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

Acuity Controls is advanced lighting controls technology, service and support from a single expert source. We offer one of the industry’s most extensive product portfolios for indoor and outdoor applications; single rooms to campuses to municipalities. Our product solutions include occupancy and photosensors, centralized and distributed systems, panels, fixture-integrated, wired and wireless controls that simply work.
TABLE OF CONTENTS

04 Code Requirements for Common Building Spaces
05 How to Use This Guide
06 Private Office Solutions
10 Open Office Solutions
12 Conference Room Solutions
14 Classroom Solutions
18 Stairwell Solutions
20 Public Restroom Solutions
22 Corridor Solutions
24 Gymnasium Solutions
26 Warehouse Solutions
28 Network Control
29 Appendix A – nLight Enabled Fixtures
30 Appendix B – Requirements Overview
About WSEC
The Washington State Energy Code (WSEC) 2015 is a residential and commercial building energy code based on the IECC which 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 multi-level control demand response capability are required in order to be compliant.

About This Guide
Acuity Controls offers the nLight® WSEC Applications Guide as a reference of typical nLight layouts that help make code compliance quicker and easier. The Acuity Controls 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
The nLight networked digital lighting control system is easy-to-use, easy-to-install and saves energy. Using only standard CAT-5e cable, nLight networks together occupancy sensors, wall stations, and digital LED luminaires to create a digital lighting system with unmatched flexibility! nLight easily scales from one room to an entire campus, creating a lighting control solution that’s perfect for your space and need. nLight may be used to meet the Enhanced Digital Lighting Controls option found in Section C406, when employing nLight enabled fixtures.
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>
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</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>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 (with backbone networked installed)</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 Control</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>C405.2.3</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>C405.2.4</td>
<td>Daylight-responsive controls shall be provided within each space with more than two general lighting fixtures within sidelight and toplight daylight zones.</td>
<td>✓</td>
</tr>
<tr>
<td>Plug Load/Controlled Receptacles</td>
<td>C405.10</td>
<td>50% of all receptacles shall be controlled by the occ sensor or time switch</td>
<td>✓</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.
PRIVATE OFFICE: No Windows, nLight Enabled Fixtures

**Bill of Materials**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
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<tbody>
<tr>
<td>🌟</td>
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<td>Various; see Appendix A</td>
<td>nLight Enabled Fixture</td>
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<tr>
<td>⚙️</td>
<td>1</td>
<td>nWSX PDT LV DX</td>
<td>On/Off and Raise/Lower, Occupancy WallPod</td>
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<tr>
<td>🌟</td>
<td>1</td>
<td>nPP20 PL</td>
<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
</tr>
</tbody>
</table>

**SEQUENCE OF OPERATIONS:**

Fixtures:
- All fixtures are dimmable
- All fixtures are controlled together or independently
- Adjustable High/Low Trim
- Optional automatic lumen compensation

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

Lighting Reduction:
- Not required for offices without windows or with 2 or less luminaries

Daylight Control:
- Not required for offices without windows or with 2 or less luminaries

Manual Control:
- On/off & raise/lower control of fixtures
- Optional automatic lumen compensation

**ADDITIONAL OPTIONS:**

- Surface or recessed mount sensors also available
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1.3) and qualify for enhanced digital lighting controls (C406.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack

**Quick summary of applicable code sections:**
- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (local switch) (C405.2.2.3)
- Lighting Reduction (C405.2.2.3)
- Enhanced Digital Lighting Controls (C406.4), with backbone networked installation
- Controlled Receptacles/Plug Load (C405.10)

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

**Additional options that add control capacity beyond code requirements.**

**Room layout diagram with control, fixture, and wiring type detail.**

**Required list of devices in order to implement room layout design above.**

**Room description.**

**Quick summary of applicable code sections.**
PRIVATE OFFICE: No Windows, nLight Enabled Fixtures

Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (local switch) (C405.2.2.3)
- Lighting Reduction (C405.2.2.2)
- Enhanced Digital Lighting Controls (C406.4) (with backbone networked installed)
- Controlled Receptacles/Plug Load (C405.10)

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<td>nLight Enabled Fixture</td>
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<td>1</td>
<td>nWSX PDT LV DX</td>
<td>On/Off and Raise/Lower, Occupancy WallPod</td>
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<td>nPP20 PL</td>
<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
</tr>
</tbody>
</table>

SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- All fixtures are controlled together or independently
- Adjustable High/Low Trim
- Optional automatic lumen compensation

