**Second Prototype Test Plan**

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From: Team 15

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Subject: Second Prototype Testing Plan

1. **Monitoring Circuit Data + Webserver Pairing**
   1. **Required Materials**
      * **Hardware**
        + **Light intensity sensor**
        + **Temperature sensor**
        + **Voltage/current sensor**
        + **2 pico w microcontrollers**
        + **Laptop to access webserver**
        + **Solar charge controller**
        + **Battery**
        + **USB to microUSB cord**
        + **Lamp (external light source)**
      * **Software**
        + **Backend express.js webserver**
        + **MongoDB database**
        + **React application**
        + **JavaScript functions**
        + **Micropython**
   2. **Set up**
      * **Each half of the monitoring circuit has been paired with the web server.**
   3. **Pre-testing Setup Procedure**
      * **Have the monitoring circuit laid out**
      * **Connect to battery for power via 5V source on solar charge controller**
      * **Open webserver on laptop**
   4. **Testing Procedure**
      * **Live feed from our web server will show the readings of our various sensors.**
      * **A small lamp will be used as an external light source to demonstrate our light sensor’s capabilities**
   5. **Measurable Criteria**
      * **Ability of webserver to display data collected in real time**
      * **Wireless connection between monitoring circuit(s) and webserver**
      * **Professional display of data on webserver**