

University of Illinois Department of
Agricultural and Biological Engineering
BEES Lab

Project Number: 95327

Test Date: November 16, 1995

Fan

Make: Valco
Model #: PM16W140MPA
Manufacturer: Val
Blade Size: 16" dia.
Orifice Dia.: 16.3"

Motor

Make: Magnetek
Model #: HF2F028N
Phase: 1
H.P.: 1/4
Amps: 1.5

Blade

Number: 4
Shape: propeller
Material: plastic
Pitch: 35
Clearance: 0.2"

Volts: 230
RPM: 1625
S.F.: -

Drive

Drive Pulley Dia. direct
Axle Pulley Dia.: drive

Shutter

Material: plastic
of Doors: 7
of Columns: 1
Door Length: 21.3"
Location: intake

Housing

Material: plastic
Intake Area: 20.4"x20.4"
Discharge Area: 16.3" dia.
Depth: 17" top
16" bottom

Guards

Description: wire
Spacing: 1.3" concentric
Location: exhaust

Other Attachments:

Discharge cone 21.3" o.d., 17.6" deep

TEST RESULTS

ValCo PM16W140MPA

Test: 95327	Static Pressure	Speed	Airflow	Efficiency
	in. water	rpm	cfm	cfm/Watt
Fan description: 16" direct drive, 1/4 hp Magnetek HF2F028N motor, plastic housing, plastic shutter, guard and discharge cone	0.00	1699	3140	14.0
	0.05	1694	3040	13.2
	0.10	1688	2920	12.3
	0.15	1682	2790	11.4
	0.20	1676	2650	10.5
	0.25	1671	2490	9.7
	0.30	1666	2300	8.8
