PHOENIX
ENGINEERING & MANUFACTURING SOLUTIONS

PHOENIX LIGHTING
Industrial/Mining/Hazardous Area Lighting Solutions

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 an 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.

PHOENIX
ENGINEERING & MANUFACTURING SOLUTIONS

ULTRASWING

EXCALIBUR
ENCLOSURES

MANUFACTURED BY PHOENIX EMS

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ILLUMINATOR

CONVEYOR & BULKHEAD LIGHTS

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.
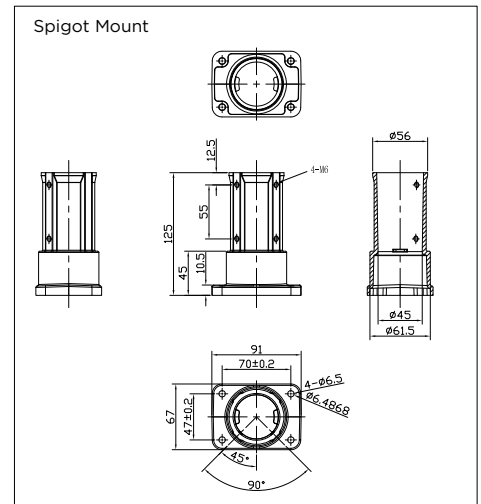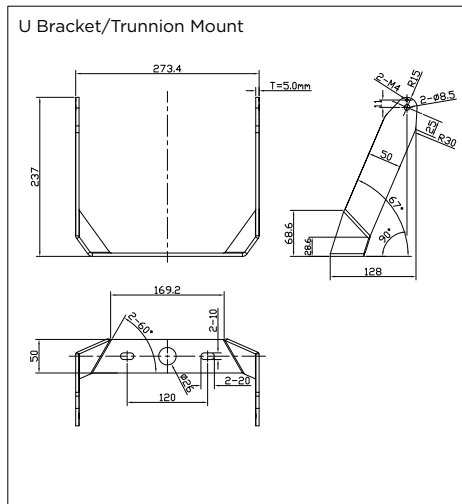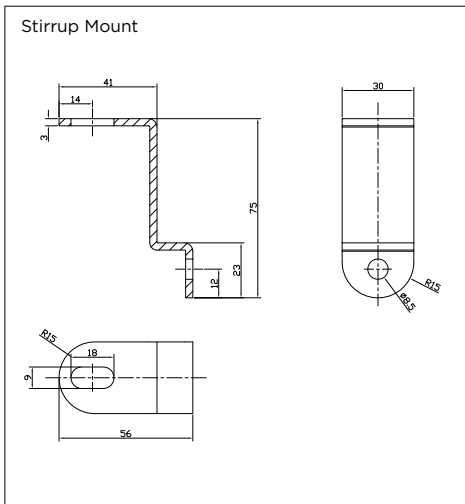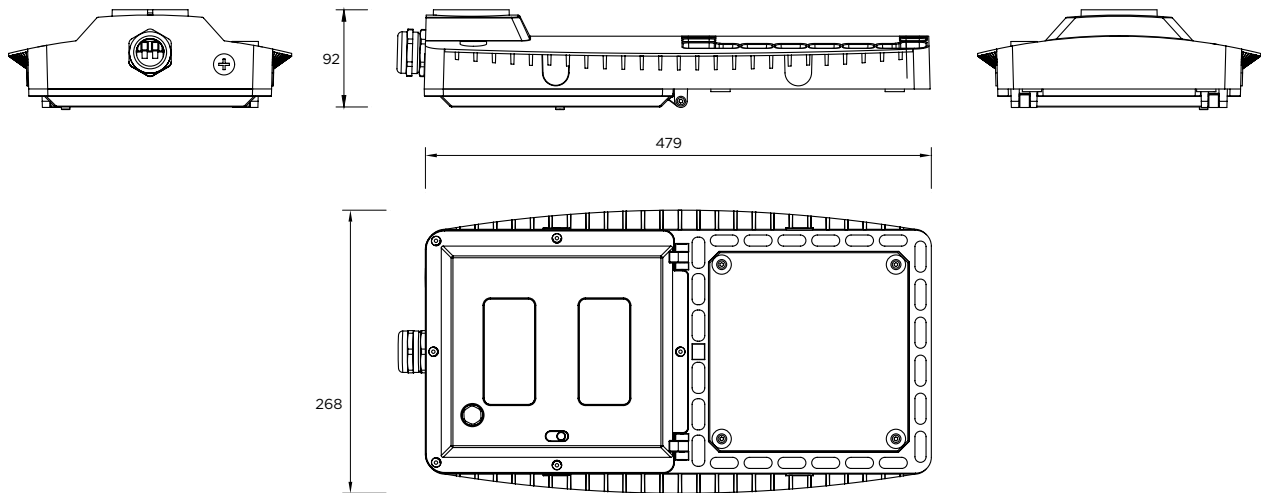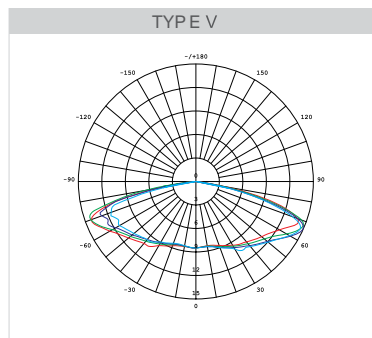
SPECIFICATIONS

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	3CCT (2200K Amber Turtle Friendly / Green Eyewash)					
CRI (Ra)	>70					
Reported L70	>50,000 Hours					
Lens Optic Type	Type II / Type V					
Electrical Characteristics						
Input	90-305VAC					24VDC
Frequency	50Hz					N/A
Powerfactor	>0.95 / 230VAC					<0.9
Total Harmonic Distortion	<15%					N/A
Environment						
IP Rating	IP66					
Impact Rating	IK08 (Optional IK09)					
Operating Temperature	-40°C To 50°C (0°C To 50°C Emergency Battery)					
Product Material and Mounting						
Option 1	Spigot Mount					
Option 2	U Bracket/Trunnion Mount					
Option 3	Stirrup Mount For Ceiling/Wall					
Product Material	Die Casting Aluminium					
Lens / Optics Material	Tempered Glass (PC Lens Optional)					
Dimensions and Weights						
Product Dimensions	479*268*92					
Product Weight	7.5KG					
Packaging Dimensions	690*335*170					
Gross Weight	8.5KG					
Warranty and Certifications						
Warranty	5 Year Warranty					
Certifications	SAA / EMC					

DIMENSIONS

92

479

268

Stirrup Mount

41
14
3
75
30
23
12
R15
R8.5
R15
18
9
56

U Bracket/Trunnion Mount

273.4
T=5.0mm
237
2-M4
R15
2-Ø8.5
R30
50
67°
68.6
Ø8.6
90°
128
169.2
50
2-60°
2-10
2-20
120
Ø26

Spigot Mount

Ø56
12.5
4-M6
125
55
45
10.5
Ø45
Ø61.5
91
70±0.2
4-Ø6.5
Ø6.4&6.8
67
47±0.2
45°
90°

PHOTOMETRIC DIAGRAMS

TYPE II

TYPE V

**Type I, III, IV available upon request

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CONVEYOR & BULKHEAD LIGHTS

BULKHEAD MINING FITTING STRUCTURE CHART

10kV surge protector

Brand LED driver

95% high transmittance tempered glass better for high lumen efficiency

NEMA twist lock receptacle

Dual waterproof sealed rubber ring IP66 approval

Patented housing connector part design

Color temperature switch

LED emergency converter

Test switch and LED indicator

Motion Sensor (Optional)

Daylight Sensor (Optional)

CONVEYOR & BULKHEAD LIGHTS

ORDERING METHODOLOGY

PLI

XX WATTS	**XX** MOUNTING	**XX** LENS TYPE	**X** VOLTAGE	**XX** FUNCTION
20W	SP (SPIGOT ADAPTOR)	T2 (TYPE II)	G (90-305VAC)	X (STANDARD)
30W		T5 (TYPE V)	L (24V DC)	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 Turtle Friendly Available

SMART TECHNOLOGY

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

SPACINGS

50W-5000K-Type ll Optics Model
Mounting Height: 3.0m
Maintenance Factor: 0.7
Walkway Width: 1.0m
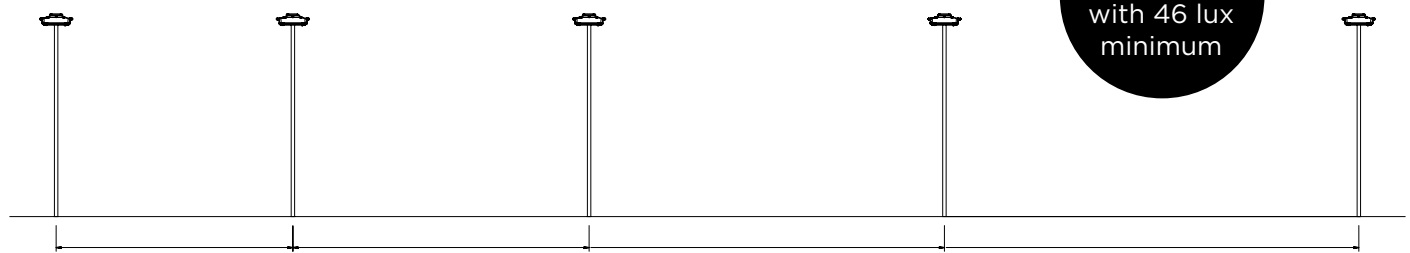
Up to 15m spacing with 46 lux minimum

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

MOUNTING OPTIONS

Stirrup Mount

Spigot Mount

U Bracket

CYCLOPS

CONVEYOR & BULKHEAD LIGHTS

CYCLOPS

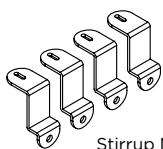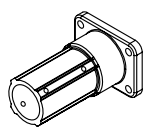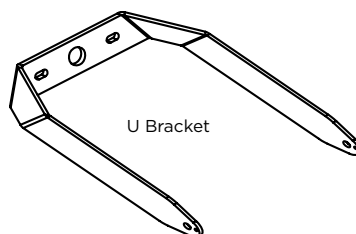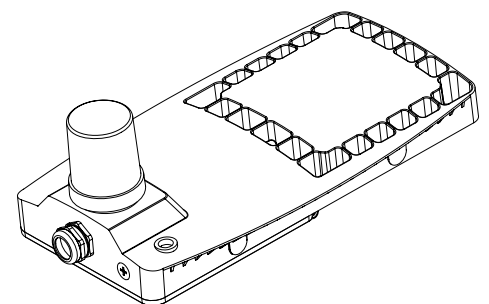The Cyclops is a high powered LED Conveyor Light fitted with a high transmittance optical lens providing maximum luminous efficiency up to 130Lm/W. It also features a super slim and elegant design structure to meet the IP66 and IK08 requirements, along with a die-cast body to control and regulate temperature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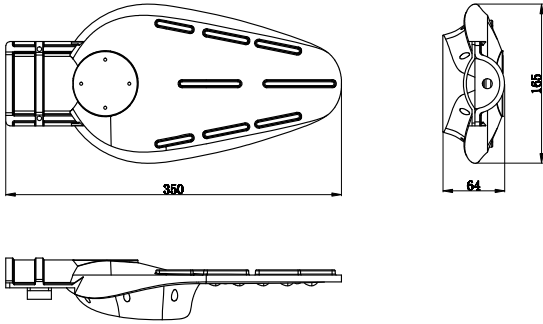
TYPICAL APPLICATIONS

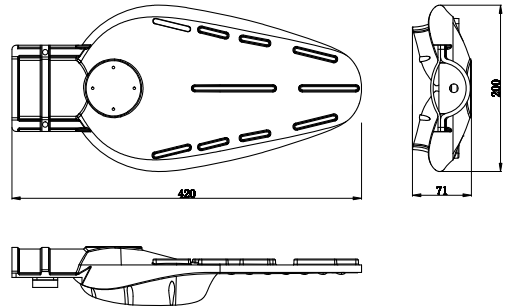Collector Road, Local Road, Residential Road, Country Road

SPECIFICATIONS

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	5700 (5000K / 4000K)								
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	Aluminum Housing								
Lens / Optics Material	PC Lens								
Dimensions and Weights									
Product Dimensions	350*165*64		420*200*71		546*260*80				
Product Weight	1.1KG		1.6KG		2.8KG				
Packaging Dimensions	425*425*450 (Ctn 8)		490*490*250 (Ctn 4)		570*295*190 (Ctn 2)				
Gross Weight	8.8KG		6.4KG		5.6KG				
Warranty and Certifications									
Warranty	5 Year Warranty								
Certifications	CE								

CONVEYOR & BULKHEAD LIGHTS

DIMENSIONS

20W/30W

350

185

64

40W/50W

420

200

71

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

546

260

80

PHOTOMETRIC DIAGRAMS

UNIT:cd
C0/180,147.0
C30/210,118.6
C60/240,71.1
C90/270,64.0

AVERAGE BEAM ANGLE(50%):100.2 DEG
20-50W TYPE II

TYPE II

UNIT:cd
C0/180,150.5
C30/210,67.5
C60/240,80.9
C90/270,77.1

AVERAGE BEAM ANGLE(50%):94.0 DEG
60-100W TYPE III

TYPE III

CONVEYOR & BULKHEAD LIGHTS

ORDERING METHODOLOGY

PLI-CYC

X	**XX**
WATTS (W)	CCT (K)

WATTS (W):
- 20W
- 30W
- 40W
- 50W
- 60W
- 70W
- 80W
- 90W
- 100W

CCT (K):
- 57 (5700K)
- 50 (5000K)
- 40 (4000K)

ACCESSORIES/CONTROLS

SPIGOT 40-50MM	PLICYC/SP01
SPIGOT 40-60MM	PLICYC/SP02
MOTION SENSOR	PLICYC/M
PHOTO SENSOR	PLICYC/P
DALI	PLICYC/DA
10KV SURGE PROTECTOR	PLICYC/10KV
NEMA RECEPTACLE	PLICYC/NEMA
ZIGBEE/PLC DUAL MODE STREET LAMP	PLICYC/PLC

EXPLORER

CONVEYOR & BULKHEAD LIGHTS

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

SPECIFICATIONS

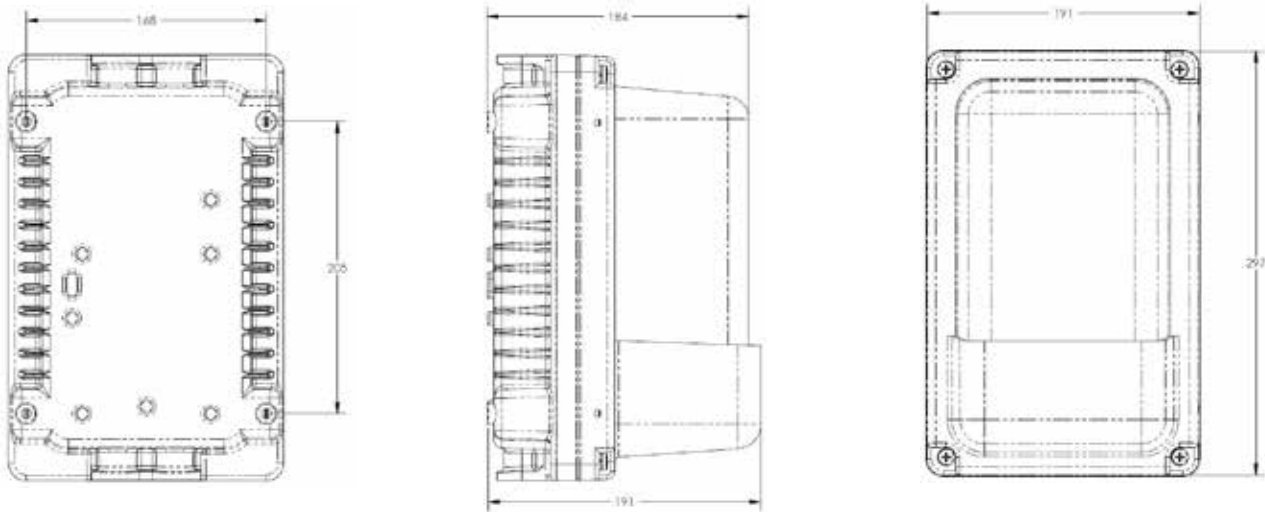| Model	PLIEXP24
Optical Characteristics	
Rated Wattage	24W
Lumens	2585
System Efficacy	100Lm/W
Colour Temperature CCT	4000K (6000K / 3000K)
CRI (Ra)	>80
Reported L70	>50,000 Hours
Lens Optic Type	120°
Electrical Characteristics	
Input	AC180-240V
Frequency	50Hz
Powerfactor	>0.95
Total Harmonic Distortion	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	
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

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CONVEYOR & BULKHEAD LIGHTS

DIMENSIONS

PHOTOMETRIC DIAGRAMS

120°
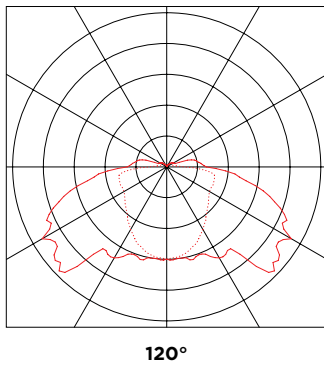
ORDERING METHODOLOGY

PLI-EXP

XX WATTS	**XX** CCT	**XX** FUNCTION
24W	60 (6000K) 40 (4000K) 30 (3000K)	ST (STANDARD) EM (EMERGENCY)

ACCESSORIES

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

CONVEYOR & BULKHEAD LIGHTS

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HUNTER

CONVEYOR & BULKHEAD LIGHTS

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

SPECIFICATIONS

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

CONVEYOR & BULKHEAD LIGHTS

DIMENSIONS

Fixture

382.0

204.0

184.0

Φ34.0

Remote Emergency Terminal Box

250

141

41.5

425

41.5

HH

PLI

G

G

0   0
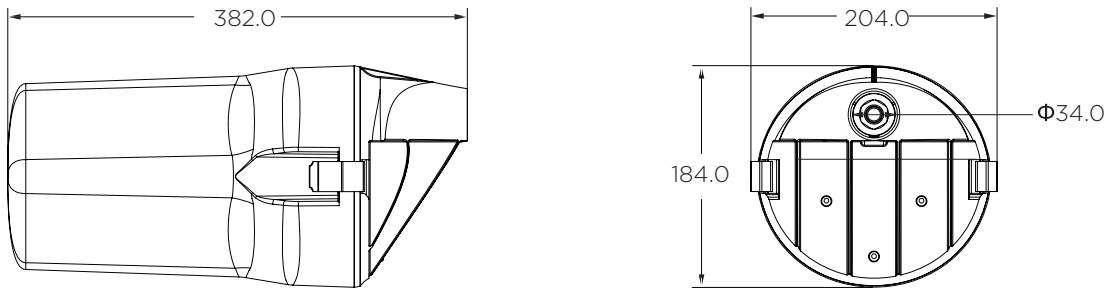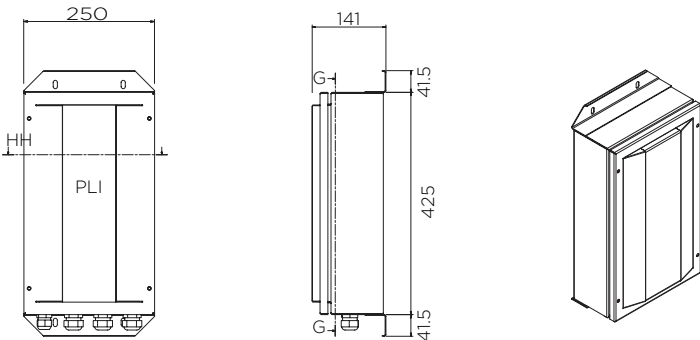
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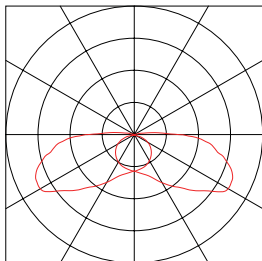
TYPE II

Green Eyewash Available

ORDERING METHODOLOGY

PLI-HTR

XX
WATTS

48

XX
CCT

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

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ILLUMINATOR EXTREME

TUNNEL/CONVEYOR/PLANT LIGHTS

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

SPECIFICATIONS

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	157Lm/W					
Colour Temperature CCT	3CCT (2200K Amber Turtle Friendly / Green Eyewash)					
CRI (Ra)	>70					
Reported L70	>50,000 Hours					
Lens Optic Type	Type II /Type V					
Electrical Characteristics						
Input	90-305VAC					24VDC
Frequency	50Hz (Optional 60Hz)					N/A
Powerfactor	>0.95 / 230VAC					<0.9
Total Harmonic Distortion	<15%					N/A
Environment						
IP Rating	IP66					
Impact Rating	IK08 (Optional IK09)					
Operating Temperature	-40°C To 50°C (0°C To 50°C Emergency Battery)					
Product Material and Mounting						
Option 1	Spigot Mount					
Option 2	U Bracket/Trunnion 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*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					

TUNNEL/CONVEYOR/PLANT LIGHTS

DIMENSIONS

95

48

92.3

508

280
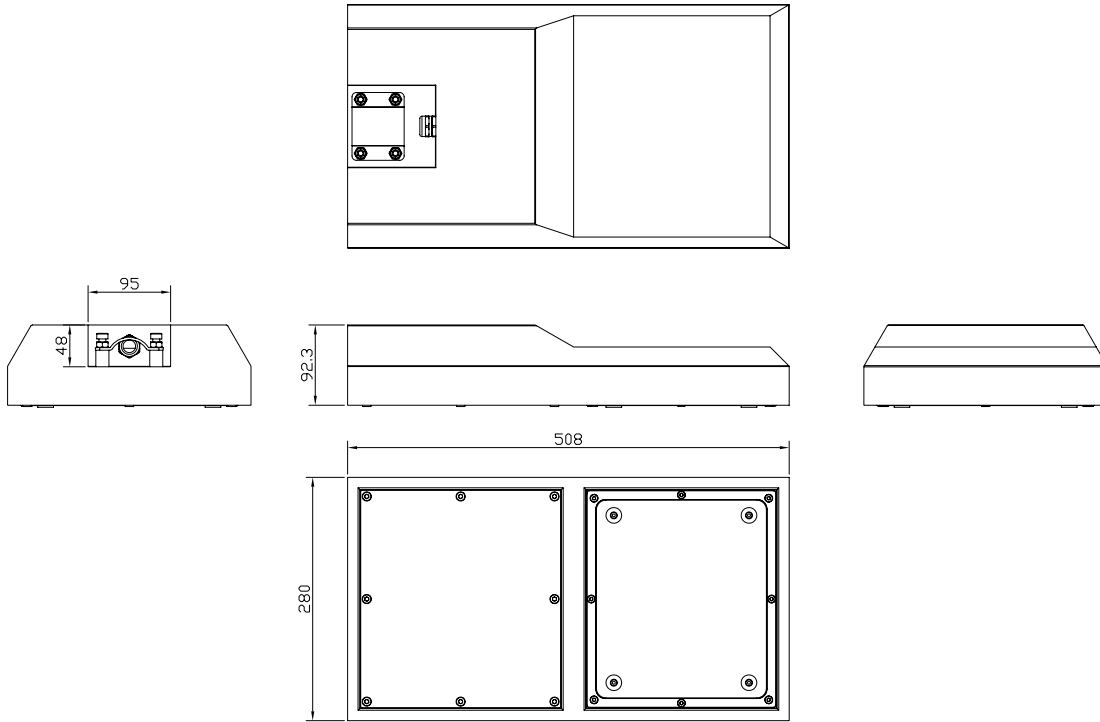
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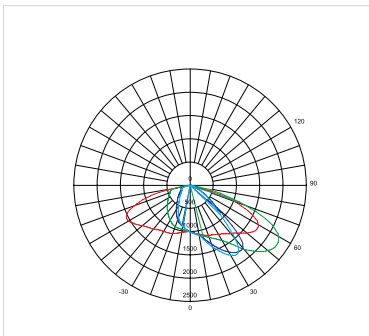
TYPE II

TYPE V

**TYPE I, III, IV available upon request

MOUNTING OPTIONS

Spigot Mount

Stirrup Mount

U Bracket

TUNNEL/CONVEYOR/PLANT LIGHTS

ORDERING METHODOLOGY
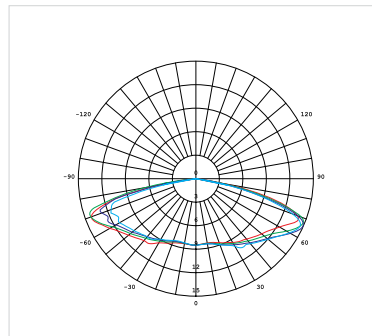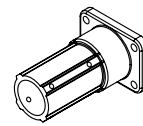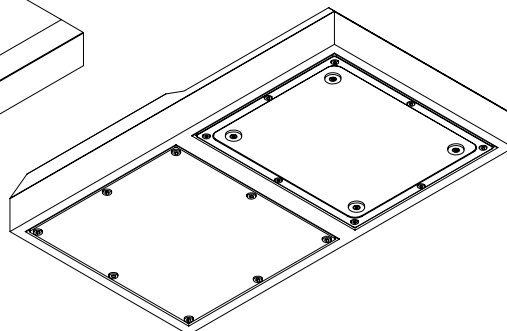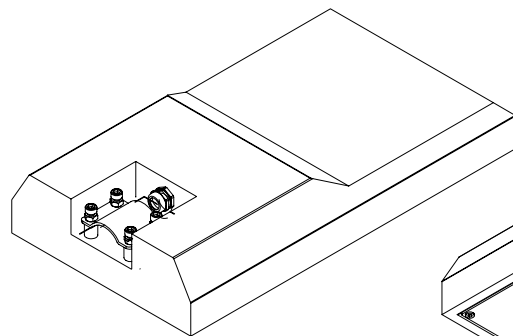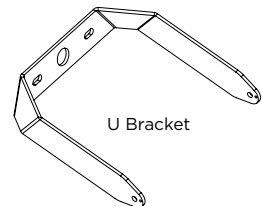
PLI-X

XX
WATTS
20W
30W
37W (24V DC VOLTAGE)
40W
50W
60W

XX
MOUNTING
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)
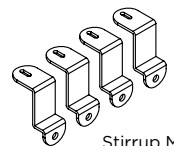
X
FUNCTION
X (STANDARD)
E (EMERGENCY)
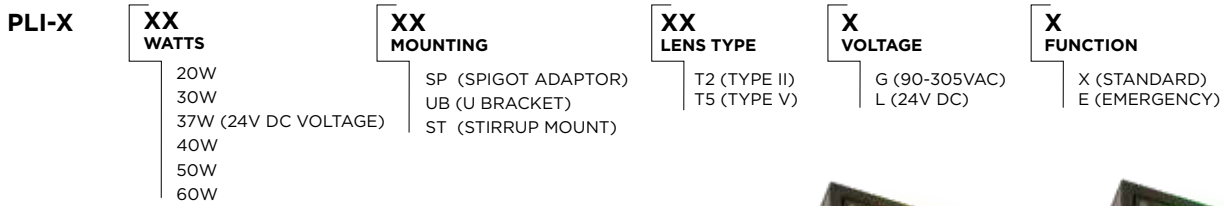
ACCESSORIES

SPIGOT ADAPTOR	PLIX/SP
U BRACKET	PLIX/UB
STIRRUP MOUNT	PLIX/ST
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 ll 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
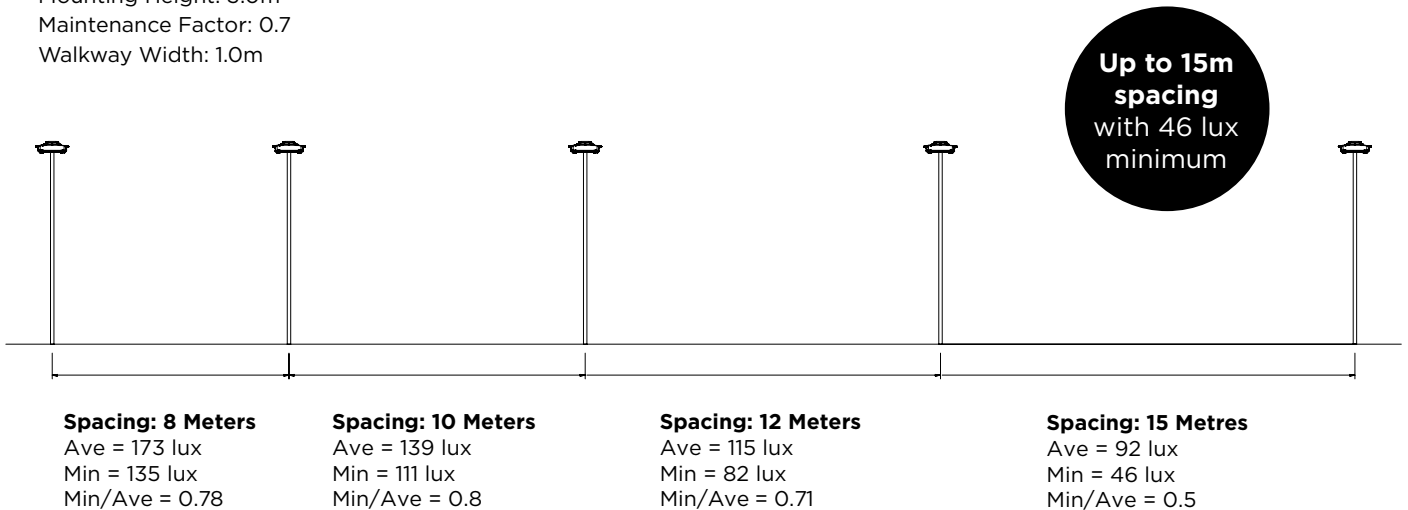
PHOENIX MASTER

