

RAIL 4 RM4DI

LED . WALL . INDIRECT / DIRECT



PART #:	
PREP BY:	DATE:
PROJECT:	
NOTES:	
APPROVAL SIGNATURE:	DATE (DD/MM/YYYY):

PERFORMANCE SUMMARY @ 3500K		MBMB	MBMD	MRMD	MM
L3					
Lumens per foot	80 CRI	1274	1290	1300	1352
	90 CRI	1115	1129	1138	1183
Distribution (Up / Down %)		51 / 49	53 / 47	51 / 49	51 / 49
Wattage per foot		12.1	12.1	12.1	12.1
Efficacy	80 CRI	106	107	107	112
	90 CRI	92	93	94	98
L70 Estimate (h)		≥ 60,000 hrs			

See page 2 for the complete Light Level Performance chart.

FEATURES

- 3/4" drop lens with seamless lines of light without pixels or shadows
- Integral drivers
- Option for daylight harvesting, occupancy sensing, dimming control and emergency lighting
- Optional Illuminated by BIOS version for Healthy Lighting and Well Building Applications

ORDERING LOGIC

Example Part Number: RM4DI-2L35K-12-MBMB-W-L31-W-1-D-90

RM4DI												
1	2	3	4	5	6	7	8	9	10	11		
1. SERIES RM4DI	2. COLOR TEMP 2L30K 3000K 2L35K 3500K 2L40K 4000K 90 CRI is available under OPTIONS BIOS is available under OPTIONS. See p2 for BIOS Naming Convention Reference	3. LENGTH 2 2 ft 3 3 ft 4 4 ft 5 5 ft 6 6 ft 7 7 ft 8 8 ft 9 9 ft 10 10 ft 11 11 ft 12 12 ft RA Continuous Rows Replace "A" with length in feet selected on p3 C Custom Length* - None (leave space empty)	4. OPTICS MBMB Up: Meta Blanc Down: Meta Blanc MBMD Up: Meta Blanc Down: Drop Lens MRMD Up: Rise Lens Down: Drop Lens MM Up: Meta Ice Down: Meta Ice BWMB Up: Batwing Down: Meta Blanc ² BWMD Up: Batwing Down: Drop Lens ² BWM Up: Batwing Down: Meta Ice ² Meta Blanc, Rise & Drop Lens: Opal diffuse lens Meta Ice: High output semi-diffuse lens				5. FINISH SA Satin Aluminum W White B Black C Custom Finish Specify RAL:		6. LIGHT LEVEL / DRIVER L1 L2^B L3^B L4^B Select Driver below. See Light Level Performance chart below.			
7. CIRCUITRY 1 1 Circuit EM Emergency / Night Light B Emergency Battery Pack ¹	8. MOUNTING W Wall	9. VOLTAGE 1 120 V 2 277 V 3 347 V 4 UNV (120 - 277V)	10. CONTROLS / SENSORS _ None (leave space empty) D Wattstopper Daylight Sensor O Wattstopper Occupancy Sensor DO Wattstopper Daylight and Occupancy Sensors			11. OPTIONS 90 90 CRI, High R9 BS BIOS Static BD BIOS Dynamic _ None (leave space empty)						

*Consult factory. | ¹ Battery operates 4ft sections only. | ² Batwing not available with BIOS. | ^B Available with BIOS^B

Select Driver:

- Factory option 0-10V, 1% Dimming
- LHE** Lutron H-Series Hi-Lume 1% EcoSystem LED Driver
- LA2** Lutron A-Series Hi-Lume 1% 2-wire LED Driver
- L5E** Lutron 5-Series EcoSystem LED Driver

Light Level Performance

3500K, 80 CRI, 0-10V Dimming (Standard)

