

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 02413

Test Date: October 24, 2002

Fan

Make: BSM Agri

Model #: 719-136732-1

Manufacturer: BSM Agri

Blade Size: 36"

Orifice Dia.: 36.8"

Blade

Number: 3

Shape: propeller

Material: stainless steel

Pitch: -

Clearance: 0.4

Shutter

Material: plastic

of Doors: 12 per column

of Columns: 2

Door Length: 20.1"

Location: intake

Other Attachments:

Motor

Make: Marathon

Model #: 9WD48A8T85A

H.P.: 1/2

Amps: 6/3

Volts: 115/230

RPM: 850

S.F.: 1.0

Drive

Drive Pulley Dia. Direct

Axle Pulley Dia.: drive

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 719-136732-1

Test: 02413

Fan description:

36" direct drive, 1/2 hp Marathon9WD48A8T85A,
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

846

840

835

828

822

816

810

Airflow

cfm

10,980

10,190

9,380

8,500

7,600

6,120

4,560

Efficiency

cfm/Watt

19.6

17.4

15.3

13.4

11.5

9.0

6.5