

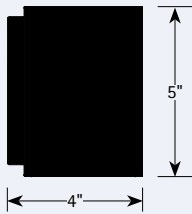


MICROLYNE[®]

FEATURES

- 3 1/2" x 5" rectilinear beam appears to float just off vertical surface of wall
- ADA compliant
- Uplight and Symmetric Downlight
- Symmetric downlight distribution standard
- Asymmetric downlight available; see MDIA WM specification sheet
- Up/Down switching available
- T5, T5HO or T8
- Extensive aesthetic and shielding options
- Full family including cable mount, wall mount, surface mount and recessed
- Companion fixtures include the 2 1/2" x 3 1/2" Microlyne[®] Mini and 3 1/2" x 3 1/2" Microlyne
- Aesthetic continuity across family, shielding and options

SHAPE AND DIMENSIONS



PROJECT INFORMATION

Project Name	Type
Catalog No.	Date

CONSTRUCTION

Extruded aluminum direct indirect housing includes typical recycled content of 25-30%.

END CAPS

Die cast flat end caps for standard lamp configuration. Both end caps feature silicone gasket to eliminate light leak, see Light Seal. Ships installed on fixture.

LIGHT SEAL

Housing unions between all joints include upper formed light seal and aligner connectors to block light. End of row and single units feature unique optimized V-O closed cell silicone gasket light seal at joints between extruded housing and die cast end cap.

CONNECTIONS

Secure, simple housing connections ensure row continuity. Standard lamp configuration features patent pending Ready Connect system for end cap connections.

MOUNTING

Microlyne[®] Direct-Indirect Wall Mount uses cleverly designed, ADA compliant, discreet wall brackets to create a floating appearance approximately 1/2" from the vertical wall surface. Brackets are made with heavy gauge galvanized steel.

REFLECTOR

High reflectance formed white reflector.

DOWNLIGHT SHIELDING

Shielding is provided for single or continuous row. Options match across entire Microlyne[®] family. Please note: lamps may have visible socket shadow. Staggered lamps recommended for continuous row. OA - Opal Acrylic lens emphasizes the narrow rectilinear shape by creating a pleasant glow of white along the underside of the housing.

WCB - White Cross Baffle emphasizes linearity with a crisp, clean bladed appearance.

MA - Matte anodized louvers incorporate an attractive but subtle grain pattern which minimizes the visibility of fingerprints and construction dust without sacrifice to aesthetic qualities.

M4R - 95% Reflective Specular Aluminum louvers combine glare control and performance with a high tech aesthetic.

HEP - High efficiency specular silver parabolic louvers maximize downlight for enhanced efficiency where maximum light output is the primary concern.

UPLIGHT SHIELDING

Uplight is open and free of shielding to allow maximum efficiency.

DISTRIBUTION

A wide range of symmetric distributions include combinations of uplight and downlight using one or more lamps in either the indirect or direct portion and combined with many types of downlight shielding. See ordering guide for additional options. Number of lamps in cross section will determine which options are available. Note Asymmetric downlight louver is also available and shown on MDIA WM specification sheet.

ELECTRICAL

Fixtures are pre-wired with electronic ballasts in 120V, 277V or 120V-277V (U). 347V available on some models; contact factory. Tandem and row configurations use quick-connect single or multi-circuit wiring between luminaires. Power feed locations as indicated on Technical Installation Data pages or project specific layouts. Night light, emergency circuits or factory installed battery packs must be specified as option.

FINISH

Matte White (MW) powder coat standard for end caps and housing. Zet Silver and other additional colors and finishes optional.

CERTIFICATION

All fixtures bear appropriate UL or C UL US labels.

