

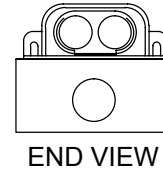
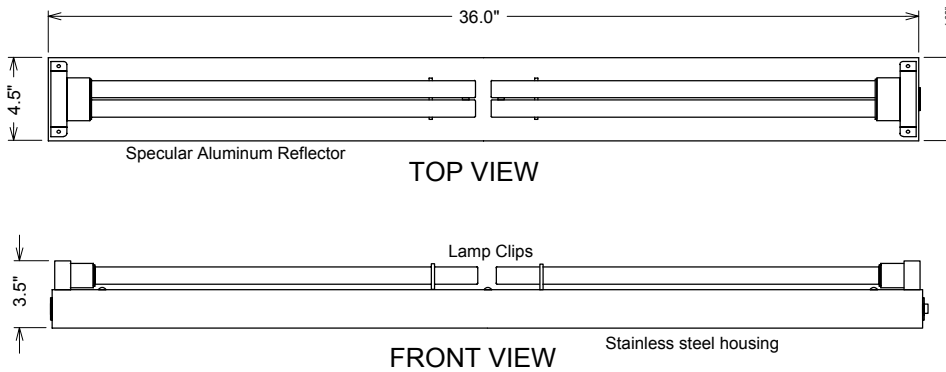
UVS-136

Dimensions: 4.5" x 3.5" x 18"
Stainless steel housing & specular aluminum reflector.

Lamp: (1) PL-L 36W TUV

Nominal Wattage: 36 Watts
UV Wattage: 12 UV Watts

Electrical: 120V thru 277V
50 - 60 Hz; electronic ballast.



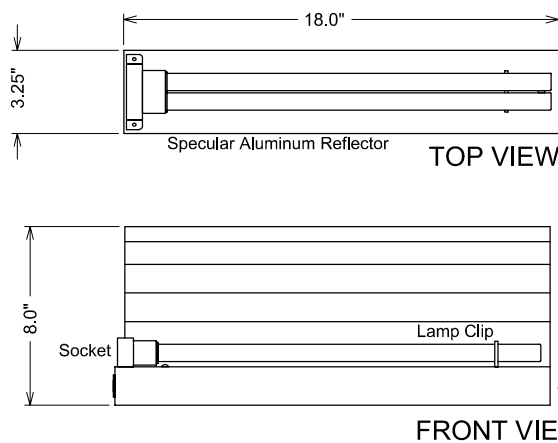
UVS-236

Dimensions: 4.5" x 3.5" x 36"
Stainless steel housing & specular aluminum reflector.

Lamp: (2) PL-L 36W TUV

Nominal Wattage: 72 Watts
UV Wattage: 24 UV Watts

Electrical: 120V thru 277V
50 - 60 Hz; electronic ballast.

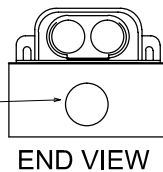


Specular aluminum & stainless steel.

Lamp & socket

Deflector/Reflector

Knockout



UVS-136-DS

Dimensions: 4.5" x 8" x 18"
Stainless steel housing & specular aluminum reflector.

Lamp: (1) PL-L 36W TUV

Nominal Wattage: 36 Watts
UV Wattage: 12 UV Watts

Electrical: 120V thru 277V
50 - 60 Hz; electronic ballast.

UVS-236-DS

Dimensions: 4.5" x 3.5" x 36"
Stainless steel housing & specular aluminum reflector.

