# Curved Injection Molded Microstructures

*CIM2*

Luminit Automotive Technoligies' CIM² is a revolutionary development in automotive lighting. These specialized microstructures can be custom designed in a variety of circular and elliptical angles for **excellent hiding power** in today's sophisticated LED automotive taillights and daytime running lights. The monolithic integration of Luminit's diffuser microstructures in a curved format allows for uniform angles on all surfaces and precisely shaped, controlled and homogenized light. CIM² Light Shaping Diffusers use AMECA-approved materials and meet the three-year weathering test of SAE J576 for plastics used in optical lenses and reflectors on motor vehicles. Zero order or a specular component will be less than 1% for visible wavelengths, but may be higher if our standard product is used with wavelengths >700nm. Luminit is able to design custom diffusers for wavelengths in the infra-red region. Please contact sales@luminitco.com for further details.

## SPECIFICATIONS

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|---|---|
| Beam Angles: (FWHM): | 80° and custom |
| Transmission Efficiency: | ≥ 85% |
| Material: | Evonik 8N PMMA or AMECA Makrolon PC |
| Size: | 18" x 14" |
| Minimum Radius of Curvature: | ~1mm |
| Corner Radius: | 2-5mm |
| Minimum Angle at Corner/Bend: | ~15° |
| Angle Tolerance: | < 1° ± 0.5° |
| Angle Tolerance (10"×10" area): | (>1° < 10°) ± 1°, >10° ± 10% |
| Transmission Spectral Range: | 400nm to 700nm |
| Temperature Range: | Based on material. Request material datasheet |
| Humidity: | > 95% ± 5% RH @ 24 hours |
| Lens: | Approved for use behind a Plexiglas V-052i 461 Med Red |
| Grade: | Scientific |

For more information, contact sales@luminitautotech.com
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