

# Rail RM2D

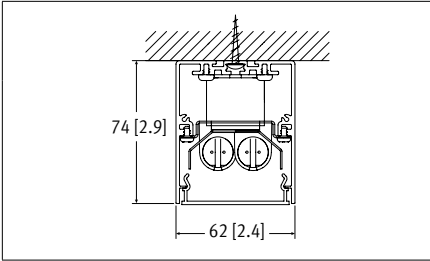
## Fluorescent . Surface



MetaICE



CAT #:
PREP BY:
DATE:
PROJECT:
TYPE:
NOTES:



## ORDERING LOGIC

RM2D				Optics				S		
Series	# of lamps	Source	Length	Up Down	Finish	Ballast	Circuitry	Mounting	Voltage	Controls

# of Lamps	Source	Optics Up	Finish	Circuitry	Voltage
1 = 1 Lamp	T8	_ = None (leave space empty)	SA = Satin Aluminum	1 = 1 Circuit	1 = 120 V
1S = 1 Staggered * (w/ Metalce only)	T5	<b>Optics Down</b>	W = White	AS = Alternate Switching	2 = 277 V
* T5/T5HO only	T5HO	SP = Specular Parabolic Louver (not available with T8)	C = Custom Finish Specify RAL#:	EM = Emergency/Night Light	3 = 347 V (Consult Factory)
	Length	SSP = Semi Specular Parabolic Louver (not available with T8)		B = Battery Pack	4 = UNV (120-277)
	4 = 4 ft	M = Meta Ice	<b>Ballast</b>	<b>Mounting</b>	<b>Controls</b>
	8 = 8 ft	A = Asymmetric Reflector (not available with T8)	E = Electronic Instant Start (T8)	S = Surface (Ceiling)	_ = None (leave space empty)
	12 = 12 ft	MA = Meta Ice with Asymmetric Reflector (not available with T8)	R = Programmed Rapid Start		D = Daylight Sensor
	R = Continuous Rows Consult factory		D1 = 0-10V Dimming		O = Occupancy Sensor
			D2 = DALI		DO = Daylight/Occupancy Sensor

## SPECIFICATIONS

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

**Housing:** Rigid extruded aluminum body, 2.3mm [0.09"] nominal wall thickness. 63mm [2.5"] wide x 74mm [2.9"] high. Steel formed end caps.

**Optics:** Specular and semi-specular parabolic louvre (not available with T8

lamps); high-transmittance snap-in Metalce lens; asymmetric reflector open bottom (not available with T8 lamps).

**Finish:** Satin aluminum and white are standard . For custom finish, contact factory.

**Weight:** 0.95 kg/300mm [2.1 lb/ft ]

**Mounting:** Surface: Direct to surface mount

**Electrical:** Factory prewired with twist and lock sockets.

**Ballast:** Instant Start, Programmed Rapid Start, 0-10V Dimming, DALI

**Controls:** Refer to Ordering Logic chart above.

**Approvals:** Certified to NRTL and IES testing standards. This product is cULus listed.

**Environment:** Suitable for dry or damp locations.

## WARRANTY

Metalumen will warrant a one year parts and labour warranty. Warranty is valid if luminaire is installed and used according to specification. The Ballast will carry a standard 5 year warranty by the manufacturer. If defective, Metalumen will send replacement ballasts or drivers at no cost along with detailed replacement instructions and instructions on how to return defective components to Metalumen.

FEATURES

**COMMERCIAL // Commercial Lighting** - With over 30 years of successful architectural lighting, providing unique concept and installation solutions has become second nature. Metalumen's Start to End Development Process results in unique performance, design and architectural requirements from concept through implementation.

Metalumen's Lighting Solutions have been applied to customer projects requiring: high profile architectural installations; improved energy efficiency; retrofit installations; unique installations. Metalumen can provide top-quality innovative fixtures when and where they are needed and, at the same time, allow the customer to determine their level of involvement in

Metalumen's Start to End Development Process.

**MetaICE** META ICE is a smooth Continuum Optical System with a 91% transmission rate that creates smooth subdued lighting with no source imagery. Meta Ice is a premium lensing optic unique to Metalumen but coupled

with a high performance side kicking specular reflector to maximize the lumens from the source creating an unparalleled lumen delivery.

