

**SLAR-50 • TAZR-R-50**

**1/2" SLOT • RETURN AIR**

CFM per Foot	1 SLOT		2 SLOT		3 SLOT		4 SLOT		5 SLOT		6 SLOT		7 SLOT		8 SLOT		CFM per Foot
	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	
20	.03	-	.01	-													20
30	.06	-	.02	-	.01	-											30
35	.08	-	.02	-	.01	-											35
40	.10	14	.03	-	.02	-	.01	-									40
45	.13	18	.03	-	.02	-	.01	-	.01	-							45
50	.16	21	.04	-	.02	-	.01	-	.01	-	.01	-					50
60			.06	-	.03	-	.02	-	.01	-	.01	-	.01	-			60
80			.10	17	.05	-	.03	-	.02	-	.02	-	.01	-	.01	-	80
90			.13	21	.06	-	.04	-	.02	-	.02	-	.01	-	.01	-	90
100					.07	13	.04	-	.03	-	.02	-	.02	-	.01	-	100
120					.10	19	.06	-	.04	-	.03	-	.02	-	.02	-	120
140					.14	24	.08	16	.05	-	.04	-	.03	-	.02	-	140
160							.10	20	.07	14	.05	-	.04	-	.03	-	160
180							.14	24	.08	18	.06	-	.05	-	.04	-	180
200							.16	27			.07	16	.06	-	.04	-	200
250											.08	20	.06	15	.06	15	250
300											.12	26	.09	21	.09	21	300
350													.12	26	.12	26	350
400													.16	31	.16	31	400

**SLAR-75 • TAZR-R-75**

**3/4" SLOT • RETURN AIR**

CFM per Foot	1 SLOT		2 SLOT		3 SLOT		4 SLOT		5 SLOT		6 SLOT		7 SLOT		8 SLOT		CFM per Foot	
	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC		
30	.02	-															30	
35	.03	-															35	
40	.04	-															40	
45	.05	-	.02	-													45	
50	.06	-	.02	-													50	
60	.09	17	.03	-													60	
70	.12	22	.03	-	.02	-											70	
80	.16	27	.04	-	.02	-											80	
90			.05	-	.03	-	.02	-									90	
100			.06	14	.03	-	.02	-									100	
120			.09	20	.04	-	.03	-	.02	-							120	
140			.13	25	.06	14	.03	-	.02	-	.02	-					140	
160					.07	18	.04	-	.03	-	.02	-	.02	-			160	
180					.09	22	.05	13	.04	-	.03	-	.02	-	.02	-	180	
200							.06	17	.04	-	.03	-	.03	-	.02	-	200	
250							.11	25	.06	18	.05	-	.04	-	.03	-	250	
300									.09	24	.06	19	.05	15	.04	-	300	
350											.09	25	.07	20	.05	15	350	
400											.11	29	.08	25	.07	20	400	
450													.11	28	.08	24	450	
500														.10	28	.10	28	500

**SLAR-100 • TAZR-R-100**

**1" SLOT • RETURN AIR**

CFM per Foot	1 SLOT		2 SLOT		3 SLOT		4 SLOT		5 SLOT		6 SLOT		7 SLOT		8 SLOT		CFM per Foot
	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	
40	.03	-															40
60	.06	18															60
80	.11	26	.03	-													80
100	.16	32	.04	16	.02	-											100
120			.06	21	.03	-	.02	-									120
140			.08	25	.04	16	.02	-									140
160			.11	29	.05	20	.03	-									160
180			.13	32	.06	23	.04	16	.02								180
200					.08	26	.04	19	.03								200
220					.09	29	.05	21	.03	17	.02	-					220
240					.11	31	.06	24	.04	19	.03	15					240
260					.12	33	.07	26	.04	21	.03	17					260
280							.08	28	.05	23	.03	19	.03	15			280
300							.09	30	.06	25	.04	21	.03	17	.02		300
350							.13	34	.08	29	.05	25	.04	22	.03	17	350
400									.10	33	.07	29	.05	25	.04	21	400
450									.13	37	.09	33	.07	29	.05	24	450
500									.16	40	.11	35	.08	32	.07	27	500
600									.23	45	.16	40	.12	37	.10	32	600
700											.22	45	.16	41	.13	37	700
800													.21	45	.17	40	800

For performance data notes see page D-18.

