## Garage Lighting

**GP1** Induction Luminaire

standard.

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The Philips Gardco GP1 is a luminaire designed specifically for parking garage lighting. The precision diecast aluminum canopy, the corrosion resistant acrylic housing, and the moisture, insect, and pollutant excluding silicone gasketing all assure long fixture life. The QL Induction Lighting system provides for extremely long life, up to 100,000 hours. GP1 luminaires provide cutoff performance.





PREFIX	WATTAGE	VOLTAGE		OPTIONS			
Enter the order code into the appropriate box above. Note: Philips Gardco reserves the right to refuse a configuration. Not all combinations							

and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX		WATTAGE	<u> </u>	
GP1 <sup>1</sup>	Garage Luminaire	85QL/830 85OL/840	85 watt QL/3000°K 85 watt OL/4000°K	FINISH INFORMATION: The upper canopy is finished with polyester powdercoat. The opaque
			05 Watt QL-1000 K	housing section is finished with acrylic lacquer. Concrete Grey finish is

VOLTAGE		NS
120 200-277²	POLY <sup>3</sup> TP DR BX JB	Polycarbonate Downlight Lens Spanner Head Tamper Resistant Screws Supplementary Downlight Reflector Bird Excluding Shroud for pendant mounted units. Balanced j-box with offset knock-out
Notes	TM WG	For non-rigid sway pendant mount. Trunnion Mount Wire Guard Can be field installed.

Notes:

The GP1 standard in Concrete Grey finish only.
Accepts 200V through 277V input.
Polycarbonate lenses carry a 1 year warranty only.



# Garage Lighting

### GP1 Induction Luminaire

#### DIMENSIONS





#### **MOUNTING AND OPTIONS**



Flush or surface mounting is easily accomplished with a galvanized steel quick mount plate (standard j-box by others).

For rigid pendant mounting to conduit (by others), the Gardco Quick Mount plate is directly attached to a standard metal 4" j-box.



An off-set, self-leveling j-box balances the luminaire in those cases where the pendant mount is free swinging. (Swivel ceiling canopy and pendant by others.) For this option specify JB when ordering.







The "TM" trunnion mounting option is designed to mount to a concrete ceiling with a die formed, anodized aluminum trunnion bracket assembly. The assembly permits (6) one inch incremental mounting height adjustments. A 1/2" I.P.S. weatherproof die cast aluminum hub is located on the top pan for field attachment of rigid or flexible conduit (by others).

The DR (Downlight Only Reflector) option provides an additional spun aluminum lower reflector which will significantly increase pavement illumination <u>and</u>mask any undesired uplight. Provides additional area illumination and masks uplight.

Practical options include a bird excluding shroud which prevents nesting and perching, reducing dirt and maintenance. A 12"/30.48cm minimum pendant length required.

FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir. Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

**CUTOFF PERFORMANCE:** Cutoff performance means a luminaire distribution where the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle at or above 90° above nadir, and 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

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### **GP1** Induction Luminaire

#### SPECIFICATIONS

**GENERAL:** The Philips Gardco GP1 is a garage luminaire. Each luminaire features a diecast electrical canopy, an acrylic housing with an uplight window, a metalized faceted downlight reflector system, a hydroformed uplight reflector, and an acrylic lens. Units are totally sealed and suitable for damp and wet locations.

**QUICK MOUNT PLATE:** A dieformed 14 ga. galvanized steel plate is supplied for mounting to a recessed, surface, or rigid pendant hung 4" j-box (standard j-box and rigid pendant by others). An integral hanger tab on the plate supports the luminaire during wiring.

Caution: Philips Gardco is not responsible for failure of mounting components supplied by others. Proper care should be exercised in mounting component selection to insure adequate luminaire support, given luminaire weight, vibration potential and thermal conditions present in the application. If luminaires are supported solely by screws into a composite j-box, additional support directly to structure is recommended. Failure to properly support the luminaire may cause damage or injury, for which Philips Gardco is not responsible.

**UPPER ELECTRICAL CANOPY:** The diecast aluminum canopy houses the ballast and wiring splices. After wiring, the canopy swings up and snaps securely to the Quick Mount Plate without tools.

**HOUSING:** The housing consists of a one piece acrylic housing with prismatic uplight window and opaque lower side section. The housing is fully gasketed to the upper canopy.

**DOWNLIGHT REFLECTOR:** Semi-specular metalized aluminum facets are precisely positioned to provide a highly efficient lighting distribution.

**UPLIGHT REFLECTOR:** The hydroformed and anodized aluminum reflector is designed to generate illumination on the ceiling and vertical surfaces.

**DOWNLIGHT LENS:** An injection molded UV resistant acrylic lens is retained with captive fasteners. The lens hinges down for relamping. Memory retentive silicone gasketing seals the lens to the housing.

**THE QL INDUCTION LIGHTING SYSTEM:** QL Induction lighting is based on a technology which is fundamentally different from that of incandescent lamps or today's conventional gas discharge lamps. Instead of the glowing filaments of incandescent lamps, or the electrodes used in conventional gas discharge lamps, light generation is by means of induction the transmission of energy via a magnetic field-combined with a gas discharge.

#### Induced Current In Lamp Bulb (Vessel)

In the QL Induction lighting system, the energy source-equivalent to the primary coil of the transformer-is the lamp's induction coil, which is powered by the high-frequency electronics in the HF generator. The secondary coil is represented by the low-pressure gas and metal vapor inside the lamp bulb. The induced current causes the acceleration of charged particles in the metal vapor. These particles collide, resulting in excitation and ionization of the metal vapor atoms, and raising the energy level of the free electrons from these atoms to a higher, unstable state. As these excited electrons fall back to their stable, lower-energy state, they emit ultraviolet radiation. This falls on the fluorescent coating inside the lamp bulb, causing light to be emitted.

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#### **QL System Components**

The QL lamp system consists of three main components, each of which can be replaced separately if service is required.

The vessel or discharge bulb is a closed glass bulb containing a low-pressure inert gas filling with a small amount of mercury vapor. The walls of the vessel are coated on the inside with a fluorescent powder of any of the modern three-line phosphor types, providing a choice of color temperatures. At present, the colors /830 (3000K) and /840 (4000K) are available. The discharge vessel is fixed to the power coupler by the plastic lamp cap with the click system. These two components normally never need to be disassembled, due to the ultra-long lifetime of the system.

The power coupler transfers energy from the HF generator to the discharge inside the glass bulb, using an antenna that comprises the primary induction coil and its ferrite core. Other parts of the power coupler are a plastic support for the antenna, a 40 cm coaxial connecting cable carrying current from the HF generator, and a heat conducting rod with mounting flange. The mounting flange allows the QL lamp system to be mechanically attached to the luminaire, and removes waste heat to a heat sink which forms part of the luminaire.

The HF generator produces the  $2.65~\mbox{MHz}$  alternating current supply to the antenna.



**FINISH:** The upper canopy is finished with polyester powdercoat. The opaque housing section is finished with acrylic lacquer. Concrete grey finish is standard.

LABELS: All fixtures bear UL or CUL (where applicable) Wet Location labels.

WARRANTY: 5 year limited warranty. See philips.com/warranties for complete details and exclusions.