



Strata2 HIGHPOWER All In One

Solar LED Street Light

Aesthetically pleasing integrated solar street light system with is compact & ULTRA modern. All components are integrated into a compact neat slimline design utilizing the latest in technology with High Lumen branded LED Package

(Philips LUMILEDS) 5050 SMDs with a 210lumen per watt led package, MPPT controller, Mono Crystalline Solar cells and LIFEPO Lithium battery technology with over 2000 charging cycles

This range is driven around 170 -180 lumens per watt for longevity and heat management of the LED PCB

If a motion sensor is used on the design we can drive this range up too a 180w 32400 lumens on a sensor based design with a custom profile over 12 hour period.

IES Files and lighting simulations available on request

FAR SUPERIOR EFFICIENCY DESIGN WITH 25.6V LIFEPO4 BATTERY AND 39V SOLAR PANEL



Battery design

Simple external battery replacement
Single or double battery configuration

Housing Design

Ergonomically designed for wind resistance and ease of installation

Durability

Intelligent management system

Design

Latest component technology

Temperature

Resistant
-20 °C to +65 °C

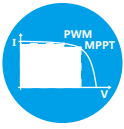
Warranty

5 Year warranty
3 Years on battery

LM-79 LM-80 TM21 **IP66 IP68**

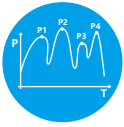


Advantages of the Strata2 Series



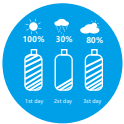
MPPT Technology

MPPT is an advanced charge mode whose full name is Maximum Power Point Tracking function which can increase the energy utilization rate by 15% to 20% than the PWM controller.



Multi-Peak MPPT

Strata series solar controller adopts multi-peak MPPT technology, which can timely track the maximum power point and improve the conversion efficiency of solar panels.



Smart 365 Technology

Intelligent solar controller technology (Intelligent power control).

It will intelligently detect recent weather conditions, reasonably plan the discharge power to achieve more rainy days.



Battery (Intelligent Charge and Discharge)

Using Grade A LiFePO4 battery cells with excellent safety performance.

Stratas unique current equalization and dual protection (software and hardware) enable the battery's capacity remains at 80% after 2000 cycles.

Lifetime is 4 times longer than that of lead-acid batteries technology.

Housing design



Choice of housing colours in Grey, White, Black or silver & Black

EASY INSTALLATION

5 Minutes to install

Simple battery replacement

Quick access for ease of maintenance

LM-79 LM-80 TM21 **IP66 IP68**



Strata2

**Philips
LUMILEDS
5050 LED Chips**



**170-180
LUMENS
PER WATT**

BATWING LENS LIGHT
DISTRIBUTION CURVE

Light distribution with greater
than 93% uniformity

LED LIGHTING

Lumileds

HIGH Lumen LEDs

170 - 180 LM/W

Combined with an integrated LED PCB with high transmittance PMMA Optical lens for optimal heat dissipation with an Aluminum body to ensure maximum heat dissipation.

Batwing lens for superb illumination and uniformity

MOTION SENSOR

TIME CONTROL + MICROWAVE SENSOR

The Strata2 Series automatically switches ON at dusk and switches OFF at dawn. During the evening the standard sensor models lighting profile will be as follows,

When motion is detected the brightness of the luminaire will increase to 100% for a present time of 30 to 60 seconds and once the sensor detects no further movement it will revert back to its determined profile over the 12 hour run cycle.

