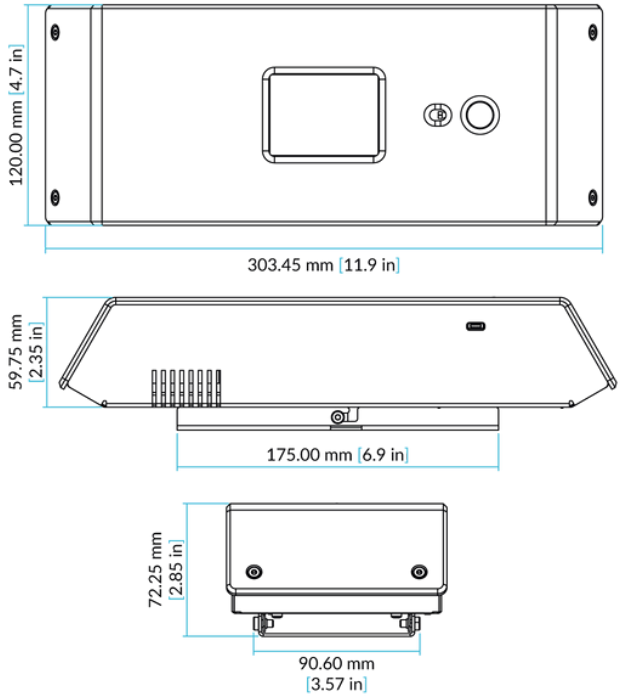
UV222™

Application

This model is designed for use in healthcare facilities, including hospitals, clinics, surgery rooms, intensive care units (ICUs), pharmacies, patient rooms, laboratories, and cleanrooms. Utilizing Far-UVC (222 nm) light technology, it provides continuous, safe, and effective antimicrobial protection. The light continuously disinfects occupied spaces, significantly reducing the spread of airborne and surface pathogens, and ensuring a safer environment for healthcare workers, patients, and visitors.

UV Medico's patented active dehumidification process eliminates humidity and corrosive molecules, effectively preventing internal corrosion and ensuring long-term durability. The integrated active dehumidifier utilizes a solid-state electrolytic process.



General product specifications

Light source	Krypton Chloride Excimer Lamp
Wavelength	222 nm
60° output	115 mW (Typical)
100° output	70 mW (Typical)
Input voltage	100-240 V AC, 50/60 Hz
Mode (programmable)	Continuous / duty cycle / motion activated
Max power consumption	20 W
Weight	1.9 kg (4.19 lbs)
Dimensions	303.45 x 120.00 x 75.25 mm (11.9 x 4.7 x 3.0 in)
Power lead (PVC)	3 x 0.75 mm² (18 AWG)
Operating temperature	0° to + 50° C (32° to 122° F)
Ambient humidity	5-90% RH Non condensing
Materials	Aluminum, quartz glass

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Key Features and Benefits

The device operates safely, as the 222 nm wavelength of Far-UVC light has been proven to be safe for human skin and eyes, allowing continuous disinfection in occupied spaces. Its broad-spectrum antimicrobial action is effective against a wide range of microorganisms, including human coronaviruses, influenza, MRSA, E.coli, and Salmonella. Unlike chemical disinfection methods, the Far-UVC light operates continuously, reducing the risk of pathogen transmission without interrupting healthcare services. Integrated smart controls allow for flexibility in managing light intensity, operating hours, and real-time status monitoring, with the possibility of integration into building automation systems. The device is environmentally friendly, generating no harmful by-products like ozone, and features low power consumption and long-lasting components. It complies with healthcare health and safety standards and regulations, ensuring safe and effective disinfection.

Advanced Control Systems

The device can be integrated with existing hospital automation systems, allowing for remote monitoring and control. It provides real-time status updates, energy usage reports, and automated on/off scheduling based on occupancy or disinfection cycles. An intuitive control panel or mobile app allows for easy operation, with options for customized disinfection schedules, intensity adjustments, and diagnostics. Optional cloud-based monitoring offers remote monitoring, alerts, and performance analytics for enhanced maintenance and efficiency.

