

PRODUCT INFORMATION

www.guvtec.com



Technilamp®

**GERMICIDAL UVC
LUMINAIRE**

TLR 31

WALL MOUNTED

25

YEARS EXPERIENCE IN AIR PURIFICATION

Technilamp® TLR 31 180° - Area coverage 25m² Wall Mounted

TECHNICAL DATA

- Wall Mounted Size 550 x 320 x 340cm
- Fitted with Philips 4 X PL-S - 9W TUV lamps
- Coverage 25m²
- Weight 10 Kg
- Schools - Open plan offices- Hospital wards



Description Specification

Model	UV-C radiant Flux (UV-C W)	Radiant Efficacy	Peak UV-C Irradiance	
			1.0 M	2.0 M
TL R 31	0.772	0.0189W/VA	63.16	18.45
Coverage	25m ²			
Electrical	220/230V AC Supply			
Size	550 x 320 x 340			
Weight	10kg's			
Lamp Type & Watt Rating	4 x Philips PL-S TUV 9W			
Lamp Life/Replacement Hours	9000 Hours			
The durability of Fitting Lifespan	7 – 10 years			
Manufacturing	ISO 9001 Approval			
UV-C 254nm	Emission Delivers the straightest, most powerful UV beam with a higher kill rate			
Upper-Air UV-C Fluence	1.2M – 20μm ² 5.0M – 10μm ²			
Lower Safe Working Zone	0.2-0.4μm ²			



TUV PL-S
TUV PL-S 9W/4P

General information

Cap base	2G7 (2G7)
Main application	disinfection
Useful life (norm)	9000h

Voltage (Nom) 60V

Mechanical and Housing

Cap base information 4 Pins(4P)

Light Technical

Colour code	TUV
Colour Designation	-(Not Specified)
Depreciation and useful time life	20%

Approval and Application

Mercury (Hg) content (Nom) 3,0mg

UV 2,3W

UV-C Radiation

Operational and Electrical

Power (Rated) Nom	8.6W
Lamp current (Nom.)	0.17A
EAN/UPC - product	87115000710833
Order code	927901904007
Numerator- quantity per pack	1
SAP nemerator - packs per outer box	60

Product data 871150071083380

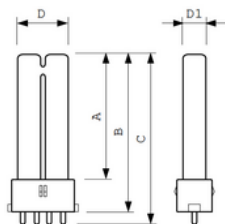
Full product code TUVPL-S)W/4P

Order Product name 927901904007

Material no (12 NC) 30.000 g

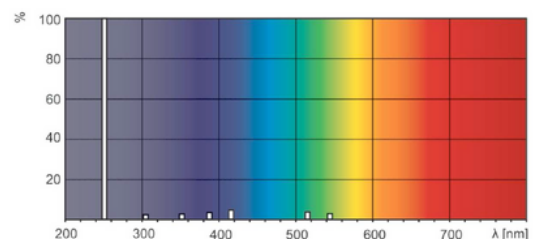
Net weight

Dimensional drawing



XDPB_XUTUVPLS-Spectral power distribution B/W

Photometric data



XDPO_XUTUVPLS-Spectral power distribution Colour

COMMISSIONING OF TECHNILAMP GUV FITTINGS

Fittings are to be fitted according to the design specifications laid out by Technilamp, based on the design guidelines set forth by the CDC and NIOSH.

The units have been tested by the University of Pretoria and the SABS and comply with SANS (IEC) 60598-2-1. As well as the ISO9001 standard. (Test document summary available on request).

The GUV units are safe for a work environment granted the installation is done to the Technilamp installation guidelines.

