Light Guides for LED Fixtures

Innovative LED light guides that deliver superior quality and control of light, enabling lighting designs that provide optimal performance, cost and aesthetics.

**High Efficiency**
- Up to 95% optical efficiency
- High application efficiency for more light on target

**Improved Control of Light**
- Precise ray-angle control
- Enhanced glare reduction
- Customizable light distribution

**Ultimate Design Flexibility**
- Thin, edge-lit light guide-based designs
- Support for many sizes and shapes with flat and curved light guides

**Superior Aesthetics**
- High-quality, unique visual performance
- Customizable optical patterns with tunable uniformity
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Overview
Beginning with edge-lit back lighting, Rambus has pioneered light guide-based design solutions for a broad range of LED lighting applications, enabling a new level of styling, efficiency and control of light.

We combined TruEdge™ LED Coupling – techniques to maximize the amount of light emitted from the LED to the light guide – with MicroLens® optics – micro 3D features that provide controlled light extraction – to create highly-efficient and cost-effective solutions with unparalleled design flexibility.

Our offering includes customizable light guide design and manufacturing solutions with expert optical engineering support. The light guides are available as off-the-shelf or customized designs that are optimized to specific customer and application requirements by varying the size, shape and density of the MicroLens optics. These light guides can be manufactured by our global lighting partners or at our state-of-the-art facility within the US.

Complete fixture prototype designs that combine Rambus optical innovations with design engineering and manufacturing support services are also available to lighting system companies and fixture manufacturers worldwide.

Features
- Superior optical control using MicroLens optics
- Customizable uniformity and distribution of light output
- Low profile designs with an unmatched quality of illumination
- Proven, economical manufacturing processes and controls

Applications
Supports a broad range of LED lighting products including:
- Office
- Hospitality
- Retail
- Residential
- Entertainment
- Automotive

Example Fixture Architecture with MicroLens Optics

![Example Fixture Architecture with MicroLens Optics](image)

High optical efficiency + Ray angle control = Maximum Application Efficiency

rambus.com/lightguides