



# Diffractive Optical Elements (DOE) for laser beam shaping

DOEs are used to shape an incident laser beam and implement a desired function like homogenizing, collimating, patterning, points focusing,...SILIOS provides customized DOEs for various lasers such as Nd:Yag, CO2, Femtosecond or Laser Diode. Depending on the requirements of the application, DOEs work either as hologram or as Fresnel zone plate optics.

## Specifications\*

Substrate

Diameter: up to 100 mm

Thickness: from 0.5 mm to 9.5 mm Material: fused silica, BK7, ...

Coating: AR coating (for plate) or Rmax coating (for mirror)

**Encoded Phase Map** 

Data: Phase Map data provided by customer.

Pixel size: down to 1 x 1 microns<sup>2</sup>

Encoded Phase Profile: etched multilevel profile (Up to 256 levels)

Wavefront PTV: 0 to  $2\pi$ 

### **Examples of beam shaping**

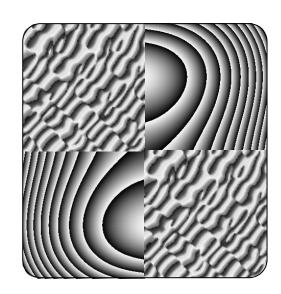
Circular or square top-hat profile, matrix, grid, line, circle patterning, ...

#### **Fields**

Laser machining, medical, imaging systems, sensors

#### Category

Phase component



**Address**: Z.I Peynier-Rousset Rue Gaston Imbert prolongée 13790 Peynier (France)

Tel: +33 (0) 442-53-89-60 Fax: +33 (0) 442-53-89-59 E-mail: contact@silios.fr Site web: www.silios.com

上海早量光电设备有限公司 Phone: 4006-888-532 WeChat: Auniontech Website: www.auniontech.com E-mail: info@auniontech.com

<sup>\*</sup> Please contact us for other specifications

