

Bioenvironmental and Structural Systems Lab

Fan Description Form

Project Number: 93026 Series/Test: /

Test Date: 2-6-93 File Name:

Fan

Make: Am. Coolair

Model #: NCF36

Serial #:

Manufacturer: Am. Coolair

Blade Size: 36.8"

Orifice Dia.: 37.3"

Blade

Number: 6

Shape: prop

Material: galv. steel

Pitch:

Clearance: .3"

Hub Diameter: 13"

Shutter

Material: aluminum

Number Doors: 13

Number Rows: 1

Door Length: 38.5"

Location: intake

Other Attachments

Motor

Make: A. O. Smith

Model #: G56A03A66

Serial #:

H.P.: 1/2

Amps: 4.8/2.4

Volts: 115/208-230

RPM: 1725-1425

S.F.: 1.3

Drive Pulley Dia.: 3.9"

Axle Pulley Dia.: 13"

Center Spacing:

Housing

Material: galv. steel

Intake Area: 40.3"x 39.5"

Discharge Area: 44" diam.

Depth: $\frac{28'' \text{ top}}{21'' \text{ bottom}}$

Guards

Description: welded wire

Spacing: 1"x 2"

Location: exhaust

TEST RESULTS

AMERICAN COOLAIR NCF36

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 93026	0.00	448	10540	20.6
Fan description:	0.05	447	9750	18.6
36" belt drive, 1/2 hp A.O. Smith G56A03A66	0.10	447	8790	16.5
motor, galvanized steel slant housing,	0.15	446	7590	13.8
aluminum shutter and guard	0.20	443	4460	7.1
	0.25	442	2990	4.6