



RM1, 5RM1
These supply ceiling diffusers discharge horizontally only. They feature three cones with two position settings to control room air induction.



RM2, 5RM2, & RA2
These supply ceiling diffusers discharge both horizontally and vertically. They feature four cones with three position settings (RM2/5RM2) or may be fully adjustable (RA2) to control vertical discharge.



RM4, 5RM4, & RA4
These supply ceiling diffusers discharge both horizontally and vertically. They feature four cones (outer anti-smudge cone) with three position settings (RM4/5RM4) or may be fully adjustable (RA4) to control vertical discharge.



RM2PLQ
This supply ceiling diffuser discharges both horizontally and vertically. It features a round plaque face with three position settings available to control vertical discharge.



RM4PLQ
This supply ceiling diffuser discharges both horizontally and vertically. It features a round plaque face with an outer anti-smudge cone. There are three position settings available to control vertical discharge.



R1DBR10
This supply ceiling diffuser discharges both horizontally and vertically. It features a ring-operated center downblow adjustment with an anti-smudge outer cone.

RM1, 5RM1, RM2, 5RM2, RM4, 5RM4, RA2, RA4

Introduction G1-3
 RM1/5RM1 Dimensional Information & Reference Charts G1-4
 RM1/5RM1 Performance Data..... G1-6
 RM2/5RM2 Dimensional Information & Reference Chart G1-8
 RM4/5RM4 Dimensional Information & Reference Chart G1-9
 RA2 Dimensional Information & Reference Chart G1-10
 RA4 Dimensional Information & Reference Chart G1-11
 RM2/5RM2/RM4/5RM4/RA2/RA4 Reference Charts G1-12
 RM2/5RM2/RM4/5RM4/RA2/RA4 Performance Data G1-13
 Engineering Specifications..... G1-15

RM2PLQ, RM4PLQ

Introduction G1-17
 Dimensional Information & Reference Charts G1-18
 Performance Data G1-21
 Engineering Specifications..... G1-22

R1DBR10

Introduction & Dimensional Information G1-23
 Reference Charts..... G1-24
 Performance Data..... G1-25
 Engineering Specification G1-26

Introduction: RM2PLQ, RM4PLQ

The RM2PLQ/RM4PLQ architectural round ceiling diffuser provides excellent performance in variable air volume systems and provides a clean, smooth look for exposed duct or hard ceiling applications. Additionally, it has a center plaque with three adjustable positions. In position one, capacity is maximized with a uniform 360 horizontal throw. In position two, room air induction is increased and throw remains horizontal. In position three, the air projects vertically from the diffuser.

Krueger's round ceiling diffusers come with a safety cable to secure the inner plaque core after removal.

MODELS

RM2PLQ - Steel Round Diffuser with Aluminum Plaque

RM4PLQ - Steel Anti-Smudge Round Diffuser with Aluminum Plaque

FEATURES

- Horizontal and vertical air distribution. (Units ship in vertical position.)
- Core is easily removable from face of diffuser.
- 360° Discharge air pattern.
- Excellent performance in variable air volume systems.
- Designed for exposed duct or hard ceiling applications.
- Safety cable included.

ACCESSORIES

- Optional Straightening Grids (Duct Mounted)
- Optional Round Damper (Duct Mounted)

