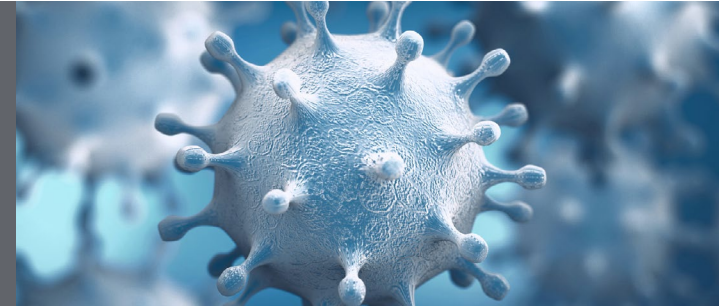




Fail-Safe GUV Disinfecting Solutions

Make a difference in a world that is adjusting to a new normal by empowering health and safety. Fail-Safe GUV Disinfecting Systems combine safeguards and germicidal ultraviolet (GUV) fixtures to unlock the proven power of UV-C to kill bacteria, mold, fungi and inactivate viruses - including SARS-CoV-2 (aka Covid-19). GUV is chemical-free and disinfects in minutes, saving hours of costly manual labor.

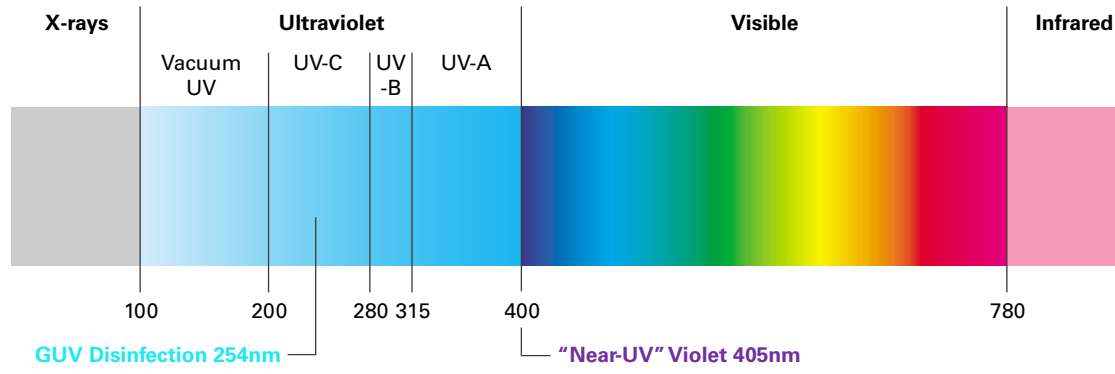


Trust Cooper Lighting Solutions

- Signify, the parent corporation of Cooper Lighting Solutions, has been a world leader in UV-C source manufacturing and delivering solutions for over 35 years to disinfect water, air and surfaces.
- Our GUV systems use optical and electrical engineering to ensure effective pathogen elimination within minutes.
- Our team of experts can provide fixture and control layouts with professional results.
- Cooper Lighting Solutions has developed the first and only UL1598 Safety Certified GUV system.



What is Disinfection Lighting?



- 222nm, Non-visible
- Technology Infancy
- Unclear Pathogen Effects
 - Virus effect being tested
 - Effective on bacteria
 - Not effective on mold or fungi
- Exposure Time Testing
- Exposure Risks
- Ozone Risks

FAR UV

Unknown Pathogen Effects
Exposure Risks
Technology Infancy

- 254nm, Non-visible
- Proven Technology (no known micro organisms resistant to UVC) ¹
- Proven Pathogen Effects
 - Inactivates viruses
 - Kills bacteria
 - Kills mold and fungi
- Exposure Time is Short
- Exposure Risks

GERMICIDAL UV (GUV)

Superior Pathogen Effect
Controllable Exposure Risks
Proven Technology

- 315/365nm Non-visible
- Proven Technology
- Limited Pathogen Effect
 - Low virus inactivation
 - Reduces bacteria
 - Limited effect on mold, fungi
- Exposure Time is Moderate
- Exposure Risk

UVA/B

Limited Pathogen Effect
Controllable Exposure Risks
Proven Technology

- 405nm, Visible light
- Technology Infancy
- Limited Pathogen Effect
 - Extremely limited viruses effect
 - Reduces bacteria
 - Unknown effect on mold and fungi
- Exposure Time is Long
- Limited Exposure Risks

