Colonial Lantern™

An Architecturally Scaled Family of Traditional Luminaires
3 Fixture Sizes

Area

4 sided lanterns are a traditional look throughout Europe and the Americas. Combine this classic elegance with contemporary optics and the result is the Colonial Lantern. The largest model is ideal for site/area illumination providing the perfect balance of proportion and performance.

Roadway

From the golden glow of high pressure sodium to the full spectrum white of pulse start metal halide or the energy savings of LED’s, the Colonial Lantern envelops low brightness optics and uniform illumination with a look perfect for retaining the heritage of downtown streetscapes or historic communities.

Scaled for the Application
Pedestrian
The Colonial Lantern's dignified appearance becomes even more defined as mounting heights reduce to human scale. Colonial produces glare-free illumination through to its wide variety of lamp sources and optics while conforming to the aesthetic and illumination requirements of any public space.

Path and Wall
The Colonial Lantern imparts a traditional elegance in each of its sizes. Wall mounted or Post top mounted up to 10' or used as a bollard, the detailing is evident and compliments performance. Open frame cut-off or decorative side panels work with the aesthetic of the Colonial Lantern to produce true architectural illumination.

Controlled Technology - The past few years has brought tremendous advances in illumination sources. Pulse-start and ceramic arc tube metal halide lamps produce the same light levels as before while consuming 20 - 25% less energy. Modern bulb configurations combine with optical systems to produce new levels of efficiency and precision. Add to this the proliferation of LED's in outdoor lighting realizing power reductions of up to 50% while retaining minimum light levels and improved uniformity. Improvements in color temperatures allow lighting schemes that blend sources for service and security concerns. Finally, the development of electronic drivers (LED) and e-ballasts (HID) provide flexibility in controlling light levels that were impossible in the past. Adjusting levels based on occupancy and activity, time-of-day and time-of-year, or other factor are achievable with these new technologies. All of this is included throughout the breadth of the Colonial family of luminaires.
Fixture Configurations

1 Model: COL

2 Model: COL-WA

Clear Flat Glass Lens - This design features excellent fixture brightness control for either LED or HID optical systems. It provides sharp cutoff optics for dark sky or light trespass requirements. See page 17 for ordering information.

Opal White Diffuser - Maximum daytime and nighttime fixture presence is created with the opal white diffuser. Use where a more traditional look is desired. Acrylic diffuser is standard. See page 19 for ordering information.

Available Optics

LED Sun Valley Lighting’s exclusive LED area lighting system available in Types II, III, IV and V$^{\text{sq}}$ light distributions. See page 11.

HID Low profile segmented reflector modules available in Types II, III, IV and V$^{\text{sq}}$ light distributions. See page 9.

Available Optics

LED Power Array™ Sun Valley’s exclusive LED system for traditional luminaires. Available in Type V light distribution. See page 10.

HID Bare lamp optics, vertical base down orientation, available in Type V light distribution. See page 9.
Clear Patterned Enclosure - Provides increased daytime and nighttime fixture presence, with precise optical control. This configuration is available with 4 distinct optical systems, featuring multiple light distributions. Acrylic enclosure is standard. See pages 9-25 for complete specifications, technical data and ordering information.

Available Optics

**HID**
This cutoff optical module is concealed inside the fixture hood, causing the clear enclosure to glow only from its textured surface. Available in Type II, III, IV and VSq light distributions.

**LED Power Array™**
This vertical array sits inside the fixture housing, and is available in Type II, III, IV and VSq light distributions. The LED array and its driver are a self contained module.

**Glass Refractor (LED or HID)**
Prismatic refractor sits inside the fixture housing, and is available in Type III and V light distributions. Refractor accommodates both the LED Power Array, and HID lamps.

**Glass Chimney (HID only)**
Traditional glass chimney mounts inside the fixture housing, and evokes a gas lantern look. Available in either clear or frosted finish. Type V light distribution.
## Suggested Combinations

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<td>4' to 3' Dia. Smooth, Tapered, Cast Alum.</td>
<td>5' Dia. Smooth, Straight, Extruded Alum.</td>
<td>5.25' to 3.5' Dia, Fluted, Tapered, Cast Alum.</td>
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**SCALE: 3/8" = 1'-0"**
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SCALE: 3/8” = 1'-0"
**Engineering Features**

**Robust Components**
The Colonial housing components are constructed of precise durable, corrosion resistant low copper aluminum castings with \( \frac{1}{4} \)" minimum wall thickness. Prior to finishing, all castings are sand blasted and pre-treated to create a uniform clean surface for paint adhesion. A White Acrylic Diffuser (WA) or Clear Patterned Acrylic Enclosure (CPA) enhance the Colonial aesthetic and optical performance capabilities. Each Enclosure is fully gasketed against the Crown and Base Fitter.

**HID Optics**
All HID reflectors are unitized assemblies. The entire fixture housing is sealed by the lens frame and gasket, thus making the optical system impervious to moisture and airborne contaminants. The reflectors are available in Type II, III, IV and VSq light distributions and are rotatable in 90 deg. increments for field orientation. See page 9.

