12” & 16” LED Shoebox Area & Flood Lights, Heritage Series

Advanced light engine technology in a traditional housing design. Wisconsin engineering and craftsmanship utilizing premium components.

Our LED lights, light poles and brackets are proudly engineered and manufactured in the USA. We use only the highest quality components, and our LED Shoebox fixtures deliver unmatched light output and efficiency for any area or flood lighting project. Precision engineered for performance and energy savings, these products dramatically reduce energy consumption by up to 80% and virtually eliminate ongoing maintenance expenses for a variety of customers and applications.

Product Overview

Highlights:

- Engineered and manufactured in Wisconsin, USA from domestic and imported components
- ETL Certified: Conforms to UL STD 1598 & CSA STD C22.2 # 250.0 for wet locations
- L70 calculated LED life over 270,000+ hours
- Drivers are 0-10v dimming standard
- Six light engine options from 5,622 – 31,849 lumens for 75-1000w HID replacements
- Premium high-output Chip-On-Board (COB) LEDs in 5000K, 4000K and 3000K options, custom color temps available upon request
- Minimum CRI of 70, custom CRI available
- DLC qualified models available. Please refer to www.designlights.org for the most current information.

Common Applications:

- Parking lots, ramps, walkways and roadways
- General area and site lighting
- Car dealerships, schools, hospitals, hotels and gas stations
- Retail stores and commercial buildings
- Sports lighting and ball fields

Light Engine Warranty:

- 5-year standard limited warranty on all light engine components
- Accessories and adders covered by separate OEM supplier warranties
Product Specifications

**Housing Construction, Finish & Mounting:**
- Rugged, die-cast, soft square aluminum housing
- Impact-resistant, tempered glass lens and durable silicone gasket
- Durable, multi-layer, polyester powder coat or industrial grade liquid paint
- Available in a variety of colors such as dark bronze, black, white, light gray, dark green and natural aluminum (custom colors available upon request)
- 6" pole mount, 10" pole mount, adjustable slipfitter and trunnion yolk brackets available as standard mounting accessories

**Optics & Lighting Distribution:**
- Innovative silicone optics assembly with precision light control and cutoff
- Standard photometric distributions include V-WIDE, 30° NARROW SPOT and 70° MEDIUM SPOT
- No secondary optics used for base model
- IES files, photometric reports and simulations available upon request

**Automotive Dealership Optics:**
- Left and right optical rotation available for applications like car dealership front lines (optics are not field-rotatable, must be done at factory)
- Delivers enhanced lighting and proper photometric control of auto dealership merchandise
- Allows for simple 2@180 pole mount while rotating forward throw light patterns toward dealership merchandise

**Electrical:**
- Operating temp: -40 °C to +45 °C
- Standard AC input of 120-277v VAC, up to 480v available
- EMI filter: 47CFR, part 2, part 15
- Power factor: >0.9
- Total harmonic distortion: <20%
- Surge protection: IEC/EN 61000-4-5 EMC test standard
- Licensed electrician required for installation

**Energy Control Options:**
- Daylight harvesting and photo controls
- Motion control and dimming
- Surge protection
- CA Title 24 compliance options available upon request

**Effective Projected Area (EPA) & Weight:**
- 12" Housing (15 LBS)
  - 0.75 EPA at 0°
  - 1.3 EPA at 45°
- 16" Housing (25 LBS)
  - 1.2 EPA at 0°
  - 2.0 EPA at 45°
This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.

1. Considered to be a typical HID equivalent. Specific HID wattage equivalents will depend on things like environmental and application characteristics, distribution type and design criteria.

2. Considered initial nominal value of the LED light engine as specified by the LED chip manufacturer. Fixture efficacy and lumen output will depend on things like color temperature, distribution type and environmental characteristics.

3. Considered the typical initial delivered lumens of the LED light engine. Specific lumens for an application will depend on things like color temperature, distribution type and environmental characteristics.

4. Lumen maintenance values at 25 ℃ are calculated per TM-21 based on LM-80 data and in-house luminaire testing.

5. In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.

6. In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.

Note: Additional wattages and configurations available upon request. Specifications are subject to change without notice.

