





# CLASS LEADING LIGHTING

Phoenix EMS is a leader in the design and manufacture of Industrial/Mining LED Lighting & Value-Add Solutions.

Our manufacturing capability is enhanced by fully resourced engineering, planning, scheduling and purchasing. This allows Phoenix EMS to handle product variations as well as engineer bespoke designs.

Phoenix EMS are the preferred choice of LED Lighting & Light Pole solutions. Our packaged solutions provide our customers with a commercial and technical advantage.

We also engineer, manufacture and design a complete range of Ultraswing Plant, Fixed, Mid-Hinged and Instrument Poles for our projects.

Phoenix EMS utilises the latest Lighting Design software to assist clients with Lighting Design to meet Australian Standards, Energy Saving Proposals and Audits, 3D Modelling and Intelligent Lighting Solutions.

Phoenix EMS operates Australia wide and has ar extensive distribution network.



# WITH DEPENDABLE QUALITY

Phoenix EMS luminaires are manufactured in accordance with ISO9000 in accredited facilities and comply with all relevant mandatory Australian Safety and EMC Standards. The products utilise the latest LED technology and are designed to handle tough environments where environmental degradation can cause premature failure of standard lighting products. Some of these factors include, high ambient temperatures, dust, water and chemical corrosion.







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TUNNEL/CONVEYOR/PLANT LIGHTS
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# ILLUMINATOR

#### **ILLUMINATOR**

The Illuminator is the newest addition to the Phoenix EMS industrial lighting family and is designed to push the light further than ever before with 15 Meter spacing across Conveyor, Walkway and Platform Lighting.

The Illuminator reduces the number of light fittings through the use of superior optics and technology to reduce capital costs and provides a fitting that operates reliably in dusty, dry & hot Australian mining conditions.



#### **TYPICAL APPLICATIONS**





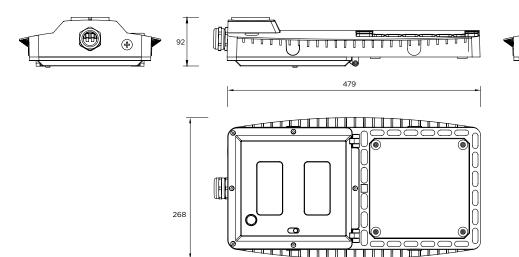


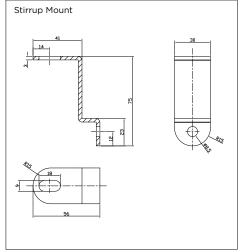
Coal & Metalliferous Mine Process Plants, Quarries, Campsite Area Lighting, General Area Lighting Car Parks, Conveyors, Pedestrian Access Road Ways, Stacker/Reclaimers, Stairwells, Tunnels, Walkways Bulkheads.

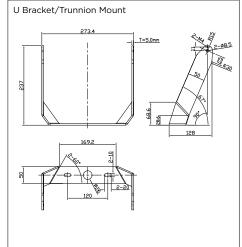
Model	PLI20	PLI30	PLI40	PLI50	PLI60	PLI37DC	
Optical Characteristics							
Rated Wattage	20W	30W	40W	50W	60W	37W	
Lumens	3140	4710	6280	7850	9420	5809	
System Efficacy			157Lm/W	@ 4000K			
Colour Temperature CCT		3C	CT (2200K Amber Turtle	Friendly / Green Eyewa	sh)		
CRI (Ra)			>7	70			
Reported L70			>50,000	) Hours			
Lens Optic Type			Type II /	Type V			
Electrical Characteristics							
Input			90-30	5VAC		24VDC	
Frequency			50	Hz		N/A	
Powerfactor			>0.95 / 2	230VAC		<0.9	
Total Harmonic Distortion			<1	5%		N/A	
Environment							
P Rating			IPe	56			
mpact Rating			IK08 (Opti				
Operating Temperature			-40°C To 50°C (0°C To 5	0°C Emergency Battery	)		
Product Material and Mount	ting						
Option 1			Spigot				
Option 2			U Bracket/Tru				
Option 3			Stirrup Mount F				
Product Material			Die Casting				
Lens / Optics Material			Tempered Glass (F	PC Lens Optional)			
Dimensions and Weights							
Product Dimensions			479*2				
Product Weight			7.5				
Packaging Dimensions	690*335*170						
Gross Weight			8.5	KG			
Warranty and Certifications							
Warranty			5 Year V	Varranty			
Certifications			SAA /	'EMC			

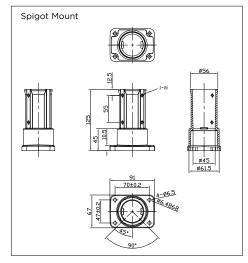


## **DIMENSIONS**

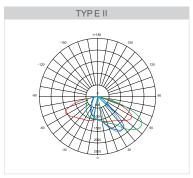




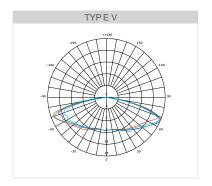




## **PHOTOMETRIC DIAGRAMS**



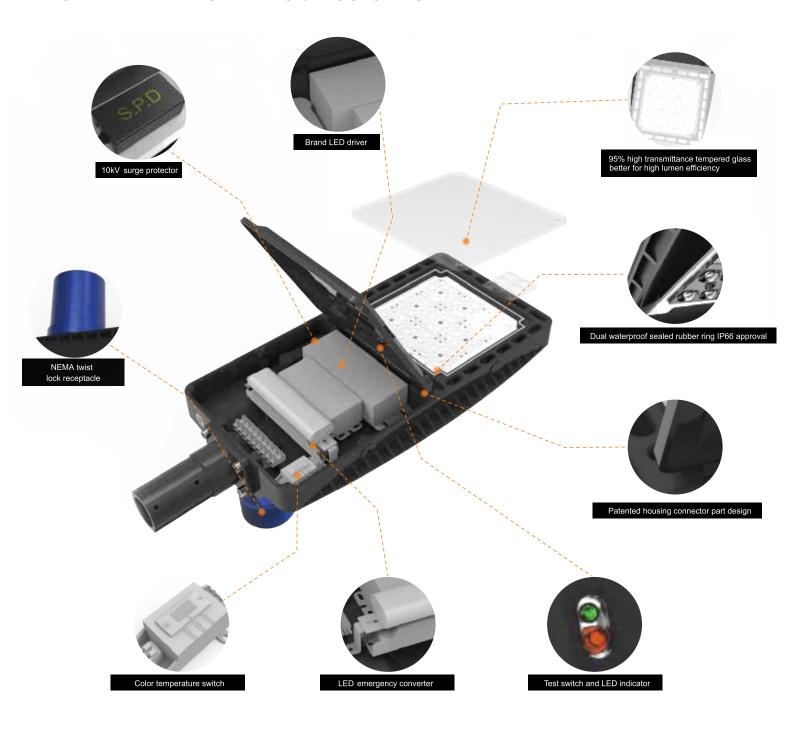








#### **BULKHEAD MINING FITTING STRUCTURE CHART**





**Motion Sensor (Optional)** 



**Daylight Sensor (Optional)** 



#### **ORDERING METHODOLOGY**

PLI	XX WATTS	XX MOUNTING	XX LENS TYPE	X VOLTAGE	XX FUNCTION
	20W 30W	SP (SPIGOT ADAPTOR)	T2 (TYPE II) T5 (TYPE V)	G (90-305VAC) L (24V DC)	X (STANDARD) E (EMERGENCY)
	37W (24V DC VOLTAGE)	UB (U BRACKET)			
	40W	ST (STIRRUP MOUNT)			
	50W	,,			
	60W				

## **ACCESSORIES/CONTROLS**

SPIGOT ADAPTOR	PLI/SP
U BRACKET	PLI/UB
STIRRUP MOUNT	PLI/ST
CORROSION PROTECTION COATING	PLI/PC
AMBER TURTLE FRIENDLY 2200K	PLI/A
GREEN EYEWASH	PLI/G
DAY/NIGHT SENSOR	PLI/DN
MOTION SENSOR (INDOOR UP TO 12 METRES)	PLI/MSID
MOTION SENSOR (OUTDOOR UP TO 12 METRES)	PLI/MSOD
NEMA 7 PIN SMART CELL	PLI/NEMA





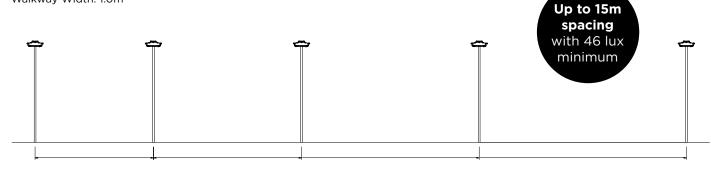
Green Eyewash Available 2200K Amber

#### **SMART TECHNOLOGY**

The Illuminator is Smart Technology ready and can be provided with a NEMA 7 Pin Smart Cell.

#### **SPACINGS**

50W-5000K-Type II Optics Model Mounting Height: 3.0m Maintenance Factor: 0.7 Walkway Width: 1.0m



Spacing: 8 Meters

Ave = 173 lux Min = 135 lux Min/Ave = 0.78 Spacing: 10 Meters

Ave = 139 lux Min = 111 lux Min/Ave = 0.8 **Spacing: 12 Meters** 

Ave = 115 lux Min = 82 lux Min/Ave = 0.71 Spacing: 15 Metres

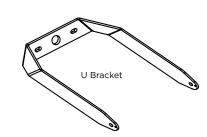
Ave = 92 lux Min = 46 lux Min/Ave = 0.5

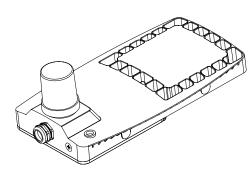
## **MOUNTING OPTIONS**



10











CYCLOPS



#### **CYCLOPS**

The Cyclops is a high powered LED Conveyor Light fitted with a high transmittance optical lens providing maximum luminous efficiency up to 130Lm/W. It also features a super slim and elegant design structure to meet the IP66 and IK08 requirements, along with a die-cast body to control and regulate temperature rise and heat dissipation performance.



#### TYPICAL APPLICATIONS







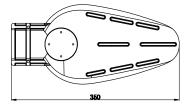
Collector Road, Local Road, Residential Road, Country Road

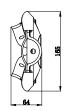
Model	PLICYC20	PLICYC30	PLICYC40	PLICYC50	PLICYC60	PLICYC70	PLICYC80	PLICYC90	PLICYC100
Optical Characteristics									
Rated Wattage	20W	30W	40W	50W	60W	70W	80W	90W	100W
Lumens	2600	3900	5200	6500	7800	9100	10400	11700	13000
System Efficacy		,			130Lm/W				
Colour Temperature CCT				570	0 (5000K / 400	00K)			
CRI (Ra)					>70				
Reported L70					>50,000				
Lens Optic Type				Type II (20W-	50W) / Type III	( 60W-100W)			
Electrical Characteristics									
Input					120-277VAC				
Frequency					50Hz				
Powerfactor					>0.95				
Total Harmonic Distortion					15%				
Environment									
IP Rating					IP66				
Impact Rating					IK08				
Operating Temperature					-20°C To 50°C				
Product Material and Mounting									
Option 1				Spigot	40-50mm / 40	-60mm			
Product Material				А	luminum Housir	ng			
Lens / Optics Material					PC Lens				
Dimensions and Weights									
Product Dimensions	350*1	65*64	420*2	200*71			546*260*80		
Product Weight	1.1	1.IKG 1.6KG 2.8KG							
Packaging Dimensions	425*425*4	425*425*450 (Ctn 8) 490*490*250 (Ctn 4) 570*295*190 (Ctn 2)							
Gross Weight	8.8	8.8KG 6.4KG 5.6KG							
Warranty and Certifications									
Warranty		5 Year Warranty							
Certifications					CE				



## **DIMENSIONS**

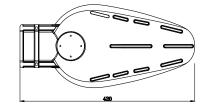
#### 20W/30W

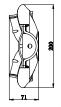






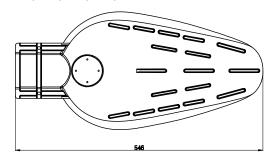
#### 40W/50W

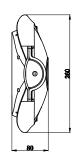


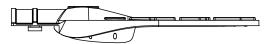




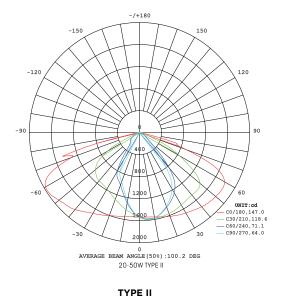
#### 60W/70W/80W/90W/100W

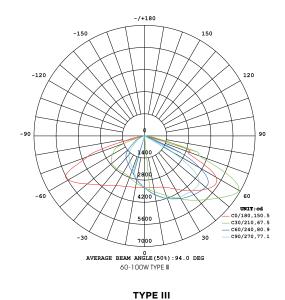






## **PHOTOMETRIC DIAGRAMS**







## **ORDERING METHODOLOGY**

PLI-CYC	X WATTS (W)	XX cct (K)
	20W	57 (5700K)
	30W	50 (5000K)
	40W	40 (4000K)
	50W	•
	60W	
	70W	
	80W	
	90W	
	100W	

## **ACCESSORIES/CONTROLS**

SPIGOT 40-50MM

SPIGOT 40-60MM

PLICYC/SP01

MOTION SENSOR

PHOTO SENSOR

PHICYC/P

DALI

10KV SURGE PROTECTOR

NEMA RECEPTACLE

ZIGBEE/PLC DUAL MODE STREET LAMP

PLICYC/SP01

PLICYC/M

PLICYC/DA

PLICYC/10KV

PLICYC/NEMA

PLICYC/NEMA





EXPLORER

#### **EXPLORER**

The Explorer features a marine grade chromated aluminium enclosure and powder-coated finish combined with a high impact borosilicate glass lens making it suitable for corrosive environments. The IP66 rating of the Explorer allows it to withstand high pressure cleaning and resistance from chemical cleaning agents.



#### TYPICAL APPLICATIONS





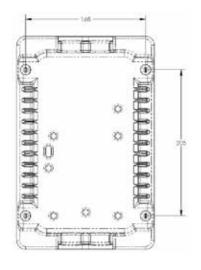


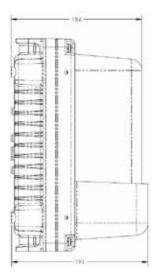
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing

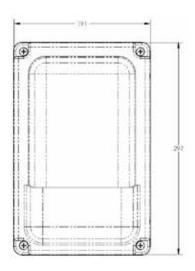
Model	PLIEXP24
Optical Characteristics	
Rated Wattage	24W
Lumens	2585
System Efficacy	100Lm/W
Colour Temperature CCT	4000K (6000K / 3000K)
CRI (Ra)	>80
Reported L70	>50,000 Hours
Lens Optic Type	120°
Electrical Characteristics	
Input	AC180-240V
Frequency	50Hz
Powerfactor	>0.95
Total Harmonic Distortion	N/A
Environment	
IP Rating	IP66
Impact Rating	IK08
Operating Temperature	-25°C To 40°C
Product Material and Mounting	
Option 1	Surface Mount
Product Material	Aluminum Body
Lens / Optics Material	Tempered Glass
Dimensions and Weights	<u>,                                      </u>
Product Dimensions	297*184*191
Product Weight	3.0KG
Packaging Dimensions (Ctn 6)	725*300*390
Gross Weight (Ctn 6)	18.0KG
Warranty and Certifications	
Warranty	5 Year Warranty
Certifications	CE / RoHS / ETL



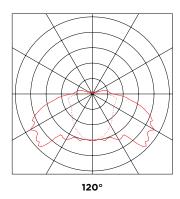
#### **DIMENSIONS**







#### PHOTOMETRIC DIAGRAMS



#### **ORDERING METHODOLOGY**

**PLI-EXP** 

XX WATTS

XX

60 (6000K) 40 (4000K) 30 (3000K) XX FUNCTION

> ST (STANDARD) EM (EMERGENCY)

#### **ACCESSORIES**

POLE MOUNT BRACKET 45° BRACKET WALL MOUNT BRACKET EMERGENCY KIT PLIEXP/PM PLIEXP/45B PLIEXP/WM PLIEXP/24KIT







#### **HUNTER**

The Hunter is the perfect solution for Conveyor, Walkway and Platform Lighting as it is available in either a polyester powder-coated aluminium body or a 316 stainless steel body. These options make it suitable for areas in high corrosion such as Coal Washeries, Materials Handling and Industrial Processing Plants.



#### **TYPICAL APPLICATIONS**







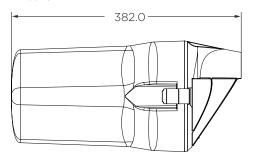
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing

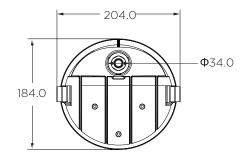
Model	PLIHTR48
Optical Characteristics	
Rated Wattage	48W
Lumens	5520
System Efficacy	115Lm/W
Colour Temperature CCT	3000K (5000K / 4000K / Green Eyewash)
CRI (Ra)	>80
Reported L70	>50,000 Hours
Lens Optic Type	Type II
Electrical Characteristics	
Input	AC90-240V
Frequency	50Hz
Powerfactor	>0.95
Total Harmonic Distortion	<9%
Environment	
IP Rating	IP66
Impact Rating	IK10
Operating Temperature	-25°C To 40°C
Product Material and Mounting	
Mounting	Suits 34mm Spigot
Product Material	Aluminum or Stainless Steel Housing
Lens / Optics Material	PMMA
Dimensions and Weights	
Product Dimensions	382*184*204
Product Weight	4.7KG
Packaging Dimensions (Ctn 6)	435*705*430
Gross Weight (Ctn 6)	28.2KG
Warranty and Certifications	
Warranty	5 Year Warranty
Certifications	CE / RoHS



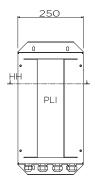
#### **DIMENSIONS**

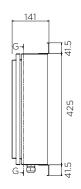
#### **Fixture**

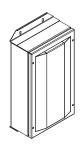




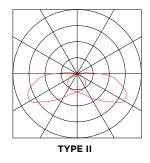
#### **Remote Emergency Terminal Box**







#### **PHOTOMETRIC DIAGRAMS**





Green Eyewash Available

#### **ORDERING METHODOLOGY**

**PLI-HTR** 

XX WATTS ССТ

50 (5000K) 40 (4000K) 30 (3000K)

G (GREEN EYEWASH)

X HOUSING

S (STAINLESS STEEL) A (ALUMINUM) XXXX
FUNCTION

ST (STANDARD) R/HETB (REMOTE EMERGENCY) I (INTEGRATED EMERGENCY)

#### **ACCESSORIES**

HUNTER REMOTE EMERGENCY TERMINAL BOX PLIHTR/HETB





# ILLUMINATOR EXTREME



#### **ILLUMINATOR EXTREME**

The Illuminator Extreme is the newest addition to the Phoenix EMS Industrial Lighting family. It is manufactured in 316 Stainless Steel and designed to push the light further than ever before with 15 Meter spacing across conveyor walkway and platform lighting.

The Illuminator Extreme reduces the number of light fittings by the use of superior optics and technology to reduce capital costs and provides a fitting that operates reliably in dusty, dry & hot Australian mining conditions.





#### **TYPICAL APPLICATIONS**





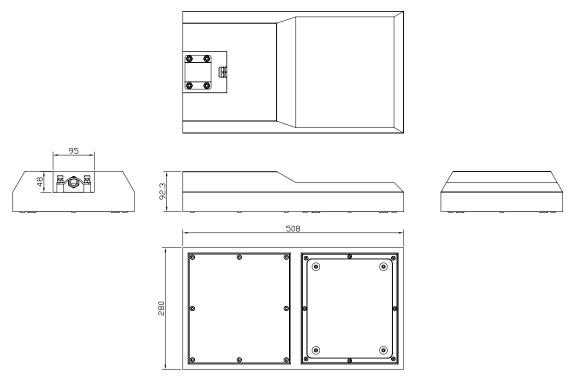


Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals

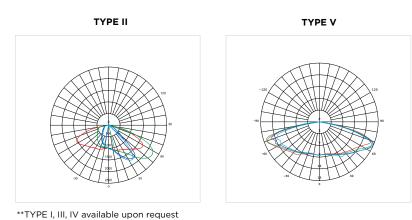
Model	PLIX20	PLIX30	PLIX40	PLIX50	PLIX60	PLIX37DC	
Optical Characteristics							
Rated Wattage	20W	30W	40W	50W	60W	37W	
Lumens	3140	4710	6280	7850	9420	5809	
System Efficacy			1571	Lm/W		•	
Colour Temperature CCT			3CCT (2200K Amber Turtl	le Friendly / Green Eyewas	h)		
CRI (Ra)			>	>70			
Reported L70			>50,00	00 Hours			
Lens Optic Type			Type II	/Type V			
Electrical Characteristics							
Input			90-30	D5VAC		24VDC	
Frequency			50Hz (Opt	tional 60Hz)		N/A	
Powerfactor			>0.95 / 3	230VAC		<0.9	
Total Harmonic Distortion			<1	15%		N/A	
Environment							
IP Rating			IF	P66			
Impact Rating			IK08 (Op	tional IK09)			
Operating Temperature			-40°C To 50°C (0°C To	50°C Emergency Battery)			
Product Material and Mounting							
Option 1			Spigo	t Mount			
Option 2			U Bracket/T	runnion Mount			
Option 3			Stirrup Mount	For Ceiling/Wall			
Product Material			Powder-coated	316 Stainless Steel			
Lens / Optics Material			PC	Lens			
Dimensions and Weights							
Product Dimensions			508*2	280*92.3			
Product Weight			7.	5KG			
Packaging Dimensions		690°335°170					
Gross Weight			8.	5KG			
Warranty and Certifications							
Warranty			5 Years	Warranty			
Certifications			SAA	/ EMC			



## **DIMENSIONS**



## **PHOTOMETRIC DIAGRAMS**



MOUNTING OPTIONS

Spigot Mount

U Bracket

XX

MOUNTING



#### **ORDERING METHODOLOGY**



50W 60W

20W 30W 37W (24V DC VOLTAGE) 40W SP (SPIGOT ADAPTOR) UB (U BRACKET) ST (STIRRUP MOUNT) XX LENS TYPE

T2 (TYPE II) T5 (TYPE V) X VOLTAGE

> G (90-305VAC) L (24V DC)

X FUNCTION

> X (STANDARD) E (EMERGENCY)

#### **ACCESSORIES**

SPIGOT ADAPTOR PLIX/SP **U BRACKET** PLIX/UB PLIX/ST STIRRUP MOUNT CORROSION PROTECTION COATING PLIX/PC DAY/NIGHT SENSOR PLIX/DN MOTION SENSOR (INDOOR UP TO 12 METRES) PLIX/MSID MOTION SENSOR (OUTDOOR UP TO 12 METRES) PLIX/MSOD AMBER TURTLE FRIENDLY 2200K PLIX/A GREEN EYEWASH PLIX/G NEMA 7 PIN SMART CELL PLIX/NEMA





Amber Turtle Friendly

Green Eyewash

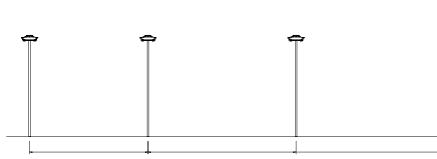
## **SMART TECHNOLOGY**

The Illuminator is Smart Technology ready and can be provided with a NEMA 7 Pin Smart Cell.

