

# SANITAIRE®

ULTRAVIOLET ROOM AIR SANITIZERS



Model RS72



Model RSM2680



Model RSCS280A

SINCE 1963  
**ATLANTIC U ULTRAVIOLET**  
CORPORATION®

## ABOUT US

Since 1963, Atlantic Ultraviolet Corporation® has pioneered the discovery and development of beneficial uses of ultraviolet energy. Over the years these efforts have led to the

development of valuable, cost effective and environmentally sound techniques and products now known and respected throughout the world.

The UV Application Specialists at Atlantic Ultraviolet Corporation® assist customers in the selection of germicidal lamps and equipment. Their specialized knowledge is a valuable resource in formulating effective and cost-conscious ultraviolet solutions. Extensive inventories and a dedicated staff enable Atlantic Ultraviolet Corporation® to fulfill its commitment to provide fast deliveries and responsive customer service.



## GERMICIDAL ULTRAVIOLET

Ultraviolet is a unique and rapid method of disinfection. It utilizes germicidal ultraviolet lamps producing short-wave radiation at 254 nanometers (nm)—a wavelength that is highly lethal to bacteria, virus, and other microorganisms.

An ever growing range of industries and consumer applications have found ultraviolet to be the ideal solution for their air and surface treatment needs.

Atlantic Ultraviolet Corporation® equipment and systems are manufactured in the USA.



**Model RS140**  
*free standing, wall or ceiling mount  
in occupied areas*



**Model RSCS280A**  
*recessed ceiling mount  
in occupied areas*



**Model RSM2680**  
*mobile, for use in  
occupied areas*

## ADVANTAGES

### **Economical**

System requires very little power to operate.

### **Safe**

No risk of over-exposure.

### **Fast**

Disinfects air in seconds.

### **Easy**

Some models require no installation.

### **Automatic**

Continuous disinfection without special attention.

### **Durable**

Polished Stainless Steel and Aluminum.

### **Versatile**

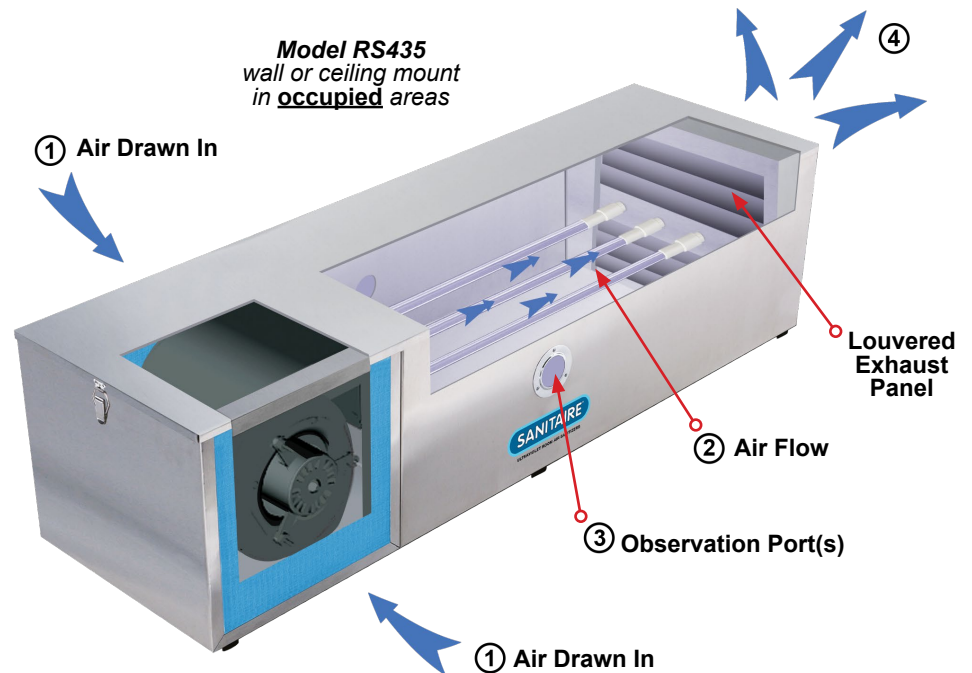
Numerous models available to handle various configurations, some models are relatively portable and can be applied to different **occupied** areas as needed.

