

2020

Laboratory Test

NO OZONE Emittance

Ozone level regulation to meet or
Exceed the UL 867 Ozone
Emittance requirement

Evaluation of Ozone emittance
per UL 867 requirements with
S400 Air System Device





EDL

Environmental Diagnostics Laboratory

Environmental Diagnostics Laboratory

Monitoring of Ozone Emission from Scientific Air S400

PACS ID#: 07175

Work Order#: 026151

Customer: Scientific Air Management LLC

Dates of Testing: 9/8/2020-9/10/2020

Date Completed: 9/10/2020

Date of Report: 9/10/2020

Environmental Diagnostics Laboratory

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September 10, 2020

To Dana Leonaggeo
1301 West Copans Toad Suite D1
Popano Beach, FL 33060

*Reference: PACS ID 07175 Work Order 026151 Monitoring of
Ozone Emission from Scientific Air S400*

Dear Dana Leonaggeo,

We appreciate the opportunity to provide you with our professional, environmental microbiology services. EDLab is pleased to submit this report that describes ozone emission from Scientific Air S400.

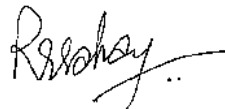
This report summarizes the findings and other relevant data as per your request. A test certificate is also issue based on the findings.

Please call me at 1-800-422-7873, ext. 301 should you have any questions. We look forward in assisting you in future projects.

Respectfully Submitted,



Joiya Mendez
QC Analyst



Dr. Rajiv R. Sahay, CIAQP, FIAS
Laboratory Director



Héctor Rivera
Analyst

1.0 Background

Dana Leonageo contacted the EDLab at Pure Air Control Services, Inc. to conduct an ozone emission test on Scientific Air S400 to comply with California State ozone regulations. The manufacturer believes that this device will not produce ozone in a concentration that surpasses California State ozone regulations of 0.050 parts per million (ppm). Upon request, a “Scope of Work” was developed by the laboratory and executed after the approval of Dana Leonageo. The laboratory report after the experiment provides ozone reading produced from Scientific Air S400.

2.0 Test Design

This study comprises a pre- and post-assessment of the ozone levels within a closed environmental chamber alongside the baseline under the prevailing environmental conditions. The ozone level was recorded using Aeroqual Ozone Monitor 500 with an ozone sensor range of 0.001-0.500 ppm. Pressure around the test site were closely monitored.

3.0 Processing

EDLab’s team of analyst collected 1 set of ozone emission data within the test chamber without the device (Scientific Air S400) running and 3 sets of ozone emission data with the device running. All data obtain during the experiment are recorded at 1-minute interval during an 8-hour duration.

4.0 Control Samples, Data, and Images

Experimental findings are recorded in the corresponding observation **Table 1**. Photographs of important stages of the experiment are presented in **Figure 1**.

5.0 Results

All data, statistical analysis and photographs are presented under the following **Table 1** and **Graph 1**.

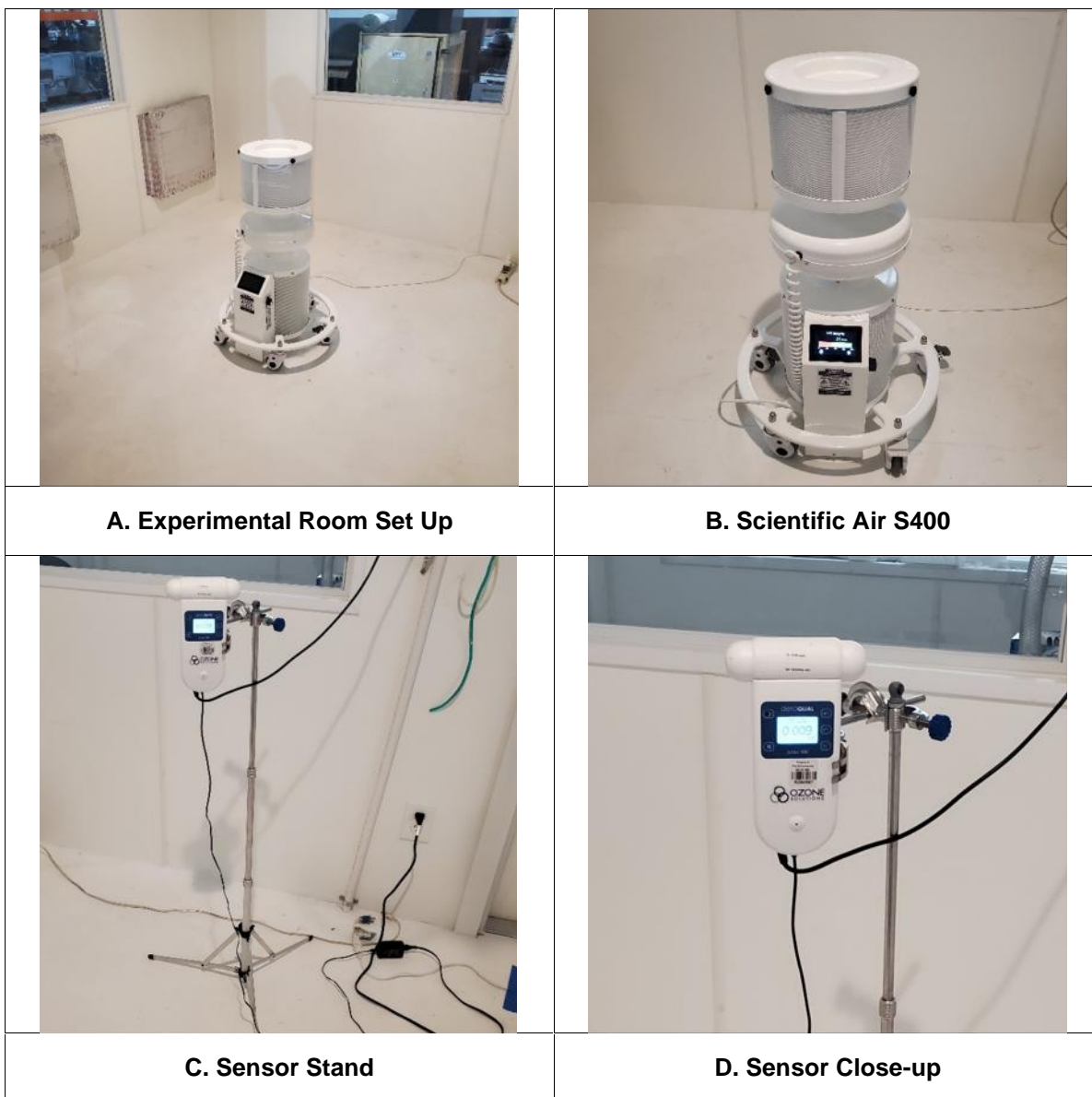
Table 1. Net ozone emission from Scientific Air S400

