

Performance Data

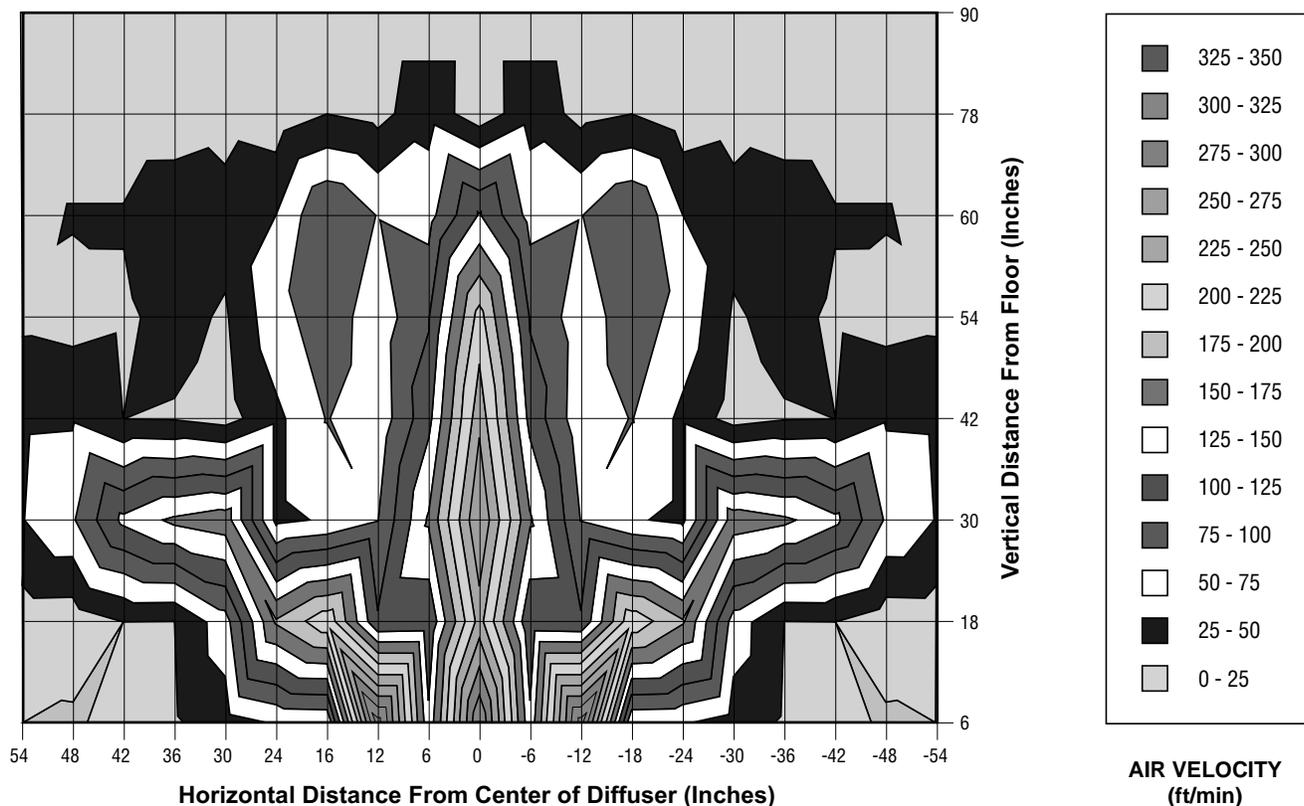
Model Series NLD • 16" x 8"

