

NEW HOPE U.S.A INC.,
The Answer to Greener Plant
PRODUCT CATALOG 2010-2011



New Hope U.S.A Incorporation

Renewable Energy Leader: The Answer to Greener Plant

Product Catalog

SMART LED THE FUTURE OF THE LIGHT



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SMART LED THE FUTURE OF THE LIGHT

WHY?

- ü Green and Environmental Protection: no lead, no mercury, no environmental pollution / RoHS Certificate
- ü Universal 12-24VDC, 85-264VAC
- ü High brightness efficiency, up to 80lm/w, 8 TIMES than the incandescent Lamps
- ü Save energy up to 80% than the conventional incandescent lamps
- ü Long Life, At least 50,000 Hours
- ü Robust Design - shock and vibration resistance
- ü Various certifications: CE, RoHS, UL
- ü Street Lights are IP65 protected

لماذا الإضاءة الرقمية الذكية بدلاً عن إضاءة النيون التقليدية؟

هناك ١٠ مميزات للإضاءة الرقمية الذكية بدلاً عن إضاءة النيون التقليدية. إليك هذه المميزات:

م	المادة	الإضاءة الرقمية الذكية	إضاءة لنيون
١	البيئة	مصاحبة للبيئة حيث يدخل من انبعاث مادة CO_2 و SO_2 وكذلك تخو من مادتي الرئيق الرصاص ومواده قابلة للتدوير ١٠٠% وهي حاصله على اعلى الاهداءات العالمية مثل (CE-RoHS-UL)	غير صالحة للبيئة حيث تبعث اداة CO_2 و SO_2 وكذلك تحوى على سميات من ازنئيق الضار بالبيئة والانسان . وهاك اتجاه دلي لحد من استخدام إضاءة لنيون بكاف اشكالها في بل من اوروبا امريكا.
٢	الكفاءة في الإضاءة وتحويل الطاقة	تقوم بكفاءة عالية بتحويل الطاقة الحرارية والكهربية إلى طاقة إضاءة. كما أن إضاءتها موجهة ومباشرة (غير معوضة)	تقوم بتضيع جزء كبير من لطاقة الكهربية إلى حرارة. وكذا جزء من إضاءتها معكوسة وغير مباشرة.
٣	التشويش (NOISE)	لا تنتج أي نوع من التشويش (الكهرومناطيسي وموجات الراديو) مما يوفر جوداً عالي في المكاتب والمحلات و حتى المختبرات التي تحوى الأجهزة الالكترونية.	على لنقض فان هذه لإضاءة لها تشويش كهرومغناطيسي عالي على كافة الأجهزة الالكترونية إضافة لى الاشخاص.
٤	نوعية لإضاءة	تعمل الإضاءة على نظام DC مما يجعل الإضاءة عالية الميظا ظاهر اوميض لمتردد وهذا يشكل مائة لعين لمسته مدمين.	تعمل الإضاءة على تيار المتردد AC مما ينتج وميض ترد يصل ما بين ١٠٠ - ١٢٠ ومضة بالثانية مما يكل طراً على العين لمستخدمين.
٥	الإضاءة الفوق البنفسجية وتحت احمر	لا تنتج هذه إضاءةاً يزعج الإضاءة الفوق بنفسجية الضار بخلايا الانسان (لذلك تستقطب البعوض ولها) كما انها لا تصدر الاشعة تحت الحمراء.	تنتج هذه لإضاءة كميات كبيرة من الاشعة فوق بنفسجية الضارة بخلايا الانسان ، كما انها تصدر الاشعة تحت الحمراء.
٦	مجال فلتية التشغيل	تتميز بمجال فولتية واسع للتشغيل حيث يمكن لهذه لإضاءة العمل على فولت ما بين ٨٠ - ٣٠٠ فلت وتغير الفولتية لا يؤثر على اائها. فهي تحتاج إلى ا حول او ستارو للتشغيل.	تعمل على فولتية محددة ١١٠ أو ٢٢٠ فولت وهي حساسة جداً لقوة لفوتية وأينخفاض طفيق فيها يود اى فلت إضاءة إلى حتيج هذه الإضاءة لمحول و تارتر لتشغيل
٧	العمر الافتراضي	عمر افتراضي عالي يصل إلى ١٠ اضعاف	عمر افتراضي قصير اى يصل إلى ما بين ١ - ١,٥

		الإضاءة لعادية (٥٠٠٠٠ ساعة) على اقل تقدير . وهذا يخضع م تكاليف قمع اليانة والعمالة.	على اسن تدير . إضافة إلى احتاجه لقطع إضاءة مل لمحو واستارتر مم يزيد من كلفة قطع الصيانة العمالة على مد واء.
٨	توفر ي الطاقة الكهربائية	لها اقدر على توفر طاقة كهربائية تصل م بين ٤٠ - ٦٠ %.	صرف طاقة كهربائية تملد ل ٣ أضعاف.
٩	الجودة والأمان	تتمز بجد و آمان عاين حي لا تحي على زجاج وأ يادة سهلة لكسر (Solid State) كما انها تعمل بة لتية منخفضة لا تسبب ال رائق. مم يعطي هولة مرون في التخزين والنقل.	تحتوي على كيات كبرة من ال جاج و واد سهلة الكسر. صعوبة ي التخزن النقل.
١٠	المرونة	تاتي ه ه الإضاءة باشكل واحجم متعددة وكذلك بدرجات ضاءة م تلفة تباينة مابين اللون ابيض المدافىء (3000 K) والابيض البارد (8000K) كما نها قابلة لتركيب مكان ي إضاءة تقليدية مابقة.	محدودة الاشكل والالون والاحجم وقوة الإضاءة.

SMART LED THE FUTURE OF THE LIGHT

STREET LIGHTS

Smart LED Street Light, is a new, energy-saving product that utilizes high power led's as light source, as one of the earliest American LED Street Light Manufacturers, Suppliers and Exporters, we are the first American LED Street Light factory who invented our SMART LED Street Light in 2006, it can be directly connected with a 85-264VAC power supply and can also be powered with the optional solar panel kit. The LED color spectrum, there is no ultraviolet light, no infrared rays, no heat, and no radiation produced. As a result, our LED Street Light series is a conventional "green" lighting source.



LED Street Light

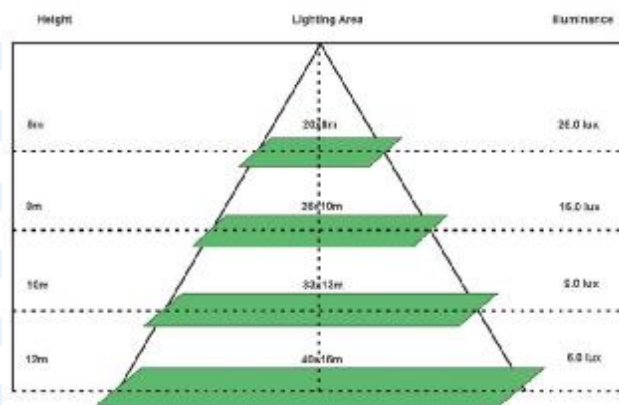


Model Name	LED Street Light
Model No.	NH-B103-045-Y-17T
Power Consumption	45W
Luminous Flux	5850lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65
Certificates	CE, RoHS, UL Pending

Specifications:

Model Number NH-B103-045-Y-17T

Input Voltage	85-264VAC
Frequency Range	47~63Hz
Power Factor(PF)	>0.9
Total Harmonic Distortion (Thd)	< 20%
Power Efficiency	85%
Working Voltage	24VDC
Led Consumption	45w
Power Supply Consumption	10w
Led Luminous Efficiency	≥80lm/W
Led Initial Flux	6,200lm
Led Maintain Flux	5,850 lm
Lamp's Efficiency (%)	> 90%



Illumination (E)

(Height=6m)≥26 Lux (Replaced Sodium Light Of 65 Lux)
 (Height=8m) ≥15 Lux (Replaced Sodium Light Of 38 Lux)
 (Height=10m) ≥9 Lux X (Replaced Sodium Light Of 20 Lux)
 (Height=12m) ≥6 Lux (Replaced Sodium Light Of 15 Lux)

Effective Illuminated Area

(Height=6m): 20 x 8m
 (Height=8m):26 x 10m
 (Height=10m):33 x 13m
 (Height=12m):40 x 16m

Color Temperature

Pure White: 5,000~7,000k; Warm White :3,000~4,000k

Color Index(CRI)

Ra > 75

Light Source

SMART Emitter (1watt)

Light Distribution Curve/Beam Pattern

Asymmetric (Bat Wing)/ Rectangular Beam

The Highest Light Intensity Angle

120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, The Vertical Axis:45°

Beam Angle

120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, °The Vertical Axis:45°

Junction Temperature(Tj)

60 °C ±10 % (Ta=25°C)

System Resistance (Rja)

0.56°C/W

Working Temperature

-30 ~ 50

Working Humidity

10%~90%

Storage Temperature

10 ~85

Working Life

50,000 Hrs

Size

448mm*232mm*112mm

LED Street Light



Model Name	LED Street Light
Model No.	NH-B103-075-Y-17T
Power Consumption	75W
Luminous Flux	9750lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65
Certificates	CE, RoHS, UL Pending

Specifications:

Model Number	NH-B103-075-Y-17T
Input Voltage	85-264VAC
Frequency Range	47~63Hz
Power Factor(PF)	>0.9
Total Harmonic Distortion (THD)	< 20%
Power Efficiency	85%
Working Voltage	24VDC
LED Consumption	75W
Power Supply Consumption	20W
LED Luminous Efficiency	≥80lm/w
LED Initial Flux	10,000lm
LED Maintain Flux	9,750lm
Lamp's Efficiency (%)	>90%

Illumination (E)

(Height=6m)≥53 Lux (Replace Sodium light of 132 Lux X)
 (Height=8m) ≥30 Lux (Replace Sodium light of 75 Lux)
 (Height=10m) ≥18 Lux (Replace sodium light of 45 Lux)
 (Height=12m) ≥13 Lux (Replace sodium light of 33 Lux)

Effective Illuminated Area

(Height=6m): 20 x 8m
 (Height=8m):26 x 10m
 (Height=10m):33 x 13m
 (Height=12m):40 x 16m

Color Temperature Pure White: 5,000~7,000K; Warm White :3,000~4,000K

Color Index(CRI) Ra > 75

Light Source SMART Emitter (1Watt)

Light Distribution Curve/Beam Pattern Asymmetric (Bat Wing)/ Rectangular Beam

The Highest Light Intensity Angle 120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, The Vertical Axis:45°

Beam Angle 120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, °The Vertical Axis:45°

Junction Temperature(Tj) 60 °C ±10 % (Ta=25°C)

