

Multiple Layers of Light



Luminaire Type: Catalog Number:









General Illumination Square Downlight with nTune





- Tunable White solution that reproduces natural light patterns and colors, complements materials, and supports productivity.
- Rhythm Range (2700K-6500K) follows the cycle of daylight
- Productivity Range (3000K-5000K) to re-energize and inspire, ideal for collaboration
- WARMDIM® Range (3000K-1800K) for relaxing; warm and comfortable when dimmed
- Bounding Ray[™] Optical Principle design provides 45° cut-off to source and source image
- Rated 65,000 hours (L80) at 25°C ambient temperature
- Dim to Dark 100% 0.1%



Distribution



Superior Perfomance

| Nominal lumens | 750 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | 4500 | 5000 |
|-------------------|-----|------|------|------|------|------|------|------|------|------|
| Delivered | 860 | 1040 | 1418 | 1937 | 2498 | 2975 | 3569 | 4092 | 4778 | 5053 |
| Wattage | 9 | 10 | 14 | 19 | 24 | 28 | 34 | 40 | 48 | 50 |
| Efficacy | 95 | 100 | 101 | 104 | 104 | 106 | 105 | 103 | 101 | 101 |
| *80 CRI, 3500 | K | | | | | | | | | |

Coordinated Apertures | Multiple Layers of Light





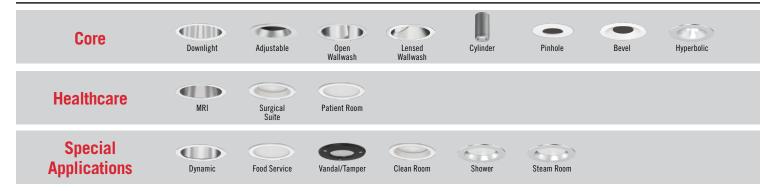
General Illumination Layer I EVO







EVO + Incito — Multiple Layers of Light





| Luminaire Type: | |
|-----------------|--|
| Catalog Number: | |

EXAMPLE: EVOGSQ TUWH RHYR/20 WTR MWD LS MVOLT NLT

| Series | Dynamic Feature | Dynamic Range ¹ | Nominal lumens values ¹ | Reflector/Flange Color | Trim Style |
|-------------------------------|--------------------------------------|--|--|--|---------------------------------------|
| EVOGSQ 6" Square Downlight | TUWH Tunable White WDIM Warm Dimming | PROR Productivity Range (3000K-5000K) RHYR Rhythm Range (2700K-6500K) HALR Halogen Range (3000K-1800K) | /07 750 lumens /30 3000 lumens /10 1000 lumens /35 3500 lumens /15 1500 lumens /40 4000 lumens /20 2000 lumens /45 4500 lumens /25 2500 lumens /50 5000 lumens | AR Clear PR Pewter WTR Wheat GR Gold WR² White painted BR² Black painted WRAMF² White painted antimicrobial finish | (blank) Self-flanged FL Flangeless |

| Aperture Finish | Voltage | Control Interface Type | Options |
|---|-------------------------|---|--|
| LS Semi-specular LD Matte-diffuse LS Specular | MVOLT 120 120V 277 277V | NLT ⁴ nLight nTune interface NLTER ⁴ nLight nTune interface with emergency circuit ZT 0-10V dimming DALI logarithmic dimming to <1%. | SF Single fuse TRW ⁵ White painted flange TRBL ⁶ Black painted flange 90CRI High CRI (90+) E10WCP Emergency battery pack, 10W Constant Power, CA Title 20 compliant with integral test switch E10WCPR Emergency battery pack, 10W Constant Power, CA Title 20 compliant with remote test switch CP ⁷ Chicago Plenum BGTD Bodine Generator Transfer Device |

ACCESSORIES — order as separate catalog numbers (shipped separately)

FCS 7TSN XXX nPODM 2P DX CCT XX nPODM 4S DX XX $Fresco\ Lighting\ Control\ with\ DMX\ and\ ethernet;\ XXX = Color.\ \ Refer\ to\ \underline{FRESCO}\ spec\ sheet\ for\ additional\ options.$

nLight 2 Channels, On/off + raise/lower control, CCT, XX = Color. Refer to nLight. nLight 4 Scene Control, On/off + raise/lower control, XX = Color. Refer to nLight.

nPODM 4S XX nLight 4 Scene Control, XX = Color. Refer to <u>nLight</u>.

