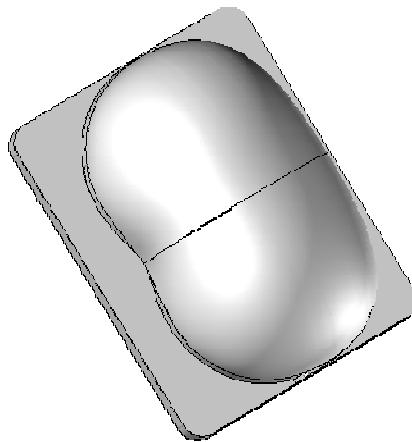




## Street Lighting Lens

LLP01A1AA

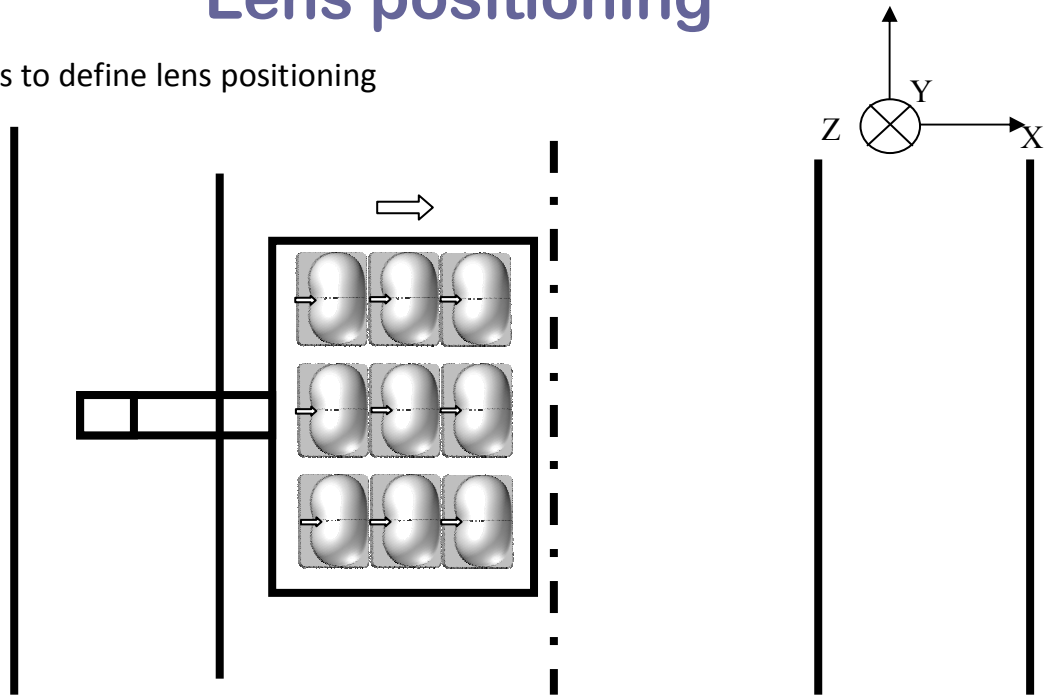


## Lens Performances

- High Efficiency : Light output ratio = 89 %
- Design to comply with european standard (EN13201)
- No light above 90°
- Luminous Intensity Class G.3
- Low Glare : Glare index class D.6
- Sharp Cut-off
- Versatile : can be used with LED chips from 1mm<sup>2</sup> up to 4mm<sup>2</sup>