System Resistance (Rja) 0.28°C/W

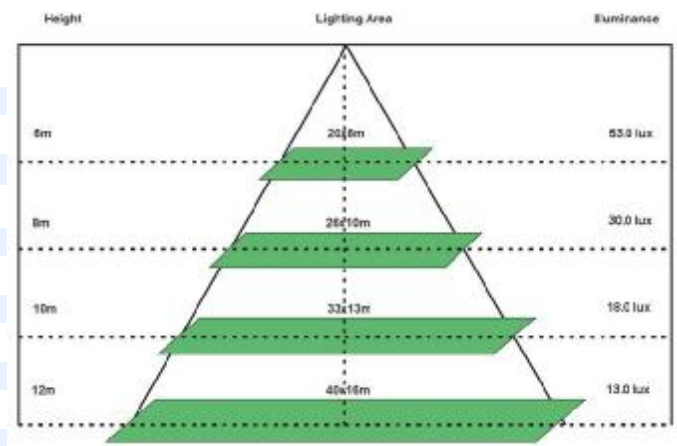
Working Temperature -30 ~ 50

Working Humidity 10%~90%

Storage Temperature 10 ~85

Working Life 50,000 Hrs

The Dimensions(Units: mm) 533mm*232mm*112mm



LED Street Light



Model Name	LED Street Light
Model No.	NH-B104-120-Y-48T
Power Consumption	120W
Luminous Flux	15600lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65
Certificates	CE, RoHS, UL Pending

Specifications:

Model Number	NH-B104-120-Y-48T
Input Voltage	85-264VAC
Frequency Range	47~63Hz
Power Factor(PF)	> 0.9
Total Harmonic Distortion (THD)	< 20%
Power Efficiency	85%
Working Voltage	24VDC
LED Consumption	120W
Power Supply Consumption	20W
LED Luminous Efficiency	≥80lm/w
LED Initial Flux	16,000lm
LED Maintain Flux	15,600lm
Lamp's Efficiency (%)	> 90%

Illumination (E)	(Height=6m) ≥80Lux (Replace Sodium light of 200Lux) (Height=8m) ≥45Lux (Replace Sodium light of 113LuxX) (Height=10m) ≥28Lux (Replace sodium light of 70Lux) (Height=12m) ≥20Lux (Replace sodium light of 50Lux)
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Effective Illuminated Area	(Height=6m): 20 x 8m (Height=8m): 26 x 10m (Height=10m): 33 x 13m (Height=12m): 40 x 16m
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Color Temperature	Pure White: 5,000~7,000K; Warm White :3,000~4,000K
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Color Index(CRI)	Ra > 75
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Light Source	SMART Emitter (1Watt)
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Light Distribution Curve/Beam Pattern	Asymmetric (Bat Wing)/ Rectangular Beam
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The Highest Light Intensity Angle	120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, The Vertical Axis:45°
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Beam Angle	120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, °The Vertical Axis:45°
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Junction Temperature(Tj)	60 °C ±10 % (Ta=25°C)
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System Resistance (Rja)	0.28°C/W
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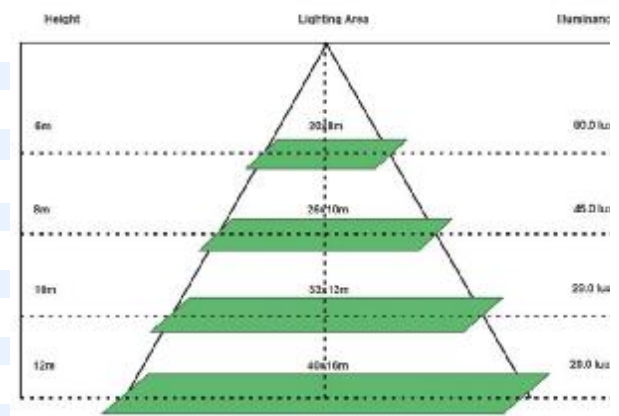
Working Temperature	-30 ~ 50
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Working Humidity	10%~90%
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Storage Temperature	10 ~85
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Working Life	50,000 Hrs
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The Dimensions(Units: mm)	585mm*347mm*112mm
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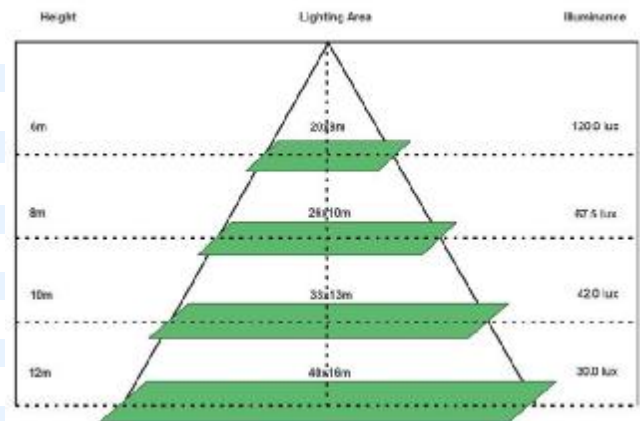
LED Street Light



Model Name	LED Street Light
Model No.	NH-B104-180-Y-13T
Power Consumption	180W
Luminous Flux	23400lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65
Certificates	CE, RoHS, UL Pending

Specifications:

Model Number	NH-B104-180-Y-13T
Input Voltage	85-264VAC
Frequency Range	47~63Hz
Power Factor(PF)	>0.9
Total Harmonic Distortion (THD)	< 20%
Power Efficiency	85%
Working Voltage	24VDC
LED Consumption	180W
Power Supply Consumption	30W
LED Luminous Efficiency	≥80lm/w
LED Initial Flux	25,000lm
LED Maintain Flux	23,400lm
Lamp's Efficiency (%)	>90%



Illumination (E)	(Height=6m)≥120.0 Lux (Replace Sodium light of 240 Lux) (Height=8m) ≥67.5 Lux (Replace Sodium light of 123 Lux) (Height=10m) ≥42.0 Lux (Replace sodium light of 80 Lux) (Height=12m) ≥30.0 Lux (Replace sodium light of 65 Lux)
Effective Illuminated Area	(Height=6m): 20 x 8m (Height=8m): 26 x 10m (Height=10m): 33 x 13m (Height=12m): 40 x 16m
Color Temperature	Pure White: 5,000~7,000K; Warm White :3,000~4,000K
Color Index(CRI)	Ra > 75
Light Source	BBE Emitter (1Watt)
Light Distribution Curve/Beam Pattern	Asymmetric (Bat Wing)/ Rectangular Beam
The Highest Light Intensity Angle	120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, The Vertical Axis:45°
Beam Angle	120°:The Horizontal Axis:110°, The Vertical Axis:45°; 140°:The Horizontal Axis:130, °The Vertical Axis:45°
Junction Temperature(Tj)	60 °C ±10 % (Ta=25°C)
System Resistance (Rja)	0.19°C/W
Working Temperature	-30 ~ 50
Working Humidity	10%~90%
Storage Temperature	10 ~85
Working Life	50,000 Hrs
The Dimensions(Units:mm)	720mm*103mm*112mm

LED Tunnel Light – SD



Model Name	LED Tunnel Light
Model No.	GB-593FL150WB
Power Consumption	150W
Luminous Flux	12,000lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65
Certificates	CE, RoHS



Model Name	LED Tunnel Light
Model No.	GB-593FL140WB
Power Consumption	140W
Luminous Flux	11,200lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65



Model Name	LED Tunnel Light
Model No.	GB-593FL120WB
Power Consumption	120W
Luminous Flux	9,600lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65



Model Name	LED Tunnel Light
Model No.	GB-593FL100WB
Power Consumption	110W
Luminous Flux	8,000lm
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
IP Rating	IP65

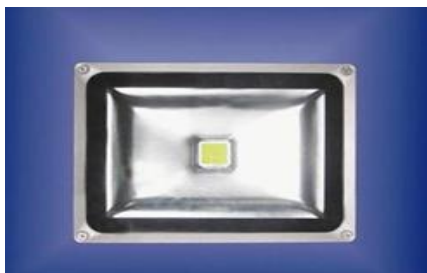
LED Flood Light – SD



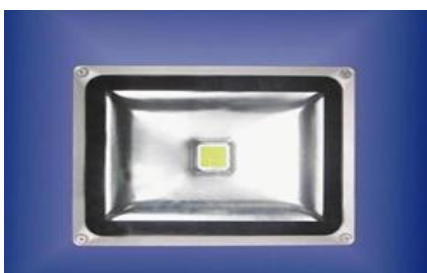
Model Name	LED Tunnel Light
Model No.	GB-360FL80WB
Power Consumption	80W
Luminous Flux	6,400lm
Working Voltage	85-264VAC
Life Span	>50,000 Hours
IP Rating	IP65
Certificates	CE, RoHS



Model Name	LED Tunnel Light
Model No.	GB-360FL60WB
Power Consumption	60W
Luminous Flux	4,800lm
Working Voltage	85-264VAC
Life Span	>50,000 Hours
IP Rating	IP65



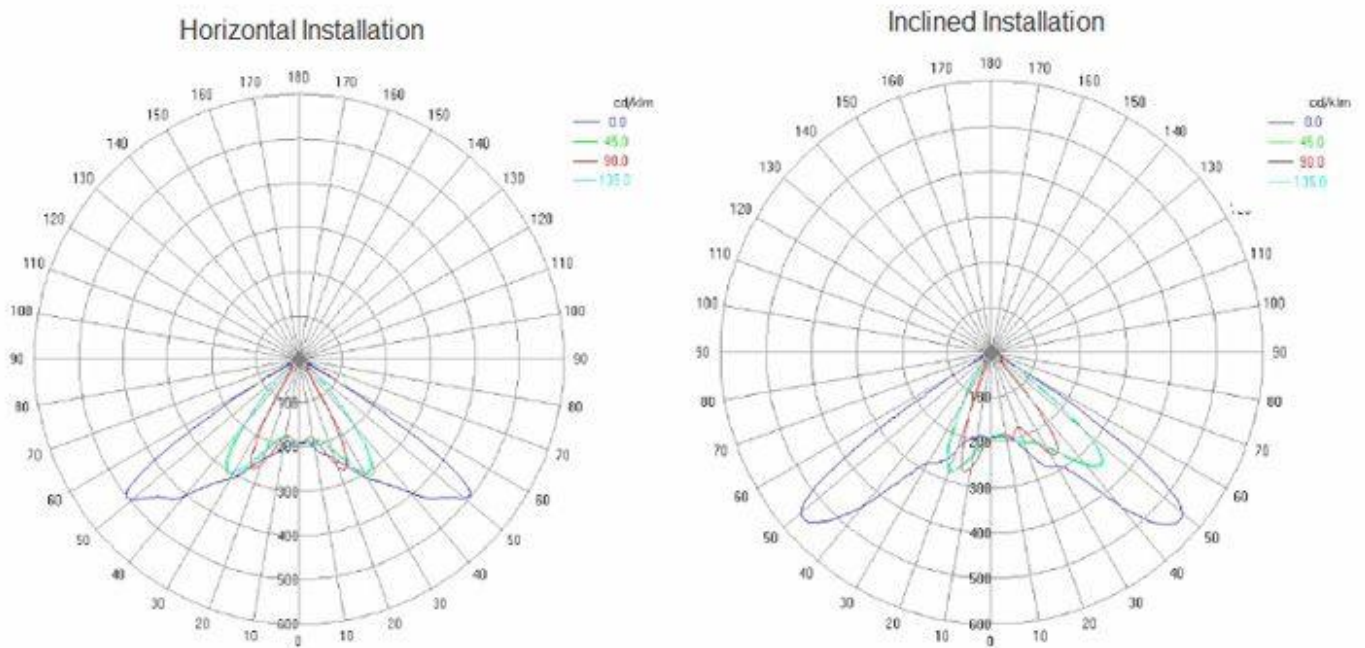
Model Name	LED Tunnel Light
Model No.	GB-290FL40WB
Power Consumption	40W
Luminous Flux	3,200lm
Working Voltage	85-264VAC
Life Span	>50,000 Hours
IP Rating	IP65



