



# The easiest switch to comfortable white light

## MASTER CityWhite CDO-ET

Ceramic metal halide lamp, with opalized ovoid outer bulb shape, used in outdoor offering pleasant white light

### Benefits

- White warm color impression providing comfort and safety
- Easy upgrade from SON to white light without additional cost
- Flexible light levels and reduced energy consumption possible via dimming option

### Features

- High-quality white light
- Directly retrofit on HPS (SON/NAV) installations for upgrade from yellow to white light
- "Plus" concept with high efficacy translates into high light output and improved lumen maintenance
- Good color rendering and harmonized warm white color temperature
- Dimmable

### Application

- Beautification and functional lighting for City centers, shopping centers and pedestrian areas, residential areas, road lighting and floodlighting

# MASTER CityWhite CDO-ET

## Versions

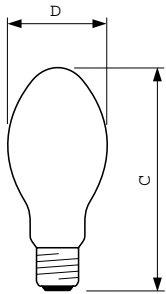


CDO-ET, E27



CDO-ET, E40

## Dimensional drawing



Product	D (max)	C (max)
MASTER CityWhite CDO-ET Plus 50W/828 E27	71 mm	156 mm
MASTER CityWhite CDO-ET Plus 70W/828 E27	71 mm	156 mm
MASTER CityWhite CDO-ET Plus 100W/828 E40	76 mm	186 mm
MASTER CityWhite CDO-ET Plus 150W/828 E40	91 mm	227 mm

### Approval and Application

Energy Efficiency Label (EEL) A+

### Controls and Dimming

Dimmable Yes

### General Information

LSF 2000 h Rated 99 %

LSF 4000 h Rated 99 %

Operating Position UNIVERSAL

### Light Technical

Color Code 828

Color Designation Warm White (WW)

Ratio Scotopic/Photopic Lumens 1.30

### Mechanical and Housing

Bulb Finish Coated glass

### Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	78 kWh	7.8 mg
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	57 kWh	5.4 mg
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	103 kWh	11.6 mg
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	157 kWh	15.8 mg

## Operating and Electrical (1/2)

# MASTER CityWhite CDO-ET

Order Code	Full Product Name	Lamp Current			
		(EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	0.98 A	96 V	80 V	88 V
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	0.775 A	86 V	70 V	78 V

Order Code	Full Product Name	Lamp Current			
		(EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	1.24 A	98 V	82 V	90 V
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	1.85 A	98 V	82 V	90 V

## Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	70,5 W	720 s
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	52 W	720 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	94.0 W	900 s
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	143.0 W	900 s

## General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	E27	12000 h	16500 h	27000 h
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	E27	12000 h	14500 h	20000 h

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	E40	20000 h	22500 h	27000 h
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	E40	20000 h	22500 h	27000 h

## General Information (2/2)

Order Code	Full Product Name	Life To 5% Failures	LSF 12000 h	LSF 16000 h	LSF 20000 h	LSF 6000 h	LSF 8000 h
		(Nom)	Rated	Rated	Rated	Rated	Rated
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	9500 h	90 %	81 %	71 %	98 %	96 %
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	9500 h	90 %	74 %	50 %	99 %	98 %
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	18000 h	99 %	97 %	90 %	99 %	99 %
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	18000 h	99 %	97 %	90 %	99 %	99 %

## Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	350 °C
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	350 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	450 °C

# MASTER CityWhite CDO-ET

Order Code	Full Product Name	Bulb Temperature (Max)
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	350 °C

## Light Technical (1/2)

Order Code	Full Product Name	Chromaticity		Correlated Color	Color Rendering
		Coordinate X (Nom)	Coordinate Y (Nom)	Temperature (Nom)	Index (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	438	398	2900 K	87
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	443	399	2800 K	89
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	444	403	2890 K	87

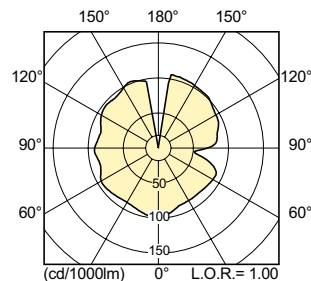
Order Code	Full Product Name	Chromaticity		Correlated Color	Color Rendering
		Coordinate X (Nom)	Coordinate Y (Nom)	Temperature (Nom)	Index (Nom)
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	443	402	2830 K	85

## Light Technical (2/2)

Order Code	Full Product Name	LLMF 12000 h Rated	LLMF 16000 h Rated	LLMF 2000 h Rated	LLMF 20000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated	Luminous Efficacy (rated) (Nom)	Luminous Flux (Rated) (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	80.5 %	76.5 %	97 %	73.5 %	93 %	89.5 %	86 %	100 lm/W	7050 lm
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	80 %	74 %	98 %	71 %	96 %	92 %	88 %	99 lm/W	5150 lm
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	85 %	82 %	95 %	80 %	92 %	90 %	88 %	100 lm/W	9400 lm
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	85 %	82 %	95 %	80 %	92 %	90 %	88 %	106 lm/W	15100 lm

## Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	B70
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	B70
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	B75
928154908835	MASTER CityWhite CDO-ET Plus 150W/828 E40	BD90



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