nLight Lighting Controls Platform

It's not just smarter. It's easier.

nLight is a sensor-based digital lighting controls solution that offers wired and wireless lighting controls that easily connect luminaires, sensors, and other control devices to create a digital network. The nLight platform of products enables ease in specification, installation, and ownership, making it the go-to digital lighting controls platform for specifiers, contractors, and building owners.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>04</td>
<td>Code Requirements for Common Building Spaces</td>
</tr>
<tr>
<td>05</td>
<td>How to Use This Guide</td>
</tr>
<tr>
<td>06</td>
<td>Private Office Solutions</td>
</tr>
<tr>
<td>08</td>
<td>Open Office Solutions</td>
</tr>
<tr>
<td>10</td>
<td>Conference Room Solutions</td>
</tr>
<tr>
<td>12</td>
<td>Classroom Solutions</td>
</tr>
<tr>
<td>14</td>
<td>Lobby Solutions</td>
</tr>
<tr>
<td>16</td>
<td>Corridor Solutions</td>
</tr>
<tr>
<td>18</td>
<td>Restroom Solutions</td>
</tr>
<tr>
<td>21</td>
<td>Stairwell Solutions</td>
</tr>
<tr>
<td>22</td>
<td>Warehouse Solutions</td>
</tr>
<tr>
<td>23</td>
<td>Gymnasium Solutions</td>
</tr>
<tr>
<td>24</td>
<td>Parking Garage</td>
</tr>
<tr>
<td>25</td>
<td>Site Lighting</td>
</tr>
<tr>
<td>26</td>
<td>nLight Hybrid Networked Lighting Control</td>
</tr>
<tr>
<td>27</td>
<td>Requirements Overview</td>
</tr>
<tr>
<td>28</td>
<td>Emergency Lighting</td>
</tr>
<tr>
<td>29</td>
<td>nLight Enabled Luminaires</td>
</tr>
</tbody>
</table>
About IECC 2015
The International Energy Conservation Code (IECC) 2015 is a residential and commercial building energy code. The IECC has been adopted by many states and municipalities. The intention of this code is to reduce energy consumption by outlining design and construction requirements which include specific constraints for lighting controls. The use of lighting controls to synchronize light levels with daylight, occupancy, and scheduled/manual inputs are required in order to be compliant.

About This Guide
Acuity Brands® offers the nLight® IECC Applications Guide as a reference of typical nLight layouts that help make code compliance quicker and easier. The Acuity Brands Design Services Team is also available to support engineers and contractors with detailed design, submittal, and installation. For additional information, please contact your Acuity Brands Sales Representative.

About nLight
nLight® is a sensor-based digital lighting controls solution that offers wired and wireless lighting controls that easily connect luminaires, sensors, and other control devices to create one digital lighting controls platform to aid in code compliance, reduce energy, and enable advanced networked capabilities. Ideal for practically any application, small to large, indoor to outdoor, nLight offers lighting controls that scale from one room to an entire floor, from one floor to an entire building, from one building to an entire campus.
The chart below is an overview of the Code Requirements for Common Building Spaces. Please use this information as a guide. For specific code requirements please refer to the IECC code.

<table>
<thead>
<tr>
<th>Control Requirement*</th>
<th>Code Provision</th>
<th>Code Summary*</th>
<th>Space Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Private Office</td>
</tr>
<tr>
<td>Manual-On or AutoOn ≤ 50%</td>
<td>C405.2.1.1.2</td>
<td>Automatically controlled spaces must be controlled to automatically turn the lighting on to not more than 50% power.</td>
<td>✓</td>
</tr>
<tr>
<td>Full Automatic-On</td>
<td>C405.2.1.1.2</td>
<td>Automatically controlled spaces are allowed to turn on to full.</td>
<td>✓</td>
</tr>
<tr>
<td>Auto-Off ≤ 50%</td>
<td>C405.2.1.2</td>
<td>Occupancy sensors shall automatically reduce lighting in warehouse aisle-ways and open areas by ≤ 50%</td>
<td>✓</td>
</tr>
<tr>
<td>Full Auto-Off via Occupancy Sensor</td>
<td>C405.2.1.1.1</td>
<td>Fixtures must automatically turn off within 30 minutes of all occupants leaving the space.</td>
<td>✓</td>
</tr>
<tr>
<td>Time-Switch Controls (via System Controller)</td>
<td>C405.2.2.1</td>
<td>Each area of the building not provided with occupant sensor controls shall be provided with time switch controls. These areas must also be provided with a manual override switch.</td>
<td>✓</td>
</tr>
<tr>
<td>Light Reduction Controls</td>
<td>C405.2.2.2</td>
<td>Spaces shall have a manual control that allows the occupant to reduce the connected lighting load uniformly by at least 50%.</td>
<td>✓</td>
</tr>
<tr>
<td>Manual Control (Local Switch)</td>
<td>C405.2.2.3</td>
<td>Areas shall incorporate a manual control to allow occupants to turn fixtures off.</td>
<td>✓</td>
</tr>
<tr>
<td>Daylight-Responsive Controls</td>
<td>C405.2.3.1/2</td>
<td>Daylight-responsive controls shall be provided within each space with sidelight and toplight daylight zones totaling &gt; 150W.</td>
<td>✓</td>
</tr>
<tr>
<td>Exterior Lighting Controls</td>
<td>C405.2.5</td>
<td>Lighting for exterior applications other than emergency lighting that is intended to be automatically off during building operation.</td>
<td>✓</td>
</tr>
<tr>
<td>Exterior Lighting Controls</td>
<td>C405.2.5.3</td>
<td>Lighting shall automatically reduce connected lighting power by not less than 30% from no later than midnight to 6 am for one hour after business closing when occupancy has not been detected for longer than 15 minutes</td>
<td>✓</td>
</tr>
</tbody>
</table>
For each space type there will be a wired solution on the left and wireless solution on the right.