3hrs 100% full brightness dimming to 50%

NEXT, 3hrs 70% brightness dimming to 40%

NEXT, 6hrs 50% brightness dimming to 25%

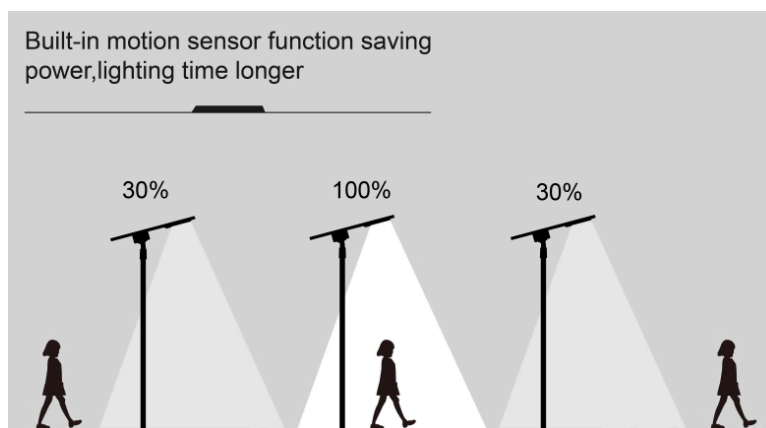
TIME CONTROL WITHOUT MOTION SENSOR

3 Hours 100% Power on rated lumen output

3 Hours 40% Power on rated lumen output

6 % 25% power of rated Lumen output

This mode will give you more light over a night cycle compared to the lighting profiles on the sensor models. We can increase profile settings to achieve a much higher lumen package up to 27000 lumens on a motion sensing variation but not on the time control design unless we reduce the standard preset running time profiles during the 3 or 4 stages of dimming during the night



Example

LM-79 LM-80 TM21 IP66 IP68 IEC



STRATA2MODELS

TECHNICAL SPECIFICATIONS



50W
MODULES -
UP to 4 modules

5050 SMD PCB
Boards
with
SMART OPTICS

Time control models
listed below

70 WATTS

12600 LUMENS

SSLASOLSTRATA280TC

80 WATTS

14400 LUMENS

SSLASOLSTRATA100TC

90 WATTS

16200 LUMENS

SSLASOLSTRATA120TC

100 WATTS

18000 LUMENS

SSLASOLSTRATA2150TC

170-180 LUMENS / WATT

Philips Lumileds

OVER 60000 HOURS LM80

Optics: type 11 / type 111 M

8-9 METERS

9-10 METERS

9-10 METERS

10-12 METERS

LITHIUM IRON PHOSPHATE **LIFEPO4** INCLUDING BATTERY MANAGEMENT SYSTEM BMS

26 - 30 AH 25.6 VOLTS

30 - 32 AH 25.6 VOLTS

32 - 36AH 25.6 VOLTS

42-48 AH 25.6 VOLTS

OVER 20 HOURS AT FULL CHARGE - 3 days reserve in SMART MODE

Charging time 6-7 HOURS

OVER 2000 CYCLES - 8 TO 10 YEARS LIFETIME

CERTIFICATION - IEC60598-2-1, UN38, EN 61427 MSDS

120 WATTS / 36V

165 WATTS / 36V

165 WATTS / 36V

185 WATTS / 36V

MONOCRYSTALLINE PANEL **GRADE A 25 YEARS**

IEC 61215 ; IEC 61730 I AND II ; IEC 60904

MPPT SMART CONTROLLER - IP68

Lighting Profile - TIME CONTROL - 4 hrs 100%, 6 hours 40%, 2 hrs 55%

WATERPROOF CONNECTOR, PLUG AND PLAY

EN 55015 ; EN 61000

LM-79 LM-80 TM21 **IP66 IP68**



STRATA2 MODELS

TECHNICAL SPECIFICATIONS



Motion sensing model
with
MICROWAVE
Motion sensor

Lighting Profile
4hrs 100% dimming to 50%
3hrs 70% dimming to 40%
5hrs 50% dimming to 25%

