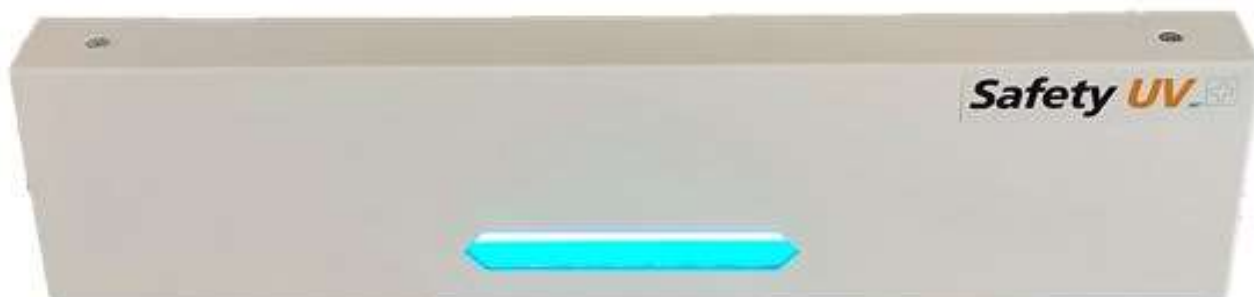


Safety **UV** ^{360°}



ANTI CONTAGION DEVICE WITH SANITIZING ACTION
THAT CAN BE USED AT THE PRESENCE OF PEOPLE





ANTI CONTAGION DEVICE WITH SANITIZING ACTION THAT CAN BE USED IN THE PRESENCE OF PEOPLE

Safety UV® is a **DEVICE** designed and patented to allow the use of UV-C solutions safely and at the presence of people and animals.

Safety UV® **INACTIVES** up to 99% of bacteria in 30 sec. (test performed on a Petri dish), also makes those on the surface of objects exposed to UVC sterile and inactive.

Safety UV® is the first **ANTI-CONTAGION** device, with **SANITIZING** action (reduction of starting contamination by 2 LOG - 99%), effective, autonomous and continuous on surfaces, objects and people for occupied spaces.

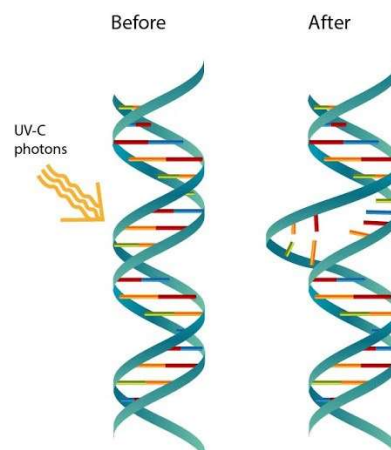
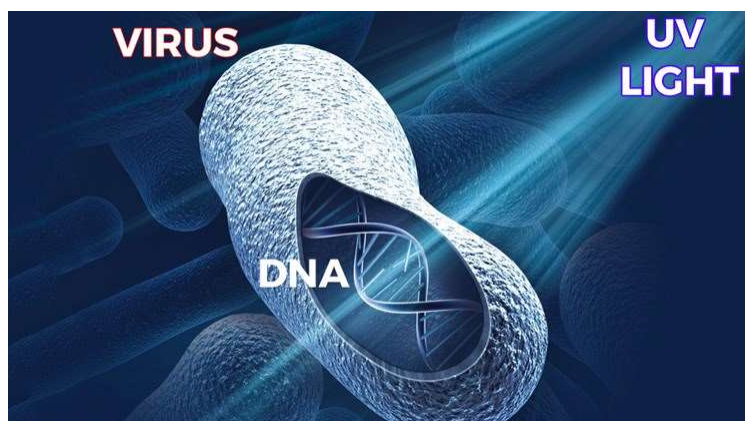
Safety UV® it can be used at the **PRESENCE of PEOPLE** as it respects the limits of risk from exposure to R.O.A. (Artificial Optical Radiation) law 81/08 (with reference to the maximum exposure times).

Safety UV® contributes to **PREVENT** the spread of **VIRUSES, BACTERIA**, fungal spores and **REDUCES** the risk of contracting infections.

Safety UV® reduces the possibility of contagion between two people who talk to each other by reducing the viral load of the droplet **ELIMINATING** almost completely (> 99%) the possibility of transmitting **VIRUSES** and **BACTERIA**.

Safety UV®, HOW DOES IT WORK ?