INSTALLATION GUIDELINES

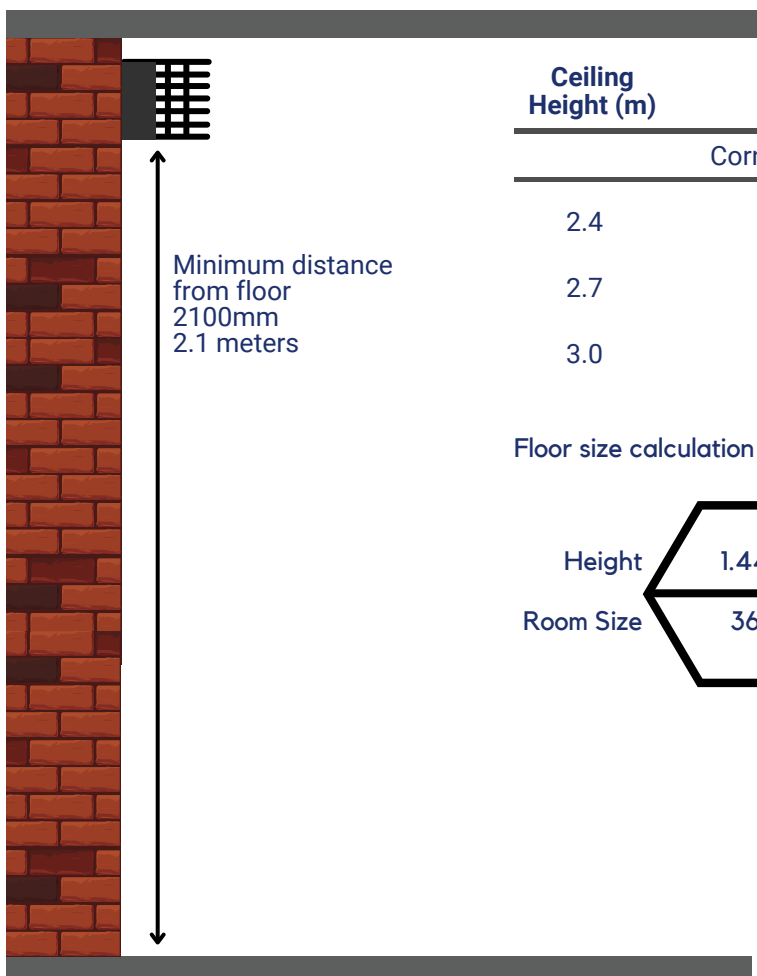
The GUV units are to be installed on a solid wall or ceiling to prevent sagging or tilting leading to irradiation angle deformation over time.

The GUV units have to be installed with the power pack facing downwards.

The top of the unit needs to be level with the floor in the width of the unit as well as irradiating direction.

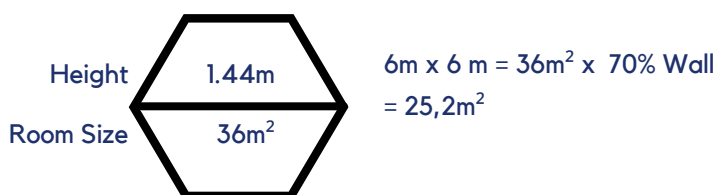
The GUV units should not be installed closer to the floor than 2100mm (2.1Meters) from the floor to the bottom of the fitting (higher is better, ceiling permitting) and no higher than 3000mm (3Meters) as per illustration.

TECHNILAMP LUMINAIRE HEIGHT INSTALLATION SPECIFICATIONS



Ceiling Height (m)	Recommended Mounting Height (m)		
	Corner Type 90	Wall Type (180)	Ceiling Type (360)
2.4	2.1	2.1	2.1
2.7	2.3	2.3	2.3
3.0	2.4	2.4	2.4

Floor size calculation to allocate appropriate Luminaire



SAFETY INSTALLATION GUIDE

Background of the use UV-C light :

TECHNILAMP* Luminaires have a 254nm Philips Lamp, which have been proven in the effectivity of GUV are well understood and proven to be effective in the disinfection of microorganisms including mould, bacteria and viruses. GUV should therefore be considered as a valid element in indoor airborne infection control strategy.

Warnings

UV-C has a much shorter wavelength and therefore a lower skin penetration depth thus does not easily cause skin irritation or cancers when compared to the UV-A and UV-B found in sunlight. UV-C can cause eye irritation at high exposure levels, therefore care must be taken to avoid direct contact.

