**FDOT High Mast Luminaire**

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Approved/Issued by: Richard Stepp, P.E., Standard Plans Engineer

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|  | FDOT High Mast Luminaire  Compliance Matrix | By submitting this form to the Department, the applicant declares that he/she represents the manufacturer and/or seller, understands the current requirements of Section 992 of the FDOT *Standard Specifications for Road and Bridge Construction,* and agrees that the below inputs are accurate to the best of the applicant’s knowledge. Also, if approved by the Department, the seller and/or manufacturer agrees to supply this product only as described in this form and its associated document submittals. |  |

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| Date: | Click here to enter a date. | Applicant’s  Name (print): |  |
| Manufacturer and/or Seller: |  |  |  |
| Luminaire Name / Model Number(s): |  | Applicant’s  Signature: |  |

|  | **Spec.**  **Section** | **Requirement** | **Requirement Met? (Applicant Input) (Yes/No)** | **Instructions/Comments (Label submittal files as described below,**  **single submittal may cover different requirements)** | **Requirement Met? (FDOT Input) (Yes/No)** |
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| 1 | 992-1.2 | The light source must be either LED, magnetic induction or plasma induction. |  | ***Submit:******Product Spec. Sheet*** *(Indicates type of light source used)* |  |
| 2 |  | Luminaire must be rated for 480-volt operation. |  | ***Submit:******Product Spec. Sheet*** *(Indicates voltage rating of luminaire)* |  |
| 3 |  | Luminaire housing must be constructed of cast aluminum. |  | ***Submit: Product Spec. Sheet*** *(Indicates material used for housing)* |  |
| 4 |  | Luminaire housing must be protected with corrosive resistant grey polyester powder coat finish. |  | ***Submit: Product Spec. Sheet*** *(Indicates finish coat type). Verified by physical inspection* |  |
| 5 | 992-2.4 | Luminaire housing shall be a slip fitter type design which accommodates a nominal 2-inch pipe size (2-3/8 inch O.D.) arm or a pole top mounting assembly which accommodates a 2-3/8 inch pole top tenon. |  | ***Submit: Product Spec. Sheet*** *(Describes pipe fitting). Verified by physical inspection* |  |
| 6 | 992-2.4 | Luminaire must have a Type V IESNA light distribution curve (IES LM-79) by an EPA recognized laboratory, capable of providing photometrics similar to a 1000W High Pressure Sodium (HPS) fixture when mounted on 80’ to 120’ poles |  | ***Submit: AGi32 “.IES” File*** *(change .IES file extension to .txt for PATH upload)* *The Department will provide an AGi32 file where Type V HPS was used, and applicant will add new Luminaire and upload file for comparison* |  |
| 7 | 992-1.2 | Permanent tag must be in housing with manufacture name, luminaire voltage, lamp wattage, and blank area for Contractor to inscribe installation date. |  | ***Submit: Product Photo.*** *If tag not shown on photo, it may also be verified by physical inspection (Submit photo regardless)* |  |
| 8 |  | Optical portion of housing must be sealed to provide an IP 66 rating. |  | ***Submit: IP-66 Testing Report*** *or Spec. Sheet showing this rating is achieved* |  |
| 9 |  | The refractor or lens used to provide the optical distribution shall be glass or polycarbonate. |  | ***Submit:******Product Spec. Sheet****. (Indicates material used for refractor or lens)* |  |
| 10 |  | Luminaire shall be listed and labeled to meet UL 1598 requirements. |  | ***Submit: UL-1598 Testing Report*** *or Certification Document showing UL1598 requirements are achieved* |  |
| 11 |  | Optical system shall meet a maximum Correlated Color Temperature of 4000°K per ANSI C78.377A (3985°K, plus or minus 275°K). |  | ***Submit: LM-79 Report*** *from EPA recognized laboratory showing Correlated Color Temperature* |  |
| 12 |  | Provide operational testing of the luminaire to determine the case temperature with an ambient temperature of 25°C and the drive currents used. Needed for LM-80 review. |  | ***Submit: In Situ Temperature Measurement Testing (ISTMT) report*** *showing case and component operating temperatures* |  |
| 13 |  | Luminaire must maintain 94.1% intensity at 10,000 hrs of testing at operational case temperature and drive current. |  | ***Submit: LM-80 and TM-21 Reports*** *from EPA Recognized laboratory* |  |
| 14 | 992-1.2 | Provide the manufacture and model number of the driver used in the luminaire. |  | ***Submit: Driver Data Sheet.***  *Indicate the manufacturer and model number of driver used in the luminaire. Verified by physical inspection.* |  |
| 15 |  | Driver must be rated for 100,000 hours at operational case temperature. |  | ***Submit: Driver Data Sheet*** *indicating driver rated life expectancy* |  |
| 16 |  | Power factor of driver must be greater or equal to 90% at full load. |  | ***Submit: Driver Data Sheet*** *indicating driver power factor* |  |
| 17 |  | Total harmonic distortion of driver must be less than or equal to 20% at full load. |  | ***Submit: Driver Data Sheet*** *indicating driver total harmonic distortion* |  |
| 18 |  | Driver must be rated for 480-volt operation. |  | ***Submit: Driver Data Sheet*** *showing data indicating driver voltage rating. Verified by physical inspection* |  |
| 19 |  | Luminaire must be provided with internal 10kV/10kA surge suppression module. |  | ***Submit: Surge Protection Device Spec Sheet*** *Indicate the manufacturer and model number of surge suppression module. Also indicate if this is the standard surge suppression module or an optional feature provided by the luminaire manufacture.* |  |
| 20 |  | Surge suppression module must meet UL 1449/ANSI C 62.41.2 Category C requirements. |  | ***Submit: Surge Protection Device Spec Sheet*** |  |
| 21 |  | Luminaire manufacturer must provide a five-year non-prorated full warranty on all components of the luminaire. |  | ***Submit: Warranty Document*** *covering a period of 5 years from the date of project acceptance or 7 years from the date of shipping* |  |
| 22 |  | Luminaire must meet additional miscellaneous requirements of Standard Specifications 715 and 992, including a luminaire housing with an electrical terminal block |  | *Verified by inspection* |  |
| 23 |  | All submitted test reports and certifications are based upon evaluation of the above-stated luminaire model number with the applicable components listed below. |  | *Verified by document review* |  |
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**Product Components:**

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| **Item:** | **Manufacturer and Model Number (Applicant Input):** |
| Light Emitting Diodes (LEDs)  (if applicable) |  |
| Driver(s) |  |
| Surge Suppression Module(s) |  |

**NOTE:** The luminaire seller shall not supply this product containing components other than those listed above.

The listed components must be used to obtain all test results and certifications of submittals including, but not limited to, light distribution curves, light wavelengths, temperature measurements, LM-79, LM-80, TM-21, UL 1598, & UL1449.