

Bioenvironmental and Structural Systems Lab
Fan Description FormProject Number: 94070 Series/Test: / Test Date: March 9, 1994 File Name: **Fan**Make: LoyalModel #: BW36-B1Serial #: -Manufacturer: LoyalBlade Size: 36"Orifice Dia.: 36.9"**Blade**Number: 3Shape: propellerMaterial: galv. steelPitch: 31 deg.Clearance: .4"Hub Diameter: -**Shutter**Material: aluminumNumber Doors: 9 per rowNumber Rows: 2Door Length: 17.9"Location: intake**Other Attachments****Motor**Make: MarathonModel #: W-56B17T20ASerial #: -H.P.: 1/2Amps: 4.6/2.3Volts: 230/115RPM: 1725S.F.: 1Drive Pulley Dia.: 2.7" o.d.
AK27Axle Pulley Dia.: 8.9" o.d.
AL94Center Spacing: 12"**Housing**Material: galv. steelIntake Area: 36" x 36"Discharge Area: 40" x 40"Depth: 31" deep**Guards**Description: wire meshSpacing: 1" x 2"Location: exhaust

TEST RESULTS

LOYAL BW36-B1

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 94070	0.00	512	10540	19.9
Fan description:	0.05	511	9760	18.0
36" belt drive, 1/2 hp Marathon W-56B17T20A	0.10	509	8980	15.9
motor, galvanized steel housing, aluminum	0.15	508	7820	13.5
shutter and guard	0.20	508	6440	10.9
	0.25	507	4780	8.1
