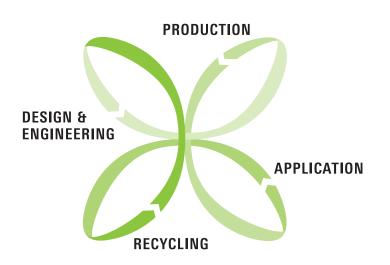
we-ef

WE-EF LIGHTING USA
PSY400 SERIES
PTY400 SERIES
Bollards & Pathway Lighting
North American Edition





WE-EF is a global manufacturer of high-performance exterior luminaires renowned for outstanding engineering design and innovative optical systems. Established in 1950 in Germany, WE-EF is recognized worldwide as a leading exterior lighting specialist that provides professional lighting solutions for various applications, ranging from urban spaces to architectural projects.

As a pioneer and innovator of a wide range of application-specific modular LED lens technologies, WE-EF develops optical systems that deliver photometric efficiency together with high visual comfort.

WE-EF is dedicated to the philosophy of combining form and function, resulting in striking and timeless product designs.

Precision in the design process, careful consideration of material selection and high-quality manufacturing processes ensure that WE-EF luminaires are considered to be a benchmark of product performance, reliability and longevity as well as ease of installation.

Responsible resource management is practiced across all areas of operation, from product life-cycle assessments to sustainable business procedures.

PSY414

[Factory sealed] Bollard. IP66. IK10. Marine-grade, all-aluminum construction.

5CE superior corrosion protection including PCS hardware. Powdercoat finish in black
RAL 9004, gray aluminum RAL 9007, white RAL 9016, or Dark Bronze RAL 8019.

Polycarbonate lens. Silicone rubber gasket. Luminaire is factory-sealed and does not need to be opened during installation.

Integral EC electronic converter. Advanced thermal management protects LEDs while optimizing lumens output. CAD-optimized optics for superior illumination and glare control.

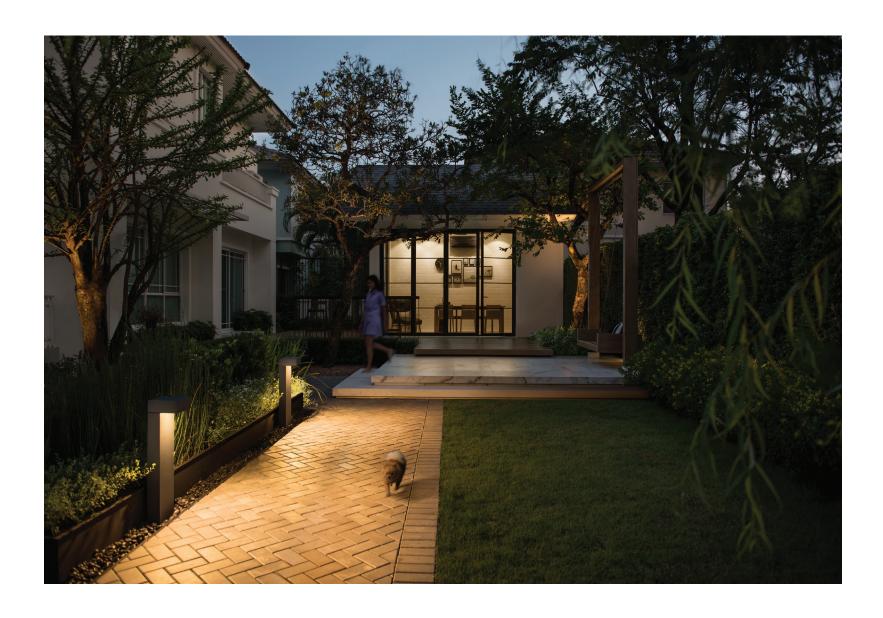
0-10V dimmable, to be specified with order (-D).

Planted root available on request.

Light source: LED 6-13 W, 3000 K and 4000 K (2700 K on request)

Available distribution: [R45]



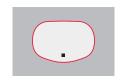




[R45

IOS® Innovative Optical System:

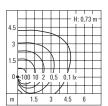
[R45] Rectangular 'forward throw' distribution



[R45]

Nominal angle of peak intensity (forward and sidewards) at 45° from nadir (downward vertical).

