R110x100-60-S-001
Preliminary Datasheet

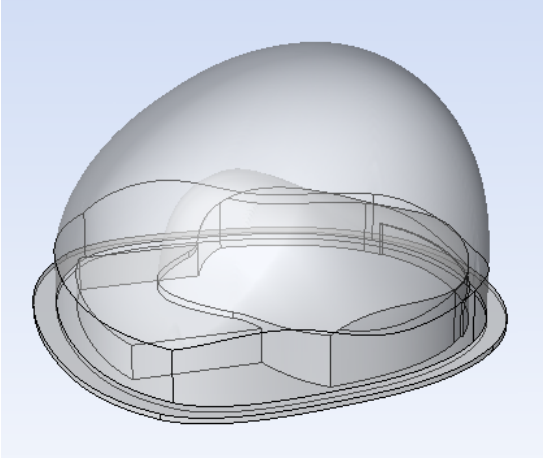
R110x100-60-S-001 – part of Upstream FreeForm optics - provides high efficiency, rapidly opening rectangular beam.

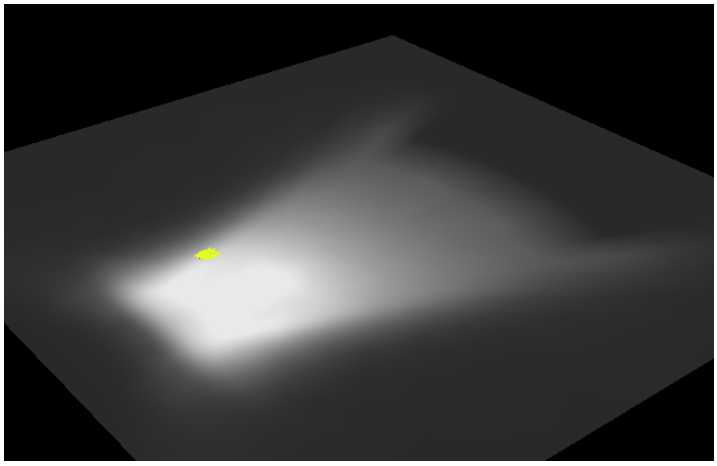
Applications

- Corridor lights
- Object illumination
- 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.

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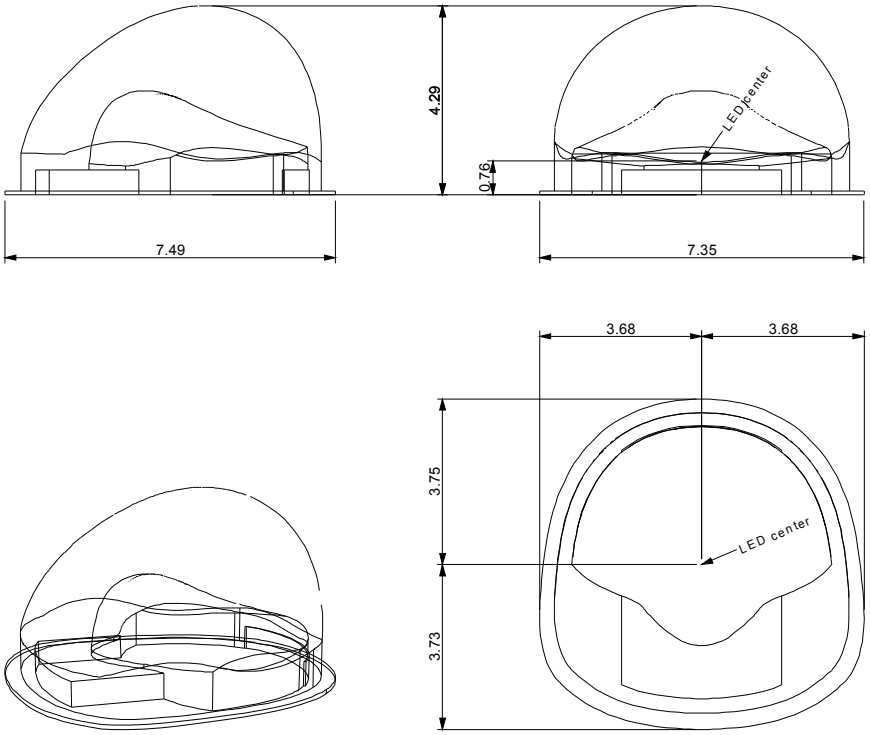
Mechanical

Lens dimensions: 7.4 x 7.5 x 4.3 (millimeters)
Lens material: PMMA



Photometrics

Beam angular output: 110 x 100 deg full opening angle, 60% offset in y dimension
Illumination at a plane: 1:2 rectangle, three sharp edges, one smoothed edge

Beam size (FWHM):

Distance	x-width	y-width
1 m	2.9 m	3.2 m
4 m	11.4 m	12.7 m
8 m	22.8 m	25.3 m

Eulumdat file available on request.

