

# NECB 2017

nLight® Applications Guide

ON/OFF



# I nLight Lighting Controls Platform

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

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



# / TABLE OF CONTENTS

- 04 Code Requirements for Common Building Spaces
- 05 How to Use This Guide
- 06 Enclosed Office Solutions
- 08 Open Plan Office Solutions
- 10 Conference Room Solutions
- 12 Classroom Solutions
- 14 Lobby Solutions
- 16 Atrium Solutions
- 18 Dining Solutions
- 20 Corridor Solutions
- 22 Restroom Solutions
- 25 Stairwell Solutions
- 26 Warehouse Storage Solutions
- 27 Gymnasium Solutions
- 28 Sales Area Solutions
- 29 Parking Garage
- **30** Site Lighting
- 31 nLight Enabled Luminaires
- 32 nLight Hybrid Networked Lighting Control
- 33 Requirements Overview



# / ABOUT

#### About NECB 2017

The National Energy Code for Buildings (NECB) 2017 is a residential and commercial building energy code. The intention of this code is to reduce energy consumption by outlining design and construction requirements which include specific constraints for lighting controls. The use of lighting controls to synchronize light levels with daylight, occupancy, and scheduled/manual inputs are required in order to be compliant.

#### **About This Guide**

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

#### About nLight

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

											Space	Туре	
	Control Requirement*			Enclosed Office	Open Plan Office	Conference, Meeting, Multipurpose Room	Classroom, Lecture Hall, Training Room	Lobby	Atrium	Dining Area	Corridor	Public or Private Washroom	Stairwell
	Manual	4.2.2.1.(3)	Areas shall incorporate a manual control to allow occupants to turn fixtures off.	~	~	•	•	•	~	•	~	**	**
Control	Restricted to Manual ON	4.2.2.1.(6)	Shall not be turned ON automatically		<b>√</b>		<b>√</b>		✓	<b>√</b>			
Manual Control	Restricted to Partial Automatic ON	4.2.2.1.(8)	Partial, automatic on to not more than 50% power.	- (or)	(or)	(or)	(or)		(or)	(or)			
	Bi-Level	4.2.2.1.(9)	Shall have at least one level of lighting, in addition to "full on" and "full off," between 30% and 70% or continuous dimming.	~	~	~	•		~	~			•
Daylight Control	Automatic Daylight Responsive Controls <sup>1,2</sup>	4.2.2.1.(10) 4.2.2.1.(13)	Requires continuous dimming or 2 set points of 50% - 70% and 20% - 40%.	~	~	~	•	•	✓	✓	✓	~	•
	Automatic Partial OFF	4.2.2.1.(16)	Shall automatically reduce by $\leq$ 50% within 20 minutes of all occupants leaving the space.					•			•		~
Automatic Control	Automatic Full OFF	4.2.2.1.(18)	Fixtures must automatically turn off within 20 minutes of all occupants leaving the space.	~	<	~	•	•	•	•	•	~	•
	Scheduled Shut-off	4.2.2.1.(20)	Shall shut off automatically when spaces are scheduled to be unoccupied via time of day programming or signals from other automatic devices or systems.		(or)			(or)	(or)	(or)	(or)		(or)
Exterior Control	Exterior Lighting Controls	4.2.4.1.(1) 4.2.4.1.(5)	Shall be controlled by astronomical time control or photosensors.										

Notes:

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

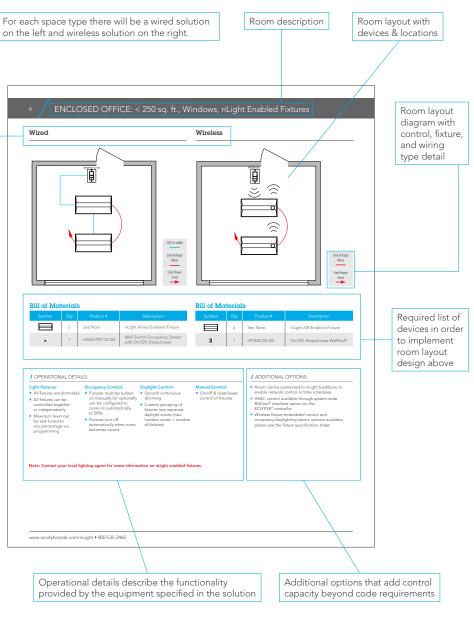
\*\* While energy code is required, safety may preclude the use of a manual controls in these spaces.

1. Sidelight and Toplight Primary daylight zones shall not exceed 150W.

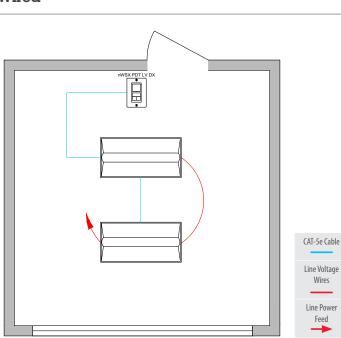
2. Sidelight Secondary daylight zones shall not exceed 300W.

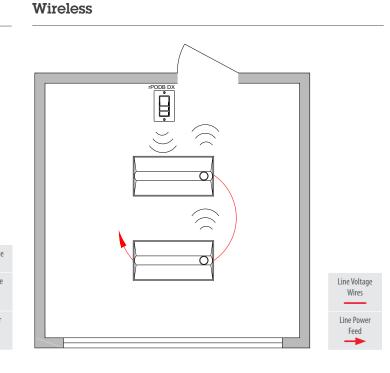
3. Does not need to comply with 4.2.2.1(10) Automatic Daylight Responsive Controls for Sidelighting.





# ENCLOSED OFFICE: < 250 sq. ft., Windows, nLight Enabled Fixtures





#### **Bill of Materials**

Symbol	Qty	Product #	Description
	2	See Note	nLight Wired Enabled Fixture
H	1	nWSX PDT LV DX	Wall Switch Occupancy Sensor with On/Off, Raise/Lower

can be configured to

to 50%)

Fixtures turn off

becomes vacant

come on automatically

automatically when room

#### **Bill of Materials**

Manual Control:

On/off & raise/lower

control of fixtures

Symbol	Qty	Product #	Description
	2	See Note	nLight AIR Enabled Fixture
	1	rPODB DX G2	On/Off, Raise/Lower WallPod®

#### **/** OPERATIONAL DETAILS:

#### Light Fixtures:

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

#### **Daylight Control:** Occupancy Control:

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

## ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE<sup>®</sup> controller
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

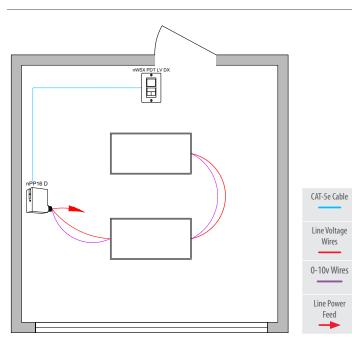
Note: Contact your local lighting agent for more information on nLight enabled fixtures.

