



# MASTER LED tube T8 UltraEfficient with Recycled Plastic

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

MASTER, LEDtube, T8, EM/Mains, 1200 mm, 220-240 V, 11.9 W, 36W TL-D, 4000 K, 2500 lm, 100000 hour(s)

MASTER, LEDtube, T8, EM/Mains, 1200 mm, 220-240 V, 11.9 W, LED alternative to 36W TL-D, 4000 K, 2500 lm, 100000 hour(s), 210 lm/W, G13 Rotatable end-cap, Beam angle 160 degree(s), Plastic, 40 %, RGO

### Product data

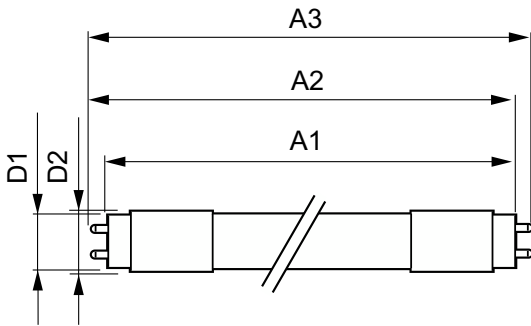
General Information		LLMF At End Of Nominal Lifetime (Nom)		70 %	
Cap-Base	G13 Rotatable end-cap	Photobiological safety according to EN 62471 RGO			
Nominal lifetime	100,000 hour(s)				
Switching Cycle	200,000				
Lighting Technology	LEDtube				
Light Technical		Operating and Electrical			
Color Code	840 [CCT of 4000K]	Input Frequency	50 to 60 Hz		
Beam Angle (Nom)	160 degree(s)	Power Consumption	11.9 W		
Luminous Flux	2,500 lm	Lamp Current (Max)	63 mA		
Color Designation	Cool White (CW)	Lamp Current (Min)	48 mA		
Correlated Color Temperature (Nom)	4000 K	Wattage Equivalent	36 W		
Luminous Efficacy (rated) (Nom)	210 lm/W	Starting Time (Nom)	0.5 s		
Color Consistency	<6	Warm-up time to 60% light	0.5 s		
Color rendering index (CRI)	80	Power Factor (Fraction)	0.9		
		Voltage (Nom)	220-240 V		
		LED alternative to fluorescent lamp power	36W TL-D		

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Ballast Compatibility	EM/Mains
<b>Temperature</b>	
T-Case Maximum (Nom)	40 °C
<b>Controls and Dimming</b>	
Dimmable	No
<b>Mechanical and Housing</b>	
Bulb Finish	Frosted
Bulb Material	Plastic
Product Length	1,200 mm
Bulb Shape	T8
Net Weight (Piece)	0.230 kg
<b>Approval and Application</b>	
Energy Saving Product	Yes
Approval Marks	RoHS compliance CE marking KEMA Keur certificate ENEC certificate
CE mark	Yes
EU RoHS compliant	Yes
LED Innovations	UltraEfficient
Ambient temperature range	-20 to +45 °C

Post-consumer recycled plastic material ratio 40 %	
<b>Application Conditions</b>	
Wireless Technology	Not applicable
<b>Sustainability Data</b>	
Product non-virgin material ratio	26.4 %
<b>Product Data</b>	
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	872016928170700
Order code	28170700
Material Nr. (12NC)	929003482208
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8720169281707
Numerator - Packs per outer box	10
EAN/UPC - Case	8720169281714

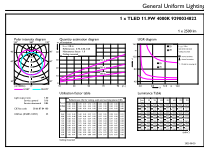
## Dimensional drawing



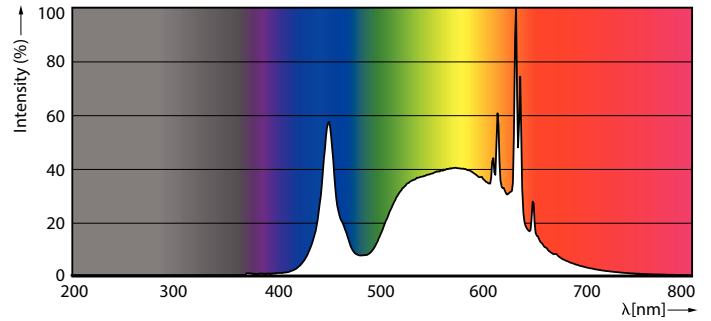
Product	D1	D2	A1	A2	A3
MAS LEDtube 1200mm UE 11.9W 840 T8 EELA	25.8 mm	28 mm	1,198.2 mm	1,205.3 mm	1,212.4 mm

