

PERFORMANCE DATA - LINEAR ARCHITECTURAL DIFFUSER
MODEL LAD - SLOTS, STANDARD BLADE, HORIZONTAL THROW WITH PLENUM

Two Slot — 1" Slot Width	Horizontal Throw	8" Oval Inlet	2 ft.	CFM	115	145	175	205	235	260	290	320
				Ps	.046	.072	.103	.140	.183	.232	.286	.346
				Pt	.054	.084	.121	.165	.215	.271	.335	.405
				NC	-	16	22	27	31	35	38	40
				Throw	7-11-16	9-13-18	11-14-19	12-15-21	13-16-22	14-17-24	14-18-25	15-19-26
			4 ft.	CFM	235	290	350	410	465	525	580	640
				Ps	.051	.080	.115	.156	.204	.257	.318	.384
				Pt	.083	.129	.186	.254	.329	.418	.513	.622
				NC	-	18	24	29	33	37	40	42
				Throw	10-15-22	12-18-25	15-19-28	17-21-30	18-22-32	19-24-34	20-25-35	21-26-37
			5 ft.	CFM	295	365	440	510	585	655	730	800
				Ps	.056	.088	.126	.172	.224	.283	.349	.422
				Pt	.107	.165	.239	.323	.423	.533	.660	.795
				NC	-	20	26	31	35	38	41	43
				Throw	13-20-25	17-24-28	20-26-31	23-28-33	25-30-35	26-32-38	27-34-40	29-35-42
Two Slot — 1" Slot Width	Horizontal Throw	10" Oval Inlet	2 ft.	CFM	115	145	175	205	235	260	290	320
				Ps	.037	.058	.083	.112	.147	.185	.229	.276
				Pt	.041	.064	.092	.125	.163	.205	.254	.307
				NC	-	16	22	27	31	35	38	40
				Throw	7-11-16	9-13-18	11--14-19	12-15-21	13-16-22	14-17-24	14-18-25	15-19-26
			4 ft.	CFM	235	290	350	410	465	525	580	640
				Ps	.041	.064	.092	.125	.163	.206	.254	.307
				Pt	.057	.089	.128	.175	.227	.288	.354	.429
				NC	-	18	24	29	33	37	40	42
				Throw	10-15-22	12-18-25	15-19-28	17-21-30	18-22-32	19-24-34	20-25-35	21-26-37
			5 ft.	CFM	295	365	440	510	585	655	730	800
				Ps	.045	.070	.101	.137	.179	.227	.279	.338
				Pt	.071	.110	.159	.215	.281	.354	.438	.528
				NC	-	20	26	31	35	38	41	43
				Throw	13-20-25	17-24-28	20-26-31	23-28-33	25-30-35	26-32-38	27-34-40	29-35-42

PERFORMANCE DATA - LINEAR ARCHITECTURAL DIFFUSER
MODEL LAD - 2-SLOTS, STANDARD BLADE, HORIZONTAL THROW WITH PLENUM

Two Slot — 1.5" Slot Width	Horizontal Throw	8" Oval Inlet	2 ft.	CFM	125	160	190	220	255	285	320	350
				Ps	.045	.071	.102	.140	.183	.232	.287	.347
				Pt	.054	.086	.123	.168	.221	.279	.346	.419
				NC	-	17	23	28	32	36	39	41
				Throw	6-9-17	8-12-18	9-14-20	11-15-22	12-17-23	14-18-25	15-19-26	16-19-28
		8" Oval Inlet	4 ft.	CFM	250	315	380	445	510	570	635	700
				Ps	.050	.079	.114	.155	.203	.258	.319	.386
				Pt	.086	.136	.198	.271	.355	.447	.553	.671
				NC	-	19	25	30	34	38	41	43
				Throw	9-13-23	11-16-26	13-20-29	15-22-31	18-23-33	20-25-35	21-26-37	22-28-39
		8" Oval Inlet	5 ft.	CFM	315	395	475	555	635	715	795	875
				Ps	.055	.087	.125	.171	.224	.283	.350	.424
				Pt	.113	.177	.256	.350	.458	.581	.718	.870
				NC	-	21	27	32	36	39	42	45
				Throw	12-18-26	15-22-29	18-27-32	21-29-35	24-31-37	27-33-39	29-35-41	30-37-44
	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	125	160	180	220	255	285	320	350
				Ps	.031	.049	.071	.098	.128	.162	.200	.243
				Pt	.034	.054	.078	.106	.139	.177	.219	.265
				NC	-	17	22	28	32	35	38	41
				Throw	6-9-17	8-12-18	9-14-20	11-15-22	12-17-23	14-18-25	15-19-26	16-19-28
			4 ft.	CFM	250	315	380	445	510	570	635	700
				Ps	.035	.055	.079	.108	.142	.180	.222	.270
				Pt	.046	.073	.105	.144	.189	.238	.295	.358
				NC	-	19	24	30	34	37	40	43
				Throw	9-13-23	11-16-26	13-20-29	15-22-31	18-23-33	20-25-35	21-26-37	22-29-39
			5 ft.	CFM	315	395	475	555	635	715	795	875
				Ps	.038	.060	.087	.119	.156	.198	.245	.296
				Pt	.056	.088	.128	.175	.229	.290	.358	.434
				NC	-	20	26	31	35	39	42	44
				Throw	12-18-26	15-22-29	18-27-32	21-29-35	24-31-37	27-33-39	29-35-41	30-37-44