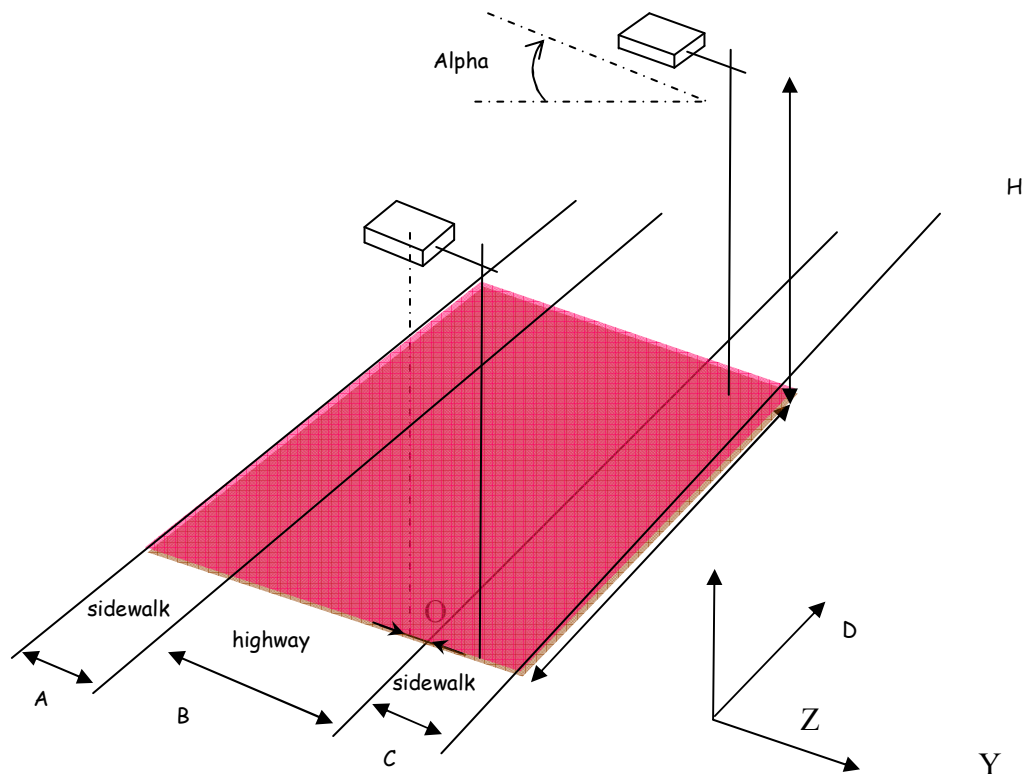
## Lens positioning

Use arrows to define lens positioning



## Road lighting Configuration

The lens is designed for European standard NF EN 13201.  
We consider the set up like this chart:



**Exemple Configuration Alpha** road surface R3 in accordance to ME3a road lighting class:

H	D	Alpha	O	A	B	C
<i>Height</i>	<i>Spacing</i>	<i>Tilt</i>	<i>Overhang</i>	<i>Sidewalk</i>	<i>Highway</i>	<i>Sidewalk</i>
<b>7 m</b>	<b>28 m</b>	<b>15 °</b>	<b>0 m</b>	<b>2 m</b>	<b>7 m</b>	<b>2 m</b>
23 ft	92 ft	15 °	0 ft	6.6 ft	23 ft	6.6 ft

## Definitions

**L : average road surface luminance of a carriageway**

Luminance of the road surface averaged over the carriageway

**U0 : longitudinal uniformity of a driving lane**

Ratio of lowest to the highest road surface luminance found in a line in the center along a driving lane

**UI : longitudinal uniformity of a carriageway**

Lowest of the longitudinal uniformities of the driving lanes of the carriageway

**TI : Treshold increment**

Measure of the loss of visibility caused by the disability of the luminaires of a road lighting installation

**SR : Surround ratio**

Average illuminance on strip just outside the edges of the carriageway in proportion to the average illuminance on strips just inside the edges.

## Luminance results

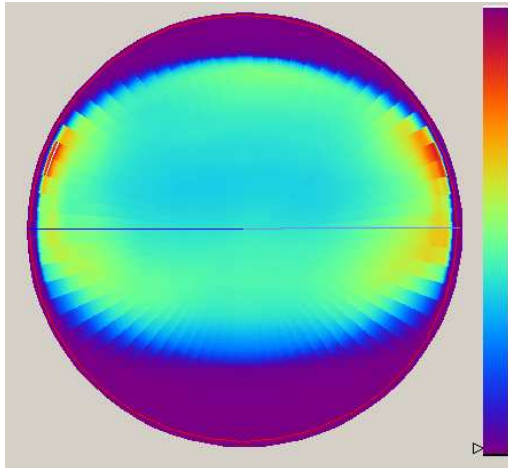
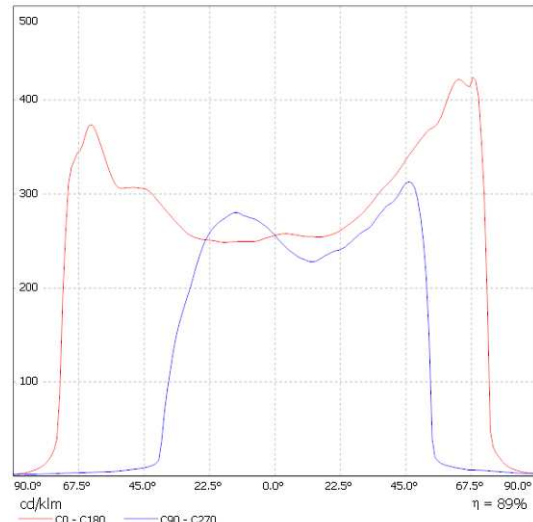
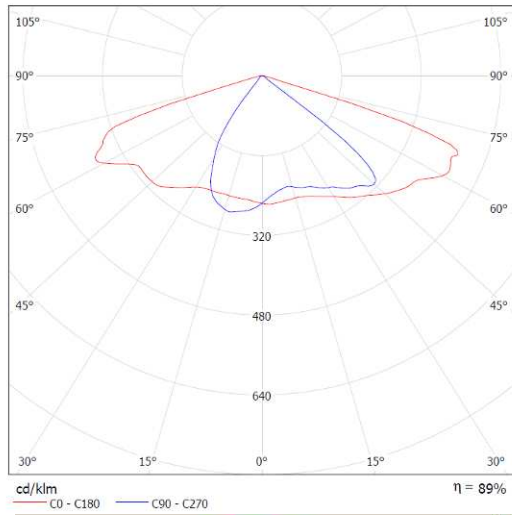
For configuration alpha:

	Sidewalk A	Highway B	Sidewalk C
L		<b>1.0 Cd/m<sup>2</sup></b>	
U0		<b>0.5</b>	
UI		<b>0.7</b>	
TI		<b>13%</b>	
SR		<b>0.7</b>	
Emoy	<b>10 Lux</b>		<b>21 Lux</b>
U0	<b>0.7</b>		<b>0.4</b>
Available for:	<i>Highway:</i> <b>ME3a / ME3b / ME3c / ME4a / ME4b / ME5 / ME6</b> <i>Sidewalks:</i> <b>CE2/CE3/CE4/CE5</b> 4 mm <sup>2</sup> LED 10 000 lm + LLP01A1AA		

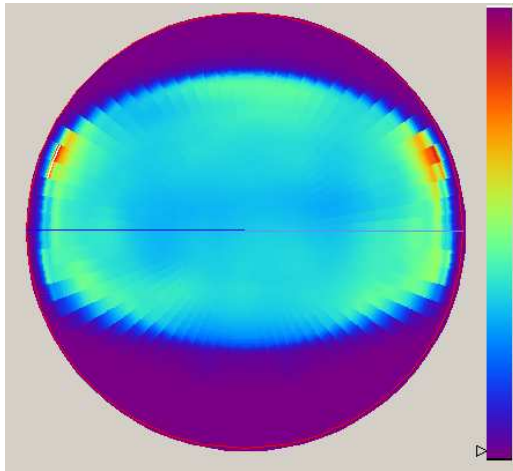
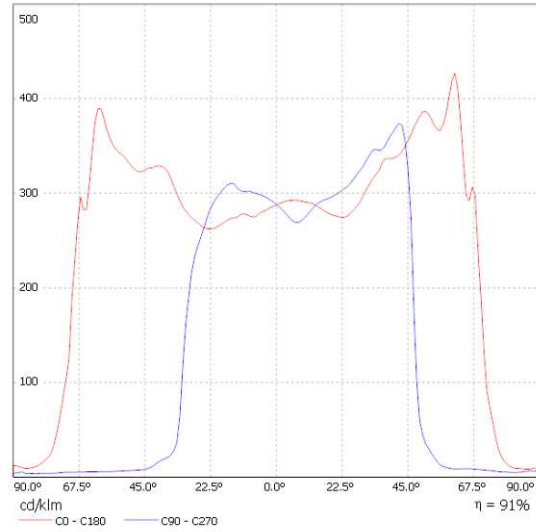
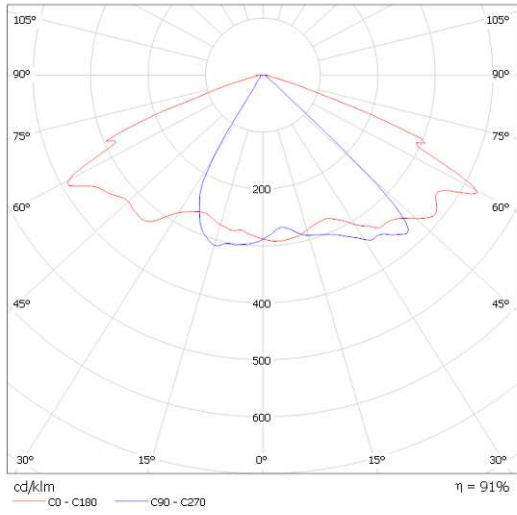
# Optical characteristics and intensity distribution

