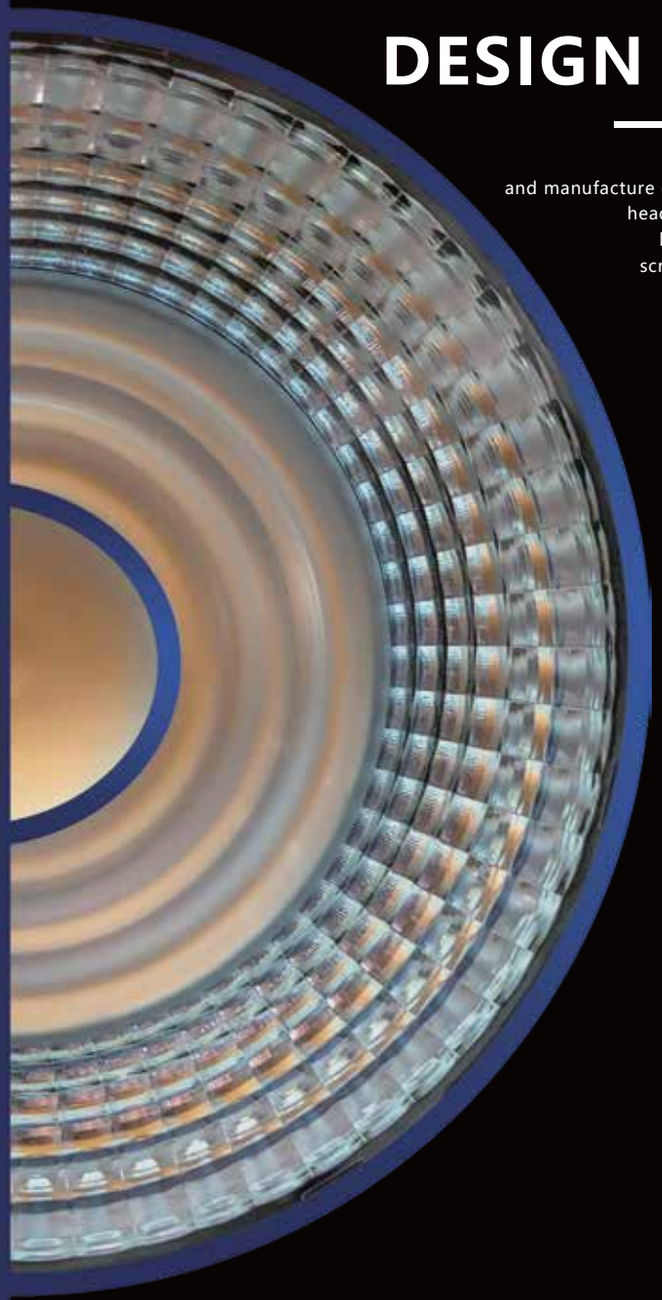
OPTICAL ENERGY DESIGN & DEVICES

HercuLux Optics focuses on the design and manufacture of optics for LED lighting, LED Automotive headlamp, UV LED precision light distribution, laser ultra-short-throw projector matching screen who is a modern high-tech enterprise that provides professional secondary light distribution solutions

Spring 2023 Edition



HERCULUX
LED Optics

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About Us

Background of establishment:

HercuLux is a company dedicated to providing the most innovative optical solutions and related optical components in the field of energy optics, jointly funded by a team of experts who have been engaged in the field of optics, precision optical molds and precision optical injection molding for more than ten years with the background of Institute of Optoelectronics, Chinese Academy of Sciences.

Registration scale:

RMB 30 million

Main business:

Energy Optics Solutions and Optical Device Suppliers

Application:

Mainly used for indoor lighting in shopping malls, hotels, offices, homes, etc; Used for outdoor lighting such as roads and advertisements; LED lights, stage lights, UV exposure machines, UV printing, and other supporting optical lenses and reflective cup products.

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:

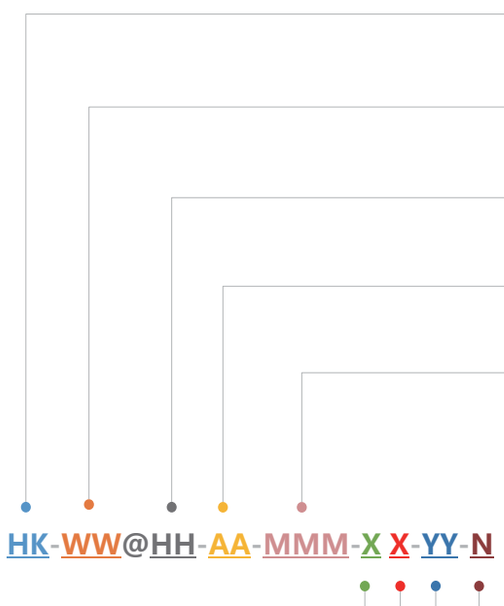
The company has applied for more than 330 patents and has obtained 222 patent authorizations, including 11 authorized invention patents, 106 utility model patents, 105 appearance patents, and is currently applying for 3 PCT patents.

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.

INDOOR

Products Code Rule



HK: Herculux Optics abbreviations

WW: Lens diameter or length

HH: Lens height

AA: FWHM(beam angle)

MMM: Applicable LED light source luminous surface size

N: "1" means single lens, "2" means 2 in 1, "3" means 3 in 1, and so on

YY: With or without glue, "0" means with glue, "1" means without glue

X: Emitting surface futures: "0"means mirror surface, "1"means ommateum, "2"means matte surface, "3"means cylindrical surface, "#"means other surface treatment

X: Reflective surface features: "0"means squama, "1"means single layer squama, "2"means double layer squama, "#"means no reflective surfaces

KIRIN OPTICAL PLATFORM

Dark
Deep anti-glare, High-quality spot

Gemini
Reflctor texture, Deep anti-glare

Moony
Compatible CCT changing COB, Suitable for wall washing

Glareless
Compatible CCT changing COB, Anti-glare

Peak
Super light control ability, with deep anti-glare function

Filmy
Compatible CCT changing COB, Ultra-thin

Rainbow
Uniform light spot, suitable for wall light or sunset light

V
Light sopt equal to "V" spot / no delamination

Zoom module
ame size , Achieved zoom

Mavic
Arbitrary transformation of lightshape, Clean, uniform light spot

Mavic Pro
Easy assembly, strong compatibility, Adjustable spot size and sharpness

Bright black Bright gold Bright silver Matte black

Light hood

Small hole hood
Wall washing hood

Light hood

Shadow hood
Olique hood

Bright black Bright gold Bright silver Matte black

Filter holder

Light filter

Linear spot Single asymmetric Double asymmetric

Transparent Cover

Transparent Filter Heavy Matte Filter Light Matte Filter

Pin-pin replacement

COB holder:

Same outer diameter； Screw positioning is consistent； Rotating interface is consistent

Lens holder

white

Lens holder

black

COB holder

white black

HERCULUX BJB DOB

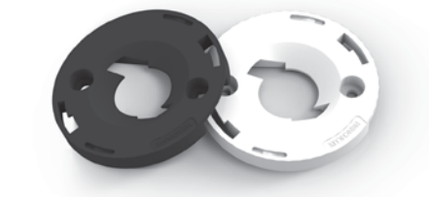
COB HOLDER

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

D35 COB HOLDER	
Outer diameter	35mm
Hight	3.5mm
Screw hole distance	25mm
Type	18
Matchable optics	
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

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

D24 COB HOLDER	
Outer diameter	24mm
Hight	3.4mm
Screw hole distance	19mm
Type	6
Matchable optics	
Series	Optical diameter
Dark series	D25/D30/D35
Glareless series	D25/D30/D35
Gemini series	D25/D30/D35
Moony series	D25/D30/D35
Peak series	D25/D30/D35
Filmy series	D30
V series	D35

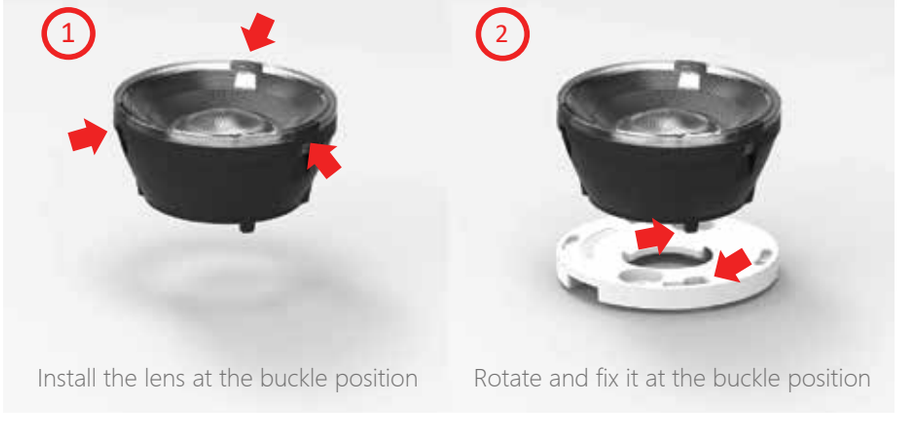


D50 COB HOLDER	
外径	50mm
高度	5.2mm
螺丝孔距	35mm
种类	13
Matchable optics	
Series	Optical diameter
Dark series	D75/D83
Glareless series	D75/D83
Gemini series	D75/D83
Moony series	D75/D83
Peak series	D75/D83
Filmy series	D75/D83
V series	D75/D83
Rainbow series	D75/D83
Zoom Module	D75/D83

LENS HOLDER

Twisting method, can be rotated with BJB solderless holder and other ZHAGA solderless holders.

Black and white color will own different optical effect solderless holders.



Install the lens at the buckle position

Rotate and fix it at the buckle position

Comparison of UGR parameters, Black Lens Holder VS White Lens Holder

Tested power：10W，683lm

Sort	FWHM	CD	K Value	Lm	Bared Light source	Efficiency
With white lens holder	22.6°	5238cd	5.81	897.1	969.8	92.50%
With black lens holder	21.9°	5541cd	6.37	869.2		89.60%

White lens holder , high efficiency

X=2H	Y=2H	5.0	5.8	5.3	6.2	6.5
	Y=3H	4.8	5.5	5.1	5.9	6.2
	Y=4H	4.7	5.4	5.1	5.7	6.1
	Y=6H	4.6	5.3	5.0	5.6	6.0
	Y=8H	4.6	5.2	5.0	5.6	6.0
	Y=12H	4.6	5.2	5.0	5.6	6.0
X=4H	Y=2H	4.6	5.4	5.0	5.7	6.1
	Y=3H	4.4	5.0	4.9	5.4	5.8
	Y=4H	4.4	4.9	4.8	5.3	5.8
	Y=6H	4.3	4.8	4.8	5.2	5.7
	Y=8H	4.3	4.8	4.8	5.2	5.7
	Y=12H	4.4	4.8	4.9	5.3	5.7
X=8H	Y=4H	4.2	4.6	4.7	5.1	5.5
	Y=6H	4.2	4.5	4.7	5.0	5.5
	Y=8H	4.3	4.6	4.8	5.1	5.6
	Y=12H	4.4	4.7	5.0	5.2	5.8
X=12H	Y=4H	4.1	4.5	4.6	5.0	5.5
	Y=6H	4.2	4.5	4.7	4.9	5.5
	Y=8H	4.3	4.5	4.8	5.0	5.6

Black lens holder, not dazzling

X=2H	Y=2H	0.4	1.3	0.7	1.6	1.9
	Y=3H	0.3	1.0	0.6	1.4	1.7
	Y=4H	0.3	1.0	0.7	1.4	1.8
	Y=6H	0.5	1.1	0.9	1.5	1.9
	Y=8H	0.6	1.2	1.0	1.6	2.0
	Y=12H	0.8	1.3	1.2	1.7	2.1
X=4H	Y=2H	0.1	0.8	0.5	1.2	1.5
	Y=3H	0.0	0.6	0.4	1.0	1.4
	Y=4H	0.1	0.6	0.6	1.1	1.5
	Y=6H	0.5	1.0	1.0	1.4	1.9
	Y=8H	0.7	1.1	1.2	1.6	2.1
	Y=12H	1.0	1.4	1.5	1.9	2.4
X=8H	Y=4H	0.1	0.5	0.6	1.0	1.5
	Y=6H	0.7	1.0	1.2	1.5	2.0
	Y=8H	1.0	1.3	1.5	1.8	2.3
	Y=12H	1.5	1.8	2.0	2.3	2.8
X=12H	Y=4H	0.1	0.4	0.6	0.9	1.4
	Y=6H	0.7	1.0	1.3	1.5	2.0
	Y=8H	1.1	1.3	1.6	1.8	2.4

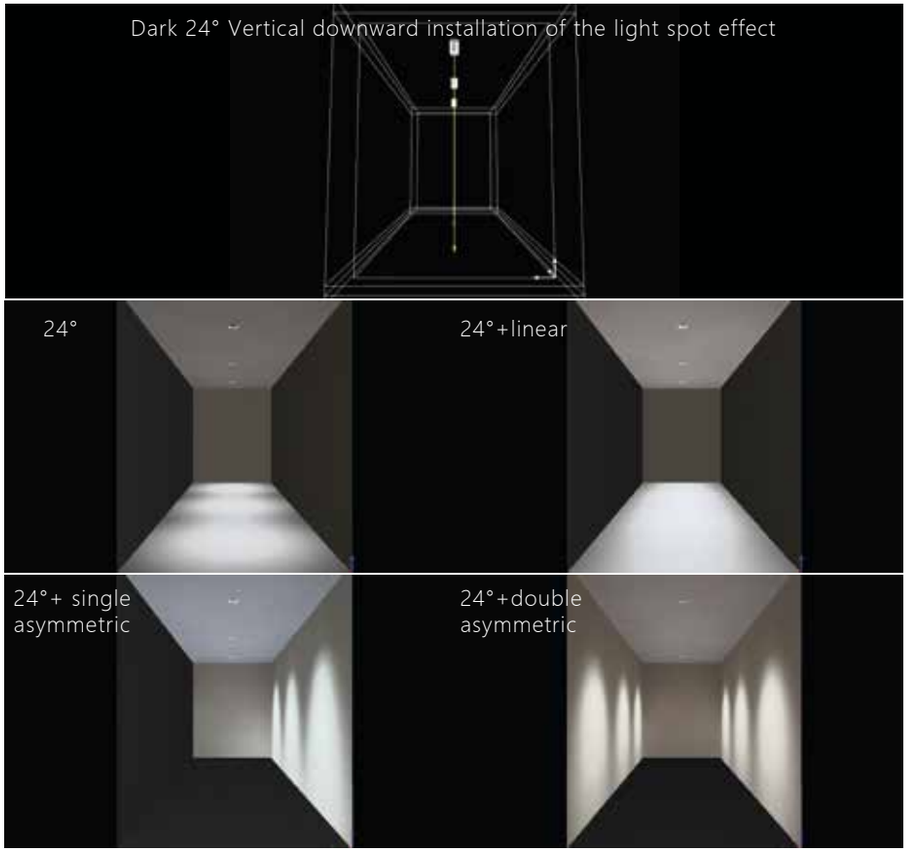
DARK

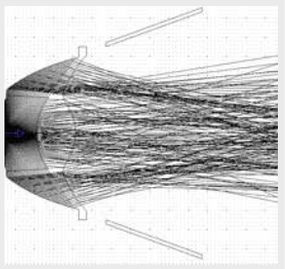
A lens for the high-quality spot of the hotel's deep anti-glare wall washing spotlight

√ Surface microstructure to reduce the background light of the spot

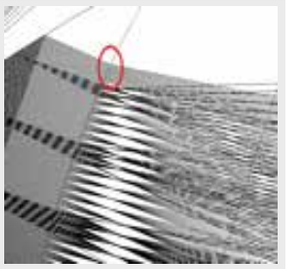
√ More uniform light spot with Fermat's spiral array

√ 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 little to the background light, which makes the background light of the entire light spot

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.

DARK

Hotel wall washer spotlight, deep anti-glare structure

Better anti-glare effect with a small hole hood

Lens diameter：45mm，Light hood bottom diameter：29mm

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.

With small hole hood, when the lamp is deflected, there is no stray light

DARK

DARK 20@11 (3030)

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

DARK 20@12 (3535)

φ: 20mm H: 12mm
Material: PMMA
FWHM: 15°/24°/36°/50°
Efficiency: 91%

DARK 25@13

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

DARK 62@30

φ: 62mm H: 30mm
Material: PMMA
FWHM: 10°/15°/24°/36°/50°
Efficiency: 93%

DARK 68@32

φ: 68mm H: 32mm
Material: PMMA
FWHM: 10°/15°/24°/36°/50°
Efficiency: 91%

DARK 75@35

φ: 75mm H: 35mm
Material: PMMA
FWHM: 10°/15°/24°/36°/50°/70°
Efficiency: 91%

DARK 83@40

φ: 83mm H: 40mm
Material: PMMA
FWHM: 10°/15°/24°/36°/50°/70°
Efficiency: 91%

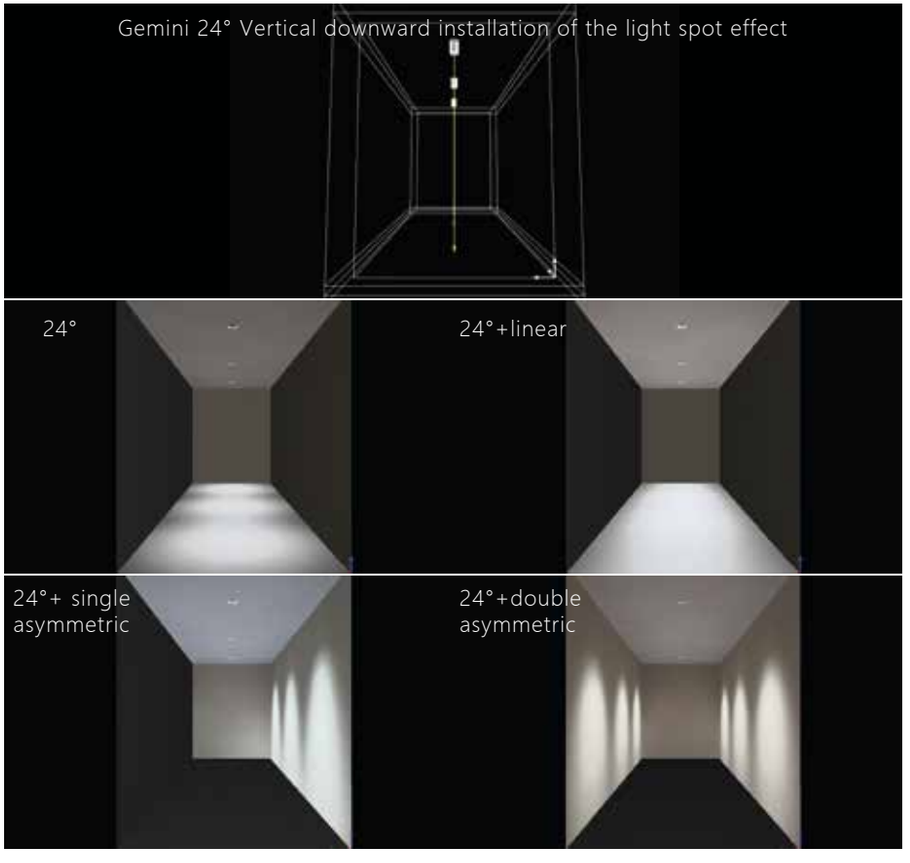
GEMINI

A reflector combined with a lens and a reflector

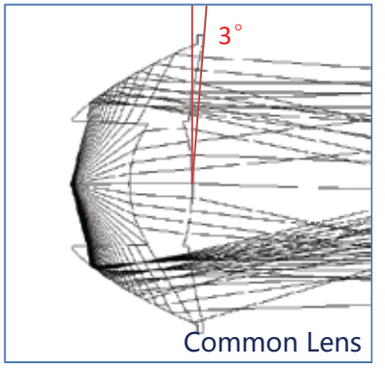
√ Vacuum plating, metal texture, and the dust-free workshop with 100,000-level air cleanliness makes the adhesion and surface of the product achieve the best effect

