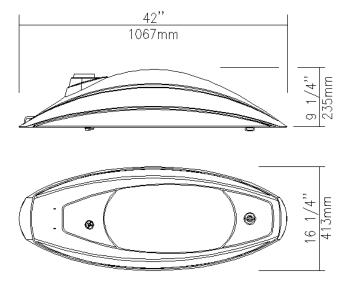
# Capella - FDOT Addendum







EPA: 0.83 sq ft / weight: 55 lb (25 kg)

Note: 3D image may not represent color or option selected.

Logos above include link, click to access.

Qty 1 Luminaire [CPLM-027]-[180W80LED-001]-740-G1-[R2M-004]-HVU-[D4I-004]-RCD7-TLRSR-SP2-BAC-GY3

#### **Description of Components:**

**Housing:** The upper and lower part of the housing are made of die cast A360 Aluminum alloy 0.180 (4.6mm) minimum thickness. The mounting means includes two brackets made of stamped galvanized steel (12ga.). Fits on a 1.9" (49mm) to 2 3/8" (60mm) OD by 10 1/2" (267mm) minimum long tenon, fixed by 3/8 16 UNC steel zinc plated bolts. An integral part of the housing permits an adjustment of +/ 5°. The housing is complete with a ground lug and a terminal block that accepts (#8 max.) wires from the primary circuit. **[CPLM-027]: Luminaire modified to receive a (TLRSR), Sensor SR.** 

**Access-Mechanism:** Quarter-turn pressure locking system made of die cast aluminum. The mechanism shall offer tool-free access to the inside of the luminaire via hinged door. An embedded memory-retentive gasket shall ensure weatherproofing.

**Light Engine: LEDgine** composed of 4 main components: **Heat Sink / LED Module / Optical System / Driver** Electrical components are RoHS compliant.

**Heat Sink:** Made of aluminum optimising the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device).

**LED Module:** Composed of 80 high-performance white LEDs. Color temperature as per ANSI/NEMA bin, Neutral White, 4000 Kelvin nominal (3985K +/ 275K or 3710K to 4260K), CRI 70 Min. 75 Typical. **[CPLM-027]: Luminaire modified to receive 2 board Mini 40LED LDG66P.** 



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**Optical Systems:** (R2M), IES type II medium; (R3M) IES type III medium; (4) IES type IV; (5) IES type V; other roadway optics available. Composed of high-performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance.

Ordering Code: 2 Board Mini 40LED IP66 4000K	Total LEDs	LED current (mA)	Average System Wattage (W)	R2M			R3M			4			5		
				Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating		Efficacy (LPW)		Lumen Output	Efficacy (LPW)	BUG Rating
180W80LED-740-G1-x	80	1450	173.5	29687	171	B4-U0-G4	29555	170	B4-U0-G4	29390	169	B3-U0-G4	29826	172	B5-U0-G4

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout.

Note: Some data may be scaled based on tests on similar but not identical luminaires.

**Driver:** High power factor of 90% minimum. electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 347 to 480 VAC rated for both application line to line or line to neutral, THD of 20% max.

The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built-in driver surge protection of 2.5kV (min).

Driver Options: (D4I), Zhaga D4i

**Surge Protector:** Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 20kV/20kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 20kV / 20kA.

**Bird Guard:** Prevents birds from entering the luminaire. Made of high-density polyethylene 0.030" (0.8mm) thick and captive to the housing.

**Luminaire Options: (RCD7)**, Receptacle with 7 pins enabling dimming and with two extra connections for future use (these connections are capped off at the factory - requires connections to be made in the field), can be used with a twist-lock control device or photoelectric cell or a shorting cap. Use of photocell or shorting cap is required to ensure proper illumination. **(TLRSR)**, SR Sensor connector with 4 pins, installed on fixture. Shipped with protective cover.

**Luminaire Options: (BAC)**, Meets the requirements of the Buy American Act of 1933 (BAA). Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.



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#### Miscellaneous

#### **Description of Components:**

**Wiring:** The connection of the luminaire is done using a terminal block connector 500V, 57A for use with bare son (#8 max.) wires from the primary circuit, located inside the housing.

**Hardware:** All exposed screws shall be complete with Ceramic primer-seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

**Finish:** Color to be **medium grey (GY3)** and in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

**LED products manufacturing standard:** The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

**Quality Control:** The manufacturer must provide a written confirmation of its ISO 9001 and ISO 14001 International Quality Standards Certification.

**Vibration Resistance:** The CPLM meets the **ANSI C136.31**, **2010**, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications. (Tested for 3G over 100 000 cycles by an independent lab)

