



## DOE-RD10K850A-x

Diffractive Optical Element DOE 10000-Dot Random Pattern (59x46 deg at 850nm)



### Features

- Random dots pattern
- Number of dots: 10,000
- Substrate material: PET/PMMA
- DOE active area: 4x4 mm
- Design wavelength: 850nm
- Minimum recommended beam diameter (FWHM): 2mm

### DOE Specifications

Parameters	Value
Field of View (FOV)	59°x46° (HxV)
Aspect Ratio	4:3
Contrast <sup>1</sup> (calculated by gray level)	≥9
Uniformity <sup>2</sup> (calculated by gray level)	≥50%
Zero Order	≤0.3%
Substrate Material	PET, PMMA

#### Notes:

1. Contrast: In the defined area, the ratio of the 95<sup>th</sup> percentile of the grayscale value over the mode grayscale value of the background,  $C = I_{95\%} / I_{\text{median}}$
2. Uniformity: The ratio of the grayscale value of the area at a given location to the grayscale value of the area in the center of the pattern,  $U = I_{\text{each area}} / I_{\text{max of each area}}$

### Ordering Information

Part Number	Description
DOE-RD10K850A-PET5	Diffractive Optical Element DOE 10000-Dot Random Pattern (59°x46° at 850nm) – PET - Dia. 5mm x T. 0.188mm
DOE-RD10K850A-PMMA5	Diffractive Optical Element DOE 10000-Dot Random Pattern (59°x46° at 850nm) – PMMA - Dia. 5mm x T. 1mm

Note: Specifications are subject to change without notice.

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