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

Daylight Control:
- Not required for offices without windows or with 2 or less luminaires

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

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1) and qualify for enhanced digital lighting controls C406.4
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
**PRIVATE OFFICE: No Windows, 0-10V Dimming Fixtures**

**Supports the Following Requirements:**
- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Lighting Reduction (C405.2.2.2)
- Controlled Receptacles/Plug Load (C405.10)

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<td>Relay Module with 0-10V Dimming Output</td>
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**SEQUENCE OF OPERATION:**

**Fixtures:**
- All fixtures are dimmable
- All fixtures are controlled together
- Adjustable High/Low Trim

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

**Daylight Control:**
- Not required for offices without windows or with two or less luminaires

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

**ADDITIONAL OPTIONS:**
- Surface or recessed mount sensors also available
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
PRIVATE OFFICE: Windows, nLight Enabled Fixtures

Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight Daylight Zones (C405.2.4.2)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)
- Controlled Receptacles/Plug Load (C405.10)

Bill of Materials

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<td>On/Off &amp; Raise/Lower WallPod</td>
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<td>ADCX DZ</td>
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<td>nPP20 PL</td>
<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
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SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- All fixtures are controlled together or independently
- Optional automatic lumen compensation
- Adjustable High/Low Trim

Occupancy Control:
- Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
- Fixtures and Receptacles 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 offices without windows or with two or less luminaires

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

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1.1) and qualify for enhanced digital Lighting Controls (C406.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Lighting Reduction (C405.2.2.2)
- Sidelight Daylight Zones (C405.2.4.2)
- Controlled Receptacles/Plug Load (C405.10)

Bill of Materials

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<td>ADCX DZ</td>
<td>Dual Zone Automatic Dimming Photocell</td>
</tr>
<tr>
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<td>1</td>
<td>nPP20 PL</td>
<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
</tr>
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</table>

SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- All fixtures are controlled together
- Adjustable High/Low Trim

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

Daylight Control:
- Smooth continuous dimming
- Not required for offices without windows or with two or less luminaires

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

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1)
- For emergency lighting control add an nPP16 D ER pack
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
OPEN OFFICE with nLight Enabled Fixtures

Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Manual Control (Local Switch) (C405.2.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)
- Controlled Receptacles/Plug Load (C405.10)

Note: Not all emergency nLight enabled fixtures require a normal monitoring feed. Refer to data sheet for additional information.

Bill of Materials

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<td>nLight Enabled Fixture</td>
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<td>nLight Enabled Fixture with EMG Option</td>
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<td>On/Off &amp; Raise/Lower WallPod</td>
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<td>Dual Technology Occupancy Sensor</td>
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<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
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</table>

SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- All fixtures are controlled together or independently
- Optional automatic lumen compensation
- Adjustable High/Low Trim

Occupancy Control:
- Fixtures must be turned on manually (or optionally can be configured to come on automatically to 50%)
- Fixtures and Receptacles 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 offices without windows or with two or less luminaires

Manual Control:
- Master on/off & raise/lower control of fixtures
- Optional individual row control (add nPODM 4P DX)

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Add Graphic WallPod (model nPOD GFX) for individual row and up to 16 scene control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1) and qualify for enhanced digital Lighting Controls (C406.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Controlled Receptacles/Plug Load (C405.10)

Bill of Materials

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<td>nCM PDT 9</td>
<td>Dual Technology Occupancy Sensor</td>
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<td>nPP20 PL</td>
<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
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Sequence of Operations:

**Fixtures:**
- All fixtures are dimmable
- Each row controlled independently
- Adjustable High/Low Trim

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

**Daylight Control:**
- Smooth continuous dimming
- Daylight zones defined by rows
- Not required for offices without windows or with two or less luminaires

**Manual Control:**
- Master on/off & raise/lower control of fixtures
- Optional individual row control (add nPODM 4P DX)

**ADDITONAL OPTIONS:**
- Surface or recessed mount sensors also available
- Add Graphic WallPod (model nPOD GFX) for individual row and up to 16 scene control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
CONFEREE ROOM with nLight Enabled Fixtures

Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Manual Control (Local Switch) (C405.2.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Enhanced Digital Lighting Controls (C406.4)
- Controlled Receptacles/Plug Load (C405.10)

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<td>nLight Enabled Downlight Fixture</td>
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<td>Dual On/Off &amp; Raise/Lower WallPod</td>
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<td>Automatic Dimming Control Photocell</td>
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<tr>
<td></td>
<td>1</td>
<td>nPP20 PL</td>
<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
</tr>
</tbody>
</table>

