

Bioenvironmental and Structural Systems Lab
Fan Description Form

Project Number: 96289 Series/Test: / Test Date: October 23, 1996 File Name: **Fan**

Make: Canarm

Model #: PBF24 w/slant kit

Serial #: -

Manufacturer: Canarm

Blade Size: 24"

Orifice Dia.: 24.7"

Blade

Number: 3

Shape: propeller

Material: plastic

Pitch: 42

Clearance: 0.4"

Hub Diameter: -

Shutter

Material: plastic

Number Doors: 7

Number Rows: 1

Door Length: 28.5"

Location: intake

Other Attachments

Discharge cone 15.5" deep, 33.3" o.d.

Note: same as 96270 but blade placed completely back in orifice**Motor**

Make: Marathon

Model #: 3WC48A17T271AP

Serial #: -

H.P.: 1/2

Amps: 5.4/2.7

Volts: 115/230

RPM: 1625

S.F.: 1.0

Drive Pulley Dia.: direct

Axle Pulley Dia.: drive

Center Spacing: -

Housing

Material: Plastic/ss

Intake Area: 27.3"x27.7"

Discharge Area: 27" dia.

Depth: 31.5" top
26.5" bottom

Guards

Description: wire mesh

Spacing: 2"x2"

Location: exhaust

TEST RESULTS

CANARM PBF24 w/slant kit, cone

	Static Pressure	Speed	Airflow	Efficiency
Test: 96289	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
	0.00	1599	7500	12.6
Fan description:	0.05	1591	6970	11.6
24" direct drive, ½ hp Marathon	0.10	1589	6590	10.8
3WC48A17T271AP motor, plastic slant	0.15	1592	6210	10.2
housing, plastic shutter, guard and discharge cone	0.20	1594	5770	9.6
	0.25	1597	5490	9.3
	0.30	1602	5020	8.7
