

Bioenvironmental and Structural Systems Lab

Fan Description Form

Project Number: 91119V Series/Test: /

Test Date: July 10, 1991 File Name: _____

Fan

Make: Val

Model #: VAFW-2051

Serial #: na

Manufacturer: -

Blade Size: 20"Orifice Dia.: 20.4"

Blade

Number : 4

Shape: propeller

Material: plastic

Pitch: 40 deg.

Clearance: .2"

Hub Diameter: --

Shutter

Material: plastic

Number Doors: 7

Number Rows: 1

Door Length: 20.9"

Location: intake

Other Attachments

Motor

Make: Magnetek

Cat. #: C044Part #: 9-16497305

H.P.: 1/2

Amps: 5.0 / 2.5

Volts: 115 / 230

RPM: 1700

S.F.: 1

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Center Spacing: na

Housing

Material: fiberglass

Intake Area: 22" x 22"

Discharge Area: 20.5"

Depth: 21.3" bottom
25.8" top

Guards

Description: plastic coated
wire

Spacing: 1.5" concentric

Location: exhaust

TEST RESULTS

VAL VAFW-2051

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 91119V	0.00	1707	5200	9.0
Fan description:	0.05	1704	5050	8.7
20" direct drive, 1/2 hp Magnetek C044	0.10	1702	4890	8.3
motor, fiberglass housing, plastic shutter	0.15	1700	4730	8.0
and guard	0.20	1699	4540	7.7
	0.25	1699	4360	7.4
	0.30	1700	4130	7.1
