

# PRODUCT DATASHEET

## LED TUBE T5 HF HE21 PERFORMANCE 849 mm 11W 840

LED TUBE T5 HF PERFORMANCE | LED tubes for electronic high frequency control gear (ECG), shatterproof



### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Offices, public buildings
- Supermarkets and department stores
- Industry

PERFOR-  
MANCE  
CLASS

### Product benefits

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- High luminous flux for sophisticated lighting tasks
- Also suitable for operation at low temperatures

### Product features

- Retrofit replacement of existing T5 lamps on HF ballast installations
- Lamp tube made of glass with splinter protection e.g. for food industry applications
- High color consistency:  $\leq 5$  sdc<sub>m</sub>
- Lifetime up to 60,000 h
- Low flicker according to EU 2019-2020 (SVM  $\leq 0.4$  / PstLM  $\leq 1$ )
- Type of protection: IP20
- Compatible with many common electronic control gears (see also compatibility list)



## TECHNICAL DATA

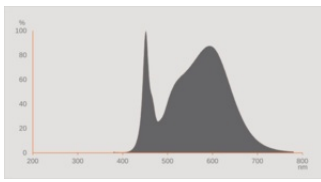
### Electrical data

Nominal wattage	11 W
Construction wattage	11.00 W
Nominal voltage	50...90 V
Operating mode	ECG <sup>1)</sup>
Nominal current	193 mA
Type of current	AC
Inrush current	12 A
Operating frequency	25...75 kHz
Mains frequency	25...75 kHz
Max. lamp number on MCB B10 A	17
Max. lamp number on MCB B16 A	28
Total harmonic distortion	15 %
Power factor $\lambda$	> 0.80

<sup>1)</sup> Check ECG compatibility at [ledvance.com/compatibility](https://www.ledvance.com/compatibility)

### Photometrical data

Luminous flux	1700 lm
Luminous efficacy	154 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	80
Light color	840
Standard deviation of color matching	≤5 sdc <sub>m</sub>
Rated LLMF at 6,000 h	0.90
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0.4



EPREL data spectral diagram PROF LEDr 4000K

Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 2.00 s
Starting time	< 0.5 s

Dimensions & Weight



Overall length	863.00 mm
Length with base excl. base pins/connection	849.00 mm
Diameter	18.50 mm
Product weight	106.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C <sup>1)</sup>
Maximum temperature at tc test point	65 °C
Performance temp. acc. to IEC 62717	45 °C <sup>2)</sup>

1) Temperature surrounding the lamp - for enclosed luminaires: temperature inside of the luminaire

2) Tp rated. Tp point coincides with Tc point - marked on device

Lifespan

Lifespan L70/B50 at 25 °C	60000 h
Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.70

Rated lamp survival factor at 6,000 h	≥ 0.90
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### Additional product data

Base (standard designation)	G5
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

### Capabilities

Dimmable	No
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### Certificates & Standards

Energy efficiency class	D <sup>1)</sup>
Energy consumption	11.00 kWh/1000h
Type of protection	IP20
Standards	CE / UKCA / 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 T5 HF H
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### LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
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### Energy labelling regulation data acc EU 2019/2015







Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	NMLS
Light source cap-type (or other electric interface)	G5
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	SINGLE_VALUE
Standby power	0 W


Networked standby power for CLS	0 W
Claim of equivalent power	No
Length	863.00 mm
Height	18.50 mm
Width	18.50 mm
Chromaticity coordinate x	0.382
Chromaticity coordinate y	0.38
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	2209923
Model number	AC70944

### Safety advice


- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The operating temperature range of LED tube is restricted. In case of doubt regarding suitability of the application please measure Tc temperature on the product prior to installation.
- All electrical connections must be made by a qualified person.
- Lamp not suitable for emergency operation.

### DOWNLOAD DATA

Documents and certificates	Document name
 User instruction / safety instructions	
 Extended installation guide	Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN
 Legal information	Informationstext 18 Abs 4 ElektroG
 Declarations of conformity	LEDTUBE
 Declarations of conformity UKCA	LEDTUBE
 ECG compatibility list	Ballast compatibility LEDVANCE LED TUBE T5 HF_T8 HF_T8 UNIVERSAL 2025

Photometric and lighting design files		Document name
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

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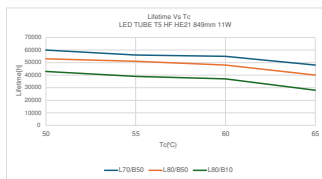
Tender texts		Document name
	Tender documents	LED TUBE T5 HF P 849 mm 11W 840-en

**LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854552489	Sleeve 1	865 mm x 20 mm x 24 mm	121.00 g	0.41 dm <sup>3</sup>
4099854552496	Shipping box 10	925 mm x 155 mm x 90 mm	1567.00 g	12.90 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.

**ADDITIONAL CATALOG INFORMATION**



**References / Links**

– For current information see [www.ledvance.com/ledtube](http://www.ledvance.com/ledtube)

**Legal advice**

– When used to replace a T5 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.