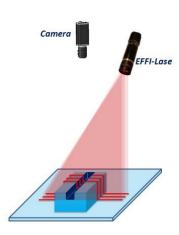


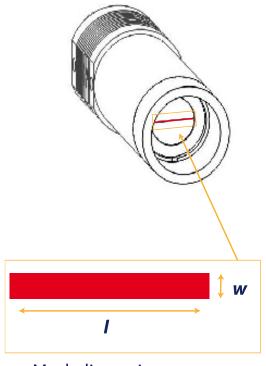
# How to design custom pattern?



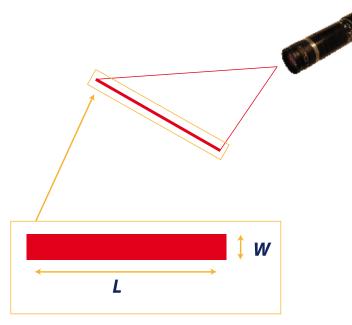


## EFFI-Lase pattern

#### How to calculate the projected pattern size (Exemple: Line)



Mask dimensions accuracy < 1,5 μm



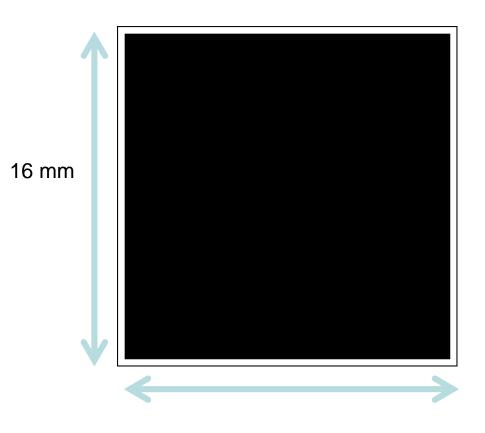
Pattern dimensions ACCURACY < 1,5 
$$\mu$$
m $\times \frac{L}{I}$ 

$$W = w \times \frac{L}{I}$$



**EFFI-Lase** 

### Mask own customer's design



#### Size:

16 \* 16 mm<sup>2</sup> = Available surface for designing pattern

#### **Resolution:**

3200 \* 3200 Px 1 Px = 5µm

#### Format:

To be sent to EFFILUX with purchase order in .bmp format using ZIP file.

EFFILUX can design masks for customers.

Clear specifications of the mask have to be sent to EFFILUX. (Working distance, projected pattern, size of projected elements)



### Mask own customer's design advices

### Mask design using a C-mount lens for 2/3" sensor.

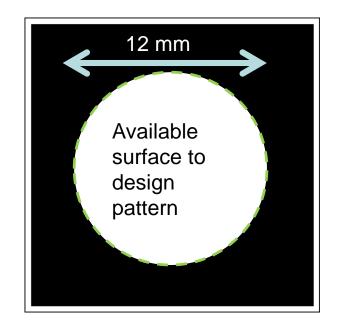
Using a C-Mount 2/3" lens, EFFILUX advices to design a mask on a 12mm diameter circular surface.

### WHY?

- To avoid distortions on extremity of the projected pattern
- Because Main part of the light emitted outside this area would not be projected anyway.

### Using a 2/3" C-mount lens:

- Advantage : PRICE of the lens
- Drawbacks : Less light is emitted





### Mask own customer's design advices

### Mask design using a C-mount lens for 1" sensor.

Using a C-Mount 1" lens, EFFILUX advices to design a mask on a 15mm diameter circular surface.

### WHY?

 To avoid distortions on extremity of the projected pattern

### Using a 1" C-mount lens:

- Advantage : More light is emitted compared to a 2/3" lens
- Drawbacks : Lens is more expansive



