# **PRODUCT DATA SHEET**

# **UltraGel** Light Diffusers

**Product Code** UG-LD1010 UG-LD1030 UG-LD2020 UG-LD4040 UG-LD6001 UG-LD6060 UG-LD8080

Light diffusers are a complete line of film lenses which are able to optically alter the output beam shape of any light source in varying degrees of diffusion strengths and profiles. Ranging from mild to strong diffusion, symmetric, and asymmetric beam control, light diffusion can be used as an accessory in many applications where precise light control shaping is desired. Using these highly efficient films you can manipulate the output distribution with a circular (symmetric) or elliptical (asymmetric) profile. These diffusion films will increase luminance uniformity and help eliminate LED "hotspotting" and dark regions with minimal light loss. Light diffusion films are particularly effective when color mixing RGB LEDs or multiple bins of the same color LED. Use these films to create a consistent color output that improves fixture aesthetics. Due to unique optical characteristics, diffusion films are an efficient way to "hide" point light sources, and other bulbs. Light diffusion lenses are also called holographic film.

### **General Features**

- Variety shaping degrees: 10, 20, 30, 40, 50, 60, 80, 10 x 30, 60 x 1
- Eliminates hotspots
- Produces a more homogenous LED color blending
- Helps reduce glare from LED unit lenses
- Minimal light loss, up to 93% efficient
- Easy to use and cut
- Various flexible polymer materials
- UV stable
- Cleanable with Windex<sup>™</sup>
- Moderate heat tolerance for LED and Fluorescent light sources
- Supplied in 12" width by any length but sold in small 1 inch linear increments

## **Specifications**

#### UG-LD1030

Specifications: 10 x 30 degree asymmetrical beam spread Base Material: PC ■ Transmission: 89% ■ Finish Gloss: High ■ Thickness: 9.06 mils ■ Typical operating range: -30 to +80 degree celsius ■ Roll Size: 12" wide

■ Sold by the linear inch (each is 12" x 1" increments)

#### UG-LD2020

Specifications: 20 x 20 degree symmetrical beam spread ■ Base Material: Acrylic ■ Transmission: 91% ■ Finish Gloss: High ■ Thickness: 3.94 mils ■ Typical operating range: -30 to +80 degree celsius ■ Roll Size: 12" wide Sold by the linear inch (each is 12" x 1" increments)

#### UG-LD3030

Specifications: 30 x 30 degree symmetrical beam spread ■ Base Material: Acrylic ■ Transmission: 90% ■ Finish Gloss: High ■ Thickness: 23.62 mils ■ Typical operating range: -30 to +80 degree celsius ■ Roll Size: 12" wide Sold by the linear inch (each is 12" x 1" increments)

#### UG-LD4040

Specifications: 40 x 40 degree symmetrical beam spread ■ Base Material: Acrylic ■ Transmission: 93% ■ Finish Gloss: High ■ Thickness: 7.28 mils ■ Typical operating range: -30 to +80 degree celsius ■ Roll Size: 12" wide Sold by the linear inch (each is 12" x 1" increments)

#### UG-LD6001

Specifications: 60 x 1 degree asymmetrical beam spread ■ Base Material: PC ■ Transmission: 82% ■ Finish Gloss: High ■ Thickness: 3.35 mils ■ Typical operating range: -30 to +80 degree celsius ■ Roll Size: 12" wide Sold by the linear inch (each is 12" x 1" increments)

#### UG-LD6060

Specifications: 60 x 60 degree symmetrical beam spread ■ Base Material: Acrylic ■ Transmission: 89% ■ Finish Gloss: Low ■ Thickness: 19.7 mils ■ Typical operating range: -30 to +80 degree celsius ■ Roll Size: 12" wide Sold by the linear inch (each is 12" x 1" increments)

#### UG-LD8080

Specifications: 80 x 80 degree symmetrical beam spread ■ Base Material: Acrylic ■ Transmission: 75% ■ Finish Gloss: High ■ Thickness: 19.7 mils ■ Typical operating range: -30 to +80 degree celsius ■ Roll Size: 11" wide ■ Sold by the linear inch (each is 11" x 1" increments)

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