

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

Project Number: 00040

Test Date: March 31, 2000

Fan

Make: Exafan

Model #: EU-50

Manufacturer: Exafan

Blade Size: 19.6" dia.

Orifice Dia.: 19.9"

Blade

Number: 6

Shape: propeller

Material: plastic

Pitch: -

Clearance: .2"

Shutter

Material: plastic

of Doors: 13 / column

of Columns: 2

Door Length: 12.4"

Location: intake

Other Attachments:

discharge cone 24" deep, 20.5" i.d., 27.8" o.d.

Motor

Make: Agratec S.L.

Type #: EU-50

H.P.: .53

Amps: 2.2

Volts: 230

RPM: -

S.F.: -

Drive

Drive Pulley Dia. Direct

Axle Pulley Dia.: drive

Housing

Material: plastic

Intake Area: 27" x 27"

Discharge Area: 20.5" dia.

Depth: 20"

Guards

Description: wire

Spacing: 2.3"

Location: exhaust

TEST RESULTS

EXAFAN EU50 w/ cone

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 00040	0.00	1708	4620	11.2
Fan description:	0.05	1702	4470	10.6
20" direct drive, 0.53 hp Agratec motor,	0.10	1699	4350	10.0
plastic housing, plastic shutter,	0.15	1694	4200	9.3
guard and discharge cone	0.20	1691	4030	8.8
	0.25	1686	3870	8.3
	0.30	1683	3690	7.8