**DAMP** Suitable for damp locations.

PHOTOMETRIC DATA

1 T8 LAMP

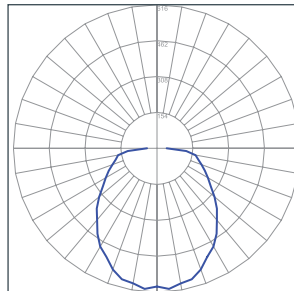
**File Name:** RM2D-1T8-4-M  
**Luminaire Lumens:** 1737  
**Efficiency:** 60%  
**Efficacy:** 50 lms/W  
**Total Watts:** 35  
**Optics Down:** Meta Ice

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80				70				50				
	RW	70	50	30	10	70	50	30	10	50	30	10	
RCR													
0	71	71	71	71	70	70	70	70	67	67	67		
1	64	60	57	55	62	59	56	54	56	54	52		
2	58	52	48	44	56	51	47	43	49	45	42		
3	52	46	40	36	51	45	40	36	43	39	35		
4	48	40	35	31	47	40	34	30	38	33	30		
5	44	36	30	26	43	35	30	26	34	29	26		
6	41	33	27	23	40	32	27	23	31	26	23		
7	38	30	24	20	37	29	24	20	28	23	20		
8	35	27	22	18	34	27	22	18	26	21	18		
9	33	25	20	16	32	24	20	16	24	19	16		
10	31	23	18	15	30	23	18	15	22	18	15		

PHOTOMETRIC CURVE



CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0.0	22.5	45.0	67.5	90.0
0	592.24	592.24	592.24	592.24	592.24
5	604.82	602.81	603.22	598.24	605.68
10	589.09	601.10	600.00	597.19	616.39
15	581.76	573.79	580.12	575.91	566.83
20	552.91	558.56	550.07	542.48	546.88
25	513.21	518.17	517.17	508.79	503.74
30	486.31	480.09	478.54	467.71	470.32
35	446.61	442.37	435.24	428.86	417.09
40	400.58	401.68	388.58	380.44	377.38
45	364.98	361.45	342.31	336.54	336.38
50	324.06	315.96	304.20	297.10	299.31
55	283.19	280.12	270.82	262.99	260.72
60	253.71	246.52	237.29	233.00	231.39
65	227.72	220.70	209.87	207.85	205.96
70	203.29	195.17	187.50	184.07	182.17
75	183.87	175.89	169.41	165.66	164.49
80	169.38	160.24	152.94	145.45	146.15
85	126.03	112.98	98.05	88.82	85.70
90	41.82	25.48	13.25	8.23	7.26

LUMINANCE DATA (CD/M<sup>2</sup>)

Vertical Angle	Horizontal Angle		
	0	45	90
45	6134	3520	3021
55	5757	2914	2387
65	6092	2447	1984
75	7524	2229	1727
85	11724	1534	1023

1 T5 LAMP

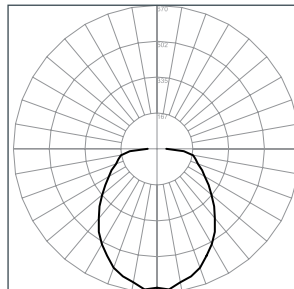
**File Name:** RM2D-1T5-4-M  
**Luminaire Lumens:** 1814  
**Efficiency:** 63%  
**Efficacy:** 59 lms/W  
**Total Watts:** 31  
**Optics Down:** Meta Ice

COEFFICIENTS OF UTILIZATION

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80				70				50				
	RW	70	50	30	10	70	50	30	10	50	30	10	
RCR													
0	74	74	74	74	73	73	73	73	69	69	69		
1	67	63	60	57	65	62	59	56	59	57	54		
2	60	55	50	46	59	53	49	45	51	47	44		
3	55	48	42	38	53	47	42	37	45	40	37		
4	50	42	37	32	49	41	36	32	40	35	31		
5	46	38	32	28	45	37	32	28	36	31	27		
6	43	34	28	24	42	34	28	24	32	28	24		
7	40	31	25	21	39	31	25	21	30	25	21		
8	37	28	23	19	36	28	23	19	27	22	19		
9	35	26	21	17	34	26	21	17	25	20	17		
10	33	24	19	16	32	24	19	16	23	19	16		

PHOTOMETRIC CURVE



CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0.0	22.5	45.0	67.5	90.0
0	647.73	647.73	647.73	647.73	647.73
5	657.67	648.49	669.97	651.46	643.38
10	632.03	627.96	645.26	647.45	638.11
15	615.11	618.85	622.29	608.73	608.01
20	589.67	598.39	586.88	576.71	583.40
25	548.77	556.11	550.94	543.92	535.51
30	513.24	516.05	509.59	495.05	492.98
35	472.42	473.21	454.69	445.04	441.00
40	421.32	426.32	408.07	393.35	392.45
45	379.18	376.31	355.45	344.55	341.08
50	332.86	330.13	314.41	299.52	295.60
55	294.13	288.75	273.36	263.59	257.44
60	259.53	252.81	240.97	232.69	232.15
65	233.08	225.70	214.60	209.36	207.44
70	203.84	198.41	189.57	186.74	184.15
75	186.62	180.59	173.89	169.95	170.22
80	171.50	164.77	159.90	154.75	153.20
85	126.17	120.38	110.04	104.71	101.78
90	43.20	31.07	20.97	15.77	13.98

LUMINANCE DATA (CD/M<sup>2</sup>)

Vertical Angle	Horizontal Angle		
	0	45	90
45	6807	3567	2941
55	6351	2812	2217
65	6563	2336	1840
75	7894	2078	1607
85	11425	1508	1061