



nLight®

# Title 24 2025 Applications Guide



Your one networked lighting control system that scales and adapts to your needs from a single room to an entire campus, both wired and wireless, indoors and out. nLight®, a flexible and optimizable system, addresses code requirements and enhances your energy and operational efficiencies. Built into the fabric of your building, create a connected experience that promotes comfort, offers personalized control, and curates user-centered spaces that evoke the desired mood.

An investment in nLight aids in compliance with California's Title 24, Part 6, standards and transforms your space with a fully scalable, connected-building infrastructure that will serve the further needs of your business.

## / TABLE OF CONTENTS

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- 02 Code Requirement Overview
- 03 How to Use This Guide
- 04 Private Office Solutions
- 06 Open Plan Office Solutions
- 10 Conference Room Solutions
- 12 Classroom Solutions
- 14 Lobby Solutions
- 16 Corridor Solutions
- 18 Restroom Solutions
- 19 Stairwell Solutions
- 20 Warehouse Storage Solutions
- 21 Gymnasium Solutions
- 22 Parking Garage
- 23 Site Lighting
- 24 nLight Hybrid Networked Lighting Control
- 25 Luminaires with Networked Embedded Controls  
by nLight
- 26 Requirements Overview
- 28 Emergency Lighting

The chart below is an overview of the code requirements for typical building spaces. Please use this information as a guide. For specific code requirements, please refer to the California Code of Regulations, Title 24, Part 6.

	Control Requirement <sup>1</sup>	Code Provision	Code Summary <sup>1</sup>	Space Type							
				Office < 250 sq. ft.	Open Office > 250 sq. ft.	Conference, Meeting Room	Classroom, Lecture Hall, Training Room	Lobby	Corridor	Restroom	Stairwell
Shut-Off Control	Area Control <sup>2</sup>	130.1(a)	All luminaires shall be functionally controlled with manual on and off lighting controls.	✓	✓	✓	✓	✓ <sup>6</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>	✓ <sup>6</sup>
	Timeclock	130.1(c) 1	All areas not shut off by occupancy sensing must be shut off by a time switch control when the space is typically unoccupied.		✓			✓	✓		
	Automatic Full-Off via Occupancy Sensor (20 minutes max)	130.1(c) 5	Occupancy or vacancy sensing controls must automatically turn lighting OFF within 20 minutes of the last detected occupancy; vacancy sensors require manual ON and may employ partial-ON.	✓	✓ <sup>5</sup>	✓	✓	(or) ✓	(or) ✓	✓ <sup>7</sup>	✓
	Automatic Partial-Off via Occupancy Sensor <sup>3</sup>	130.1(c) 6 & 7	Partial-off occupancy sensing may be used in combination with another form of full automatic shutoff (exception: parking garage areas may use just partial-off sensing).						✓		✓
Light Level Control	Multi-Level Lighting Controls <sup>9</sup>	130.1(b)	Any enclosed area ≥ 100 ft <sup>2</sup> with a lighting power density > 0.5 W/ft <sup>2</sup> that has more than one luminaire, shall provide multi-level lighting control.	✓	✓	✓	✓	✓	✓	✓	
	Automatic Multi-Level Daylight Controls	130.1(d)	Areas in designated daylight zones with total power ≥ 75 watts use automatic multi-level daylight controls.	✓	✓	✓	✓	✓	✓	✓	✓
Additional Controls	Demand Response	110.12(c), (e) 130.1(e)	Buildings having a total installed lighting power of ≥ 4,000W shall be capable of automatically reducing lighting power, including controlled receptacles in response to demand response signals.	✓	✓	✓	✓	✓	✓	✓	✓
	Receptacle (i.e., Plug Load) Control <sup>4</sup>	130.5(d)	Both controlled and uncontrolled 120-volt receptacles shall be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, and copy rooms.	✓	✓	✓		✓			
Outdoor Lighting Controls	Daylight Availability	130.2(c) 1	Lighting shall be controlled by a photo control, astronomical time-switch control or other control to automatically shut off when daylight is available.								
	Automatic Scheduling Controls	130.2(c) 2	Controls shall be capable of reducing the lighting power by 50-90%, and capable of turning the lighting off, during scheduled unoccupied periods. Scheduling a minimum of two nighttime periods with independent lighting levels is required.								
	Motion Sensing Controls	130.2(c) 3	Controls shall be capable of reducing the lighting power by 50-90%, and capable of turning the lighting off, during unoccupied periods. Motion sensing controls shall be capable of reducing the lighting to its dim or off state no longer than 15 minutes after the area has been vacated.								

Gymnasium	Warehouse	Parking Garage	Site Lighting/Facade/Parking Garage Roof
✓ <sub>6</sub>	✓	✓ <sub>6</sub>	
✓			
	✓	✓	
✓	✓	✓	
✓	✓	✓ <sub>8</sub>	
✓	✓	✓	
			✓
			✓
			✓

This Title 24, Part 6, Applications Guide is designed to facilitate quicker and easier lighting controls solutions to help you address the requirements of the standards using nLight lighting controls. While there are many ways to design a space to support building energy codes, use this guide as a quick reference to get your project on the path toward compliance. Our Design Services Team is also available to support engineers and contractors with detailed design, submittal, and installation assistance. For additional information, please contact your Acuity Brands sales representative.

Room description

4 Office: < 250 sq. ft., Windows, Luminaires with Networked Embedded Controls by nLight

**Wired**

**Wireless**

Symbol	Qty	Product #	Description
	2	See Note	Troffer with Wired Networked Embedded Controls by nLight with Sensor Option
	1	HWXA PDX LV DX	Wall Switch/Occupancy Sensor with On/Off, Raise/Lower
	1	rPF20 PL	Plug Load Relay Pack

Symbol	Qty	Product #	Description
	2	See Note	Troffer with Wireless Networked Embedded Controls by nLight with Sensor Option
	1	rPCDBA DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	1	rPF20 24V EFP G2	Plug Load Relay Pack

**OPERATION DETAILS:**

**Luminaires:**

- All luminaires are dimmable.
- All luminaires can be controlled together or independently.
- Maximum level can be set via programming.

**Occupancy Control:**

- Partial-on occupancy sensors automatically activate between 25-70% of controlled lighting power or luminaire must be turned on manually.
- Plug load turns on automatically.
- Luminaires and plug load automatically turn off when room becomes vacant.

**Daylight Control:**

- Not required if room has < 24 SF of glazing or lighting load < 120W in the light and the sidelit daylight zone.

**Manual Control:**

- On/Off & raise/lower control of luminaires.

**ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbones to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a).
- IRMC control available through system-wide BACnet® interface option on the ECLIPSE® controller.
- Luminaires with wireless networked embedded controls by nLight with occupancy/daylighting sensor options available, please see the luminaire specification sheet.

Note: Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

Room layout diagram with control, luminaire, and wiring type detail

List of devices required to implement room layout design above

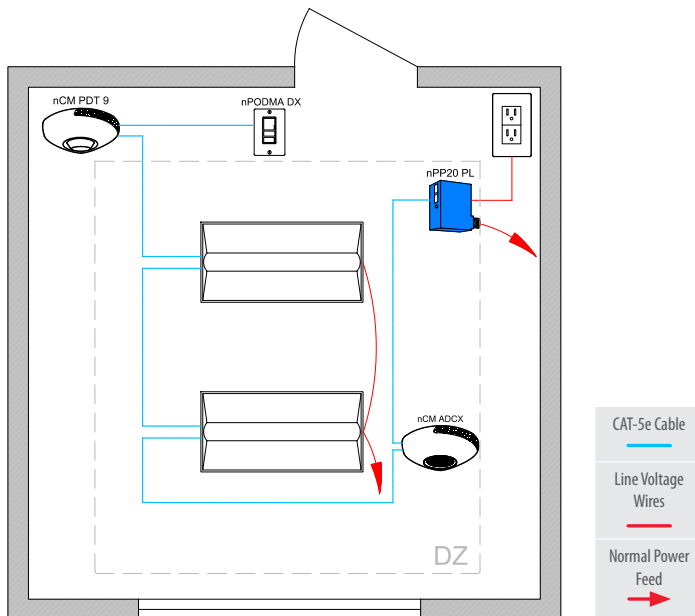
Additional options that add control capacity beyond code requirements

Operation details describe the functionality provided by the equipment specified in the solution

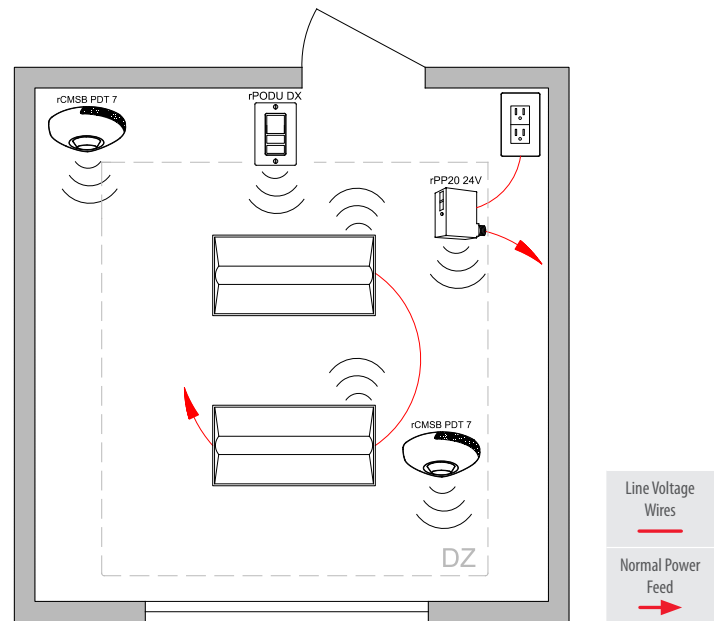
- Note: This summary is for general information purposes only and is provided without any warranty as to accuracy, completeness, or otherwise. The user should read the applicable code sections for more complete and detailed descriptions of code requirements and exceptions and should consult with a professional engineer or other competent advisor before making any decision or taking any action based on this summary.
- Can be inaccessible to unauthorized personnel.
- Not required in residential areas such as hotels, condos or dormitories.
- Does not apply to Classrooms and Lecture Halls.
- In office spaces greater than 250 square feet, control zones shall not exceed 600 sq ft. Occupancy sensor controls shall be used to reduce light level of vacant zones by 80%, and lighting shall turn off after all control zones are vacant.
- Restrooms with two or more stalls, parking areas, stairwells, corridors and areas of the building intended for access or use by the public may use a manual control not accessible to unauthorized personnel.
- Stairwells require automatic full-ON and partial-OFF by at least 50% when the space is unoccupied.
- The wattage requirement for daylight responsive controls in sidelit primary and secondary zones in parking garages is 60 watts or greater.
- Where multi-level lighting controls are required, occupant sensors must operate as either partial-ON controls activating 50-70% of lighting power automatically or as vacancy sensors requiring manual ON activation.

