



Maintenance • Service • Safety

## Recommendations For Lumalier UVGI Air & Surface Disinfectors ADPL Series



[www.lumalier.com](http://www.lumalier.com)

1931 Thomas Road | Memphis TN 38134 | 901-800-1709  
EPA ESTABLISHMENT NO. 91347-TN-001

# Maintenance

## Scheduled Maintenance Procedures

Quarterly – Check the LED light to insure all lamps are operational.

Semi-Annually – If the lamps show visual dust accumulation, they should be cleaned.

To clean lamps:

- De-energize by switching the toggle switch to the “off” position.
- Remove the UV unit from the duct.
- Using soft cotton gloves, remove the lamp(s) from the UV unit.
- Using a soft cotton cloth, with isopropyl alcohol, wipe the lamps and allow to dry.
- Replace the lamps.
- Reinstall the UV unit in the duct.
- Turn on the exterior toggle switch.

Annually – Replace the lamps.

To replace lamps:

- De-energize by switching the toggle switch to the “off” position.
- Remove the UV unit from the duct.
- Remove the used lamp(s) from the UV unit.
- Wearing soft cotton gloves and using a soft cotton cloth, with isopropyl alcohol, wipe the new lamps and allow to dry.
- Install the new lamps.
- Reinstall the UV unit in the duct.
- Turn on the toggle switch.
- Check the LED light to insure all lamps are operational.

## Service

Lumalier replacement parts and lamps can be purchased factory-direct.

Call 901-800-1709.

## What is UVGI?

UV-C, also known as “germicidal ultraviolet”, **has a specific wavelength of 253.7nanometers (253.7 billionths of a meter)** and is known to deactivate molds, spores and germs contained in tiny airborne droplet nuclei that transmit diseases such as measles, tuberculosis, and influenza from person to person. With significant penetrating ability, UV-C can penetrate the cell wall of a microorganism and destroy it but it cannot penetrate the outer layer of human skin or the cornea of the eye. Although overexposure may lead to a temporary, minor eye irritation or skin reddening it does not cause serious or long-term health effects.

## Safety

### Personal Protective Equipment

Employees must wear personal protective equipment whenever UV radiation measurements are being made close to the lamp source in order to document lamp output, or when maintenance procedures must be performed in areas where UVGI systems are activated.

Personal Protection Equipment includes:

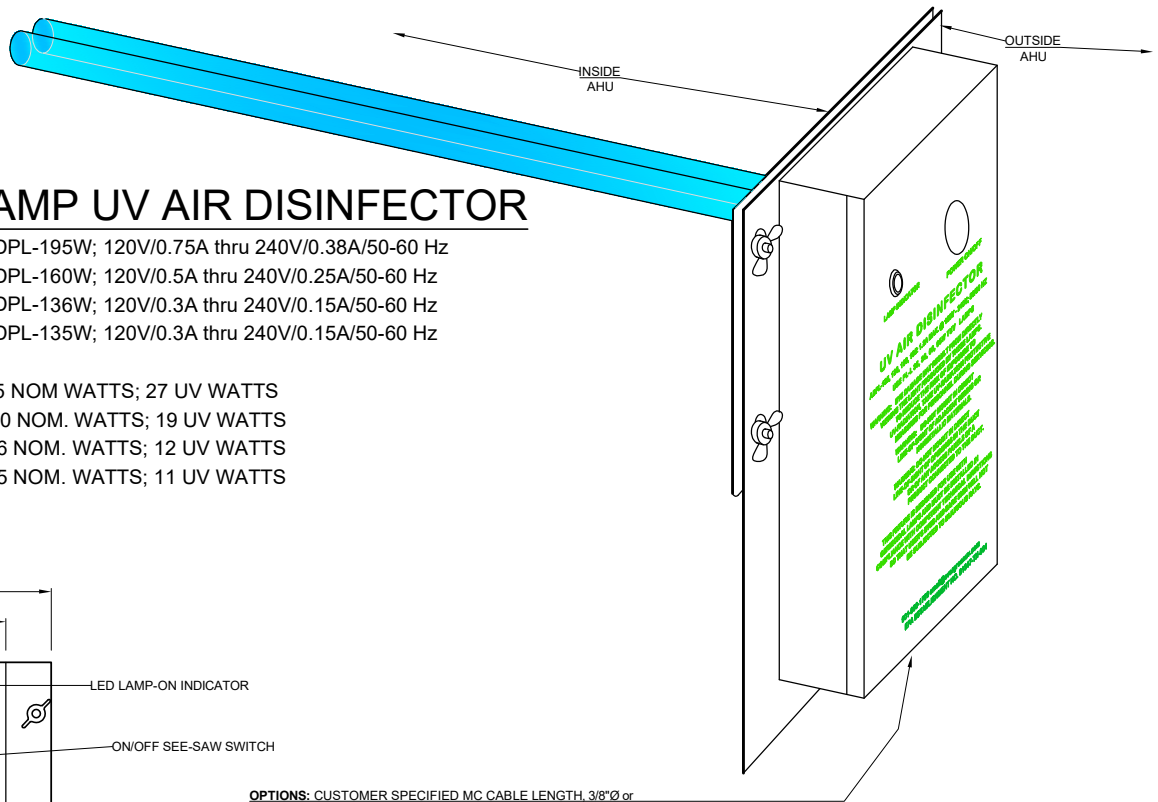
- Safety glasses with side shields
- Head, neck and face covering opaque to UV radiation
- Soft cotton gloves
- Long-sleeved, tightly woven fabrics with SPF 15 or greater

