

- Линза 30° ARL-01ED-AP30L-M2**
- Линза 40° ARL-01ED-AP40L06-M2**
- Линза 60° ARL-01ED-AP60L06-M2**
- Линза 70° ARL-01ED-AP70L06-M2**
- Линза 80° ARL-01ED-AP80L06-M2**



Features

- High efficiency
- Available in 6 beam Patterns
- Optimized for uniform effects
- Lens with Housing

Typical applications

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

Compatible Led Type:

The ARL-01ED-APxxL-M2 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 Four different lens models different lens models: Medium beam (30deg), wide beam (40deg), ultra wide beam (60-80deg) and oval beam (40*55deg).⁽²⁾

The Way to Assembly:

The lens should be assembled to the MCPCB or heat sink hole by the built-in three installation legs. The three installation legs ensure ideal relative position between the lens and LEDs resulting in the best optical performance.

**Hot Pressure and Ultrasonic Assembly process are recommended.*

Function:

ARL-01ED-APxxL-M2 provides exceptional color uniform result with the highest efficiency through careful engineering and precision manufacturing process.

**Lens housings (holders) are available in Black, white and clear*

Notes:

- (1) Edixeon® is a trademark of Edison Opto, for technical information on LEDs, please refer to Edison Opto
- (2) Typical beam divergence will be affected by different color of LEDs.

General Specifications

| | |
|-----------------------------|------------------------------------|
| Lens Material | Optical Grade PMMA PC |
| Operating Temperature range | -40°C ~ + 70°C (upper limit +80°C) |
| Storage Temperature range | -40°C ~ + 70°C (upper limit +80°C) |

**Average transmittance in visible spectrum 400nm~700nm > 90%*

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

| Part No. | Typical Cone Angle (degree) ⁽³⁾ with EDER-1LA3 EDEG-1LA2 EDEB-1LA1 | | | | |
|-------------------------|---|------------|-----------|------------|-----------------|
| | Red LEDs | Green LEDs | Blue LEDs | White LEDs | Warm White LEDs |
| Линза ARL-01ED-AP30L-M2 | 21 | 21 | 24 | 28 | 25 |
| Линза ARL-01ED-AP40L-M2 | 31 | 31 | 35 | 36 | 33 |
| Линза ARL-01ED-AP60L-M2 | 56 | 54 | 55 | 58 | 60 |
| Линза ARL-01ED-AP70L-M2 | 64 | 66 | 67 | 69 | 66 |
| Линза ARL-01ED-AP80L-M2 | 56 | 54 | 55 | 58 | 60 |

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 No. | Typical on axis intensity (cd/lm) ⁽⁴⁾ with EDER-1LA3 EDEG-1LA2 EDEB-1LA1 | | | | |
|-------------------------|---|------------|-----------|------------|-----------------|
| | Red LEDs | Green LEDs | Blue LEDs | White LEDs | Warm White LEDs |
| Линза ARL-01ED-AP30L-M2 | 650 | 1400 | 160 | 720 | 800 |
| Линза ARL-01ED-AP40L-M2 | 330 | 500 | 70 | 410 | 450 |
| Линза ARL-01ED-AP60L-M2 | 100 | 130 | 20 | 210 | 160 |
| Линза ARL-01ED-AP70L-M2 | 80 | 110 | 20 | 135 | 95 |
| Линза ARL-01ED-AP80L-M2 | 40 | 55 | 10 | 80 | 65 |

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.

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.

