V.01/25



# **OPTICAL ENERGY DESIGN & DEVICES**



#### Chengdu HercuLux Photoelectric Technology Co., Ltd.

: Room 501-510, Comprehensive Service Building, vation Industrial Park, Nanshan Cloud Valley, Nanshan District, izhen City, Guangdong P.R China, Zip code: 518055 +86 755 2640 6841 Fax: +86 755 2907 5140 il: sales@herculux.com Website: http://www.herculux.com/er

# 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.



附 – Singel 3 | 8-2550 Kontich | Belgium | Tel + 32 (0)3 458 30 33 | info@alcom be | www.alcom.be 🔜 – Rivium 1e straat 52 | 2989 L£ Capelle aan den Ijssel | The Netherlands | Tel +31 (0)10 288 25 00 | info@alcom.nf | www.alcom





**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.

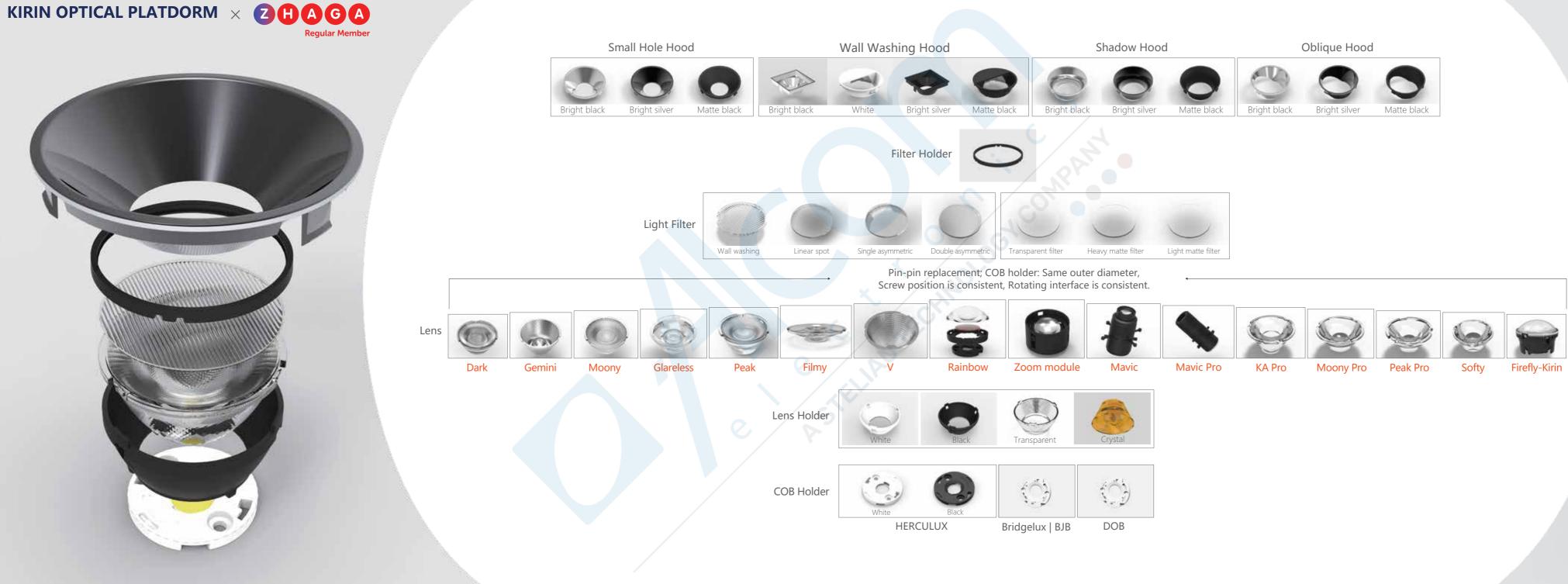
**R & D capabilities -** The R&D team of the company is composed of a team of experts with a background in the Institute of Optoelectronics, Chinese Academy of Sciences. There are 32 R&D personnel, accounting for 26.45% of the total number of employees. Among them, there are 8 full-time optical design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



008	DARK	048	V SERIES		KIRIN OPTIC	CAL PLAT	FORM
014	GEMINI	054	ZOOM MODULE			> ,	5
020	MOONY	058	MAVIC & MAVIC PRO	074	FIREFLY-KIRIN	082	LIGHT FILTER
026	GLARELESS	062	KA PRO	078	COB HOLDER	086	LIGHT HOOD
032	РЕАК	068	MOONY PRO	080	LENS HOLDER		
036	FILMY	070	PEAK PRO				
042	RAINBOW	072	SILICONE LENS				NDOOR
092	PHOTON	112	INFINITY	128	WARTERFALL		
098	КА	118	FOCUS	130	TRANSFORMERS	144	LIGHTNING
104	CHAMELEON	122	POLAROID	134	DIAMOND	148	COMET
108	BLACK HOLE	126	SUNFLOWER	140	NEBULA	150	CUSTOMIZED SOLUTIONS

# **Products Code Rule**



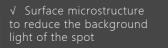


www.herculux.com/en | 007

# DARK SERIES

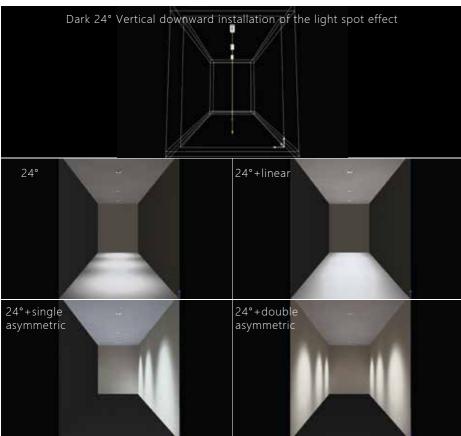
A lens for the high-efficiency spot of the hotel's deep anti-glare wall washing spotlight

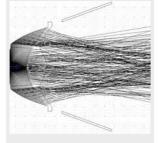




√ More uniform light spot with Fermat's spiral array

√ Better anti-glare effect with cross-light design



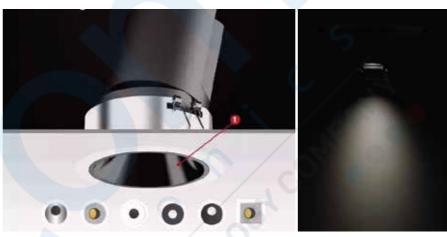


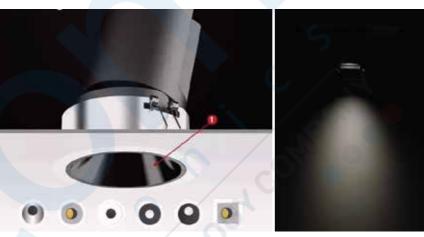
In the design process of the Dark series, the light on the reflective surface and the light on the refracting surface are cross-distributed to achieve the effect of deep anti-glare.

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



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.





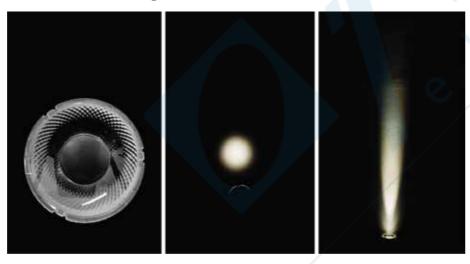
The cross-lighting design principle makes the lamps and lanterns with light holes smaller than the optical diameter, together with the small holes of the hood, hiding deeper and better control of glare, and the optical efficiency has little impact, but also to ensure that the spot effect.



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

little to the background light, which makes the

background light of the



#### Hotel wall washer spotlight, deep anti-glare structure

## Cross-lighting for the ultimate in anti-glare

#### 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



Small hole hood perfectly solves the phenomenon of butterfly spots when deflecting the wall and washing the wall.



# **DARK SERIES**



#### DARK 20@11 (3030)

φ: 19mm H: 11mm Material: PMMA FWHM: 15°/24°/36°/50° Efficiency: 91%



#### DARK 20@12 (3535)

φ: 20mm H: 12mmMaterial: PMMAFWHM: 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%