Name:	MDI-4-1T5-HEP-EP
Test #:	14953
Efficiency:	88.3%
LER:	74

ORDERING INFORMATION

EXAMPLE: MDI-16-1U1DT5-WM-WCB-EP120-MW-EL

MDI	ROW LENGTH	WM	MOUNTING	DOWNLIGHT SHIELDING	VOLTAGE	COLOR
	4 4' Single		WM Wall Mount	OA Opal Acrylic Lens	U 120V-277V	MW Matte White (Std.)
	8 8' Single			WCB White Cross Baffle	120 120V	ZT ZET Metallic Silver
	12 12' Single			MA Matte Anodized Low Iridescent Semi-Specular Aluminum Louver (24 Cell)	277 277V	See MTX-1 for other color selections.
	— Indicate row length in 4' increments. ^{1,2}			M4R 95% Reflective Specular Aluminum Louver (24 Cell)	347 347V	
MODEL	LAMP TYPE AND PROFILE					
MDI Microlyne [®] Direct-Indirect	1U1DT5	1 Lamp Up, 1 Lamp Down, T5 ³				
	1U2DT5	1 Lamp Up, 2 Lamps Down, T5 ³				
	2U1DT5	2 Lamps Up, 1 Lamp Down, T5 ³				
	2U2DT5	2 Lamps Up, 2 Lamps Down, T5 ³				
	1U1DT5HO	1 Lamp Up, 1 Lamp Down, T5HO ³				
	1U2DT5HO	1 Lamp Up, 2 Lamps Down, T5HO ³				
	2U1DT5HO	2 Lamps Up, 1 Lamp Down, T5HO ³				
	2U2DT5HO	2 Lamps Up, 2 Lamps Down, T5HO ³				
	1U1DT8	1 Lamp Up, 1 Lamp Down, T8 ³				
				BALLAST	OPTIONS	
				E Electronic, Instant Start (Std. for T8)	DC Dust Cover (N/A with T5HO)	LR Left/Right Switching (2-Lamp only)
				EP Electronic, Programmed Start (Std. for T5 & T5HO, optional for T8)	UB Upper/Lower Switching	EL 1 Emergency Battery Pack Per Row ^{4,5,7}
				ED Electronic, Dimming (Must Specify) ⁴	EMC One Emergency Circuit ^{4,5,6,7}	NL Night Light Circuit ^{4,5,6,7}
				ESD Electronic, Step Dimming ⁴	GLR Fast Blow Fuse	GMF Slow Blow Fuse
					CSA UL listed or CSA certified for Canada	DL Damp Label (Available on most models)

¹ Rows over 12' will be configured by Alera. Example: 16' will be (2) 8'. For alternate configurations, contact factory.

² Shorter increments are available—contact factory.

³ Lamps may cause visible socket shadow in downlight component.

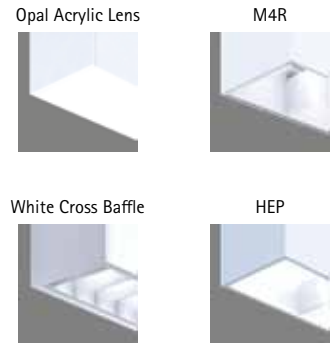
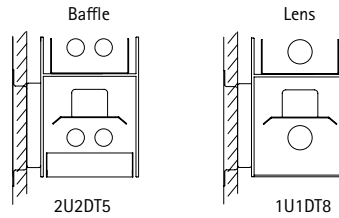
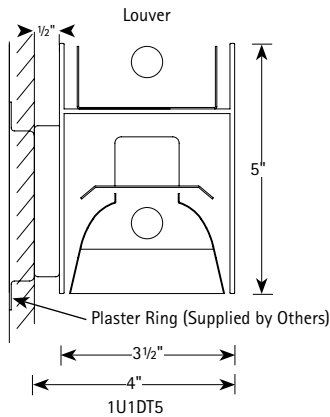
⁴ Specify dedicated voltage.

⁵ Not available with all configurations; some limitations apply. Contact factory for details.

⁶ One extra feed drop per row with through wiring. (Standard is one 4ft lamp per circuit.)

⁷ For additional, specify quantity before nomenclature (Example: 2EL120, EMC277).

