



# QM lighting

## QM-03012

### 15 × 1W Beam Light



Add: 3F, HuShanRoad, No. 13, Daguangkan Industrial Zone, Bantian, LonggangDistrict, Shenzhen,

Guangdong, China

Tel: 86-755-84714721 Fax: 86-755-84714707

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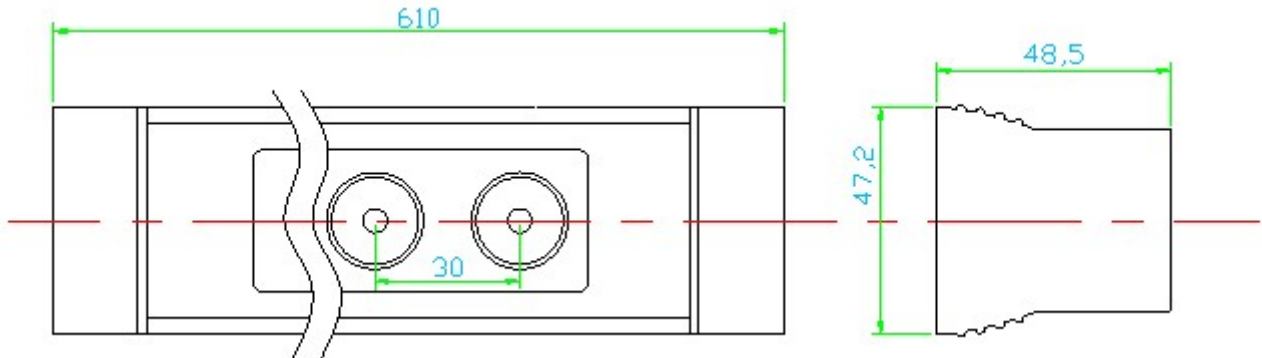
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## Dimensions



Unit: mm

Tolerance:  $\pm 2.5$  mm

## Specifications

- BULB TYPE: Beam Light 15X1W
- BASE TYPE: 2pin/3Pin
- INPUT VOLTAGE: 85--260V AC with reversed polarity protect
- INPUT POWER: 16.5W
- OUTPUT POWER: 15W
- TOTAL LENGTH: 610mm
- BEAM ANGLE: 15/25/30/45/60degrees
- REFLECTOR EFFICIENCY: 85%
- LIGHT SOURCE: 15X1 W high power LED
- LED OUTPUT CURRENT: 320mA
- BODY TEMPERATURE:  $< 55^{\circ}\text{C}$
- LED WORKING TEMPERATURE:  $-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$
- FULL RANGE OF COLORS: cool white, warm white, blue, green ,red,yellow ,RGB
- NET WEIGHT: 1000g
- ALUMINIUM HOUSING
- NO UV OR IR RADIATION
- SAFETY ASSURANCE: CE&RoHS

## Illuminance and Beam Angles

part no.	LED Brand	Color	wavelength/CCT (nm/K)	Luminous Flux (LM)	Power	Color-rendering index	Light Effect (lm/W)
QM-03012-001	Cree	cool white	5000-7000K	588	16.5	70 ~ 75	36
QM-03012-002		Nature white	3500-5000K	489	16.4	80 ~ 85	30
QM-03012-003		warm white	2700-3500K	489	16.4	80 ~ 85	30

