

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

Project Number: 00037

Test Date: March 31, 2000

Fan

Make: Exafan

Model #: EU-40

Manufacturer: Exafan

Blade Size: 15.7" dia.

Orifice Dia.: 16.0"

Blade

Number: 6

Shape: propeller

Material: plastic

Pitch: -

Clearance: .2"

Shutter

Material: plastic

of Doors: 10

of Columns: 1

Door Length: 20.4"

Location: intake

Other Attachments:

discharge cone 19.5" deep, 16.7" i.d., 23.5" o.d.

Motor

Make: Agratec S.L.

Type #: EU-40

H.P.: .33

Amps: 1.4

Volts: 230

RPM: -

S.F.: -

Drive

Drive Pulley Dia. Direct

Axle Pulley Dia.: drive

Housing

Material: plastic

Intake Area: 21.5" x 21.5"

Discharge Area: 16.7" dia.

Depth: 20"

Guards

Description: wire

Spacing: 2.3"

Location: exhaust

TEST RESULTS

EXAFAN EU40 w/ cone

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 00037	0.00	1710	3070	11.4
Fan description:	0.05	1705	2980	10.8
16" direct drive, 0.33 hp Agratec motor,	0.10	1701	2880	10.2
plastic housing, plastic shutter,	0.15	1696	2770	9.6
guard and discharge cone	0.20	1692	2650	9.0
	0.25	1687	2540	8.3
	0.30	1681	2430	7.8