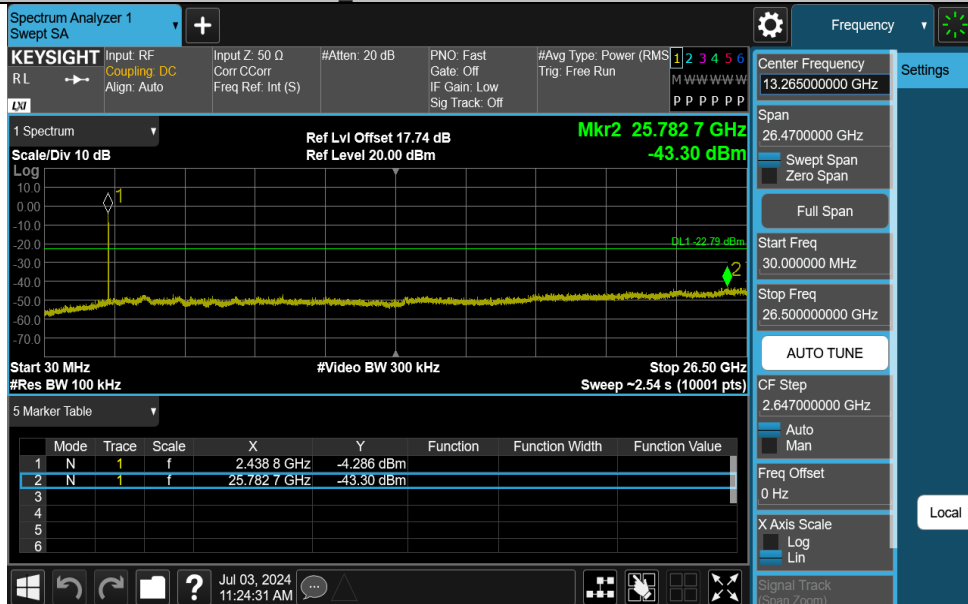
BLE 1M-Ant1-2480-30~26500-PASS



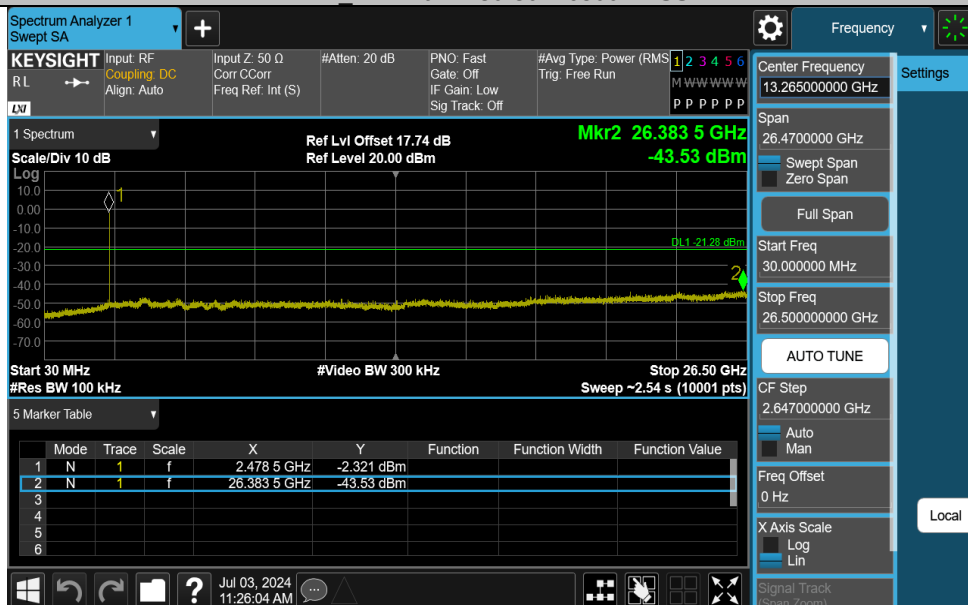
BLE 2M-Ant1-2402-30~26500-PASS



BLE 2M-Ant1-2440-30~26500-PASS



BLE 2M-Ant1-2480-30~26500-PASS



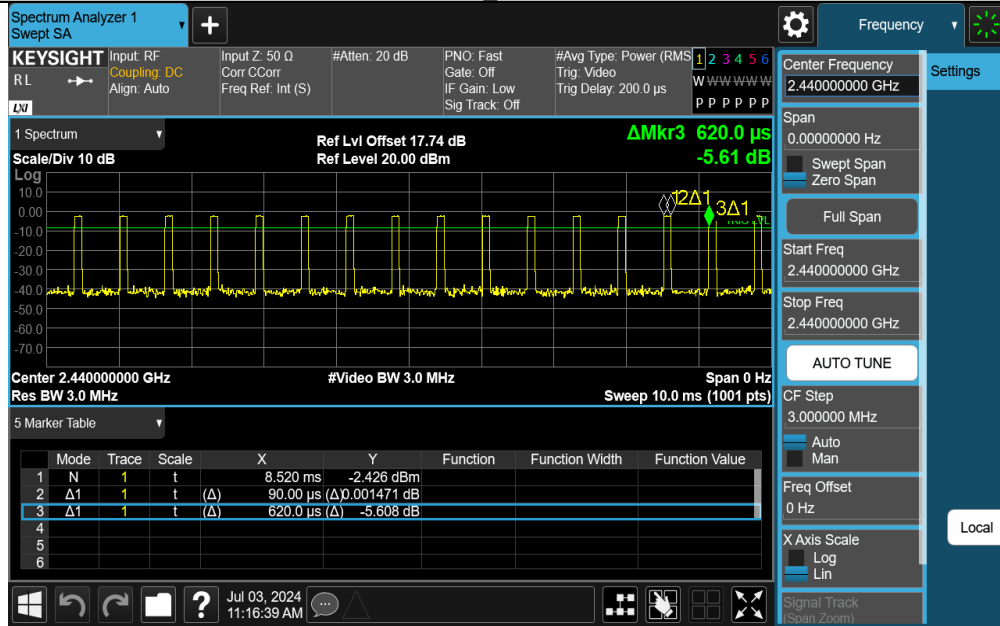
Appendix G: Duty Cycle

Test Result

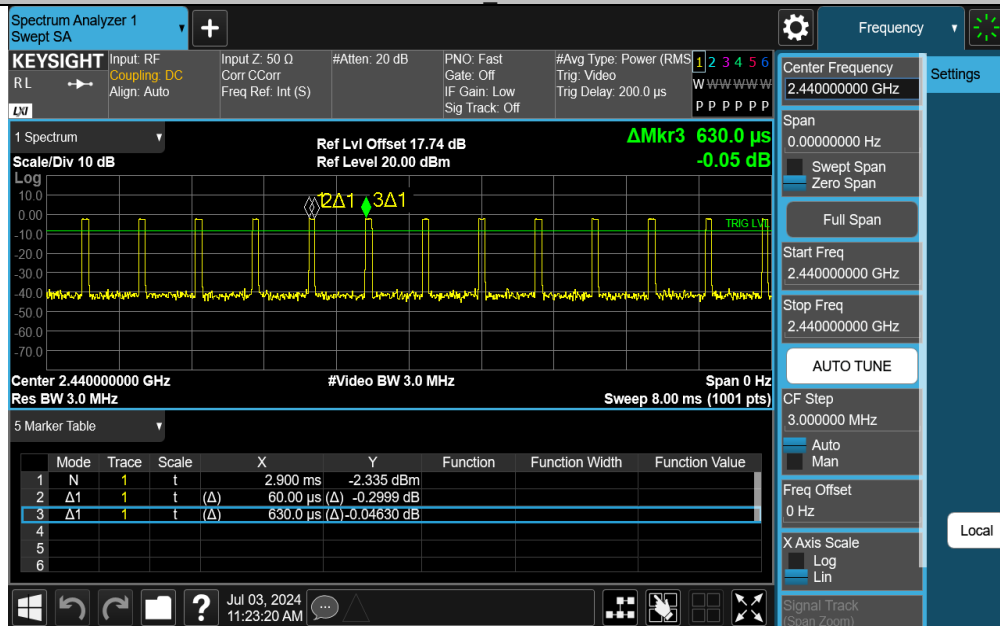
Test Mode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2440	0.09	0.62	14.52	8.38
BLE_2M	Ant1	2440	0.06	0.63	9.52	10.21

Test Graphs

NTNV-BLE 1M-Ant1-2440



NTNV-BLE 2M-Ant1-2440



10.2.Test Result For Right Earbud

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	0.648	2401.685	2402.333	0.5	PASS
BLE_1M	Ant1	2440	0.660	2439.670	2440.330	0.5	PASS
BLE_1M	Ant1	2480	0.669	2479.667	2480.336	0.5	PASS
BLE_2M	Ant1	2402	1.254	2401.346	2402.600	0.5	PASS
BLE_2M	Ant1	2440	1.368	2439.322	2440.690	0.5	PASS
BLE_2M	Ant1	2480	1.272	2479.334	2480.606	0.5	PASS

