

## R135x55-70-GxSy-001 Preliminary Datasheet

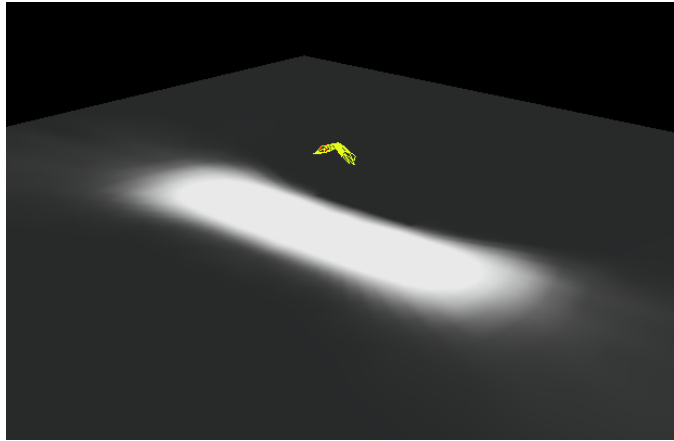
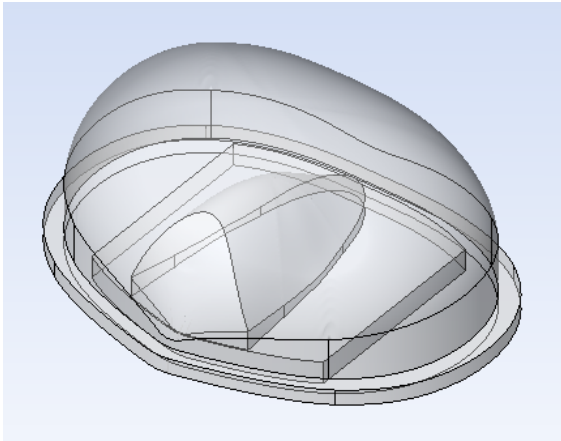
R135x55-70-GxSy-001 - part of Upstream FreeForm optics - provides high efficiency, rapidly opening beam in x dimension and concentrated beam in y dimension, designed particularly for street illumination.

### *Applications*

- Street lights
- Corridor lights
- Specialty illumination

### *Compatible LED sources*

- Luxeon Rebel
- Cree XPE, Cree XPG, Osram Oslon



### **Upstream FreeForm optics**

Upstream FreeForm optics are based on an advanced proprietary design algorithms that are allowing unbeatable efficiency and light distribution characteristics for LED lighting applications. It is especially good choice when a wide area needs to be illuminated uniformly. The FreeForm technology provides uniform solid beam with smaller optics size.

Upstream FreeForm optics can create the desired light beam for your application - whether you prefer rectangular or circular beam shape with wide or narrow angle. With the optimized application specific light distribution, all the light from the LED chip is used to illuminate the object without wasting light and energy for undesired places. This provides very significant - up to 80% - energy saving compared to normal LED lamps.

#### **Contact Information**

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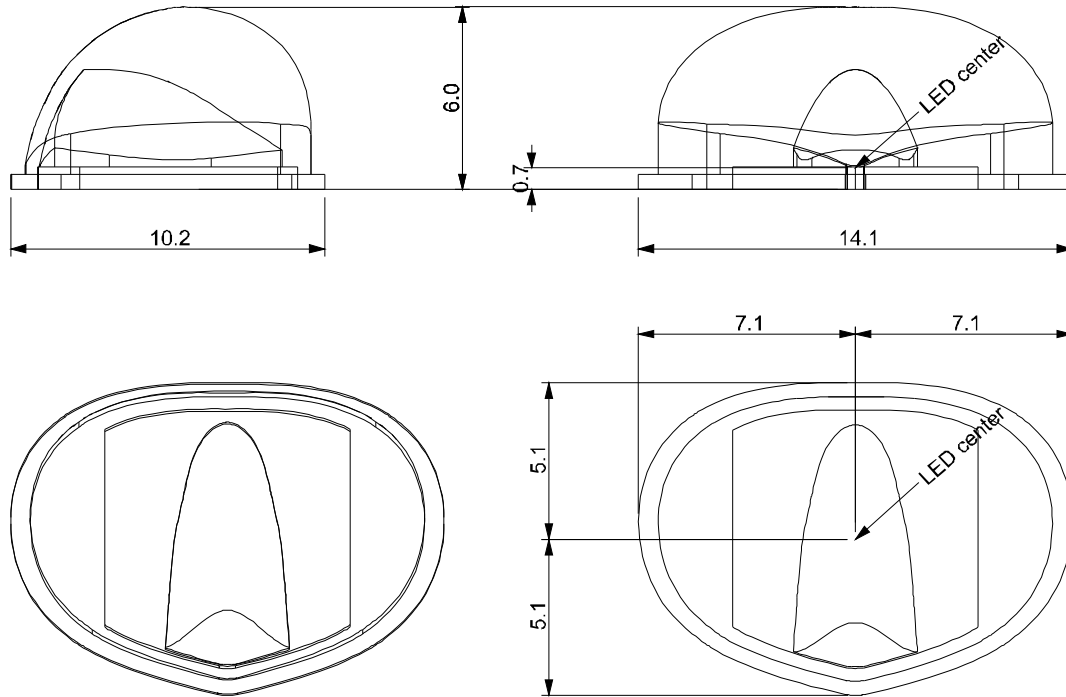
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**Mechanical**

