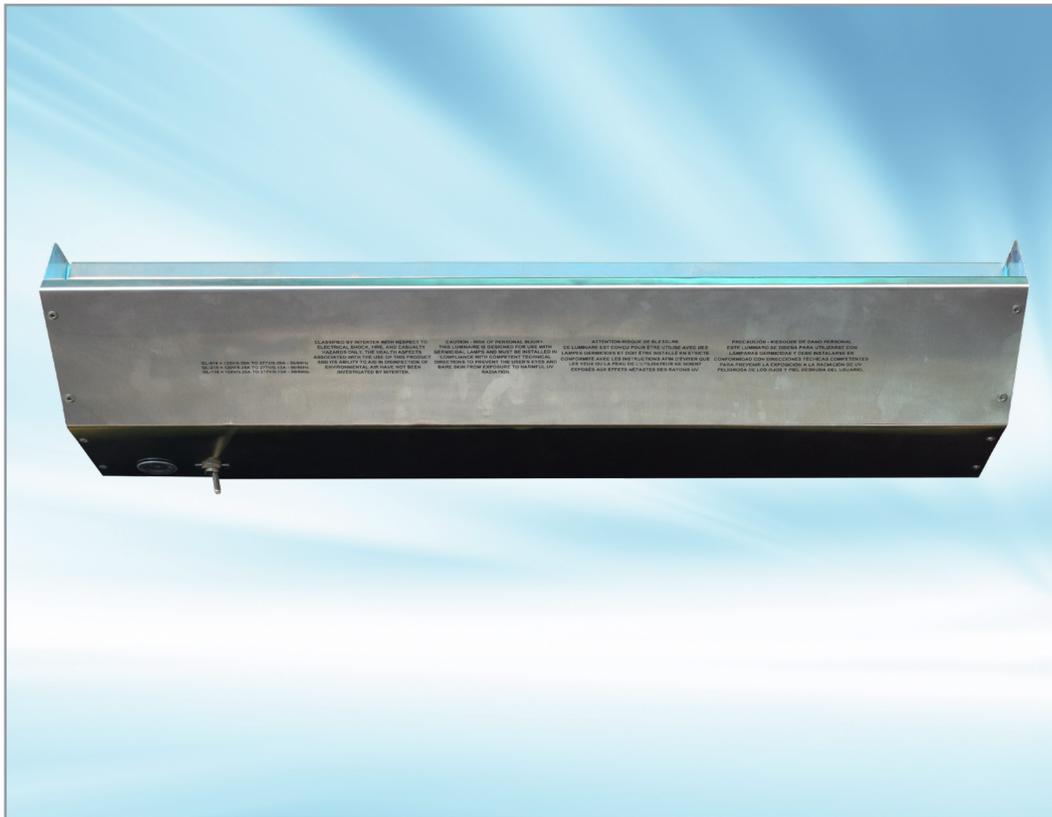




Maintenance • Service • Safety

Recommendations For Lumalier Upper Air GL Series



1931 Thomas Road | Memphis TN 38134 | 901-800-1709
EPA EST. NO. 91347-TN-002

Maintenance

Scheduled Maintenance Procedures

Quarterly – After reading the warnings, visually inspect lamps to ensure all lamps are operational. Wear eye and skin protection.

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

To clean lamps:

- De-energize (turn off power) by switching the toggle switch to the “OFF” position.
- Using soft cotton gloves, remove the lamps from the UVC unit.
- Wipe lamps with a soft cotton cloth and isopropyl alcohol; allow to dry.
- Replace the lamps.
- Read warnings. Turn on the exterior toggle switch.
- Inspect the lamps from below to ensure all lamps are energized.

Annually – Replace the lamps.

To replace lamps:

- De-energize (turn off power) by switching the toggle switch to the “OFF” position.
- Remove the used lamps from the UVC 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.
- Read warnings, power up fixture. Wear eye and skin protection.
- Inspect lamps to ensure that lamp(s) is/are on/energized.

Service

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

For information call 901-800-1709.

Safety

Personal Protective Equipment

Employees must wear personal protective equipment whenever UVC irradiation 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 UVC systems are activated. Personal Protection Equipment includes:

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

Reporting UV Exposure

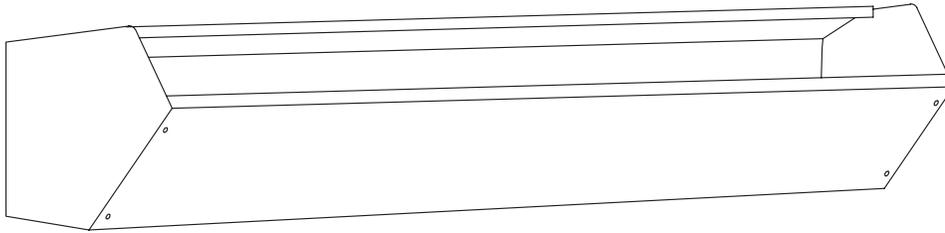
If temporary eye or skin irritation develops after acute exposure to UVC irradiation, contact your supervisor and/or physician.

