



MASTER LEDtube T8 UltraEfficient



MAS LEDtube 1500mm UE 20W 840 T8

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	75,000 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	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
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	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
Ballast Compatibility	EM/Mains
LED alternative to fluorescent lamp power	58 W
Inrush current at mains	4.24
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

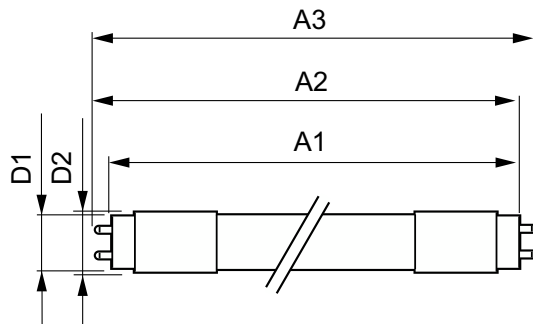
MASTER LEDtube T8 UltraEfficient

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
Temperature	
T-Case Maximum (Nom)	60 °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)	0.285 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	1205538
CE mark	Yes
EU RoHS compliant	Yes
Flickering value (PstLM) - Flickering value as per EN 61000-3-3	0.5
Stroboscopic effect visibility measure (SVM)	0.2
Ambient temperature range	-20 °C to 45 °C

Product Data	
Order product name	MAS LEDtube 1500mm UE 20W 840 T8
Full product name	MAS LEDtube 1500mm UE 20W 840 T8
Full product code	871951433976700
Order code	929003067202
Material Nr. (12NC)	929003067202
Numerator - Quantity Per Pack	1
EAN/UPC - Product/Case	8719514339767
Numerator - Packs per outer box	10
EAN/UPC - Case	8719514339774

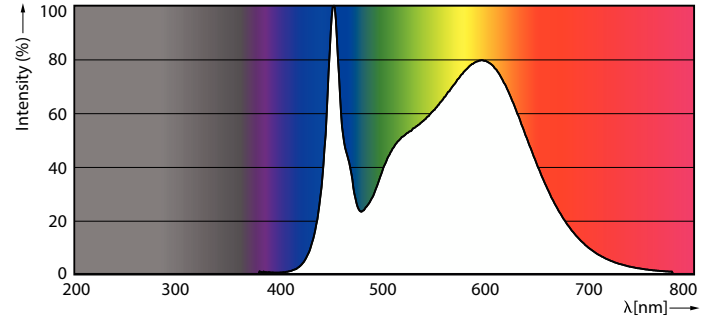
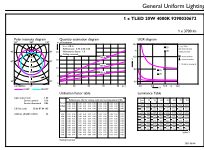
Dimensional drawing



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

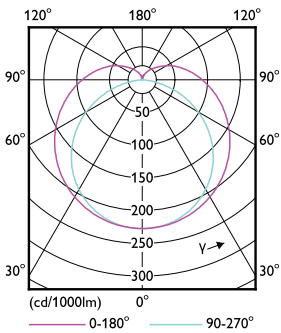
MASTER LEDtube T8 UltraEfficient

Photometric data



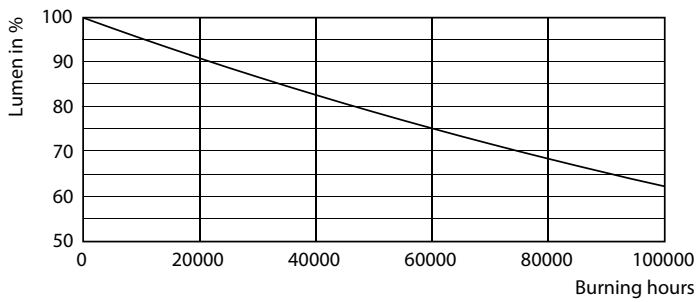
General uniform lighting - MAS LEDtube 1500mm UE 20W 840 T8

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

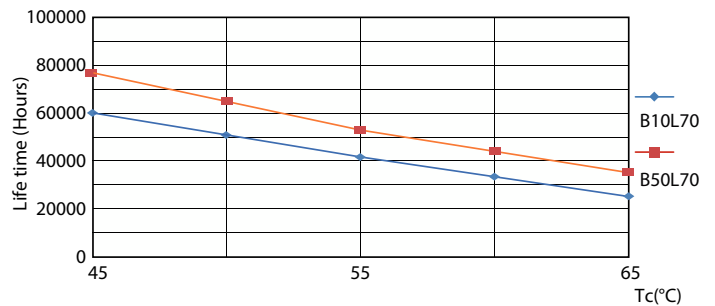


Light Distribution Diagram - MAS LEDtube 1500mm UE 20W 840 T8

Lifetime



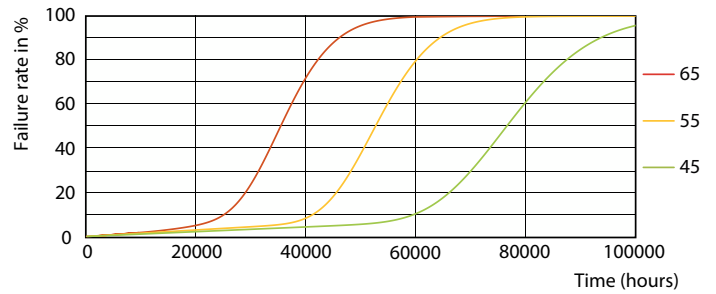
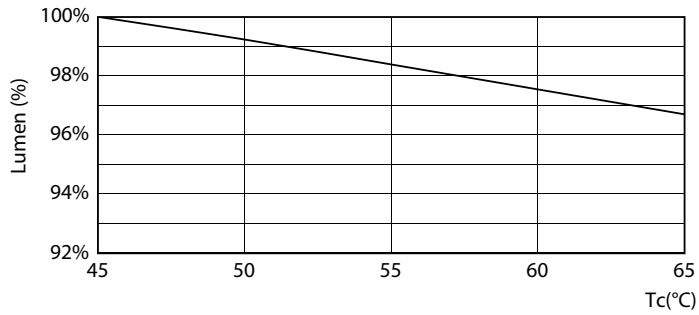
Lumen Maintenance Diagram - MAS LEDtube 1500mm UE 20W 840 T8



Life Expectancy Diagram

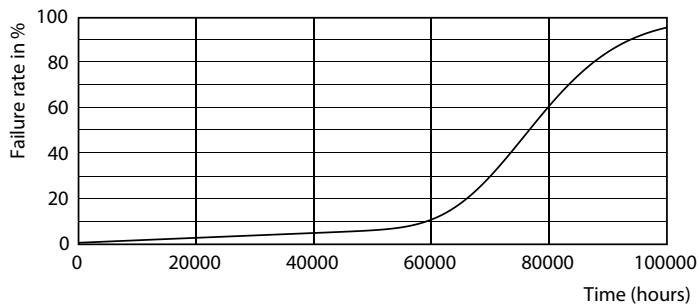
MASTER LEDtube T8 UltraEfficient

Lifetime



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

MAS-LEDtube-UE-T8-20240408-75K-FailureRate-LED



Life Expectancy Diagram

