

## **NeoBulb Boulevard Pro 102 (Mixing Warm)- for Street Lighting Application**



**NeoBulb Boulevard Pro 102** is LEDs outdoor lighting device associating twelve ultra-high-power NeoPac Light Engines coupled with narrow or wide or asymmetric secondary optics. **NeoBulb Boulevard** offers ultra high brightness with narrow, wide and asymmetric beam patterns for street/flood lighting application. It is available in two different colors such as white & warm white. Available in different wattage, it is perfect for streets, traffic routes, building facades, perimeters, car parking and advertising billboards. It could save substantial energy and reduce CO2 emission as compared to conventional Mercury or High pressure sodium street lanterns.

**NeoBulb Boulevard** 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:**

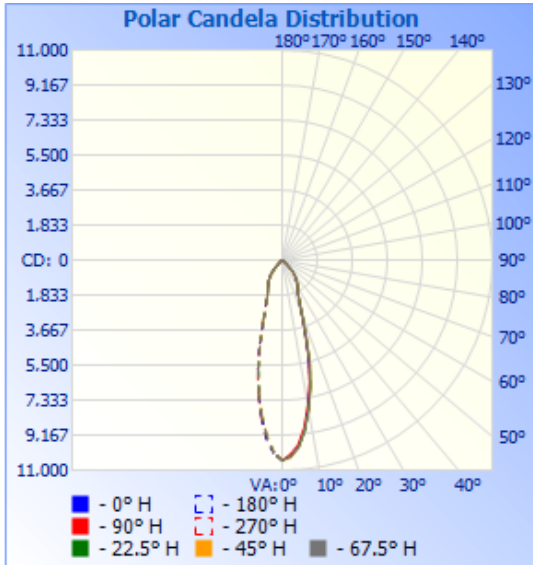
- Applications : streets, traffic routes, building facades, perimeters, car parking and advertising billboards
- LEDs Light Source: 6x10W White Emitter + 6x7W Amber LEDs Emitter
- Extra-high-power LED emitters
- High performance optical system
- Excellent thermal management
- Proprietary NeoPac<sup>®</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~ 300 V, 50 ~ 60 Hz	AC 100~ 300 V, 50 ~ 60 Hz	AC 100~ 300 V, 50 ~ 60 Hz
Power Efficiency	82 %	82 %	82 %
LED-Power Consumption	102 W( Power Factor >=0.9 )	102 W( Power Factor >=0.9 )	102 W( Power Factor >=0.9 )
System Power Consumption	125 W	125 W	125 W
LEDs Initial Luminous Flux	5,490 lm( T <sub>j</sub> =25°C )	5,490 lm( T <sub>j</sub> =25°C )	5,490 lm( T <sub>j</sub> =25°C )
LEDs Maintained Luminous Flux	4,940 lm(T <sub>j</sub> =60°C,T <sub>a</sub> =25°C)	4,940 lm(T <sub>j</sub> =60°C,T <sub>a</sub> =25°C)	4,940 lm(T <sub>j</sub> =60°C,T <sub>a</sub> =25°C)
Lighting Fixture Luminous Flux	4,445 lm(T <sub>j</sub> =60°C, T <sub>a</sub> =25°C)	4,200 lm(T <sub>j</sub> =60°C, T <sub>a</sub> =25°C)	3,955 lm(T <sub>j</sub> =60°C, T <sub>a</sub> =25°C)
Luminaire( Luminance) Efficiency	> 90 %	> 85 %	> 75 %
Max. Illuminance (E <sub>max</sub> )	> 164 lux ( @ 8 m )	> 34 lux ( @ 8 m )	> 17 lux ( @ 8 m )
Correlated Color Temperature	2700 ~4000K	2700 ~4000K	2700 ~4000K
CRI ( Color Rendering Index )	> 65	> 65	> 65
Light Source	NeoPac <sup>®</sup> Emitter (7&10 W)	NeoPac <sup>®</sup> Emitter (7&10 W)	NeoPac <sup>®</sup> Emitter (7&10 W)
Beam Pattern / Beam Angle	Narrow/ 26°	Wide/80°	Asymmetric/ 135°
Junction Temperature ( T <sub>j</sub> )	50°C ± 1°C ( T <sub>a</sub> = 25°C )	50°C ± 1°C ( T <sub>a</sub> = 25°C )	50°C ± 1°C ( T <sub>a</sub> = 25°C )
Sys. Thermal Resistance ( R <sub>ja</sub> )	0.25°C / W	0.25°C / W	0.25°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	Die-cast Aluminum	Die-cast Aluminum	Die-cast Aluminum
Dimensions( mm)	715( L ) X 445( W) X138(H)	715( L ) X 445( W) X138(H)	715( L ) X 445( W) X138(H)
Net Weight (Approx.)	24 kg	24 kg	24 kg

