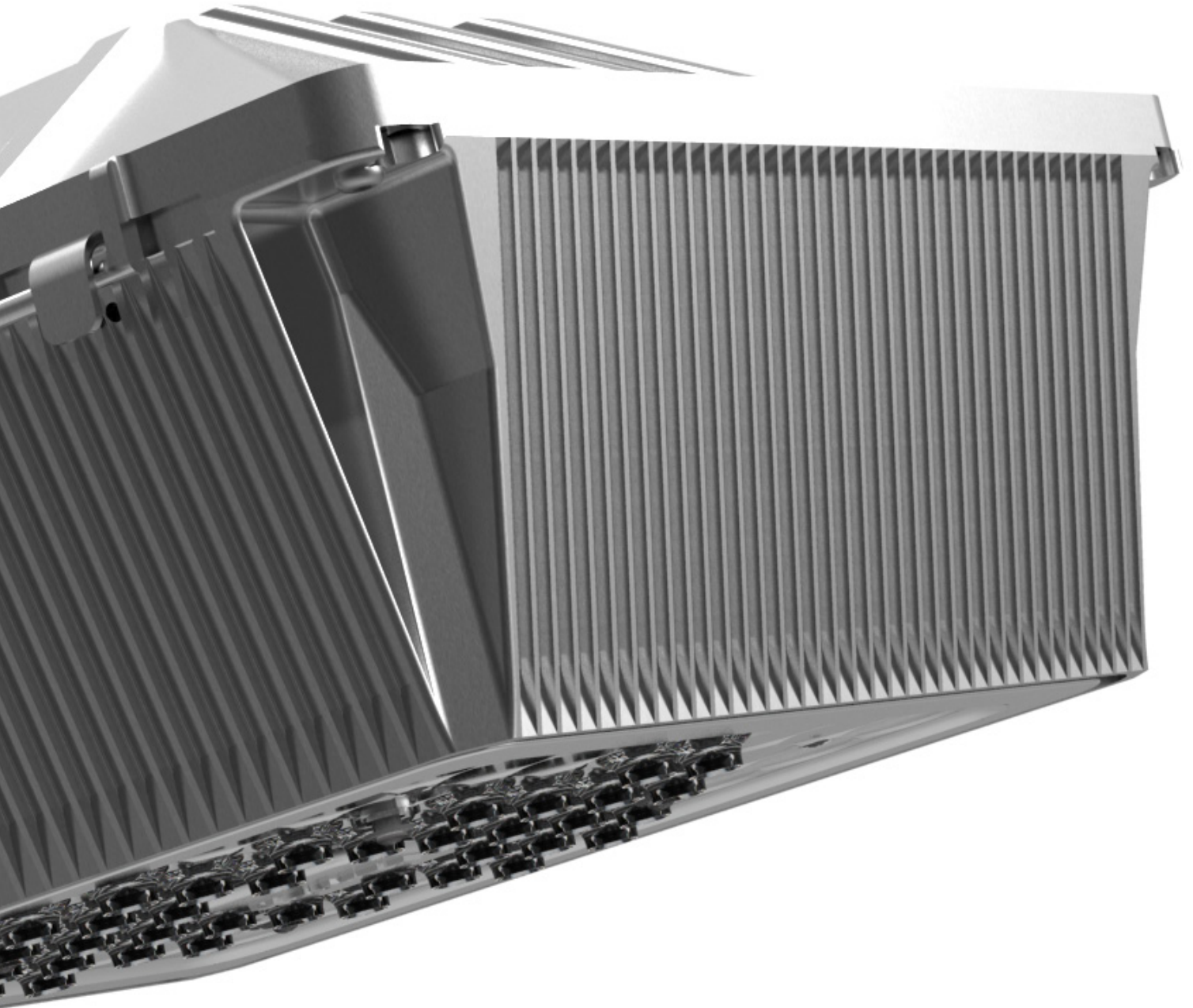


E N D U R A



ENDURA

Parking structure luminaire is designed with the exclusive field replaceable LED Bezel. This platform delivers superior performance coupling precise optical control with superior uniformity making it the perfect HID garage retrofit fixture. Controls option allows the end user to save even more energy with dimming drivers and motion detectors which can reduce wattage up to an additional 50%. The cast aluminum housing is designed for maximum thermal transfer, providing an expected L70 life of 150,000hrs at the highest power levels and has additional features of an integral bird-guard and easy installation.

