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| Sr No | Scenario | Case | Expected Result | Result |
| 1 | Measuring Watt Usage | Use ACS sensor with a bulb. Run it on for 5 min. Calculate the value for 1 hour. Compare it with the manufacturers data. | Should be approx equal |  |
| 2 | Sending data to rpi and from rpi | Send a random string value from teensy board to rpi and display on the monitor | String should be displayed on the monitor. |  |
| 3 | Testing the relay | Supply voltage to the positive and negative leads and check resistance between the leads | Resistance should be close to 0 ohms. Or a beep should be heard for continuity check |  |
| 4 | Testing the display | Connect the display to rpi zero. Write a gui program to turn on the led connected to the teensy board. | Display should be on. Led should be turned on and off |  |
| 5 | Testing the transformer | 1)Measure the resistance between primary and secondary coil and determine the primary and secondary coil  2) Measure the resistance s1 and s2.  3) Resistance between primary and secondary.  4) Resistance between core and primary and core and secondary  5) Measure the secondary voltage and connect the primary voltage. | 1) Primary should have a significantly higher value than secondary.  2) They should be equal.  3) Should be infinite (ie., open)  4) They both should be infinite (ie., open)  5) Should be 12 V |  |
| 6 | Testing the voltage regulator | Connect 12 V supply to the input pins and measure the output value | Should be around 5 V +- 0.12 V |  |
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