

**DIGITAL NAVIGATION**

[Ordering Tree](#) [nLight Platform](#) [Controls](#) [Photometrics](#) [Performance Data](#)

**FEATURES & SPECIFICATIONS**

**INTENDED USE** — ENVEX is a high-performance recessed ambient solution suitable for all application types. Designed to improve quality of light, ENVEX provides performance, configurability, delivery, value and style. A typically configured ENVEX features a **Unified Glare Rating (UGR)** starting at 17, UGR data available on page 9. Both designs, Hourglass and Hourglass with Center Spine, are created to elevate the space with a unique, undistruptive, calm and soothing illumination. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate. [Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)**

**CONSTRUCTION** — ENVEX is engineered to have a **curved luminous surface** to reduce glare while increasing its volumetric class. Its smooth acrylic lens, and direct-lit over optic technology, allow for **no individual LED images to be visible** to the occupants in the space. ENVEX seamless transition zones permit for the **uniform illumination across the lens** to be visually comfortable to look into. Built with non-exposed corners and seamless flanges within the T-Grid, ENVEX is a single, self-contained fixture with a steel housing and plastic end caps **not requiring onsite assembly** for installation outside of additional accessories. The power supply and circuit board of the luminaire is integral to the unit. ENVEX allows for design flexibility by incorporating a center element, if chosen, without compromising its fully luminous aperture.

ENVEX has **IP5X rated** sealed optics to prevent dust and bugs from protruding inside of the fixture. All the painted components within the luminaire have **paint particles of 31um or larger, painted to a thickness of no less than 3 mils** for even coverage. Before delivery, ENVEX undergoes component verification by means of visual scanning equipment to ensure proper CCT, Lumens, and CRI; in addition to the optical scanning to detect visual defects for the most optimal quality assurance.

**ELECTRICAL** — ENVEX delivers performance superiority with long-life LEDs and unique over optics that when coupled with high-efficiency drivers, provide superior quantity of illumination for extended service life. ENVEX offers **80% LED lumen maintenance at 60,000 hours** and color variation within **3-step MacAdam ellipse ranging from 3000K-5000K.**

ENVEX offers 8 different lumen packages ranging from 1500 to 7200 lumen with certifications in DLC Standard and/or DLC Premium allowing for rebates and energy savings solutions.

This fixture offers flicker free dimming with capability to dim to either 10%, 1% or .1%.

Driver disconnect provided where required to comply with US and Canadian codes.

**SENSOR** — ENVEX features multiple integral sensor types without compromising the range and aesthetic of the fixture. Integrated sensor (individual control): Sensor Switch MSD7ADXC ((Passive infrared (PIR)) or MSDPDT7ADXC ((PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 4 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): This sensor is nLight-enabled, Integrated Smart Sensor (nLight Air Wireless Platform): The RES7 sensor is has the ability to communicate over the wireless nLight control platform. See page 5 for more details on the Integrated Smart Sensor.

**INSTALLATION** — ENVEX fits into standard 15/16" and narrow 9/16" T-grid ceiling systems. Suitable for damp location. For recessed mounting in hard ceiling applications, Drywall Grid Adapters (DGA) are available as an accessory. See Accessories section.

**LISTINGS** — CSA certified to meet US and Canadian standards. Intended for indoor use only. **Damp location listed. IC rated. IP5X rated. Tested in accordance with ISO 14644-1; suitable for ISO Class 5-9 positive and negative pressure clean rooms.**

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/OPL](http://www.designlights.org/OPL) to confirm which versions are qualified.

**GOVERNMENT PROCUREMENT** — BAA – Product with the BAA option qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under DOT Buy America regulations. BABA – Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Build America, Buy America Act. Please refer to [www.acuitybrands.com/buy-american](http://www.acuitybrands.com/buy-american) for additional information.

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/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.

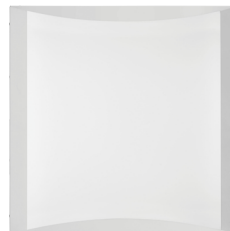
Specifications subject to change without notice.

|                |
|----------------|
| Catalog Number |
| Notes          |
| Type           |

**ENVEX Series LED**

**ENVEX™**

1'x4' LED, 2'x2' LED and 2'x4' LED



| Specifications                                     | Weights     |
|--|-------------|
| Length: 23.75 (60.3), 47.75 (121.4), 47.75 (121.4) | 2X2: 15 lbs |
| Width: 23.75 (60.3), 23.75 (60.3), 11.75 (29.7)    | 2X4: 22 lbs |
| Depth: 3.625 (9.6), 3.625 (9.6), 3.125 (7.8)       | 1X4: 17 lbs |

All dimensions are inches (centimeters) unless otherwise specified.

**Embed nLight controls today. Prepare for tomorrow.**

| Now                     | Tomorrow            |
|-------------------------|---------------------|
| User-friendly install   | Scalability         |
| Enhanced energy savings | Space configuration |
| Code compliance         | Future-ready        |

**A+ 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](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

# ENVEX Spec Ambient

ENVEX™ elegantly integrates with every ceiling type to allow structure and style to take the lead. The seamless transition zones from both of the hourglass designs, combined with low lumen density, create the high quality of light only ENVEX™ can provide.

## HRG: Hourglass Design



- Clean appearance in the ceiling plane provides design flexibility.
- Low lumen density delivers visually comfortable experience.
- Seamless transition zones & uniform illumination enables universal application.



## HRGC: Hourglass with Center Spine Design



- Center Spine design allows for further design optimization on a fully luminous surface.
- Spine's geometrically perfected angle preserves uniformity across the fixture surface.
- Unified transition zones on spine and side bezels grant ease of transition between lighter and darker areas.