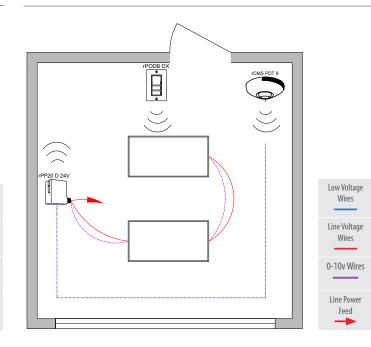
# Wired

# ENCLOSED OFFICE: < 250 sq. ft., Windows, 0-10V Dimming Fixtures

Wireless

#### Wired





#### **Bill of Materials**

Symbol	Qty	Product #	Description
Ĺ,	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

**Occupancy Control:** 

to 50%)

Fixtures turn off

becomes vacant

can be configured to

come on automatically

automatically when room

#### OPERATIONAL DETAILS:

#### Light Fixtures:

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

#### Daylight Control:

 Fixtures must be turned on manually (or optionally dimming

#### Manual Control:

 $\square$ 

Ē

6

 On/off & raise/lower control of fixtures

**Bill of Materials** 

1

1

1

#### ADDITIONAL OPTIONS:

rPP20 D 24V G2

rPODB DX G2

rCMS PDT 9 G2

 Room can be connected to nLight backbone to enable network control or time schedules

Relay Pack with 0-10V

On/Off, Raise/Lower WallPod

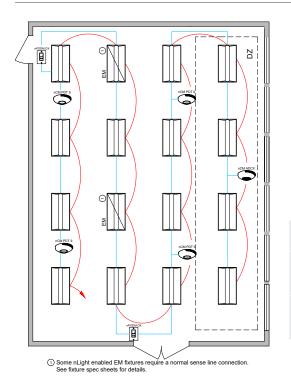
Occupancy and Daylight Sensor

Dimming Output

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

# OPEN PLAN OFFICE: > 300 sq. ft., nLight Enabled Fixtures

#### Wired



# CAT-5e Cable Line Voltage Wires Line Power Feed

Daylight Control:

dimming

of fixtures)

Smooth continuous

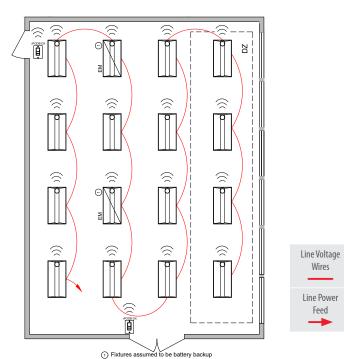
Custom grouping of

fixtures into separate

daylight zones (max.

number zones = number

#### Wireless



Fixtures assumed to be batter

#### **Bill of Materials**

Symbol	Qty	Product #	Description
	14	See Note	nLight AIR Enabled Fixture
	2	See Note	nLight AIR Enabled Fixture with Battery Option
	2	rPODB DX G2	On/Off, Raise/Lower WallPod

#### **Bill of Materials**

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

#### OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### Occupancy Control:

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

#### Manual Control:

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

#### ADDITIONAL OPTIONS:

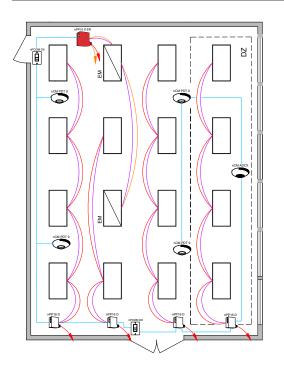
- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet

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

3

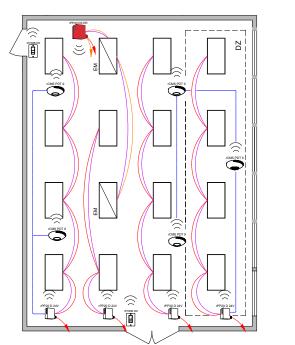
# OPEN PLAN OFFICE: > 300 sq. ft., 0-10V Dimming Fixtures

#### Wired





#### 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
	1	nCM ADCX RJB	Daylight Sensor

#### **Bill of Materials**

Symbol	Qty	Product #	Description
ß	4	rPP20 D 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
	5	rCMS PDT 9 G2	Occupancy and Daylight Sensor

#### OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Occupancy Control:**

can be configured to

to 50%)

Fixtures turn off

come on automatically

automatically when room becomes vacant

on manually (or optionally

**Daylight Control:** Fixtures must be turned Smooth continuous

by rows

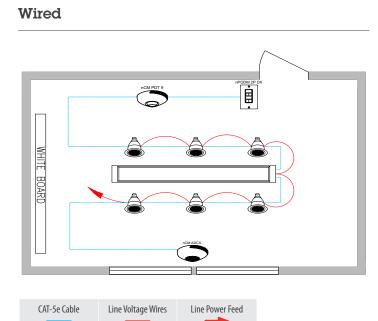
- dimming Daylight zones defined
- Manual Control:
- On/off & raise/lower control of fixtures

#### ADDITIONAL OPTIONS:

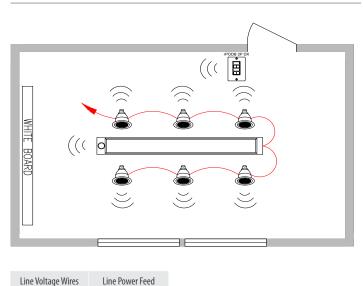
- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option



# CONFERENCE ROOM with nLight Enabled Fixtures



Wireless



#### **Bill of Materials**

Symbol	Qty	Product #	Description
	1	See Note	nLight Wired Enabled Linear Fixture
â	6	See Note	nLight Wired Enabled Downlight Fixture
	1	nPODM 2P DX	2-Pole On/Off, Raise/ Lower WallPod
	1	nCM PDT 9 RJB	Occupancy Sensor
	1	nCM ADCX RJB	Daylight Sensor

#### OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### Occupancy Control: Fixtures must be

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

#### Daylight Control:

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

**Manual Control:** 

of fixtures

On/off & raise lower

control of two zones

â

ġ

**Bill of Materials** 

1

6

1

See Note

See Note

rPODB 2P DX G2

## ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

nLight AIR Enabled

Downlight Fixture 2-Pole On/Off, Raise/

Lower WallPod

Linear Fixture nLight AIR Enabled

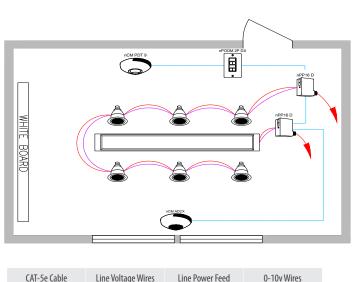
 Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet

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

0

# CONFERENCE ROOM with 0-10V Dimming Fixtures

#### Wired

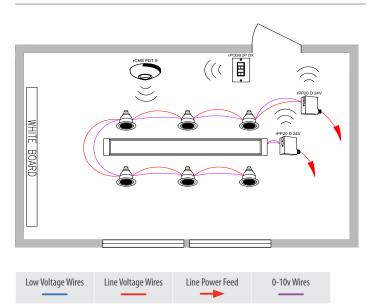


CAT-5e Cable

Line Voltage Wires

Line Power Feed

#### **Wireless**



#### **Bill of Materials**

Symbol	Qty	Product #	Description
	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 RJB	Daylight Sensor

#### **Bill of Materials**

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

#### **/** OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Occupancy Control:**

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

#### **Manual Control:**

**Daylight Control:** 

dimming

Smooth continuous

Daylight zones defined

by relay module wiring

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

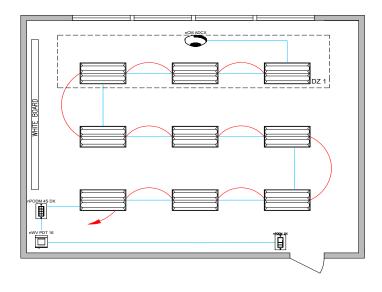
#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

# CLASSROOM with nLight Enabled Fixtures

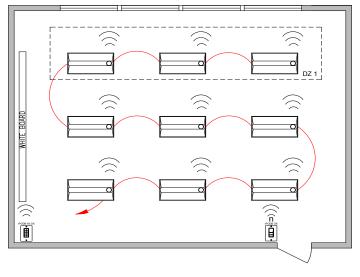
#### Wired





CAT-5e Cable

Line Voltage Wires Line Power Feed



Line Voltage Wires Lin

Line Power Feed

#### **Bill of Materials**

Symbol	Qty	Product #	Description
	9	See Note	nLight Wired Enabled Fixture
¢	1	nPODM DX	On/Off, Raise/Lower WallPod
	1	nWV PDT 16	Dual Technology Wide View Occupancy Sensor
Ē	1	nPODM 4S DX	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower
	1	nCM ADCX RJB	Daylight Sensor

#### **Bill of Materials**

Symbol	Qty	Product #	Description
	9	See Note	nLight AIR Enabled Fixture
Ļ	1	rPODB DX G2	On/Off, Raise/Lower WallPod
	1	rPODB 4S DX G2	Teacher Station — 4 Scene Control with Master On/Off & Raise/Lower

#### OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### Occupancy Control:

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

#### Daylight Control:

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

#### Manual Control:

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

#### ADDITIONAL OPTIONS:

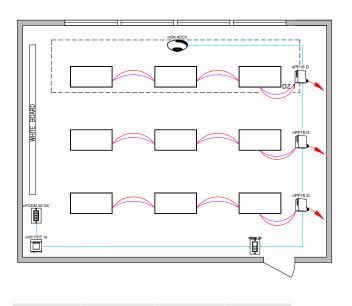
- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet

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

12

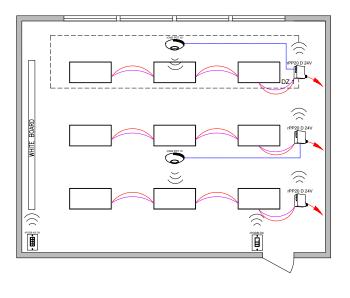
# CLASSROOM with 0-10V Dimming Fixtures

#### Wired



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

#### Wireless



Low Voltage Wires	Line Voltage Wires	Line Power Feed

0-10v Wires

#### **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 RJB	Daylight Sensor

#### **Bill of Materials**

Symbol	Qty	Product #	Description
<b></b> ,	3	rPP20 D 24V G2	Relay Pack with 0-10V Dimming Output
¢	1	rPODB DX G2	On/Off, Raise/Lower WallPod
$\bigcirc$	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

#### OPERATIONAL DETAILS:

#### **Light Fixtures:**

- All fixtures are dimmableEach row can be controlled independently
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

Daylight Control:

dimming

by rows

Smooth continuous

Daylight zones defined

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

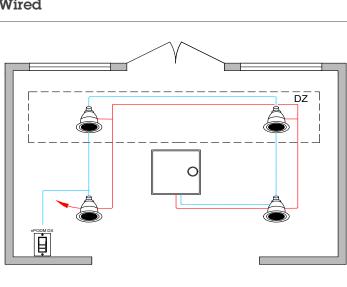
#### Manual Control:

- Master on/off & raise/ lower control of entire room
- Teacher station with 4 preset scenes

#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

# LOBBY with nLight Enabled Fixtures



DZ O 

**Bill of Materials** 

CAT-5e Cable

Line Voltage Wires

Symbol	Qty	Product #	Description
٢	4	See Notes	nLight Wired Enabled Downlight
0	1	See Notes	nLight Wired Enabled troffer (recessed)
	1	nPODM DX	On/Off, Raise/Lower WallPod

Line Power Feed

# **Bill of Materials**

On/off & raise/lower

control of fixtures

Line Voltage Wires

Wireless

Symbol	Qty	Product #	Description
٢	4	See Notes	nLight AIR Enabled Downlight
0	1	See Notes	nLight AIR Enabled troffer (recessed)
	1	rPODB DX G2	On/Off, Raise/Lower WallPod

ADDITIONAL OPTIONS:

#### **|** OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Occupancy Control:**

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

#### Daylight Control:

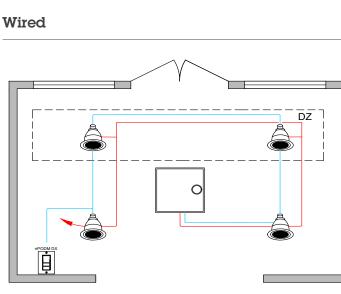
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max number zones = number of fixtures)

# Manual Control:

Line Power Feed

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet

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

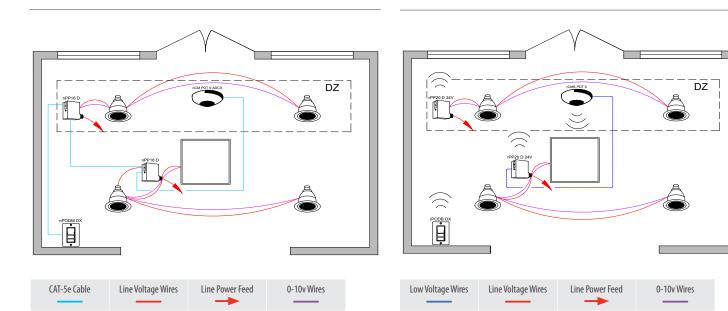


www.acuitybrands.com/nLight • 800-535-2465

# 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
ů,	1	nPODM DX	On/Off, Raise/Lower WallPod
	1	nCM PDT 9 ADCX	Occupancy and Daylight Sensor

#### OPERATIONAL DETAILS:

#### Light Fixtures:

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

#### Occupancy Control:

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

#### Daylight Control:

- Smooth continuous dimming
- Daylight zones defined by relay module wiring

**Bill of Materials** 

2

1

1

 $\bigcap$ 

É

#### Manual Control:

 On/off & raise/lower control of fixtures

#### ADDITIONAL OPTIONS:

rPP20 D 24V G2

rPODB DX G2

rCMS PDT 9 G2

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

Relay Pack with 0-10V

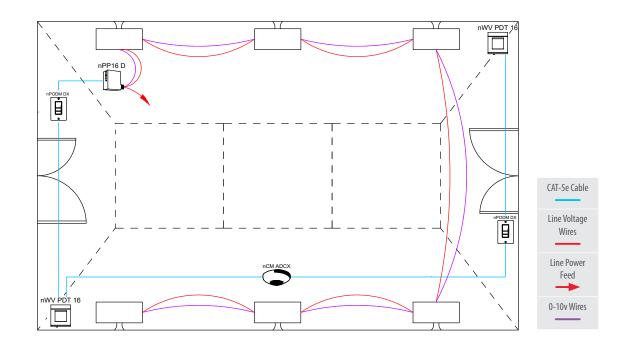
On/Off, Raise/Lower WallPod

Dimming Output

Occupancy and

Daylight Sensor

#### Wired



#### **Bill of Materials**

Symbol	Qty	Product #	Description
	1	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	2	nPODM DX	On/Off, Raise/Lower WallPod
	2	nWV PDT 16	Dual Technology Wide View Occupancy Sensor
	1	nCM ADCX RJB	Daylight Sensor

#### / OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

programming

**Occupancy Control:** Fixtures must be turned

can be configured to

to 50%)

Fixtures turn off

becomes vacant

come on automatically

automatically when room

on manually (or optionally

#### Daylight Control:

- Smooth continuous
  - dimming Daylight zones defined by

control of fixtures

Manual Control:

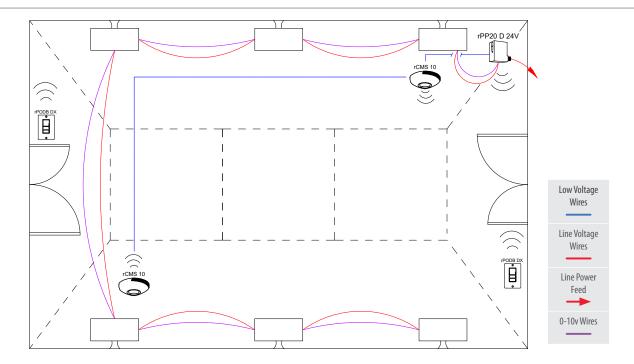
On/off & raise/lower

relay wiring modules

#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

#### Wireless



#### **Bill of Materials**

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

**Manual Control:** 

On/off & raise/lower

control of fixtures

#### OPERATIONAL DETAILS:

#### Light Fixtures:

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

#### Occupancy Control:

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

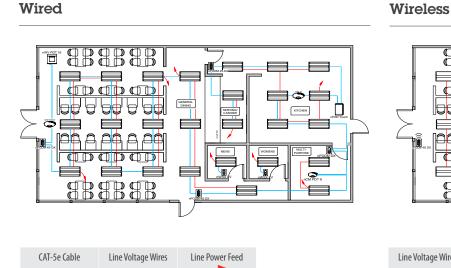
#### Daylight Control:

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

# ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet

# DINING with nLight Enabled Fixtures



#### 8 6 F -be Ð bd 00 a 18<mark>8</mark> A <u>a</u>a 20 A

(( B

((° 🗎

 $\sim$ 

2

	uü	O	
Line Voltage Wires Line Power Feed	Line Voltage Wires	Line Power Feed	

D

#### **Bill of Materials**

Symbol	Qty	Product #	Description
	26	See Note	nLight Wired Enabled Fixture
	1	nPODM DX	On/Off, Raise/Lower WallPod
	3	nPODM 4S DX	4 Scene Control with Master On/Off & Raise/Lower
	1	nCM PDT 9 RJB	Occupancy Sensor
$\bigcirc$	1	nCM ADCX RJB	Daylight Sensor
	1	nCM 10 RJB	Occupancy Sensor
	2	nWSX LV	Occupancy Wall Switch, On/Off
	1	nWV PDT 16	Dual Technology Wide View Occupancy Sensor
	1	nPOD TOUCH	Touchscreen Wall Switch

#### **Bill of Materials**

- 0

Symbol	Qty	Product #	Description	
	26	See Note	nLight AIR Enabled Fixture	
Ě	1	rPODB DX G2	On/Off, Raise/Lower WallPod	
	2	rPODB G2	On/Off WallPod	
I	4	rPODB 4S DX G2	4 Scene Control with Master On/Off & Raise/Lower	

