



# MASTER LEDtube T8 Ultra Efficient



## MAS LEDtube 1500mm UE 20W 840 T8

With energy prices rising and the EU's Green Deal<sup>2</sup> continuing to fund energy efficient building renovations, many are looking into make their company's lighting more sustainable. The new Philips MASTER LEDtube Ultra Efficient T8 is a true breakthrough on the way to more sustainable lighting. It replaces your current fluorescent tube or LED tube directly and offers immediately great energy cost reduction as well as a much longer lifetime!

### Product data

| General Information        |                |
|----------------------------|----------------|
| Cap-Base                   | G13 ROT        |
| Nominal lifetime           | 75,000 hour(s) |
| Switching Cycle            | 200,000        |
| Lighting Technology        | LED            |
| Flux measurement reference | Sphere         |
| CE mark                    | Yes            |
| EU RoHS compliant          | Yes            |

| Light Technical                       |                    |
|---------------------------------------|--------------------|
| Color Code                            | 840 [CCT of 4000K] |
| Beam Angle (Nom)                      | 160 degree(s)      |
| Luminous Flux                         | 3,700 lm           |
| Color Designation                     | Cool White (CW)    |
| Correlated Color Temperature (Nom)    | 4000 K             |
| Luminous Efficacy (rated) (Nom)       | 185 lm/W           |
| Color Consistency                     | <6                 |
| Color rendering index (CRI)           | 80                 |
| LLMF At End Of Nominal Lifetime (Nom) | 70 %               |

|   |     |
|---|-----|
| Flickering value (PstLM) - Flickering value as per EN 61000-3-3 | 0.5 |
| Stroboscopic effect visibility measure (SVM)                    | 0.2 |
| Photobiological safety according to EN 62471                    | RG0 |

| Operating and Electrical                  |             |
|---|-------------|
| Line Frequency                            | 50 to 60 Hz |
| Input Frequency                           | 50 to 60 Hz |
| Power Consumption                         | 20 W        |
| Lamp Current (Max)                        | 103 mA      |
| Lamp Current (Min)                        | 85 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 | 58 W        |
| Inrush current at mains                   | 4.24        |
| Max. lamp no. on MCB B type 10A - Mains   | 75          |

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|   |          |
|---|----------|
| Max. lamp no. on MCB B type 10A – EM ballast without Comp. Cap. | 75       |
| Max. lamp no. on MCB B type 10A – EM ballast with Comp. Cap.    | 10       |
| Max. lamp no. on MCB B type 16A – Mains                         | 120      |
| Max. lamp no. on MCB B type 16A – EM ballast without Comp. Cap. | 120      |
| Max. lamp no. on MCB B type 16A – EM ballast with Comp. Cap.    | 16       |
| Ballast Compatibility   | EM/Mains |

## Temperature

|                           |                 |
|---------------------------|-----------------|
| Ambient temperature range | -20 °C to 45 °C |
| T-Case Maximum (Nom)      | 60 °C           |

## Controls and Dimming

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

## Mechanical and Housing

|                |          |
|----------------|----------|
| Bulb Finish    | Frosted  |
| Bulb Material  | Plastic  |
| Product Length | 1,500 mm |
| Bulb Shape     | T8       |

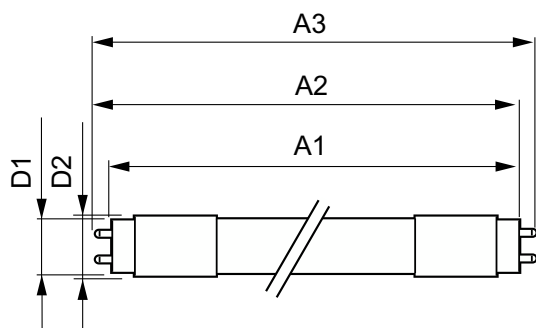
## Approval and Application

|                               |   |
|-------------------------------|---|
| Energy Efficiency Class       | B   |
| Energy Saving Product         | Yes   |
| Approval Marks                | RoHS compliance TUV CE marking<br>KEMA Keur certificate |
| Energy Consumption kWh/1000 h | 20 kWh  |
| EPREL Registration Number     | 1205538   |

## Product Data

|                                 |                                     |
|---------------------------------|-------------------------------------|
| Order product name              | MAS LEDtube 1500mm UE 20W<br>840 T8 |
| Full product name               | MAS LEDtube 1500mm UE 20W<br>840 T8 |
| Full product code               | 871951433976700                     |
| Order code                      | 929003067202                        |
| Material Nr. (12NC)             | 929003067202                        |
| Numerator - Quantity Per Pack   | 1                                   |
| EAN/UPC - Product/Case          | 8719514339767                       |
| Numerator - Packs per outer box | 10                                  |
| EAN/UPC - Case                  | 8719514339774                       |

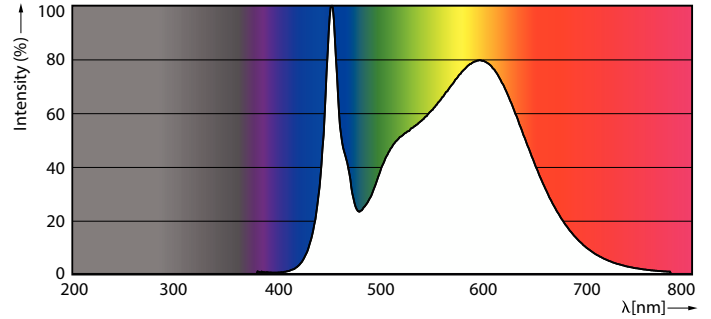
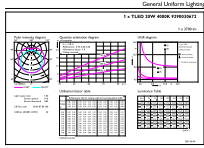
## Dimensional drawing



| Product                             | D1      | D2    | A1         | A2         | A3       |
|-------------------------------------|---------|-------|------------|------------|----------|
| MAS LEDtube 1500mm UE 20W<br>840 T8 | 25.8 mm | 28 mm | 1,498.8 mm | 1,505.9 mm | 1,513 mm |

