

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 00031

Test Date: March 31, 2000

Fan

Make: Exafan

Model #: EU-35

Manufacturer: Exafan

Blade Size: 14.3" dia.

Orifice Dia.: 14.6"

Blade

Number: 6

Shape: propeller

Material: plastic

Pitch: -

Clearance: .2"

Shutter

Material: plastic

of Doors: 9

of Columns: 1

Door Length: 18.3"

Location: intake

Other Attachments:

Discharge cone 18" deep, 14.9" i.d., 21" o.d.

Motor

Make: Agratec S.L.

Type #: EU-35

H.P.: .25

Amps: 0.9

Volts: 230

RPM: -

S.F.: -

Drive

Drive Pulley Dia. Direct

Axle Pulley Dia.: drive

Housing

Material: plastic

Intake Area: 19.5" x 19.5"

Discharge Area: 14.9" dia.

Depth: 20"

Guards

Description: wire

Spacing: 2.3"

Location: exhaust

TEST RESULTS

EXAFAN EU35 w/ cone

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 00031	0.00	1697	2210	10.2
Fan description:	0.05	1692	2140	9.7
14" direct drive, 1/4 hp Agratec motor,	0.10	1687	2040	9.0
plastic housing, plastic shutter,	0.15	1682	1960	8.4
guard and discharge cone	0.20	1675	1880	7.9
	0.25	1670	1790	7.3
	0.30	1665	1670	6.7