

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

Project Number:01329

Test Date: November 5, 2001

Fan

Make: Chore-Time

Model #: 46992-4822

Manufacturer: CTB Inc.

Blade Size: 48"

Orifice Dia.: 48.7"

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.4"

Shutter

Material: plastic

of Doors: 15 per column

of Columns: 2

Door Length: 25.9"

Location: intake

Other Attachments:

Discharge cone 24.4" deep, 48.7" i.d., 57.8" o.d.

Motor

Make: GE

Model #: 5KCR49UN0462AT

H.P.: 1

Amps: 4.4/5.4

Volts: 230 60/50 hz

RPM: 1725/1425

S.F.: 1.40

Drive

Drive Pulley Dia. 2.7" o.d.
AK27

Axle Pulley Dia.: 8.4" o.d.
AK84

Housing

Material: galvanized steel

Intake Area: 54.3" x 54.6"

Discharge Area: 48.7" dia.

Depth: 33" top
21" bottom

Guards

Description: wire

Spacing: 1" x 2"

Location: exhaust

TEST RESULTS

CHORE-TIME 46992-4822

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 01329	0.00	553	20,500	28.9
Fan description:	0.05	552	19,300	25.3
48" belt drive, 1 hp GE 5KCR49UN0462AT	0.10	551	18,100	22.4
motor, galvanized steel slant housing,	0.15	550	16,600	19.7
plastic shutter, guard and discharge cone	0.20	549	14,800	16.6
	0.25	549	12,500	13.4
