

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

Project Number: 00039

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:

wind hood 31.5" deep

Motor

Make: Agratec S.L.

Type #: EU50

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/ hood

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 00039	0.00	1693	4090	8.9
Fan description:	0.05	1690	3960	8.6
20" direct drive, 0.53 hp Agratec motor,	0.10	1688	3840	8.2
plastic housing, plastic shutter,	0.15	1685	3710	7.9
guard and wind hood	0.20	1683	3570	7.5
	0.25	1682	3440	7.1
	0.30	1681	3260	6.7