SEQUENCE OF OPERATIONS:

**Fixtures:**
- All fixtures are dimmable
- Each row/fixture controlled independently
- Optional automatic lumen compensation
- Adjustable High/ Low Trim

**Occupancy Control:**
- Fixtures must be turned on manually (or optionally can be configured to some on automatically to 50%)
- Fixtures and Receptacles 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 with two or less luminaires

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

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Add nPOD GFX for touch screen control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1) and qualify for enhanced digital lighting controls (C406.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supported by the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Controlled Receptacles/Plug Load (C405.10)

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**SEQUENCE OF OPERATIONS:**

**Fixtures:**
- All fixtures are dimmable
- Each row controlled independently
- Adjustable High/Low Trim

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

**Daylight Control:**
- Smooth continuous dimming
- Daylight zones defined by rows
- Not required for areas without windows or with two or less luminaires

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

**ADDITIONAL OPTIONS:**
- Surface or recessed mount sensors also available
- Add nPOD GFX for touch screen control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)
- Controlled Receptacles/Plug Load (C405.10)

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<td>1</td>
<td>nPODM DX</td>
<td>On/Off &amp; Raise/Lower WallPod</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol" /></td>
<td>1</td>
<td>nPODM 4S DX</td>
<td>Teacher Station — 4 Scene Control Master On/Off &amp; Raise/Lower</td>
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<tr>
<td><img src="image4" alt="Symbol" /></td>
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<tr>
<td><img src="image5" alt="Symbol" /></td>
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<tr>
<td><img src="image6" alt="Symbol" /></td>
<td>1</td>
<td>nPP20 PL</td>
<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
</tr>
</tbody>
</table>

SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- Each row/fixture controlled independently
- Optional automatic lumen compensation
- Adjustable High/Low Trim
- a = A/V Zone
- b = General Zone

Occupancy Control:
- Fixtures must be turned on manually (or optionally can be configured to some on automatically to 50%)
- Fixtures and Receptacles 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 with two or less luminaires

Manual Control:
- Master on/off & raise/lower control of entire room
- Master 4 scene control
  - a = A/V Zone
  - b = General Zone

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Add graphic wallpod (model nPOD GFX) for individual row and up to 16 scene control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1) and qualify for enhanced digital lighting controls (C406.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack

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Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Controlled Receptacles/Plug Load (C405.10)

Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
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<th>Description</th>
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<tr>
<td><img src="symbol.png" alt="Relay Module" /></td>
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<td>nPP16 D</td>
<td>Relay Module with 0-10V Dimming Output</td>
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<td><img src="symbol.png" alt="Teacher Station — 4 Scene Control Master On/Off &amp; Raise/Lower" /></td>
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<td><img src="symbol.png" alt="Automatic Dimming Control Photocell" /></td>
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<tr>
<td><img src="symbol.png" alt="Plug Load (Receptacle) PowerPack 20 Amp" /></td>
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<td>Plug Load (Receptacle) PowerPack 20 Amp</td>
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SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- Each row controlled independently
- Adjustable High/Low Trim
- a = A/V Zone
- b = General Zone

Occupancy Control:
- Fixtures must be turned on manually (or optionally can be configured to some on automatically to 50%)
- Fixtures and Receptacles 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 with two or less luminaries

Manual Control:
- Master on/off & raise/lower control of entire room
- Master 4 scene control
- a = A/V Zone
- b = General Zone

Additional Options:
- Surface or recessed mount sensors also available
- Add graphic wallpod (model nPOD GFX) for individual row and up to 16 scene control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)
- Controlled Receptacles/Plug Load (C405.10)

Bill of Materials

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<td>2</td>
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<td>nLight Dual-Technology Occupancy Sensor</td>
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<td>1</td>
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<tr>
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<td>nPP20 PL</td>
<td>nLight Plug Load Controller, 20A</td>
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SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- Each row/fixture controlled independently
- Optional automatic lumen compensation
- Adjustable High/ Low Trim
  - a = A/V Zone
  - b = General Zone

Occupancy Control:
- Fixtures must be turned on manually (or optionally can be configured to some on automatically to 50%)
- Fixtures and Receptacles 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 with two or less luminaires

Manual Control:
- Master on/off & raise/lower control of entire room
- Master 4 scene control
  - a = A/V Zone
  - b = General Zone