TUNNEL/CONVEYOR/PLANT LIGHTS

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

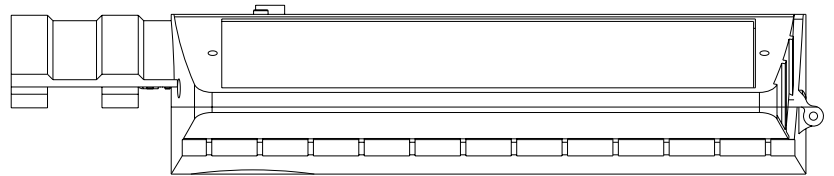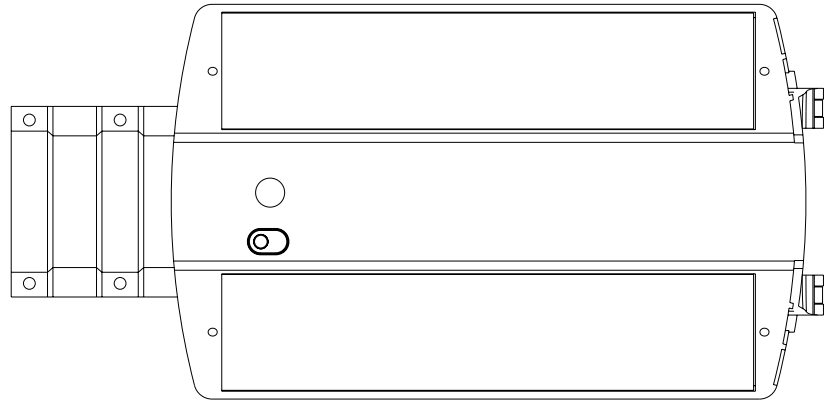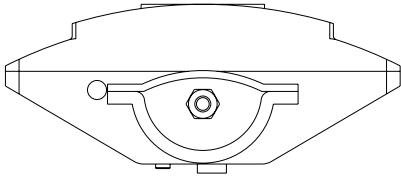Mining, MIA (Mining Infrastructure Area), Coal, Open Cuts, Metalliferous, Iron Ore, Industrial, Processing Plants, Materials Handling, Lithium Processing, Power Generation, Energy & Utilities, Water & Waste Water, Ports, Wharfs & Waterways, Chemical & Processing, Ports & Wharves, Airports, Car Parks,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

SPECIFICATIONS

Model	PLIPHXM50	PLIPHXM70
Optical Characteristics		
Rated Wattage	50W	70W
Lumens	6750	9450
System Efficacy	135Lm/W	
Colour Temperature CCT	3CCT (2200K Amber Turtle Friendly / Green Eyewash)	
CRI (Ra)	>70	
Reported L70	>50,000 Hours	
Lens Optic Type	Type II / Type V	
Electrical Characteristics		
Input	100-240AC	
Frequency	50/60Hz	
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 Battery)	
Product Material and Mounting		
Option 1	Spigot Mount	
Option 2	Trunnion Mount	
Option 3	Stirrup Mount	
Product Material	Die Cast Aluminum	
Lens / Optics Material	Tempered Glass Lens	
Dimensions and Weights		
Product Dimensions	420*250*96	
Product Weight	5.5KG	
Packing Dimensions	501*219*78	
Gross Weight	6.5KG	
Warranty and Certifications		
Warranty	5 Year Warranty	
Certifications	SAA	

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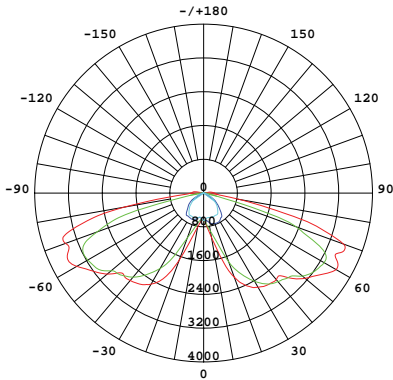## DIMENSIONS

420*250*96

PHOTOMETRIC DIAGRAMS

TYPE II

TYPE V

TUNNEL/CONVEYOR/PLANT LIGHTS

BULKHEAD MINING FITTING STRUCTURE CHART

NEMA twist lock receptacle

Brand LED driver

10kV surge protector

Patented housing connector part design

Color temperature switch

LED emergency converter
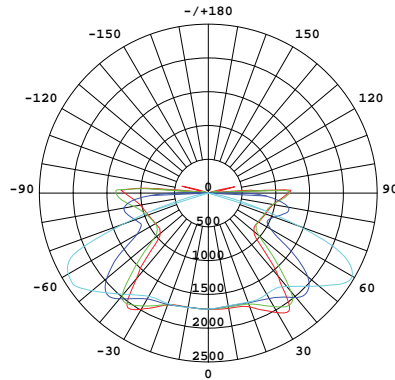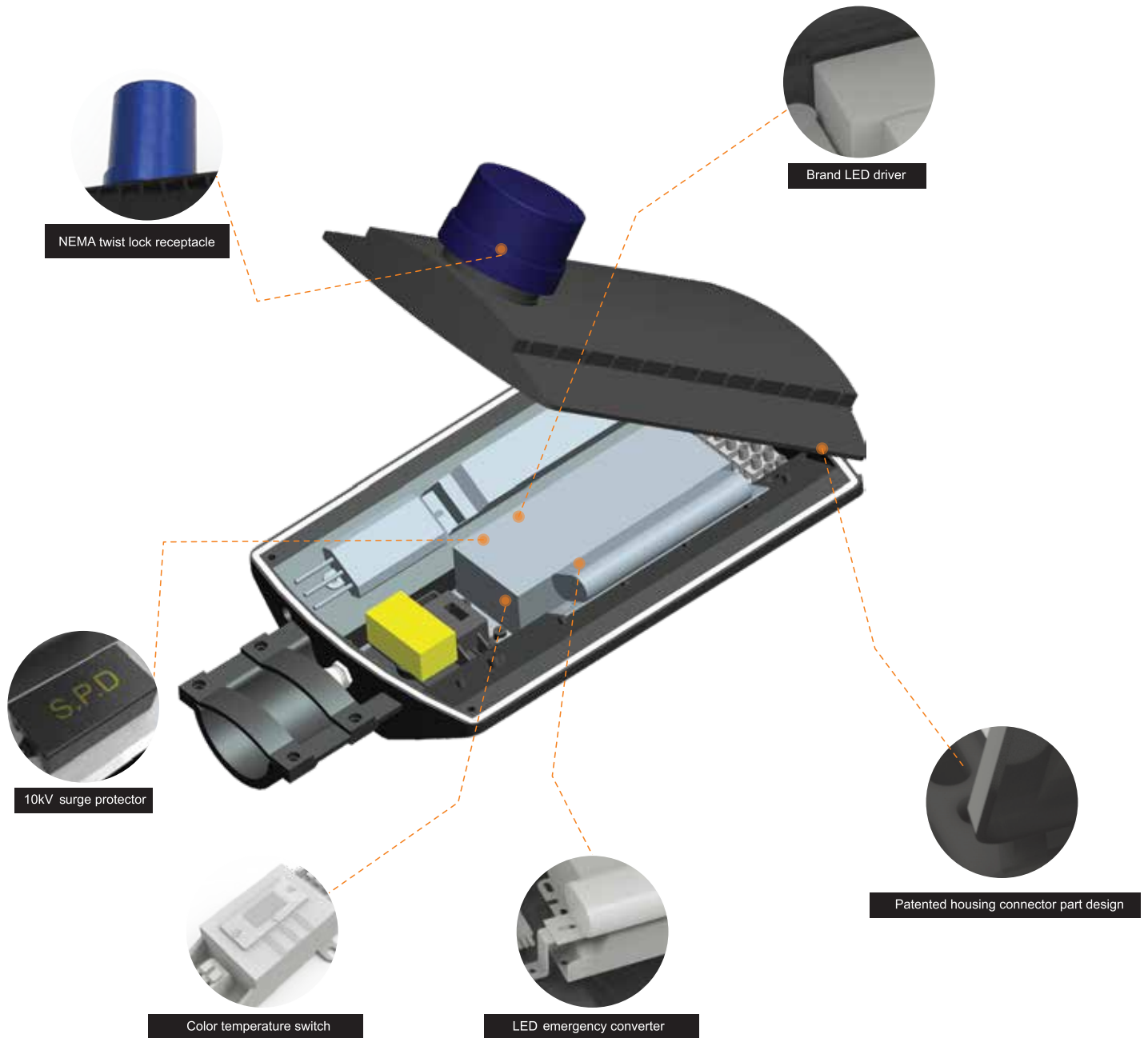
Motion Sensor (Optional)
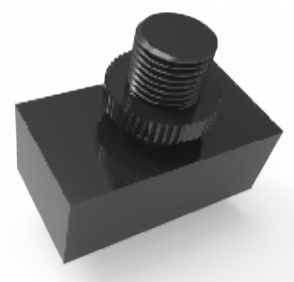
Daylight Sensor (Optional)

TUNNEL/CONVEYOR/PLANT LIGHTS

ORDERING METHODOLOGY

PLI-PHXM | **XX** WATTS | **X** CCT | **XX** LENS TYPE | **XX** FUNCTION | **X** CONTROLS | **XX** MOUNTING

XX WATTS
50W
70W

X CCT
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
STIRRUP MOUNT	PLIPHXM/ST
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

MOUNTING OPTIONS

Spigot Mount

Stirrup Mount

U Bracket

Amber Turtle Friendly Available

Green Eyewash Available

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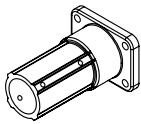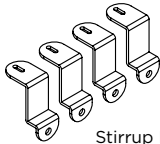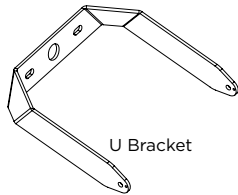
PHOENIX PLUS

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

SPECIFICATIONS

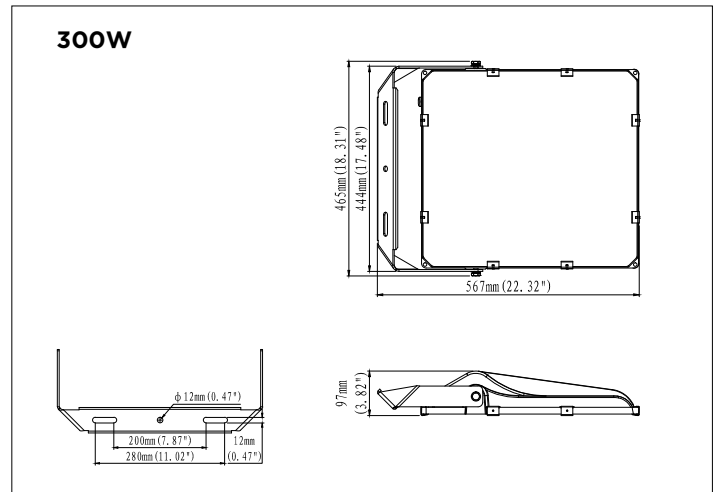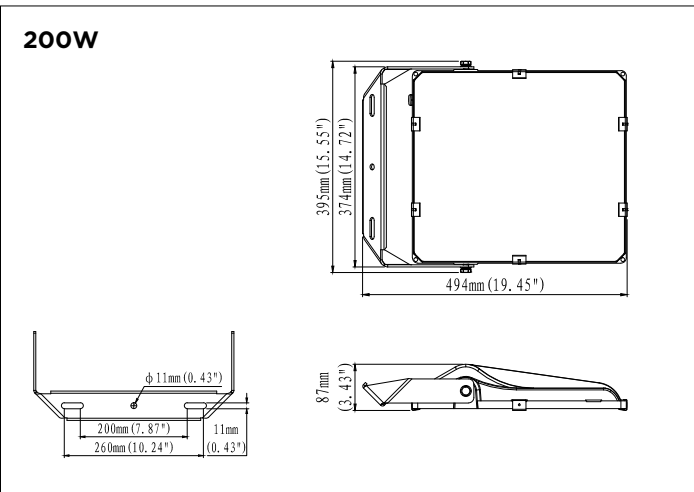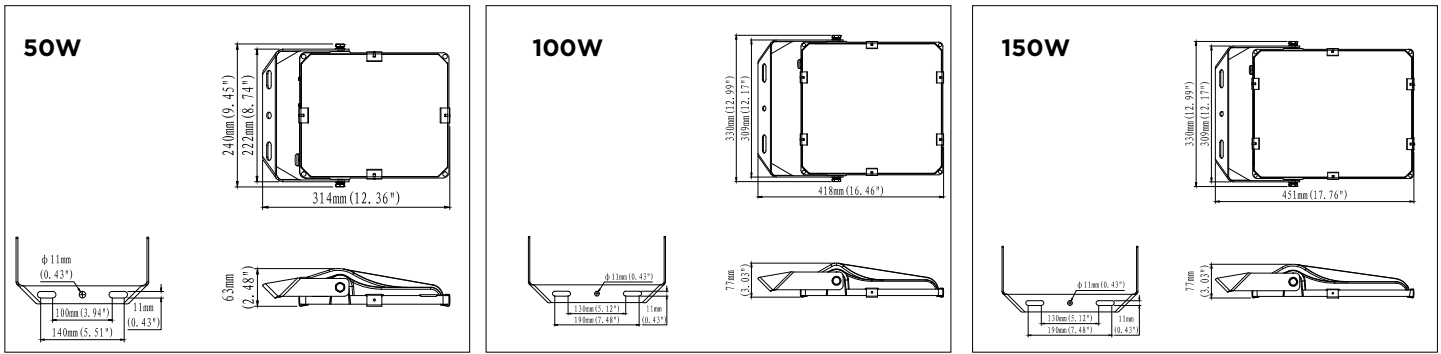| Model:	PLIPHXP50	PLIPHXP100	PLIPHXP150	PLIPHXP200	PLIPHXP300
Optical Characteristics					
Rated Wattage	50W	100W	150W	200W	300W
Lumens	6750	13500	20250	27000	40500
System Efficacy	135Lm/W				
Colour TemperatureCCT	5000K (4000K / 3000K / 2200K Amber Turtle Friendly)				
CRI (Ra)	>70				
Reported L70	>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					
Option 1	Trunion Bracket Mount				
Option 2	Pole Spigot 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

50W
240mm (9. 45")
222mm (8. 74")
314mm (12. 36")
φ11mm (0. 43")
100mm (3. 94")
140mm (5. 51")
11mm (0. 43")
63mm (2. 48")

100W
330mm (12. 99")
309mm (12. 17")
418mm (16. 46")
φ11mm (0. 43")
130mm (5. 12")
190mm (7. 48")
11mm (0. 43")
77mm (3. 03")

150W
330mm (12. 99")
309mm (12. 17")
451mm (17. 76")
φ11mm (0. 43")
130mm (5. 12")
190mm (7. 48")
11mm (0. 43")
77mm (3. 03")

200W
395mm (15. 55")
374mm (14. 72")
494mm (19. 45")
φ11mm (0. 43")
200mm (7. 87")
260mm (10. 24")
11mm (0. 43")
87mm (3. 43")

300W
465mm (18. 31")
444mm (17. 48")
567mm (22. 32")
φ12mm (0. 47")
200mm (7. 87")
280mm (11. 02")
12mm (0. 47")
97mm (3. 82")

PHOTOMETRIC DIAGRAMS

F00801/65° x 120°
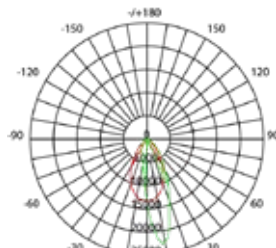
F01601/30° x 60°
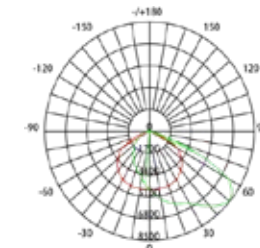
F01602/65° x 120° FT
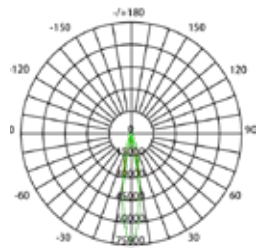
F01603/15°
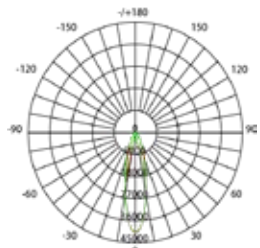
F01604/30°
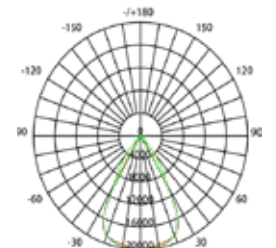
F01605/60°
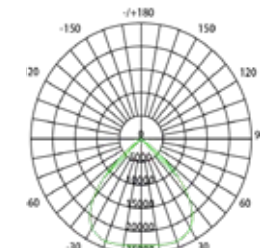
F01606/90°

HIGH-POWER FLOODLIGHTS

ORDERING METHODOLOGY

PLI-PHXP

XXX WATTS	**XX** CCT	**XX** LENS TYPE
50W	50 (5000K)	01 (F00801)
100W	40 (4000K)	02 (F01601)
150W	30 (3000K)	03 (F01602)
200W	20 (2200K)	04 (F01603)
300W		05 (F01604)
		06 (F01605)
		07 (F01606)

ACCESSORIES

42MM POLE MOUNT BRACKET	PLIPHXP/PM42
60MM POLE MOUNT BRACKET	PLIPHXP/PM60
76MM POLE MOUNT BRACKET	PLIPHXP/PM76
WIRE GUARD	PLIPHXP/WG
ANTI CORROSION/MARINE GRADE VERSION	PLIPHXP/AC

Wire Guard

42mm/60mm/76mm Pole Mount Bracket

Phoenix Plus Anti Corrosion

RAIDER SERIES

HIGH-POWER FLOODLIGHTS

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

SPECIFICATIONS

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	5000K (4000K / 3000K)				
CRI (Ra)	>70				
Reported L70	>50,000 Hours				
Lens Optic Type	10° / 15° / 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
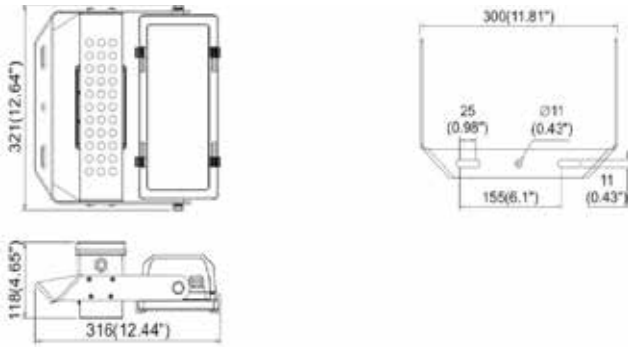
400W/419*340*222
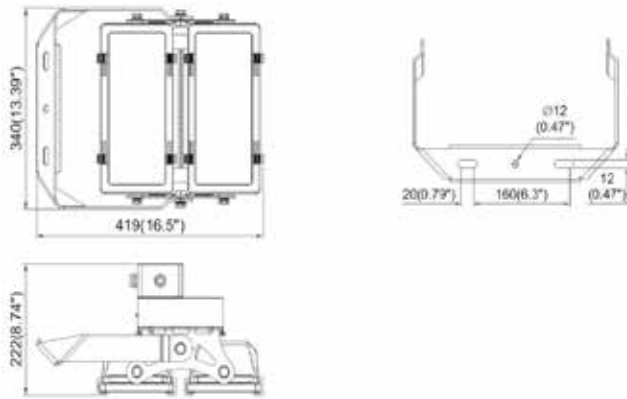
600W/529*340*226
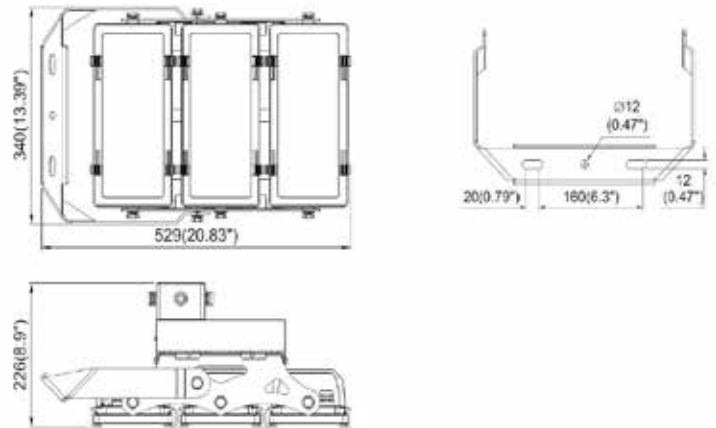
800W/674*385*368
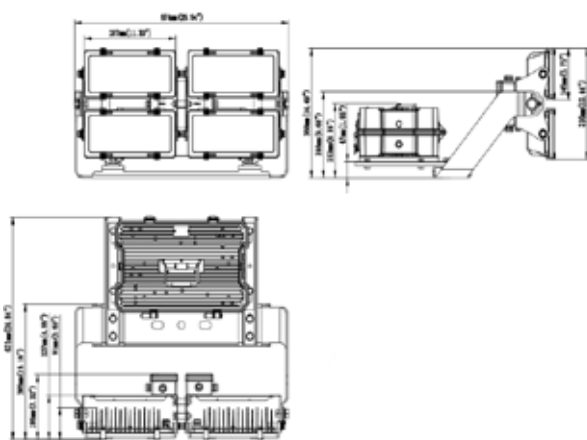
1200W/674*387*473
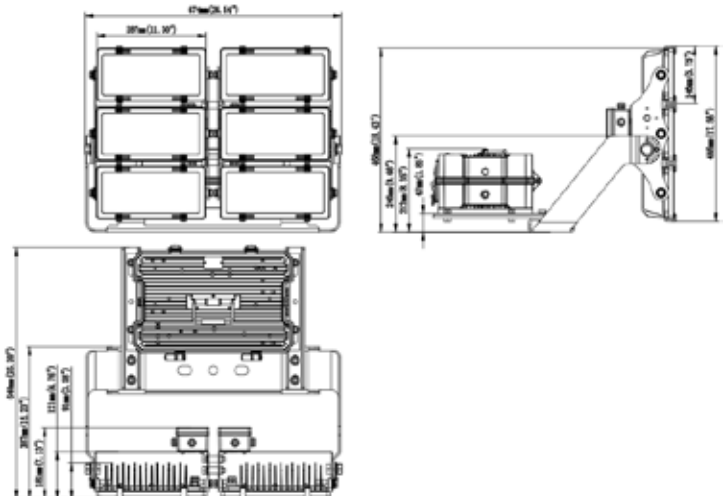
HIGH-POWER FLOODLIGHTS

ORDERING METHODOLOGY

PLI-RDR

XXX WATTS	**XX** CCT	**XX** LENS TYPE
200W	50 (5000K)	01 (F01601)
400W	40 (4000K)	02 (F01602)
600W	30 (3000K)	03 (F01603)
800W		04 (F01604)
1200W		05 (F01605)
		06 (F01606)

ACCESSORIES

TRUNNION MOUNT BRACKET   PLIRDR/TM
VISOR   PLIRDR/VIS

Optional Visor

PHOTOMETRIC DIAGRAMS
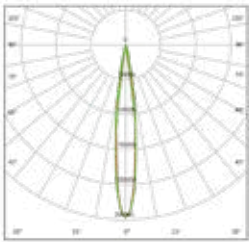
F06001/10°
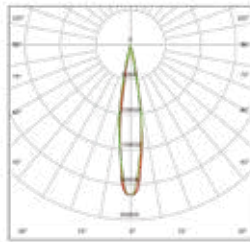
F06002/15°
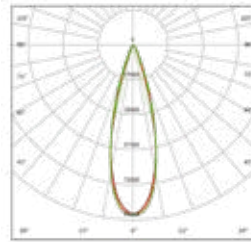
F06003/30°
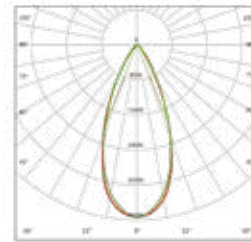
F06005/45°
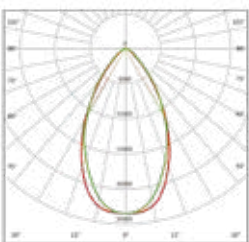
F06006/60°
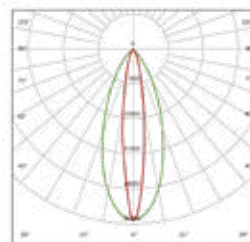
F06004/15° x 40°
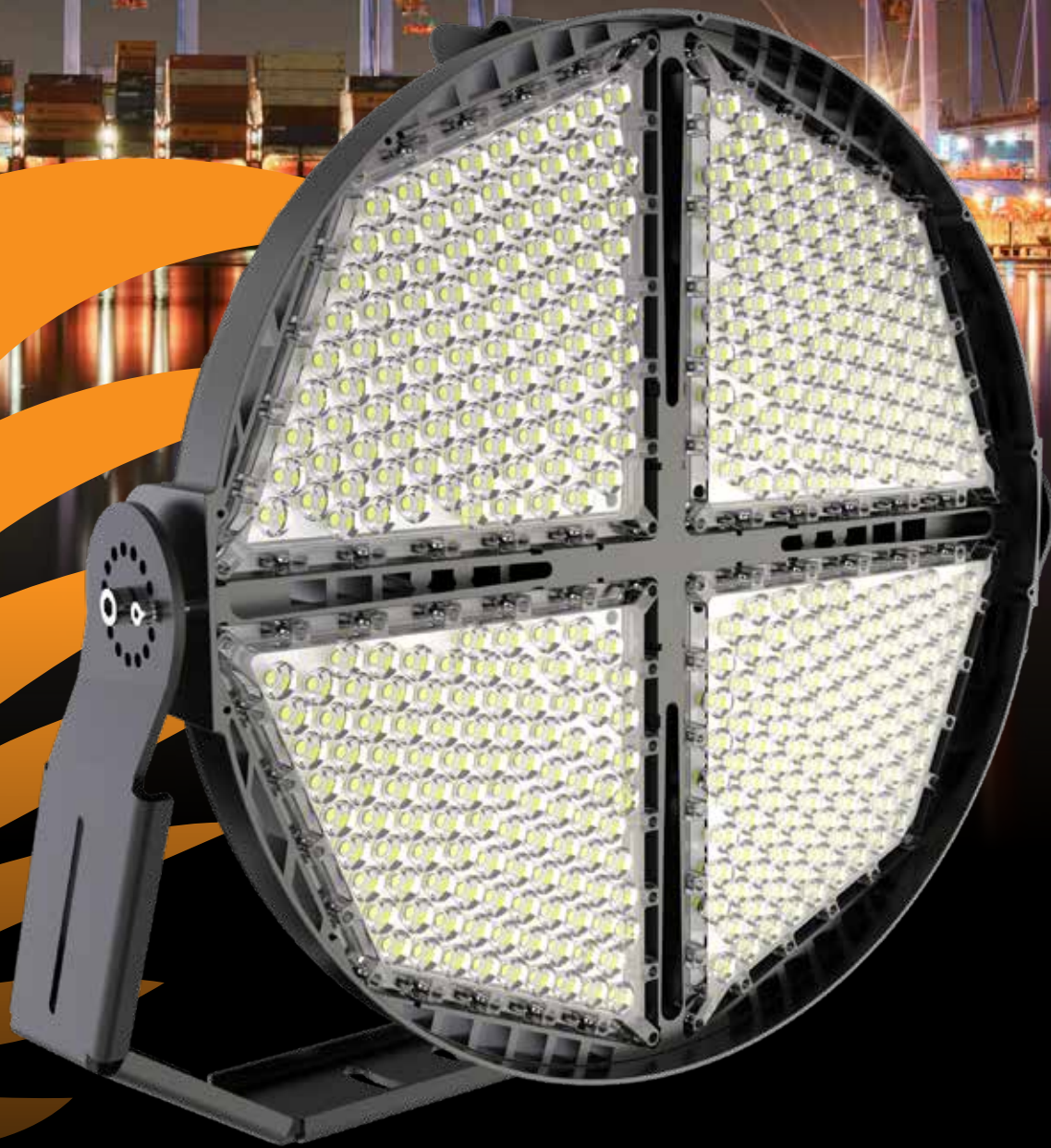
HAWK

