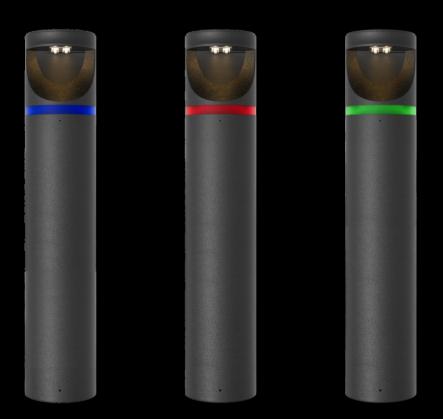


Optional R/G/B luminous accent













### Luna Park Series IED BOLLARD LIGHTS

#### Upper Cover[1]:

- Grafit m
- Corrosion resistant casting aluminum, no-rinse surface treatment
- Double powder-coated
- -Optimized surface for reduced accumulation of dirt

#### LED Module[2]:

- High power LEDs
- Color or CCT(K):warm white 3000K, neutral white 4000K & others
- CRI 80+, optional CRI90+
- 3-step MacAdam (SDCM≤3Step)

#### Optical lens[2]:

- IESNA Type II (medium) beam or 360degree beam
- Applicable for European P-class standard pedestrian lighting and M-class roads
- Amber lenses cut down the blue light spectrum from white light LEDs to provide safer lighting for night-time surroundings and create biologically sustainable lighting

#### Anti-glare cone[3]:

- Corrosion-resistant cast aluminum, No-Rinse surface treatment
- Double powder-coated
- Glare-free above the light aperture

#### **Bollard & Accessories:**

- Housing Material: aluminum profile [4]
  Customized made finish color is available on request
- Fastener: SUS 316 stainless steel [5]
- Base plate: mounting accessories [6]

#### **Options:**

- Dimming: O-1 OV, DALI, TRIAC (ELV)
- Optional R/G/B luminous accent
- Motion sensor
- Emergency backup

Ø152×H250mm



Ø152×H600mm



Ø152×H1000mm



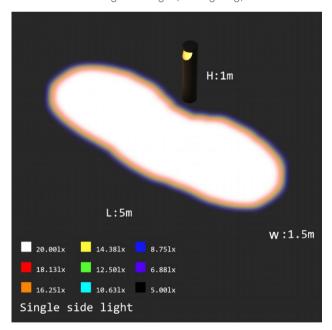


#### **Unique Features**

Modular design / Single side light and double sides light

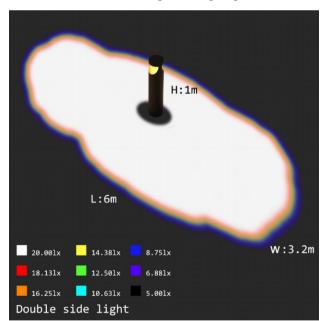


Single side light (Path lighting)





Double sides light(Area lighting)



#### Different Optics and Light Distribution Curve for Options (Note: for Luna Park-Series LED Bollard Lights only):

Type II Distribution

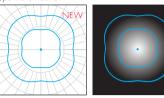




#### T2 Optic (standard)

The Type II distribution is used for narrow pathways and trails, narrow entrances of shopping centers, parking lots and office complex's.

#### Type V Distribution





The Type V optic produce a symmetrical distribution that has the same intensity at all angles. This distribution has a uniform symmetry of candle power that is essentially the same at all lateral angles. It is meant for large, commercial parking lighting as well as areas where sufficient, evenly distribution light is necessary.

Type III Distribution



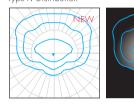


T3 Optic

The type III distribution is meant for roadway lighting, general parking areas and other areas where a larger area of lighting is required. Type III lighting needs to be placed to the side of the area, allowing the light to project outward and fill the area. This produces a filling light flow.

