**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

### Specifications [typical @tc=25°C ]

<table>
<thead>
<tr>
<th>Pattern: Target</th>
<th>Product name</th>
<th>Material</th>
<th>Working Wavelength</th>
<th>Size</th>
<th>Angle a</th>
<th>Angle b</th>
<th>0th order intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diffractive Optical Element](Viewed with microscope)</td>
<td>O-DE-R-43-T-1-P</td>
<td>PMMA</td>
<td>635nm</td>
<td>φ 8 X 1.2 mm</td>
<td>21°</td>
<td>10.4°</td>
<td>&lt; 3%</td>
</tr>
</tbody>
</table>