

H-SERIES

SWEEÖ[®]
LED Lighting



LM-79
LM-80

IP66
IK10



RoHS
Compliant

5 YEAR
WARRANTY

LED STREET LIGHTS

01 | LED Street Lights

www.sweeo.com



Overview

The SWEEO H-Series LED street lights are using PHILIPS LUMILEDS® luminous source, providing excellent lumen output, long-lasting stability and splendid sight.

The SWEEO H-Series LED street lights have a high luminous efficiency and better service life. Provide 5 years warranty on luminaire.

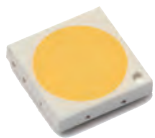
Color Options

▬ Silver Gray ▬ Black

HIGH-EFFICACY LED LIGHT SOURCE



Philips Lumileds Luxeon TX
Greater than 135lm/W high efficacy, illumination grade LED light source.



Philips Lumileds 3030 2D
Greater than 150lm/W high efficacy, illumination grade LED light source.



Philips Lumileds 5050
Greater than 185lm/W high efficacy, illumination grade LED light source.

HIGH-END LED DRIVER (Two options)

+ NON-DIMMABLE



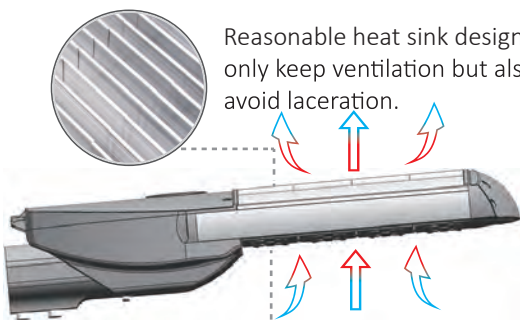
High-end Mean Well HLG Series LED driver, optimal stability, performance and lifespan.

+ DIMMABLE

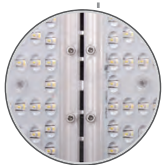


High-end Inventronics programmable LED driver, integrate dimming function and 6KV /10KV surge protection. Provide excellent performance and lifespan.

AIR CONVECTION EFFECT

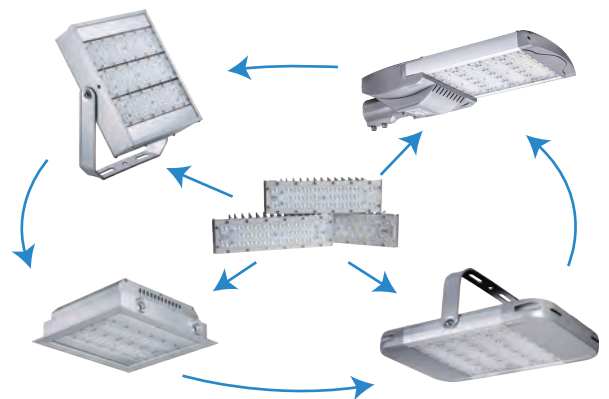


Reasonable heat sink design, not only keep ventilation but also avoid laceration.



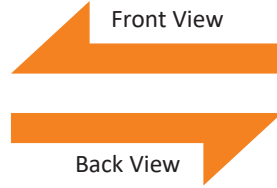
Gaps between each module increase heat dissipation speed and solve the problem of dust deposition.

FLEXIBLE COMBINATIONS OF MODULES

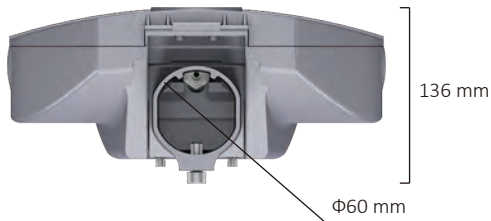


Design

★ External Design



316 mm



Number of Modules	1	2	3	4	5	6	7
"L" Length	431 mm	504 mm	577 mm	650 mm	723 mm	796 mm	869 mm
Weight	5.3 kg	6.1 kg	7.3 kg	8.2 kg	9.0 kg	9.9 kg	10.8 kg

★ Design Features



Professional lens design, suitable for various applications.



Luminaire body is fixed by two M8x16 fortified stainless steel screws.



