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**Maintenance • Service • Safety  
Recommendations For Lumalier UVGI Air &  
Surface Disinfector  
CM-218**



1931 Thomas Rd.      Bartlett, TN 38134  
[email@evergreenuv.com](mailto:email@evergreenuv.com)      901-800-1709  
EPA Establishment No. 91347-TN-001

# 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 by switching the toggle switch to the “off” position.
- Remove the chrome mesh lamp guard.
- 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.
- Reinstall the chrome mesh lamp guard.
- Turn on the exterior toggle switch. Read warnings.
- Inspect the lamps through a viewing window to insure all lamps are energized.

Annually – Replace the lamps.

To replace lamps:

- De-energize by switching the toggle switch to the “off” position.
- Remove the chrome mesh lamp guard.
- 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.
- Turn on the exterior toggle switch.
- Inspect the lamps through the viewing port to insure all lamps are energized.

# Service

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

## Safety

### Personal Protective Equipment

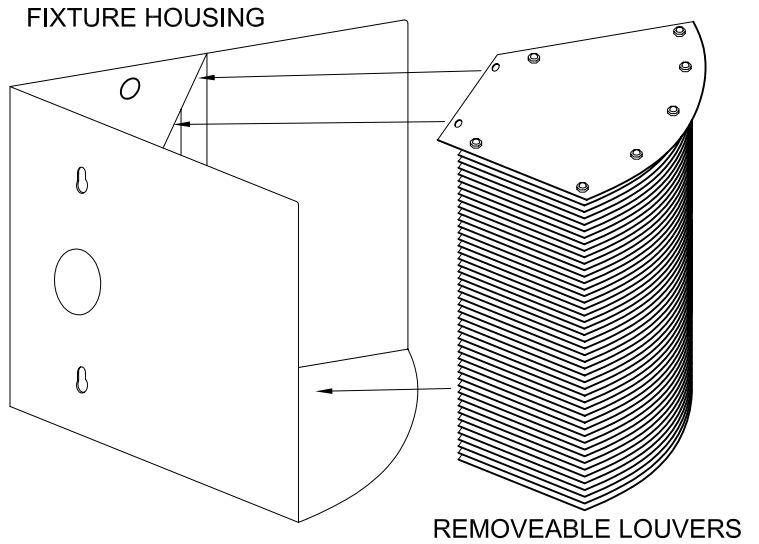
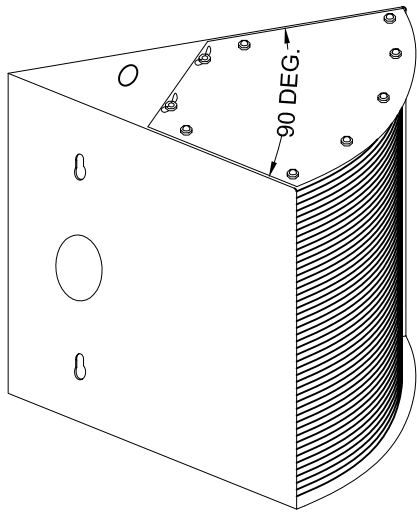
Employees must wear personal protective equipment whenever UV radiation measurements are being made close to the lamp source in order to document lamp output, or when maintenance procedures must be performed in areas where UVGI systems are activated. Personal Protection Equipment includes:

- 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.





DIMENSIONS: 14.25" W. x 10.5" EXT. x 9.0" H.

