Mechanical and Electrical Products Testing Center, Shanghai Entry-Exit Inspection and Quarantine Bureau

Test Report

Instruction No.: 201603409

Report No.: 20160279

Sample Name: Air Purifier

Model Number: MA-E85K-C-W

Test period: March 9, 2016 – March 25, 2016

Manufacturer: Mitsubishi Electric Corporation

Examining Body: Mechanical and Electrical Products Testing Center, Shanghai Entry-Exit Inspection and Quarantine Bureau

Test Report

Instruction No. 2016030409

Preparer: Huang Yi Signature:

Verifier: Ni Bin Signature:

Authorizer: Dai Xue Wei Signature:

Authorization date: March 31, 2016

Examining Body: Mechanical and Electrical Products Testing Center, Shanghai Entry-Exit Inspection and Quarantine Bureau

Address: 1208 Minsheng Road, Pudong, Shanghai Postal Code: 200135

Tel: 021-68546965 021-68546963 Fax: 021-68546965

Test site: Same as above

Applicant: Mitsubishi Electric Air-Conditioning & Visual Information Systems (Shanghai) Ltd.

Address: 15th floor, No. 300, Nanjing East Road, Shanghai

Rationale for the Test: Based on the applicant's request

Test: Test for removal rate of inhalable particulate matter (PM 2.5), formaldehyde, benzene, TVOC, and ozone

Explanation of standard deviation /

Sample Name: Air Purifier Model Name (Model Number): MA-E85K-C-W

Manufacturer: Mitsubishi Electric Corporation

Address: 2-7-3 Marunouchi, Chiyoda-ku, Tokyo

Rated value: 220 V~ 50 Hz 86 W

Sampling conditions: Sending of samples (2 units) Date of arrival of samples: March 4, 2016

Test results: Compliant (Passed)

Description of the Test: Perform 99% pollutant removal test for PM 2.5, formaldehyde, benzene, TVOC, and ozone based on the applicant's request.

Statement: 1. No part of this report may be copied without the written approval of the testing laboratory, unless the entire contents are copied.

2. The test results are valid only for the samples examined.

Remarks: 1. Explanation of judgment terms

(1) Passed (compliant): The examined sample conforms to the requirements of the standard.

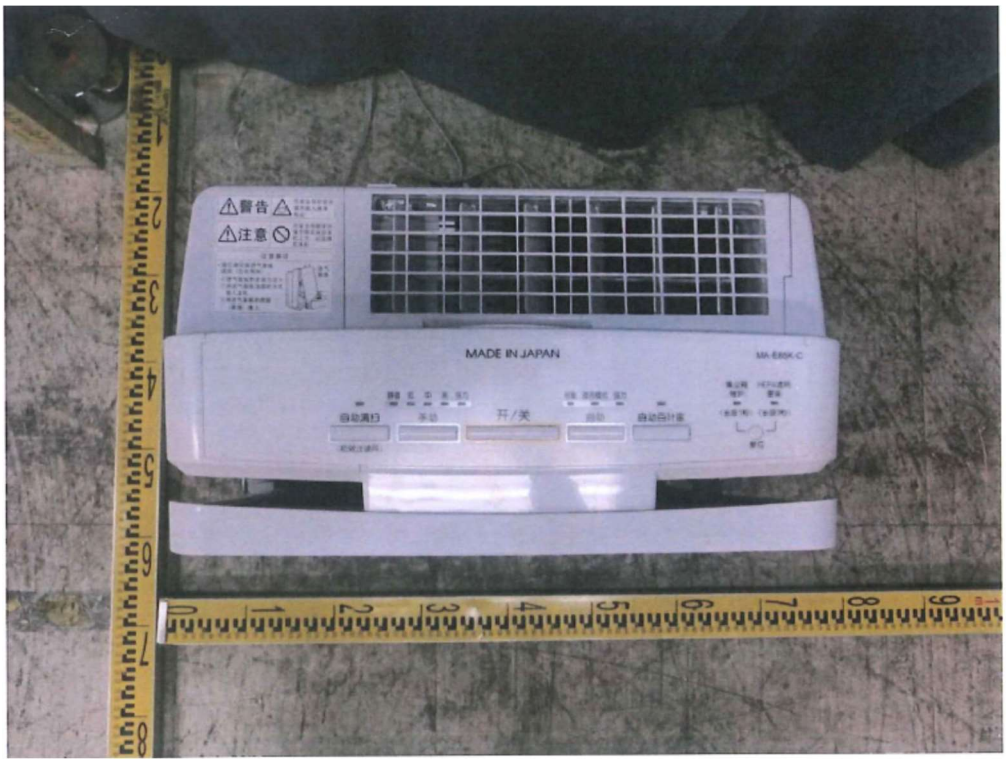
(2) Not applicable: This test is not applicable to the sample.

(3) Rejected (non-compliant): The test sample does not comply with the requirements of the standard.

(4) ---: This test has not been performed.