HIGH-POWER FLOODLIGHTS

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

SPECIFICATIONS

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° / 60°	
Electrical Characteristics		
Input	100-277V (347/480V Optional)	
Frequency	50Hz	
Powerfactor	>0.96	
Total Harmonic Distortion	<20%	
Environment		
IP Rating	IP66	
Impact Rating	IK10	
Operating Temperature	-40°C To 50°C	
Product Material and Mounting		
Option 1	Trunnion Mount Bracket	
Product Material	Powder-Coated Die Cast Aluminium	
Lens / Optics Material	Polycarbonate Lens	
Dimensions and Weights		
Product Dimensions	545*275.5*563.5	
Product Weight	27.0KG	
Packaging Dimensions	800*740*420	
Gross Weight	29.0KG	
Warranty and Certifications		
Warranty	5 Year Warranty	
Certifications	CE / RoHS	

HIGH-POWER FLOODLIGHTS

DIMENSIONS

545,00 (21.46")

275,50 (10.85")

563,50 (22.19")
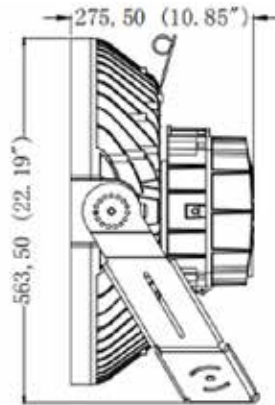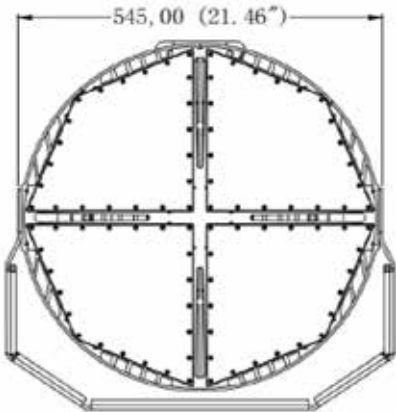
Integral Driver

PHOTOMETRIC DIAGRAMS
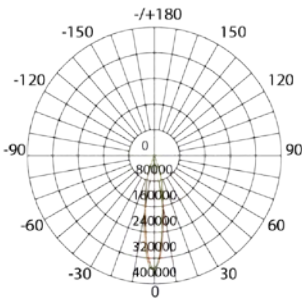
AVERAGE BEAM ANGLE(50%):18.2DEG
UNIT:cd
— C0/180 Ic:353054   — C90/270 Ic:354895
9.2,9.1   10.0,8.2

15°
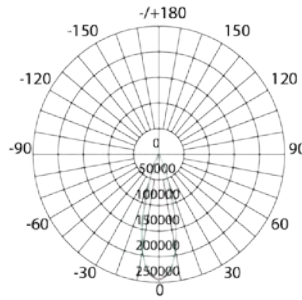
AVERAGE BEAM ANGLE(50%):29.8 DEG
UNIT:cd
— C0/180,29.5deg   — C60/240,29.9deg
— C30/210,29.6deg   — C90/270,30.1deg

30°
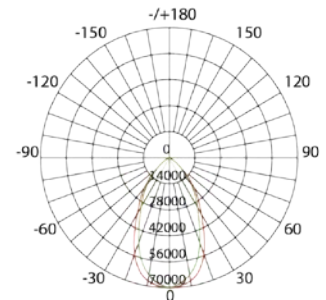
AVERAGE BEAM ANGLE(50%):57.4 DEG
UNIT:cd
— C0/180 Ic:69654   — C90/270 Ic:69607
30.1,30.1   27.3,27.3

60°

ORDERING METHODOLOGY

PLI-HWK

XXX WATTS	**XX** CCT	**XX** BEAM ANGLE	**XX** 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

HIGH-POWER FLOODLIGHTS

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HAWK JNR

HIGH-POWER FLOODLIGHTS

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

SPECIFICATIONS

Model:	PLIHWKJ315	PLIHWKJ460	PLIHWKJ580	PLIHWKJ720
Optical Characteristics				
Rated Wattage	315W	460W	580W	720W
Lumens	51975	75900	95700	118800
System Efficacy	165Lm/W			
Colour Temperature CCT	5700K (5000K / 4000K / 3000K)			
CRI (Ra)	>70 (>80 Optional)			
Reported L70	>50,000 Hours			
Lens Optic Type	15° / 30° / 60°			
Electrical Characteristics				
Input	100-270VAC (200-480V Optional)			
Frequency	50Hz			
Powerfactor	>0.96			
Total Harmonic Distortion	<20%			
Environment				
IP Rating	IP66			
Impact Rating	IK10			
Operating Temperature	- 40°C To 50°C			
Product Material and Mounting				
Option 1	Trunnion Mount Bracket			
Option 2	Rotatable Bracket			
Product Material	Powder-Coated Die Cast Aluminum (Black)			
Lens / Optics Material	Polycarbonate 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°
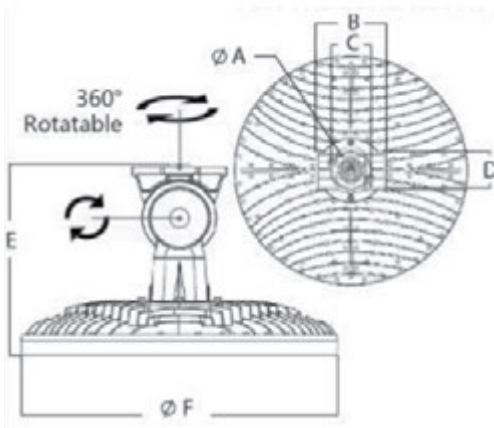
HAWKJ/315W

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
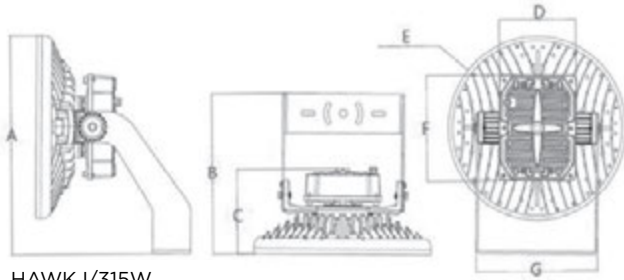
HAWKJ/315W

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")
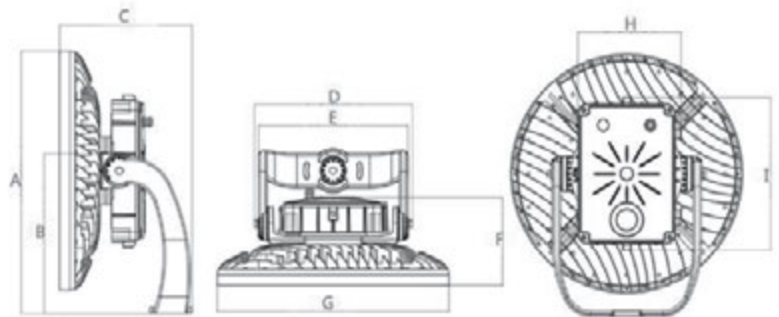
HAWKJ/460W-720W

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

15°

30°

60°

48

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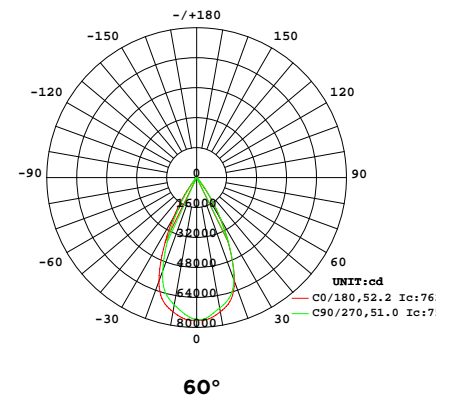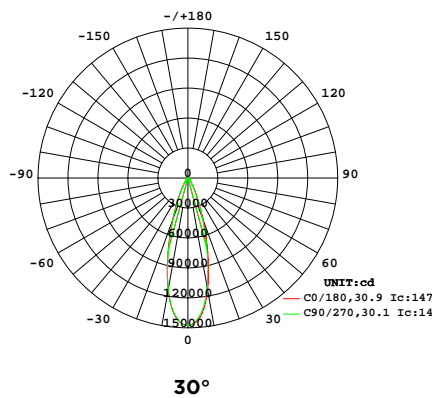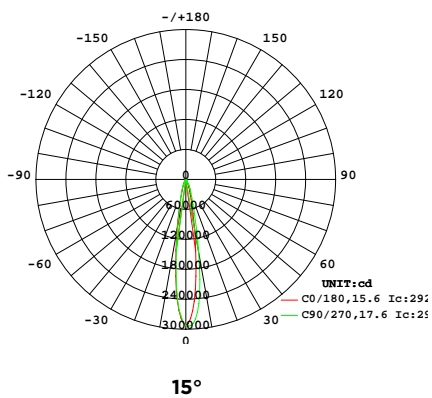
HIGH-POWER FLOODLIGHTS

ORDERING METHODOLOGY

PLI-HWKJ

XXX
WATTS

315W
460W
580W
720W

XX
CCT

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

XX
BEAM ANGLE

01 (15°)
02 (30°)
03 (60°)

ACCESSORIES

TRUNNION MOUNT BRACKET   PLIHWKJ/TM
360° ROTATABLE BRACKET   PLIHWKJ/RB
VISOR   PLIHWKJ/VIS

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PHOENIX CHALLENGER

HIGH-POWER FLOODLIGHTS

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 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

HIGH-POWER FLOODLIGHTS
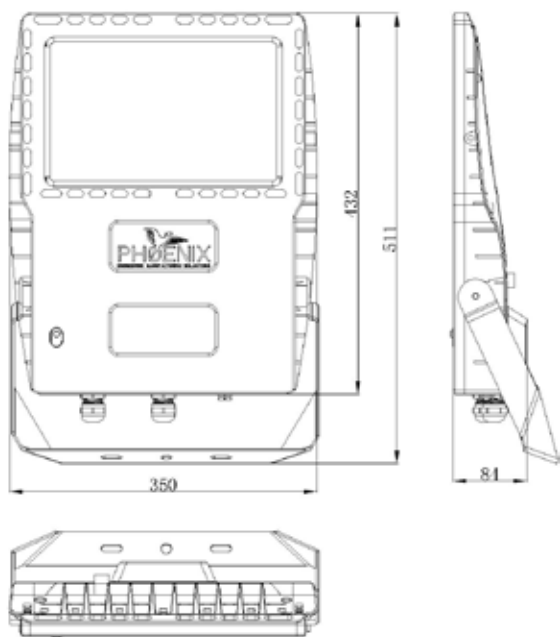
DIMENSIONS

PHOTOMETRIC DIAGRAMS

AVERAGE BEAM ANGLE(50%):90.0 DEG

155° x 60°

HIGH-POWER FLOODLIGHTS

ORDERING METHODOLOGY

PLI-CHA

XXX WATTS	XX FUNCTION	X CONTROLS	XX MOUNTING
50W	ST (STANDARD)	X (NONE)	SP (SPIGOT ADAPTOR)
100W	EM (EMERGENCY)	P (PHOTO SENSOR)	UB (U BRACKET)
150W		M (MOTION SENSOR)	ST (STIRRUP MOUNT)
		D (DAYLIGHT SENSOR)	
		R (RS485 DIMMER)	
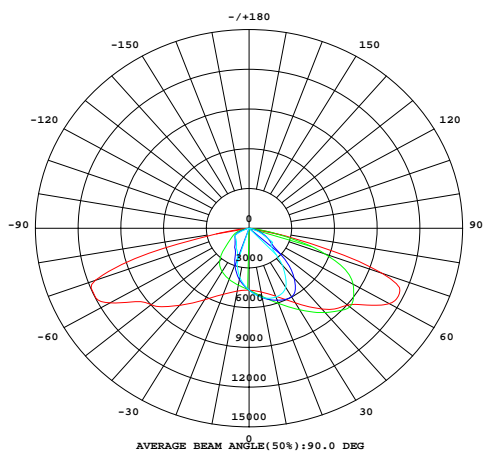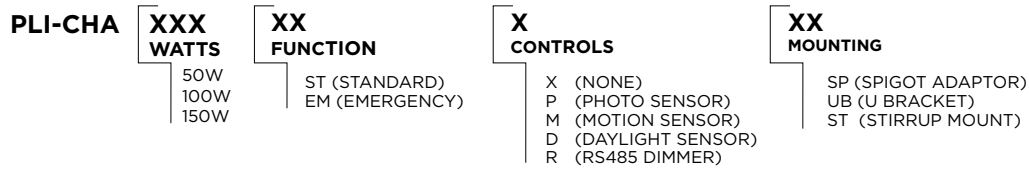
ACCESSORIES

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
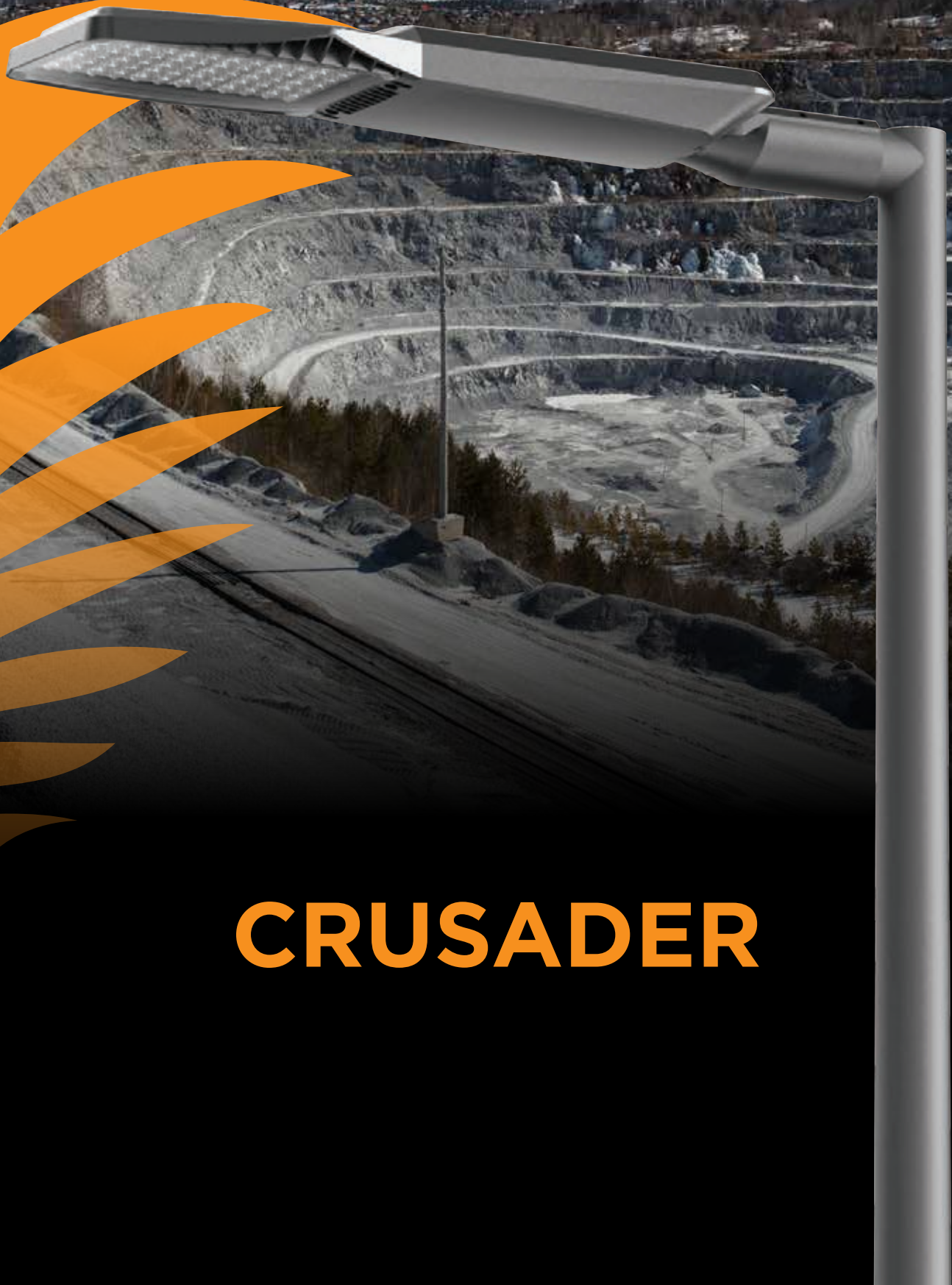
CRUSADER

AREA LIGHTING

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

SPECIFICATIONS

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 / 5700K / 5000K / 4000K / 3000K								
CRI (Ra)	>70 (>80 Optional)								
Reported L70	>50,000 Hours								
Lens Optic Type	Type II-M / Type 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	Spigot Mount 60mm								
Option 2	Spigot Mount 76mm								
Product Material	Die Casting Aluminium								
Lens / Optics Material	Tempered Glass								
Dimensions and Weights									
Product Dimensions	670*201*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								

AREA LIGHTING

DIMENSIONS

70W, 80W, 90W & 100W

72mm

670mm

201mm

110W, 120W, 130W, 140W & 150W

96mm

745mm

284mm

PHOTOMETRIC DIAGRAMS

TYPE II-M

UNIT:cd/klm
C0/180,156.5°
C30/210,123.2°
C60/240,79.5°
C90/270,70.0°

AVERAGE BEAM ANGLE(50%):107.3 DEG

TYPE II-S

UNIT:cd/klm
C0/180,151.8°
C30/210,56.9°
C60/240,60.4°
C90/270,56.4°

AVERAGE BEAM ANGLE(50%):110.2DEG

TYPE III

UNIT:cd/klm
C0/180,158.9°
C30/210,112.2°
C60/240,88.0°
C90/270,81.6°

AVERAGE BEAM ANGLE(50%):110.2DEG

TYPE IV

UNIT:cd/klm
C0/180,1397°
C30/210,129.3°
C60/240,106.5°
C90/270,988°

AVERAGE BEAM ANGLE(50%):118.6 DEG

TYPE V

UNIT:cd/klm
C0/180,1603°
C30/210,160.7°
C60/240,158.7°
C90/270,1573°

AVERAGE BEAM ANGLE(50%):159.2 DEG

AREA LIGHTING

ORDERING METHODOLOGY

PLI-CRU

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

ACCESSORIES

SPIGOT MOUNT BRACKET 60MM	PLICRU/SP60
SPIGOT MOUNT BRACKET 76MM	PLICRU/SP76
PE CELL	PLICRU/PE
ZIGBEE LIGHT CONTROLLER	PLICRU/ZLC
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

SPECIFICATIONS

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	>50,000 Hours							
Lens Optic Type	Type III / Type IV / Type V							
Electrical Characteristics								
Input	Input 100-277V (347-480V Optional)							
Frequency	50Hz							
Powerfactor	>0.96							
Total Harmonic Distortion	<20%							
Environment								
IP Rating	IP65							
Impact Rating	IK10							
Operating Temperature	-40°C To 50°C							
Product Material and Mounting								
Option 1	Spigot Mount (Type A, B, C, D, E - Refer To Dimensions)							
Product Material	Aluminium Alloy							
Lens / Optics Material	PC Lens							
Dimensions and Weights								
Product Dimensions	585*270*56			679*350*56			750*360*75	
Product Weight	4.8KG			5.5KG			10.5KG	
Packaging Dimensions	690*370*180			760*410*180			810*430*180	
Gross Weight	6.6KG			8.5KG			12.1KG	
Warranty and Certifications								
Warranty	5 Year Warranty							
Certifications	SAA / CE / RoHS							

DIMENSIONS
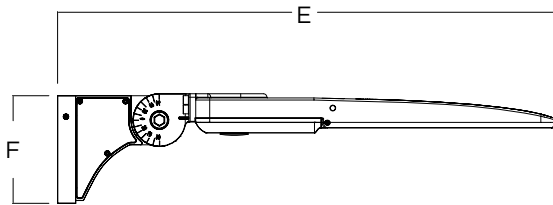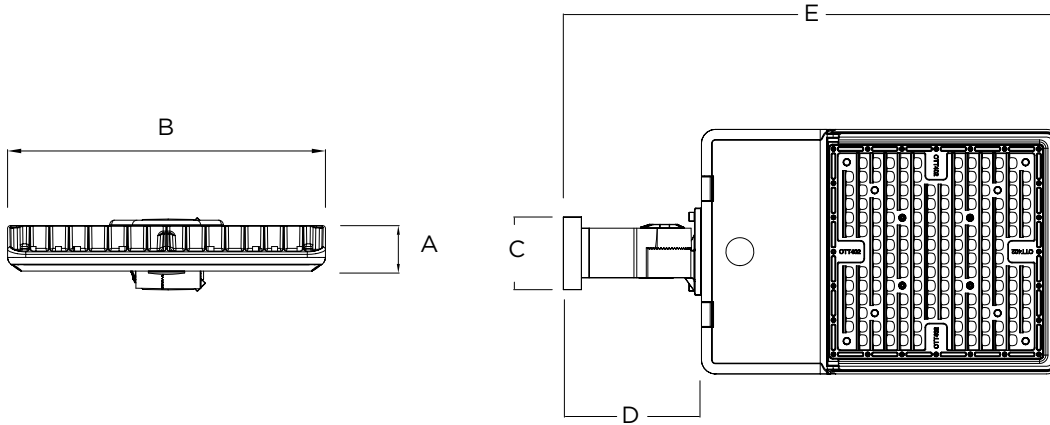
A	B	C	D	E	F
75W/115W/145W					
56MM	270MM	77MM	165MM	585MM	150MM
180W/200W/230W					
56MM	350MM	77MM	165MM	679MM	150MM
300W/420W					
75MM	360MM	77MM	165MM	750MM	150MM

PHOTOMETRIC DIAGRAMS

TYPE III
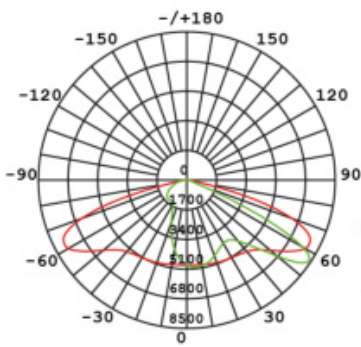
TYPE IV
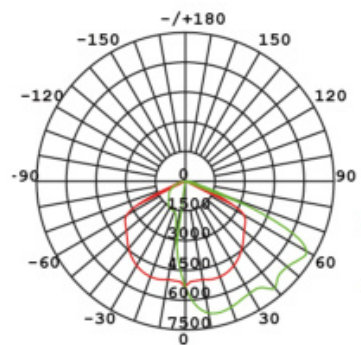
TYPE V
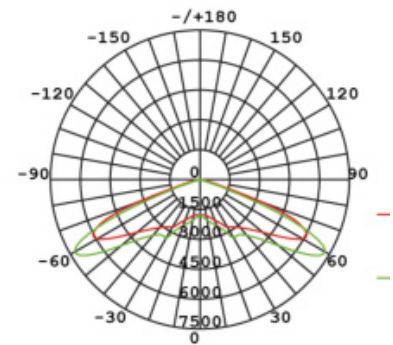
ACCESSORIES

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

ORDERING METHODOLOGY

PLI-FLI

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

ACCESSORIES

ADJUSTABLE SPIGOT MOUNT	PLIFLI/SP
PE CELL	PLIFLI/PE

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EAGLE

LED BATTENS WEATHERPROOF

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

SPECIFICATIONS

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 Request)		
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		

LED BATTENS WEATHERPROOF

DIMENSIONS

140.0

115.0

DIM (MM)

1610.0

1310.0

700.0
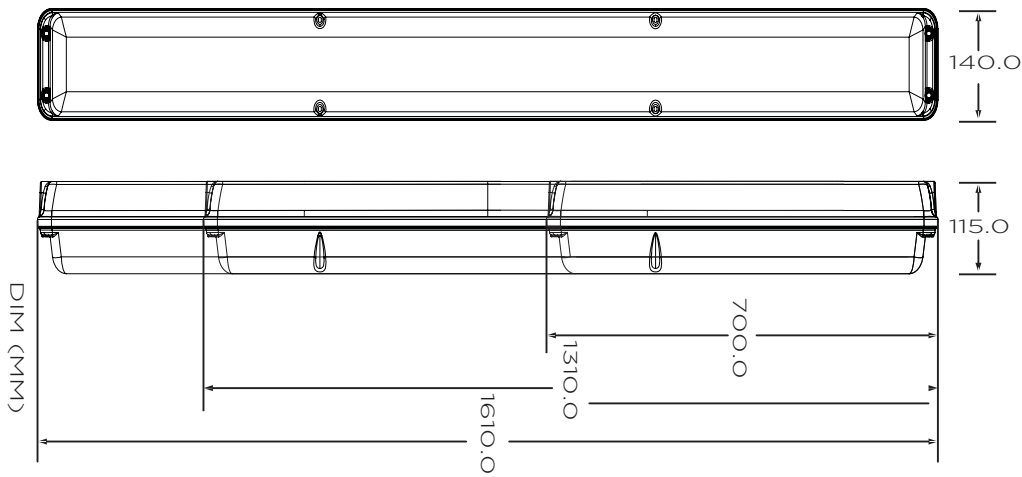
PHOTOMETRIC DIAGRAMS
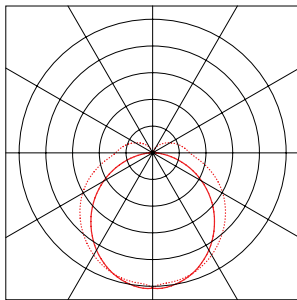
120°

ACCESSORIES
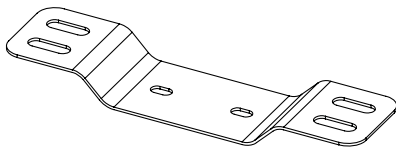
Ceiling Mount Bracket
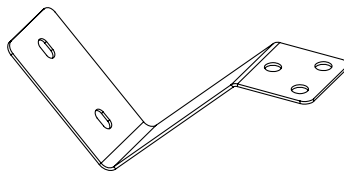
Angled Wall Mount Bracket
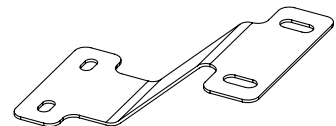
Surface Mount Bracket
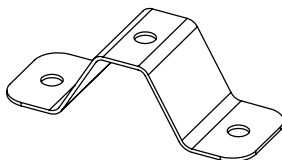
Pipe Clamp Kit
(40mm OD Pipe)
(50mm OD Pipe)
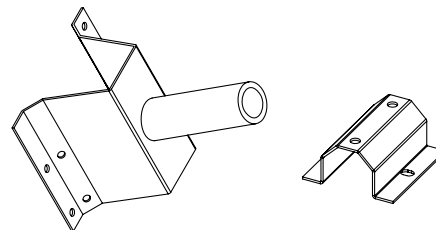
Wall Mount Bracket Kit

LED BATTENS WEATHERPROOF

ORDERING METHODOLOGY

PLI-EGL

XX **WATTS**	XX **CCT**	XX **FUNCTION**
24W	50 (5000K)	ST (STANDARD)
48W	40 (4000K)	EM (EMERGENCY)
72W	30 (3000K)	

ACCESSORIES

CEILING MOUNT BRACKET	PLIEGL/CM
WALL MOUNT BRACKET	PLIEGL/WM
ANGLED WALL MOUNT BRACKET	PLIEGL/AM
SURFACE MOUNT BRACKET	PLIEGL/SM
PIPE CLAMP KIT 40MM OD POLE	PLIEGL/PCL40
PIPE CLAMP KIT 50MM OD POLE	PLIEGL/PCL50

FALCON

LED BATTENS WEATHERPROOF

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

SPECIFICATIONS

Model:	PLIFAL20	PLIFAL20	PLIFAL40	PLIFAL60
Rated Wattage	20W	20W	40W	60W
Lumens	2000	2000	4000	6000
System Efficacy	100Lm/W			
Colour Temperature CCT	5000K (4000K / 3000K)			
CRI (Ra)	>80			
Reported L70	>50,000 Hours			
Lens Optic Type	120°			
Electrical Characteristics				
Input	220-240VAC			
Frequency	50Hz			
Powerfactor	>0.90			
Total Harmonic Distortion	<20%			
Environment				
IP Rating	IP65			
Impact Rating	IK08			
Operating Temperature	-20°C To 40°C			
Product Material and Mounting				
Option 1	Surface Mount Clips			
Product Material	PC Body, Steel Gear Tray			
Lens / Optics Material	PC Lens			
Dimensions and Weights				
Product Dimensions	665*90*88	1265*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 / CE / RoHS			

LED BATTENS WEATHERPROOF

DIMENSIONS

15mm
10mm
657mm
400mm
20W/665*90*88

15mm
10mm
1267mm
860mm
20W/40W/ 1265*90*88

15mm
10mm
1567mm
1027mm
60W/1565*90*88

PHOTOMETRIC DIAGRAMS

20W

40W

60W

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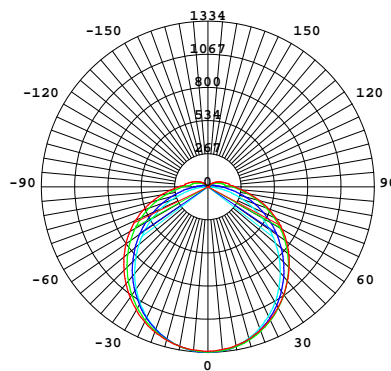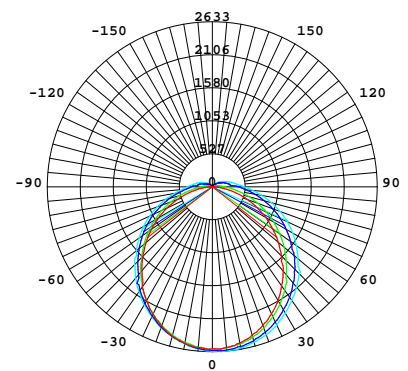
LED BATTENS WEATHERPROOF