Operational details describe the functionality provided by the equipment specified in the solution.

Additional options that add control capacity beyond code requirements

Notes:
* This summary is for general information purposes only and is provided without any warranty as to accuracy, completeness, or otherwise. The user should read the applicable code sections for more complete and detailed descriptions of code requirements and exceptions and should consult with a professional engineer or other competent advisor before making any decision or taking any action based on this summary.
** While energy code is required, safety may preclude the use of a manual controls in these spaces.
PRIVATE OFFICE: < 250 sq. ft., Windows, nLight Enabled Fixtures

### Wired

![Wired Diagram](image1)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nWSX PDT LV DX</td>
<td>Wall Switch Occupancy Sensor with On/Off, Raise/Lower</td>
</tr>
</tbody>
</table>

### Wireless

![Wireless Diagram](image2)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod®</td>
</tr>
</tbody>
</table>

**Bill of Materials**

**OPERATIONAL DETAILS:**

**Light Fixtures:**
- All fixtures are dimmable
- All fixtures can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**
- Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
- Fixtures turn off automatically when room becomes vacant

**Daylight Control:**
- Not required for offices without windows or that have loads <150W in sidelight zones

**Manual Control:**
- On/off & raise/lower control of fixtures

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE® controller
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**Note:** Contact your local lighting agent for more information on nLight enabled fixtures.
PRIVATE OFFICE: < 250 sq. ft., Windows, 0-10V Dimming Fixtures

**Wired**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- For emergency lighting control use a power pack with ER option

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Symbol" /></td>
<td>1</td>
<td>nPP16 D EFP</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image2" alt="Symbol" /></td>
<td>1</td>
<td>nWSX PDT LV DX</td>
<td>Wall Switch Occupancy Sensor with On/Off, Raise/Lower</td>
</tr>
</tbody>
</table>

**Operational Details:**

- Light Fixtures:
  - All fixtures are dimmable
  - All fixtures are controlled together
  - Maximum level can be task tuned to any percentage via programming
- Occupancy Control:
  - Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
  - Fixtures turn off automatically when room becomes vacant
- Daylight Control:
  - Not required for offices without windows or that have loads <150W in sidelight zone
- Manual Control:
  - On/off & raise/lower control of fixtures

**Additional Options:**

- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- For emergency lighting control use a power pack with ER option

---

**Wired**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- For emergency lighting control use a power pack with ER option

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Symbol" /></td>
<td>1</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image2" alt="Symbol" /></td>
<td>1</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol" /></td>
<td>1</td>
<td>rCMS PDT 9 G2</td>
<td>Occupancy and Daylight Sensor</td>
</tr>
</tbody>
</table>

---

IECC 2015: nLight Applications Guide
OPEN OFFICE with nLight Enabled Fixtures

**Wired**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**Light Fixtures:**
- All fixtures are dimmable
- All fixtures are controlled together or independently
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**
- Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
- Fixtures turn off automatically when room becomes vacant

**Daylight Control:**
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number zones = number of fixtures)
- Not required for offices without windows or that have loads <150W in sidelight zones

**Manual Control:**
- On/off & raise/lower control of fixtures

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture with EMG option</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPODM DX</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>nCM PDT 9 RJB</td>
<td>Occupancy Sensor</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nCM ADCX RJB</td>
<td>Daylight Sensor</td>
</tr>
</tbody>
</table>

**Wireless**

- Fixtures assumed to be battery backup

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>14</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture with Battery Option</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
  - Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**NOTE:** Contact your local lighting agent for more information on nLight enabled fixtures.