Sensor is activated for 30
seconds per activation

80 WATTS

14400 LUMENS

SFSOLSTRATA280M

100 WATTS

18000 LUMENS

SFSOLSTRATA100M

120 WATTS

21600 LUMENS

SFSOLSTRATA2120M

150 / 160 WATTS

25500/27000 LUMENS

SFSOLSTRATA2150M / 160M

180 LUMENS / WATT

Philips Lumileds

OVER 60000 HOURS LM80

Optics: type 11 / type 111 M

8-9 METERS

9-10 METERS

9-10 METERS

10-12 METERS

LITHIUM IRON PHOSPHATE **LIFEPO4** INCLUDING BATTERY MANAGEMENT SYSTEM BMS

26 AH 25.6 VOLTS

30 AH 25.6 VOLTS

36AH 25.6 VOLTS

42-54 AH 25.6 VOLTS

OVER **20 HOURS** AT FULL CHARGE - 3 days reserve in SMART MODE

Charging time 6-7 HOURS

OVER 2000 CYCLES - 8 TO 10 YEARS LIFETIME

CERTIFICATION - IEC60598-2-1, UN38, EN 61427 MSDS

120 WATTS / 36V

165 WATTS / 36V

165 WATTS / 36V

185 / 200WATTS / 36V

MONOCRYSTALLINE PANEL **GRADE A 25 YEARS**

IEC 61215 ; IEC 61730 I AND II ; IEC 60904

MPPT SMART CONTROLLER, IP68

MICROWAVE MOTION SENSOR

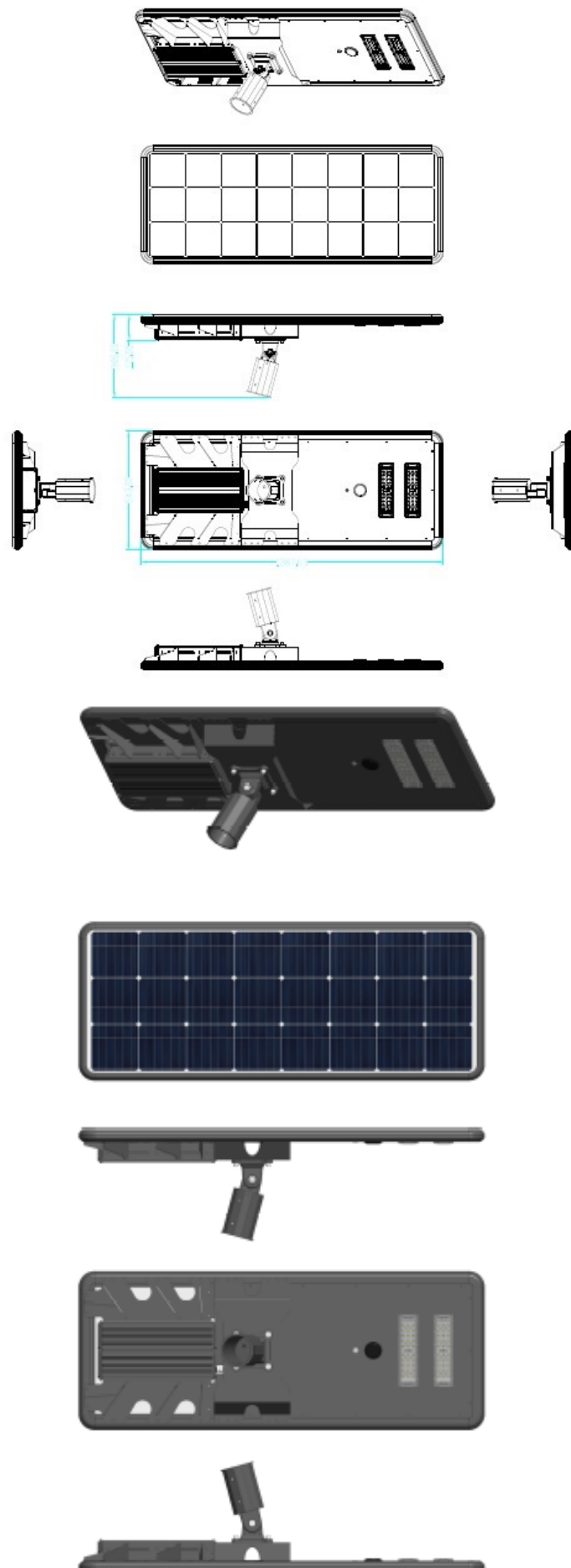
WATERPROOF CONNECTOR, PLUG AND PLAY

EN 55015 ; EN 61000

LM-79 LM-80 TM21 **IP66 IP68**



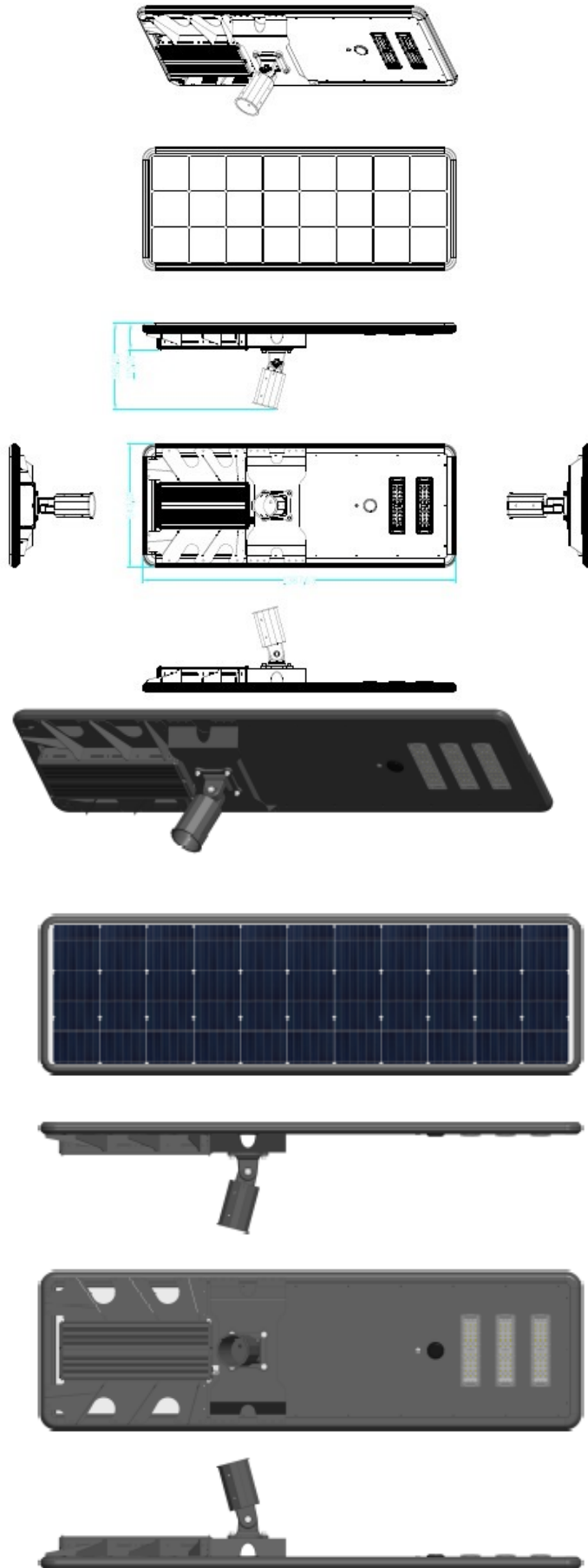
60 / 70 / 80w Schematics with SLIP Rotatable collar
Vertical and side entry
Spigot 76mm



60W
Packing Dimensions
1 solar light per box
1460L X 600W X 160H mm
Weight 30kGS / Box

