Roadway Lighting

RP-8-00
Reaffirmed 2005

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American National Standard Practice for Roadway Lighting

Publication of this Committee Report has been approved by the IESNA. Suggestions for revisions should be directed to the IESNA.

Prepared by:

The Standard Practice Subcommittee of the IESNA Roadway Lighting Committee
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1.0 INTRODUCTION

1.1 Purpose of this Standard Practice

The primary purpose of this Standard Practice is to serve as the basis for design of fixed lighting for roadways, adjacent bikeways, and pedestrian ways. The Standard Practice deals entirely with lighting and does not give advice on construction. Its purpose is to provide recommended practices for designing new continuous lighting systems for roadways. It is not intended to be applied to existing lighting systems until such systems are redesigned. It has been prepared to advance the art, science, and practice of roadway lighting in North America. Roadway lighting includes pedestrian and bikeway lighting when it is associated with the public right-of-way (see Figure 2).

The decision to provide or upgrade roadway lighting at a particular location should be made on the basis of a study of local conditions. Once a decision has been made to provide lighting, this publication provides the basis for designing an appropriate system.

1.2 Purpose of Roadway Lighting

The principal purpose of roadway lighting is to produce quick, accurate, and comfortable visibility at night. These qualities of visibility may safeguard, facilitate, and encourage vehicular and pedestrian traffic. Every designer should provide for those inherent qualities required by the user. A very important consideration is that of making streets and highways useful during hours of darkness as well as during the daytime. Where good visibility is provided through lighting, efficient night use can be made of the large investments in roadways and motor vehicles. Thus, the proper use of roadway lighting as an operative tool provides economic and social benefits to the public including:

(a) Reduction in night accidents, attendant human misery, and economic loss
(b) Aid to police protection and enhanced sense of personal security
(c) Facilitation of traffic flow