

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

Project Number: 99114

Test Date: July 1, 1999

Fan

Make: Chore-Time

Model #: 43680-4822(AK28)

Manufacturer: Chore Time

Blade Size: 48" dia.

Orifice Dia.: 48.5"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 15 per column

of Columns: 2

Door Length: 25.9"

Location: intake

Other Attachments:

Discharge cone 24.3" deep, 56.8" o.d., 48.5" i.d.

Motor

Make: GE

Model #: 5KCR49UNO462T

H.P.: 1

Amps: 4.4/5.4

Volts: 230

RPM: 1725/1425

S.F.: 5.9/7.5 Amps

Drive

Drive Pulley Dia. AK28

Axle Pulley Dia.: 8.5" o.d.

Housing

Material: galvanized steel

Intake Area: 54.4" x 54"

Discharge Area: 52" x 52.3"

Depth: 33.3" top
20.8" bottom

Guards

Description: welded wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

CHORE-TIME 43680-4822

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 99114	0.00	548	21,800	26.7
Fan description:	0.05	547	20,600	23.8
48" belt drive, 1 hp GE 5KCR49UN0462T	0.10	546	19,200	21.0
motor, galv. steel slant housing, plastic	0.15	546	17,600	18.2
shutter, guard and discharge cone	0.20	543	15,600	15.3
	0.25	542	13,100	12.4
	0.30	541	9,900	9.0