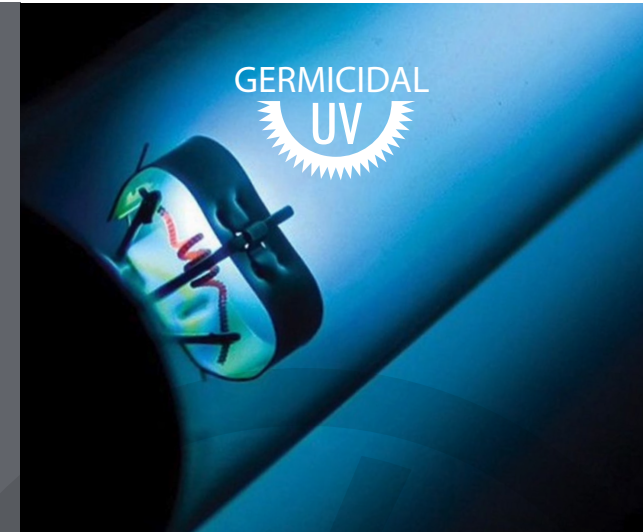
NEAR-UV

Limited Pathogen Effect
Limited Exposure Risks
Technology Infancy

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

GUV 101

- GUV refers to short-wavelength ultraviolet energy that is proven to kill bacteria and inactivate viruses...**FAST!** These short wavelengths in the photobiological UV spectral band known as “UV-C” are centered at 254nm which is optimal for eliminating pathogens.
- Germicidal effectiveness is referred to as a dose, which is the product of UV-C energy (how much) and time (how long).
- GUV is an excellent surface and air disinfectant due to its quick germicidal efficacy confirmed by decades of peer-reviewed scientific evidence.
- GUV can pose a safety and health hazard to the eyes and skin if improperly used or installed.
- Cooper Lighting has developed guidelines around installation, operation, and maintenance, with a focus on safety and efficacy.

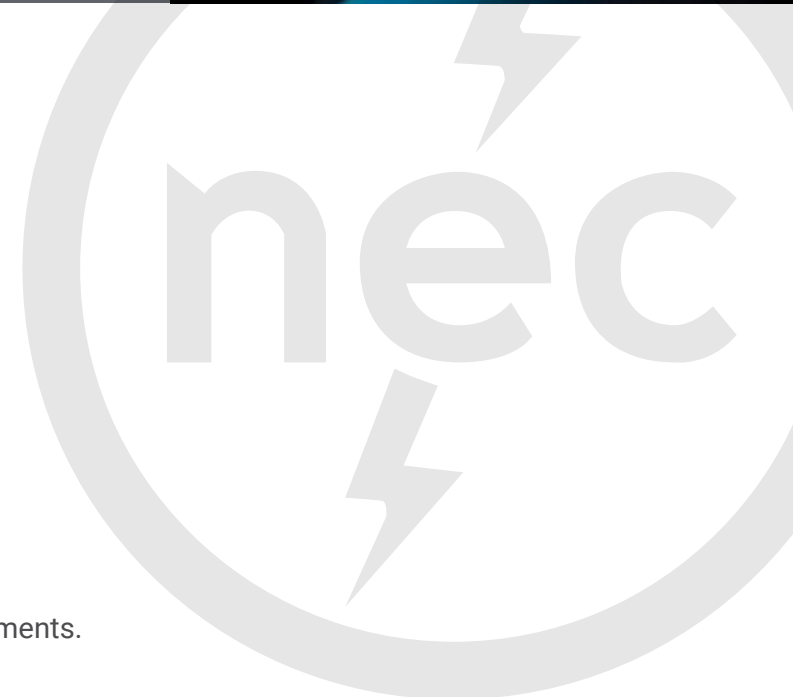


Safety Certified



Germicidal UV System

- **Safety First!** Cooper Lighting GUV combines primary and secondary safeguards to deliver the world's first UL1598 Safety Certified GUV system.
- GUV Controls ensure the space is vacant before the GUV Fixtures will turn on and will automatically turn off if someone enters the space.
- The National Electric Code (NEC) requires all permanently installed electrical equipment to be tested and certified by an OSHA approved NRTL.
- Cooper Lighting has the only system that meets these requirements.