# **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%



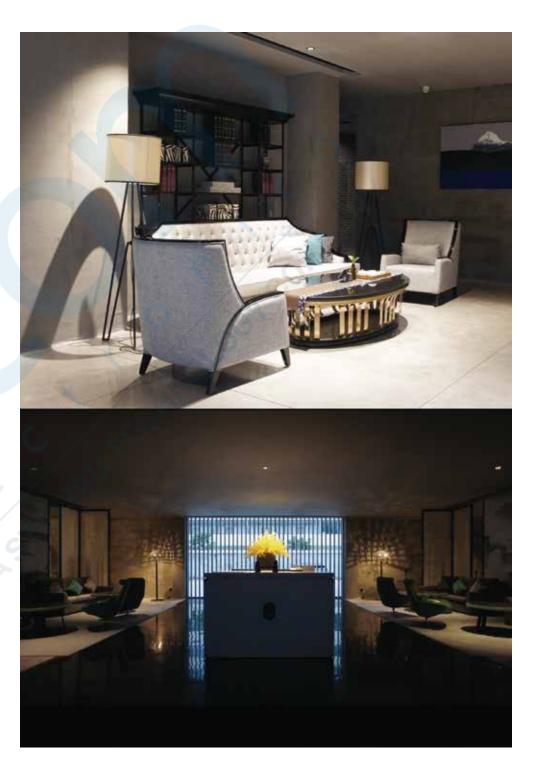
#### DARK 68@32

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%

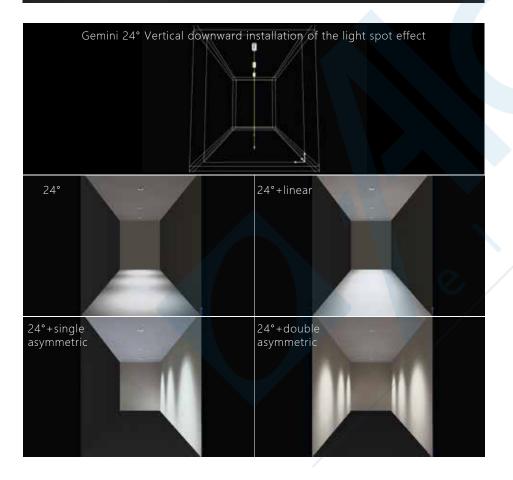


# **GEMINI SERIES**

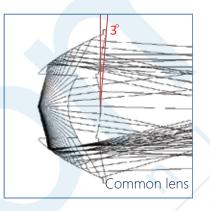
A reflector combines with a lens

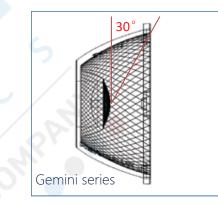


- ✓ Vacuum plating, metal texture, and the dust-free workshop with 100,000-level air cleanliness makes the adhesion and surface of the product achieve the best effect
- ✓ Complete integrated injection molding easy to install
- $\checkmark$  With deep anti-glare effect

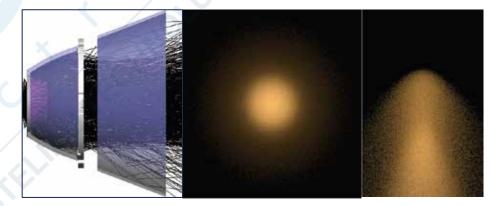


#### Comes with 30° anti-glare angle



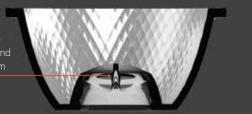


Through the cross light distribution and the control of the proportion of the intermediate light, the wall washing light spot is also relatively clean.

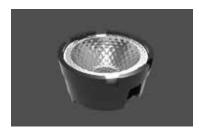


Cross light control, reasonable light control

The cavity hole of the lens is conducive to the heat dissipation of the cavity, while the diameter of the corresponding hole on the end face of the light exit surface is less than 2mm to prevent mosquitoes and other insects from entering the cavity.



# **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: 16mmMaterial: Vaccum Aluminum Plating PCFWHM: 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 50@24**

φ: 50mm H: 24mm
Material: Vaccum Aluminum Plating PC
FWHM: 15°/24°/36°/50°
Efficiency: 80%



#### GEMINI 55@25

φ: 55mm H: 25mmMaterial: Vaccum Aluminum Plating PCFWHM: 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 62@30

φ: 62mm H: 30mmMaterial: Vaccum Aluminum Plating PCFWHM: 15°/24°/36°/50°Efficiency: 80%

# **GEMINI SERIES**



## GEMINI 68@32

φ: 68mm H: 32mm Material: Vaccum Aluminum Plating PC FWHM: 15°/24°/36°/50° Efficiency: 80%



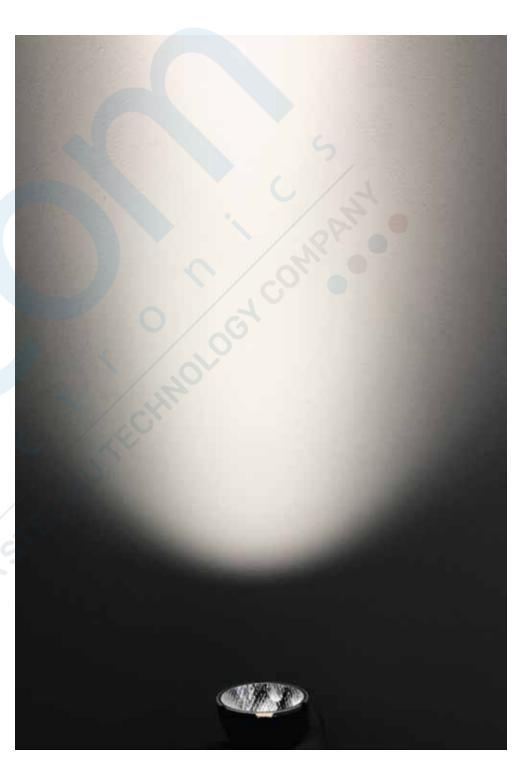
## GEMINI 75@35

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



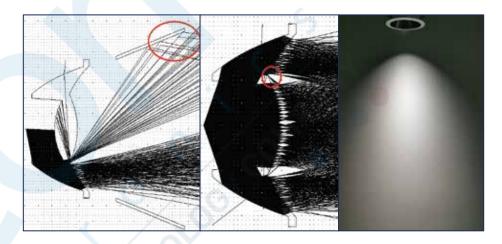
# ✓ Special surface structure, directional light control technology

- ✓ Calculus technology combined with Fermat's spiral to align the column, the light mixing is more uniform, and it can match the CCT changing COB.
- ✓ Deep anti-glare lamp can also make spot cut-off and clean.

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.



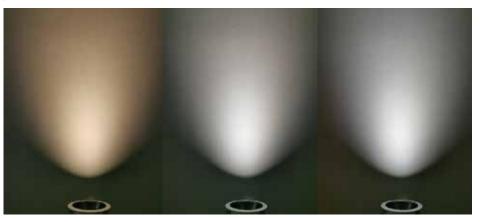
By strengthening the light on the receiving surface of the light emitting surface, this part of the light is forcibly cut off by the anti glare cover when passing through it, resulting in a clear cut-off line when washing the wall.



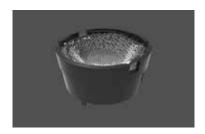
## CCT changing COB can be matched

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





# **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: 15mmMaterial: PCFWHM: 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 45@21

φ: 45mm H: 21mmMaterial: PCFWHM: 15°/24°/36°/50°Efficiency: 88%



#### MOONY 62@30

φ: 62mm H: 30mm Material: PC FWHM: 15°/24°/36°/50° Efficiency: 88%

# **MOONY SERIES**



#### MOONY 68@32

φ: 68mm H: 32mm Material: PC FWHM: 15°/24°/36°/50° Efficiency: 88%



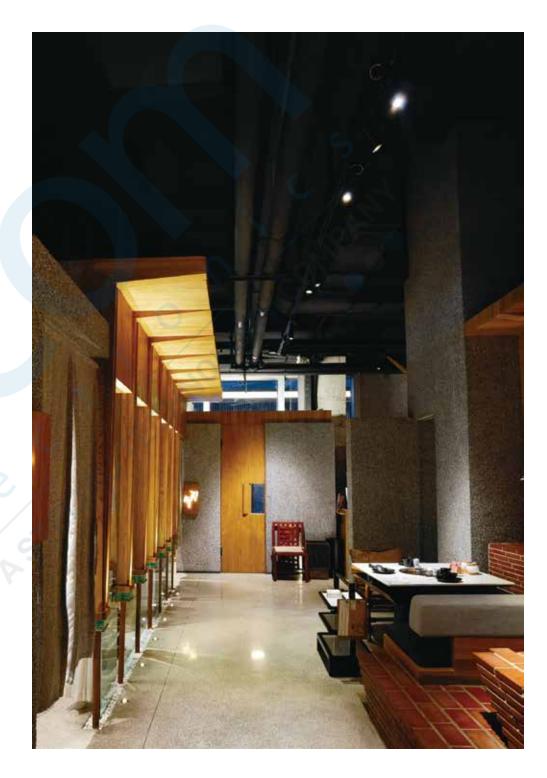
## MOONY 75@35

φ: 75mm H: 35mm Material: PC FWHM: 15°/24°/36°/50° Efficiency: 88%



## MOONY 83@40

φ: 83mm H: 40mmMaterial: PCFWHM: 15°/24°/36°/50°Efficiency: 88%



# **GLARELESS SERIES**

A lens with anti-glare effect



- ✓ Calculus technology combined with Fermat's spiral to align the column, the light mixing is more uniform, and it can match the CCT changing COB.
- √ Sinking design, better anti-glare effect
- High temperature resistance PC material reliability

#### Smooth the surface, more conducive to anti-glare

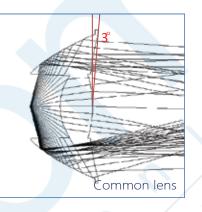
The light-emitting surface is smoothly treated, and there is no matte, sun-stripe and other structures, so that the light-emitting surface is no stray light and no glare.

