

power light source

Luxeon™ Collimator

LXHL-NX05

Technical Data

Luxeon™ is a revolutionary, energy efficient and ultra compact new light source, combining the lifetime and reliability advantages of Light Emitting Diodes with the brightness of conventional lighting.

The Collimator LXHL-NX05 was designed to efficiently collimate the light of a Luxeon power light source into a 10° beam.

The optical design of the collimator uses the Total Internal Reflection mechanism to collimate the light. This design and the use of precision-injection molding optical grade Acrylic plastics bring the optical efficiency up to 90%.



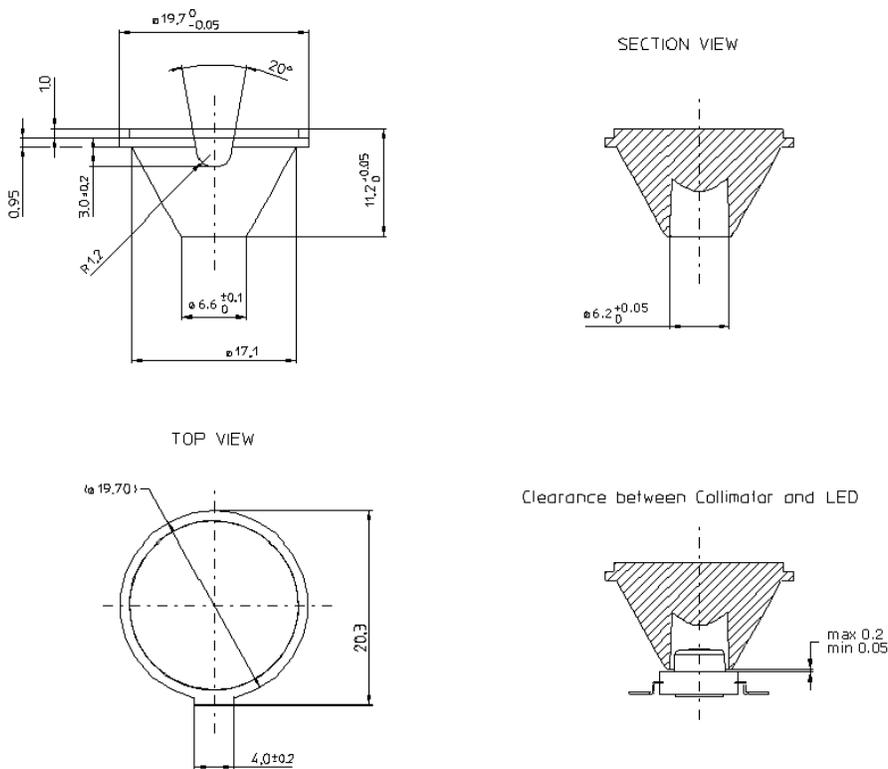
Features

- Up to 90% efficiency
- 10° viewing angle
- Works with all Luxeon products
- Optical grade Acrylic plastic

Typical Applications

- Reading lights (car, bus, aircraft)
- Portable (flashlight, bicycle)
- Mini-accent / Decorative / Fiber Optics Alternative
- Undershef / Task Lighting
- Indoor and Outdoor Commercial and Residential Architectural lighting

Mechanical Dimensions



Notes:

1. All dimensions in millimeters
2. The collimator rim ($\phi 19.7\text{mm}$) may be used as a snap-on feature to support the collimator
3. The Luxeon light source must be protected from any axial or lateral loads caused by the collimator—do not clamp the collimator against the Luxeon emitter.
4. The collimator is molded from optical grade acrylic. Do not subject to temperatures greater than 75°C as plastic deformation may occur. Protect collimator against exposure to solvents and adhesives that are not compatible with acrylic. Use care in handling the optic to avoid scratches or other damage that will effect the optical performance.

Representative Spatial Radiation Pattern

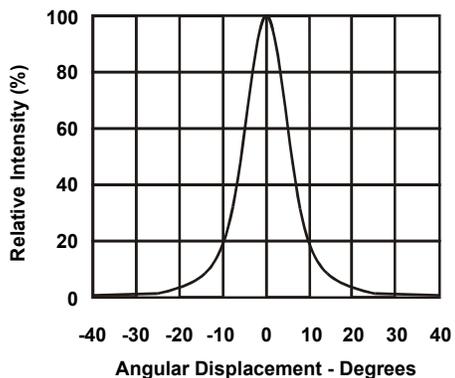


Figure 1. Representative Spatial Radiation for Luxeon devices with collimator.

About Luxeon



Luxeon is the new world of solid state lighting (LED) technology. Luxeon Power Light Source Solutions offer huge advantages over conventional lighting and huge advantages over other LED solutions. Luxeon enables partners to create and market products that, until now, were impossible to create. This means the opportunity to create products with a clear competitive advantage in the market. Products that are smaller, lighter, sleeker, cooler, and brighter. Products that are more fun to use, more efficient, and more environmentally conscious than ever before possible!



Company Information

Luxeon is developed, manufactured and marketed by Lumileds Lighting, LLC. Lumileds is a world-class supplier of Light Emitting Diodes (LEDs) producing billions of LEDs annually. Lumileds is a fully integrated supplier, producing core LED material in all three base colors (Red, Green, Blue) and White. Lumileds has R&D development centers in San Jose, California and Best, The Netherlands. Production capabilities in San Jose, California and Malaysia.

Lumileds is pioneering the high-flux LED technology and bridging the gap between solid state LED technology and the lighting world. Lumileds is absolutely dedicated to bringing the best and brightest LED technology to enable new applications and markets in the Lighting world.



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Lumileds may make process or materials changes affecting the performance or other characteristics of Luxeon. These products supplied after such change will continue to meet published specifications, but may not be identical to products supplied as samples or under prior orders.

LUMILEDS

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