

	<p>180/5180 180M/5180M These supply grilles feature individually adjustable curved blades. Available in steel or aluminum construction.</p>		<p>4880 This heavy duty, double deflection, supply grille features 1/2" front and 3/4" back blade spacing. Available in steel construction only.</p>
	<p>80/580 These single deflection supply grilles feature 3/4" blade spacing. Available in steel or aluminum construction.</p>		<p>800/5800 These single deflection, steel supply registers feature a gang-operated rear louver and 3/4" blade spacing. Available in steel or aluminum construction.</p>
	<p>585 This single deflection supply grille features 1/2" blade spacing. Available in aluminum construction only.</p>		<p>AF80/AF580 These single deflection, supply grilles feature airfoil blades at 3/4" spacing. Blades are aluminum construction only with steel or aluminum frame.</p>
	<p>880/5880 These double deflection supply grilles feature 3/4" blade spacing. Available in steel or aluminum construction.</p>		<p>AF880/AF5880 These double deflection, supply grilles feature airfoil blades at 3/4" spacing. Blades are aluminum construction only with steel or aluminum frame.</p>
	<p>5885 This double deflection supply grille features 1/2" blade spacing. Available in aluminum construction only.</p>		<p>5815 This fixed-blade supply grille features a removable, reversible core. Deflection may be set at 5° or 15° up/down. Available in aluminum construction only.</p>
	<p>480 This heavy duty, single deflection, supply grille features 1/2" blade spacing. Available in steel construction only.</p>		

180, 5180, 180M, 5180M

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 Performance Data.....I1-6
 Engineering SpecificationI1-24

80, 580, 880, 5880, 585, 5885, 480, 4880, 800, 5800

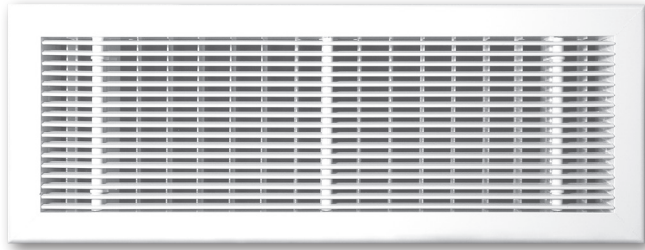
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AF80, AF580, AF880, AF5880

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5815

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 Performance Data.....I1-67
 Engineering SpecificationI1-75



5815

Introduction: 5815

The 5815 series removable, reversible core supply grille feature fixed front blades and adjustable rear blades. The front blades are spaced 1/4" apart and designed with 15° deflection on one side and 5° deflection on the other. Removing and rotating the core allows for fixed 15° and 5° up or down deflection settings. The rear blades are adjusted to set the spread of the discharge air. The 5815 grille is mounted by removing the core and attaching the neck of the frame to the duct work resulting in a clean installation with hidden screws. These grilles are an excellent choice for applications that require an architectural quality supply grille.

ACCESSORIES

- Steel Opposed Blade Damper (Model OBD)
- Steel Painted Opposed Blade Damper (Model POBD)
- Aluminum Opposed Blade Damper (Model 5OBD)

MODEL

5815 - Fixed Blade, Removable, Reversible Core, Aluminum Supply Grille

FEATURES

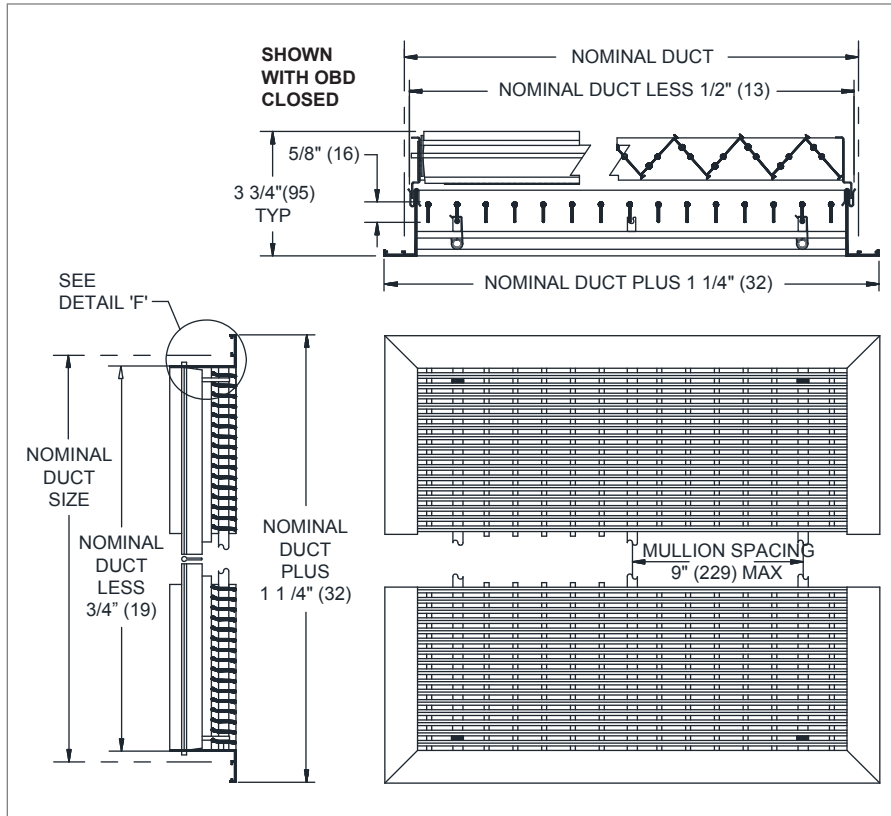
- Adjustable rear deflection blades.
- 5° Up or down deflection.
- 15° Up or down deflection.
- Concealed mounting.

FINISHES

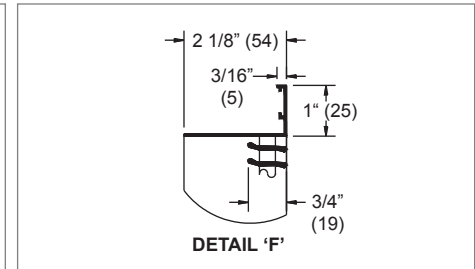
- Standard finish is #44 British White.
- Optional finishes available.

5815 Dimensional Information

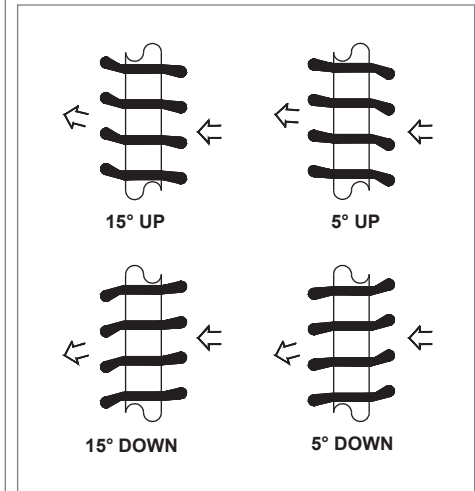
5815, FACE VIEW, SIDE VIEW, & CROSS SECTION