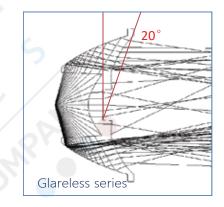






# Come with 20° anti-glare angle





# 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 30@16

φ: 30mm H: 16mmMaterial: PCFWHM: 15°/24°/36°/60°Efficiency: 88%



#### GLARELESS 50@24

φ: 50mm H: 24mmMaterial: PCFWHM: 15°/24°/36°/60°Efficiency: 88%



#### **GLARELESS 55@25**

φ: 55mm H: 25mm 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 45@21

φ: 45mm H: 21mm 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: 40mmMaterial: PCFWHM: 15°/24°/36°/60°Efficiency: 88%



# **PEAK SERIES**

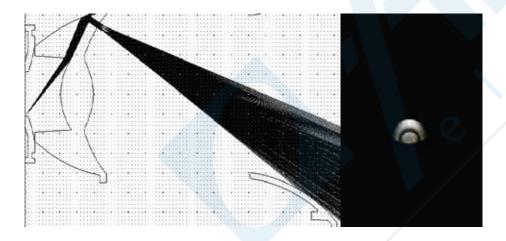
A clean wall-washing and extremely deep anti-glare lens



- $\checkmark$  Surface treatment, directional light control
- $\checkmark$  Matching with light hood to achieve ultimate anti-glare
- √ More uniform light spot

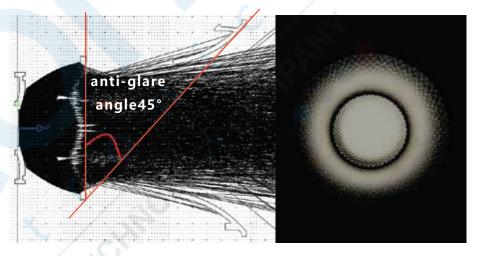
#### Surface treatment, directional light control

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.



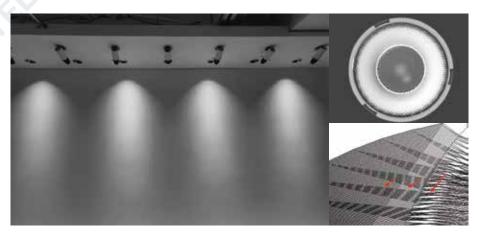
## Matching with light hood to achieve ultimate anti-glare

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.



# **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 30@15

φ: 30mm H: 15mm Material: PMMA FWHM: 15°/24°/36°/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%
 90%



#### **PEAK/ PEAK V 35@16**

φ: 35mm H: 16mm Material: PMMA FWHM: 15°/24°/36°/50° (PEAK V no 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 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%

# **FILMY SERIES**

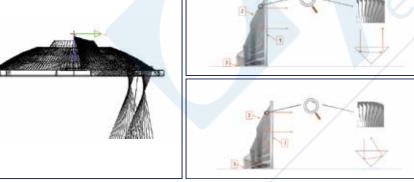
A lens as thin as a cicada wing



## Ultra-thin design

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





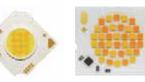
#### Beautiful appearance

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 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 50@10

φ: 50mm H: 10mm 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%



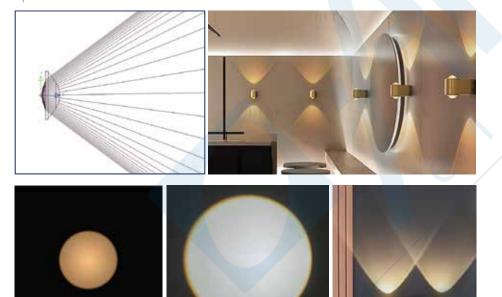
# **RAINBOW SERIES**

#### 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.



Actual light

## 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
5	Ø49.8		Rainbow lens D83/D75	D50 COB holder



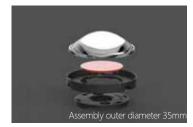
Simulated light spot

# **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%



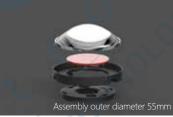
#### **RAINBOW 25@06**

φ: 25mm H: 6mm Material: PC FWHM: 75° Efficiency: 88%



#### RAINBOW 47@15

φ: 47mm H: 15mm Material: PC FWHM: 75° Efficiency: 88%







φ: 52mm H: 15mm Material: PC FWHM: 75° Efficiency: 88%

# Assembly outer diameter 45mm

## RAINBOW 42@12

φ: 42mm H: 12mm Material: PC FWHM: 75° Efficiency: 88%



#### **RAINBOW 58@16**

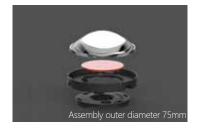
φ: 58mm H: 16mm Material: PC FWHM: 75°/95° Efficiency: 88%

# **RAINBOW SERIES**



## RAINBOW 64@19

φ: 64mm H: 19mm Material: PC FWHM: 75° Efficiency: 88%



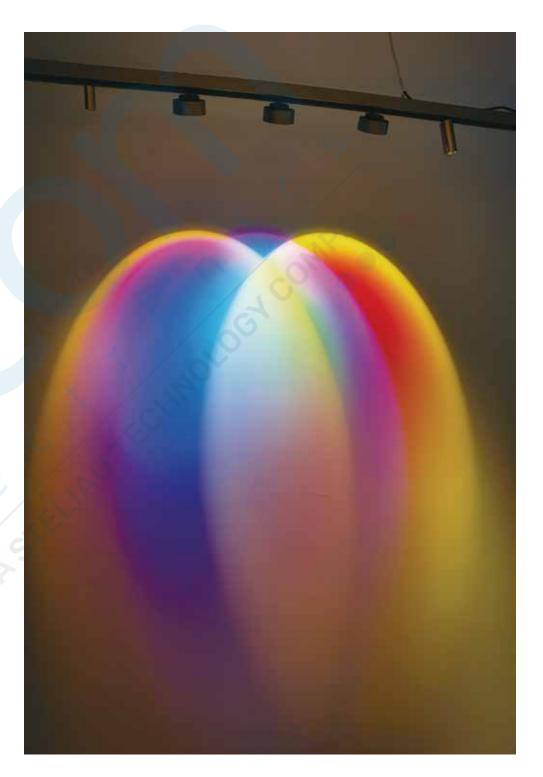
# RAINBOW 71@18

φ: 71mm H: 18mm Material: PC FWHM: 75° Efficiency: 88%



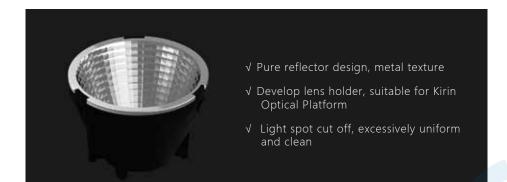
# RAINBOW 79@18

φ: 79mm H: 18mm Material: PC FWHM: 80° Efficiency: 88%



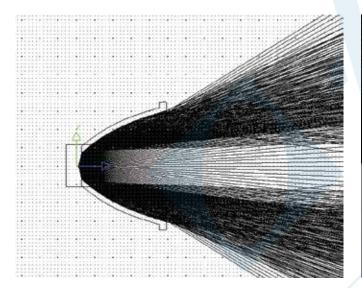
# **V SERIES**

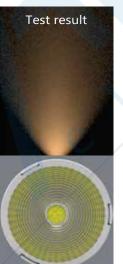
A reflector with anti-glare effect



## Distribute lights appropriately

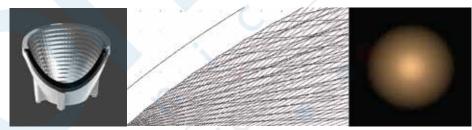
In order to uniform the wall-washing lights without delamination, for reflectors of different diameters, it's necessary to accurate the reflector's height, distribute the lights appropriately, and control the lights on the reflecting surface precisely.





# 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

<text>

# **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 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 45@34

φ: 45mm H: 34mm
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%

# **V SERIES**



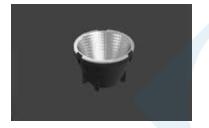
## V 68@45

φ: 68mm H: 45mm Material: Vaccum Aluminum Plating PC FWHM: 15°/24°/36°/50° Efficiency: 88%



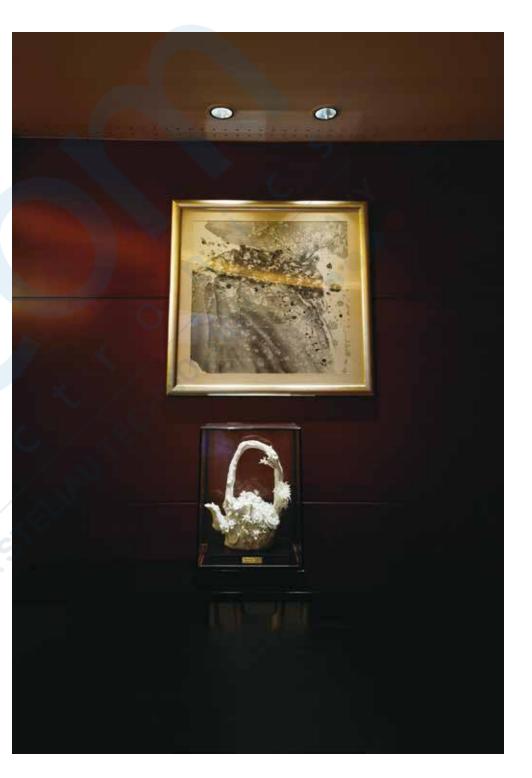
#### V 75@47

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.