#### **SPACINGS**

50W-5000K-Type II Optics Model

Mounting Height: 3.0m Maintenance Factor: 0.7 Walkway Width: 1.0m



Up to 15m spacing with 46 lux minimum

**Spacing: 8 Meters** Ave = 173 lux

Min = 135 lux Min/Ave = 0.78 Spacing: 10 Meters

Ave = 139 lux Min = 111 lux Min/Ave = 0.8 Spacing: 12 Meters Ave = 115 lux Min = 82 lux

Min/Ave = 0.71

Spacing: 15 Metres Ave = 92 lux Min = 46 lux Min/Ave = 0.5





#### **PHOENIX MASTER**

The Phoenix Master is a brand-new state of the art competitive universal solution for Tunnels, Conveyor & Plant lighting applications. The patented design appearance enables the lamp to have a self-cleaning function to avoid dust collection and its double anti-thunder technology allows the fixture to operate smoothly in extreme conditions. The Phoenix Master also features a built-in 3CCT colour temperature adjustment or the choice of 2200K Amber Turtle Friendly and Green Eyewash.



#### TYPICAL APPLICATIONS







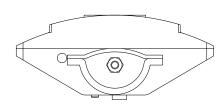
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals

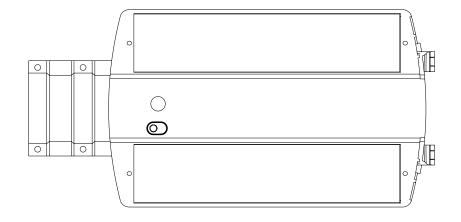
Model	PLIPHXM50	PLIPHXM70			
Optical Characteristics					
Rated Wattage	50W	70W			
Lumens	6750	9450			
System Efficacy	135L	.m/W			
Colour Temperature CCT	3CCT (2200K Amber Turtle	e Friendly / Green Eyewash)			
CRI (Ra)	>	70			
Reported L70	>50,00	0 Hours			
Lens Optic Type	Type II	/ Type V			
Electrical Characteristics					
Input	100-2	240AC			
Frequency	·	60Hz			
Power Factor	>0.95 /	230VAC			
Total Harmonic Distortion	<1	5%			
Environment					
IP Rating	IF	266			
Impact Rating	Ik	.08			
Operating Temperature	-40°C To 50°C (0°C To 50°	-40°C To 50°C (0°C To 50°C w Emergency Battery)			
Product Material and Mounting					
Option 1	Spigot	t Mount			
Option 2	Trunnic	n Mount			
Option 3	Stirrup	Mount			
Product Material	Die Cast	Aluminum			
Lens / Optics Material	Tempered	Glass Lens			
Dimensions and Weights					
Product Dimensions	420*2	250*96			
Product Weight	5.5KG				
Packing Dimensions	501*219*78				
Gross Weight	6.5KG				
Warranty and Certifications					
Warranty	5 Year V	Warranty			
Certifications	S.	AA			

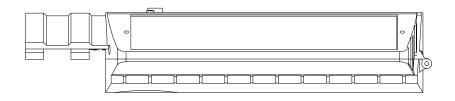


## **DIMENSIONS**

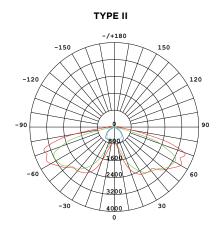


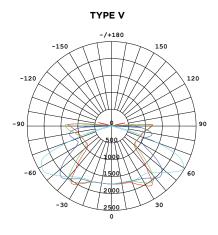






## **PHOTOMETRIC DIAGRAMS**

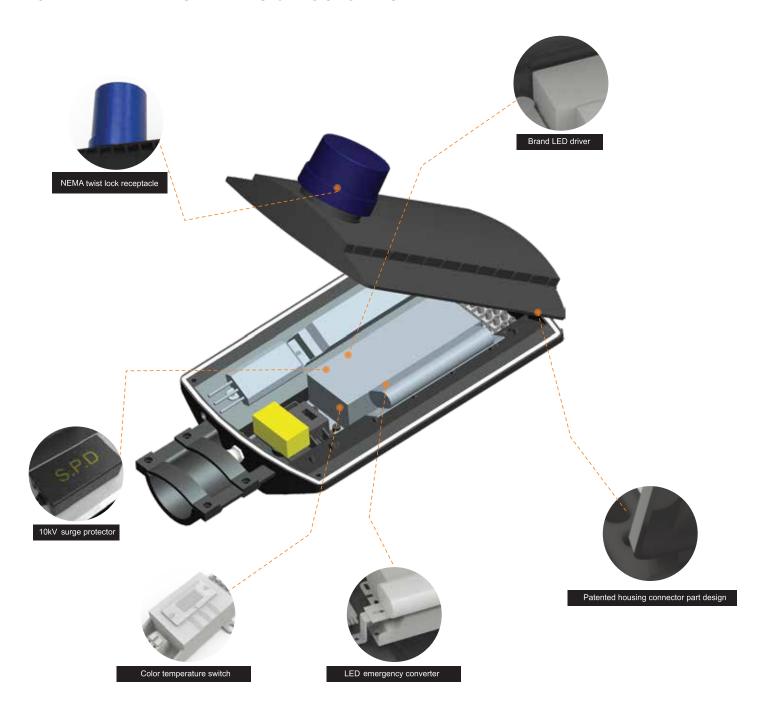








#### **BULKHEAD MINING FITTING STRUCTURE CHART**





**Motion Sensor (Optional)** 



**Daylight Sensor (Optional)** 





#### **ORDERING METHODOLOGY**

**PLI-PHXM** 

XX WATTS 50W 70W **Х** сст

3 (3CCT) A (2200K AMBER TURTLE FRIENDLY) G (GREEN) XX LENS TYPE

T2 (TYPE II) T5 (TYPE V) XX FUNCTION

ST (STANDARD) EM (EMERGENCY) X CONTROLS

X (NONE)
P (PHOTO SENSOR)
M (MOTION SENSOR)
D (DAYLIGHT SENSOR)
R (RS485 DIMMER)

XX MOUNTING

SP (SPIGOT) ST (STIRRUP) TM (TRUNNION MOUNT)

#### **ACCESSORIES**

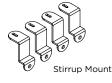
SPIGOT ADAPTOR PLIPHXM/SP PLIPHXM/ST STIRRUP MOUNT TRUNNION MOUNT PLIPHXM/TM PHOTO SENSOR PLIPHXM/P MOTION SENSOR PLIPHX/M DAYLIGHT SENSOR PLIPHXM/D RS485 DIMMER PLIPHXM/R NEMA RECEPTACLE PLIPHXM/N VISOR PLIPHXM/VIS

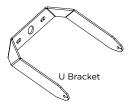
# VISOR PLIPTARY VIS

#### **MOUNTING OPTIONS**



Spigot Mount







Amber Turtle Friendly Available



Green Eyewash Available







# PHOENIX PLUS

## **HIGH-POWER FLOODLIGHTS**



#### **PHOENIX PLUS**

The Phoenix Plus is a sleek and reliable compact floodlight with an efficiency of up to 135Lm/W. An excellent temperature range of -30°C to +50°C makes the Phoenix Plus a lighting solution suitable for a wide range of Industrial and Mining applications.



#### TYPICAL APPLICATIONS







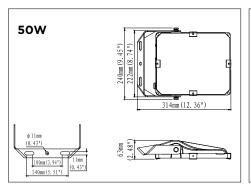
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals

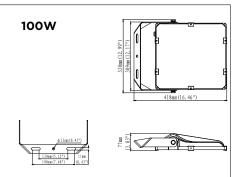
Model:	PLIPHXP50	PLIPHXP100	PLIPHXP150	PLIPHXP200	PLIPHXP300					
Optical Characteristics										
Rated Wattage	50W	100W	150W	200W	300W					
Lumens	6750	13500	20250	27000	40500					
System Efficacy	135Lm/W									
Colour TemperatureCCT	5000K (4000K / 3000K / 2200K Amber Turtle Friendly)									
CRI (Ra)		>70								
Reported L70			>50,000 Hours							
Lens Optic Type		30° x 60° / 65	° x 120° / 65° x 120° FT / 15° /	30° / 60° / 90°						
Electrical Characteristics										
Input			100-240VAC							
Frequency			50Hz							
Powerfactor			>0.92							
Total Harmonic Distortion			10%							
Environment										
IP Rating			IP66							
Impact Rating			IK08							
Operating Temperature			-30°C To 50°C							
Product Material and Mounting	9									
Option 1			Trunion Bracket Mount							
Option 2		Pole S	pigot Adaptor (42mm, 60mm	76mm)						
Product Material			Aluminum Alloy							
Lens / Optics Material			Toughened Glass, PC Lens							
Dimensions and Weights										
Product Dimensions	314*240*63	418*330*77	451*330*77	494*395*87	567*465*97					
Product Weight	2.6KG	3.9KG	4.5KG	6.3KG	9.5KG					
Packaging Dimensions	364*280*105	474*368*120	516*368*130	568*430*140	652*510*160					
Gross Weight	2.9KG	4.5KG	5.2KG	7.2KG	10.6KG					
Warranty and Certifications										
Warranty			5 Year Warranty							
Certifications			CE / SAA / RoHS							

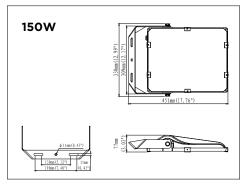
## **HIGH-POWER FLOODLIGHTS**

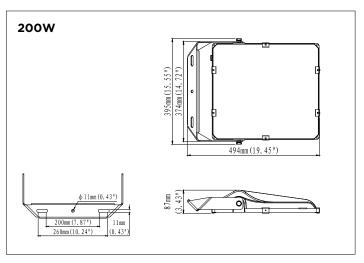


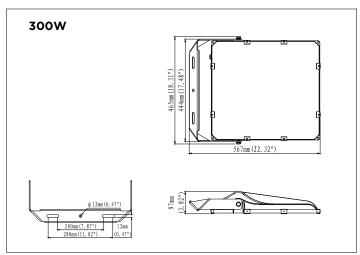
## **DIMENSIONS**



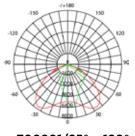




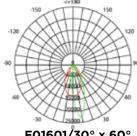




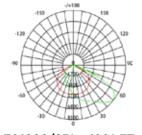
## **PHOTOMETRIC DIAGRAMS**



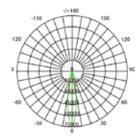
F00801/65° x 120°



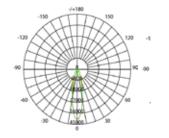
F01601/30° x 60°



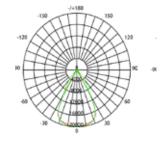
F01602/65° x 120° FT



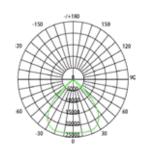
F01603/15°



F01604/30°



F01605/60°



F01606/90°



#### **ORDERING METHODOLOGY**

**PLI-PHXP** 

XXX WATTS

50W 100W 150W 200W 300W XX cct

50 (5000K) 40 (4000K) 30 (3000K) 20 (2200K) XX LENS TYPE

> 01 (F00801) 02 (F01601) 03 (F01602) 04 (F01603)

05 (F01604) 06 (F01605) 07 (F01606)

#### **ACCESSORIES**

42MM POLE MOUNT BRACKET 60MM POLE MOUNT BRACKET 76MM POLE MOUNT BRACKET WIRE GUARD

ANTI CORROSION/MARINE GRADE VERSION

PLIPHXP/PM42 PLIPHXP/PM60 PLIPHXP/PM76 PLIPHXP/WG PLIPHXP/AC











**Phoenix Plus Anti Corrosion** 







RAIDER SERIES

#### **RAIDER SERIES**

The Raider Series LED floodlight is designed specifically for use in high mounting applications where large volumes of light are required. Featuring a modular design ranging from 200W - 1200W, the Raider offers unlimited adjustability for any large scale lighting application.



#### TYPICAL APPLICATIONS







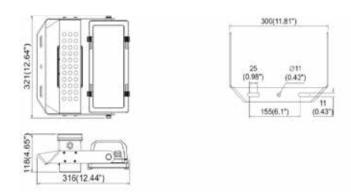
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals

Model	PLIRDR200	PLIRDR400	PLIRDR600	PLIRDR800	PLIRDR1200	
Optical Characteristics						
Rated Wattage	200W	400W	600W	800W	1200W	
Lumens	27000	54000	81000	108000	162000	
System Efficacy			135Lm/W			
Colour Temperature CCT		5	6000K (4000K / 3000K	)		
CRI (Ra)			>70			
Reported L70			>50,000 Hours			
Lens Optic Type		10° / 1	5° / 15° x 40° / 30° / 45°	° / 60°		
Electrical Characteristics						
Input			100-240VAC			
Frequency			50Hz			
Powerfactor			>0.92			
Total Harmonic Distortion			10%			
Environment						
IP Rating			IP65			
Impact Rating			IK08			
Operating Temperature			-30°C To 40°C			
Product Material and Mounting						
Option 1			Trunnion Mount Bracket			
Product Material			Aluminium Alloy			
Lens / Optics Material			PMMA			
Dimensions and Weights						
Product Dimensions	321*316*118	419*340*222	529*340*226	674*385*368	674*387*473	
Product Weight	4.1KG	9.4KG	15.3KG	22.0KG	27.0KG	
Packaging Dimensions	360*160*375	478*270*390	598*280*400	760*620*300	760*710*300	
Gross Weight	4.7KG	10.6KG	16.8KG	26.0KG	30.0KG	
Warranty and Certifications						
Warranty		5 Year Warranty				
Certifications			SAA / CE / RoHS			

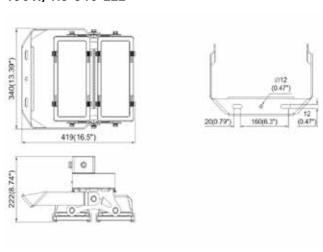


#### **DIMENSIONS**

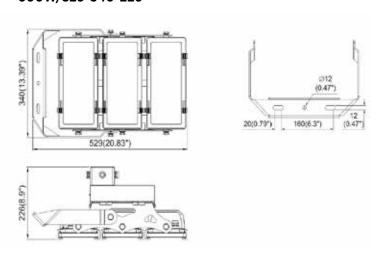
#### 200W/321\*316\*118



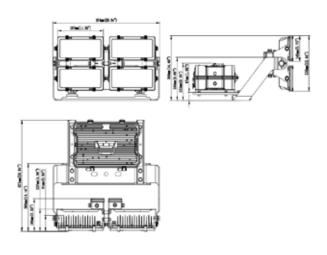
#### 400W/419\*340\*222



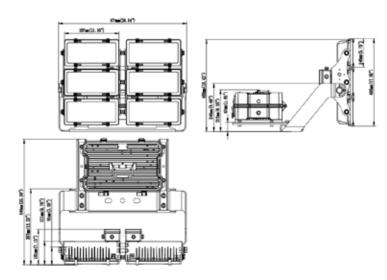
### 600W/529\*340\*226



#### 800W/674\*385\*368



#### 1200W/674\*387\*473





## **ORDERING METHODOLOGY**

**PLI-RDR** 

XXX WATTS

200W 400W 600W 800W

1200W

XX cct

50 (5000K) 40 (4000K) 30 (3000K) XX LENS TYPE

> 02 (F01602) 03 (F01603) 04 (F01604) 05 (F01605) 06 (F01606)

01 (F01601)

#### **ACCESSORIES**

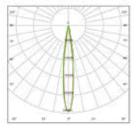
TRUNNION MOUNT BRACKET VISOR

PLIRDR/TM PLIRDR/VIS

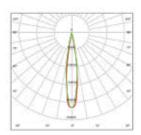


**Optional Visor** 

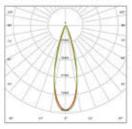
## **PHOTOMETRIC DIAGRAMS**



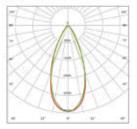
F06001/10°



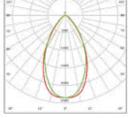
F06002/15°



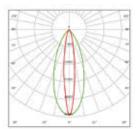
F06003/30°



F06005/45°



F06006/60°



F06004/15° x 40°





**HAWK** 

#### **HAWK**

The Hawk is a high powered LED floodlight designed for Mining and Industrial applications. It features a superior high output and offers a unique optical design that virtually eliminates glare with minimal impact on performance.





### **TYPICAL APPLICATIONS**





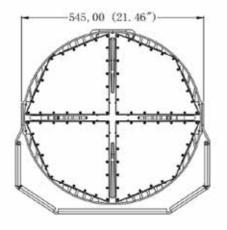


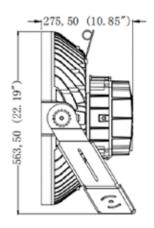
MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals

Model:	PLIHWK750	PLIHWK960		
Optical Characteristics				
Rated Wattage	750W	960W		
Lumens	108750	129600		
System Efficacy	145Lm/W	135Lm/W		
Colour Temperature CCT	5700K (5000K /	4000K / 3000K)		
CRI (Ra)	>70 (>80 / >	90 Optional)		
Reported L70	>50,000	Hours*		
Lens Optic Type	15° / 30	0° / 60°		
Electrical Characteristics				
Input	100-277V (347/4	480V Optional)		
Frequency	50	Hz		
Powerfactor	>0.	96		
Total Harmonic Distortion	<20	0%		
Environment				
IP Rating	IP6	56		
Impact Rating	IK	10		
Operating Temperature	-40°C T	o 50°C		
Product Material and Mounting				
Option 1	Trunnion Mo	unt Bracket		
Product Material	Powder-Coated Di	e Cast Aluminium		
Lens / Optics Material	Polycarbo	nate Lens		
Dimensions and Weights				
Product Dimensions	545*275.	5*563.5		
Product Weight	27.0	KG		
Packaging Dimensions	800*740*420			
Gross Weight	29.0KG			
Warranty and Certifications				
Warranty	5 Year W	/arranty		
Certifications	CE/F	RoHS		



#### **DIMENSIONS**

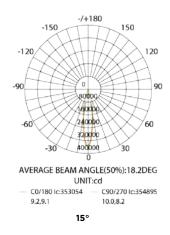


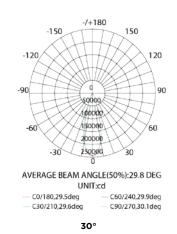


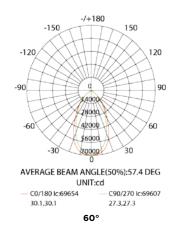


**Integral Driver** 

#### PHOTOMETRIC DIAGRAMS







#### ORDERING METHODOLOGY

**PLI-HWK** XXX XX XX XX **WATTS BEAM ANGLE DRIVER** 750W 57 (5700K) 01 (15°) ID (INTEGRATED DRIVER) 960W 50 (5000K) 02 (30°) RD (REMOTE DRIVER) 40 (4000K) 03 (60°) 30 (3000K)

#### **ACCESSORIES**

TRUNNION MOUNT BRACKET PLIHWK/TM VISOR PLIHWK/VIS PE CELL PLIHWK/PE REMOTE ENCLOSURE SS FLANGE MOUNT PLIHWK/R1 REMOTE MOUNTING PAN PLIHWK/R2 REMOTE STAND ALONE SS FLOOR MOUNT ENCLOSURE PLIHWK/R3



**Optional Visor** 





# HAWK JNR

#### **HAWK JNR**

The Hawk Jnr LED floodlight is designed to deliver a superior high output and also features a unique optical design that virtually eliminates glare with minimal impact on performance. It is available in a variety of flood distributions for lighting applications such as Large Area Lighting and Mining applications.



#### TYPICAL APPLICATIONS







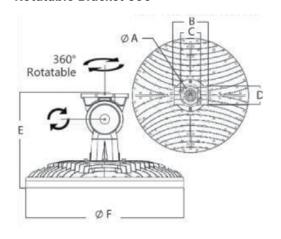
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals

Model:	PLIHWKJ315	PLIHWKJ460	PLIHWKJ580	PLIHWKJ720	
Optical Characteristics					
Rated Wattage	315W	460W	580W	720W	
Lumens	51975	75900	95700	118800	
System Efficacy		165L	_m/W		
Colour Temperature CCT		5700K (5000K /	4000K / 3000K)		
CRI (Ra)		>70 ( >80	Optional)		
Reported L70		>50,00	0 Hours		
Lens Optic Type		15° / 30	0° / 60°		
Electrical Characteristics					
Input		100-270VAC (20	0-480V Optional)		
Frequency		50	)Hz		
Powerfactor		>0	0.96		
Total Harmonic Distortion		<2	20%		
Environment					
IP Rating		IP	266		
Impact Rating		Ik	(10		
Operating Temperature		- 40°C	To 50°C		
Product Material and Mounting					
Option 1		Trunnion Me	ount Bracket		
Option 2		Rotatabl	e Bracket		
Product Material		Powder-Coated Die C	Cast Aluminum (Black)		
Lens / Optics Material		Polycarbo	onate Lens		
Dimensions and Weights		,			
Product Dimensions	468*468*343		550*550*336		
Product Weight	14.0KG		18.0KG		
Packaging Dimensions	540*540*415 620*620*405				
Gross Weight	15.9KG 21.6KG				
Warranty and Certifications					
Warranty		5 Year \	Warranty		
Certifications		CE/	RoHS		



#### **DIMENSIONS**

#### Rotatable Bracket 360°



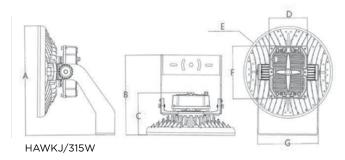
#### HAWKJ/315W

**A:** 7.3CM, **B:** 16.5CM, **C:** 9.3CM, **D:** 9.0CM, **E:** 34.3CM, **F:** 46.8CM

#### HAWKJ/460W-720W

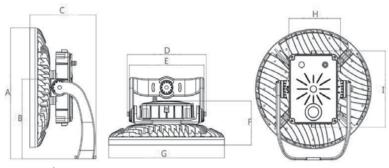
**A:** 7.3CM, **B:** 16.5CM, **C:** 9.3CM, **D:** 9.0CM, **E:** 33.6CM, **F:** 55.0CM

#### **Trunnion Mount Bracket**



**A:** 55.96CM(22.0"), **B:** 40.68CM(16.0"), **C:** 21.4CM(8.4"), **D:** 20.3CM(8"), **E:** 46.8CM(18.4"), **F:** 26.8CM(10.5"),

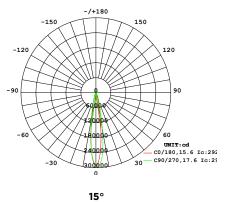
**G:** 32.01CM(12.6")

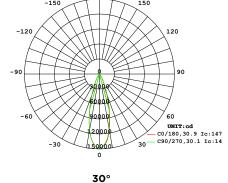


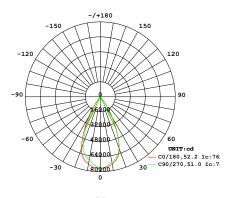
HAWKJ/460W-720W

**A:** 60.2CM(23.7"), **B:** 36.6CM(14.4"), **C:** 31.48CM(12.4"), **D:** 37.5CM(14.7"), **E:** 35.4CM(13.9"), **F:** 20.25CM(8.0"), **G:** 55.0CM(16"), **H:** 24.5CM(9.6"), **I:** 35.1CM(13.8")

#### **PHOTOMETRIC DIAGRAMS**









#### **ORDERING METHODOLOGY**

PLI-HWKJ	XXX	XX	XX	
	WATTS	cct	BEAM ANGLE	
	315W 460W 580W 720W	57 (5700K) 50 (5000K) 40 (4000K) 30 (3000K)	01 (15°) 02 (30°) 03 (60°)	

#### **ACCESSORIES**

TRUNNION MOUNT BRACKET 360° ROTATABLE BRACKET VISOR

PLIHWKJ/TM PLIHWKJ/RB PLIHWKJ/VIS





## PHOENIX CHALLENGER



#### PHOENIX CHALLENGER

The Phoenix Challenger is a stainless-steel Floodlight/Bulkhead suitable for a wide range of applications. It features a die-cast stainless steel body that can withstand temperatures from -40°C to 50°C standard and 0°C to 50°C in emergency mode. It is designed with 3CCT (5000K/4000K/3000K) and 3 modes of mounting (Spigot, Stirrup & U Bracket). The Phoenix Challenger is a superior fitting that is designed for dusty, hot and dry Australian mining conditions.



