



Disinfection Solutions





The Trusted Authority for K-12 Schools

K-12 Schools Benefits:

- Enhances student and faculty performance
- Reduces absenteeism
- Promotes efficient performance of HVAC equipment with less maintenance
- Extends equipment lifecycles

Valkr Ray UV Solutions is dedicated to providing UVC products that contribute to improving environmental conditions in K-12 schools for the students, teachers, and administrators. The use of UVC improves indoor environments and contributes to enhanced student and teacher productivity and reduced absenteeism. It also promotes efficient performance of HVAC equipment with less maintenance and extends equipment lifecycles. There are many different areas within a K-12 environment — each with its own unique challenge and solution for the best result in pathogen reduction.

- Cafeterias
- Hallways
- Athletic facilities
- Classrooms
- Administrative buildings
- Nurses offices

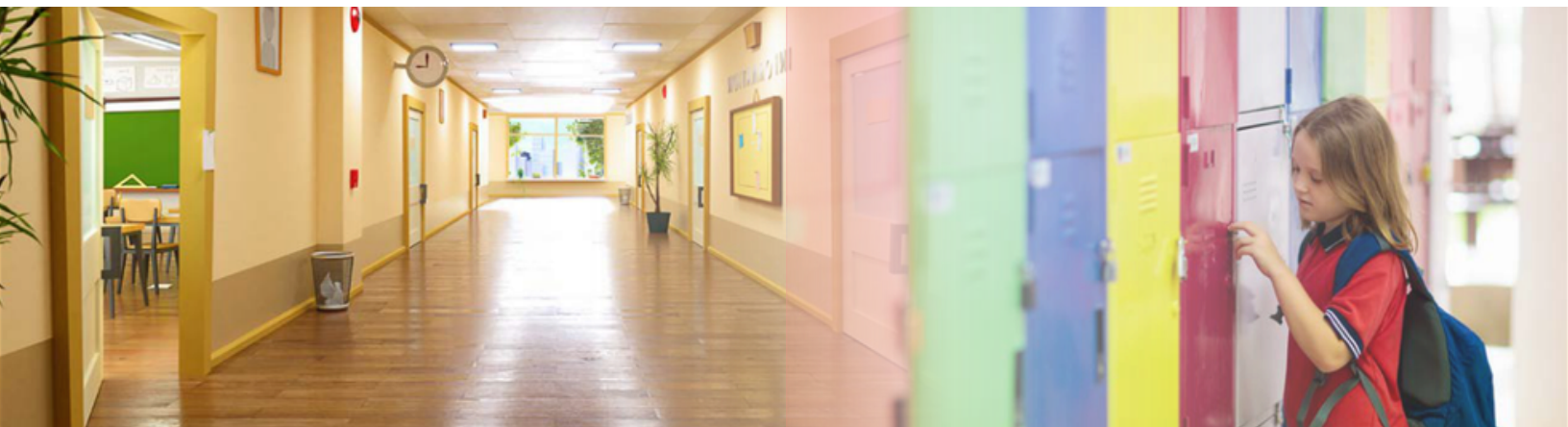
UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: K-12 Schools

- Poor indoor air quality (IAQ), which impacts student and teacher performance and attendance.
 - Spread of infectious agents.
 - High energy and maintenance costs.
-



UVC Disinfection Products for K-12 Schools

UVC for IAQ and Energy Efficiency

In AHU and In Duct UV Fixtures

In-AHU and In-Duct UV fixtures, such as the Lumalier AR Series UVC Fixtures, are installed inside ventilation systems to provide high-level, facility-wide disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ

Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas.

- Installation applications include lobbies in administrative buildings, classrooms, hallways, cafeterias, libraries, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management

Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection.

- Portable units are ideal for temporary disinfection of floors, desks, and table surfaces after any “student discharge event” (blood, vomit, diarrhea, etc.).
- Ideal for classrooms, cafeterias, or any area where contaminated surfaces can spread sickness.
- Recommended for treatment of difficult-to-disinfect surfaces, such as keyboards, monitors, lab and cafeteria equipment.
- Surface disinfection units are available in both fixed and portable options.