ORDERING METHODOLOGY

PLI-FAL

XX WATTS	**XX** CCT	**XX** DIMENSIONS	**XX** FUNCTION
20W	50 (5000K)	01 (20W/665*90*88)	ST (STANDARD)
40W	40 (4000K)	02 (20W/1265*90*88)	EM (EMERGENCY)
60W	30 (3000K)		

ACCESSORIES

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

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KESTREL

LED BATTENS WEATHERPROOF

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.
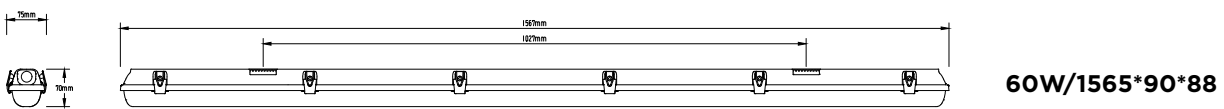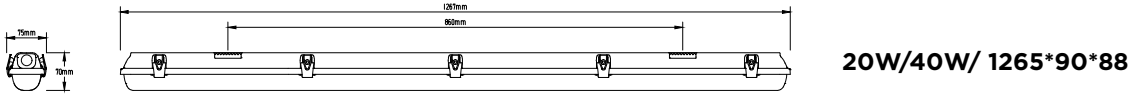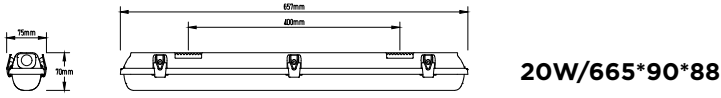
TYPICAL APPLICATIONS

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
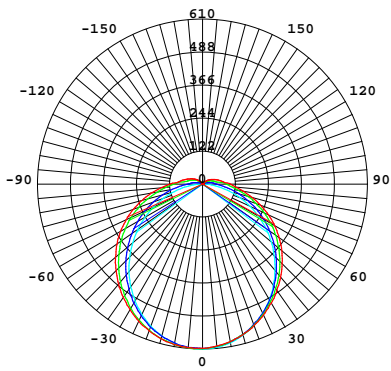
SPECIFICATIONS

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 Mounting								
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*116*100		1200*116*100			1500*116*100		
Product Weight	1.5KG		3.0KG			4.0KG		
Packaging Dimensions	630*268*232		1230*268*232			1530*268*232		
Gross Weight	2.0KG		3.5KG			4.5KG		
Warranty and Certifications								
Warranty	5 Year Warranty							
Certifications	SAA / CE / RoHS							

LED BATTENS WEATHERPROOF

DIMENSIONS

L = 600MM / 1200MM / 1500MM

265.75   265.75   265.75   265.75

100

116

150

46

760

970
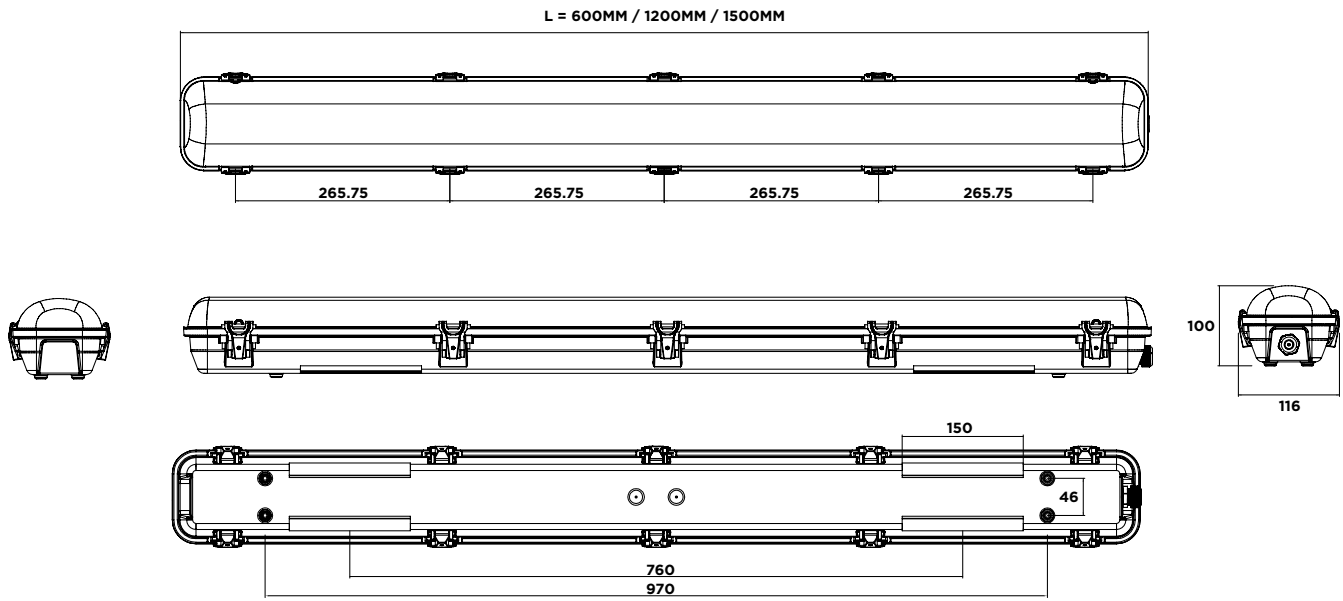
PHOTOMETRIC DIAGRAMS
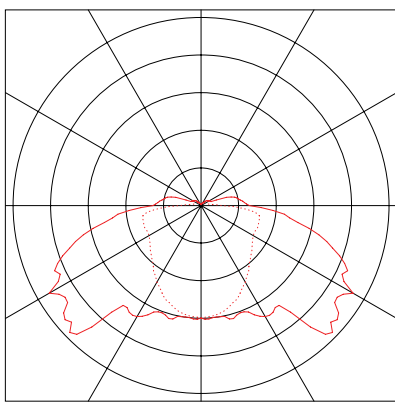
120°

LED BATTENS WEATHERPROOF

ORDERING METHODOLOGY

PLI-KES

XX WATTS	**XX** CCT	**XX** DIMENSIONS
15W	65 (6500K)	01 (50W/1200*116*100)
20W	57 (5700K)	02 (50W/1500*116*100)
24W	50 (5000K)	
30W	40 (4000K)	
36W	30 (3000K)	
50W		
65W		

ACCESSORIES

BRACKET MOUNT	PLIKES/BM
SUSPENSION CHAIN	PLIKES/SC

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TEXL

LED BATTENS WEATHERPROOF

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
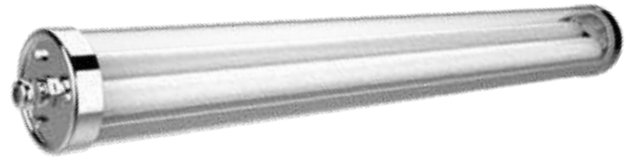
TYPICAL APPLICATIONS

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

SPECIFICATIONS

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 Lens / 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 (Tempered Glass, PMMA Optional)		
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		

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LED BATTENS WEATHERPROOF

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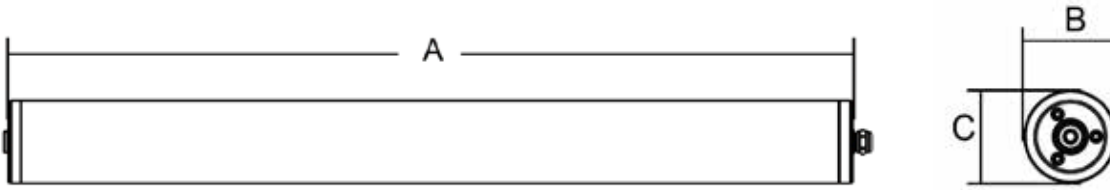
WATTAGE	SIZE A (MM)	SIZE B (MM)	SIZE C (MM)
20W	600MM	70MM	70MM
36W	1200MM	70MM	70MM
48W	1500MM	70MM	70MM

PHOTOMETRIC DIAGRAMS

120°
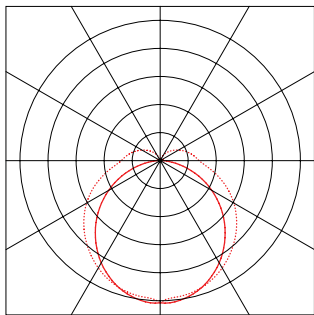
ORDERING METHODOLOGY

PLI-TXL

XX WATTS	XX CCT	XX LENS TYPE	XX FUNCTION
20W	65 (6500K)	PC (CLEAR GLASS)	ST (STANDARD)
36W	50 (5000K)	PO (OPAL GLASS)	EM (EMERGENCY)
48W	40 (4000K)	AC (PMMA CLEAR)	
	30 (3000K)	AO (PMMA OPAL)	
	G (GREEN)	TG (TEMPERED GLASS)	

ACCESSORIES

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

LED BATTENS WEATHERPROOF

Green Eyewash Available

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

SPECIFICATIONS

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 / 5700K / 5000K / 4000K / 3000K				
CRI (Ra)	>80				
Reported L70	>50,000 Hours				
Lens Optic Type	120° Polycarbonate Diffuser				
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	Tempered Glass or PC Lens				
Dimensions and Weights					
Product Dimensions	Refer to dimensions below				
Product Weight	2.2KG	3.6KG		4.8KG	
Packaging Dimensions	725*330*290	1325*165*150		1625*165*150	
Gross Weight	10.3KG (Ctn 10)	4.2KG		5.5KG	
Warranty and Certifications					
Warranty	5 Year Warranty				
Certifications	SAA				

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DIMENSIONS

POLYCARBONATE COVER

TEMPERED GLASS COVER

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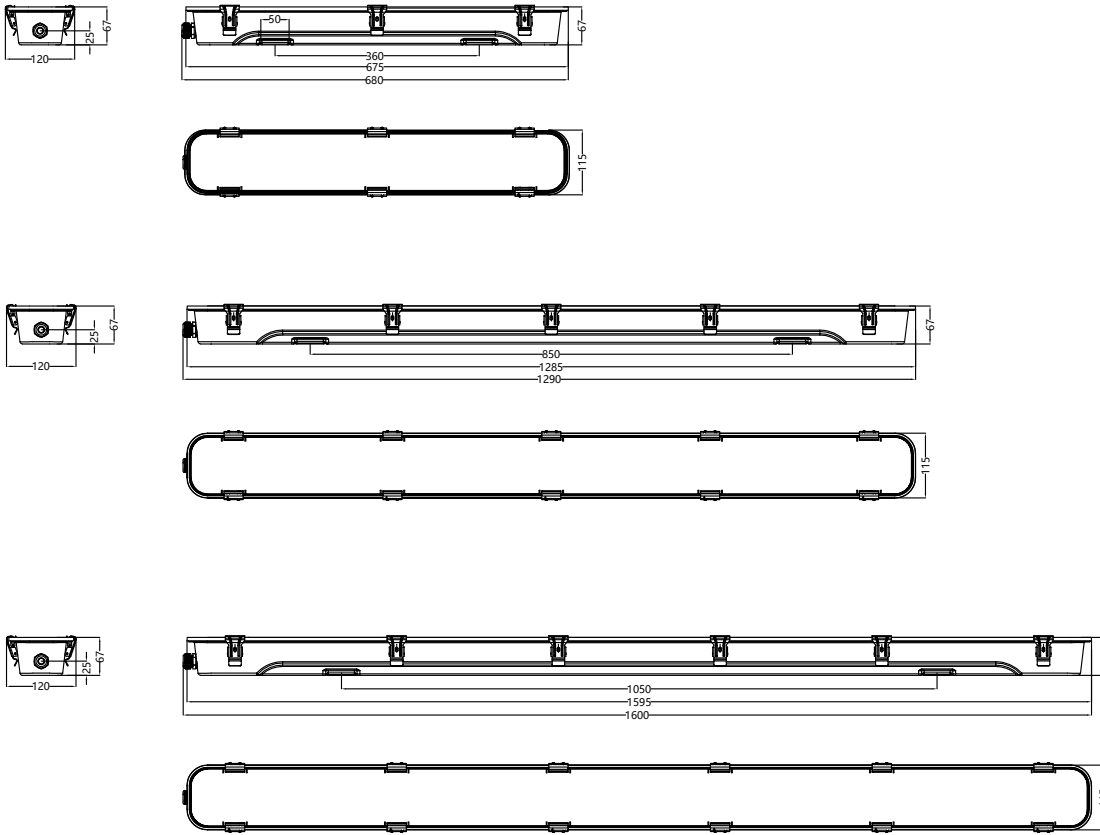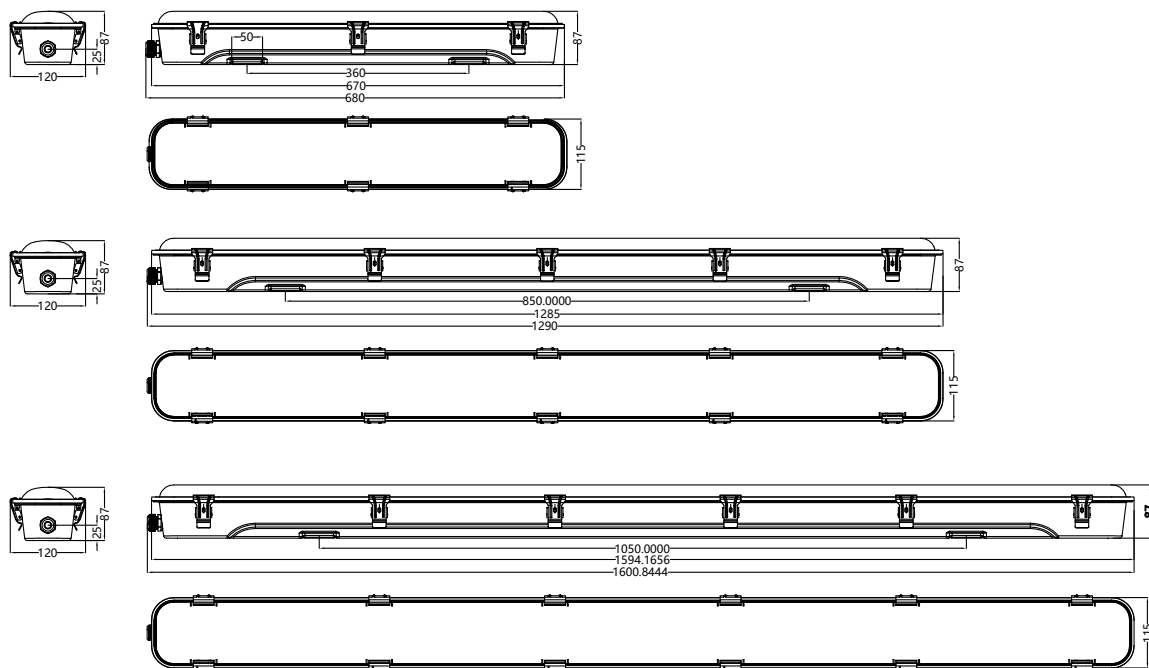
LED BATTENS WEATHERPROOF

ORDERING METHODOLOGY

PLI-INH

XX
WATTAGE

25W
35W
45W
50W
62W

XX
CCT

65 (6500K)
57 (5700K)
50 (5000K)
40 (4000K)
30 (3000K)

XX
LENS TYPE

01 (TEMPERED GLASS LENS)
02 (PC LENS)

XX
FUNCTION

ST (STANDARD)
EM (EMERGENCY)

ACCESSORIES

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

PHOTOMETRIC DIAGRAMS

120°

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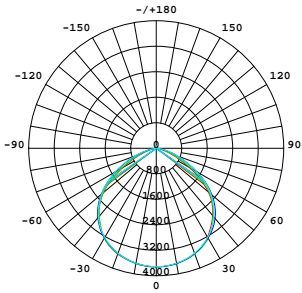
THUNDERBIRD

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

SPECIFICATIONS

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
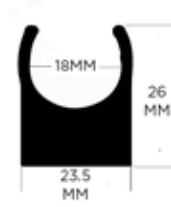
PIPE BASE

BLOCK HOLE POSITION MAP
*Suitable for 2.5mmsquared Cable

TERMINAL DIMENSIONS

PHOTOMETRIC DIAGRAMS

120°

ORDERING METHODOLOGY

PLI-THU **X**
WATTS

6W

ACCESSORIES

BRACKET MOUNT   PLITHU/BM

ULTRASWING

TOOL-LESS LOWERING POLES AND ACCESSORIES

GUARDIAN

LED HIGH & LOW BAYS

GUARDIAN

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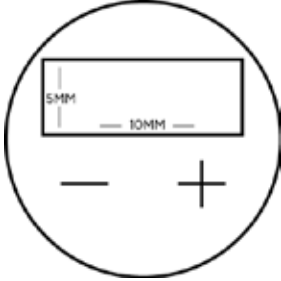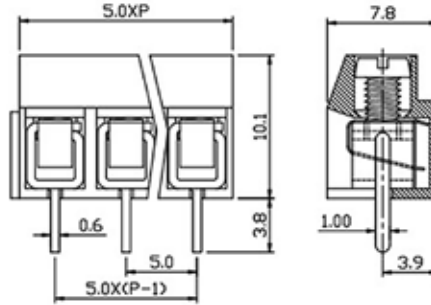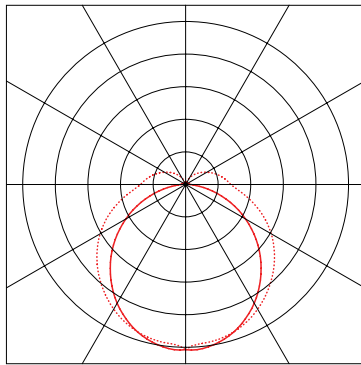ries, Warehouses and Workshops. It features a unique optical design that virtually eliminates glare with minimal impact on performance.

TYPICAL APPLICATIONS

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

SPECIFICATIONS

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	100-277VAC (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		

LED HIGH & LOW BAYS

DIMENSIONS

A	B	C	D
556mm	830mm	461mm	100mm

PHOTOMETRIC DIAGRAMS

15°	30°	60°	90°

AVERAGE BEAM ANGLE(50%):18.2DEG UNIT:cd

AVERAGE BEAM ANGLE(50%):29.8 DEG UNIT:cd

AVERAGE BEAM ANGLE(50%):57.4 DEG UNIT:cd

AVERAGE BEAM ANGLE(50%):79.3 DEG UNIT·cd
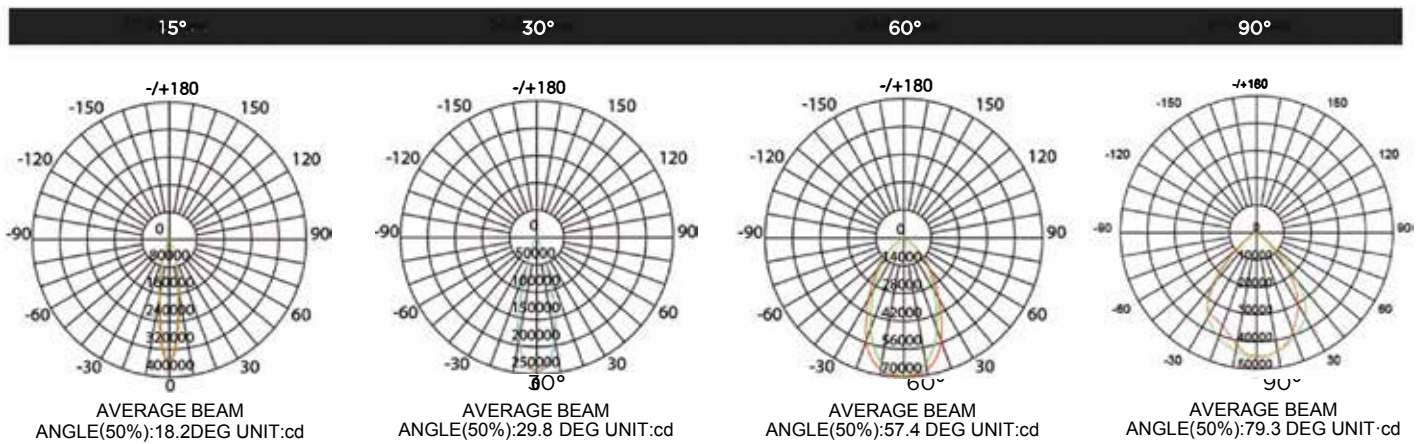
ORDERING METHODOLOGY

PLI-GRDN

XXX WATTS	XX CCT	XX BEAM ANGLE	X CONTROLS
300W	57 (5700K)	01 (15°)	X (NONE)
400W	50 (5000K)	02 (30°)	M (MOTION)
460W	40 (4000K)	03 (60°)	D (1-10V)
	30 (3000K)	04 (90°)	

ACCESSORIES

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

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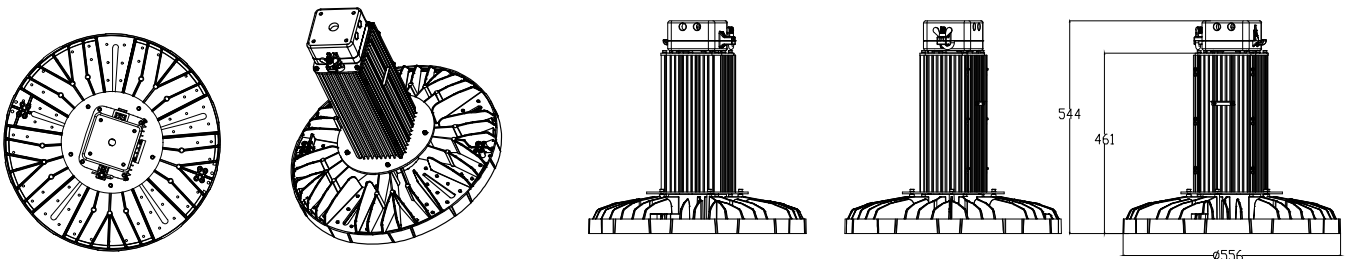
HARRIER
EXTREME

LED HIGH & LOW BAYS

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.
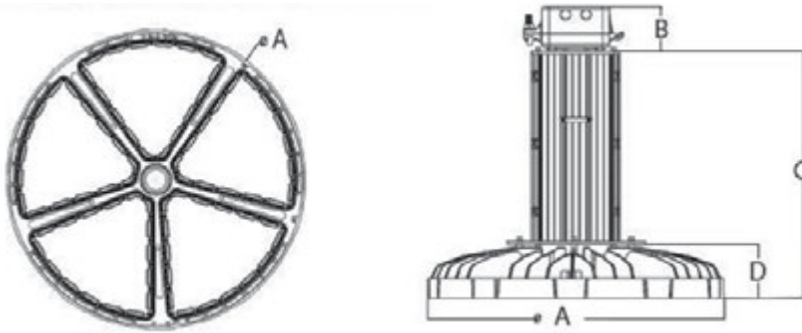
TYPICAL APPLICATIONS

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

SPECIFICATIONS

| 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	Toughened Glass and PC Lens				
Dimensions and Weights					
Product Dimensions	Refer to dimensions below				
Product Weight	2.9KG		4.6KG		6.2KG
Packaging Dimensions	400*400*300		480*480*310		580*580*330
Gross Weight	3.8KG		6.0KG		7.2KG
Warranty and Certifications					
Warranty	5 Year Warranty				
Certifications	SAA / CE / RoHS				

** High lumen output up to 170Lm/W available on request

LED HIGH & LOW BAYS

DIMENSIONS
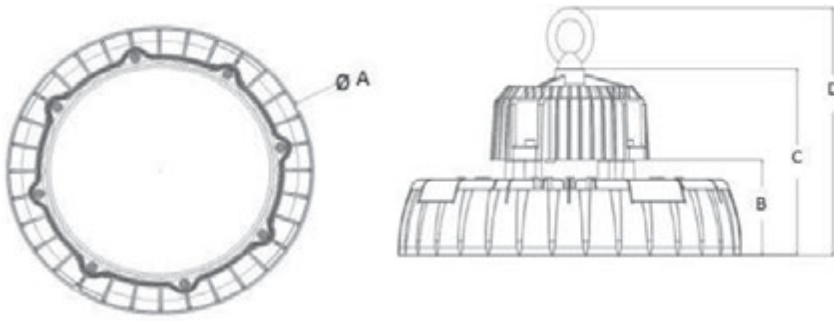
A	B	C	D
60W and 100W Models			
248mm	710mm	138mm	182mm
150W Model			
319mm	710mm	138mm	183mm
200W and 240W Models			
400mm	710mm	141mm	202mm

PHOTOMETRIC DIAGRAMS

60°	90°	120°
AVERAGE BEAM ANGLE(50%):60.1 DEG UNIT:cd	AVERAGE BEAM ANGLE(50%):92.9 DEG UNIT:cd	AVERAGE BEAM ANGLE(50%):126.9 DEG UNIT:cd
–C0/180,30.9 –C0/270,29.1	–C0/180,91.5 –C0/270,94.3	–C0/180,129.0 –C0/270,124.9
60°	**90°**	**120°**
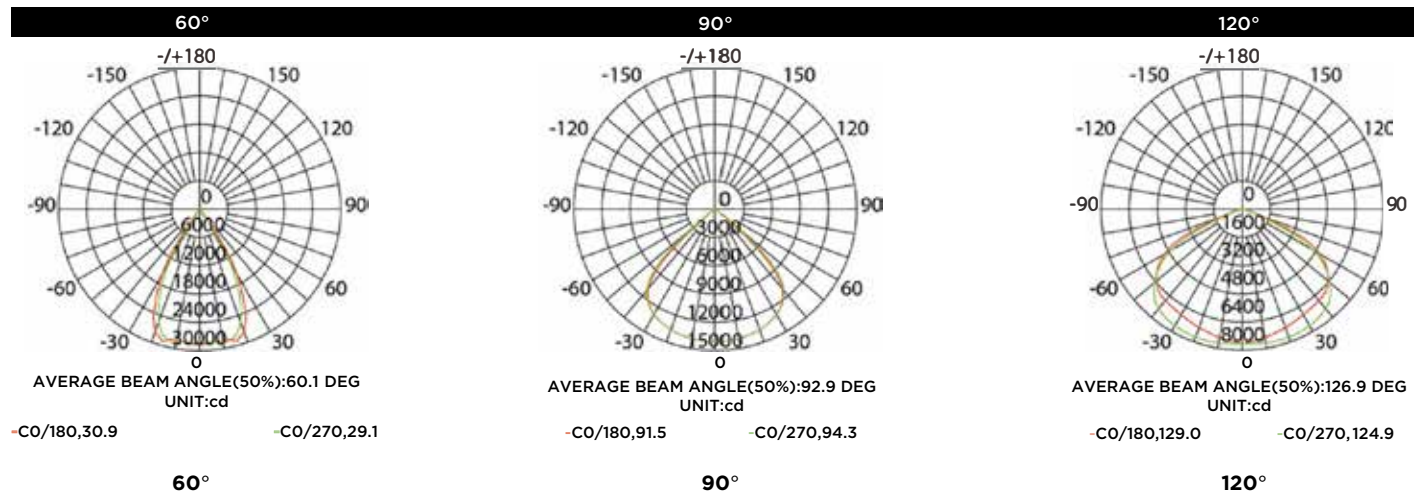
LED HIGH & LOW BAYS

ORDERING METHODOLOGY

PLI-HEX

XXX WATTS	**XX** CCT	**XX** BEAM ANGLE
60W	57 (5700K)	01 (60°)
100W	50 (5000K)	02 (90°)
150W	40 (4000K)	03 (120°)
200W	30 (3000K)	
240W		

ACCESSORIES

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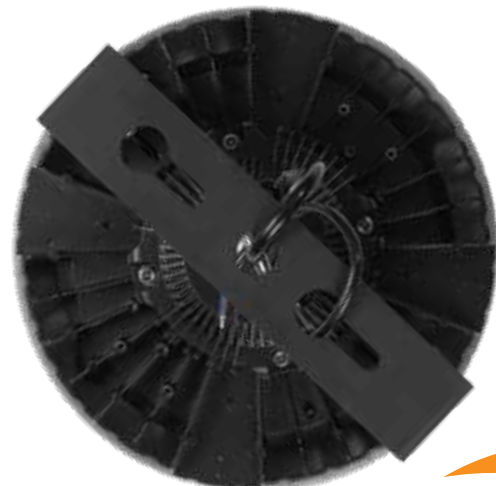
HARRIER PLUS

LED HIGH & LOW BAYS

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.

