Ambient Energy

Rivera, Pedro

The purpose of this experiment was to examine the potential capturing of energy from the environment using an antenna first tested by Nikola Tesla. The antenna was used to measure voltages in three different situations: height of the antenna, time of day, and the location. Data were recorded, mean values for each situation were calculated, and then two-sample t-tests were performed. The mean for 0 cm was -5.425 millivolts, 152.4 cm was 13.325 millivolts, Indoors was 4.3 millivolts, outdoors was 3.6 millivolts, daytime was 9.85 millivolts, and nighttime was -1.95 millivolts. The p-value for the comparison of height was .037, the p-value for location was .933, and the p-value for time was .305. The analysis of the data indicated that there is a statistically significant difference between ground level and 152.4 cm above the ground, due to a 97% chance that the two sets weren't from the same data set. The other two comparisons (indoors and outdoors; daytime and nighttime) showed no significant statistical differences between their respective comparisons due to high p-values. It was noted that the circuit's voltage fluctuated with the weather and location. Voltage output increased when the antenna was placed near objects known to radiate waves of any form such as an Internet router. This indicated that photons were collected in multiple wavelengths. With this knowledge we are one more step closer to finding out how can we harness the energy collected. Further research is still needed to develop a method to obtain a constant current.

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