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Add graphic wallpod (model nPOD GFX) for individual row and up to 16 scene control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1) and qualify for enhanced digital lighting controls (C406.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight Daylight Zone (C405.2.4.2)
- Controlled Receptacles/Plug Load (C405.10)

Bill of Materials

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<th>Description</th>
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<td>20’ 3 Circuit, Emergency</td>
</tr>
<tr>
<td><img src="image1.png" alt="Symbol" /></td>
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<td>Dual Technology Wide View Occupancy Sensor</td>
</tr>
<tr>
<td><img src="image2.png" alt="Symbol" /></td>
<td>1</td>
<td>nCM ADCX DZ</td>
<td>Dual Zone Automatic Dimming Control Photocell</td>
</tr>
<tr>
<td><img src="image3.png" alt="Symbol" /></td>
<td>6</td>
<td>nPP16D</td>
<td>nLight Power Pack with 0-10VDC Dimming</td>
</tr>
<tr>
<td><img src="image4.png" alt="Symbol" /></td>
<td>2</td>
<td>nPP16 D ER</td>
<td>nLight Power Pack with 0-10VDC Dimming</td>
</tr>
<tr>
<td><img src="image5.png" alt="Symbol" /></td>
<td>1</td>
<td>nPODM 4S DX</td>
<td>nLight Preset Wallpod, Master Station</td>
</tr>
<tr>
<td><img src="image6.png" alt="Symbol" /></td>
<td>2</td>
<td>nPODM</td>
<td>nLight Wallpod On/Off</td>
</tr>
<tr>
<td><img src="image7.png" alt="Symbol" /></td>
<td>1</td>
<td>nPP20 PL</td>
<td>nLight Plug Load Controller, 20A</td>
</tr>
</tbody>
</table>

SEQUENCE OF OPERATIONS:

- **Fixtures:**
  - All fixtures are dimmable
  - Each row controlled independently
  - Adjustable High/Low Trim
  - a = A/V Zone
  - b = General Zone

- **Occupancy Control:**
  - Fixtures must be turned on manually (or optionally can be configured to some on automatically to 50%) and fixtures and receptacles 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 with two or less luminaries

- **Manual Control:**
  - Master on/off & raise/lower control of entire room
  - Master 4 scene control
  - a = A/V Zone
  - b = General Zone

ADDITIONAL OPTIONS:

- Surface or recessed mount sensors also available
- Add graphic wallpod (model nPOD GFX) for individual row and up to 16 scene control
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
**STAIRWELL with nLight Enabled Fixtures**

**Supports the Following Requirements:**
- Full Auto-Off via Occupancy Sensor (C405.2.1.1)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)

**Bill of Materials**

<table>
<thead>
<tr>
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<tr>
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<td>2</td>
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<td>Various; see appendix A, nLight Enabled Fixture w/embedded occupancy sensor</td>
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**SEQUENCE OF OPERATIONS:**

**Fixtures:**
- All fixtures are dimmable
- Adjustable High/Low Trim

**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

**ADDITIONAL OPTIONS:**
- Surface or recessed mount sensors also available
- Stairwell can be connected to nLight backbone to enable network control or time schedules (C405.2.1.1)
- For sidelight/toplight daylight zones with three or more fixtures add ADCX option for daylight control (C405.2.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:
- Full Auto-Off via Occupancy Sensor (C405.2.1.1)

Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>1</td>
<td>nPP16 D</td>
<td>Relay Module with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image" alt="Symbol" /></td>
<td>2</td>
<td>nCM PDT 10</td>
<td>PIR Extended Range Occupancy Sensor</td>
</tr>
</tbody>
</table>

**SEQUENCE OF OPERATIONS:**

- **Fixtures:**
  - All fixtures are dimmable
  - Adjustable High/Low Trim

- **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

**ADDITIONAL OPTIONS:**

- Surface or recessed mount sensors also available
- Stairwell can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1)
- For sidelight/toplight daylight zones with three or more fixtures add ADCX option for daylight control. May require additional nPP16D Relay/Dimming modules
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
## PUBLIC RESTROOM with nLight Enabled Fixtures

### Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Manual Control (Local Switch) (C405.2.3)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)

### Bill of Materials (Each Restroom)

<table>
<thead>
<tr>
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<tr>
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<td>nLight Enabled Fixture</td>
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<tr>
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<td>nLight Enabled Emergency Fixture</td>
</tr>
<tr>
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<td>1</td>
<td>nWSX PDT LV</td>
<td>On/Off, Occupancy WallPod</td>
</tr>
<tr>
<td><img src="image" alt="nCM PDT 9" /></td>
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<td>nCM PDT 9</td>
<td>Dual Technology Occupancy Sensor</td>
</tr>
</tbody>
</table>