High Voltage Options Available

TYPICAL APPLICATIONS

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

SPECIFICATIONS

Model:	PLIHPL100	PLIHPL150	PLIHPL200	PLIHPL240
Optical Characteristics				
Rated Wattage	100W	150W	200W	240W
Lumens	16000	24000	32000	38400
System Efficacy	160Lm/W			
Colour Temperature CCT	5000K (6000K / 4000K)			
CRI (Ra)	>70 (>80, >90 Optional)			
Reported L70	>50,000 Hours			
Lens Optic Type	60° / 90° / 110°			
Electrical Characteristics				
Input	100-240VAC			
Frequency	50Hz			
Powerfactor	>0.95			
Total Harmonic Distortion	<15%			
Environment				
IP Rating	IP65			
Impact Rating	IK08			
Operating Temperature	-30°C To 50°C			
Product Material and Mounting				
Option 1	Eyebolt			
Option 2	Ceiling Mount U Bracket			
Product Material	Aluminum			
Lens / Optics Material	PC Lens			
Dimensions and Weights				
Product Dimensions	280*280*180		360*360*190	
Product Weight	3.08KG		4.78KG	
Packaging Dimensions	380*380*280		460*460*300	
Gross Weight	4.58KG		6.5KG	
Warranty and Certifications				
Warranty	5 Year Warranty			
Certifications	CE / RoHS			

LED HIGH & LOW BAYS

DIMENSIONS
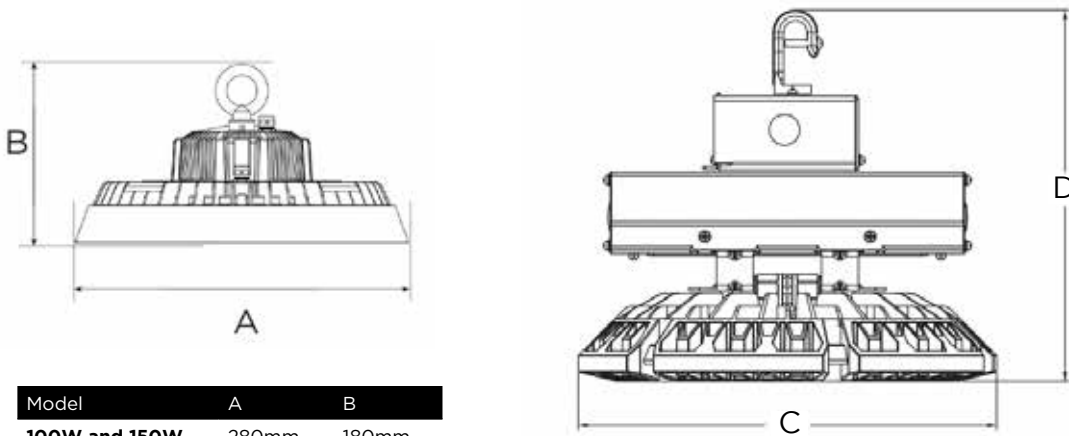
Model	A	B
100W and 150W	280mm	180mm
200W and 240W	360mm	190mm

PHOTOMETRIC DIAGRAMS
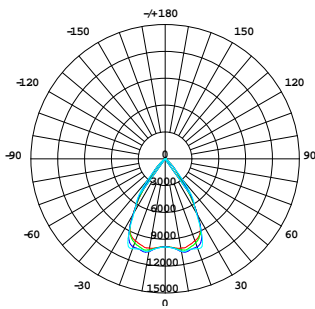
60°
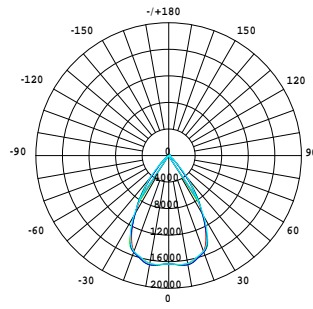
90°
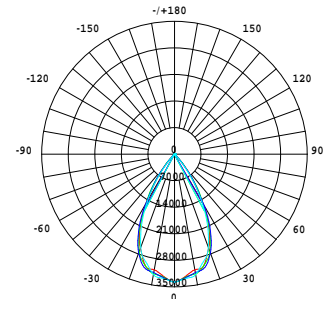
110°

ORDERING METHODOLOGY

PLI-HPL

XXX WATTS	**XX** CCT	**XX** BEAM ANGLE	**X** CONTROLS
100W	60 (6000K)	01 (60°)	X (NONE)
150W	50 (5000K)	02 (90°)	M (MOTION SENSOR)
200W	40 (4000K)	03 (110°)	D (DALI)
240W			

ACCESSORIES

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

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ROVER

LED HIGH & LOW BAYS

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.
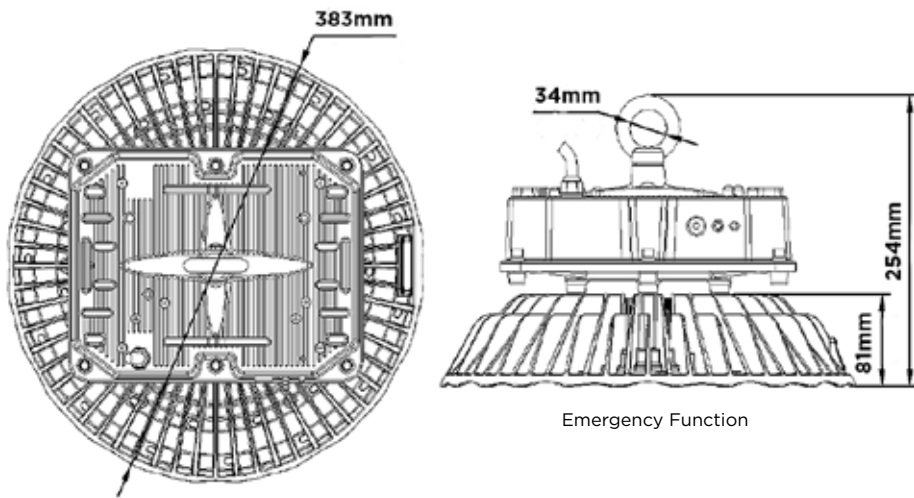
TYPICAL APPLICATIONS

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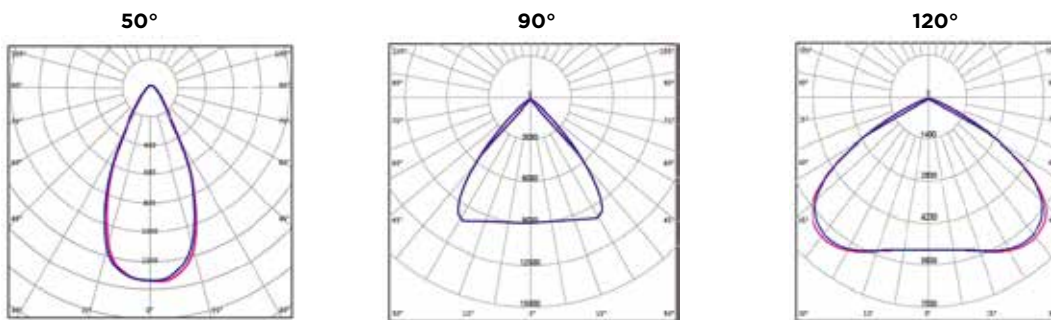
SPECIFICATIONS

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	140Lm/W					
Colour Temperature CCT	50000K (4000K / 3000K)					
CRI (Ra)	>70 (>80 Optional)					
Reported L70	>50,000 Hours					
Lens Optic Type	50° / 90° / 120°					
Electrical Characteristics						
Input	100-240VAC					
Frequency	50 / 60Hz					
Powerfactor	>0.9					
Total Harmonic Distortion	<20%					
Environment						
IP Rating	IP65					
Impact Rating	IK10					
Operating Temperature	-30°C To 50°C					
Product Material and Mounting						
Option 1	Eyebolt					
Option 2	Ceiling Mount Bracket (45° or 180°)					
Product Material	Aluminum Housing					
Lens/Optics Material	Tempered Glass (PC Lens Optional)					
Dimensions and Weights						
Product Dimensions	Refer to dimensions below					
Product Weight	7.0KG			7.3KG		7.6KG
Packaging Dimensions	440*255*449					
Gross Weight	7.9KG			8.7KG		9.6KG
Options						
Warranty	5 Year Warranty					
Certifications	SAA /CE /RoHS					

LED HIGH & LOW BAYS

DIMENSIONS

383mm

34mm

254mm

81mm

Emergency Function

PHOTOMETRIC DIAGRAMS

50°

90°

120°

ACCESSORIES

Aluminum Reflector

45° Ceiling Mount Bracket

180 Deg Bracket

Safety Chain

LED HIGH & LOW BAYS

ORDERING METHODOLOGY

PLI-ROV | **XXX** WATTS | **XX** CCT | **XX** BEAM ANGLE | **XX** LENS TYPE | **XX** FUNCTION | **XXX** CONTROLS

WATTS	CCT	BEAM ANGLE	LENS TYPE	FUNCTION	CONTROLS
100W	50 (5000K)	01 (50°)	TG (TEMPERED GLASS)	ST (STANDARD)	X (NONE)
120W	40 (4000K)	02 (90°)	PC (POLYCARBONATE	EM (EMERGENCY)	M (MOTION SENSOR)
150W	30 (3000K)	03 (120°)	LENS)		D (DIMMABLE 1-10V)
200W					P (PE CELL)
240W					DA (DALI)
300W					ZIG (ZIGBEE)

ACCESSORIES

EYEBOLT	PLIROV/EB
45° CEILING MOUNT BRACKET	PLIROV/CM1
180° CEILING MOUNT BRACKET	PLIROV/CM2
MOTION SENSOR	PLIROV/M
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.
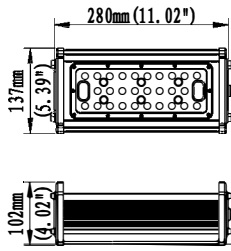
TYPICAL APPLICATIONS

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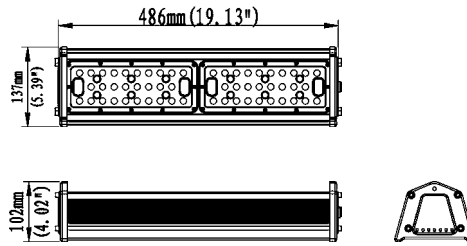
SPECIFICATIONS

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

30W

280mm (11. 02")
137mm (5. 39")
102mm (4. 02")

60W

486mm (19. 13")
137mm (5. 39")
102mm (4. 02")

90W

718mm (28. 27")
137mm (5. 39")
102mm (4. 02")

120W

718mm (28. 27")
275mm (10. 83")
102mm (4. 02")

150W

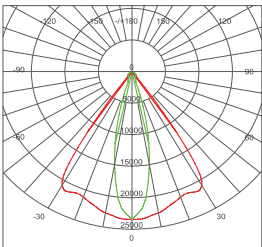948mm (37. 32")
137mm (5. 39")
102mm (4. 02")

180W

1178mm (46. 38")
137mm (5. 39")
102mm (4. 02")
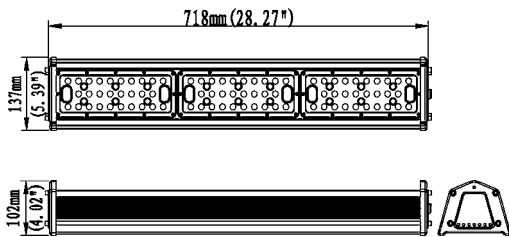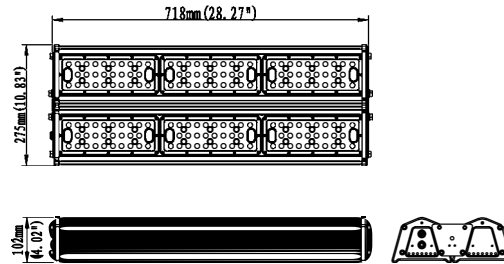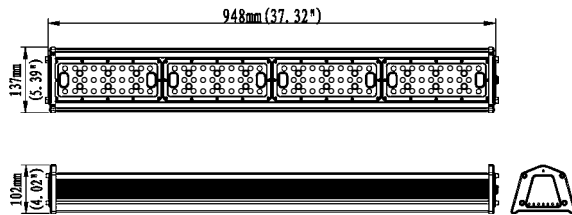
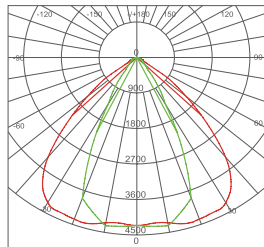## PHOTOMETRIC DIAGRAMS

L02801/90°

L02802/120°
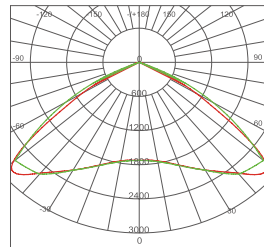
L02803/30° x 70°
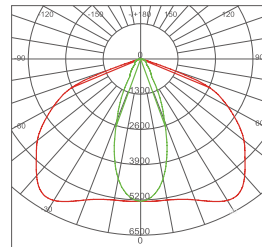
L02804/60° x 90°

L02805/40° x 130°

LINEAR LIGHTS

ORDERING METHODOLOGY

PLI-RAP

XX **WATTS**	XX **CCT**	XX **LENS TYPE**	XX **FUNCTION**
30W	50 (5000K)	01 (L02801/90°)	ST (STANDARD)
60W	40 (4000K)	02 (L02802/120°)	EM (EMERGENCY)
90W	30 (3000K)	03 (L02803/30° x 70°)	
120W		04 (L02804/60° x 90°)	
150W		05 (L02805/40° x 130°)	
180W			

ACCESSORIES

SURFACE MOUNT BRACKET	PLIRAP/SM
WIRE SUSPENSION MOUNT	PLIRAP/WM
PE CELL	PLIRAP/P
MOTION SENSOR	PLIRAP/M
DIMMABLE 1-10V DRIVER	PLIRAP/D
ZIGBEE SMART CONTROL	PLIRAP/ZIG
DALI	PLIRAP/DA
90° LENS	PLIRAP/01
120° LENS	PLIRAP/02
30° x 70° LENS	PLIRAP/03
60° x 90° LENS	PLIRAP/04
40° x 130° LENS	PLIRAP/05

24m

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

SPECIFICATIONS

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	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

PHOENIX
ENGINEERING & MANUFACTURING SOLUTIONS

DIMENSIONS

378mm

160mm

73.5mm
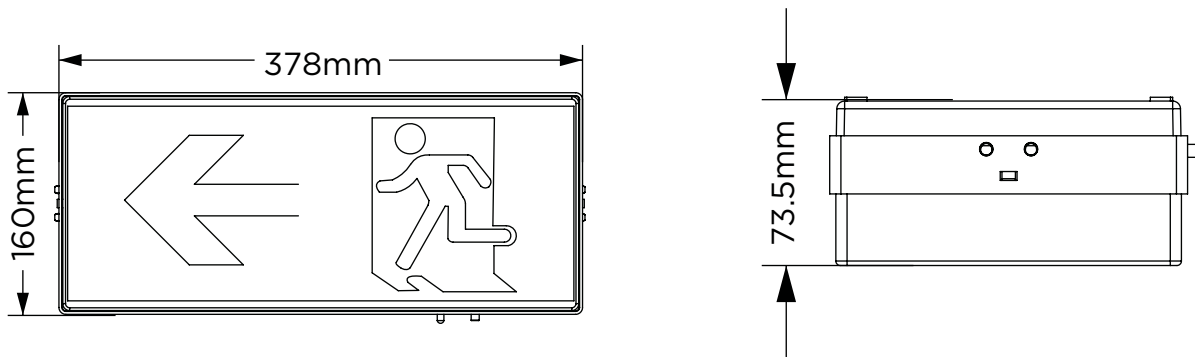
STANDARD DECAL SET

* Standard decal set included

ORDERING METHODOLOGY

PLI-RM1 | **X**
WATTS

3W

ACCESSORIES

WALL MOUNT BRACKET   PLIRM1/WM
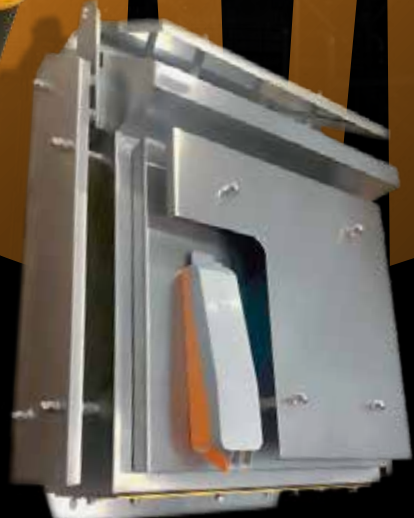
RUNNING MAN II

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

SPECIFICATIONS

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 Mounting	
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).

EXIT LIGHTING

DIMENSIONS
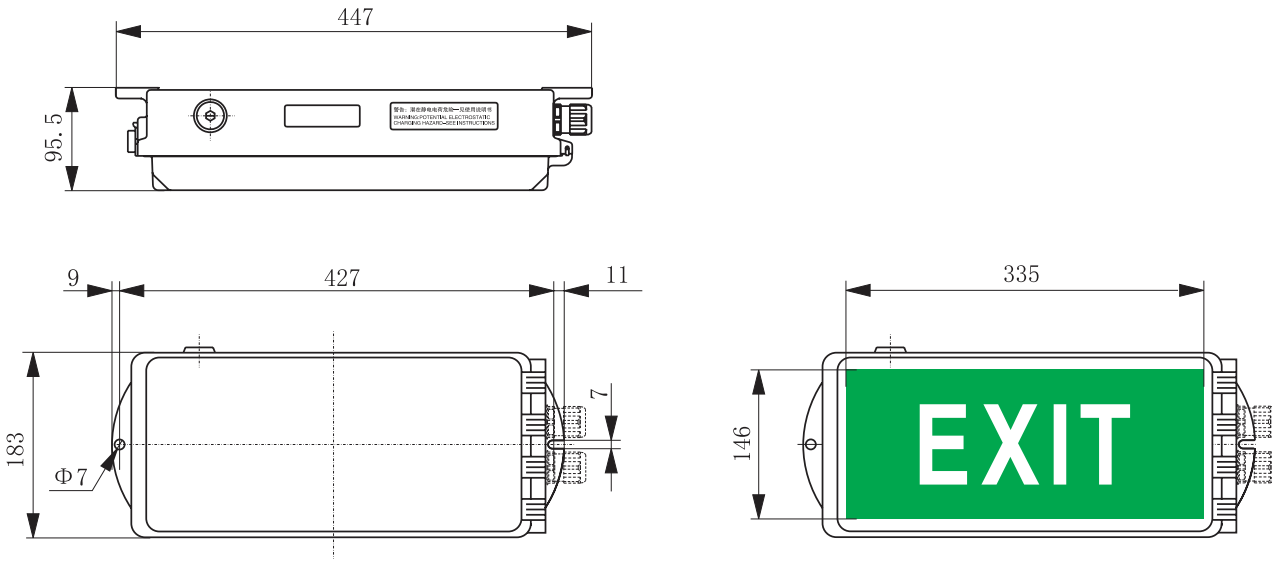
DECAL OPTIONS

DECAL - 01

DECAL - 02

DECAL - 03

DECAL - 04

DECAL - 05

EXIT LIGHTING

ORDERING METHODOLOGY

PLI-RM2 | **X** WATTS | **XX** FUNCTION | **XX** SURGE PROTECTION

3W

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

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
LEFT ARROW DECAL	PLIRM2/04
RIGHT ARROW DECAL	PLIRM2/05

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24m

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

SPECIFICATIONS

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

EXIT LIGHTING

DIMENSIONS

381

162

86

STANDARD DECAL SET

24m

24m

24m
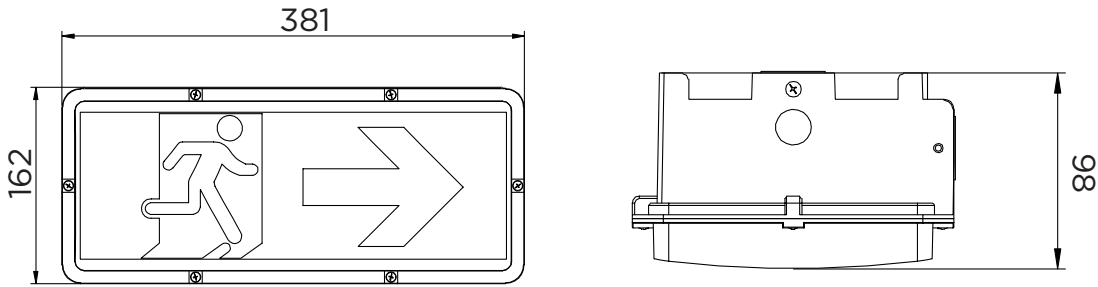
* Standard decal set included

ORDERING METHODOLOGY

PLI-RM3 | **X**
| **WATTS**
| 3W

ACCESSORIES

WALL MOUNT BRACKET   PLIRM3/WM

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EXCALIBUR
ENCLOSURES

APOLLO

SOLAR LED

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

SPECIFICATIONS

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 / 4000K / 3000K					
CRI (Ra)	>70					
Reported L70	>50,000 Hours					
Lens Optic Type	70° x 150°					
Solar Characteristics						
Solar Panel	30W			75W		
Photovoltaic Panel	Monocrystalline Silicon Photovoltaic Panel					
Li-on Battery	12V/13AH			12V/40AH		
Charging Time	5-7 Hours					
Run Time (Full Power)	10 Hours				7.5 Hours	6 Hours
Environment						
IP Rating	IP65					
Impact Rating	IK08					
Operating Temperature	-30°C To 50°C					
Product Material and Mounting						
Option 1	Adjustable Post Top Mount (60MM Spigot)					
Option 2	Adjustable Side Entry Mount (60MM Spigot)					
Product Material	Aluminium Housing					
Lens Cover / Optics Material	PC 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 Warranty					
Certification	SAA / CE					

SOLAR LED

DIMENSIONS

10/20W
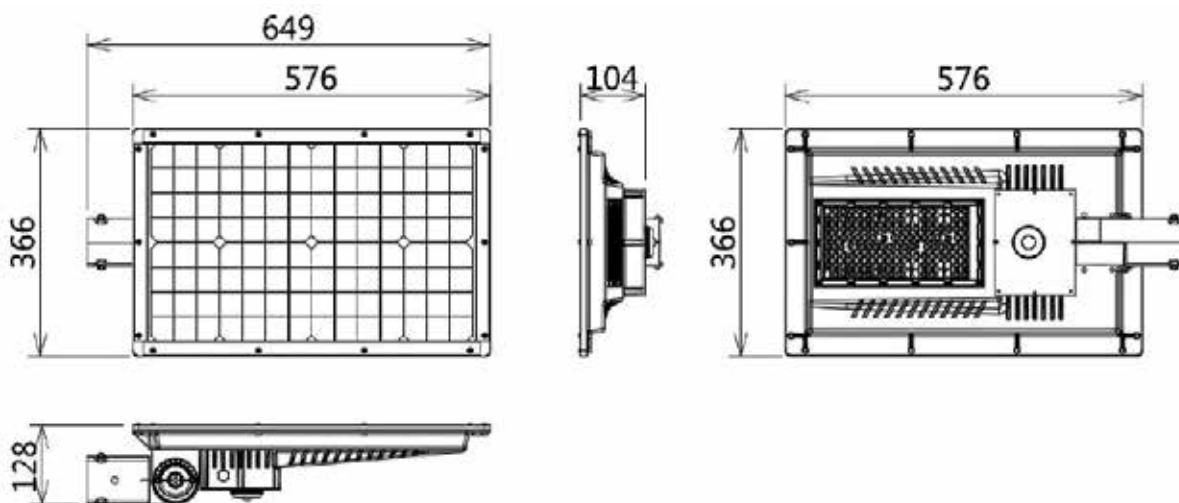
30/40/50/60W
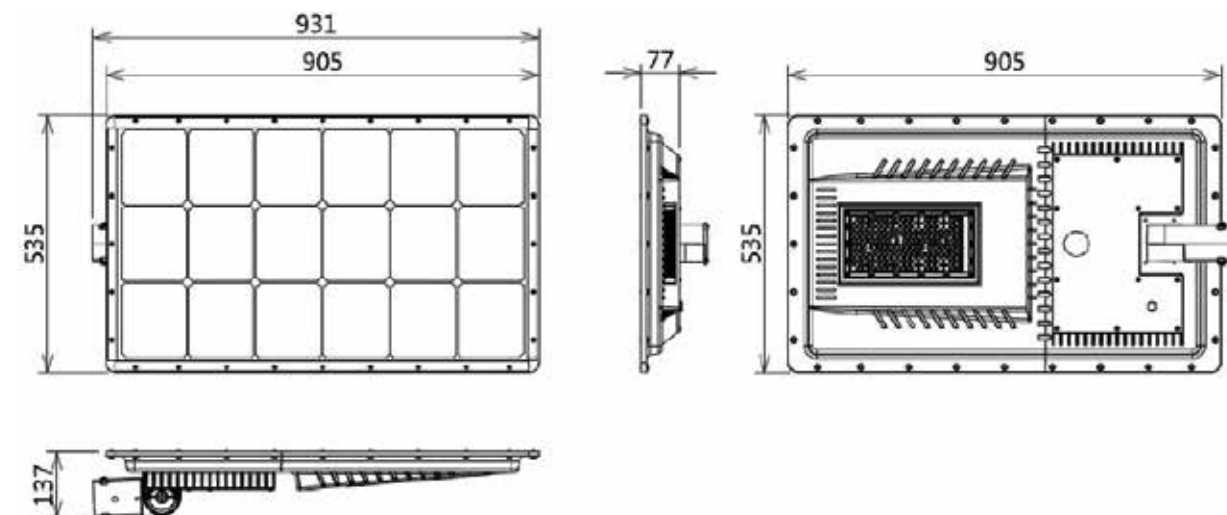
PHOTOMETRIC DIAGRAMS

70° x 150°

SOLAR LED
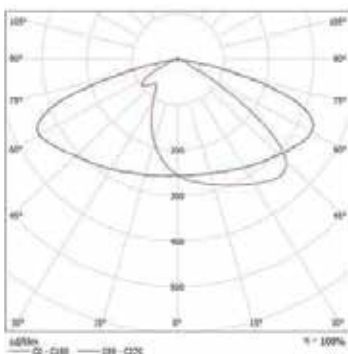
ORDERING METHODOLOGY

PLI-APO

XX
WATTS

10W
20W
30W
40W
50W
60W

XX
CCT

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.

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GALACTIC PLUS

SOLAR LED

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

SPECIFICATIONS

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	6500K / 5700K / 5000K / 4000K / 3000K									
CRI (Ra)	>70 (>80 Optional)									
Reported L70	>50,000 Hours									
Lens Optic Type	120º / Type II / Type III / Type 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 Panel									
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 Rainy Days									
Environment										
IP Rating	IP65									
Impact Rating	IK08									
Operating Temperature	-40°C To 50°C									
Product Material and Mounting										
Option 1	Universal Bracket									
Option 2	Wall Mount									
Option 3	Round Pole Mount									
Option 4	Square Pole Mount									
Product Material	Powder-Coated Die Cast Aluminium (Anti Corrosion Coating)									
Lens / Optics Material	PC Lens									
Dimensions and Weights										
Product Dimensions	633*365*211		793*365*211		948*365*211		1103*365*211		1263*365*211	1418*365*211
Product Weight	12.0KG		13.5KG		15.0KG		16.5KG		18.1KG	19.7KG
Packaging Dimensions	825*190*435		985*190*435		1140*190*435		1295*190*435		1455*190*435	1610*190*435
Gross Weight	14.4KG		16.2KG		18.0KG		19.9KG		21.8KG	23.6KG
Warranty & Certifications										
Warranty	3 Year Warranty									
Certifications	CE / RoHS / FCC									

DIMENSIONS

10/15W
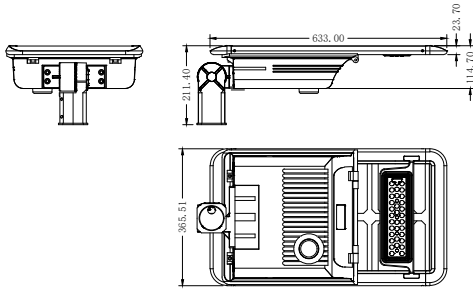
40/45W
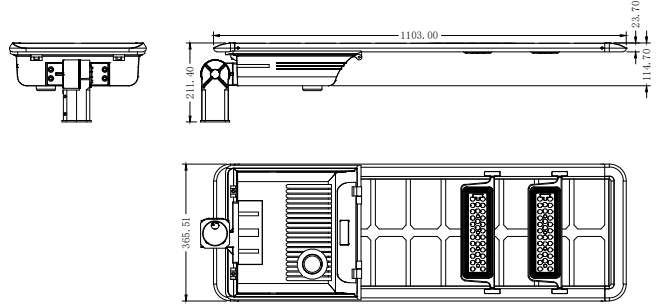
20/25W
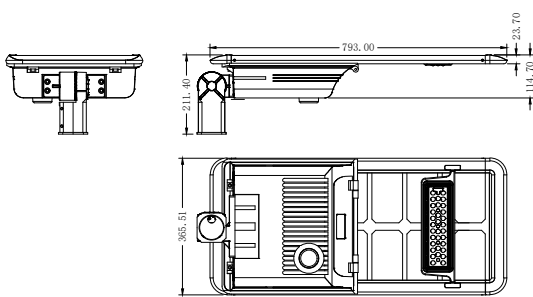
50W
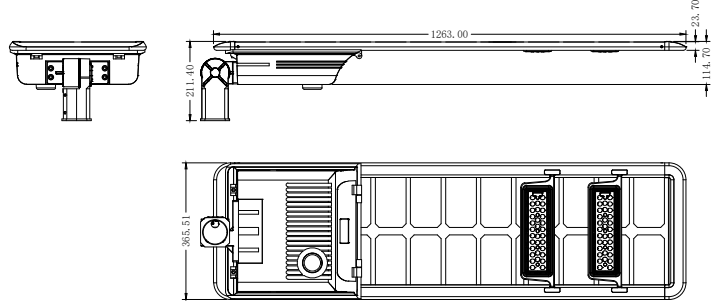
30/35W

60W
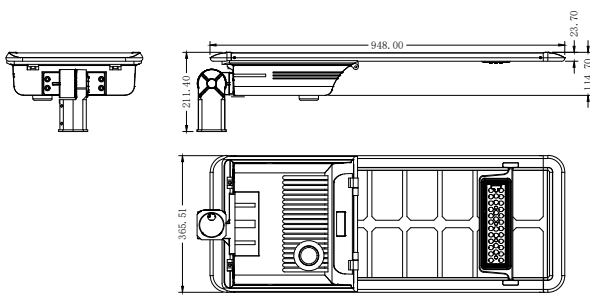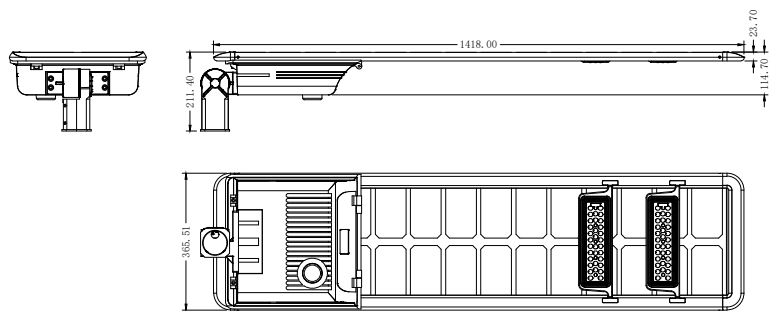
PHOTOMETRIC DIAGRAMS

Photometrics & IES files available on request.

