Commercial Developer Lighting Solutions

ACCENT
CANOPY
AREA/SITE
WALKWAY
FLOODLIGHTING
WALL
CONTROLS
Customer Parking

Lighting makes your facility more inviting and a well lit parking area provides overall customer and employee safety. Traditional, contemporary and period style luminaires in a variety of sizes as well as matching poles are available. (See pages 4 & 5)

Shopping Centers

From large mall properties to mid-size and strip mall plazas, Hubbell Lighting offers complete lighting solutions from contemporary to period style luminaires. (See pages 4 & 7)

Commercial Developer Lighting Applications

Hubbell Lighting is your single source for interior and exterior luminaires for every stage of commercial development including major regional malls, small strip centers, new construction and major renovation. We offer an extensive selection of energy-efficient luminaires for the most discriminating architect to the value-driven contractor. Our luminaire selections include: multifunctional fixtures for area/site, wallpacks, floodlighting, perimeter lighting, ceiling/canopy and accent fixtures for feature and display. All Hubbell products are built with quality and performance as the number one priority as well as providing attractive daytime appearance with superior nighttime performance. Additionally, our lighting professionals can assist with the layout of the luminaires and provide a complete lighting analysis of the space to ensure the best presentation.

Accent Lighting

Accent lighting for signs, flag poles, architectural features or landscaping includes floodlights or ingrade luminaires. These fixtures bring a cohesive look to the property. A variety of light source choices are available including energy saving LED. (See pages 6 & 7)

Entrance/Vestibule

An inviting entrance for customers requires accent and highlight lighting. Bollards, low level floods, landscape and wallpacks complete the package and are available in matching styles and finishes. (See pages 4 & 7)

Complete Solutions

A consistent and coordinated look to all the fixtures on the project maintains architectural integrity. Energy-efficient LED and traditional HID systems are available from area/site, wallpacks, canopy to bollards. (See pages 4-7)
Windsor LED
- The Windsor provides classical styling with updated LED technology for scale and performance in pedestrian or parking areas.
- Available in 2 sizes, 4 different LED wattages and 6 optical distributions.

Viper LED
- Available in two sizes with a wide choice of LED wattage configurations and optical distributions.
- Designed to replace HID lighting up to 1000W MH or HPS, 5 different mounting options for new and existing installations.

Urban LED
- Decorative LED luminaire is designed for area lighting, the Urban is your ultimate solution
- 4 styles, 2 different shades, 4 LED wattages, and 6 full cutoff lighting distributions, make the Urban an ideal solution for energy efficient, for parking areas and walkways.

Warp 9 LED
- WARP9 LED was designed to disappear from the site, camouflage itself all with an eye to let the architecture shine through. The definition of a modern, energy-efficient, truly sustainable LED lighting solution. Available in 2 sizes, HID to LED upgrades are available.

Altitude Small LED
- Kim Lighting’s ALTITUDE is the next revolution in LED outdoor lighting. The ultimate in luminaire design innovation by balancing form, engineering and superior optics. ALTITUDE is proportionally scalable with six sizes capable of pedestrian/site/roadway environments.

MSV M-Pulsive™
- Square, one-piece formed aluminum housing is completely sealed, flat and convex glass available; up to 1000w systems.

Alaire
- Architectural, one-piece, die-cast aluminum housing; Contour lines and radius corners complete unique design; Heat dissipating fins on top; flat or convex glass, up to 1000w systems.

Medallion
- Architectural, one-piece die-cast aluminum, housing die-cast aluminum door hinges to housing and secures with two, captive screws; Clear, flat or convex, tempered glass lens; up to 1000w systems.

HID Solutions – Vertical Lamp
- Improved light level uniformity and increased pole spacing

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HID Solutions – Horizontal Lamp
- Higher light levels and compact/lower profile design

Dallas
- Round spun aluminum housing featuring an embossed decorative band. Optional color vinyl/trim strips available; up to 1000w systems

Archetype
- The eclectic shape of The Archetype LED readily adapts to and complements contemporary architectural design. Upgradable with HID to LED kits allows a broad range of applications.

Structural
- Kim Lighting’s elegant form of Structural LED is an orchestrated combination of simple shapes in a dynamic architectural luminaire. Optional structural elements and HID to LED Upgrade Kits are available.
The wiHUBB® control systems from HBA (Hubbell Building Automation) allow programmable control of site/parking luminaires, facility signs, ingrade and wall packs for maximum energy savings. In-Fixture Modules feature full-range dimming capabilities into LED luminaires from Hubbell Lighting outdoor brands (AAL, Beacon, KIM Lighting, Hubbell Outdoor & Spaulding Lighting). Additionally, wiHUBB Smart Pack and Preset Switch can be included for manual override control further maximizing savings.

### wiHUBB® Controls Features and Benefits

**Energy Savings**
- Fixture scheduling for On/Off and dimmed levels of illumination

**Lower installation costs**
- No rewiring or trenching on retrofit applications
- Factory installed wireless modules
- No additional wiring

**Capabilities**
- Programmable control of site luminaires
- wiHUBB devices communicate utilizing the most advanced radio RF technology
- Expandable/scalable system grows as your facility and lighting needs grow

### wiHUBB® – Complete Control of Fixtures for Maximum Energy Savings

The wiHUBB® system is flexible allowing site owner/manager to group fixtures by area for maximum energy savings and control. Below example of grouping and scheduling luminaries for commercial site.