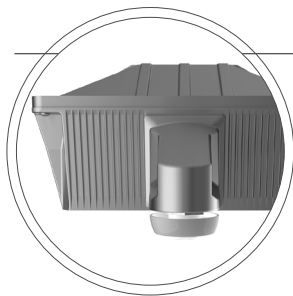
FEATURING

- 3** wattages
- 6** lighting distributions
- smarter** circuit technology
- 7** standard colors
- LifeShield™** thermal regulator



shown with optional motion sensor (MDD)

Parking structure luminaires may present the greatest lighting retrofit opportunity today. Many parking structures are high-abuse 24/7/365 facilities which require specialized lighting equipment to deliver task-specific light levels. As such, the frequency of lamp and ballast replacements and energy usage is significantly higher than most other facilities.



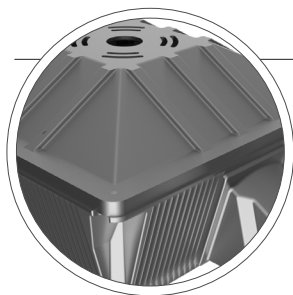
Motion Activated Response

Beacon EDR luminaires are available with an optional passive infrared (PIR) motion sensor capable of detecting motion within 24 feet of the sensor, 360° around the luminaire, when placed at an 8 foot mounting height. When no motion is detected for 5 minutes, the Motion Response system reduces the wattage from 10% to 50% (factory set at 50% reduction) of the maximum wattage, reducing the light level accordingly. Delay is field adjustable up to 30 minutes. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.



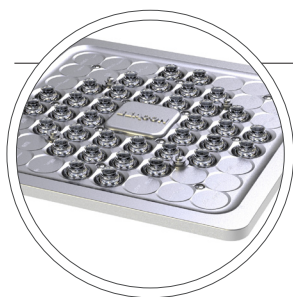
Easy To Install

The unique design allows the luminaire top to be installed separately and directly to a recessed or surface-mounted junction box. Installed in a few simple steps; 1. Mount top to junction box and connect wires, 2. Hang main housing from top and connect quick disconnect, 3. Lift and slide top housing into place, 4. Tighten screws to complete installation.



Bird Nesting Deterrent Top

The Beacon EDR consists of a die cast aluminum two piece housing. The shape of the top housing is designed as a bird nesting deterrent and is a standard feature. The top and bottom castings are designed to hinge open for easy mounting and easy access. The housing is designed with heat dissipating fins for LED thermal management without the use of metallic screens, cages, or fans.



Replaceable LED Cartridge

The EDR luminaire is supplied with a one-piece, replaceable LED CARTRIDGE SYSTEM consisting of a 'heat transfer pad', an LED engine, LED lamps, optics, gasket and a die cast aluminum bezel.

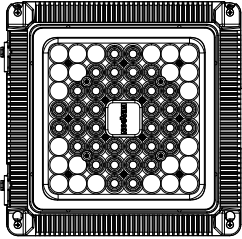
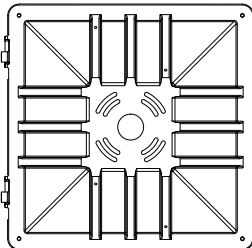
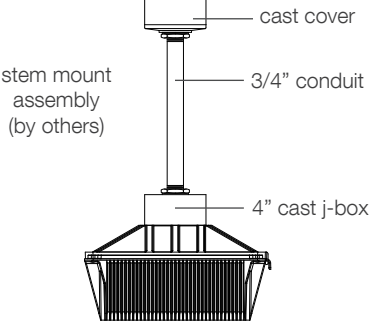
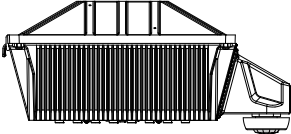
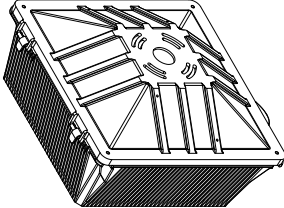
Type:

