

Danish Technological Institute has tested the air purifier Beyond Guardian Air by Aerus, for its efficiency to reduce the concentration of particles and volatile organic compounds from cigarette smoke



Declaration of test and assessment

Danish Technological Institute has tested the air purifier Beyond Guardian Air by Aerus, for its efficiency to reduce the concentration of particles and volatile organic compounds (VOC) from cigarette smoke using a modified ANSI/AHAM AC-1-2015 method.

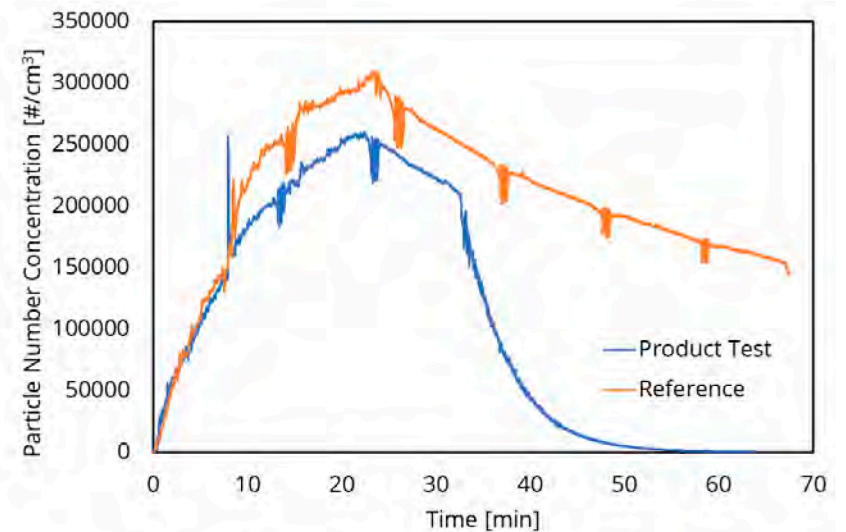
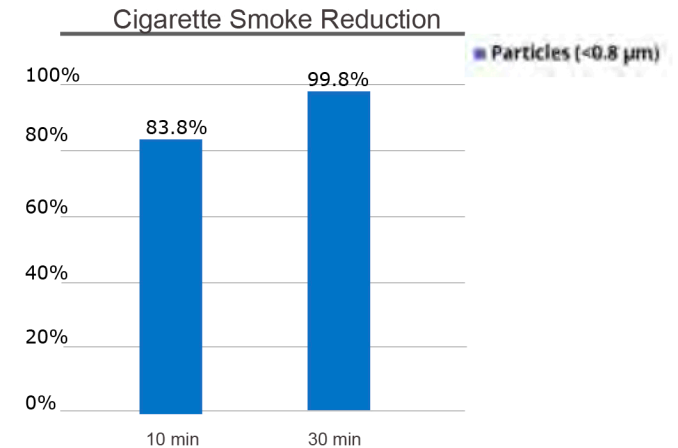
The test was conducted with the air purifier unit installed in a 20 m³ sealed room. The efficiency of the air purifier was tested by a method, where particles and VOC were generated through a smoking phase consisting of sequential smoking of three cigarettes using a smoking robot over a period of 20 - 25 minutes. The smoking phase is immediately followed by a 10-minute period where the cigarette smoke is mixed, before the air purifier is turned on. This marks the beginning of the 30-minutes Product Test period

The rate of reduction of the particles and VOC 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 Beyond Guardian Air.

Prepared by:
Teknologisk Institut
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Author: Stig Koust Hansen, Ph.D., Consultant

Quality Assurance: Casper Laur Byg,
Specialist



Particle Number concentration measured over time. The smoke phase occurs during the initial 25 minutes, which is followed by a 10-minute mixing period. Hereafter the air purifier is turned on (only for product test) for 30 minutes.

The full testing procedures and results are presented in report no. 956985



2017 Space Technology Hall
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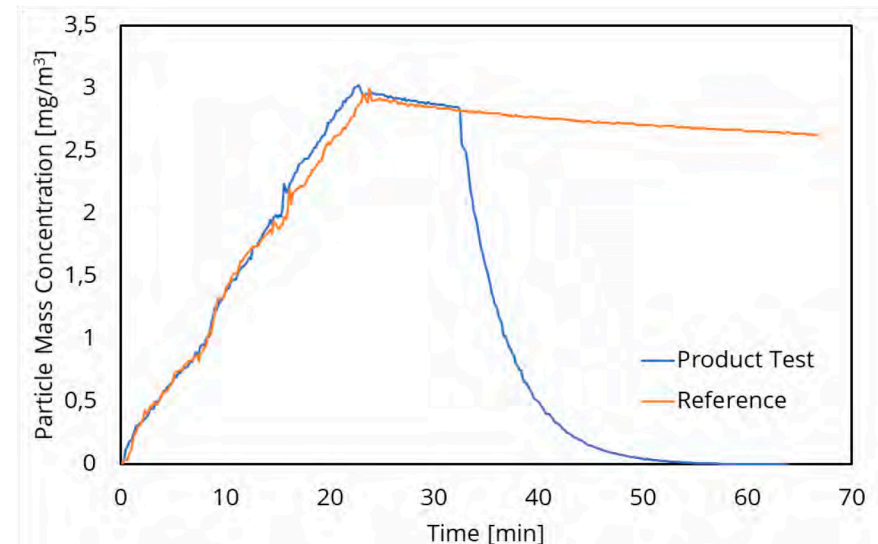
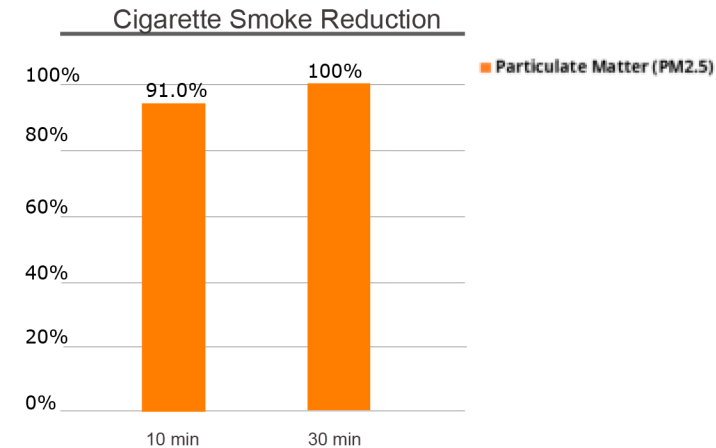
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Particle Mass concentration measured over time. The smoke phase occurs during the initial 25 minutes, which is followed by a 10-minute mixing period. Hereafter the air purifier is turned on (only for product test) for 30 minutes.

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