

INDOOR

HercuLux Optics is a high-tech enterprise dedicated to providing system solutions for LED lighting, UV curing, laser projection, AOI machine vision inspection and other applications. National Specialized, Specialized and New "Small Giant" High-tech Enterprises







Chengdu HercuLux Photoelectric Technology Co., Ltd.

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HercuLux Optics is a high-tech Specialized and Sophisticated SMEs dedicated to providing system solutions for applications such as LED lighting, UV curing, laser projection, and AOI machine vision inspection.

We have a R&D team with the background in the Institute of Optics and Electronics, Chinese Academy of Sciences, consisting of experts who have been working for decades in the fields of optics, precision optical molds and precision optical injection molding, fine chemicals and electronic control, as well as a highly efficient and passionate marketing team, which ensures fast product innovation, stable and reliable quality of the products, and fast and considerate service.

Since the start of our company, in order to address the secondary light distribution problems in many LED applications, the company has introduced products such as calculus anti-glare lens, nearly 100% efficiency of the adaptive colloidal street lamp lens, very small angle (less than 3 deg) outdoor spotlight lens, ultra-thin (thickness of less than 8mm) triple total reflection lens, the angle and spot shape of the optical lens module can be changed, efficiency of more than 90% of the zoom series, CCT changing COB can be matched full stroke high efficiency (greater than 80%) high center light intensity of the zoom optical module, MOS film, high temperature-resistant silicone materials and lens, anti-glare firefly series.

For the AOI machine vision inspection field, the introduction of photolithography plate plane shadowless light source, to fill the gaps in the domestic market; for the



printing curing field, the world's first introduction of full UV (A \ B \ C) LED direct contact with the large-scale printing press curing modules and systems, not only for the printing industry to save energy, but also for the printing industry to save energy, and the printing industry to save energy, system, not only for the printing industry energy saving and environmental protection to provide a perfect solution and further enhance the printing overprint accuracy and significantly reduce the odor of printed materials due to ozone.

National High tech Enterprise - Established in 2013; Obtained the national high-tech enterprise qualification in 2014; Obtaining the national high-tech enterprise qualification in 2014 was the first enterprise in Sichuan to obtain the national high-tech enterprise qualification the following year after its establishment.

Computer Software Copyright - To ensure the perfect presentation of design theoretical values on actual products, Herculux has independently developed specialized optical conversion software and injection molding analysis precision compensation software.

Patents - The company has applied for more than 330 patents and has obtained 222 patent authorizations, including 11 authorized invention patents, 106 utility model patents, 105 appearance patents, and is currently applying for 3 PCT patents.

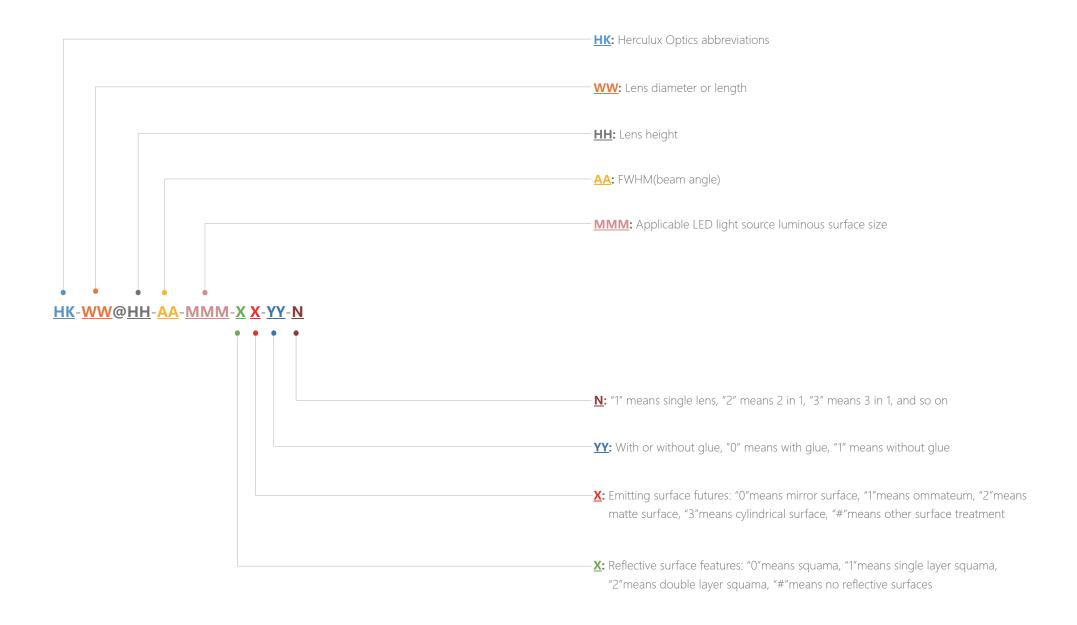
R & D capabilities - The R&D team of the company is composed of a team of experts with a background in the Institute of Optoelectronics, Chinese Academy of Sciences. There are 32 R&D personnel, accounting for 26.45% of the total number of employees. Among them, there are 8 full-time optical design engineers, including one senior engineer, three master's, and four undergraduate students.





800	DARK	048	V SERIES		KIRIN OPTICAL PLATFORM			
014	GEMINI	054	ZOOM MODULE					
020	MOONY	058	MAVIC & MAVIC PRO	074	FIREFLY-KIRIN	082	LIGHT FILTER	
026	GLARELESS	062	KA PRO	078	COB HOLDER	086	LIGHT HOOD	
032	PEAK	068	MOONY PRO	080	LENS HOLDER			
036	FILMY	070	PEAK PRO					
042	RAINBOW	072	SILICONE LENS				INDOOR	
092	PHOTON	112	INFINITY	128	WARTERFALL			
098	KA	118	FOCUS	130	TRANSFORMERS	144	LIGHTNIN	
104	CHAMELEON	122	POLAROID	134	DIAMOND	148	COME	
108	BLACK HOLE	126	SUNFLOWER	140	NEBULA	150	CUSTOMIZED SOLUTIO	

Products Code Rule



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Small Hole Hood

Wall Washing Hood





























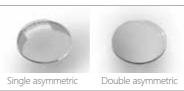
Filter Holder















Pin-pin replacement; COB holder: Same outer diameter, Screw position is consistent, Rotating interface is consistent.







Gemini



Moony



Glareless



Peak









Rainbow



Zoom module







KA Pro



Moony Pro

Peak Pro



Softy



Firefly-Kirin

Lens Holder

Filmy















DOB

COB Holder

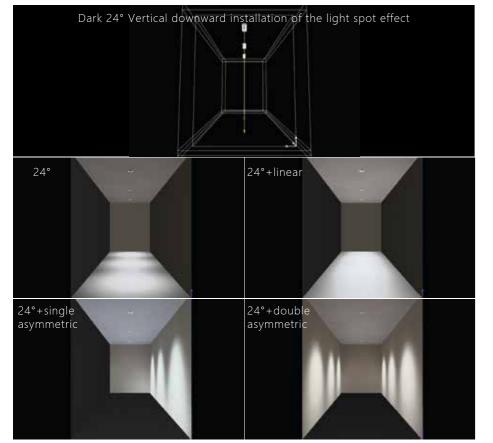
HERCULUX

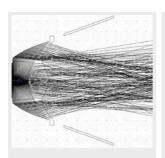
Bridgelux | BJB

DARK SERIES

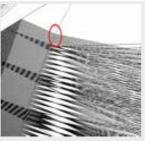
A lens for the high-efficiency spot of the hotel's deep anti-glare wall washing spotlight







In the design process of the Dark series, the light on the reflective surface and the light on the refracting surface are cross-distributed to achieve the effect of deep anti-glare.

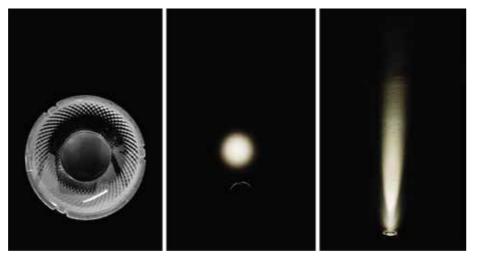


Based on the cross-light distribution design, coupled with the two-dimensional uniform light microstructure, the light spot can be softer, while the controllable light contributes relatively little to the background light, which makes the background light of the

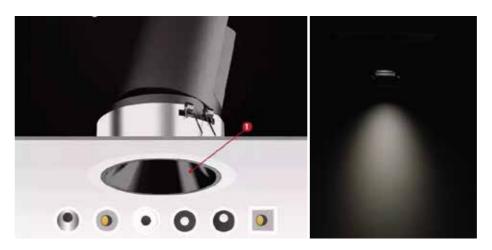


In order to achieve the best effect of the whole lamp, we will develop matching hoods on some lenses to make the optics of the lamp reach the best condition.

The unique optical design of the narrow beam angle makes the spot more concentrated while less glare.

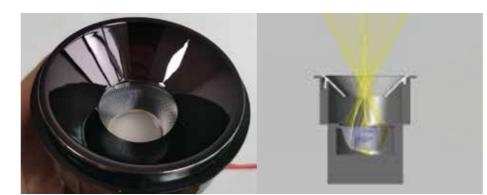


Hotel wall washer spotlight, deep anti-glare structure



Cross-lighting for the ultimate in anti-glare

The cross-lighting design principle makes the lamps and lanterns with light holes smaller than the optical diameter, together with the small holes of the hood, hiding deeper and better control of glare, and the optical efficiency has little impact, but also to ensure that the spot effect.



Assembly size of small hole hood

Lens dia(mm)	Hood height(mm)	Hood small hole dia(mm)	Distance from hole to lens(mm)
25	13	17	6
30	16	19	8
35	16	23	9
45	21	29	12
50	24	35	14
55	25	38	19
62	30	46	20
68	32	48	22
75	35	52	25
83	40	65	29





DARK SERIES



DARK 20@11 (3030)

φ: 19mm H: 11mm

FWHM: 15°/24°/36°/50°

Efficiency: 91%

Material: PMMA



DARK 20@12 (3535)

φ: 20mm H: 12mm

Material: PMMA

FWHM: 15°/24°/36°/50°

Efficiency: 91%



DARK 25@13 (D4)

φ: 25mm H: 13mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 91%



DARK 30@16

φ: 30mm H: 16mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 91%



DARK 35@16

φ: 35mm H: 16mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 91%



DARK 45@21

φ: 45mm H: 21mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 91%



DARK 50@24

φ: 50mm H: 24mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 91%



DARK 55@25

φ: 55mm H: 25mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 91%

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DARK SERIES



DARK 62@30

φ: 62mm H: 30mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 93%



DARK 75@35

φ: 75mm H: 35mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°/70°

Efficiency: 91%



DARK 68@32

φ: 68mm H: 32mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 91%



DARK 83@40

φ: 83mm H: 40mm

Material: PMMA

FWHM: 10°/15°/24°/36°/50°/70°

Efficiency: 91%

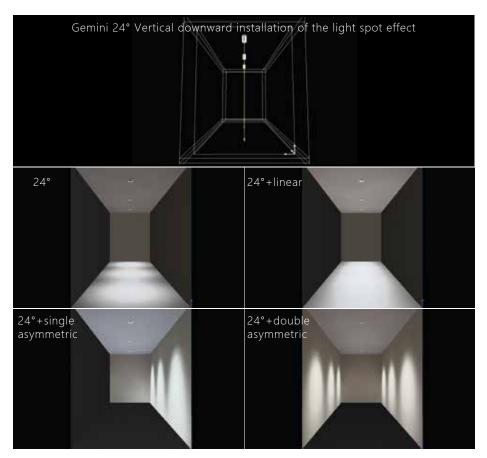




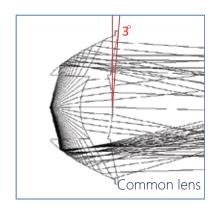
GEMINI SERIES

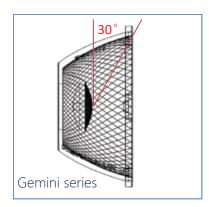
A reflector combines with a lens



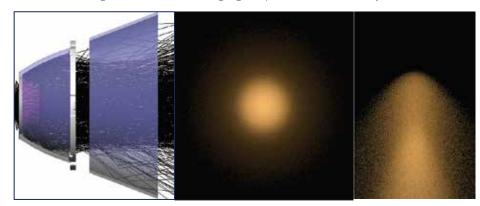


Comes with 30° anti-glare angle





Through the cross light distribution and the control of the proportion of the intermediate light, the wall washing light spot is also relatively clean.



Cross light control, reasonable light control



GEMINI SERIES



GEMINI 25@13

φ: 25mm H: 13mm

Material: Vaccum Aluminum Plating PC

FWHM: 18°/24°/36°/50°

Efficiency: 80%



GEMINI 35@16

φ: 35mm H: 16mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



GEMINI 30@16

φ: 30mm H: 16mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



GEMINI 45@21

φ: 45mm H: 21mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



GEMINI 50@24

φ: 50mm H: 24mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



GEMINI 55@25

φ: 55mm H: 25mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



GEMINI 62@30

φ: 62mm H: 30mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%

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GEMINI SERIES



GEMINI 68@32

φ: 68mm H: 32mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



GEMINI 75@35

φ: 75mm H: 35mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



GEMINI 83@40

φ: 83mm H: 40mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 80%



MOONY SERIES

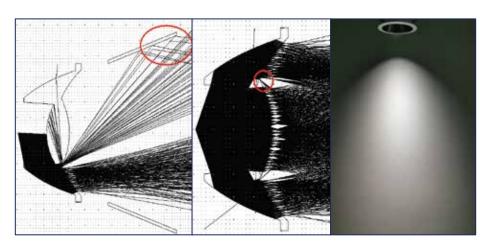
A clean wall washer lens can match with CCT changing COB



Moony series can achieve similar wall wash effect of reflector, with clean edge cutoff, even transition and no delamination, and can also be matched with CCT changing COB for smart lighting applications.