Ordering Code:

Job Name:

Notes:

ENDURA

| details | | pendant mount (by others) | |
|---|---------|--|--|
|  | 12" sq. |  |  <p>cast cover</p> <p>3/4" conduit</p> <p>4" cast j-box</p> <p>stem mount assembly (by others)</p> <p>consult factory</p> |
|  | 5.5" |  | |

shown with optional motion detector (MDD)


ORDERING EXAMPLE: EDR / 36G-90 / UNV / T2 / MDD / MT

| | | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|

| model | engine-watts | optics | voltage | electrical options | color |
|-------|--------------|--|-----------------------|---|----------------------|
| EDR | 24G-30 | T2 type II | UNV 120-277V | PEC photocell | BB black |
| | 24G-60 | T3 type III | 347V | 1PF single power feed | BZ bronze |
| | 36G-90 | T4 type IV | 480V | 2PF dual power feed | BW white |
| | | T5R type V, rectangular (low brightness)** | 12VDC consult factory | LSC LifeShield™ thermal regulator | BG green |
| | | T5S type V, square | | MDD motion detector w/ 10% to 50% dimming | BY gray |
| | | T5W type V wide round | | | MB metallic bronze |
| | | | | | MT metallic titanium |
| | | | | | ___ RAL |
| | | | | | ___ other |

* 12VDC - for solar power assembly (consult factory)

** Low brightness drive aisle optic

 Amber LEDs available (consult factory for watts and lumens)

Rated lifetime is based on an exponential decay model, using lamp manufacturers' data points from LM80 testing. This philosophy has been used by other manufacturers, as well as the Department of Energy. Lifetime rating may be revised to comply with TM-21 once that Standard is released.

Power/Lumens & Distributions

| Engine | T5-70 Lumens | T5-50 Lumens | T2/T3 Lumens | T4 Lumens | # of LEDs | CCT LED Type | L70 Life Hrs |
|--------|--------------|--------------|--------------|-----------|-----------|--------------|--------------|
| 24G-30 | 2432 | 2583 | 2253 | 2233 | 24 | 4500K | 170,000h |
| 24G-60 | 4224 | 4493 | 3918 | 3881 | 24 | 4500K | 150,000h |
| 36G-90 | 6670 | 7094 | 6187 | 6128 | 36 | 4500K | 150,000h |

GENERAL: The Beacon EDR luminaire is a ceiling surface mounted or pendant mounted parking structure luminaire with a field replaceable LED light-engine & optical bezel system. Internal components are totally enclosed in a rain-tight and corrosion-resistant die cast aluminum housing. The EDR Luminaire is CSA listed and suitable for damp locations (wet location available on request).

HOUSING & LED THERMAL MANAGEMENT: The Beacon EDR luminaire consists of a die cast aluminum two-piece housing. The shape of the top housing is designed as a bird nesting deterrent. The die cast main (thermal) housing provides direct-heat exchange between the LED light engine and the cool outdoor air by drawing heat through integral heat channels and out to the sculptured and functional luminaire surface. LED drivers are thermally isolated from the main housing, mechanically attached and heat-sunk to the top housing. The main housing is designed with heat dissipating fins for LED thermal management without the use of metallic screens, cages, or fans. The main and top housings are designed to hinge open for easy mounting and easy access.

MOUNTING & INSTALLATION: The top housing is designed with various bolt patterns for mounting to a recessed, surface or rigid-pendant hung 4" junction box junction box and rigid stem provided by others). After mounting the top housing to the junction box, the main housing is designed to hang and hinge closed after connecting the male and female quick connectors. The mounting design permits a simple retrofit to existing parking structure luminaires that utilize surface mount or recessed junction boxes.

