



U.S. Department
of Transportation
**Federal Highway
Administration**

JAN - 9 2012

1200 New Jersey Ave., SE
Washington, D.C. 20590

In Reply Refer To:
HOTO-1

Susan Marshall
Sales & Marketing Manager
Traffic Division
Electrotechnics Corp. (ELTEC)
Via e-mail: susan@elteccorp.com

Dear Ms. Marshall:

Thank you for your November 10, 2011, email to Mr. Scott Wainwright of our Manual on Uniform Traffic Control Devices (MUTCD) Team regarding the requirements for the light intensity of Rectangular Rapid Flashing Beacons (RRFB) under the technical conditions of our July 16, 2008, Interim Approval number IA-11.

In your email, you noted that IA-11 states that the RRFB light intensity "shall meet the minimum specifications of Society of Automotive Engineers (SAE) standard J595 (Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance, and Service Vehicles) dated January 2005." However, you also noted that SAE J595 covers three "classes" of lights and that establishes minimum light intensity requirements separately for each class. You asked which class of light under the SAE J595 standard is intended to be used for RRFBs installed under IA-11.

It is our Official Interpretation that the yellow lights used as warning beacons in RRFBs shall meet the SAE J595 requirements for peak luminous intensity (candelas) for Class 1. The reasons for this interpretation are as follows.

RRFBs were granted Interim Approval status in 2008 following successful experimentations in St. Petersburg, Florida, and other locations that found RRFBs to be highly effective for the intended purpose of calling attention to the pedestrian crossing sign and achieving very high rates of driver yielding to pedestrians at the crossing. We have determined that yellow lights meeting the SAE J595 Class 1 yellow peak luminous intensity standard were used in all of the approved RRFB experimentation locations, the data from which resulted in issuance of IA-11.

The SAE J595 peak luminous intensity requirements for Class 2 and Class 3 are only about 25 percent and 10 percent, respectively, of the peak luminous intensity requirement for Class 1. Because the July 16, 2008, IA-11 document inadvertently did not specify which of the three classes of light is required, some RRFBs installed since then have used lights not meeting the Class 1 intensity requirements. The reduced light intensity of such installations has been

noticeable and, anecdotally, jurisdictions are seeing far lower rates of driver yielding at such locations than was achieved at the original RRFB experimentation locations. Therefore, it is our determination that SAE J595 Class 1 yellow lights are to be used for RRFBs under IA-11.

Thank you for bringing this matter to our attention. Please note that we have assigned your request the following official interpretation number and title: "4(09)-17 (I) - RRFB Light Intensity." Please refer to this number in any future correspondence regarding this issue.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark R. Kehrli". The signature is fluid and cursive, with a large initial "M" and a period at the end.

Mark R. Kehrli
Director, Office of Transportation
Operations