



**SUBJECT** Microbiological Test

**TEST LOCATION** TÜV SÜD China

TÜV SÜD Products Testing (Shanghai) Co., Ltd.

B-3/4, No.1999 Du Hui Road, Minhang District  
Shanghai 201108, P.R. China

**CLIENT NAME** Guangzhou CHUANG ZAO MEI Technology Co., Ltd

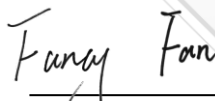
**CLIENT ADDRESS** Dehe International A505.No.2.Qixinggang Industrial Road,JUNHE street,  
Baiyun District,Guangzhou

**TEST PERIOD** 07-Jun-2023~27-Jun-2023

**TEST REQUEST** Antibacterial test - with reference to Ministry of health of the People's  
Republic of China, Technical standard for disinfection (2002) 2.1.5.5

Prepared By

Prepared By

  
(Fancy Fan)  
Report Drafter

Authorized By

  
(Steven Zhang)  
Authorized Signatory

**Note:** (1) General Terms & Conditions as mentioned overleaf. (2) The results relate only to the items tested.(3) The test report shall not be reproduced except in full without the written approval of the laboratory.(4) Without the agreement of the laboratory , the client is not authorized to use the test results for unapproved propaganda.


**SAMPLE SOURCE/ RECEIPT DATE/ TEST DATE**

Logistics Express / 07-Jun-2023/ 07-Jun-2023

**THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED**

**BY/ ON BEHALF OF THE CLIENTS AS:**

Sample Name: Ultraviolet Disinfection Lamp  
Sample Specification: /  
Batch No./Date: /  
Manufactory: /

SAMPLE NO.	DESCRIPTION	PHOTOGRAPH
721681482	Ultraviolet Disinfection Lamp	

**TEST METHOD(S)**

**1.1 Preparation of carrier**

Prepare 6 carriers for each organism of test, 3 for test carriers, 3 for control samples. The surface of each carrier should contain  $5 \times 10^5 \sim 5 \times 10^6$  cell.

**1.2 Test Procedure**

**1.2.1** Turn on the test sample, then place the carrier contain the organism into the test sample for certain minutes with maximum load location specified in user's manual. Take out the carrier and rinse the carrier using PBS.

**1.2.2 Viable cell count of bacteria by the agar plate culture method**

Take exactly 1 ml of the washings in 1.2.1 with a pipet and place it in a test tube containing 4ml of PBS and mix it well. Then take 1 ml from this test tube with a new pipet and place it in another test tube containing 9 ml PBS and mix it well. Repeat these prodedures to prepare 10-fold serial dilutions. Dispense 1 ml each of the washings and each dilution into 2 sterilized petridishes. To each petri dish, add 15-20 ml of the medium and mix it well. Incubate the plates and count the number of colonies.

**1.3 Calculation of the killing rate**

$$\text{Killing Log Value} = \log \left[ \frac{\text{Control Count}}{\text{Test Count}} \right]$$

$$\text{Killing Rate} = \frac{\text{Control count} - \text{Test count}}{\text{Control count}} \times 100\%$$

**TEST ORGANISM(S)**

*Staphylococcus aureus* ATCC 6538  
*Staphylococcus epidermidis* ATCC 12228  
*Streptococcus pyogenes* ATCC21059  
*Bacillus atrophaeus* ATCC 9372  
*Candida Albicans* ATCC 10231



**TEST RESULT(S)**

Contact time: 2 min

Test organism	Concentration of bacteria (CFU/mL)	Test times	Treated sample (CFU/piece)	Positive control (CFU/piece)	Killing Log value	Killing rate %	Comment (Killing Log value $\geq 3$ )
<i>Staphylococcus aureus</i> ATCC 6538	2.1 $\times 10^8$	1	<5	2.2 $\times 10^6$	>5.60	>99.99	PASS
		2	<5	2.0 $\times 10^6$			
		3	<5	1.8 $\times 10^6$			
<i>Staphylococcus epidermidis</i> ATCC 12228	1.3 $\times 10^8$	1	<5	1.7 $\times 10^6$	>5.57	>99.99	PASS
		2	<5	2.1 $\times 10^6$			
		3	<5	1.8 $\times 10^6$			
<i>Streptococcus pyogenes</i> ATCC21059	2.3 $\times 10^8$	1	<5	2.5 $\times 10^6$	>5.69	>99.99	PASS
		2	<5	2.3 $\times 10^6$			
		3	<5	2.6 $\times 10^6$			
<i>Bacillus atrophaeus</i> ATCC 9372	1.9 $\times 10^8$	1	<5	1.3 $\times 10^6$	>5.40	>99.99	PASS
		2	<5	1.2 $\times 10^6$			
		3	<5	1.3 $\times 10^6$			
<i>Candida Albicans</i> ATCC 10231	3.7 $\times 10^8$	1	<5	3.1 $\times 10^6$	>5.76	>99.99	PASS
		2	<5	2.6 $\times 10^6$			
		3	<5	3.0 $\times 10^6$			

Note:

1.CFU: Colony forming unit

2.This report is for internal use only such as internal scientific research, education, quality control, product R&D.

-END OF THE TEST REPORT-