

Pure Performance in an LED Sconce

121 LINE Specification Grade LED Sconces - Generation 2



PHILIPS





Finish shown is Tiger Drylac 38/40127 Pearl Night Blue

The Philips Gardco 121 Sconce

Taking its cue from the extremely successful 100 LINE, the Philips Gardco 121 Generation 2 LED Performance Sconce integrates classic design with high output illumination. The stylish form is both sleek and contemporary, pairing straight lines with rounded edges. This approach allows the luminaire to complement a wide assortment of architectural styles and designs, while delivering high light levels and incredibly useful patterns.

The 121 is a luminaire specifically designed and engineered around advanced LED sources. Philips Gardco engineers have succeeded in harnessing the power of the LED source to develop distinct, usable distributions with maximum light and minimal energy consumption. With a total of four defined patterns, wattages from 18w to 75w and lumen packages up to 5,500+, you can easily replace HID sources up to 175 watts while enjoying energy savings of up to 64%. Generation 2 optics provide up to a 30% increase in luminaire spacings. Additionally, the Generation 2 121 LED Sconce can be specified with an impressive selection of control possibilities which regulate light output to ensure that sufficient lower light levels are used when maximum light output is unnecessary.

Classic design meets high output illumination

The unique and stylish housing of the 121 LED Sconce was carefully conceived to minimize the form while maximizing heat dissipation and airflow. This integral cooling system assures that LED performance is not jeopardized as a result of overheating and maximizes component and LED life. The fins spanning the top and front of the luminaire act to radiate heat from within the housing, cooling the LED arrays and the system's electrical components. The stainless steel screen located directly below the fins minimize debris collection and maximizes the airflow to allow for lower operating temperatures, extending the life of the luminaire components.

Durable die cast aluminum construction assures that housing sections fit within the most exacting tolerances. Internal components are easily accessible should maintenance be required. TGIC Finishes are designed to protect and to assure permanence.

The result is a stylish, sophisticated and expertly crafted wall mounted luminaire that maintains Philips Gardco quality throughout while providing energy savings of up to 90% compared to conventional sources.



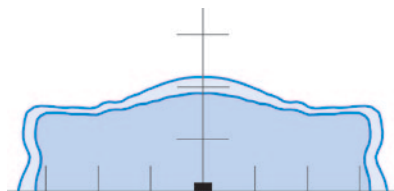
121 shown is Philips Gardco black paint (BLP)



Utilizing energy efficient advanced LED technology supplies greater light output and a prolonged lifespan when held up against conventional HID sources, while drawing significantly less of power. The Philips Gardco 121 Generation 2 Sconce features an advanced LED array system that virtually redefines illumination from the wall. Improved visibility, increased efficiency and tighter control reduces the quantity of luminaires required to light a space to the desired levels. This contributes to substantial cost savings and reduced environmental impact in both the short and long term.

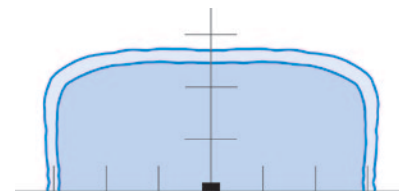
While LEDs are starting to be increasingly more commonplace in outdoor lighting, it is crucial to note that not all LED systems are created equal. Drawing from its long tradition of offering efficient high performance optics, Philips Gardco engineers optics that capture the light output from each individual LED and send it to where it's needed most. Each LED is surrounded by its own specific optic and placed within the array to deliver precise patterns that correspond to the most typical area lighting scenarios, with tightly controlled edges. This allows for lighting layouts that can more easily achieve stringent LEED outdoor lighting requirements.

The 121 is available in four unique and practical patterns.



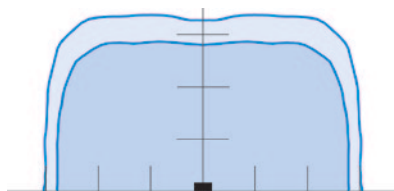
Type 2

A Type II (2) wide throw with maximized lateral spacing.



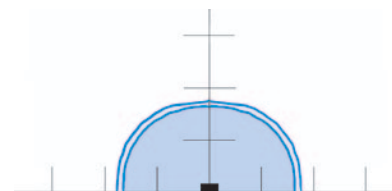
Type 3

A Type III (3) optimized wide throw that adds excellent forward contribution.



