

>> DE-R 227 - Standard Diffractive Optical Element

Element Number: DE-R 227

Description: Solid Line - 40

Material: Polycarbonate (PC)

Size (Ø x Thickness): 8 x 1.2 mm

Optimum Wavelength: **650 nm**

(The element is usable with a range of wavelengths, but the following parameters will vary most with the wavelength: pattern size (see table 1) and intensity in the undiffracted central spot ('zero order', see table 2). At the optimum wavelength given on this datasheet, the element shows the same intensity in the central spot as in the off-axis spots.)

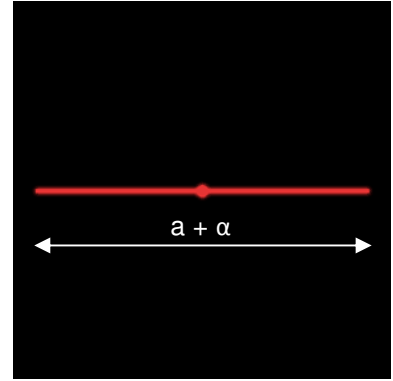
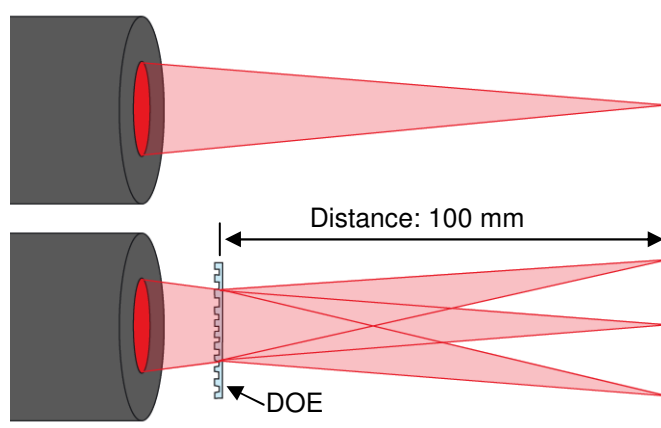


Table 1

Wavelength	Pattern Size @ 100 mm Distance	Pattern Angles
	a	α
488 nm	55 mm	31°
543 nm	62 mm	34°
594 nm	68 mm	38°
635 nm	73 mm	40°
650 nm	75 mm	41°
730 nm	86 mm	47°
780 nm	93 mm	50°
808 nm	97 mm	52°

Setup:



Diffraction Zero Order Intensity:

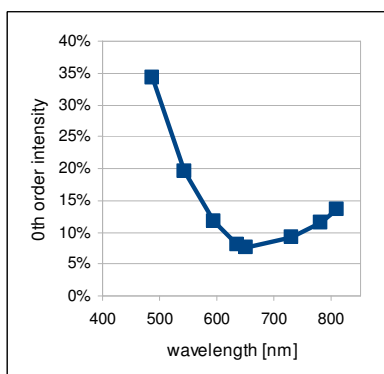


Table 2

Wavelength	0th Order Intensity
488	35%
543	20%
594	12%
635	8%
650	8%
730	10%
780	12%
808	14%