The radiated and discharge sound power levels of each unit at varying air flow rates and inlet static pressures are shown in the performance data tables. Disregarding other factors and/or equipment that could contribute to the noise in the occupied space, these ratings along with the acoustical environment in which the unit operates, will determine the perceived noise level.

Noise generated within the terminal and emitted through the discharge air (discharge sound) will be attenuated by any ductwork downstream of the terminal. The noise emitted through the casing of the terminal (radiated sound) will be attenuated by the room's ceiling. Depending upon the application, either the radiated or discharge noise level will be the relative higher and determine the perceived noise level in the occupied space. The occupied space itself will provide further attenuation depending on the acoustical characteristics of the walls, ceilings, floors and internal furnishings.

All manufacturers must make certain assumptions on the acoustical environment of the application and then apply these assumptions to the unit's sound power ratings to determine the resultant sound pressures and perceived noise level in the occupied space. While the AHRI sound power ratings have been certified and can accurately be compared from one manufacturer to another, the NC values predicted will be dependent upon the acoustical assumptions made.

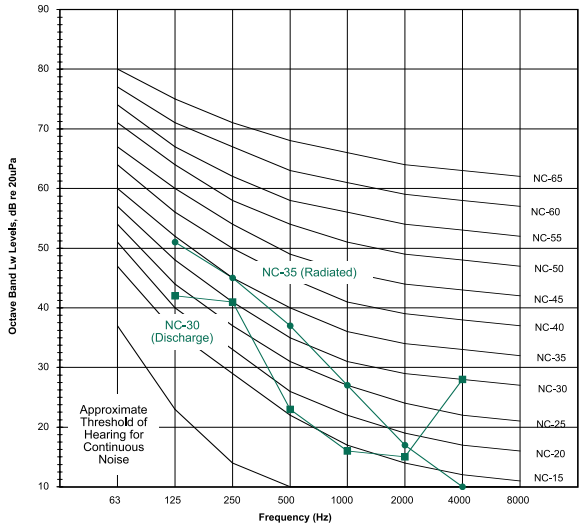
When selecting terminals, check the attenuation assumptions before comparing cataloged NC values. Anemostat uses the AHRI Standard 885, Appendix E attenuation assumptions for determining the anticipated noise levels. The attenuation assumptions in this standard are shown in table 2.

Table 3: Typical NC Design Values

Hotel rooms	25 - 35
Offices and conference rooms	25 - 35
Open offices	30 - 40
Classrooms	35 - 40 (max)
Churches	25 - 35
Hospital wards	30 - 40
Gymnasiums	40 - 45
Libraries	30 - 40

The NC curves are intended to reflect a human's perceived noise comfort. Plotting the anticipated sound pressure by octave band and determining the tangent NC curve reached throughout all octave bands (using the acoustical assumptions) will indicate the NC value anticipated.

Example of NC Curve Plot



NC Curves for Specifying the Design Level in Terms of the Maximum Permissible Sound Pressure Level for Each Frequency Band

	Radiated Lw @ 1800 cfm - 1.0" w.g. Inlet Ps							
	63	125	250	500	1000	2000	4000	8000
Lw Data	-----	69	64	57	53	48	46	-----
Attenuation	-----	18	19	20	26	31	36	-----
Plotted Data	-----	51	45	37	27	17	10	-----
NC	-----	**34**	**35**	**32**	**25**	**17**	-----	-----
	Discharge 1800 cfm @ 0.25" w.g. External Ps							
	63	**125**	**250**	**500**	**1000**	**2000**	**4000**	**8000**
Lw Data	-----	71	71	64	67	67	67	-----
Attenuation	-----	29	30	41	51	52	39	-----
Plotted Data	-----	42	41	23	16	15	28	-----
NC	-----	**22**	**30**	**16**	-----	-----	**30**	-----

Notes:
1. Size 7512 QST (see tables 39 and 40)
2. Radiated sound in the 250 Hz (third octave) is the controlling band

