



Technical Report No.: 64.180.20.05926.01

Date: 2021-01-20

Client: Name: GOOD WIND CO., LIMITED (#107106)
Address: RM 1302 13/F CHEONG K BULDING 84-86 DES VOEUX ROAD
CENTRAL, HONG KONG
contact person: Mr. Wu ChangQing

Manufacturing place: Manufacturer's name: SHENZHEN GOODWIND TECHNOLOGY DEVELOPMENT CO., LTD (#110960)
Address: B303 DongLian Industrial Park Chuangye Rd. 23 Distric Baoan, 518101 Shenzhen, PEOPLE'S REPUBLIC OF CHINA
Factory's name: SHENZHEN CITY ZHENG YONG JIA, ELECTRICAL CO., LTD.
Address: Area B, 3F, Building NO. C, Wangfeng, Industrial Park, Tangwei Community, Gongming Sub-district Office, Guangming, New District, 518132 Shenzhen, PEOPLE'S REPUBLIC OF CHINA

Test subject: Product: Hand Dryer
Type: GWHD71
Trademark: N/A

Test specification: GB 21551.3-2010
Technical Standard For disinfection – 2002

Purpose of examination: • Test according to the test specification and the client's requirements

Test result: The test results refer to page 3 and 4

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1 Description of the test subject

1.1 Function

Manufacturer's specification for intended use:
Hand Dryer with UV lamp is for disinfection function and for household indoor use.

1.2 Consideration of the foreseeable use

- Not applicable
 Covered through the applied standard
 Covered by the following comment
 Covered by attached risk analysis

1.3 Technical Data

Model : GWHD71
Ratings : 220-240V~, 50-60Hz, 720W
Protection Class : Class I; Class II; Class III
Degree of Protection : IP X3
 Stationary (fixed appliance)
 Portable
Construction : Hand-held
 Open-frame
Supply connection : Non detachable cord
 Permanent connection to fixed wiring
 Appliance inlet
Operation mode : continuous operation;
 Intermittent operation;
 Short time operation;
Weight (kg) : --

2 Order

2.1 Date of Purchase Order, Customer's Reference

2020-12-11

2.2 Receipt of Test Sample, Condition, Location

2020-12-11;
TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch

2.3 Date of Testing

2020-12-12 to 2021-01-19

2.4 Location of Testing

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch

2.5 Points of Non-compliance or Exceptions of the Test Procedure

None

3 Test Results:

Decision rule according to IEC Guide 115:2007, clause 4.4.3, 4.5.1 (accuracy method) was applied.

3.1. Germicidal test results:

3.1.1	TABLE: Germicidal test for Staphylococcus aureus (金黄色葡萄球菌)					--
	Rated input		230V, 50Hz			—
Tested item no.	Reference Group			Tetsed Group		
	Average colony forming unit before test V_0 (cfu/m ³)	Average colony forming unit after test V_t (cfu/m ³)	Natural extinction rate N_t (%)	Average colony forming unit before test V_1 (cfu/m ³)	Average colony forming unit after test V_2 (cfu/m ³)	Germicidal rate K_t (%)
1.	2.56×10 ⁶	1.82×10 ⁶	28.91	2.69×10 ⁶	1.92×10 ³	99.90
2.	2.43×10 ⁶	1.70×10 ⁶	30.04	2.30×10 ⁶	1.60×10 ³	99.90
3.	2.94×10 ⁶	1.92×10 ⁶	34.69	2.82×10 ⁶	1.92×10 ³	99.90
Supplementary information: -						

3.1.2	TABLE: Germicidal test for Escherichia coli (大肠杆菌)					--
	Rated input		230V, 50Hz			—
Tested item no.	Reference Group			Tetsed Group		
	Average colony forming unit before test V_0 (cfu/m ³)	Average colony forming unit after test V_t (cfu/m ³)	Natural extinction rate N_t (%)	Average colony forming unit before test V_1 (cfu/m ³)	Average colony forming unit after test V_2 (cfu/m ³)	Germicidal rate K_t (%)
1.	2.46×10 ⁶	1.31×10 ⁶	46.75	2.30×10 ⁶	1.28×10 ³	99.90
2.	1.89×10 ⁶	1.09×10 ⁶	42.33	1.76×10 ⁶	9.60×10 ²	99.91
3.	2.11×10 ⁶	1.12×10 ⁶	46.92	2.02×10 ⁶	9.60×10 ²	99.91
Supplementary information: -						

3.1.3	TABLE: Germicidal test for Klebsiella pneumoniae (肺炎克雷伯氏菌)					--
	Rated input		230V, 50Hz			—
Tested item no.	Reference Group			Tetsed Group		
	Average colony forming unit before test V_0 (cfu/m ³)	Average colony forming unit after test V_t (cfu/m ³)	Natural extinction rate N_t (%)	Average colony forming unit before test V_1 (cfu/m ³)	Average colony forming unit after test V_2 (cfu/m ³)	Germicidal rate K_t (%)
1.	3.04×10 ⁶	1.98×10 ⁶	34.87	2.91×10 ⁶	1.92×10 ³	99.90
2.	2.27×10 ⁶	1.60×10 ⁶	29.52	2.43×10 ⁶	1.60×10 ³	99.91
3.	2.62×10 ⁶	1.82×10 ⁶	30.53	2.82×10 ⁶	1.92×10 ³	99.90

