



# CorePro LEDtube EM/ Mains T8



## CorePro LEDtube 1500mm 20W 830 T8

Philips CorePro LEDtubes are the quick and easy way to replace T8 fluorescent or other LED tubes with a fast pack back time. Not only does the Core range of LEDtubes require a low initial investment, but LED energy efficiency also delivers instant savings that you can bank on over a long and reliable lifetime. Plus, with the same lamp size and light distribution as fluorescent alternatives, you'll never know the difference. There are two ways to install these LED tubes: Rewire your existing fluorescent-based luminaires so the CorePro LEDtubes work directly on the Mains. Or simply change the fluorescent starter to an LED starter that can be used with your Electromagnetic ballasts.

### Warnings and Safety

- NOTE: The overall energy efficiency and light distribution of any installation that uses these lamps will be determined by the design of the installation.
- Installation must be done according to the installation diagrams provided with the lamp or available online. Installation must be done by a certified professional.

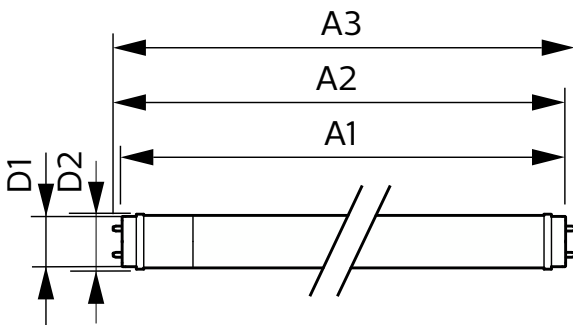
### Product data

| General Information        |                    |  |            |
|----------------------------|--------------------|--|------------|
| Cap-Base                   | G13                | Luminous Flux                                | 2,050 lm   |
| Nominal lifetime           | 50,000 hour(s)     | Color Designation                            | White (WH) |
| Switching Cycle            | 200,000            | Correlated Color Temperature (Nom)           | 3000 K     |
| Lighting Technology        | LED                | Luminous Efficacy (rated) (Nom)              | 102 lm/W   |
| Flux measurement reference | Sphere             | Color Consistency                            | <6         |
|                            |                    | Color rendering index (CRI)                  | 80         |
|                            |                    | LLMF At End Of Nominal Lifetime (Nom)        | 70 %       |
|                            |                    | Photobiological safety according to EN 62471 | RGO        |
| Light Technical            |                    |  |            |
| Color Code                 | 830 [CCT of 3000K] |  |            |
| Beam Angle (Nom)           | 240 degree(s)      |  |            |

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| Operating and Electrical   |             |
|--|-------------|
| Line Frequency   | 50 to 60 Hz |
| Input Frequency  | 50 to 60 Hz |
| Power Consumption  | 20 W        |
| Lamp Current (Nom)   | 105 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   |
| Ballast Compatibility  | EM/Mains    |
| LED alternative to fluorescent lamp power                                    | 58 W        |
| Inrush current at mains  | 7.4         |
| Max. lamp no. on MCB B type 10A - Mains                                      | 51          |
| Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor. | 76          |
| Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.    | 17          |
| Max. lamp no. on MCB B type 16A - Mains                                      | 82          |
| Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor. | 122         |
| Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.    | 27          |
| Temperature  |             |
| T-Case Maximum (Nom)   | 60 °C       |
| Controls and Dimming   |             |
| Dimmable   | No          |
| Mechanical and Housing   |             |
| Bulb Finish  | Frosted     |
| Bulb Material  | Glass       |
| Product Length   | 1,500 mm    |
| Bulb Shape   | T8          |

## Dimensional drawing



| Net Weight (Piece)  | 0.220 kg  |
|---|---|
| Approval and Application  |   |
| Energy Efficiency Class   | F   |
| Energy Saving Product   | Yes   |
| Approval Marks  | RoHS compliance CE marking<br>KEMA Keur certificate |
| Energy Consumption kWh/1000 h                                   | 20 kWh  |
| EPREL Registration Number                                       | 1827710   |
| CE mark   | Yes   |
| EU RoHS compliant   | Yes   |
| Flickering value (PstLM) - Flickering value as per EN 61000-3-3 | 1   |
| Stroboscopic effect visibility measure (SVM)                    | 0.4   |
| Ambient temperature range                                       | -20 to +45 °C                                       |