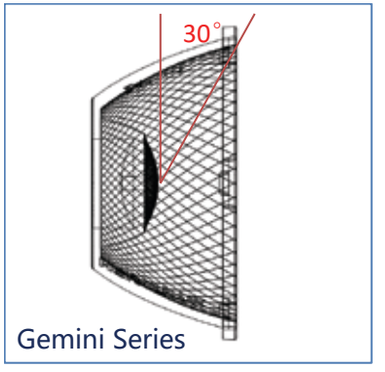
√ Complete integrated injection molding easy to install

√ With deep anti-glare effect

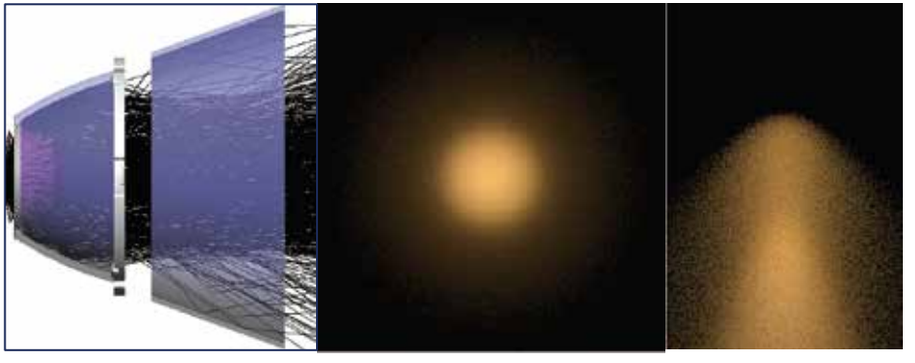


Comes with 30° anti-glare angle

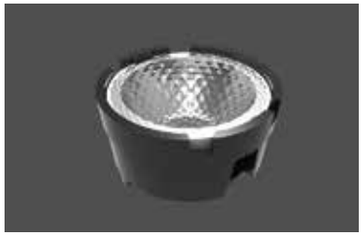




Through the cross light distribution and the control of the proportion of the intermediate light, the wall washing light spot is also relatively clean.



GEMINI



GEMINI 25@13

φ: 25mm H: 13mm
Material: Vaccum Aluminum Plating PC
FWHM: 18°/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 35@16

φ: 35mm 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%

GEMINI

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

A clean wall washer lens can match with CCT changing COB

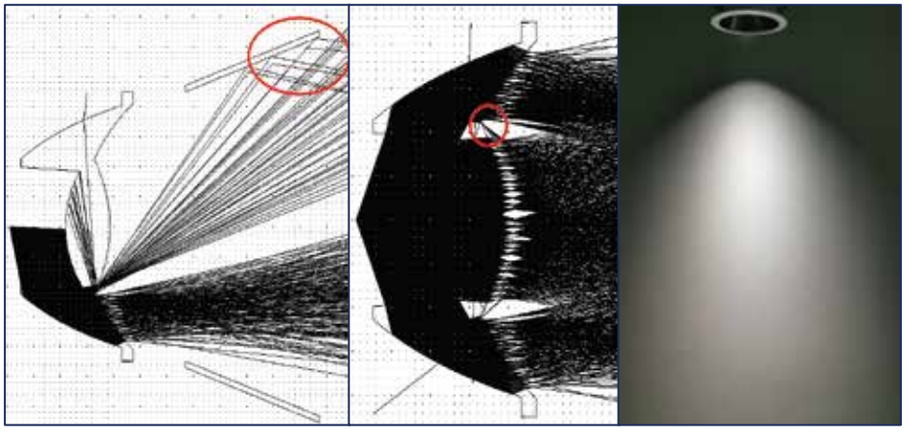
- ✓ Special surface structure, directional light control technology
- ✓ Calculus technology combined with Fermat's spiral to align the column, the light mixing is more uniform, and it can match the CCT changing COB.
- ✓ Deep anti-glare lamp can also make spot cut-off and clean.

Lens+ White lens holder= high efficiency

Lens+ Black lens holder= more anti-glare

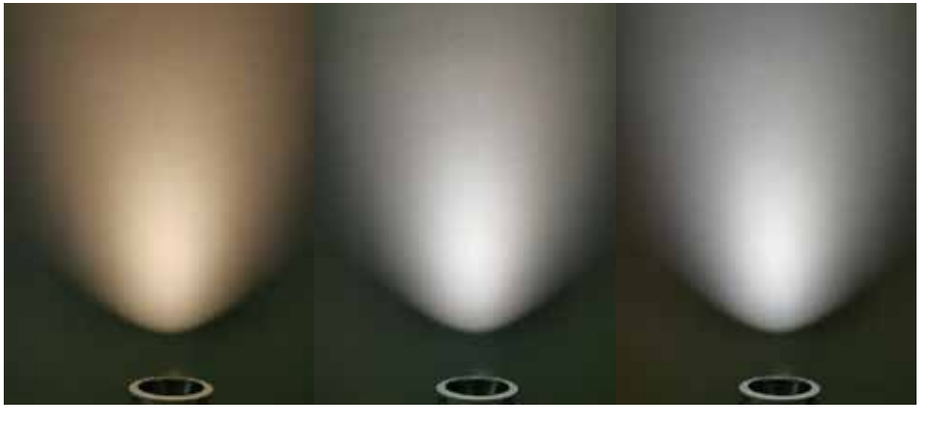
Smooth surface treatment, more conducive to anti glare

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.

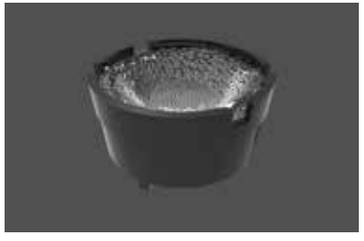


CCT changing COB can be matched

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



MOONY 25@13

φ：25mm　H：13mm
Material：PC/PMMA
FWHM：18°/24°/36°/50°(developing)
Efficiency：88%

MOONY 30@15

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

MOONY 35@16

φ：35mm　H：16mm
Material：PC
角度：15°/24°/36°/50°
Efficiency：88%

MOONY 45@21

φ：45mm　H：21mm
Material：PC
角度：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%

MOONY

MOONY 68@32

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

MOONY 75@35

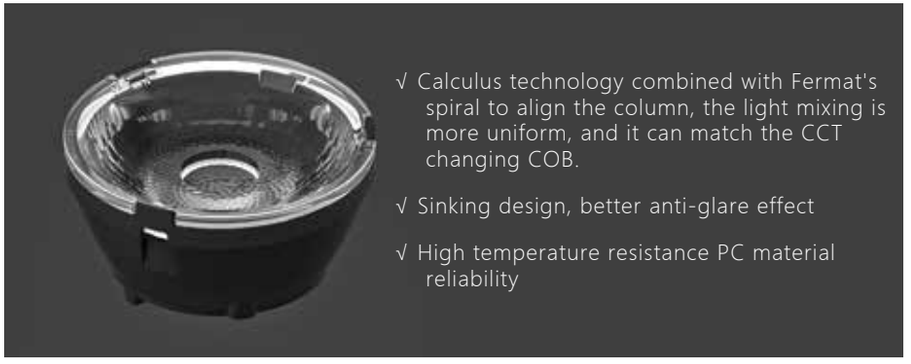
φ: 75mm H: 35mm
Material: PC
FWHM: 15°/24°/36°/50°
Efficiency: 88%

MOONY 83@40

φ: 83mm H: 40mm
Material: PC
FWHM: 15°/24°/36°/50°
Efficiency: 88%

GLARELESS

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.

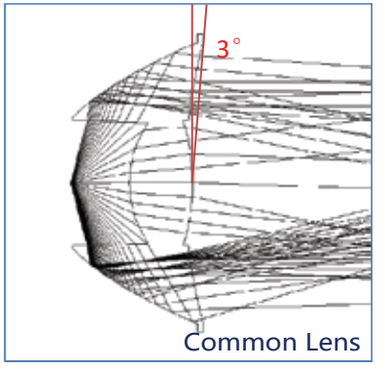
√ Sinking design, better anti-glare effect

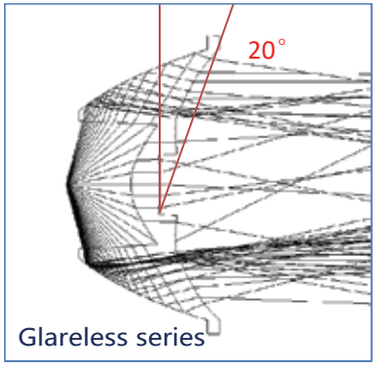
√ High temperature resistance PC material reliability

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.

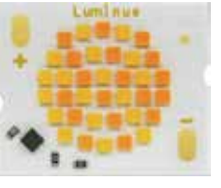
Comes with 20°anti-glare angle





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

GLARELESS 25@13

φ: 25mm H: 13mm
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 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 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

GLARELESS 68@32

φ: 72mm H: 22mm

Material: PC

FWHM: 15°/24°/36°/60°(developing)

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°(developing)

Efficiency: 88%

PEAK

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

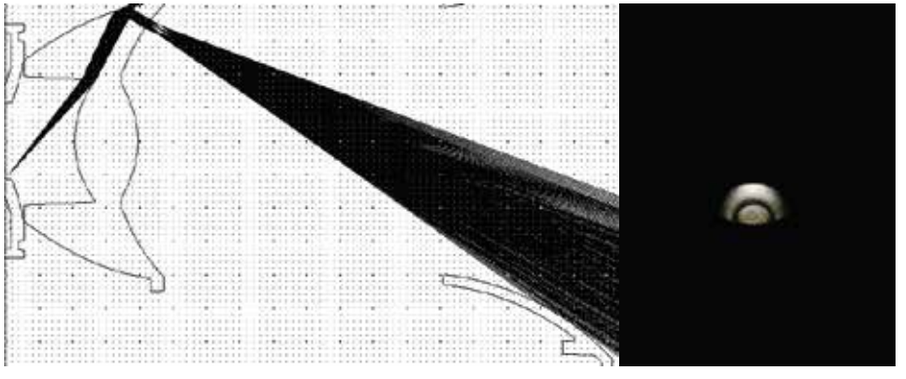
√ Surface treatment, directional light control

√ Matching with light hood to achieve ultimate anti-glare

√ More uniform light spot

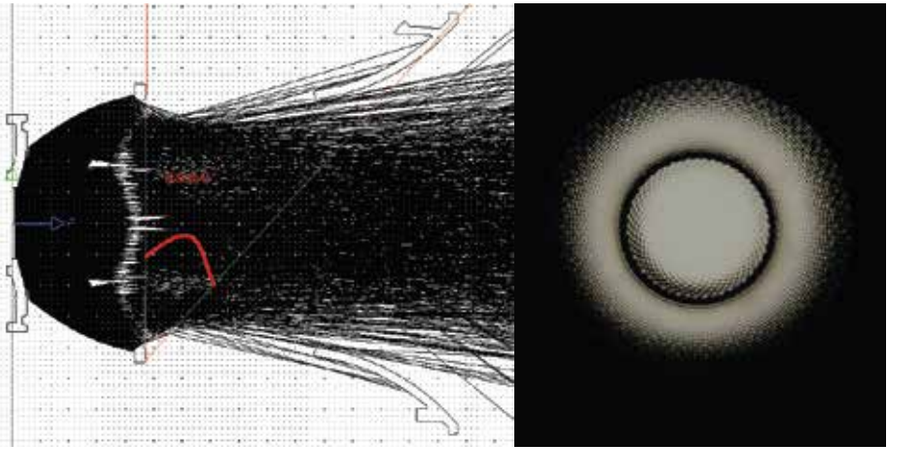
Surface treatment, directional light control

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.



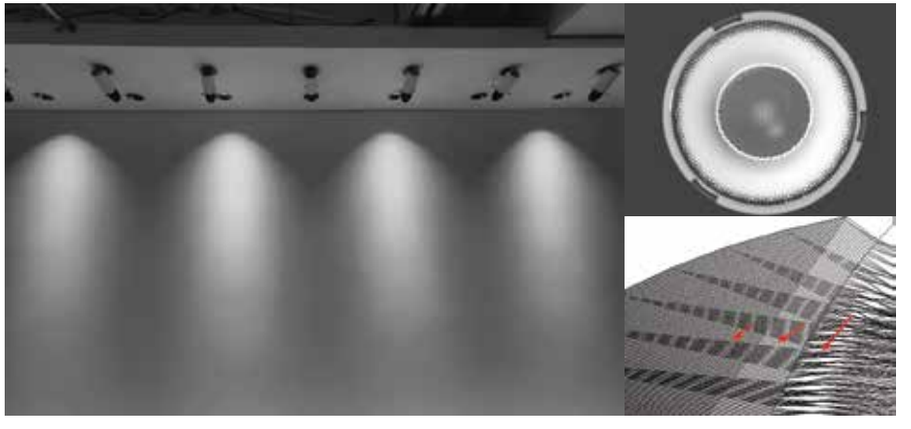
Matching with light hood to achieve ultimate anti-glare

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

PEAK/ PEAK V 25@13

φ: 25mm H: 13mm
Material: PMMA
FWHM: 15°/24°/36°/50°
(PEAK V not have 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 not have 50 °)
Efficiency: 90%

PEAK/ PEAK V 35@16

φ: 35mm H: 16mm
Material: PMMA
FWHM: 15°/24°/36°/50°
(PEAK V not have 50 °)
Efficiency: 90%

PEAK/ PEAK V 40@19

φ: 40mm H: 19mm
Material: PMMA
FWHM: 15°(developing)/24°/36°/50°
(PEAK V not have 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%

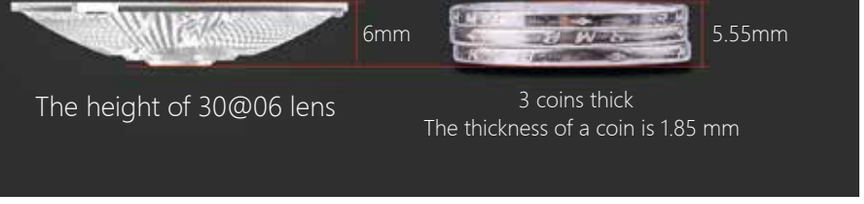
FILMY

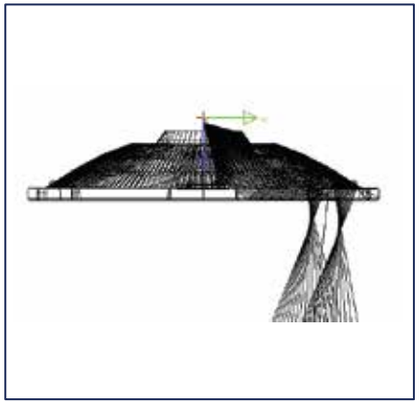
A lens as thin as a cicada wing

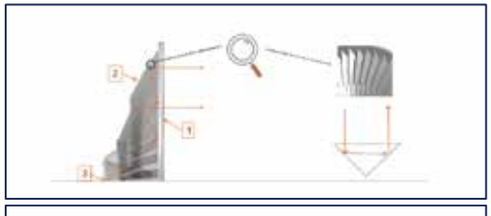
- ✓ Triple total reflection technology, ultra-thin product
- ✓ Mixing uniformity, CCT changing COB can be matched
- ✓ Develop lens holder, suitable for Kirin Optical Platform

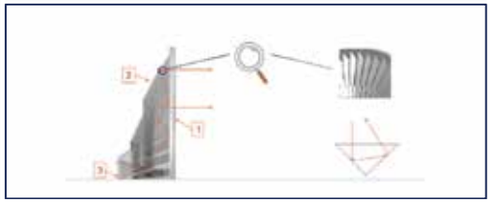
Ultra-thin design

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

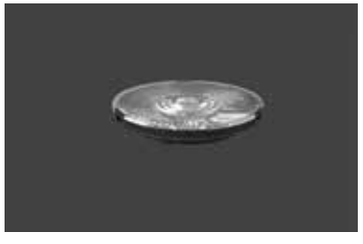
FILMY

FILMY 30@06

φ: 30mm H: 6mm
Material: PC
FWHM: 10°/15°/24°/36°/60°
Efficiency: 85%

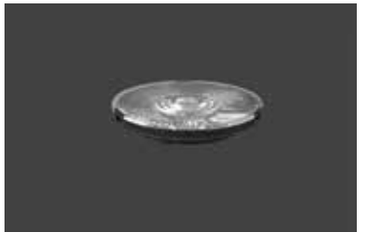
FILMY 35@07

φ: 35mm H: 7mm
Material: PC
FWHM: 10°/15°/24°/36°/60°
Efficiency: 85%



FILMY 45@09

φ: 45mm H: 9mm
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

FILMY 75@15

φ: 75mm H: 15mm
Material: PC
FWHM: 10°/15°/24°/36°/60°
Efficiency: 85%

FILMY 83@17

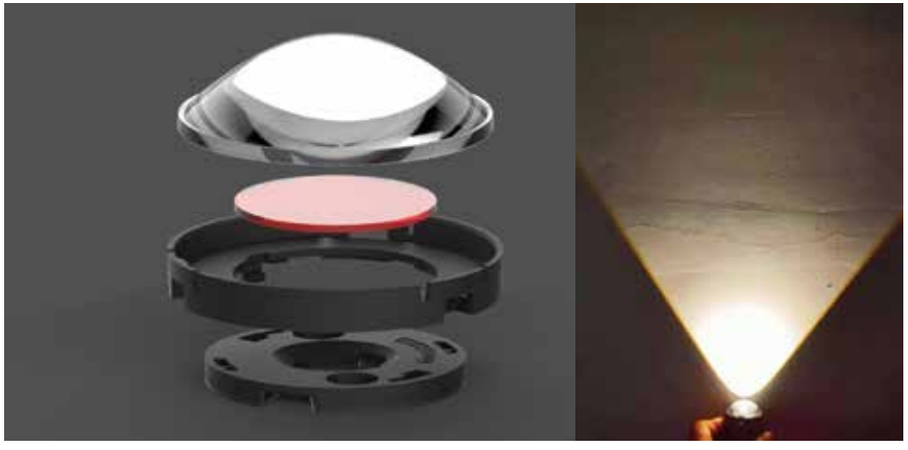
φ: 83mm H: 17mm
Material: PC
FWHM: 10°/15°/24°/36°/60°
Efficiency: 85%

FILMY 90@18

φ: 90mm H: 18mm
Material: PC
FWHM: 10°/15°/24°/36°/60°
Efficiency: 85%

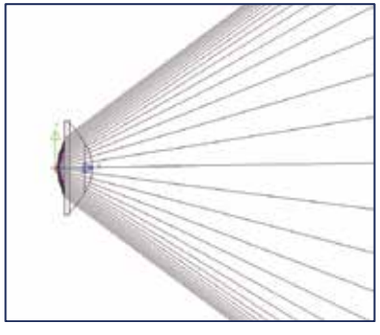
RAINBOW

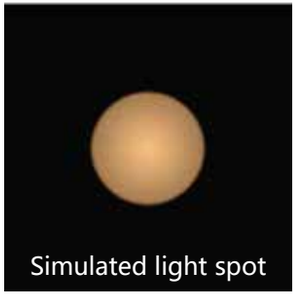
A lens like an eye.