Facts about UV222

Safety	UV222 is 100% safe for use in the presence of humans and animals, and fully complies with international UV radiation standards.
Efficacy	Far-UVC light at 222 nm is a proven and effective decontamination method. Research from around the world has demonstrated its germicidal effectiveness.
Knowledge	UV222 has been developed and engineered in cooperation with several universities. It is thoroughly tested and well-documented. Note: UV222TM installations must be performed by authorized installers only.
Ecological	UV222 is mercury-free. It offers decontamination without the use of chemicals or leaving any residue.
IOT	Built-in Internet of Things (IoT) technology for advanced connectivity and monitoring.

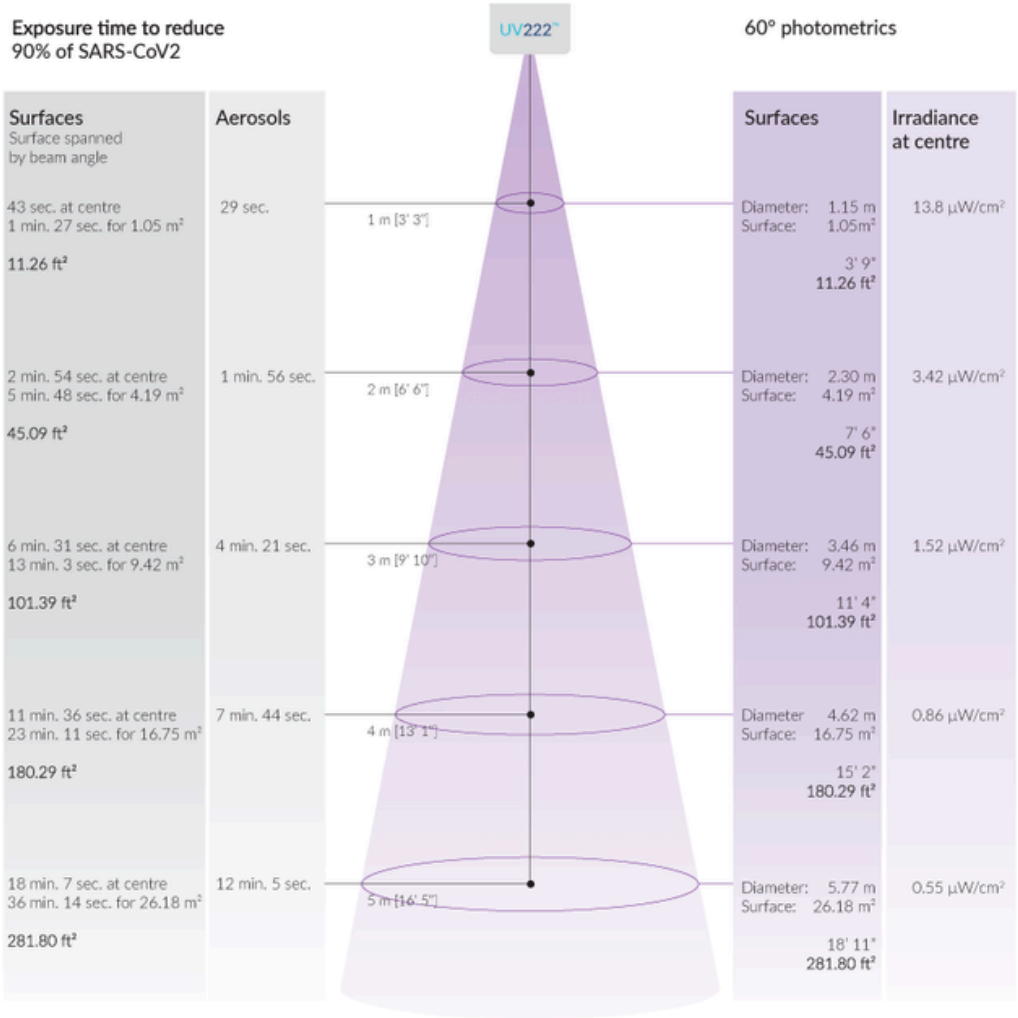
UV222™

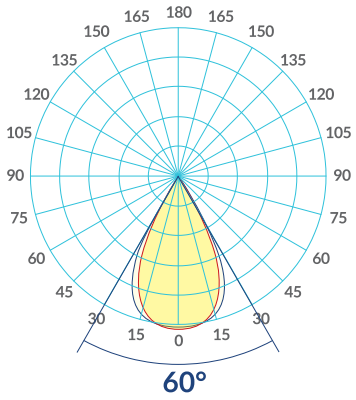
Photometrics and Efficacy of the 60° Model

The UV222™ serves as a vital tool for infection control and prevention. Its effectiveness in inactivating harmful pathogens makes it suitable for various applications.

The UV222™ employs Far-UVC technology, which has demonstrated efficacy in inactivating a wide range of pathogens, including those responsible for zoonotic diseases. With a peak emission wavelength of 222 nm, this system effectively targets microorganisms while remaining safe for use around living animals.

Our UV222™ solutions come in two distinct versions, each tailored to meet different needs. The 60° model delivers a higher output with a concentrated beam, making it ideal for rapid and targeted disinfection in areas where time efficiency is crucial, such as hospital rooms, laboratories, or high-traffic public spaces.





Peak emission wavelength: 222 nm
Output power in range (200-230 nm): 115 mW
Dose needed (222 nm, COVID-19) 90% inactivation for aerosols: 390 µJ/cm2
Dose needed (222 nm, COVID-19) 90% inactivation for surfaces: 600 µJ/cm2

