

CLEANBOX SARS-CoV-2 Antiviral Evaluation**Test Method Summary**

Test Method	Cytopathic effect assay
Test Organism	SARS-CoV-2 isolate USA-WA1/2020
Test Solution	Eagles Modified Medium with 2% Fetal Bovine Serum
Test Samples	1.75 cm diameter N95 squares (provided by CLEANBOX) or plastic tissue culture plate lid
Inoculum Applied to N95 Swatches	0.014 mL (1×10^5 or 3×10^3 pfu) applied to each square or plastic lid area section and dried for 30 minutes at room temperature.
Recovery Solution	Eagles Modified Medium with 2% Fetal Bovine Serum
Measuring Method of Recovery of Viable Viral Particles	After irradiation, virus sample on mask squares was recovered by washing and added to VeroE6 cells. On day 7, cells were analyzed by microscopy for cytopathic effect.

Results Summary

Inoculated N95 squares or plastic lids were placed inside the CLEANBOX test unit directly underneath the device. Samples were then exposed to the ultraviolet light (UV) for either 0 (unexposed control), 1, 2, or 4 minutes. Exposure of 2 or 4 minutes resulted in complete inactivation of SARS-CoV-2 inoculated on masks or plastic at 1×10^5 pfu or 3×10^3 pfu.

Amount of virus	Treatment	Duration of treatment	Surface	Day 7 # samples positive for CPE/total # samples
1×10^5 pfu	UV	1 min	Plate lid	3/3
1×10^5 pfu	UV	2 min	Plate lid	0/3
1×10^5 pfu	UV	4 min	Plate lid	0/3
1×10^5 pfu	None	4 min	Plate lid	3/3
3×10^3 pfu	UV	1 min	Plate lid	0/3
3×10^3 pfu	UV	2 min	Plate lid	0/3
3×10^3 pfu	UV	4 min	Plate lid	0/3
3×10^3 pfu	None	4 min	Plate lid	3/3
1×10^5 pfu	UV	1 min	Mask-exterior	1/3
1×10^5 pfu	UV	2 min	Mask-exterior	0/3
1×10^5 pfu	UV	4 min	Mask-exterior	0/3
1×10^5 pfu	None	4 min	Mask-exterior	3/3
3×10^3 pfu	UV	1 min	Mask-exterior	1/3
3×10^3 pfu	UV	2 min	Mask-exterior	0/3
3×10^3 pfu	UV	4 min	Mask-exterior	0/3
3×10^3 pfu	None	4 min	Mask-exterior	3/3

