



# MASTER LED tube EM/Mains T8 with Recycled Plastic



## MAS LEDtube 900mm HO 12W 865 T8

MASTER, LEDtube, T8, EM/Mains, 900 mm, 220-240 V, 12 W, 30W TL-D, 6500 K, 1575 lm, CRI 80, 75000 h

Our new sustainability hero Philips MASTER LEDtube T8 EM/mains — a pioneering LED tube designed for performance, durability and environmental impact. As the first-ever LED tube to feature 40% post-consumer recycled plastic, it sets a new standard for sustainable lighting without compromising quality. With a long lifetime of 75,000 hours and high luminous efficacy up to 185 lm/W, the MASTER LEDtube T8 ensures outstanding energy efficiency. These T8 LED tubes are the right choice for absolute performance and are designed to stand up to everyday conditions. Unparalleled savings thanks to low-energy consumption and an exceptionally long lifetime ensure that this tube masters every demanding application.

### Product data

| General Information        |                       |
|----------------------------|-----------------------|
| Cap base                   | G13 Rotatable end-cap |
| Nominal lifetime           | 75,000 h              |
| Switching Cycle            | 200,000               |
| Lighting Technology        | LEDtube               |
| Flux measurement reference | Sphere                |
| Warranty period            | 5 years               |

| Light Technical                     |                    |
|-------------------------------------|--------------------|
| Colour Code                         | 865 [CCT of 6500K] |
| Beam angle (nom.)                   | 160 degree(s)      |
| Luminous Flux                       | 1,575 lm           |
| Colour designation                  | Cool Daylight      |
| Correlated Colour Temperature (Nom) | 6500 K             |
| Luminous efficacy (rated) (nom.)    | 131 lm/W           |
| Colour consistency                  | <6                 |
| Colour rendering index (CRI)        | 80                 |

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|  |      |
|--|------|
| LLMF at end of nominal lifetime (nom.)       | 70 % |
| Photobiological safety according to EN 62471 | RG0  |

## Operating and Electrical

|  |             |
|--|-------------|
| Line Frequency   | 50 to 60 Hz |
| Input frequency  | 50 to 60 Hz |
| Power Consumption  | 12 W        |
| Lamp current (max.)  | 60 mA       |
| Lamp current (min.)  | 50 mA       |
| Starting time (nom.)   | 0.5 s       |
| Warm-up time to 60% light  | 0.5 s       |
| Power Factor (Fraction)  | 0.9         |
| Voltage (nom.)   | 220–240 V   |
| LED alternative to fluorescent lamp power                                    | 30W TL-D    |
| Inrush current at mains  | 8           |
| Max. lamp no. on MCB B type 10A — Mains                                      | 90          |
| Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor. | 125         |
| Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.    | 15          |
| Max. lamp no. on MCB B type 16A — Mains                                      | 150         |
| Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor. | 200         |
| Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.    | 25          |
| Ballast Compatibility  | EM/Mains    |

## Temperature

|                       |       |
|-----------------------|-------|
| T-Case maximum (nom.) | 50 °C |
|-----------------------|-------|

## Controls and Dimming

|          |    |
|----------|----|
| Dimmable | No |
|----------|----|

## Mechanical and Housing

|                |         |
|----------------|---------|
| Lamp Finish    | Frosted |
| Bulb material  | Plastic |
| Product length | 900 mm  |
| Bulb shape     | T8      |

|                    |          |
|--------------------|----------|
| Net Weight (Piece) | 0.180 kg |
|--------------------|----------|

## Approval and Application

|   |  |
|---|--|
| Energy Efficiency Class                       | E  |
| Energy-saving product                         | Yes  |
| Approval marks                                | RoHS compliance CE marking KEMA<br>Keur certificate ENEC certificate |
| Energy consumption kWh/1,000 hours            | 12 kWh   |
| EPREL Registration Number                     | 2571887  |
| CE mark                                       | Yes  |
| EU RoHS compliant                             | Yes  |
| Flickering value (PstLM)                      | 0.1  |
| Stroboscopic effect                           | 0.1  |
| Ambient temperature range                     | -20 to +45 °C  |
| Post-consumer recycled plastic material ratio | 40 %   |

