



**\* PRODUCT DATASHEET**

\* Model: HX-CRF

\* Dimensions:

Lens: 21.64x21.64mm H12.10mm

Cone holder: N/A

Square holder: 21.64x21.64mm H11.69mm

\* Materials:

Lens: Optical Grade PMMA PC

Holder: ABS

\* Assembly Dimensions:

Lens with cone holder: N/A

Lens with square holder: 21.64x21.64mm H12.79mm

\* Surface Treatment: Stripes surface

\* Beam Angle: 12(±2) x48(±2) deg

\* For Led:

CREE XP-C/E/G



Seoul Z5P



CREE XT-E



Oslon CP7P



CREE XB-D



3535



\* Certification: SGS RoHs



\*Features:

High efficiency

Available in 1 beam Patterns

Optimized for uniform effects

Lens with holder

\*Typical applications:

Stage lighting

Street lights

Decorative light

Architectural lighting

Down light

Flashlight

**\* Brief description:**

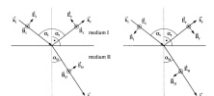
\*The OPTIC-FOV (Shenzhen Hongxuan Optoelectronic Technology Co., Ltd) lens offers low-profile lenses specifically designed for the Luxeon® LEDs, Edison® LEDs, Bridgelux® LEDs OSRAM® LEDs or Seoul® LEDs.

\*A software-optimized aspheric profile enables the generation of several different beam output patterns:narrow,medium,elliptical and wides beams.

The high collection efficiency reaches 85% of the total flux emitted by the LEDs.

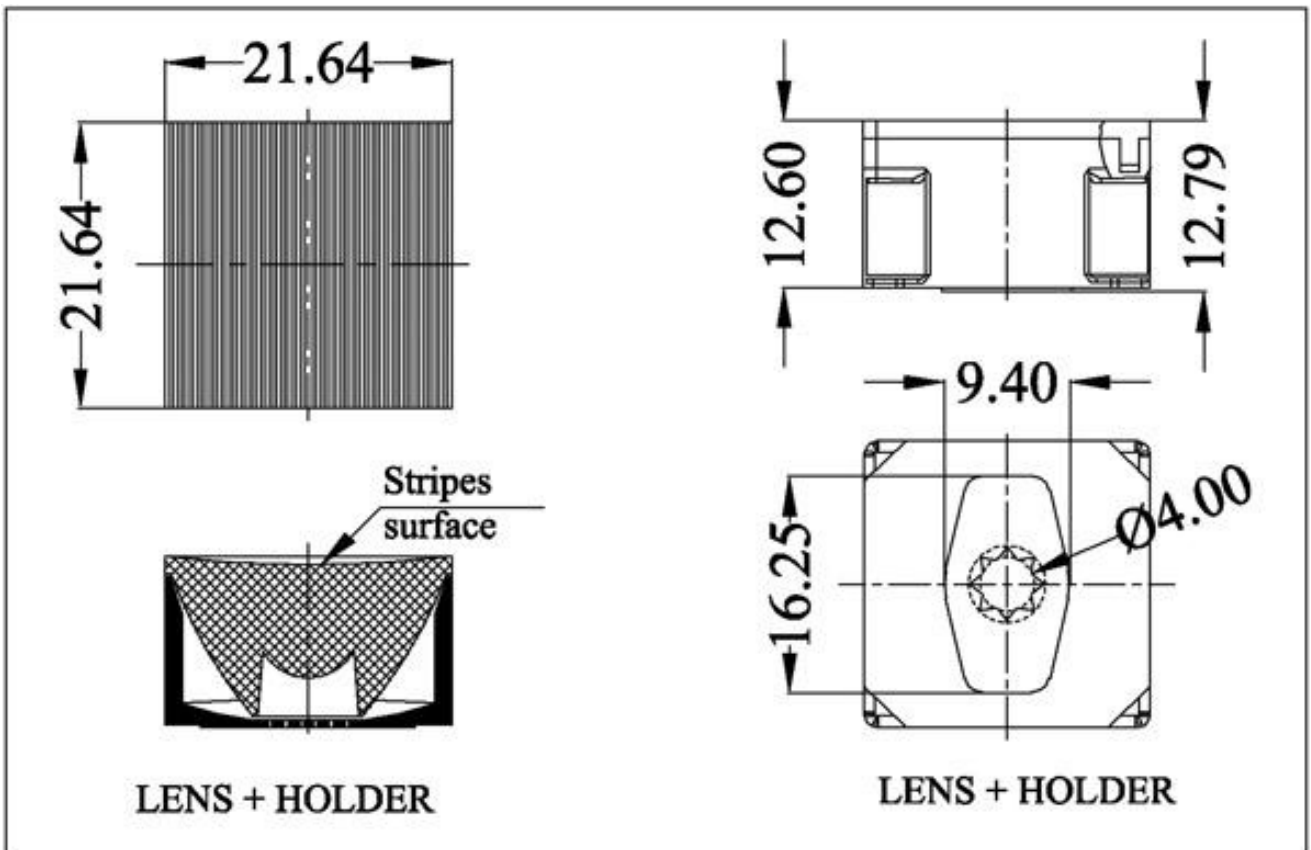
\*Lens holders are available in white or black,and provide the proper alignment the between the LEDs and the lenses,set correct distance between the lens and LED.

