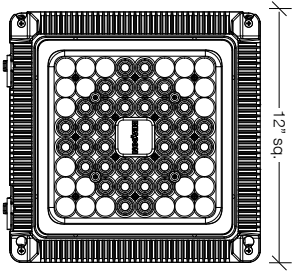


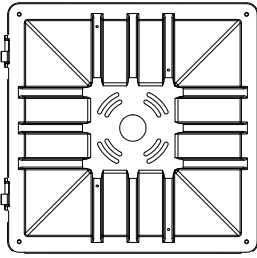
Type: _____
 Project Name: _____
 Notes: _____

Sample *EDR* *48E-63* *AMB* *T5R* *180* *UNV* *MOB - 4 - 50 - 15* *BBT*
 Ordering / / / / / / /
 A **B** **C** **D** **E** **F** **G** **H**

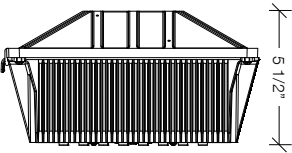
DETAILS



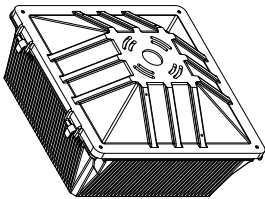
Bottom



Top

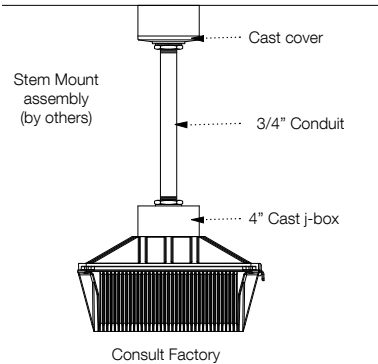


Side



Isometric

CEILING MOUNT



A. MODEL		H. COLOR	
EDR	Endura	BBT	basic black textured
B. ENGINE-WATTS		BMT	black matte textured
24E2-45	45 Watts - LED array	WHT	white textured
36E2-65	65 Watts - LED array	MBT	metallic bronze textured
48E2-90	90 Watts - LED array	BZT	bronze textured
60E2-110	110 Watts - LED array	DBT	dark bronze textured
C. LED CHIP WAVELENGTH		GYS	gray smooth
AMB	amber 590nm (std.)	DPS	dark platinum smooth
RO	red/orange 610nm (high output)	GNT	green textured
D. OPTICS		MST	metallic silver textured
T2	type II	MTT	metallic titanium textured
T3	type III	OWI	old world iron
T4	type IV	RAL	_____
T5R	type V, rectangular		
T5QM	type V, square medium		
T5W	type V, round wide		
E. SHIELDING			
90	90° shield		
180	180° shield		
270	270° shield		
F. VOLTAGE			
UNV	120-277V		
347	347V		
480	480V		
G. ELECTRICAL OPTIONS			
PEC	photocell, button		
MOB	motion sensor 33% or 50% dimming ¹		
OCS	occupancy sensor (on/off)		

¹ not available on 48E-63 and 60E-80

ENDURA (LED)

Endura Garage & Canopy Luminaire

Max Weight: 11 lbs

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-sunked 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 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 stainless steel 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 impedance 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 coexist 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 on-board surge protector shall be a UL recognized component for the United States and Canada and have a surge current rating of 20,000 Amps using the industry standard 8/20 pSec wave. The LSP shall have a clamping voltage of 825V and surge rating of 540J. 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).

Power Supply/Driver Requirements: U.L. UL1310, Class 2 and UL48 compliant.

Operating Environment: Shall be able to operate normally in ambient temperatures from -40°C to 40°C.

Finish: Finish shall be a Beacote V polyester powder-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pre-treatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pound.

Agency Certification: The luminaire shall bear a CSA label and be marked suitable for damp locations (standard). Luminaire may be specified for wet locations. This product is approved by the Florida Fish and Wildlife Conservation Commission.

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.

Due to our continued efforts to improve our products, product specifications are subject to change without notice.