

PERFORMANCE DATA | IP | SQUARE, WITH OBD/MULTILOUVER

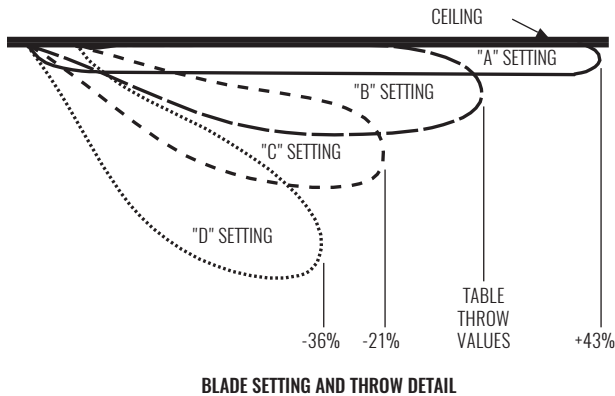
SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
					ft	ft	ft	ft							
6 x 6	200	0.024	50	-	4-6-13	4-6-11	3-5-10	3-4-9	-	13	19	17	12	-	
	300	0.055	75	18	6-10-19	6-8-17	5-7-14	4-7-13	18	23	29	27	22	17	
	400	0.098	100	25	8-13-25	7-11-22	6-10-19	6-9-18	25	30	36	34	29	24	
	500	0.153	125	31	11-16-32	9-14-28	8-12-24	7-11-22	31	36	42	40	35	30	
	600	0.220	150	35	13-19-35	11-17-33	10-14-29	9-13-26	36	41	47	45	40	35	
	700	0.299	175	39	15-22-37	13-19-36	11-17-32	10-16-28	40	45	51	49	44	39	
8 x 8	800	0.390	200	43	17-25-40	15-22-38	13-19-34	12-18-30	43	48	54	52	47	42	
	200	0.021	89	-	5-7-14	4-6-13	4-5-11	3-5-10	-	12	18	16	11	-	
	300	0.048	133	18	7-11-22	6-9-19	5-8-16	5-8-15	17	22	28	26	21	16	
	400	0.085	178	25	10-14-29	8-13-25	7-11-22	7-10-20	24	29	35	33	28	23	
	500	0.133	222	31	12-18-36	10-16-31	9-13-27	8-13-25	30	35	41	39	34	29	
	600	0.191	267	36	14-22-43	13-19-38	11-16-32	10-15-30	35	40	46	44	39	34	
10 x 10	700	0.260	311	40	17-25-50	15-22-44	13-19-38	12-18-35	39	44	50	48	43	38	
	800	0.339	356	43	19-29-53	17-25-50	14-22-43	13-20-40	42	47	53	51	46	41	
	200	0.020	139	-	5-8-16	5-7-14	4-6-12	4-6-11	-	11	17	15	-	-	
	300	0.044	208	18	8-12-24	7-10-21	6-9-18	6-8-17	17	22	28	26	21	16	
	400	0.078	278	26	11-16-32	9-14-28	8-12-24	7-11-22	24	29	35	33	28	23	
	500	0.122	347	31	13-20-40	12-17-35	10-15-30	9-14-28	30	35	41	39	34	29	
12 x 12	600	0.176	417	36	16-24-48	14-21-42	12-18-36	11-17-34	34	39	45	43	38	33	
	700	0.239	486	40	19-28-56	16-24-49	14-21-42	13-20-39	38	43	49	47	42	37	
	800	0.313	556	43	21-32-64	19-28-56	16-24-48	15-22-45	42	47	53	51	46	41	
	200	0.019	200	-	6-9-18	5-8-15	4-7-13	4-6-12	-	11	17	15	-	-	
	300	0.042	300	19	9-13-26	8-11-23	7-10-20	6-9-18	17	22	28	26	21	16	
	400	0.074	400	26	12-18-35	10-15-31	9-13-26	8-12-25	24	29	35	33	28	23	
14 x 14	500	0.116	500	32	15-22-44	13-19-38	11-16-33	10-15-31	30	35	41	39	34	29	
	600	0.167	600	37	18-26-53	15-23-46	13-20-39	12-18-37	35	40	46	44	39	34	
	700	0.227	700	41	20-31-61	18-27-54	15-23-46	14-21-43	39	44	50	48	43	38	
	800	0.296	800	44	23-35-70	20-31-61	18-26-53	16-25-49	42	47	53	51	46	41	
	200	0.018	272	-	6-9-19	6-8-17	5-7-14	4-7-13	-	11	17	15	-	-	
	300	0.040	408	18	9-14-28	8-12-25	7-11-21	7-10-20	17	22	28	26	21	16	
16 x 16	400	0.071	544	26	13-19-38	11-17-33	9-14-28	9-13-27	24	29	35	33	28	23	
	500	0.111	681	31	16-24-47	14-21-41	12-18-36	11-17-33	30	35	41	39	34	29	
	600	0.160	817	36	19-28-57	17-25-50	14-21-43	13-20-40	35	40	46	44	39	34	
	700	0.218	953	40	22-33-66	19-29-58	17-25-50	15-23-46	39	44	50	48	43	38	
	800	0.285	1089	44	25-38-76	22-33-66	19-28-57	18-27-53	42	47	53	51	46	41	
	200	0.017	356	-	7-10-20	6-9-18	5-8-15	5-7-14	-	11	17	15	-	-	
18 x 18	300	0.039	533	20	10-15-31	9-13-27	8-11-23	7-11-21	17	22	28	26	21	16	
	400	0.069	711	27	14-20-41	12-18-36	10-15-31	9-14-28	24	29	35	33	28	23	
	500	0.108	889	33	17-25-51	15-22-44	13-19-38	12-18-36	30	35	41	39	34	29	
	600	0.156	1067	38	20-31-61	18-27-53	15-23-46	14-21-43	35	40	46	44	39	34	
	700	0.212	1244	42	24-36-71	21-31-62	18-27-53	17-25-50	39	44	50	48	43	38	
	800	0.277	1422	45	27-41-81	24-36-71	20-31-61	19-28-57	42	47	53	51	46	41	
20 x 20	200	0.017	450	-	7-11-22	6-9-19	5-8-16	5-8-15	-	11	17	15	-	-	
	300	0.038	675	18	11-16-32	9-14-28	8-12-24	8-11-23	17	22	28	26	21	16	
	400	0.068	900	25	14-22-43	13-19-38	11-16-32	10-15-30	24	29	35	33	28	23	
	500	0.106	1125	31	18-27-54	16-24-47	14-20-41	13-19-38	30	35	41	39	34	29	
	600	0.153	1350	35	22-32-65	19-28-57	16-24-49	15-23-45	35	40	46	44	39	34	
	700	0.208	1575	39	25-38-76	22-33-66	19-28-57	18-27-53	39	44	50	48	43	38	
20 x 20	800	0.271	1800	43	29-43-87	25-38-76	22-32-65	20-30-61	42	47	53	51	46	41	
	200	0.017	556	-	8-11-23	7-10-20	6-9-17	5-8-16	-	-	16	14	-	-	
	300	0.038	833	21	11-17-34	10-15-30	9-13-26	8-12-24	15	20	26	24	19	14	
	400	0.067	1111	28	15-23-46	13-20-40	11-17-34	11-16-32	23	28	34	32	27	22	
	500	0.104	1389	34	19-29-57	17-25-50	14-22-43	13-20-40	29	34	40	38	33	28	
	600	0.150	1667	39	23-34-69	20-30-60	17-26-52	16-24-48	33	38	44	42	37	32	
20 x 20	700	0.204	1944	43	27-40-80	23-35-70	20-30-60	19-28-56	37	42	48	46	41	36	
	800	0.267	2222	46	31-46-92	27-40-80	23-34-69	21-32-64	41	46	52	50	45	40	

NOTE: See notes and correction factors on page P1-8.

PERFORMANCE DATA | IP | SQUARE, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
in	fpm	in wg	cfm	NC	ft	ft	ft	ft							
24 x 24	200	0.016	800	-	7-13-25	6-11-22	5-10-19	5-9-18	-	-	16	14	-	-	
	300	0.037	1200	17	13-19-38	11-17-33	10-14-29	9-13-27	16	21	27	25	20	15	
	400	0.065	1600	24	17-25-51	15-22-44	13-19-38	12-18-35	23	28	34	32	27	22	
	500	0.102	2000	30	21-32-63	18-28-55	16-24-48	15-22-44	29	34	40	38	33	28	
	600	0.146	2400	35	25-38-76	22-33-67	19-29-57	18-27-53	34	39	45	43	38	33	
	700	0.199	2800	39	30-44-89	26-39-78	22-33-67	21-31-62	38	43	49	47	42	37	
30 x 30	200	0.016	1250	12	7-14-29	6-13-25	5-11-22	5-10-20	-	-	16	14	-	-	
	300	0.036	1875	23	14-22-43	13-19-38	11-16-32	10-15-30	16	21	27	25	20	15	
	400	0.063	2500	30	19-29-57	17-25-50	14-22-43	13-20-40	23	28	34	32	27	22	
	500	0.099	3125	36	24-36-72	21-31-63	18-27-54	17-25-50	29	34	40	38	33	28	
	600	0.142	3750	40	29-43-86	25-38-75	22-32-65	20-30-60	34	39	45	43	38	33	
	700	0.194	4375	44	34-50-101	29-44-88	25-38-75	23-35-70	38	43	49	47	42	37	
36 x 36	200	0.016	1800	13	6-14-32	12-18-36	10-16-31	10-14-29	-	11	17	15	-	-	
	300	0.035	2700	23	14-24-48	18-27-54	16-23-47	14-22-43	16	21	27	25	20	15	
	400	0.062	3600	31	21-32-64	24-36-72	21-31-62	19-29-58	23	28	34	32	27	22	
	500	0.097	4500	37	27-40-80	30-45-90	26-39-78	24-36-72	29	34	40	38	33	28	
	600	0.140	5400	41	32-48-96	36-54-109	31-47-93	29-43-87	34	39	45	43	38	33	
	700	0.191	6300	45	37-56-111	42-63-127	36-54-109	34-51-101	38	43	49	47	42	37	
	800	0.249	7200	49	42-64-127	48-72-145	41-62-124	39-58-116	41	46	52	50	45	40	

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. The throw values given for 1-Way Throw is for [Total CFM] CFM per side. The throw values given for 2-Way Throw is for [Total CFM/2] CFM per side. The throw values given for 3-Way Throw is for [Total CFM/3] CFM per side. The throw values given for 4-Way Throw is for [Total CFM/4] CFM per side. See Krueger's selection software for performance data not shown, including octave band data.



NOTE: Reference page P1-5 for blade setting detail.

CORRECTION FACTOR (WITH OBD)			
BLADE SETTING	THROWS (MULTIPLY)	P _s (MULTIPLY)	NC (ADD)
A	1.43	1.30	+2
B	1.00	1.00	+0
C	0.79	0.72	-3
D	0.64	0.52	-4

CORRECTION FACTOR (WITHOUT OBD)			
BLADE SETTING	THROWS (MULTIPLY)	P _s (MULTIPLY)	NC (ADD)
A	1.43	1.20	+0
B	1.00	0.85	-3
C	0.70	0.61	-4
D	0.64	0.33	-6

PERFORMANCE DATA | IP | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
					ft	ft	ft	ft							
4 x 6	200	0.028	33	-	4-6-12	3-4-8	3-4-9	3-4-8	-	15	21	19	14	-	
	300	0.064	50	18	6-9-18	4-6-12	4-7-13	4-6-12	20	25	31	29	24	19	
	400	0.113	67	25	8-12-23	6-8-17	6-9-18	6-8-17	27	32	38	36	31	26	
	500	0.177	83	31	10-15-26	7-10-21	7-11-22	7-10-19	33	38	44	42	37	32	
	600	0.255	100	36	12-18-28	8-12-25	9-13-24	8-12-21	38	43	49	47	42	37	
	700	0.347	117	40	14-21-31	10-14-29	10-16-26	10-15-23	42	47	53	51	46	41	
	800	0.453	133	43	16-23-33	11-17-31	12-18-28	11-17-24	45	50	56	54	49	44	
4 x 8	200	0.026	44	-	4-6-13	5-7-14	3-5-9	3-4-9	-	14	20	18	13	-	
	300	0.059	67	18	6-9-19	7-10-21	5-7-14	4-7-13	20	25	31	29	24	19	
	400	0.106	89	25	8-13-25	9-14-25	6-9-19	6-9-18	27	32	38	36	31	26	
	500	0.165	111	31	11-16-30	12-17-28	8-12-24	7-11-22	33	38	44	42	37	32	
	600	0.237	133	36	13-19-33	14-21-31	9-14-28	9-13-24	38	43	49	47	42	37	
	700	0.323	156	40	15-22-35	16-24-34	11-17-30	10-15-26	42	47	53	51	46	41	
	800	0.422	178	43	17-25-38	18-25-36	13-19-32	12-18-28	45	50	56	54	49	44	
4 x 10	200	0.025	56	-	4-7-13	4-6-12	3-5-10	3-5-9	-	14	20	18	13	-	
	300	0.057	83	18	7-10-20	6-9-17	5-7-15	5-7-14	20	25	31	29	24	19	
	400	0.101	111	26	9-13-27	8-12-23	7-10-20	6-9-19	27	32	38	36	31	26	
	500	0.158	139	31	11-17-33	10-15-29	8-12-25	8-12-23	33	38	44	42	37	32	
	600	0.228	167	36	13-20-37	12-17-35	10-15-30	9-14-27	38	43	49	47	42	37	
	700	0.310	194	40	16-23-39	14-20-37	12-17-34	11-16-30	42	47	53	51	46	41	
	800	0.405	222	44	18-27-42	16-23-40	13-20-36	12-19-32	45	50	56	54	49	44	
4 x 12	200	0.025	67	-	5-7-14	4-6-12	3-5-10	3-5-10	-	15	21	19	14	-	
	300	0.055	100	19	7-10-21	6-9-18	5-8-16	5-7-15	20	25	31	29	24	19	
	400	0.099	133	26	9-14-28	8-12-24	7-10-21	6-10-19	28	33	39	37	32	27	
	500	0.154	167	32	12-17-35	10-15-30	9-13-26	8-12-24	34	39	45	43	38	33	
	600	0.222	200	36	14-21-40	12-18-37	10-16-31	10-15-29	38	43	49	47	42	37	
	700	0.302	233	40	16-24-43	14-21-41	12-18-37	11-17-32	42	47	53	51	46	41	
	800	0.394	267	44	19-28-46	16-24-44	14-21-39	13-19-35	46	51	57	55	50	45	
4 x 14	200	0.024	78	-	5-8-16	4-6-11	4-6-12	4-6-11	-	15	21	19	14	-	
	300	0.054	117	19	8-12-24	6-9-17	6-9-18	6-9-17	21	26	32	30	25	20	
	400	0.097	156	26	11-16-32	8-11-23	8-12-24	8-11-23	28	33	39	37	32	27	
	500	0.151	194	32	14-20-39	10-14-29	10-15-30	9-14-28	34	39	45	43	38	33	
	600	0.218	233	37	16-24-43	11-17-34	12-18-37	11-17-32	39	44	50	48	43	38	
	700	0.296	272	41	19-28-47	13-20-40	14-21-40	13-20-35	42	47	53	51	46	41	
	800	0.387	311	44	22-32-50	15-23-46	16-24-42	15-23-37	46	51	57	55	50	45	
4 x 16	200	0.024	89	-	5-8-15	4-7-13	4-6-11	4-5-11	-	15	21	19	14	-	
	300	0.054	133	19	8-11-23	7-10-20	6-8-17	5-8-16	21	26	32	30	25	20	
	400	0.095	178	26	10-15-30	9-13-26	8-11-23	7-11-21	28	33	39	37	32	27	
	500	0.149	222	32	13-19-38	11-16-33	9-14-28	9-13-26	34	39	45	43	38	33	
	600	0.215	267	37	15-23-45	13-20-39	11-17-34	11-16-32	39	44	50	48	43	38	
	700	0.292	311	41	18-26-50	15-23-46	13-20-39	12-18-37	43	48	54	52	47	42	
	800	0.382	356	44	20-30-53	18-26-51	15-23-45	14-21-40	46	51	57	55	50	45	
4 x 18	200	0.024	100	-	5-8-15	5-7-14	4-6-12	4-5-11	11	16	22	20	15	-	
	300	0.053	150	19	8-12-23	7-10-20	6-9-17	5-8-16	21	26	32	30	25	20	
	400	0.094	200	27	10-15-31	9-14-27	8-12-23	7-11-22	29	34	40	38	33	28	
	500	0.147	250	32	13-19-39	11-17-34	10-15-29	9-14-27	34	39	45	43	38	33	
	600	0.212	300	37	15-23-46	14-20-41	12-17-35	11-16-33	39	44	50	48	43	38	
	700	0.289	350	41	18-27-53	16-24-47	14-20-41	13-19-38	43	48	54	52	47	42	
	800	0.377	400	45	21-31-57	18-27-54	15-23-46	14-22-42	47	52	58	56	51	46	
4 x 20	200	0.023	111	-	5-8-16	5-7-14	4-6-12	4-6-11	-	14	20	18	13	-	
	300	0.053	167	20	8-12-24	7-10-21	6-9-18	6-8-17	20	25	31	29	24	19	
	400	0.094	222	27	11-16-32	9-14-28	8-12-24	7-11-22	27	32	38	36	31	26	
	500	0.146	278	33	13-20-40	12-17-35	10-15-30	9-14-28	33	38	44	42	37	32	
	600	0.211	333	37	16-24-48	14-21-42	12-18-36	11-17-33	38	43	49	47	42	37	
	700	0.287	389	41	19-28-56	16-24-49	14-21-42	13-20-39	42	47	53	51	46	41	
	800	0.374	444	45	21-32-60	19-28-56	16-24-48	15-22-45	45	50	56	54	49	44	

NOTE: See notes and correction factors on page P1-15.