# Office: < 250 sq. ft., Windows, Luminaires with Networked Embedded Controls by nLight






## Wired







## Wireless



## Bill of Materials

Symbol	Qty	Product #	Description
	2	See Note	Troffer with Wired Networked Embedded Controls by nLight with Sensor Option
	1	nPODMA DX	On/Off, Raise/Lower WallPod
	1	nPP20 PL	Plug Load Relay Pack
	1	nCM PDT 9 RJB	Occupancy Sensor
	1	nCM ADCX	Daylight sensor

## Bill of Materials

Symbol	Qty	Product #	Description
	2	See Note	Troffer with Wireless Networked Embedded Controls by nLight with Sensor Option
	1	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	1	rPP20 24V EFP G2	Plug Load Relay Pack
	2	rCMSB PDT 7 G2	Battery Powered Occupancy & Daylight Sensor

## / OPERATION DETAILS:

### Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

### Occupancy Control:

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Plug load turns on automatically
- Luminaires and plug load automatically turn off when room becomes vacant

### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone

### Manual Control:

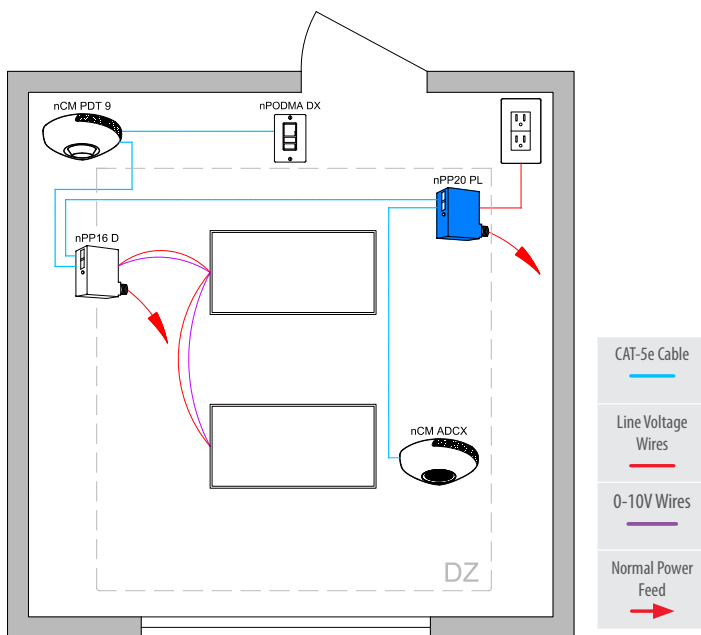
- On/off & raise/lower control of luminaires

## / ADDITIONAL OPTIONS:

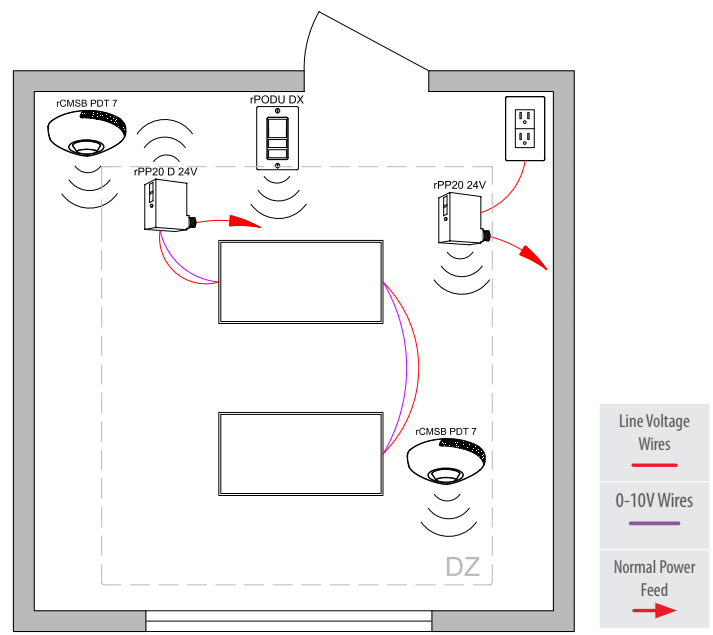
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclypse™ controller
- Networked embedded controls by nLight are available with an occupancy and photocell option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- A wired wall-switch-sensor is available in-lieu of the wall-switch and sensor

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

## Wired



## Wireless



## Bill of Materials

Symbol	Qty	Product #	Description
	1	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPODMA DX	On/Off, Raise/Lower WallPod
	1	nPP20 PL	Plug Load Relay Pack
	1	nCM PDT 9 RJB	Occupancy Sensor
	1	nCM ADCX	Daylight sensor

## Bill of Materials

Symbol	Qty	Product #	Description
	1	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	1	rPP20 24V EFP G2	Plug Load Relay Pack
	1	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	2	rCMSB PDT 7 G2	Battery Powered Occupancy and Daylight Sensor

## / OPERATION DETAILS:

**Luminaires:**

- All luminaires are dimmable
- Luminaires are controlled based on power pack line voltage and 0-10V wiring
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Plug load turns on automatically
- Luminaires and plug load automatically turn off when room becomes vacant

**Daylight Control:**

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone

**Manual Control:**

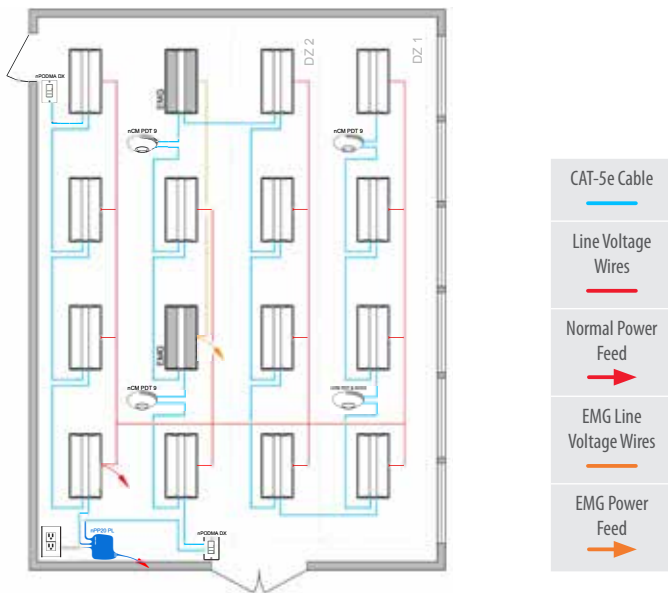
- On/off & raise/lower control of luminaires

## / ADDITIONAL OPTIONS:

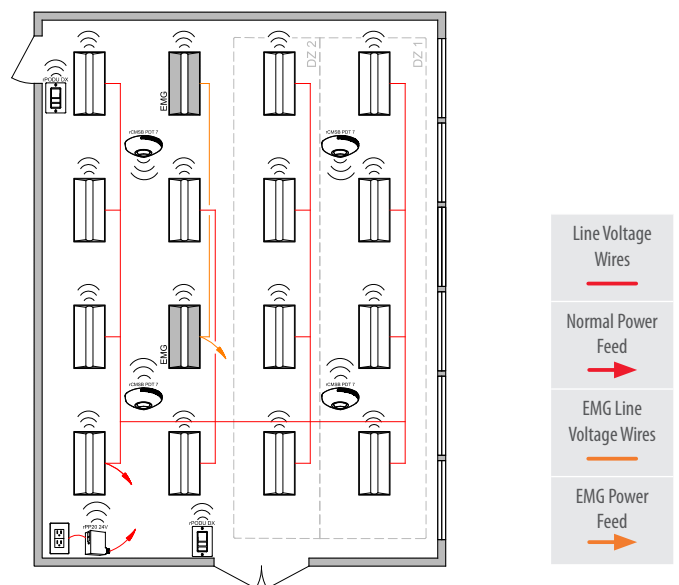
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller or through occupancy sensor auxiliary relay (AR) contact option
- Networked embedded controls by nLight are available with an occupancy and photocell option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- A wired wall-switch-sensor is available in-lieu of the wall-switch and sensor

# Open Office <600ft<sup>2</sup> with Luminaires with Networked Embedded Controls by nLight

## Wired



## Wireless



## Bill of Materials

Symbol	Qty	Product #	Description
	14	See Note	Luminaire with Wired Networked Embedded Controls by nLight
	2	See Note	Luminaire with Wired Networked Embedded Controls by nLight with Emergency Option
	2	nPODMA DX	On/Off, Raise/Lower WallPod
	3	nCM PDT 9 RJB	Occupancy Sensor
	1	nCM PDT 9 ADCX RJB	Occupancy & Daylight Sensor
	1	nPP20 PL	Plug Load Relay Pack

## Bill of Materials

Symbol	Qty	Product #	Description
	14	See Note	Troffer with Wireless Networked Embedded Controls by nLight
	2	See Note	Troffer with Wireless Networked Embedded Controls by nLight with EM Option
	2	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	1	rPP20 24V EFP G2	Plug Load Relay Pack
	4	rCMSB PDT 7 G2	Battery Powered Occupancy & Daylight Sensor

### / OPERATION DETAILS:

#### Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Plug load turns on automatically
- Luminaires and plug load automatically turn off when room becomes vacant

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

#### Manual Control:

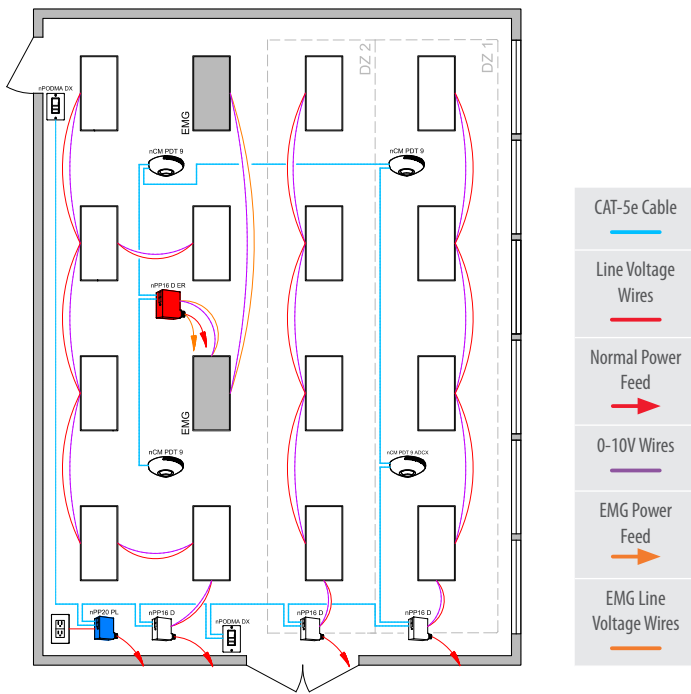
- On/off & raise/lower control of luminaires

### / ADDITIONAL OPTIONS:

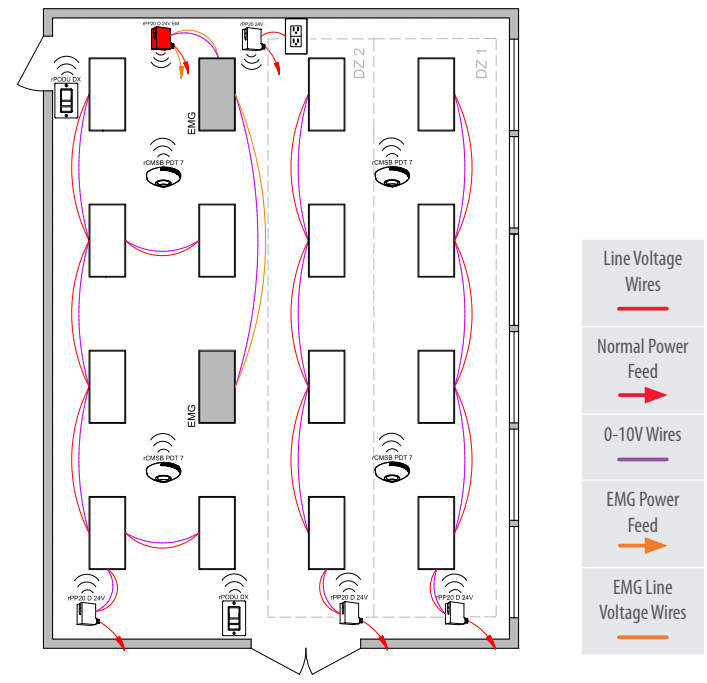
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller
- Networked embedded controls by nLight are available with an occupancy and photocell option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a daylight sensor without occupancy sensing
- Multi-pole, scene, and touchscreen switch available in both wired and wireless versions

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

**Wired**



**Wireless**



**Bill of Materials**

Symbol	Qty	Product #	Description
	3	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPP16 D ER EFP	Emergency Relay Pack with 0-10V Dimming Output
	2	nPODMA DX	On/Off, Raise/Lower WallPod
	3	nCM PDT 9 RJB	Occupancy Sensor
	1	nCM PDT 9 ADCX RJB	Occupancy & Daylight Sensor
	1	nPP20 PL	Plug Load Relay Pack