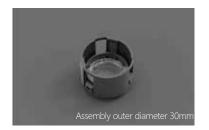
The light direction of wide beam angle

# 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.

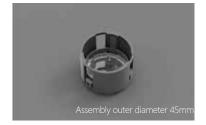


# **ZOOM MODULE**



#### 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 47@15

φ: 47mm H: 15mm Material: PC FWHM: 10°~45° Efficiency: /

#### ZOOM 54@16

φ: 54mm H: 16mm Material: PC FWHM: 10°~45° Efficiency: /



## ZOOM 42@13

φ: 42mm H: 13mm 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



Mavic



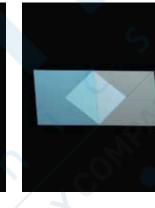
96mm-

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



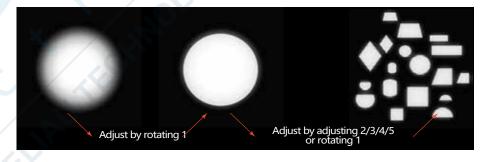
Suitable for monochrome and bicolor light sources smaller than 6mm.







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

Step 2:Install component 7 directly onto the light source and lock the screws. Step:Install component 8 onto component 7, with the screws on the side of the screws.

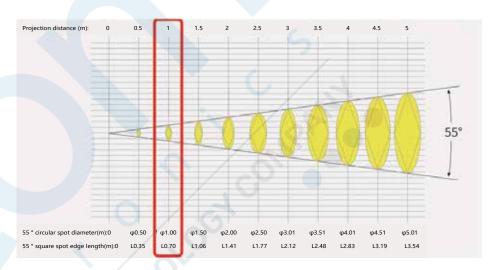


#### The lens can rotate 360 degrees and can be used for logos

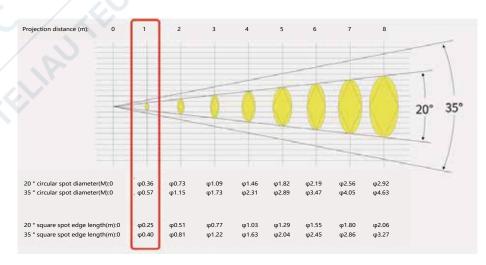
Loosen the hand screws 9 on both sides, and the lamp 8 can rotate 360 ° around accessory 7, making it flexible and adaptable to the needs of multiple views and angles. It can also be used for logo lights, and the logo sheet needs to be customized separately.



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



# **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.

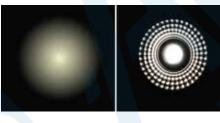


#### KA Pro Product Features



## 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.



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

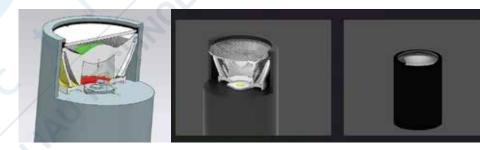


# Test Situation

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					

# **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%

# **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.







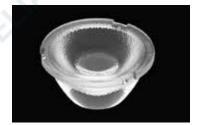
#### MOONY PRO 28@13

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%

# **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.

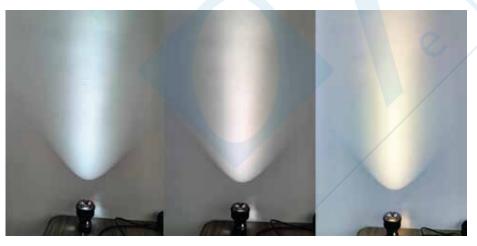
The Moony Pro Series (soft grazing wall) and Peak Pro Series (hard grazing wall) are great additions to the Kirin Optical platform, offering more beautiful designs and personalized needs for the field of home lighting without main lights.



# 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%

# **SOFTY SERIES**

#### Advantages of silicone lens

- $\checkmark$  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  $\mu\text{-level}.$
- $\checkmark$  High toughness,the material is soft and elastic,making it easy to form and unmold complex structures.
- $\checkmark$  High weatherability,HercuLux self-innovate silicon,high aging resistance, yellowing resistance and optical stability,ong service life.
- $\checkmark$  Recyclable, liquid silicone can be recycled into silicone oil, environmentally friendly.
- $\checkmark$  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.

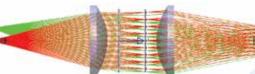
# **FIREFLY-KIRIN SERIES**

### 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 (	COB	Power	:7.1W	
Product series	Angle(50%)	Angle(10%)	LM	CBCP	K value	Efficiency
Firefly-Kirin	23.9	42.7	564LM	2739CD	4.85	86%
Other bands φ35-24°	24.9	44.4	552LM	2251CD	4.07	84%
Firefly-Kirin	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  $\phi$ 45-24°



Other bands  $\phi$ 45-24°

# **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 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%



# 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%

# **COB HOLDER**

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

C H A G A Regular Member	
	D35 COB HOLDER
Outer diameter	35mm
Hight	3.5mm
Screw holde distance	25mm
Туре	18
Matchable potics	
Series	Optical diameter
Dark series	D25/D30/D35/D45/D50/D55/D62/D68
Glareless series	D25/D30/D35/D45/D50/D55/D62/D68
Gemini series	D25/D30/D35/D45/D50/D55/D62/D68
Moony series	D25/D30/D35/D45/D50/D55/D62/D68
Peak series	D30/D35/D45/D50/D55/D62/D68
Filmy series	D30/D35/D45/D50/D55/D62/D68
V series	D30/D35/D45/D50/D55/D62/D68
Rainbow series	D35/D45/D50/D55/D62/D68
Zoom Module	D35/D45/D50

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

D24 COB
Outer diameter
Hight
Screw holde distance
Туре
Matchable potics
Series
Dark series
Glareless series
Gemini series
Moony series
Peak series
<b>-</b> 'l '
Filmy series
2



**D50 COB HODER** 

Optical diameter	50mm
Hight	5.2mm
Screw holde distance	35mm
Туре	13
Matchable potics	
Series	Optical diameter
Dark series	D75/D83
Glareless series	D75/D83
Gemini series	D75/D83
Moony series	D75/D83
Peak series	D75/D83
Filmy series	D75/D83
V series	D75/D83
Rainbow series	D75/D83
Zoom Module	D75/D83

# **LENS HOLDER**

Twisting method, can be rotated with BJB solderless holder and other **ZHAGA** solderless holders. Three colours, different colours, different effects. Size:  $\phi 45/\phi 50/\phi 55/\phi 62/\phi 68/\phi 75$ 



Install the lens at the buckle position

Rotate and fix it at the buckle position

# Test Comparison:

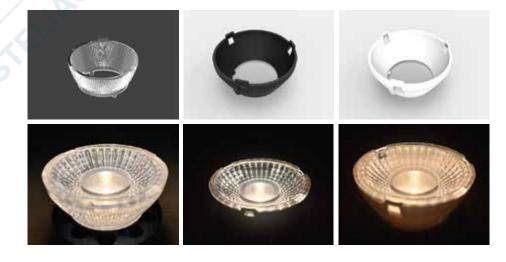
Test condition:  $\phi$ 45; Test COB:  $\phi$ 9

	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:



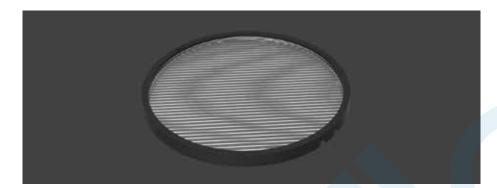
Glare Comparison:



# LIGHT FILTER

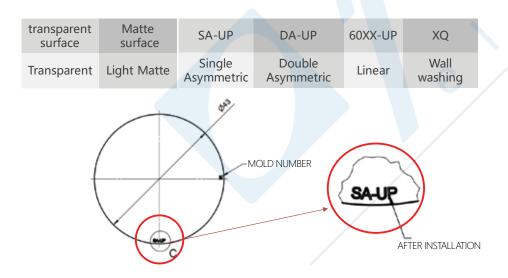
# 6 types of Filter for the Kirin platform

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



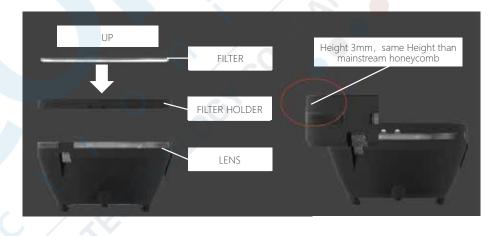
#### Identification of Filter

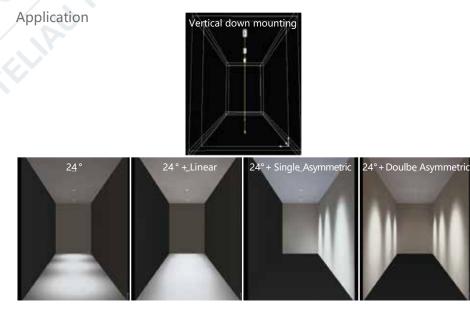
Filter can be identified by the naked eye. Transparent: has a smooth and shiny surface on both sides. Light /Heavy Matte: while the soft has a smooth and shiny surface on both sides. Single Asymmetric: has the words "SA-UP" marked on the surface. Double Asymmetric: the double polarizer has the words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



#### 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.





# LIGHT FILTER

Different filters with different lenses will get different spot effects.

