

Nuwave LLC

TEST REPORT

SCOPE OF WORK

Removal Rate Testing - Air Purifier - [See the Page 2 Model(s)]

REPORT NUMBER

211221146GZU-002

ISSUE DATE

22-Aug-2022

[REVISED DATE]

None

PAGES

12

DOCUMENT CONTROL NUMBER

AP-US-TRF_V5.1[31-05-2021]

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Test Report

Report Number	211221146GZU-002
Test Laboratory Name / Address	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Room 02, & 101/E201/E301/E401/E501/E601/E701/E801 of Room 01 1-8/F., No.7-2, Caipin Road, Science City, GETDD, Guangzhou, Guangdong, China
Applicant Name / Address	Nuwave LLC 560 Bunker Ct., Vernon Hills, IL 60061 USA
Manufacturing Name / Address	Not provided
Product	Air Purifier
Brand Name	Nuwave Oxypure
Description	The product covered by this report is a cord connected indoor used only Air Purifier.
Model(s) (if applicable)	475**
Model Similarity	** may be two numbers; all models are identical except for the specific model name.
Rated voltage (V)	100-240~
Rated frequency (Hz)	50-60
Rated power (W)	12
Date of receipt of sample(s)	18-Jan-2022
Date of test	26-Jan-2022
Sample Condition	Prototype
Test standard(s) or criteria(s)	Refer to ANSI/AHAM AC-1-2020 & Special Requirements of the Applicant.
Conclusion	No conclusion for this test report.
Date of issue	22-Aug-2022
Date of revision	None

Prepared by:

Elvis Cai

Elvis Cai
Engineer

Approved by:

Amit Li

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Sr. Supervisor

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The test report only allows to be revised only within the report defined retention period unless standard or regulation was withdrawn or invalid. When determining the test result, measurement uncertainty has been considered.





Test Equipment List:

Equipment Name	Type	Number	Calibration Date	Due Date
Laser Aerosol Spectrometer	3340	SA016-23-04	2022/3/1	2023/2/28
Aerodynamic Particle Sizer	3321	SA016-23-05	2022/1/27	2023/1/26
Fluidized Bed Aerosol Generator	3400A	SA016-23-05	2022/6/3	2023/6/2
Air Cleaner testing Chamber		SA016-23	2022/6/3	2023/6/2

Device Under Test Description:

The device(s) tested for this report were/was Model 475**

The following device settings were used during testing: 120V/60Hz, Speed 3, Tested on the Table

	
<p align="center">Unit in test</p>	<p align="center">Control Panel View</p>
	
<p align="center">Filter view</p>	<p align="center">Adaptor</p>

Results of pollutants remove rate for Cigarette Smoke:

Monitored particle size ranges for the Cigarette Smoke particulates were: 0.1-1 microns.

Model/Configuration: S211221146-002, 475**, 120V/60Hz, Speed 3

Time (min)	Cigarette smoke				
	0.1µm	0.11µm	0.12µm	0.13µm	0.14µm
10	52.90%	57.18%	58.84%	61.32%	61.31%
20	81.87%	83.67%	85.54%	85.80%	86.55%
30	93.19%	93.90%	95.14%	95.43%	95.76%
40	97.65%	98.02%	98.12%	98.39%	98.24%
50	99.16%	99.24%	99.45%	99.37%	99.36%
60	99.76%	99.79%	99.72%	99.82%	99.93%
70	99.90%	99.91%	99.93%	99.88%	99.90%
80	99.98%	99.99%	99.95%	100.00%	99.95%
90	100.00%	99.99%	100.00%	100.00%	99.98%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	Cigarette smoke				
	0.15µm	0.16µm	0.17µm	0.18µm	0.19µm
10	63.61%	62.85%	67.06%	65.53%	62.42%
20	87.38%	87.18%	88.38%	89.17%	89.22%
30	96.00%	95.89%	96.27%	95.73%	95.55%
40	98.71%	98.92%	98.61%	99.02%	98.93%
50	99.43%	99.33%	99.33%	99.54%	99.73%
60	99.76%	99.85%	99.86%	99.87%	99.73%
70	99.88%	99.96%	99.95%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	Cigarette smoke				
	0.2µm	0.225µm	0.25µm	0.275µm	0.3µm
10	65.99%	61.74%	67.86%	76.25%	70.59%
20	88.82%	88.45%	88.95%	91.25%	88.23%
30	96.31%	97.18%	97.43%	96.88%	100.00%
40	98.87%	98.72%	99.49%	99.38%	100.00%
50	99.70%	99.49%	100.00%	100.00%	100.00%
60	99.94%	99.87%	100.00%	100.00%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Results of pollutants remove rate for Cigarette Smoke:

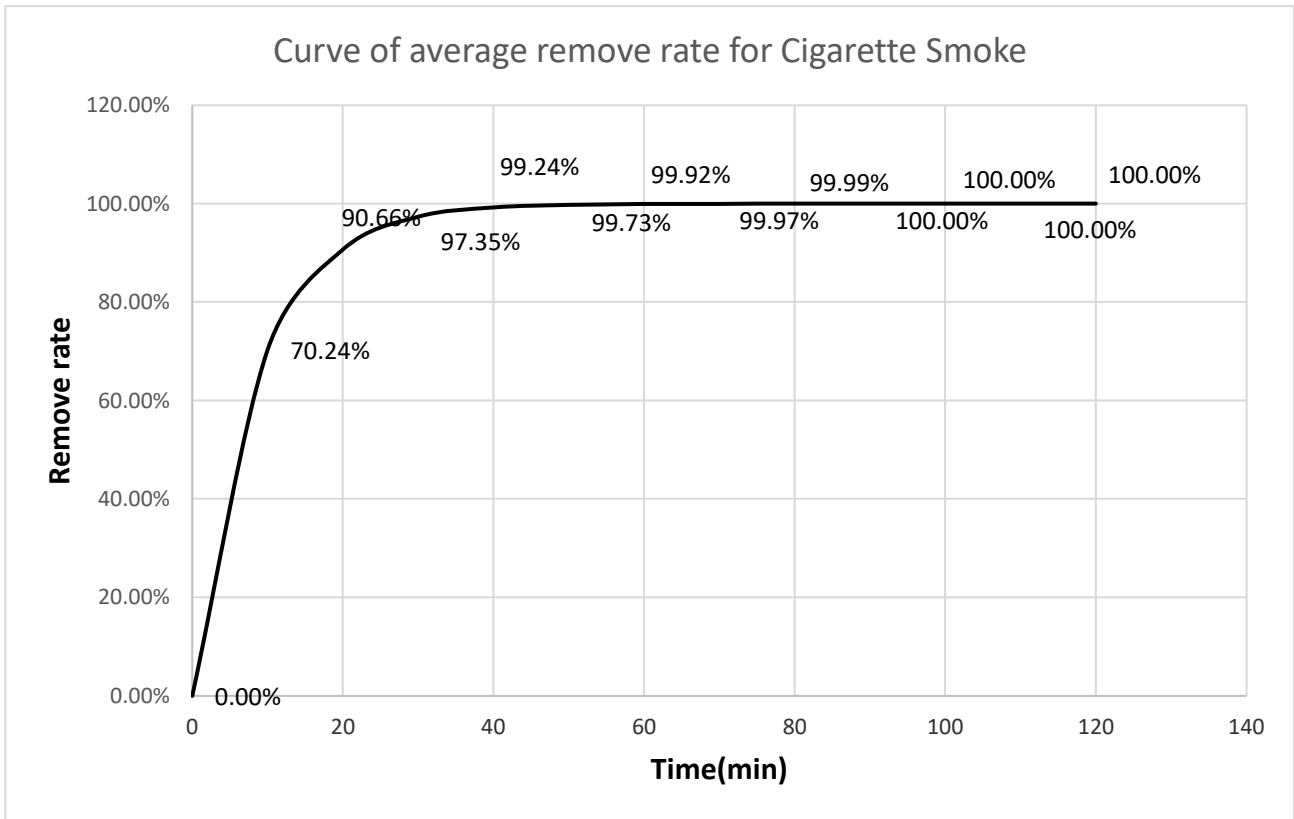
Monitored particle size ranges for the Cigarette Smoke particulates were: 0.1-1 microns.

Model/Configuration: S211221146-002, 475**, 120V/60Hz, Speed 3

Time (min)	Cigarette smoke				
	0.325µm	0.35µm	0.4µm	0.45µm	0.5µm
10	74.00%	77.14%	70.00%	44.44%	100.00%
20	94.00%	94.29%	90.00%	77.78%	100.00%
30	98.00%	100.00%	95.00%	100.00%	100.00%
40	100.00%	100.00%	100.00%	100.00%	100.00%
50	100.00%	100.00%	100.00%	100.00%	100.00%
60	100.00%	100.00%	100.00%	100.00%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	Cigarette smoke				
	0.6µm	0.7µm	0.8µm	0.9µm	1µm
10	60.00%	75.00%	100.00%	100.00%	100.00%
20	100.00%	100.00%	100.00%	100.00%	100.00%
30	100.00%	100.00%	100.00%	100.00%	100.00%
40	100.00%	100.00%	100.00%	100.00%	100.00%
50	100.00%	100.00%	100.00%	100.00%	100.00%
60	100.00%	100.00%	100.00%	100.00%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Curve of average remove rate for Cigarette Smoke



Results of pollutants remove rate for Dust:

Monitored particle size ranges for the Dust particulates were: 0.5-3 microns.

