




BRAINLIT

: U V E N

LIGHT FOR SAFER ENVIRONMENTS

Autonomous deactivation of pathogens in a matter of minutes, without business disruption.

February 2022



Eliminate >90%
of SARS-COV2
in 2min¹



DISINFECTION THROUGH UV-C LIGHTING

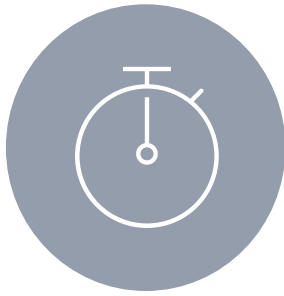
The world we live in is uncertain and the recent pandemic has highlighted the fact that viruses and bacteria can live both in the air and on surfaces and thereby spread and affect our health. As we learn to live with these infection outbreaks there is demand for an efficient way to disinfect frequently visited public spaces to protect people from harmful pathogens. BrainLit is a Swedish health technology company with the aim to improve the quality of life for people through lighting.

Using our knowledge and experience in lighting we have developed a unique system that uses UV-C lighting to quickly, safely and automatically disinfect both air and surfaces to create a safe and healthy environment.

- ✓ **Safeguarding frequently visited closed spaces with high degree of pathogens such as restrooms**
- ✓ **Eliminates pathogens from both air and surfaces**
- ✓ **Manual disinfection using chemicals can be minimized**

WITH SAFETY IN MIND

Areas with no humans are exposed to UV-C light for disinfection. An advanced safety system using radar and infrared sensors ensures that disinfection will only start when the space is unoccupied. If someone enters the space during disinfection the presence detection is triggered, and it switches from UV-C lighting to regular lighting.



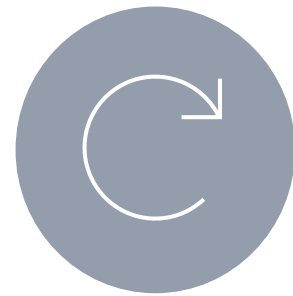
FAST

Eliminates >90% of SARS-COV2 in 2min



SAFE

An advanced safety system using radar and infrared sensors identifies that the area is unoccupied



AUTOMATED

The disinfection cycle runs automatically after every time the space has been occupied

DISINFECTION EFFICACY OF UV-C

The disinfection efficacy of BrainLit Uven has been independently verified by the Swedish Defence Research Agency (FOI)¹

2 minute disinfection cycle; UV-C dose 1.4 mJ/cm².

This dose corresponds to:

Inactivation of >90% SARS-CoV-2^{1,2,3}

Inactivation of >99% E. coli^{4,5}, Salmonella⁴

1.) Uven disinfection evaluation with SARS-CoV-2 plaque assay, Swedish Defence Research Agency, 2021

2.) Quantitative evaluation of SARS-CoV-2 inactivation using a deep ultraviolet light-emitting diode, Minamikawa, T., Koma, T., Suzuki, A. et al., Sci Rep, 2021 3.) UV-LED disinfection of Coronavirus: Wavelength effect, Gerchman, Y., Mamane, H., Friedman, N., Mandelboim, M., J. Photobiology and Photochemistry B: Biology, 2020

4.) Fundamental Characteristics of Deep-UV Light-Emitting Diodes and Their Application To Control Foodborne Pathogens, Joo-Yeon Shin, Soo-Ji Kim, Do-Kyun Kim, Dong-Hyun Kang, Food Microbiology, 2015 5.) Inactivation of Listeria and E. coli by Deep-UV LED: effect of substrate conditions on inactivation kinetics., Cheng, Y., Chen, H., Sánchez Basurto, L.A. et al., Sci Rep, 2020. 6.) Disinfection of Methicillin-Resistant Staphylococcus aureus, Vancomycin-resistant Enterococcus faecium and Acinetobacterbaumannii using Klaran WD array system, Richard M. Mariita, Rajul V. Randive, bioRxiv, 2020.



UVEN DISINFECTION UNIT

UV 600x600 mm | Art: 100021












Power property 120-277V 50/60Hz, 50W+75W+20W	Peak wavelength 260-280 nm
LED color temperature 4700K	FWHM <40nm
Lumen output 4000 lm	Radiated power 450 mW
Lifetime L70 > 100 000 h	Lifespan 10 000 h



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