5815, FRAME DETAILS



5815, CORE ADJUSTMENT



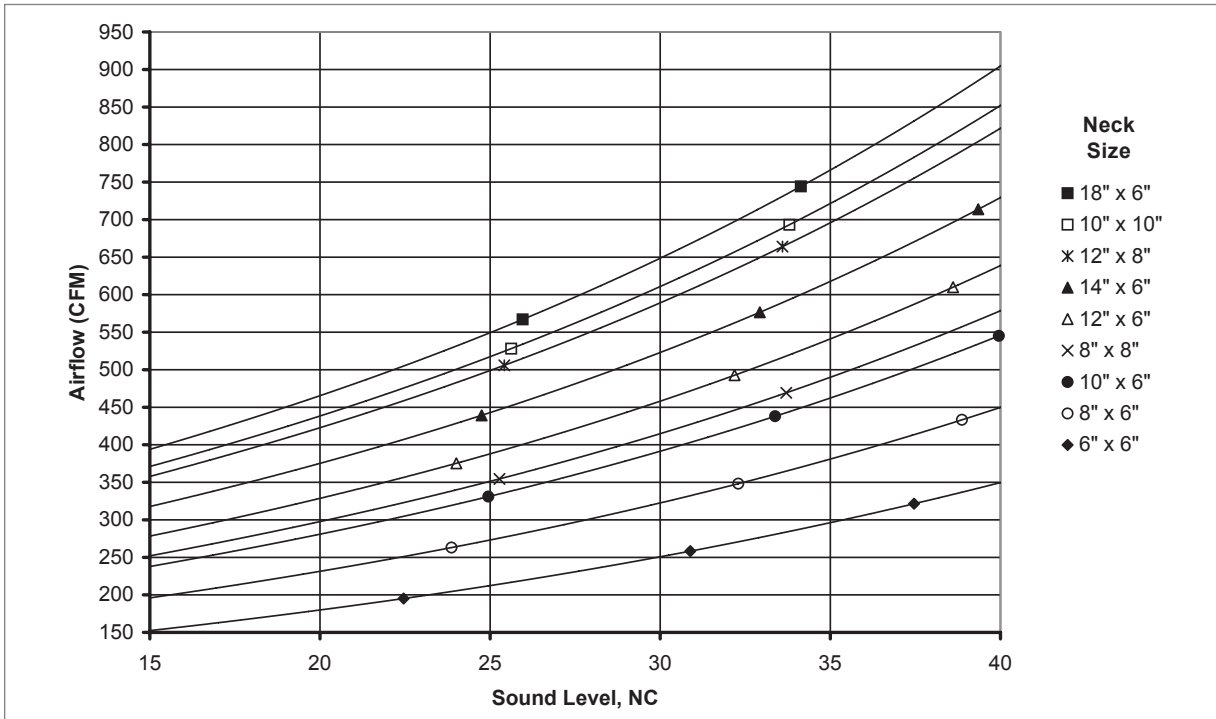
NOTE: Dimensions in parentheses are mm.

SUPPLY GRILLES

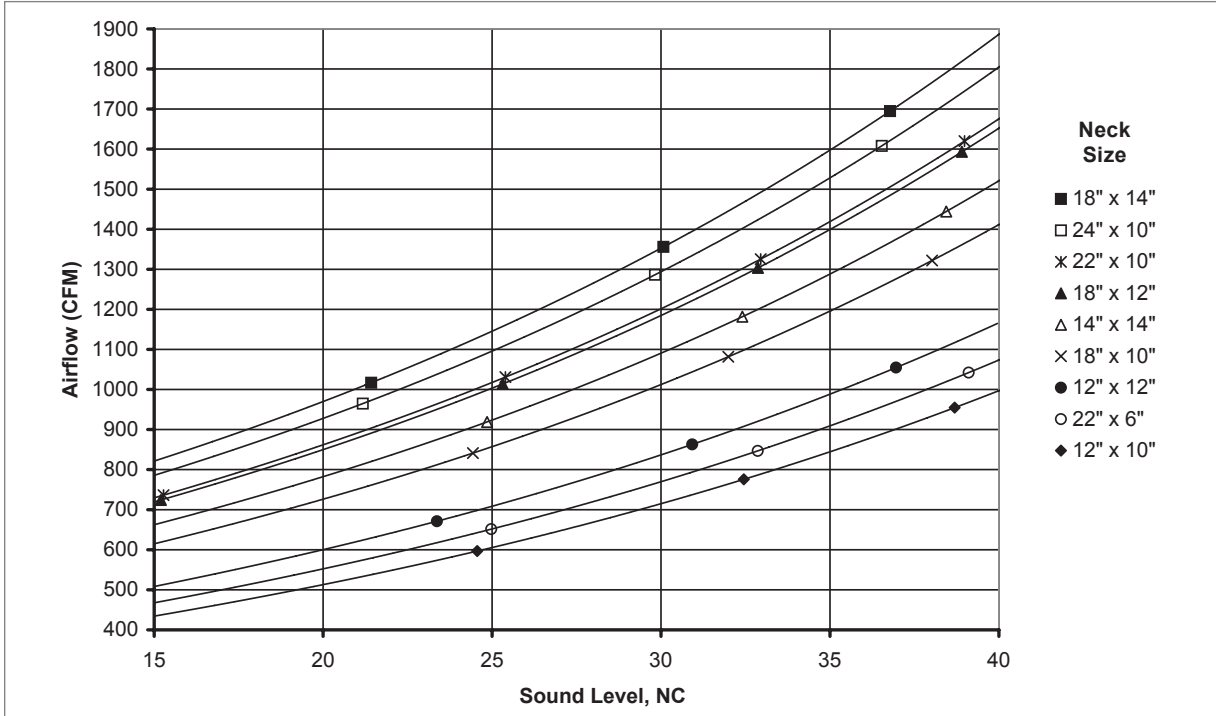
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5815 Reference Charts

AIRFLOW VS. NC: 5815 (NO DAMPER)

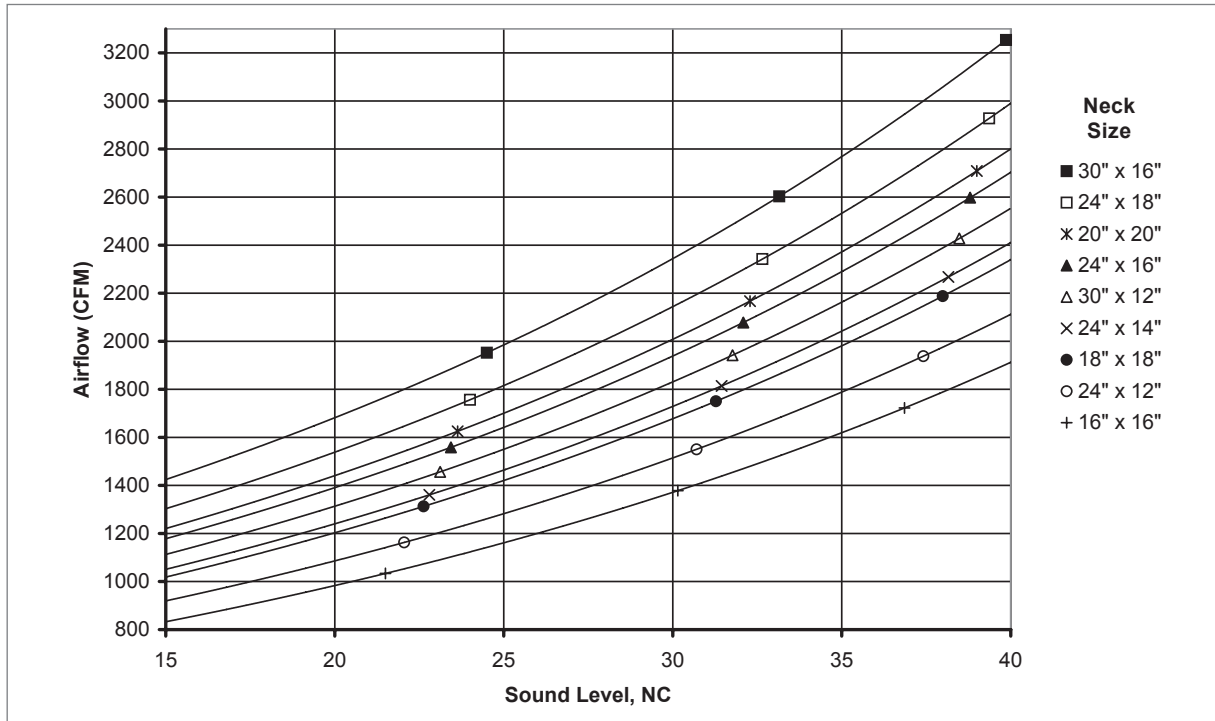


AIRFLOW VS. NC: 5815 (NO DAMPER)

