R-OMNI / ARCHITECTURAL CEILING / ROUND PLAQUE

		Neck Velocity, fpm	400	500	600	700	800	900	1000	1200	1400
		Velocity Pressure, In WG	0.010	0.016	0.022	0.031	0.040	0.051	0.062	0.090	0.122
6"	Positions	Air Flow, cfm	79	98	118	137	157	177	196	236	275
	Center	Total Pressure, In WG	0.017	0.027	0.039	0.053	0.070	0.088	0.109	0.156	0.213
		NC (Noise Criteria)	-	-	-	13	17	21	24	30	34
		Horizontal Throw, Ft	2-4-8	2-5-9	3-6-10	5-7-10	5-8-11	6-8-12	6-9-12	8-10-14	8-10-15
	Down	Total Pressure, In WG	0.012	0.018	0.026	0.036	0.047	0.049	0.073	0.105	0.143
		NC (Noise Criteria)	-	-	-	-	12	17	20	27	33
		Horizontal Throw, Ft	1-3-6	2-4-7	3-5-8	4-6-9	4-6-9	5-7-10	5-7-10	6-8-11	7-9-12
	Up	Total Pressure	0.026	0.041	0.059	0.080	0.105	0.132	0.164	0.235	0.321
		NC (Noise Criteria)	-	-	10	15	19	22	25	31	35
		50 fpm Vert. Proj., Ft @ 10° F Heating	2	3	4	5	6	7	8	10	12
		50 fpm Vert. Proj., Ft @ 20° F Heating	2	3	4	5	6	7	8	9	11
		50 fpm Vert. Proj., Ft @ 30° F Heating	1	2	3	4	5	6	7	8	10
		50 fpm Vert. Proj., Ft @ 40° F Heating	1	2	2	3	4	5	6	7	9
8"	Positions	Air Flow, cfm	140	175	209	244	279	314	349	419	489
	Center	Total Pressure, In WG	0.019	0.029	0.042	0.057	0.075	0.095	0.117	0.168	0.229
		NC (Noise Criteria)	-	-	-	12	16	20	24	30	35
		Horizontal Throw, Ft	2-3-6	3-4-8	3-5-9	4-5-10	4-6-11	5-7-12	5-8-12	6-9-13	7-10-15
	Down	Total Pressure, In WG	0.014	0.021	0.031	0.042	0.055	0.070	0.086	0.124	0.168
		NC (Noise Criteria)	-	-	-	-	13	17	21	27	33
		Horizontal Throw, Ft	2-3-5	3-4-8	3-5-9	4-5-10	4-6-11	5-7-12	5-8-12	6-9-13	7-10-15
	Up	Total Pressure	0.040	0.062	0.089	0.121	0.158	0.200	0.247	0.355	0.484
		NC (Noise Criteria)	-	-	10	15	20	25	28	35	41
		50 fpm Vert. Proj., Ft @ 10° F Heating	6	7	8	9	10	11	12	14	16
		50 fpm Vert. Proj., Ft @ 20° F Heating	5	6	7	8	9	10	11	13	15
		50 fpm Vert. Proj., Ft @ 30° F Heating	5	6	7	8	9	9	10	12	14
		50 fpm Vert. Proj., Ft @ 40° F Heating	4	5	6	7	8	9	10	12	14
10"	Positions	Air Flow, cfm	218	273	327	382	436	491	545	654	764
	Center	Total Pressure, In WG	0.019	0.030	0.043	0.059	0.077	0.098	0.121	0.174	0.237
		NC (Noise Criteria)	-	-	14	19	23	27	30	35	40
		Horizontal Throw, Ft	3-4-8	3-5-10	4-6-11	5-7-12	5-8-13	6-9-13	6-10-14	8-11-16	9-12-17
	Down	Total Pressure, In WG	0.015	0.024	0.034	0.046	0.060	0.076	0.094	0.136	0.185
		NC (Noise Criteria)	-	-	-	13	18	23	27	34	39
		Horizontal Throw, Ft	3-4-8	3-5-10	4-6-11	5-7-12	5-8-13	6-9-13	6-10-14	8-11-16	9-12-17
	Up	Total Pressure	0.028	0.044	0.064	0.087	0.114	0.144	0.178	0.256	0.348
		NC (Noise Criteria)	-	-	-	16	21	27	31	39	46
		50 fpm Vert. Proj., Ft @ 10° F Heating	7	8	9	10	11	12	13	15	17
		50 fpm Vert. Proj., Ft @ 20° F Heating	7	8	9	9	10	11	12	14	16
		50 fpm Vert. Proj., Ft @ 30° F Heating	6	7	8	9	10	10	11	13	15
		50 fpm Vert. Proj., Ft @ 40° F Heating	5	6	7	8	9	10	11	13	15