Applications

DEAR MICROBES,
YOU DON'T STAND
A CHANCE.

Cooper Lighting Solutions' NEW GUV disinfection solutions take the guesswork out of disinfecting, getting the job done quickly and effectively.



RETAIL



SPORTING EVENTS



RESTROOMS



FOOD SERVICE



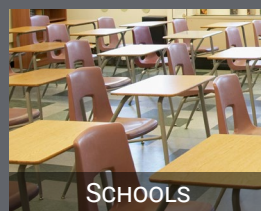
HEALTHCARE



OFFICES



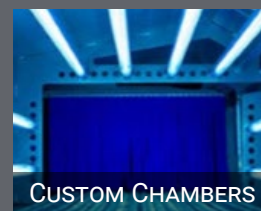
HOSPITALITY



SCHOOLS



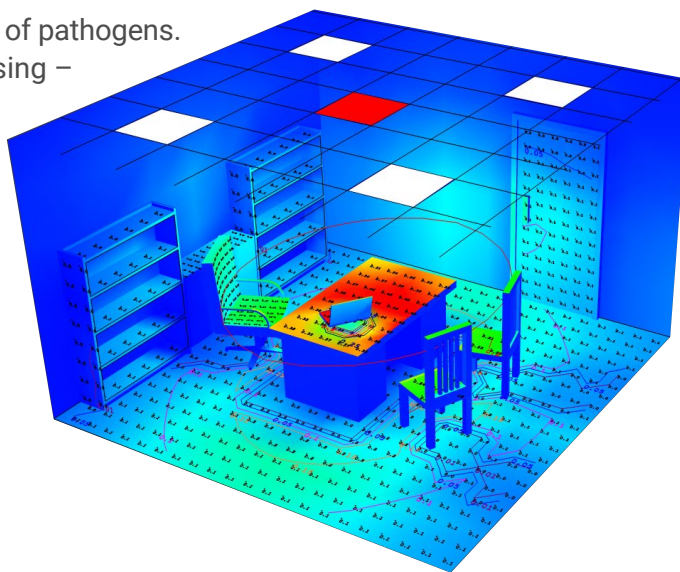
SUPERMARKETS



CUSTOM CHAMBERS

Planning GUV - Private Office

- Every micro-organism is susceptible to UV-C and the dosing needed to eliminate these pathogens are known.
- Our system is powerful - eliminating 99.99% of pathogens. This is based upon scientifically proven dosing – the product of UV-C energy over a period of time. Typically, the room surfaces are disinfected in less than 20 minutes!
- Cooper Lighting's team of experts have created optical tools to effectively determine proper fixture type and placement to maximize the disinfection.
- Using these outputs, we can effectively determine the time needed to operate the GUV system to eliminate the pathogens.



GUV Fixtures



GLR GERMICIDAL UV
LOUVERED RECESSED
Pg. 5



GSL GERMICIDAL UV
STRIPLIGHT
Pg. 6



GH GERMICIDAL UV
HIGHBAY
Pg. 7



GUC GERMICIDAL UV
UNDERCABINET
Pg. 8



GTR GERMICIDAL UV
TROFFER
Pg. 9-10

[Click to
visit page](#)

GLR GERMICIDAL UV LOUVERED RECESSED

The GLR Germicidal UV Louvered Recessed series combines the aesthetics of a louvered fixture with the disinfecting power of Germicidal UV technology.



Ideal for
HOSPITALITY, OFFICE AND SCHOOLS

Features

- Available in 2' x 2' and 2' x 4'
- Ideal for use in low and medium height grid ceilings or in dry wall ceilings using accessory mounting kits
- Louvers deliver a quiet ceiling and enhanced optical control during disinfection cycle

25

ESTIMATED MINUTES TO DISINFECT (COVID-19)



Featured

GUV: 22GLR-3GUV2-S33I-R1

General Lighting: LDS6B10D010-EU6B102027-6LBS1MW

GSL GERMICIDAL UV STRIPLIGHT

The GSL Germicidal UV Striplight Series is a narrow strip family using the latest in Germicidal UV technology.

