# BATTERY CALCULATIONS

**FAP-001-01**

## Notification Appliance Circuit

### Voltage Drop & Power Requirements

<table>
<thead>
<tr>
<th>Circuit</th>
<th>Power Demand</th>
<th>Voltage Drop</th>
<th>Power Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>120W</td>
<td>2%</td>
<td>118.8W</td>
</tr>
<tr>
<td>2</td>
<td>120W</td>
<td>2%</td>
<td>118.8W</td>
</tr>
<tr>
<td>3</td>
<td>120W</td>
<td>2%</td>
<td>118.8W</td>
</tr>
<tr>
<td>4</td>
<td>120W</td>
<td>2%</td>
<td>118.8W</td>
</tr>
</tbody>
</table>

### Power Demand Calculation

1. **Pre-Overlap Voltage:** 230V
2. **Connection Factor:** 0.80
3. **Voltage Drop:** 2% (230V x 0.02 = 4.6V)
4. **Net Voltage:** 225.4V

### Voltage Drop Calculation

1. **Pre-Overlap Voltage:** 230V
2. **Connection Factor:** 0.80
3. **Voltage Drop:** 2% (230V x 0.02 = 4.6V)
4. **Net Voltage:** 225.4V

---

**AS BUILT**

- 09/24/13