ORDERING NOTES

- 1. PROR and RHYR available only with TUWH. HALR available only with WDIM.
- 2. Nominal lumen values when tested at 3500K.
- 3. Not available with aperture finishes.
- 4. Requires power from nLight network bridge or nPS 80.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with WR (white reflector) or FL (flangeless) option.
- For use with different reflector finish only (i.e. AR, PR, WTR, GR options). Not applicable with BR (black reflector) or FL (flangeless) option.
- 7. Voltage-specific (120 or 277V). Not available with battery pack options.



Optical Assemby

Fully serviceable and upgradeable lensed LED light engine suitable for field maintenance or service from below the ceiling.

Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top-down flash characteristic for superior glare control.

Unitized optics shall have mechanical attachment of the light engine to the lower reflector for complete optical alignment.

Electrical

The luminaire shall operate from a 50 or 60 Hz ± 3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. The fluctuations of line voltage shall have no visible effect on the luminous output.

The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output.

Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages.

Input wires shall be 18AWG, 300V minimum, solid copper.

Controls

Tunable white nTune™ is an all-digital light color temperature control within an nLight enabled luminaire.

nTune™ allows color temperature settings through the Productivity Range of 3000K to 5000K or Rhythm Range of 2700K to 6500K.

Refer to nLight Programming User's Guide for instructions on customizing your application with SensorView™.

Dimming

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 - 0.1% of rated lumen output with a smooth shut off function to step to 0%.

Construction

Luminaire housing shall be constructed of 16-gauge galvanized steel and have preinstalled telescopic mounting bars with maximum 32" and minimum 15" extension and 4" vertical adjustment.

Luminaires shall be suitable for installation in ceilings up to 1½" thick. (specify ceiling thickness adapter to extend frame to accommodate ceiling thickness up to 5").

Tool-less adjustments shall be possible after installation.

The assembly and manufacturing process for the luminaire shall be designed to assure all internal components are adequately supported to withstand mechanical shock and vibration.

25°C ambient temperature standard (1/2" clearance on all sides from non-combustible materials in non-IC applications, unless marked spacing noted otherwise).

For use in insulated ceilings, a 3" clearance on all sides from insulation is required (unless marked spacing noted otherwise).

Listings

Fixtures are CSA certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, wet location covered ceiling.

Photometrics

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 20% over the minimum operational life of 60,000 hours.

Buy American Act

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note

Actual performance may differ as a result of end user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

4 Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight* control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight* control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details





Partially finished mud ring, showing cross-section detail.



An EVO downlight requires only approximately 3" of plaster to finish.



EVO with flangeless trim

Flangeless Installation

Gotham's flangeless option utilizes a micro-thin polymer mud ring that minimizes the amount of drywall compound required to finish the ceiling. The end result is a virtually undetectable flangeless downlight installation.

The polymer mud ring is installed independent of the of the recessed frame, therefore floating with the ceiling. This innovation minimizes any surface cracks during reflector installation, ceiling movement and any future service to the recessed frame, wiring, electronics, etc.