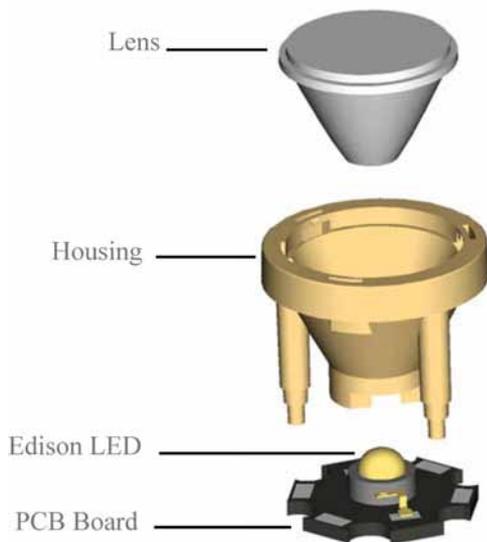
(4) The efficiency value listed above is the total value of the whole lens model, the value depends on the total flux of the LED used. Luminous intensity depends on the LEDs flux and its tolerances, for more details of LED flux, please check Edixeon® datasheet.

Mechanical Specifications

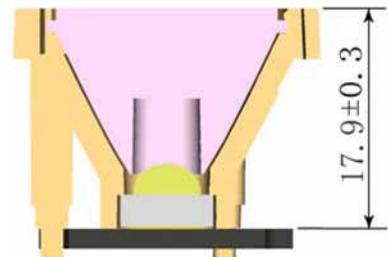
Usage and Maintenance :

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.

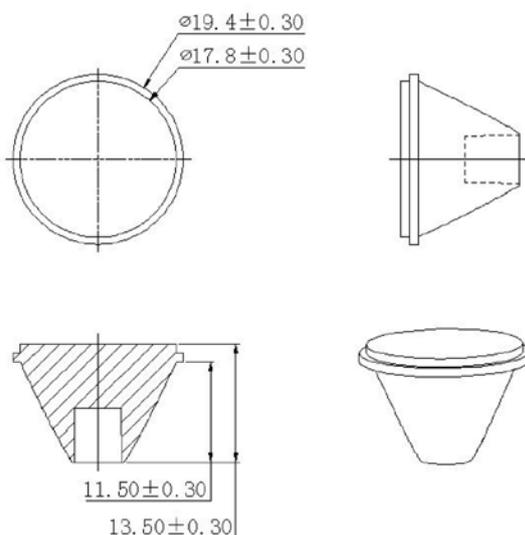
1. Lens+Leds+MCPCB assembly instruction:



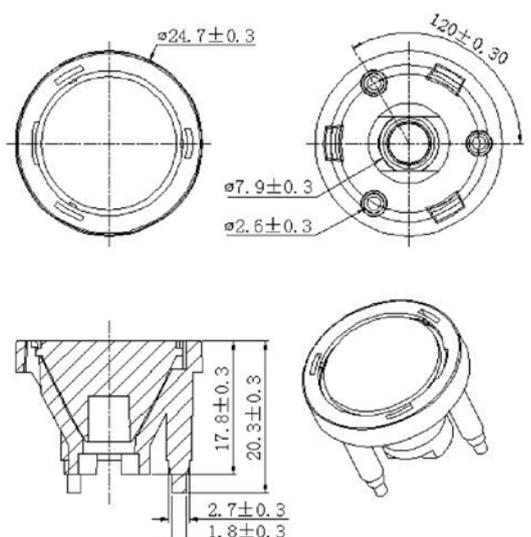
2. View assembly lens with MCPCB:



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

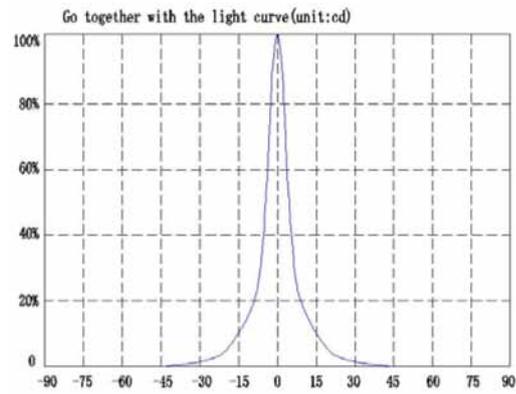
*Edixeon® single white LED:EDEW-KLC8

ARL-01ED-AP30L-M2

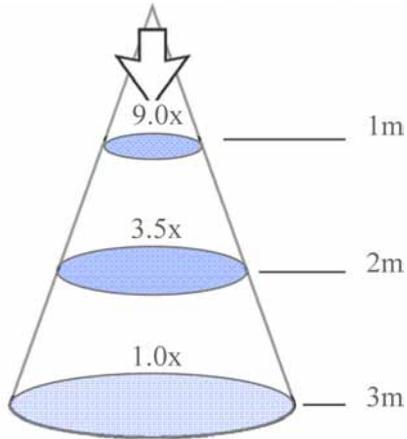
1. Beam Pattern



2. Angular Intensity Distribution



3. Shine on one degree diagram

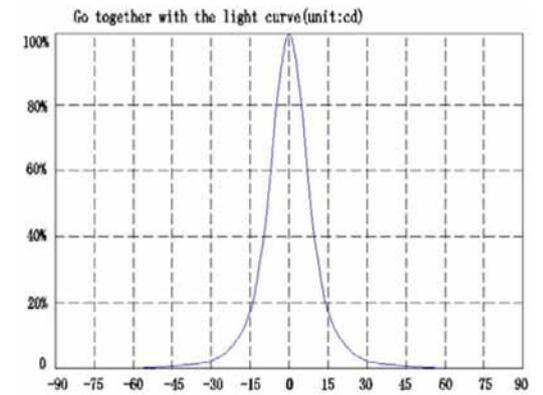


ARL-01ED-AP40L-M2

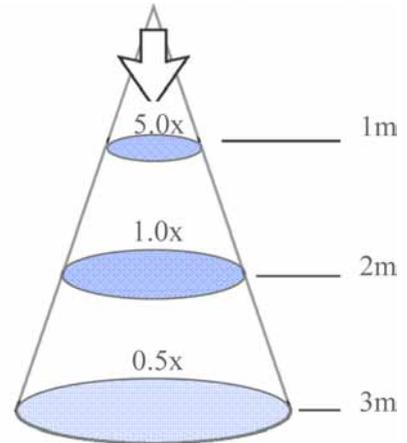
1. Beam Pattern



2. Angular Intensity Distribution



3. Shine on one degree diagram

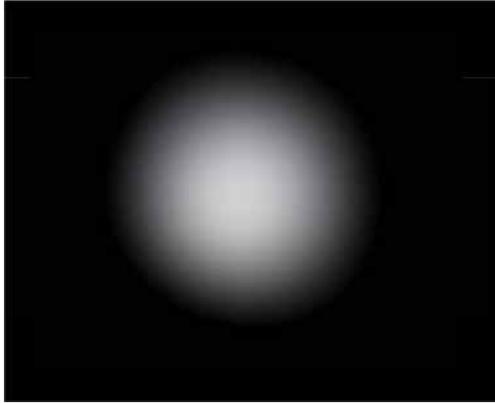


Illumination charts