Safety

To ensure safety, the installation design must be aligned to the specific design of TECHNILAMP* Luminaire ceiling, corner, or wall-mounted system and must follow TECHNILAMP* strict recommendations. All TECHNILAMP* Luminaires must not be able to tilt under normal operation or conditions. This applies to all three versions of Luminaires.

Sensors & Motion detection

UVC light is effective when used correctly, safeguards should be in place when installing the Luminaires, we recommend that motion sensors be installed at luminaire ceiling height, the sensor range should be at the same range of the narrow UV-C light emitted, so that, the Luminaire is not interrupted by activity below, but only when exposure directly by the narrow UV-C light emitted at ceiling height.

Evaluation of Facility to be fitted:

Height of Ceiling

Care must be taken that the room meets the adequate room height requirements, that allow for safe emission. The minimum installation height of the lower horizontal reference plane of any open GUV device is 2.1 meters.

The highest eye level of the occupied zone is dependent on the room function but is considered by default to be 1.7 meters, Acceptance criteria for room safety assessments are the upper limits of eye and skin exposure as described in the safety section above.

Ceiling Height (m)	Recommended Mounting Height (m)		
	Corner Type 90	Wall Type (180)	Ceiling Type (360)
2.4	2.1	2.1	2.1
2.7	2.3	2.3	2.3
3.0	2.4	2.4	2.4

Reflections in the facilities

The potential of high UV-C intensities being reflected in the occupied portion of the room must be considered by designers and users.

Certain materials and surfaces that reflect visible light might also reflect UV-C light; for example consider windows, mirrors, exposed ducting, and metallic or high gloss architectural finishes in the upper room, this needs to be blackened or removed to ensure no light deviation.

Stairway exposure of UV-C Light

Care must be taken in the placement of TECHNILAMP Luminaires in rooms or foyers, that have stairways that will expose light to people ascending upwards, placement of Luminaire needs to be placed at the stairway region and shining the light away from the stairway and not towards it, dividers can be placed to protect upper 1/3 of the stairwell, can also be considered, a light meter can be used to measure exposure of the upper 1/3rd of stairwell.

Measurement of light dispersion

TECHNILAMP* luminaires are installed with PHILIPS good quality low-pressure mercury vapor arc lamps (dominant at UV-C 254 nm), as the Luminaires are placed at advised ceiling height, a good protocol is to measure the light dispersion so that safety measurements should form part of the characterization and commissioning, of the fixture as the human eye is sensitive to the UV-b spectrum (280-315 nm). The onus is on the user to confirm or have these safety limits confirmed

TLR 31
180° - Area coverage
25m² Wall Mounted

 **IEC 60335-2-65**

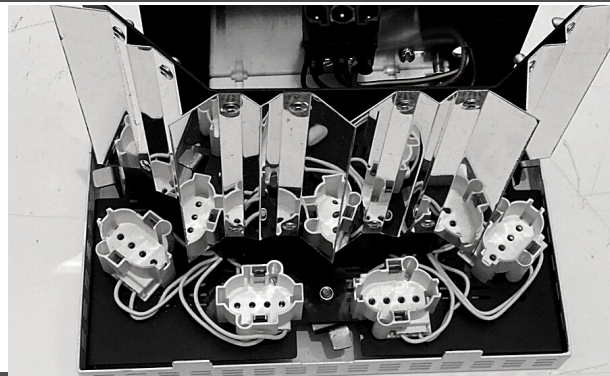
The TLR 31 was designed to be installed 2100mm from the floor in the centre of the wall as the unit's radiation profile is in a one hundred and eighty degree spread.



After the unit has been unboxed the power supply needs to be removed this is done by inserting a square electrical panel key in the locking mechanism and rotating clockwise, the locking mechanism is now disengaged and the power supply can now be removed.



The lamps included in the box can now be fitted as show below then the power supply can be re-fitted.



In order to mount the unit the wall bracket needs to be attached securely to a wall as depicted below.