**Bill of Materials**

Symbol	Qty	Product #	Description
	3	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	1	rPP20 D 24V EM EFP G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	4	rCMSB PDT 7 G2	Battery Powered Occupancy and Daylight Sensor
	1	rPP20 24V EFP G2	Plug Load Relay Pack

**/ OPERATION DETAILS:**

**Luminaires:**

- All luminaires are dimmable
- Luminaires are controlled based on power pack line voltage and 0-10V wiring
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Plug load turns on automatically
- Luminaires and plug load automatically turn off when room becomes vacant
- Each occupancy control zone will not exceed 600 sq ft, will dim to 20% output or less when vacant, and will turn off when all zones are vacant

**Daylight Control:**

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

**Manual Control:**

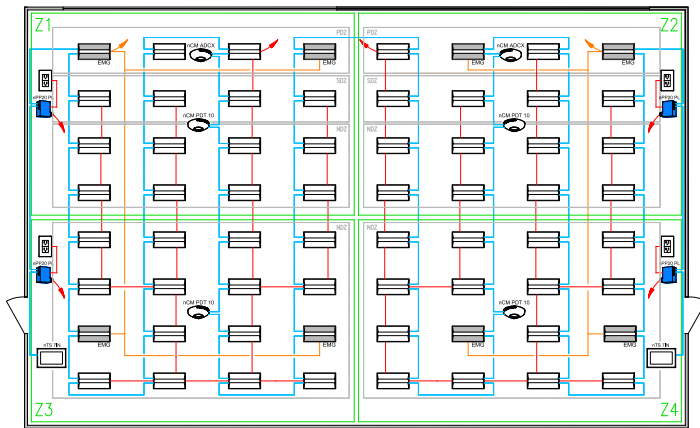
- On/off & raise/lower control of luminaires

**/ ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller or through occupancy sensor auxiliary relay (AR) contact option
- Networked embedded controls by nLight are available to minimize material and labor time and provide flexibility in rezoning luminaires in any configuration
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a daylight sensor without occupancy sensing
- Multi-pole, scene, and touchscreen switch available in both wired and wireless options

# Open Office >600ft<sup>2</sup> with Luminaires with Networked Embedded Controls by nLight

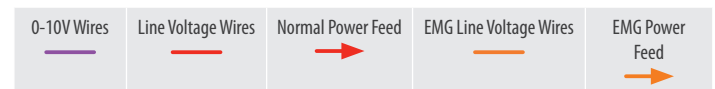
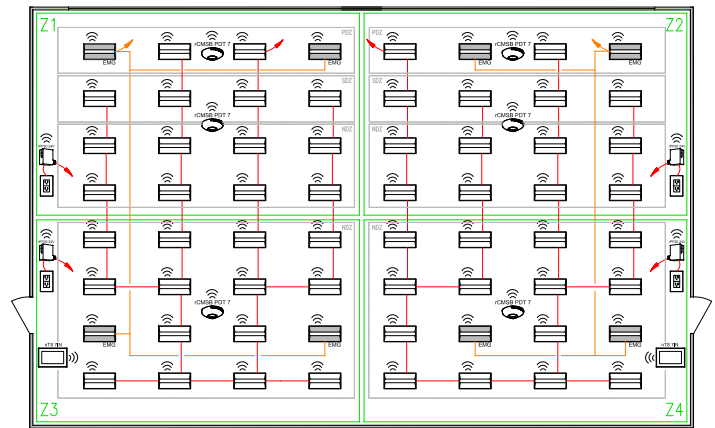
## Wired



### Bill of Materials

Symbol	Qty	Product #	Description
	4	nCM PDT 10 RJB	Occupancy Sensor
	2	nCM ADCX	Daylight Sensor
	4	nPP20 PL	Plug Load Relay Pack
	2	nTS 7IN WH	7" Touchscreen Controller
	8	See Note	Luminaire with Wired Networked Embedded Controls by nLight with Emergency Option
	56	See Note	Luminaire with Wired Networked Embedded Controls by nLight

## Wireless



### Bill of Materials

Symbol	Qty	Product #	Description
	6	rCMSB PDT 7 G2	Battery Powered Occupancy and Daylight Sensor
	4	rPP20 EFP G2	Plug Load Relay Pack
	2	nTS 7IN WH	7" Touchscreen Controller
	8	Luminaire with Wireless	Luminaire with Wireless Networked Embedded Controls by nLight with Emergency Option
	56	See note	Luminaire with Wireless Networked Embedded Controls by nLight

### / OPERATION DETAILS:

#### Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Motion detected in a control zone will activate lights to any level up to full power
- Plug load turns on automatically
- When occupancy is detected in a control zone, all other control zones that are unoccupied shall operate at a maximum of 20% of full power
- In 20 minutes or less after a control zone is unoccupied, the occupancy sensor shall uniformly reduce lighting power in the control zone to a maximum of 20% of full power
- In 20 minutes or less after the entire office space is unoccupied, the occupancy sensors shall automatically turn off lighting and plug-loads in all control zones in the space
- Each occupancy control zone will not exceed 600 sq ft.

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

#### Manual Control:

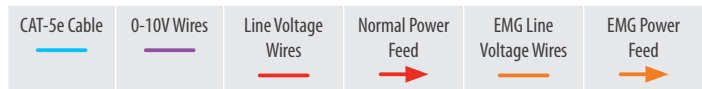
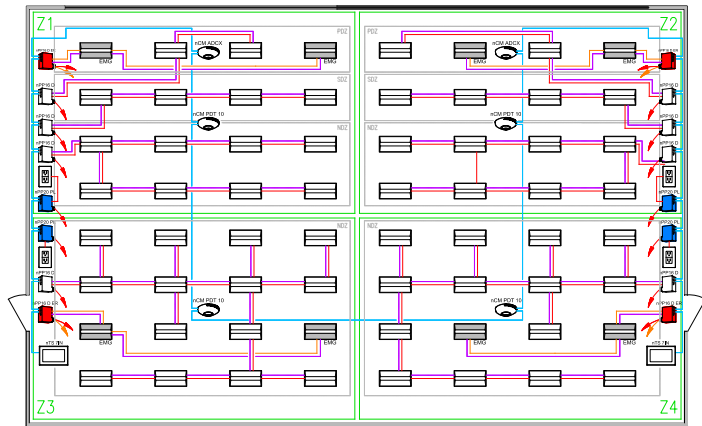
- On/off & raise/lower control of luminaires

### / ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller
- Networked embedded controls by nLight are available with an occupancy and photocell option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a daylight sensor without occupancy sensing
- Multi-pole, scene, and touchscreen switch available in both wired and wireless options

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

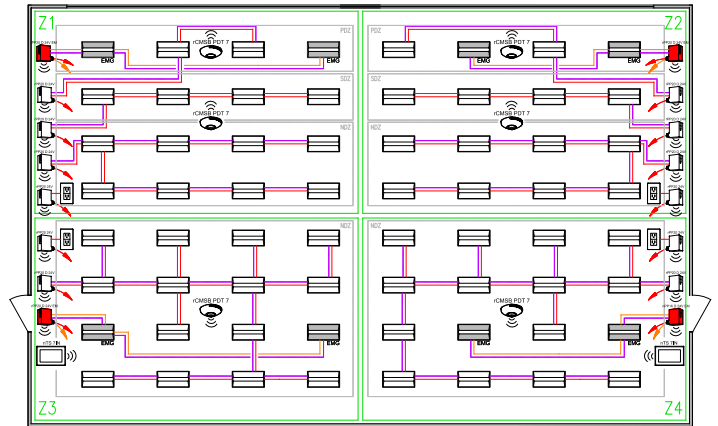
**Wired**



**Bill of Materials**

Symbol	Qty	Product #	Description
	4	nPP16 D ER EFP	Emergency Relay Pack with 0-10V Dimming Output
	8	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	4	nCM PDT 10 RJB	Occupancy Sensor
	2	nCM AC DX	Daylight Sensor
	4	nPP20 PL	Plug Load Relay Pack
	2	nTS 7IN WH	7" Touchscreen Controller

**Wireless**



**Bill of Materials**

Symbol	Qty	Product #	Description
	6	rCMSB PDT 7 G2	Relay Pack with 0-10V Dimming Output
	4	rPP20 D 24V EM EFP G2	Emergency Relay Pack with 0-10V Dimming Output
	8	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	4	rPP20 EM EFP G2	Plug Load Relay Pack
	2	nTS 7IN WH	7" Touchscreen Controller

**OPERATION DETAILS:**

**Luminaires:**

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Motion detected in a control zone will activate lights to any level up to full power
- Plug load turns on automatically
- When occupancy is detected in a control zone, all other control zones that are unoccupied shall operate at a maximum of 20% of full power
- In 20 minutes or less after a control zone is unoccupied, the occupancy sensor shall uniformly reduce lighting power in the control zone to a maximum of 20% of full power
- In 20 minutes or less after the entire office space is unoccupied, the occupancy sensors shall automatically turn off lighting and plug-loads in all control zones in the space
- Each occupancy control zone will not exceed 600 sq ft.

**Daylight Control:**

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

**Manual Control:**

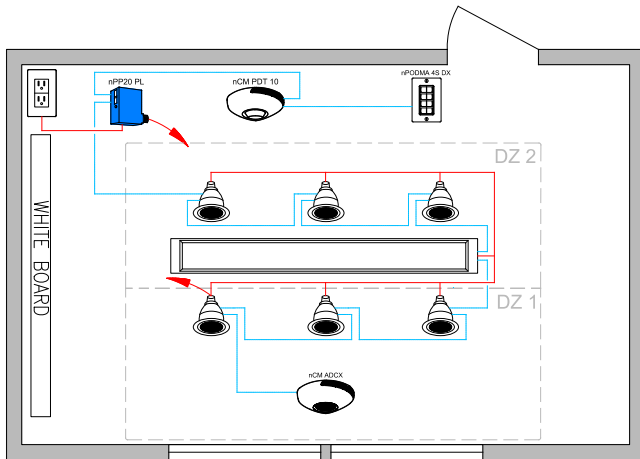
- On/off & raise/lower control of luminaires

**ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller
- Networked embedded controls by nLight are available to minimize material and labor time and provide flexibility in rezoning luminaires in any configuration
- Wireless sensor is available as a non-battery version that can be powered via a power-pack.
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a daylight sensor without occupancy sensing
- Multi-pole, scene, and touchscreen switch available in both wired and wireless options

# Conference Room with Luminaires with Networked Embedded Controls by nLight

## Wired

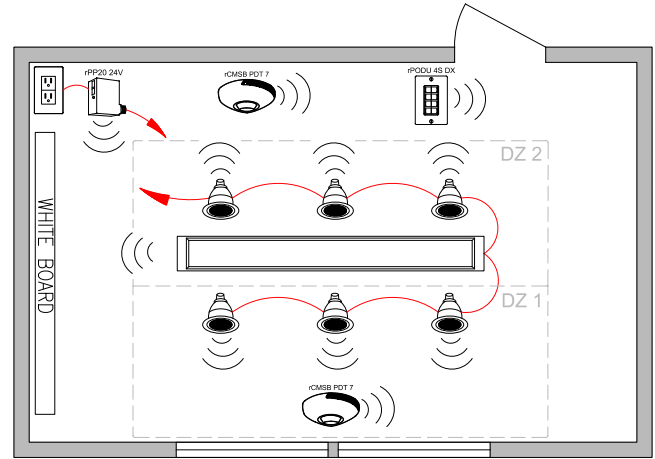


CAT-5e Cable

Line Voltage Wires

Normal Power Feed

## Wireless



Line Voltage Wires

Normal Power Feed

## Bill of Materials

Symbol	Qty	Product #	Description
	1	See Note	Luminaire with Wired Networked Embedded Controls by nLight
	6	See Note	Downlight with Wired Networked Embedded Controls by nLight
	1	nPODMA 4S DX	4 Scene Switch with Raise/Lower
	1	nPP20 PL	Plug Load Relay Pack
	1	nCM ADCX RJB	Daylight Sensor
	1	nCM PDT 10 RJB	Dual-Tech Occupancy Sensor