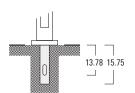
[R45]		Color Temp	Lumen Range	Factor*
PSY414	3 LED 6W/700 mA	3000-4000K	552-552	1.00
PSY414	3 LED 9W/1050 mA	3000-4000K	865-998	1.83
PSY414	3 LED 13W/1400 mA	3000-4000K	1106-1277	2.34

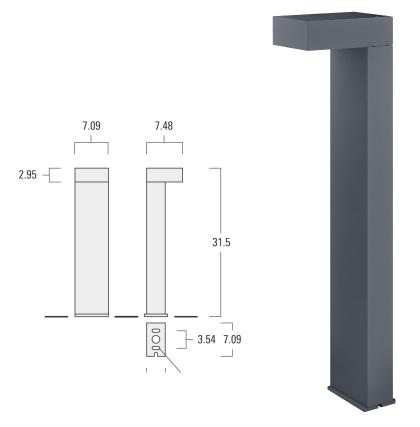


[R45]

Accessories:

Planted root – Galvanised steel.lbsESV2for PSY4148.4





PSY424

[Factory sealed] Bollard. IP66. IK10. Marine-grade, all-aluminum construction.

5CE superior corrosion protection including PCS hardware. Powdercoat finish in black
RAL 9004, gray aluminum RAL 9007, white RAL 9016, or Dark Bronze RAL 8019.

Polycarbonate lens. Silicone rubber gasket. Luminaire is factory-sealed and does not need to be opened during installation.

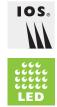
Integral EC electronic converter. Advanced thermal management protects LEDs while optimizing lumens output. CAD-optimized optics for superior illumination and glare control.

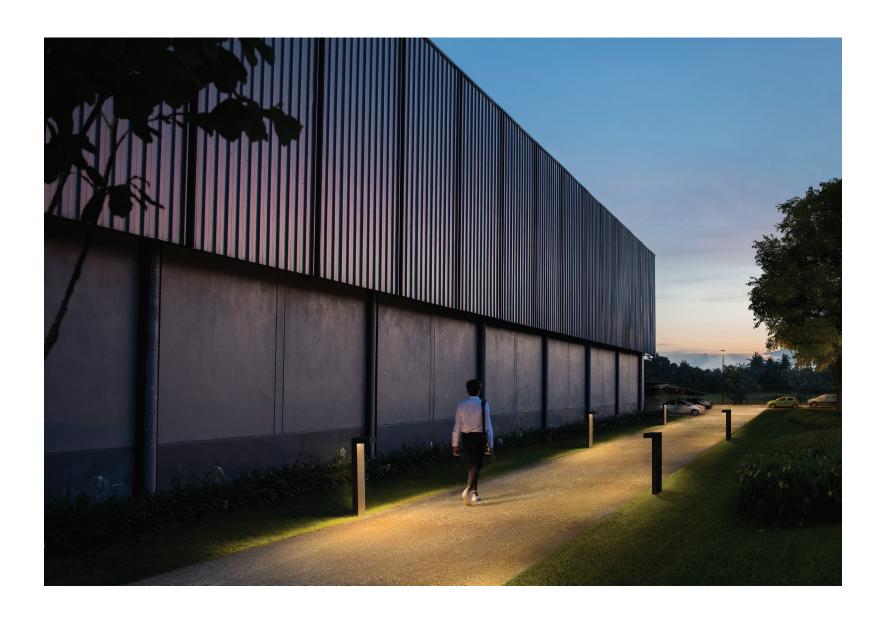
0-10V dimmable, to be specified with order (-D).

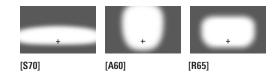
Planted root available on request.