### **Low Maintenance**

Annual Lamp replacement and periodic cleaning is required.

## PRINCIPLE OF OPERATION

The **SANITAIRE**<sup>®</sup> design has been carefully conceived to provide adequate germicidal ultraviolet exposure for air disinfection in **occupied** areas. The dosage, as it applies to ultraviolet disinfection, is a function of time, and the intensity, of ultraviolet radiation, to which the air is exposed. Our UV application specialists would be happy to perform the necessary calculations to ensure the model we provide is appropriate for your particular application.



The operation of the **SANITAIRE**<sup>®</sup> is as follows:

- ① Air is drawn into **SANITAIRE**<sup>®</sup> model through the washable electrostatic particulate filters (except Model RSM2680 which utilizes disposable filters).
- ② The air is forced into the ultraviolet exposure chamber where it is irradiated by germicidal ultraviolet light (lamp quantity varies per model).
- ③ Observation Port/Sight Glass provides positive indication of germicidal lamp operation.
- ④ The purified air exits the sanitizer, through the louvered exhaust panel, located at the opposite end of the sanitizer. In the case of the **SANITAIRE**<sup>®</sup> Model RSA760, once through the louvered exhaust panel, air is forced through a .3 micron HEPA filter and finally through an electrostatic particulate filter before exiting the sanitizer into **occupied** areas.

# SPECIAL FEATURES

## SANITAIRE® RS72, RS140, RS435, and RSA760 Free Standing, Wall, or Ceiling Mount Sanitizer

Utilize **SANITAIRE®** Room Air Sanitizers to protect occupants including but not limited to personnel, clients and patients from infection due to airborne microbes, particularly in crowded or poorly ventilated areas, and in situations where the risk of cross infection is high.

**SANITAIRE®** Room Air Sanitizers are germicidal ultraviolet fixtures that effectively destroy airborne microbes including bacteria, mold and virus in enclosed **occupied spaces** and are available in a number of different configurations to adapt to any setting.

**SANITAIRE®** Room Air Sanitizers utilize **STER-L-RAY®** Germicidal Ultraviolet Lamps which are completely enclosed within a stainless steel and reflective aluminum exposure chamber and are safe for use in most applications.

### **STER-L-RAY®** Germicidal Ultraviolet Lamp(s)

Lamp(s) are instant starting and provide the utmost in quality, sustained output, and longevity. (See page 11 for more information.)

### Interlock Safety Switch

The interlock safety switch is a standard feature that disconnects power to the model when the access panel is unhinged for lamp or filter replacement (located under the cover).

### Surelite™ Ballast(s)

State-of-the-art electronic ballast specifically developed for the operation of ultraviolet lamps. Versatile ballast provides high lamp output; is lightweight, efficient, and operates cool for longer life.

### Stainless Steel Enclosure

Manufactured in Type 304 stainless steel for unparalleled strength, durability, and an attractive finish.



### Promate™ Particulate Filter(s)

- Washable Electrostatic Filter (on all models)
- Absolute Filter - HEPA Type (on Model RSA760)



### Promate™ Standard Wall Mount Kit

Consists of (2) pre-drilled stainless steel brackets. Brackets enable model to be mounted to wall in either the vertical or horizontal position (included).

### Steadfast™ Lampholders

Set includes a stationary and a spring-loaded, telescopic holder that holds a single pin lamp securely. The spring-loaded feature on one end facilitates convenient, quick and easy lamp changes.