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.

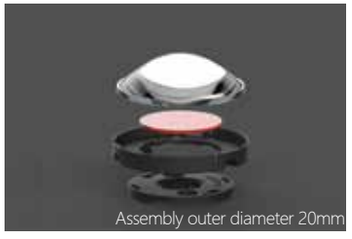
Sunset effect:

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:

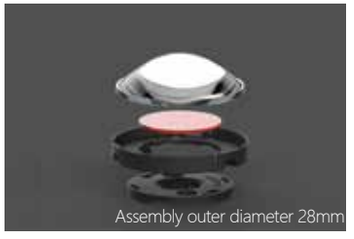
Color filter	Size	Color	Matching optics	Matching COB holder
1.01.12912	17.8@1.1	Sunset Red	Rainbow Lens D20/D25	D24 COB holder
1.01.12899	27@1.1	Sunset Red	Rainbow Lens D35/D45/D50/D55/D62/D68	D35 COB holder
1.01.12946	49.8@1.1	Sunset Red	Rainbow Lens D83/D75	D50 COB holder

RAINBOW



RAINBOW 18@05

φ: 18mm H: 5mm
Material: PC
FWHM: 75°
Efficiency: 88%



RAINBOW 25@06

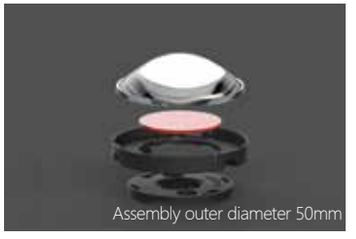
φ: 25mm H: 6mm
Material: PC
FWHM: 75°
Efficiency: 88%

RAINBOW 32@09

φ: 32mm H: 9mm
Material: PC
FWHM: 75°
Efficiency: 88%

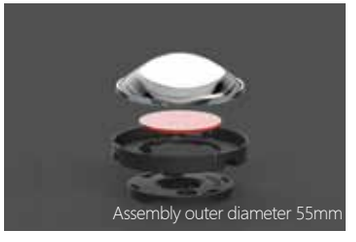
RAINBOW 42@12

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



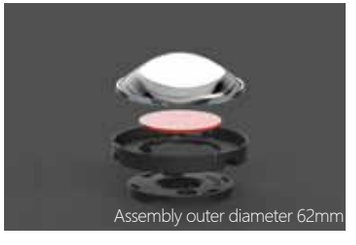
RAINBOW 47@15

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



RAINBOW 52@15

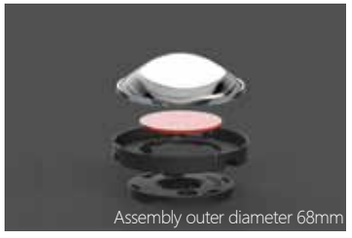
φ: 52mm H: 15mm
Material: PC
FWHM: 75°
Efficiency: 88%



RAINBOW 58@16

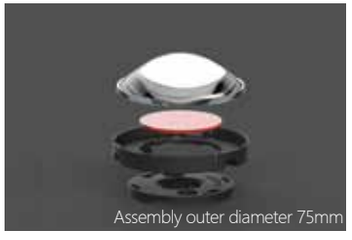
φ: 58mm H: 16mm
Material: PC
FWHM: 75°/95°
Efficiency: 88%

RAINBOW


Assembly outer diameter 68mm

RAINBOW 64@19

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


Assembly outer diameter 75mm

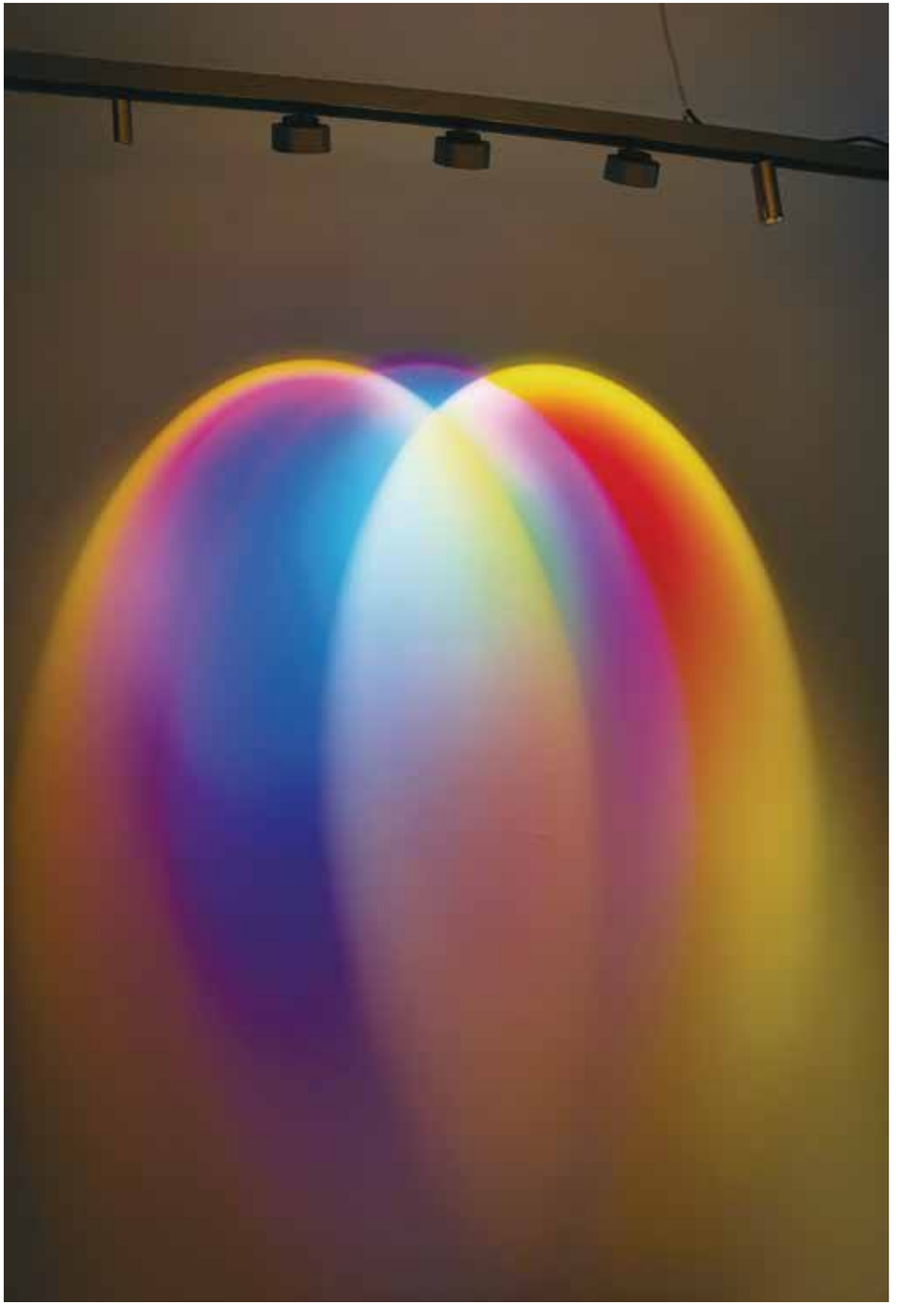
RAINBOW 71@18

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


Assembly outer diameter 83mm

RAINBOW 79@18

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

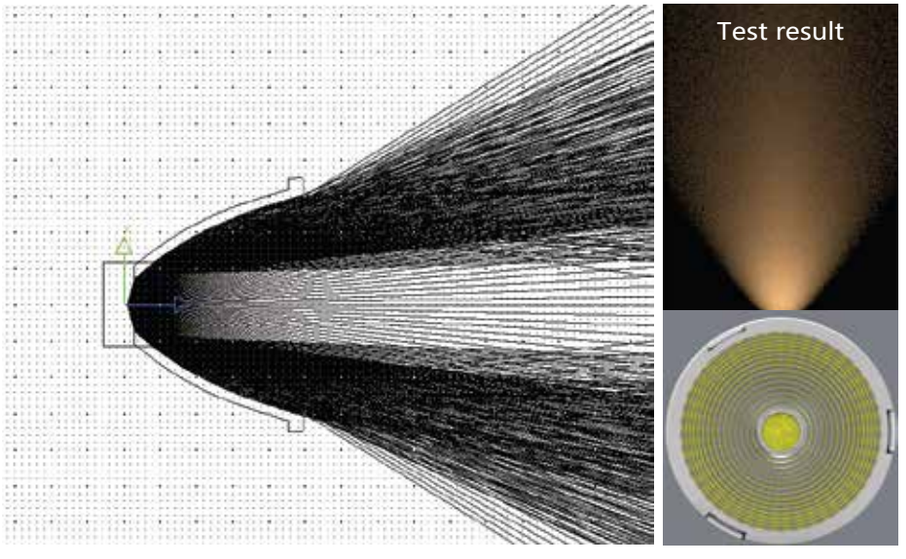


V SERIES

A reflector with anti-glare effect

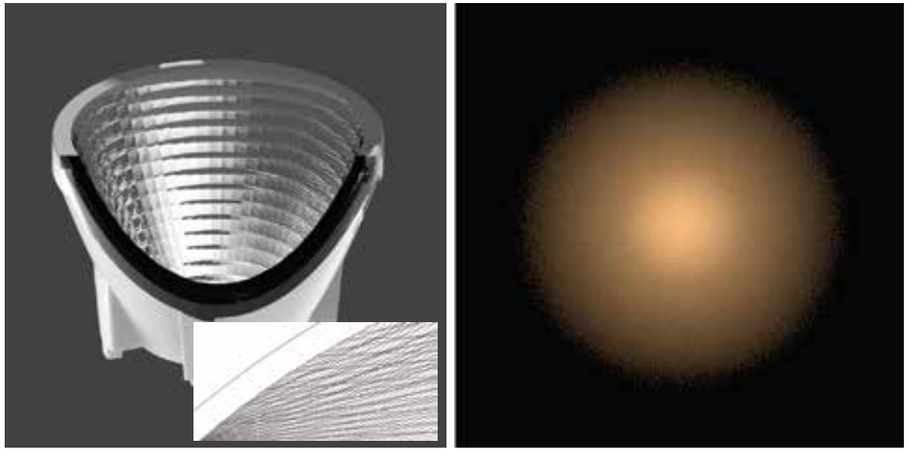
Distribute lights appropriately

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.



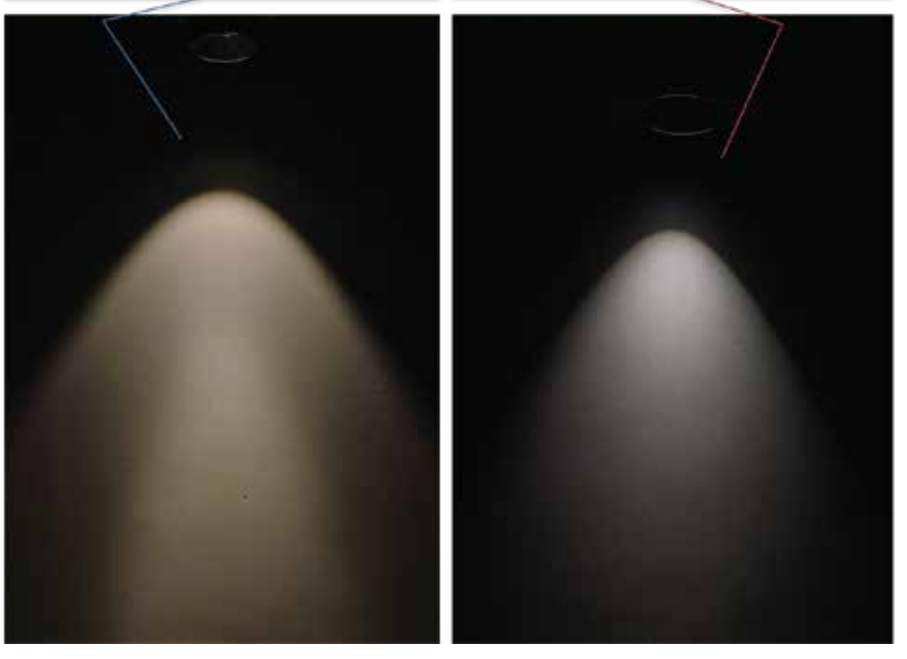
Uniform light spot

On the basis of rationally distributing the middle light and the reflective surface light, plus the scaly surface of the reflective surface, the light spot becomes more softer, and at the same time, the reflective surface light can be precisely controlled to avoid the phenomenon of delamination and dark areas.



Spot contrast

Common reflector	HercuLux V series
The transition between the main spot and the side spot is uneven and there is a dark areas	The transition between the main spot and the side spot is uniform, no dark areas, and the edges are cut off



V SERIES

V 25@17

φ: 25mm H: 17mm
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 35@23

φ: 35mm H: 23mm
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%

V SERIES

V 68@45

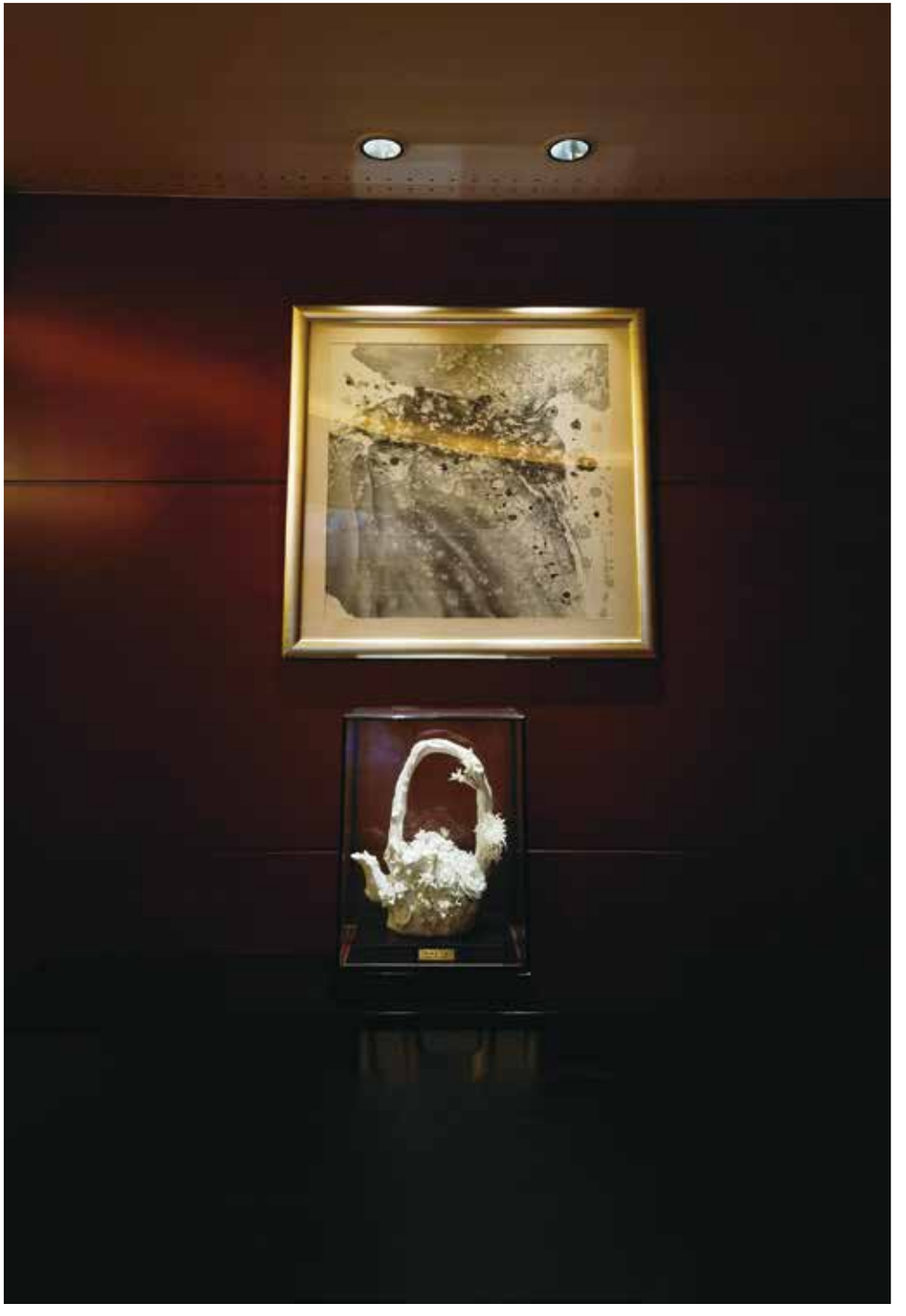
φ: 68mm H: 45mm
Material: Vaccum Aluminum Plating PC
FWHM: 15°/24°/36°/50°
Efficiency: 88%

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

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

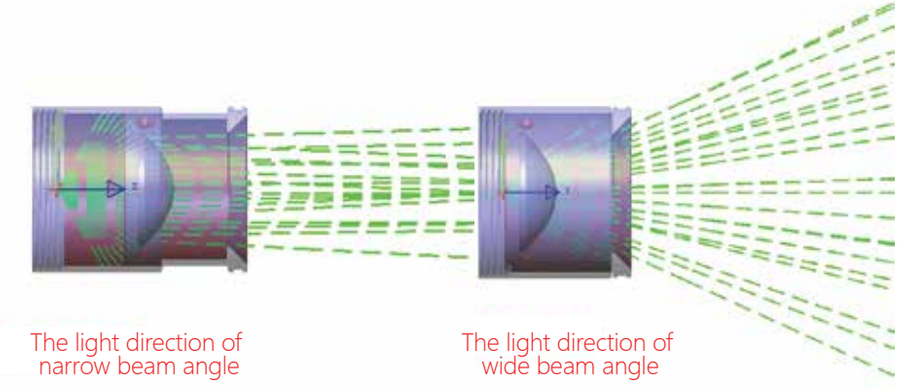
The zoom module is composed of a lens, a lens holder, and a fixed holder, wherein the lens holder drives the lens to move back and forth in the fixed holder to realize the change of the focal length of the lens relative to the position of the LED, thereby realizing the change of the angle. In the zoom 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.