Test Graphs

BLE 1M-Ant1-2402-PASS



BLE 1M-Ant1-2440-PASS



BLE 1M-Ant1-2480-PASS



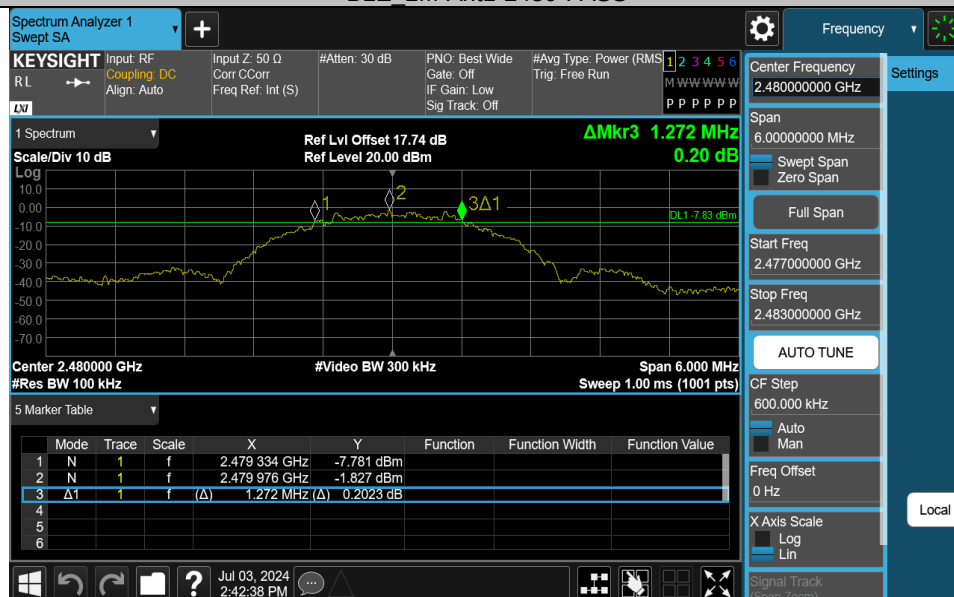
BLE 2M-Ant1-2402-PASS



BLE 2M-Ant1-2440-PASS



BLE 2M-Ant1-2480-PASS



Appendix B: Maximum conducted output power

Test Result Peak

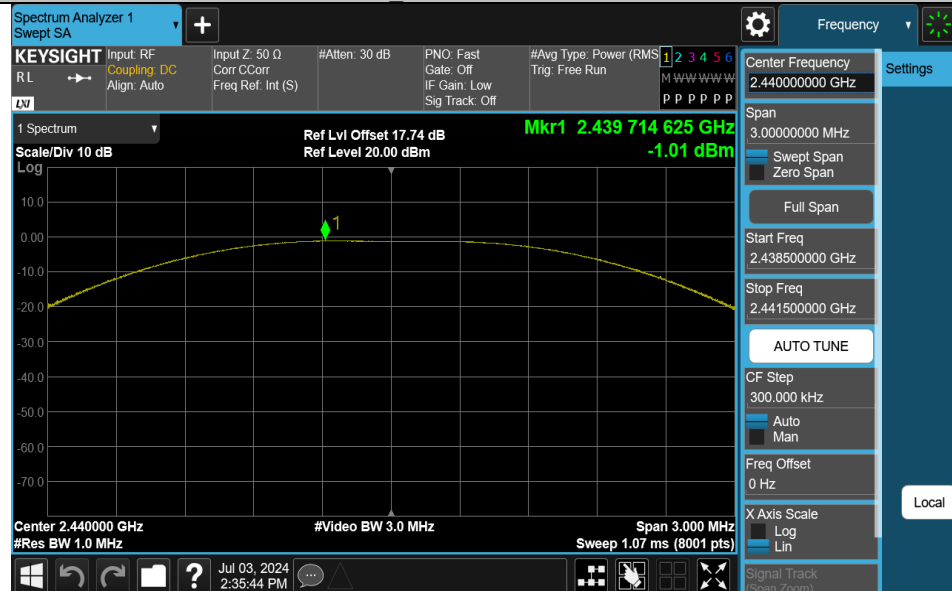
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-1.77	≤30	PASS
BLE_1M	Ant1	2440	-1.01	≤30	PASS
BLE_1M	Ant1	2480	0.18	≤30	PASS
BLE_2M	Ant1	2402	-1.62	≤30	PASS
BLE_2M	Ant1	2440	-0.68	≤30	PASS
BLE_2M	Ant1	2480	0.56	≤30	PASS

Test Graphs Peak

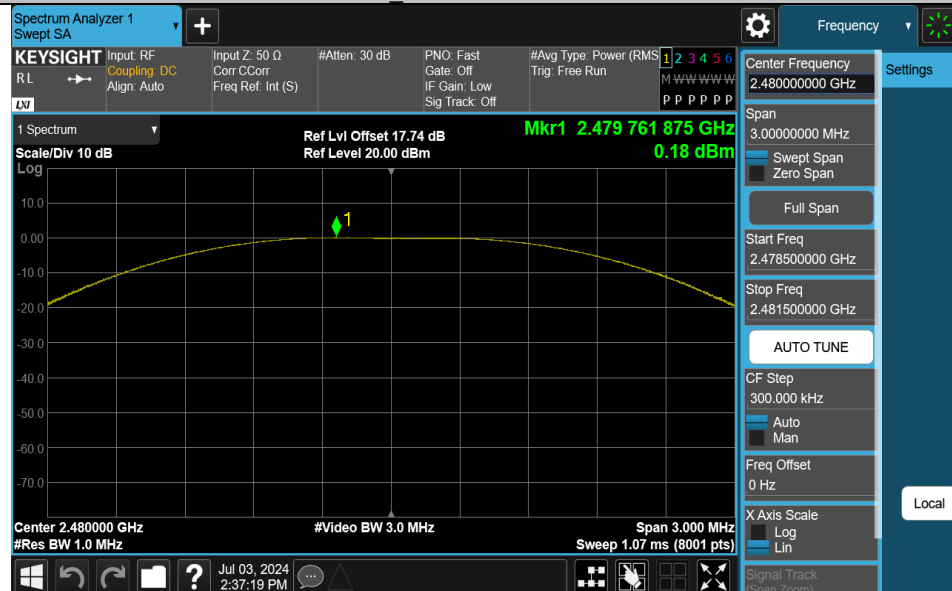
BLE 1M-Ant1-2402-PASS



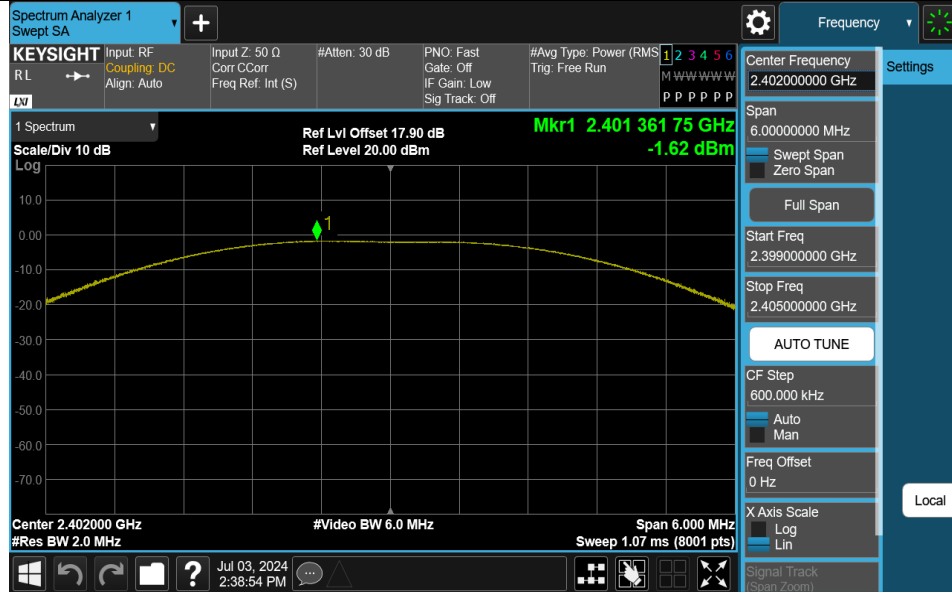
BLE 1M-Ant1-2440-PASS



BLE 1M-Ant1-2480-PASS



BLE 2M-Ant1-2402-PASS



BLE 2M-Ant1-2440-PASS



BLE 2M-Ant1-2480-PASS



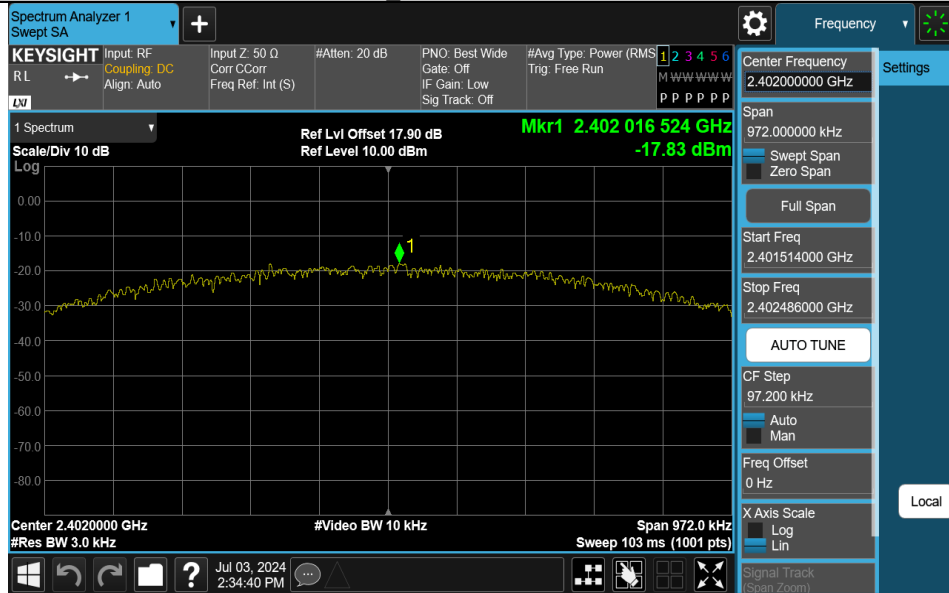
Appendix C: Maximum power spectral density

Test Result

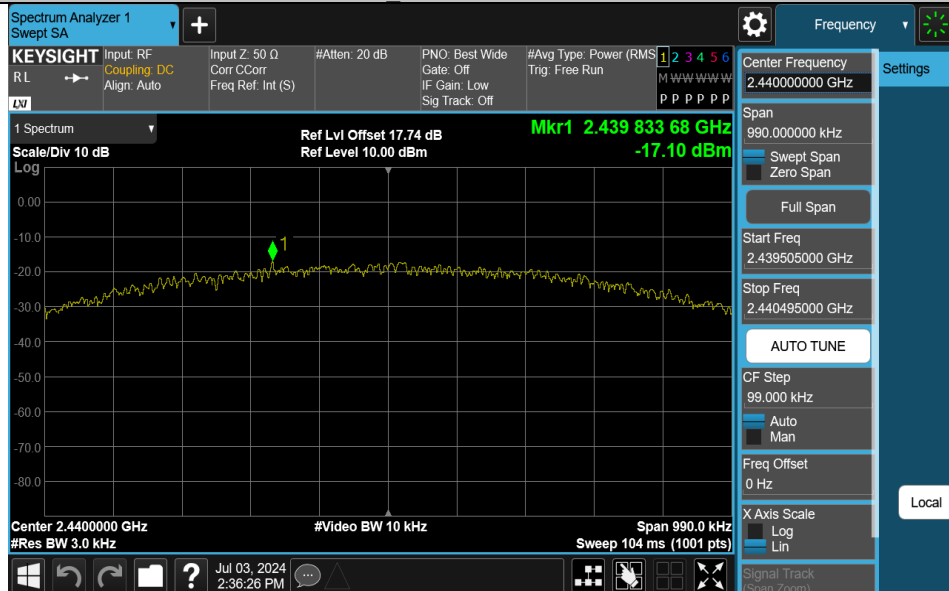
Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.83	≤8.00	PASS
BLE_1M	Ant1	2440	-17.10	≤8.00	PASS
BLE_1M	Ant1	2480	-15.92	≤8.00	PASS
BLE_2M	Ant1	2402	-20.08	≤8.00	PASS
BLE_2M	Ant1	2440	-19.30	≤8.00	PASS
BLE_2M	Ant1	2480	-18.07	≤8.00	PASS

