

Type: \_\_\_\_\_  
 Project Name: \_\_\_\_\_  
 Notes: \_\_\_\_\_

Sample	CAP-21	24E-32	AMB	T2	180	UNV	PEC	3RNW	BBT
Ordering	<input type="checkbox"/>								
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>

DETAILS		A. MODEL	I. COLOR
CAP - Round Shade		<b>CAP-21</b> 21" Capitol	<b>BBT</b> basic black textured
	26" - CAP Shown with optional 3RNW rings EPA: 1.39 ft <sup>2</sup> 40 lbs	<b>MRDS-21</b> 21" Miramar deep shade	<b>BMT</b> black matte textured
MRDS - Deep Shade		<b>MAR-21</b> 21" Maritas	<b>WHT</b> white textured
	21" - CAP EPA: 1.04 ft <sup>2</sup> 35 lbs	<b>CAP-26</b> 26" Capitol	<b>MBT</b> metallic bronze textured
MRSS - Shallow Shade		<b>MRSS-26</b> 26" Miramar shallow shade	<b>BZT</b> bronze textured
	26" - MRDS Shown with optional 3RNW rings EPA: 1.25 ft <sup>2</sup> 40 lbs	<b>MRDS-26</b> 26" Miramar deep shade	<b>DBT</b> dark bronze textured
MAR - Curved Shade		<b>MAR-26</b> 26" Maritas	<b>GYS</b> gray smooth
	21" - MRDS EPA: 1.00 ft <sup>2</sup> 35 lbs		<b>DPS</b> dark platinum smooth
		<b>B. ENGINE-WATTS</b>	<b>GNT</b> green textured
		<b>24E-32</b> 32 Watts - LED array	<b>MST</b> metallic silver textured
		<b>36E-48</b> 48 Watts - LED array	<b>MTT</b> metallic titanium textured
		<b>48E-63</b> 63 Watts - LED array	<b>OWI</b> old world iron
		<b>60E-80</b> 80 Watts - LED array	<b>RAL</b> _____
		<b>C. LED CHIP WAVELENGTH</b>	
		<b>AMB</b> amber 590nm (std.)	
		<b>D. OPTICS</b>	
		<b>T2</b> type II	
		<b>T3</b> type III	
		<b>T4</b> type IV	
		<b>T5R</b> type V, rectangular	
		<b>T5QM</b> type V, square medium	
		<b>T5W</b> type V, round wide	
		<b>E. SHIELDING</b>	
		<b>90</b> 90° shield	
		<b>180</b> 180° shield	
		<b>270</b> 270° shield	
		<b>F. VOLTAGE</b>	
		<b>UNV</b> 120-277V	
		<b>347</b> 347V	
		<b>480</b> 480V	
		<b>G. ELECTRICAL OPTIONS</b>	
		<b>PEC</b> photocell, button	
		<b>H. STYLE OPTIONS</b>	
		<b>NRNW</b> no rings	
		<b>3RNW</b> three cast rings	



**Housing & LED Thermal Management:** The drivers shall be located in the top cast housing and shall be accessible without tools by hinging the lower shade assembly. The driver and all electrical components shall be on a tray. The lower shade shall be made from a one-piece aluminum spinning. The LED bezel assembly shall be attached to a one piece aluminum heat sink to provide direct-heat exchange between the LED light engine and the cool outdoor air. The Housing is designed for LED thermal management without the use of metallic screens, cages, or fans. The top casting shall be able to be pendent mounted in place with a stainless steel safety pin and then permanently held in place with four stainless steel bolts.

**Bezel optical system:** Each Beacon 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 two-piece die cut silicone and polycarbonate foam gasket ensures a weather-proof seal around each individual LED and allows the luminaire to be rated for high-pressure hose down applications.

The optical cartridge is secured to the aluminum heat sink with fasteners to ensure thermal conductivity. The optics are held in place without the use of adhesives and the complete assembly 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 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.

**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. All driver components supplied are Component-to-component wiring within the luminaire will carry no more than 80% of rated current 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.

**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).

**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 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 bear a CSA label and be marked suitable for 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 on [www.beaconproducts.com](http://www.beaconproducts.com) complete details and exclusions.

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