



DOE-RD30K830A-x

Diffraction Optical Element DOE 30000-Dot Random Pattern (70x55.4 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)	70°x55.4° (HxV)
Aspect Ratio	4:3
Contrast ¹ (calculated by gray level)	≥3
Uniformity ² (calculated by gray level)	≥45%
Zero Order	≤0.2%
Substrate Material	PET, PMMA

Notes:

1. Contrast: In the defined area, the ratio of the 95th 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-RD30K830A-PET5	Diffraction Optical Element DOE 30000-Dot Random Pattern (70°x55.4° at 830nm) – PET - Dia. 5mm x T. 0.188mm
DOE-RD30K830A-PMMA5	Diffraction Optical Element DOE 30000-Dot Random Pattern (70°x55.4° at 830nm) – PMMA - Dia. 5mm x T. 1mm

Note: Specifications are subject to change without notice.

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