

Clean™

by  
CodeLumen Lighting



**AIR 1**

Smart Ultraviolet Germicidal Technology



CL-A1-LIND24-EVO-2PM-01



CL-A1-LIND24-EVO-01



CL-A1-LIND30-EVO-01

## AIR 1 | A1

### Product Description

AIR 1 uses germicidal ultraviolet (UV) wavelengths to continuously disinfect airborne viruses and bacteria, making it safe for people and animals to be around.

Numerous studies show that a wavelength of 254 nanometers (nm) inactivates the DNA and RNA of bacteria, viruses, and other microorganisms thus stopping the pathogens from replicating. That is what AIR 1 uses.

AIR 1's purification technology reduces the risk of cross-infection and exposure of room occupants to the infectious microbes. Its special horizontal louvers project the ultraviolet rays across the upper room air, effectively destroying bacteria and viruses that are carried into the ultraviolet field by convection currents or air circulation.



## Applications

The application of UV-C has been widely accepted since the mid-20th century. AIR 1 produces strong enough UV light in circulating air for application in a wide range of industries, including:



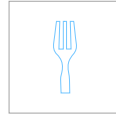
Hospitals / Medical



Universities / Schools



Office Buildings



Food Industry



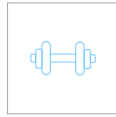
Household



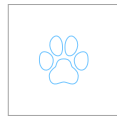
Retail Stores



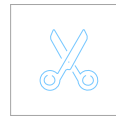
Hospitality / Hotels



Gymnasiums



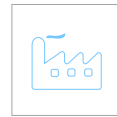
Veterinary Clinics



Beauty Shops



Laboratories



Manufacturing Industry

## Advantages

### Economical

Less power consumption at a time when electricity costs are skyrocketing

### Safe

UV wavelength emitted cannot penetrate human skin

### Fast

Works in seconds to make the room safe for its occupants

### Automatic

Continuously disinfects without requiring any input from your end

### Durable

Made of stainless steel and aluminum to last longer

### Low Maintenance

Annual lamp replacement and periodic cleaning is all that is required.

### Electronic Ballasts

Electronic Ballasts offers these advantages over conventional ballasts:

- Deliver high UV lamp output
- Lightweight
- Operate cool for longer life
- Versatile—each operates a wide range of lamps
- Save energy through high efficiency
- Provide silent operation



**Special Features**

**Wall Mount Indirect Fixture**

CL-A1-LIND24-EVO / CL-A1-LIND30-EVO

**Interlock Safety Switch**

Safeguards field technicians from exposure to ultraviolet wavelengths by automatically disconnecting power to the lamp when the fixture is opened.

**Stainless Steel Construction**

The fixture is made of stainless steel for unparalleled strength, durability, and an attractive finish.

**Polished Reflector**

The device maximizes ultraviolet intensity thanks to its special polished reflector on the interior walls.

**Germicidal Lamp**

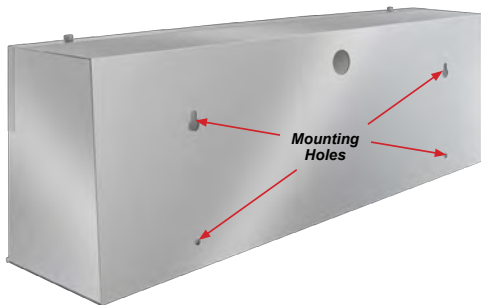
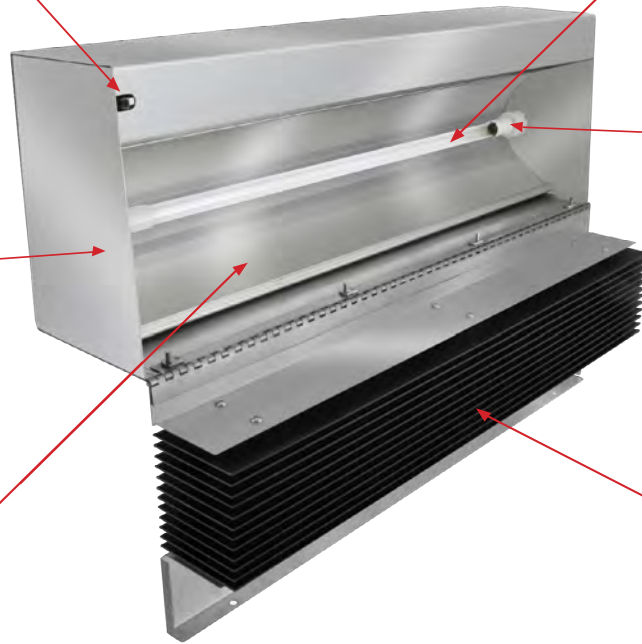
A top-quality automatic lamp that provides sustained output and longevity.

