

PGL7 LED



The Next Generation of
Parking Structure Lighting

PGL7



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KIM LIGHTING

Since Kim Lighting invented the first true Parking Garage Luminaire in 1988, we have continuously refined, reinvented, and redefined the science of parking garage lighting. The PGL7 LED marks the 5th generation of parking garage luminaires by Kim Lighting.

Kim Lighting is known throughout the world as the premier designer and manufacturer of quality, high performance, and architecturally relevant outdoor lighting solutions. Kim Lighting is a division of Hubbell Lighting, Inc.





North Park Parking Garage - Auburn, AL
Photographer, Kristen Ashcom

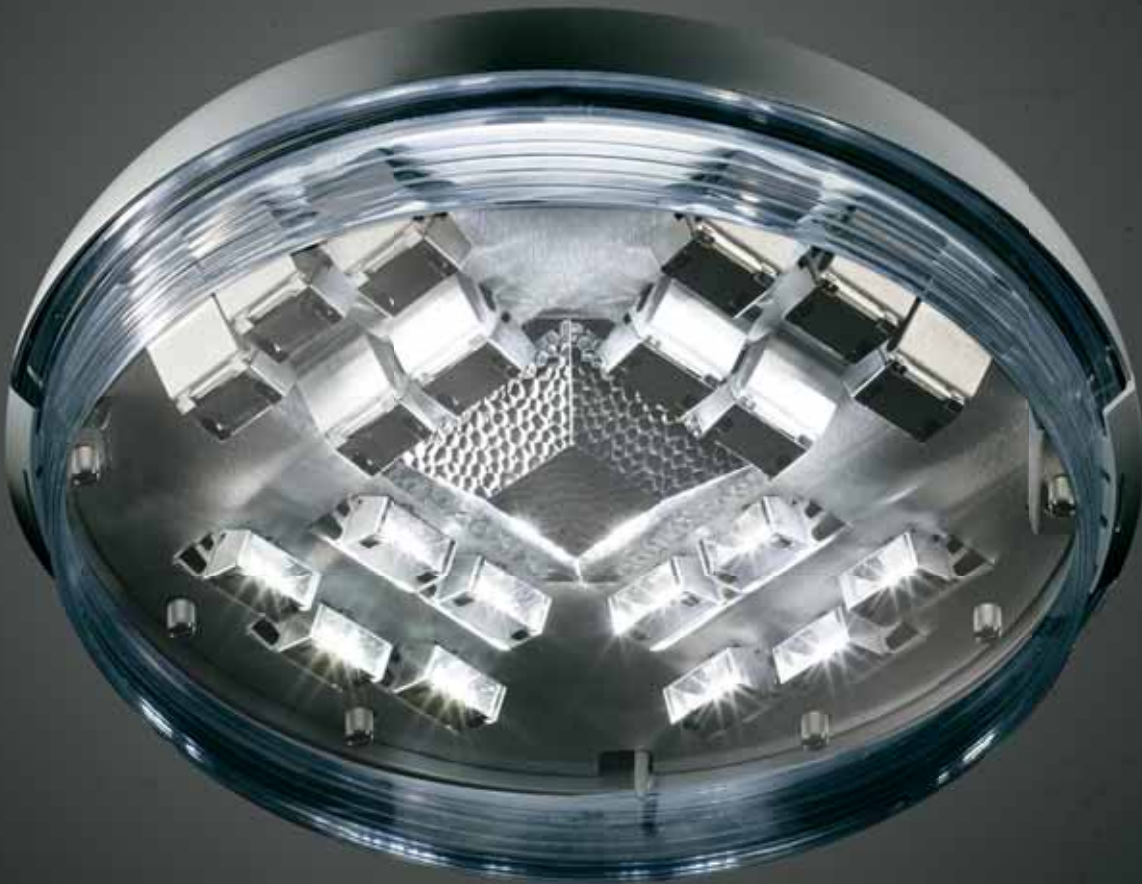
The Dynamics of Parking Structure and Low Level Mounting Lighting Design

Now is the time for PGL7 LED, the newest innovation in parking structure and low level mounting luminaires from Kim Lighting. More than ever, designers are challenged with finding a versatile luminaire to meet energy codes while still maintaining performance, architectural relevance and optical flexibility. The answer... PGL7 LED.

PGL7 LED is the modern, multi-distribution luminaire that allows light to be directed where it is needed. With Kim Lighting's PGL7 LED, the future of parking structure and low mounting height solutions has arrived.

This is LED parking structure lighting perfection. This is Kim Lighting.

Glare, no. Brilliant, yes.



Premium Comfort and Safety

PGL7 LED is the first parking garage luminaire to utilize LEDs properly and safely to effectively capitalize on the incredible efficiency, life, and brightness of Solid State Lighting technology. Just because LEDs are the wave of the future does not mean that designers should abandon the important safety practices and performance standards established by the industry over decades of study and refinement. Rather, PGL7 LED exceeds illumination requirements to maintain uniformity and reduce disability glare that can significantly affect vehicular traffic and pedestrian safety.



Achieving Design Excellence

Canted MicroEmitter™ Design

Each PGL7 LED board and Emitter reflector is precisely aimed at optimal angles for maximum reach and uniform illumination. See page 4 for more details.

LED'S RECESSED INTO
FIXTURE HOUSING

Deeply Regressed Sources

Since PGL7 LEDs are tightly controlled with reflectors, it is not necessary to place them at the lens plane to maximize efficiency. Glare and high angle brightness are significantly reduced.

Refractor Ribs

The lens refractor ribs are designed to direct light above the mounting plane to produce even, indirect illumination.

Acrylic Lens

The lightweight, clear lens is injected molded from UV stabilized acrylic. Polycarbonate lens also available.

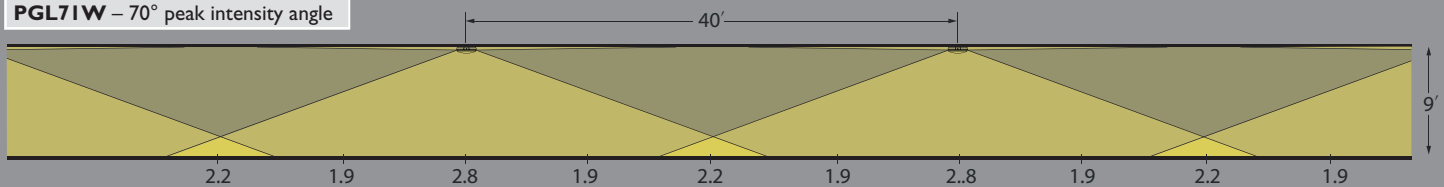
Integral Specular Reflector

PGL7 LED's EmitterDeck™ is designed with a secondary specular reflector to further improve distribution and precisely aim luminous intensity to the proper plane.

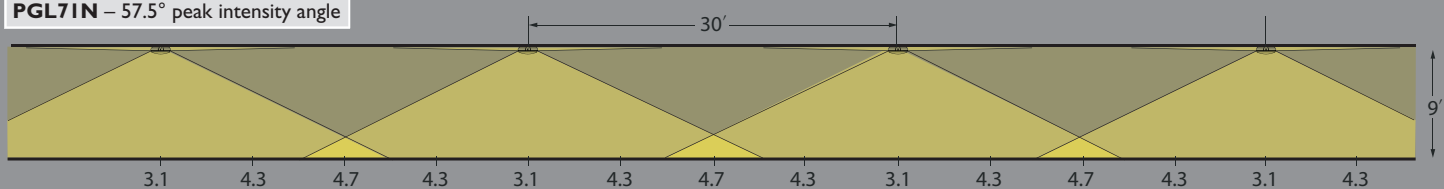
Exclusive Optical Technology Meets Industry Standards

By maintaining and controlling peak intensity angles, the PGL7 LED achieves optimum cutoff to avoid disability glare while still maintaining superior uniformity. Below are two mounting and distribution examples illustrating the optical flexibility of the PGL7 LED.

