OFF-AXIS TIR LENS FOR CONFORMAL VEHICULAR LUMINAIRES

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CONFORMAL LUMINAIRES

• Streamlined Surfaces Curved and Slanted
• Too Much Volume for On-Axis Luminaires
IMPROVING THE TIR LENS

- TIR Lens with Linear External Deflector Grooves
- Dirt & Drag Mean External Window Needed
- Limited Deflection Capability of Refraction Alone
ASYMMETRIC LINEAR LENS

- Right and Left Halves Different
- Inboard and Outboard Deflections
HIGH RIM ANGLES

- TIR Lenses usually only go to 90° from axis
- Take Rim Angle to 120°
INTERNAL-TILT PRINCIPLE

- Tilt Entire TIR Lens Profile
- Horizontal Flat-Top Increases the Deflection
- 10° and 20° Profiles; Up to 45° Possible
- Both Linear and Circular
OFF-AXIS CIRCULAR TIR

- Cutaway view from above of 120° Rim Angle
- 30° Axial Tilt and 45° Beam Deflection
OFF-AXIS CIRCULAR TIR

- Cutaway view from below of 120° Rim Angle
- Elliptical Outline, Decentered Source
LINEAR TIR LENS

- Designed for Fluorescent Lamps
LINEAR LENS FOR LEDs

• Transverse Lensing for Line of LEDs
DAYLIGHT RUNNING LAMP

- Cutaway View from Below
- Linear Lens for Amber LEDs
DAYLIGHT RUNNING LAMP

- Cutaway View from Above
- 40 ° Deflection
- Meets Prescription
- Tilted Mold Release