

# Homogenizer

## Pitch 0.8



### Features and Advantages

Lens array with cross-oriented cylindrical lenses on both sides.  
Top hat profiles with high homogeneity can be generated in both dimensions. <sup>(1)</sup>

### Product Specifications

Specification Data	Unit	Value
Material		Fused Silica
Length (L)	mm	20.0 ± 0.1
Width (W)	mm	20.0 ± 0.1
Thickness (T)	mm	2.0 ± 0.1
Clear Aperture	mm <sup>2</sup>	18.0 x 18.0
Refractive Index n @ 248 nm / @ 532 nm / @ 1064nm		1.509 / 1.461 / 1.449
Pitch (P)	mm	0.8
Transmission (without coating)	%	> 90
Protective Chamfer	mm x 45°	NA
Surface Imperfections (DIN ISO 10110-7)		5/ 3×0,1; L1×0,25; E1

Product Code	ZLA000509 <sup>(2)</sup>	ZLA000243 <sup>(2)</sup>	ZLA000507	ZLA000486 <sup>(2)</sup>		
Specification Data	Unit	Value				
Radius	mm	4.35 ± 0.13	8.70 ± 0.26	11.1 ± 0.33	16.7 ± 0.50	
EFL	@ 248 nm	mm	8.55 ± 0.26	17.1 ± 0.51	21.8 ± 0.65	32.8 ± 0.98
	@ 532 nm	mm	9.44 ± 0.28	18.9 ± 0.57	24.1 ± 0.72	36.3 ± 1.09
	@ 1064nm	mm	9.67 ± 0.29	19.4 ± 0.58	24.7 ± 0.74	37.1 ± 1.11
Numerical Aperture [p / (2f)]	@ 248 nm		0.0468	0.0234	0.0183	0.0122
	@ 532 nm		0.0424	0.0212	0.0166	0.0110
	@ 1064nm		0.0414	0.0206	0.0162	0.0108

<sup>(1)</sup> Suitable for multi-mode laser sources M<sup>2</sup> > 20 (approx.)

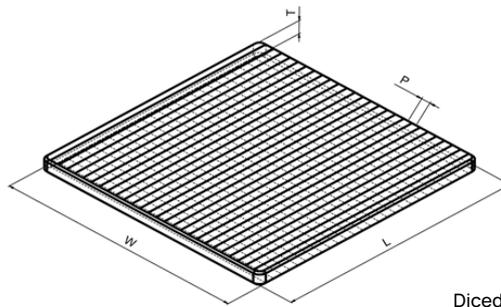
<sup>(2)</sup> Example for customization – design and dimensions on request.

## Product Specifications

Product Code		ZLA000488 <sup>(2)</sup>	ZLA000229 <sup>(2)</sup>	ZLA000230 <sup>(2)</sup>	ZLA000511 <sup>(2)</sup>	
Specification Data	Unit	Value				
Radius	mm	24.4 ± 0.73	48.0 ± 1.4	78.0 ± 2.3	105.0 ± 3.2	
EFL	@ 248 nm	mm	48.0 ± 1.4	94.4 ± 2.8	153.4 ± 4.6	206.5 ± 6.2
	@ 532 nm	mm	53.0 ± 1.6	104.2 ± 3.1	169.3 ± 5.1	227.9 ± 6.8
	@ 1064nm	mm	54.3 ± 1.6	106.8 ± 3.2	173.5 ± 5.2	233.5 ± 7.0
Numerical Aperture [p / (2f)]	@ 248 nm		0.0083	0.0042	0.0026	0.0019
	@ 532 nm		0.0075	0.0038	0.0024	0.0018
	@ 1064nm		0.0074	0.0037	0.0023	0.0017

<sup>(2)</sup> Example for customization – design and dimensions on request.

## Product Drawing (mm)



Diced asymmetrically – symmetric dicing on request