FINISHES

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



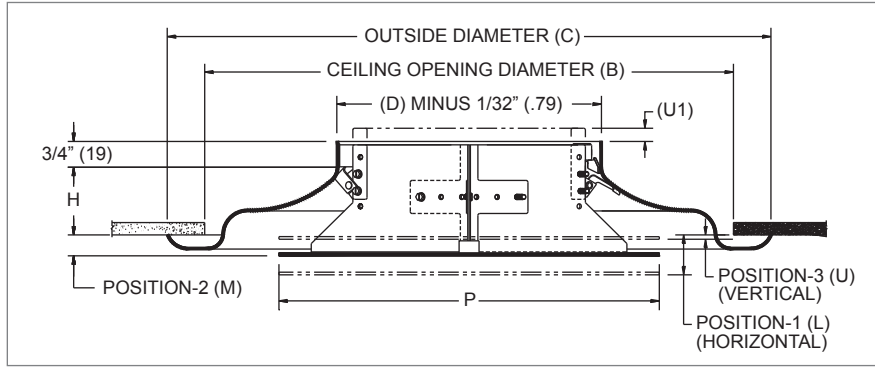
RM2PLQ



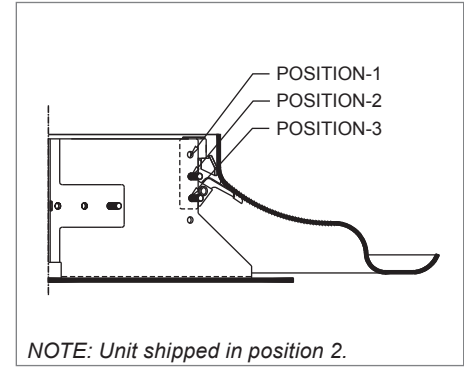
RM4PLQ

RM2PLQ Dimensional Information

RM2PLQ, CROSS SECTION



RM2PLQ, POSITIONS



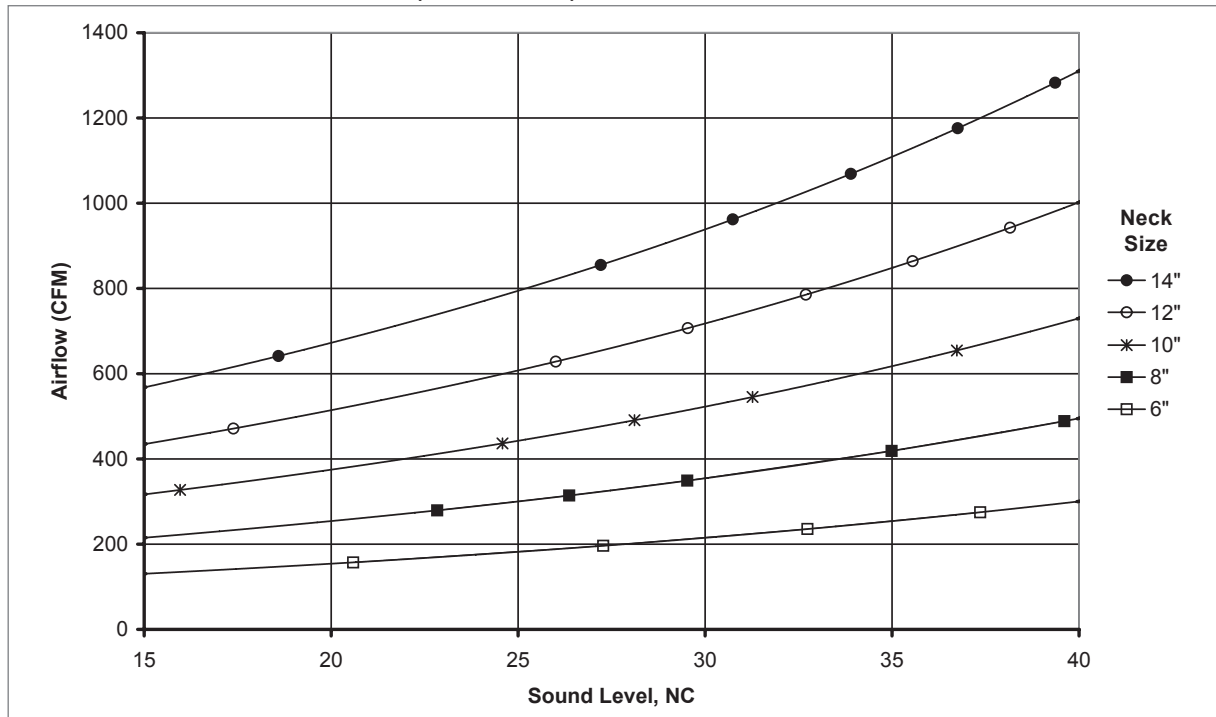
RM2PLQ, AVAILABLE NECK SIZES

Nominal Duct Diameter	B	C	H	P	U	U1 *	M	L
6"	12" (305)	13 1/2" (343)	1 5/8" (41)	6" (9)	1/16" (2)	1/2" (13)	5/8" (16)	1 3/16" (30)
8"	16" (406)	18" (457)	2 1/8" (54)	12" (305)	3/16" (5)	1/2" (13)	3/4" (19)	1 5/16" (33)
10"	20" (508)	22 1/2" (572)	2 5/8" (67)	15" (381)	0	1/2" (13)	9/16" (14)	1 1/8" (29)
12"	24" (635)	27" (686)	3 1/4" (83)	18" (457)	1/8" (3)	11/16" (17)	5/8" (16)	1 3/8" (35)
14"	28" (711)	31 1/2" (800)	3 3/4" (95)	21" (533)	1/16" (2)	13/16" (21)	13/16" (21)	1 9/16" (40)

NOTES: Dimensions in parentheses are mm. * (U1) Extends above the neck when plaque is placed in position 3.

RM2PLQ Reference Chart

AIRFLOW VS. NC LEVEL: RM2PLQ (NO DAMPER)