| | Marked Spacing in Inches 25°C Ambient | | | | | | | | | | |
|------------------|---------------------------------------|--|---------------------|--|--|--|--|--|--|--|--|
| Lumen Package | Fixed Center to Center MIN | Fixture Center to Build- ing Member MIN | Space Above Fixture | | | | | | | | |
| 500-5000 | None | None | None | | | | | | | | |
| 6000 | 24 | 12 | 5 | | | | | | | | |
| 8000 | | | 11 | | | | | | | | |
| 10000 | 36 | 18 | | | | | | | | | |
| 12000 | 30 | 10 | 9 | | | | | | | | |
| 15000 | | | J | | | | | | | | |
| 17500 | 72 | 36 | | | | | | | | | |

| Marked Spacing in Inches 40°C Ambient | | | | | | | | | | |
|---------------------------------------|----------------------------|--|---------------------|--|--|--|--|--|--|--|
| Lumen Package | Fixed Center to Center MIN | Fixture Center to Build- ing Member MIN | Space Above Fixture | | | | | | | |
| 5000 | 24 | 12 | Ę. | | | | | | | |
| 6000 | Ζ4 | 12 | J | | | | | | | |
| 8000 | | | | | | | | | | |
| 10000 | 48 | 24 | 9 | | | | | | | |
| 12000 | | | | | | | | | | |
| 15000 | 72 | 36 | 9 | | | | | | | |

| Ma | Marked Spacing Chicago Plenum Open Frame in Inches 25°C Ambient | | | | | | | | | |
|------------------|---|--|---------------------|--|--|--|--|--|--|--|
| Lumen Package | Fixed Center to Center MIN | Fixture Center to Build- ing Member MIN | Space Above Fixture | | | | | | | |
| 250-5000 | None | None | None | | | | | | | |
| 6000 | 24 | 12 | 5 | | | | | | | |
| 8000 | | | 11 | | | | | | | |
| 10000 | 36 | 18 | | | | | | | | |
| 12000 | 30 | 10 | 9 | | | | | | | |
| 15000 | | | 3 | | | | | | | |
| 17500 | 72 | 36 | | | | | | | | |

| М | Marked Spacing Chicago Plenum Enclosure in Inches 25°C Ambient | | | | | | | | | |
|------------------|--|---------------------------------------|---------------------|--|--|--|--|--|--|--|
| Lumen Package | Fixed Center to Center MIN | Fixture Center to Building Member MIN | Space Above Fixture | | | | | | | |
| 250-6000 | None | None | None | | | | | | | |
| 8000 | 36 | 18 | 6 | | | | | | | |
| 10000 | 48 | 24 | 2 | | | | | | | |
| 12000 | 40 | | 3 | | | | | | | |

| Lumen Output Multiplier - Finish Trim | | | | | | | | | | | |
|---------------------------------------|------------|-------------|-------------|-----------|------------------|------------|--|--|--|--|--|
| Finish | Clear (AR) | Pewter (PR) | Wheat (WTR) | Gold (GR) | White (WR/WRAMF) | Black (BR) | | | | | |
| Specular (LS) | 1.00 | 0.88 | 0.83 | 0.95 | N/A | N/A | | | | | |
| Semi-specular (LSS) | 0.95 | 0.84 | 0.79 | 0.90 | N/A | N/A | | | | | |
| Matte-diffuse (LD) | 0.85 | 0.73 | 0.69 | 0.80 | N/A | N/A | | | | | |
| Paint | N/A | N/A | N/A | N/A | 0.87 | 0.73 | | | | | |

| Driver Default Dimming Curve | | | | | | | | | |
|------------------------------|-------------|------------------|--------------------|--|--|--|--|--|--|
| Nomenclature | Min Dimming | Driver Dim Curve | Control Dim Curve | | | | | | |
| ZT | 0.1% | Linear | Linear/Logarithmic | | | | | | |
| DALI | 0.1% | Linear | Linear/Logarithmic | | | | | | |

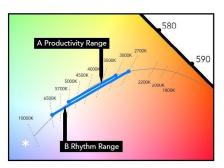
How to Estimate Delivered Lumens in Emergency Mode

Delivered Lumens = 1.25 x P x LPW

P = Output power of emergency driver. P = 10W for PS1055CP

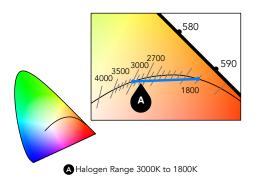
LPW = Lumen per watt rating of the luminaire. This information is available on the ABL luminaire spec sheet.

