### WaveLinx Connected Lighting

#### 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>W1L-RL-W</td>
<td>1 Large button scene wallstation</td>
</tr>
<tr>
<td>6</td>
<td>24EN-LD2-34-UNV-L835-CD1-SWP1-U</td>
<td>Encounter 2x4 with iNstinct Sensor</td>
</tr>
</tbody>
</table>

#### Design Considerations:

- **Gateway/WAC range:**
  - 150 feet to 250 feet LOS
  - 300 feet LOS

- **Number of interior walls:**
  - 2 walls
  - 3 walls

- **Distance from WAC to 1st WCL device:**
  - 150 feet
  - 200 feet

- **Distance between WCL devices:**
  - 75 feet
  - 150 feet

- **Number of hops from WAC:**
  - 4 hops
  - 5 hops

- **Number of areas per WAC:**
  - 15 + construction area
  - 15 + construction area

- **Number of zones per area:**
  - 3
  - 16

- **Number of scenes per area:**
  - 16

#### Typical Wiring Detail

- **Wireless Area Controller (WAC-POE):** installed within 150ft of WCL devices
- **Encounter 2x4 with iNstinct Sensor:**

#### 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

- **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

#### IECC 2015 Design Guide

- **Corridor with 0-10V Dimming**

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**Typical Wiring Detail**

- Wireless Area Controller (WAC-POE) installed within 150ft of WCL devices.
- Encounter 2x4 with iNstinct Sensor:

**Additional Information:**

- Occupancy Sensor
- Daylighting Control
- Manual On/Off
- Testing Control
- Manual Override
- Occupancy Override
- Automatic Dimming
- Energy Monitoring
- Functional Response
- Demand Response
- Enhanced Digital