Test Graphs

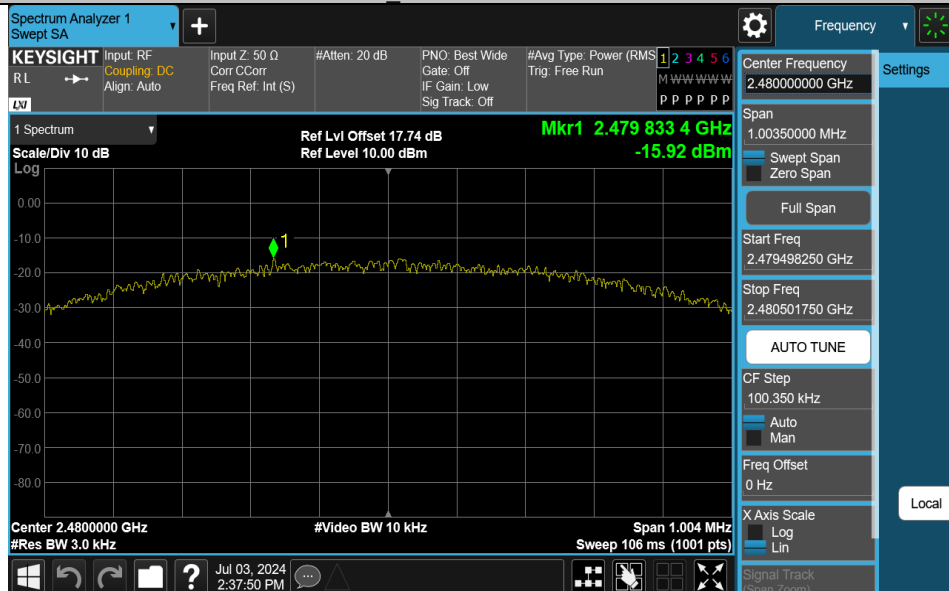
BLE 1M-Ant1-2402-PASS



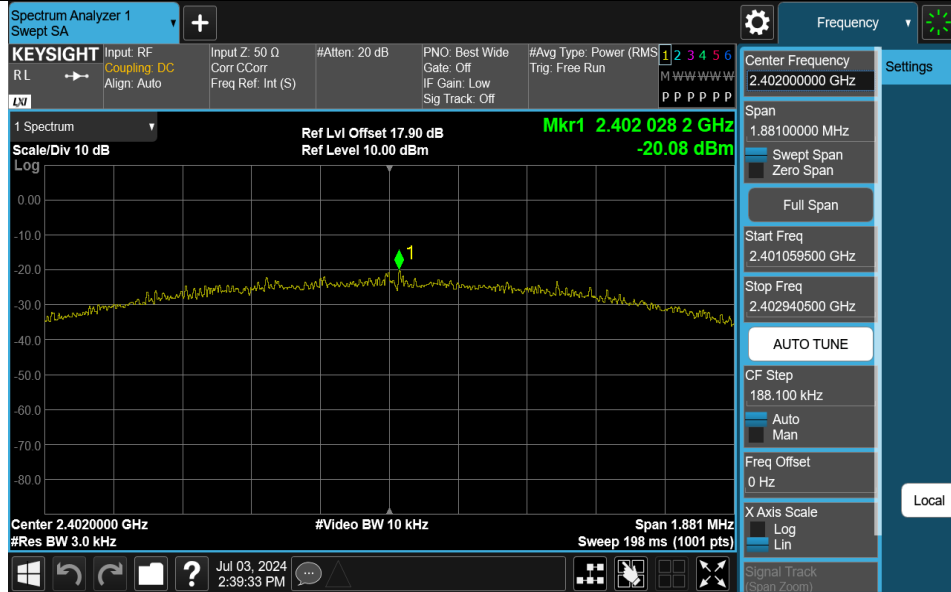
BLE 1M-Ant1-2440-PASS



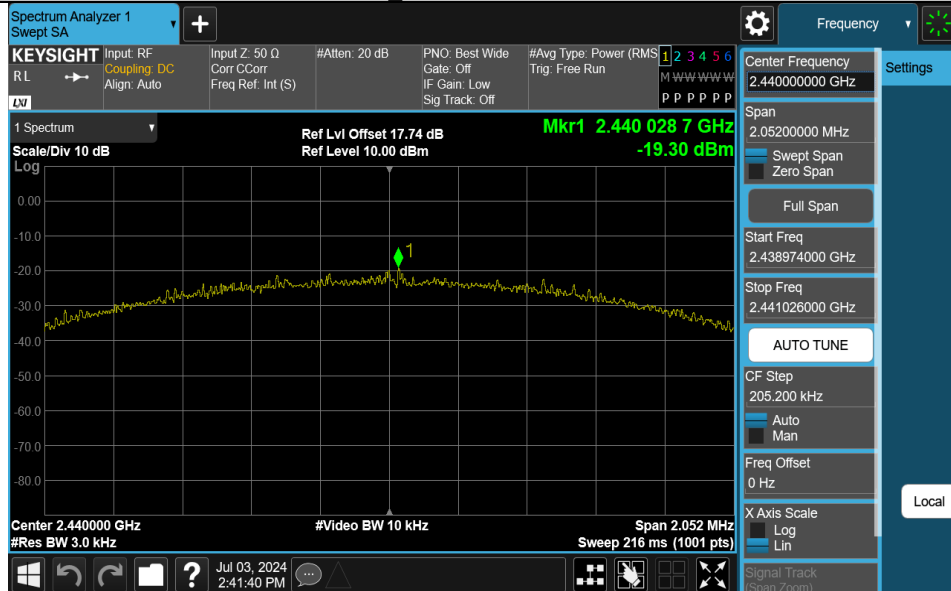
BLE 1M-Ant1-2480-PASS



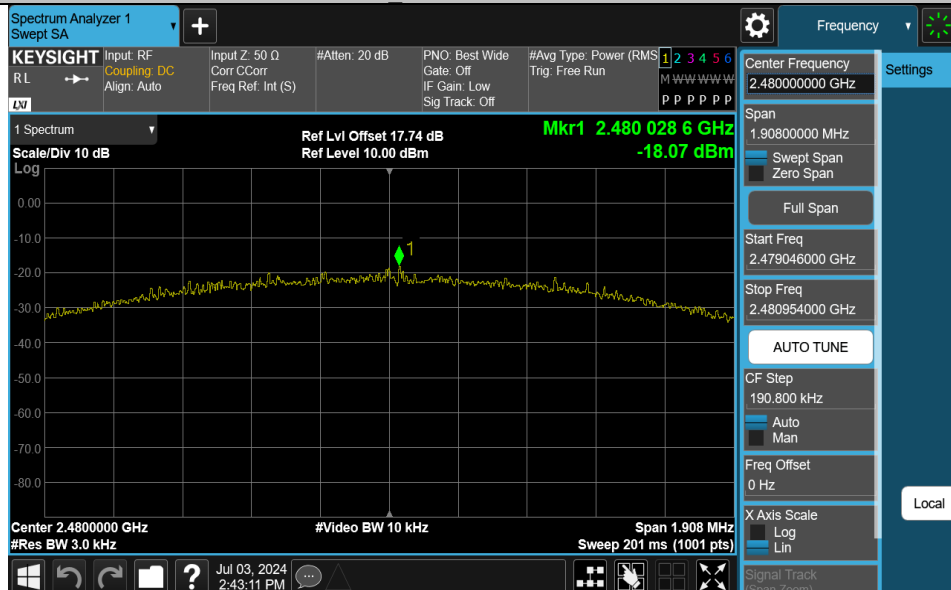
BLE 2M-Ant1-2402-PASS



BLE 2M-Ant1-2440-PASS



BLE 2M-Ant1-2480-PASS



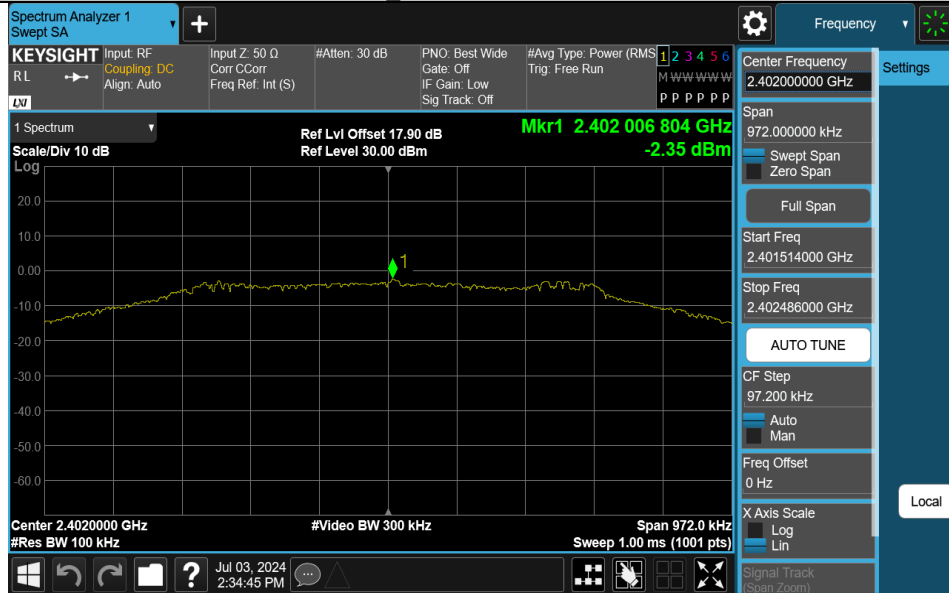
Appendix D: Reference level measurement

Test Result

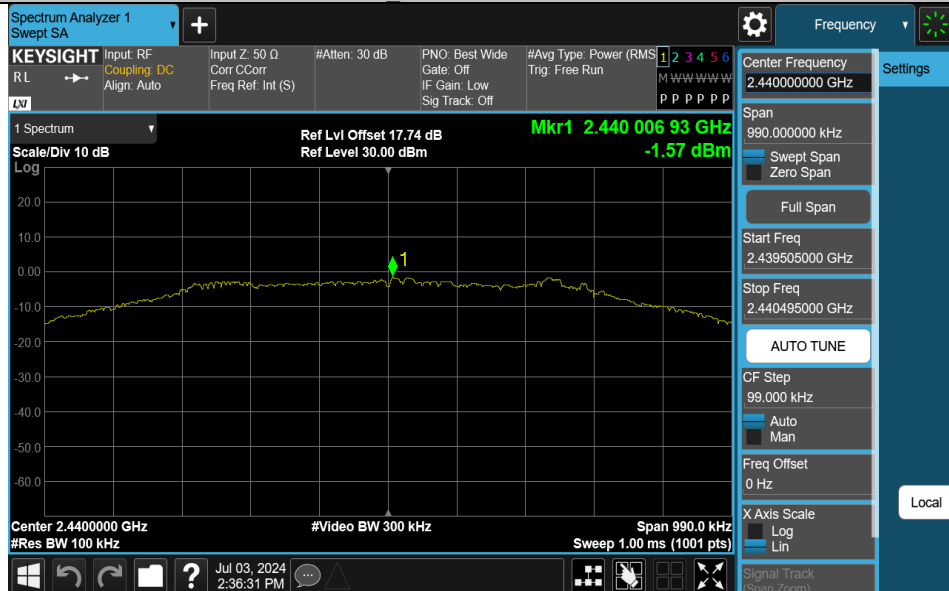
Test Mode	Antenna	Freq(MHz)	Max.Point[MHz]	Result[dBm]
BLE_1M	Ant1	2402	2402.01	-2.35
BLE_1M	Ant1	2440	2440.01	-1.57
BLE_1M	Ant1	2480	2480.25	-0.20
BLE_2M	Ant1	2402	2401.50	-3.03
BLE_2M	Ant1	2440	2440.01	-1.55
BLE_2M	Ant1	2480	2479.99	-0.79

