

**PERFORMANCE DATA:**

**MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 9" (229) HIGH PLENUM (STD.)**

**24" (610) Long with 8" (203) Down-Blow**

<b>6" Round Inlet</b>	Airflow, CFM	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
	Total Pressure	.035	.059	.089	.122	.162	.205	.253	.307
	Static Pressure	.029	.048	.071	.097	.127	.160	.196	.236
	Noise Criteria	–	–	16	21	26	31	34	37
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15
<b>8" Oval Inlet</b>	Airflow, CFM	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
	Total Pressure	.024	.041	.061	.085	.111	.142	.175	.213
	Static Pressure	.022	.037	.055	.076	.099	.126	.155	.188
	Noise Criteria	–	–	–	18	21	25	28	31
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15

**36" (914) Long with 12" (305) Down-Blow**

<b>6" Round Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.057	.095	.143	.198	.262	.333	.413	.501
	Static Pressure	.043	.070	.103	.141	.184	.231	.284	.342
	Noise Criteria	18	22	27	31	35	38	42	45
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28
<b>8" Oval Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.032	.054	.082	.115	.155	.198	.248	.302
	Static Pressure	.027	.045	.068	.095	.127	.162	.202	.246
	Noise Criteria	–	–	18	23	27	30	34	37
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28

**48" (1219) Long with 12" (305) Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.044	.077	.118	.167	.224	.290	.364	.446
	Static Pressure	.035	.061	.093	.131	.175	.226	.283	.346
	Noise Criteria	–	19	24	28	32	36	39	42
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32
<b>10" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.041	.069	.106	.148	.198	.255	.318	.389
	Static Pressure	.036	.061	.093	.130	.173	.222	.277	.338
	Noise Criteria	–	–	16	22	26	30	34	37
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32

**60" (1524) Long with 15" (381) Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.050	.088	.135	.192	.260	.337	.424	.521
	Static Pressure	.036	.063	.096	.136	.184	.237	.298	.365
	Noise Criteria	–	20	26	31	36	40	43	46
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35
<b>10" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.052	.087	.129	.179	.235	.299	.369	.447
	Static Pressure	.045	.074	.109	.150	.196	.248	.305	.368
	Noise Criteria	–	18	23	27	31	35	39	42
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35

**Return Section**

<b>R Models</b>	Airflow, CFM/ft.	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

**PERFORMANCE DATA:**

**MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 9" (229) HIGH PLENUM (STD.)**

**36" (914) Long with 15" (381) Down-Blow**

<b>6" Round Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.050	.086	.132	.184	.247	.317	.396	.483
	Static Pressure	.036	.061	.092	.127	.169	.215	.267	.324
	Noise Criteria	15	21	26	30	35	38	42	44
	Horizontal Throw	2-5-13	4-8-17	6-10-21	7-13-24	9-15-27	11-17-29	13-19-31	14-21-33
	Vertical Throw	2-5-13	4-8-16	6-10-18	8-13-20	10-15-22	12-17-23	14-19-23	16-21-23
<b>8" Oval Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.030	.051	.079	.111	.150	.193	.243	.296
	Static Pressure	.025	.042	.065	.091	.122	.157	.197	.240
	Noise Criteria	–	15	20	24	28	32	35	37
	Horizontal Throw	2-5-13	4-8-17	6-10-21	7-13-24	9-15-27	11-17-29	13-19-31	14-21-33
	Vertical Throw	2-5-13	4-8-16	6-10-18	8-13-20	10-15-22	12-17-23	14-19-23	16-21-23

**48" (1219) Long with 15" (381) Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.039	.068	.104	.148	.199	.258	.323	.396
	Static Pressure	.030	.052	.079	.112	.150	.194	.242	.296
	Noise Criteria	–	15	21	26	30	34	37	40
	Horizontal Throw	3-6-12	5-8-15	6-9-19	8-11-21	9-13-24	10-15-26	11-17-28	13-19-29
	Vertical Throw	3-6-15	5-9-18	7-12-22	9-15-25	11-17-27	13-19-30	14-21-31	16-23-32
<b>10" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.037	.063	.095	.133	.179	.230	.286	.350
	Static Pressure	.032	.055	.082	.115	.154	.197	.245	.299
	Noise Criteria	–	–	19	23	27	31	34	38
	Horizontal Throw	3-6-12	5-8-15	6-9-19	8-11-21	9-13-24	10-15-26	11-17-28	13-19-29
	Vertical Throw	3-6-15	5-9-18	7-12-22	9-15-25	11-17-27	13-19-30	14-21-31	16-23-32

