

Direction Turning Film (DTF)

Lighting Applications

Luminit's Direction Turning Film (DTF) is a non-symmetrical linear micro-prismatic that imparts a 20° shift in the angle of a semi-collimated light source. The DTF works well with LED light sources that utilize secondary optics. Some applications include recessed can lights to allow for more wall washing, pathway/stair lighting to reduce glare and increase ground illumination, and pool lighting to increase illumination of the bottom. Direction Turning Films can be combined with Light Shaping Diffusers® to shape and homogenize the beam in addition to changing the direction. The beam can be shaped in a circular or elliptical pattern dependent on the diffuser angle chosen.

Applications and Benefits:

- Recessed can lights to allow for more wall washing
- Pathway/stair lighting to reduce glare and increase ground illumination
- Pool lighting to increase illumination of the bottom
- Cost-savings with no changes to the light fixture
- The redirected image is virtually distortion free
- Easy to incorporate

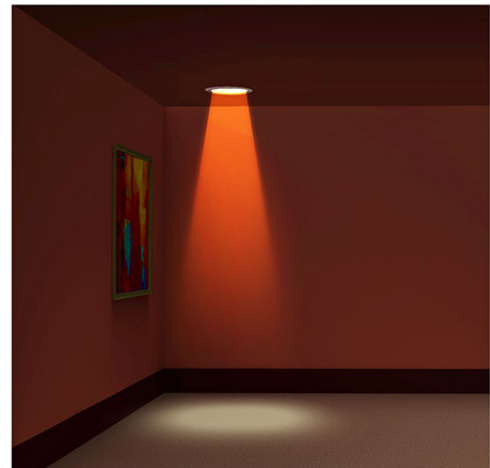


Figure 1 :
Fixed Recessed Down Light

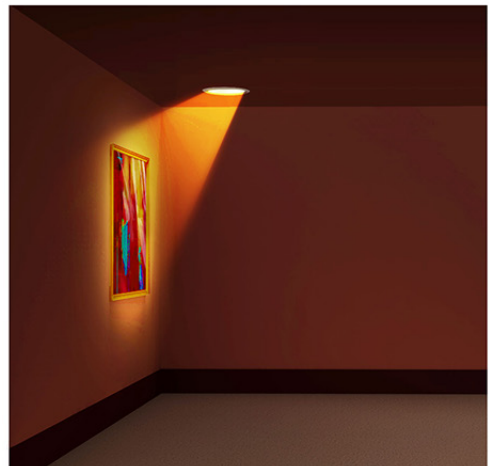


Figure 2 :
Lighting shown with Direction Turning Film

Luminit's Direction Turning Film(DTF) has a prismatic structure that changes the direction of a light source by 20 degrees.

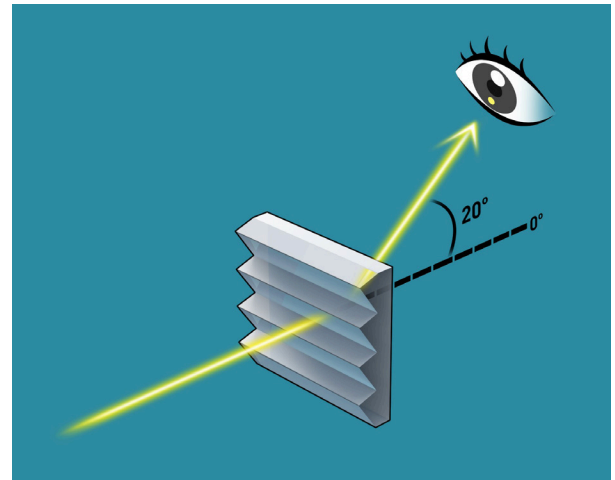
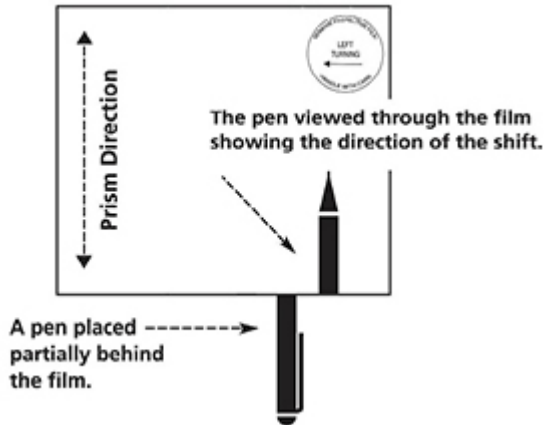


Figure 3 is a drawing showing the way the prismatic structure redirects light. Note: The sticker is on the prism side.

SPECIFICATIONS

Turning Angle:	20°
Substrate:	0.010 polycarbonate
Transmission Spectral Range:	400nm to 800nm
Temperature Range:	-30°C to 80°C @ 240 hrs.
Humidity:	95% ± 5% RH @ 24 hrs.
Pencil Hardness:	> 2H
Yellow Index:	<2% direct exposure (240 hours)
Solvent Resistances:	Methanol, Windex®

Note that the specifications contained herein are subject to change