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## cool white

### CIE Parameter:

Coordinate:  $x=0.3150, y=0.3467$

CCT:  $T_c=6267$  K

Purity=5.6%

$u=0.1929, v=0.3185$

Main Wave=501.4nm

Peak Wave=455.0nm

Half Width=32.3nm

Red Ratio=13.1%

Chromatism SDCM=3.6

Color rendering property :  $R_a=75.8$

R1=71

R2=82

R3=89

R4=72

R5=72

R6=75

R7=86

R8=60

R9=-26

R10=57

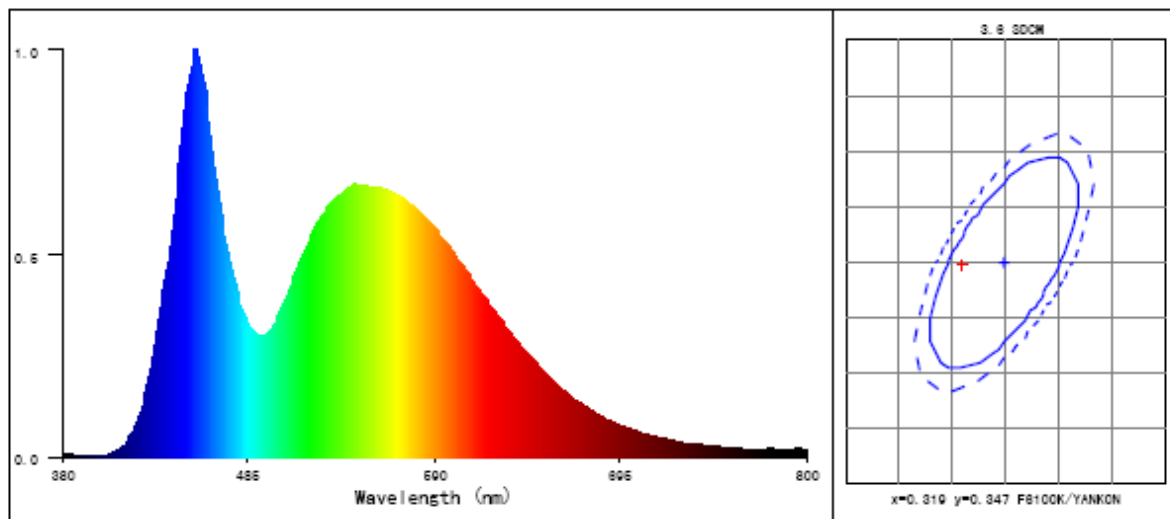
R11=67

R12=48

R13=74

R14=94

R15=65



### Other parameters:

Flux:  $\Phi=588.0$  Lm

Efficiency:  $Eff_i=35.6$  Lm/W

Stability:  $\%=-1.6$  %

THD= 0.0%

Voltage:  $U=220.4$  V

Current:  $I=0.078$  A

Power:  $P=16.5$  W

Power factor:  $PF=0.955$

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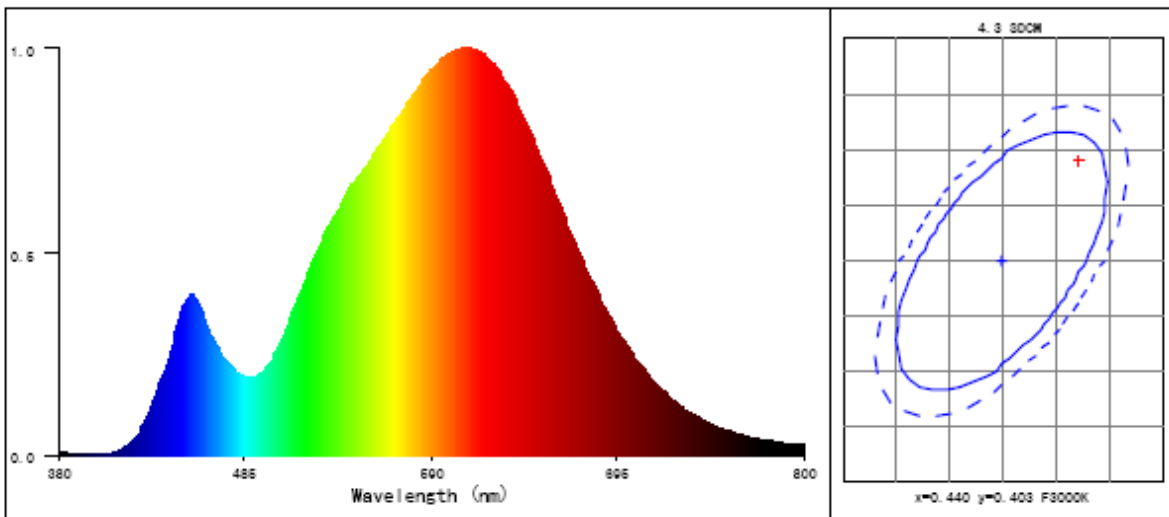


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## warm white

### CIE Parameter:

Coordinate: $x=0.4474, y=0.4122$	OCT: $Tc=2896\text{ K}$	Purity=58.0%		
$u=0.2538, v=0.3507$	Main Wave=582.7nm	Peak Wave=610.0nm		
Half Width=147.1nm	Red Ratio=25.1%	Chromatism SDCM=4.3		
Color rendering property :Ra=82.6				
R1=81	R2=89	R3=94	R4=80	R5=79
R6=84	R7=87	R8=67	R9=23	R10=72
R11=76	R12=62	R13=82	R14=96	R15=77



### Other parameters:

Flux: $\Phi=488.8\text{ Lm}$	Efficiency: $\text{Effi}=29.8\text{ Lm/W}$	Stability: $\%=1.3\%$	THD= 0.0%
Voltage: $U=220.4\text{ V}$	Current: $I=0.078\text{ A}$	Power: $P=16.4\text{ W}$	Power factor: $\text{PF}=0.955$