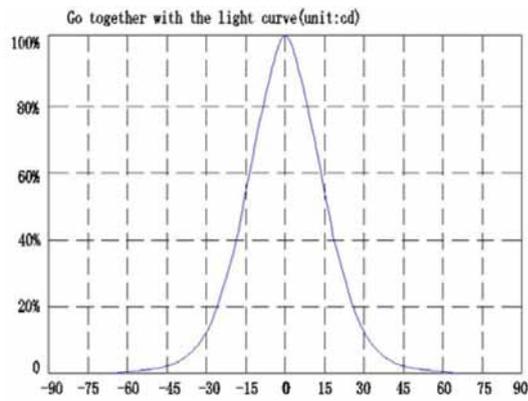
*Edixeon® single white LED:EDEW-KLC8

ARL-01ED-AP60L-M2

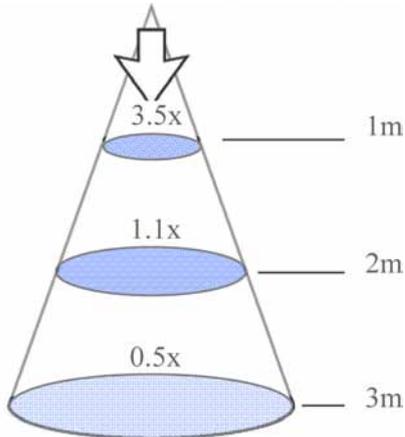
1. Beam Pattern



2. Angular Intensity Distribution

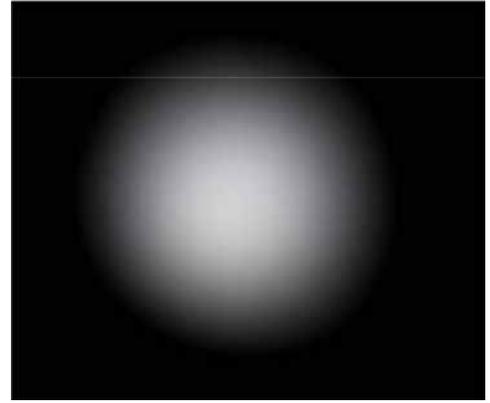


3. Shine on one degree diagram

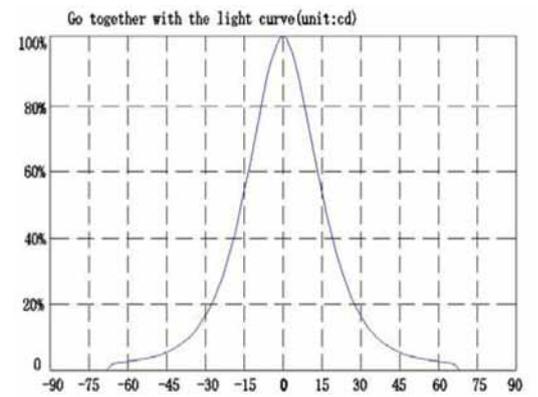


ARL-01ED-AP70L-M2

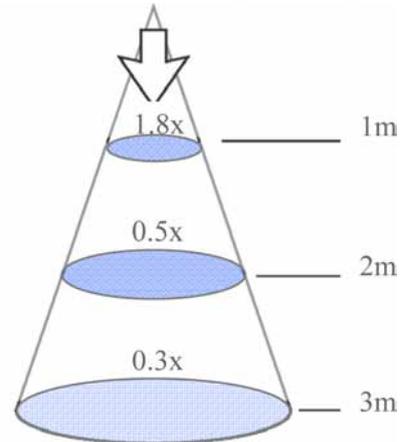
1. Beam Pattern



2. Angular Intensity Distribution



3. Shine on one degree diagram

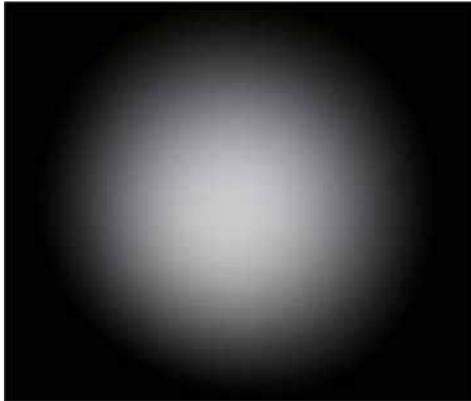


Illumination charts