PERFORMANCE DATA | IP | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
in	fpm	in wg	cfm	NC	ft	ft	ft	ft							
4 x 24	200	0.023	133	-	6-8-17	5-7-15	4-6-13	4-6-12	-	15	21	19	14	-	
	300	0.052	200	20	8-13-25	7-11-22	6-9-19	6-9-18	20	25	31	29	24	19	
	400	0.092	267	27	11-17-34	10-15-29	8-13-25	8-12-23	28	33	39	37	32	27	
	500	0.144	333	33	14-21-42	12-18-37	10-16-31	10-15-29	33	38	44	42	37	32	
	600	0.208	400	38	17-25-50	15-22-44	13-19-38	12-18-35	38	43	49	47	42	37	
	700	0.283	467	42	20-29-59	17-26-51	15-22-44	14-21-41	42	47	53	51	46	41	
6 x 10	800	0.369	533	45	22-34-65	20-29-59	17-25-50	16-23-47	45	50	56	54	49	44	
	200	0.022	83	-	5-7-14	4-6-12	4-5-11	3-5-10	-	15	21	19	14	-	
	300	0.049	125	18	7-11-21	6-9-19	5-8-16	5-7-15	20	25	31	29	24	19	
	400	0.087	167	25	10-14-29	8-12-25	7-11-21	7-10-20	27	32	38	36	31	26	
	500	0.136	208	31	12-18-36	10-16-31	9-13-27	8-12-25	33	38	44	42	37	32	
	600	0.197	250	36	14-21-43	12-19-37	11-16-32	10-15-30	38	43	49	47	42	37	
6 x 12	700	0.267	292	40	17-25-48	15-22-44	12-19-37	12-17-35	42	47	53	51	46	41	
	800	0.349	333	43	19-29-52	17-25-49	14-21-43	13-20-39	45	50	56	54	49	44	
	200	0.021	100	-	5-7-15	4-7-13	4-6-11	3-5-10	-	15	21	19	14	-	
	300	0.048	150	18	7-11-22	7-10-20	6-8-17	5-8-16	20	25	31	29	24	19	
	400	0.085	200	26	10-15-30	9-13-26	7-11-22	7-10-21	27	32	38	36	31	26	
	500	0.133	250	31	12-19-37	11-16-33	9-14-28	9-13-26	33	38	44	42	37	32	
6 x 14	600	0.191	300	36	15-22-45	13-20-39	11-17-34	10-16-31	38	43	49	47	42	37	
	700	0.260	350	40	17-26-52	15-23-46	13-20-39	12-18-37	42	47	53	51	46	41	
	800	0.340	400	43	20-30-57	17-26-52	15-22-45	14-21-42	45	50	56	54	49	44	
	200	0.021	117	-	5-8-16	5-7-14	4-6-12	4-5-11	-	15	21	19	14	-	
	300	0.047	175	18	8-12-23	7-10-20	6-9-17	5-8-16	20	25	31	29	24	19	
	400	0.083	233	26	10-16-31	9-14-27	8-12-23	7-11-22	28	33	39	37	32	27	
6 x 16	500	0.130	292	32	13-19-39	11-17-34	10-15-29	9-14-27	33	38	44	42	37	32	
	600	0.188	350	36	16-23-47	14-20-41	12-17-35	11-16-33	38	43	49	47	42	37	
	700	0.256	408	40	18-27-54	16-24-48	14-20-41	13-19-38	42	47	53	51	46	41	
	800	0.334	467	44	21-31-61	18-27-54	16-23-47	14-22-43	45	50	56	54	49	44	
	200	0.021	133	-	5-8-16	5-7-14	4-6-12	4-6-11	-	14	20	18	13	-	
	300	0.046	200	19	8-12-24	7-11-21	6-9-18	6-8-17	20	25	31	29	24	19	
6 x 18	400	0.082	267	26	11-16-32	9-14-28	8-12-24	8-11-23	27	32	38	36	31	26	
	500	0.129	333	32	13-20-40	12-18-35	10-15-30	9-14-28	33	38	44	42	37	32	
	600	0.185	400	37	16-24-48	14-21-42	12-18-36	11-17-34	38	43	49	47	42	37	
	700	0.252	467	40	19-28-56	16-25-49	14-21-42	13-20-39	41	46	52	50	45	40	
	800	0.329	533	44	21-32-64	19-28-56	16-24-48	15-23-45	45	50	56	54	49	44	
	200	0.020	150	-	6-8-17	5-7-15	4-6-12	4-6-12	-	14	20	18	13	-	
6 x 20	300	0.046	225	19	8-12-25	7-11-22	6-9-19	6-9-17	20	25	31	29	24	19	
	400	0.081	300	26	11-17-33	10-15-29	8-12-25	8-12-23	27	32	38	36	31	26	
	500	0.127	375	32	14-21-42	12-18-36	10-16-31	10-15-29	33	38	44	42	37	32	
	600	0.183	450	37	17-25-50	15-22-44	12-19-37	12-17-35	38	43	49	47	42	37	
	700	0.249	525	41	19-29-58	17-25-51	15-22-44	14-20-41	42	47	53	51	46	41	
	800	0.325	600	44	22-33-66	19-29-58	17-25-50	15-23-46	45	50	56	54	49	44	
6 x 24	200	0.314	167	-	6-9-17	5-7-15	4-6-13	4-6-12	-	15	21	19	14	-	
	300	0.020	250	19	9-13-26	7-11-22	6-10-19	6-9-18	20	25	31	29	24	19	
	400	0.046	333	27	11-17-34	10-15-30	9-13-26	8-12-24	28	33	39	37	32	27	
	500	0.081	417	32	14-21-43	12-19-37	11-16-32	10-15-30	33	38	44	42	37	32	
	600	0.127	500	37	17-26-51	15-22-45	13-19-38	12-18-36	38	43	49	47	42	37	
	700	0.183	583	41	20-30-60	17-26-52	15-22-45	14-21-42	42	47	53	51	46	41	
6 x 24	800	0.249	667	44	23-34-68	20-30-60	17-26-51	16-24-48	45	50	56	54	49	44	
	200	0.326	200	-	6-9-18	5-8-16	4-7-13	4-6-13	-	15	21	19	14	-	
	300	0.045	300	20	9-13-27	8-12-24	7-10-20	6-9-19	21	26	32	30	25	20	
	400	0.080	400	27	12-18-36	10-16-31	9-13-27	8-13-25	28	33	39	37	32	27	
	500	0.124	500	33	15-22-45	13-20-39	11-17-34	10-16-31	34	39	45	43	38	33	
	600	0.179	600	37	18-27-54	16-24-47	13-20-40	13-19-38	38	43	49	47	42	37	
6 x 24	700	0.244	700	41	21-31-63	18-28-55	16-24-47	15-22-44	42	47	53	51	46	41	
	800	0.319	800	45	24-36-72	21-31-63	18-27-54	17-25-50	46	51	57	55	50	45	

NOTE: See notes and correction factors on page P1-15.

PERFORMANCE DATA | IP | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
					ft	ft	ft	ft							
6 x 30	200	0.020	250	-	6-10-19	6-8-17	5-7-14	4-7-13	11	16	22	20	15	-	
	300	0.044	375	20	10-14-29	8-13-25	7-11-22	7-10-20	21	26	32	30	25	20	
	400	0.079	500	27	13-19-38	11-17-33	10-14-29	9-13-27	28	33	39	37	32	27	
	500	0.123	625	33	16-24-48	14-21-42	12-18-36	11-17-33	34	39	45	43	38	33	
	600	0.177	750	38	19-29-57	17-25-50	14-22-43	13-20-40	39	44	50	48	43	38	
	700	0.241	875	42	22-33-67	20-29-59	17-25-50	16-23-47	43	48	54	52	47	42	
	800	0.314	1000	45	25-38-76	22-33-67	19-29-57	18-27-54	46	51	57	55	50	45	
8 x 10	200	0.020	111	-	5-8-15	4-7-13	4-6-11	4-5-11	-	13	19	17	12	-	
	300	0.046	167	18	8-11-23	7-10-20	6-9-17	5-8-16	19	24	30	28	23	18	
	400	0.081	222	25	10-15-30	9-13-27	8-11-23	7-11-21	26	31	37	35	30	25	
	500	0.127	278	31	13-19-38	11-17-33	9-14-28	9-13-27	32	37	43	41	36	31	
	600	0.183	333	36	15-23-46	13-20-40	11-17-34	11-16-32	37	42	48	46	41	36	
	700	0.249	389	40	18-27-53	15-23-46	13-20-40	12-19-37	41	46	52	50	45	40	
	800	0.326	444	43	20-30-60	18-27-53	15-23-46	14-21-42	44	49	55	53	48	43	
8 x 12	200	0.020	133	-	5-8-16	5-7-14	4-6-12	4-6-11	-	14	20	18	13	-	
	300	0.045	200	18	8-12-24	7-10-21	6-9-18	6-8-17	19	24	30	28	23	18	
	400	0.079	267	26	11-16-32	9-14-28	8-12-24	7-11-22	27	32	38	36	31	26	
	500	0.124	333	31	13-20-40	12-17-35	10-15-30	9-14-28	32	37	43	41	36	31	
	600	0.178	400	36	16-24-48	14-21-42	12-18-36	11-17-33	37	42	48	46	41	36	
	700	0.243	467	40	19-28-56	16-24-49	14-21-42	13-19-39	41	46	52	50	45	40	
	800	0.317	533	44	21-32-64	19-28-56	16-24-48	15-22-44	45	50	56	54	49	44	
8 x 14	200	0.019	156	-	6-8-17	5-7-14	4-6-12	4-6-12	-	14	20	18	13	-	
	300	0.044	233	18	8-12-25	7-11-22	6-9-19	6-9-17	19	24	30	28	23	18	
	400	0.078	311	26	11-17-33	10-14-29	8-12-25	8-12-23	27	32	38	36	31	26	
	500	0.122	389	32	14-21-41	12-18-36	10-15-31	10-14-29	33	38	44	42	37	32	
	600	0.175	467	36	17-25-50	14-22-43	12-19-37	12-17-35	37	42	48	46	41	36	
	700	0.238	544	40	19-29-58	17-25-51	14-22-43	13-20-40	41	46	52	50	45	40	
	800	0.311	622	44	22-33-66	19-29-58	17-25-50	15-23-46	45	50	56	54	49	44	
8 x 16	200	0.019	178	-	6-9-17	5-7-15	4-6-13	4-6-12	-	14	20	18	13	-	
	300	0.043	267	19	9-13-26	7-11-22	6-10-19	6-9-18	20	25	31	29	24	19	
	400	0.077	356	26	11-17-34	10-15-30	9-13-26	8-12-24	27	32	38	36	31	26	
	500	0.120	444	32	14-21-43	12-19-37	11-16-32	10-15-30	33	38	44	42	37	32	
	600	0.173	533	37	17-26-51	15-22-45	13-19-39	12-18-36	38	43	49	47	42	37	
	700	0.235	622	41	20-30-60	17-26-52	15-22-45	14-21-42	42	47	53	51	46	41	
	800	0.307	711	44	23-34-68	20-30-60	17-26-51	16-24-48	45	50	56	54	49	44	
8 x 18	200	0.019	200	-	6-9-18	5-8-15	4-7-13	4-6-12	-	14	20	18	13	-	
	300	0.043	300	19	9-13-26	8-12-23	7-10-20	6-9-19	20	25	31	29	24	19	
	400	0.076	400	26	12-18-35	10-15-31	9-13-26	8-12-25	27	32	38	36	31	26	
	500	0.119	500	32	15-22-44	13-19-39	11-17-33	10-15-31	33	38	44	42	37	32	
	600	0.171	600	37	18-26-53	15-23-46	13-20-40	12-19-37	38	43	49	47	42	37	
	700	0.232	700	41	21-31-62	18-27-54	15-23-46	14-22-43	42	47	53	51	46	41	
	800	0.303	800	44	24-35-71	21-31-62	18-26-53	16-25-49	45	50	56	54	49	44	
8 x 20	200	0.019	222	-	6-9-18	5-8-16	5-7-14	4-6-13	-	15	21	19	14	-	
	300	0.042	333	19	9-14-27	8-12-24	7-10-20	6-10-19	20	25	31	29	24	19	
	400	0.075	444	27	12-18-36	11-16-32	9-14-27	8-13-25	28	33	39	37	32	27	
	500	0.118	556	32	15-23-45	13-20-40	11-17-34	11-16-32	33	38	44	42	37	32	
	600	0.169	667	37	18-27-55	16-24-48	14-20-41	13-19-38	38	43	49	47	42	37	
	700	0.230	778	41	21-32-64	19-28-56	16-24-48	15-22-45	42	47	53	51	46	41	
	800	0.301	889	44	24-36-73	21-32-64	18-27-55	17-25-51	45	50	56	54	49	44	
8 x 30	200	0.018	333	-	7-10-20	6-9-18	5-8-15	5-7-14	11	16	22	20	15	-	
	300	0.041	500	20	10-15-31	9-13-27	8-11-23	7-11-21	21	26	32	30	25	20	
	400	0.073	667	28	14-20-41	12-18-36	10-15-31	9-14-28	29	34	40	38	33	28	
	500	0.115	833	33	17-25-51	15-22-44	13-19-38	12-18-36	34	39	45	43	38	33	
	600	0.165	1000	38	20-31-61	18-27-53	15-23-46	14-21-43	39	44	50	48	43	38	
	700	0.224	1167	42	24-36-71	21-31-62	18-27-53	17-25-50	43	48	54	52	47	42	
	800	0.293	1333	45	27-41-81	24-36-71	20-31-61	19-28-57	46	51	57	55	50	45	

NOTE: See notes and correction factors on page P1-15.

PERFORMANCE DATA | IP | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
in	fpm	in wg	cfm	NC	ft	ft	ft	ft							
8 x 36	200	0.018	400	-	8-12-23	7-10-20	6-9-17	5-8-16	11	16	22	20	15	-	
	300	0.041	600	21	12-17-35	10-15-30	9-13-26	8-12-24	22	27	33	31	26	21	
	400	0.073	800	28	15-23-46	14-20-41	12-17-35	11-16-32	29	34	40	38	33	28	
	500	0.114	1000	34	19-29-58	17-25-51	15-22-44	14-20-41	35	40	46	44	39	34	
	600	0.164	1200	38	23-35-70	20-30-61	17-26-52	16-24-49	39	44	50	48	43	38	
	700	0.223	1400	42	27-41-81	24-36-71	20-30-61	19-28-57	43	48	54	52	47	42	
10 x 12	800	0.291	1600	46	31-46-93	27-41-81	23-35-70	22-32-65	47	52	58	56	51	46	
	200	0.019	167	-	5-8-16	5-7-14	4-6-12	4-6-11	-	14	20	18	13	-	
	300	0.043	250	18	8-12-24	7-10-21	6-9-18	6-8-17	19	24	30	28	23	18	
	400	0.076	333	26	11-16-32	9-14-28	8-12-24	7-11-22	27	32	38	36	31	26	
	500	0.119	417	32	13-20-40	12-17-35	10-15-30	9-14-28	33	38	44	42	37	32	
	600	0.171	500	36	16-24-48	14-21-42	12-18-36	11-17-34	37	42	48	46	41	36	
10 x 14	700	0.233	583	40	19-28-56	16-24-49	14-21-42	13-20-39	41	46	52	50	45	40	
	800	0.304	667	44	21-32-64	19-28-56	16-24-48	15-22-45	45	50	56	54	49	44	
	200	0.019	194	-	6-9-17	5-7-15	4-6-13	4-6-12	-	14	20	18	13	-	
	300	0.042	292	19	9-13-26	7-11-22	6-10-19	6-9-18	20	25	31	29	24	19	
	400	0.075	389	26	11-17-34	10-15-30	9-13-26	8-12-24	27	32	38	36	31	26	
	500	0.117	486	32	14-21-43	12-19-37	11-16-32	10-15-30	33	38	44	42	37	32	
10 x 16	600	0.168	583	37	17-26-51	15-22-45	13-19-38	12-18-36	38	43	49	47	42	37	
	700	0.229	681	41	20-30-60	17-26-52	15-22-45	14-21-42	42	47	53	51	46	41	
	800	0.299	778	44	23-34-68	20-30-60	17-26-51	16-24-48	45	50	56	54	49	44	
	200	0.018	222	-	6-9-18	5-8-16	4-7-13	4-6-13	-	14	20	18	13	-	
	300	0.041	333	19	9-13-27	8-12-24	7-10-20	6-9-19	20	25	31	29	24	19	
	400	0.074	444	26	12-18-36	10-16-31	9-13-27	8-13-25	27	32	38	36	31	26	
10 x 24	500	0.115	556	32	15-22-45	13-20-39	11-17-34	10-16-31	33	38	44	42	37	32	
	600	0.166	667	37	18-27-54	16-24-47	13-20-40	13-19-38	38	43	49	47	42	37	
	700	0.225	778	41	21-31-63	18-28-55	16-24-47	15-22-44	42	47	53	51	46	41	
	800	0.294	889	44	24-36-72	21-31-63	18-27-54	17-25-50	45	50	56	54	49	44	
	200	0.018	333	-	7-11-21	6-9-19	5-8-16	5-7-15	-	15	21	19	14	-	
	300	0.040	500	20	11-16-32	9-14-28	8-12-24	7-11-22	21	26	32	30	25	20	
10 x 30	400	0.071	667	27	14-21-43	12-19-37	11-16-32	10-15-30	28	33	39	37	32	27	
	500	0.111	833	33	18-27-53	16-23-47	13-20-40	12-19-37	34	39	45	43	38	33	
	600	0.160	1000	38	21-32-64	19-28-56	16-24-48	15-22-45	39	44	50	48	43	38	
	700	0.218	1167	42	25-37-75	22-33-65	19-28-56	17-26-52	43	48	54	52	47	42	
	800	0.285	1333	45	28-43-85	25-37-75	21-32-64	20-30-60	46	51	57	55	50	45	
	200	0.018	417	-	8-12-23	7-10-20	6-9-18	5-8-16	11	16	22	20	15	-	
10 x 36	300	0.040	625	20	12-18-35	10-15-31	9-13-26	8-12-25	21	26	32	30	25	20	
	400	0.070	833	28	16-23-47	14-20-41	12-18-35	11-16-33	29	34	40	38	33	28	
	500	0.110	1042	34	20-29-59	17-26-51	15-22-44	14-20-41	35	40	46	44	39	34	
	600	0.158	1250	38	23-35-70	20-31-61	18-26-53	16-25-49	39	44	50	48	43	38	
	700	0.215	1458	42	27-41-82	24-36-72	20-31-61	19-29-57	43	48	54	52	47	42	
	800	0.281	1667	46	31-47-94	27-41-82	23-35-70	22-33-66	47	52	58	56	51	46	
12 x 14	200	0.017	500	-	8-13-25	7-11-22	6-9-19	6-9-18	11	16	22	20	15	-	
	300	0.039	750	21	13-19-38	11-17-33	9-14-28	9-13-27	22	27	33	31	26	21	
	400	0.070	1000	28	17-25-51	15-22-44	13-19-38	12-18-35	29	34	40	38	33	28	
	500	0.109	1250	34	21-32-63	18-28-55	16-24-47	15-22-44	35	40	46	44	39	34	
	600	0.157	1500	39	25-38-76	22-33-66	19-28-57	18-27-53	40	45	51	49	44	39	
	700	0.214	1750	43	30-44-89	26-39-78	22-33-66	21-31-62	44	49	55	53	48	43	
12 x 16	800	0.279	2000	46	34-51-101	30-44-89	25-38-76	24-35-71	47	52	58	56	51	46	
	200	0.018	233	-	6-9-18	5-8-16	5-7-14	4-6-13	-	14	20	18	13	-	
	300	0.041	350	19	9-14-27	8-12-24	7-10-21	6-10-19	20	25	31	29	24	19	
	400	0.073	467	26	12-18-37	11-16-32	9-14-27	9-13-26	27	32	38	36	31	26	
	500	0.114	583	32	15-23-46	13-20-40	11-17-34	11-16-32	33	38	44	42	37	32	
	600	0.164	700	37	18-27-55	16-24-48	14-21-41	13-19-38	38	43	49	47	42	37	
12 x 18	700	0.223	817	41	21-32-64	19-28-56	16-24-48	15-22-45	42	47	53	51	46	41	
	800	0.291	933	44	24-37-73	21-32-64	18-27-55	17-26-51	45	50	56	54	49	44	

NOTE: See notes and correction factors on page P1-15.