| Airflow, cfm | 50 | 75 | 100 | 125 | 150 | 175 | 200 |
|-----------------------------------|-----------|-------------|-------------|-------------|--------------|--------------|---------------|
| NC | - | - | - | - | 18 | 21 | 24 |
| 22 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.045 | 0.008 | 0.015 | 0.023 | 0.033 | 0.045 | 0.059 |
| Vertical Projection, ft. | 0-1.0-2.0 | 1.5-2.5-3.5 | 3.5-4.5-5.0 | 4.5-5.5-6.5 | 6.0-6.5-8.0 | 6.5-7.0-8.5 | 7.0-8.0-9.5 |
| Horizontal Spread, ft. | 0-1.0-1.5 | 0.5-1.0-2.5 | 1.5-2.5-4.0 | 3.0-4.0-7.0 | 4.0-5.0-9.0 | 5.0-6.5-7.0 | 6.0-7.0-8.5 |
| 45 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.006 | 0.012 | 0.022 | 0.035 | 0.050 | 0.068 | 0.089 |
| Vertical Projection, ft. | 0-1.0-2.0 | 1.0-2.5-3.0 | 3.0-4.0-4.5 | 4.0-5.0-5.5 | 5.0-6.0-6.5 | 5.5-6.5-7.0 | 6.0-7.0-8.0 |
| Horizontal Spread, ft. | 0-1.0-2.0 | 0.5-1.5-3.5 | 2.5-3.0-5.0 | 4.5-5.0-7.5 | 6.0-7.5-10.0 | 6.5-8.0-9.0 | 7.5-9.0-10.5 |
| 60 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.009 | 0.020 | 0.035 | 0.056 | 0.080 | 0.109 | 0.142 |
| Vertical Projection, ft. | 0-1.0-1.5 | 0.5-2.0-3.0 | 2.0-3.5-4.5 | 3.5-4.5-5.0 | 4.5-5.0-6.0 | 5.0-5.5-6.0 | 5.0-6.0-7.0 |
| Horizontal Spread, ft. | 0-1.0-2.5 | 0.5-2.0-4.5 | 3.0-4.0-6.0 | 5.0-6.0-8.0 | 6.5-8.5-11.0 | 8.0-9.5-11.0 | 9.0-11.0-12.5 |

Performance Notes:

- Projection and Spread data were determined in a room with an 11' ceiling height and 10°F ΔT, between supply air and averaged occupied room temperature.
- Vertical projection (throw) is the maximum height above the floor where terminal velocities of 150, 100 and 50 fpm were observed. Horizontal Spread is the total width of the isovel where terminal velocities of 150, 100 and 50 fpm were observed.
- Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts. Dash (-) in space denotes an NC value of less than 15.
- Tests conducted on units complete with directional vanes adjusted to the deflection settings of 22, 45 or 60 degrees. Damper fully open.
- Data derived from independent tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.

PERFORMANCE TEST – MODEL NLD @ 150 CFM



Note: The graph above shows actual air velocities and the associated isovels. This data was obtained in a full scale mock-up test performed on a standard Model NLD @ 150 cfm with a 10°F ΔT and a 45° blade deflection.

Performance Data

Model Series NLD • 20" x 8"

| Airflow, cfm | 150 | 175 | 200 | 225 | 250 | 275 | 300 |
|-----------------------------------|-------------|-------------|--------------|---------------|---------------|---------------|----------------|
| NC | - | 17 | 19 | 22 | 24 | 26 | 31 |
| 22 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.020 | 0.027 | 0.036 | 0.045 | 0.056 | 0.067 | 0.080 |
| Vertical Projection, ft. | 3.5-6.0-7.0 | 5.0-7.0-8.0 | 5.5-8.0-8.5 | 7.0-8.5-9.0 | 7.5-8.5-10.0 | 7.5-10.0-10.5 | 8.0-10.0-10.5 |
| Horizontal Spread, ft. | 4.0-5.0-6.0 | 4.5-5.5-6.5 | 5.0-6.5-7.0 | 5.5-6.5-7.5 | 6.0-7.0-8.5 | 6.0-7.5-9.0 | 6.5-8.0-9.0 |
| 45 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.030 | 0.041 | 0.054 | 0.069 | 0.084 | 0.102 | 0.122 |
| Vertical Projection, ft. | 3.0-5.0-5.5 | 4.0-5.5-6.5 | 4.5-6.5-7.0 | 5.5-7.0-7.5 | 6.0-7.0-8.0 | 6.0-8.0-8.5 | 6.5-8.0-8.5 |
| Horizontal Spread, ft. | 5.0-6.0-7.0 | 5.5-7.0-8.0 | 6.5-8.0-9.0 | 7.0-8.5-9.5 | 7.5-9.0-10.5 | 7.5-9.5-11.0 | 8.0-10.0-11.0 |
| 60 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.048 | 0.066 | 0.087 | 0.110 | 0.135 | 0.162 | 0.194 |
| Vertical Projection, ft. | 2.5-4.5-5.0 | 3.5-5.0-6.0 | 4.0-6.0-6.5 | 5.0-6.5-7.0 | 5.5-6.5-7.0 | 5.5-7.0-7.5 | 6.0-7.0-8.0 |
| Horizontal Spread, ft. | 6.0-7.0-8.5 | 6.5-8.5-9.5 | 7.5-8.5-10.5 | 8.5-10.0-11.0 | 9.0-11.0-12.5 | 9.0-11.5-13.0 | 10.0-12.0-13.0 |

