

Date Completed: _____

Performed By: _____

1. Test Name: Subsystem Fan Test Procedure

Test Author: Tyler

Addresses Specs: S2, S3, S4, S5, S7

The fan is connected to a flow meter that measures the cfm of the air as it passes the flow meter. The results are collected as measurements of the cfm once the fan has stabilized and there is a constant flow.

2. Required Equipment

	Equipment Description	Quantity	Settings	✓
1	Multimeter	1	Measures voltage	
2	Power supply	1	Set to 12V	
3	Flow meter	1	N/A	
4	Fan	1	N/A	
5	Electrical cables	6	N/A	
6	Circuit	1	Optional	

Table 1: Required equipment and its settings.

3. Test Procedure

1. Plug power supply into a wall outlet
2. Connect power supply to circuit (if applicable) OR
3. Connect fan to power supply
4. Connect flow meter leads to the multimeter to read voltages that are output
5. Turn on power supply
6. Using the formula:

$$(V * 50 \text{ [Hz]} * 60 \text{ [sec-min]}) / 239.27289 \text{ [Sensing element constant]} = \text{CFM}$$

Determine the flow rate of the fan.

4. Measurements

Test No.	Measured Voltage (V)
1	
2	
3	

4	
5	

5. Results

Test No.	CFM
1	
2	
3	
4	
5	

6. Pass/Fail

Did the unit pass or fail the test? Defend your decision.

PASS	FAIL

Table 2: PASS/FAIL

Additional Comments:

Signoff upon completion: _____