**48" (1219) Long with 18" (457) Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.038	.066	.102	.145	.194	.251	.315	.387
	Static Pressure	.029	.050	.077	.109	.145	.187	.234	.287
	Noise Criteria	–	16	21	26	30	34	37	40
	Horizontal Throw	4-6-11	5-7-15	6-9-19	7-11-22	9-13-25	10-15-27	11-17-29	12-19-31
	Vertical Throw	2-5-14	5-8-18	7-11-21	8-14-24	10-16-26	12-18-28	14-20-30	15-22-31
<b>10" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.039	.065	.099	.138	.184	.236	.293	.357
	Static Pressure	.034	.057	.086	.120	.159	.203	.252	.306
	Noise Criteria	–	15	20	24	28	32	35	38
	Horizontal Throw	4-6-11	5-7-15	6-9-19	7-11-22	9-13-25	10-15-27	11-17-29	12-19-31
	Vertical Throw	2-5-14	5-8-18	7-11-21	8-14-24	10-16-26	12-18-28	14-20-30	15-22-31

**60" (1524) Long with 18" (457) Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.051	.090	.139	.198	.268	.348	.438	.539
	Static Pressure	.037	.065	.100	.142	.192	.248	.312	.383
	Noise Criteria	15	21	26	31	36	40	43	46
	Horizontal Throw	5-8-16	7-11-20	9-14-23	11-16-26	13-19-28	15-20-30	16-22-32	18-23-33
	Vertical Throw	3-6-12	5-8-16	6-10-20	8-12-23	9-14-26	11-16-28	12-18-30	13-20-32
<b>10" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.043	.076	.115	.163	.218	.281	.351	.430
	Static Pressure	.036	.063	.095	.134	.179	.230	.287	.351
	Noise Criteria	–	15	21	27	32	36	39	42
	Horizontal Throw	5-8-16	7-11-20	9-14-23	11-16-26	13-19-28	15-20-30	16-22-32	18-23-33
	Vertical Throw	3-6-12	5-8-16	6-10-20	8-12-23	9-14-26	11-16-28	12-18-30	13-20-32

**Return Section**

<b>R Models</b>	Airflow, CFM/ft.	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

**PERFORMANCE DATA**

**MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 7" (178) HIGH PLENUM (OPT.)**

**24" (610) Long with 8" Down-Blow**

<b>6" Oval Inlet</b>	Airflow, CFM	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
	Total Pressure	.050	.082	.119	.162	.209	.263	.321	.385
	Static Pressure	.043	.068	.098	.131	.168	.208	.252	.300
	Noise Criteria	–	–	23	26	29	33	37	40
	Horizontal Throw	2-4-11	4-7-14	5-9-17	7-11-20	9-13-22	10-15-24	12-17-26	13-18-27
	Vertical Throw	2-3-11	4-6-14	5-8-16	6-10-18	7-12-20	8-13-22	10-15-23	11-16-24
<b>8" Oval Inlet</b>	Airflow, CFM	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
	Total Pressure	.036	.059	.086	.118	.154	.194	.238	.287
	Static Pressure	.033	.053	.077	.104	.135	.170	.208	.249
	Noise Criteria	–	–	20	23	26	29	33	36
	Horizontal Throw	2-4-11	4-7-14	5-9-17	7-11-20	9-13-22	10-15-24	12-17-26	13-18-27
	Vertical Throw	2-3-11	4-6-14	5-8-16	6-10-18	7-12-20	8-13-22	10-15-23	11-16-24