ORDERING INFORMATION Example: ENVX 2X2 HRG 3300LM 80CRI 40K MIN1 EZT MVOLT

| Series                        | Fixture Dimension          | Fixture Style                    | Lumens Output              | CRI          | Color Temperature | Minimum Dimming Level                   |
|-------------------------------|----------------------------|----------------------------------|----------------------------|--------------|-------------------|---|
| ENVX Spec Ambient LED Troffer | 1x4 1'x4'                  | HRG Hourglass                    | 1500LM Nominal 1500 lumens | 80CRI 80 CRI | 30K 3000K         | DARK Constant current, dimming to <1% ‡ |
|                               |                            | HRGC Hourglass with Center Spine | 2000LM Nominal 2000 lumens | 90CRI 90 CRI | 35K 3500K         | MIN1 Constant current, dimming to 1%    |
|                               |                            |                                  | 3000LM Nominal 3000 lumens |              | 40K 4000K         |   |
|                               |                            |                                  | 4000LM Nominal 4000 lumens |              | 50K 5000K         |   |
|                               |                            |                                  | 4800LM Nominal 4800 lumens |              |                   |   |
|                               |                            |                                  | 6000LM Nominal 6000 lumens |              |                   |   |
|                               | 7200LM Nominal 7200 lumens |                                  |                            |              |                   |   |
|                               | 2x2 2'x2'                  | 2000LM Nominal 2000 lumens       |                            |              |                   |   |
|                               |                            | 3300LM Nominal 3300 lumens       |                            |              |                   |   |
|                               |                            | 4000LM Nominal 4000 lumens       |                            |              |                   |   |
|                               |                            | 4800LM Nominal 4800 lumens       |                            |              |                   |   |
|                               |                            | 2x4 2'x4'                        | 3000LM Nominal 3000 lumens |              |                   |   |
| 4000LM Nominal 4000 lumens    |                            |                                  |                            |              |                   |   |
| 4800LM Nominal 4800 lumens    |                            |                                  |                            |              |                   |   |
| 6000LM Nominal 6000 lumens    |                            |                                  |                            |              |                   |   |
|                               |                            |                                  | 7200LM Nominal 7200 lumens |              |                   |   |

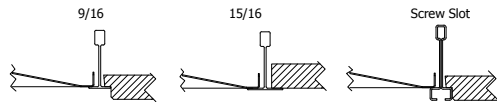
| Dimming                          | Voltage               | Step Level Dimming            | Emergency Option   |
|----------------------------------|-----------------------|-------------------------------|--|
| EZT eldoLED 0-10V Dimming ‡      | MVOLT MVOLT, 120-277V | (blank) no step level dimming | E7W Emergency Battery Pack, 7W, CA Title 20 Noncompliant ‡                                     |
| ZT Generic 0-10V ‡               | 120 120V              | SLD Step-level dimming ‡      | E10WLCP EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS ‡ |
| ECO Lutron Ecosystem interface ‡ | 277 277V              |                               | E15WLCP EM Self-Diagnostic battery pack, 15W Constant Power, Certified in CA Title 20 MAEDBS ‡ |
| DALI DALI ‡                      | 347 347V ‡            |                               | EMG nLight emergency option ‡  |
|                                  |                       |                               | GTD Generator Transfer Device ‡  |

| Networked Controls ‡   |   | Stand Alone Controls ‡  |  |
|--|---|---|--|
| Wireless   | Wired   | Individual control  |  |
| NLTAIR2 RIO nLight AIR Generation 2 enabled, radio module without sensor ‡   | NIO nLight no constant lumen management   | MSD7ADCX PIR Integral occupancy sensor with automatic dimming photocell   |  |
| NLTAIR2 RES7 nLight AIR Generation 2 enabled, integral occupancy sensor with automatic dimming photocell for Networking Capabilities ‡ | NES7 nLight no constant lumen management, nLight nES7 PIR integral occupancy sensor   | MSDPDT7ADCX PDT Integral occupancy sensor with automatic dimming photocell  |  |
| NLTAIR2 RES7PDT nLight AIR Generation 2 enabled, microphonics dual technology occupancy sensor with automatic dimming photocell ‡      | NESPDT7 nLight no constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor   | VTX8FOCC Vertex low-profile on/off occupancy PIR occupancy sensor with VLP programming at 8ft mounting height                     |  |
| NLTAIR2 RVTX8FOCC nLight AIR Generation 2 enabled, Vertex low-profile on/off occupancy PIR occupancy sensor ‡                          | NES7ADCX nLight no constant lumen management, nLight nES7 ADCX PIR integral occupancy sensor with automatic dimming photocell                       | VTX8FADC Vertex low-profile on/off PIR occupancy sensor with auto dimming photocell with VLP programming at 8ft mounting height   |  |
|  | NES7PDT7ADCX nLight no constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell       | VTX15FOCC Vertex low-profile on/off occupancy PIR occupancy sensor with VLP programming at 15ft mounting height                   |  |
|  | CL80 nLight 80% constant lumen management   | VTX15FADC Vertex low-profile on/off PIR occupancy sensor with auto dimming photocell with VLP programming at 15ft mounting height |  |
|  | CL80 NES7 nLight 80% constant lumen management, nLight nES7 PIR integral occupancy sensor   |   |  |
|  | CL80 NESPDT7 nLight 80% constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor                                       |   |  |
|  | CL80 NES7ADCX 80% constant lumen management, nLight nES7 ADCX PIR integral occupancy sensor with automatic dimming photocell                        |   |  |
|  | CL80 NES7PDT7ADCX nLight 80% constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell |   |  |
|  | NVTX8FOCC nLight enabled, Vertex low-profile on/off occupancy PIR occupancy sensor  |   |  |

| Standby Mode  | Options   |
|---|---|
| NOC NOC Occupancy sensor disabled ‡                               | GLR Fast-blowing fuse ‡   |
|   | GMF Slow-blowing fuse ‡   |
|   | PWS1836 6' pre-wire, 18 gauge, 3/8" dia., 3 wire - 1 circuit  |
|   | PWS1846 6' pre-wire, 18 gauge, 3/8" dia., 4 wire - 2 circuit  |
|   | PWS1846 PWSLV Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge ‡  |
|   | PWS1856LV 6' pre-wire, 18 gauge, 3/8" dia., 5 wire - 1 circuit w/ low voltage wires ‡   |
|   | CP Chicago plenum approved ‡  |
|   | RRLA RELOC®-Ready Luminaire (RRL) connectors. Driver wired to pin position #1 (120V, 277V, 347V - Phase A)  |
|   | RRLAB RELOC®-Ready Luminaire (RRL) connectors. Driver wired to pin position #2 (120V, 277V, 347V - Phase A)   |
|   | RRLAE RELOC®-Ready Luminaire (RRL) connectors. Driver wired to pin position #1 (120V, 277V, 347V - Phase A). Emergency driver wired to pin position #2 (120V, 277V, 347V - Phase B) |
| DWAM Anti-microbial paint   |   |
| LATC T-bar clips  |   |
| BAA Buy America(n) Act and/or Build America Buy America Qualified |   |

