guvtec®
GERMICIDAL UV

PRODUCT INSTALLATION INFORMATION

Technilamp®

GERMICIDAL UVC LUMINAIRE

TLR 30

CEILING MOUNTED LUMINAIRE

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UV-C

Technilamp® **TLR 30** 360° - Area coverage 36m²; Ceiling Mounted

TECHNICAL DATA

Ceiling Mounted size 560x550x300cm
Fitted with Philips 6 X PL-S - 9W TUV/4P lamps
Coverage 36m²
Weight 15kg
Large waiting area of Hospitals / Clinics

Description Specification

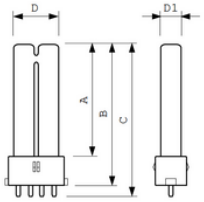
Model	UV-C radiant Flux (UV-C W)	Radiant Efficacy	Peak UV-C Irradiance 1.0 M	2.0 M
TLR 30	**1.36**	**0.0025W/VA**	**39.80**	**11.24**

Coverage	36m²
Electrical	220/230V AC Supply
Size	560 x 550 x 300
Weight	15kg's
Lamp Type & Watt Rating	6 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 – 20µm² 5.0M – 10µm²
Lower Safe Working Zone	0.2-0.4µm²

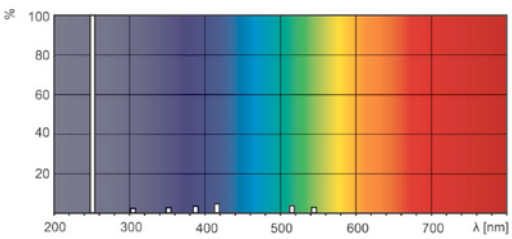
TUV PL-S
TUV PL-S 9W/4P

General information		Voltage (Nom)	60V
Cape base	2G7 (2G7)		
Main application	disinfection	Mechanical and Housing	
Useful life (norm)	9000h	Cap base information	4 Pins(4P)
Light Technical		Approval and Application	
Colour code	TUV	Mercury (Hg) content (Nom)	3,0mg
Colour Designation	-(Not Specifiec)		
Depreciation and useful time life time	20%	UV	
		UV-C Radiation	2,3W
Operational and Electrical	8.6W		
Power (Rated) Nom	0.17A	Product data	
Lamp current (Nom.)		Full product code	871150071083380
EAN/UPC - product	87115000710833	Order Product name	TUVPL-S)W/4P
Order code	927901904007	Material no (12 NC)	927901904007
Numerator- quantity per pack	1	Net weight	30.000 g
SAP nemerator - packs per outer box	60		

