



# MASTER LEDtube T8 UltraEfficient



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

With energy prices rising and the EU's Green Deal2 continuing to fund energy efficient building renovations, many are looking into make their company's lighting more sustainable. The new Philips MASTER LEDtube Ultra Efficient 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	
Cap-Base	G13 ROT
Nominal lifetime	100,000 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	2,500 lm
Color Designation	Cool White (CW)
Correlated Color Temperature (Nom)	4000 K
Luminous Efficacy (rated) (Nom)	210 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	11.9 W
Lamp Current (Max)	63 mA
Lamp Current (Min)	48 mA
Starting Time (Nom)	1 s
Warm-up time to 60% light	1 s
Power Factor (Fraction)	0.9
Voltage (Nom)	220-240 V
Ballast Compatibility	EM/Mains
LED alternative to fluorescent lamp power	36 W
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

# MASTER LEDtube T8 UltraEfficient

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

## 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

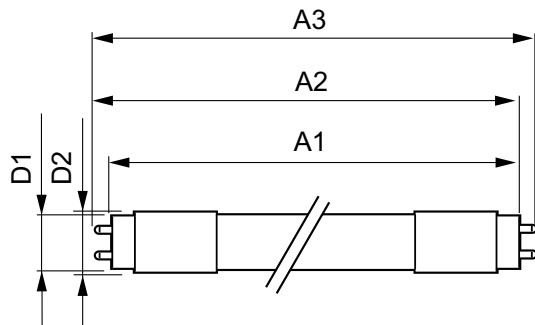
Energy Efficiency Class	A
Energy Saving Product	Yes
Approval Marks	RoHS compliance CE marking KEMA Keur certificate ENEC certificate

Energy Consumption kWh/1000 h	12 kWh
EPREL Registration Number	1013082
CE mark	Yes
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	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

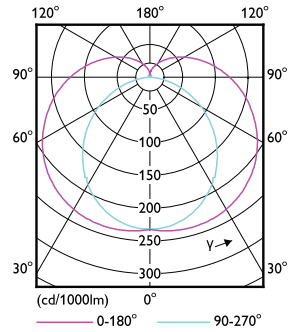
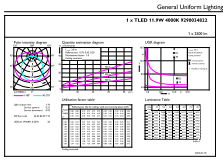
## Dimensional drawing



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

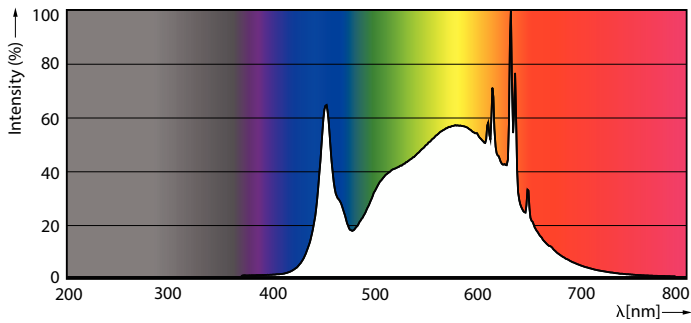
# MASTER LEDtube T8 UltraEfficient

## Photometric data



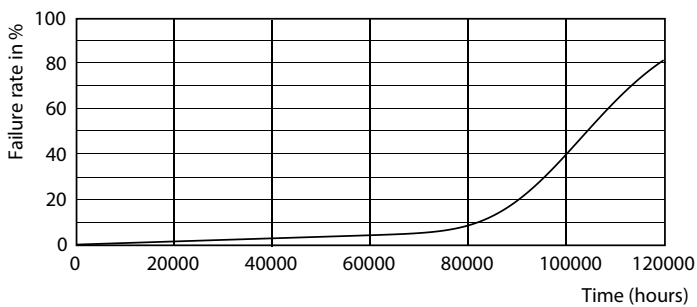
General uniform lighting - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

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

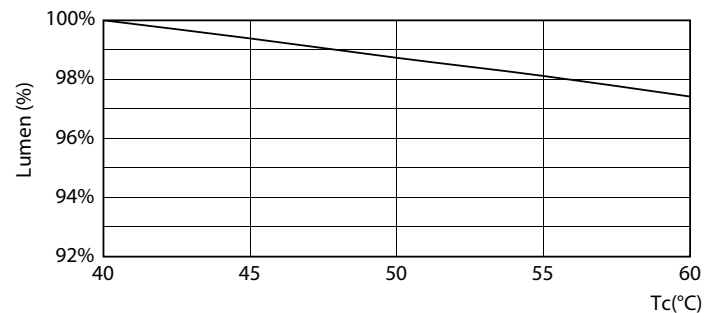


Spectral Power Distribution Colour - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

## Lifetime



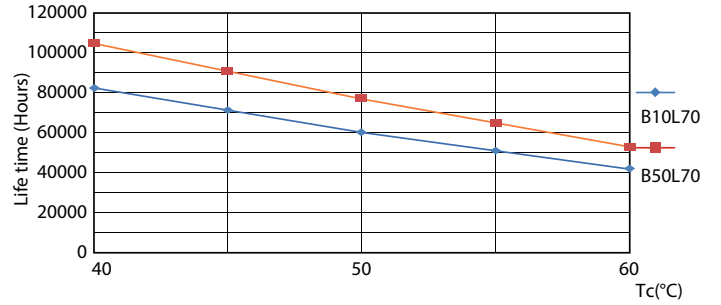
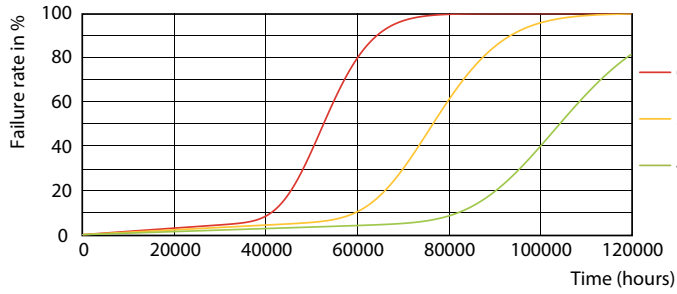
Life Expectancy Diagram



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

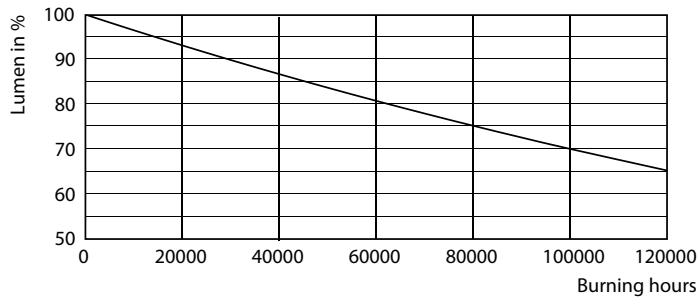
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## Lifetime



LEDtube\_100K\_4060\_FailureRate-LED

LifetimeVsTc



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

