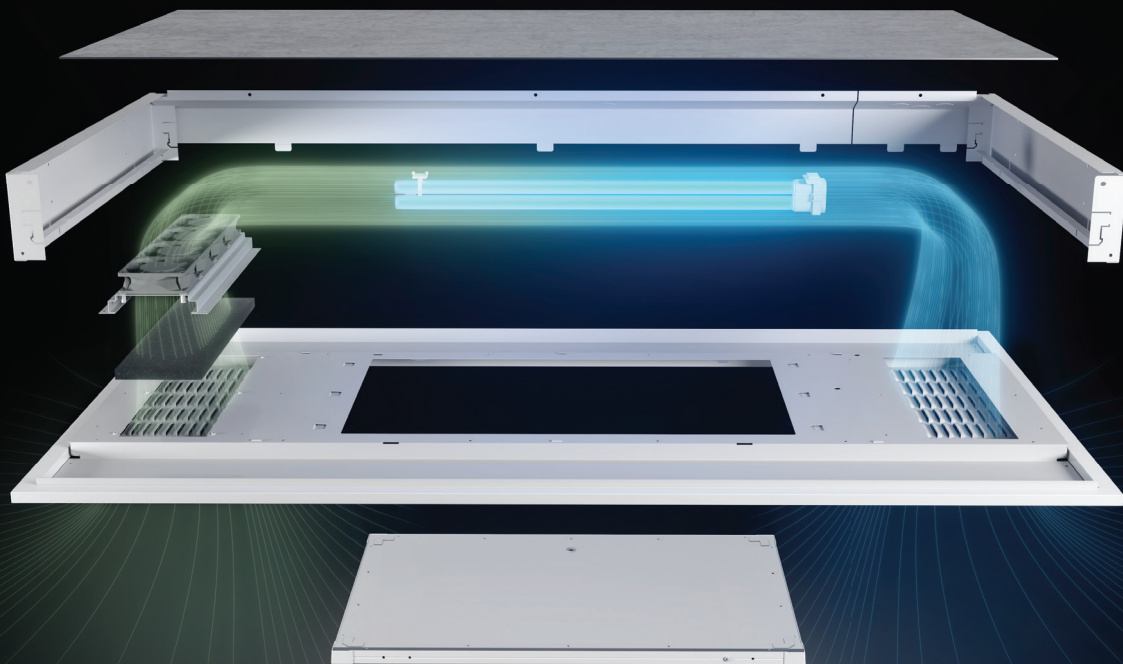




EvōlAir UV™ HFLV

INSTALLATION AND OPERATING INSTRUCTIONS



Powered by UV Angel Clean Air™

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service of this equipment should be performed by a **qualified licensed electrician**.
- 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.
- This equipment contains high intensity UV light for air treatment.
- 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 ALL EQUIPMENT SAFEGUARDS TO ENSURE THE SYSTEM IS OPERATING IN ACCORDANCE WITH THE SYSTEM MANUFACTURER'S INSTRUCTIONS.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- Servicing of this UV generating equipment must be performed only by Acuity Brands Lighting only after disconnection of the equipment.
- Maintenance of the equipment may only be performed when the equipment is not in operation. Always wear eye protection when performing maintenance.
- Contact Acuity Brands Lighting for replacement lamp when lamp module reaches end of life.
- Refer all servicing to Acuity Brands Lighting if there is any damage to the unit or it is not operating correctly.
- 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.
- All references to "disinfection" are referring generally to the reduction of pathogenic bioburden and are not intended to refer to any specific definition of the term as may be used for other purposes by the U.S. Food and Drug Administration or the U.S. Environmental Protection Agency. This equipment is not for use as a medical device or for the disinfection of medical devices.
- It is the obligation of the end-user to consult with a qualified Professional Engineer and a Certified Industrial Hygienist, if applicable, to determine whether this luminaire and its installation meets the applicable requirements for system performance, code compliance, safety (including safety and hazard alerting signs), suitability and effectiveness for use in a particular application design. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this luminaire in an application design.
- **DO NOT INSTALL DAMAGED PRODUCT!** This equipment has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.
- If the UV-C lamp is marked (Hg) then it contains mercury. Follow all disposal laws when replacing or otherwise disposing of the lamp and/or this equipment.
- Do not block any ventilation openings.
- Do not tamper with the unit.
- These instructions do not purport to cover all details or variations in equipment nor to provide every possible contingency to meet in connection with installation, operation, or maintenance. Should further information be desired, or should particular problems arise which are not covered sufficiently for the purchaser's or owner's purposes, please refer to Acuity Brands Lighting.

