



**Ace Lab Systems**  
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**Unidirectional Airflow**

**Test Report:** 9-200619-1  
**Work Order#** 527854

**Next Test Due**

**JUNE 2021**

Institution: <u>DataRecovery.com</u>	Service Representative: <u>Brooks, Darryl</u>
Department: <u>n/a</u>	Date Tested: <u>19JUN20</u>
Address: <u>110 North Research Drive</u>	Instrument Manufacturer: <u>Enviro</u>
City, State, Zip: <u>Edwardsville, IL 62025</u>	Model: <u>111-Z04-UL</u>
Contact: <u>Mike Katich</u>	Serial Number: <u>S09-120V-00790</u>
Phone Number: <u>800-237-4200 ext. 257</u>	Location: _____

Tests Conducted			Airflow
<input checked="" type="checkbox"/> Hepa/Ulpa Filter Leak Test	<input type="checkbox"/> Airflow Visualization Test	<input checked="" type="checkbox"/> Lighting Intensity	<input type="checkbox"/> Horizontal
<input checked="" type="checkbox"/> Airflow Velocity Test	<input checked="" type="checkbox"/> Non-Viable Sample	<input type="checkbox"/> Electrical Outlet	<input checked="" type="checkbox"/> Vertical
<input type="checkbox"/> Induction Leak/Back Streaming Test	<input type="checkbox"/> Viable Sample		

Pass **Airflow Velocity Test:**  Fail

96	93	90	95	87	92	80
93	86	88	99	92	87	92
90	97	99	92	84	93	87

Range FPM: 90 - 110 Avg. Supply Vel: 91  
 Avg. +/- 20%: 73 - 109 Effective Filter Area: 6.71  
 Non-Viable Locations Total CFM: 611

**Electrical Outlet:**

Pass  
 Fail  
 N/A

**Mag Gauge Reading:**  
n/a

**Hepa/Ulpa Filter Leak Test:**

33 ug/L  No leaks above 0.01%  
 Leaks Found  
 1.5 Laskin Nozzles  Leaks repaired  
 Pass  Fail

**Airflow Visualization Test:**

Pass  Fail

Comments: n/a

**Light Level:**

Visible Lighting Intensity: 67 Foot candles @ work zone  
 U.V. Lighting Intensity: n/a uW/cm sq. At work surface

**Induction Leak/Back Streaming Test**

No Leaks above ISO Class 5  Leaks Found  
 Leaks Repaired  Pass  Fail

Comments: n/a

Note: Reported leak locations on Airflow Visualization Test with X and Y

**Final Comments:**

Comments: Operation Satisfactory  
\*work area meets class 5 per ISO 14644-1(2015)  
\*work area meets class 4 per ISO 14644-1(2015)

\*All calibrations are NIST traceable if applicable

<input checked="" type="checkbox"/> <b>PASS</b>	<b>Final Results:</b>	<input type="checkbox"/> <b>FAIL</b>	<b>Equipment</b>	<b>MAKE/MODEL</b>	<b>SERIAL</b>	<b>CAL</b>
 <b>Field Service Engineer</b>			Aerosol Photometer	TEC PH-4	3203	Sep-19
			Air Velocity Meter	TSI 9535A	1940007	Oct-19
			Particle Counter	Solair 3100+	050804029	May-20

<b>ISO 14644-1:2015</b>					
Date: 2020-06-19 12:58:50					
Targeted Class Level: 5					
Created By: Administrator					
Created On: 2020-06-19 12:55:49					
Operator Name: Darryl Brooks					
2020-06-19 12:49:18 to 2020-06-19 12:54:29					
<b>Particle Counter(s) Used</b>					
SOLAIR 3100+ (01) (Serial #050804029)					
<b>Cleanroom Information</b>					
Floor Area: 1.000 m <sup>2</sup>					
Air Flow: Unidirectional					
State: Operational					
Classification: Pass					
<b>0.5 micron</b>					
Location	Samples	Min Volume (L)	Sample Average (counts)	Average p/m <sup>3</sup>	Pass/Fail
Location 001	1	28.3	0.0	0.0	Pass
Location 002	1	28.3	0.0	0.0	Pass
Location 003	1	28.3	0.0	0.0	Pass
Location 004	1	28.3	0.0	0.0	Pass
Location 005	1	28.3	0.0	0.0	Pass
Min Sample Volume Limit (L)					5.682
ISO Class 5 Limit					3520.0
Classification					Pass

<b>ISO 14644-1:2015</b>					
Date: 2020-06-19 12:58:50					
Targeted Class Level: 4					
Created By: Administrator					
Created On: 2020-06-19 12:55:49					
Operator Name: Darryl Brooks					
2020-06-19 12:49:18 to 2020-06-19 12:54:29					
<b>Particle Counter(s) Used</b>					
SOLAIR 3100+ (01) (Serial #050804029)					
<b>Cleanroom Information</b>					
Floor Area: 1.000 m <sup>2</sup>					
Air Flow: Unidirectional					
State: Operational					
Classification: Pass					
<b>0.5 micron</b>					
Location	Samples	Min Volume (L)	Sample Average (counts)	Average p/m <sup>3</sup>	Pass/Fail
	1	57.1	0.0	0.0	Pass
Location 002	1	57.1	0.0	0.0	Pass
Location 003	1	57.1	0.0	0.0	Pass
Location 004	1	57.1	0.0	0.0	Pass
Location 005	1	57.1	0.0	0.0	Pass
Min Sample Volume Limit (L)					0.568
ISO Class 4 Limit					352.0
Classification					Pass