NOTE: ‡ indicates option value has ordering restrictions. Please reference the Option Value Ordering Restrictions chart on the next page.

| Option Value Ordering Restrictions ‡ |  |
|--------------------------------------|--|
| Option Value                         | Restriction  |
| DARK                                 | Not available with networked or Stand Alone controls   |
| EZT                                  | Not available with MIN10   |
| ZT                                   | Not available with DARK  |
| ECO                                  | Not available with MIN10 or with networked or wired controls   |
| DALI                                 | Not available with: MIN10 or MIN1 or with an networked or wired controls   |
| 347                                  | Not available with: E7W, E10WLCP, E15WLCP, SLD, GTD, GLR, GMF, ECO   |
| SLD                                  | Not available with 7200LM. Not available with any controls. Must select MIN10. Leave Dimming section blank   |
| E7W                                  | Not available with 347V  |
| E10WLCP                              | Not available with 347V  |
| E15WLCP                              | Not available with: 2X2 or 347V  |
| EMG                                  | Not available with: 1500LM, 2000LM. Leave Dimming section blank. Must select a Networked Control   |
| GTD                                  | Must select 120 OR 277, Not available with 347V or MVOLT   |
| NETWORKED CONTROLS                   | Not available with DARK or MIN10. Leave Dimming section blank. Not available with STAND ALONE CONTROLS or SLD. Solutions with Integrated sensor will have a temporary extended lead time. Consult Factory. |
| STAND ALONE CONTROLS                 | Not available with DARK or MIN10. Leave Dimming section blank. Not available with NETWORK CONTROLS or SLD. Solutions with Integrated sensor will have a temporary extended lead time. Consult Factory.     |
| NLTAIR2 RES7, RES7PDT, RIO           | See UL924 Sequence of Operation chart on page 4. Can be used as a normal power sensing device for nLight AIR devices and luminaires with EM emergency options.   |
| NOC                                  | Must select a Wireless Network Control   |
| GLR                                  | Must select 120 or 277   |
| GMF                                  | Must select 120 or 277   |
| PWS1846 PWSLV, PWS1856LV             | Not available with nLight wired network or individual controls   |
| PS1055LCP                            | Field installable only on the 1X4 and 2X4 version of the ENVX  |
| BAA                                  | Not available with ECO, DALI, SLD, RVTX8FOCC, NVTX8FOCC, VT8FOCC, VTX8FADC, VTX15FOCC or VTX15FADC   |
| CP                                   | Not available with NLIGHT wired network or individual controls, PWS1836, PWS1846, PWS1846 PWSLV or PWS1856LV   |



\*DGA accessory available to provide ceiling trim flange and fixture support for plaster or plasterboard ceiling. Recommended rough-in dimensions for DGA installation is 24-3/4" x 24-3/4" (Tolerance is +1/8", -0").

### UL924 Sequence of Operation

The below information applies to all nLight AIR devices with an EM option.

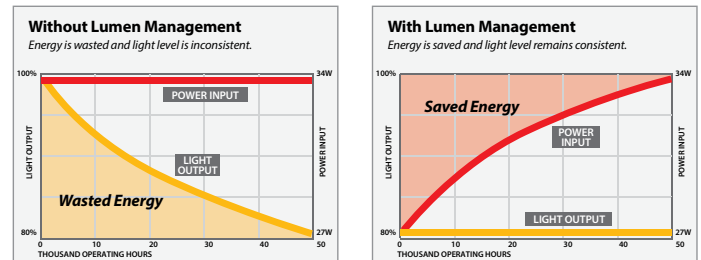
- EM devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, EM devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts
- Only non-emergency rPP20, rLSXR, rSBOR, rSDGR, and nLight AIR luminaires with version 3.4 or later firmware can provide normal power sensing for EM devices. See specification sheets for control devices and luminaires for more information on options that support normal power sensing.

## Accessories

| Accessories: Order as separate catalog number. |   |
|--|---|
| DGA14  | Drywall grid adapter for 1x4 recessed fixture.                            |
| DGA22  | Drywall grid adapter for 2x2 recessed fixture.                            |
| DGA24  | Drywall grid adapter for 2x4 recessed fixture.                            |
| ENVX TGRID CLIP J4                             | Pack of 4 grid clips for 9/16" T grid compatibility.                      |
| ENVX TGRID CLIP J50                            | Pack of 50 grid clips for 9/16" T grid compatibility.                     |
| PS1055LCP M5                                   | Field installable, not available with 347V. See restriction note above. ‡ |
| 1X4SMKSH PAF                                   | Multi-Use Surface Mount Kit 1X4 Post-Paint                                |
| 2X2SMKSH PAF                                   | Multi-Use Surface Mount Kit 2x2 Post-Paint                                |
| 2x4SMKSH PAF                                   | Multi-Use Surface Mount Kit 2x4 Post-Paint                                |

## Constant Lumen Management

Enabled by the embedded nLight control, the ENVX actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.