Type 4

A Type IV (4) with maximized forward throw distribution for small parking areas.



Type MT

An MT medium throw for when concentrated light near the wall is desired.

All luminaires carry an IP66 rating and are UL listed wet location for downlighting applications.

Generation 2 optics take high performance to new levels

High Light Levels and Uniform Distribution

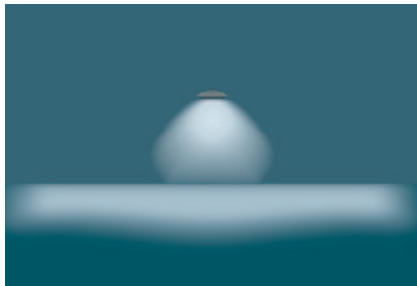
Optical systems feature advanced Class 1 LED arrays designed to efficiently direct light into very wide or forward projecting light patterns without hot spots, streaks or striations.

Spacings

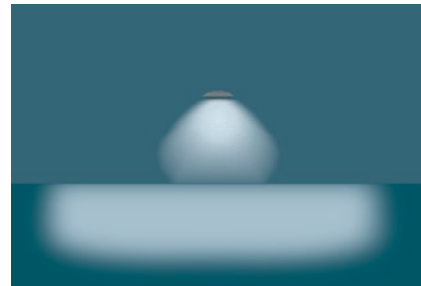
Sconce spacings can be driven by aesthetics, economy, or by a combination of both. For aesthetic purposes, the luminaire placement is selected first, followed by the selection of the optical system. In this scenario, the sconce may satisfy primary or supplemental lighting requirements. When economic conditions govern the decision and wide spacings are necessary, the Philips Gardco 121 LINE LED offers 5:1 spacing to mounting height ratios with Type 2 optics. At a 12' mounting height, sconces may be spaced as far as 60' apart. For the best of both worlds, the Type 3 offers excellent lateral spacings and forward projection in a very usable rectangular pattern.

Control of Glare & Light Trespass

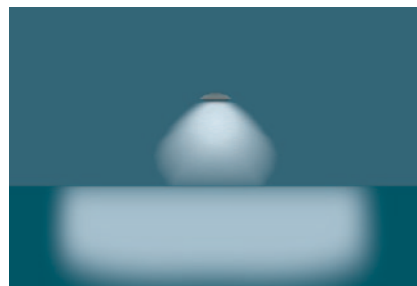
The most destructive factor to lighting performance is glare. The traditional refractor wall pack generates light at excessively high angles, creating glare within a driver's or pedestrian's field of view. In addition, light above 90° may result in distracting brightness into neighboring spaces. Philips Gardco 121 performance sconces utilize precision LED optical systems to provide full cutoff performance. This assures that light at or above 80° is minimized and light above 90° is eliminated - resulting in extraordinary control of luminaire brightness and undesired illumination.



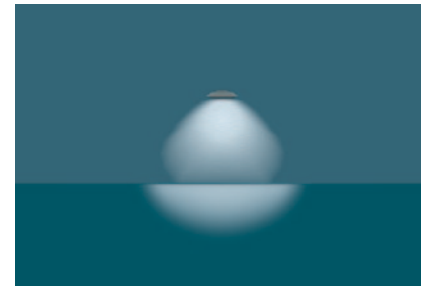
Type 2



Type 3



Type 4



Type MT

The three-dimensional interpretation of typical performance presented here demonstrates the asymmetric distributions available with Types 2, 3, 4 and MT optical systems. Enhancement of the building facade as well as reduced glare illumination are all part of the sconce standard offering. Note the significant drop off of these optical systems at the edge of the distribution.

Further photometric information is available through your Philips Gardco representative or our Applications Engineering Department.

Brilliant design meets quality construction

The design and construction of the 121 LED Sconce luminaire continues the Philips Gardco tradition of providing specification quality design and craftsmanship. Each feature demonstrates an attention to detail and a highly refined method of achieving long-term performance and trouble-free operation.

The housing and door frame are each single pieces of die cast aluminum and the finish is a fade and abrasion resistant, electrostatically applied, thermally cured textured polyester powdercoat. The TGIC painted powdercoat finish is bonded to the exterior surfaces. Four standard colors and over 210 optional colors provide the designer with a broad palette to either showcase the luminaire and its refined beauty, or minimize its effect on the space.