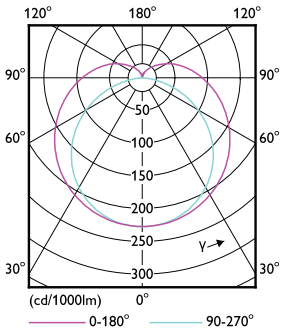
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## Photometric data



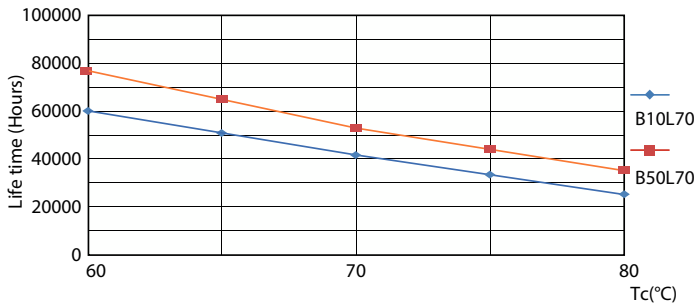
General uniform lighting - MAS LEDtube 1500mm UE 20W 840 T8

Spectral Power Distribution Colour - MAS LEDtube 1500mm UE 20W 840 T8

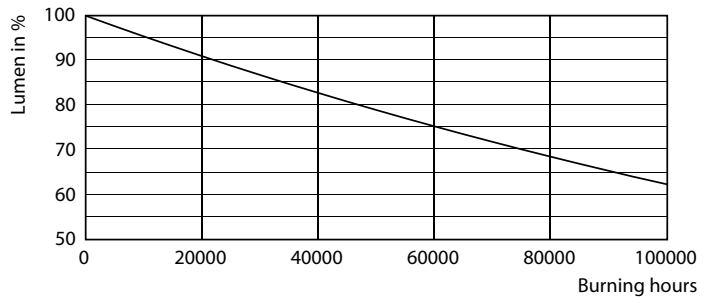


Light Distribution Diagram - MAS LEDtube 1500mm UE 20W 840 T8

## Lifetime



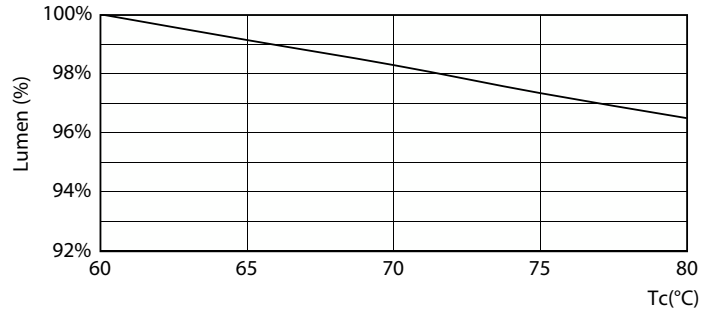
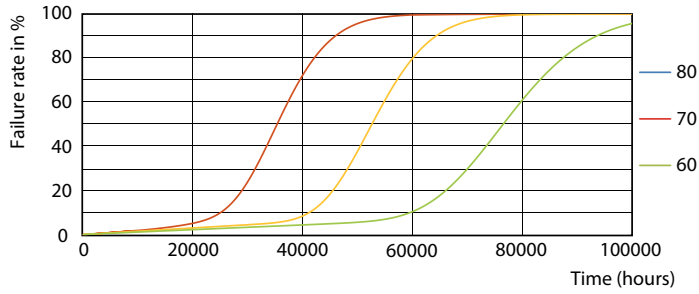
Life Expectancy Diagram - MAS LEDtube 1500mm UE 20W 840 T8



Lumen Maintenance Diagram - MAS LEDtube 1500mm UE 20W 840 T8

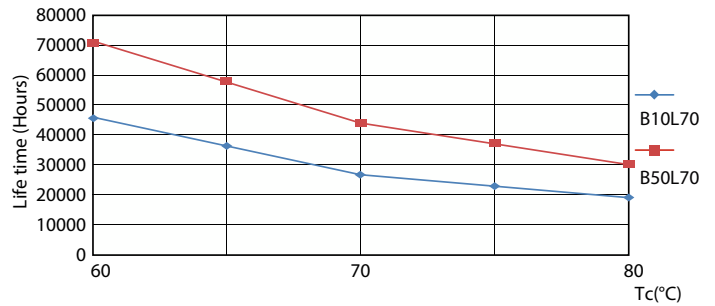
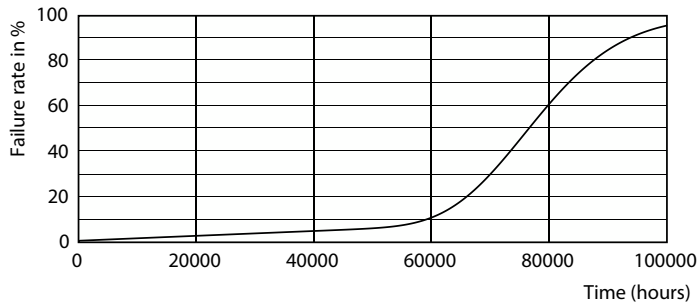
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## Lifetime



Life Expectancy Diagram - MAS LEDtube 1500mm UE 20W 840 T8

Lumen Maintenance Diagram - MAS LEDtube 1500mm UE 20W 840 T8



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