PGL7IW – 70° peak intensity angle



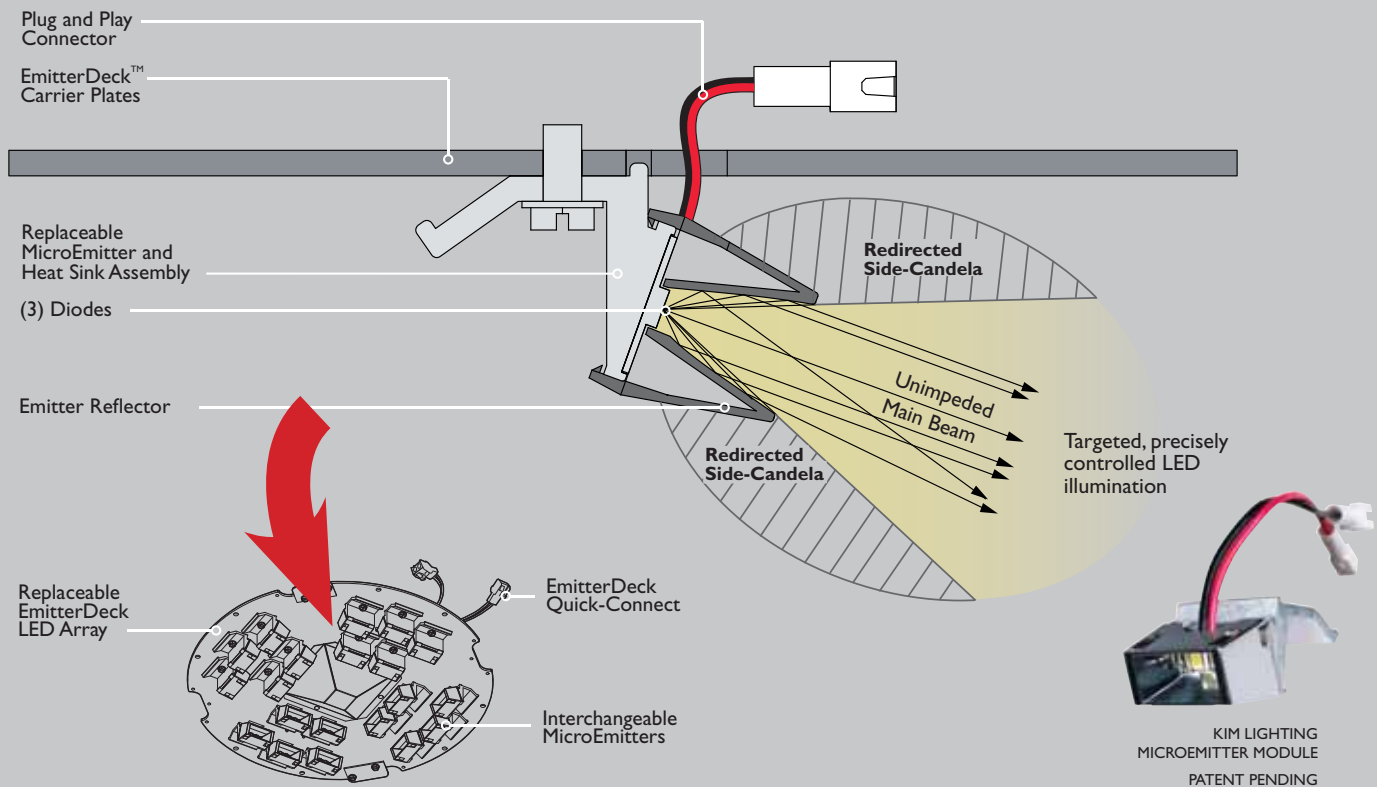
PGL7IN – 57.5° peak intensity angle



* Footcandle readings at nadir and between luminaires.

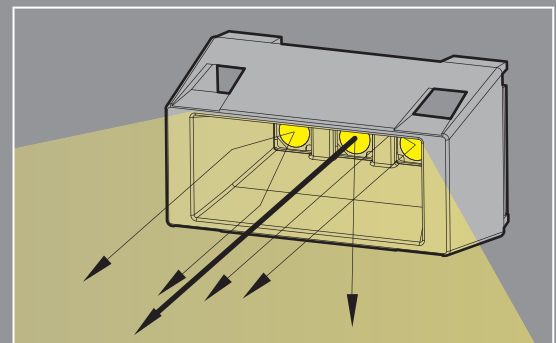
MicroEmitter™ Reflector Modules

Kim Lighting has always been known for its expertise in optical design and advanced engineering, and has applied that knowledge in PGL7 LED's patent pending MicroEmitter technology.



Maintaining Peak Intensity Angle

Essentially miniature luminaires, a replaceable MicroEmitter consists of a circuit board of three LEDs individually controlled by a precision reflector. This efficient design leaves each diode's main beam intensity unencumbered while amplifying and redirecting any LED spill light. Each MicroEmitter is mounted in the PGL7 LED EmitterDeck, which is recessed into the luminaire housing. Each MicroEmitter is aimed to widely spread uniform illumination to the ground plane while maintaining a 70° peak intensity angle¹. The result is comfortable, powerful, and properly shielded LED sources that only place light where intended.



MicroEmitter Reflector Module

¹70° peak intensity angle applies to wide distribution offerings.

Innovative Design

Kim Speed Mount

Die-Cast Aluminum Cooling Fins

LifeShield® Protection System

Dimming Port within LifeShield
(Purple and Grey leads included)

Electronic Driver with 0-10V Dimming Interface

Tool-less Latches (2)

Die-Cast Aluminum Electrical Housing

Replaceable EmitterDeck™

Thumb Screws (8)

MicroEmitter™ Modules

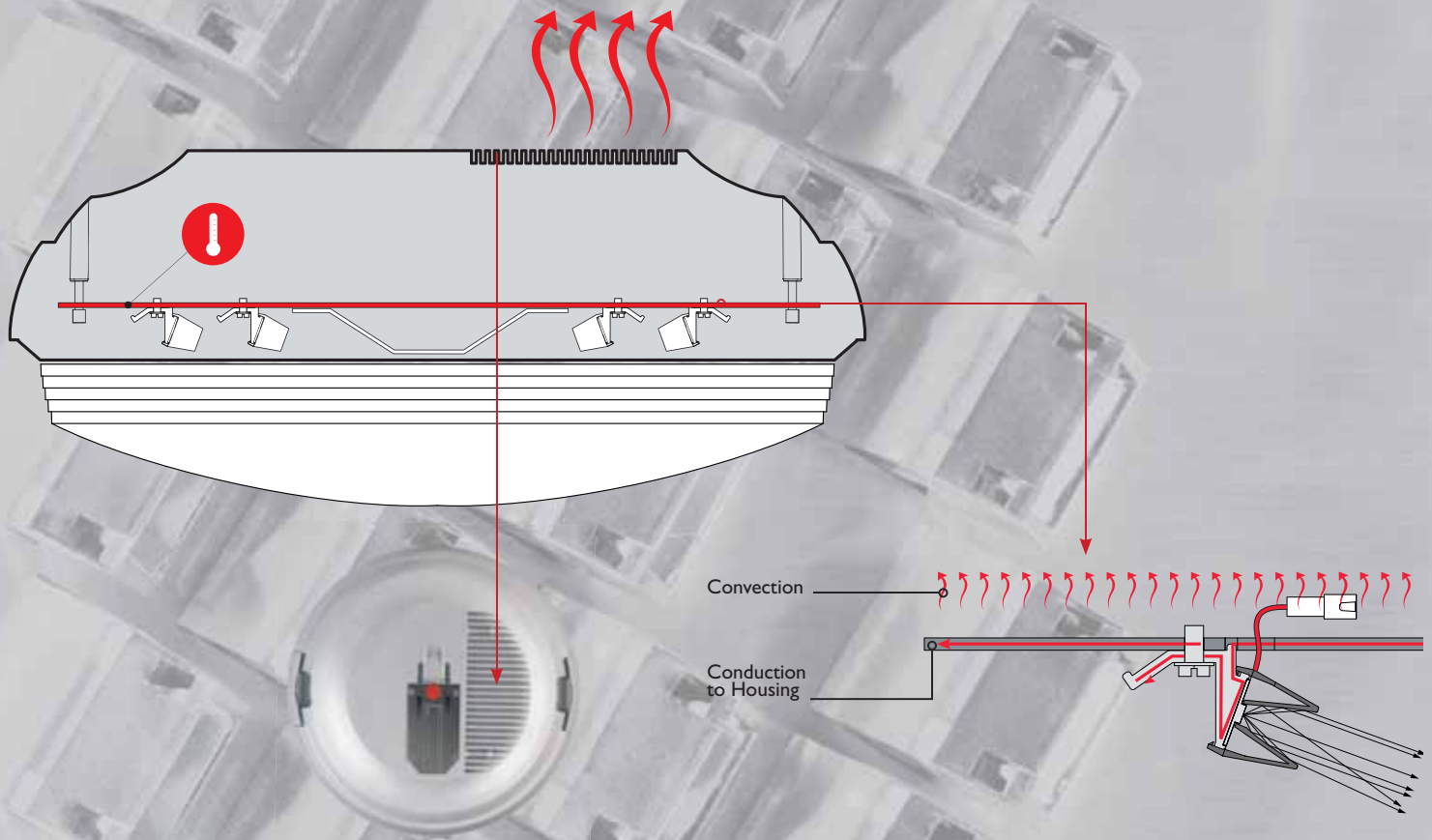
Integral Specular Reflector

Refractor Rib

Acrylic Lens



Advanced Thermal Technology



Dual Heat Management with Exclusive LifeShield® Protection System

PGL7 LED luminaires employ two distinct but complimentary methods to manage the life-limiting heat produced by the LED diode. Both conduction and convection are used to disperse heat, thereby maintaining diode performance and long life. Heat is drawn away from the housing chamber and dispersed into the free air around the luminaire. Additionally, each MicroEmitter module incorporates a solid aluminum heat sink, which is mechanically secured to the EmitterDeck™. The EmitterDeck is composed of a heavy gauge aluminum carrier plate and is affixed directly to the housing to dissipate heat to the outside environment.