Modular LED array with individual optics for each LED. Optics are precisely positioned to achieve desired distribution patterns

Metal core circuit board for added heat dissipation

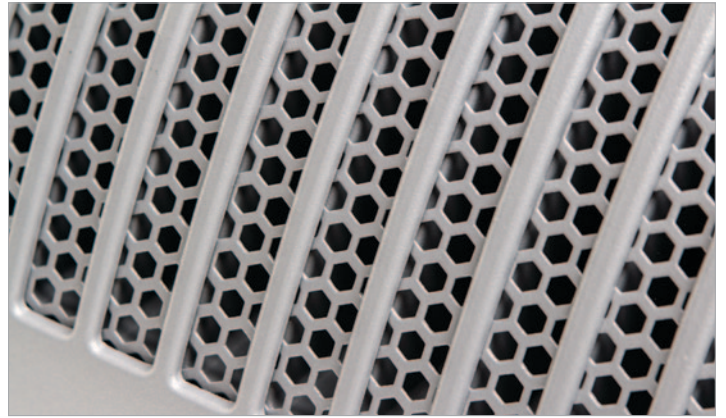
Constant current driver for driving LEDs at 350mA, 530mA or 700mA

The door frame is die cast aluminum and has been carefully designed to integrate seamlessly to the housing form. The door frame is hinged closed and is secured to the housing with two captive stainless steel fasteners that provide vandal resistance yet remain easily accessed for service.

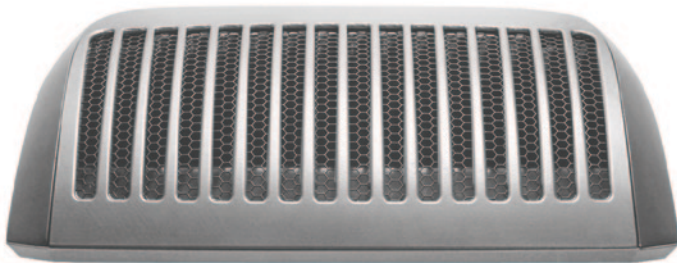
When the door frame is closed, the 121 LED Sconce is completely sealed at all points of material transition. Gaskets completely seal the housing and door frame, preventing the intrusion of insects, dust, water and other contaminants, ensuring a long life of optimal performance.

Controlling light is only part of the challenge when operating an advanced LED system. The thermal management of high power LEDs is particularly critical. LED's produce an extraordinary amount of heat. If this heat is not sufficiently removed, the LEDs will operate at greater temperatures, forcing them to be drastically less efficient, significantly less reliable and ultimately reducing both their lifespan and the life of their components.

In order to provide optimal operating conditions, the engineers at Philips Gardco developed an innovative airflow ventilation system for the 121 Wall Sconce. As a result, the 121 provides a sophisticated solution to the inherent challenges of LED thermal management.



The 121 incorporates die cast radiating fins as a part of the aesthetic design, efficiently conducting heat away from the LED components. These fins are designed to maximize airflow and to increase the overall thermal efficiency of the luminaire. The key outcome is that the LED junction temperature is held to an absolute minimum.



All electrical components in the 121 LED Sconce are securely mounted to the ribbed, die cast aluminum back plate. The ribbing on the plate exterior dissipates heat from the interior components, lowering the luminaire's operating temperature and leading to a longer product lifespan.



The mounting plate permits easy installation of the luminaire, using a simple and secure "hinge and lock" system.

Controlling energy means saving dollars

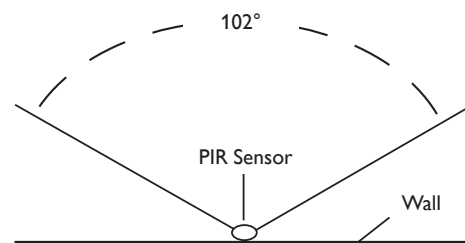
The 121 LED Performance Sconce was conceived and constructed with energy savings in mind. Through the use of highly efficient LEDs as well as the dual-level Motion Response system, the 121 LED Sconce provides the most appropriate amount of light at all times, while significantly reducing the cost of operation.

The use of LED technology allows for improved light output and a longer lifespan than traditional HID sources while consuming a mere fraction of the power. The Philips Gardco 121 LINE LED performance sconces contains an advanced Class 1 LED array system that defines new standards for wall mounted illumination and efficiency. These systems use up to 50% less energy resulting in a reduction in operating costs of up to 40% when compared with most HID wall mounted systems in use today. This translates into real savings and reduced environmental impact in both the short and long term.

