

Bioenvironmental and Structural Systems Lab
Fan Description Form

Project Number: 92046 Series/Test: /

Test Date: February 26, 1992 File Name: _____

Fan

Make: Loyal

Model #: WF36-5

Serial #:

Manufacturer: Loyal-Roth Mfg.

Blade Size: 36"

Orifice Dia.: 36.9"

Blade

Number: K3604-31

Shape: 4 Blade

Material: Galvanized Steel

Pitch: 31

Clearance: 0.4"

Hub Diameter: 4"

Shutter

Material: Plastic

Number Doors: 13

Number Rows: 2

Door Length: 19.8"

Location: Intake

Motor

Make: Marathon

Model #: W-56B17T20A

Serial #: 1

H.P.: 1/2

Amps: 4.6 / 2.3

Volts: 115 / 230

RPM: 1725

S.F.: 1

Drive Pulley Dia.: 2.8"

Axle Pulley Dia.: 8.9"

Center Spacing:

Housing

Material: Galv. Steel

Intake Area: 42x42 square

Discharge Area: 42" cone

Depth: 21"

Guards

Description: Circular 42"

Spacing: 1.9"

Location: End of cone

Other Attachments

TEST RESULTS

LOYAL WF36-5

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 92046	0.00	528	12250	23.4
Fan description:	0.05	527	11330	20.8
36" belt drive, 1/2 hp Marathon W-56B17T20A	0.10	525	10250	18.1
motor, galvanized steel housing,	0.15	524	8810	14.9
plastic shutter, guard and discharge cone	0.20	524	5460	9.3
	0.25	521	4340	6.8