### Reporting UV Exposure

Should any eye or skin irritation that develops after acute exposure to UV radiation one should contact their supervisor or physician.

## Material Safety Data Sheets (MSDS)

For MSDS sheets on our lamps, please contact your local Lumalier representative.

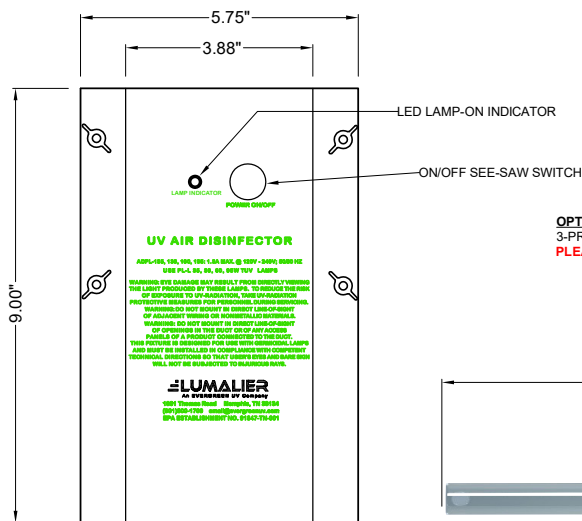


## ADPL SINGLE LAMP UV AIR DISINFECTOR

**ELECTRICAL REQUIREMENTS:** ADPL-195W; 120V/0.75A thru 240V/0.38A/50-60 Hz  
 ADPL-160W; 120V/0.5A thru 240V/0.25A/50-60 Hz  
 ADPL-136W; 120V/0.3A thru 240V/0.15A/50-60 Hz  
 ADPL-135W; 120V/0.3A thru 240V/0.15A/50-60 Hz