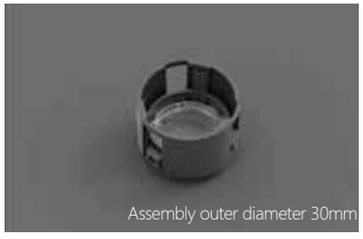
The light direction of narrow beam angle

The light direction of wide beam angle

Anti-glare effect

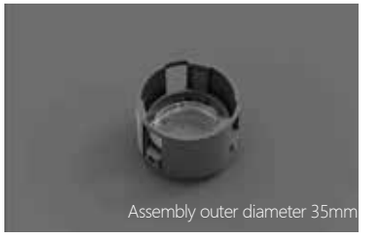
The zoom module has an anti-glare angle of 38°itself, and the anti-glare angle remains unchanged during the entire zooming process, so that the zoom module can achieve excellent anti-glare effect at all angles. The following pictures are the real shot effect of the small, medium and large angle.

ZOOM



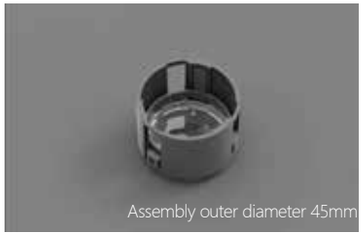
ZOOM 22@06

φ: 22mm H: 6mm
Material: PC
FWHM: 10°~45°
Efficiency: /



ZOOM 27@08

φ: 27mm H: 8mm
Material: PC
FWHM: 10°~45°
Efficiency: /

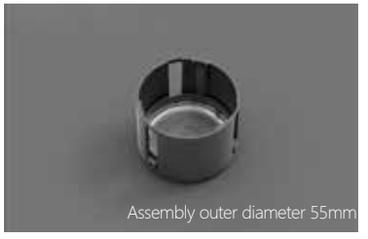


ZOOM 37@12

φ: 37mm H: 12mm
Material: PC
FWHM: 10°~45°
Efficiency: /

ZOOM 42@13

φ: 42mm H: 13mm
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 65@19

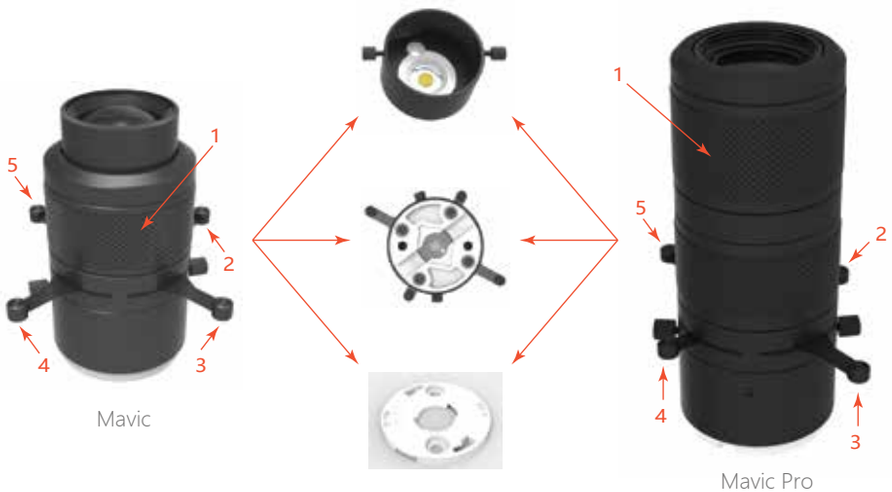
φ: 65mm H: 19mm
Material: PC
FWHM: 10°~45°
Efficiency: /

MAVIC&MAVIC PRO

A lens with ultra small size and clean light spot.

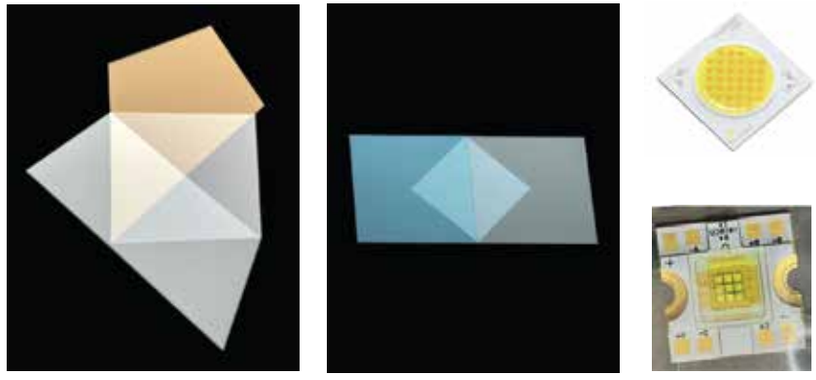
Mavic　　Mavic Pro

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

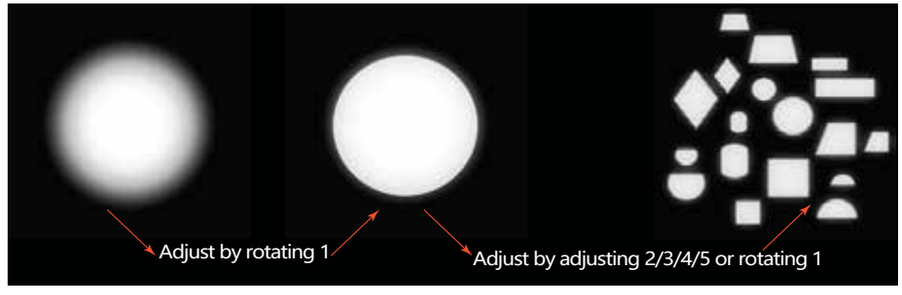


Mavic　　Mavic Pro

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



Can cut any shape and rotate 360 degrees.



High precision, showcasing more details.

MAVIC&MAVIC PRO

Easy assembly and strong compatibility

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

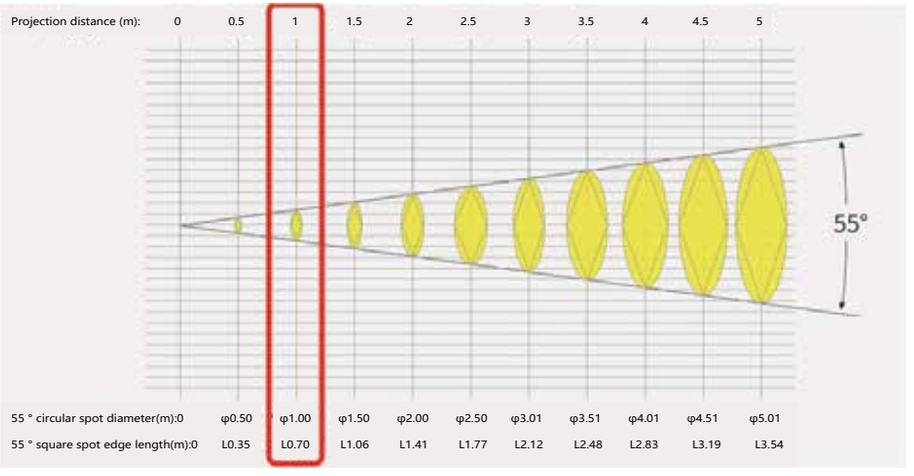
Stop 2:Install component 7 directly onto the light source and lock the screws.

Stop:Install component 8 onto component 7, with the screws on the side of the screws.

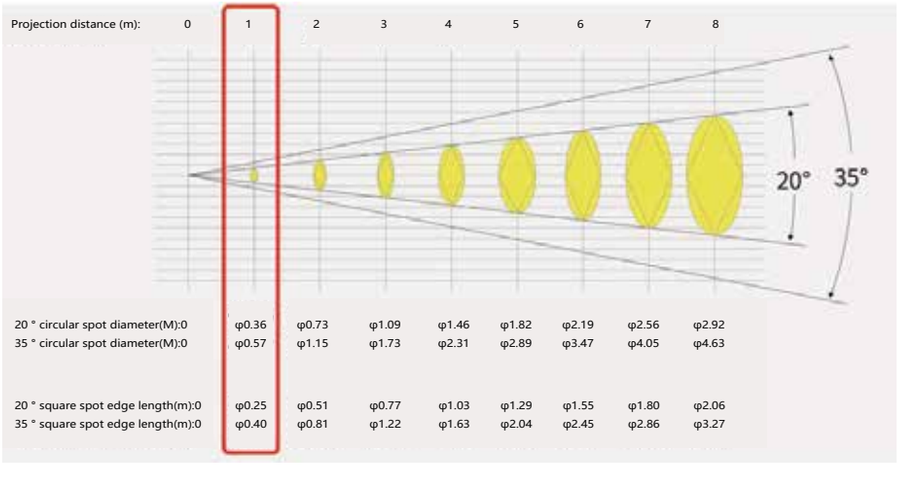
The lens can rotate 360 degrees and can be used for logos

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

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.

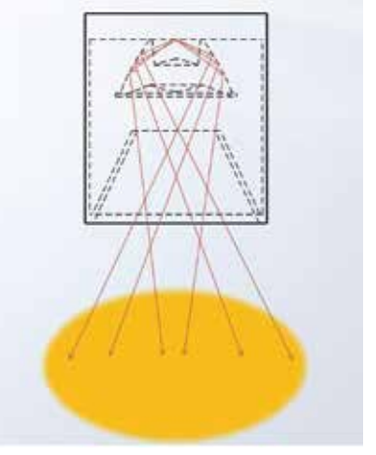
flat hood | small hole hood | oblique hole | wall washing hood | square hood

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.

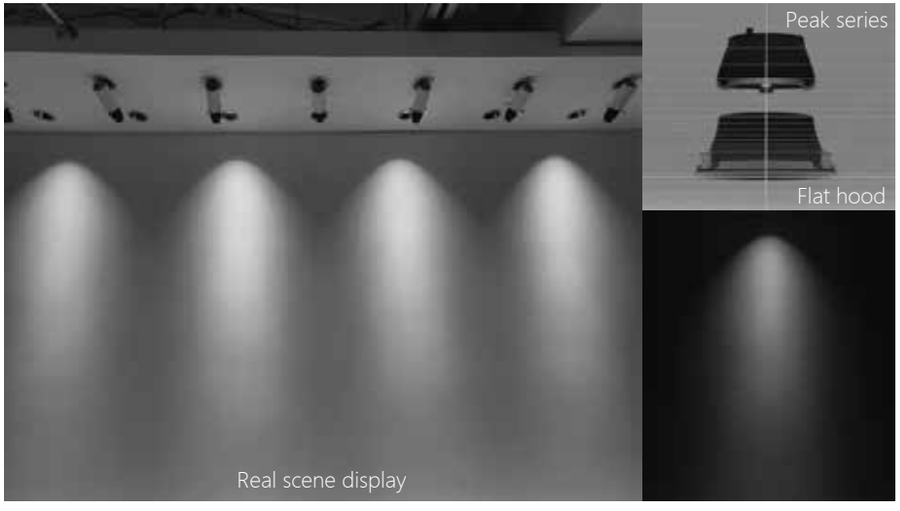


Types & Color	Size	Distance between light-hood & lens	Small hole Diameter	Adaptable lens	Adaptable filter
Oblique: Matte Black/ Bright Black/ Bright Gold/ Bright Silver	D：33.5mm H：10.68mm	h：5.2mm	/	Dark25/Gemini25/ Moony25/Peak25	Single asymmetric/ Double asymmetric/ Linear spot/ Matte filter
	D：50mm H：9.65mm	h：12mm	/	Dark30/Gemini30/ Moony30/Peak30	
	D：50mm H：17.89mm	h：5.2mm	/	Dark35/Gemini35/ Moony35/Peak35	
	D：68mm H：23.45mm	h：5mm	/	Dark35/Gemini35/ Moony35/Peak35	
	D：68mm H：25mm	h：5.17mm	/	Dark45/Gemini45/ Moony45/Peak45	
	D：70mm H：28mm	h：5.2mm	/	Dark50/Gemini50/ Moony50/Peak50	
	D：100mm H：36.3mm	h：7mm	/	Dark55/Gemini55/ Moony55/Peak55	
	D：100mm H：37mm	h：8mm	/	Dark62/Gemini62/ Moony62/Peak62	
	D：145mm H：50.9mm	h：8mm	/	Dark68/Gemini68/ Moony68/Peak68	
	D：145mm H：52.07mm	h：10mm	/	Dark75/Gemini75/ Moony75/Peak75	
Small hole: Matte Black/ Bright Black/ Bright Gold/ Bright Silver	D：68mm H：20.77mm	h：9mm	d：23mm	Dark35/Gemini35/ Moony35/Peak35	
	D：68mm H：17.77mm	h：12.4mm	d：29mm	Dark45/Gemini45/ Moony45/Peak45	

LIGHT HOOD

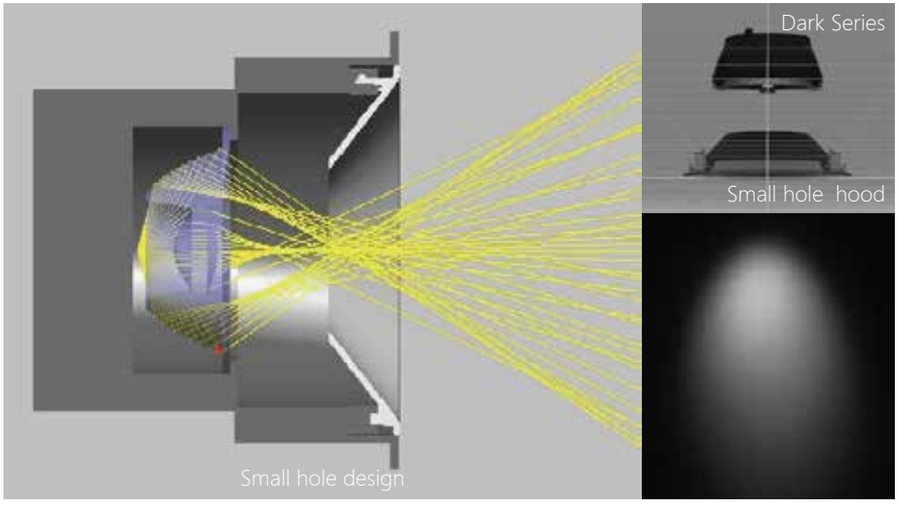
Peak series lens & Flat hood

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

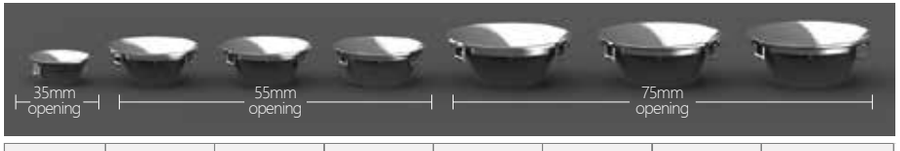


Dark series lens & Small hole hood

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



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)

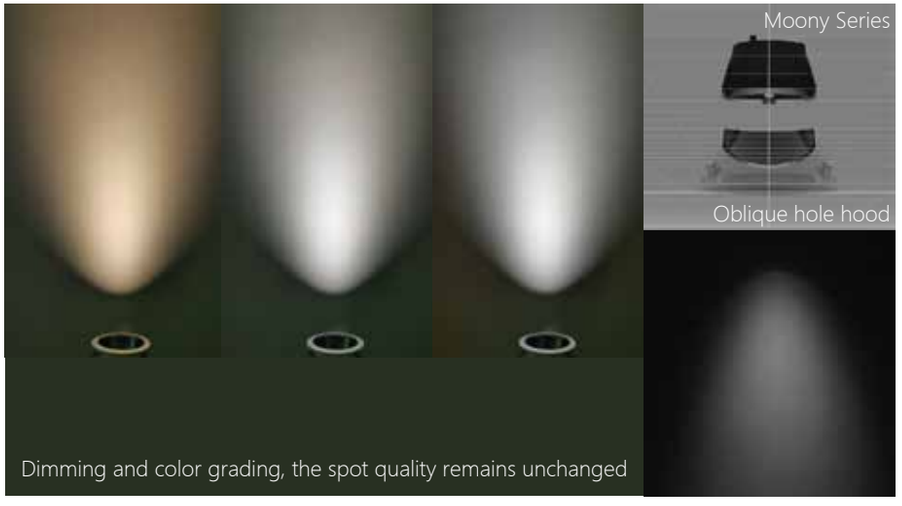
Small Hole Hood Matching Information Sheet

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

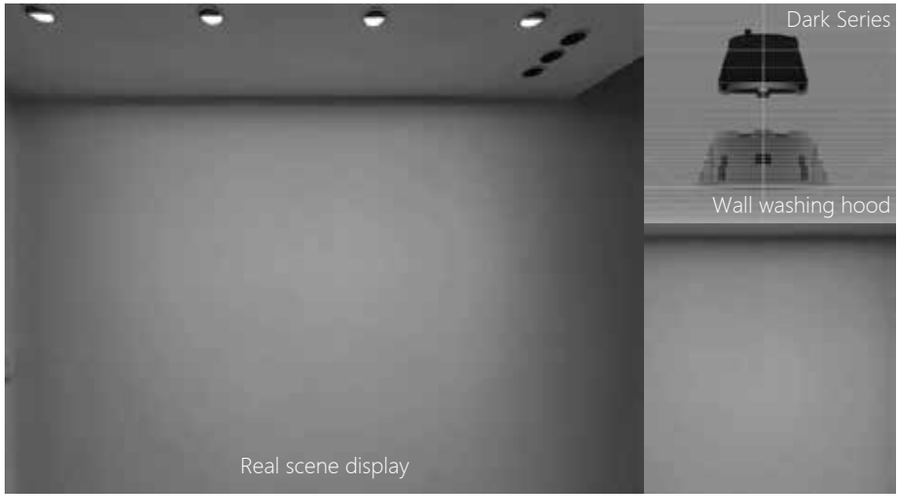
Dark / Moony & Oblique hole hood

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.



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.