Model/Configuration: S211221146-002, 475**, 120V/60Hz, Speed 3

Time (min)	Dust				
	<0.523µm	0.542µm	0.583µm	0.626µm	0.673µm
10	66.63%	67.72%	69.03%	68.59%	68.65%
20	88.93%	89.11%	89.04%	89.62%	89.14%
30	95.63%	96.24%	96.33%	96.24%	96.00%
40	98.70%	98.61%	98.88%	98.68%	98.63%
50	99.49%	99.57%	99.70%	99.64%	99.62%
60	99.85%	99.75%	99.87%	99.74%	99.86%
70	99.93%	99.87%	99.89%	99.91%	99.91%
80	99.96%	99.95%	99.96%	99.98%	99.93%
90	99.98%	100.00%	99.98%	99.98%	99.97%
100	100.00%	100.00%	100.00%	99.98%	99.97%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	Dust				
	0.723µm	0.777µm	0.835µm	0.898µm	0.965µm
10	67.71%	68.15%	68.09%	66.28%	67.61%
20	88.43%	88.33%	89.26%	88.73%	88.87%
30	95.79%	96.48%	96.26%	96.09%	97.10%
40	98.82%	98.43%	98.76%	98.61%	98.86%
50	99.65%	99.59%	99.63%	99.72%	99.41%
60	99.85%	99.81%	99.82%	99.76%	99.80%
70	99.98%	99.91%	99.94%	99.88%	99.91%
80	99.98%	99.95%	99.96%	99.98%	99.94%
90	100.00%	100.00%	99.96%	99.98%	99.97%
100	100.00%	100.00%	99.98%	100.00%	100.00%
110	100.00%	100.00%	99.98%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	Dust				
	1.037µm	1.114µm	1.197µm	1.286µm	1.382µm
10	66.95%	69.19%	68.77%	65.71%	70.83%
20	88.69%	89.84%	88.33%	89.02%	90.91%
30	96.32%	96.67%	97.35%	97.14%	97.70%
40	99.27%	99.13%	99.04%	98.89%	98.90%
50	99.65%	99.64%	99.58%	99.44%	99.80%
60	99.77%	99.77%	99.82%	99.92%	99.80%
70	100.00%	99.86%	99.94%	99.92%	100.00%
80	100.00%	99.86%	100.00%	99.92%	100.00%
90	100.00%	99.95%	100.00%	100.00%	100.00%
100	100.00%	99.95%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Results of pollutants remove rate for Dust:

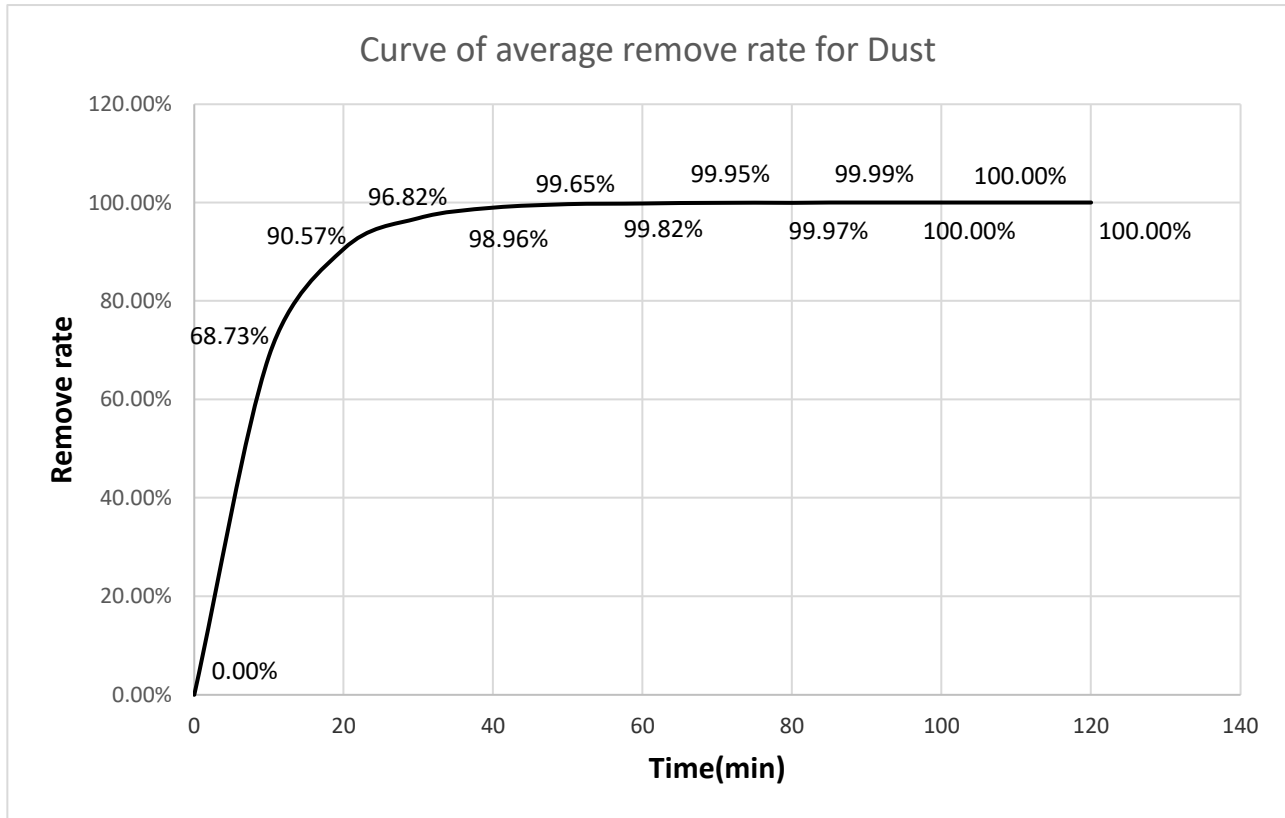
Monitored particle size ranges for the Dust particulates were: 0.5-3 microns.