Table 2: AHRI Attenuation Table

	Octave Band						
	2	**3**	**4**	**5**	**6**	**7**	
Radiated	2	1	0	0	0	0	Environmental Effect
All Sizes	16	18	20	26	31	36	Type II Mineral Fiber
	18	**19**	**20**	**26**	**31**	**36**	**Total dB Reduction**
	Octave Band						
	2	**3**	**4**	**5**	**6**	**7**	
Discharge	2	1	0	0	0	0	Environmental Effect
Sizes 5-7	2	4	10	20	20	14	5 ft., Duct Lining (12x12)
(300-700	9	5	2	0	0	0	End Reflection
cfm)	6	10	18	20	21	12	5 ft., 8 in. Flex Duct
	5	6	7	8	9	10	Room Effect
	3	3	3	3	3	3	Sound Power Division
	27	**29**	**40**	**51**	**53**	**39**	**Total dB Reduction**
	Octave Band						
	2	**3**	**4**	**5**	**6**	**7**	
Discharge	2	1	0	0	0	0	Environmental Effect
Sizes	2	3	9	18	17	12	5 ft., Duct Lining (15x15)
8-16x24	9	5	2	0	0	0	End Reflection
(>700 cfm)	6	10	18	20	21	12	5 ft., 8 in. Flex Duct
	5	6	7	8	9	10	Room Effect
	5	5	5	5	5	5	Sound Power Division
	29	**30**	**41**	**51**	**52**	**39**	**Total dB Reduction**

Sound Performance

An important consideration in building design is the acoustics. Like room temperature and air speed, acoustics effect the overall comfort of occupants within a space. Fan terminal units located in the ceiling plenum produce sound pressure levels. Table 38 represents the estimation of occupied space sound levels yielding Noise Criteria(NC) values in accordance with AHRI Standard 885 "Procedure for Estimating Occupied Space Sound Levels in the Application of Air Terminals and Air Outlets." These are predictions based on one acoustical model as described in Appendix E of AHRI 885, entitled"Typical Sound Attenuation Values - Normative" and are listed in Table 2. This data is not a substitute for an acoustical analysis or room mock-up of each specific installation, but is presented based on what might be considered a typical installation. (See AHRI Standard 885 for accuracy of predictions using this method).

Table 2: AHRI Attenuation Table

	Octave Band 2	3	4	5	6	7	
Radiated	2	1	0	0	0	0	Environmental Effect
All Sizes	16	18	20	26	31	36	Type II Mineral Fiber
	18	**19**	**20**	**26**	**31**	**36**	Total dB Reduction
	Octave Band 2	**3**	**4**	**5**	**6**	**7**	
Inlet	2	1	0	0	0	0	Environmental Effect
Sizes 6-7	2	4	10	20	20	14	5ft., Duct Lining
(300-700cfm)	9	5	2	0	0	0	(12x12) End Reflection
	6	10	18	20	21	12	5 ft., 8 in. Flex Duct
	5	6	7	8	9	10	Room Effect
	3	3	3	3	3	3	Sound Power Division
	27	**29**	**40**	**51**	**53**	**39**	Total dB Reduction
	Octave Band 2	**3**	**4**	**5**	**6**	**7**	
Inlet	2	1	0	0	0	0	Environmental Effect
Sizes 8-16	2	3	9	18	17	12	5ft., Duct Lining
(>700cfm)	9	5	2	0	0	0	(15x15) End Reflection
	6	10	18	20	21	12	5 ft., 8 in. Flex Duct
	5	6	7	8	9	10	Room Effect
	5	5	5	5	5	5	Sound Power Division
	29	**30**	**41**	**51**	**52**	**39**	Total dB Reduction

Notes:

1. NC values are calculated based on procedures outlined in AHRI standard 885, appendix E as shown in table 2 above.
2. Where no NC value is shown (---), NC values are less than 20.
3. Min. ΔPs is the static pressure drop through the primary air valve at which a given air flow can be maintained with the damper set in full open position.
4. All static pressures are measured in inches w.g.
5. All data represents conditions @ 0.25 inches w.g. downstream static pressure.