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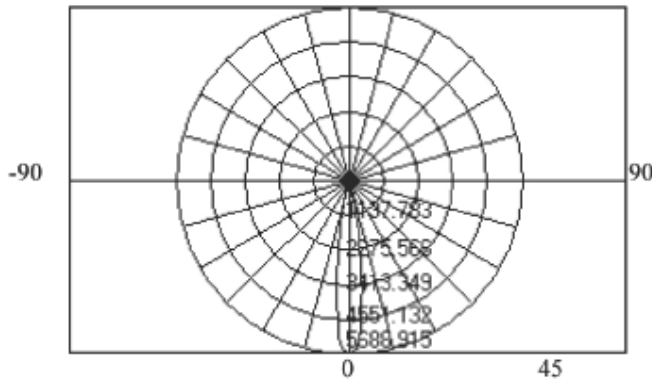
30° cool white

## Photometric Results

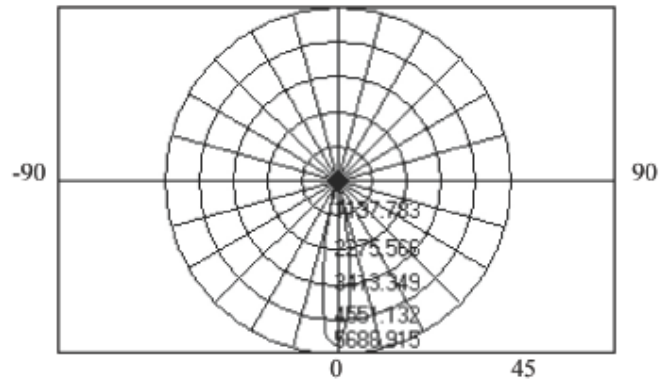
Lumens  
 Efficiency  
 Central Intensity: 5670.000 cd  
 Maximum Intensity: 5688.900 cd

Angle of maximum intensity: C: 180.0 G: 0.9  
 Half Peak Side Left: -8.1 Right: 7.2  
 Beam Angle(10%): Left: -14.4 Right: 13.5

Light Distribution Curve C0/C180



Light Distribution Curve C90/C270



H[m]	Diameter[m]	Illuminance[lx]
0.60	0.16	15749.9
1.20	0.32	3937.5
1.80	0.48	1750.0
2.40	0.64	984.4
3.00	0.81	630.0

Half peak angle: 2 x 7.7° C0-C180

H[m]	Diameter[m]	Illuminance[lx]
0.60	0.18	14925.5
1.20	0.36	3731.4
1.80	0.54	1658.4
2.40	0.72	932.8
3.00	0.90	597.0

Half peak angle: 2 x 8.6° C90-C270

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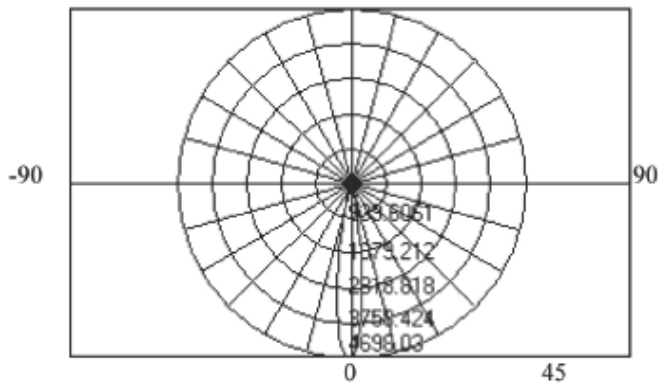
30° warm white

## Photometric Results

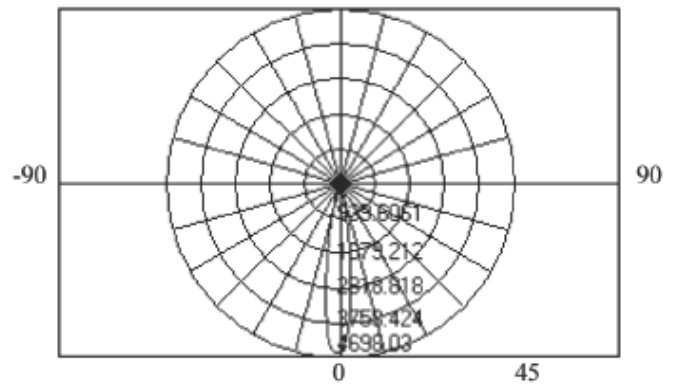
Lumens 4664.800  
 Efficiency 100.00  
 Central Intensity: 4664.800 cd  
 Maximum Intensity: 4698.000 cd

Angle of maximum intensity: C: 0.0 G: 0.9  
 Half Peak Side Left: -8.1 Right: 6.3  
 Beam Angle(10%): Left: -14.4 Right: 12.6

