LUXIBEL®

UVC DISINFECTION SYSTEMS

AN ADDITIONAL LAYER OF SAFETY IN PUBLIC SPACES

Anti-Covid-19

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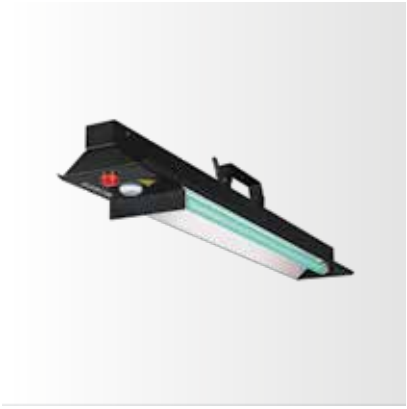
UVC DISINFECTION SYSTEMS



B Direct

B Direct II

B Hybrid

B Air V2

B Square

B Cannon

Important safety warning
Never allow human beings under direct radiation of UVC

UVC DISINFECTION SYSTEMS

Increasingly, we spend more time indoors, for example at work, in airplanes, schools and shopping malls. The air we breathe in these environments is anything but clean. In fact, it's often re-circulated along with all the bacteria, viruses, pollen, smoke and toxic gases that are trapped along with it.

In hospitals this can be a real problem. hospital-acquired infections affect around 10% of patients during their stay. And there is increasing evidence that up to 20% of these infections, like the flu, moulds, pneumonia and MRSA, is transmitted via the air, at a huge price, both in terms of human life and financial costs. Tuberculosis is even 100% transmitted via the air. Luxibel UVC purification lamp systems provide a safe, reliable and sustainable solution. Ideal for use in ventilation air ducts, air disinfection units or stand-alone air purifiers.

These types of **UVC purification systems** from **Luxibel** can also be used for **surface** and/or **air disinfection** in the food and beverage industries, hospital rooms, pharmacy shops, surface disinfection in public transport like buses, airplanes etc. They help protect against airborne pathogens, creating a safer and healthier indoor environment with the power of light.

Made in Europe with hight-quality Philips light sources.

Antibacterial **Antivirus** **Antifungal** **Anti-mold**

WARNING

When in operation the product will emit internal UVC radiation. UVC radiation is invisible to humans and exposure to UVC radiation may cause serious damage to eyes and skin. The floodlights contain a small amount of mercury which can be poisonous at certain concentrations.

Avoid

Direct or indirect lighting on eyes or skin of humans or animals and exposure to direct or strongly reflected UVC light.

CAN UVC HELP PREVENT COVID-19 TRANSMISSION BY REDUCING CONTAMINATION?

The International Ultraviolet Association (IUVA) believes that UV disinfection technologies can play a role in a multiple barrier approach to reducing the transmission of the virus causing COVID-19, SARS-CoV-2, based on current disinfection data and empirical evidence. UV is a known disinfectant that can help to mitigate the risk of acquiring an infection in contact with the COVID-19 virus when applied correctly.

BENEFITS OF UVC TECHNOLOGY

Effective

UVC radiation has been proven to be effective against waterborne and airborne pathogenic micro-organisms including those responsible for cholera, hepatitis, polio, typhoid, giardia, cryptosporidium and many other bacterial, viral and parasitic diseases.

Measureable

The UVC disinfection effect is directly related to the UV dose (which is the product of intensity and exposure time of the micro-organisms) so it's effectiveness can be simply measured once the system design is validated.

Instant result

UVC radiation works instantly and the effectiveness does not depend on the temperature.

Eco-friendly

UVC technology is environmentally friendly and has no harmful effect when overdosed on surfaces, water or air.

Low-cost

UVC installations have low capital and operation cost.

Physical process

UVC disinfection is a physical process: no chemical substances are added.

B DIRECT FAMILY

The B Direct family comes in two versions: **B Direct** and **B Direct II**. Both disinfect air and surface, prevent secondary infections and eliminate bacteria, viruses and fungal and mold spores in the air. Use in production halls, hospitals, health care facilities, pharmacies, public transport and many more. All direct radiating fixtures are equiped with a double security with movement sensor and LED light + sound alarm.