## Emergency Battery Pack Options - Field Installable




| Battery Model Number               | Wattage | Runtime (Minutes) | Lumen Output* @ 120 Lumens/Watt | Other   |
|------------------------------------|---------|-------------------|---------------------------------|---|
| <a href="#">ILB CP07 2H A</a>      | 7W      | 120               | 840                             | Storm Shelter/ 2-hour Runtime                                   |
| <a href="#">ILB CP10 A</a>         | 10W     | 90                | 1200                            |   |
| <a href="#">ILB CP10 HE AELR A</a> | 10W     | 90                | 1200                            | Title 20; Enabled with Self Testing, Automated Reporting (STAR) |
| <a href="#">ILBLP CP10 HE SD A</a> | 10W     | 90                | 1200                            | Title 20, Self Diagnostic                                       |
| <a href="#">ILBLP CP15 HE SD A</a> | 15W     | 90                | 1800                            | Title 20, Self Diagnostic                                       |
| <a href="#">ILB CP20 HE A</a>      | 20W     | 90                | 2400                            | Title 20  |
| <a href="#">ILB CP20 HE SD A</a>   | 20W     | 90                | 2400                            | Title 20, Self Diagnostic                                       |

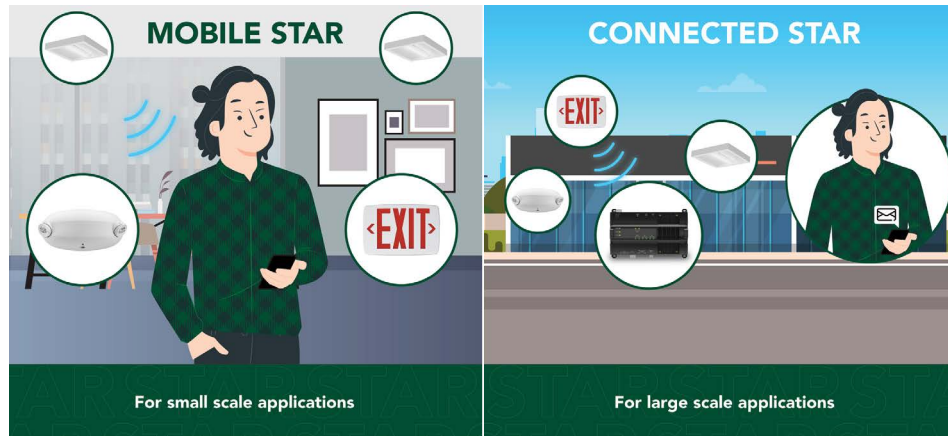
All the above are UL 924 Listed products that are certified for field install external/remote to the fixture.  
 \*Minimum delivered lumen output to assist in product selection for increased fixture mounting height.  
 Delivered emergency illumination of CP10 models outperforms legacy 1400 lumen fluorescent emergency ballasts.  
 Please contact us at [techsupport@iotaengineering.com](mailto:techsupport@iotaengineering.com) for any Emergency Battery related questions.

### Enabled with STAR

**Emergency Lighting with Self-Testing Automated Reporting (STAR)**, enables self-testing and automated reporting to aid in life safety code compliance. Build your solution and choose your preferred deployment from Mobile STAR, where test data is logged in each individual unit and broadcast to the **CLAIRity™+ app**, or Connected STAR, where test data is logged in the STAR Gateway by IOTA® and emailed directly. **Leave the ladders, disruptions and written records behind with emergency lighting solutions with STAR!**

**Life Safety Code NFPA 101 testing and reporting requirements for emergency lighting include:**

-  Testing for 30 seconds every 30 days
-  Testing for 90 minutes once a year
-  Record keeping and to report to the authority having local jurisdiction

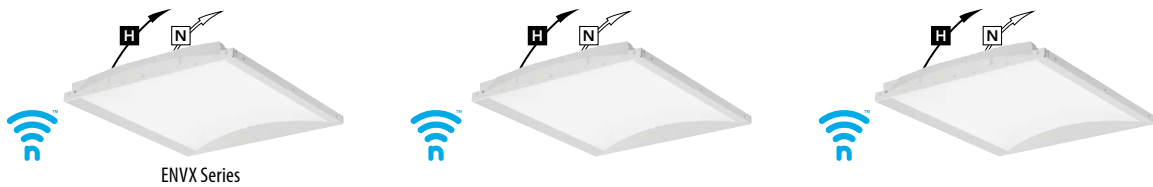


# ENVEX Spec Ambient

## nLight Platform

| nLight embedded fixtures offer:           | Customers get:   |
|---|--|
| Manual Dimming                            | Convenience and visual comfort for occupants                           |
| Motion Sensing and/or Daylight Harvesting | Energy savings and code compliance                                     |
| Fixture or Group Level Control            | Ability to configure lighting to the space requirements                |
| Flexibility                               | Ease of fixture moves, adds and changes                                |
| Wireless Wall Switch (nLight AIR Only)    | Ease and flexibility of placement                                      |
| Astronomical and Time of Day Scheduling   | Energy savings and building security                                   |
| Scalable Solution                         | nLight controls to grow with your business                             |
| Future-Ready                              | nLight platform to set foundation for future upgrades and capabilities |

## nLight Air Wireless

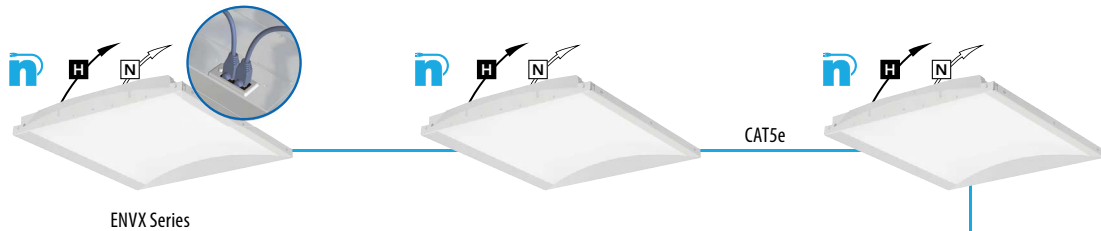


### Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With the CLAIRITY+ Pro app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome



## nLight Wired Networking



### Simple as 1,2,3

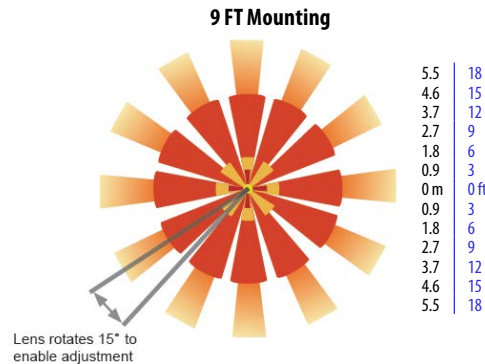
1. Install the nLight® Wired fixtures with embedded control
2. Install the nLight Wired wall switch
3. Connect the fixtures using standard CAT5e cables and the devices will automatically discover each other and work (plug and play)



| Sensor Options |                             |                   |     |                         |                       |
|----------------|-----------------------------|-------------------|-----|-------------------------|-----------------------|
| Option         | Automatic Dimming Photocell | Occupancy Sensing |     | nLight Wired Networking | nLight AIR Networking |
|                |                             | PIR               | PDT |                         |                       |
| MSD7ADCX       | X                           | X                 |     |                         |                       |
| MSDPDT7ADCX    | X                           |                   | X   |                         |                       |
| NES7           |                             | X                 |     | X                       |                       |
| NES7ADCX       | X                           | X                 |     | X                       |                       |
| NESPDT7        |                             |                   | X   | X                       |                       |
| NESPDT7ADCX    | X                           |                   | X   | X                       |                       |
| RES7           | X                           | X                 |     |                         | X                     |
| RESPDT7        | X                           | X                 | X   |                         | X                     |

## Sensor Coverage Pattern Mini 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor



### Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.

The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

### nLight AIR Wireless

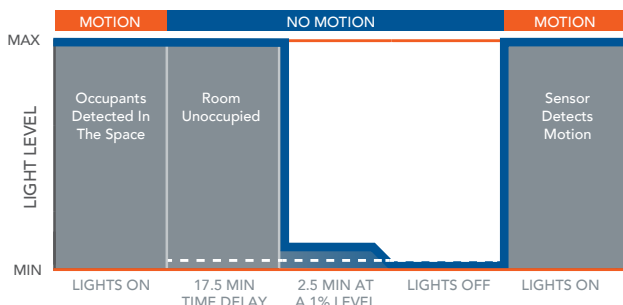
nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.

### nLight Wired Networking

The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the nES7ADCX includes an integrated photocell, which enables daylight harvesting controls.

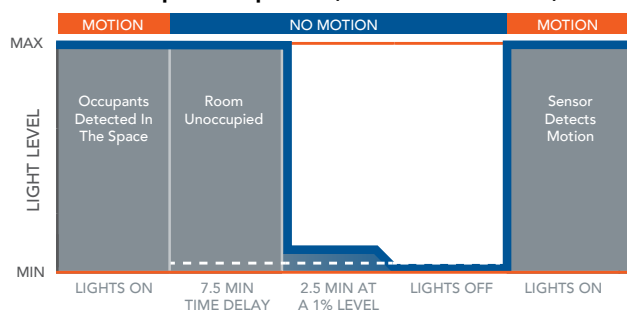
For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

### Sequence of Operation (MSD7 Sensor)



\*The presetting on the automatic dimming photocell is 5fc.

### Sequence of Operation (nES7 and rES7 and Sensor)



\*The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).

## Controls Accessories

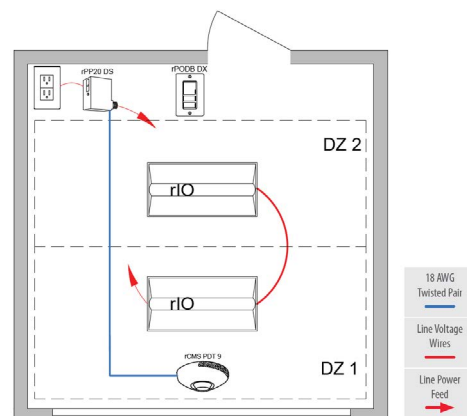
**nLight® Wired Control Accessories:**  
Order as separate catalog number. Visit [www.acuitybrands.com/products/controls/nlight](http://www.acuitybrands.com/products/controls/nlight).

| WallPod stations     | Model number       | Occupancy sensors                            | Model number               |
|----------------------|--------------------|--|----------------------------|
| On/Off               | nPODMA [Color]     | Small motion 360°, ceiling (PIR / dual tech) | nCM 9 RJB / nCM PDT 9 RJB  |
| On/Off & raise/lower | nPODMA DX [Color]  | Large motion 360°, ceiling (PIR / dual tech) | nCM10 RJB / nCM PDT 10 RJB |
| Graphic touchscreen  | nPOD TOUCH [Color] | Wall switch with raise/lower                 | nWSX PDT LV DX [color]     |
| Photocell controls   | Model number       | Cat-5 cable (plenum rated)                   | Model number               |
| Full range dimming   | nCM ADCX RJB       | 10' cable                                    | CATS 10FT J1               |
|                      |                    | 30' cable                                    | CATS 30FT J1               |

**nLight® AIR Control Accessories:**  
Order as separate catalog number. Visit [www.acuitybrands.com/products/controls/nlightair](http://www.acuitybrands.com/products/controls/nlightair).

| Wall switches                    | Model number            |
|----------------------------------|-------------------------|
| On/Off single pole               | rPODBA [color] G2       |
| On/Off two pole                  | rPODBA 2P [color] G2    |
| On/Off & raise/lower single pole | rPODBA DX [color] G2    |
| On/Off & raise/lower two pole    | rPODBA 2P DX [color] G2 |
| Occupancy/Daylighting Sensor     | Model number            |
| Small Motion 360, Ceiling        | rCMSB 7 G2              |

ENVEX fixtures with integrated rIO devices complement any small office space. Pair them with an rCMS occupancy sensor and the space now has wireless occupancy sensing and dimming capability. For additional configuration options please consult with Tech Support.



| rCMS   |                       | Example: RCMSB 7 G2  |                               |
|--|-----------------------|--|-------------------------------|
| Series / Detection                             | Detection             | Lens   | Generation                    |
| RCMSB nLight AIR occupancy and daylight sensor | [blank] PIR Detection | 7 Low Mount 360<br>45 High Mount 360°<br>45A High Mount Aisleway | G2 Generation 2 compatibility |