## **TYPICAL APPLICATIONS**







Coal & Metalliferous Mine Process Plants, Quarries, Campsite Area Lighting, General Area Lighting Car Parks, Conveyors, Pedestrian Access Road Ways, Stacker/Reclaimers, Stairwells, Tunnels, Walkways, Bulkheads.

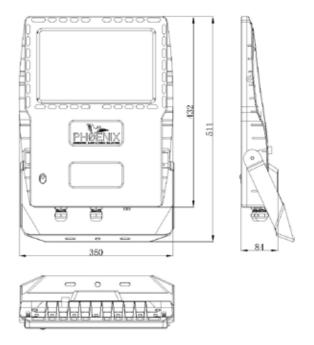
#### **SPECIFICATIONS**

Model No:	PLICHA50	PLICHA100	PLICHA150		
Optical Characteristics					
Rated Wattage	50W	100W	150W		
Lumens	6750	13500	20250		
System Efficacy		135Lm/W			
Colour Temperature CCT		3CCT			
CRI (Ra)		>70			
Reported L70		>50,000 Hours			
Lens Optic Type		155° x 60°			
Electrical Characteristics					
Input		90-305VAC			
Frequency		50Hz			
Power Factor		>0.95/230VAC			
Total Harmonic Distortion		<15%			
Environment					
IP Rating		IP66			
Impact Rating		IK08			
Operating Temperature	-40°C	To 50°C (0°C To 50°C w Emergency E	Battery)		
Product Material and Mounting					
Option 1		Spigot Mount (For OD 27-38MM Pipe)	)		
Option 2		U Bracket (For Square Pole)			
Option 3		Stirrup Mount (For Ceiling/Wall)			
Product Material		Die-cast 316 Stainless Steel			
Lens / Optics Material		PC Lens			
Dimensions and Weights					
Product Dimensions		432*350*84			
Product Weight		19.0KG			
Packing Dimensions	550*460*120				
Gross Weight	20.0KG				
Warranty and Certifications					
Warranty		5 Year Warranty			
Certifications		SAA			

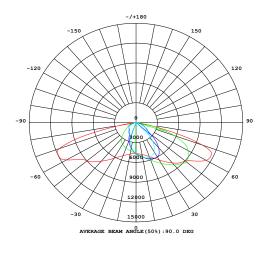
SAA / Zone 1, 2, 21, 22 Pending Approval



## **DIMENSIONS**



## **PHOTOMETRIC DIAGRAMS**



155° x 60°





#### **ORDERING METHODOLOGY**

PLI-CHA

XXX WATTS

100W

150W

XX FUNCTION

> ST (STANDARD) EM (EMERGENCY)

X CONTROLS

> X (NONE) P (PHOTO SENSOR)

M (MOTION SENSOR)
D (DAYLIGHT SENSOR)
R (RS485 DIMMER)

XX MOUNTING

> SP (SPIGOT ADAPTOR) UB (U BRACKET) ST (STIRRUP MOUNT)

#### **ACCESSORIES**

SPIGOT ADAPTOR PLICHA/SP
U BRACKET PLICHA/UB
STIRRUP MOUNT PLICHA/SM
PHOTO SENSOR PLICHA/P
MOTION SENSOR PLICHA/M
DAYLIGHT SENSOR PLICHA/D
RS485 DIMMER PLICHA/R
NEMA RECEPTACLE PLICHA/NEMA

#### **MOUNTING OPTIONS**







Spigot Mount

U Bracket

Stirrup Mount





#### **CRUSADER**

The Crusader is a uniquely designed area light and represents the trend of municipal and roadway lighting. Compatible with the latest version of Zigbee Smart Control, the Crusader is an intelligent lighting solution fit for a wide range of applications.



#### TYPICAL APPLICATIONS







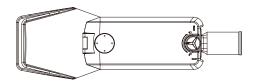
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals

Model	PLICRU70	PLICRU80	PLICRU90	PLICRU100	PLICRU110	PLICRU120	PLICRU130	PLICRU140	PLICRU150
Optical Characteristics									
Rated Wattage	70W	80W	90W	100W	110W	120W	130W	140W	150W
Lumens	9800	11200	12600	14000	15400	16800	18200	19600	21000
System Efficacy					140Lm/W	-			
Colour Temperature CCT				6500K / 5700	OK / 5000K / 40	000K / 3000K			
CRI (Ra)				>7	70 (>80 Option	al)			
Reported L70					>50,000 Hours				
Lens Optic Type			Т	Гуре II-M / Туре	II-S / Type III /	Type IV / Type	V		
Electrical Characteristics									
Input					220-240V				
Frequency					50Hz				
Powerfactor					>0.95				
Total Harmonic Distortion					<19%				
Environment									
IP Rating					IP66				
Impact Rating					IK08				
Operating Temperature					-40°C To 50°C				
Product Material and Mounting									
Option 1				Sp	igot Mount 60n	nm			
Option 2				Sp	igot Mount 76n	nm			
Product Material				Die	Casting Alumin	ium			
Lens / Optics Material					Tempered Glass	5			
Dimensions and Weights									
Product Dimensions		670*2	01*72				745*284*96		
Product Weight		6.5KG 9.1KG							
Packaging Dimensions		828*285*285 (Ctn 2) 942*320*160 (Ctn 1)							
Gross Weight		15.5KG 11.2KG							
Warranty and Certifications									
Warranty		5 Year Warranty							
Certifications					CE / SAA				

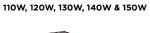


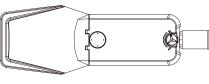
## **DIMENSIONS**

#### 70W, 80W, 90W & 100W

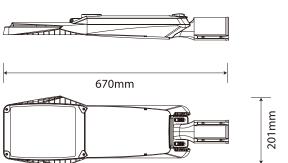


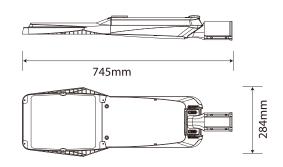




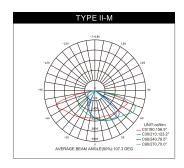


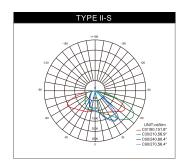


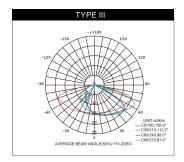


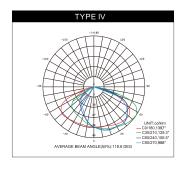


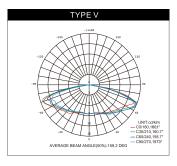
## **PHOTOMETRIC DIAGRAMS**













## **ORDERING METHODOLOGY**

PLI-CRU XXX WATTS		XX cct	XXX LENS TYPE		
	70W 80W 90W 100W 110W 120W 130W 140W 150W	65 (6500K) 57 (5700K) 50 (5000K) 40 (4000K) 30 (3000K)	T2M (TYPE II-M) T2S (TYPE II-S) T3 (TYPE III) T4 (TYPE IV) T5 (TYPE V)		

#### **ACCESSORIES**

SPIGOT MOUNT BRACKET 60MM
SPIGOT MOUNT BRACKET 76MM
PLICRU/SP76
PE CELL
ZIGBEE LIGHT CONTROLLER
ZIGBEE INTEGRATED CONTROLLER
PLICRU/ZIC
ZIGBEE SOFTWARE
PLICRU/ZSW







FLIGHT SERIES



#### **FLIGHT SERIES**

The Flight Series is a LED Area Light designed for a range of different applications. It features an anti corrosion coating and a housing made of die casted aluminium alloy to ensure greater heat dissipation and also utilises external fins. Along with these features, it is designed to provide a wider, smoother and more uniform light output.



#### TYPICAL APPLICATIONS





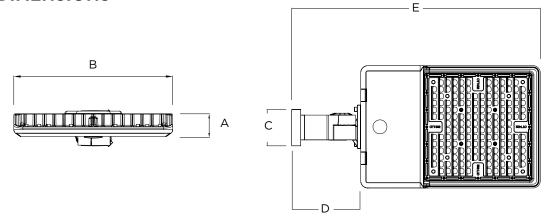


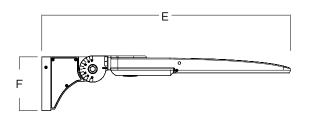
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks, General Area Lighting, Container Terminals, Airports

Model:	PLIFLI75	PLIFLI115	PLIFLI145	PLIFLI180	PLIFLI200	PLIFLI230	PLIFLI300	PLIFLI420
Optical Characteristics								
Rated Wattage	75W	115W	145W	180W	200W	230W	300W	420W
Lumens	13125	18745	24795	30960	33200	36340	43500	60060
System Efficacy	175Lm/W	163Lm/W	171Lm/W	172Lm/W	166Lm/W	158Lm/W	145Lm/W	143Lm/W
Colour Temperature CCT				5700K (5000K /	4000K / 3000K	)		
CRI (Ra)				>	70			
Reported L70				>50,00	0 Hours			
Lens Optic Type				Type III / Typ	e IV / Type V			
Electrical Characteristics								
Input			Ir	put 100-277V (3	47-480V Option	al)		
Frequency				50	Hz			
Powerfactor				>0	).96			
Total Harmonic Distortion				<2	20%			
Environment								
IP Rating				IP	65			
Impact Rating				IK	10			
Operating Temperature				-40°C	To 50°C			
Product Material and Mounting								
Option 1			Spigot Mou	unt (Type A, B, C	D, E - Refer To D	imensions)		
Product Material				Alumini	um Alloy			
Lens / Optics Material				PC I	Lens			
Dimensions and Weights								
Product Dimensions		585*270*56			679*350*56		750*3	60*75
Product Weight		4.8KG			5.5KG		10.5	SKG
Packaging Dimensions		690*370*180 760*410*180		810*43	30*180			
Gross Weight		6.6KG 8.5KG 12.1KG						KG
Warranty and Certifications								
Warranty				5 Year V	Varranty			
Certifications				SAA/C	E / RoHS			



## **DIMENSIONS**





Α	В	С	D	E	F	
		75W/11	5W/145W			
56MN	1 270MN	1 77MM	165MM	585MM	150MM	
		180W/20	00W/230V	٧		
56MN	1 350MN	4 77MM	165MM	679MM	150MM	
	300W/420W					
75MN	1 360MN	4 77MM	165MM	750MM	150MM	

## **PHOTOMETRIC DIAGRAMS**

#### **ACCESSORIES**

SLIP FITTER PLIFLI-A
ADJUSTABLE ARM MOUNT PLIFLI-B
TRUNNION MOUNT U BRACKET TO SUIT 75W-230W MODELS
TRUNNION MOUNT U BRACKET TO SUIT 300W-420W MODELS
DIRECT ARM MOUNT PLIFLI-B
REDUCER TO SUIT BRACKET A
PLIFLI-R





## **ORDERING METHODOLOGY**

PLI-FLI	XXX	XX	XX	X
	WATTS	cct	LENS TYPE	CONTROLS
	75W 115W 145W 180W 200W 230W 300W 420W	57 (5700K) 50 (5000K) 40 (4000K) 30 (3000K)	T5 (TYPE V) T4 (TYPE IV) T3 (TYPE III)	X (NONE) P (PE CELL)

## **ACCESSORIES**

ADJUSTABLE SPIGOT MOUNT PLIFLI/SP PE CELL PLIFLI/PE





EAGLE



#### **EAGLE**

The polyester powder-coated aluminium enclosure combined with a high-impact polycarbonate diffuser makes the Eagle a good fit for corrosive atmospheres or where the risk of mechanical damage is possible. The IP66 rating of the Eagle allows it to be used in areas where cleanliness is of importance as it can withstand high-pressure cleaning and resistance from chemical cleaning agents. The diffuser is secured with stainless steel cap head screws making it suitable for areas where vandal resistance is required.



#### TYPICAL APPLICATIONS





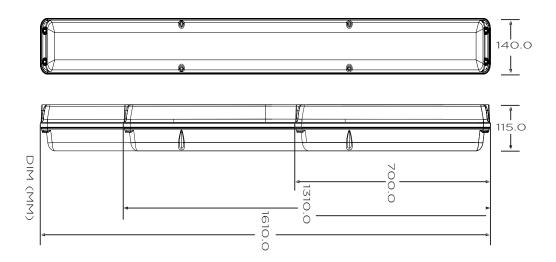


Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing

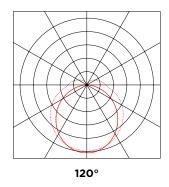
Model:	PLIEGL24	PLIEGL48	PLIEGL72		
Optical Characteristics					
Rated Wattage	24W	48W	72W		
Lumens	2568	5088	8208		
System Efficacy	107Lm/W	106Lm/W	114Lm/W		
Colour Temperature CCT		5000K (4000K / 3000K)			
CRI (Ra)		>80			
Reported L70		>50,000 Hours			
Lens Optic Type		120°			
Electrical Characteristics					
Input		90-240VAC (DC Available on Reques	t)		
Frequency		50Hz			
Powerfactor		>0.95			
Total Harmonic Distortion		10%			
Environment					
IP Rating		IP66			
Impact Rating		IK08			
Operating Temperature		-30°C To 55°C			
Product Material and Mounting					
Option 1		Ceiling Mount			
Option 2		Wall Mount			
Option 3		Angled Wall Mount			
Option 4		Surface Mount			
Option 5		Pipe Clamp Mount 40mm or 50mm			
Product Material		Die-casting Aluminum			
Lens / Optics Material		Frosted PC Lens			
Dimensions and Weights					
Product Dimensions	700*140*115	1310*140*115	1610*140*115		
Product Weight	2KG	3.5KG	4KG		
Packaging Dimensions	725*300*390	1335*300*390	1665*300*270		
Gross Weight	3.2KG	4.7 KG	5.4KG		
Warranty and Certifications					
Warranty		5 Year Warranty			
Certifications		SAA / CE / RoHS			



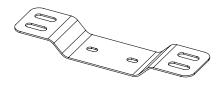
#### **DIMENSIONS**



## **PHOTOMETRIC DIAGRAMS**



#### **ACCESSORIES**



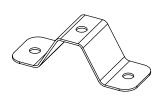
Ceiling Mount Bracket



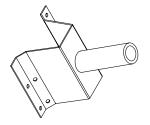
Angled Wall Mount Bracket



Surface Mount Bracket



Pipe Clamp Kit (40mm OD Pipe) (50mm OD Pipe)



Wall Mount Bracket Kit



## **ORDERING METHODOLOGY**

**PLI-EGL** 

XX WATTS ХХ

XX FUNCTION

24W 50 (5000K) 48W 40 (4000K) 72W 30 (3000K) ST (STANDARD) EM (EMERGENCY)

#### **ACCESSORIES**

CEILING MOUNT BRACKET
WALL MOUNT BRACKET
ANGLED WALL MOUNT BRACKET
SURFACE MOUNT BRACKET
PIPE CLAMP KIT 40MM OD POLE
PIPE CLAMP KIT 50MM OD POLE

PLIEGL/CM PLIEGL/WM PLIEGL/AM PLIEGL/SM PLIEGL/PCL40 PLIEGL/PCL50





FALCON



#### **FALCON**

The Falcon is a general purpose LED weatherproof luminaire comprising a high impact UV stabilized diffuser. It features a pour in place polyurethane gasket in conjunction with a secure and screw lockable stainless steel latch system making the Falcon a hardy and durable luminaire.



## **TYPICAL APPLICATIONS**





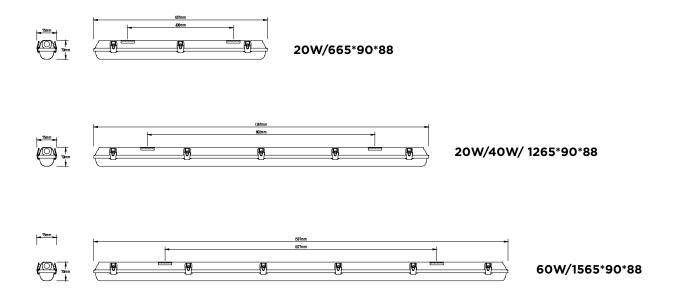


Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing

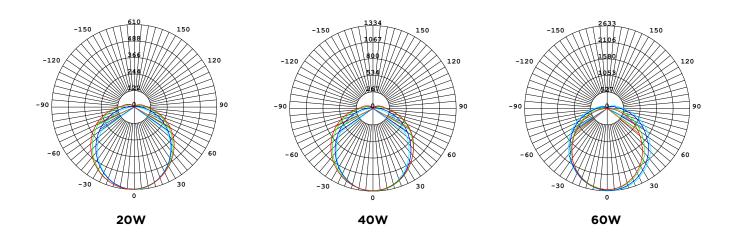
Model:	PLIFAL20	PLIFAL20	PLIFAL40	PLIFAL60	
Rated Wattage	20W	20W	40W	60W	
Lumens	2000	2000	4000	6000	
System Efficacy		1001	_m/W		
Colour Temperature CCT		5000K (400	OOK / 3000K)		
CRI (Ra)		>	80		
Reported L70		>50,00	00 Hours		
Lens Optic Type		12	20°		
Electrical Characteristics					
Input		220-2	240VAC		
Frequency		50	OHz		
Powerfactor		>(	0.90		
Total Harmonic Distortion		<2	20%		
Environment					
IP Rating		IF	P65		
Impact Rating		Ih	(08		
Operating Temperature		-20°C	To 40°C		
Product Material and Mounting	9				
Option 1		Surface N	1ount Clips		
Product Material		PC Body, St	eel Gear Tray		
Lens / Optics Material		PC	Lens		
Dimensions and Weights					
Product Dimensions	665*90*88	1269	5*90*88	1565*90*88	
Product Weight	1.1KG	2.0KG	2.5KG	3.2KG	
Packaging Dimensions	690*240*310	1315*240*310		1315*240*310	
Gross Weight (Ctn 10)	13.2KG	24.0KG	30.0KG	38.4KG	
Warranty and Certifications					
Warranty		5 Year Warranty			
Certifications		SAA/C	CE / RoHS		



## **DIMENSIONS**



## **PHOTOMETRIC DIAGRAMS**





## **ORDERING METHODOLOGY**

**PLI-FAL** 

XX WATTS

20W

40W 60W XX

50 (5000K) 40 (4000K)

30 (3000K)

XX DIMENSIONS

01 (20W/665\*90\*88) 02 (20W/1265\*90\*88) XX FUNCTION

> ST (STANDARD) EM (EMERGENCY)

#### **ACCESSORIES**

SURFACE MOUNT CLIPS DALI CONTROL DIMMABLE 1-10V DRIVER MOTION SENSOR PLIFAL/SM PLIFAL/DA PLIFAL/D PLIFAL/M





## **KESTREL**



#### **KESTREL**

The Kestrel is a high performance, corrosion resistant, IP65 waterproof batten. With GRP housing the Kestrel is designed to withstand aggressive atmospheres laden with salts, acids, and mineral oils. The Kestrel is suitable for locations that are exposed to liquids and gases that contain potentially corrosive chemicals.



#### **TYPICAL APPLICATIONS**





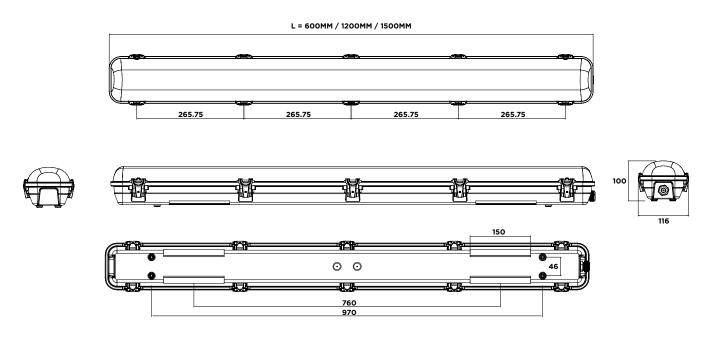


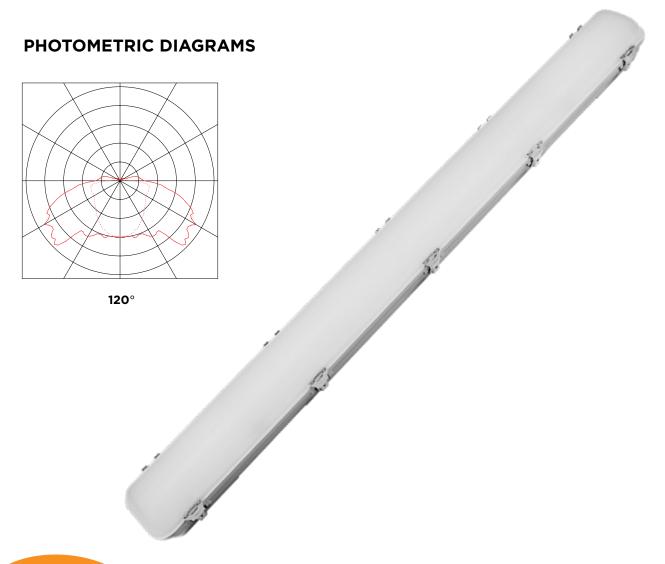
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing

Model No.	PLIKES15	PLIKES24	PLIKES20	PLIKES36	PLIKES50	PLIKES30	PLIKES50	PLIKES65
Optical Characteristics								
Rated Wattage	15W	24W	20W	36W	50W	30W	50W	65W
Lumens	1950	3120	2600	4680	6500	3900	6500	8450
System Efficacy	130Lm/W							
Colour Temperature CCT	5000K (6500K / 5700K / 4000K / 3000K)							
CRI (Ra)	>80							
Reported L70	>50,000 Hours							
Lens Optic Type	120°							
Electrical Characteristics								
Input	220-240V							
Frequency	50/60Hz							
Powerfactor	>0.95							
GWT	850°C							
Environment								
IP Rating	IP65							
Impact Rating	IK08							
Operating Temperature	-15°C To 35°C							
Product Material and Mour	nting							
Option 1	Bracket Mount							
Option 2	Suspension Chain							
Product Material	GRP Housing (Glass Reinforced Plastic)							
Lens / Optics Material	Corrosion Resistant PMMA Diffuser							
Dimensions and Weights								
Product Dimensions	600*1	16*100		1200*116*100			1500*116*100	
Product Weight	1.5	KG		3.0KG			4.0KG	
Packaging Dimensions	630*2	58*232		1230*268*232			1530*268*232	
Gross Weight	2.0	KG		3.5KG			4.5KG	
Warranty and Certification	ns							
Warranty	5 Year Warranty							
Certifications	SAA / CE / RoHS							



## **DIMENSIONS**







## **ORDERING METHODOLOGY**

**PLI-KES** 

XX WATTS

65W

XX cct

XX DIMENSIONS

15W 65 (6500K) 20W 57 (5700K) 24W 50 (5000K) 30W 40 (4000K) 36W 30 (3000K) 50W

01 (50W/1200\*116\*100) 02 (50W/1500\*116\*100)

### **ACCESSORIES**







TEXL



### **TEXL**

The Texl is an enclosed cylindrical luminaire with integrated control gear designed to withstand high pressure water. Offering a clear polycarbonate diffuser, the Texl is suited to a wide variety of wet and dusty industrial applications.

