# **PHILIPS** Lighting

# MASTER LEDtube T8 UltraEfficient

# MAS LEDtube 1500mm UE 20W 865 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	865 [CCT of 6500K]
Beam Angle (Nom)	160 degree(s)
Luminous Flux	3,700 lm
Color Designation	Cool Daylight
Correlated Color Temperature (Nom)	6500 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	RGO

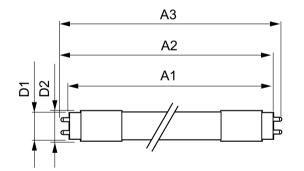
Operating and Electrical	
Line Frequency	50 to 60 Hz
Input Frequency	50 to 60 Hz
Power Consumption	20 W
Lamp Current (Max)	103 mA
Lamp Current (Min)	85 mA
Starting Time (Nom)	0.5 s
Warm-up time to 60% light	0.5 s
Power Factor (Fraction)	0.9
Voltage (Nom)	220-240 V
Ballast Compatibility	EM/Mains
LED alternative 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	75
without Compensation Capacitor.	
Max. lamp no. on MCB B type 10A - EM ballast	10
with Compensation Capacitor.	
Max. lamp no. on MCB B type 16A - Mains	120



## MASTER LEDtube T8 UltraEfficient

Max. lamp no. on MCB B type 16A – EM ballast	120	Energy Consumption kWh/1000 h	20 kWh
without Compensation Capacitor.		EPREL Registration Number	1205539
Max. lamp no. on MCB B type 16A – EM ballast	16	CE mark	Yes
with Compensation Capacitor.		EU RoHS compliant	Yes
		Flickering value (PstLM) - Flickering value as per	0.5
Temperature		EN 61000-3-3	
T-Case Maximum (Nom)	60 °C	Stroboscopic effect visibility measure (SVM)	0.2
		Ambient temperature range	-20 °C to 45 °C
Controls and Dimming			
Dimmable	No	Product Data	
		Order product name	MAS LEDtube 1500mm UE 20\
Mechanical and Housing		-	865 T8
Bulb Finish	Frosted	Full product name	MAS LEDtube 1500mm UE 20\
Bulb Material	Plastic	-	865 T8
Product Length	1,500 mm	Full product code	871951433978100
Bulb Shape	T8	Order code	929003067302
Net Weight (Piece)	0.285 kg	Material Nr. (12NC)	929003067302
		Numerator - Quantity Per Pack	1
Approval and Application		EAN/UPC - Product/Case	8719514339781
Energy Efficiency Class	В	Numerator - Packs per outer box	10
Energy Saving Product	Yes	EAN/UPC - Case	8719514339798
Approval Marks	RoHS compliance CE marking		
	KEMA Keur certificate ENEC		
	certificate		

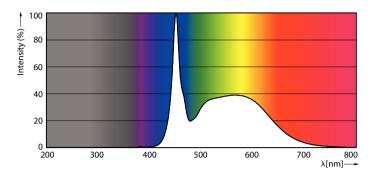
### Dimensional drawing

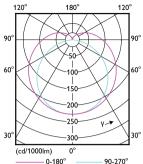


Product	D1	D2	A1	A2	A3
MAS LEDtube 1500mm UE 20W	25.8 mm	28 mm	1,498.8 mm	1,505.9 mm	1,513 mm
865 T8					

### MASTER LEDtube T8 UltraEfficient

Photometric data





Spectral Power Distribution Colour - MAS LEDtube 1500mm UE 20W 865 T8

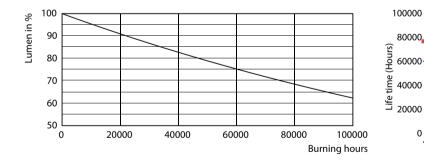
Light Distribution Diagram - MAS LEDtube 1500mm UE 20W 865 T8

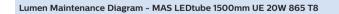
55

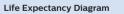
1 × TLED 384	* \$580K 9290030473
	1 + 3790 km

#### General uniform lighting - MAS LEDtube 1500mm UE 20W 865 T8

#### Lifetime







0∟ 45

B10L70

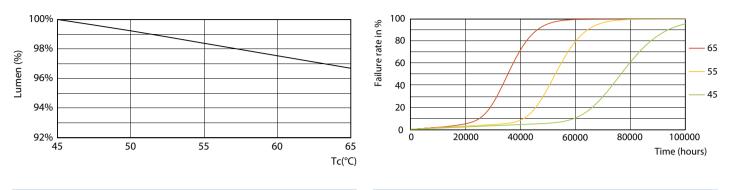
-B50L70

Tc(°C)

65

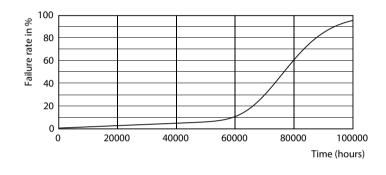
### MASTER LEDtube T8 UltraEfficient

Lifetime



Lumen Maintenance Diagram - MAS LEDtube 1500mm UE 20W 865 T8

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



Life Expectancy Diagram



© 2025 Signify Holding All rights reserved. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify. Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V.

www.lighting.philips.com 2025, March 17 - data subject to change