

Bioenvironmental and Structural Systems Lab

Fan Description Form

Project Number: 93340 Series/Test: /

Test Date: October 5, 1993 File Name:

Fan

Make: Triangle Eng.

Model #: PF4815D

Serial #: -

Manufacturer: Triangle Eng.

Blade Size: 48"

Orifice Dia.: 49.1"

Blade

Number: 3

Shape: propeller

Material: aluminum

Pitch: -

Clearance: .5"

Hub Diameter: -

Shutter

Material: aluminum

Number Doors: 17

Number Rows: 1

Door Length: 51.3"

Location: exhaust

Other Attachments

Motor

Make: Magnetek

Model #: 8-181905-01

Serial #: -

H.P.: 1.0

Amps: 5.1

Volts: 230

RPM: 850

S.F.: 1.0

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Center Spacing: -

Housing

Material: wood

Intake Area: 50"x50"

Discharge Area: 50"x50"

Depth: 16"

Guards

Description: welded wire

Spacing: 1" x 2"

Location: intake

TEST RESULTS

TRIANGLE PF 4815-D

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 93340	0.00	850	17100	21.0
Fan description:	0.05	844	15700	18.1
48" direct drive, 1 hp Magnetek 8-181905-01	0.10	838	14100	15.3
motor, wood housing, aluminum shutter	0.15	829	12100	12.3
and guard	0.20	813	9300	8.5
	0.25	788	7100	5.8