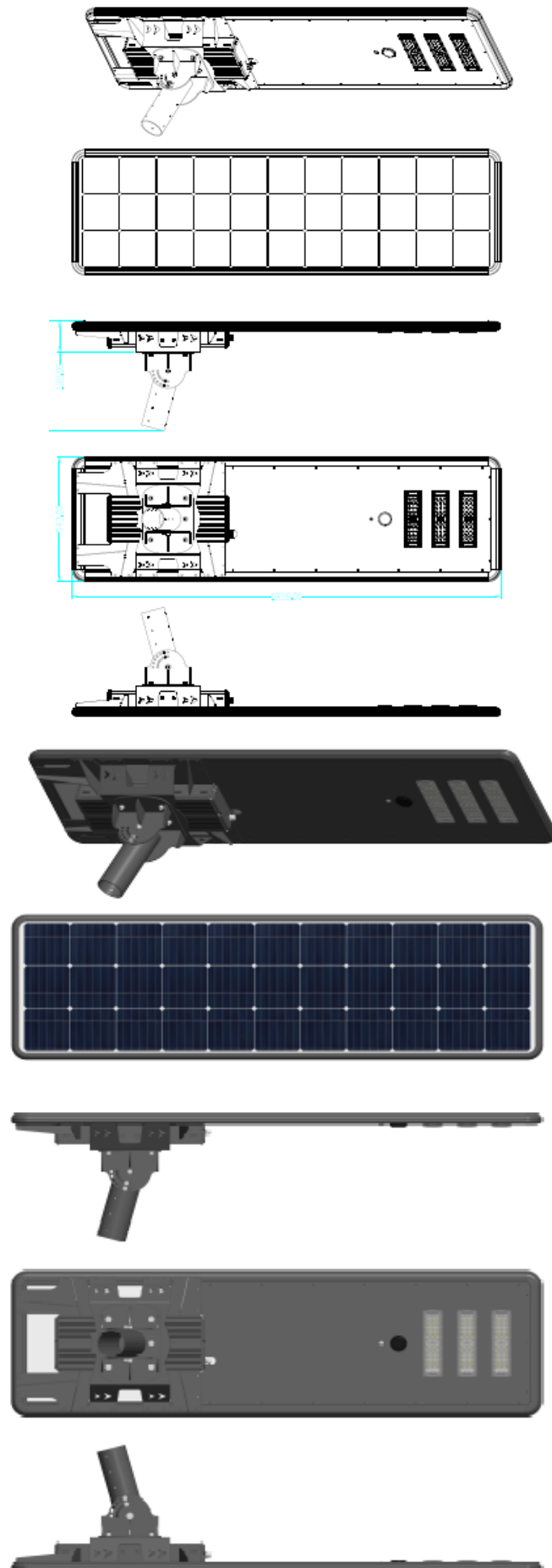
80W
Packing Dimensions
1 solar light per box
1460L X 600W X 160H mm
Weight 30kGS / Box

100w Schematics with SLIP Rotatable collar
Vertical and side entry
Spigot 76mm



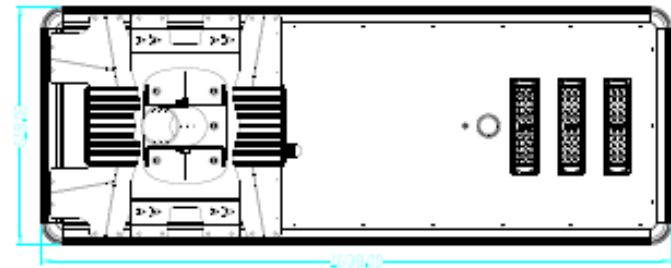
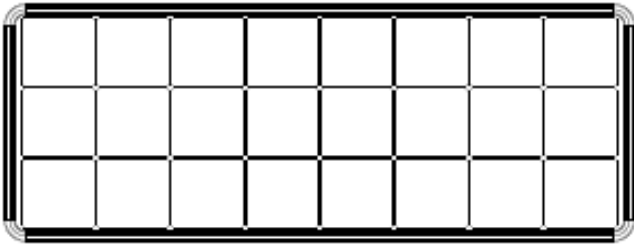
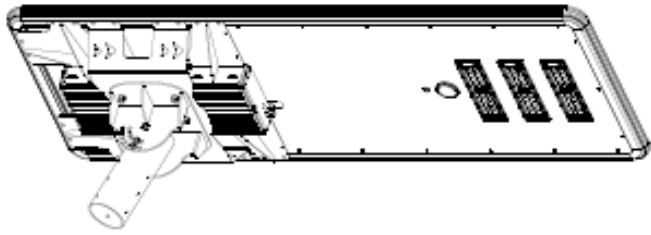
100W
Packing Dimensions
1 solar light per box
1700L X 600W X 160H mm
Weight 35kGS / Box