- Lamp life: > 9.000hrs
- Mounting: wall, ceiling or tripod
- 360° RF movement sensor
- Visual and audio alarm (70dB)
- Protective foil for lamp (on request)
- Lamp replacement: once a year
- Irradiance @ 1m: 150 microW/cm³ (B Direct)
  300 microW/cm³ (B Direct II)

B DIRECT

1x TUV 55W HO

IP20

57W AC 230V - 50Hz

1.080 x 135 x 165 mm | 42.5 x 5.3 x 6.5 in

6,6 kg | 14.6 lb

B DIRECT II

2x TUV 55W HO

IP20

112W AC 230V - 50Hz

1.080 x 135 x 245 mm | 42.5 x 5.3 x 9.6 in

8,8 kg | 19.4 lb

Available accessories

Mounting arm

Wireless invidual control

Movement sensor

Available in any RAL colour on request

Important safety warning
Never allow human beings under direct radiation of UVC


20

B SQUARE

The **B Square** is a disinfection unit for mounting in ceiling that disinfects surfaces, prevents secondary infections and eliminates bacteria, viruses and fungal and mold spores in the air. All direct radiating fixtures have a standard double security with a moving sensor and an audiovisual alarm. It can be used in production halls, hospitals, health care facilities, pharmacies, public transport and many more.

- Lamp life: > 9.000 hrs
- 360° RF movement sensor
- Visual and audio alarm (70 dB)
- Fits straight into ceiling system
- Suspended on 4 springs for lowered ceiling

2x TUV PL-L 60W

IP20

124W AC 220-230V - 50Hz

595 x 595 x 80 mm | 23.4 X 23.4 X 3.15 lb

4,8 kg | 10.6 lb

Important safety warning
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B HYBRID

The **B Hybrid** combines direct and indirect disinfection. The indirect module makes 24 hour disinfection possible in the presence of people and animals. It eliminates airborn bacteria, viruses and fungal and mold spores. Use in production halls, health care facilities, pharmacies, public transport, shops and many more.

- Lamp life: > 9.000hrs
- Disinfection time < 15min
- Mounting: wall, ceiling or tripod
- Recommended uptime: 24h
- 360° RF movement sensor
- Visual and audio alarm (70dB)
- Lamp replacement: once a year
- Air filter replacement: twice a year recommended
- Irradiance @ 1m: 150 microW/cm^3

117m^3/h fan capacity

1x TUV 55W HO + 2x TUV 55W HO

IP20

184W AC 230V - 50Hz

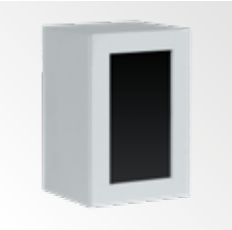
1.150 x 235 x 320 mm | 45.28 x 9.25 x 12.6 in

14,7kg | 32.41lb

Available accessories

Mounting arm

Wireless invidual control



Movement sensor

Replacement set: dust filter with carbon

Available in any RAL colour on request

Important safety warning
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B AIR V2

The **B Air V2** takes care of 24h air disinfection in the presence of people and animals and eliminates bacteria, viruses and fungal and mold spores in the air. This indirect UVC air disinfection unit can be used in production halls, health care facilities, pharmacies, public transport, shops and many more.

The B Air V2 comes with a B Nozzle standard included to use Luxibel's patented Mid-Air Disinfection System (MADS).

