

Brief Introduction

LED Street Light, is a new, energy-saving product that utilizes high power led's as light source, as one of the earliest China LED Street Light Manufacturers, Suppliers and Exporters, we are the first China LED Street Light factory who invented our BBE 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.



Model Name	LED Street Light
Model No.	SP90
LED Power Consumption	23W
Luminous Flux	2,150lm
Input Voltage	100-240VAC
Life Spam	>50,000 Hours
IP Rating	IP60
Certificates	CE, RoHS, UL Pending
MOQ	5 pcs
Payment Term	T/T, L/C
Warranty	12 Months

Specification

Item \ Model	SP90
Input Voltage	AC 100 ~ 240 V
Frequency Range	50/60 Hz
Power Factor (PF)	>0.9
Total Harmonic Distortion (THD)	<20%
Power Efficiency	85 %
Working Voltage	24VDC
LED Consumption	23 W
Power Supply Consumption	5 W
LED Luminous Efficiency	≥140 lm/w
LED Initial Flux	3,220 lm (Ta=25°C)
LED Maintain Flux	2,400 lm (Tj=78°C, Ta=25°C)
Lamp Output Flux	2,150 lm (Tj=78°C, Ta=25°C)
Lamp's Efficiency (%)	>90 %

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)
Effective Illuminated Area	20×8 m (Height=6 m) 26×10 m (Height=8 m) 33×13 m (Height=10 m) 40×16 m (Height=12 m)
Color Temperature	Pure White: 5,000~5,800 K, White White:4,000~4,500K
Color Index(CRI)	Ra>65
Light Source	BBE Emitter (1 Watt)
Light Distribution Curve / Beam Pattern	Asymmetric (Bat Wing) / Rectangular Beam
The Highest Light Intensity Angle	The Horizontal Axis: 110°, The Vertical Axis : 45°
Beam Angle	The Horizontal Axis: 120°, The Vertical Axis : 60°
Junction Temperature (Tj)	78°C ± 10% (Ta=25°C)
System Resistance (Rja)	1.4°C/W
Working Temperature	- 30°C~50 ° C
Working Humidity	10 % ~ 90 % RH
Storage Temperature	10°C~90°C
Working Life	> 50,000 Hrs
Light Body & Lampshade Material	Aluminum Alloy and PC
Lamp Base	E39 / E40
The Dimensions(Units : mm)	∅ 90x275 mm
Net Weight (g)	1 kg
IP Rating	IP 60

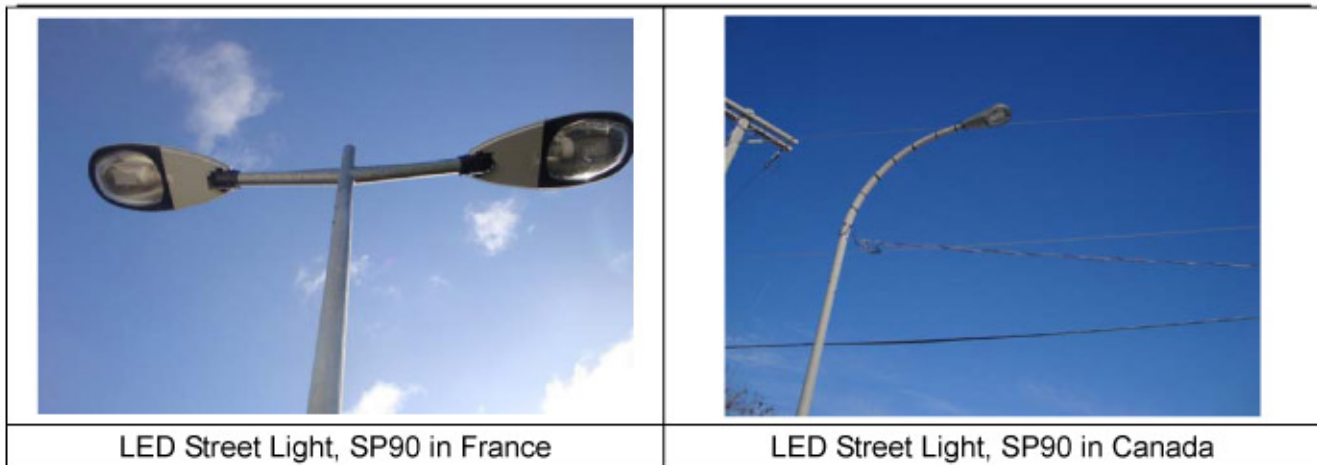
Projects Display



LED Street Light, SP90 in USA



LED Street Light, SP90 in Brazil



Detailed Features

1	<p>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;</p>
2	<p>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;</p>
3	<p>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);</p>
4	<p>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;</p>
5	<p>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;</p>
6	<p>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;</p>
7	<p>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;</p>
8	<p>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 light into the rest room;</p>
9	<p>No High-voltage, No Dust Adsorption - Eliminate the high-voltage adsorb the dust cause the lampshade become dark, reduce the brightness;</p>
10	<p>No High-temperature, No Aging Yellow Lampshade - Eliminate baking the traditional lampshade which cause aging yellow, shortened life expectancy and decrease the brightness;</p>
11	<p>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 Street Light at all;</p>
12	<p>Start Without Delay - Reach the normal brightness and do not have to wait when switch on,</p>

	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 temperature of the mercury lamp which cause the depressed mood, observers will feel more comfortable;
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 sodium and mercury lamps;
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 \geq 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;
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 can also be combined. To achieve the best cost performance and high reliability customers;
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 will be replace by the 100W LED lamp, the luminous efficiency will reach 300lm/w eventually;
25	Have a number of patents for inventions and utility model patents.

Comparison

Items	High Pressure Sodium	BBE 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



Shenzhen Bang-Bell Electronics Co., Ltd.