## Bill of Materials

Symbol	Qty	Product #	Description
	1	See Note	Luminaire with Wireless Networked Embedded Controls by nLight
	6	See Note	Downlight with Wireless Networked Embedded Controls by nLight
	1	rPODu 4S DX	4 Scene Switch with Raise/Lower
	1	rPP20 24V EFP G2	Plug Load Relay Pack
	2	rCMSB PDT 7 G2	Battery Powered Occupancy and Daylight Sensor

### / OPERATION DETAILS:

#### Light Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Plug load turns on automatically
- Luminaires and plug load automatically turn off when room becomes vacant

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

#### Manual Control:

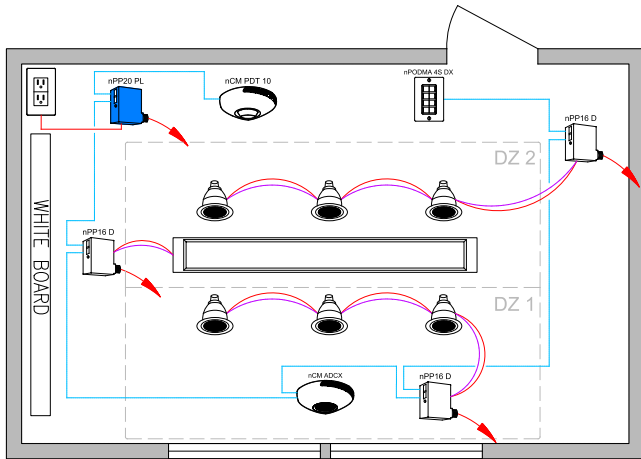
- On/off & raise lower control of two zones of luminaires

### / ADDITIONAL OPTIONS:

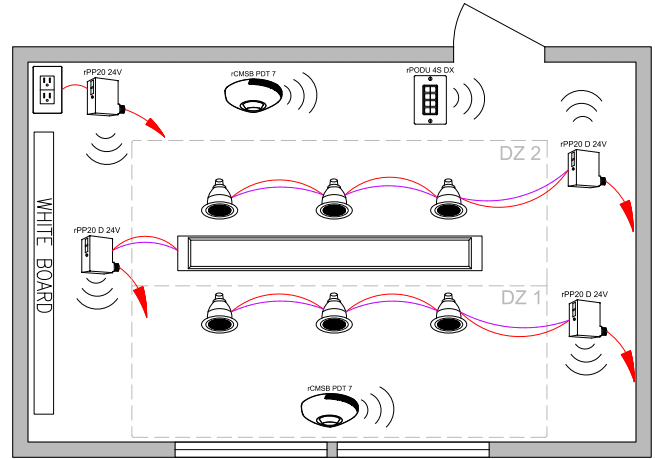
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller
- Networked embedded controls by nLight are available with an occupancy and daylight sensing option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a combination occupancy and daylight sensor
- Scene switches and touchscreens are available in both wired and wireless versions

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

**Wired**



**Wireless**



**Bill of Materials**

Symbol	Qty	Product #	Description
	3	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPODMA 4S DX	4 Scene switch with Raise/Lower
	1	nCM PDT 10 RJB	Occupancy Sensor
	1	nCM ADCX RJB	Daylight Sensor
	1	nPP20 PL	Plug Load Relay Pack

**Bill of Materials**

Symbol	Qty	Product #	Description
	3	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	1	rPODU 4S DX	4 Scene Switch with Raise/Lower
	2	rCMSB PDT 7 G2	Battery Powered Occupancy and Daylight Sensor
	1	rPP20 24V EFP G2	Plug Load Relay Pack

**/ OPERATION DETAILS:**

**Light Luminaires:**

- All luminaires are dimmable
- Luminaires are controlled based on power pack line voltage and 0-10V wiring
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Plug load turns on automatically
- Luminaires and plug load automatically turn off when room becomes vacant

**Daylight Control:**

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

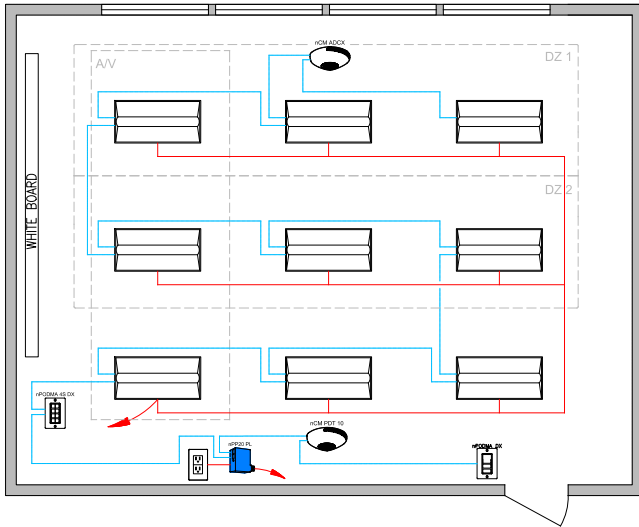
**Manual Control:**

- On/off & raise lower control of two zones of luminaires

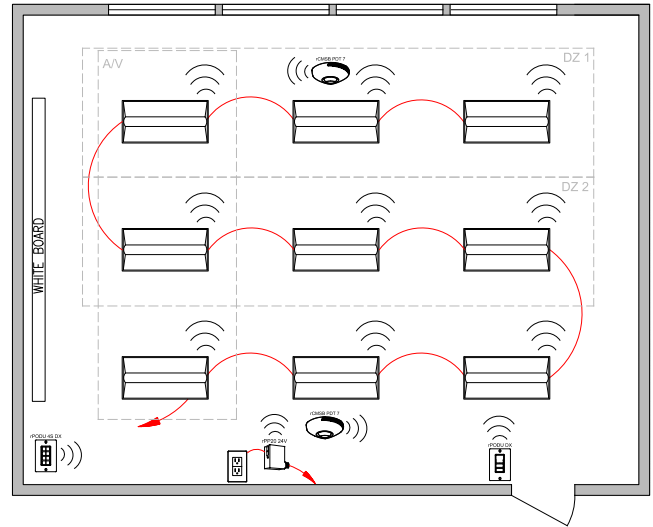
**/ ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller or through occupancy sensor auxiliary relay (AR) contact option
- Networked embedded controls by nLight are available with an occupancy and daylight sensing option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a combination occupancy and daylight sensor
- Scene switches and touchscreens are available in both wired and wireless versions
- A wired wall/corner-mount sensor is available if there are suspended obstructions in the space

## Wired



## Wireless



— CAT-5e Cable  
— Line Voltage Wires  
➔ Normal Power Feed

— Line Voltage Wires  
➔ Normal Power Feed

### Bill of Materials

Symbol	Qty	Product #	Description
	9	See Note	Troffer with Wired Networked Embedded Controls by nLight
	1	nPODMA DX	On/Off, Raise/Lower WallPod
	1	nPP20 PL	Plug Load Relay Pack
	1	nPODMA 4S DX	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower
	1	nCM PDT 10 RJB	Occupancy Sensor
	1	nCM ADCX RJB	Daylight Sensor

### Bill of Materials

Symbol	Qty	Product #	Description
	9	See Note	Troffer with Wireless Networked Embedded Controls by nLight
	1	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	1	rPODU 4S DX G2	Teacher Station — Battery Powered 4 Scene Control with Master On/Off & Raise/Lower
	1	rPP20 24V EFP G2	Plug Load Relay Pack
	2	rCMSB PDT 7 G2	Battery Powered Occupancy and Daylight Sensor

### / OPERATION DETAILS:

#### Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Fixture automatically turn off when room becomes vacant

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

#### Manual Control:

- On/off & raise/lower control of luminaires
- Teacher station with 4 preset scenes

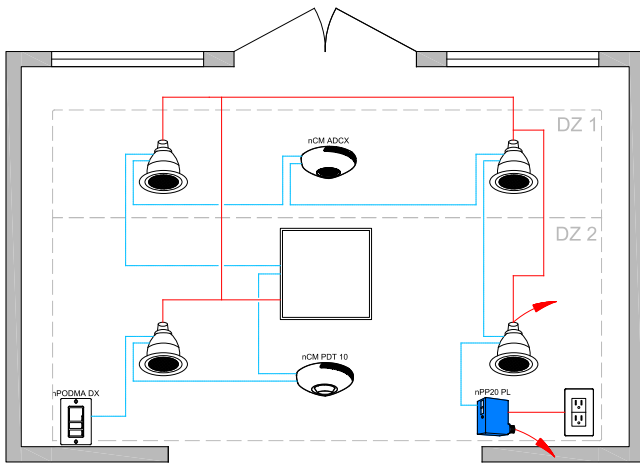
### / ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller
- Networked embedded controls by nLight are available with an occupancy and daylight sensing option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a combination occupancy and daylight sensor
- Scene switches and touchscreens are available in both wired and wireless versions
- A wired wall/corner-mount sensor is available if there are suspended obstructions in the space

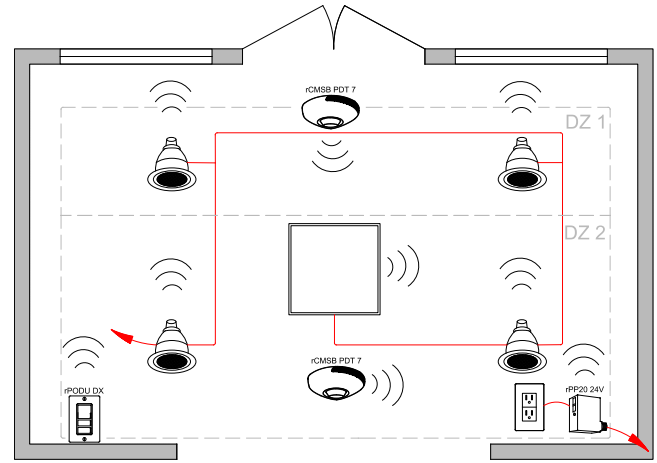
**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.



## Wired



## Wireless



### Bill of Materials

Symbol	Qty	Product #	Description
	4	See Notes	Downlight with Wired Networked Embedded Controls by nLight
	1	See Notes	Troffer with Wired Networked Embedded Controls by nLight
	1	nPODMA DX	On/Off, Raise/Lower WallPod
	1	nPP20 PL	Plug Load Relay Pack
	1	nCM ADCX RJB	Daylight Sensor
	1	nCM PDT 10 RJB	Occupancy Sensor

### Bill of Materials

Symbol	Qty	Product #	Description
	4	See Notes	Downlight with Wireless Networked Embedded Controls by nLight
	1	See Notes	Troffer with Wireless Networked Embedded Controls by nLight
	1	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	1	rPP20 24V G2	Plug Load Relay Pack
	2	rCMBS PDT 7 G2	Battery Powered Occupancy and Daylight Sensor

### / OPERATION DETAILS:

#### Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Occupancy sensors automatically activate luminaires to full output and turn plug-loads ON
- Occupancy sensor automatically reduce lighting power by at least 50% when space becomes vacant
- Luminaires and plug-load automatically turn off when space is vacant or lights can be turned off via a time schedule

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

#### Manual Control:

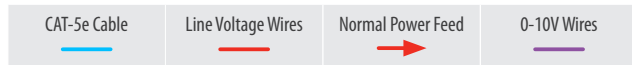
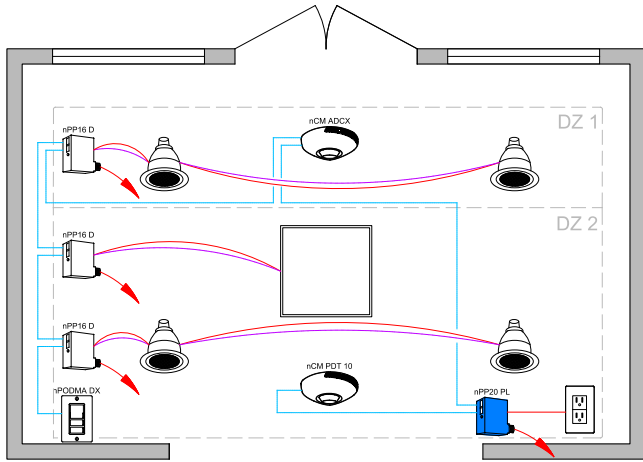
- On/off & raise/lower control of luminaires

