

Absolute confidence, in a world of uncertainty

We are living in unprecedented times. In the face of a global pandemic, the world is demanding a proven and effective way to protect people from harmful micro-organisms.

Bacteria and viruses can cause a wide range of common infections. They can live in air, on surfaces and on objects, even after normal cleaning routines. That means any contamination left behind in the air we breathe and on the surfaces we touch can have a profound effect on our day-to-day health and wellbeing.

UV-C disinfection

UV-C lighting disinfects radiated air and surfaces which contain bacteria and viruses and helps to reduce them from spreading further. All micro-organisms tested to date respond to UV-C lighting¹

Philips UV-C disinfection luminaires

With 35 years of experience in UV-C lighting, we have built up strong application expertise. This has led us to develop a new range of UV-C disinfection luminaires and chambers, ideal for use in offices, retail outlets, factories; in hospitality areas, schools and public washrooms and even on modes of transport such as aircraft, buses and trains.

1 Fluence (UV Dose) Required to Achieve Incremental Log Inactivation of Bacteria, Protozoa, Viruses and Algae Revised, updated and expanded by Adel Haji Malayeri, Madjid Mohseni, Bill Cairns and James R. Bolton. With earlier contributions by Gabriel Chevrefils (2006) and Eric Caron (2006) With peer review by Benoît Barbeau, Harold Wright (1999) and Karl G. Linden.







Shining a light on UV technology

UV-C radiation is a known disinfectant for air, surfaces and objects that can help mitigate the risk of acquiring an infection.

What is UV technology?

Ultra-Violet (UV) light is invisible to the human eye and is divided into UV-A, UV-B and UV-C.

UV-C is found within 100-280 nm range. The germicidal action is maximized at 265 nm. Philips Low pressure UV-C lamps have their main emission at 254 nm where the action on DNA is 85% of the peak value. As a result, our germicidal lamps are extremely effective in breaking

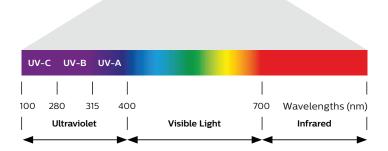
down the DNA and RNA of micro-organisms. This means that they cannot replicate and cause disease².

The technology has primarily been used in areas where there is a risk of microbiological contamination, and has been used safely and effectively for more than 40 years³.

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Our test results show that above a specific dose of UV-C radiation, viruses were completely inactivated: in a matter of seconds we could no longer detect any virus."

Dr. Anthony Griffiths, Associate Professor of Microbiology at Boston University School of Medicine



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² A comparison of pulsed and continuous ultraviolet light sources for the decontamination of surfaces. McDonald K.F., Curry R.D., Clevenger T.E., Unklesbay K., Eisenstark A., Golden J., Morgan R.D. IEEE Trans. Plasma Sci. 2000;28:1581–1587. doi: 10.1109/27.901237.

³ EPA Report, "Building Retrofits for Increased Protection Against Airborne Chemical and Biological Releases" Pg. 56.

Professional air, surfaces and objects disinfection

Everywhere it's needed

Philips UV-C disinfection luminaires can be used to disinfect air, surfaces and objects in a wide range of applications. These include hospitality areas, schools and public washrooms. In offices, retail outlets and factories. Even on modes of transport such as aircraft, buses and trains

For more information on the benefits of Philips UV-C disinfection luminaires in your chosen application, please contact your local Signify representative.

The power to protect in real-world applications



Retail
Disinfecting shopping carts,
shelves and counters



Hair and beauty salons Disinfect client rooms, floor, mirror, chair, counter surfaces and other sensitive areas



Schools
Disinfect classroom walls,
floors, desks and surfaces



Disinfect work rooms, meeting spaces and corridors



Banking
Disinfect counters, cash
machines and work surfaces



Hospitality
Disinfect guest rooms,
reception areas and health club
facilities



Food outlets
Disinfect preparation surfaces
and equipment



Washrooms
Disinfect vanity units, basins and mirrors



Transport
Disinfect interior and exterior
surfaces of different vehicles
and passengers' waiting spaces



Philips UV-C disinfection upper air

Airborne viruses and bacteria contaminate the air trapped indoors and can pose a real health threat. Upper air UV-C systems are powerful instruments to disinfect the upper air layers within rooms.

Benefits

- Optimized for low ceiling heights, the UV-C rays are distributed at device level and above.
- The beam of UV-C rays is controlled by specific reflectors and the louvre design. This allows for the disinfection of the air in a space, while ensuring that day-to-day business activities can continue underneath the area where the device is active.
- Allows disinfection of a large volume of air while business activity continues.
- Radiates UV-C in the upper part of rooms, where it does not reach people directly.
- Quietly and effectively deactivates airborne viruses and bacteria with Philips UV-C (253.7 nm) lamps.

- Effective disinfection over the useful long lifetime of lamp and luminaire.
- Environmentally friendly no ozone emissions during or after use.

Features:

- · Shortwave UV radiation peak at 253.7 nm (UVC).
- Louvres and reflector control the distribution of UV-C at the device level and above, where people are not usually present.
- Complies with IEC 62471 standard for photobiological safety.



Philips UV-C disinfection upper air wall mounted

Designed for the disinfection of air in a lot of applications, with installation on walls.

- · Wall mounted installation.
- · Philips T5 TUV lamp included: 25W.



Philips UV-C disinfection upper air ceiling mounted

Designed to be installed on false ceilings for the disinfection of air in a wide range of applications.

- · Surface mounted on false ceilings.
- Philips PL-S TUV lamp included: 4x9W.



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Philips UV-C disinfection chamber

An effective disinfection chamber with UV-C for fast and environment friendly disinfection of versatile objects. Its application areas are all professional indoor applications for bacteria & viruses disinfection.

Benefits

• In laboratory testing, Signify's UV-C light sources inactivated 99% of SARS-CoV-2 virus on a surface with an exposure time of 6 seconds!

Features:

- · Heavy-duty stainless-steel chamber
- Auto power off when the chamber is open ensuring no UV-C exposure to user
- Prefixed step timer for disinfection, easy to use, one touch operation
- · Available size:
- Medium: height of 660 mm, 110 liters



Medium



¹ Tests performed in a lab setting by Boston University using a Signify UV-C light source revealed that a dose of 5mJ/cm² reduced 99% of SARS-CoV-2, the virus causing COVID-19, in just 6 seconds. Based on the data, it was determined that a dose of 22mJ/cm² will result in a reduction of 99.9999% in 25 seconds. Research variables available upon request.

² To be confirmed