

MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING AND OPERATIONS

JUNE 2016

WHEATON DECORATIVE LED PEDESTRIAN LUMINAIRE

1) PURPOSE

The purpose of these specifications is to provide minimum requirements for the design, manufacture, finishing and delivery of the Wheaton decorative LED pedestrian luminaires. The Wheaton decorative LED pedestrian luminaire is intended to be mounted on decorative pole in urban streetscaped areas in Montgomery County. Any manufacturer, distributor or vendor who submits bid shall agree to comply with these specifications.

2) DESCRIPTION

The U.L. approved luminaire is round in shape, has four "PILLARS" to support the top of the fixture and 21 inches (+/- one inch) in diameter, designed to be used as an outdoor streetlight. The luminaire shall provide a Type III distribution.

Each luminaire shall include the following:

- a) LED optical assembly in the top of the fixture;
- b) 120 volt LED Driver
- c) 10KV Surge Suppression Device built in
- d) Finish color shall match semi-gloss black thermosetting, polyester powder coating.;
- e) Heavy duty cast aluminum fitter assembly which supports the optical assembly;
- f) Button type photoelectric cell to be installed in the base of the luminaire fixture (see attached detail).
- g) All necessary hardware required for mounting on Wheaton Pedestrian poles

The luminaire must be of suitable size to accommodate a LED equivalent) array and driver.

3) OPTICAL ASSEMBLY

The optical assembly shall consist of high precision refractive lenses mounted above the LED emitter arrays in such a way to achieve optimum upright control. The lenses shall also control horizontal light distribution patterns are achieved. The optical assembly shall support finished with high temperature gloss black oven cured enamel. The assembly shall be secured to the luminaire with the four pillars.

4) HOUSING

The housing shall consist of heavy grade A319 cast aluminum. The main body, or capital, acts as an enclosure for the driver assembly and is of adequate thickness so as to give sufficient structural rigidity. The capital shall have an opening at the base of the tenon body to allow the luminaire to be mounted to a tenon of 3-1/2" maximum diameter.

5) DRIVER & SURGE PROTECTION

The driver shall be mounted to facilitate easy removal for maintenance operations. The driver shall be equipped with a 10KV Surge Protection and suppression system. All electrical connections shall be polarized and of plug-in design. The driver shall be wired to receive 120 volt AC current. The driver shall reliably start and operate the lamp in ambient temperatures down to minus 30 degrees. The terminal block shall be capable of accepting up to a #6 AWG wire.

6) LED COLOR TEMPERATURE (CCT) & RENDERING INDEX (CRI)P

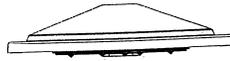
The Correlated Color Temperature (CCT) shall be a nominal Kelvin Temperature of 3500 ± 200K with a minimum Color Rendering Index (CRI) of 70.

7) PHOTOELECTRIC CELL

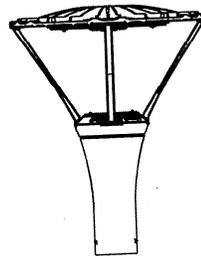
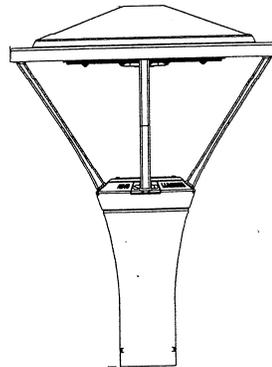
The photocell shall be a "U.L. approved" twist-lock type or equal. The photoelectric cell shall be located in the base of the luminaire fixture. (See attached detail.)

8) CORROSION PROTECTION

The complete luminaire assembly must be U.L. listed as "Suitable for Wet Locations." The U.L. listing number shall be submitted with the bid. All exposed metal parts of the luminaire shall be protected against corrosive environments by alkaline cleaning, zinc phosphate pretreatment and Triglycidyl Isocyanurate polyester powder paint.



PYRAMID



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