



# The easiest switch to comfortable white light

## MASTER CityWhite CDO-TT

Ceramic metal halide lamp with clear tubular 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

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 electromagnetic control gear or electronic gear suitable to drive CDO lamps (e.g. HID-PV Xt CDO)
- Control gear must include end-of-life protection (IEC61167, IEC 62035)
- Warm restart time can be up to 15 minutes; T15 ignitors therefore advised
- 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.

Versions

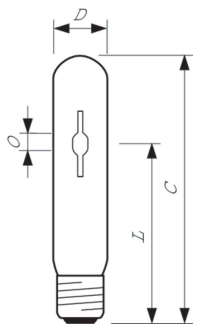
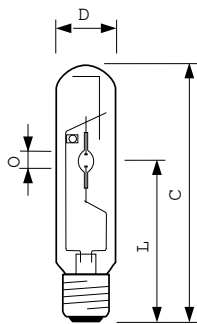


MASTER CityWhite CDO-TT Plus 70W E27



LPPR CDO-TT 0002

Dimensional drawing



| Product                                | D (max) | O       | L      | C (max) |
|----------------------------------------|---------|---------|--------|---------|
| MASTER CityWh CDO-TT Plus 100W/828 E40 | 47 mm   | 8.5 mm  | 132 mm | 211 mm  |
| MASTER CityWh CDO-TT Plus 150W/828 E40 | 47 mm   | 10 mm   | 132 mm | 211 mm  |
| MASTER CityWh CDO-TT Plus 150W/942 E40 | 46 mm   | 10 mm   | 132 mm | 211 mm  |
| MASTER CityWh CDO-TT Plus 250W/830 E40 | 47 mm   | 12.1 mm | 157 mm | 257 mm  |

| Product                               | D (max) | O       | L      | C (max) |
|---------------------------------------|---------|---------|--------|---------|
| MASTER CityWh CDO-TT Plus 50W/828 E27 | 36 mm   | 5.25 mm | 102 mm | 156 mm  |
| MASTER CityWh CDO-TT Plus 70W/828 E27 | 36 mm   | 7.15 mm | 102 mm | 156 mm  |
| MASTER CityWh CDO-TT Plus 70W/942 E27 | 36 mm   | 7.75 mm | 102 mm | 156 mm  |

MASTER CityWhite CDO-TT

|                        |           |
|------------------------|-----------|
| General Information    |           |
| Operating Position     | UNIVERSAL |
| Controls and Dimming   |           |
| Dimmable               | Yes       |
| Mechanical and Housing |           |
| Bulb Finish            | Clear     |

General Information

| Order Code   | Full Product Name                      | Cap-Base | Order Code   | Full Product Name                      | Cap-Base |
|--------------|----------------------------------------|----------|--------------|----------------------------------------|----------|
| 928082619230 | MASTER CityWh CDO-TT Plus 70W/942 E27  | E27      | 928082219231 | MASTER CityWh CDO-TT Plus 150W/828 E40 | E40      |
| 928082519230 | MASTER CityWh CDO-TT Plus 150W/942 E40 | E40      | 928082319230 | MASTER CityWh CDO-TT Plus 250W/830 E40 | E40      |
| 928082019235 | MASTER CityWh CDO-TT Plus 70W/828 E27  | E27      | 928082419235 | MASTER CityWh CDO-TT Plus 50W/828 E27  | E27      |
| 928082119231 | MASTER CityWh CDO-TT Plus 100W/828 E40 | E40      |              |                                        |          |

Light Technical

| Order Code   | Full Product Name                      | Chromaticity       | Chromaticity       | Color Designation | Correlated Color Temperature (Nom) | Color                 | Luminous Efficacy (rated) (Nom) | Luminous Flux |
|--------------|----------------------------------------|--------------------|--------------------|-------------------|------------------------------------|-----------------------|---------------------------------|---------------|
|              |                                        | Coordinate X (Nom) | Coordinate Y (Nom) |                   |                                    | rendering index (CRI) |                                 |               |
| 928082619230 | MASTER CityWh CDO-TT Plus 70W/942 E27  | 0.371              | 0.366              | Cool White (CW)   | 4200 K                             | 90                    | 101 lm/W                        | 7,500 lm      |
| 928082519230 | MASTER CityWh CDO-TT Plus 150W/942 E40 | 0.371              | 0.366              | Cool White (CW)   | 4200 K                             | 91                    | 107 lm/W                        | 16,100 lm     |
| 928082019235 | MASTER CityWh CDO-TT Plus 70W/828 E27  | 0.447              | 0.4                | Warm White (WW)   | 2800 K                             | 86                    | 105 lm/W                        | 7,750 lm      |
| 928082119231 | MASTER CityWh CDO-TT Plus 100W/828 E40 | 0.447              | 0.4                | Warm White (WW)   | 2800 K                             | 88                    | 106 lm/W                        | 10,450 lm     |
| 928082219231 | MASTER CityWh CDO-TT Plus 150W/828 E40 | 0.447              | 0.4                | Warm White (WW)   | 2800 K                             | 87                    | 110 lm/W                        | 16,400 lm     |
| 928082319230 | MASTER CityWh CDO-TT Plus 250W/830 E40 | 0.434              | 0.398              | Warm White (WW)   | 3000 K                             | 88                    | 113 lm/W                        | 28,400 lm     |
| 928082419235 | MASTER CityWh CDO-TT Plus 50W/828 E27  | 0.447              | 0.4                | Warm White (WW)   | 2800 K                             | 84                    | 104 lm/W                        | 5,500 lm      |