Rational clamshell design for wiring compartment, sturdy and durable.



Use stainless steel screws for whole luminaire, no corrosion worries.



Use German **WAGO** connectors for internal wiring, safe, convenient & fast.



Innovative pluggable connector, clean & efficient.



Neat inner cavity structure, ensure the thermal convection of LED driver.



Full aluminum made, sufficient heat dissipation area.

DETAILED FEATURES

Electrical & Photometric

★ 3030 Version

Number of Modules	Model	LED Working Current	Power	Luminaire Efficacy (+/- 5%)	Lumen Output (+/- 5%)	Input Voltage	LED Brand	Driver Brand	Light Distributions	CCT (K)	Surge Protection Device	Lifetime (h)
1	LOZ-LD40H4-130XXXXXX	95mA	40W	130 lm / w	5200 lm	100-240V /277V AC 50 /60Hz	Philips Lumileds 3030 2D	MeanWell Inventronics	TypeI, Medium TypeII, Medium TypeIII, Medium TypeV, Short TYPEII, BLS	3000* 4000 5000 5700	10KV	>100,000 (L70)
	LOZ-LD50H5-130XXXXXX	115mA	50W	120 lm / w	6000 lm							>80,000 (L70)
	LOZ-LD60H6-130XXXXXX	145mA	60W	115 lm / w	6900 lm							>100,000 (L70)
2	LOZ-LD80H4-230XXXXXX	100mA	80W	130 lm / w	10400 lm							>100,000 (L70)
	LOZ-LD100H5-230XXXXXX	120mA	100W	120 lm / w	12000 lm							>80,000 (L70)
	LOZ-LD120H6-230XXXXXX	145mA	120W	115 lm / w	13800 lm							>100,000 (L70)
3	LOZ-LD120H4-330XXXXXX	100mA	120W	130 lm / w	15600 lm							>100,000 (L70)
	LOZ-LD150H5-330XXXXXX	120mA	150W	120 lm / w	18000 lm							>80,000 (L70)
	LOZ-LD180H6-330XXXXXX	145mA	180W	115 lm / w	20700 lm							>100,000 (L70)
4	LOZ-LD160H4-430XXXXXX	100mA	160W	130 lm / w	20800 lm							>100,000 (L70)
	LOZ-LD200H5-430XXXXXX	120mA	200W	120 lm / w	24000 lm							>80,000 (L70)
	LOZ-LD240H6-430XXXXXX	145mA	240W	115 lm / w	27600 lm							>100,000 (L70)
5	LOZ-LD200H4-530XXXXXX	100mA	200W	130 lm / w	26000 lm							>100,000 (L70)
	LOZ-LD240H5-530XXXXXX	120mA	240W	120 lm / w	28800 lm							>100,000 (L70)

*Luminous Efficacy of 3000K is 5% lower than other CCTs.

*"XX" in Model represents different CCT.

*"XXXX" in Model represents different lighting distributions.

★ 3535 Version

Number of Modules	Model	LED Working Current	Power	Luminaire Efficacy (+/- 5%)	Lumen Output (+/- 5%)	Input Voltage	LED Brand	Driver Brand	Light Distributions	CCT (K)	Surge Protection Device	Lifetime (h)
1	LOZ-LD35H-135XXXXXX	750mA	35W	100 lm / w	3500 lm	100-240V /277V AC 50 /60Hz	Philips Lumileds Luxeon TX	MeanWell Inventronics	TypeI, Medium TypeII, Medium TypeIII, Medium TypeV, Short	3000* 4000 5000 5700	10KV	>100,000 (L70)
	LOZ-LD40H2-135XXXXXX	860mA	40W	100 lm / w	4000 lm							
2	LOZ-LD65H-235XXXXXX	750mA	65W	100 lm / w	6500 lm							
	LOZ-LD80H2-235XXXXXX	900mA	80W	100 lm / w	8000 lm							
3	LOZ-LD100H-335XXXXXX	750mA	100W	100 lm / w	10000 lm							
	LOZ-LD120H2-335XXXXXX	900mA	120W	100 lm / w	12000 lm							
4	LOZ-LD135H-435XXXXXX	750mA	135W	100 lm / w	13500 lm							
	LOZ-LD160H2-435XXXXXX	900mA	160W	100 lm / w	16000 lm							
5	LOZ-LD165H-535XXXXXX	750mA	165W	100 lm / w	16500 lm							
	LOZ-LD200H2-535XXXXXX	900mA	200W	100 lm / w	20000 lm							
6	LOZ-LD200H-635XXXXXX	750mA	200W	100 lm / w	20000 lm							
	LOZ-LD240H2-635XXXXXX	900mA	240W	100 lm / w	24000 lm							
7	LOZ-LD230H-735XXXXXX	750mA	230W	100 lm / w	23000 lm							
	LOZ-LD280H2-735XXXXXX	900mA	280W	100 lm / w	28000 lm							