Care should be taken to ensure the bracket is installed level

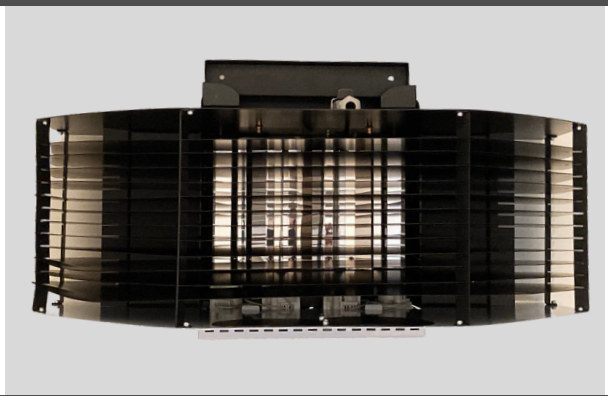


TLR 31
180° - Area coverage
25m² Wall Mounted

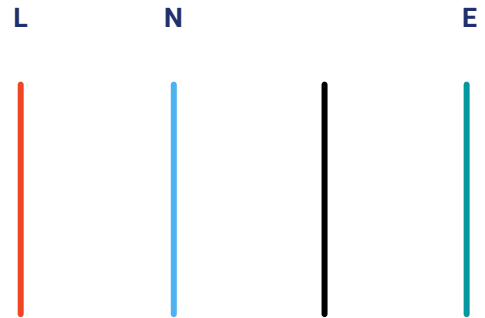
 **IEC 60335-2-65**

the unit can now be connected to a power source of 230V AC 50Hz

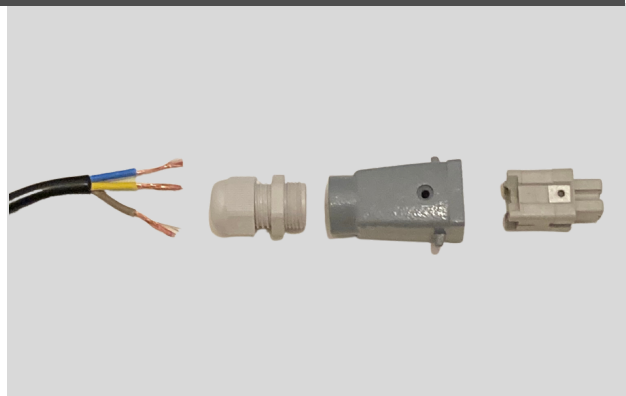
The Unit is supplied with a quick disconnect plug in order to easily remove the unit when necessary



As seen in the depiction the plug has four connection points numbered in a clockwise direction (viewed from a connection side of the plug)



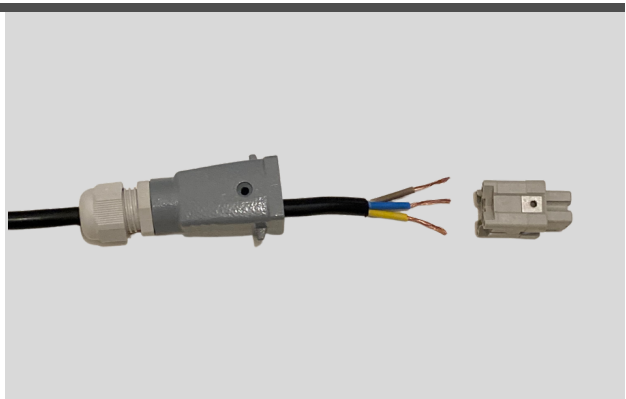
Pin number one is connected to live. Pin 2 is connected to neutral. Pin three is not used. Pin four is connected to ground



The supply cable is connected to the female socket insert

Pin - 1 = Live
Pin - 2 = Neutral
Pin - 3 = Not Connected
Pin - 4 = Ground

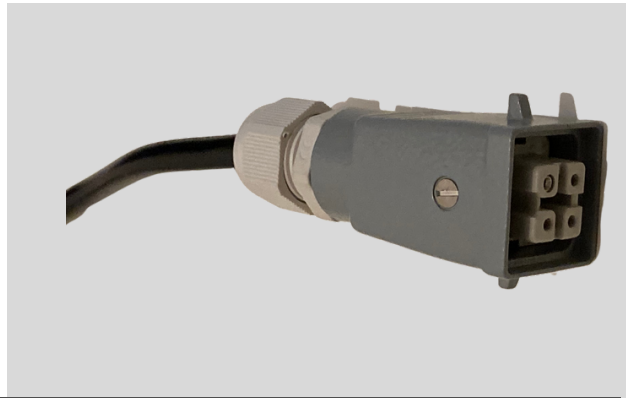
The socket insert is then secured with the supplied socket securing screw



