# WaveLinx Connected Lighting

## Typical Wiring Detail

### Design Consideration:
- **Best Practice:**
  - Gateway/WAC range: 150 feet to 200 feet LOS
  - Number of interior walls: 3 walls
  - Distance from WAC to 1st WCL device: 150 feet
  - Distance between WCL devices: 75 feet
  - Number of hops from WAC: 4 hops
  - Number of areas per WAC: 15 + construction area
  - Number of zones per area: 3
  - Number of scenes per area: 16

### Best Practice:
- **300 feet LOS
  - 3 walls
  - 200 feet
  - 150 feet
  - 5 hops
  - 15 + construction area
  - 16

## Bill of Materials

<table>
<thead>
<tr>
<th>Qty</th>
<th>Catalog #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WAC-POE</td>
<td>Wireless Area Controller</td>
</tr>
<tr>
<td>2</td>
<td>W4S-RL-W</td>
<td>1 Large button scene wallstation</td>
</tr>
<tr>
<td>24</td>
<td>24EN-LD2-34-UNV-L835-CD1-SWPD1-U</td>
<td>Encounter 2x4 with Instinct Sensor</td>
</tr>
</tbody>
</table>

## Sequence of Operations:

### Lighting
- 0-10V Lighting Loads
- Up to 3 Dimming Zones
- Out of the Box 75% High End Trim

### Occupancy
- Out of the Box Auto On to 50%
- Optional Vacancy Mode
- Optional Auto On to Scene
- Plug Load Turns On with Occupancy
- Automatic Off of Lighting and Plug Load on Vacancy

### Daylighting
- Continuous Dimming to Off
- Individual Luminaire Daylight Dimming
- Daylighting Not Required for Indoor Offices
- Not Required in Spaces Without Windows That Are Less Than 120W.

### Manual Controls
- Programmable Scenes
- Scene Raise
- Scene Lower
- All Off

### Additional Features
- Energy Calculations Available Through Trellix
- Automatic Demand Response Available from Wireless Area Controller
- Scheduling of Partial Off Light Levels and Times from Wireless Area Controller
- UL924 Emergency Control Capabilities Available via Luminaire Battery Backup

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**(Functional Testing)**

**(Energy Monitoring)**

**(Receptacle Control)**

**(Scheduled Off)**

**(Automatic Off)**

**(Partial On)**

**(Manual On)**

**(Local Control)**

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