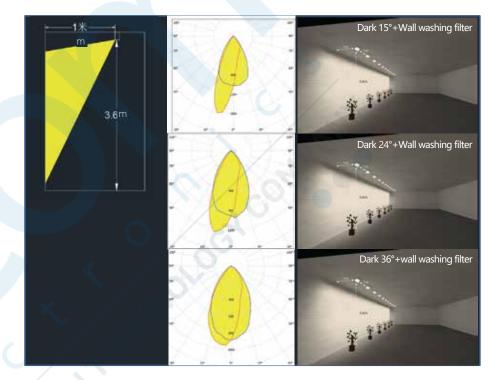
15°	Single Asymmetric	Double Asymmetric	Linear
24°			
36°			

#### Wall washing filter

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



# Lens Effects



# Size

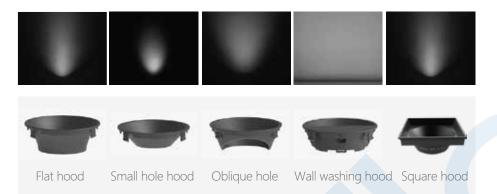
For the Kirin Optical Platform series products, corresponding size-variable lenses have been developed. Specific sizes include:  $\varphi 25$ ,  $\varphi 30$ ,  $\varphi 35$ ,  $\varphi 45$ ,  $\varphi 50$ ,  $\varphi 55$ ,  $\varphi 62$ ,  $\varphi 68$ ,  $\varphi 75$ , and  $\varphi 83$ , with support 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.



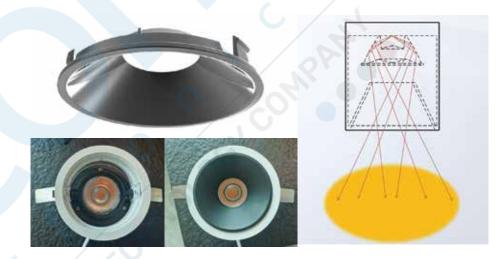
### Multiple colors available and customizable

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.

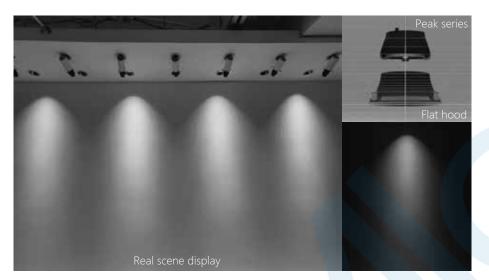


Types & Color	Size	Distance between light-hood & lens	Small hole Diameter	Adaptable lens	Adaptable filter	
	D: 33.5mm	h: 52mm	/	Dark25/Gemini25/		
	H: 10.68mm	11. 5.211111	/	Moony25/Peak25		
	D: 50mm	h: 12mm	/	Dark30/Gemini30/		
	H: 9.65mm	11. 1211111	/	Moony30/Peak30		
	D: 50mm	h: 52mm	/	Dark35/Gemini35/		
	H: 17.89mm	11. 3.211111	/	Moony35/Peak35		
	D: 68mm	h: 5mm	/	Dark35/Gemini35/		
	H: 23.45mm	11. 311111	/	Moony35/Peak35	Single asymmetric/ Double asymmetric, Linear spot/	
Oblique:	D: 68mm	h: 517mm	/	Dark45/Gemini45/		
Matte Black/ Bright Black/	H: 25mm	11. 5.1711111	1	Moony45/Peak45		
Bright Gold/ Bright Silver	D: 70mm	h: 5.2mm	/	Dark50/Gemini50/		
Bright Gold/ Bright Silver	H: 28mm			Moony50/Peak50		
	D: 100mm		/	Dark55/Gemini55/		
	H: 36.3mm		/	Moony55/Peak55	Matte filter	
	D: 100mm	h: 8mm	/	Dark62/Gemini62/	]	
	H: 37mm	II. OIIIII	/	Moony62/Peak62		
	D: 145mm	h: 8mm	/	Dark68/Gemini68/		
	H: 50.9mm	11. 011111	/	Moony68/Peak68		
	D: 145mm	h: 10mm	/	Dark75/Gemini75/		
	H: 52.07mm	11. 1011111	/	Moony75/Peak75	-	
Small hole:	D: 68mm	h: 9mm	d: 23mm	Dark35/Gemini35/		
Matte Black/ Bright Black/	H: 20.77mm		G. 201111	Moony35/Peak35	_	
Bright Gold/ Bright Silver	D: 68mm	h: 12.4mm	d: 29mm	Dark45/Gemini45/		
bright Goldy Bright Silver	H: 17.77mm			Moony45/Peak45		

# **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.

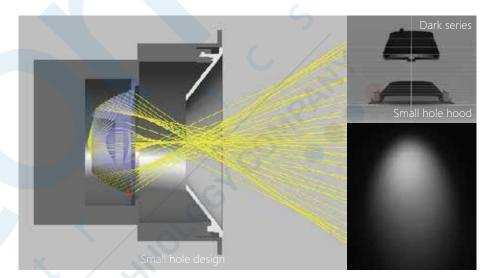


Flat hood matching information sheet

→35mm Hopening →		55mm	-	3		5mm pening	
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°				1.01.2	23222		1.01.23307(D6)
24°	1.01.23154	1.01.13050	1.01.13021	1.01.1	2962	1.01.23216	1.01.12657(D6) 1.01.23096(D9)
36°	1.01.23163	1.01.23143	1.01.23139	1.01.1	13016		1.01.23067(D6) 1.01.23137(D9)
50°				1.01.2	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.



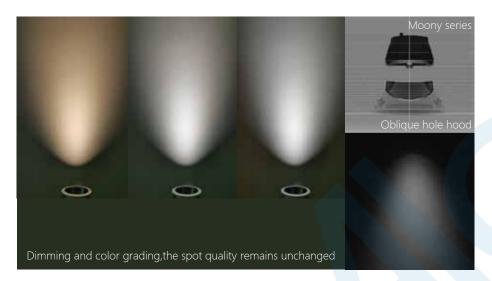
# Small hole hood matching information sheet

•	) L: %	-1	~		(i 1)	-1	e 🏲	2			
Hood Diameter	33.5	50	50	68	68	68	70	100	90	100	145
Hood MN	1.07.12752	1.07.12663	1.07.12745	1.07.02471	1.07.92058 (D6)	1.07.12764 (D9)	1.07.23079	1.07.12670	1.07.12813	1.07.12665	1.07.12731
Matching Dark Diameter	25	30	35	35	45	45	50	55	62	62	68

# **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.



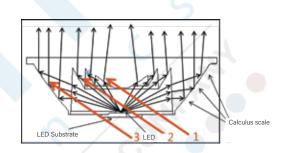
# Recommended wall washing hood solution

	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



### **Principle**

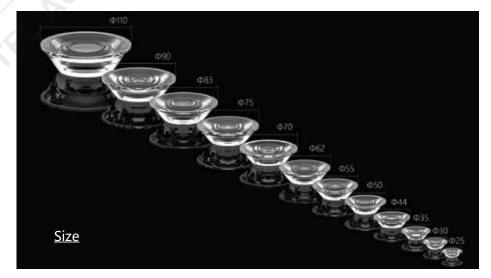
Photon Lens designed by one refracting surface and several fully reflecting surfaces, can control the light distribution well by lower lens height.

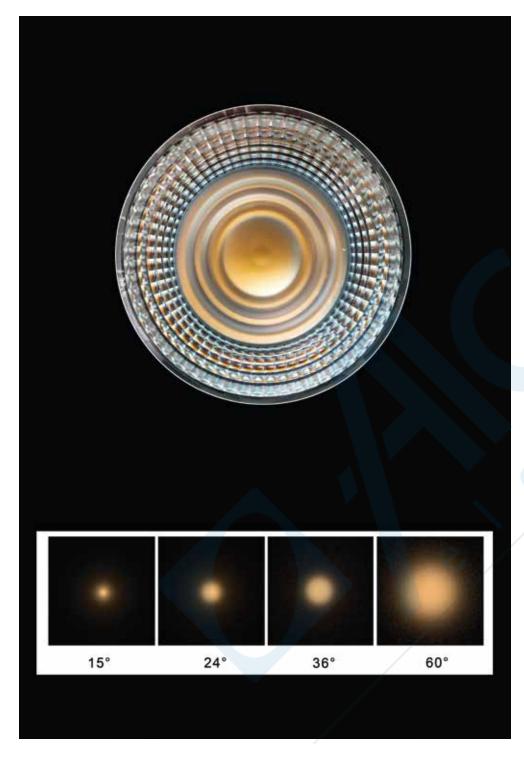


# Why can make the light distribution well by lower lens height?

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 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%



