

nLight®

Title 24 2019 Applications Guide

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nLight

Today's nLight[®] platform is more powerful than ever, providing your environment with innovative networked control that is simple and sophisticated. From simple, convenient, plug-and-play lighting controls to scalable BACnet[™]/IP-protocol systems, nLight connects a wide range of luminaires, sensors, I/O modules and other digital components to create a smart digital network.

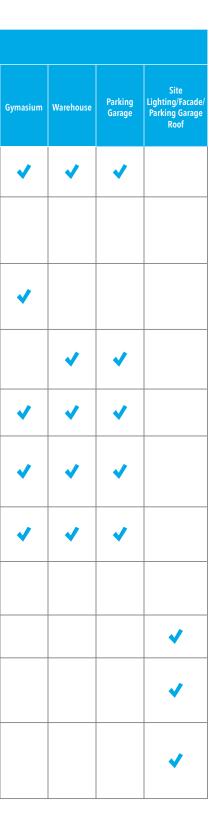
An investment in nLight supports compliance with California's Title 24, Part 6, standards and transforms your space with a fully scalable, connected-building infrastructure that will serve the further needs of your business. Now that is powerful.

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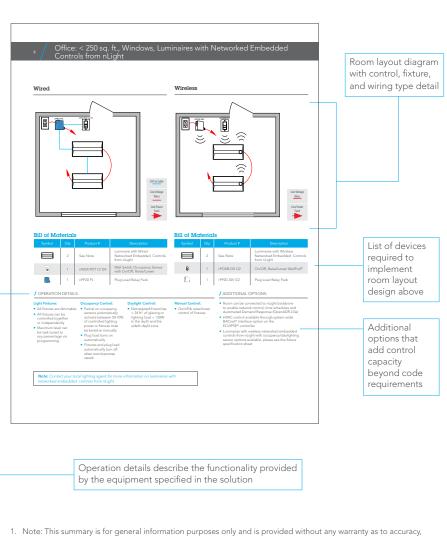
The chart below is an overview of the code requirements for typical building spaces. Please use this information as a guide. For specific code requirements, please refer to the California Code of Regulations, Title 24, Part 6.

	Control Code Requirement ¹ Provision								Space Typ	be	
			Code Summary ¹	Office < 250 sq. ft.	Open Office > 250 sq. ft.	Conference, Meeting Room	Classroom, Lecture Hall, Training Room	Lobby	Corridor	Restroom	Stairwell
	Area Control ²	130.1(a)	All luminaires shall be functionally controlled with manual on and off lighting controls.	4	4	4	•	4	~	~	•
ontrol	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.						•	<	•
Shut-Off Control	Automatic Full- Off via Occupancy Sensor ³	130.1(c) 5	Occupant-sensing controls must be used in specific areas to shut off lighting.	•	- (or)	~	~	- (or)	(or)	(or)	(or)
	Automatic Partial-Off via Occupancy Sensor ³	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).						✓		•
bntrol	Multi-Level Lighting Controls	130.1(b)	Any enclosed area ≥ 100 ft² with a lighting power density > 0.5 W/ft², shall provide multi-level lighting control.	✓	<	✓	<	✓		✓	
Light Level Control	Automatic Multi-Level Daylight Controls	130.1(d)	Areas in designated daylight zones with total power ≥ 120 watts and with a lighting power density > 0.3 W/ft ² shall use automatic multi-level daylight controls.	<	<	•	•	•	•	•	~
Controls	Demand Response	110.12(c) 130.1(e)	In buildings >10,000 ft², excluding areas <0.5 W/ft², lights shall be capable of automatically reducing power in response to a Demand Response Signal.	~	~	~	~	•	•	~	•
Additional Controls	Receptacle (i.e., Plug Load) Control ⁴	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.	•	•	~		•			
	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.								
Outdoor Lighting Controls	Automatic Scheduling Controls	Controls shall be capable of reducing the lighting power by 50-90%, and capable of turning the Scheduling 130.2(c) 2 lighting off, during scheduled unoccupied periods									
Outdoor	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.								



This Title 24, Part 6, Applications Guide is designed to facilitate quicker and easier lighting controls solutions to help you comply with 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

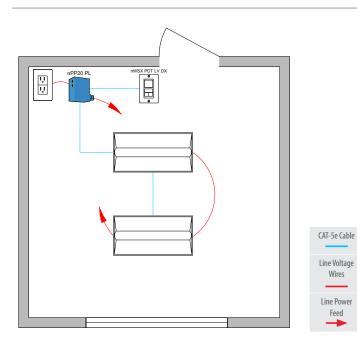


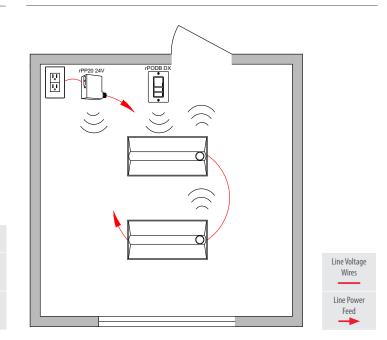
- completeness, or otherwise. The user should read the applicable code sections for more complete and detailed descriptions of code requirements and exceptions and should consult with a professional engineer or other competent advisor before making any decision or taking any action based on this summary.
- 2. Can be inaccessible to unauthorized personnel
- 3. Not required in residential areas such as hotels, condos or dormitories
- 4. Does not apply to Classrooms and Lecture Halls

