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LED STREET LIGHT DATASHEETS

ITEM NO: SP90



Specification:

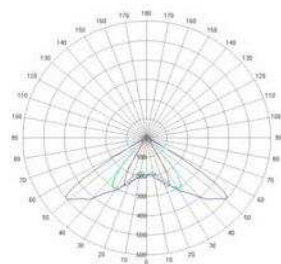
Input Voltage	85-264VAC, 12 or 24VAC/DC	Color Temperature	Pure White: 5,000 ~ 7,000 K, White White:3,000~4,000K
Frequency Range	47 ~ 63 Hz	Color Index(CRI)	Ra > 75
Power Factor(PF)	>0.9	Light Source	BRIDGELUX(Imported from USA)
Total Harmonic Distortion (THD)	<20%	Light Distribution Curve / Beam Pattern	Asymmetric (Bat Wing) / Rectangular Beam
Power Efficiency	83%	The Highest Light Intensity Angle	The Horizontal Axis: 110°, The Vertical Axis: 45°
Working Voltage	24V DC	Beam Angle	The Horizontal Axis: 120°, The Vertical Axis: 60°
LED Consumption	28 W	Junction Temperature (Tj)	70 °C ± 1 0% (Ta= 25 ° C)
Power Supply Consumption	7 W	System Resistance (Rja)	1.4 °C / W
LED Luminous Efficiency	≥80 lm/w	Working Temperature	-30 °C ~ 40 °C
LED Initial Flux	2,500 lm (Tj=25 °C)	Working Humidity	10 % ~ 90 % RH
LED Maintain Flux	2,300 lm (Tj=70 °C, Ta=25 °C)	Storage Temperature	10 °C ~ 85 °C
Lamp Output Flux	2,100 lm (Tj=70 °C, Ta=25 °C)	Working Life	> 50,000 Hrs
Lamp's Efficiency (%)	>90 %	Light Body & Lampshade Material	Aluminum Alloy and PC
Illumination (E)	(Height=6 m) ≥13 lux (Equal to HPS 33 lux) (Height=8 m) ≥7.5 lux (Equal to HPS 19 lux) (Height=10 m) ≥4.5 lux (Equal to HPS 11 lux) (Height=12 m) ≥3 lux (Equal to HPS 7.5 lux)	Lamp Base	E40
		The Dimensions(Units : mm)	∅ 90x275 mm
Effective Illuminated Area	20x8 m (Height=6 m) 26x10 m (Height=8 m) 33x13 m (Height=10 m) 40x16 m (Height=12 m)	Net Weight (kg)	1.007 kg
		IP Rating	IP 60
		Packing	1 pc/White Box, 10 pcs/Carton
		Carton Size	680 x 330 x 285 mm
		Container Q'ty (pcs)	20'Q: 4200 pcs 40'Q: 8910 pcs, 40'HQ: 10440 pcs

Curves:

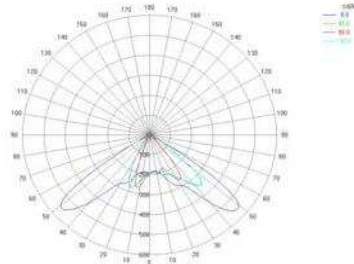
Bat-wing beam pattern of the distribution curve, also can be changed by different section's demand. Rationally control the distribution to be a rectangular beam pattern. When the installation height=12m, the beam pattern is 40x16m rectangular, and the radiation-efficiency is more than 70% in the effective 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.

