

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

Project Number: 99064

Test Date: April 16, 1999

Fan

Make: Multifan

Model #: MF50P-C-ME

Manufacturer: Multifan

Blade Size: 50"

Orifice Dia.: 50.6"

Blade

Number: 3

Shape: propeller

Material: plastic

Pitch:

Clearance: 0.3"

Shutter

Material: clear plastic
s.s. frame

of Doors: 17 per column

of Columns: 3

Door Length: 18.35"

Location: intake

Other Attachments:

discharge cone 28" deep, 50.6" 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. 3.8" o.d.

Axle Pulley Dia.: 11.9" o.d.

Housing

Material: plastic

Intake Area: 57" x 56"

Discharge Area: 50.6" dia.

Depth: 14"

Guards

Description: wire

Spacing: 2"

Location: exhaust

TEST RESULTS

MULTIFAN MF50P-C-ME

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 99064	0.00	555	27,100	25.5
Fan description:	0.05	553	24,900	22.4
50" belt drive, 1 hp Magnetek C782	0.10	551	22,800	19.8
motor, plastic housing, plastic shutter,	0.15	550	18,900	16.1
guard and discharge cone	0.20	551	15,700	13.6
	0.25	553	10,800	10.0