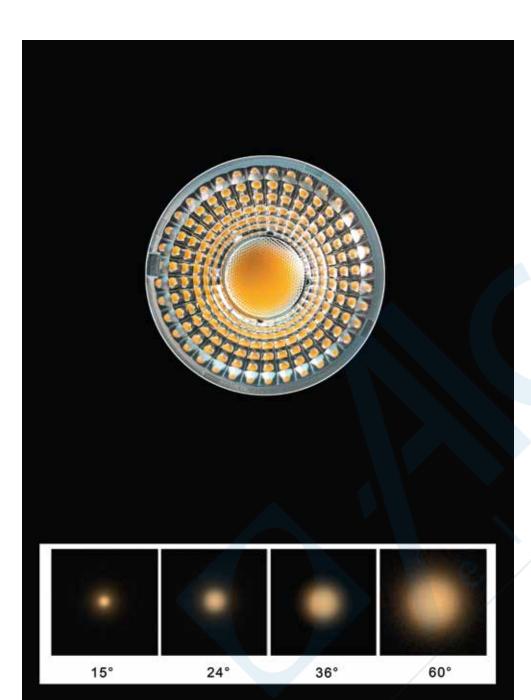
# PHOTON 75@21

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%





Commercial lighting application





#### 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

KA 45@21

φ: 45mm H: 21mm

FWHM: 15°/24°/36°/60°

Material: PMMA

Efficiency: 90%

φ: 40mm H: 20mm Material: PC/PMMA FWHM: 15°/24°/36°/60° Efficiency: 90%





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%



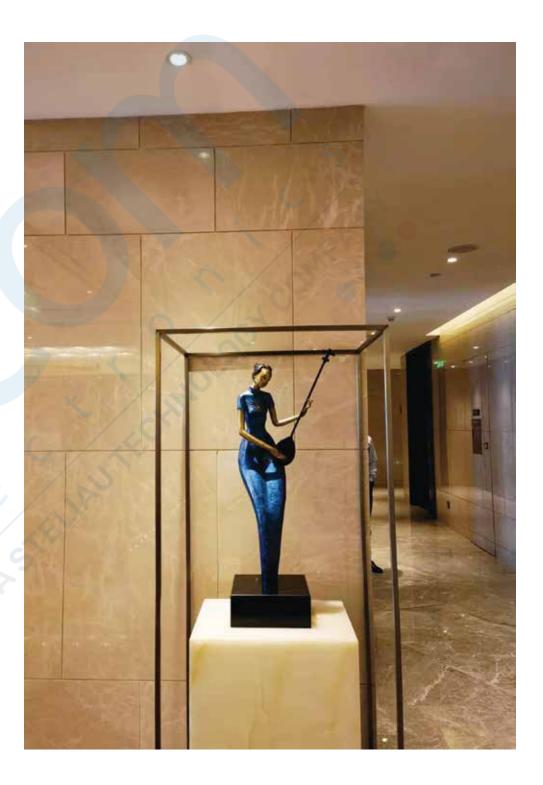
### KA 69@30

φ: 69mm H: 30mm Material: PMMA FWHM: 15°/24°/36°/60° Efficiency: 90%

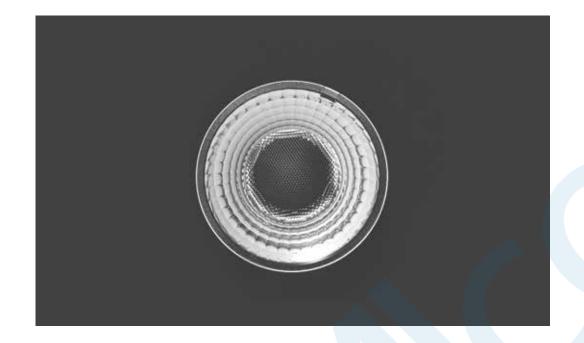


# KA 75@31

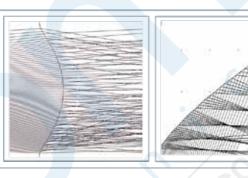
φ: 75mm H: 31mm Material: PMMA FWHM: 10°/15°/24°/36°/60° Efficiency: 92%



# **CHAMELEON**



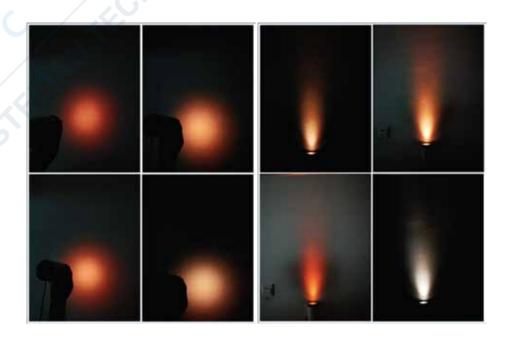
# Product Characteristics



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.

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



# 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**



#### 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@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

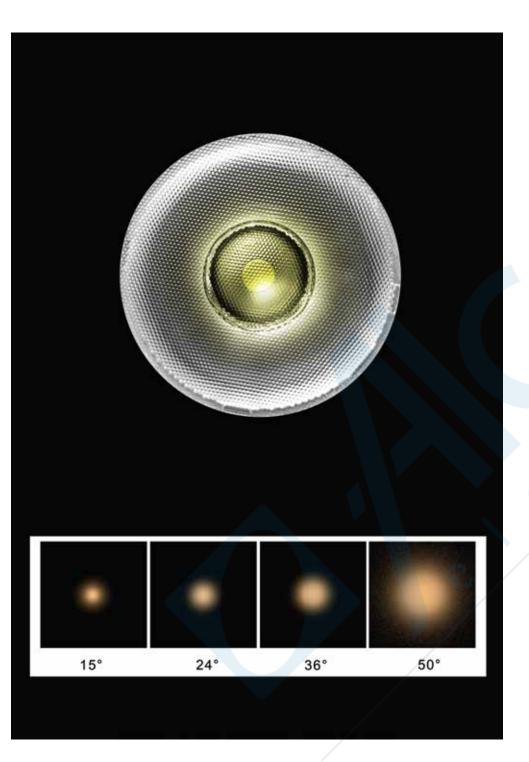
φ: 75mm H: 31mm Material: PMMA FWHM: 24°/36°/60° Efficiency: 90%



# CHAMELEON 55@21

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

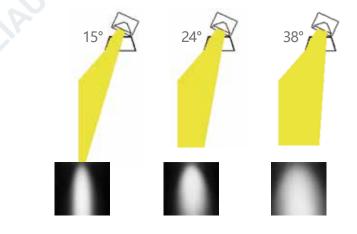
# **BLACK HOLE**



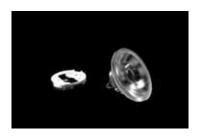
### Introduction

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**



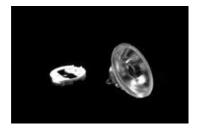
# BLACK HOLE 28@14

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%



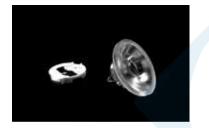
# BLACK HOLE 30@15

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%



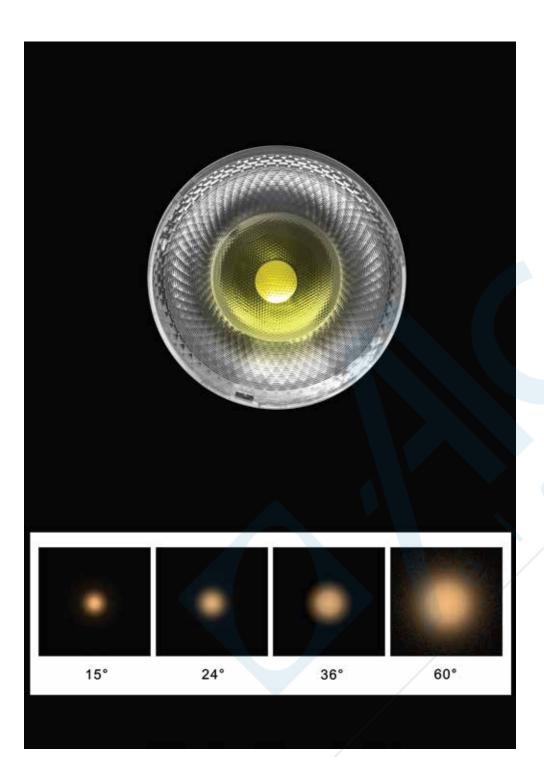
# BLACK HOLE 35@18

φ: 35mm H: 18mmMaterial: PCFWHM: 15°/24°/36°/50°Efficiency: 85%



#### BLACK HOLE 62@24

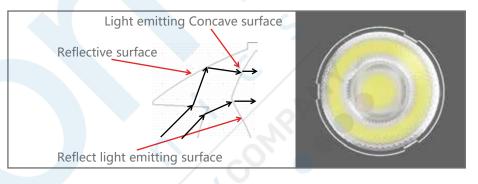
φ: 62mm H: 24mm Material: PC FWHM: 15°/24°/36°/50° Efficiency: 85%



# INFINITY

#### 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.



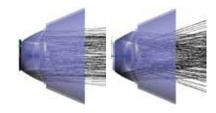
# Nice cutoff and fulfilled spot center (strong zoom capability):

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.



