

**University of Illinois Department of
Agricultural Engineering
BESS Lab**

Project Number: 98254

Test Date: November 12, 1998

Fan

Make: Schaefer

Model #: FM4800-2G

Manufacturer: Schaefer

Blade Size: 48"

Orifice Dia.: 48.5"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Shutter

Material: aluminum

of Doors: 14 per column

of Columns: 2

Door Length: 26.8"

Location: intake

Other Attachments:

Motor

Make: Magnetek

Model #: C597

H.P.: 1 - .29

Amps: 5.3 - 3.0

Volts: 230

RPM: 1725 - 1140

S.F.: 1.0

Drive

Drive Pulley Dia. 2.8" o.d.

Axle Pulley Dia.: 10" o.d.

Housing

Material: fiberglass

Intake Area: 54.5" x 55"

Discharge Area: 48.4" dia.

Depth: 33" top
29.5" bottom

Guards

Description: wire

Spacing: 1.5" concentric

Location: exhaust

TEST RESULTS

SCHAEFER FM4800-2G

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98254	0.00	461	17500	22.2
Fan description:	0.05	460	16100	19.8
48" belt drive, 1 - .29 hp Magnetek C597	0.10	460	14500	17.4
2 speed motor, fiberglass housing, aluminum shutter	0.15	459	12300	14.5
and guard	0.20	459	8700	9.8
	0.25	457	6300	6.4
*2 speed motor - high speed performance				