Test Graphs

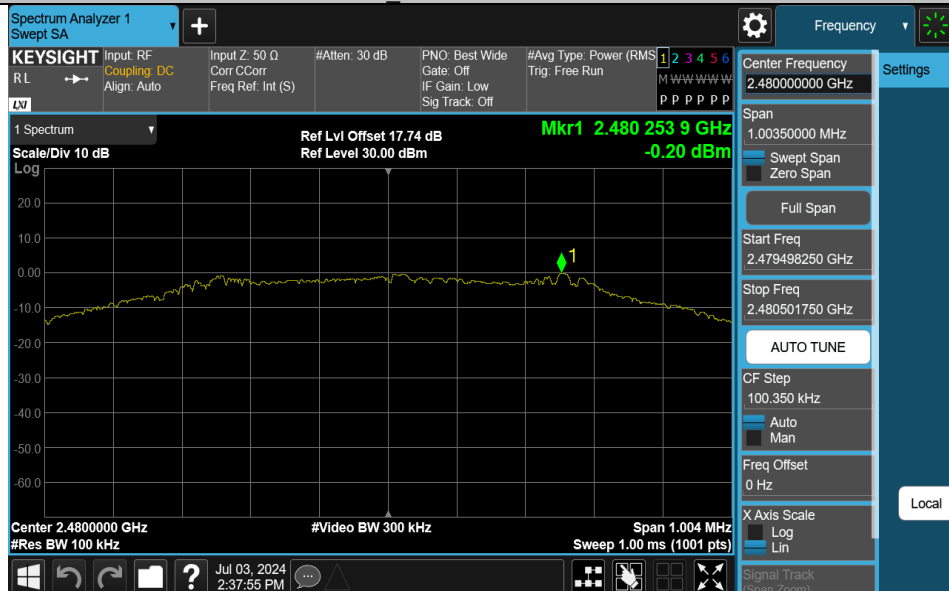
BLE 1M-Ant1-2402-PASS



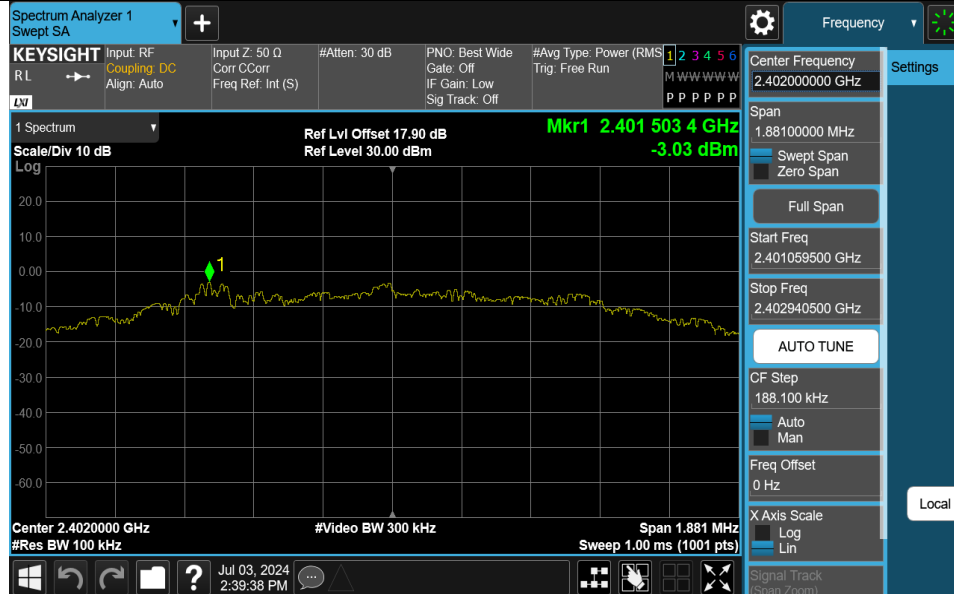
BLE 1M-Ant1-2440-PASS



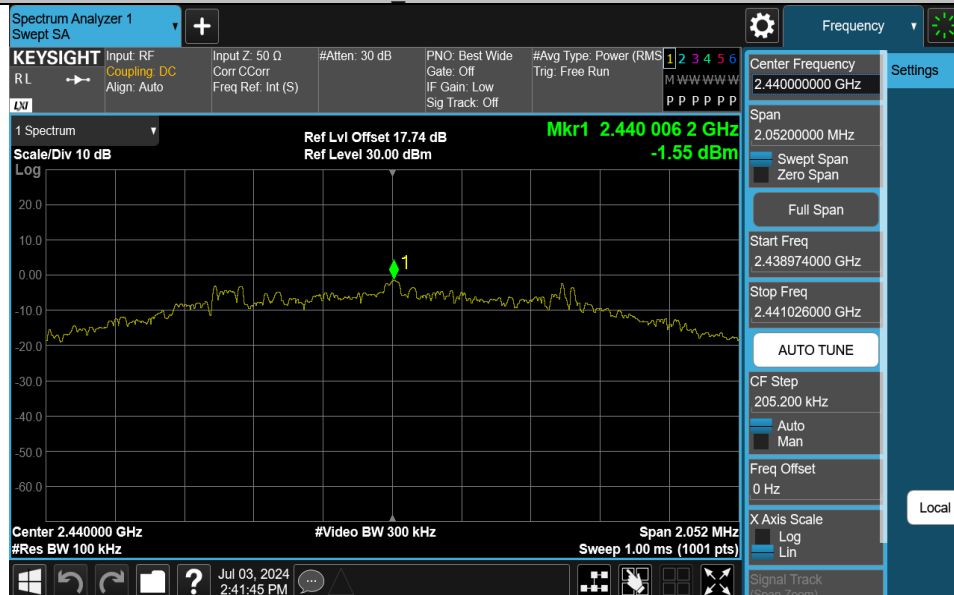
BLE 1M-Ant1-2480-PASS



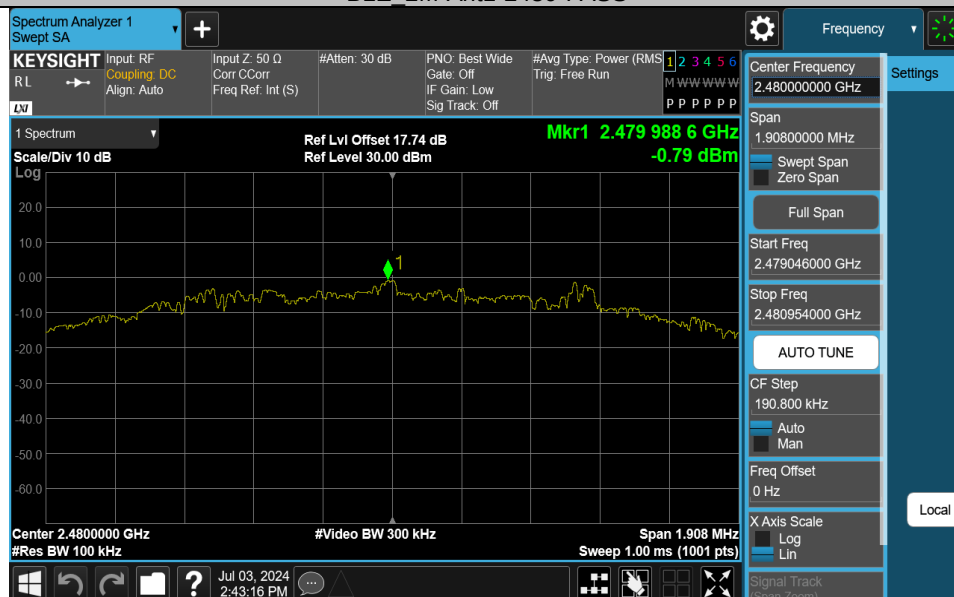
BLE 2M-Ant1-2402-PASS



BLE 2M-Ant1-2440-PASS



BLE 2M-Ant1-2480-PASS



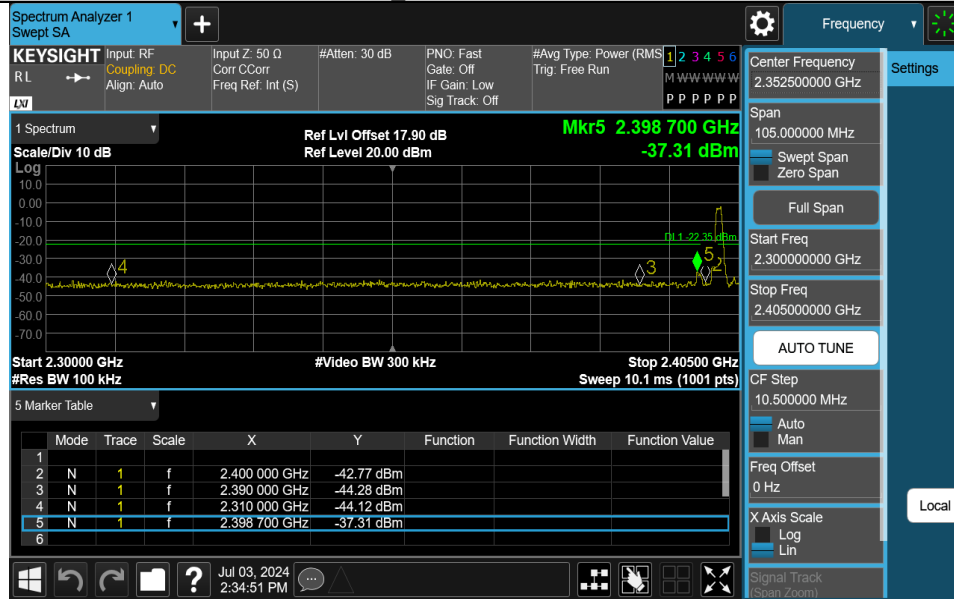
Appendix E: Band edge measurements

Test Result

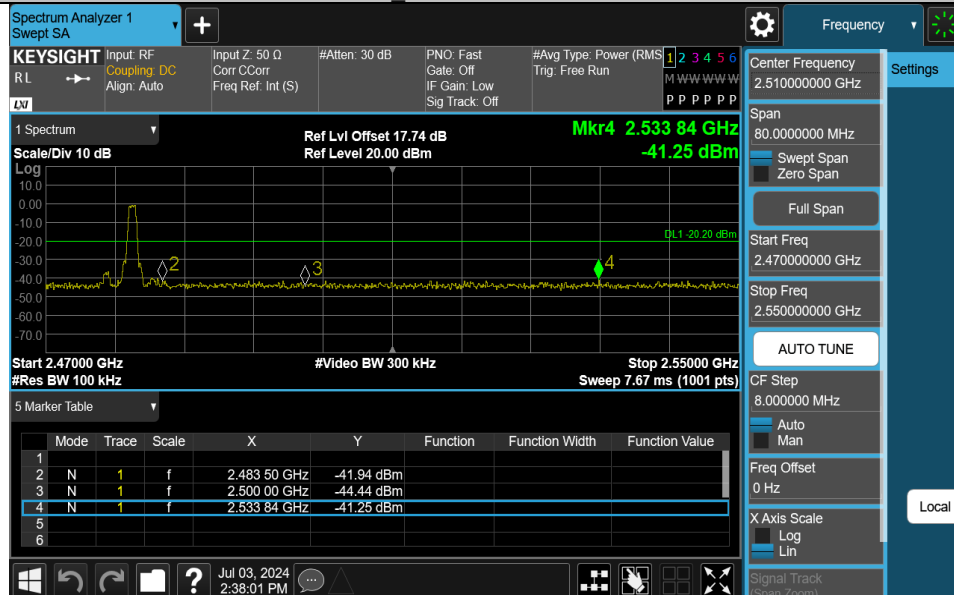
Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.35	-37.31	≤ -22.35	PASS
BLE_1M	Ant1	High	2480	-0.20	-41.25	≤ -20.2	PASS
BLE_2M	Ant1	Low	2402	-3.03	-35.16	≤ -23.03	PASS
BLE_2M	Ant1	High	2480	-0.79	-41.37	≤ -20.79	PASS