**SLAR-150 • TAZR-R-150**

**1-1/2" SLOT • RETURN AIR**

CFM per Foot	1 SLOT		2 SLOT		3 SLOT		4 SLOT		5 SLOT		6 SLOT		7 SLOT		8 SLOT		CFM per Foot
	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	
60	.03	-															60
80	.05	21															80
100	.08	28															100
120	.11	34	.03	14													120
140			.04	19													140
160			.05	24	.02	-											160
180			.06	28	.03	16											180
200			.08	31	.04	19	.02	-									200
220			.09	35	.04	23	.03	14									220
240			.11	37	.05	26	.03	17									240
260			.13	41	.06	28	.03	20									260
280					.07	31	.04	22	.02	15							280
300					.08	33	.04	25	.03	17	.02						300
350					.10	38	.06	30	.04	22	.03	17					350
400					.14	45	.08	34	.05	27	.03	22	.02	17			400
450							.10	38	.06	31	.04	26	.03	21	.02	17	450
500							.12	42	.08	35	.05	29	.04	25	.03	20	500
600									.11	41	.08	36	.06	31	.04	27	600
700									.15	46	.10	41	.08	37	.06	32	700
800									.20	51	.14	46	.10	41	.08	37	800

**Test Standard**

- ANSI / ASHRAE standard 70

**Sound Levels**

- NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref: 10<sup>-12</sup> watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands
- NC shown is based on 4' diffuser length. For other active lengths, use the following adjustment factors:

If Diffuser Length is:	2'	4'	6'	8'	10+'
Add to NC value:	-3	0	+2	+3	+4

**Throw (Horizontal Pattern)**

- For ceiling installed SLAD, large numbers of slots in a single direction should be carefully studied for drop effects.
- The numbers shown in table are throw distances, in feet, measured along the jet trajectory axis relating to terminal velocities of 150,100, & 50 fpm, with the jet attached to a surface for a 10'+ active length. These are ONE way patterns. For other active lengths, use the following throw adjustment factors:

If Diffuser Length is:	2'	4'	6'	8'	10+'
Multiply Throw Dist by:	.45	.65	.80	.90	1.00

- For installation with a free, unattached jet, multiply throw value by .70
- For two way applications, determine proportion of air in each direction and refer to throw distance for number of slots in the same direction.
- Terminal velocity is the air speed, in feet per minute, measured in the supply air stream

**High Sidewall Applications**

When a SLAD diffuser is used in a high sidewall the air can be:

1. Projected vertically up the side wall to the ceiling. In this case use the horizontal pattern data, subtracting the SLAD to ceiling distance from the throw distance given. This is the preferred method.
2. Directed horizontally and attaches itself to the ceiling via the Coanda effect. In this case, use the vertical projection throw (average of heating and cooling value) times 1.4 when the SLAD is located close to the ceiling. Decrease the factor 1.4 by .1 (down to a minimum of 1.0) for every foot the SLAD is located below the ceiling. The drop effect must also be studied closely when cooling is used in conjunction with this high sidewall SLAD mounted more than 1 – 2 feet below the ceiling.

**Vertical Projection**

- The numbers shown in table are projection distances, in feet, measured along the jet trajectory axis relating to a terminal velocity of 50 fpm, for a 4' active length. H based on a heating differential of 20° F. C based on a cooling differential of 20° F. For other active lengths, use the following projection adjustment factors:

If Diffuser Length is:	2'	4'	6'	8'	10+'
Multiply Proj Dist by:	.70	1.00	1.20	1.40	1.50

- Terminal velocity is the air speed, in feet per minute, measured in the supply air stream.

**Pressure**

- P<sub>s</sub> represents Static Pressure, inches of water

**Model SLAR Return Data**

- Sound and pressure data shown for return unit without internal components.