Ideal for
RETAIL, SCHOOLS AND DISTRIBUTION CENTERS



Features

- Available in 4' lengths with 1 or 2 GUV sources
- Ideal for surface mounted or suspended
- Optional wireguard to protect sources from damage
- Optional reflectors for symmetric and asymmetric control

5

ESTIMATED MINUTES TO DISINFECT (COVID-19)



Featured

GUV: Cove - GSL-1GUV4-R1

Ceiling - 22GLR-3GUV2-S33I-R1

General Lighting: 8RBG6-SL1-L8SCT3

GH GERMICIDAL UV HIGHBAY

The GH Germicidal UV High Bay Series is designed for large area UV disinfection. It accommodates 6 or 8 germicidal UV sources using the latest in Germicidal UV electronics.



Ideal for
GYMS, RETAIL AND CUSTOM CHAMBERS

20

ESTIMATED MINUTES TO DISINFECT (COVID-19)

Features

- The 6-source version is ideal for lowbay applications for suspension mount under 20'
- The 8-source version has the maximum GUV density and is ideal for highbay applications for suspension mount over 20'
- Excellent solution for open areas including retail checkout, loading docks, distribution centers, custom chambers and fitness centers.
- Optional wireguard



Featured

GUV: GH-6GUV4-N-R2
WG/HBL6-4FT-B

General Lighting: HVL8-4-LD4-2HI-40-UNV-O-EDD1-S

GUC GERMICIDAL UV UNDERCABINET

The GUC Germicidal UV Undercabinet Series is a low profile design and uses the latest in Germicidal UV technology.



Ideal for
HEALTHCARE, OFFICE AND SCHOOLS

Features

- Surface mount fixture is available in 2' and 4' lengths
- Custom designed reflector to maximize germicidal energy output
- Focused optics are ideal for shelves, small closets and elevators

6

ESTIMATED MINUTES TO DISINFECT (COVID-19)



Featured

GUV: GUC-1GUV2-R1

22GLR-3GUV2-S33I-R1

General Lighting: 22ID-40-CFR2-L835-U

Fail-Safe GUV Disinfecting Solutions

GTR GERMICIDAL UV TROFFER RECESSED

The GTR Germicidal UV Troffer Recessed Series provides maximum germicidal disinfection in grid or hard ceiling applications.



Ideal for
CLASSROOMS, OFFICE AND DISTRIBUTION CENTERS

Features

- Available in 2' x 4' with 4 and 6-source options
- Compatible with standard grid ceilings
- Optional drywall kit
- Optional door with wireguard

16

ESTIMATED MINUTES TO DISINFECT (COVID-19)



Featured

GUV: 24GTR-WGD-4GUV4- R1

General Lighting: 22CZ2-50VHE-UNV-L840-CD1-U

GTR GERMICIDAL UV TROFFER RECESSED

When used in higher ceilings, the wireguard option provides additional protection where needed while maximizing the delivered GUV power.

Ideal for
CAFETERIAS



Features

- Available in 2' x 4' with 4 and 6-source options
- Compatible with standard grid ceilings
- Optional drywall kit
- Optional door with wireguard

20

ESTIMATED MINUTES TO DISINFECT (COVID-19)



Featured

GUV: 24GTR-WGD-4GUV4- R1
General Lighting: 24FP4740C

Controls

Germicidal UV inactivates viruses and eliminates bacteria, mold, and fungi. It can also be harmful to humans if exposed to GUV for too long. That is why we developed the first and only UL1598 Safety Certified GUV System. Using our components, you can be more confident the space is vacant whenever the system is running. The system will automatically turn off if someone enters the space.



There are three primary objectives of the GUV Control System:



Confirming the space is vacant

GUV Clearance Pushbuttons are strategically placed throughout the space to be disinfected. All GUV Clearance Pushbuttons must be pressed before the system can be turned on. This ensures the user walks the entire space to confirm it is vacant.