Test Graphs

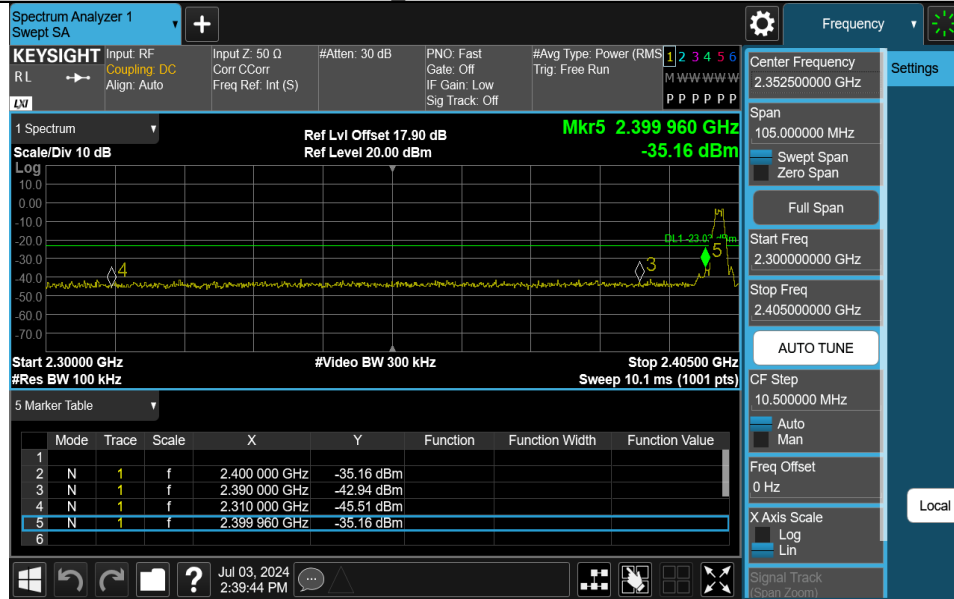
BLE 1M-Ant1-2402-PASS



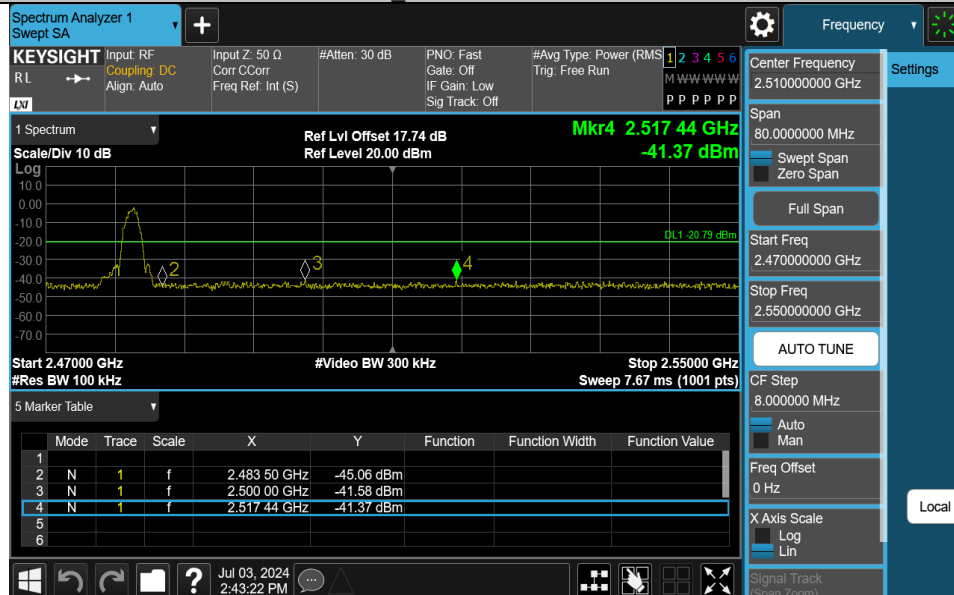
BLE 1M-Ant1-2480-PASS



BLE 2M-Ant1-2402-PASS



BLE 2M-Ant1-2480-PASS

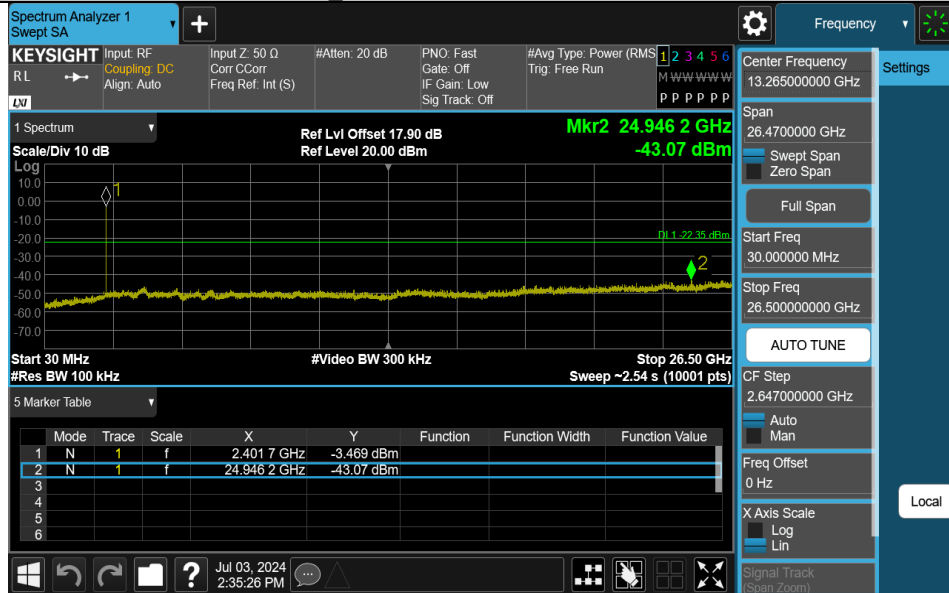


Appendix F: Conducted Spurious Emission Test Result

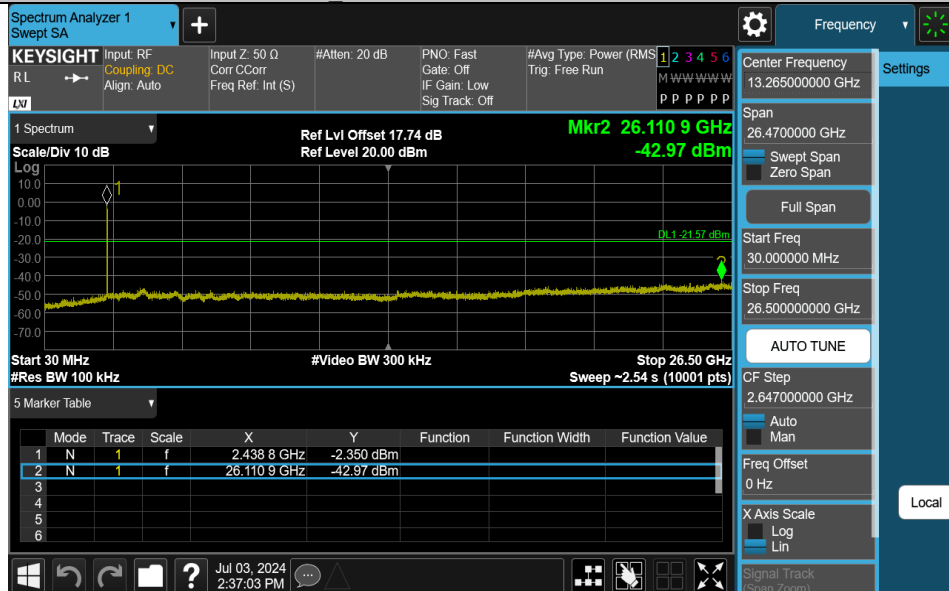
Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	30~26500	-2.35	-43.07	≤ -22.35	PASS
BLE_1M	Ant1	2440	30~26500	-1.57	-42.97	≤ -21.57	PASS
BLE_1M	Ant1	2480	30~26500	-0.20	-43.05	≤ -20.2	PASS
BLE_2M	Ant1	2402	30~26500	-3.03	-43.05	≤ -23.03	PASS
BLE_2M	Ant1	2440	30~26500	-1.55	-43.21	≤ -21.55	PASS
BLE_2M	Ant1	2480	30~26500	-0.79	-42.89	≤ -20.79	PASS

