

# SEESHINE LIGHTING TECHNOLOGIES LIMITED

## Company Presentation

- With own power supply design, it allows us to provide a total solution include LED lighting, dimmable function and ensure the life span of the LED product. it allows us to provide a total solution include LED lighting, dimmable function and ensure the life span of the LED product.
- We provide warranty period for 2 years, 3 years and 5 years base on product series. 3 Year Warranty is a standard international term.
- Professional LED lighting and design company with 4 year experience in LED.
- The whole group was incorporated in 2007. Our production base covers 33000 square meters with 3 stories. We mainly research LED street light, indoor LED lighting.

# Group Culture

- Group spirit: Teamworking, cooperation, innovation, hard working.
- Goal: develop as a worldwide brand of energy-saving and environmentally friendly products.
- Group business principle: quality is the soul of our company, customer's satisfaction is the goal of our company.

# Features:

## Features

- 1. We use high quality LEDs (imported not local China), which can last up to 77,000 hours lifetime (at 70% lumen maintenance)*
- 2. Use the isolation driver, protected against overpower, overheat, short- and open-circuit, longer lifetime*
- 3. We use high quality components and housing material, aluminum PCBs and aluminum body for better heat dissipation and high quality PC diffuser.*
- 4. Our lamps are brighter than traditional compact fluorescent lamps*
- 5. High efficiency and high Power factor  $\geq 80\%$*
- 6. We provide up to 5 years guarantee (for tubes)!*
- 7. We are UL, CE, and RoHS certified*



# Omni-directional lamp

- 5w 400Lm candle



- 5w 400Lm A55/G60 Bulb



- 8W/10W 800Lm A95 Bulb



SEESHINE LIGHTING

## Downlight-Dimmable, Halogen replacement

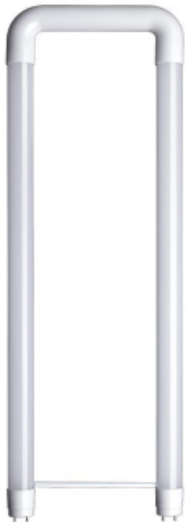


- 6/8Inch 24W 2200Lm  
Downlight

- 10W/13W/15W COB  
Downlight

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# LED Lighting



T8

0.6M(2ft) 9W

1.2M(4ft) 18~22W

2.4M(8ft) 35W,45W

T12 U shape

One power end

3/5 years Warranty.

CE,ROHS, FCC

Epistar SMD3528 LED

and LUMENMAX

SMD3014 LED

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# Seeshine Spot light 6W,7W,8W

**GU10/MR16 Connect to 110/220V without driver  
dimmable.**



- GU10/MR16 230V/220V/110V
- Without driver,
- dimmable.

**Dimmable GU10 230Volts well, 4Pcs CREE XPE  
5W 310Lm~400Lm Warm White can be nice warm  
2700K  
and 3000K**



GU10  
Dim well with 230v



MR16 so far only make no Dim

- CREE "fans" like this item.
- 4pcs CREE XPE LED chips.
- Can be bright if use SMD
- Sharp LED
- Dim down to 20%.
- Warm white can be nice
- warm 2700K and 3000K

CREE XPE(3year warranty)  
LG LED(2 year warranty)  
Epistar LED(2 year warranty)  
CE.ROHS certification.

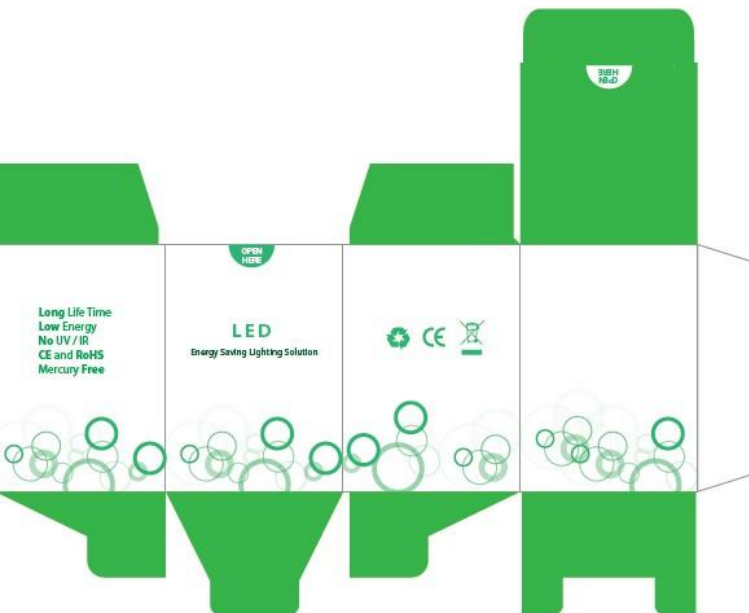
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# Our package



