

# 50° Diffusing Angle 50mm Dia., Fused Silica Holographic Diffuser



UV Fused Silica Holographic Diffusers

Stock **#48-522** **20+ In Stock**

-

1

+

£656<sup>00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1+         | £656.00 each                  |
| Need More?     | <a href="#">Request Quote</a> |

**i** Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Holographic Diffuser

Physical & Mechanical Properties

Clear Aperture CA (mm):

45.7 ±0.1

Diameter (mm):

50.00 ±0.1

Construction:

|                                             |                                     |
|---------------------------------------------|-------------------------------------|
| Mounted                                     |                                     |
| Optical Properties                          |                                     |
| ±5                                          | Angle Tolerance (°):                |
| 50 (FWHM)                                   | Diffusing Angle (°):                |
| <a href="#">Fused Silica</a> (Corning 7980) | Substrate: <input type="checkbox"/> |
| Typical: 90                                 | Transmission (%):                   |
| 400 - 700                                   | Wavelength Range (nm):              |
| Threading & Mounting                        |                                     |
| 5.00 +0.00/-0.35                            | Mount Thickness (mm):               |
| Environmental & Durability Factors          |                                     |
| -40 to +170                                 | Operating Temperature (°C):         |
| Regulatory Compliance                       |                                     |
| <a href="#">Compliant</a>                   | RoHS 2015:                          |
| <a href="#">View</a>                        | Certificate of Conformance:         |
| <a href="#">Compliant</a>                   | Reach 247:                          |

## Product Details

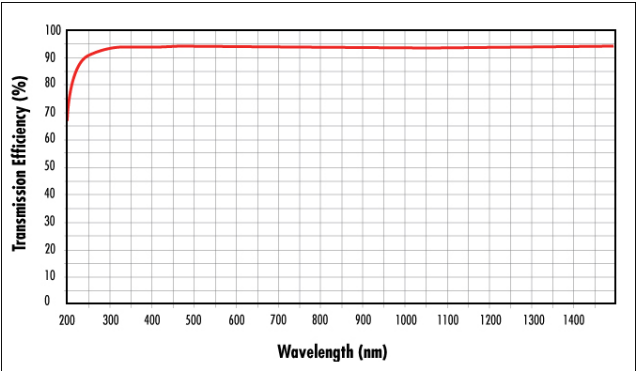
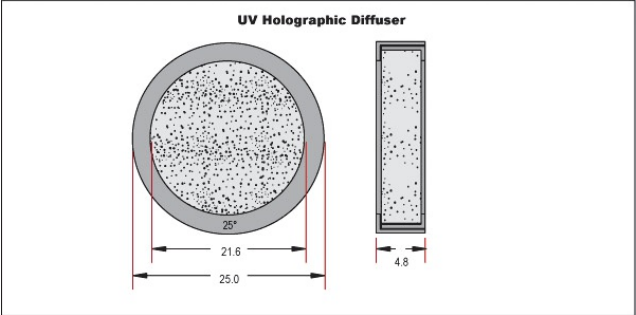
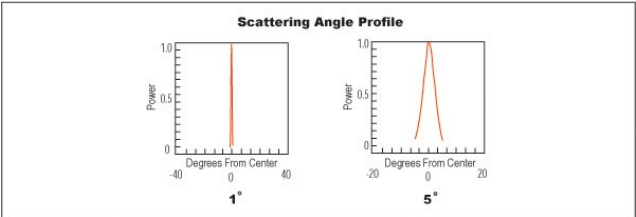
- Diffusing Angles Ranging from 0.5 - 50°
- Fused Silica Substrate Ideal for High Temperatures
- Homogenous Light Distribution
- [Standard Holographic Diffusers](#) Also Available

UV Fused Silica Holographic Diffusers are used to control the diffuse area of illumination and increase transmission efficiency to greater than 90% from filament lamps, LEDs, arc lamps, and other sources. These UV Fused Silica Holographic Diffusers use a fused silica substrate enabling their use at higher operating temperature than [polycarbonate holographic diffusers](#) and offer controlled, homogenous light distribution. It is important to note that diffusing angles are given for a collimated input beam and angular divergence will vary for different incidence angles.

Unlike many holographic elements, these specific fused silica components transmit light in the UV, visible, and near-infrared. Zero order, or a specular component, of transmitted light is less than 1% for visible wavelengths. Diffusers with wider diffusing angles (10 degree FWHM or wider) can also be used in an extended range of 200-1500nm, but those with lower diffusing angles are only recommended for use between 400-700nm.

**Note:** Matte surface should face the light source. To clean holographic diffusers, dampen a lint free cloth wipe with methanol and gently wipe the entire diffuser surface in a gentle, circular pattern. Immediately and carefully blow off the clean diffuser area with dry compressed air. Caution: cleaning may cause a change in the optical performance of the diffuser.

## Technical Information



Compatible Mounts

;