## Application Conditions

|                                     |                |
|-------------------------------------|----------------|
| Can it be used in closed luminaires | Yes            |
| Wireless Technology                 | Not applicable |

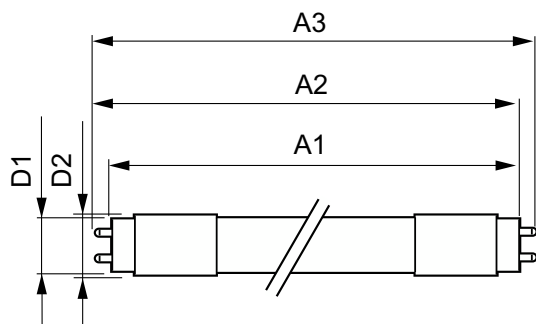
## Sustainability Data

|                                   |        |
|-----------------------------------|--------|
| Product non-virgin material ratio | 28.1 % |
|-----------------------------------|--------|

## Product Data

|                                 |                                 |
|---------------------------------|---------------------------------|
| Order product name              | MAS LEDtube 900mm HO 12W 865 T8 |
| Full product name               | MAS LEDtube 900mm HO 12W 865 T8 |
| Full EOC                        | 871869668710900                 |
| Order code                      | 929001298502                    |
| Material no. (12 NC)            | 929001298502                    |
| Numerator – quantity per pack   | 1                               |
| EAN/UPC – Product/Case          | 8718696687109                   |
| Numerator – packs per outer box | 10                              |
| EAN/UPC - Case                  | 8718696687116                   |

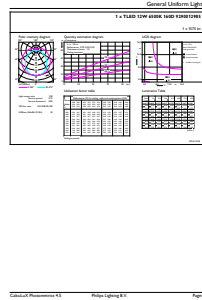
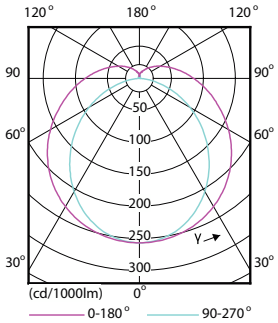
## Dimensional drawing



| Product                         | D1       | D2    | A1       | A2       | A3       |
|---------------------------------|----------|-------|----------|----------|----------|
| MAS LEDtube 900mm HO 12W 865 T8 | 25.78 mm | 28 mm | 893.3 mm | 900.4 mm | 907.5 mm |

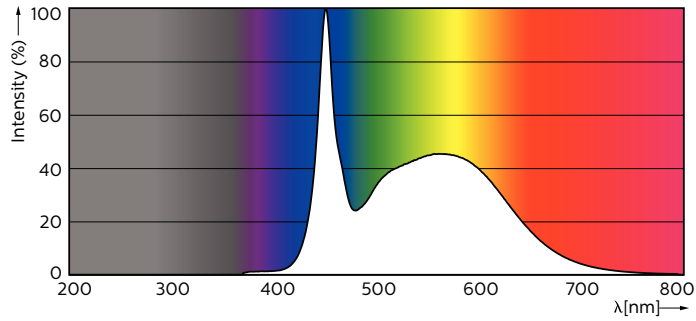
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## Photometric data



