

# **Cylindrical Lens Array**

## Pitch 1.3



#### **Features and Advantages**

Lens array with cylindrical lenses on one side.

Top hat profiles with high homogeneity can be generated in one dimension. (1)

\* Product similar to image, see product drawing below.

#### **Product Specifications**

Specification Data	Unit	Value
Material		Fused Silica
Length (L)	mm	$35.0 \pm 0.1$
Width (W)	mm	$35.0 \pm 0.1$
Thickness (T)	mm	$2.0 \pm 0.1$
Clear Aperture	mm²	32.5 x 32.5
Refractive Index n @ 248 nm / @ 532 nm / @ 1064nm		1.509 / 1.461 / 1.449
Pitch (P)	mm	1.3
Transmission (without coating)	%	> 90
Protective Chamfer	mm x 45°	$0.3 \pm 0.2$
Surface Imperfections (DIN ISO 10110-7)		5/ 10×0.1: L3×0.25: F1

		ZLA001102 <sup>(2)</sup>	ZLA000796 <sup>(2)</sup>	ZLA000772	ZLA000791 <sup>(2)</sup>
	Unit	Value			
	mm	$2.99 \pm 0.09$	$4.40 \pm 0.13$	$6.50 \pm 0.20$	$8.40 \pm 0.25$
@ 248 nm	mm	$5.88 \pm 0.18$	$8.65 \pm 0.26$	$12.8 \pm 0.38$	$16.5 \pm 0.50$
@ 532 nm	mm	$6.49 \pm 0.19$	$9.55 \pm 0.29$	$14.1 \pm 0.42$	$18.2 \pm 0.55$
@ 1064nm	mm	$6.65 \pm 0.20$	$9.79 \pm 0.29$	$14.5 \pm 0.43$	$18.7 \pm 0.56$
@ 248 nm		0.1105	0.0751	0.0508	0.0394
@ 532 nm		0.1002	0.0681	0.0461	0.0357
@ 1064nm		0.0977	0.0664	0.0448	0.0348
	@ 532 nm @ 1064nm @ 248 nm @ 532 nm	mm @ 248 nm mm @ 532 nm mm @ 1064nm mm @ 248 nm @ 532 nm	Unit         Value           mm         2.99 ± 0.09           @ 248 nm         mm         5.88 ± 0.18           @ 532 nm         mm         6.49 ± 0.19           @ 1064nm         mm         6.65 ± 0.20           @ 248 nm         0.1105           @ 532 nm         0.1002	Unit         Value           mm         2.99 ± 0.09         4.40 ± 0.13           @ 248 nm         mm         5.88 ± 0.18         8.65 ± 0.26           @ 532 nm         mm         6.49 ± 0.19         9.55 ± 0.29           @ 1064nm         mm         6.65 ± 0.20         9.79 ± 0.29           @ 248 nm         0.1105         0.0751           @ 532 nm         0.1002         0.0681	Unit         Value           mm         2.99 ± 0.09         4.40 ± 0.13         6.50 ± 0.20           @ 248 nm         mm         5.88 ± 0.18         8.65 ± 0.26         12.8 ± 0.38           @ 532 nm         mm         6.49 ± 0.19         9.55 ± 0.29         14.1 ± 0.42           @ 1064nm         mm         6.65 ± 0.20         9.79 ± 0.29         14.5 ± 0.43           @ 248 nm         0.1105         0.0751         0.0508           @ 532 nm         0.1002         0.0681         0.0461

<sup>(1)</sup> Suitable for multi-mode laser sources M2 > 20 (approx.)

Tel: +49 231 22 24 1 - 0 (DE) +86 29 8956 0050 (CN) | Email: sales@focuslight.com | Website: https://www.focuslight.com

 $<sup>\</sup>ensuremath{^{(2)}}$  Example for customization — design and dimensions on request.



### **Product Specifications**

Product Code			ZLA001688 <sup>(2)</sup>	ZLA001689 <sup>(2)</sup>	ZLA000744 <sup>(2)</sup>	ZLA000742 <sup>(2)</sup>	ZLA001101 <sup>(2)</sup>
Specification Data		Unit	Value				
Radius		mm	$12.5 \pm 0.38$	$17.0 \pm 0.51$	$25.0 \pm 0.75$	$50.0 \pm 1.5$	-50.0 ± 1.5
EFL	@ 248 nm	mm	$24.6 \pm 0.74$	$33.4 \pm 1.0$	$49.2 \pm 1.5$	$98.3 \pm 2.9$	$-98.3 \pm 2.9$
	@ 532 nm	mm	$27.1 \pm 0.81$	36.9 ± 1.1	$54.3 \pm 1.6$	$108.5 \pm 3.3$	-108.5 ± 3.3
	@ 1064nm	mm	$27.8 \pm 0.83$	37.8 ± 1.1	$55.6 \pm 1.7$	111.2 ± 3.3	-111.2 ± 3.3
Numerical Aperture	@ 248 nm		0.0264	0.0195	0.0132	0.0066	0.0066
[p / (2f)]	@ 532 nm		0.0240	0.0176	0.0120	0.0060	0.0060
	@ 1064nm		0.0234	0.0172	0.0117	0.0059	0.0059

 $<sup>^{(2)}</sup>$  Example for customization — design and dimensions on request.

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