Test Graphs

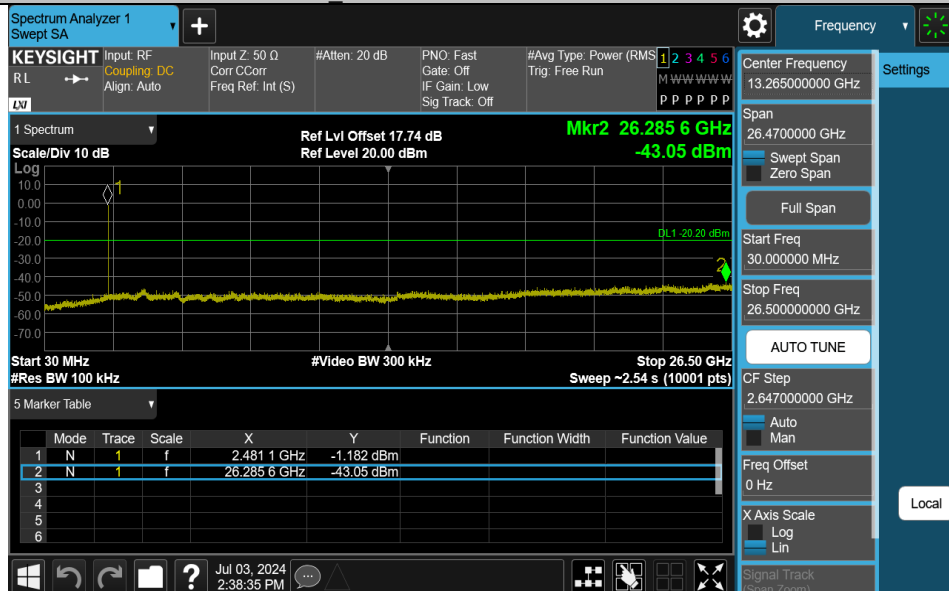
BLE 1M-Ant1-2402-30~26500-PASS



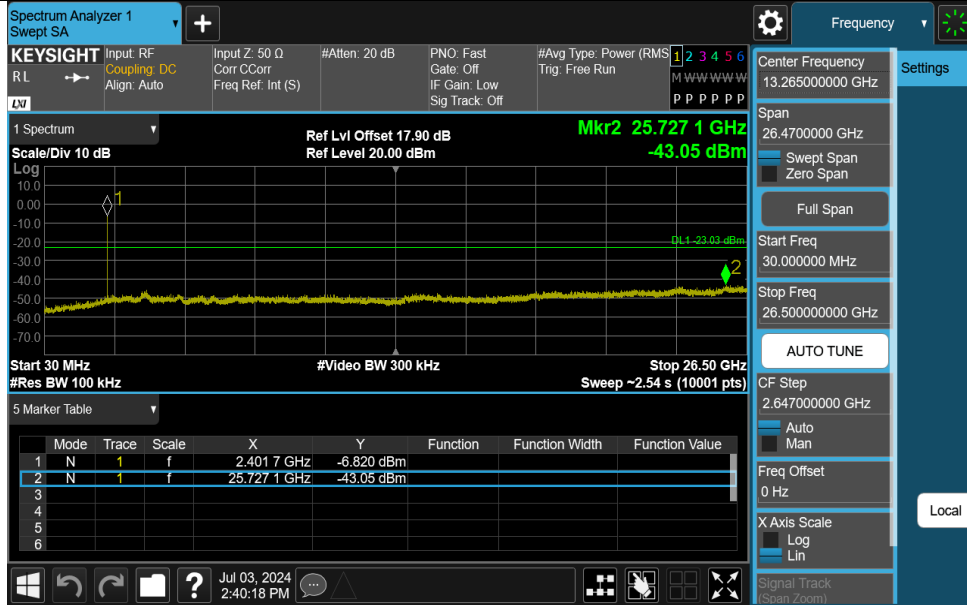
BLE 1M-Ant1-2440-30~26500-PASS



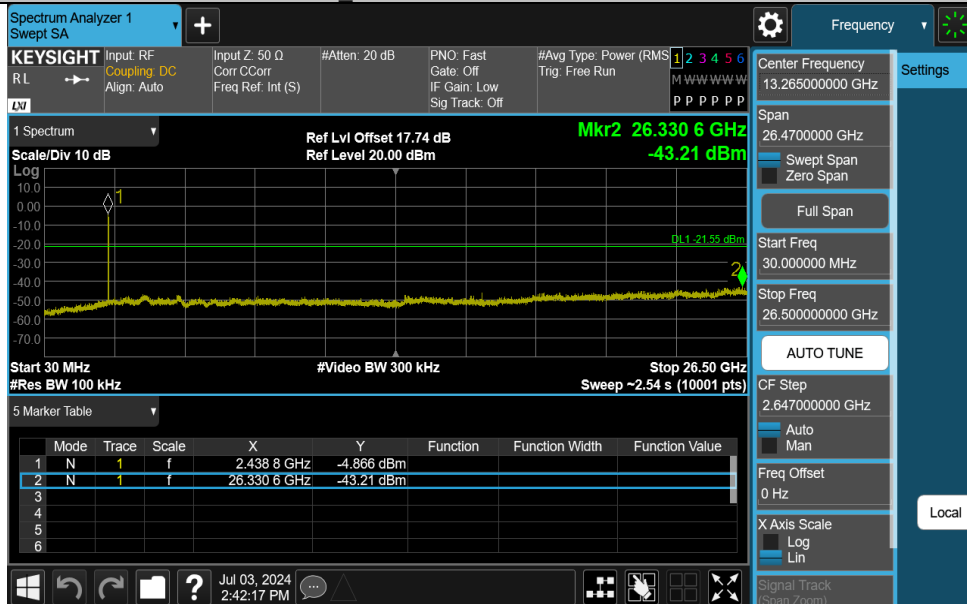
BLE 1M-Ant1-2480-30~26500-PASS



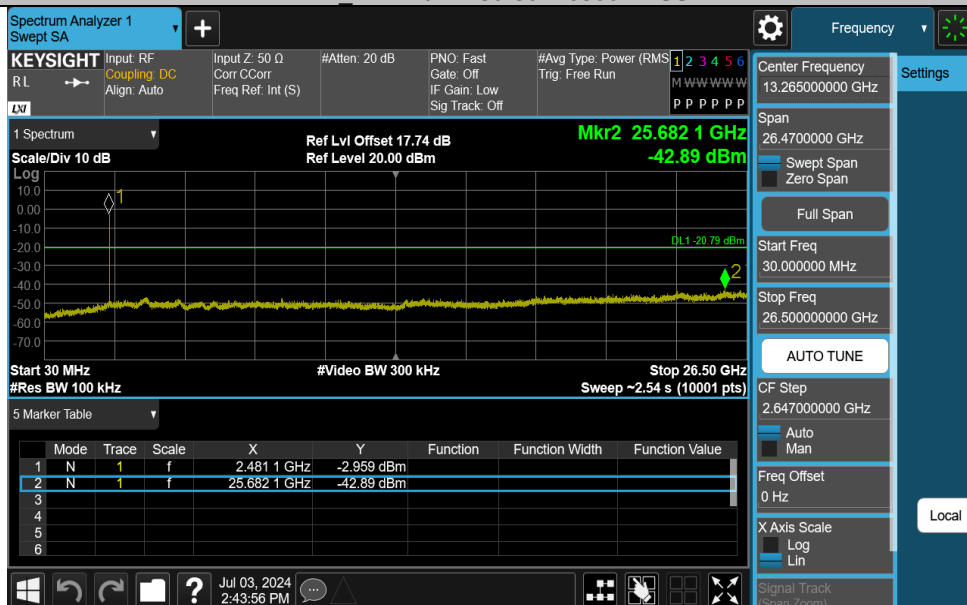
BLE 2M-Ant1-2402-30~26500-PASS



BLE 2M-Ant1-2440-30~26500-PASS



BLE 2M-Ant1-2480-30~26500-PASS



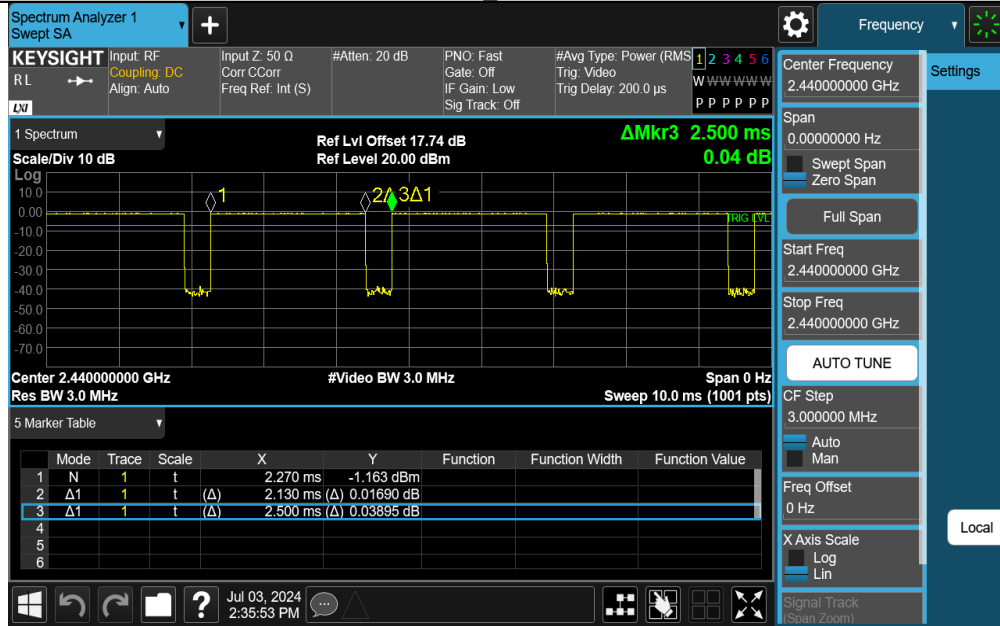
Appendix G: Duty Cycle

Test Result

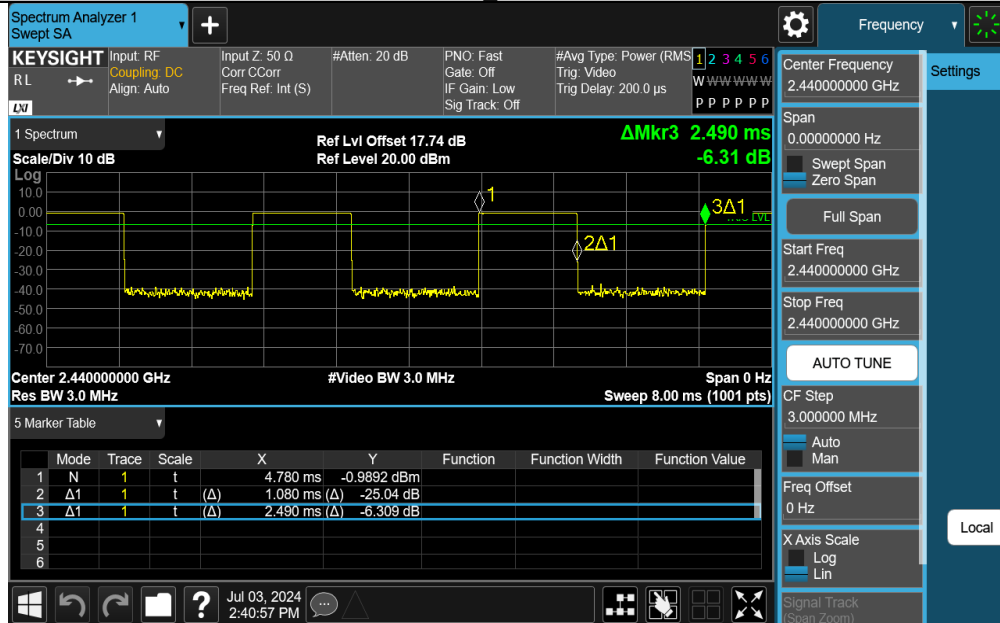
Test Mode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
BLE_1M	Ant1	2440	2.13	2.50	85.20	0.70
BLE_2M	Ant1	2440	1.08	2.49	43.37	3.63

