

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

1 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	55	70	85	100	115	130	145
	Total Pressure	.096	.141	.195	.255	.325	.400	.485
	Static Pressure	.090	.133	.184	.241	.305	.377	.455
	Noise Criteria	18	23	27	31	35	37	41
	Throw	8-13-22	10-15-25	12-18-28	14-20-30	15-21-32	16-22-34	18-24-35
8" Round Inlet	Airflow, CFM	65	80	95	110	125	140	155
	Total Pressure	.106	.157	.216	.284	.360	.444	.537
	Static Pressure	.104	.153	.211	.277	.351	.433	.524
	Noise Criteria	18	24	28	32	36	39	42
	Throw	10-16-26	13-19-29	16-22-32	18-24-35	20-26-37	21-27-39	23-29-41
10" Oval Inlet	Airflow, CFM	75	90	110	125	145	160	180
	Total Pressure	.127	.187	.258	.339	.430	.531	.642
	Static Pressure	.125	.186	.255	.335	.425	.524	.634
	Noise Criteria	18	23	28	32	36	38	42
	Throw	12-18-28	15-22-32	19-25-35	21-27-38	23-30-40	25-31-43	27-33-45

1 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	55	80	100	120	140	165	200
	Total Pressure	.057	.095	.143	.197	.260	.333	.411
	Static Pressure	.049	.082	.121	.167	.219	.278	.344
	Noise Criteria	11	17	23	28	31	36	40
	Throw	7-11-21	9-15-25	12-17-29	13-20-32	15-20-34	16-23-36	17-24-38
8" Round Inlet	Airflow, CFM	65	85	110	130	150	180	200
	Total Pressure	.049	.081	.121	.167	.220	.280	.346
	Static Pressure	.046	.078	.115	.158	.208	.264	.326
	Noise Criteria	9	17	23	28	32	37	39
	Throw	9-13-24	12-18-29	15-21-34	17-24-37	19-25-39	21-28-42	22-30-44
10" Oval Inlet	Airflow, CFM	75	100	125	150	175	200	225
	Total Pressure	.053	.089	.131	.181	.238	.303	.374
	Static Pressure	.052	.086	.128	.176	.231	.293	.362
	Noise Criteria	13	20	26	31	35	38	41
	Throw	10-15-26	14-20-32	17-24-37	20-27-40	22-29-43	24-32-46	26-34-48

1 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	65	85	110	130	155	175	200
	Total Pressure	.024	.043	.068	.098	.133	.174	.220
	Static Pressure	.009	.016	.025	.036	.049	.063	.079
	Noise Criteria	6	15	21	28	33	36	40
	Throw	4-7-13	8-10-15	10-12-16	11-13-18	11-14-20	12-14-21	13-17-23
8" Round Inlet	Airflow, CFM	75	100	130	160	185	215	240
	Total Pressure	.020	.036	.057	.082	.111	.145	.183
	Static Pressure	.013	.022	.034	.049	.066	.085	.107
	Noise Criteria	6	15	22	28	33	37	41
	Throw	6-8-12	8-10-16	10-13-18	12-15-19	13-16-21	15-18-23	16-19-25
10" Oval Inlet	Airflow, CFM	80	110	140	170	200	230	250
	Total Pressure	.016	.028	.043	.062	.084	.109	.202
	Static Pressure	.012	.022	.034	.048	.064	.083	.105
	Noise Criteria	5	15	22	27	33	37	40
	Throw	6-9-14	7-12-16	10-14-19	12-15-21	13-17-22	15-18-24	16-20-25
12" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	280
	Total Pressure	.016	.028	.044	.062	.084	.109	.274
	Static Pressure	.014	.025	.038	.054	.073	.094	.118
	Noise Criteria	12	16	22	27	33	37	39
	Throw	6-9-12	9-12-16	11-14-18	12-15-22	13-16-24	14-17-25	15-19-27

