ULTRAVIOLET ROOM AIR SANITIZER

Model RS

Model RSM

Model RSCS

ADVANTAGES

Economical
System requires very little power to operate.

Safe
No risk of over-exposure.

Fast
Disinfects air in seconds.

Easy
Simple installation and maintenance.

Automatic
Continuous disinfection without special attention.

Durable
Polished Stainless Steel and Aluminum.

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

Low Maintenance
Annual Lamp replacement and periodic cleaning is all that is required.

PRINCIPLE OF OPERATION

The **Sanitaire**® 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 unit we provide is appropriate for your particular application.
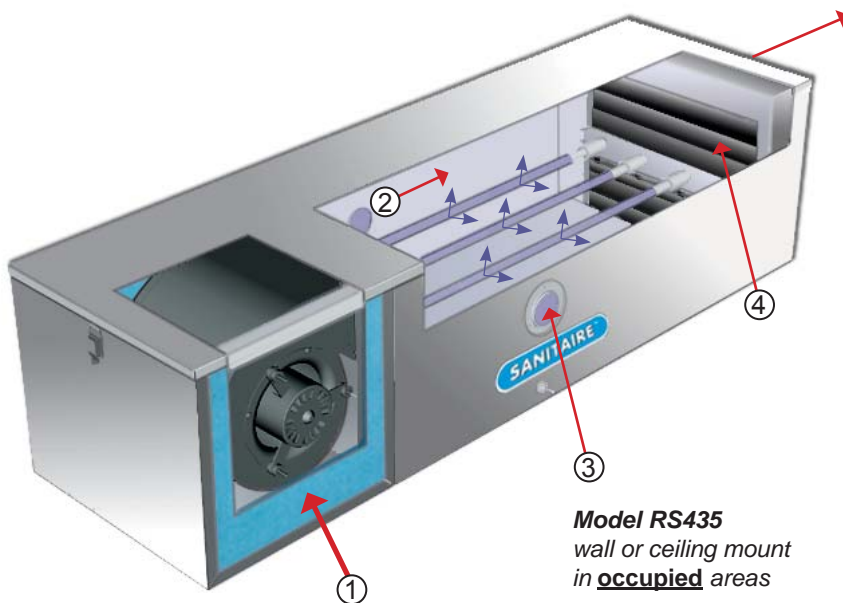
Model RS435
*wall or ceiling mount
in **occupied** areas*

The operation of the **Sanitaire**® is as follows:

① Air is drawn into **Sanitaire**® unit 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**® *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.

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 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® Slimline Germicidal Lamp(s)
Lamp(s) 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 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.
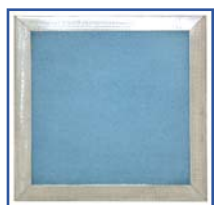
Interlock Safety Switch
The interlock safety switch is a standard feature that disconnects power to the unit when the access panel is unhinged for lamp or filter replacement (located under the cover).
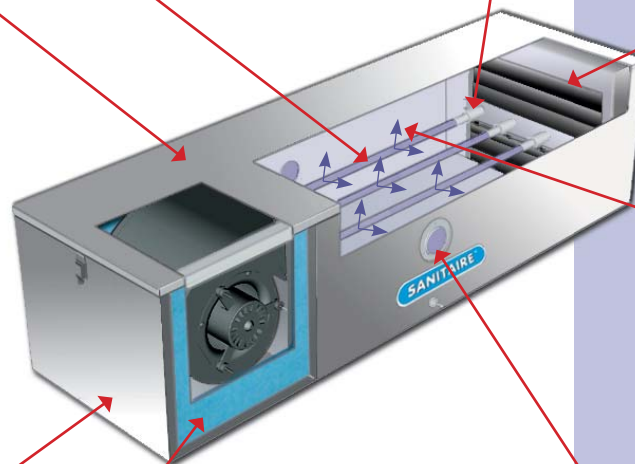
Louvers Exhaust Panel
Protects the room's occupants from ultraviolet exposure by restricting ultraviolet radiation from passing into the room.