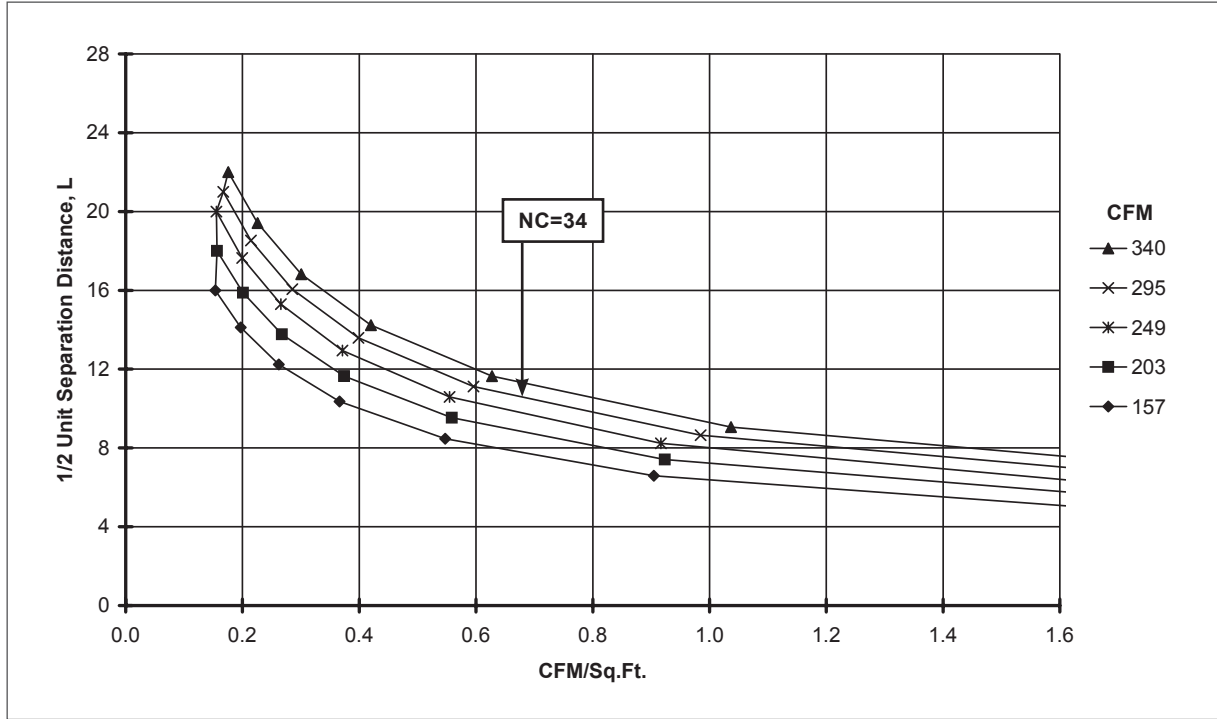


ROUND DIFFUSERS

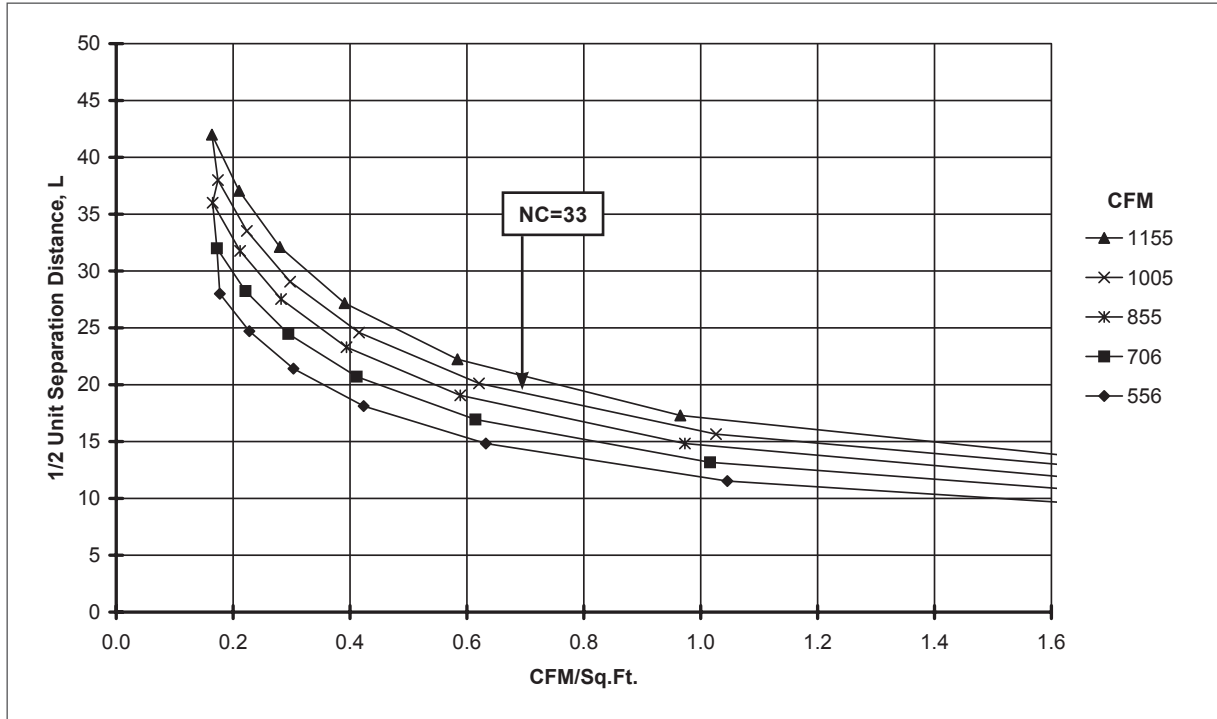
RM2PLQ

RM2PLQ, RM4PLQ Reference Charts: Horizontal Throw

DIFFUSER SPACING FOR 80% ADPI: RM2PLQ, RM4PLQ, 6" NECK (NO DAMPER)



DIFFUSER SPACING FOR 80% ADPI: RM2PLQ, RM4PLQ, 14" NECK (NO DAMPER)



NOTES: Charts are at 20 BTUH/ft² loads. See the Engineering section of this catalog for instructions on how to read these charts and additional ADPI information.