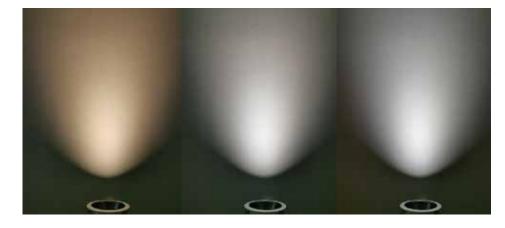
By strengthening the light on the receiving surface of the light emitting surface, this part of the light is forcibly cut off by the anti glare cover when passing through it, resulting in a clear cut-off line when washing the wall.



CCT changing COB can be matched

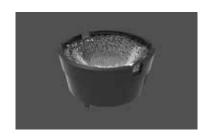
The light is split and concentrated through the microstructure of the lens, so that the color mixing of the light spot is more uniform.





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MOONY SERIES



MOONY 25@13

φ: 25mm H: 13mm Material: PC/PMMA FWHM: 18°/24°/36°/50°

Efficiency: 88%



MOONY 35@16

φ: 35mm H: 16mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY 30@15

φ: 30mm H: 15mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY 45@21

φ: 45mm H: 21mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY 50@24

φ: 50mm H: 24mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY 55@25

φ: 55mm H: 25mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY 62@30

φ: 62mm H: 30mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%

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MOONY SERIES



MOONY 68@32

φ: 68mm H: 32mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY 75@35

φ: 75mm H: 35mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY 83@40

φ: 83mm H: 40mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



GLARELESS SERIES

A lens with anti-glare effect



Smooth the surface, more conducive to anti-glare

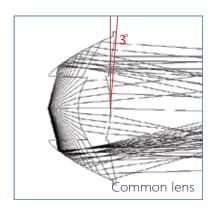
The light-emitting surface is smoothly treated, and there is no matte, sun-stripe and other structures, so that the light-emitting surface is no stray light and no glare.

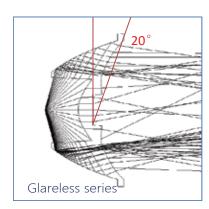






Come with 20° anti-glare angle





CCT changing COB can be matched

The reflective surface adopts calculus technology, so that the lens can match with CCT changing COB, and the spot is more uniform.



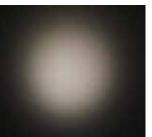






Spot effect







GLARELESS SERIES



GLARELESS 25@13

φ: 25mm H: 13mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 35@16

φ: 35mm H: 16mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 30@16

φ: 30mm H: 16mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 45@21

φ: 45mm H: 21mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 50@24

φ: 50mm H: 24mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 55@25

φ: 55mm H: 25mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 62@30

φ: 62mm H: 30mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%

GLARELESS SERIES



GLARELESS 68@32

φ: 72mm H: 22mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 75@35

φ: 75mm H: 35mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



GLARELESS 83@40

φ: 83mm H: 40mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 88%



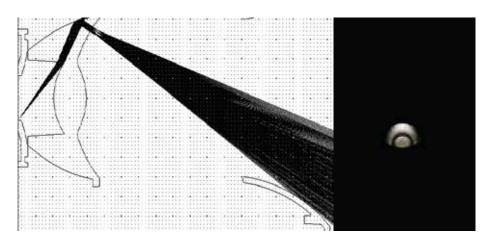
PEAK SERIES

A clean wall-washing and extremely deep anti-glare lens



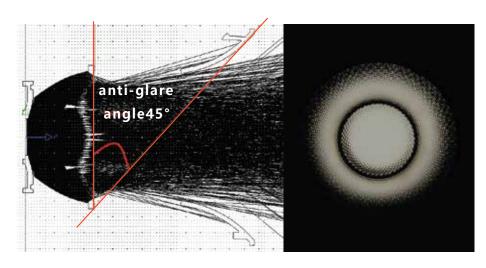
Surface treatment, directional light control

Special treatment of the light in certain positions of the Peak series lens so that with the glare shield, some of the light just passes over the edge of the large opening of the glare shield, making it a more obvious cut-off line between light and dark when washing the wall.



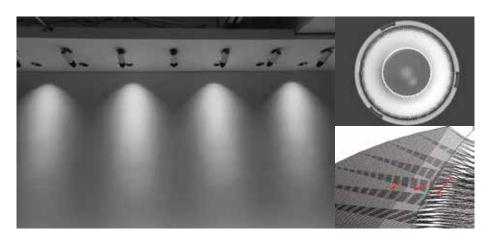
Matching with light hood to achieve ultimate anti-glare

Adding microstructure on the surface of the lens makes the light cross-mix more evenly on the surface of the lens, and with the anti-glare cover developed by our company, the light spot of the wall washing is more even.



More uniform light spot

The reflective surface treatment allows some of the light to cross-mix in multiple places within the lens and then mix again at the exit surface, resulting in a more uniform overall light spot.



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PEAK SERIES



PEAK/ PEAK V 25@13

φ: 25mm H: 13mm Material: PMMA

FWHM: 15°/24°/36°/50°

(PEAK V no 50°) Efficiency: 90%



PEAK/ PEAK V 35@16

φ: 35mm H: 16mm

Material: PMMA

FWHM: 15°/24°/36°/50°

(PEAK V no 50°) Efficiency: 90%



PEAK 30@15

φ: 30mm H: 15mm Material: PMMA

FWHM: 15°/24°/36°/50°

Efficiency: 90%



PEAK/ PEAK V 40@19

φ: 40mm H: 19mm

Material: PMMA

FWHM: 15°(developing)/24°/36°/50°

(PEAK V no 50°) Efficiency: 90%



PEAK/ PEAK V 45@21

φ: 45mm H: 21mm

Material: PMMA

FWHM: 15°/24°/36°/50°

(PEAK V no 50°)

Efficiency: 90%



PEAK 55@25

φ: 55mm H: 25mm

Material: PMMA

FWHM: 15°/24°/36°/50°

Efficiency: 90%



PEAK 68@32

φ: 68mm H: 32mm

Material: PMMA

FWHM: 15°/24°/36°/50°

Efficiency: 90%

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FILMY SERIES

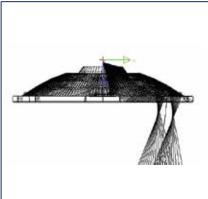
A lens as thin as a cicada wing

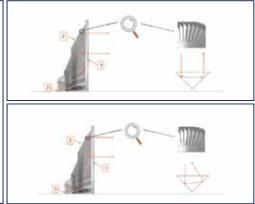


Ultra-thin design

In the limited optical space, through triple total reflection technology, the optical path is increased to control lights effectively.







Beautiful appearance

Combining calculus with three total reflections, the lens looks like a blooming flower, which is quite exquisite as the appearance of lamps.



Triple total reflection technology: narrow angle can also match CCT changing COB





FILMY SERIES



FILMY 30@06

φ: 30mm H: 6mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 45@09

φ: 45mm H: 9mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 35@07

φ: 35mm H: 7mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 50@10

φ: 50mm H: 10mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 55@11

φ: 55mm H: 11mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 62@13

φ: 62mm H: 13mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 68@13

φ: 68mm H: 13mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%

FILMY SERIES



FILMY 75@15

φ: 75mm H: 15mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 83@17

φ: 83mm H: 17mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



FILMY 90@18

φ: 90mm H: 18mm

Material: PC

FWHM: 10°/15°/24°/36°/60°

Efficiency: 85%



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RAINBOW SERIES

A lens like an eye



Aspherical design:

Adjust the internal structure of the convex aspherical surface to make the light spot cut-off and uniform.









Suitable for Kirin optical platform:

The size is from 20-83mm. By using our customized lens holders, it can be assembled on our COB holders and realize a convenient replacement. it can also match with various COB brands through the corresponding COB holders.

Sunset effect:

By adding color filter, the color of the light spot can be changed to achieve different lighting effects.

There are three sizes of sunset red color-changing filters, which can be applied to sunset lights, wall lights, atmosphere lights, etc. You can also customize different colors filters according to your own needs.

The specific parameters of the color filters are as follows:

Color filter	Size	Matching optics	Matching COB holder	
Ø17.8		Rainbow lens D20/D25	D24 COB holder	
Ø27	27@1.1	Rainbow lens D35/D45/D50/D55/D62/D68	D35 COB holder	
Ø49.8		Rainbow lens D83/D75	D50 COB holder	



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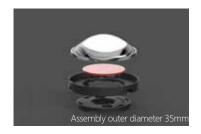
RAINBOW SERIES



RAINBOW 18@05

φ: 18mm H: 5mm

Material: PC FWHM: 75° Efficiency: 88%



RAINBOW 32@09

φ: 32mm H: 9mm

Material: PC FWHM: 75° Efficiency: 88%



RAINBOW 25@06

φ: 25mm H: 6mm

Material: PC FWHM: 75° Efficiency: 88%



RAINBOW 42@12

φ: 42mm H: 12mm

Material: PC FWHM: 75° Efficiency: 88%



RAINBOW 47@15

φ: 47mm H: 15mm

Material: PC FWHM: 75° Efficiency: 88%



RAINBOW 52@15

φ: 52mm H: 15mm

Material: PC FWHM: 75°

Efficiency: 88%



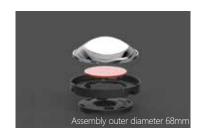
RAINBOW 58@16

φ: 58mm H: 16mm

Material: PC FWHM: 75°/95° Efficiency: 88%

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RAINBOW SERIES



RAINBOW 64@19

φ: 64mm H: 19mm

Material: PC FWHM: 75° Efficiency: 88%



RAINBOW 71@18

φ: 71mm H: 18mm

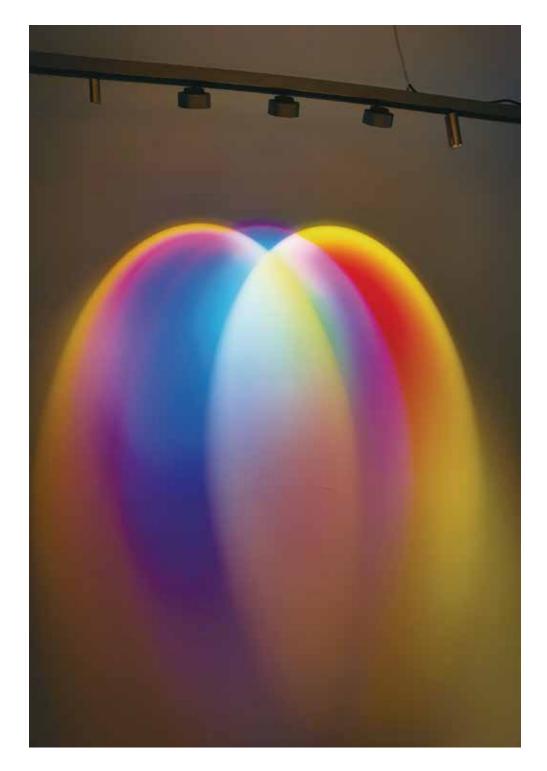
Material: PC FWHM: 75° Efficiency: 88%



RAINBOW 79@18

φ: 79mm H: 18mm

Material: PC FWHM: 80° Efficiency: 88%



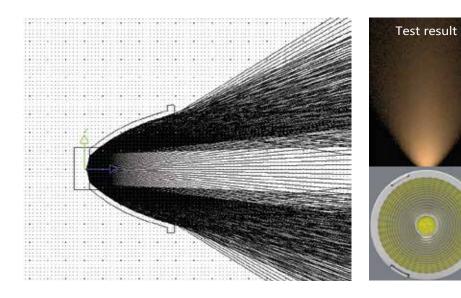
V SERIES

A reflector with anti-glare effect



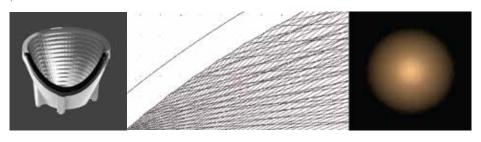
Distribute lights appropriately

In order to uniform the wall-washing lights without delamination, for reflectors of different diameters, it's necessary to accurate the reflector's height, distribute the lights appropriately, and control the lights on the reflecting surface precisely.