Seeshine®  
Lighting Technologies Limited

Generic Packaging Box Design  
For small products



Front

Back



LIGHTING TECHNOLOGIES LIMITED

## Heat dissipation

SEESHINEMR16



SEESHINEMR16 use a dissipation hole at the base to dissipate the heat with high efficiency, the light stability is superior and with longer life span, no noise

PHILIPS MR16



The heat sink of Philips mr16 is in bottom Of the plastic case. The light use fans for heat conversion, however, there is fan noise when it working, if the fans broken, the light will not work anymore, poor stability, with noise and shorter life span

## Components

SEESHINEMR16



SEESHINEMR16 apply MCPCB with high dissipation efficiency, even though the costs higher than FR4 chip board, the MR16 bulb can maintain better stability and life span

PHILIPS MR16



Philips use FR4 chip board with low costs and heat dissipation, the result leads to a 42 degree Celsius temperature difference, which shorten the life span of the bulbs.



## Our spot light VS Philips

SS-MR16-A6	10 Min	20 Min	30 Min	60 Min	90 Min	120 Min
Heat sink	47.5	54.6	58.2	61	61.3	62
Chip board	52	57.4	59.4	60.5	61.9	63
Working temperature	25.3	24.5	24.8	24.3	24.9	25.1

According to the chart, SS-MR16-A6 has a longer time to reach heat temperature up to 60degrees, meanwhile maintains longer temperature stability time, the temperature gap between the heat sink and chip board is very small, which means the SS-MR16-A6 has good dissipation design technology and guarantee the heat transfers to the heat sink very fast, and maintains a good stability and life time for the MR16 bulbs.



Philips 10W	10 Min	20 Min	30 Min	60 Min	90 Min	120 Min
Heat sink	48.8	55.2	59.1	62.5	62.6	62.9
Chip board	71.4	93.2	101.3	105	104.8	105.1
Working temperature	25.2	24.8	24.6	25.3	24.5	25.1

In contrast, the PHILIPS 10W MR16 has 42degrees Celsius difference between the chip board and the heat sink due to the low thermal conductivity, as estimated,  $T_j$  will reach up to 117degrees, high  $T_j$  will lead to serious light decay, which badly affect the leds life span.

## DIMMING FUNCTION

## Our spot light VS Philips

SEESHINEMR16



SEESHINEMR16 dimmable driver inside, and most of the dimmers in the market are compatible with it. It has wider scope of compatibility.

PHILIPS MR16



No designed dimmable driver inside, so the dimmable only limit to some of the dimmers only, not has good scope of dimmers compatibility.

## LUMEN DECAY TEST

Continuously lighting the SS-MR16-A6 for 3 month (2160) hours in the ambient temperature of 80°C

	BEFORE TEST	AFTER TEST	LIGHT DECAY
SS-MR16-A6	1160lux	1120lux	3.0%
Phillips 10W	980lux	765lux	29.0%

**Conclusion:** The SS-MR16-A6 has excellent HEAT DISSIPATION TECHNOLOGY, so the led decay is small, but PHILIPS MR16 temperature between chip board and heat sink is large, therefore, the led decay is more, and which make the bulb shorter life span.



5W, LG LED

400Lm

2Year Warranty.