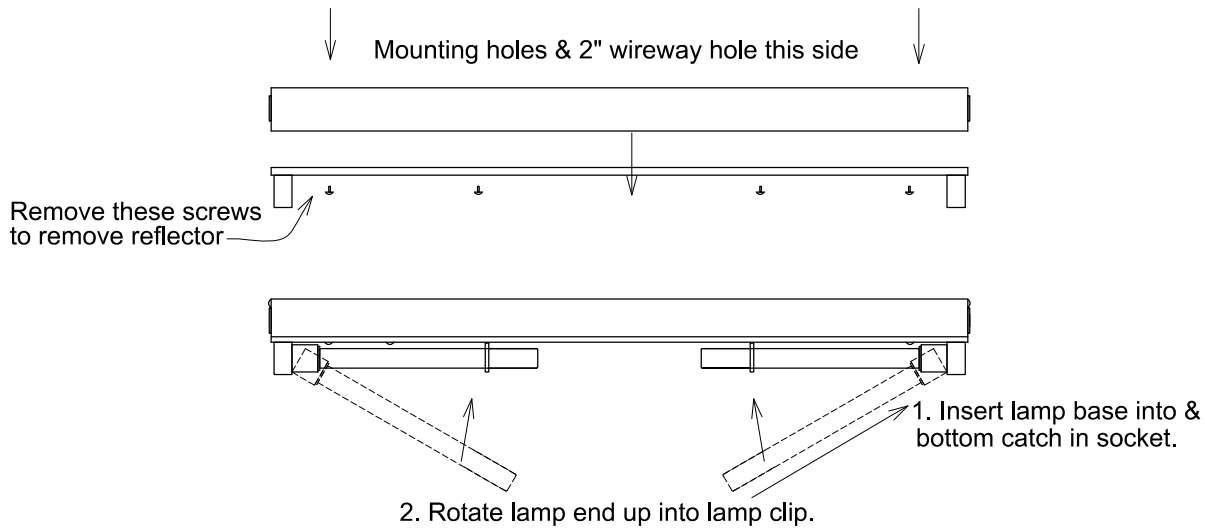
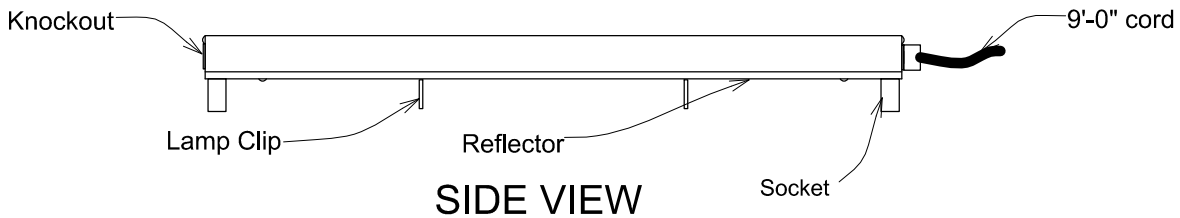
Lamp: (2) PL-L 36W TUV

Nominal Wattage: 72 Watts
UV Wattage: 24 UV Watts

Electrical: 120V thru 277V
50 - 60 Hz; electronic ballast.

DATA SHEET
UVS SERIES

 **EvergreenUV**
Environmental Disinfection
901-800-1709 email@evergreenuv.com
EPA ESTABLISHMENT NO. 91347-TN-001



1. Disconnect power to fixture location.
2. Be sure that the mounting structure will safely support the weight of the fixture so that no immediate or future damage will occur to persons or property. All ducts to be reinforced as per SMACNA standards.
3. Remove the reflector by removing the screws shown.
4. Mount the fixture housing in the selected position thru the two holes in bottom using appropriate fasteners by others.
5. Reinstall reflector onto housing.
6. Locate a three-prong grounded electrical outlet (by others) within 9'-0" of the fixture and plug in cord cap.
7. Read caution note below, lamp fixture & test.

Electrical requirements: UVS-218 = 120V/0.29A to 277V/0.13A UVS-236 = 120V/1.3A to 277V/0.56A

!! CAUTION !!