AUTOMATIC THERMAL SELF-MONITORING AND ADJUSTMENT

Each EmitterDeck incorporates two temperature sensors located at the hottest locations of the back side of the deck. Each sensor sends temperature readings every 30 seconds to Kim Lighting's exclusive LifeShield Protection System. In extreme conditions, LifeShield detects above tolerance temperature and automatically lowers the current to the MicroEmitters to preserve diode life. Lumen output is restored to full capacity once the temperature is stabilized to within acceptable limits. The LifeShield Protection System provides consistent performance with minimal output reduction in extreme and fluctuating environmental conditions. See page 20 for further details.



LifeShield®
Protection System



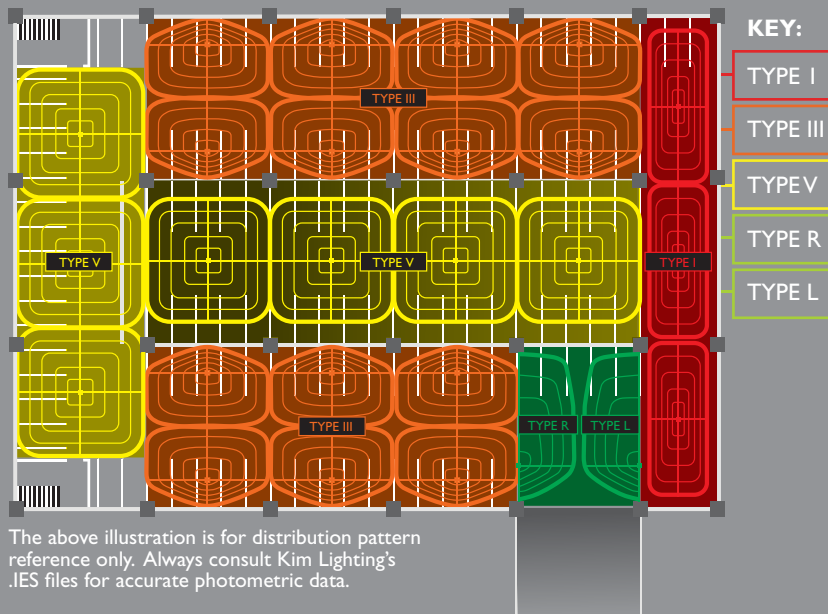
Palette of Color Temperatures

PGL7 LED offers a variety of color temperatures to meet the needs of modern applications. Specify 3500K in residential and interior environments to improve skin color rendering and to provide a warm, hospitable atmosphere. Specify 5100K for applications where the cool color appearance of traditional HID sources is desirable. Other color temperatures available include 580nm amber color for wildlife and turtle zones, and 4300K and 6000K are available on an “Engineered to Order” basis.

Specify:	580nm*	3500K	5100K
Cat. No.	L2K	L3K	L5K
Description	Amber	Daylight	Bright White
Light Color	↓	↓	↓

* 580nm is an amber color offering and is equivalent to 1700K. The light source offering meets wildlife and turtle zone ordinances.







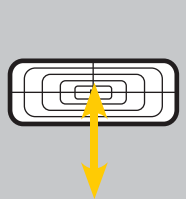
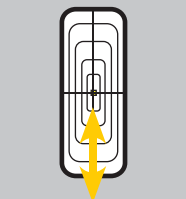
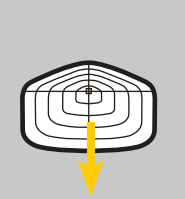
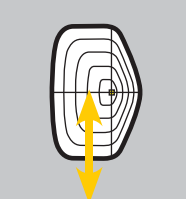
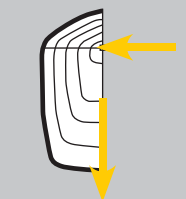
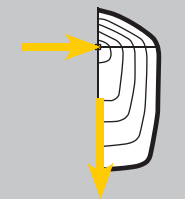
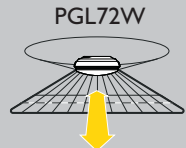
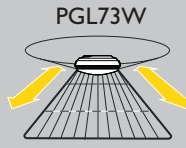
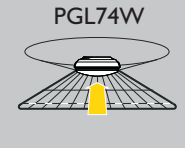
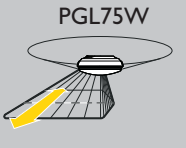
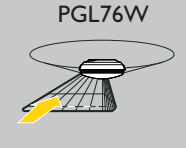
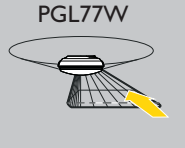
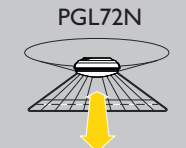

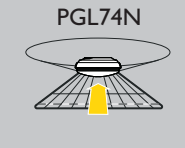
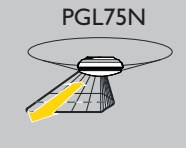
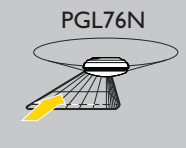
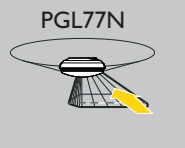
Redefining the Science of Parking Garage Lighting



The above illustration is for distribution pattern reference only. Always consult Kim Lighting's .IES files for accurate photometric data.

PGL7 addresses the need for exceptional uniformity while maintaining superior vertical and horizontal illumination for all types of parking structure applications. The flexibility of Kim Lighting's MicroEmitter technology provides designers with a full palette of IES Type I, III and V distributions, and introduces unique one-way left, and one-way right distributions. Now, designers can select an optical system that best suits the application need without sacrificing safety and uniformity.

Optical Configuration Matrix

PGL72 • TYPE I	PGL73 • TYPE I	PGL74 • TYPE III	PGL75 • TYPE III	PGL76 • TYPE L	PGL77 • TYPE R
					
DRIVE Direction					
					
WIDE 70° peak intensity angle					
PGL72W 	PGL73W 	PGL74W 	PGL75W 	PGL76W 	PGL77W 
NARROW 57.5° peak intensity angle					
PGL72N 	PGL73N 	PGL74N 	PGL75N 	PGL76N 	PGL77N 

Arrow denotes driving direction

No other LED parking garage luminaire can offer the flexibility of PGL7LED. The possibilities are only attainable with Kim Lighting's patent pending MicroEmitter technology. Custom distribution configurations are also available with PGL7LED.

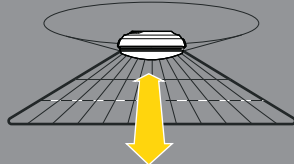
Contact your local Kim Lighting Sales representative to explore the full range of optical possibilities.

PGL71 • Type V



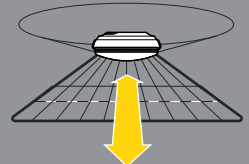
WIDE 70° peak intensity angle

PGL71W



NARROW 57.5° peak intensity angle

PGL71N



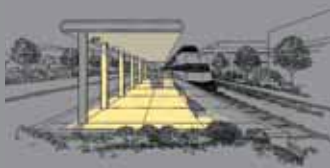
Ultimate Lighting Solutions



CRITERIA	
CATALOG NO.:	PGL71W/L5K
PHOTOMETRIC REPORT:	KL02001
ROW:	Double
DISTRIBUTION TYPE:	Wide, Type V
MOUNTING HEIGHT:	9'
BAY WIDTH:	55'
LUMINAIRE SPACING:	30'
MAXIMUM FC:	6.50
MINIMUM FC:	2.40
MATERIAL:	Concrete

The above illustration is a BIM project example using Kim Lighting's .rfa and .ies formatted files. To create your own layout using Kim Lighting's technical data, download PGL7 LED's 3D design files. For photometric references refer to page 18-19.

The PGL7 LEDs optical variety provides a range of solutions for low level mounting applications. Because each PGL7 LED MicroEmitter™ is optically controlled separately, designers have the flexibility to shape, direct, and distribute light precisely ... and only where it is desired.



Covered Platforms

PGL7 LED one-way distribution is ideal for applications requiring a narrow beam spread such as platforms for trains and bus stops.



Covered Walkways

PGL7 LED pendant is a great solution for lighting covered walkways where the roof structure is peaked or vaulted. The PGL7 LED will light the ceiling in addition to the walkway and columns.



Covered Drive-Thru Entrances

PGL7 LED provides driveway and ceiling illumination and important vertical illumination for entrances with heavy pedestrian traffic.



Covered Loading Docks

PGL7 LED provides excellent horizontal and vertical illumination with exceptional brightness control toward the trucks.

Preserving Resources



DEPARTMENT OF ENERGY (DOE): Kim Lighting is a strategic partner working with the DOE in the development of nationwide SSL standards that balance efficiency and lighting quality.



ROHS/WEEE COMPLIANT: Kim Lighting is doing its part to limit hazardous waste. The PGL7 LED housing and LED components meet strict US and international environmental protection and recyclability requirements.



CLEAN INDUSTRIAL WASTEWATER AWARD: Kim Lighting's California factory has been awarded the Sanitation District of LA County's clean water certification each year since 2006.



MADE FROM +90% RECYCLED MATERIALS: The PGL7 LED aluminum housing and reflector components are constructed from more than 90% recycled materials and are entirely lead and mercury free.

