

## **NeoBulb Avenue AC 60W (White)-for Street Lighting Application**



**NeoBulb Avenue 60** is a LEDs outdoor lighting device associating six ultra-high-power NeoPac Light Engines coupled with narrow or wide or asymmetric secondary optics. **NeoBulb Avenue 60** offers ultra high brightness with narrow, wide & asymmetric beam patterns for street lighting application. It is available in two different colors such as white & warm white. Available in different wattage, it can be used both in AC and DC operation either with city power or solar power application. It is perfect for minor road, access roads, city streets and amenity or security lighting. It could save substantial energy and reduce CO2 emission as compared to conventional Mercury or High pressure Sodium street lanterns.

**NeoBulb Avenue** Series as well as entire NeoBulb product lines are ingeniously engineered LED lighting devices that are designed based on the proprietary NeoPac Universal Platform (NUP). Empowered by this structural LED technological platform, all NeoBulb products can operate at ultra-high power with high luminous flux, low junction temperature ( $T_j$ ) and have outstanding performance with long predictable reliable life.

### ■ **Features:**

- Applications: from minor roads to city streets, amenity or security lighting
- Extra-high-power LED emitters
- High performance optical system
- Excellent thermal management
- Proprietary NeoPac<sup>®</sup> Universal Platform
- Excellent aesthetic design and durable construction
- Narrow or wide or Asymmetric beam pattern
- Long useful life ( > 50,000 hours )
- Excellent luminaire efficiency > 75-90 %
- IP65

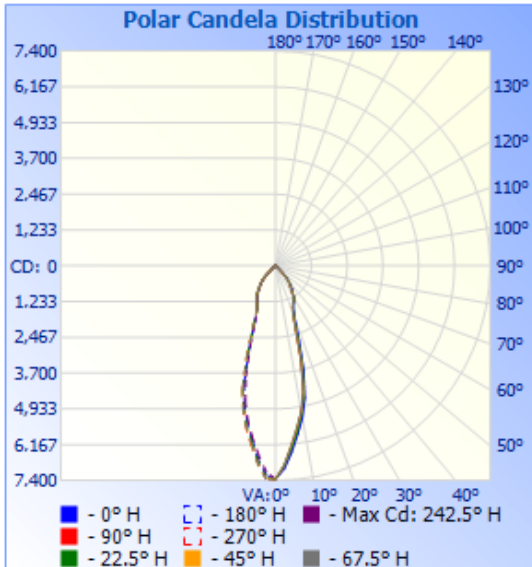


## ■ Specifications

| Items                                       | Narrow Beam  | Wide Beam  | Asymmetric Beam  |
|---|--|--|--|
| Voltage Range                               | AC 100~ 240 V, 50 ~ 60 Hz                              | AC 100~ 240 V, 50 ~ 60 Hz                              | AC 100~ 240 V, 50 ~ 60 Hz                                    |
| Power Efficiency                            | 82 %   | 82 %   | 82 %   |
| LED-Power Consumption                       | 60 W   | 60 W   | 60 W   |
| System Power Consumption                    | 73 W   | 73 W   | 73 W   |
| LEDs Initial Luminous Flux                  | 3,600 lm ( T <sub>j</sub> =25°C )                      | 3,600 lm ( T <sub>j</sub> =25°C )                      | 3,600 lm ( T <sub>j</sub> =25°C )                            |
| LEDs Maintained Luminous Flux               | 3,385 lm ( T <sub>j</sub> =55°C,T <sub>a</sub> =25°C ) | 3,385 lm ( T <sub>j</sub> =55°C,T <sub>a</sub> =25°C ) | 3,385 lm ( T <sub>j</sub> =55°C,T <sub>a</sub> =25°C )       |
| Lighting Fixture Luminous Flux              | 3,045 lm( T <sub>j</sub> =55°C,T <sub>a</sub> =25°C )  | 2,880 lm( T <sub>j</sub> =55,T <sub>a</sub> =25°C )    | 2,710 lm ( T <sub>j</sub> = 55 ° C, T <sub>a</sub> =25 ° C ) |
| Luminaire( Luminance) Efficiency            | > 90 %   | 85 %   | 75 %   |
| Max. Illuminance (E <sub>max</sub> )        | > 294 lux ( @ 5 m )                                    | > 66 lux ( @ 5 m )                                     | > 34 lux ( @ 5 m )   |
| Correlated Color Temperature                | 5000 ~ 7000 K  | 5000 ~ 7000 K  | 5000 ~ 7000 K  |
| CRI ( Color Rendering Index )               | > 75   | > 75   | > 75   |
| Light Source                                | NeoPac® Emitter( 10 Watt )                             | NeoPac® Emitter( 10 Watt )                             | NeoPac® Emitter(10 W)  |
| Beam Pattern / Beam Angle                   | Narrow (26°)   | Wide ( 80° )   | Asymmetric ( 135° )  |
| Junction Temperature ( T <sub>j</sub> )     | 55°C ± 1°C (T <sub>a</sub> = 25°C)                     | 55°C ± 1°C (T <sub>a</sub> = 25°C)                     | 55°C ± 1°C (T <sub>a</sub> = 25°C)                           |
| Sys. Thermal Resistance ( R <sub>ja</sub> ) | 0.5°C/ W   | 0.5°C/ W   | 0.5°C/ W   |
| Housing Ambient Temp.                       | 40° C(T <sub>a</sub> =25° C)                           | 40° C(T <sub>a</sub> =25° C)                           | 40° C(T <sub>a</sub> =25° C)                                 |
| Operating Temp.( Ambient )                  | - 30°C ~ 40°C  | - 30°C ~ 40°C  | - 30°C ~ 40°C  |
| Humidity                                    | 10 % ~ 90 % RH   | 10 % ~ 90 % RH   | 10 % ~ 90 % RH   |
| Storage Temp.                               | 10°C ~85°C   | 10°C ~85°C   | 10°C ~85°C   |
| Useful Life                                 | > 50,000 Hrs   | > 50,000 Hrs   | > 50,000 Hrs   |
| Case  | Mg & Al structure                                      | Mg & Al structure                                      | Mg & Al structure  |
| Dimensions( mm)                             | 545 ( L ) X 310 ( W ) X133(H)                          | 545 ( L ) X 310 ( W ) X133(H)                          | 545 ( L ) X 310 ( W ) X133(H)                                |
| Net Weight (Approx.)                        | 12.5 kg  | 12.5 kg  | 12.5 kg  |

