

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

One Slot — 1" Slot Width	Horizontal Throw	6" Round Inlet	2 ft.	CFM	55	65	80	95	105	120	130	145
				Ps	.044	.067	.096	.129	.168	.212	.261	.315
				Pt	.049	.074	.106	.144	.186	.235	.288	.349
				NC	-	19	24	27	30	33	35	37
				Throw	5-7-11	6-9-12	7-9-13	8-10-14	9-11-15	9-11-16	10-12-17	10-13-18
			4 ft.	CFM	110	135	160	185	210	240	265	290
				Ps	.048	.075	.106	.144	.187	.235	.290	.350
				Pt	.068	.104	.148	.199	.258	.329	.403	.486
				NC	17	21	26	29	32	35	37	39
				Throw	6-10-15	8-12-17	10-13-19	11-14-20	12-15-21	13-16-23	14-17-24	14-18-25
			5 ft.	CFM	135	170	200	235	265	300	330	365
				Ps	.053	.082	.117	.158	.205	.259	.319	.384
				Pt	.083	.129	.182	.247	.319	.405	.495	.600
				NC	18	23	27	31	34	36	39	41
				Throw	9-13-17	11-16-19	13-18-21	15-19-22	17-20-24	18-22-25	19-23-27	19-24-28
	Horizontal Throw	8" Oval Inlet	2 ft.	CFM	55	65	80	95	105	120	130	145
				Ps	.043	.056	.094	.126	.164	.207	.255	.307
				Pt	.044	.068	.097	.132	.171	.215	.265	.320
				NC		17	22	26	30	33	36	39
				Throw	5-7-11	6-9-12	7-9-13	8-10-14	9-11-15	9-11-16	10-12-17	10-13-18
			4 ft.	CFM	110	135	160	185	210	240	265	290
				Ps	.047	.073	.104	.141	.183	.230	.283	.342
				Pt	.054	.084	.119	.160	.208	.264	.324	.391
				NC	-	19	24	28	32	35	38	41
				Throw	6-10-15	8-12-17	10-13-19	11-14-20	12-15-21	13-16-23	14-17-24	14-18-25
			5 ft.	CFM	135	170	200	235	265	300	330	365
				Ps	.052	.080	.114	.155	.201	.253	.311	.376
				Pt	.063	.097	.138	.187	.242	.306	.375	.453
				NC	-	20	25	30	34	37	40	42
				Throw	9-13-17	11-16-19	13-18-21	15-19-22	17-20-24	18-22-25	19-23-27	19-24-28

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

One Slot — 1.5" Slot Width	Horizontal Throw	6" Round Inlet	2 ft.	CFM	55	70	90	110	125	145	160	180
				Ps	.026	.047	.073	.105	.143	.187	.236	.292
				Pt	.031	.055	.086	.125	.168	.221	.278	.344
				NC	-	18	23	27	31	34	37	39
				Throw	3-6-11	5-8-12	6-9-14	8-11-15	9-12-17	10-12-18	11-13-19	11-14-20
			4 ft.	CFM	110	145	180	215	250	290	325	360
				Ps	.029	.052	.081	.117	.159	.207	.262	.324
				Pt	.049	.086	.133	.191	.260	.343	.433	.534
				NC	-	20	25	29	33	36	39	41
				Throw	5-8-15	7-11-18	9-13-20	11-15-22	12-17-23	14-18-25	15-19-26	16-20-28
			5 ft.	CFM	135	180	225	270	315	360	405	450
				Ps	.032	.057	.089	.128	.175	.228	.289	.356
				Pt	.062	.109	.171	.246	.335	.438	.554	.684
				NC	15	21	27	31	34	37	40	43
				Throw	6-11-17	9-14-20	12-18-22	14-21-24	17-22-26	19-24-28	21-25-30	22-26-31
One Slot — 1.5" Slot Width	Horizontal Throw	8" Oval Inlet	2 ft.	CFM	55	70	90	110	125	145	160	180
				Ps	.024	.042	.066	.094	.129	.168	.213	.262
				Pt	.025	.045	.070	.102	.138	.180	.227	.281
				NC	-	-	19	24	29	33	36	39
				Throw	3-6-11	5-8-12	6-9-14	8-11-15	9-12-17	10-12-18	11-13-19	11-14-20
			4 ft.	CFM	110	145	180	215	250	290	325	360
				Ps	.026	.047	.073	.105	.143	.187	.236	.292
				Pt	.033	.059	.092	.132	.179	.236	.298	.367
				NC	-	-	21	26	31	35	38	41
				Throw	5-8-15	7-11-18	9-13-20	11-15-22	12-17-23	14-18-25	15-19-26	16-20-28
			5 ft.	CFM	135	180	225	270	315	360	405	450
				Ps	.029	.051	.080	.115	.157	.205	.260	.321
				Pt	.039	.070	.110	.158	.215	.281	.355	.439
				NC	-	16	22	28	32	36	39	42
				Throw	6-11-17	9-14-20	12-18-22	14-21-24	17-22-26	19-24-28	21-25-30	22-26-31