Model/Configuration: S211221146-002, 475**, 120V/60Hz, Speed 3

Time (min)	1.486µm	1.596µm	Dust 1.715µm	1.843µm	1.981µm
10	70.61%	66.86%	66.97%	77.18%	75.86%
20	90.88%	90.37%	90.91%	93.78%	92.41%
30	96.73%	96.72%	98.18%	98.34%	99.31%
40	98.78%	99.04%	99.39%	98.76%	99.31%
50	99.73%	99.61%	99.39%	99.17%	99.31%
60	99.86%	99.81%	99.39%	99.17%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	2.129µm	2.288µm	Dust 2.458µm	2.642µm	2.839µm
10	80.23%	69.05%	75.00%	66.67%	50.00%
20	97.67%	92.86%	91.67%	100.00%	87.50%
30	98.84%	97.62%	100.00%	100.00%	87.50%
40	98.84%	97.62%	100.00%	100.00%	100.00%
50	100.00%	100.00%	100.00%	100.00%	100.00%
60	100.00%	100.00%	100.00%	100.00%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Curve of average remove rate for Dust



Results of pollutants remove rate for Pollen:

Monitored particle size ranges for the Pollen particulates were: 5-11 microns.

Model/Configuration: S211221146-002, 475**, 120V/60Hz, Speed 3

Time (min)	Pollen				
	5.048µm	5.425µm	5.829µm	6.264µm	6.732µm
10	73.61%	83.75%	81.51%	80.31%	82.53%
20	97.22%	96.25%	97.48%	98.45%	97.47%
30	100.00%	100.00%	100.00%	100.00%	100.00%
40	100.00%	100.00%	100.00%	100.00%	100.00%
50	100.00%	100.00%	100.00%	100.00%	100.00%
60	100.00%	100.00%	100.00%	100.00%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	Pollen				
	7.234µm	7.774µm	8.354µm	8.977µm	9.647µm
10	87.77%	90.79%	92.45%	95.25%	95.44%
20	98.34%	98.67%	99.59%	98.93%	100.00%
30	100.00%	99.84%	100.00%	99.69%	100.00%
40	100.00%	100.00%	100.00%	100.00%	100.00%
50	100.00%	100.00%	100.00%	100.00%	100.00%
60	100.00%	100.00%	100.00%	100.00%	100.00%
70	100.00%	100.00%	100.00%	100.00%	100.00%
80	100.00%	100.00%	100.00%	100.00%	100.00%
90	100.00%	100.00%	100.00%	100.00%	100.00%
100	100.00%	100.00%	100.00%	100.00%	100.00%
110	100.00%	100.00%	100.00%	100.00%	100.00%
120	100.00%	100.00%	100.00%	100.00%	100.00%

Time (min)	Pollen	
	10.37µm	11.14µm
10	96.15%	96.97%
20	100.00%	100.00%
30	100.00%	100.00%
40	100.00%	100.00%
50	100.00%	100.00%
60	100.00%	100.00%
70	100.00%	100.00%
80	100.00%	100.00%
90	100.00%	100.00%
100	100.00%	100.00%
110	100.00%	100.00%
120	100.00%	100.00%

Curve of average remove rate for Pollen