Light source: LED 12-26 W, 3000 K and 4000 K (2700 K on request)

Available distributions: [S70] [A60] [R65]





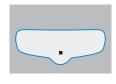


IOS® Innovative Optical System:

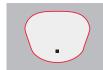
[S70] Streetlighting distribution

[A60] Asymmetric 'forward throw' distribution

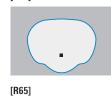
[R65] Rectangular 'forward throw' distribution



[S70]



[A60]



Rectangular forward throw distribution.

Streetlighting distribution. Nominal angle of peak intensity at 70° from nadir (downward vertical).

Nominal angle of peak intensity (forward and sidewards)

through 60-65° from nadir (downward vertical).

Achieves maximum spacing between luminaires.

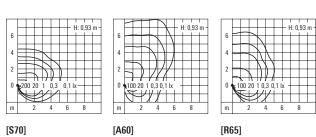
Asymmetric forward throw distribution.

Nominal angle of peak intensity through

60°-65° from nadir (downward vertical). Rearward spillage limited to an angle of 10°.

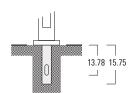
Rearward spillage limited to an angle of 10°.

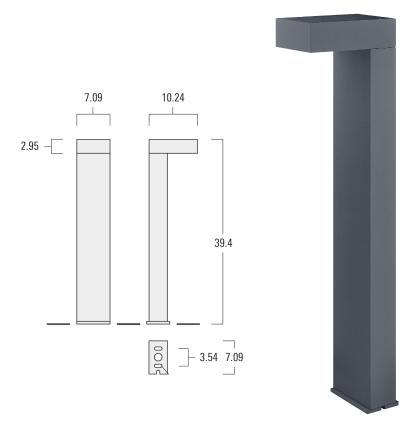
[\$70]		Color Temp	Lumen Range	Factor*
PSY424	6 LED 12W/700 mA	3000K-4000K	1160-1160	1.00
PSY424	6 LED 18W/1050 mA	3000K-4000K	1939-2237	1.83
P31424	0 LED 1800/1000 MA	3000K-4000K	1939-2237	1.03
PSY424	6 LED 26W/1400 mA	3000K-4000K	2480-2861	2.34
[A60]		Color Temp	Lumen Range	Factor*
PSY424	6 LED 12W/700 mA	3000K-4000K	1208-1208	1.00
PSY424	6 LED 18W/1050 mA	3000K-4000K	1758-2028	1.83
PSY424	6 LED 26W/1400 mA	3000K-4000K	2248-2593	2.34
[R65]		Color Temp	Lumen Range	Factor*
PSY424	6 LED 12W/700 mA	3000K-4000K	1043-1043	1.00
PSY424	6 LED 18W/1050 mA	3000K-4000K	1939-1107	1.83
PSY424	6 LED 26W/1400 mA	3000K-4000K	2215-2556	2.34



Accessories:

Planted r	oot – Galvanised steel.	lbs
ESV2	for PSY424	8.4





^{*} Multiplier for isolux values of 4000K variants.

PTY414

[Factory sealed] Bollard. IP66. IK10. Marine-grade, all-aluminum construction.

5CE superior corrosion protection including PCS hardware. Powdercoat finish in black
RAL 9004, gray aluminum RAL 9007, or white RAL 9016. RFC™ Reflection Free Contour
main lens. Silicone rubber gasket. Luminaire is factory-sealed and does not need to be
opened during installation.

Integral EC electronic converter. Advanced thermal management protects LEDs while optimizing lumens output. CAD-optimized optics for superior illumination and glare control.

0-10V dimmable, to be specified with order (-D).

Planted root available on request.

Light source: LED 12-26 W, 3000 K and 4000 K (2700 K on request)

Available distribution: [R45/R45]







[R45/R45]

IOS® Innovative Optical System: [R45/R45] Rectangular 'forward throw' distribution

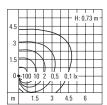


Rectangular forward throw distribution.

Nominal angle of peak intensity (forward and sidewards) at 45° from nadir (downward vertical).

