

# CorePro LEDtube EM/ Mains T8



## CorePro LEDtube 1500mm 20W 840 T8

Philips CorePro LEDtubes are the quick and easy way to replace T8 fluorescent or other LED tubes with a fast pay 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	2,200 lm
Nominal lifetime	50,000 hour(s)	Luminous Efficacy (rated) (Nom)	110 lm/W
Switching Cycle	200,000	Color Designation	Cool White (CW)
Lighting Technology	LED	Correlated Color Temperature (Nom)	4000 K
Flux measurement reference	Sphere	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	1
		Stroboscopic effect visibility measure (SVM)	0.4
Light Technical			
Color Code	840 [CCT of 4000K]		
Beam Angle (Nom)	240 degree(s)		

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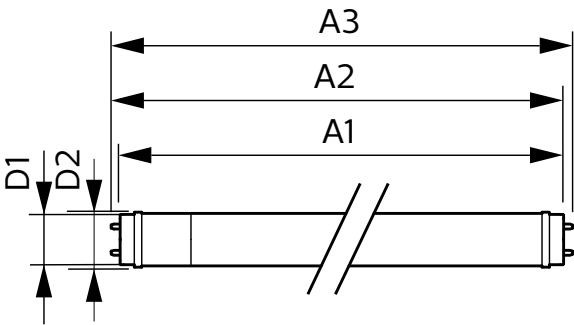
Photobiological safety according to EN 62471	RG0
Operating and Electrical	
Line Frequency	50 to 60 Hz
Input Frequency	50 to 60 Hz
Power Consumption	20 W
Lamp Current (Nom)	105 mA
Starting Time (Nom)	0.5 s
Warm-up time to 60% light	0.5 s
Power Factor (Fraction)	0.9
Voltage (Nom)	220-240 V
LED alternative 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
Ballast Compatibility	EM/Mains
Temperature	
Ambient temperature range	-20 to +45 °C
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
Approval and Application	
Energy Efficiency Class	E
Energy Saving Product	Yes
Approval Marks	RoHS compliance CE marking KEMA Keur certificate
Energy Consumption kWh/1000 h	20 kWh
EPREL Registration Number	1827700
CE mark	Yes
EU RoHS compliant	Yes

Application Conditions	
can it be used in closed luminaires	Yes

Product Data	
Order product name	CorePro LEDtube 1500mm 20W 840 T8
Full product name	CorePro LEDtube 1500mm 20W 840 T8
Full product code	871951445981600
Order code	929003547402
Material Nr. (12NC)	929003547402
Numerator - Quantity Per Pack	1
Net Weight (Piece)	0.220 kg
EAN/UPC - Product/Case	8719514459816
Numerator - Packs per outer box	20
EAN/UPC - Case	8719514459823

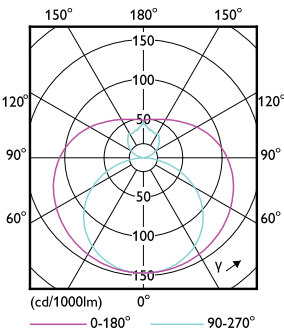
Dimensional drawing



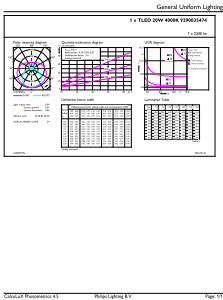
Product	D1	D2	A1	A2	A3
CorePro LEDtube 1500mm 20W 840 T8	25.7 mm	28 mm	1,500 mm	1,507.1 mm	1,514.2 mm

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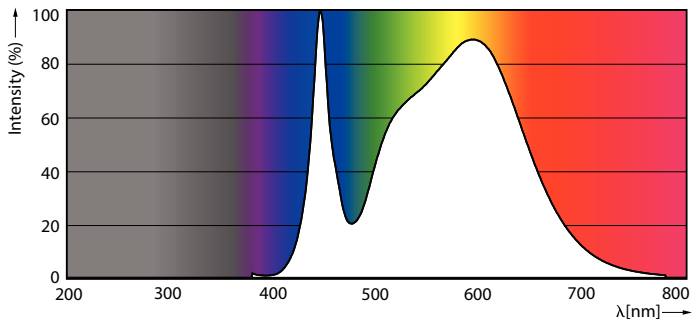
Photometric data



Light Distribution Diagram - CorePro LEDtube 1500mm 20W 840 T8

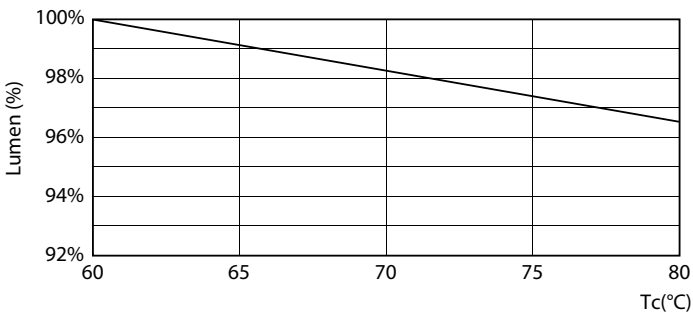


General uniform lighting - CorePro LEDtube 1500mm 20W 840 T8

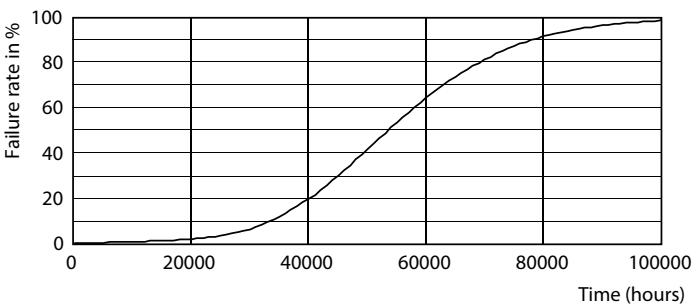


Spectral Power Distribution Colour - CorePro LEDtube 1500mm 20W 840 T8

Lifetime



Lumen Maintenance Diagram - CorePro LEDtube 1500mm 20W 840 T8



Life Expectancy Diagram

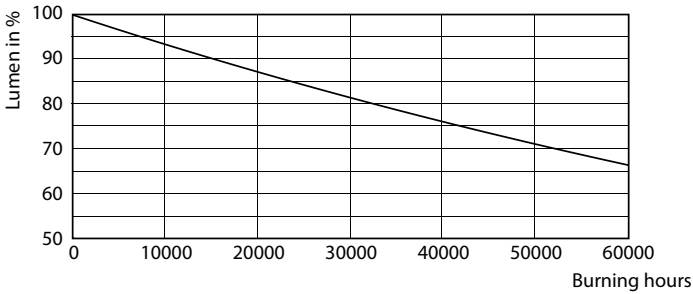
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Lifetime



LifetimeVsTc

FailureRate



Lumen Maintenance Diagram - CorePro LEDtube 1500mm 20W 840 T8

