



NSRL-005 E40 100W Specification



- NSRL-005 By using the world groundbreaking Pipe Cooling Technology, we achieved a better coolant system than regular aluminium. Optimised fluid evaporation and condensation to transfer heat and apply our thermal controlled air-cooling technology, our E40 LED light is more powerful, compact, bright and has better thermal dissipation.
- Unique Integrated lens and cover design. Special arrangement of the lens provides a better light focus and greater light efficiency. This special design also reduced the weight of the LED lamp system, making it extremely compact and easy to fix.
- The first E40 designed by controlling the temperature of high power LED street lights. Temperature controlling systems protect the LED light and achieve a longer life-cycle. When the temperature is higher than 70°C (+/-5°C), the temperature controlling system is active to provide protection by lowering the current by 50%. When the temperature drops to 50°C, the current will be adjusted back to normal.
- Using a common standard base, which is adjustable to a full 360 degree angle, it can be rotated as needed to any angle after the lamp is tightened to achieve the best lighting position.
- With its light weight and compact appearance, our high-power LED street light can effectively reduce the air resistance and its weight on the pole, increasing the safety factor.
- Supplied through an AC-DC driver, gives a stable current and a continuous temperature control system. The intelligent controlling system embedded in our LED lights will accurately provide continuous current even when the power supply is unstable.

- Wide Working Voltage (85-260 VAC) Use PWM technic, efficiently, lower thermal, more accurate.
- Non-polluting to the power supplying network. Power factor ≥ 0.9 , THD $\leq 20\%$, EMI is up to par with the global standard. Reducing energy loss and avoiding high frequency pollution to the power network.
- Combined with Solar Energy, our LED streetlight is highly energy-efficient and always works reliably at low voltages. Also can combined Solar Energy with main supply according to your local Solar Energy source.
- High Luminous efficiency. The LED's Luminous efficiency is more than 90 lm/w, and it can reach as high as 200 lm/w when LED brightness increases dramatically. At this point, HPS 400W will be directly replaced by 100W LED streetlight, and it will achieve even better energy savings when it reaches a level of 300lm/w.

● Typical Applications:

- Superhighway, roadway, pathway, garden, Park, stadium etc. It is also used for solar power directly.





Technologic Parameter

Input Voltage	36VDC
Power Efficiency	>95%
Light Source	Bridgelux 3W Warm wite High Power LED
Working Voltage	36VDC
Power Consumption (Bulb/LED)	100W
Power Supply + Fan Consumption	15-20W
LED Luminous Efficiency	140 lm/w
LED Initial Flux(Instant on)	7,560 lm (Tj=25°C)
LED Lamp Maintain Flux	7,000 lm (Tj=70°C,Ta=25°C)
Lamp's Efficiency (%)	>90 %
Color Temperature standard: Warm White	Warm White: 3,000 ~ 3,500 K
Nature White	Neutral White: 4,000~4,500 K
Cool White	Daylight White: 5,500~7,000K
Color Index(CRI)	Ra>80
Light Source/Count	54PCS High Power 3 Watt LED Lamp Emitter
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: 150°, The Vertical Axis: 60°
Junction Temperature (Tj)	70 ° C ± 1 0% (Ta= 25 ° C)
System Resistance (Rja)	1.4 ° C / W
Working Temperature	- 40 ° C ~ +50 ° C
Working Humidity	10 % ~ 90 % RH
Storage Temperature	10 ° C ~ 85 ° C
LED Emitter Life	50,000 Hours
LED Lamp (Light Bulb) Life	35,000 Hours
Lamp Body & Lens Material	Aluminum Alloy and PC(PMMA)
Lamp Base	E40 Mogul Base
The Dimensions(Units : mm)	∅ 105x 285 mm
N. W / G.W (g)	1.2 Kg /1.38 Kg
IP Rating	IP 30
Packing	1 pcs/White Box, 10 pcs/Carton
Carton Size: single piece / 10pieces	335 x 125 x 125 / 635 x 350 x 280 mm
Replaces	High Pressure Sodium and Metal Halide 200W~300W

