

# **Wide Angle Diffusers**

# 25° Glass Diffuser



#### **Features and Advantages**

High quality diffusers for spanning a defined angle from collimated light. A top hat or cos<sup>-2</sup> profile with steep slopes and high homogeneity can be created along one dimension in angular space. Combining two diffusers creates a homogeneous rectangular distribution. Especially designed for high laser input powers, using low absorption glass or fused silica for optimized LIDT.

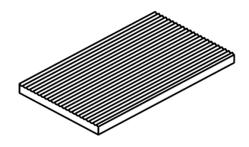
The new diffusers provide line or rectangular shape, steep slopes, high optical efficiency, wide angles, repeatability, no zero order, no hot spots, no degradation under UV.

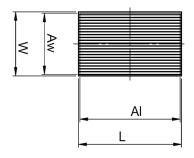
## **Product Specifications**

Product Code		ZLA003130
Specification Data	Unit	Value
Design Angle (FW/e²)	0	25
Angular Output Profile(1)		Top Hat
Material		Fused Silica
Length (L)	mm	5 ± 0.1
Width (W)	mm	5 ± 0.1
Thickness (T)	mm	$0.5 \pm 0.05$
Clear Aperture (Al x Aw)	mm²	4.5 x 4.5
Refractive Index		1.45
Design Wavelength	nm	1064
AR Coating <sup>(2)</sup>	nm	Uncoated
Transmission <sup>(3)</sup>	%	90(4)

<sup>(1)</sup> M<sup>2</sup> > 10 and minimum beam size > 2.5mm FW/e<sup>2</sup> advised to ensure steep slopes and high homogeneity

### **Product Drawing (mm)**





Rev 01 | Updated February 22, 2024 | RoHS compliant 2011/65/EU and 2015/863/EU

<sup>(2)</sup> Customization for coating design is available

 $<sup>^{(3)}</sup>$  Transmission > 99% is available at design wavelength  $\pm 10 nm$  and angle of incident 0-30°