
Summary

LED technology can be used to effectively eliminate airborne viruses, including coronavirus. After exposing SARS-CoV-2 to UVC LED modules for 1, 3, and 5 seconds respectively, researchers observed rapid and significant log reductions in the virus.

Test Report

REQUEST

Virucidal Activity Test
by UV Irradiation

TEST TEMPERATURE

Room Temperature
(Approx. 20°C)

PRODUCT

UVC module (100mW)

CELL LINE

Vero E6

PURPOSE

Sterilization

TEST PERIOD

2020.11.20-12.01

TEST VIRUS

SARS-CoV-2

TITRATION

CPE

TREATMENT TIME

1, 3, 5 sec

Test Result

PRODUCT	VIRUS TITER TCID ₅₀	TREATMENT TIME	DISTANCE	VIRUS REDUCTION RATE	
				(LOG)	(%)
UVC module (100mW)	2.15 x 10 ⁷	1 sec	2cm	2.250	99.437%
		3 sec		2.583	99.739%
		5 sec		2.751	99.823%