

Wide Angle Diffusers

20° Glass Diffuser



Features and Advantages

High quality diffusers for spanning a defined angle from collimated light. A top hat or \cos^{-2} 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		ZLA003014 ⁽¹⁾
Specification Data	Unit	Value
Design Angle (FW/e ²)	°	20
Angular Output Profile ⁽²⁾		Top Hat
Material		S-TiH53
Length (L)	mm	4.5 ± 0.05
Width (W)	mm	7.75 ± 0.05
Thickness (T)	mm	0.5 ± 0.05
Clear Aperture (Al x Aw)	mm ²	4.3 x 7.55
Refractive Index		1.81
Design Wavelength	nm	1064
AR Coating ⁽³⁾	nm	1054 - 1074
Transmission ⁽⁴⁾	%	99

⁽¹⁾ Example for customization – design, dimensions and coating on request

⁽²⁾ M² > 10 and minimum beam size > 2.5mm FW/e² advised to ensure steep slopes and high homogeneity

⁽³⁾ Customization for coating design is available

⁽⁴⁾ Transmission at design wavelength and angle of incident 0-20°

Product Drawing (mm)

