

# 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  $\leq$  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	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



## Light technical data

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

## **Dimensions & Weight**



Overall length	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
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#### Certificates & Standards

Energy efficiency class	D <sup>1)</sup>
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)

±) Energy efficiency class (EEC) on a scale of A (nignest efficiency) to G (lowest efficiency)		
Country-specific categorizations		
Order 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	No	
Envelope	No	
High luminance light source	No	
Anti-glare shield	No	
Correlated colour temperature type	SINGLE_VALUE	
Standby power	0 W	

0 W

0.381

Chromaticity coordinate y 0.379

R9 Colour rendering index 0.00

Beam angle correspondence SPHERE\_360
Survival factor 0.90

Displacement factor 0.90

LED light source replaces a fluorescent light source

No

EPREL ID

642

642876

October 11, 2023, 08:32:55 SubstiTUBE T5 HF HE14 7 W/4000 K 549

Networked standby power for CLS

Chromaticity coordinate x

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 max temperature on the product prior to installation.

#### **DOWNLOAD DATA**

	Documents and certificates
PDF	User instruction
PDF	Installation guide
POF	Declarations Of Conformity CE
PDF	Declarations Of Conformity UKCA
	Photometric and lighting design files
	IES file (IES)
	LDT file (Eulumdat)
	LDC typ polar
	Spectral power distribution

#### **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 dm³
4058075543331	Shipping box 10	618 mm x 153 mm x 80 mm	1277.00 g	7.56 dm³

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.