The Trusted Authority for Universities & Colleges

University Benefits:

- Improved health & human wellness
- Reduced absenteeism and increased performance of students and faculty
- Reduced pathogens to mitigate risk of outbreaks
- Delivered performance-based solutions
- Increased energy efficiency
- Reduced maintenance costs

Valkr Ray UV Solutions is dedicated to providing UVC products that contribute to improving environmental conditions in universities and other educational facilities for the students, faculty, and administrators. The use of UVC improves indoor environments and contributes to enhanced student and faculty productivity and reduced absenteeism. It also promotes efficient performance of HVAC equipment with less maintenance and extends equipment lifecycles. Achieving the best results in pathogen reduction starts with identifying the specific challenges in the different university environments:

- Dorms
- Cafeterias
- Athletic facilities
- Classrooms & lecture halls
- Administrative buildings

UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Universities

- Poor indoor air quality (IAQ), which impacts student and faculty performance and attendance.
 - Spread of infectious agents.
 - High energy and maintenance costs.
-



www.valkrray.com
22800 Indian Creek Drive
Dulles, Virginia 20166
(703) 996-6043



UVC Disinfection Products for Universities

UVC for IAQ and Energy Efficiency

In AHU and In Duct UV Fixtures

In-AHU and In-duct UV fixtures, such as the Lumalier AR Series UVC Fixtures, are installed inside ventilation systems to provide high-level, facility-wide disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ

Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas.

- Installation applications include lobbies in administrative buildings, classrooms and lecture halls, hallways, cafeterias, libraries, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management

Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection.

- Appropriate for temporary disinfection of floors, desks, and table surfaces that have been contaminated.
- Ideal for treatment of difficult-to-disinfect surfaces, such as keyboards, monitors, lab and cafeteria equipment.
- Surface disinfection units are available in both fixed and portable options.



The Trusted Authority for Private and Group Residential

Residential Benefits:

- Inactivate environmental pathogens to reduce your family's infection rates and illnesses
- Reduce odors and poor air quality within your home
- Reduce energy consumption by AHUs and eliminate chemical coil cleaning

What are four causes of poor indoor air in your home?

Old and new construction methods

Modern, energy efficient buildings are designed and built to be airtight, creating an ideal indoor incubator for the growth of germs and mold colonies. Older, 'drafty' homes have unfiltered air that leaks in from dusty attics, sooty fireplaces, bathroom fans vents, stove fan vents, dryer vents, and poorly insulated or ill-fitting doors and windows.

Increased use of synthetic materials

The ever-increasing use of synthetic materials in buildings, furniture, carpets, and cleaning supplies provides an ongoing source of airborne volatile organic chemicals (VOCs).

Poor design of our homes and HVAC

Poor design and/or construction of heating, ventilation, and air conditioning (HVAC) systems prevents proper air exchanges and poor circulation of conditioned air.

Personal activities and habits

Occupant activities like cooking, cleaning, and laundry; poor maintenance habits (i.e. forgetting to replace filters or procrastination in repairs); and contributing factors such as smoking, burning candles, and use of air 'fresheners'.

UVC Solutions

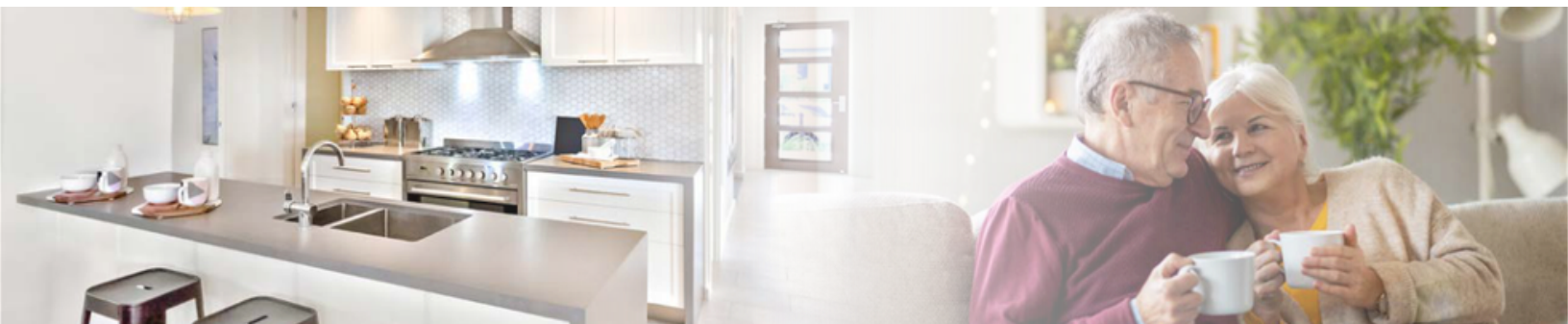
Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Private and Group Residential

Poor indoor air quality (IAQ) due to:

- Airborne particulates (mostly dust)
 - Airborne biological microbes (germs, virus, bacteria, fungus)
 - Airborne chemicals and gasses (volatile organic compounds (VOCs)).
-





UVC Disinfection Products for Residential Facilities

UVC for IAQ and Energy Efficiency In AHU and In Duct UV Fixtures

In-AHU and In-Duct fixtures, such as the ADPL or PRU Series UVC Fixtures, are installed inside ventilation systems to provide high-level disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection in homes and residential facilities. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature

failure of air conditioning equipment.

