

Test report

The sample(s) listed below was/were submitted and identified on behalf of the applicant/vendor

Applicant/Vendor : Hong Kong University of Science and Technology / HKUST, Clear Water Bay, Kowloon, Hong Kong

Manufacturer : /

Product Description : UVC LED Disinfection Module for Elevator Push-buttons

Trade Mark : /

Model/Item/SKU# : Home made

Electrical Rating : 24VDC, 100mA, 2.4W

Sample Receiving Date : 04/24/2022

Test Period : 04/25/2022 to 06/02/2022



Standards/Protocol : Technical Standard for Disinfection (2002 Ministry of Health P.R.China)-2.1.5.4 / Validation of disinfection efficacy of sterilization and disinfection instruments

Test Result : Please refer to next page(s).

Summary : /

Remark :

1. The test was carried out by accredited laboratory (Guangdong Detection Center of Microbiology).
2. Unless otherwise stated, the test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
3. The test report is used for customer research, teaching, internal quality control, product development etc, and for client's internal use only.

Signed for and on behalf of
SGS-CSTC Standard Technical Services Co., Ltd. Guangzhou Branch



Authorized Signature
Robin Lu



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Sample pretreatment:

The carrier was glass sheet. Place the carrier in the center of the glass plate holder of this device. The tests lasted for 3s, 10s, 30s, 60s, 120s and 180s respectively.

Test Result(s):

Test germs	Action time	Test groups	Average number of positive controls (cfu/PCS)	Average number of testing groups (cfu/PCS)	Sterilization logarithm	Killing rate (%)
Escherichia coli 8099	3s	1	3.4×10 ⁶	1.6×10 ⁶	0.33	52.94
		2	3.3×10 ⁶	1.5×10 ⁶	0.35	54.55
		3	3.0×10 ⁶	1.4×10 ⁶	0.33	53.33
	10s	1	3.4×10 ⁶	2.9×10 ⁵	1.07	91.47
		2	3.3×10 ⁶	2.7×10 ⁵	1.09	91.82
		3	3.0×10 ⁶	2.6×10 ⁵	1.06	91.33
	30s	1	3.4×10 ⁶	1.0×10 ⁵	1.53	97.06
		2	3.3×10 ⁶	9.5×10 ⁴	1.54	97.12
		3	3.0×10 ⁶	8.8×10 ⁴	1.54	97.07
	60s	1	4.2×10 ⁶	3.1×10 ³	3.13	99.93
		2	4.4×10 ⁶	3.4×10 ³	3.11	99.92
		3	4.1×10 ⁶	3.0×10 ³	3.13	99.93
	120s	1	4.2×10 ⁶	1.0×10 ³	3.62	99.98
		2	4.4×10 ⁶	1.1×10 ³	3.60	99.98
		3	4.1×10 ⁶	9.6×10 ²	3.63	99.98
	180s	1	4.2×10 ⁶	3.4×10 ²	4.09	99.99
		2	4.4×10 ⁶	3.6×10 ²	4.08	99.99
		3	4.1×10 ⁶	3.1×10 ²	4.12	99.99
Staphylococcus aureus ATCC 6538	3s	1	4.4×10 ⁶	1.6×10 ⁶	0.44	63.64
		2	4.7×10 ⁶	1.7×10 ⁶	0.44	63.83
		3	4.5×10 ⁶	1.7×10 ⁶	0.42	62.22
	10s	1	4.4×10 ⁶	3.4×10 ⁵	1.11	92.27
		2	4.7×10 ⁶	3.7×10 ⁵	1.10	92.13
		3	4.5×10 ⁶	3.6×10 ⁵	1.09	92.00
30s	1	4.4×10 ⁶	3.8×10 ⁴	2.06	99.14	
	2	4.7×10 ⁶	4.3×10 ⁴	2.04	99.09	



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		3	4.5×10^6	4.0×10^4	2.17	99.11
	60s	1	1.6×10^6	9.8×10^2	3.20	99.94
		2	1.9×10^6	1.1×10^3	3.24	99.94
		3	1.8×10^6	1.0×10^3	3.26	99.94
	120s	1	1.6×10^6	3.4×10^2	3.67	99.98
		2	1.9×10^6	3.8×10^2	3.70	99.98
		3	1.8×10^6	3.6×10^2	3.70	99.98
	180s	1	1.6×10^6	55	4.46	99.99
		2	1.9×10^6	70	4.43	99.99
		3	1.8×10^6	65	4.45	99.99

--- End of Report ---



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