

**Bioenvironmental and Structural Systems Lab
Fan Description Form**Project Number: 93087 Series/Test: / Test Date: 2/12/93 File Name: **Fan**Make: AerotechModel #: AT24ZSerial #: Manufacturer: AerotechBlade Size: 23.8"Orifice Dia.: 24.3"**Blade**Number: 4Shape: propellerMaterial: aluminumPitch: 28 deg. @ 2/3 rad.Clearance: .2"Hub Diameter: 2.5"**Shutter**Material: PlasticNumber Doors: Number Rows: 1Door Length: Location: intake**Other Attachments**Discharge cone 24.3" I.D., 30" O.D., 23.5" deep**Motor**Make: MagnetekModel: HFL3L068Sample #: s-848e-5H.P.: 1/3Amps: 4.4/2.2Volts: 115/230RPM: 1075S.F.: -Drive Pulley Dia.: directAxle Pulley Dia.: driveCenter Spacing: --**Housing**Material: plasticIntake Area: 25.9"x25.5"Discharge Area: 24.3" dia.Depth: 20"**Guards**Description: plastic coated
wireSpacing: 1.5" concentricLocation: exhaust

TEST RESULTS

AEROTECH AT24ZCP

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 93087	0.00	1074	6310	15.5
Fan description:	0.05	1068	5890	14.0
24" direct drive, 1/3 hp Magnetek HFL3L068	0.10	1062	5480	12.9
motor, plastic housing, plastic shutter,	0.15	1059	5030	11.7
guard and discharge cone	0.20	1060	4490	10.5
	0.25	1071	3340	8.3
	0.30	1073	2190	5.4