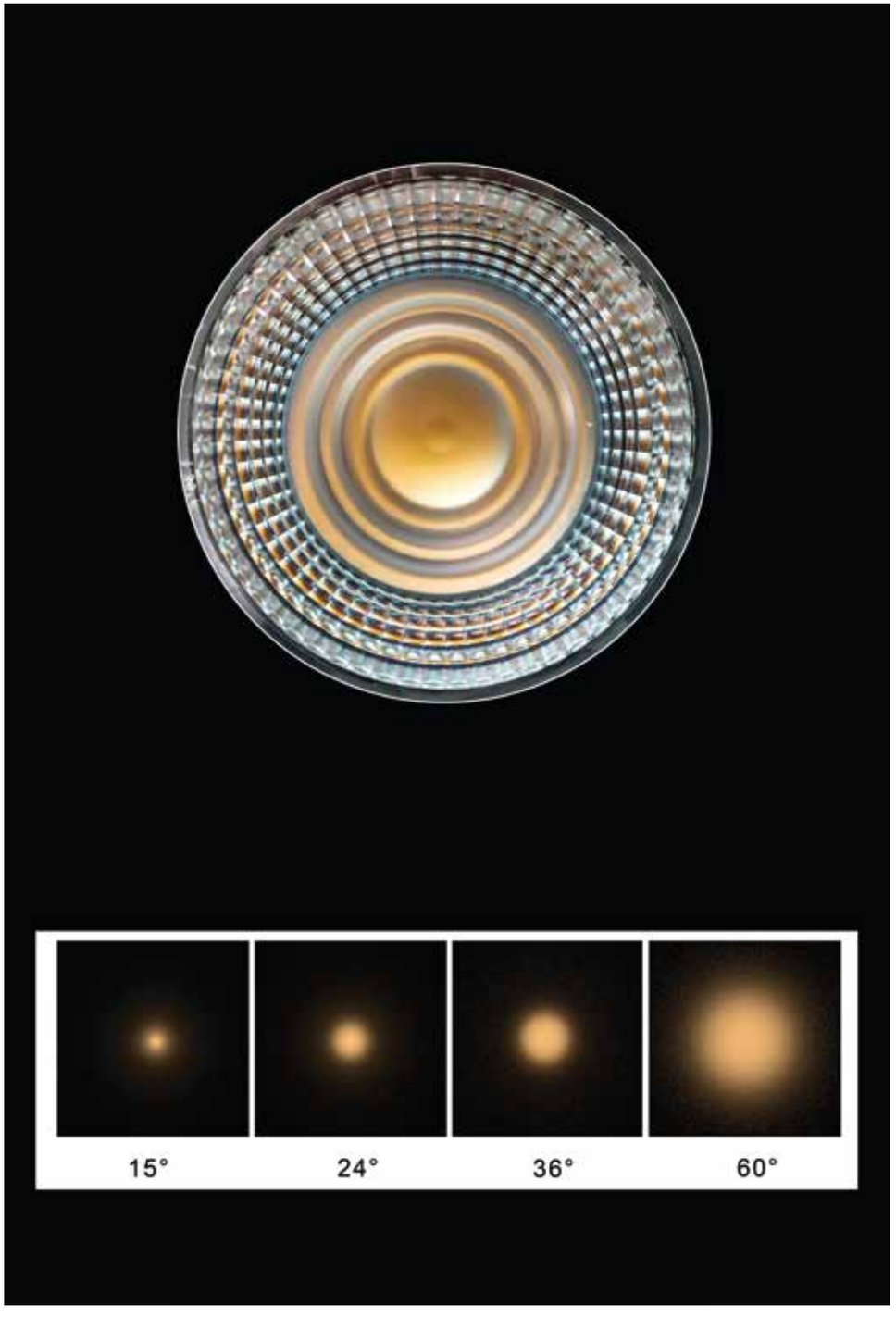


Oblique Hole Hood Matching Information Sheet

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

Recommended Wall Washing Hood Solution

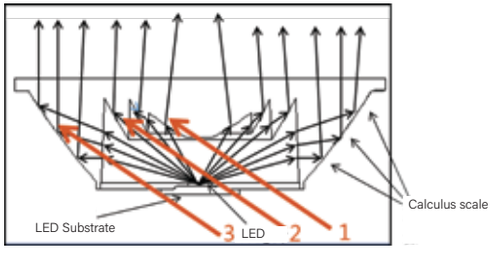
	35 Opening scheme	55 Opening scheme	75 Opening scheme	95 Opening scheme
Wall Washing Hood MN	1.07.23206 /1.07.23206	1.07.23295_A /1.07.23295_B	1.07.23130	1.01.23310
Recommended optics	Dark D25-15° 1.01.92131	Dark D35-15° 1.01.91997	Dark D45-15° 1.01.91887	Dark D50-15° 1.01.92006



PHOTON

Principle

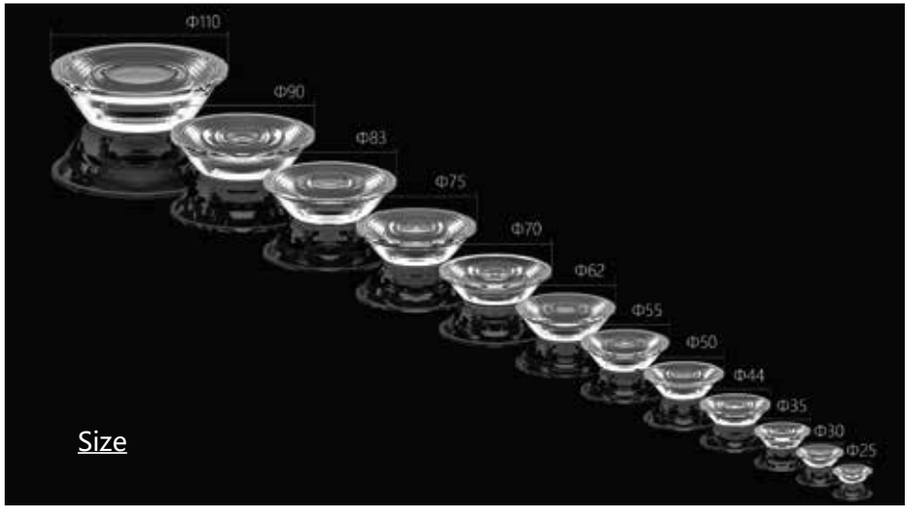
Photon Lens designed by one refracting surface and several fully reflecting surfaces, can control the light distribution well by lower lens height.



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 30@08

φ: 30mm H: 8mm
Material: PC
FWHM: 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 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 50@14

φ: 50mm H: 14mm
Material: PC
FWHM: 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

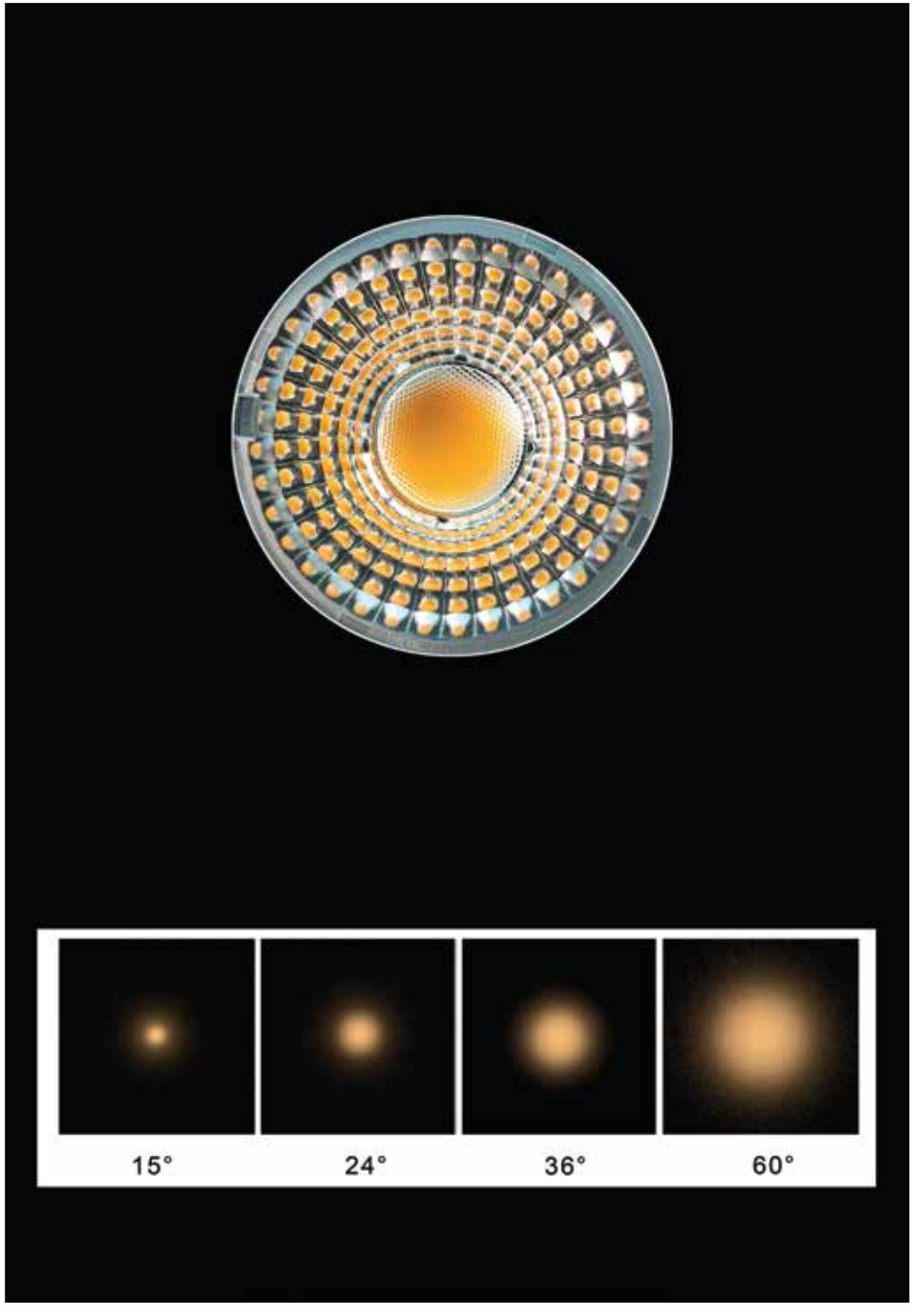
φ: 90mm H: 23.2mm
Material: PC
FWHM: 15°/24°/36°/60°
Efficiency: 85%

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%



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 40@20

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

KA 43@19

φ: 43mm H: 19mm
Material: PC/PMMA
FWHM: 10°/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

KA 66@36

φ: 66mm H: 36mm
Material: PMMA
FWHM: 15°/24°/36°/60°
Efficiency: 90%

KA 69@30

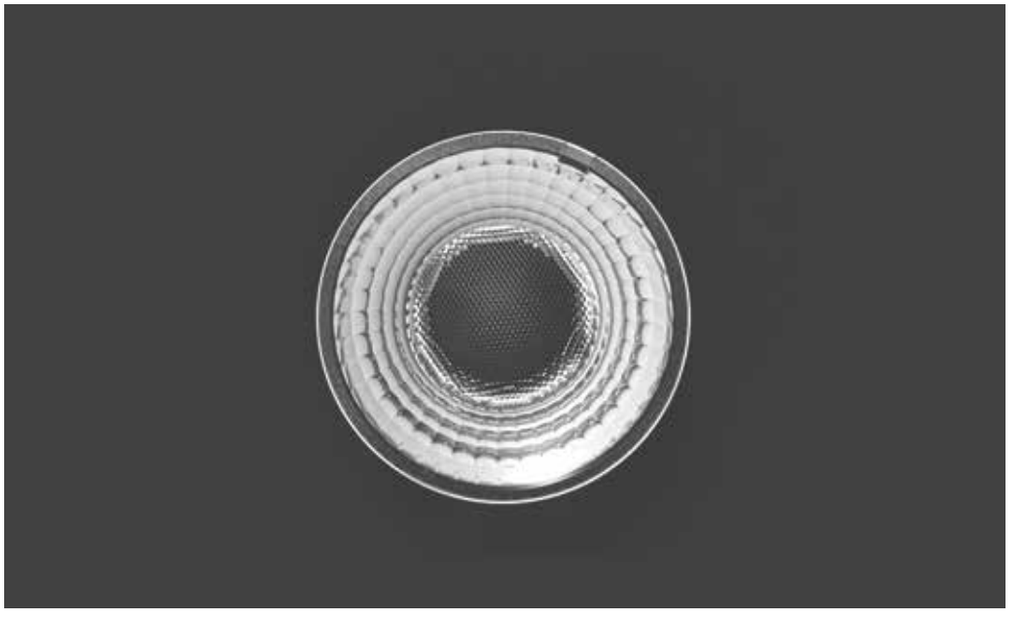
φ: 69mm H: 30mm
Material: PMMA
FWHM: 15°/24°/36°/60°
Efficiency: 90%

KA 72@33

φ: 72mm H: 33mm
Material: PMMA
FWHM: 12°/15°/20°/24°/36°/60°
Efficiency: 90%

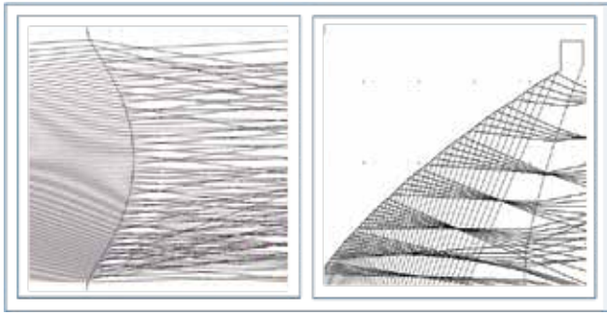
KA 75@31

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



CHAMELEON

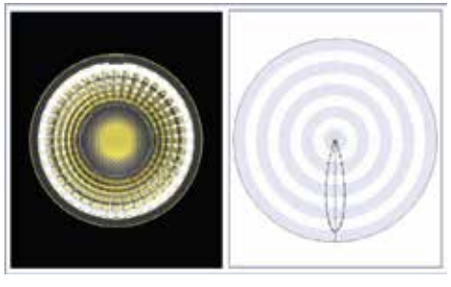
Product Characteristics



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.

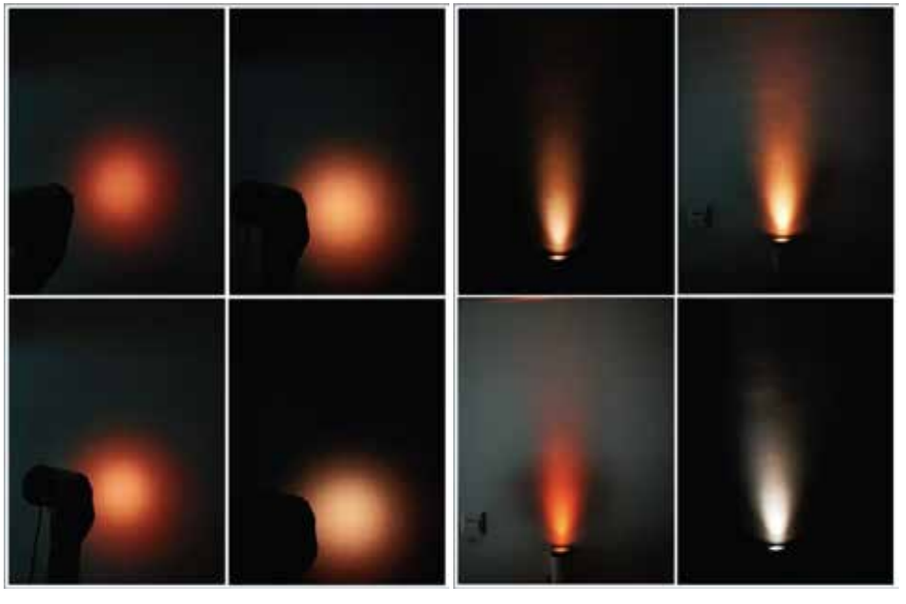
Principle of Design



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 overlapping 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 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 62@31

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

CHAMELEON 44@20

φ: 44mm H: 20mm
Material: PC
FWHM: 24°/36°/60°
Efficiency: 90%

CHAMELEON 55@21

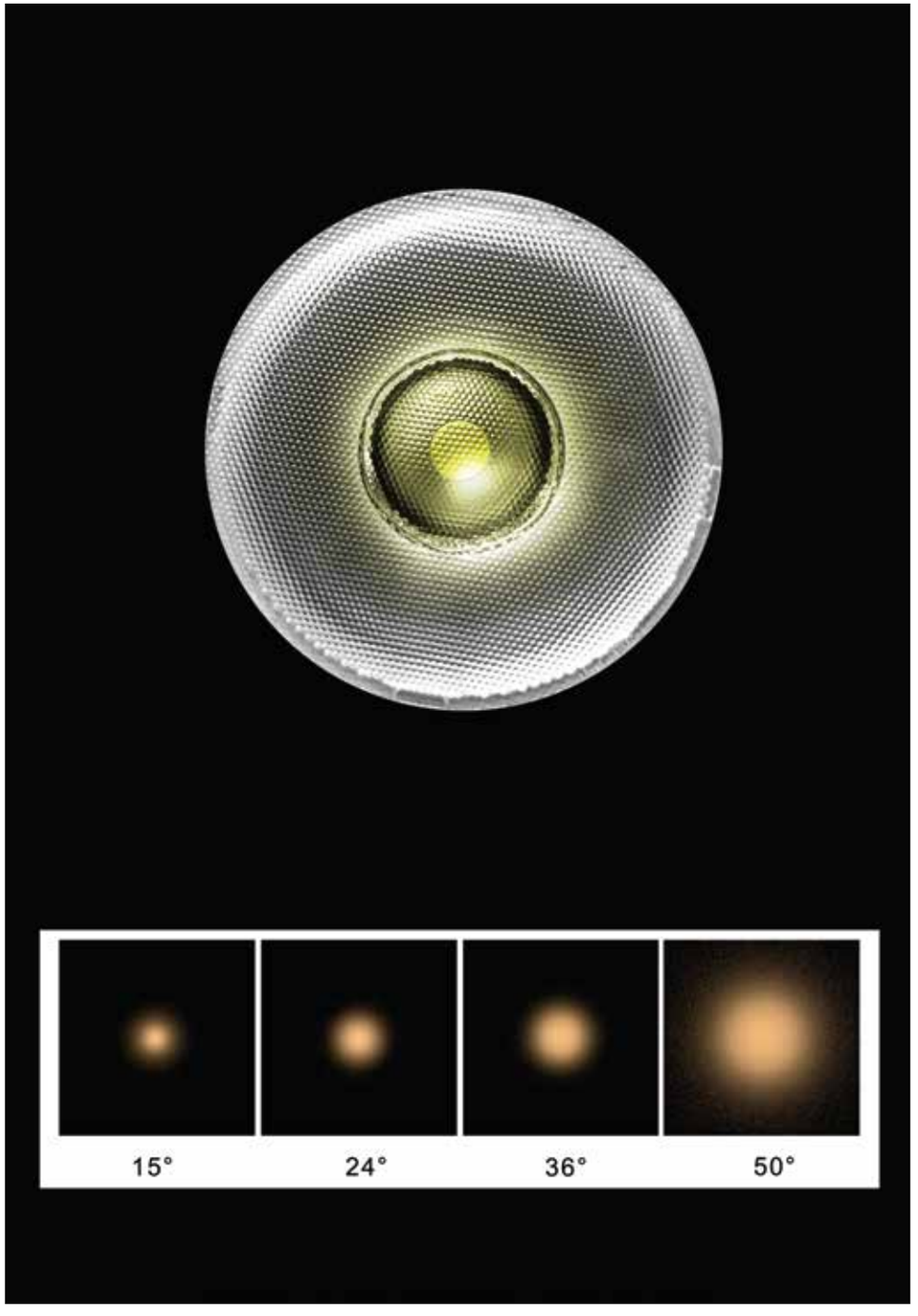
φ: 55mm H: 21mm
Material: PMMA
FWHM: 24°/36°/60°
Efficiency: 90%

CHAMELEON 72@33

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

CHAMELEON 75@31

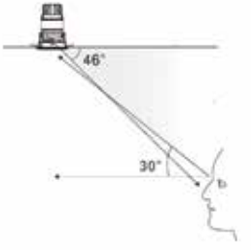
φ: 75mm H: 31mm
Material: PMMA
FWHM: 24°/36°/60°
Efficiency: 90%



