

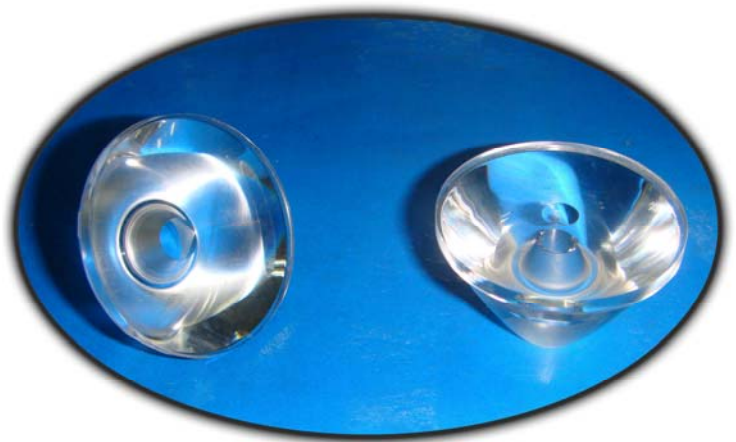
# LL01ED-AYxxL Single Color Lens

## Datasheet

For Edixeon® Multi-Color and Single-Color LEDs

### Features:

- High efficiency
- Available in 2 beam Patterns
- Optimized for uniform effects
- Lens with Housing



### Typical applications :

- Stage Lighting
- Street Lights
- Decorative Light
- Architectural Lighting
- Down Light



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## General Information

### • Compatible Led Type :

The LL01ED-AYxxL Single lens are optimized for both Multi-Color R.,G,B Edixeon® LEDs and Single-Color Edixeon® LEDs from Edison Opto.(1)

### • Beam Angle Type :

An optimized profile integrate different front shape enable the generation of two different lens models different lens models: Smallest beam (10deg) and Medium beam (38deg).<sup>(2)</sup>

### • The Way to Assembly :

The housing that can use the MR16 series aluminum cup or by oneself develop to apply

**\*Manually installation or if necessary thermal glue are recommended.**

### • Function :

LL01ED-AYxxL provides exceptional color uniform result with the highest efficiency through careful engineering and precision manufacturing process.

#### Notes:

(1) Edixeon® is a trademark of Edison Opto, for technical information on LEDs, please refer to Edison Opto website at [www.edison-opto.com.tw](http://www.edison-opto.com.tw).

(2) Typical beam divergence will be affected by different color of LEDs.

## General Specifications

- Lens Material Optical Grade PMMA PC
- Operating Temperature range  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$  (upper limit  $+80^{\circ}\text{C}$ )
- Storage Temperature range  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$  (upper limit  $+80^{\circ}\text{C}$ )
- \*Average transmittance in visible spectrum 400nm~700nm > 90%

## Optical Specifications [ Typical beam Angle and intensity (cd/lm) of LL01 lenses ]

- Edipower 5W LED

Part Number	Typical Cone Angle (degree) <sup>(3)</sup> with Edipower 5W LED			
	Red LEDs ●	Green LEDs ●	Blue LEDs ●	RGB ●
LL01ED-AY10L	27	29	29	
LL01ED-AY38L	37	40	40	

The typical cone angle the full angle measured where the luminous intensity is 90% of the peak value of intensity. That typical cone varies with LED color due to different chip size and chip position tolerance.

Part Number	Typical on axis intensity (cd/lm) <sup>(4)</sup> with Edipower 5W LED			
	Red LEDs ●	Green LEDs ●	Blue LEDs ●	RGB ●
LL01ED-AY10L	320	920	30	
LL01ED-AY38L	180	520	20	

Luminous intensity depends on the flux binning and tolerance of the LEDs. Please refer to the LEDs datasheet for more detail on flux binning and mechanical tolerance.

- Edipower 5W LED

Part Number	Typical Cone Angle (degree) <sup>(3)</sup> with Edipower 5W LED	
	White LEDs ○	Warm white LEDs ●
LL01ED-AY10L	27	26
LL01ED-AY38L	36	34

The typical cone angle the full angle measured where the luminous intensity is 90% of the peak value of intensity. That typical cone varies with LED color due to different chip size and chip position tolerance.

