

**Bioenvironmental and Structural Systems Lab**  
**Fan Description Form**Project Number: 93030 Series/Test:     /    Test Date: 2-6-93 File Name:                     **Fan**Make: Am. CoolairModel #: NCF36Serial #:                     Manufacturer: Am. CoolairBlade Size: 36.8"Orifice Dia.: 37.3"**Blade**Number: 6Shape: propMaterial: galv. steelPitch:                     Clearance: .3"Hub Diameter: 13"**Shutter**Material: aluminumNumber Doors: 13Number Rows: 1Door Length: 38.5"Location: intake**Other Attachments**Discharge cone 24" depth, 44" o.d., 37.3" i.d.**Motor**Make: EmersonModel #: R63ZZDD-146Serial #:                     H.P.: 1/2Amps: 4.8/2.4Volts: 115/230RPM: 1725S.F.: 1.3Drive Pulley Dia.: 3.9"Axle Pulley Dia.: 13"Center Spacing:                     **Housing**Material: galv. steelIntake Area: 40.3"x 39.5"Discharge Area: 44" diam.Depth: 28" top  
21" bottom**Guards**Description: wireSpacing: 2" concentricLocation: exhaust

TEST RESULTS

AMERICAN COOLAIR NCF36

|                                            | Static Pressure  | Speed      | Airflow    | Efficiency      |
|--------------------------------------------|------------------|------------|------------|-----------------|
|                                            | <u>in. water</u> | <u>rpm</u> | <u>cfm</u> | <u>cfm/Watt</u> |
| Test: 93030                                | 0.00             | 448        | 11750      | 22.9            |
| Fan description:                           | 0.05             | 447        | 10840      | 20.5            |
| 36" belt drive, 1/2 hp Emerson R63ZZDD-146 | 0.10             | 447        | 9710       | 17.7            |
| motor, galvanized steel slant housing,     | 0.15             | 446        | 8520       | 15.3            |
| aluminum shutter, guard and discharge cone | 0.20             | 446        | 6270       | 10.9            |
|                                            | 0.25             | 442        | 2790       | 4.3             |

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