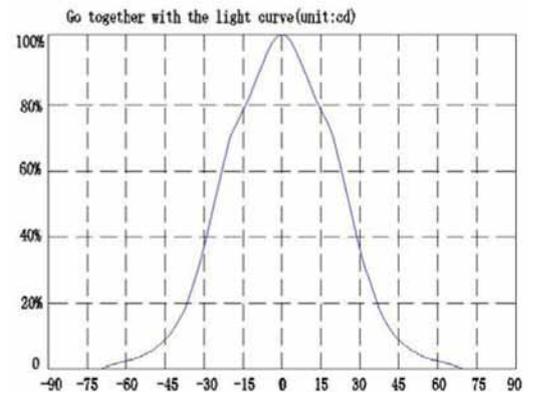
*Edixeon® single white LED:EDEW-KLC8

ARL-01ED-AP80L-M2

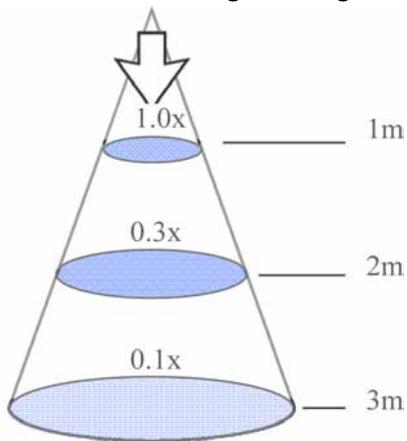
1. Beam Pattern



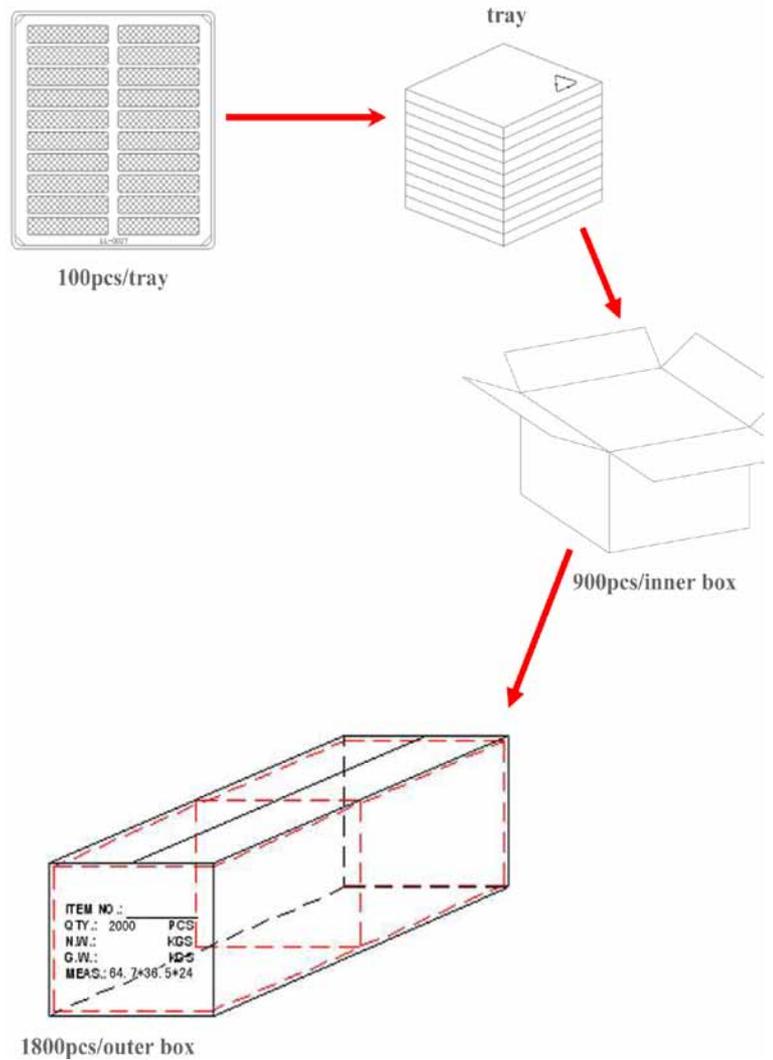
2. Angular Intensity Distribution



3. Shine on one degree diagram



Package



| Item | Quantity | Total | Size (LxWxH) |
|-----------|-----------------------|----------|-----------------|
| Tray | | 100 pcs | 34x30x3.5 cm |
| Inner box | 9 tray/box | 900 pcs | 35x31x21 cm |
| Outer box | 2 inner box/outer box | 1800 pcs | 64.7x36.5x24 cm |