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS

OCCUPIED SPACES ENCLOSED UV EQUIPMENT



WARNING

RISK OF ELECTRIC SHOCK

- ✓ Disconnect or turn off power before installation or servicing.
- ✓ Verify that supply voltage is correct by comparing it with the luminaire label information.
- ✓ Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- ✓ All wiring connections should be capped with UL approved recognized wire connectors.



WARNING

RISK OF BURN

- ✓ Allow lamp/fixture to cool before handling. Do not touch hot lens, lamp, guard, or enclosure.
- ✓ Follow all lamp manufacturer's warnings, recommendations and restrictions on lamp operation including but not limited to: ballast type, burning position, replacement, and recycling.



CAUTION

RISK OF INJURY

- ✓ Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.
- ✓ Eye damage may result from directly viewing the light produced by the lamp in this equipment. Always turn off lamp before servicing.



CAUTION

RISK OF UV EXPOSURE

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

- ✓ Disconnect or turn off power to this equipment before performing maintenance on other elements in the space.
- ✓ Avoid eye and skin exposure to unshielded product. Do not look at operating lamp. Eye injury may result. Follow installation instructions and operation manual.
- ✓ If safety interlocks are overridden and equipment is opened, this unit emits UV radiation which can injure exposed eyes and skin. Eye injury can include pain, light sensitivity, and gritty sensation on the eye that manifest days later. Irritation similar to a sunburn can occur on exposed skin.



CAUTION

RISK OF FIRE

- ✓ Keep combustible and other materials that can burn away from lamp/lens.
- ✓ Do not operate in close proximity to persons, combustible materials or substances affected by heat or drying.

Failure to follow any of these instructions could void product warranties available at www.acuitybrands.com/support/warranty.
For technical assistance, call 800-705-SERV (7378)

EPA Est. No.: 95756-GA-1 / 89661-MEX-1. For sale only in the United States of America and Mexico.

Meets California ozone emissions limit. CARB certified.

Produced for: Acuity Brands Lighting, Inc., One Lithonia Way, Conyers, GA 30012
Acuity Brands Lighting, Inc. assumes no responsibility for claims arising out of improper or careless installation or handling of its products.

DIRECTIONS FOR USE

EvōIAir UV HFLV OPERATION AND INSTALLATION

Instructions for use

1. Install the EvōIAir UV into ceiling.
2. Green light means unit is working correctly; if the green light is not lit, contact the Acuity Brands Lighting team for support.
3. Replace UV lamp and filter annually or after 9000 hours of use.



EvōIAir UV HFLV DN (Downlight)

Weight: 22 lbs

Length 47.75" Width: 23.8" Depth: 3.94"



EvōIAir UV HFLV NDN (No DN)

Weight: 20 lbs

Length: 47.75" Width: 23.8" Depth: 3.94"

Packing Contents

- Fixture Housing
- Instructions
- Antenna

Power Ratings

- UV engine power requirements: 110-277VAC, 115W
- LED downlighting power requirements 110-277VAC, 50W

Important Safety Instructions



WARNING: This fixture must be grounded and installed in accordance with local and national electrical codes, by a person familiar with construction and operation of the product and the hazards involved. Manufacturer assumes no responsibility for the improper installation or application of this fixture.



WARNING: Fixture contains high intensity UV light for air treatment. Always wear eye protection when performing maintenance or service. Turn off unit / disconnect before servicing.

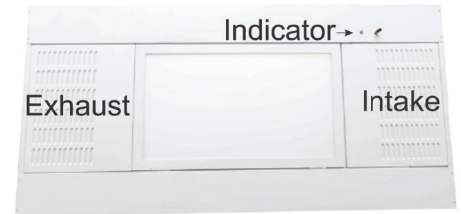
Caution

- Remove fixture from carton with care to avoid possible cuts and abrasions from raw edges. It is recommended to wear cut-resistance installation gloves while handling and installing. Please read complete detailed installation instructions enclosed prior to installation.
- Risk of burn. Disconnect power and allow fixture to cool before changing lamp or handling fixture.
- Notice: Green ground screw provided in proper location. Do not relocate.
- Notice: Lamps contain mercury, dispose according to local, state and federal laws.
 - + For more information, visit: www.lamprecycle.org.
- Do not use outdoors.
- Do not use equipment for other than its intended use.
- The use of accessory equipment not specified by Acuity Brands Lighting is not recommended and may cause an unsafe condition. Read this entire document.