MAINSTREAM DYNAMIC TUNABLE WHITE WITH NTUNE TECHNOLOGY



A Productivity Range 3000K to 5000K

B Rhythm Range 2700K to 6500K



Tunable white nTune™ is an all digital light color temperature control wihin an nLight enabled luminaire. This brings tunable white lighting control into the mainstream with repeatable, consistent results in an economical luminaire form and system already familiar to schools. Designers and facility operators are granted the freedom to tie scenes to specific activities or to complement colors or materials within a visual environment. nTune™ allows color temperature settings through the Productivity Range of 3000K to 5000K or Rhythm Range of 2700K to 6500K. Refer to nLight Programming User's Guide for instructions on customizing to your application with SensorView™.

TUNABLE WHITE GPHD

Gamut: One dimensional warm-Cool

Path: Direct 3000K to 5000K (Productivity Range) or 2700K to 6500K (Rhythm Range)

Handle: Two Natural Language Handles: Intensity and CCT **Data:** nLight with nTune technology for both handles of control

*Dimensions in inches [centimeters]

Aperture: 6" (15.2)

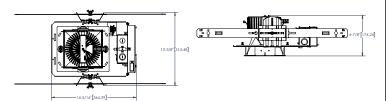
Ceiling Opening: 6-5/8" (16.8) self-flanged

Overlap trim: 7" (17.8) self-flanged

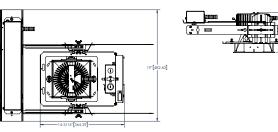
6-3/4" (17.1) flangeless

= 0.5 6

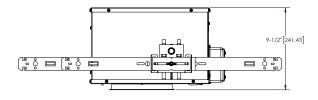
250LM-5000LM Standard

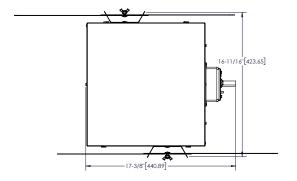


250LM-5000LM Battery Pack



250-5000LM Open Frame CP





Inital FC
Mounting Center
Height Beam

149.7

80.5

50.2

34.2

Inital FC Mounting Center

150.5

50.5

34.4

25.0

10.0

12.0

14.0

8.0

10.0

12.0

16.0

50% beam -

Diameter FC

17.1 20.1

7.2 40.3

9.1 25.1 16.6 5.0

12.9 12.4 23.5 2.5

50% beam -

5.3

9.1

11.0

12.9 12.5 23.5

75.3

40.5 25.2 17.2 10% beam -82.2°

Diameter FC

10% beam -

16.6 5.0

20.1

50% beam - 10% beam -

15.1

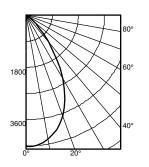
13.1 8.1

15.0

6"

