

Project:	
Catalog Number:	
Notes:	

# **Deneb**

### HIGH-BAY LUMINAIRES FOR COMMERCIAL AND INDUSTRIAL BUILDINGS

### **FEATURES**

- High Efficiency: Delivers 140lm/W light.
- Versatile Light Distribution: Offers multiple options, including a dotted lens for superior glare control.
- Robust Protection: Features IP66, IP69K, and IK08 for a dustproof clean fixture.
- Corrosion Category C3: Suitable for medium atmospheric corrosivity; ideal for food processing and industrial settings.
- Flexible Installation & Sleek Design: Boasts a beautiful, lightweight (approx. 400mm diameter) design with eye hook, eye bolt, and hanging pipe options.



### **REGULATORY QUALIFICATIONS**

- All variations are DLC-listed
- ETL-listed





### **APPLICATIONS**

- Food Processing Plants
- Warehouses
- Factories
- Pharmaceutical Manufacturing Facilities
- Chemical Facilities
- Beverage Processing
- Poultry and Meat Processing
- Food Production



# **DENEB HIGH-BAY**

TECHNICAL SPECIFICATIONS					
Model No.	DNB-100	DNB-120 DNB-15		DNB-200	
Power Consumption (±5%)	100W	120W	150W	200W	
Power Supply	SOSEN				
Input Voltage	120V-277V / 277V-480V, 50/60Hz				
Power Factor	>0.95				
Control	Dimmable				

OPTIC SPECIFICATIONS				
LED Type	Seoul Chip			
Luminous Flux (±10%)	14,000lm	16,800lm	21,000lm	28,000lm
Efficacy (lm/W) (5000K Ra80)	140lm/W			
Correlated Color Temperature	5000K (3000K, 4000K optional)			
Color Rendering Index	Ra80			
Beam Angle	H00129 / H00125 / H00128			



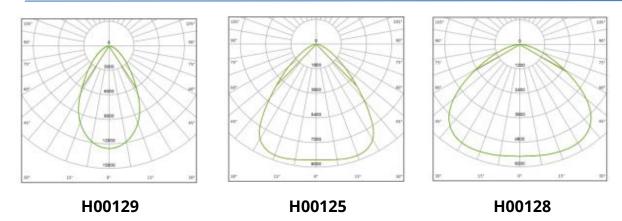
# **DENEB HIGH-BAY**

MOUNTING AND PRODUCT DIMENSIONS			
Product Dimension (mm/inch)	398×211mm (15.66" x 8.3")		
Luminaire Net Weight (kg/lbs)	4.66±0.3kg (10.27±0.66Lbs)		
Mounting Option	Eye Bolt, Eye Hook, Pipe Mount		
Material	Aluminum alloy		
Lens	Polycarbonate lens		
Fixture Color	White		
IK Rating	IK08		
IP Rating	IP66 & IP69K		

LIFESPAN AND WARRANTY			
Operating Temperature	-30°C to +45°C (-22°F ~ 113°F)		
Warranty	5 Years		



# **PHOTOMETRIC DATA**



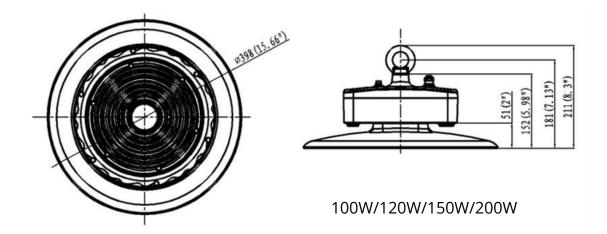
## **MOUNTING OPTIONS**





## **DIMENSIONAL DATA**

Unit:mm



## **ACCESSORIES**



### **Optic Lens**

High transmittance PC materials, UV test approval. Please refer to PHOTOMETRIC

Please refer to PHOTOMETRIC DATA for different beam angle.



### **Aluminum Reflectors**

Different beam angle, anti glare effect Black/silver color options.



### **PC Reflector**

90°PC reflector with lid.



### **Safety Rope**

304 stainless steel, available for 0.25m, 1m, 1.5m and 5m long.



### **Adaptor**

Adaptor for 3/4" pendant mount

<sup>\*</sup>Images not to scale.



## **ORDERING INFORMATION**

### ORDERING EXAMPLE: BSL-DNB-100-MV-40K-H00129-EH-WH

SERIES	WATTAGE & LUMEN OUTPUT	VOLTAGE	CORELATED COLOR TEMPERATURE (CCT)	BEAM ANGLE	CONTROL OPTIONS	MOUNTING OPTIONS	FINISH COLOR
DNB	100W (1400lm)	MV (100- 277V)	30K (3000K)	H00129	Dimmable	EH (Eye Hook)	WH (White)
	120W (16800lm)	HV (277- 480V)	40K (4000K)	H00125		EB (Eye Bolt)	
	150W (21000lm)		50K (5000K)	H00128		PM (Pipe Mount)	
	200W (28,000lm)						

### **OPTIONAL ACCESSORIES AVAILABLE\***

- Emergency Battery Backup: External driver for field installation.
- Occupancy Sensor & Dimming Controls: For enhanced energy management.
- NEMA Plugs: Male and female options for flexible electrical connections.
- Mounting Chain/Cables: For secure suspension.
- Wire Nuts/Connectors: For safe electrical connections.
- Conduit Adapters: For integrating with existing conduit.
- Safety Cables: Provides secondary support for suspended fixtures.
- Mounting Hardware: For various hanging applications.