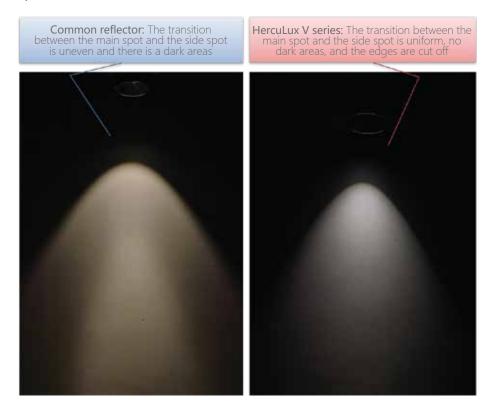


Light spot uniformity

On the basis of the reasonable distribution of the middle light and the light of the reflective surface, coupled with the reflective surface of the scaled surface differential structure, the light spot becomes more soft, and at the same time, it can be accurately controlled on the light of the reflective surface to avoid the occurrence of stratification. Dark ring and other phenomena.



Spot contrast



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V SERIES



V 25@17

φ: 25mm H: 17mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



V 35@23

φ: 35mm H: 23mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



V 30@19

φ: 30mm H: 19mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



V 45@34

φ: 45mm H: 34mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



V 50@36

φ: 50mm H: 36mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



V 55@36

φ: 55mm H: 36mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



V 62@41

φ: 62mm H: 41mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%

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V SERIES



V 68@45

φ: 68mm H: 45mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



V 75@47

φ: 75mm H: 47mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



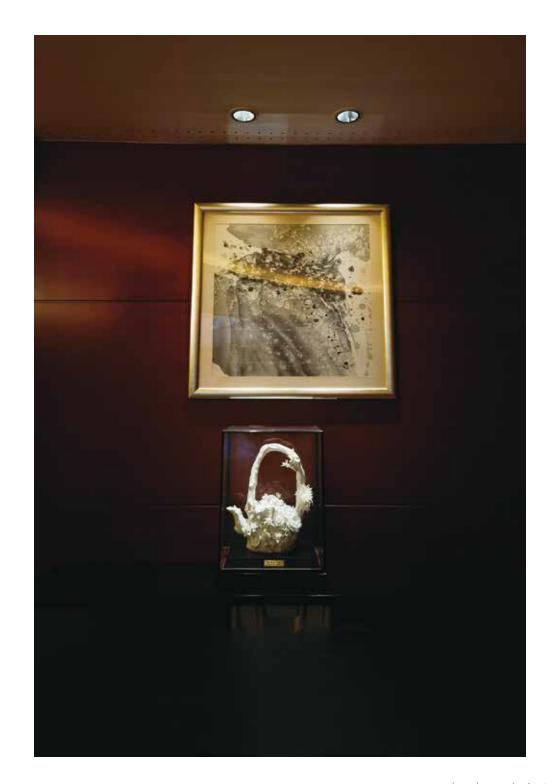
V 83@60

φ: 83mm H: 60mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



ZOOM MODULE

The main zoom product in the Kirin Optical Platform, zoom without changing sizes

The zoom module is composed of a lens, a lens holder, and a fixed holder, wherein the lens holder drives the lens to move back and forth in the fixed holder to realize the change of the focal length of the lens relative to the position of the LED, thereby realizing the change of the angle. In the zoom module development plan, the outer diameter is consistent with other dimensions of the Kirin Optical Platform. The total planned outer diameters are 30, 35, 45, 50, 55, 62, 75.



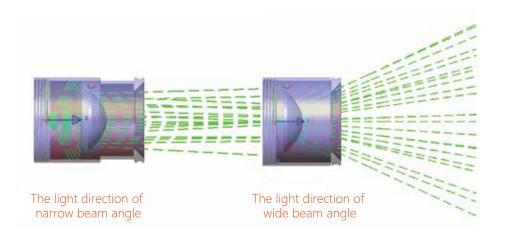
Easy install

After the customer gets the zoom module, they only need to add a zoom connection structure and fix it on the lens holder with screws, that is, the module can be rotated on the Kirin Optical Platform holder, and the front part of the lamp can be completed by adding the lamp shell, and the structure is simple.



Fermat microstructure design

The convex lens is partially designed with Fermat microstructure, which makes the overall light spot soft and cut off, and the transition light spot is more natural.



Anti-glare effect

The zoom module has an anti-glare angle of 38°itself, and the anti-glare angle remains unchanged during the entire zooming process, so that the zoom module can achieve excellent anti-glare effect at all angles. The following pictures are the real shot effect of the small, medium and large angle.



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ZOOM MODULE

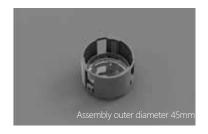


ZOOM 22@06

φ: 22mm H: 6mm

Material: PC FWHM: 10°~45°

Efficiency: /



ZOOM 37@12

φ: 37mm H: 12mm

Material: PC FWHM: 10°~45°

Efficiency: /



ZOOM 27@08

φ: 27mm H: 8mm

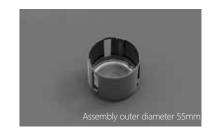
Material: PC FWHM: 10°~45° Efficiency: /



ZOOM 42@13

φ: 42mm H: 13mm

Material: PC FWHM: 10°~45° Efficiency: /



ZOOM 47@15

 $\phi\colon\,47mm$ H: 15mm

Material: PC

FWHM: 10°~45° Efficiency: /



ZOOM 54@16

φ: 54mm H: 16mm

Material: PC FWHM: 10°~45° Efficiency: /



ZOOM 65@19

φ: 65mm H: 19mm

Material: PC FWHM: 10°~45°

Efficiency: /

MAVIC & MAVIC PRO

A lens with ultra small size and clean light spot



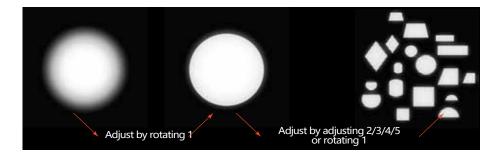
Same base, consistent with the screw hole position of the Qilin platform D35 light source bracket.



Suitable for monochrome and bicolor light sources smaller than 6mm.



Can adjust to any shape and rotate 360 degrees.



High precision, can show more details.





MAVIC & MAVIC PRO

Easy assembly and strong compatibility

Step 1: Unscrew the screws and replace the conventional light source bracket 6.



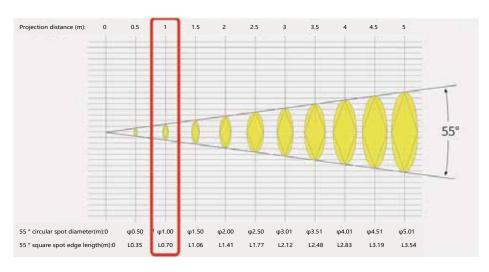


The lens can rotate 360 degrees and can be used for logos

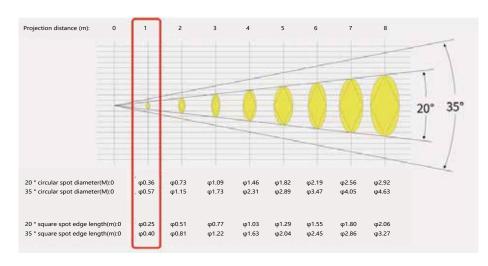
Loosen the hand screws 9 on both sides, and the lamp 8 can rotate 360 ° around accessory 7, making it flexible and adaptable to the needs of multiple views and angles. It can also be used for logo lights, and the logo sheet needs to be customized separately.



Differences: Different projection ratios



Mavic: Circular spot diameter at 1 meter: 1 meter



Mavic Pro: Spot diameter at 1 meter: 0.36-0,57 meters.

The spot size of Mavic Pro is adjustable

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KA PRO SERIES

The KA Pro is a major upgrade based on Calculus technology. Compared to the KA series, the KA pro offers a significant increase in main center light intensity and efficiency.



KA Pro Product Features







- $\ensuremath{\checkmark}$ Calculus technology with uniform spot and cut-off
- √ High light intensity in the main center
- √ Higher light efficiency
- √ Superior color mixing ability
- √ Perfectly adapted to Kirin Optical Platform

Color mixing ability:

The reflective surface adopts calculus technology, so that the lens can match with CCT changing COB, and the spot is more uniform.

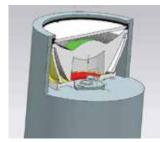


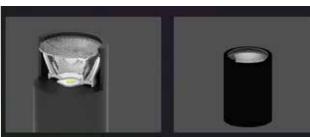
Test Situation

Series	Diameter	Height	Materials	Angle	K-value	Efficiency
KA-Pro series	50	24	РММА	24°	5.3	93.7%
KA series				24°	4.6	92.8%
KA-Pro series				36°	3.0	94.3%
KA series				36°	2.5	91.3%

Matching filter

KA PRO series, matched with different variable filter to realize different lighting effects, single asymmetric, double asymmetric, linear, wall wash, transparent filter. Track light + wall washer, suitable for track light fixtures, no need to add deeper light hood.





Comparison Application

Luminaire spacing	1M	1M	1M		
Distance from wall	1M	1M	1M		
Wall height	3.6M	3.6M	3.6M		
Base lens	12°	24°	36°		
Luminaire Offset Angle	35	35	35		
Light distribution curve					

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KA PRO SERIES



KA PRO 30@16

φ: 30mm H: 16mm Material: PMMA

FWHM: 15°/24°/36°/50°

Efficiency: 92%



KA PRO 45@16

φ: 45mm H: 16mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



KA PRO 35@12

φ: 35mm H: 12mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



KA PRO 50@16

φ: 50mm H: 16mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



KA PRO 40@13

φ: 40mm H: 13mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



KA Pro 55@21

φ: 55mm H: 21mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%

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KA PRO SERIES



KA PRO 62@24

φ: 62mm H: 24mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



KA PRO 68@25

φ: 68mm H: 25mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



KA PRO 75@30

φ: 75mm H: 30mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



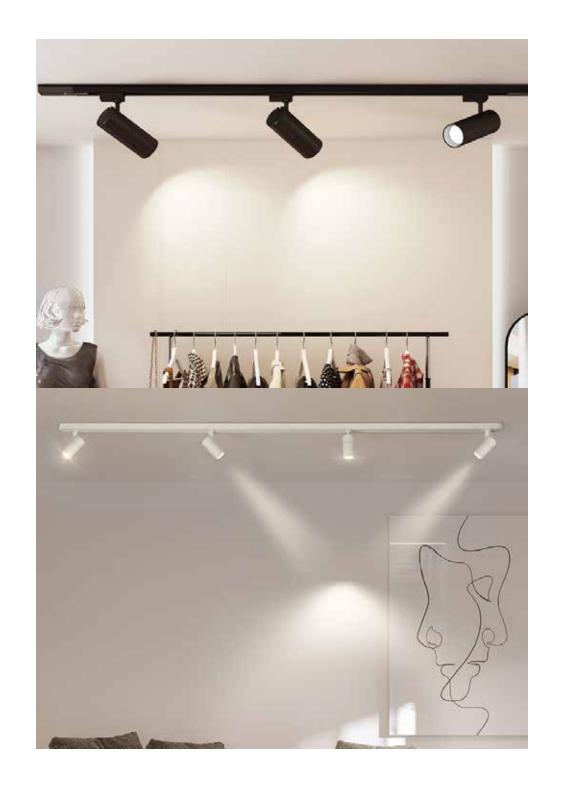
KA PRO 83@32

φ: 83mm H: 32 mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 92%



MOONY PRO SERIES

Hard grazing wall

Grazing wall as a unique category (no sub-light spots, clear light and shadow, sharp spots, layered) gives users a unique experience and is loved by many users. Some users prefer hard grazing wall, but others favor soft grazing wall.

The Moony Pro Series (soft grazing wall) and Peak Pro Series (hard grazing wall) are great additions to the Kirin Optical platform, offering more beautiful designs and personalized needs for the field of home lighting without main lights.



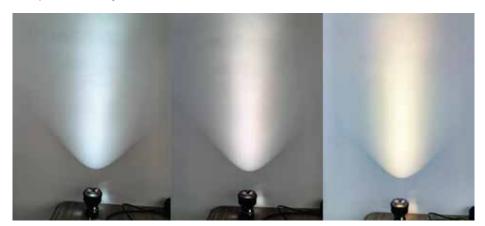
COB Compatible

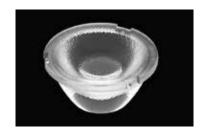
Both regular color temperatures and dual-color temperature light sources on the market can be compatible, easily controlled.











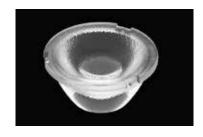
MOONY PRO 28@13

φ: 28mm H: 13mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



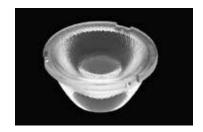
MOONY PRO 35@18

φ: 35mm H: 18mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



MOONY PRO 45@21

φ: 45mm H: 21mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%

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PEAK PRO SERIES

Soft grazing wall

Grazing wall as a unique category (no sub-light spots, clear light and shadow, sharp spots, layered) gives users a unique experience and is loved by many users. Some users prefer hard grazing wall, but others favor soft grazing wall.

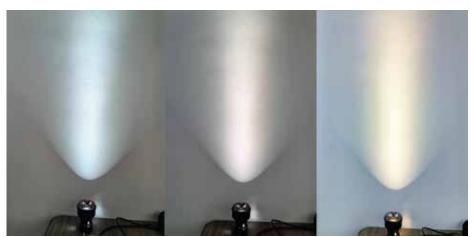
The Moony Pro Series (soft grazing wall) and Peak Pro Series (hard grazing wall) are great additions to the Kirin Optical platform, offering more beautiful designs and personalized needs for the field of home lighting without main lights.