EV06SQ TUWH RHYR /45 6AR LS CRI80 2700K

INPUT WATTS: 47.7, DELIVERED LUMENS: 4751, LM/W=99.6, 0.94 S/MH, TEST NO. 19-102-C04P102

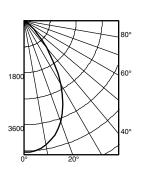


| | | | | | | pc | | 80% | | | 70% | | | 50% | |
|----|------|--------|------------|------------|--------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | Ave | Lumens | Zone | Lumens | % Lamp | pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% |
| 0 | 4529 | | 0° - 30° | 2992.6 | 63.0 | 0 | 119 | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 |
| 5 | 4485 | 423 | 0° - 40° | 4129.4 | 86.9 | 1 | 110 | 108 | 105 | 108 | 106 | 104 | 104 | 102 | 101 |
| 15 | 4064 | 1135 | 0° - 60° | 4743.4 | 99.8 | 2 | 102 | 98 | 94 | 100 | 97 | 93 | 97 | 94 | 91 |
| 25 | 3162 | 1435 | 0° - 90° | 4751.8 | 100.0 | 3 | 95 | 89 | 85 | 93 | 88 | 85 | 91 | 87 | 83 |
| 35 | 1831 | 1137 | 90° - 180° | 0.0 | 0.0 | 4 | 88 | 82 | 78 | 87 | 81 | 77 | 85 | 80 | 76 |
| 45 | 654 | 519 | 0° - 180° | 4751.8 | *100.0 | 5 | 82 | 76 | 71 | 81 | 75 | 71 | 79 | 74 | 70 |
| 55 | 83 | 95 | * | Efficiency | , | 6 | 76 | 70 | 65 | 75 | 69 | 65 | 74 | 69 | 65 |
| 65 | 5 | 6 | | | | 7 | 71 | 65 | 60 | 70 | 64 | 60 | 69 | 64 | 60 |
| 75 | 1 | 2 | | | | 8 | 67 | 60 | 56 | 66 | 60 | 56 | 65 | 59 | 56 |
| 85 | 0 | 0 | | | | 9 | 63 | 56 | 52 | 62 | 56 | 52 | 61 | 56 | 52 |
| 90 | 0 | | | | | 10 | 59 | 53 | 49 | 58 | 53 | 49 | 58 | 52 | 48 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

EV06SQ TUWH RHYR /45 6AR LS CRI80 3500K

0 5 15

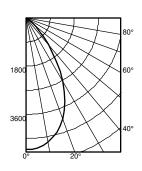
25 35 INPUT WATTS: 47.7, DELIVERED LUMENS: 4778, LM/W=100.2, 0.94 S/MH, TEST NO. 19-102-C04P99



| | | | | | PC | | 00 /0 | | | 10/0 | | | 00 /0 | |
|------|--------|------------|------------|--------|----|-----|-------|-----|-----|------|-----|-----|-------|-----|
| Ave | Lumens | Zone | Lumens | % Lamp | pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% |
| 4554 | | 0° - 30° | 3009.3 | 63.0 | 0 | 119 | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 |
| 4510 | 425 | 0° - 40° | 4152.5 | 86.9 | 1 | 110 | 108 | 105 | 108 | 106 | 104 | 104 | 102 | 101 |
| 4087 | 1141 | 0° - 60° | 4769.9 | 99.8 | 2 | 102 | 98 | 94 | 100 | 97 | 93 | 97 | 94 | 91 |
| 3180 | 1443 | 0° - 90° | 4778.3 | 100.0 | 3 | 95 | 89 | 85 | 93 | 88 | 85 | 91 | 87 | 83 |
| 1841 | 1143 | 90° - 180° | 0.0 | 0.0 | 4 | 88 | 82 | 78 | 87 | 81 | 77 | 85 | 80 | 76 |
| 658 | 522 | 0° - 180° | 4778.3 | *100.0 | 5 | 82 | 76 | 71 | 81 | 75 | 71 | 79 | 74 | 70 |
| 84 | 95 | * | Efficiency | | 6 | 76 | 70 | 65 | 75 | 69 | 65 | 74 | 69 | 65 |
| 5 | 6 | | | | 7 | 71 | 65 | 60 | 70 | 64 | 60 | 69 | 64 | 60 |
| 1 | 2 | | | | 8 | 67 | 60 | 56 | 66 | 60 | 56 | 65 | 59 | 56 |
| 0 | 0 | | | | 9 | 63 | 56 | 52 | 62 | 56 | 52 | 61 | 56 | 52 |
| 0 | | | | | 10 | 59 | 53 | 49 | 58 | 53 | 49 | 58 | 52 | 48 |
| | | | | | | | | | | | | | | |