Operation by authorized personnel

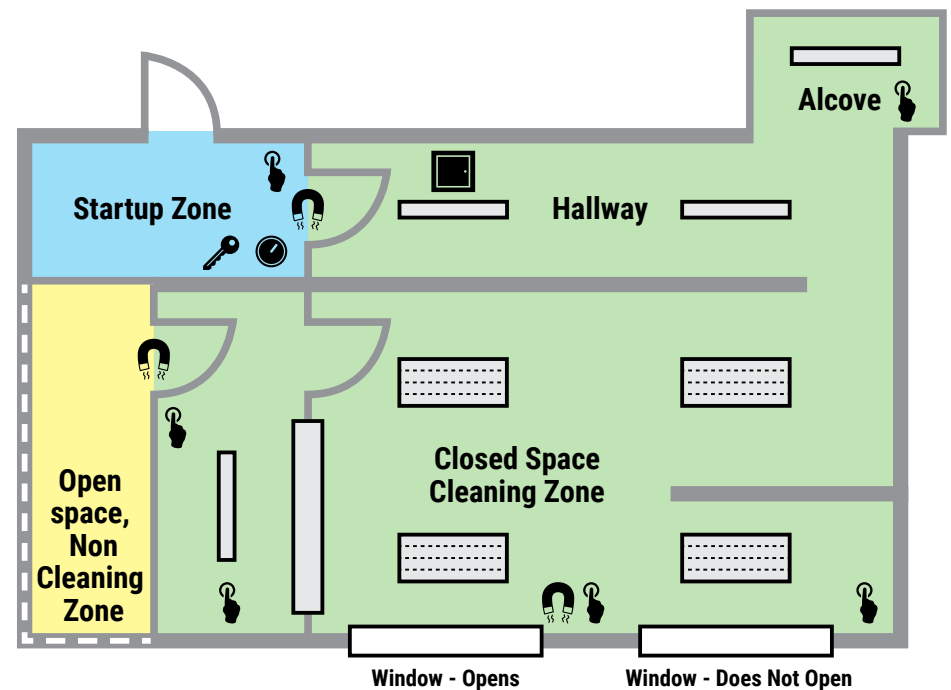
Each system has a GUV User Station connected to it. This station includes a keyed switch which ensures only authorized personnel can operate the system.



System automatically turns off*

The GUV Control System will automatically turn off if someone enters the space. GUV Magnetic Access Sensors are placed on all points of entry to create a containment area. If an individual enters the containment area, the system will automatically shut off.

* GUV Magnetic Access Sensors do not prevent doors from being opened in case of an emergency



GUV GERMICIDAL UV CONTROL SYSTEM

GUV Control Panel

The GUV Control Panel manages the GUV Control System based on inputs received from GUV Clearance Pushbuttons and GUV Magnetic Access Sensors. Each GUV Control Panel can have 1 GUV User Station and up to 24 GUV Clearance Pushbuttons connected to it.

GUV User Station

The GUV User Station is an information center and user interface to the GUV Control System. It houses a keyed activation switch to ensure only authorized personnel can operate the system, three LED indicators, and an ON/OFF selector switch.

GUV Magnetic Access Sensor

The GUV Magnetic Access Sensor, composed of an actuator and read head, ensures all doors, windows and other access points are closed. For the GUV Control System to be activated, all of these sensors must be in the closed position. Opening a door or window will stop the GUV session.

GUV Clearance Pushbutton

GUV Clearance Pushbuttons are used to verify that no one is within the space prior to the GUV session. Pushbutton will light up when the button is pressed letting the user know it is active.

GUV-16-120-277 Medium Panel (16 Pushbuttons)
GUV-24-120-277 Large Panel (24 Pushbuttons)



Control Panel to be mounted in electrical room

GUV-USER-1



GUV-MAG-SENSOR-1

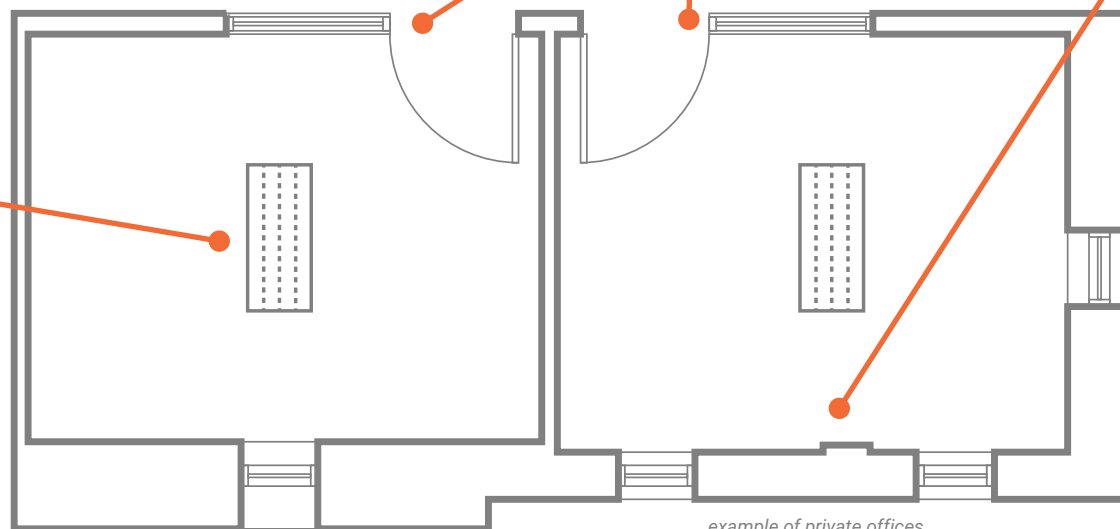
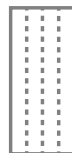