- Lamp life: > 9.000hrs
- Mounting: wall, ceiling or tripod
- Recommended uptime: 24h
- Lamp replacement: once a year
- Air filter replacement: twice a year recommended
- B Nozzle (Mid-Air Disinfection System)

117m³/h fan capacity

1x TUV 55W HO + 2x TUV 55W HO

IP20

129W AC 230V - 50Hz

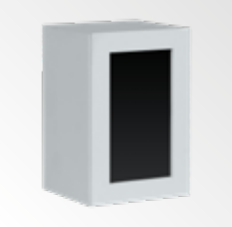
1.150 x 180 x 235 mm | 45.3 x 7.1 x 9.3 in

11,1 kg | 24.5 lbs

Available accessories

Mounting arm

Wireless invidual control



Movement sensor

Replacement set: dust filter with carbon

Available in any RAL colour on request

Important safety warning
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B CANNON

Preliminary specifications

The **B Cannon** is a high volume air disinfection unit for large scale venues. Its high air flow capacity and very high internal UVC disinfection, makes sure that all microorganisms are effected inside the B Cannon. No UVC radiation escapes from the unit due to the use of light traps (air passes through, while (UV)-light is blocked.

B Cannon is the perfect solution to disinfect large venues like concert & exhibition halls, sports arenas, shopping malls, production facilities, airports & train stations…

- Lamp life: > 9.000hrs
- Mounting: hanging or standing
- Recommended uptime: 24h
- Control: manual, DMX or remote (optional)
- Easy and fast maintenance thanks to rail system
- Filter blow-out function

12.000 m^3/h fan capacity

30x TUV 55W HO

IP20

4.680W 3x AC 230V - 50Hz - 16A

2.395 x 1.265 x 800 mm | 94.29 x 49.8 x 31.5 in

265 kg | 584.2 lbs

Available accessories

Rail system

Easy-to-use

Light trap

B Nozzle

Wireless invidual control

Important safety warning
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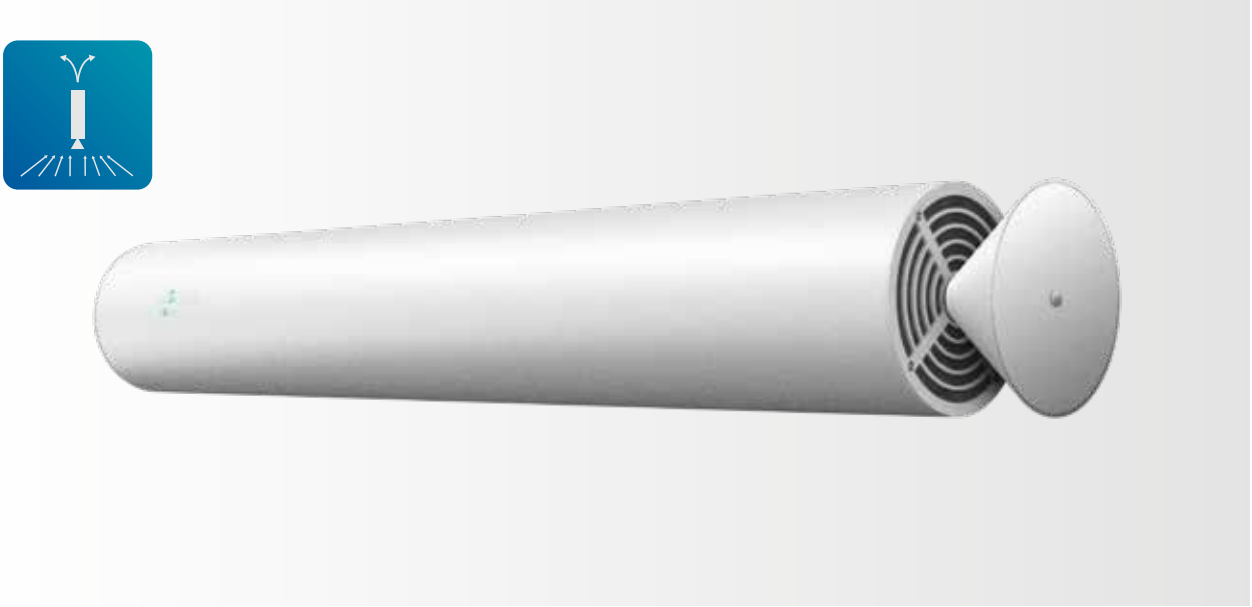
LUXI EL

