

airocide®

DEVELOPED FOR NASA

Airocide Kills SARS-CoV-2 Within Minutes

SteriLumen, Inc. worked with MRIGlobal on a series of scientific tests to measure the efficacy of Airocide air purification products at eliminating and neutralizing aerosolized SARS-CoV-2 in a controlled environment.

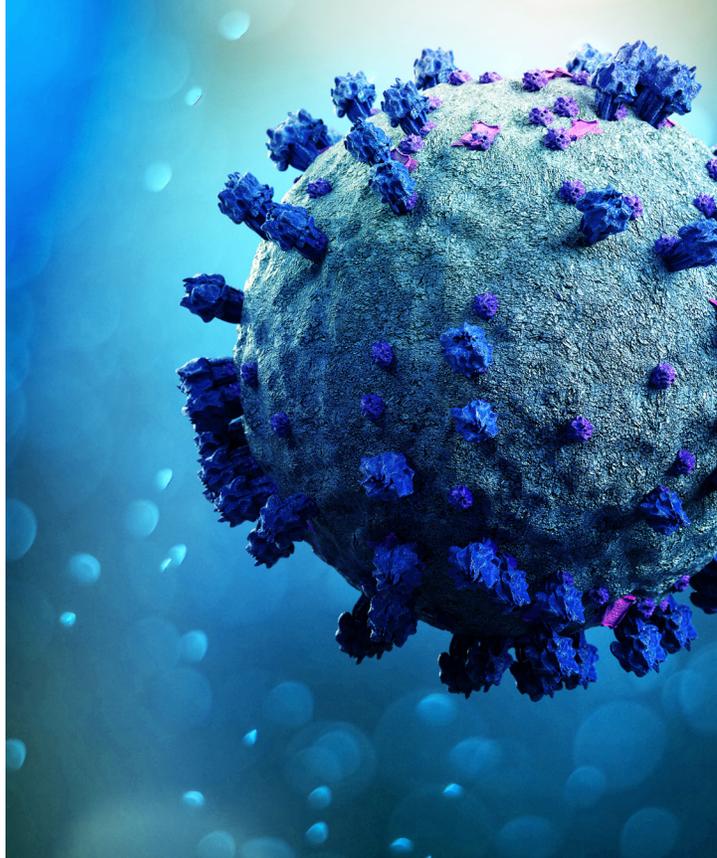
The Solution

TESTING APPROACH

The tests compared the performance of an Airocide unit fitted with an integrated [particulate] filter and PCO catalyst, an Airocide operating without its filter but with the catalyst still functioning, and three baseline tests with a non-operating, unpowered Airocide unit. For the study, MRIGlobal designed and built a test system; a Plexiglas chamber contained in a protective cabinet. They fitted the chamber with a highly precise aerosol generation system and sample collection systems to ensure consistent and reproducible conditions for each test.

Each Airocide unit was tested under the same conditions, for the same amount of time, including the unpowered baseline unit. The powered testing units were turned on for a 20-minute warm-up period, the test chamber was filled with aerosolized SARS-CoV-2 for 10 minutes, and multiple air samples were collected starting after 5 minutes and 30 seconds, continuing for up to 30 minutes during the test period.

Please contact hello@sterilumen.com to request the original study and more information about Airocide. The study was not performed in compliance with the FDA Good Laboratory Practice Regulations (21 CFR 58) or EPA Good Laboratory Practice Regulations (40 CFR 160). All operations pertaining to this study, unless specifically defined in the official Final Report, were performed according to the Standard Operating Procedures of MRIGlobal. All study records are stored at MRIGlobal.



The Results

MRIGLOBAL'S CONCLUSIONS

Airocide with filter and PCO catalyst reduced 99.94% of SARS-CoV-2 within 5 minutes and 30 seconds.

MRIGlobal's report points to the reduction or deactivation of SARS-CoV-2 in the tested air. Once testing was completed, MRIGlobal analyzed the results and reported them in a scientific measure of microbial elimination known as log reduction. Their report indicates a reduction of 99.94% by the Airocide unit with a [particulate] filter and PCO catalyst within 5 minutes and 30 seconds, and 99.05% by the unit with a catalyst but without a filter during the 20-30 minute test period.