COB Compatible

Both regular color temperatures and dual-color temperature light sources on the market can be compatible, easily controlled.







PEAK PRO 28@14

φ: 28mm H: 14mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



PEAK PRO 35@17

φ: 35mm H: 17mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%



PEAK PRO 45@21

φ: 45mm H: 21mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 88%

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SOFTY SERIES

Advantages of silicone lens

- √ High Temp,200°C up can be used in high-power lamps.
- √ Zero InnerStress,completely prevent stress cracking.
- \checkmark High Molding Accuracy,molecular-level replication between the silicone and the mold, surface precision can achieve μ -level.
- √ High toughness, the material is soft and elastic, making it easy to form and unmold complex structures.
- √ High weatherability, HercuLux self-innovate silicon, high aging resistance, yellowing resistance and optical stability, ong service life.
- √ Recyclable, liquid silicone can be recycled into silicone oil, environmentally friendly.
- √ Same dimensions as all Kirin platform,and can be directly interchanged.

Long service life: In the process of synthesizing Silicone, we strictly control the content of chloride ions in the silicone resin, controlling it to be less than 1 ppm, and allow the platinum salt initiator to fully react during the synthesis. So the degree of yellowing of our silicone lenses is almost negligible!

How to verify the yellowing resistance of silicone lens: leave it at 150°C for more than 240 hours to verify its anti-yellowing performance.

Comparison of HercuLux silicone lens and other brands after being placed in a 150°C environment for 500 hours.





SOFTY 20@11

φ: 20mm H: 11mm Material: Silicone

FWHM: 15°/24°/36°/50°

Efficiency: 94%









SOFTY 25@13

φ: 25mm H: 13mm

Material: Silicone

FWHM: 24°/36° (15°/50°developing)

Efficiency: 94%

SOFTY 35@16

φ: 35mm H: 16mm

Material: Silicone

FWHM: 24° (15°/36°/50°developing)

Efficiency: 94%

SOFTY 45@21

φ: 45mm H: 21mm

Material: Silicone

FWHM: 24°/36° (10°/15°/50°developing)

Efficiency: 94%

SOFTY 62@30

φ: 62mm H: 30mm

Material: Silicone

FWHM: 24° (15°/36°/50°developing)

Efficiency: 94%

SOFTY 83@40

φ: 83mm H: 40mm

Material: Silicone

FWHM: 24° (15°/36°/50°developing)

Efficiency: 94%

Standard products are under continuous development and can be customised

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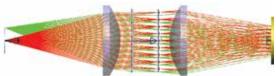
FIREFLY-KIRIN SERIES

Development Background

At present, in commercial lighting and hotel lighting, there are very few optics with good color mixing, especially nowadays, it is difficult to guarantee the spot quality after the color COB comes out, and secondly, the spot quality is not good, and It's very harsh.

Firefly-Kirin series, using Herculux patented "Light cone correction technology" technology. Comply with Zhaga standard, super color mixing ability.





Light cone correction technology, The design concept comes form imaging optics, which combines imaging optics with energy optics.

- To achieve the following two objectives:
- 1: Uniform irradiance on the exit surface.
- 2: Expanding LEDs from point light sources to surface light sources.

Conforms to Zhaga standards:

From the time of project approval, we require the design of the whole series of products to meet the pin to pin replacement with Kirin optical platform products, fully in line with Zhaga standards.



Superb color mixing ability and ultra-high center light intensity:

Herculux's patented "light cone correction technology" achieves excellent color uniformity, high illuminance uniformity on the lens surface to achieve high CBCP, excellent light distribution angle and ultra-low glare performance.











Parameter comparison:

Test conditions	COB: 6mm T	unable CCT (Power			
Product series	Angle(50%)	Angle(10%)	LM	CBCP	K value	Efficiency
Firefly-Kirin φ35-24°	23.9	42.7	564LM	2739CD	4.85	86%
Other bands φ35-24°	24.9	44.4	552LM	2251CD	4.07	84%
Firefly-Kirin φ35-36°	35.7	57	554LM	1428CD	2.57	85%
Other bands φ35-36°	35.6	60.7	541LM	1236CD	2.28	83%
Firefly-Kirin φ35-60°	59.8	78	558LM	596CD	1	85%
Other bands φ35-60°	52.9	93.6	483LM	518.8CD	1.07	74%

Spot Comparison:



Firefly-Kirin φ45-24°



Other bands $\phi45-24^{\circ}$

FIREFLY-KIRIN SERIES



FIREFLY-KIRIN 28@19

φ: 28mm H: 19mm

Material: PMMA+Vaccum Aluminum

Plating PC

FWHM: 24°/36°/60° Efficiency: 92%



FIREFLY-KIRIN 33@17

φ: 30mm H: 17mm

Material: PMMA+Vaccum Aluminum

Plating PC

FWHM: 24°/36°/60° Efficiency: 92%



FIREFLY-KIRIN 35@25

φ: 35mm H: 25mm

Material: PMMA+Vaccum Aluminum

Plating PC

FWHM: 24°/36°/60° Efficiency: 92%



FIREFLY-KIRIN 40@30

φ: 40mm H: 30mm

Material: PMMA+Vaccum Aluminum

Plating PC

FWHM: 24°/36°/60° Efficiency: 92%



FIREFLY-KIRIN 45@34

φ: 45mm H: 34mm

Material: PMMA+Vaccum Aluminum

Plating PC

FWHM: 24°/36°/60° Efficiency: 92%



FIREFLY-KIRIN 50@38

φ: 50mm H: 38mm

Material: PMMA+Vaccum Aluminum

Plating PC

FWHM: 24°/36°/60° Efficiency: 92%



FIREFLY-KIRIN 55@39

φ: 55mm H: 39mm

Material: PMMA+Vaccum Aluminum

Plating PC

FWHM: 24°/36°/60° Efficiency: 92%

COB HOLDER

Can buckle with the lens holder; Same COB holder can match different COB Substrate size and COB brand.



Meet the assembly standards of ZHAGA. Interchangeable with solder free brackets such as BJB, with consistent outer diameter, screw positioning, and rotating interface.



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LENS HOLDER

Twisting method, can be rotated with BJB solderless holder and other **ZHAGA** solderless holders. Three colours, different colours, different effects. Size: $\phi45/\phi50/\phi55/\phi62/\phi68/\phi75$







Test Comparison:

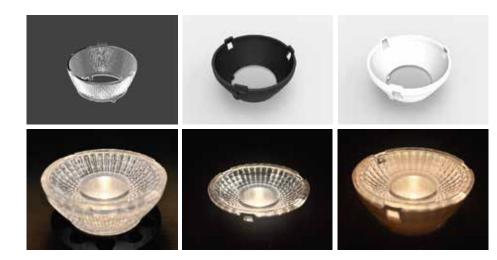
Test condition: φ45; Test COB: φ9

	Black	White	Crystal	Black	White	Crystal									
Standard angle(°)		10			15			24			36			50	
Measured angle(°)	18.1	18.1	17.9	18.8	18.7	18.4	23.3	23.2	22.9	35.9	35.9	35.4	51.9	51	50.4
K value(cd/lm)	8.04	6.97	7.01	6.68	6.25	6.26	5.35	5.09	5.18	2.74	2.62	2.69	1.36	1.37	1.38
Effiniency	63.85%	74.33%	73.13%	90.61%	92.59%	91.37%	90.61%	95.63%	94.81%	88.71%	93.17%	92.32%	88.81%	94%	92.34%

UGR Comparison:



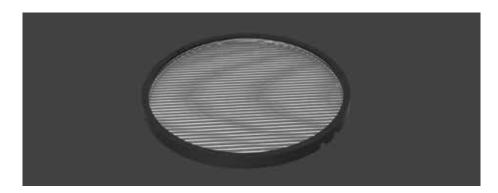
Glare Comparison:



LIGHT FILTER

6 types of Filter for the Kirin platform

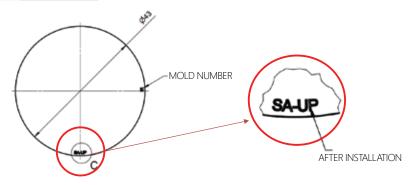
Linear/ Single Asymmetric/ Double Asymmetric/ Wall Washing/ Transparent / Heavy/Light Matte



Identification of Filter

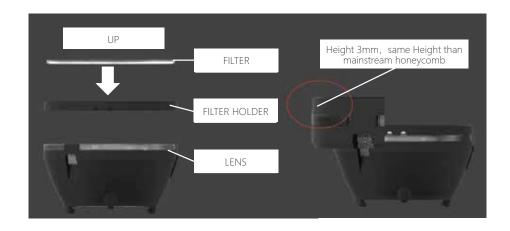
Filter can be identified by the naked eye. Transparent: has a smooth and shiny surface on both sides. Light /Heavy Matte: while the soft has a smooth and shiny surface on both sides. Single Asymmetric: has the words "SA-UP" marked on the surface. Double Asymmetric: the double polarizer has the words "DA-UP" marked on the surface. Linear: has the words "60XX-UP" marked on the surface. Wall washing: has the words "XQ" marked on the surface.

transparent surface	Matte surface	SA-UP	DA-UP	60XX-UP	XQ
Transparent	Light Matte	Single Asymmetric	Double Asymmetric	Linear	Wall washing



Installation method

The transparent and light&heavy matte without optical structure can be installed directly, while Linear, Asymmetric, double Asymmetric, and wall washing filter with optical structure need to be installed with the smooth surface facing up, and the direction with the words SA-UP/DA-UP/60XX-UP-/XQ is the direction of the light spot .



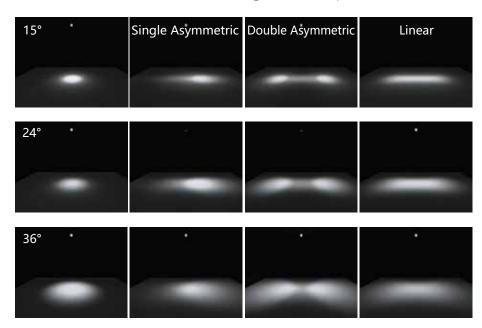
Application





LIGHT FILTER

Different filters with different lenses will get different spot effects.

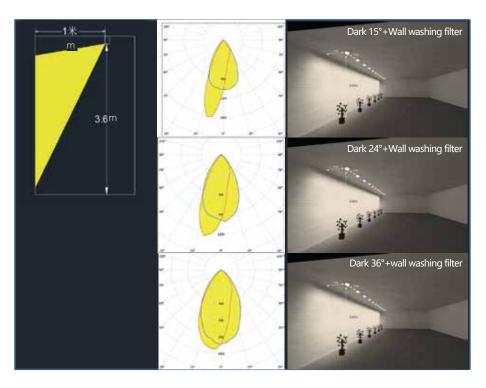


Wall washing filter

Suitable for track lighting fixtures without deepened anti-glare louver.



Lens Effects



Size

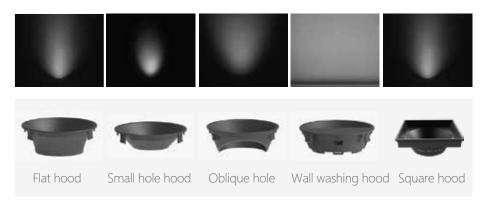
For the Kirin Optical Platform series products, corresponding size-variable lenses have been developed. Specific sizes include: φ 25, φ 30, φ 35, φ 45, φ 50, φ 55, φ 62, φ 68, φ 75, and φ 83, with support for customized development. The embedded ring height for variable lenses of different sizes is 3mm. The actual diameter and height of the variable lenses are slightly smaller than the corresponding embedded ring sizes.



LIGHT HOOD

Various types are choosable

Small hole hood, oblique hole hood, flat hood, wall washing hood Various forms of hoods, switch at will. The installation method is the same, can be switched at will.



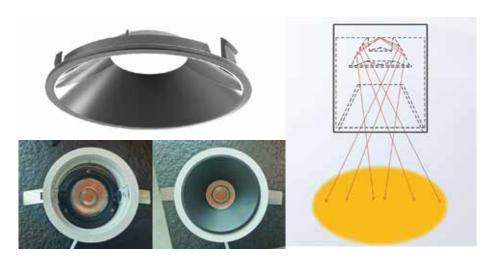
Multiple colors available and customizable

There are currently four colors available: bright black, bright gold, bright silver, and matte black. Customization of other colors is also acceptable.



Small hole hood

The cross-light design principle makes the light output hole of the lamp smaller than the optical diameter. With the small hole hood, it can be hidden deeper, the glare can be better controlled, and the optical efficiency has little effect, and the light spot effect can be guaranteed. The small hole hood perfectly solves the phenomenon of butterfly spots when deflecting the wall and washing the wall.