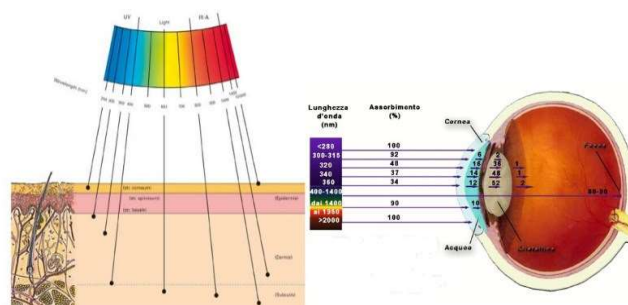
SAFETY UV devices base their operating principle on the combination of the radiations emitted by a lamp, which through the irradiation of short-wave UV-C with a peak at 253.7nm eliminates or limits the capability of the pathogenic organism to reproduce, and creates a patented shielding that eliminates UV-C frequencies that are harmful to humans and animals.



SAFETY UV shielding made with special materials allows the passage of wavelengths around 222nm which cannot penetrate the human cell membrane while it is effective in killing VIRUS and BACTERIA.

The sources used, thanks to an internal coating, ensure constant UV brightness for the entire life of the lamp. In addition, the special glass of which the source is equipped with filters the 185nm radiations that produce ozone.

This allows the use of SAFETY UV devices even in presence, in compliance with the ROA as required by Law 81/08 (with reference to the maximum exposure times).

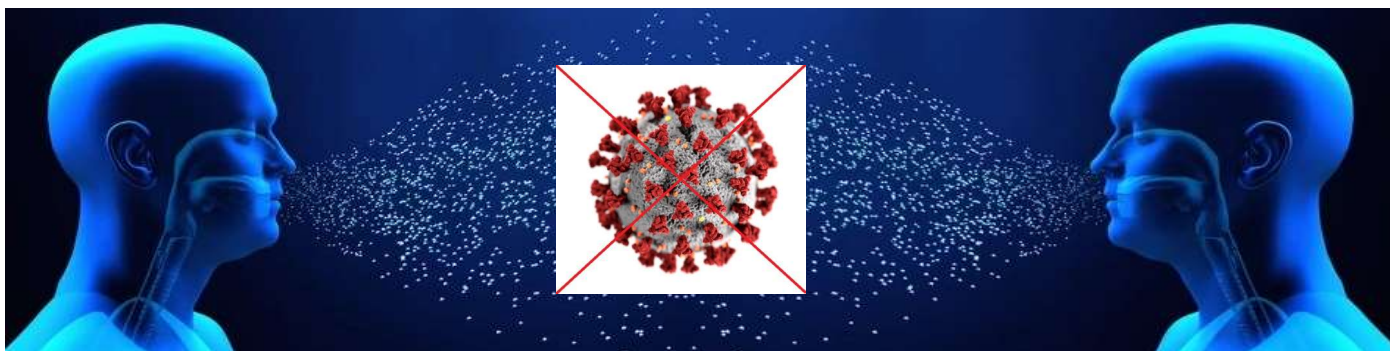


Safety UV®, HOW TO USE ?

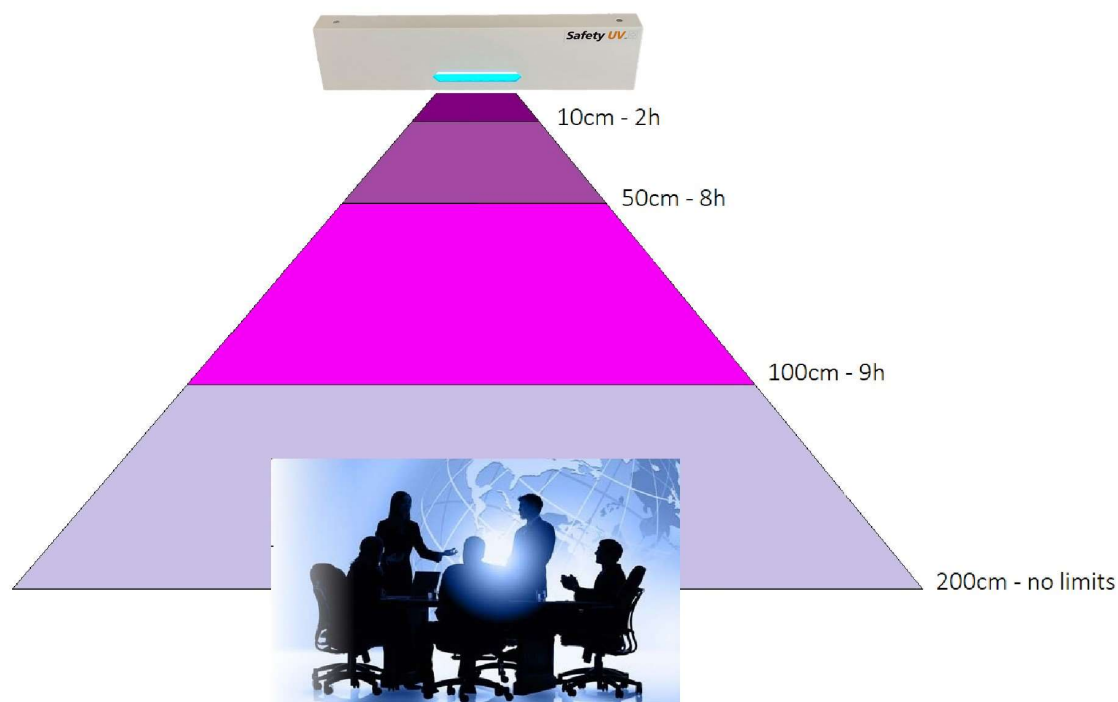
Safety UV® sanitizes hands from VIRUSES in <3 sec. (used at a distance of less than 10cm)