*Luminous Efficacy of 3000K is 5% lower than other CCTs.

*"XX" in Model represents different CCT.

*"XXXX" in Model represents different lighting distributions.

★ 5050 Version

Number of Modules	Model	LED Working Current	Power	Luminaire Efficacy (+/- 5%)	Lumen Output (+/- 5%)	Input Voltage	LED Brand	Driver Brand	Light Distributions	CCT (K)	Surge Protection Device	Lifetime (h)
1	LOZ-LD40H4-150XXXXXX	48mA	40W	155 lm /w	6200 lm	100-240V /277V AC 50 /60Hz	Philips Lumileds 5050	MeanWell Inventronics	TypeII, Medium TypeIII, Medium TypeV, Short	3000* 4000 5000 5700	10KV	>100,000 (L70)
	LOZ-LD50H5-150XXXXXX	59mA	50W	150 lm /w	7500 lm							
	LOZ-LD60H6-150XXXXXX	75mA	60W	145 lm /w	8700 lm							
2	LOZ-LD80H4-250XXXXXX	50mA	80W	155 lm /w	12400 lm							
	LOZ-LD100H5-250XXXXXX	61mA	100W	150 lm /w	15000 lm							
	LOZ-LD120H6-250XXXXXX	75mA	120W	145 lm /w	17400 lm							
3	LOZ-LD120H4-350XXXXXX	50mA	120W	155 lm /w	18600 lm							
	LOZ-LD150H5-350XXXXXX	58mA	150W	150 lm /w	22500 lm							
	LOZ-LD180H6-350XXXXXX	75mA	180W	145 lm /w	26100 lm							
4	LOZ-LD160H4-450XXXXXX	50mA	160W	155 lm /w	24800 lm							
	LOZ-LD200H5-450XXXXXX	58mA	200W	150 lm /w	30000 lm							
	LOZ-LD240H6-450XXXXXX	75mA	240W	145 lm /w	34800 lm							
5	LOZ-LD200H4-550XXXXXX	50mA	200W	155 lm /w	31000 lm							
	LOZ-LD240H5-550XXXXXX	61mA	240W	150 lm /w	36000 lm							

*Luminous Efficacy of 3000K is 5% lower than other CCTs.

*"XX" in Model represents different CCT.

*"XXXX" in Model represents different lighting distributions.

Working Environment & Packing

Number of Modules	Working Environment	Storage Temperature	Rating	CRI	Power Factor	Power Efficiency	Material	Pole Diameter (mm)	Product Dimensions (mm)	Carton Size (mm)	N.W (kg)	G.W (kg)
1	-40 °C ~ +50 °C 10% ~ 90%RH	-40 °C ~ +50 °C	Class I IP66 IK10	>70	>0.95	>90%	Housing: Die-cast aluminum; Heat sink: Stretched Aluminium Alloy; Lens: PC	60	431*316*136	480*370*200	5.3	6.3
2									504*316*136	555*370*200	6.1	7.3
3									577*316*136	630*370*200	7.3	8.6
4									650*316*136	705*370*200	8.2	9.6
5									723*316*136	780*370*200	9.0	10.6
6									796*316*136	855*370*200	9.9	11.6
7									869*316*136	930*370*200	10.8	12.6

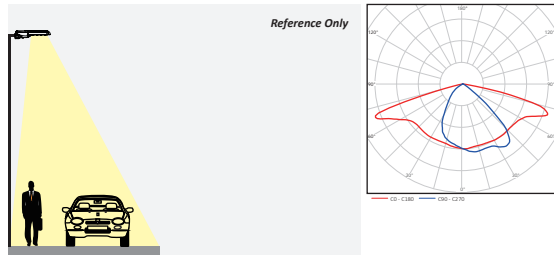
Note: Above data of weight are all typical values.