### / ADDITIONAL OPTIONS:

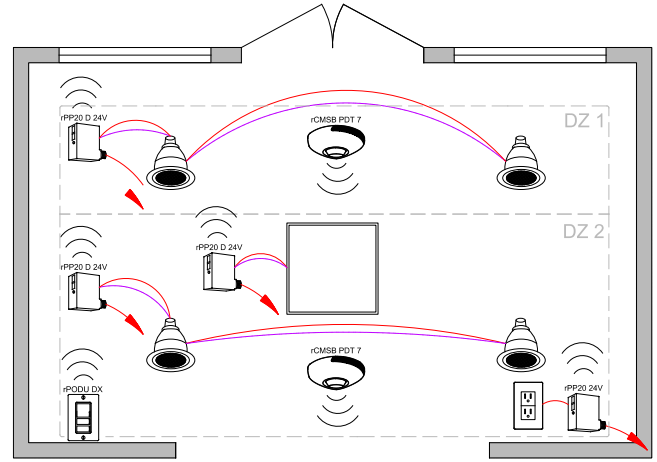
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller
- Networked embedded controls by nLight are available with an occupancy and daylight sensor option
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Scene switches and touchscreen are available in both wired and wireless versions
- Wired sensor is available as a combination sensor with both occupancy and daylight sensing capabilities
- A wired wall/corner-mount sensor is available if there are suspended obstructions in the space

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

**Wired**



**Wireless**



**Bill of Materials**

Symbol	Qty	Product #	Description
	3	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPODMA DX	On/Off, Raise/Lower WallPod
	1	nCM ADCX	Daylight Sensor
	1	nPP20 PL	Plug Load Relay Pack
	1	nCM PDT 10 RJB	Occupancy Sensor

**Bill of Materials**

Symbol	Qty	Product #	Description
	3	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	1	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	2	rCMSB PDT 7 G2	Battery Powered Occupancy and Daylight Sensor
	1	rPP20 24V G2	Plug Load Relay Pack

**/ OPERATION DETAILS:**

**Luminaires:**

- All luminaires are dimmable
- Luminaires are controlled based on power pack line voltage and 0-10V wiring
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Occupancy sensors automatically activate luminaires to full output and turn plug-loads ON
- Occupancy sensor automatically reduce lighting power by at least 50% when space becomes vacant
- Luminaires and plug-load automatically turn off when space is vacant or lights can be turned off via a time schedule

**Daylight Control:**

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylight and the sidelit daylight zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

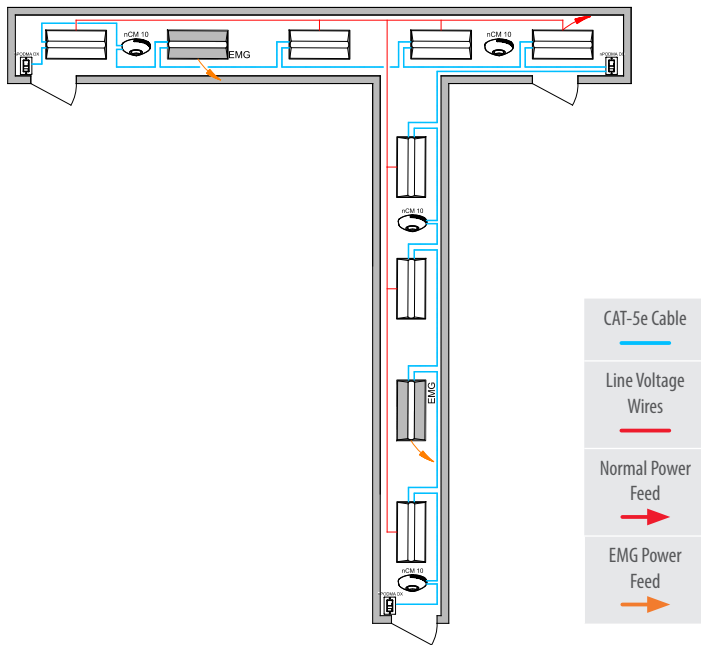
**Manual Control:**

- On/off & raise/lower control of luminaires

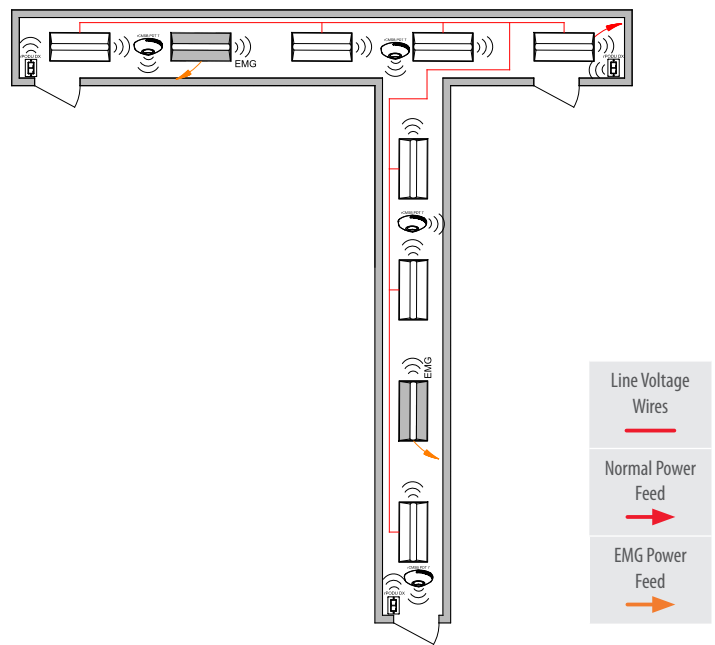
**/ ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller or through occupancy sensor auxiliary relay (AR) contact option
- Networked embedded controls by nLight are available to minimize material and labor time and provide flexibility in rezoning luminaires in any configuration
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions
- Wired sensor is available as a combination sensor with both occupancy and daylight sensing capabilities
- A wired wall/corner-mount sensor is available if there are suspended obstructions in the space

## Wired



## Wireless



### Bill of Materials

Symbol	Qty	Product #	Description
	7	See Note	Troffer with Wired Networked Embedded Controls by nLight
	2	See Note	Troffer with Wired Networked Embedded Controls by nLight with EM Option
	4	nCM 10 RJB	Occupancy Sensor
	3	nPODMA DX	On/Off, Raise/Lower WallPod

### Bill of Materials

Symbol	Qty	Product #	Description
	7	See Note	Troffer with Wireless Networked Embedded Controls by nLight
	2	See Note	Troffer with Wireless Networked Embedded Controls by nLight with EM
	3	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod
	4	rCMSB 7	Battery Powered Occupancy and Daylight Sensor

### / OPERATION DETAILS:

#### Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Luminaires automatically turn off or optionally can be configured to drop to low dim setting of at least 50% when space becomes vacant

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

#### Manual Control:

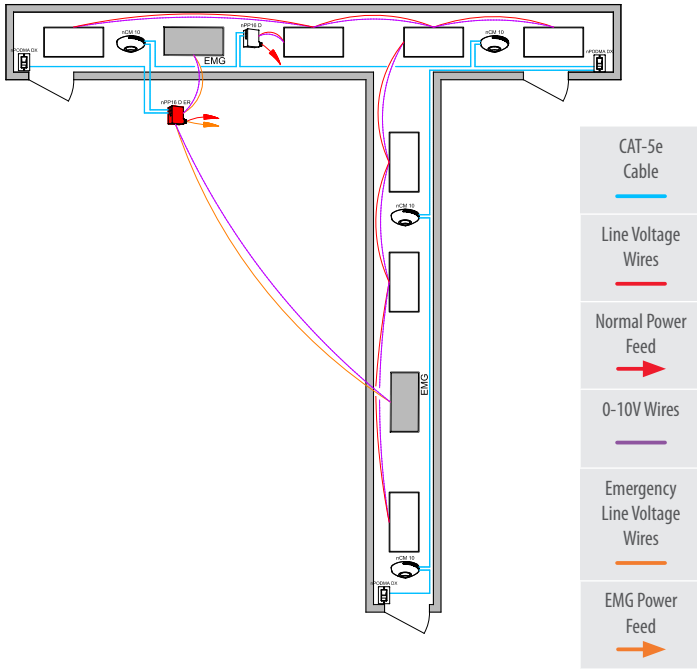
- On/off & raise/lower control of luminaires

### / ADDITIONAL OPTIONS:

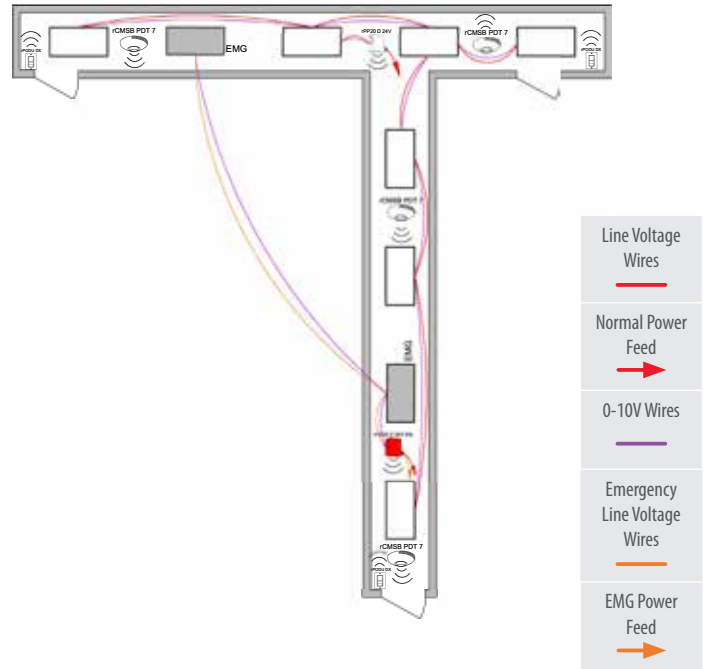
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller
- Networked embedded controls by nLight are available to minimize material and labor time and provide flexibility in rezoning luminaires in any configuration
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

**Wired**



**Wireless**



**Bill of Materials**

Symbol	Qty	Product #	Description
	1	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPP16 D ER EFP	Emergency Relay Pack with 0-10V Dimming Output
	4	nCM 10 RJB	Occupancy Sensor
	3	nPODMA DX	On/Off, Raise/Lower WallPod

**Bill of Materials**

Symbol	Qty	Product #	Description
	1	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	1	rPP20 D 24V EM EFP G2	Emergency Relay Pack with 0-10V Dimming Output
	4	rCMSB PDT 7 G2	Battery Powered Occupancy Sensor
	3	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod

**/ OPERATION DETAILS:**

**Luminaires:**

- All luminaires are dimmable
- Luminaires are controlled based on power pack line voltage and 0-10V wiring
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Luminaires automatically turn off or optionally can be configured to drop to low dim setting of at least 50% when space becomes vacant

**Daylight Control:**

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

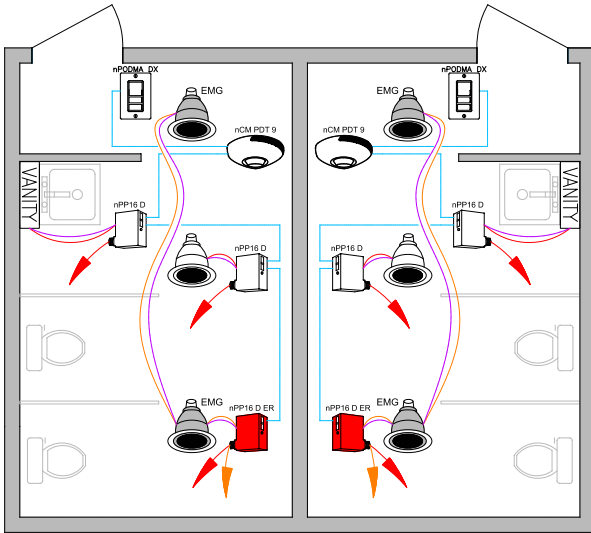
**Manual Control:**

- On/off & raise/lower control of luminaires

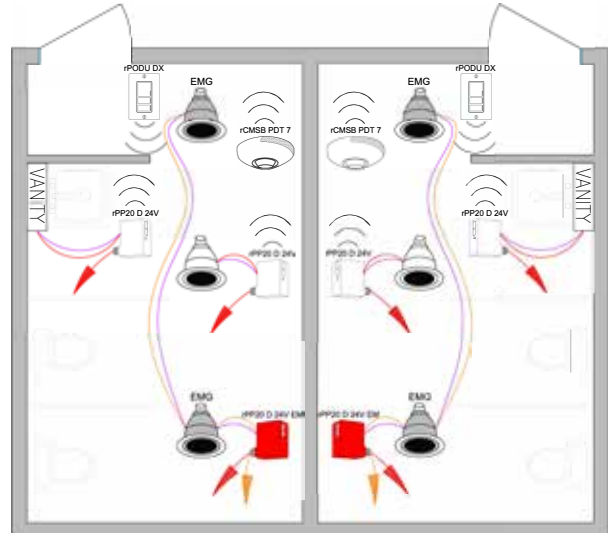
**/ ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller or through occupancy sensor auxiliary relay (AR) contact option
- Networked embedded controls by nLight are available to minimize material and labor time and provide flexibility in zoning luminaires in any configuration
- Wireless sensor is available as a non-battery version that can be powered via a power-pack
- Wireless battery powered switches are available in line powered versions

**Wired**



**Wireless**



① nLight AIR devices with an EM option must be grouped with a normal power sensing device to exit emergency operation. See control device spec sheet for details.