Light Distribution Curve C0/C180



Light Distribution Curve C90/C270



H[m]	Diameter[m]	Illuminance[lx]
0.60	0.15	12957.7
1.20	0.30	3239.4
1.80	0.45	1439.7
2.40	0.61	809.9
3.00	0.76	518.3

Half peak angle: 2 x 7.2° C0-C180

H[m]	Diameter[m]	Illuminance[lx]
0.60	0.16	12739.2
1.20	0.32	3184.8
1.80	0.48	1415.5
2.40	0.64	796.2
3.00	0.81	509.6

Half peak angle: 2 x 7.7° C90-C270

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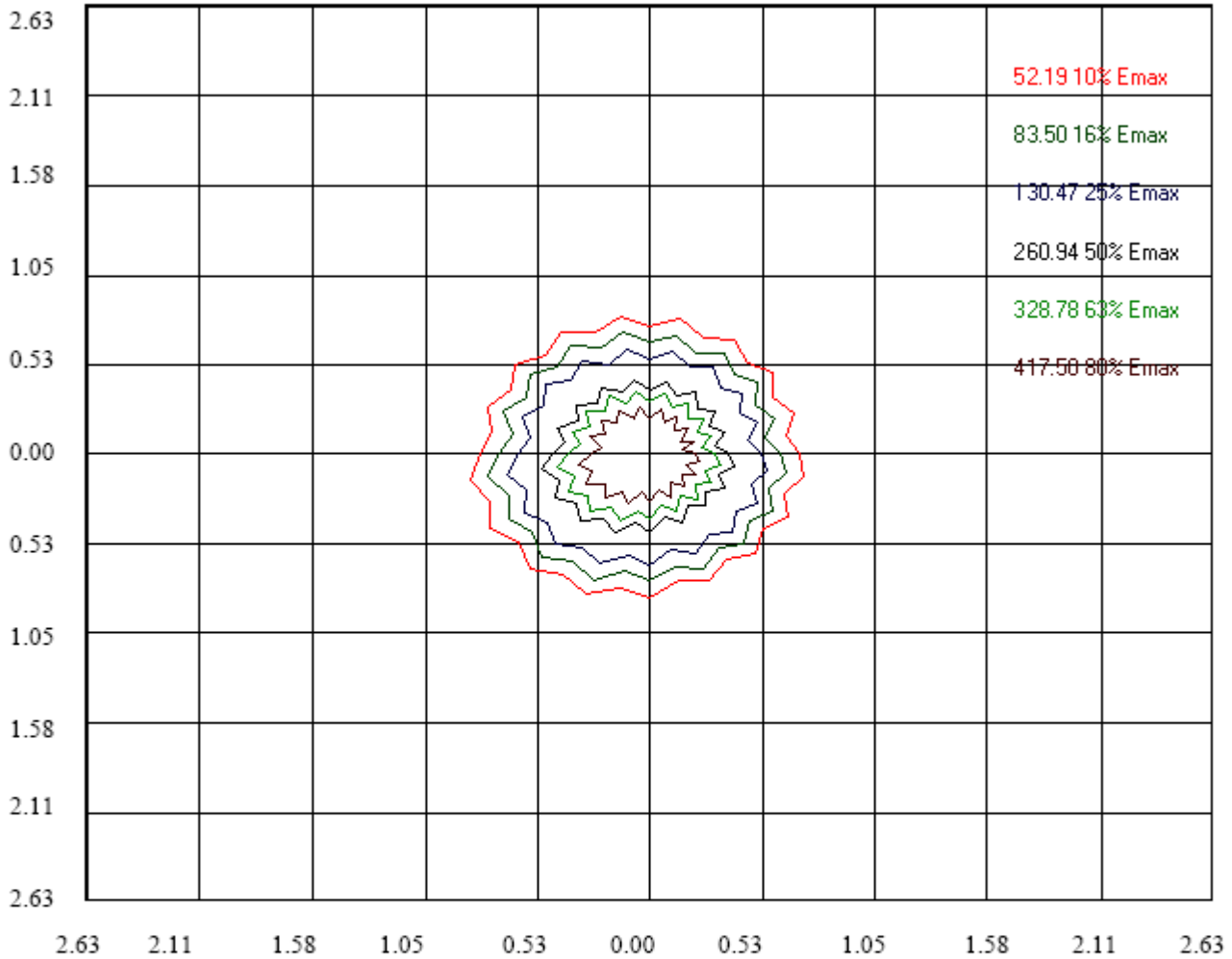
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## Illumination map

Iso-Lux[lx]



**Height: 3 m**

**Max Illuminance: 521.875 lx**

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