

Elias Towe, PhD
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BY E-MAIL

Jeffrey D. Mullen
Chief Executive Officer
Dynamics Inc.
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November 7, 2020

Re: Audit of Dynamics Nanowave Air

Dear Mr. Mullen:

I have completed my review and audit of the Dynamics Nanowave Air device.

During my review, I was given full access to any and all resources, designs, materials, and data that I requested.

My review included an analysis of the design, test results, and performance of the Nanowave Air device, as well as the claims made by Dynamics for the Nanowave Air device.

As a result of my review, I can attest and certify that the claims listed in Exhibit A made by Dynamics are true and accurate.

I am an expert in the field of ultraviolet light and the materials that create ultraviolet light. I was educated at the Massachusetts Institute of Technology, where I received the S.B., S.M., and Ph.D. degrees from the Department of Electrical and Computer Science and where I also received a Vinton Hayes Fellow. I was then a Professor at Electrical and Computer Engineering at the University of Virginia and a Program Manager at the Defense Advanced Research Projects Agency. I am currently a Grobstein Professor of Materials Science and Engineering & Professor of Electrical and Computer Engineering.

My research includes optical and quantum phenomena in materials for applications in novel photonic devices. A partial list of my publications can be found at:

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C39&q=elias+towe+carnegie+mellon&btnG=

Very truly yours,

Elias Towe

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Exhibit A

The UV-C lights in your device will degrade over time and impact performance against the COVID-19 virus. To see how much virus your device will inactivate at any time, just select a speed and the adjacent LED will blink differently based on inactivation performance.

COVID-19 Virus Inactivation ¹	Level 1: 99% to 90% ²	Level 2: 89.9% to 75% ²	Level 3: 74.9% to 51% ²	Total Hours
If at this performance level	Speed LED will blink 1 time	Speed LED will blink 2 times	Speed LED will blink 3 times	
300 LPM	1,400 hours	+1,700 hours	+2,100 hours	5,200 hours
200 LPM	2,100 hours	+2,500 hours	+3,100 hours	7,700 hours
100 LPM	4,200 hours	+5,100 hours	+6,300 hours	15,600 hours

¹Inactivation of a virus is a process where the RNA or DNA of a pathogen is damaged so it can no longer replicate. These devices are intended to inactivate SARS-CoV-2, the COVID-19 virus, and no claim is being made to stop any individual from getting COVID-19.

²Inactivation rates will vary based on relative humidity and altitude. Hours based on a 55% relative humidity and inactivation ranges cover relative humidity between 30% and 55% and the degradation of UV-C light sources over time, assuming mean performance of light sources. Hours based on device operating continuously at a given speed. If multiple speeds are utilized the device lifespan will change based on the duration the device is operated in each speed.