- Provides your home with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ

Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas in group residential facilities.

- Installation applications include lobbies in administrative buildings, hallways, common and gathering areas, gyms, cafeterias, libraries, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management

Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection in group residential facilities.

- Portable units are ideal for temporary disinfection of floors, desks, and table surfaces after any “resident discharge event” (blood, vomit, diarrhea, etc.).
- Ideal for group activity and common areas where contaminated surfaces can spread sickness.
- Recommended for treatment of difficult-to-disinfect surfaces.
- Surface disinfection units are available in both fixed and portable options.



The Trusted Authority for Healthcare Facilities

Healthcare Industry Benefits:

- Improve patient outcomes
- Mitigate risk of Hospital Acquired Infections (HAIs)
- Mitigate risk of infection spread to hospital staff and reducing absenteeism
- Reduce energy consumption, and eliminate chemical coil cleaning

Lumalier is dedicated to providing UVC products that contribute to improving environmental conditions in healthcare facilities for patients, medical staff, employees, and visitors. The use of UVC improves indoor environments and contributes to improved patient outcomes. It also promotes efficient performance of HVAC equipment with less maintenance and extends equipment lifecycles.

Determining the best solution(s) for pathogen reduction starts with identifying the specific healthcare space and its unique challenges.

- Patient exam rooms
- Hospital rooms
- Administrative offices
- Hallways
- Nurses stations
- Pharmacies
- Patient isolation rooms
- Waiting rooms

UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Healthcare Facilities

- Indoor air quality (IAQ).
 - Airborne pathogens are a source of infection and disease.
 - HVAC bio-burden spreads infectious bio-aerosols and increases energy consumption.
 - High energy and maintenance costs.
-





UVC Disinfection Products for Healthcare Facilities

UVC for IAQ and Energy Efficiency

In AHU and In Duct UV Fixtures

In-AHU and In-Duct UV fixtures, such as the Lumalier AR Series UVC Fixtures, are installed inside ventilation systems to provide high-level, facility-wide disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ

Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas.

- Installation applications include waiting rooms, exam rooms, nurses stations, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management

Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection.

- Appropriate for temporary disinfection of contaminated floors, desks, and table surfaces.
- Ideal for treatment of difficult-to-disinfect surfaces, such as keyboards, monitors, lab and cafeteria equipment and for use in pharmacies, patient isolation rooms, morgues, or any area where contaminated surfaces exist.
- Surface disinfection units are available in both fixed and portable options.



The Trusted Authority for Municipal & Office Buildings

Municipal & Office Buildings Benefits:

- Inactivates environmental pathogens to reduce risk of sick building syndrome and building related illnesses
- Improves occupant performance and reduces risk
- Reduces energy consumption
- Eliminates coil cleaning

Valkr Ray UV Solutions is dedicated to providing UVC products that contribute to improving environmental conditions in office buildings for employees, visitors, and employers. The use of UVC improves indoor environments and contributes to enhanced employee productivity and reduced absenteeism. It also promotes efficient performance of HVAC equipment with less maintenance and extends equipment lifecycles. Achieving the best results in pathogen reduction starts with identifying the specific space and challenge, which can be unique to office building environments:

- Cubical spaces
- Work/collaboration rooms
- Break rooms
- Conference rooms
- Kitchens
- Lobbies
- Waiting areas
- Gathering areas
- Court rooms

UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Municipal & Office Buildings

- Poor indoor air quality (IAQ), which impacts employee performance and attendance.
- Spread of infectious agents.
- High energy and maintenance costs.





UVC Disinfection Products for Municipal & Office Buildings

UVC for IAQ and Energy Efficiency In AHU and In Duct UV Fixtures

In-AHU and In-Duct fixtures, such as the Lumalier AR Series UVC Fixtures, are installed inside ventilation systems to provide high-level, facility-wide disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas.