Test Graphs

NTNV-BLE 1M-Ant1-2440

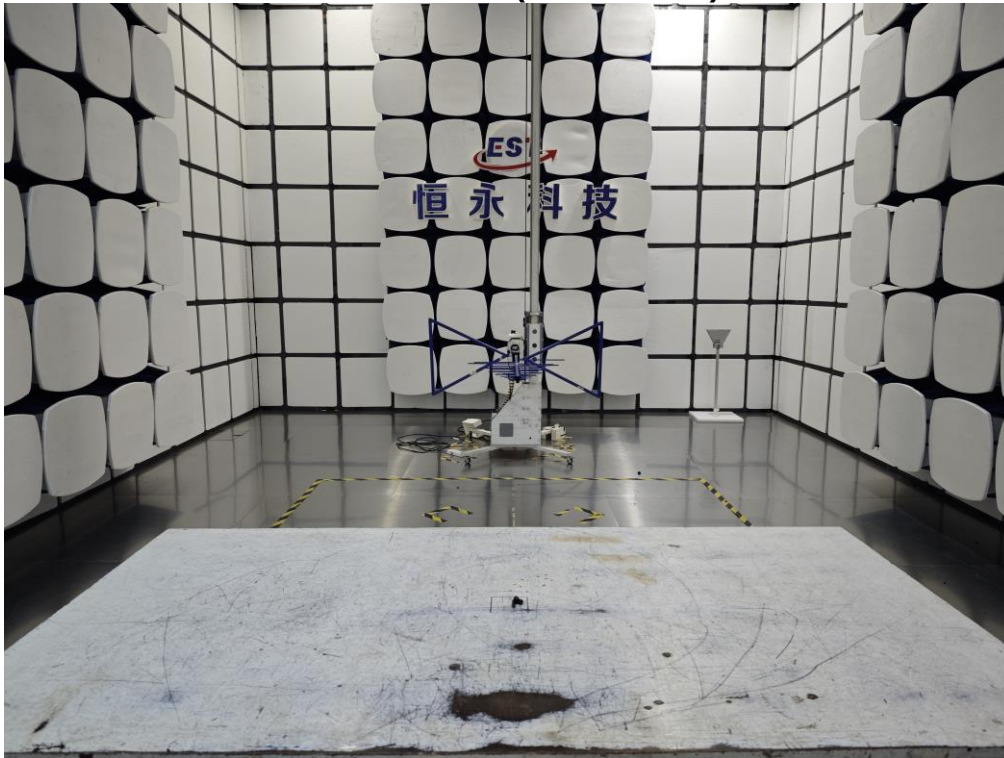


NTNV-BLE 2M-Ant1-2440

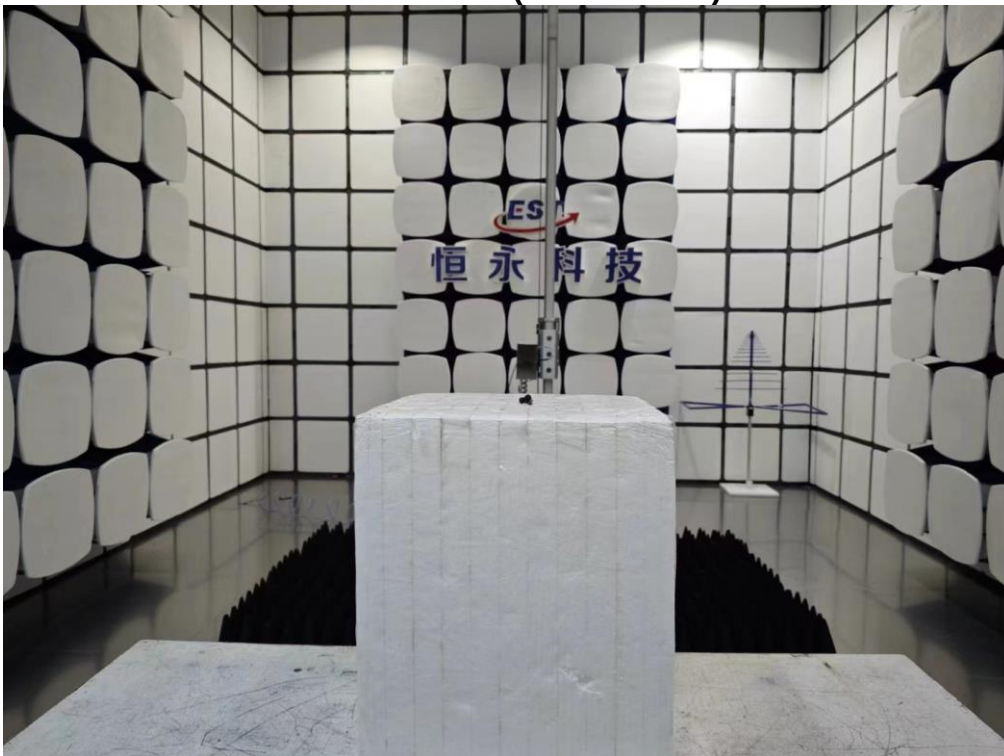


11. TEST SETUP PHOTO

Radiated Test (Below 1GHz)



Radiated Test (Above 1GHz)



