

**Bioenvironmental and Structural Systems Lab**  
**Fan Description Form**Project Number: 96277 Series/Test:     /    Test Date: October 22, 1996 File Name:                     **Fan**Make: CanarmModel #: PBF20 w/slant kit  
1/3 hp, coneSerial #: -Manufacturer: CanarmBlade Size: 20" dia.Orifice Dia.: 20.6"**Blade**Number: 3Shape: propellerMaterial: polypropylenePitch: 43 degreeClearance: 0.3"Hub Diameter: -**Shutter**Material: plasticNumber Doors: 6Number Rows: 1Door Length: 24.3"Location: intake**Other Attachments**discharge cone 14.3" deep, 28" o.d.**Motor**Make: MarathonModel #: 3WC48A17T272APSerial #: -H.P.: 1/3Amps: 3.8/1.9Volts: 115/230RPM: 1625S.F.: 1.0Drive Pulley Dia.: directAxle Pulley Dia.: driveCenter Spacing: -**Housing**Material: plastic/ssIntake Area: 23.6"x23.2"Discharge Area: 23" dia.Depth: 30.5" top  
26" bottom**Guards**Description: wireSpacing: 2" concentricLocation: exhaust

TEST RESULTS

CANARM PBF20 1/3 hpw/slant kit, cone

|                                                  | Static Pressure  | Speed      | Airflow    | Efficiency      |
|--------------------------------------------------|------------------|------------|------------|-----------------|
| Test: 96277                                      | <u>in. water</u> | <u>rpm</u> | <u>cfm</u> | <u>cfm/Watt</u> |
|                                                  | 0.00             | 1670       | 5110       | 13.9            |
| Fan description:                                 | 0.05             | 1666       | 4870       | 12.8            |
| 20" direct drive, 1/3 hp Marathon 3WC48A17T272AP | 0.10             | 1663       | 4680       | 12.2            |
| motor, plastic slant housing, plastic shutter,   | 0.15             | 1661       | 4430       | 11.6            |
| guard and discharge cone                         | 0.20             | 1659       | 4160       | 10.7            |
|                                                  | 0.25             | 1661       | 3800       | 9.9             |
|                                                  | 0.30             | 1666       | 3140       | 8.4             |