---

**OPERATIONAL DETAILS:**

- Some nLight enabled EMG fixtures require a normal sense line connection. See fixture spec sheets for details.
- Fixtures assumed to be battery backup

---

www.acuitybrands.com/nLight • 800-535-2465
OPEN OFFICE with 0-10V Dimming Fixtures

Wired

Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)

Note: Max of 4 fixtures per controlled group

HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

### Light Fixtures:
- All fixtures are dimmable
- Each row controlled independently
- Maximum level can be task tuned to any percentage via programming

### Occupancy Control:
- Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
- Fixtures turn off automatically when room becomes vacant

### Daylight Control:
- Smooth continuous dimming
- Daylight zones defined by rows
- Not required for offices without windows or that have loads <150W in sidelight zones

### Manual Control:
- On/off & raise/lower control of fixtures

### Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>nPP16 D EFP</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nPP16 D ER EFP</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPODM DX</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>nCM PDT 9 RJB</td>
<td>Occupancy Sensor</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nCM ADCX RJB</td>
<td>Daylight Sensor</td>
</tr>
</tbody>
</table>

### OPERATIONAL DETAILS:

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

Wireless

Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>rPP20 DS ER G2</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>rCMS PDT 9 G2</td>
<td>Occupancy and Daylight Sensor</td>
</tr>
</tbody>
</table>

ADDITIONAL OPTIONS:
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

IECC 2015: nLight Applications Guide
**OPERATIONAL DETAILS:**

**Light Fixtures:**
- All fixtures are dimmable
- Maximum level can be task tuned to any percentage via programming
- A/V zone can be programmed to control two fixtures in front of the whiteboard

**Occupancy Control:**
- Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
- Fixtures turn off automatically when room becomes vacant

**Daylight Control:**
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max number zones = number of fixtures)
- Not required for areas without windows or that have loads ≤150w in sidelight zones

**Manual Control:**
- On/off & raise/lower control of two zones of fixtures

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4) Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

Note: Contact your local lighting agent for more information on nLight enabled fixtures.
CONFERENCE ROOM with 0-10V Dimming Fixtures

### Operational Details:

**Light Fixtures:**
- All fixtures are dimmable.
- Maximum level can be task tuned to any percentage via programming.

**Occupancy Control:**
- Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%).
- Fixtures turn off automatically when room becomes vacant.

**Daylight Control:**
- Smooth continuous dimming.
- Daylight zones defined by rows.
- Not required for areas without windows or that have loads <150W in sidelight zones.

**Manual Control:**
- On/off & raise/lower control of two zones of fixtures.

### Additional Options:
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4).
- Note: Max of 4 fixtures per controlled group.
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option.

### Bill of Materials

**Wired**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Symbol" /></td>
<td>2</td>
<td>nPP16 D EFP</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image2.jpg" alt="Symbol" /></td>
<td>1</td>
<td>nPODM 2P DX</td>
<td>2-Pole On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td><img src="image3.jpg" alt="Symbol" /></td>
<td>1</td>
<td>nCM PDT 9 RJB</td>
<td>Occupancy Sensor</td>
</tr>
<tr>
<td><img src="image4.jpg" alt="Symbol" /></td>
<td>1</td>
<td>nCM ADCX RJB</td>
<td>Daylight Sensor</td>
</tr>
</tbody>
</table>

**Wireless**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5.jpg" alt="Symbol" /></td>
<td>2</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image6.jpg" alt="Symbol" /></td>
<td>1</td>
<td>rPODB 2P DX G2</td>
<td>2-Pole On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td><img src="image7.jpg" alt="Symbol" /></td>
<td>1</td>
<td>rCMS PDT 9 G2</td>
<td>Occupancy and Daylight Sensor</td>
</tr>
</tbody>
</table>

**Wiring Diagrams**

- Wired: CAT-5e Cable, Line Voltage Wires, Line Power Feed, 0-10V Wires.
- Wireless: Low Voltage Wires, Line Voltage Wires, Line Power Feed, 0-10V Wires.
CLASSROOM with nLight Enabled Fixtures

**Wired**

OPERATIONAL DETAILS:
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**Light Fixtures:**
- All fixtures are dimmable
- All fixtures are controlled together or independently
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**
- Fixtures must be turned on manually (or optionally can be configured to some on automatically to 50%)
- Fixtures automatically turn off when room becomes vacant

**Daylight Control:**
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max number zones = number of fixtures)
- Not required for areas without windows or that have loads <150W in sidelight zones

**Manual Control:**
- On/off & raise/lower control of entire room
- Teacher station with control of two zones

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Light Fixture" /></td>
<td>9</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture</td>
</tr>
<tr>
<td><img src="image" alt="On/Off WallPod" /></td>
<td>1</td>
<td>nPODM DX</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td><img src="image" alt="Dual Technology Wide View Occupancy Sensor" /></td>
<td>1</td>
<td>nWV PDT 16</td>
<td>Dual Technology Wide View Occupancy Sensor</td>
</tr>
<tr>
<td><img src="image" alt="Teacher Station — 4 Scene Control Master On/Off &amp; Raise/Lower" /></td>
<td>1</td>
<td>nPODM 4S DX</td>
<td>Teacher Station — 4 Scene Control Master On/Off &amp; Raise/Lower</td>
</tr>
<tr>
<td><img src="image" alt="Daylight Sensor" /></td>
<td>1</td>
<td>nCM ADCX RJB</td>
<td>Daylight Sensor</td>
</tr>
</tbody>
</table>

