

>> DE-R 248 - Standard Diffractive Optical Element

Element Number: DE-R 248

Description: Cross - 37

Material: Polycarbonate (PC)

Size (\varnothing x Thickness): 8 x 1.2 mm

Optimum Wavelength: 543 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.)

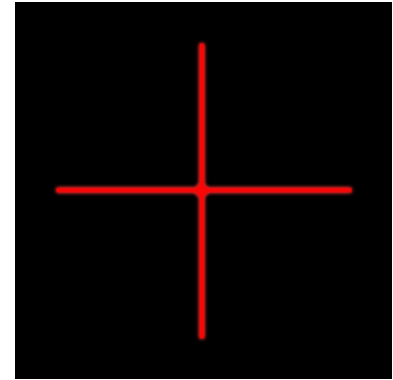
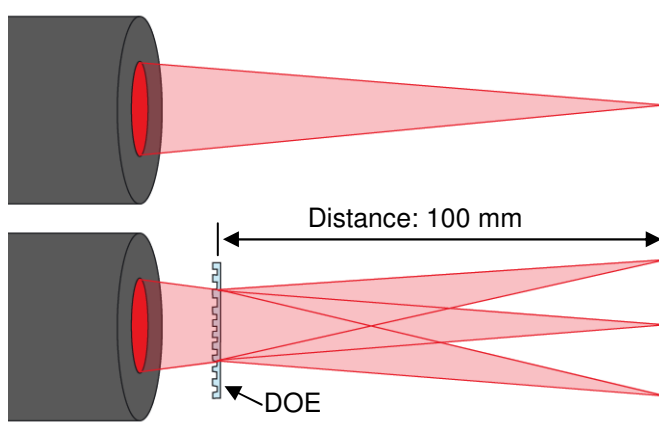


Table 1

Wavelength	Pattern Size @ 100 mm Distance	Pattern Angles
	a	α
488 nm	50 mm	28°
543 nm	55 mm	31°
594 nm	61 mm	34°
635 nm	66 mm	36°
650 nm	68 mm	37°
730 nm	77 mm	42°
780 nm	83 mm	45°
808 nm	87 mm	47°

Setup:



Diffraction Zero Order Intensity:

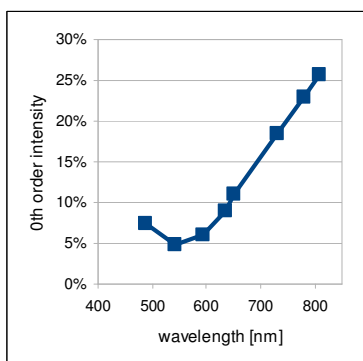


Table 2

Wavelength	0th Order Intensity
808	26%
780	23%
730	19%
650	11%
635	9%
594	7%
543	5%
488	8%