

RON DESANTIS GOVERNOR 605 Suwannee Street Tallahassee, FL 32399-0450 KEVIN J. THIBAULT, P.E. SECRETARY

December 14, 2020

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: 9920109 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 Richard Stepp from the State Roadway Design Office to update table 992-1 to the Roadway Standard.

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

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

Sincerely,

Signature on file

Daniel Strickland, P.E. State Specifications Engineer

DS/rf

Attachment

cc: Florida Transportation Builders' Assoc.

State Construction Engineer

HIGHWAY LIGHTING MATERIALS (REV 12-14-20)

SUBARTICLE 992-2.4.1 is deleted and the following substituted:

992-2.4 Luminaires: Provide luminaires in accordance with the following requirements. **992-2.4.1 Luminaires for Conventional Lighting:** Luminaires shall meet the following additional requirements:

a. A maximum correlated color temperature (CCT) of 4000°K meeting ANSI C78.377A (3985°K, plus or minus 275°K).

b. The optical portion of the housing shall be sealed to provide an IP 66 rating.

The luminaire mounting assembly shall be a slipfitter type designed to accommodate a nominal 2 inch pipe size (2-3/8 inch O.D.) arm or a pole top mounting assembly designed to accommodate a 2-3/8 inch pole top tenon.

For APL qualification, the manufacturer must have a fixture with an IESNA light distribution curve (IES LM-79) by an EPA recognized laboratory, meeting a minimum pole spacing of 240 feet using the AGi32 lighting optimization tool with the following settings:

Table 992-1	
Setting	Requirement
Roadway Standard	IES RP-8- 2000 18
R-Table	R3 (Q0=0.07)
Roadway Layout	Two Rows Opposite, With Median, 2R OPP w/M
Roadway Width	40 feet
Median Width	22 feet
Number of Lanes in Direction of Travel	3
Driver's Side of Roadway	Right
Calculation Area	Bottom
Mounting Height	As per manufacturer's recommendation
Setback	12 feet
Tilt	0°
Optimization Criteria	Avg. Illuminance = 1.5 fc Avg./Min. Ratio = 4 Max./Min. Ratio = 10 Lv Max./L Avg. Ratio = 0.3
Arm Length	Pole top fixtures – as provided by the IES file Arm mounted fixtures – 12 feet

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