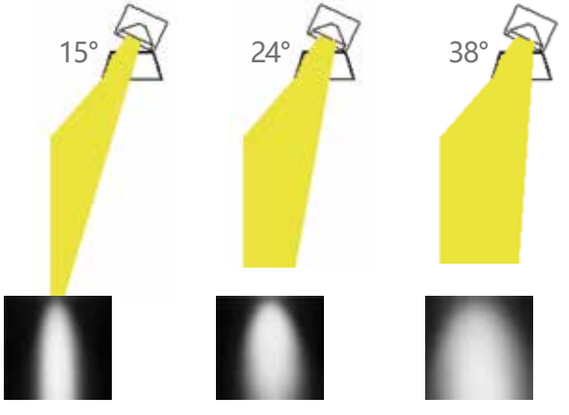
BLACK HOLE

Introduction

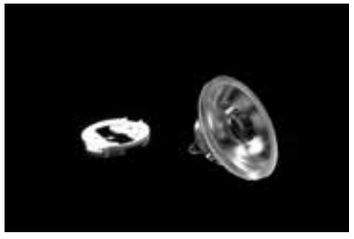
The Max shielding angle of the LED lamp is 46°, can avoid the glare effectively. The most accepted shielding angle of the human visual area always more than 30°,the other light in this area will occur the glare. So when the shielding angle of the LED lamp more than 30°, will control the light out the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

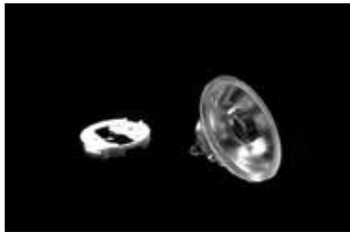


BLACK HOLE



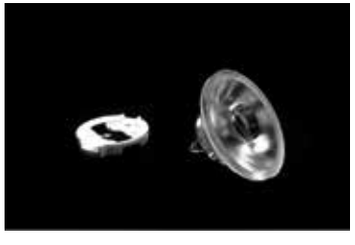
BLACK HOLE 28@14

φ: 28mm H: 14mm
Material: PC
FWHM: 15°/24°/36°/50°
Efficiency: 85%



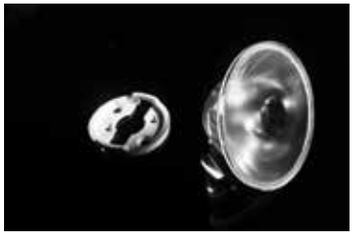
BLACK HOLE 30@15

φ: 30mm H: 15mm
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 45@24

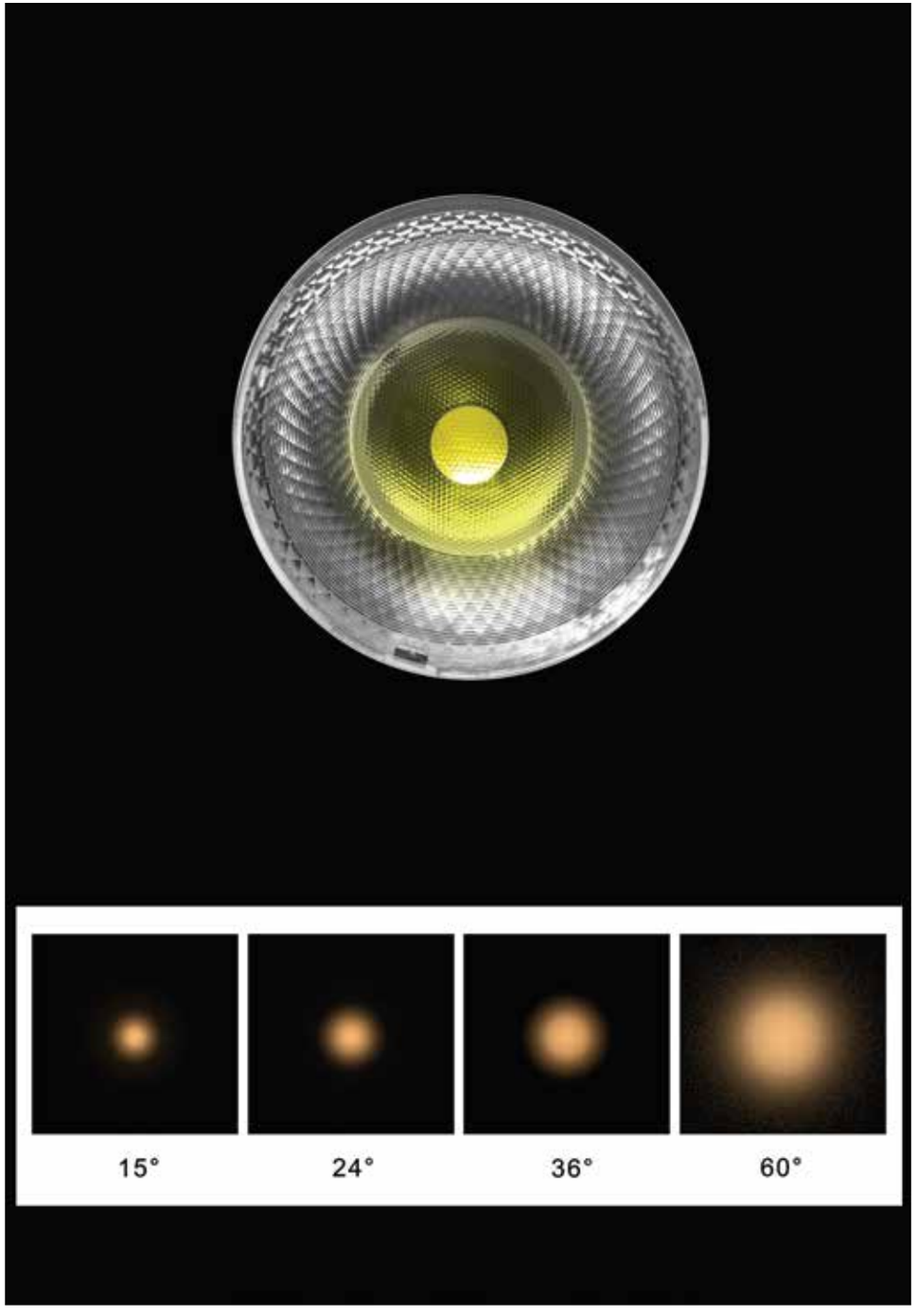
φ: 45mm H: 24mm
Material: PC
FWHM: 7°/10°/24°/34°/50°
Efficiency: 85%

BLACK HOLE 50@24

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

BLACK HOLE 62@24

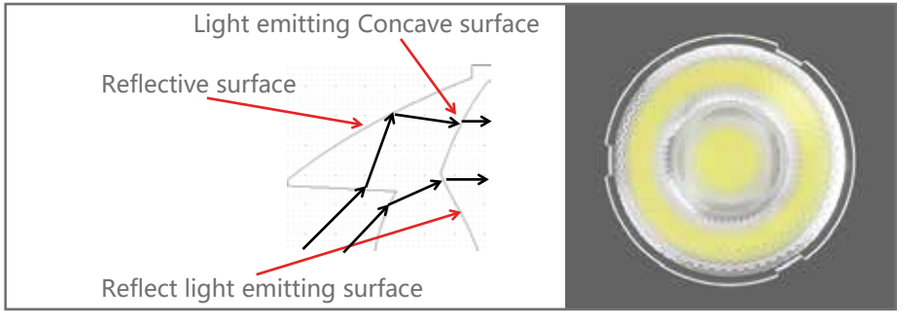
φ: 62mm H: 24mm
Material: PC
FWHM: 15°/24°/36°/50°
Efficiency: 85%



INFINITY

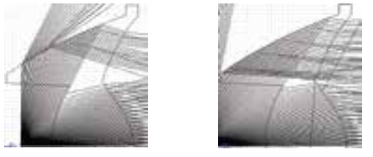
High efficiency (90%)

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.



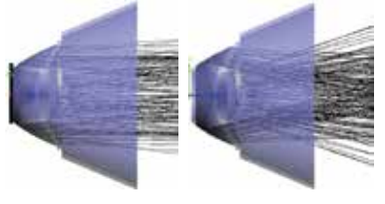
Nice cutoff and fulfilled spot center (strong zoom capability):

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 35@14-35_60

φ: 35mm H: 14mm
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 55@23-35_60

φ: 55mm H: 23mm
Material: PMMA
FWHM: 35°~60°
Efficiency: 90%~92%

INFINITY 45@20-15_36

φ: 45mm H: 20mm
Material: PMMA
FWHM: 15°~36°
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 72@29-35_60

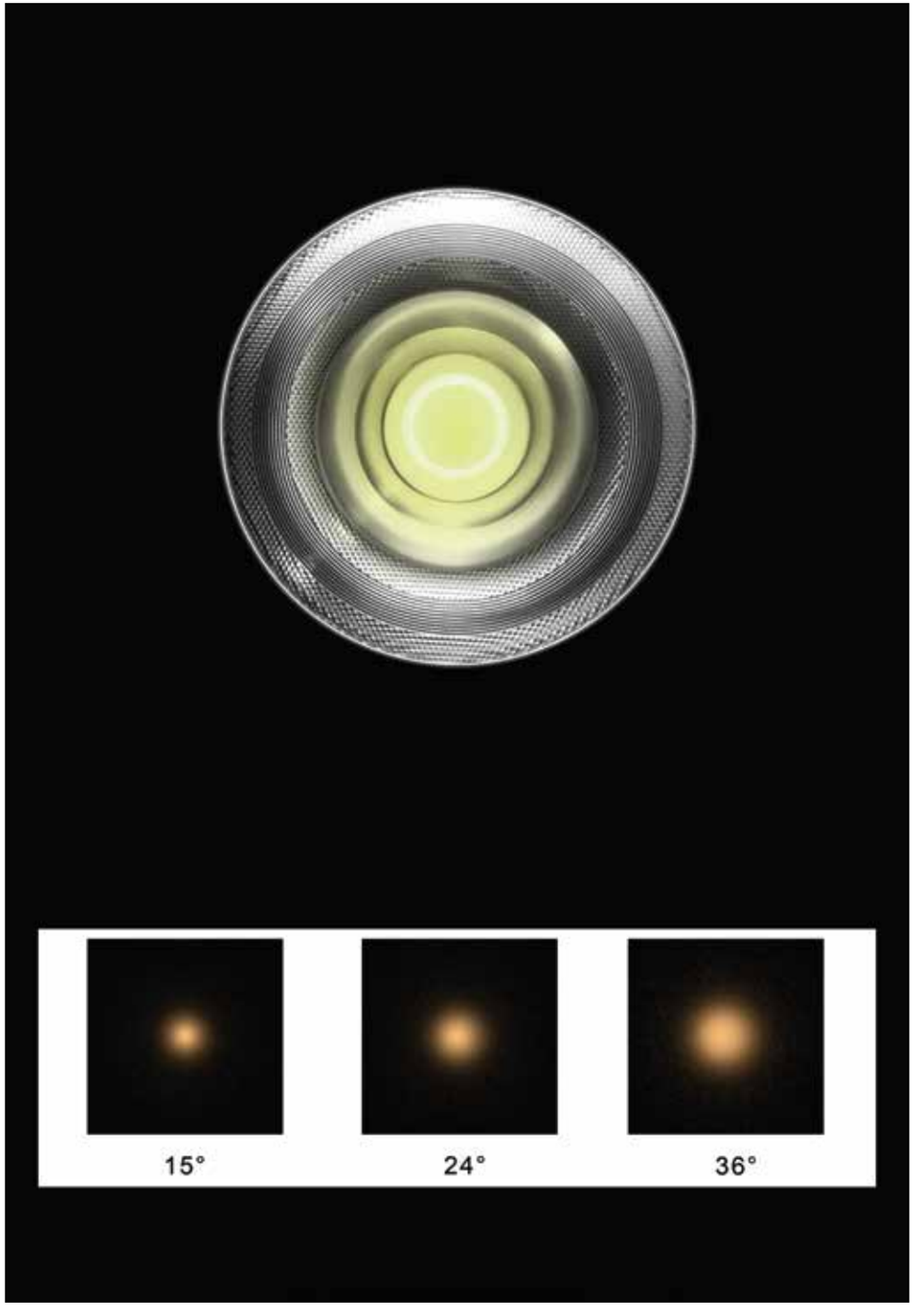
φ: 72mm H: 29mm
Material: PMMA
FWHM: 35°~60°
Efficiency: 90%~92%

INFINITY 75@34-15_36

φ: 75mm H: 34mm
Material: PMMA
FWHM: 15°~36°
Efficiency: 90%~92%

INFINITY 75@30-36_60

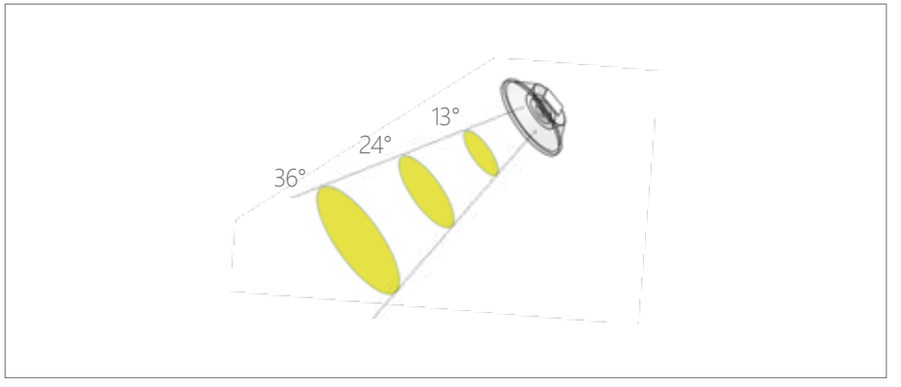
φ: 75mm H: 30mm
Material: PMMA
FWHM: 35°~60°
Efficiency: 90%~92%

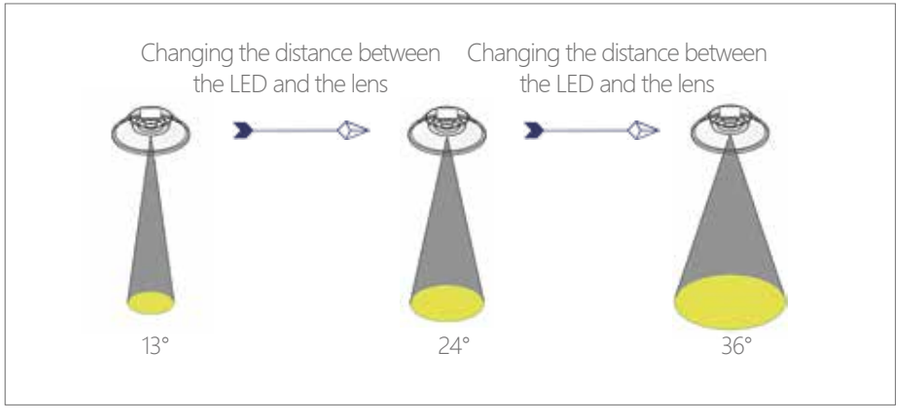


FOCUS

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.

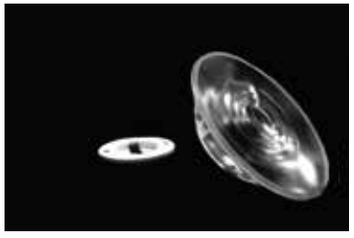




Product characteristics

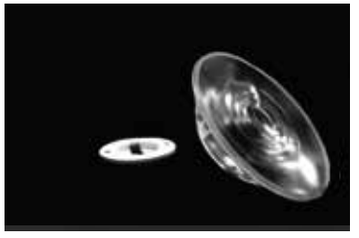
Fresnel lens has unique optical properties, which can change the optical angle and the size of the spot by changing the distance between light source and lens.

FOCUS



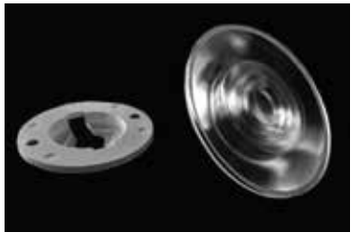
FOCUS 35@10

φ: 35mm H: 10mm
Material: PC
FWHM: 13°~36°
Efficiency: 85%



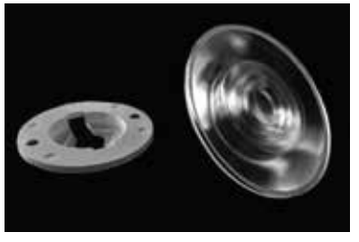
FOCUS 44@13

φ: 44mm H: 13mm
Material: PC
FWHM: 13°~36°
Efficiency: 85%



FOCUS 50@14

φ: 50mm H: 14mm
Material: PC
FWHM: 13°~38°
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

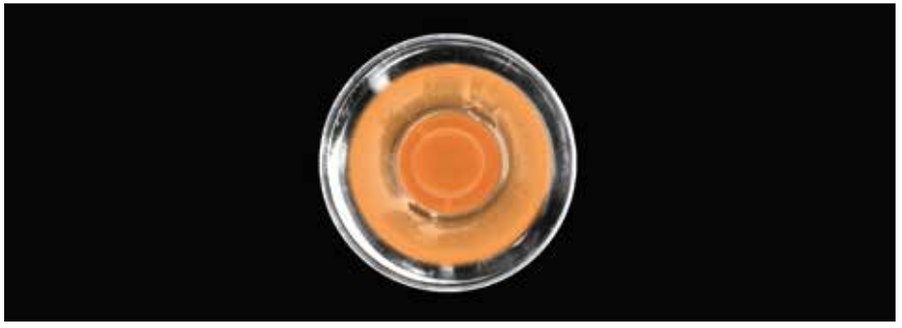
φ: 75mm H: 19mm
Material: PC
FWHM: 13°~38°
Efficiency: 85%

FOCUS 90@24

φ: 90mm H: 24mm
Material: PC
FWHM: 13°~38°
Efficiency: 85%

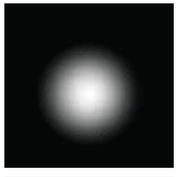
POLAROID

Lens front view



Facula shape

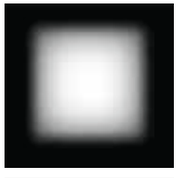
Polaroid Filter A: 25°



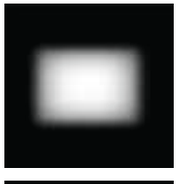
Polaroid Filter B: 36°

Polaroid Filter C: 25°×25°

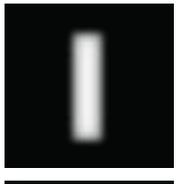
Polaroid Filter D: 36°×36°



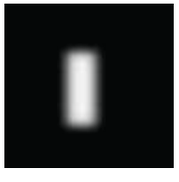
Polaroid Filter E: 25°×36°



Polaroid Filter F: 10°×25°



Polaroid Filter G: 10°×36°



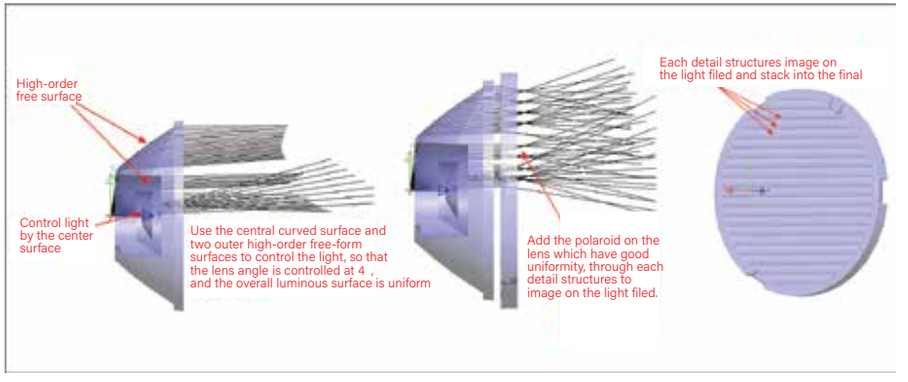
Polaroid Filter H: 4°×36°

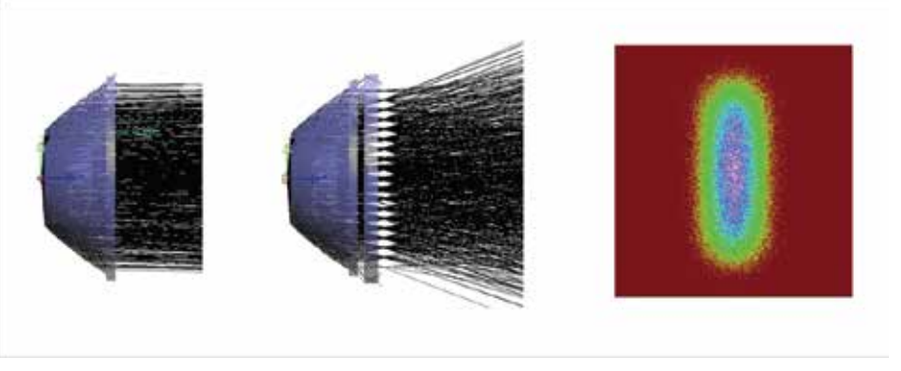
Introduction

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.