Supplementary information: -

3.1.4	TABLE: Germicidal test for Candida albicans (白色念珠菌)					--
	Rated input		230V, 50Hz			—
Tested item no.	Reference Group			Tetsed Group		
	Average colony forming unit before test V_0 (cfu/m ³)	Average colony forming unit after test V_t (cfu/m ³)	Natural extinction rate N_t (%)	Average colony forming unit before test V_1 (cfu/m ³)	Average colony forming unit after test V_2 (cfu/m ³)	Germicidal rate K_t (%)
1.	2.37×10^6	1.02×10^6	56.96	2.50×10^6	9.60×10^2	99.91
2.	1.82×10^6	9.28×10^5	49.01	1.95×10^6	9.60×10^2	99.90
3.	2.02×10^6	9.60×10^5	52.48	2.11×10^6	9.60×10^2	99.90
Supplementary information: -						

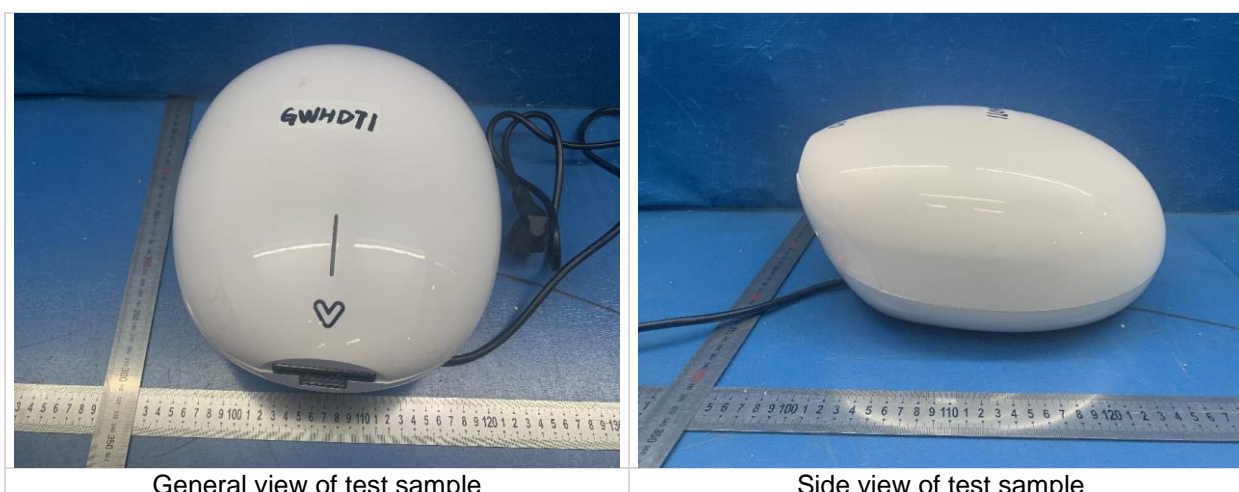
4 Remark

4.1 The hand dryer continuously operated for 120 min in the 1m³ test cabinet; The growth of bacteria was sterile in the negative tubes for the reference group.

4.2 The calculation formulas are
$$N_t(\%) = \frac{V_0 - V_t}{V_0} \times 100 \quad \text{and} \quad K_t(\%) = \frac{V_1 \times (1 - N_t) - V_2}{V_1 \times (1 - N_t)} \times 100 ;$$

5 Documentation

5.1 Photo of test sample:

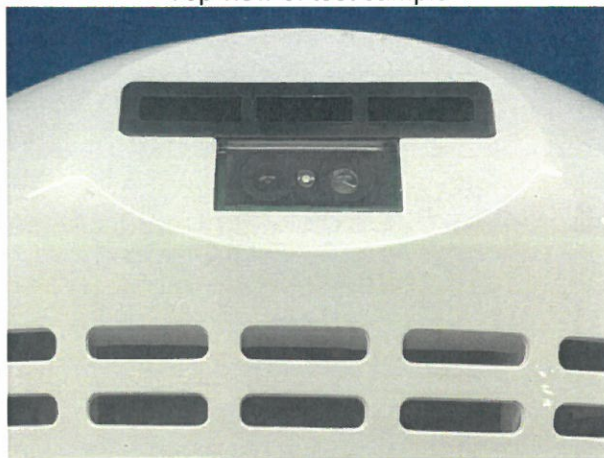







Top view of test sample



Rear view of test sample



Details of test sample

g_dwind	MODEL: GWHD71
	Rating Voltage: AC 220-240V
	Frequency: 50 - 60Hz
	Power Consumption: 720W
	Protection Grade: IPX3
	Isolation: Class I
	Designed in Europe
	Assembled in China
	GOOD WIND CO., LIMITED
	RM 1302 13/F CHEONG K BUILDING 84-86
	DES VOEUX ROAD CENTRAL HK

Rating label

6 Summary

- This report is only for test result, without verdict.

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch TÜV SÜD Group

Tested by:

Mason Mai
Project Handler

printed name, function & signature

Approved by:

Relly Ren
Designated Reviewer

printed name, function & signature

--- End of Report ---