BEZEL OPTICAL SYSTEM: Each Endura luminaire is supplied with an Optical one piece cartridge system consisting of an LED engine, LED lamps, optics, gasket and die cast aluminum bezel. The cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece Optical system. Two-piece silicone and polycarbonate foam gasket ensures a weather-proof seal around each individual LED and allows the Endura luminaire to be rated for high-pressure hose down applications.

The optical cartridge is secured to the extruded housing with fasteners and a heat pad to ensure thermal conductivity. The optics are held in place without the use of adhesives and the complete assemble is gasketed for high pressure hose down cleaning. The cartridge assembly is available in various lighting distributions using TIR designed Acrylic optical lenses over each LED.

PRINTED CIRCUIT BOARD (PCB): Aluminum thermal clad board with 0.062" thick aluminum base layer "high temperature" HT-06503 or equivalent (subject to change) dielectric (0.003" thick, thermal conductivity of 2.2 W/MK, UL RTI of 140°C) 0.0014" thick copper circuit layer Circuit layer designed with copper pours to minimize thermal impedence across dielectric. Board shall be supplied with QPAD-3 fiberglass reinforced thermal pad 0.005" thick thermal conductivity of 2.0 W/Mk. Continuous use temperature of 180°C UL94 V-0. Board will be mounted to the heat sink using 12 #4-40 screws to ensure contact with thermal pad and heat sink. Use of thermal grease will not be allowed.

LIFESHIELD™ CIRCUIT: Thermal circuit shall protect the luminaire from excessive temperature by interfacing with its 0-10V dimmable drivers to reduce drive current as necessary. The factory-preset temperature limits shall be designed to ensure maximum hours of operation to assure L70 rated lumen maintenance. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range in recognition of the effect of reduced current on the internal temperature and longevity of the LEDs and other components.

A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55°C (131°F).

The thermal circuit will allow higher maximum wattages than would be permissible on an unregulated luminaire (if some variation in light output is permissible), without risk of premature LED failure.

Operation shall be smooth and undetectable to the eye. Thermal circuit shall directly measure the temperature at the LED solder point.

Thermal circuit shall consist of surface mounted components mounted on the LED engine (printed circuit board). For maximum simplicity and reliability, the device shall have no dedicated enclosure, circuit board, wiring harness, gaskets, or hardware. Device shall have no moving parts, and shall operate entirely at low voltage (NEC Class 2). The device shall be located in an area of the luminaire that is protected from the elements.

Thermal circuit shall be designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers.

Device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.). The device will effectively control the solder point temperature as needed; otherwise it will allow the other control device(s) to function unimpeded.

MOTION ACTIVATED LUMINAIRES: Beacon EDR luminaires are available with an optional passive infrared (PIR) motion sensor capable of detecting motion within 24 feet of the sensor, 360° around the luminaire, when placed at an 8 foot mounting height. When no motion is detected for 5 minutes, the Motion Response system reduces the wattage from 10% to 50% (factory set at 50% reduction) of the maximum wattage, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.

ELECTRICAL: Luminaires are equipped with an LED driver that accepts 100V through 277V, 50 Hz to 60 Hz (UNIV), or a driver that accepts 347V or 480V input. Power factor is .92 at full load. All electrical components are rated at 50,000 hours at full load and 40°C ambient conditions per MIL-217F Notice 2. Optional 0 to 10 volt dimming drivers are available upon request. Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. 15A rating applies to primary (AC) side only.

SURGE PROTECTOR: The onboard surge protector shall be a UL recognized component for the United States and Canada and have a surge current rating of 10,000 Amps using the industry standard 8/20 pSec wave. The LSP shall have a clamping voltage of 320V and surge rating of 372J. The case shall be a high-temperature, flame resistant plastic enclosure.

FASTENERS: All fasteners shall be stainless steel. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required, consult factory).

AGENCY CERTIFICATION: The luminaire shall bear a CSA label and be marked suitable for damp locations (standard).

WARRANTY: Beacon luminaires feature a 5 year limited warranty. Beacon LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers are covered by a 5 year limited warranty. PIR sensors carry a 5 year limited warranty from the sensor manufacturer. See Warranty Information on www.beaconproducts.com complete details and exclusions.