

**Bioenvironmental and Structural Systems Lab  
Fan Description Form**

Project Number: 94375 Series/Test:     /    

Test Date: December 19, 1994 File Name:                     

**Fan**

Make: MCM  
 Model #: 9S003622  
 Serial #: -  
 Manufacturer: Miller Control Mfg.  
 Blade Size: 36"  
 Orifice Dia.: 36.6"

**Blade**

Number: 3  
 Shape: propeller  
 Material: galv. steel  
 Pitch: -  
 Clearance: .3"  
 Hub Diameter: -

**Shutter**

Material: aluminum  
 Number Doors: 9 per row  
 Number Rows: 2  
 Door Length: 19.6"  
 Location: intake

**Other Attachments**

Discharge cone 20.3" deep, 43" o.d.

**Motor**

Make: Emerson  
 Model #: K55HXCBS-6346  
 Serial #: -  
 H.P.: 1/2  
 Amps: 6.4/3.2  
 Volts: 115/230

RPM: 825  
 S.F.: 1.0  
 Drive Pulley Dia.: direct  
 Axle Pulley Dia.: drive  
 Center Spacing: -

**Housing**

Material: fiberglass  
 Intake Area: 42.5"x42.5"  
 Discharge Area: 36.5" dia.  
 Depth: 24" top  
           19.3" bottom

**Guards**

Description: welded wire  
 Spacing: 2" x 4"  
 Location: exhaust

## TEST RESULTS

MILLER CONTROL & MFG. 9S003622

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 94375	0.00	859	11050	22.1
Fan description:	0.05	853	10400	19.7
36" direct drive, 1/2 hp Emerson	0.10	849	9710	17.3
K55HXCBS-6346 motor, fiberglass housing,	0.15	845	8960	15.2
aluminum shutter, guard and discharge cone	0.20	839	7840	12.7
	0.25	836	6130	9.7
	0.30	820	4530	6.4

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