Preliminary Datasheet Plastic Diffractive Lens CDW042/52

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 3.08	mm
Free Working Distance *FWD*		mm
RMS mean @ 46 % of CA on axis Corrected for cover glass	40	mλ
RMS max. (±3σ) full CA on axis Corrected for cover glass	70	mλ
Optical Tolerance	0.1	mm
Field Radius	0.1	mm
Mechanical parameters		
Mounting hole diameter D_{mh}	∅ 5.20 (+ 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 catalogue file available.