Dimensional drawing



Photometric data



XDPB_XUTUVPLS-Spectral power distribution B/W

XDPO_XUTUVPLS-Spectral power distribution Colour

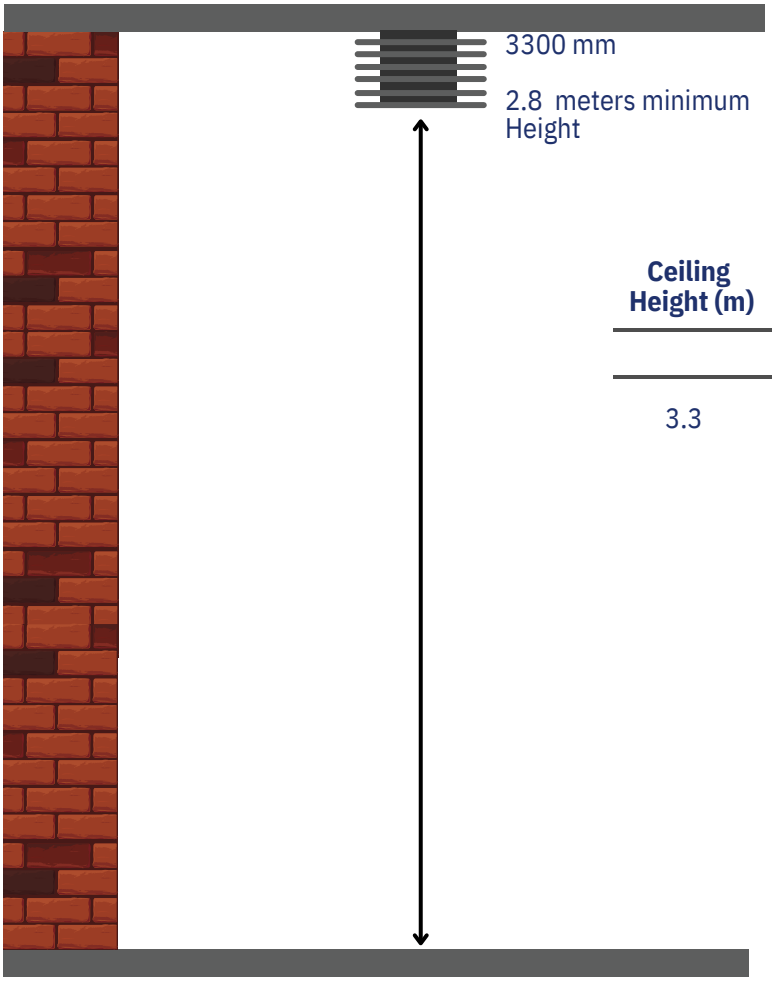
TECHNILAMP TLR 30 INSTALLATION MANUAL

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 2800mm (2.8Meters) from the floor to the bottom of the fitting (higher is better, ceiling permitting) and no higher than 3300mm (3.3 Meters) as per illustration.

TECHNILAMP LUMINAIRE HEIGHT
INSTALLATION SPECFICATIONS For TLR 30



Ceiling Height (m)	Recommended Mounting Height (m)
	Ceiling Type (360)
3.3	2.8

Technilamp® SAFETY INSTALLATION GUIDE

Background of the use UV-C light :

TECHNILAMP* Luminaries use a 254nm Philips Lamp that effectively disinfects microorganisms such as mould, bacteria, and viruses. GUV is a valid element in indoor airborne infection control strategies.

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 2.8meters

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 Luminaries 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.

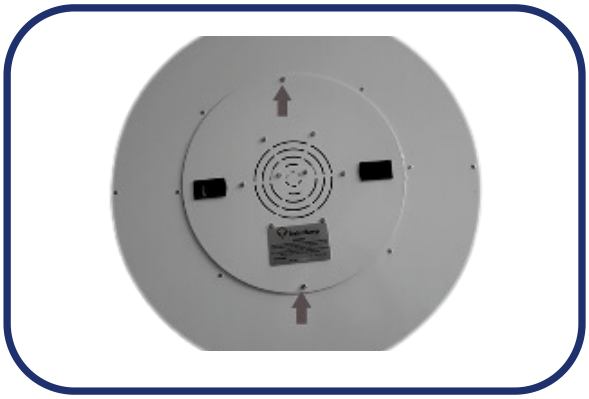
Measurement of light dispersion

TECHNILAMP* luminaires are installed with PHILIPS good quality low-pressure mercury vapor arc lamps (dominant at UV-C 254 nm), as the Luminaries 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

