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29th of September 2022

Declaration of test and assessment

Danish Technological Institute has tested the efficiency for reducing the concentration of aerosolized virus by the air purifier UV AIR.

The test was conducted with the air purifier unit installed in a 20 m³ sealed room. The efficiency of the air purifier was tested using MS2 bacteriophages (ATCC 15597-B1) on host *Escherichia coli* (ATCC 15597) as a virus surrogate. The virus surrogate was aerosolized from a test suspension containing SM buffer with $\sim 10^{10}$ PFU/ml.

The reduction rate of the aerosolized MS2 was determined as the difference between a reference experiment designed to measure the natural decay rate and the reduction rate measured during the use of the UV AIR air purifier. These inactivation rates were determined by sampling of the air in the chamber over a 30-minute period.

The significant and consistent difference between the reference experiment and the product test clearly shows a reduction of the concentration of airborne and active MS2 caused by the air purifier.

Based on the measured concentration of active MS2 over time, the reduction rates and reduction half times attributed to the UV AIR are calculated and are found in the table below:

Reference Half time	UV AIR Half time	30 minutes reduction rate
12 minutes	3 minutes	99,3 ± 0,4 %

The full testing procedures and results are presented in report no. 129118.

Best regards,

Naja Villadsen, PhD consultant
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