

# Elliptical Diffuser 10x20° 50mm

## TECHNICAL DATA SHEET

1.59mm Acrylic PMMA Microstructured Optical Sheet

### Properties

Property	Value
Materials	Rigid PMMA Sheet permanently laminated to PET (Polyethylene terephthalate) film with hard microstructured polymer coating
Thickness	RA06: 1.59 mm substrate +/- 0.16 mm
UV Stability	Typical result $\Delta a^* = -1.60$ $\Delta b^* = 6.8$ in accelerated UVA exposure, 2400KJ/m <sup>2</sup>
Temperature Range	-34 °C to 70 °C
Compliance	RoHS and REACH Compliant (certificate of compliance available upon request)
FWHM Diffusion	Across Width of Roll $20^\circ \pm 10\%$ , Along Length of Roll $10^\circ \pm 15\%$ (2)

Full Width Half Max (FWHM) measured using Bright View internal method: collimated white light, texture incident, into goniophotometer

### Ratings and Certifications

The sheet substrate material used in this product has the following properties as provided by the vendor. Yellow cards for these substrates are available. Bright View diffusers have not been tested or rated by UL. The material safety data sheets for substrate materials are available upon request.

- UL-94 rating of substrate material: HB
- ULRTI Elec: 90 Imp: 90 Str: 90
- Outdoor Weatherability: F1

### Quality

- If purchasing full sheets, the central area of 24 x 72 inches (610 x 1830 mm) is defined as the “quality area” for which the material will meet all specifications. Any material outside of the quality area should not be used.
- Inspected according to Bright View Inspection Method & Cosmetic Specifications, document BVT-FGS-001 Rev A

### Handling Techniques

- Care should be taken when moving these parts on any surface. The preferred method is to lift the material directly up and off the surface. To avoid scratching the lens structures or substrate do not slide the material across any surface.
- Cotton gloves are recommended while handling films to prevent oil stains or fingerprints.
- Care should be taken to prevent spatter or oil spots from machine lubrication.

Bright View goniometric angle test methods:

(1) 532nm laser collimated to 0.5 degrees FWHM

(2) input source is white light collimated to 3.4 degrees FWHM

(3) input source is white light collimated to 5.3 degrees FWHM

Bend Radius values are at room temperature operation. Bend radius should increase as temperature increases.

Data sheet specifications subject to change without notice.