Certification

Manufacturer
ISO9001
H Series
CE, ROHS, LM79, LM80
H2 Series
CE, ROHS, LM80
H4/H5 Series
CE, ROHS, LM79, LM80
H6 Series
CE, ROHS, LM79, LM80

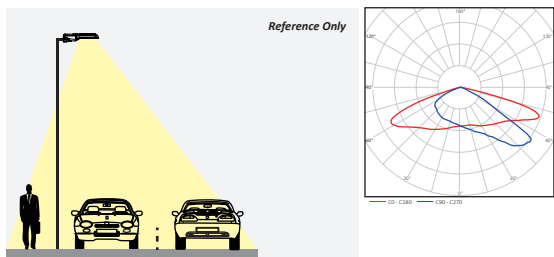
Multiple Light Distribution Options

Street light should fit with a wide range of applications, such as highway, express way, roadway, avenue, walking path or parking lot lightings. Considering this, SWEEÖ provides different light distribution lens for the H Series street light to achieve best lighting effect in different applications. SWEEÖ follows the North American IESNA standard in providing the optional lens width ,Type I, Type II, Type III and Type V. Type I is suitable for walking path with 1 lane, Type II is for 2 lanes and Type III is for even more wider road, Type V is for parking lot. SWEEÖ selects the most suitable lens for its customers according to the detailed parameters project by project.



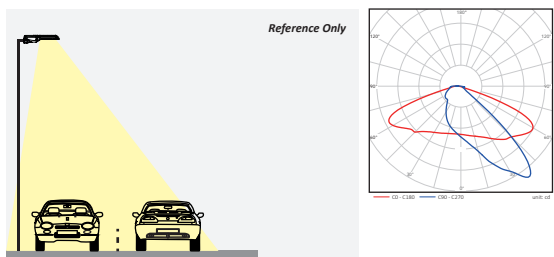
TYPE I

The Type I lens of SWEEÖ H series street light has beam angle of 50*160 degrees. In the IESNA Standard, The Type I distribution is great for lighting walkways, paths and sidewalks. It is generally applicable to where the mounting height is approximately equal to the roadway width.



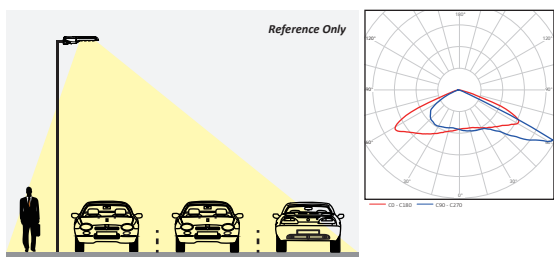
TYPE II

The Type II lens of SWEEÖ H series street light has beam angle of 65*155 degrees. In the IESNA Standard, the Type II distribution is used for wide walkways, on ramps and entrance roadways, as well as other long, narrow lighting. It is generally applicable to where the width of the roadway does not exceed 1.75 times the designed mounting height.



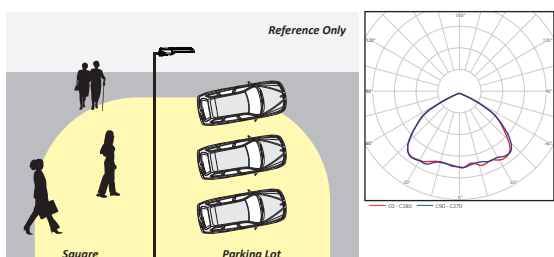
TYPE II BLS

The Type II BLS is a new light distribution developed based on Type II. BLS means back light shield. The light on the back of pole be reduced and the light in front of the pole be increased accordingly. It is generally applicable to where no need or need less light on the back of pole, such as residential area, high way, bridge and etc.