Green Affiliates and Partnerships

Kim Lighting is working closely with numerous organizations to develop industry standards to assure the efficiency, dependability and quality of the LED products that are sold to our customers.

Kim Lighting's LED luminaires qualify for many rebate and tax incentive programs nationwide. Always check local utility, state and federal incentive programs developed by the U.S. Department of Energy, as these programs update frequently.

Log onto www.dsireusa.org for the most current rebate and tax incentive programs nationwide programs.

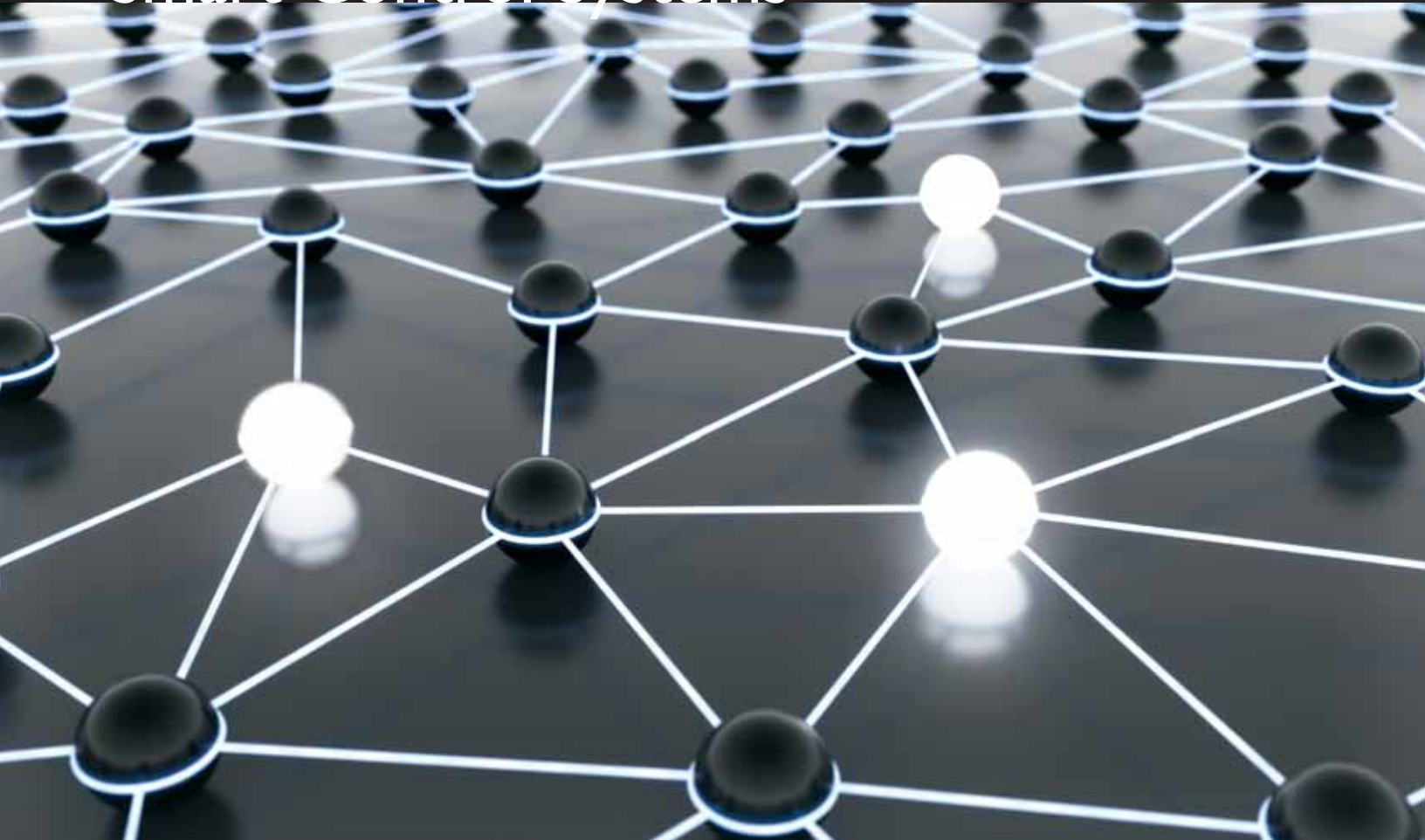


Upgradable EmitterDeck™



PGL7 LED offers the ultimate sustainable solution of upgrading the EmitterDeck™ to new technology as it becomes available. (See page 14 for additional details)

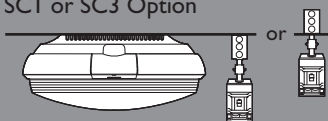
Smart Control Systems



Energy Savings During Unoccupied Periods

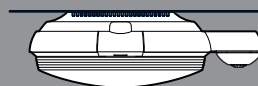
PGL7 LED offers four Smart Control System options to control illumination output for daytime harvesting and nighttime energy conservation during unoccupied periods. The PGL7 LED driver features a 0-10V dimming interface, allowing 0-100% illumination options for all four systems. Users have the option to control output according to automatic programmed settings, ambient light detection, or by motion sensing.

SC1 or SC3 Option



J-Box and Occupancy Sensor
(By others)

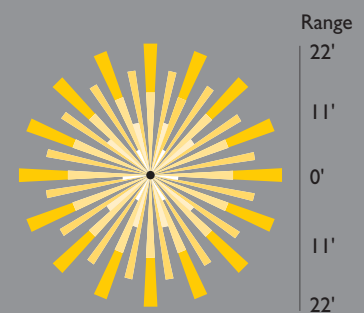
SC2 or SC4 Option



Occupancy Sensor
(Factory installed)

SC1 and SC3 option requires a signal from a master satellite or remote occupancy sensor device to operate dimming capabilities

TYPICAL SENSOR DISTANCE FOR PARKING GARAGE APPLICATION (360° radial detection)

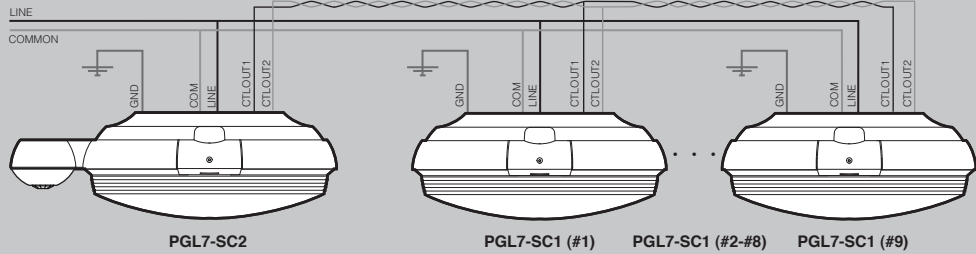


9' Mounting Height Shown
(Top view)

Download the PGL7 LED Specification Sheet for time delay, ambient light detection, sensitivity and sensor coverage at www.kimlighting.com

How It Works

Simple Method



The PGL7-SC2's built-in occupancy sensor detects motion near the fixture. It then sends a signal via the low voltage control output wires (twisted pair) to the commissioned fixtures it controls.

The PGL7-SC1 & SC2 fixtures wired to the same control circuit react to the occupancy signal from the original SC2 fixture, and come up from dim to their full output.

OPTION	ILLUMINATION	SENSOR LOCATION		SWITCHING RELAY		RELAY COMMUNICATION	
	OUTPUT	REMOTE	ATTACHED	TWISTED PAIR	WIRELESS	MASTER RELAY UNIT	SATELLITE CAPACITY
SC1 ^{1,2}	50% or 100%	x	-	x	-	-	-
SC2 ³	50% or 100%	-	x	x	-	x	up to 10 units

NOTE: Footnote references below

Application Criteria:
 Mounting Height: 8' or 9'
 Spacing: 20' or 30'
 Bay Width (Floor): 50' or 55'
 Master Satellite: 3 units per standard 50' - 60' floor

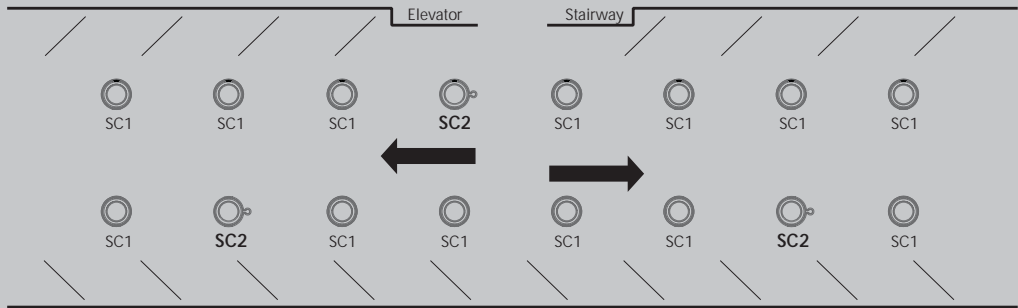
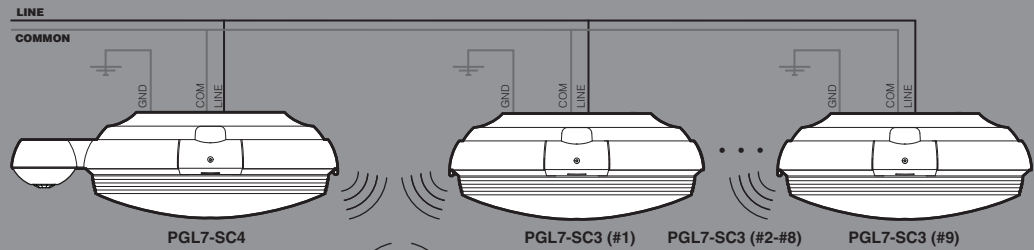


Diagram not to scale. For reference only.