Types & Color	Size	Distance between light-hood & lens	Small hole Diameter	Adaptable lens	Adaptable filter
	D: 33.5mm H: 10.68mm	h: 5.2mm	/	Dark25/Gemini25/	
	D: 50mm		/ Moony25/Peak25 , Dark30/Gemini30/		
	H: 9.65mm	h: 12mm	/	Moony30/Peak30	
	D: 50mm			Dark35/Gemini35/	
	H: 17.89mm	h: 5.2mm	/	Moony35/Peak35	
	D: 68mm	L	,	Dark35/Gemini35/	
	H: 23.45mm	h: 5mm	/	Moony35/Peak35	
Oblique: Matte Black/ Bright Black/	D: 68mm	h · 5 17mm	/	Dark45/Gemini45/	
	H: 25mm	11. 3.17111111	/	Moony45/Peak45	
Bright Gold/ Bright Silver	D: 70mm	h: 5.2mm	/	Dark50/Gemini50/	Single asymmetric/
Bright Gold/ Bright Silver	H: 28mm	11. 3.211111		Moony50/Peak50	Double asymmetric/
	D: 100mm	h: 7mm	/		Linear spot/
	H: 36.3mm	11. 7111111	/	Moony55/Peak55	Matte filter
	D: 100mm	h· 8mm	/	Dark62/Gemini62/	
	H: 37mm		,	Moony62/Peak62	
	D: 145mm	h· 8mm	/	Dark68/Gemini68/	
	H: 50.9mm		,	Moony68/Peak68	
	D: 145mm	h: 10mm	/	Dark75/Gemini75/	
	H: 52.07mm		ŕ	Moony75/Peak75	
Small hole: Matte Black/ Bright Black/	D: 68mm	h: 9mm	d: 23mm	Dark35/Gemini35/	
	H: 20.77mm			Moony35/Peak35	
Bright Gold/ Bright Silver	D: 68mm H: 17.77mm	h: 12.4mm	d: 29mm	Dark45/Gemini45/	
	<u> [п. 17.77mm</u>			Moony45/Peak45	

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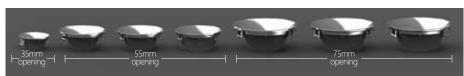
LIGHT HOOD

Peak series lens & Flat hood

Kirin Optical Platform Peak series lens with flat hood Wall washing is clean, without delamination, and the light spot is uniform.



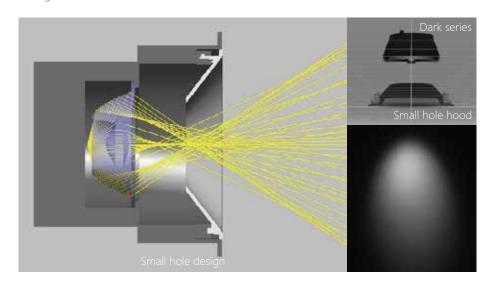
Flat hood matching information sheet



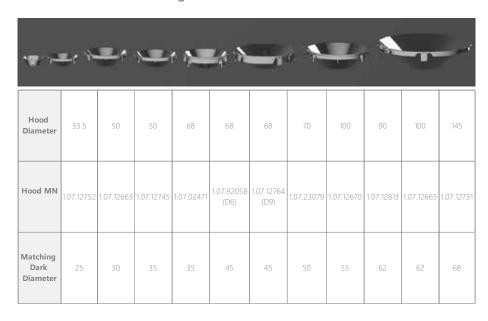
MN	1.07.23184	1.07.23141	1.07.23142	1.07.23190	1.07.23161	1.07.23217	1.07.23083
Flat Hood Diameter	33.5	50	50	50	68	68	68
Peak Diameter	PEAK 20@10	PEAK 25@13	PEAR 30@15	PEAK 35@16		PEAK 40@19	PEAK 45@21
15°				1.01.23222			1.01.23307(D6)
24°	1.01.23154	1.01.13050	1.01.13021	1.01.12962		1.01.23216	1.01.12657(D6) 1.01.23096(D9)
36°	1.01.23163	1.01.23143	1.01.23139	1.01.13016			1.01.23067(D6) 1.01.23137(D9)
50°				1.01.23212			1.01.23319(D6) 1.01.23319(D9)

Dark series lens & Small hole hood

Kirin Optical Platform Dark series lens with small hole hood Uniform light spot, deeper anti-glare.



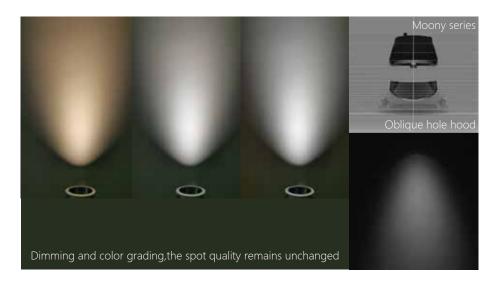
Small hole hood matching information sheet



LIGHT HOOD

Dark/Moony & Oblique hood

Kirin Optical Platform Moony/Dark series lenses with oblique hole hood, The edge of the spot is cut off cleanly and the transition is even.

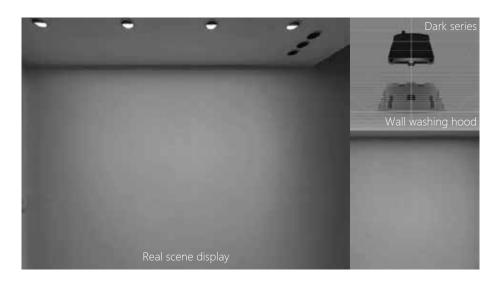


Oblique hole hood matching information sheet

Hood Diameter	50	68	68	70	100	100	145	145
Hood MN	1.07.92096	1.07.02440	1.07.02335	1.07.92097	1.07.92135	1.07.92104	1.07.92118	1.07.92102
Matching Dark/ Moony diameter	35	35	45	50	55	62	68	75

Dark series lens & Wall washing hood solution

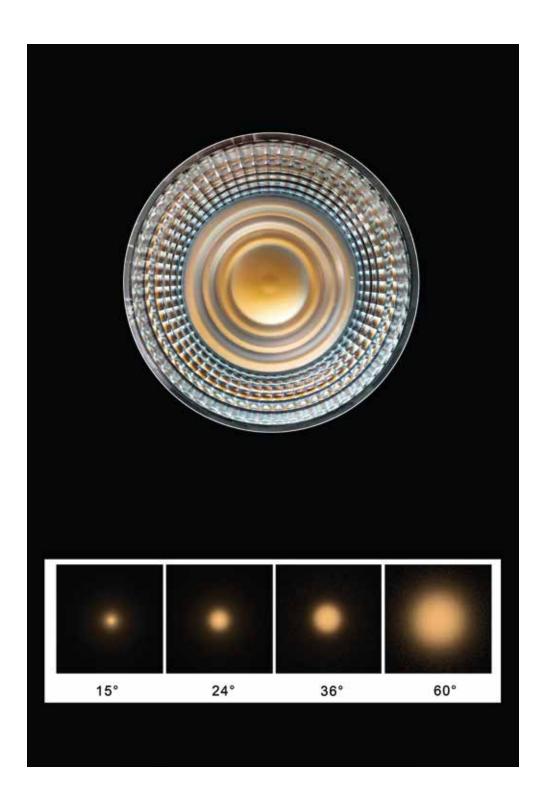
Kirin Optical Platform Dark series lenses with wall washing hood, The entire wall has uniform brightness and the skyline is clear.



Recommended wall washing hood solution

	35 Opening	55 Opening	75 Opening	95 Opening
	scheme	scheme	scheme	scheme
Wall Washing Hood MN	1.07.23206 /1.07.23206	1.07.23295_A /1.07.23295_B	1.07.23130	1.01.23310
Recommended optics	Dark D25-15°	Dark D35-15°	Dark D45-15°	Dark D50-15°
	1.01.92131	1.01.91997	1.01.91887	1.01.92006

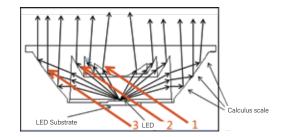
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Principle

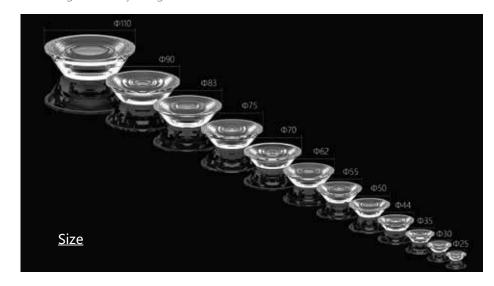
Photon Lens designed by one refracting surface and several fully reflecting surfaces, can control the light distribution well by lower lens height.



Why can make the light distribution well by lower lens height?

Area 1 is refracting surface, control the light from the middle of the LED, to control the small beam angle; Area 2 are fully reflecting surfaces, little far away from the COB, control some long lights to be small beam angle; Area 3 are periphery fully reflecting surfaces, control the outermost lights also the best lights, can make smaller beam angle and make a clear edge light spot

To sum up, the lens of the Photon series divides the light of the light source into several parts, and then optimizes each part. In the case of light spot cut-off, the central light intensity is high.



PHOTON



PHOTON 25@07

φ: 25mm H: 6.7mm

Material: PC

FWHM: 15°/24°/36°/60° Wall wash: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 44@11

φ: 44mm H: 11.3mm

Material: PC

FWHM: 15°/24°/36°/60° Wall wash: 15°/24°/36°/60° Color mixing: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 30@08

φ: 30mm H: 8mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 50@14

φ: 50mm H: 14mm

Material: PC

FWHM: 15°/24°/36°/60°

Color mixing: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 35@10

φ: 35mm

Material: PC

FWHM: 15°/24°/36°/60° Wall wash: 15°/24°/36°/60° Color mixing: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 55@15

φ: 55mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%

PHOTON



PHOTON 62@18

φ: 62mm H: 17.5mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 83@22

φ: 83mm H: 22mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 70@19

φ: 70mm H: 18.5mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 90@22

φ: 90mm H: 23.2mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 75@21

φ: 75mm H: 21.5mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%



PHOTON 110@32

φ: 110mm H: 32mm

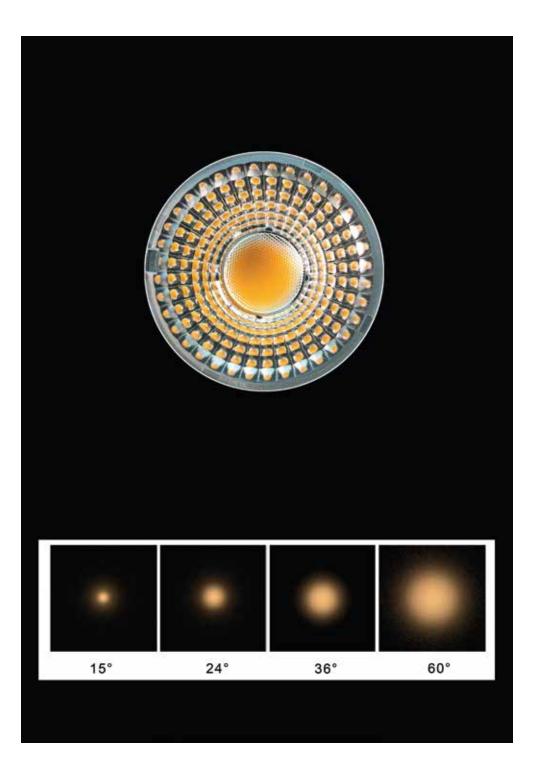
Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 85%

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Facula shape



Commercial lighting application





KA



KA 35@16

φ: 35mm H: 16mm Material: PC/PMMA

FWHM: 10°/15°/24°/36°/50°

Efficiency: 90%



KA 43@19

φ: 43mm H: 19mm Material: PC/PMMA

FWHM: 10°/15°/24°/36°/60°

Efficiency: 90%



KA 40@20

φ: 40mm H: 20mm Material: PC/PMMA FWHM: 15°/24°/36°/60°

Efficiency: 90%



KA 45@21

φ: 45mm H: 21mm Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 90%



KA 50@25

φ: 50mm H: 25mm

Material: PMMA

FWHM: 12°/15°/24°/36°/45°/60°

Efficiency: 90%



KA 55@24

φ: 55mm H: 24mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 90%



KA 62@31

φ: 62mm H: 31mm

Material: PMMA

FWHM: 15°/24°/36°/45°/60°

Efficiency: 90%





KA 66@36

φ: 66mm H: 36mm Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 90%



KA 72@33

φ: 72mm H: 33mm Material: PMMA

FWHM: 12°/15°/20°/24°/36°/60°

Efficiency: 90%



KA 69@30

φ: 69mm H: 30mm

Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 90%



KA 75@31

φ: 75mm H: 31mm

Material: PMMA

FWHM: 10°/15°/24°/36°/60°

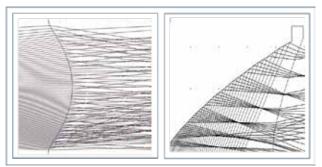
Efficiency: 92%







Product Characteristics

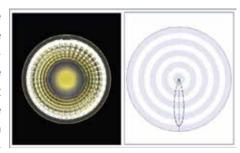


Using calculus total reflection combined with local directional differential technology, while the color temperature and brightness of the light source change, the angle and color of the light spot are not affected.

Using the principle of calculus lens, the reflected light is differentiated to effectively mix light. Add a surface differential structure to the incident and exit convex surfaces, so that the transmitted light is evenly distributed, and the color is uniform.