\*The lens holder can be glued to the PCB to provide a secure assembly.

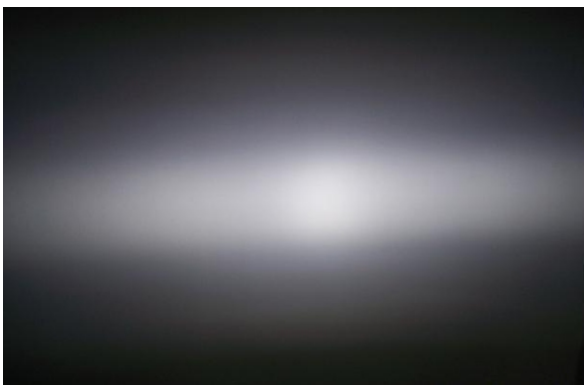




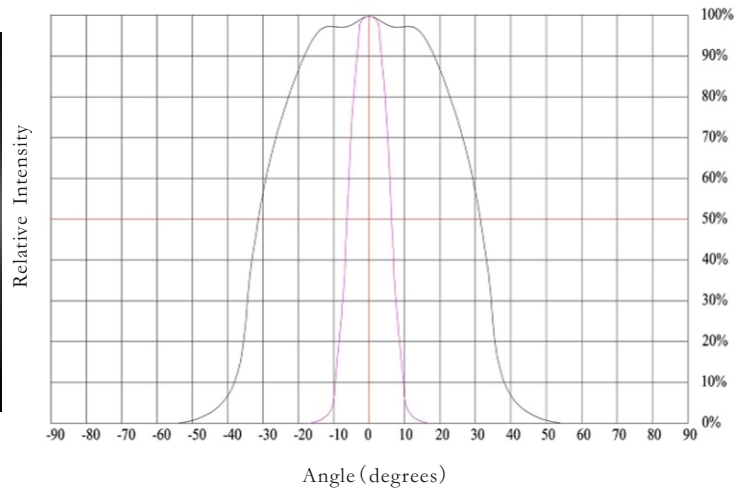
**\* Holder and Lens dimensions of the 2D views**



**\* Beam Pattern**



**\* Angular Intensity Distribution**



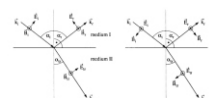
**\* Typical illuminance values**

Normal Distance (m)	1.5	2	5	9
Illuminance (lux <sub>1W led</sub> )	N/A	N/A	N/A	N/A
Illuminance (lux <sub>3W led</sub> )	N/A	N/A	N/A	N/A

Notes:

\*Cree flux characteristics at IF=350mA and T<sub>J</sub>=25°C: for 1W Q5 (Part Name: XPGWHT-L1-0000-00DE4/Neutral White/107lm/Lambertian LED)

\*Typical illuminance values is reference data (Receiving surface of the average illuminance. Performance values given are typical values and will vary dependant on LED Binning, colour and drive profile values).





## \* LED Lens materials feature table

Items	Features	Experimental methods	Units	PMMA
Physical properties	Density	ASTM D792	g/cm	1.19
	Absorbtion	ASTM D570	%	2
Optical properties	Refraction index	ASTM D542		1.49
	Transmittance	ASTM D1003	%	95
	ABBE	ASTM D542		58
	Birefringence		nm	<20
Thermodynamical properties	Glass transition point	DSC	°C	150
	Heat distortion	ASTM D648 (1.85kg/cm)	°C	120
Mechanical properties	Tensile strength	ASTM D638	MPA	730
	Tensile elongation	ASTM D638	%	10
	Flexural modulus	ASTM D790	10MPA	3

### \* Notes :

- 1.Engineering drawings and all dimensions are in millimeters,holder and lens tolerance,respectively  $\pm 0.10$  and  $\pm 0.05$ .
- 2.Product operating temperature range  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$  (upper limit  $+80^{\circ}\text{C}$ ).
- 3.Product storage temperature range  $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$  (upper limit  $+80^{\circ}\text{C}$ ).
- 4.Average transmittance in visible spectrum  $400\text{nm} \sim 700\text{nm} > 92\%$ .
- 5.If necessary,clean lenses with mild soap water and soft cloth.
- 6.Never use any commercial cleaning solvents on lenses,like alcohol.
- 7.Please handle and install lenses with wearing gloves,skin oils may damage lens or its optical characteristic.

