



DOE-RD38K940-x

Diffraction Optical Element DOE 38000-Dot Random Pattern (68x48.5 deg at 940nm)



Features

- Random dots pattern
- Number of dots: 38,000
- Substrate material: PET/PMMA
- DOE active area: 5x5 mm
- Design wavelength: 940nm
- Minimum recommended beam diameter (FWHM): 2mm

DOE Specifications

| Parameters | Value |
|--|-----------------|
| Field of View (FOV) | 68°x48.5° (HxV) |
| Aspect Ratio | 4:3 |
| Contrast ¹ (calculated by gray level) | ≥5 |
| Uniformity ² (calculated by gray level) | ≥30% |
| 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-RD38K940-PET5 | Diffraction Optical Element DOE 38000-Dot Random Pattern (68°x48.5° at 940nm) – PET - Dia. 5mm x T. 0.188mm |
| DOE-RD38K940-PMMA5 | Diffraction Optical Element DOE 38000-Dot Random Pattern (68°x48.5° at 940nm) – PMMA - Dia. 5mm x T. 1mm |

Note: Specifications are subject to change without notice.

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