GUV-PB-1



Pushbuttons are installed in each room to be disinfected

Fail-Safe GUV Fixtures



example of private offices



Germicidal UV System

Light ARchitect app

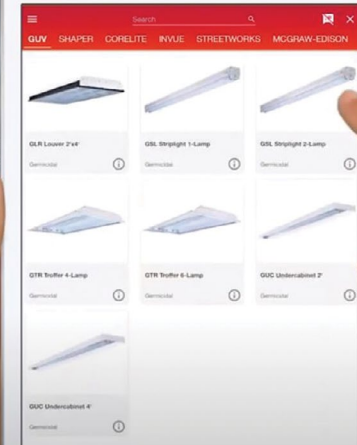
GUV Estimator

Now available on the
Light ARchitect app.



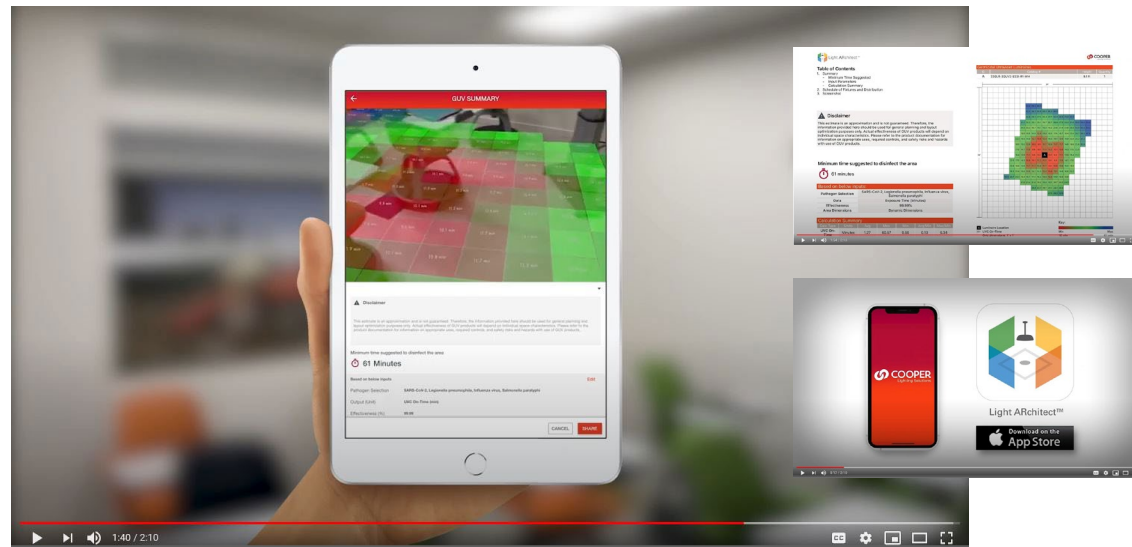
Light ARchitect™

Download the app on your iOS device (iPhone and/or iPad) and explore the new GUv estimator feature, enabling pathogen(s) selection and the time to disinfect a space.



