

Bioenvironmental and Structural Systems Lab
Fan Description FormProject Number: 94066 Series/Test: / Test Date: March 9, 1994 File Name: **Fan**Make: LoyalModel #: BW48-2BSerial #: Manufacturer: LoyalBlade Size: 48"Orifice Dia.: 48.8"**Blade**Number: 3Shape: propellerMaterial: galv. steelPitch: 34 deg.Clearance: .3"Hub Diameter: -**Shutter**Material: aluminumNumber Doors: 12 per rowNumber Rows: 2Door Length: 23.8"Location: intake**Other Attachments****Motor**Make: MagnetekModel #: 8-181973-01Serial #: -H.P.: 1 - .29Amps: 4.6 - 3.0Volts: 230RPM: 1725 - 1140S.F.: 1.0Drive Pulley Dia.: 2.6"
AK26Axle Pulley Dia.: 9 " o.d.
AL94Center Spacing: 12"**Housing**Material: galv. steelIntake Area: 48" x 48"Discharge Area: 52" x 52"Depth: 31"**Guards**Description: wire meshSpacing: 1" x 2"Location: exhaust

TEST RESULTS

LOYAL BW48-2B

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 94066	0.00	489	18800	21.6
Fan description:	0.05	489	17600	19.6
48" belt drive, 1 hp Magnetek 8-181973-01	0.10	487	16200	17.7
2-speed motor, galvanized steel housing,	0.15	486	14600	15.5
aluminum shutter and guard	0.20	486	11800	12.5
	0.25	486	8200	8.5
* 2-speed motor - high speed performance				