**Wireless**

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Light Fixture" /></td>
<td>9</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture</td>
</tr>
<tr>
<td><img src="image" alt="On/Off WallPod" /></td>
<td>1</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td><img src="image" alt="2-Pole On/Off, Raise/Lower WallPod" /></td>
<td>1</td>
<td>rPODB 2P DX G2</td>
<td>2-Pole On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

\[Note: Contact your local lighting agent for more information on nLight enabled fixtures.\]

www.acuitybrands.com/nLight • 800-535-2465
**CLASSROOM with 0-10V Dimming Fixtures**

### Wired

- **Operational Details:**
  - **Light Fixtures:**
    - All fixtures are dimmable
    - Each row can be controlled independently
    - Maximum level can be task tuned to any percentage via programming
  - **Occupancy Control:**
    - Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
    - Fixtures automatically turn off when room becomes vacant
  - **Daylight Control:**
    - Smooth continuous dimming
    - Daylight zones defined by rows
    - Not required for areas without windows or that have loads <150W in sidelight zones
  - **Manual Control:**
    - Master on/off & raise/lower control of entire room
    - Teacher station with control of two zones

- **Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>nPP16 D EFP</td>
<td>Relay Module with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nPODM DX</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nWV PDT 16</td>
<td>Dual Technology Wide View Occupancy Sensor</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nPODM 4S DX</td>
<td>Teacher Station — 4 Scene Control with Master On/Off &amp; Raise/Lower</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nCM ADCX RJB</td>
<td>Daylight Sensor</td>
</tr>
</tbody>
</table>

### Wireless

- **Operational Details:**
  - **Light Fixtures:**
    - All fixtures are dimmable
    - Each row can be controlled independently
    - Maximum level can be task tuned to any percentage via programming
  - **Occupancy Control:**
    - Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
    - Fixtures automatically turn off when room becomes vacant
  - **Daylight Control:**
    - Smooth continuous dimming
    - Daylight zones defined by rows
    - Not required for areas without windows or that have loads <150W in sidelight zones
  - **Manual Control:**
    - Master on/off & raise/lower control of entire room
    - Teacher station with control of two zones

- **Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rCMS PDT 10 G2</td>
<td>Occupancy and Daylight Sensor</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>rPODB 2P DX G2</td>
<td>2-Pole On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

### Additional Options:
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
  - Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
LOBBY with nLight Enabled Fixtures

### Wired

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🏞️</td>
<td>4</td>
<td>See Notes</td>
<td>nLight Wired Enabled Downlight</td>
</tr>
<tr>
<td>🏞️</td>
<td>1</td>
<td>See Notes</td>
<td>nLight Wired Enabled troffer (recessed)</td>
</tr>
<tr>
<td>🏞️</td>
<td>1</td>
<td>nPODM DX</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

**Operational Details:**
- **Light Fixtures:**
  - All fixtures are dimmable
  - Maximum level can be task tuned to any percentage via programming

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied
  - Fixtures automatically turn off when room becomes vacant

- **Daylight Control:**
  - Smooth continuous dimming
  - Custom grouping of fixtures into separate daylight zones (max number zones = number of fixtures)
  - Not required for areas without windows or that have loads <150W in sidelight zones

- **Manual Control:**
  - On/off & raise/lower control of fixtures

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

---

### Wireless

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🏞️</td>
<td>4</td>
<td>See Notes</td>
<td>nLight AIR Enabled Downlight</td>
</tr>
<tr>
<td>🏞️</td>
<td>1</td>
<td>See Notes</td>
<td>nLight AIR Enabled troffer (recessed)</td>
</tr>
<tr>
<td>🏞️</td>
<td>1</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

**Operational Details:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

---

Note: Contact your local lighting agent for more information on nLight enabled fixtures.
LOBBY with 0-10V Dimming Fixtures

**Wired**

![Wired diagram](image1)

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image2" alt="Symbol" /></td>
<td>2</td>
<td>nPP16 D</td>
<td>EFP Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol" /></td>
<td>1</td>
<td>nPODM DX</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
<tr>
<td><img src="image4" alt="Symbol" /></td>
<td>1</td>
<td>nCM PDT 9 ADCX</td>
<td>Occupancy and Daylight Sensor</td>
</tr>
</tbody>
</table>

**OPERATIONAL DETAILS:**

**Light Fixtures:**
- All fixtures are dimmable
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**
- Fixtures automatically go to full bright when occupied
- Fixtures automatically turn off when room becomes vacant

**Daylight Control:**
- Smooth continuous dimming
- Daylight zones defined by relay module wiring
- Not required for areas without windows or that have loads <150W in sidelight zones

**Manual Control:**
- On/off & raise/lower control of fixtures

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4) Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
CORRIDOR with nLight Enabled Fixtures

Wired

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture with EMG Option</td>
</tr>
<tr>
<td><img src="symbol" alt="nPODM" /></td>
<td>3</td>
<td>nPODM</td>
<td>On/Off WallPod</td>
</tr>
<tr>
<td><img src="symbol" alt="nCM 10" /></td>
<td>4</td>
<td>nCM 10 RJB</td>
<td>Occupancy Sensor</td>
</tr>
</tbody>
</table>

Some nLight enabled EMG fixtures require a normal sense line connection. See fixture spec sheet for details.