### DAMP LOCATION ONLY

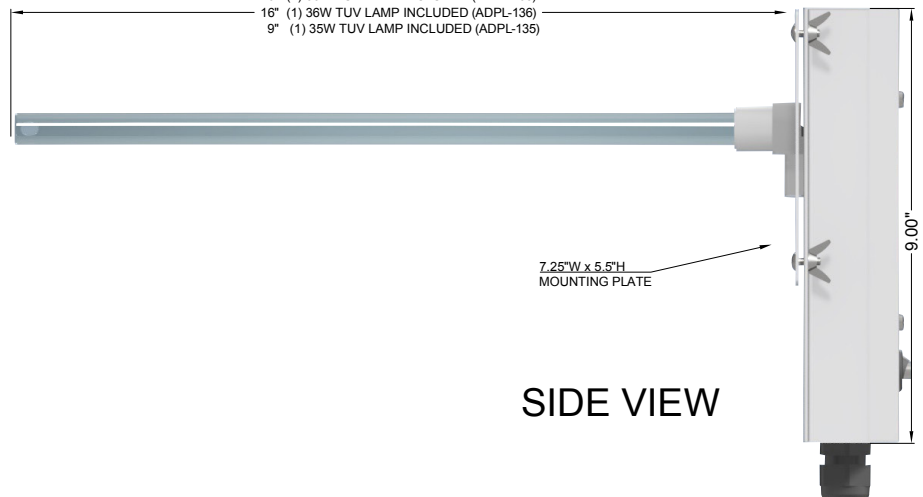
**AVAILABLE LAMP WATTAGES:** 95 NOM WATTS; 27 UV WATTS  
 60 NOM. WATTS; 19 UV WATTS  
 36 NOM. WATTS; 12 UV WATTS  
 35 NOM. WATTS; 11 UV WATTS



FRONT VIEW

**OPTIONS:** CUSTOMER SPECIFIED MC CABLE LENGTH, 3/8"Ø or 3-PRONG CORD WITH PLUG AVAILABLE 9'-0" (274.0 cm)  
**PLEASE SPECIFY DESIRED OPTION ON PURCHASE ORDER & REQUIRED LENGTH OF MC CABLE**

- 21.5" (1) 95W TUV LAMP INCLUDED (ADPL-195)
- 16" (1) 60W TUV LAMP INCLUDED (ADPL-160)
- 16" (1) 36W TUV LAMP INCLUDED (ADPL-136)
- 9" (1) 35W TUV LAMP INCLUDED (ADPL-135)



SIDE VIEW

**NOTE:** TO ENSURE PROPER FIT AND CLEARANCES AT INSTALLATION, CONFIRMATION OF ALL DIMENSIONS & CONDITIONS IS THE SOLE RESPONSIBILITY OF AHU'S LOCAL AUTHORIZED PERSONNEL & MUST BE PERFORMED BY SAME ON RESPECTIVE AHU(S) PRIOR TO UV UNITS' PRODUCTION (i.e. IT IS THE RESPONSIBILITY OF THE OWNER, OWNER'S REPRESENTATIVE, AND/OR CONTRACTOR TO DETERMINE IF THE UV UNIT WILL OR WILL NOT FIT IN AHU). THIS SUBMITTAL DRAWING WAS GENERATED WITH ONLY LIMITED INFORMATION, PROVIDED VIA AHU(S) MANUFACTURER'S OR CUSTOMER'S WRITTEN AND/OR VERBAL INFORMATION, SPECIFICATIONS, SCHEMATIC DRAWINGS, SKETCHES &/OR SCHEDULES. CONFIRMATION OF AHU(S) UV AREA ON SITE CONDITION(S) IS NECESSARY FOR A SMOOTH INSTALLATION. THIS DRAWING MUST BE SIGNED & DATED BY RESPONSIBLE PARTY FOR APPROVAL BEFORE PRODUCTION CAN PROCEED.

**WARRANTY:** THERE IS A 1-YEAR MANUFACTURER'S WARRANTY ON THE UV LAMP(S) AND A 5-YEAR MANUFACTURER'S WARRANTY ON WORKMANSHIP. ANY ATTEMPT TO REPAIR BY ANYONE OTHER THAN MANUFACTURER WILL VOID WARRANTY.