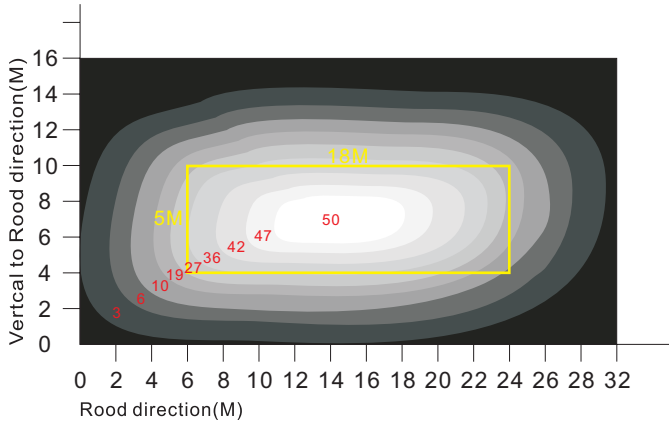
Illumination and Beam Pattern

Illumination (E)	Effective Lighting Area
(Height=6 m) ≥ 50 lux	18×5 m (Height=6 m)
(Height=8 m) ≥ 29.2 lux / (Height=9 m) ≥ 23 lux	25×7 m (Height=8 m)
(Height=10 m) ≥ 18 lux	30×8 m (Height=10 m)
(Height=12 m) ≥ 13 lux	36×10 m (Height=12 m)

