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Preliminary Datasheet Plastic Diffractive Lens CDW042

These data concern a full plastic a-spherical diffractive lens. It is specified for use as a collimator in combination with a diode laser. It can be mounted by use of glue or spring-loaded. Mechanical lock-mounting is not advisable because of possible distortions.

Parameters		**Wavelength 670 nm**	**Unit**
Design conditions			
N.A.		0.25	--
Clear Aperture *CA*		2.1	mm
Designed with laser cover glass (*BK7*) on source side:			
Distance from source		0.55	mm
Glass thickness		0.25	mm
Optical parameters			
Focal Length		4.24	mm
Back Focal Length *BFL (with/without BK7 coverglass)*		3.57 / 3.49	mm
Free Working Distance *FWD*		3.08	mm
RMS mean	on axis	40	mλ
RMS max. (±3σ)	on axis	50	mλ
Optical Tolerance		0.1	mm
Field Radius		0.1	mm
Mechanical parameters			
Mounting hole diameter D_{mh}		∅ 6.40 (+ 0.03)	mm
Other parameters: see drawing			
Environmental stability			
Storage Temperature		-25 to 70	°C
Operating Temperature		5 to 65	°C

General Data:
Transmission [%]: 90
Lens Material: Acrylic

Specifications subject to change without notice.
Zemax cataloguefile available.

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