



CorePro LED tube EM/ Mains T8



CorePro LEDtube 1800mm 21W830 T8

CorePro, LEDtube, T8, EM/Mains, 1800 mm, 21 W, 70W TL-D, 3000 K, 2900 lm, CRI 80, 50000 hour(s)

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		Flux measurement reference	Sphere
Cap-Base	G13	Light Technical	
Nominal lifetime	50,000 hour(s)	Color Code	830 [CCT of 3000K]
Switching Cycle	200,000	Beam Angle (Nom)	160 degree(s)
Lighting Technology	LEDtube	Luminous Flux	2,900 lm

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Color Designation	White (WH)
Correlated Color Temperature (Nom)	3000 K
Luminous Efficacy (rated) (Nom)	138 lm/W
Color Consistency	<6
Color rendering index (CRI)	80
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	21 W
Lamp Current (Max)	106 mA
Lamp Current (Min)	87 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	70W TL-D
Inrush current at mains	8.2
Max. lamp no. on MCB B type 10A - Mains	65
Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor.	65
Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.	10
Max. lamp no. on MCB B type 16A - Mains	100
Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor.	100
Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.	16
Ballast Compatibility	EM/Mains

Temperature

T-Case Maximum (Nom)	60 °C
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Controls and Dimming

Dimmable	No
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Mechanical and Housing

Bulb Finish	Frosted
Bulb Material	Plastic
Product Length	1,800 mm
Bulb Shape	T8
Net Weight (Piece)	0.220 kg

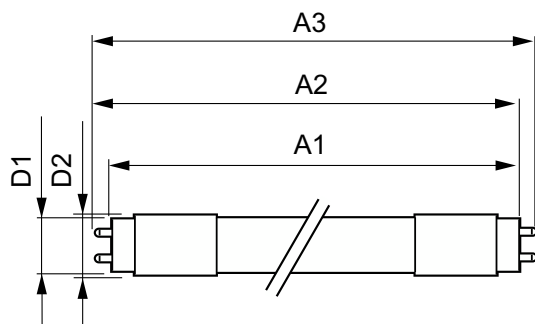
Approval and Application

Energy Efficiency Class	D
Energy Saving Product	Yes
Approval Marks	RoHS compliance KEMA Keur certificate
Energy Consumption kWh/1000 h	21 kWh
EPREL Registration Number	1384738
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 °C to 45 °C

Product Data

Order product name	CorePro LEDtube 1800mm 21W830 T8
Full product name	CorePro LEDtube 1800mm 21W830 T8
Full product code	871951449493000
Order code	929003584702
Material Nr. (12NC)	929003584702
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8719514494930
Numerator - Packs per outer box	10
EAN/UPC - Case	8719514494947

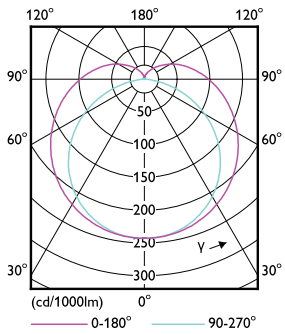
Dimensional drawing



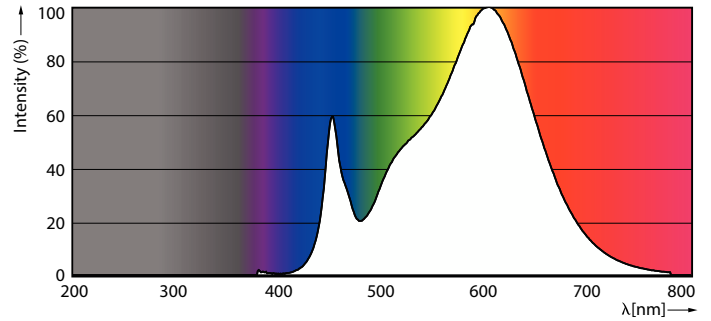
Product	D1	D2	A1	A2	A3
CorePro LEDtube 1800mm 21W830 T8	25.8 mm	28 mm	1,762.6 mm	1,769.7 mm	1,776.8 mm

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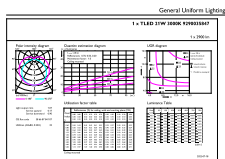
Photometric data



Light Distribution Diagram - CorePro LEDtube 1800mm 21W830 T8



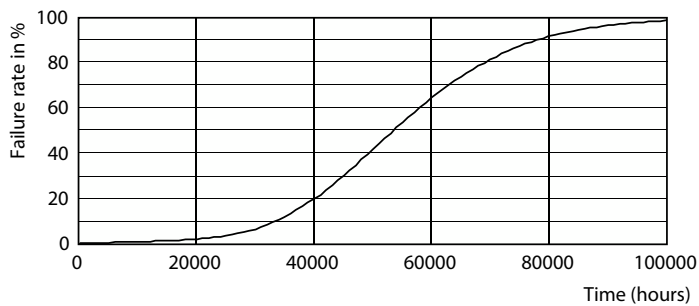
Spectral Power Distribution Colour - CorePro LEDtube 1800mm 21W830 T8



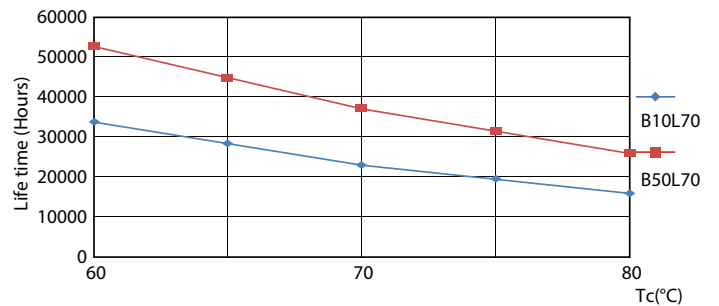
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General uniform lighting - CorePro LEDtube 1800mm 21W830 T8

Lifetime



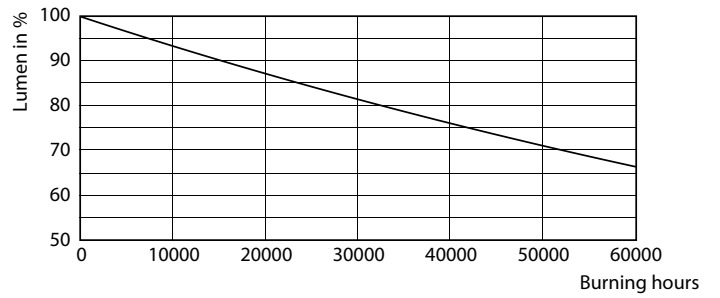
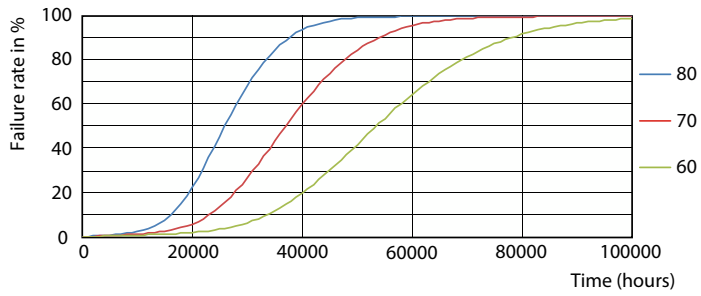
Life Expectancy Diagram



LifetimeVsTc

CorePro LED tube EM/Mains T8

Lifetime



FailureRate

Lumen Maintenance Diagram - CorePro LEDtube 1800mm 21W830 T8

