



MASTER LED tube EM/Mains T8 with Recycled Plastic

MAS LEDtube 1500mm UO 20W 840 T8 EELB

MASTER, LEDtube, T8, EM/Mains, 1500 mm, 20 W, 58W TL-D, 4000 K, 3700 lm, CRI 80, 75000 hour(s)

Our new sustainability hero Philips MASTER LEDtube T8 EM/mains — a pioneering LED tube designed for performance, durability, and environmental impact. As the first-ever LED tube to feature 40% post-consumer recycled plastic, it sets a new standard for sustainable lighting without compromising quality. With a long lifetime of 75,000 hours and high luminous efficacy up to 185 lm/W, the MASTER LEDtube T8 ensures outstanding energy efficiency. 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 master every demanding application.

Product data

General Information	
Cap-Base	G13 Rotatable end-cap
Nominal lifetime	75,000 hour(s)
Switching Cycle	200,000
Lighting Technology	LEDtube
Flux measurement reference	Sphere
Warranty period	5 years

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

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LLMF At End Of Nominal Lifetime (Nom)	70 %
Photobiological safety according to EN 62471	RG0

Sustainability Data

Product non-virgin material ratio	25.8 %
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Operating and Electrical

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	58W TL-D
Inrush current at mains	9
Max. lamp no. on MCB B type 10A - Mains	75
Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor.	75
Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.	10
Max. lamp no. on MCB B type 16A - Mains	120
Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor.	120
Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.	16
Ballast Compatibility	EM/Mains

Temperature

T-Case Maximum (Nom)	50 °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)	0.265 kg

Approval and Application

Energy Efficiency Class	B
Energy Saving Product	Yes
Approval Marks	RoHS compliance CE marking KEMA Keur certificate ENEC certificate
Energy Consumption kWh/1000 h	20 kWh
EPREL Registration Number	2144210
CE mark	Yes
EU RoHS compliant	Yes
LED Innovations	UltraEfficient
Flickering value (PstLM) - Flickering value as per EN 61000-3-3	0.1
Stroboscopic effect visibility measure (SVM)	0.1
Ambient temperature range	-20 to +45 °C
Post-consumer recycled plastic material ratio	40 %

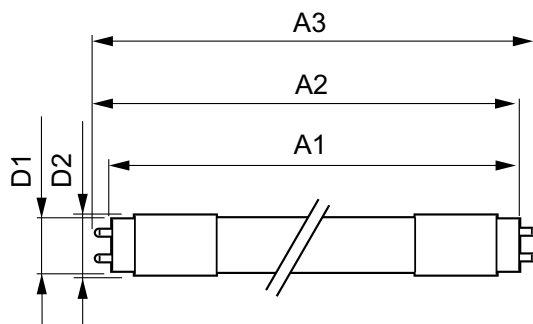
Application Conditions

can it be used in closed luminaires	Yes
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Product Data

Order product name	MAS LEDtube 1500mm UO 20W 840 T8 EELB
Full product name	MAS LEDtube 1500mm UO 20W 840 T8 EELB
Full product code	872016938801700
Order code	929004242202
Material Nr. (12NC)	929004242202
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8720169388017
Numerator - Packs per outer box	10
EAN/UPC - Case	8720169388024

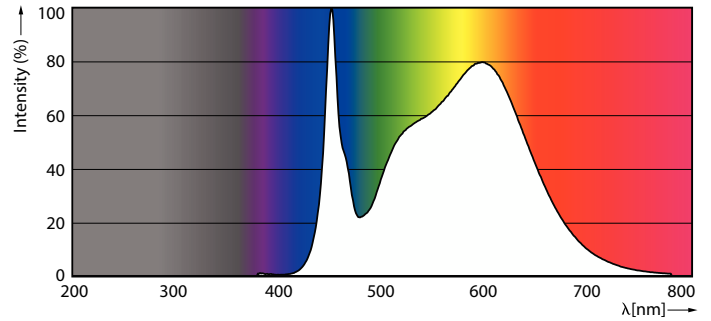
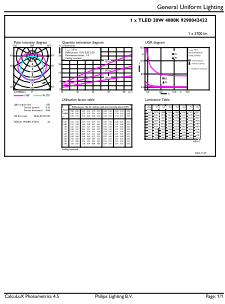
Dimensional drawing