<sup>\*</sup>Accessories sold separately.



### WARRANTY



Big Shine LED products are covered by a five-year limited warranty against defects in materials. A fixture is considered defective if 10% or more of the LED fixture's components have failed. Visit our website to learn more about our product warranty: bigshineled.com/resources.

### **Covered Under Warranty:**

Warranty Length: 5 years from purchase date (or installed date in some cases)

Coverage: Manufacturer defects in materials

Repair or Replacement: Big Shine LED may determine to repair or replace the product.

### **Not Covered Under Warranty:**

- · Damage caused by misuse, accidents, weather, improper installation, or unauthorized repairs.
- Using the product for something other than its intended purpose.

Visit our website to read the terms and conditions of our product warranty at bigshineled.com/resources.

### **How to Submit a Warranty Claim:**

To submit a warranty claim, visit our website at bswpartnerhub.com or contact us at (845) 219-5548.

### LED PREVENTATIVE MAINTENANCE

Implementing a preventative maintenance plan helps ensure optimal performance and longevity of LED lighting systems through regular inspections and upkeep. Here are some steps to take to keep LED lighting systems in good working condition, prevent malfunction, and extend their lifespan.

- I. Maintenance schedule: The frequency of maintenance tasks will depend on the specific lighting system, its environment, and usage. As a general rule, LED fixtures should be inspected and cleaned at least once every six months. Tasks should be performed more frequently in high-traffic areas or in environments with excessive dust and debris.
- II. Record keeping: It is also important to keep accurate records of all maintenance tasks performed on the lighting system. This information can be used to track the performance of the system, identify any trends or patterns, and schedule future maintenance tasks.

For a more detailed preventative maintenance plan, visit the Resource Center in our website at bigshineled.com/resources.



### **DEFINITIONS**

### **LM-80 Testing**

The LM-80 test method that measures the lumen maintenance, or long-term light output, of an LED light source over a period of time. Big Shine LED fixtures are tested at three different temperatures for at least 6,000 hours and up to 10,000 hours. By measuring the LED's light output at regular intervals during this extended period, the LM-80 test can determine how the performance of the LED degrades over its lifespan. To obtain test results for individual Big Shine LED fixtures, visit our website or contact us at info@bigshineled.com.

#### TM-21 Method

TM-21 is a method for projecting the lumen maintenance and lifespan of an LED light source based on data collected from LM-80 testing. The data collected during the LM-80 testing must show a stable trend in lumen maintenance. The TM-21 calculates a decay rate based on the data, which shows how quickly the LED's brightness is diminishing over time. The TM-21 sets a limit on how far the projected lifespan can be estimated base on the LM-80 data. The lifespan cannot exceed six times the duration of the LM-80 testing. The extrapolation limit ensures that predictions made by the TM-21 are based on solid data and do not exceed too far beyond the actual testing period.

#### L70 Rating

The L70 is a measure of an LED's longevity. It represents the time it takes for the LED's brightness or lumen output to drop to 70% of its original level. In other words, it estimates how long the LED will last before it dims significantly.

#### L90 Rating

The L90 rating is similar to the L70 rating, but it measures a different level of light output maintenance in LEDs. This measures the time it takes for an LED light source to decrease to 90% of its original brightness or lumen output. It's a stricter standard compared to the L70 because it represents a higher level of light output maintenance. This rating is important for applications where higher light levels must be maintained for a longer period of time.

### **Total Harmonic Distortion (THD)**

The Total Harmonic Distortion is a measure of the distortion in the electrical current caused by non-linear loads. THD is expressed as a percentage and represents the deviation of the current waveform from a perfect sinusoidal wave. Lower THD percentages in LED improve energy efficiency as the fixture has less wasted energy. It also extends the life of the LED fixture and other connected devices in a building's electrical system as less heat is generated in the electrical wiring and components, reducing the risk of overheating. Lower THD also improves power quality, causes less interference and enhances the reliability of the entire electrical system. To better understand the benefits of lower THD in LED fixtures, visit our website at bigshineled.com.

### **Power Factor**

A higher power factor in LED fixtures means the fixture uses electrical power more efficiently. Less power is wasted in the form of reactive power, so the lighting system consumes less electricity overall. A higher power factor also improves the overall power quality of the electrical system, resulting in a more stable and consistent power supply, which benefits other devices connected to the same electrical network. Other benefits include reducing the load on the electrical grid, reducing heat generation, and enhancing the lifespan of all equipment on the system. For more details on power factor, visit our website at bigshineled.com.

### **Efficacy**

The efficacy in an LED fixture refers to how efficiently the light converts electrical power into visible light. It's typically measured in lumens per watt, indicating how much light is produced for each watt of electricity used.

### **Luminous Flux**

Luminous flux is the total amount of visible light emitted by a light source, measured in lumens. It represents the overall brightness of the light produced.

### **Dominant Peak Wavelength**

It represents the wavelength that contributes most to the perceived color of the light source.

### Full Width at Half Maximum (FWHM)

It is a measure of the spectral bandwidth of a light source. Specifically, it is the width of the spectral curve at half of its maximum intensity. A narrower FWHM indicates a more focused spectral distribution, while a wider FWHM suggests a broader spectral distribution.