Advanced Method



The PGL7-SC4's built-in occupancy sensor detects motion near the fixture. It then sends a signal to the base station reporting this motion.

Base Station
 Digital Lighting Control System (by others)

The base station receives the signal from the SC4, processes it, and sends a signal out to all commissioned SC3 fixtures near the SC4 to return to full brightness.

The commissioned SC3 fixtures near the original SC4 receive the signal from the base station, and come up from dim to their full output.

OPTION	ILLUMINATION	SENSOR LOCATION		SWITCHING RELAY		RELAY COMMUNICATION	
	OUTPUT	REMOTE	ATTACHED	TWISTED PAIR	WIRELESS	MASTER RELAY UNIT	SATELLITE CAPACITY
SC3 ^{2,4}	0%-100%	x	-	-	x	x	unlimited connections
SC4 ^{3,4}	0%-100%	-	x	-	x	x	unlimited connections

¹ Option requires a signal from the master satellite to dim illumination ² Sensor by others ³ Photocell mode option included ⁴ Base station required (by others)

Installation, Upgradeability & Maintenance

Installation

The PGL7 LED is shipped completely assembled and is designed for a quick and easy install.



SPEED MOUNT

The speed mount attaches to the junction box and is labeled with the “Driving Direction” to guide correct orientation in the garage for the selected light pattern.



FIXTURE WIRING AND MOUNTING

Both hands can be used for installing the housing. Final mounting is made by simply sliding the fixture onto the speed mount, which engages an anti-theft locking device.



REMOVING THE LENS

PGL7 LED is designed with tool-less access to the EmitterDeck for maintenance and module replacements.

EmitterDeck™ Upgradeability

Although LED diodes feature exceptionally long life, facility managers value the peace of mind provided by PGL7 LED's modular maintenance capabilities.



THUMB SCREWS RELEASE DECK

The EmitterDeck is secured to the housing for heat dissipation. It is released by loosening thumb screws and set screws along the perimeter.



REMOVABLE EMITTERDECK

Disconnect the plug & play connectors and remove the EmitterDeck. Install the new EmitterDeck by plugging in the connectors, re-installing the thumb screws and housing lens.

CAUTION: Disable all power to the luminaire before conducting any maintenance or upgrade activity. Failure to do so will create a hazardous working environment.

MicroEmitter™ Module Replacement

MicroEmitters are available as an individual replacement part and are easily replaced in the unlikely event of a premature diode failure.



MICROEMITTER MODULE REMOVAL

A single removable mounting screw holds the MicroEmitter module in place.



DISCONNECTING THE WIRING

Once the MicroEmitter module is released, pull the wiring through the mounting slot to access the plug & play connectors.



INSTALL THE NEW MICROEMITTER

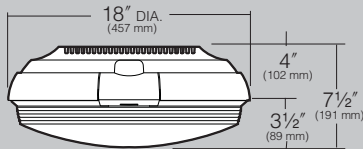
Install the new MicroEmitter by plugging in the connector and reinstalling the mounting screw. Replace the housing lens.

Specifications

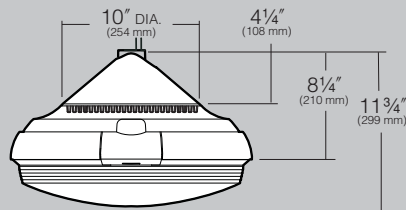
PGL7 LED

60 Light Emitting Diodes
Total Max System Watts = 73W

Standard Acrylic Refractor



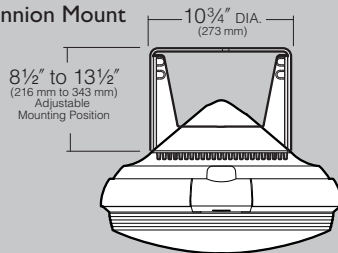
Balanced Pendant J-Box and Bird Shroud



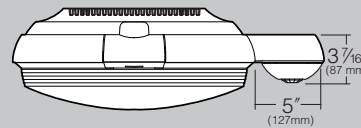
OPTIONAL BALANCED PENDANT J-BOX AND BIRD SHROUD (PB2)

Pendant installations pose two problems that are solved by this option. First, the luminaire must be balanced to hang straight. Second, the luminaire top should not provide a place for birds to nest. Constructed of die-cast aluminum, the PB2 utilizes the Kim speed mount for rapid fixture mounting and provides an aesthetic and functional solution for pendant installations.

Trunnion Mount



Smart Control System (SC2, SC4)



Specifications

SPEED MOUNT Electro-zinc plated steel for mounting to standard 4" junction box or mud-box. Fixture hangs from hooks to free both hands to make field wire connections. Allows tool-free fixture mounting to junction box, with integral anti-theft lock.

ELECTRICAL HOUSING: Die-cast, low copper (<0.6% Cu) aluminum alloy for direct mounting to the Kim Speed Mount. Wire entries are sealed by a silicone grommet. Integral latches (2) are die-cast aluminum with stainless steel springs and stainless steel hangers for the refractor.

REFRACTOR: Standard refractor is one-piece injection molded acrylic, .125" minimum wall thickness. Optional refractor is one-piece injection molded UV stabilized Lexan, .125" minimum wall thickness. The prisms around the perimeter refract the spill light off the MicroEmitters upward to eliminate the cave effect. Refractor attaches to electrical housing with (2) no-tool quick release latches, with one latch captive as a hinge. Perimeter is fully sealed with a one-piece extruded silicone gasket, with the ends fused together to form a continuous piece, sealing the refractor to the electrical housing, and providing an IP66 fixture rating.

EMITTER DECK: Precision injection molded, high specular reflectors are positioned to achieve directional control toward desired task. The entire assembly fastens to the housing as a one-piece module and features wiring quick-disconnects for easy upgrading.

DRIVER: All electrical components are UL recognized and mounted directly to the electrical housing for maximum heat dissipation. A step-down transformer within the housing may be used for 347V and 480V systems.

SENSOR (SC2, SC4): The occupancy sensor device and enclosure is factory installed onto the electrical housing. The occupancy sensor (Model No. OMNI IRLRP) is a product of Hubbell Building Automation, an affiliate of Hubbell Lighting Inc., and is UL and cUL listed with a 5-year warranty.

FINISH: Standard finish on fixture electrical housing, optional PB2 and TB2, is (PS) Platinum Silver. Platinum Silver shall be a Powdura® TGIC powder coat paint. All other colors shall be a Super TGIC powder coat paint. Optional white (WH) and custom colors available.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

Listings and Ratings		
CSA listed to UL 1598 standards ¹	IP66 Rated	40°C Ambient

¹Suitable for wet locations

Kim Lighting reserves the right to change specifications without notice.

Ordering Information

Ordering Example:

PGL71W / 60L3K120 / PS / PB2

1

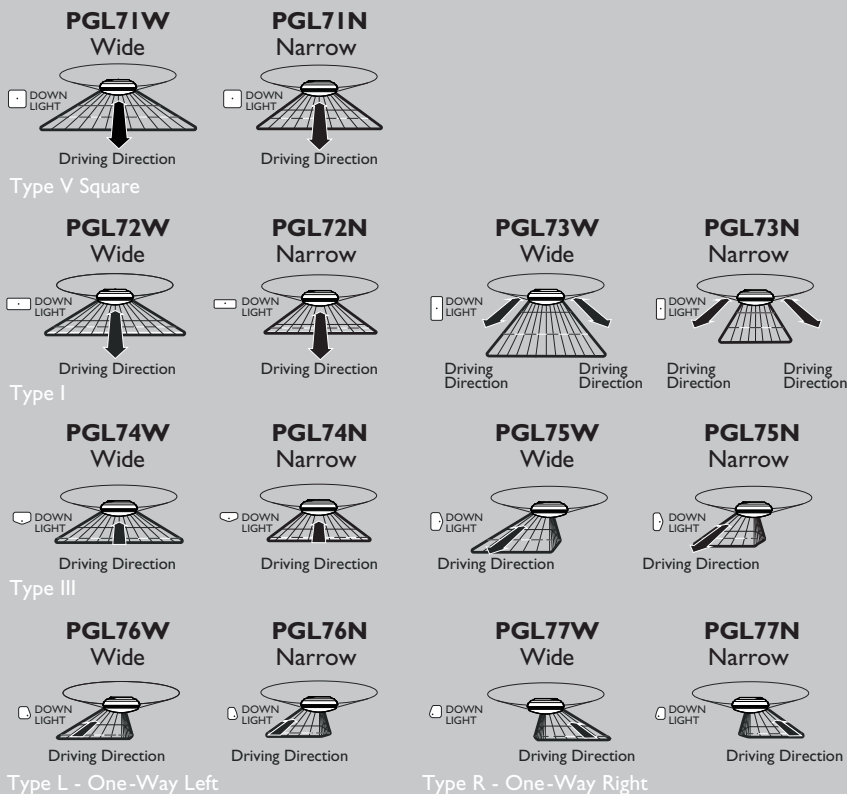
2

3

4-11

1 Fixture
Catalog No. designates PGL LED fixture with Wide or Narrow optical distribution.

Wide = 70° peak intensity angle
Narrow = 57.5° peak intensity angle



2 Electrical Module
Source indicates the amount of light emitting diodes

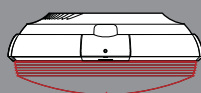
60L	3K	120	
SOURCE 60L = 60LED's	COLOR TEMPERATURE ¹ 3K = 3500K 5K = 5100K 2K = 580nm amber	VOLTAGE 120 = 120V 208 = 208V 240 = 240V	277 = 277V 347 = 347V 480 = 480V