---

Wireless

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture with Battery Option</td>
</tr>
<tr>
<td><img src="symbol" alt="rPODB G2" /></td>
<td>3</td>
<td>rPODB G2</td>
<td>On/Off WallPod</td>
</tr>
</tbody>
</table>

Fixtures assumed to be battery backup

---

**OPERATIONAL DETAILS:**

- **Light Fixtures:**
  - All fixtures are dimmable
  - All fixtures are controlled together or independently
  - Maximum level can be task tuned to any percentage via programming

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied
  - Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

- **Manual Control:**
  - On/off control of fixtures

---

**ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4) Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet

---

Note: Contact your local lighting agent for more information on nLight enabled fixtures.
CORRIDOR with 0-10V Dimming Fixtures

### Wired

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>1</td>
<td>nPP16 D EFP</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>1</td>
<td>nPP16 D ER EFP</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>4</td>
<td>nCM 10 RJB</td>
<td>Occupancy Sensor</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>3</td>
<td>nPODM</td>
<td>On/Off WallPod</td>
</tr>
</tbody>
</table>

**OPERATIONAL DETAILS:**

- **Light Fixtures:**
  - All fixtures are dimmable
  - Maximum level can be task tuned to any percentage via programming

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied
  - Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

- **Manual Control:**
  - On/off control of fixtures

**ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
  - Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller

### Wireless

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>1</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>1</td>
<td>rPP20 DS ER G2</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>4</td>
<td>rCMS 10 G2</td>
<td>Occupancy Sensor</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>3</td>
<td>rPODB G2</td>
<td>On/Off WallPod</td>
</tr>
</tbody>
</table>

**Bill of Materials**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
  - Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller

### Bill of Materials

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
  - Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
PUBLIC RESTROOM with nLight Enabled Fixtures

**Wired**

- All fixtures are dimmable
- All fixtures are controlled together or independently (per room)
- Maximum level can be task tuned to any percentage via programming.

**Occupancy Control:**
- Fixtures automatically go to full bright when occupied (or optionally can be configured to come on automatically to 50%)
- Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

**Manual Control:**
- On/off & raise/lower control of fixtures
- If switch poses safety concerns, optionally can be programmed for “on only”

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight Wired Enabled Fixture with the EMG Option</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPODM DX</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

Note: Some nLight enabled EMG fixtures require a normal sense line connection. See fixture spec sheets for details.

**Wireless**

- Fixtures assumed to be battery backup

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture with the Battery Option</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

**OPERATIONAL DETAILS:**

**Light Fixtures:**
- All fixtures are dimmable
- All fixtures are controlled together or independently (per room)
- Maximum level can be task tuned to any percentage via programming.

**Occupancy Control:**
- Fixtures automatically go to full bright when occupied (or optionally can be configured to come on automatically to 50%)
- Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

**Manual Control:**
- On/off & raise/lower control of fixtures
- If switch poses safety concerns, optionally can be programmed for “on only”

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
  Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

Note: Contact your local lighting agent for more information on nLight enabled fixtures.
PUBLIC RESTROOM with 0-10V Dimming Fixtures

**Wired**

- All fixtures are dimmable
- All fixtures are controlled together or independently (per room)
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**
- Fixtures automatically go to full bright when occupied (or optionally can be configured to come on automatically to 50%)
- Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

**Manual Control:**
- On/off & raise/lower control of fixtures
- If switch poses safety concerns, optionally can be programmed for “on only”

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>nPP16 D EFP</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPP16 D ER</td>
<td>Emergency Module with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPODM DX</td>
<td>On/Off &amp; Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nCM PDT 9 RJB</td>
<td>Occupancy Sensor</td>
</tr>
</tbody>
</table>

**Wired**

- All fixtures are dimmable
- All fixtures are controlled together or independently (per room)
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**
- Fixtures automatically go to full bright when occupied (or optionally can be configured to come on automatically to 50%)
- Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

**Manual Control:**
- On/off & raise/lower control of fixtures
- If switch poses safety concerns, optionally can be programmed for “on only”

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rPP20 DS ER G2</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rPODB DX G2</td>
<td>On/Off &amp; Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rCMS PDT 9 G2</td>
<td>Occupancy Sensor</td>
</tr>
</tbody>
</table>

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4) Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

---

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>nPP16 D EFP</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPP16 D ER</td>
<td>Emergency Module with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPODM DX</td>
<td>On/Off &amp; Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nCM PDT 9 RJB</td>
<td>Occupancy Sensor</td>
</tr>
</tbody>
</table>

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rPP20 DS ER G2</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rPODB DX G2</td>
<td>On/Off &amp; Raise/Lower WallPod</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>rCMS PDT 9 G2</td>
<td>Occupancy Sensor</td>
</tr>
</tbody>
</table>

---

IECC 2015: nLight Applications Guide
PRIVATE / SINGLE RESTROOM with nLight Enabled Fixture

**Wired**

- **Light Fixtures:**
  - All fixtures are dimmable
  - Maximum level can be task tuned to any percentage via programming