TYPE III

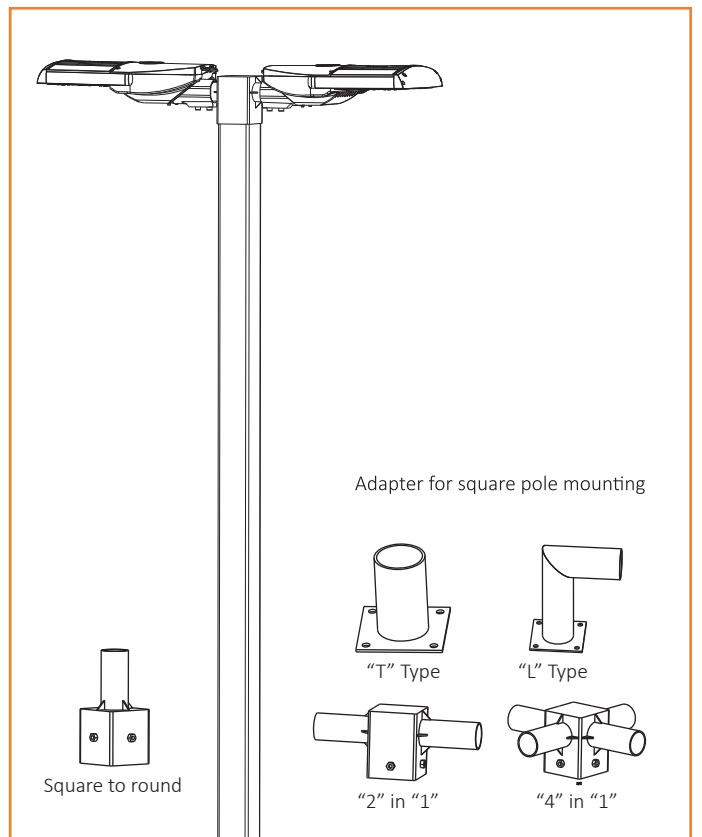
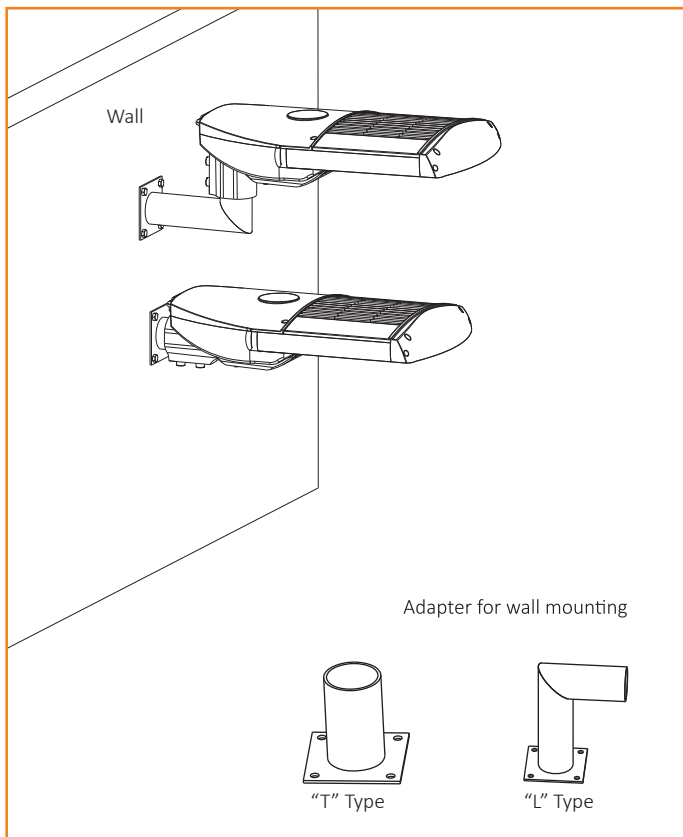
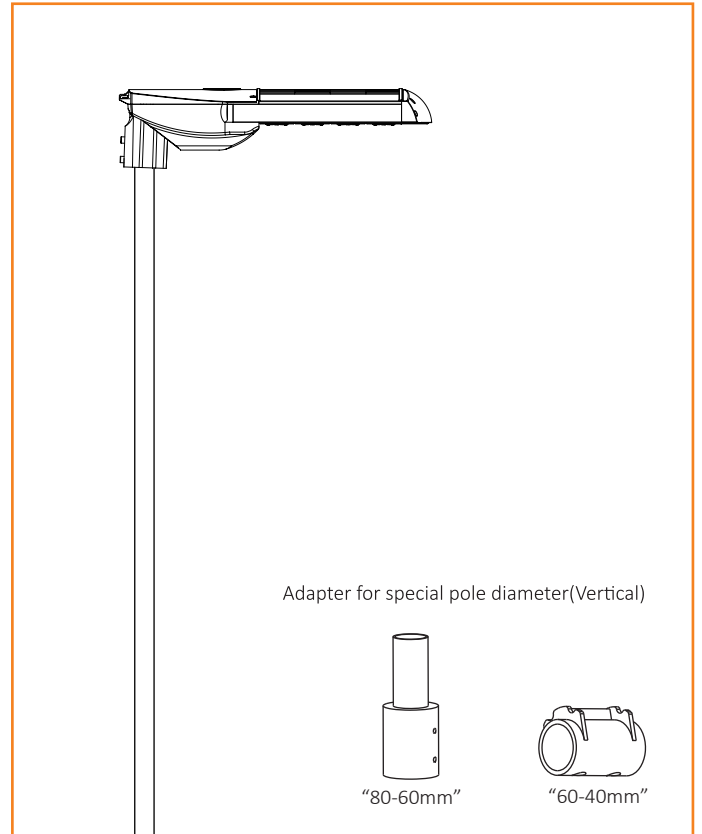
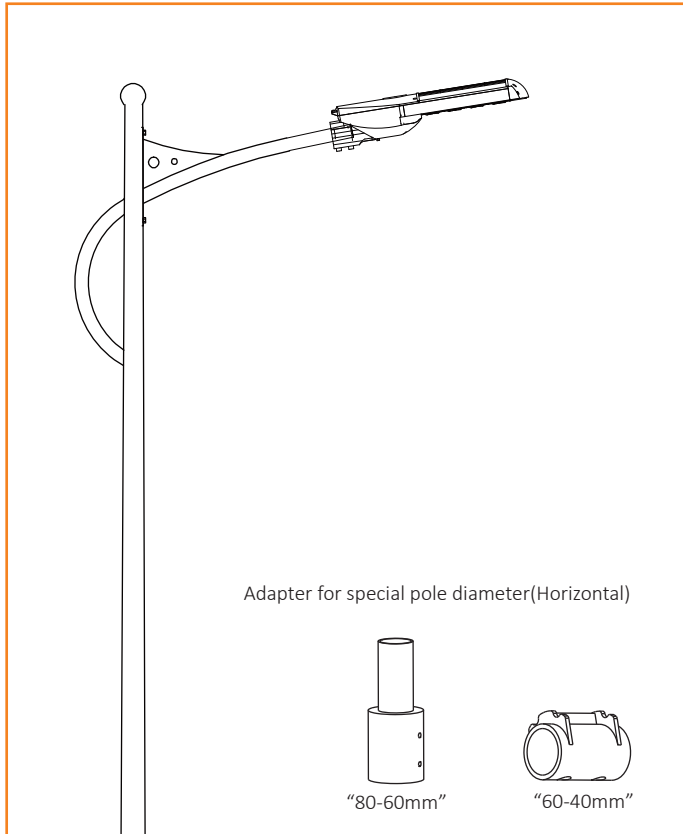
The Type III lens of SWEEÖ H series street light has beam angle of 80*160 degrees. In the IESNA Standard, the Type III distribution is meant for roadway lighting, general parking areas and other areas where a larger area of lighting is required. This distribution is intended for luminaires mounted at or near the side of medium width roadways or areas, where the width of the roadway or area does not exceed 2.75 times the mounting height.