Table 38: NC Values & Min. Static

Model QST Unit Size	CFM	Min ΔPs[3]	Radiated Fan Only	Primary Inlet Static Pressure 0.5"	1.0"	2"	3"	Disch Fan Only	Model EST CFM	Unit Size
	200	0.10	17	17	22	26	27	---		
	300	0.11	20	20	25	29	30	---		
1706	400	0.18	25	25	29	34	35	20		
	450	0.22	26	27	31	35	37	21		
	500	0.27	27	29	32	36	38	24		
	250	0.10	19	19	21	24	25	---		
	350	0.10	22	24	25	29	30	---		
1707	450	0.11	26	27	30	32	35	21		
	550	0.15	31	33	34	36	38	25		
	650	0.21	35	36	37	39	40	29		
	350	0.10	22	24	26	29	31	---		
	450	0.10	26	27	30	32	35	21		
1708	550	0.10	31	32	34	36	38	25		
	600	0.10	34	35	35	37	39	27		
	650	0.11	35	36	36	38	40	29		
		0.10	---	---	---	---	22	---	200	
		0.11	---	---	---	21	25	---	300	
		0.18	---	---	---	25	30	---	400	**3306**
		0.22	---	---	20	27	32	---	450	
		0.27	---	---	21	29	34	---	500	
		0.10	---	---	---	---	20	---	250	
		0.10	---	---	---	21	25	---	350	
		0.11	---	---	---	25	29	---	450	**3307**
		0.15	21	---	22	29	34	---	550	
		0.21	24	22	26	31	36	---	650	
	600	0.10	24	22	26	31	35	---	600	
	700	0.13	25	24	27	34	37	---	700	
2508	800	0.16	26	25	29	35	38	---	800	**3308**
	850	0.18	26	26	30	36	39	20	850	
	900	0.20	27	27	31	37	40	21	900	
	600	0.10	24	24	26	32	34	---	600	
	800	0.14	26	29	31	36	38	20	800	
2509	900	0.17	27	31	35	38	40	21	900	**3309**
	1000	0.22	29	32	36	39	41	24	1000	
	1100	0.25	31	33	38	40	42	26	1100	
	600	0.10	24	26	27	31	32	---	600	
	800	0.10	26	29	31	36	37	21	800	
2510	1000	0.14	29	31	35	38	40	24	1000	**3310**
	1100	0.17	31	32	37	39	41	26	1100	
	1200	0.20	34	36	38	40	42	30	---	
	1000	0.10	27	29	31	35	36	22	1000	
	1100	0.11	29	31	34	36	37	24	1100	
5010	1200	0.13	29	34	35	38	38	25	1200	**5010**
	1300	0.14	30	36	37	39	41	26	1300	
	1400	0.16	31	37	38	40	44	27	1400	
	1000	0.10	27	30	31	36	38	24	1000	
	1200	0.11	29	32	35	38	39	25	1200	
5012	1400	0.14	31	37	37	40	41	27	1400	**5012**
	1600	0.17	36	40	40	41	44	31	1600	
	1800	0.20	38	41	42	44	45	35	---	
	1100	0.10	29	31	34	38	40	25	1100	
	1300	0.12	30	35	36	40	42	26	1300	
5014	1500	0.15	34	37	39	42	44	30	1500	**5014**
	1700	0.18	37	40	41	44	45	32	---	
	1800	0.20	38	41	42	45	46	35	---	
	1200	0.10	23	24	26	34	37	---	1200	
	1400	0.11	27	27	29	35	39	22	1400	
7512	1600	0.13	29	31	31	36	40	26	1600	**7512**
	1800	0.17	32	34	35	37	41	30	1800	
	2000	0.20	37	37	37	38	42	31	2000	
	1200	0.10	23	24	27	34	37	---	1200	
	1400	0.11	27	26	30	35	38	22	1400	
7514	1700	0.15	30	31	32	37	40	29	1700	**7514**
	2000	0.20	37	35	35	40	42	31	2000	
	2300	0.25	39	39	39	41	44	35	---	
	1600	0.14	32	32	34	37	40	24	1600	
	1700	0.15	32	32	34	38	41	26	1700	
1012	1800	0.17	34	34	35	38	41	27	1800	**1012**
	1900	0.18	35	35	36	39	41	29	1900	
	2000	0.20	35	36	37	39	42	30	2000	
	1600	0.14	32	32	35	37	39	24	1600	
	1900	0.18	35	36	36	38	40	29	1900	
1014	2100	0.21	36	37	37	39	41	31	2100	**1014**
	2300	0.25	39	40	40	41	42	34	2300	
	2600	0.31	41	42	44	44	44	38	---	
	1800	0.17	34	35	35	36	38	27	1800	
	2000	0.20	35	36	36	37	39	30	2000	
1016	2200	0.24	37	37	37	39	40	32	2200	**1016**
	2400	0.27	39	39	39	40	41	35	2400	
	2600	0.31	41	41	41	42	44	38	---	