Model Name	LED Tunnel Light
Model No.	GB-290FL20WB
Power Consumption	20W
Luminous Flux	1,600lm
Working Voltage	85-264VAC
Life Span	>50,000 Hours
IP Rating	IP65

Lamp Distribution Curves:

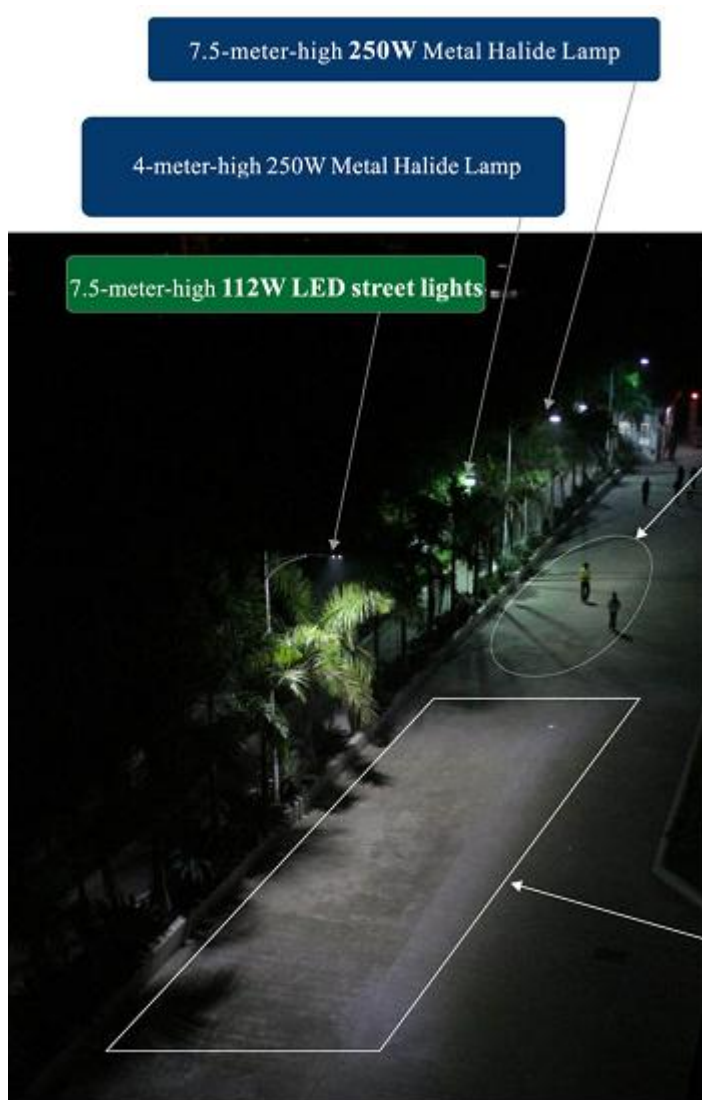
Bat-wing beam pattern of the distribution curve also can be changed by different section's demand. Rationally control the distribution to be a rectangular beam pattern. When the installation height=12m, the beam pattern is 40x16m rectangular, and the radiation-efficiency is more than 70% in the effective region, the total transperance is more than 90%, the greatest extent possible to reduce the loss of light, the LED light has been fully utilized. The illumination uniformity is very good in the effective radiation region, even better than 0.5, higher than the highest grades of 0.4 of the state road's standards. The edge of the beam pattern is very clear and slide, no adverse glare out of the effective radiation region, will not cause any light pollution, it is an idea cut-lighting lamp. Satisfy the requirements of the road lighting or other special lighting, which can be widely used in the special requirements such as street lighting, advertising lighting, etc.; it is a green, energy-saving, environmentally friendly lighting product.



Comparison:

Items	High Pressure Sodium HPS	SMART LED Street Light
Photometric Performance	Bad	Excellent
Radiator Performance	Bad	Excellent
Electric Performance	Electric Shock Easy(High Voltage)	Safe (Low Voltage)
Working Life	Short (5,000h)	Quite Long (> 50,000h)
Working Voltage Range	Narrow ($\pm 7\%$)	Wide($\pm 20\%$)
Power Consumption	Quite High	Quite Low
Startup Speed	Quite Slow(Over 10minutes)	Rapid (2s)
Strobe	Yes(Alternating Current Drive)	No(Direct Current Drive)
Optical Efficiency	Low	High
Color Index/ Distinguish Feature	Bad, Ra< 50(The Color Of Object Is Faith, Boring, Hypnosis)	Good, Ra>75(The Color Of Object Is Fresh, Veritable And Comfortable)
Color Temperature	Quite Low (Yellow Or Amber , Uncomfortable)	Ideal Color Temperature (Comfortable)
Bad Glare	Strong Glare (Dazzle)	No Harmful Glare
Light Pollution	Strong	No
Heating	Serious (>300°C)	Cold Light (<60°C)
Lampshade Turn Dark	Easy (Absorb Dust)	No (Static Proof)
Lamp Aging Turn Yellow	In A Short Time	No
Shockproof Performance	Bad(Fragile)	Good (No Filament Nor Glass)
Environment Pollution	Contains Lead Element Etc.	No
Maintenance Cost	High	Quite Low
Product Cubage	Big	Small (Slim Appearance)
Product Weight	Heavy	Light
Cost-Effective	Low	High
Integrated Performance	Bad	Excellent

LED BEAM COMPARISON



250W Metal halide Lamp

Lamp power 285W, rectifier power 23W
Power factor 0.5

Total consumption 616W

Brightness is significantly less than the LED lamp.

Maximum intensity is 34 lux with an average intensity of 15 lux.

The beam pattern is oval and undefined.

Uniformity of illumination is poor with high intensity concentrated in the centre of the beam.

112W LED Streetlight

LED consumption 125W
Power consumption 20W
Power factor 0.99

Total consumption 145W

Brightness is significantly higher than the metal halide lamp.

Maximum intensity is 40 lux with an average intensity of 30 lux.

The beam pattern is rectangular 26x10 and highly undefined.

Uniformity of illumination is excellent without light loss at the beam extremities

LED COLOUR COMPARISON



A SMART LED Street Lamp

No glare, comfortable color temperature with true, daylight irradiation levels

B Metal Halide Street lamp

Strong glare, high color temperature with harsh irradiation levels

C Sodium street lamp

Strong glare, Very low color temperature producing untrue yellow and orange irradiation effects

POWER CONSUMPTION COMPARISON

SDL6 (168W) streetlight & 400W HPS Streetlight

Working 12 hours a day

Item	HPS	SDL6	Remark
Lamp power consumption	400W	168W	
Lamp source Electrical distribution	Rectifier 120W	Switching Power 30W	
Comprehensive Cable Loss (6%)	24W	10W	
Transformer loss (3%)	12W	5W	
Reactive power compensation	0.85	0.99	
Total Lamp's Power consumption	654W	215W	
Daily consumption	7.85 kWh	2.58 kWh	Calculated by 12 hours a day
Consumption per month	238.64 kWh	78.43 kWh	Calculated on a 30.4 days basis
Consumption per year	2,867.21 kWh	942.35 kWh	Calculated on a 365.25 days basis
10 year's consumption estimation	28,672.12 Kwh	9423.50 Kwh	

ملاحظات	الإضاءة الرقمية الذكية SDL6	إضاءة الـ وديوم	عنصر المارنة
	١٦٨ واط	٤٠٠ واط	استهلاك الطاقة لمصباح الواحد
	٣٠ واط	١٢٠ واط	مصدر إضاءة
	١٠ واط	٢٤ واط	التوفير في حج الكابل ٦%
	٥ واط	١٢ واط	الاستهلاك في المحول ٣%
	٠,٩٩	٠,٨٥	تعويض لإضاءة
	٢١٥ واط	٦٥٤ واط	استهلاك الطاقة للوحدة
١٢ ساعة عمل	٢,٥٨ كيلو واط	٧,٨٥ كيلو واط	الاستهلاك اليوم للوحدة
٣٦٥ يوم	٩٤٢,٣٥ كيلو واط	٢,٨٦٧,٢١ كيلو واط	الاستهلاك السنو للوحدة
	٩,٤٢٣,٥ كيلو واط	٢٨,٦٧٢,١٢ كيلو واط	الاستهلاك لـ ١٠ سنوات
	٩٤٢,٣٥٠ كيلو واط	٢,٨٦٧,٢١٢ كيلو واط	اعتبار ١٠٠ وحدة
٧٠% توفير	١١٣,٠٨٢ ريال	٣٤٤,٠٦٥,٤٤ ريال	مالياً باعتبار ١٢,٠٠ ريال / كيلو واط

SMART LED STREET LIGHT FEATURES:

Revolutionary Photometric Design - The world's first dedicated optical system (rectangular beam focusing lens). Reasonable control of the light distribution, spot rectangular beam pattern, and ensure an ideal uniformity of brightness on the road surface;

1

Unique Integrated Lens and Lampshade Design - Array Lens play a protective and spot light role, avoid wasteful duplication of light and reduce the loss of light, also reduce the weight of the product and enable simplified structure;

2

Standard E40, 360-degree Rotation Lamp Holder - It can still rotate after full tightening the lamp holder arbitrarily, adjust to ensure the best direction face to the ground;

3

Direct Replacement Light Source Design - Direct replace the existing high-pressure mercury lamp, high pressure sodium lamp, metal halide lamps, no need to change the original lamp shell;