- PC lens
- IP69
- 1450psi high pressure wash-down
- 316 Stainless steel end caps
- HACCP and NSF approved
- Strong impact resistance IK10
- ENEC approved to ensure top quality



#### TYPICAL APPLICATIONS





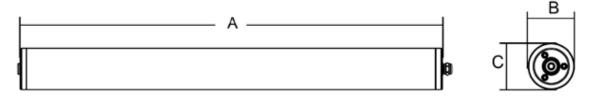


Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, High Wash Down Area, Chemical Plants, Abattoirs, Poultry & Processing Plants, Spirals, Food & Beverage, Ports & Wharves

Model:	PLITXL20	PLITXL36	PLITXL48			
Optical Characteristics						
Rated Wattage	20W	36W	48W			
Lumens	2600	4680	6240			
System Efficacy		130Lm/W				
Colour Temperature CCT	5000K (6500K / 4000K / 3000K / Green Eyewash)					
CRI (Ra)	>80					
Reported L70		>50,000 Hours				
Lens Optic Type	PC Ler	ns / Tempered Glass / PMMA				
Electrical Characteristics						
Input		220-240VAC				
Frequency		50Hz				
Powerfactor		≥0.95@230Vac				
Total Harmonic Distortion		≤15%				
Environment						
IP Rating		IP69				
Impact Rating		IK10				
Operating Temperature		-20°C To 35°C				
Product Material and Mounting						
Option 1		Ceiling Mounted				
Option 2		Suspension				
Product Material	316	Stainless Steel End Caps				
Lens / Optics Material	PC Lens (T	Tempered Glass, PMMA Optio	nal)			
Dimensions and Weights		_				
Product Dimensions	600*70*70	1200*70*70	1500*70*70			
Product Weight	2.0KG	1.6KG	1.9KG			
Packaging Dimensions (Ctn 6)	818*411*286	1418*411*286	1718*411*286			
Gross Weight (Ctn 6)	12.0KG	9.6KG	11.4KG			
Warranty and Certifications						
Warranty		5 Year Warranty				
Certifications		SAA / CE				



## **DIMENSIONS**



WATTAGE	SIZE A (MM)	SIZE B (MM)	SIZE C (MM)
20W	600MM	70MM	70MM
36W	1200MM	70MM	70MM
48W	1500MM	70MM	70MM



### **ORDERING METHODOLOGY**

PLI-TXL	X W	X	XX		X ENS TYPE	 X UNCTION
		20W 36W 48W		65 (6500K) 50 (5000K) 40 (4000K) 30 (3000K) G (GREEN)	PC (CLEAR GLASS) PO (OPAL GLASS) AC (PMMA CLEAR) AO (PMMA OPAL) TG (TEMPERED GLASS)	ST (STANDARD) EM (EMERGENCY)

## **ACCESSORIES**

CEILING MOUNT BRACKET PLITXL/CM
NON-MAINTAINED SMART EMERGENCY MODULE PLITXL/EM
SUSPENSION KIT PLITXL/SK
ANTI THEFT CLIP PLITXL/TC









INHIBITOR

#### **INHIBITOR**

The Inhibitor is an IP65 stainless steel waterproof luminaire suitable for high humidity outdoor environments and is designed to withstand extreme temperatures. It is resistant to impact, provides a 50,000 hour lifetime, and has over 70% energy savings compared to lighting with similar lumen output. The Inhibitor features high luminous efficacy, low power consumption, and is pollution-free making it the perfect solution for a wide range of applications.



### **TYPICAL APPLICATIONS**







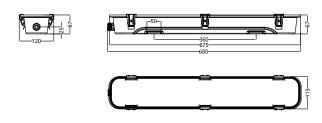
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing

Model:	PLIINH25	PLIINH35	PLIINH45	PLIINH50	PLIINH62
Optical Characteristics					
Rated Wattage	25W	35W	45W	50W	62W
Lumens	3500	4900	6300	7000	8680
System Efficacy			140Lm/W		
Colour Temperature CCT		6500K / 57	700K / 5000K / 4000	K / 3000K	
CRI (Ra)			>80		
Reported L70			>50,000 Hours		
Lens Optic Type		120	o° Polycarbonate Diffu	ser	
Electrical Characteristics					
Input			220-240VAC		
Frequency			50Hz		
Powerfactor			>0.90		
Total Harmonic Distortion			<20%		
Environment					
IP Rating			IP65		
Impact Rating			IKO8		
Operating Temperature			-40°C To 55°C		
Product Material and Mounting	_				
Option 1			Ceiling Mount Bracket		
Product Material			304 Stainless Steel		
Lens / Optics Material		Ter	mpered Glass or PC Le	ens	
Dimensions and Weights					
Product Dimensions		Re	efer to dimensions belo	)W	
Product Weight	2.2KG	3.6	KG	4.8	KG
Packaging Dimensions	725*330*290	1325*16	65*150	1625*1	65*150
Gross Weight	10.3KG (Ctn 10)	4.2	KG	5.5	KG
Warranty and Certifications					
Warranty			5 Year Warranty		
Certifications			SAA		

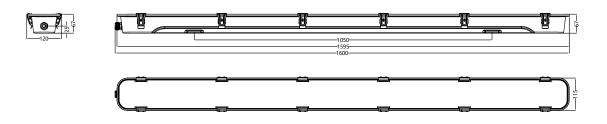


## **DIMENSIONS**

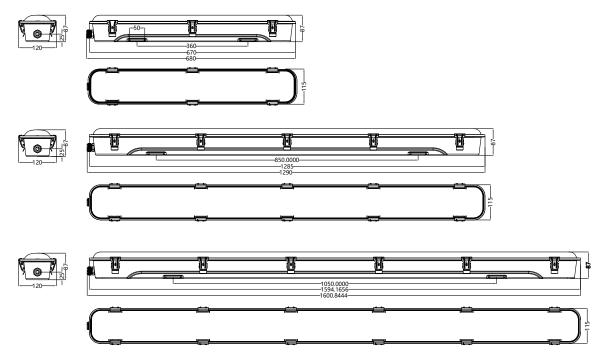
#### **POLYCARBONATE COVER**







#### **TEMPERED GLASS COVER**





## **ORDERING METHODOLOGY**

62W

**PLI-INH** 

 XX LENS TYPE

> 01 (TEMPERED GLASS LENS) 02 (PC LENS)

XX FUNCTION

> ST (STANDARD) EM (EMERGENCY)

#### **ACCESSORIES**

CEILING MOUNT BRACKET EMERGENCY KIT MOTION SENSOR PLIINH/CM PLIINH/MS PLIINH/M

30 (3000K)

### PHOTOMETRIC DIAGRAMS





THUNDERBIRD

#### STRIP LIGHTING



#### **THUNDERBIRD**

The Thunderbird is a high visibility tube light and a high powered LED array (Light Emitting Diode) in a 20mm acrylic enclosed tube with an IP20 rating. This light is suited to Industrial Applications, Visible Break Isolation Panel Lighting, Emergency Lighting, Switch Board Panels and General Electrical Enclosure Lighting. The Thunderbird is a LED array suitable for harsh conditions and sustains a long life. It has been designed to reject electrical interference that normally abounds in industrial environments and includes screw connection for electrical termination.



#### TYPICAL APPLICATIONS







Cabinet Lighting, Electrical Enclosures, Visible Break Isolators, Strip Lighting

Model:	PLITHU
Optical Characteristics	
Rated Wattage	6W
Lumens	600
System Efficacy	100Lm/W
Colour Temperature CCT	5500K
CRI (Ra)	>80
Reported L70	> 50,000 Hours
Lens Optic Type	120°
Electrical Characteristics	
Input	DC 24V
Frequency	50Hz
Powerfactor	>0.80
Total Harmonic Distortion	<20%
Environment	
IP Rating	IP20
Impact Rating	IK07
Operating Temperature	0°C To 70°C
Product Material and Mounting	
Option 1	Bracket Mount
Product Material	Polycarbonate
Lens / Optics Material	Transparent PC Lens
Dimensions and Weights	
Product Dimensions	192*215
Product Weight	100G
Packaging Dimensions	200*225
Gross Weight	100G
Warranty and Certifications	
Warranty	2 Year Warranty
Certifications	CE / RoHS

### **DIMENSIONS**

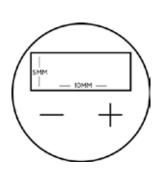




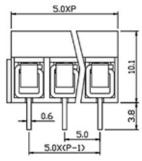


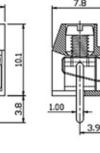
**TUBE DIMENSIONS** 

PIPE BASE



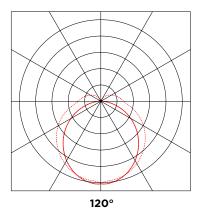
BLOCK HOLE POSITION MAP \*Suitable for 2.5mmsquared Cable





TERMINAL DIMENSIONS

## **PHOTOMETRIC DIAGRAMS**







#### **ACCESSORIES**

BRACKET MOUNT PLITHU/BM





TOOL-LESS LOWERING POLES AND ACCESSORIES



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GUARDIAN

#### **GUARDIAN**

The Guardian is a high efficacy LED High Bay Floodlight, specifically designed for Industrial Lighting applications such as Factories, Warehouses and Workshops. It features a unique optical design that virtually eliminates glare with minimal impact on performance.



## **TYPICAL APPLICATIONS**







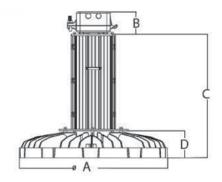
Heavy Vehicle Workshops, MIA Infrastructure, Warehouses & Stores, General Workshops, Factories, Heavy Industry, Overhead Cranes

Model:	PLIGRDN300	PLIGRDN400	PLIGRDN460		
Optical Characteristics					
Rated Wattage	300W	400W	460W		
Lumens	50400	64800	74060		
System Efficacy	168Lm/W	162Lm/W	161Lm/W		
Colour Temperature CCT	5700K	((5000K / 4000K / 3000K)			
CRI (Ra)	>	70 (>80, >90 Optional)			
Reported L70		>50,000 Hours			
Lens Optic Type		15° / 30° / 60° / 90°			
Electrical Characteristics					
Input	100-2	77VAC (347/480V Optional)			
Frequency		50Hz			
Powerfactor		<0.95			
Total Harmonic Distortion		<20%			
Environment					
IP Rating		IP65			
Impact Rating		IK08			
Operating Temperature		-40°C To 50°C			
Product Material and Mounting					
Option 1		Eyebolt			
Product Material		Aluminum			
Lens / Optics Material		PC Lens			
Dimensions and Weights					
Product Dimensions		Refer to Dimensions			
Product Weight		20.0KG			
Packaging Dimensions	756*756*340				
Gross Weight		22.2KG			
Warranty and Certifications					
Warranty		5 Year Warranty			
Certifications		SAA / CE / RoHS			



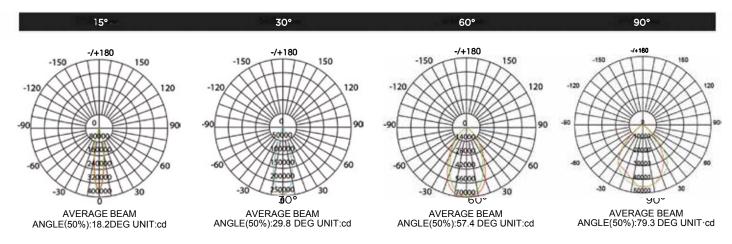
### **DIMENSIONS**





Α	В	С	D
556mm	830mm	461mm	100mm

#### PHOTOMETRIC DIAGRAMS



### **ORDERING METHODOLOGY**

**PLI-GRDN** 

XXX WATTS

> 300W 400W 460W

XX cct

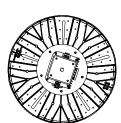
57 (5700K) 50 (5000K) 40 (4000K) 30 (3000K) BEAM ANGLE

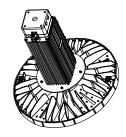
01 (15°) 02 (30°) 03 (60°) 04 (90°) X CONTROLS

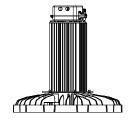
> X (NONE) M (MOTION) D (1-10V)

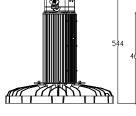
## **ACCESSORIES**

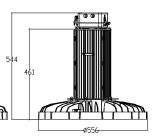
EYEBOLT MOTION SENSOR DIMMABLE 1-10V DRIVER JUNCTION BOX PLIGRDN/EB PLIGRDN/M PLIGRDN/D PLIGRDN/JB

















## HARRIER EXTREME



#### HARRIER EXTREME

The Harrier Extreme is a high efficacy LED High Bay Floodlight designed for Industrial and Indoor Lighting. It features a superior high output and a unique optical design that virtually eliminates glare with minimal impact on performance.



## **TYPICAL APPLICATIONS**







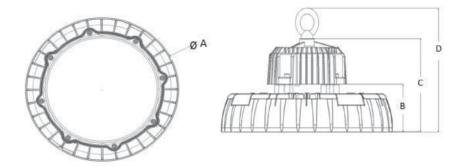
Heavy Vehicle Workshops, MIA Infrastructure, Warehouses & Stores, General Workshops, Factories, Heavy Industry, Overhead Cranes, Airports

Model:	PLIHEX60	PLIHEX100	PLIHEX150	PLIHEX200	PLIHEX240			
Optical Characteristics								
Rated Wattage	60W	100W	150W	200W	240W			
Lumens	10020	15800	24900	33200	39120			
System Efficacy	167Lm/W	158Lm/W	166Lm/W	166Lm/W	163Lm/W			
Colour Temperature CCT		5000K (5700K / 4000K / 3000K)						
Frequency		>70 (>80 Optional)						
Reported L70			> 50,000 Hours					
Lens Optic Type			60° / 90° / 120°					
Electrical Characteristics								
Input		100-277VAC (347/480V Optional)						
Frequency			50Hz					
Powerfactor			<0.96					
Total Harmonic Distortion			<20%					
Environment								
IP Rating	IP40		IP65					
Impact Rating			IK08					
Operating Temperature			-40°C To 50°C					
Product Material and Mounting								
Option 1			Eyebolt					
Option 2			U Bracket					
Product Material			Aluminum Housing					
Lens / Optics Material		Tou	ghened Glass and PC I	Lens				
Dimensions and Weights								
Product Dimensions			efer to dimensions bel	1				
Product Weight	2.9		4.6KG		2KG			
Packaging Dimensions	400*40		480*480*310		80*330			
Gross Weight	3.8	KG	6.0KG	7.2	2KG			
Warranty and Certifications								
Warranty			5 Year Warranty					
Certifications			SAA / CE / RoHS					

 $<sup>^{\</sup>ast\ast}$  High lumen output up to 170Lm/W available on request

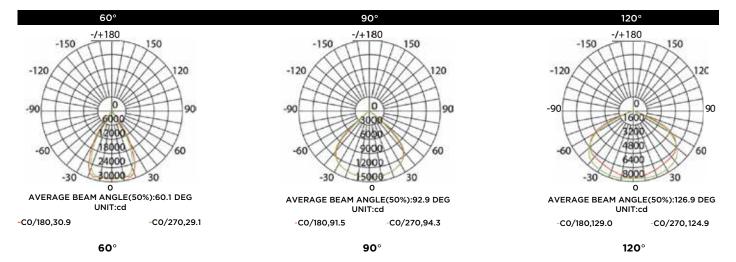


### **DIMENSIONS**



А	В	С	D			
60W and	100W Mode	ls				
248mm	710mm	138mm	182mm			
150W Model						
319mm	710mm	138mm	183mm			
200W and 240W Models						
400mm	710mm	141mm	202mm			

### **PHOTOMETRIC DIAGRAMS**







## **ORDERING METHODOLOGY**

**PLI-HEX** 

XXX WATTS XX

XX BEAM ANGLE

60W 100W 150W 200W 240W 57 (5700K) 50 (5000K) 40 (4000K) 30 (3000K) 01 (60°) 02 (90°) 03 (120°)

## **ACCESSORIES**

EYEBOLT PLIHEX/EB
U BRACKET PLIHEX/UB
PE CELL PLIHEX/P
MOTION SENSOR PLIHEX/M
POLYCARBONATE DIFFUSER PLIHEX/PC













## HARRIER PLUS

#### **HARRIER PLUS**

The Harrier Plus is a robust LED High Bay Floodlight designed for industrial environments. It features marine grade aluminum housing and a polyester powder-coat finish which provides chemical resistance in corrosive environments. It features over-current, over-voltage and temperature protection to protect the driver and LEDs in case the supply voltage fluctuates and where the voltage transients can damage sensitive electronics.



### **TYPICAL APPLICATIONS**





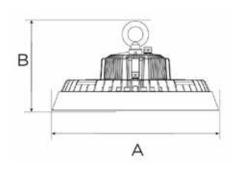


Heavy Vehicle Workshops, MIA Infrastructure, Warehouses & Stores, General Workshops, Factories, Heavy Industry, Overhead Cranes, Airports

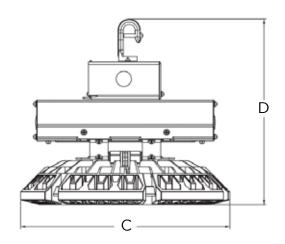
Model:	PLIHPL100	PLIHPL150	PLIHPL200	PLIHPL240			
Optical Characteristics							
Rated Wattage	100W	150W	200W	240W			
Lumens	16000	24000	32000	38400			
System Efficacy		1601	_m/W				
Colour Temperature CCT		5000K (600	OOK / 4000K)				
CRI (Ra)		>70 (>80, >90 Optional)					
Reported L70		>50,00	00 Hours				
Lens Optic Type		60° / 90° / 110°					
Electrical Characteristics							
Input	100-240VAC						
Frequency		50	OHz				
Powerfactor		>(	0.95				
Total Harmonic Distortion		<	15%				
Environment							
P Rating		IF	P65				
mpact Rating		Ik	(08				
Operating Temperature		-30°C	To 50°C				
Product Material and Mounting							
Option 1			ebolt				
Option 2		Ceiling Mou	ınt U Bracket				
Product Material			ninum				
Lens / Optics Material		PC	Lens				
Dimensions and Weights							
Product Dimensions		30*180	360*36				
Product Weight	3.08		4.78				
Packaging Dimensions	380*38		460*46				
Gross Weight	4.58	BKG	6.5	KG			
Warranty and Certifications							
Warranty			Warranty				
Certifications		CE /	RoHS				



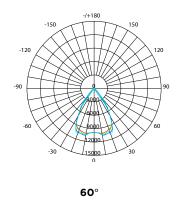
### **DIMENSIONS**

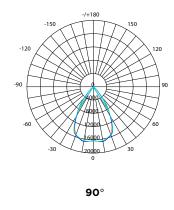


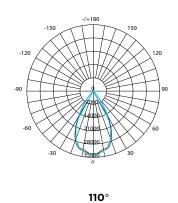
Model	А	В
100W and 150W	280mm	180mm
200W and 240W	360mm	190mm



### **PHOTOMETRIC DIAGRAMS**







## **ORDERING METHODOLOGY**

**PLI-HPL** 

XXX WATTS

100W 150W 200W 240W XX

60 (6000K) 50 (5000K) 40 (4000K) XX BEAM ANGLE

> 01 (60°) 02 (90°) 03 (110°)

X CONTROLS

> X (NONE) M (MOTION SENSOR) D (DALI)

## **ACCESSORIES**

EYEBOLT CEILING MOUNT U BRACKET MOTION SENSOR DALI PLIHPL/EB PLIHPL/UB PLIHPL/M PLIHPL/D









# ROVER



#### **ROVER**

The Rover is a low-profile and durable state of the art fixture. It is designed to quickly and easily upgrade existing H.I.D and fluorescent fixtures. The LED high bay combines high light output LED technology with remarkable energy savings for a quick return on investment. Offered in narrow and wide beam distributions, the Rover can include a dimming feature and be equipped with a motion sensor. The Dali control provides you with the convenience of smart lighting and maximizes your energy consumption savings.



#### TYPICAL APPLICATIONS





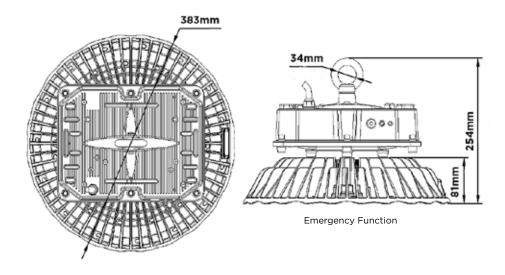


Heavy Vehicle Workshops, MIA Infrastructure, Warehouses & Stores, General Workshops, Factories, Heavy Industry, Overhead Cranes, Airports

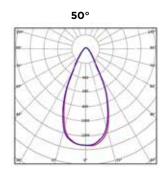
Model:	PLIROV100	PLIROV120	PLIROV150	PLIROV200	PLIROV240	PLIROV300			
Optical Characteristics									
Rated Wattage	100W	120W	150W	200W	240W	300W			
Lumens	14000	16800	21000	28000	33600	42000			
System Efficacy			140L	m/W					
Colour Temperature CCT		50000K (4000K / 3000K)							
CRI (Ra)			>70 (>80	Optional)					
Reported L70			>50,00	0 Hours					
Lens Optic Type			50° / 90	0° / 120°					
Electrical Characteristics									
Input			100-2	40VAC					
Frequency			50 /	60Hz					
Powerfactor			>(	0.9					
Total Harmonic Distortion			<2	10%					
Environment									
IP Rating			IP	65					
Impact Rating			Ik	(10					
Operating Temperature			-30°C	To 50°C					
Product Material and									
Mounting Option 1			Eve	ebolt					
Option 2				acket (45° or 180°)					
Product Material				n Housing					
Lens/Optics Material			Tempered Glass (	PC Lens Optional)					
Dimensions and Weights									
Product Dimensions			Refer to dime	ensions below					
Product Weight		7.0KG		7.3	KG	7.6KG			
Packaging Dimensions			440*2	55*449					
Gross Weight		7.9KG		8.7	'KG	9.6KG			
Options									
Warranty			5 Year \	Warranty					
Certifications			SAA /C	E/RoHS					

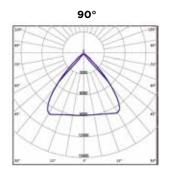


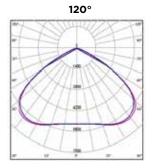
## **DIMENSIONS**



## **PHOTOMETRIC DIAGRAMS**







## **ACCESSORIES**







45° Ceiling Mount Bracket



180 Deg Bracket



Safety Chain



### **ORDERING METHODOLOGY**

PLI-ROV XXX WATTS CCT

100W 120W 150W 200W 240W 300W

XX BEAM ANGLE 50 (5000K) 40 (4000K) 01 (50°) 40 (4000K) 02 (90°)

03 (120°)

30 (3000K)

TG (TEMPERED GLASS)
PC (POLYCARBONATE LENS)

XX

XX

ST (STANDARD) EM (EMERGENCY) XXX CONTROLS

X (NONE)
M (MOTION SENSOR)
D (DIMMABLE 1-10V)
P (PE CELL)
DA (DALI)
ZIG (ZIGBEE)

#### **ACCESSORIES**

**EYEBOLT** PLIROV/EB 45° CEILING MOUNT BRACKET 180° CEILING MOUNT BRACKET PLIROV/CM1 PLIROV/CM2 PLIROV/M MOTION SENSOR DIMMABLE 1-10V DRIVER PLIROV/D PE CELL PLIROV/P DALI CONTROL PLIROV/DA ZIGBEE CONTROL PLIROV/ZIG ALUMINIUM REFLECTOR PLIROV/ALU SAFETY CHAIN PLIROV/SC



Optional Emergency Function





RAPTOR

## **LINEAR LIGHTS**

### **RAPTOR**

The Raptor is a linear LED High Bay Floodlight that features a narrow lighting pattern and asymmetric optic lens that can adapt to environments that require high shelving such as Factories, Warehouses and Workshops. The rectangular light pattern can reduce light loss and works perfectly as an aisle lighting solution. Intelligent Lighting add ons are also available such as a PIR sensor, motion sensor and daylight harvesting sensors.



