



MASTER LEDtube EM/ Mains T8



MAS LEDtube 1500mm UO 21.7W 840 T8

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 T8 LED 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 ensure this tube masters every demanding application.

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.

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

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)	170 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	21.7 W
Lamp Current (Max)	108 mA
Lamp Current (Min)	89 mA
Starting Time (Nom)	0.5 s
Warm-up time to 60% light	0.5 s
Power Factor (Fraction)	0.9

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Voltage (Nom)	220-240 V
Ballast Compatibility	EM/Mains
LED alternative to fluorescent lamp power	58 W
Inrush current at mains	8.4
Max. lamp no. on MCB B type 10A – Mains	70
Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor.	70
Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.	10
Max. lamp no. on MCB B type 16A – Mains	110
Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor.	110
Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.	16

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	1,500 mm
Bulb Shape	T8
Net Weight (Piece)	0.285 kg

Approval and Application

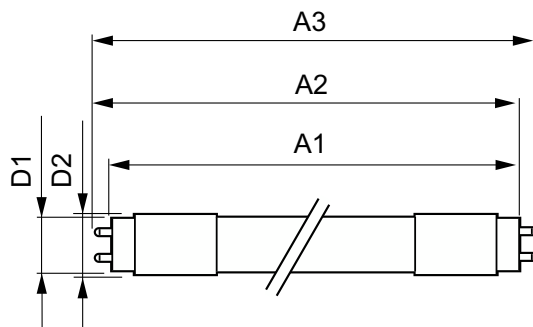
Energy Efficiency Class	C
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Energy Saving Product	Yes
Approval Marks	RoHS compliance CE marking KEMA Keur certificate ENEC certificate
Energy Consumption kWh/1000 h	22 kWh
EPREL Registration Number	1206977
CE mark	Yes
EU RoHS compliant	Yes
Flickering value (PstLM) – Flickering value as per EN 61000-3-3	0.5
Stroboscopic effect visibility measure (SVM)	0.2
Ambient temperature range	-20 °C to 45 °C

Product Data

Order product name	MAS LEDtube 1500mm UO 21.7W 840 T8
Full product name	MAS LEDtube 1500mm UO 21.7W 840 T8
Full product code	871951431664500
Order code	929002998602
Material Nr. (12NC)	929002998602
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8719514316645
Numerator - Packs per outer box	10
EAN/UPC - Case	8719514316652

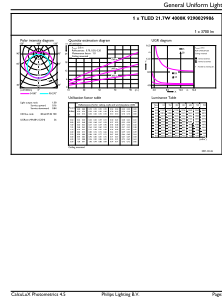
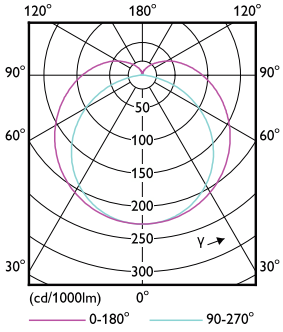
Dimensional drawing



Product	D1	D2	A1	A2	A3
MAS LEDtube 1500mm UO 21.7W 840 T8	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm

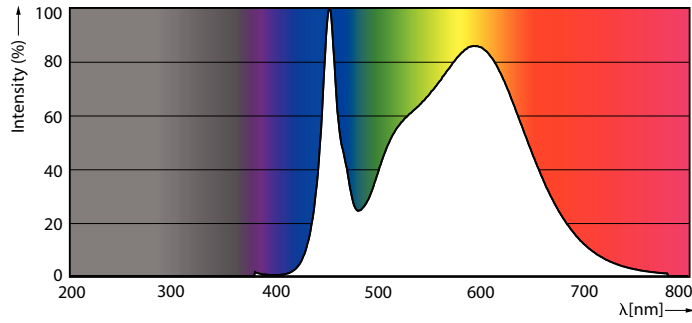
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Photometric data