PERFORMANCE DATA | IP | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
					ft	ft	ft	ft							
12" x 20"	200	0.018	333	-	7-11-21	6-9-19	5-8-16	5-7-15	-	15	21	19	14	-	
	300	0.040	500	20	11-16-32	9-14-28	8-12-24	7-11-22	21	26	32	30	25	20	
	400	0.070	667	27	14-21-42	12-19-37	11-16-32	10-15-30	28	33	39	37	32	27	
	500	0.110	833	33	18-27-53	15-23-46	13-20-40	12-19-37	34	39	45	43	38	33	
	600	0.158	1000	38	21-32-64	19-28-56	16-24-48	15-22-45	39	44	50	48	43	38	
	700	0.215	1167	42	25-37-74	22-32-65	19-28-56	17-26-52	43	48	54	52	47	42	
	800	0.281	1333	45	28-42-85	25-37-74	21-32-64	20-30-59	46	51	57	55	50	45	
12" x 24"	200	0.017	400	-	8-11-23	7-10-20	6-9-17	5-8-16	11	16	22	20	15	-	
	300	0.039	600	20	11-17-34	10-15-30	9-13-26	8-12-24	21	26	32	30	25	20	
	400	0.069	800	27	15-23-46	13-20-40	11-17-34	11-16-32	28	33	39	37	32	27	
	500	0.108	1000	33	19-29-57	17-25-50	14-21-43	13-20-40	34	39	45	43	38	33	
	600	0.156	1200	38	23-34-69	20-30-60	17-26-52	16-24-48	39	44	50	48	43	38	
	700	0.212	1400	42	27-40-80	23-35-70	20-30-60	19-28-56	43	48	54	52	47	42	
	800	0.277	1600	45	31-46-92	27-40-80	23-34-69	21-32-64	46	51	57	55	50	45	
12" x 36"	200	0.017	600	11	9-14-27	8-12-24	7-10-20	6-10-19	12	17	23	21	16	11	
	300	0.038	900	21	14-20-41	12-18-36	10-15-31	10-14-29	22	27	33	31	26	21	
	400	0.068	1200	29	18-27-54	16-24-48	14-20-41	13-19-38	30	35	41	39	34	29	
	500	0.106	1500	34	23-34-68	20-30-60	17-26-51	16-24-48	35	40	46	44	39	34	
	600	0.153	1800	39	27-41-82	24-36-71	20-31-61	19-29-57	40	45	51	49	44	39	
	700	0.208	2100	43	32-48-95	28-42-83	24-36-71	22-33-67	44	49	55	53	48	43	
	800	0.272	2400	46	36-54-109	32-48-95	27-41-82	25-38-76	47	52	58	56	51	46	
14" x 18"	200	0.017	350	-	7-11-22	6-9-19	5-8-16	5-8-15	-	15	21	19	14	-	
	300	0.039	525	20	11-16-32	9-14-28	8-12-24	8-11-23	21	26	32	30	25	20	
	400	0.070	700	27	14-22-43	13-19-38	11-16-32	10-15-30	28	33	39	37	32	27	
	500	0.109	875	33	18-27-54	16-24-47	14-20-41	13-19-38	34	39	45	43	38	33	
	600	0.157	1050	38	22-32-65	19-28-57	16-24-49	15-23-45	39	44	50	48	43	38	
	700	0.213	1225	42	25-38-76	22-33-66	19-28-57	18-26-53	43	48	54	52	47	42	
	800	0.278	1400	45	29-43-86	25-38-76	22-32-65	20-30-61	46	51	57	55	50	45	
14" x 24"	200	0.017	467	-	8-12-24	7-11-21	6-9-18	6-9-17	11	16	22	20	15	-	
	300	0.038	700	20	12-18-37	11-16-32	9-14-27	9-13-26	21	26	32	30	25	20	
	400	0.068	933	28	16-24-49	14-21-43	12-18-37	11-17-34	29	34	40	38	33	28	
	500	0.106	1167	34	20-30-61	18-27-53	15-23-46	14-21-43	35	40	46	44	39	34	
	600	0.153	1400	38	24-37-73	21-32-64	18-27-55	17-26-51	39	44	50	48	43	38	
	700	0.208	1633	42	28-43-85	25-37-75	21-32-64	20-30-60	43	48	54	52	47	42	
	800	0.272	1867	46	33-49-98	28-43-85	24-37-73	23-34-68	47	52	58	56	51	46	
14" x 36"	200	0.017	700	11	9-14-29	8-13-25	7-11-22	6-10-20	12	17	23	21	16	11	
	300	0.037	1050	21	14-22-43	13-19-38	11-16-33	10-15-30	22	27	33	31	26	21	
	400	0.067	1400	29	19-29-58	17-25-51	14-22-43	14-20-41	30	35	41	39	34	29	
	500	0.104	1750	35	24-36-72	21-32-63	18-27-54	17-25-51	36	41	47	45	40	35	
	600	0.150	2100	39	29-43-87	25-38-76	22-33-65	20-30-61	40	45	51	49	44	39	
	700	0.204	2450	43	34-51-101	30-44-89	25-38-76	24-35-71	44	49	55	53	48	43	
	800	0.267	2800	47	39-58-116	34-51-101	29-43-87	27-41-81	48	53	59	57	52	47	
16" x 18"	200	0.017	400	-	8-11-23	7-10-20	6-9-17	5-8-16	-	15	21	19	14	-	
	300	0.039	600	20	11-17-34	10-15-30	9-13-26	8-12-24	21	26	32	30	25	20	
	400	0.069	800	27	15-23-46	13-20-40	11-17-34	11-16-32	28	33	39	37	32	27	
	500	0.107	1000	33	19-29-57	17-25-50	14-21-43	13-20-40	34	39	45	43	38	33	
	600	0.154	1200	38	23-34-69	20-30-60	17-26-51	16-24-48	39	44	50	48	43	38	
	700	0.210	1400	42	27-40-80	23-35-70	20-30-60	19-28-56	43	48	54	52	47	42	
	800	0.274	1600	45	30-46-91	27-40-80	23-34-69	21-32-64	46	51	57	55	50	45	
16" x 20"	200	0.017	444	-	8-12-24	7-10-21	6-9-18	6-8-17	11	16	22	20	15	-	
	300	0.038	667	20	12-18-36	10-16-31	9-13-27	8-13-25	21	26	32	30	25	20	
	400	0.068	889	28	16-24-48	14-21-42	12-18-36	11-17-33	29	34	40	38	33	28	
	500	0.106	1111	33	20-30-60	17-26-52	15-22-45	14-21-42	34	39	45	43	38	33	
	600	0.153	1333	38	24-36-72	21-31-63	18-27-54	17-25-50	39	44	50	48	43	38	
	700	0.208	1556	42	28-42-84	24-37-73	21-31-63	19-29-58	43	48	54	52	47	42	
	800	0.272	1778	45	32-48-95	28-42-84	24-36-72	22-33-67	46	51	57	55	50	45	

NOTE: See notes and correction factors on page P1-15.

PERFORMANCE DATA | IP | RECTANGULAR, WITH OBD/MULTILOUVER

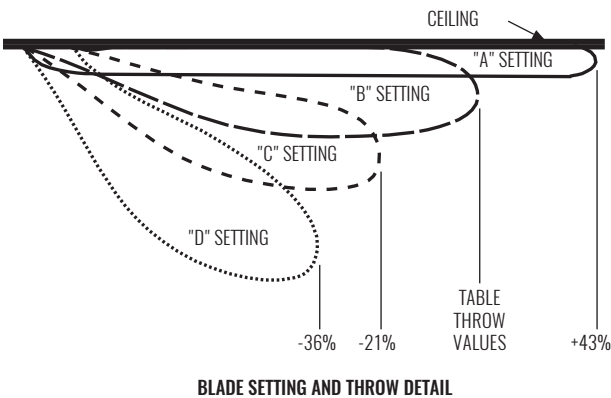
SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
in	fpm	in wg	cfm	NC	ft	ft	ft	ft							
16" x 24"	200	0.017	533	-	9-13-26	8-11-23	6-10-19	6-9-18	11	16	22	20	15	-	
	300	0.038	800	21	13-19-39	11-17-34	10-14-29	9-14-27	22	27	33	31	26	21	
	400	0.067	1067	28	17-26-52	15-23-45	13-19-39	12-18-36	29	34	40	38	33	28	
	500	0.105	1333	34	21-32-64	19-28-56	16-24-48	15-23-45	35	40	46	44	39	34	
	600	0.151	1600	38	26-39-77	23-34-68	19-29-58	18-27-54	39	44	50	48	43	38	
	700	0.206	1867	42	30-45-90	26-39-79	23-34-68	21-32-63	43	48	54	52	47	42	
16" x 30"	800	0.268	2133	46	34-52-103	30-45-90	26-39-77	24-36-72	47	52	58	56	51	46	
	200	0.066	667	11	9-14-28	8-12-25	6-11-21	6-10-20	12	17	23	21	16	11	
	300	0.037	1000	21	14-21-42	12-19-37	11-16-32	10-15-30	22	27	33	31	26	21	
	400	0.066	1333	29	19-28-57	17-25-50	14-21-42	13-20-40	30	35	41	39	34	29	
	500	0.104	1667	34	24-35-71	21-31-62	18-27-53	17-25-50	35	40	46	44	39	34	
	600	0.149	2000	39	28-42-85	25-37-74	21-32-64	20-30-59	40	45	51	49	44	39	
16" x 36"	700	0.203	2333	43	33-50-99	29-43-87	25-37-74	23-35-69	44	49	55	53	48	43	
	800	0.265	2667	46	38-57-113	33-50-99	28-42-85	26-40-79	47	52	58	56	51	46	
	200	0.016	800	11	9-15-31	8-13-27	6-11-23	6-11-21	12	17	23	21	16	11	
	300	0.037	1200	22	15-23-46	13-20-40	11-17-34	11-16-32	23	28	34	32	27	22	
	400	0.066	1600	29	20-31-61	18-27-54	15-23-46	14-21-43	30	35	41	39	34	29	
	500	0.103	2000	35	26-38-77	22-33-67	19-29-57	18-27-54	36	41	47	45	40	35	
18" x 20"	600	0.148	2400	39	31-46-92	27-40-80	23-34-69	21-32-64	40	45	51	49	44	39	
	700	0.201	2800	43	36-54-107	31-47-94	27-40-80	25-37-75	44	49	55	53	48	43	
	800	0.263	3200	47	41-61-122	36-54-107	31-46-92	29-43-86	48	53	59	57	52	47	
	200	0.017	500	-	8-13-25	7-11-22	6-9-19	6-9-18	11	16	22	20	15	-	
	300	0.038	750	20	13-19-38	11-16-33	9-14-28	9-13-26	21	26	32	30	25	20	
	400	0.067	1000	28	17-25-50	15-22-44	13-19-38	12-18-35	29	34	40	38	33	28	
18" x 24"	500	0.105	1250	34	21-31-63	18-27-55	16-23-47	15-22-44	35	40	46	44	39	34	
	600	0.151	1500	38	25-38-75	22-33-66	19-28-56	18-26-53	39	44	50	48	43	38	
	700	0.206	1750	42	29-44-88	26-38-77	22-33-66	20-31-61	43	48	54	52	47	42	
	800	0.269	2000	46	33-50-100	29-44-88	25-38-75	23-35-70	47	52	58	56	51	46	
	200	0.017	600	-	9-14-27	8-12-24	6-10-20	6-9-19	11	16	22	20	15	-	
	300	0.037	900	21	14-20-41	12-18-35	10-15-30	9-14-28	22	27	33	31	26	21	
18" x 36"	400	0.066	1200	28	18-27-54	16-24-47	14-20-41	13-19-38	29	34	40	38	33	28	
	500	0.104	1500	34	23-34-68	20-30-59	17-25-51	16-24-47	35	40	46	44	39	34	
	600	0.149	1800	39	27-41-81	24-35-71	20-30-61	19-28-57	40	45	51	49	44	39	
	700	0.203	2100	43	32-47-95	28-41-83	24-35-71	22-33-66	44	49	55	53	48	43	
	800	0.266	2400	46	36-54-108	32-47-95	27-41-81	25-38-76	47	52	58	56	51	46	
	200	0.016	900	11	9-16-32	7-14-28	6-12-24	6-11-22	12	17	23	21	16	11	
20" x 24"	300	0.037	1350	22	16-24-48	14-21-42	12-18-36	11-17-34	23	28	34	32	27	22	
	400	0.065	1800	29	21-32-64	19-28-56	16-24-48	15-22-45	30	35	41	39	34	29	
	500	0.102	2250	35	27-40-80	23-35-70	20-30-60	19-28-56	36	41	47	45	40	35	
	600	0.146	2700	40	32-48-96	28-42-84	24-36-72	22-34-67	41	46	52	50	45	40	
	700	0.199	3150	44	37-56-112	33-49-98	28-42-84	26-39-79	45	50	56	54	49	44	
	800	0.260	3600	47	43-64-129	37-56-112	32-48-96	30-45-90	48	53	59	57	52	47	
20" x 36"	200	0.016	667	11	9-14-28	7-12-25	6-11-21	6-10-20	12	17	23	21	16	11	
	300	0.037	1000	21	14-21-42	12-19-37	11-16-32	10-15-30	22	27	33	31	26	21	
	400	0.066	1333	28	19-28-57	16-25-49	14-21-42	13-20-40	29	34	40	38	33	28	
	500	0.103	1667	34	24-35-71	21-31-62	18-26-53	16-25-49	35	40	46	44	39	34	
	600	0.148	2000	39	28-42-85	25-37-74	21-32-64	20-30-59	40	45	51	49	44	39	
	700	0.202	2333	43	33-49-99	29-43-87	25-37-74	23-35-69	44	49	55	53	48	43	
20" x 36"	800	0.263	2667	46	38-57-113	33-49-99	28-42-85	26-40-79	47	52	58	56	51	46	
	200	0.016	1000	12	9-17-34	7-15-29	6-13-25	6-12-24	13	18	24	22	17	12	
	300	0.036	1500	22	17-25-50	15-22-44	13-19-38	12-18-35	23	28	34	32	27	22	
	400	0.064	2000	29	22-34-67	20-29-59	17-25-50	16-24-47	30	35	41	39	34	29	
	500	0.101	2500	35	28-42-84	24-37-73	21-31-63	20-29-59	36	41	47	45	40	35	
	600	0.145	3000	40	34-50-101	29-44-88	25-38-76	24-35-71	41	46	52	50	45	40	
20" x 36"	700	0.197	3500	44	39-59-118	34-51-103	29-44-88	27-41-82	45	50	56	54	49	44	
	800	0.258	4000	47	45-67-134	39-59-118	34-50-101	31-47-94	48	53	59	57	52	47	

NOTE: See notes and correction factors on page P1-15.