Type III light distributions have a preferred lateral width of 40°. 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 IV Distribution

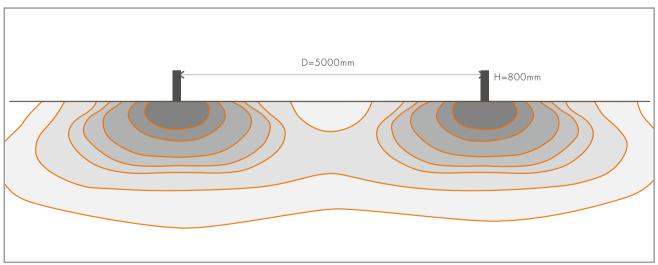




The type IV distribution produces a semicircular light meant for mounting on the sides of buildings and walls. It's best for illuminating the perimeter of parking areas and businesses. The intensity of the Type IV lighting has the same intensity at angles from 90° to 270°.

Type IV light distributions have a preferred lateral width of 60°. This distribution is intended for side-of-road mounting and is generally used on wide roadways where the roadway width does not exceed 3.7 times the mounting height.

#### Asymmetrical Light Distribution



#### Model No.: 17LA (Single/12W) / LCL-17LB(Double/24W)



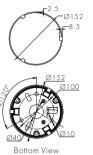


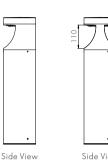
IK06

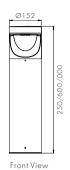












(Flange Base)

(Single)

Side View (Double)

#### **Technical Specifications**

Item 1	Number	Optional Control Mode	Light Color or e CCT (K) Light Source		Beam Angle	Input Voltage (V)	Typical Power (VV)±3%	Typical Luminance (LM)	IK Rate
1 <i>7</i> L	A-104	ON/OFF, 0-10V, DALI	2700K, 3000K, 4000K, 5000K	4×3W CREE or LUMILEDS LED	Standard Type II, (Optional Typ III, Type IV, Type V)	220-240VAC (120-277VAC)	12	Cool white=960 Warm white=816	06
7LB-	-108	ON/OFF, 0-10V, DALI	2700K, 3000K, 4000K, 5000K	8×3W CREE or LUMILEDS LED	Standard Type II, (Optional Typ III, Type IV, Type V)	220-240VAC (120-277VAC)	24	Cool white=1920 Warm white=1632	06

#### **Material Specifications**

Housing: Die-casting aluminum, No-Rinse surface treatment;

Double Powder Coated Bronze or Black finish

Amber lens, efficiency≥90% Lens

LED: High Power SMD LED, Brands: Cree, Lumileds and etc.

3-step MacAdam; Life time: L70; >60,000 Hours;

CRI80+ (or CRI90+ is available)

Integral Driver (with integral transient 2.5kV surge protection) 220-240V (or 120-277V) input, Constant current output

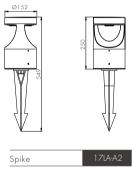
-20°C~+40°C Operating Temperature:

H05RN-F 3×0.75mm², L=0.5m Power Cable: SUS 316 Stainless Steel Fastener:

Flange base (Die-casting aluminum), (Optional) buried base Mounting Part: Control Support (Optional): Basic ON/OFF, Optional DALI, O/1-10V, TRIAC(ELV) dimming

Emergency Back-up Motion sensor R/G/ or B Decorative strip Performance for options:

Warning: Please inform us when the luminaire is used in corrosive environment before placing order.





Optional mounting accessory for bollard light in 250mm height Material: PC

\*Need to be purchased separately

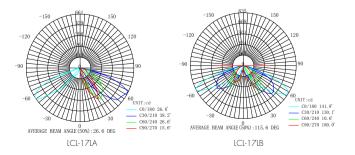
#### **Optional Accessories**



anchor Concrete

Optional mounting accessory Mounting plate with 3-threaded bar and fixing nuts M8

Material: stainless steel
\*Need to be purchased separately



## Post Top Luminaire - Luna Park Series:





#### Model No.: 17PA (Single) / 17PB(Double) | Laugh Series Post Top Light



LCL-07PB

(Double Side Light)

Units:mm

#### **Material Specifications**

Housing: Die-casting aluminum, No-Rinse surface treatment; Double Powder Coated Bronze or Black finish;

Height available in  $3{\sim}4$ meters or other customize made height

Amber lens, efficiency≥90% lens

LED: High Power SMD LED, Brands: Cree, Lumileds and etc.

