

# 1st Experiment

Date

8:20 PM 开始, assume this is 1am.

电流比较: 0.3 Vs 0.378  
0.

| 电压     | 电流    | 瓦数   | Hz | kwh (度) | Cost            | total cost | PF   |
|--------|-------|------|----|---------|-----------------|------------|------|
| V      | A     | Wat  |    |         | cent/kwh        |            |      |
| 120.2  | 0.378 | 31.9 | 60 | 0.213   | 2.92            |            |      |
| 121    | 0.378 | 31.9 |    | 0.218   | <del>2.92</del> | 2.34       | 0.73 |
| 21.2°C |       |      |    |         |                 |            |      |

| 湿度              | 时间          | 电压                                 | 电流    | 瓦数          | Hz | 度数 kwh | Cost            | PF                        | 电流   |
|-----------------|-------------|------------------------------------|-------|-------------|----|--------|-----------------|---------------------------|------|
| 1am             | 8:20        | 120.2                              | 0.378 | 31.9        | 60 | 0.213  | 2               |                           | 0.3  |
| 21.2            | 1:10am 8:30 | 121                                | 0.378 | 31.9        | 60 | 0.218  | 2.34            | 0.73                      | 0.31 |
| 23.6            | 1:20am 8:40 | 121.1                              | 0.378 | 31.9        | 60 | 0.221  | 2.36            | <sup>2.71</sup><br>(32.5) | 0.33 |
| 23.2            | 1:30 8:50   | 121.2                              | 0.389 | 32.5        | 60 | 0.226  | 2.37            | 0.68                      | 0.34 |
| <del>24.5</del> | 1:35 8:55   | 121.7                              | 0.389 | 32.8        | 60 | 0.229  | <del>2.39</del> | 0.69                      | 0.34 |
| 25.1            | 1:36 8:01   | 121.4                              | 0.40  | 31.9        | 60 | 0.233  | 2.39            | 0.67                      | 0.33 |
| 24.8            | 1:41 9:06   | 121.8                              | 0.400 | 31.9        | 60 | 0.235  | 2.39            | 0.66                      | 0.33 |
| 25.3            | 1:46 9:11   | 121.4                              | 0.389 | 31.9        | 60 | 0.238  | 2.40            | 0.70                      | 0.34 |
| 26.1            | 2am 9:20    | <sup>121</sup><br><del>120.7</del> | 0.411 | 31.9 / 33.9 |    | 0.243  | 2.42            | 0.68                      | 0.36 |
| 26.8            | 9:30        |                                    | 0.422 | 31.9 / 34.3 |    | 0.248  | 2.43            | 0.67                      | 0.36 |

# 2nd Experiment

| Time Interval (minute) | Battery Temp in °C | Voltage in V | Frequency in HZ | Current in A | Real Current A | Wattage Output in W  | Energy in KWh | Wattage input in W | Cost/K Wh | Cost in Cents |
|------------------------|--------------------|--------------|-----------------|--------------|----------------|----------------------|---------------|--------------------|-----------|---------------|
| 8:50                   | 19.5               | 120.4        | 60              | 0.389        | 0.30           | <del>32.2</del> 32.2 | 0.275         |                    | 2.92      | 2.52          |
| 9:00                   | 20.2               | 120.4        | 60              | 0.378        | 0.34           | 32.2                 | 0.281         |                    | 2.92      | 2.53          |
| 9:10                   | 20.6               | 120.5        | 60              | 0.389        | 0.33           | 32.5                 | 0.286         |                    | 2.92      | 2.55          |
| 9:20                   | 21.6               | 119.4        | 60              | 0.389        | 0.34           | 32.8                 | 0.291         |                    | 2.92      | 2.56          |
| 9:30                   | 21.3               | 120.2        | 60              | 0.378        | 0.35           | 33.1                 | 0.297         |                    | 2.92      | 2.58          |
| 9:40                   | 22.6               | 120.7        | 60              | 0.389        | 0.36           | 33.4                 | 0.302         |                    | 2.92      | 2.59          |
| 9:50                   | 23.2               | 120.7        | 60              | 0.389        | 0.36           | 34.0                 | 0.307         |                    | 2.92      | 2.60          |
| 10:00                  | 23.3               | 119.8        | 60              | 0.400        | 0.37           | 34.3                 | 0.313         |                    | 2.92      | 2.62          |
| 10:10                  | 23.9               | 120.2        | 60              | 0.422        | 0.37           | 35.1                 | 0.318         |                    | 2.92      | 2.64          |
| 10:20                  | 24.0               | 120.2        | 60              | 0.422        | 0.38           | 35.7                 | 0.324         |                    | 2.92      | 2.65          |
| 10:30                  | 24.8               | 119.4        | 60              | 0.432        | 0.39           | 36.3                 | 0.330         |                    | 2.92      | 2.67          |
| 10:40                  | 24.9               | 120.5        | 60              | 0.422        | 0.03           | 0.0                  | 0.335         |                    | 2.92      | 2.69          |
| 10:50                  | 24.5               | 121.0        | 60              | 0.000        | 0.02           | 0.0                  | 0.336         |                    | 2.92      | 2.69          |
| 11:00                  |                    |              | 60              |              |                |                      |               |                    | 2.92      | 2.69          |