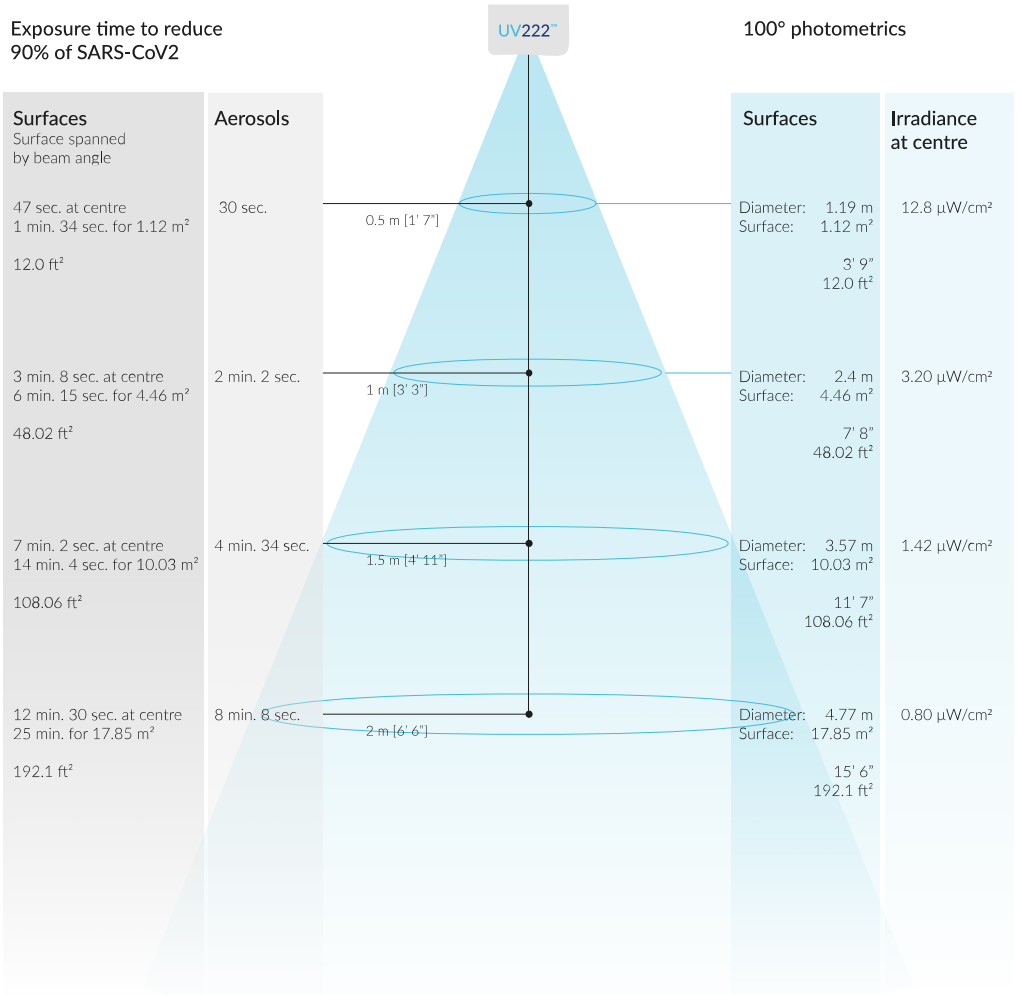
UV222™

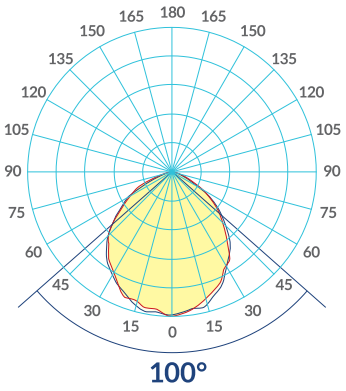
Photometrics and Efficacy of the 100° Model

Continuous exposure during operation not only enhances biosecurity but also contributes to a healthier environment.

The 100° model, with its wider beam and lower intensity, is designed for extended operation while staying well within safe exposure limits. This version is particularly suited for larger or frequently occupied areas.

Whether you need quick, effective action or long-term, comprehensive coverage, UV222™ offers the flexibility to adapt to your specific disinfection needs.





Peak emission wavelength: 222 nm
Output power in range (200-230 nm): 70 mW
Dose needed (222 nm, COVID-19) 90% inactivation for aerosols: 390 µJ/cm2
Dose needed (222 nm, COVID-19) 90% inactivation for surfaces: 600 µJ/cm2

UV222™

Installation and Integration
The unit can be installed in various configurations, including wall-mounted, ceiling-mounted, and portable setups, making it suitable for diverse healthcare settings. Its plug-and-play design ensures quick and simple installation, minimizing downtime in critical areas like ICUs and operating rooms. The device is compatible with existing hospital and clinic building management systems (BMS), allowing centralized control and monitoring across large facilities.

Maintenance & Serviceability
The device is designed for long operational life with minimal maintenance. It features easily replaceable UVC bulbs and dust-resistant housings. The system can also be equipped with self-diagnostic capabilities to alert staff to required maintenance, ensuring continuous operation. Extended warranty options are available, which include regular maintenance checks, priority support, and replacement parts.

Environmental Impact
The Far-UVC Light Model is energy-efficient, with low power consumption that reduces both operational costs and environmental impact. Unlike chemical disinfectants, it leaves no harmful residues or by-products and is mercury-free, making disposal simple and eco-friendly.

Regulatory Compliance
The Far-UVC Light Model UV222™ complies with key regulatory standards. It holds CE certification, demonstrating adherence to European health, safety, and environmental protection standards. It also complies with RoHS regulations, ensuring it is free from hazardous materials such as lead and mercury. The device meets the IEC 62471:2008 guidelines for photobiological safety, guaranteeing safe exposure levels in occupied spaces. For the U.S. market, it may be registered as an FDA Class I device for specific healthcare environments.

The UV222™ complies with the following regulatory standards:

International Standards

ISO 15858	UV-C Devices – Safety information – permissible human exposure.
IEC 62471	Photobiological safety of lamps and lamp systems.
IEC PAS 63313 ED1	Position statement on germicidal UV-C irradiation - UV-C safety guidelines (see Global Lighting Association).

International Guidelines

ACGIH® (American Conference of Governmental Hygienists)	2021 and 2022 TLV (Threshold Limit Values) & BEI (Biological Exposure Indices) for chemical substances and physical agents.