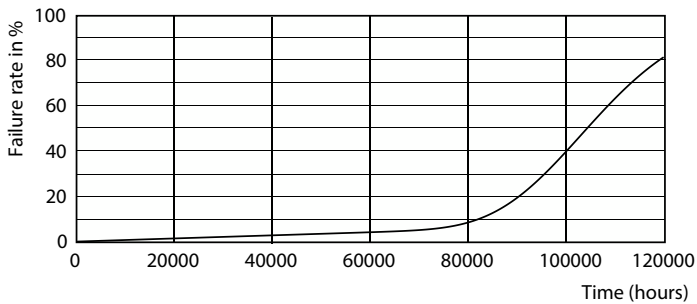
Light Distribution Diagram - MAS LEDtube 900mm HO 12W 865 T8

General uniform lighting - MAS LEDtube 900mm HO 12W 865 T8

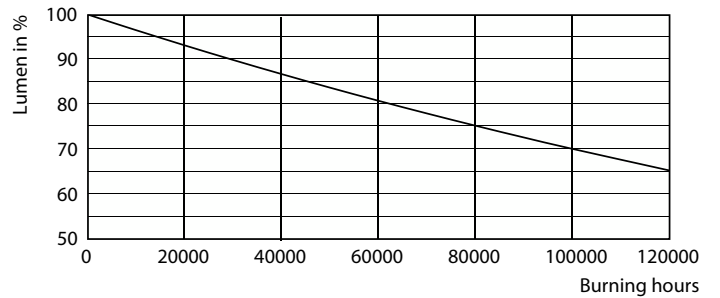


Spectral Power Distribution Colour - MAS LEDtube 900mm HO 12W 865 T8

## Lifetime



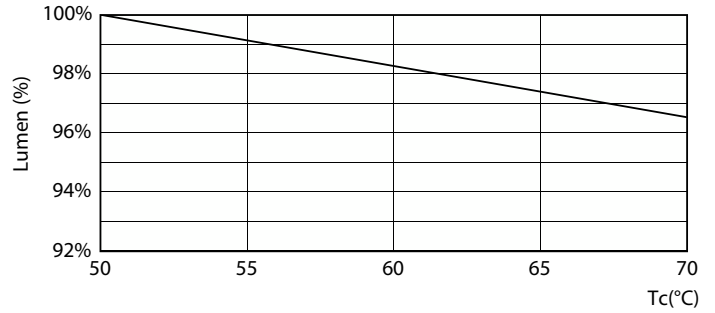
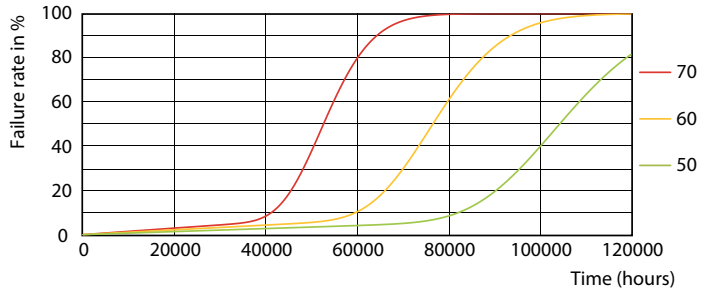
Life Expectancy Diagram



Lumen Maintenance Diagram - MAS LEDtube 900mm HO 12W 865 T8

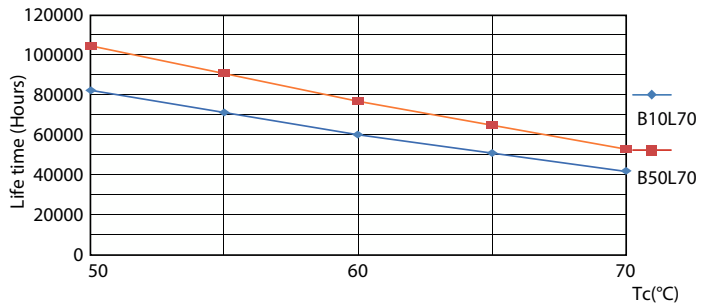
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## Lifetime



Life Expectancy Diagram

Lumen Maintenance Diagram - MAS LEDtube 900mm HO 12W 865 T8



Life Expectancy Diagram