### Light Engine Specifications (Values Listed for Type V, 5000K)

<table>
<thead>
<tr>
<th>Base Model</th>
<th>System Watts</th>
<th>LED Watts</th>
<th>HID Replacement¹</th>
<th>Number of COBs</th>
<th>Drive Current</th>
<th>Nominal Lumens²</th>
<th>Delivered Lumens³</th>
<th>L70 EnergySTAR LED Life⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-SBHC-40-50-MV-5</td>
<td>40w</td>
<td>36w</td>
<td>75-175w</td>
<td>1</td>
<td>1,050 mA</td>
<td>5,622</td>
<td>4,854</td>
<td>270,000+ Hrs</td>
</tr>
<tr>
<td>12-SBHC-80-50-MV-5</td>
<td>79w</td>
<td>71w</td>
<td>125-300w</td>
<td>2</td>
<td>1,050 mA</td>
<td>11,119</td>
<td>10,007</td>
<td>270,000+ Hrs</td>
</tr>
<tr>
<td>12-SBHC-120-50-MV-5*</td>
<td>118w</td>
<td>106w</td>
<td>200-400w</td>
<td>3</td>
<td>1,050 mA</td>
<td>16,490</td>
<td>14,841</td>
<td>270,000+ Hrs</td>
</tr>
<tr>
<td>16-SBHC-160-50-MV-5*</td>
<td>157w</td>
<td>142w</td>
<td>300-525w</td>
<td>4</td>
<td>1,050 mA</td>
<td>21,735</td>
<td>19,562</td>
<td>270,000+ Hrs</td>
</tr>
<tr>
<td>16-SBHC-200-50-MV-5</td>
<td>196w</td>
<td>177w</td>
<td>400-650w</td>
<td>5</td>
<td>1,050 mA</td>
<td>26,855</td>
<td>24,169</td>
<td>270,000+ Hrs</td>
</tr>
<tr>
<td>16-SBHC-240-50-MV-5*</td>
<td>235w</td>
<td>211w</td>
<td>750-1000w</td>
<td>6</td>
<td>1,050 mA</td>
<td>31,849</td>
<td>28,664</td>
<td>270,000+ Hrs</td>
</tr>
</tbody>
</table>

* 120w: DLC qualified model in 3000K, 4000K and 5000K. - 160w: DLC qualified model in MV and HV voltage. - 240w: DLC qualified model.

Consult local codes for specific turtle friendly requirements such as shields and visors; other turtle certifications available upon request.

### Amperage Load

<table>
<thead>
<tr>
<th>Wattage</th>
<th>Total Amps Per Fixture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110v</td>
</tr>
<tr>
<td>40w</td>
<td>0.36A</td>
</tr>
<tr>
<td>79w</td>
<td>0.72A</td>
</tr>
<tr>
<td>118w</td>
<td>1.07A</td>
</tr>
<tr>
<td>157w</td>
<td>1.43A</td>
</tr>
<tr>
<td>196w</td>
<td>1.78A</td>
</tr>
<tr>
<td>235w</td>
<td>2.14A</td>
</tr>
</tbody>
</table>

### Lumen Maintenance Factor (LMF)⁴

<table>
<thead>
<tr>
<th>Type</th>
<th>Ambient</th>
<th>Initial LMF</th>
<th>25K Hour Projected LMF</th>
<th>50K Hour Projected LMF</th>
<th>75K Hour Projected LMF</th>
<th>100K Hour Projected LMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>COB</td>
<td>25 ℃ (77 ℉)</td>
<td>100%</td>
<td>95%</td>
<td>92%</td>
<td>89%</td>
<td>87%</td>
</tr>
</tbody>
</table>

1. Considered to be a typical HID equivalent. Specific HID wattage equivalents will depend on things like environmental and application characteristics, distribution type and design criteria.

2. Considered initial nominal value of the LED light engine as specified by the LED chip manufacturer. Fixture efficacy and lumen output will depend on things like color temperature, distribution type and environmental characteristics.

3. Considered the typical initial delivered lumens of the LED light engine. Specific lumens for an application will depend on things like color temperature, distribution type and environmental characteristics.

4. Lumen maintenance values at 25 ℃ are calculated per TM-21 based on LM-80 data and in-house luminaire testing.

5. In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.

6. In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.

Note: Additional wattages and configurations available upon request. Specifications are subject to change without notice.
This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.