¹ 4300K and 6500K are also available on an "Engineered to Order" basis

3 Finish
Platinum Silver shall be a Powdura® TGIC powder coat paint. All other colors shall be a SuperTGIC powder coat paint.

Color:	Platinum Silver (standard)	White	Custom Colors	Consult your Kim Lighting Representative for custom colors.
Cat. No.:	PS	WH	CC	

4 Optional Lexan® Refractor Lens:

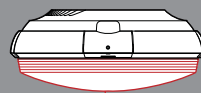


Lexan Refractor

Cat. No.: **LS**

Injection molded UV stabilized Lexan has the same prism design as the standard acrylic. The Lexan refractor lens decreases the luminaire efficiency, and has a different index of refraction than the acrylic material. As a result, moderately altering beam angles and candela.

5 Semi-Opal Refractor Lens:
ASOL = Acrylic
LSOL = Lexan

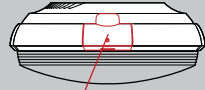


Semi-Opal Refractor Lens

Cat. No.: **ASOL**
LSOL

The semi-opal refractor lens is a one-piece injection molded acrylic or Lexan lens, .125" minimum wall thickness. The lens option softens the light output and reduces glare from direct views of the optical system. The semi-opal lens decreases the luminaire efficiency, and has a different index of refraction than the standard, clear acrylic or clear polycarbonate. As a result, moderately altering beam angles and candela.

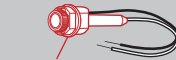
6 Tamper-Resistant Latches:



Tamper-Resistant Latch

Cat. No.: **TS** Stainless steel captive hex socket (Allen) shoulder screws secure latches in locked position.

7 Fusing:

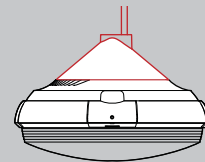


Single Fuse

High temperature fuse holders factory installed inside the fixture housing. Fuse is included.

Line Volts: 120V 208V 240V 277V 347V 480V
 Cat. No.: **SF DF DF SF SF DF**

8 Balanced Pendant J-Box and Bird Shroud:

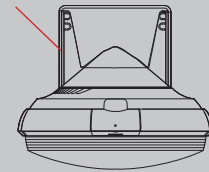


Die-Cast aluminum, finished to match the fixture electrical housing. Offset 3/4" NPT pendant entry to balance fixture in free-swinging installation. The Kim Speed Mount is furnished for fixture attachment to the PB2. This option is shipped separate from fixture.

Cat. No.: **PB2PS PB2WH PB2CC**
 Platinum Silver White Custom Color

9 Trunnion Mount:

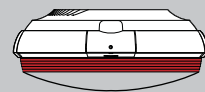
Trunnion Mount



One-piece cast aluminum fixture mount utilizes the standard Kim speed mount for fixture attachment, and also serves as a junction box for field wire connections. Top of fixture mount casting has 1/2" NPT to receive conduit from ceiling J-box. (Ceiling J-box and conduit to fixture by others.) Upper trunnion section is 1 1/2" aluminum bar with adjustable mounting positions in 1" increments. Suspends fixture from 8 1/2" to 13 1/2" below the ceiling, as measured to the fixture top. Finished to match fixture electrical housing.

Cat. No.: **TB2PS TB2WH TB2CC**
 Platinum Silver White Custom Color

10 Perimeter Shield Lens:



Cat. No.: **PSL** The lens rim can be shielded 180° to reduce uplight or light trespass illumination by employing a high heat color spray around the house side portion of the lens. NOTE: PGL74W, PGL74N and PGL75W, PGL75N only.

11 Smart Control Systems:

Contact Kim Lighting Technical Support for technical information and installations.

SC1 - Provides the most economical low voltage method of switching lighting levels based on occupancy within a space. SC1 is equipped with a relay and fixed resistor to allow 50% dimming; PGL7 driver is a 0-10V dimming interface. Wire leads extending out the top of the luminaire for twisted pair wiring connection to the occupancy sensor. The occupancy sensor device is a remote install, typically mounted to a j-box. Wire leads exiting the luminaire distance is 8". Junction box and occupancy sensor by others.

SC2² - The occupancy sensor device and aluminum enclosure is factory installed onto the electrical housing. SC2 is equipped with a Power Pack, Fixed Resistor and Occupancy Sensor to allow 50% dimming; PGL7 driver is a 0-10V dimming interface. Wire leads extending out the top of the luminaire for twisted pair wiring connection to the occupancy sensor. For master SC2 relay communication, a set of secondary detection wiring extends out the top of the luminaire for satellite relaying, up to 10 units. Occupancy Sensor provided.

SC3³ - Provides an advanced method of switching lighting levels based on occupancy within a space. SC3 is equipped with a Control Module and an Antenna to provide 0-100% dimming; PGL7 driver is a 0-10V dimming interface. An RF relay device is included in the luminaire for wireless communication (by others). For master relaying from occupancy control, connection is twisted pair wiring. The SC3 occupancy sensor can provide satellite relaying up to 300' maximum distance. Wire leads exiting the luminaire distance is 8". Junction box, control panel and occupancy sensor by others. Base station required.

SC4³ - Provides an advanced method of switching lighting levels based on occupancy within a space. The occupancy sensor device and aluminum enclosure is factory installed onto the electrical housing. SC4 is equipped with a Control Module, Power Pack and an Antenna to provide 0-100% dimming; PGL7 driver is a 0-10V dimming interface. An RF relay device is included in the luminaire for wireless communication. The SC4 can provide satellite relaying up to 300' maximum distance. Occupancy Sensor provided. Control panel by others. Base station required.

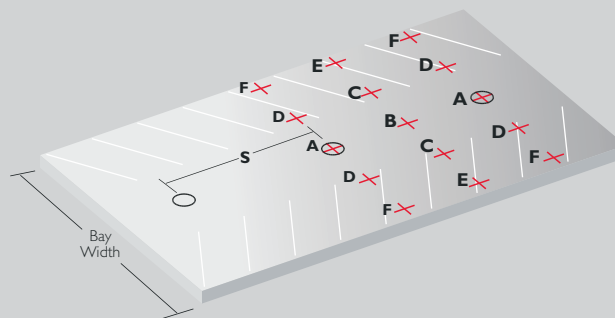
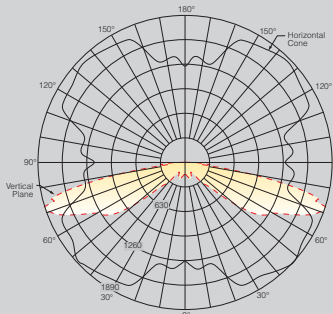
² SC2 and SC4 occupancy sensor is a product of Hubbell Building Automation, a division of Hubbell Lighting Inc.

³ SC3 and SC4 wireless components are third party products, and will carry the manufacturer's technical support service and warranty policy.

