

# P&H SHOVEL LIGHTING

For Models: 2800 / 4100 / 4800

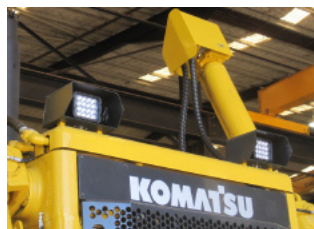
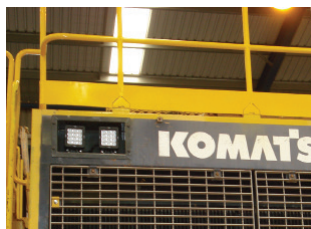


## LED | LIGHTING CATALOG

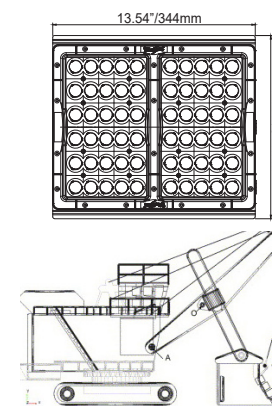


# ENGINEERED LIGHTING SOLUTIONS

**Vision X lighting** fixtures are not merely lighting systems, they are engineered lighting solutions. They provide increased efficiency, increased safety, decreased environmental impact, and decreased costs. Vision X LED lights offer a large increase in energy efficiency over older technologies while also increasing the safety and productivity of the working environment by outputting 80% more light than the fixtures used previously.



## SOLUTION PROCESS



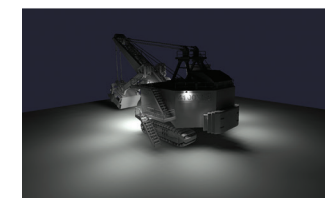
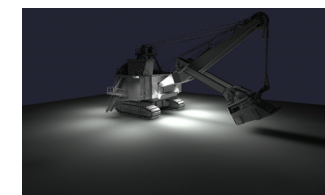
### 2D BLUEPRINT

Vision X Lighting begins each project with a customer provided list of machines to be retrofitted, then gathers the technical information for those machines.



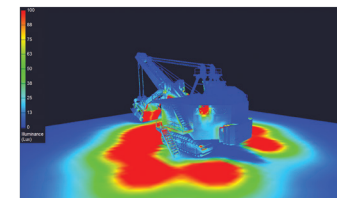
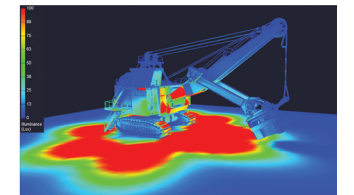
### 3D MODEL

A 3D model is built to the customer's specifications, then carried over into the rendering.



### SIMULATION RENDER

A simulation rendering ensures the final product will meet the customer's lighting requirements.