Measurement done with Ledgon 100 goniophotometer

## 4mm<sup>2</sup> Chip size LED



**2mm<sup>2</sup> Chip size LED**

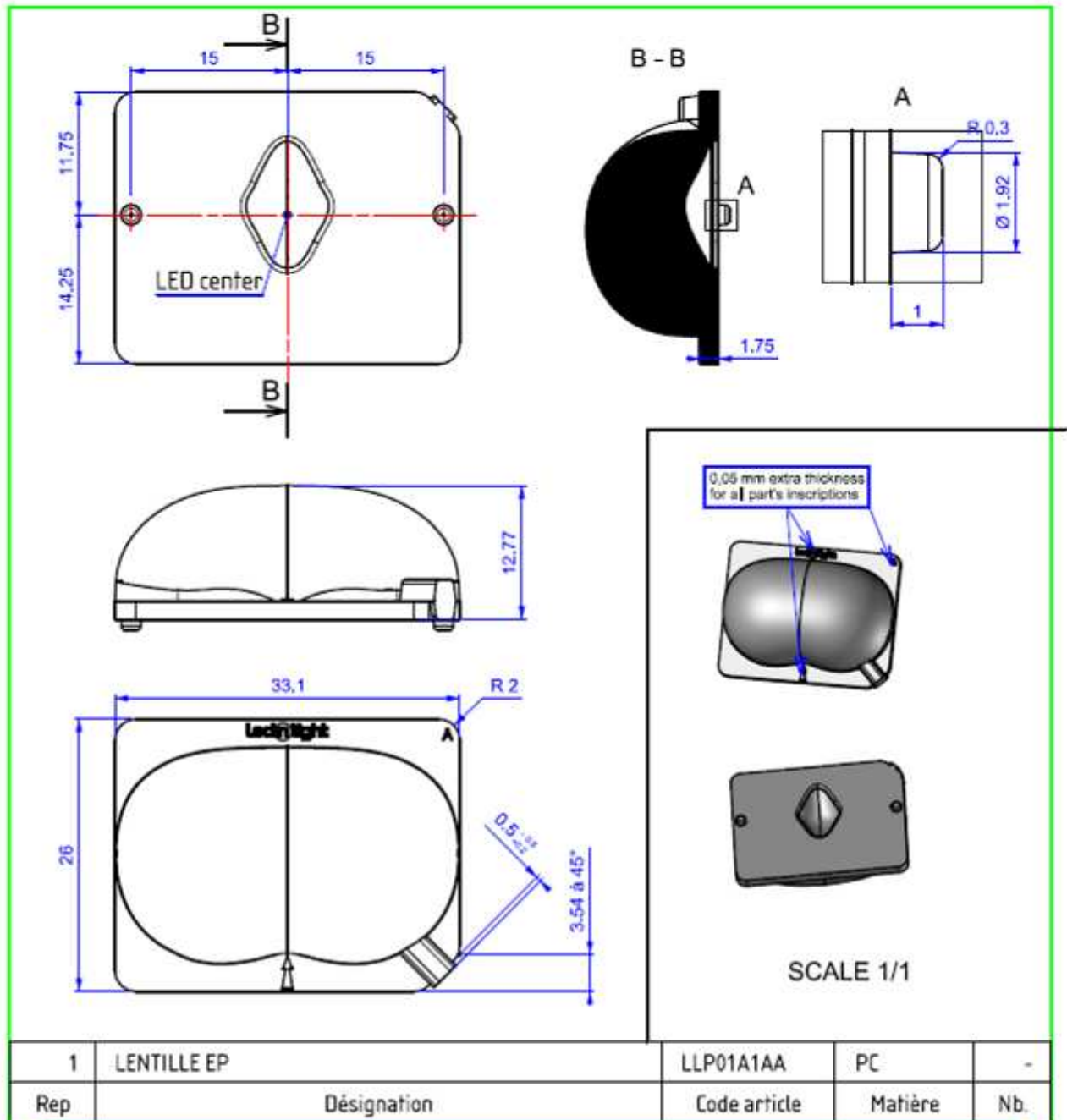


# Mechanical characteristics LLP01A1AA

Dimensionssare in millimeter

General tolerance +/-0.15 mm (standard NF T 58 -000 cat. 4, reduced class)

Mechanical interface can be adapted on request.



# Recommended layout :

