

Bioenvironmental and Structural Systems Lab
Fan Description FormProject Number: 92126 Series/Test: / Test Date: March 27, 1992 File Name: **Fan**Make: Loyal
Model #: BW48-A1
Serial #: -
Manufacturer: Loyal Roth Mfg. Co.
Blade Size: 48"
Orifice Dia.: 48.9"**Blade**Number: 3
Shape: propeller
Material: Galv. steel
Pitch: 26 deg.
Clearance: .4"
Hub Diameter: 3"**Shutter**Material: aluminum
Number Doors: 12 per row
Number Rows: 2
Door Length: 23.8"
Location: exhaust**Other Attachments**spring loaded belt tensioner.**Motor**Make: Marathon
Model #: W-56B17T5508A
Serial #: 1
H.P.: 1
Amps: 10/5
Volts: 115/230
RPM: 1725
S.F.: 1
Drive Pulley Dia.: 3.1"
Axle Pulley Dia.: 9.9"
Center Spacing: -**Housing**Material: galv. steel
Intake Area: 52" x 52"
Discharge Area: 48" x 48"
Depth: 26.5"**Guards**Description: wire mesh
Spacing: 1" x 2"
Location: inlet

TEST RESULTS

LOYAL BW48-A1

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 92126	0.00	513	20100	21.2
Fan description:	0.05	512	18600	19.0
48" belt drive, 1 hp Marathon W-56B17T5508A	0.10	511	17200	16.9
motor, galvanized steel housing,	0.15	510	15500	14.8
aluminum shutter and guard	0.20	509	13200	12.2
	0.25	510	9900	9.3