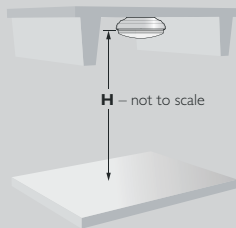
Photometry

PGL71W/L5K	
Report Number	KL02001
Light Dist. Type	Wide, Type V
Mounting Height	8 Feet
Lamp	60 LED
Temperature	5100K
Total Flux	4131
System Watts	73W
Efficacy	57 lm/W

Max. Candela Plot
1895 Candela at 72.5° Vertical. 46.5° Horizontal



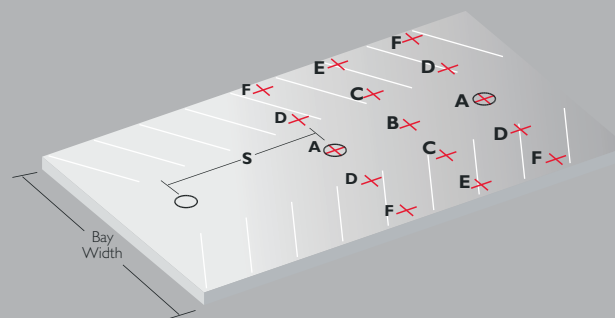
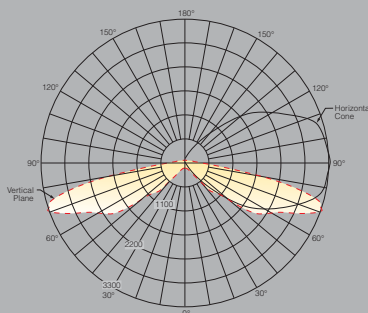
PGL71W - Single Row



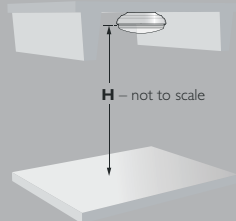
Bay Width	Mounting Height	Spacing S	Horizontal Footcandles on Deck						Maintained Avg./fc	Uniformity Avg./Min.	Max./Min.
			A	B	C	D	E	F			
50'	8'	20'	5.40	3.90	5.20	4.00	1.60	1.60	3.05	3.05	5.40
	8'	30'	3.90	3.50	3.40	2.40	1.20	1.00	2.18	3.11	5.57
	9'	20'	3.80	3.40	5.10	3.70	1.90	1.80	2.94	2.45	4.25
	9'	30'	3.40	3.00	3.40	2.20	1.40	1.20	2.15	2.56	4.38
55'	8'	20'	5.40	3.90	4.70	3.80	1.30	1.30	2.82	3.53	6.75
	8'	30'	3.80	3.40	3.10	2.40	0.90	0.80	1.87	4.68	9.50
	9'	20'	4.80	3.40	4.60	3.60	1.50	1.50	2.72	2.72	4.80
	9'	30'	3.30	3.00	3.20	2.20	1.10	1.00	1.94	2.77	4.71

PGL72W/L5K	
Report Number	KL02003
Light Dist. Type	Wide, Type I
Mounting Height	8 Feet
Lamp	60 LED
Temperature	5100K
Total Flux	4264
System Watts	73W
Efficacy	58 lm/W

Max. Candela Plot
3351 Candela at 70° Vertical. 89.5° Horizontal



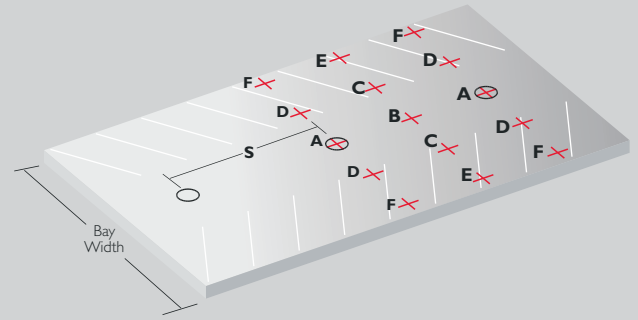
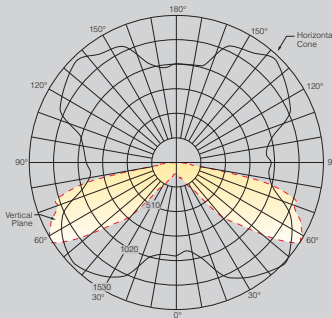
PGL72 - Single Row



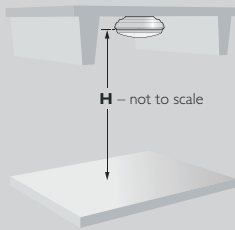
Bay Width	Mounting Height	Spacing S	Horizontal Footcandles on Deck						Maintained Avg./fc	Uniformity Avg./Min.	Max./Min.
	H		A	B	C	D	E	F			
50'	8'	20'	3.70	2.50	2.80	4.50	1.10	1.20	3.62	2.13	4.00
	8'	30'	3.50	.80	1.00	4.20	0.70	0.90	2.71	3.87	9.00
	9'	20'	3.10	2.50	2.50	4.40	1.30	1.40	2.65	1.74	3.10
	9'	30'	2.80	0.90	1.10	4.10	0.80	1.00	2.67	3.81	8.57
55'	8'	20'	3.70	2.40	2.70	3.80	0.80	0.90	3.24	2.49	4.62
	8'	30'	3.50	0.80	1.00	3.50	0.50	0.60	2.22	4.44	10.80
	9'	20'	3.10	2.50	2.70	3.90	1.10	1.10	3.26	2.14	3.63
	9'	30'	2.80	0.90	1.10	3.50	0.70	0.80	2.36	3.37	7.43

PGL7IN/L5K	
Report Number	KL01736
Light Dist. Type	Nar., Type V
Mounting Height	8 Feet
Lamp	60 LED
Temperature	5100K
Total Flux	4221
System Watts	73W
Efficacy	58 lm/W

Max. Candela Plot
1537 Candela at 57.5.0° Vertical. 46° Horizontal



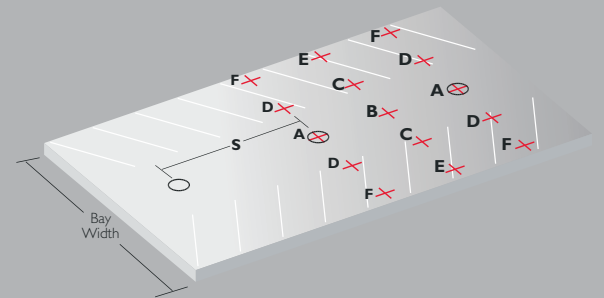
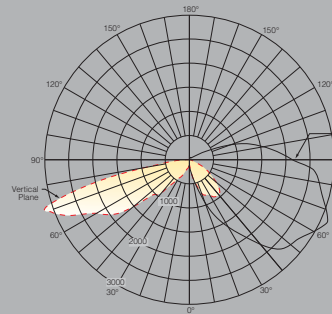
PGL7IN - Single Row



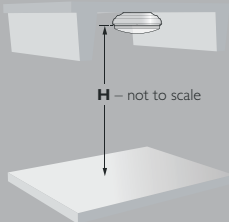
Bay Width	Mounting Height	Spacing S	Horizontal Footcandles on Deck						Maintained Avg./fc	Uniformity Avg./Min.	Max./Min.
			A	B	C	D	E	F			
50'	8'	20'	5.40	3.90	4.70	3.80	1.30	1.30	2.82	3.53	6.75
	8'	30'	3.80	3.40	3.10	2.40	.90	.80	1.87	4.68	9.50
	9'	20'	4.80	3.40	4.60	3.60	1.50	1.50	2.72	2.72	4.80
	9'	30'	3.30	3.00	3.20	2.20	1.10	1.00	1.94	2.77	4.71
55'	8'	20'	4.90	7.40	4.70	4.50	1.10	1.20	3.20	4.00	9.25
	8'	30'	3.10	4.60	2.70	3.30	.80	.80	2.18	3.63	7.67
	9'	20'	4.60	6.20	5.10	4.30	1.40	1.10	3.14	3.49	6.89
	9'	30'	2.70	4.50	2.90	3.10	1.00	1.00	2.15	3.07	6.43

PGL74W/L5K	
Report Number	KL02017
Light Dist. Type	Wide, Type III
Mounting Height	8 Feet
Lamp	60 LED
Temperature	5100K
Total Flux	4075
System Watts	73W
Efficacy	56 lm/W

Max. Candela Plot
3150 Candela at 70.0° Vertical. 66.0° Horizontal



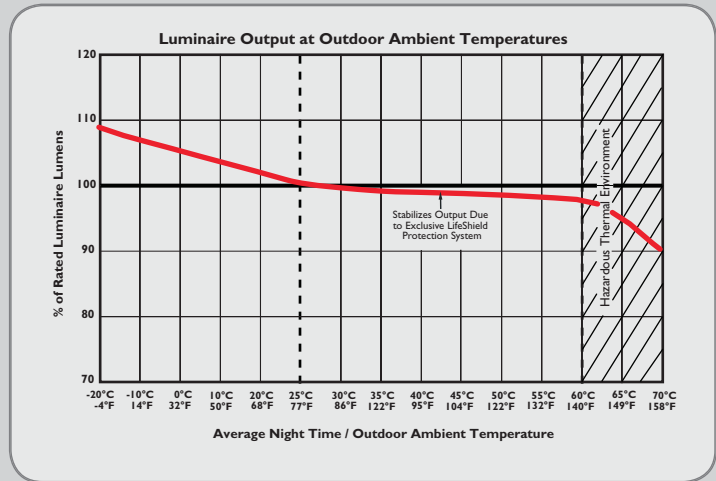
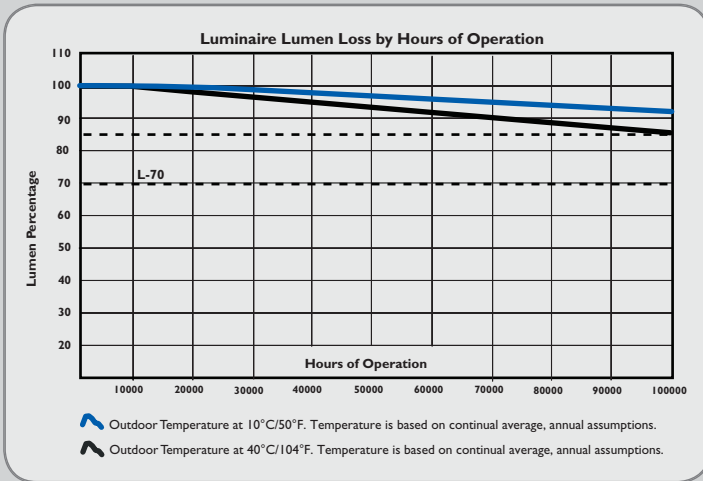
PGL74 - Single Row