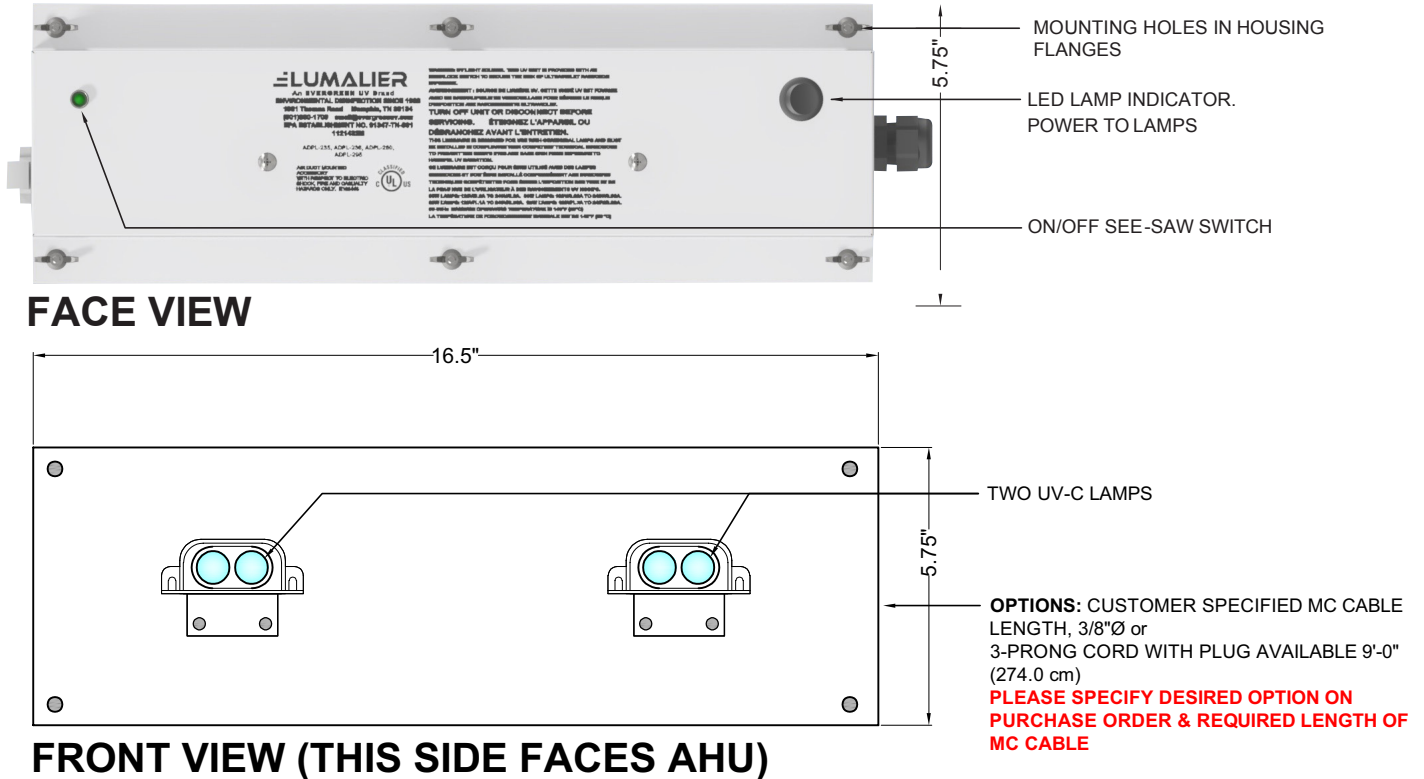
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# ADPL TWO-LAMP UV AIR DISINFECTOR

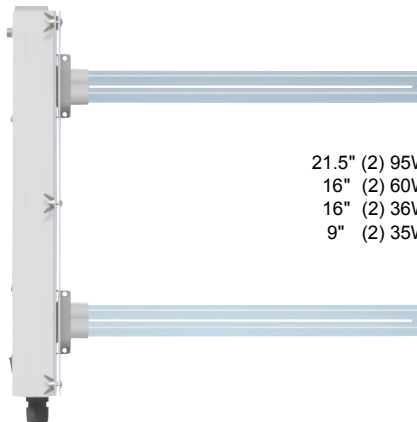
**ELECTRICAL REQUIREMENTS:** ADU-295; 120V/1.5A thru 240V/0.75A/50-60 Hz  
 ADU-260; 120V/1.0A thru 240V/0.5A/50-60 Hz  
 ADU-236; 120V/0.6A thru 240V/0.3A/50-60 Hz  
 ADU-235; 120V/0.6A thru 240V/0.3A/50-60 Hz

