

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

Project Number: 98015

Test Date: January 19, 1998

Fan

Make: Chore-Time

Model #: 40921-4822

Manufacturer: Chore-Time

Blade Size: 48"

Orifice Dia.: 48.8"

Blade

Number: 3

Shape: propeller

Material: galv. Steel

Pitch: -

Clearance: 0.4"

Shutter

Material: Plastic

of Doors: 16 per column

of Columns: 2

Door Length: 26.3"

Location: exhaust

Other Attachments:

Motor

Make: Magnetek

Model #: 8-182505-01

H.P.: 1

Amps: 4.3/8.6

Volts: 230/115

RPM: 1725

S.F.: 1.40

Drive

Drive Pulley Dia.: 2.9" o.d.

Axle Pulley Dia.: 8.5" o.d.

Housing

Material: galv. Steel

Intake Area: 52.3"x52.3"

Discharge Area: 52.3"x52.3"

Depth: 16"

Guards

Description: wire

Spacing: 1" x 2"

Location: intake

TEST RESULTS

CHORE-TIME 40921-4822

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98015	0.00	557	20000	19.6
Fan description:	0.05	556	18900	17.9
48" belt drive, 1 hp Magnetek 8-182505-01	0.10	555	17600	16.3
motor, galvanized steel housing, plastic shutter	0.15	554	16300	14.7
and guard	0.20	554	14800	13.1
	0.25	553	13100	11.4
	0.30	553	10400	8.9
