

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number:01325

Test Date: November 5, 2001

Fan

Make: Chore-Time

Model #: 46991-4822

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:

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. 3.0" o.d.
AK30

Axle Pulley Dia.: 9.3" o.d.
AK94

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 46991-4822	Static Pressure	Speed	Airflow	Efficiency
Test: 01325	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
	0.00	554	19,600	22.5
Fan description:	0.05	553	18,400	20.4
48" belt drive, 1 hp GE 5KCR49UN0462AT	0.10	553	17,400	18.5
motor, galvanized steel slant housing, plastic shutter	0.15	553	16,000	16.7
and guard	0.20	552	14,600	14.8
	0.25	551	12,300	12.0