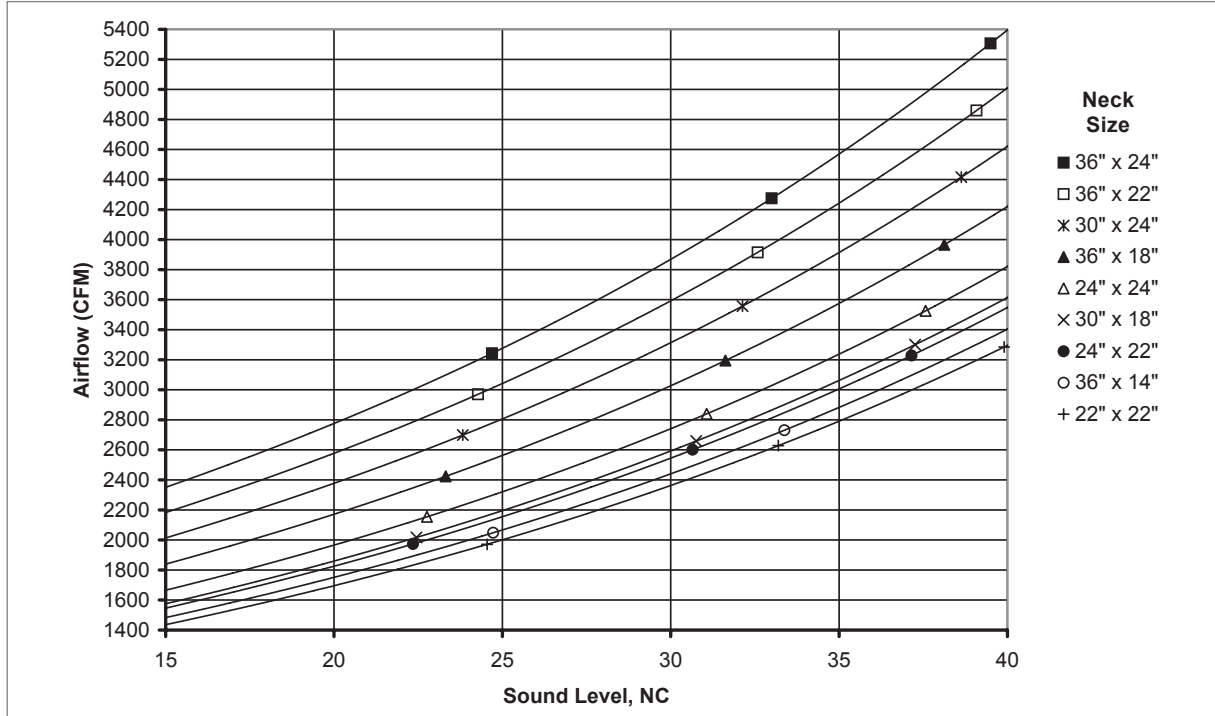


5815 Reference Charts

AIRFLOW VS. NC: 5815 (NO DAMPER)



AIRFLOW VS. NC: 5815 (NO DAMPER)



SUPPLY GRILLES

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5815 Performance Data: Horizontal Throw

IP DATA: 5815 (NO DAMPER)

Nom Duct	Duct Area	Neck Vel	Air Flow	0°		22.5°		45°		NC	Octave Band, dB					
				Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7
				"WG	ft	"WG	ft	"WG	ft							
6" x 6"	0.25	300	69	.016	3 - 7 - 14	.018	3 - 6 - 11	.019	2 - 3 - 6	-	12	14	-	-	-	-
		575	132	.058	9 - 14 - 21	.065	7 - 11 - 16	.070	4 - 6 - 10	11	25	28	27	22	15	-
		850	195	.127	14 - 18 - 26	.141	11 - 14 - 20	.154	6 - 8 - 12	22	34	36	36	33	30	21
		1125	258	.223	17 - 21 - 30	.247	13 - 16 - 23	.269	8 - 9 - 13	31	39	42	43	42	40	32
8" x 6"	0.33	300	93	.016	4 - 8 - 17	.018	3 - 6 - 13	.019	2 - 4 - 8	-	13	15	11	-	-	-
		575	178	.058	11 - 16 - 25	.065	8 - 12 - 19	.070	5 - 7 - 11	12	27	29	28	23	16	-
		850	263	.127	16 - 21 - 30	.141	12 - 16 - 23	.154	7 - 9 - 13	24	35	37	38	35	31	22
		1125	348	.223	20 - 24 - 34	.247	15 - 19 - 27	.269	9 - 11 - 15	32	41	44	45	43	41	33
10" x 6"	0.42	300	117	.016	4 - 9 - 19	.018	3 - 7 - 15	.019	2 - 4 - 8	-	14	16	12	-	-	-
		575	224	.058	12 - 18 - 28	.065	9 - 14 - 21	.070	5 - 8 - 12	13	28	30	29	24	17	-
		850	331	.127	18 - 24 - 33	.141	14 - 18 - 26	.154	8 - 11 - 15	25	36	38	39	36	32	23
		1125	438	.223	22 - 27 - 38	.247	17 - 21 - 30	.269	10 - 12 - 17	33	42	45	46	44	42	34
8" x 8"	0.44	300	125	.016	5 - 10 - 19	.018	4 - 8 - 15	.019	2 - 4 - 9	-	14	16	13	-	-	-
		575	240	.058	12 - 19 - 28	.065	10 - 14 - 22	.070	6 - 8 - 13	14	28	30	29	24	18	-
		850	355	.127	18 - 24 - 35	.141	14 - 19 - 27	.154	8 - 11 - 16	25	36	39	39	36	32	24
		1125	469	.223	23 - 28 - 40	.247	18 - 22 - 31	.269	10 - 13 - 18	34	42	45	46	45	43	34
12" x 6"	0.50	300	141	.016	5 - 10 - 21	.018	4 - 8 - 16	.019	2 - 5 - 9	-	15	17	13	-	-	-
		550	258	.053	13 - 19 - 30	.059	10 - 15 - 23	.064	6 - 8 - 13	13	28	30	29	23	17	-
		800	375	.113	18 - 25 - 36	.125	14 - 20 - 28	.136	8 - 11 - 16	24	35	38	38	35	30	22
		1050	493	.195	24 - 29 - 41	.215	18 - 22 - 32	.234	11 - 13 - 18	32	41	44	45	43	41	32
14" x 6"	0.58	300	165	.016	5 - 11 - 22	.018	4 - 9 - 17	.019	2 - 5 - 10	-	16	17	14	-	-	-
		550	302	.053	14 - 20 - 32	.059	11 - 16 - 25	.064	6 - 9 - 14	13	28	31	29	24	17	-
		800	439	.113	20 - 27 - 39	.125	15 - 21 - 30	.136	9 - 12 - 17	25	36	39	39	35	31	22
		1050	576	.195	25 - 31 - 44	.215	20 - 24 - 34	.234	11 - 14 - 20	33	42	45	46	44	41	33
12" x 8"	0.67	300	190	.016	6 - 12 - 24	.018	4 - 9 - 18	.019	3 - 5 - 11	-	16	18	15	-	-	-
		550	348	.053	15 - 22 - 34	.059	11 - 17 - 27	.064	7 - 10 - 15	14	29	31	30	25	18	-
		800	506	.113	21 - 29 - 41	.125	16 - 23 - 32	.136	10 - 13 - 19	25	37	39	39	36	32	23
		1050	664	.195	27 - 33 - 47	.215	21 - 26 - 37	.234	12 - 15 - 21	34	42	45	46	44	42	34
10" x 10"	0.69	300	198	.016	6 - 12 - 24	.018	5 - 9 - 19	.019	3 - 5 - 11	-	16	18	15	-	-	-
		550	363	.053	15 - 22 - 35	.059	12 - 17 - 27	.064	7 - 10 - 16	14	29	31	30	25	18	-
		800	528	.113	22 - 30 - 42	.125	17 - 23 - 33	.136	10 - 13 - 19	26	37	39	39	36	32	23
		1050	693	.195	28 - 34 - 48	.215	22 - 27 - 38	.234	13 - 15 - 22	34	43	45	46	44	42	34
18" x 6"	0.75	300	213	.016	6 - 13 - 25	.018	5 - 10 - 20	.019	3 - 6 - 11	-	17	18	15	-	-	-
		550	390	.053	15 - 23 - 36	.059	12 - 18 - 28	.064	7 - 10 - 16	15	29	32	30	25	18	-
		800	567	.113	22 - 31 - 44	.125	17 - 24 - 34	.136	10 - 14 - 20	26	37	40	40	37	32	24
		1050	744	.195	29 - 35 - 50	.215	22 - 27 - 39	.234	13 - 16 - 23	34	43	46	47	45	42	34
12" x 10"	0.83	300	239	.016	6 - 13 - 27	.018	5 - 10 - 21	.019	3 - 6 - 12	-	17	19	16	-	-	-
		525	418	.049	16 - 23 - 38	.054	12 - 18 - 29	.059	7 - 11 - 17	14	29	31	30	24	17	-
		750	597	.099	22 - 32 - 45	.110	17 - 25 - 35	.120	10 - 14 - 20	25	36	39	39	35	30	22
		975	776	.168	29 - 36 - 51	.186	22 - 28 - 40	.202	13 - 16 - 23	32	42	45	45	43	40	32
22" x 6"	0.92	300	261	.016	7 - 14 - 28	.018	5 - 11 - 22	.019	3 - 6 - 13	-	18	19	16	-	-	-
		525	456	.049	16 - 24 - 39	.054	13 - 19 - 30	.059	7 - 11 - 18	14	29	31	30	25	18	-
		750	651	.099	23 - 33 - 47	.110	18 - 26 - 36	.120	10 - 15 - 21	25	37	39	39	35	31	22
		975	847	.168	30 - 38 - 53	.186	23 - 29 - 41	.202	14 - 17 - 24	33	42	45	46	43	40	32
22" x 6"	0.92	1200	1042	.254	34 - 42 - 59	.281	27 - 33 - 46	.306	15 - 19 - 27	39	46	49	51	50	48	40