See page C44 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

1 Slot • 60" (1524) Long

6" Round Inlet	Airflow, CFM	105	125	150	170	195	215	240
	Total Pressure	.060	.106	.165	.237	.321	.418	.528
	Static Pressure	.020	.035	.054	.076	.103	.133	.167
	Noise Criteria	19	25	29	33	36	39	41
	Throw	4-7-13	6-10-16	8-13-18	9-15-20	10-16-22	11-18-23	12-19-25
8" Round Inlet	Airflow, CFM	115	140	170	200	225	255	280
	Total Pressure	.039	.069	.106	.152	.204	.266	.333
	Static Pressure	.022	.039	.060	.085	.114	.148	.186
	Noise Criteria	19	25	30	33	37	40	42
	Throw	5-9-15	8-12-19	10-16-21	12-18-23	13-20-26	14-22-27	16-23-29
10" Oval Inlet	Airflow, CFM	90	120	150	180	210	240	260
	Total Pressure	.032	.057	.087	.124	.167	.217	.273
	Static Pressure	.023	.041	.063	.090	.121	.157	.197
	Noise Criteria	17	22	28	31	35	38	40
	Throw	6-10-16	9-14-21	12-18-23	14-21-25	15-23-28	16-25-29	19-26-32
12" Oval Inlet	Airflow, CFM	135	165	195	225	255	285	325
	Total Pressure	.031	.054	.083	.118	.159	.206	.259
	Static Pressure	.025	.043	.067	.095	.128	.166	.209
	Noise Criteria	12	18	23	27	33	37	39
	Throw	6-10-16	9-14-21	13-18-23	15-21-24	16-23-27	17-25-28	20-26-31

2 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	50	70	90	110	150	185	200
	Total Pressure	.038	.069	.106	.150	.200	.257	.320
	Static Pressure	.034	.060	.092	.128	.170	.217	.269
	Noise Criteria	7	11	15	22	29	35	40
	Throw	5-10-19	9-14-24	13-18-28	15-21-31	17-23-34	19-25-36	20-27-38
8" Round Inlet	Airflow, CFM	80	110	140	170	200	215	240
	Total Pressure	.043	.073	.110	.154	.206	.264	.330
	Static Pressure	.039	.066	.099	.139	.184	.236	.293
	Noise Criteria	7	16	23	29	34	38	43
	Throw	8-13-24	13-18-28	16-22-32	19-24-34	21-27-37	23-29-39	25-31-40
10" Oval Inlet	Airflow, CFM	80	110	140	170	200	230	260
	Total Pressure	.035	.059	.086	.118	.154	.194	.238
	Static Pressure	.033	.055	.081	.110	.143	.180	.277
	Noise Criteria	7	16	18	27	33	38	43
	Throw	10-15-24	14-19-28	17-22-32	19-24-34	21-26-36	23-28-38	26-32-42

2 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	120	160	200	240	280	320	360
	Total Pressure	.062	.107	.165	.235	.318	.413	.521
	Static Pressure	.036	.062	.095	.134	.180	.233	.293
	Noise Criteria	12	20	26	31	36	39	43
	Throw	7-12-22	10-17-27	12-20-31	14-23-33	16-25-36	17-27-38	18-29-40
8" Round Inlet	Airflow, CFM	130	170	215	255	295	340	380
	Total Pressure	.049	.082	.124	.172	.229	.296	.368
	Static Pressure	.039	.066	.098	.137	.182	.233	.290
	Noise Criteria	15	19	26	31	35	39	42
	Throw	8-14-24	11-19-28	14-21-34	17-24-36	19-26-38	20-29-40	21-31-42
10" Oval Inlet	Airflow, CFM	135	180	225	265	310	355	400
	Total Pressure	.047	.077	.114	.157	.207	.263	.325
	Static Pressure	.042	.070	.102	.140	.183	.232	.286
	Noise Criteria	11	19	25	30	35	38	42
	Throw	10-16-26	14-20-31	17-23-36	20-26-38	22-28-41	24-31-42	25-33-44
12" Oval Inlet	Airflow, CFM	175	235	290	350	410	465	525
	Total Pressure	.037	.063	.096	.136	.183	.237	.299
	Static Pressure	.033	.055	.084	.120	.161	.208	.261
	Noise Criteria	13	20	26	32	36	39	42
	Throw	12-17-27	16-24-33	20-28-38	22-32-40	26-35-45	27-38-47	28-41-49