**LED Power Array™ Optics**
This vertical array is a fully self contained module located inside the sealed fixture enclosure. Available in Type II, III, IV and V light distributions. See page 10.

**LED® Optics**
Because thermal control is so critical to LED life expectancy and lumen output, **LED®** Optical Modules are sealed units that “float” within the housing. This allows natural air flow to enter the housing and flow around the entire LED Module. See page 11.

**Unitized Electrical Module**
All electrical components are mounted on a plate, making initial installation and future servicing quick and simple.
The Colonial housing components are constructed of precise durable, corrosion resistant low copper aluminum castings with ¼" minimum wall thickness. Prior to finishing, all castings are sand blasted and pre-treated to create a uniform clean surface for paint adhesion. A White Acrylic Diffuser (WA) or Clear Patterned Acrylic Enclosure (CPA) enhance the Colonial aesthetic and optical performance capabilities. Each Enclosure is fully gasketed against the Crown and Base Fitter.

HID Optics
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LED Power Array
This vertical array is a fully self contained module located inside the sealed fixture enclosure. Available in Type II, III, IV and V light distributions.

Unitized Electrical Module
All electrical components are mounted on a plate, making initial installation and future servicing quick and simple.

Optics
Because thermal control is so critical to LED life expectancy and lumen output, Optical Modules are sealed units that "float" within the housing. This allows natural air flow to enter the housing and flow around the entire LED Module.
HID reflectors are fabricated from pre-finished 95% reflectance. Multiple vertical staging reduces the overall reflector height allowing it to fit within the low profile fixture housing.

HID reflectors are precisely contoured and staged to produce high angled candlepower for maximum pole spacing with sharp cutoff and excellent uniformity.

Colonial HID cutoff Optical Systems satisfy dark sky requirements. As such, they eliminate wasted upward light (energy), enhance visibility for safety and security, and contribute to a growing movement to bring back the star filled night sky.

Standard IES light distributions are available to satisfy project requirements for illumination coverage with the least number of poles.
LED Power Array™ Optics
Patent Pending  See LED Power Array™ Catalog for a complete presentation on the LED System.

Vertical Power Array With Opal Diffuser

The Vertical Power Array in this configuration replaces a standard lamp source. The 360° radial output of the Vertical Power Array provides even light across the opal diffuser.

Angled Power Array With Clear Patterned Enclosure

Optical control in this configuration is provided by the Angled Power Array. The LED modules with precision performance Micro-Reflectors are aligned to produce IES type distributions (II, III, IV, and V-Sq). The Angled Power Array is designed to work in conjunction with the patterned enclosure to increase visual acuity.

Vertical Power Array Inside Prismatic Glass Refractor With Clear Patterned Enclosure

The Vertical Power Array in this configuration replaces a standard lamp source and provides a radially uniform light pattern with the internal Prismatic Glass Refractor. Optical control is provided by the internal refractor. The patterned enclosure adds another layer of glare control to the configuration and increases visual acuity.
The **LED** system uses a three stage optical train for precise control and distribution of the raw LED light: **Capture** 100% of the raw LED light; **Collimate** all of the light downward; and **Vector** the light outward to the area to be illuminated.

0% of Total Light Output occurs at or above 90° vertical.

Less than 4% of Total Light Output occurs above 75°.

The **LED** optical system satisfies dark sky requirements. Uniformity of illumination is superior with the **LED** system due to its precise optics.

Type II, III, IV and V Sq. standard IES light distributions are available with the LED or HID optical system.

*Available in COL21 and COL18 only.
Dimensions

Pole and Pendant Mounted

COL12 - Tenon Mount
Pole Top, Arm or Wall Mount

COL12 - Pendant Suspended
Arm or Wall Mount

COL18 - Tenon Mount
Pole Top, Arm or Wall Mount

COL18 - Pendant Suspended
Arm or Wall Mount

Bollards

COL1 - Round Shaft
Arm or Wall Mount

COLB1 - Round Shaft
Arm or Wall Mount

COLB2 - Square Shaft
Arm or Wall Mount

Wall Mounted

COL21 - Tenon Mount
Pole Top, Arm or Wall Mount

COL21 - Pendant Suspended
Arm or Wall Mount

SCALE: 3/4" = 1'-0"
Specifications

All Models

Fixture Housing - One piece low copper heavy wall aluminum casting (A356 alloy; <.02Cu). Hood is fastened to the Housing with a stainless steel hinge and secured with a tool-less stainless steel latch 180° opposite the hinge. Housing and Hood is sealed with an extruded closed cell silicone gasket.

Lenses

COL HID and LED models - See HID Lamp/Electrical and VLED for lens specification.

COL-WA - Opal White Acrylic is standard. Lenses are gasketed at housing.

COL-CPA - Clear Patterned Acrylic is standard. Lenses are gasketed at housing.

Finish - Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.

HID Lamp/Electrical

Horizontal Lamp Optical System

Lens (COL model) - Clear 3/16" thick tempered flat glass lens. Lens is gasketed around the perimeter and retained by stainless steel clips.

