

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

Project Number: 98038

Test Date: February 18, 1998

Fan

Make: Aerotech

Model #: AX36V1CP

Manufacturer: Aerotech

Blade Size: 36"

Orifice Dia.: 36.6"

Blade

Number: 3

Shape: propeller

Material: aluminum

Pitch: -

Clearance: 0.3"

Shutter

Material: plastic

of Doors: 12 per row

of Columns: 2

Door Length: 20.1"

Location: intake

Other Attachments:

Discharge cone 25.3" deep, 47.5" o.d., 36.6" i.d.

Motor

Make: Aerotech

Model #: 177550-03

H.P.: 1/2

Amps: 3.3/6.6

Volts: 230/115

RPM: 850

S.F.: 1.0

Drive

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Housing

Material: galv. Steel

Intake Area: 42" x 42"

Discharge Area: 36.6"

Depth: 24.3"

Guards

Description: wire

Spacing: 2"

Location: exhaust

TEST RESULTS

AEROTECH AX36V1CP

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98038	0.00	858	11840	20.9
Fan description:	0.05	854	11000	18.6
36" direct drive, 1/2 hp Aerotech 177550-03	0.10	852	10180	16.6
motor, galvanized steel housing, plastic shutter,	0.15	848	9270	14.9
guard and discharge cone	0.20	846	7930	12.4
	0.25	845	6270	9.8
	0.30	848	4460	7.3