

LUCIDIUM•CUV[®]

Advanced Germicidal UV Solutions

UV-C coil maintenance and
air purification solutions
customized to your
commercial HVAC system

LUCIDIUM•CUV[®]

UV-C for Commercial HVAC

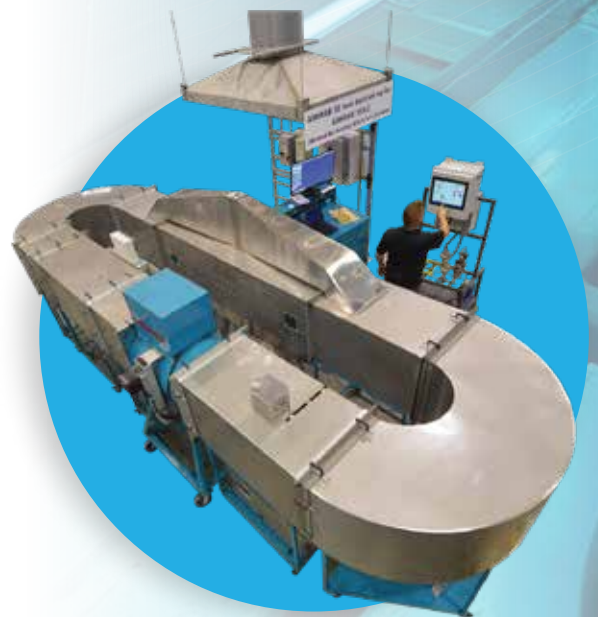
Lucidium CUV[®] is a reliable, highly effective means for disinfecting HVAC coils, and when properly designed provides an excellent commercial grade air purification solution.

Lucidium CUV[®] systems are easily configured to fit any commercial HVAC coil by incorporating a variety of germicidal UV-C lamp sizes in combination with easy-to-fit rack system and power supply.

Why RGF UVC – ASHRAE 185.2

How do you know your UV-C lamp systems are operating to specifications? RGF Environmental is the only manufacturer of UV-C lamp systems that performs ASHRAE 185.2 testing. The 185.2 Standard established a uniform test method for measuring the intensity of ultraviolet lamps under typical HVAC operating conditions.

185.2 testing is important to ensure the performance of UV-C lamps and establishes the validity of energy calculations or models commonly used throughout the air quality industry. Based on our testing, the energy output of a UV-C lamp can vary by over 50% from specifications depending on the installation location, temperature range, lamp design, airflow, and relative humidity, within an HVAC system.



Why UV-C?

Documented Effectiveness

Numerous studies since the 1930s documenting the effectiveness of UV inactivating microbes.

Energy Savings

Dirty condenser coils can increase HVAC energy consumption by up to 30% or more .
Commercial building HVAC can represent 29% of total on-site energy use.

Economical Operation

Clean coils can reduce energy spending by 10-15%.
Commercial building HVAC can represent 29% of total on-site energy use.

Increased Sustainability and IAQ

Dirty coils continuously contribute mold and bacteria resulting in poor IAQ.

New and Retrofit Systems

Custom designed system specific to your HVAC.

Efficient Installation and Operation

- Toolless lamp Installation
- Flex-Rack system for all size of air handlers
- NEMA 4X power supply with lamp status indicator lights standard
- High output patented lamps standard with IP65 quick connections
- Reflectors standard
- Largest selection of UV-C lamp sizes available
- Lamp shatter proofing available
- Magnetic lamp mounts standard



Designed Systems

RGF Environmental will design a Lucidium CUV[®] system for your HVAC project. Our professional team works with customers to determine the design specifications for each facility, resulting in a customized solution specific to your needs. Our extensive selection of UV lamps, flexible rack units, NEMA 4X power supplies, multiple mounting options and safety accessories provide the quality and installation flexibility for all commercial HVAC systems.