Reflector Module - One piece specular Alzak® optical reflector segments rigidly mounted to an aluminum frame and attached to the housing. Reflector module is field rotatable in 90° increments. Sockets are porcelain 4KV pulse rated. (E39) mogul (COL21) or (E26) medium base (COL18 and COL12). Other bases as noted. Reflector modules are factory prewired with quick-disconnect plug.

Vertical Lamp Optical Systems

Bare Lamp Optics (COL-WA only) - Vertically oriented base down lamp produces a symmetric distribution. Sockets are porcelain 4KV pulse rated. (E39) mogul (COL21) or (E26) medium base (COL18 and COL12).

Reflector/Refractor Module (CPA only) - Borosilicate glass refractor produces either a symmetric (Type V) or asymmetric (Type II) distribution pattern. Sockets are porcelain 4KV pulse rated, mogul (COL21) or medium base (COL18 and COL12).

Electrical Module - All electrical components are UL and cUL recognized, mounted on a single plate and factory prewired with quick-disconnect plugs. Standard electronic MH ballasts have power factor of >.95 (70W – 150W) -20°F starting, 120-277V or >.90 (250W), -20°F starting, 200-277V, 50Hz/60Hz and have lamp End-of-life protection. 347V option utilizes a step down transformer to the electronic ballast. Electronic MH ballast has a power factor of >.90 (210W), -4°F starting, 200 - 277V, 50Hz/60Hz and has lamp End-of-life protection. Magnetic MH ballasts are high reactance, high power factor (70W – 150W) or CWA (250W), -20°F starting, multi-tap 120-277V, 60Hz. All HPS ballasts are core and coil, high-reactance, high power factor (70W – 150W) or CWA (200W – 250W), -40°F starting.
**LED Power Array™**

**General Power Array Specifications** - LED Power Array consists of a three-dimensional array of individual LED tubes fastened to a retaining plate. Each LED tube houses LED emitters mounted to a vented circuit board. The circuit boards are mechanically mounted to an extruded radial heatsink and transfer the heat away from the LED emitter to the heatsink. An acrylic lens and end cap protect the components within each LED Tube.

**LED Emitters** - LED emitters are mounted to vented and heat sinked circuit boards within each LED Tube. LED's are minimum 70CRI and standard 4000K CCT (Neutral White). Also available as 3000K CCT (Warm White) or 5000K CCT (Cool White).

**LED Driver** - UL and CUL recognized Constant Current LED drivers operate on input voltages from 120 – 277VAC, 50/60hz and are mounted to an aluminum bracket secured to the barrier plate. Driver is independently sealed and UL Listed for wet location. Driver is independently sealed and UL Listed for wet location. (Consult factory for High-Low and dimming options. Consult factory for dimming applications and alternate voltages.)

**Angled Power Array (COL-CPA)**
Micro-Reflectors mounted around each LED produce precise beam patterns and control the raw output of each individual LED emitter. LED tubes with clear lenses are uniquely aimed horizontally and vertically and combined to produce IES Distribution Types II, III, IV, and V. The retaining plate is field rotatable and secured with a lock nut.

**Vertical Power Array (COL-WA and COL-CPA)**

- **Refractor** – 6 LED tubes with clear lenses are mounted to a retaining plate in equal radial increments for an even light distribution. The raw output of the LED emitter is utilized to simulate a standard light source while the refractor produces either a symmetric (Type V) or asymmetric (Type III) distribution pattern.

- **Clear Patterned Enclosure** – 6 or 8 LED tubes with frosted lenses are mounted to a retaining plate in equal radial increments for an even light distribution. The raw output of the LED emitter is utilized to simulate a standard light source and the diffuser produces a symmetric (Type V) distribution pattern.

- **Opal Diffuser** – 6 or 8 LED tubes with frosted lenses are mounted to a retaining plate in equal radial increments for an even light distribution. The raw output of the LED emitter is utilized to simulate a standard light source and the diffuser produces a symmetric (Type V) distribution pattern.

**LED® Optical Module** - Low copper A356 alloy (<.2% copper) cast aluminum housing. Integrated clear tempered 3/16” glass lens sealed with a continuous silicone gasket protects emitters (LED’s) and emitter Reflector-Prism optics, and seals the module from water intrusion and environmental contaminants. Entire module meets an IP67 rating. Emitters (LED’s) are high output, standard Neutral White nominal 4000K CCT for the entire module (Warm white 3000K CCT and Cool White 5000K CCT also available). Each emitter is optically controlled by a Reflector-Prism injection molded from H12 acrylic (3 types per module; one from 0° - 50°; one from 50° - 65°; one from 65° - 72°). Each Reflector-Prism has indexing pins for aiming and is secured to an optical plate made of matte black anodized aluminum. The optical plate locates every Reflector-Prism over an emitter. The Reflector-Prisms are arrayed to produce IES Type II, IES Type III, IES Type IV or IES Type V-SQ light distributions. The entire Optical Module is field rotatable in 90° increments. Both module and drivers are factory wired using water resistant, insulated cord. Lens, module and drivers are field replaceable.