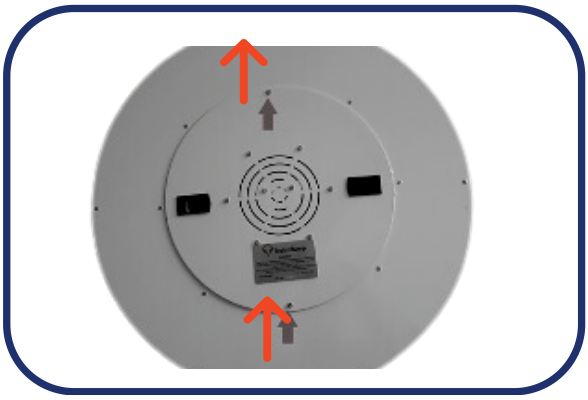
guvtec® GERMICIDAL UV

Technilamp® TLR 30 360° - Area coverage 36m²; Ceiling Mounted

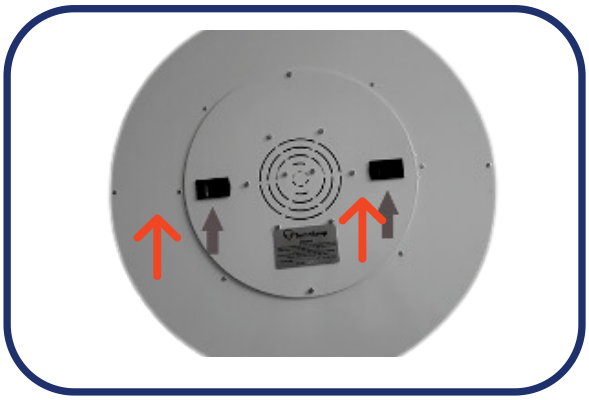
The TLR-30 was designed to be installed 2800mm from the floor in the centre of an designated area as the unit's radiation profile is in a three hundred and sixty degree spread.



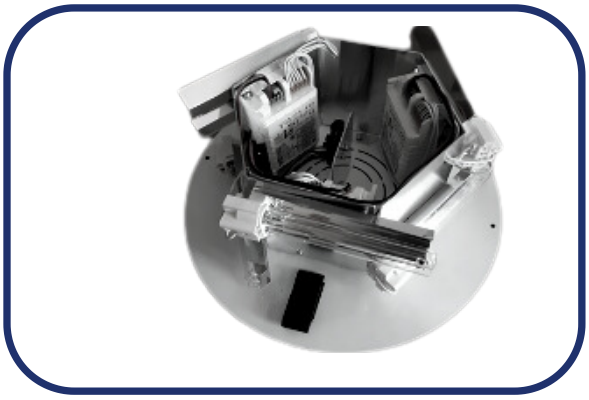
After the unit has been unboxed the power supply needs to be removed this is done by removing the safety locking screws.



The power supply can now be removed.
Be pressing towards one another on the locking tabs and pulling away from the unit



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



In order to mount the unit the ceiling bracket needs to be attached securely to a ceiling as depicted below. (screwing into a joist or beam where possible)

Care should be taken to ensure the bracket is installed level in both the X and Y axis. (2D Cartesian)

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

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

When working with ultraviolet light, it's important to take the necessary precautions to avoid injury. UV light can be dangerous to your eyes and skin if not taken seriously. For this reason, all facilities that use UV light should install UV safety signs to alert workers to the procedures they need to follow, and PPE they need to wear to avoid injury. Never look directly into uv light.

Warnings
Preventive Measures

Attention: before using the machine, please completely read this operating manual.

Keep this operating manual properly for future.

Do not allow children or non-qualified personnel handling the unit.

Do not touch the unit or the power cord with wet hands.

Unplug the unit in case of storm and when you are not going to use it for a long time.
Place the unit in a dry place, away from dust and water splashes.

Do not pull, twist or fold the power excessively.

Do not wet the unit; do not use chemical products to clean it.

WARNING: to prevent electric shock hazards connect the unit to a proper power source (grounded 230 V, 50/60 Hz).

The machine features a precision circuit. Prevent fortuitous impacts and stresses that could cause mechanical damage.

Do not introduce potentially explosive substances.
Remove any dirt or water from the cable connection.
Unplug the appliance immediately if you detect noise, odor or smoke.
Install the product away from heat sources.
Do not use the appliance in particularly hu- mid places, or near flammable materials (alcohol, solvents, etc.).

Do not use the machine with products different than defined in the intended use.
To prevent accidents, be cautious when using the unit.
Ensure that there is no exposure of UVC light to eyes and skin
Ensure the Luminaires is secured securley on a flat wall or ceiling
Do not dismount, repair or modify the machine.
If you find a defective component or a prob-lem do not use the machine.

