

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 02117

Test Date: May 23, 2002

Fan

Make: PW Aire

Model #: EF4800LE

Manufacturer: PW Aire

Blade Size: 47.8" dia.

Orifice Dia.: 48.4"

Blade

Number: 3

Shape: propeller

Material: plastic

Pitch: 27.5 deg.

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 13 per column

of Columns: 3

Door Length: 16.0"

Location: intake

Other Attachments:

Motor

Make: FHP

Model #: M0095594

H.P.: 1.5

Amps: 13.6/6.8

Volts: 115/230

RPM: 1725

S.F.: 1.0

Drive

Drive Pulley Dia. 3" o.d.

Axle Pulley Dia.: 10.3" o.d.

Housing

Material: plastic

Intake Area: 49.3" x 49.3"

Discharge Area: 48.4" dia.

Depth: 36" top

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

PW Aire EF4800LE

Test: 02117

Fan description:

48" belt drive, 1.5 hp FHP M0095594
motor, plastic housing, plastic shutter
and guard

Static Pressure
in. water

Speed
rpm

Airflow
cfm

Efficiency
cfm/Watt

0.00

505

20,500

18.9

0.05

505

19,300

17.0

0.10

503

17,800

15.1

0.15

499

16,100

13.2

0.20

498

13,400

10.9

0.25

501

8,400

7.0

0.30

495

6,500

5.0