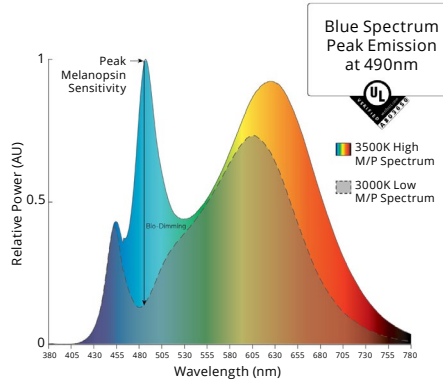
Optics	UP: Meta Blanc DOWN: Meta Blanc (MBMB)			UP: Meta Blanc DOWN: Drop Lens (MBMD)			UP: Rise Lens DOWN: Drop Lens (MRMD)			UP: Meta Ice DOWN: Meta Ice (MM)		
	Lumens per foot	Wattage per foot	Efficacy (lm/W)	Lumens per foot	Wattage per foot	Efficacy (lm/W)	Lumens per foot	Wattage per foot	Efficacy (lm/W)	Lumens per foot	Wattage per foot	Efficacy (lm/W)
L1	749	7.0	107	758	7.0	108	814	6.9	118	794	7.0	113
L2	937	8.9	106	949	8.8	107	956	8.8	109	997	8.9	113
L3	1274	12.1	106	1290	12.1	107	1300	12.1	108	1352	12.1	112
L4	2363	25.0	95	2393	25.0	96	2412	24.2	100	2639	24.2	109

Standard | Lumen Adjustment Factor

Color Temp	80 CRI	90 CRI
3000K	0.984	0.880
3500K	1.000	0.875
4000K	1.032	0.879

BIOS 3500K

	Optics	Light Level	Lumens per foot	Wattage per foot	Efficacy (lm/W)	R9	COI**	EML or M/P*
Static	UP: Meta Blanc DOWN: Meta Blanc (MBMB)	L2	1244	18.9	66	≥ 90	< 3.3	0.8
		L3	1659	26.6	62			
		L4	2016	34.4	59			
	UP: Meta Blanc DOWN: Drop Lens (MBMD)	L2	1309	18.9	69			
		L3	1746	26.6	66			
		L4	2122	34.4	62			
	UP: Rise Lens DOWN: Drop Lens (MRMD)	L2	1256	18.9	67			
		L3	1675	26.6	63			
		L4	2035	34.4	59			
	UP: Meta Ice DOWN: Meta Ice (MM)	L2	1413	18.9	75			
		L3	1885	26.6	71			
		L4	2291	34.4	67			
Dynamic	UP: Meta Blanc DOWN: Meta Blanc (MBMB)	L2	1119	18.9	59			
		L3	1493	26.6	56			
		L4	1814	34.4	53			
	UP: Meta Blanc DOWN: Drop Lens (MBMD)	L2	1178	18.9	62			
		L3	1571	26.6	59			
		L4	1910	34.4	56			
	UP: Rise Lens DOWN: Drop Lens (MRMD)	L2	1130	18.9	59.9			
		L3	1507	26.6	56.6			
		L4	1832	34.4	53.3			
	UP: Meta Ice DOWN: Meta Ice (MM)	L2	1272	18.9	67			
		L3	1696	26.6	64			
		L4	2062	34.4	60			



BIOS Naming Convention Reference

BIOS Static	3500K	35BIOSST
	4000K	40BIOSST
BIOS Dynamic	3500K	35BIOSDY
	4000K	40BIOSDY

BIOS | Lumen Adjustment Factor (LAF)

Color Temp	LAF
3500K	1.00
4000K	1.05

* EML or M/P is a ratio that describes the relative melanopic lux (M) versus the photopic lux (P). BIOS provides the following m/p values: 3000K = 0.7, 3500K = 0.8, 4000K = 0.9. ** COI - Cyanosis Observation Index.

Metalumen's light level performance metrics are subject to manufacturers component tolerances.

CONTINUOUS ROWS

Step 1) Indicate desired quantity of rows under the QTY column

Step 2) ← Pods → If applicable, select pod(s) per row to indicate desired Emergency/Night Light/Battery location. If a similar row requires a different Emergency lighting location, please fill out another sheet.