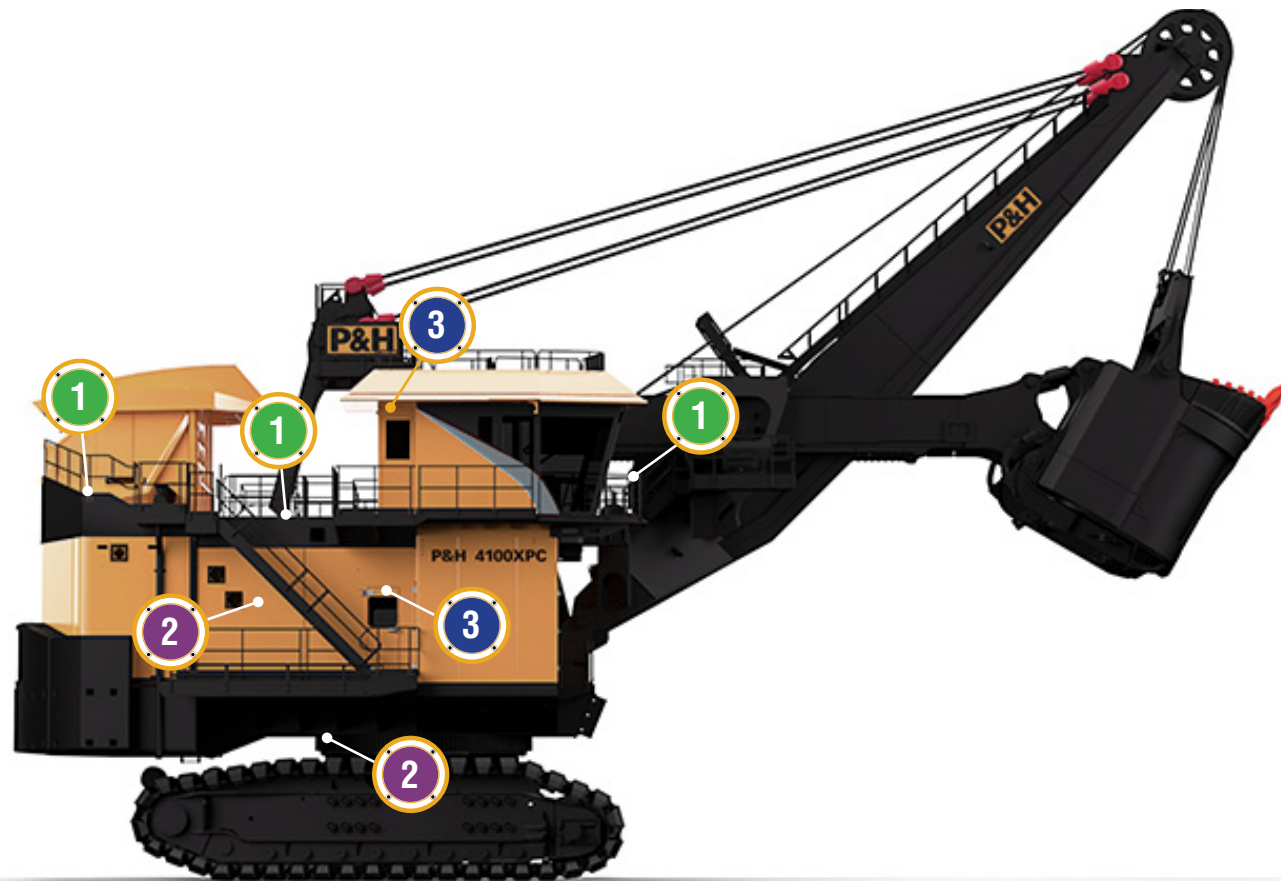


### SOLUTION

Vision X Lighting creates a complete breakdown of the customer's specific needs to meet their safety requirements.

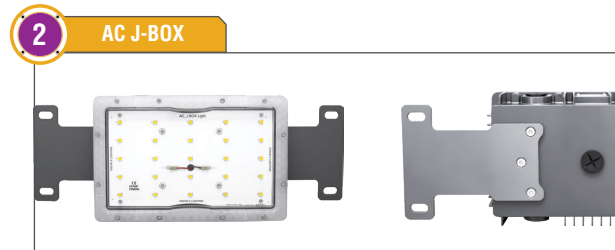


# P&H SHOVEL LIGHTING FITOUT GUIDE



## WORK AREA LIGHTING AC FLOOD SERIES WORK LIGHT

Number of Fixtures : **Equipment Specific**  
Location : **House, Boom**  
Beam Pattern : **90° Wide Flood**  
Part # : **LSG066090PH**



## HOUSE & TRACK LIGHTING J-BOX SERIES WORK LIGHT

Number of Fixtures : **Equipment Specific**  
Location : **Interior House, Track**  
Beam Pattern : **180° Ultra Wide Flood**  
Part # : **LSG0225180PH**



## EQUIPMENT & OVER-DOOR LIGHTING AC-SERIES WORK LIGHT

Number of Fixtures : **Equipment Specific**  
Location : **Over-Door**  
Beam Pattern : **180° Ultra Wide Flood**  
Part # : **LSGSM40180PH**



## SAFETY | KILLZONE LIGHTING XIL-SERIES WORK LIGHT

Number of Fixtures : **Equipment Specific**  
Location : **L, R, Rear Sides**  
Beam Pattern : **30/65° Elliptical**  
Part # : **XIL-UMX44E3065R**



**Project Name:**  
**Date:**  
**Type:**

## Application

Designed to directly bolt in, these OEM replacements will out perform the factory P&H lighting by over 80% on the effective work area. Simple quick connect wiring allows for one time wiring and no further electrical wiring to change the fixture. 3D analysis allows for site specific aiming with our patented ProTrac aiming system. Industry leading LED light output, size, weight and reliability for reduced unscheduled maintenance.