SUPPLY GRILLES

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NOTE: See notes on page I1-70.

5815 Performance Data: Horizontal Throw

IP DATA: 5815 (NO DAMPER)

Nom Duct	Duct Area	Neck Vel	Air Flow	0°		22.5°		45°		NC	Octave Band, dB					
				Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7
				"WG	ft	"WG	ft	"WG	ft							
12" x 12"	1.00	300	288	.016	7 - 15 - 29	.018	5 - 11 - 23	.019	3 - 7 - 13	-	18	20	16	-	-	-
		500	479	.044	16 - 24 - 40	.049	13 - 19 - 31	.053	7 - 11 - 18	13	29	31	29	24	16	-
		700	671	.086	23 - 34 - 48	.096	18 - 26 - 37	.104	10 - 15 - 21	23	36	38	38	34	29	20
		900	863	.143	29 - 38 - 54	.158	23 - 30 - 42	.172	13 - 17 - 24	31	41	44	44	41	38	29
		1100	1055	.213	34 - 42 - 60	.236	27 - 33 - 46	.257	16 - 19 - 27	37	45	48	49	48	45	37
18" x 10"	1.25	300	361	.016	8 - 16 - 33	.018	6 - 13 - 25	.019	4 - 7 - 15	-	19	21	17	-	-	-
		500	601	.044	18 - 27 - 45	.049	14 - 21 - 35	.053	8 - 12 - 20	14	30	32	30	25	17	-
		700	841	.086	26 - 38 - 53	.096	20 - 29 - 41	.104	12 - 17 - 24	24	37	39	39	35	30	21
		900	1082	.143	33 - 43 - 60	.158	25 - 33 - 47	.172	15 - 19 - 27	32	42	45	45	42	39	30
		1100	1322	.213	39 - 47 - 67	.236	30 - 37 - 52	.257	17 - 21 - 30	38	46	49	50	48	46	38
14" x 14"	1.36	300	394	.016	8 - 17 - 34	.018	6 - 13 - 27	.019	4 - 8 - 15	-	19	21	18	-	-	-
		500	656	.044	19 - 29 - 47	.049	15 - 22 - 37	.053	9 - 13 - 21	15	30	32	31	25	18	-
		700	919	.086	27 - 39 - 56	.096	21 - 31 - 43	.104	12 - 18 - 25	25	37	40	39	35	30	21
		900	1182	.143	34 - 45 - 63	.158	27 - 35 - 49	.172	15 - 20 - 28	32	42	45	45	43	39	31
		1100	1444	.213	40 - 49 - 70	.236	31 - 38 - 54	.257	18 - 22 - 31	38	46	49	50	49	47	39
18" x 12"	1.50	300	435	.016	9 - 18 - 36	.018	7 - 14 - 28	.019	4 - 8 - 16	-	20	22	18	-	-	-
		500	724	.044	20 - 30 - 49	.049	16 - 23 - 38	.053	9 - 14 - 22	15	30	33	31	25	18	-
		700	1014	.086	28 - 41 - 59	.096	22 - 32 - 45	.104	13 - 19 - 26	25	37	40	40	36	30	22
		900	1304	.143	36 - 47 - 66	.158	28 - 36 - 51	.172	16 - 21 - 30	33	43	45	46	43	40	31
		1100	1593	.213	42 - 52 - 73	.236	33 - 40 - 57	.257	19 - 23 - 33	39	47	50	51	49	47	39
22" x 10"	1.53	300	442	.016	9 - 18 - 36	.018	7 - 14 - 28	.019	4 - 8 - 16	-	20	22	18	-	-	-
		500	736	.044	20 - 30 - 50	.049	16 - 24 - 39	.053	9 - 14 - 22	15	31	33	31	25	18	-
		700	1031	.086	28 - 42 - 59	.096	22 - 32 - 46	.104	13 - 19 - 27	25	38	40	40	36	31	22
		900	1325	.143	36 - 47 - 67	.158	28 - 37 - 52	.172	16 - 21 - 30	33	43	45	46	43	40	31
		1100	1620	.213	43 - 52 - 74	.236	33 - 41 - 57	.257	19 - 24 - 33	39	47	50	51	49	47	39
24" x 10"	1.67	200	322	.007	4 - 9 - 25	.008	3 - 7 - 20	.009	2 - 4 - 11	-	12	13	-	-	-	-
		400	643	.028	16 - 25 - 47	.031	13 - 20 - 36	.034	7 - 11 - 21	-	26	28	26	19	-	-
		600	965	.064	25 - 38 - 57	.070	20 - 29 - 44	.077	11 - 17 - 26	21	35	37	36	31	25	16
		800	1286	.113	34 - 47 - 66	.125	26 - 36 - 51	.136	15 - 21 - 30	30	41	43	43	40	36	27
		1000	1608	.176	42 - 52 - 74	.195	33 - 40 - 57	.213	19 - 23 - 33	37	45	48	49	47	44	36
18" x 14"	1.75	200	339	.007	4 - 9 - 26	.008	3 - 7 - 20	.009	2 - 4 - 12	-	12	13	-	-	-	-
		400	678	.028	17 - 26 - 48	.031	13 - 20 - 37	.034	7 - 12 - 22	-	26	28	26	19	-	-
		600	1017	.064	26 - 39 - 59	.070	20 - 30 - 45	.077	12 - 18 - 26	21	35	37	36	32	25	16
		800	1356	.113	35 - 48 - 68	.125	27 - 37 - 52	.136	16 - 22 - 30	30	41	44	44	40	36	27
		1000	1695	.176	43 - 54 - 76	.195	34 - 41 - 59	.213	20 - 24 - 34	37	46	48	49	47	44	36
16" x 16"	1.78	200	345	.007	4 - 9 - 26	.008	3 - 7 - 20	.009	2 - 4 - 12	-	12	14	-	-	-	-
		400	689	.028	17 - 26 - 48	.031	13 - 20 - 37	.034	8 - 12 - 22	-	27	29	26	19	11	-
		600	1034	.064	26 - 39 - 59	.070	20 - 31 - 46	.077	12 - 18 - 27	21	35	37	36	32	26	16
		800	1378	.113	35 - 48 - 68	.125	27 - 37 - 53	.136	16 - 22 - 31	30	41	44	44	40	36	27
		1000	1723	.176	44 - 54 - 76	.195	34 - 42 - 59	.213	20 - 24 - 34	37	46	48	49	47	44	36
24" x 12"	2.00	200	388	.007	4 - 10 - 28	.008	3 - 8 - 22	.009	2 - 5 - 13	-	13	14	-	-	-	-
		400	775	.028	18 - 28 - 51	.031	14 - 22 - 40	.034	8 - 13 - 23	-	27	29	27	20	11	-
		600	1163	.064	28 - 42 - 63	.070	22 - 32 - 49	.077	13 - 19 - 28	22	36	38	37	32	26	17
		800	1550	.113	37 - 51 - 72	.125	29 - 40 - 56	.136	17 - 23 - 33	31	42	44	44	41	37	28
		1000	1938	.176	46 - 57 - 81	.195	36 - 44 - 63	.213	21 - 26 - 36	37	46	49	50	48	45	37
18" x 18"	2.25	200	438	.007	5 - 11 - 30	.008	4 - 8 - 23	.009	2 - 5 - 13	-	13	15	-	-	-	-
		400	875	.028	19 - 30 - 54	.031	15 - 23 - 42	.034	9 - 13 - 24	-	28	30	27	20	12	-
		600	1313	.064	30 - 44 - 67	.070	23 - 34 - 52	.077	13 - 20 - 30	23	36	38	37	33	27	17
		800	1750	.113	39 - 54 - 77	.125	31 - 42 - 60	.136	18 - 24 - 35	31	42	45	45	41	37	28
		1000	2188	.176	49 - 61 - 86	.195	38 - 47 - 67	.213	22 - 27 - 39	38	47	50	50	48	45	37
24" x 14"	2.33	200	454	.007	5 - 11 - 30	.008	4 - 8 - 23	.009	2 - 5 - 14	-	13	15	-	-	-	-
		400	907	.028	19 - 30 - 55	.031	15 - 23 - 43	.034	9 - 14 - 25	11	28	30	27	21	12	-
		600	1361	.064	30 - 45 - 68	.070	23 - 35 - 53	.077	14 - 20 - 31	23	36	39	38	33	27	18
		800	1814	.113	40 - 55 - 78	.125	31 - 43 - 61	.136	18 - 25 - 35	31	42	45	45	42	37	29
		1000	2268	.176	50 - 62 - 88	.195	39 - 48 - 68	.213	23 - 28 - 39	38	47	50	50	48	46	37

