



LED Overview

Outdoor Lighting Solutions Utilizing LED Technology

PHILIPS



LED OVERVIEW

Philips Gardco now incorporates LEDs as a source in a number of luminaires. Rather than attempting to place this source into existing luminaires that were originally designed around HID lamps, new luminaires have been developed, each engineered to maximize the benefits of LED technology.

Working with LEDs presents many challenges. While some are similar to those of more traditional sources, many are unique. For example, despite their small size LEDs generate significant heat. As the wattage and useful light increases, the heat increases as well. For owners to realize a return on their investment, LEDs must exhibit a long life. Without proper attention to thermal management, life expectancy of the LED can decrease dramatically.

Philips Gardco understands this and has made thermal management a top priority. Our LED luminaires provide an environmentally responsible solution that keeps performance, aesthetics, and the owner's real world financial needs in mind.



Blending sophisticated LED optics with advanced thermal technology, the **Radiant** is an area luminaire with a distinctly contemporary style. The housing is designed to prevent the buildup of contaminants and to permit airflow to cool the LED components. An integral die cast aluminum arm provides an effortless transition from the pole to the luminaire. The Radiant is also available with solar power, which can help reduce operating costs, assist in achieving LEED certification, and aid in overall energy independence.



The **LED Bollard** combines refined aesthetics, exceptional light output and maximum energy savings to create the most sophisticated and versatile LED walkway lighting product available today. The stacked modular louvers control glare and uniformly distribute light in patterns of 180 or 360 degrees. When equipped with the bi-level Motion Response System, energy usage is further reduced. Like the Radiant, the LED Bollard is also available with solar power.

The **121 LED Wall Sconce** offers classic styling reminiscent of the Philips Gardco 100 Line series while providing a solution designed around LED technology. The sloped surface ribs of the die cast aluminum housing are designed to minimize the form while maximizing heat dissipation and airflow, resulting in excellent thermal control.



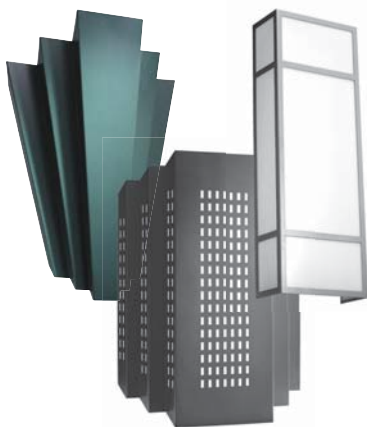
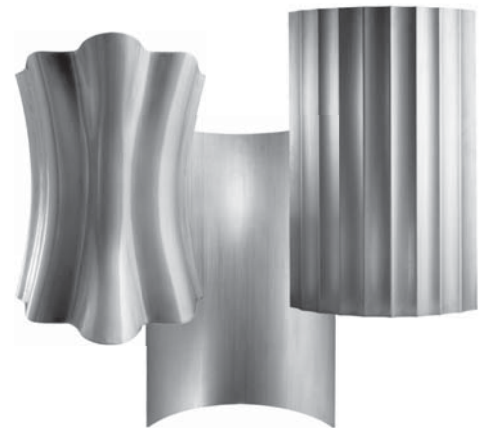
The Philips Gardco **Motion Response System** is engineered to reduce energy cost and maximize savings. Available with both the LED Bollard and 121 LED Sconce, the system uses motion-sensing technology to switch between low light and high light modes. This revolutionary feature ensures that low light levels are used when maximum light is unnecessary, resulting in energy savings of up to 90 percent.

The Emco **ELG LED Parking Garage Luminaire** is designed to meet the unique challenges of parking garage applications while minimizing service needs and maximizing energy savings. The high-performance Type V optical system was developed expressly for parking structures, providing full cutoff and consistent uniformity of illumination while minimizing glare and light trespass. The ELG utilizes the identical Quick Mount Plate system as the Philips Gardco GPI making retrofitting quick and easy.



The **96 Line Step and Aisle Light** utilizes an integrated optical system that relies on a single four-watt LED. This minimally scaled luminaire achieves a remarkable level of illumination. Available in both round and rectangular shapes, and designed for use in all types of wall construction, the 96 Line is scaled to make a tasteful and discreet design statement.

The **Organics** collection of building-mounted luminaires is a natural fit with today's architecture. Each style is unique yet maintains the organic look that inspired the product line. Available in seven contoured shapes, Organics can be specified with a number of finishes, optical systems and distribution options to meet the needs of any project.



Like the Organics, **Large Fascia Plates** are graceful large scale architectural accents. Part sconce, part architecture, part decoration and part identity marker, they are available in five distinct styles. These LED luminaires are available with white or color LEDs or they can be equipped with LED color changing technology for architectural effect and impact. For additional flexibility, both the Large Fascia Plates and Organics luminaires are available in compact fluorescent and HID configurations. To see the full line of Organics, and Large Fascia Plates please visit Sitelighting.com.

Although not used as the primary source, LEDs are also used in the **Circa** and **108 Circa Sconce** luminaires. Available in five electrifying colors, LEDs add a unique accent to the Circa's ring when illuminated.



Understanding LED System Performance

Philips Gardco is committed to providing complete information on LED system performance according to accepted standards established by the IESNA and other organizations. L70 is the accepted term for describing the predicted life of LEDs. It is the estimated time in hours when an LED is producing 70% of initial light output. Philips Gardco publishes L70 data for all LED luminaires on the applicable Submittal Data Sheets. The L70 data is based on calculations utilizing the IESNA LM-80 methodology that have been provided by our selected LED vendors, in addition to our own thermal tests. L70 data is provided based both on 25°C (77°F) and 40°C (104°F) ambient temperature conditions.

All Gardco and Emco LED luminaires have been tested in accordance with IESNA LM-79 procedures. The Philips Gardco Engineering Laboratory is a UL certified laboratory under both the D.A.P and C.T.D.P. programs and as such is required to follow ISO 17025 protocol.

Gardco's Commitment to Sustainability



Philips Gardco incorporates a “green” symbol to help its customers identify products that offer maximized energy savings. This symbol appears on product lines, or configurations within a product line, to help customers to quickly identify products that offer “true” energy consumption reduction.

Gardco has a long history of approaching site lighting with a “less is more” strategy. Minimizing the number of luminaires and poles required on a site through performance optics and other product features was a founding principal of the company. The use of energy efficient lamps and ballasts is an important component of all product offerings and of our product engineering strategies. We also consider energy consumption in the choice of lamps used with products. Embracing new energy efficient technologies, such as high light output lamps and LEDs, is at the heart of all current new product development efforts.

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Philips Gardco Warranty

Philips Gardco LED products carry a limited 5 year warranty.
For full warranty information please visit sitelighting.com.



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