Table 39: Radiated Fan + Primary Sound Power Data (dB)

Model QST			Radiated Sound Power Levels (dB re: 10^{-12} watts) FAN = PRIMARY CFM																						Model EST	
			0.5" ΔPs						1.0" ΔPs						2.0" ΔPs						3.0" ΔPs					
			Sound Power Levels, dB						Sound Power Levels, dB						Sound Power Levels, dB						Sound Power Levels, dB					
			Octave Band						Octave Band						Octave Band						Octave Band					
Unit	CFM	Min. ΔPs[1]	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	2	3	4	5	6	7	Unit	CFM
	200	0.10	55	50	42	36	33	29	57	54	45	39	38	35	60	57	49	43	44	41	61	58	52	47	46	45		
	300	0.11	57	52	44	38	35	31	59	56	47	41	40	37	62	59	51	45	45	43	63	60	54	49	48	47		
1706	400	0.18	62	56	48	42	37	33	63	59	50	44	42	38	66	63	54	47	46	44	66	64	57	50	49	48		
	450	0.22	64	58	49	43	39	35	65	61	51	45	43	39	67	64	55	48	47	45	67	66	58	51	50	49		
	500	0.27	65	59	50	45	41	38	66	62	53	46	44	41	68	65	56	49	48	46	69	67	60	52	51	50		
	250	0.10	55	51	44	37	34	30	56	53	46	41	39	36	58	55	50	50	48	46	58	56	51	53	52	51		
	350	0.10	60	55	47	41	37	33	61	56	49	45	42	39	62	59	52	51	49	48	62	60	54	54	53	52		
1707	450	0.11	64	58	49	43	40	36	65	60	51	47	44	42	66	62	54	52	50	49	66	64	57	55	54	53		
	550	0.15	67	62	52	46	43	39	68	63	53	49	46	44	69	65	56	53	51	50	70	67	59	56	55	54		
	650	0.21	70	65	55	49	45	41	71	66	56	50	48	45	72	68	58	54	52	51	72	69	60	57	56	55		
	350	0.10	61	55	46	40	36	32	62	57	48	42	41	38	63	59	52	45	45	44	63	61	53	48	49	48		
	450	0.10	64	58	48	42	39	34	66	60	49	44	42	40	67	62	53	47	46	46	67	64	56	49	50	49		
1708	550	0.10	68	62	50	44	41	36	69	63	51	45	44	41	70	65	54	48	47	47	70	67	57	51	51	50		
	600	0.10	69	64	51	46	42	37	70	64	52	47	45	42	71	66	55	49	48	48	71	68	58	52	52	51		
	650	0.11	70	65	52	47	44	38	71	65	53	48	46	44	72	67	56	50	50	49	72	69	59	53	53	52		
		0.10	43	39	29	26	23	19	48	45	35	29	29	29	52	51	42	32	36	35	54	54	47	36	37	38	200	
		0.11	45	42	31	28	24	21	50	47	37	31	31	31	54	53	45	34	37	37	56	56	49	38	39	40	300	
		0.18	50	45	35	32	27	23	54	50	40	34	33	32	58	56	47	36	38	38	59	60	51	39	40	42	400	3306
		0.22	51	47	36	33	29	25	55	52	41	35	34	33	59	58	49	37	39	39	61	62	53	40	41	43	450	
		0.27	53	48	37	35	31	28	57	53	42	36	35	35	60	59	50	38	40	40	62	63	54	41	41	43	500	
		0.10	43	40	31	27	24	20	47	44	36	31	30	30	50	49	43	39	40	40	51	52	46	42	43	44	250	
		0.10	47	44	34	31	27	23	51	47	38	35	33	34	54	53	46	40	42	42	55	56	49	43	44	45	350	
		0.11	51	47	36	34	29	26	55	51	41	37	36	36	58	56	48	41	42	43	59	59	51	44	45	47	450	3307
		0.15	55	51	39	36	32	29	59	54	43	39	38	38	62	59	49	42	43	44	63	63	53	46	46	47	550	