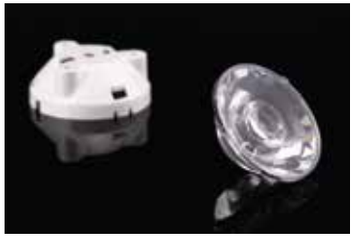
POLAROID

POLAROID 30@11

φ: 30mm H: 11mm
Material: PC
FWHM: 6°
Efficiency: 90%

POLAROID 35@21

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

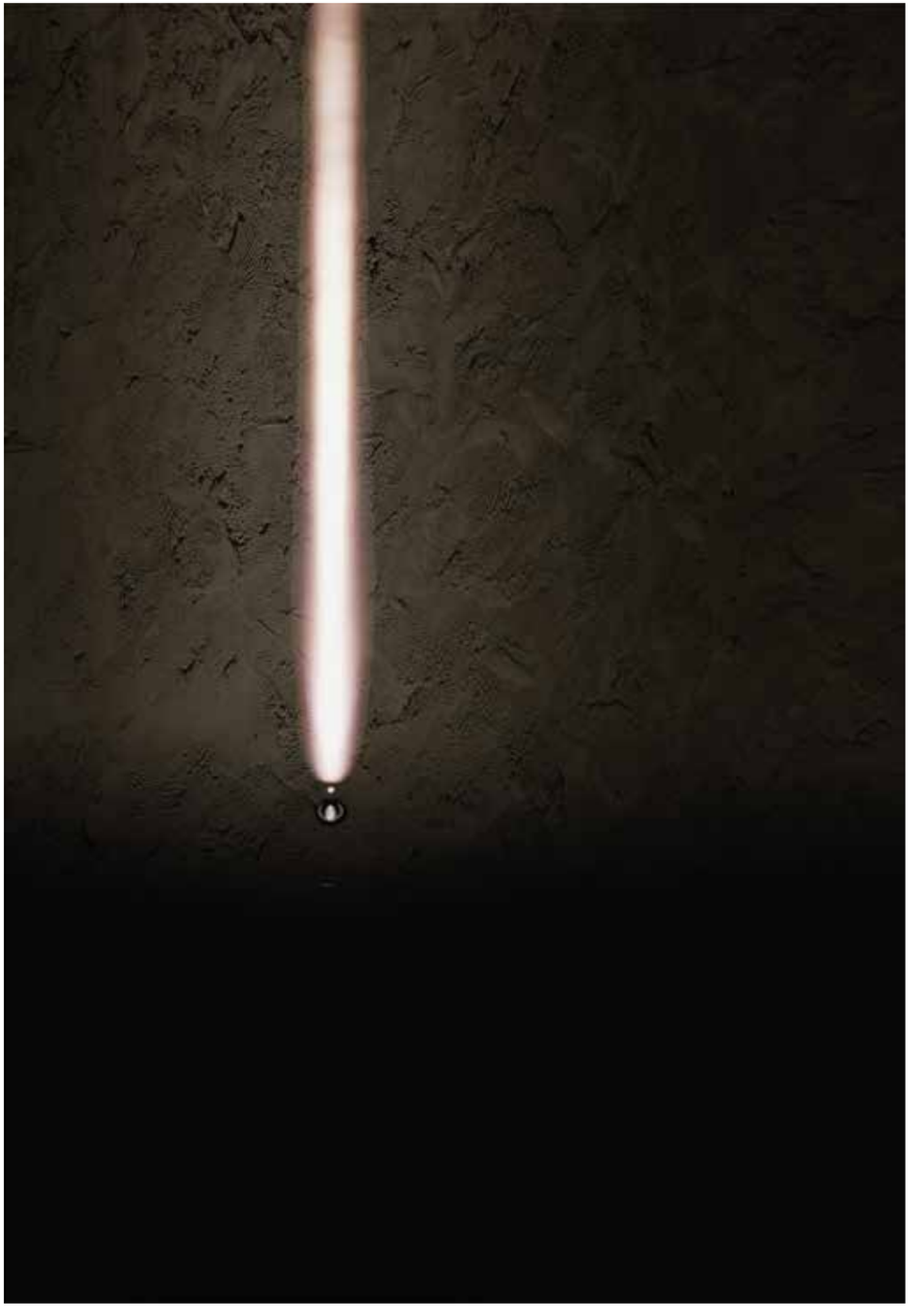


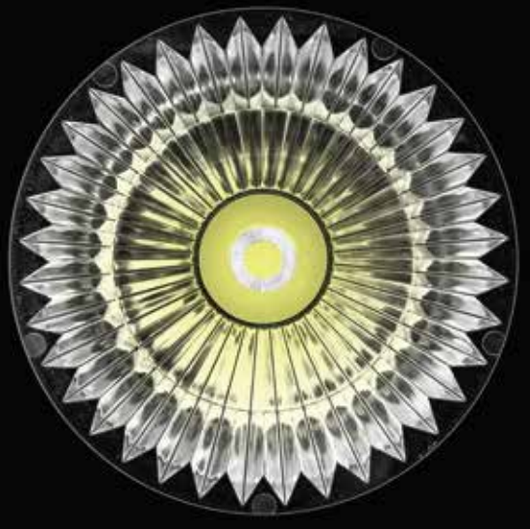
POLAROID 40@15

φ: 40mm H: 15mm
Material: PC
FWHM: 4° / 6.9°
Efficiency: 90%

POLAROID 50@18

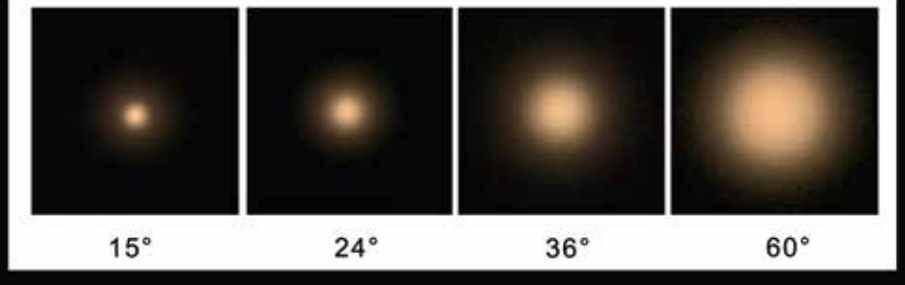
φ: 50mm H: 18mm
Material: PC
FWHM: 3°
Efficiency: 90%





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

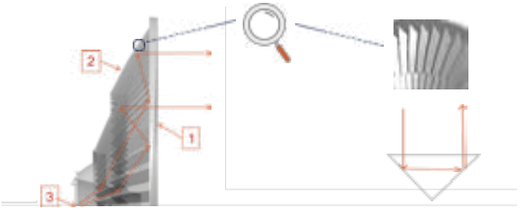
φ: 45mm H: 8mm Material: PC Efficiency: 88% FWHM: 15°/24°/36°/60°



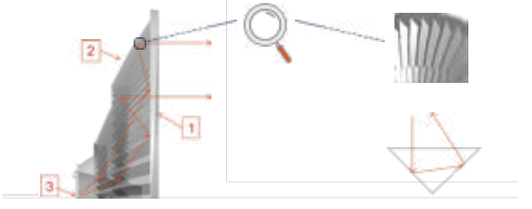
SUNFLOWER

Design Principle

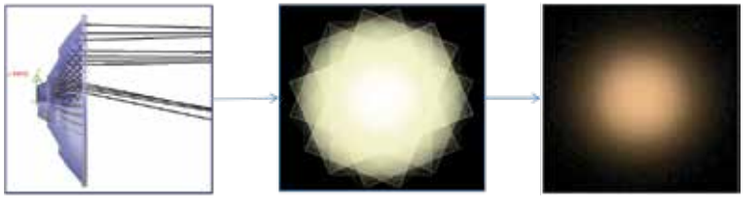
Triple-Reflection technology is a great innovation based on Calculus technology, greatly reduced the lens height compare with the original calculus lens, let the light reflect three times inside the lens, make sure get good light distribution with lower height lens.



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.

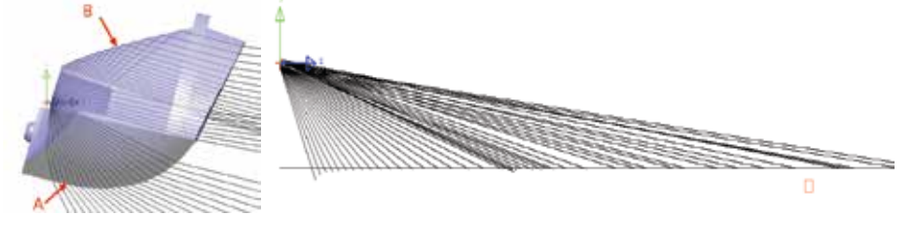


WATERFALL

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%

AURORA：HK-82@193-0398-ASM

Size：L:225mm D:166mm

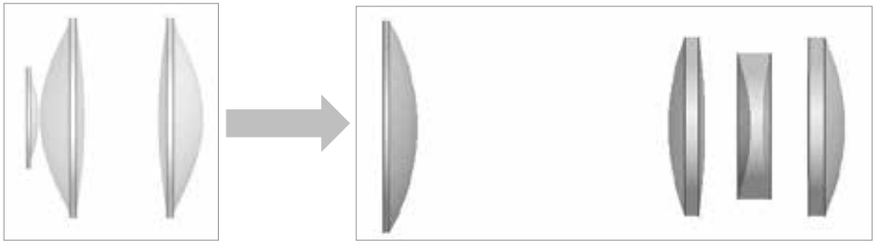
Material: Glass

Aurora lens light-cut function

The original light-cutting function is retained, and the shape of the light spot can be freely changed by blocking the light and imaging. This upgrade inserts all use magnetic suction, which is more fluent and more balanced than before.

Aurora lens optical principle

Aurora completely abandons the previous optical surface, the upgraded light spot has no blue edges and is more uniform and cut off, and this upgrade is a glass lens that can carry higher power.

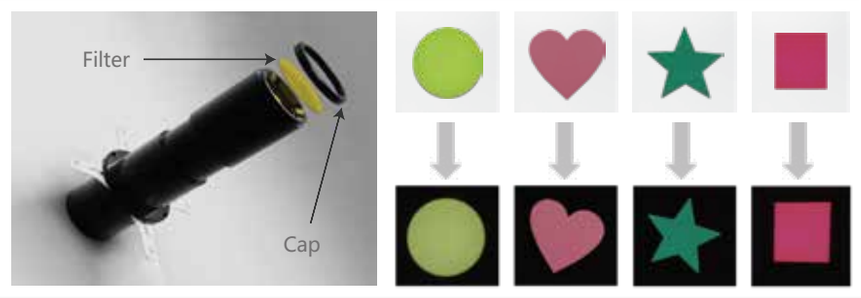


Aurora lens projection function

Aurora adds a logo light function. By changing the LOGO film and adjusting the front lens, you can get different logo imaging. The logo film mounting ring uses magnetic suction to make installation convenient and simple.

Aurora lens Color changing function

Aurora has added a filter function. By installing different filters, you can get the same spot as the color of the filter. Aurora can get different colors of light spots by changing the filter, and it can also cut the light spots into different shapes.

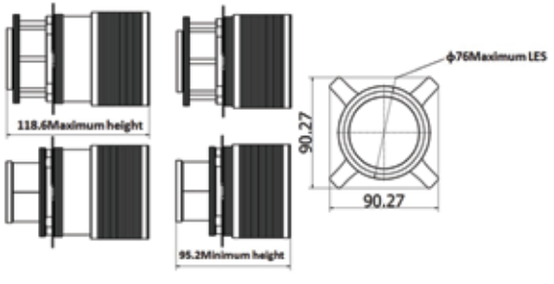


Application: Museum lighting, Art exhibition lighting or lighting used in special application.

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

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

Structure diagram

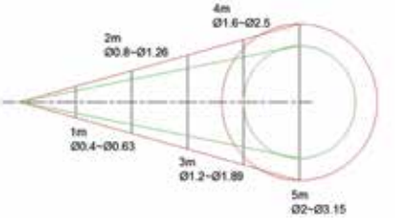


Introduction

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.

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:

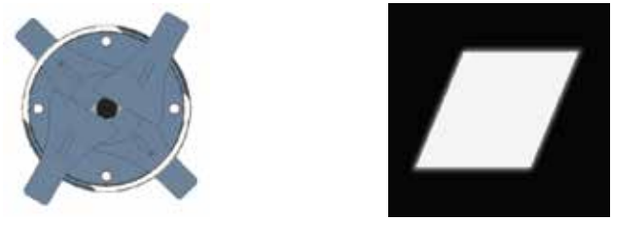
Pulling the part pointed by arrow 1 can change the sharpness of the spot boundary;
Pulling the part pointed by arrow 2 changes the spot size.
At the same time plug four inserts; Spin can change the spot shape arbitrarily, as the following example shows:

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

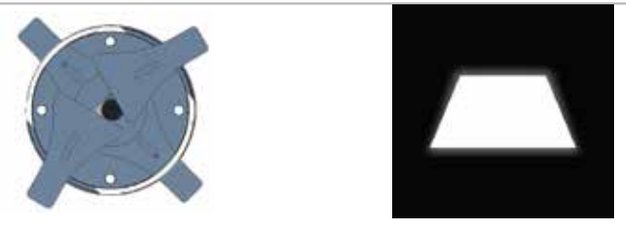
TRANSFORMERS

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

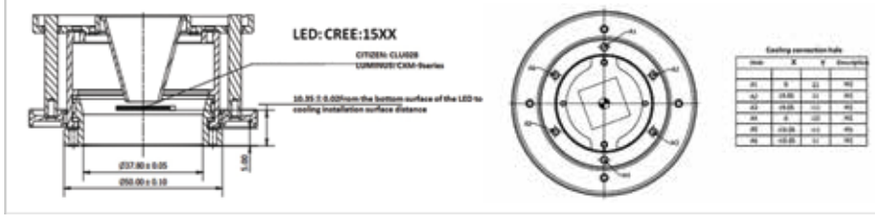
Change the position of the insert, as shown below, the circular spot will become a parallelogram spot.



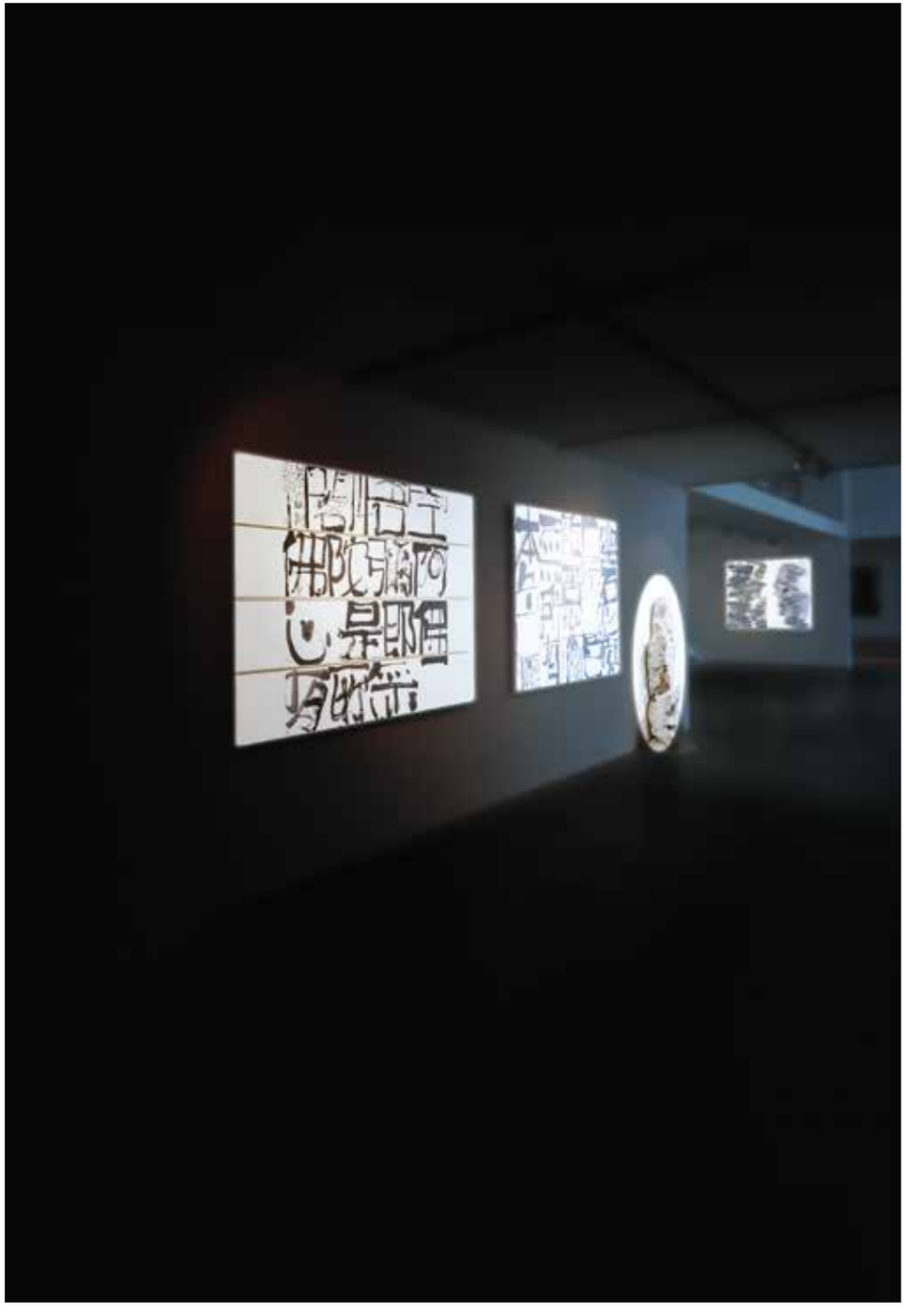
Change the insert position, as shown below, the circular spot will become a trapezoidal spot.