Installation Instructions

Environment

NOTICE: The EvōAir UV is to be operated indoors, in a temperature and humidity-controlled environment between 68-122°F and 20-80% humidity.



Orientation of Units

1. The indicator light end is the untreated air intake and can be positioned next HVAC return/exhaust grill (end to end). It is preferred that the intake is positioned at least 2' from the HVAC return.
2. The intake cannot be within 3' of a HVAC supply diffuser.
3. The fixed grill end (opposite of indicator light end) is the treated air exhaust and can be positioned next to the HVAC supply diffuser (end to end). It is preferred that the exhaust is positioned at least 2' from the HVAC supply diffuser.
4. The exhaust cannot be within 4' of HVAC return/exhaust grills.

Drop Ceiling Grid-Lock Feature

1. The EvōAir UV installs like a standard lay in troffer with the added feature of our gridlock system to ensure it stays firmly in place. Where required, the unit should be tethered (supplied by others) to a secure anchor point that is capable of supporting the fixture's weight in the ceiling (Figure 1a).

Downlight 22 lbs
No Downlight 20 lbs

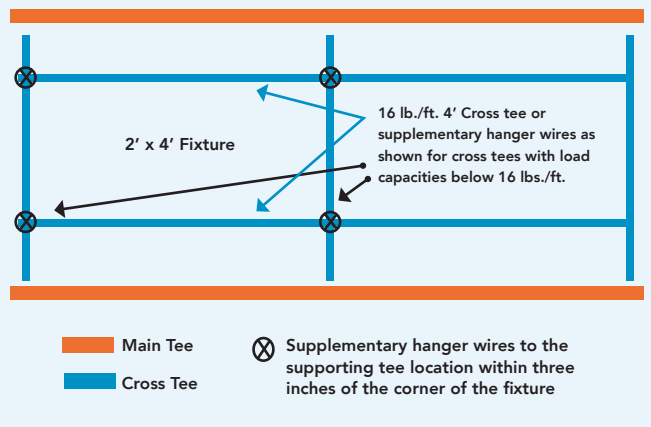
Note: Use minimum of (2) #12 wires at diagonal corners.

2. Four Grid-Lock tabs are built into the housing. Bend each tab 90 degrees. Lay the fixture into the grid, and rotate each tab until it engages with the T-grid. There is no need to open the fixture to use this feature (Figure 1b).

FIGURE 1b



FIGURE 1a



NOTICE: Grid Lock features are intended to be used for securing to NEMA Type-G recessed ceiling T's.

3. Facility installing contractor shall hang, secure and mount air treatment system units per the local and/or state codes and standards.
4. The unit fits standard 9/16", 15/16" and 1" acoustical ceiling grids (fineline, architectural and commercial types).
5. The unit will also recess into the standard drywall frame kit. The installation of the drywall frame kit shall be the responsibility of the installing contractor. The installation must meet all state and local codes/ordinances.

OPTIONAL: Hard Ceiling Surface Mount

1. Remove the C-Frame, two endcaps and hardware bags from the box.
2. The installing contractor shall provide all mounting fasteners. Wood screws, washers, toggle bolts, or suspension hardware must be sized to support a minimum of 60 lbs. Contractor to provide mechanical support to structure in accordance with state and local codes/ordinances.
3. If power will be coming from the top of the unit, knockout the C-Frame diamond (Figure 2).
4. Use 6 holes to secure Surface Mounting Kit to the ceiling surface (Figure 2). Locate the holes on C-Frame. There are three options of holes to choose from. The rectangle shape option is for hanging/suspension. The two options are for lagging/screwing are shown with triangles and circles around the holes.
5. Orient the C-Frame so that the pivot pins are on the supplied power side (Figure 3). Contractor shall properly mount C-Frame to ceiling using appropriate hardware (supplied by others).
6. Move EvōAir UV unit to C-Frame so that the slotted cut hooks onto the pivot pins. Be sure the side of the unit with power is nearest to the pivot pins (Figure 4).
7. Leave system hanging down to perform step eight.
8. See Wiring Fixture section of this manual to wire the Healthcare Filtration Luminaire unit. Install in accordance to NEC, ANSI/NFPA 70 & local codes.
9. Pivot the unit up into the C-Frame. Fasten the non-hinged end to the holes on the long sides of the C-Frame using two of the provided #8-32 x 1/2" machine screws. Do not tighten screws at this time.
10. Fasten the long sides of the of the C-Frame with four of the provided #8-32 x 1/2" machine screws. Tighten all 6 screws to 18 in-lb.
11. Attach end-cap with slot to the end of the unit where power is supplied using four #8 x 3/8" sheet metal screws. Tighten to 12 in-lb to prevent stripping.
12. Attach the other end-cap to the other side using the four remaining #8 x 3/8" sheet metal screws.