**DAMP LOCATION ONLY**

**AVAILABLE LAMP WATTAGES:** 190 NOM. WATTS; 54 UV WATTS  
 120 NOM. WATTS; 38 UV WATTS  
 72 NOM. WATTS; 24 UV WATTS  
 70 NOM. WATTS; 22 UV WATTS



## SIDE VIEW

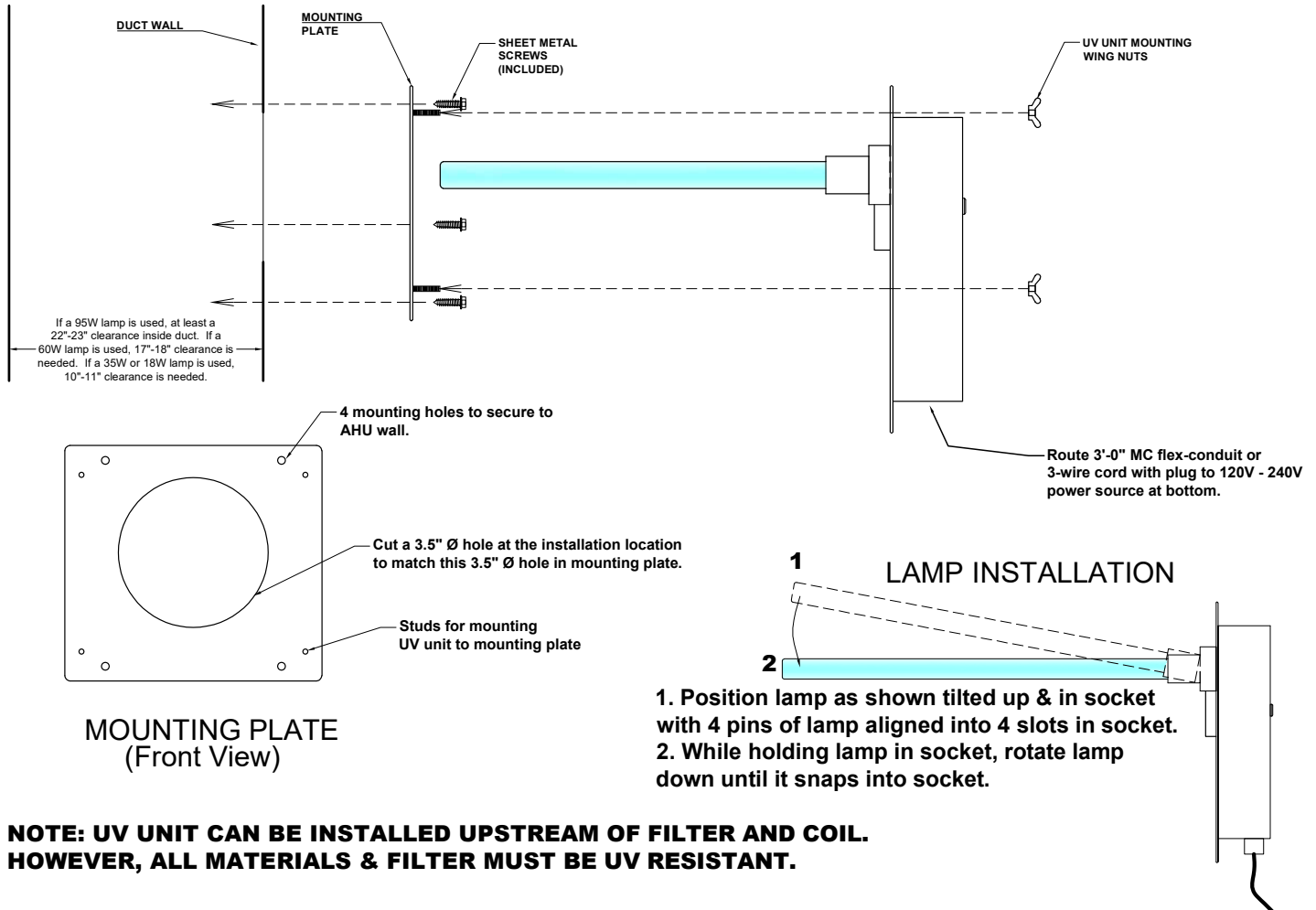


21.5" (2) 95W TUV LAMPS INCLUDED (ADPL-295)  
 16" (2) 60W TUV LAMPS INCLUDED (ADPL-260)  
 16" (2) 36W TUV LAMPS INCLUDED (ADPL-236)  
 9" (2) 35W TUV LAMPS INCLUDED (ADPL-235)

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APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_



