

**Bioenvironmental and Structural Systems Lab
Fan Description Form**Project Number: 93086 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: aluminumNumber Doors: 6Number Rows: 1Door Length: 25.9"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 AT24ZCA

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 93086	0.00	1078	6590	16.6
Fan description:	0.05	1071	6180	15.1
24" direct drive, 1/3 hp Magnetek HFL3L068	0.10	1065	5750	13.7
motor, plastic housing, aluminum shutter,	0.15	1061	5330	12.5
guard and discharge cone	0.20	1058	4800	11.1
	0.25	1060	4140	9.7
	0.30	1074	2020	5.1