

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

Project Number:98244

Test Date: November 10, 1998

Fan

Make: Chore - Time

Model #: 41476 - 4822

Manufacturer: Chore - Time

Blade Size: 48"

Orifice Dia.: 48.8"

Blade

Number: 2

Shape: propeller

Material: galvanized 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: GE

Model #: K63ZZEDD - 4539

H.P.: 1.0

Amps: 5.2

Volts: 230

RPM: 850

S.F. : 1.0

Drive

Drive Pulley Dia. Direct

Axle Pulley Dia.: Drive

Housing

Material: Galvanized steel

Intake Area: -

Discharge Area: 48.5" dia

Depth: 29.5" top 25" bottom

Guards

Description: wire

Spacing: 1" x 2"

Location: exhaust

TEST RESULTS

CHORE-TIME 41476-4822

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98244	0.00	850	18000	21.3
Fan description:	0.05	845	16700	18.6
48" direct drive, 1 hp GE K63ZZEDD-4539	0.10	840	15300	16.2
motor, galvanized steel housing, plastic shutter	0.15	834	13600	13.9
and guard	0.20	831	12000	11.8
	0.25	824	10100	9.6
	0.30	805	6800	5.8