Surelite™ Ballast
State-of-the-art electronic ballast(s) specifically developed for the operation of ultraviolet lamps. Versatile, instant start ballast(s) provides higher lamp output; is smaller, lighter, more efficient and operates cooler than magnetic ballasts.

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

Model RS435

(see page 10 for Optional Accessories)
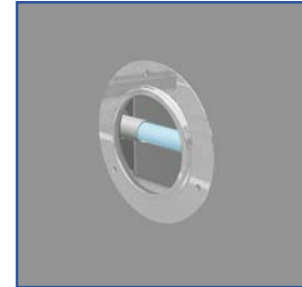
Observation Port/Sight Glass Assembly
A Sight Glass Assembly allows for visual inspection of the lamp(s).

Stainless Steel Enclosure
The unit is manufactured in Type 304 stainless steel for unparalleled strength, durability and an attractive finish.

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

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

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.

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 ① Unit Capacity (cubic feet per minute)	Dimensions			Electrical * ② Requirements (amp)	Max. Room Size Treated @ 3 Room Air Changes/Hour (cubic feet per hour)	Max. Room Size Treated @ 6 Room Air Changes/Hour (cubic feet per hour)	Max. Treatment Capacity (cubic feet per 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 Unit capacity incorporates an estimated allowance for airflow friction loss across filter and unit.
② Information listed refers to 120 Volt 60 Hz units. 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 Consumption ①	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
RS140	05-1348-R (2)	21-7/8" (556 mm)	24"	61.4 Watts	8.5 Watts	10,000
RS435	05-1352-R (4)	27-7/8" (708 mm)	30"	153.6 Watts	11.2 Watts	10,000
RSA760	05-1352-R (4)	27-7/8" (708 mm)	30"	153.6 Watts	11.2 Watts	10,000

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

Sanitaire® RSCS280 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 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® Slimline Germicidal 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 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.

Surelite™ Ballast
State-of-the-art electronic ballasts specifically developed for the operation of ultraviolet lamps. Versatile, instant start ballasts provide higher lamp output; are smaller, lighter, more efficient and operate cooler than magnetic ballasts.

Louvers 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 operation.

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

Model RSCS280

(see page 10 for Optional Accessories)

Stainless Steel Enclosure
The unit is manufactured in Type 304 stainless steel for unparalleled strength, durability and an attractive finish.
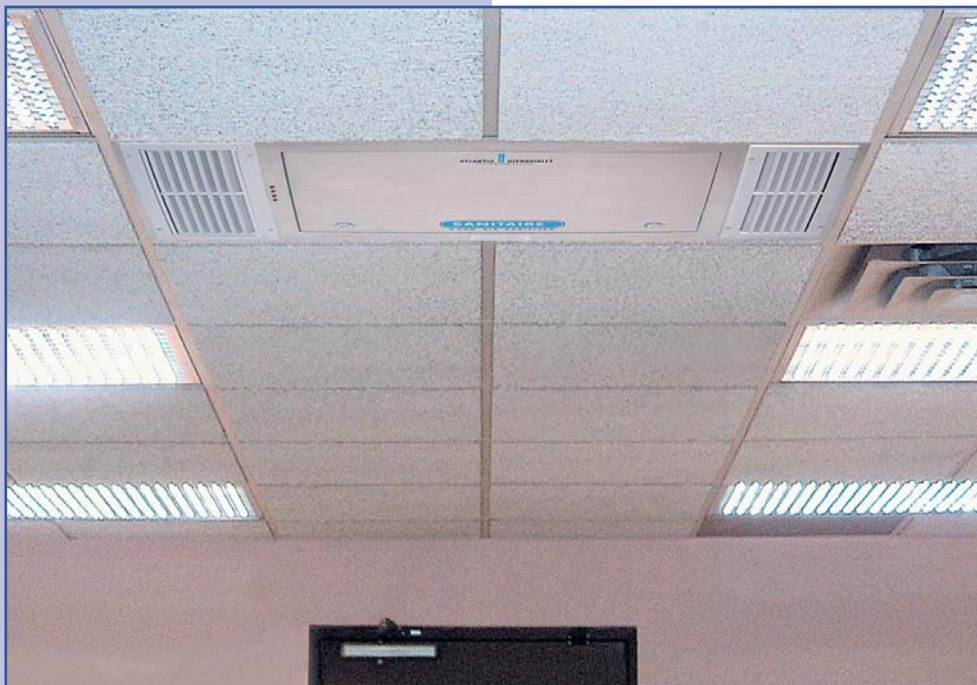
Interlock Safety Switch
The interlock safety switch is a standard feature that disconnects power to the unit when the access panel is opened allowing for lamp replacement or other maintenance.

