



# MASTER LED tube T8 UltraEfficient with Recycled Plastic



## MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

MASTER, LEDtube, T8, EM/Mains, 1200 mm, 11.9 W, 36W TL-D, 4000 K, 2500 lm, CRI 80, 100000 hour(s)

With energy prices rising and the EU's Green Deal continuing to fund energy efficient building renovations, many are looking into make their company's lighting more sustainable. The new Philips MASTER LEDtube UltraEfficient T8 is a true breakthrough on the way to more sustainable lighting. It replaces your current fluorescent tube or LED tube directly and offers immediately great energy cost reduction as well as a much longer lifetime!

### Product data

General Information		Color Designation	
Cap-Base	G13 Rotatable end-cap	Color Designation	Cool White (CW)
Nominal lifetime	100,000 hour(s)	Correlated Color Temperature (Nom)	4000 K
Switching Cycle	200,000	Luminous Efficacy (rated) (Nom)	210 lm/W
Lighting Technology	LEDtube	Color Consistency	<6
Flux measurement reference	Sphere	Color rendering index (CRI)	80
Warranty period	10 years	LLMF At End Of Nominal Lifetime (Nom)	70 %
		Photobiological safety according to EN 62471	RG0
Light Technical		Operating and Electrical	
Color Code	840 [CCT of 4000K]	Line Frequency	50 to 60 Hz
Beam Angle (Nom)	160 degree(s)	Input Frequency	50 to 60 Hz
Luminous Flux	2,500 lm	Power Consumption	11.9 W

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Lamp Current (Max)	63 mA
Lamp Current (Min)	48 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	36W TL-D
Inrush current at mains	5
Max. lamp no. on MCB B type 10A - Mains	120
Max. lamp no. on MCB B type 10A – EM ballast without Compensation Capacitor.	120
Max. lamp no. on MCB B type 10A – EM ballast with Compensation Capacitor.	15
Max. lamp no. on MCB B type 16A - Mains	190
Max. lamp no. on MCB B type 16A – EM ballast without Compensation Capacitor.	190
Max. lamp no. on MCB B type 16A – EM ballast with Compensation Capacitor.	25
Ballast Compatibility	EM/Mains

## Temperature

T-Case Maximum (Nom)	40 °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	1,200 mm
Bulb Shape	T8
Net Weight (Piece)	0.230 kg

## Approval and Application

Energy Efficiency Class	A
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Energy Saving Product	Yes
Approval Marks	RoHS compliance CE marking KEMA Keur certificate ENEC certificate
Energy Consumption kWh/1000 h	12 kWh
EPREL Registration Number	2102398
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
Wireless Technology	Not applicable

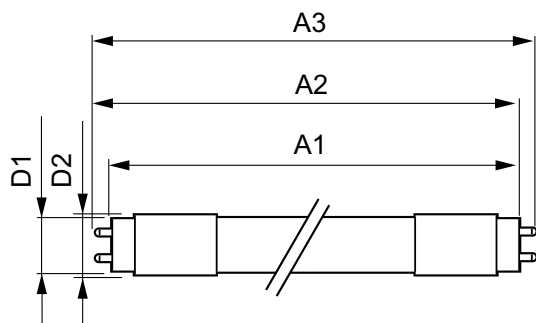
## Sustainability Data

Product non-virgin material ratio	26.5 %
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## Product Data

Order product name	MAS LEDtube 1200mm UE 11.9W 840 T8 EELA
Full product name	MAS LEDtube 1200mm UE 11.9W 840 T8 EELA
Full product code	871951443166900
Order code	929003482202
Material Nr. (12NC)	929003482202
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8719514431669
Numerator - Packs per outer box	10
EAN/UPC - Case	8719514431676

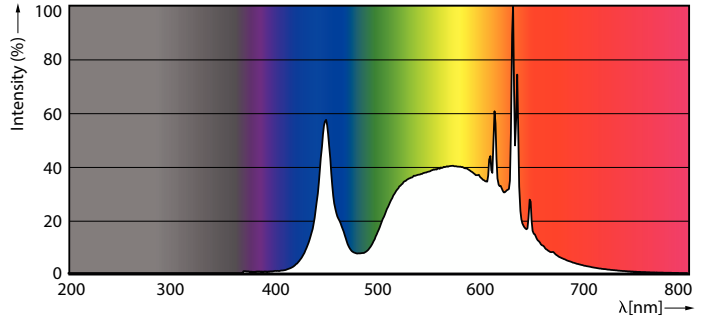
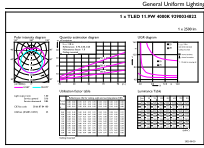
## Dimensional drawing



Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm UE 11.9W 840 T8 EELA	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm

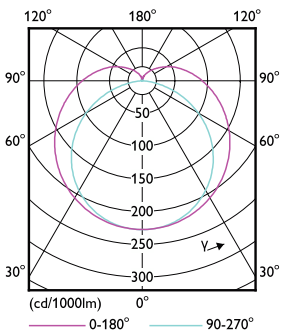
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## Photometric data



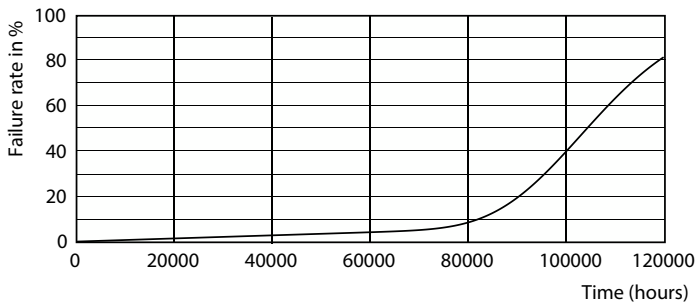
General uniform lighting - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

Spectral Power Distribution Colour - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

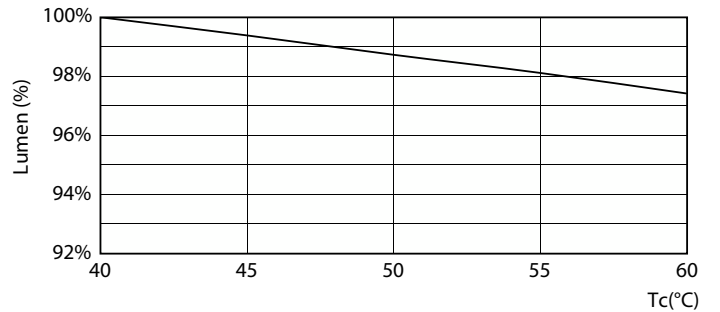


Light Distribution Diagram - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

## Lifetime



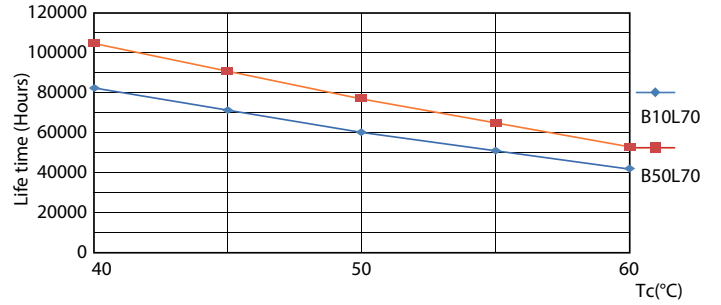
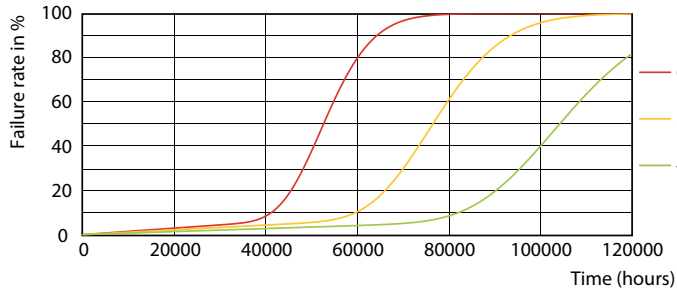
Life Expectancy Diagram



Lumen Maintenance Diagram - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

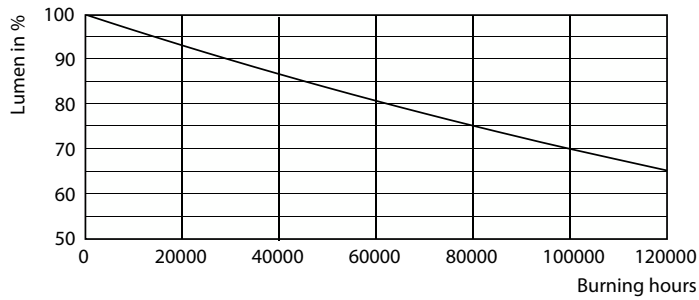
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## Lifetime



LEDtube\_100K\_4060\_FailureRate-LED

LifetimeVsTc



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