### SEQUENCE OF OPERATIONS:

**Fixtures:**
- All fixtures are dimmable
- All fixtures are controlled together or independently (per room)
- Optional automatic lumen compensation
- Adjustable High/Low Trim

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

**Manual Control:**
- On/off control of fixtures (per room)

### ADDITIONAL OPTIONS:

- Surface or recessed mount sensors also available
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.1) and qualify for enhanced digital lighting controls (C406.4).
- For emergency lighting control order fixtures with -n80EMG or -n100EMG option
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Manual Control (Local Switch) (C405.2.2.3)

Bill of Materials (Each Restroom)

<table>
<thead>
<tr>
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<th>Product #</th>
<th>Description</th>
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<tr>
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<td>1</td>
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<td>Relay Module with 0-10V Dimming Output</td>
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<tr>
<td><img src="image2.png" alt="image2" /></td>
<td>1</td>
<td>nPP16 D ER</td>
<td>Emergency Relay Module (UL924) with 0-10V Dimming Output</td>
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<tr>
<td><img src="image3.png" alt="image3" /></td>
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<tr>
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</table>

SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- All fixtures are controlled together (per room)
- Adjustable High/Low Trim

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

Manual Control:
- On/off control of fixtures (per room)

ADDITIONAL OPTIONS:
- Surface or recessed mount sensors also available
- Room can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1)
- Emergency nPP16 D ER pack only required when using a generator or inverter. Not required when using battery packs.
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack.
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Enhanced Digital Lighting Controls (C406.4) (with network backbone installed)

Bill of Materials

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<tr>
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<tr>
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<tr>
<td></td>
<td>4</td>
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<td>Extended Range PIR Occupancy Sensor</td>
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</table>

Optional:

| ![On/Off Wallpod](image) | 3 | nPODM | On/Off Wallpod |

SEQUENCE OF OPERATIONS:

- Fixtures:
  - All fixtures are dimmable
  - All fixtures are controlled together or independently
  - Optional automatic lumen compensation
  - Adjustable High/Low Trim

- 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

ADDITIONAL OPTIONS:

- Surface or recessed mount sensors also available
- Space/zone can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1) and qualify for enhanced digital lighting controls (C406.4)
- For emergency lighting control order fixtures with -n80EMG or -n100EMG option
- For sidelight/toplight daylight zones with more than two luminaires, add nCM ADCX for daylight control (C405.2.4)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)

### Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
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<th>Description</th>
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<tr>
<td><img src="image2" alt="Symbol" /></td>
<td>1</td>
<td>nPP16 D ER</td>
<td>Emergency Relay Module (UL924) with 0-10V Dimming Output</td>
</tr>
<tr>
<td><img src="image3" alt="Symbol" /></td>
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<td>nCM 10</td>
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**Optional:**

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<td>On/Off Wallpod</td>
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</table>

### Sequence of Operations:

**Fixtures:**
- All fixtures are dimmable
- All fixtures are controlled together
- Adjustable High/Low Trim

**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

### Additional Options:

- Surface or recessed mount sensors also available
- Space/zone can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1)
- Emergency nPP16 DER only required when using a Gen/Investor. Not required when using battery packs
- For sidelight/toplight daylight zones with more than two luminaires add nCM ADCX for daylight control (C405.2.3.1/2) (may require additional nPP16 D Relay and Dimming modules)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Full Auto-On via Occupancy Sensor (C405.2.1.1.2)
- Manual Control (Local Switch) (C405.2.3)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)
- Sidelight or Toplight Daylight Zones (C405.2.4)

Bill of Materials

<table>
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<tr>
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<th>Qty</th>
<th>Product #</th>
<th>Description</th>
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<tr>
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<td>25</td>
<td>Fixtures</td>
<td>Generic with 0-10VDC dimming</td>
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<tr>
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<td>21</td>
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<td></td>
<td>4</td>
<td>XPW CMRB6 EM</td>
<td>High Bay Occupancy Sensor with Photocell w/UL924</td>
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<td>XPW BRG POE</td>
<td>XPW Wireless Bridge</td>
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<td>RS CCS BWH</td>
<td>Contact Closure, On/Off/Dim Wall Switch</td>
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SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- All fixtures are controlled together or independently
- Adjustable High/ Low Trim