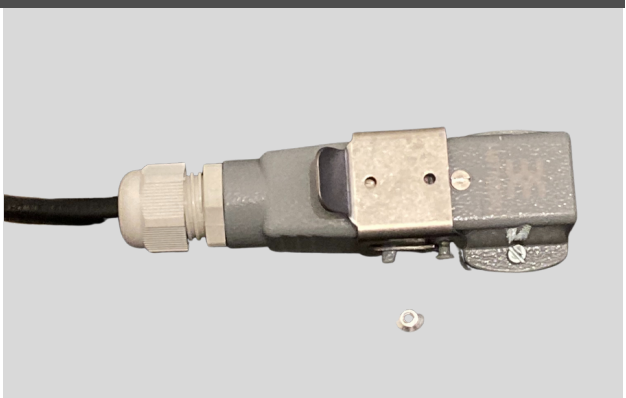
TLR 31
180° - Area coverage
25m² Wall Mounted

 IEC 60335-2-65

the socket and plug can now be secured via the securing bracket,



The socket and plug can now be secured via the securing bracket



Once the unit is securely fitted and electrical connections are done the unit can be fine-tuned by adjusting the angle adjustments brackets at the back if the units until a value of below 0.1 W/cm² at t20 degrees below the horizontal plane of the bottom of the unit at a distance of 500mm

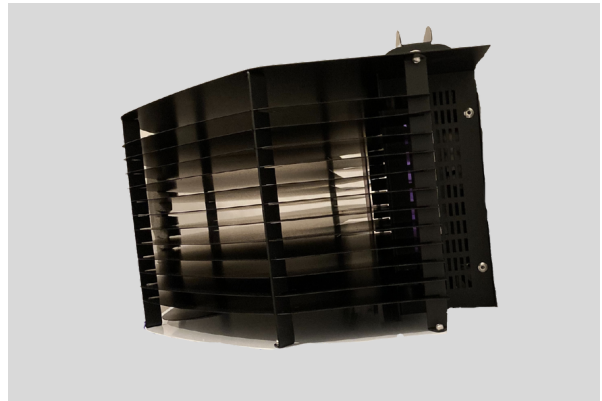
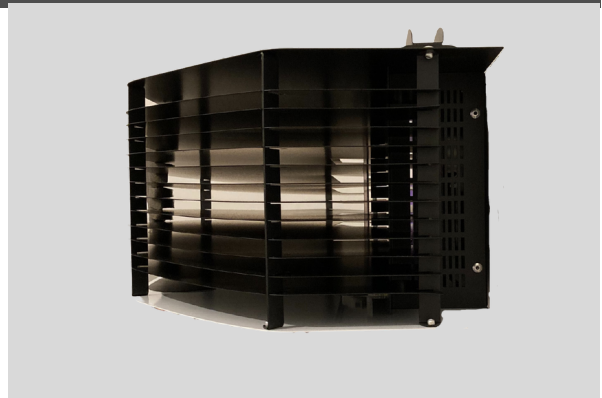


TLR 31
180° - Area coverage
25m² Wall Mounted

 IEC 60335-2-65

the Maximum and minimum adjustment angles can be seen below. it is key to ensure that the luminaire is at 90 degrees to the wall, so as to ensure a horizontal light that is not exposed downwards

It is highly recommended that the unit be connected to a dedicated circuit as to facilitate easy isolation