Record drawings for rows not represented here will be sent out upon order.

QTY	Nominal Length	Run Length Overall	Along / Start Length	Mid Length(s)	End Length	Asymmetric Reflector Light Throw Direction	Diagram
	4'	1225 [48.2]	4			↑	
	8'	2442 [96.1]	8			↑	
	12'	3661 [144.1]	12			↑	
	16'	4881 [192.2]	8	8		↑	
	20'	6100 [240.2]	12	8		↑	
	24'	7319 [288.1]	12	12		↑	
	28'	8538 [336.1]	8	12	8	↑	
	32'	9757 [384.1]	12	8	12	↑	
	36'	10977 [432.2]	12	12	12	↑	
	40'	12196 [480.2]	12	8, 8	12	↑	
	44'	13415 [528.1]	12	12, 8	12	↑	
	48'	14634 [576.1]	12	12, 12	12	↑	

ROWS IN PLAN VIEW

Rows are for demonstration purposes only and are not to scale.

LEGEND

- Standard (STD) Wire Entry Location
(located on back of fixture either: 231 mm from end cap, or 229 mm from end of extrusion without end cap)
- Emergency (EM) / Night Light Location
(4 ft sections)
- EM Wire Entry or Battery Wire Entry Location
(located 231 mm from end on back of fixture).

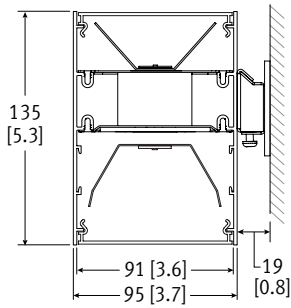
Wall bracket

- = 231 [9.1] Distance between end-cap and bracket
- ▲ = 458 [18.0] Distance between brackets at joiners
- A = Distance between brackets
- B = Extrusion lengths (includes end-caps)

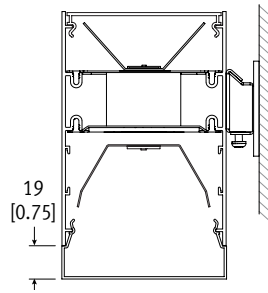
EM / Night Light and EM or Battery Wire Entry location in relation to pod selections:

Example 20 ft run

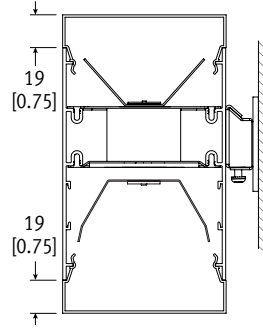
CROSS SECTIONS



UP: Meta Blanc, DOWN: Meta Blanc
UP: Meta Ice, DOWN: Meta Ice



UP: Meta Blanc
DOWN: Drop Lens



UP: Rise Lens
DOWN: Drop Lens

SPECIFICATIONS

Due to the Continuous Improvement Policy at Metalumen, we reserve the right to change our specifications without notice.

Housing: Rigid extruded aluminum body, 2.0mm (0.08”) nominal wall thickness. Aluminum end caps.
Optical System: Metalumen luminaires are designed to utilize leading edge LED technology combined with luminaire optimized reflectors and our custom diffusers, resulting in industry leading optical performance.
BIOS LED: BIOS SkyBlue® solutions have a peak at 490nm to provide an enhanced spectrum with high M/P (melanopic to photopic) ratios

while also providing a low Cyanosis Observation Index (COI), making it ideally suited for Healthcare and Healthy Lighting projects. BIOS® SkyBlue® lighting solutions also contribute to satisfying Circadian Lighting Design Feature for WELL Building Standard v1 and v2.
CRI: 83+ for 3500K, 80 minimum for all CCTs in standard configurations.
Lumen Maintenance: Minimum 50,000h with TM-21 lumen maintenance of 85% @ 25°C ambient

temperature (calculated based on IESNA LM-80-08 LED test data). L70: ≥ 60 000hrs.
Finish: Satin aluminum, white and black are standard finishes. For custom finish, contact factory.
Mounting: Mounting plate provided.
Electrical: Factory prewired with easy wire quick connect sections.
Drivers: Metalumen offers 0-10V dimming* as a standard on our entire LED product offering. Dimming range is 1%-100%. Power factor is > 90%. Class