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

Wireless

Wired





Bill of Materials

Symbol	Qty	Product #	Description
	2	See Note	Luminaire with Wired Networked Embedded Controls from nLight
E	1	nWSX PDT LV DX	Wall Switch Occupancy Sensor with On/Off, Raise/Lower
	1	nPP20 PL	Plug Load Relay Pack

/ OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control: Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or fixtures must

- Plug load turns on automatically
- Fixtures and plug load automatically turn off when room becomes vacant
- **Daylight Control:**
- lighting load < 120W in the skylit and the sidelit daylit zone be turned on manually
- Manual Control: Not required if room has On/off & raise/lower < 24 ft². of glazing or control of fixtures

Bill of Materials

Symbol	Qty	Product #	Description
	2	See Note	Luminaire with Wireless Networked Embedded Controls from nLight
Ė	1	rPODB DX G2	On/Off, Raise/Lower WallPod®
	1	rPP20 24V G2	Plug Load Relay Pack

ADDITIONAL OPTIONS:

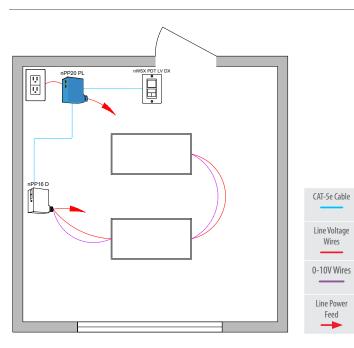
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE[®] controller
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

Office: < 250 sq. ft., Windows, 0-10V Dimming Fixtures

Wireless

Wired



Bill of Materials

Symbol	Qty	Product #	Description
	1	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nWSX PDT LV DX	Wall Switch Occupancy Sensor with On/Off, Raise/Lower
	1	nPP20 PL	Plug Load Relay Pack

/ OPERATION DETAILS:

Light Fixtures:

- All fixtures are dimmable
 Fixtures 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 fixtures must
- be turned on manuallyPlug load turns on automatically
- Fixtures and plug load automatically turn off when room becomes vacant

Daylight Control:

 Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone

Manual Control:

 On/off & raise/lower control of fixtures

ADDITIONAL OPTIONS:

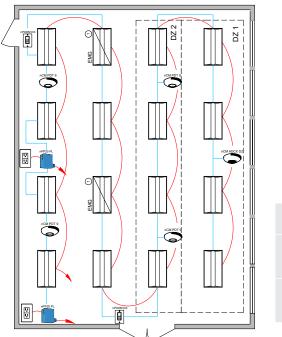
- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet[®] interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

Bill of Materials

Symbol	Qty	Product #	Description
	1	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
	1	rPODB DX G2	On/Off, Raise/Lower WallPod
	1	rCMS PDT 9 G2	Occupancy and Daylight Sensor
ß	1	rPP20 24V G2	Plug Load Relay Pack

Open Office with Luminaires with Networked Embedded Controls from nLight

Wired



CAT-5e Cable Line Voltage Wires Line Power Feed

Some emergency luminaires with networked embedded controls from nLight require (1)a normal sense line connection. See fixture spec sheet for details.

Bill of Materials

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

Occupancy Control:

Partial-on occupancy

sensors automatically

of controlled lighting

power or fixtures must

be turned on manually

Fixtures and plug load

automatically turn off

when room becomes

Plug load turns on

automatically

vacant

activate between 50-70%

/ OPERATION DETAILS:

Light Fixtures:

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

Daylight Control:

- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

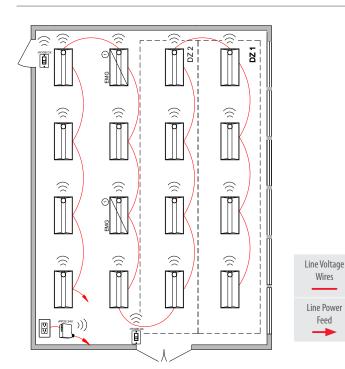
- **Manual Control:** On/off & raise/lower
- control of fixtures

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
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

Wireless



(1) Fixtures assumed to be battery backup

Bill of Materials

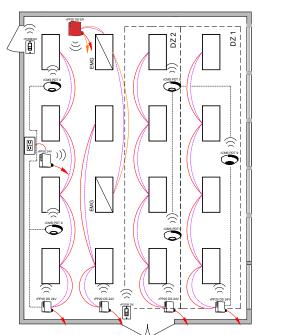
Symbol	Qty	Product #	Description
	14	See Note	Luminaire with Wireless Networked Embedded Controls from nLight
	2	See Note	Luminaire with Wireless Networked Embedded Controls from nLight with Battery Option
	2	rPODB DX G2	On/Off, Raise/Lower WallPod
	1	rPP20 24V G2	Plug Load Relay Pack

Open Office with 0-10V Dimming Fixtures

Wired

CAT-5e Cable Line Voltage Wires Line Power Feed O-10V Wires EMG Power Feed

Wireless





Bill of Materials

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

Bill of Materials

Manual Control:

On/off & raise/lower

control of fixtures

Symbol	Qty	Product #	Description		
ß	4	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output		
	1	rPP20 DS ER G2	Emergency Relay Pack with 0-10V Dimming Output		
° •	2	rPODB DX G2	On/Off, Raise/Lower WallPod		
0	5	rCMS PDT 9 G2	Occupancy and Daylight Sensor		
	1	rPP20 24V G2	Plug Load Relay Pack		

OPERATION DETAILS:

Light Fixtures:

- All fixtures are dimmable
 Fixtures 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 fixtures must be turned on manually
- Plug load turns on automatically
- Fixtures and plug load automatically turn off when room becomes vacant