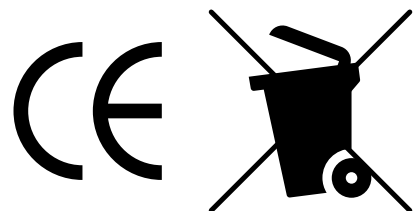


OPERATING REQUIREMENTS

- Before installation ensure that the contents of the packaging match the packing list
- The unit should be installed in a damp, humid, or wet area the unit is strictly intended for indoor use only. Do not use the unit in bathrooms saunas or outdoors.
- The unit should always be installed on a flat surface with the fins parallel to the floor of the area to be disinfected. The unit should never be installed with the fins sagging towards an area occupied by people and animals

ENVIRONMENT

If the appliance is discarded in due course, it should not be treated as household waste, please dispose of it in accordance with and instructions of the local authority. Please remove the lamps before discarding the unit as the lamps contain mercury and need to be disposed of, in accordance with the local municipal regulations.





WARNING: UVC: is emitted from this product, avoid eye and skin exposure to the unshielded product.
Follow installation instructions and user Manual.



WARNINGS AND SAFETY

DANGER: Each TECHNILAMP* Luminaires are fitted with PHILIPS UV-C lamps. Direct exposure to UV-C can be dangerous and result in a sunburn-like reaction to the skin and serious damage to the cornea. As UV-C is invisible to the eye, the UV-C luminaire must be used and installed in strict accordance with the requirements set forth in the user manual and/or the mounting instructions. TECHNILAMP* UV-C Luminaires must only be sold and installed by nominated Electrical and Air Conditioner Installers, that have been trained according to our stringent safety and legal requirements.

KEY GUIDELINES

TECHNILAMP* Luminaires are not certified or approved as a medical device, locally or globally, and should not be used as such. They should never be used in applications or activities that may cause and or lead to death, personal injury, and or damage to the environment.

DISCLAIMER

The UV-C TECHNILAMP* Luminaire's that are fitted with PHILIPS UV-C lamps, is effective in the deactivation of certain mould, bacteria, viruses, or any foreign pathogens that is explained and referenced by clinical research and data referenced (below (1)). TECHNILAMP*, GUVTEC* and PHILIPS do not promise or warrant that the use of the UV-C Luminaire's will protect any user from or prevent infection and/or contamination with any mould, bacteria, viruses, illness, or disease. The UV-C TECHNILAMP* Luminaire's (including PHILIPS lamps) are not approved and/or certified as a medical device by the FDA and/or any other regulatory body. As such, the TECHNILAMP* Luminaire's (PHILIPS lamps) are not intended for and must not be used to disinfect medical devices and/or for medical purposes. In addition to and without limitation of any exclusions or limitations of liability of TECHNILAMP*, GUVTEC* and PHILIPS lamps, as set forth in any agreement for the sale, distribution or otherwise making available of the UV-C TECHNILAMP* Luminaire's (PHILIPS lamps) shall have no responsibility or liability whatsoever for any claim or damage that may arise from or relate to any use of the UV-C upper air devices outside of their intended use or contrary to their installation and operation instructions, each as described in this document, the user manuals and/or the mounting instructions of UV-C TECHNILAMP Luminaires.

The trademark GUVTEC is registered in accordance with the corresponding legal precepts in the name of QUAVEL INVESTMENTS LIMITED. GUVTEC shall not be liable for loss of profit, loss of savings, damage to reputation, loss of goodwill, indirect, incidental, punitive, or consequential damages arising out of regarding the contract or the sale of any products or services by GUVTEC or their use, whether such damages are based on tort, warranty, contract or other legal concepts - even if GUVTEC has been informed or is aware of the possibility of such damages.

Any claim for damages by the Buyer must be made within ninety (90) days from the date of the event giving rise to such claim and any lawsuit arising from such claim must be brought within one year from the date of the claim. Any claim filed or submitted in violation of the preceding sentence shall be null and void.

The limitations and exclusions set forth in this Clause shall apply only to the extent permitted by applicable mandatory law.



COMPANY INFORMATION

TECHNILAMP* part of the BIDVEST Group, South Africa

GUVTEC* part of QUAVEL Investments LTD.

Reg No 577356, (QUAVEL) ; 677556 (GUVTEC) VAT 3414804FH DUBLIN

CONTACT; (353) 1 442 8588

EMAIL: Info@guvtec.com

WEBSITE: www.guvtec.com