Operating and Electrical

| Order Code   | Full Product Name                      | Voltage | Power       | Order Code   | Full Product Name                      | Voltage | Power       |
|--------------|----------------------------------------|---------|-------------|--------------|----------------------------------------|---------|-------------|
|              |                                        | (Nom)   | Consumption |              |                                        | (Nom)   | Consumption |
| 928082619230 | MASTER CityWh CDO-TT Plus 70W/942 E27  | 96 V    | 74.0 W      | 928082219231 | MASTER CityWh CDO-TT Plus 150W/828 E40 | 99 V    | 148.5 W     |
| 928082519230 | MASTER CityWh CDO-TT Plus 150W/942 E40 | 97 V    | 150.0 W     | 928082319230 | MASTER CityWh CDO-TT Plus 250W/830 E40 | 99 V    | 250.0 W     |
| 928082019235 | MASTER CityWh CDO-TT Plus 70W/828 E27  | 91 V    | 73.5 W      | 928082419235 | MASTER CityWh CDO-TT Plus 50W/828 E27  | 83 V    | 53.0 W      |
| 928082119231 | MASTER CityWh CDO-TT Plus 100W/828 E40 | 100 V   | 99.0 W      |              |                                        |         |             |

Mechanical and Housing

MASTER CityWhite CDO-TT

| Order Code   | Full Product Name                      | Bulb Shape |
|--------------|----------------------------------------|------------|
| 928082619230 | MASTER CityWh CDO-TT Plus 70W/942 E27  | T35        |
| 928082519230 | MASTER CityWh CDO-TT Plus 150W/942 E40 | T46        |
| 928082019235 | MASTER CityWh CDO-TT Plus 70W/828 E27  | T35        |
| 928082119231 | MASTER CityWh CDO-TT Plus 100W/828 E40 | T46        |

| Order Code   | Full Product Name                      | Bulb Shape |
|--------------|----------------------------------------|------------|
| 928082219231 | MASTER CityWh CDO-TT Plus 150W/828 E40 | T46        |
| 928082319230 | MASTER CityWh CDO-TT Plus 250W/830 E40 | T46        |
| 928082419235 | MASTER CityWh CDO-TT Plus 50W/828 E27  | T31        |

Approval and Application

| Order Code   | Full Product Name                      | Energy Consumption<br>kWh/1000 h | Mercury (Hg)<br>Content (Max) | Mercury (Hg)<br>Content (Nom) |
|--------------|----------------------------------------|----------------------------------|-------------------------------|-------------------------------|
| 928082619230 | MASTER CityWh CDO-TT Plus 70W/942 E27  | 74 kWh                           | 6.6 mg                        | 6.6 mg                        |
| 928082519230 | MASTER CityWh CDO-TT Plus 150W/942 E40 | 150 kWh                          | 13 mg                         | 12.6 mg                       |
| 928082019235 | MASTER CityWh CDO-TT Plus 70W/828 E27  | 74 kWh                           | 7.8 mg                        | 7.8 mg                        |
| 928082119231 | MASTER CityWh CDO-TT Plus 100W/828 E40 | 99 kWh                           | 12 mg                         | 11.6 mg                       |
| 928082219231 | MASTER CityWh CDO-TT Plus 150W/828 E40 | 149 kWh                          | 15.8 mg                       | 15.8 mg                       |
| 928082319230 | MASTER CityWh CDO-TT Plus 250W/830 E40 | 250 kWh                          | 25 mg                         | 25.3 mg                       |
| 928082419235 | MASTER CityWh CDO-TT Plus 50W/828 E27  | 53 kWh                           | 5.4 mg                        | 5.4 mg                        |

