

University of Illinois Department of
Agricultural Engineering
BEES Lab

Project Number: 02418

Test Date: October 24, 2002

Fan

Make: BSM Agri

Model #: 719-136747-1 w/cone

Manufacturer: BSM Agri

Blade Size: 36"

Orifice Dia.: 36.8"

Blade

Number: 4

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.4

Shutter

Material: plastic

of Doors: 12 per column

of Columns: 2

Door Length: 20.1"

Location: intake

Other Attachments:

discharge cone 26" deep, 40.3" i.d., 47" o.d.,

Motor

Make: Marathon

Model #: 9WH56B17T5522D

H.P.: 3/4

Amps: 6.6/3.3

Volts: 115/230

RPM: 1725

S.F.: 1.0

Drive

Drive Pulley Dia. 3.3" o.d.

Axle Pulley Dia.: 9" o.d.

Housing

Material: fiberglass

Intake Area: 39" x 40"

Discharge Area: 40.3" dia.

Depth: 36" top
26" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

Test Results

BSM AGRI 719-136747-1

Test: 02418

Fan description:

36" belt drive, 3/4 hp Marathon 9WH56B17T5522D
motor fiberglass housing, plastic shutter, guard
and discharge cone

Static Pressure

in. water

0.00

0.05

0.10

0.15

0.20

0.25

0.30

Speed

rpm

618

617

616

615

615

613

610

Airflow

cfm

12,890

12,020

11,030

9,730

7,600

4,760

3,570

Efficiency

cfm/Watt

22.5

19.8

17.4

14.7

11.5

6.9

4.7