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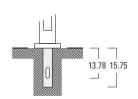
[R45/R45]		Color Temp	Lumen Range	Factor*
PTY414	LED-2x3/12W/700 mA	2700K-4000K	1039-1097	1.00
PTY414	LED-2x3/18W/1050 mA	2700K-4000K	1631-1983	1.83
PTY414	LED-2x3/26W/1400 mA	2700K-4000K	2085-2536	2.34

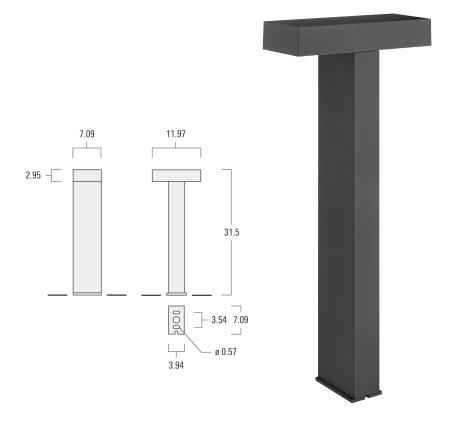


[R45]

Accessories:

Planted root – Galvanised steel.lbsESV2for PTY4148.4





PTY424

[Factory sealed] Bollard. IP66. IK10. Marine-grade, all-aluminum construction.

5CE superior corrosion protection including PCS hardware. Powdercoat finish in black
RAL 9004, gray aluminum RAL 9007, white RAL 9016, or Dark Bronze RAL 8019.

Polycarbonate lens. Silicone rubber gasket. Luminaire is factory-sealed and does not need to be opened during installation.

Integral EC electronic converter. Advanced thermal management protects LEDs while optimizing lumens output. CAD-optimized optics for superior illumination and glare control.

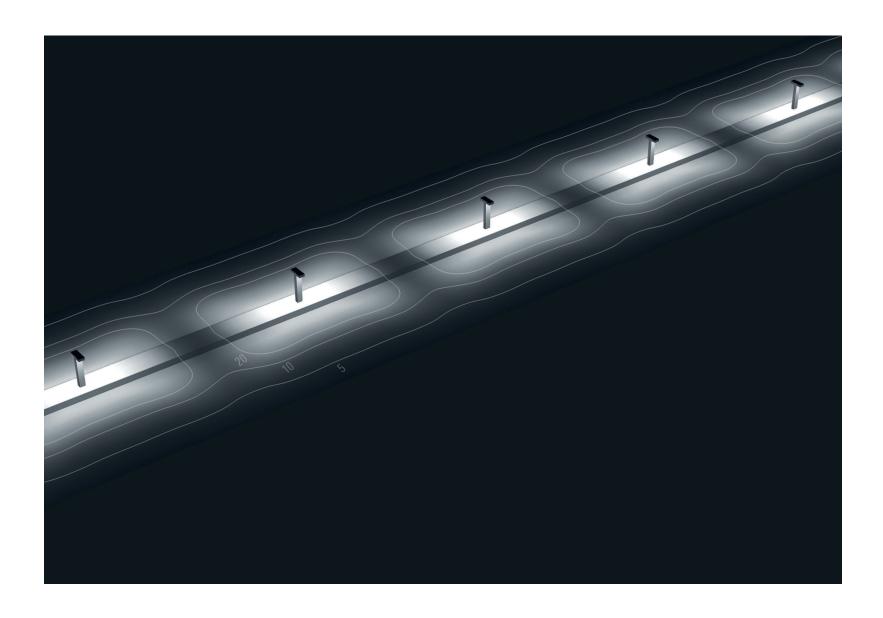
0-10V dimmable, to be specified with order (-D).

Planted root available on request.

Light source: LED 24-52 W, 2700K, 3000K and 4000K Available distributions:

[S70] [A60] [R65]









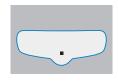


[S70/S70]

[A60/A60]

[R65/R65]

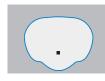
IOS® Innovative Optical System: [S70/S70] Streetlighting distribution [A60/A60] Asymmetric 'forward throw' distribution [R65/R65] Rectangular 'forward throw' distribution



[\$70/\$70]



[A60/A60]



[R65/R65]

Streetlighting distribution.