		0.21	58	54	42	39	35	31	62	57	45	41	39	39	64	61	51	43	44	44	65	65	55	46	46	48	650	
	600	0.10	57	54	44	40	36	33	61	57	47	43	40	39	64	61	52	46	45	45	65	64	55	49	48	49	600	
	700	0.13	59	55	46	42	38	35	63	58	49	44	42	41	66	63	54	48	47	47	67	66	57	51	50	51	700	
2508	800	0.16	61	56	48	44	40	37	64	59	50	45	43	42	67	64	55	49	48	48	68	67	59	52	51	52	800	3308
	850	0.18	62	57	50	45	41	38	65	60	51	46	44	43	68	65	56	50	48	49	69	68	59	52	51	53	850	
	900	0.20	63	58	51	46	42	39	65	61	52	47	45	43	69	66	57	50	49	49	70	69	60	53	52	53	900	
	600	0.10	59	55	45	41	37	30	61	57	47	45	43	37	64	62	52	50	49	45	64	63	56	53	53	50	600	
	800	0.14	65	59	49	45	41	34	66	61	51	48	45	39	68	65	55	52	51	46	69	67	58	55	54	51	800	
2509	900	0.17	66	61	51	48	43	37	68	64	52	49	47	41	70	67	56	53	52	47	71	69	59	56	55	52	900	3309
	1000	0.22	66	62	52	49	45	40	69	65	54	51	48	43	71	68	57	54	53	49	72	70	60	57	57	55	1000	
	1100	0.25	66	63	54	50	48	42	71	67	56	52	50	45	73	69	58	55	54	50	74	71	61	59	59	58	1100	
	600	0.10	59	57	45	40	36	30	61	58	48	45	42	38	62	61	53	50	49	46	62	62	56	53	53	51	600	
	800	0.10	63	59	48	44	39	34	64	61	50	47	44	40	66	65	55	52	50	48	66	66	59	55	54	52	800	
2510	1000	0.14	66	61	52	48	44	39	68	64	53	48	47	43	70	67	57	53	52	50	70	69	60	56	55	54	1000	3310
	1100	0.17	67	62	54	49	46	41	70	66	55	50	48	44	71	68	58	54	53	51	72	70	61	57	56	55	1100	
	1200	0.20	70	65	55	51	47	42	72	67	56	52	50	46	73	69	59	55	54	52	73	71	62	58	57	56	---	
	1000	0.10	64	59	52	47	42	39	67	61	54	48	45	44	70	64	58	52	50	50	70	65	59	55	54	54	1000	
	1100	0.11	66	61	54	49	43	40	68	63	55	50	46	45	71	65	59	53	51	51	71	66	60	55	52	53	1100	
5010	1200	0.13	67	63	55	51	44	42	69	64	56	51	47	46	72	67	60	54	51	51	72	67	60	54	51	51	1200	5010
	1300	0.14	69	65	57	52	46	43	70	66	58	52	48	47	73	68	61	55	52	52	73	70	62	56	53	53	1300	
	1400	0.16	71	66	59	53	47	45	72	67	59	53	49	48	73	69	62	55	52	52	75	72	64	58	55	55	1400	
	1000	0.10	65	60	52	47	41	37	66	61	55	49	45	43	67	65	59	53	50	50	67	67	62	56	54	54	1000	
	1200	0.11	66	62	55	50	44	40	67	64	57	51	46	45	68	67	60	54	51	51	69	68	63	56	54	54	1200	
5012	1400	0.14	70	66	58	52	46	43	70	66	59	53	48	46	70	69	62	56	52	51	71	70	64	58	55	55	1400	5012
	1600	0.17	72	69	60	54	49	46	72	69	61	55	50	48	73	70	63	57	53	52	73	72	65	59	56	56	1600	
	1800	0.20	74	70	62	56	51	48	75	71	63	56	52	49	75	72	65	58	54	53	75	73	67	60	57	56	---	
	1100	0.10	65	61	54	49	42	38	67	63	55	50	44	43	69	67	59	52	49	48	69	69	62	55	52	52	1100	
	1300	0.12	67	64	56	51	44	41	69	65	57	52	46	44	71	69	60	54	50	49	72	71	64	56	53	53	1300	