4

Intelligent Current Control - Intelligent current control, whatever any deviant situation, it is able to achieve the precision constant current, ensure the LED can work under the secure current;

6

No Adverse Glare - Eliminate the glare caused by the adverse ordinary lights glare and visual fatigue sight interference, improve driving safety, reduce the incidence of traffic accidents, fully embodies the spirit of "People-oriented Technology" in this product;

7

No High-temperature, No Aging Yellow Lampshade - Eliminate baking the traditional lampshade which cause aging yellow, shortened life expectancy and decrease the brightness;

10

Start Without Delay - Reach the normal brightness and do not have to wait when switch on, eliminate a long process of starting of the traditional street lights;

12

Impact Resistance, Shock-proof, Without Ultraviolet (UV) and Infrared (IR) Radiation - No filament and glass frames, avoid break of the traditional lamp, without harm to the human body;

14

High Color Index, Nice Coloration - To show the true colors and more brighter;

15

Multiple Color Temperature Options - Color temperature to meet the needs of different occasions, eliminated the low color temperature of the sodium lamp which cause the hypnotic mood and high color temperature of the mercury lamp which cause the depressed mood, observers will feel more comfortable;

16

Perfect Combination With Solar Energy - Fully exert the advantage of the LED work under low voltage and environmental work, according to the local solar energy resources, electricity and solar power can also be combined. To achieve the best cost performance and high reliability customers;

23

High Luminous Efficiency - LED luminous efficiency of the existing conditions is $\geq 65\text{lm/w}$, with the rapid increase LED brightness, when the luminous efficiency reach 150lm/w , the 400W sodium lamp will be replace by the 100W LED lamp,? The luminous efficiency will? reach 300lm/w eventually;

24

SMART LED THE FUTRE OF THE LIGHT

COMMERCIAL LIGHTS

SMART LED Commercial Light gives off directional light, so the light goes where you aim it. LED Light Bulb is closer to the color of daylight - which new studies suggest is good for staying alert. SMART LED Light Bulb can be used to replace your standard fluorescent or halogen light Bulb. The bright, white LED light produced by our LED Light Bulb works especially well for task lighting and reading light. LEDs not only produce light more efficiently, they also have a tiny mirror that reflects light in one direction. A more directed light means less wasted light.

The best way to start using our long life SMART LED Light Bulb is to try one first. Swap out a regular bulb on your porch, in a ceiling can, task or accent light, or maybe replace a bulb that you leave on at night. To get familiar with LED Light Bulb, we recommend you experiment with different lighting combinations and see how their reduced light output works for you. SMART LED Light Bulb has Edison style bases and will fit your existing Lamp and fixtures. With LED Light Bulb and just a bit of planning you can create a more interesting lighting environment while cutting down on your electric bill.

LED Tube Light – SDLT8



Model Name	LED Tube Light
Model No.	SDLT8
Power Consumption	8/16/18/20 W
Luminous Flux	Various
Working Voltage	85-264VAC
Life Spam	>50,000 Hours
Certificates	CE, RoHS, UL

(No starter or transformer needed)

A complete range of T8 tube lamps in various lengths from 600mm to 2400mm designed to replace conventional fluorescent tube lights.

DIP and SMD LED technology.

Available in pure or warm white colors. Certification RoHS, CE, and UL

LED Tube Light – SDLT8 / TYPES:

SMART T8 LED 8W tube lamp (replaces 600mm fluorescent tube lamps)



Model Name	LED Tube Light
Model No.	SDLT8-DIP
Power Consumption	8W
Luminous Flux	810lm
Working Voltage	85-264VAC
Power Factor	0.9 Tube Materials
Color	White/Warm White
Lamp Size	Ø30x600mm

SMART T8 LED 16W tube lamp (replaces 1200mm fluorescent tube lamps)



Model Name	LED Tube Light
Model No.	SDLT8-DIP
Power Consumption	16W
Luminous Flux	1248lm
Working Voltage	85-264VAC
Power Factor	0.88 Tube Materials
Color	White/Warm White
Lamp Size	Ø30x1200mm

SMART T8 LED 18W tube lamp (replaces 1500mm fluorescent tube lamps)



Model Name	LED Tube Light
Model No.	SDLT8-DIP
Power Consumption	18W
Luminous Flux	1403lm
Working Voltage	85-264VAC
Power Factor	0.89 Tube Materials
Color	White/Warm White
Lamp Size	Ø30x1500mm

SMART T8 SMD high power LED 8W tube lamp (replaces 600mm tube lamps)



Model Name	LED Tube Light
Model No.	SDLT8-SMD
Power Consumption	8W
Luminous Flux	645lm
Working Voltage	85-264VAC
Color	White/Warm White
Lamp Size	Ø30x600mm

SAMRT T8 SMD high power LED 20W tube lamp (replaces 1200mm tubes)



Model Name	LED Tube Light
Model No.	SDLT8-SMD
Power Consumption	20W
Luminous Flux	1300lm
Working Voltage	85-264VAC
Color	White/Warm White
Lamp Size	Ø30x1200mm

SMART T8 SMD high power LED 18W tube lamp (replaces 1500mm tubes)



Model Name	LED Tube Light
Model No.	SDLT8-SMD
Power Consumption	18W
Luminous Flux	1700lm
Working Voltage	85-264VAC
Color	White/Warm White
Lamp Size	Ø30x1500mm

POWER CONSUMPTION COMPARISON

LED Tube (8W) & 40W Neon Lamp

Working 12 hours a day

Item	Neon Lamp	LED Tube	Remark
Lamp power consumption	40W	8W	
Lamp source Electrical distribution	Rectifier 12W	Switching Power 3W	
Reactive power compensation	0.85	0.99	
Total Lamp's Power consumption	40W	8W	
Daily consumption	480Wh	96Wh	Calculated by 12 hours a day
Consumption per month	14.592 kWh	2.918 kWh	Calculated on a 30.4 days basis
Consumption per year	175.320 kWh	35.064 kWh	Calculated on a 365.25 days basis
10 year's consumption estimation	28,672.12 Kwh	9423.50 Kwh	(0.12 SAR /kwh for indtrial subscriptions (save /year 67.322880 Million SAR)

ملاحظات	الإضاءة الرقمية الذكية	الإضاءة التقليدية ٤٠ واط	عنصر المارئة
	٩ واط X ٤	٤٠ واط X ٢	استهلاك الطاقة لمصباح الواحد
	المحول ٣ واط	المعدل ١٢ واط	مصدر اضاءة
	٠,٩٩	٠,٨٥	تعويض لإضاءة
	٣٩ واط	١٠٨,٨ واط	استهلاك الطاقة للوحدة
١٢ ساء عمل	٤٦٨ واط	١٣٠٨ واط	الاستهلا اليوم للوحدة
	١٧٠,٨٢ كيد واط	٤٧٧,٤٧ كيد واط	الاستهلا السنو للوحدة
	١٧٠٨,٢ كيد واط	٤٧٧٤,٧ كيد واط	الاستهلاك ل١٠ سنوا ت
	١٧,٠٨٢,٠٠٠ كيد واط	٤٧,٧٤٧,٠٠٠ كيد واط	اعتبار ١٠,٠٠٠ وحدة
	٢,٠٤٩,٨٤٠ ريال	٥,٧٢٩,٦٤٠ ريال	ماليا باعتبار ١٢,٠٠٠ ريال / كيد واط

LED Bay Lamps Industrial SDLB



SAMRT LED high and low bay lights have a spun aluminum casing and stainless steel fixings.

Superior thermal management, alternating switching power system and world leading CREE high power LED chips ensure that the SAMRT LED space lighting range deliver industry leading performance and the highest quality.

Certificates : CE, RoHS & ISO9000

LED Bay Lights – SDLB / TYPES:

SMART high power LED High bay lamp - 160W (replaces 400W MH lamp)



Model Name	LED LB lamp
Model No.	NH-SL160W
Power Consumption	160W
Luminous Flux	12,800lm
Working Voltage	85-264VAC
IP rating	IP65
Color	Pure White – Warm White
Beam Angle	120/60degree

SMART high power LED low bay lamp 80W (replaces 250W HPS lamp)



Model Name	LED LB lamp
Model No.	NH-SL120W
Power Consumption	120W
Luminous Flux	9,600lm
Working Voltage	85-264VAC
IP rating	IP65
Color	Pure White – Warm White
Beam Angle	120/60degree

LED Bulb Lamps for existing fittings



The latest high power LED technology is now available in simple easy to install light bulbs for home or commercial lighting applications. LED replacement light bulbs are available in 'warm white' or 'pure white' colors and are designed to fit most existing lamp holders.

SMART LED light bulbs offer up to two thirds savings in electricity costs compared to incandescent light bulbs and are designed to last around ten years.