### Louvered Exhaust Panel

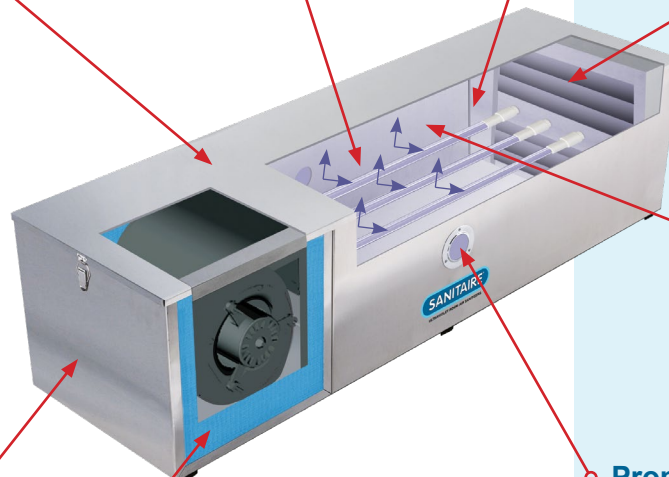
Protects the room's occupants from ultraviolet exposure by restricting ultraviolet radiation from passing into the room.

### Polished Reflector

Interior surface is polished providing a highly reflective surface to maximize ultraviolet intensity within the chamber.

### Promate™ Observation Port/ Sight Glass Assembly

A Sight Glass Assembly allows for visual inspection of the lamp(s).



**Model RS435**

(See page 10 for Optional Accessories)

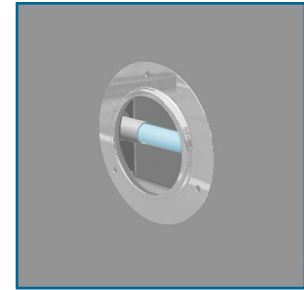
# INSTALLATION



**Figure 1 – SANITAIRE® RS140** (shown) For maximum efficiency the **SANITAIRE®** should be located as centrally as possible, preferably not close to the floor or the corners of the **occupied** area to be treated.

The louvered exhaust panel, of the **SANITAIRE®** Room Air Sanitizer, restricts ultraviolet radiation from passing into the room, protecting the room's occupants from ultraviolet exposure.

**RS72, RS140, RS435** and **RSA760** are commonly installed utilizing wall mounting brackets included with purchase. See page 10 for optional mounting brackets.



**Promate™ Observation Port/  
Sight Glass Assembly**

A Sight Glass Assembly allows for visual inspection of the lamp(s).

## SPECIFICATIONS—SANITAIRE® RS72, RS140, RS435, AND RSA760 SANITIZER

Model	Nominal Model Capacity (cubic feet / minute) ①	Dimensions			Electrical Requirements* (amps) ②	Max. Room Size Treated at 3 Room Air Changes/Hour (cubic feet)	Max. Room Size Treated at 6 Room Air Changes/Hour (cubic feet)	Max. Treatment Capacity (cubic feet / hour)
		Length	Width	Height				
RS72	54	34-1/2"	7-3/4"	7-3/4"	1.25	1,080	540	3,240
RS140	105	34-1/2"	7-3/4"	7-3/4"	2.30	2,100	1,050	6,300
RS435	326	47-5/16"	14"	12"	4.52	6,525	3,263	19,575
RSA760	380	61"	14"	12"	5.65	7,600	3,800	22,800

① Model capacity incorporates an estimated allowance for airflow friction loss across filter and model.

② Information listed refers to 120 Volt 60 Hz models. Contact factory for specifics on other voltages.

\* Consult factory with specific power requirements.

## GENUINE **STER-L-RAY®** GERMICIDAL LAMP DATA

Model	Lamp No. (Quantity)	Lamp Length	Lamp Length (including lampholders)	Power ① Consumption	Ultraviolet Output (per lamp) ②	Rated Average Effective Life
RS72	05-1348-R (1)	21-7/8" (556 mm)	24"	30.7 Watts	8.5 Watts	10,000 Hours
RS140	05-1348-R (2)	21-7/8" (556 mm)	24"	61.4 Watts	8.5 Watts	10,000 Hours
RS435	05-1352-R (4)	27-7/8" (708 mm)	30"	153.6 Watts	11.2 Watts	10,000 Hours
RSA760	05-1352-R (4)	27-7/8" (708 mm)	30"	153.6 Watts	11.2 Watts	10,000 Hours

① Wattage is Lamp Watts and ballast loss (approximate). ② Output at 254 nanometers at 100 hours and 80° F (approximate).