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

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

ADDITIONAL OPTIONS:
- Space can be connected to the nLight backbone to enable network control or time schedules (C406.2.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Supports the Following Requirements:

- Full Auto-Off via Occupancy Sensor (C405.2.1.1.1)
- Full Auto-On via Occupancy Sensor (C405.2.1.1.2)
- Manual Control (Local Switch) (C405.2.3)
- Sidelight or Toplight Daylight Zones (C405.2.4)

Bill of Materials

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<th>Description</th>
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<tbody>
<tr>
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<td>25</td>
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<tr>
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<td></td>
<td>5</td>
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<td>nLight Power Pack w/0-10VDC Emergency UL924</td>
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<td>1</td>
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<td>nLight Wallpod On/Off operation</td>
</tr>
</tbody>
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SEQUENCE OF OPERATIONS:

Fixtures:
- All fixtures are dimmable
- Each row controlled independently
- Adjustable High/ Low Trim

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

Manual Control:
- On/off & raise/lower control of fixtures
- Graphic Wallpod (nPOD GFX) allows for individual row and up to 16 scene control

ADDITIONAL OPTIONS:
- Space can be connected to the nLight backbone to enable network control or time schedules (C405.2.2.1)
- For local integration with HVAC, add an nAR40 Auxiliary Relay Pack
Supports the Following Requirements:

- Occupancy Sensor Control Function in Warehouse (C405.2.1.2)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)

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>35</td>
<td>Fixture</td>
<td>Generic with 0-10VDC dimming</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>XPA CMRB6</td>
<td>High Bay Occupancy Sensor with Photocell</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>XPW CMRB6 EM</td>
<td>High Bay Occupancy Sensor with Photocell w/UL924</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>XPW BRG POE</td>
<td>XPW Wireless Bridge</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>SIAC2L2</td>
<td>XPW Warless Contact Closure Input</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>RS CCS BWH</td>
<td>Contact Closure, On/Off/Dim Wall Switch</td>
</tr>
</tbody>
</table>

SEQUENCE OF OPERATIONS:

- **Fixtures:**
  - All fixtures are dimmable
  - Optional automatic lumen compensation
  - Adjustable High/ Low Trim

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

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

ADDITIONAL OPTIONS:

- Surface or recessed mount sensors also available
- Space can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack

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WAREHOUSE with 0-10V Dimming Fixtures

Supports the Following Requirements:

- Occupancy Sensor Control Function in Warehouse (C405.2.1.2)
- Enhanced Digital Lighting Controls (C406.4) (with backbone network installed)

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>35</td>
<td>Fixture</td>
<td>Generic 0-10VDC Dimming</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>nCM6</td>
<td>High Bay Occupancy Sensor</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>nPP16 D</td>
<td>nLight Power Pack w/0-10VDC</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>nPP16 D ER</td>
<td>nLight Power Pack w/0-10VDC Emergency UL924</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>nGFX</td>
<td>nLight LCD Touchscreen</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>nPODM</td>
<td>nLight Wallpod On/Off operation</td>
</tr>
</tbody>
</table>

SEQUENCE OF OPERATIONS:

- **Fixtures:**
  - All fixtures are dimmable
  - Optional automatic lumen compensation
  - Adjustable High/Low Trim

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

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

ADDITIONAL OPTIONS:

- Surface or recessed mount sensors also available
- Space can be connected to nLight backbone to enable network control or time schedules (C405.2.2.1)
- For local integration with HVAC, add an nAR 40 Auxiliary Relay Pack
Programmable Time Switch Control:

Although not pictured within each of the individual room design guides, each nLight Control Zone can be connected via an nLight backbone to create a networked nLight lighting control system capable of meeting the requirements of the WSEC programmable timeclock provision (Section C405.2.2.1). A networked system also enables astronomical time clock control.

Additionally, the nLight network backbone is required to meet the Enhanced Digital Lighting Controls additional efficiency package option (C406.4).

For additional information regarding building management integration or demand response features, please contact your Acuity Brands Sales Representative.