Product	D1	D2	A1	A2	A3
MAS LEDtube 1500mm UO 20W	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
840 T8 EELB					

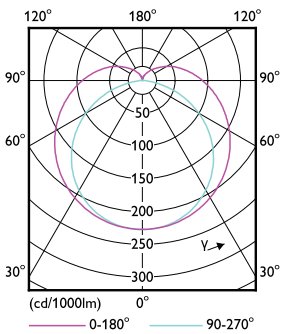
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Photometric data



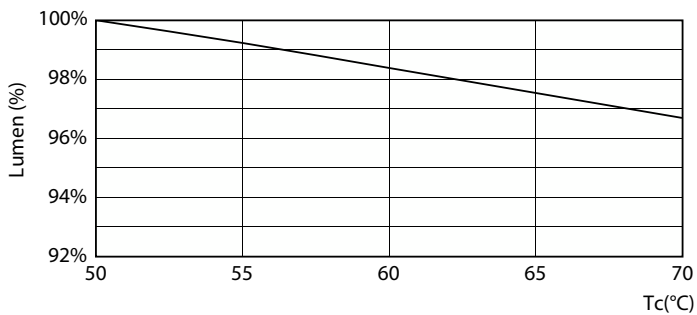
General uniform lighting - MAS LEDtube 1500mm UO 20W 840 T8 EELB

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

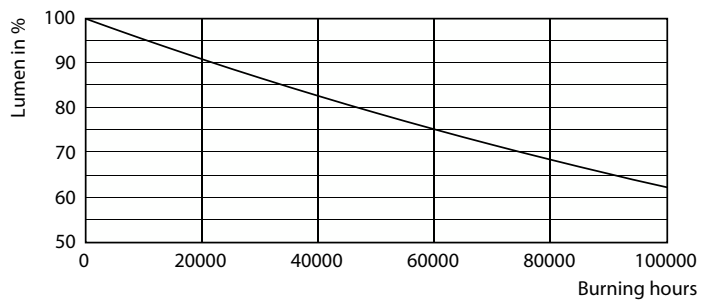


Light Distribution Diagram - MAS LEDtube 1500mm UO 20W 840 T8 EELB

Lifetime



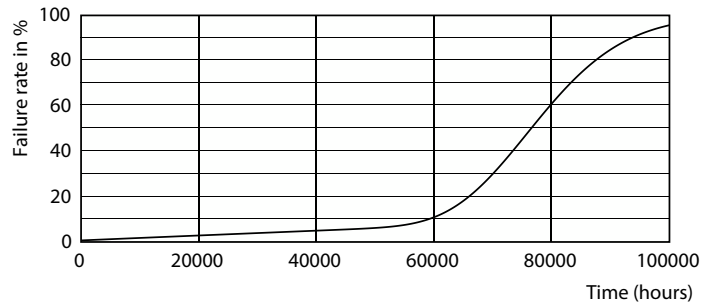
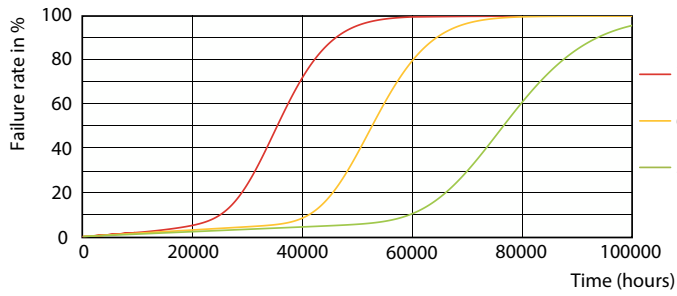
Lumen Maintenance Diagram - MAS LEDtube 1500mm UO 20W 840 T8 EELB



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

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Lifetime



LEDtube-75K-5070-FailureRate-LED

Life Expectancy Diagram



LifetimeVsTc