Sensor Switch  
WSX



nLight WIRED  
nPOD UNITOUCH



nLight WIRED  
nPODMA DX



nLight AIR  
rPODBA



ENVEX



rPODBA

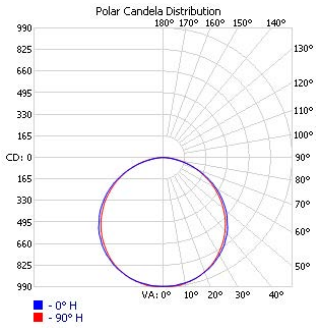


RCMSB

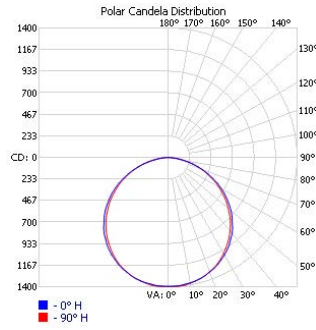


## PHOTOMETRICS

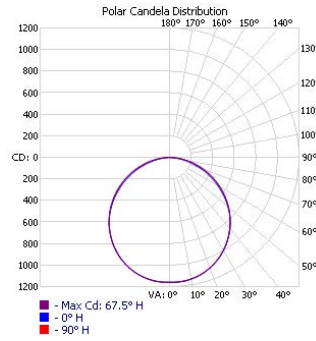
**ENVX 1X4 HRG 3000LM 80CRI 35K**



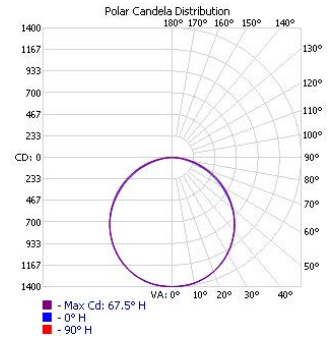
**ENVX 1X4 HRG 4000LM 80CRI 35K**



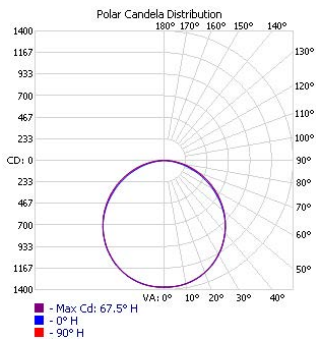
**ENVX 2X2 HRG 3300LM 80CRI 35K**



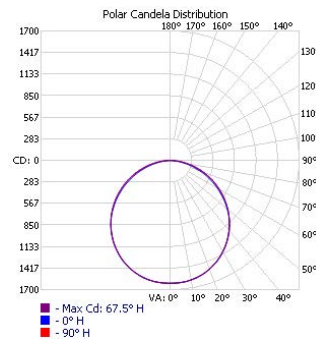
**ENVX 2X2 HRG 4000LM 80CRI 35K**



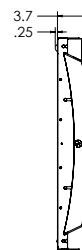
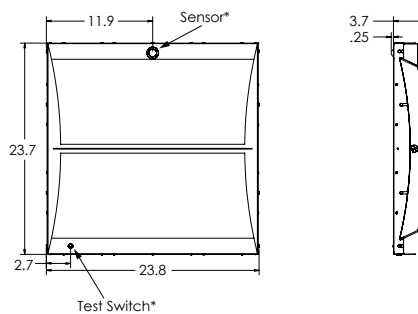
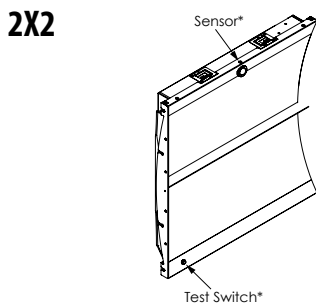
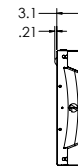
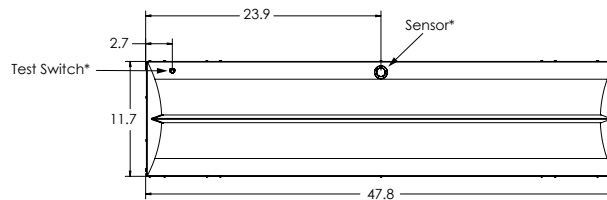
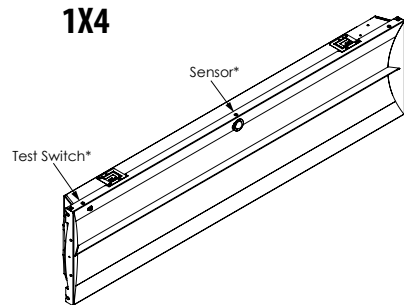
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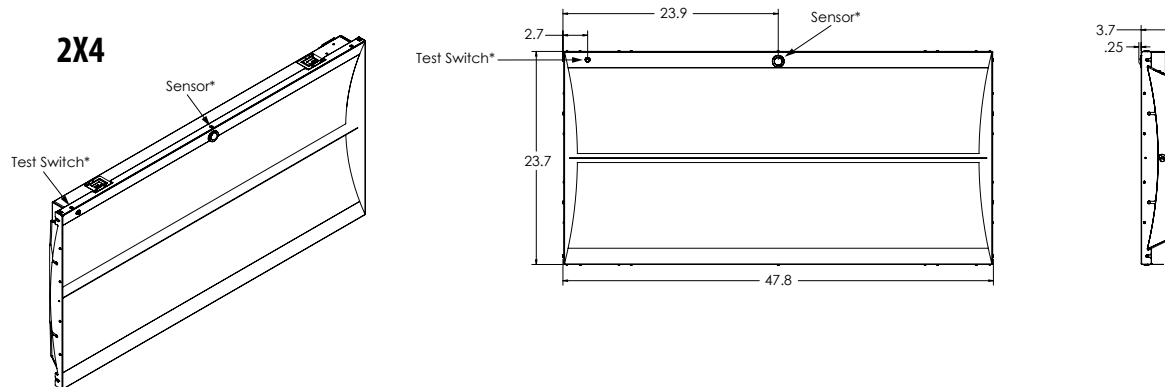
**ENVX 2X4 HRG 4800LM 80CRI 35K**



