



LED Roadway Lighting

Benefits

Light-emitting diode (LED) lighting is an exciting new technology that provides many features and benefits to owners and users of roadway lighting systems.

- **Increased energy efficiency and reduced carbon footprint**
- **Durable** – heavy-duty light fixtures with no filaments or electrodes; shock and vibration resistant
- **Long Life** – 50,000+ hours (compared to high-pressure sodium (HPS) at 30,000 hours and metal halide at 15,000 hours)
- **Performance** – no warm-up or restrike time, instant on/off, cold- and heat-tolerant
- **Color Rendering** – warm white light with color rendering index (CRI) of 70+ (versus orange color HPS with low CRI) enhances visibility and color recognition
- **Directional** – delivers light to the roadway and sidewalk area with little or no wasted or stray light (light trespass)
- **Improved uniformity and lighting quality**
 - Uniform distribution of light across target area (roadway)
 - Higher levels of vertical illuminance than conventional light sources
 - Low optical losses of lumens from the light fixture
 - High luminance efficacy (lumens per watt)
 - Precise cutoff of backlight and uplight (light trespass)
- **Improved lumen maintenance** over time versus conventional light sources (loss of lumens with age/hours of use)
- **Contains no mercury, lead, toxic chemicals** or other known disposal hazards; 100 percent recyclable
- **Produces little infrared light** and very low UV emissions
- **Enhanced safety and security** for drivers, pedestrians and residents
- **Enables the use of wireless networked controls**
 - Lighting performance monitoring
 - Proactive maintenance and repair scheduling
 - Energy usage metering
 - Increased energy efficiency opportunities
 - On-demand on/off control and dimming