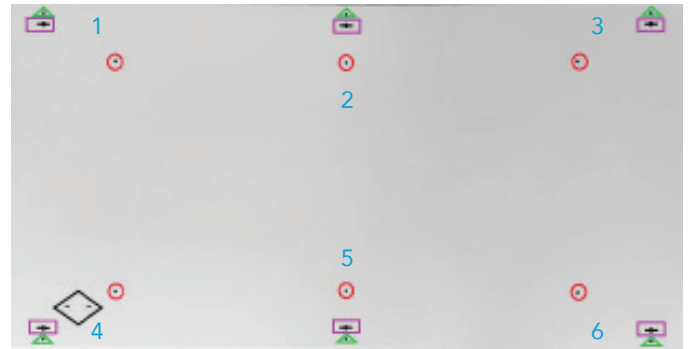


FIGURE 2: C-Frame back. Each shape represents a different set of holes. Diamond denotes power knockout hole.

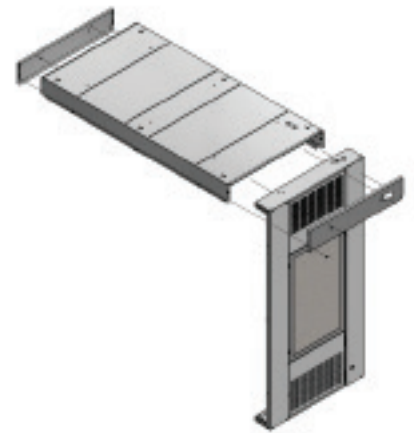


FIGURE 3: Total Assembly Exploded View

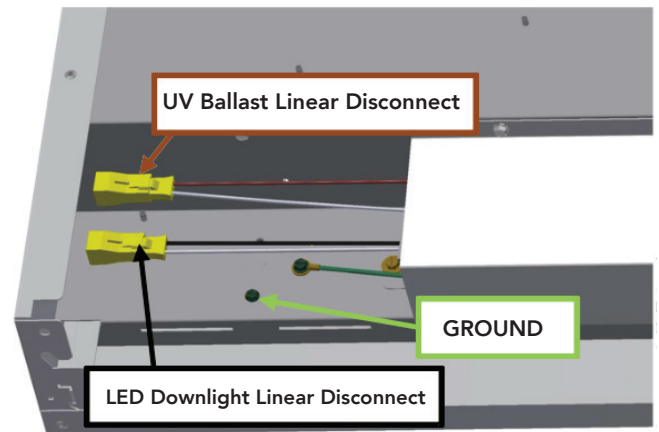


FIGURE 4: C-Frame pivot pin unit Interaction

Wiring Fixture

1. Wiring must comply with all applicable electrical codes.
2. Turn off power before installing wiring.
3. Remove insulation from the ends of incoming power wires (Figure 6).
4. Remove and retain the access plate screw, slide the plate inward and rock out to remove from the backside of fixture.
5. Select and remove K.O.(s) in access plate as required.
6. Add a certified cable clamp connector or conduit connector into the K.O. hole before feeding in wires.
7. Insert wires into removed K.O. hole. Take ground wire and wrap it counter-clockwise around head of green ground screw provided in frame (Figure 5). Hand tighten screw to secure ground wire.

FIGURE 5



NOTICE: Ground screw provided on the frame under the access plate.

