

Certificate of Inactivation Effect of UVC GENERATOR of Haier Air Conditioner on the Novel Coronavirus

QINGDAO, Mar.19, 2021- Haier Air Conditioning announced that Texcell S.A. (*1), the global research organization, has confirmed that Haier UVC GENERATOR inactivates 99.998% of Novel Coronavirus (SARS-CoV-2) within their sealed test facilities (*2).

In November 2020, Haier Air Conditioning initiated an official cooperation with Texcell S.A. to conduct tests on the Haier UVC GENERATOR that is utilized in the Haier range of Air conditioners. The tests were conducted at Texcell's professional laboratory located in Paris. In the laboratory test environment, the Haier UVC GENERATOR effectively inhibited SARS-CoV-2, with efficiency up to 99.998% in 1 hour (*3).

UVC (Ultraviolet C), a type of UV ray, with a wavelength on the spectrum ranging from 200-280nm, and has been widely used for disinfection in people's everyday life. It works by damaging the structure of DNA and RNA, causing the microorganism to be unable to perform vital cellular functions. Haier UVC GENERATOR emits the rays with a wavelength between 270-280 nm. The device is installed on the evaporator and generates rays near the air inlet from the right to the left when the function is turned on. It instantly inhibits the airborne hazards when the air passes through the area exposed to UVC rays, thus delivering healthy air to users' room.

Nowadays, the global pandemic of novel coronavirus (SARS-CoV-2) brings quite a lot of challenges to people's daily life. The study conducted by Texcell confirms the efficiency of UVC GENERATOR is expected to reduce the risk of infection caused by COVID-19.

When the pandemic began in early 2020, Haier Air Conditioning reacted quickly to support their global partners by delivering masks and providing healthy air conditioners to mobile cabin hospitals in face of great challenges. The company is committed to operating in ways that better serve society as a whole. In the future, it will continue to conducting research and innovation to lead the HVAC industry further, meanwhile constantly strive to meet users' demand as priority.

For Reference:

- Project Overview

Testing of Inactivation Effect of Haier UVC GENERATOR on SARS-CoV-2

- Project Results

The test report shows that the inactivation effect of UVC GENERATOR installed in Haier's air conditioner reached 99.998% in the space with a volume of 45L in 1 hour.

Methodology and data:

Organization: Texcell SA

Subject: Novel Coronavirus (SARS-CoV-2)

Device: Haier UVC GENERATOR device

Volume: 45L enclosed box (400mm×350mm×350mm)

Process:

- The Haier UVC GENERATOR device is fixed 3cm from the ground in a 45L enclosed box.
- The viral slide glass was placed in the test box and exposed within the irradiation range of the UVC GENERATOR for entire test time (1hr).
- Each virus slide glass in the test group and control group were eluted thoroughly and respectively.
- The Virus amount of each slide glass was counted and used to calculate inhibition rate.

Results data:

Test subject	Inhibition rate	Capacity	Hour
SARS-CoV-2	99.998%	45L	1 hour

Notes:

*1. Since 1987, Texcell SA has been providing Cell production, Viral Clearance, Viral Safety Testing & Immune profiling services to large pharmaceutical and biotechnology companies in Europe and USA, and Asia.

*2. The test target was to assess the effects of UVC GENERATOR in inhibiting novel coronavirus instead of the performance of air conditioner unit with UVC GENERATOR.

*3. The test was conducted in a 45L enclosed box in the laboratory conditions, and test result differs from those found in living spaces.

Disclaimer

The effectiveness of the claims mentioned hereby may be varied or limited to the evolution or mutation of specific virus, bacteria etc. (if any). Haier Air Conditioning reserves the right of final interpretation.