PERFORMANCE DATA | IP | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
					ft	ft	ft	ft							
24" x 30"	200	0.016	1000	12	8 - 17 - 34	7 - 15 - 29	6 - 13 - 25	6 - 12 - 23	13	18	24	22	17	12	
	300	0.036	1500	22	17 - 25 - 50	15 - 22 - 44	13 - 19 - 38	12 - 18 - 35	23	28	34	32	27	22	
	400	0.064	2000	29	22 - 34 - 67	20 - 29 - 59	17 - 25 - 50	16 - 23 - 47	30	35	41	39	34	29	
	500	0.100	2500	35	28 - 42 - 84	24 - 37 - 73	21 - 31 - 63	20 - 29 - 59	36	41	47	45	40	35	
	600	0.144	3000	40	34 - 50 - 101	29 - 44 - 88	25 - 38 - 75	23 - 35 - 70	41	46	52	50	45	40	
	700	0.196	3500	44	39 - 59 - 117	34 - 51 - 103	29 - 44 - 88	27 - 41 - 82	45	50	56	54	49	44	
	800	0.257	4000	47	45 - 67 - 134	39 - 59 - 117	34 - 50 - 101	31 - 47 - 94	48	53	59	57	52	47	
24" x 36"	200	0.016	1200	12	8 - 18 - 36	7 - 16 - 32	6 - 14 - 27	6 - 13 - 25	13	18	24	22	17	12	
	300	0.036	1800	22	18 - 27 - 54	16 - 24 - 48	14 - 20 - 41	13 - 19 - 38	23	28	34	32	27	22	
	400	0.064	2400	30	24 - 36 - 73	21 - 32 - 63	18 - 27 - 54	17 - 25 - 51	31	36	42	40	35	30	
	500	0.099	3000	36	30 - 45 - 91	26 - 40 - 79	23 - 34 - 68	21 - 32 - 63	37	42	48	46	41	36	
	600	0.143	3600	40	36 - 54 - 109	32 - 48 - 95	27 - 41 - 82	25 - 38 - 76	41	46	52	50	45	40	
	700	0.195	4200	44	42 - 63 - 127	37 - 56 - 111	32 - 48 - 95	30 - 44 - 89	45	50	56	54	49	44	
	800	0.254	4800	48	48 - 73 - 145	42 - 63 - 127	36 - 54 - 109	34 - 51 - 102	49	54	60	58	53	48	
30" x 36"	200	0.016	1500	13	8 - 19 - 40	7 - 17 - 35	6 - 14 - 30	6 - 13 - 28	14	19	25	23	18	13	
	300	0.035	2250	23	19 - 30 - 60	17 - 26 - 52	14 - 22 - 45	13 - 21 - 42	24	29	35	33	28	23	
	400	0.063	3000	30	27 - 40 - 80	23 - 35 - 70	20 - 30 - 60	19 - 28 - 56	31	36	42	40	35	30	
	500	0.098	3750	36	33 - 50 - 100	29 - 44 - 87	25 - 37 - 75	23 - 35 - 70	37	42	48	46	41	36	
	600	0.141	4500	41	40 - 60 - 120	35 - 52 - 105	30 - 45 - 90	28 - 42 - 84	42	47	53	51	46	41	
	700	0.192	5250	45	46 - 70 - 139	41 - 61 - 122	35 - 52 - 105	33 - 49 - 98	46	51	57	55	50	45	
	800	0.251	6000	48	53 - 80 - 159	46 - 70 - 139	40 - 60 - 120	37 - 56 - 112	49	54	60	58	53	48	

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. The throw values given for 1-Way Throw is for [Total CFM] CFM per side. The throw values given for 2-Way Throw is for [Total CFM/2] CFM per side. The throw values given for 3-Way Throw is for [Total CFM/3] CFM per side. The throw values given for 4-Way Throw is for [Total CFM/4] CFM per side. See Krueger's selection software for performance data not shown, including octave band data.



NOTE: Reference page P1-5 for blade setting detail.

CORRECTION FACTOR (WITH OBD)			
BLADE SETTING	THROWS (MULTIPLY)	PS (MULTIPLY)	NC (ADD)
A	1.43	1.30	+2
B	1.00	1.00	+0
C	0.79	0.72	-3
D	0.64	0.52	-4

CORRECTION FACTOR (WITHOUT OBD)			
BLADE SETTING	THROWS (MULTIPLY)	PS (MULTIPLY)	NC (ADD)
A	1.43	1.20	+0
B	1.00	0.85	-3
C	0.70	0.61	-4
D	0.64	0.33	-6

GRILLES | STAINLESS STEEL

PERFORMANCE DATA | METRIC | SQUARE, WITH OBD/MULTILOUVER

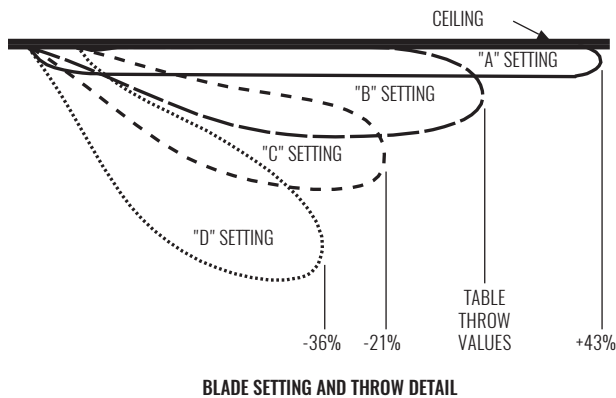
SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
					m	m	m	m							
152 x 152	1.02	6.1	24	-	1.3-1.9-3.9	1.1-1.7-3.4	1.0-1.5-2.9	0.9-1.4-2.7	-	13	19	17	12	-	
	1.52	13.7	35	18	1.9-2.9-5.8	1.7-2.5-5.1	1.5-2.2-4.4	1.4-2.0-4.1	18	23	29	27	22	17	
	2.03	24.3	47	25	2.6-3.9-7.7	2.3-3.4-6.8	1.9-2.9-5.8	1.8-2.7-5.4	25	30	36	34	29	24	
	2.54	38.0	59	31	3.2-4.8-9.6	2.8-4.2-8.5	2.4-3.6-7.3	2.3-3.4-6.8	31	36	42	40	35	30	
	3.05	54.7	71	35	3.9-5.8-10.5	3.4-5.1-10.0	2.9-4.4-8.7	2.7-4.1-7.9	36	41	47	45	40	35	
	3.56	74.4	83	39	4.5-6.8-11.4	3.9-5.9-10.8	3.4-5.1-9.7	3.2-4.7-8.5	40	45	51	49	44	39	
	4.06	97.2	94	43	5.2-7.7-12.2	4.5-6.8-11.6	3.9-5.8-10.3	3.6-5.4-9.1	43	48	54	52	47	42	
203 x 203	1.02	5.3	42	-	1.5-2.2-4.4	1.3-1.9-3.8	1.1-1.6-3.3	1.0-1.5-3.1	-	12	18	16	11	-	
	1.52	11.9	63	18	2.2-3.3-6.6	1.9-2.9-5.7	1.6-2.5-4.9	1.5-2.3-4.6	17	22	28	26	21	16	
	2.03	21.1	84	25	2.9-4.4-8.8	2.6-3.8-7.7	2.2-3.3-6.6	2.0-3.1-6.1	24	29	35	33	28	23	
	2.54	33.0	105	31	3.6-5.5-10.9	3.2-4.8-9.6	2.7-4.1-8.2	2.6-3.8-7.7	30	35	41	39	34	29	
	3.05	47.5	126	36	4.4-6.6-13.1	3.8-5.7-11.5	3.3-4.9-9.8	3.1-4.6-9.2	35	40	46	44	39	34	
	3.56	64.7	147	40	5.1-7.7-15.2	4.5-6.7-13.4	3.8-5.7-11.5	3.6-5.4-10.7	39	44	50	48	43	38	
	4.06	84.5	168	43	5.8-8.8-16.2	5.1-7.7-15.3	4.4-6.6-13.1	4.1-6.1-12.2	42	47	53	51	46	41	
254 x 254	1.02	4.9	66	-	1.6-2.4-4.9	1.4-2.1-4.3	1.2-1.8-3.6	1.1-1.7-3.4	-	11	17	15	-	-	
	1.52	10.9	98	18	2.4-3.6-7.3	2.1-3.2-6.4	1.8-2.7-5.5	1.7-2.6-5.1	17	22	28	26	21	16	
	2.03	19.5	131	26	3.2-4.9-9.7	2.8-4.3-8.5	2.4-3.6-7.3	2.3-3.4-6.8	24	29	35	33	28	23	
	2.54	30.4	164	31	4.1-6.1-12.2	3.5-5.3-10.6	3.0-4.6-9.1	2.8-4.3-8.5	30	35	41	39	34	29	
	3.05	43.8	197	36	4.9-7.3-14.6	4.3-6.4-12.8	3.6-5.5-10.9	3.4-5.1-10.2	34	39	45	43	38	33	
	3.56	59.6	229	40	5.7-8.5-17.0	5.0-7.4-14.9	4.3-6.4-12.8	4.0-6.0-11.9	38	43	49	47	42	37	
	4.06	77.8	262	43	6.5-9.7-19.5	5.7-8.5-17.0	4.9-7.3-14.6	4.5-6.8-13.6	42	47	53	51	46	41	
305 x 305	1.02	4.6	94	-	1.8-2.7-5.3	1.6-2.3-4.7	1.3-2.0-4.0	1.2-1.9-3.7	-	11	17	15	-	-	
	1.52	10.4	142	19	2.7-4.0-8.0	2.3-3.5-7.0	2.0-3.0-6.0	1.9-2.8-5.6	17	22	28	26	21	16	
	2.03	18.4	189	26	3.5-5.3-10.6	3.1-4.7-9.3	2.7-4.0-8.0	2.5-3.7-7.5	24	29	35	33	28	23	
	2.54	28.8	236	32	4.4-6.7-13.3	3.9-5.8-11.6	3.3-5.0-10.0	3.1-4.7-9.3	30	35	41	39	34	29	
	3.05	41.5	283	37	5.3-8.0-16.0	4.7-7.0-14.0	4.0-6.0-12.0	3.7-5.6-11.2	35	40	46	44	39	34	
	3.56	56.5	330	41	6.2-9.3-18.6	5.4-8.2-16.3	4.7-7.0-14.0	4.3-6.5-13.0	39	44	50	48	43	38	
	4.06	73.8	378	44	7.1-10.6-21.3	6.2-9.3-18.6	5.3-8.0-16.0	5.0-7.5-14.9	42	47	53	51	46	41	
356 x 356	1.02	4.4	128	-	1.9-2.9-5.8	1.7-2.5-5.0	1.4-2.2-4.3	1.3-2.0-4.0	-	11	17	15	-	-	
	1.52	10.0	193	18	2.9-4.3-8.6	2.5-3.8-7.6	2.2-3.2-6.5	2.0-3.0-6.1	17	22	28	26	21	16	
	2.03	17.8	257	26	3.8-5.8-11.5	3.4-5.0-10.1	2.9-4.3-8.6	2.7-4.0-8.1	24	29	35	33	28	23	
	2.54	27.7	321	31	4.8-7.2-14.4	4.2-6.3-12.6	3.6-5.4-10.8	3.4-5.0-10.1	30	35	41	39	34	29	
	3.05	40.0	385	36	5.8-8.6-17.3	5.0-7.6-15.1	4.3-6.5-13.0	4.0-6.1-12.1	35	40	46	44	39	34	
	3.56	54.4	450	40	6.7-10.1-20.2	5.9-8.8-17.6	5.0-7.6-15.1	4.7-7.1-14.1	39	44	50	48	43	38	
	4.06	71.0	514	44	7.7-11.5-23.1	6.7-10.1-20.2	5.8-8.6-17.3	5.4-8.1-16.1	42	47	53	51	46	41	
406 x 406	1.02	4.3	168	-	2.1-3.1-6.2	1.8-2.7-5.4	1.5-2.3-4.6	1.4-2.2-4.3	-	11	17	15	-	-	
	1.52	9.7	252	20	3.1-4.6-9.3	2.7-4.1-8.1	2.3-3.5-7.0	2.2-3.2-6.5	17	22	28	26	21	16	
	2.03	17.3	336	27	4.1-6.2-12.4	3.6-5.4-10.8	3.1-4.6-9.3	2.9-4.3-8.7	24	29	35	33	28	23	
	2.54	27.0	420	33	5.2-7.7-15.5	4.5-6.8-13.5	3.9-5.8-11.6	3.6-5.4-10.8	30	35	41	39	34	29	
	3.05	38.8	503	38	6.2-9.3-18.5	5.4-8.1-16.2	4.6-7.0-13.9	4.3-6.5-13.0	35	40	46	44	39	34	
	3.56	52.9	587	42	7.2-10.8-21.6	6.3-9.5-18.9	5.4-8.1-16.2	5.0-7.6-15.1	39	44	50	48	43	38	
	4.06	69.1	671	45	8.2-12.4-24.7	7.2-10.8-21.6	6.2-9.3-18.5	5.8-8.7-17.3	42	47	53	51	46	41	
457 x 457	1.02	4.2	212	-	2.2-3.3-6.6	1.9-2.9-5.8	1.6-2.5-4.9	1.5-2.3-4.6	-	11	17	15	-	-	
	1.52	9.5	319	18	3.3-4.9-9.9	2.9-4.3-8.6	2.5-3.7-7.4	2.3-3.5-6.9	17	22	28	26	21	16	
	2.03	16.9	425	25	4.4-6.6-13.2	3.8-5.8-11.5	3.3-4.9-9.9	3.1-4.6-9.2	24	29	35	33	28	23	
	2.54	26.4	531	31	5.5-8.2-16.5	4.8-7.2-14.4	4.1-6.2-12.3	3.8-5.8-11.5	30	35	41	39	34	29	
	3.05	38.0	637	35	6.6-9.9-19.8	5.8-8.6-17.3	4.9-7.4-14.8	4.6-6.9-13.8	35	40	46	44	39	34	
	3.56	51.7	743	39	7.7-11.5-23.0	6.7-10.1-20.2	5.8-8.6-17.3	5.4-8.1-16.1	39	44	50	48	43	38	
	4.06	67.6	850	43	8.8-13.2-26.3	7.7-11.5-23.0	6.6-9.9-19.8	6.1-9.2-18.4	42	47	53	51	46	41	
508 x 508	1.02	4.2	262	-	2.3-3.5-7.0	2.0-3.1-6.1	1.7-2.6-5.2	1.6-2.4-4.9	-	-	16	14	-	-	
	1.52	9.3	393	21	3.5-5.2-10.5	3.1-4.6-9.2	2.6-3.9-7.8	2.4-3.7-7.3	15	20	26	24	19	14	
	2.03	16.6	524	28	4.6-7.0-13.9	4.1-6.1-12.2	3.5-5.2-10.5	3.3-4.9-9.8	23	28	34	32	27	22	
	2.54	25.9	655	34	5.8-8.7-17.4	5.1-7.6-15.3	4.4-6.5-13.1	4.1-6.1-12.2	29	34	40	38	33	28	
	3.05	37.4	787	39	7.0-10.5-20.9	6.1-9.2-18.3	5.2-7.8-15.7	4.9-7.3-14.6	33	38	44	42	37	32	
	3.56	50.8	918	43	8.1-12.2-24.4	7.1-10.7-21.4	6.1-9.2-18.3	5.7-8.5-17.1	37	42	48	46	41	36	
	4.06	66.4	1049	46	9.3-13.9-27.9	8.1-12.2-24.4	7.0-10.5-20.9	6.5-9.8-19.5	41	46	52	50	45	40	

NOTE: See notes and correction factors on page P1-17.

PERFORMANCE DATA | METRIC | SQUARE, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	OCTAVE BAND, dB						
					m	m	m	m	2	3	4	5	6	7	
cm	m/s	Pa	L/s	NC											
610 x 610	1.02	4.0	378	-	2.2 - 3.9 - 7.7	1.9 - 3.4 - 6.7	1.6 - 2.9 - 5.8	1.5 - 2.7 - 5.4	-	-	16	14	-	-	
	1.52	9.1	566	17	3.9 - 5.8 - 11.6	3.4 - 5.1 - 10.1	2.9 - 4.3 - 8.7	2.7 - 4.0 - 8.1	16	21	27	25	20	15	
	2.03	16.2	755	24	5.1 - 7.7 - 15.4	4.5 - 6.7 - 13.5	3.9 - 5.8 - 11.6	3.6 - 5.4 - 10.8	23	28	34	32	27	22	
	2.54	25.3	944	30	6.4 - 9.6 - 19.3	5.6 - 8.4 - 16.9	4.8 - 7.2 - 14.5	4.5 - 6.7 - 13.5	29	34	40	38	33	28	
	3.05	36.4	1133	35	7.7 - 11.6 - 23.1	6.7 - 10.1 - 20.2	5.8 - 8.7 - 17.3	5.4 - 8.1 - 16.2	34	39	45	43	38	33	
	3.56	49.5	1321	39	9.0 - 13.5 - 27.0	7.9 - 11.8 - 23.6	6.7 - 10.1 - 20.2	6.3 - 9.4 - 18.9	38	43	49	47	42	37	
	4.06	64.7	1510	42	10.3 - 15.4 - 30.8	9.0 - 13.5 - 27.0	7.7 - 11.6 - 23.1	7.2 - 10.8 - 21.6	41	46	52	50	45	40	
762 x 762	1.02	3.9	590	12	2.0 - 4.4 - 8.7	1.8 - 3.8 - 7.6	1.5 - 3.3 - 6.5	1.4 - 3.1 - 6.1	-	-	16	14	-	-	
	1.52	8.9	885	23	4.4 - 6.5 - 13.1	3.8 - 5.7 - 11.5	3.3 - 4.9 - 9.8	3.1 - 4.6 - 9.2	16	21	27	25	20	15	
	2.03	15.8	1180	30	5.8 - 8.7 - 17.5	5.1 - 7.6 - 15.3	4.4 - 6.5 - 13.1	4.1 - 6.1 - 12.2	23	28	34	32	27	22	
	2.54	24.6	1475	36	7.3 - 10.9 - 21.8	6.4 - 9.6 - 19.1	5.5 - 8.2 - 16.4	5.1 - 7.6 - 15.3	29	34	40	38	33	28	
	3.05	35.5	1770	40	8.7 - 13.1 - 26.2	7.6 - 11.5 - 22.9	6.5 - 9.8 - 19.6	6.1 - 9.2 - 18.3	34	39	45	43	38	33	
	3.56	48.3	2065	44	10.2 - 15.3 - 30.6	8.9 - 13.4 - 26.7	7.6 - 11.5 - 22.9	7.1 - 10.7 - 21.4	38	43	49	47	42	37	
	4.06	63.1	2360	48	11.6 - 17.5 - 34.9	10.2 - 15.3 - 30.6	8.7 - 13.1 - 26.2	8.2 - 12.2 - 24.5	41	46	52	50	45	40	
914 x 914	1.02	3.9	850	13	1.9 - 4.3 - 9.7	3.6 - 5.5 - 11.0	3.1 - 4.7 - 9.4	2.9 - 4.4 - 8.8	-	11	17	15	-	-	
	1.52	8.7	1274	23	4.3 - 7.3 - 14.5	5.5 - 8.3 - 16.5	4.7 - 7.1 - 14.1	4.4 - 6.6 - 13.2	16	21	27	25	20	15	
	2.03	15.5	1699	31	6.5 - 9.7 - 19.4	7.3 - 11.0 - 22.0	6.3 - 9.4 - 18.9	5.9 - 8.8 - 17.6	23	28	34	32	27	22	
	2.54	24.2	2124	37	8.1 - 12.1 - 24.2	9.2 - 13.8 - 27.5	7.9 - 11.8 - 23.6	7.3 - 11.0 - 22.0	29	34	40	38	33	28	
	3.05	34.9	2549	41	9.7 - 14.5 - 29.1	11.0 - 16.5 - 33.0	9.4 - 14.1 - 28.3	8.8 - 13.2 - 26.4	34	39	45	43	38	33	
	3.56	47.5	2973	45	11.3 - 16.9 - 33.9	12.8 - 19.3 - 38.5	11.0 - 16.5 - 33.0	10.3 - 15.4 - 30.8	38	43	49	47	42	37	
	4.06	62.0	3398	49	12.9 - 19.4 - 38.7	14.7 - 22.0 - 44.0	12.6 - 18.9 - 37.7	11.7 - 17.6 - 35.2	41	46	52	50	45	40	

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. The throw values given for 1-Way Throw is for [(Total L/s) L/s per side. The throw values given for 2-Way Throw is for [(Total L/s)/2] L/s per side. The throw values given for 3-Way Throw is for [(Total L/s)/3] L/s per side. The throw values given for 4-Way Throw is for [(Total L/s)/4] L/s per side. See Krueger's selection software for performance data not shown, including octave band data.



