

Bioenvironmental and Structural Systems Lab

Fan Description Form

Project Number: 91099V Series/Test: /

Test Date: July 8, 1991 File Name: _____

Fan

Make: Val

Model #: VAFW0805

Serial #: na

Manufacturer: -

Blade Size: 7.6"

Orifice Dia.: 7.9"

Blade

Number : 4

Shape: propeller

Material: stainless steel

Pitch: na

Clearance: .2"

Hub Diameter: na

Shutter

Material: plastic

Number Doors: 3

Number Rows: 1

Door Length: 7.9"

Location: intake

Other Attachments

Motor

Make: Emerson

Model #: K37HXBBF-416

Serial #: na

H.P.: 1/15

Amps: .95

Volts: 230

RPM: 3400

S.F.: 1

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Center Spacing: na

Housing

Material: fiberglass

Intake Area: 9" x 9"

Discharge Area: 7.9"

Depth: 16.3" bottom
20.8" top

Guards

Description: plastic coated
wire

Spacing: 1" concentric

Location: exhaust

TEST RESULTS

VAL VAFW-0805

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 91099V	0.00	3512	574	7.2
Fan description:	0.05	3504	538	6.4
8" direct drive, 1/15 hp Emerson K37HXXBBF-416	0.10	3504	521	5.9
motor, fiberglass housing, plastic shutter	0.15	3499	501	5.7
and guard	0.20	3497	473	5.4
	0.25	3495	415	4.6
	0.30	3494	282	3.1
