

>> DE-R 283 - Standard Diffractive Optical Element

Element Number: DE-R 283

Description: Solid Line - 20

Material: Polymethyl Methacrylate (PMMA)

Size (Ø 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.)

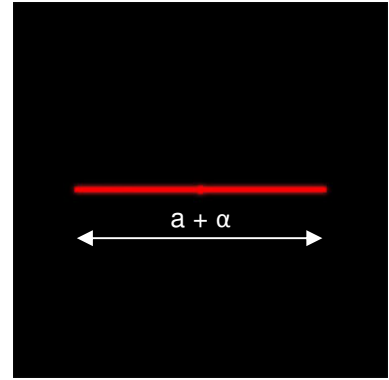
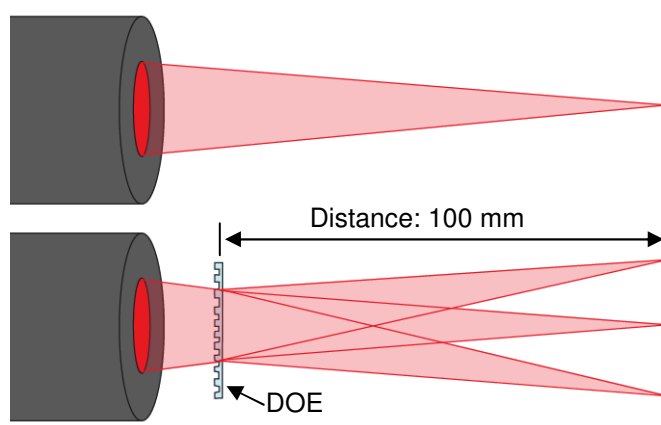


Table 1

Wavelength	Pattern Size @ 100 mm Distance	Pattern Angles
	a	α
488 nm	27 mm	15.4°
543 nm	30 mm	17.1°
594 nm	33 mm	18.7°
635 nm	35 mm	20°
650 nm	36 mm	20.5°
730 nm	41 mm	23°
780 nm	44 mm	25°
808 nm	45 mm	26°

Setup:



Diffraction Zero Order Intensity:

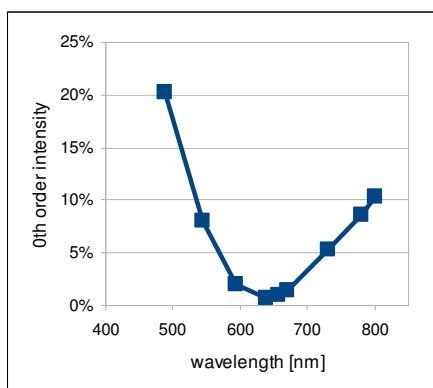


Table 2

Wavelength	0th Order Intensity
488	20%
543	8%
594	2%
635	0.8%
650	0.9%
730	1.4%
780	6%
808	9%