



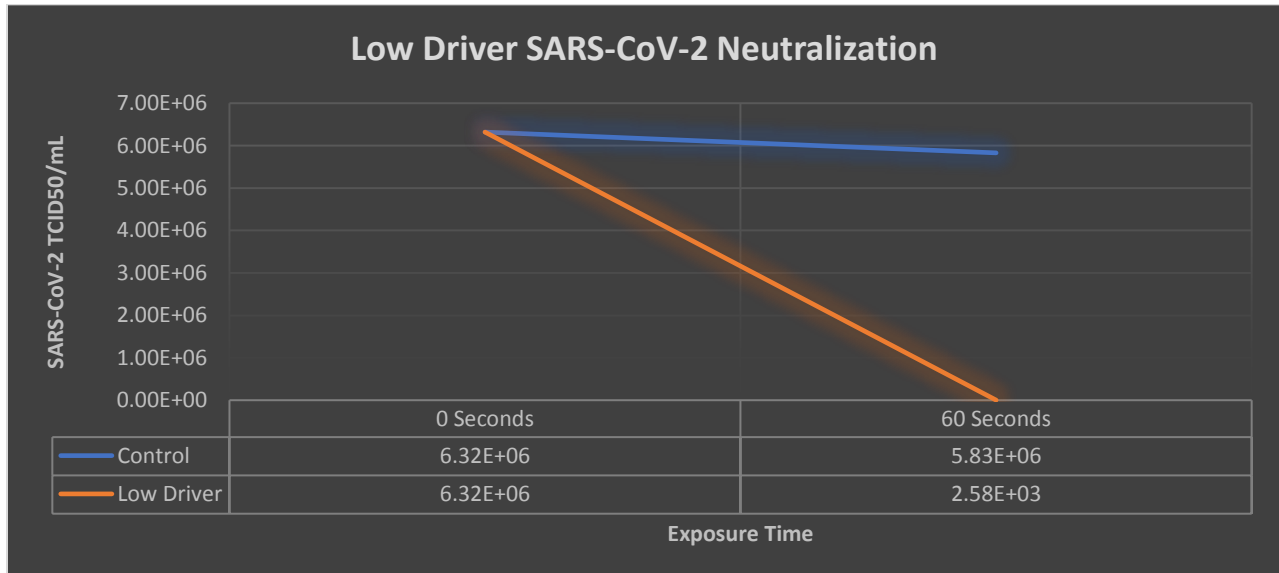
02/15/2021

To Whom It May Concern,

Innovative Bioanalysis has conducted a series of efficacy tests using Luminii's Purifii products to inactivate the SARS-CoV-2 virus on surfaces and/or in the air. The testing was performed at our lab in Costa Mesa, CA. Luminii's Purifii products achieved significant reductions in all the tests, as further detailed below.

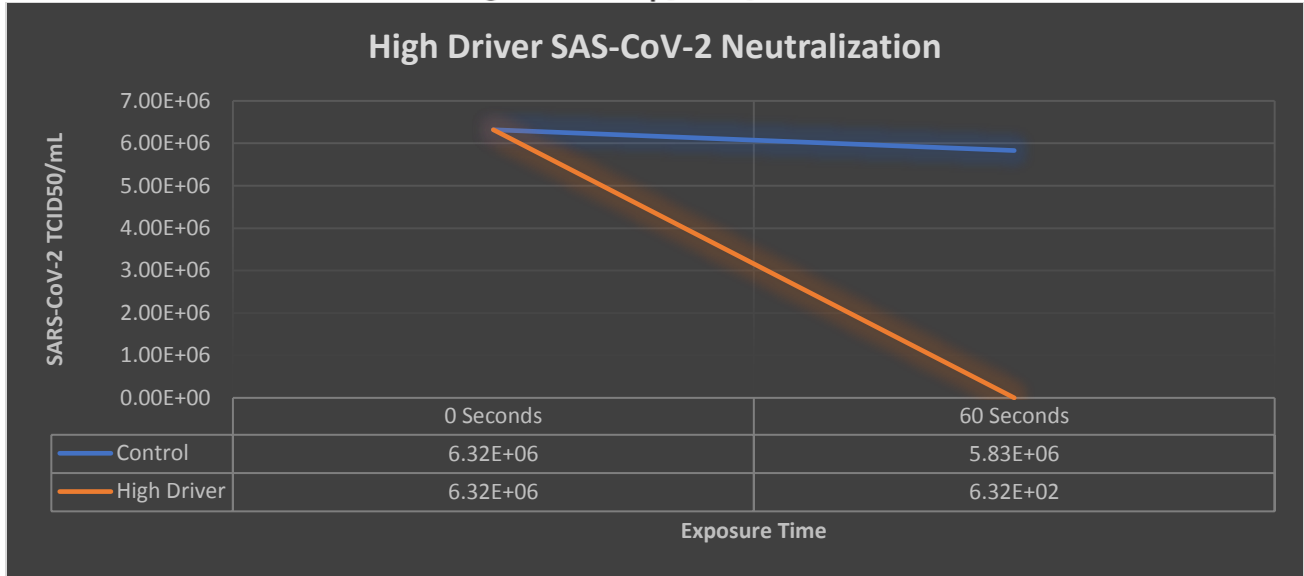
Surface Test Result Summary (Luminii's Purifii LED)