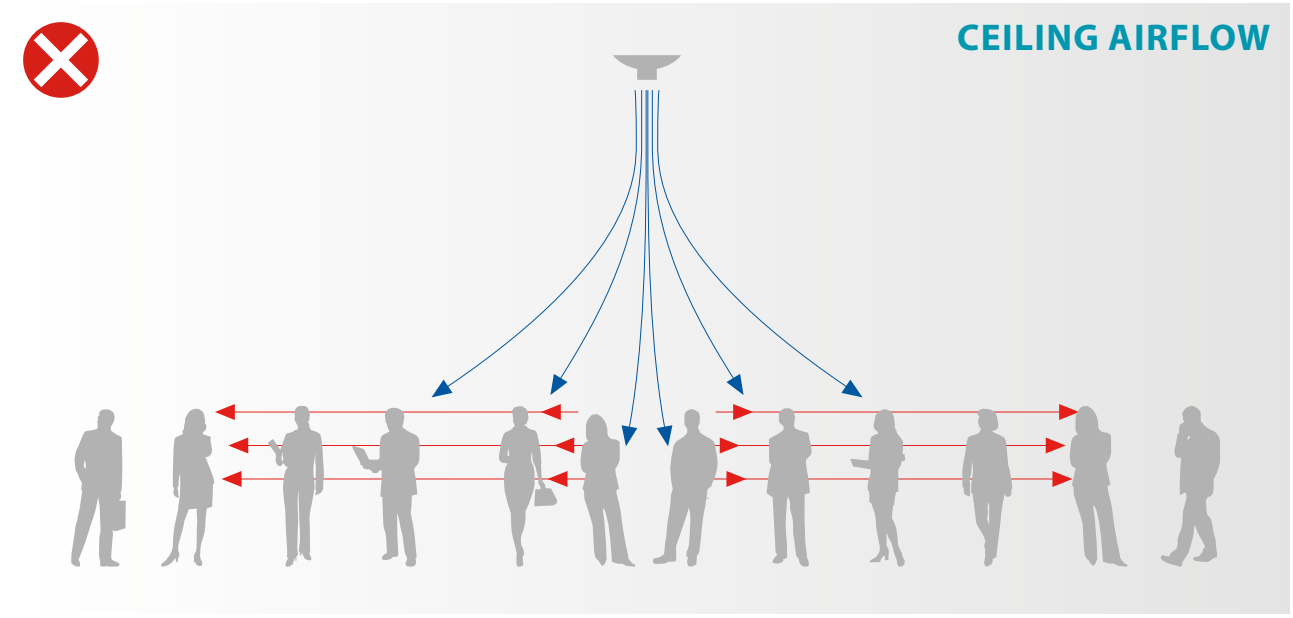
MID-AIR DISINFECTION SYSTEM (MADS)