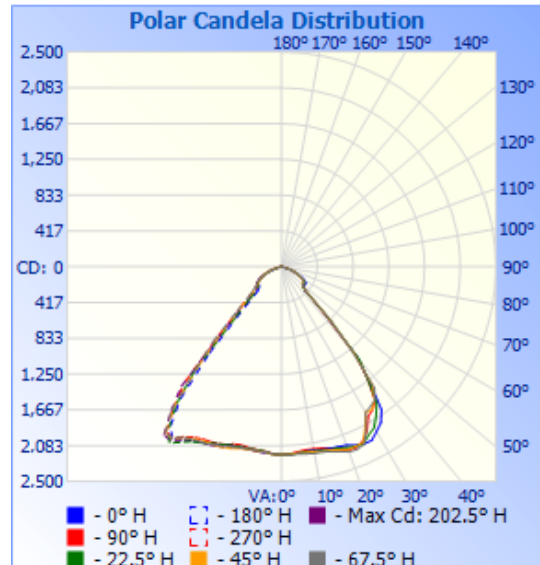
**■ Photometric Data**

**◆ Narrow Beam Pattern (26°)**



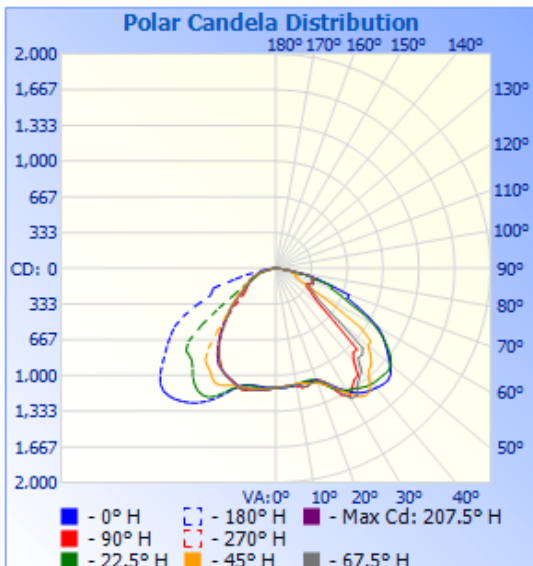
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	83.4%	3,712.1	76.3	76.7
Beam (50%):	33%	1,466.8	28.9	29
Total:	99.6%	4,431.3		

**◆ Wide Beam Pattern (80°)**



	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	95%	3,989.5	117.2	126.3
Beam (50%):	76.3%	3,203.2	57.7	78.5
Total:	99.9%	4,196.3		

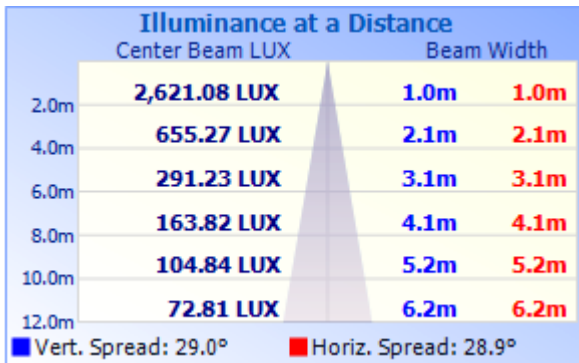
**◆ Asymmetric Beam Pattern (135°)**



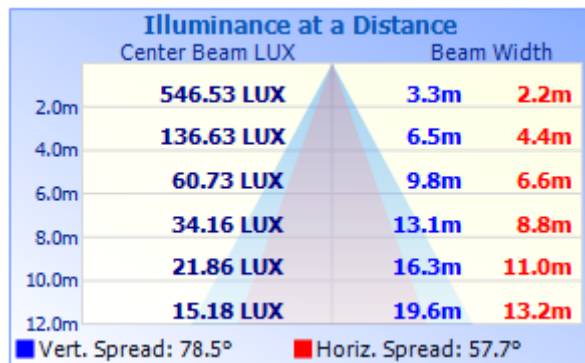
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	98.1%	3,878.5	142.4	161.2
Beam (50%):	75.1%	2,969.9	59	133
Total:	100%	3,955.2		

