

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

Project Number: 97291

Test Date: October 29, 1997

Fan

Make: Canarm

Model #: FG24HO w/cone

Manufacturer: Canarm

Blade Size: 24"

Orifice Dia.: 24.5"

Blade

Number: 3

Shape: propeller

Material: galv. Steel

Pitch: -

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 7

of Columns: 1

Door Length: 28.6"

Location: intake

Other Attachments:

discharge cone 32" o.d., 16" deep

Motor

Make: Marathon

Model #: 4WJ48A11T596A

H.P.: 1/2

Amps: 6.4/3.2

Volts: 115/230

RPM: 1075

S.F.: 1.0

Drive

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Housing

Material: fiberglass

Intake Area: 29.8"x30"

Discharge Area: 27" dia.

Depth: 28" top
21.4" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

TEST RESULTS

CANARM FG24HO w/cone

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 97291	0.00	1132	7970	15.6
Fan description:	0.05	1127	7750	14.4
24" direct drive, ½ hp Marathon 4WJ48A11T596A	0.10	1122	7510	13.4
motor, fiberglass housing, plastic shutter,	0.15	1115	7200	12.1
guard and discharge cone	0.20	1108	6900	11.1
	0.25	1103	6570	10.1
	0.30	1095	6120	9.0