CE, ROHS



- . In compliance with UL and Energy star.**
- . Give 3 year warranty**
- . Dimmable are available**
- .PF:0.9**
- . 7W,8W,9W,10W Available**

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- 9.5W
- 600Lm
- Colour Temperature: 3000K and 5700K
- CREE
- CRI: 80 for warm white
- PF:90
- Three year warranty
- Undertaken 3000 hours test,all are alright.
- Lighting Decay: 58
- 9.5W

# LED Garden Light

- 25W,30W,28W,30W,60W,80W,100W 140degree and 360Degree beam angle, 2 year warranty, Bridgelux LED



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# Evaluation of Strategic Partner

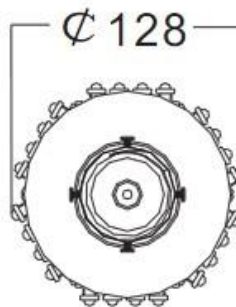
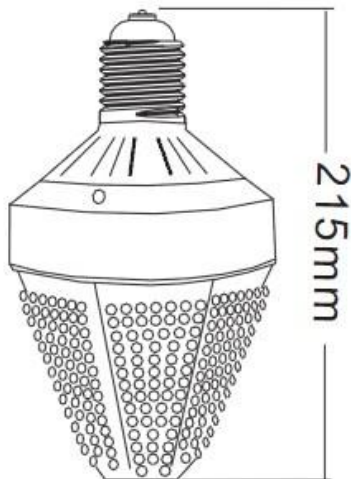
- “Other than 80° beam angle LED used in this Ningxia street lighting project, we also have 150° LED. Both types of LED radiate light over a specified angle and the emission can be easily redirected via equipping with lens or reflector based on different design requirement from lighting fixtures,” said Kaichong Cheng, the Marketing Director of OSRAM Opto Semiconductors Asia Ltd.
- To further save energy and to provide comfortable illumination to the road, light sensors are installed to control the luminance. On a normal day, the lamps will work in full light for five hours and will be turned down to half light (half power) until dawn. On other occasions when light conditions vary, the luminance can be adjusted accordingly. As a result, each lamp will consume only 80W, which is only 1/5 of a High Pressure Sodium (HPS) lamp.



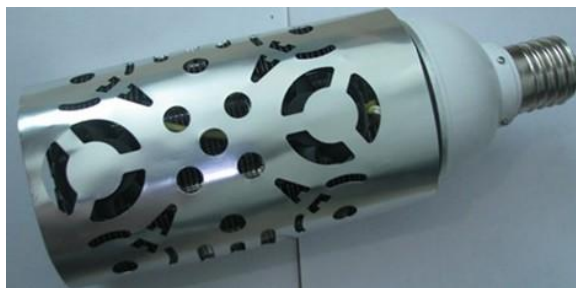
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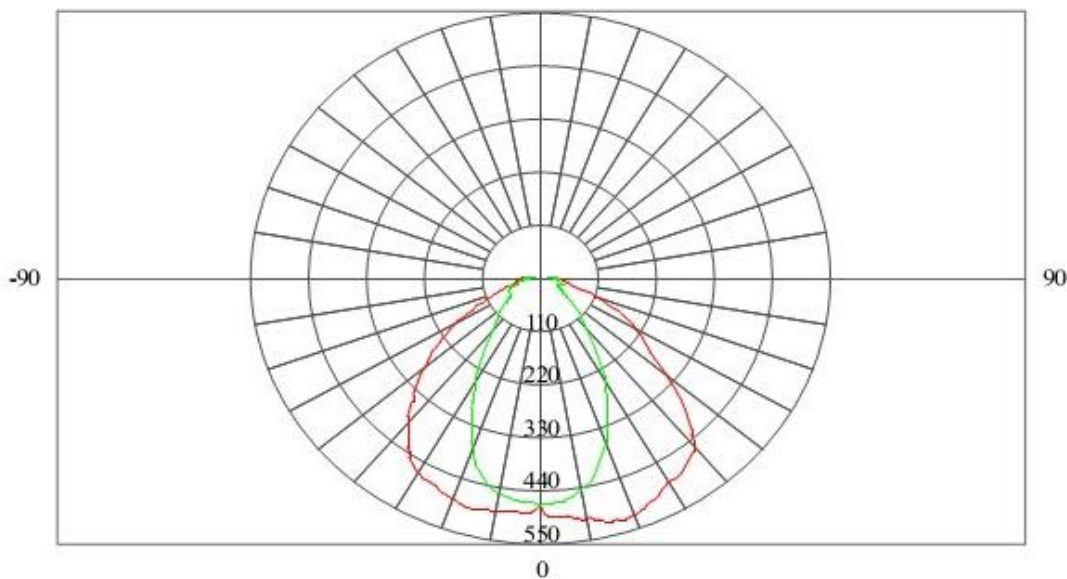
- 20W garden lamp
- 35W garden lamp