**Driver** – UL and CUL recognized Constant Current LED drivers operate on input voltages from 120 – 277VAC, 50/60hz and are mounted to an aluminum bracket secured to the barrier plate. Driver is independently sealed and UL Listed for wet location. (Consult factory for High-Low and dimming options. Consult factory for dimming applications and alternate voltages.)
## Lamp / Electrical Guide

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<thead>
<tr>
<th>Lamp Type</th>
<th>Bulb Type</th>
<th>Initial Lumens</th>
<th>Life (Hours)</th>
<th>ANSI Code</th>
<th>Starting Temp.</th>
<th>Circuit Type</th>
<th>System Watts</th>
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<th>Max. Input Amps</th>
<th>Min. Fuse Amps</th>
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### Pulse Start Metal Halide

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### High Pressure Sodium

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<tr>
<td>28</td>
<td>LED</td>
<td>24 LED Optical Module - 350mA</td>
<td>1.610 - 2.380</td>
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<td>-40°F</td>
<td>28</td>
<td>120</td>
<td>277</td>
<td>0.25</td>
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<td>55</td>
<td>LED</td>
<td>48 LED Optical Module - 350mA</td>
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<td>277</td>
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<td>76</td>
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<td>48 LED Optical Module - 525mA</td>
<td>4.457 - 6.557</td>
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<td>64 LED Optical Module - 350mA</td>
<td>3.989 - 5.961</td>
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<td>6.408 - 10,444</td>
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<td>120</td>
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<tr>
<td>192</td>
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<td>120 LED Optical Module - 525mA</td>
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<td>-40°F</td>
<td>192</td>
<td>120</td>
<td>277</td>
<td>1.76</td>
<td>0.76</td>
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</tr>
</tbody>
</table>

**NOTES:**
1. U.S. Architectural Lighting’s Lamp and Electrical Guide is for reference only. ALWAYS consult lamp and ballast manufacturer’s data for exact technical specifications.
2. All initial Lumen values shown are approximate in the vertical position and may vary from one manufacturer to another.
3. For HX-HPF circuits, Max Input Amps is the highest of starting, operating, or opening circuit currents. For CWA circuits, the figure is operating current.
4. Lumen values for LED Modules vary according to the distribution type and house side shielding.

**WARNING:** All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.
**HID**

Spec/Order Example: COL18/HR-III/150PSMH120/1/RAL7004-T

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OPTICS</th>
<th>LAMP/BALLAST MODE</th>
<th>MOUNTING</th>
<th>FINISH</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COL21</td>
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<td></td>
</tr>
<tr>
<td>COL18</td>
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</tr>
<tr>
<td>COL12</td>
<td></td>
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</tbody>
</table>

**NOTES FOR ELECTRONIC BALLASTS:**
- 400W SUFFIX -B AFTER VOLTAGE FOR ELECTRONIC BALLASTS
- BALLASTS ARE 50-277 VOLT

**NOTES:**
1. TUBULAR LAMP, POZI BASE, E BALLAST ONLY
2. TUBULAR LAMP, POZI BASE
3. FOR PSMH, HOR POSITION LAMP REQUIRED
4. E39 BASE, FOR POZI LAMP REQUIRED
5. PSMH ONLY
6. E BALLAST NOT AVAILABLE
7. NA for 39PSM and 50HPS
8. NA to 39HPS
9. 0X0N4 BASE

**Optic**

**Horizontal Lamp**

**SEGMENTED REFLECTOR**

**HR**

**Spec/Order Example:** COL18/HR-III/150PSMH120/1/RAL7004-T

**Optic**

**Horizontal Lamp**

**SEGMENTED REFLECTOR**

**HR**

**Notes:**
- ADD SUFFIX -E AFTER VOLTAGE FOR ELECTRONIC BALLASTS
- ABOVE 175W ARE 200-277 VOLT
- PSMH ONLY
- -E BALLAST NOT AVAILABLE
- N/A for 35HPS and 50HPS
- N/A for 39HPS
- GX24Q-4 BASE

**FOR SMOOTH FINISH REMOVE SUFFIX “T”**

(EXAMPLE: RAL-9005-T)

**HOUSE SIDE SHIELD**

HS

**PHOTO CELL + VOLTAGE**

(EXAMPLE: PC120V)

PC+V

**TWIST LOCK**

(TPC+V)