Principle of Design

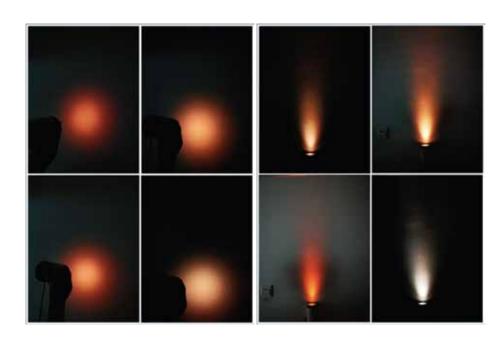
The reflecting surface of the lens uses the principle of differential and integration. The light emitted by the light source is differentiated by a large number of scales, and the light source is divided into several sub-light sources (differential). Each sub-light source is presented separately on the illumination light field, and by rearranging and overlap-



ping the centers, rotating and superimposing (integration), the light of different color temperatures is cross-distributed to achieve a mixed light effect. Differential redistribution of the light source not only makes the light more finely distributed and achieves a good light mixing effect, but also the brightness of the light emitting surface is uniform and even. The area reduces the glare of the lens.

The transmission surface of the lens is arranged in a microstructure and a function array to control the intermediate light reasonably, and then the light from the light source is differentiated and superimposed in an orderly manner, thereby solving the problem of uneven mixing of light transmitted through the lens.

Chameleon Series, Size: 55@21, 24°Lens Spot



CHAMELEON



CHAMELEON 35@16

φ: 35mm H: 16mm Material: PC/PMMA FWHM: 24°/36°/60° Efficiency: 90%



CHAMELEON 44@20

φ: 44mm H: 20mm

Material: PC

FWHM: 24°/36°/60° Efficiency: 90%



CHAMELEON 43@19

φ: 43mm H: 19mm Material: PC/PMMA FWHM: 24°/36°/60° Efficiency: 90%



CHAMELEON 55@21

φ: 55mm H: 21mm Material: PMMA FWHM: 24°/36°/60° Efficiency: 90%



CHAMELEON 55@24

φ: 55mm H: 24mm Material: PMMA FWHM: 24°/36°/60° Efficiency: 90%



CHAMELEON 72@33

φ: 72mm H: 33mm Material: PMMA FWHM: 24°/36°/60° Efficiency: 90%



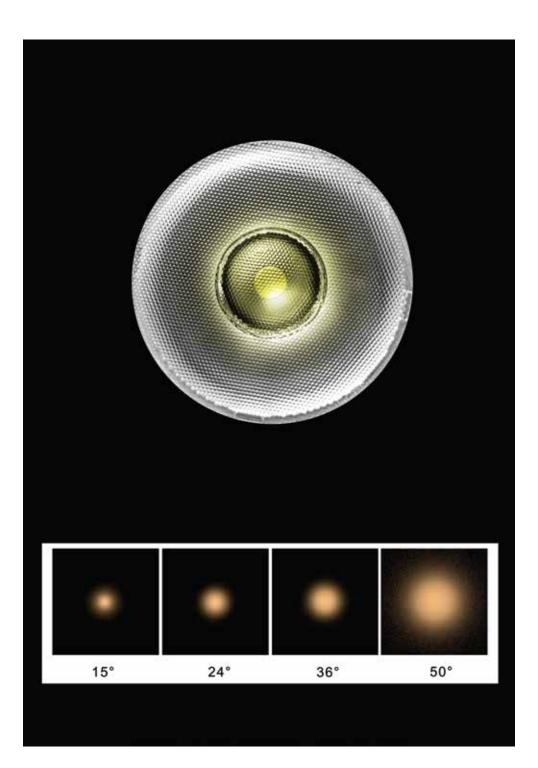
CHAMELEON 62@31

φ: 62mm H: 31mm Material: PMMA FWHM: 24°/36°/60° Efficiency: 90%



CHAMELEON 75@31

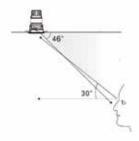
φ: 75mm H: 31mm Material: PMMA FWHM: 24°/36°/60° Efficiency: 90%



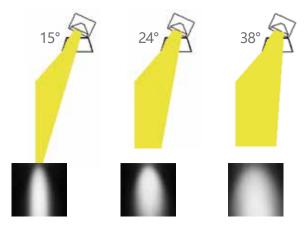


Introduction

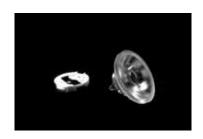
The Max shielding angle of the LED lamp is 46°, can avoid the glare effectively. The most accepted shielding angle of the human visual area always more than 30°, the other light in this area will occur the glare. So when the shielding angle of the LED lamp more than 30°, will control the light out the area to decrease glare.



The polarized light wash wall lamp should have the drift angle, normally have the problem of stratified facula because of the antiglare visor interfered the facula. Hercu-Lux Black Hole family special designed for the hotel, considered the effect of the front ring of the antiglare visor before designing, can distribute the light effectively, even when the customer replacing the front ring, the facula will transit uniformly.



BLACK HOLE



BLACK HOLE 28@14

φ: 28mm H: 14mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 85%



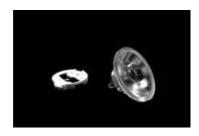
BLACK HOLE 45@24

φ: 45mm H: 24mm

Material: PC

FWHM: 7°/10°/24°/34°/50°

Efficiency: 85%



BLACK HOLE 30@15

φ: 30mm H: 15mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 85%



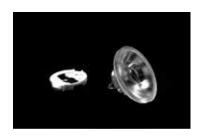
BLACK HOLE 50@24

φ: 50mm H: 24mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 85%



BLACK HOLE 35@18

φ: 35mm H: 18mm

Material: PC

FWHM: 15°/24°/36°/50°

Efficiency: 85%



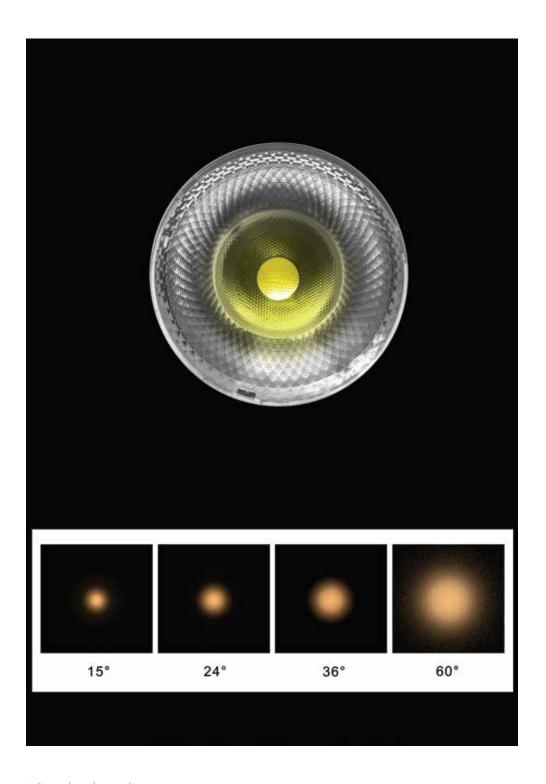
BLACK HOLE 62@24

φ: 62mm H: 24mm

Material: PC

FWHM: 15°/24°/36°/50°

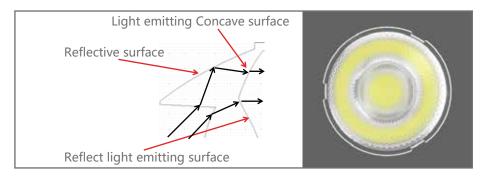
Efficiency: 85%



High efficiency (90%)



Zooming is achieved by properly distributing the ratio of reflected and refracted light during zooming, rather than actively losing light to achieve it, thereby achieving high efficiency.



Short stroke

Beam angle of the intermediate refracted light is designed larger in a shorter stroke so that the Min and Max beam angles stroke difference are in a shorter range.





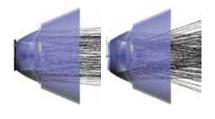
Nice cutoff and fulfilled spot center (strong zoom capability):

The spot cutoff is generated by the intermediate refracted light; considering the overall zooming effect, the cutoff is made moderate by adding an appropriate compound eye to optimize the spot edge on the refracting light exit surface.

Innovatively adding a two-dimensional uniform light microstructure to the surface of the lens, so that the light intensity is softened, the central light intensity can be guaranteed; Especially for the wide beam angle central spot, it has a certain compensation effect, making the center of the wide beam angle spot full.

Better anti-glare effect

In the process of zooming, the main light of the narrow beam angle is emitted along the optical axis direction, while the main light is deflected away from the hood at a wide beam angle, only very little light reaches the hood regardless of the beam angles. So the new lens can be matched with a deeper anti-glare cover to achieve a better anti-glare effect comparing to conventional KA.



<u>INFINITY</u>



INFINITY 35@15-15 36

φ: 35mm H: 15mm

Material: PMMA FWHM: 15°~36°

Efficiency: 90%~92%



INFINITY 45@20-15 36

φ: 45mm H: 20mm

Material: PMMA FWHM: 15°~36°

Efficiency: 90%~92%



INFINITY 35@14-35 60

φ: 35mm H: 14mm

Material: PMMA FWHM: 35°~60°

Efficiency: 90%~92%



INFINITY 45@18-35_60

φ: 45mm H: 18mm

Material: PMMA FWHM: 35°~60°

Efficiency: 90%~92%



INFINITY 55@25-15 36

φ: 55mm H: 25mm

Material: PMMA FWHM: 15°~36°

Efficiency: 90%~92%



INFINITY 62@28-15 36

φ: 62mm H: 28mm

Material: PMMA FWHM: 15°~36°

Efficiency: 90%~92%



INFINITY 55@23-35 60

φ: 55mm H: 23mm

Material: PMMA FWHM: 35°~60°

Efficiency: 90%~92%



INFINITY 62@26-35 60

φ: 62mm H: 26mm

Material: PMMA FWHM: 35°~60°

Efficiency: 90%~92%

INFINITY



INFINITY 72@33-15 36

φ: 72mm H: 33mm

Material: PMMA FWHM: 15°~36°

Efficiency: 90%~92%



INFINITY 75@34-15_36

φ: 75mm H: 34mm

Material: PMMA FWHM: 15°~36°

Efficiency: 90%~92%



INFINITY 72@29-35_60

φ: 72mm H: 29mm

Material: PMMA FWHM: 35°~60°

Efficiency: 90%~92%



INFINITY 75@30-36_60

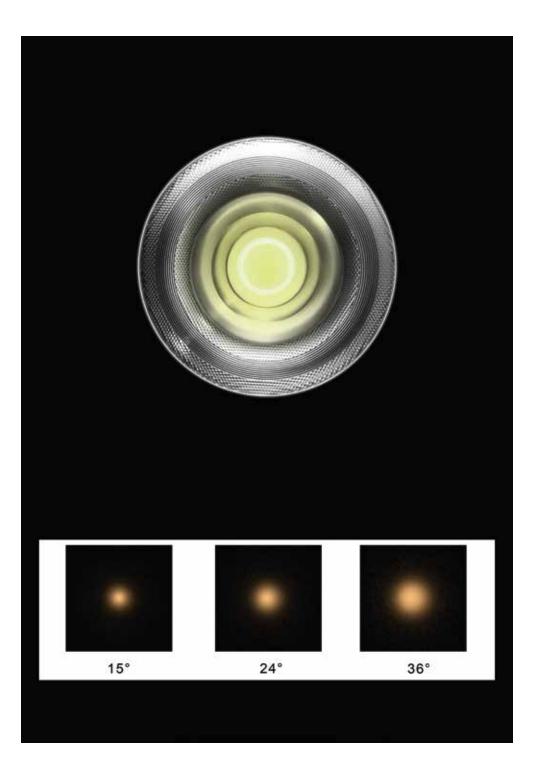
φ: 75mm H: 30mm

Material: PMMA FWHM: 35°~60°

Efficiency: 90%~92%

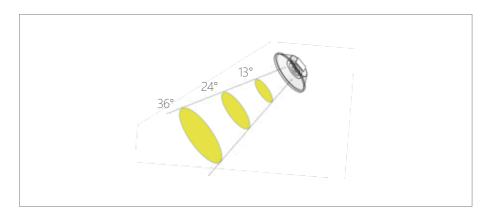


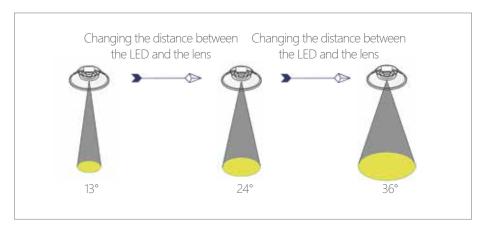




Introduction

Different with the traditional convex lens, the focus family can keep the same efficiency when zooming. By the special optical designing, each reflection surfaces have the same uniform energy to achieve good uniformity without the dark in the middle.

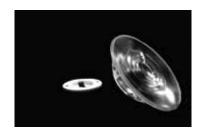




Product characteristics

Fresnel lens has unique optical properties, which can change the optical angle and the size of the spot by changing the distance between light source and lens.