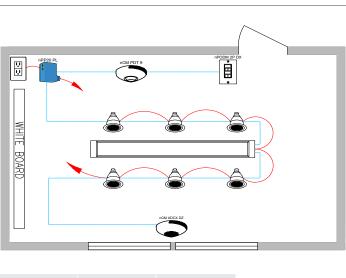
Daylight Control:

- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

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 or through occupancy sensor auxiliary relay (AR) contact option
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

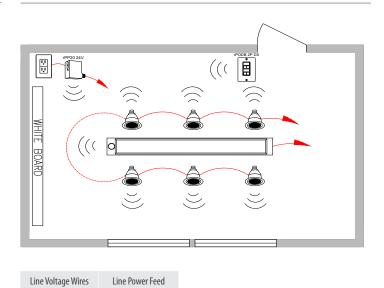
Conference Room with Luminaires with Networked Embedded Controls from nLight



CAT-5e Cable

Line Voltage Wires Line Power Feed

Wireless



Bill of Materials

Luminaire with Wired 1 See Note Networked Embedded Controls from nLight Downlight with Wired â 6 See Note Networked Embedded Controls from nLight 2-Pole On/Off, Raise/ ġ 1 nPODM 2P DX Lower WallPod 1 G nCM PDT 9 RJB Occupancy Sensor nCM ADCX DZ RJB 1 Dual Zone Daylight Sensor nPP20 PL Plug Load Relay Pack

Bill of Materials

Symbol	Qty	Product #	Description
	1	See Note	Luminaire with Wireless Networked Embedded Controls from nLight
â	6	See Note	Downlight with Wireless Networked Embedded Controls from nLight
	1	rPODB 2P DX G2	2-Pole On/Off, Raise/ Lower WallPod
	1	rPP20 24V G2	Plug Load Relay Pack

/ OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

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

vacant

Daylight Control:

- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

Manual Control:

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

ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a)
- HVAC control available through system-wide BACnet[®] interface option on the ECLYPSE[®] controller
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

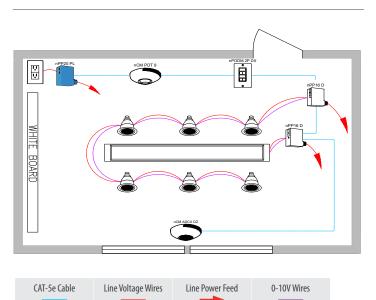
Wired

Conference Room with 0-10V Dimming Fixtures

Wireless

BOAR

Wired



Line Voltage Wires

0-10V Wires

Bill of Materials

Symbol	Qty	Product #	Description
ß	2	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPODM 2P DX	2-Pole On/Off, Raise/ Lower WallPod
	1	nCM PDT 9 RJB	Occupancy Sensor
	1	nCM ADCX DZ RJB	Dual Zone Daylight Sensor
	1	nPP20 PL	Plug Load Relay Pack

Bill of Materials

Low Voltage Wires

Manual Control:

Symbol	Qty	Product #	Description
	2	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
Ė	1	rPODB 2P DX G2	2-Pole On/Off, Raise/ Lower WallPod
	1	rCMS PDT 9 G2	Occupancy and Daylight Sensor
	1	rPP20 24V G2	Plug Load Relay Pack

Line Power Feed

OPERATION DETAILS:

Light Fixtures:

- All fixtures are dimmable
- Fixtures 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 fixtures must be turned on manually
 Plug load turns on
- automatically
 Fixtures and plug load automatically turn off when room becomes vacant

Daylight Control:

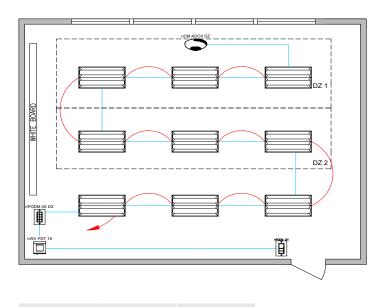
- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the
 On/off & raise lower control of two zones of fixtures
- sidelit daylit zone Smooth continuous dimming
- Daylight zones defined by relay packs

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 or through occupancy sensor auxiliary relay (AR) contact option
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

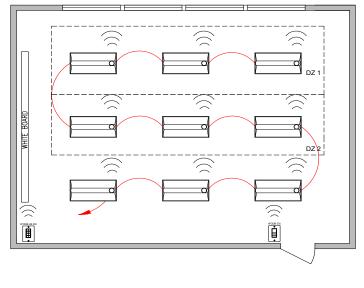
Wired





CAT-5e Cable

Line Voltage Wires Line Power Feed



Line Voltage Wires Line Power Feed

Bill of Materials

Symbol	Qty	Product #	Description
Symbol	Quy	filoddel #	Description
	9	See Note	Luminaire with Wired Networked Embedded Controls from nLight
* *	1	nPODM DX	On/Off, Raise/Lower WallPod
	1	nWV PDT 16	Dual Technology Wide View Occupancy Sensor
	1	nPODM 4S DX	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower
	1	nCM ADCX DZ RJB	Dual Zone Daylight Sensor

Bill of Materials

Symbol	Qty	Product #	Description
	9	See Note	Luminaire with Wireless Networked Embedded Controls from nLight
	1	rPODB DX G2	On/Off, Raise/Lower WallPod
H	1	rPODB 4S DX G2	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower

OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

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

Not required if room has

- On/off & raise/lower
- control of fixtures Teacher station with 4
- preset scenes
- sidelit daylit zone Smooth continuous dimming

< 24 ft². of glazing or

lighting load < 120W

in the skylit and the

Daylight Control:

Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

Manual Control:

to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a) HVAC control available through system-wide

ADDITIONAL OPTIONS:

BACnet® interface option on the ECLYPSE[®] controller

• Room can be connected to nLight backbone

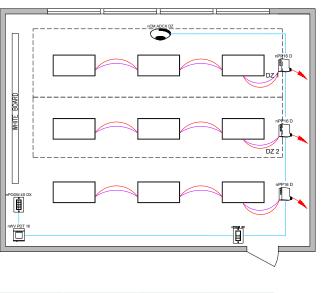
Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

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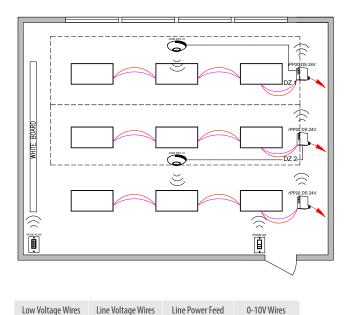
Classroom with 0-10V Dimming Fixtures

Wired



CAT-5e Cable Line Voltage Wires Line Power Feed 0-10V Wires

Wireless



Bill of Materials

Symbol	Qty	Product #	Description
	3	nPP16 D EFP	Relay Module with 0-10V Dimming Output
	1	nPODM DX	On/Off, Raise/Lower WallPod
	1	nWV PDT 16	Dual Technology Wide View Occupancy Sensor
	1	nPODM 4S DX	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower
	1	nCM ADCX DZ RJB	Dual Zone Daylight Sensor

Bill of Materials

Manual Control:

On/off & raise/lower

control of fixtures

preset scenes

Teacher station with 4

Symbol	Qty	Product #	Description
Ē,	3	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
ů u	1	rPODB DX G2	On/Off, Raise/Lower WallPod
	2	rCMS PDT 10 G2	Occupancy and Daylight Sensor
	1	rPODB 4S DX G2	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower

OPERATION DETAILS:

Light Fixtures:

- All fixtures are dimmable
- Fixtures 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 fixtures must be turned on manually
- Fixture automatically turn off when room becomes vacant

Daylight Control:

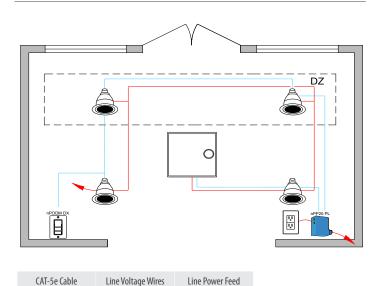
- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

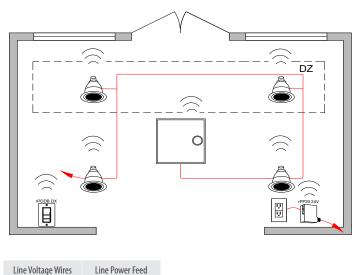
ADDITIONAL OPTIONS:

- 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 or through occupancy sensor auxiliary relay (AR) contact option
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet



Wireless





Bill of Materials

Symbol	Qty	Product #	Description
٢	4	See Notes	Downlight with Wired Networked Embedded Controls from nLight
0	1	See Notes	Troffer (recessed) with Wired Networked Embedded Controls from nLight
	1	nPODM DX	On/Off, Raise/Lower WallPod
	1	nPP20 PL	Plug Load Relay Pack

OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

vacant

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

Daylight Control:

- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

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

Manual Control:

On/off & raise/lower

Bill of Materials

0

Ē

4

1

1

See Notes

See Notes

rPODB DX G2

rPP20 24V G2

control of fixtures

ADDITIONAL OPTIONS:

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

Downlight with Wireless

Networked Embedded Controls from nLight Troffer (recessed) with Wireless Networked

Embedded Controls from

Plug Load Relay Pack

On/Off, Raise/Lower WallPod

nLight

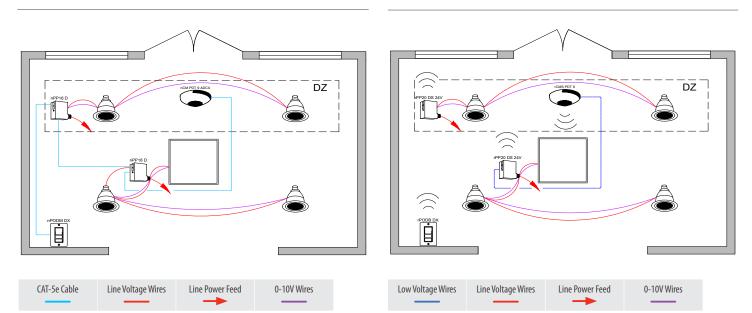
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE[®] controller
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet



Lobby with 0-10V Dimming Fixtures

Wired

Wireless



Bill of Materials

Symbol	Qty	Product #	Description
	2	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
<u> </u>	1	nPODM DX	On/Off, Raise/Lower WallPod
	1	nCM PDT 9 ADCX	Occupancy and Daylight Sensor

OPERATION DETAILS:

Light Fixtures:

- All fixtures are dimmable Fixtures 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 fixtures must be turned on manually
- Plug load turns on automatically
- Fixtures and plug load automatically turn off when room becomes vacant

Daylight Control:

- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming
- Daylight zones defined by relay packs

Manual Control:

- On/off & raise/lower control of fixtures
- BACnet® interface option on the ECLYPSE
 - Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

Bill of Materials

Symbol	Qty	Product #	Description
Ĺ,	2	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
Ė	1	rPODB DX G2	On/Off, Raise/Lower WallPod
\bigcirc	1	rCMS PDT 9 G2	Occupancy and Daylight Sensor

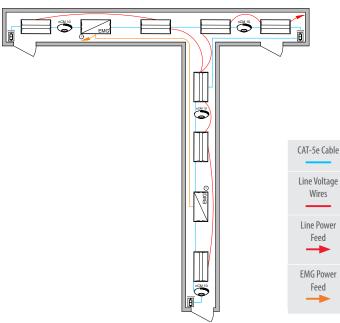
ADDITIONAL OPTIONS:

- 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 controller or through occupancy sensor auxiliary relay (AR) contact option

Title 24 2019 Applications Guide

Corridor with Luminaires with Networked Embedded Controls from nLight





Some emergency luminaires with networked embedded controls from nLight require a (1)normal sense line connection. See fixture spec sheet for details.

