



## DOE-RD30K830B-x

### Diffractive Optical Element DOE 30000-Dot Random Pattern (80x50.5 deg at 830nm)



#### Features

- Random dots pattern
- Number of dots: 30,000
- Substrate material: PET/PMMA
- DOE active area: 5x5 mm
- Design wavelength: 830nm
- Minimum recommended beam diameter (FWHM): 2mm

#### DOE Specifications

Parameters	Value
Field of View (FOV)	80°x50.5° (HxV)
Aspect Ratio	16:9
Contrast <sup>1</sup> (calculated by gray level)	≥4.5
Uniformity <sup>2</sup> (calculated by gray level)	≥35%
Zero Order	≤0.2%
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 median 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-RD30K830B-PET5	Diffractive Optical Element DOE 30000-Dot Random Pattern (80°x50.5° at 830nm) – PET - Dia. 5mm x T. 0.188mm
DOE-RD30K830B-PMMA5	Diffractive Optical Element DOE 30000-Dot Random Pattern (80°x50.5° at 830nm) – PMMA - Dia. 5mm x T. 1mm

Note: Specifications are subject to change without notice.

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