# SPECIAL FEATURES

## SANITAIRE® RSCS280A Recessed Ceiling Mount Sanitizer

Utilize **SANITAIRE®** Room Air Sanitizers to protect occupants including but not limited to personnel, clients and patients from infection due to airborne microbes, particularly in crowded or poorly ventilated areas, and in situations where the risk of cross infection is high.

**SANITAIRE®** Room Air Sanitizers are germicidal ultraviolet fixtures that effectively destroy airborne microbes including bacteria, mold and virus in enclosed spaces and are available in a number of different configurations to adapt to any setting.

**SANITAIRE®** Room Air Sanitizers utilize **STER-L-RAY®** Germicidal Ultraviolet Lamps which are completely enclosed within a stainless steel and reflective aluminum exposure chamber and are safe for use in every application.

### STER-L-RAY® Germicidal Ultraviolet Lamps

Lamps are instant starting and provide the utmost in quality, sustained output, and longevity.  
(See page 11 for more information.)

### Steadfast™ Lampholders

Set includes a stationary holder that holds a four pin lamp securely.

### Surelite™ Ballasts

State-of-the-art electronic ballasts specifically developed for the operation of ultraviolet lamps. Versatile ballasts provide high lamp output; are lightweight, efficient, and operate cool for longer life.

### Lamp Operation Indicators

(LEDs) Provide positive indication of each germicidal lamp operation.

### Stainless Steel Enclosure

Manufactured in Type 304 stainless steel for unparalleled strength, durability, and an attractive finish.



### Promate™ Particulate Filter

Washable Electrostatic Filter

### Steadfast™ Lampholders

Set includes a stationary holder that holds a four pin lamp securely.

### Louvered Exhaust Panel

Protects the room's occupants from ultraviolet exposure by restricting ultraviolet radiation from passing into the room.

### Polished Reflector

Interior surface is polished providing a highly reflective surface to maximize ultraviolet intensity within the chamber.



**Model RSCS280A**

(See page 10 for Optional Accessories)

### Interlock Safety Switch

The interlock safety switch is a standard feature that disconnects power to the model when the access panel is unhinged for lamp or filter replacement (located under the cover).

# INSTALLATION



**Figure 2** – The **SANITAIRE® Model RSCS280A** (shown) is recommended for use in rooms with suspended “T-Bar” ceilings. Professional installation recommended.

## SPECIFICATIONS—SANITAIRE® RSCS280A RECESSED CEILING MOUNT SANITIZER

Model	Nominal Model Capacity (cubic feet / minute) ①	Dimensions			Electrical Requirements* (amps) ②	Max. Room Size Treated at 3 Room Air Changes/Hour (cubic feet)	Max. Room Size Treated at 6 Room Air Changes/Hour (cubic feet)	Max. Treatment Capacity (cubic feet / hour)
		Length	Width	Height				
RSCS280A	210	46-5/8"	22-1/8"	9-7/16"	4.2	4,200	2,100	12,600

① Model capacity incorporates an estimated allowance for airflow friction loss across filter and model.

② Information listed refers to 120 Volt 60 Hz models. Contact factory for specifics on other voltages.

\* Consult factory with specific power requirements.

## GENUINE **STER-L-RAY®** GERMICIDAL LAMP DATA

Model	Lamp No. (Quantity)	Lamp Length	Lamp Length (including lampholders)	Power ① Consumption	Ultraviolet Output (per lamp) ②	Rated Average Effective Life
RSCS280A	05-0497 (4)	27-7/8" (708 mm)	30"	153.6 Watts	11.2 Watts	10,000 Hours

① Wattage is Lamp Watts and ballast loss (approximate).

② Output at 254 nanometers at 100 hours and 80° F (approximate).