3-step MacAdam;

Life time: L70; >60,000 Hours; CRI80+ (or CRI90+ is available)

Driver

Integral Driver: 120-277V input, Constant current output Voltage protection:10kV in Common Mode (CM), 6kV in Differential Mode (DM)

-20°C~+40°C Operating Temperature:

H05RN-F 3×0.75mm<sup>2</sup>, L=0.5m Power Cable: SUS 316 Stainless Steel Fastener:

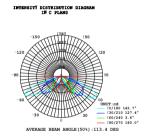
Mounting Part: buried base

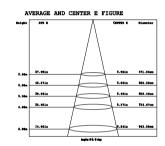
Basic ON/OFF, Optional DALI, 0/1-10V, TRIAC(ELV) dimming Control Support (Optional):

Performance for options: Emergency Back-up Motion sensor

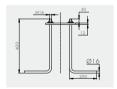
Warning: Please inform us when the luminaire is used in corrosive environment before placing order.

#### Photometric Data 48W





#### **Optional Accessories**



Concrete anchor

Optional mounting accessory
Mounting plate with 4-threaded bar
and fixing nuts M16
Material: stainless steel
\*Need to be purchased separately

Ø152 ————————————————————————————————————	988 90152	
	215	300
Ø18 9 150 150	220 918 150	

LCL-07PA

(Single Side Light)

#### **Technical Specifications**

Item Number	Height (meters)	Optional Control Mode	Light Color or CCT (K)	Light Source	Beam Angle	Input Voltage (V)	Typical Power (W)±3%	Typical Luminance (LM)	IK Rate
1 <i>7</i> PA-108	3m, 3.5m, or others	ON/OFF, 0-10V, DALI,ELV	2700K,3000K, 4000K,5000K	8×3VV CREE or LUMILEDS LED (2 Modules, 3LEDs/MODULE)	Standard Type II, (Optional Typ III, Type IV, Type V)	220-240VAC (120-277VAC)	24	Cool white=1920 Warm white=1632	06
1 <i>7</i> PA-112	3m, 3.5m, or others	ON/OFF, 0-10V, DALI,ELV	2700K,3000K, 4000K,5000K	12×3W CREE or LUMILEDS LED (3 Modules, 3LEDs/MODULE)	Standard Type II, (Optional Typ III, Type IV, Type V)	220-240VAC (120-277VAC)	36	Cool white=2880 Warm white=2448	06
1 <i>7</i> PB-116	3m, 3.5m, or others	ON/OFF, 0-10V, DALI,ELV	2700K,3000K, 4000K,5000K	16x3W CREE or LUMILEDS LED (4 Modules, 3LEDs/MODULE)	Standard Type II, (Optional Typ III, Type IV, Type V)	220-240VAC (120-277VAC)	48	Cool white=3840 Warm white=3264	06
1 <i>7</i> PB-124	3m, 3.5m, or others	ON/OFF, 0-10V, DALI,ELV	2700K,3000K, 4000K,5000K	24×3W CREE or LUMILEDS LED (6 Modules, 3LEDs/MODULE)	Standard Type II, (Optional Typ III, Type IV, Type V)	220-240VAC (120-277VAC)	72	Cool white=5760 Warm white=4896	06

## ECLIPSE LUNA PARK SERIES:



















# Eclipse Luna Park Series LED BOLLARD LIGHTS

#### Upper Cover[1]:

- Grafit m
- Corrosion resistant casting aluminum, no-rinse surface treatment
- Double powder-coated
- -Optimized surface for reduced accumulation of dirt

#### LED Module[2]:

- High power LEDs
- Color or CCT(K):warm white 3000K, neutral white 4000K and 5000K, 6000K or others
- CRI 80+, optional CRI90+
- 3-step MacAdam (SDCM≤3Step)

#### Light Window[3]:

- Temper glass ring

#### Anti-glare cone[4]:

- Corrosion-resistant cast aluminum, No-Rinse surface treatment
- Double powder-coated
- Glare-free above the light aperture

#### **Bollard & Accessories:**

- Housing Material: aluminum profile, T=2mm [5] Customized made finish color is available on request
- Fastener: SUS 316 stainless steel [6]
- Base plate: mounting accessories [7]