12"	Positions	Air Flow, cfm	314	393	471	550	628	707	785	942	1100
	Center	Total Pressure, In WG	0.022	0.034	0.048	0.066	0.086	0.109	0.134	0.194	0.263
		NC (Noise Criteria)	15	19	22	25	27	30	32	35	38
		Horizontal Throw, Ft	5-7-14	6-9-16	7-10-17	8-12-18	9-14-20	10-15-21	11-16-22	14-17-24	15-18-26
	Down	Total Pressure, In WG	0.016	0.025	0.036	0.049	0.064	0.081	0.100	0.144	0.196
		NC (Noise Criteria)	10	15	19	22	25	28	30	34	37
		Horizontal Throw, Ft	4-6-11	5-7-14	6-8-16	6-10-17	7-11-18	8-13-19	9-14-20	11-16-22	13-17-24
	Up	Total Pressure	0.033	0.052	0.074	0.101	0.132	0.167	0.206	0.297	0.404
		NC (Noise Criteria)	10	15	20	23	27	29	32	36	40
		50 fpm Vert. Proj., Ft @ 10° F Heating	8	9	11	12	13	15	16	18	21
		50 fpm Vert. Proj., Ft @ 20° F Heating	8	9	10	11	13	14	15	17	20
		50 fpm Vert. Proj., Ft @ 30° F Heating	7	8	9	10	12	13	14	17	20
		50 fpm Vert. Proj., Ft @ 40° F Heating	7	8	9	10	12	13	14	16	19
14"	Positions	Air Flow, cfm	428	535	641	748	855	962	1069	1283	1497
	Center	Total Pressure, In WG	0.015	0.024	0.034	0.046	0.061	0.077	0.095	0.137	0.186
		NC (Noise Criteria)	-	13	18	23	26	30	33	38	42
		Horizontal Throw, Ft	4-6-12	5-8-14	6-9-15	7-11-16	8-12-17	9-13-18	10-14-19	12-15-21	13-16-23
	Down	Total Pressure, In WG	0.011	0.016	0.024	0.032	0.042	0.053	0.066	0.094	0.129
		NC (Noise Criteria)	-	12	17	21	25	28	31	36	40
		Horizontal Throw, Ft	3-6-12	5-8-14	6-9-16	7-11-17	8-12-18	9-14-19	10-14-20	9-13-19	14-17-24
	Up	Total Pressure	0.022	0.034	0.050	0.067	0.088	0.112	0.138	0.198	0.270
		NC (Noise Criteria)	-	15	20	24	28	31	34	39	43
		50 fpm Vert. Proj., Ft @ 10° F Heating	10	12	14	15	17	19	21	24	28
		50 fpm Vert. Proj., Ft @ 20° F Heating	10	12	13	15	17	19	20	24	28
		50 fpm Vert. Proj., Ft @ 30° F Heating	9	11	13	14	16	18	20	24	28
		50 fpm Vert. Proj., Ft @ 40° F Heating	9	11	12	14	16	18	19	23	27

Performance notes appear at end of performance data

- All data, except vertical projection, was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006
- Vertical projection data was calculated from computational fluid dynamics models
- All data based upon supply performance
- All pressures are in inches of water
- Diffusers are shipped in center position
- To obtain static pressure, subtract the velocity pressure from the total pressure
- The negative static pressure for return performance is equal to the total pressure of supply at the same cfm
- Return NC is 2 NC higher than supply NC at the same cfm
- Horizontal throw values are for terminal velocities of 150, 100 and 50 fpm under isothermal conditions
- If mounted on an exposed duct, the throw values are 70% of those listed in the table
- Vertical projections are for terminal velocity of 50 fpm in heating mode
- NC values based on a room absorption of 10 dB
- Dash (-) in space indicates NC value less than 10