THIS UNIT IS DESIGNED FOR USE WITH ULTRAVIOLET LAMPS AND MUST BE INSTALLED IN COMPLIANCE WITH COMPETENT TECHNICAL DIRECTIONS SO THAT USERS' EYES AND BARE SKIN WILL NOT BE SUBJECTED TO INJURIOUS RAYS.

DO NOT LET EYES OR BARE SKIN BECOME EXPOSED TO ULTRAVIOLET RAYS EMITTED BY THE UV LAMPS USED IN THIS FIXTURE. EXTREME CARE SHOULD BE TAKEN TO INSURE THAT NO ONE IS PRESENT IN ROOM WHILE LAMPS ARE ENERGIZED. IF ROOM IS TO BE OCCUPIED WHILE LAMPS ARE ENERGIZED, EYE AND SKIN PROTECTION MUST BE WORN. SAFETY GLASSES AND GLOVES ARE PROVIDED WITH FIXTURE.

WARNING: EYE DAMAGE MAY RESULT FROM DIRECTLY VIEWING THE LIGHT PRODUCED BY THESE LAMPS. TO REDUCE THE RISK OF EXPOSURE TO UV RADIATION, TAKE UV PROTECTION MEASURES FOR PERSONNEL DURING SERVICING.

PLEASE NOTE:

By ordering this unit, the user specifically acknowledges the following to be fact:

1. The user thoroughly understands the hazards of UV-C radiation.
2. The user is SOLELY responsible for the safe and effective use of this device.
3. The user is SOLELY responsible for determining suitability of the end user and the end user's application of the device.

RL0230616UVSINST

**INSTALLATION INSTRUCTION
UVS SERIES**



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EPA ESTABLISHMENT NO. 91347-TN-001

MATERIAL SAFETY DATA SHEET

S06-03001
Revised: 12/2012

PRODUCT: TUV Germicidal Lamps

SECTION 1: MANUFACTURER

Manufacturer's Name and Address: Philips Lighting Company
A Division of Philips Electronics
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873-4186

Emergency Telephone No: (800) 424-9300 CHEMTREC
(800) 555-0050 Philips Lighting Technical Information

SECTION 2: HAZARDOUS INGREDIENTS

	OSHA (PEL) mg/m ³	ACGIH (TLV) mg/m ³ TWA	% by Wt.
Inert Ingredients (Glass, Metal, etc.)			~ 99
Mercury (7439-97-6)	.1	.025	~0.1

Mercury is inside the lamp, breakage may result in exposure.

SECTION 3: PHYSICAL CHEMICAL CHARACTERISTICS

This item is a glass light bulb. The mercury is inside the bulb, chemical characteristics of the bulb are not applicable. This bulb can crack if hit with a heavy object.

SECTION 4: FIRE AND EXPLOSION DATA

Glass is not a combustible, melting point is over 900°F. Fire and explosion data are not applicable. Under extreme heat, the bulb might crack or melt.

SECTION 5: REACTIVITY DATA

Stability: Lamp is stable.

Incompatibility: Glass can be attacked by hydrofluoric acid.

Polymerization: Not Applicable.

SECTION 6: HEALTH EFFECTS

DANGER: These lamps emit ULTRAVIOLET RADIATION (UVC). Avoid exposure. Ultraviolet radiation is harmful to the skin and the eyes and can cause serious skin burns and eye injury either from direct or reflected radiation. To reduce the risk of personal injury, install only in fixtures which provide adequate protection to area occupants. Should not be used for illumination purposes.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND USE

Consult the fixture manufacturer regarding the suitability of the fixture for this lamp. Operate with proper auxiliary equipment. Turn off lamps before installing, replacing, cleaning or performing any maintenance work near fixtures.

Handle lamps carefully to avoid breakage. Broken glass can cause cuts.