5014	1500	0.15	70	66	59	53	47	44	72	68	60	54	49	46	73	71	62	56	51	50	74	72	65	58	54	53	1500	5014
	1700	0.18	72	69	60	55	49	46	73	70	61	55	50	47	74	72	63	57	53	51	75	73	66	59	55	54	---	
	1800	0.20	73	70	61	56	50	47	74	71	62	56	51	48	75	73	64	57	53	51	76	74	67	59	55	54	---	
	1200	0.10	59	55	50	45	40	36	63	57	51	46	44	41	67	63	55	50	49	47	69	66	59	53	52	53	1200	
	1400	0.11	62	58	52	48	42	38	64	59	53	48	45	42	69	64	57	51	50	48	71	68	60	54	53	53	1400	
7512	1600	0.13	66	61	55	50	44	40	67	61	55	51	47	44	70	65	58	53	51	49	72	69	61	55	54	54	1600	7512
	1800	0.17	68	63	57	52	47	43	69	64	57	53	48	46	71	66	59	54	52	50	73	70	62	57	55	54	1800	
	2000	0.20	70	66	59	54	48	45	71	66	59	54	50	47	72	67	60	55	53	51	74	71	63	58	56	55	2000	
	1200	0.10	60	54	50	45	40	34	64	58	52	49	44	40	68	63	57	53	49	46	69	66	61	57	53	50	1200	
	1400	0.11	62	57	52	47	42	36	66	60	54	50	45	41	70	64	58	54	50	47	72	67	62	58	54	51	1400	
7514	1700	0.15	67	60	55	50	45	41	68	62	57	51	47	43	72	66	60	55	51	48	74	69	63	59	55	52	1700	7514
	2000	0.20	70	64	58	53	48	44	70	64	59	54	49	46	74	68	61	57	52	50	76	70	64	60	56	53	2000	
	2300	0.25	73	67	61	56	51	47	73	67	61	56	51	48	75	69	63	58	53	51	77	72	65	61	57	54	---	
	1600	0.14	68	61	55	49	44	40	69	62	56	50	47	44	71	66	59	53	51	50	72	69	63	56	55	54	1600	
	1700	0.15	68	62	56	50	45	41	69	63	57	51	48	45	71	67	60	54	52	50	72	70	63	57	55	54	1700	
1012	1800	0.17	69	63	57	51	46	42	69	64	58	52	49	46	71	67	60	54	52	51	73	70	64	57	55	55	1800	1012
	1900	0.18	70	64	58	52	47	43	70	65	59	53	49	47	72	68	61	55	53	51	73	70	64	58	56	55	1900	
	2000	0.20	71	65	59	53	48	44	71	66	60	54	50	47	73	68	62	55	53	52	74	71	65	58	56	55	2000	
	1600	0.14	68	61	55	49	44	40	70	62	55	50	46	43	71	66	59	53	51	49	72	68	62	56	54	53	1600	
	1900	0.18	71	64	58	52	47	43	71	64	58	52	48	46	72	67	60	55	52	50	73	69	63	57	55	54	1900	
1014	2100	0.21	72	66	60	54	49	45	72	66	60	54	50	47	73	68	62	56	53	51	74	70	64	58	56	55	2100	1014
	2300	0.25	74	68	61	56	51	47	74	68	62	56	51	49	75	69	63	57	54	52	75	71	65	59	56	55	2300	
	2600	0.31	76	71	64	59	54	51	77	71	65	59	54	52	77	71	65	60	56	54	77	72	66	61	58	56	---	
	1800	0.17	70	61	56	50	44	41	70	62	56	51	46	43	71	65	59	54	50	48	72	67	62	57	54	53	1800	
	2000	0.20	71	64	59	52	47	43	71	64	59	53	48	45	72	66	60	55	51	49	73	68	63	58	55	54	2000	
1016	2200	0.24	72	66	60	54	48	45	72	66	60	54	49	46	73	68	61	56	52	50	74	69	64	58	55	54	2200	1016
	2400	0.27	73	68	62	56	50	47	73	68	62	56	51	48	74	69	63	57	53	51	75	70	65	59	56	54	2400	
	2600	0.31	75	70	64	59	53	50	75	70	64	59	53	50	76	71	64	59	55	53	77	72	66	60	57	55	---	

