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

Project Number: 10414
Test Date: September 14, 2010

Fan:
Make- *Schaefer*
Model- *573CF2G-3-HV*
Blade dia.- *57"*
Orifice dia.- *58"*

Blade:
Number- *3*
Shape- *propeller*
Material- *galvanized steel*
Pitch- *-*
Clearance- *0.5"*

Drive Sheaves:
Drive dia.- *3.5" o.d.*
Axle dia.- *10.3" o.d.*

Motor:
Make- *Leeson*
Cat. #: *117514.00*
Hp- *2*
RPM- *1745*
Volts- *208-230/460*
Amps- *6-5.8/2.9*
Hz- *60*
Phase- *3*
S. F.- *1.25*

Housing:
Material- *fiberglass*
Intake area- *58.5" x 59"*
Discharge- *58" dia.*
Depth- *28.5"*
0

Shutter:
Material- *aluminum*
Doors- *15 per column*
Columns- *2*
Door length *29.6"*
Location- *intake*

Guards:
Description- *wire*
Spacing- *1.5" concentric*
Location- *exhaust*

Discharge Cone:
Depth- *25.5"*
Minor dia.- *58"*
Major dia.- *66.5"*

Notes: *0*

Test Conditions:

T(wb):	65	Barometric pressure, recorded	29.41
T(db):	79	Barometric Pressure, corrected	29.28

Static Pressure (in.H2O)	Airflow (cfm)	rpm	Volts	Amps	Watts	cfm/Watt
0.00	**32300**	574	230.9	5.39	1553	**20.8**
0.05	**30500**	574	230.4	5.48	1592	**19.1**
0.10	**28700**	573	230.2	5.55	1624	**17.7**
0.15	**26600**	573	230.0	5.61	1646	**16.1**
0.20	**24300**	572	229.9	5.63	1661	**14.6**
0.25	**21200**	572	229.6	5.61	1652	**12.8**
0.30	**16300**	573	229.5	5.50	1599	**10.2**