



Light Shaping Diffusers®

Edge-lit Uniformity Tape (EUT)

Edge-lit Uniformity Tape (EUT) is an LSD-based (Light Shaping Diffuser®) thin film that homogenizes and diffuses light generated by LEDs in edge lit lighting. The EUT film is applied directly to the side of the light guide facing the LED light source. The film includes an optically clear adhesive to adhere to the light guide. The opposite side of the film facing the LED light source is the LSD microstructure covered by a protective film which must be removed after installation. The EUT microstructure improves brightness uniformity as it homogenizes the light and spreads it more evenly in the plane of the light guide to reduce dark spots and hot spots.

Features

- Spreads and homogenizes light to increase brightness uniformity
- Reduces hot spots, head-lighting or other non-uniform characteristics
- Enables uniformity at increased LED spacing, potentially reducing LED costs
- Simple tape application to the side of the light guide facing the LED light source
- No alignment required

Benefits

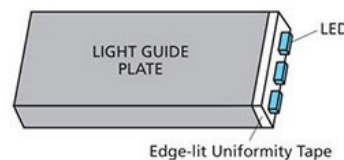
- Cost savings for manufacturers—fewer LEDs required for uniform coverage
- Easy application—adhesive backing
- Increases brightness uniformity and reduces non-uniform characteristics

Optical Characteristics

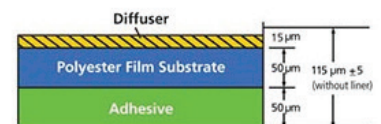
- Transmission: Greater than 88%
- Lighting Panel Uniformity: Greater than 80%
- Light Spread Angle : $\pm 70^\circ$ from the normal

Material:

- Substrate 2 mil (50 μ m) Polyester
- Adhesive 2 mil (50 μ m) Acrylic PSA



Edge-lit Uniformity Tape applied to the Light Guide plate.



Note: Cross section image not to scale. Values in this section are typical values, but not property limits.



Light Shaping Diffuser microstructures embedded on the EUT spread light to reduce hot spots and dark spots.

Edge-lit Uniformity Tape Specs

Angle FWHM

70° x 2°

Substrate Thickness

0.002"

EUT Roll Width

2.8mm/150 ft.

3.8mm/150 ft.

4.8mm/150 ft.

5.8mm/150 ft.

7.8mm/150 ft.

Note: Customers must cut tape to length required for their light guide.

All specifications contained herein are subject to change without notice.