#### **Options:**

- Dimming: O-1 OV, DALI, TRIAC (ELV)



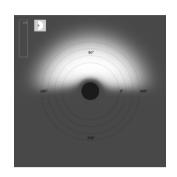


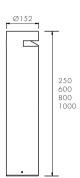
#### Model No.: 17YA (12W/ 180°) | LED Bollard Light



Units:mm







#### **Technical Specifications**

Item Number	Optional Height (mm)	Optional Control Mode	Light Color or CCT (K)	Light Source	Beam Angle	Input Voltage (V)	Typical Power (W)±3%	Typical Luminance (LM)	IK Rate
1 <i>7</i> LA-124	250mm, 600mm, 800mm,1000mm	ON/OFF, 0-10V, DALI	2700K,3000K, 4000K, 5000K	24×0.5W CREE or LUMILEDS SMD LED	180°	220-240VAC (120-277VAC)	12W	Cool white=457 Warm white=388	09

#### **Material Specifications**

Light Window:

Housing: Die-casting aluminum, No-Rinse surface treatment; Double Powder Coated Bronze or Black finish

Temper glass, efficiency≥90%

High Power SMD LED, Brands: Cree, Lumileds and etc. LED:

3-step MacAdam; Life time: L70; >60,000 Hours;

CRI80+ (or CRI90+ is available)

Integral Driver, 120-277VAC input, Constant current output

Operating Temperature: -20°C~+40°C

Power Cable: H05RN-F 3×0.75mm<sup>2</sup>, L=0.5meter

SUS 316 Stainless Steel Fastener(Screws):

Mounting Part: Flange base (Die-casting aluminum), (Optional) buried base Basic ON/OFF, Optional DALI, 0/1-10V, TRIAC(ELV) dimming Control Support (Optional):

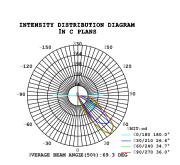
Warning: Please inform us when the luminaire is used in corrosive environment before placing order.

#### **Optional Accessories**



Concrete anchor

Optional mounting accessory Mounting plate with 3-threaded bar and fixing nuts M8
Material: stainless steel
\*Need to be purchased separately

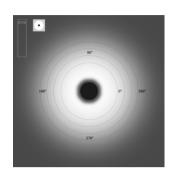


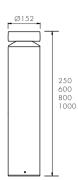
#### Model No.: 17YB (24W /360°) | LED Bollard Light



Units:mm







#### **Technical Specifications**

Item Number	Optional Height (mm)	Optional Control Mode	Light Color or CCT (K)	Light Source	Beam Angle	Input Voltage (V)	Typical Power (W)±3%	Typical Luminance (LM)	IK Rate
1 <i>7</i> YB-148	250mm, 600mm, 800mm, 1000mm	ON/OFF, 0-10V, DALI	2700K,3000K, 4000K, 5000K	48×0.5W CREE or LUMILEDS SMD LED	360°	220-240VAC (120-277VAC)	24W	Cool white=820 Warm white=697	09

#### **Material Specifications**

Housing: Die-casting aluminum, No-Rinse surface treatment;

Double Powder Coated Bronze or Black finish

Light Window: Temper glass, efficiency≥90%

LED: High Power SMD LED, Brands: Cree, Lumileds and etc.

3-step MacAdam; Life time: L70; >60,000 Hours;

CRI80+ (or CRI90+ is available)

Driver: Integral Driver, 120-277VAC input, Constant current output

Operating Temperature: -20°C~+40°C

Power Cable: H05RN-F 3x0.75mm², L=0.5meter

Fastener(Screws): SUS 316 Stainless Steel

Mounting Part: Flange base (Die-casting aluminum), (Optional) buried base

Control Support (Optional): Basic ON/OFF, Optional DALI, O/1-10V, TRIAC(ELV) dimming

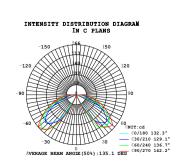
Warning: Please inform us when the luminaire is used in corrosive environment before placing order.