ORDERING METHODOLOGY

PLI-GALP

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

ACCESSORIES

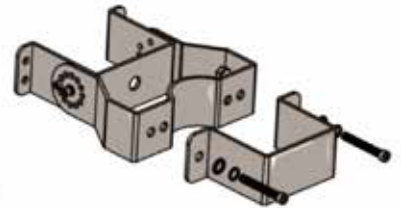|	
UNIVERSAL MOUNTING BRACKET	PLIGALP/UNI
WALL MOUNT BRACKET	PLIGALP/WM
ROUND POLE BRACKET	PLIGALP/RP
SQUARE POLE BRACKET	PLIGALP/SP
DIMMABLE 1-10V DRIVER	PLIGALP/D
MOTION SENSOR	PLIGALP/M
CCTV CAMERA	PLIGALP/CCTV
BIRD SCARER	PLIGALP/BS

Universal Bracket   Wall Mount   Round Pole   Square Pole
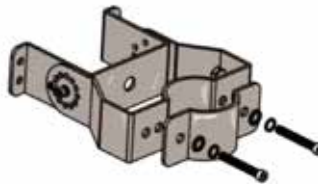
SMART TECHNOLOGY

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.

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SOLAR LED

GALACTIC MAX

SOLAR LED

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

SPECIFICATIONS

Model	PLIGALM80	PLIGALM100
Optical Characteristics		
Rated Wattage	80W	100W
Lumens	14400	18000
System Efficacy	180Lm/W	
Colour Temperature CCT	6500K / 5700K / 5000K / 4000K / 3000K	
CRI (Ra)	>70 (>80 Optional)	
Reported L70	100,000 Hours	
Lens Optic Type	Type II / Type III	
Electrical Characteristics		
Input	12-24VDC	
Solar Characteristics		
Solar Panel	36V/130W	36V/160W
Photovoltaic Panel	Double Crystal 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 Mount (Spigot & Bracket)	
Product Material	Powder-Coated Die-Cast 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

80W

100W

PHOTOMETRIC DIAGRAMS

AVERAGE BEAM ANGLE(50%):108.3 DEG

TYPE II

AVERAGE BEAM ANGLE(50%):116.3 DEG

TYPE III

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SOLAR LED
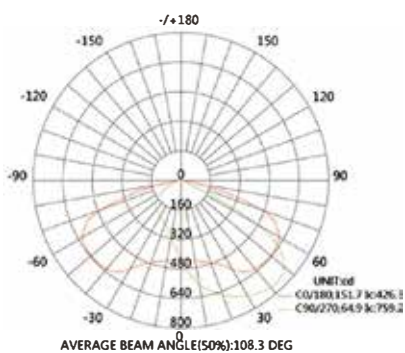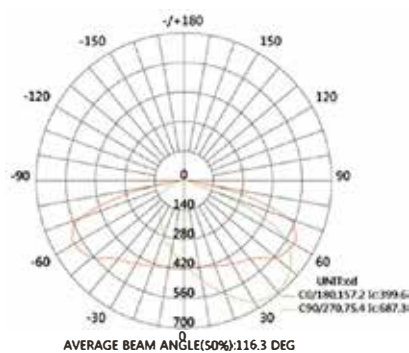
ORDERING METHODOLOGY

PLI-GALM

XX WATTS	**XX** CCT	**XX** LENS TYPE	**X** CONTROLS
80W	65 (6500K)	T2 (TYPE II)	X (NONE)
100W	57 (5700K)	T3 (TYPE III)	M (MOTION SENSOR)
	50 (5000K)		P (PHOTOCELL)
	40 (4000K)		D (DIMMABLE)
	30 (3000K)		

ACCESSORIES

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

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.

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SOLARNATOR

SOLAR LED

SOLARNATOR

The Solarnator is the newest solar fitting by Phoenix EMS. It is 360° horizontally adjustable and ±60° 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

SPECIFICATIONS

Model	PLISOL20	PLISOL30
Optical Characteristics		
Rated Wattage	20W	30W
Lumens	3000	4500
System Efficacy	150Lm/W	
Colour Temperature CCT	5000K / 4000K / 3000K	
CRI (Ra)	>70 (>80 Optional)	
Reported L70	>50,000 Hours (Ta=30º@L70)	
Lens Optic Type	Type II	
Solar Characteristics		
Solar Panel	50W	90W
Photovoltaic Panel	Monocrystalline Photovoltaic Panel	
LiFePO4 Battery	25AH/160WH	36AH/230WH
Charging Time	6-7 Hours	
Run Time (Full Power)	12 Hours	
Maximum Autonomy	7 Rainy Days	
Environment		
IP Rating	IP66	
Impact Rating	IK08	
Operating Temperature	- 20ºC To 50ºC	
Product Material and Mounting		
Option 1	Side Entry (60MM Spigot + Bracket)	
Option 2	Post Top (60MM Spigot + Bracket)	
Product Material	Aluminium Alloy	
Lens / Optics Material	Polycarbonate 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	

DIMENSIONS

SIDE ENTRY

20W
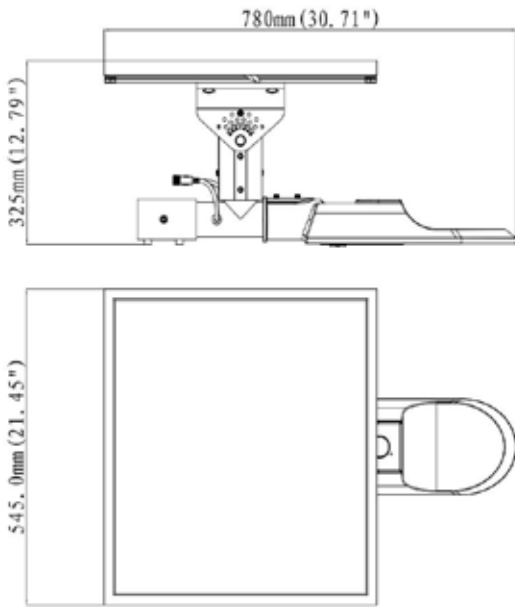
30W

POST TOP

20W

30W

SOLAR LED
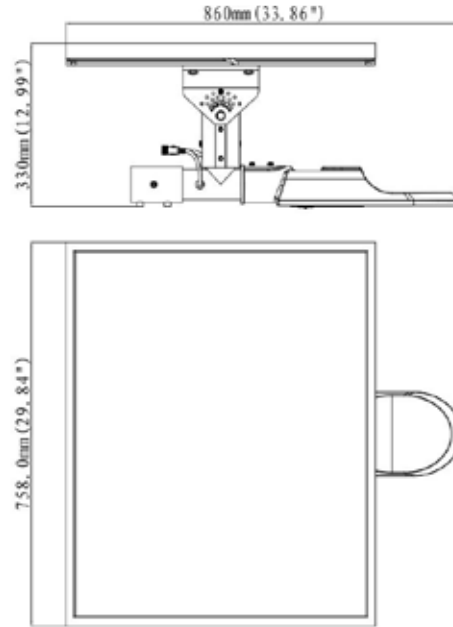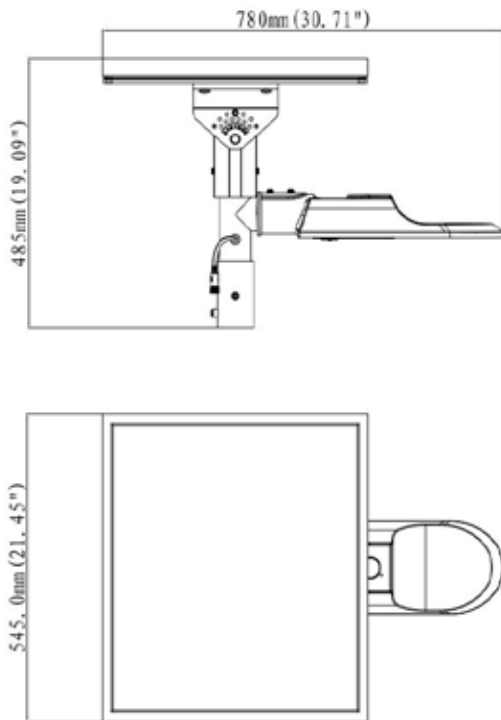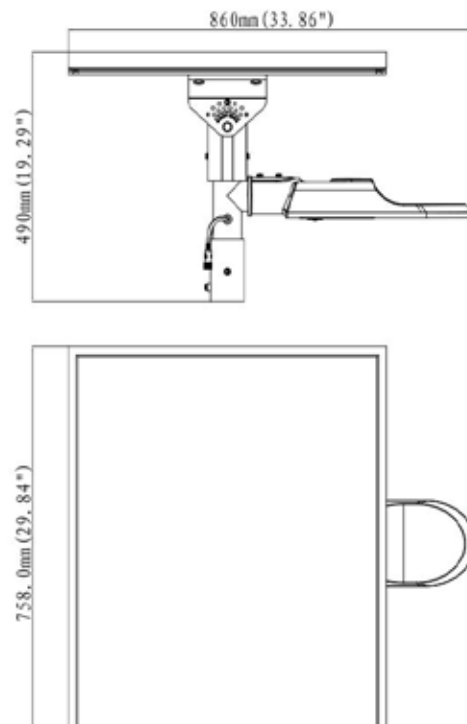
ORDERING METHODOLOGY

PLI-SOL

XX WATTS	**XX** CCT	**X** MOUNTING
20W	50 (5000K)	S (SIDE ENTRY)
30W	40 (4000K)	P (POST TOP)
	30 (3000K)	

ACCESSORIES

60MM SPIGOT + BRACKET	PLISOL/SP
LiFeP04 BATTERY	PLISOL/B
SOLAR PANEL	PLISOL/P

PHOTOMETRIC DIAGRAMS

UNIT cd
C0/180,156.1
C90/270,63.3

TYPE II
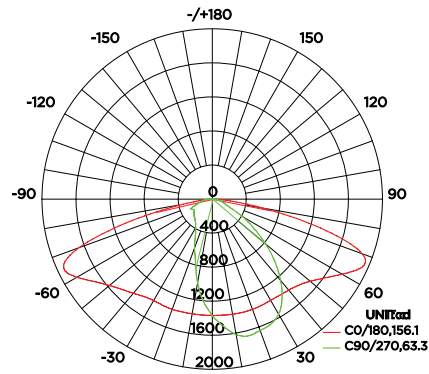
MOUNTING OPTIONS

POST TOP

SIDE ENTRY

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SOLAR SYSTEMS AND VALUE ADD SOLUTIONS

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

- Turnkey Solar Lighting, Solar Pods & Ultraswing Light Pole packages available

SCOUT

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.

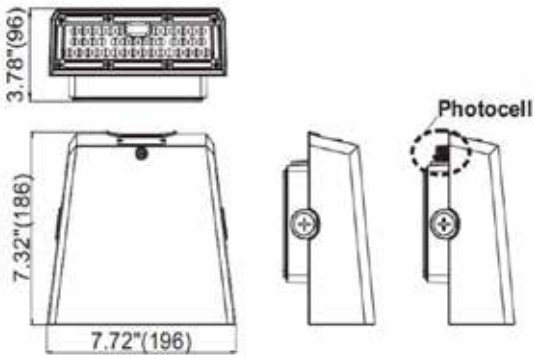## TYPICAL APPLICATIONS

Security, Pathway and Perimeter Lighting, Building Facades.

SPECIFICATIONS

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*125*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

3.78"(96)
7.32"(186)
7.72"(196)
Photocell

40W/70W

4.92"(125)
8.07"(205)
11.10"(282)
Photocell
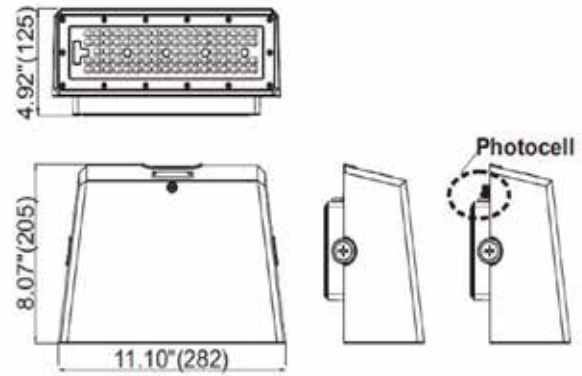
PHOTOMETRIC DIAGRAMS
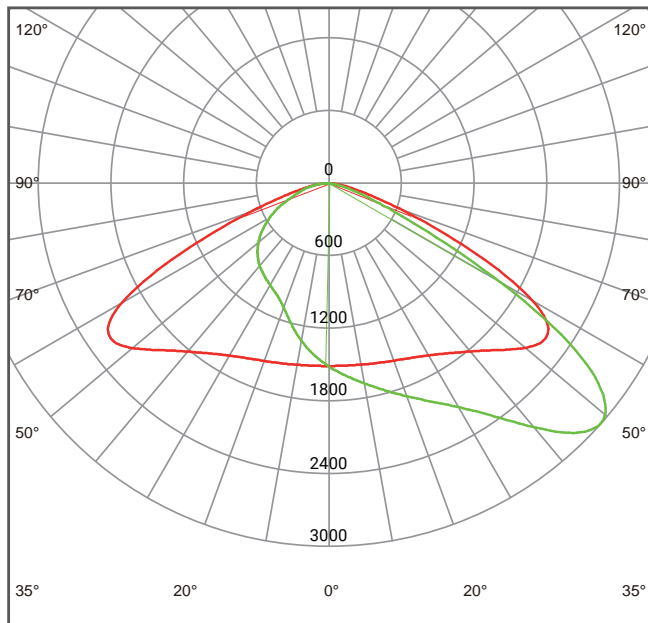
10W/20W/30W
30° x 150°

40W/70W
45° x 150°

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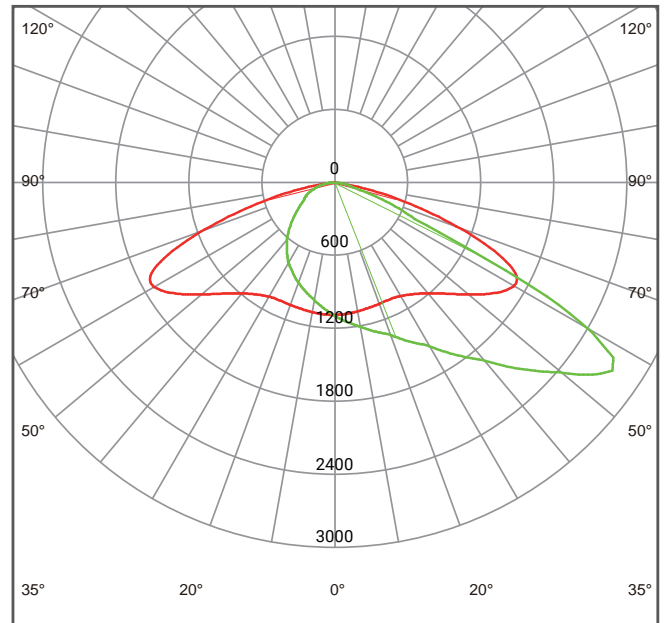
WALL PACK LIGHTS

ORDERING METHODOLOGY

PLI-SCT

XX **WATTS**	**XX** **CCT**
10W	50 (5000K)
20W	40 (4000K)
30W	
40W	
70W	
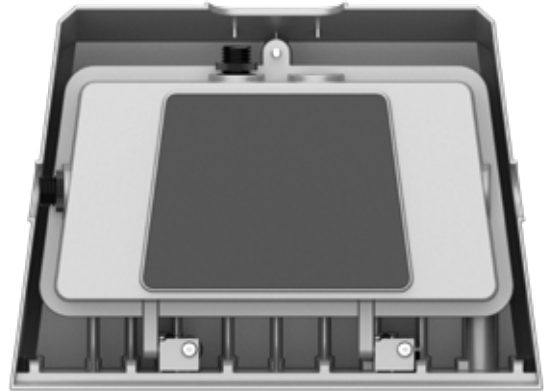
ACCESSORIES

SURFACE MOUNT BRACKET   PLISCT/SM

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139
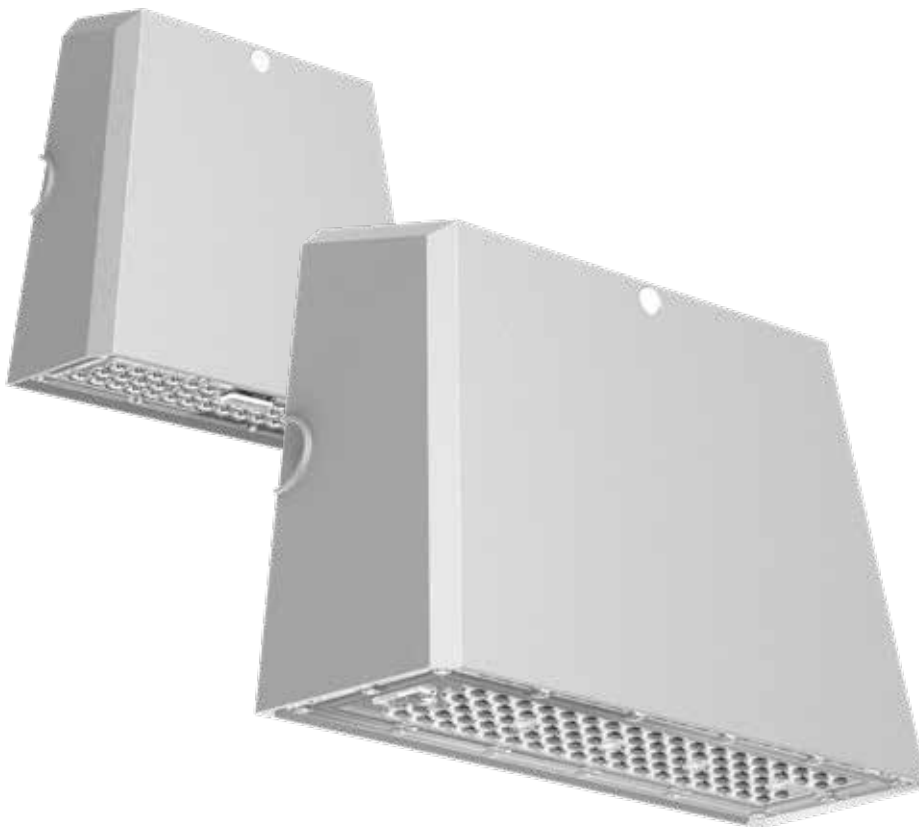
PETREL

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.
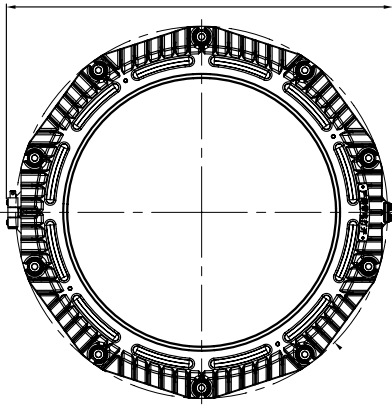
TYPICAL APPLICATIONS

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

SPECIFICATIONS

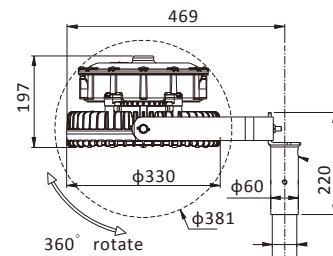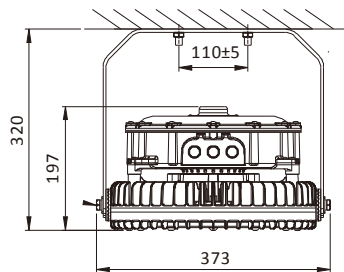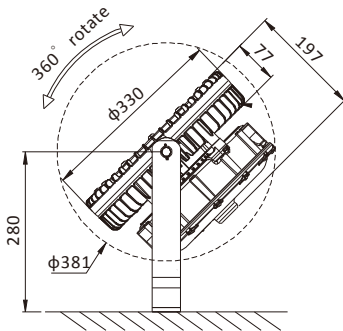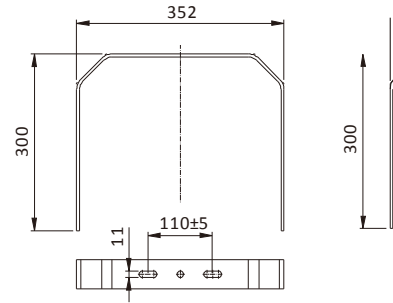| Model:	PLIPET100	PLIPET120	PLIPET150	PLIPET200	PLIPET240	PLIPET300
Optical Characteristics						
Rated Wattage	100W	120W	150W	200W	240W	300W
Lumens	17640	17640	22050	29400	35280	44100
System Efficacy	140Lm/W					
Colour Temperature CCT	4000K (3000K / 5000K / 5700K Optional)					
CRI (Ra)	>70					
Reported L70	>50,000 Hours					
Lens Optic Type	60° / 80° / 120°					
Electrical						
Input	100-277VAC (347-480VAC / 20-30VAC/DC Optional)					
Frequency	50/60Hz					
Powerfactor	>0.98					
Total Harmonic Distortion	<10%					
Environment						
IP Rating	IP66					
Impact Rating	IK10					
Operating Temperature	-40°C To 55°C					
Product Material and Mounting						
Option 1	Stanchion Mount					
Option 2	Pole Mount					
Option 3	Ceiling Mount					
Option 4	Pendant Mount					
Option 5	Pipe Mount					
Product Material	Die-Casting Aluminium Alloy					
Lens / Optics Material	Tempered 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 Warranty					
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/105°/T95*C Db IP66					

DIMENSIONS - 100W/120W/150W

Stanchion Mount

Ceiling Mount

Pole Mount

Pendant Mount

Pipe Mount

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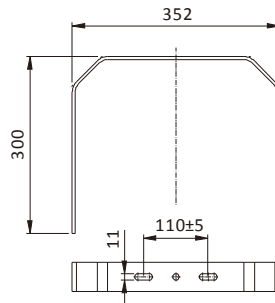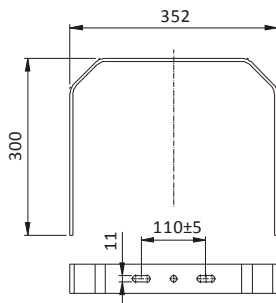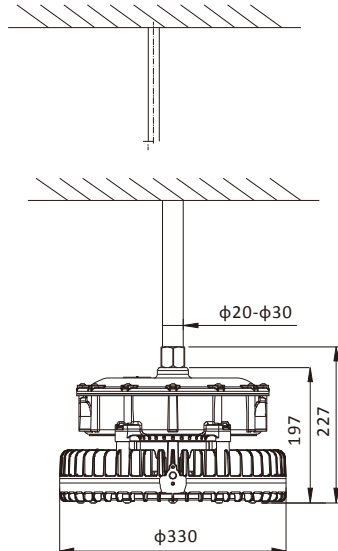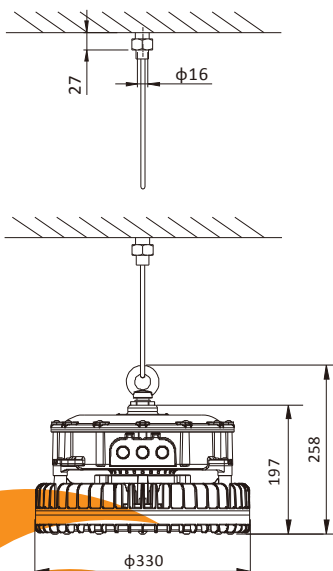
DIMENSIONS - 200W/240W/300W
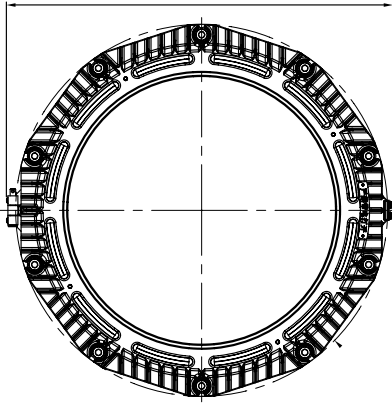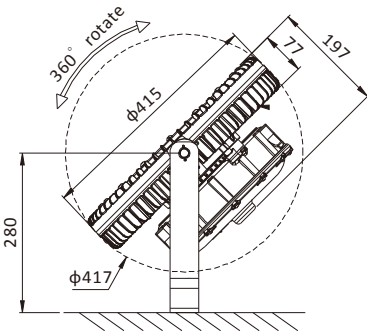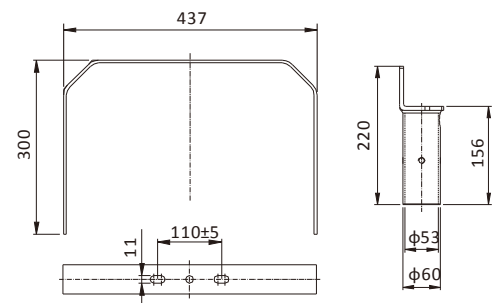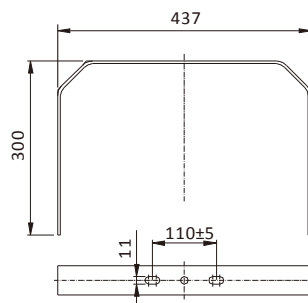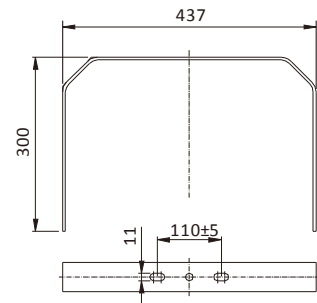