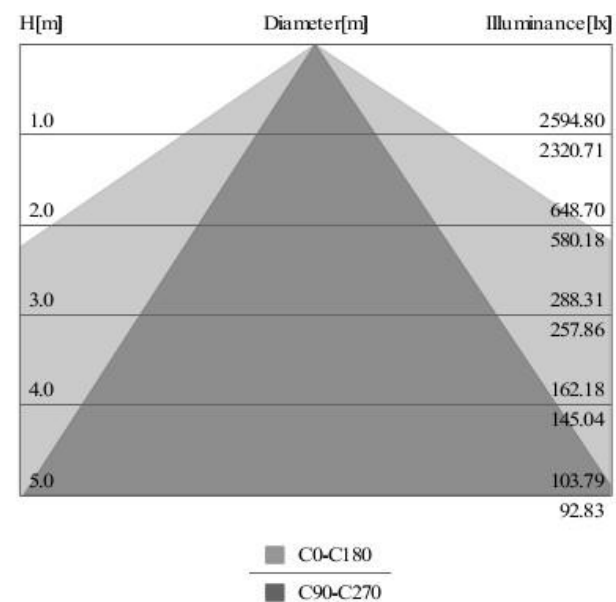
# IES Files

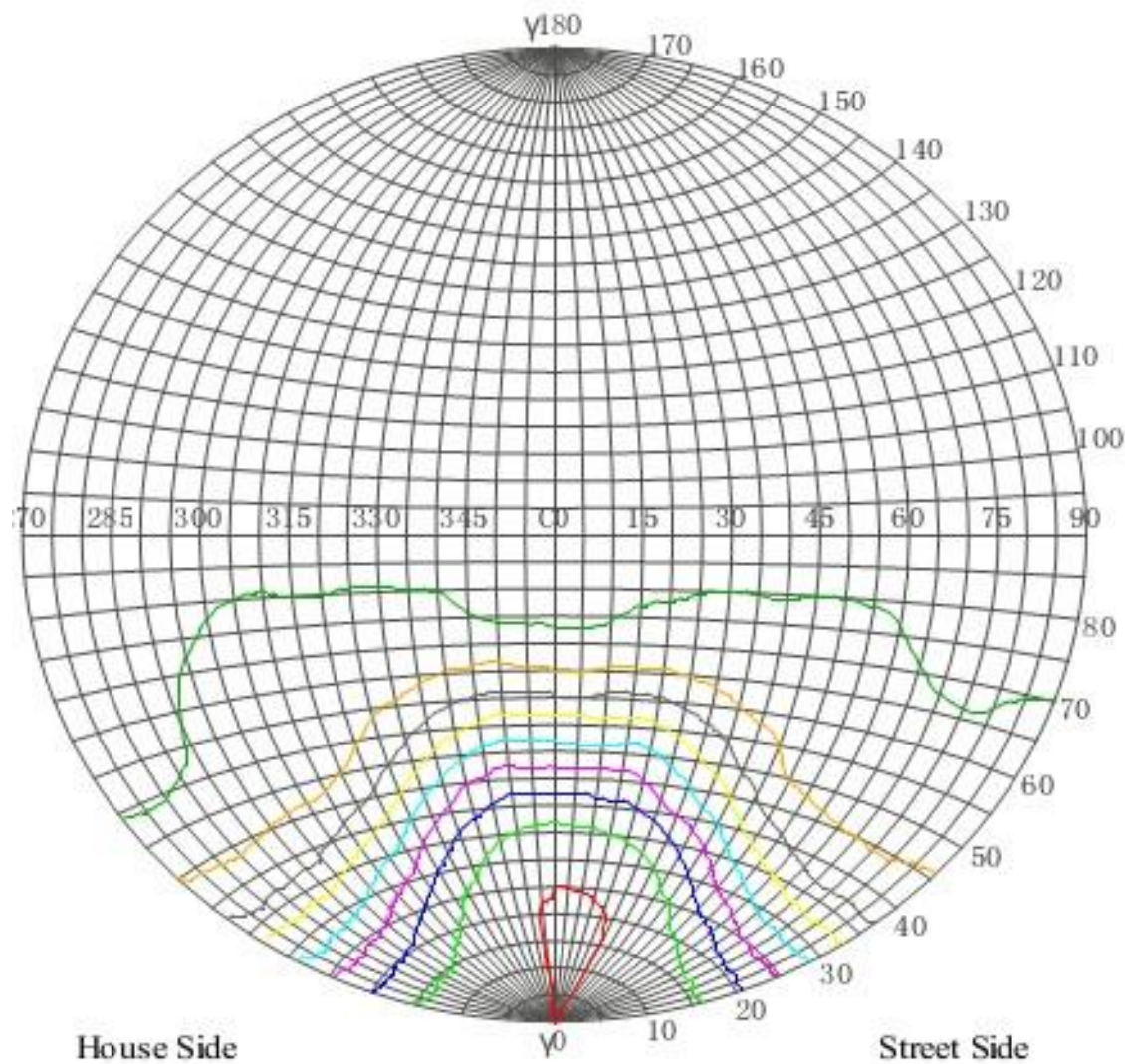


**cd/1000 lm Curve**



**Illumination Cone Curve**





### Road Lamp Type

CIE : semi-cut-off

CIE : short-narrow extension

IES : semi-cut-off

IES : I-very short

Max. At80 : 54.67cd/klm

Max. At90 : 34.3380cd/klm

Isocandela Curve(Round Net)	
Intensity Unit	cd
Imax = 100%	2595
90%	2336
80%	2076
70%	1817
60%	1557
50%	1298
40%	1038
30%	779
20%	519
10%	260

# Comparasion

Maximum luminous intensities  
at 70°: 291 cd/klm  
at 80°: 30 cd/klm  
at 90°: 11 cd/klm

- Your lamp data

## Road Lamp Type

CIE : semi-cut-off

CIE : short-narrow extension

IES : semi-cut-off

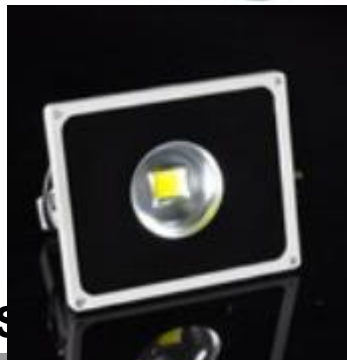
IES : I-very short

Max. At 80: 54.67cd/klm

Max. At 90: 34.3380cd/klm

- Our lamp data

# Flood light



10W

30W

50W

120W

220W

260W

IES File are provided.

CE.ROHS, TUV if

need



## COMPARISON OF ILLUMINATION

120W LED High Bay Lamp

400W Mercury Lamps



6m

210 LX

194 LX

8m

155 LX

123 LX

10m

99 LX

84 LX

12m

73 LX

58 LX



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# Intelligent LED Lighting



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**Project Name: Flutlicht Heidelberg**  
**Product: Electricity LED Flood Light**