#### **Optional Accessories**



Concrete anchor 07YB-A1
Optional mounting accessory
Mounting plate with 3-threaded bar
and fixing puts M8

and fixing nuts M8
Material: stainless steel
\*Need to be purchased separately



#### Model No.: 17YC (10W/ 360°) | LED Bollard Light



IP65



Units:mm









#### **Technical Specifications**

Item Number	Optional Pole Height (mm)	Optional Control Mode	Light Color or CCT (K)	Light Source	Beam Angle	Input Voltage (V)	Typical Power (W)±3%	Typical Luminance (LM)	IK Rate
1 <i>7</i> YC-124	600mm, 800mm, 1000mm	ON/OFF	2700K,3000K, 4000K, 5000K	24×0.5W CREE or LUMILEDS SMD LED	360°	12/24VDC, 220-240VAC (120-277VAC)	10W	Cool white=369 Warm white=313	06

#### **Material Specifications**

Housing: Die-casting aluminum, No-Rinse surface treatment; Double Powder Coated Bronze or Black finish

Light Window: Light Guidance Ring Made of Optical Polymer, Efficiency≥90%

High Power SMD LED, Brands: Cree, Lumileds and etc. 3-step MacAdam; Life time: L70; >60,000 Hours; CR180+ (or CR190+ is available) LED:

Driver: Integral Driver, 120-277VAC input, Constant current output

Operating Temperature: -20°C~+40°C

Power Cable: H05RN-F 3×0.75mm<sup>2</sup>, L=0.5meter Mounting Part (Optional): PC Spike, Round Flange base, Round base

Warning: Please inform us when the luminaire is used in corrosive environment before placing order.



#### **Optional Accessories**



PC Spike

Material: PC For ground stake mounting



Round Flange Base Material: Aluminum alloy For surface mounting



Round Base Material: Aluminum alloy For surface mounting
Note: Please inquire separately
before ordering.

#### Model No.: 17XA (10W) | LED Bollard Light



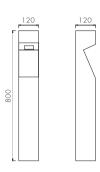
Units:mm











#### **Technical Specifications**

Item Number	Optional Pole Height (mm)	Optional Control Mode	Light Color or CCT (K)	Light Source	Beam Type	Input Voltage (V)	Typical Power (W)±3%	Typical Luminance (LM)	IK Rate
1 <i>7</i> XA-124	600mm, 800mm, 1000mm	ON/OFF	2700K,3000K, 4000K, 5000K	12×1W CREE 3030 LED	Type II, Type V, Type IV	220-240VAC (120-277VAC)	10W	Cool white=900 Warm white=765	06

#### **Material Specifications**

Die-casting aluminum, No-Rinse surface treatment; Housing: Double Powder Coated Black finish.

Light Window: Optical Polymer, Efficiency≥90%

High Power SMD LED, Brands: Cree, Lumileds and etc. LED:

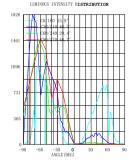
3-step MacAdam; Life time: L70; >60,000 Hours; CR180+ (or CR190+ is available)

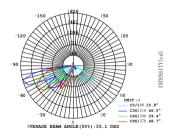
Integral Driver, 120-277VAC input, Constant current output Driver:

-20°C~+40°C Operating Temperature:

Power Cable: H05RN-F 3×0.75mm², L=0.5meter Mounting Part: Square Flange base(order separately) Control Support: ON/OFF, DALI, 0-10V, TRIAC, DMX512

Warning: Please inform us when the luminaire is used in corrosive environment before placing order





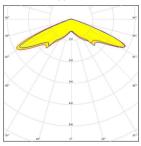
#### **Optional Accessories**



Square Flange Base

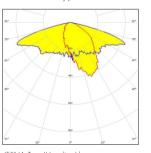
Plate Size: 113×113×30mm 120 mm flange to be fixed in concrete with stainless steel screws for fixing in the ground.
\*Need to be purchased separately

# Type V



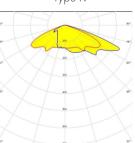
IESNA Type V (square) beam for wide areas (e.g.: car parks)

#### Type II



IESNA Type II (medium) beam, applicable for European P-class standard pedestrian lighting and M-class roads.

Type IV



IESNA Type IV for wider roads and area lighting like car parks and yards.