See page C44 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

2 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	65	105	150	190	230	270	315
	Total Pressure	.078	.120	.174	.234	.302	.379	.472
	Static Pressure	.030	.046	.064	.086	.110	.138	.168
	Noise Criteria	14	20	26	30	34	37	40
	Throw	6-10-18	8-12-20	10-14-22	11-15-24	12-17-25	13-18-27	14-19-28
8" Round Inlet	Airflow, CFM	100	150	200	250	300	350	400
	Total Pressure	.056	.086	.123	.165	.214	.269	.329
	Static Pressure	.035	.052	.074	.098	.127	.158	.193
	Noise Criteria	13	20	26	31	35	38	42
	Throw	8-12-21	11-15-23	13-17-26	14-19-28	16-21-29	17-22-31	18-23-32
10" Oval Inlet	Airflow, CFM	80	140	195	250	305	365	420
	Total Pressure	.040	.069	.103	.145	.194	.251	.314
	Static Pressure	.030	.051	.078	.110	.149	.192	.242
	Noise Criteria	9	17	24	29	33	37	41
	Throw	5-8-18	8-12-22	10-15-26	12-18-29	13-20-32	15-21-34	16-23-36
12" Oval Inlet	Airflow, CFM	180	240	300	360	420	480	540
	Total Pressure	.048	.078	.113	.155	.201	.254	.312
	Static Pressure	.042	.067	.098	.133	.173	.218	.267
	Noise Criteria	14	21	26	31	35	39	42
	Throw	8-13-22	11-16-25	14-19-28	16-21-30	17-23-32	19-24-34	20-26-35

2 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	120	170	220	270	320	370	420
	Total Pressure	.049	.080	.117	.163	.217	.279	.349
	Static Pressure	.024	.039	.058	.080	.109	.140	.178
	Noise Criteria	12	20	26	31	35	39	42
	Throw	4-7-15	6-10-18	8-13-21	10-15-23	12-18-28	13-20-29	15-21-31
10" Oval Inlet	Airflow, CFM	100	160	215	270	325	385	440
	Total Pressure	.043	.071	.105	.146	.194	.250	.315
	Static Pressure	.029	.047	.070	.097	.132	.169	.215
	Noise Criteria	15	20	25	29	34	38	41
	Throw	5-8-16	7-11-20	9-15-23	12-17-25	13-19-27	14-21-29	15-22-31
12" Oval Inlet	Airflow, CFM	200	260	320	380	440	500	560
	Total Pressure	.037	.061	.091	.125	.168	.217	.273
	Static Pressure	.029	.046	.069	.095	.130	.167	.212
	Noise Criteria	10	19	25	30	34	38	42
	Throw	10-15-24	12-19-25	15-21-27	17-23-31	19-23-32	20-25-36	22-27-39

3 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	85	110	140	175	200	235	270
	Total Pressure	.039	.063	.096	.138	.180	.236	.299
	Static Pressure	.026	.041	.061	.084	.110	.139	.171
	Noise Criteria	10	15	23	28	32	36	39
	Throw	6-11-21	10-15-24	12-18-28	14-20-29	16-21-32	17-24-34	18-25-34
8" Round Inlet	Airflow, CFM	100	130	160	195	230	270	310
	Total Pressure	.036	.058	.087	.122	.161	.206	.255
	Static Pressure	.030	.047	.070	.097	.126	.160	.196
	Noise Criteria	10	16	24	28	33	37	40
	Throw	8-14-24	13-18-28	15-22-32	18-25-34	21-26-37	22-29-39	24-31-40
10" Oval Inlet	Airflow, CFM	115	155	195	240	280	330	375
	Total Pressure	.039	.063	.094	.131	.172	.219	.271
	Static Pressure	.036	.057	.085	.117	.153	.193	.238
	Noise Criteria	9	16	22	29	32	36	40
	Throw	9-16-26	15-21-31	18-25-35	21-28-37	25-30-40	26-33-43	28-35-44

See page C44 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

3 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	130	170	210	250	290	330	370
	Total Pressure	.054	.090	.134	.186	.248	.317	.396
	Static Pressure	.024	.038	.055	.075	.098	.123	.152
	Noise Criteria	10	16	24	29	33	37	41
	Throw	7-11-22	9-15-24	12-16-28	13-19-29	15-20-32	16-21-34	16-23-34
8" Round Inlet	Airflow, CFM	140	190	235	280	325	375	420
	Total Pressure	.038	.064	.094	.129	.170	.219	.271
	Static Pressure	.028	.044	.063	.086	.112	.142	.174
	Noise Criteria	10	17	25	30	34	38	42
	Throw	9-14-25	12-18-28	15-20-32	17-23-34	19-25-37	21-26-39	21-28-40
10" Oval Inlet	Airflow, CFM	155	210	265	320	375	430	485
	Total Pressure	.039	.064	.094	.129	.170	.216	.268
	Static Pressure	.033	.053	.077	.104	.136	.172	.211
	Noise Criteria	9	18	24	30	34	38	42
	Throw	10-16-27	14-20-31	17-23-35	20-26-37	22-28-40	24-30-42	25-32-44
12" Oval Inlet	Airflow, CFM	210	270	330	390	450	510	570
	Total Pressure	.035	.060	.090	.127	.168	.216	.269
	Static Pressure	.029	.050	.076	.106	.141	.181	.225
	Noise Criteria	11	19	25	30	34	37	40
	Throw	10-16-28	15-22-34	19-26-39	22-29-43	25-32-46	27-34-48	29-36-51