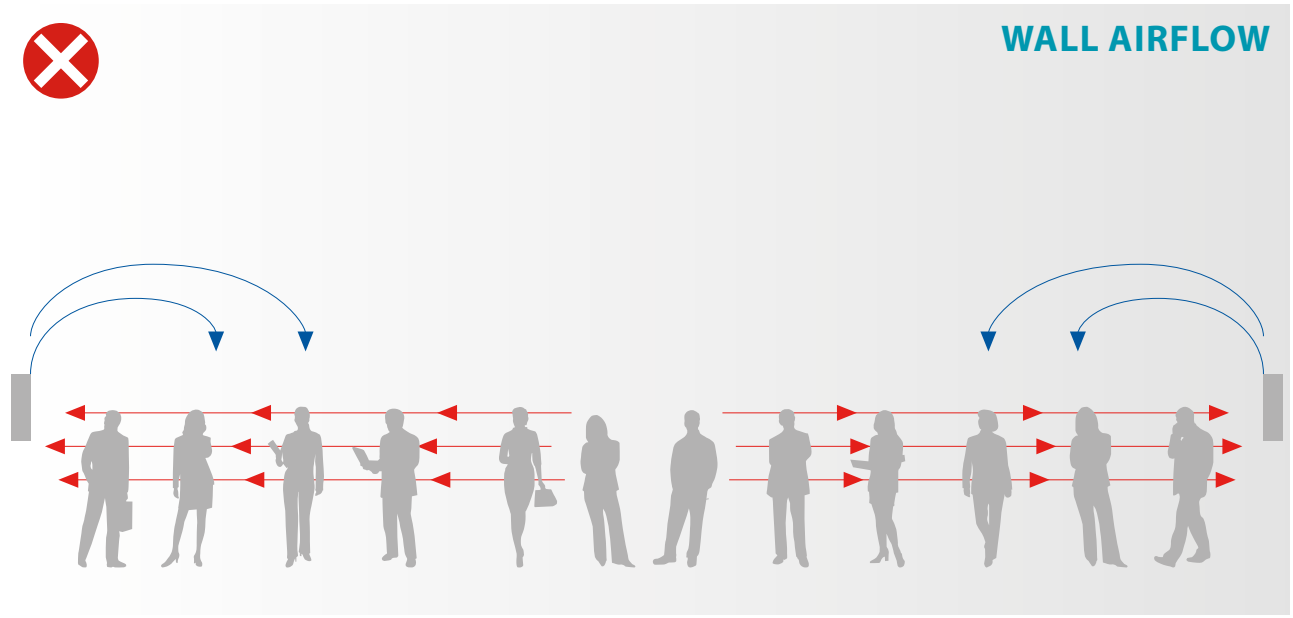
THE COMBINATION OF UVC AIR DISINFECTION AND AERODYNAMICS

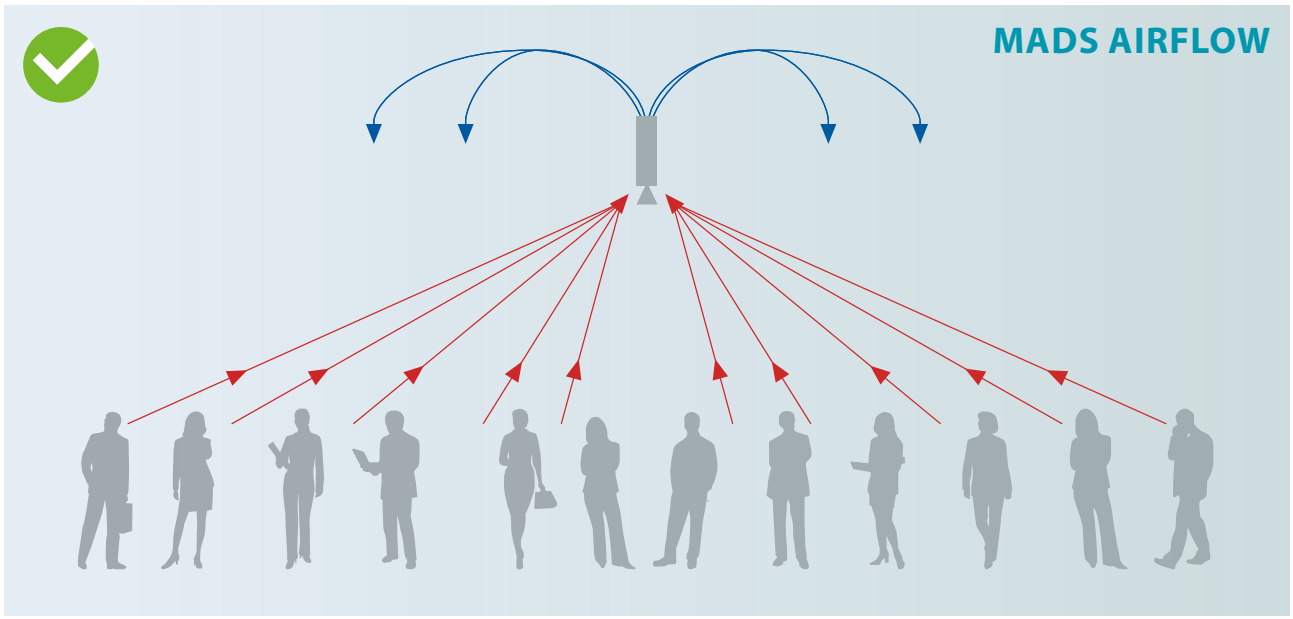
The **MADS** system is developed for larger spaces with an audience where air circulation needs to be taken into account. The main advantage of this installation is ensuring that the air breathed out by guests is sucked upwards by the **aerodynamically-patented system**. Micro-organisms such as bacteria and viruses are neutralised and germ-free air is blown back into the room or venue. When we meet up in enclosed spaces with groups of people, air disinfection will contribute to reducing infection rates.