**TWIST LOCK**

RECEPTACLE ONLY

TPR

**SINGLE FUSE**

120V, 277V

SF

**DOUBLE FUSE**

208V, 240V

DF
COL - Clear Glass Lens
LED Order Information

Optic Enclosed Module

Spec/Order Example: COL21/VLED-VSQ/120LED CW/3-90/RAL7004/DF

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OPTICS</th>
<th>LED MODE</th>
<th>MOUNTING</th>
<th>FINISH</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COL12</td>
<td>TYPE SYMMETRIC VLED - SYM. . . . . .</td>
<td>No. LEDs</td>
<td>COLOR TEMP - CCT</td>
<td>VOLTAGE</td>
<td>ARM MOUNT</td>
</tr>
<tr>
<td>COL18</td>
<td>TYPE V VLED-VSQ . . . . .</td>
<td>No. LEDs</td>
<td>DRIVE CURRENT</td>
<td>COLOR TEMP - CCT</td>
<td>VOLTAGE</td>
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<td>COL21</td>
<td>TYPE II VLED - II . . . . .</td>
<td>No. LEDs</td>
<td>DRIVE CURRENT</td>
<td>COLOR TEMP - CCT</td>
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<tr>
<td>COL18</td>
<td>TYPE III VLED - III . . . . .</td>
<td>No. LEDs</td>
<td>DRIVE CURRENT</td>
<td>COLOR TEMP - CCT</td>
<td>VOLTAGE</td>
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<tr>
<td>COL18</td>
<td>TYPE IV VLED - IV . . . . . .</td>
<td>No. LEDs</td>
<td>DRIVE CURRENT</td>
<td>COLOR TEMP - CCT</td>
<td>VOLTAGE</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OPTICS</th>
<th>LED MODE</th>
<th>MOUNTING</th>
<th>FINISH</th>
<th>OPTIONS</th>
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<tbody>
<tr>
<td>COL12</td>
<td>TYPE ASYMMETRIC VLED - ASY. . . . . .</td>
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<td>COLOR TEMP - CCT</td>
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<td>WM</td>
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<td>COL12</td>
<td>TYPE SYMMETRIC VLED - SYM. . . . . .</td>
<td>No. LEDs</td>
<td>COLOR TEMP - CCT</td>
<td>VOLTAGE</td>
<td>WM</td>
</tr>
</tbody>
</table>

No. LEDs: 120LED (132 Watts), 100LED (110 Watts), 80LED (97 Watts), 64LED (72 Watts), 48LED (53 Watts)

Drive Current: 350mA, 525mA

Color Temp - CCT: NW (4000K)* STANDARD, CW (5000K), WW (3000K)

Voltage: 120, 208, 240, 277, 347, 480

Arm Mount: 1, 2-180, 2-90, 3-90, 3-120, 4-90

Wall Mount: For Smooth Finish Remove Suffix "T" (Example: RAL-9005)

Options:
- Internal House Side Shield
- Double Fuse (208V, 240V)
- Single Fuse (120V, 277V)
- TWIST LOCK RECEPTACLE ONLY
- Consult Factory for Custom Colors
- Consult Factory for Dimming Options
- Other LED Colors Available Consul Factory

*STANDARD NW (4000K)
+PHOTO CELL + VOLTAGE (EXAMPLE: PC120V)
+DIMMABLE DRIVER(S) (0-10V)
+HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR
+10KV SURGE PROTECTOR
+20KV SURGE PROTECTOR
+Photo Cell + Voltage (Example: PC120V)
+TPC+V
+TWIST LOCK PHOTO CELL + VOLTAGE (EXAMPLE: PC120V)
+T1PC+V
+COL21 & COL18 Only
+Consult Factory for Custom Colors
+Consult Factory for Dimming Options

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SUN VALLEY LTD. 18
**COL-WA** - Opal White Acrylic Diffuser

**HID Order Information**

Spec/Order Example: COL21-WA/HR-V/250PSMH240/PT/RAL9003

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OPTICS</th>
<th>LAMP/BALLAST MODE</th>
<th>MOUNTING</th>
<th>FINISH</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HORIZONTAL SEGMENTED REFLECTOR</td>
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<tr>
<td></td>
<td>□ TYPE SYMMETRIC VL - S Y M . . . . . .</td>
<td>WATTS</td>
<td>TYPE</td>
<td>VOLTS</td>
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<td>COL21-WA</td>
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<td>□ 770</td>
<td>PSMH</td>
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<tr>
<td></td>
<td></td>
<td>□ 600</td>
<td>HPS</td>
<td>208</td>
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<td></td>
<td></td>
<td>□ 510</td>
<td>HPS</td>
<td>200</td>
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<tr>
<td>□ COL18-WA</td>
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<tr>
<td></td>
<td></td>
<td>□ 150</td>
<td>PSMH</td>
<td>120</td>
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<tr>
<td></td>
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<td>□ 100</td>
<td>HPS</td>
<td>208</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>□ 70</td>
<td>HPS</td>
<td>200</td>
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<tr>
<td>□ COL12-WA</td>
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<td>□ 70</td>
<td>PSMH</td>
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<td></td>
<td></td>
<td>□ 50</td>
<td>HPS</td>
<td>200</td>
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<td>□ 22</td>
<td>HPS</td>
<td>100</td>
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**NOTES FOR ELECTRONIC BALLASTS:**
- ADD SUFFIX “E” AFTER VOLTAGE FOR ELECTRONIC LAMPS - 150W ARE 120 - 377VOLT
- ABOVE 175W ARE 200 - 277VOLT
- PSMH ONLY

**NOTES:**
1 - TUBULAR LAMP, PGZ18 BASE, -E BALLAST ONLY
2 - TUBULAR LAMP, G12 BASE
3 - FOR PSMH, NON-POSITION LAMP REQUIRED
4 - ES BASE, NON-POSITION LAMP REQUIRED
5 - PSMH ONLY
6 - E BALLAST NOT AVAILABLE
7 - N/A for SHPS and 50HPS
8 - N/A for SHPS
9 - G24Q-4 BASE