CROSS SECTION



PHOTOMETRIC DATA

LUMINAIRE DATA Test 14953

Luminaire	MDI-4-1T5-HEP-EP Microlyne® Beams 3.5" x 48" 2-Lamp with 1 x 15 CELL HEP LOUVER
Ballast	ICN-2S28
Ballast Factor	1.03
Lamp	F28T5
Lumens per Lamp	2600
Watts	64
Shielding Angle	0° = 19 90° = 33
Spacing Criterion	0° = 1.23 90° = 1.24
Luminous Opening in Feet	Length: 4.00 Width: 0.23 Height: 0.00

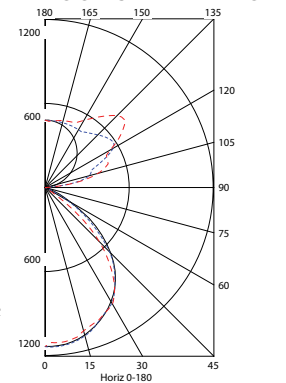
AVG. LUMINANCE (Candela/Sq. M.)

Angle	0.0	22.5	45.0	67.5	90.0
0	13279	13279	13279	13279	13279
30	12699	12753	12861	12956	13010
40	11867	11669	11837	11409	10951
45	10954	10821	10689	9547	8852
50	9611	9538	8937	6917	5970
55	7833	7425	6609	3937	2631
60	4891	5054	4048	1404	445
65	3073	2768	1633	498	221
70	924	992	753	205	171
75	45	271	271	90	136
80	0	270	135	67	67
85	0	134	134	0	0

COEFFICIENTS OF UTILIZATION (%)

RCR	80				70				50				0			
	RW	70	50	30	10	70	50	30	10	50	30	10	0	0	0	0
1	87	84	81	78	80	78	75	73	66	64	62	38				
2	80	75	70	66	74	69	65	62	59	56	53	34				
3	74	66	61	56	68	62	57	53	53	49	46	30				
4	68	59	53	48	63	55	50	46	48	43	40	27				
5	63	53	47	42	58	50	44	40	43	39	35	24				
6	58	48	42	37	54	45	39	35	39	34	31	21				
7	54	44	37	32	50	41	35	31	36	31	28	19				
8	50	40	33	29	46	37	31	27	32	28	25	17				
9	47	36	30	26	43	34	29	25	30	25	22	16				
10	44	33	27	23	40	31	26	22	28	23	20	14				

INDOOR CANDELA PLOT



RCR = Room Cavity Ratio
RC = Effective Ceiling Cavity Reflectance RW = Wall Reflectance

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	875	16.8	19.1
0-40	1416	27.2	30.9
0-60	2147	41.3	46.8
0-90	2220	42.7	48.4
90-120	799	15.4	17.4
90-130	1250	24.0	27.2
90-150	1966	37.8	42.8
90-180	2370	45.6	51.6
0-180	4590	88.3	100.0

ENERGY DATA

Total Luminaire Efficiency	88.3%
Luminaire Efficacy Rating (LER)	74
ANSI/IESNA RP-1-2004 Compliance	Yes-VDT Normal Use
Comparative Yearly Lighting Energy Cost per 1000 Lumens	\$3.24 based on 3000 hrs. and \$0.08 per KWH

Test Date 4/3/08

MICROLYNE® FAMILY QUICK REFERENCE PAGE FINDER

	MR	MRA	MMR	MMRA	M	MA	MM	MMA	MDI	MDIA
SYMMETRIC	X		X		X		X		X	
ASYMMETRIC		X		X		X		X		X
GRID/SLOT GRID GRID FLANGE/SLOT GRID FLANGE	MRG MRSTGG	MRA G MRASTGG	MMR, MMRA G							
FLANGE	MR F MRSTGF	MRA F MRASTGF	MMR, MMRA F							
PLASTER	MR P MRSTGP	MRA P MRASTGP	MMR, MMRA P							
CABLE					MCM MSTGCM	MACM MASTGCM	MM, MMA CM		MDI CM MDI STG CM	MDIA CM MDIA STG CM
SURFACE					MSM MSTGSM	MASM MASTGSM	MM, MMA SM			
WALL					MWM MSTGWM	MAWM MASTGWM	MM, MMA WM		MDI WM MDI STG WM	MDIA WM MDIA STG WM