ROUND DIFFUSERS

RM2PLQ - RM4PLQ

RM2PLQ, RM4PLQ Performance Data: Horizontal/Vertical Throw
IP/METRIC DATA: RM2PLQ, RM4PLQ (NO DAMPER)

		IP Data											Metric Data												
		Neck Vel	Air Flow	Horizontal		Vertical		Vertical Projection				HZ	VT	Neck Vel	Air Flow	Horizontal		Vertical		Vertical Projection					
				Ps	Pt	Ps	Pt	10°F	20°F	30°F	40°F					Ps	Pt	Ps	Pt	5°C	11°C	17°C	22°C		
		FPM	CFM	"WG	"WG	"WG	"WG	ft	ft	ft	ft	ft	NC	NC	m/s	L/s	Pa	Pa	Pa	Pa	m	m	m	m	
6" Dia.	200	39	0.00	0.00	0.01	0.01	1-1-2	0	0	0	0	-	-	1.0	19	0	1	2	3	0.2-0.3-0.7	0.1	0.1	0.1	0.1	
	400	79	0.00	0.01	0.03	0.04	1-2-4	1	1	1	1	-	-	2.0	37	1	4	8	11	0.5-0.7-1.4	0.4	0.3	0.3	0.2	
	600	118	0.01	0.03	0.08	0.10	2-3-7	3	3	2	2	-	12	3.0	56	2	8	19	24	0.7-1.0-2.0	0.9	0.8	0.6	0.5	
	800	157	0.02	0.06	0.13	0.17	3-4-8	5	4	4	3	11	21	4.1	74	4	14	33	43	0.9-1.4-2.3	1.6	1.4	1.1	1.0	
	1000	196	0.03	0.09	0.21	0.27	4-6-9	8	7	6	5	17	27	5.1	93	7	22	52	67	1.1-1.7-2.6	2.6	2.1	1.8	1.5	
	1200	236	0.04	0.13	0.30	0.39	4-7-9	11	10	8	7	23	33	6.1	111	10	32	75	97	1.4-2.0-2.8	3.5	3.1	2.3	2.1	
	1400	275	0.05	0.18	0.41	0.53	5-7-10	13	12	9	8	27	37	7.1	130	14	44	102	132	1.6-2.2-3.1	4.1	3.7	2.7	2.5	
	1600	314	0.07	0.23	0.53	0.69	6-8-11	15	14	10	10	31	41	8.1	148	18	57	133	173	1.8-2.3-3.3	4.6	4.2	3.1	2.9	
2000	393	0.11	0.36	0.83	1.08	7-9-12	19	17	13	12	38	48	10.2	185	28	90	208	270	2.1-2.6-3.7	5.8	5.2	3.8	3.6		
8" Dia.	200	70	0.00	0.00	0.01	0.01	1-1-3	1	1	1	0	-	-	1.0	33	0	1	2	2	0.3-0.5-0.9	0.2	0.2	0.2	0.1	
	400	140	0.00	0.01	0.03	0.04	2-3-6	3	3	2	2	-	-	2.0	66	1	3	7	10	0.6-0.9-1.8	1.0	0.8	0.7	0.6	
	600	209	0.01	0.03	0.07	0.09	3-4-9	7	6	5	4	-	14	3.0	99	2	8	17	22	0.9-1.4-2.7	2.1	1.8	1.5	1.2	
	800	279	0.02	0.06	0.12	0.16	4-6-10	12	10	8	7	15	23	4.1	132	4	14	29	39	1.2-1.8-3.1	3.7	3.2	2.5	2.2	
	900	314	0.02	0.07	0.15	0.20	4-7-11	14	12	9	9	19	26	4.6	148	5	17	37	50	1.4-2.0-3.3	4.2	3.8	2.8	2.6	
	1000	349	0.02	0.09	0.18	0.25	5-7-11	15	14	10	10	22	30	5.1	165	6	21	46	61	1.5-2.3-3.5	4.7	4.2	3.1	2.9	
	1200	419	0.03	0.12	0.27	0.36	6-9-12	18	17	12	11	27	35	6.1	198	8	31	66	89	1.8-2.7-3.8	5.6	5.0	3.7	3.5	
	1400	489	0.05	0.17	0.36	0.48	7-10-13	21	19	14	13	32	40	7.1	231	11	42	90	120	2.1-2.9-4.1	6.5	5.9	4.3	4.1	
1600	559	0.06	0.22	0.47	0.63	8-10-14	24	21	16	15	36	44	8.1	264	15	55	118	157	2.4-3.1-4.4	7.4	6.4	4.9	4.6		
10" Dia.	200	109	0.00	0.00	0.01	0.01	1-2-4	1	1	1	1	-	-	1.0	51	0	1	2	2	0.4-0.6-1.1	0.4	0.4	0.3	0.2	
	400	218	0.00	0.01	0.02	0.03	2-4-7	6	5	4	3	-	-	2.0	103	1	3	6	9	0.8-1.1-2.3	1.7	1.4	1.2	1.0	
	600	327	0.01	0.03	0.06	0.08	4-6-11	12	10	9	7	-	16	3.0	154	2	7	14	19	1.1-1.7-3.3	3.8	3.1	2.6	2.2	