2 rating. Drivers are integral.
Approvals: Certified to NRTL and IES testing standards. This product is cULus listed. RoHS compliant.
Environment: Suitable for dry or damp locations.
**Standard drivers compatible with passive/sinking dimmers. Please contact Metalumen if active/sourcing dimmer support is required.*

	DLC Approved RM4DI Products	RM4DI-2L35K-4-MM-xx-L1X-X-XX-[34]-X	RM4DI-2L35K-8-MM-xx-L1X-X-XX-[34]-X	For more Metalumen DLC Approved Products, visit the DLC Website
		RM4DI-2L35K-4-MM-xx-L2X-X-XX-[34]-X	RM4DI-2L35K-8-MM-xx-L2X-X-XX-[34]-X	
		RM4DI-2L35K-4-MM-xx-L3X-X-XX-[34]-X	RM4DI-2L35K-8-MM-xx-L3X-X-XX-[34]-X	
		RM4DI-2L40K-4-MM-xx-L1X-X-XX-[34]-X	RM4DI-2L40K-8-MM-xx-L1X-X-XX-[34]-X	
		RM4DI-2L40K-4-MM-xx-L2X-X-XX-[34]-X	RM4DI-2L40K-8-MM-xx-L2X-X-XX-[34]-X	
		RM4DI-2L40K-4-MM-xx-L3X-X-XX-[34]-X	RM4DI-2L40K-8-MM-xx-L3X-X-XX-[34]-X	

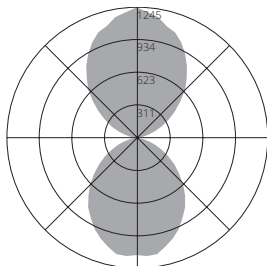
WARRANTY

Metalumen will warrant defective luminaires for 5 years from date of purchase. Warranty is valid if luminaire is installed and used according to specification. If defective, Metalumen will send replacement boards or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

PHOTOMETRIC DATA - 3500K, 80 CRI

Optics Up: Meta Blanc
Optics Down: Meta Blanc
IES File: RM4DI-2L35K-4-MBMB-L3
Lumens: 1274/ft Wattage: 12.1/ft
Efficacy: 106 lm/W

PHOTOMETRIC CURVE
51% Up
49% Down



ZONAL LUMEN SUMMARY

Table with 3 columns: Zone, Lumens, %Fixt. Rows include zones from 0-20 to 0-180.

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

Table with 4 columns: RC, RW, and two sets of 4 columns for 80, 70, 50 reflectance levels.

LUMINANCE DATA (CD/M²)

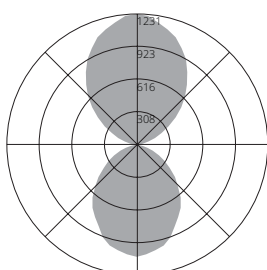
Table with 2 columns: Vertical Angle, Horizontal Angle. Rows include angles from 0 to 85.

CANDELA DISTRIBUTION

Table with 3 columns: Vertical Angle, Horizontal Angle, Candela values.

Optics Up: Meta Blanc
Optics Down: Drop Lens
IES File: RM4DI-2L35K-4-MBMD-L3
Lumens: 1290/ft Wattage: 12.1/ft
Efficacy: 107 lm/W

PHOTOMETRIC CURVE
54% Up
47% Down



ZONAL LUMEN SUMMARY

Table with 3 columns: Zone, Lumens, %Fixt. Rows include zones from 0-20 to 0-180.

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

Table with 4 columns: RC, RW, and two sets of 4 columns for 80, 70, 50 reflectance levels.