◆ Light Distribution Curve

① Lamp's Plane Installation



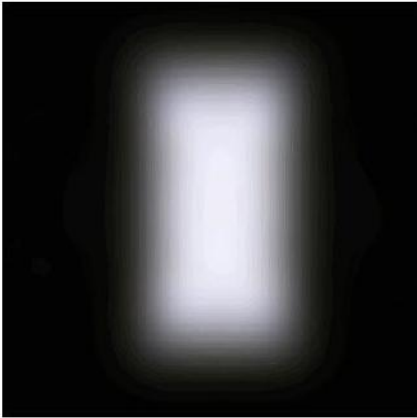
② Lamp's Inclined Installation



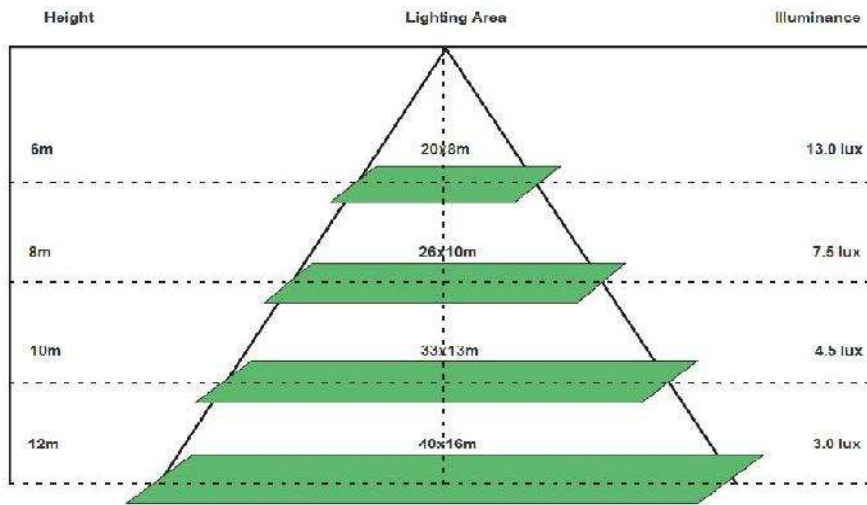
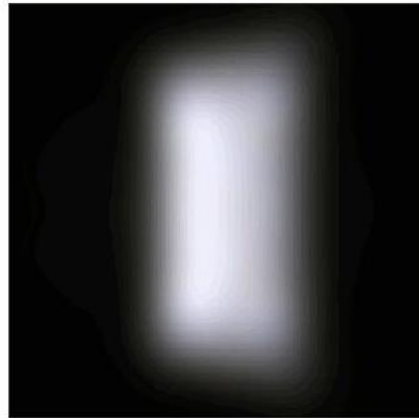
Beam Pattern:

The Beam Pattern is rectangular (rectangle), good illumination uniformity, brightness difference is very little between the spot of center and periphery. Almost no difference in the direction of extending the road completely with the continuous extension of the road, it is the ideal lighting lamps for road lighting.

Horizontal Installation



Inclined Installation



Projects:

LED technology is increasingly being used in street light applications due to its longer life and energy-saving qualities. Compared to an HPS street light, an LED street light will last up to 50,000 hours and significantly reduce light pollution. An LED Street Light will also be better equipped to withstand extreme hot and cold temperatures than an HPS Street Light, which makes it suited for outdoor use. Moreover, LED Street Light has a 100 to 1,000 times faster response, even no delay, which results in sharp, pure color. See where we installed our LED Street Light, choose LED Street Light from our LED today and experience the future of light!



[LED Street Light SP90 in New Zealand](#)



[LED Street Light SP90 in Brazil](#)



[LED Street Light SP90 in UK](#)



[LED Street Light SP90 in Chile](#)

Comparison:		
Item	High Pressure Sodium	Our 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

- Features:**
- 1.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;
 - 2.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;
 - 3.Creative Design of the Radiator and Lampholder Integration - Fully protect LED life and heat dissipation requirements, satisfied with the structure and design of LED Lights fundamentally, with the most distinctive features of LED Lights(see attached picture);
 - 4.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;
 - 5.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;
 - 6.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;
 - 7.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
 - 8.No Light Pollution - Light Distribution designed for road lighting, in addition to illuminate the path and will not illuminate the road outside the region. Eliminate the interference signal by the residents of the
 - 9.No High-voltage, No Dust Adsorption - Eliminate the high-voltage adsorb the dust cause the lampshade become dark, reduce the brightness;
 - 10.No High-temperature, No Aging Yellow Lampshade - Eliminate baking the traditional lampshade which cause aging yellow, shortened life expectancy and decrease the brightness;
 - 11.Wide Working Voltage - The brightness and working life will be reduced if the working voltage change more than 7% for the traditional streetlight, but it will not influence our LED Streetlight at all;
 - 12.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;
 - 13.No Strobe - Eliminate the visual fatigue which caused by the strobe lights of the traditional street lamps;
 - 14.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;
 - 15.High Color Index, Nice Coloration - To show the true colors and more brighter;
 - 16.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
 - 17.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 50%-80% than the conventional
 - 18.Long Life, Up To 50,000 Hours - (Working for 10 hours a day, can be used for more than 13 years), is 5-10 times working life than a traditional sodium or mercury lamp;
 - 19.Green and Environmental Protection - no lead, no mercury, no environmental pollution;
 - 20.Universal Input Voltage - 85-264VAC full voltage range constant, constant-current PWM technology, high efficiency, low-heat, high-precision constant current;
 - 21.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
 - 22.Work Under Low-voltage and Low-Heat, Safe and Reliable - LED junction temperature can be controlled under an ideal temperature ($T_J < 70^\circ\text{C}$, $T_a = 25^\circ\text{C}$ ambient temperature);
 - 23.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
 - 24.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
 - 25.Have a number of patents for inventions and utility model patents