Bay Width	Mounting Height	Spacing S	Horizontal Footcandles on Deck						Maintained Avg./fc	Uniformity Avg./Min.	Max./Min.
			A	B	C	D	E	F			
50'	8'	20'	3.40	4.40	4.60	5.00	1.70	1.70	3.12	2.57	4.82
	8'	30'	3.90	3.50	3.40	2.40	1.00	1.20	2.18	3.15	5.57
	9'	20'	2.90	4.80	4.50	4.70	2.10	2.10	3.10	2.25	4.83
	9'	30'	3.40	3.00	3.40	2.20	1.40	1.20	2.15	2.50	4.38
55'	8'	20'	3.30	4.30	4.20	4.50	1.30	1.30	2.80	2.95	6.63
	8'	30'	3.00	1.10	2.30	3.60	0.80	1.00	1.98	3.40	5.14
	9'	20'	2.80	4.80	4.20	4.40	1.60	1.60	2.84	2.59	5.70
	9'	30'	2.50	1.30	2.40	3.50	1.00	1.20	2.13	2.75	3.89

Lumen Performance

PGL7 LED's exclusive LifeShield® Protection System controls lumen depreciation in extreme and fluctuating environments to preserve operational lifespan. Always consult www.kimlighting.com for the most current performance data.



Notes:

- Lumen loss stabilization is a result of Kim Lighting's MicroEmitter luminaires exclusive LifeShield Protection System and Dual Heat Management System.
- The LifeShield Protection System will lower the current to the LEDs significantly if the luminaire is exposed to direct heat (sun) or excessive abnormal conditions.
- Luminaire Lumen Loss assumptions are based on LM-80 results and product testing based upon 5100K CCT, 350mA drive current, 25°C lab ambient and cathode temperature at 85°C. Assumptions past 6,000 hours are interpolated.

- Cathode temperature baseline is at 85°C. If cathode temperature increases during ambient changes and abnormal environment conditions, % of rated lumens will slightly decrease.
- Outdoor ambient temperatures are assumed SITU averages by geographic region.
- As Solid State Lighting technology and thermal management systems continually advance, lumen loss projections are subject to improvement.

LM-79-2008 Photometry

(INDICATES STANDARD IES FORMATTING)

```

IESNA:LM-63-2002
[TEST]KL02001
[TESTLAB]KIM LIGHTING
[ISSUEDATE]04/14/10
[MANUFAC]KIM LIGHTING
[LUMCAT]PGL71W/LED-5100K
[LUMINAIRE]LED PARKING GARAGE LUMINAIRE
[MORE]DIE-CAST ALUMINUM ROUND HOUSING. LED EMITTER DECK CONSISTING
[MORE]CARRIER PLATE, HEATSINK, REFLECTORS AND CONSTANT CURRENT
[MORE]BOARDS. CLEAR ACRYLIC LENS. USING (1) 75 WATT DRIVER FROM
[MORE]TRP.
[LAMP]60 DIODES. 5100K. CONSTANT CURRENT
[BALLAST]75 WATT 350mA THOMAS RESEARCH DRIVER
[OTHER]SYSTEM WATTS = 73.1
[_MOUNTING]PARKING STRUCTURE
[_ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.
[_ABSOLUTELUMENS]4131
TILT=NONE
-1 1 74 43 1 1 -1.583333 -1.583333 0.500000
    
```

Kim Lighting's photometric data for PGL7 LED luminaires is tested to the IESNA LM-79-2008 standard, and Kim Lighting only uses LEDs that are tested to the IESNA LM-80-2008 standard. When evaluating photometric data for LED luminaires, look for a negative one (-1) in the lumen output space of the photometric data file to assure compliance with LM-79-2008.

The test reports (pages 18-19) reflect photometry performed under LM-79-2008 standards.

Actual Test Report

Warranty Information:

PGL7 LED Limited Manufacturer's Warranty

When properly installed and under normal conditions of use, Kim Lighting warrants PGL7 LED products ("Product(s)") sold by Kim Lighting to be free from defects in material and workmanship for (i) a period of five (5) years for metal parts, (ii) a period of ten (10) years for exterior housing paint finish(s), (iii) a period of six (6) years for LED Light Engines (MicroEmitters) and, (iv) a period of five (5) years for LED power components (LED Driver, LifeShield® Device, Surge Protector), from the date of sale of such goods to the buyer as specified in Kim Lighting shipment documents for each Product(s). Occupancy sensors, LED drivers, dimmers and relay wiring components are covered by the manufacturer's warranty. The buyer agrees to make all claims regarding defects or deficiencies in the Product(s) according to the terms of Kim Lighting's official warranty. Warranty claims must be made in writing according to Kim Lighting procedures existing at the time of the claim. Valid warranty claims must be made within the warranty period specified herein above, and submitted within thirty (30) days of discovery of the damage or defect. No FIELD labor, repair, DISMANTLE, or installation charges are included with this warranty. Kim Lighting may repair or replace any Product(s) covered by this warranty at its sole discretion and in accordance with its procedure. Any unauthorized return, repair, replacement or modification of the Product(s) shall void this warranty. This warranty applies only to the use of the Product(s) as intended by Kim Lighting and does not cover any misapplication or misuse of said Product(s), or installation in hazardous or corrosive environments. In no event shall Kim Lighting's total liability for any reason arising hereunder exceed the purchase price paid to Kim Lighting for the product purchased by the buyer hereunder. Contact Kim Lighting for complete warranty language, exceptions, and limitations.

5/6/10
PGL7 LED WARRANTY

Additional Kim Lighting Premium LED Families



HID to LED
UPGRADE KIT



MicroEmitter™ LED Technology
COMPREHENSIVE CATALOG



WARP9® LED
SITE / ROADWAY



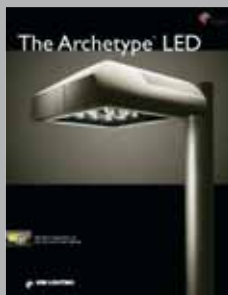
Era® LED
SITE / ROADWAY



Era® Bell/Era® Acorn LED
SITE / ROADWAY



Curvilinear LED
SITE / ROADWAY



The Archetype® LED
SITE / ROADWAY



Structural LED
SITE / ROADWAY



Wall Director® LED
WALL MOUNTED



All Inclusive LED
LANDSCAPE COLLECTION

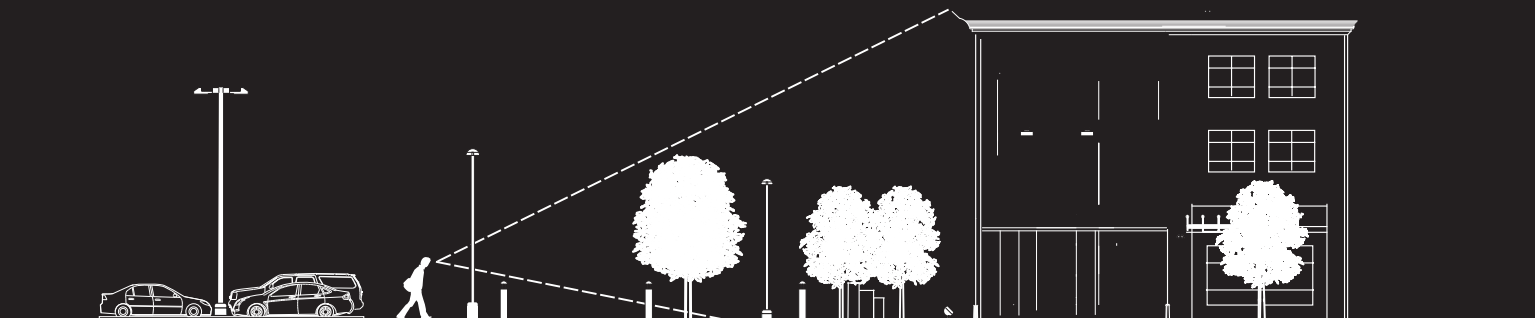


PGL7 LED



Kim Lighting's Commitment to Solid State Lighting

Kim Lighting has embraced the advancements of Solid State Lighting and now employs the technology in every category of its product offering. Ranging from Street and Area lighting to Parking Garage Luminaires, Kim Lighting is committed to the economic and sustainable benefits of the fastest growing technology in the marketplace. Furthermore, Kim Lighting is working alongside the Department of Energy (DOE) and the Energy Star program to develop SSL standards that assure the efficiency, dependability and quality for our customers.



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www.kimlighting.com

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