



# MASTER CityWhite CDO-ET

## MASTER CityWhite CDO-ET Plus 150W/828 E40

Ceramic metal halide lamp, with opalized ovoid outer bulb shape, used in outdoor offering 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
- Lamps may use electronic or electromagnetic control gear
- Control gear must include end-of-life protection (IEC61167, IEC 62035)

### Product data

General information	
Cap base	E40 [ E40]
Burning Position	UNIVERSAL [ Any/Universal]
Life to 5% failures (nom.)	18000 h
Life to 10% failures (nom.)	20000 h
Life to 20% failures (nom.)	22500 h
Life to 50% failures (nom.)	27000 h
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	97 %
LSF 20000 h Rated	90 %
	Sphere

Light technical	
Colour Code	828 [ CCT of 2,800 K]
Lamp Luminous Flux 25°C EL (Nom)	15400 lm
Lamp Luminous Flux (Nom)	15400 lm
Colour Designation	Warm white (WW)
Chromaticity coordinate X (nom.)	0.447
Chromaticity coordinate Y (nom.)	0.4
Colour Temperature, horizontal (Nom)	2800 K
Lamp Luminous Efficacy EM (Nom)	108 lm/W
Colour Rendering Index,horiz (Nom)	85
LLMF 2000 h Rated	95 %
LLMF 4000 h Rated	92 %
LLMF 6000 h Rated	90 %
LLMF 8000 h Rated	88 %
LLMF 12000 h Rated	85 %
LLMF 16000 h Rated	82 %
LLMF 20000 h Rated	80 %

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Ratio scotopic/photopic lumens	1.30
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## Operating and electrical

Power (Rated) (Nom)	143.0 W
Lamp current run-up (max.)	3 A
Lamp current (EM) (nom.)	1.85 A
Ignition supply voltage (max.)	198 V
Ignition peak voltage (max.)	5000 V
Ignition supply voltage (min.)	198 V
Re-ignition time (min.) (max.)	900 s
Ignition time (max.)	30 s
Voltage (Max)	98 V
Voltage (Min)	82 V
Voltage (Nom)	89 V

## Controls and dimming

Dimmable	Yes
Run-up time 90% (max.)	3 min

## Mechanical and housing

Lamp Finish	Coated glass
Bulb shape	BD90 [ BD 90mm]

## Approval and application

Energy Efficiency Class	F
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Mercury (Hg) content (max.)	15.8 mg
Mercury (Hg) content (nom.)	15.8 mg
Energy consumption kWh/1,000 hours	143 kWh
	473400

## UV

PET (NIOSH) (min.)	8 h/500lx
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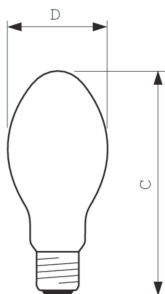
## Luminaire design requirements

Bulb temperature (max.)	350 °C
Cap-base temperature (max.)	250 °C
Cap-base temperature (max.)	482 °F

## Product data

Full product code	871829115881300
Order product name	MASTER CityWhite CDO-ET Plus 150W/828 E40
EAN/UPC – product	8718291158813
Order code	928154908835
SAP numerator – quantity per pack	1
Numerator – packs per outer box	12
SAP material	928154908835
Net Weight (Piece)	0.157 kg
ILCOS code	ME150/28/1B-H-E40

## Dimensional drawing

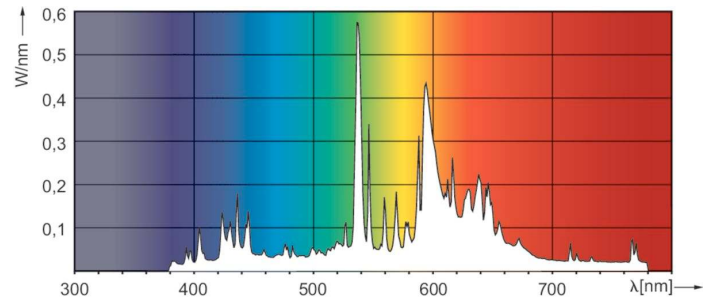
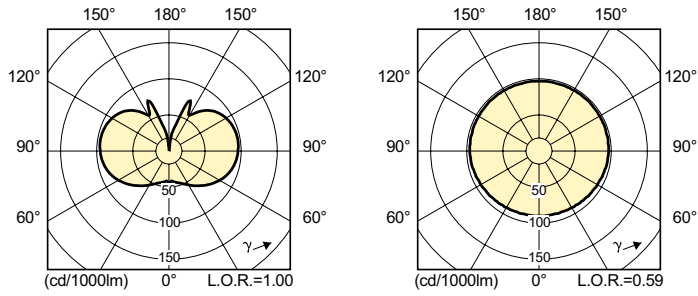


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Product	D (max)	C (max)
MASTER CityWhite CDO-ET Plus 150W/828 E40	91 mm	227 mm

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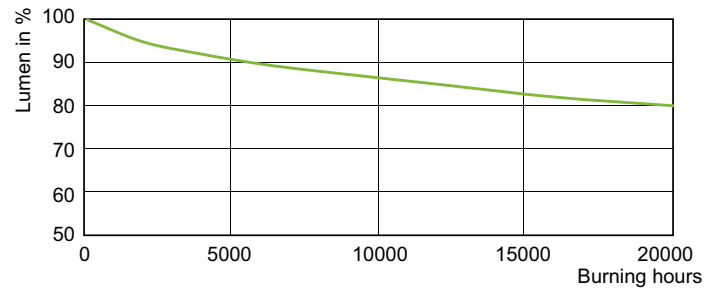
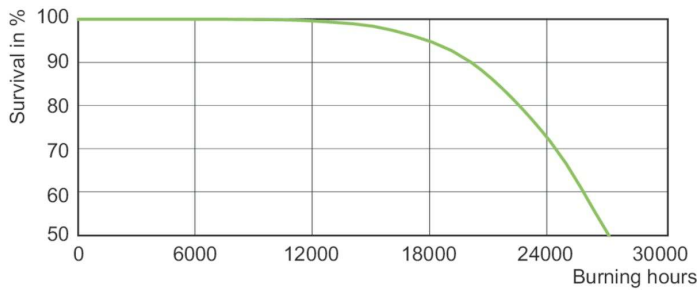
## Photometric data



LDLD\_CDO-ET\_0003-Light distribution diagram

LDPO\_CDO-ET\_0002-Spectral power distribution Colour

## Lifetime



LDLE\_CDO-ET\_0002-Life expectancy diagram

LDLM\_CDO-ET\_0002-Lumen maintenance diagram