**Bill of Materials**

Symbol	Qty	Product #	Description
	4	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	2	nPP16 D ER EFP	Emergency Module with 0-10V Dimming Output
	2	nCM PDT 9 RJB	Occupancy Sensor
	2	nPODMA DX	On/Off, Raise/Lower WallPod

**Bill of Materials**

Symbol	Qty	Product #	Description
	4	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	2	rPP20 D 24V EM EFP G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rCMSB PDT 7 G2	Battery Powered Occupancy Sensor
	2	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod

**/ OPERATION DETAILS:**

**Luminaires:**

- All luminaires are dimmable
- Luminaires are controlled based on power pack line voltage and 0-10V wiring
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or luminaires must be turned on manually
- Fixture automatically turn off when room becomes vacant

**Daylight Control:**

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

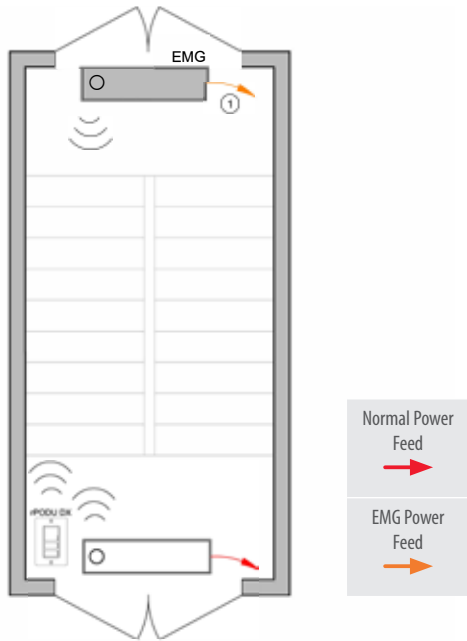
**Manual Control:**

- On/off & raise/lower control of luminaires
- Manual controls may be installed in a location inaccessible to the public

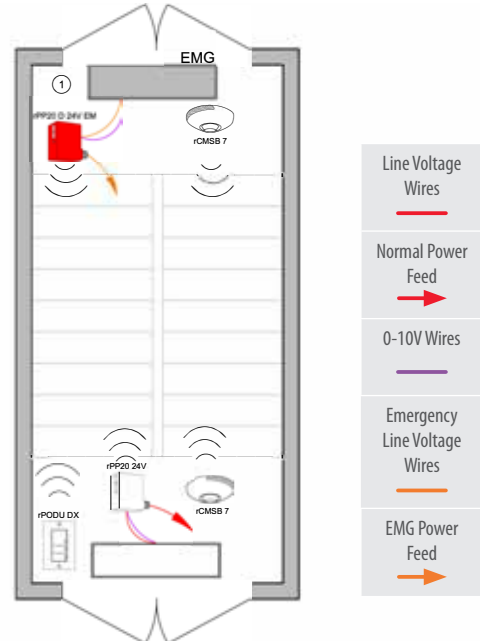
**/ ADDITIONAL OPTIONS:**

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller or through occupancy sensor auxiliary relay (AR) contact option

## Luminaires with Wireless Networked Embedded Controls by nLight



## Wireless with 0-10V Dimming Luminaires



### Bill of Materials

Symbol	Qty	Product #	Description
	1	See Note	Luminaire with Wireless Networked Embedded Controls by nLight with Sensor Option
	1	See Note	Luminaire with Wireless Networked Embedded Controls by nLight with Sensor and Emergency Option
	1	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod

### Bill of Materials

Symbol	Qty	Product #	Description
	1	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	1	rPP20 D 24V EM EFP G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rCMSB PDT 7 G2	Battery Powered Occupancy Sensor
	1	rPODU DX G2	Battery Powered, On/Off, Raise/Lower WallPod

### / OPERATION DETAILS:

#### Luminaires:

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Luminaires automatically turn off or optionally can be configured to drop to low dim setting of at least 50% when space becomes vacant

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

#### Manual Control:

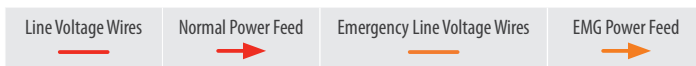
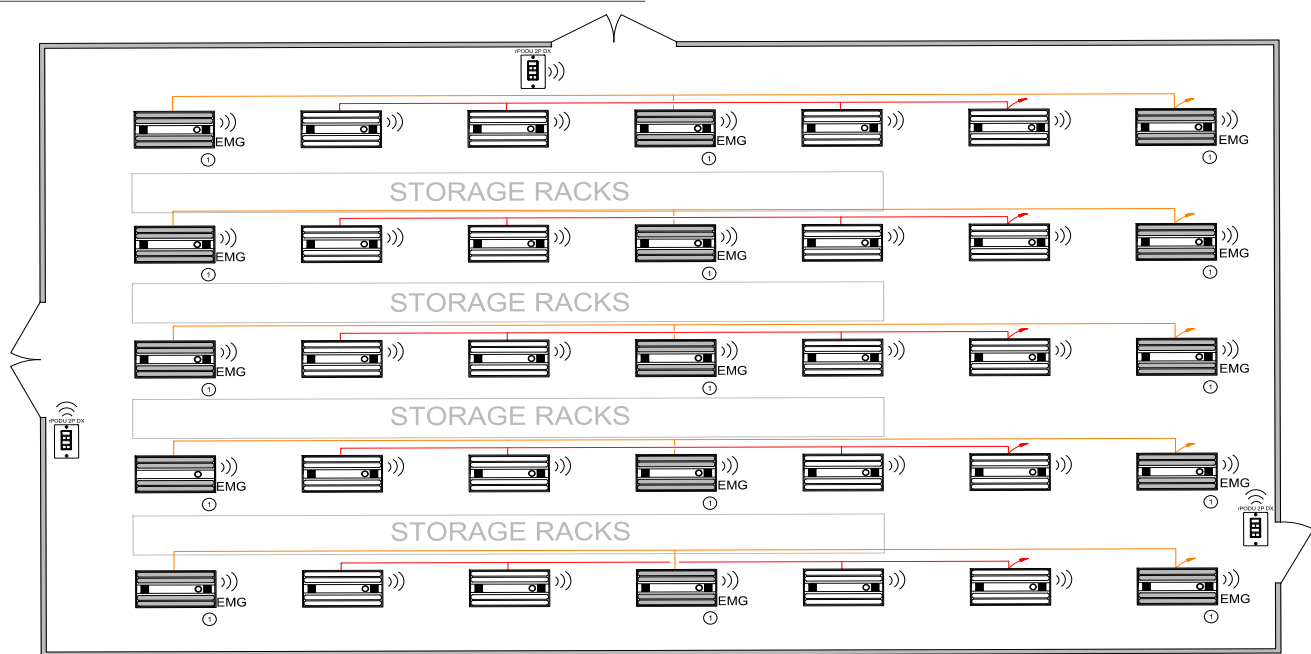
- On/off & raise/lower control of luminaires

### / ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

## Luminaires with Wireless Networked Embedded Controls by nLight



### Bill of Materials

Symbol	Qty	Product #	Description
	20	See Note	High Bay with Wireless Networked Embedded Controls by nLight with Sensor Option
	15	See Note	High Bay with Wireless Networked Embedded Controls by nLight with Sensor and Emergency Option
	3	rPODU 2PDX G2	Battery Powered, 2-Pole, On/Off, Raise/Lower WallPod

#### / OPERATION DETAILS:

##### Luminaires:

- All luminaires are dimmable
- Maximum level can be task tuned to any percentage via programming

##### Occupancy Control:

- Occupancy sensors automatically activate luminaires to full output
- Occupancy sensor automatically reduce lighting power by at least 50% when space becomes vacant
- Luminaires and plug-load automatically turn off when space is vacant or lights can be turned off via a time schedule

##### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming

##### Manual Control:

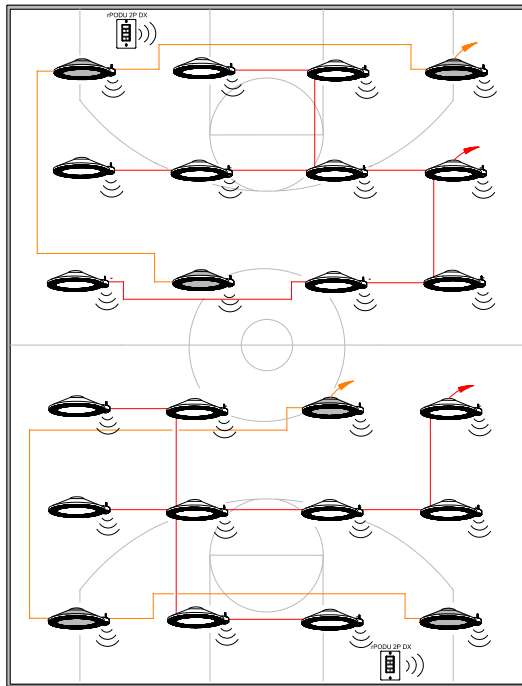
- On/off control of two zones of luminaires

#### / ADDITIONAL OPTIONS:

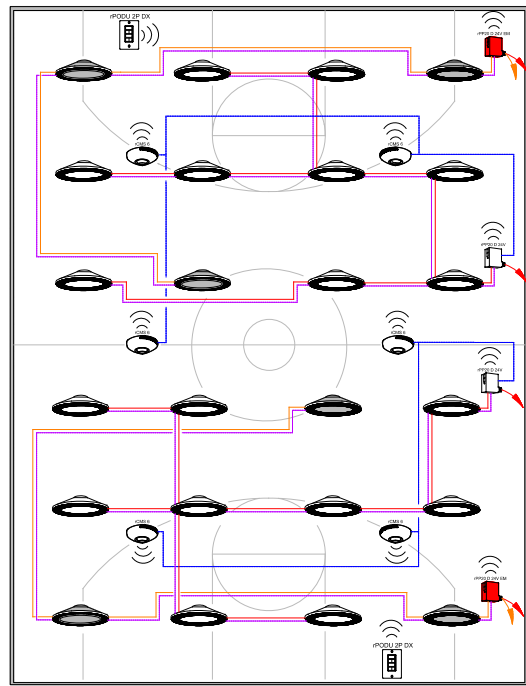
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