Photo of sample

External view of the appliance



Control panel

Photo of sample

Appliance name plate

(name plate label)

Summary of Test Results					
Test sequence	Test	Test requirements	Test results		
			Time	Concentration (mg/m^3)	Purification efficiency (%)
1	Purification efficiency of inhalable particulate matter (calculated using a particle diameter of ≤ 2.5 μm)	The test shall be conducted in a 30 m^2 test chamber, and the initial concentration of particulate matter shall be controlled within the range of (5.0 ± 1.0) mg/m^3.	0 min	5.45	/
			10 min	0.35	93.6
			20 min	0.04	99.3
			30 min	0.01	99.8
2	Formaldehyde purification efficiency	The test shall be conducted in a 30 m^2 test chamber and the initial concentration of formaldehyde shall be controlled within the range of (1.0 ± 0.20) mg/m^3.	0 h	1.153	/
			1 h	0.527	54.3
			2 h	0.348	69.8
			3 h	0.258	77.6
			4 h	0.224	80.6
			5 h	0.197	82.9
			6 h	0.172	85.1
			7 h	0.157	86.4
			8 h	0.139	87.9
			9 h	0.125	89.2
			10 h	0.112	90.3
			11 h	0.102	91.2
			12 h	0.096	91.7
			13 h	0.090	92.2
			14 h	0.083	92.8
			15 h	0.078	93.2
			16 h	0.072	93.8
			17 h	0.068	94.1
			18 h	0.062	94.6
			19 h	0.055	95.2
			20 h	0.050	95.7
			21 h	0.045	96.1
			22 h	0.031	97.3
			23 h	0.023	98.0
			24 h	0.017	98.5
			25 h	0.009	99.2

Summary of Test Results					
Test sequence	Test	Test requirements	Test results		
			Time	Concentration (mg/m^3)	Purification efficiency (%)
3	Benzene purification efficiency	The test shall be conducted in a 30 m^2 test chamber and the initial concentration of benzene shall be controlled within the range of (1.1 ± 0.22) mg/m^3.	0 h	1.23	/
			1 h	0.22	82.1
			2 h	0.08	93.5
			3 h	0.01	99.2
4	TVOC (total volatile organic compounds) purification efficiency	The test shall be conducted in a 30 m^2 test chamber and the initial concentration of TVOCs shall be controlled within the range of (6.0 ± 1.20) mg/m^3.	0 h	6.86	/
			1 h	0.81	88.2
			2 h	0.27	96.1
			3 h	0.01	99.8
5	Ozone purification efficiency	The test shall be conducted in a 30 m^2 test chamber and the initial concentration of ozone shall be controlled within the range of (1.6 ± 0.32) mg/m^3.	0 h	1.82	/
			1 h	0.01	99.4
Note: For the setting of initial concentrations of pollutants, refer to the requirements of GB/T18801-2015 “Air Purifier” standard, GB/T18883-2002 “Indoor Air Quality Standard” and APIAC/LM01-2013 “Evaluation Requirements for Indoor Air Purifier Purification Performance.”					

Shanghai Environmental Protection Product Quality Supervision and Inspection Station

Test Report

Test Report Number: 2015120-35-88467

Product Name	Air Purifier		Model Name (Model Number)	MA-E85K-C	
			Brand	Mitsubishi Electric	
Origin of the assignment	Corporate consignment		Inspection category	Consignment inspection	
Contractor name	Mitsubishi Electric Air-Conditioning & Visual Information Systems (Shanghai) Ltd.				
Name of the manufacturer	Mitsubishi Electric Corporation				
Product label		Lot no. / Date of production		Number of samples	1 unit
Date of consignment	July 1, 2015	Inspection site	Building 6, No.716, Yishan Road, Shanghai		
Date of arrival of the sample	July 1, 2015	Consignment slip number	DZ0000955		
Description of the condition of the sample	Operation of the unit is normal.				
Test and test compliance	Test: Purification efficiency for 0.1 μm solid particulate matter GB/T18801-2008 Air Purifier GB/T18883-2002 Indoor Air Quality Standard and requirements of the consignor				
Test period	July 1, 2015 – July 20, 2015				
Test results	The tests were conducted based on the above test standards; for detailed data, refer to the Summary of Test Results page of this report. Special stamp for the test report Date of issue of authorization: July 20, 2015				
Contractor name	Address	15th floor, Celebrity Commercial Building, 300 Nanjing East Road, Shanghai			
	Postal code	200001	Tel.	021-23123379	
Remarks	This field left blank				

Confirmation: Authorization:

Test Report

Summary of Test Results page				
Sequence	Test	Unit	Measured value	
1	Purification efficiency for 0.1 μm solid particulate matter	%	10 min	97
			20 min	> 99
			30 min	> 99
			40 min	> 99
			50 min	> 99
			60 min	> 99
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Remarks	1. Test chamber conditions: Volume: 30 m3, Temperature: (23-26) °C, Humidity: (44-55) % RH 2. Test method For the test of 0.1 μm solid particulate matter, cigarette smoke and mist shall be used as the main dust source, and the counting method shall be the standard test method. The initial concentration shall be 2.2×10^7 particles/L, and the natural decay in 60 minutes shall be less than 10%. Formula for calculating the purification efficiency for pollutants during testing: [(initial concentration - final concentration) / initial concentration] x 100%.			

End of test result contents