## SPECIFICATIONS

### Mechanical Information:

<b>Fixture Weight:</b>	54.6 lbs (24.77kg)
<b>Shipping Weight:</b>	62.60 lbs (28.39kg)
<b>Mounting/ Entries: (See Accessories)</b>	(1) 3/4" NPT - TOP (2) 3/4" NPT 90° - SIDES (2) 3/4" NPT 45°- SIDES

### Electric Specifications:

<b>Operating Voltage:</b>	90 - 305V AC 127 - 431V DC
<b>Wattage:</b>	280W
<b>Operating Temp:</b>	-40°C ~ 60°C
<b>THD:</b>	<20% (@load≥50% / 115VAC,230VAC) (@load≥75% / 277VAC)
<b>Power Factor:</b>	≥ 0.98/115VAC ≥ 0.95/230VAC ≥ 0.92/277VAC
<b>Short Circuit:</b>	Constant Current Limiting, Recovers Automatically After Fault Condition is Removed
<b>Frequency:</b>	47-63Hz
<b>Vibration:</b>	15.6Grms

### Construction:

<b>Housing:</b>	Die-Cast 6061 Aluminum
<b>Finish:</b>	Gloss Grey
<b>Lens:</b>	Polycarbonate Lens

LED

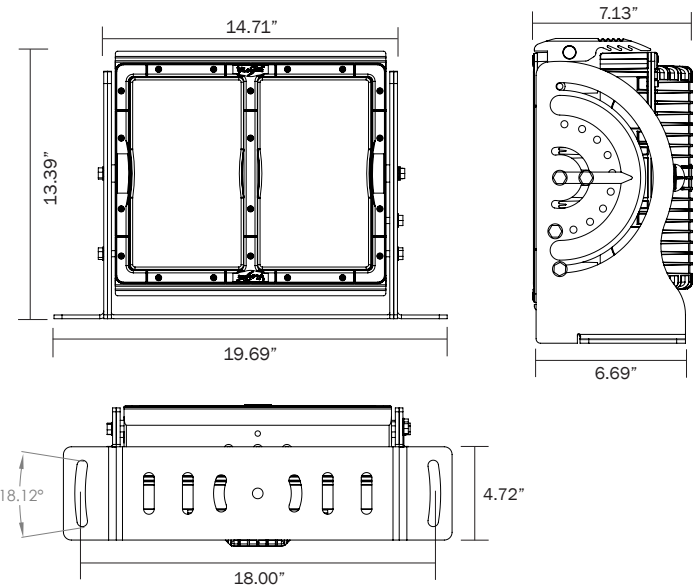
<b>LED:</b>	XP-LHD(CREE)
<b>Amp Draw:</b>	2.43A @ 115VAC 1.22A @ 230VAC 1.01A @ 277VAC
<b>Lifespan:</b>	50,000 hr



**UL**  
**LISTED**

PART #:		BEAM PATTERN
1	LSG066090PH	Flood 90°

## 2D DRAWING:



## RATINGS:

<b>EMC Emission:</b>	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (@Load $\geq 50\%$ ); EN61000-3-3
<b>EMC Immunity:</b>	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, Light Industry Level (surge immunity Line-Earth 4KV, Line-Line 2KV)
<b>Ingress Protection:</b>	IP-68, IP69k





# HOUSE & TRACK LIGHTING

## Product Information

Project Name:  
Date:  
Type:

### Application

Interior house and track lighting direct OEM replacement. Simple quick connect wiring allows for one time wiring and no further electrical wiring to change the fixture. Provides 200+ degree lighting other LED fixtures cannot produce. Industry leading LED light output, size, weight and reliability for reduced unscheduled maintenance.