Performance Notes:

- Projection and Spread data were determined in a room with an 11' ceiling height and 10°F ΔT, between supply air and averaged occupied room temperature.
- Vertical projection (throw) is the maximum height above the floor where terminal velocities of 150, 100 and 50 fpm were observed. Horizontal Spread is the total width of the isovel where terminal velocities of 150, 100 and 50 fpm were observed.
- Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts. Dash (-) in space denotes an NC value of less than 15.
- Tests conducted on units complete with directional vanes adjusted to the deflection settings of 22, 45 or 60 degrees. Damper fully open.
- Data derived from independent tests conducted in accordance with ANSI/ASHRAE Standard 70 – 1991.



Performance Data

Model Series NLD • 18"x 10"

| Airflow, cfm | 150 | 175 | 200 | 225 | 250 | 275 | 300 |
|-----------------------------------|-------------|-------------|-------------|--------------|--------------|---------------|---------------|
| NC | - | 15 | 17 | 20 | 22 | 24 | 29 |
| 22 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.017 | 0.023 | 0.030 | 0.038 | 0.047 | 0.057 | 0.067 |
| Vertical Projection, ft. | 3.0-5.5-6.0 | 4.0-6.0-7.0 | 5.0-7.0-7.5 | 6.0-7.5-8.0 | 6.5-7.5-8.5 | 7.0-8.5-9.5 | 7.5-9.0-10.0 |
| Horizontal Spread, ft. | 3.5-4.0-5.0 | 4.0-5.0-5.5 | 4.5-5.5-6.5 | 5.0-6.0-7.0 | 5.5-6.5-7.5 | 5.5-6.5-8.0 | 6.0-7.0-8.5 |
| 45 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.026 | 0.035 | 0.046 | 0.058 | 0.072 | 0.087 | 0.102 |
| Vertical Projection, ft. | 3.0-4.5-5.0 | 3.5-5.0-6.0 | 4.0-5.5-6.0 | 5.0-6.0-6.5 | 5.5-6.5-7.0 | 6.0-7.0-8.0 | 7.0-8.0-8.5 |
| Horizontal Spread, ft. | 4.5-5.0-6.0 | 5.0-6.0-7.0 | 5.5-7.0-8.0 | 6.0-7.5-8.5 | 6.5-8.0-9.5 | 6.5-8.5-10.0 | 7.0-9.0-11.0 |
| 60 Degree Blade Deflection | | | | | | | |
| Plenum Pressure, in w.g. | 0.041 | 0.056 | 0.073 | 0.092 | 0.114 | 0.138 | 0.162 |
| Vertical Projection, ft. | 2.5-4.0-4.5 | 3.0-4.5-5.0 | 3.5-5.0-5.5 | 4.5-5.5-6.0 | 4.5-5.5-6.5 | 5.0-6.0-7.0 | 5.0-6.5-7.5 |
| Horizontal Spread, ft. | 5.0-6.5-7.5 | 6.0-7.5-8.5 | 7.0-8.5-9.5 | 7.5-9.0-10.0 | 8.0-9.5-11.0 | 8.5-10.5-12.0 | 9.0-11.5-13.0 |

Performance Notes:

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