CEILEO
LED RECESSED CANOPY LIGHTING

BEACON
design. performance. technology

HUBBELL Lighting
INTEGRATED HEAT DISSIPATION
The Ceileo LED lighting system from BEACON PRODUCTS offers a low-profile, ultimate solution in LED recessed canopy lighting applications. With its contemporary-streamlined design, it leads the industry with a unique visual appearance that is sure to complement both new and existing architecture.

ADVANCED LED DESIGN
The Ceileo’s unique design offers an added advantage in thermal management thereby providing even longer life of the high wattage LED configurations while its unique visual appearance is sure to complement the both new and existing architecture. The Ceileo is THE cutting edge in LED style, performance and technology.
ABOUT CEILEO
high performance LED lighting

Ceileo is a commercial grade LED canopy luminaire that utilizes high powered LED’s with precise efficient optical control and on board wattage and lumen choices. Ceileo consumes only 55 watts and is designed to replace up to 250 watt HID systems, and at the same time reduce maintenance by delivering over 200,000 hours of projected life.

LIFESHIELD™
thermal regulation circuit

Ambient temperatures in which outdoor luminaires operate differ widely because of geographic and climatic variations. Because of this, LED luminaires may be subjected to temperatures in excess of their rated operating temperatures. Beacon Products has developed a circuit that counters this damaging effect by controlling drive current to the LEDs and when necessary, reduces that current (using a dimming driver) to ensure the maximum operating temperature of the LED itself is not exceeded.

• Extremely Accurate
• Controls total power at the LED
• Prevents premature failure of LED caused by “Day-Burners”
• Assures Maximum Life of the LED
• Low Power Consumption
• Geographically compatible

LED BEZEL
cartridge bezel system

The ‘Heart’ of Beacon Products leadership in utilizing the latest in LED technology is incorporated in the unique LED bezel with optics specifically designed to provide the highest efficiency and utilization required. With Beacon’s specially designed optical-grade acrylic lenses, each bezel produces the selected light distribution which eliminates light trespass, reduces glare and maintains uniformity regardless of the mounting height. This modular component is featured in many of the Beacon Products luminaires, including the Ceileo, Genesis, Viper, Alpha, Urban, Endura, Aurora, Traverse, and Cruzer.
Ceileo (LED)
Recessed Canopy Luminaire
Max Weight: 11 lbs

A. MODEL
CLO

B. ENGINE-WATTS
24NB-55  55 Watts - LED array

C. CCT - COLOR TEMP
3K  3000K
4K  4200K
5K  5100K (std.)

D. OPTICS
5X5  aisle lighter
T5R  type V, rectangular
T5QM  type V, square medium
T5QN  type V, square narrow
T5W  type V, round wide
3x5  vertical flood
DF  diffused lens

E. VOLTAGE
UNV  120-277V

F. STYLE OPTIONS
RD  round
SQ  square

G. COLOR
BBT  basic black textured
BMT  black matte textured
WHT  white textured
MBT  metallic bronze textured
BZT  bronze textured
DBT  dark bronze textured
GYS  gray smooth
DPS  dark platinum smooth
GNT  green textured
MST  metallic silver textured
MTT  metallic titanium textured
OWI  old world iron
RAL  __________
APPLICATIONS: Ceileo is a commercial grade LED outdoor and indoor canopy downlight that utilizes high powered LEDs utilizing precise efficient optical control and on board wattage and lumen choices. Ceileo is designed to replace up to 175W and 250 Watt HID lamps with 55 watts, and at the same time reduce maintenance by delivery of over 200,000 hours of projected life.

HOUSING & LED THERMAL MANAGEMENT: The Beacon Ceileo luminaire consists of a cast aluminum external housing and recessed driver housing. The cast aluminum housing provides direct-heat exchange between the LED light engine and the cool outdoor air. LED drivers are thermally isolated from the main housing.

The driver and wiring compartments comprise a min 20 gauge corrosion protected steel platform utilizing a J-box with snap-on cover for easy access. Approved for 8 (4 in/4 out) No. 12 AWG conductors rated for 90°C through wiring. The LED cast housing is designed to be easily removed for access and replacement.

LED LIGHT ENGINE/BEZEL: Each Ceileo 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. A die cut foam silicone gasket ensures a weather-proof seal around each individual LED. The cartridge assembly is available in various lighting distributions using TIR designed acrylic optical lenses over each LED.

The Ceileo uses a 24-LED engine that can be field adjusted to four wattages (55, 45, 30.15 watts) and four lumen outputs. The adjustments are made by removing a small screw and using a small screw driver. The light engine comes standard with 70 CRI in 5000k temperature. The Ceileo comes standard with 0-10 V dimming capability, with flicker-free dimming to 10%.

INSTITUTE THERMAL TESTING: Independent institute thermal testing shall confirm solder point temperatures not to exceed 55°C and driver case temperatures not to exceed 60°C at 55-watts input power. At 30-watts input power solder point temperature shall not exceed 40°C and driver case temperatures not to exceed 55°C.

PHOTOMETRICS: The luminaire efficiency rating (LER) shall be a minimum of 95. The luminaire BUG rating shall not exceed B3-U1-G1. Depending on the optic, the peak candle power shall occur at 71 degrees in the vertical shall be no less than 2104. The lumens between 90 to 90 degrees shall not exceed 6%.

THERMAL REGULATION 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.

Operation shall be smooth and undetectable to the eye. Thermal circuit shall directly measure the temperature near 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. 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 current-sinking 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.

ELECTRICAL: Luminaires are equipped with an LED driver that accepts 100V through 277V, 50Hz to 60 Hz (UNIV). Power factor is min .90 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. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is rated by UL for use at 600VAC at 90°C or higher.

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).

Color Rendering Index (CRI): Luminare shall have a minimum CRI of 70 at 5000K.

Finish: Finish shall be a Babycoat V polyester powder-coat electro-statically applied and thermocured. Beacoat V finish shall consist of a five stage iron phosphate chemical pretreatment 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 be listed to UL 1598 for use in wet locations.

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.

Power/Lumens & Distribution

<table>
<thead>
<tr>
<th>Engine</th>
<th>Wattage</th>
<th>Delivered Lumen (varies by optic)</th>
<th>Delivered LPW</th>
<th>TM21 Calculated % Lumen Maint. at 100,000 hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>24NB</td>
<td>55</td>
<td>5125-5615</td>
<td>90-100</td>
<td>96.19%</td>
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</tbody>
</table>

TM21 is the framework for taking LM-80 data and making useful LED lifetime projections. Reported and calculated lifetimes shown are based on hours at the time of this printing. For current reported and calculated hours please contact factory or Beacon’s web-site.

CCT (COLOR TEMP) Lumen Output Multipliers

<table>
<thead>
<tr>
<th>CRI (Color Rendering)</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>5100K = 1.0</td>
<td>min 67 CRI</td>
</tr>
<tr>
<td>4200K = 0.92</td>
<td>min 70 CRI</td>
</tr>
<tr>
<td>3000K = 0.75</td>
<td>min 80 CRI</td>
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</table>

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

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SPECIFICATION