Nominal angle of peak intensity

at 70° from nadir (downward vertical).

Achieves maximum spacing between luminaires.

Asymmetric forward throw distribution.

Nominal angle of peak intensity through

60°-65° from nadir (downward vertical).

Rearward spillage limited to an angle of 10°.

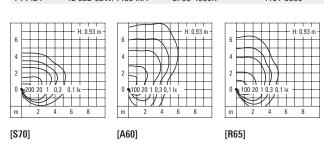
Rectangular forward throw distribution.

Nominal angle of peak intensity (forward and sidewards)

through 60-65° from nadir (downward vertical).

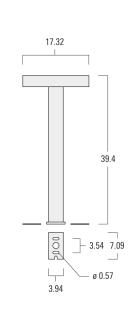
Rearward spillage limited to an angle of 10°.

[S70]		Color Temp	Lumen Range	Factor*
PTY424	12 LED 24W/700 mA	2700-4000K	2183-2304	1.00
PTY424	12 LED 36W/1050 mA	2700-4000K	3655-4445	1.83
PTY424	12 LED 52W/1400 mA	2700-4000K	4675-5686	2.34
[A60]		Color Temp	Lumen Range	Factor*
PTY424	12 LED 24W/700 mA	2700-4000K	2278-2404	1.00
PTY424	12 LED 36W/1050 mA	2700-4000K	3317-4034	1.83
PTY424	12 LED 52W/1400 mA	2700-4000K	4242-5159	2.34
[R65]		Color Temp	Lumen Range	Factor*
PTY424	12 LED 24W/700 mA	2700-4000K	1967-2076	1.00
PTY424	12 LED 36W/1050 mA	2700-4000K	3269-3976	1.83
PTY424	12 LED 52W/1400 mA	2700-4000K	4181-5086	2.34



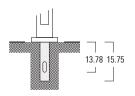


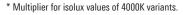
2.95





Planted root – Galvanised steel.		
ESV2	for PTY424	8.4





PSY400 FEATURES

IP classification: IP66
Electrical protection: Class I
Impact protection: IK10

Luminaire housing: Marine-grade, die-cast aluminum alloy, 5CE superior corrosion protection

Hardware: PCS hardware (polymer coated stainless steel)

Main lens: Polycarbonate

Gasket: Silicone rubber gasket

EC: Integral EC electronic converter. 700 mA and 1050 mA versions featuring 6/6 kV surge

protection, 1400 mA versions 10/10 kV. Advanced thermal management protects LEDs

while optimizing lumens output.

Light source: 3-6 LEDs, 6-26W/700-1400 mA, 2700 K, 3000 K and 4000 K

Optics: CAD-optimized optics for superior illumination and glare control. OLC® One LED Concept.

Heat sink: Integrated

Installation: Luminaire is factory-sealed and does not need to be opened during installation.

Dimming: 0-10V dimmable, to be specified with order (-D).



PSY400

PTY400 FEATURES

IP classification: IP66
Electrical protection: Class I
Impact protection: IK10

Luminaire housing: Marine-grade, die-cast aluminum alloy, 5CE superior corrosion protection

Hardware: PCS hardware (polymer coated stainless steel) Main lens: RFC^{TM} Reflection Free Contour main lens

Gasket: Silicone rubber gasket

EC: Integral EC electronic converter. 700 mA and 1050 mA versions featuring 6/6 kV surge

protection, 1400 mA versions 10/10 kV. Advanced thermal management protects LEDs

while optimizing lumens output.

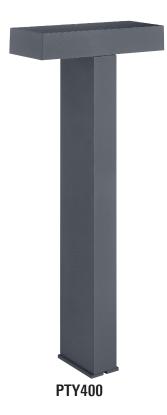
Light source: 6-12 LEDs, 12-52W/700-1400 mA, 2700 K, 3000 K and 4000 K

Optics: CAD-optimized optics for superior illumination and glare control. OLC® One LED Concept.

Heat sink: Integrated

Installation: Luminaire is factory-sealed and does not need to be opened during installation.