## Application Conditions

|                                     |     |
|-------------------------------------|-----|
| can it be used in closed luminaires | Yes |
|-------------------------------------|-----|

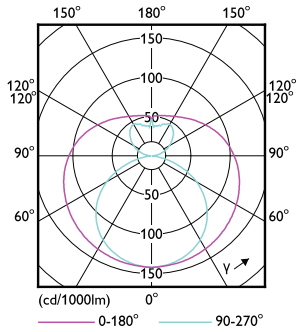
## Product Data

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Order product name              | CorePro LEDtube 1500mm 20W<br>830 T8 |
| Full product name               | CorePro LEDtube 1500mm 20W<br>830 T8 |
| Full product code               | 871951448642300                      |
| Order code                      | 929003577332                         |
| Material Nr. (12NC)             | 929003577332                         |
| Numerator - Quantity Per Pack   | 1                                    |
| EAN/UPC - Product/Case          | 8719514486423                        |
| Numerator - Packs per outer box | 20                                   |
| EAN/UPC - Case                  | 8719514486430                        |

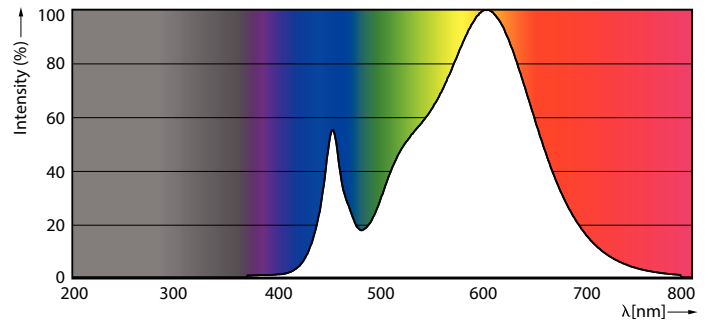
| Product                              | D1      | D2    | A1       | A2         | A3         |
|--------------------------------------|---------|-------|----------|------------|------------|
| CorePro LEDtube 1500mm 20W<br>830 T8 | 25.7 mm | 28 mm | 1,500 mm | 1,507.1 mm | 1,514.2 mm |

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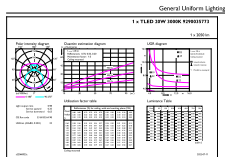
## Photometric data



Light Distribution Diagram - CorePro LEDtube 1500mm 20W 830 T8

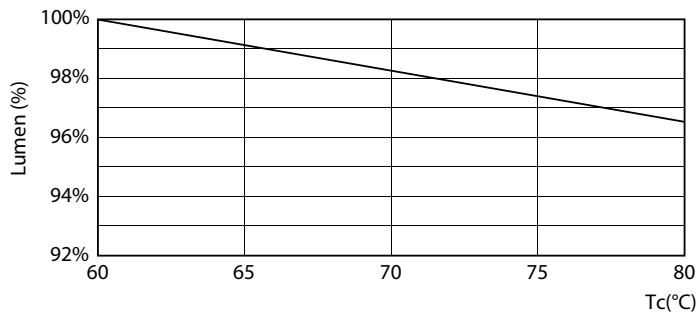


Spectral Power Distribution Colour - CorePro LEDtube 1500mm 20W 830 T8

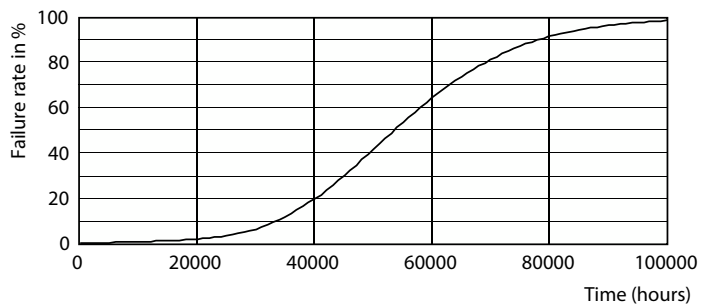


General uniform lighting - CorePro LEDtube 1500mm 20W 830 T8

## Lifetime



Lumen Maintenance Diagram - CorePro LEDtube 1500mm 20W 830 T8



Life Expectancy Diagram

# CorePro LEDtube EM/Mains T8

## Lifetime



LifetimeVsTc

FailureRate



Lumen Maintenance Diagram - CorePro LEDtube 1500mm 20W 830 T8