Part Number	Typical on axis intensity (cd/lm) <sup>(4)</sup> with Edipower 5W LED	
	White LEDs ○	Warm white LEDs ●
LL01ED-AY10L	1210	660
LL01ED-AY38L	640	310

Luminous intensity depends on the flux binning and tolerance of the LEDs. Please refer to the LEDs datasheet for more detail on flux binning and mechanical tolerance.

Notes:

- (3) The typical divergence will be changed by different color, chip size and chip position tolerance.  
The typical total divergence is the full angle measured where the luminous intensity is half of the peak value.
- (4) The efficiency value listed above is the total value of the whole lens model, the value depends on the total flux of the LED used. Luminous intensity depends on the LEDs flux and its tolerances, for more details of LED flux, please check Edixeon® datasheet at [www.edison-opto.com.tw](http://www.edison-opto.com.tw).

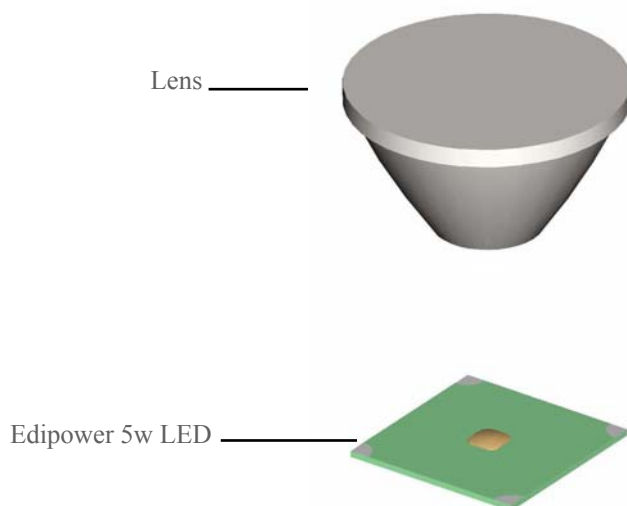
## Mechanical Specifications

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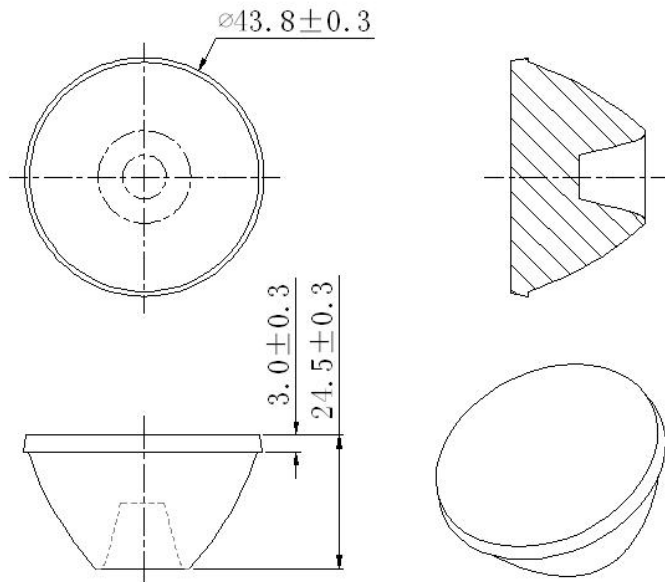
### • Usage and Maintenance :

1. If necessary, clean lenses with mild soap, water and soft cloth
2. Never use any commercial cleaning solvents on lenses, like alcohol
3. Please handle or install lenses with wearing gloves, skin oils may damage lens or its optical characteristic.

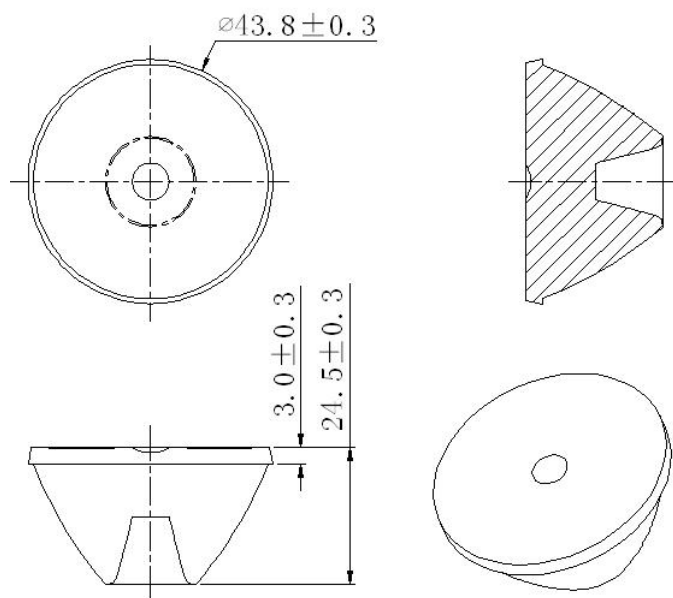
1. Lens + Leds+MCPCB assembly instruction:



### 3. LL01ED-AY10L Dimensions and Top Views:



### 4. LL01ED-AY38L Dimensions and Top Views :



#### Notes:

- (1) All dimensions are in mm.
- (2) Drawing not to scale.
- (3) Collimator material is PMMA.

## Illumination charts

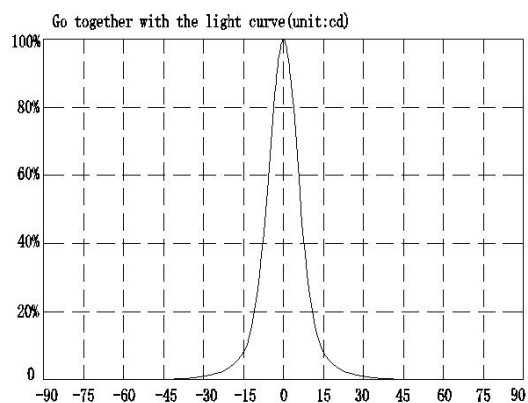
\*Edixeon® single white LED: Edipower 5W LED

LL01ED-AY10L

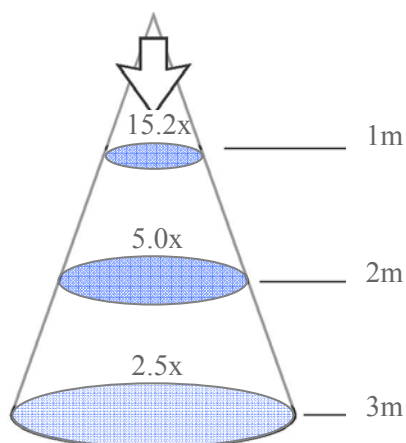
### 1. Beam Pattern



### 2. Angular Intensity Distribution

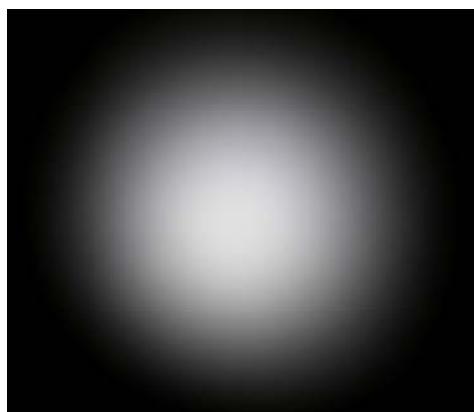


