

University of Illinois Department of
Agricultural Engineering
BEES Lab

Project Number: 00075bd

Test Date: April 27, 2000

Fan

Make: Big Dutchman

Model #: 60-36-5201

Manufacturer: Canarm

Blade Size: 36"

Orifice Dia.: 36.6"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 11 per column

of Columns: 2

Door Length: 20"

Location: intake

Other Attachments:

Motor

Make: FHP/ Leeson

Model #: P1170-36DP

H.P.: 1/2

Amps: 6.0/3.0

Volts: 115/230

RPM: 850

S.F.: 1.15

Drive

Drive Pulley Dia. Direct

Axle Pulley Dia.: drive

Housing

Material: fiberglass

Intake Area: 39.5" x 39.8"

Discharge Area: 39.3" dia.

Depth: 32.5" top
23" bottom

Guards

Description: wire

Spacing: 2"

Location: exhaust

Test Results

BIG DUTCHMAN 60-36-5201

Test: 00075bd

Fan description:

36" direct drive, 1/2 hp FHP P1170-36DP
motor, fiberglass housing, plastic shutter,
and guard

Static Pressure

in. water

0.00

0.05

0.10

0.15

0.20

0.25

0.30

Speed

rpm

851

843

837

830

824

808

778

Airflow

cfm

11,390

10,540

9,730

8,830

7,520

5,740

3,680

Efficiency

cfm/Watt

22.5

19.4

17.2

14.8

11.9

8.5

4.7