

INNOVATIVE BIOANALYSIS

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Big Ass Fans©
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Re: Summary review of deactivation experiments using BAF provided Bi-Polar Ionization and Haiku UVC systems.

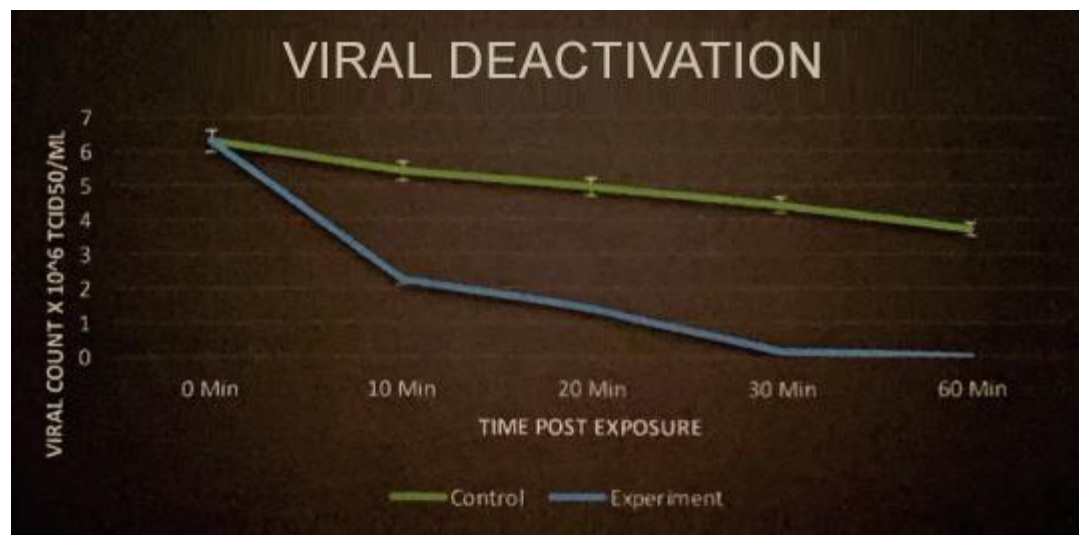
Delta T Corporation dba Big Ass Fans commissioned Innovative Bioanalysis to conduct viral testing on inactivating SARS-CoV-2 on their air disinfection products utilizing integrated UVC and Needlepoint Bipolar Ionization. Both tests successfully decreased the overall concentrations of SARS-CoV-2. This summary is intended for overall general results reporting and the full test reports should be referenced for more specific details on the experiments and testing procedures.

Ionization testing summary:

Testing consisted of obtaining average ion counts per cubic centimeter over the test samples for a total elapsed time of one hour in a metal and glass bio safety chamber, 72" W x 30" H x 30" D with sealed seams using a direct inoculation testing site

The overall log 10 values indicate a deactivation rate above 99.999% based on a starting stock of 6.32×10^6 TCID50/ml. Since deactivation occurs when pathogens and ions interact, it has been shown that this deactivation is either equivalent or slightly greater in circulating air saturated with ions. The chart shown below, indicates the overall reduction.

Overall Log 10 Reduction at Various Times:

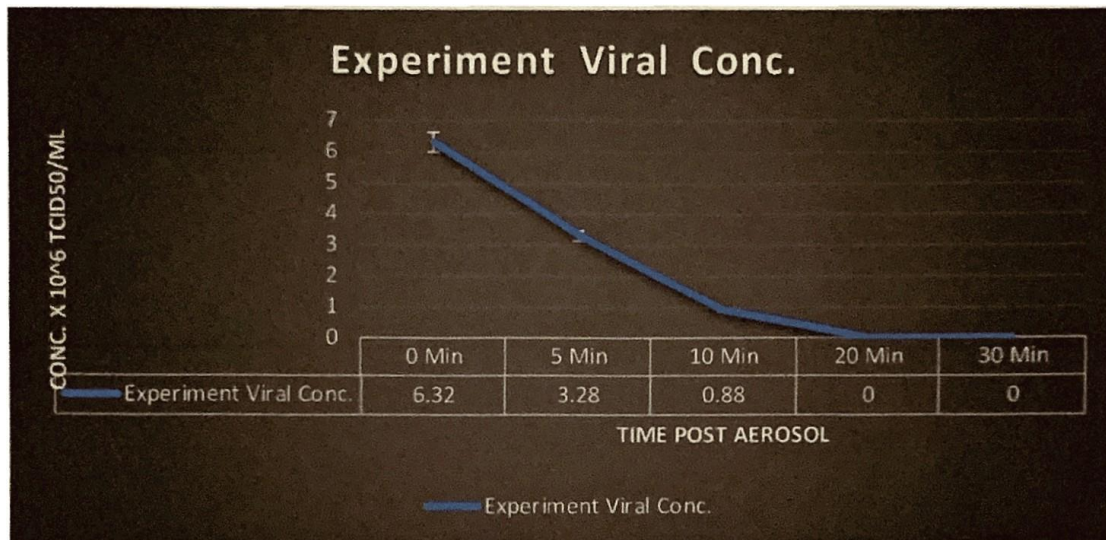


Haiku UVC testingsummary:

The test consisted of 3 ml of viral media with a concentration of 6.32×10^6 TCID50/ml nebulized over a period of 18 minutes in a metal and glass sealed containment room, 2CYW x B'H x 8'0". Samples were collected after the nebulizer was exhausted and the container was saturated with viral aerosol at 5 min, 10 min, 20 min, and 30 min post.

It can be concluded that between 10 and 20 minutes there was an overall reduction of SARS-CoV-2 in the air of 99.999%. The graph below indicates the overall reduction.

Overall Log 10 Reduction at Various Times:



Kevin Noble
Chief Operating Officer
Innovative Bioanalysis, LLC