NOTE: See notes on page I1-70.

SUPPLY GRILLES

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5815 Performance Data: Horizontal Throw
IP DATA: 5815 (NO DAMPER)

Nom Duct	Duct Area	Neck Vel	Air Flow	0°		22.5°		45°		NC	Octave Band, dB						
				Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7	
in	ft ²	FPM	CFM	"WG	ft	"WG	ft	"WG	ft								
30" x 12"	2.50	200	486	.007	5 - 11 - 31	.008	4 - 9 - 24	.009	2 - 5 - 14	-	14	15	-	-	-	-	
		400	971	.028	20 - 31 - 57	.031	15 - 24 - 44	.034	9 - 14 - 26	11	28	30	28	21	12	-	
		600	1457	.064	31 - 47 - 70	.070	24 - 36 - 54	.077	14 - 21 - 32	23	37	39	38	33	27	18	
		800	1942	.113	42 - 57 - 81	.125	32 - 44 - 63	.136	19 - 26 - 36	32	42	45	45	42	38	29	
		1000	2428	.176	52 - 64 - 91	.195	40 - 50 - 70	.213	23 - 29 - 41	38	47	50	51	49	46	38	
24" x 16"	2.67	200	520	.007	5 - 12 - 32	.008	4 - 9 - 25	.009	2 - 5 - 15	-	14	15	11	-	-	-	
		400	1039	.028	21 - 32 - 59	.031	16 - 25 - 46	.034	9 - 15 - 27	11	28	30	28	21	12	-	
		600	1559	.064	32 - 48 - 73	.070	25 - 37 - 56	.077	15 - 22 - 33	23	37	39	38	33	27	18	
		800	2078	.113	43 - 59 - 84	.125	33 - 46 - 65	.136	19 - 27 - 38	32	43	45	45	42	38	29	
		1000	2598	.176	54 - 66 - 94	.195	42 - 51 - 73	.213	24 - 30 - 42	39	47	50	51	49	46	38	
20" x 20"	2.78	200	542	.007	5 - 12 - 33	.008	4 - 9 - 26	.009	2 - 5 - 15	-	14	15	11	-	-	-	
		400	1084	.028	21 - 33 - 61	.031	16 - 26 - 47	.034	9 - 15 - 27	11	29	31	28	21	13	-	
		600	1625	.064	33 - 49 - 74	.070	26 - 38 - 57	.077	15 - 22 - 33	24	37	39	38	34	27	18	
		800	2167	.113	44 - 61 - 86	.125	34 - 47 - 66	.136	20 - 27 - 39	32	43	46	46	42	38	29	
		1000	2709	.176	55 - 68 - 96	.195	43 - 52 - 74	.213	25 - 30 - 43	39	48	50	51	49	46	38	
24" x 18"	3.00	200	586	.007	5 - 12 - 34	.008	4 - 10 - 27	.009	2 - 6 - 15	-	14	16	11	-	-	-	
		400	1171	.028	22 - 34 - 63	.031	17 - 27 - 49	.034	10 - 15 - 28	12	29	31	28	22	13	-	
		600	1757	.064	34 - 51 - 77	.070	27 - 40 - 60	.077	15 - 23 - 35	24	37	40	39	34	28	19	
		800	2342	.113	46 - 63 - 89	.125	35 - 49 - 69	.136	21 - 28 - 40	33	43	46	46	43	38	30	
		1000	2928	.176	57 - 70 - 99	.195	44 - 55 - 77	.213	26 - 32 - 45	39	48	51	52	49	47	38	
30" x 16"	3.33	200	651	.007	6 - 13 - 36	.008	4 - 10 - 28	.009	3 - 6 - 16	-	15	16	11	-	-	-	
		400	1302	.028	23 - 36 - 66	.031	18 - 28 - 51	.034	10 - 16 - 30	12	29	31	29	22	13	-	
		600	1952	.064	36 - 54 - 81	.070	28 - 42 - 63	.077	16 - 24 - 37	25	38	40	39	34	28	19	
		800	2603	.113	48 - 66 - 94	.125	37 - 51 - 73	.136	22 - 30 - 42	33	44	46	46	43	39	30	
		1000	3254	.176	60 - 74 - 105	.195	47 - 57 - 81	.213	27 - 33 - 47	40	48	51	52	50	47	39	
22" x 22"	3.36	200	657	.007	6 - 13 - 36	.008	4 - 10 - 28	.009	3 - 6 - 16	-	15	16	12	-	-	-	
		400	1314	.028	23 - 36 - 67	.031	18 - 28 - 52	.034	10 - 16 - 30	12	29	31	29	22	13	-	
		600	1971	.064	36 - 54 - 82	.070	28 - 42 - 63	.077	16 - 24 - 37	25	38	40	39	34	28	19	
		800	2628	.113	48 - 67 - 94	.125	37 - 52 - 73	.136	22 - 30 - 42	33	44	46	46	43	39	30	
		1000	3285	.176	60 - 75 - 105	.195	47 - 58 - 82	.213	27 - 34 - 47	40	48	51	52	50	47	39	
36" x 14"	3.50	200	683	.007	6 - 13 - 37	.008	5 - 10 - 29	.009	3 - 6 - 17	-	15	16	12	-	-	-	
		400	1365	.028	24 - 37 - 68	.031	18 - 29 - 53	.034	11 - 17 - 31	13	30	32	29	22	14	-	
		600	2048	.064	37 - 55 - 83	.070	29 - 43 - 64	.077	17 - 25 - 37	25	38	40	39	35	28	19	
		800	2731	.113	49 - 68 - 96	.125	38 - 53 - 74	.136	22 - 31 - 43	33	44	47	47	43	39	30	
		1000	3414	.176	62 - 76 - 107	.195	48 - 59 - 83	.213	28 - 34 - 48	40	49	51	52	50	47	39	
24" x 22"	3.67	200	717	.007	6 - 14 - 38	.008	5 - 11 - 29	.009	3 - 6 - 17	-	15	17	12	-	-	-	
		375	1345	.025	21 - 36 - 67	.027	17 - 28 - 52	.030	10 - 16 - 30	11	28	30	28	21	11	-	
		550	1973	.053	35 - 52 - 82	.059	27 - 40 - 63	.064	16 - 23 - 37	22	36	39	37	32	25	16	
		725	2601	.093	46 - 66 - 94	.103	35 - 51 - 73	.112	21 - 30 - 42	31	42	45	44	41	36	27	
		900	3229	.143	57 - 74 - 104	.158	44 - 57 - 81	.172	26 - 33 - 47	37	47	49	50	47	44	35	
30" x 18"	3.75	200	733	.007	6 - 14 - 38	.008	5 - 11 - 30	.009	3 - 6 - 17	-	15	17	12	-	-	-	
		375	1375	.025	22 - 36 - 68	.027	17 - 28 - 53	.030	10 - 16 - 31	11	28	30	28	21	11	-	
		550	2017	.053	35 - 53 - 83	.059	27 - 41 - 64	.064	16 - 24 - 37	22	36	39	37	32	26	16	
		725	2659	.093	46 - 67 - 95	.103	36 - 52 - 73	.112	21 - 30 - 43	31	42	45	44	41	36	27	
		900	3300	.143	57 - 75 - 106	.158	45 - 58 - 82	.172	26 - 34 - 48	37	47	49	50	47	44	35	
24" x 24"	4.00	200	783	.007	6 - 14 - 40	.008	5 - 11 - 31	.009	3 - 6 - 18	-	16	17	12	-	-	-	
		375	1469	.025	22 - 37 - 70	.027	17 - 29 - 55	.030	10 - 17 - 32	11	29	31	28	21	12	-	
		550	2154	.053	36 - 54 - 85	.059	28 - 42 - 66	.064	16 - 24 - 38	23	37	39	38	33	26	17	
		725	2840	.093	48 - 69 - 98	.103	37 - 54 - 76	.112	22 - 31 - 44	31	43	45	45	41	36	27	
		900	3525	.143	59 - 77 - 109	.158	46 - 60 - 85	.172	27 - 35 - 49	38	47	50	50	48	44	36	
36" x 18"	4.50	200	881	.007	7 - 15 - 42	.008	5 - 12 - 33	.009	3 - 7 - 19	-	16	18	13	-	-	-	
		375	1653	.025	24 - 39 - 75	.027	18 - 31 - 58	.030	11 - 18 - 34	12	29	31	29	21	12	-	
		550	2424	.053	38 - 58 - 91	.059	30 - 45 - 70	.064	17 - 26 - 41	23	37	40	38	33	26	17	
		725	3195	.093	51 - 73 - 104	.103	39 - 57 - 81	.112	23 - 33 - 47	32	43	46	45	41	37	28	
		900	3966	.143	63 - 82 - 116	.158	49 - 63 - 90	.172	28 - 37 - 52	38	48	50	51	48	45	36	

