

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

Project Number: 01206

Test Date: August 22, 2001

Fan

Make: American Coolair

Model #: MNEFE52L

Manufacturer: American Coolair

Blade Size: 53"

Orifice Dia.: 53.4"

Blade

Number: 4

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.2"

Shutter w/ bell mouth inlet

Material: plastic

of Doors: 16

of Columns: 3

Door Length: 17.1"

Location: intake

Other Attachments:

Belt tensioner

Motor

Make: Emerson

Model #: T63ZZBBA-800

H.P.: 1

Amps: 11.0/5.5

Volts: 115/208-230

RPM: 1725

S.F.: 1.3
13.2/6.6 SFA

Drive

Drive Pulley Dia. 2.5"
MA25

Axle Pulley Dia.: 9.5"

Housing

Material: galvanized steel

Intake Area: 56" x 57"

Discharge Area: 53.4" dia.

Depth: 30.3" top
21.3" bottom

Guards

Description: wire

Spacing: 2" x 2"

Location: exhaust

TEST RESULTS

AMERICAN COOLAIR MNEFE52L

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 01206	0.00	450	23,000	22.9
Fan description:	0.05	449	21,300	20.4
53" belt drive, 1 hp Emerson T63ZZBBA-800	0.10	447	19,500	18.0
motor, galvanized steel slant housing,	0.15	446	17,200	15.4
plastic bell mouth shutter and guard	0.20	445	14,700	12.8
	0.25	444	11,500	9.8
	0.30	443	8,100	6.7