### SPECIFICATIONS

#### Mechanical Information:

Fixture Weight:	8 lbs (3.8kg)
Shipping Weight:	10 lbs (4.5kg)
Mounting/ Entries: (See Accessories)	(6) 3/4" NPT - SIDES

#### Electric Specifications:

Operating Voltage:	90 - 305VAC 127 - 431VDC
Wattage:	50W
Operating Temp:	-40°C - 60°C
THD:	<20% (@load≥50% / 115VAC,230VAC) (@load≥75% / 277VAC)
Power Factor:	≥ 0.98/115VAC ≥ 0.95/230VAC ≥ 0.92/277VAC
Short Circuit:	Constant Current Limiting, Recovers Automatically After Fault Condition is Removed
Frequency:	47-63Hz
Vibration:	15.6Grms

#### Construction:

Housing:	Die-Cast 6061 Aluminum
Finish:	Gloss Grey
Lens:	Polycarbonate Lens

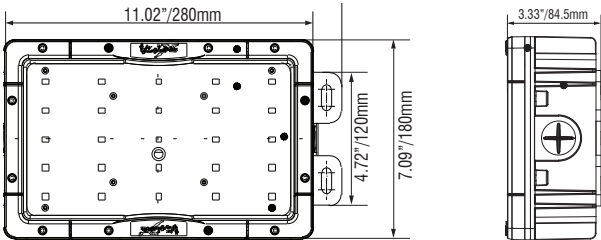
#### LED

LED:	MHB-B(CREE)
Amp Draw:	0.43A @ 115VAC 0.22A @ 230VAC 0.18A @ 277VAC
Lifespan:	50,000 hr



PART #:	BEAM PATTERN
2 LSG0224180PH	180°

#### 2D DRAWING:



#### RATINGS:

EMC Emission:	Compliance to EN55022,EN61000-3-2 Class A ,EN61000-3-3
EMC Immunity:	Compliance to EN55024, EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), criteria A
Ingress Protection:	IP-68, IP69k



# EQUIPMENT & OVER-DOOR LIGHTING

## Product Information

Project Name:  
Date:  
Type:

### Application

Direct bolt on over door and access panel lighting. Provides 200+ degree lighting other LED fixtures cannot match. Reduce unscheduled maintenance with robust mounts and guaranteed light operation. Optional colored covers for indicator lighting available in Red, Amber, Blue and Green. Industry leading LED light output, size, weight and reliability for reduced unscheduled maintenance.

### SPECIFICATIONS

#### Mechanical Information:

Fixture Weight:	2 lbs (0.9kg)
Shipping Weight:	4 lbs (1.8kg)
Mounting/ Entries: (See Accessories)	(4 ) 3/4" NPT - SIDES

#### Electric Specifications:

Operating Voltage:	90 - 264VAC 127 - 370VDC
Wattage:	10W
Operating Temp:	-40°C ~ 60°C
THD:	<20% (@load≥50% / 115VAC,230VAC) (@load≥75% / 277VAC)
Power Factor:	≥ 0.98/115VAC ≥ 0.95/230VAC ≥ 0.92/277VAC
Short Circuit:	Constant Current Limiting, Recovers Automatically After Fault Condition is Removed
Frequency:	47-63Hz
Vibration:	15.6Grms

#### Construction:

Housing:	Die-Cast 6061 Aluminum
Finish:	Gloss Grey
Lens:	Polycarbonate Lens

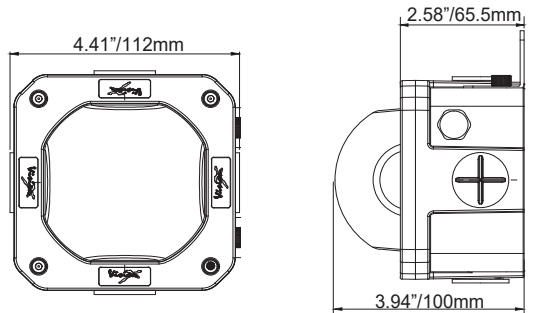
#### LED Light Engine/ Driver

LED:	5630(LG)
Amp Draw:	0.09A @ 115VAC 0.04A @ 230VAC 0.04A @ 277VAC
Lifespan:	50,000 hr



PART #:	BEAM PATTERN
3 LSGSM40180PH	180°

#### 2D DRAWING:



#### RATINGS:

EMC Emission:	Compliance to EN55022,EN61000-3-2 Class A ,EN61000-3-3
EMC Immunity:	Compliance to EN55024, EN61000-4-2,3,4,5,6,8,11; light industry level(surge 2KV), criteria A
Ingress Protection:	IP-68, IP69k





# KILLZONE LIGHTING

## Product Information

Project Name:  
Date:  
Type:

### Application

The Vision X Kill Zone system uses an elliptical pattern and a RED LED to paint a potential “Kill Zone” path around the counter weight of any shovel or can also indicate the swing path of any piece of equipment. This modular system can be scaled to any size or any application.