NOTE: Reference page P1-5 for blade setting detail.

CORRECTION FACTOR (WITH OBD)			
BLADE SETTING	THROWS (MULTIPLY)	Ps (MULTIPLY)	NC (ADD)
A	1.43	1.30	+2
B	1.00	1.00	+0
C	0.79	0.72	-3
D	0.64	0.52	-4

CORRECTION FACTOR (WITHOUT OBD)			
BLADE SETTING	THROWS (MULTIPLY)	Ps (MULTIPLY)	NC (ADD)
A	1.43	1.20	+0
B	1.00	0.85	-3
C	0.70	0.61	-4
D	0.64	0.33	-6

GRILLES | STAINLESS STEEL

PERFORMANCE DATA | METRIC | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
cm	m/s	Pa	L/s	NC	m	m	m	m							
102 x 152	1.016	7.0	16	-	0.6-0.9-1.7	0.4-0.6-1.2	0.4-0.6-1.3	0.4-0.6-1.2	-	15	21	19	14	-	
	1.524	15.9	24	18	0.9-1.3-2.6	0.6-0.9-1.8	0.6-1.0-1.9	0.6-0.9-1.8	20	25	31	29	24	19	
	2.032	28.2	31	25	1.1-1.7-3.4	0.8-1.2-2.4	0.9-1.3-2.6	0.8-1.2-2.4	27	32	38	36	31	26	
	2.54	44.0	39	31	1.4-2.1-4.3	1.0-1.5-3.0	1.1-1.6-3.2	1.0-1.5-3.0	33	38	44	42	37	32	
	3.048	63.4	47	36	1.7-2.6-5.1	1.2-1.8-3.6	1.3-1.9-3.8	1.2-1.8-3.6	38	43	49	47	42	37	
	3.556	86.3	55	40	2.0-3.0-6.0	1.4-2.1-4.2	1.5-2.2-4.5	1.4-2.1-4.2	42	47	53	51	46	41	
4.064	112.8	63	43	2.3-3.4-6.8	1.6-2.4-4.8	1.7-2.6-5.1	1.6-2.4-4.8	45	50	56	54	49	44		
102 x 203	1.016	6.6	21	-	0.6-0.9-1.8	0.7-1.0-2.0	0.5-0.7-1.4	0.4-0.6-1.3	-	14	20	18	13	-	
	1.524	14.8	31	18	0.9-1.4-2.7	1.0-1.5-3.0	0.7-1.0-2.0	0.6-1.0-1.9	20	25	31	29	24	19	
	2.032	26.3	42	25	1.2-1.8-3.6	1.3-2.0-4.0	0.9-1.4-2.7	0.8-1.3-2.5	27	32	38	36	31	26	
	2.54	41.1	52	31	1.5-2.3-4.5	1.7-2.5-5.0	1.1-1.7-3.4	1.1-1.6-3.2	33	38	44	42	37	32	
	3.048	59.1	63	36	1.8-2.7-5.4	2.0-3.0-6.0	1.4-2.0-4.1	1.3-1.9-3.8	38	43	49	47	42	37	
	3.556	80.5	73	40	2.1-3.2-6.3	2.3-3.5-7.0	1.6-2.4-4.8	1.5-2.2-4.4	42	47	53	51	46	41	
4.064	105.1	84	43	2.4-3.6-7.2	2.6-4.0-7.5	1.8-2.7-5.4	1.7-2.5-5.1	45	50	56	54	49	44		
102 x 254	1.016	6.3	26	-	0.6-1.0-1.9	0.6-0.8-1.7	0.5-0.7-1.4	0.4-0.7-1.3	-	14	20	18	13	-	
	1.524	14.2	39	18	1.0-1.4-2.9	0.8-1.3-2.5	0.7-1.1-2.1	0.7-1.0-2.0	20	25	31	29	24	19	
	2.032	25.2	52	26	1.3-1.9-3.8	1.1-1.7-3.3	1.0-1.4-2.9	0.9-1.3-2.7	27	32	38	36	31	26	
	2.54	39.4	66	31	1.6-2.4-4.8	1.4-2.1-4.2	1.2-1.8-3.6	1.1-1.7-3.3	33	38	44	42	37	32	
	3.048	56.8	79	36	1.9-2.9-5.7	1.7-2.5-5.0	1.4-2.1-4.3	1.3-2.0-4.0	38	43	49	47	42	37	
	3.556	77.2	92	40	2.2-3.3-6.7	1.9-2.9-5.8	1.7-2.5-5.0	1.6-2.3-4.7	42	47	53	51	46	41	
4.064	100.9	105	44	2.5-3.8-7.6	2.2-3.3-6.7	1.9-2.9-5.7	1.8-2.7-5.3	45	50	56	54	49	44		
102 x 305	1.016	6.1	31	-	0.7-1.0-2.0	0.6-0.9-1.7	0.5-0.7-1.5	0.5-0.7-1.4	-	15	21	19	14	-	
	1.524	13.8	47	19	1.0-1.5-3.0	0.9-1.3-2.6	0.7-1.1-2.2	0.7-1.0-2.1	20	25	31	29	24	19	
	2.032	24.6	63	26	1.3-2.0-4.0	1.2-1.7-3.5	1.0-1.5-3.0	0.9-1.4-2.8	28	33	39	37	32	27	
	2.54	38.4	79	32	1.7-2.5-5.0	1.5-2.2-4.4	1.2-1.9-3.7	1.2-1.7-3.5	34	39	45	43	38	33	
	3.048	55.2	94	36	2.0-3.0-6.0	1.7-2.6-5.2	1.5-2.2-4.5	1.4-2.1-4.2	38	43	49	47	42	37	
	3.556	75.2	110	40	2.3-3.5-7.0	2.0-3.1-6.1	1.7-2.6-5.2	1.6-2.4-4.9	42	47	53	51	46	41	
4.064	98.2	126	44	2.7-4.0-8.0	2.3-3.5-7.0	2.0-3.0-6.0	1.9-2.8-5.6	46	51	57	55	50	45		
102 x 356	1.016	6.0	37	-	0.8-1.2-2.3	0.5-0.8-1.6	0.6-0.9-1.7	0.5-0.8-1.6	-	15	21	19	14	-	
	1.524	13.6	55	19	1.2-1.7-3.5	0.8-1.2-2.5	0.9-1.3-2.6	0.8-1.2-2.4	21	26	32	30	25	20	
	2.032	24.1	73	26	1.6-2.3-4.7	1.1-1.6-3.3	1.2-1.7-3.5	1.1-1.6-3.3	28	33	39	37	32	27	
	2.54	37.6	92	32	1.9-2.9-5.8	1.4-2.1-4.1	1.5-2.2-4.4	1.4-2.0-4.1	34	39	45	43	38	33	
	3.048	54.2	110	37	2.3-3.5-7.0	1.6-2.5-4.9	1.7-2.6-5.2	1.6-2.4-4.9	39	44	50	48	43	38	
	3.556	73.8	128	41	2.7-4.1-8.2	1.9-2.9-5.8	2.0-3.1-6.1	1.9-2.9-5.7	42	47	53	51	46	41	
4.064	96.4	147	44	3.1-4.7-9.3	2.2-3.3-6.6	2.3-3.5-7.0	2.2-3.3-6.5	46	51	57	55	50	45		
102 x 406	1.016	5.9	42	-	0.7-1.1-2.2	0.6-0.9-1.9	0.5-0.8-1.6	0.5-0.8-1.5	-	15	21	19	14	-	
	1.524	13.4	63	19	1.1-1.6-3.2	0.9-1.4-2.8	0.8-1.2-2.4	0.8-1.1-2.3	21	26	32	30	25	20	
	2.032	23.8	84	26	1.4-2.2-4.3	1.3-1.9-3.8	1.1-1.6-3.2	1.0-1.5-3.0	28	33	39	37	32	27	
	2.54	37.1	105	32	1.8-2.7-5.4	1.6-2.4-4.7	1.3-2.0-4.0	1.3-1.9-3.8	34	39	45	43	38	33	
	3.048	53.5	126	37	2.2-3.2-6.5	1.9-2.8-5.7	1.6-2.4-4.8	1.5-2.3-4.5	39	44	50	48	43	38	
	3.556	72.8	147	41	2.5-3.8-7.5	2.2-3.3-6.6	1.9-2.8-5.7	1.8-2.6-5.3	43	48	54	52	47	42	
4.064	95.0	168	44	2.9-4.3-8.6	2.5-3.8-7.5	2.2-3.2-6.5	2.0-3.0-6.0	46	51	57	55	50	45		
102 x 457	1.016	5.9	47	-	0.7-1.1-2.2	0.6-1.0-1.9	0.6-0.8-1.7	0.5-0.8-1.6	11	16	22	20	15	-	
	1.524	13.2	71	19	1.1-1.7-3.3	1.0-1.5-2.9	0.8-1.2-2.5	0.8-1.2-2.3	21	26	32	30	25	20	
	2.032	23.5	94	27	1.5-2.2-4.4	1.3-1.9-3.9	1.1-1.7-3.3	1.0-1.6-3.1	29	34	40	38	33	28	
	2.54	36.7	118	32	1.9-2.8-5.6	1.6-2.4-4.9	1.4-2.1-4.2	1.3-1.9-3.9	34	39	45	43	38	33	
	3.048	52.9	142	37	2.2-3.3-6.7	1.9-2.9-5.8	1.7-2.5-5.0	1.6-2.3-4.7	39	44	50	48	43	38	
	3.556	72.0	165	41	2.6-3.9-7.8	2.3-3.4-6.8	1.9-2.9-5.8	1.8-2.7-5.4	43	48	54	52	47	42	
4.064	94.0	189	45	3.0-4.4-8.9	2.6-3.9-7.8	2.2-3.3-6.7	2.1-3.1-6.2	47	52	58	56	51	46		
102 x 508	1.016	5.8	52	-	0.8-1.1-2.3	0.7-1.0-2.0	0.6-0.9-1.7	0.5-0.8-1.6	-	14	20	18	13	-	
	1.524	13.1	79	20	1.1-1.7-3.4	1.0-1.5-3.0	0.9-1.3-2.6	0.8-1.2-2.4	20	25	31	29	24	19	
	2.032	23.3	105	27	1.5-2.3-4.6	1.3-2.0-4.0	1.1-1.7-3.4	1.1-1.6-3.2	27	32	38	36	31	26	
	2.54	36.4	131	33	1.9-2.9-5.7	1.7-2.5-5.0	1.4-2.1-4.3	1.3-2.0-4.0	33	38	44	42	37	32	
	3.048	52.4	157	37	2.3-3.4-6.9	2.0-3.0-6.0	1.7-2.6-5.1	1.6-2.4-4.8	38	43	49	47	42	37	
	3.556	71.3	184	41	2.7-4.0-8.0	2.3-3.5-7.0	2.0-3.0-6.0	1.9-2.8-5.6	42	47	53	51	46	41	
4.064	93.2	210	45	3.0-4.6-9.1	2.7-4.0-8.0	2.3-3.4-6.9	2.1-3.2-6.4	45	50	56	54	49	44		

NOTE: See notes and correction factors on page P1-24.