## DIMENSIONS



## DIMENSIONS



\*Location when fixture is ordered with emergency battery or integral sensor

| UGR Values of ENVX 1x4 @ <b>80CRI</b> and 3500K<br>(70% 50% 20% reflectance using a 4H x 8H room size) |           |         |           |         | UGR Values of ENVX 1x4 @ <b>90CRI</b> and 3500K<br>(70% 50% 20% reflectance using a 4H x 8H room size) |           |         |           |         |
|--|-----------|---------|-----------|---------|--|-----------|---------|-----------|---------|
| Lumen Package  | HRG       |         | HRGC      |         | Lumen Package  | HRG       |         | HRGC      |         |
|  | Crosswise | Endwise | Crosswise | Endwise |  | Crosswise | Endwise | Crosswise | Endwise |
| 1500LM   | 17.7      | 17.7    | 17.5      | 16.8    | 1500LM   | 17.2      | 17.1    | 17        | 16.3    |
| 2000LM   | 18.8      | 18.8    | 18.5      | 17.8    | 2000LM   | 18.3      | 18.3    | 18        | 17.3    |
| 3000LM   | 20        | 20      | 19.9      | 19.2    | 3000LM   | 19.5      | 19.4    | 19.4      | 18.7    |
| 4000LM   | 21.2      | 21.2    | 20.9      | 20.2    | 4000LM   | 20.7      | 20.7    | 20.4      | 19.7    |
| 4800LM   | 21.8      | 21.8    | 21.5      | 20.8    | 4800LM   | 21.3      | 21.3    | 21        | 20.3    |
| 6000LM   | 22.3      | 22.3    | 22.5      | 21.8    | 6000LM   | 21.8      | 21.8    | 22        | 21.3    |
| 7200LM   | 23.3      | 23.3    | 23.1      | 22.4    | 7200LM   | 22.8      | 22.7    | 22.6      | 21.9    |

\*UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application.

| UGR Values of ENVX 2x2 @ <b>80CRI</b> and 3500K<br>(70% 50% 20% reflectance using a 4H x 8H room size) |           |         |           |         | UGR Values of ENVX 2x2 @ <b>90CRI</b> and 3500K<br>(70% 50% 20% reflectance using a 4H x 8H room size) |           |         |           |         |
|--|-----------|---------|-----------|---------|--|-----------|---------|-----------|---------|
| Lumen Package  | HRG       |         | HRGC      |         | Lumen Package  | HRG       |         | HRGC      |         |
|  | Crosswise | Endwise | Crosswise | Endwise |  | Crosswise | Endwise | Crosswise | Endwise |
| 2000LM   | 18.3      | 19      | 18.2      | 18.3    | 2000LM   | 17.8      | 18.4    | 17.7      | 17.8    |
| 3300LM   | 20.1      | 20.8    | 20.1      | 20.2    | 3300LM   | 19.6      | 20.3    | 19.6      | 19.7    |
| 4000LM   | 20.8      | 21.5    | 20.7      | 20.8    | 4000LM   | 20.3      | 21      | 20.2      | 20.3    |
| 4800LM   | 21.4      | 22.1    | 21.4      | 21.5    | 4800LM   | 20.9      | 21.6    | 20.8      | 21      |

\*UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application.

| UGR Values of ENVX 2x4 @ <b>80CRI</b> and 3500K<br>(70% 50% 20% reflectance using a 4H x 8H room size) |           |         |           |         | UGR Values of ENVX 2x4 @ <b>90CRI</b> and 3500K<br>(70% 50% 20% reflectance using a 4H x 8H room size) |           |         |           |         |
|--|-----------|---------|-----------|---------|--|-----------|---------|-----------|---------|
| Lumen Package  | HRG       |         | HRGC      |         | Lumen Package  | HRG       |         | HRGC      |         |
|  | Crosswise | Endwise | Crosswise | Endwise |  | Crosswise | Endwise | Crosswise | Endwise |
| 3000LM   | 17.2      | 17.9    | 17.1      | 17.2    | 3000LM   | 16.7      | 17.3    | 16.6      | 16.7    |
| 4000LM   | 18.3      | 19      | 18.4      | 18.6    | 4000LM   | 17.8      | 18.4    | 17.9      | 18      |
| 4800LM   | 18.8      | 19.5    | 18.9      | 19      | 4800LM   | 18.3      | 19      | 18.3      | 18.5    |
| 6000LM   | 19.6      | 20.3    | 19.6      | 19.7    | 6000LM   | 19.1      | 19.8    | 19        | 19.2    |
| 7200LM   | 20.1      | 20.8    | 20.4      | 20.5    | 7200LM   | 19.6      | 20.3    | 19.8      | 20      |

\*UGR varies based on luminaire options and is affected by application dependent parameters. Numbers depicted here are considered "Luminaire-UGR and/or "Point-UGR" values. To determine a more precise maximum UGR value ("Application-UGR"), a full lighting design layout should be completed with the selected luminaire configuration for each application.

