

* PRODUCT DATASHEET

* Model: HX-CSP-2060

* Dimensions:

Lens: $\Phi 20.00\text{mm}$ H12.15 $\pm 0.05\text{mm}$
 Cylinder holder: $\Phi 21.50\text{mm}$ H12.75mm
 bipod striped cylinder holder: N/A

* Materials:

Lens: Optical Grade PMMA/ PC
 Holder: ABS

* Assembly Dimensions:

Lens with cylinder holder: $\Phi 21.50\text{mm}$ H13.20 $\pm 0.05\text{mm}$
 Lens with bipod striped cylinder holder: N/A

* Surface Treatment: Stripes (Ripple Linear) Surface

* Beam Angle: 20(± 5)*60(± 5)deg

* For Led:

CREE X-PC/E/G/G2/TE Federal 3535
 Seoul Acriche Z5 LG/Samsung 3535
 Nichia 119A OSRAM OSLON SSL/Square

* 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 or Seoul® LEDs, Cree® 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.

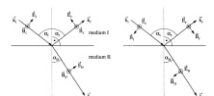
*The lens holder can be glued to the PCB to provide a secure assembly.



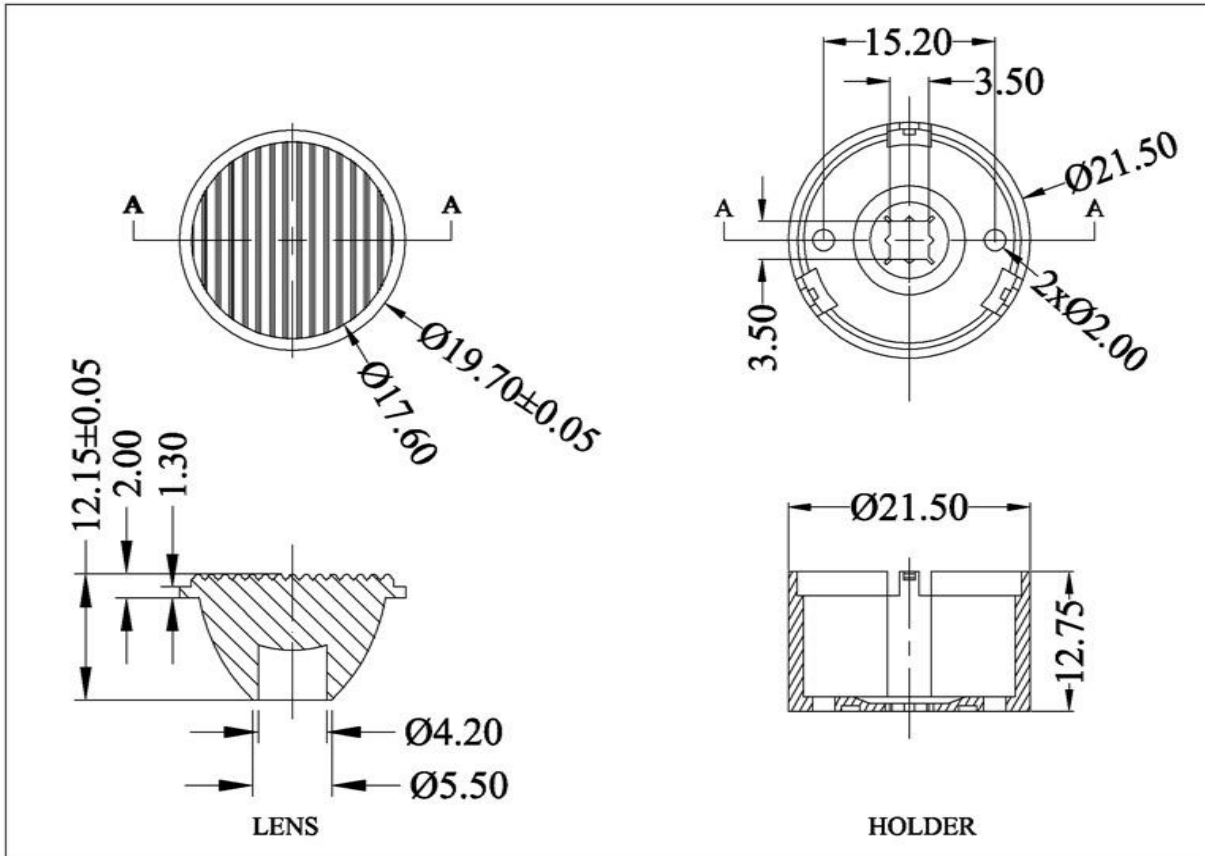
Company: Shenzhen Hongxuan Optoelectronic Technology Co., Ltd
 Address: 33 building, Tongfuyu industrial park, Dalang Longhua new district,
 Shenzhen city, Guangdong China

