



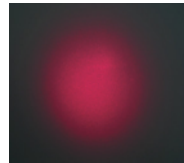
## Light Shaping Diffusers®

Angles, Sizes and Formats

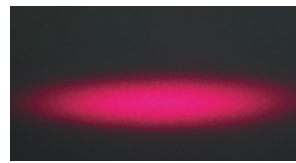
Luminit Light Shaping Diffusers homogenize and directionally shape light with high transmission efficiency and excellent hiding power. Available in seamless rolls on polycarbonate, polyester or acrylic substrates, including UV-stable or UL-approved substrates, we offer diffusers with elliptic and circular outputs in a variety of substrates, sizes and angles from small to extreme. We can custom cut to your specifications, and offer low-cost Injection Molded (IM) lenses that can be designed in a variety of shapes and sizes in symmetrical and asymmetrical beam angles for any LED module design.



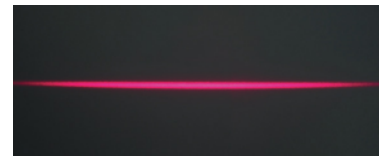
NoDiffuser



30° Diffuser



30° X 5° Diffuser



60° X 1° Diffuser

### Large Volume Seamless

Circular Angle (FWHM)	Elliptical Angle (FWHM)	Substrate & Thickness	Sizes	Options
80°	80° x 50°	Polycarbonate P1 - 0.010"	<b>Roll Width</b>	Protective film
60°	60° x 30°		24" Wide	Partial rolls
30°	60° x 10°		Standard	available with
20°	60° x 1°		length = 500ft	50ft minimum
10°	50° x 3°			length
5°	40° x 10°			
3.5°	30° x 3°			
2°	30° x 1°			
1°	15° x 1°			
	1° x 60°			
	1° x 40°			

### LSD Sheets and Panels

Circular Angle (FWHM)	Elliptical Angle (FWHM)	Substrate & Thickness	Sizes	Options
100°	90° x 60°	<b>Polycarbonate</b>	12" x 12"	With PSA and Protective Film
80°	95° x 25°	P1 – 0.010"	Custom angles and larger sizes available on request	
40°	80° x 50°	P3 – 0.030"		
30°	75° x 45°	P6 – 0.060"		
20°	60° x 30°	P8 – 0.118"		
10°	60° x 10°	Polyester, acrylic, UVT acrylic substrates also available		
7.5°	60° x 1°			
5°	40° x 1°			
3.5°	30° x 5°			
2°	30° x 1°			
1°	30° x 1°			
0.5°	1° x 40°			

### Injection Molded Parts

Angles & Transmission	Material	Lens/Optics Sizes & Thickness	Minimum Qty.	Options
Standard LSD angles  >85%	Polycarbonate, acrylic or other specified optical materials	Up to 6.5" in size 0.030 up to 0.125" thick	10,000 or more	Requires 6 weeks lead time

### Direction Turning Film

Angle (FWHM)	Substrate & Thickness	Transmission Spectral Range	Sizes	Options
20°	Polycarbonate	400nm-800nm	24" x 24"	PSA Protective Film

P1-0.010

### Volumetric Light Shaping Diffusers for Linear Light Fixtures

Temp. Range	Material & Thickness (FWHM)	Duffusion Angles	BYK Transmission	Haze
-30°C to 80°C	PS 1.5MM (PMMA available by special request)	60°	80%*	102%

### Glass Diffusers

Angle FWHM	Substrate & Thickness	Sizes	Options
50°	<b>UV Fused Silica</b>	25mm	Custom elliptical and circular angles as well as larger sizes can be made.
40°	U3 3mm	50mm	
30°		2" x 2"	
20°	<b>B270</b>		
15°	G6 - 3mm		
10°			
5°			
1°			
0.5°			

\*As measured by a BYK Haze-Gard (ASTM D 1003)

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