

# Healthy Air Technology Ltd.

## TEST REPORT

### SCOPE OF WORK

CADR Testing - Air Purifier - [HA500;HA500-A;HA500-B;HA500-C;HA500-D;HA500-E]

### REPORT NUMBER

210630149GZU-001

### ISSUE DATE

8-Oct-2021

### [REVISED DATE]

None

### PAGES

6

### DOCUMENT CONTROL NUMBER

AP-US-TRF\_V5.1[31-05-2021]

©2021 INTERTEK



## Test Report

Report Number 210630149GZU-001  
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 Healthy Air Technology Ltd.  
Oxford University Begbroke Science Park, Begbroke, Oxford, United  
Kingdom, OX5 1PF  
Manufacturing Name / Address Healthy Air Technology Ltd.  
Oxford University Begbroke Science Park, Begbroke, Oxford, United  
Kingdom, OX5 1PF  
Product Air Purifier  
Brand Name Healthy Air Technology  
Description The product covered by this report is a cord connected indoor used only Air  
Purifier.  
Model(s) (if applicable) HA500;HA500-A;HA500-B;HA500-C;HA500-D;HA500-E  
Model Similarity All models are identical except for the specific model name.  
Rated voltage (V) 220-240  
Rated frequency (Hz) 50-60  
Rated power (W) 45  
Date of receipt of sample(s) 30-Jun-2021  
Date of test 23-Sep-2021  
Sample Condition Production  
Test standard(s) or criteria(s) ANSI/AHAM AC-1-2020  
Conclusion The results reported are within the minimum and maximum limits of  
measurability of the ANSI/AHAM AC-1-2020 "Association of Home Appliance  
Manufacturers Method for Measuring Performance of Portable Household  
Electric Room Air Cleaners" Test Method.  
Date of issue 8-Oct-2021  
Date of revision None

Prepared by:



Ben Deng

Project Engineer

Approved by:



Amit Li

Sr. Supervisor

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

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 Method:**

Tests were performed in accordance with ANSI/AHAM AC-1-2020 entitled "Association of Home Appliance Manufacturers Method for Measuring Performance of Portable Household Electric Room Air Cleaners". This standard method has defined limits of measurability. The practical limits of measurability are: Dust 10 to 600 CADR, Tobacco smoke 10 to 600 CADR and Pollen 25 to 450 CADR. The statistical validity of test results outside of the stated practical limits is questionable and unevaluated. Clean Air Delivery Rates (CADR's) were determined using Tobacco Smoke, AC Fine Test Dust, and Paper Mulberry Pollen.

Additional requirements for energy taken from IEC 62301 Ed. 2 entitled, "Household Electrical Appliances – Measurement of Standby Power".

Monitored particle size ranges for the three particulates were as follows:  
Smoke - 0.10-1.0 microns; Dust - 0.5-3 microns; Pollen - 5-11 microns.

PM2.5 CADR is obtained by combining the CADR of Cigarette smoke particle sizes ranging from 0.1 and 0.5 microns with the CADR of dust particles that fall in the range of 0.5 to 2.5 microns and performing a geometric average calculation.

$$PM2.5 \text{ CADR} = \sqrt{\text{Smoke CADR}(0.1 - 0.5\mu\text{m}) \times \text{Dust CADR}(0.5 - 2.5)}$$





**Test Equipment List:**

Equipment Name	Type	Number	Calibration Date	Due Date
Laser Aerosol Spectrometer	3340	SA016-23-04	2021/2/26	2022/2/25
Aerodynamic Particle Sizer	3321	SA016-23-05	2021/1/26	2022/1/25
Fluidized Bed Aerosol Generator	3400A	SA016-23-05	2021/6/4	2022/6/3
Air Cleaner testing Chamber		SA016-23	2021/6/4	2022/6/3

### Device Under Test Description:

The device(s) tested for this report were/was Model HA500

The following device settings were used during testing: 220V/50Hz, Speed 5, Anoin ON, Tested on the Floor

		
<p><b>Unit in test</b></p>	<p><b>Control Panel View</b></p>	<p><b>Filter view for HEPA side</b></p>
	<p><b>NA</b></p>	<p><b>NA</b></p>
<p><b>Filter view for Carbon side</b></p>		

**Results of Performance Tests:**

Model/Configuration	Test Particulate	Natural Decay Rate	CADR (FT <sup>3</sup> /Min)	CADR STDEV	Power (W)
HA500 S210630149-001 220V/50Hz, Speed 5, Anoin ON Tested on the Floor	Smoke	0.00607	303.9	1.8	49.7
	Dust	0.00768	295.7	1.5	49.7
	Pollen	0.11279	319.0	8.7	49.3
	PM2.5	-	299.7	-	-

**Conclusion:**

The results reported are within the minimum and maximum limits of measurability of the ANSI/AHAM AC-1-2020 "Association of Home Appliance Manufacturers Method for Measuring Performance of Portable Household Electric Room Air Cleaners" Test Method.