# INFINITY



#### 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: 35mmH: 14mmMaterial:PMMAFWHM:35°~60°Efficiency:90%~92%



#### INFINITY 55@25-15\_36

φ: 55mm H: 25mm 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 45@18-35\_60

φ: 45mm H: 18mm Material: PMMA FWHM: 35°~60° Efficiency: 90%~92%



# INFINITY 62@28-15\_36

φ: 62mm H: 28mm Material: PMMA FWHM: 15°~36° 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%

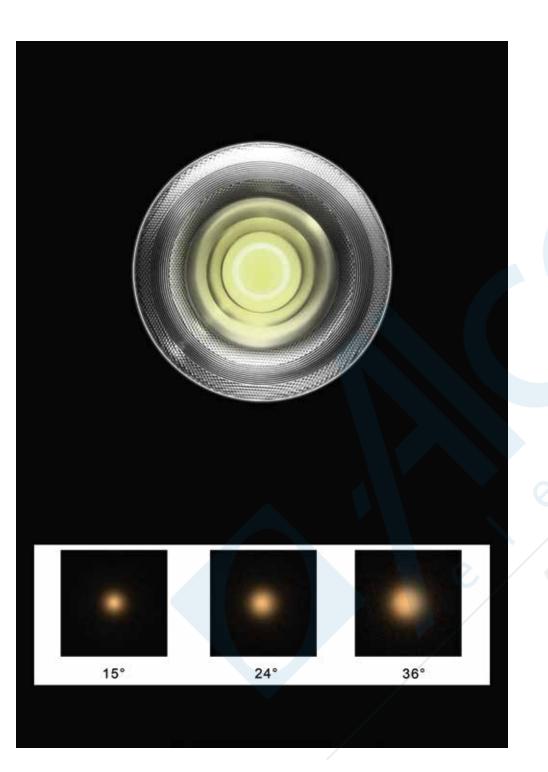


# INFINITY 75@30-36\_60

φ: 75mm H: 30mm Material: PMMA FWHM: 35°~60° Efficiency: 90%~92%

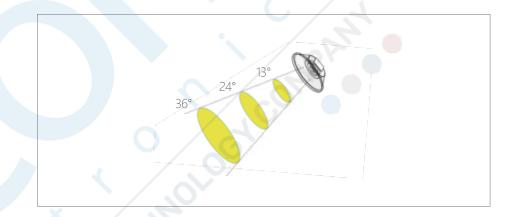


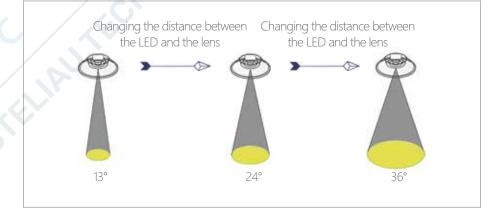




#### Introduction

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.

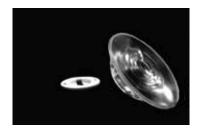




# Product characteristics

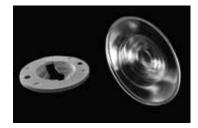
Fresnel lens has unique optical properties, which can change the optical angle and the size of the spot by changing the distance between light source and lens.





### FOCUS 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 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%

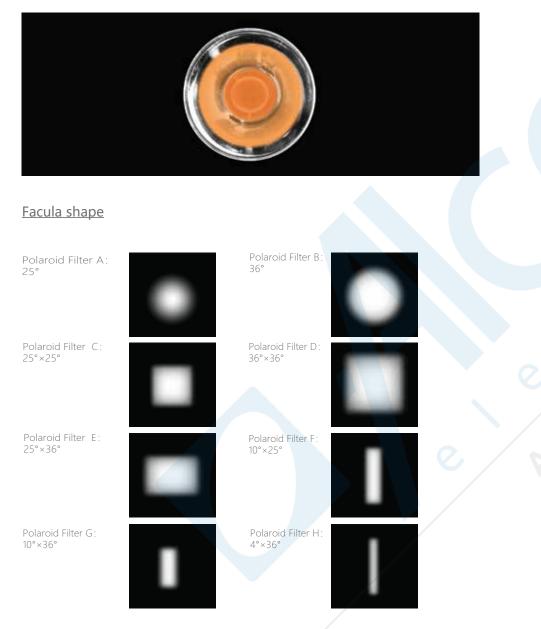


# FOCUS 62@17

φ: 62mm H: 17mm Material: PC FWHM: 13°~36° Efficiency: 85%



#### Lens front view

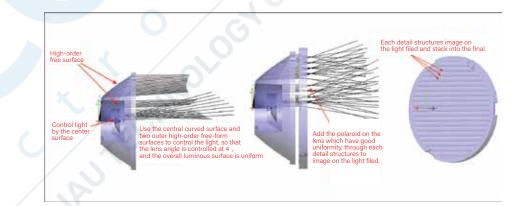


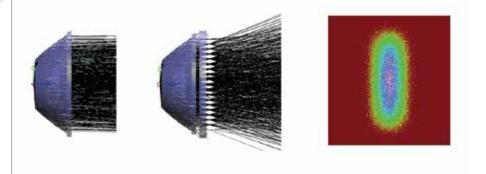
### Introduction

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%



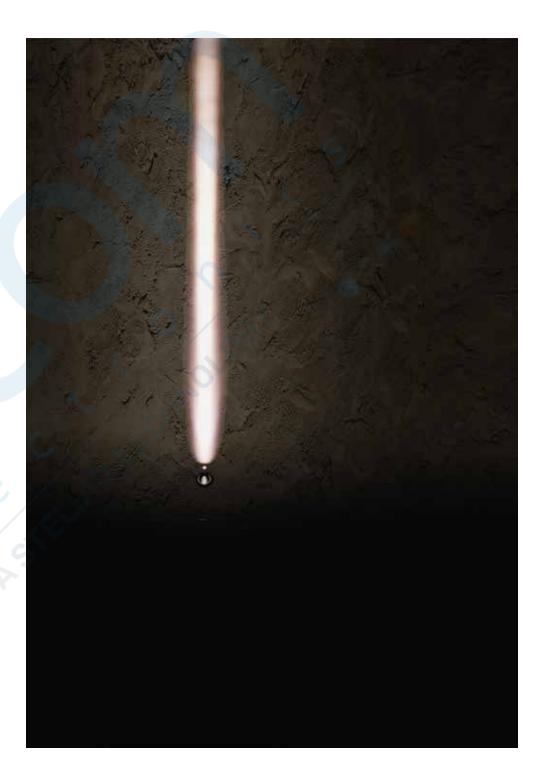
#### POLAROID 35@21

φ: 35mm H: 21mm Material: PC FWHM: 7° Efficiency: 90%

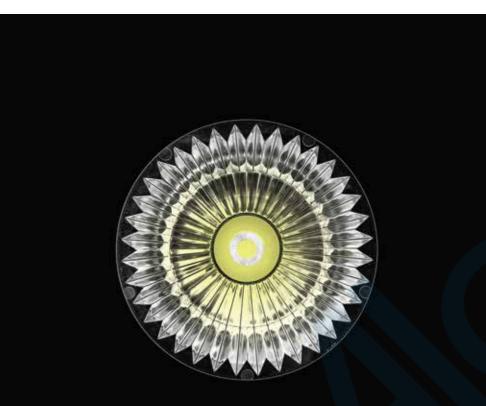


### POLAROID 50@18

φ: 50mm H: 18mm Material: PC FWHM: 3° Efficiency: 90%

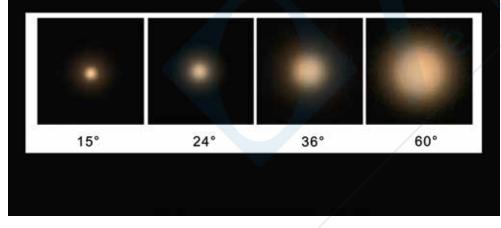


# **SUNFLOWER**



### SUNFLOWER: HK-45@08-XX-7070-20-1g-1

φ: 45mm H: 8mm Material: PC Efficiency: 88% FWHM: 15°/24°/36°/60°

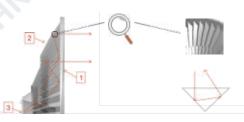


#### Design Principle

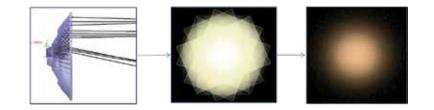
Triple-Reflection technology is a great innovation based on Calculus technology, greatly reduced the lens height compare with the original calculus lens, let the light reflect three times inside the lens, make sure get good light distribution with lower height lens.



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.



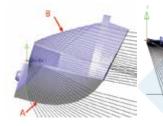




#### Product characteristics

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

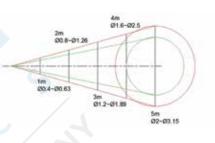
φ: 47mm H: 38mm Material: PMMA Efficiency: 80%

# TRANSFORMERS

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

#### **Instructions**

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.

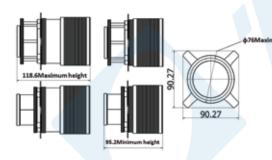




# Introduction

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.