**Optic Vertical Lamp - Base Down**

**HID**

**Working Sheet**

**ARM MOUNT**

**FOR SMOOTH FINISH REMOVE SUFFIX “T” (EXAMPLE: RAL-9005)**

**STANDARD TEXTURED FINISH**

**HOUSE SIDE SHIELD**

**PHOTO CELL + VOLTAGE** (EXAMPLE: PC120V)

**TWIST LOCK PHOTO CELL + VOLTAGE** (EXAMPLE: PC120V)

**TWIST LOCK RECEPTACLE ONLY**

**SINGLE FUSE** (120V, 277V)

**DOUBLE FUSE** (208V, 240V)

**OPAL POLYCARBONATE DIFFUSER**

**HOUSE SIDE SHIELD**

**PHOTO CELL + VOLTAGE** (EXAMPLE: PC120V)

**TWIST LOCK PHOTO CELL + VOLTAGE** (EXAMPLE: PC120V)

**TWIST LOCK RECEPTACLE ONLY**

**SINGLE FUSE** (120V, 277V)

**DOUBLE FUSE** (208V, 240V)

**OPAL POLYCARBONATE DIFFUSER**

**SUN VALLEY LTD.**

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## LED Order Information

**Spec/Order Example:** COL12-WA/VP-V/64LED NW/2-180/RAL8019/TPR

<table>
<thead>
<tr>
<th>MODEL</th>
<th>OPTICS</th>
<th>LED MODE</th>
<th>MOUNTING</th>
<th>FINISH</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>COL21-WA</td>
<td>SYMMETRIC VPA - SYM</td>
<td>NO. LEDS</td>
<td>NW (4000K)*</td>
<td>VOLTAGE</td>
<td>ARM MOUNT</td>
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<tr>
<td>80LED (85 Watts)</td>
<td>120</td>
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<td>64LED (87 Watts)</td>
<td>208</td>
<td>2-180</td>
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<td>48LED (55 Watts)</td>
<td>240</td>
<td>2-90</td>
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<tr>
<td>36LED (42 Watts)</td>
<td>277</td>
<td>3-90</td>
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<tr>
<td>64LED (69 Watts)</td>
<td>347</td>
<td>3-120</td>
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<tr>
<td>48LED (55 Watts)</td>
<td>480</td>
<td>4-90</td>
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<tr>
<td>36LED (74 Watts)</td>
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<td>COL18-WA</td>
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<tr>
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</tr>
<tr>
<td>48LED (55 Watts)</td>
<td>208</td>
<td>2-180</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>36LED (71 Watts)</td>
<td>240</td>
<td>2-90</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>64LED (69 Watts)</td>
<td>277</td>
<td>3-90</td>
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<tr>
<td>48LED (55 Watts)</td>
<td>347</td>
<td>3-120</td>
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<tr>
<td>36LED (71 Watts)</td>
<td>480</td>
<td>4-90</td>
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<td>COL12-WA</td>
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<tr>
<td>12LED (14 Watts)</td>
<td>208</td>
<td>2-180</td>
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</tr>
</tbody>
</table>

*Consult Factory for options and finishes.*

**Types of LED Colors**

- **COL21-WA:**
  - Dark Bronze RAL-8019-T
  - Black RAL-9005-T
  - Green RAL-6005-T

- **COL18-WA:**
  - Dark Bronze RAL-8019-T
  - Green RAL-6005-T

- **COL12-WA:**
  - Opal White Acrylic Diffuser

**Mounting Options**

- **ARM MOUNT:**
  - 64LED (69 Watts)
  - 48LED (55 Watts)
  - 36LED (71 Watts)

**Finish Options**

- **STANDARD TEXTURED FINISH**
  - Black RAL-9005-T
  - White RAL-9003-T
  - Grey RAL-7004-T

**Other Features**

- **DIMMABLE DRIVER(S):** (0-10V)
- **HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NON-INTEGRATED MOTION SENSOR:** HLSW
- **10KV SURGE PROTECTOR:** 10SP
- **20KV SURGE PROTECTOR:** (277V & 480V Only) 20SP
- **PHOTO CELL + VOLTAGE** (EXAMPLE: PC120V) PC+V
- **TWIST LOCK RECEPTACLE ONLY** (COL21 & COL18 Only) TPR
- **SINGLE FUSE** (120V, 277V) SF
- **DOUBLE FUSE** (208V, 240V) DF
- **OPAL POLYCARBONATE DIFFUSER** WP
**COL-CPA - Clear Patterned Acrylic Enclosure**