Stanchion Mount

Ceiling Mount

Pole Mount

Pendant Mount

Pipe Mount

HAZARDOUS AREA
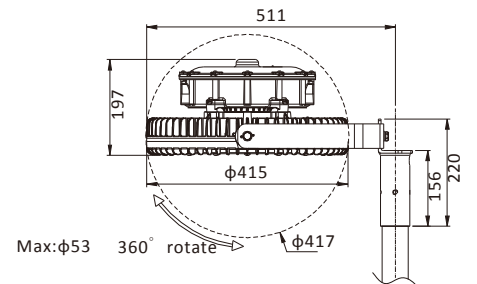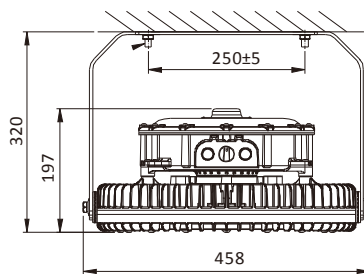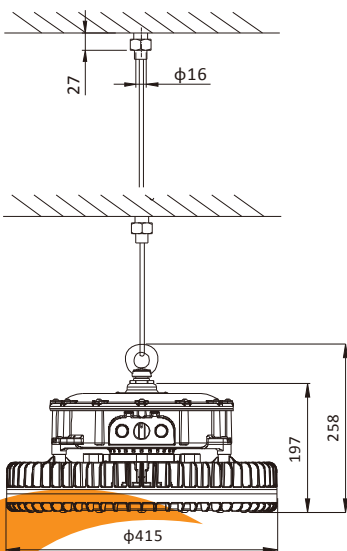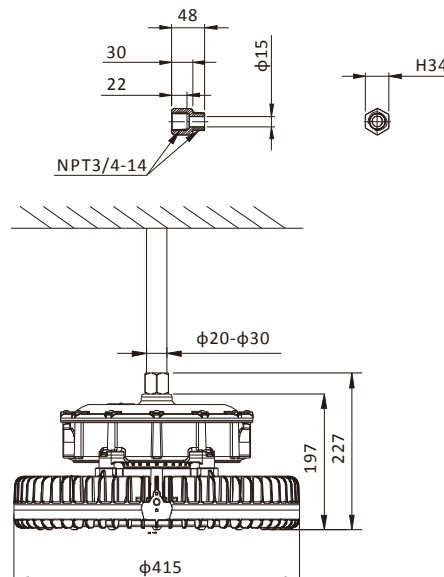
PHOTOMETRIC DIAGRAMS
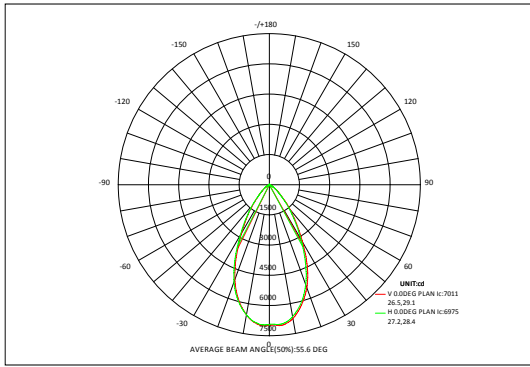
60°
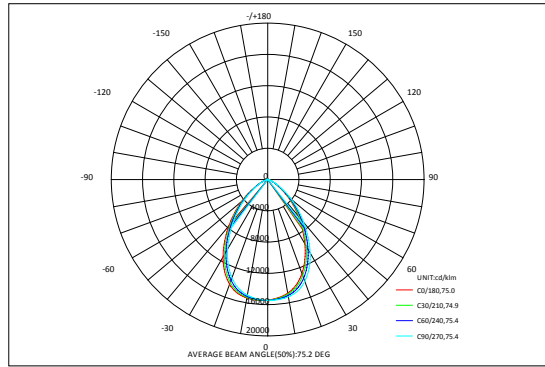
80°

120°
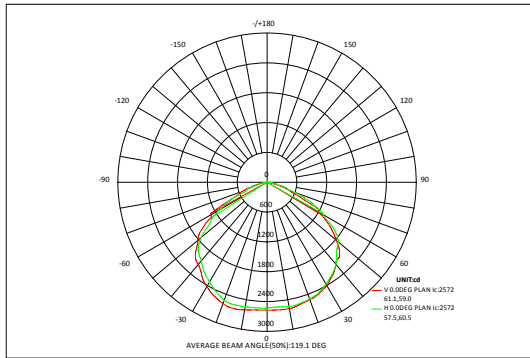
ORDERING METHODOLOGY

PLI-PET

XXX WATTS
100W
120W
150W
200W
240W
300W

XX CCT
57 (5700K)
50 (5000K)
40 (4000K)
30 (3000K)

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	-40ºC To 55ºC						
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 Mount						
Option 6	Pole Mount						
Product Material	Aluminium Housing						
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	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	IECEx/Gas: II 2 G Ex eb mb op is IIC T5 T6 Gb IECEx/Dust: II 2 D Ex op is tb IIIC T80°C Db						

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DIMENSIONS

L = 385MM / 685MM / 1285MM

126

88
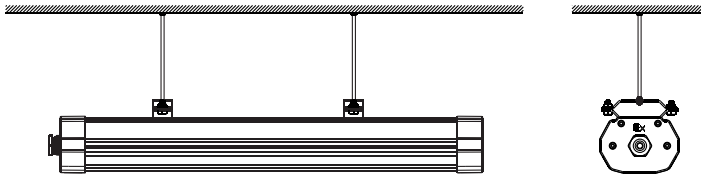
PENDANT POLE MOUNT

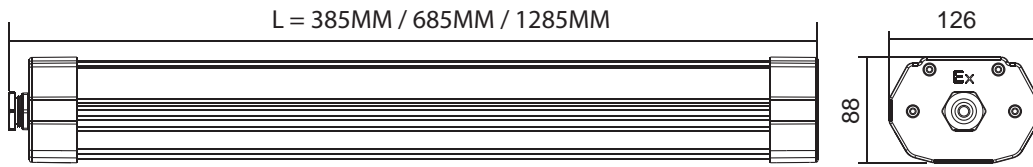### PENDANT CHAIN MOUNT
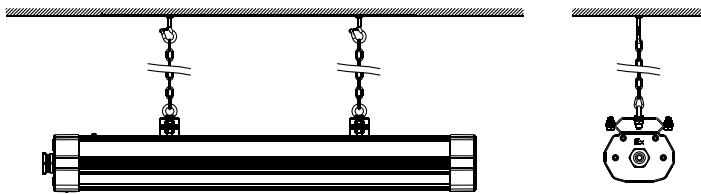
SS CEILING MOUNT A
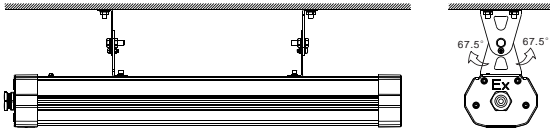
SS CEILING MOUNT B (ADJUSTABLE ANGLES)

67.5°   67.5°
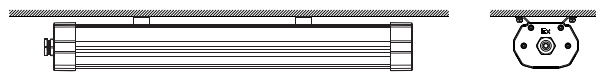
WALL MOUNT A

WALL MOUNT B (ADJUSTABLE ANGLES)

67.5°
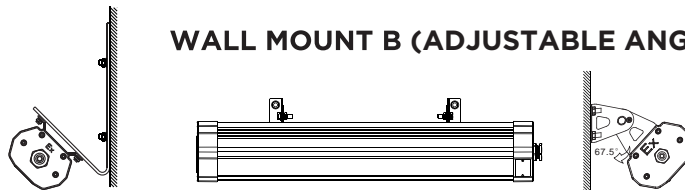
BEAM CLAMP MOUNT
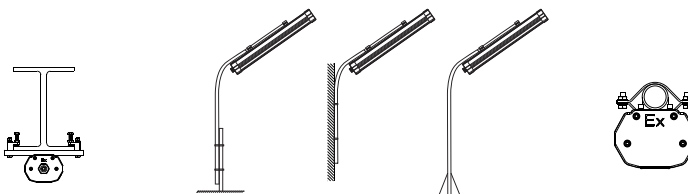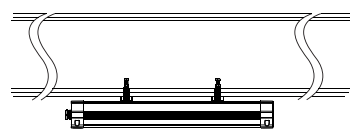
POLE MOUNT

ORDERING METHODOLOGY

PLI-CHI

XX WATTS	**XX** CCT	**XX** DIMENSIONS	**X** LENS TYPE	**XX** FUNCTION
24W	60 (6000K)	02 (685*126*88/36W)	C (CLEAR LENS)	ST (STANDARD)
36W	50 (5000K)	03 (1285*126*88/36W)	F (DIFFUSED LENS)	EM (EMERGENCY)
50W	40 (4000K)			
60W	30 (3000K)			
72W				
80W				

ACCESSORIES

PENDANT POLE MOUNT	PLICHI/PP
PENDANT CHAIN MOUNT	PLICHI/PC
CEILING MOUNT A	PLICHI/CM1
CEILING MOUNT B (ADJUSTABLE ANGLES)	PLICHI/CM2
WALL MOUNT A	PLICHI/WM1
WALL MOUNT B (ADJUSTABLE ANGLES)	PLICHI/WM2
BEAM CLAMP MOUNT	PLICHI/BC
POLE MOUNT	PLICHI/PM
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

cd/klm
C0/180
C90/270

180°

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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	Zone 1 & 21 / Zone 2 & 22	
Rating	IECEx/Gas: Ex 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 Dust: Ex tb III C T80°C/ T85°C Db	

DIMENSIONS

152

400mm - 30W
795mm - 60W

225

705mm - 30W
1308mm - 60W

Ø Diameter

Pole Mount Bracket

200
210

Ceiling Mount Bracket

MOUNTING OPTIONS

500

300

200

165

Ceiling/Surface

Pipe

Pendant

Chain

Clamp Mount

210

230

30°

Wall Mount

PHOTOMETRIC DIAGRAMS

−/+180
−150   150
−120   120
−90   90
−60   60
−30   30
0

190
380
570
760
950

C0/180
C90/270

30W

−/+180
−150   150
−120   120
−90   90
−60   60
−30   30
0

400
800
1200
1600
2000

C0/180
C90/270

60W

HAZARDOUS AREA
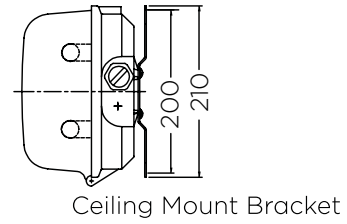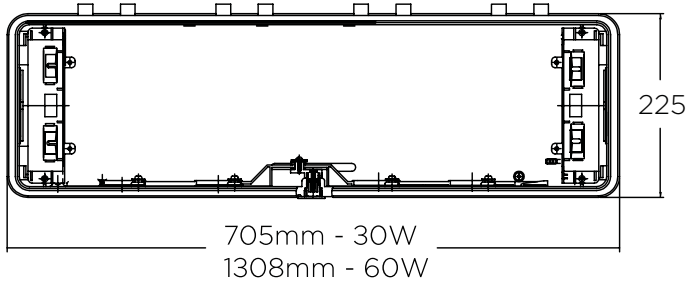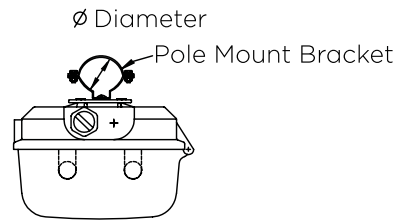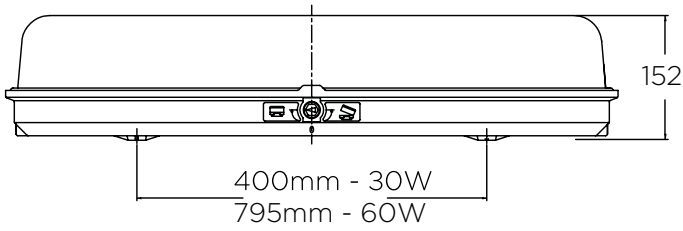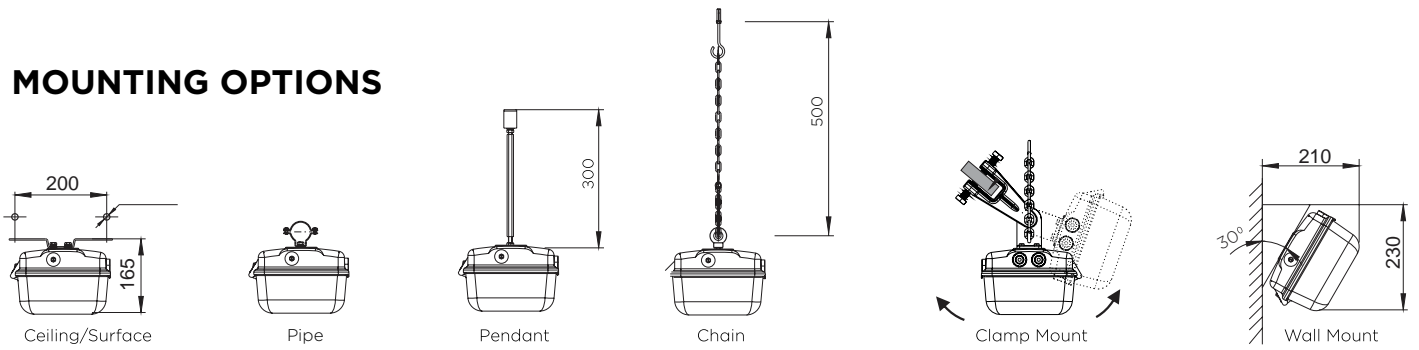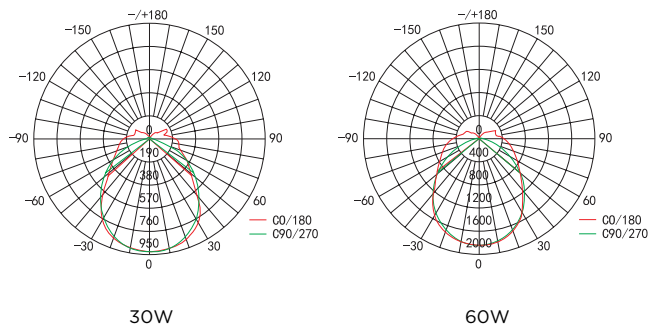
ORDERING METHODOLOGY

PLI-FALX

XX WATTS	**XX** FUNCTION	**X** SURGE PROTECTION
30W	ST (STANDARD)	X (NONE)
60W	EM (EMERGENCY)	F (WITH FUSE)

ACCESSORIES

PENDANT MOUNT PLIFALX/PD
CHAIN MOUNT PLIFALX/CH
ADJUSTABLE CLAMP BRACKET PLIFALX/ADJ
ADJUSTABLE CLAMP BRACKET STAINLESS STEEL PLIFALX/ADJ-SS
PIPE MOUNT 42MM PLIFALX/PM42
PIPE MOUNT STAINLESS STEEL 42MM PLIFALX/PM42-SS
PIPE MOUNT 48MM PLIFALX/PM48
PIPE MOUNT STAINLESS STEEL 48MM PLIFALX/PM48-SS
PIPE MOUNT 60MM PLIFALX/PM60
PIPE MOUNT STAINLESS STEEL 60MM PLIFALX/PM60-SS
CEILING MOUNT BRACKET PLIFALX/CM
CEILING MOUNT BRACKET STAINLESS STEEL PLIFALX/CM-SS
WALL MOUNT BRACKET FOR POLE MOUNT PLIFALX/WM

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		

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DIMENSIONS

342 mm (13.5 in)

214mm(8.4in)

239mm(11.5in)

328mm(12.9in)

200 mm (7.9in)

239mm(11.5in)

271mm(10.7in)

200 mm (7.9in)

30mm (1.2in)

Φ5mm (0.2in)

Φ6.5mm (1.4in)

50mm (2in)

56mm (2.2in)

Φ5.5mm (0.22in)

Φ36mm (1.4in)

60mm (2.4in)

140mm (5.5in)
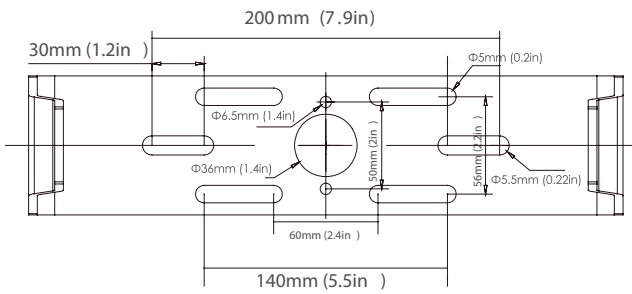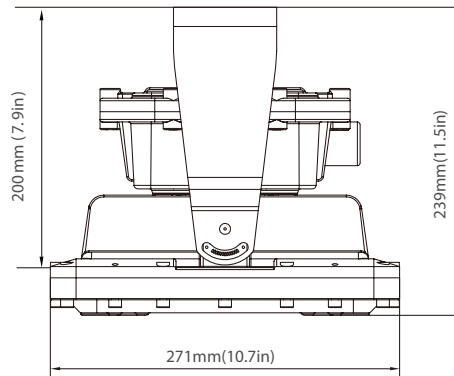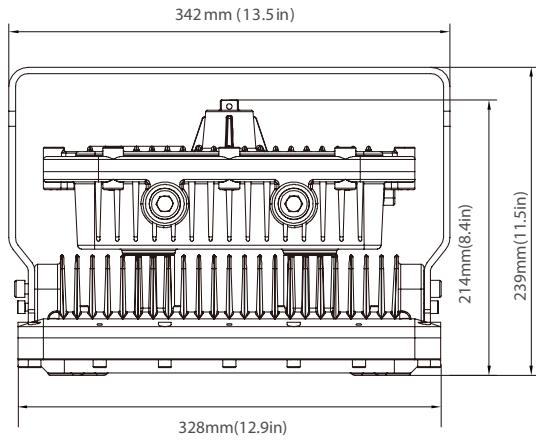
PHOTOMETRIC DIAGRAMS

25 Degree

0
9000
18000
27000
36000
45000

60 Degree

0
3000
6000
9000
12000
15000

120 Degree

0
900
1800
2700
3600
4500
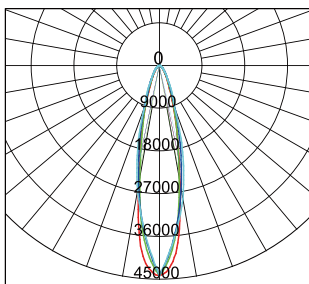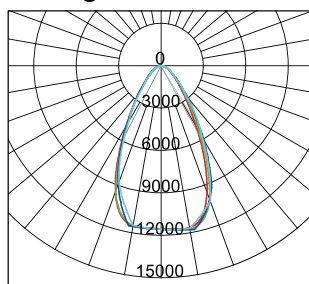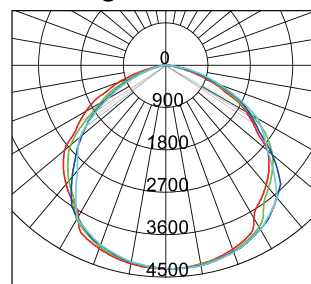
HAZARDOUS AREA

ORDERING METHODOLOGY

PLI-DEF

XXX WATTS	**XX** CCT	**XX** BEAM ANGLE	**XX** MOUNTING
80W	50 (5000K)	01 (25°)	PM (POLE MOUNT)
100W	40 (4000K)	02 (60°)	CM (CEILING MOUNT)
150W	30 (3000K)	03 (120°)	WM (ANGLE WALL MOUNT)
			PD (PENDANT MOUNT)

ACCESSORIES

POLE MOUNT	PLIDEF/PM
CEILING MOUNT	PLIDEF/CM
ANGLE WALL MOUNT	PLIDEF/WM
PENDANT MOUNT	PLIDEF/PD
SAFETY CHAIN	PLIDEF/SC
GLARE SHIELD	PLIDEF/GS
WIRE GUARD	PLIDEF/WG
10KV SURGE PROTECTOR	PLIDEF/10KV

HAZARDOUS AREA

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

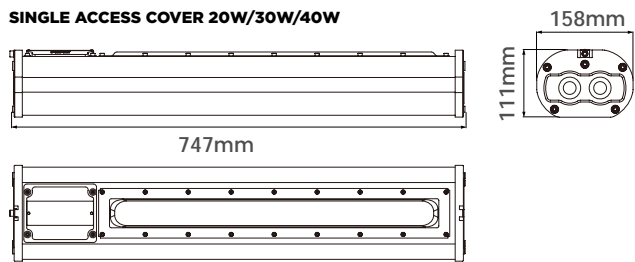| Model	PLIWAR20	PLIWAR30	PLIWAR40	PLIWAR50	PLIWAR60	PLIWAR80	PLIWAR100
Optical Characteristics							
Rated Wattage	20W	30W	40W	50W	60W	80W	100W
Lumens	2400	3600	4800	6000	7200	9600	12000
System Efficacy	120Lm/W						
Colour Temperature CCT	5700K (5000K / 4000K)						
CRI (Ra)	>70						
Reported L70	>100,000 Hours at 25° Ambient						
Lens Optic Type	110°						
Electrical Characteristics							
Input	AC120-277V						
Frequency	50Hz (Optional 60Hz)						
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	Refer to dimensions below						
Product Weight	6.7KG				9.9KG		
Packaging Dimensions	920*220*170				1505*220*170		
Gross Weight	7.7KG				10.9KG		
Warranty and Certifications							
Warranty	5 Year Warranty						
Certifications	IECEx / CE / RoHS						
Classification	Zone 1 & 21						
Rating	IECEx/Gas: Ex db eb mb IIC T6 Gb						
	IECEx/Dust: Ex tb IIIC T80°C Db						
	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						

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HAZARDOUS AREA

DIMENSIONS

SINGLE ACCESS COVER 20W/30W/40W

158mm

111mm

747mm

TWIN ACCESS COVER 20W/30W/40W

864mm

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

1332mm

PHOTOMETRIC DIAGRAMS

0
900
1800
2700
3600
4500

110°
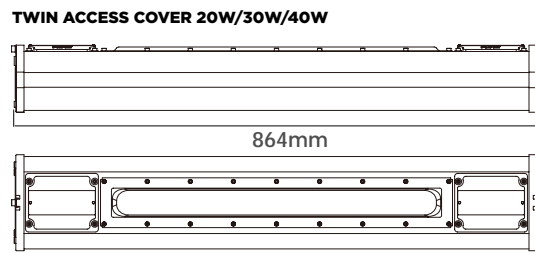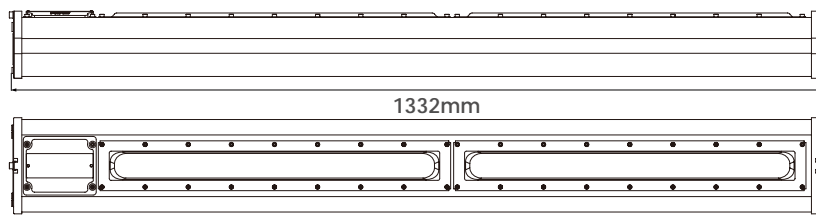
TWIN ACCESS COVER 40W/50W/60W/80W/100W

1449mm
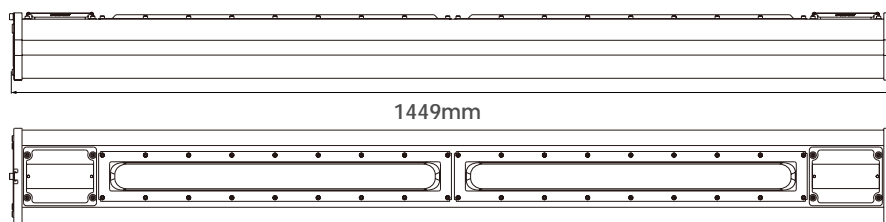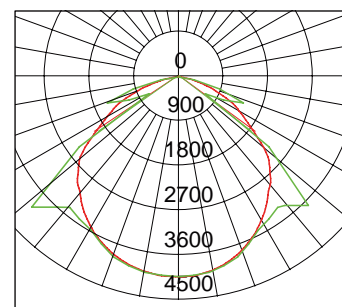
ORDERING METHODOLOGY

PLI-WAR

XXX WATTS	XX CCT	XX FUNCTION	X DIMENSIONS

WATTS
20W
30W
40W
50W
60W
80W
100W

CCT
57 (5700K)
50 (5000K)
40 (4000K)

FUNCTION
ST (STANDARD)
EM (EMERGENCY)

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	PLIWAR/LCM
HIGH CEILING MOUNT BRACKET	PLIWAR/HCM
EYEBOLT	PLIWAR/EB
WALL MOUNT SWIVEL BRACKET	PLIWAR/WM
WALL MOUNT OUTREACH BRACKET 0.6M	PLIWAR/WMO60
WALL MOUNT OUTREACH BRACKET 0.6M	PLIWAR/WMO60
WALL MOUNT OUTREACH BRACKET 1.2M	PLIWAR/WM120
PIPE CLAMP BRACKET 40-45MM	PLIWAR/PC40
PIPE CLAMP BRACKET 47-51MM	PLIWAR/PC47
PIPE CLAMP BRACKET 54-57MM	PLIWAR/PC54
PIPE CLAMP BRACKET 58-62MM	PLIWAR/PC58

LOW CEILING MOUNT BRACKET

HIGH CEILING MOUNT BRACKET

EYEBOLT MOUNT

WALL MOUNT SWIVEL BRACKET

WALL MOUNT OUTREACH BRACKET

POLE MOUNT CLAMP

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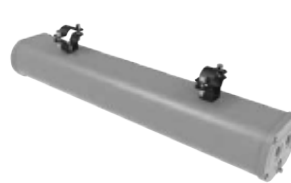
SPHINX SERIES

MOBILE MACHINERY

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° Flood						
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							
Option 1	U Bracket						
Product Material	Cast Aluminium Body						
Lens / Optics Material	PC Lens						
Dimensions and Weights							
Product Dimensions	108*72*139		125*103*139		152*115*141		188*135*167
Product Weight	2.0KG						
Packaging Dimensions	118*80*150		135*115*150		165*125*150		210*145*180
Gross Weight	2.5KG						
Warranty and Certifications							
Warranty	2 Year Warranty						
Certifications	CE / RoHS						

SPHINX-27   SPHINX-40   SPHINX-50   SPHINX-60   SPHINX-90   SPHINX-100   SPHINX-120

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DIMENSIONS

SPHINX-27

DIMENSIONS

108mm
108mm
71.8mm
138mm

PHOTOMETRIC DIAGRAMS

C0/C180

30° SPOT

C90/270

60° FLOOD

SPHINX-40

DIMENSIONS

108mm
108mm
71.8mm
138mm

PHOTOMETRIC DIAGRAMS

C0/C180

30° SPOT

C90/270

60° FLOOD

SPHINX-90

DIMENSIONS

152mm
132mm
115.4mm
141mm

PHOTOMETRIC DIAGRAMS

C0/C180

30° SPOT

C90/270

60° FLOOD

SPHINX-100

DIMENSIONS

152mm
132mm
115.4mm
141mm

PHOTOMETRIC DIAGRAMS

C0/C180

30° SPOT

C90/270

60° FLOOD

SPHINX-50

DIMENSIONS

125mm
110mm
102.8mm
138.7mm

PHOTOMETRIC DIAGRAMS

C0/C180

30° SPOT

C90/270

60° FLOOD

SPHINX-60

DIMENSIONS

125mm
110mm
102.8mm
138.7mm

PHOTOMETRIC DIAGRAMS

C0/C180

30° SPOT

C90/270

60° FLOOD

SPHINX-120

DIMENSIONS

188mm
178mm
135mm
167mm

PHOTOMETRIC DIAGRAMS

C0/C180

30° SPOT

C90/270

60° FLOOD

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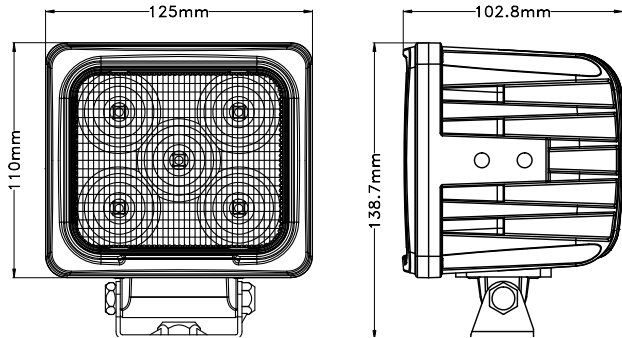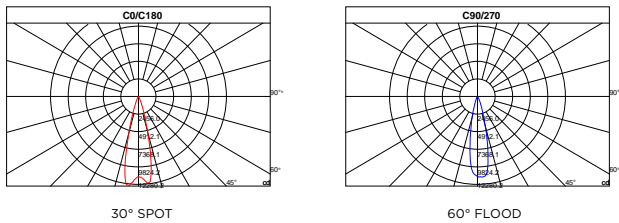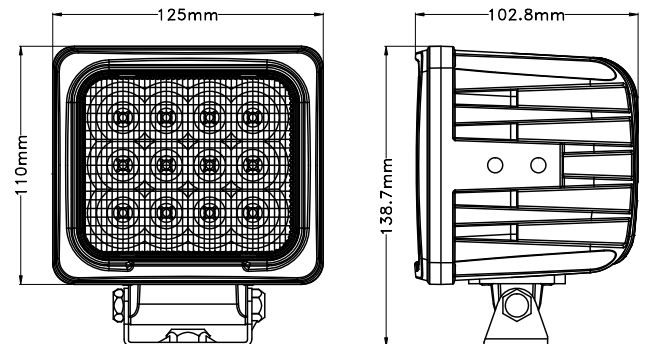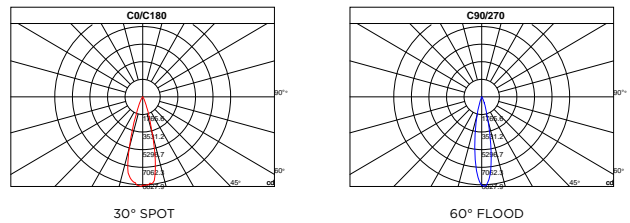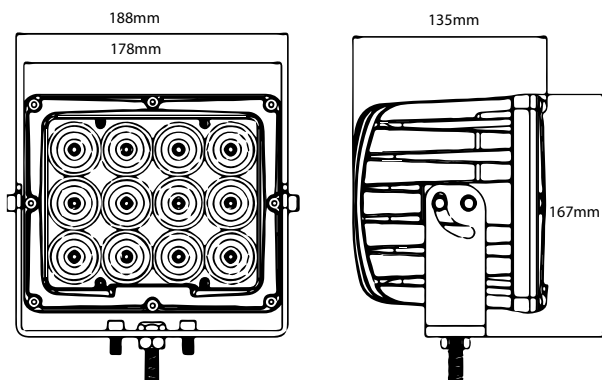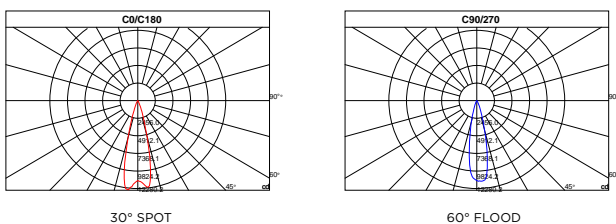
ORDERING METHODOLOGY