**36" (914) Long with 12" Down-Blow**

<b>6" Oval Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.054	.093	.141	.198	.264	.340	.424	.518
	Static Pressure	.037	.062	.093	.129	.170	.217	.269	.326
	Noise Criteria	–	22	26	30	34	38	41	46
	Horizontal Throw	3-5-11	4-7-15	6-9-18	7-11-21	8-13-24	10-14-26	11-16-28	12-17-30
	Vertical Throw	2-4-11	3-6-15	5-9-19	6-11-14	8-9-16	9-10-17	11-11-19	8-11-20
<b>8" Oval Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.048	.082	.122	.170	.224	.286	.355	.430
	Static Pressure	.041	.068	.101	.139	.183	.231	.286	.345
	Noise Criteria	–	–	22	26	30	33	37	40
	Horizontal Throw	3-5-11	4-7-15	6-9-19	7-11-21	8-13-24	10-14-26	11-16-28	12-17-30
	Vertical Throw	2-4-11	3-6-15	5-9-19	6-11-14	8-9-16	9-10-17	11-11-19	8-11-20

**48" (1219) Long with 12" Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.063	.108	.164	.232	.310	.400	.501	.613
	Static Pressure	.049	.084	.127	.177	.236	.303	.379	.462
	Noise Criteria	–	20	24	28	32	36	40	43
	Horizontal Throw	7-11-20	9-14-24	11-16-27	12-19-30	14-21-32	16-23-34	17-25-36	19-26-37
	Vertical Throw	3-5-11	5-7-14	7-10-17	8-12-19	10-14-22	12-16-23	13-18-24	15-19-25
<b>10" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.047	.083	.128	.183	.248	.322	.406	.500
	Static Pressure	.039	.069	.107	.153	.207	.268	.338	.416
	Noise Criteria	–	–	21	25	29	33	37	41
	Horizontal Throw	7-11-20	9-14-24	11-16-27	12-19-30	14-21-32	16-23-34	17-25-36	19-26-37
	Vertical Throw	3-5-11	5-7-14	7-10-17	8-12-19	10-14-22	12-16-23	13-18-24	15-19-25

**60" (1524) Long with 15" Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.078	.136	.207	.292	.392	.506	.635	.778
	Static Pressure	.057	.098	.148	.207	.277	.355	.444	.542
	Noise Criteria	–	24	29	33	37	41	45	48
	Horizontal Throw	4-8-15	7-11-19	9-14-22	11-16-25	13-18-27	15-20-29	16-22-31	18-23-32
	Vertical Throw	3-5-13	5-8-16	7-11-19	9-14-22	11-16-25	13-18-27	15-20-28	16-22-29
<b>10" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.071	.123	.188	.267	.358	.462	.579	.709
	Static Pressure	.059	.102	.155	.219	.293	.377	.472	.577
	Noise Criteria	–	21	26	30	34	38	42	45
	Horizontal Throw	4-8-15	7-11-19	9-14-22	11-16-25	13-18-27	15-20-29	16-22-31	18-23-32
	Vertical Throw	3-5-13	5-8-16	7-11-19	9-14-22	11-16-25	13-18-27	15-20-28	16-22-29

**Return Section**

<b>R Models</b>	Airflow, CFM/ft.	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

**PERFORMANCE DATA**

**MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 7" (178) HIGH PLENUM (OPT.)**

**36" (914) Long with 15" Down-Blow**

<b>6" Oval Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.060	.102	.153	.213	.281	.359	.446	.541
	Static Pressure	.043	.071	.105	.144	.187	.236	.290	.349
	Noise Criteria	–	–	23	27	31	35	38	42
	Horizontal Throw	2-3-10	3-5-14	4-7-17	5-8-19	6-10-22	7-12-24	9-13-26	10-15-28
	Vertical Throw	1-3-9	2-3-10	3-4-15	4-5-18	5-7-20	6-8-22	6-9-24	7-10-25
<b>8" Oval Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.046	.078	.116	.161	.213	.271	.336	.407
	Static Pressure	.038	.064	.095	.131	.171	.217	.267	.322
	Noise Criteria	–	–	22	26	30	33	36	40
	Horizontal Throw	2-3-10	3-5-14	4-7-17	5-8-19	6-10-22	7-12-24	9-13-26	10-15-28
	Vertical Throw	1-3-9	2-3-10	3-4-15	4-5-18	5-7-20	6-8-22	6-9-24	7-10-25