Certificates : CE, RoHS , UL & ISO9000

Life Span : 50,000 Hours



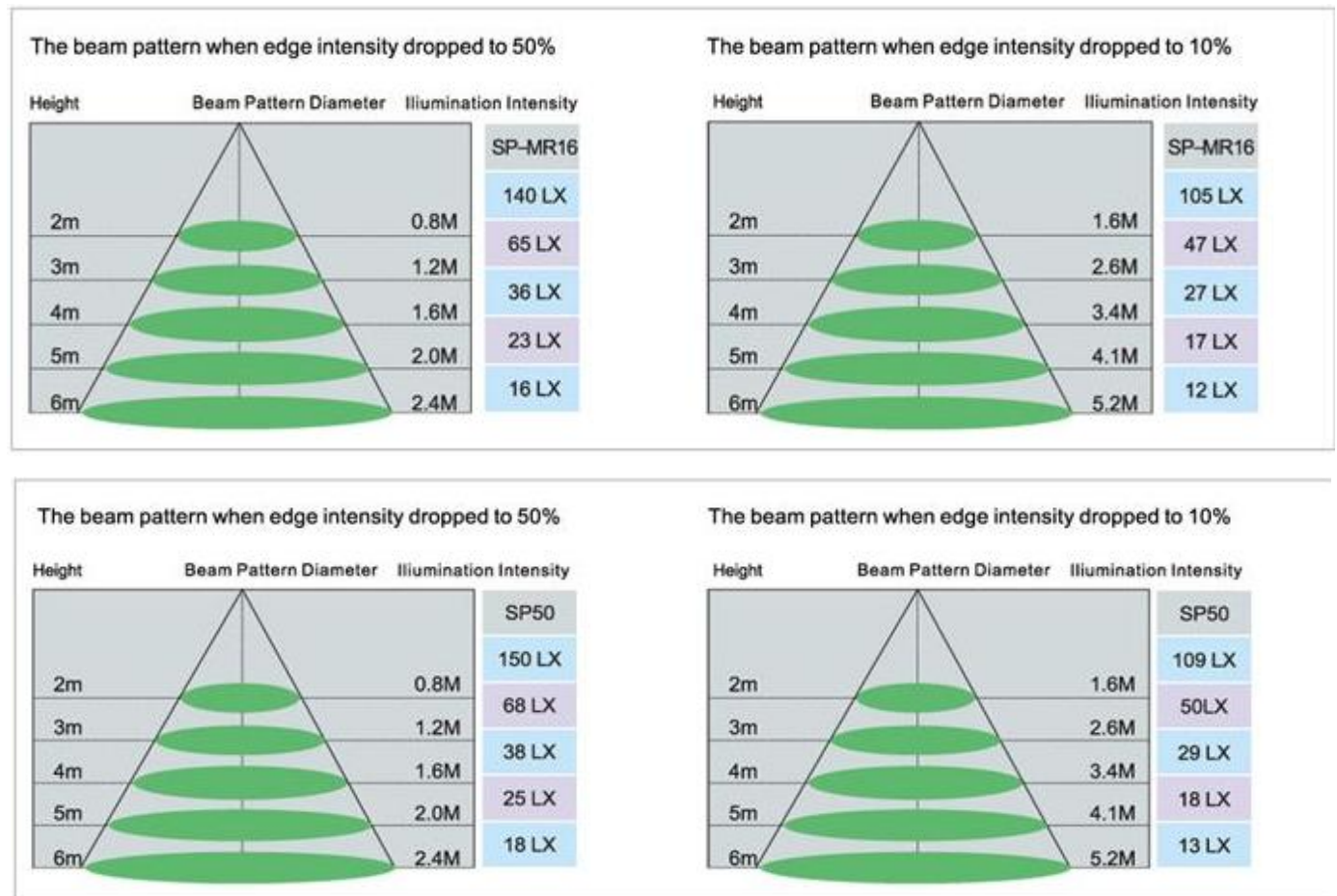
Model Name	LED Spotlight
Model No.	MR16
Power Consumption	3W
Luminous Flux	170lm
Working Voltage	12VAC/DC (Need an adapter for 85-264VAC)
IP rating	IP60
Color	Pure/Warm White, Red, Yellow, Green or Blue Color
Lamp Size	Ø50x45mm
Lamp base	GU5.3, GU10 (SSI MR16, replace the traditional GU5.3 MR16 Lamp directly)



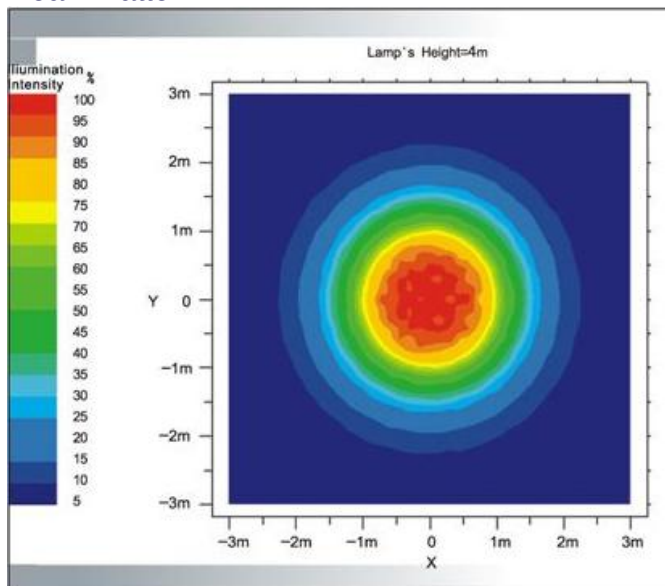
Model Name	LED Spotlight
Model No.	SP50
Power Consumption	3W
Luminous Flux	190lm
Working Voltage	12VAC/DC or 85-264VAC
IP rating	IP60
Color	Pure/Warm White, Red, Yellow, Green or Blue Color
Lamp Size	Ø50x71mm
Lamp base	E27, E26, E17, E14, E12, GU10

The Beam pattern can be controlled within 30 Degree, reduce the brightness loss furthest, apply with different topical lighting requirements.

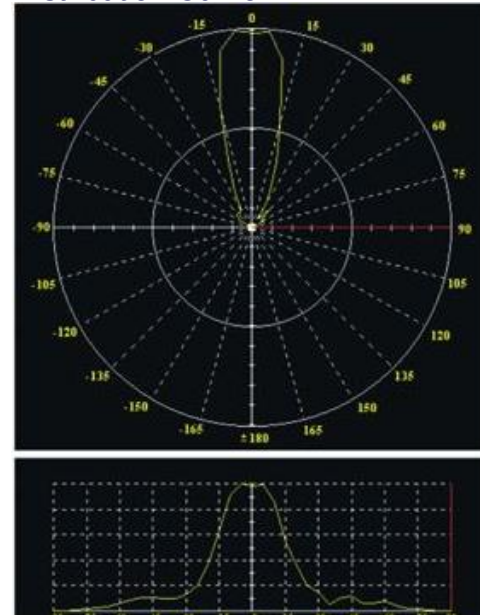
The Different Height Illumination Distribution



Beam Pattern



Distribution Curve



Smart high power LED Bulb (Replaces Conventional Lights Bulb)



Model Name	LED Bulb
Model No.	SP70
Power Consumption	5W = 40W Incandescent Bulb
Luminous Flux	250lm
Working Voltage	85-264vac , 12V or 24VAC/DC
IP rating	IP60
Color	Pure/Warm White, Red, Yellow, Green or Blue Color
Lamp Size	Ø70x99mm
Lamp base	E27, E26, B22



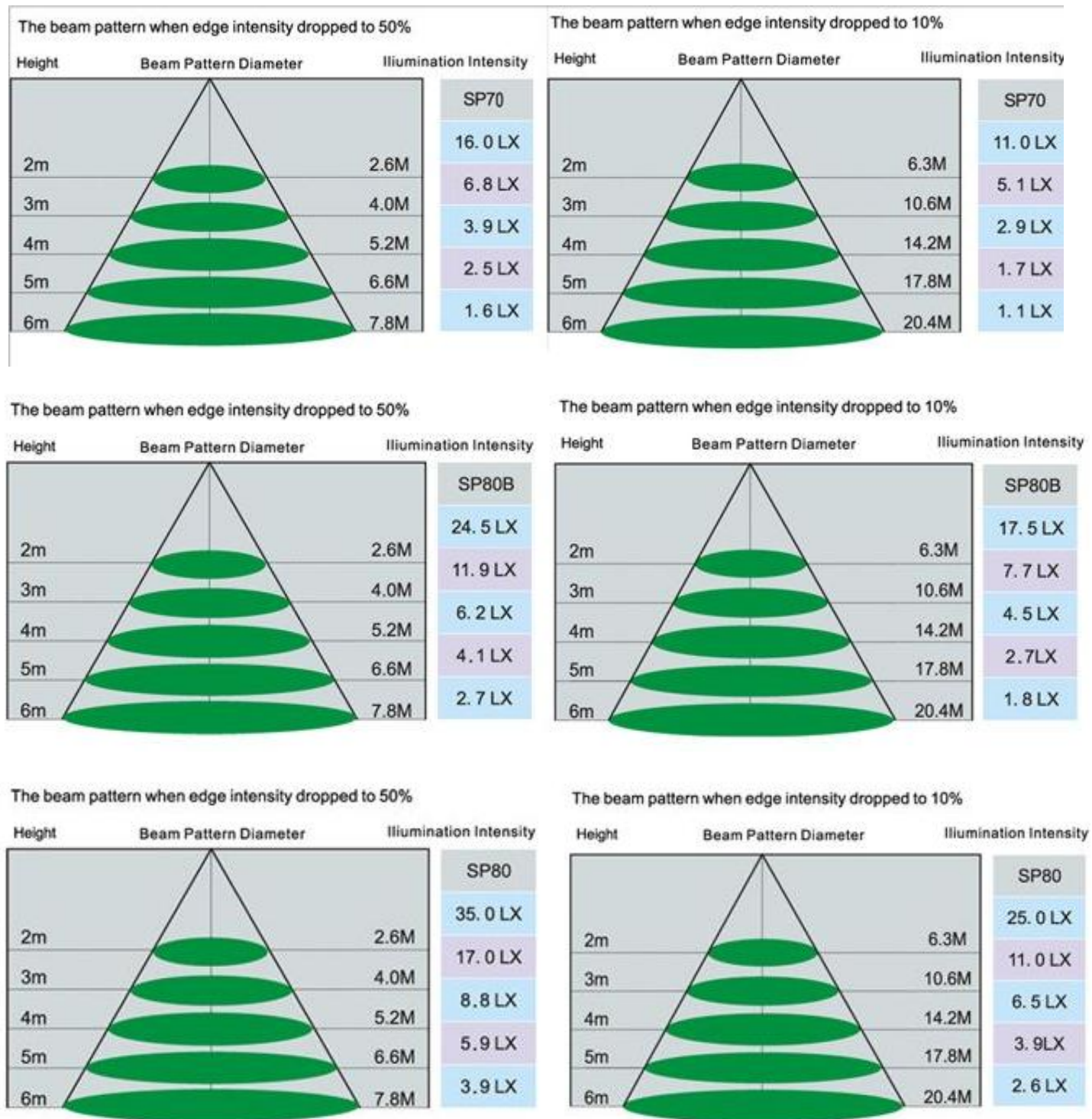
Model Name	LED Bulb
Model No.	SP80B
Power Consumption	10W = 75W Incandescent Bulb
Luminous Flux	500lm
Working Voltage	85-264vac , 12V or 24VAC/DC
IP rating	IP60
Color	Pure/Warm White, Red, Yellow, Green or Blue Color
Lamp Size	Ø80x159mm
Lamp base	E27, E26, B22



Model Name	LED Bulb
Model No.	SP80
Power Consumption	15W = 100W Incandescent Bulb
Luminous Flux	750lm
Working Voltage	85-264vac , 12V or 24VAC/DC
IP rating	IP60
Color	Pure/Warm White, Red, Yellow, Green or Blue Color
Lamp Size	Ø80x159mm
Lamp base	E27, E26, B22

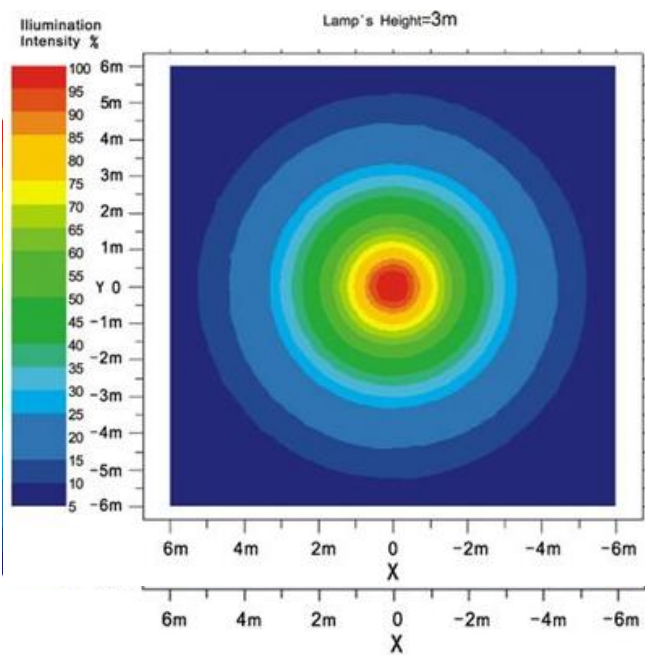
Most of the LED bulbs or Led light sources are point source of light in the present market, we can see the light points from the bulb easily, and it can't hide the in aesthetic inside structure, gives lot of glare out. It is easy to fill fatigue even decrease your visual acuity if we use these light source in a long time. Even some of them used an ivory cover to make it a surface light source. But it has a very low throughput Of 50%-70% only. SMART Led bulb used the fly's- eye lens, it has a 90% throughput rate.