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- LED Tube
- LED Bulb

## Protections.



The lights are being test for 24 hours and on/off electronic shake

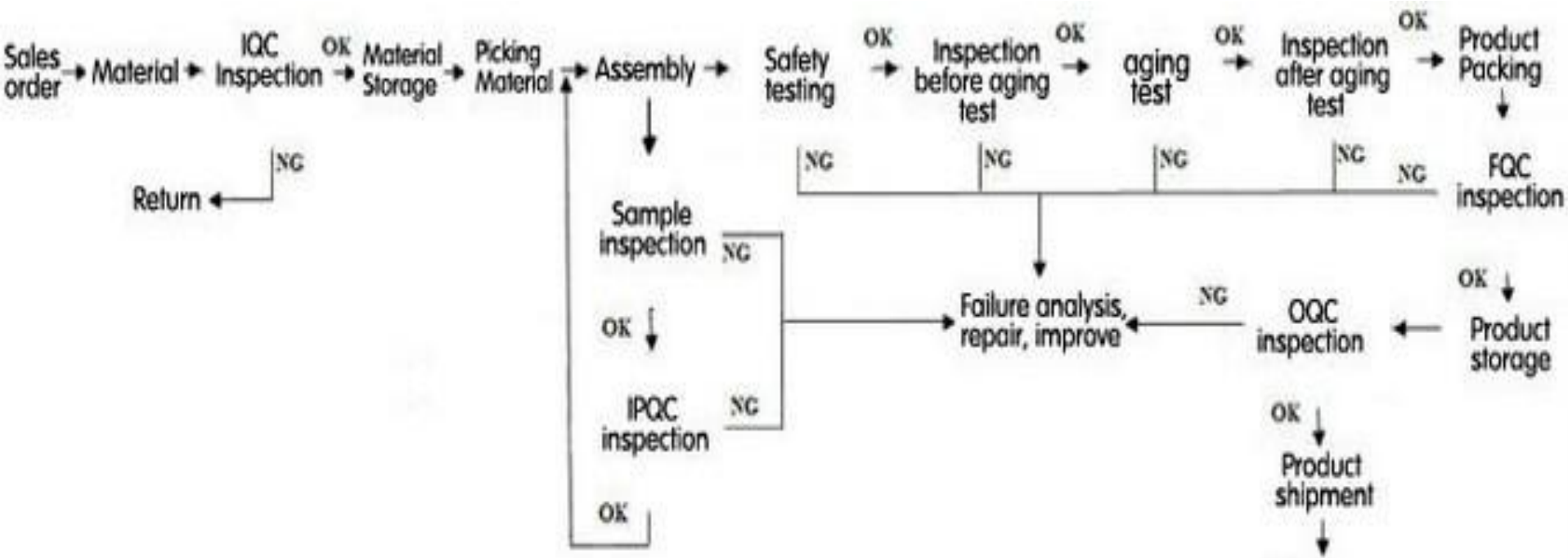
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Test photometric of the Spot light.

The lights are putting under the high temperature 80 degree and humidity 80%.

# QA Process.



# Strictly meeting the regulation

CRI>80Ra for indoor lighting.

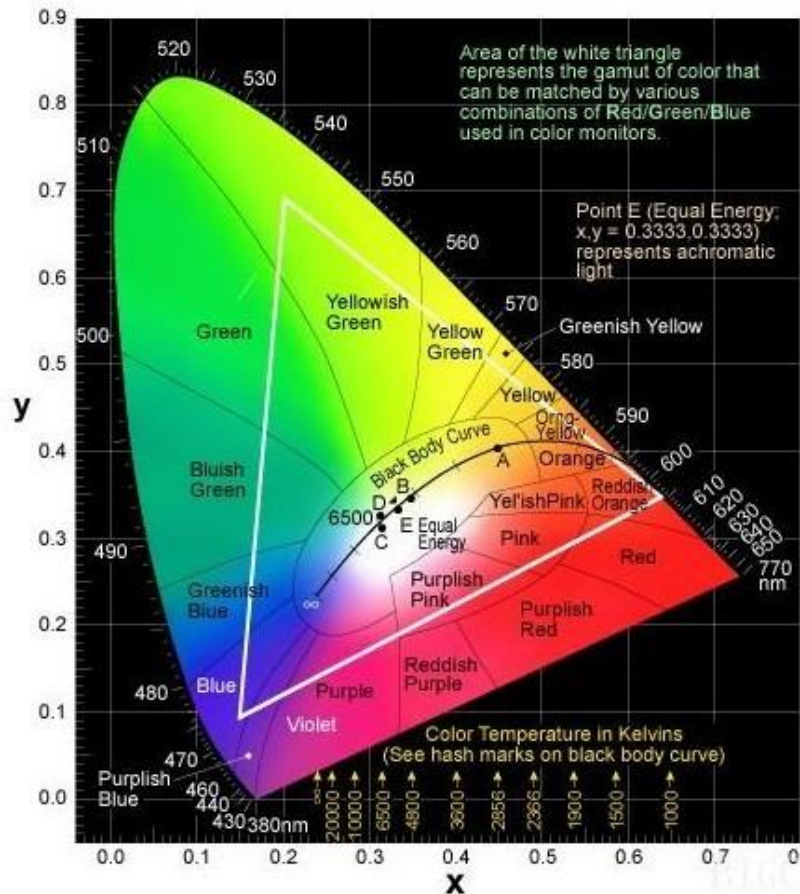
Power factor>0.9 for 10W above that save energy.