# SPECIAL FEATURES

## SANITAIRE® RSM2680 Mobile Air Sanitizer

Utilize **SANITAIRE®** Room Air Sanitizers to protect occupants including but not limited to personnel, clients and patients from infection due to airborne microbes, particularly in crowded or poorly ventilated areas, and in situations where the risk of cross infection is high.

**SANITAIRE®** Room Air Sanitizers are germicidal ultraviolet fixtures that effectively destroy airborne microbes including bacteria, mold and virus in enclosed **occupied** spaces and are available in a number of different configurations to adapt to any setting.

**SANITAIRE®** Room Air Sanitizers utilize **STER-L-RAY®** Germicidal Ultraviolet Lamps which are completely enclosed within a stainless steel exposure chamber and are safe for use in every application.

### **STER-L-RAY®** Germicidal Ultraviolet Lamps

Lamps are instant starting and provide the utmost in quality, sustained output, and longevity. (See page 11 for more information.)

### **Surelite™** Ballasts

State-of-the-art electronic ballasts specifically developed for the operation of ultraviolet lamps. Versatile ballasts provide high lamp output; are lightweight, efficient, and operate cool for longer life.

### **Steadfast™** Lampholders

Set includes a stationary and a spring-loaded, telescopic holder that holds a single pin lamp securely. The spring-loaded feature on one end facilitates convenient, quick and easy lamp changes.

### **Interlock Safety Switch**

The interlock safety switch is a standard feature that disconnects power to the model when the access panel is unhinged for lamp or filter replacement (located under the cover).

### **Polished Reflector**

Interior surface is polished providing a highly reflective surface to maximize ultraviolet intensity within the chamber.



**Model RSM2680**

(See page 10 for Optional Accessories)

### **Louvered Exhaust Panel**

Protects the room's occupants from ultraviolet exposure by restricting ultraviolet radiation from passing into the room.

### **Lamp Operation Indicators**

(LEDs) Provide positive indication of each germicidal lamp's operation.

### **Stainless Steel Enclosure**

Manufactured in Type 304 stainless steel for unparalleled strength, durability, and an attractive finish.

### **Promate™ Disposable Filters**

Cost effective, disposable filters for frequent filter changes.

### **Differential Air Pressure Gauge**

Used to measure filter resistance by measuring the pressure differential between outside (the fixture) air and the pressure in the blower compartment helping to indicate when filter replacement is required.

### **3-Position Power Switch**

Power to the fixture is controlled by a three position key switch. In the "BLOWER ONLY" position, power is supplied to just the blower and no power is supplied to the germicidal lamps. In the "LAMPS & BLOWER" position, power is supplied to both the blower and the germicidal lamps.



# INSTALLATION



**Figure 3 – SANITAIRE® RSM2680** (shown) The Model RSM2680 Room Air Sanitizer is mobile, and requires no professional installation. Simply roll the fixture into the **occupied** area to be treated, and plug into an appropriate power source. When in operation, air is drawn into the fixture through the four louvered Filter Panels, located around the base of the fixture. The air passes into the exposure chamber, where it is irradiated by twelve (12) **STER-L-RAY®** Germicidal Ultraviolet Lamps. The air then passes out of the fixture, through the louvered Exhaust Panel, located on the top of the fixture.

The Louvered Exhaust Panel of the fixture protects the room's occupants from ultraviolet exposure, by restricting ultraviolet radiation from passing into the **occupied** room.

## SPECIFICATIONS—SANITAIRE® RSM2680 MOBILE AIR SANITIZER

Model	Nominal Model Capacity (cubic feet / minute) ①	Dimensions			Electrical Requirements* (amps) ②	Max. Room Size Treated at 3 Room Air Changes/Hour (cubic feet)	Max. Room Size Treated at 6 Room Air Changes/Hour (cubic feet)	Max. Treatment Capacity (cubic feet / hour)
		Length	Width	Height				
RSM2680	2000	32"	30"	78-3/4"	11.00	40,000	20,000	120,000

① Model capacity incorporates an estimated allowance for airflow friction loss across filter and model.