PERFORMANCE DATA - LINEAR ARCHITECTURAL DIFFUSER
MODEL LAD - 2-SLOTS, STANDARD BLADE, HORIZONTAL THROW WITH PLENUM

Two Slot — 2" Slot Width	Horizontal Throw	8" Oval Inlet	2 ft.	CFM	155	190	225	260	295	330	365	400
				Ps	.065	.097	.137	.183	.235	.294	.360	.432
				Pt	.079	.118	.166	.222	.286	.357	.437	.525
				NC	-	16	21	26	30	33	36	38
				Throw	9-13-18	11-14-20	13-16-22	14-17-24	15-18-25	15-19-27	16-20-28	17-21-29
			4 ft.	CFM	310	380	450	520	590	560	730	800
				Ps	.072	.108	.152	.203	.261	.327	.400	.480
				Pt	.128	.192	.270	.360	.464	.580	.710	.853
				NC	-	18	23	28	32	35	38	40
				Throw	9-14-26	11-17-29	14-20-31	16-23-34	18-25-36	20-27-38	22-28-40	24-29-42
			5 ft.	CFM	390	475	565	650	740	825	915	1000
				Ps	.079	.119	.167	.223	.287	.359	.440	.528
				Pt	.168	.250	.353	.469	.606	.756	.927	1.110
				NC	-	19	24	29	33	36	39	42
				Throw	12-19-29	15-23-32	18-27-35	21-31-37	24-34-40	27-36-42	29-38-44	32-39-47
	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	155	190	225	260	295	330	365	400
				Ps	.032	.048	.067	.089	.115	.143	.175	.211
				Pt	.036	.054	.076	.101	.130	.163	.199	.239
				NC	-	16	21	26	30	33	36	38
				Throw	6-10-18	8-12-20	10-14-22	11-17-24	13-18-25	14-19-27	16-20-28	17-21-29
			4 ft.	CFM	310	380	450	520	590	660	730	800
				Ps	.035	.053	.074	.099	.127	.159	.195	.234
				Pt	.052	.079	.110	.147	.190	.238	.291	.349
				NC	-	18	23	28	32	35	38	40
				Throw	9-14-26	11-17-29	14-20-31	16-23-34	18-25-36	20-27-38	22-28-40	24-29-42
			5 ft.	CFM	390	475	565	650	740	825	915	1000
				Ps	.039	.058	.081	.109	.140	.175	.214	.257
				Pt	.066	.099	.139	.185	.238	.297	.365	.437
				NC	-	19	24	29	33	36	39	42
				Throw	12-19-29	15-23-32	18-27-35	21-31-37	24-34-40	27-36-42	29-38-44	32-39-47

PERFORMANCE DATA - LINEAR ARCHITECTURAL DIFFUSER
MODEL LAD - 2-SLOTS, STANDARD BLADE, HORIZONTAL THROW WITH PLENUM

Two Slot — 2.5" Slot Width	Horizontal Throw	10" Oval Inlet	2 ft.	CFM	210	255	300	345	390	430	475	520
				Ps	.061	.088	.122	.160	.203	.252	.306	.365
				Pt	.074	.108	.148	.195	.248	.307	.373	.445
				NC	-	18	23	27	31	34	37	39
				Throw	8-12-21	10-15-24	11-17-25	13-19-27	15-20-29	16-22-31	18-23-32	19-24-34
			4 ft.	CFM	425	510	600	690	775	865	950	1040
				Ps	.067	.098	.135	.178	.226	.280	.340	.406
				Pt	.121	.176	.242	.319	.404	.502	.608	.727
				NC	-	20	25	29	33	36	39	41
				Throw	11-17-30	14-21-33	16-24-36	19-27-39	21-29-41	23-31-43	26-32-45	27-34-47
			5 ft.	CFM	530	640	750	860	970	1080	1190	1300
				Ps	.084	.123	.169	.222	.282	.350	.425	.507
				Pt	.168	.245	.336	.442	.562	.696	.845	1.009
				NC	16	21	26	31	35	38	41	43
				Throw	15-23-34	18-28-37	22-32-40	25-37-43	28-39-46	31-41-48	34-43-51	37-45-53
	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	210	255	300	345	390	430	475	520
				Ps	.038	.055	.076	.100	.127	.157	.191	.228
				Pt	.046	.067	.092	.121	.154	.191	.232	.277
				NC	-	17	22	26	30	34	36	39
				Throw	8-12-21	10-15-24	11-17-25	13-19-27	15-20-29	16-22-31	18-23-32	19-24-34
			4 ft.	CFM	425	510	600	690	775	865	950	1040
				Ps	.042	.061	.084	.111	.141	.175	.212	.254
				Pt	.075	.108	.149	.196	.249	.309	.375	.448
				NC	-	19	24	28	32	36	38	41
				Throw	11-17-30	14-21-33	16-24-36	19-27-39	21-29-41	23-31-43	26-32-45	27-34-47
			5 ft.	CFM	530	640	750	860	970	1080	1190	1300
				Ps	.046	.068	.093	.122	.155	.192	.234	.279
				Pt	.097	.141	.194	.255	.324	.402	.488	.583
				NC	-	20	26	30	34	37	40	42
				Throw	15-23-34	18-28-37	22-32-40	25-37-43	28-39-46	31-41-48	34-43-51	37-45-53