Cost savings and reduced energy usage is only the beginning. Further savings can be realized by utilizing one of the dimming configurations available with the 121 LINE LED. These configurations can reduce power usage by an additional 50% over using the LED source alone. Additional dimming options can be based on time of day, ambient light, or any other control parameters desired (actual dimming system supplied by others.)

Motion Response (MR)

The 121 LINE LED with Motion Response (-MR) provides light only when it's needed, reducing power by 75% when the area is unoccupied. Once motion is detected, the luminaire switches to full light output until no motion is recognized for a 5 minute period. The 121 LINE LED uses an integral motion sensor.



0-10V Dimming (DIM)

The 121 LINE LED with 0-10V Dimming (-DIM) is designed for control by a 0-10v dimming system (supplied by others.)

Automatic Profile Dimming (APD)

The 121 LINE LED with Automatic Profile Dimming (-APD) provides guaranteed savings by reducing power and light output by 50% during periods of low traffic. By calculating the night-time midpoint, power is reduced by 50% during the two hours prior to and the six hours after. This results in an automatic additional energy savings of 33% on average.

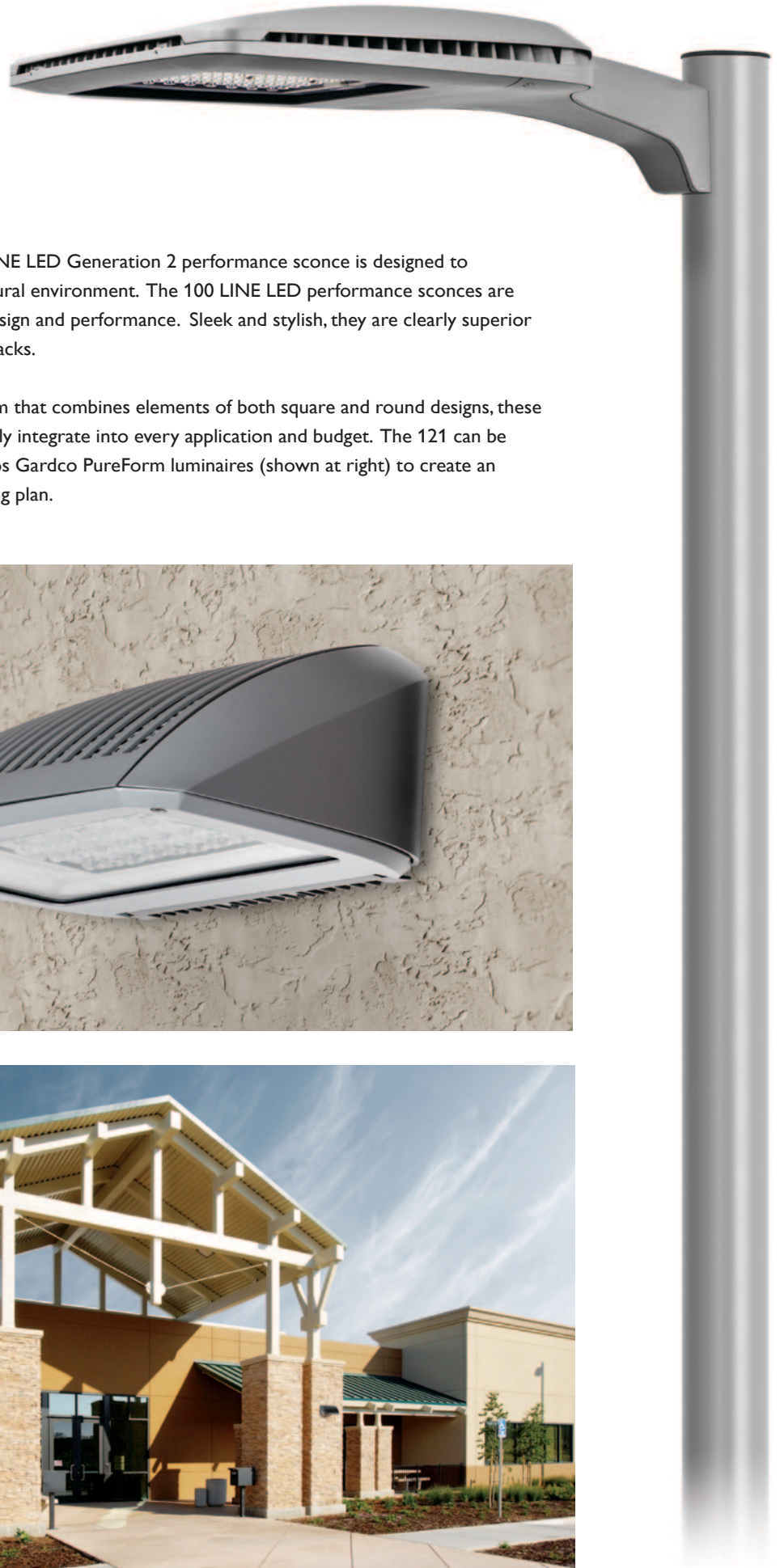
Dual Circuit Control (DCC)