Material Safety Data Sheets (MSDS)

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

SUBMITTAL DRAWING

GL-218



DIMENSIONS: 24" L. x 7 7/8" EXT. x 4 1/8" H.
FINISHES: ALUMINUM HOUSING & REFLECTOR

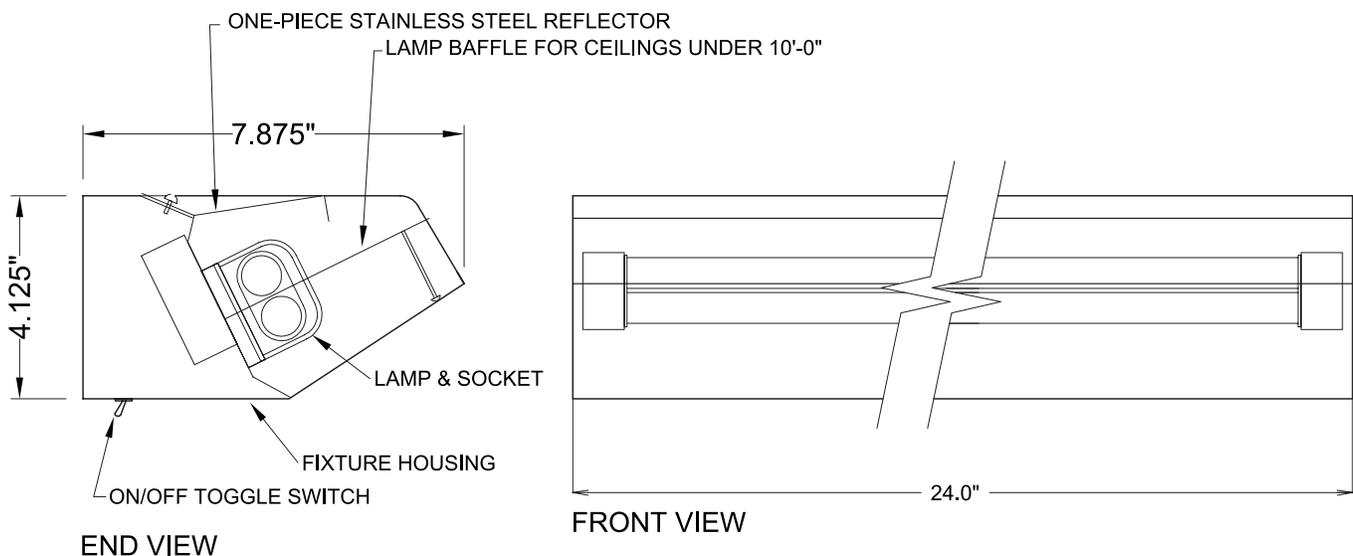
ELECTRICAL REQUIREMENTS: 120V THRU 240V/ 50-60Hz / 0.5A
LAMP: (2) 18W TWIN TUBE UV
UV WATTS: 11 UV WATTS / NOMINAL WATTS: 36 WATTS; 120V/0.29A (MINIMUM) THROUGH 240V/0.13A (MAXIMUM)

MINIMUM CEILING HEIGHT: 9'-0"; CEILINGS LESS THAN 10'-0" REQUIRE LAMP BAFFLE.
SPECIFY ON PURCHASE ORDER

MOUNT NO LOWER THAN 7' 0" ABOVE FINISHED FLOOR.