Notes:

1. Min. Ps is the static pressure drop through the primary air valve at which a given air flow can be maintained with the damper set in full open position.
2. All data represents conditions @ 0.25 inches w.g. downstream static pressure.
3. All sound data is measured in accordance with industry Standard AHRI - 880.

Table 40: Radiated & Discharge Fan Only Sound Power Data (dB)

Sound Power Levels (dB re: 10^{-12} watts)

Model QST		Radiated Fan Only						Discharge Fan Only						Model EST	
		Sound Power Levels, dB						Sound Power Levels, dB							
		Octave Band						Octave Band						Fan	
Unit	Fan CFM	2	3	4	5	6	7	2	3	4	5	6	7	CFM	Unit
	200	51	50	40	34	28	24	64	58	52	49	45	40		
	300	53	52	43	37	31	27	66	60	54	51	47	42		
1706	400	61	56	47	39	33	29	74	64	58	57	53	51		
	450	62	57	48	40	34	30	75	66	59	58	55	53		
	500	63	58	49	41	35	31	76	68	61	60	56	55		
	250	52	51	41	35	29	25	65	59	53	50	46	41		
	350	57	54	45	38	32	28	70	62	56	54	50	47		
1707	450	62	57	48	40	34	30	75	66	59	58	55	53		
	550	65	61	50	43	37	32	78	69	62	61	58	57		
	650	67	64	52	45	39	34	81	72	64	64	61	60		
	350	57	54	45	38	32	28	70	62	56	54	50	47		
	450	62	57	48	40	34	30	75	66	59	58	55	53		
1708	550	65	61	50	43	37	32	78	69	62	61	58	57		
	600	66	63	51	44	38	33	80	71	63	63	60	59		
	650	67	64	52	45	39	34	81	72	64	64	61	60		
		39	42	33	29	21	18	48	50	44	40	36	31	200	
		41	43	36	32	24	21	50	52	45	43	37	33	300	
		49	48	40	34	26	23	58	57	50	49	44	42	400	3306
		50	49	41	36	27	24	59	58	51	50	46	43	450	
		51	50	42	36	28	25	60	60	52	51	47	45	500	
		40	43	34	30	22	19	49	51	45	41	37	32	250	
		45	46	38	33	25	22	54	54	48	46	41	37	350	
		50	49	41	36	27	24	59	58	51	50	46	43	450	3307
		53	53	44	38	30	26	62	62	54	53	49	47	550	
		55	55	45	40	32	28	65	64	56	55	52	52	650	
	600	54	55	44	39	31	27	64	63	55	54	51	49	600	
	700	55	56	46	41	33	29	67	64	58	56	54	54	700	
2508	800	56	57	47	43	35	31	69	65	60	58	56	55	800	3308
	850	57	57	48	45	36	33	70	66	61	60	58	56	850	
	900	58	58	49	46	37	34	71	67	62	61	59	57	900	
	600	54	55	44	39	31	27	64	63	55	54	51	49	600	
	800	56	57	47	43	35	31	69	66	60	58	56	56	800	
2509	900	58	58	49	46	37	34	71	67	62	61	59	57	900	3309
	1000	60	59	50	47	39	36	72	69	64	63	61	60	1000	
	1100	62	61	52	48	41	38	74	71	65	64	63	62	1100	
	600	54	55	44	39	31	27	64	63	55	54	51	49	600	
	800	56	57	47	43	35	31	69	67	60	58	56	57	800	
2510	1000	60	59	50	47	39	36	72	69	64	63	61	60	1000	3310
	1100	62	61	52	48	41	38	74	71	65	64	63	62	1100	
	1200	64	63	54	49	43	40	77	74	67	67	66	65	—-	

