

# PRODUCT DATASHEET SubstiTUBE T5 HF HE14 7 W/4000 K 549 mm

SubstiTUBE TUBE T5 HF | LED tubes for electronic high frequency control gears



#### 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
- 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: ≤ 5 sdcm
- Lifetime up to 50,000 h
- Low flicker according to EU 2019-2020 (SVM ≤ 0.4 / PstLM ≤ 1)
- Type of protection: IP20





- Compatible with many common electronic control gears (see also compatibility list)

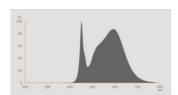
# TECHNICAL DATA

# Electrical data

Nominal wattage	7 W
Construction wattage	7.00 W
Nominal voltage	4070 V
Operating mode	ECG
Nominal current	185 mA
Type of current	AC
Inrush current	17 A
Operating frequency	2075 kHz
Mains frequency	2075 kHz
Total harmonic distortion	< 20 %
Power factor λ	> 0.80

# Photometrical data

Luminous flux	1000 lm
Luminous efficacy	142 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	83
Light color	840
Standard deviation of color matching	≤5 sdcm
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	563.00 mm
Length with base excl. base pins/connection	549.00 mm
Diameter	17.00 mm
Tube diameter	16 mm
Maximum diameter	17 mm
Product weight	88.00 g

# Temperatures & operating conditions

Ambient temperature range	-20+45 °C
Maximum temperature at tc test point	62 °C

# Lifespan

Lifespan L70/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 1)

Energy consumption	8.00 kWh/1000h
Type of protection	IP20
Standards	CE
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

Corder reference  LEDTUBE T5 HF 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  NMLS  Light source cap-type (or other electric interface)  G5  Connected light source (CLS)  No  Color-tuneable light source  Involope  No  High luminance light source  No  Anti-glare shield  No  Correlated colour temperature type  SINGLE_VALUE  Standby power  OW  Networked standby power for CLS  Ow  Claim of equivalent power  Length  Height  17.00 mm  Width  Chromaticity coordinate x  O.3379  Ba Colour reportering index	LOGISTICAL DATA  Temperature range at storage  Energy labelling regulation data acc EU 2019/2015  Lighting technology used  Non-directional or directional  Mains or non-mains  Light source cap-type (or other electric interface)  Connected light source (CLS)  Color-tuneable light source  Envelope  High luminance light source  Anti-glare shield  Correlated colour temperature type  Standby power  Networked standby power for CLS  Claim of equivalent power  Length  Height  Width  Chromaticity coordinate x	-20+80 °C  LED  NDLS  NMLS
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Beam angle correspondence SPHERE_360	Beam angle correspondence	
Survival factor 0.90	Survival factor	SPHERE_360
Displacement factor 0.90	Displacement factor	
LED light source replaces a fluorescent light source No	LED light source replaces a fluorescent light source	0.90

EPREL ID	642876
Model number	AC35161

## 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.
- Not suitable for emergency lighting.

#### DOWNLOAD DATA

	Documents and certificates	Document name	
PDF	User instruction / safety instructions	SubstiTUBE T5 HF (ECG) LED TUBE	
PDF	Extended installation guide	SubstiTUBE® T8 T5	
PDF	Declarations of conformity	LEDTUBE T5 HF	
PDF	Declarations of conformity UKCA	LEDTUBE T8 and T5	

Photometric and lighting design files	Document name
IES file (IES)	ST5HE14 0.6M 7W 840 HF G5 OSRAM
LDT file (Eulumdat)	ST5HE14 0.6M 7W 840 HF G5 OSRAM
Light distribution curve type polar	ST5HE14 0.6M 7W 840 HF G5 OSRAM
Spectral power distribution	EPREL data spectral diagram PROF LEDr 4000K

#### LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075543324	Sleeve 1	565 mm x 20 mm x 24 mm	101.00 g	0.27 dm <sup>3</sup>
4058075543331	Shipping box 10	618 mm x 153 mm x 80 mm	1277.00 g	7.56 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/osram-substitube

# 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.