	800	436	0.01	0.05	0.10	0.14	5-7-13	17	15	11	11	19	25	4.1	206	3	13	25	34	1.5-2.3-3.9	5.2	4.7	3.5	3.3	
	900	491	0.01	0.07	0.12	0.18	6-8-13	19	17	13	12	22	28	4.6	232	4	16	31	44	1.7-2.5-4.1	5.9	5.3	3.9	3.7	
	1000	545	0.02	0.08	0.15	0.22	6-9-14	21	19	14	13	25	31	5.1	257	4	20	38	54	1.9-2.8-4.3	6.5	5.9	4.3	4.1	
	1200	654	0.03	0.12	0.22	0.31	7-11-16	26	23	17	16	31	37	6.1	309	6	29	55	78	2.3-3.3-4.7	7.8	6.9	5.2	4.9	
	1400	764	0.04	0.16	0.30	0.42	9-12-17	28	25	20	18	35	41	7.1	360	9	39	75	106	2.6-3.6-5.1	8.6	7.5	6.1	5.6	
1600	873	0.05	0.21	0.39	0.55	10-13-18	30	26	23	20	39	45	8.1	412	11	51	98	138	3.0-3.9-5.5	9.2	8.0	6.9	5.9		
12" Dia.	200	157	0.00	0.00	0.00	0.01	1-2-4	2	2	1	1	-	-	1.0	74	0	1	1	2	0.5-0.7-1.4	0.6	0.5	0.4	0.4	
	400	314	0.00	0.01	0.02	0.03	3-4-9	8	7	6	5	-	-	2.0	148	0	3	5	7	0.9-1.4-2.7	2.5	2.1	1.8	1.5	
	600	471	0.00	0.03	0.04	0.06	4-7-13	17	15	11	10	13	17	3.0	222	1	7	10	16	1.4-2.0-4.0	5.1	4.6	3.4	3.2	
	800	628	0.01	0.05	0.07	0.11	6-9-15	22	20	15	14	21	26	4.1	297	2	12	19	29	1.8-2.7-4.6	6.8	6.1	4.5	4.2	
	900	707	0.01	0.06	0.09	0.14	7-10-16	25	23	17	16	25	30	4.6	334	2	15	24	36	2.0-3.1-4.9	7.6	6.9	5.1	4.8	
	1000	785	0.01	0.07	0.12	0.18	7-11-17	28	25	18	17	28	33	5.1	371	3	18	29	45	2.3-3.4-5.2	8.5	7.6	5.6	5.3	
	1100	864	0.01	0.09	0.14	0.22	8-12-18	30	26	20	19	31	36	5.6	408	3	22	35	54	2.5-3.7-5.4	9.2	8.0	6.2	5.8	
	1200	942	0.02	0.11	0.17	0.26	9-13-19	32	27	22	20	34	38	6.1	445	4	26	42	64	2.7-4.0-5.7	9.6	8.3	6.7	6.2	
1300	1021	0.02	0.12	0.20	0.30	10-14-19	33	28	24	21	36	41	6.6	482	5	31	49	75	2.9-4.2-5.9	10.0	8.7	7.3	6.4		
14" Dia.	200	214	0.00	0.00	0.00	0.01	2-3-5	3	2	2	2	-	-	1.0	101	0	1	1	1	0.5-0.8-1.6	0.9	0.7	0.6	0.5	
	400	428	0.00	0.01	0.01	0.02	3-5-10	11	9	8	7	-	-	2.0	202	0	3	3	5	1.1-1.6-3.2	3.5	2.9	2.4	2.0	
	600	641	0.00	0.02	0.03	0.05	5-8-15	21	19	14	13	15	19	3.0	303	0	6	6	12	1.6-2.4-4.7	6.2	5.6	4.1	3.9	
	800	855	0.00	0.04	0.05	0.09	7-10-18	27	25	18	17	24	27	4.1	404	0	10	12	21	2.1-3.2-5.4	8.3	7.5	5.5	5.2	
	900	962	0.00	0.05	0.06	0.11	8-12-19	31	28	20	19	27	31	4.6	454	1	13	15	27	2.4-3.6-5.7	9.4	8.4	6.2	5.8	
	1000	1069	0.00	0.07	0.07	0.13	9-13-20	34	29	23	21	31	34	5.1	505	1	16	18	34	2.6-4.0-6.0	10.2	8.9	6.9	6.5	
	1100	1176	0.00	0.08	0.09	0.16	10-14-21	35	31	25	23	33	37	5.6	555	1	20	22	41	2.9-4.4-6.3	10.7	9.3	7.6	6.9	
	1200	1283	0.00	0.09	0.10	0.19	10-15-22	37	32	27	24	36	39	6.1	605	1	23	26	48	3.2-4.7-6.6	11.2	9.7	8.3	7.2	
1300	1390	0.00	0.11	0.12	0.23	11-16-23	38	33	30	25	38	42	6.6	656	1	27	30	57	3.4-4.9-6.9	11.6	10.1	9.0	7.5		

