

RICK SCOTT GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 MIKE DEW SECRETARY

June 11, 2018

Khoa Nguyen Director, Office of Technical Services Federal Highway Administration 3500 Financial Plaza, Suite 400 Tallahassee, Florida 32312

Re: State Specifications Office

Section: 992

Proposed Specification: 9920700 Highway Lighting Materials.

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Ed Cashman to provide luminaire retrofit kits as an option.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to dan.hurtado@dot.state.fl.us.

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on file

Dan Hurtado, P.E. State Specifications Engineer

DH/rf

Attachment

cc: Florida Transportation Builders' Assoc.

State Construction Engineer

HIGHWAY LIGHTING MATERIALS

(REV <u>6-11</u>4-19-18)

SECTION 992 is expanded by the following new Article:

992-7 Luminaire Retrofit Kits for Conventional Lighting.

Luminaire retrofit kits shall meet the following requirements:

- <u>a. The light source for luminaire retrofit kits shall be light emitting diodes (LEDs)</u> meeting ANSI C78.377A with a maximum correlated color temperature of 4000°K (3985°K ± 275°K).
- b. The luminaire retrofit kit shall be UL 1598C listed by an OSHA "Nationally Recognized Testing Laboratory" (NRTL).
 - c. The optics shall have an IP 66 rating. Submit testing report.
- d. LEDs shall be capable of maintaining 94.1% intensity at 10,000 hours with an ambient temperature of 25°C (IES LM-80). Submit testing report.
- e. Luminaire retrofit kits shall have a IESNA light distribution curve (IES LM-79) designated by an EPA-recognized laboratory. Submit testing report.
- f. Luminaire retrofit kits shall meet a minimum pole spacing of 240 feet using the AGi32 lighting optimization tool in accordance with the settings shown in Sub-article 992-2.4. Submit IES file.
- g. Luminaire retrofit kits shall have a driver rated for 100,000 hours with a power factor greater than or equal to 90% at full load and a total harmonic distortion less than or equal to 20% at full load. Submit driver information that documents these requirements, including the operational temperature of the driver at 25°C.
 - h. Luminaire retrofit kits shall accommodate a circuit voltage of 480V.
- <u>i. Luminaire retrofit kits shall be provided with a minimum 10kV/10kA internal surge protection device (SPD) meeting UL 1449 and ANSI C62.41.2 Category C High. Submit SPD information that documents these requirements.</u>
- j. The manufacturer shall submit a five-year non-prorated full warranty on all components of the luminaire retrofit kit to the Department. The warranty shall begin on the project acceptance date and include all components of the luminaire retrofit kit.

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