Particulate Filter
Washable Electrostatic Filter

Figure 2 - The **Sanitaire®** **Model RSCS280** (shown) is recommended for use in rooms with suspened "T-Bar" ceilings. Professional installation recommended.

SPECIFICATIONS - Sanitaire® RSCS280 Recessed Ceiling Mount Sanitizer

Model	Nominal ① Unit Capacity (cubic feet per minute)	Dimensions			Electrical * ② Requirements (amp)	Max. Room Size Treated @ 3 Room Air Changes/Hour (cubic feet per hour)	Max. Room Size Treated @ 6 Room Air Changes/Hour (cubic feet per hour)	Max. Treatment Capacity (cubic feet per hour)
		Length	Width	Height				
RSCS280	210	46-5/8"	22-1/8"	9-7/16"	4.4	4,200	2,100	12,600

① Unit capacity incorporates an estimated allowance for airflow friction loss across filter and unit.
② Information listed refers to 120 Volt 60 Hz units. 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
RSCS280	05-1352-R (4)	27-7/8" (708 mm)	30"	153.6 Watts	11.2 Watts	10,000

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

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 lamps which are completely enclosed within a stainless steel exposure chamber and are safe for use in every application.

STER-L-RAY® Slimline Germicidal Lamps
Lamps are instant starting and provide the utmost in quality, sustained output and longevity. (see page 11 for more information)

Surelite™ Ballast
State-of-the-art electronic ballasts specifically developed for the operation of ultraviolet lamps. Versatile, instant start ballasts provide higher lamp output; are smaller, lighter, more efficient and operate cooler than magnetic ballasts.

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.

Interlocked Safety Switch
The interlock safety switch is a standard feature that disconnects power to the unit when the access panel is removed for lamp replacement or other maintenance.

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)

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

Stainless Steel Enclosure
The unit is manufactured in Type 304 stainless steel for unparalleled strength, durability and an attractive finish.

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.

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

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

① Unit capacity incorporates an estimated allowance for airflow friction loss across filter and unit.
② Information listed refers to 120 Volt 60 Hz units. 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

① Wattage is Lamp Watts and ballast loss (approximate).
② Output at 254 nanometers at 100 hours and 80 degrees 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**® units except for RSM2680, at the time of purchase, **Sentinel**™ output connector needs to be installed for easy plug-in and operation.)
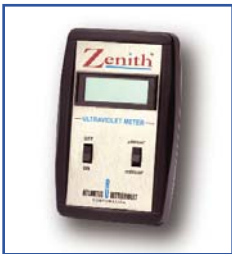
Zenith™ Ultraviolet Meter
A sensitive, hand-held, ultraviolet meter that can be used to:
• Survey installations to ensure that the germicidal ultraviolet radiant exposure, of personnel within the treated area, is within acceptable limits. The **Zenith**™ Ultraviolet Meter provides accurate and easy-to-read levels of intensity that may be interpreted by anyone - not just engineers.
• Check the intensity of aging ultraviolet lamps
(Available for ALL **Sanitaire**® units)

ArmorLite™ Safety Shield
Protective coating applied to **STER-L-RAY**® Germicidal Lamps insures protection for employees, products and work environments by eliminating the dangers associated with fragments of broken lamps and mercury contamination.
(Available for **STER-L-RAY**® Lamps used in ALL **Sanitaire**® units)