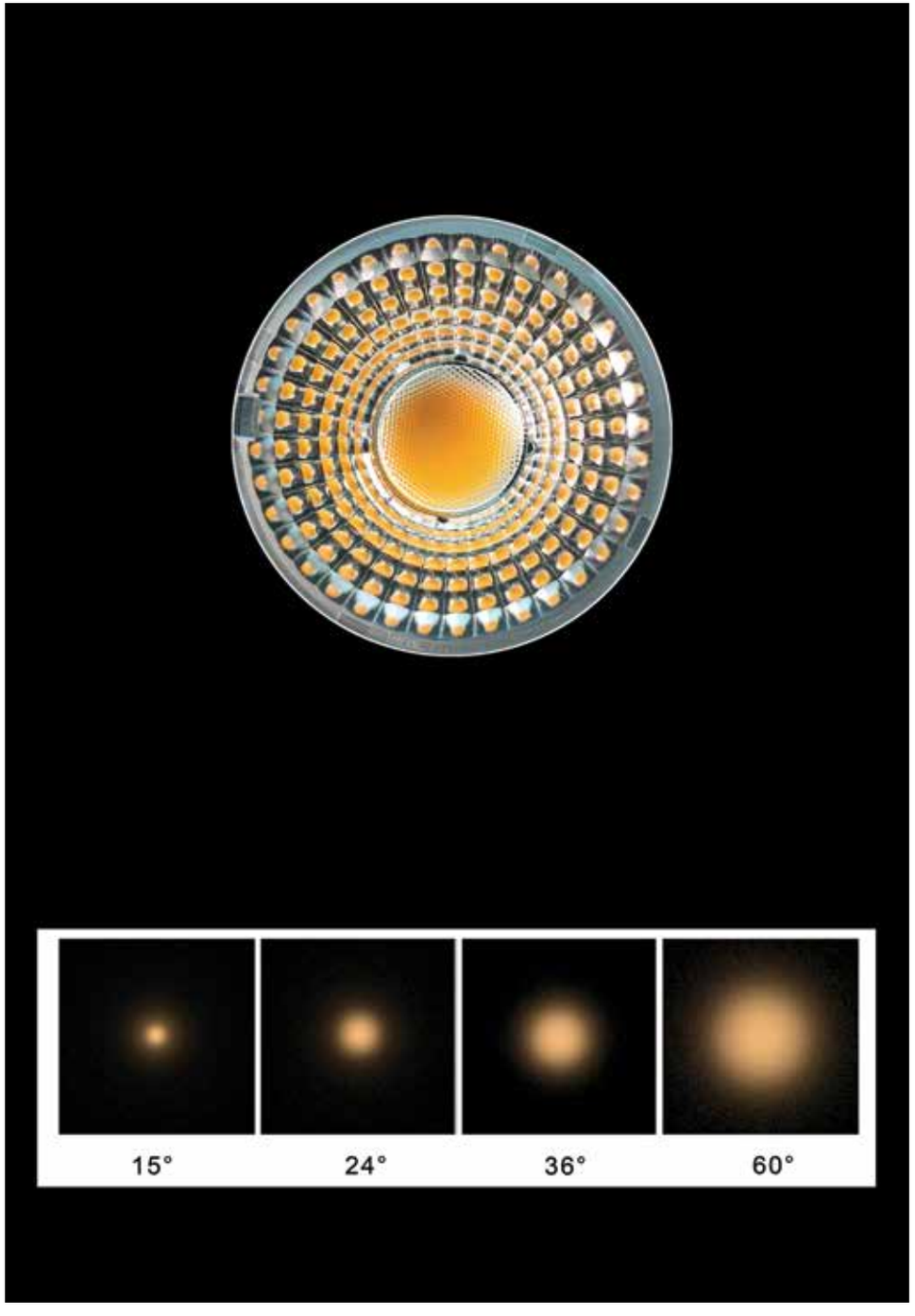


Cooling installation size

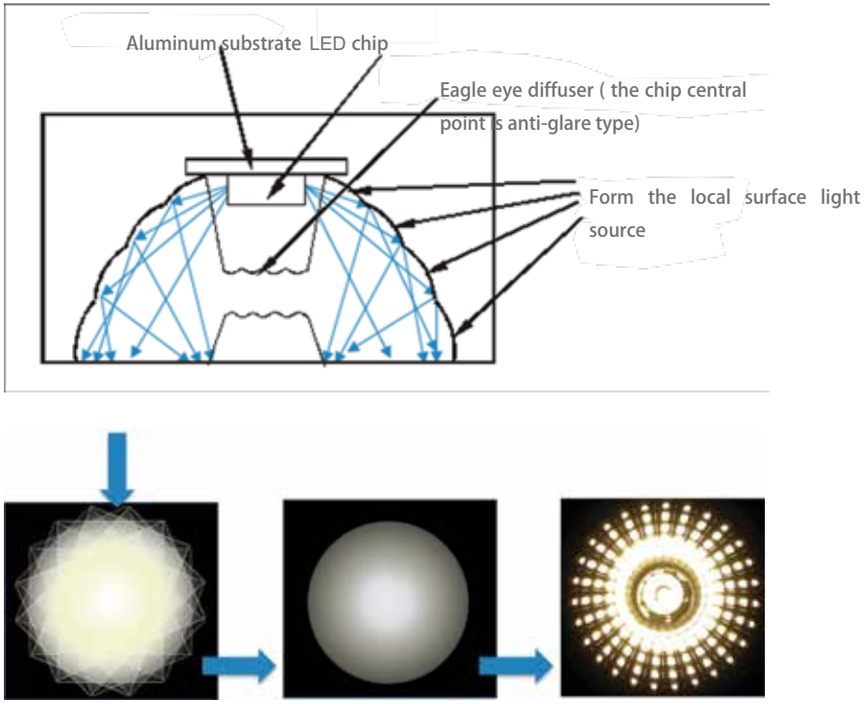


When customers create cooling base, the remaining size can be customized, in addition to the size marked on the map for a fixed size. Application: Museum lighting, Art exhibition lighting or lighting used in special application.





Principle



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 35@17

φ: 35mm H: 17.2mm
Material: PMMA
FWHM: 15°/24°/38°/60°
Efficiency: 92%

DIAMOND 43@22.8

φ: 43mm H: 22.8mm
Material: PMMA
FWHM: 15°/24°/36°/60°/90°/120°
Efficiency: 92%

DIAMOND 44@18

φ: 44mm H: 18mm
Material: PMMA
FWHM: 24°/38°
Efficiency: 92%

DIAMOND 44@20

φ: 44mm H: 20mm
Material: PC
FWHM: 15°/24°/36°/60°
Efficiency: 90%

DIAMOND 46@24

φ: 46mm H: 24mm
Material: PMMA
FWHM: 10°
Efficiency: 92%

DIAMOND

DIAMOND 52@25

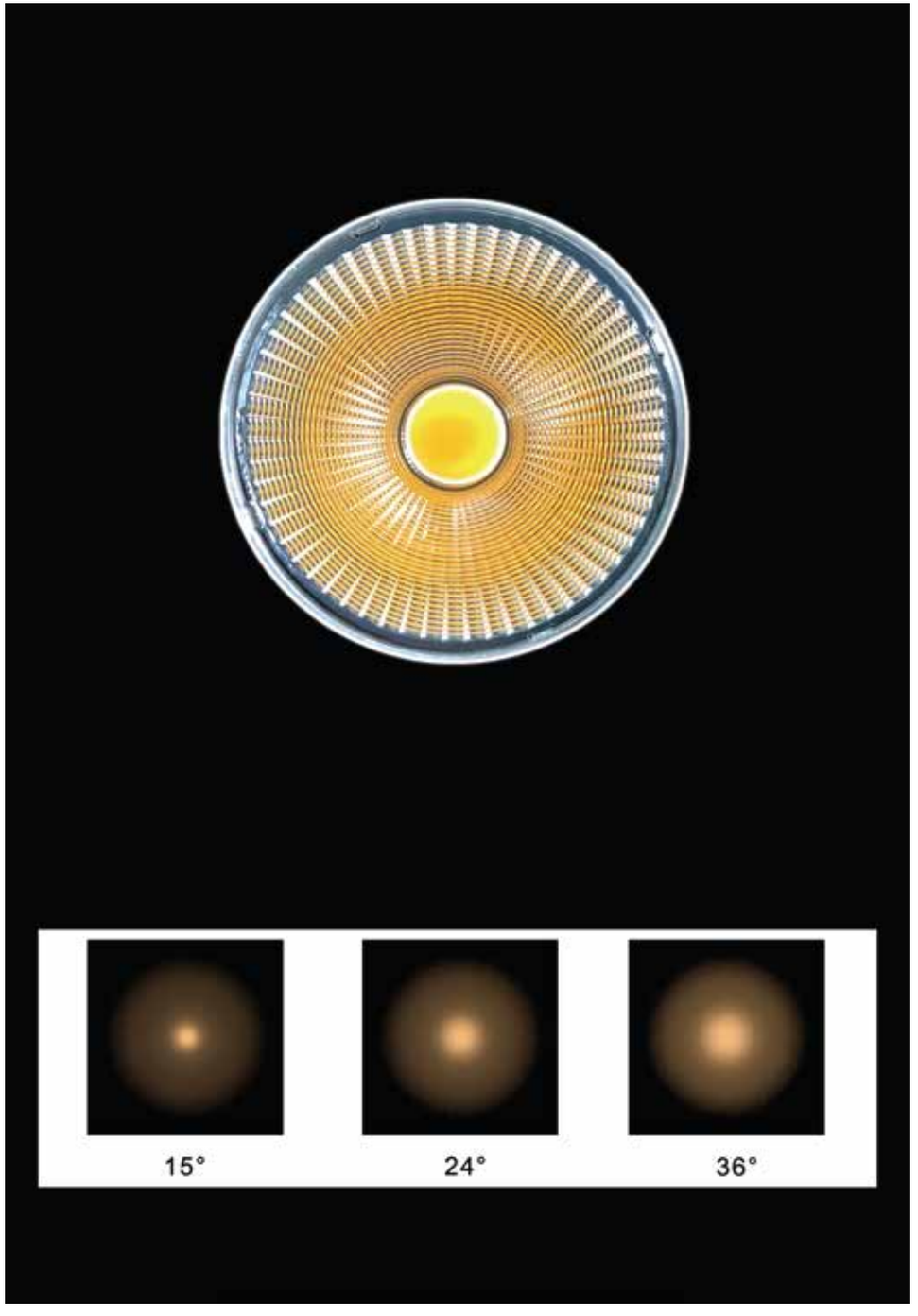
φ: 52mm H: 25mm
Material: PMMA
FWHM: 15°/24°/36°
Efficiency: 92%

DIAMOND 55@21

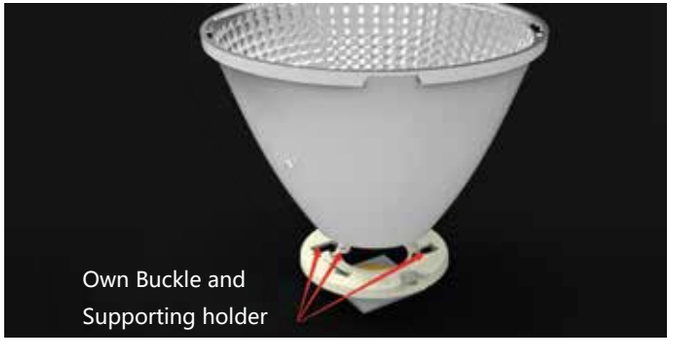
φ: 55mm H: 21mm
Material: PMMA
FWHM: 15°/24°/36°/60°
Efficiency: 90%

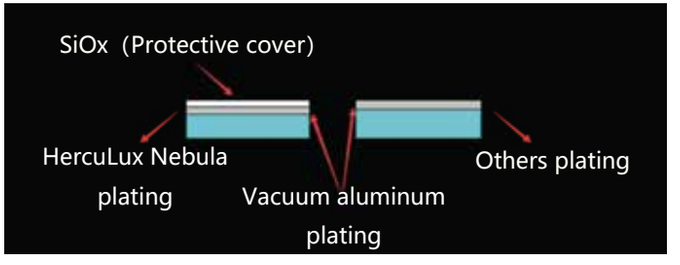
DIAMOND 62@22

φ: 62mm H: 22mm
Material: PMMA
FWHM: 30°/38°/60°/90°
Efficiency: 92%



Features





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%

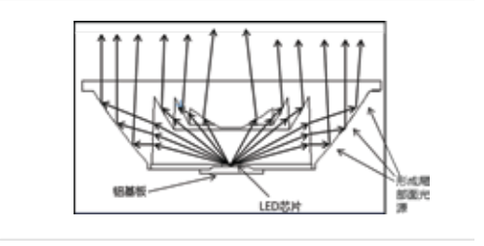
NEBULA 95@64

φ：95mm　H：64mm
Material：Vaccum Aluminum Plating PC
FWHM：15°/24°/36°
Efficiency：90%

LIGHTNING

Principle

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



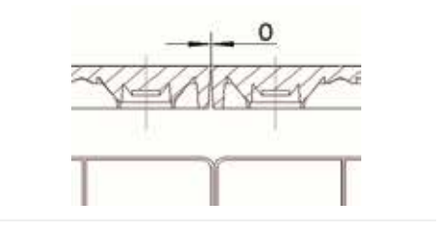
Appearance

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.

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.



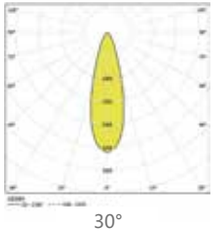
UGR

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

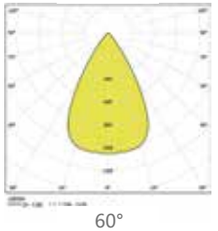
LIGHTNING

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

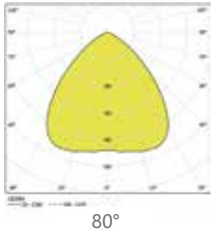
Size：L:286mm W:61mm
FWHM：30°/60°/80°
Material：PC
Efficiency：86%
Application：Linear Light
Lens by LED：
SMD 3030/2835



30°



60°

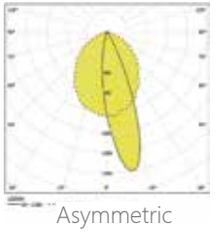


80°

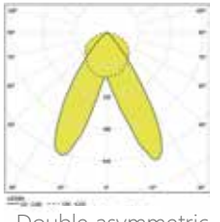
LIGHTNING

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

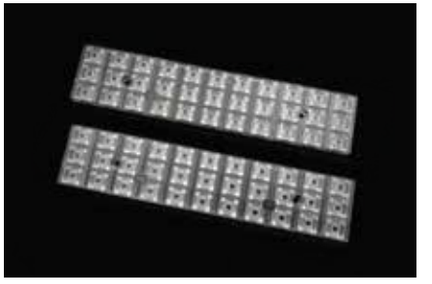
Size：L:286mm W:61mm
FWHM：Asymmetric/Double asymmetric
Material：PC
Efficiency：86%
Application：Linear Light
Lens by LED：
SMD 3030/2835



Asymmetric



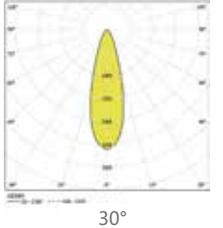
Double asymmetric



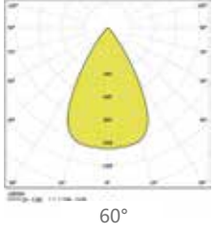
LIGHTNING

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

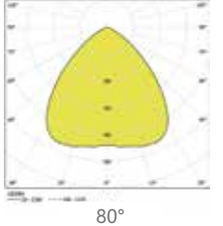
Size：L:286mm W:61mm
FWHM：30°/60°/80°
Material：PMMA
Efficiency：88%
Application：Linear Light
Lens by LED：
SMD 3030/2835



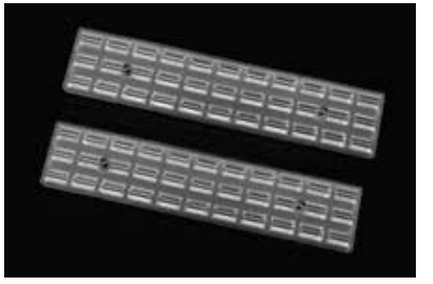
30°



60°



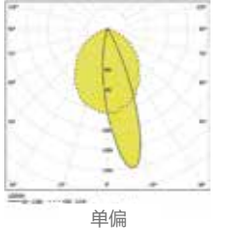
80°



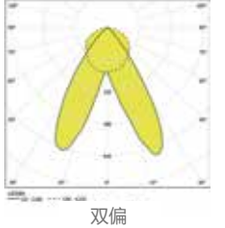
LIGHTNING

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



单偏

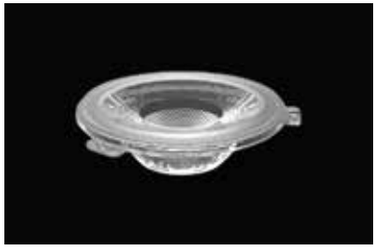


双偏

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-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-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-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

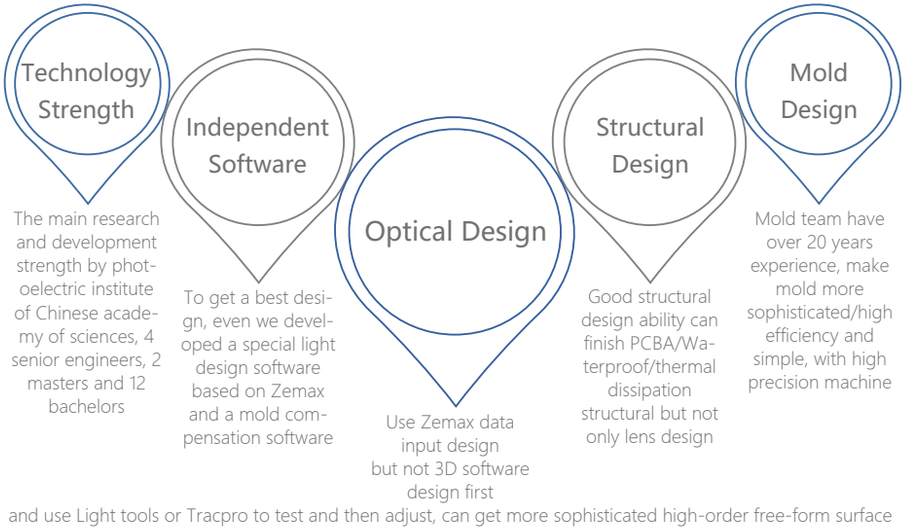
In addition to the standard mold products introduced in the catalogue, HercuLux can also provide customized solution services. With a professional design team and a complete industrial chain, tailor-made for customers, seeking the best solution for the project.

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 → Structural design → Optical simulation → Mold assess → 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

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