8. Locate the UV ballast linear disconnect (brown conductor) connector within fixture (Figure 5).

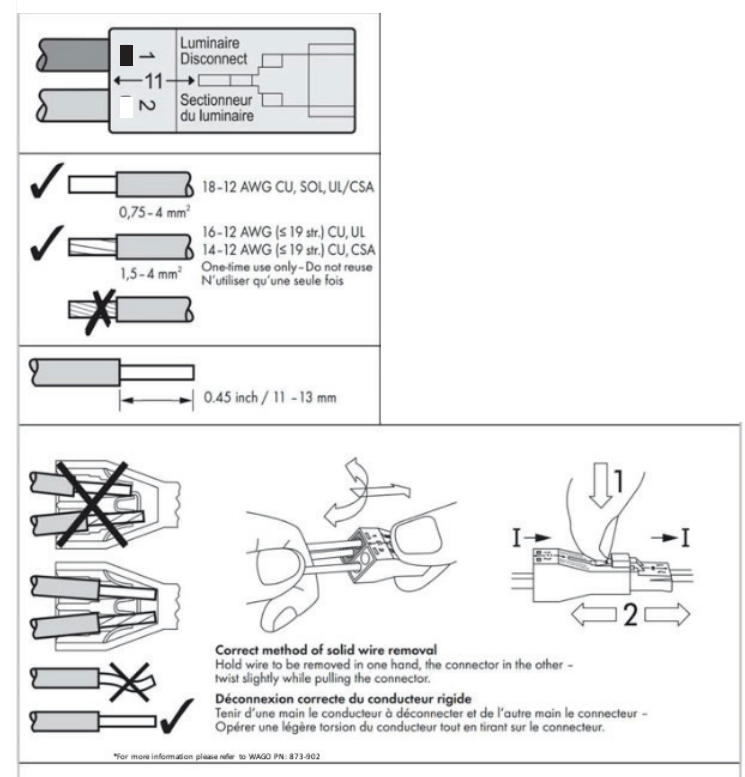
NOTICE: UV lamp should be connected to constant supply voltage for the most effective treatment results.

9. Grip black supply wire firmly, insert and push conductor into connector port marked with black rectangle and #1 until it bottoms out (Figure 6*).

NOTICE: Connector is one time use only. Do not remove wire once inserted.

10. Insert white supply into the port marked with white rectangle and #2.
11. Use only one conductor per port and assure that no copper is exposed on inserted wires.
12. WIRING FOR LED DOWNLIGHT (Optional): Repeat steps 7 through 10 connecting incoming power to the LED Downlight Linear Disconnect (Figure 5). The downlight can be wired to switch or constant supply voltage.

FIGURE 6



13. Reinstall the access plate using the screw retained from step 4.

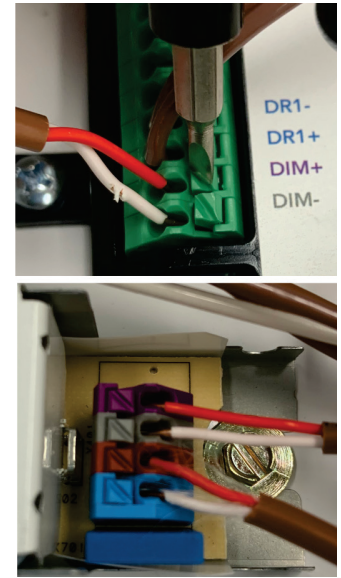
* For more information please refer to WAGO PN: 873-902

Optional Downlight 0-10V Dimmer Switch Control

The EvölAir UV downlight can be dimmed with a wall switch. To enable dimming, follow this procedure.

1. Assure power is disconnected from fixture.
2. Remove and retain 4 screws securing the two electrical enclosure covers. Slide covers inward and pivot to remove.
3. To disconnect the 2 conductor cable that connects the control module to the LED driver use a small flat head screwdriver to depress the terminal block plungers to remove the wires (Figure 7).
 - a. Disconnect control module DIM+ and DIM- wires.
 - b. Disconnect LED driver Gray/Pink and Violet terminal wires.
 - c. Remove and discard the 2 conductor cable.
4. Connect dimmer switch to the LED driver with 18 AWG solid copper wire rated >300V. Strip wire insulation exposing conductors 3/8". Connect Dim+ wire to violet terminal and Dim- wire to Gray/Pink terminal.
5. Reinstall enclosure covers.

FIGURE 7



First Time UV Lamp Installation

1. Assure power is disconnected from fixture.
2. Open the grill door by moving latches down with fingers or a paint safe tool (Figure 8).

NOTICE: Grill door must be opened prior to large UV-C chamber door.

3. Read WARNING label.
4. Open the large UV-C chamber door (either a downlight door or a solid metal door) by moving latches down.
5. Use clean, cloth gloves carefully remove the new lamp from box and insert it into the 2G11 socket and retention clip.

NOTICE: Oil from fingers will permanently etch glass of lamp, weaken structure and damage to lamp will result. Clean lamp with rubbing alcohol and clean cloth if necessary.