② Information listed refers to 120 Volt 60 Hz models. Contact factory for specifics on other voltages.

\* Consult factory with specific power requirements.

## GENUINE **STER-L-RAY®** GERMICIDAL LAMP DATA

Model	Lamp No. (Quantity)	Lamp Length	Lamp Length (including lampholders)	Power ① Consumption	Ultraviolet Output (per lamp) ②	Rated Average Effective Life
RSM2680	05-1334-R (12)	45-7/8" (1165 mm)	48"	792 Watts	21.0 Watts	10,000 Hours

① Wattage is Lamp Watts and ballast loss (approximate).

② Output at 254 nanometers at 100 hours and 80° F (approximate).

## OPTIONAL ACCESSORIES



### SENTINEL® Remote Lamp Indicator\*

The SENTINEL® Remote Lamp Indicator monitors lamp operation of one, two, or four lamp ultraviolet fixtures and is available with a 25, 50 or 100 foot cable. (Available for ALL SANITAIRE® models, except for RSM2680, at the time of purchase. SENTINEL® output connector needs to be installed for easy plug-in and operation.)



### Zenith™ UV-C Detector

The Zenith™ UV-C Detector is a sensitive hand-held, self-contained battery operated ultraviolet meter that can be used for:

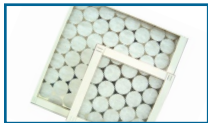
- Monitoring UV-C Germicidal Lamp Intensity & Aging
- Measuring UV-C Germicidal Fixture Leakage

(Available for ALL SANITAIRE® models.)



### ArmorLite™ Safety Shield

Protective coating applied to **STER-L-RAY®** Germicidal Lamps ensures protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps. (Lamp on right has ArmorLite™ coating. Available for **STER-L-RAY®** Lamps used in ALL SANITAIRE® models at the time of purchase. The coating is installed at the factory.)



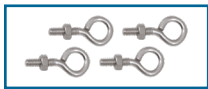
### Promate™ Disposable Filters

Cost effective, filters for use when frequent filter changes are necessary. (Available for ALL SANITAIRE® models.)



### Promate™ Optional Wall Mount Kit

Consists of (2) pre-drilled stainless steel brackets. Brackets are designed to provide a more aesthetic look for the installation while allowing model to be mounted to the wall in a horizontal position. (Available for SANITAIRE® Model RS72, RS140, RS435 and RSA760.)



### Promate™ Ceiling Mount Kit

Consists of (4) eye bolts used to suspend model from ceiling. (Available for SANITAIRE® Model RS72, RS140, RS435 and RSA760.)



### Promate™ Integral Elapsed Time Indicator\*

The Elapsed Time Indicator is a real-time, non-resettable display of accumulated operating time. Useful for scheduling and recording maintenance and lamp replacement. (Available for ALL SANITAIRE® models.)



### Promate™ Integral Key Lock Switch\*

The Key Lock Switch will ensure tamper proof operation in either ON or OFF position. (Available for ALL SANITAIRE® models.)



### Promate™ Safety Glasses

Safety eyewear should be used as general-purpose safety protection and for additional shielding from germicidal ultraviolet rays.



### Promate™ Face Shield

Lightweight visor with adjustable headgear provides eye and face protection from germicidal ultraviolet rays.