**Lampholder**

The safety of your lamp is assured by the spring-loaded telescopic holder. Conveniently and easily change the lamp thanks to the spring-loaded feature.

**Louvers**

Unique construction to direct ultraviolet rays to the upper portion of the room.



The fixture is to be mounted on a plumb and vertical surface, at a minimum height of 7 feet from the bottom of the fixture to the floor, in a location that must be able to safely support 16 pounds.



**Special Features**

**Pendant Mount Indirect Fixture**

CL-A1-LIND24-EVO-2PM

**Interlock Safety Switch**

Safeguards field technicians from exposure to ultraviolet wavelengths by automatically disconnecting power to the lamp when the fixture is opened.

**Stainless Steel Construction**

The fixture is made of stainless steel for unparalleled strength, durability, and an attractive finish.

**Polished Reflector**

The device maximizes ultraviolet intensity thanks to its special polished reflector on the interior walls.

**Pendant Mount Canopy Set**

**Germicidal Lamp**

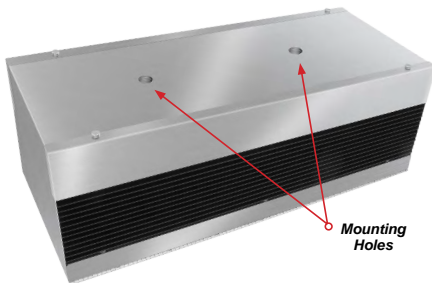
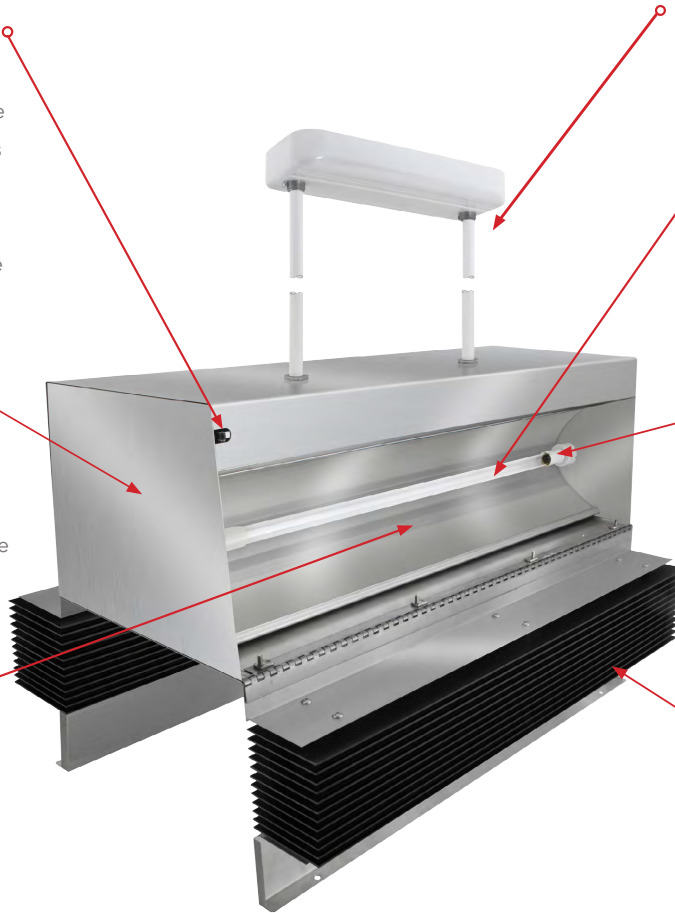
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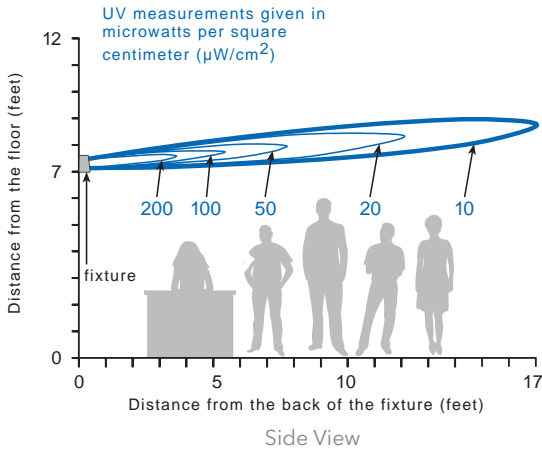


**Mounting Holes**

The fixture is to be mounted at a minimum height of 7 feet from the bottom of the fixture to the floor, in a location that must be able to safely support 32 pounds.