### TYPICAL APPLICATIONS







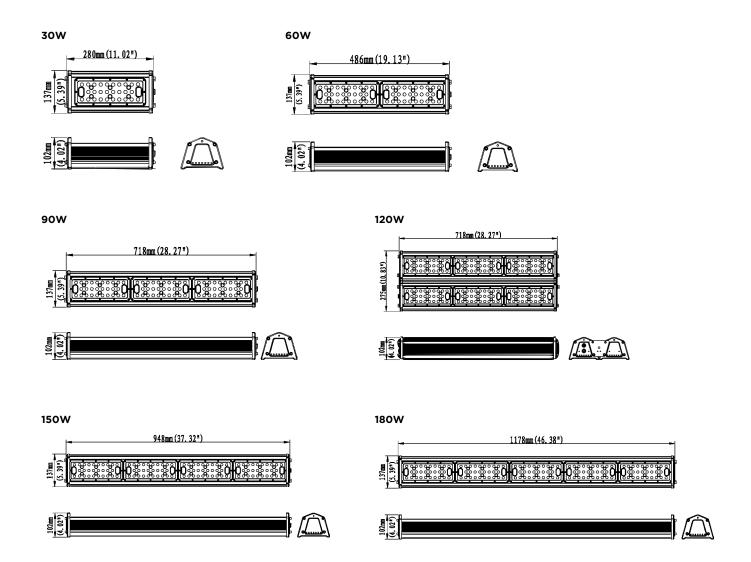
Heavy Vehicle Workshops, MIA Infrastructure, Warehouses & Stores, General Workshops, Factories, Heavy Industry, Overhead Cranes, Airports

Model:	PLIRAP30	PLIRAP60	PLIRAP90	PLIRAP120	PLIRAP150	PLIRAP180
Optical Characteristics						
Rated Wattage	30W	60W	90W	120W	150W	180W
Lumens	3900	7800	12150	16200	20250	24300
System Efficacy	130Lm/W 135Lm/W					
Colour Temperature CCT	5000K (4000K / 3000K)					
CRI (Ra)	>70					
Reported L70	>50,000 Hours					
Lens Optic Type	90° / 120° / 30° x 70° / 60° x 90° / 40° x 130°					
Electrical Characteristics						
Input	100-277VAC					
Frequency	50Hz					
Powerfactor	>0.90					
Total Harmonic Distortion	<10%					
Environment						
IP Rating	IP65					
Impact Rating	IK10					
Operating Temperature	-30°C To 50°C					
Product Material and Mounting						
Option 1	Adjustable Surface Mount					
Option 2	Wire Suspension Mount					
Product Material	Aluminum Alloy					
Lens / Optics Material	PC Lens					
Dimensions and Weights						
Product Dimensions	280*137*102	486*137*102	718*137*102	718*275*102	948*137*102	1178*137*102
Product Weight	2KG	3.4KG	4.7KG	5.8KG	6.9KG	8.7KG
Packaging Dimensions	350*200*160	555*200*160	790*200*160	790*338*160	1020*200*160	1250*200*160
Gross Weight	2.3KG	4.0KG	5.3KG	6.5KG	8.0KG	9.8KG
Warranty and Certifications						
Warranty	5 Year Warranty					
Certifications	CE / SAA / ROHS / ENEC / CB					

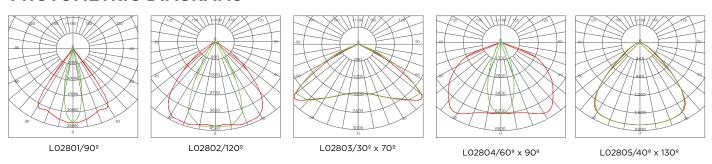
## **LINEAR LIGHTS**



## **DIMENSIONS**



## **PHOTOMETRIC DIAGRAMS**



## **LINEAR LIGHTS**



## **ORDERING METHODOLOGY**

**PLI-RAP** 

XX WATTS

30W

60W 90W 120W 150W 180W

XX cct 50 (5000K) 40 (4000K) 30 (3000K) XX LENS TYPE

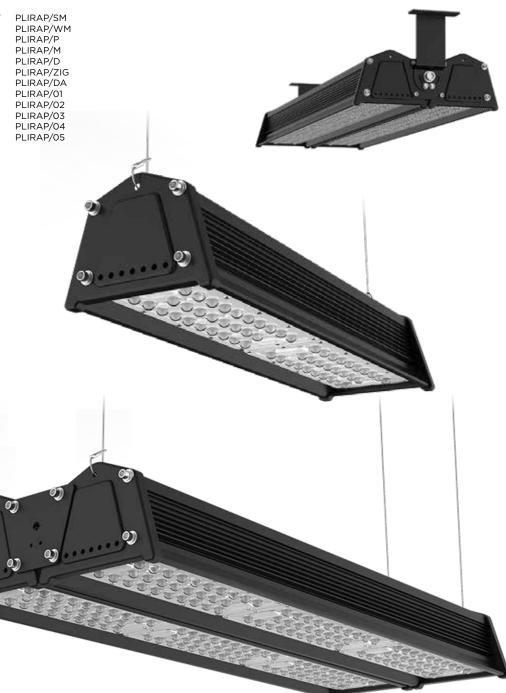
01 (L02801/90°) 02 (L02802/120°) 03 (L02803/30° x 70°) 04 (L02804/60° x 90°) 05 (L02805/40° x 130°)

XX FUNCTION

ST (STANDARD) EM (EMERGENCY)

#### **ACCESSORIES**

SURFACE MOUNT BRACKET WIRE SUSPENSION MOUNT PE CELL MOTION SENSOR DIMMABLE 1-10V DRIVER ZIGBEE SMART CONTROL DALI 90° LENS 120° LENS 30° x 70° LENS 60° x 90° LENS 40° x 130° LENS





## RUNNING MAN I



#### **RUNNING MAN I**

The Running Man I is an energy efficient, long life LED emergency exit light. It features both single and double sided decals with both the Running Man and Exit decals included. The Running Man I is complete with a large terminal block + entry cable and maintained emergency operation mode.



## **TYPICAL APPLICATIONS**







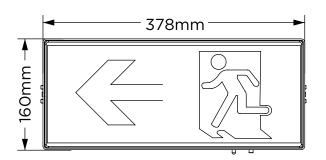
Switch Rooms, Control Rooms, Electrical Equipment Rooms, Tunnels, Industrial Warehouse, Office Complex, Workshops

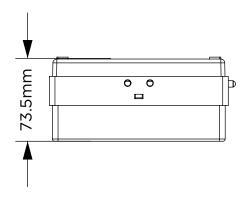
Model	PLIRM1		
Optical Characteristics			
Rated Wattage	3W		
Lumens	300		
System Efficacy	100Lm/W		
Colour Temperature CCT	5700K		
CRI (Ra)	>70		
Reported L70	>50,000 Hours		
Lens Optic Type	Polycarbonate Diffuser		
Viewing Distance	24M		
Electrical Characteristics			
Input	240V		
Frequency	50Hz		
Powerfactor	>0.9		
Operating Mode			
Operating System	Manual Test Switch		
Charging Method	Constant Current (16hrs), Pulse Charge (Standby)		
Total Harmonic Distortion	N/A		
Environment			
IP Rating	IP20		
Impact Rating	IK08		
Operating Temperature	0°C To 40°C		
Product Material and Mounting			
Option 1	Wall Mount		
Product Material	Polycarbonate Body		
Lens / Optics Material	otics Material PC Lens		
Dimensions and Weights			
Product Dimensions	378*160*73.5		
Product Weight	1.48KG		
Packaging Dimensions (Ctn 10)	430.5*410.5*360.5		
Weight (Ctn 10)	14.8KG		
Certifications and Warranty			
Warranty	2 Year Warranty		
Certifications	SAA		
AS/NZ 2293 Classification	C0=E2.5 C90=D2.0		

## **EXIT LIGHTING**



## **DIMENSIONS**







## STANDARD DECAL SET







\* Standard decal set included

## **ORDERING METHODOLOGY**

## **ACCESSORIES**



WALL MOUNT BRACKET

PLIRM1/WM



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# RUNNING MAN II



#### **RUNNING MAN II**

The Running Man II is a corrosion resistant emergency luminaire for use in hazardous areas that may be subject to flammable liquids, gases, vapors or combustible dusts. It features a corrosion resistant GRP body and polycarbonate diffuser with a central locking device that disconnects the supply when the luminaire is opened. Applications include Chemical and Petrochemical Processing, Storage Facilities, Industrial and Commercial.



#### **TYPICAL APPLICATIONS**





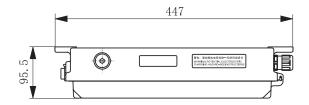


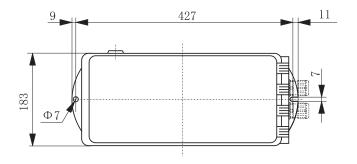
Switch Rooms, Control Rooms, Electrical Equipment Rooms, Tunnels, Industrial Warehouse, Office Complex, Workshops

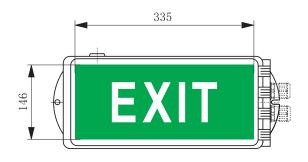
Model	PLIRM2						
Optical Characteristics							
Rated Wattage	3W						
Lumens	160						
System Efficacy	53Lm/W						
Colour Temperature CCT	5700K						
CRI (Ra)	>70						
Reported L70	50,000 Hours						
Lens Optic Type	Polycarbonate						
Viewing Distance	30M						
Electrical Characteristics							
Input	110-240V						
Frequency	50/60Hz						
Powerfactor	>0.95						
Total Harmonic Distortion	20%						
Environment							
IP Rating	IP66						
Impact Rating	IK10						
Operating Temperature	-20°C To 55°C						
Product Material and Mounti	ing						
Option 1	Surface Mount						
Product Material	Polycarbonate						
Lens / Optics Material	PC Lens						
Dimensions and Weights							
Product Dimensions	447*183*96						
Product Weight	3.5KG						
Packaging Dimensions	460*220*180						
Gross Weight	3.2KG						
Warranty and Certifications							
Warranty	5 Year Warranty						
Certifications	IECEx						
Classification	Zone 1 & Zone 21 / Zone 2 & 22						
Rating	IECEx/Gas: Ex eb ib op is II q C T4 Gb (without fuse and isolation switch) / Ex db eb ib mb op is q II C T4 Gb (with fuse and isolation switch)  IECEx/Dust: Ex tb III C T80 Db (without fuse and isolation switch) / Ex tb III C T80 Db (with fuse and isolation switch).						



#### **DIMENSIONS**







#### **DECAL OPTIONS**



DECAL - 01







DECAL - 03





DECAL - 05



#### **ORDERING METHODOLOGY**

PLI-RM2

X WATTS

3W

XX FUNCTION

ST (STANDARD)

M (MAINTAINED EMERGENCY)
NM (NON-MAINTAINED EMERGENCY)

XX SURGE PROTECTION

X (NONE) FS (FUSE & SWITCH)

#### **ACCESSORIES**

SURFACE MOUNT BRACKET PLIRM2/SM EXIT DECAL PLIRM2/01 UP ARROW DECAL PLIRM2/02 DOWN ARROW DECAL PLIRM2/03 RIGHT ARROW DECAL PLIRM2/05





## RUNNING MAN III



#### **RUNNING MAN III**

The Running Man III is a LED weatherproof and energy efficient emergency exit light. It features both single and double sided decals with both the Running Man and Exit decals included.



#### **TYPICAL APPLICATIONS**





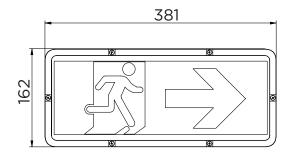


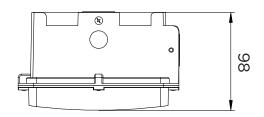
Switch Rooms, Control Rooms, Electrical Equipment Rooms, Tunnels, Industrial Warehouse, Office Complex, Workshops

Model	PLIRM3			
Optical Characteristics				
Rated Wattage	3W			
Lumens	300			
System Efficacy	100Lm/W			
Colour Temperature CCT	5700K			
CRI (Ra)	>70			
Reported L70	>50,000 Hours			
Lens Optic Type	Polycarbonate Diffuser			
Viewing Distance	24M			
Electrical Characteristics				
Input	240V			
Frequency	50Hz			
Powerfactor	>0.9			
Operating Mode				
Operating System	Manual Test Switch			
Charging Method	Constant Current (16hrs), Pulse Charge (Standby)			
Total Harmonic Distortion	N/A			
Environment				
IP Rating	IP65			
Impact Rating	IK08			
Operating Temperature	1°C To 40°C			
Product Material and Mounting				
Option 1	Wall Mount			
Product Material	Polycarbonate Body			
Lens / Optics Material	PC Lens			
Dimensions and Weights				
Product Dimensions	381*162*86			
Product Weight	4.1KG			
Packaging Dimensions (Ctn 10)	560*410*360			
Weight (Ctn 10)	41.0KG			
Certifications and Warranty				
Warranty	2 Year Warranty			
Certifications	SAA			
AS/NZ 2293 Classification	C0=E2.5 C90=D2.0			



#### **DIMENSIONS**







#### STANDARD DECAL SET







## **ORDERING METHODOLOGY**

## ACCESSORIES

PLI-RM3 X WATTS

WALL MOUNT BRACKET

PLIRM3/WM

<sup>\*</sup> Standard decal set included



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MANUFACTURED BY PHOENIX EMS



APOLLO



#### **APOLLO**

The Apollo is an all in one solar luminaire, featuring built in MPPT technology that tracks the maximum sun for a quick charge. The Apollo allows for 8-10 hours of full brightness after a full charge, or 36 hours in dimming mode. It also features a wide range of control system functions: switch on, dimming, colour temperature, timing, light control, motion sensor, working status display, energy saving analysis, fault report, GIS positioning and group function via it's in built iSense Smart Control System.



#### TYPICAL APPLICATIONS







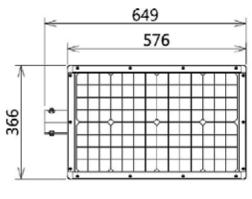
Urban and Rural Roads, Highways, Water Dikes, Bridges, Parks, Industrial Areas, City Squares, Residential Areas

Model	PLIAPO10	PLIAPO20	PLIAPO30	PLIAPO40	PLIAPO50	PLIAPO60
Optical Characteristics						
Rated Wattage	10W	20W	30W	40W	50W	60W
Lumens	1700	3200	4440	5600	6750	7800
System Efficacy	170Lm/w	160Lm/w	148Lm/w	140Lm/w	135Lm/w	130Lm/w
Colour Temperature CCT			5000K / 400	OOK / 3000K		
CRI (Ra)			>7	70		
Reported L70			>50,00	0 Hours		
Lens Optic Type			70° ×	( 150°		
Solar Characteristics						
Solar Panel		30W			75W	
Photovoltaic Panel			Monocrystalline Silico	on Photovoltaic Panel		
Li-on Battery		12V/13AH			12V/40AH	
Charging Time			5-7 H	Hours		
Run Time (Full Power)		10 H	lours		7.5 Hours	6 Hours
Environment						
IP Rating			IP	65		
Impact Rating			IK	08		
Operating Temperature			-30°C	Го 50°C		
Product Material and Mounting						
Option 1			Adjustable Post Top N	Mount (60MM Spigot)		
Option 2			Adjustable Side Entry	Mount (60MM Spigot)		
Product Material			Aluminiur	m Housing		
Lens Cover / Optics Material			PC I	Lens		
Dimensions and Weights						
Product Dimensions		649*366*128			931*535*137	
Product Weight	7.6KG 16.4KG					
Packaging Dimensions	644*434*188 980*600*180					
Gross Weight	8.4KG 18.0KG					
Warranty & Certifications				·		
Warranty			3 Year V	Varranty		
Certification	SAA / CE					

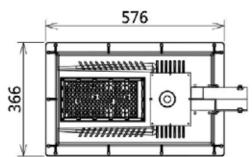
## PHOENIX ENGINEERING & MANUFACTURING SOLUTIONS

#### **DIMENSIONS**



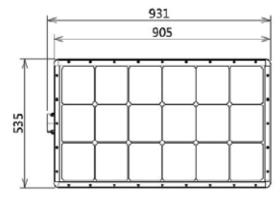


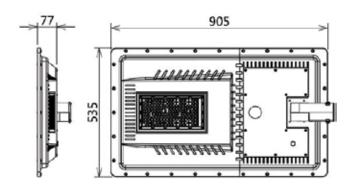






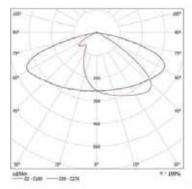
#### 30/40/50/60W







#### **PHOTOMETRIC DIAGRAMS**



70° x 150°



#### **ORDERING METHODOLOGY**

PLI-APO	XX WATTS	XX cct
	10W 20W 30W 40W 50W 60W	50 (5000K) 40 (4000K) 30 (3000K)

#### **ACCESSORIES**

60MM SPIGOT PLIAPO/SP

#### **SMART TECHNOLOGY**

Built in MPPT Technology to track maximum sunlight for quick charging and an EMS Management System to monitor, control and carry out optimal energy usage even after 10 days of rainy weather. The Apollo also has multiple built in control system functions via the iSense Smart Control System which is controlled remotely from a mobile device or computer: switch on, dimming, colour temperature, timing, light control, motion sensor, working status display, energy saving analysis, fault report, GIS positioning and group function.







GALACTIC PLUS



#### **GALACTIC PLUS**

The Galactic Plus is a die-cast aluminum all in one solar light. It features an anti-UV polycarbonate lens with precision individual optics for uniform illumination and is designed for industrial applications that may have limited access to electrical supply. The PIR/microwave motion sensor and smart lighting controller are built in for remote monitoring, fault tracking and precise positioning, and an automatic fault alarm via a smart cloud platform to access on your mobile device or computer.



#### **TYPICAL APPLICATIONS**





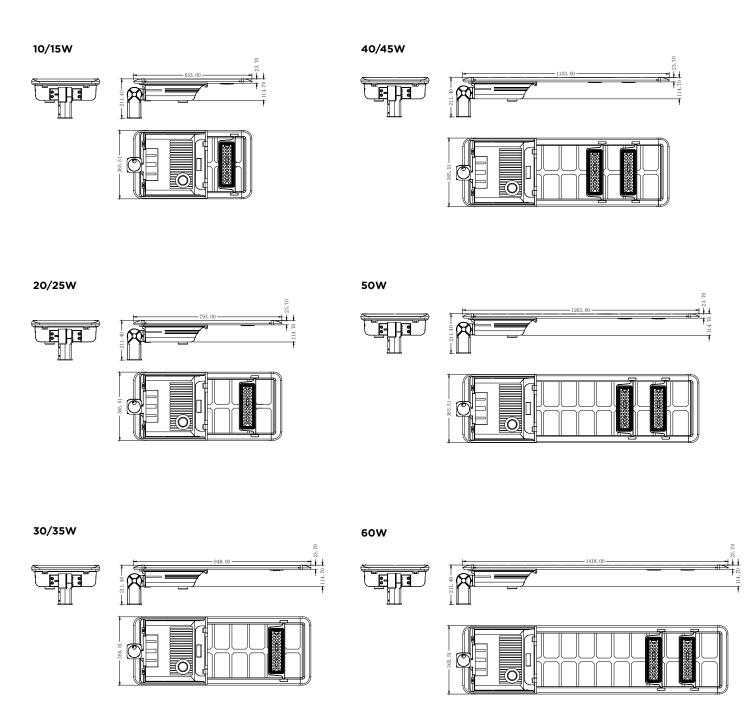


Urban and Rural Roads, Highways, Water Dikes, Bridges, Parks, Industrial Areas, City Squares, Residential Areas

Model	PLIGALP10	PLIGALP15	PLIGALP20	PLIGALP25	PLIGALP30	PLIGALP35	PLIGALP40	PLIGALP45	PLIGALP50	PLIGALP60
Optical Characteristics										
Rated Wattage	10W	15W	20W	25W	30W	35W	40W	45W	50W	60W
Lumens	2100	3030	4000	4950	6060	7070	8120	9000	9900	120000
System Efficacy	210Lm/W	202Lm/W	200Lm/W	198Lm/W	202Lm/W	202Lm/W	203Lm/W	200Lm/W	198Lm/W	200Lm/W
Colour Temperature CCT				6500	K / 5700K / 50	000K / 4000K	/ 3000K			
CRI (Ra)					>70 (>8	0 Optional)			-	
Reported L70					>50,0	00 Hours				
Lens Optic Type					120º / Type II /	Type III / Type	e IV			
Electrical Characteristics	·									
Input					12	-24V				
Powerfactor					<	0.95				
Solar Characteristics	·									
Solar Panel	30W/18V	30W/18V	40W/18V	40W/18V	50W/18V	50W/18V	60W/18V	60W/18V	70W/18V	80W/18V
Photovoltaic Panel				[	Double Crystal	Photovoltaic P	anel			
Li-on Battery	12.8V/150W	12.8V/150W	12.8V/230W	12.8V/230W	12.8V/307W	12.8V/307W	12.8V/384W	12.8V/384W	12.8V/461W	12.8V/461W
Charging Time	5.12 Hours	5.12 Hours	5.76 Hours	5.76 Hours	6.14 Hours	6.14 Hours	6.40 Hours	6.40 Hours	6.58 Hours	6.72 Hours
Run Time (Full Power)					15	Hours				
Maximum Autonomy					7 Rai	ny Days				
Environment										
IP Rating					I	P65				
Impact Rating						K08				
Operating Temperature					-40°C	To 50°C				
Product Material and Moun	ting									
Option 1					Univers	al Bracket				
Option 2						Mount				
Option 3					Round F	Pole Mount				
Option 4					Square	Pole Mount				
Product Material				Powder-Coate	d Die Cast Alur	minium (Anti C	Corrosion Coati	ng)		
Lens / Optics Material		PC Lens								
Dimensions and Weights										
Product Dimensions	633*3	65*211	793*3	65*211	948*3	65*211	1103*	365*211	1263*365*211	1418*365*211
Product Weight	12.0	OKG	13.5	5KG	15.0	KG	16.	5KG	18.1KG	19.7KG
Packaging Dimensions	825*19	00*435	985*19	00*435	1140*19	00*435	1295*1	90*435	1455*190*435	1610*190*435
Gross Weight	14.4	4KG	16.2	2KG	18.0	)KG	19.	9KG	21.8KG	23.6KG
Warranty & Certifications										
Warranty		3 Year Warranty								
Certifications		CE / RoHS / FCC								



#### **DIMENSIONS**



## **PHOTOMETRIC DIAGRAMS**

Photometrics & IES files available on request.