The DCC configuration allows for separate circuiting of each LED board.

Application

The Philips Gardco 121 LINE LED Generation 2 performance sconce is designed to complement any architectural environment. The 100 LINE LED performance sconces are equal parts engineering, design and performance. Sleek and stylish, they are clearly superior to obtrusive, glaring wall packs.

With its sleek tapered form that combines elements of both square and round designs, these compact sconces seamlessly integrate into every application and budget. The 121 can be paired with matching Philips Gardco PureForm luminaires (shown at right) to create an elegantly unified site lighting plan.



121 LED Performance Sconce Specifications

GENERAL DESCRIPTION: Each Philips Gardco 121 luminaire is a wall mounted full cutoff luminaire with integrated lensed LEDs mounted in a fixed array. Internal components are totally enclosed in a rain-tight, dust-tight and corrosion resistant housing. The housing, back plate and door frame are die cast aluminum. A choice of four (4) optical systems is available. Luminaires are suitable for wet locations, mounted in the normal downlight position.

HOUSING: The single-piece stylized housing is die cast aluminum. A memory retentive gasket seals the housing with the door frame to exclude moisture, dust, insects and pollutants from the luminaire. A black, die cast ribbed backplate is included.

IP RATING: 121 Generation 2 luminaires have a rating of IP66.

DOOR FRAME: A single-piece die cast aluminum door frame integrates to the housing form. The door frame is hinged closed and secured to the housing with two (2) captive stainless steel fasteners.

OPTICAL SYSTEMS: Philips Gardco 121 Generation 2 LED luminaires utilize lensed LED arrays set to achieve IES Type II, Type III, and Type IV distributions, as well as a Medium Throw distribution. Individual LED arrays are replaceable. Luminaires feature high performance Class 1 LED systems. Luminaires are supplied standard with a clear glass lens.

LED PERFORMANCE:

PREDICTED LUMEN DEPRECIATION DATA		
Ambient Temperature °C	Driver mA	L ₇₀ Hours
25 °C	350 mA	180,000
	530 mA	150,000
	700 mA	120,000
40 °C	350 mA	170,000
	530 mA	130,000
	700 mA	100,000

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output.

THERMAL MANAGEMENT: The 121 design provides deep integral thermal radiation fins cast into the upper housing to assist in the thermal management so critical to long LED system life. Metallic screens are placed over the fins and integrated to the housing to prevent the buildup of dust, dirt and contaminants, while permitting required air flow for cooling.

ELECTRICAL: Luminaires are equipped with an LED driver that accepts 120V through 277V, 50hz to 60hz, input. Driver output is either 350 mA, 530 mA or 700 mA, based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F/150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaires consume 0.0 watts in the off state.

FINISH: Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), natural aluminum (NP) and beige (BGP). Consult factory for specifications on custom colors.

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

WARRANTY: Philips Gardco luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED drivers also feature a 5 year warranty. See Warranty Information on sitelighting.com for complete details and exclusions.

Philips Gardco reserves the right to change materials or modify the design of its product without notification as part of the company's continuing product improvement program.

Prior to ordering, consult submittal data sheet #G200-037 - 121 LED Performance Sconce - generation 2 at sitelighting.com/literature/g_121-Gen2_cut.pdf for the most current information, notes and exclusions, as well as detailed specifications for luminaire configurations, controls and delivered lumen data.

