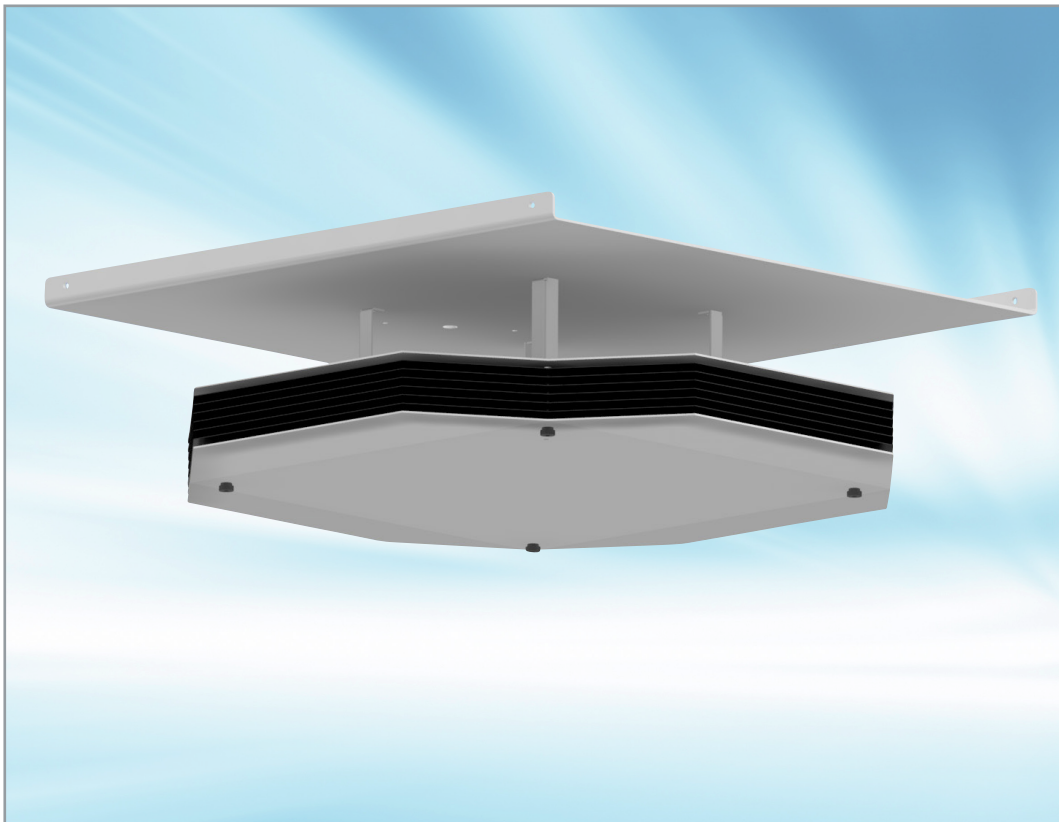




Maintenance • Service • Safety

Recommendations for Lumalier Air and Surface Disinfector
CDU Series



www.lumalier.com

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EPA ESTABLISHMENT NO. 91347-TN-001

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Maintenance

Scheduled Maintenance Procedures

Quarterly – Visually inspect lamps through a viewing window to insure all lamps are operational.

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

To clean lamps:

- De-energize the **CDU** UV unit using the appropriate breaker.
- Remove the bottom cover.
- Using soft cotton gloves, remove the lamps from the UV unit.
- Using a soft cotton cloth, with isopropyl alcohol, wipe the lamps and allow to dry.
- Replace the lamps. **Use only 9W, (PL9WTUV) or 18W, (PL-L18WTUV) non-ozone lamps.**
- Reinstall the cover.
- Read warnings, then turn on breaker.
- Inspect the lamps from below the fixture to insure all lamps are energized.

Bi-Annually – Replace the lamps.

To replace lamps:

- De-energize by switching off the breaker.
- Remove the cover.
- Remove the used lamps 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 bottom cover. Read warnings.
- Inspect the lamps **from below the fixture** to ensure all lamps are energized.

All maintenance and service to be performed by qualified personnel while following safety instructions.

Service

Lumalier replacement parts and lamps can be purchased from authorized distributors.

