

Bioenvironmental and Structural Systems Lab

Fan Description Form

Project Number: 92037 Series/Test: /

Test Date: February 25, 1992 File Name:

Fan

Make: Loyal

Model #: WF 48-5

Serial #:

Manufacturer: Loyal-Roth Mfg.

Blade Size: 48"

Orifice Dia.: 48.9"

Blade

Number: K-4803-26

Shape: 3 Blade

Material: Galvanized Steel

Pitch: 26

Clearance: 0.4"

Hub Diameter: 3"

Shutter

Material: Aluminum

Number Doors: 14

Number Rows: 2

Door Length: 27"

Location: Intake

Motor

Make: Marathon

Model #: W-56B17T5508A

Serial #: 1

H.P.: 1

Amps: 10 / 5

Volts: 115 / 230

RPM: 1725

S.F.: 1

Drive Pulley Dia.: 3.1"

Axle Pulley Dia.: 9.9"

Center Spacing:

Housing

Material: Galv. Steel

Intake Area: 54x54 square

Discharge Area: 54" cone

Depth: 24"

Guards

Description: Circular 54"

Spacing: 1.9"

Location: End of cone

Other Attachments

TEST RESULTS

LOYAL WF48-5

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 92037	0.00	524	22100	24.7
Fan description:	0.05	522	20800	21.9
48" belt drive, 1 hp Marathon W-56B17T5508A	0.10	520	19400	19.4
motor, galvanized steel housing,	0.15	519	17700	16.9
aluminum shutter, guard and discharge cone	0.20	518	15600	14.3
	0.25	517	13200	11.8

