

Bioenvironmental and Structural Systems Lab
Fan Description FormProject Number: 92125 Series/Test: / Test Date: March 27, 1992 File Name: **Fan**Make: Loyal
Model #: BW36-A1
Serial #: -
Manufacturer: Loyal-Roth Mfg. Co.
Blade Size: 36"
Orifice Dia.: 36.9"**Blade**Number: 4
Shape: propeller
Material: galv. steel
Pitch: 31 deg.
Clearance: .4"
Hub Diameter: 4"**Shutter**Material: aluminum
Number Doors: 9 per row
Number Rows: 2
Door Length: 35.8"
Location: exhaust**Other Attachments**Spring belt tensioner**Motor**Make: Marathon
Model #: W-56B17T20A
Serial #: 1
H.P.: 1/2
Amps: 4.6/2.3
Volts: 115/230
RPM: 1725
S.F.: 1
Drive Pulley Dia.: 2.8"
Axle Pulley Dia.: 8.9"
Center Spacing: -**Housing**Material: galv. steel
Intake Area: 40" x 40"
Discharge Area: 36" x 36"
Depth: 26.5"**Guards**Description: wire mesh
Spacing: 1" x 2"
Location: intake

TEST RESULTS

LOYAL BW36-1

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 92125	0.00	526	10690	19.1
Fan description:	0.05	526	9790	17.0
36" belt drive, 1/2 hp Marathon W-56B17T20A	0.10	525	9210	15.8
motor, galvanized steel housing,	0.15	524	7420	12.4
aluminum shutter and guard	0.20	525	5240	9.4
	0.25	522	4440	7.0
