**ALKCO** 

Germicidal UV

**Luminaires & Solutions** 

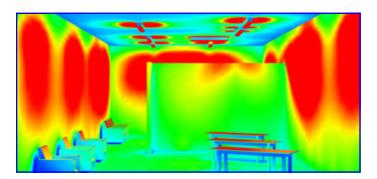


## Germicidal UV luminaires and solutions

We are living in unprecedented times. In the face of a global pandemic, Alkco germicidal UV luminaires utilize Signify UV-C technology to offer a layer of disinfection against bacteria, viruses, and fungal spores. Air and surface disinfection can play an important role in a broad range of applications such as schools, offices, industry, (food) retail and museums.



### Why UV-C, the reason is simple...

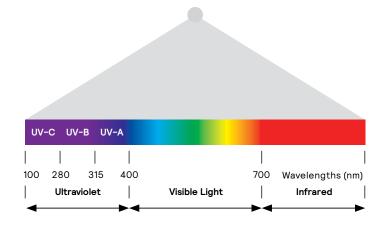


Simulated layout with Germicidal UV 4' Strip product line

UV-C radiation is a proven disinfectant for air, surfaces and water. It has been used extensively to mitigate the risk of acquiring infections for more than 40 years<sup>1</sup>. Many hundreds of bacteria and viruses have been tested to date, including various Coronaviruses, and all respond to UV-C radiation<sup>2</sup>. 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<sup>3</sup>. This is a clear indication that UV-C light can provide a sense of security in your disinfection strategy.

#### How does UV-C work?

In the light spectrum, UV-C is found within the 100 to 280 nanometer (nm) range. It has a specific wavelength of 253.7nm, at which wavelength UVC light breaks down the DNA of bacteria, viruses and spores. This renders them harmless so they cannot replicate.<sup>4</sup>



- 1. EPA Report, "Building Retrofits for Increased Protection Against Airborne Chemical and Biological Releases" Pg. 56.
- 2. 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 Benoit Barbeau, Harold Wright (1999) and Karl G. Linden.
- 3. Data made available to us by the National Emerging Infectious Diseases Laboratories (NEIDL) at Boston University (to be the subject of a forthcoming scientific publication) shows that Signify's UV-C light sources irradiating the surface of a material inoculated with SARS-CoV-2 (the virus that causes the COVID-19 disease) resulted in a 99% reduction of the SARS-CoV-2 virus at a UV-C dose of 5mJ/cm² (exposure time 6 seconds). This study further determined that a 99.999% reduction of the SARS-CoV-2 virus would result from applying a UV-C dose of 22mJ/cm² (exposure time 25 seconds). Research variables are available upon request.
- 4. 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.

## Alkco Germicidal UV

**Luminaires & Solutions** 

# Signify is the market leader in UV-C light sources and has been manufacturing UV-C products for more than 35 years



#### **Reliable Technology**

All Signify UV-C low pressure mercury lamps contain a unique coating on the inner glass wall. This helps ensure the UV-C output never drops below 85% of initial output over the Rated Average Life of the lamp<sup>1</sup>.



#### **Proven Experience**

We have a proven track record in innovative UV-C technology optimized for each application. All backed by solid development support.



#### **Lowest Mercury Content**

Our unique mercury capsules help optimize performance with precise dosing using very little mercury in the lamps, and no mercury emission during manufacturing.



#### **Application Knowledge**

Signify is a leading manufacturer in providing solutions for professional purposes across a variety of applications. Our lighting products, systems and services enable our customers to have a unique quality of light and make people's lives safer and comfortable.

#### The power to protect in real-world applications



#### Retail

Keep shelves and counters free from contamination



#### Schools

Disinfect the classroom walls, floors, desks and surfaces



#### Offices

Neutralize work rooms, meeting spaces and corridors



#### Banking

Disinfect counters, cash machines and work surfaces



#### Hospitality

Protect guest rooms, health facilities and reception areas



#### Restrooms

Sterilize vanity units, basins and mirrors



#### Grocerv

Eliminate bacteria on preparation surfaces and equipment



#### To learn more about Signify UV-C Luminaires & Solutions, please visit www.signify.com/uv-c

Rated Average Life means the average length of operation at which point 50% of the lamps will be operational and 50% will not (B50).

## **Alkco** Germicidal UV

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## UV-C Upper Air Disinfection luminaires

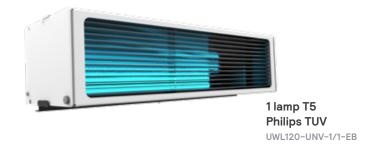
## Germicidal UV 2x2 Grid Ceiling Mount

- · Available 2x2 Grid ceiling mount housing
- · 4 lamp 9 W PL-S Philips TUV
- · White or black polyester powder coated steel housing
- Applications: Offices, Education, Retail



## Germicidal UV Louvered Wall Mount

- Available 22" white polyester powder coated housing (black optional)
- · 1 lamp 20 W T5 Philips TUV
- · Specular aluminum reflector
- · Wall mounting plate provided
- Applications: Offices, Education, Retail



## Germicidal UV Indirect Wall

- · Available 4' length
- 1 lamp 20W T5 Philips TUV
- · 18 gauge steel housing with specular aluminum reflector
- · High quality powder coat finish in matte white
- · Applications: Offices, Education, Retail



## Germicidal UV Indirect Industrial

- · Available 2' & 4' lengths
- · 1 or 2 lamp versions with T5 Philips TUV
- Can be installed suspended at a minimum mounting height of 15' for a minimum 20' ceiling
- Applications: Offices, Education, Retail, Industrial



## **Alkco** Germicidal UV

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## **UV-C Direct Disinfection Luminaires**

## Germicidal UV Strip

- · Available 4' length
- 1 & 2 lamp versions available with 36 W T8 Philips TUVs
- · Can be surface or suspended mounted
- Available directional reflectors, wireguard, and mounting brackets
- Applications: Offices, Education, Retail, Industrial



## Germicidal UV High Bay

- Available 4 & 6 lamp versions for low bay and high bay applications ranging from 10' to 25' ceiling heights
- · 36 W T8 Philips TUVs produce a peak output of 253.7nm
- Wireguard and 5' mounting cables with V-hooks
- Applications: Education, Retail, Industrial



#### Germicidal UV

#### **UV-C Controls systems**

- Signify has developed a dedicated controls solution for direct UV-C applications using Philips Dynalite controls
- For more information, download the technical documents at: www.alcko.com/germicidaluv



Note: The products depicted herein are not approved and/or certified as medical devices.

\* Lamps shipped separately.



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