PERFORMANCE DATA | METRIC | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB										
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7					
					m	m	m	m											
cm	m/s	Pa	L/s	NC															
102 x 610	1.016	5.7	63	-	1.7-2.5-5.1	1.5-2.2-4.5	1.3-1.9-3.8	1.2-1.8-3.6	-	15	21	19	14	-					
	1.524	12.9	94	20	2.5-3.8-7.6	2.2-3.3-6.7	1.9-2.9-5.7	1.8-2.7-5.3	20	25	31	29	24	19					
	2.032	23.0	126	27	3.4-5.1-10.2	3.0-4.5-8.9	2.5-3.8-7.6	2.4-3.6-7.1	28	33	39	37	32	27					
	2.54	35.9	157	33	4.2-6.4-12.7	3.7-5.6-11.1	3.2-4.8-9.5	3.0-4.5-8.9	33	38	44	42	37	32					
	3.048	51.7	189	38	5.1-7.6-15.3	4.5-6.7-13.4	3.8-5.7-11.5	3.6-5.3-10.7	38	43	49	47	42	37					
	3.556	70.4	220	42	5.9-8.9-17.8	5.2-7.8-15.6	4.5-6.7-13.4	4.2-6.2-12.5	42	47	53	51	46	41					
	4.064	92.0	252	45	6.8-10.2-19.9	5.9-8.9-17.8	5.1-7.6-15.3	4.8-7.1-14.3	45	50	56	54	49	44					
152 x 254	1.016	5.4	39	-	1.4-2.2-4.3	1.3-1.9-3.8	1.1-1.6-3.3	1.0-1.5-3.0	-	15	21	19	14	-					
	1.524	12.2	59	18	2.2-3.3-6.5	1.9-2.8-5.7	1.6-2.4-4.9	1.5-2.3-4.6	20	25	31	29	24	19					
	2.032	21.7	79	25	2.9-4.3-8.7	2.5-3.8-7.6	2.2-3.3-6.5	2.0-3.0-6.1	27	32	38	36	31	26					
	2.54	34.0	98	31	3.6-5.4-10.8	3.2-4.7-9.5	2.7-4.1-8.1	2.5-3.8-7.6	33	38	44	42	37	32					
	3.048	48.9	118	36	4.3-6.5-13.0	3.8-5.7-11.4	3.3-4.9-9.8	3.0-4.6-9.1	38	43	49	47	42	37					
	3.556	66.6	138	40	5.1-7.6-14.7	4.4-6.6-13.3	3.8-5.7-11.4	3.5-5.3-10.6	42	47	53	51	46	41					
	4.064	87.0	157	43	5.8-8.7-15.7	5.1-7.6-14.9	4.3-6.5-13.0	4.0-6.1-11.8	45	50	56	54	49	44					
152 x 305	1.016	5.3	47	-	1.5-2.3-4.5	1.3-2.0-4.0	1.1-1.7-3.4	1.1-1.6-3.2	-	15	21	19	14	-					
	1.524	11.9	71	18	2.3-3.4-6.8	2.0-3.0-6.0	1.7-2.6-5.1	1.6-2.4-4.8	20	25	31	29	24	19					
	2.032	21.2	94	26	3.0-4.5-9.1	2.6-4.0-7.9	2.3-3.4-6.8	2.1-3.2-6.4	27	32	38	36	31	26					
	2.54	33.1	118	31	3.8-5.7-11.3	3.3-5.0-9.9	2.8-4.3-8.5	2.6-4.0-7.9	33	38	44	42	37	32					
	3.048	47.6	142	36	4.5-6.8-13.6	4.0-6.0-11.9	3.4-5.1-10.2	3.2-4.8-9.5	38	43	49	47	42	37					
	3.556	64.8	165	40	5.3-7.9-15.9	4.6-6.9-13.9	4.0-6.0-11.9	3.7-5.6-11.1	42	47	53	51	46	41					
	4.064	84.7	189	43	6.1-9.1-17.2	5.3-7.9-15.9	4.5-6.8-13.6	4.2-6.4-12.7	45	50	56	54	49	44					
152 x 356	1.016	5.2	55	-	1.6-2.4-4.7	1.4-2.1-4.1	1.2-1.8-3.5	1.1-1.7-3.3	-	15	21	19	14	-					
	1.524	11.7	83	18	2.4-3.5-7.1	2.1-3.1-6.2	1.8-2.7-5.3	1.7-2.5-5.0	20	25	31	29	24	19					
	2.032	20.8	110	26	3.1-4.7-9.4	2.8-4.1-8.3	2.4-3.5-7.1	2.2-3.3-6.6	28	33	39	37	32	27					
	2.54	32.5	138	32	3.9-5.9-11.8	3.4-5.2-10.3	3.0-4.4-8.9	2.8-4.1-8.3	33	38	44	42	37	32					
	3.048	46.7	165	36	4.7-7.1-14.2	4.1-6.2-12.4	3.5-5.3-10.6	3.3-5.0-9.9	38	43	49	47	42	37					
	3.556	63.6	193	40	5.5-8.3-16.5	4.8-7.2-14.5	4.1-6.2-12.4	3.9-5.8-11.6	42	47	53	51	46	41					
	4.064	83.1	220	44	6.3-9.4-18.6	5.5-8.3-16.5	4.7-7.1-14.2	4.4-6.6-13.2	45	50	56	54	49	44					
152 x 406	1.016	5.1	63	-	1.6-2.4-4.9	1.4-2.1-4.3	1.2-1.8-3.7	1.1-1.7-3.4	-	14	20	18	13	-					
	1.524	11.5	94	19	2.4-3.7-7.3	2.1-3.2-6.4	1.8-2.8-5.5	1.7-2.6-5.1	20	25	31	29	24	19					
	2.032	20.5	126	26	3.3-4.9-9.8	2.9-4.3-8.6	2.4-3.7-7.3	2.3-3.4-6.8	27	32	38	36	31	26					
	2.54	32.0	157	32	4.1-6.1-12.2	3.6-5.3-10.7	3.1-4.6-9.2	2.9-4.3-8.6	33	38	44	42	37	32					
	3.048	46.1	189	37	4.9-7.3-14.7	4.3-6.4-12.8	3.7-5.5-11.0	3.4-5.1-10.3	38	43	49	47	42	37					
	3.556	62.7	220	40	5.7-8.6-17.1	5.0-7.5-15.0	4.3-6.4-12.8	4.0-6.0-12.0	41	46	52	50	45	40					
	4.064	81.9	252	44	6.5-9.8-19.6	5.7-8.6-17.1	4.9-7.3-14.7	4.6-6.8-13.7	45	50	56	54	49	44					
152 x 457	1.016	5.1	71	-	1.7-2.5-5.0	1.5-2.2-4.4	1.3-1.9-3.8	1.2-1.8-3.5	-	14	20	18	13	-					
	1.524	11.4	106	19	2.5-3.8-7.6	2.2-3.3-6.6	1.9-2.8-5.7	1.8-2.6-5.3	20	25	31	29	24	19					
	2.032	20.3	142	26	3.4-5.0-10.1	2.9-4.4-8.8	2.5-3.8-7.6	2.4-3.5-7.1	27	32	38	36	31	26					
	2.54	31.7	177	32	4.2-6.3-12.6	3.7-5.5-11.0	3.2-4.7-9.5	2.9-4.4-8.8	33	38	44	42	37	32					
	3.048	45.6	212	37	5.0-7.6-15.1	4.4-6.6-13.2	3.8-5.7-11.4	3.5-5.3-10.6	38	43	49	47	42	37					
	3.556	62.1	248	41	5.9-8.8-17.7	5.2-7.7-15.5	4.4-6.6-13.2	4.1-6.2-12.4	42	47	53	51	46	41					
	4.064	81.0	283	44	6.7-10.1-20.2	5.9-8.8-17.7	5.0-7.6-15.1	4.7-7.1-14.1	45	50	56	54	49	44					
152 x 508	1.016	78.3	79	-	1.7-2.6-5.2	1.5-2.3-4.5	1.3-1.9-3.9	1.2-1.8-3.6	-	15	21	19	14	-					
	1.524	5.1	118	19	2.6-3.9-7.8	2.3-3.4-6.8	1.9-2.9-5.8	1.8-2.7-5.5	20	25	31	29	24	19					
	2.032	11.4	157	27	3.5-5.2-10.4	3.0-4.5-9.1	2.6-3.9-7.8	2.4-3.6-7.3	28	33	39	37	32	27					
	2.54	20.3	197	32	4.3-6.5-13.0	3.8-5.7-11.4	3.2-4.9-9.7	3.0-4.5-9.1	33	38	44	42	37	32					
	3.048	31.7	236	37	5.2-7.8-15.6	4.5-6.8-13.6	3.9-5.8-11.7	3.6-5.5-10.9	38	43	49	47	42	37					
	3.556	45.6	275	41	6.1-9.1-18.2	5.3-8.0-15.9	4.5-6.8-13.6	4.2-6.4-12.7	42	47	53	51	46	41					
	4.064	62.1	315	44	6.9-10.4-20.8	6.1-9.1-18.2	5.2-7.8-15.6	4.8-7.3-14.5	45	50	56	54	49	44					
152 x 610	1.016	81.1	94	-	1.8-2.7-5.5	1.6-2.4-4.8	1.4-2.0-4.1	1.3-1.9-3.8	-	15	21	19	14	-					
	1.524	11.2	142	20	2.7-4.1-8.2	2.4-3.6-7.2	2.0-3.1-6.1	1.9-2.9-5.7	21	26	32	30	25	20					
	2.032	19.8	189	27	3.6-5.5-10.9	3.2-4.8-9.6	2.7-4.1-8.2	2.5-3.8-7.6	28	33	39	37	32	27					
	2.54	31.0	236	33	4.6-6.8-13.7	4.0-6.0-11.9	3.4-5.1-10.2	3.2-4.8-9.6	34	39	45	43	38	33					
	3.048	44.6	283	37	5.5-8.2-16.4	4.8-7.2-14.3	4.1-6.1-12.3	3.8-5.7-11.5	38	43	49	47	42	37					
	3.556	60.7	330	41	6.4-9.6-19.1	5.6-8.4-16.7	4.8-7.2-14.3	4.5-6.7-13.4	42	47	53	51	46	41					
	4.064	79.3	378	45	7.3-10.9-21.8	6.4-9.6-19.1	5.5-8.2-16.4	5.1-7.6-15.3	46	51	57	55	50	45					

NOTE: See notes and correction factors on page P1-24.

PERFORMANCE DATA | METRIC | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
cm	m/s	Pa	L/s	NC	m	m	m	m							
152 x 762	1.016	4.9	118	-	1.9-2.9-5.8	1.7-2.5-5.1	1.5-2.2-4.4	1.4-2.0-4.1	11	16	22	20	15	-	
	1.524	11.0	177	20	2.9-4.4-8.7	2.5-3.8-7.6	2.2-3.3-6.5	2.0-3.1-6.1	21	26	32	30	25	20	
	2.032	19.6	236	27	3.9-5.8-11.6	3.4-5.1-10.2	2.9-4.4-8.7	2.7-4.1-8.1	28	33	39	37	32	27	
	2.54	30.6	295	33	4.8-7.3-14.5	4.2-6.4-12.7	3.6-5.4-10.9	3.4-5.1-10.2	34	39	45	43	38	33	
	3.048	44.0	354	38	5.8-8.7-17.4	5.1-7.6-15.3	4.4-6.5-13.1	4.1-6.1-12.2	39	44	50	48	43	38	
	3.556	59.9	413	42	6.8-10.2-20.3	5.9-8.9-17.8	5.1-7.6-15.3	4.7-7.1-14.2	43	48	54	52	47	42	
4.064	78.3	472	45	7.7-11.6-23.2	6.8-10.2-20.3	5.8-8.7-17.4	5.4-8.1-16.3	46	51	57	55	50	45		
203 x 254	1.016	5.1	52	-	1.5-2.3-4.6	1.3-2.0-4.0	1.2-1.7-3.5	1.1-1.6-3.2	-	13	19	17	12	-	
	1.524	11.4	79	18	2.3-3.5-6.9	2.0-3.0-6.1	1.7-2.6-5.2	1.6-2.4-4.8	19	24	30	28	23	18	
	2.032	20.3	105	25	3.1-4.6-9.2	2.7-4.0-8.1	2.3-3.5-6.9	2.2-3.2-6.5	26	31	37	35	30	25	
	2.54	31.7	131	31	3.8-5.8-11.5	3.4-5.0-10.1	2.9-4.3-8.7	2.7-4.0-8.1	32	37	43	41	36	31	
	3.048	45.6	157	36	4.6-6.9-13.8	4.0-6.1-12.1	3.5-5.2-10.4	3.2-4.8-9.7	37	42	48	46	41	36	
	3.556	62.1	184	40	5.4-8.1-16.1	4.7-7.1-14.1	4.0-6.1-12.1	3.8-5.7-11.3	41	46	52	50	45	40	
4.064	81.1	210	43	6.2-9.2-18.1	5.4-8.1-16.1	4.6-6.9-13.8	4.3-6.5-12.9	44	49	55	53	48	43		
203 x 305	1.016	4.9	63	-	1.6-2.4-4.8	1.4-2.1-4.2	1.2-1.8-3.6	1.1-1.7-3.4	-	14	20	18	13	-	
	1.524	11.1	94	18	2.4-3.6-7.2	2.1-3.2-6.3	1.8-2.7-5.4	1.7-2.5-5.1	19	24	30	28	23	18	
	2.032	19.7	126	26	3.2-4.8-9.7	2.8-4.2-8.4	2.4-3.6-7.2	2.3-3.4-6.8	27	32	38	36	31	26	
	2.54	30.8	157	31	4.0-6.0-12.1	3.5-5.3-10.6	3.0-4.5-9.1	2.8-4.2-8.4	32	37	43	41	36	31	
	3.048	44.4	189	36	4.8-7.2-14.5	4.2-6.3-12.7	3.6-5.4-10.9	3.4-5.1-10.1	37	42	48	46	41	36	
	3.556	60.4	220	40	5.6-8.4-16.9	4.9-7.4-14.8	4.2-6.3-12.7	3.9-5.9-11.8	41	46	52	50	45	40	
4.064	78.9	252	44	6.4-9.7-19.3	5.6-8.4-16.9	4.8-7.2-14.5	4.5-6.8-13.5	45	50	56	54	49	44		
203 x 356	1.016	4.8	73	-	1.7-2.5-5.0	1.5-2.2-4.4	1.3-1.9-3.8	1.2-1.8-3.5	-	14	20	18	13	-	
	1.524	10.9	110	18	2.5-3.8-7.5	2.2-3.3-6.6	1.9-2.8-5.7	1.8-2.6-5.3	19	24	30	28	23	18	
	2.032	19.4	147	26	3.3-5.0-10.0	2.9-4.4-8.8	2.5-3.8-7.5	2.3-3.5-7.0	27	32	38	36	31	26	
	2.54	30.3	184	32	4.2-6.3-12.6	3.7-5.5-11.0	3.1-4.7-9.4	2.9-4.4-8.8	33	38	44	42	37	32	
	3.048	43.6	220	36	5.0-7.5-15.1	4.4-6.6-13.2	3.8-5.7-11.3	3.5-5.3-10.5	37	42	48	46	41	36	
	3.556	59.3	257	40	5.9-8.8-17.6	5.1-7.7-15.4	4.4-6.6-13.2	4.1-6.2-12.3	41	46	52	50	45	40	
4.064	77.5	294	44	6.7-10.0-20.1	5.9-8.8-17.6	5.0-7.5-15.1	4.7-7.0-14.1	45	50	56	54	49	44		
203 x 406	1.016	4.8	84	-	1.7-2.6-5.2	1.5-2.3-4.6	1.3-2.0-3.9	1.2-1.8-3.6	-	14	20	18	13	-	
	1.524	10.7	126	19	2.6-3.9-7.8	2.3-3.4-6.8	2.0-2.9-5.9	1.8-2.7-5.5	20	25	31	29	24	19	
	2.032	19.1	168	26	3.5-5.2-10.4	3.0-4.6-9.1	2.6-3.9-7.8	2.4-3.6-7.3	27	32	38	36	31	26	
	2.54	29.8	210	32	4.3-6.5-13.0	3.8-5.7-11.4	3.3-4.9-9.8	3.0-4.6-9.1	33	38	44	42	37	32	
	3.048	43.0	252	37	5.2-7.8-15.6	4.6-6.8-13.7	3.9-5.9-11.7	3.6-5.5-10.9	38	43	49	47	42	37	
	3.556	58.5	294	41	6.1-9.1-18.2	5.3-8.0-15.9	4.6-6.8-13.7	4.2-6.4-12.7	42	47	53	51	46	41	
4.064	76.4	336	44	6.9-10.4-20.8	6.1-9.1-18.2	5.2-7.8-15.6	4.9-7.3-14.6	45	50	56	54	49	44		
203 x 457	1.016	4.7	94	-	1.8-2.7-5.4	1.6-2.3-4.7	1.3-2.0-4.0	1.3-1.9-3.8	-	14	20	18	13	-	
	1.524	10.6	142	19	2.7-4.0-8.1	2.3-3.5-7.0	2.0-3.0-6.0	1.9-2.8-5.6	20	25	31	29	24	19	
	2.032	18.9	189	26	3.6-5.4-10.7	3.1-4.7-9.4	2.7-4.0-8.1	2.5-3.8-7.5	27	32	38	36	31	26	
	2.54	29.5	236	32	4.5-6.7-13.4	3.9-5.9-11.7	3.4-5.0-10.1	3.1-4.7-9.4	33	38	44	42	37	32	
	3.048	42.5	283	37	5.4-8.1-16.1	4.7-7.0-14.1	4.0-6.0-12.1	3.8-5.6-11.3	38	43	49	47	42	37	
	3.556	57.8	330	41	6.3-9.4-18.8	5.5-8.2-16.4	4.7-7.0-14.1	4.4-6.6-13.2	42	47	53	51	46	41	
4.064	75.6	378	44	7.2-10.7-21.5	6.3-9.4-18.8	5.4-8.1-16.1	5.0-7.5-15.0	45	50	56	54	49	44		
203 x 508	1.016	4.7	105	-	1.8-2.8-5.5	1.6-2.4-4.8	1.4-2.1-4.1	1.3-1.9-3.9	-	15	21	19	14	-	
	1.524	10.5	157	19	2.8-4.1-8.3	2.4-3.6-7.3	2.1-3.1-6.2	1.9-2.9-5.8	20	25	31	29	24	19	
	2.032	18.7	210	27	3.7-5.5-11.0	3.2-4.8-9.7	2.8-4.1-8.3	2.6-3.9-7.7	28	33	39	37	32	27	
	2.54	29.3	262	32	4.6-6.9-13.8	4.0-6.0-12.1	3.5-5.2-10.4	3.2-4.8-9.7	33	38	44	42	37	32	
	3.048	42.1	315	37	5.5-8.3-16.6	4.8-7.3-14.5	4.1-6.2-12.4	3.9-5.8-11.6	38	43	49	47	42	37	
	3.556	57.3	367	41	6.4-9.7-19.3	5.6-8.5-16.9	4.8-7.3-14.5	4.5-6.8-13.5	42	47	53	51	46	41	
4.064	74.9	420	44	7.4-11.0-22.1	6.4-9.7-19.3	5.5-8.3-16.6	5.2-7.7-15.5	45	50	56	54	49	44		
203 x 762	1.016	4.6	157	-	2.1-3.1-6.2	1.8-2.7-5.4	1.5-2.3-4.6	1.4-2.2-4.3	11	16	22	20	15	-	
	1.524	10.3	236	20	3.1-4.6-9.3	2.7-4.1-8.1	2.3-3.5-7.0	2.2-3.2-6.5	21	26	32	30	25	20	
	2.032	18.2	315	28	4.1-6.2-12.4	3.6-5.4-10.8	3.1-4.6-9.3	2.9-4.3-8.7	29	34	40	38	33	28	
	2.54	28.5	393	33	5.2-7.7-15.5	4.5-6.8-13.5	3.9-5.8-11.6	3.6-5.4-10.8	34	39	45	43	38	33	
	3.048	41.1	472	38	6.2-9.3-18.5	5.4-8.1-16.2	4.6-7.0-13.9	4.3-6.5-13.0	39	44	50	48	43	38	
	3.556	55.9	551	42	7.2-10.8-21.6	6.3-9.5-18.9	5.4-8.1-16.2	5.0-7.6-15.1	43	48	54	52	47	42	
4.064	73.0	629	45	8.2-12.4-24.7	7.2-10.8-21.6	6.2-9.3-18.5	5.8-8.7-17.3	46	51	57	55	50	45		

NOTE: See notes and correction factors on page P1-24.