For technical assistance or information 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.

Ozone Caution

Ozone has been proven to be hazardous to human health. It can cause moderate to severe and chronic breathing problems. Some UV-C lamps produce ozone and these must be avoided. The only UV-C lamp(s) that is recommended, is the Philips brand lamps. They do not produce ozone. If other than Philips lamps are ordered and to be installed, it must be specified in the lamp data that the lamps are ozone-free.

The use of accessory equipment not recommended by the manufacturer, may cause an unsafe condition.

Do not use this equipment for other than intended use.

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

Safe Installation

All installation is to be performed by qualified personnel and according to the NEC (National Electrical Code) and local code. DO NOT MOUNT BELOW 8'-6" (243.8cm) FROM FLOOR TO BOTTOM OF FIXTURE.

This equipment is designed for use with germicidal UV radiation sources and must be installed in compliance with competent technical directions to prevent risk of personal injury from UV radiation. UV radiation can pose a risk of personal injury. Over exposure can result in temporary damage to eyes and bare skin. To reduce the risk of over exposure, this equipment must be installed in accordance with the manufacturer's site planning recommendations.

UV and optical radiation can be reflected by surrounding surfaces such as ceilings and walls. Since the reflective properties of surfaces can vary widely, it should be considered as part of site planning.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT PERSONS WILL NOT BE EXPOSED TO EXCESSIVE UV OR OPTICAL RADIATION DURING EQUIPMENT OPERATION. THIS WILL REQUIRE THE INSTALLER TO CONDUCT AN ASSESSMENT OF IRRADIANCE OR ILLUMINANCE LEVELS IN THE SURROUNDING OCCUPIED SPACES PRIOR TO OCCUPANCY.

Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel. THESE DEVICES ARE NOT INTENDED FOR GENERAL ILLUMINATION.

Do not use in areas where people occupy the space above the luminaire such as stairwells, balconies, 2 level lobbies, adjacent to exposed elevators, ramps, etc.

Do not operate the luminaire or use the space until the installer has verified there is no UVC danger within the occupied space. The luminaire must be powered off at the breaker panel in the event there needs to be any maintenance or servicing required.

Maintenance and servicing of this UV generating equipment shall be performed by authorized personnel. Service personnel must wear appropriate Personal Protective Equipment (PPE) if the equipment will be in operation during the maintenance or servicing work. Contact the equipment manufacturer for PPE recommendations and guidance.

Warnings:

Products are not provided with safeguards and may only be installed and used in connection with the appropriate safeguards. Customer is responsible for procuring and installing said safeguards prior to using the product.

Electrical luminaires are designed for permanent installation in ordinary (non-hazardous) locations in accordance with the National Electrical Code and all applicable local codes. Do not use in areas of limited ventilation or in high ambient enclosures. The lamp and luminaire operate at high.

Notes:

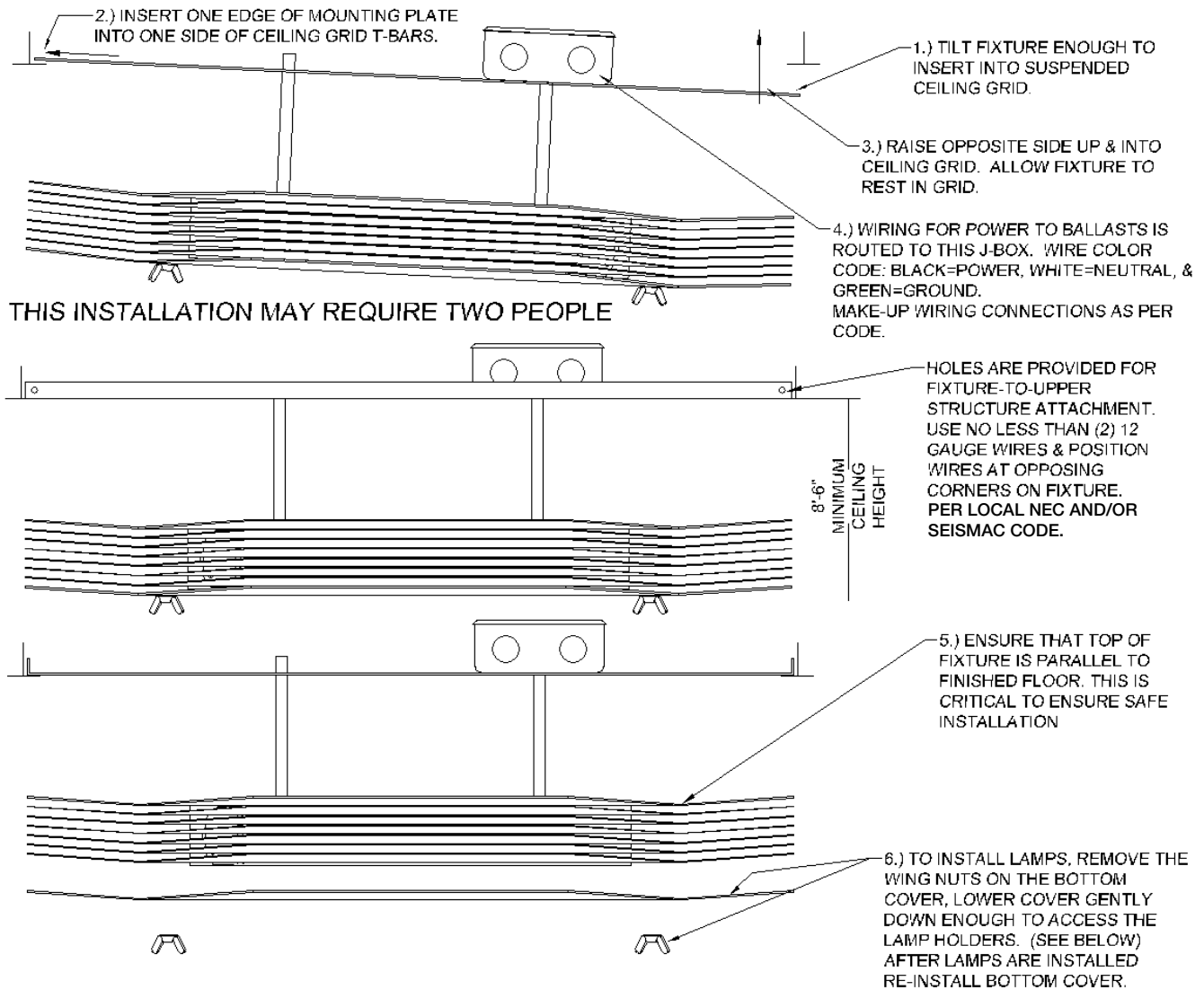
There is a momentary switch provided for added protection against UVC exposure. This switch is in the normally "ON" position until the bottom plate is replaced. THIS FEATURE IS ONLY DESIGNED TO LIMIT UVC EXPOSURE AND IS NOT A SUBSTITUTE FOR DISCONNECTING BRANCH POWER AT THE BREAKER PANEL.

For access to the ballast and internal electrical connections, FIXTURE MUST BE DE-ENERGIZED FROM THE BREAKER PANEL BEFORE SERVICE MAY BE ATTEMPTED! For internal access, remove wiring cover by removing four (4) screws at each corner.

Material Safety Data Sheets (MSDS)

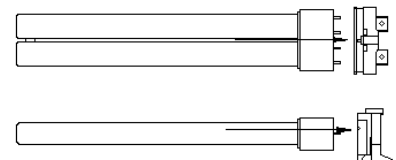
For MSDS sheets on our lamps, please contact your local Lumalier representative.

DATA SHEET CDU



AFTER INSTALLING LAMPS & RE-INSTALLING BOTTOM COVER, FIXTURE CAN NOW BE POWERED & TESTED **AFTER** TAKING UV PROTECTIVE MEASURES.

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



CAREFULLY ALIGN LAMP BASE INSIDE LAMP HOLDER BETWEEN THE METAL TABS INSIDE THE HOLDER AND ALIGNING WITH PINS ON LAMP BASE & THE SLOTS IN THE HOLDER. PUSH LAMP IN UNTIL IT SNAPS IN PLACE.