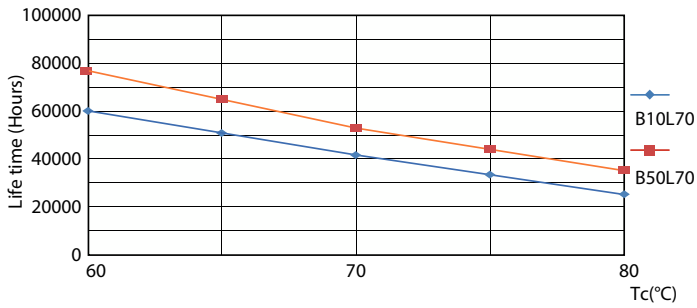
Light Distribution Diagram - MAS LEDtube 1500mm UO 21.7W 840 T8

General uniform lighting - MAS LEDtube 1500mm UO 21.7W 840 T8

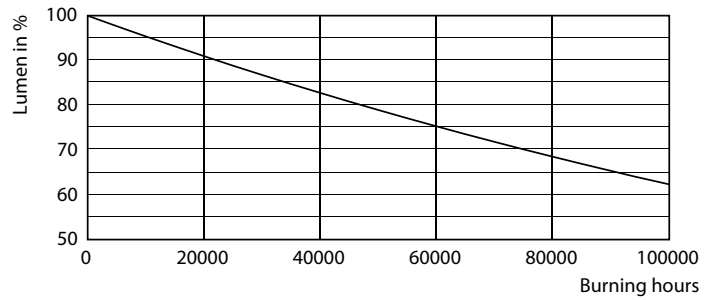


Spectral Power Distribution Colour - MAS LEDtube 1500mm UO 21.7W 840 T8

Lifetime



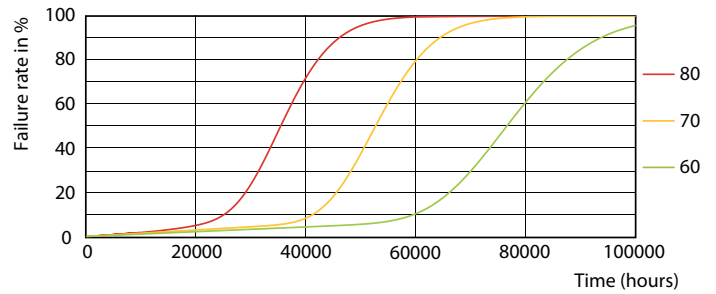
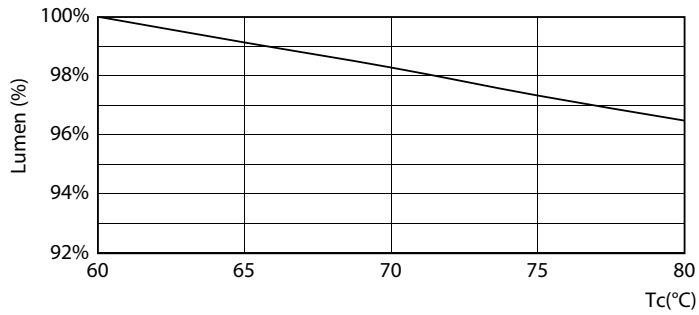
LifetimeVsTc



Lumen Maintenance Diagram - MAS LEDtube 1500mm UO 21.7W 840 T8

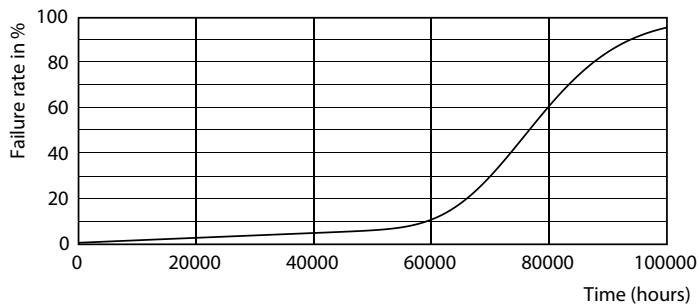
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Lifetime



Lumen Maintenance Diagram - MAS LEDtube 1500mm UO 21.7W 840 T8

LEDtube-75K-6080-FailureRate-LED



Life Expectancy Diagram