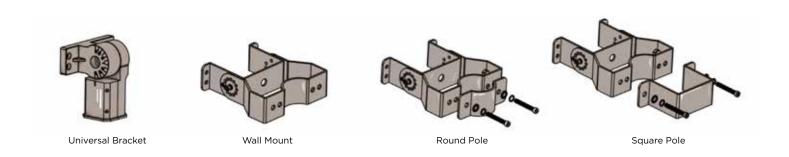


#### **ORDERING METHODOLOGY**

PLI-GALP	XX WATTS	XX cct	XX LENS TYPE	X
	10W 15W 20W 25W 30W 35W 40W 45W 50W 60W	65 (6500K) 50 (5000K) 40 (4000K) 30 (3000K) 57 (5700K)	01 (120°) 02 (TYPE II) 03 (TYPE III) 04 (TYPE IV)	X (NONE) M (MOTION SENSOR) D (DIMMABLE)

#### **ACCESSORIES**

UNIVERSAL MOUNTING BRACKET
WALL MOUNT BRACKET
ROUND POLE BRACKET
SQUARE POLE BRACKET
DIMMABLE 1-10V DRIVER
MOTION SENSOR
CCTV CAMERA
BIRD SCARER
PLIGALP/DY
PLIGALP/M
PLIGALP/CCTV
PLIGALP/CSTV

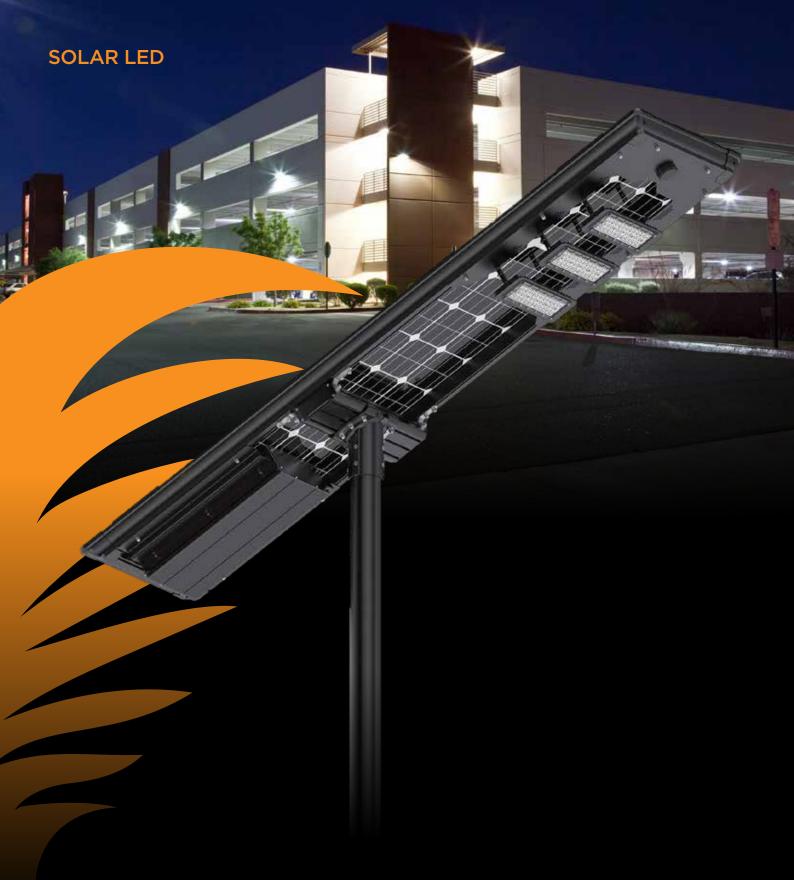




#### **SMART TECHNOLOGY**

The Galactic Plus features a built in Smart Lighting Control System that can be controlled remotely via Bluetooth on your smart device and uploaded to a cloud platform. The Smart Controller can be used for Data + Project + IOT management.





GALACTIC MAX

#### **GALACTIC MAX**

The Galactic Max is the sister product to the Galactic Plus and is an impressive high wattage solar light, available for a wide range of applications. It features a low profile and bifacial solar panel design suitable for remote regions or a no-electric supply zone. The bilateral solar panels increase the overall conversion efficiency by 30%. The Galactic Max comes with a rotatable LED module, worry-free installation, and is virtually maintenance-free. Available with MPPT Intelligent Control, motion sensor, photocell and dimming options.



#### TYPICAL APPLICATIONS





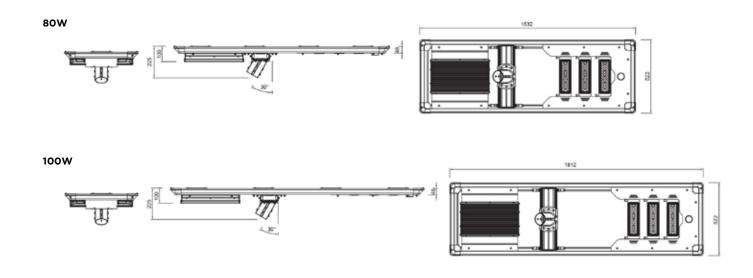


Urban and Rural Roads, Highways, Water Dikes, Bridges, Parks, Industrial Areas, City Squares, Residential Areas

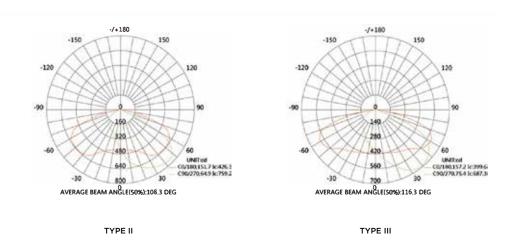
Model	PLIGALM80	PLIGALM100			
Optical Characteristics	FLIGALITIOU	FLIGALINIOU			
Rated Wattage	80W	100W			
Lumens	14400	18000			
System Efficacy	11.100	180Lm/W			
Colour Temperature CCT	6500K / 5700K	X / 5000K / 4000K / 3000K			
CRI (Ra)	>70	O (>80 Optional)			
Reported L70	10	00,000 Hours			
Lens Optic Type	Ту	ype II / Type III			
Electrical Characteristics					
Input		12-24VDC			
Solar Characteristics					
Solar Panel	36V/130W	36V/160W			
Photovoltaic Panel	Double Cry	ystal Photovoltaic Panel			
Li-on Battery	25.6V30AH/768WH	25.6V36AH/922WH			
Charging Time		6 Hours			
Run Time (Full Power)	10 Hours (36	Hours in Dimming Mode)			
Maximum Autonomy		3 Rainy Days			
Environment					
IP Rating		IP65			
Impact Rating		IK08			
Operating Temperature	-	-10°C To 50°C			
Product Material and Mounting					
Option 1	Post Top M	ount (Spigot & Bracket)			
Product Material	Powder-Coated Die-Cast	t Aluminium (Anti Corrosion Coating)			
Lens / Optics Material	Polycarbonate Lens				
Dimensions and Weights					
Product Dimensions	1532*522*109	1812*522*109			
Warranty & Certifications					
Warranty	3 Year Warranty				
Certifications	SAA / CE / RoHS / FCC				



#### **DIMENSIONS**

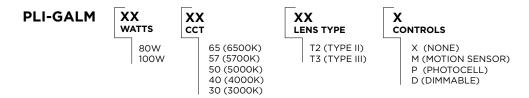


#### **PHOTOMETRIC DIAGRAMS**





#### **ORDERING METHODOLOGY**



#### **ACCESSORIES**

POST TOP SPIGOT PLIGALM/SP
MOTION SENSOR PLIGALM/M
PHOTOCELL PLIGALM/P
DIMMABLE PLIGALM/D
4KV SPD PLIGALM/4KV
INTELLIGENT CONTROL PLIGALM/IC





SOLARNATOR

#### **SOLARNATOR**

The Solarnator is the newest solar fitting by Phoenix EMS. It is  $360^{\circ}$  horizontally adjustable and  $\pm 60^{\circ}$  elevation angle adjustable. The Solarnator's 12 hour working mode is designed to last for 7 rainy days and an adopted mono-crystalline solar panel with a quick charge LiFePO4 battery. The spigot is fitted with a pluggable waterproof connector in all terminals which makes installation quick and easy.



## **TYPICAL APPLICATIONS**







Urban and Rural Roads, Highways, Water Dikes, Bridges, Parks, Industrial Areas, City Squares, Residential Areas

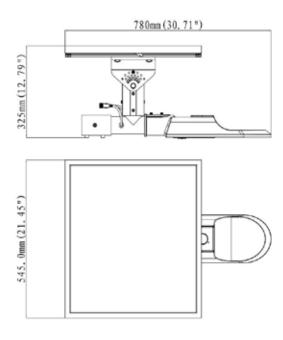
Model	PLISOL20	PLISOL30			
Optical Characteristics					
Rated Wattage	20W	30W			
Lumens	3000	4500			
System Efficacy	150L	.m/W			
Colour Temperature CCT	5000K / 40	00K / 3000K			
CRI (Ra)	>70 (>80	Optional)			
Reported L70	>50,000 Hours	s (Ta=30º@L70)			
Lens Optic Type	Тур	oe II			
Solar Characteristics					
Solar Panel	50W	90W			
Photovoltaic Panel	Monocrystalline F	Photovoltaic Panel			
LiFePO4 Battery	25AH/160WH	36AH/230WH			
Charging Time	6-7 I	Hours			
Run Time (Full Power)	12 H	lours			
Maximum Autonomy	7 Rain	ny Days			
Environment					
IP Rating	IP	966			
Impact Rating	IK	08			
Operating Temperature	- 20°C	To 50°C			
Product Material and Mounting					
Option 1	Side Entry (60MM	1 Spigot + Bracket)			
Option 2	Post Top (60MM	Spigot + Bracket)			
Product Material	Alumini	um Alloy			
Lens / Optics Material	Polycarbo	onate Lens			
Dimensions and Weights					
Product Dimensions	Refer to dimensions below				
Product Weight	16.0KG 20.6KG				
Gross Weight	19.8KG	24.9KG			
Warranty & Certifications					
Warranty	5 Year \	Warranty			
Certifications		CE			



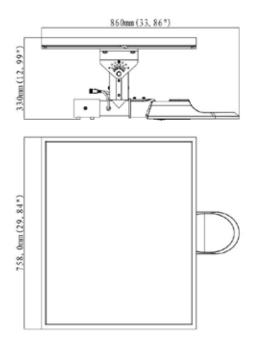


## **SIDE ENTRY**

#### 20W

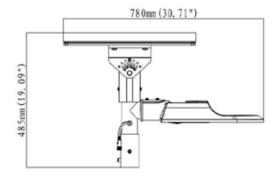


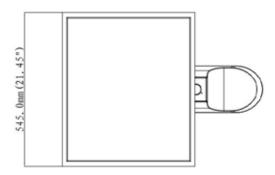
#### 30W



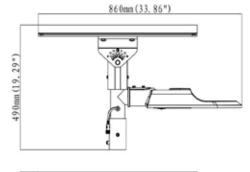
## POST TOP

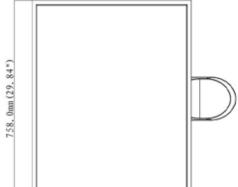
#### 20W





#### **30W**







#### **ORDERING METHODOLOGY**

**PLI-SOL** 

XXWATTS

20W

30W

XXССТ 50 (5000K) 40 (4000K)

30 (3000K)

MOUNTING

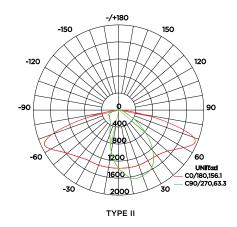
S (SIDE ENTRY) P (POST TOP)

#### **ACCESSORIES**

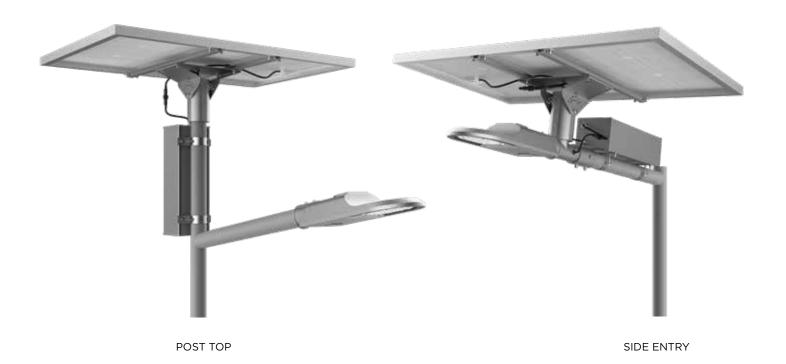
60MM SPIGOT + BRACKET PLISOL/SP LiFePO4 BATTERY **SOLAR PANEL** 

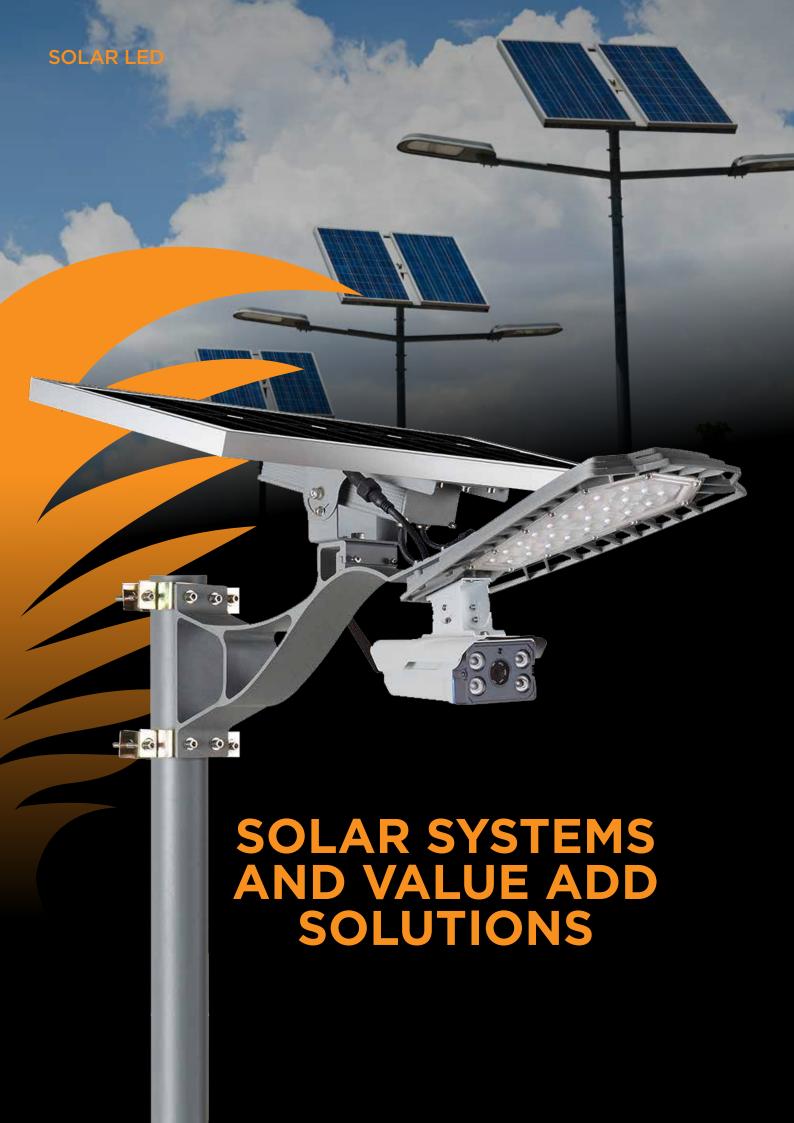
PLISOL/B PLISOL/P

#### **PHOTOMETRIC DIAGRAMS**



#### **MOUNTING OPTIONS**







#### PHOENIX EMS SOLAR & VALUE-ADD SOLUTIONS

Our impressive range of Solar Lighting has a variety of value-add solutions available to help meet your requirements and create a customised product. Available for both indoor and outdoor applications.

- Patent Double MPPT Controller complete with a super charging function that dims automatically and functions even on rainy days to achieve 'all weather lighting'
- 4G Wifi Network Camera which features 3 mega-pixel lens and night vision distance of 60 meters
- HD 4G Wifi Network Camera which features full night vision and a high quality lens
- 4G Wifi Network mobile app allows you to have full control of camera and adjust according to your preferences



















#### WALL PACK LIGHTS



#### **SCOUT**

The Scout is a low profile and light weight LED Wall Pack luminaire which is designed for long life usage with minimal maintenance and great performance. It features a gray cast aluminum coating and has a high lumen output which makes it perfect for Security, Pathway and Perimeter lighting applications by brightening doorways and pedestrian walkways.



#### **TYPICAL APPLICATIONS**







Security, Pathway and Perimeter Lighting, Building Facades.

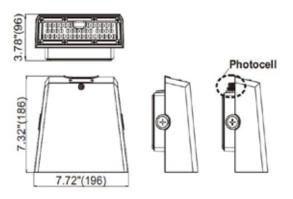
Model:	PLISCT10	PLISCT20	PLISCT30	PLISCT40	PLISCT70		
Optical Characteristics							
Rated Wattage	10W	20W	30W	40W	70W		
Lumens	1250	2500	3750	5000	8750		
System Efficacy			125Lm/W				
Colour Temperature CCT			5000K (4000K)				
CRI (Ra)			>70				
Reported L70			>50,000 Hours				
Lens Optic Type		30° x 150°		45° :	x 150°		
Electrical Characteristics							
Input			100-240VAC				
Frequency			50Hz				
Powerfactor			<0.90				
Total Harmonic Distortion			10%				
Environment							
IP Rating			IP66				
Impact Rating			IK08				
Operating Temperature			-30°C To 45°C				
Product Material and Mounting							
Option 1			Surface Mount				
Product Material			Aluminum				
Lens / Optics Material			PC Lens				
Dimensions and Weights							
Product Dimensions		196*96*186		282*12	25*205		
Product Weight		3.3KG 6.5KG					
Packaging Dimensions		505*395*230 (Ctn 6) 330*155*235 (Ctn 1)					
Gross Weight		19.8KG 7.0KG					
Warranty and Certifications							
Warranty		5 Year Warranty					
Certifications			CE / ROHS				

## **WALL PACK LIGHTS**

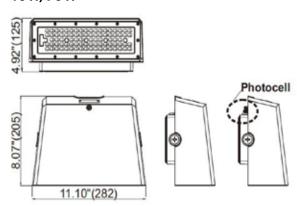


#### **DIMENSIONS**

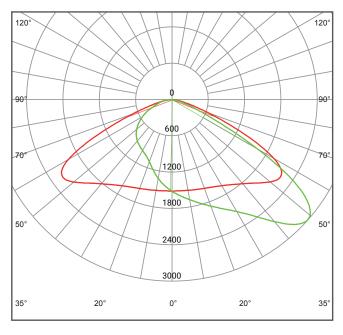
#### 10W/20W/30W



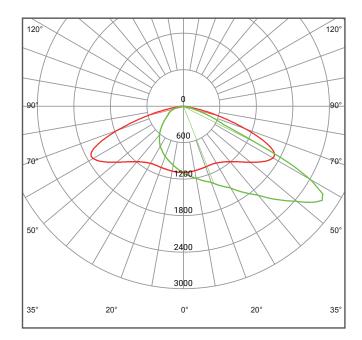
#### 40W/70W



#### **PHOTOMETRIC DIAGRAMS**



10W/20W/30W 30° x 150°



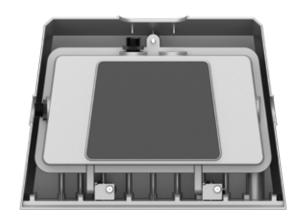
40W/70W 45° x 150°

## WALL PACK LIGHTS



#### **ORDERING METHODOLOGY**

**PLI-SCT** 



#### **ACCESSORIES**

SURFACE MOUNT BRACKET

PLISCT/SM





## PETREL



#### **PETREL**

The Condor is an LED floodlight best suited to industrial environments. It features a powder-coated marine grade aluminium die cast body and PC lens. It is particularly suited to harsh environmental conditions where high temperatures and harsh chemical are present.



#### **TYPICAL APPLICATIONS**





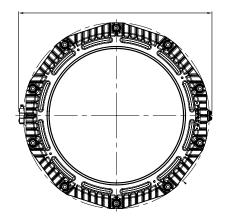


Petroleum Industry, Crude Oil, Metallurgical, Power Generation & Transmission, Railway, Tunnels, Chemical, Offshore Rigs

Model:	PLIPET100	PLIPET120	PLIPET150	PLIPET200	PLIPET240	PLIPET300
Optical Characteristics						
Rated Wattage	100W	120W	150W	200W	240W	300W
Lumens	17640	17640	22050	29400	35280	44100
System Efficacy			140L	m/W		
Colour Temperature CCT			4000K (3000K / 500	OK / 5700K Optional)		
CRI (Ra)			>70	ı		
Reported L70			>50,000	Hours		
Lens Optic Type			60° / 80°	/ 120°		
Electrical						
Input		100-27	77VAC (347-480VAC /	20-30VAC/DC Option	nal)	
Frequency			50/	60Hz		
Powerfactor			>0	).98		
Total Harmonic Distortion			<1	0%		
Environment						
IP Rating			IP	66		
Impact Rating			IH	(10		
Operating Temperature			-40°C T	¯o 55°C		
Product Material and Mounting						
Option 1			Stanchi	on Mount		
Option 2			Pole	Mount		
Option 3			Ceiling	g Mount		
Option 4			Pendan	t Mount		
Option 5			Pipe	Mount		
Product Material			Die-Casting Al	uminium Alloy		
Lens / Optics Material			Temper	ed Glass		
Dimensions and Weights						
Product Dimensions		330*197			415*197	
Product Weight		11.0KG			14.0KG	
Packaging Dimensions	440*440*340 440*440*340					
Gross Weight	11.5KG 14.5KG					
Warranty & Certifications						
Warranty			5 Year V	Varranty		
Certifications	IECEx / CE / RoHS					
Classification	Group II / Zone 1 & 21 / Zone 2 & 22					
Rating		Gas: II2 G Ex db IIC	T4/T5 Gb / Dust: II2	D Ex tb IIIC T115°C/1	105°/T95*C Db IP66	

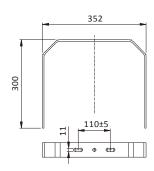


## **DIMENSIONS - 100W/120W/150W**



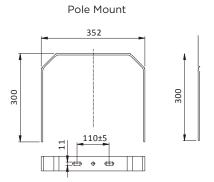


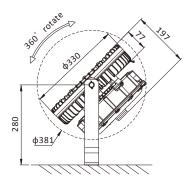
Stanchion Mount

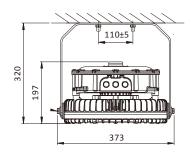


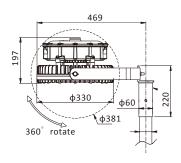
Ceiling Mount

352

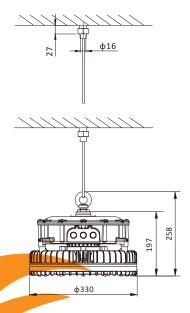


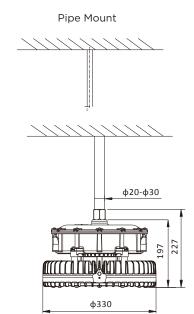






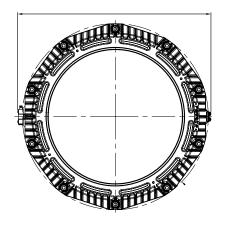
Pendant Mount





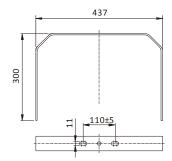


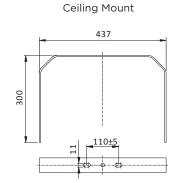
## **DIMENSIONS - 200W/240W/300W**

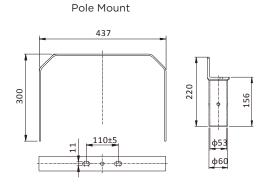




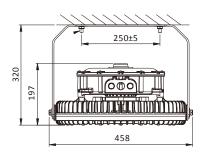
Stanchion Mount

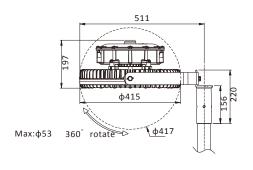




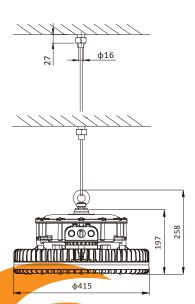


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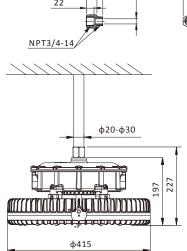


Pendant Mount





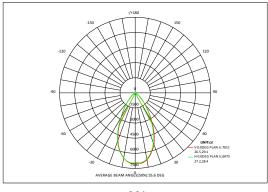
H34

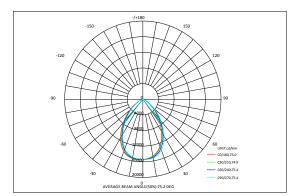


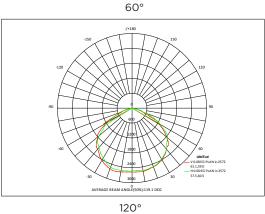
Pipe Mount



#### **PHOTOMETRIC DIAGRAMS**









#### ORDERING METHODOLOGY

PLI-PE	
--------	--

•	XXX WATTS		X CT
	100W		57 (5700K)
	120W		50 (5000K)
	150W		40 (4000K)
	200W		30 (3000K)
	240W		
	300W		

## XX BEAM ANGLE

01 (60°) 02 (80°) 03 (120°)

#### XX VOLTAGE

ST (100-277VAC) D (347-480VAC) E (20-30VAC/DC)

#### XX OPTIONS

ST (STANDARD)
DA (DALI DIMMING)
ON (EMERGENCY TYPE)
S (SENSOR)
V (0-10V DIMMING)

#### **ACCESSORIES**

Ceiling Mount Bracket PLIPET/CM
Stanchion Wall Mount Bracket PLIPET/WM
Pole Mount Bracket PLIPET/PM
Pipe Clamp PLIPET/PC
Eyebolt Pendant Mount PLIPET/EB



CHIEF



#### CHIEF

The Chief is an excellent choice for Hazardous Area Lighting and is suitable for a wide range of applications. It features a low-profile, lightweight design and has an impact resistant polycarbonate clear or diffused lens. The Chief's light distribution will project uniform illumination throughout the entire space and it's low maintenance costs reduce power consumption by over 50%.



