



**CALIFORNIA STATE SCIENCE FAIR  
2009 PROJECT SUMMARY**

<b>Name(s)</b> Seth N. Thompson	<b>Project Number</b>  29098
<b>Project Title</b> Reflect the Rays: Aluminum Foil and Solar Power Production	
<b>Abstract</b> <b>Objectives/Goals</b> The purpose of my project was to determine if placing aluminum foil reflective panels on a photovoltaic cell would have an effect on the current produced by the solar panel. The test variable angles that were tested: 30°, 60°, 90° and 180°. I believed that the aluminum foil would give the solar panel the most power if the aluminum foil is positioned at a 90° angle, relative to the solar panel. <b>Methods/Materials</b> A moveable reflective panel that could be moved to the angles tested was constructed. The solar panel was tested once without the reflective panel and four other times with the reflective panel placed at the various test variables. I tested the solar panel 15 times for each variable using a multimeter to measure the current. <b>Results</b> The 60° angle provided the greatest current output while the control (absence of reflective panels) provided the least current output. <b>Conclusions/Discussion</b> My conclusion is that aluminum foil can increase the power of a solar panel. Amongst the angles tested, a 60° angle would provide the greatest current output.	
<b>Summary Statement</b> The purpose of my project was to determine if placing aluminum foil reflective panels on a photovoltaic cell would have an effect on the current produced by the solar panel.	
<b>Help Received</b> Thank you to my mother and science teacher for helping me with my project, thank you to the school for providing my board materials, thank you to Mr. Matthew Potter from Unlimited Energy for providing me with information about solar panels.	