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied (or optionally can be configured to come on automatically to 50%)
  - Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

- **Manual Control:**
  - On/off & raise/lower control of fixtures
  - If switch poses safety concerns, optionally can be programmed for "on only"

- **ADDITIONAL OPTIONS:**
  - Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
  - HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
  - Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>See Notes</td>
<td>nLight Wired Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nWSX LV DX</td>
<td>Occupancy Wall Switch, On/Off, Raise/Lower</td>
</tr>
</tbody>
</table>

**Wireless**

- **Light Fixtures:**
  - All fixtures are dimmable

- **Manual Control:**
  - On/off & raise/lower control of fixtures

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>See Notes</td>
<td>nLight AIR Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>rPODB DX G2</td>
<td>On/Off, Raise/Lower WallPod</td>
</tr>
</tbody>
</table>

---

**OPERATIONAL DETAILS:**

- **Light Fixtures:**
  - All fixtures are dimmable

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied (or optionally can be configured to come on automatically to 50%)
  - Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

- **Manual Control:**
  - On/off & raise/lower control of fixtures
  - If switch poses safety concerns, optionally can be programmed for "on only"

**ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**Note:** Contact your local lighting agent for more information on nLight enabled fixtures.
NON-EXIT STAIRWELL with nLight Enabled Fixtures/0-10V Dimming Fixtures

Wireless with nLight Enabled Fixtures

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4)
- Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>See Note</td>
<td>nLight AIR Enabled Fixture with Battery Option</td>
<td></td>
</tr>
</tbody>
</table>

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>rPP20 DS 24V G2</td>
<td></td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td>1</td>
<td>rPP20 DS 24V ER G2</td>
<td></td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td>2</td>
<td>rCMS 10 G2</td>
<td></td>
<td>Occupancy and Daylight Sensor</td>
</tr>
</tbody>
</table>

**Additional Options:**

- Line Power Feed
- EMG Power Feed

**Operational Details:**

- **Light Fixtures:**
  - All fixtures are dimmable
  - Maximum level can be task tuned to any percentage via programming

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied
  - Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

- **Manual Control:**
  - Safety may preclude the use of a manual control in these areas

Note: Contact your local lighting agent for more information on nLight enabled fixtures.
Wireless with nLight Enabled Fixtures

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20</td>
<td>IBG Series</td>
<td>nLight AIR Wireless Enabled Fixture</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>IBG Series</td>
<td>nLight AIR Wireless Enabled Fixture with EM Option</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>rPODB 2P G2</td>
<td>2-Pole On/Off WallPod</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>rCMS 6 G2</td>
<td>Occupancy Sensor</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>rPP20 DS ER G2</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>rPODB 2P G2</td>
<td>2-Pole On/Off WallPod</td>
</tr>
</tbody>
</table>

**Operational Details:**

- **Light Fixtures:**
  - All fixtures are dimmable
  - Maximum level can be task tuned to any percentage via programming

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied
  - Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

- **Daylight Control:**
  - Daylight responsive controls lights to full off when adequate daylight present
  - Not required for spaces without skylights or that have loads <150W in toplight zones

**Additional Options:**

- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4) Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

---

Wireless with 0-10V Dimming Fixtures

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>rPP20 DS ER G2</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>rPODB 2P G2</td>
<td>2-Pole On/Off WallPod</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>rCMS 6 G2</td>
<td>Occupancy Sensor</td>
</tr>
</tbody>
</table>

Note: Contact your local lighting agent for more information on nLight enabled fixtures.
### GYMNASIUM with nLight Enabled Fixtures/0-10V Dimming Fixtures

#### Wireless with nLight Enabled Fixtures

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>18</td>
<td>See Notes</td>
<td>nLight AIR Wireless Enabled Fixture</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>6</td>
<td>See Notes</td>
<td>nLight AIR Wireless Enabled Fixture with EM Option</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>2</td>
<td>rPODB 2P G2</td>
<td>2-Pole On/Off WallPod</td>
</tr>
</tbody>
</table>

**OPERATIONAL DETAILS:**

**Light Fixtures:**
- All fixtures are dimmable
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**
- Fixtures automatically go to full bright when occupied
- Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

**Daylight Control:**
- Daylight responsive controls lights to full off when adequate daylight present
- Not required for spaces without skylights or that have loads <150W in toplight zones

**ADDITIONAL OPTIONS:**
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1 - Time-Switch Controls), and also qualify for Enhanced Digital Lighting Controls (C406.4) Note: Max of 4 fixtures per controlled group
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

**Note:** Contact your local lighting agent for more information on nLight enabled fixtures.

---

#### Wireless with 0-10V Dimming Fixtures

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>2</td>
<td>rPP20 DS 24V G2</td>
<td>Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>2</td>
<td>rPP20 DS 24V ER G2</td>
<td>Emergency Relay Pack with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>2</td>
<td>rPODB 2P G2</td>
<td>2-Pole On/Off WallPod</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>6</td>
<td>rCMS 6 G2</td>
<td>High Bay Occupancy Sensor</td>
</tr>
</tbody>
</table>

