

## A500 Series Square Louvered Ceiling Diffuser

Nominal Duct Size (in. x in.)	Core Velocity (fpm)		400		500		600		700		900		1100		1500	
	Total Pressure (in. w.g.)		0.013		0.020		0.117		0.169		0.229		0.300		0.379	
			A	B	A	B	A	B	A	B	A	B	A	B	A	B
6" x 6" 0.25 ft <sup>2</sup> Duct Area (0.14 Ak)	Total Air Flow (cfm)		52		65		78		91		117		143		195	
	NC (dB)		--		--		--		17		22		28		31	
	4-Way	Air Flow/Side (cfm)	13		16		20		23		29		36		49	
		Throw (ft.)	3		4		4		5		6		7		10	
	3-Way	Air Flow/Side (cfm)	15	22	19	28	23	33	26	39	34	50	41	61	77	41
		Throw (ft.)	3	4	4	5	4	5	5	6	6	7	7	8	8	11
2-Way	Air Flow/Side (cfm)	26		50		63		75		88		100		113		
	Throw (ft.)	3		4		5		6		8		9		11		
1-Way	Air Flow/Side (cfm)	52		100		125		150		175		200		225		
	Throw (ft.)	4		6		7		8		11		13		18		
8" x 8" 0.44 ft <sup>2</sup> Duct Area (0.23 Ak)	Total Air Flow (cfm)		80		100		120		140		180		220		300	
	NC (dB)		--		--		--		18		23		29		32	
	4-Way	Air Flow/Side (cfm)	20		25		30		35		45		55		75	
		Throw (ft.)	4		5		6		6		8		10		14	
	3-Way	Air Flow/Side (cfm)	42	63	56	84	70	105	84	127	98	148	113	169	127	190
		Throw (ft.)	2	4	3	5	3	6	4	7	5	10	6	12	9	15
2-Way	Air Flow/Side (cfm)	40		50		60		70		90		110		150		
	Throw (ft.)	4		5		6		7		9		11		15		
1-Way	Air Flow/Side (cfm)	80		100		120		140		180		220		300		
	Throw (ft.)	6		8		9		10		13		15		20		
10" x 10" 0.69 ft <sup>2</sup> Duct Area (0.30 Ak)	Total Air Flow (cfm)		116		145		174		203		261		319		435	
	NC (dB)		--		--		16		19		25		30		34	
	4-Way	Air Flow/Side (cfm)	29		36		44		51		65		80		109	
		Throw (ft.)	4		5		7		9		10		11		16	
	3-Way	Air Flow/Side (cfm)	75	113	100	150	125	188	150	225	175	263	200	300	225	338
		Throw (ft.)	2	4	3	5	3	6	4	7	5	10	6	12	9	15
2-Way	Air Flow/Side (cfm)	58		73		87		102		131		160		218		
	Throw (ft.)	5		6		8		10		13		15		20		
1-Way	Air Flow/Side (cfm)	116		145		174		203		261		319		435		
	Throw (ft.)	7		9		10		13		15		19		26		
12" x 12" 1.00 ft <sup>2</sup> Duct Area (0.42 Ak)	Total Air Flow (cfm)		168		210		252		294		378		462		630	
	NC (dB)		--		--		16		20		25		31		35	
	4-Way	Air Flow/Side (cfm)	42		53		63		74		95		116		158	
		Throw (ft.)	6		7		8		9		11		13		17	
	3-Way	Air Flow/Side (cfm)	48	72	60	90	72	108	84	126	108	162	132	198	302	270
		Throw (ft.)	4	6	5	8	6	10	7	12	9	16	11	20	16	24
2-Way	Air Flow/Side (cfm)	84		105		126		147		189		231		315		
	Throw (ft.)	6		7		9		10		13		16		24		
1-Way	Air Flow/Side (cfm)	168		210		252		294		378		462		630		
	Throw (ft.)	8		10		13		15		19		23		31		
14" x 14" 1.36 ft <sup>2</sup> Duct Area (0.65 Ak)	Total Air Flow (cfm)		236		295		354		413		531		649		885	
	NC (dB)		--		--		17		21		26		32		35	
	4-Way	Air Flow/Side (cfm)	59		74		89		103		133		162		221	
		Throw (ft.)	6		8		9		10		13		16		22	
	3-Way	Air Flow/Side (cfm)	68	101	85	126	101	152	118	177	152	228	186	278	253	379
		Throw (ft.)	4	9	6	10	7	12	8	14	10	17	13	20	18	26
2-Way	Air Flow/Side (cfm)	118		148		177		207		267		325		443		
	Throw (ft.)	8		10		11		13		15		18		23		
1-Way	Air Flow/Side (cfm)	236		295		354		413		531		649		885		
	Throw (ft.)	11		13		16		19		24		30		38		

- Throw data is given for isothermal conditions.
- Terminal Velocity is 75 FPM.

- NC values are based on room absorption of 10dB re 10<sup>-12</sup> watts.
- Blanks "--" indicate NC value of less than 15dB.