



# A new age in outdoor city lighting

## CosmoPolis CosmoWhite

Philips Cosmopolis Outdoor Lighting System simplifies outdoor lighting with the combination of a miniature lamp and an optimized electronic ballast system.

### Benefits

- Energy efficiency and long, dependable service, not only to reduce your lighting cost of ownership but also to address environmental concerns.
- Improved visibility and enhanced ambience to attract people back into your city centers at night.
- Miniaturization enables unobtrusive lighting and exciting new luminaire designs.

### Features

- Crisp, white light.
- Rated average life of 30,000 hours\*
- Compact system - allows for smaller, lightweight luminaires, using light-duty poles, and uses less raw materials to conserve resources.
- Increased luminous efficacy.
- Available in 60, 90 and 140 watts.
- \* Rated average life is the life obtained, on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average. 30,000 hours rated average life at horizontal application. For vertical application, rated average life for 90W and 140W is 20,000 hours, while rated average life for 60W is 15,000 hours.

### Application

- Ideal for indoor and outdoor applications of industrial facilities and warehouses
- Lamp optimized for horizontal position; when positioned vertically, the lifetime specification is much lower (as much as - 40%)

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## Warnings and Safety

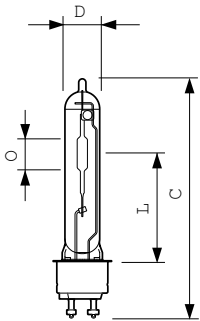
- R "WARNING: These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available." This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA:21 CFR 1040.30 Canada: SOR/DORS/80-381)

## Versions



CPO-TW 140W /728 PGZ12

## Dimensional drawing



Product	D (max)	D	O	L	C (max)
CPO-TW 90W/728 White PGZ12	20 mm	19 mm	18 mm	66 mm	143 mm
CPO-TW 140W/728 White PGZ12	20 mm	19 mm	22 mm	66 mm	150 mm
CPO-TW 60W/728 White PGZ12	20 mm	19 mm	14 mm	59 mm	132 mm

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## Controls and dimming

Dimmable	Yes
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## Operating and electrical

Re-ignition Time (Min) (Max)	900 s
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## General information

Cap-Base	PGZ12
LSF 12000 h Rated	99 %
LSF 2000 h Rated	99 %
LSF 4000 h Rated	99 %
LSF 6000 h Rated	99 %
LSF 8000 h Rated	99 %
Operating Position	UNIVERSAL

## Light technical

Color Code	728
Color Designation	White (WH)

## Mechanical and housing

Bulb Finish	Clear
Bulb Shape	T19

## Approval and application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
928088505105	CPO-TW 60W/728 White PGZ12	66 kWh	2.0 mg
928093505105	CPO-TW 90W/728 White PGZ12	99 kWh	3.0 mg
928088805105	CPO-TW 140W/728 White PGZ12	154 kWh	3.9 mg

## Operating and electrical

Order Code	Full Product Name	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Power (Nom)
928088505105	CPO-TW 60W/728 White PGZ12	99 V	85 V	92 V	60.0 W
928093505105	CPO-TW 90W/728 White PGZ12	98 V	86 V	92 V	90.0 W

Order Code	Full Product Name	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Power (Nom)
928088805105	CPO-TW 140W/728 White PGZ12	100 V	88 V	94 V	141.0 W

## General information (1/2)

Order Code	Full Product Name	Life To 10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)	Life To 5% Failures (Nom)
928088505105	CPO-TW 60W/728 White PGZ12	24000 h	27000 h	32000 h	21500 h
928093505105	CPO-TW 90W/728 White PGZ12	24000 h	27000 h	32000 h	21500 h

Order Code	Full Product Name	Life To 10% Failures (Nom)	Life To 20% Failures (Nom)	Life To 50% Failures (Nom)	Life To 5% Failures (Nom)
928088805105	CPO-TW 140W/728 White PGZ12	20000 h	24000 h	30000 h	18000 h

## General information (2/2)

Order Code	Full Product Name	LSF 16000 h Rated	LSF 20000 h Rated	LSF 24000 h Rated	LSF 30000 h Rated
928088505105	CPO-TW 60W/728 White PGZ12	99 %	97 %	90 %	63 %
928093505105	CPO-TW 90W/728 White PGZ12	99 %	97 %	90 %	63 %

Order Code	Full Product Name	LSF 16000 h Rated	LSF 20000 h Rated	LSF 24000 h Rated	LSF 30000 h Rated
928088805105	CPO-TW 140W/728 White PGZ12	97 %	90 %	80 %	50 %

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## Luminaire design requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928088505105	CPO-TW 60W/728 White PGZ12	400 °C
928093505105	CPO-TW 90W/728 White PGZ12	470 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928088805105	CPO-TW 140W/728 White PGZ12	550 °C

## Light technical (1/3)

Order Code	Full Product Name	Chromaticity		Color Rendering	
		Coordinate X (Nom)	Coordinate Y (Nom)	Index (Min)	Index (Nom)
928088505105	CPO-TW 60W/728 White PGZ12	453	405	70	73
928093505105	CPO-TW 90W/728	449	412	67	70

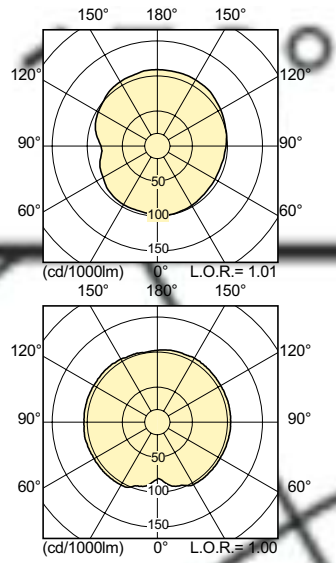
Order Code	Full Product Name	Chromaticity		Color Rendering	
		Coordinate X (Nom)	Coordinate Y (Nom)	Index (Min)	Index (Nom)
928088805105	CPO-TW 140W/728 White PGZ12	440	413	-	72

## Light technical (2/3)

Order Code	Full Product Name	LLMF 12000 h Rated	LLMF 16000 h Rated	LLMF 2000 h Rated	LLMF 20000 h Rated	LLMF 24000 h Rated	LLMF 30000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated
928088505105	CPO-TW 60W/728 White PGZ12	89 %	87 %	92 %	86 %	84 %	82 %	90 %	90 %	90 %
928093505105	CPO-TW 90W/728 White PGZ12	92 %	91 %	94 %	90 %	-	-	93 %	93 %	93 %
928088805105	CPO-TW 140W/728 White PGZ12	89 %	88 %	94 %	87 %	86 %	-	93 %	92 %	91 %

## Light technical (3/3)

Order Code	Full Product Name	Luminous		Ratio
		Efficacy (rated) (Nom)	Luminous Flux (Rated) (Nom)	Scotopic/Photopic Lumens
928088505105	CPO-TW 60W/728 White PGZ12	120 lm/W	7200 lm	1.15
928093505105	CPO-TW 90W/728 White PGZ12	120 lm/W	10800 lm	1.15
928088805105	CPO-TW 140W/728 White PGZ12	125 lm/W	17600 lm	1.30



120°

90°