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

One Slot — 2" Slot Width	Horizontal Throw	8" Oval Inlet	2 ft.	CFM	100	120	140	160	180	200	220	240
				Ps	.044	.063	.086	.112	.142	.176	.212	.253
				Pt	.050	.072	.097	.127	.161	.199	.241	.286
				NC	-	18	23	27	30	33	36	38
				Throw	6-9-15	7-11-16	8-12-17	10-13-19	11-14-20	12-15-21	13-15-22	13-16-23
		4 ft.		CFM	200	240	280	320	360	400	440	480
				Ps	.049	.070	.096	.125	.158	.195	.236	.281
				Pt	.072	.104	.141	.184	.233	.288	.349	.415
				NC	15	20	25	29	32	35	38	40
				Throw	9-13-21	10-15-23	12-17-25	14-19-26	15-20-28	17-21-29	18-22-31	19-23-32
		5 ft.		CFM	250	300	350	400	450	500	550	600
				Ps	.054	.077	.105	.137	.174	.215	.260	.309
				Pt	.090	.130	.176	.230	.292	.360	.436	.518
				NC	17	22	26	30	34	37	39	42
				Throw	11-17-23	14-21-25	16-23-28	18-25-29	21-26-31	23-28-33	24-29-34	25-31-36
	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	100	120	140	160	180	200	220	240
				Ps	.043	.062	.085	.111	.140	.173	.209	.249
				Pt	.045	.065	.088	.115	.146	.180	.218	.259
				NC	-	17	22	26	30	33	36	38
				Throw	6-9-15	7-11-16	8-12-17	10-13-19	11-14-20	12-15-21	13-15-22	13-16-23
			4 ft.	CFM	200	240	280	320	360	400	440	480
				Ps	.048	.069	.094	.123	.156	.192	.232	.276
				Pt	.055	.079	.108	.141	.179	.221	.267	.318
				NC	-	19	24	28	32	35	38	40
				Throw	9-13-21	10-15-23	12-17-25	14-19-26	15-20-28	17-21-29	18-22-31	19-23-32
			5 ft.	CFM	250	300	350	400	450	500	550	600
				Ps	.053	.076	.103	.135	.171	.211	.256	.304
				Pt	.064	.092	.125	.164	.207	.256	.310	.369
				NC	-	20	25	29	33	36	39	42
				Throw	11-17-23	14-21-25	16-23-28	18-25-29	21-26-31	23-28-33	24-29-34	25-31-36