Lens dimensions: 14.1 x 10.2 x 6.0 (millimeters)

Lens material: PMMA



**Photometrics**

Beam angular output: 135 x 55 deg full opening angle, 70% offset in y dimension  
 Illumination at a plane: 5:1 rectangle, smoothed in x, sharper in y

Beam size (FWHM):

Distance	x-width	y-width
1 m	5.0 m	1.2 m
4 m	20.0 m	4.8 m
8 m	40.0 m	9.5 m

Eulumdat file available on request.

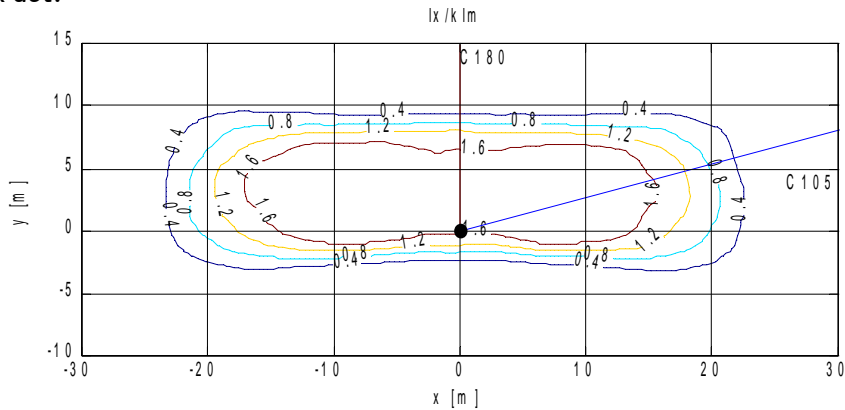
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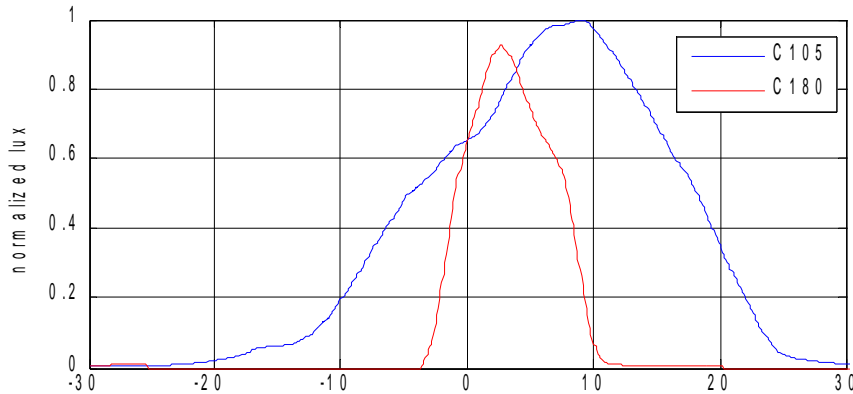
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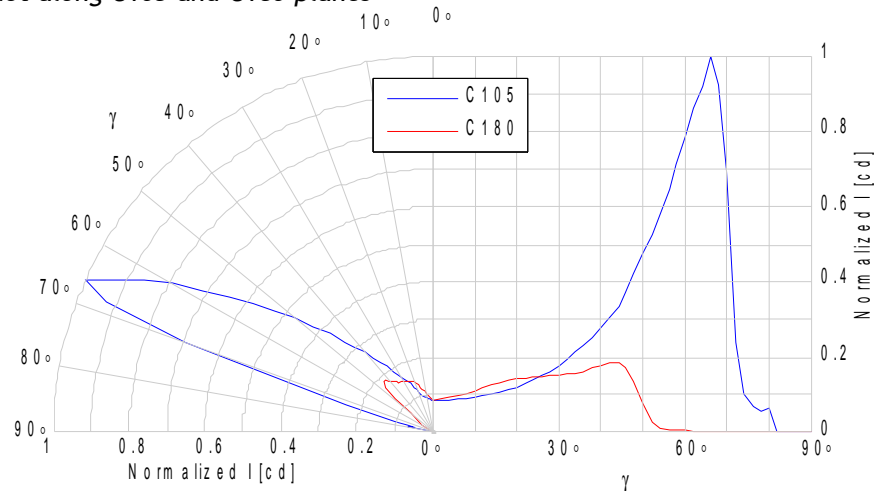
Beam beam cross section at  $z = 8$  m distance. Lens and led rotated 5 deg around x. Lens xy-position is shown by a black dot.



Beam profiles along C285-C105 and C0-C180 planes.



Relative candela plot along C105 and C180 planes



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