---

**Line Voltage Wires**

**Line Power Feed**

**EM Power Feed**

**Low Voltage Wires**

**0-10V Wires**

**Line Voltage Wires**

**Line Power Feed**

**EM Power Feed**
Wireless Parking Garage

**OPERATIONAL DETAILS:**

- **Light Fixtures:**
  - All fixtures are dimmable
  - All fixtures can be controlled together or independently
  - Maximum level can be task tuned to any percentage via programming

- **Occupancy Control:**
  - Fixtures automatically go to full bright when occupied
  - Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

- **Daylight Control:**
  - Daylight responsive controls lights to full off when adequate daylight present

**ADDITIONAL OPTIONS:**

- Devices can be connected to nLight backbone to enabled network control or time schedules, including astronomical time schedules
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

Note: Contact your local lighting agent for more information on nLight enabled fixtures.

### Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>See Notes</td>
<td>nLight AIR Enabled Fixture</td>
</tr>
</tbody>
</table>

www.acuitybrands.com/nLight • 800-535-2465
Wireless Site Lighting

OPERATIONAL DETAILS:

Light Fixtures:
- All fixtures are dimmable
- All fixtures can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

Occupancy Control:
- Fixtures automatically go to full bright when occupied
- Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

Daylight Control:
- Daylight responsive controls lights to full off when adequate daylight present

ADDITIONAL OPTIONS:
- Devices can be connected to nLight backbone to enabled network control or time schedules, including astronomical time schedules
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

Note: Contact your local lighting agent for more information on nLight enabled fixtures.

Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Line Voltage Wires</td>
<td>Line Power Feed</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>See Notes</td>
<td>nLight AIR Enabled Area Fixture</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>See Notes</td>
<td>nLight AIR Enabled Wall Mount</td>
</tr>
</tbody>
</table>

NECYD

NLTAIR

rPODB 2P

5 See Notes nLight AIR Enabled Area Fixture

5 See Notes nLight AIR Enabled Wall Mount

Note: Contact your local lighting agent for more information on nLight enabled fixtures.
Some nLight enabled EMG fixtures require a normal sense line connection. See fixture spec sheet for details.

### Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Symbol" /></td>
<td>1</td>
<td>nBRG 8 KIT</td>
<td>8-Port Backbone Bridge</td>
</tr>
<tr>
<td><img src="image2" alt="Symbol" /></td>
<td>1</td>
<td>nECY MVOLT ENC</td>
<td>nLight ECLYPSE Network System Controller and Optional BMS Interface</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol" /></td>
<td>1</td>
<td>nECYD NLTAIR G2</td>
<td>nLight AIR Adapter</td>
</tr>
</tbody>
</table>

### Programmable Time Clock Control:

Although not pictured within each of the individual room design guides, each nLight controlled space can be connected via an nLight backbone to create a networked nLight lighting control system capable of meeting the requirements of IECC 2015 Provision C405.2.2.1, Time-Switch Controls. A networked system also enables astronomical time clock control.
## APPENDIX B: Requirements Overview

<table>
<thead>
<tr>
<th>Control Requirement</th>
<th>Code Provision</th>
<th>nLight Solution Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manual Control</strong>&lt;br&gt;(Local Switch)</td>
<td>C405.2.2.3</td>
<td>nLight WallPod devices provide a user with local control of lighting within an nLight controlled space. WallPods are available in multiple styles – each with varying features and user experiences. <strong>Push-Button WallPod</strong>&lt;br&gt;Traditional tactile buttons and LED user feedback. <strong>Graphic WallPod</strong>&lt;br&gt;Full-color touch screen provides a sophisticated look and feel.</td>
</tr>
<tr>
<td><strong>Time-Switch Controls</strong>&lt;br&gt;(via System Controller)</td>
<td>C405.2.2.1</td>
<td>Individual nLight control groups (i.e.: rooms) can be easily networked together across an entire building simply by connecting them into a “backbone” made up of one or more nLight bridge devices and/or nLight AIR adapters and an nLight ECLYPSE system controller. The system controller provides programmable time clock functionality for an nLight network as well as interfaces to the SensorView suite of web-based software applications (via an Ethernet LAN / WAN connection). <strong>Network System Controller</strong>&lt;br&gt;Additional benefits of installing an nLight backbone include remote status monitoring, system-wide configuration changes, and BMS interface capability.</td>
</tr>
<tr>
<td><strong>Full Auto-Off via Occupancy Sensor</strong></td>
<td>C405.2.1.1.1</td>
<td>nLight occupancy sensors utilize 100% digital passive infrared (PIR) detection, come in several mounting styles, and offer multiple coverage pattern options. Additionally, nLight sensors are available with patented Microphonics™ dual technology detection for rooms with obstructions. Configuring for full off vs. partial off control is done with system programming. <strong>360° Occupancy Sensor</strong>&lt;br&gt;Surface mounts to ceiling tiles or sheetrock/plaster. <strong>120° WideView Corner Sensor</strong>&lt;br&gt;Directly mounts in corner or to ceiling via repositionable ceiling bracket.</td>
</tr>
<tr>
<td><strong>Manual On, Auto-On &lt;=50%, Full Automatic On</strong></td>
<td>C405.2.1.1.2</td>
<td>nLight provides multiple options for controlling continuous dimming luminaires. This allows spaces with several lighting types and technologies to be controlled together and with a common user experience. <strong>nLight Enabled Acuity Brands Fixtures</strong>&lt;br&gt;Acuity Brands offers a wide variety of LED fixtures with factory installed integrated nLight controls that provide smooth continuous dimming. <strong>Dimming Relay Packs</strong>&lt;br&gt;nLight dimming relay enable control of any 0-10VDC dimmable LED luminaire.</td>
</tr>
<tr>
<td><strong>Light-Reduction Controls</strong></td>
<td>C405.2.2.2</td>
<td>nLight offers standalone daylight harvesting sensors as well as occupancy sensors with integrated daylight harvesting. Sensors are available in various housings and provide continuous dimming control of any/all networked nLight enabled fixtures or dimming relay packs, each capable of being its own daylight zone. <strong>Ceiling Mount Dimming Photocell</strong>&lt;br&gt;<strong>Recessed Mount Dimming Photocell</strong>&lt;br&gt;*Available with nLight Wired products only.</td>
</tr>
</tbody>
</table>