[Regulation Lux level table for Europe contry.](#)

LED Panel for USA all make to be fire rated.

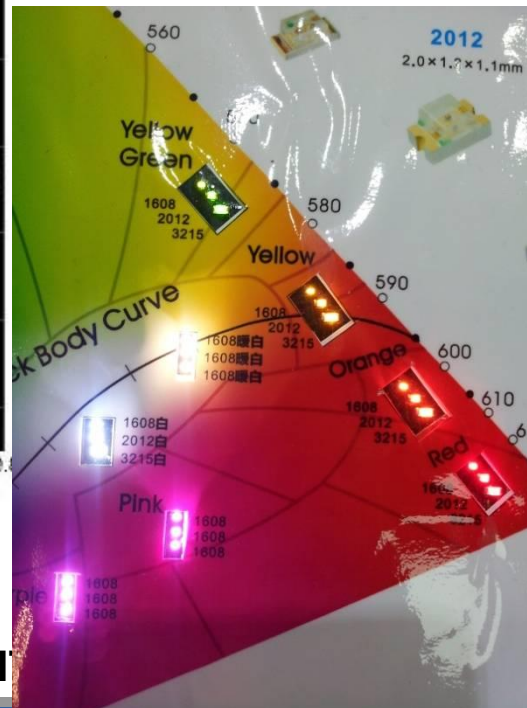
All of the dimmable items that have the highest compatibility.

# Colour constancy control.



We keep an record of the model that customer ordered.

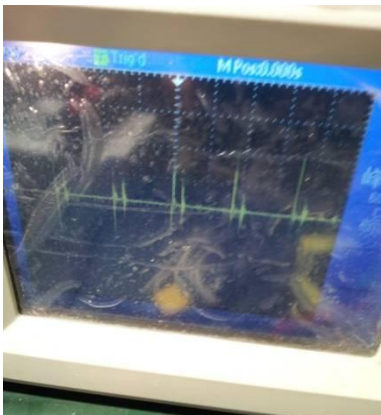
1. Keep the physical color sample that meet the color for the customer.
2. Keepy the record of the X/Y line position.
3. If customer confirm the products is used on the same chain shops, properties. We make the order same as the last batch which were shipped.
4. Since we are doing the LED encapsulation, we are able to package the LED chip source color by ourselves.



SEESHINE LIGHT

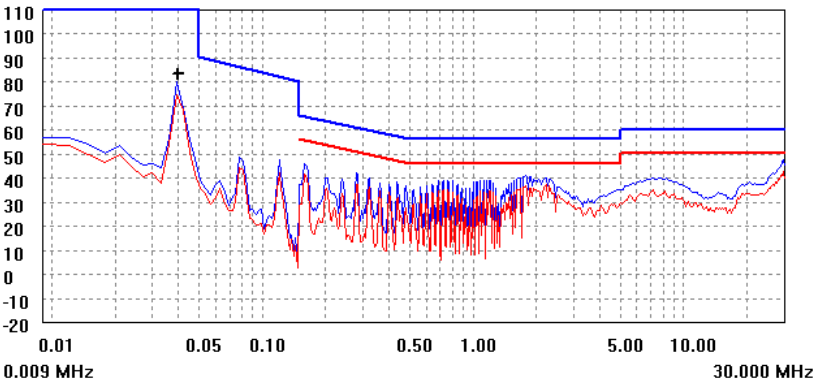
LIMITED

# Power supply control.



## EMI TEST REPORT

Organization:	Operator:	0	EUT:
Place:	Time:	2012/12/5/9:47	
Detector: PK+AV	Test-time[ms]:	20	
Limit: EN55015	Transducer(PK/AV):	PK0 / AV0	
Remark: OK			
Start[MHz]	End[MHz]	Step[MHz]	
0.009	30.000	0.003	
dBuV			



(AV) freq[MHz] lev[dBuV] Lim[dBuV] Δ(lev-Lim)  
0.040 83.1

For light that are more than 10W, the power factor is greater than 0.9.

For the AC to AC led lights of our product lines, they are greater than 0.93

For the LED light that are 35W or above, power factor is greater than 0.93.

We are assemble the LED power supply ourselves. And the driver test instrument can and will adjust the power factor on the product producing process.