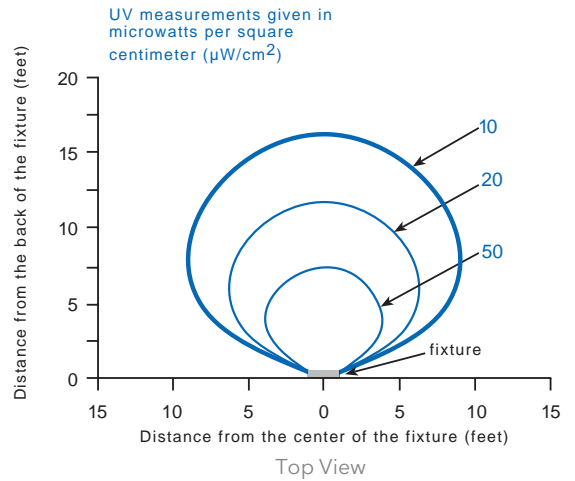
### UV Disinfection Coverage Area



Air 1 UV-C energy at **254 nanometers (nm)** is projected across the upper room air (7 feet height), ensuring the continuous purification.

The degree of inactivation by UV radiation is directly related to its coverage area. The regions on the edges of the coverage are bound to be less inactivated. That is why AIR 1 extends further, from **220 sq.ft. to 320 sq.ft.**

The strength of disinfection minimizes as the UV radiation extend further wide. To cover larger areas, the S1 and S2 models are more appropriate.