SUPPLY GRILLES

5 8 1 5

NOTE: See notes on page I1-70.

5815 Performance Data: Horizontal Throw

IP DATA: 5815 (NO DAMPER)

Nom Duct	Duct Area	Neck Vel	Air Flow	0°		22.5°		45°		NC	Octave Band, dB					
				Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7
in	ft²	FPM	CFM	"WG	ft	"WG	ft	"WG	ft							
30" x 24"	5.00	200	981	.007	7 - 16 - 44	.008	5 - 12 - 34	.009	3 - 7 - 20	-	17	18	13	-	-	-
		375	1840	.025	25 - 42 - 79	.027	19 - 32 - 61	.030	11 - 19 - 35	12	30	32	29	22	13	-
		550	2699	.053	41 - 61 - 96	.059	31 - 47 - 74	.064	18 - 27 - 43	24	38	40	39	34	27	18
		725	3557	.093	54 - 78 - 110	.103	41 - 60 - 85	.112	24 - 35 - 49	32	44	46	46	42	37	28
		900	4416	.143	66 - 86 - 122	.158	52 - 67 - 95	.172	30 - 39 - 55	39	48	51	51	49	45	37
36" x 22"	5.50	200	1080	.007	7 - 17 - 46	.008	6 - 13 - 36	.009	3 - 8 - 21	-	17	18	14	-	-	-
		375	2025	.025	26 - 44 - 83	.027	20 - 34 - 64	.030	12 - 20 - 37	13	30	32	30	22	13	-
		550	2970	.053	43 - 64 - 100	.059	33 - 50 - 78	.064	19 - 29 - 45	24	38	40	39	34	27	18
		725	3915	.093	56 - 81 - 115	.103	44 - 63 - 89	.112	25 - 37 - 52	33	44	46	46	42	37	29
		900	4860	.143	70 - 91 - 128	.158	54 - 70 - 99	.172	31 - 41 - 58	39	48	51	52	49	45	37
36" x 24"	6.00	200	1179	.007	8 - 17 - 49	.008	6 - 14 - 38	.009	3 - 8 - 22	-	17	19	14	-	-	-
		375	2211	.025	27 - 46 - 86	.027	21 - 35 - 67	.030	12 - 20 - 39	13	31	33	30	23	13	-
		550	3243	.053	45 - 67 - 105	.059	35 - 52 - 81	.064	20 - 30 - 47	25	39	41	40	34	28	18
		725	4275	.093	59 - 85 - 120	.103	45 - 66 - 93	.112	26 - 38 - 54	33	44	47	47	43	38	29
		900	5307	.143	73 - 95 - 134	.158	56 - 73 - 104	.172	33 - 43 - 60	39	49	52	52	49	46	37

NOTES: Throw values are given for terminal velocities of 150, 100, and 50 FPM. Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See Krueger's selection software for performance data not shown, including octave band data.