Signify (formerly Philips Lighting) published the results of tests on UVC light on the coronavirus. Through scientific testing by researchers at Boston University they concluded that UVC radiation is highly effective in neutralizing the coronavirus. There is no risk of harmful radiation to people, as Luxibel carries out the UVC disinfection process within a fully-enclosed device.









All representations above are in scale 1:60.

REFERENCE LIST

AED Studios (BE)

Fellowship of The Woodlands (USA)

Tennis Club Molenbos (BE)

Medical Prevention Rehabilitation Center (ES)

Dental practice Pinke & Beijerinck (NL)

Café Saint-Pol (BE)

Alpha Motors Mobilhome Rental (BE)

Hairdresser (DK)

Restaurant De Lekkerbek (BE)

- Radio MK Station (UK)
- Codem Composites (UK)
- Central de Telefónica de Madrid (ES)
- Town Hall of Arroyo de la Luz (ES)
- Town Hall of Albala (ES)
- Town Hall of Sierra De Fuentes (ES)
- Town Hall of Mata de Alacantra (ES)
- Town Hall of Plasenzuela (ES)
- Town Hall of Villamesias (ES)
- Town Hall of Santa Cruz de la Sierra (ES)
- Town Hall of La Aldea del Obispo (ES)
- Town Hall of Arroyomolinos (ES)
- Town Hall of Edificio 3 Milenio Junta de Extremadura (ES)
- Town Hall of Castilblanco (ES)
- Town Hall of Azuaga (ES)
- Kindergarten Kos (GR)
- BMW Meeting room (DE)

- Great British Bake Off Television Show (UK)
- AED Film Studios (BE)
- Fellowship of The Woodlands Video Broadcast Control Room (USA)

- Treehouse Hotel London (UK)
- Restaurant De Lekkerbek (BE)
- Café Saint-Pol (BE)
- Restaurant De Sécretaire (BE)
- Café 't Loze Vissertje (BE)

- Medical Prevention Rehabilitation Center (ES)
- Hospital Ptuj (SL)
- Hospital Rotterdam (NL)
- Military Hospital Neder-Over-Heembeek (BE)
- Orthopaedic Clinic (SG)
- Dental practice Pinke & Beijerinck (NL)
- Better Hearing Clinic (UK)
- Doctor Practice De Keulenaer (BE)
- Data Dental (BE)

- Hairdresser (DK)
- Cadena Uniqlo (ES)
- H73 Turkish barber (UK)

- Dressing Rooms Levante Football Club (ES)
- Training Center Mouscron Football Club (BE)
- Tennis Club Molenbos (BE)
- Theme Parc Bobbejaanland (BE)
- Theme Parc Europapark (DE)
- Spa Wellness Center Medina Califa Baños Árabes (ES)
- Spa Wellness Center Medina Mayrit Baños Árabes (ES)
- Spa Wellness Center Medina Nazarí Baños Árabes (ES)
- Spa Wellness Center Al Andalus Baños Árabes (ES)
- Opthalmic Exploration Center Tunis (TUN)

- Alpha Motors Mobilhome Rental (BE)
- JESCO Auto Training School (BE)

WHITE PAPER

UVC AIR DISINFECTION - SCIENTIFICALLY VERIFIED

WHITE PAPER
CLICK HERE

The Luxibel type B Air V2 (2x 55W TUV disinfection lamp) makes use of this same principle to treat indoor air and because of its aerodynamic design and vertical structure it samples in a laminar mode of flow in the middle of the air column above the crowds.

