



Ace Lab Systems
 1550 S. Kingshighway
 St Louis, MO 63110
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 WWW AceLabSystems Com

Biological Safety Cabinet
Test Report : 9-160126-2

Ace ID# _____

Next Test Due
January 2017

Work Order #: 114898

Institution: DataRecovery.com
 Department: n/a
 Address: 110 North Research Dr.
 City, State, ZIP: Edwardsville, IL 62025
 Contact: Laura Hunter
 Phone Number: 1-800-237-4200 ext 263

Service Representative: Brooks, Darryl
 Date Tested: 01-26-16
 Instrument Manufacturer: Enviroco
 Model: 111-Z04-UL
 Serial #: S09-120-00790
 Location: Lab

This unit meets the requirements of the following standards of specifications as of this date. Testing was performed in accordance with the criteria established by the National Sanitation Foundation, Standard Number 49 and/or Federal Standard 209E.

Tests Conducted

- Particle Count
- HEPA Filter Leak Test
- Velocity Profile and Volume
- Face Velocity
- Airflow Smoke Patterns
- Lighting Intensity
- Other _____
- Electrical Safety
- Decontamination
- Federal Standard 209E
- NSF No 49
- Manufacturer Specifications

Final Testing Results

- Unit Certified
- Unit Not Certified

Remarks: Final Test Satisfactory
*work area meet class 5 per USP797
and class 100 per ISO 14644-1

Mag Gauge Reading
n/a

+	+	+	+	+	94	77	84	80	90	95
+	+	+	+	+	79	84	82	89	87	74
+	+	+	+	+	95	87	86	79	73	75
+	+	+	+	+						
+	+	+	+	+						
+	+	+	+	+						
+	+	+	+	+						

Rear: n/a n/a
 Center: n/a n/a
 Front: n/a n/a

Sash Opening: n/a

+	+	+	+	+	+	+	+	+	+	E
+	+	+	+	+	+	+	+	+	+	x
+	+	+	+	+	+	+	+	+	+	h
+	+	+	+	+	+	+	+	+	+	a
+	+	+	+	+	+	+	+	+	+	s
+	+	+	+	+	+	+	+	+	+	t
+	+	+	+	+	+	+	+	+	+	
+	+	+	+	+	+	+	+	+	+	

Supply

Average Downflow Velocity: 84 Feet Per Minute 80-120 Range

Average Exhaust Velocity: n/a Feet Per Minute n/a
 Effective Filter Area: n/a Square Feet Range
 Exhaust Air Volume: n/a Cubic Feet Per Minute n/a Range

Smoke Airflow Patterns

This test insures that airflow is inward along the entire perimeter of the work access opening, that airflow within the work area is downward with no dead spots or refluxing, that outside air does not pass on or over the work surface, and there is no refluxing or escape of smoke from the biological safety cabinet

Inside Cabinet

Centerline of the work surface, 4 inches above the top of the work access opening Yes No N/A

One inch behind window, 6 inches above the top of the work access opening Yes No N/A

Outside Cabinet

Along the entire Perimeter of the work access opening, 15 in. from opening Yes No N/A

If Sliding Window Present

Inside Cabinet below the wiper gasket Yes No N/A

Work Access Opening Airflow

Area of Access Opening: n/a Square Feet
 Calculated Velocity: n/a Feet Per Minute n/a Range
 Measured Velocity: n/a Feet Per Minute

HEPA Filter Leak Test

No leaks above 0.01% Leaks Found Leaks Repaired
 Acceptance: Aerosol penetration shall not exceed 0.01%

Lighting Intensity

Visible Lighting Intensity: 25 Foot Candles at work Surface
 U V Lighting Intensity: n/a uW/cm sqr at work surface

Electrical Safety

Pass Fail

Equipment Used

	Make and Model	Serial #	Cal Date
Aerosol Photometer:	PH-4	1929	10/15
Air Velocity Meter:	TSI-9535A	1545007	11/15
Particle Counter:	A2400	000100515	09/15

Darryl Brooks
 Field Service Engineer

ISO 14644-1:1999(E)

Report for Area: S09-120-00790

Report Date: 1/26/2016

ACE ELECTRIC LAB SYSTEMS

1550 KINGSHIGHWAY

ST. LOUIS, MO 63110

USA

Test Start: 1/26/2016 1:15:00PM

Occupancy State: At-rest

Clean Zone Area: 1.00 Sq. Meters

Test End: 1/26/2016 1:22:14PM

Target Class: 5

Minimum Number of Locations: 1

Counter: MetOne A2400

Serial Number: 000100515

Location Averages	0.5 μ m	No. SPMples	User
1	0.00	1	
2	6.00	1	
3	0.00	1	
4	2.00	1	
5	0.00	1	

Mean of Averages 57.06

Standard Deviation 92.79

Standard Error 41.06

95% UCL 143.90

ISO Class 5 Limit 3,520.00

Test Result PASS

Overall Test Result: PASSES for ISO Class 5