



ANSI/IES RP-8-18

RECOMMENDED PRACTICE FOR DESIGN AND MAINTENANCE OF ROADWAY AND PARKING FACILITY LIGHTING



www.ies.org

RP-8-18

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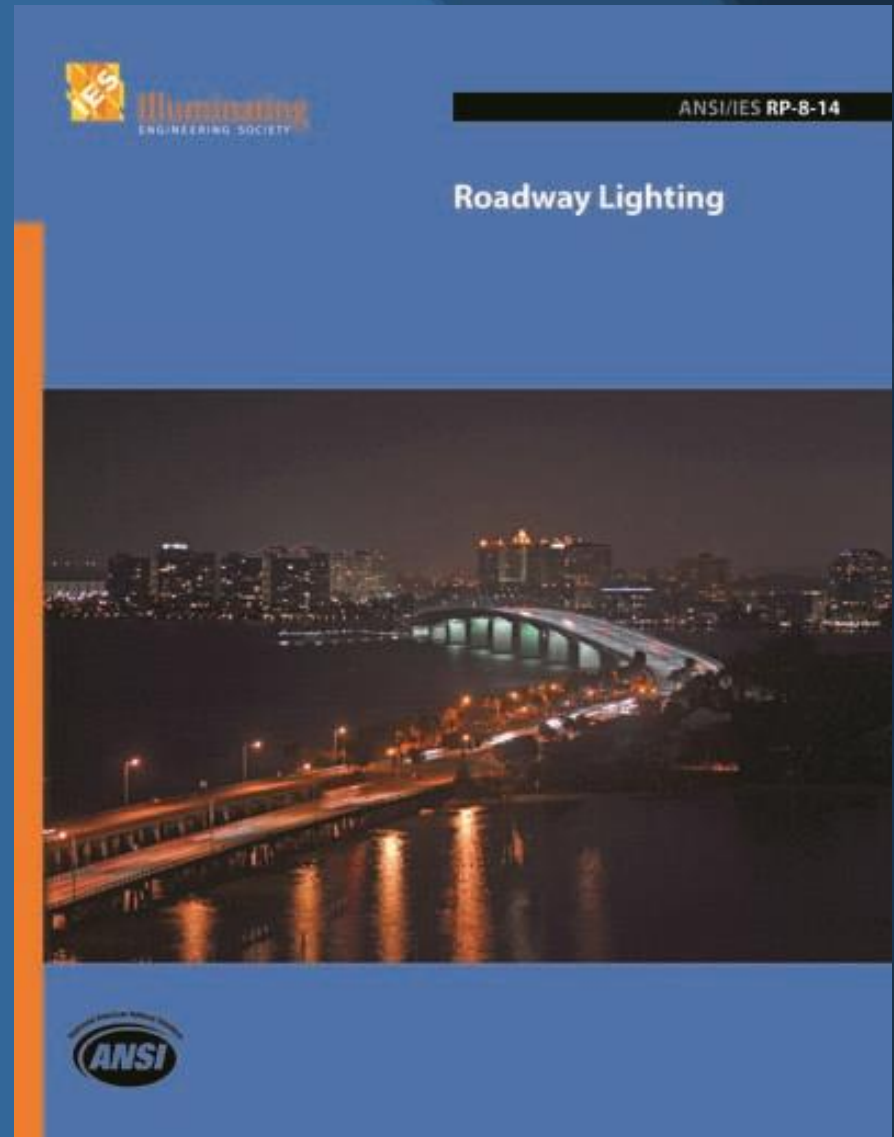
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RP-8-14

Illuminating Engineering Society (IES) RP-8-14 - Roadway Lighting

The primary purpose of this Standard Practice is to serve as the basis for design of fixed lighting for roadways, streets, adjacent bikeways, and pedestrian ways. The Standard Practice deals entirely with lighting design and does not give advice on construction.