WE ARE RGF®

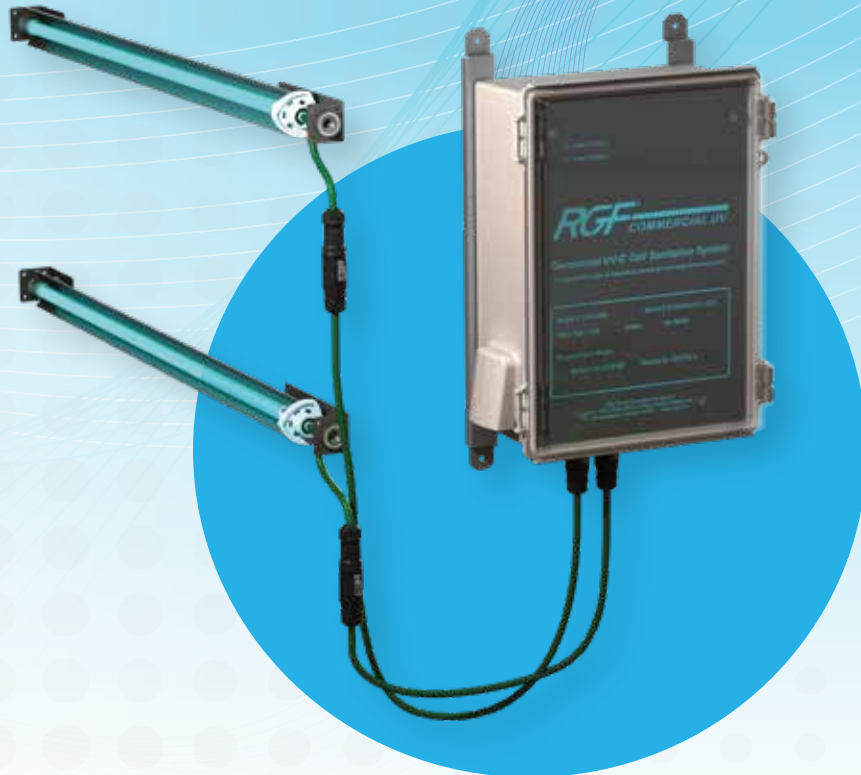
The LUCIDIUM CUV® HVAC Coil Maintenance

Installed on commercial and industrial HVAC coils to reduce microbial growth, LUCIDIUM CUV® reduces HVAC maintenance and improves operational efficiency by as much as 30%. LUCIDIUM CUV® is easily fitted to new or existing HVAC systems and when designed accordingly can substantially improve indoor air quality.

LUCIDIUM CUV® systems are easily configured to fit any HVAC coil by incorporating a variety of germicidal UV-C lamp sizes in combination with easy-to-fit rack system and power supply.



