University of Illinois Department of Agricultural Engineering
BESS Lab

Project Number: 97314

Test Date: November 19, 1997

Fan

Make: Triangle Engineering

Model #: SLW48156

Manufacturer: Triangle Engineering

Blade Size: 48"

Orifice Dia.: 48.5"

Blade

Number: 6

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Shutter

Material: aluminum

# of Doors: 17

# of Columns: 1

Door Length: 51.2"

Location: exhaust

Other Attachments:

Discharge cone 49.3" i.d., 59.3" o.d., 24" deep

Motor

Make: Magnetek

Model #: 8-158719

H.P.: 1.0

Amps: 4.8/9.6

Volts: 230/115

RPM: 1725

S.F.: 1.00

Drive

Drive Pulley Dia.: 3.5"o.d.

Axle Pulley Dia.: 12"o.d.

Housing

Material: galv. Steel

Intake Area: 52" x 54.8"

Discharge Area: 49.3" dia.

Depth: 35" top
23" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

TRIANGLE SLW48156

Test: 97314	Static Pressure in. water	Speed rpm	Airflow cfm	Efficiency cfm/Watt
	0.00	489	20500	21.2
Fan description:	0.05	487	19400	19.1
48" belt drive, 1 hp Magnetek 8-158719	0.10	487	18000	16.9
motor, galv. steel slant housing, aluminum	0.15	485	16700	15.2
shutter, guard and discharge cone	0.20	484	14600	12.8
	0.25	483	9900	8.1