#### **/** OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Occupancy Control:**

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

#### Manual Control:

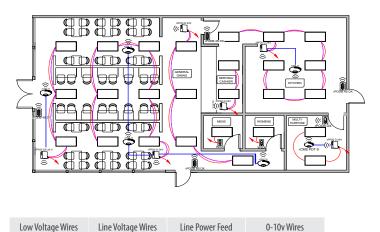
- Smooth continuous dimming
- Custom grouping of fixtures into separate daylight zones (max. number zones = number of fixtures)

**Daylight Control:** 

- On/off & raise/lower control of fixtures
- ADDITIONAL OPTIONS:
- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet
- For emergency lighting control use a power pack with ER/EM option or nLight Enabled Fixture with emergency option

# DINING with 0-10V Dimming Fixtures

#### Õ ╘ n 38 ÂĞ 30 А $\square$ (TI) Y 0 DÖ CAT-5e Cable Line Power Feed Line Voltage Wires 0-10v Wires



#### **Bill of Materials**

Wired

Symbol	Qty	Product #	Description
Ē	1	nPODM DX	On/Off, Raise/Lower WallPod
	3	nPODM 4S DX	4 Scene Control with Master On/Off & Raise/Lower
	1	nCM PDT 9 RJB	Occupancy Sensor
$\bigcirc$	1	nCM ADCX RJB	Daylight Sensor
	1	nCM 10 RJB	Occupancy Sensor
	2	WSX	Occupancy Wall Switch, On/Off
	1	nWV PDT 16	Dual Technology Wide View Occupancy Sensor
	1	nPOD TOUCH	Touchscreen Wall Switch
ß	6	nPP16 D EFP	Relay Pack with 0-10V Dimming Output

**Occupancy Control:** 

to 50%) Fixtures turn off automatically when room becomes vacant

on manually (or optionally

can be configured to

come on automatically

#### **Bill of Materials**

**Wireless** 

Symbol	Qty	Product #	Description	
È	1	rPODB G2	On/Off WallPod	
Ĩ	4	rPODB 4S DX G2	4 Scene Control with Master On/Off & Raise/Lower	
ß	6	rPP20 D 24V G2	Relay Pack with 0-10V Dim- ming Output	
	5	rCMS 10 G2	Occupancy Sensor	
$\bigcirc$	1	rCMS PDT 9 G2	Occupancy and Daylight Sensor	
	2	WSX	Occupancy Wall Switch, On/Off, Raise/Lower	
	I		1	

#### / OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### Daylight Control:

- Smooth continuous dimming
- Daylight zones defined by relay wiring modules

#### Manual Control:

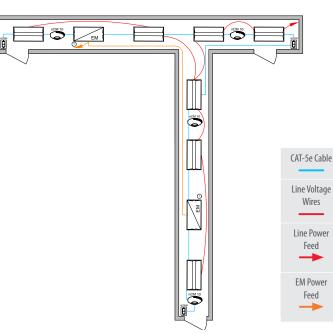
 On/off & raise/lower control of fixtures

#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

# CORRIDOR with nLight Enabled Fixtures

#### Wired



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

#### **Bill of Materials**

Symbol	Qty	Product #	Description
	7	See Note	nLight Wired Enabled Fixture
	2	See Note	nLight Wired Enabled Fixture with EMG Option
	3	nPODM	On/Off WallPod
	4	nCM 10 RJB	Occupancy Sensor

#### / OPERATIONAL DETAILS:

#### Light Fixtures:

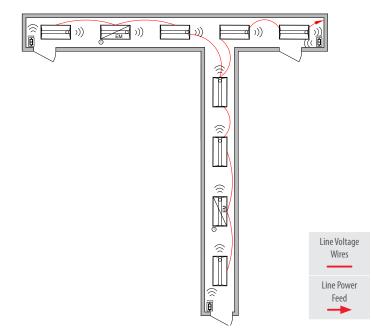
- All fixtures are dimmableAll fixtures are controlled together
- or independently

  Maximum level can be task
- tuned to any percentage via programming

#### Occupancy Control:

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

#### Wireless



(1) Fixtures assumed to be battery backup

#### Bill of Materials

Manual Control:

On/off control of fixtures

Symbol	Qty	Product #	Description
	7	See Note	nLight AIR Enabled Fixture
	2	See Note	nLight AIR Enabled Fixture with Battery Option
	3	rPODB G2	On/Off WallPod

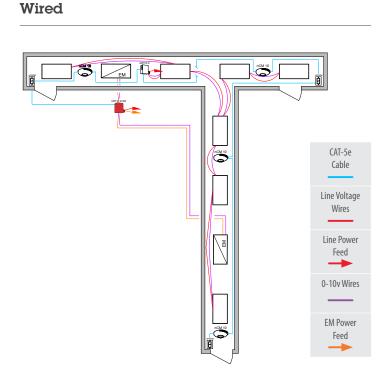
#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet)
- If daylight exists, add Automatic Daylight Responsive Controls per 4.2.2.1.(10) and 4.2.2.1.(13)

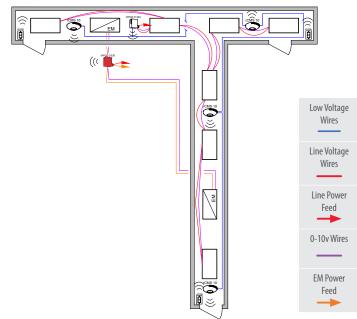
Note: Contact your local lighting agent for more information on nLight enabled fixtures.

20

# CORRIDOR with 0-10V Dimming Fixtures



#### **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	
, Į	3	nPODM	On/Off WallPod	

#### **/** OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Occupancy Control:**

Fixtures automatically go to full bright when occupied Fixtures automatically turn off

or optionally can be configured

to drop to low dim setting when space becomes vacant

#### Manual Control:

On/off control of fixtures

**Bill of Materials** 

1

1

4

3

 $\bigcap$ 

0

ġ

#### ADDITIONAL OPTIONS:

rPP20 D 24V G2

rPP20 D ER G2

rCMS 10 G2

rPODB G2

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller

Relay Pack with 0-10V

Emergency Relay Pack with 0-10V Dimming Output

Dimming Output

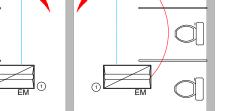
Occupancy Sensor

On/Off WallPod

If daylight exists, add Automatic Daylight Responsive Controls per 4.2.2.1.(10) and 4.2.2.1.(13)

# PUBLIC WASHROOM with nLight Enabled Fixtures

#### Wired



1) Some nLight enabled EM fixtures require a normal sense line connection. See fixture spec sheets for details.

