

>> DE-R 265 - Standard Diffractive Optical Element

Element Number: DE-R 265

Description: 1 : 19 Dot Line

Number of Dots: 19 Dots

Material: Polycarbonate (PC)

Size (\varnothing 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.)

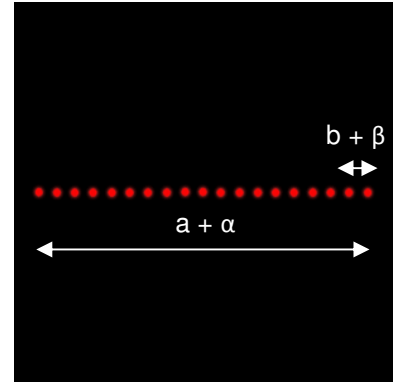
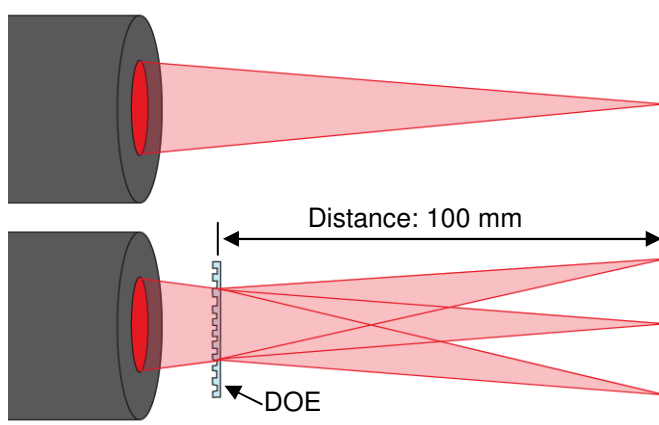


Table 1

Wavelength	Pattern Size @ 100 mm Distance		Pattern Angles	
	a	b	α	β
488 nm	18 mm	1.00 mm	10.3°	0.57°
543 nm	20 mm	1.12 mm	11.5°	0.64°
594 nm	22 mm	1.22 mm	12.6°	0.70°
635 nm	24 mm	1.31 mm	13.4°	0.75°
650 nm	24 mm	1.34 mm	13.7°	0.76°
730 nm	27 mm	1.51 mm	15.4°	0.86°
780 nm	29 mm	1.61 mm	16.5°	0.92°
808 nm	30 mm	1.67 mm	17.1°	0.95°

Setup:



Diffraction Zero Order Intensity:

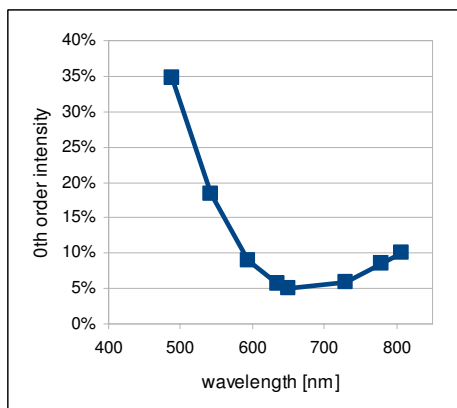


Table 2

Wavelength	0th Order Intensity
488	35%
543	19%
594	10%
635	6%
650	5%
730	6%
780	9%
808	10%