





## MAS LEDtube HF 1500mm HE 20W 830 T5

The Philips MASTER LEDtube integrates a LED light source into a traditional fluorescent form factor. Its unique design creates a perfectly uniform visual appearance, which cannot be distinguished from traditional fluorescent. These T5 lighting 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 make these T5 LED tubes the choice for every demanding application.

### **Product data**

| General Information                   |                             |  |  |  |
|---------------------------------------|-----------------------------|--|--|--|
| Cap-Base                              | G5                          |  |  |  |
| Nominal lifetime                      | 60,000 hour(s)              |  |  |  |
| Switching Cycle                       | 50,000                      |  |  |  |
| Lighting Technology                   | LED                         |  |  |  |
| Flux measurement reference            | Sphere                      |  |  |  |
|                                       |                             |  |  |  |
| Light Technical                       |                             |  |  |  |
| Color Code                            | 830 [CCT of 3000K]          |  |  |  |
| Beam Angle (Nom)                      | 200 degree(s)               |  |  |  |
| Luminous Flux                         | 2,800 lm                    |  |  |  |
| Color Designation                     | White (WH)                  |  |  |  |
| Correlated Color Temperature (Nom)    | 3000 K                      |  |  |  |
| Luminous Efficacy (rated) (Nom)       | 140.00 lm/W                 |  |  |  |
| Color Consistency                     | <6                          |  |  |  |
| Color rendering index (CRI)           | 80                          |  |  |  |
| LLMF At End Of Nominal Lifetime (Nom) | Nominal Lifetime (Nom) 70 % |  |  |  |
|                                       |                             |  |  |  |

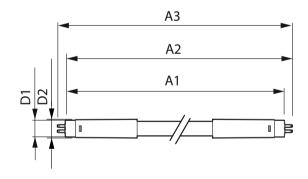
| Photobiological safety according to EN 62471 | RG0            |  |  |  |
|--|----------------|--|--|--|
|  |                |  |  |  |
| Operating and Electrical                     |                |  |  |  |
| Line Frequency                               | 30K to 100K Hz |  |  |  |
| Input Frequency                              | 30K to 100K Hz |  |  |  |
| Power Consumption                            | 20 W           |  |  |  |
| Lamp Current (Max)                           | 350 mA         |  |  |  |
| Lamp Current (Min)                           | 150 mA         |  |  |  |
| Starting Time (Nom)                          | 0.5 s          |  |  |  |
| Warm-up time to 60% light                    | 0.5 s          |  |  |  |
| Power Factor (Fraction)                      | 0.92           |  |  |  |
| Voltage (Nom)                                | 80-130 V       |  |  |  |
| Ballast Compatibility                        | HF             |  |  |  |
| LED alternative to fluorescent lamp power    | 35 W           |  |  |  |
| Inrush current at mains                      | -              |  |  |  |
| Max. lamp no. on MCB B type 10A - Mains      | -              |  |  |  |
| Max. lamp no. on MCB B type 10A – EM ballast | -              |  |  |  |
| without Compensation Capacitor.              |                |  |  |  |

Datasheet, 2025, March 17 data subject to change

| Max. lamp no. on MCB B type 10A – EM ballast | -                                 |
|--|-----------------------------------|
| with Compensation Capacitor.                 |                                   |
| Max. lamp no. on MCB B type 16A - Mains      | -                                 |
| Max. lamp no. on MCB B type 16A – EM ballast | -                                 |
| without Compensation Capacitor.              |                                   |
| Max. lamp no. on MCB B type 16A – EM ballast | -                                 |
| with Compensation Capacitor.                 |                                   |
|  |                                   |
| Temperature                                  |                                   |
| T-Case Maximum (Nom)                         | 65 ℃                              |
|  |                                   |
| Controls and Dimming                         |                                   |
| Dimmable                                     | Yes - Check ballast compatibility |
|  |                                   |
| Mechanical and Housing                       |                                   |
| Bulb Finish                                  | Frosted                           |
| Bulb Material                                | Glass                             |
| Product Length                               | 1,500 mm                          |
| Bulb Shape                                   | T5                                |
| Net Weight (Piece)                           | 0.196 kg                          |
|  |                                   |
| Approval and Application                     |                                   |
| Energy Efficiency Class                      | E                                 |