Contact us for questions or detailed troubleshooting information.

NOTE: Please read this manual thoroughly. It contains crucial safety information regarding installation, usage, and maintenance. Using the equipment in a way not specified by the manufacturer may compromise its safety features.

Thank you for purchasing our UV disinfection luminaries Please read these instructions for use carefully before using the product.

Operating principle

A UVC luminaire emits a focused band of light that is designed not to shine downwards, thanks to its unique prism and louvre configuration, which prevents any downward light exposure.
Positioned at ceiling height, the UVC luminaires effectively capture all airborne pathogens as they rise, utilising the principles of convection and ventilation. With over 20 air changes per hour (ACH) facilitating upward and downward movement, this method is highly efficient for eliminating foreign pathogens.

The germicidal effects of ultraviolet light are well established. It is understood that UV light with a wavelength of 254 nanometers interacts with the DNA of germs, causing damage that renders them inactive and removes foreign pathogens 99,9% effective.

Disinfection range

The disinfection range of the TLR 31 is 25m² through a narrow beam that is emitted, with no UVC light is distributed downwards, this has been tested by University of Pretoria scientific department

Operation

(1) Put on to match the standard power supply of the instrument the electric voltage ;(please check the product of the instrument back to mark before usage)
(2) Place the Luminaire on the wall or ceiling ensuring with a plumline bubble that it is set at 90 degrees to the wall
(3) Once set tighten the guard at the back of the Luminaire so as to ensure that there is no movement
(4) Once set connect the power source to the inway plug on the Luminaire, ensuring that no exposure of light reaches the eyes, wearing UVC safely glasses is compulsory
(5) Ensure power source is an independant swtich only used for the Luminaire

Warning a 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 Luminaries 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.

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.

Precautions

Do not look directly at the lamp when it is on.
Be sure to plug the appliance into a 220V outlet. 50 Hz.
Do not operate the appliance with wet hands.
Do not introduce wet objects inside the disinfection chamber
Do not open the door with the equipment running.
Do not allow children to operate the appliance.

Technical data

Coverage 36m²
Electrical.....S220/230V AC Supply
Size.....60 x 550 x 300
Weight 15Kg
Lamp Type & Watt Rating .....4 x Philips PL-S TUV 9W
Lamp Life/Replacement Hours .....9000 Hours
The durability of Fitting Lifespan .....10 years
Manufacturing .....ISO 9001 Approval
Type of UVC Radiance .....UV-C 254nm
Upper-Air UV-C Fluence. .....1.2M – 20µm² 5.0M – 10µm²
Lower Safe Working Zone 0.2-0.4µm²

Declaration of conformity UE

The firm Guvtec Germicidal UV
address: 8/9 Westmoreland Street
Dublin D02 NW22 R. of Ireland
Hereby declares that the product

Technilamp UVC luminaries TLR 30 180° - Area coverage 36m² Ceiling Mounted

Meets the requirements set out in the following directives:
Generic emission light industry light environment (2011) SANS 6100-6-3
Class B - Radiated emissions SANS 211
Class B - Conducted emissions SANS 211
Harmonic Current emissions SANS / IEC 61000-3-2
Voltage changes, voltage fluctuations and flick SANS / IEC 61000-3-3
Electrostatic discharge SANS / IEC 61000-4-2
Radiated immunity SANS / IEC 61000-4-3
Electrical fast transient / burstsSANS / IEC 61000-4-4
Surges SANS / IEC 61000-4-5
Conducted RF Immunity SANS / IEC 61000-4-6
Frequency Magnetic Fields SANS / IEC 61000-4-8
Voltage dips and interrupts SANS / IEC 61000-4-1

CE Mark IEC 60335-2-65

Euzebio Viana Meneses
Managing Director
Guvtec germicidal uv