Bill of Materials

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Qty</th>
<th>Product #</th>
<th>Description</th>
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<td>8-Port Backbone Bridge</td>
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<tr>
<td><img src="image2.png" alt="Symbol" /></td>
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<td>nECY</td>
<td>Lighting and HVAC Controller</td>
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</tbody>
</table>
## APPENDIX A: nLight Enabled Fixtures

<table>
<thead>
<tr>
<th>Product Family</th>
<th>Fixture Series</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lithonia Lighting</td>
<td>LDN</td>
<td>Downlight</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>DOM</td>
<td>Downlight</td>
</tr>
<tr>
<td>Gotham</td>
<td>EVO</td>
<td>LED Downlight</td>
</tr>
<tr>
<td>Gotham</td>
<td>Incito</td>
<td>LED Downlight</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>IBL / IBH</td>
<td>LED Highbay</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>PTN</td>
<td>LED Highbay - Proteon</td>
</tr>
<tr>
<td>Mark Architectural Lighting</td>
<td>Slot 2 LED</td>
<td>Pendant, Recessed, Wall, Surface</td>
</tr>
<tr>
<td>Mark Architectural Lighting</td>
<td>Slot 4 LED</td>
<td>Pendant, Recessed, Wall, Surface</td>
</tr>
<tr>
<td>Mark Architectural Lighting</td>
<td>SPR LED</td>
<td>Perimeter</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>AC Series</td>
<td>LED Recessed</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>AL Series</td>
<td>LED High Performance Architectural Recessed</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>AVLED</td>
<td>Avante® LED Recessed - Direct/Indirect</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>BLT Series</td>
<td>LED Recessed</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>BZL Series</td>
<td>LED Recessed Indirect</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>FSL Series</td>
<td>LED Recessed</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>RT Series</td>
<td>LED Recessed Volumetric</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>T Series</td>
<td>LED Recessed Troffer</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>VT Series</td>
<td>LED Recessed Volumetric</td>
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<tr>
<td>Lithonia Lighting</td>
<td>GT Series</td>
<td>General Recessed Troffer</td>
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<tr>
<td>Lithonia Lighting</td>
<td>SBS Series</td>
<td>LED Shadow Box Square</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>RTLX</td>
<td>LED Surface Volumetric</td>
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<tr>
<td>Lithonia Lighting</td>
<td>ST LED</td>
<td>LED Surface Volumetric</td>
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<tr>
<td>ReLight</td>
<td>RTLR</td>
<td>LED Relight Volumetric Recessed Mount</td>
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<tr>
<td>ReLight</td>
<td>RTLEDRT</td>
<td>Relight Volumetric for Lensed Troffers</td>
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<tr>
<td>ReLight</td>
<td>SBS LX</td>
<td>LED Relight Shadow Box Square</td>
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<td>LED Relight Lensed Troffers</td>
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<tr>
<td>ReLight</td>
<td>VTLR LED</td>
<td>LED Relight Parabolic Lensed</td>
</tr>
<tr>
<td>Mark Architectural Lighting</td>
<td>Fin LED</td>
<td>Recessed</td>
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<td>Mark Architectural Lighting</td>
<td>Veil LED</td>
<td>Recessed</td>
</tr>
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<td>Mark Architectural Lighting</td>
<td>Whisper LED</td>
<td>Recessed</td>
</tr>
<tr>
<td>Mark Architectural Lighting</td>
<td>Nol LED</td>
<td>Recessed</td>
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<td>Peerless</td>
<td>Mino LED</td>
<td>Recessed</td>
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<tr>
<td>Peerless</td>
<td>Vellum LED</td>
<td>Recessed, Suspended</td>
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<tr>
<td>ReLight</td>
<td>ACLX</td>
<td>AC Series Surface Mount</td>
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<tr>
<td>ReLight</td>
<td>T LX</td>
<td>LED Relight Surface Mount</td>
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<tr>
<td>Lithonia Lighting</td>
<td>ALLS</td>
<td>LED Surface Mount</td>
</tr>
<tr>
<td>ReLight</td>
<td>VTLX</td>
<td>LED Relight Volumetric Surface Mount</td>
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<tr>
<td>Peerless</td>
<td>Lightline, Indirect</td>
<td>Suspended</td>
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<tr>
<td>Peerless</td>
<td>Lightedge</td>
<td>Suspended</td>
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<tr>
<td>Peerless</td>
<td>Icetray</td>
<td>Suspended</td>
</tr>
<tr>
<td>Peerless</td>
<td>Cerra</td>
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<td>Peerless</td>
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<tr>
<td>Peerless</td>
<td>Prima</td>
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<tr>
<td>Peerless</td>
<td>Naro</td>
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</tr>
<tr>
<td>Peerless</td>
<td>Tulip</td>
<td>Suspended</td>
</tr>
<tr>
<td>Peerless</td>
<td>Envision</td>
<td>Suspended</td>
</tr>
<tr>
<td>Peerless</td>
<td>Aero</td>
<td>Suspended</td>
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<tr>
<td>Peerless</td>
<td>Enzo</td>
<td>Suspended</td>
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<tr>
<td>Peerless</td>
<td>Round 2/4 LED</td>
<td>Suspended, Wall</td>
</tr>
<tr>
<td>Peerless</td>
<td>Square LED</td>
<td>Suspended, Wall</td>
</tr>
<tr>
<td>Peerless</td>
<td>Origami LED</td>
<td>Suspended, Wall</td>
</tr>
<tr>
<td>Peerless</td>
<td>Bruno LED</td>
<td>Suspended, Wall</td>
</tr>
<tr>
<td>Peerless</td>
<td>Staple</td>
<td>Suspended, Wall</td>
</tr>
<tr>
<td>Lithonia Lighting</td>
<td>WL Series</td>
<td>LED Wall Bracket Surface</td>
</tr>
</tbody>
</table>

