

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

Project Number: 99061

Test Date: April 16, 1999

Fan

Make: Multifan

Model #: MF50P-C-M

Manufacturer: Multifan

Blade Size: 50"

Orifice Dia.: 50.6"

Blade

Number: 3

Shape: propeller

Material: plastic

Pitch:

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 17 per column

of Columns: 3

Door Length: 18.5"

Location: intake

Other Attachments:

discharge cone 28" deep, 50" i.d., 67" o.d.

Motor

Make: Magnetek

Model #: C782

H.P.: 1

Amps: 4.3/8.6

Volts: 230/115

RPM: 1725

S.F.: 1.40

Drive

Drive Pulley Dia. 4" o.d.

Axle Pulley Dia.: 11.9" o.d.

Housing

Material: plastic

Intake Area: 57" x 56"

Discharge Area:

Depth: 14"

Guards

Description: wire

Spacing: 2"

Location: exhaust

TEST RESULTS

MULTIFAN MF50P-C-M

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 99061	0.00	583	28,300	24.1
Fan description:	0.05	581	26,800	21.7
50" belt drive, 1 hp Magnetek C782	0.10	578	24,800	19.3
motor, plastic housing, plastic shutter,	0.15	576	22,400	16.8
guard and discharge cone	0.20	576	18,600	13.8
	0.25	577	14,200	10.9
	0.30	583	6,200	5.6