CAT-5e Cable	Line Voltage Wires	Line Power Feed
		-

#### **Bill of Materials**

Symbol	Qty	Product # Description		
	2	See Note	nLight Wired Enabled Fixture	
	2	See Note	nLight Wired Enabled Fixture with the EMG Option	
© 	2	nPODM DX	On/Off, Raise/Lower WallPod	
	2	nCM PDT 9 RJB	Occupancy Sensor	

#### **/** OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Occupancy Control:**

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

#### Manual Control:

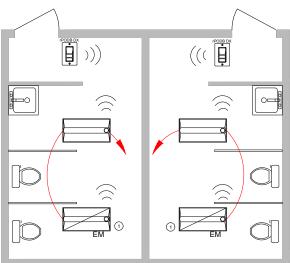
- On/off & raise/lower control of fixtures
- If switch poses safety concerns, optionally can be programmed for "on only"

#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet
- If daylight exists, add Automatic Daylight Responsive Controls per 4.2.2.1.(10) and 4.2.2.1.(13)

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

**Wireless** 



(1) Fixtures assumed to be battery backup

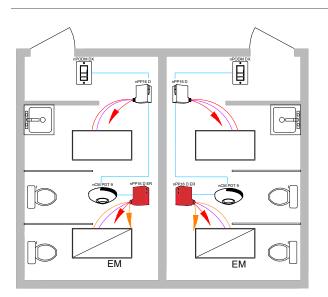
Line Power Feed Line Voltage Wires

#### **Bill of Materials**

Symbol	Qty	Product #	Description
	2	See Note	nLight AIR Enabled Fixture
	2	See Note	nLight AIR Enabled Fixture with the Battery Option
	2	rPODB DX G2	On/Off, Raise/Lower WallPod

# PUBLIC WASHROOM 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

#### OPERATIONAL DETAILS:

#### Light Fixtures:

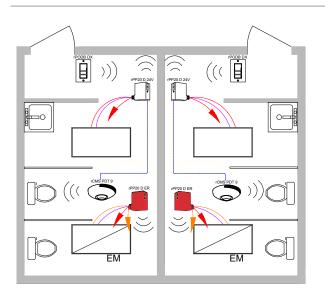
- All fixtures are dimmable
- All fixtures are controlled together or independently (per room)
- Maximum level can be task tuned to any percentage via programming

#### Occupancy Control:

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

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

#### Wireless



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

#### **Bill of Materials**

**Manual Control:** 

of fixtures

for "on only"

On/off & raise/lower control

If switch poses safety concerns,

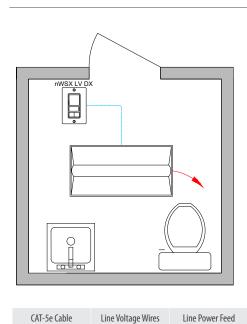
optionally can be programmed

Symbol	Qty	Product #	Description
	2	rPP20 D 24V G2	Relay Pack with 0-10V Dimming Output
	2	rPP20 D 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:

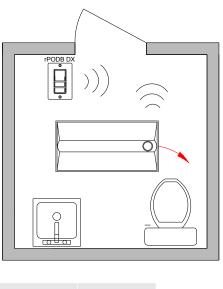
- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet
- If daylight exists, add Automatic Daylight Responsive Controls per 4.2.2.1.(10) and 4.2.2.1.(13)

# PRIVATE / SINGLE WASHROOM with nLight Enabled Fixture



CAT-5e Cable Line Voltage Wires

#### **Wireless**



Line Voltage Wires Line Power Feed

**Bill of Materials** 

Symbol	Qty	Product #	Description
	1	See Notes	nLight Wired Enabled Fixture
-	1	nWSX LV DX	Occupancy Wall Switch, On/Off, Raise/Lower

**Bill of Materials** 

Symbol	Qty	Product #	Description
	1	See Notes	nLight AIR Enabled Fixture
	1	rPODB DX G2	On/Off, Raise/ Lower WallPod

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

#### **Occupancy Control:**

Fixtures automatically go to full bright when occupied (or optionally can be configured to come on automatically to 50%) Fixtures automatically turn off or optionally can be configured

to drop to low dim setting when

space becomes vacant

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

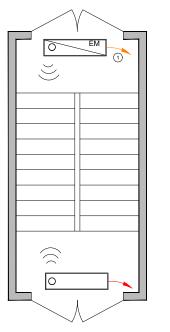
#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet
- If daylight exists, add Automatic Daylight Responsive Controls per 4.2.2.1.(10) and 4.2.2.1.(13)

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

Wired

#### Wireless with nLight Enabled Fixtures



① Fixtures assumed to be battery backup

#### **Bill of Materials**

Symbol	Qty	Product #	Description
0	1	See Note	nLight AIR Enabled Fixture
	1	See Note	nLight AIR Enabled Fixture with Battery Option

#### **/** OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Occupancy Control:**

 Fixtures automatically go to full bright when occupied

Manual Control:

Safety may preclude the use of a

manual control in these areas

Line Power Feed

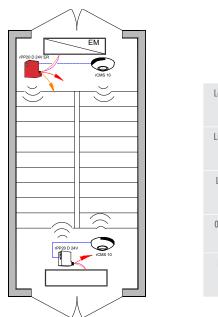
EM Power

Feed

 Fixtures automatically turn off or optionally can be configured to drop to low dim setting when space becomes vacant

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

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





#### **Bill of Materials**

Symbol	Qty	Product #	Description
ß	1	rPP20 D 24V G2	Relay Pack with 0-10V Dimming Output
	1	rPP20 D 24V ER G2	Emergency Relay Pack with 0-10V Dimming Output
	2	rCMS 10 G2	Occupancy and Daylight Sensor

#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet® interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet
- If daylight exists, add Automatic Daylight Responsive Controls per 4.2.2.1.(10) and 4.2.2.1.(13)