| Performance Data               |                  |             |             |
|--------------------------------|------------------|-------------|-------------|
| Catalog Number                 | Delivered Lumens | Input Watts | Lumens/Watt |
| ENVX 1X4 HRG 1500LM 80CRI 35K  | 1516             | 12          | 125         |
| ENVX 1X4 HRG 1500LM 90CRI 35K  | 1308             | 12          | 107         |
| ENVX 1X4 HRG 2000LM 80CRI 35K  | 2097             | 17          | 127         |
| ENVX 1X4 HRG 2000LM 90CRI 35K  | 1809             | 17          | 109         |
| ENVX 1X4 HRG 3000LM 80CRI 35K  | 2948             | 24          | 125         |
| ENVX 1X4 HRG 3000LM 90CRI 35K  | 2543             | 24          | 108         |
| ENVX 1X4 HRG 4000LM 80CRI 35K  | 4169             | 33          | 125         |
| ENVX 1X4 HRG 4000LM 90CRI 35K  | 3596             | 33          | 108         |
| ENVX 1X4 HRG 4800LM 80CRI 35K  | 5019             | 41          | 123         |
| ENVX 1X4 HRG 4800LM 90CRI 35K  | 4329             | 41          | 106         |
| ENVX 1X4 HRG 6000LM 80CRI 35K  | 5785             | 51          | 114         |
| ENVX 1X4 HRG 6000LM 90CRI 35K  | 4990             | 51          | 98          |
| ENVX 1X4 HRGC 1500LM 80CRI 35K | 1448             | 12          | 119         |
| ENVX 1X4 HRGC 1500LM 90CRI 35K | 1249             | 12          | 103         |
| ENVX 1X4 HRGC 2000LM 80CRI 35K | 1937             | 18          | 109         |
| ENVX 1X4 HRGC 2000LM 90CRI 35K | 1671             | 18          | 94          |
| ENVX 1X4 HRGC 3000LM 80CRI 35K | 2878             | 24          | 122         |
| ENVX 1X4 HRGC 3000LM 90CRI 35K | 2483             | 24          | 105         |
| ENVX 1X4 HRGC 4000LM 80CRI 35K | 3891             | 33          | 116         |
| ENVX 1X4 HRGC 4000LM 90CRI 35K | 3357             | 33          | 100         |
| ENVX 1X4 HRGC 4800LM 80CRI 35K | 4626             | 41          | 113         |
| ENVX 1X4 HRGC 4800LM 90CRI 35K | 3991             | 41          | 98          |
| ENVX 1X4 HRGC 6000LM 80CRI 35K | 6085             | 53          | 114         |
| ENVX 1X4 HRGC 6000LM 90CRI 35K | 5250             | 53          | 98          |
| ENVX 1X4 HRG 7200LM 80CRI 35K  | 7601             | 65          | 117         |
| ENVX 1X4 HRG 7200LM 90CRI 35K  | 6557             | 65          | 101         |
| ENVX 1X4 HRGC 7200LM 80CRI 35K | 7302             | 65          | 113         |
| ENVX 1X4 HRGC 7200LM 90CRI 35K | 6299             | 65          | 97          |
| ENVX 2X2 HRG 2000LM 80CRI 35K  | 1994             | 17          | 115         |
| ENVX 2X2 HRG 2000LM 90CRI 35K  | 1720             | 17          | 99          |
| ENVX 2X2 HRG 3300LM 80CRI 35K  | 3411             | 30          | 114         |
| ENVX 2X2 HRG 3300LM 90CRI 35K  | 2943             | 30          | 99          |

| Performance Data               |                  |             |             |
|--------------------------------|------------------|-------------|-------------|
| Catalog Number                 | Delivered Lumens | Input Watts | Lumens/Watt |
| ENVX 2X2 HRG 4000LM 80CRI 35K  | 4112             | 36          | 113         |
| ENVX 2X2 HRG 4000LM 90CRI 35K  | 3547             | 36          | 98          |
| ENVX 2X2 HRG 4800LM 80CRI 35K  | 4943             | 45          | 109         |
| ENVX 2X2 HRG 4800LM 90CRI 35K  | 4264             | 45          | 94          |
| ENVX 2X2 HRGC 2000LM 80CRI 35K | 1914             | 17          | 110         |
| ENVX 2X2 HRGC 2000LM 90CRI 35K | 1651             | 17          | 95          |
| ENVX 2X2 HRGC 3300LM 80CRI 35K | 3319             | 30          | 110         |
| ENVX 2X2 HRGC 3300LM 90CRI 35K | 2863             | 30          | 95          |
| ENVX 2X2 HRGC 4000LM 80CRI 35K | 3946             | 36          | 109         |
| ENVX 2X2 HRGC 4000LM 90CRI 35K | 3404             | 36          | 94          |
| ENVX 2X2 HRGC 4800LM 80CRI 35K | 4766             | 45          | 105         |
| ENVX 2X2 HRGC 4800LM 90CRI 35K | 4111             | 45          | 91          |
| ENVX 2X4 HRG 3000LM 80CRI 35K  | 2933             | 23          | 126         |
| ENVX 2X4 HRG 3000LM 90CRI 35K  | 2530             | 23          | 108         |
| ENVX 2X4 HRG 4000LM 80CRI 35K  | 4036             | 33          | 122         |
| ENVX 2X4 HRG 4000LM 90CRI 35K  | 3481             | 33          | 105         |
| ENVX 2X4 HRG 4800LM 80CRI 35K  | 4748             | 40          | 117         |
| ENVX 2X4 HRG 4800LM 90CRI 35K  | 4096             | 40          | 101         |
| ENVX 2X4 HRG 6000LM 80CRI 35K  | 5908             | 50          | 117         |
| ENVX 2X4 HRG 6000LM 90CRI 35K  | 5097             | 50          | 101         |
| ENVX 2X4 HRG 7200LM 80CRI 35K  | 6831             | 58          | 118         |
| ENVX 2X4 HRG 7200LM 90CRI 35K  | 5893             | 58          | 102         |
| ENVX 2X4 HRGC 3000LM 80CRI 35K | 2834             | 23          | 121         |
| ENVX 2X4 HRGC 3000LM 90CRI 35K | 2445             | 23          | 104         |
| ENVX 2X4 HRGC 4000LM 80CRI 35K | 4168             | 36          | 117         |
| ENVX 2X4 HRGC 4000LM 90CRI 35K | 3596             | 36          | 101         |
| ENVX 2X4 HRGC 4800LM 80CRI 35K | 4693             | 41          | 116         |
| ENVX 2X4 HRGC 4800LM 90CRI 35K | 4049             | 41          | 100         |
| ENVX 2X4 HRGC 6000LM 80CRI 35K | 5739             | 51          | 113         |
| ENVX 2X4 HRGC 6000LM 90CRI 35K | 4951             | 51          | 98          |
| ENVX 2X4 HRGC 7200LM 80CRI 35K | 7223             | 64          | 112         |
| ENVX 2X4 HRGC 7200LM 90CRI 35K | 6231             | 64          | 97          |

| Emergency Battery Estimated Lumens                                       |
|--|
| Use the formula below to estimate the delivered lumens in emergency mode |
| <b>Estimated Lumens = 1.25 x P x LPW</b>                                 |
| <b>P</b> = Output power of emergency driver (10W for PS1055CP)           |
| <b>LPW</b> = Lumen per watt rating of the luminaire.                     |