

# >> DE-R 260 - Standard Diffractive Optical Element

**Element Number: DE-R 260**

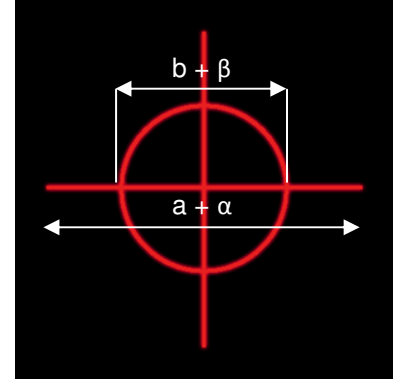
Description: Viewfinder (Circle & Cross)

Material: Polycarbonate (PC)

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

Optimum Wavelength: **635 nm**

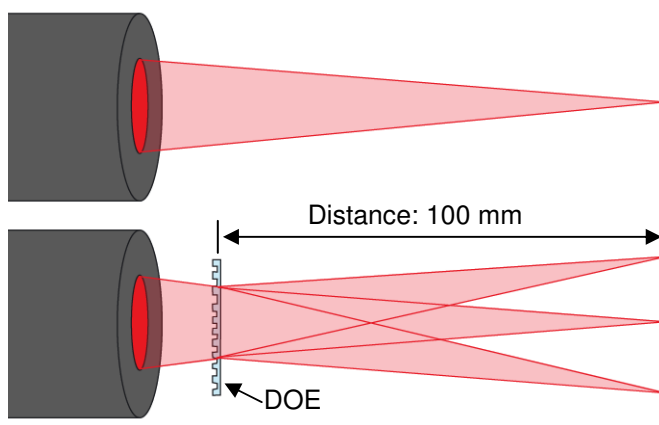
(The element is usable with a range of wavelengths, but the following parameters will vary most with the wavelength: pattern size (see table 1) and intensity in the undiffracted central spot ('zero order', see table 2). At the optimum wavelength given on this datasheet, the element shows the same intensity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



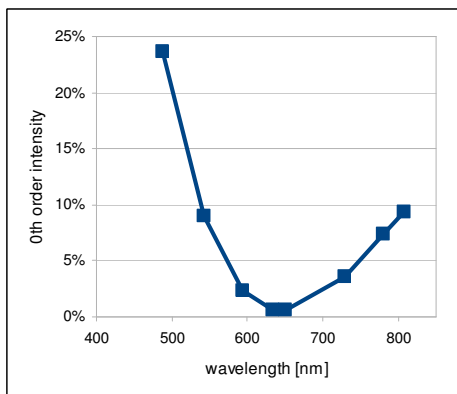
**Table 1**

Wavelength	Pattern Size @ 100 mm Distance		Pattern Angles	
	a	b	$\alpha$	$\beta$
488 nm	28 mm	14.0 mm	15.9°	8.0°
543 nm	31 mm	15.6 mm	17.7°	8.9°
594 nm	34 mm	17.1 mm	19.4°	9.8°
<b>635 nm</b>	<b>37 mm</b>	<b>18.3 mm</b>	<b>21°</b>	<b>10.5°</b>
650 nm	38 mm	18.7 mm	21°	10.7°
730 nm	42 mm	21 mm	24°	12°
780 nm	46 mm	23 mm	26°	12.9°
808 nm	47 mm	23 mm	27°	13.3°

## Setup:



## Diffraction Zero Order Intensity:



**Table 2**

Wavelength	0th Order Intensity
488	24%
543	10%
594	2.4%
<b>635</b>	<b>0.6%</b>
650	0.6%
730	3.6%
780	8%
808	10%