A starting viral concentration of 6.32×10^6 TCID₅₀/mL was applied to coupons and allowed to dry. Coupons were exposed to UV from Luminii's Purifii LED light engine for 60 seconds at two different power levels. At the first power level there was an overall reduction of SARS-CoV-2 of 99.96%. At the second power level there was an overall reduction of SARS-CoV-2 of 99.99%. The highest level of reduction observable by the test methodology is 99.99%.



Percent Reduction: 60 Seconds: 99.96

Log10 Reduction: 60 Seconds: 3.39

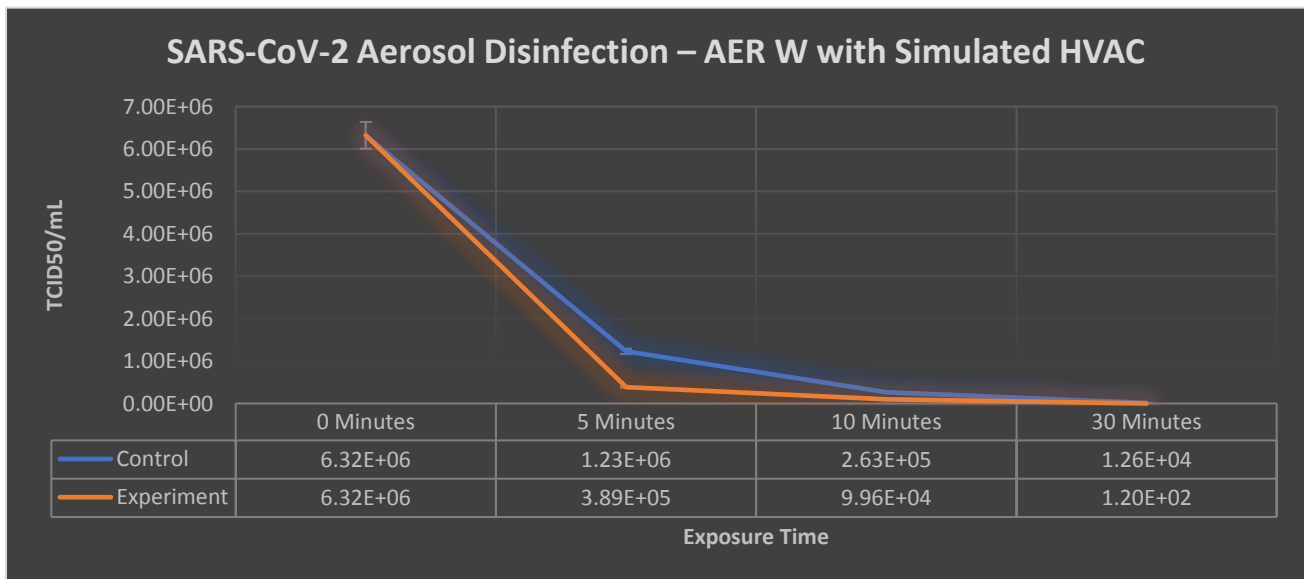


Percent Reduction: 99.99

Log10 Reduction: 4.00

Aerosol Test with Simulated HVAC (Purifii AER W)

The test consisted of aerosolizing a starting concentration of SARS-CoV-2 of 6.32×10^6 TCID50/mL into a sealed 8'x8'x10' chamber with one Purifii AER W mounted on one 8' wall. The chamber was outfitted with a custom ducting system to simulate air mixing from an HVAC system. The air mixing system was a closed loop, with no outside air being introduced. After 10 minutes there was a net reduction of SARS-CoV-2 in the air of 99.6%.



