

Performance Data

Model HRDP-1 • 90° Pattern

With ULPA Filter • 99.9995% Minimum Removal Efficiency on 0.12 Micrometer Particle Size
Imperial Units

24" x 24" or 600 mm x 600 mm Module Size • 8" (203 mm) dia. Inlet • ΔT – 10°F (5.5°C)

Airflow L/S	Pt	Ps	NC	T Horizontal Throw @			T Vertical Throw @		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
100	.17	.17	–	0.5	1.0	1.5	1.0	1.5	2.5
150	.38	.37	–	1.0	1.5	2.0	2.0	2.5	3.5
200*	.68	.66	16	1.5	2.0	2.5	2.5	3.5	4.0
250	1.07	1.03	19	1.0	2.5	3.0	3.0	3.5	4.5
295**	1.49	1.44	22	2.0	2.5	3.5	3.5	4.0	5.0

48" x 24" or 1200 mm x 600 mm Module Size • 12" (305 mm) dia. Inlet • ΔT – 10°F (5.5°C)

Airflow CFM	Pt	Ps	NC	T Horizontal Throw @			T Vertical Throw @		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
300	.27	.26	–	0.5	1.0	1.5	1.5	2.0	2.5
400	.48	.46	–	1.0	1.5	2.0	2.0	3.0	4.0
500*	.75	.72	19	1.0	2.0	3.0	2.5	3.5	5.0
600	1.08	1.04	23	1.5	2.5	3.5	3.0	4.0	6.0
715**	1.53	1.48	28	2.0	3.0	4.0	3.5	4.5	6.5

48" x 12" or 1200 mm x 300 mm Module Size • 8" (203 mm) dia. Inlet • ΔT – 10°F (5.5°C)

Airflow CFM	Pt	Ps	NC	T Horizontal Throw @			T Vertical Throw @		
				100 FPM	75 FPM	50 FPM	100 FPM	75 FPM	50 FPM
100	.17	.17	–	0.5	0.5	1.0	0.5	0.5	1.0
150	.39	.38	–	0.5	1.0	1.5	0.5	1.0	1.5
200*	.69	.67	17	1.0	1.5	2.0	0.5	1.0	1.5
250	1.08	1.04	20	1.0	1.5	2.5	1.0	1.5	2.0
290**	1.45	1.40	23	1.5	2.0	3.0	1.0	1.5	2.0

CFM - cubic feet per minute

FPM - feet per minute velocity

Pt - total pressure - inches w.g.

Ps - static pressure - inches w.g.

T - throw in feet

NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Performance Notes:

1. The radial flow pattern of the HRDP-1 is unlike conventional air distribution devices. The data presented above describes isovels by average terminal velocity in both horizontal and vertical directions.

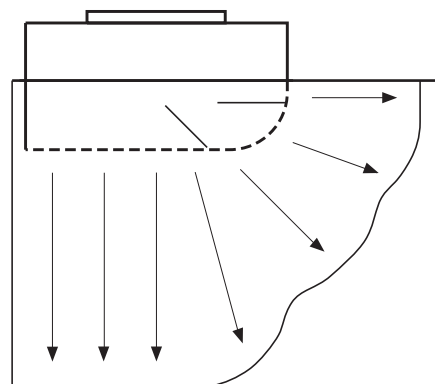
2. ΔT is the temperature difference between supply and room air. Testing is based on 10°F (5.5°C) cooling.

3. Performance data is for diffusers with clean filters. Filters may be operated up to a final resistance of 2" w.g. (500 Pa).

4.* Recommended maximum airflow is based on 100 fpm (0.51 m/s) velocity per square foot of filter media face area.

** Maximum airflow shown is based on 150 fpm (0.76 m/s) velocity per square foot of filter media face area. Exceeding these airflows may result in reduced filter efficiencies. Refer to the engineering section for more details.

5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2006.



Typical 75 fpm Isovel