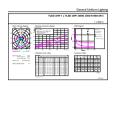
| Energy Saving Product           | Yes                          |  |  |  |
|---------------------------------|------------------------------|--|--|--|
| Approval Marks                  | RoHS compliance KEMA Keur    |  |  |  |
|                                 | certificate                  |  |  |  |
| Energy Consumption kWh/1000 h   | 20 kWh                       |  |  |  |
| EPREL Registration Number       | 1384137                      |  |  |  |
| CE mark                         | Yes                          |  |  |  |
| EU RoHS compliant               | Yes                          |  |  |  |
| Ambient temperature range       | -20 °C to 45 °C              |  |  |  |
|                                 |                              |  |  |  |
| Product Data                    |                              |  |  |  |
| Order product name              | MAS LEDtube HF 1500mm HE 20W |  |  |  |
|                                 | 830 T5                       |  |  |  |
| Full product name               | MAS LEDtube HF 1500mm HE 20W |  |  |  |
|                                 | 830 T5                       |  |  |  |
| Full product code               | 871869674335500              |  |  |  |
| Order code                      | 929001391302                 |  |  |  |
| Material Nr. (12NC)             | 929001391302                 |  |  |  |
| Numerator - Quantity Per Pack   | 1                            |  |  |  |
| EAN/UPC - Product/Case          | 8718696743355                |  |  |  |
| Numerator - Packs per outer box | 10                           |  |  |  |
| EAN/UPC - Case                  | 8718696743362                |  |  |  |
|                                 |                              |  |  |  |

# Dimensional drawing



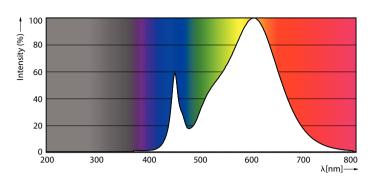
| Product                  | D1      | D2      | A1       | A2         | A3         |
|--------------------------|---------|---------|----------|------------|------------|
| MAS LEDtube HF 1500mm HE | 15.5 mm | 18.8 mm | 1,449 mm | 1,456.1 mm | 1,463.2 mm |
| 20W 830 T5               |         |         |          |            |            |

#### Photometric data

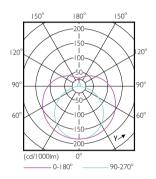


Calculat Photometria 43 Philips Lighting B.V. Page.

General uniform lighting - MAS LEDtube HF 1500mm HE 20W 830 T5

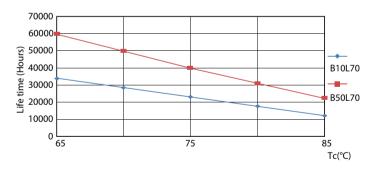


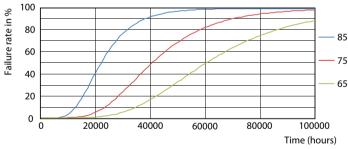
Spectral Power Distribution Colour - MAS LEDtube HF 1500mm HE 20W 830 T5



Light Distribution Diagram - MAS LEDtube HF 1500mm HE 20W 830 T5

### Lifetime

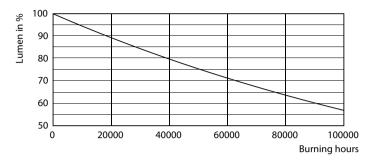


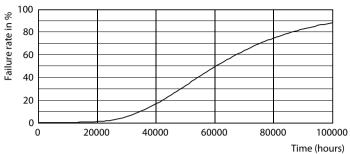


LifetimeVsTc

FailureRate

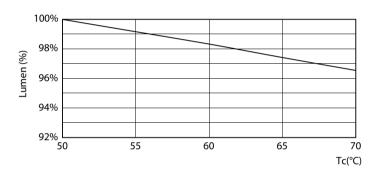
#### Lifetime





Lumen Maintenance Diagram - MAS LEDtube HF 1500mm HE 20W 830 T5





Lumen Maintenance Diagram - MAS LEDtube HF 1500mm HE 20W 830 T5



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