



# TEST REPORT



Test Laboratory	UL LLC
Test Laboratory Address	12 Laboratory Dr. Research Triangle Park, NC 27709

Applicant Name:	Membrane Solutions (Nan Tong) Co., Ltd.
Applicant Address:	No. 3, Hongxing East Road, NETDA Nantong City, Jiangsu, P.R. China

Title of Test:	U.S. Department of Energy 10 DFR Part 430 Air Cleaner Efficiency Testing
Test Standard or Procedure:	Appendix FF to Subpart B of Part 430
Project Number	4791141329 2.1

Product Description	Air Purifier
Model	MS601
Manufacturer	SHANGHAI BESTEAST International Trading Inc.
Brand Name	Membrane Solutions
Model Similarity	MS601W
Rated Voltage (V)	120
Rated Frequency (Hz)	60
Rated Power (W)	68
Rated Current (A)	N/A
Sample(s) Received Date	2/9/2024
Sample Condition	New

Test Conducted by:	David Corely
Test Date:	3/15/2024 - 3/27/2024
Report Issue Date:	3/29/2024
Report Revision Number:	1.0

Tested By:	David Corely	Report By:	Connor Hoover
			

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Version:	Date:	Description
1.0	3/29/2024	Initial Release


**Test Equipment**

Equipment Name	Equipment ID	Manufacture	Model	Last Cal Date	Next Cal Date
Test Chamber	13D1-08	N/A	N/A	N/A	N/A
Dust Aerosol Generator	208906	TSI Inc.	3410A	N/A	N/A
Laser Aerosol Spectrometer	208905	TSI Inc.	3340A	5/24/2023	5/24/2024
Aerodynamic Particle Sizer	208903	TSI Inc.	3321	2/21/2024	2/28/2025

**Product Photos**

**Air Purifier**

Model No.: MS601  
 Voltage: 120V  
 Frequency: 60Hz  
 Power: 68W



CAN ICES-5(B)/NMB-5(B)  
 Contains IC: 23243-WBR3  
 Contains FCC ID: 2ANDL-WBR3

**Membrane Solutions**®

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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Comforms to UL Std.507  
 Certified to CSA Std.c22.2 No.113

www.msPURElife.com  
 Made in China



CADR Test Results

Sample Number	Sample Setting	Test Challenge	Decay Rate	CADR (ft <sup>3</sup> /min)	CADR St. Dev.	Power (W)
6892563	High Fan Speed	Dust	0.3686	359	2.28	64.24
		Smoke	0.3783	368	2.61	65.56
		Pollen	0.4783	339	4.35	N/A
6892564	High Fan Speed	Dust	0.3551	345	4.60	66.40
		Smoke	0.3855	375	1.99	66.89
		Pollen	0.4790	340	10.39	N/A
6892565	High Fan Speed	Dust	0.3852	374	2.21	66.45
		Smoke	0.3956	385	2.02	67.03
		Pollen	0.5091	370	9.45	N/A

Average CADR Values

CADR (ft <sup>3</sup> /min)		
Dust	Smoke	Pollen
359	376	350

Average PM2.5 CADR (ft <sup>3</sup> /min)
367

Inactive Power

Sample	(W)
6892563	0.91
6892564	0.88
6892565	0.47
Average	0.75

Average Active Power

Power (W)
66.10

Annual Energy Consumption

AEC (kWh/year)
388.19

Integrated Energy Factor

IEF	DOE Criteria Tier 1 Requirement	Result
5.53	2	Pass