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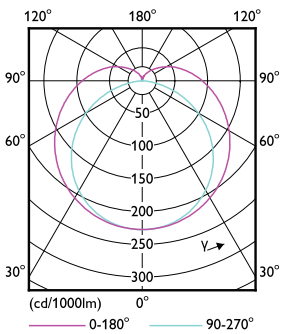
## Photometric data



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

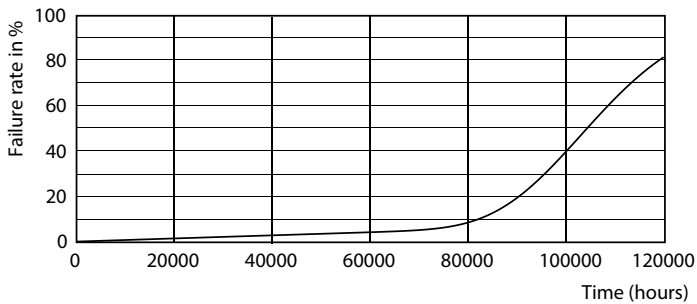


Spectral Power Distribution Colour - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

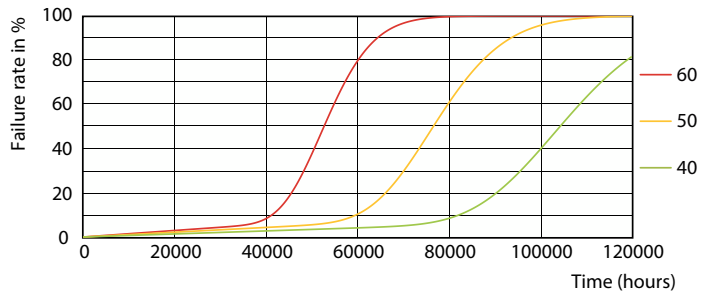


Light Distribution Diagram - MAS LEDtube 1200mm UE 11.9W 840 T8 EELA

## Lifetime



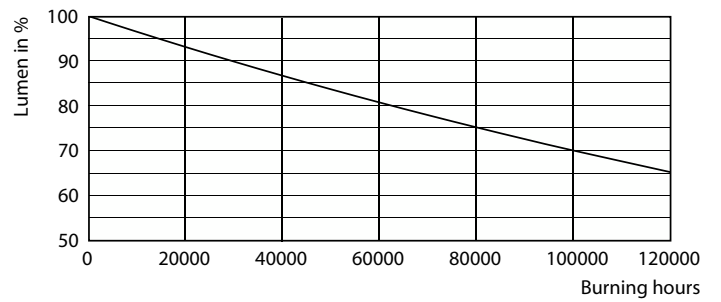
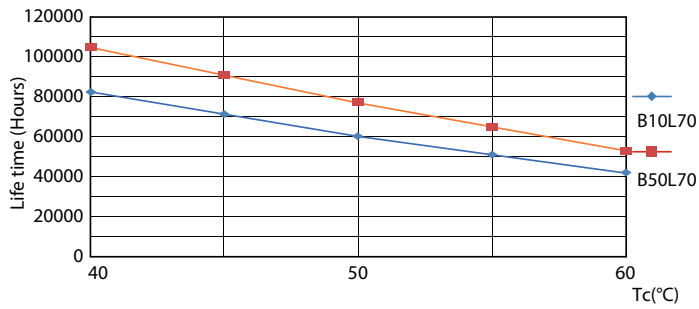
Life Expectancy Diagram



LEDtube\_100K\_4060\_FailureRate-LED

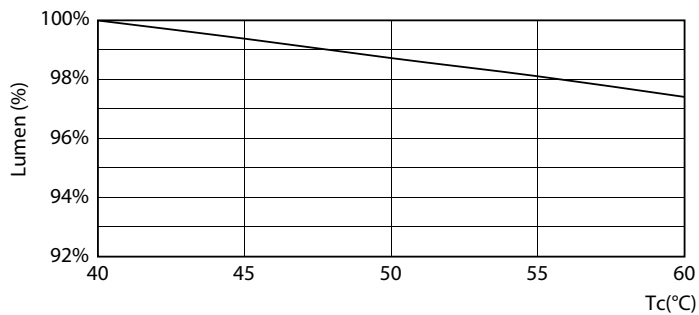
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## Lifetime



LifetimeVsTc

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



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