■ **Illuminance Distribution vs. Distance**

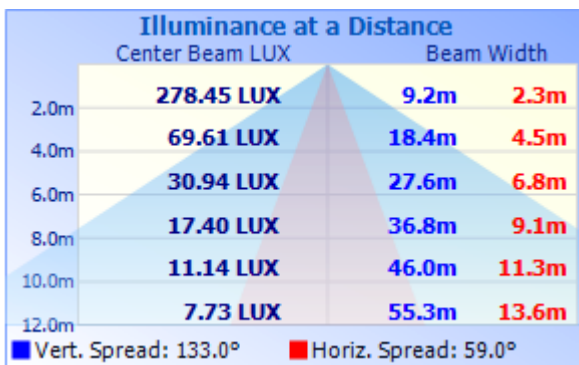
◆ **Narrow Beam (Max.) Distribution**



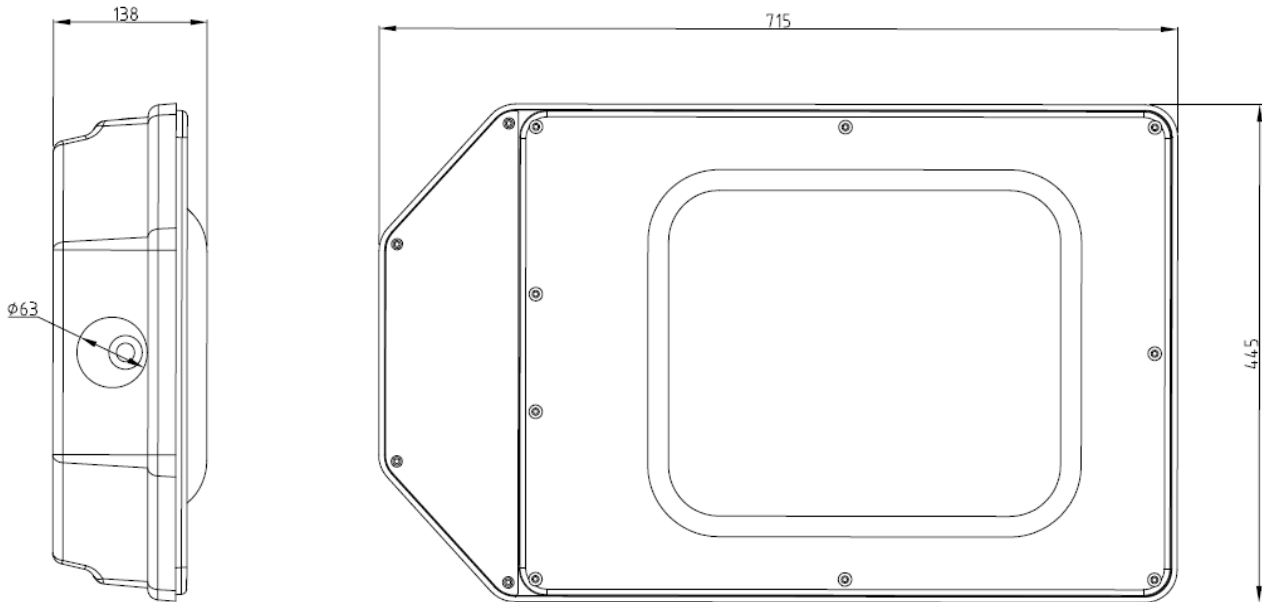
◆ **Wide Beam (Max.) Distribution**



◆ **Asymmetric Beam (Max.) Distribution**



■ **Drawings:**



**Remark:**

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

Dimensional Units: mm

1. Saturation Time under Natural Convection: 3 Hrs.