NOTES: Throw values are given terminal velocities of 150, 100, and 50 FPM (0.75, 0.50, and 0.25 m/s). Horizontal throw values are given for isothermal conditions. Vertical throw values are for a terminal velocity of 50 FPM, free jet, at the temperature differences shown. 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 value of less than 10. Data was obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70, ISO Standard 5219, and ISO Standard 3741. See selection software for performance data not shown, including octave band data.

ROUND DIFFUSERS

RM2PLQ - RM4PLQ

RM2PLQ, RM4PLQ Suggested Specification & Configuration

RM2PLQ, RM4PLQ

The architectural round ceiling diffuser shall be Krueger model RM2PLQ. The removable plaque core shall be supported by a safety cable to provide ease of installation and maintenance for all neck sizes. The center plaque assembly shall be adjustable to provide three different discharge settings from horizontal to vertical and easily removable using a spring locking mechanism. The center plaque assembly shall be supported by a safety cable to provide ease of installation and maintenance. Round outer cone shall be constructed of 18 gage steel and a heavy gage aluminum plaque face.

An optional deep, one piece outer cone shall be available for the enhancement to the anti-smudge characteristics (RM4PLQ).

PERFORMANCE

The manufacturer shall provide published (printed or electronic) performance data for the diffuser. The diffuser shall be tested in accordance to the data standards at the time of product introduction or ANSI/ASHRAE Standard 70.

FINISH

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

1. SERIES: (XXXXXX)

RM2PLQ - Steel, Round Diffuser with Aluminum Plaque

RM4PLQ - Steel, Round Anti-Smudge Diffuser with Aluminum Plaque

2. INLET: (XX)

6" - 14" in 2" Increments

3. DAMPER: (XX)

00 - NONE

04 - PRD10

06 - PR12

4. ACCESSORIES: (X)

0 - No Accessories

R - Round Straightening Grid

5. FINISH: (XX)

01 - Mill

10 - Alumican

35 - Black

44 - British White

ROUND DIFFUSERS

RM2PLQ - RM4PLQ

SAMPLE CONFIGURATION: RM2PLQ - 12 - 00 - 0 - 44