



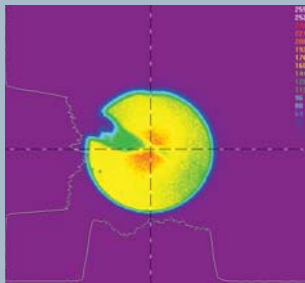
Glass-On-Glass Light Shaping Diffusers[®]

Luminit announces a new line of Light Shaping Diffusers (LSD's) that offer superior UV transmission and are designed for high temperature and high power laser environments.

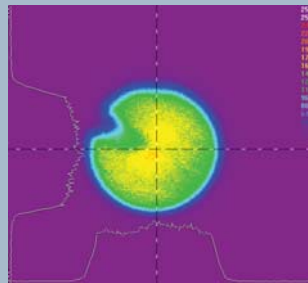
These Glass-On-Glass LSD Diffusers are particularly applicable to biomedical instrumentation and other high damage threshold applications. UV products offering very high transmission efficiency of UV radiation are also available. Custom sizes are available to fit your application.

A holographically recorded, randomized surface relief structure is replicated on a glass surface on a float glass or UV silica substrate. The precise surface relief structures provide high transmission efficiency (up to 92%) and controlled angular distribution while providing high-quality homogenized light.

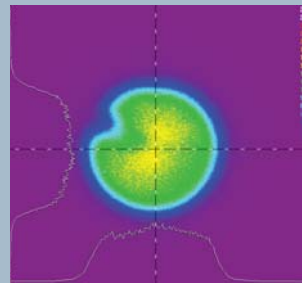
Following are examples of homogenizing the output of a 633nm HeNe Laser.



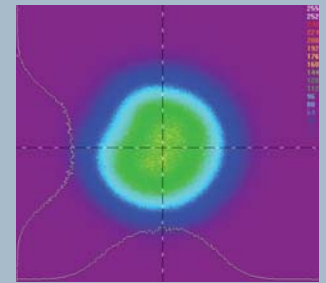
No Diffuser



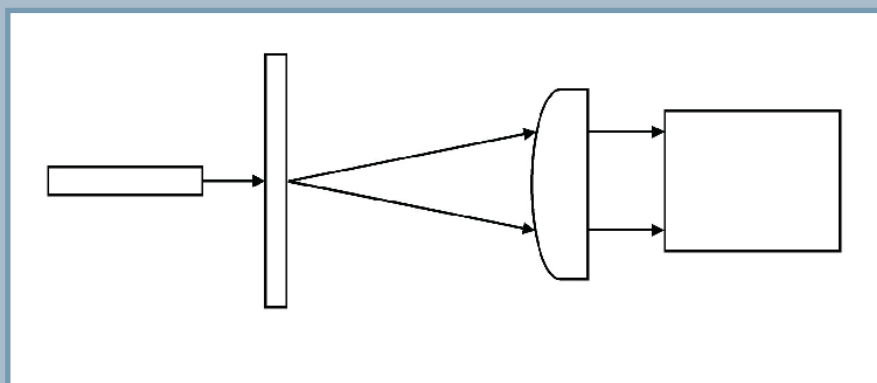
0.5° Diffuser, 5mm after Fiber



1° Diffuser, 5mm after Fiber

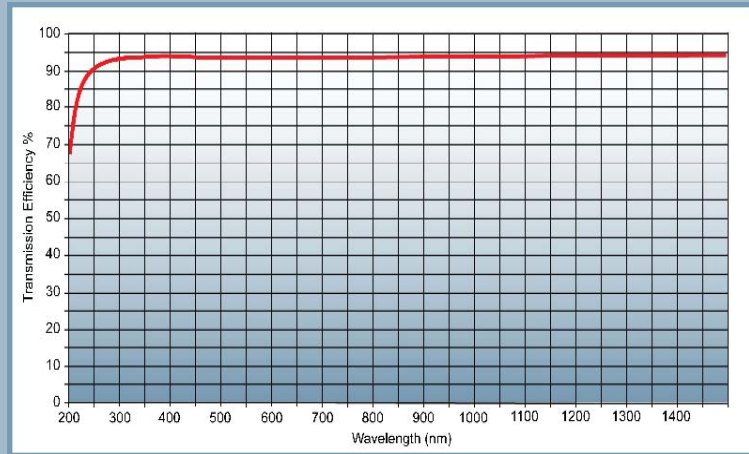


5° Diffuser, 5mm after Fiber



Homogenization of High Power Laser Source

Luminit is a world-wide leader in technical innovation in the transmission of light. Our broad product line of Light Shaping Diffusers and custom designed solutions can be tailored to your most exacting needs.



LSD on UV Silica Transmission Performance

LSD Ultra-High Temperature/Power Glass Diffuser
500°C Stable

Angle FWHM	Substrate & Thickness	Size
0.5° to 14°	Fused Silica Glass B270 3mm	25mm Dia. 50mm Dia. 2" x 2"
Custom angles*		Custom sizes*
Laser Damage Threshold (8J/cm ²)		

LSD High Temperature/Power Glass Diffuser
170°C Stable

Angle FWHM	Substrate & Thickness	Size
0.5° to 50°	Fused Silica Glass B270 3mm	25mm Dia. 50mm Dia. 2" x 2"
Custom angles*		Custom sizes*

*Please call (310) 320-1066 for more information

Product Information

- Transmission efficiency:
85-92% dependent on angle and wavelength
88-92% over visible spectrum
- Transmission wavelength:
200 or 240-1500nm+
- Brightness Uniformity >=85%
- Temperature Range:
-40C to 170C or -40C to 500C*
*Limited to 14° or lower angle (FWHM)
- Humidity: Cycled at 95% for 24 hours
- Custom angles
- Circular or elliptical

Note that all specifications contained herein are subject to change without notice.



20600 Gramercy Place, Building 203 Torrance, California 90501
Ph. (310) 320-1066 Fx. (310) 320-8067 www.luminitco.com