**48" (1219) Long with 15" Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.057	.099	.150	.211	.281	.362	.452	.552
	Static Pressure	.044	.074	.112	.156	.207	.265	.330	.401
	Noise Criteria	–	–	23	27	31	34	38	42
	Horizontal Throw	7-10-17	9-13-21	10-15-24	12-17-27	13-19-29	15-21-31	16-23-33	17-24-34
	Vertical Throw	2-4-11	4-6-14	6-9-17	7-11-20	9-13-22	11-15-23	12-17-25	14-19-25
<b>10" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.050	.086	.131	.184	.245	.315	.394	.481
	Static Pressure	.043	.073	.110	.153	.204	.262	.326	.397
	Noise Criteria	–	–	22	26	29	33	37	40
	Horizontal Throw	7-10-17	9-13-21	10-15-24	12-17-27	13-19-29	15-21-31	16-23-33	17-24-34
	Vertical Throw	2-4-11	4-6-14	6-9-17	7-11-20	9-13-22	11-15-23	12-17-25	14-19-25

**48" (1219) Long with 18" Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.056	.096	.146	.205	.273	.350	.437	.533
	Static Pressure	.042	.072	.108	.150	.199	.254	.314	.382
	Noise Criteria	–	20	24	27	31	35	38	42
	Horizontal Throw	2-4-11	4-6-14	5-9-18	7-11-21	8-13-23	10-14-26	11-16-28	12-18-29
	Vertical Throw	2-3-7	4-4-9	3-6-12	5-7-14	5-9-15	7-9-17	7-11-19	8-12-19
<b>10" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.052	.089	.134	.188	.249	.318	.396	.482
	Static Pressure	.045	.076	.113	.157	.208	.265	.328	.398
	Noise Criteria	–	–	22	25	29	33	36	40
	Horizontal Throw	2-4-11	4-6-14	5-9-18	7-11-21	8-13-23	10-14-26	11-16-28	12-18-29
	Vertical Throw	2-3-7	4-4-9	3-6-12	5-7-14	5-9-15	7-9-17	7-11-19	8-12-19

**60" (1524) Long with 18" Down-Blow**

<b>8" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.072	.124	.189	.267	.357	.460	0.576	0.705
	Static Pressure	.051	.086	.130	.182	.242	.309	0.385	0.469
	Noise Criteria	–	23	28	32	37	40	44	48
	Horizontal Throw	7-19-17	8-14-21	10-15-24	14-18-27	14-20-29	16-22-32	18-23-34	20-25-35
	Vertical Throw	3-6-14	5-9-17	7-12-20	9-14-23	11-16-25	13-18-27	14-20-28	16-22-29
<b>10" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.064	.110	.167	.234	.312	.401	0.501	0.612
	Static Pressure	.052	.089	.134	.187	.248	.317	0.395	0.480
	Noise Criteria	–	21	25	30	34	38	42	45
	Horizontal Throw	7-19-17	8-14-21	10-15-24	14-18-27	14-20-29	16-22-32	18-23-34	20-25-35
	Vertical Throw	3-6-14	5-9-17	7-12-20	9-14-23	11-16-25	13-18-27	14-20-28	16-22-29

**Return Section**

<b>R Models</b>	Airflow, CFM/ft.	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
	Negative Static Pressure	-.010	-.018	-.027	-.038	-.050	-.063	-.079	-.098

See page C73 for performance data notes.

**PERFORMANCE DATA:**

**MODELS 59ND(I) & 59NDR(I) • HORIZONTAL/VERTICAL PATTERN • 11" (279) HIGH PLENUM (OPT.)  
24" (610) Long with 8" (203) Down-Blow**

<b>6" Round Inlet</b>	Airflow, CFM	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
	Total Pressure	.028	.050	.078	.112	.152	.199	.251	.310
	Static Pressure	.022	.039	.061	.088	.120	.157	.199	.245
	Noise Criteria	–	–	15	20	25	30	33	36
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15
<b>8" Round Inlet</b>	Airflow, CFM	<b>60</b>	<b>80</b>	<b>100</b>	<b>120</b>	<b>140</b>	<b>160</b>	<b>180</b>	<b>200</b>
	Total Pressure	.019	.034	.053	.076	.104	.136	.172	.212
	Static Pressure	.017	.031	.048	.069	.094	.123	.155	.192
	Noise Criteria	–	–	–	15	20	25	28	31
	Horizontal Throw	4-8-7	7-11-20	9-15-23	12-17-25	14-20-28	16-21-29	18-23-31	19-23-32
	Vertical Throw	1-3-7	2-4-9	3-6-10	4-7-12	5-8-13	6-9-14	7-10-14	8-11-15