Dimming: 0-10V dimmable, to be specified with order (-D).





Typical application where the avoidance of light pollution and glare is required. The [R45] distribution provides broad forward and sideward area coverage.



The PSY424 [A60] high-performance bollard delivers excellent forward-throw illumination. Suitable for 'staggered' driveway installations as shown here.



Luminiare does not need to be opened during installation.



Five anti-corrosion properties

- Substrate marine grade aluminum alloy
- Conversion coating multi-step pre-treatment
- Powder coating UV stabilised, architectural grade coating
- PCS hardware refer to detail below
- Process Control tightly controlled process and quality checks, up to 3,000-hour salt spray tests





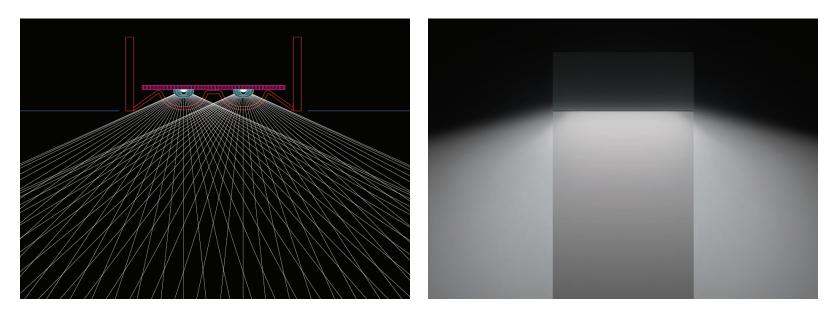
PCS hardware

- Austenitic stainless steel
- Tough, impregnated polymer coating
- Non-metallic barrier, protects against galvanic corrosion

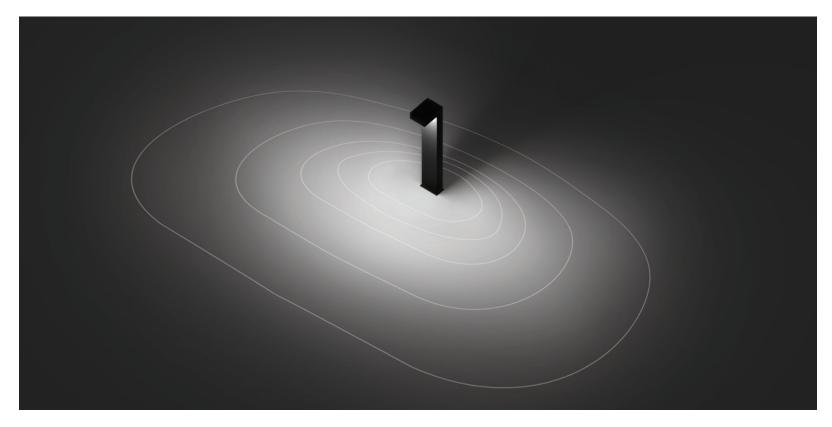




WE-EF's versatile, high-performance street and area lighting optics – customized for bollards of 31-39 inches in height – deliver first-class illumination for narrow driveways, landscapes, pathways etc. With four different light distributions to choose from – [R45] [S70] [A60] [R65] – a large variety of lighting challenges can be addressed and mastered. At the same time, 100% horizontal cut-off addresses dark skies concerns and safeguards high visual comfort.



This CAD ray-tracing simulation demonstrates the [R45] optics' broad downward light distribution as well as its glare control qualities. The combined 'side throw' and 'forward throw' of light delivers uniform coverage for large areas.



Typical isolux diagram of a single-unit PSY414 [R45] installations. Several luminaires installed in a row provide excellent illumination for pathways, landscapes etc.

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Product specifications given in this catalogue reflect their status as of January 2018. Errors and omissions are excepted. Data given are subject to change without prior notice. The conditions of sale, as published in WE-EF's current price lists and/or business forms, apply. Export transactions require special agreements, particularly with regard to shipment and payment.

PSY400/PTY400 SERIES

Bollards

North American Edition 2020 © WE-EF 2020

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