

>> DE-R 280 - Standard Diffractive Optical Element

Element Number: DE-R 280

Description: Cross - 60

Material: Polymethyl Methacrylate (PMMA)

Size (\varnothing x Thickness): 8 x 1 mm

Optimum Wavelength: 635 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.)

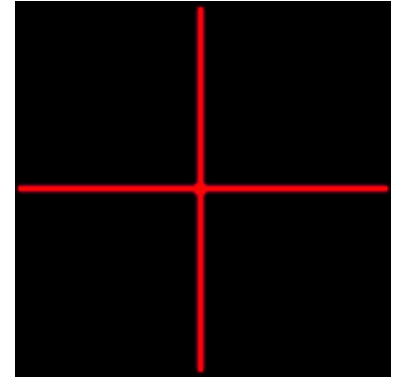
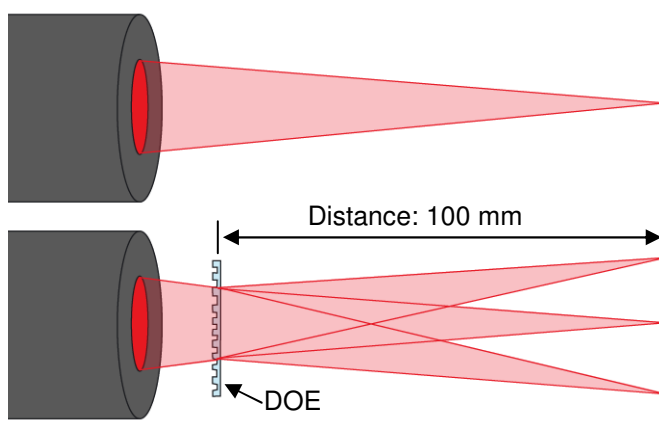


Table 1

Wavelength	Pattern Size @ 100 mm Distance	Pattern Angles
	a	α
488 nm	83 mm	45°
543 nm	95 mm	51°
594 nm	106 mm	56°
635 nm	116 mm	60°
650 nm	119 mm	62°
730 nm	141 mm	70°
780 nm	156 mm	76°
808 nm	165 mm	79°

Setup:



Diffraction Zero Order Intensity:

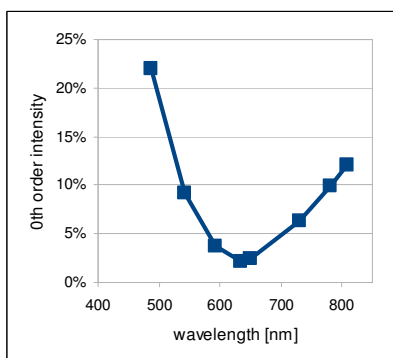


Table 2

Wavelength	0th Order Intensity
488	22%
543	9.1%
594	3.8%
635	2.2%
650	2.5%
730	6.3%
780	9.9%
808	12.0%