

Lauren Nelson
Solar Panel Efficiency

We are running low on fossil fuels; we realize it but very little is being done. So, solar panels are part of the answer. They save fossil fuels and are better for the environment because they don't generate pollution like other energy sources. That's why I want to see how the angle of a solar panel affects the amount of electricity generated. To do this, I will have to place three solar panels at three different angles: 25, 45, and 90 degrees. Then I will read the voltage generated by each solar panel. I think that the solar panel at a 25 degree angle will collect the most energy because the sun's angle is 21 degrees in October at 3:00 p.m. facing the sun. The data I collected for the experiment showed the 25 degree angled solar panel had an average of 1.336 volts, the 45 degree angled solar panel had an average of 1.092 volts, and the 90 degree angled solar panel had an average of 1.025 volts over six days of measurements. In conclusion, my data proved that the 25 degree angled solar panel collected the most sunlight or energy.