Sound Power Levels (dB re: 10^{-12} watts)

Model QST		Radiated Fan Only						Discharge Fan Only						Model EST	
		Sound Power Levels, dB						Sound Power Levels, dB							
		Octave Band						Octave Band						Fan	
Unit	Fan CFM	2	3	4	5	6	7	2	3	4	5	6	7	CFM	Unit
	1000	62	58	51	47	39	35	70	67	61	61	60	58	1000	
	1100	63	59	52	48	40	37	71	68	62	63	61	60	1100	
5010	1200	64	59	53	49	42	38	72	69	63	64	63	61	1200	5010
	1300	65	60	54	50	43	40	73	70	65	65	64	62	1300	
	1400	66	61	56	51	45	41	75	71	66	67	66	63	1400	
	1000	62	58	51	47	39	35	71	68	61	61	60	60	1000	
	1200	64	59	53	49	42	38	72	69	63	64	63	61	1200	
5012	1400	66	61	56	51	45	41	75	71	66	67	66	63	1400	5012
	1600	68	65	58	54	48	45	78	74	68	70	69	68	1600	
	1800	70	67	59	55	50	48	80	77	70	72	71	72	—-	
	1100	63	59	52	48	40	37	71	69	62	63	61	61	1100	
	1300	65	60	54	50	43	40	73	70	65	65	64	62	1300	
5014	1500	67	63	57	52	46	43	76	73	67	68	67	67	1500	5014
	1700	69	66	59	55	49	46	79	75	69	71	70	69	—-	
	1800	70	67	59	55	50	48	80	77	70	72	71	72	—-	
	1200	60	54	49	45	37	32	68	63	57	60	58	55	1200	
	1400	63	58	53	49	40	37	71	66	59	62	61	58	1400	
7512	1600	64	59	54	51	43	38	73	69	62	65	64	62	1600	7512
	1800	67	62	56	53	45	41	75	72	64	67	67	67	1800	
	2000	69	63	57	54	47	44	76	73	66	69	69	68	2000	
	1200	60	54	49	45	37	32	68	63	57	60	58	55	1200	
	1400	63	58	53	49	40	37	71	66	59	62	61	58	1400	
7514	1700	66	60	55	52	44	40	74	71	63	66	65	66	1700	7514
	2000	69	63	57	54	47	44	76	73	66	69	69	68	2000	
	2300	73	66	59	56	50	46	80	76	68	72	72	72	—-	
	1600	68	60	54	49	42	38	71	67	61	63	62	60	1600	
	1700	68	61	55	50	43	39	73	69	62	64	63	62	1700	
1012	1800	69	62	56	51	44	40	74	70	63	65	64	64	1800	1012
	1900	70	63	57	52	45	41	75	71	64	67	66	66	1900	
	2000	70	64	58	53	47	43	76	72	65	68	67	67	2000	
	1600	68	60	54	49	42	38	74	67	61	63	62	60	1600	
	1900	70	63	57	52	45	41	75	71	64	67	66	66	1900	
1014	2100	71	65	58	54	48	44	76	73	66	69	68	68	2100	1014
	2300	73	67	60	56	50	46	78	75	68	71	70	71	2300	
	2600	75	70	62	58	53	49	81	79	71	74	73	74	—-	
	1800	69	62	56	51	44	40	74	70	63	65	64	64	1800	
	2000	70	64	58	53	47	43	76	72	65	68	67	67	2000	
1016	2200	72	66	59	55	49	45	77	74	67	70	69	69	2200	1016
	2400	73	68	61	57	51	47	80	76	69	72	71	72	2400	
	2600	75	70	62	58	53	49	81	79	71	74	73	74	—-	

Notes:
1. All data represents conditions @ 0.25 inches w.g. external static pressure.
2. All sound data is measured in accordance with industry Standard AHRI - 880.