**36" (914) Long with 12" (305) Down-Blow**

<b>6" Round Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.040	.070	.110	.159	.216	.282	.357	.441
	Static Pressure	.027	.047	.074	.107	.145	.190	.240	.296
	Noise Criteria	–	15	21	26	31	34	38	41
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28
<b>8" Round Inlet</b>	Airflow, CFM	<b>90</b>	<b>120</b>	<b>150</b>	<b>180</b>	<b>210</b>	<b>240</b>	<b>270</b>	<b>300</b>
	Total Pressure	.023	.040	.063	.090	.123	.160	.203	.250
	Static Pressure	.018	.033	.051	.073	.100	.131	.165	.204
	Noise Criteria	–	–	15	20	25	28	32	35
	Horizontal Throw	2-5-13	4-8-17	6-11-20	8-14-23	10-16-25	12-18-27	14-20-28	15-21-29
	Vertical Throw	2-5-12	4-7-15	6-10-18	8-12-21	9-14-23	10-16-25	12-17-27	13-19-28

**48" (1219) Long with 12" (305) Down-Blow**

<b>8" Round Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.037	.065	.102	.147	.200	.261	.331	.408
	Static Pressure	.029	.052	.082	.188	.160	.209	.264	.327
	Noise Criteria	–	16	21	25	29	33	36	39
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32
<b>10" Oval Inlet</b>	Airflow, CFM	<b>120</b>	<b>160</b>	<b>200</b>	<b>240</b>	<b>280</b>	<b>320</b>	<b>360</b>	<b>400</b>
	Total Pressure	.024	.043	.067	.097	.132	.172	.217	.268
	Static Pressure	.021	.038	.059	.084	.115	.150	.190	.235
	Noise Criteria	–	–	–	19	23	27	31	34
	Horizontal Throw	4-8-16	6-11-20	9-14-23	11-17-26	13-19-29	15-21-31	16-23-32	18-24-34
	Vertical Throw	3-6-14	5-8-17	7-11-21	8-13-24	10-16-26	12-18-29	13-20-30	15-22-32

**60" (1524) Long with 15" (381) Down-Blow**

<b>8" Round Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.039	.069	.108	.156	.213	.278	.352	.434
	Static Pressure	.028	.049	.076	.110	.150	.196	.248	.306
	Noise Criteria	–	–	20	25	30	34	37	40
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35
<b>10" Oval Inlet</b>	Airflow, CFM	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>350</b>	<b>400</b>	<b>450</b>	<b>500</b>
	Total Pressure	.026	.047	.073	.106	.144	.188	.188	.293
	Static Pressure	.022	.039	.060	.087	.118	.154	.154	.241
	Noise Criteria	–	–	–	21	26	30	33	36
	Horizontal Throw	4-6-13	5-8-17	7-11-21	8-13-24	10-15-26	11-17-28	13-19-30	14-21-31
	Vertical Throw	5-8-17	7-12-21	10-15-25	12-18-28	14-20-30	16-22-32	18-24-34	20-25-35

**Return Section**

<b>R Models</b>	Airflow, CFM/ft.	<b>30</b>	<b>40</b>	<b>50</b>	<b>60</b>	<b>70</b>	<b>80</b>	<b>90</b>	<b>100</b>
	Negative Static Pressure	–.010	–.018	–.027	–.038	–.050	–.063	–.079	–.098

See page C73 for performance data notes.

PLENUM SLOT AND LIGHT TROFFER DIFFUSERS

## PERFORMANCE DATA NOTES:

### Model Series 5700

#### Performance Data Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.
2. All pressures are in inches w.g..
3. 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.
4. Noise Criteria [NC] values are based on a room absorption of 10 dB, re 10<sup>-12</sup> watts. Dash (–) in space denotes an Noise Criteria level less than 15.
5. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 – 2023.

### Models 59ND(I),59NDR(I)

#### 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 inches w.g.
3. Noise Criteria (values) based on 10 dB room absorption, re 10<sup>-12</sup> watts.
4. Dash ( — ) in space indicates an NC level of less than 15.
5. Tested with one-way fixed horizontal discharge in the direction of the inlet and center down-blow deflector full open. Straight flexible duct connection.
6. Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70–2023.