Safety UV® inactivates more than 99% of the viruses contained in the droplet



Safety UV® can be used in shared spaces. You can use SAFETY UV remembering to respect the exposure times according to the distance you are and according the installation position.



Safety UV® WHERE IS IT USED?



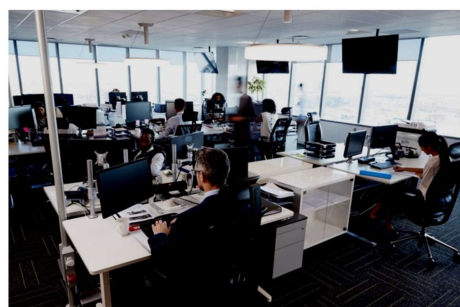
RETAIL, SHOPPING CENTERS



SCHOOLS



RESTAURANTS, BARS, HOTELS



OFFICES, BANKS



HAIRDRESSERS, BEAUTICIANS



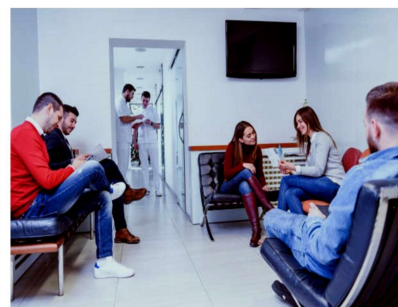
RSA



TRANSPORTS



HOSPITALS, MEDICAL OFFICES



BREEDING



FOOD INDUSTRY



LIFTS

Safety UV[®] TABLE OF ESTIMATED TIMES OF SANITIZATION / BACTERIOLOGICAL ABATEMENT OF AIR

(calculation extrapolated from studies on the effectiveness of aerosol abatement using ultraviolet light calculated by deduction)

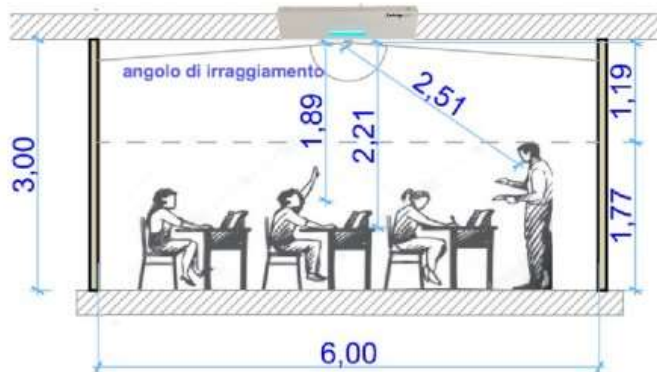
distance	time	% of reduction	% of reduction with fix time of a 1 sec.
10 cm	30 ms	99,9%	99,9999%
50 cm	750 ms	99,9%	99,99%
1 mt.	3 sec.	99,9%	99%
2 mt.	12 sec.	99,9%	85%
3 mt.	24 sec.	99,9%	80%
4 mt.	48 sec.	99,9%	70%
8 mt.	3 min. 12 sec.	99,9%	50%

Safety UV[®] TABLE OF ESTIMATED SURFACE SANITIZATION TIMES

(data extrapolated from tests performed by SAFETY 360 SRL calculated by deduction)

distance	time	% of reduction
10 cm	3 sec	91,7%
50 cm	2 min	91,7%
1 m	7 min 30 sec	91,7%
2 m	30 min	91,7%
3 m	1h 30 min	91,7%
4 m	1h 30 min	91,7%