SUPPLY GRILLES

5815 Performance Data: Horizontal Throw
METRIC DATA: 5815 (NO DAMPER)

Nom Duct	Duct Area	Neck Vel	Air Flow	0°		22.5°		45°		NC	Octave Band, dB					
				Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7
				Pa	m	Pa	m	Pa	m							
152 x 152	0.02	1.52	33	4.0	1.0 - 2.2 - 4.4	4.4	0.8 - 1.7 - 3.4	4.8	0.5 - 1.0 - 2.0	-	12	14	-	-	-	-
		2.92	62	14.5	2.8 - 4.2 - 6.4	16.1	2.2 - 3.2 - 5.0	17.5	1.3 - 1.9 - 2.9	11	25	28	27	22	15	-
		4.32	92	31.7	4.1 - 5.5 - 7.8	35.1	3.2 - 4.3 - 6.1	38.2	1.9 - 2.5 - 3.5	22	34	36	36	33	30	21
		5.72	122	55.6	5.2 - 6.4 - 9.0	61.5	4.0 - 4.9 - 7.0	67.0	2.3 - 2.9 - 4.0	31	39	42	43	42	40	32
		7.11	152	86.1	5.8 - 7.1 - 10.0	95.2	4.5 - 5.5 - 7.8	103.8	2.6 - 3.2 - 4.5	37	44	47	49	49	48	40
203 x 152	0.03	1.52	44	4.0	1.2 - 2.5 - 5.1	4.4	0.9 - 2.0 - 3.9	4.8	0.5 - 1.1 - 2.3	-	13	15	11	-	-	-
		2.92	84	14.5	3.2 - 4.9 - 7.5	16.1	2.5 - 3.8 - 5.8	17.5	1.5 - 2.2 - 3.4	12	27	29	28	23	16	-
		4.32	124	31.7	4.8 - 6.4 - 9.1	35.1	3.7 - 5.0 - 7.0	38.2	2.2 - 2.9 - 4.1	24	35	37	38	35	31	22
		5.72	164	55.6	6.0 - 7.4 - 10.4	61.5	4.7 - 5.7 - 8.1	67.0	2.7 - 3.3 - 4.7	32	41	44	45	43	41	33
		7.11	204	86.1	6.7 - 8.2 - 11.6	95.2	5.2 - 6.4 - 9.0	103.8	3.0 - 3.7 - 5.2	39	45	48	50	50	49	42
254 x 152	0.04	1.52	55	4.0	1.4 - 2.8 - 5.7	4.4	1.1 - 2.2 - 4.4	4.8	0.6 - 1.3 - 2.6	-	14	16	12	-	-	-
		2.92	106	14.5	3.6 - 5.5 - 8.4	16.1	2.8 - 4.2 - 6.5	17.5	1.6 - 2.5 - 3.8	13	28	30	29	24	17	-
		4.32	156	31.7	5.4 - 7.2 - 10.2	35.1	4.2 - 5.6 - 7.9	38.2	2.4 - 3.2 - 4.6	25	36	38	39	36	32	23
		5.72	207	55.6	6.8 - 8.3 - 11.7	61.5	5.2 - 6.4 - 9.1	67.0	3.0 - 3.7 - 5.3	33	42	45	46	44	42	34
		7.11	257	86.1	7.5 - 9.2 - 13.0	95.2	5.8 - 7.2 - 10.1	103.8	3.4 - 4.2 - 5.9	40	46	49	51	51	50	43
203 x 203	0.04	1.52	59	4.0	1.4 - 2.9 - 5.9	4.4	1.1 - 2.3 - 4.6	4.8	0.6 - 1.3 - 2.7	-	14	16	13	-	-	-
		2.92	113	14.5	3.8 - 5.6 - 8.7	16.1	2.9 - 4.4 - 6.7	17.5	1.7 - 2.5 - 3.9	14	28	30	29	24	18	-
		4.32	167	31.7	5.6 - 7.4 - 10.5	35.1	4.3 - 5.8 - 8.2	38.2	2.5 - 3.3 - 4.7	25	36	39	39	36	32	24
		5.72	221	55.6	7.0 - 8.6 - 12.1	61.5	5.4 - 6.6 - 9.4	67.0	3.1 - 3.9 - 5.4	34	42	45	46	45	43	34
		7.11	276	86.1	7.8 - 9.5 - 13.5	95.2	6.0 - 7.4 - 10.5	103.8	3.5 - 4.3 - 6.1	40	47	50	52	51	51	43
305 x 152	0.05	1.52	66	4.0	1.5 - 3.1 - 6.2	4.4	1.2 - 2.4 - 4.8	4.8	0.7 - 1.4 - 2.8	-	15	17	13	-	-	-
		2.79	122	13.3	3.8 - 5.7 - 9.0	14.7	3.0 - 4.4 - 7.0	16.0	1.7 - 2.6 - 4.0	13	28	30	29	23	17	-
		4.06	177	28.1	5.6 - 7.7 - 10.8	31.1	4.3 - 5.9 - 8.4	33.9	2.5 - 3.4 - 4.9	24	35	38	38	35	30	22
		5.33	233	48.4	7.2 - 8.8 - 12.4	53.6	5.6 - 6.8 - 9.6	58.4	3.2 - 3.9 - 5.6	32	41	44	45	43	41	32
		6.60	288	74.2	8.0 - 9.8 - 13.8	82.1	6.2 - 7.6 - 10.7	89.5	3.6 - 4.4 - 6.2	39	45	49	50	49	48	41
356 x 152	0.05	1.52	78	4.0	1.6 - 3.4 - 6.8	4.4	1.3 - 2.6 - 5.2	4.8	0.7 - 1.5 - 3.0	-	16	17	14	-	-	-
		2.79	143	13.3	4.1 - 6.2 - 9.7	14.7	3.2 - 4.8 - 7.5	16.0	1.9 - 2.8 - 4.4	13	28	31	29	24	17	-
		4.06	207	28.1	6.0 - 8.3 - 11.7	31.1	4.7 - 6.4 - 9.1	33.9	2.7 - 3.7 - 5.3	25	36	39	39	35	31	22
		5.33	272	48.4	7.7 - 9.5 - 13.4	53.6	6.0 - 7.4 - 10.4	58.4	3.5 - 4.3 - 6.0	33	42	45	46	44	41	33
		6.60	337	74.2	8.6 - 10.6 - 14.9	82.1	6.7 - 8.2 - 11.6	89.5	3.9 - 4.8 - 6.7	39	46	49	51	50	49	41
305 x 203	0.06	1.52	90	4.0	1.7 - 3.6 - 7.3	4.4	1.3 - 2.8 - 5.6	4.8	0.8 - 1.6 - 3.3	-	16	18	15	-	-	-
		2.79	164	13.3	4.4 - 6.6 - 10.4	14.7	3.4 - 5.2 - 8.1	16.0	2.0 - 3.0 - 4.7	14	29	31	30	25	18	-
		4.06	239	28.1	6.4 - 8.9 - 12.6	31.1	5.0 - 6.9 - 9.7	33.9	2.9 - 4.0 - 5.7	25	37	39	39	36	32	23
		5.33	313	48.4	8.3 - 10.2 - 14.4	53.6	6.4 - 7.9 - 11.2	58.4	3.7 - 4.6 - 6.5	34	42	45	46	44	42	34
		6.60	388	74.2	9.3 - 11.3 - 16.0	82.1	7.2 - 8.8 - 12.4	89.5	4.2 - 5.1 - 7.2	40	47	50	52	51	50	42
254 x 254	0.06	1.52	93	4.0	1.8 - 3.7 - 7.4	4.4	1.4 - 2.9 - 5.7	4.8	0.8 - 1.7 - 3.3	-	16	18	15	-	-	-
		2.79	171	13.3	4.5 - 6.8 - 10.6	14.7	3.5 - 5.3 - 8.3	16.0	2.0 - 3.1 - 4.8	14	29	31	30	25	18	-
		4.06	249	28.1	6.6 - 9.1 - 12.8	31.1	5.1 - 7.0 - 10.0	33.9	3.0 - 4.1 - 5.8	26	37	39	39	36	32	23
		5.33	327	48.4	8.5 - 10.4 - 14.7	53.6	6.6 - 8.1 - 11.4	58.4	3.8 - 4.7 - 6.6	34	43	45	46	44	42	34
		6.60	405	74.2	9.5 - 11.6 - 16.4	82.1	7.3 - 9.0 - 12.7	89.5	4.3 - 5.2 - 7.4	40	47	50	52	51	50	42
457 x 152	0.07	1.52	100	4.0	1.8 - 3.8 - 7.7	4.4	1.4 - 3.0 - 6.0	4.8	0.8 - 1.7 - 3.5	-	17	18	15	-	-	-
		2.79	184	13.3	4.7 - 7.0 - 11.0	14.7	3.6 - 5.5 - 8.6	16.0	2.1 - 3.2 - 5.0	15	29	32	30	25	18	-
		4.06	268	28.1	6.8 - 9.4 - 13.3	31.1	5.3 - 7.3 - 10.3	33.9	3.1 - 4.2 - 6.0	26	37	40	40	37	32	24
		5.33	351	48.4	8.8 - 10.8 - 15.2	53.6	6.8 - 8.4 - 11.8	58.4	4.0 - 4.9 - 6.9	34	43	46	47	45	42	34
		6.60	435	74.2	9.8 - 12.0 - 17.0	82.1	7.6 - 9.3 - 13.1	89.5	4.4 - 5.4 - 7.6	41	47	50	52	51	50	42
305 x 254	0.08	1.52	113	4.0	2.0 - 4.1 - 8.1	4.4	1.5 - 3.2 - 6.3	4.8	0.9 - 1.8 - 3.7	-	17	19	16	-	-	-
		2.67	197	12.1	4.7 - 7.1 - 11.4	13.4	3.7 - 5.5 - 8.9	14.6	2.1 - 3.2 - 5.1	14	29	31	30	24	17	-
		3.81	282	24.7	6.8 - 9.7 - 13.7	27.3	5.3 - 7.5 - 10.6	29.8	3.1 - 4.3 - 6.1	25	36	39	39	35	30	22
		4.95	366	41.8	8.8 - 11.0 - 15.6	46.2	6.8 - 8.5 - 12.1	50.3	4.0 - 5.0 - 7.0	32	42	45	45	43	40	32
		6.10	451	63.3	10.0 - 12.2 - 17.3	70.0	7.7 - 9.5 - 13.4	76.2	4.5 - 5.5 - 7.8	39	46	49	50	49	48	40
559 x 152	0.09	1.52	123	4.0	2.0 - 4.2 - 8.5	4.4	1.6 - 3.3 - 6.6	4.8	0.9 - 1.9 - 3.8	-	18	19	16	-	-	-
		2.67	215	12.1	5.0 - 7.4 - 11.9	13.4	3.8 - 5.8 - 9.2	14.6	2.2 - 3.3 - 5.4	14	29	31	30	25	18	-
		3.81	307	24.7	7.1 - 10.1 - 14.3	27.3	5.5 - 7.8 - 11.1	29.8	3.2 - 4.5 - 6.4	25	37	39	39	35	31	22
		4.95	400	41.8	9.2 - 11.5 - 16.3	46.2	7.1 - 8.9 - 12.6	50.3	4.1 - 5.2 - 7.3	33	42	45	46	43	40	32
		6.10	492	63.3	10.4 - 12.8 - 18.0	70.0	8.1 - 9.9 - 14.0	76.2	4.7 - 5.7 - 8.1	39	46	49	51	50	48	40

