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Artificial Light vs. Natural Light

The purpose of this project was to test different light bulb's voltages in comparison to the sun's voltage. Which light would have the closest voltage to the sun, so in the future I can test if the light bulb has enough voltage to charge a battery. I hypothesized that since the LED ten cell light is famous for how bright it is, that it would give out the most voltage, and eventually charge better and faster.

My experiment involved converting an old night stand into a solar panel box and installing terminals to the solar panel and a voltage meter that measured the lights DC voltage. I then tested the different household lights to see which was the closest. The lights were warmed up for thirty seconds before being tested and voltages measured; making sure that each light was kept in the box for about twenty-five seconds.

The hypothesis proved completely incorrect. The data proved that the incandescent light bulb was the closest measuring 17.32v; when the sun's voltage measured at 20.17v. The most commonly used light bulb had the most energy.

I have concluded and discovered that the voltage that a light gives out depends greatly on its heat emission, and the filaments in "soft white" bulb emits a great amount of heat. The LED was the least due to the small or nonexistent amount of heat it gave out.