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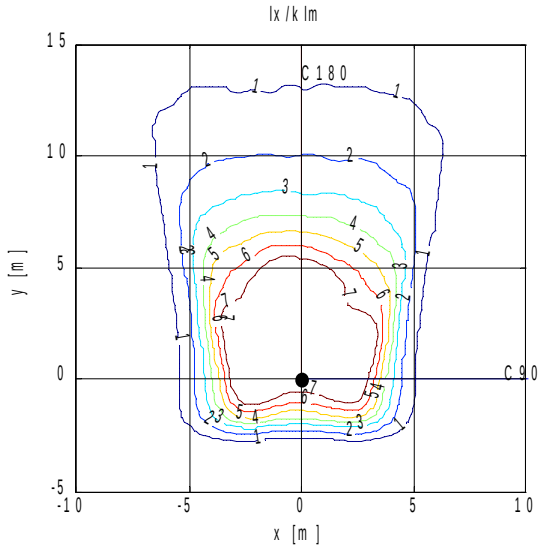
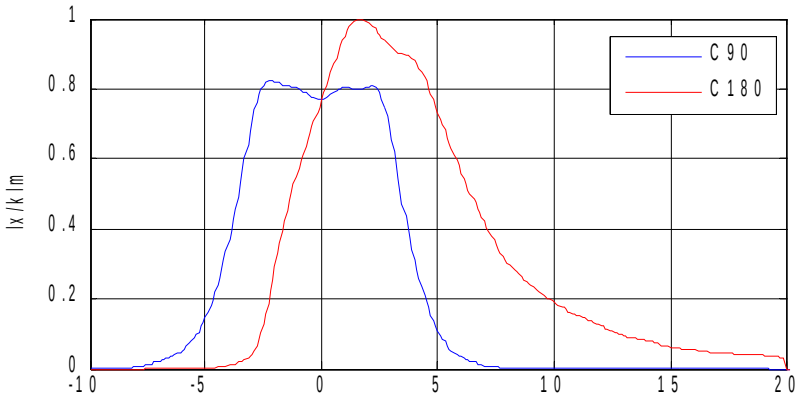
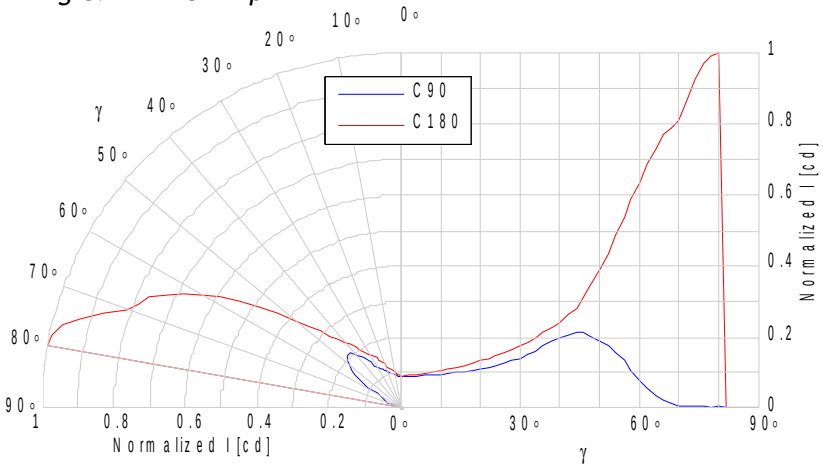
Beam beam cross section at z = 8 m distance. Lens and led rotated 48 deg around x. Lens xy-position is shown by a black dot.



Beam profiles along C270-C90 and C0-C180 planes.



Relative candela plot along C90 and C180 planes



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