Light is OSRAM



SubstiTUBE® Advanced UO – ST5AU-1.5m-37W-HF

Preliminary Datasheet



Innovative LED-lamp, easy and safe to use in ECG installations as direct retrofit. Energy saving potential of up to 50% by replacing 1.5 m T5 fluorescent tubes. Instant 100% light without flickering. No mercury.

Applicable in warehouses, cold storage, supply rooms, corridors, industry, stairways, garages, etc; for applications with high operating hours.

Technical operating data

Product	Color	Colortemp. [K]	Lum. Flux [lm]	Voltage [V] / Frequency [Hz] Input current [mA]	Power [W]	Radiance- Angle [°]
ST5AU-1.5m-37W- 865-HF	Cool Daylight	6500 K	5600	220 - 240 V 50 / 60 Hz	37 W	180 °
ST5AU-1.5m-37W- 840-HF	Cool White	4000 K	5600	664 mA	57 88	100

All Data are related to the entire lamp. Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

Technical Features

Full-glass LED lamp in T5 shape with G5	Up to 60,000 h lifetime
socket	Switching cycles > 200.000
> Weight: 185g	Color Rendering Index (CRI) > 80
For operation at ECG; no modification	 Overpower, overheat and short circuit
necessary	protected
Direct Retrofit for ECG luminaires by	Not for operation with CCG, not dimmable
replacement of lamp	 RoHS-conformity, no mercury
 High color homogeneity 	Energy Efficiency Class: A++
8 8 9	

Powerfactor > 0.9

Minimum / Maximum ratings

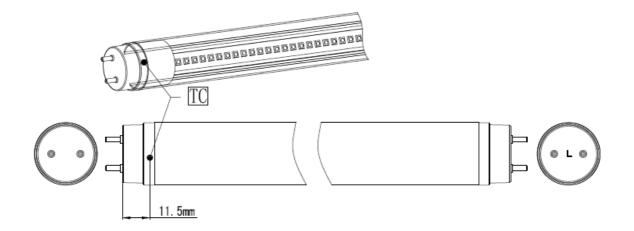
	Maximum temperature	Storage temperature	Ambient temperature
	at Tc test point	Ts	Ta
ST5AU- 1.5m-HF	65°C	-20° 80°C	-20° 45°C

Drawings



Product	I	d

ST5AU-1.5m-HF	1449 mm	17 mm





Safety and Application notes

- > Use SubstiTUBE[®] Advanced UO HF luminaires which do **not** have any starter.
- SubstiTUBE Advanced UO HF is designed for general lighting service and must not be damaged or operated in a damaged condition.
- > Since only the lamp is replaced, no constructive modification to the luminaire is necessary.
- SubstiTUBE[®] Advanced UO HF is compatible with ECGs of various brand manufacturers. For further information regarding the tested ECGs a compatibility list can be found on the following page.
- The compatibility list is based upon testing conducted by the manufacturer in a lab simulated environment, and the results can vary in certain field applications due to a number of factors. OSRAM does not take over any responsibility, warranty or liability that these results can also be achieved by using the devices under other conditions, or when using successor models of the tested devices, or different models of the same manufacturer. In case of non-observance of the instructions, safety risks like overheating of SubstiTUBE[®] or ECG may occur in rare cases.
- SubstiTUBE[®] Advanced UO HF emits light only with a limited angle, not like a fluorescent tube with 360° output.
- > This lamp may not be suitable for use in all applications where a traditional fluorescent lamp has been used.
- > The temperature range of this lamp is more restricted.
- Due to the characteristic light distribution of SubstiTUBE® Advanced UO HF, the resulting luminaire light characteristic is likely to change. It is not guaranteed that e.g. standards for lighting at working places will be complied to after replacement. A photometric check of the installation is recommended.
- > Luminous flux and power consumption will change in dependency of used ballast.
- > The effective energy savings depend on the efficiency of the luminaire setup to be replaced and should be considered individually in each case.



 \triangleright

The SubstiTUBE[®] Advanced is protected according to IP20. Applications with external risk of moisture and dust can be served with an adequately protected luminaire.

- Photobiological safety of lamps and lamp systems according to IEC 62471: Risk group: Exempt
- SubstiTUBE[®] Advanced UO HF is designed for standard lamp-holders. Some lamp-holders, e.g. push-in fixing without a rotor, are not suitable for SubstiTUBE[®] Advanced UO HF.



Lamp suitable for high frequency operation (HF)



Lamp not suitable for emergency operation



Dimming not allowed

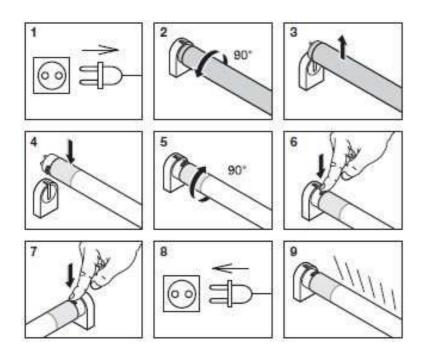
Compatibility List

		SubstiTUBE Advanced T5 UO 1.5m HF
OSRAM	QTi 1X35/49/80 GII	1x
OSRAM	QTi 2X35/49/80 GII	2x
OSRAM	QTP5 1X80	1x
OSRAM	QT-FQ 2X80	2x
Philips	HF-P 180 TL5/PL-L III IDC	1x
Philips	HF-P 280 TL5/PL-L III IDC	2x
Philips	HF-Performer Intelligent 1 28/35/49/80 TL5 EII 220-240V	1x
Tridonic	PC 1x80 T5 PRO lp	1x
Tridonic	PC 2x80 T5 PRO lp	2x
Tridonic	PC 1/80 T5 INDUSTRY	1x
Tridonic	PC 1/14-35/49/80 T5 PRO-M lp	1x
Helvar	EL2x80ngn5	2x
Vossloh	ELXc 180.634	1x
Vossloh	ELXc 280.637	2x
BAG	MLS80.1FR-11/220-240	1x
BAG	MLS80.1/54.2FR-11/220-240	1x
BAG	BCS80.1FX-11/220-240	1x
BAG	BCS80.2FX-11/220-240	2x

Installation Instructions for ECG

Below an example for typical lamp holder types is described

- > Make sure that the supply voltage is disconnected (1).
- > Turn the conventional lamp 90° (2) and take it out of the socket carefully (3).
- Insert SubstiTUBE[®] Advanced UO HF into socket (4) and locate into position by turning 90° (5).
- > Activate tube by pushing the two safety buttons (6), (7).
- > Connect SubstiTUBE[®] Advanced UO HF to supply voltage (8).
- > Check light emission direction (9).



Ordering guide

Product name	Light color	EAN*	S-Unit**
ST5AU-1.5m-37W-865-HF	Cool Daylight / 6500 K	4052899956643	25 x 1
ST5AU-1.5m-37W-840-HF	Cool White / 4000 K	4052899956636	25 X 1

* EAN: Ordering number per single module ** S-Unit: Lamps per shipping unit

Sales and Technical Support

Sales and technical support is given by the local OSRAM subsidiaries.

On our worldwide homepage all OSRAM subsidiaries are listed with complete address and phone numbers.

Further Information

> Downloads: Eulumdat /IES files, CE declaration

www.osram.com/SubstiTUBE

OSRAM GmbH

Head Office:

Marcel-Breuer-Strasse 6 80807 Munich, Germany Phone +49 89 6213-0 www.osram.com

