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## 40° Diffusing Angle 50mm Dia., Fused Silica Holographic Diffuser



UV Fused Silica Holographic Diffusers

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### General

Holographic Diffuser **Type:**

### Physical & Mechanical Properties

45.7 ±0.1 **Clear Aperture CA (mm):**

50.00 ±0.1 **Diameter (mm):**

Mounted **Construction:**

## Optical Properties

±4 **Angle Tolerance (°):**

40 (FWHM) **Diffusing Angle (°):**

**Fused Silica** (Corning 7980) **Substrate:**

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

**Compliant** **RoHS 2015:**

**View** **Certificate of Conformance:**

**Compliant** **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