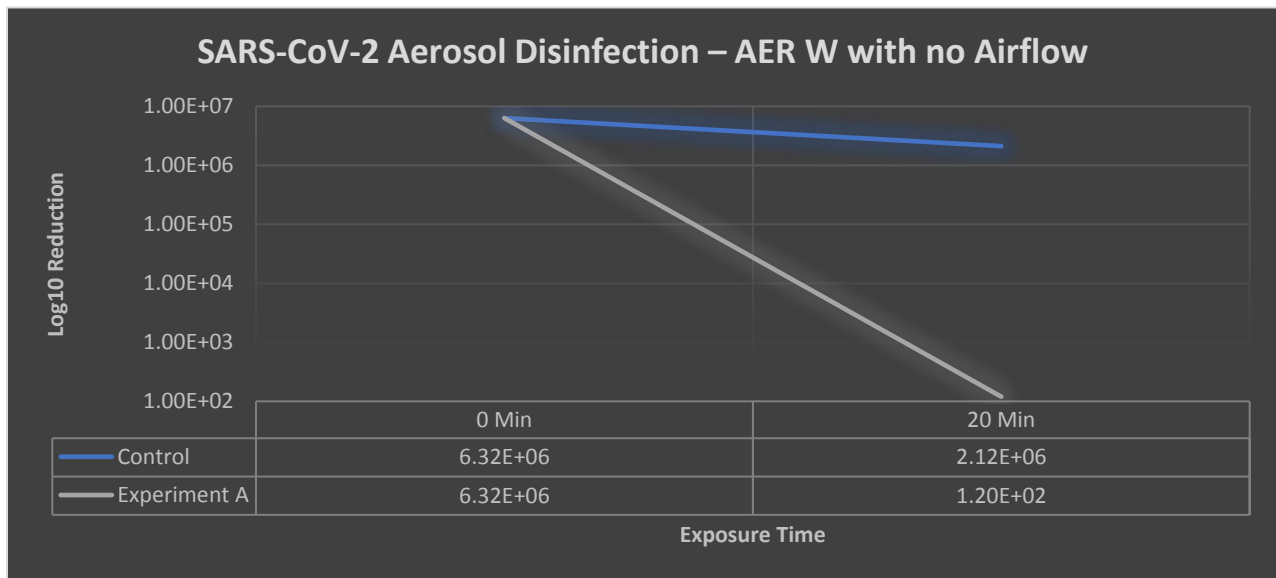
Percent Reduction: 5 Minute: 99.38, 10 Minute: 99.98, 30 Minutes: 99.99

Net Log10 Reduction: 5 Minute: 1.5, 10 Minute: 2.42, 30 Minute: 2.02



Aerosol Test with no Airflow (Purifii AER W)


The test consisted of aerosolizing a starting concentration of SARS-CoV-2 of 6.32×10^6 TCID₅₀/mL into a sealed 8'x8'x20' chamber with one Purifii AER W unit mounted on each 8' wall for a total of two units. There was no airflow in the chamber at the time of testing. After 20 minutes there was a net reduction of SARS-CoV-2 in the air of 99.994%.



Percent Reduction: 20 Minute: 99.998

Net Log₁₀ Reduction: 20 Minute: 4.25

The tests result above are indicative of a successful neutralization of SARS-CoV-2 via UV technology. When conducting these tests, there are several variables that need to be accounted for including aerosol sample collection method, swab and rinse recovery rate, cell confluency, incubation, and the viability of the virus. Innovative Bioanalysis takes precautions to limit these variables as best we can to ensure the most accurate results.

DocuSigned by:

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