12. EUT PHOTO

External Photos

M/N: TW205



External Photos
M/N: TW205



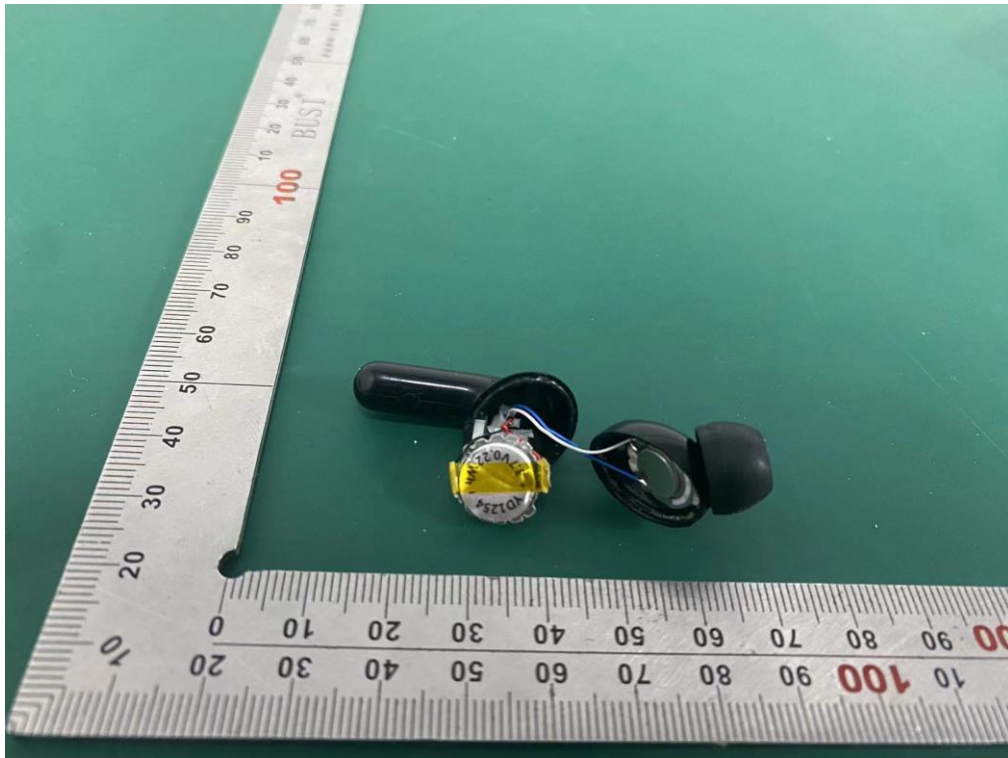
External Photos
M/N: TW205



External Photos
M/N: TW205

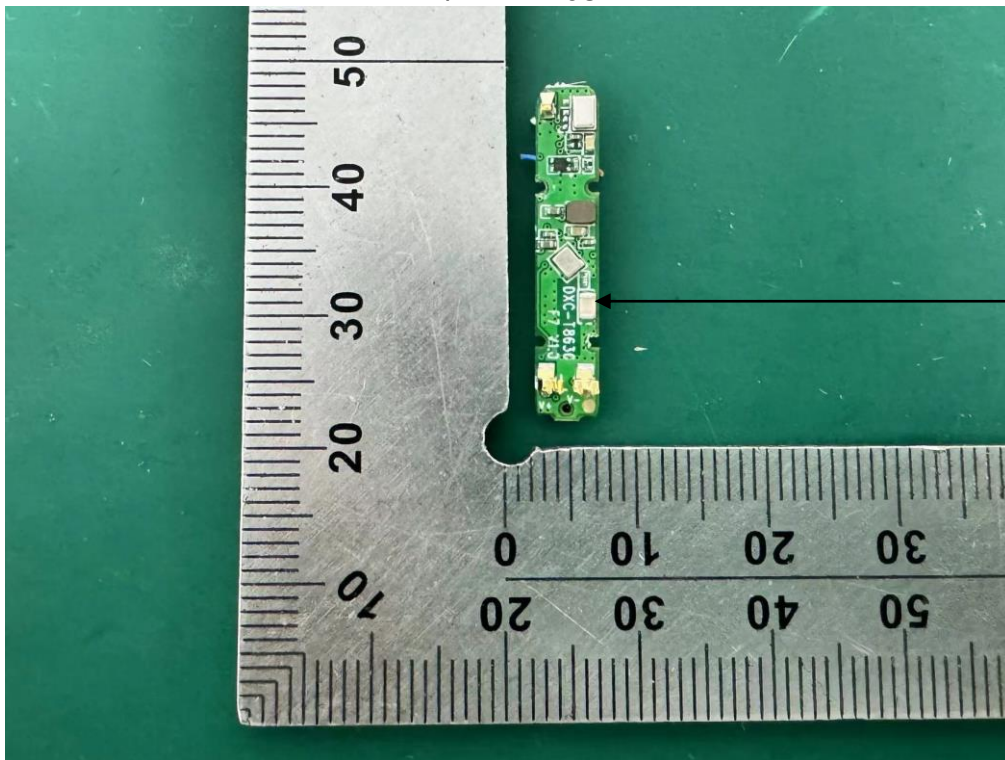


Internal Photos
M/N: TW205

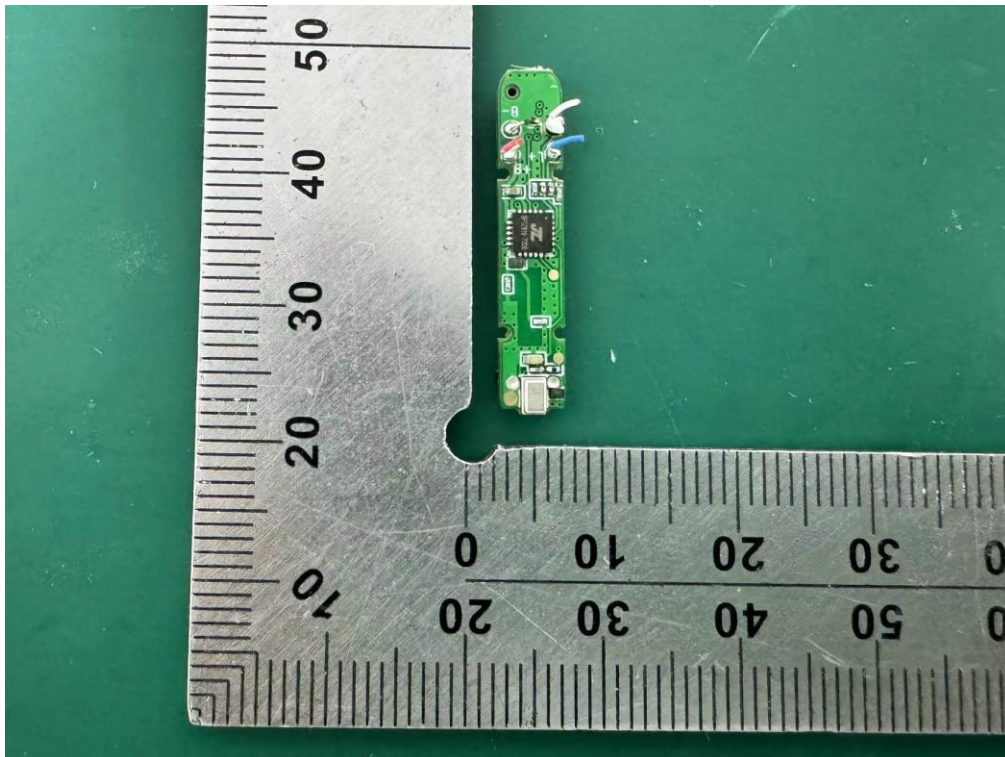


Internal Photos

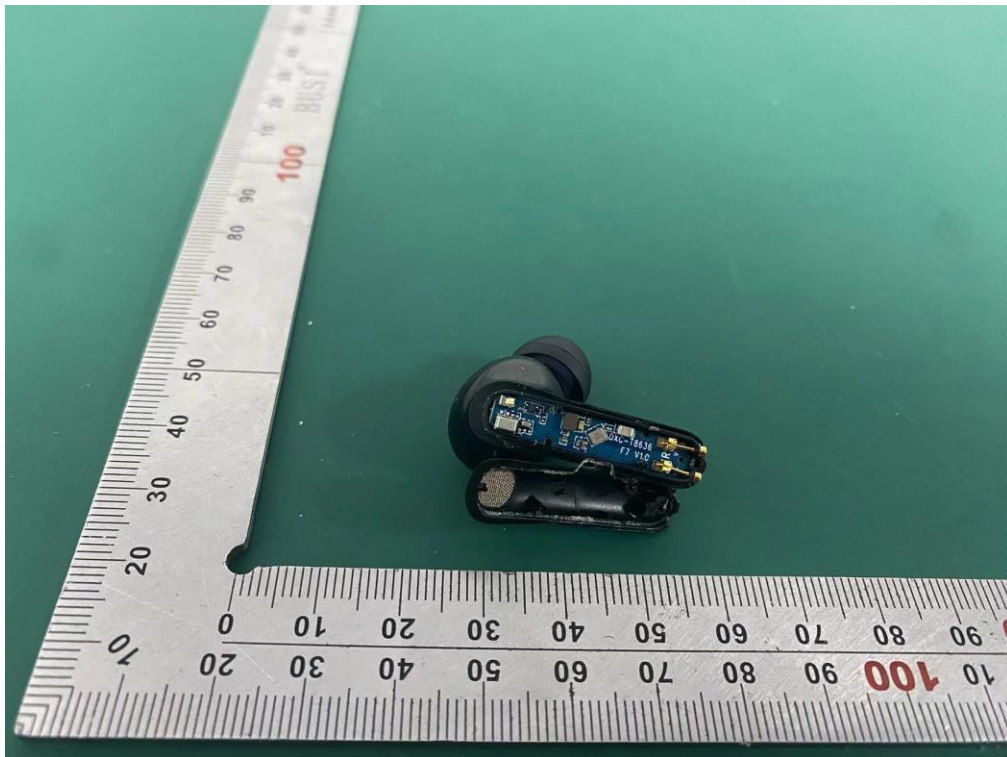
M/N: TW205



Bluetooth
Antenna

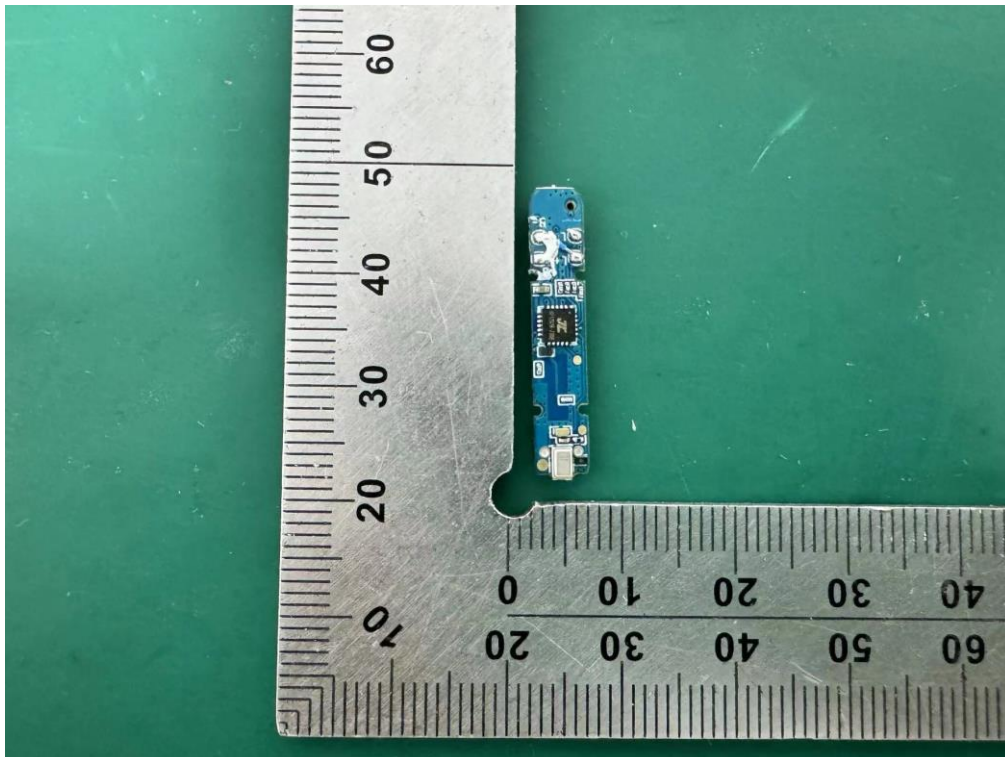
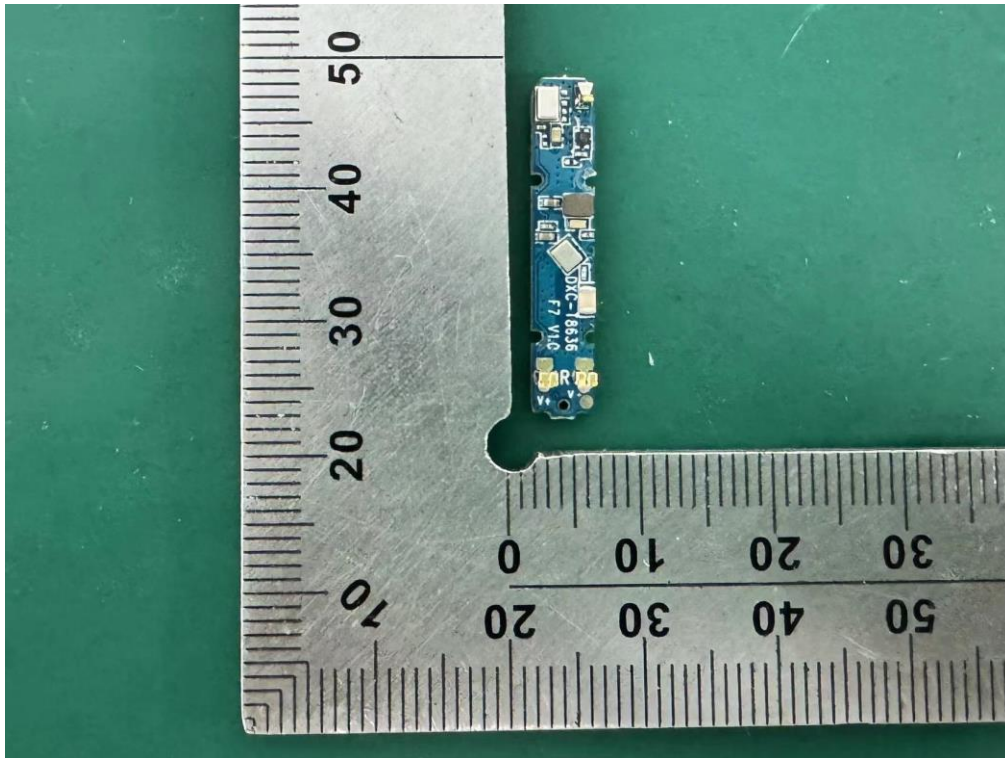


Internal Photos
M/N: TW205



Internal Photos

M/N: TW205

**End of Test Report**