3 Slot • 48" (1219) Long

6" Round Inlet	Airflow, CFM	170	220	275	315	360	400	440
	Total Pressure	.080	.133	.202	.275	.364	.459	.572
	Static Pressure	.029	.046	.068	.092	.120	.151	.186
	Noise Criteria	18	22	28	32	36	38	41
	Throw	8-11-19	9-14-22	11-16-24	13-18-28	13-20-30	14-21-31	16-23-32
8" Round Inlet	Airflow, CFM	190	250	310	365	425	485	520
	Total Pressure	.056	.089	.128	.172	.226	.286	.354
	Static Pressure	.032	.049	.069	.092	.118	.147	.180
	Noise Criteria	6	21	26	32	36	38	41
	Throw	8-11-21	9-15-25	12-18-28	14-19-29	17-21-31	18-22-33	19-24-34
10" Oval Inlet	Airflow, CFM	200	250	320	385	450	520	590
	Total Pressure	.047	.076	.113	.154	.202	.257	.318
	Static Pressure	.033	.054	.078	.107	.139	.176	.216
	Noise Criteria	15	20	26	31	35	38	41
	Throw	9-15-23	11-17-27	14-20-30	16-22-32	18-24-34	20-25-36	20-27-37
12" Oval Inlet	Airflow, CFM	220	280	340	405	475	560	635
	Total Pressure	.044	.072	.105	.144	.189	.239	.295
	Static Pressure	.036	.058	.084	.114	.149	.188	.231
	Noise Criteria	5	20	26	30	34	38	41
	Throw	9-13-23	12-17-26	15-20-29	17-22-31	19-24-34	21-26-36	23-28-39

3 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	210	260	310	370	425	480	535
	Total Pressure	.063	.094	.131	.174	.224	.280	.342
	Static Pressure	.028	.041	.058	.078	.101	.126	.155
	Noise Criteria	15	22	27	32	35	39	42
	Throw	6-12-20	8-15-24	11-17-27	13-19-29	15-22-31	17-25-35	20-26-37
10" Oval Inlet	Airflow, CFM	275	330	395	460	525	595	630
	Total Pressure	.056	.083	.115	.154	.197	.247	.303
	Static Pressure	.032	.047	.066	.088	.114	.143	.175
	Noise Criteria	20	24	28	34	35	40	43
	Throw	11-16-26	13-20-30	14-21-32	17-23-35	20-25-37	22-30-39	24-33-42
12" Oval Inlet	Airflow, CFM	250	300	350	420	500	610	680
	Total Pressure	.048	.072	.100	.134	.171	.215	.263
	Static Pressure	.035	.053	.074	.099	.127	.159	.195
	Noise Criteria	11	18	23	29	34	38	40
	Throw	8-14-24	11-17-26	13-19-29	15-22-31	19-26-35	22-28-37	24-30-41

See page C44 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

4 Slot • 24" (610) Long

6" Round Inlet	Airflow, CFM	125	150	170	200	235	270	320
	Total Pressure	.046	.075	.116	.162	.220	.281	.356
	Static Pressure	.023	.035	.052	.072	.095	.121	.150
	Noise Criteria	10	20	25	28	33	36	40
	Throw	6-11-21	9-15-24	12-17-28	14-20-30	16-22-32	18-24-34	18-26-35
8" Round Inlet	Airflow, CFM	125	160	205	250	295	340	385
	Total Pressure	.035	.054	.083	.117	.157	.202	.253
	Static Pressure	.026	.040	.060	.083	.109	.139	.172
	Noise Criteria	10	17	23	29	33	37	40
	Throw	8-14-24	12-18-28	15-21-32	18-25-35	21-27-37	23-30-39	24-32-41
10" Oval Inlet	Airflow, CFM	145	185	210	270	320	370	420
	Total Pressure	.037	.056	.086	.121	.160	.205	.256
	Static Pressure	.032	.048	.072	.100	.132	.168	.208
	Noise Criteria	15	17	23	28	33	37	40
	Throw	9-16-26	14-21-31	18-24-35	21-28-38	25-31-40	27-34-43	28-36-45

