

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 02107

Test Date: May 24, 2002

Fan

Make: PWAire

Model #: EF2400MT

Manufacturer: PW Aire

Blade Size: 24" dia.

Orifice Dia.: 24.6"

Blade

Number: 4

Shape: propeller

Material: plastic

Pitch: -

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 7

of Columns: 1

Door Length: 26.3"

Location: intake

Other Attachments:

Chimney housing

Motor

Make: Magnetek

Model #: C047

H.P.: 1/2

Amps: 7.2/3.6

Volts: 115/230

RPM: 1100

S.F.: 1.00

Drive

Drive Pulley Dia. Direct

Axle Pulley Dia.: drive

Housing

Material: plastic

Intake Area: 25.5" x 25.5"

Discharge Area: 24.8"

Depth: 28" top
26" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

PW Aire EF2400MT

Test: 02107

Fan description:

24" direct drive, ½ hp Magnetek C047
motor, plastic housing, plastic shutter
and guard

Static Pressure
in. water

Speed
rpm

Airflow
cfm

Efficiency
cfm/Watt

0.00

1133

6,190

11.9

0.05

1132

5,840

11.2

0.10

1132

5,400

10.5

0.15

1134

4,770

9.5

0.20

1142

3,170

6.8

0.25

1135

2,620

5.4

0.30

1129

2,010

3.8