LUMINANCE DATA (CD/M²)

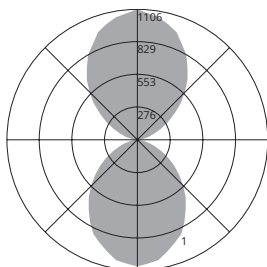
Table with 2 columns: Vertical Angle, Horizontal Angle. Rows include angles from 0 to 85.

CANDELA DISTRIBUTION

Table with 3 columns: Vertical Angle, Horizontal Angle, Candela values.

Optics Up: Rise Lens
Optics Down: Drop Lens
IES File: RM4DI-2L35K-4-MRMD-L3
Lumens: 1300/ft Wattage: 12.1/ft
Efficacy: 107 lm/W

PHOTOMETRIC CURVE
51% Up
49% Down



ZONAL LUMEN SUMMARY

Table with 3 columns: Zone, Lumens, %Fixt. Rows include zones from 0-20 to 0-180.

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

Table with 4 columns: RC, RW, and two sets of 4 columns for 80, 70, 50 reflectance levels.

LUMINANCE DATA (CD/M²)

Table with 2 columns: Vertical Angle, Horizontal Angle. Rows include angles from 0 to 85.

CANDELA DISTRIBUTION

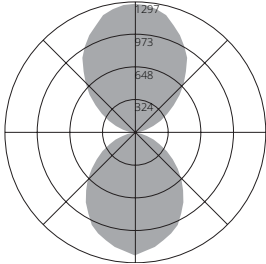
Table with 3 columns: Vertical Angle, Horizontal Angle, Candela values.

Photometric performance is measured and scaled in accordance with IESNA LM-79.

PHOTOMETRIC DATA - 3500K, 80 CRI

Optics Up: Meta Ice
Optics Down: Meta Ice
IES File: RM4DI-2L35K-4-MM-L3
Lumens: 1352/ft Wattage: 12.1/ft
Efficacy: 112 lm/W

PHOTOMETRIC CURVE
51% Up
49% Down



ZONAL LUMEN SUMMARY

Table with 3 columns: Zone, Lumens, %Fixt. Lists lumens distribution across various zones from 0-20 to 0-180 degrees.

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

Table with 4 columns: RC, RW, 80, 70, 50. Shows utilization coefficients for different cavity reflectance values.

LUMINANCE DATA (CD/M²)

Table with 2 columns: Vertical Angle, Horizontal Angle. Shows luminance values for various angles.

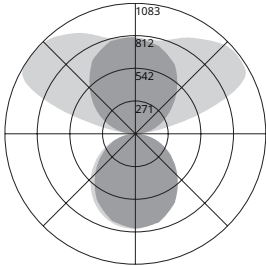
CANDELA DISTRIBUTION

Vertical Angle, Horizontal Angle

Table with 5 columns: Vertical Angle, Horizontal Angle (0, 22.5, 45, 67.5, 90). Shows candela distribution across angles.

Optics Up: Batwing
Optics Down: Meta Blanc
IES File: RM4DI-2L35K-4-BWMB-L3
Lumens: 1403/ft Wattage: 12.0/ft
Efficacy: 117 lm/W

PHOTOMETRIC CURVE
62% Up
38% Down



ZONAL LUMEN SUMMARY

Table with 3 columns: Zone, Lumens, %Fixt. Lists lumens distribution across various zones from 0-20 to 0-180 degrees.

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method | Effective Floor Cavity Reflectance = .20

Table with 4 columns: RC, RW, 80, 70, 50. Shows utilization coefficients for different cavity reflectance values.

LUMINANCE DATA (CD/M²)

Table with 2 columns: Vertical Angle, Horizontal Angle. Shows luminance values for various angles.

CANDELA DISTRIBUTION

Vertical Angle, Horizontal Angle

Table with 5 columns: Vertical Angle, Horizontal Angle (0, 22.5, 45, 67.5, 90). Shows candela distribution across angles.

Photometric performance is measured and scaled in accordance with IESNA LM-79.