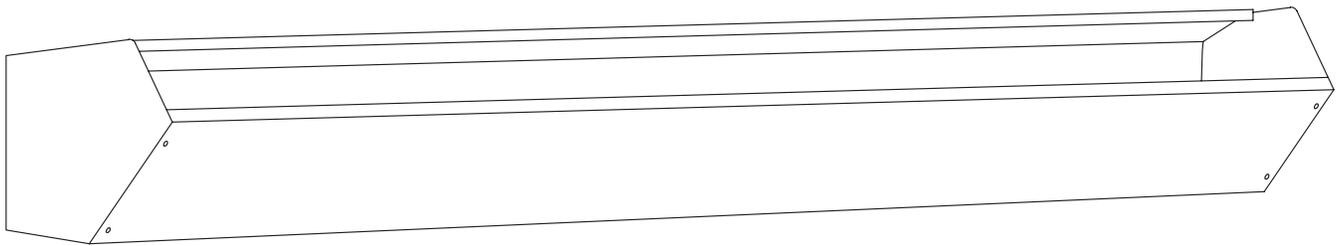
WALL MOUNTED

STANDARD IS HARDWIRED. IF A 6'-0" CORD IS DESIRED, **SPECIFY ON PURCHASE ORDER**



SUBMITTAL DRAWING

GL-418



DIMENSIONS: 40" L. x 7 7/8" EXT. x 4 1/8" H.
 FINISHES: ALUMINUM HOUSING & REFLECTOR

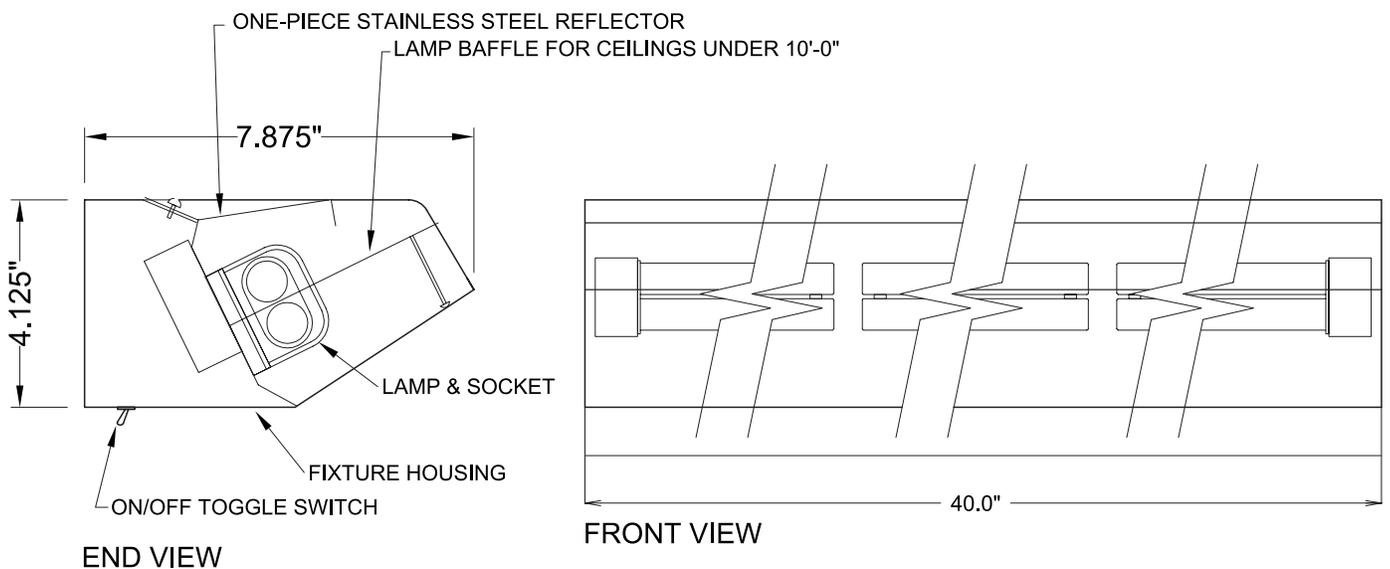
ELECTRICAL REQUIREMENTS: 120V THRU 240V/ 50-60Hz / 0.5A
 LAMP: (4) 18W TWIN TUBE UV
 UV WATTS: 22 UV WATTS / NOMINAL WATTS: 72 WATTS; 120V/0.29A (MINIMUM) THROUGH
 240V/0.13A (MAXIMUM)

MINIMUM CEILING HEIGHT: 9'-0"; CEILINGS LESS THAN 10'-0" REQUIRE LAMP BAFFLE.
SPECIFY ON PURCHASE ORDER

MOUNT NO LOWER THAN 7' 0" ABOVE FINISHED FLOOR.