- Installation applications include cubical spaces, work/collaboration rooms, break rooms, conference rooms, kitchens, lobbies, waiting areas, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection.

- Appropriate for temporary disinfection of floors, desks, and table surfaces that have been contaminated.
- Ideal for treatment of difficult-to-disinfect surfaces, such as keyboards, monitors, lab and cafeteria equipment.
- Surface disinfection units are available in both fixed and portable options.



The Trusted Authority for Retail and Restaurants

Retail & Restaurant Industry Benefits:

- Reduces contamination on food surfaces and containers
- Mitigates risk of person to person spread within establishments
- Provides ease of mind to business patrons
- Reduces end-user liabilities/recalls
- Promotes efficient performance of HVAC equipment with less maintenance
- Extends equipment lifecycles

Valkr Ray UV Solutions is dedicated to providing UVC products that contribute to improving environmental conditions in retail businesses and restaurants for employees, patrons, and employers. The use of UVC improves indoor environments and contributes to enhanced employee productivity and reduced absenteeism. It also promotes efficient performance of HVAC equipment with less maintenance and extends equipment lifecycles. Determining which solution will best reduce pathogen levels starts with identifying the space and challenges in the retail or restaurant environment:

- Dining and Bar Areas
- Work-out Spaces
- Salon and Barber Shop Stations
- Check-out Lines
- Retail Stores

UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Retail and Restaurants

- Spread of infectious agents on surfaces and in the air.
- Contaminated products, equipment, and high-touch surfaces.
- Poor indoor air quality (IAQ) decreases worker performance.
- High energy and maintenance costs.





UVC Disinfection Products for Retail Businesses and Restaurants

UVC for IAQ and Energy Efficiency In AHU and In Duct UV Fixtures

In-AHU and In-Duct UV fixtures, such as the ADPL and PRU Series Fixtures, are installed inside ventilation systems to provide high-level, facility-wide disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction into high-risk areas.

- Ideal for use in salons & barber shops, dining areas, grocery stores, retail establishments, gymnasiums and health clubs, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection.

- Portable units are ideal for temporary disinfection of floors and table surfaces.
- Ideal for any area where contaminated surfaces can spread sickness.
- Use for treatment of difficult-to-disinfect surfaces on registers and high-touch equipment in gyms and kitchens.
- Surface disinfection units are available in both fixed and portable options.

January 2021

©2021 Lumalier. All Rights Reserved.



www.valkrray.com
22800 Indian Creek Drive
Dulles, Virginia 20166
(703) 996-6043



The Trusted Authority for Food and Beverage Manufacturing

Food Industry Benefits:

- Reduce contamination on food surfaces and containers
- Increase shelf life
- Reduce end-user liabilities/recalls
- Promote efficient performance of HVAC equipment with less maintenance
- Extend equipment lifecycles

Valkr Ray UV Solutions is dedicated to providing UVC products that contribute to improving environmental conditions in food and beverage manufacturing facilities. The use of UVC improves indoor environments and contributes to reduced employee infection rates and illnesses. It also promotes efficient performance of HVAC equipment with less maintenance and extends equipment lifecycles. It is important to identify the specific spaces and challenges to determine the best solution(s) for pathogen reduction:

- Warehousing and Storage
- Refrigeration
- Processing and Packaging
- Automated Lines
- Floors, Walls and Ceilings
- Ingredient Mixing

UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Food and Beverage Manufacturing

- Spread of infectious agents on surfaces and in the air.
 - Contaminated products.
 - Poor indoor air quality (IAQ) decreases worker performance.
 - High energy and maintenance costs.
-





UVC Disinfection Products for Food and Beverage Manufacturing Facilities

UVC for IAQ and Energy Efficiency

In AHU and In Duct UV Fixtures

In-AHU and In-Duct UV fixtures, such as the Lumalier AR Series UVC Fixtures, are installed inside ventilation systems to provide high-level, facility-wide disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ

Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas.

- Installation applications include administrative offices, food processing spaces, packaging areas, break rooms, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management

Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection.

- Appropriate for temporary disinfection of floors, desks, and table surfaces that have been contaminated.
- Ideal for treatment of difficult-to-disinfect surfaces, such as food packaging and processing areas, conveyors, keyboards, monitors, lab and cafeteria equipment.
- Surface disinfection units are available in both fixed and portable options.