#### Fixtures – Location Scheduled Time

<table>
<thead>
<tr>
<th>Fixtures/Location</th>
<th>Scheduled Time</th>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>R</th>
<th>F</th>
<th>S</th>
<th>Holiday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking/Wallpacks</td>
<td>ON 30 minutes Before Sunset</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking/Wallpacks</td>
<td>ON 15 minutes Before Sunset</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Parking</td>
<td>Dim Reduction 8:00 p.m.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Parking</td>
<td>Dim Reduction 9:00 p.m.</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Parking</td>
<td>On at 75% 8:00 a.m.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>All Fixtures</td>
<td>All OFF 15m After Sunrise</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

**Additional SAVINGS & Control**

For additional information about wiHUBB and Hubbell Building Automation please visit: www.hubbell-automation.com
Hubbell Lighting brands offer the most comprehensive site luminaire styles and poles for the unique lighting needs of commercial lighting applications. Models include both traditional HID luminaires in horizontal and vertical lamp orientations in a variety of shapes and sizes as well as the latest LED innovations.

**Traditional HID Luminaires**

Traditional HID area/site lighting sources incorporate luminaires with a reflector system that delivers industry leading performance, illumination and uniformity for light exactly where it’s needed.

- Typically higher light levels
- Lower initial cost
- Broad offering of luminaire designs
- Optic assembly flexibility

**IESNA Recommended Values**

It is also important to consider current IESNA recommended RP20 guidelines for designing fixed lighting for parking facilities. IESNA recommendations only apply to the design of new lighting systems for parking facilities. The lighting recommendations are for the reasonably safe movement of vehicular and pedestrian traffic in parking facilities. These values should be considered a minimum guideline, which are subject to changes based on sound engineering judgment. Considerations on illuminance requirements of a parking facility are affected by layout, operation, and vehicular traffic safety issues, plus the visibility and security needs of pedestrians walking to or from their vehicles.

More commonly, parking lots are illuminated to higher levels for safety and security reasons.

**Solid State Lighting – LED Design & Performance**

Our LED luminaires are designed with industry leading optical lenses and systems to distribute light where it is specifically needed for area/site, floodlighting, wall, pedestrian, parking structure and landscape applications.

**LED Luminaire Advantages**

By utilizing precise LED optical design and directional lens placement to maximize light delivery to the task, LED luminaires deliver many advantages over traditional lighting sources:

- Energy efficiency – lower operating costs
- Superior light level uniformity – improved visual acuity
- Improved pole and fixture spacing reduces installation costs
- Long source life – reduces maintenance costs
- Virtually maintenance free
- Enhanced control options for increased energy savings and customized lighting

**HID LED Comparison Chart**

<table>
<thead>
<tr>
<th>HID System</th>
<th>HID Wattage</th>
<th>HID Life Hours</th>
<th>LED Wattage</th>
<th>LED Life Hours</th>
<th>Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>150w PSMH</td>
<td>185</td>
<td>70</td>
<td>54%</td>
<td></td>
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</tr>
<tr>
<td>250w PSMH</td>
<td>283</td>
<td>140</td>
<td>51%</td>
<td></td>
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<tr>
<td>320w PSMH</td>
<td>381</td>
<td>210</td>
<td>42%</td>
<td></td>
<td></td>
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<tr>
<td>400w PSMH</td>
<td>461</td>
<td>210</td>
<td>34%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100w HPS</td>
<td>130</td>
<td>70</td>
<td>54%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>250w HPS</td>
<td>295</td>
<td>140</td>
<td>52%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400w HPS</td>
<td>464</td>
<td>210</td>
<td>59%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Lighting Zone ILLUMINANCE REQUIREMENTS**

<table>
<thead>
<tr>
<th>Lighting Zone</th>
<th>Minimum Horizontal</th>
<th>Uniformity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting Zone 0</td>
<td>0.2 fc</td>
<td>8:1</td>
</tr>
<tr>
<td>Lighting Zone 1</td>
<td>0.50 fc</td>
<td>10:1</td>
</tr>
<tr>
<td>Lighting Zone 2</td>
<td>0.75 fc</td>
<td>10:1</td>
</tr>
<tr>
<td>Lighting Zone 3</td>
<td>1.00 fc</td>
<td>10:1</td>
</tr>
</tbody>
</table>

*Higher lumen fixtures can reduce number of fixtures on pole assemblies. Note: LED Source chart and system watts/lumens based on recent LED installations and client feedback. Consult your Hubbell Lighting Representative for more information.

**Cimarron LED – Spaulding Lighting**

Albuquerque, NM

**Minimum Horizontal Uniformity**

<table>
<thead>
<tr>
<th>Lighting Zone</th>
<th>Minimum Horizontal</th>
<th>Maximum Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting Zone 0</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Lighting Zone 1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Lighting Zone 2</td>
<td>0.50 fc</td>
<td>10:1</td>
</tr>
<tr>
<td>Lighting Zone 3</td>
<td>0.75 fc</td>
<td>10:1</td>
</tr>
<tr>
<td>Lighting Zone 4</td>
<td>1.00 fc</td>
<td>10:1</td>
</tr>
</tbody>
</table>