**NOTE: UV UNIT CAN BE INSTALLED UPSTREAM OF FILTER AND COIL. HOWEVER, ALL MATERIALS & FILTER MUST BE UV RESISTANT.**

**RISK OF EXPOSURE TO EXCESSIVE ULTRAVIOLET RADIATION-DO NOT OPERATE** without complete lamp enclosure in place.

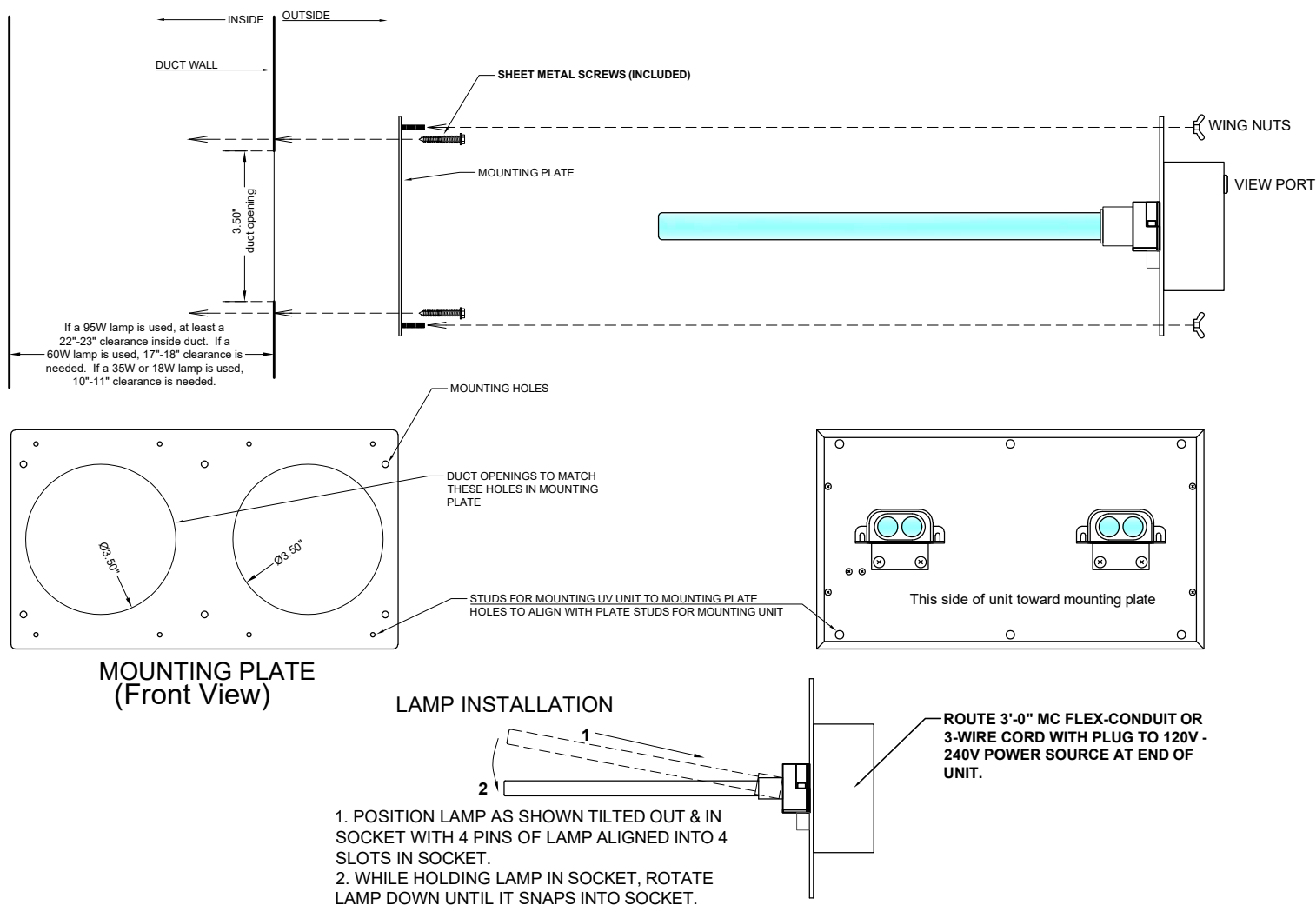
**WARNING:** Eye damage may result from directly viewing the light produced by these lamps. To reduce the risk of exposure to UV radiation, take UV protection measures for personnel during servicing. Safety glasses and clothing must be worn if it is necessary to be exposed to UV.