6. Close both doors, starting with the large door followed by the grill door and latch tightly.
7. Turn on power and confirm the status light is green (Figure 9) indicating the UV-C light and fans are on. (See Status Indicator Light table for additional light descriptions.)



FIGURE 8

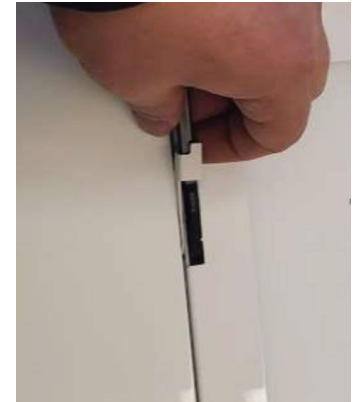


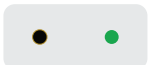
FIGURE 9



Antenna Installation

1. Internal wireless connectivity module is disabled. Install antenna for future wireless connectivity when this feature is enabled by Acuity Brands Lighting.
2. Thread the supplied antenna onto the brass connection near the indicator light after installation is complete.
3. Take care not to bend the wire inside the antenna during installation.
4. Thread on until seated and tighten lightly with 8mm wrench. Do not over torque, 12 in-lb (1.1 Nm) maximum.

Status Indicator Light

	LED INDICATOR	MODE	DESCRIPTION
	YELLOW Flash	Power Up	Single flash when power is applied.
	GREEN Solid	Normal	UV lamp and fans are operating correctly, the door is closed properly, and the system is in normal operating mode.
	YELLOW Solid	Warning	UV lamp nearing end of 9000 hr. useful life (nominal). Replace lamp and filter with kit from manual.
	GREEN Flash	Maintenance	1 second on, 1 second off indication during service with the doors open.
	RED Flash	Fault	Reoccurring every 5 seconds: Lamp fault – 1 flash Control board fault – 2 flashes Fan fault – 3 flashes

Maintenance

The UV lamp is rated for 9000 hours (nominal) of continuous use. It is recommended that the UV lamp and the filter are changed annually. Service only with Acuity Brands UV Lamp & Filter replacement kit: P/N RK8HFLV KIT.

UV-C Lamp and Filter Replacement:

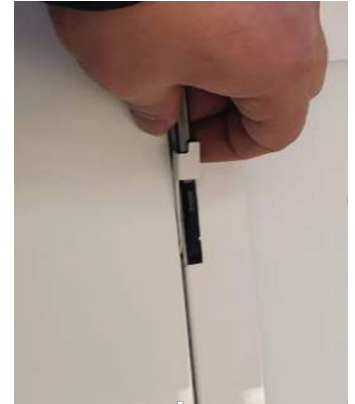
1. Assure power is disconnected from fixture.
2. Open the grill door by moving latches down with fingers or a paint safe tool (Figure 12).

NOTICE: Grill door must be opened prior to large UV-C chamber door.

3. Read WARNING label.
4. Open the large UV-C chamber door (either an edge-light door or a solid metal door) by moving latches down.
5. Using gloves and protective eyewear, remove the UV-C lamp from the socket and retaining clip.
6. Dispose of used UV-C lamp at local or state-run hazardous waste disposal facility, with a universal waste handler, or an authorized recycling facility.



FIGURE 12



7. Using clean cloth gloves carefully remove the new lamp from box and insert it into the 2G11 socket and retention clip.

NOTICE: Oil from fingers will permanently etch glass of lamp, weaken structure and damage to lamp will result. Clean lamp with rubbing alcohol and clean cloth if necessary.

8. Close the large door and latch tightly.
9. Using gloves and protective eyewear, grab the black tabs on the filter and pull them to the center of the filter then down to remove.
10. Safely dispose of the used filter.
11. Install the new filter in the reverse order of which it was removed.
12. Close the grill door and latch tightly.
13. Turn on the power and confirm the status light is green indicating the UV-C light and fans are on (Figure 13).

FIGURE 13



If you experience an issue with your EvōAir UV HFLV , please contact our team at 800-705-SERV (7378) for troubleshooting assistance or help with ordering a replacement part.

Warranty

5-year limited warranty for UV device housing, mechanical, white light-emitting components, ballast, and driver. 2-year limited warranty on UV device fan, switches, and other electrical components. No warranty on UV-C lamps and filters. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions



EPA Est. No. 95756-GA-1
EPA Est. No. 89661-MEX-1
Produced for:
Acuity Brands Lighting, Inc.
One Lithonia Way
Conyers, GA 30012