* Many lens options available, contact us for more options

### Ordering Information

**Fond du Lac, WI 54935**  
206 W. McWilliams St.

---

#### Mounting Accessories

<table>
<thead>
<tr>
<th>Designation</th>
<th>Color Temp.</th>
<th>Distribution Type</th>
<th>Color</th>
<th>Accessories</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-SBHC</td>
<td>50 = 5000K</td>
<td>5 = Type V Round</td>
<td>DB = Dark Bronze</td>
<td>Mounting</td>
</tr>
<tr>
<td>16-SBHC</td>
<td>40 = 4000K</td>
<td>5W = Type V Square</td>
<td>BK = Black</td>
<td><strong>BPC1</strong></td>
</tr>
<tr>
<td></td>
<td>30 = 3000K</td>
<td>4 = Type IV FWD</td>
<td>WH = White</td>
<td><strong>BPC2</strong></td>
</tr>
<tr>
<td></td>
<td>CT = Custom</td>
<td>3 = Type III Wide</td>
<td>SG = Slate Gray</td>
<td><strong>BPC3</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 = Type II Wide</td>
<td>LG = Light Gray</td>
<td><strong>BPC4</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>70 = 70° Medium Spot</td>
<td>DG = Dark Green</td>
<td><strong>SPC1</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 = 30° Narrow Spot</td>
<td>NA = Nat. Alum. Paint</td>
<td><strong>SPC2</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>CD = Custom</td>
<td>SC = Custom Color</td>
<td><strong>SPC3</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>SPC4</strong></td>
</tr>
</tbody>
</table>

**Input Voltage**

- **MV** = 100-277v
- **HV** = 347-480v
- **CV** = Custom

**Wattage**

- 40 = 40 Watt
- 60 = 60 Watt
- 80 = 80 Watt
- 120 = 120 Watt
- 160 = 160 Watt
- 200 = 200 Watt
- 240 = 240 Watt

**Ex. 12-SBHC-120-50-MV-5-DB-6S-BPC1**

---

**Housing**

- **WG12** = 12” Wire Guard
- **WG16** = 16” Wire Guard
- **VS12** = 12” House Side Visor
- **VS16** = 16” House Side Visor

---

**Controls**

- **BPC1** = Button Photocontrol, 120 VAC
- **BPC2** = Button Photocontrol, 208 to 277 VAC
- **BPC3** = Button Photocontrol, 347 VAC
- **BPC4** = Button Photocontrol, 480 VAC
- **SPC1** = Swivel Photocontrol, 120 VAC
- **SPC2** = Swivel Photocontrol, 208 to 277 VAC
- **SPC3** = Swivel Photocontrol, 347 VAC
- **SPC4** = Swivel Photocontrol, 480 VAC

**MPS** = Motion/Photo Sensor with BLUETOOTH, 8-40 ft. mounting heights, 100 ft. diameter at 40 ft., 100-347VAC (single phase) or 208/230/480VAC (phase-to-phase) (Installed In Fixture)

**UG Series**

- **SRG-277-10** = Surge Protector, 120v - 277v
- **SRG-480-10** = Surge Protector, 347v - 480v

**F10** = 10 Amp Fuse Kit, 120-480 VAC

**Other**

- **WHP11NP** = 11” Cord w/o Plug, Stripped Pigtail Both Ends (Not Installed)
- **WHP7NP** = 7” Cord w/o Plug, Stripped Pigtail Both Ends (Not Installed)
- **WHP11P1** = 11” Cord w/ NEMA 5-15P, Stripped Pigtail One End (Not Installed)
- **WHP7P1** = 7” Cord w/ NEMA 5-15P, Stripped Pigtail One End (Not Installed)
- **WHP3NP** = 3’ Cord w/o Plug, Stripped Pigtail Both Ends (Not Installed)
- **WHP3P1** = 3’ Cord w/ NEMA 5-15P, Stripped Pigtail One End (Not Installed)
- **CG1** = 1/2” NPT Cord Grip, 0.180-0.400” Cord OD Range (Not Installed)
- **AMB** = Amber (turtle friendly 585-595nm)

---

*Many lens options available, contact us for more options*
6" & 10" Arm Drill Pattern for 12" & 16" Shoebox Fixtures

TOP OF POLE

3" Recommended

3/8" Diameter

1"

1"

3/4" Diameter (Wire Entry)

3/8" Diameter

IMPORTANT: DIMENSIONS ARE NOT TO SCALE!
Tennis Court Davit Arm Adapter For Slipfitter Mount

IMPORTANT: DIMENSIONS ARE NOT TO SCALE!