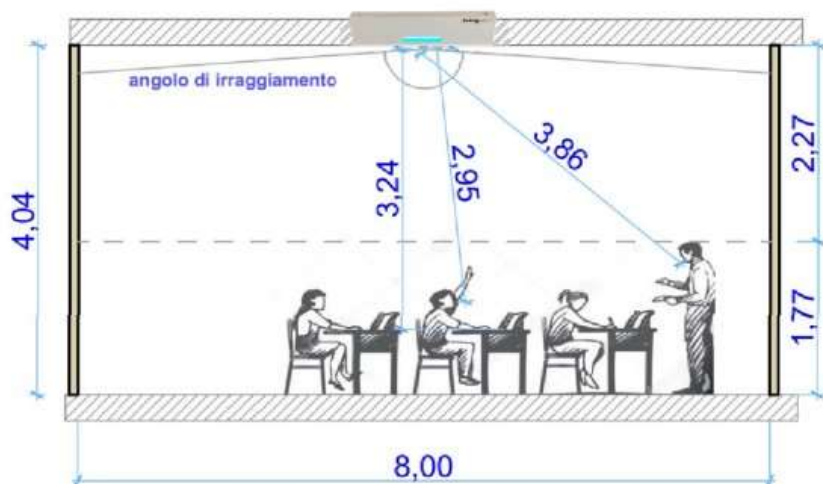
Safety UV^{360°} Example of installation in a classroom 36sqm (6x6m) height 3.00m



Scheduled times for air sanitization:
 professor (droplet), 1 sec. about 99%
 3 sec. 99.9%
 students (droplet), 1 sec. 85%
 12 sec. 99.9%

Estimated time for surface sanitization:
 school desk: 30 min approx. 91.7%

Safety UV^{360°} Example of classroom installation 64 sqm (8x8m) height 4.00 m



Scheduled times for air sanitization:
 professor (droplet), 1 sec. about 74%
 45 sec. 99.9%
 students (droplet), 1 sec. about 80%
 24 sec. 99.9%

Estimated time for sanitizing surfaces:
 school desk: 71 min. 91.7%

Safety UV[®] DATA SHEET

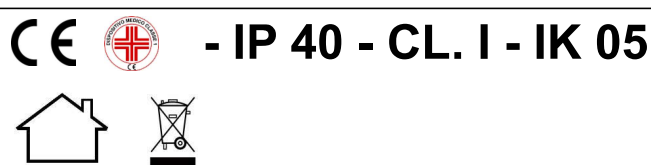
Name: SAFETY UV

Application: limitation of transmission of infectious agents.

Indications: the lamp has been designed and built with the aim of limiting the transmission of infectious agents in the environment. Sanitizing lamp that can also be used in presence.

Reference technical standards: D-LGS 81/08 Chapter V, title IX - EN 17272: 2020 - EN 14971: 2020 - EN 14255 - EN ISO 15858: 2016 - EN 62471: 2009

Product photography:



Technical data:

Power supply voltage: 220-240Vac \pm 10% - 50 / 60Hz

Power factor: > 0.90

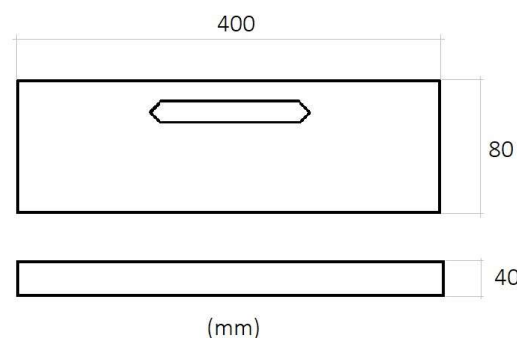
Device consumption: 9W

Working ambient temperature (Ta): - 10 °C ... + 35 °C

Rated source life: 11.000h

Source safely replaceable thanks to the automatic disconnector

Dimensional data:



Instructions for use: lamp suitable for use also in the workplace and in the healthcare sector. It can also be used at the presence of people for 2h at 10cm, 8h at 50cm, 9h at 100cm, without limits > 200cm. .

