



MASTER CosmoWhite CPO-TW & CPO-TW Xtra

MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12

New-generation ceramic metal halide lamps used in Outdoor offering efficient and pleasant white light

Warnings and Safety

- Use only in totally enclosed luminaire, even during testing (IEC61167, IEC 62035, IEC60598)
- The luminaire must be able to contain hot lamp parts if the lamp ruptures
- Use only with electronic control gear
- Control gear must include end-of-life protection (IEC61167, IEC 62035)
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

Product data

General information			
Cap-Base	PGZ12 [PGZ12]	LSF 6000 h Rated	99 %
Operating Position	UNIVERSAL [Any or Universal (U)]	LSF 8000 h Rated	99 %
Life to 5% Failures (Nom)	21500 h	LSF 12000 h Rated	99 %
Life To 10% Failures (Nom)	24000 h	LSF 16000 h Rated	99 %
Life to 20% Failures (Nom)	27000 h	LSF 20000 h Rated	97 %
Life to 50% Failures (Nom)	32000 h	LSF 24000 h Rated	90 %
ANSI Code HID	C188/E	LSF 30000 h Rated	63 %
LSF 2000 h Rated	99 %	Flux measurement reference	Sphere
LSF 4000 h Rated	99 %		

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Light technical

Color Code	728 [CCT of 2800K]
Luminous Flux (Nom)	10800 lm
Luminous Flux (Rated) (Nom)	10800 lm
Color Designation	White (WH)
Chromaticity Coordinate X (Nom)	0.447
Chromaticity Coordinate Y (Nom)	0.4
Correlated Color Temperature (Nom)	2800 K
Luminous Efficacy (rated) (Nom)	120 lm/W
Color Rendering Index (Min)	67
Color Rendering Index (Nom)	70
LLMF 2000 h Rated	94 %
LLMF 4000 h Rated	93 %
LLMF 6000 h Rated	93 %
LLMF 8000 h Rated	93 %
LLMF 12000 h Rated	92 %
LLMF 16000 h Rated	91 %
LLMF 20000 h Rated	90 %
Ratio Scotopic/Photopic Lumens	1.15

Operating and electrical

Power (Nom)	90.0 W
Ignition Peak Voltage (Max)	5000 V
Re-Ignition Time (Min) (Max)	900 s
Ignition Time (Max)	30 s
Voltage (Max)	98 V
Voltage (Min)	86 V
Voltage (Nom)	92 V

Controls and dimming

Dimmable	Yes
Run-Up Time 90% (Max)	4 min

Mechanical and housing

Bulb Finish	Clear
Bulb Shape	T19 [T 19mm]

Approval and application

Energy Efficiency Class	E
Mercury (Hg) Content (Max)	3 mg
Mercury (Hg) Content (Nom)	3.0 mg
Energy Consumption kWh/1000 h	90 kWh
EPREL Registration Number	473351

UV

Pet (Niosh) (Min)	8 h/500lx
Pet (Niosh) (Nom)	38 h/500lx
Damage Factor D/fc (Nom)	0.18

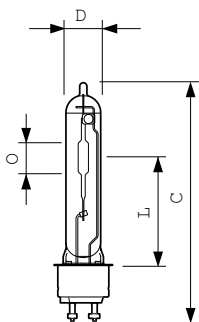
Luminaire design requirements

Bulb Temperature (Max)	470 °C
Cap-Base Temperature (Max)	300 °C

Product data

Full product code	871150021121715
Order product name	MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12
Order code	PGZ12
EAN/UPC - Product	8711500211217
Order code	928093505127
Numerator - Quantity Per Pack	1
Numerator - Packs per outer box	12
Material Nr. (12NC)	928093505127
Net Weight (Piece)	0.037 kg
ILCOS Code	MT-90/728-H-PGZ12-20/143

Dimensional drawing

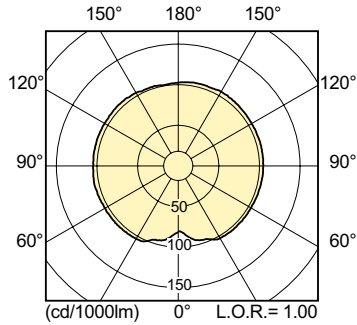


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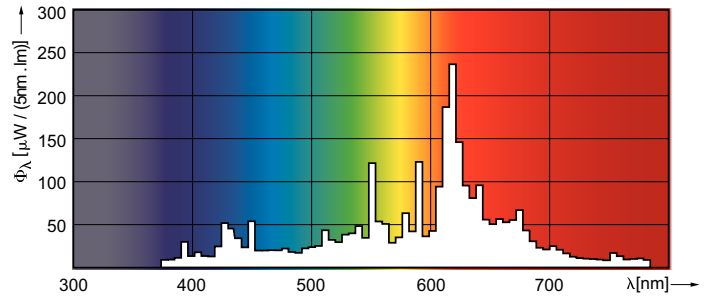
Product	D (max)	D	O	L	C (max)
MASTER CosmoWhite CPO-TW Xtra 90W/728 PGZ12	20 mm	19 mm	18 mm	66 mm	143 mm

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Photometric data

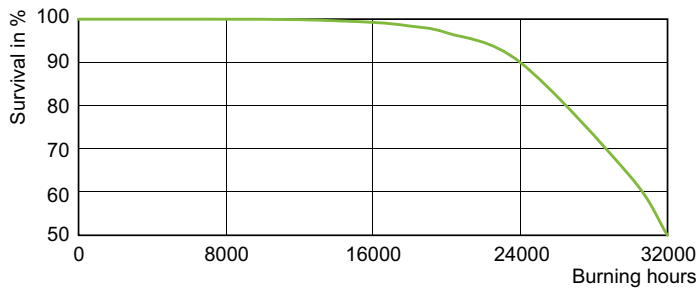


LDLD_CPO-TW_0003-Light distribution diagram

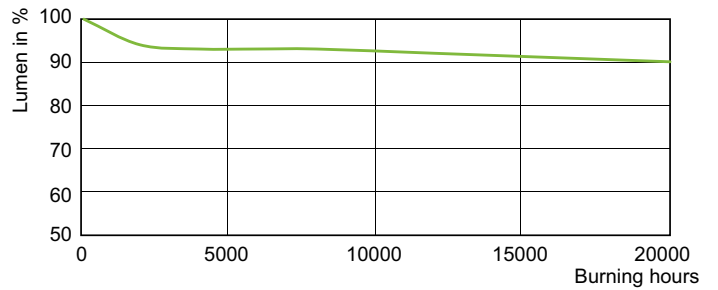


LDPO_CPO-TW_90W_728-Spectral power distribution Colour

Lifetime



LDLE_CPO-TW_0001-Life expectancy diagram



LDLM_CPO-TW_0003-Lumen maintenance diagram