PERFORMANCE DATA | METRIC | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB										
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7					
					m	m	m	m											
cm	m/s	Pa	L/s	NC															
203 x 914	1.016	4.5	189	-	2.4-3.5-7.1	2.1-3.1-6.2	1.8-2.6-5.3	1.6-2.5-4.9	11	16	22	20	15	-					
	1.524	10.2	283	21	3.5-5.3-10.6	3.1-4.6-9.3	2.6-4.0-7.9	2.5-3.7-7.4	22	27	33	31	26	21					
	2.032	18.1	378	28	4.7-7.1-14.1	4.1-6.2-12.3	3.5-5.3-10.6	3.3-4.9-9.9	29	34	40	38	33	28					
	2.54	28.3	472	34	5.9-8.8-17.6	5.1-7.7-15.4	4.4-6.6-13.2	4.1-6.2-12.3	35	40	46	44	39	34					
	3.048	40.7	566	38	7.1-10.6-21.2	6.2-9.3-18.5	5.3-7.9-15.9	4.9-7.4-14.8	39	44	50	48	43	38					
	3.556	55.4	661	42	8.2-12.3-24.7	7.2-10.8-21.6	6.2-9.3-18.5	5.8-8.6-17.3	43	48	54	52	47	42					
	4.064	72.4	755	46	9.4-14.1-28.2	8.2-12.3-24.7	7.1-10.6-21.2	6.6-9.9-19.8	47	52	58	56	51	46					
254 x 305	1.016	4.7	79	-	1.6-2.4-4.9	1.4-2.1-4.3	1.2-1.8-3.6	1.1-1.7-3.4	-	14	20	18	13	-					
	1.524	10.7	118	18	2.4-3.6-7.3	2.1-3.2-6.4	1.8-2.7-5.5	1.7-2.6-5.1	19	24	30	28	23	18					
	2.032	18.9	157	26	3.2-4.9-9.7	2.8-4.3-8.5	2.4-3.6-7.3	2.3-3.4-6.8	27	32	38	36	31	26					
	2.54	29.6	197	32	4.1-6.1-12.2	3.5-5.3-10.6	3.0-4.6-9.1	2.8-4.3-8.5	33	38	44	42	37	32					
	3.048	42.6	236	36	4.9-7.3-14.6	4.3-6.4-12.8	3.6-5.5-10.9	3.4-5.1-10.2	37	42	48	46	41	36					
	3.556	58.0	275	40	5.7-8.5-17.0	5.0-7.4-14.9	4.3-6.4-12.8	4.0-6.0-11.9	41	46	52	50	45	40					
	4.064	75.8	315	44	6.5-9.7-19.4	5.7-8.5-17.0	4.9-7.3-14.6	4.5-6.8-13.6	45	50	56	54	49	44					
254 x 356	1.016	4.6	92	-	1.7-2.6-5.2	1.5-2.3-4.5	1.3-1.9-3.9	1.2-1.8-3.6	-	14	20	18	13	-					
	1.524	10.5	138	19	2.6-3.9-7.8	2.3-3.4-6.8	1.9-2.9-5.8	1.8-2.7-5.4	20	25	31	29	24	19					
	2.032	18.6	184	26	3.5-5.2-10.4	3.0-4.5-9.1	2.6-3.9-7.8	2.4-3.6-7.2	27	32	38	36	31	26					
	2.54	29.0	229	32	4.3-6.5-12.9	3.8-5.7-11.3	3.2-4.9-9.7	3.0-4.5-9.1	33	38	44	42	37	32					
	3.048	41.8	275	37	5.2-7.8-15.5	4.5-6.8-13.6	3.9-5.8-11.6	3.6-5.4-10.9	38	43	49	47	42	37					
	3.556	56.9	321	41	6.0-9.1-18.1	5.3-7.9-15.9	4.5-6.8-13.6	4.2-6.3-12.7	42	47	53	51	46	41					
	4.064	74.4	367	44	6.9-10.4-20.7	6.0-9.1-18.1	5.2-7.8-15.5	4.8-7.2-14.5	45	50	56	54	49	44					
254 x 406	1.016	4.6	105	-	1.8-2.7-5.5	1.6-2.4-4.8	1.4-2.1-4.1	1.3-1.9-3.8	-	14	20	18	13	-					
	1.524	10.3	157	19	2.7-4.1-8.2	2.4-3.6-7.2	2.1-3.1-6.2	1.9-2.9-5.7	20	25	31	29	24	19					
	2.032	18.3	210	26	3.6-5.5-10.9	3.2-4.8-9.6	2.7-4.1-8.2	2.6-3.8-7.7	27	32	38	36	31	26					
	2.54	28.6	262	32	4.6-6.8-13.7	4.0-6.0-12.0	3.4-5.1-10.3	3.2-4.8-9.6	33	38	44	42	37	32					
	3.048	41.2	315	37	5.5-8.2-16.4	4.8-7.2-14.4	4.1-6.2-12.3	3.8-5.7-11.5	38	43	49	47	42	37					
	3.556	56.1	367	41	6.4-9.6-19.1	5.6-8.4-16.7	4.8-7.2-14.4	4.5-6.7-13.4	42	47	53	51	46	41					
	4.064	73.3	420	44	7.3-10.9-21.9	6.4-9.6-19.1	5.5-8.2-16.4	5.1-7.7-15.3	45	50	56	54	49	44					
254 x 610	1.016	4.4	157	-	2.2-3.2-6.5	1.9-2.8-5.7	1.6-2.4-4.9	1.5-2.3-4.5	-	15	21	19	14	-					
	1.524	10.0	236	20	3.2-4.9-9.7	2.8-4.2-8.5	2.4-3.6-7.3	2.3-3.4-6.8	21	26	32	30	25	20					
	2.032	17.7	315	27	4.3-6.5-13.0	3.8-5.7-11.3	3.2-4.9-9.7	3.0-4.5-9.1	28	33	39	37	32	27					
	2.54	27.7	393	33	5.4-8.1-16.2	4.7-7.1-14.2	4.0-6.1-12.1	3.8-5.7-11.3	34	39	45	43	38	33					
	3.048	39.9	472	38	6.5-9.7-19.4	5.7-8.5-17.0	4.9-7.3-14.6	4.5-6.8-13.6	39	44	50	48	43	38					
	3.556	54.3	551	42	7.6-11.3-22.7	6.6-9.9-19.8	5.7-8.5-17.0	5.3-7.9-15.9	43	48	54	52	47	42					
	4.064	71.0	629	45	8.6-13.0-25.9	7.6-11.3-22.7	6.5-9.7-19.4	6.0-9.1-18.1	46	51	57	55	50	45					
254 x 762	1.016	4.4	197	-	2.4-3.6-7.1	2.1-3.1-6.2	1.8-2.7-5.3	1.7-2.5-5.0	11	16	22	20	15	-					
	1.524	9.9	295	20	3.6-5.3-10.7	3.1-4.7-9.3	2.7-4.0-8.0	2.5-3.7-7.5	21	26	32	30	25	20					
	2.032	17.5	393	28	4.7-7.1-14.2	4.2-6.2-12.5	3.6-5.3-10.7	3.3-5.0-10.0	29	34	40	38	33	28					
	2.54	27.4	492	34	5.9-8.9-17.8	5.2-7.8-15.6	4.4-6.7-13.3	4.2-6.2-12.5	35	40	46	44	39	34					
	3.048	39.4	590	38	7.1-10.7-21.4	6.2-9.3-18.7	5.3-8.0-16.0	5.0-7.5-14.9	39	44	50	48	43	38					
	3.556	53.6	688	42	8.3-12.5-24.9	7.3-10.9-21.8	6.2-9.3-18.7	5.8-8.7-17.4	43	48	54	52	47	42					
	4.064	70.1	787	46	9.5-14.2-28.5	8.3-12.5-24.9	7.1-10.7-21.4	6.6-10.0-19.9	47	52	58	56	51	46					
254 x 914	1.016	4.3	236	-	2.6-3.8-7.7	2.2-3.4-6.7	1.9-2.9-5.8	1.8-2.7-5.4	11	16	22	20	15	-					
	1.524	9.8	354	21	3.8-5.8-11.5	3.4-5.0-10.1	2.9-4.3-8.7	2.7-4.0-8.1	22	27	33	31	26	21					
	2.032	17.4	472	28	5.1-7.7-15.4	4.5-6.7-13.5	3.8-5.8-11.5	3.6-5.4-10.8	29	34	40	38	33	28					
	2.54	27.1	590	34	6.4-9.6-19.2	5.6-8.4-16.8	4.8-7.2-14.4	4.5-6.7-13.5	35	40	46	44	39	34					
	3.048	39.1	708	39	7.7-11.5-23.1	6.7-10.1-20.2	5.8-8.7-17.3	5.4-8.1-16.2	40	45	51	49	44	39					
	3.556	53.2	826	43	9.0-13.5-26.9	7.9-11.8-23.6	6.7-10.1-20.2	6.3-9.4-18.9	44	49	55	53	48	43					
	4.064	69.5	944	46	10.3-15.4-30.8	9.0-13.5-26.9	7.7-11.5-23.1	7.2-10.8-21.5	47	52	58	56	51	46					
305 x 356	1.016	4.5	110	-	1.9-2.8-5.6	1.6-2.4-4.9	1.4-2.1-4.2	1.3-1.9-3.9	-	14	20	18	13	-					
	1.524	10.2	165	19	2.8-4.2-8.3	2.4-3.7-7.3	2.1-3.1-6.3	1.9-2.9-5.8	20	25	31	29	24	19					
	2.032	18.1	220	26	3.7-5.6-11.1	3.2-4.9-9.7	2.8-4.2-8.3	2.6-3.9-7.8	27	32	38	36	31	26					
	2.54	28.3	275	32	4.6-7.0-13.9	4.1-6.1-12.2	3.5-5.2-10.4	3.2-4.9-9.7	33	38	44	42	37	32					
	3.048	40.7	330	37	5.6-8.3-16.7	4.9-7.3-14.6	4.2-6.3-12.5	3.9-5.8-11.7	38	43	49	47	42	37					
	3.556	55.4	385	41	6.5-9.7-19.5	5.7-8.5-17.0	4.9-7.3-14.6	4.5-6.8-13.6	42	47	53	51	46	41					
	4.064	72.4	440	44	7.4-11.1-22.3	6.5-9.7-19.5	5.6-8.3-16.7	5.2-7.8-15.6	45	50	56	54	49	44					

NOTE: See notes and correction factors on page P1-24.

PERFORMANCE DATA | METRIC | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
cm	m/s	Pa	L/s	NC	m	m	m	m							
305 x 508	1.016	4.4	157	-	2.2-3.2-6.5	1.9-2.8-5.6	1.6-2.4-4.8	1.5-2.3-4.5	-	15	21	19	14	-	
	1.524	9.8	236	20	3.2-4.8-9.7	2.8-4.2-8.5	2.4-3.6-7.3	2.3-3.4-6.8	21	26	32	30	25	20	
	2.032	17.5	315	27	4.3-6.5-12.9	3.8-5.6-11.3	3.2-4.8-9.7	3.0-4.5-9.0	28	33	39	37	32	27	
	2.54	27.3	393	33	5.4-8.1-16.1	4.7-7.1-14.1	4.0-6.0-12.1	3.8-5.6-11.3	34	39	45	43	38	33	
	3.048	39.4	472	38	6.5-9.7-19.4	5.6-8.5-16.9	4.8-7.3-14.5	4.5-6.8-13.5	39	44	50	48	43	38	
	3.556	53.6	551	42	7.5-11.3-22.6	6.6-9.9-19.8	5.6-8.5-16.9	5.3-7.9-15.8	43	48	54	52	47	42	
4.064	70.0	629	45	8.6-12.9-25.8	7.5-11.3-22.6	6.5-9.7-19.4	6.0-9.0-18.1	46	51	57	55	50	45		
305 x 610	1.016	4.3	189	-	2.3-3.5-7.0	2.0-3.0-6.1	1.7-2.6-5.2	1.6-2.4-4.9	11	16	22	20	15	-	
	1.524	9.7	283	20	3.5-5.2-10.4	3.0-4.6-9.1	2.6-3.9-7.8	2.4-3.7-7.3	21	26	32	30	25	20	
	2.032	17.3	378	27	4.6-7.0-13.9	4.1-6.1-12.2	3.5-5.2-10.4	3.2-4.9-9.7	28	33	39	37	32	27	
	2.54	27.0	472	33	5.8-8.7-17.4	5.1-7.6-15.2	4.4-6.5-13.1	4.1-6.1-12.2	34	39	45	43	38	33	
	3.048	38.9	566	38	7.0-10.4-20.9	6.1-9.1-18.3	5.2-7.8-15.7	4.9-7.3-14.6	39	44	50	48	43	38	
	3.556	52.9	661	42	8.1-12.2-24.4	7.1-10.7-21.3	6.1-9.1-18.3	5.7-8.5-17.1	43	48	54	52	47	42	
4.064	69.1	755	45	9.3-13.9-27.9	8.1-12.2-24.4	7.0-10.4-20.9	6.5-9.7-19.5	46	51	57	55	50	45		
305 x 914	1.016	4.2	283	11	2.7-4.1-8.3	2.3-3.6-7.2	2.0-3.1-6.2	1.9-2.9-5.8	12	17	23	21	16	11	
	1.524	9.5	425	21	4.1-6.2-12.4	3.6-5.4-10.9	3.1-4.7-9.3	2.9-4.3-8.7	22	27	33	31	26	21	
	2.032	16.9	566	29	5.5-8.3-16.5	4.8-7.2-14.5	4.1-6.2-12.4	3.9-5.8-11.6	30	35	41	39	34	29	
	2.54	26.4	708	34	6.9-10.3-20.7	6.0-9.1-18.1	5.2-7.8-15.5	4.8-7.2-14.5	35	40	46	44	39	34	
	3.048	38.0	850	39	8.3-12.4-24.8	7.2-10.9-21.7	6.2-9.3-18.6	5.8-8.7-17.4	40	45	51	49	44	39	
	3.556	51.8	991	43	9.7-14.5-29.0	8.4-12.7-25.3	7.2-10.9-21.7	6.8-10.1-20.3	44	49	55	53	48	43	
4.064	67.6	1133	46	11.0-16.5-33.1	9.7-14.5-29.0	8.3-12.4-24.8	7.7-11.6-23.2	47	52	58	56	51	46		
356 x 457	1.016	4.3	165	-	2.2-3.3-6.6	1.9-2.9-5.8	1.6-2.5-4.9	1.5-2.3-4.6	-	15	21	19	14	-	
	1.524	9.7	248	20	3.3-4.9-9.9	2.9-4.3-8.6	2.5-3.7-7.4	2.3-3.5-6.9	21	26	32	30	25	20	
	2.032	17.3	330	27	4.4-6.6-13.1	3.8-5.8-11.5	3.3-4.9-9.9	3.1-4.6-9.2	28	33	39	37	32	27	
	2.54	27.1	413	33	5.5-8.2-16.4	4.8-7.2-14.4	4.1-6.2-12.3	3.8-5.8-11.5	34	39	45	43	38	33	
	3.048	39.0	496	38	6.6-9.9-19.7	5.8-8.6-17.3	4.9-7.4-14.8	4.6-6.9-13.8	39	44	50	48	43	38	
	3.556	53.0	578	42	7.7-11.5-23.0	6.7-10.1-20.1	5.8-8.6-17.3	5.4-8.1-16.1	43	48	54	52	47	42	
4.064	69.3	661	45	8.8-13.1-26.3	7.7-11.5-23.0	6.6-9.9-19.7	6.1-9.2-18.4	46	51	57	55	50	45		
356 x 610	1.016	4.2	220	-	2.5-3.7-7.4	2.2-3.2-6.5	1.9-2.8-5.6	1.7-2.6-5.2	11	16	22	20	15	-	
	1.524	9.5	330	20	3.7-5.6-11.1	3.2-4.9-9.7	2.8-4.2-8.3	2.6-3.9-7.8	21	26	32	30	25	20	
	2.032	16.9	440	28	4.9-7.4-14.8	4.3-6.5-13.0	3.7-5.6-11.1	3.5-5.2-10.4	29	34	40	38	33	28	
	2.54	26.5	551	34	6.2-9.3-18.5	5.4-8.1-16.2	4.6-7.0-13.9	4.3-6.5-13.0	35	40	46	44	39	34	
	3.048	38.1	661	38	7.4-11.1-22.2	6.5-9.7-19.5	5.6-8.3-16.7	5.2-7.8-15.6	39	44	50	48	43	38	
	3.556	51.9	771	42	8.6-13.0-25.9	7.6-11.4-22.7	6.5-9.7-19.5	6.1-9.1-18.2	43	48	54	52	47	42	
4.064	67.8	881	46	9.9-14.8-29.7	8.6-13.0-25.9	7.4-11.1-22.2	6.9-10.4-20.8	47	52	58	56	51	46		
356 x 914	1.016	4.1	330	11	2.6-4.4-8.8	2.3-3.9-7.7	2.0-3.3-6.6	1.8-3.1-6.2	12	17	23	21	16	11	
	1.524	9.3	496	21	4.4-6.6-13.2	3.9-5.8-11.6	3.3-5.0-9.9	3.1-4.6-9.2	22	27	33	31	26	21	
	2.032	16.6	661	29	5.9-8.8-17.6	5.1-7.7-15.4	4.4-6.6-13.2	4.1-6.2-12.3	30	35	41	39	34	29	
	2.54	25.9	826	35	7.3-11.0-22.0	6.4-9.6-19.3	5.5-8.3-16.5	5.1-7.7-15.4	36	41	47	45	40	35	
	3.048	37.3	991	39	8.8-13.2-26.4	7.7-11.6-23.1	6.6-9.9-19.8	6.2-9.2-18.5	40	45	51	49	44	39	
	3.556	50.8	1156	43	10.3-15.4-30.8	9.0-13.5-27.0	7.7-11.6-23.1	7.2-10.8-21.6	44	49	55	53	48	43	
4.064	66.4	1321	47	11.7-17.6-35.2	10.3-15.4-30.8	8.8-13.2-26.4	8.2-12.3-24.7	48	53	59	57	52	47		
406 x 457	1.016	4.3	189	-	2.3-3.5-6.9	2.0-3.0-6.1	1.7-2.6-5.2	1.6-2.4-4.9	-	15	21	19	14	-	
	1.524	9.6	283	20	3.5-5.2-10.4	3.0-4.6-9.1	2.6-3.9-7.8	2.4-3.6-7.3	21	26	32	30	25	20	
	2.032	17.1	378	27	4.6-6.9-13.9	4.0-6.1-12.1	3.5-5.2-10.4	3.2-4.9-9.7	28	33	39	37	32	27	
	2.54	26.7	472	33	5.8-8.7-17.4	5.1-7.6-15.2	4.3-6.5-13.0	4.0-6.1-12.1	34	39	45	43	38	33	
	3.048	38.4	566	38	6.9-10.4-20.8	6.1-9.1-18.2	5.2-7.8-15.6	4.9-7.3-14.6	39	44	50	48	43	38	
	3.556	52.3	661	42	8.1-12.1-24.3	7.1-10.6-21.3	6.1-9.1-18.2	5.7-8.5-17.0	43	48	54	52	47	42	
4.064	68.3	755	45	9.3-13.9-27.8	8.1-12.1-24.3	6.9-10.4-20.8	6.5-9.7-19.4	46	51	57	55	50	45		
406 x 508	1.016	4.2	210	-	2.4-3.6-7.3	2.1-3.2-6.3	1.8-2.7-5.4	1.7-2.5-5.1	11	16	22	20	15	-	
	1.524	9.5	315	20	3.6-5.4-10.9	3.2-4.8-9.5	2.7-4.1-8.2	2.5-3.8-7.6	21	26	32	30	25	20	
	2.032	16.9	420	28	4.8-7.3-14.5	4.2-6.3-12.7	3.6-5.4-10.9	3.4-5.1-10.2	29	34	40	38	33	28	
	2.54	26.5	524	33	6.0-9.1-18.1	5.3-7.9-15.9	4.5-6.8-13.6	4.2-6.3-12.7	34	39	45	43	38	33	
	3.048	38.1	629	38	7.3-10.9-21.8	6.3-9.5-19.0	5.4-8.2-16.3	5.1-7.6-15.2	39	44	50	48	43	38	
	3.556	51.8	734	42	8.5-12.7-25.4	7.4-11.1-22.2	6.3-9.5-19.0	5.9-8.9-17.8	43	48	54	52	47	42	
4.064	67.7	839	45	9.7-14.5-29.0	8.5-12.7-25.4	7.3-10.9-21.8	6.8-10.2-20.3	46	51	57	55	50	45		

NOTE: See notes and correction factors on page P1-24.