# <u>Structure diagram</u>



mIES

TRANSFORMERS: HK-76@95-199----ASM

Size: L:119mm D:76mm Efficiency: 70%

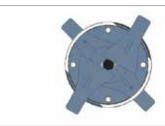
130 www.herculux.com/en

# 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.

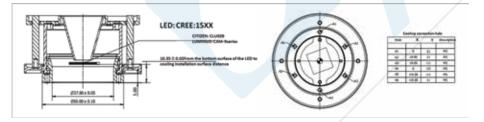




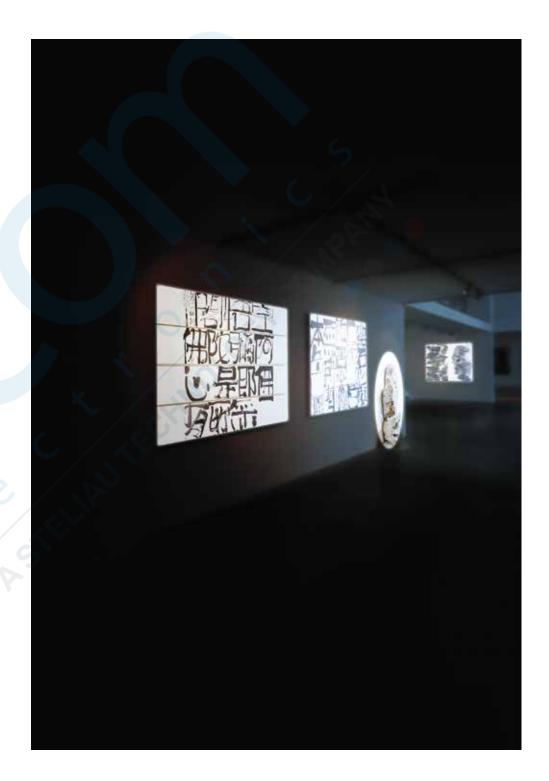
Change the insert position, as shown below, the circular spot will become a trapezoidal spot.

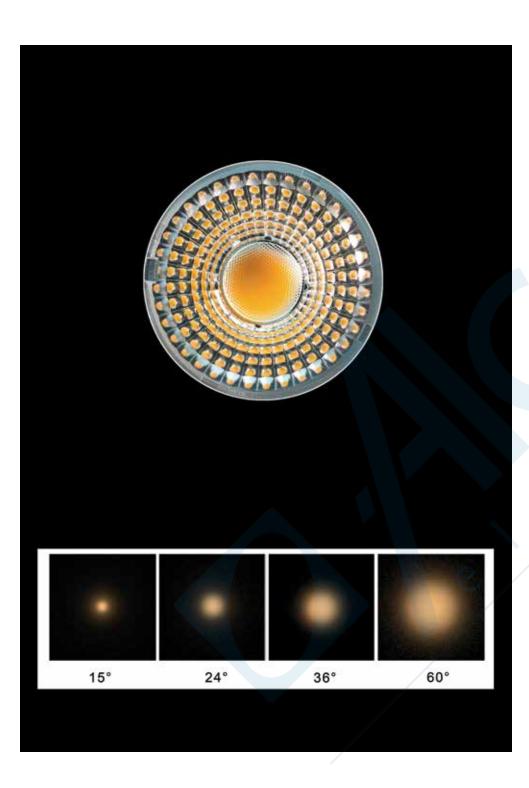


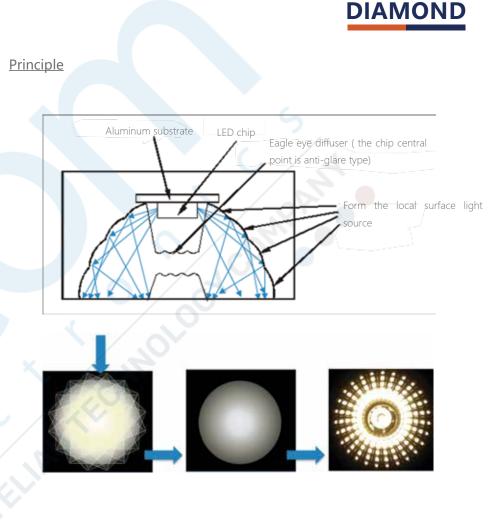
Cooling installation size



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%



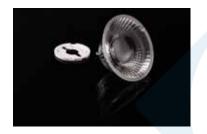
# DIAMOND 35@17

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

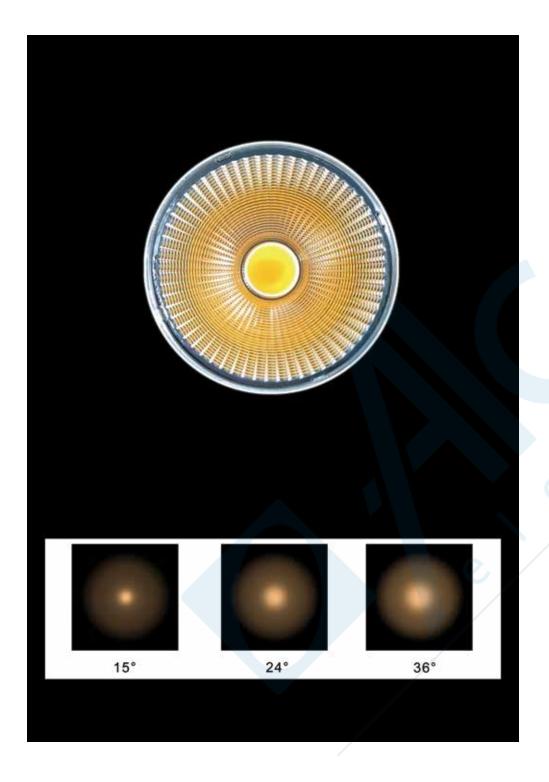
φ: 55mm H: 21mm Material: PMMA FWHM: 15°/24°/36°/60° Efficiency: 90%



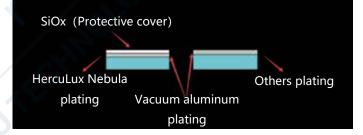
# **DIAMOND 62@22**

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 44@20

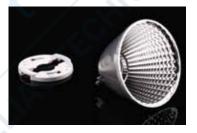
φ: 44mm H: 20mm Material: Vaccum Aluminum Plating PC FWHM: 15°/24°/36° Efficiency: 90%

Material: Vaccum Aluminum Plating PC



#### **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%



### **NEBULA 69@46**

**NEBULA 50@35** 

FWHM: 15°/24°/36° Efficiency: 90%

φ: 50mm H: 35mm

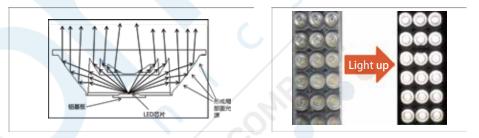
φ: 69mm H: 46mm Material: Vaccum Aluminum Plating PC FWHM: 15°/24°/36° Efficiency: 90%

# **LIGHTNING**



#### **Principle**

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



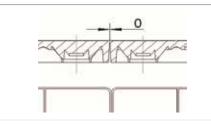
# Appearance

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.

# <u>Structure</u>

1. Injecting the glue from the module front surface, upper is bigger than the under, can achieve the lens zero clear-ance assembled.

2. Optical PC material, enough heat and weather resistance, UL-94: V2; UV cut : f1.



# <u>UGR</u>

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

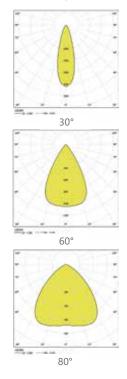




# LIGHTNING

#### 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

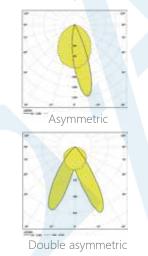




# LIGHTNING

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

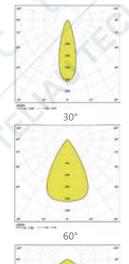
Size: L:286mm W:61mm FWHM: Asymmetric/Double asymmetric Material: PC Efficiency: 86% Application: Linear Light Lens by LED: SMD 3030/2835



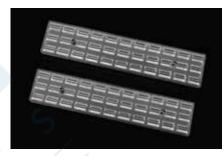
# LIGHTNING

# 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



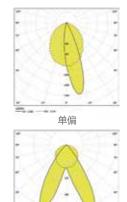
80°



# 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

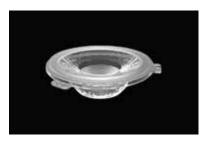
Size: Φ: 73.3 mm H:20.3mm FWHM: 25°/40° Material: PC Efficiency: 88% Application: PAR30, Down Light Lens by LED: Copy COB: 6PCS 3030 , 6PCS 2835



# 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**

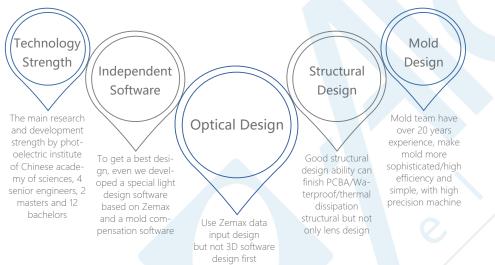
In addition to the standard mold products introduced in the catalogue, HercuLux can also provide customized solution services. With a professional design team and a complete industrial chain, tailor-made for customers, seeking the best solution for the project.

# 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.

# <u>Self-built 20000 m<sup>2</sup> HercuLux park</u>



Complete mold processing chain with a constant temp precision processing <u>area</u>



### More than 100 precision injection machines



Self-built PC Vaccum Aluminum Plating workshop, One Spraving Production Line, Two Vacuum Plating Machine, 100000 Level Purification Workshop





Singel 3 | B-2550 Kontich | Belgium | Tel. +32 (0)3 458 30 33 | info@alcom.be | www.alcom.be | www.alcom.be | www.alcom.nl | w