

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

Project Number: 99118

Test Date: July 1, 1999

Fan

Make: Chore-Time

Model #: 43679-4822(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:

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: 1" x 2"

Location: exhaust

TEST RESULTS

CHORE-TIME 43679-4822

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 99118	0.00	547	19,700	22.4
Fan description:	0.05	545	18,600	20.1
48" belt drive, 1 hp GE 5KCR49UN0462T	0.10	545	17,300	18.1
motor, galv. steel slant housing, plastic	0.15	544	15,800	16.0
shutter and guard	0.20	544	14,100	13.7
	0.25	543	11,700	10.9
	0.30	541	8,900	8.0