### SPECIFICATIONS

#### MECHANICAL:

Fixture Weight:	2.65 lbs (1.2kg)
Shipping Weight:	4.03 lbs (1.83kg)
Mounting:	Single Bolt M10

#### ELECTRICAL:

Operating Voltage:	11~65VDC
Wattage:	21W
Operating Temp:	-40°C ~ 80°C
Vibration:	15.6Grms
Connector:	2 Pin Deutsch

#### CONSTRUCTION:

Housing:	Die-Cast 6061 Aluminum
Finish:	Gloss Black
Lens:	Polycarbonate Lens

#### LED

LED:	3W (XPG-CREE, RED)
Raw Lumens:	3,451 lm
Amp Draw:	2.97A @ 11.8V
Lifespan:	50,000 hr

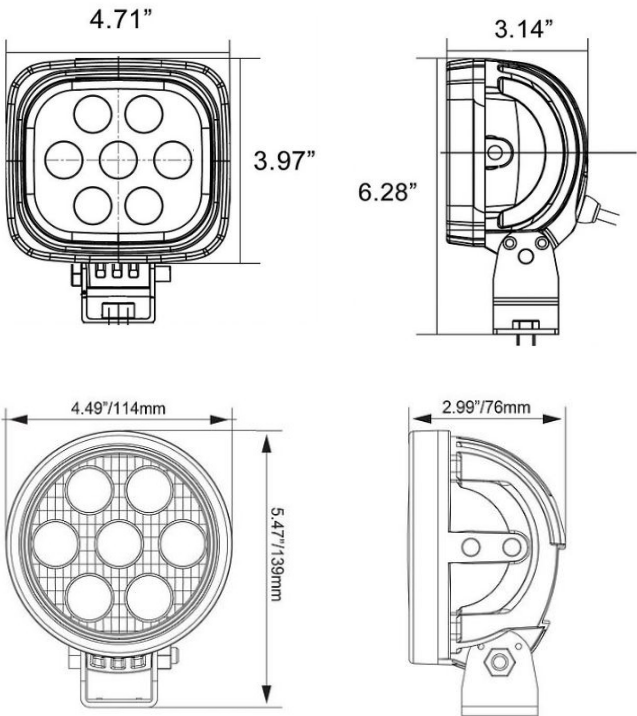
#### RATINGS:

EMC Emission:	(CISPR 25) Edition 3.0 (2008-03) Class 3
Ingress Protection:	IP-68, IP69k
Warranty:	3 Years



PART #:	BEAM PATTERN	HOUSING
4 XIL-UM44E3065R	Elliptical 30/60° RED	Square
XIL-UM40E3065R	Elliptical 30/60° RED	Round

#### 2D DRAWING:

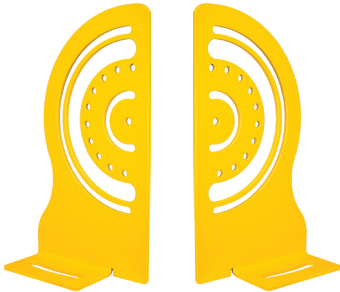


# ACCESSORY LIGHTING

## Replacement Parts

Project Name:  
Date:  
Type:

### BRACKETS



P&H SHOVEL LIGHT  
HEAVY DUTY TRUNNION  
Part # : LAG60TRHD



P&H HOUSE AND TRACK LIGHT  
BRACKETS  
Part # : LAGJ5PH1

### HARDWARE



P&H SHOVEL LIGHT  
PIN FEMALE QUICK CONNECT 2M  
Part # : LAYUPC2M



JUNCTION BOX LIGHT  
PIN MALE 3/4" QUICK CONNECT  
Part # : LASUQC34

### NOTES:



**VISION X USA**  
1601 Boundary Blvd  
Auburn WA 98001  
United States of America  
P: 253-218-2900  
[www.vxindustrial.com](http://www.vxindustrial.com)



**VISION X ASIA**  
23-7 Dongtansandan  
9-gil Dongtan-myeon Hwaseong-si  
Gyeonggi-do 18487, Korea  
P: 82-32-515-4814  
[www.visionxlighting.com](http://www.visionxlighting.com)