TYPE V

The Type V lens of SWEEÖ H series street light has beam angle of 110*110 degrees. In the IESNA Standard, It is intended for luminaire mounting at or near center of roadways, center islands of parkway, and intersections. It is also meant for large, commercial parking lot lighting as well as areas where sufficient, evenly distributed light is necessary.

Various Installation Methods With Different Adapters



Surge Protection Device

Type	Nominal input voltage (V)	Protection level Up (L-N) (kV)	Protection level Up (LN-GND) (kV)	Open circuit voltage U_{oc} (kV)	Nominal surge current I_n (kA)	Min. number of surges, nominal current
A - Class I	277	≤ 1.6	$\leq 2 - 4$	10	5	100 strikes at 3kA 50 strikes at 5kA 1 strike at 10kA
Type	Maximum surge current I_{MAX} (kA)	Number of surges, maximum current	Insulation classification	Open Circuit Voltage U (kV)	Lifetime @ Tc life, 90% survivals (hours)	Application
A - Class I	10	1 strike	Class I	10	100,000	built-in use only

General product characteristics
 T ambient (°C): -40 to +70 °C
 Tcase life (°C): +80 °C

All dimensions are mentioned in mm

CLASS I

Dimming Optional

Inventronics driver will be used if dimming request.
 Multiple dimming functions are integrated (0-5V DC or 0-10V DC or PWM Signal or Timer).

- ★ 0-5V Dimming [All the models over 50W are available]
- ★ 0(1)-10V Dimming [All the models are available]
- ★ PWM Dimming [All the models over 50W are available]
- ★ Timer Dimming [All the models over 50W are available]

Flexible Fitter

H0
Factory default
Fitter on H0 position

H10
Adjust fitter to H10 position
by 4mm allen wrench

H15
Adjust fitter to H15 position
by 4mm allen wrench

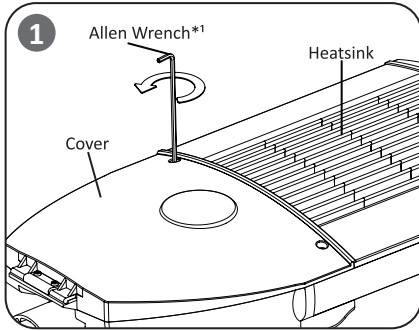
V0
Adjust fitter to V0 position
by 4mm allen wrench

V5
Adjust fitter to V5 position
by 4mm allen wrench

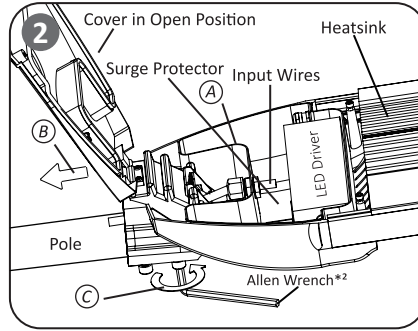
V15
Adjust fitter to V15 position
by 4mm allen wrench

Fitter

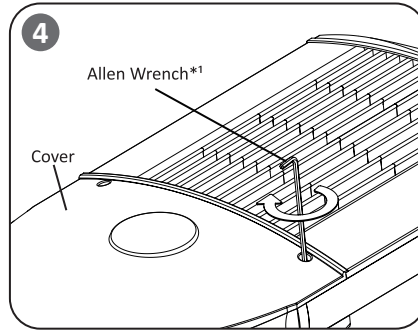
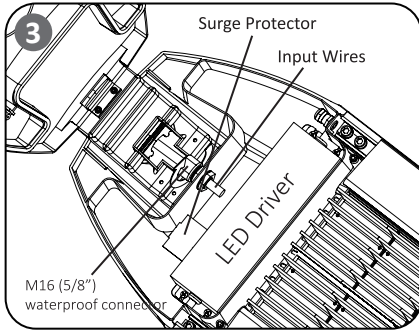
Installation



*1 Allen Wrench: 4mm (5/32")
*1 Inner Hexagon Screw: M5 (3/16")



*2 Allen Wrench: 6mm (7/32")
*2 Inner Hexagon Screw: M8 (5/16")



STEP 1:

To open cover, hold fixture by heatsink with the light modules **facing down**. Remove 2 screws on the cover by 4mm (5/32") allen wrench.

