



MASTER LEDtube EM/ Mains T8



MASTER LEDtube 1500mm UO 20W 830 T8 EELC

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. For those that are looking for value for money within limited budget and re-lamping efforts for better light effect and lifetime.

Warnings and Safety

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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	830 [CCT of 3000K]
Beam Angle (Nom)	160 degree(s)
Luminous Flux	3,400 lm
Color Designation	White (WH)
Correlated Color Temperature (Nom)	3000 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	
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	58 W
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

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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
Controls and Dimming	
Dimmable	No
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	C
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	2144203
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

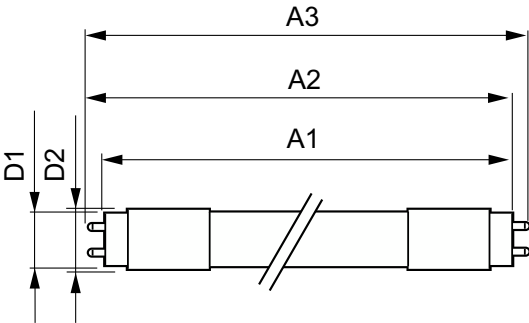
Application Conditions

can it be used in closed luminaires	Yes
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Product Data

Order product name	MAS LEDtube 1500mm UO 20W 830 T8 EELC
Full product name	MASTER LEDtube 1500mm UO 20W 830 T8 EELC
Full product code	872016938799700
Order code	38799700
Material Nr. (12NC)	929004242102
Numerator – Quantity Per Pack	1
EAN/UPC – Product/Case	8720169387997
Numerator – Packs per outer box	10
EAN/UPC – Case	8720169388000

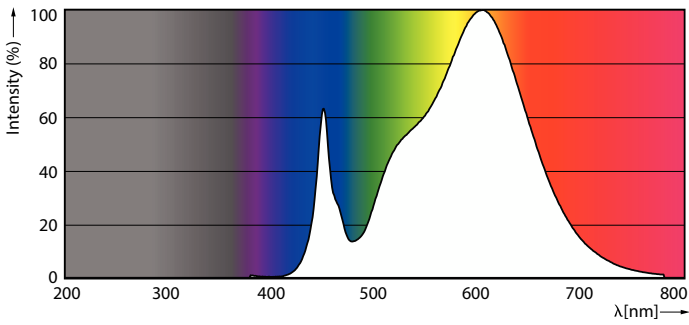
Dimensional drawing



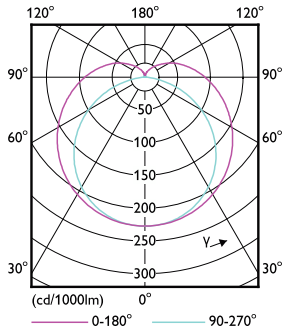
Product	D1	D2	A1	A2	A3
MAS LEDtube 1500mm UO 20W 830 T8 EELC	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm

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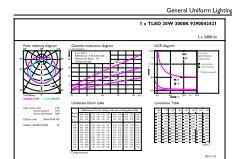
Photometric data



Spectral Power Distribution Colour - MAS LEDtube 1500mm UO 20W 830 T8 EELC

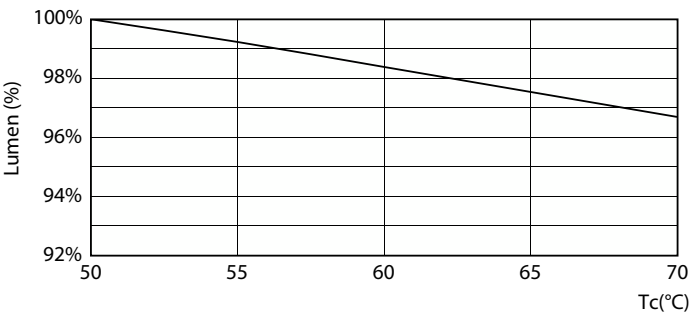


Light Distribution Diagram - MAS LEDtube 1500mm UO 20W 830 T8 EELC

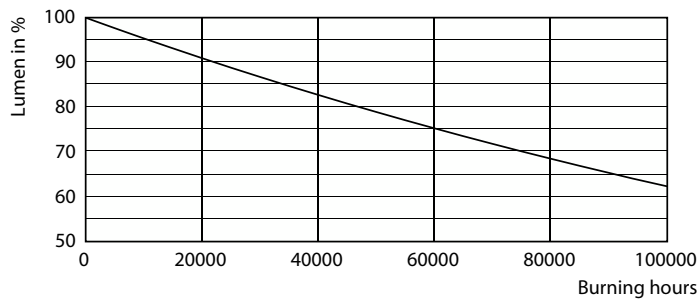


General uniform lighting - MAS LEDtube 1500mm UO 20W 830 T8 EELC

Lifetime



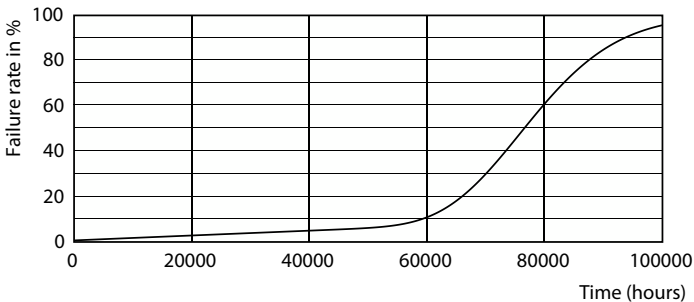
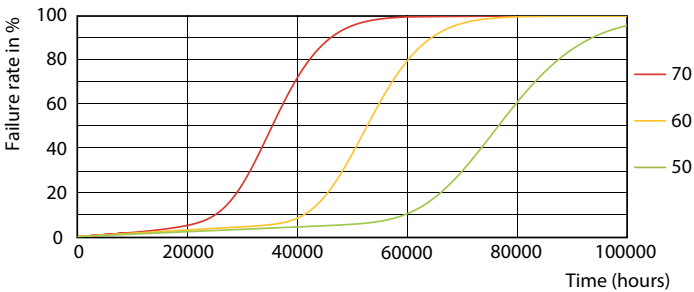
Lumen Maintenance Diagram - MAS LEDtube 1500mm UO 20W 830 T8 EELC



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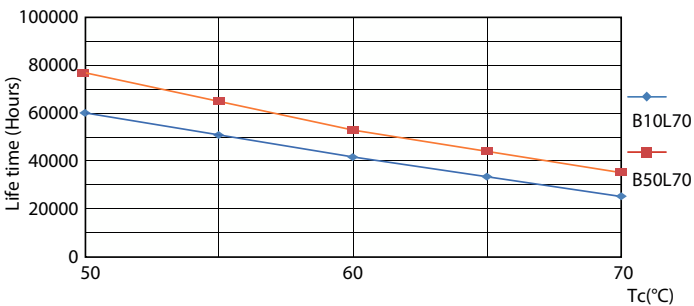
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Lifetime



LEDtube-75K-5070-FailureRate-LED

Life Expectancy Diagram



LifetimeVsTc