*Note: New nLight enabled fixtures are added regularly. Please reference fixture spec sheets for nLight enabled options.*
<table>
<thead>
<tr>
<th>Control Requirement</th>
<th>Code Provision</th>
<th>Code Summary*</th>
<th>Recommendations for Compliance</th>
<th>nLight Solution Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Control (Local Switch)</td>
<td>C405.2.3.2</td>
<td>Areas shall incorporate a manual control to allow occupants to turn fixtures off.</td>
<td>Include manual control device(s) in all room control system designs with the possible exception of public spaces where a manual switch might hinder safety or security.</td>
<td>nLight WallPod devices provide a user with local control of lighting within an nLight controlled space (i.e.: nLight zone). WallPods are available in multiple styles – each with varying features and user experience.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Push-Button WallPod</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Graphic WallPod</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Traditional tactile buttons and LED user feedback.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Full-color touch screen provides a sophisticated look and feel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programmable Time Switch Controls</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>Utilizing controls capable of being networked across an entire building enables simple compliance via a single central programmable time switch.</td>
<td>Individual nLight Control Zones (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 an nLight Gateway. The Gateway provides programmable time switch functionality for an nLight network as well as interfaces to the SensorView Suite of web-based software applications (via an Ethernet LAN / WAN connection).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Network Gateway</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Additional benefits of installing an nLight backbone include remote status monitoring, iOS smartphone app control, and BMS interface capability</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>Always include occupancy sensors in all control system designs regardless of lighting type.</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. low dimming control is done with system programming.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>360° Occupancy Sensor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>120° WideView Corner Sensor</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Surface or recessed mounts to ceiling tiles or sheetrock/plaster.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Directly mounts in corner or to ceiling via repositionable ceiling bracket.</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.
## APPENDIX B: Requirements Overview

<table>
<thead>
<tr>
<th>Control Requirement</th>
<th>Code Provision</th>
<th>Code Summary*</th>
<th>Recommendation for Compliance</th>
<th>nLight Solution Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Manual Lighting Reduction</strong></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>Continuously dimmable LED (or fluorescent) fixtures and manual dimming controls are the easiest method of compliance.</td>
<td><em>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.</em></td>
</tr>
<tr>
<td><strong>Light Level Control</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>nLight enabled Acuity Brands Fixtures</strong></td>
</tr>
<tr>
<td><strong>Daylight-Responsive Controls</strong></td>
<td>C405.2.4</td>
<td>Daylight-responsive controls shall be provided within each space with sidelight and toplight daylight zones.</td>
<td>Automatic daylight harvesting photocells that continuously adjust the level of dimming fixtures according to daylight levels provide the most effective and least distracting control.</td>
<td><strong>Dimming Relay Packs / Panels</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><em>Acuity offers a wide variety of LED fixtures with factory installed integrated nLight controls that provide smooth continuous dimming, and optional automatic lumen maintenance or manual task tuning.</em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>nLight dimming relay packs / panels enable control of any 0-10VDC dimmable LED (or fluorescent) luminaire. Manual task tuning control can also be used.</strong></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.*
Additional Resources:

**Acuity Controls Typical Layout Drawings**
www.acuitybrands.com/typicals

**Use the Following Sections of the WSEC 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 C405.2.1.2** – Full Automatic On
- **Section C405.2.2.1** – Time Switch Controls
- **Section C405.2.2.2** – Manual Lighting Reduction
- **Section C405.2.4** – Daylight-Responsive Controls
- **Section C406.4** – Enhanced Digital Lighting Controls
- **Section C405.2.1** – Occupancy Sensor Controls
- **Section C405.10** – Controlled Receptacles