Disposable Filters
Cost effective, filters for use when frequent filter changes are necessary.
(Available for ALL **Sanitaire**® units)

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 unit to be mounted to the wall in a horizontal position.
(Available for **Sanitaire**® Model RS72, RS140, RS435 and RSA760 units)

Ceiling Mount Kit
Consists of (4) eye bolts used to suspend unit from ceiling.
(Available for **Sanitaire**® Model RS72, RS140, RS435 and RSA760 units)

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**® units)

Integral Key Lock Switch*
The Key Lock Switch will insure tamperproof operation in either on or off position.
(Available for ALL **Sanitaire**® units)

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

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 and 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
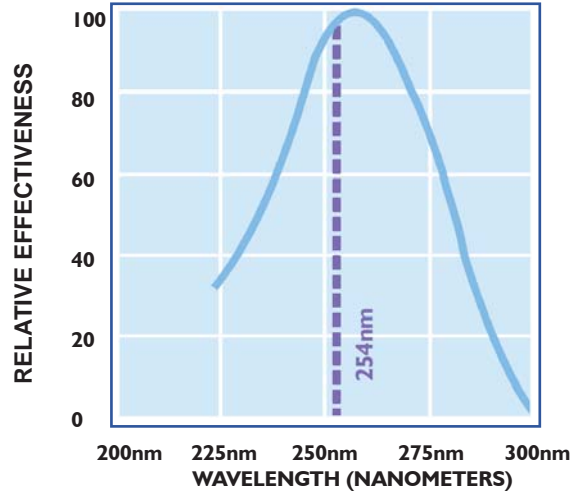▪ cosmetic production
▪ plus countless other facilites

Relative Spectral Energy Distribution (Typical)
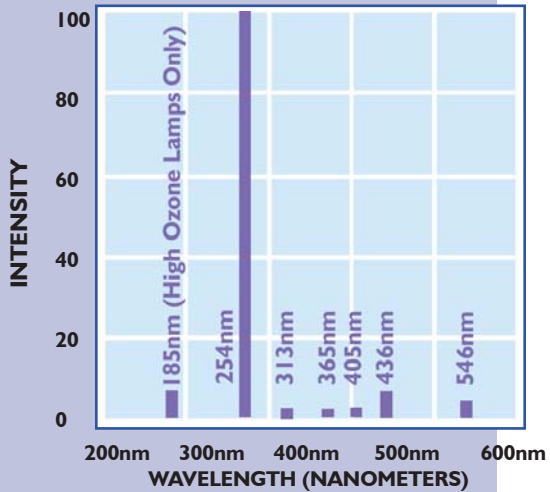
Germicidal Effectiveness As Related to Wavelength

STER-L-RAY® Germicidal Lamps are shortwave, low pressure mercury vapor discharge tubes that produce ultraviolet wavelengths lethal to microorganisms. Approximately 95% of the ultraviolet energy emitted from *STER-L-RAY*® germicidal lamps is at the mercury resonance line of 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 faceshield, gloves and protective clothing.

ULTRAVIOLET DOSAGE

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	Diptheria	6,500
Legionella pneumophila	*L. pneumophila*	Bacteria	Legionnaire's Disease	2,700
Mycobacterium tuberculosis	*M. tuberculosis*	Bacteria	Tuberculosis (TB)	10,000
Pseudomonas aeruginosa	*P. aeruginosa*	Bacteria		3,900
Serratia Marcescens	*S. marcescens*	Bacteria		6,160
Staphlylococcus aureus	*S. aureus*	Bacteria		6,600
Staphlylococcus epidermidis	*S. epidermidis*	Bacteria		5,800
Adeno Virus Type III		Virus		4,500
Coxsackie A2		Virus		6,300
Influenza		Virus	Flu	3,400

* Nominal Ultraviolet dosage (µWSec/cm2) necessary to inactivate better than 99% of specific microorganism.
   Consult factory for more complete listing.