

## Test 2

|                           |              | Tesla Switch Configuration |           |           | 20 watt load | 8.5 hour run time      |             |
|---------------------------|--------------|----------------------------|-----------|-----------|--------------|------------------------|-------------|
|                           | Time (hours) | Battery 1                  | Battery 2 | Battery 3 | Battery 4    | Average                | Cumulative  |
| Start (switch off)        |              | 12.48                      | 12.44     | 12.48     | 12.46        | 12.465                 |             |
| On                        | 0:00         | 12.48                      | 12.24     | 12.47     | 12.28        | 12.3675                |             |
|                           | 0:15         | 12.5                       | 12.08     | 12.45     | 12.16        | 12.2975                | 0.07        |
|                           | 0:30         | 12.51                      | 12.05     | 12.44     | 12.11        | 12.2775                | 0.09        |
|                           | 0:45         | 12.51                      | 12.04     | 12.44     | 12.08        | 12.2675                | 0.1         |
|                           | 1:00         | 12.51                      | 12.04     | 12.45     | 12.07        | 12.2675                | 0.1         |
|                           | 1:15         | 12.51                      | 12.03     | 12.44     | 12.06        | 12.26                  | 0.1075      |
|                           | 1:30         | 12.51                      | 12.02     | 12.44     | 12.06        | 12.2575                | 0.11        |
|                           | 1:45         | 12.51                      | 12.02     | 12.44     | 12.05        | 12.255                 | 0.1125      |
| Swap Top and bottom batts |              |                            |           |           |              |                        |             |
|                           | 2:00         | 12.26                      | 12.22     | 12.22     | 12.24        | 12.235                 | 0.1325      |
|                           | 5:30         | 12.06                      | 12.34     | 12.16     | 12.24        | 12.2                   | 0.1675      |
| Swap Top and Bottom Batts |              |                            |           |           |              |                        |             |
|                           | 5:45         | 12.32                      | 12.04     | 12.35     | 12.04        | 12.1875                | 0.18        |
|                           | 6:00         | 12.33                      | 12.03     | 12.35     | 12.03        | 12.185                 | 0.1825      |
|                           | 8:30         | 12.38                      | 11.95     | 12.36     | 11.97        | 12.165                 | 0.2025      |
|                           |              |                            |           |           |              | Total Loss=.2025 Volts |             |
| Switch Disconnected       |              | 12.38                      | 12.12     | 12.37     | 12.12        | 12.2475                |             |
| After Resting             |              |                            |           |           |              |                        | Charge gair |
| 15 mins                   |              | 12.38                      | 12.17     | 12.39     | 12.19        | 12.2825                | 0.035       |
| 30 mins                   |              | 12.36                      | 12.19     | 12.4      | 12.2         | 12.2875                | 0.04        |
| 9 hrs                     |              | 12.36                      | 12.23     | 12.43     | 12.24        | 12.315                 | 0.0675      |

|                   |      | 4 Batteries Parallel |           |           |           | 20 watt load |  | 8.5 hour run time |  |
|-------------------|------|----------------------|-----------|-----------|-----------|--------------|--|-------------------|--|
| Time (hours)      |      | Battery 1            | Battery 2 | Battery 3 | Battery 4 | Average      |  | Cumulative        |  |
| Start (light off) |      | 12.51                | 12.41     | 12.51     | 12.41     | 12.46        |  |                   |  |
| On                | 0:00 | 12.34                | 12.38     | 12.4      | 12.4      | 12.38        |  |                   |  |
|                   | 0:15 | 12.21                | 12.3      | 12.24     | 12.31     | 12.265       |  | 0.115             |  |
|                   | 0:30 | 12.15                | 12.26     | 12.19     | 12.27     | 12.2175      |  | 0.1625            |  |
|                   | 0:45 | 12.13                | 12.23     | 12.16     | 12.24     | 12.19        |  | 0.19              |  |
|                   | 1:00 | 12.12                | 12.22     | 12.16     | 12.22     | 12.18        |  | 0.2               |  |
|                   | 1:15 | 12.11                | 12.2      | 12.14     | 12.2      | 12.1625      |  | 0.2175            |  |

|      |       |       |       |       |        |       |
|------|-------|-------|-------|-------|--------|-------|
| 1:30 | 12.1  | 12.19 | 12.14 | 12.19 | 12.155 | 0.225 |
| 8:30 | 11.84 | 12.04 | 11.88 | 12.06 | 11.955 | 0.425 |

Loss Loss/hr

0.1

0.06625  
0.030455

0.030417  
0.023824

(Averaged)

ied

Loss Loss/hr

0.2

0.15  
0.05