

Square Ceiling Diffusers – LCD Series



Performance Data

12 x 12 Face Size

Nominal Neck Size	Neck Velocity, FPM	400	500	600	700	800	900	1000	1200	1400	1600
6" Dia.	VP	.010	.016	.023	.031	.040	.051	.063	.090	.122	.160
	TP	.018	.029	.043	.060	.079	.100	.128	.175	.250	.325
	Air Flow, CFM	80	100	120	140	160	180	200	235	275	315
	T	1-2-4	1-2-5	1-3-6	2-3-6	2-4-8	3-4-8	3-4-10	4-5-10	4-6-14	5-8-14
8" Dia.	NC	-	-	-	-	-	22	26	33	38	41
	TP	.031	.047	.065	.087	.110	.140	.168	.235	.310	.395
	Air Flow, CFM	140	175	210	245	280	315	350	420	490	560
	T	3-5-9	4-5-11	5-7-13	5-8-14	6-9-14	7-11-16	7-11-16	9-13-20	11-14-20	13-14-20
NC		-	-	-	-	-	22	26	33	38	41

24 x 24 Face Size

Nominal Neck Size	Neck Velocity, FPM	400	500	600	700	800	900	1000	1200	1400	1600
6" Dia.	VP	.010	.016	.023	.031	.040	.051	.063	.090	.122	.160
	TP	.015	.023	.035	.045	.060	.076	.095	.135	.186	.240
	Air Flow, CFM	80	100	120	140	160	180	200	235	275	315
	T	1-1-4	1-2-5	1-2-6	1-3-7	2-4-9	2-5-9	3-6-11	3-6-12	4-7-14	6-8-15
8" Dia.	NC	-	-	-	-	-	21	24	27	32	36
	TP	.021	.033	.047	.063	.082	.105	.128	.183	.245	.325
	Air Flow, CFM	140	175	210	245	280	315	350	420	490	560
	T	1-1-5	1-2-6	1-3-8	2-4-8	3-5-10	3-6-10	4-16-13	5-8-13	6-8-16	7-10-17
10" Dia.	NC	-	-	-	-	-	25	29	33	37	42
	TP	.024	.037	.047	.074	.097	.123	.150	.215	.293	.372
	Air Flow, CFM	220	270	330	380	435	490	545	655	765	870
	T	1-3-6	2-4-8	3-5-9	4-6-12	5-6-12	5-7-14	6-9-15	6-10-15	8-13-17	9-13-18
12" Dia.	NC	-	-	-	-	25	29	33	37	40	44
	TP	.026	.039	.057	.075	.097	.127	.150	.245	.310	.410
	Air Flow, CFM	315	390	470	550	630	705	785	990	1100	1255
	T	2-3-7	3-4-9	3-5-10	4-6-13	5-7-13	5-8-15	5-8-16	7-9-18	9-11-18	10-12-19
14" Dia.	NC	-	-	23	26	29	33	35	39	43	47
	TP	.030	.050	.070	.100	.110	.160	.200	.240	.390	.490
	Air Flow CFM	425	530	635	745	850	955	1060	1270	1490	1695
	T	3-4-9	4-5-11	4-7-13	5-7-16	6-9-16	7-11-16	7-11-19	9-13-19	11-16-19	11-16-27
15" Dia.	NC	-	-	23	26	29	33	36	42	43	47
	TP	.033	.054	.072	.100	.127	.163	.204	.280	.395	.500
	Air Flow	490	615	735	860	985	1110	1230	1470	1720	1970
	T	5-7-10	6-8-11	7-9-14	8-10-17	8-13-18	10-15-19	11-16-22	12-18-27	13-20-32	15-22-34
NC		-	-	24	28	36	37	39	43	49	52

CFM – cubic feet per minute
FPM – feet per minute velocity
TP – total pressure – inches w.g.
VP – velocity pressure – inches w.g.
T – throw in feet
NC – Noise Criteria (values based on 10dB room absorption).

Notes:
 1) Throws are given at 150, 100, and 50 fpm terminal velocities.
 2) NC values less than 20 are not shown.
 3) Data were derived from independent tests in accordance with ISO Standard 5219, ISO Standard 3741 and ADC Test Code 1062 GRD84.

Neck Size Diameter in Inches	Nominal Overall Face Size	Ak Factor
6	12 x 12	0.131
8	12 x 12	0.202
8	24 x 24	0.227
10	24 x 24	0.331
12	24 x 24	0.450
14	24 x 24	0.511
15	24 x 24	0.625