- Environmentally Friendly 50,000 Hours Lifetime
- Superior colour rendering index compared to HPS, LPS or MV
- Low temperature applications to -40°C and high temperature up to 55°C
- Temperature compensation technology for longer life

#### TYPICAL APPLICATIONS







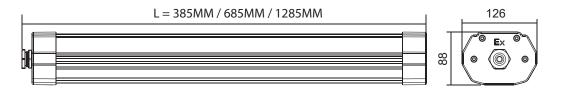
Coal & Metalliferous Mine Process Plants, Quarries, Campsite Area Lighting, General Area Lighting Car Parks, Conveyors, Pedestrian Access Road Ways, Stacker/Reclaimers, Stairwells, Tunnels, Walkways, Bulkheads.

#### **SPECIFICATIONS**

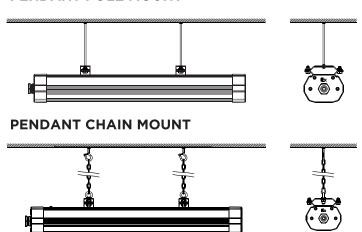
Model:	PLICHI24	PLICHI36	PLICHI36	PLICHI50	PLICHI60	PLICHI72	PLICHI80
Optical Characteristics							
Rated Wattage	24W	36W	36W	50W	60W	72W	80W
Lumens	2640	3960	3960	5500	6600	7920	8800
System Efficacy		,		110Lm/W	,		
Colour Temperature CCT		5000K (6000K / 4000K / 3000K)					
CRI (Ra)				>75			
Reported L70				>50,000 Hours			
Lens Optic Type				180º			
Electrical Characteristics							
Input				100-277VAC			
Frequency				50/60Hz			
Power Factor				>0.95			
Total Harmonic Distortion				N/A			
Environment							
IP Rating				IP66			
Impact Rating				IK10			
Operating Temperature				-40°C To 55°C			
Product Material and Mounting							
Option 1		Ceiling Mount A/B					
Option 2		Wall Mount A/B					
Option 3		Pendant Pole Mount					
Option 4		Pendant Chain Mount					
Option 5				Beam Clamp Mour	t		
Option 6				Pole Mount			
Product Material				Aluminium Housin	g		
Lens/Optics Material		Clear Lens or Diffused Lens					
Dimensions and Weights							
Product Dimensions	385*126*88	685*126*88			1285*126*88		
Product Weight	2.8KG	2.8KG 4.5KG 7.5KG					
Gross Weight	4.0KG	6.0KG			9.7KG		
Warranty and Certifications							
Warranty				5 Year Warranty			
Certifications		IECEx / CE / RoHS					
Classification		Zone 1 & 21 / Zone 2 & 22					
Rating				2 G Ex eb mb op i II 2 D Ex op is tb I		-	



#### **DIMENSIONS**



#### PENDANT POLE MOUNT



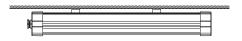
#### **SS CEILING MOUNT A**



#### **SS CEILING MOUNT B (ADJUSTABLE ANGLES)**









#### **WALL MOUNT A**





#### WALL MOUNT B (ADJUSTABLE ANGLES)





#### **BEAM CLAMP MOUNT**









**POLE MOUNT** 



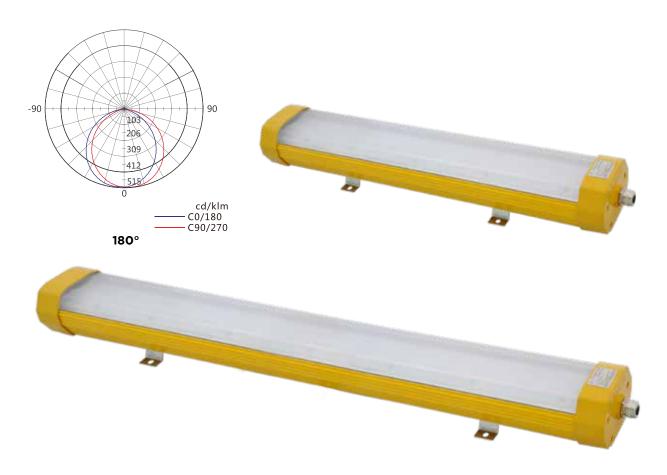
#### **ORDERING METHODOLOGY**

PLI-CHI	XX	XX	XX	X	XX
	WATTS	cct	DIMENSIONS	LENS TYPE	FUNCTION
	24W 36W 50W 60W 72W 80W	60 (6000K) 50 (5000K) 40 (4000K) 30 (3000K)	O2 (685*126*88/36W) O3 (1285*126*88/36W)	C (CLEAR LENS) F (DIFFUSED LENS)	ST (STANDARD) EM (EMERGENCY)

#### **ACCESSORIES**

PENDANT POLE MOUNT PENDANT CHAIN MOUNT PLICHI/PP PLICHI/PC PLICHI/CM1 CEILING MOUNT A CEILING MOUNT B (ADJUSTABLE ANGLES) PLICHI/CM2 WALL MOUNT A PLICHI/WM1 WALL MOUNT B (ADJUSTABLE ANGLES) PLICHI/WM2 BEAM CLAMP MOUNT PLICHI/BC PLICHI/PM POLE MOUNT MEANWELL DRIVER UPGRADE 24W/36W/50W PLICHI/MW1 MEANWELL DRIVER UPGRADE 60W/72W/80W PLICHI/MW1 MARINE PAINTING PLICHI/MP END TO END WIRING PLICHI/E2E

#### **PHOTOMETRIC DIAGRAMS**





# FALCON X



#### **FALCON X**

The Falcon X is a corrosion resistant luminaire designed for use in hazardous areas that are subject to flammable liquids, gases, vapors and combustible dusts. It features a corrosion resistant GRP body and polycarbonate diffuser with a central locking device that disconnects the supply when the luminaire is opened.



#### **TYPICAL APPLICATIONS**







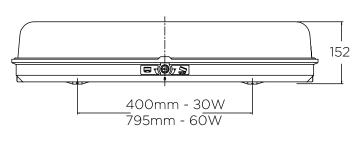
Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing

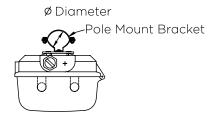
#### **SPECIFICATIONS**

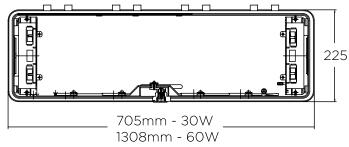
Model:	PLIFALX30	PLIFALX60				
Optical Characteristics						
Rated Wattage	30W	60W				
Lumens	3000	4800				
System Efficacy	100Lm/W 80Lm/W					
Colour Temperature CCT		5700K				
CRI (Ra)	>75					
Reported L70	> 50,000 Hours					
Lens Optic Type		PC				
Electrical Characteristics						
Input		100-250V AC				
Frequency		50Hz				
Powerfactor		>0.95				
Total Harmonic Distortion		20%				
Environment						
IP Rating		IP66				
Impact Rating		IK10				
Operating Temperature		-20°C To 55°C				
Product Material and Mounting						
Option 1	Adjustable Clamp Mount					
Option 2	Chain Mount					
Option 3	Adjustable Bracket					
Option 4	Pipe Mount					
Option 5	Ceiling Mount					
Option 6	Wall Mount					
Product Material	Full	Plastic Explosion Proof				
Lens / Optics Material		PC Diffuser				
Dimensions and Weights						
Product Dimensions	705*225*152	1308*225*152				
Product Weight	5.5KG	9.1KG				
Packaging Dimensions	748*272*195	1358*272*195				
Gross Weight	6.1KG	10.0KG				
Warranty and Certifications						
Warranty		18 Month Warranty				
Certifications		IECEx				
Classifications		ne 1 & 21 / Zone 2 & 22				
Rating		x db eb mb op is q II C T6/T5 Gb				
	IECEx/Dust: Ex tb III C T80°C/ T85°C Db ATEX/Gas: II 2 G D Ex db eb mb op is q II C T6/T5 Gb					
		Ex tb III C T80°C/ T85°C Db				
	Dust: Ex to III C 180°C/ 185°C Db					

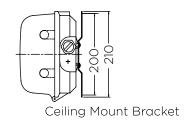


#### **DIMENSIONS**





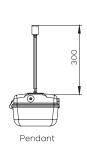


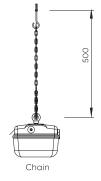


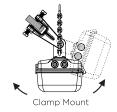
## **MOUNTING OPTIONS**

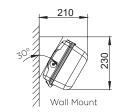




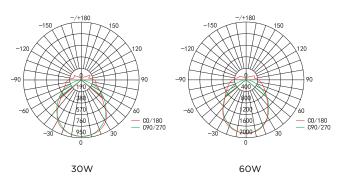








## **PHOTOMETRIC DIAGRAMS**







#### **ORDERING METHODOLOGY**

**PLI-FALX** 

XX WATTS 30W XX FUNCTION

EM (EMERGENCY)

SURGE PROTECTION ST (STANDARD)

X (NONE) F (WITH FUSE)

#### **ACCESSORIES**

PENDANT MOUNT PLIFALX/PD CHAIN MOUNT PLIFALX/CH





DEFENDER



#### **DEFENDER**

The Defender is a LED luminaire designed for installation where moisture, dirt, dust, corrosion and vibration may be present, or NEMA 3 and 4X areas where wind, water, snow or high ambient temperatures can be expected. The Defender can be used in locations made hazardous by the presence of flammable vapors, gases or combustible dusts as defined by the NEC and IEC. The Defender is ideal for retrofit of existing HPS/MH and offers higher efficacy for increased energy savings, lower maintenance costs and shorter paybacks.



#### TYPICAL APPLICATIONS







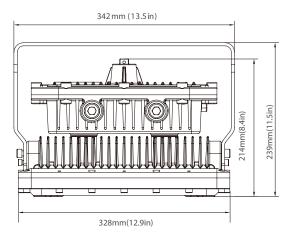
Coal & Metalliferous Mine Process Plants, Quarries, Campsite Area Lighting, General Area Lighting Car Parks, Conveyors, Pedestrian Access Road Ways, Stacker/Reclaimers, Stairwells, Tunnels, Walkways, Bulkheads.

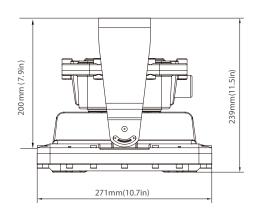
#### **SPECIFICATIONS**

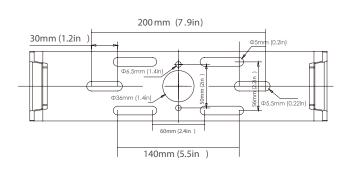
Model:	PLIDEF80	PLIDEF100	PLIDEF150				
Optical Characteristics							
Rated Wattage	80W	100W	150W				
Lumens	10400	13000	19500				
System Efficacy		130Lm/W					
Colour Temperature CCT		5000K (4000K / 3000K)					
CRI (Ra)		>70					
Reported L70		>50,000 Hours					
Lens Optic Type		25° / 60° / 120°					
Electrical Characteristics							
Input		AC100-240/277					
Frequency		50/60Hz					
Powerfactor		>0.95					
Total Harmonic Distortion		20%					
Environment							
IP Rating		IP66					
Impact Rating		IK10					
Operating Temperature	-25°C To 50°C						
Product Material and Mounting							
Option 1	Pole Mount						
Option 2	Ceiling Mount						
Option 3	Angle Wall Mount						
Option 4	Pendant Mount						
Product Material		Copper Free Aluminium					
Lens / Optics Material		Tempered Glass Lens					
Dimensions and Weights							
Product Dimensions		328*271*239					
Product Weight	15.2KG	15.3KG	15.5KG				
Packaging Dimensions		412*372*270					
Gross Weight	16.2KG	16.3KG	16.5KG				
Warranty and Certifications							
Warranty		5 Year Warranty					
Certifications		IECEx / CE / RoHS					
Classification		Zone 1 & 21					
Rating		IECEx/Gas: Ex d IIB T6 Gb					
		IECEx/Dust: Ex tb IIIC T85°C Db					



#### **DIMENSIONS**



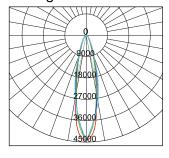




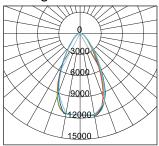


#### **PHOTOMETRIC DIAGRAMS**

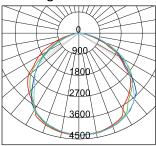
25 Degree



60 Degree



120 Degree





#### **ORDERING METHODOLOGY**

**PLI-DEF** 

XXX WATTS

80W

100W 150W ХХ

50 (5000K)

40 (4000K) 30 (3000K) XX BEAM ANGLE

> 01 (25°) 02 (60°) 03 (120°)

XX MOUNTING

PM (POLE MOUNT)
CM (CEILING MOUNT)
WM (ANGLE WALL MOUNT)
PD (PENDANT MOUNT)

#### **ACCESSORIES**

POLE MOUNT
CEILING MOUNT
ANGLE WALL MOUNT
PENDANT MOUNT
SAFETY CHAIN
GLARE SHIELD
WIRE GUARD
10KV SURGE PROTECTOR

PLIDEF/PM PLIDEF/CM PLIDEF/WM PLIDEF/PD PLIDEF/SC PLIDEF/GS PLIDEF/WG PLIDEF/10KV







WARRIOR



#### **WARRIOR**

The Warrior is a new generation LED linear floodlight designed for Zone 1 & 21 hazardous areas. It features a low profile design allowing installation in work areas with low ceiling height. The Warrior has a UV stable and impact resistant clear or diffused PC lens (Standard) to minimise glare and a wiring access cover with captive screws for end to end feed through wiring.



#### **TYPICAL APPLICATIONS**







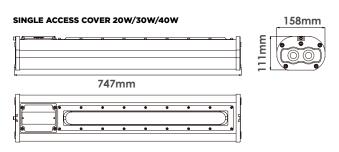
Coal & Metalliferous Mine Process Plants, Quarries, Campsite Area Lighting, General Area Lighting Car Parks, Conveyors, Pedestrian Access Road Ways, Stacker/Reclaimers, Stairwells, Tunnels, Walkways Bulkheads.

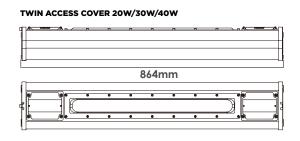
#### **SPECIFICATIONS**

Model	PLIWAR20	PLIWAR30	PLIWAR40	PLIWAR50	PLIWAR60	PLIWAR80	PLIWAR100
Optical Characteristics							
Rated Wattage	20W	30W	40W	50W	60W	80W	100W
Lumens	2400	3600	4800	6000	7200	9600	12000
System Efficacy		120Lm/W					
Colour Temperature CCT		5700K (5000K / 4000K)					
CRI (Ra)		>70					
Reported L70			>100,00	00 Hours at 25°	Ambient		
Lens Optic Type				110°			
Electrical Characteristics							
Input				AC120-277V			
Frequency			50	Hz (Optional 60	Hz)		
Powerfactor				>0.95			
Total Harmonic Distortion				<20%			
Environment							
IP Rating				IP66			
Impact Rating				IK10			
Operating Temperature				-40°C To 55°C			
Product Material and Mounting							
Option 1		Ceiling Mount Bracket					
Option 2		Eyebolt					
Option 3		Wall Mount					
Option 4		Pipe Clamp Mount					
Product Material	Marine Grade Aluminium						
Lens / Optics Material				PC Lens			
Dimensions and Weights							
Product Dimensions			Refe	r to dimensions b			
Product Weight		6.7KG				KG	
Packaging Dimensions		920*220*170			1505*2	20*170	
Gross Weight		7.7KG			10.9	9KG	
Warranty and Certifications							
Warranty				5 Year Warranty			
Certifications				ECEx / CE / RoH	IS		
Classification				Zone 1 & 21			
Rating			, .	as: Ex db eb mb			
				oust: Ex tb IIIC T			
	Gas: II 2 G Ex db eb mb op is IIC T6 Gb Dust: II 2 D Ex op is tb IIIC T80°C Db						
			Dust: II 2 I	ב Ex op is tb IIIC	180°C Dp		

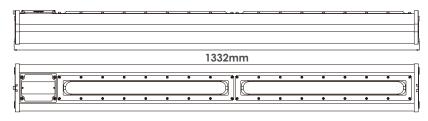


#### **DIMENSIONS**

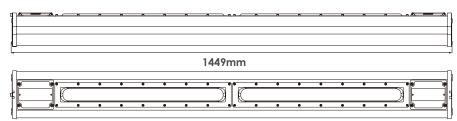




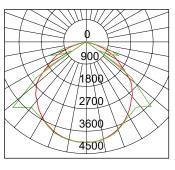
#### SINGLE ACCESS COVER 40W/50W/60W/80W/100W



#### TWIN ACCESS COVER 40W/50W/60W/80W/100W



#### **PHOTOMETRIC DIAGRAMS**



110°





#### **ORDERING METHODOLOGY**

#### **PLI-WAR**

XXX WATTS

50W

60W 80W 100W

XX XX CCT

57 (5700K) 50 (5000K) 40 (4000K) XX FUNCTION

ST (STANDARD) EM (EMERGENCY) X DIMENSIONS

A (747\*158\*111 SINGLE ACCESS COVER 20W/30W/40W)
B (864\*158\*111 TWIN ACCESS COVER 20W/30W/40W)
C (1332\*158\*111 SINGLE ACCESS COVER 50W/60W/80W/100W)
D (1332\*158\*111 TWIN ACCESS COVER 50W/60W/80W/100W)

#### **ACCESSORIES**

LOW CEILING MOUNT BRACKET HIGH CEILING MOUNT BRACKET EYEBOLT

EYEBOLT
WALL MOUNT SWIVEL BRACKET
WALL MOUNT OUTREACH BRACKET 0.6M
WALL MOUNT OUTREACH BRACKET 1.2M
PIPE CLAMP BRACKET 40-45MM
PIPE CLAMP BRACKET 47-5IMM
PIPE CLAMP BRACKET 54-57MM
PIPE CLAMP BRACKET 54-57MM
PIPE CLAMP BRACKET 58-62MM

PLIWAR/LCM PLIWAR/HCM PLIWAR/EB PLIWAR/WM PLIWAR/WM060 PLIWAR/WM120 PLIWAR/PC40 PLIWAR/PC47 PLIWAR/PC54 PLIWAR/PC54

#### LOW CEILING MOUNT BRACKET



#### HIGH CEILING MOUNT BRACKET



EYEBOLT MOUNT



#### WALL MOUNT SWIVEL BRACKET



WALL MOUNT OUTREACH BRACKET



POLE MOUNT CLAMP







SPHINX SERIES



#### **SPHINX 27 - 120**

The Sphinx is an IP69 waterproof mobile machinery floodlight and is designed for heavy duty machinery in industrial environments. It features a 9-32 VDC operating voltage range, 30 degree spot beam (60 degree flood beam are available), stainless steel adjustable mounting brackets and is rubber gasket vibration resistant.



#### TYPICAL APPLICATIONS







Draglines, Shovels, Dozers, Trucks, Forklifts, Water Carts, Wheel Loaders, Light Vehicle Fleet, Mobile Machinery, Front End Loaders, Drill Rigs, Lighting Towers

#### **SPECIFICATIONS**

Model	PLISPX27	PLISPX40	PLISPX50	PLISPX60	PLISPX90	PLISPX100	PLISPX120
Optical Characteristics							
Rated Wattage	27W	40W	50W	60W	90W	100W	120W
Lumens	2430	3600	4500	5400	8100	9000	10800
System Efficacy				90Lm/W			
Colour Temperature CCT				6000K			
CRI (Ra)				>70			
Reported L70				> 50,000 Hours			
Lens Optic Type				30° Spot/60° Floo	d		
Electrical Characteristics							
Input				9-32V DC			
Frequency				N/A			
Power factor				>0.95			
Environment							
IP Rating				IP69K			
Impact Rating		N/A					
Operating Temperature				-20°C To 50°C			
Product Material and Mounting	g						
Option 1		U Bracket					
Product Material				Cast Aluminium Bo	dy		
Lens / Optics Material				PC Lens			
Dimensions and Weights						,	
Product Dimensions	108*72	*139	125*10	O3*139	152	*115*141	188*135*167
Product Weight				2.0KG			
Packaging Dimensions	118*80	*150	135*1	15*150	165*	125*150	210*145*180
Gross Weight				2.5KG			
Warranty and Certifications							
Warranty	2 Year Warranty						
Certifications	CE / RoHS						

SPHINX-27



SPHINX-50









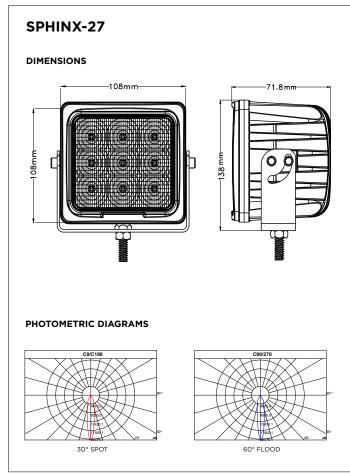


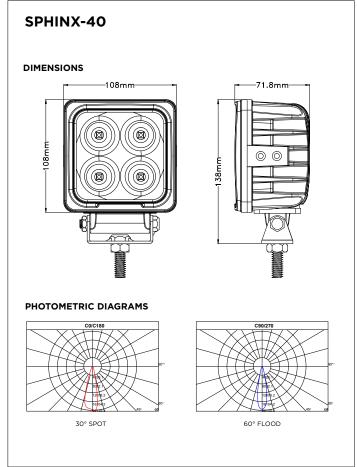


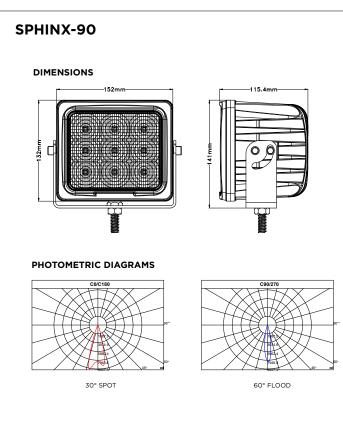


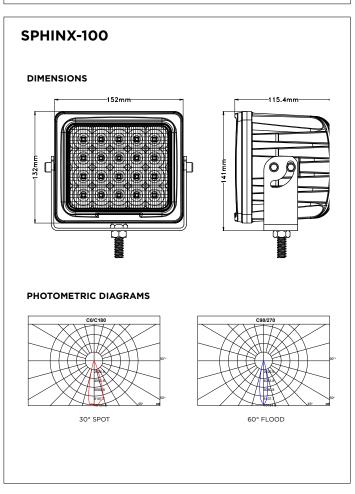


#### **DIMENSIONS**

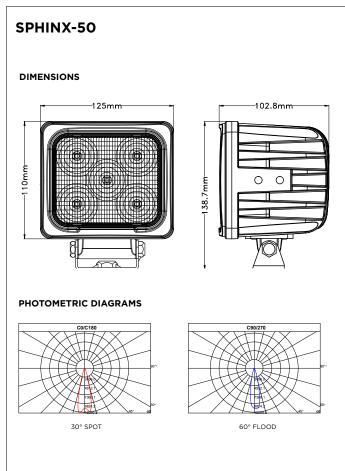


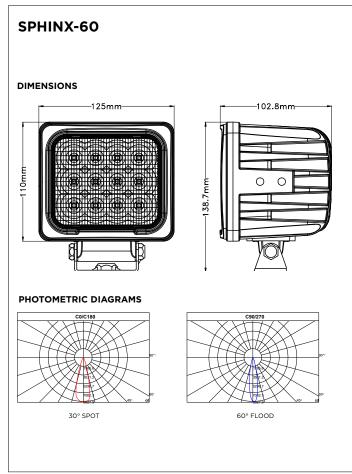


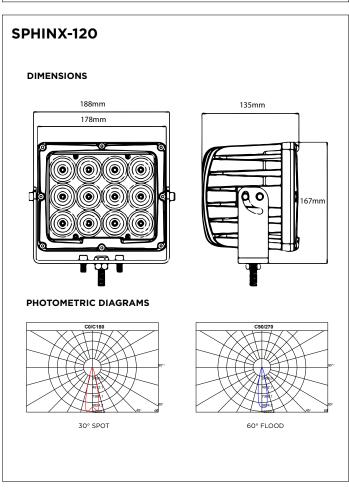














#### **ORDERING METHODOLOGY**

**PLI-SPX** 

XX WATTS **XX BEAM ANGLE**01 (30°)
02 (60°)