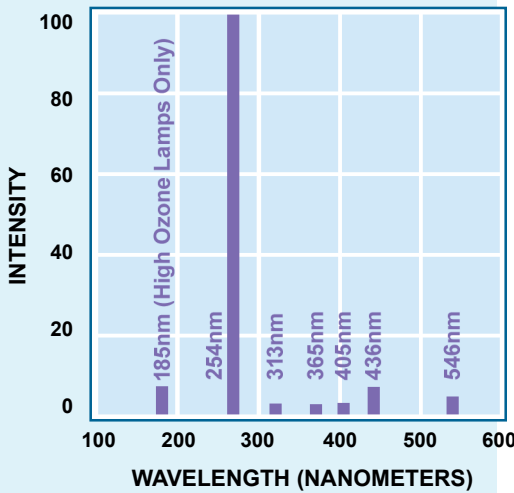
## APPLICATIONS

- Office Buildings
- Waiting Rooms
- Laboratories
- Hospitals
- Clinics
- Maternity Areas
- Labor & Delivery Areas
- Pathology Labs
- Kidney Dialysis Labs
- Operating Rooms
- Methadone Clinics
- Burn Centers
- TB Clinics
- Homeless Shelters
- Prisons & Jails
- Detention Centers
- Nursing Homes
- Universities
- Schools
- Veterinary Clinics
- Animal Husbandry
- Kennels
- Food Industry
- Food Processing
- Dairy Processing
- Bakeries
- Auditorium
- Conference Rooms
- Ballrooms
- Gymnasiums
- Clean Rooms
- Pharmaceutical Mfg.
- Electronic Production
- Cosmetic Production
- Plus Countless Other Facilities

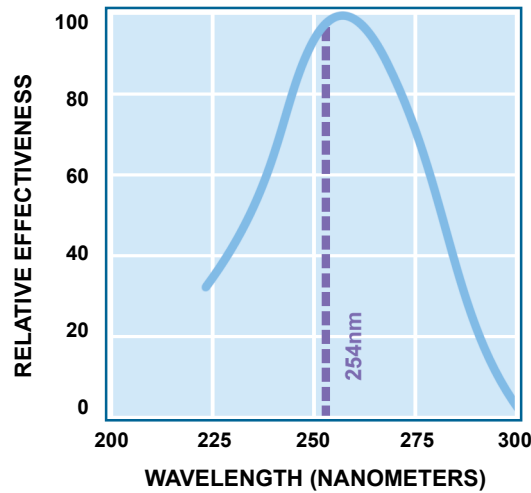
\* Item must be ordered at same time as SANITAIRE® Room Air Sanitizer (installed at factory).

# GENUINE *STER-L-RAY*® GERMICIDAL LAMPS

Relative Spectral Energy Distribution (Typical)



Germicidal Effectiveness As Related to Wavelength



***STER-L-RAY*® Germicidal Lamps** are shortwave, low pressure tubes that produce ultraviolet wavelengths lethal to microorganisms. Approximately 95% of the ultraviolet energy emitted from ***STER-L-RAY*®** germicidal lamps is at 254 nanometers, the region of germicidal effectiveness most destructive to bacteria, mold and virus.

***STER-L-RAY*®** and the ***STER-L-RAY*®** logo are trademarks of Atlantic Ultraviolet Corporation.

**CAUTION:** Exposure to direct or reflected germicidal ultraviolet rays will cause painful eye irritation and reddening of the skin. Personnel subject to such exposure must wear suitable face shield, gloves and protective clothing.

Hg – LAMP CONTAINS MERCURY, manage in accord with disposal laws, see: LampRecycle.org.

## ULTRAVIOLET DOSAGE

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


ORGANISM	ALTERNATE NAME	TYPE	DISEASE	DOSE*
<i>Corynebacterium diphtheriae</i>	<i>C. diphtheriae</i>	Bacteria	Diphtheria	6,500
<i>Legionella pneumophila</i>	<i>L. pneumophila</i>	Bacteria	Legionnaire's Disease	12,300
<i>Mycobacterium tuberculosis</i>	<i>M. tuberculosis</i>	Bacteria	Tuberculosis (TB)	10,000
<i>Pseudomonas aeruginosa</i>	<i>P. aeruginosa</i>	Bacteria		3,900
<i>Serratia Marcescens</i>	<i>S. marcescens</i>	Bacteria		6,160
<i>Staphylococcus aureus</i>	<i>S. aureus</i>	Bacteria		6,600
<i>Staphylococcus epidermidis</i>	<i>S. epidermidis</i>	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. Consult factory for more complete listing.

*The Standard of Excellence In Ultraviolet*



*Manufacturers / Engineers / Sales / Service* – Germicidal Ultraviolet - Equipment & Lamps

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