NOTE: See notes on page I1-74.

5815 Performance Data: Horizontal Throw

METRIC DATA: 5815 (NO DAMPER)

Nom Duct mm	Duct Area m ²	Neck Vel m/s	Air Flow L/s	0°		22.5°		45°		NC	Octave Band, dB					
				Pt	Throw	Pt	Throw	Pt	Throw		2	3	4	5	6	7
				Pa	m	Pa	m	Pa	m							
762 x 610	0.46	1.02	463	1.8	2.2 - 4.8 - 13.5	1.9	1.7 - 3.8 - 10.4	2.1	1.0 - 2.2 - 6.1	-	17	18	13	-	-	-
		1.91	868	6.2	7.6 - 12.6 - 24.0	6.8	5.9 - 9.8 - 18.6	7.4	3.4 - 5.7 - 10.8	12	30	32	29	22	13	-
		2.79	1274	13.3	12.3 - 18.5 - 29.0	14.7	9.6 - 14.4 - 22.5	16.0	5.6 - 8.3 - 13.1	24	38	40	39	34	27	18
		3.68	1679	23.1	16.3 - 23.6 - 33.3	25.5	12.6 - 18.3 - 25.8	27.8	7.3 - 10.6 - 15.0	32	44	46	46	42	37	28
		4.57	2084	35.6	20.2 - 26.3 - 37.1	39.4	15.7 - 20.4 - 28.8	42.9	9.1 - 11.8 - 16.7	39	48	51	51	49	45	37
914 x 559	0.51	1.02	510	1.8	2.3 - 5.1 - 14.1	1.9	1.8 - 3.9 - 10.9	2.1	1.0 - 2.3 - 6.4	-	17	18	14	-	-	-
		1.91	956	6.2	7.9 - 13.2 - 25.1	6.8	6.2 - 10.3 - 19.5	7.4	3.6 - 6.0 - 11.3	13	30	32	30	22	13	-
		2.79	1402	13.3	13.0 - 19.4 - 30.5	14.7	10.0 - 15.1 - 23.6	16.0	5.8 - 8.7 - 13.7	24	38	40	39	34	27	18
		3.68	1848	23.1	17.1 - 24.7 - 35.0	25.5	13.2 - 19.2 - 27.1	27.8	7.7 - 11.1 - 15.7	33	44	46	46	42	37	29
		4.57	2294	35.6	21.2 - 27.6 - 39.0	39.4	16.4 - 21.4 - 30.2	42.9	9.5 - 12.4 - 17.5	39	48	51	52	49	45	37
914 x 610	0.56	1.02	557	1.8	2.4 - 5.3 - 14.8	1.9	1.8 - 4.1 - 11.4	2.1	1.1 - 2.4 - 6.6	-	17	19	14	-	-	-
		1.91	1044	6.2	8.3 - 13.8 - 26.3	6.8	6.4 - 10.7 - 20.4	7.4	3.7 - 6.2 - 11.8	13	31	33	30	23	13	-
		2.79	1531	13.3	13.5 - 20.3 - 31.8	14.7	10.5 - 15.7 - 24.7	16.0	6.1 - 9.1 - 14.3	25	39	41	40	34	28	18
		3.68	2017	23.1	17.8 - 25.8 - 36.5	25.5	13.8 - 20.0 - 28.3	27.8	8.0 - 11.6 - 16.4	33	44	47	47	43	38	29
		4.57	2504	35.6	22.1 - 28.8 - 40.7	39.4	17.2 - 22.3 - 31.6	42.9	10.0 - 13.0 - 18.3	39	49	52	52	49	46	37

NOTES: Throw values are given for terminal velocities of 0.75, 0.50, and 0.25 m/s. Throw values are given for isothermal conditions. NC values are based on octave band 2 - 7 sound power levels minus a room absorption of 10dB, re 10⁻¹² Watts. Dash in space denotes a NC or dB value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See Krueger's selection software for performance data not shown, including octave band data.

SUPPLY GRILLES

5815 Suggested Specification & Configuration

- 1. SERIES: (XXXX)**
5815 - Multi-Deflection, Removable Core, Aluminum Supply Grille
- 2. PATTERN: (X) ***
H - Horizontal Front Blades
V - Vertical Front Blades
- 3. WIDTH: (XX)**
6" - 72" in 1" Increments
- 4. HEIGHT: (XX)**
4" - 36" in 1" Increments
- 5. FRAME: (XXX)**
F22 - Surface Mount
- 6. FRAME TYPE: (X)**
F - Flat Frame
- 7. FASTENING METHOD: (XX)**
00 - No Screw Holes
01 - Standard Screw Holes
- 8. DAMPER: (XX) ****
00 - No Damper
01 - Steel Opposed Blade Damper (Model OBD)
15 - Aluminum Opposed Blade Damper (Model 5OBD)
- 9. ACCESSORIES: (XX) *****
00 - None
IS - Insect Screen
DS - Debris Screen
- 10. FINISH: (XX)**
01 - Mill
10 - Alumican
35 - Black
44 - British White

Maximum single size unit is 72"x24".

* Pattern "V" not available with Height of 4" or 5".

** Damper not available with Insect or Debris Screen.

*** Insect and Debris Screen not available with widths greater than 48".

5815

The supply grille shall be a Krueger model 5815. This grille must have fixed extruded aluminum blades on 1/4" centers with a minimum thickness of 0.062". The core of the 5815 shall be assembled using mandrel construction. This core must be removable from the frame of the 5815 to allow the core to be flipped or rotated so one core can provide four different blade orientations: 5° up, 5° down, 15° up and 15° down. The grille shall also have a set of fully adjustable rear deflection blades spaced on 3/4" centers made of extruded aluminum. The frame of the grille must be constructed of extruded aluminum with nominal thickness 0.040 – 0.050". This frame must also produce a border of 1" around all sides of the grille and have a flat edge with mitered corner.

Optional damper shall be available made of heavy gage steel (OBD) or aluminum (5OBD) and operable from the face of the supply grille.

PERFORMANCE

The manufacturer shall provide published (printed or electronic) performance data for the diffuser. Performance data shall include 2 - 7 octave band sound power levels. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ASHRAE Standard 70.

FINISH

The paint finish shall be #44 British White and be an anodic acrylic paint, baked at 315°F for 30 minutes. The paint thickness shall be 0.8 – 1.0 mils, gloss at 60° per ASTM D523-89 of 50 – 85%, pencil hardness per ASTM D3363-92A of HB – H, crosshatch adhesion per ASTM D3359-83 of 4B – 5B, impact per ASTM D2794-93 of direct impact >100 in/lb and reverse impact >80 in/lb, salt spray per ASTM B117-9048 of 96 hours, humidity per ASTM D2247-92 of >500 hours and water soak per ASTM D870-92 of 250 hours.