In a study executed by the IBPR (Prof. Wacław Dąbrowski Institute of Agriculture and Food Biotechnology) in Poland, our apparatus exhibits an almost immediate effect on the microbial air quality, by a reduction of 71 and 49 % of respectively total microbial and fungal count after 2 hours of operation in a setup of 1,3 fold treatment of indoor air volume per hour **(See Figure 1)**. After 20 hours the reduction in viable count were reduced with 98% and 93% of the initial burden respectively.

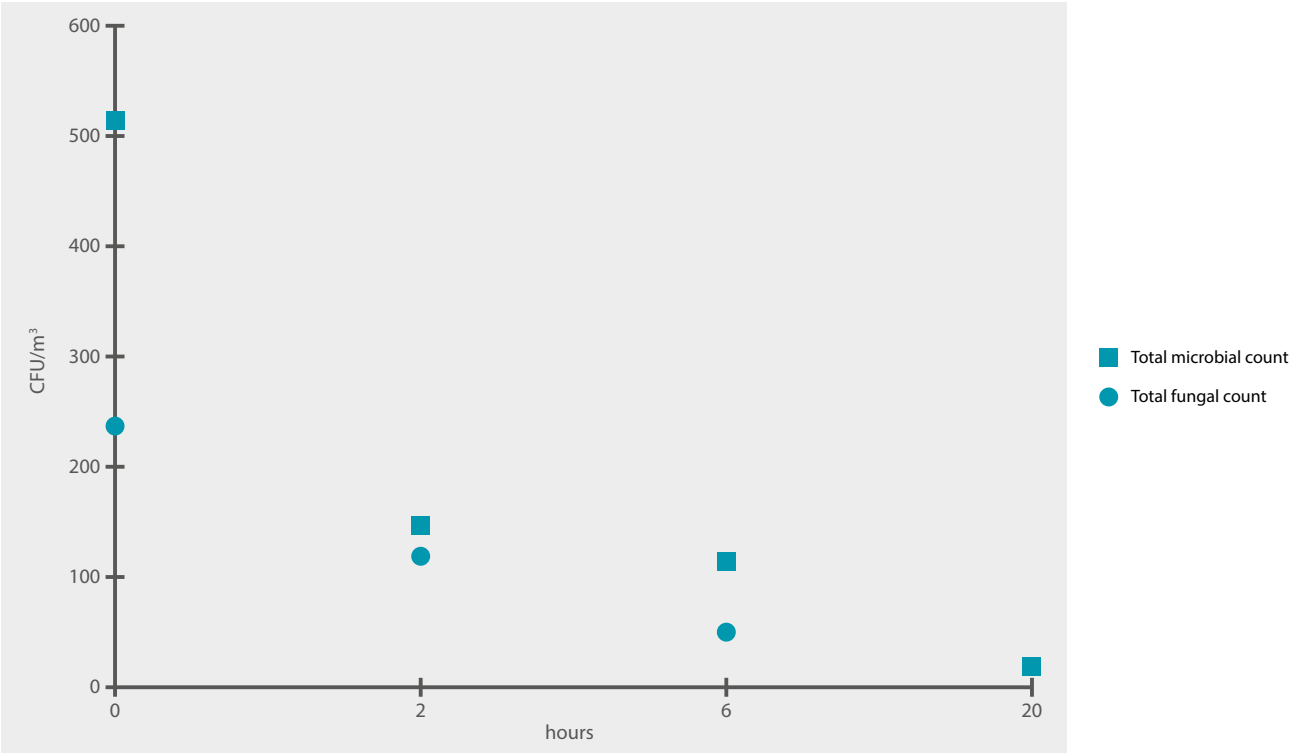


Figure 1: Total microbial and fungal viable counts upon sampling of 1 m³ of indoor air (MAS-100 ECOTM air sampler, MBV), after growth on media.

LUXI3EL®

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ULA HEALTH CARE

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