### 3. Shine on one degree diagram

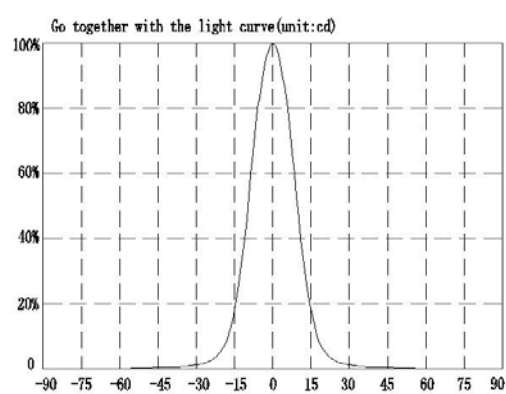


LL01ED-AY38L

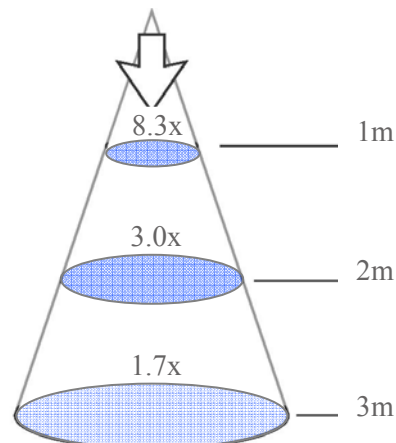
### 1. Beam Pattern



### 2. Angular Intensity Distribution

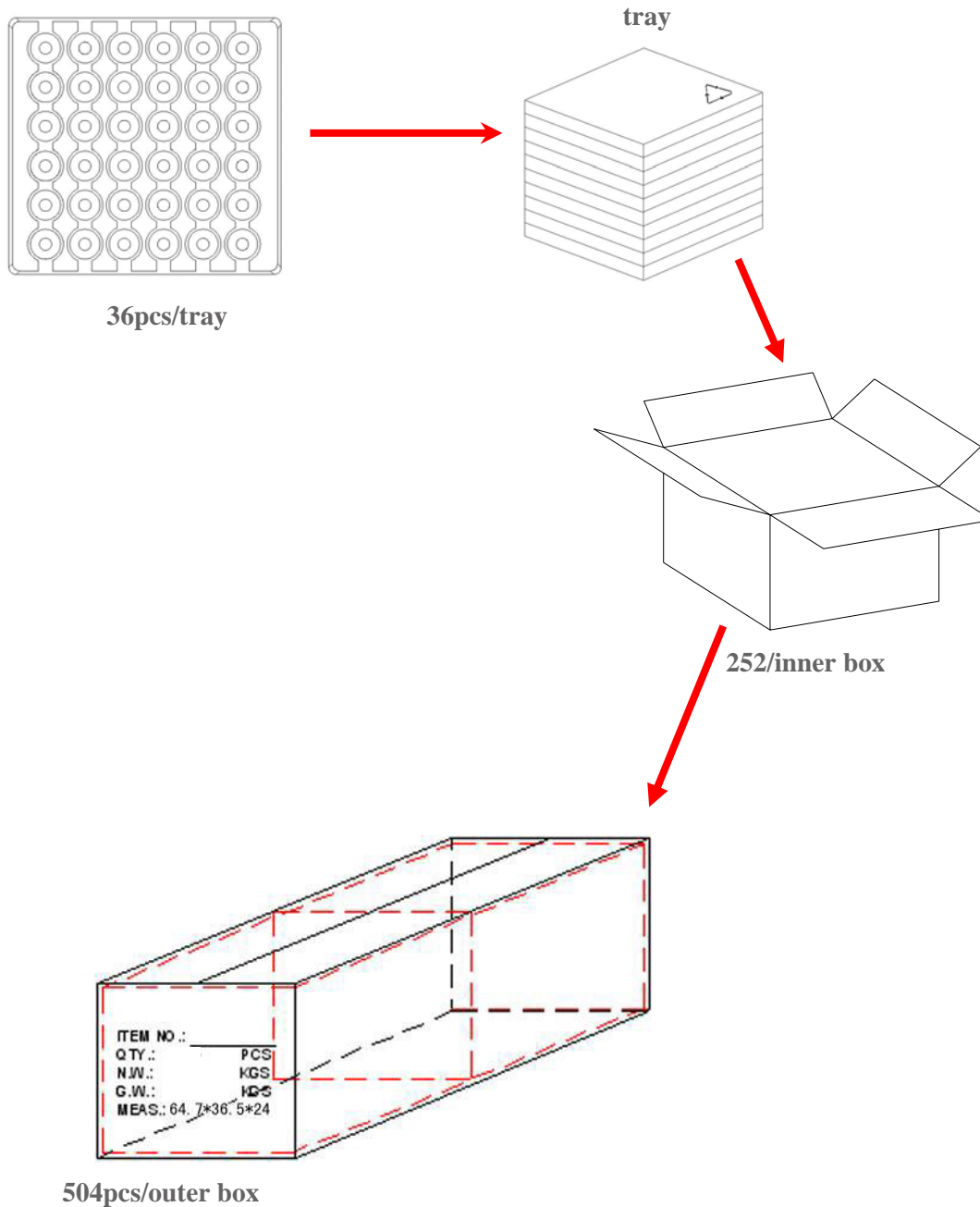


### 3. Shine on one degree diagram



### Package

Item	Quantity	Total	Size (long * width * high)
Tray		36pcs	34*30*3.5 cm
Inner box	7tray/box	252pcs	35*31*21 cm
Outer box	2 inner box/outer box	504pcs	64.7*36.5*24 cm



## Product Nomenclature

