

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

Project Number: 95325 Series/Test: /

Test Date: November 16, 1995 File Name:

Fan

Make: Raydot
 Model #: PMC-2055
 Serial #: -
 Manufacturer: Raydot
 Blade Size: 21" dia.
 Orifice Dia.: 21.3"

Motor

Make: Magnetek
 Model #: 181612
 Serial #: -
 H.P.: 1/2
 Amps: 2.1
 Volts: 230
 RPM: 1725

Blade

Number: 4
 Shape: propeller
 Material: plastic
 Pitch: 35
 Clearance: 0.2"
 Hub Diameter: -

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

Housing

Material: plastic
 Intake Area: 23.8"x23.8"
 Discharge Area: 21.3"
 Depth: 18.5" top
 17" bottom

Shutter

Material: plastic
 Number Doors: 8 per row
 Number Rows: 2
 Door Length: 12.3"
 Location: intake

Guards

Description: wire
 Spacing: 1.3" concentric
 Location: exhaust

Other Attachments

Discharge cone 27" o.d., 20.5" deep

TEST RESULTS

RAYDOT PMC-2055

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 95325	0.00	1700	5550	14.0
Fan description:	0.05	1696	5350	13.1
20" direct drive, 1/2 hp Magnetek 181612	0.10	1692	5170	12.4
motor, plastic housing, plastic shutter, guard	0.15	1688	4960	11.6
and discharge cone	0.20	1684	4790	11.0
	0.25	1682	4560	10.3
	0.30	1680	4390	9.8