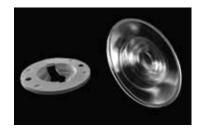
FOCUS



FOCUS 35@10

φ: 35mm H: 10mm

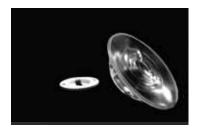
Material: PC FWHM: 13°~36° Efficiency: 85%



FOCUS 50@14

φ: 50mm H: 14mm

Material: PC FWHM: 13°~38° Efficiency: 85%



FOCUS 44@13

φ: 44mm H: 13mm

Material: PC FWHM: 13°~36° Efficiency: 85%



FOCUS 62@17

φ: 62mm H: 17mm

Material: PC FWHM: 13°~36° Efficiency: 85%



FOCUS 72@20

φ: 72mm H: 20mm

Material: PC

FWHM: 13°~36° Efficiency: 85%



FOCUS 75@19

φ: 75mm H: 19mm

Material: PC

FWHM: 13°~38° Efficiency: 85%



FOCUS 90@24

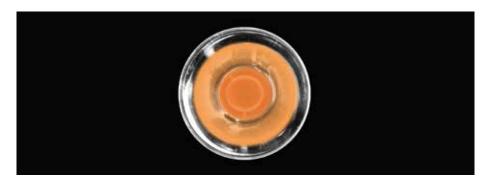
φ: 90mm H: 24mm

Material: PC

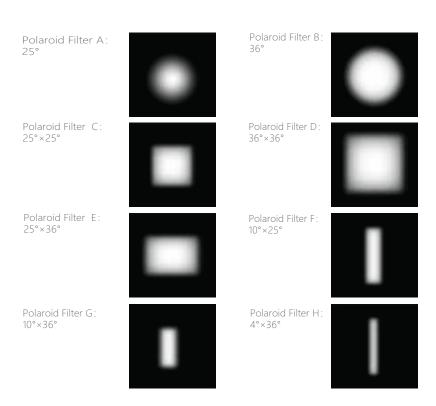
FWHM: 13°~38° Efficiency: 85%

POLAROID

Lens front view



Facula shape

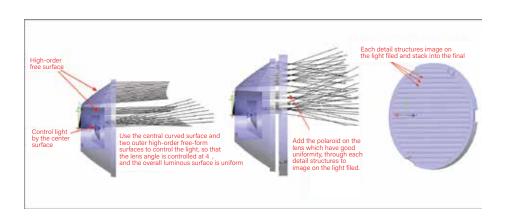


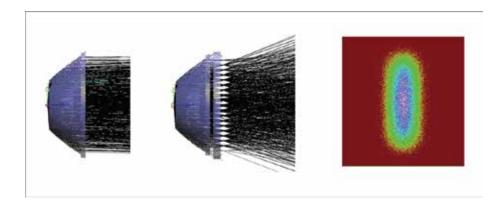
Introduction

Polaroid means using the normally narrow beam angle circle optics to achieve different beam angle, different shape of the facula. Main application is the partial lighting in the art exhibition, not only can achieve different facula requirements, but also can decrease the cost effectively.

Principle

Redistributing the collimating light by each tiny structures to achieve different beam angle and different shape optics, then mixed to achieve different target facula.





POLAROID



POLAROID 30@11

φ: 30mm H: 11mm

Material: PC FWHM: 6°

Efficiency: 90%



POLAROID 40@15

φ: 40mm H: 15mm

Material: PC FWHM: 4° / 6.9°

Efficiency: 90%



POLAROID 35@21

φ: 35mm H: 21mm

Material: PC FWHM: 7°

Efficiency: 90%

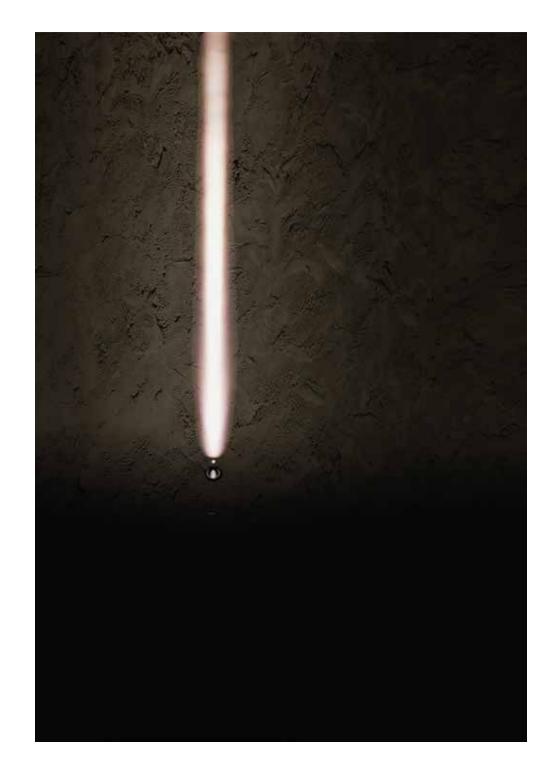


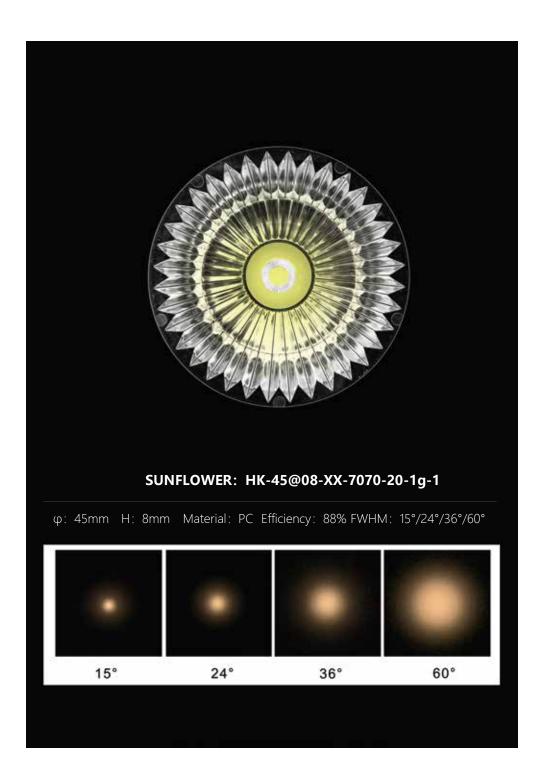
POLAROID 50@18

φ: 50mm H: 18mm

Material: PC FWHM: 3°

Efficiency: 90%





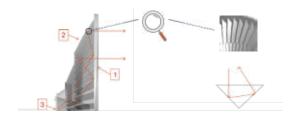


Design Principle

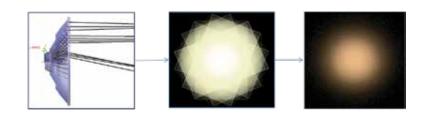
Triple-Reflection technology is a great innovation based on Calculus technology, greatly reduced the lens height compare with the original calculus lens, let the light reflect three times inside the lens, make sure get good light distribution with lower height lens.



Graphic 1 is a fully reflecting surface and a optical emitting surface, light from graphic 3(LED) fully reflected to graphic 2(included angle) by the surface 1, then totally reflect two times in the included angle, at last all lights emit out from surface 1 by total three times reflection.



The reflect surfaces of included angle 2 are all fully reflecting surface, control the lens angle by adjust the surface shape. Ultrathin thickness 8mm, thinner than thinner, save more space for designer. Application: MR16/GU10/Downlight/Par20.



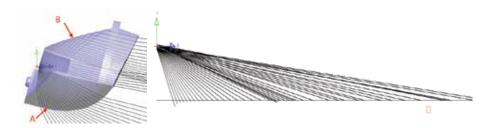




Product characteristics

High wall washing height, uniform light spot, high efficiency, applicable to low-pole lighting such as indoor wall washing and outdoor guardrail lights.

Light distribution



Using a combined light distribution, the optics at the top and bottom of the wall can be separated. The optical part of the lens is separated into part A (transmission type) and part B (total reflection type). The two parts are combined with light distribution to achieve wall washing lighting. The combination of the transmissive surface and the reflective surface makes the wall wash height high, close to the wall, and wide horizontal distance.

Structure design

The structure of the lens is matched with the design method of the lens, and the holder design has its own anti-glare function. (Due to the inconsistency of different lamps, HercuLux can provide design reference for the holder)







WATERFALL 35@23

φ: 35mm H: 23mm

Material: PMMA Efficiency: 80%



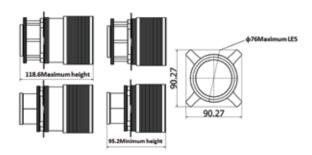
WATERFALL 47@38

φ: 47mm H: 38mm

Material: PMMA Efficiency: 80%



Structure diagram

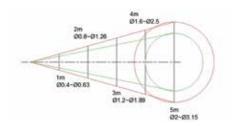


Introduction

This product consists of triple lens plus special structure. By moving the front and center lenses, the product can be made into circular patches of different sizes with clear or blurred borders.



At the same time, through four inserts, the product can also freely adjust the circular spot to the following types of light spots.



<u>Instructions</u>

Transformers, its initial form is as follows:



At this moment, turn left and right respectively 1, 2, Get the following pattern:



Pulling the part pointed by arrow 1 can change the sharpness of the spot boundary; Pulling the part pointed by arrow 2 changes the spot size.

At the same time plug four inserts; Spin can change the spot shape arbitrarily, as the following example shows:

Insert the initial state as the right, A circular spot.





TRANSFORMERS

Changing the position of the insert, the circular spot will change to a rectangular spot as shown below.



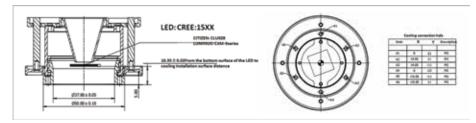
Change the position of the insert, as shown below, the circular spot will become a parallelogram spot.



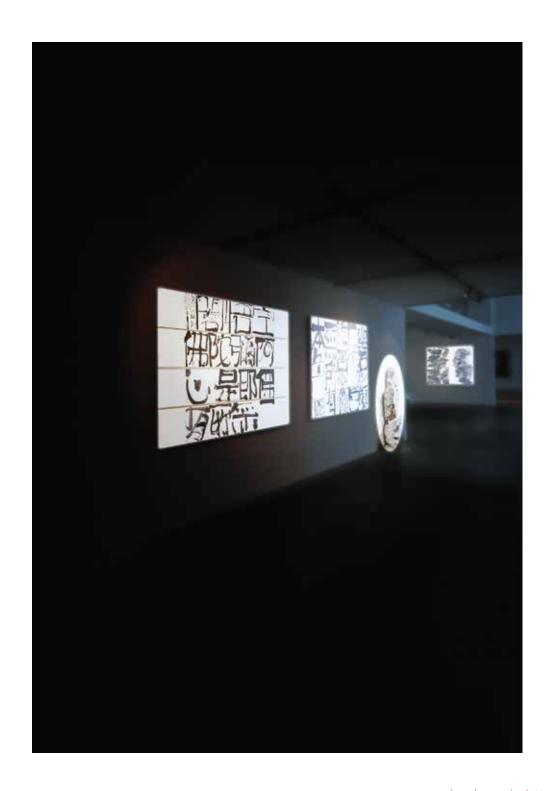
Change the insert position, as shown below, the circular spot will become a trapezoidal spot.



Cooling installation size

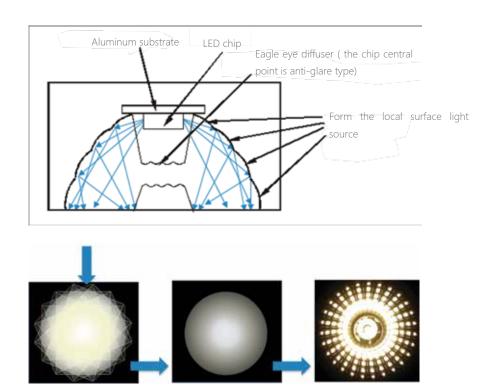


When customers create cooling base, the remaining size can be customized, in addition to the size marked on the map for a fixed size. Application: Museum lighting, Art exhibition lighting or lighting used in special application.





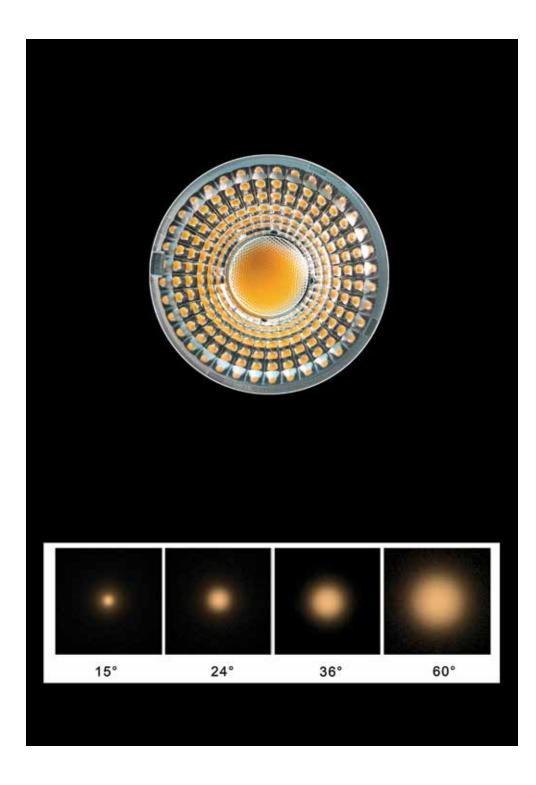




Make segmentation differential process for the wave surface of several scale light sources. In this way, the light source will be cut into several sub-light sources. (differential calculus for light source);

Each sub-light source forms sub-facula on the light field. The centers coincide with each other, rotate and overlay (differential calculus of light field) and form a lighting field with uniform color;

The light received by each scale would be consistent or with uniform change. In this way, the glaring surface of lens would have the same brightness and prevent dazzling.