## Luminaires with Wireless Networked Embedded Controls by nLight



## Wireless with 0-10V Dimming Luminaires



Line Voltage Wires	Normal Power Feed	Emergency Line Voltage Wires	EMG Power Feed

Low Voltage Wires	0-10V Wires	Line Voltage Wires	Normal Power Feed	Emergency Line Voltage Wires	EMG Power Feed

### Bill of Materials

Symbol	Qty	Product #	Description
	18	See Notes	Luminaire with Wireless Networked Embedded Controls by nLight with Sensor Option
	6	See Notes	Luminaire with Wireless Networked Embedded Controls by nLight with Sensor and Emergency Option
	2	rPODU 2P DX G2	Battery Powered, 2-Pole, On/Off, Raise/Lower WallPod

### Bill of Materials

Symbol	Qty	Product #	Description
	2	rPP20 D 24V EFP G2	Relay Pack with 0-10V Dimming Output
	2	rPP20 D 24V EM EFP G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rPODU 2P DX G2	Battery Powered, 2-Pole, On/Off, Raise/Lower WallPod
	6	rCMS 6 G2	High Bay Occupancy Sensor

### / OPERATION DETAILS:

#### Luminaires:

- All luminaires are dimmable
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

- Occupancy sensors automatically activate luminaires to full output
- Occupancy sensor automatically reduce lighting power by at least 50% when space becomes vacant
- Luminaires and plug-load automatically turn off when space is vacant or lights can be turned off via a time schedule

#### Daylight Control:

- Not required if room has < 24 ft<sup>2</sup> of glazing or lighting load < 75W in the skylit and the sidelit daylight zone
- Smooth continuous dimming

#### Manual Control:

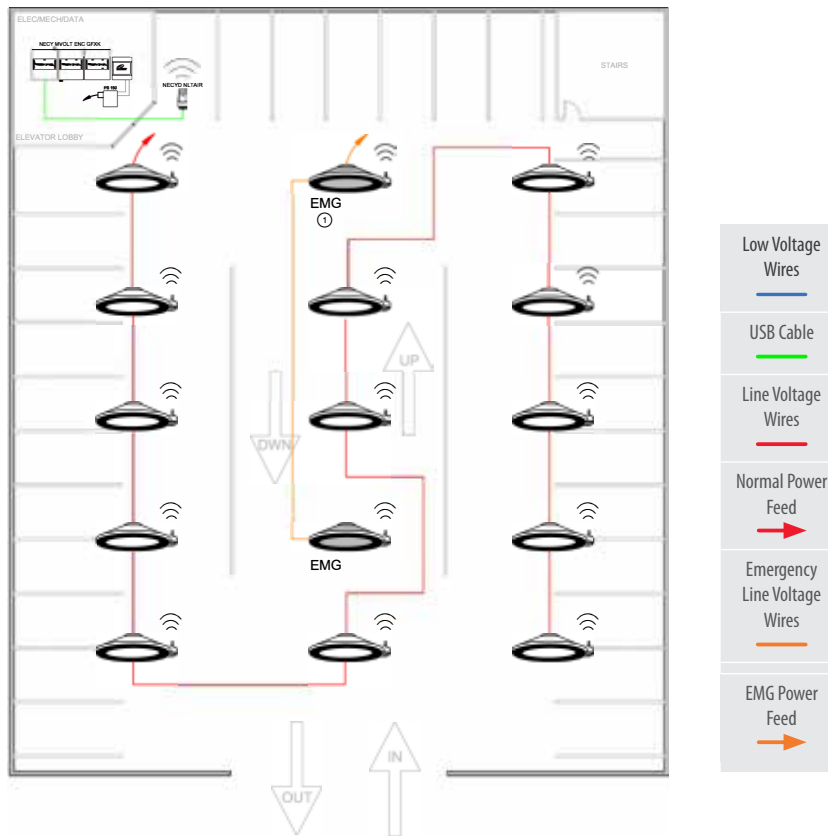
- On/off control of two zones of luminaires

### / ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the Eclipse™ controller





**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

## Wireless Parking Garage



- ① Fixture(s) assumed to include nLight AIR EM emergency options. For battery backup option, no dedicated emergency circuit necessary. nLight AIR devices with an EM option must be grouped with a normal power sensing device to exit emergency operation. See control device spec sheet for details.

## Bill of Materials

Symbol	Qty	Product #	Description
	13	See Note	Canopy with Wireless Networked Embedded Controls by nLight with Sensor Option
	2	See Note	Canopy with Wireless Networked Embedded Controls by nLight with Sensor and Emergency Option
	1	nECY	nLight Eclipse™ Network System Controller with Graphic Touchscreen
	1	nECYD NLTAIR G2	nLight AIR Adapter

## / OPERATION DETAILS:

**Luminaires:**

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

**Occupancy Control:**

- Each control zone should be no more than 500W
- Luminaires automatically turn fully ON in the separately controlled zone
- Luminaires automatically turn ON from all designed paths of egress
- Luminaires automatically dim down to 20-50% of full power when zone becomes vacant

**Daylight Control:**

- Not required if space has < 36 ft<sup>2</sup>. of glazing or lighting load < 60W in the sidelit daylight zone
- Smooth continuous dimming
- Custom grouping of luminaires into separate daylight zones (max. number of zones = number of luminaires)

**Manual Control:**

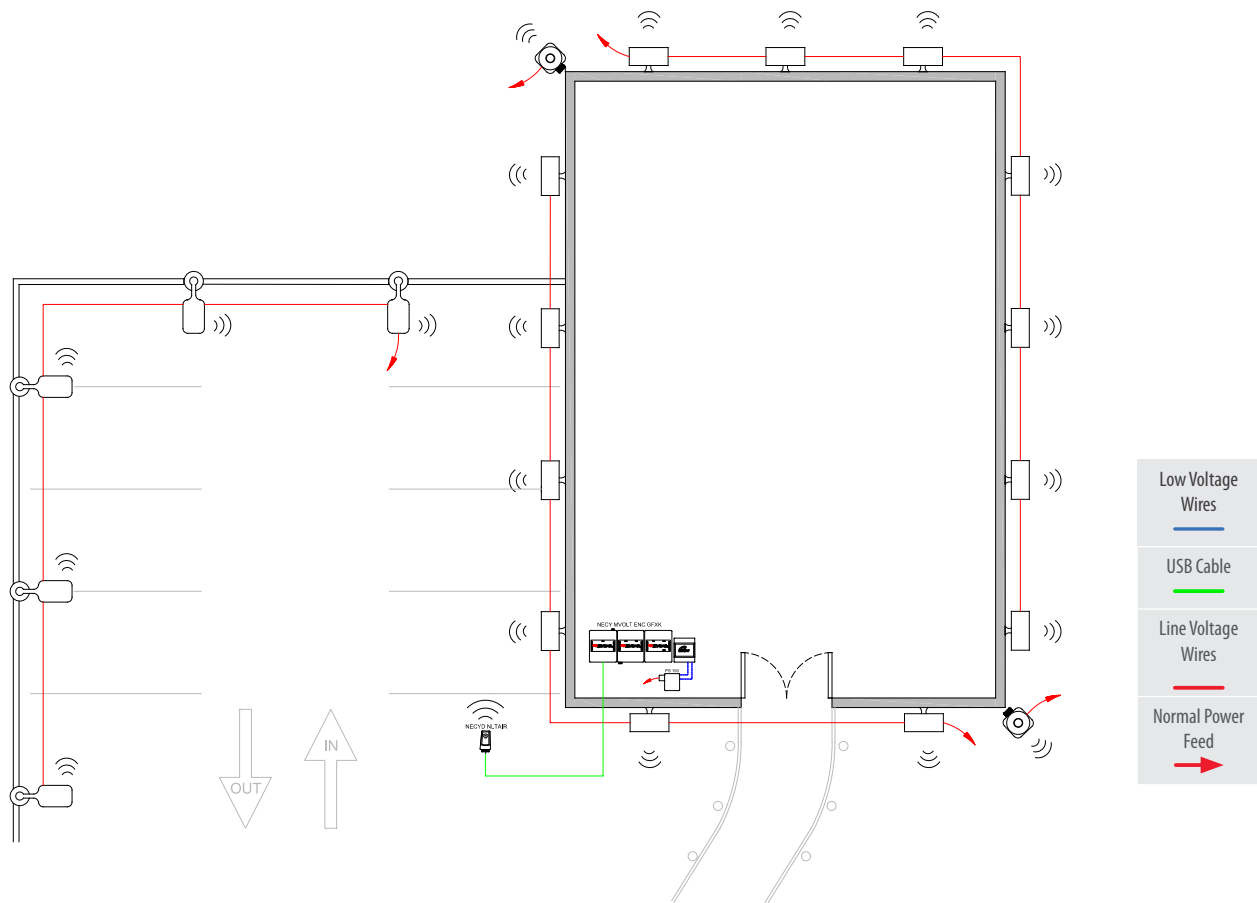
- On/off control of luminaires via graphic touchscreen on nECY

## / ADDITIONAL OPTIONS:

- Devices can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)

**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

Wireless Site Lighting



Bill of Materials

Symbol	Qty	Product #	Description
	5	See Note	Area Luminaire with Wireless Networked Embedded Controls by nLight
	13	See Note	Wall Mount with Wireless Networked Embedded Controls by nLight
	1	nECY	nLight Eclipse™ Network System Controller with Graphic Touchscreen
	1	nECYD NLTAIR G2	nLight AIR Adapter
	2	rSBOR	nLight AIR Repeaters

/ OPERATION DETAILS:

**Luminaires:**

- All luminaires are dimmable
- All luminaires can be controlled together or independently
- Maximum level can be task tuned to any percentage via programming

**Shut-Off Control:**

- Luminaires that are mounted 24ft or below and are >40W automatically go to full bright when occupied
- Luminaires automatically dim down by at least 50-90% when space becomes unoccupied
- Luminaires will turn off when space becomes vacant for no more than 15 minutes
- Zones to be no more than 1,500W
- Time schedule shall provide two nighttime periods with interdependent lighting levels

**Daylight Control:**

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

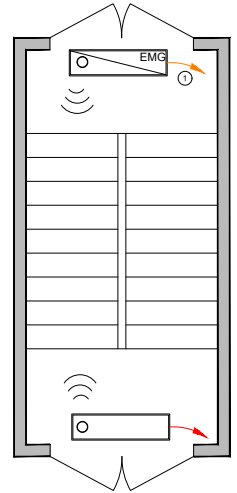
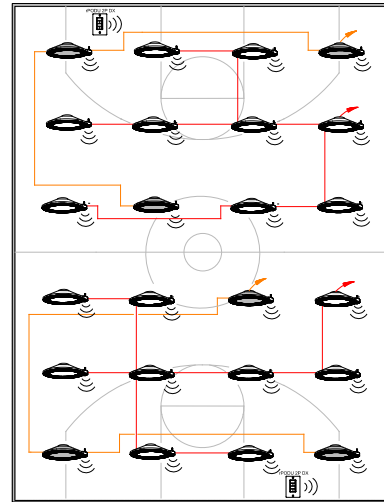
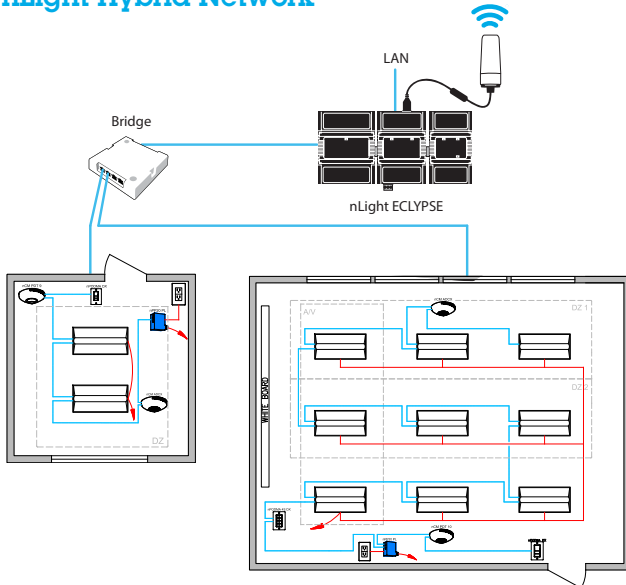
/ ADDITIONAL OPTIONS:

- Devices can be connected to nLight backbone to enable network control, time schedules, astronomical time schedules, and Automated Demand Response (OpenADR 2.0a)




**Note:** Contact your local lighting agent for more information on luminaires with networked embedded controls by nLight.