PERFORMANCE DATA | METRIC | RECTANGULAR, WITH OBD/MULTILOUVER

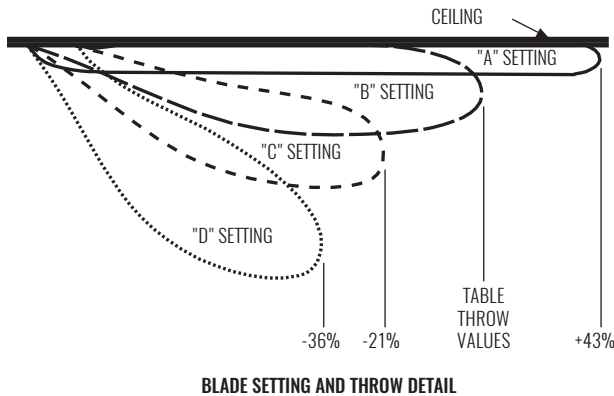
SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
					m	m	m	m							
cm	m/s	Pa	L/s	NC											
406 x 610	1.016	4.2	252	-	2.6-3.9-7.8	2.3-3.4-6.9	2.0-2.9-5.9	1.8-2.7-5.5	11	16	22	20	15	-	
	1.524	9.4	378	21	3.9-5.9-11.7	3.4-5.1-10.3	2.9-4.4-8.8	2.7-4.1-8.2	22	27	33	31	26	21	
	2.032	16.7	503	28	5.2-7.8-15.7	4.6-6.9-13.7	3.9-5.9-11.7	3.7-5.5-11.0	29	34	40	38	33	28	
	2.54	26.1	629	34	6.5-9.8-19.6	5.7-8.6-17.1	4.9-7.3-14.7	4.6-6.9-13.7	35	40	46	44	39	34	
	3.048	37.6	755	38	7.8-11.7-23.5	6.9-10.3-20.6	5.9-8.8-17.6	5.5-8.2-16.4	39	44	50	48	43	38	
	3.556	51.2	881	42	9.1-13.7-27.4	8.0-12.0-24.0	6.9-10.3-20.6	6.4-9.6-19.2	43	48	54	52	47	42	
	4.064	66.8	1007	46	10.4-15.7-31.3	9.1-13.7-27.4	7.8-11.7-23.5	7.3-11.0-21.9	47	52	58	56	51	46	
406 x 762	1.016	16.5	315	11	2.6-4.3-8.6	2.3-3.8-7.5	2.0-3.2-6.5	1.8-3.0-6.0	12	17	23	21	16	11	
	1.524	9.3	472	21	4.3-6.5-12.9	3.8-5.6-11.3	3.2-4.8-9.7	3.0-4.5-9.0	22	27	33	31	26	21	
	2.032	16.5	629	29	5.7-8.6-17.2	5.0-7.5-15.1	4.3-6.5-12.9	4.0-6.0-12.1	30	35	41	39	34	29	
	2.54	25.8	787	34	7.2-10.8-21.5	6.3-9.4-18.8	5.4-8.1-16.1	5.0-7.5-15.1	35	40	46	44	39	34	
	3.048	37.1	944	39	8.6-12.9-25.8	7.5-11.3-22.6	6.5-9.7-19.4	6.0-9.0-18.1	40	45	51	49	44	39	
	3.556	50.5	1101	43	10.0-15.1-30.1	8.8-13.2-26.4	7.5-11.3-22.6	7.0-10.5-21.1	44	49	55	53	48	43	
	4.064	66.0	1259	46	11.5-17.2-34.4	10.0-15.1-30.1	8.6-12.9-25.8	8.0-12.1-24.1	47	52	58	56	51	46	
406 x 914	1.016	4.1	378	11	2.6-4.7-9.3	2.3-4.1-8.1	2.0-3.5-7.0	1.8-3.3-6.5	12	17	23	21	16	11	
	1.524	9.2	566	22	4.7-7.0-14.0	4.1-6.1-12.2	3.5-5.2-10.5	3.3-4.9-9.8	23	28	34	32	27	22	
	2.032	16.4	755	29	6.2-9.3-18.6	5.4-8.1-16.3	4.7-7.0-14.0	4.3-6.5-13.0	30	35	41	39	34	29	
	2.54	25.6	944	35	7.8-11.6-23.3	6.8-10.2-20.4	5.8-8.7-17.4	5.4-8.1-16.3	36	41	47	45	40	35	
	3.048	36.8	1133	39	9.3-14.0-27.9	8.1-12.2-24.4	7.0-10.5-20.9	6.5-9.8-19.5	40	45	51	49	44	39	
	3.556	50.1	1321	43	10.9-16.3-32.6	9.5-14.2-28.5	8.1-12.2-24.4	7.6-11.4-22.8	44	49	55	53	48	43	
	4.064	65.4	1510	47	12.4-18.6-37.2	10.9-16.3-32.6	9.3-14.0-27.9	8.7-13.0-26.1	48	53	59	57	52	47	
457 x 508	1.016	4.2	236	-	2.5-3.8-7.6	2.2-3.3-6.7	1.9-2.9-5.7	1.8-2.7-5.3	11	16	22	20	15	-	
	1.524	9.4	354	20	3.8-5.7-11.4	3.3-5.0-10.0	2.9-4.3-8.6	2.7-4.0-8.0	21	26	32	30	25	20	
	2.032	16.7	472	28	5.1-7.6-15.2	4.4-6.7-13.3	3.8-5.7-11.4	3.6-5.3-10.7	29	34	40	38	33	28	
	2.54	26.2	590	34	6.3-9.5-19.0	5.6-8.3-16.7	4.8-7.1-14.3	4.4-6.7-13.3	35	40	46	44	39	34	
	3.048	37.7	708	38	7.6-11.4-22.8	6.7-10.0-20.0	5.7-8.6-17.1	5.3-8.0-16.0	39	44	50	48	43	38	
	3.556	51.3	826	42	8.9-13.3-26.7	7.8-11.7-23.3	6.7-10.0-20.0	6.2-9.3-18.7	43	48	54	52	47	42	
	4.064	67.0	944	46	10.2-15.2-30.5	8.9-13.3-26.7	7.6-11.4-22.8	7.1-10.7-21.3	47	52	58	56	51	46	
457 x 610	1.016	4.1	283	-	2.6-4.1-8.2	2.3-3.6-7.2	2.0-3.1-6.2	1.8-2.9-5.8	11	16	22	20	15	-	
	1.524	9.3	425	21	4.1-6.2-12.3	3.6-5.4-10.8	3.1-4.6-9.3	2.9-4.3-8.6	22	27	33	31	26	21	
	2.032	16.5	566	28	5.5-8.2-16.4	4.8-7.2-14.4	4.1-6.2-12.3	3.8-5.8-11.5	29	34	40	38	33	28	
	2.54	25.8	708	34	6.9-10.3-20.6	6.0-9.0-18.0	5.1-7.7-15.4	4.8-7.2-14.4	35	40	46	44	39	34	
	3.048	37.2	850	39	8.2-12.3-24.7	7.2-10.8-21.6	6.2-9.3-18.5	5.8-8.6-17.3	40	45	51	49	44	39	
	3.556	50.6	991	43	9.6-14.4-28.8	8.4-12.6-25.2	7.2-10.8-21.6	6.7-10.1-20.1	44	49	55	53	48	43	
	4.064	66.1	1133	46	11.0-16.4-32.9	9.6-14.4-28.8	8.2-12.3-24.7	7.7-11.5-23.0	47	52	58	56	51	46	
457 x 914	1.016	4.0	425	11	2.6-4.9-9.8	2.3-4.3-8.5	2.0-3.7-7.3	1.8-3.4-6.8	12	17	23	21	16	11	
	1.524	9.1	637	22	4.9-7.3-14.7	4.3-6.4-12.8	3.7-5.5-11.0	3.4-5.1-10.3	23	28	34	32	27	22	
	2.032	16.2	850	29	6.5-9.8-19.5	5.7-8.5-17.1	4.9-7.3-14.7	4.6-6.8-13.7	30	35	41	39	34	29	
	2.54	25.3	1062	35	8.1-12.2-24.4	7.1-10.7-21.4	6.1-9.2-18.3	5.7-8.5-17.1	36	41	47	45	40	35	
	3.048	36.4	1274	40	9.8-14.7-29.3	8.5-12.8-25.6	7.3-11.0-22.0	6.8-10.3-20.5	41	46	52	50	45	40	
	3.556	49.6	1487	44	11.4-17.1-34.2	10.0-15.0-29.9	8.5-12.8-25.6	8.0-12.0-23.9	45	50	56	54	49	44	
	4.064	64.7	1699	47	13.0-19.5-39.1	11.4-17.1-34.2	9.8-14.7-29.3	9.1-13.7-27.4	48	53	59	57	52	47	
508 x 610	1.016	4.1	315	11	2.6-4.3-8.6	2.3-3.8-7.5	2.0-3.2-6.4	1.8-3.0-6.0	12	17	23	21	16	11	
	1.524	9.2	472	21	4.3-6.4-12.9	3.8-5.6-11.3	3.2-4.8-9.7	3.0-4.5-9.0	22	27	33	31	26	21	
	2.032	16.4	629	28	5.7-8.6-17.2	5.0-7.5-15.0	4.3-6.4-12.9	4.0-6.0-12.0	29	34	40	38	33	28	
	2.54	25.6	787	34	7.2-10.7-21.5	6.3-9.4-18.8	5.4-8.1-16.1	5.0-7.5-15.0	35	40	46	44	39	34	
	3.048	36.9	944	39	8.6-12.9-25.8	7.5-11.3-22.6	6.4-9.7-19.3	6.0-9.0-18.0	40	45	51	49	44	39	
	3.556	50.2	1101	43	10.0-15.0-30.1	8.8-13.2-26.3	7.5-11.3-22.6	7.0-10.5-21.0	44	49	55	53	48	43	
	4.064	65.5	1259	46	11.5-17.2-34.4	10.0-15.0-30.1	8.6-12.9-25.8	8.0-12.0-24.1	47	52	58	56	51	46	
508 x 914	1.016	4.0	472	12	2.6-5.1-10.2	2.3-4.5-8.9	1.9-3.8-7.7	1.8-3.6-7.1	13	18	24	22	17	12	
	1.524	9.0	708	22	5.1-7.7-15.3	4.5-6.7-13.4	3.8-5.7-11.5	3.6-5.4-10.7	23	28	34	32	27	22	
	2.032	16.0	944	29	6.8-10.2-20.4	6.0-8.9-17.9	5.1-7.7-15.3	4.8-7.1-14.3	30	35	41	39	34	29	
	2.54	25.1	1180	35	8.5-12.8-25.5	7.4-11.2-22.3	6.4-9.6-19.1	6.0-8.9-17.9	36	41	47	45	40	35	
	3.048	36.1	1416	40	10.2-15.3-30.6	8.9-13.4-26.8	7.7-11.5-23.0	7.1-10.7-21.4	41	46	52	50	45	40	
	3.556	49.1	1652	44	11.9-17.9-35.7	10.4-15.6-31.3	8.9-13.4-26.8	8.3-12.5-25.0	45	50	56	54	49	44	
	4.064	64.2	1888	47	13.6-20.4-40.8	11.9-17.9-35.7	10.2-15.3-30.6	9.5-14.3-28.6	48	53	59	57	52	47	

NOTE: See notes and correction factors on page P1-24.

PERFORMANCE DATA | METRIC | RECTANGULAR, WITH OBD/MULTILOUVER

SIZE	NECK VEL	TOTAL PRES	AIR FLOW	SOUND	THROW DIRECTION				OCTAVE BAND, dB						
					1-WAY THROW	2-WAY THROW	3-WAY HROW	4-WAY THROW	2	3	4	5	6	7	
cm	m/s	Pa	L/s	NC	m	m	m	m							
610 x 762	1.016	4.0	472	12	2.6 - 5.1 - 10.2	2.3 - 4.5 - 8.9	1.9 - 3.8 - 7.6	1.8 - 3.6 - 7.1	13	18	24	22	17	12	
	1.524	9.0	708	22	5.1 - 7.6 - 15.3	4.5 - 6.7 - 13.4	3.8 - 5.7 - 11.5	3.6 - 5.4 - 10.7	23	28	34	32	27	22	
	2.032	16.0	944	29	6.8 - 10.2 - 20.4	5.9 - 8.9 - 17.8	5.1 - 7.6 - 15.3	4.8 - 7.1 - 14.3	30	35	41	39	34	29	
	2.54	25.0	1180	35	8.5 - 12.7 - 25.5	7.4 - 11.2 - 22.3	6.4 - 9.6 - 19.1	5.9 - 8.9 - 17.8	36	41	47	45	40	35	
	3.048	35.9	1416	40	10.2 - 15.3 - 30.6	8.9 - 13.4 - 26.8	7.6 - 11.5 - 22.9	7.1 - 10.7 - 21.4	41	46	52	50	45	40	
	3.556	48.9	1652	44	11.9 - 17.8 - 35.7	10.4 - 15.6 - 31.2	8.9 - 13.4 - 26.8	8.3 - 12.5 - 25.0	45	50	56	54	49	44	
4.064	63.9	1888	47	13.6 - 20.4 - 40.8	11.9 - 17.8 - 35.7	10.2 - 15.3 - 30.6	9.5 - 14.3 - 28.5	48	53	59	57	52	47		
610 x 914	1.016	4.0	566	12	2.6 - 5.5 - 11.0	2.3 - 4.8 - 9.6	1.9 - 4.1 - 8.3	1.8 - 3.9 - 7.7	13	18	24	22	17	12	
	1.524	8.9	850	22	5.5 - 8.3 - 16.5	4.8 - 7.2 - 14.5	4.1 - 6.2 - 12.4	3.9 - 5.8 - 11.6	23	28	34	32	27	22	
	2.032	15.8	1133	30	7.3 - 11.0 - 22.0	6.4 - 9.6 - 19.3	5.5 - 8.3 - 16.5	5.1 - 7.7 - 15.4	31	36	42	40	35	30	
	2.54	24.7	1416	36	9.2 - 13.8 - 27.6	8.0 - 12.1 - 24.1	6.9 - 10.3 - 20.7	6.4 - 9.6 - 19.3	37	42	48	46	41	36	
	3.048	35.6	1699	40	11.0 - 16.5 - 33.1	9.6 - 14.5 - 28.9	8.3 - 12.4 - 24.8	7.7 - 11.6 - 23.1	41	46	52	50	45	40	
	3.556	48.5	1982	44	12.9 - 19.3 - 38.6	11.3 - 16.9 - 33.8	9.6 - 14.5 - 28.9	9.0 - 13.5 - 27.0	45	50	56	54	49	44	
4.064	63.3	2265	48	14.7 - 22.0 - 44.1	12.9 - 19.3 - 38.6	11.0 - 16.5 - 33.1	10.3 - 15.4 - 30.9	49	54	60	58	53	48		
762 x 914	1.016	3.9	708	13	2.6 - 5.8 - 12.1	2.2 - 5.1 - 10.6	1.9 - 4.3 - 9.1	1.8 - 4.0 - 8.5	14	19	25	23	18	13	
	1.524	8.8	1062	23	5.8 - 9.1 - 18.2	5.1 - 8.0 - 15.9	4.3 - 6.8 - 13.6	4.0 - 6.4 - 12.7	24	29	35	33	28	23	
	2.032	15.6	1416	30	8.1 - 12.1 - 24.2	7.1 - 10.6 - 21.2	6.1 - 9.1 - 18.2	5.7 - 8.5 - 17.0	31	36	42	40	35	30	
	2.54	24.4	1770	36	10.1 - 15.1 - 30.3	8.8 - 13.3 - 26.5	7.6 - 11.4 - 22.7	7.1 - 10.6 - 21.2	37	42	48	46	41	36	
	3.048	35.2	2124	41	12.1 - 18.2 - 36.3	10.6 - 15.9 - 31.8	9.1 - 13.6 - 27.3	8.5 - 12.7 - 25.4	42	47	53	51	46	41	
	3.556	47.9	2478	45	14.1 - 21.2 - 42.4	12.4 - 18.6 - 37.1	10.6 - 15.9 - 31.8	9.9 - 14.8 - 29.7	46	51	57	55	50	45	
4.064	62.5	2832	48	16.2 - 24.2 - 48.5	14.1 - 21.2 - 42.4	12.1 - 18.2 - 36.3	11.3 - 17.0 - 33.9	49	54	60	58	53	48		

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. The throw values given for 1-Way Throw is for [(Total L/s)/2] L/s per side. The throw values given for 2-Way Throw is for [(Total L/s)/2] L/s per side. The throw values given for 3-Way Throw is for [(Total L/s)/3] L/s per side. The throw values given for 4-Way Throw is for [(Total L/s)/4] L/s per side. See Krueger's selection software for performance data not shown, including octave band data.



NOTE: Reference page P1-5 for blade setting detail.

CORRECTION FACTOR (WITH OBD)			
BLADE SETTING	THROWS (MULTIPLY)	Ps (MULTIPLY)	NC (ADD)
A	1.43	1.30	+2
B	1.00	1.00	+0
C	0.79	0.72	-3
D	0.64	0.52	-4

CORRECTION FACTOR (WITHOUT OBD)			
BLADE SETTING	THROWS (MULTIPLY)	Ps (MULTIPLY)	NC (ADD)
A	1.43	1.20	+0
B	1.00	0.85	-3
C	0.70	0.61	-4
D	0.64	0.33	-6