The Different Height Illumination Distribution

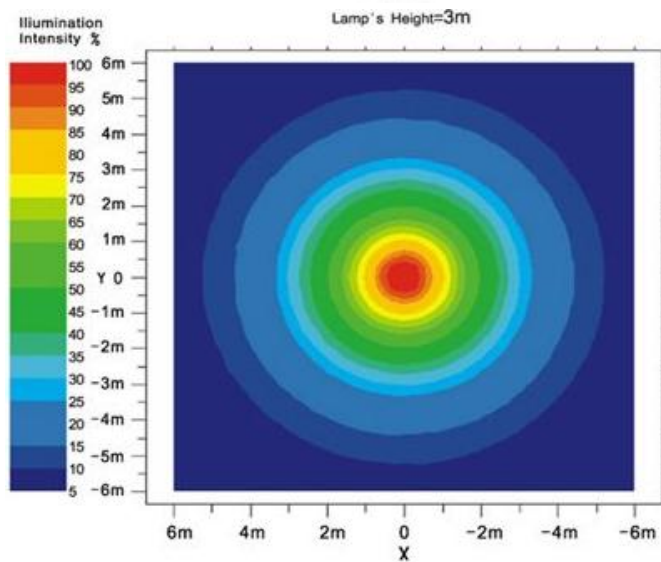
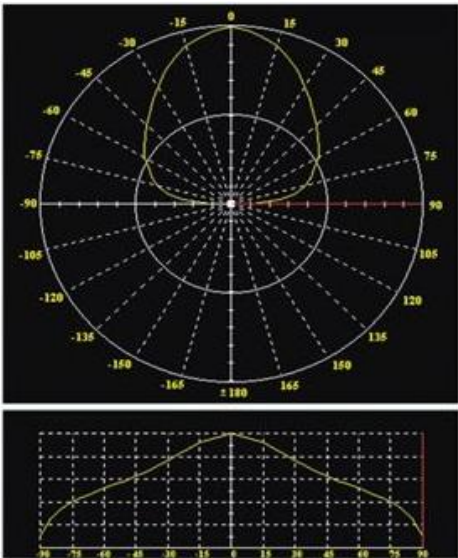


Beam Pattern

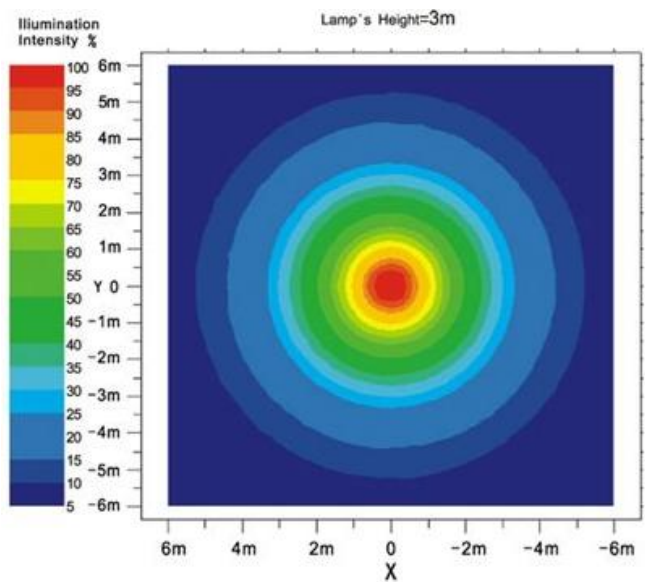
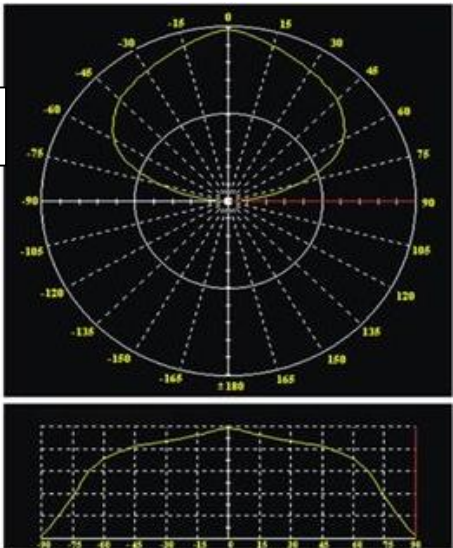
Distribution Curve



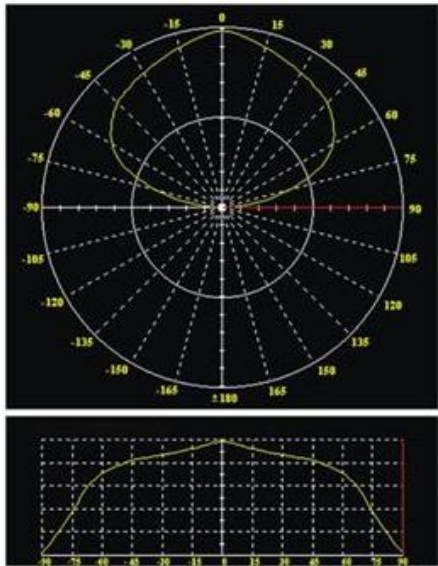
SP70



SP80B



SP80



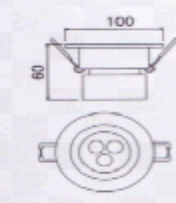
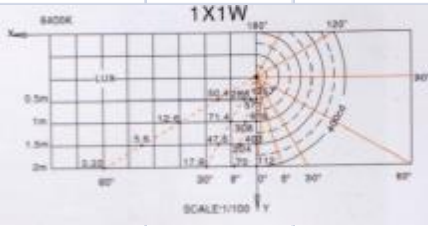
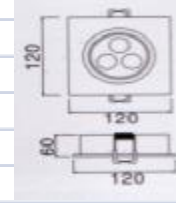
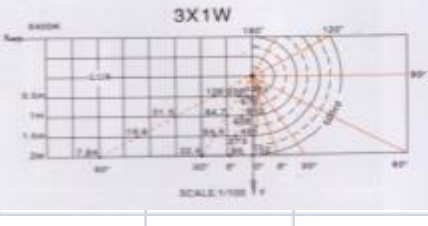
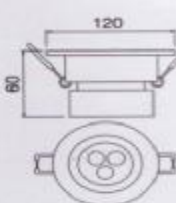
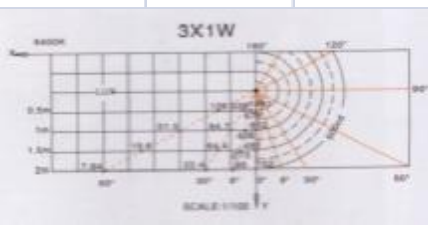
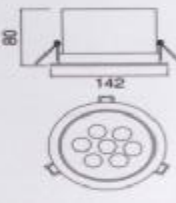
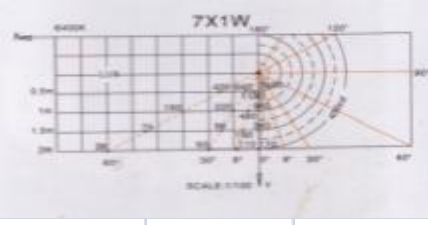
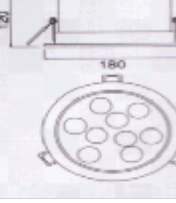
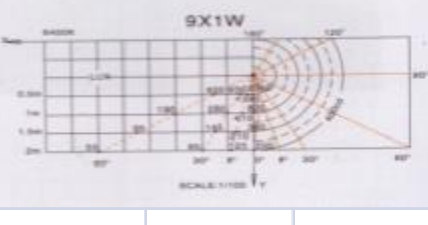
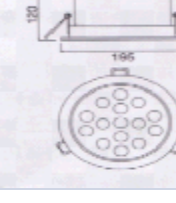
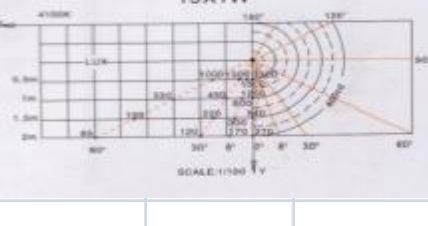
Celing Light – Down light

- High voltage low power dissipation & long endurance.
- Radiator with columnar to dissipate heat from all directions.
- High quality, low temperature rise and low light decline.
- Energy –saving and environment friendly.



