

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 98011

Test Date: January 13, 1998

Fan

Make: Chore-Time

Model #: 41041-4822

Manufacturer: Chore-Time

Blade Size: 48"

Orifice Dia.: 48.5"

Blade

Number: 3

Shape: propeller

Material: galv. Steel

Pitch: -

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 15 per row

of Columns: 2

Door Length: 25.8"

Location: intake

Other Attachments:

Motor

Make: Magnetek

Model #: 8-182505-01

H.P.: 1.0

Amps: 4.3/8.6

Volts: 230/115

RPM: 1725

S.F.: 1.40

Drive

Drive Pulley Dia.: Ak28

Axle Pulley Dia.: 8.5" o.d.

Housing

Material: galv. Steel

Intake Area: 54.3"x54.1"

Discharge Area: 54.3" x 54.3"

Depth: 30" top
25" bottom

Guards

Description: wire

Spacing: 1"x2"

Location: exhaust

TEST RESULTS

CHORE-TIME 41041-4822

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98011	0.00	556	20200	18.9
Fan description:	0.05	555	19100	17.2
48" belt drive, 1 hp Magnetek 8-182505-01	0.10	554	17800	15.6
motor, galvanized steel slant housing,	0.15	553	16500	14.1
plastic shutter and guard	0.20	553	15000	12.6
	0.25	552	13100	10.6
	0.30	549	9500	7.4
