



# MASTER CosmoWhite CPO-TT Xtra

## MST CosmoWhite CPO-TT Xtra 90W/628 E40

New-generation ceramic metal-halide tubular lamps used in outdoor applications, offering efficient and pleasant white light

### Warnings and Safety

- Use only in a totally enclosed luminaire, even during testing (IEC 61167, IEC 62035, IEC 60598)
- The luminaire must be able to contain hot lamp parts if the lamp ruptures
- Use only with suitable electronic control gear
- Control gear must include end-of-life protection (IEC 61167, IEC 62035)
- E27 lamp holders and other parts in luminaires should be designed to withstand the ignition voltage of the electronic control gear (rated at 5 kV ignition pulse)
- 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	E40 [ E40]
Operating position	P20 [ Parallel +/-20D or Horizontal(HOR)]
Life to 5% failures (nom.)	21500 h
Life to 10% failures (nom.)	24000 h
Life to 20% failures (nom.)	27000 h
Life to 50% failures (nom.)	32000 h
ANSI code HID	-
LSF 2000 h Rated	99 %
LSF 4000 h Rated	99 %
LSF 6000 h Rated	99 %
LSF 8000 h Rated	99 %

LSF 12000 h Rated	99 %
LSF 16000 h Rated	99 %
LSF 20000 h Rated	97 %
LSF 24000 h Rated	90 %
LSF 30000 h Rated	63 %
Light Technical	
Colour Code	628 [ CCT of 2,800 K]
Luminous flux (rated) (nom.)	10200 lm
Colour designation	Warm white (WW)
Chromaticity coordinate X (nom.)	0.460
Chromaticity coordinate Y (nom.)	0.417

# MASTER CosmoWhite CPO-TT Xtra

Luminous efficacy (rated) (nom.)	113.48 lm/W
Colour-rendering index (min.)	63
Color rendering index (nom.)	66
LLMF 2000 h Rated	93 %
LLMF 4000 h Rated	91 %
LLMF 6000 h Rated	90 %
LLMF 8000 h Rated	88 %
LLMF 12000 h Rated	87 %
LLMF 16000 h Rated	86 %
LLMF 20000 h Rated	85 %
LLMF 24000 h Rated	84 %
LLMF 30000 h Rated	83 %
Ratio scotopic/photopic lumens	1.15

## Operating and Electrical

Power (Rated) (Nom)	89 W
Lamp current (EM) (nom.)	0.97 A
Re-ignition time (min.) (max.)	900 s
Ignition time (max.)	30 s
Voltage (Max)	97 V
Voltage (Min)	81 V
Voltage (Nom)	92 V

## Controls and Dimming

Dimmable	Yes
Run-up time 90% (max.)	2 min

## Mechanical and Housing

Lamp Finish	Clear
-------------	-------

## Approval and Application

Energy efficiency label (EEL)	A+
Mercury (Hg) content (nom.)	3.0 mg
Energy consumption kWh/1,000 hours	98 kWh

## UV

PET (NIOSH) (min.)	114 h/500lx
PET (NIOSH) (nom.)	203 h/500lx
Damage factor D/fc (nom.)	0.28

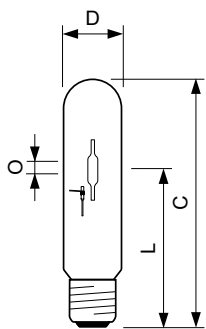
## Luminaire Design Requirements

Bulb temperature (max.)	450 °C
Cap-base temperature (max.)	250 °C

## Product Data

Full product code	871829168115100
Order product name	MST CosmoWhite CPO-TT Xtra 90W/628 E40
EAN/UPC – product	8718291681151
Order code	68115100
Local order code	90COTT628
SAP numerator – quantity per pack	1
Numerator – packs per outer box	12
Material no. (12 NC)	928060209227
Net Weight (Piece)	0.140 kg

## Dimensional drawing

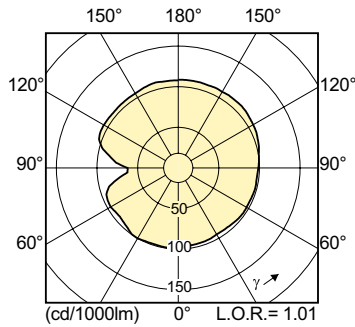


CPO-TT Xtra 90W/628 E40

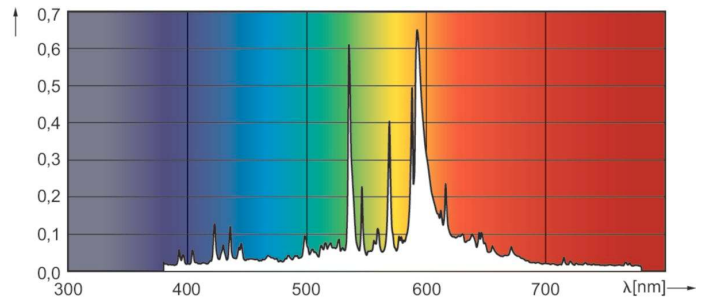
Product	D (max)	D	O	L	C (max)
MST CosmoWhite CPO-TT Xtra 90W/628 E40	47 mm	46 mm	18 mm	132 mm	211 mm

# MASTER CosmoWhite CPO-TT Xtra

## Photometric data

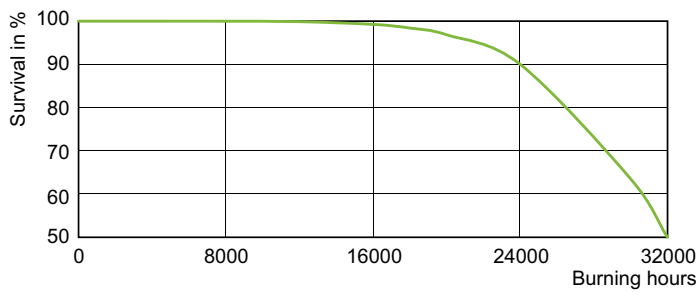


LDLD\_CPO-TT\_0002-Light distribution diagram

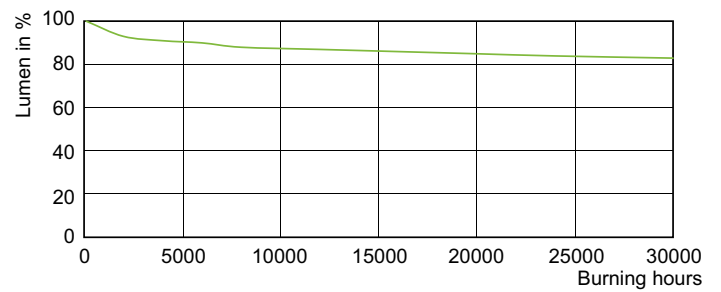


LDPO\_CPO-TT\_0002-Spectral power distribution Colour

## Lifetime



LDLE\_CPO-TT\_0001-Life expectancy diagram



LDLM\_CPO-TT\_0002-Lumen maintenance diagram

