

# PRODUCT DATASHEET LED TUBE T8 EM ULTRA OUTPUT HIGHBAY 1200 mm 14W 840

LED TUBE T8 EM ULTRA OUTPUT HIGHBAY | High performance LED tubes for electromagnetic control gear (CCG) and AC mains, and for high bay applications



#### Areas of application

- General illumination within ambient temperatures from -20...+50  $^{\circ}\text{C}$
- Storage and (high bay) warehouses
- Illumination of production areas
- Industry

#### Product benefits

- Very high illuminance level compared to standard LED tubes
- Very high resistance to switching loads
- High luminous flux for sophisticated lighting tasks
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 62 % (compared to T8 fluorescent lamp)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Also suitable for operation at low temperatures

#### Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Narrow beam angle: 90°
- Rotatable end caps





- Low flicker according to EU 2019-2020 (SVM  $\leq 0.4$  / PstLM  $\leq$  1)
- ENEC 10 VDE mark
- Lifetime up to 75,000 h
- Type of protection: IP20
- Mercury-free and RoHS compliant

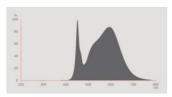
## TECHNICAL DATA

## Electrical data

Nominal wattage	14 W
Construction wattage	14.00 W
Nominal voltage	220240 V
Operating mode	CCG, AC Mains
Nominal current	66 mA
Type of current	AC
Inrush current	10.2 A
Suitable for DC input	Yes
Input voltage DC	186260 V
Operating frequency	50/60 Hz
Mains frequency	50/60 Hz
Max. lamp number on MCB B10 A	3
Max. lamp number on MCB B10 A - CCG without compensation	26
Max. lamp number on MCB B10 A - CCG with compensation	2
Max. lamp number on MCB B16 A	6
Max. lamp number on MCB B16 A - CCG without compensation	42
Max. lamp number on MCB B16 A - CCG with compensation	3
Total harmonic distortion	11 %
Power factor $\lambda$	0.90

## Photometrical data

Luminous flux	2600 lm
Luminous efficacy	185 lm/W
Lumen main.fact.at end of nom.life time	0.96
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	80
Light color	840
Standard deviation of color matching	≤5 sdcm
Rated LLMF at 6,000 h	0.80
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



EPREL data spectral diagram PROF LEDr 4000K

# Light technical data

Beam angle	90 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

## Dimensions & Weight



Overall length	1213.00 mm
Length with base excl. base pins/connection	1200.00 mm
Diameter	28.00 mm
Tube diameter	25.70 mm
Maximum diameter	28 mm
Product weight	260.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+50 °C <sup>1)</sup>
Maximum temperature at to test point	65 °C

<sup>1)</sup> Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

# Lifespan

Lifespan L70/B50 at 25 °C	75000 h
Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.96
Rated lamp survival factor at 6,000 h	≥ 0.90

## Additional product data

Base (standard designation)	G13
Mercury content	0.0 mg
Mercury-free	Yes

# Capabilities

## Certificates & Standards

Energy efficiency class	B 1)
Energy consumption	14.00 kWh/1000h
Type of protection	IP20
Standards	CE / UKCA / VDE / ENEC / EAC
Photobiological safety group acc. to EN62778	RG0

<sup>1)</sup> Energy efficiency class (EEC) on a scale of A (highest efficiency) to G (lowest efficiency)

# Country-specific categorizations

Order reference	LEDTUBE T8 EM U
LOGISTICAL DATA	
Temperature range at storage	-20+80 °C