Note: This summary is for general information purposes only and is provided without any warranty as to accuracy, completeness, or otherwise. The user should read the applicable code sections for more complete and detailed descriptions of code requirements and exceptions and should consult with a professional engineering or other competent advisor before making any decision or taking any action based on this summary.
2015 IECC and Emergency Lighting

IECC lighting controls requirement C405.2 (and subsection 405.2.5 for exterior lighting controls) provides exceptions for emergency and egress lighting, indicating that lighting controls are not required for the following types of lighting:

- Areas designated as security or emergency areas that are required to be continuously lighted.
- Interior exit stairways, interior exit ramps and exit passageways.
- Emergency egress lighting that is normally off.
- Lighting for covered vehicle entrances or exits from buildings or parking structures where required for safety, security or eye adaptation.

Generally speaking, lighting that is normally on during occupied periods, normally dimmed or off during unoccupied periods, and also used to provide for egress during emergency power conditions should be controlled in compliance with C405.2. nLight features various UL924 listed options that can be specified to provide both lighting control in compliance with IECC and emergency operation in compliance with locally enforced fire codes.

Additional specification details and information can be found on the nLight platform webpage at www.acuitybrands.com/nLight.
nLight Enabled Fixtures

Acuity Brands offers the industry’s broadest portfolio of controls enabled fixtures. Please scan the QR code to see the current nLight enabled fixtures.

Mobile Apps

Quick and Easy Lighting Configuration and Control In the Palm of Your Hand

**nLight Wired**

- **nLight BLE Radio Module**
  nLight wired uses the nIO BT (Bluetooth® Low Energy radio module) to communicate with the nConfig app to modify the settings and operation of the devices in an nLight zone.

- **nConfig™**
  The nConfig mobile app is for nLight wired controls startups. It’s a quick and easy alternative to SensorView software for smaller projects and simple programming.

**nLight AIR**

- **CLAIRITY™ Pro**
  The CLAIRITY™ Pro mobile app allows you to start up, configure and troubleshoot nLight AIR wireless controls from a compatible smartphone or tablet.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Acuity Brands Lighting is under license.
Additional Resources

**Acuity Controls Typical Layout Drawings**

**IECC**
http://www.iccsafe.org/

**Use the Following Sections of the IECC 2015 Code as Reference:**

- Section C405.2.1.1.1 – Full Auto-Off via Occupancy Sensor
- Section C405.2.1.1.2 – Manual-On or Partial-On
- Section C405.2.1.1.2 – Full Automatic On
- Section C405.2.1.3 – Local Switch
- Section C405.2.2.1 – Programmable Timeclock
- Section C405.2.2.2 – Manual Lighting Reduction
- Section C405.2.3.1/2 – Daylight-Responsive Controls
- Section C405.2.5 – Exterior Lighting Controls
- Section C406.4 – Enhanced Digital Lighting Controls

**Explore Acuity Academy**
Acuity Academy provides educational resources for individuals wanting to expand their lighting, controls and building management technical knowledge. On Acuity Academy, you can register for instructor-led classes, take e-learning courses or watch videos and recorded content. https://www.acuitybrands.com/resources/training-and-education

**nLight Lighting Controls Platform Page**
www.acuitybrands.com/nlight

---

**A+ Certified** solutions from Acuity Brands help you quickly and confidently select and implement lighting systems that are both compatible and consistent.

For lighting applications, A+ means verified consistent performance, visual appearance and system interoperability of all luminaires and controls within the certified solutions. For lighting professionals it means confidence that all parts of the lighting system will work together and meet common Acuity Brands specifications.

Go to www.acuitybrands.com/solutions/a-certified or contact your local Acuity Brands representative for more information.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Acuity Brands Lighting is under license.