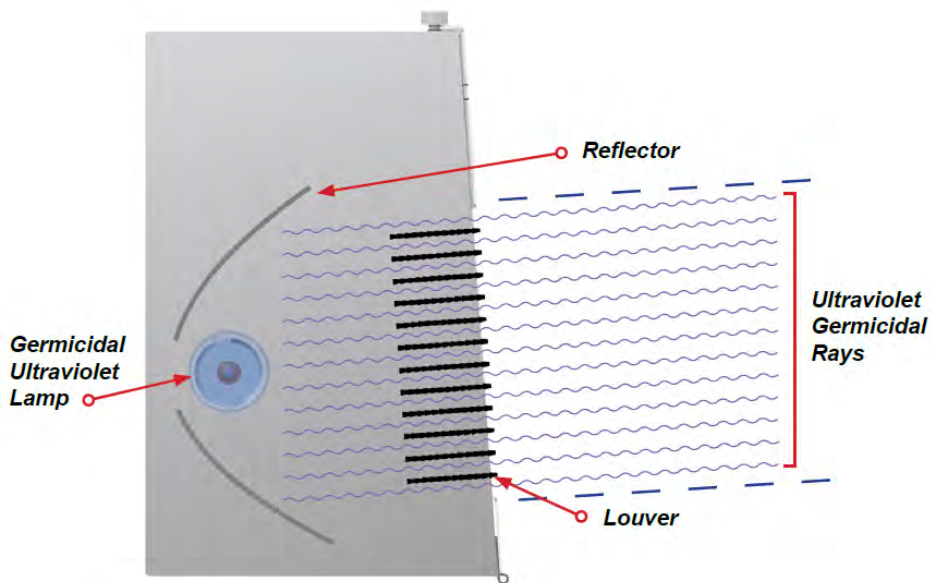


## Principle of operation

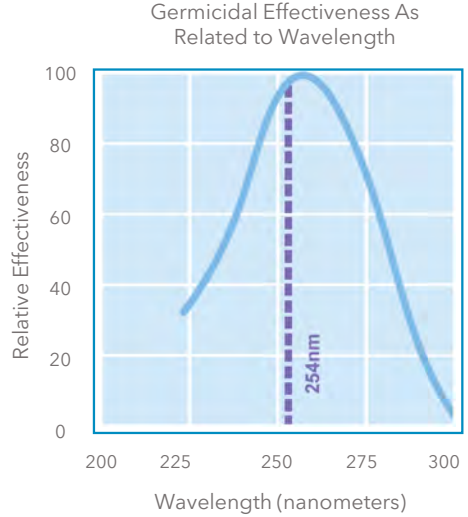
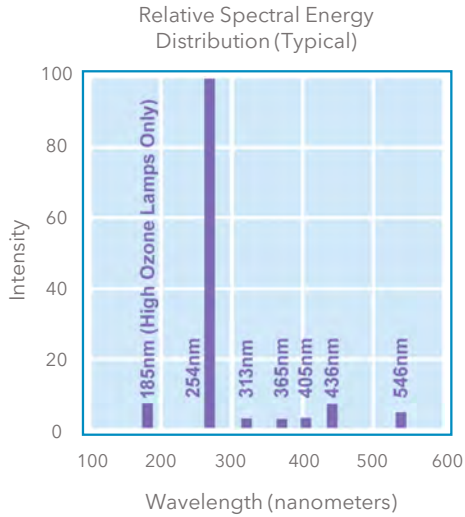
Ultraviolet germicidal irradiation disinfection method uses a wavelength of 254nm to destroy infectious microorganisms' nucleic acid, either killing them or making them unable to perform cellular functions.

Air 1 operates in these three simple steps:

1. Ultraviolet rays project across the upper room air.
2. Microorganisms within the covered area are either inactivated or killed.
3. The automatic feature of the device continuously disinfects the living spaces.



**Operating characteristics**



Germicidal lamps provide effective protection against microorganisms. A small cross-section is shown below.

Organism	Alternate Name	Type	Disease	Dose
Corynebacterium diphtheriae	C. diphtheriae	Bacteria	Diphtheria	6,500
Legionella pneumophila	L. pneumophila	Bacteria	Legionnaire’s Disease	12,300
Mycobacterium tuberculosis	M. tuberculosis	Bacteria	Tuberculosis (TB)	10,000
Pseudomonas aeruginosa	P. aeruginosa	Bacteria		3,900
Serratia Marcescens	S. marcescens	Bacteria		6,160
Staphylococcus aureus	S. aureus	Bacteria		6,600
Staphylococcus epidermidis	S. epidermidis	Bacteria		5,800
Adeno Virus Type III		Virus		4,500
Coxsackie A2		Virus		6,300
Influenza		Virus	Flu	6,600

\*Nominal Ultraviolet dosage ( $\mu\text{WSec}/\text{cm}^2$ ) necessary to inactivate better than 99% of specific microorganism.



### Technical Specifications

Model	Power	UV Power	Voltage	Exterior Housing Dimensions			Rated Average Lamp Life
				Length	Height	Depth	
CL-A1-LIND24-EVO-01	31 W	8.5 W	120 V	24" (609mm)	5-11/32" (118mm)	7-7/8" (155mm)	10,000 Hours
CL-A1-LIND30-EVO-01	37 W	11 W	120 V	30" (762mm)	5-3/8" (117mm)	8-5/16" (195mm)	10,000 Hours
CL-A1-LIND24-EVO-2PM-01	61.4 W	17 W	120 V	24" (609mm)	10-17/32" (240mm)	7-7/8" (155mm)	10,000 Hours
CL-A1-LIND24-EVO-02	31 W	8.5 W	220~240 V	24" (609mm)	5-11/32" (118mm)	7-7/8" (155mm)	10,000 Hours
CL-A1-LIND30-EVO-02	37 W	11 W	220~240 V	30" (762mm)	5-3/8" (117mm)	8-5/16" (195mm)	10,000 Hours
CL-A1-LIND24-EVO-2PM-02	61.4 W	17 W	220~240 V	24" (609mm)	10-17/32" (240mm)	7-7/8" (155mm)	10,000 Hours


- Wattage is Lamp Watts including ballast loss (approximate).
- Output at 254 nanometers at 100 hours and 80 degrees F (approximate).
- Bottom of fixture must be installed at a minimum height of 7 feet above the floor.

### How to order

**CL-A1-**  **-EVO-**  **-**

LIND24                      -                      01

LIND30                      2PM                      02

 **WARNING:** Germicidal ultraviolet rays are harmful to the eyes and skin. Avoid exposure to direct or reflected germicidal ultraviolet rays.



\*Note: Design, features and specifications subject to change without notice. Some features may not be available on all models. For more information please visit us at [www.clumen.com](http://www.clumen.com) or send us an email at [info@clumen.com](mailto:info@clumen.com)