FINISHES: FLAT BLACK LOUVERS & BEIGE HOUSING

ELECTRICAL REQUIREMENTS: 120V(0.29A) THRU 240V(0.13A)/50-60Hz / 0.5A

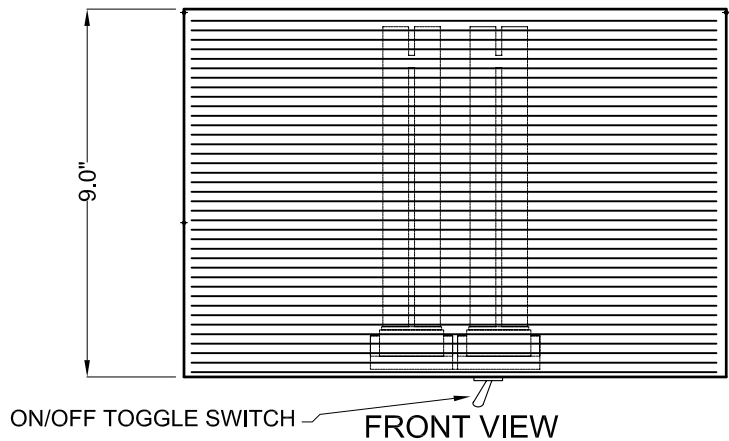
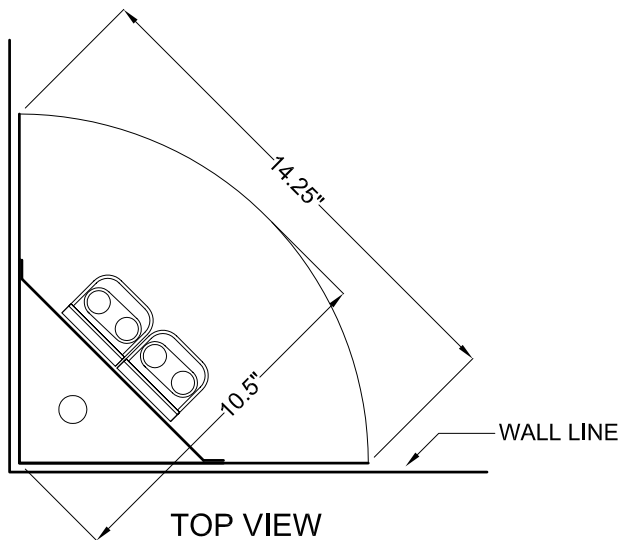
LAMP: (2) 18W TWIN TUBE UV

UV WATTS: 11 UV WATTS; NOMINAL WATTS: 36 WATTS

MINIMUM CEILING HEIGHT: 8' 0"; MOUNT NO LOWER THAN 7' 0" ABOVE FINISHED FLOOR

WALL MOUNTED & REMOVABLE LOUVERS FOR EASE OF MAINTENANCE.

9" OVERALL HEIGHT; ON/OFF TOGGLE SWITCH & INTEGRAL SAFETY SWITCH



REVLVL016MAR2011TJG

**DATA SHEET  
CM-218**



1931 Thomas Rd.  
901-800-1709



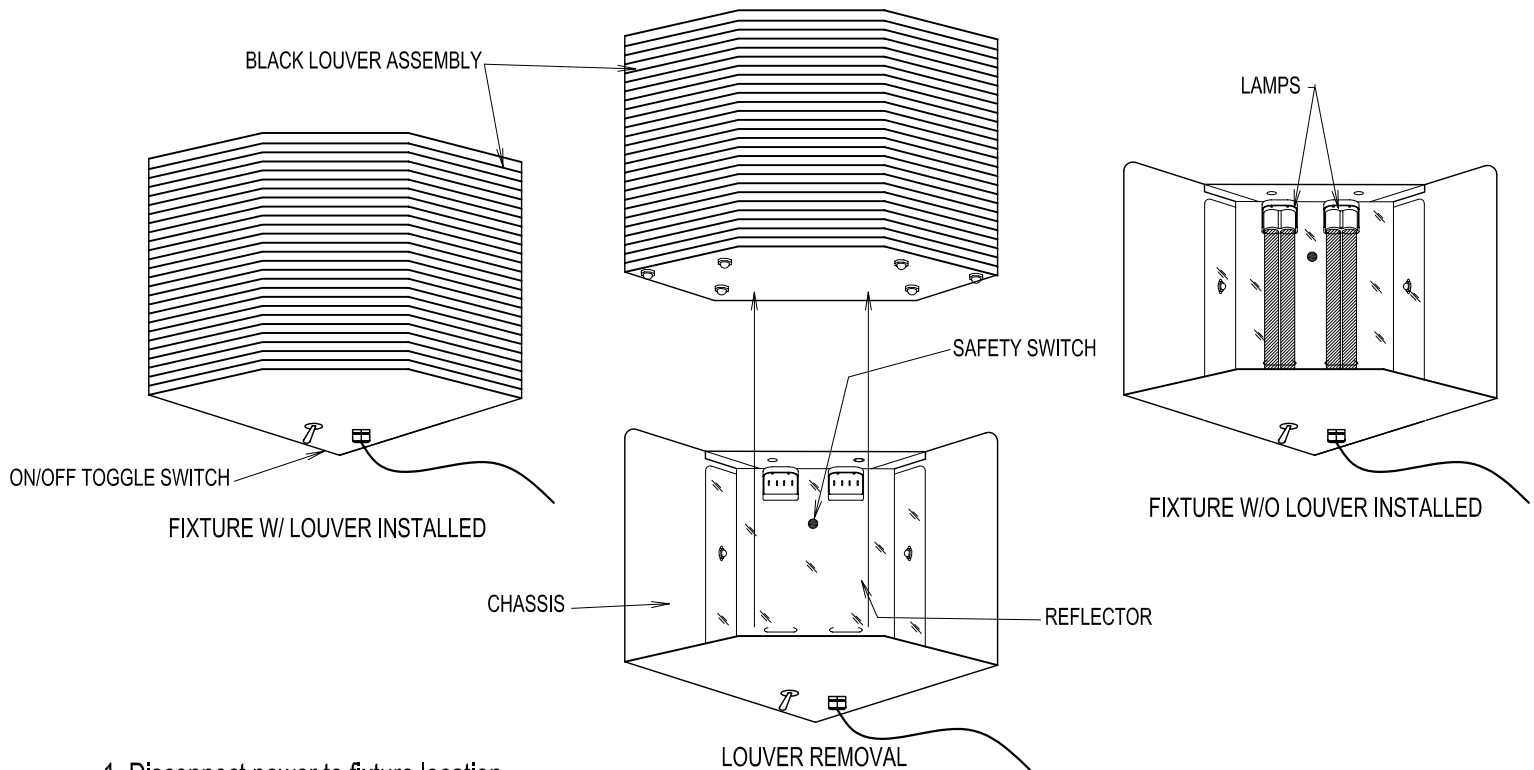
Bartlett, TN 38134  
email@evergreenUV.com

