

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 02409

Test Date: October 24, 2002

Fan

Make: BSM Agri

Model #: 719-150831-1

Manufacturer: BSM Agri

Blade Size: 50"

Orifice Dia.: 50.9"

Blade

Number: 3

Shape: propeller

Material: stainless steel

Pitch: -

Clearance: 0.5"

Shutter

Material: plastic

of Doors: 16 per column

of Columns: 3

Door Length: 18"

Location: intake

Other Attachments:

Discharge cone 27" deep, 55" i.d., 62" o.d.

Motor

Make: GE

Model #: 5KCR48WN0513X

H.P.: 1.0

Amps: 9.6/4.8

Volts: 115/230

RPM: 1725

S.F.: 1.40

Drive

Drive Pulley Dia. 3.0" o.d.

Axle Pulley Dia.: 9" o.d.

Housing

Material: fiberglass

Intake Area: 54" x 52.3"

Discharge Area: 55" dia.

Depth: 44" top
31" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

Test Results

BSM AGRI 719-150831-1

Test: 02409

Fan description:

50" belt drive, 1 hp GE 5KCR48WN0513X 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

560

558

557

556

555

554

553

Airflow

cfm

25,100

23,600

22,100

20,200

17,900

15,300

9,800

Efficiency

cfm/Watt

26.3

22.9

20.5

17.9

15.1

12.6

7.8