Ū,

**.** 

D

Ū

Low Voltage Wires

#### Wireless with nLight Enabled Fixtures



Î

Ē

ö

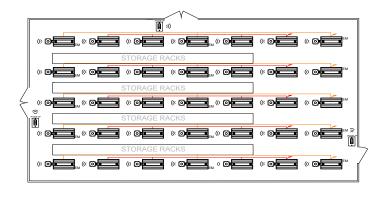
e i

▆▖ॕ

Line Voltage Wires

**.** \*

**S** 





#### **Bill of Materials**

Symbol	Qty	Product #	Description
	20	IBG Series	nLight AIR Enabled Fixture
	15	IBG Series	nLight AIR Enabled Fixture with EM Option
	3	rPODB 2P G2	2-Pole On/Off WallPod

#### / OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### Occupancy Control:

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

#### Daylight Control:

- Smooth continuous dimming
- For nLight enabled, custom grouping of fixtures into separate daylight zones (max number zones = number of fixtures)
- For relay packs, daylight zones defined by relay module wiring
  Not required for areas without
- Not required for areas without windows or that have loads < 150W in sidelit zones

#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option

« D

-

Line Power Feed

(((

çanı Ş

-

Ö

**EM Power Feed** 

 Wireless fixture embedded control and occupancy/ daylighting sensor options available, please see the fixture specification sheet

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

# Bill of Materials

CMS 4

Š

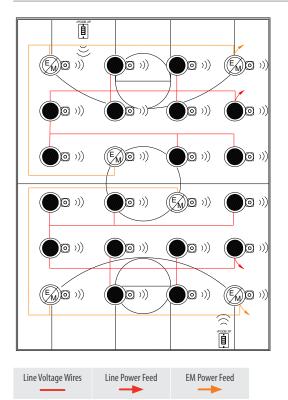
i ș

0-10v Wires

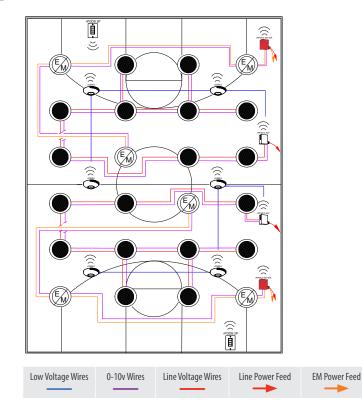
Symbol	Qty	Product #	Description
	6	rPP20 D 24V G2	Relay Pack with 0-10V Dimming Output
	6	rPP20 D ER G2	Emergency Relay Pack with 0-10V Dimming Output
	3	rPODB 2P G2	2-Pole On/Off WallPod
	12	rCMS 6 G2	Occupancy Sensor

#### www.acuitybrands.com/nLight • 800-535-2465

#### Wireless with nLight Enabled Fixtures



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



#### **Bill of Materials**

Symbol	Qty	Product #	Description
۵	18	See Notes	nLight AIR Enabled Fixture
۵	6	See Notes	nLight AIR Enabled Fixture with EM Option
	2	rPODB 2P G2	2-Pole On/Off WallPod

#### **Bill of Materials**

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

#### OPERATIONAL DETAILS:

#### Light Fixtures:

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

#### Occupancy Control:

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

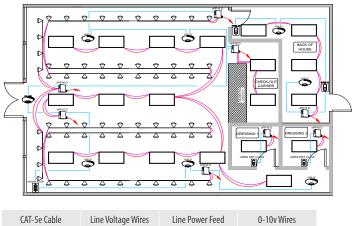
#### Daylight Control:

- Smooth continuous dimming
- For nLight enabled, custom
- grouping of fixtures into separate daylight zones (max number zones = number of fixtures) • For relay packs, daylight zones
- defined by relay module wiring
- Not required for areas without windows or that have loads < 150W in sidelit zones

#### ADDITIONAL OPTIONS:

- Room can be connected to nLight backbone to enable network control or time schedules
- HVAC control available through system-wide BACnet<sup>®</sup> interface option on the ECLYPSE controller or through occupancy sensor auxiliary relay (AR) contact option
- Wireless fixture embedded control and occupancy/daylighting sensor options available, please see the fixture specification sheet

# SALES AREA Wireless Enabled Fixtures/0-10V Dimming Fixtures



#### **Bill of Materials**

Symbol	Qty	Product #	Description
	8	nPP16 D EFP	Relay Pack with 0-10V Dimming Output
	1	nPODM 4S DX	4 Scene Control with Master On/Off & Raise/Lower
	2	nPODM DX	On/Off, Raise/Lower WallPod
	7	nCM 10 RJB	Occupancy Sensor
$\bigcirc$	1	nCM ADCX RJB	Daylight Sensor
E	2	nWSX PDT LX DX	Wall Switch Occupancy Sensor with On/Off, Raise/Lower

#### **/** OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### **Daylight Control: Occupancy Control:**

- Fixtures must be turned Smooth continuous on manually (or optionally dimming can be configured to
  - Daylight zones defined by rows

#### Manual Control: On/off & raise/lower

control of fixtures

# **Bill of Materials**

Low Voltage Wires

**Wireless** 

e

Line Voltage Wires

	in or materials				
Symbol	Qty	Product #	Description		
Ĺ,	6	rPP20 D 24V G2	Relay Pack with 0-10V Dimming Output		
	1	rPODM 4S DX	4 Scene Control with Master On/Off & Raise/Lower		
	2	rPODB DX G2	On/Off, Raise/Lower WallPod		
0	8	rCMS 10 G2	Occupancy and Daylight Sensor		
	2	WSX	Wall Switch Occupancy Sensor with On/Off, Raise/Lower		

Line Power Feed

#### ADDITIONAL OPTIONS:

 Room can be connected to nLight backbone to enable network control or time schedules

圎

۳. (پ

Ĝ

0-10v Wires

BACK OF HOUSE

圎

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

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

come on automatically

automatically when room becomes vacant

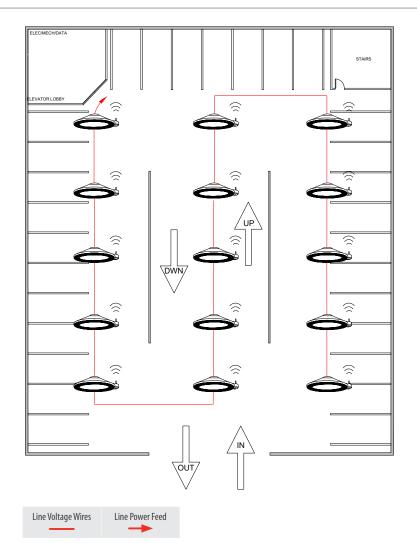
to 50%)

