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

Project Number: c05260
Test Date: July 20, 2005

Fan: Make- Aerotech
Model- AX511G3
Size- 51"
RPM- 1725
Phase- 3

Motor: Make- AO Smith
Model- 0243146A
Amps- 3.3-3.2/1.6
Volts- 200-230/460
Hz- 60

Attachments: Galvanized orifice panel, cast aluminum propeller
Belt drive 3.5 & 11.0" o.d. pulleys

Notes: Avg. centerline velocity 5d 1150 rpm

Test Conditions:

<table>
<thead>
<tr>
<th>T(wb): 66.5 Barometric pressure, recorded</th>
<th>T(db): 85 Barometric Pressure, corrected</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Impeller ø</th>
<th>Thrust</th>
<th>rpm</th>
<th>Volts</th>
<th>Amps</th>
<th>kW</th>
<th>Efficiency Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>51.075</td>
<td>28.868</td>
<td>548</td>
<td>223.2</td>
<td>3.84</td>
<td>1.228</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Airflow* (thrust cfm) | (thrust cfm/W) |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25900</td>
<td>21.1</td>
</tr>
</tbody>
</table>

*Airflow - ANSI/AMCA 230-12 Eq. 9.6 IP