## nLight Hybrid Networked Lighting Control: Programmable Time Clock and Automatic Demand Response

### nLight Hybrid Network



### Backbone Devices

Symbol	Qty	Product #	Description
	1	nBRG 8 KIT	8-Port Backbone Bridge
	1	nECY MVOLT ENC	nLight Eclipse™ Network System Controller and Optional BMS Interface
	1	nECYD NLTAIR G2	nLight AIR Adapter

### Programmable Time Clock Control:

Although not pictured within each of the individual room design guides, each nLight Control Zone can be connected to an nLight backbone to create a networked nLight lighting control system capable of meeting the requirements of CA Title 24, Part 6, automatic time-switch and demand response provisions [sections 130.1(c)1 and 130.1(e), respectively]. A networked system also enables astronomical time clock control.

### Automatic Demand Response (ADR):

In buildings with more than 4,000W of lighting power, lighting power must be capable of being automatically reduced by a minimum of 15% in response to an automated demand response signal (ADR) to meet the requirements of CA Title 24, Part 6, demand response control [section 130.1(e)]. OpenADR is an open and standardized way for electricity providers to communicate demand response signals with their customers using a common language over any existing IP-based communications network, such as the Internet.

## Luminaires with Networked Embedded Controls by nLight

Acuity Brands offers the industry's broadest portfolio of luminaire with networked embedded controls by nLight. Please scan the QR code to see the current luminaires with networked embedded controls by nLight.



Luminaire with Wireless Networked Embedded Controls by nLight



Luminaire with Wired Networked Embedded Controls by nLight

## CLAIRITY™ + Mobile App

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

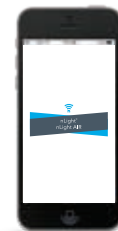
### nLight Wired








The nLight Wired micro-application of CLAIRITY+ is a cost-effective method that simplifies programming and reduces start-up times for nLight devices in smaller projects.

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.

### nLight AIR









The nLight AIR application provides easy startup, configuration and modification of nLight® AIR wireless controls. This cloud connected app allows validated end users (electrical contractors, sales agents or facility maintenance professionals) to start up, configure and troubleshoot from a compatible smartphone or tablet.

Control Requirement		Code Provision	nLight Solution Details	
Area Control	130.1(a)	<p>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.</p>		
		<b>Push-Button WallPod</b>	<b>Graphic WallPod*</b>	
		<p><a href="#">nPODMA Series</a>  <a href="#">rPODU Series</a>  <a href="#">rPODLA</a>  <a href="#">nPODA Key</a></p> 	<p><a href="#">nTS Touchscreen</a></p> 	
Traditional tactile buttons and LED user feedback.		Full-color touch screen provides a sophisticated look and feel.		
Shut-Off Control	Programmable Timeclock and Automatic Scheduling Controls 130.1(c)1 130.2(c)2	<p>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 Eclipse™ 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).</p>		
		<b>Network System Controller</b>		
		<p><a href="#">Network System Controller</a></p> 		
Additional benefits of installing an nLight backbone include remote status monitoring, system-wide configuration changes, BMS interface capability, and ADR interface capability.				
Automatic Full-Off via Occupancy Sensor	130.1(c) 5	<p>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.</p>		
Automatic Partial-Off via Occupancy Sensor	130.1(c) 6 & 7	<b>360° Occupancy Sensor</b>		<b>120° WideView Corner Sensor*</b>
		<p><a href="#">nCM Series</a>  <a href="#">rCMS Series</a>  <a href="#">rCMSB Series</a></p> 		<p><a href="#">nWV Series</a></p> 
		Surface mounts to ceiling tiles or sheetrock/plaster.		Directly mounts in corner or to ceiling via repositionable ceiling bracket.

\*Available with nLight Wired products only.

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.

Control Requirement	Code Provision	nLight Solution Details	
Light Level Control  Multi-Level Lighting Controls and Outdoor Lighting Controls	130.1(b) 130.2(c)1 130.2(c)3	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.	
		<b>Acuity Brands Luminaires with Networked Embedded Controls by nLight</b>	<b>Dimming Relay Packs</b>
			<a href="#">nPP16 Series</a> <a href="#">rPP20 Series</a> 
		Acuity Brands offers a wide variety of LED luminaires with factory installed embedded controls by nLight that provide smooth continuous dimming.	nLight dimming relay enable control of any 0-10VDC dimmable LED luminaire.
Automatic Multi-Level Daylight Controls	130.1(d)	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 luminaires with networked embedded controls by nLight or dimming relay packs, each capable of being its own daylight zone.	
		<b>Ceiling Mount Dimming Photocell</b>	<b>Recessed Mount Dimming Photocell*</b>
		<a href="#">nCM Series</a> <a href="#">rCMS Series</a> <a href="#">rCMSB Series</a> 	<a href="#">nRM Series</a> 
Additional Controls  Receptacle (i.e., Plug Load) Control	130.5(d)	The nLight Plug Load Relay Pack is capable of switching an entire 20A receptacle load. Simply add an occupancy sensor to an nLight Control Zone (room) and the sensor will automatically switch off when the room is vacant.	
		<b>Plug Load / Receptacle Relay Pack</b>	
			

## Title 24 2025 and Emergency Lighting

### Less Wiring, Less to Install

EM is designed for projects with external emergency power sources, such as generators or inverters, and delivers a lower cost of install than traditional solutions by eliminating dedicated wiring used to sense normal power. Instead of requiring additional wiring, nLight AIR devices connected to normal power wirelessly communicate with EM devices to advise when normal power is available.

### Benefits

#### Significant Savings:

By avoiding additional wiring that is used to sense the availability of normal power, EM reduces emergency lighting installation costs by as much as 40%.

#### Robust Emergency Application Offering:

Field installable and luminaire embedded EM options are available for commercial indoor, hospital, warehouse, industrial, parking garage, outdoor spaces, and more.

#### UL 924 Compliant:

EM devices comply with UL 924 standards.

#### Built-In Normal Power Sense:

A variety of nLight AIR devices have a built-in feature to sense the availability of normal power, providing emergency zone sensing for EM devices often without the need for additional hardware.

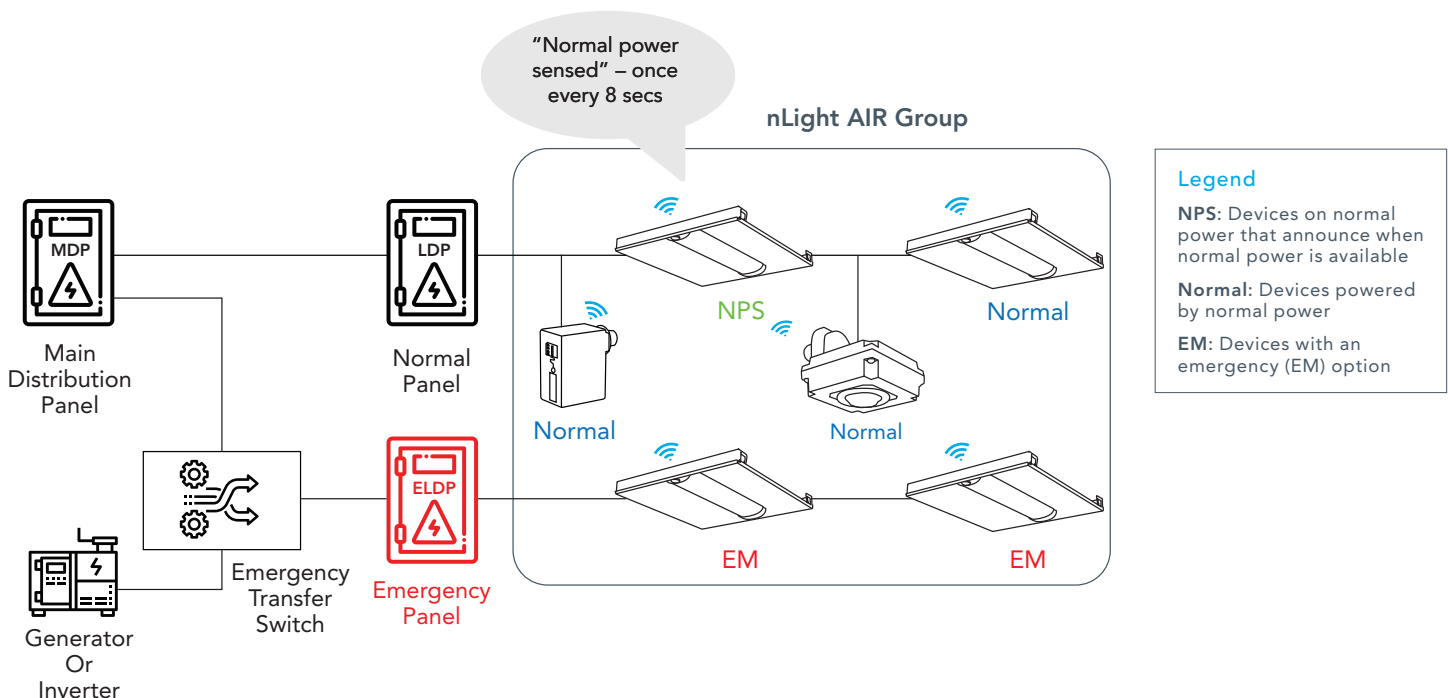
#### Quick Test Feature:

The CLAIRITY™+ mobile app includes a quick test feature that simulates normal power being lost, reducing the need to access critical areas to cycle breakers.

### Simple and Fast

The example one-line below shows the simplicity of the overall system, and the timeline describes the quick response of EM devices to loss of power.

#### A Versatile, Uncomplicated Solution



## Wall Switches - Contemporary Design for nLight Wall Switches

The nLight® platform portfolio of wall switches offer enhanced aesthetics for wired and wireless applications. The modern design makes them ideal solutions for commercial office, healthcare, and industrial options.

### Features & Benefits

- **Contemporary Aesthetic** – A modern and sleek design featuring a matte finish, screwless wall plate, and thin profile with recessed buttons
- **Color Options/Custom Engraving** – A full range of color options provides a variety of choices for your building designs with the assurance that the color of the housing and the wall plate match
- **Easy-to-Install and Program** – The innovative screwless wall plate design and mobile apps make for easy installation and programming

### Available Color Options



White



Lt ALmond



Ivory



Gray



Black



Red

## nLight®

### Title 24 2025 Applications Guide

In addition to being North America's leading manufacturer of indoor and outdoor luminaires, Acuity Brands offers an extensive portfolio of advanced lighting control and building technology solutions for indoor and outdoor applications, from single-room control to fully connected smart building management and space utilization. Our products, technology, expertise and support include occupancy and photosensors, centralized and distributed systems, panels, wired/wireless networked embedded controls and IoT platform services, including space utilization solutions.

### nLight Solution Typical Layout Drawings

<https://www.acuitybrands.com/resources/customer-tools/typicals>

### California Energy Commission 2025 Energy Standards

<https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency>

### California Lighting Technology Center

<https://cltc.ucdavis.edu/>

### Energy Code Ace

<https://energycodeace.com/>

### Use the Following Sections of the Title 24 Code as Reference:

- Section 100.1 – Definitions and rules of construction
- Section 110.9 – Mandatory requirements for lighting control devices and systems, ballasts and luminaires
- Section 130.0 – Lighting controls and equipment - general
- Section 130.1 – Indoor lighting controls that shall be installed
- Section 130.2 – Outdoor lighting controls and equipment
- Section 130.4 – Lighting control acceptance and installation certificate requirements
- Section 130.5 – Electrical power distribution systems
- Section 140.3 – Prescriptive requirements for building envelopes
- Section 140.6 – Prescriptive requirements for indoor lighting

