Bioenvironmental and Structural Systems Lab
Circulating Fan Performance - Final Report

Project Number: c13236
Test Date: June 13, 2013

Fan:
- Make: Munters Aerotech
- Model: AX51DG23-HE
- Size: 51"
- Orifice ø: 51.5"

Motor:
- Make: Munters
- Model: Munters Drive
- Hp: 230V input

Guards:
- Description: none

Blade:
- Number: 3
- Shape: propeller
- Material: cast aluminum

Drive Sheaves:
- Drive o.d.: direct
- Axle o.d.: drive

Housing:
- Material: galvanized steel
- Depth: 7"

Notes:
- Hitachi WJ200-022LF-CP inverter

5 x D Centerline Velocity (fpm): 0

Test Conditions:
- T(wb): 64
- T(db): 76
- Barometric Pressure, recorded: 29.26
- Barometric Pressure, corrected: 29.13

<table>
<thead>
<tr>
<th>D Impeller ø (in.)</th>
<th>Thrust Efficiency Ratio (lbf/kW)</th>
<th>Thrust (lbf)</th>
<th>Efficiency (cmf)</th>
<th>5D center Velocity (fpm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>28.96</td>
<td>28.8</td>
<td>540</td>
<td>227</td>
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<td></td>
<td></td>
<td></td>
<td>4.13</td>
<td>1.007</td>
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</tbody>
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*Airflow - ANSI/AMCA 230-12 Eq. 9.6 IP