121 LED Performance Sconce Ordering

Example	PREFIX	OPTICAL SYSTEM	LED WATTAGE	LED SELECTION	VOLTAGE	PAINTED FINISH	OPTIONS
	121	3	75LA	NW	UNIV	NP	F
121	Constant Wattage / Full Light Output	2	350mA	CW	UNIV	BRP Bronze	F
121-MR	with Motion Response	3	18LA	Cool White	120V through 277V	BLP Black	DL
121-DIM	with 0-10V Dimming	4	35LA-350	NW	347	WP White	PCB
121-APD	with Automatic Profile Dimming	MT	35LA-2	Neutral White	Requires EBB	NP Natural Aluminum	WS
121-DCC	with Dual Circuit Control		530mA	WW	Extended Back Box option	BGP Beige	EBB
			26LA	Warm White		OC Optional Color	
			50LA			SC Special Color	
			50LA-2				
			700mA				
			35LA-700				
			75LA				
			75LA-2				

Refer to Submittal Data Sheet on sitelighting.com for complete details and restrictions for luminaire configurations.

OPTICAL SYSTEM

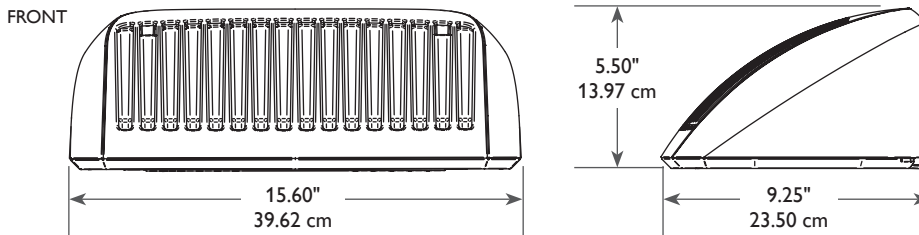
- 2** IES Type II
- 3** IES Type III
- 4** IES Type IV
- MT** Medium Throw

OPTIONS

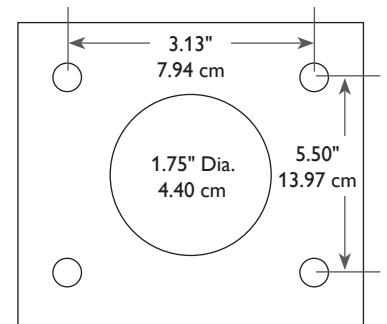
- F** Fusing
- DL** Diffusing Glass Lens (Reduces Performance)
- PCB** Button Type Photocontrol
- WS** Wall Mounted Box for Surface Conduit
- EBB** Extended Back Box (Required for 347V luminaires)

Dimensions

STANDARD 121



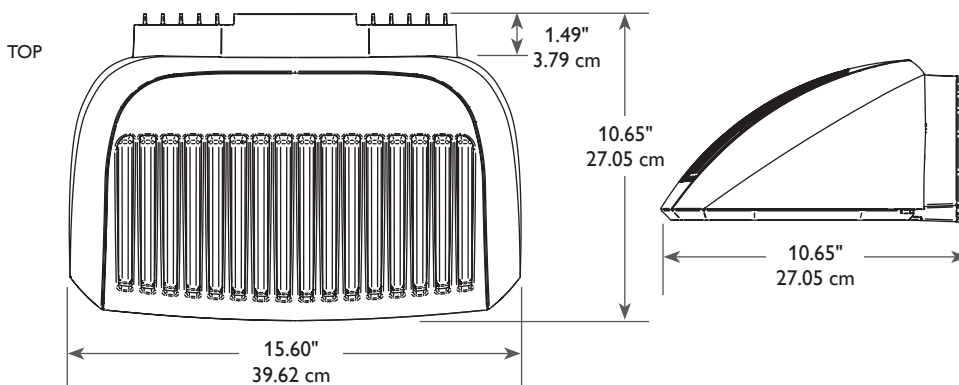
MOUNTING PLATE



Mounting Bolt Pattern

Note: Mounting plate center is located in the center of the luminaire width and 2.38" (6.03cm) above the luminaire bottom (lens down position). Splices must be made in the J-box (by others). Mounting plate must be secured by max. 5/16" (.79cm) diameter bolts (by others) structurally to the wall

121 WITH EXTENDED BACKPLATE (EBB) OPTION



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Learn more about the Philips Gardco 121 family of luminaires at sitelighting.com/121

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Philips Gardco Warranty

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