University of Illinois Department of Agricultural and Biological Engineering
Bioenvironmental and Structural Systems Lab
Final Report

Project Number: 06273
Test Date: November 16, 2006

Fan:
Make- *Mutifan*
Model- *MF36FLV-WS*
Blade dia.- *36"*
Orifice dia.- *36.3"*

Blade:
Number- *3*
Shape- *propeller*
Material- *plastic*
Pitch- -
Clearance- *0.2"*

Drive Sheaves:
Drive dia.- *direct*
Axle dia.- *drive*

Motor:
Make- *Vostermans*
Model- *8E92-3PP-25*
Hp- *0.83 kW*
RPM- *800*
Volts- *230*
Amps- *3.8*
Hz- *60*
Phase- *1*
S. F.- -

Housing:
Material- *fiberglass*
Intake area- *42.5" x 42.6"*
Discharge- *36.3" dia.*
Depth- *19"*

Shutter:
Material- *plastic(white)*
Doors- *15 per column*
Columns- *2*
Door length *21.1"*
Location- *intake*

Guards:
Description- *wire*
Spacing- *2" concentric*
Location- *exhaust*

Discharge Cone:
Depth- *28.4"*
Minor dia.- *36.3"*
Major dia.- *47"*

Notes: *0*

Test Conditions:

T(wb):	60	Barometric pressure, recorded	28.94
T(db):	80	Barometric Pressure, corrected	28.81

Static Pressure (in.H2O)	Airflow (cfm)	rpm	Volts	Amps	Watts	cfm/Watt
0.00	**12400**	827	230.5	3.28	702	**17.7**
0.05	**11600**	821	230.0	3.39	725	**16.0**
0.10	**10700**	814	230.1	3.49	741	**14.5**
0.15	**9600**	806	229.8	3.58	764	**12.5**
0.20	**8400**	802	230.1	3.65	778	**10.8**
0.25	**7100**	804	230.1	3.60	774	**9.1**
0.30	**5800**	808	230.2	3.56	757	**7.7**