IES RP-8 (Background)

IESNA have been developing street lighting standards for 90+ years

Roadway Lighting Committee developed document (over 100 members) made up of:

- Designers and specifiers
- Researchers
- Manufacturers
- Governments
- Utilities
- Special interest groups

• Principles of Streetlighting	1928
• Code of Streetlighting	1930
• Code of Streetlighting	1935
• Code of Streetlighting	1937
• Recommended Practice of Streetlighting	1940
• Recommended Practice of Street and Highway Lighting	1945
• American Standard Practice for Street and Highway Lighting	1947
• American Standard Practice for Street and Highway Lighting	1953
• American Standard Practice for Roadway Lighting	1963
• American Standard Practice for Roadway Lighting	1972
• American Standard Practice for Roadway Lighting	1977
• American Standard Practice for Roadway Lighting	1983
• American Standard Practice for Roadway Lighting (reaffirmed)	1993
• American Standard Practice for Roadway Lighting (reaffirmed 2005)	2000

IESNA Documents Replaced by RP-8-18

- RP-8-14, *Roadway Lighting*
- RP-20-14, *Lighting for Parking Facilities* (revised 2016)
- RP-22-11, *Tunnel Lighting*
- DG-4-14, *Design Guide for Roadway Lighting Maintenance*
- DG-19-08, *Design Guide for Roundabout Lighting*
- DG-21-15, *Design Guide for Residential Street Lighting*
- DG-23-14, *Design Guide for Toll Plazas*
- DG-26-16, *Design Guide for Lighting the Roadway in Work Zones*
- DG-28-15, *Design Guide for Selection, Installation, Operations and Maintenance of Roadway Lighting Control Systems*
- LM-50-13, *Photometric Measurement of Roadway and Street Lighting Installations*
- LM-71-14, *Photometric Measurement of Tunnel Lighting Installations*
- TM-10-00(R2011), *Addressing Obtrusive Light (Urban Sky Glow and Light Trespass) in Conjunction with Roadway Lighting*

RP-8-18 What has Changed

- New document 430 pages – More informative
- It is based on the Transportation Association of Canada Guide for the Design of Roadway Lighting
- Made up of 19 Chapters (replaces many documents)
- Includes design examples and extensive explanation
- Will be offered in electronic version with allot of features (multiple users, hyperlinks, group share and comments/notes, bookmarks, etc)
- Document under continuous maintenance to stay current

Including lighting for:

- Roads, streets, highways
- Tunnels
- Pedestrian and bicycle pathways in the public right of way
- Intersections, including roundabouts
- Parking lots, parking garages
- Toll plazas, rest areas, weigh stations
- At-grade railway crossings
- Roadway signs
- Temporary installations and work zones

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Chapter 17: Parking Lots and Parking Garages

Chapter 18: Roadway Sign Lighting

Chapter 19: Temporary and Work Zone Lighting



Annexes

ANNEX A – Roadway and Tunnel Field Measurements

ANNEX B – Outdoor Lighting Controls: Additional Information

ANNEX C – Contrast Method for Determining Threshold Lighting in a Tunnel

ANNEX D – Calculation of Tunnel Wall Luminance Using BRDFs for Typical Tunnel Wall Materials

ANNEX E – Evaluation of Lseq: Correct Use of a Camera

ANNEX F – Conversion Factors, Acronyms and Symbols

ANNEX G – Visibility Based Analysis of Parking Facility Lighting

ANNEX H – General Procedure for Calculating Maintained Illum in Pkg Lots and Garages

ANNEX I – Environmental Ratings for Enclosures

ANNEX J – Roadway Lighting Operations and Maintenance Example

Benefits

- Focused on safety
- Extensive explanation
- Continuous maintenance
- ANSI approved
- Consensus and research based
- Educational information



RP-8-18 – Where to Purchase

<https://www.ies.org/product-category/recommended-practices-and-ansi-standards/>