PLI-SPX

XX
WATTS

27W
40W
50W
60W
90W
100W
120W

XX
BEAM ANGLE

01 (30°)
02 (60°)

ACCESSORIES

U BRACKET - PLISPX/UB

SPHINX-27

SPHINX-40

SPHINX-50

SPHINX-60

SPHINX-90

SPHINX-100

SPHINX-120

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INDUSTRY APPROVED VISIBLE BREAK
ISOLATORS & LOCAL CONTROL STATIONS

PHOENIX
ENGINEERING & MANUFACTURING SOLUTIONS

DANGER

240VAC
ISOLATE ELSEWHERE BEFORE
REMOVING COVER

TURNKEY SOLUTIONS & PACKAGES

VALUE ADD CAPABILITY

TURNKEY SOLUTIONS & PACKAGES
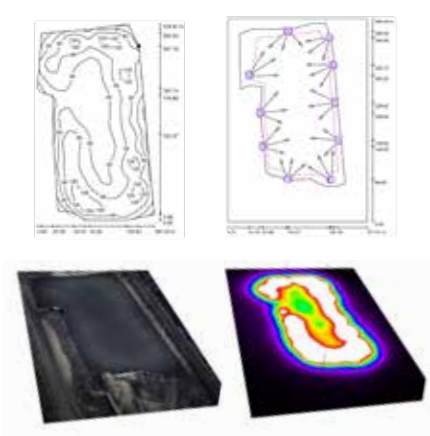
Lighting Studies

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
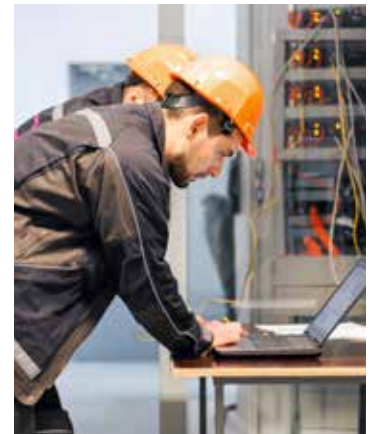
Comprehensive
After Sale Support

LIGHTING STUDIES
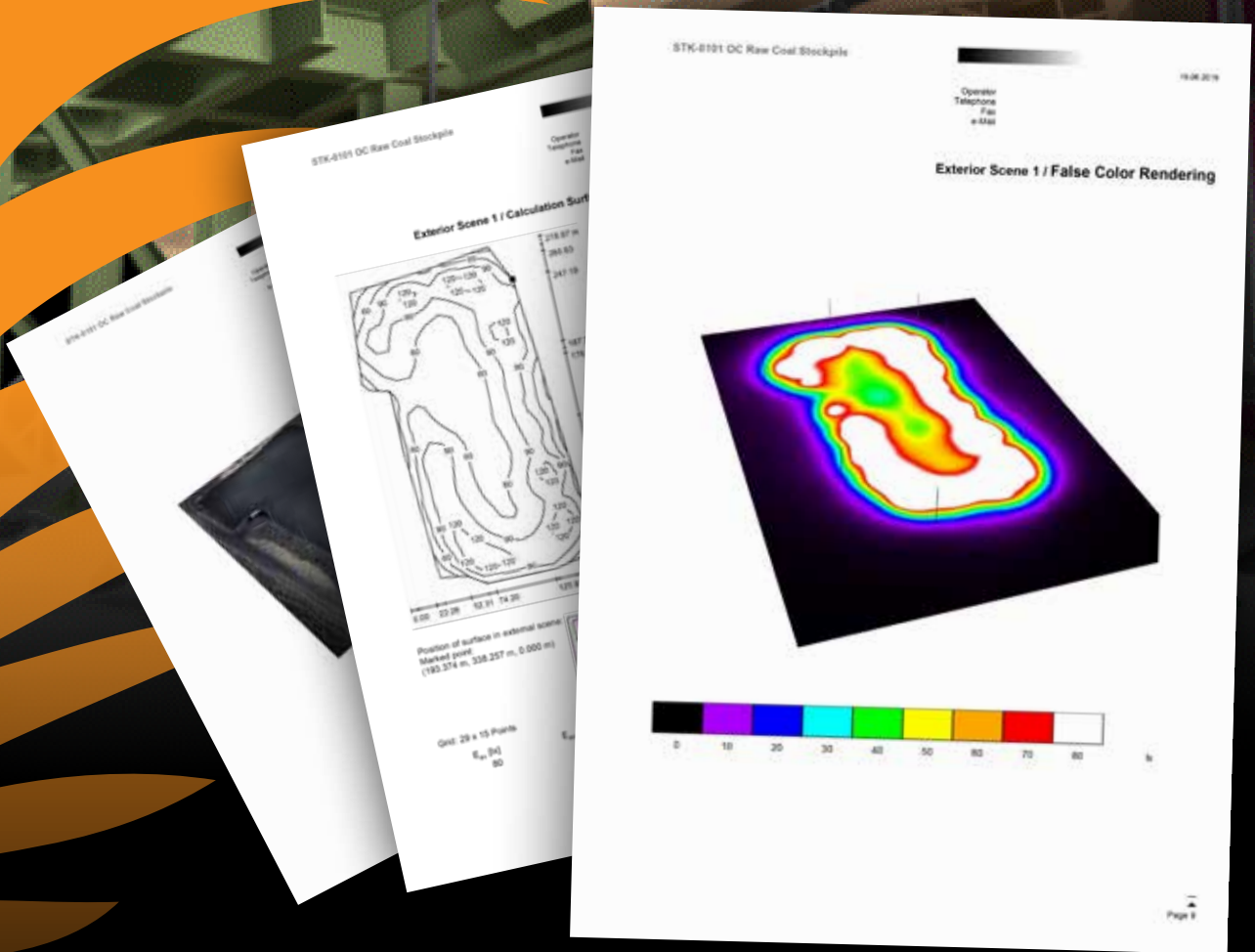
LIGHTING STUDIES

LIGHTING DESIGN CAPABILITIES
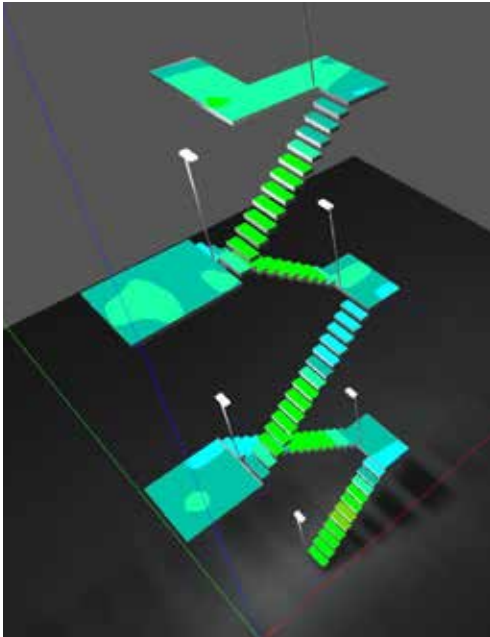
Dialux Lighting Design
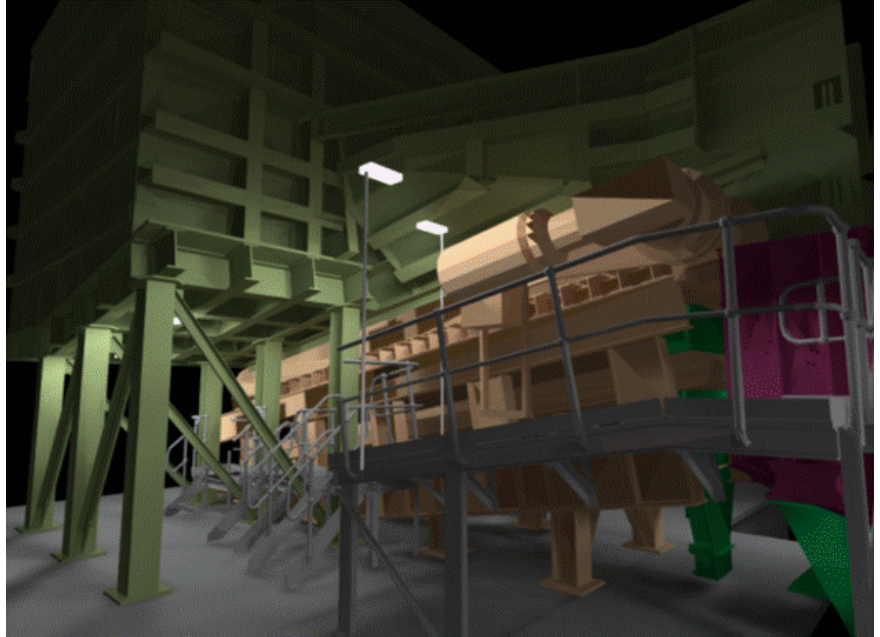
3D Modelling
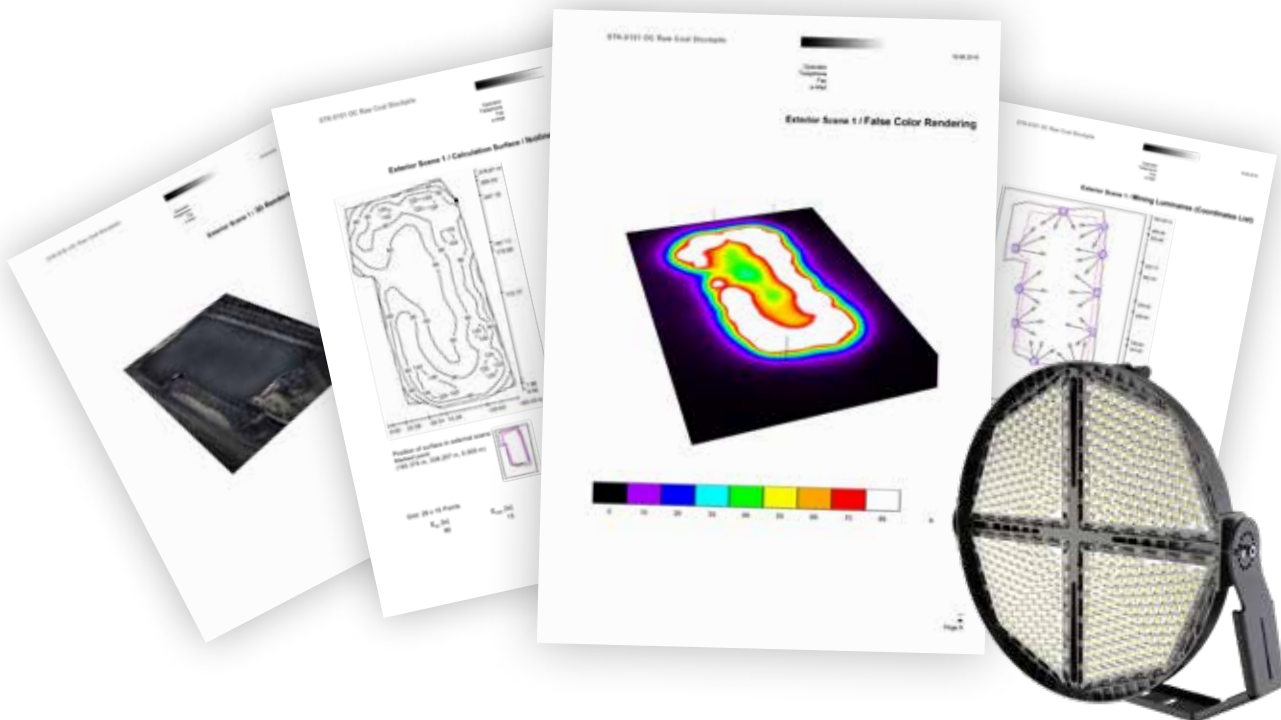
Lighting to Australian Requirements

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.

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GLOSSARY

Please note that the following information is only a guide.

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.

LIGHT TEMPERATURE (K)

WARM LIGHT			DAYLIGHT		COLD LIGHT	
2500	3500	4000	4500	5000	5500	6500

CANDLE	INCANDESCENT LAMP	SUNSET	DAWN	DAYLIGHT LAMP	NOON	CLOUDY WEATHER	CLOUDY	CLOUDLESS SKY
1000	3000 3200	3000 3200	3500	3800 4500	5500	6000	7000	10000 15000

COLOUR RENDERING INDEX (CRI)
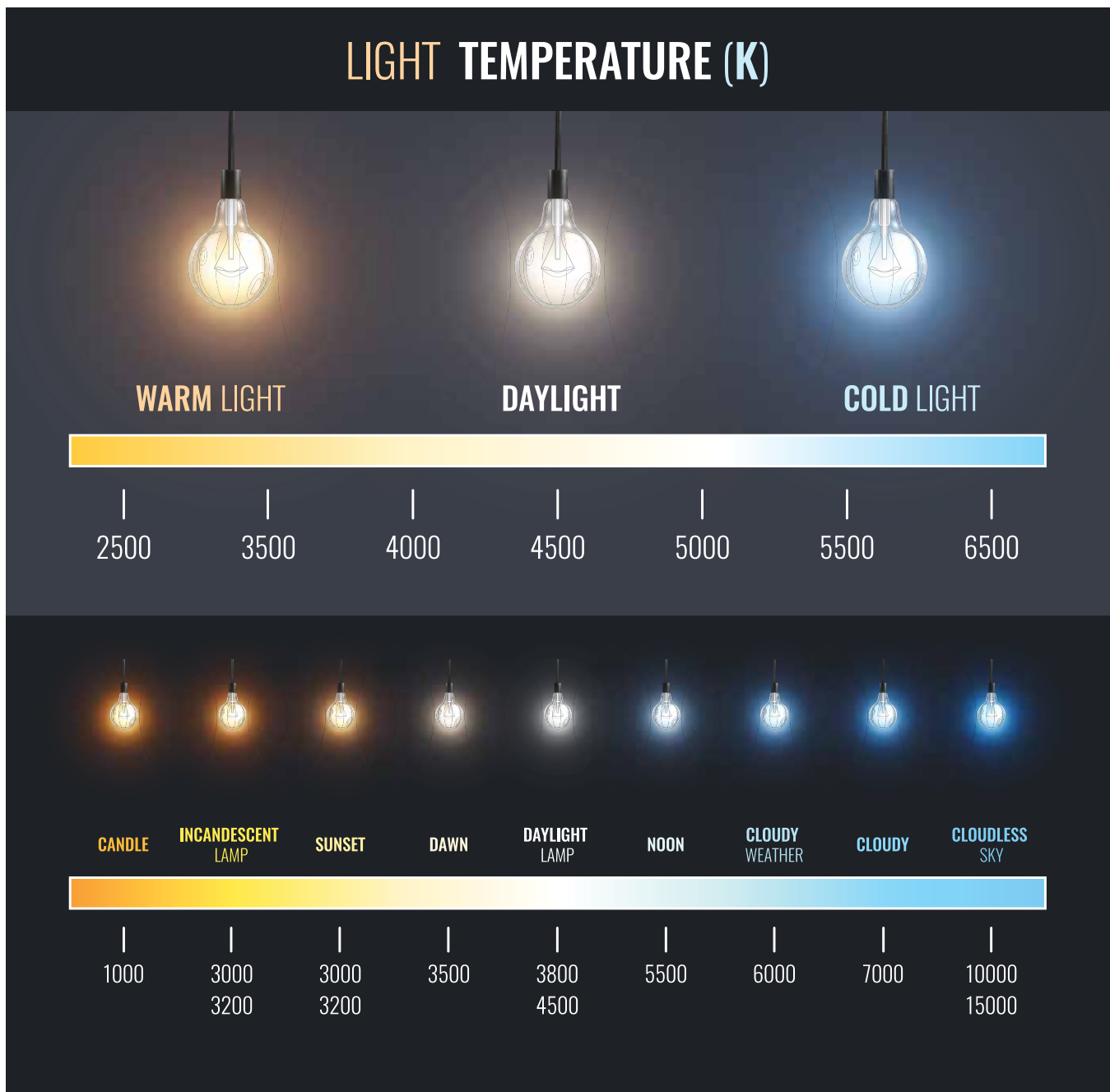
WHAT IS CRI?

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.

2700K
CRI 100

2700K
CRI 90

2700K
CRI 80

2700K
CRI 70
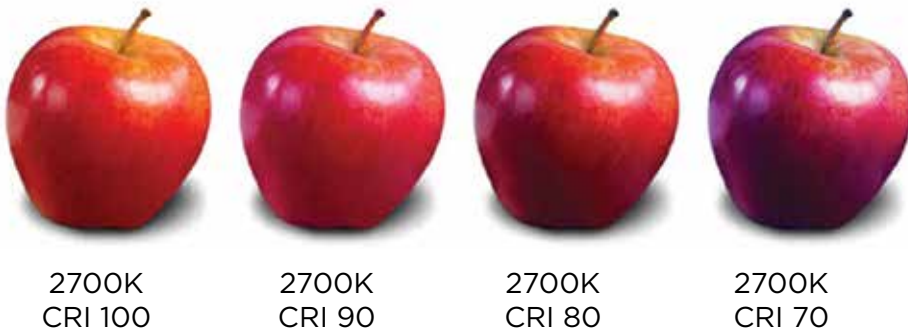
LED LIGHTING

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 flawless natural colour if you select a LED with a high CRI. This can be vital in environments where you need natural colouring.

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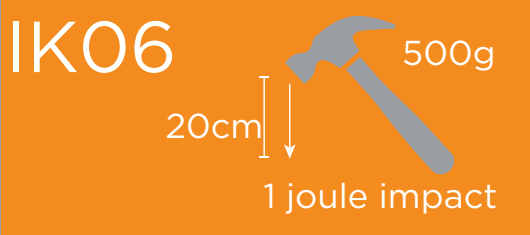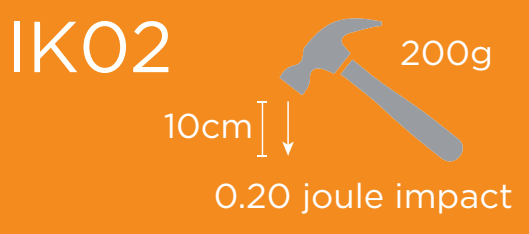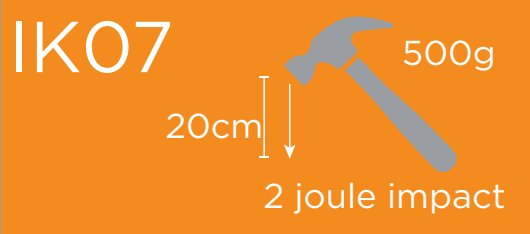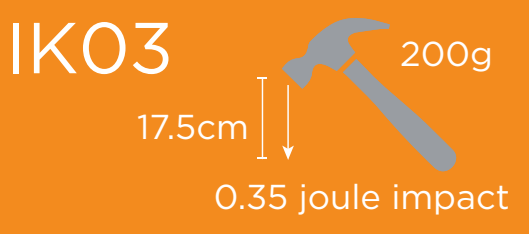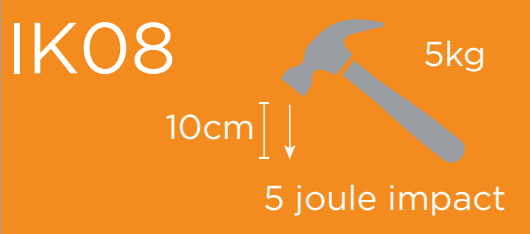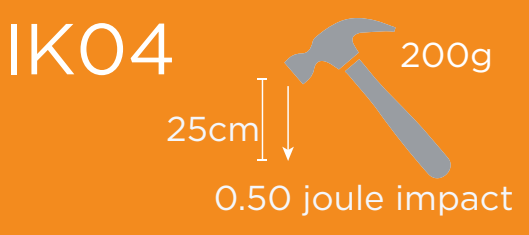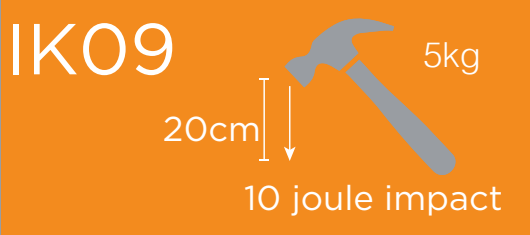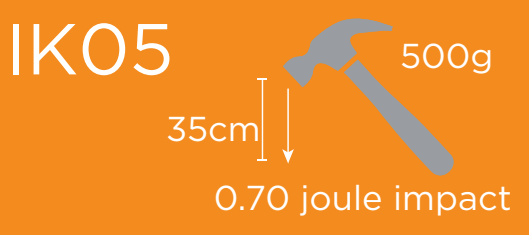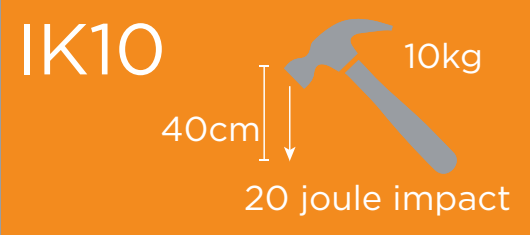
Equipment intended for use in Zone 1 areas cannot be used in Division 1 areas as this covers Zone 0 rated areas also.

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.

IK01	200g	7.5cm	0.15 joule impact
IK06	500g	20cm	1 joule impact
IK02	200g	10cm	0.20 joule impact
IK07	500g	20cm	2 joule impact
IK03	200g	17.5cm	0.35 joule impact
IK08	5kg	10cm	5 joule impact
IK04	200g	25cm	0.50 joule impact
IK09	5kg	20cm	10 joule impact
IK05	500g	35cm	0.70 joule impact
IK10	10kg	40cm	20 joule impact

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.

SOLIDS

PROTECTED AGAINST A SOLID OBJECT GREATER THAN 50MM, SUCH AS A HAND	1
PROTECTED AGAINST A SOLID OBJECT GREATER THAN 12.5MM, SUCH AS A FINGER	2
PROTECTED AGAINST A SOLID OBJECT GREATER THAN 2.5MM, SUCH AS A SCREWDRIVER	3
PROTECTED AGAINST A SOLID OBJECT GREATER THAN 1MM, SUCH AS A WIRE	4
DUST PROTECTED. LIMITED INGRESS OF DUST PERMITTED. WILL NOT INTERFERE WITH OPERATION OF EQUIPMENT	5
DUST TIGHT. NO INGRESS OF DUST.	6

IP
INGRESS PROTECTION

6 DUST **5** WATER

LIQUIDS

1	PROTECTED AGAINST VERTICAL FALLING DROPS OF WATER. LIMITED INGRESS PERMITTED
2	PROTECTED AGAINST SPRAYS OF WATER UP TO 15° FROM VERTICAL. LIMITED INGRESS PERMITTED
3	PROTECTED AGAINST SPRAYS OF WATER UP TO 60° FROM VERTICAL
4	PROTECTED AGAINST WATER SPLASHED FROM ANY DIRECTION
5	PROTECTED AGAINST LOW PRESSURE JETS OF WATER FROM ANY DIRECTION
6	PROTECTED AGAINST STRONG JETS OF WATER FROM ANY DIRECTION
7	PROTECTED AGAINST IMMERSION UP TO 1 METRE FOR 30 MINUTES
8	PROTECTED AGAINST COMPLETE CONTINOUS SUBMERSION IN WATER
9	PROTECTED AGAINST HIGH PRESSURE, HIGH TEMPERATURE JETS OF WATER AND STEAM

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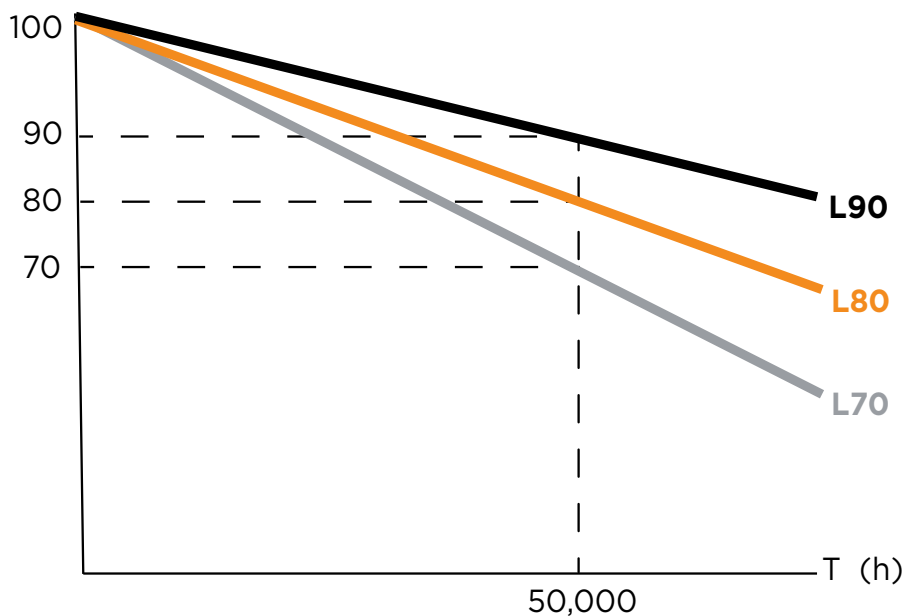
As LED technology advanced, the lifespan of luminaires surged and the 70% figure of L70 began exceeding 60,000 hours. This led to the creation of additional ratings such as L80 (80% of initial lumens) and L90 (90% of initial lumens). Using the table above for an example, a luminaire rated at 50,000 hours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

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LUX LEVELS GUIDELINES

AREA	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

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.

AS/NZS 1680: Interior and Workplace 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: Lighting for Road and 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: Sport Lighting		
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
AS/NZS 2293: Emergency Escape Lighting 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: Control of Obtrusive Effects of Outdoor Lighting		

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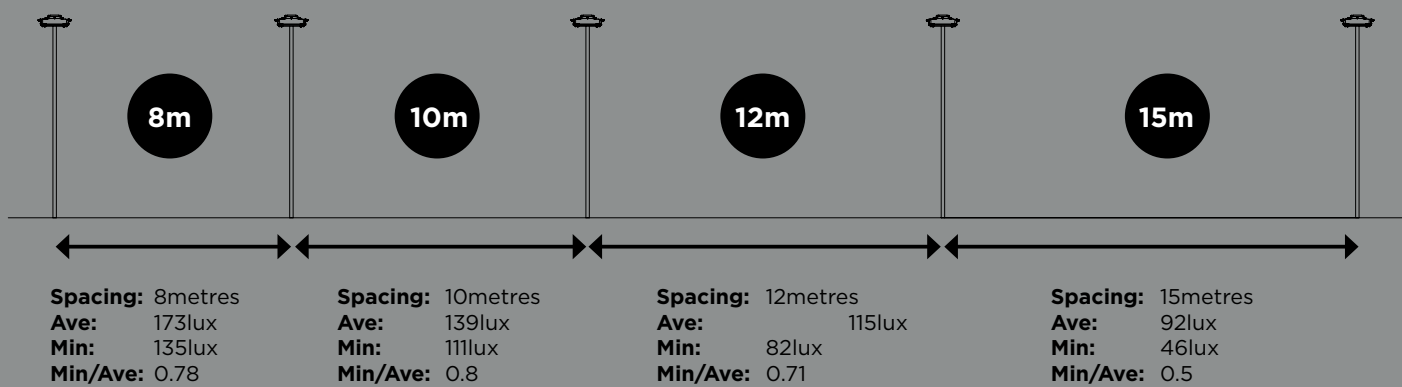
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ILLUMINATOR

Up to 15m spacing with 40 lux minimum

SPACINGS

50W-5000K-Type II Optics Model Mounting
Height: 3.0m **Maintenance Factor:** 0.8

8m **10m** **12m** **15m**

Spacing: 8metres	**Spacing:** 10metres	**Spacing:** 12metres	**Spacing:** 15metres
Ave: 173lux	**Ave:** 139lux	**Ave:** 115lux	**Ave:** 92lux
Min: 135lux	**Min:** 111lux	**Min:** 82lux	**Min:** 46lux
Min/Ave: 0.78	**Min/Ave:** 0.8	**Min/Ave:** 0.71	**Min/Ave:** 0.5

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