| Time Interval | 60 min. | 120 min. | 180 min. | 240 min. | 300 min. | 360 min. | 420 min. | 480 min. | Remark |
|------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|--------|
| Trail | Avg. (ppm) | Avg. (ppm) | Avg. (ppm) | Avg. (ppm) | Avg. (ppm) | Avg. (ppm) | Avg. (ppm) | Avg. (ppm) | |
| Scientific Air S400 Off | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | Yes |
| Scientific Air S400 On (I) | 0.000 | 0.000 | 0.001 | 0.001 | 0.002 | 0.003 | 0.003 | 0.003 | Yes |
| Scientific Air S400 On (II) | 0.004 | 0.004 | 0.004 | 0.005 | 0.004 | 0.004 | 0.005 | 0.005 | Yes |
| Scientific Air S400 On (III) | 0.006 | 0.005 | 0.006 | 0.007 | 0.007 | 0.008 | 0.009 | 0.007 | Yes |

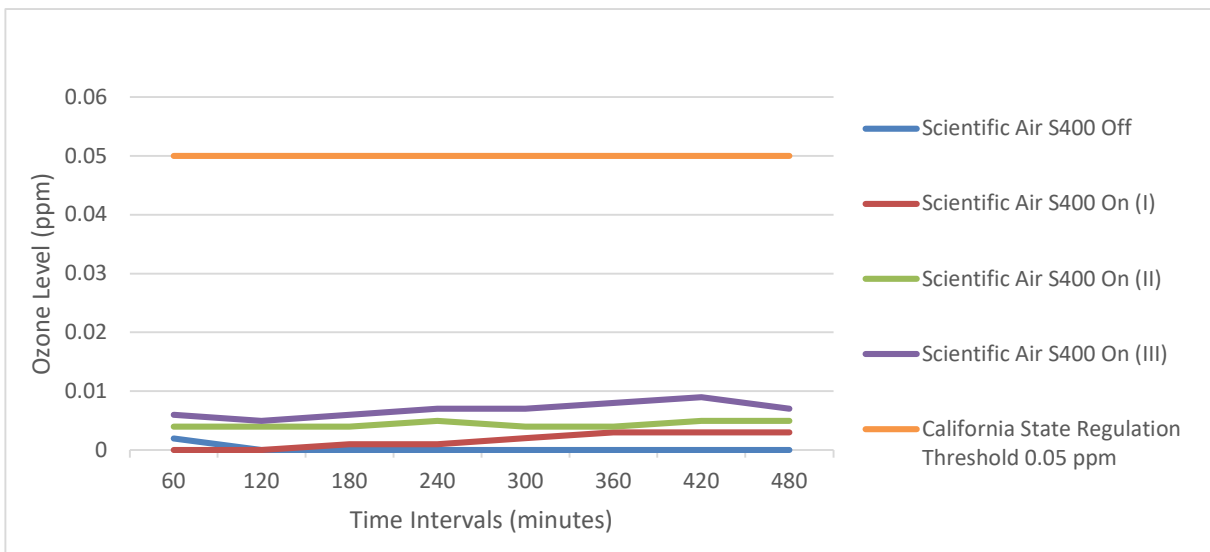
6.0 Photographs and Figures

The following section contains photos and figures of some important observations as well as other experimental stages, including graphs based off the experimental findings.

Figure 1: Experimentation Site



Graph 1. Ozone Emission from Scientific Air S400



7.0 Conclusion

The goal of this study was to examine if the Scientific Air S400 complies with California State ozone level regulations. Three sets of 8-hour ozone monitoring were conducted by operating the Scientific Air S400 unit inside the environmental chamber. A set of data was also collected after conditioning the environmental chamber and placing the equipment inside. The ozone emitted by the Scientific Air S400 was below the 0.050 ppm threshold set by the California State ozone level regulation. This unit meets or exceeds the UL 867 requirements.

END OF REPORT