EV06SQ TUWH RHYR /45 6AR LS CRI80 6500K

INPUT WATTS: 47.7, DELIVERED LUMENS: 5156L, LM/W=108.1, 0.94 S/MH, TEST NO. 19-102-C04P102



| | | | | | | Pi | | | | | ,,0 | | | | |
|----|------|--------|------------|------------|--------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | рс | | 80% | | | 70% | | | 50% | |
| | Ave | Lumens | Zone | Lumens | % Lamp | pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% |
| 0 | 4915 | | 0° - 30° | 3247.5 | 63.0 | 0 | 119 | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 |
| 5 | 4867 | 459 | 0° - 40° | 4481.2 | 86.9 | 1 | 110 | 108 | 105 | 108 | 106 | 104 | 104 | 102 | 101 |
| 15 | 4410 | 1231 | 0° - 60° | 5147.4 | 99.8 | 2 | 102 | 98 | 94 | 100 | 97 | 93 | 97 | 94 | 91 |
| 25 | 3431 | 1557 | 0° - 90° | 5156.6 | 100.0 | 3 | 95 | 89 | 85 | 93 | 88 | 85 | 91 | 87 | 83 |
| 35 | 1987 | 1234 | 90° - 180° | 0.0 | 0.0 | 4 | 88 | 82 | 78 | 87 | 81 | 77 | 85 | 80 | 76 |
| 45 | 710 | 564 | 0° - 180° | 5156.6 | *100.0 | 5 | 82 | 76 | 71 | 81 | 75 | 71 | 79 | 74 | 70 |
| 55 | 90 | 103 | * | Efficiency | 1 | 6 | 76 | 70 | 65 | 75 | 69 | 65 | 74 | 69 | 65 |
| 65 | 6 | 7 | | | | 7 | 71 | 65 | 60 | 70 | 64 | 60 | 69 | 64 | 60 |
| 75 | 2 | 2 | | | | 8 | 67 | 60 | 56 | 66 | 60 | 56 | 65 | 59 | 56 |
| 85 | 0 | 0 | | | | 9 | 63 | 56 | 52 | 62 | 56 | 52 | 61 | 56 | 52 |
| 90 | 0 | | | | | 10 | 59 | 53 | 49 | 58 | 53 | 49 | 58 | 52 | 48 |
| | | | | | | | | | | | | | | | |

| | | 51.2 | 0 | 82.2 | 0 |
|----------|-----------|----------|------|----------|------|
| | Inital FC | | | | |
| Mounting | Center | | | | |
| Height | Beam | Diameter | FC | Diameter | FC |
| 8.0 | 162.5 | 5.3 | 81.2 | 9.6 | 16.3 |
| 10.0 | 87.4 | 7.2 | 43.7 | 13.1 | 8.7 |
| 12.0 | 54.5 | 9.1 | 27.2 | 16.6 | 5.4 |
| 14.0 | 37.2 | 11.0 | 18.6 | 20.1 | 3.7 |
| 16.0 | 27.0 | 12.9 | 13.5 | 23.5 | 2.7 |
| | | | | | |

nLight® The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

nLight® Wired Control Accessories

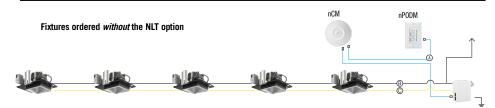
Order as separate catalog number. Visit nLight.

Wall Switches Model Number On/Off single pole nPODM (color) On/Off two pole nPODM 2P (color) nPOD DX (color) On/Off & raise/lower single pole On/Off & raise/lower two pole nPODM 2P DX (color) nPOD GFX (color) Graphic touchscreen

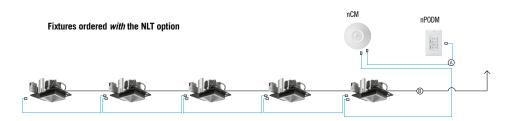
Photocell Controls

Dimming nCM ADCX

Possibilites for nLight® wired



nPS 80 EZ or nPP16 D



nLight® Wired Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech) **Model Number** Small motion 360°, ceiling nCM 9 / nCM PDT 9 Large motion 360°, ceiling nCM 10 / nCM PDT 10 Wide View nWV 16 / nWV PDT 16 Wall switch with raise/lower nWSX LV DX / nWSX PDT LV DX

Cat-5 Cables (plenum rated)

CAT5 10FT J1 10', CAT5 15', CAT5 CAT5 15FT J1