DIAMOND



DIAMOND 35@12.4

φ: 35mm H: 12.4mm

Material: PMMA FWHM: 24°/38° Efficiency: 92%



DIAMOND 44@18

φ: 44mm H: 18mm

Material: PMMA FWHM: 24°/38° Efficiency: 92%



DIAMOND 35@17

φ: 35mm H: 17.2mm

Material: PMMA

FWHM: 15°/24°/38°/60°

Efficiency: 92%



DIAMOND 44@20

φ: 44mm H: 20mm

Material: PC

FWHM: 15°/24°/36°/60°

Efficiency: 90%



DIAMOND 43@22.8

φ: 43mm H: 22.8mm

Material: PMMA

FWHM: 15°/24°/36°/60°/90°/120°

Efficiency: 92%



DIAMOND 46@24

φ: 46mm H: 24mm

Material: PMMA

FWHM: 10°

Efficiency: 92%

DIAMOND



DIAMOND 52@25

φ: 52mm H: 25mm Material: PMMA FWHM: 15°/24°/36° Efficiency: 92%



DIAMOND 55@21

φ: 55mm H: 21mm Material: PMMA

FWHM: 15°/24°/36°/60°

Efficiency: 90%



DIAMOND 62@22

φ: 62mm H: 22mm

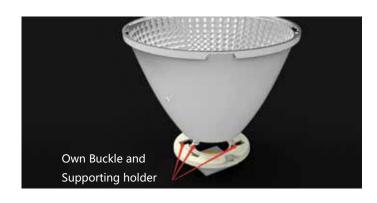
Material: PMMA FWHM: 30°/38°/60°/90°

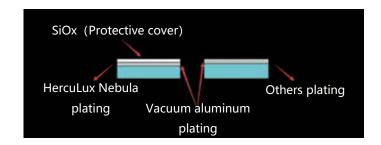
Efficiency: 92%











1、Assembly:

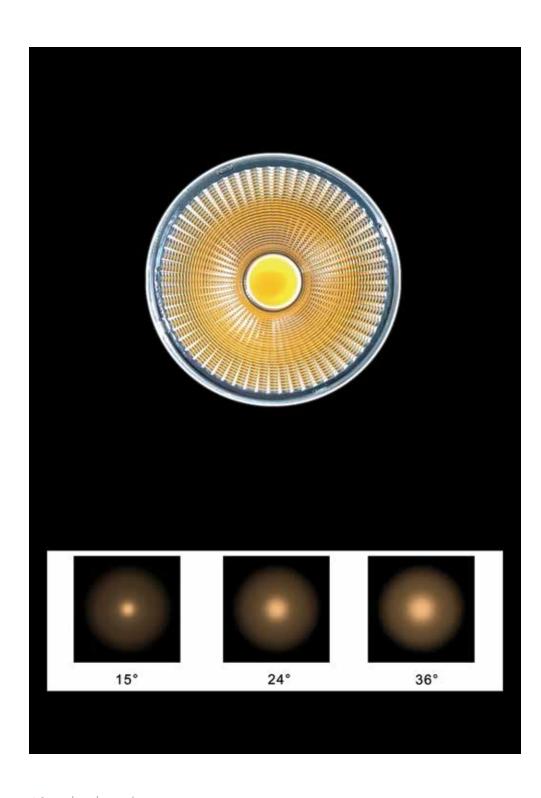
Easy assembling own buckle design and supporting holder design, easy for assembling and precise positioning

2. Flexible replacement:

Easy Changing By special buckle and supporting holder and holder design, can easy change the reflector to get different beam angle in project site;

3. Coating technology:

SiOx plating Automotive-glade reflective glass vacuum Plating technology of aluminum and SiOx, separate air and the aluminum plating, Superior anti-corrosion performance, can pass NaOH Alkali solution testing.



NEBULA



NEBULA 44@20

φ: 44mm H: 20mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36° Efficiency: 90%



NEBULA 50@35

φ: 50mm H: 35mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36° Efficiency: 90%



NEBULA 69@46

φ: 69mm H: 46mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36° Efficiency: 90%



NEBULA 75@54

φ: 75mm H: 54mm

Material: Vaccum Aluminum Plating PC

FWHM: 15°/24°/36° Efficiency: 90%



NEBULA 95@64

φ: 95mm H: 64mm

Material: Vaccum Aluminum Plating PC

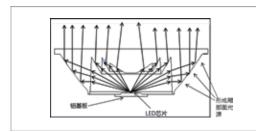
FWHM: 15°/24°/36° Efficiency: 90%





Principle

Adapted the calculus and Fresnel technology, have good effect although the short height assemble, and lower UGR importantly.



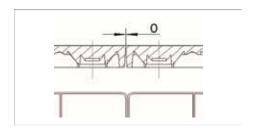


Appearance

HercuLux adopted the calculus and Fresnel technology, make the lens looked beautiful, the scales' space create the similar effect like the grid when lighting, and the surface brightness is more downy. Own technology, enough patents.

Structure

- 1. Injecting the glue from the module front surface, upper is bigger than the under, can achieve the lens zero clearance assembled.
- 2、Optical PC material, enough heat and weather resistance, UL-94: V2; UV cut:f1.



UGR

UGR In our optical designing experience, the better angle for the office lighting is 80°, lower UGR





LIGHTNING

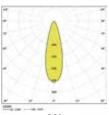
HK-286@10-XX-3030-22-1g-33

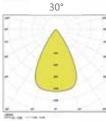
Size: L:286mm W:61mm FWHM: 30°/60°/80°

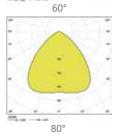
Material: PC Efficiency: 86%

Application: Linear Light

Lens by LED: SMD 3030/2835









LIGHTNING

HK-286@10-XX-3030-22-1g-3

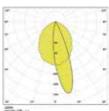
Size: L:286mm W:61mm

FWHM: Asymmetric/Double asymmetric

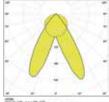
Material: PC Efficiency: 86%

Application: Linear Light

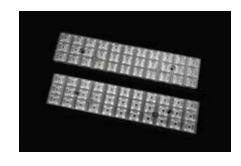
Lens by LED: SMD 3030/2835



Asymmetric



Double asymmetric



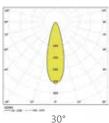
LIGHTNING

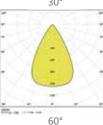
HK-286@08-XX-3030-22-1g-33

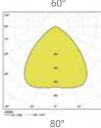
Size: L:286mm W:61mm FWHM: 30°/60°/80° Material: PMMA Efficiency: 88%

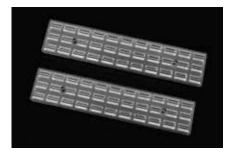
Application: Linear Light

Lens by LED: SMD 3030/2835









LIGHTNING

HK-286@08-XX-3030-22-1g-33

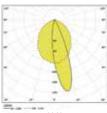
Size: L:286mm W:61mm

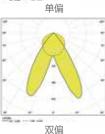
FWHM: Asymmetric/Double asymmetric

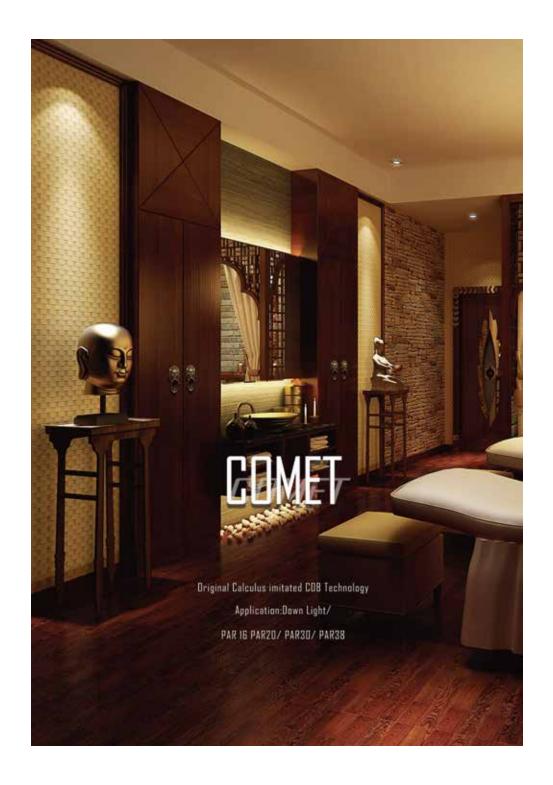
Material: PMMA Efficiency: 88%

Application: Linear Light

Lens by LED: SMD 3030/2835









COMET

HK-45@13-XX-3030-22-1g-1

Size: Φ: 45 mm H: 13.3mm

FWHM: 30° Material: PC Efficiency: 88%

Application: PAR16, Down Light

Lens by LED:

Copy COB: 6PCS 3030 , 6PCS 2835



COMET

HK-73@20-XX-3030-22-1g-1

Size: Φ: 73.3 mm H:20.3mm

FWHM: 25°/40° Material: PC Efficiency: 88%

Application: PAR30, Down Light

Lens by LED:

Copy COB: 6PCS 3030 , 6PCS 2835



COMET

HK-51@16-XX-3030-22-1g-1

Size: Φ: 51.3 mm H:16.3mm

FWHM: 25°/40° Material: PC Efficiency: 88%

Application: PAR20, Down Light

Lens by LED:

Copy COB: 6PCS 3030 , 6PCS 2835



COMET

HK-83@24-XX-3030-22-1g-1

Size: Φ: 94.2 mm H:24mm

FWHM: 25°/40° Material: PC Efficiency: 88%

Application: PAR38, Down Light

Lens by LED:

Copy COB: 6PCS 3030 , 6PCS 2835

CUSTOMIZED SOLUTIONS

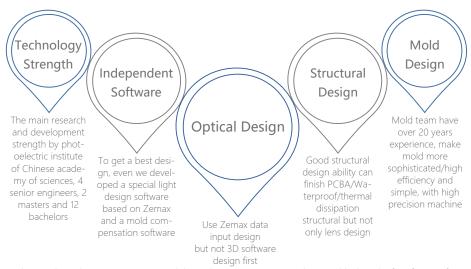
In addition to the standard mold products introduced in the catalogue, HercuLux can also provide customized solution services. With a professional design team and a complete industrial chain, tailor-made for customers, seeking the best solution for the project.

Extended Polynomial Lens

The Extended Polynomial surface shape is defined by:

$$z = \frac{cr^2}{1 + \sqrt{1 - (1 + k)c^2r^2}} + \sum_{i=1}^{N} A_i E_i(x, y).$$

HercuLux adopts imaging optical design software: ZEmax to do data input level design to achieve more accurate chip level design.



and use Light tools or Tracpro to test and then adjust, can get more sophisticated high-order free-form surface

Quick response for Design: Optical design \rightarrow Structural design \rightarrow Optical simulation \rightarrow Mold assess \rightarrow Injection molding analysis

Optical design, structural design, mold design, injection molding production, quality inspection, HercuLux has a complete industrial chain to ensure that optical products can be independently controlled in each link, so that product quality, appearance, performance and other aspects are the best state!

Custom Process

Kindly provide detail requirements:

1. Lens size requirement; 2. Optical requirement(FWHM), Target IES will be better; 3. Lens Efficiency; 4. Assembly drawing sharing; 5. LED; 6. Material: PC or PMMA; 7. Application; 8. Other special information.

Optical Design Report:

Our R&D will process to optical designing according to your optical requirement, designing in 2-5 days and we will share you the design report.

Structure Design:

If you are satisfied with the optical report, we could process to structure designing. Please kindly provide the assembly drawing, structure drawing and any file is helpful for us to design structure.

Structure Confirm:

Confirm the structure (Step file): 1. Whether the lens structure conflict with the PCB; 2. Whether the lens structure conflict with the Lamp's structure; 3. Whether the lens structure conflict with the component location; 4. etc.

Quotation:

Quotation for Mold and product: 1. It depends on the mold size and its complexity; 2. Quotation includes Test Mold fee and Final Mold fee and price for unit product. (Test Mold is not absolutely necessary, it is according to the complexity of the mold.)

Customer PO Arrangement:

After you confirm the quotation, please kindly share your PO.

PI and Payment Arrangement:

We will arrange PI and we process to payment issue. After payment is done, we will process to mold producion.

Mold Production:

We need 30-35 working days to produce the mold, then will send you the samples which mold produce when the mold finished.

Confirm The Simples:

Whether the simples is same with the optical design and structure design.

Mass Producion: If the samples checking is OK, Procedure as below,1. Your mass order; 2. Our PI arrangement; 3. Your payment arrangement; 4. Mass producion.

Self-built 20000 m² HercuLux park



Complete mold processing chain with a constant temp precision processing area



More than 100 precision injection machines



<u>Self-built PC Vaccum Aluminum Plating workshop, One Spraying Production Line, Two Vacuum Plating Machine, 100000 Level Purification Workshop</u>