**WARNING -** Do not mount in direct line-of-sight of openings in the duct or of any access panels of a product connected to the duct.

**WARNING -** Do not mount in direct line-of-sight of adjacent wiring or non-metallic materials.

1. Locate a grounded 120V-240V power source within reach of the power cable. Turn power OFF power to installation location.
2. Be sure that the mounting structure will safely support the weight of the entire UV unit so that no immediate or future damage will occur to persons or property. All ducts to be braced per SMACNA standards. All wiring to be in accordance with the National Electrical Code, local codes, and facility codes. Wrap exposed materials, such as wiring, with metal duct tape.
3. Remove the warning sticker from the mounting plate.
4. Using the mounting plate as a template, mark the 3 1/2" hole on the AHU wall.
5. Cut-out the 3 1/2" diameter hole (as marked) in AHU. Use self-drilling/tapping screws provided and secure mounting plate to AHU.
6. Install the mounting plate onto the AHU wall. Temporarily install UV unit onto mounting plate as above. Make wiring connections according to ALL codes if a hardwired installation is performed. If a cord and plug is used, be sure that there is a grounded outlet within reach.
7. Remove the UV unit off of the mounting plate, be sure the power is off, lamp unit with the UV lamp included, place the UV unit into correct position on mounting plate (see illustration above), secure the UV unit to mounting plate with the wing nuts provided and apply power. Do not remove grounding pin for installation to a non-grounded receptacle.
8. Flip on/off switch to the "ON" position & look to the LED light to make sure that the lamp is energized. **DO NOT DEFEAT THE SAFETY SWITCH WHILE UV UNIT IS OUT OF AIR DUCT.**

If there is a problem with the UV unit, see the trouble-shooting page. **IF THE UV UNIT IS OPENED, WARRANTY IS VOID. ANY REPAIRS ARE TO BE MADE BY THE MANUFACTURER.**