Fixtures turn off

# Wired

www.acuitybrands.com/nLight • 800-535-2465

#### Wireless Parking Garage



#### **Bill of Materials**

Symbol	Qty	Product #	Description
õ	15	See Notes	nLight AIR Enabled Fixture

#### OPERATIONAL DETAILS:

#### **Light Fixtures:**

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

#### Occupancy Control:

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

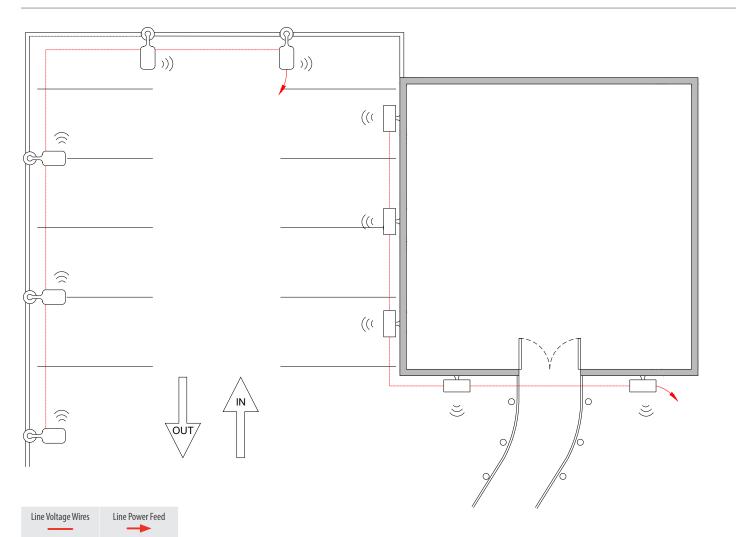
#### Daylight Control:

 Daylight responsive controls lights to full off when adequate daylight present

#### ADDITIONAL OPTIONS:

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

#### Wireless Site Lighting



#### **Bill of Materials**

Symbol	Qty	Product #	Description	
¢-	5	See Notes	nLight AIR Enabled Area Fixture	
	5	See Notes	nLight AIR Enabled Wall Mount	

#### **/** OPERATIONAL DETAILS:

#### Light Fixtures:

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

#### • • •

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

#### Daylight Control:

 Daylight responsive controls lights to full off when adequate daylight present

#### ADDITIONAL OPTIONS:

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

# nLight Enabled Fixtures

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



# **Mobile Apps**

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







#### nLight BLE Radio Module

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



#### nConfig™

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

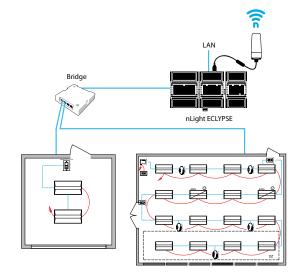
The Bluetooth® word mark and logos are registered trademarks owned by Bluettoth SIG, Inc. and any use of such marks by Acuity Brands Lighting is under license.

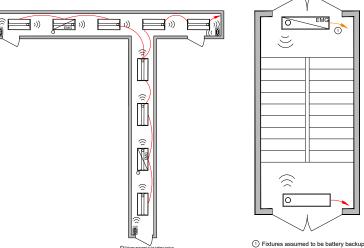
#### nLight AIR



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

# nLight Hybrid Networked Lighting Control: Programmable Timeclock





EMG 6

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

#### **Bill of Materials**

Symbol	Qty	Product #	Description
	1	nBRG 8 KIT	8-Port Backbone Bridge
	1	nECY MVOLT ENC	nLight ECLYPSE Network System Controller and Optional BMS Interface 347V Option Available
Ţ	1	nECYD NLTAIR G2	nLight AIR Adapter

#### Programmable Time Clock Control:

Although not pictured within each of the individual room design guides, each nLight controlled space can be connected via an nLight backbone to create a networked nLight lighting control system capable of meeting the requirements of NECB 2017 Provision 4.2.2.1.(20), Scheduled Shut-off. A networked system also enables astronomical time clock control.

# APPENDIX B: Requirements Overview

	Control Code Requirement Provision		nLight Solution Details		
hut-Off Control	Manual Control (Local Switch)	4.2.2.1.(3)	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/Touchscreen Wall Switch*	
			nPODM Series rPODB Series	Graphic WallPod®	
			Traditional tactile buttons and LED user feedback.	Full-color touch screen provides a sophisticated look and feel.	
	Time-Switch Controls and Exterior Lighting Control (via System Controller)	4.2.2.1.(20) 4.2.4.1.(1) 4.2.4.1.(5)	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).		
			Network System Controller		
			Network System Controller		
			Additional benefits of installing an nLight backbone include remote status monitoring, system-wide configuration changes, and BMS interface capability.		
	Restricted to Manual ON, Restricted to Partial Automatic ON, Automatic Partial OFF, Automatic Full OFF	4.2.2.1.(6) 4.2.2.1.(8) 4.2.2.1.(16) 4.2.2.1.(18)	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 <sup>™</sup> dual technology detection for rooms with obstructions. Configuring for full off vs. partial off control is done with system programming.		
			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.	
Level (		4.2.2.1.(10) 4.2.2.1.(13)	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.		
	Automatic Daylight Responsive Controls		nLight Enabled Acuity Brands Fixtures	Dimming Relay Packs	
				nPP16 Series	
			Acuity Brands offers a wide variety of LED fixtures with factory installed integrated nLight controls that provide smooth continuous dimming.	nLight dimming relay enable control of any 0-10VDC dimmable LED luminaire.	
			nLight offers standalone daylight harvesting sensors as well as occupancy sensors with integrated daylight harvesting. Sensors are available in various housings and provide continuous dimming control of any/all networked nLight enabled fixtures or dimming relay packs, each capable of being its own daylight zone.		
			Ceiling Mount Dimming Photocell	Recessed Mount Dimming Photocell*	
			nCM Series rCMS Series	nRM Series	

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



# Additional Resources

#### **Acuity Controls Typical Layout Drawings**

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

#### NECB

https://www.nrcan.gc.ca/buildings/canadas-national-energy-code/20675

#### **Explore Acuity Academy**

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

#### nLight Lighting Controls Platform Page

www.acuitybrands.com/nlight



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

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

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

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