## Energy labelling regulation data acc EU 2019/2015

Light source cap-type (or other electric interface)  Connected light source (CLS)  No  Color-tuneable light source  No  Envelope  No  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  Standby power  O W  Claim of equivalent power  Length  G13  Ro  No  No  1213.00 mm		
Mains or non-mains  MLS  Light source cap-type (or other electric interface)  Connected light source (CLS)  No  Color-tuneable light source  No  Envelope  No  High luminance light source  Anti-glare shield  Correlated colour temperature type  Standby power  Claim of equivalent power  Length  MLS  MLS  MLS  MLS  MIS  Standby power  No  No  1213.00 mm	Lighting technology used	LED
Light source cap-type (or other electric interface)  Connected light source (CLS)  No  Color-tuneable light source  No  Envelope  No  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  Standby power  O W  Claim of equivalent power  Length  G13  Ro  No  No  1213.00 mm	Non-directional or directional	NDLS
Connected light source (CLS)  No  Color-tuneable light source  No  Envelope  No  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  Standby power  OW  Claim of equivalent power  Length  No  No  1213.00 mm	Mains or non-mains	MLS
Color-tuneable light source  Envelope  No  High luminance light source  No  Anti-glare shield  Correlated colour temperature type  Standby power  O W  Claim of equivalent power  Length  No  No  1213.00 mm	Light source cap-type (or other electric interface)	G13
Envelope No High luminance light source No Anti-glare shield No Correlated colour temperature type SINGLE_VALUE Standby power 0 W Claim of equivalent power No Length 1213.00 mm	Connected light source (CLS)	No
High luminance light source  Anti-glare shield  No  Correlated colour temperature type  SINGLE_VALUE  Standby power  O W  Claim of equivalent power  No  Length  No	Color-tuneable light source	No
Anti-glare shield No  Correlated colour temperature type SINGLE_VALUE  Standby power 0 W  Claim of equivalent power No  Length 1213.00 mm	Envelope	No
Correlated colour temperature type  SINGLE_VALUE  O W  Claim of equivalent power  No  Length  1213.00 mm	High luminance light source	No
Standby power 0 W  Claim of equivalent power No  Length 1213.00 mm	Anti-glare shield	No
Claim of equivalent power No Length 1213.00 mm	Correlated colour temperature type	SINGLE_VALUE
Length 1213.00 mm	Standby power	0 W
	Claim of equivalent power	No
Height 28.00 mm	Length	1213.00 mm
	Height	28.00 mm

Chromaticity coordinate x	0.3818
Chromaticity coordinate y	0.3797
R9 Colour rendering index	1
Beam angle correspondence	SPHERE_360
Survival factor	0.9
Displacement factor	0.9
LED light source replaces a fluorescent light source	No
EPREL ID	1879597
Model number	AC59260,AC59260

#### **EQUIPMENT / ACCESSORIES**

- Replacement starter for LED tubes

## Safety advice

- Not suitable for operation with electronic control gear.
- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- Not suitable for emergency lighting.
- Disconnect mains before installation.

## DOWNLOAD DATA

	Documents and certificates	Document name	
POF	User instruction / safety instructions	LEDTUBE T8 EM UO HB S	
PDF	Legal information	Informationstext 18 Abs 4 ElektroG	
PDF	Declarations of conformity	LED tube	
PDF	Declarations of conformity UKCA	LED tubes	
	Photometric and lighting design files	Document name	
	IES file (IES)	LEDTUBE T8 EM UO HB S 1200 14W 840	
	LDT file (Eulumdat)	LEDTUBE T8 EM UO HB S 1200 14W 840	

	Photometric and lighting design files	Document name
	UGR file (UGR table)	LEDTUBE T8 EM UO HB S 1200 14W 840
	Light distribution curve type cone	LEDTUBE T8 EM UO HB S 1200 14W 840
	Light distribution curve type polar	LEDTUBE T8 EM UO HB S 1200 14W 840
<u></u>	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

Tender texts	Document name
Tender documents	LED TUBE T8 EM ULTRA OUTPUT HIGHBAY S 1200 mm 14W 840-EN

#### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854258633	Sleeve 1	1,255 mm x 29 mm x 29 mm	289.00 g	1.06 dm <sup>3</sup>
4099854258640	Shipping box 10	1,290 mm x 170 mm x 95 mm	3511.00 g	20.83 dm <sup>3</sup>

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

#### References / Links

- For current information see www.ledvance.com/ledtube

## Legal advice

- When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

#### **DISCLAIMER**

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.