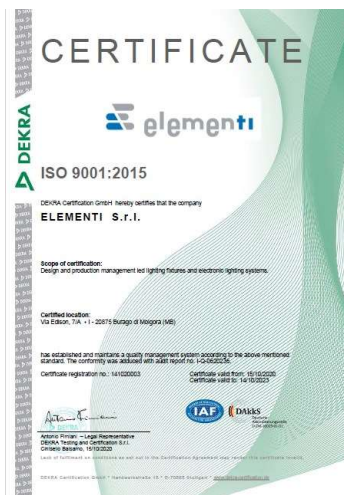
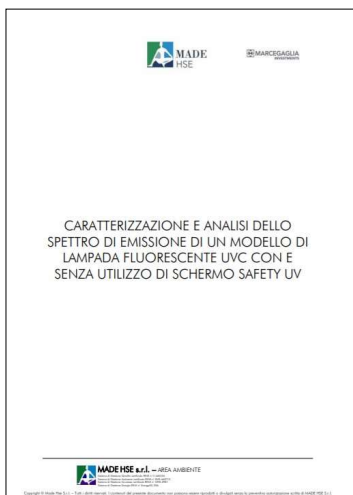
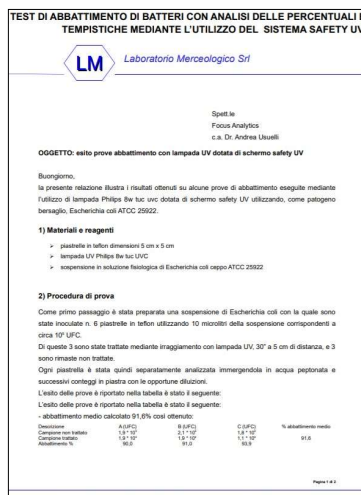
Installation: wall and ceiling

Usage warnings: do not remove the lower shield. Check the integrity of the protection shield. Do not switch on the lamp without the protective shield and / or with the protective shield damaged. Do not exceed the exposure times indicated in the instructions for use. Do not expose patients and patients with open wounds to direct radiation. It is extremely unlikely that the breaking of the bulb could have consequences on the health of consumers. In case a bulb breaks, ventilate the room for 30 minutes and remove the fragments. Do not use a vacuum cleaner.

Due to the technological evolution of the components, the data indicated are subject to updating and therefore confirmation of the specifications must be requested at the order stage. Dimensions and specifications are subject to change without notice. Elementi makes no representations or warranties as to the accuracy or completeness of the information. The information in this document is to be used for information purposes and does not bind any commercial contract, except where expressly agreed with Elementi.

Safety UV[®] CERTIFICATIONS

- MADE HSE srl - area ambiente per le ROA: CHARACTERIZATION AND ANALYSIS OF THE EMISSION SPECTRUM OF A UVC FLUORESCENT LAMP MODEL WITH AND WITHOUT THE USE OF SAFETY UV SHIELD.
- SANA srl (accreditato ACRREDIA no. 0747): PATHOGEN KILLING TEST USING THE SAFETY UV SYSTEM - Feb. 2021
- LM Laboratorio Merceologico srl: BACTERIA KILLING TEST WITH PERCENTAGE AND TIMING ANALYSIS USING THE SAFETY UV SYSTEM - Feb. 2021
- DEKRA quality system: ISO 9001:2015




Safety UV[®] ACADEMIC REFERENCE PUBLICATIONS


Scientific report: Far-UVC light (222nm) efficiently and safely inactivates airborne human coronaviruses (Manuela Buonanno, David Welch, Igor Shuryak & David J. Brenner) 2020.

Scientific report: Far-UVC light: A new tool to control the spread of airborne-mediated microbial diseases (David Welch, Manuela Buonanno, Veljko Grilj, Igor Shuryak, Connor Crickmore, Alan W. Bigelow, Gerhard Randers-Pehrson, Gary W. Johnson & David J. Brenner) February 2017

Working group ISS Biocidi COVID-19. Interim recommendations on the sanitation of non-health facilities in the current COVID-19 emergency: surfaces, interiors and clothing. Version 15 May 2020. Rome: Istituto Superiore di Sanità; 2020. (Rapporto ISS COVID-19 n. 25/2020)

Radiation research: germicidal efficacy and mammalian skin safety of 222nm UV Light, April 2017

 **elementi** was born from the fusion of different experiences matured since 1980 in the sectors of lighting components, electronics, software, communication and mechanics.

 **elementi** is a company belonging to the APF SRL group.

Technical competence, familiarity with the most modern and recent technologies, working habits in partnership in innovative research projects allow us to make available to the lighting sector a mature and dynamic structure ready to face the most demanding challenges for the development of led fixtures always more innovative, performing, complex and connected.

 **elementi** is a young reality born from years of historical collaboration with the most important global companies in the Lighting sector both as component suppliers and as technological partners for the development of high performance products

Our technical team is ready to meet your needs with concrete, reliable products and a quality/price ratio that is difficult to find in other situations on the Italian scene.

Passion, attention to the customer, experience, flexibility and competence are the ingredients and the guarantee of our success!



electronics embedded engineering technology for innovation

DESIGN, PRODUCE and DISTRIBUTE **Safety UV** under license from SAFETY UV SRL

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