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

One Slot — 2.5" Slot Width	Horizontal Throw	10" Oval Inlet	2 ft.	CFM	130	160	190	220	250	280	310	340
				Ps	.049	.075	.106	.142	.183	.229	.281	.338
				Pt	.054	.082	.116	.156	.201	.253	.310	.372
				NC	-	16	22	27	31	34	37	39
				Throw	7-10-17	9-13-19	10-14-20	12-15-22	13-16-23	14-17-25	15-18-26	16-19-27
			4 ft.	CFM	260	320	380	440	500	560	620	680
				Ps	.055	.083	.117	.157	.203	.255	.312	.376
				Pt	.075	.114	.160	.215	.277	.348	.427	.513
				NC	-	18	24	29	33	36	39	41
				Throw	10-15-24	12-18-26	14-20-29	17-22-31	19-23-33	20-25-35	21-26-37	22-27-38
			5 ft.	CFM	325	400	475	550	625	700	775	850
				Ps	.060	.092	.129	.173	.223	.280	.344	.413
				Pt	.092	.139	.196	.263	.339	.426	.522	.628
				NC	-	20	25	30	34	37	40	43
				Throw	13-20-27	16-25-29	19-27-32	22-29-34	25-31-37	27-33-39	28-35-41	30-36-43
One Slot — 2.5" Slot Width	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	130	160	190	220	250	280	310	340
				Ps	.044	.066	.093	.125	.162	.203	.249	.299
				Pt	.047	.071	.100	.134	.173	.217	.266	.320
				NC	-	16	22	27	31	34	37	39
				Throw	7-10-17	9-13-19	10-14-20	12-15-22	13-16-23	14-17-25	15-18-26	16-19-27
			4 ft.	CFM	260	320	380	440	500	560	620	680
				Ps	.049	.074	.104	.139	.180	.225	.276	.332
				Pt	.061	.092	.130	.174	.225	.282	.345	.415
				NC	-	18	24	29	33	36	39	41
				Throw	10-15-24	12-18-26	14-20-29	17-22-31	19-23-33	20-25-35	21-26-37	22-27-38
			5 ft.	CFM	325	400	475	550	625	700	775	850
				Ps	.053	.081	.114	.153	.198	.248	.304	.366
				Pt	.072	.110	.155	.207	.268	.336	.412	.495
				NC	-	20	25	30	34	37	40	43
				Throw	13-20-27	16-25-29	19-27-32	22-29-34	25-31-37	27-33-39	28-35-41	30-36-43

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

One Slot — 3" Slot Width	Horizontal Throw	10" Oval Inlet	2 ft.	CFM	140	170	200	230	260	290	320	350
				Ps	.053	.078	.108	.143	.183	.227	.276	.331
				Pt	.059	.087	.120	.159	.203	.252	.307	.367
				NC	-	16	21	25	29	33	35	38
				Throw	7-10-17	8-13-19	10-15-21	11-16-22	13-17-24	14-18-25	15-19-26	16-19-28
			4 ft.	CFM	280	340	400	460	520	580	640	700
				Ps	.059	.087	.120	.159	.203	.252	.307	.368
				Pt	.082	.121	.168	.222	.283	.352	.429	.513
				NC	-	18	23	27	31	35	37	40
				Throw	10-15-25	12-18-27	14-21-29	16-22-32	18-24-34	20-25-35	21-26-37	22-28-39
			5 ft.	CFM	350	425	500	575	650	725	800	875
				Ps	.065	.095	.132	.175	.223	.278	.338	.404
				Pt	.101	.149	.206	.273	.349	.434	.528	.632
				NC	-	19	24	29	33	36	39	41
				Throw	13-20-28	16-24-30	19-28-33	21-30-35	24-32-37	27-34-40	29-35-42	30-37-44
	Horizontal Throw	12" Oval Inlet	2 ft.	CFM	140	170	200	230	260	290	320	350
				Ps	.051	.075	.104	.137	.175	.218	.265	.317
				Pt	.054	.080	.111	.146	.187	.233	.283	.339
				NC	-	16	21	25	29	33	35	38
				Throw	7-10-17	8-13-19	10-15-21	11-16-22	13-17-24	14-18-25	15-19-26	16-19-28
			4 ft.	CFM	280	340	400	460	520	580	640	700
				Ps	.056	.083	.115	.152	.194	.242	.294	.352
				Pt	.070	.104	.144	.190	.243	.302	.368	.440
				NC	-	18	23	27	31	35	37	40
				Throw	10-15-25	12-18-27	14-21-29	16-22-32	18-24-34	20-25-35	21-26-37	22-28-39
			5 ft.	CFM	350	425	500	575	650	725	800	875
				Ps	.062	.091	.127	.167	.214	.266	.324	.387
				Pt	.084	.124	.171	.227	.290	.360	.439	.525
				NC	-	19	24	29	33	36	39	41
				Throw	13-20-28	16-24-30	19-28-33	21-30-35	24-32-37	27-34-40	29-35-42	30-37-44

PERFORMANCE NOTES FOR XG-AFL FORMATIONS 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