POWER: 6 WATT	POWER: 7.5 WATT	POWER: 15 WATT	POWER: 30 WATT
INSTALLATION DISTANCE: 1 M×1 M INSTALLATION HEIGHT: 1.5 M AVERAGE IX UNDERGROUND: 75Ix - 100Ix	INSTALLATION DISTANCE: 1.5M×1.5M INSTALLATION HEIGHT: 1.8 M AVERAGE IX UNDERGROUND: 90Ix - 110Ix	INSTALLATION DISTANCE: 1.5M×1.5M INSTALLATION HIGH: 1.8M AVERAGE IX UNDERGROUND: 200 Ix- 250 Ix	INSTALLATION DISTANCE: 1.8M×1.8M INSTALLATION HIGH: 2.8M AVERAGE IX UNDERGROUND: 200 Ix-250 Ix

PART NUMBER	NK2-96-006/1-CA	NK2-96-008/1-CA	NK2-48-015/4-CB	NK2-24-030/4-CC
INPUT POWER	6W	7.5W	15 W	30W
LAMP FLUX	260 lm	320 lm	640LM	2400LM
VOLTAGE	90VAC-260VAC	90VAC-260VAC	90VAC-260VAC	90VAC-260VAC
CURRENT	20 mA	25mA	50mA	80mA
FREQUENCY	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
AC POWER FACTOR	45%	45%	45%	98%
DC POWER EFFICIENCY	94%	94%	94%	94%
COLOR TEMPERATURE	4500K~6500K	4500K~6500K	4500K~6500K	4500K~6500K
LIGHT SOURCE LIFE	50000	50000	50000	50000
WORKING TEMPERATURE	-40°C~ + 50°C	-40°C~ + 50°C	-40°C~ + 50°C	-40°C~ + 50°C
WORKING HUMIDITY	10%~90%	10%~90%	10%~90%	10%~90%
HOUSING & LAMPSHADE	ALUMINUM ALLOY	ALUMINUM ALLOY	ALUMINUM ALLOY	ALUMINUM ALLOY
IP RATING	IP20	IP20	IP20	IP20
SIZE	70×100	70×100	120x120	180x150
N.W	250G	250G	220G	280G

	Model:	QF - TDFW8001-1X1W-SY		
	Volts:	AC85-240V		
	Lumens:	90 LM		
	Size:	80 MM		
	Watts:	1X1W		
	Material:	ALUMINUM		
	PCS:	48		
	Pack Size:	430X430X210 MM		
	Model:	QF - TDFW1001F-3X1W-LY-FW		
	Volts:	AC85-240V		
	Lumens:	270 LM		
	Size:	130X130 MM		
	Watts:	3X1W		
	Material:	ALUMINUM		
	PCS:	24		
	Pack Size:	530X360X360 MM		
	Model:	QF - TDFW1001-3X1W-SY		
	Volts:	AC85-240V		
	Lumens:	270 LM		
	Size:	90 MM		
	Watts:	3X1W		
	Material:	ALUMINUM		
	PCS:	24		
	Pack Size:	530X360X360 MM		
	Model:	QF - TDFW1201-7X1W-SJ		
	Volts:	AC85-240V		
	Lumens:	630 LM		
	Size:	120 MM		
	Watts:	7X1W		
	Material:	ALUMINUM		
	PCS:	24		
	Pack Size:	445X300X350 MM		
	Model:	QF - TDFW1401-9X1W-SH		
	Volts:	AC85-240V		
	Lumens:	810 LM		
	Size:	140 MM		
	Watts:	9X1W		
	Material:	ALUMINUM		
	PCS:	24		
	Pack Size:	740X375X390 MM		
	Model:	QF - TDFW1601-15X1W-SJ		
	Volts:	AC85-240V		
	Lumens:	1350 LM		
	Size:	160 MM		
	Watts:	15X1W		
	Material:	ALUMINUM		
	PCS:	24		
	Pack Size:	800X405X510 MM		

Special Features:

- 1 With proprietary optical technology, high beam pattern definition and brightness uniformity;
- 2 **Unique Integrated Lens and Lampshade Design.** The lens have both light focus and protection LED protection function, avoid the brightness wastage, let the product looks more concise beauty.
- 3 **Creative High Power LED Planar Combine Packaging, Radiator and Lamp holder Integration.** Fully protect LED life and heat dissipation requirements, satisfied with the structure and design of LED Lights fundamentally, which the most distinctive features of LED Lights;
- 4 **Tremendous Energy Saving,** Used the ultra high power, high brightness LED light source ,together with the high power efficiency power supply, which can save energy **up to 80%** than the conventional incandescent lamps, under the same power consumption, the brightness is 8 times than the traditional incandescent lamps;
- 5 **No Strobe Flashing,** Working under DC, eliminate the tireless which caused by the traditional strobe flashing;
- 6 **Impact Resistance, Shock-proof, Without Ultraviolet (UV) and Infrared (IR) Radiation:** No filament and glass frames, avoid break of the traditional lamp, without harm to the human body;
- 7 **Work under Low-voltage and Low-Heat, Safe and Reliable:** The surface temperature is less than ($T_a=25^{\circ}\text{C}$ ambient temperature);
- 8 Adopting the PWM constant-current technology, with high efficiency, low heat and high precision constant current;
- 9 **Reduced Line Loss, No Pollution to Power Network:** Power factor ≥ 0.9 , THD $\leq 20\%$, EMI apply with the global universal index, reduce the power loss and transmission lines to avoid contamination of the network of high frequency interference;
- 10 High brightness efficiency, up to 80lm/w, various color temperature optional, High Color Index, Nice Coloration;
- 11 **Have a number of patents for inventions and utility model patents.**
- 12 With various certifications: CE, RoHS, and UL.

SMART high intensity LED light bulb



High intensity LED replacement light bulbs. Ideal for indoor or outdoor, park and pathway lighting, Glass 'bowl' candelabra fittings and bulkhead lighting. Screw in fittings E14, E27 and E40. Available in Pure or warm white colors. 50,000 hours working life, **Certification RoHS, CE& UL**

SMART high intensity LED light bulb (Replaces 40W to 75W bulb)



Model Name	LED HI Bulb
Model No.	HI3.2 / HI5.2
Power Consumption	3.2W = 40W Incandescent Bulb 5.2W = 75W Incandescent Bulb
Luminous Flux	240lm / 400lm
Working Voltage	85-264VAC
Color	Pure/Warm White
Lamp Size	Ø36mm
Lamp base	E27, E14

SMART high intensity LED light bulb (Replaces 100W bulb)



Model Name	LED HI Bulb
Model No.	HI13.2
Power Consumption	13.2W = 100W Incandescent Bulb
Luminous Flux	1000lm
Working Voltage	85-264VAC
Color	Pure/Warm White
Lamp Size	Ø74mm
Lamp base	E27, E14, E40

SMART high intensity LED light bulb (Replaces 150W bulb)



Model Name	LED HI Bulb
Model No.	HI20
Power Consumption	20W = 150W Incandescent Bulb
Luminous Flux	1500lm
Working Voltage	85-264VAC
Color	Pure/Warm White
Lamp Size	Ø100mm
Lamp base	E27, E40

SMART LED THE FUTRE OF THE LIGHT

FLOOD & DECORATIVE LIGHTS

High power LED floodlights offer an energy saving alternative to halogen or sodium floodlights. Ideal for lighting bill boards, building facades, and countless other commercial and domestic applications.

SMART LED floodlights are designed to replace conventional metal halide (halogen) and sodium lamps and **reduce electricity consumption** by up to two thirds over the extended design life of more than 30,000 hours.

A cast aluminum body, stainless steel fixings and toughened glass construction makes SMART LED floodlights shock and vibration proof; the epoxy powder coated paint finish ensures long life.

Superior thermal management, alternating switching power system and world leading CREE high power LED chips ensure that SMART LED floodlights deliver industry leading performance and the highest quality.

SMART high power LED floodlight

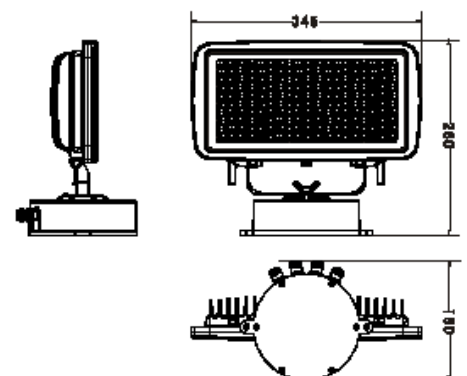
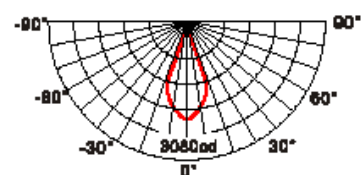
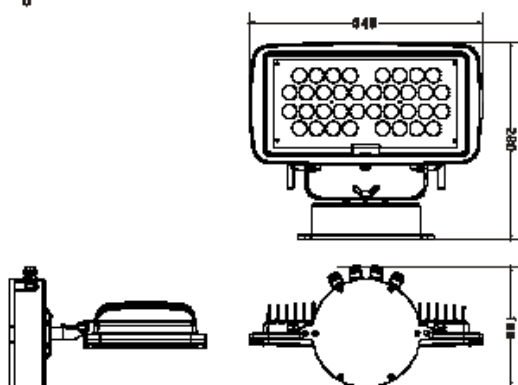
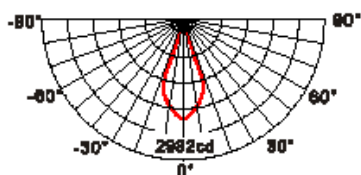
Model Name	Model No.	Power Consumption	Luminance Flux	Working Voltage	IP Rating	Color	Lamp Size mm
Flood light 50W	FL50	50W	3750lm	90-260VAC 50/60Hz	IP65	Pure White	500x375x140
Flood light 80W	FL80	80W	6000lm	90-260VAC 50/60Hz	IP65	Pure White	560x400x120
Flood light 100W	FL100	100W	7500lm	90-260VAC 50/60Hz	IP65	Pure White	560x400x120
Flood light 120W	FL120	120W	9000lm	90-260VAC 50/60Hz	IP65	Pure White	600x535x220
Flood light 150W	FL150	150W	11,250lm	90-260VAC 50/60Hz	IP65	Pure White	600x535x220
Flood light 200W	FL200	200W	15,000lm	90-260VAC 50/60Hz	IP65	Pure White	600x535x220



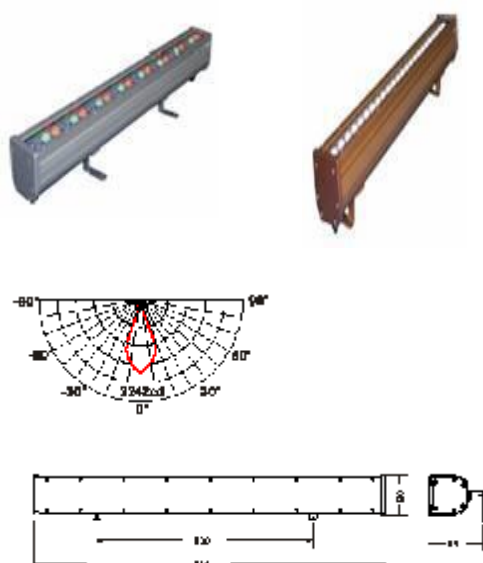
SMART LED Wall Washer Lights



Model Name	LED Wall Washer Light
Model No.	WWL
Power Consumption	36W Max.
Luminous Flux	1680lm
Working Voltage	85-264VAC
Color	Pure/Warm White , RGB & AWB
Projection Distance	15-20 m
Dimensions	345mm(L)x180mm(W)x280mm (H)
Control	One Controller DMX-512 Manages three channel wall washer (Signal Amplifier needs to be added every 90 Meters)
Certifications	RoHS, CE, ISO9000, IP65 Aluminum Alloy Housing