**HID Order Information**

**Spec/Order Example:** COL18-CPA/PG-III/150PSMH120/WM/RAL6005-T/TPC+V

---

**HID**

**Optics**

- **Horizontal Lamp**
  - SEGMENTED REFLECTOR
  - HR

- **Vertical Lamp**
  - GLASS REFRACTOR
  - PG
  - GLASS CHIMNEY
  - GC

---

**MODEL**

- COL21-CPA
- COL18-CPA
- COL12-CPA

---

**OPTIONS**

- **HORIZONTAL SEGMENTED REFLECTOR**
  - FOR COL21 AND COL18 MODELS
  - TYPE III
    - HR - II
  - TYPE III
    - HR - III
  - TYPE IV
    - HR - IV
    - (COL18 ONLY)
  - TYPE IV WIDE
    - HR - IV W - W
    - (COL21 ONLY)

- **FORWARD THROW (HOUSE SIDE CUT-OFF)**
  - HR-FT-HSC

- **TYPE V-SQ**
  - HR-V - S Q

---

**LAMP/BALLAST MODE**

- **WATTS**
  - 150
  - 150T
  - 100
  - 70
  - 70T

- **TYPE**
  - PSMH
  - HPS
  - 42 CFL
  - 39T PSMH
  - 35 HPS

- **VOLTS**
  - 120
  - 208
  - 208’
  - 240
  - 240’
  - 277
  - 277’
  - 347

---

**MOUNTING**

- ARM MOUNT
  - 1
  - 2-180
  - 2-90
  - 3-90
  - 3-120
  - 4-90

- WALL MOUNT
  - Refer to Sun Valley Lighting binder or website section - Arms/Wall Brackets

---

**FINISH**

- STANDARD TEXTURED FINISH
  - BLACK RAL-9005-T
  - WHITE RAL-9003-T
  - GREY RAL-7005-T
  - DARK BRONZE RAL-8019-T
  - GREEN RAL-6005-T

**OPTIONS**

- HOUSE SIDE SHIELD (HR & PG ONLY)
- PHOTO CELL + VOLTAGE (EXAMPLE: PC120V)
- TWIST LOCK PHOTO CELL + VOLTAGE (EXAMPLE: PC120V)
- TWIST LOCK RECEPTACLE ONLY (COL21 & COL18 Only)
- SINGLE FUSE (120V, 277V)
- DOUBLE FUSE (208V, 240V)
- GEAR SMOOTH POLYCARBONATE DIFFUSER

---

**NOTES FOR ELECTRONIC BALLASTS:**

1. ADD SUFFIX –E AFTER VOLTAGE FOR ELECTRONIC BALLAST
2. ABOVE 175W ARE 120 – 277VOLT
3. PSMH ONLY
4. E39 BASE, HOR POSITION LAMP REQUIRED
5. PSMH ONLY
6. -E BALLAST NOT AVAILABLE
7. N/A for 35HPS and 50HPS
8. N/A to 50PS
9. G94Q4 BASE

---

**WATT/TYPES/TYPE/VOLTS**

- COL21-CPA
  - 250
  - 6

- COL18-CPA
  - 210T
  - 1, 5

- COL12-CPA
  - 150
  - 70
  - 42 CFL
  - 39T PSMH
  - 35 HPS

---

**FUSES**

- 120V, 277V

---

**NOTES:**

1. TUBULAR LAMP, PGZ18 BASE, -E BALLAST ONLY
2. TUBULAR LAMP, G12 BASE
3. FOR PSMH, HOR POSITION LAMP REQUIRED
4. E39 BASE, HOR POSITION LAMP REQUIRED
5. PSMH ONLY
6. -E BALLAST NOT AVAILABLE
7. N/A for 35HPS and 50HPS
8. N/A to 50PS
9. G94Q4 BASE

---

**References:**

- HOUSE SIDE SHIELD (HR & PG ONLY)
- PHOTO CELL + VOLTAGE (EXAMPLE: PC120V)
- TWIST LOCK PHOTO CELL + VOLTAGE (EXAMPLE: PC120V)
- TWIST LOCK RECEPTACLE ONLY (COL21 & COL18 Only)
- SINGLE FUSE (120V, 277V)
- DOUBLE FUSE (208V, 240V)
- GEAR SMOOTH POLYCARBONATE DIFFUSER
### COL-CPA - Clear Patterned Acrylic Enclosure
#### LED Order Information

**Spec/Order Example:** COL21-CPA/GRV-III/80LED CW/3-120/RAL8009/SF

#### Optics

**LED Power Array™**
- ANGLED POWER ARRAY
- GLASS REFRACTOR w/ VERTICAL POWER ARRAY
- VERTICAL POWER ARRAY

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<thead>
<tr>
<th>MODEL</th>
<th>OPTICS</th>
<th>LED MODE</th>
<th>VOLTAGE</th>
<th>MOUNTING</th>
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### OPTIONS
- 1 – ANGLED POWER ARRAY ONLY
- 2 – GLASS REFRACTOR ONLY

### Notes
- **FOR SMOOTH FINISH REMOVE SUFFIX "T" (EXAMPLE: RAL-9005)
- CONSULT FACTORY FOR CUSTOM COLORS
- 10KV SURGE PROTECTOR
- 20KV SURGE PROTECTOR (277V & 480V Only)
- PHOTOCALL + VOLTAGE (EXAMPLE: PC120V) PC+V
- TWIST LOCK PHOTOCALL + VOLTAGE (EXAMPLE: PC120V) TP+V (COL21 & COL18 Only)
- SINGLE FUSE (120V, 277V) SF
- DOUBLE FUSE (208V, 240V) DF
- CEAR SMOOTH POLYCARBONATE DIFFUSER CP
**COLB** - Clear Flat Glass Lens