## !! 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. MINIMUM CEILING HEIGHT REQUIRED FOR THIS FIXTURE IS 8'-0".**



1. Disconnect power to fixture location.
2. Remove the louver assembly by unscrewing the top wing nuts & lifting the black louver assembly out of the chassis.
3. Remove reflector by unscrewing the nuts on each side of reflector. Mount fixture chassis in room corner, Insure that the mounting structure will safely support the weight (40lbs.) of the entire fixture. Mount fixture chassis in room corner, no less than 7'-0" from finished floor to bottom of fixture. Mount fixture using the four keyhole slots in chassis, and using appropriate anchors (by others).
4. Reinstall reflector, be sure that ON/OFF toggle switch is in "OFF" position, lamp fixture with 2 each 18W twin-tube UV lamps. Use cotton gloves provided to handle lamps. Touching lamps with bare hands does not effect lamp life. Residue left on lamps can reduce UV output. Clean dirty lamps with isopropyl alcohol & soft cloth.
5. Reinstall louver assembly. Unit will not operate without louvers in place. DO NOT DEFEAT safety switch & activate lamps without louvers in place. Plug cord into 120V grounded outlet. Read caution above & test fixture.

# CM-218 INSTALLATION INSTRUCTIONS



1931 Thomas Rd.  
901-800-1709



Bartlett, TN 38134  
email@evergreenUV.com

CM SERIES PARTS LIST				
	Manufacturer	Part No.	Description	
Ballast	Advance	IUV-2S18-HI-LD	Multi voltage 120 thru 277	CE for 230V; CSA NRTC/C; UL listed 704G
Sockets	Leviton	OG47YO		CSA / UL 75W/600V
Wire	TEWN	18 ga.	Black, white,green, red,blue, yellow	CSA CL1251; AWM3173;
Toggle Switch	Leviton	085-720-134	3A/250V; 6/125V	CSA;
Lamps	Philips	PL-L 18W TUV		UL; CSA
Squeeze Connectors	3M	L501	Drop-down	CSA



## MATERIAL SAFETY DATA SHEET

S06-03001  
Revised: 12/2012

**PRODUCT: TUV Germicidal Lamps**

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### **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

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### **SECTION 2: HAZARDOUS INGREDIENTS**

	OSHA (PEL) mg/m <sup>3</sup>	ACGIH (TLV) mg/m <sup>3</sup> 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.

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### **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.

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#### **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.

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#### **SECTION 5: REACTIVITY DATA**

Stability: Lamp is stable.

Incompatibility: Glass can be attacked by hydrofluoric acid.

Polymerization: Not Applicable.

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#### **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.

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#### **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.

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## **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.

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## **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