120w Schematics with SLIP REINFORCED Rotatable collar
Vertical and side entry & Solid Adjustable Spigot option
Spigot 76mm / 84mm



120W
Packing Dimensions
1 solar light per box
1920L X 600W X 170H mm
Weight 39kGS / Box

150w / 160w Schematics with SLIP Rotatable collar
Vertical and side entry & Solid Adjustable Spigot option
Spigot 76mm / 84mm



150W
Packing Dimensions
1 solar light per box
1700L X 675W X 170H mm
Weight 43kGS / Box

160w Also available with a 210w 39v Solar panel design

160W
Packing Dimensions
1 solar light per box
1700L X 675W X 170H mm
Weight 46kGS / Box

Multiple Light Distribution Optics

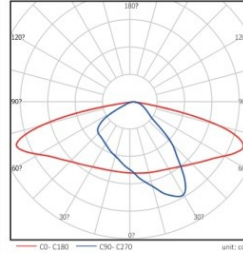
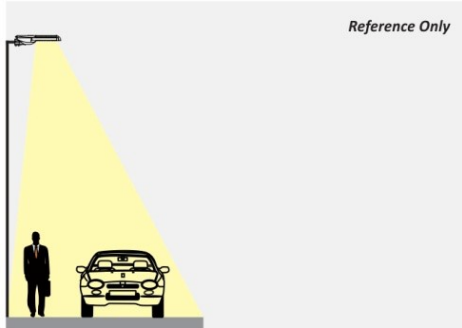
Strata2 Solar LED Street Light

Wide range of Lighting applications: Parks, Estates, Walkways, Roadways and Parking areas.

IESNA standards in providing different Lens optics, Type 1, Type 11, Type 111

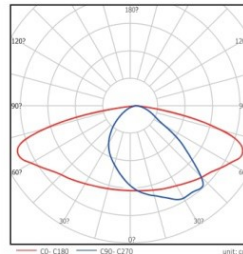
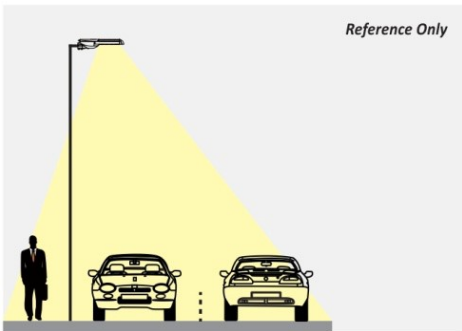
1 Lane, 2 lanes or 3 lanes and other wider lighting variations available

We will assist with a lighting simulation that best suits your requirements.



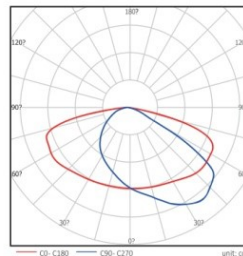
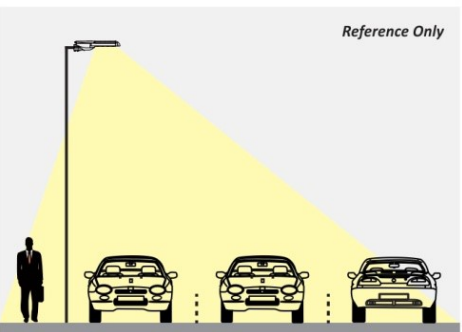
TYPE I

The Type I lens has a beam angle of 70°*140 degrees. In the IESNA Standard, The Type 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 has a beam angle of 75°*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 III Medium

The Type III lens has a beam angle of 155°*70 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.