

Bioenvironmental and Structural Systems Lab
Fan Description FormProject Number: 95289 Series/Test: / Test Date: October 24, 1995 File Name: **Fan**Make: AcmeModel #: BDR48J-CSerial #: -Manufacturer: AcmeBlade Size: 48"Orifice Dia.: 48.5"**Blade**Number: 4Shape: propellerMaterial: Galvanized steelPitch: -Clearance: .3"Hub Diameter: -**Shutter**Material: aluminumNumber Doors: 13 per rowNumber Rows: 2Door Length: 25.3"Location: intake**Other Attachments**Discharge cone 22.5" deep, 59" o.d.**Motor**Make: A.O. SmithModel #: K56A40B83Serial #: -H.P.: 1Amps: 11.0/5.5Volts: 115/230RPM: 1725/1425S.F.: 1.3Drive Pulley Dia.: AK30Axle Pulley Dia.: AK114
11" o.d.Center Spacing: -**Housing**Material: galv. steelIntake Area: 52"x51.6"Discharge Area: 51.5"x51.5"Depth: 35.5" top
20.3" bottom**Guards**Description: welded wireSpacing: 2" concentricLocation: exhaust

TEST RESULTS

ACME BDR48J-C

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 95289	0.00	473	23800	22.5
Fan description:	0.05	472	22700	20.6
48" belt drive, 1 hpA.O. Smith K56A40B83	0.10	471	21600	19.0
motor, steel slant housing, aluminum shutter,	0.15	470	20300	17.2
guard and discharge cone	0.20	470	18600	15.4
	0.25	469	16700	13.6
	0.30	468	14100	11.0