STEP 2:

Keep the cover in open position, lead the **Input Wires** in through the M16 (5/8") water-proof connector (**see A**), Do not tighten. Slide fixture onto pole (**see B**) and adjust to level position. Once desired position is achieved, tighten (2) mounting bolts (**see C**). Recommended torque: 17Nm ± 1Nm.

STEP 3:

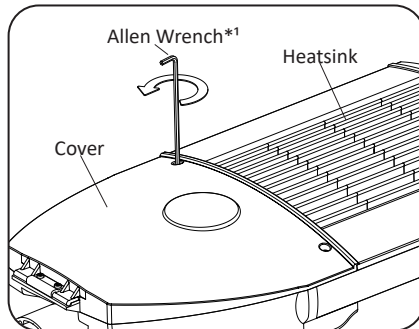
Connect the **Input Wires** into **Terminal Block**, Reference "**Electrical Connections**" section for completing electrical connections.

STEP 4:

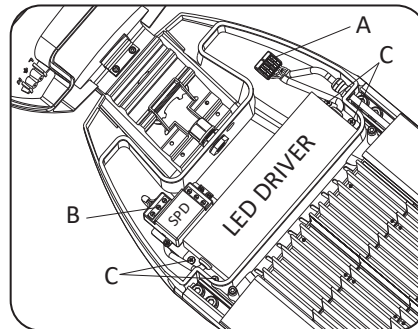
Close the cover, tighten (2) mounting bolts.

Maintenance

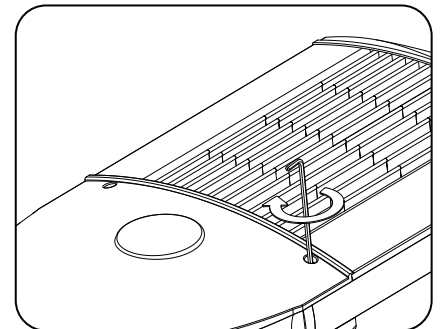
★ Driver replacement



STEP 1:
To open cover, hold fixture by heatsink with the light modules **facing down**. Remove 2 screws on the cover by 4mm (5/32") allen wrench.

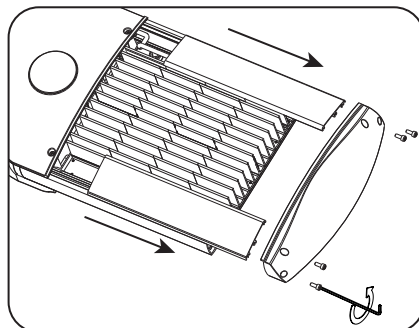


STEP 2:
Keep the cover in open position, unscrew the four M4X8 screws (**see C**) and pull out the input of driver from surge protector device (**see B**) by cross screwdriver, disconnect the driver from the WAGO connect (**see A**), take off the failed driver and replace by a new one.

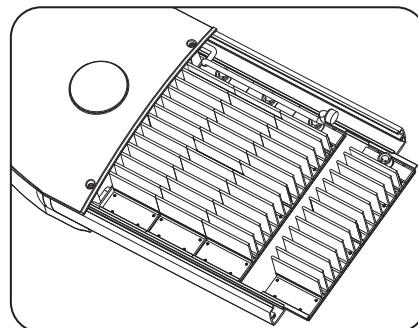


STEP 3:
Connect and tighten up each part back step by step. Maintenance finished.

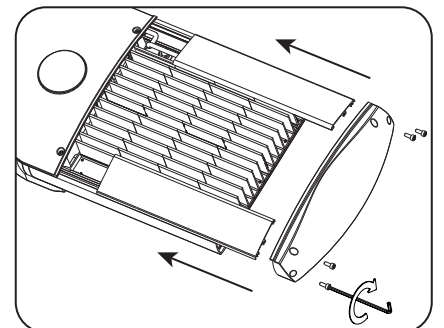
★ Module replacement



STEP 1:
Unscrew the four M5x12 screws by 4mm (5/32") allen wrench and pull out the lamp head. then Pull out the cover both sides by hand.



STEP 2:
Disconnect the failed module from connector and replace a new one.



STEP 3:
Connect and tighten up each part back step by step. Maintenance finished.