**HID/LED Bollard Order Information**

**Spec/Order Example:** COLB1/HR-ASY/70PSMH120/1/RAL7004-T

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**HORIZONTAL LAMP REFLECTOR**

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**NOTES FOR ELECTRONIC BALLASTS:**
- 40W SUFFIX E AFTER VOLTAGE FOR ELECTRONIC
- 39W – 175W ARE 120 – 277VOLT
- ABOVE 175W ARE 200 – 277VOLT
- PSMH ONLY

**NOTES:**
1. TUBULAR LAMP, PZ98 BASE, E BALLAST ONLY
2. TUBULAR LAMP, 122 BASE
3. FOR PSMH, HOR POSITION LAMP REQUIRED
4. E39 BASE, HOR POSITION LAMP REQUIRED
5. PSMH ONLY
6. E BALLAST NOT AVAILABLE
7. N/A for 35HPS and 50HPS
8. N/A for 39HPS
9. N/A for 50HPS

**SEGMENTED REFLECTOR**

**HR**

**Enclosed Module**

**LED MODULE**

**OPTIONS**

- HOUSE SIDE SHEILD (. . . HS)
- PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) . . . . PC+V
- SINGLE FUSE (120V, 277V) . . . . . . . . SF
- DOUBLE FUSE (208V, 240V) . . . . . . . . DF

**OTHER LED COLORS AVAILABLE**

- NW (4000K) * STANDARD (24 LED) 120 208 240 277 347 480
- GW (5000K) 240 277 347 480
- NW (3000K) 240 277 347 480

* OTHER LED COLORS AVAILABLE

**CONSULT FACTORY FOR CUSTOM COLORS**
## COLB-WA - Opal White Acrylic Diffuser
HID/LED Bollard Order Information

**Spec/Order Example:** COLB1-WA/VL-SYM/50PSMH277/RAL-9005-T

### Options

#### Optics

- Vertical Lamp
  - VERTICAL BARE LAMP OPTIC VL
  - VERTICAL POWER ARRAY VPA

#### LED POWER ARRAY™

#### VERTICAL POWER ARRAY

### HID/LED

### MODEL OPTICS LAMP/BALLAST MODE FINISH OPTIONS

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### NOTES FOR ELECTRONIC BALLASTS:
- ADD SUFFIX -E AFTER VOLTAGE FOR ELECTRONIC
  - 120V: 175W ARE 120 – 277VOLT
  - ABOVE 175W ARE 200 – 277VOLT
- PSMH ONLY

### NOTES:
1. TUBULAR LAMP, PGZ18 BASE, -E BALLAST ONLY
2. TUBULAR LAMP, G12 BASE
3. FOR PSMH, HORIZ POSITION LAMP REQUIRED
4. FOR E39 BASE, HORIZ POSITION LAMP REQUIRED
5. PSMH ONLY
6. -E BALLAST NOT AVAILABLE
7. -N/A for LAMPS and LAMPS
8. -N/A for E39
9. -G24Q-4 BASE

### HORIZONTAL SEGMENTED REFLECTOR HID & CFL

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<th>VOLTAGE</th>
<th>OTHER LED COLORS AVAILABLE CONSULT FACTORY</th>
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### VERTICAL POWER ARRAY LED

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### HORIZONTAL SEGMENTED REFLECTOR HID & CFL

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COLB-CPA - Clear Patterned Acrylic Enclosure
HID/LED Bollard Order Information

Spec/Order Example: COLB2-CPA/VPA-SYM/24LED-NW/277/RAL-9003-T

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*NOTE: For Symmetric distribution, use VPA-SYM with house side shield option.

CONSULT FACTORY FOR DIMMING OPTIONS
LED Optics

LED’s offer several inherent advantages for Outdoor Illumination due to their size, longevity, and energy saving potential. Within a system, LED’s can surpass many of the shortcomings of HID-based systems in uniformity, glare control, and full-spectrum light output. Specialized optics that “vector” the LED’s raw light output, careful control of the LED operating temperature, and a mechanical enclosure that will protect the LED’s over their lifetime are all part of the LED Optical Modules.

LED Power Array™

The LED Power Array™ allows you to control the energy saving light source with one of the most flexible optical systems ever created to harness the LED. Capable of being configured to produce specific distribution patterns or used as the illumination engine behind precision refractors, Sun Valley’s LED Power Array™ is THE robust solution for bringing the benefits of LED’s to traditional luminaires.

DS Series

The DS Series is the epitome of the “Knob and Shade” style luminaire. The bold aesthetic elements, from the variety of shade styles to the decorative luminous treatments, allow the DS Series to be configured to match any architectural context. Additionally, a wide selection of optical approaches provide the lighting professional with the tools to address environments that demand performance driven light levels or that require soft, decorative illumination.