■ **Photometric Data**

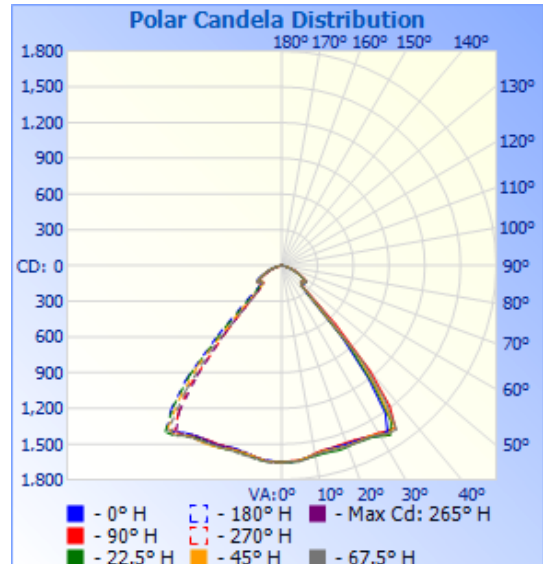
◆ **Narrow Beam Pattern (26°)**



**Flood Summary**

|              | Efficiency | Lumens  | Horizontal Spread | Vertical Spread |
|--------------|------------|---------|-------------------|-----------------|
| Field (10%): | 87.5%      | 2,932.4 | 80.1              | 80.1            |
| Beam (50%):  | 36%        | 1,206.9 | 31                | 31.2            |
| Total:       | 99.7%      | 3,342.2 |                   |                 |

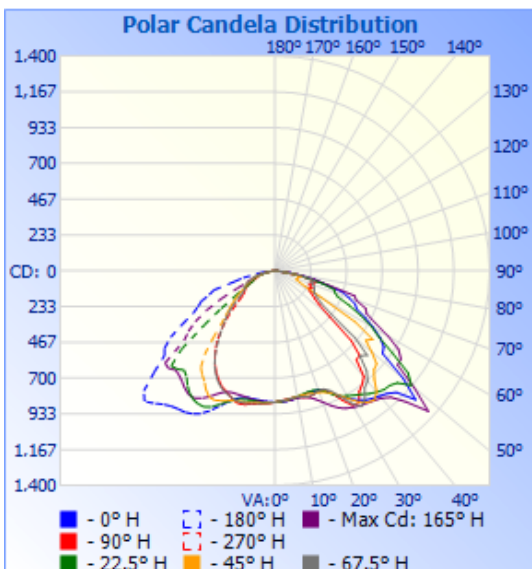
◆ **Wide Beam Pattern (80°)**



**Flood Summary**

|              | Efficiency | Lumens  | Horizontal Spread | Vertical Spread |
|--------------|------------|---------|-------------------|-----------------|
| Field (10%): | 95.1%      | 2,857.0 | 115.3             | 124             |
| Beam (50%):  | 78%        | 2,343.7 | 55.6              | 77.7            |
| Total:       | 99.9%      | 3,001.5 |                   |                 |