Waste Disposal Method: At the end of rated life, when this lamp is removed from service, it will be subjected to the current Toxic Characteristic Leaching Procedure (TCLP) prescribed by the Environmental Protection Agency. This test is used to determine whether an item is a hazardous waste or a non-hazardous waste under current EPA definitions. These lamps would fail the TCLP test and would be considered hazardous under the Universal Waste Rules. Generators should evaluate all of the disposal options, which may be available in the particular state in which the generator's facility is located. The generator should check with federal, state and local officials for their guidance. Philips encourages recycling of its products by qualified recyclers.

SECTION 8: CONTROL MEASURES

Do not operate under these lamps without personal protective equipment. (Goggles, glove, skin protection)

Respiratory protection: If large numbers of these lamps are being broken an appropriate respirator should be considered. Note: Crushing of lamps on site may require a permit from state or federal authorities. We recommend recycling as the preferred disposal option.

Ventilation: Avoid inhalation of airborne dust

Hand and eye protection should be worn when handling broken glass.

SECTION 9: REGULATORY INFORMATION

As a product these mercury-containing lamps, when shipped in the manufacturer's original packaging, are not regulated for ground or ocean shipment.

This material safety data sheet does not constitute "knowledge of the waste" in certain jurisdictions.

08/2005
Revised: 12/2012

S06-03001



TUV SteriLamp[®] High Output
germicidal lamps for air purification



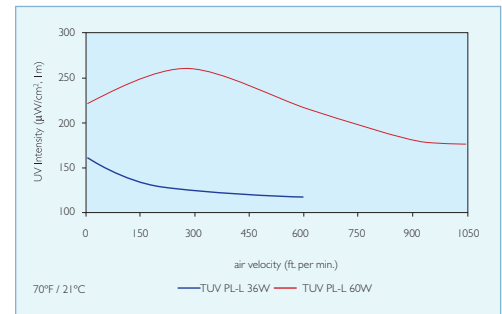
PHILIPS

TUV SteriLamp® High Output germicidal lamps for air purification

Philips SteriLamp® lamps play a vital role in helping to purify air all around the world. The UV radiation efficiency of low-pressure mercury germicidal lamps is strongly affected by the surface temperature of the bulb. Especially when applied in moving air, 'windchill' effects which will have a serious impact. Philips High Output 'HO' lamps are 'overpowered' lamps, corrected for windchill influences and therefore operating at their optimum in the application.

As an example, the UV output of TUV PL-L 60W 'HO' for various air velocities, compared to the performance of a standard PL-L 36W version, having the same dimensions.

The High Output lamps are available as very compact, single-ended PL-L twin-tube, as well as straight single-ended T5 versions. The lamps are designed for operation with electronic ballasts, with lamp currents ranging from 800 mA to 1000 mA. (PL-L 60W: 600mA-900 mA).



UV vs Windchill Factor.

Type	Cap/base	Lamp voltage V	Lamp current A	UV-C 100h W	µW/cm² at 1 meter W	Depreciation 9000 hr %	Useful lifetime h
TUV PL-L							
TUV 35W	HO	2G11	40	0.85	11	105	20 9000
TUV 60W	HO	2G11	118	0.67	18.0	166	20 9000
TUV 95W	HO	2G11	100	0.95	32.0	304	20 9000

Type	Cap/base	Tube diameter mm	Lamp voltage V	Lamp current mA	Lamp wattage W	UV-C 100h W	µW/cm² at 1 meter W	Depreciation 8000 hr %	Useful lifetime h
TUV T5									
TUV 36 T5 HO 4P-SE	4-pin single-ended	16	97*	800*	75*	25.0	230	20	9000
TUV 64 T5 HO 4P-SE	4-pin single-ended	16	175*	800*	145*	48.0	442	20	9000

* When used with electronic gear 25 kHz HF

Philips offers the most complete range of UV germicidal lamps. For a complete overview of our range, please contact us for a copy of our brochure 'Perfection Preserved by the purest of light'.

For more information or support:

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Tel: +1 732 5633000
Fax: +1 732 5633428



www.uvdisinfection.philips.com