4 Slot • 36" (914) Long

6" Round Inlet	Airflow, CFM	145	190	240	285	335	380	430
	Total Pressure	.059	.099	.153	.214	.290	.371	.469
	Static Pressure	.022	.035	.051	.069	.090	.113	.139
	Noise Criteria	9	17	24	29	32	35	39
	Throw	7-11-22	8-15-24	11-16-27	12-18-28	14-20-31	15-20-32	16-21-34
8" Round Inlet	Airflow, CFM	160	225	285	345	405	470	530
	Total Pressure	.039	.068	.102	.144	.193	.251	.313
	Static Pressure	.025	.040	.058	.079	.103	.130	.160
	Noise Criteria	10	18	24	30	33	36	40
	Throw	9-14-25	11-18-28	14-20-31	16-22-33	18-24-36	20-25-37	21-26-39
10" Oval Inlet	Airflow, CFM	190	265	335	405	475	550	620
	Total Pressure	.039	.065	.097	.135	.179	.230	.286
	Static Pressure	.030	.048	.070	.096	.125	.157	.194
	Noise Criteria	9	18	24	29	33	36	40
	Throw	10-16-27	13-20-31	16-23-34	19-25-36	21-27-39	23-29-40	24-30-42
12" Oval Inlet	Airflow, CFM	235	310	385	455	530	605	680
	Total Pressure	.035	.060	.092	.129	.172	.221	.276
	Static Pressure	.027	.047	.072	.101	.134	.172	.214
	Noise Criteria	10	17	23	28	33	36	40
	Throw	10-16-26	14-20-30	17-23-33	20-25-35	22-27-38	24-29-39	25-30-41

4 Slot • 48" (1219) Long

8" Round Inlet	Airflow, CFM	225	300	370	440	510	580	650
	Total Pressure	.060	.101	.151	.210	.278	.356	.444
	Static Pressure	.032	.052	.076	.104	.136	.173	.213
	Noise Criteria	12	19	26	31	34	39	42
	Throw	6-12-20	10-16-27	13-18-30	15-22-33	16-25-35	18-27-37	20-28-40
10" Oval Inlet	Airflow, CFM	240	320	400	480	565	645	730
	Total Pressure	.047	.079	.117	.162	.214	.273	.340
	Static Pressure	.031	.050	.073	.100	.131	.166	.205
	Noise Criteria	15	19	26	30	34	38	41
	Throw	10-14-24	12-18-29	15-21-31	17-23-34	19-25-36	21-27-37	22-28-39
12" Oval Inlet	Airflow, CFM	275	360	445	530	615	700	785
	Total Pressure	.040	.065	.097	.133	.176	.224	.279
	Static Pressure	.030	.048	.070	.096	.125	.158	.195
	Noise Criteria	15	21	25	30	34	37	40
	Throw	10-14-24	13-18-28	16-21-30	18-23-33	20-25-35	22-27-36	23-28-38

See page C44 for performance data notes.

PERFORMANCE DATA • MODEL SERIES 5800

MODEL: 5810(I) • 1" (25) SLOT WIDTH

4 Slot • 60" (1524) Long

8" Round Inlet	Airflow, CFM	310	370	430	490	550	610	670
	Total Pressure	.078	.112	.154	.202	.256	.318	.386
	Static Pressure	.025	.038	.053	.071	.091	.115	.141
	Noise Criteria	18	23	28	32	36	39	42
	Throw	8-11-19	9-13-21	10-15-22	11-16-23	12-17-25	12-18-26	13-19-27
10" Oval Inlet	Airflow, CFM	350	420	495	565	640	710	785
	Total Pressure	.058	.085	.119	.157	.202	.251	.308
	Static Pressure	.029	.043	.060	.080	.104	.130	.159
	Noise Criteria	15	19	26	31	35	38	41
	Throw	9-13-23	11-16-28	13-19-28	15-20-30	16-21-32	17-23-33	18-25-35
12" Oval Inlet	Airflow, CFM	385	470	555	640	725	810	895
	Total Pressure	.052	.078	.109	.145	.187	.233	.286
	Static Pressure	.032	.048	.067	.090	.116	.145	.178
	Noise Criteria	12	19	25	29	34	37	41
	Throw	11-16-28	14-19-32	16-22-34	18-24-37	20-26-39	22-28-41	23-30-42

Performance Data Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. Total and Static Pressure are in in. w.g..
3. Noise Criteria [NC] values based on a room absorption of 10 dB, re 10⁻¹² watts. Dash (-) in space denotes a Noise Criteria level less than 15.

4. Cataloged throws are for a one-way horizontal air pattern. For divided airflow, deduce the airflow in each direction according to the number of slots, with the total airflow apportioned between the slots. Look up throw for the airflow in each direction according to the number of slots in that direction.

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