◆ **Asymmetric Beam Pattern (135°)**



**Flood Summary**

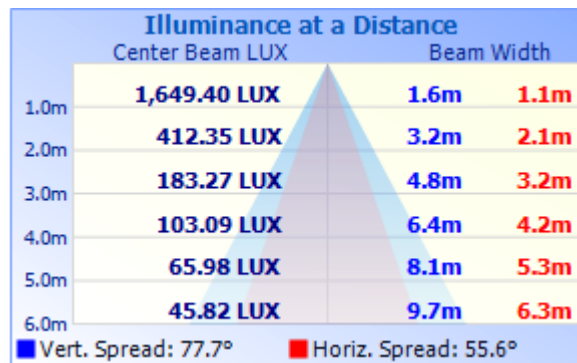
|              | Efficiency | Lumens  | Horizontal Spread | Vertical Spread |
|--------------|------------|---------|-------------------|-----------------|
| Field (10%): | 97.7%      | 2,891.6 | 140.4             | 162.6           |
| Beam (50%):  | 71.3%      | 2,110.9 | 59.1              | 128.1           |
| Total:       | 99.9%      | 2,957.9 |                   |                 |

## ■ Illuminance Distribution Vs. Distance

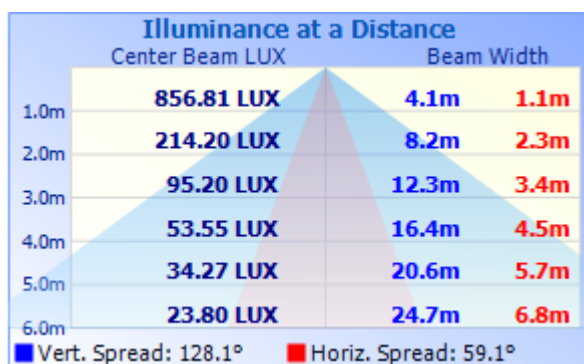
### ◆ Narrow Beam (Max.)Distribution



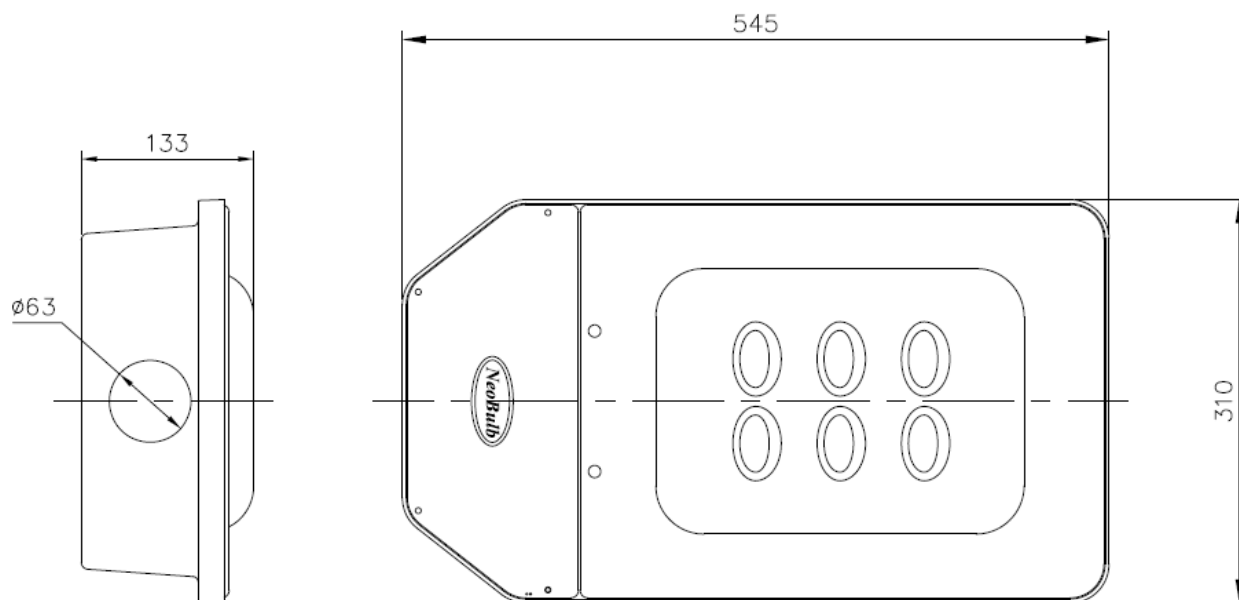
### ◆ Wide Beam (Max.)Distribution



### ◆ Asymmetric Beam (Max.)Distribution



■ **Drawings:**



**Remark:**

1. Deviation +/- 10 % for all listed data.

Dimensional Units: mm

1. Saturation Time in Natural Convection: 2 Hrs.