PERFORMANCE DATA - LINEAR ARCHITECTURAL DIFFUSER
MODEL LAD - 2-SLOTS, STANDARD BLADE, HORIZONTAL THROW WITH PLENUM

Two Slot — 3" Slot Width	Horizontal Throw	10" Oval Inlet	2 ft.	CFM	195	240	280	320	365	405	450	490
				Ps	.027	.039	.054	.072	.092	.114	.139	.166
				Pt	.038	.056	.078	.102	.131	.163	.199	.238
				NC	-	16	21	25	29	33	35	38
				Throw	6-10-20	8-12-23	10-15-25	11-17-26	13-19-28	14-21-30	16-22-31	17-23-33
			4 ft.	CFM	390	475	560	645	730	810	895	980
				Ps	.030	.044	.060	.080	.102	.127	.155	.185
				Pt	.075	.111	.154	.203	.260	.322	.392	.470
				NC	-	18	23	27	31	35	37	40
				Throw	8-14-29	12-18-32	14-21-35	16-24-37	18-27-40	20-30-42	22-31-44	24-33-46
			5 ft.	CFM	490	595	700	805	910	1015	1120	1225
				Ps	.041	.061	.085	.112	.143	.178	.216	.259
				Pt	.113	.166	.230	.304	.389	.484	.589	.705
				NC	-	19	24	29	33	36	39	41
				Throw	11-19-32	15-24-36	18-28-39	21-32-42	24-36-44	27-40-47	30-42-49	32-44-51
	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	195	240	280	320	365	405	450	490
				Ps	.022	.032	.044	.058	.075	.093	.113	.135
				Pt	.028	.042	.058	.077	.098	.122	.149	.178
				NC	-	-	20	24	28	32	35	37
				Throw	6-10-20	8-12-23	10-15-25	11-17-26	13-19-28	14-21-30	16-22-31	17-23-33
			4 ft.	CFM	390	475	560	645	730	810	895	980
				Ps	.024	.035	.049	.065	.083	.103	.125	.150
				Pt	.051	.076	.105	.140	.179	.221	.269	.323
				NC	-	17	22	26	30	34	37	39
				Throw	8-14-29	12-18-32	14-21-35	16-24-37	18-27-40	20-30-42	22-31-44	24-33-46
			5 ft.	CFM	490	595	700	805	910	1015	1120	1225
				Ps	.026	.039	.054	.071	.091	.113	.138	.165
				Pt	.070	.103	.142	.188	.240	.298	.363	.435
				NC	-	18	23	28	32	35	38	41
				Throw	11-19-32	15-24-36	18-28-39	21-32-42	24-36-44	27-40-47	30-42-49	32-44-51

PERFORMANCE NOTES FOR LAD LINEAR ARCHITECTURAL DIFFUSER SERIES

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)

CFM/LF Cubic Feet per Minute per Linear Foot (air)

Velocity Velocity of air stream in Feet per Minute

Ps Negative static pressure (inches of water column)

NC Noise criterion, sound pressure level NC ratings are based on sound power level (Lw) re: 10^{-12} watts minus a 10dB room attenuation in all octave bands

1. All pressures are given in inches of water.
2. Isothermal throws are given for velocities of 150, 100 and 50 FPM.
3. Throw values are based on a 1-way discharge from the slot with the controller set at 0 discharge. For 2-way discharges, throw is based upon the number and size of the slots throwing in each direction, with the total supply air flow split equally between all slots in the unit.
4. Data was collected in accordance to ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets"
5. Correction factor tables are only to be used with continuous pressurized ceiling plenum performance data.

Table 1. NC Correction For Length

Length (feet)	2	4	6	8	10
Supply	-2	+0	+2	+3	+5
Return	+0	+3	+5	+6	+8

Table 2. Throw Correction Multiplier For Length

Length (feet)	2	4	8	10	12
Throw Correction	0.72	0	1.5	1.7	1.8