WALL MOUNTED

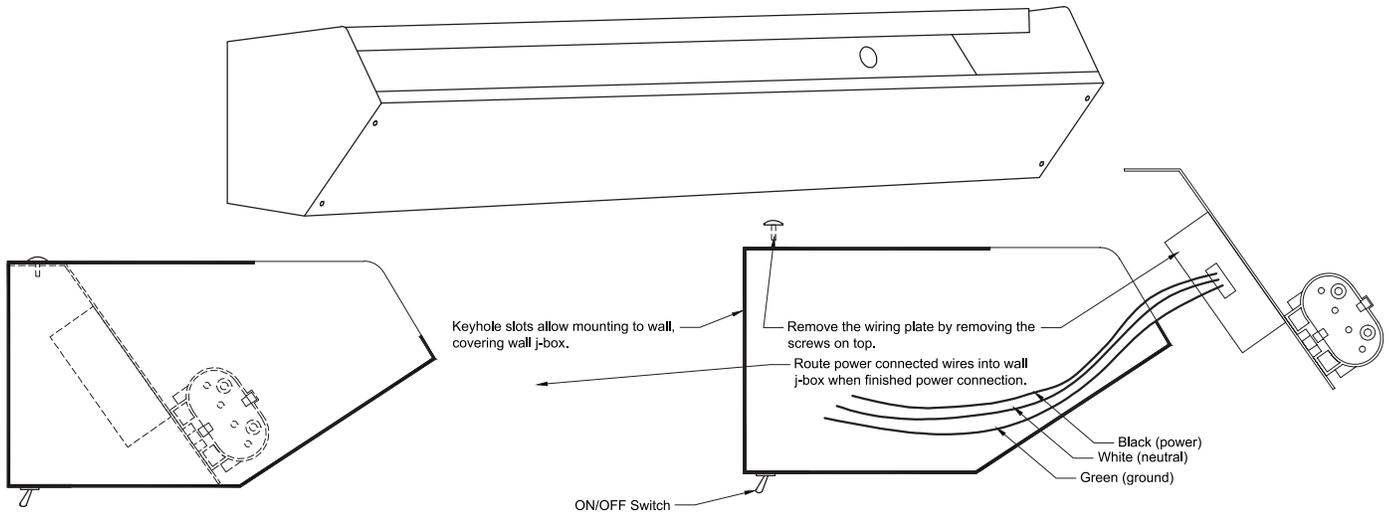
STANDARD IS HARDWIRED. IF A 6'-0" CORD IS DESIRED, **SPECIFY ON PURCHASE ORDER**



GL INSTALLATION

!! 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. DO NOT MOUNT WITH BOTTOM OF FIXTURE BELOW 7'-0" ABOVE FINISHED FLOOR.



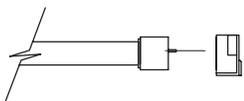
HARDWIRED INSTALLATIONS

1. Disconnect power to fixture location.
2. Be sure that the mounting structure will safely support the entire weight of the fixture so that no immediate or future damage will occur to persons or property. Use keyhole slots in the fixture back to attach fixture to wall using appropriate anchors by others.
3. Remove the wiring tray by unscrewing the 2 screws in top of fixture.
4. Connect house power to fixture following National Electrical Code, local code, & facility code. A licensed electrician is to perform any electrical work. Fixture wiring color code is: black=power(hot), white=neutral, green=ground. Route all 3 wires back into wall j-box.
5. Reinstall reflector, be sure that **ON/OFF** toggle switch is in “**OFF**” position, lamp fixture with 2 each 18W twin-tube UV lamps (included). Use cotton gloves provided to handle lamps. Touching lamps with bare hands does not affect lamp life. Residue left on lamps can reduce UV output. Clean dirty lamps with isopropyl alcohol & soft cloth. **Following UV protective measures**, test fixture.

PLUG-IN INSTALLATIONS

1. Disconnect power to fixture location.
2. Be sure that the mounting structure will safely support the entire weight of the fixture so that no immediate or future damage will occur to persons or property. Use keyhole slots in the fixture back to attach fixture to wall using appropriate anchors by others. No need to remove wiring tray. Use the access hole in the wiring tray to access the keyholes. Cord is 9'-0" long.
3. Ensuring that **ON/OFF** toggle switch is in “**OFF**” position, lamp fixture with 18W twin-tube UV lamps (included). Use cotton gloves provided to handle lamps. Touching lamps with bare hands does not affect lamp life. Residue left on lamps can reduce UV output. Clean dirty lamps with isopropyl alcohol & soft cloth.
4. Plug cord into house power following National Electrical Code, local code, & facility code. A licensed electrician is to perform any electrical work. **Following UV protective measures**, test fixture.

LAMP INSTALLATION



1. Push lamp into socket & lamp clip until it gently snaps in to socket.
2. Insert four pins of lamp into four socket slots.

Troubleshooting Guide

Issue	Probable Cause and Solution
Single lamp flickers	Lamp is not securely seated in the socket. ✓ Remove and securely reseal lamp Lamp is defective or at the end of its life cycle ✓ Replace with new lamp
Two lamps are out	Ballast is possibly defective. NOTE: On most GL units, one ballast is used to power two lamps; if the ballast is defective, two lamps will fail to illuminate. If one lamp is out, the other lamp will not energize. ✓ Check to ensure both lamps are securely seated in their lamp sockets. ✓ 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, send to Lumalier for repair.

NOTES:

To prevent damage to lamps or sockets, follow lamp replacement instructions carefully. Insert the 4 pin base of the lamp into the lamp socket parallel to the reflector and push straight down into socket, push the 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, lifting the free end of lamp out and doing the same to the socket end of lamp. 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 $\leq 5\text{mg}$ of Mercury.

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.

Making sure that the lamp base is between the metal clips in socket, push the lamp base into the lamp socket.

Repeat procedure with each lamp.