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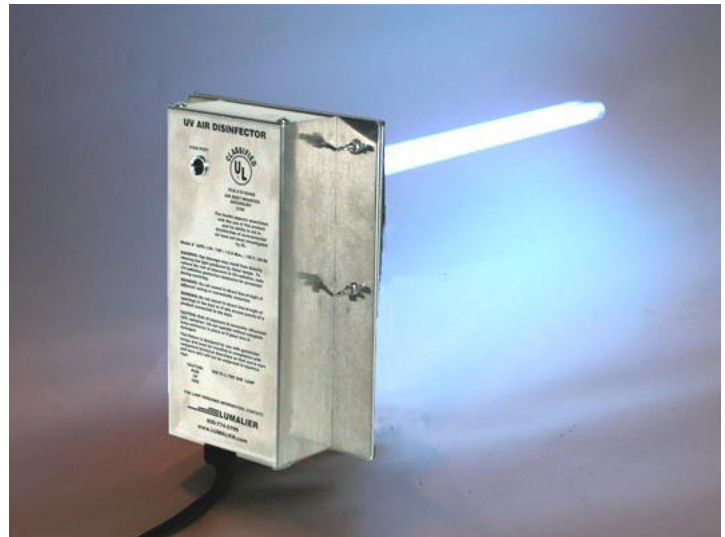
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## Installing the ADPL



1. Cut out 3 1/2" opening



2. Install Mounting Plate



3. Insert Device



4. Tighten 4 Wing Nuts supply power from wire grounded 120V circuit, ensure LED is on



## Troubleshooting Guide, Lumalier Model ADPL

| Issue            | Probable Cause and Solution  |
|------------------|--|
| Lamp(s) flickers | <p>Lamp is not securely seated in the socket.</p> <ul style="list-style-type: none"> <li>✓ Remove and securely reseal lamp</li> </ul> <p>Lamp is defective or at the end of its life cycle</p> <ul style="list-style-type: none"> <li>✓ Replace with new lamp</li> </ul>   |
| Lamp(s) are out  | <p>On all ADPL units, one ballast is used to power lamps. Neither lamp will energize if either of the two lamps is 'burned', improperly seated in the socket, or if the ballast is defective.</p> <ul style="list-style-type: none"> <li>✓ Check to insure both lamps are securely seated in their lamp sockets.</li> <li>✓ Replace one of the lamps, but do not dispose of the removed lamp. If both lamps fail to energize, replace the second lamp with the lamp removed from the first socket. If both lamps again fail to energize, replace both lamps. If both new lamps fail to energize, call LUMALIER technical support. 1-901-800-1709</li> </ul> <p>Ballast / ballast wiring</p> <ul style="list-style-type: none"> <li>✓ Check all wiring to insure proper connection to the ballast</li> <li>✓ Replace ballast</li> </ul> <p>Toggle switch is turned off.</p> <ul style="list-style-type: none"> <li>✓ Safety / toggle switches are single pole switches and all must be in the ON position</li> </ul> <p>Breaker is tripped or turned off @ electrical box</p> <ul style="list-style-type: none"> <li>✓ Check breaker switch. Turn breaker switch to OFF, and then to ON.</li> <li>✓ Replace defective switch</li> </ul> |

## Note:

To prevent damage to lamps or sockets, follow lamp replacement instructions carefully. Insert the 4 pin base of the lamp into the lamp socket at about a

45 angle. Pivot the opposite, exposed end of the lamp towards the lamp-holder bracket to secure and seat the lamp into the socket. A 'click' will be heard or felt when the lamp is properly seated. Removal is performed by reversing this action, pivoting the exposed end of the lamp out and away from the base of the unit until the lamp is at a 45 angle from the socket / base. Pull the lamp straight out and away from the socket.

Always use gloves to avoid surface contamination of the lamp. Always dispose of lamps in accordance with local waste disposal laws. For reference, Philips lamps contain 5mg of Mercury. Philips MSDS sheets are shown at the end of this instruction manual.

Ballast replacement requires proper training, tools and skills. DO not attempt to secure wiring or replace ballasts without proper knowledge and training to do so.

## Replaceable Parts:

LAMPS: PHILIPS PL-L 95W TUV (2G11 BASE)

PHILIPS PL-L 60WTUV (2G11 BASE)

PHILIPS PL-L 36W TUV (2G11 BASE)

PHILIPS PL-L 35W TUV (2G11 BASE)