Bill of Materials

Symbol	Qty	Product #	Description
	7	See Note	Luminaire with Wired Networked Embedded Controls from nLight
	2	See Note	Luminaire with Wired Networked Embedded Controls from nLight with Emergency Option
	3	nPODM	On/Off WallPod
	4	nCM 10 RJB	Occupancy Sensor

OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

- Fixtures automatically 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 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
 - Smooth continuous dimming
 - Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

Manual Control:

 On/off & raise/lower control of fixtures

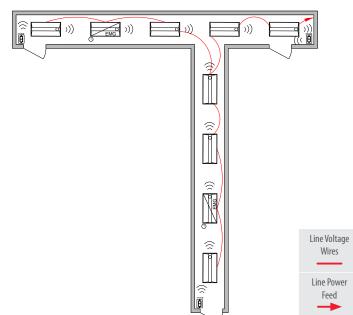
ADDITIONAL OPTIONS:

- 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
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

Wired

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(1) Fixtures assumed to be battery backup

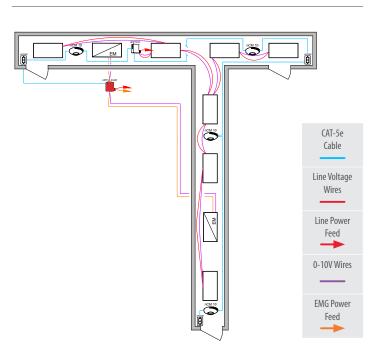
Bill of Materials

Symbol	Qty	Product #	Description
	7	See Note	Luminaire with Wireless Networked Embedded Controls from nLight
X	2	See Note	Luminaire with Wireless Networked Embedded Controls from nLight with Battery Option
	3	rPODB G2	On/Off WallPod

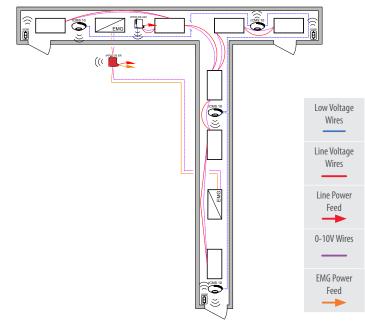
Corridor with 0-10V Dimming Fixtures

1!

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	
Ì	3	nPODM	On/Off WallPod	

/ OPERATION DETAILS:

Light Fixtures:

- All fixtures are dimmable
- Fixtures 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:

 Fixtures 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 ft². of glazing or lighting load < 120W in the skylit and the
 On/off & raise/lower control of fixtures
- sidelit daylit zone Smooth continuous dimming
- Daylight zones defined by relay packs

- 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 or through occupancy sensor auxiliary relay (AR) contact option
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

Bill of Materials

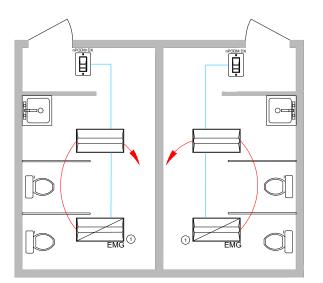
Manual Control:

Symbol	Qty	Product #	Description
	1	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
	1	rPP20 DS ER G2	Emergency Relay Pack with 0-10V Dimming Output
	4	rCMS 10 G2	Occupancy Sensor
Ė	3	rPODB G2	On/Off WallPod

ADDITIONAL OPTIONS:

Public Restroom with Luminaires with Networked Embedded Controls from nLight

Wired

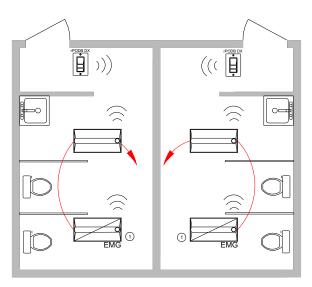


Some emergency luminaires with networked embedded controls from nLight require a (1) normal sense line connection. See fixture spec sheet for details.

Line Power Feed

Line Voltage Wires

Wireless



Fixtures assumed to be battery backup

Line Voltage Wires Line Power Feed

2

2

2

See Note

See Note

rPODB DX G2

Bill of Materials

Bill of Materials

CAT-5e Cable

Symbol	Qty	Product #	Description
	2	See Note	Luminaire with Wired Networked Embedded Controls from nLight
	2	See Note	Luminaire with Wired Networked Embedded Controls from nLight With the Emergency Option
	2	nPODM DX	On/Off, Raise/Lower WallPod

/ OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

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

Daylight Control:

- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

Manual Control:

ġ

 On/off & raise/lower control of fixtures

ADDITIONAL OPTIONS:

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

Luminaire with Wireless

Networked Embedded Controls from nLight Luminaire with Wireless Networked Embedded

