

# LL01ED-BLxxL-Mx 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-BLxxL-Mx 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:Medium beam (38deg), and oval beam(30\*65deg). (2)

#### • The Way to Assembly:

The Lens should be assembled to the PCB board or MCPCB by set its housing upon LEDs which provides the most appropriate related position, so as to achieve the best uniform results.

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

#### • Function:

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

\*Lens housings (holders) are available in white, black and clear.

#### 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.
- (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  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C} \text{ (upper limit } +80^{\circ}\text{C)}$ 

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

#### • EDERTB-1LA1

Part Number	Typical Cone Angle (degree) <sup>(3)</sup> with EDERTB-1LA1			
Tart Ivanioci	Red LEDs	Green LEDs	Blue LEDs	
LL01ED-BL38L-M2	25	25	25	
LL01ED-BL3065L-M2	26*70	26*70	26*70	

The typical cone angle measures where the luminous intensity is 90% of the peak value of intensity. This 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 EDERTB-1LA1			
i dit i tallioti	Red LEDs •	Green LEDs	Blue LEDs •	
LL01ED-BL38L-M2	1350	1100	60	
LL01ED-BL3065L-M2	130	350	10	

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

#### • EDEW-KLC8 And EDEX-KLC8

Part Number	Typical Cone Angle (degree) <sup>(3)</sup> with EDEW-KLC8		
1 art i vannoer	White LEDs O	Warm white LEDs	
LL01ED-BL38L-M2	35	34	
LL01ED-BL3065L-M2	33*63	31*60	

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 EDEW-KLC8		
Tart Ivaniooi	White LEDs O	Warm white LEDs	
LL01ED-BL38L-M2	1200	750	
LL01ED-BL3065L-M2	400	250	

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.

<sup>\*</sup>Average transmittance in visible spectrum 400nm~700nm> 90%





#### Notes:

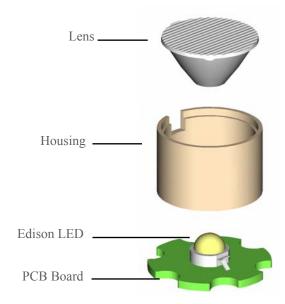
- (3) The typical divergence will be changed by different color, chip size and chip position tolerance. The typical total divergence is the full angle measured where the luminous intensity is half of the peak value.
- (4) The efficiency value listed above is the total value of the whole Tri-lens model, 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.

#### **Mechanical Specifications**

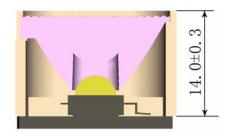
#### • Usage and Maintenance:

- 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:



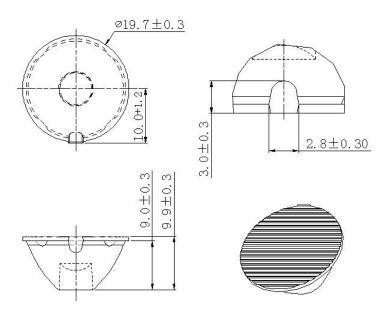
#### 2. View assembly lens with MCPCB:



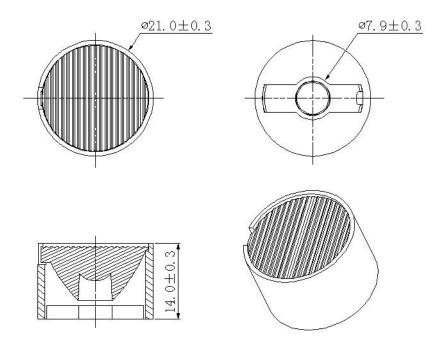
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### 3. Lens dimensions and Top Views:



#### 4. Lens assembly dimensions and Top Views:



#### Notes:

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





#### Illumination charts

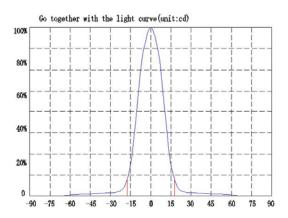
\*Edixeon® single white LED:EDEW-KLC8

#### LL01ED-AL38L-Mx

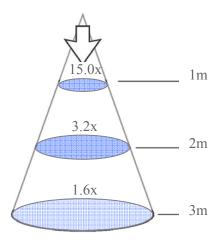
#### 1. Beam Pattern



#### 2. Angular Intensity Distribution



#### 3. Shine on one degree diagram

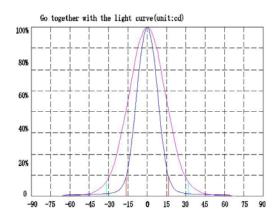


#### LL01ED-AL3065L-Mx

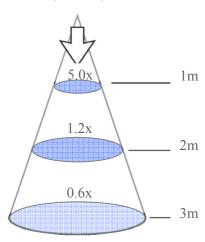
#### 1. Beam Pattern



#### 2. Angular Intensity Distribution



#### 3. Shine on one degree diagram

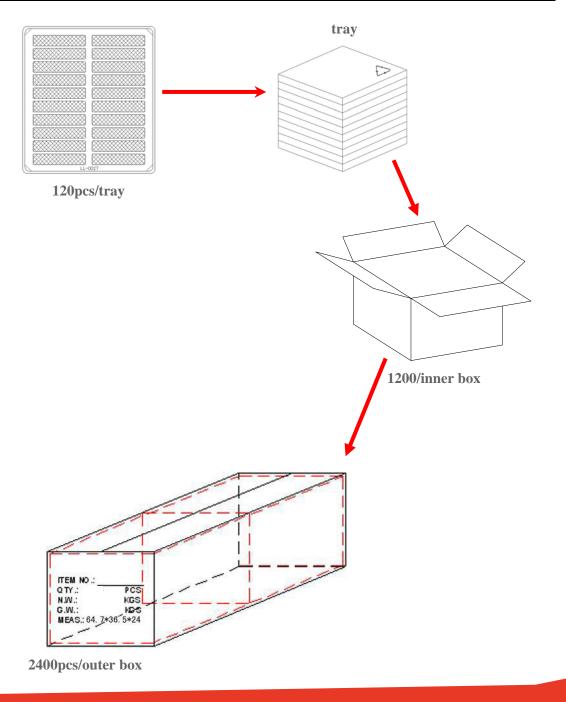






# Package

Item	Quantity	Total	Size (long * width * high)
Tray		120pcs	34*30*3.5 cm
Inner box	10tray/box	1200pcs	35*31*21 cm
Outer box	2 inner box/outer box	2400pcs	64.7*36.5*24 cm





#### **Product Nomenclature**