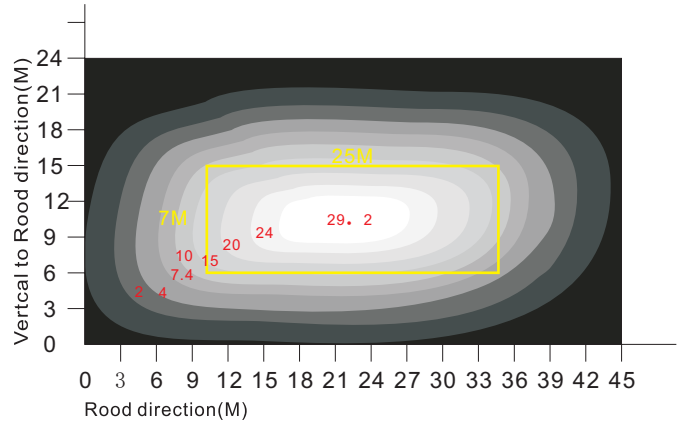




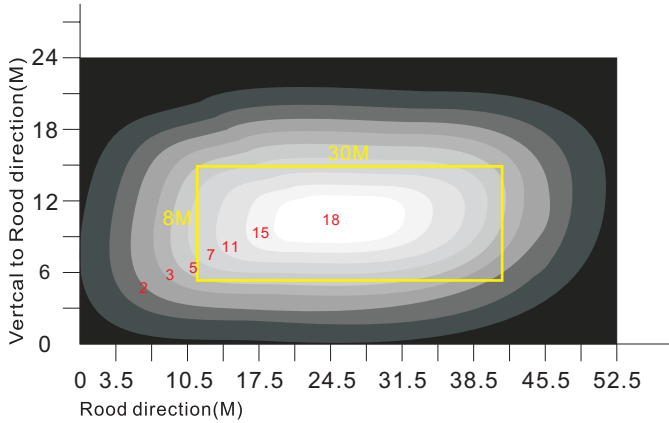
Illuminance Distribution



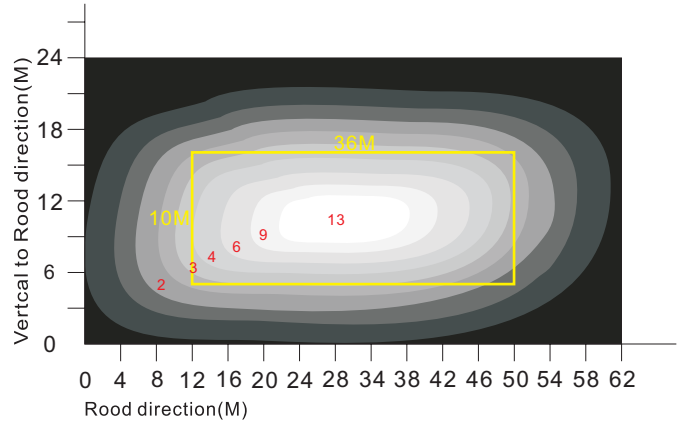
Lamp height:6M
 The effective lumination area can be realized just as the yellow rectangular area indicated ,18M*5M.
 Average lumination: 43Lux.
 Road surface evenness ratio:68%



Lamp height:8M
 The effective lumination area can be realized just as the yellow rectangular area indicated ,25M*7M.
 Average lumination: 22Lux.
 Road surface evenness ratio:68%



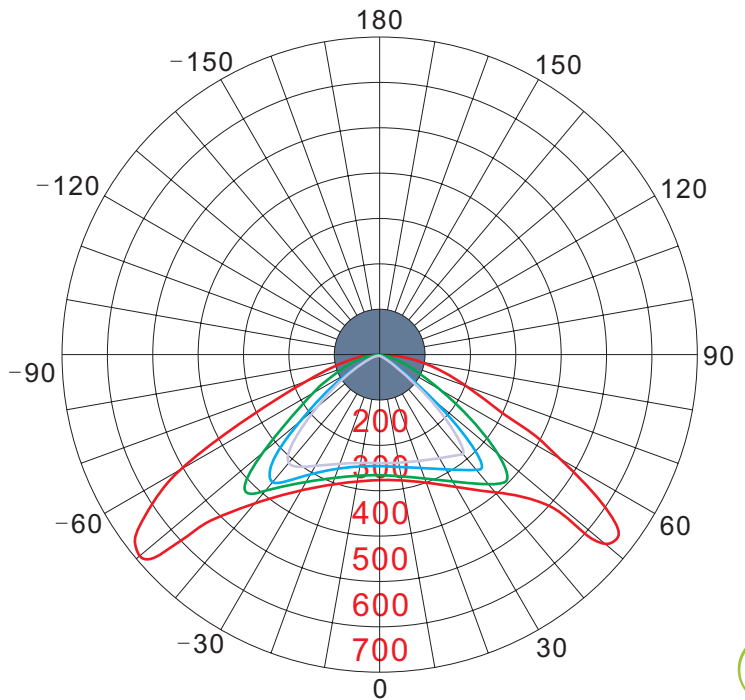
Lamp height:10M
 The effective lumination area can be realized just as the yellow rectangular area indicated ,30M*8M.
 Average lumination: 13Lux.
 Road surface evenness ratio:68%



Lamp height:12M
 The effective lumination area can be realized just as the yellow rectangular area indicated ,36M*10M.
 Average lumination: 8Lux.
 Road surface evenness ratio:68%

Light Distribution Curve

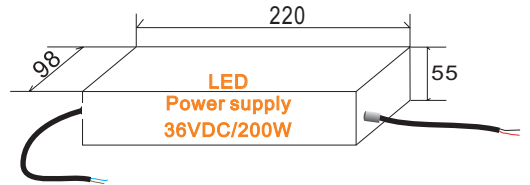
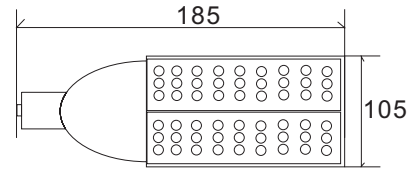
- Cd/kLm
- C0 /180
 - C30 /210
 - C60 /240
 - C90 /270





Dimensioned drawing

Unit: mm



Wiring diagram