Battery Option

Controls from nLight With the

On/Off, Raise/Lower WallPod

- HVAC control available through system-wide BACnet® interface option on the ECLYPSE® controller
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

Public Restroom with 0-10V Dimming Fixtures

Wired

CAT-5e Cable	0-10V Wires	Line Voltage Wires	Line Power Feed	EM Power Feed

Bill of Materials

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

Occupancy Control:

OPERATION DETAILS:

Light Fixtures:

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

Daylight Control:

dimming

by relay packs

Daylight zones defined

- Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or fixtures must be turned on manually
 Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
 Smooth continuous
- Fixture automatically turn off when room becomes vacant

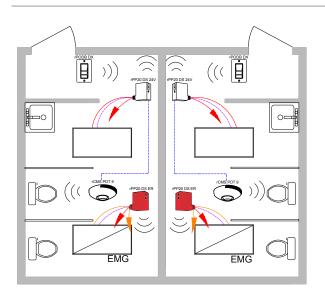
Manual Control:

- On/off & raise/lower control of fixtures
- e/lower tures to enable network control, time schedules and Automated Demand Response (OpenADR 2.0a) HVAC control available through system-wide
 - HVAC control available through system-wide BACnet[®] interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

Room can be connected to nLight backbone

 Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

Wireless



Low Voltage Wires	0-10V Wires	Line Voltage Wires	Line Power Feed	EM Power Feed
			-	

Bill of Materials

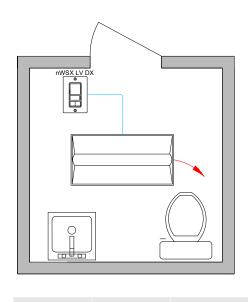
Symbol	Qty	Product #	Description
	2	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
	2	rPP20 DS ER G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rPODB DX G2	On/Off & Raise/ Lower WallPod
	2	rCMS PDT 9 G2	Occupancy Sensor

ADDITIONAL OPTIONS:

Private / Single Restroom with Luminaires with Networked Embedded Controls from nLight

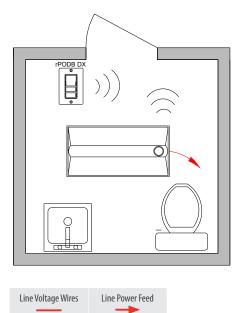
Wired

Wireless



CAT-5e Cable

Line Voltage Wires Line Power Feed



Bill of Materials

Symbol	Qty	Product #	Description
	1	See Notes	Luminaire with Wireless Networked Embedded Controls from nLight
÷	1	rPODB DX G2	On/Off, Raise/ Lower WallPod

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
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

Bill of Materials

Symbol	Qty	Product #	Description
	1	See Notes	Luminaire with Wired Embedded Controls from nLight
÷.	1	nWSX LV DX	Occupancy Wall Switch, On/Off, Raise/Lower

Occupancy Control:

sensors automatically

of controlled lighting

power or fixtures must

be turned on manually

Fixture automatically turn

off when room becomes

Note: Contact your local lighting agent for more information on luminaires

vacant

with networked embedded controls from nLight.

activate between 50-70%

/ OPERATION DETAILS:

Light Fixtures:

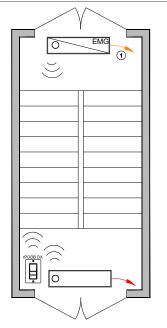
 All fixtures are dimmable
 Partial-on occupancy Maximum level can be task tuned to any percentage via programming

Manual Control:

 On/off & raise/lower control of fixtures

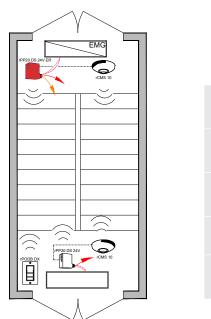
Non-Exit Stairwell with Luminaires with Networked Embedded Controls from nLight /0-10V Dimming Fixtures

Luminaires with Wireless Networked Embedded Controls from nLight



Line Power Feed EMG Power Feed

Wireless with 0-10V Dimming Fixtures





(1) Fixtures assumed to be battery backup

Bill of Materials

Symbol	Qty	Product #	Description
0	1	See Note	Luminaire with Wireless Networked Embedded Controls from nLight
	1	See Note	Luminaire with Wireless Networked Embedded Controls from nLight with Battery Option
	1	rPODB DX G2	On/Off, Raise/ Lower WallPod

Bill of Materials

Symbol	Qty	Product #	Description
ß	1	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
	1	rPP20 DS 24V ER G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rCMS 10 G2	Occupancy and Daylight Sensor
	1	rPODB DX G2	On/Off, Raise/ Lower WallPod

/ OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

- Fixtures automatically Not required if room has < 24 ft². of glazing or turn off or optionally can be configured to drop lighting load < 120W to low dim setting of at least 50% when space becomes vacant
 - in the skylit and the sidelit daylit zone

Daylight Control:

- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

On/off & raise/lower

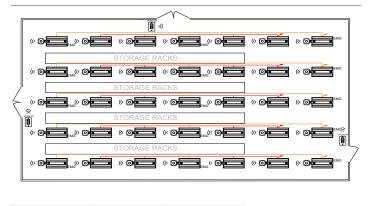
- **Manual Control:** control of fixtures

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
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

Luminaires with Wireless Networked Embedded Controls from nLight



Line Voltage Wires Line Power Feed EM Power Feed

Bill of Materials

Symbol	Qty	Product #	Description
	20	IBG Series	Luminaire with Wireless Networked Embedded Controls from nLight
o	15	IBG Series	Luminaire with Wireless Networked Embedded Controls from nLight with Emergency Option
	3	rPODB 2P G2	2-Pole On/Off WallPod

/ OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control: Daylight Control:

- Not required if room has < 24 ft². of glazing or lighting load < 120W in the skylit and the sidelit daylit zone
- Smooth continuous dimming

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

Fixtures automatically

turn off or optionally can

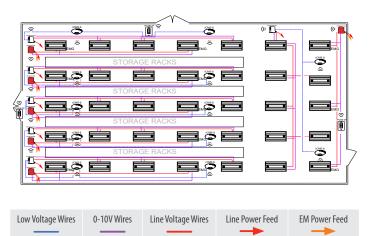
be configured to drop

to low dim setting of at

least 50% when space

becomes vacant

Wireless with 0-10V Dimming Fixtures



Bill of Materials

Symbol	Qty	Product #	Description
	6	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
	6	rPP20 DS ER G2	Emergency Relay Pack with 0-10V Dimming Output
	3	rPODB 2P G2	2-Pole On/Off WallPod
\bigcirc	12	rCMS 6 G2	Occupancy Sensor

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
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

Manual Control:

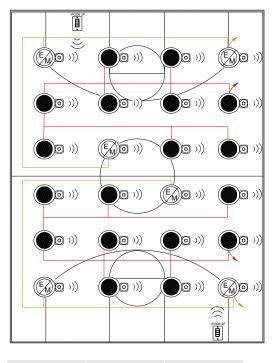
On/off control of two

zones of fixtures

20

Luminaires with Wireless Networked Embedded Controls from nLight

Wireless with 0-10V Dimming Fixtures



Line Voltage Wires	Line Power Feed	EM Power Feed

Bill of Materials

Symbol	Qty	Product #	Description
•	18	See Notes	Luminaire with Networked Embedded Controls from nLight
6	6	See Notes	Luminaire with Wireless Networked Embedded Controls from nLight with Emergency Option
	2	rPODB 2P G2	2-Pole On/Off WallPod

OPERATION DETAILS:

Light Fixtures:

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

Daylight Control: Occupancy Control:

< 24 ft². of glazing or

lighting load < 120W

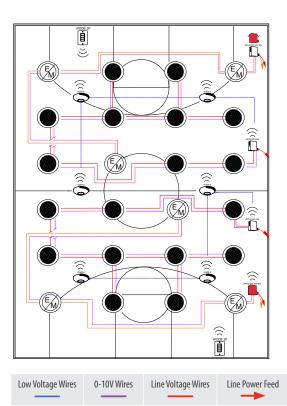
in the skylit and the

sidelit daylit zone

dimming

- Not required if room has Partial-on occupancy sensors automatically activate between 50-70% of controlled lighting power or fixtures must Smooth continuous
- be turned on manually Fixture automatically turn off when room becomes vacant

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



Bill of Materials

Manual Control:

On/off control of two

zones of fixtures

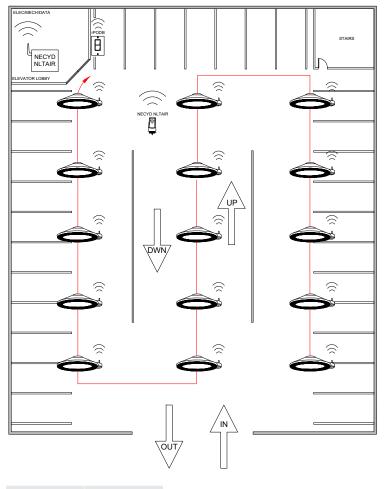
Symbol	Qty	Product #	Description
\square	2	rPP20 DS 24V G2	Relay Pack with 0-10V Dimming Output
	2	rPP20 DS 24V ER G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rPODB 2P G2	2-Pole On/Off WallPod
\bigcirc	6	rCMS 6 G2	High Bay Occupancy Sensor

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
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

EM Power Feed

Wireless Parking Garage



Line Voltage Wires Line Power Feed

Bill of Materials

Symbol Qty Product #		Product #	Description	
	See Notes		See Notes	Luminaires with Wireless Networked Embedded Controls from nLight
	°	1	rPODB DX G2	On/Off, Raise/ Lower WallPod

Manual Control:

/ OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

 All fixtures are dimmable
 Fixtures automatically turn off or optionally can be configured to drop to low dim setting of 20-50% when space becomes vacant

Daylight Control:

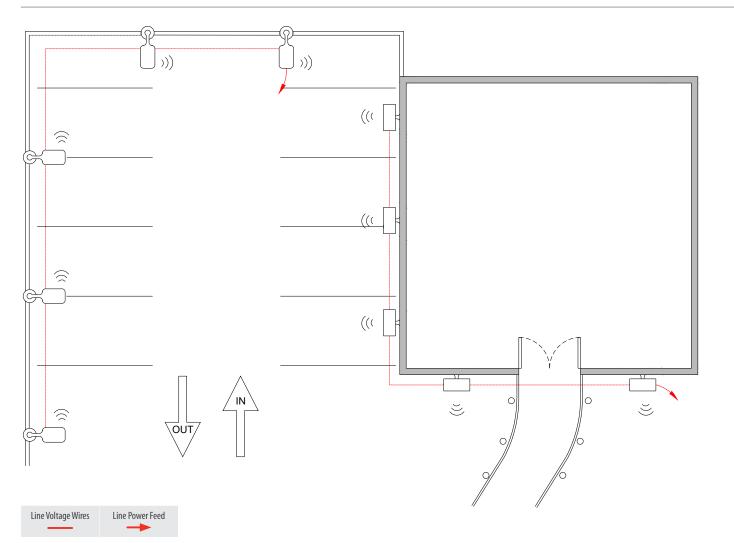
- Not required if room has < 36 ft². of glazing or lighting load < 60W in the sidelit daylit zone
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number of zones = number of fixtures)

