

### Application

DVD optical pickups  
 3D mapping  
 Bio-Detection  
 Optical metrology  
 Charged couple devices (CCD)  
 LCD backlight systems  
 Virtual keyboard



### Introduction

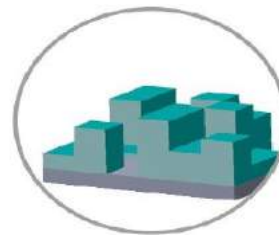
Diffractive Optical Elements (DOE) are optical microstructure elements that use interference properties of their micro etched surfaces to diffract a light source into a wide variety of patterns.

Compared to the conventional optical lenses, the DOEs have reduced dimensions and lighter weight but also show greater beam shape control and brightness stability.

In addition to a great choice of various patterns, Egismos can also design DOE for custom-made profiles.

### Feature

Wide pattern angle  
 High angle resolution  
 Various projection patterns  
 Compact size and lightweight



*Diffractive Optical Element  
(Viewed with microscope)*

### Specifications[typical @tc=25°C ]

Pattern: Cross	Product name	Material	Working Wavelength	Size	Angle a	0 <sup>th</sup> order intensity
	O-DE-R-43-C-1-P	PMMA	650nm	φ 8 X 1.2 mm	5°	< 3%
	O-DE-R-43-C-2-P	PMMA	635nm	φ 8 X 1.2 mm	10°	< 3%
	O-DE-R-43-C-3-P	PMMA	635nm	φ 8 X 1.2 mm	15°	< 3%