The Trusted Authority for Energy Efficiency

Energy Efficiency Benefits:

- Reduces energy consumption
- Extends equipment lifecycles
- Eliminates the need for chemical coil cleaning

The ECO Solution (Environmental Coil Optimization)

Environmental Coil Optimization destroys the insulating biofilm to 'release' dirt and debris that contribute to coil fouling. Coil optimization returns the Air Handling Unit (AHU) to as-new specification to help achieve the benefits listed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), while providing substantial and immediate energy efficiency that results in rapid ROI payback.

UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct air disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Energy Efficiency

Problem: Facility managers struggle with maintaining HVAC units. Coil cleaning is often one of the most neglected maintenance requirements. To truly keep coils clean and performing to original specifications, coils may need to be cleaned four times per year (quarterly) which is expensive, labor and chemical intensive, and unrealistic.

Solution: Lumalier's In-AHU and In-Duct UV fixtures are specifically engineered for the ideal treatment of coils, engineered and scaled specifically for the coil's exact height, width, and CFM of the HVAC system.



www.valkrray.com
22800 Indian Creek Drive
Dulles, Virginia 20166
(703) 996-6043

UVC Disinfection Products for Energy Efficiency

UVC for Indoor Air Quality (IAQ) and Energy Efficiency In AHU and In Duct UV Fixtures

In-AHU and In-Duct UV fixtures, such as the Lumalier AR Series UVC Fixtures, are installed inside ventilation systems. In addition to providing high-level, facility-wide disinfection of airborne infectious pathogens, these fixtures provide facilities with other important benefits.

- Eliminates biological growth on coils and in the drain pan that

can cause coil fouling, odors, and premature failure of air conditioning equipment.

- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.
- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.

AHU Benefits:

1. Eliminates all mold and biological growth on coil fins, drain pan, fan motor and surrounding plenum, and odors are eliminated.
2. Bio-free coils generate greater condensate volume and lower Relative Humidity (RH%) in the facility. Increased condensate properly removes debris as originally specified = cleaner coils and cleaner pans.
3. Delta-T and thermal efficiency restoration, static pressure reduction, improved air flow, reduced fan amperage draw = return to as-built specifications.
4. Energy savings = 8% to 20% / energy ROI = 1 to 4 years.
5. Keeps coils clean 24/7/365.

Maintenance Benefits:

1. Eliminates need for chemical coil cleaning = labor and chemical savings.
2. Eliminates need for pan pills or odor pills in pans or plenums.
3. More efficient system = fewer service issues. Lifecycle of AHU extended by approximately 2 years.

Installation applications include:

- Healthcare
- Office Buildings
- Universities
- K-12 Schools
- Correctional Facilities
- Food Manufacturing





The Trusted Authority for Correctional Facilities

Correctional Facility Benefits:

- Inactivate environmental pathogens to reduce inmate and staff infection rates and illnesses
- Reduce risk and legal exposure
- Reduce energy consumption by AHUs and eliminate chemical coil cleaning

Valkr Ray UV Solutions is dedicated to providing UVC products that contribute to improving environmental conditions in correctional facilities for inmates, facility staff, and visitors. The use of UVC improves indoor environments and contributes to reduced inmate and staff infection rates and illnesses. It also promotes efficient performance of HVAC equipment with less maintenance and extends equipment lifecycles. Determining the best solution for pathogen reduction in a correctional facility starts with identifying the specific area and challenge:

- Cafeterias
- Administrative buildings
- Medical evaluation rooms
- Hallways • Living quarters
- Common areas

UVC Solutions

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

Challenges: Correctional Facilities

- Indoor air quality (IAQ).
- Rising cost of treatment for inmates and staff for airborne diseases.
- Spread of infectious agents.
- Inefficient HVAC systems are costly to operate.



UVC Disinfection Products for Correctional Facilities

UVC for IAQ and Energy Efficiency

In AHU and In Duct UV Fixtures

In-AHU and In-Duct fixtures, such as the the Lumalier AR Series UVC Fixtures, are installed inside ventilation systems to provide high-level, facility-wide disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides facilities with an ROI benefit with reduced energy consumption and maintenance.

UVC for IAQ

Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas.

- Installation applications include lobbies in administrative buildings, hallways, cafeterias, common areas, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

UVC for Risk Management

Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection.

- Appropriate for temporary disinfection of floors, desks, and table surfaces that have been contaminated.
- Ideal for treatment of difficult-to-disinfect surfaces, such as keyboards, monitors, lab and cafeteria equipment.
- Surface disinfection units are available in both fixed and portable options.