ADDITIONAL OPTIONS:

- Devices can be connected to nLight backbone to enable network control, time schedules and On/off control of fixtures Automated Demand Response (OpenADR 2.0a)
 - Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

Wireless Site Lighting



Bill of Materials

Symbol	Qty	Product #	Description	
¢-	5	See Notes Area Luminaire with Wireless Networked Embedded Controls from nLight		
5 See Notes Wall Mount with Wireless Networked Embedded Controls from nLight		Wall Mount with Wireless Networked Embedded Controls from nLight		

/ OPERATION DETAILS:

Light Fixtures:

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

Occupancy Control:

- Fixtures automatically go to full bright when occupied
- Fixtures automatically turn off or optionally can be configured to reduce power by at least 50-90% when space becomes unoccupied

Daylight Control:

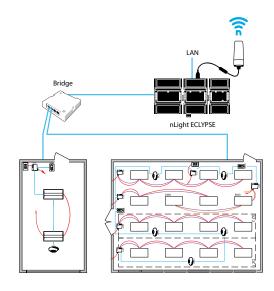
 Daylight responsive controls lights to full off when adequate daylight present

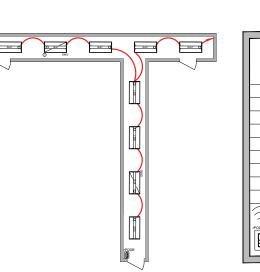
ADDITIONAL OPTIONS:

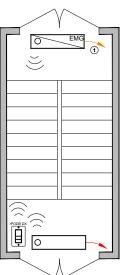
- Devices can be connected to nLight backbone to enable network control, time schedules, astronomical time schedules, and Automated Demand Response (OpenADR 2.0a)
- Luminaires with wireless networked embedded controls from nLight with occupancy/daylighting sensor options available, please see the fixture specification sheet

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

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







① Fixtures assumed to be battery backup

Bill of Materials

Symbol	Qty	Product #	Description
	1	nBRG 8 KIT	8-Port Backbone Bridge
	1	nECY	nLight ECLYPSE System Controller and Option- al BMS Interface and OpenADR Interface
Ļ	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 via 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 larger than 10,000 square feet, lighting power must be capable of being automatically reduced by a minimum of 15% in response to an automatic 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 from nLight

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



Mobile Apps

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

nLight Wired





nLight BLE Radio Module

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

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.



nConfig™

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

nLight AIR



CLAIRITY[™] Pro

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

APPENDIX A: Requirements Overview

	Control Requirement	Code Provision	nLight Solution Details		
			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.		
			Push-Button WallPod	Graphic WallPod*	
	Area Control	130.1(a)	nPODM Series	Graphic WallPod®	
			Traditional tactile buttons and LED user feedback.	Full-color touch screen provides a sophisticated look and feel.	
			Individual nLight control groups (i.e.: rooms) can be easily networked together across an entire building simply by connecting them into a "backbone" made up of one or more nLight bridge devices and/or nLight AIR adapters and an nLight ECLYPSE system controller. The system controller provides programmable time clock functionality for an nLight network as well as interfaces to the SensorView suite of web-based software applications (via an Ethernet LAN / WAN connection).		
0	Programmable		Network System Controller		
Shut-Off Control	Timeclock and Automatic Scheduling Controls	130.1(c)1 130.2(c)2	Network System Controller		
			Additional benefits of installing an nLight backbone include remote status interface capability, and ADR interface capability.	monitoring, system-wide configuration changes, and BMS	
	Automatic Full-Off via Occupancy Sensor	130.1(c) 5	nLight occupancy sensors utilize 100% digital passive infrared (PIR) detection, come in several mounting styles, and offer multiple coverage patter options. Additionally, nLight sensors are available with patented Microphonics [™] dual technology detection for rooms with obstructions. Configurin for full off vs. partial off control is done with system programming.		
	Automatic Partial-Off via Occupancy Sensor	130.1(c) 6 & 7	360° Occupancy Sensor	120° WideView Corner Sensor*	
			nCM Series rCMS Series	nWV Series	
			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.

APPENDIX B: Requirements Overview

Control Code Requirement 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.		
			Acuity Brands Luminaires with Networked Embedded Controls from nLight	Dimming Relay Packs	
				nPP16 Series	
			Acuity Brands offers a wide variety of LED fixtures with factory installed embedded controls from 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 from nLight or dimming relay packs, each capable of being its own daylight zone.		
			Ceiling Mount Dimming Photocell	Recessed Mount Dimming Photocell*	
			nCM Series rCMS Series	nRM Series	
	Receptacle (i.e., Plug Load) Control	130.5(d)	The nLight Plug Load Relay Pack is capable of switching an entire 20A rece (room) and the sensor will automatically switch off when the room is vacar	ptacle load. Simply add an occupancy sensor to an nLight Control Zone it.	
Controls			Plug Load / Receptacle Relay Pack		
Additional Controls			nPP20 PL Series	rPP20 Series	

nLight[®] Title 24 2019 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, luminaire-integrated wired/wireless networked 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 2019 Energy Standards

https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency

California Lighting Technology Center

https://cltc.ucdavis.edu/article/nonresidential-lighting-whats-new-2019-title-24-part-6-energy-code

Energy Code Ace

http://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