40W 50W 60W 90W 100W 120W

#### **ACCESSORIES**

U BRACKET - PLISPX/UB

**SPHINX-27** 



**SPHINX-50** 







**SPHINX-60** 

SPHINX-90

SPHINX-100

SPHINX-120











# INDUSTRY APPROVED VISIBLE BREAK ISOLATORS & LOCAL CONTROL STATIONS

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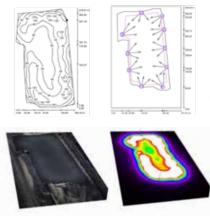




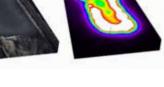
#### **VALUE ADD CAPABILITY**



#### **TURNKEY SOLUTIONS & PACKAGES**



**Lighting Studies** 





**LED Lighting Supply** 



Light Poles Fully Assembled



Junction Boxes Fitted with Terminals and Gland Entries



LED Light Fittings Pre-wired with 3m Tails



**LED Light Fittings** Fitted to Poles



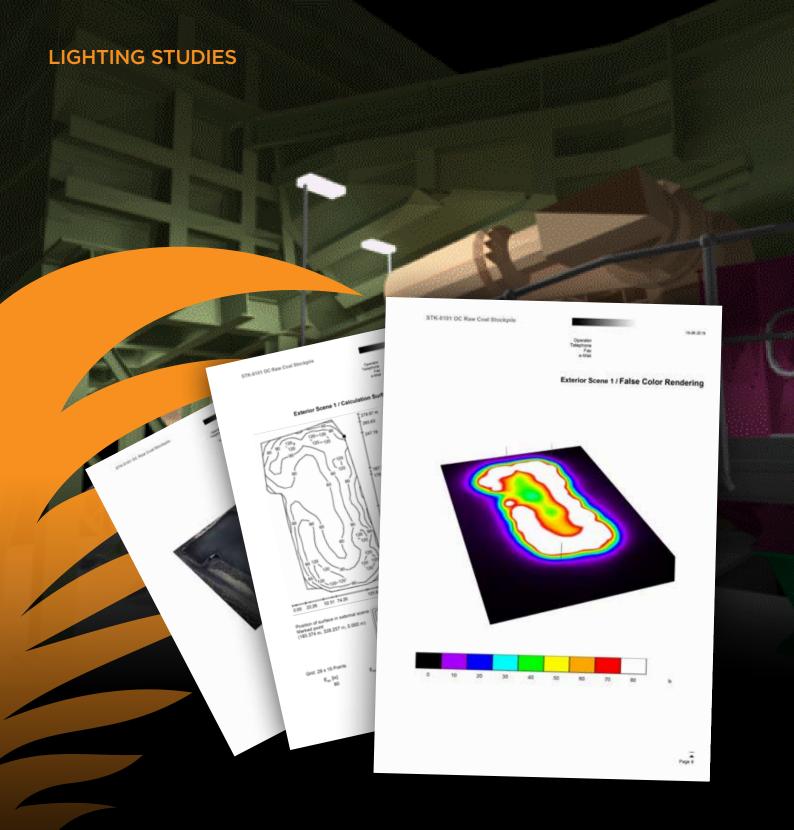
LED Light Fitting Terminated into Junction Box



Packaging and Shipping



Comprehensive After Sale Support

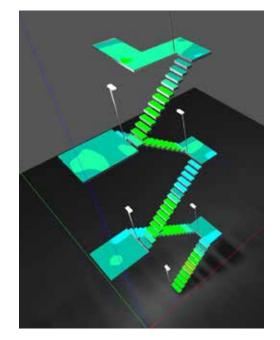


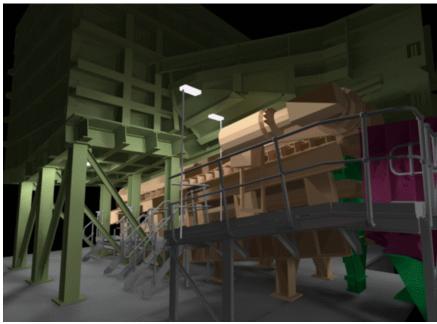
# LIGHTING STUDIES

# **LIGHTING STUDIES**



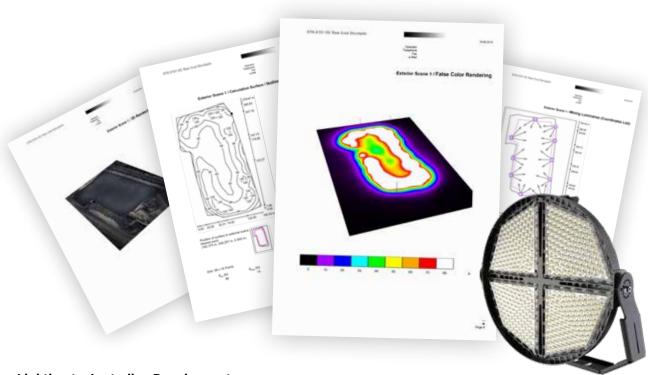
#### LIGHTING DESIGN CAPABILITIES





**Dialux Lighting Design** 

**3D Modelling** 



#### **Lighting to Australian Requirements**

In order to provide the right light, we conduct lighting studies by our qualified in house lighting designers and engineers. This also ensures that the lighting in your project meets Australian Lighting Standards. Based on our lighting studies, we provide you with the most suitable LED lighting solutions for your

project. Our lighting designers and engineers base their designs solely on the customers needs to develop and create a state of the art lighting solution.



GLOSSARY

#### **CCT CHART**

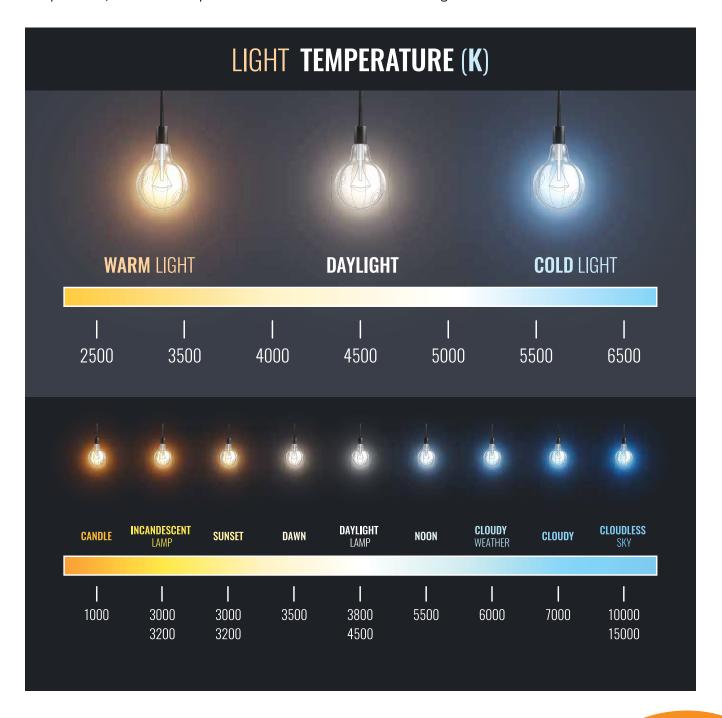


#### What is Colour Temperature?

Correlated Colour Temperature (CCT) is effectively a measure of how yellow or blue the colour of light discharged from a light bulb appears. It is measured in Kelvin and is most frequently found between 2200 Kelvin degrees and 6500 Kelvin degrees.

Warm light sources, such as incandescent bulbs, have a low colour temperature (2200-3000K) and include more light in the red, orange, and yellow range. When you picture a warm colour temperature, think of a fireplace or a room that's lights have been dimmed.

Cool light sources, such as some HID or fluorescent lamps, have a high colour temperature (>4000K) and distribute more light in the blue range. When you picture a warm colour temperature, think of a fireplace or a room that have had their lights dimmed.



#### **COLOUR RENDERING INDEX (CRI)**



#### WHAT IS CRI?

CRI indicates how precisely artificial light renders the colour of object. On a spectrum of 1 to 100, CRI estimates the colour rendering and colour precision of objects beneath different lighting compared to how those objects would appear below incandescent lights or natural sunlight. The greater the numerical value of CRI, the better the luminaire or bulbs colour rendering. Normally, a CRI of 80 or above is deemed good, while a CRI of 90 or higher is excellent. Color rendering index should not be confused with color temperature. Color temperature, measured in Kelvin, determines how warm or cool lighting is.

#### WHY IS CRI IMPORTANT?

It is a critical aspect in any industrial or commercial environment. A LED lamp with a low CRI will divulge a flat, pale hue to anything it illuminates. This can cause plain, monotonous colours. LED lighting with a high CRI can infuse luminosity into your environment. A high CRI will make the colours of anything and everything in its path vibrant. A high CRI is particularly important for colour-critical applications where visual appeal and colour accuracy is fundamental to its environment.



#### **LED LIGHTING**

Industrial LED Lighting can provide better CRI than fluorescents as their CRI value is much higher which leads to better vibrance and accurate colour representation of an object or person.

Different types of lamps have different colour rendering capabilities. At the bottom of the spectrum are high-pressure sodium and mercury-vapor lights, with CRIs of about 24 and 49. Fluorescent bulbs can produce moderate CRI, although you have to pick and choose. Dependent on the material, fluorescents have a CRI range of 50 to 85. When you choose a great fluorescent, you can get good but not an excellent colour rendition.

Modern LED technology can produce a CRI of 90+. This means you can get virtually flaw-less natural colour if you select a LED with a high CRI. This can be vital in environments where you need natural colouring.

#### HAZARDOUS AREA GUIDE



**ZONE 0/ZONE 20 -** Zone 0 hazardous area is an area where a flammable atmosphere is present continuously or for long periods or frequently. Continuous release inside a dust containment enclosure gives rise to Zone 20 - a place in which an explosive atmosphere, in the form of a cloud of combustible dust in air, is present continuously, or for long periods or frequently for short periods. For example, a mill or pneumatic conveying system.

**ZONE 1/ZONE 21 -** Zone 1 hazardous area is an area where a flammable atmosphere is likely to occur in normal operation occasionally. A Zone 21 area is categorised as a place in which an explosive atmosphere involving a combination of air or flammable substances in the form of powder or dust is likely to occur in normal operation occasionally. These are normally process areas where dusts and powders are more likely to be present.

**ZONE 2/ZONE 22 -** Zone 2 hazardous area is an area where a flammable atmosphere is not likely to occur in normal operation but, if it does occur, it will exist for a short period only. A Zone 22 area is categorised as an atmosphere where a mixture of air and flammable substances in the form of powder or dust is not likely to transpire in normal operation, but if it does occur, will persevere for a short period only. These are normally storage areas but can also be process areas.

**ATEX -** ATEX is the European certification given to equipment tested and approved to be intrinsically-safe. If a product / piece of equipment has official ATEX certification, it has been fully tested and approved to be safe to use in hazardous / explosive atmospheres. Remember, if an electrical / electronic device does not have ATEX approval and does not feature the Ex logo, it must not be used or brought onto site in explosive atmosphere areas. This certification **is not** accepted in Australia.

**IECEX -** IECEX stands for the certification by the International Electrotechnical Commission for Explosive Atmospheres. To be IECEX certified, all products must go through a monitored process by the International Electrotechnical Commission to ensure that they meet the minimum safety requirements. This process will determine if the products can be used in hazardous or potentially explosive locations. Participating countries in the IECEX Scheme include the majority of countries in Australia, Canada, Europe, Russia, China, United States and South Africa.

Classification of Zones and Divisions						
Type of Area	NEC	ATEX and IEC	Definition			
Continuous hazard	Division 1	Zone 0 / Zone 20	explosive atmosphere is continually present			
Intermittent hazard	Division 1	Zone 1 / Zone 21	explosive atmosphere is likely to occur in normal operation			
Hazard under abnormal conditions	Division 2	Zone 2 / Zone 22	explosive atmosphere is unlikely to occur but if it does, will exist only for a short period			

Equipment intended for use in Zone 1 areas cannot be used in Division 1 areas as this covers Zone 0 rated areas also.

#### IK RATING CHART



The Impact Protection Rating (IK Rating) comprises of the letters IK, followed by two digits. These two digits help us to classify the level of protection a piece of equipment offers and categorise the degrees of protection proposed by enclosures for electrical equipment against external mechanical impacts.

This standard stipulates how enclosures should be mounted when tests are conducted, the atmospheric conditions that should prevail, the number of impacts and their even distribution, and the size, style, material, and dimensions of the numerous times of hammer intended to generate the energy levels needed.

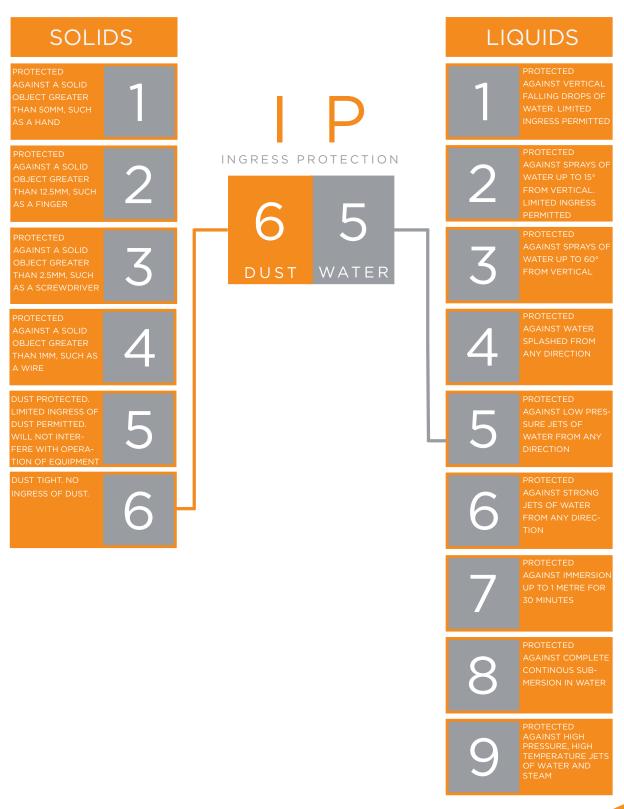


#### IP RATING CHART



#### WHAT ARE IP RATINGS?

IP (Ingress Protection) ratings categorise the level of protection that the exterior of a luminaire provides against solids and liquids entering into and damaging the light. They are usually made up of solids and liquids. The solids digit will inform you how efficient the luminaire is at preventing solids getting in. The solids digit is almost always 5 or 6 as it ensures that the casing of the luminaire is dust resistant and dustproof. The second digit determines how well the luminaire is protected from liquid damage. Our LED lights can be anything from weatherproof or splash-proof right up to fully waterproof.



#### LED LIFETIME

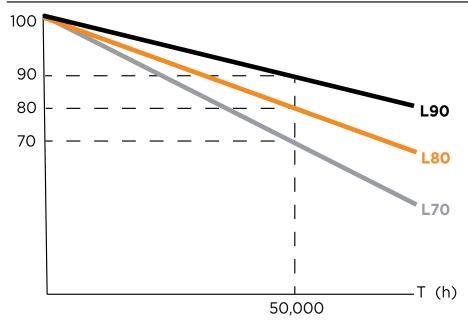


L70 - LED must preserve 70% of their original lumens throughout their rated life. For example, an LED with a life of 25,000 hours means that at 25,000 hours of use, the LED bulb will be generating 70% of the light output that it was emitting when it was brand new.

LM80 - A uniform testing method for determining the lumen depreciation of LED modules or chips over a period of time and under certain set conditions. Normally, LED chips are tested for 6,000 hours until they reach L70. LM-80 defines the rated life of the LED module, but not the life of the complete LED product. Other mechanisms, such as drivers, electrical connections, product integrity, etc. may fail before the LEDs.

LM79 - An approved method that measures the electrical and photometric properties of the LED luminaire. This process includes luminous flux, electrical power, efficiency, chromaticity as well as the diffusion of luminous force. Results of metric measurements displayed on a lighting product label derive from test results based on the LM-79 report.

TM21 - Offers advice on the use of data accumulated through LM-80 tests to evaluate the lifespan of a light source outside the number of test hours suggested by LM-80 and permits us to deduce the lifespan up to six times the number of test hours. For example, luminaires tested for 6,000 hours in a laboratory environment should not be sold with a certification specifying a lifespan greater than 36,000 hours based on the L70 lifespan.



As LED technology advanced, the lifespan of luminaires surged and the 70% figure of L70 began exceeding 60,000 hours. This led to the creation of additional ratings such as L80 (80% of initial lumens) and L90 (90% of initial lumens). Using the table above for an example, a luminaire rated at 50,000 hours L90 would retain 90% of its light output at 50,000 hours, whereas a luminaire rated 50,000 hours L70 would only retain 70% of its output.

# **LUX LEVELS GUIDELINES**



DEA

MINIMUM AVERAGE LUX

General access and movement around work areas	80
General indoor workshop operating areas: Rough work	160
General indoor workshop operating areas: Medium work	240
General indoor workshop operating areas: Fine work	400
Workshop office	320
Control rooms and switchrooms	320
Change rooms	80
Switch room external area (general inspection)	50
Switch room external area (maintenance and repair)	200
Stairways and stairwells	80
Warehouse with bulk dead storage areas	80
Warehouse with bulk live storage areas	160
Conveyor walkways	40
Conveyor tunnels	160
Conveyor inspection points	80
Train loading and unloading station	40
General plant work areas	160
Ore handling: transfer stations	160
Ore crushing and screening areas	160
Stockpile ring road	30
Stockpile dump areas	50
Stockyard interiors	50
Marshalling yards	20
General roadways	5
Roadway intersections	7.5
Pathways	5
Car park	10











#### **MATERIALS CHART**



**ALUMINIUM** - a light malleable ductile silvery-white metallic element that contests corrosion; the third most rich element in the earth's crust (8.1 per cent), appearing only as a compound, mainly in bauxite.

**ALUMINIUM ALLOY -** An aluminum alloy is a chemical structure where other elements are added to pure aluminum to increase its properties, primarily to boost its strength. These other elements include iron, silicon, copper, magnesium, manganese and zinc at levels when merged may project as much as 15 percent of the alloy by weight.

**ANTI-CORROSION -** Anti-corrosion coatings consent for added protection of metal surfaces and act as a barrier to prevent the contact between chemical compounds or corrosive materials. Along with preventing corrosion, they also offer a bonus of abrasion resistance, non-stick performance, and chemical protection.

**FROSTED POLYCARBONATE -** Frosted polycarbonate is concealed by fine particles. While light transmitting the frosted surface, scattering and diffuse reflection transpires and makes the light soft and uniformly distribute.

**GLASS LENS -** Its resistance to scratches is incredible. Like most objects, glass is still vulnerable to scratching, but its integral advantages make it hard to scratch and consequently they do not require an added scratch-resistant coating for protection. Glass is thought to be the most optically clear material existing, which is why it's still used in other objects that need precision clarity such as lenses, and microscopes.

**MARINE GRADE ALUMINIUM -** Marine grade metals are specifically created to endure use in water or wet environments. Generally, this is achieved by adding particular alloys to the metal to make it corrosion-resistant, weigh less, and more economical. Marine grade aluminum alloys usually contain aluminum-magnesium (Al-Mg) alloys and aluminum magnesium-silicon (Al-Mg-Si) alloys.

**PMMA -** Polymethyl methacrylate (PMMA), also recognised as acrylic or acrylic glass, is a transparent and inflexible thermoplastic material commonly used as an unbreakable replacement for glass. PMMA has numerous technical advantages that include high resistance to UV light and weathering, exceptional light transmission and limitless colouring options.

**POLYCARBONATE** - A polycarbonate lens is created through a thermoplastic polymer of the carbonate family. It is about 10 times more impact resistant than normal plastic or glass lenses. Polycarbonate lenses are favoured over glass lenses because of its lightweight, ultraviolet (UV) and impact resistance characteristics.

# TYPICAL AS/NZS LIGHTING STANDARDS



AS/NZS 1680: Inte	erior and Workplace	e Lighting
1680.0	Part 0	Safe movement
1680.1	Part 1	General principles and recommendations
1680.2.1	Part 2.1	Circulation spaces and other general areas
1680.2.2	Part 2.2	Office and screen-based tasks
1680.2.3	Part 2.3	Educational and training facilities
1680.2.4	Part 2.4	Industrial tasks and processes
1680.2.5	Part 2.5	Hospital and medical tasks
1680.3	Part 3	Measurement, calculation and presentation of photometric data
1680.4	Part 4	Maintenance of electric lighting systems
AS/NZS 1158: Ligh	nting for Road and F	Public Spaces
1158.0	Part 0	Introduction
1158.1.1	Part 1.1	Vehicular traffic (Category V) lighting – Performance and design
		requirements
1158.1.2	Part 1.2	Vehicular traffic (Category V) lighting – Guide to design, installation,
		operation and maintenance
1158.2	Part 2	Computer procedures for the calculation of light technical parameters for
		Category V and Category P lighting
1158.3.1	Part 3.1	Pedestrian area (Category P) lighting – Performance and installation design
		requirements
1158.4	Part 4	Lighting of pedestrian crossings
1158.5	Part 5	Tunnels and underpasses
1158.6	Part 6	Luminaires
AS/NZS 2560: Spc		
2560.1	Part 1	General principles
2560.2.1	Part 2.1	Specific applications – Lighting for outdoor tennis
2560.2.2	Part 2.2	Specific applications – Lighting of multipurpose indoor sports centres
2560.2.3	Part 2.3	Specific applications – Lighting for football (all codes)
2560.2.4	Part 2.4	Specific applications – Lighting for outdoor netball and basketball
2560.2.5	Part 2.5	Specific applications – Swimming pools
2560.2.6	Part 2.6	Specific applications – Baseball and softball
2560.2.7	Part 2.7	Specific applications – Outdoor hockey
2560.2.8	Part 2.8	Specific applications – Bowling greens
		nting and Exit Signs for Building
2293.1	Part 1	System design, installation and operation
2293.2	Part 2	Inspection and maintenance
2293.3	Part 3	Emergency escape luminaires and exit signs
AS/ANZ 4282: Co	ntrol of Obtrusive E	ffects of Outdoor Lighting











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