Japanese Rubycon capacitor whose lifespan can reach 12,000 hours under 105°C of ambient temperature. The temperature of the capacitor in our driver when stable working is about 60°C under 35°C of ambient temperature. According to our engineer, the lifespan of the capacitor will be longer more than 2 times under so low temperature.

3. IC, which determines the whole performance of the driver including the efficiency and safety, which has the performance of Short circuit protection.

We use ST, PI, Iwatt brand IC for different lamps.

4. MOS, use AUK brand MOS from Korea, which is essential to the lifespan and performance of the whole driver.

5. Driver can pass 3750V input to output hi-pot test and 3000V input to surface of lamp hi-pot test for high power lamps.

6. Can pass the Surge Test.

7.Pass the EMF (Electromagnetic fields) test, which is very safe for human body.

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# Equipment Test instrument.



LED Chip Aging, Test



Aging, Integrated half sphere





High /low voltage test box



Multi-intelligent life test



Oscilloscope



Multi-spot temperature data logging device



Drive power input characteristic analysis



Frequency power



Adjustable DC Power supply

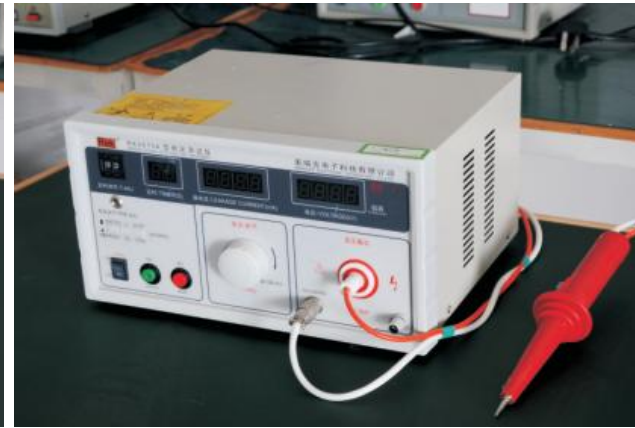
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Leakage Tester



Digital Bridge



Pressure Tester



Compactors Leakage Tester



Electricity power factor, input voltage, current data, test the capacitance

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# Test instrument.

LED Chip colour temperature picking, LED CHIP encapsulation



Driver production, SMT Machine.



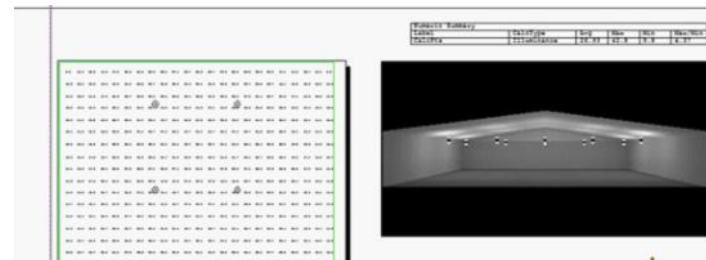
SEES

Respond,  
Respect,  
Product,  
Services  
Understanding  
are our key to our customer.

# Lighting Design service

- Lighting Design and Photometric Evaluation
- Accurate photometry is an intricate part of all lighting projects. We use state of the art software such as Photopia and AGI32 to create detailed photometric data for each and every fixture and their corresponding lamping.
- Using this technology we can determine the lamping, fixture spacing, hang heights, and foot candle requirements in a required space. All of this information is important when determining how to light your project.

- 
- 
- 
- 



- Lighting Design and Photometric services include:
- 
- - IES files for both standard and custom fixtures
- - Photopia (create accurate IES files for custom fixtures)
- - AGI32 layouts and calculations
- - Project evaluation and consultation
- 
- 



- If you are in need of specific IES data please [call or email us](#) and we will be happy to assist you.

**SEESHINE LIGHTING TECHNOLOGIES LIMITED**

# Looking for Partners.....



*"Coming together is a beginning, staying together is progress, and working together is success"....Henry Ford*



**IF YOU ARE SAYING 'YES' TO ALL THESE  
QUALITY THEN OUR PRODUCT SUITABLE  
FOR YOUR BUSINESS!**



**SEESHINE LIGHTING TECHNOLOGIES LIMITED**

**Thank you !**