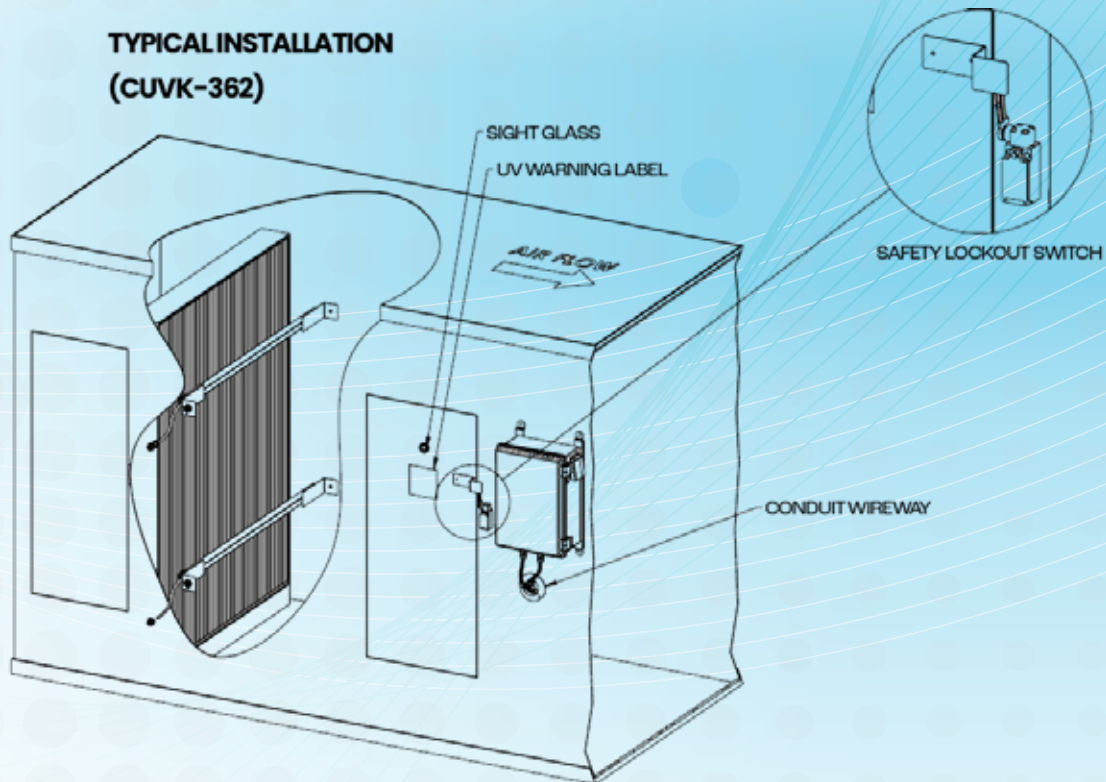
UV-C LIGHT



Commercial UV Specifications

| Model # | CUV ¹⁸ | CUV ²⁴ | CUV ³⁰ | CUV ³⁶ | CUV ⁴² | CUV ⁴⁸ | CUV ⁵⁴ | CUV ⁶⁰ |
|------------------------------|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Technology | UV-C Light | UV-C Light | UV-C Light | UV-C Light | UV-C Light | UV-C Light | UV-C Light | UV-C Light |
| Lamp Service Period | 2 year (17,500 hours) | | | | | | | |
| Replacement Lamp Part # | CUV18 | CUV24 | CUV30 | CUV36 | CUV42 | CUV48 | CUV54 | CUV60 |
| Length (inches) | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60 |
| Length (mm) | 458 | 610 | 762 | 915 | 1067 | 1220 | 1372 | 1524 |
| Lamp Warranty | 2 year (17,500 hours) | | | | | | | |
| UV-C Watts | 48 | 55 | 70 | 84 | 100 | 112 | 124 | 136 |
| μW/cm2 at 1 meter | 100 | 130 | 190 | 250 | 290 | 330 | 370 | 425 |
| Transformer Electrical Input | 110-270 VAC 50/60 Hz | | | | | | | |
| Power Supply Warranty | 1 Year | | | | | | | |
| Operation | Designed for Constant Operation Independent of HVAC | | | | | | | |
| Installation | Installation of the lamps can be either mechanical, or magnetic mounted; Power supply is mechanically mounted. Wire for constant operation. | | | | | | | |

TYPICAL INSTALLATION (CUVK-362)



WARRANTY

1 year on the system, 2 years on the lamps

LAMP REPLACEMENT

Recommended after 2 years



For complete
specs and
submittals,
please scan
QR code.



UL 1598:2018 Ed.4
CAN/CSA C22.2
No.250.0:2018

LUCIDIUM·CUV[®]

By *RGF*[®]

Lucidium CUV[®] Coil Irradiation at University of Central Florida

The University of Central Florida (UCF) contacted RGF Environmental for an HVAC coil sanitation and air purification system utilizing UV-C germicidal irradiation. The University has its main campus located in Orlando, Florida with nine regional campuses throughout central Florida. With 70,406 students (as of Fall 2021), UCF has the second largest student body of any public university in the United States.



Based on the University's goal to be climate-neutral by 2050, UV-C irradiation of the HVAC coils within their campus footprint will play a critical role in reducing energy consumption. Microbial growth in the HVAC coil increases system pressure and reduces heat exchange efficiency. UV-C light energy targeted on the HVAC coil will eliminate microbial growth resulting in as much as 20% less energy consumption by the HVAC system.

Along with energy savings, the university also required the UV-C solution be specified to help reduce airborne microbial particles traveling through the HVAC system. By increasing the UV-C light energy across the coil face Lucidium CUV[®] can reduce airborne microbes. The dual benefit of reducing microbial transmission and coil irradiation throughout the Universities campuses was essential to their ongoing operations.

In consultation with UCF, RGF[®] specified Lucidium CUV[®] systems for multiple buildings to provide reliable coil cleaning and airborne microbial reduction. Using RGF's germicidal UV-C energy mapping software, Lucidium CUV[®] systems were custom designed for each individual HVAC system to deliver UV irradiation averaging 3,200 to 4,000 uW/cm². The average UV-C dosage was modeled based on the size and layout of the air handler, to be the most advantageous for reliable air purification and reducing the most resilient airborne microbes.

Following the installation of Lucidium CUV[®] systems, the University will monitor microbial growth on the HVAC coils to ensure ongoing performance of the system. RGF[®] continues to specify new Lucidium CUV[®] systems to ensure the University achieves its sustainability goals and provides a continued safe working environment for students and faculty.



Dr. James Marsden, Executive Director of Science and Technology



RGF® now manufactures high quality UV-C Lucidium lamps onsite from 5" to 60" long ensuring no supplier delays on this critical component. The sealed ISO class clean room features an RGF® HEPA filtration system, REME® air treatment, and RGF® Clean Room Entry System.



By taking a vertical approach to manufacturing, RGF® eliminates supply chain risks helping to manage production lead time and costs to ultimately benefit our customers.



For Information Contact:
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800-842-7771

BUY LOCAL!

Clean Air is Life™

LET US HELP PROTECT YOURS



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