

# PRODUCT DATASHEET

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

LED TUBE T5 AC MAINS PERFORMANCE | LED tubes for operation on AC mains



### Areas of application

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

### Product benefits

- No bending thanks to glass technology
- Shatter protection thanks to special PET coating
- High luminous flux for sophisticated lighting tasks

### Product features

- LED replacement for T5 fluorescent lamps with G5 base on AC mains
- 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 50,000 h
- Low flicker according to EU 2019-2020 ( $SVM \leq 0.4$  /  $PstLM \leq 1$ )
- Type of protection: IP20



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## TECHNICAL DATA

### Electrical data

|                               |                           |
|-------------------------------|---------------------------|
| Nominal wattage               | 11 W                      |
| Nominal voltage               | 220...240 V               |
| Operating mode                | AC Mains                  |
| Nominal current               | 50 mA                     |
| Type of current               | AC                        |
| Inrush current                | 7 A                       |
| Suitable for DC input         | Yes                       |
| Input voltage DC              | 186...260 V <sup>1)</sup> |
| Operating frequency           | 50/60 Hz                  |
| Mains frequency               | 50/60 Hz                  |
| Max. lamp number on MCB B10 A | 72                        |
| Max. lamp number on MCB B16 A | 90                        |
| Total harmonic distortion     | 20 %                      |
| Power factor $\lambda$        | > 0.90                    |

1) Permitted voltage range

### 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 sdcn    |
| 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          | 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                                    | 19.00 mm  |
| Product weight                              | 110.00 g  |

Temperatures & operating conditions

|                                      |                            |
|--------------------------------------|----------------------------|
| Ambient temperature range            | -20...+45 °C <sup>1)</sup> |
| Maximum temperature at tc test point | 64 °C                      |
| Performance temp. acc. to IEC 62717  | 52 °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  | 50000 h |
| Lifespan L80/B50 at 25 °C  | 50000 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 |

#### Additional product data

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

#### Capabilities

|          |    |
|----------|----|
| Dimmable | No |
|----------|----|

#### 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 AC H |
|-----------------|-----------------|

#### LOGISTICAL DATA

|                              |              |
|------------------------------|--------------|
| Temperature range at storage | -20...+80 °C |
|------------------------------|--------------|

#### Energy labelling regulation data acc EU 2019/2015

|                                                     |              |
|-----------------------------------------------------|--------------|
| Lighting technology used                            | LED          |
| Non-directional or directional                      | NDLS         |
| Mains or non-mains                                  | MLS          |
| 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                                               | 19.00 mm   |
| Width                                                | 19.00 mm   |
| Chromaticity coordinate x                            | 0.382      |
| Chromaticity coordinate y                            | 0.380      |
| R9 Colour rendering index                            | 1          |
| Beam angle correspondence                            | SPHERE_360 |
| Survival factor                                      | 0.9        |
| Displacement factor                                  | 0.90       |
| LED light source replaces a fluorescent light source | No         |
| EPREL ID                                             | 2209908    |
| Model number                                         | AC71283    |

### 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.
- The operating temperature range of LED tube is restricted. In case of doubt regarding suitability of the application please measure T<sub>c</sub> temperature on the product prior to installation.
- After rewiring of a luminaire the installer will be responsible for all technical and safety consequences.
- All electrical connections must be made by a qualified person.
- Disconnect mains before installation.
- Lamp not suitable for emergency operation.

### DOWNLOAD DATA

|                                                                                    | Documents and certificates             | Document name                                                      |
|------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------|
|  | User instruction / safety instructions | LED TUBE T5 AC MAINS                                               |
|  | Extended installation guide            | Installation instructions LED TUBE T8, T5 und DULUX LED 2024 10 EN |
|  | Extended installation guide            | LEDVANCE Luminaire conversion checklist                            |
|  | Legal information                      | Informationstext 18 Abs 4 ElektroG                                 |
|  | Declarations of conformity             | LEDTUBE                                                            |

| Documents and certificates                                                        |                                 | Document name                               |
|-----------------------------------------------------------------------------------|---------------------------------|---------------------------------------------|
|   | Declarations of conformity UKCA | LEDTUBE                                     |
| Photometric and lighting design files                                             |                                 | Document name                               |
|  | Spectral power distribution     | EPREL data spectral diagram PROF LEDr 4000K |
| Tender texts                                                                      |                                 | Document name                               |
|   | Tender documents                | LED TUBE T5 AC MAINS P 849 mm 11W 840-en    |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854552724 | Sleeve<br>1                  | 865 mm x 20 mm x 24 mm               | 125.00 g     | 0.41 dm <sup>3</sup>  |
| 4099854552731 | Shipping box<br>10           | 945 mm x 140 mm x 85 mm              | 1566.00 g    | 11.25 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](http://www.ledvance.com/ledtube)

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