

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

Project Number: 97249

Test Date: October 21, 1997

Fan

Make: Chore-Time

Model #: 40402-3621

Manufacturer: Chore-Time

Blade Size: 36"

Orifice Dia.: 36.5"

Blade

Number: 3

Shape: propeller

Material: galv. steel

Pitch: -

Clearance: 0.3"

Shutter

Material: Aluminum

Number of Doors: 10 per

Number of Columns: 2

Door Length: 20.3"

Location: intake

Other Attachments:

Motor

Make: Fasco

Model #: U28B1

H.P.: 1/2

Amps: 6.0/3.0

Volts: 115/230

RPM: 825

S.F.: 1.15

Drive

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Housing

Material: galv. Steel

Intake Area: 42.5" x 42.5"

Discharge Area: 36.5" dia.

Depth: 25.3" top
23.8" bottom

Guards

Description: wire

Spacing: 1" x 2"

Location: exhaust

TEST RESULTS

CHORE-TIME 40402-3621

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 97249	0.00	836	10150	20.0
Fan description:	0.05	828	9470	17.6
36" direct drive, ½ hp Fasco U28B1	0.10	822	8760	15.6
motor, galv. steel slant housing,	0.15	814	7960	13.7
aluminum shutter and guard	0.20	807	7010	11.5
	0.25	794	5770	9.0
	0.30	765	3880	5.5