Tel: 0086-755-29059599 Fax: 0086-755-29056599 Email: opticfov@gmail.com

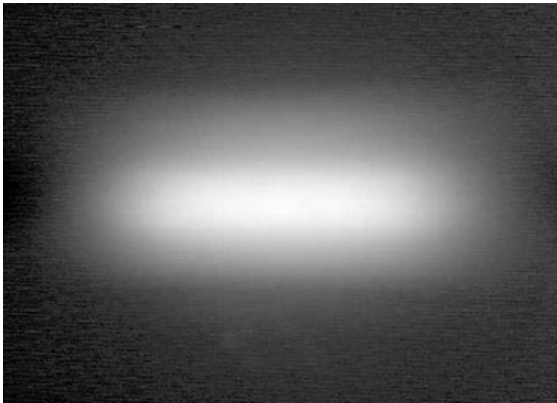
Website: www.optic-fov.com



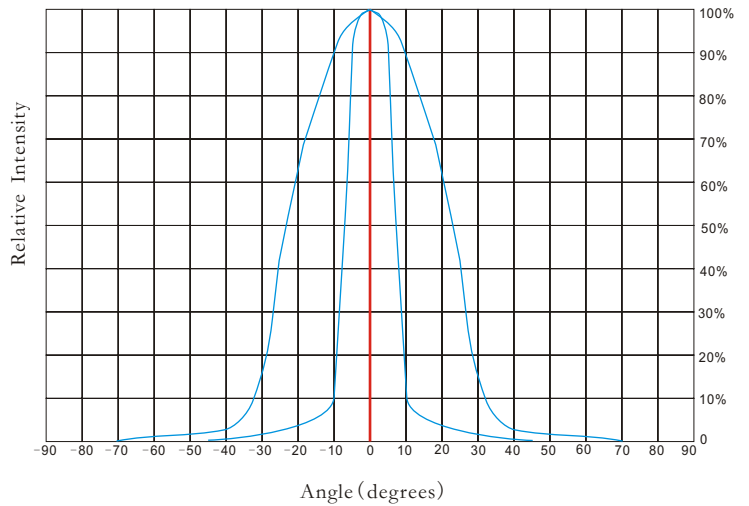
*** Holder and Lens dimensions of the 2D views**



*** Beam Pattern**



*** Angular Intensity Distribution**



*** Typical illuminance values**

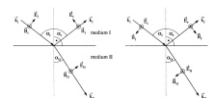
Normal Distance (m)	1.5	2	5	9
Illuminance (lux _{1W led})	N/A	N/A	N/A	N/A
Illuminance (lux _{3W led})	N/A	N/A	N/A	N/A

Notes:

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

*Performance values given are typical values and will vary dependant on LED binning, colour and drive profile

*Typical illuminance values is reference data (Receiving surface of the average illuminance 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 ± 0.10 and ± 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 specturm $400\text{nm} \sim 700\text{nm} > 92\%$.
- 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.