Watch the GUV Estimator tutorial

Simple, impactful, and
result-focused

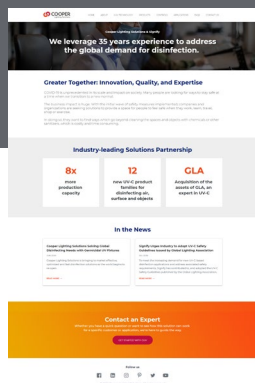


Where to learn more

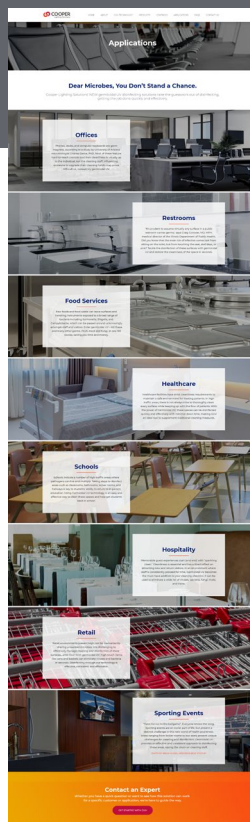
www.cooperlighting.com/GUV

GUV Disinfection Solutions Website

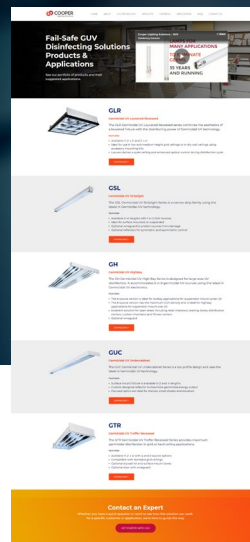
About



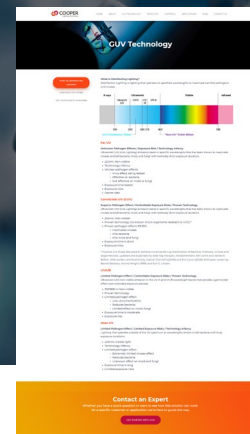
Applications



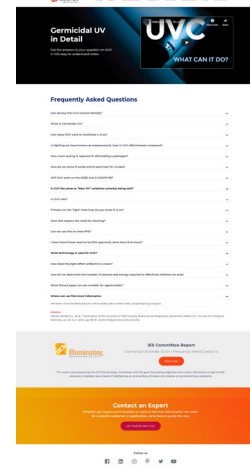
Products



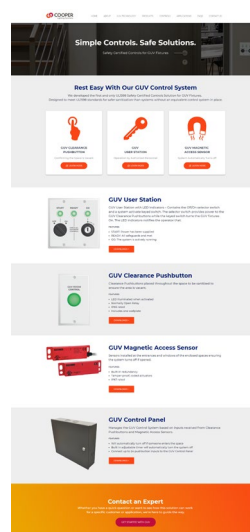
Technology



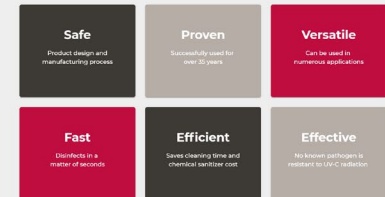
FAQs



Controls

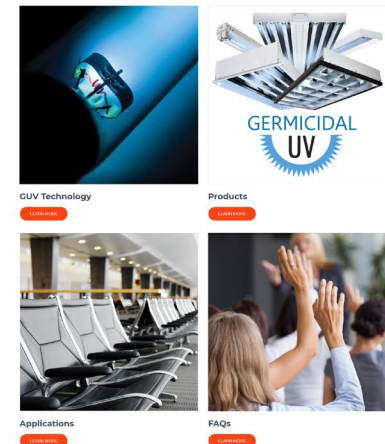


Germicidal UV as a disinfectant? Believe it.

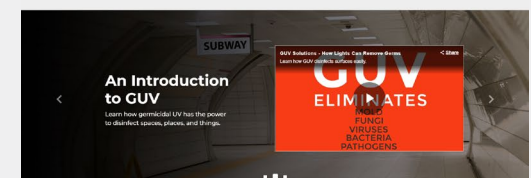
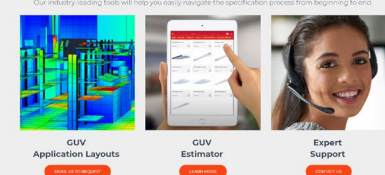


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Get Started on GUV



Specifying GUV



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Printed in USA
Publication No. BR519054EN
August 10, 2020 4:04 PM

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