University of Illinois, Department of Agricultural and Biological Engineering
Bioenvironmental and Structural Systems Lab
Circulating Fan Performance - Final Report

Project Number: c15044
Test Date: January 12, 2012

Fan:
Make- Termotecnica Pericoli
Model- ACF26
Size- 24.6" (625 mm)
Orifice ø - 25.6" (650.24

Blade:
Number- 6
Shape- propeller
Material- aluminum

Motor:
Make- ABB
Model - M2AA 080 A6
Hp- 0.37 kW
RPM- 1130
Volts- 230
Amps- 1.58
Hz- 60
Phase- 3
S.F. - -

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

Housing: 0
Material- galvanized steel
Depth- 13" (330 mm)

Guards:
Description- wire
Spacing- 0.4" / 0.8" (10 / 20 mm) concentric
Location- intake / exhaust

Notes: 0

5 x D Centerline Velocity (fpm): 1110

Test Conditions:

T(wb):	47.5	Barometric pressure, recorded	29.67
T(db):	62.5	Barometric Pressure, corrected	29.58

D Impeller ø (in.)	Thrust (lbf)	Thrust Efficiency Ratio (lbf/kW)	rpm	Volts	Amps	kW	Airflow* (thrust cfm)	Efficacy (thrust cfm/W)
24.6	5.68	13.6	1120	225.5	1.46	0.417	5380	12.9

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