

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

Project Number: 98013

Test Date: January 16, 1998

Fan

Make: Chore-Time

Model #: 40453-2422

Manufacturer: Chore-Time

Blade Size: 24"

Orifice Dia.: 24.3"

Blade

Number: 4

Shape: propeller

Material: cast aluminum

Pitch: -

Clearance: 0.2"

Shutter

Material: plastic

of Doors: 7

of Columns: 1

Door Length: 26.4"

Location: intake

Other Attachments:

Wind hood.

Motor

Make: GE

Model #: 5KCP39SG

H.P.: 1/3

Amps: 2.00

Volts: 230

RPM: 1075

S.F.: -

Drive

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Housing

Material: fiberglass

Intake Area: 28.1" x 28.1"

Discharge Area: 24.3" dia.

Depth: 20" top
19" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

CHORE-TIME 40453-2422

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98013	0.00	1082	4890	13.0
Fan description:	0.05	1083	4510	12.1
24" direct drive, 1/3 hp GE 5KCP39SG	0.10	1084	4150	11.1
motor, fiberglass housing, plastic shutter,	0.15	1087	3570	9.6
guard and wind hood	0.20	1085	2480	6.7
	0.25	1071	1950	4.9
	0.30	1059	1270	3.1
