

Lumin CPAP Cleaner Effective at Decontaminating N95 Masks

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Independent lab testing has verified the Lumin CPAP accessory cleaner can effectively decontaminate N95 respirators contaminated with human coronavirus 229E (ATCC VR-740), according to an independent analysis reported by manufacturer 3B Medical.

Lumin is a high-powered UVC based sanitizing device initially developed for home use to clean CPAP accessories in a mirrored chamber. According to 3B Medical, the device has a measured UVC irradiance output of roughly 2,000 mJ/cm², well in excess of the dose requirement to kill most bacteria and viruses.

According to the independent analysis by Microchem, an N95 respirator contaminated with human coronavirus 229E ATCC VR-740 was sanitized using the Lumin. 3B Medical reports that Lumin had “greater than a 99.9% kill of human coronavirus.”

From the study:

The purpose of the study was to determine the virucidal efficacy of the Lumin device against Human Coronavirus 229E, ATCC VR-740 supplemented with a 5% FBS soil load, at a contact time of 5 minutes at an exposure temperature of room temperature (25.5°C to 25.8°C and 45.7% to 46.2% RH).

The Plate Recovery Control demonstrated a viral titer of 3.75 log₁₀ TCID₅₀ per 0.1 ml and 4.05 log₁₀ TCID₅₀ per carrier.

Taking the cytotoxicity and neutralization control results into consideration, the evaluated test device demonstrated an average ≥ 3.25 Log₁₀ reduction in viral titer (99.94% reduction).

No test substance cytotoxicity was detected in either lot of test substance assayed (≤ 0.50 Log₁₀).

The Test Substance Neutralization Control demonstrated that the test substance was neutralized at ≤ 0.50 Log₁₀ for the lot assayed.