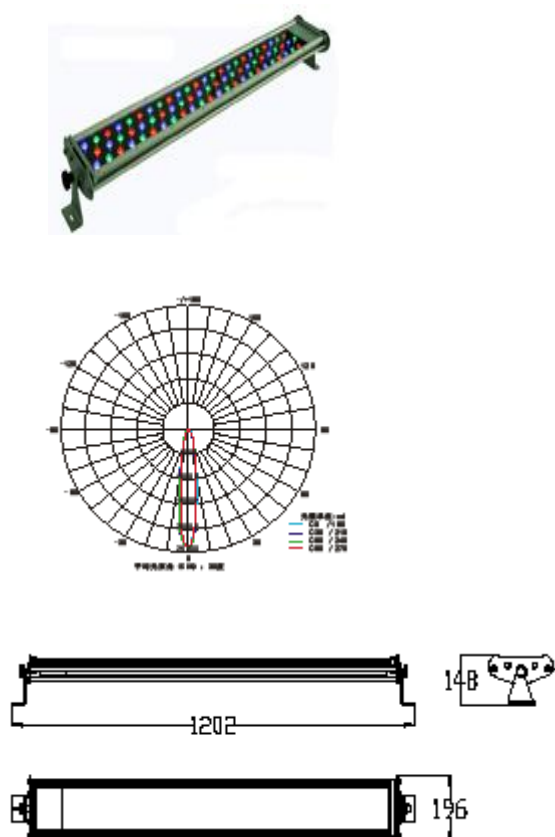


SMART LED Indoor Wall Washer Lights



Model Name	LED Indoor Wall Washer Light
Model No.	IWWL
Power Consumption	28W Max.
Luminous Flux	1680lm
Working Voltage	85-264VAC
Color	Pure/Warm White , RGB & AWB
Projection Distance	15-20 m
Dimensions	815mm(L)x90mm(W)x125mm(H)
Control	One Controller DMX-512 Manages three channel wall washer (Signal Amplifier needs to be added every 90 Meters)
Certifications	RoHS, CE, ISO9000

SMART LED Outdoor Wall Washer Lights



Model Name	LED Outdoor Wall Washer Light
Model No.	OWWL
Power Consumption	72W Max.
Luminous Flux	2,700lm
Working Voltage	85-264VAC
Color	Pure/Warm White , RGB & AWB
Projection Distance	Up to 60 m
Dimensions	1202mm(L)x196mm(W)x148mm(H)
Control	One Controller DMX-512 Manages three channel wall washer (Signal Amplifier needs to be added every 90 Meters)
Certifications	RoHS, CE, ISO9000 IP 65 Aluminum Alloy Casing, Glass Front with Beam Angle 30

REVOLUTION

ENERGY SAVING LED LIGHT PANEL

SMART LED light panel is the industry's first amalgamated flat sheet lighting unit. The SMART LED Light Sheet is a fusion of high brightness LEDs embedded within a 3D facet cut acrylic panel.

Characterized by its slender 8mm profile, light weight and stylish design, the SMART LED Revolution Light sheet as a flat light source offers a whole new world of lighting opportunities.

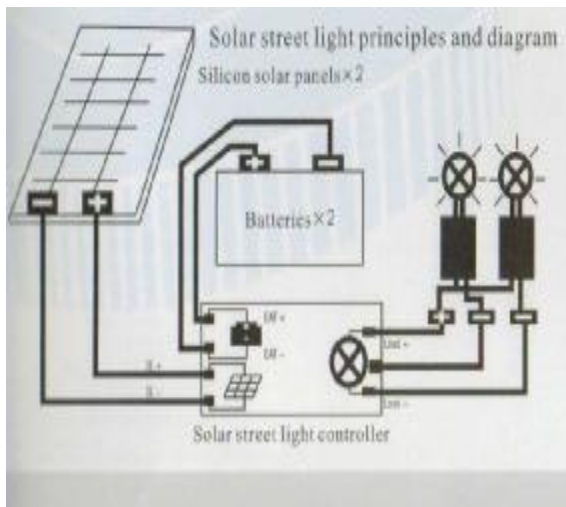
Picture	Item	Description	Voltage
	GB-PL-300-300ST	1: Item :24w led guide panel 2: led quantity :24pcs 1w high power led 3:wattage :24w 4:dimension :300*300mm 5:lumens :1050LM	AC110v/AC240v
	GB-PL-600-600ST	1: Item :56w led guide panel 2: led quantity :56pcs 1w high power led 3:wattage: 45w 4:dimension :600*600mm 5:lumens :1350LM	AC110v/AC240v
	GB-PL-300-1200ST	1: Item :56w led guide panel 2: led quantity :56pcs 1w high power led 3:wattage :45w 4:dimension :300*1200mm 5:lumens :1350LM	AC110v/AC240v

Ultimate flexibility - Outstanding performance

- ⦿ SMART LED light panels consume more than two thirds less electricity than conventional lighting.
- ⦿ SMART LED light panels can be made in any shape or size to replace almost all existing applications.
- ⦿ SMART LED light panels use high power LED light sources with a design life of over 50,000 hours.
- ⦿ SMART LED light panels are unbreakable, require zero maintenance and do not contain harmful or hazardous chemicals associated with other low energy lighting products.
- ⦿ **CUT IT, DRILL IT, SHAPE IT, GLUE IT, AND SCREW IT.** Revolution SMART LED light panels are ultimately flexible offering a natural cool white light in almost any imaginable situation.



Solar LED Street Light – SDLS



Model Name	Solar LED Street light
Model No.	SDLS
Power Consumption	56W white light
Luminous intensity	26 Lux à 6m / 15 Lux à 8m
Diameter of light cone	20x8m at 6m / 26x10m at 8m
Life Spam	>50,000 Hours / 10 years
Photovoltaic module	KC130GHT- 2 130Wp 12V charge each
Charge controller	Sunlight Morningstar 24V-10A
Battery and mast	not provided

Advantages of cost effective LED lighting for streets, crossings, parking areas, gardens and public areas compared to conventional sodium lamps:

- Completely autonomous from external power supplies
- Automatic on off function controlled by integral daylight light sensor
- Immediate lighting without pre-heating
- Cool white light without flickering
- Over 10 year LED lamp life
- Long life PV modules with 20 year production capacity
- Two high efficiency PV module
- LED lamps retain luminosity for their full life span
- In case of a single LED breakdown all other LED modules continue to work
- LED lamps are non toxic
- Low installation costs without trenches and cables
- Safe 24 volt circuit without risk of electric shock
- All components are light-weight
- Zero power supply cost



SMART Solar LED Kit components:

2 photovoltaic modules Kyocera 130 Wp (3 year guarantee)

Dimensions: 1425 X 652 X 36, performance guarantee: 20 years

1 Night/day automatic controller 24V KYOCERA photovoltaic panels

Sunlight 24V-10A (5 year guarantee)

1 Unit of SMART SDL2 LED lamp head module

2 modules LED power 56W (1 year guarantee)

Performance guarantee: 10 years

1 Galvanized steel mast head support

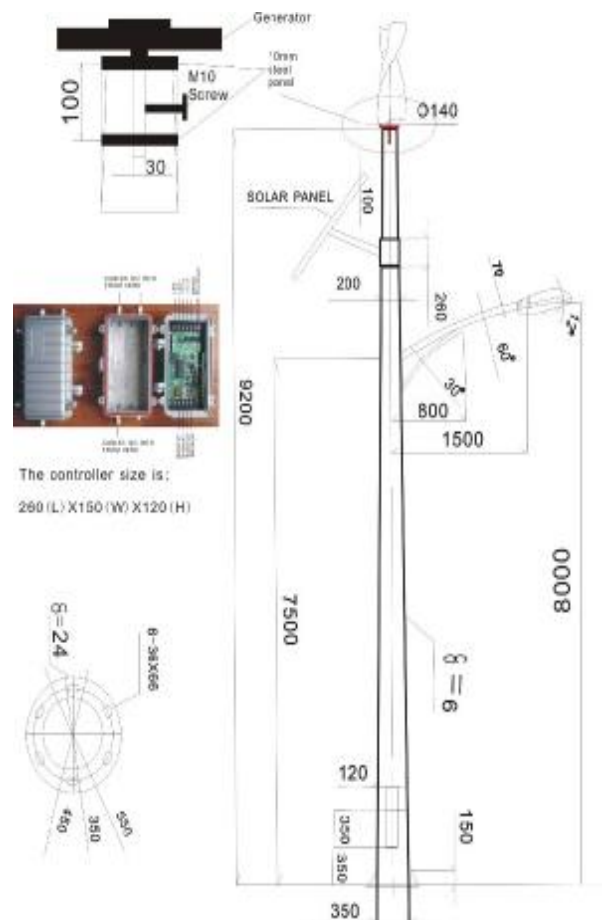


Hybrid Street Light

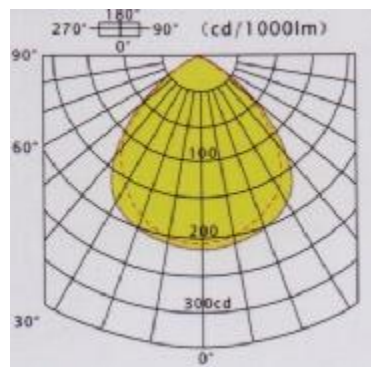
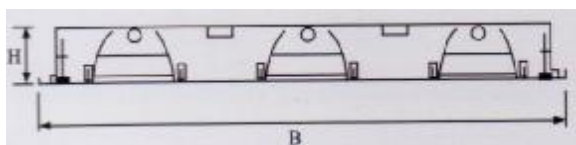
item	name of part	model/spec			quantity
1	100W spire wind turbine	NEW-V-100	include generator and blades		1
2	300W hybrid controller	NWC100	control charge 'discharge current and protect generator etc		1
3	120W solar panel	NWS60/18V	single crystal silicon		2
4	super LED light	55W	single chip		1
5	battery	100AH/12V	special for wind turbine		2
6	pole and fittings	7.2M	include solar frame		1
7	battery box	waterproof			1
8	cable and fittings				1

Note:

- The start wind speed is 2m/s and rated wind speed is 9m/s, the rated RPM of our generator is 100RPM.
- No need protect brake etc when the wind speed is more than rated wind speed can resist 60m/s strong.
- Wind, even if no sunshine and no wind, the system can continue to working for 3 days.



Ceiling – mounted T8 grid lamp panel series



Model	Spec	Long (mm)	Wide (mm)	High (mm)	Packing size (cm)	Quantities (pcs/ctn)
HYL-075	2X40W	1220	300	80	130X32X19	2
HYL-073	4X20W	610	600	80	66X63X19	2
HYL-052	4X20W	598	598	75	66X64X18	2
HYL-0881	3X40W	1198	598	85	126X63X19	2