

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-0 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® Cable Mount uses adjustable aircraft cable. 5" steel canopy covers are provided standard for feed and non-feed locations.

REFLECTOR

High reflectance formed white reflector.

DOWNLIGHT SHIELDING

Shielding is provided for single or continuous row. Options match across entire Microlyne® family.

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 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 STG CM 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 powder coat standard for end caps and housing. Zet Silver and additional colors and finishes optional.

CERTIFICATION

All fixtures bear appropriate UL or C UL US labels.

ORDERING INFORMATION

EXAMPLE: MDI-20-STG-1U1DT5-CM48-OA-EPU-MW

MDI -		- STG -		- CM									
ROW LENGTH		LAMP STAGGER		MOUNTING		SUSPENSION LENGTH (CM)		BALLAST		VOLTAGE		COLOR	
4	4' Single	STG	Staggered Lamps Down	CM	Adj. Aircraft Cable Mount	18	18"	EP	Electronic, Programmed Start (Std. for T5 & T5HO)	U	120V-277V	MW	Matte White (Std.)
8	8' Single					48	48"	ED	Electronic, Dimming (Must specify) ²	120	120V	ZT	ZET Metallic Silver
12	12' Single					96	96"			277	277V		
---	Indicate row length in 4' increments. ¹					Other	Specify			347	347V		See MTX-1 for other color selections.
MODEL	ROW PATTERN	LAMP TYPE AND PROFILE		DOWNLIGHT SHIELDING		OPTIONS							
MDI	Microlyne® Direct-Indirect	Blank	Straight	1U1DT5	1 Lamp Up, 1 Lamp Down, T5	OA	Opal Acrylic Lens	DC	Dust Cover (N/A with T5HO)				
	P	Pattern (specify)		1U1DT5HO	1 Lamp Up, 1 Lamp Down, T5HO	WCB	White Cross Baffle	LR	Left/Right Switching				
		Pattern layouts require factory approval drawings.		1U2DT5	1 Lamp Up, 2 Lamps Down, T5	MA	Matte Anodized Low Iridescent Semi-Specular Aluminum Louver (24 Cell)	UB	Upper/Lower Switching				
				1U2DT5HO	1 Lamp Up, 2 Lamps Down, T5HO	M4R	95% Reflective Specular Aluminum Louver (24 Cell)	EL	One Emergency Battery Pack Per Row ^{2,3,5}				
				2U1DT5	2 Lamps Up, 1 Lamp Down, T5	HEP	High Efficiency Parabolic Specular Louver (15 Cell)	EMC	One Emergency Circuit ^{2,3,4,5}				
				2U1DT5HO	2 Lamps Up, 1 Lamp Down, T5HO			NL	Night Light Circuit ^{2,3,4,5}				
				2U2DT5	2 Lamps Up, 2 Lamps Down, T5			GLR	Fast Blow Fuse				
				2U2DT5HO	2 Lamps Up, 2 Lamps Down, T5HO			GMF	Slow Blow Fuse				
								TBAR	T-Bar Mounting				
								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.

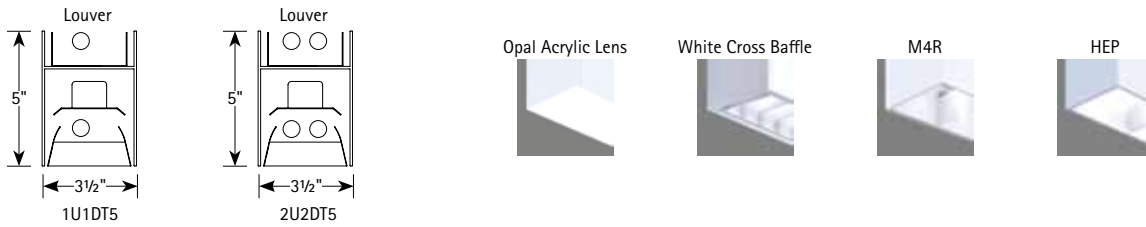
² Specify dedicated voltage.

³ Not available with all configurations; some limitations apply. Contact factory for details.

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

⁵ For additional, specify quantity before nomenclature (Example: 2EL120, EMC277).

CROSS SECTION



PHOTOMETRIC DATA

LUMINAIRE DATA Test 14953

Luminaire	MDI-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

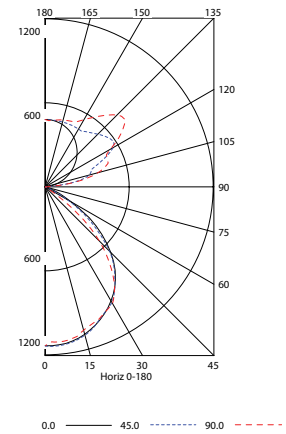
AVG. LUMINANCE (Candela/Sq. M.)

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

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® Staggered			
	1T5		2T5	
	Row Length	Lamp Configuration	Row Length	Lamp Configuration
4' (Non-STG)	4'	(1) 4'	4'	(2) 4'
8'	8'	(3) 3'	8'	(4) 4'
12'	12'	(1) 2' (3) 3' (1) 4'	12'	(6) 4'
16'	16'	(4) 3' (2) 4'	16'	(8) 4'
20'	20'	(1) 2' (5) 3' (2) 4'	20'	(10) 4'
24'	24'	(6) 3' (3) 4'	24'	(12) 4'
28'	28'	(1) 2' (7) 3' (3) 4'	28'	(14) 4'
32'	32'	(8) 3' (4) 4'	32'	(16) 4'
48'	48'	(12) 3' (6) 4'	48'	(24) 4'