Rail RM2D Fluorescent . Pendant	CAT #:
	PREP BY:
Metalice MANP	DATE:
	PROJECT:
	TYPE: NOTES:

### **ORDERING LOGIC**

		Optics			
RM2D					
Series # of lam	ops Source Lei	ngth Up Down	Finish Ballast Circ	uitry Mounting	Voltage Controls
# of Lamps	Length	Optics Up	Finish	Circuitry	Voltage
<b>1 =</b> 1 Lamp	<b>4</b> = 4 ft	<pre>_ = None (leave space empty)</pre>	<b>SA =</b> Satin Aluminum	<b>1 =</b> 1 Circuit	<b>1</b> = 120 V
<b>1S</b> = <sup>1</sup> Staggered * (w/ Metalce only)	<b>8 =</b> 8 ft	Optics Down	<b>W</b> = White	<b>AS =</b> Alternate Switching	<b>2 =</b> 277 V
* T5/T5HO only	<b>12 =</b> 12 ft	<b>SP</b> = Specular Parabolic Louver (not available with T8)	<b>C</b> = Custom Finish Specify RAL#:	<b>EM =</b> Emergency/Night Light	<b>3 =</b> 347 V (Consult Factory)
Length	<b>R</b> = Continuous Rows Consult factory	<b>SSP</b> = Semi Specular Parabolic Louver (not available with T8)		<b>B =</b> Battery Pack	<b>4 =</b> UNV (120-277)
T8		<b>M =</b> Meta Ice	Ballast	Mounting	Controls
T5		A = Asymmetric Reflector (not available with T8)	<b>E =</b> Electronic Instant Start (T8)	<b>PA =</b> Pendant Aircraft Cable	— = None (leave space empty)
T5HO		MA = Meta Ice with Asymmetric Reflector (not available	<b>R =</b> Programmed Rapid Start	<b>PT =</b> Pendant Aircraft Cable for T-Bar	<b>D</b> = Daylight Sensor
		with T8)	<b>D1 =</b> 0-10V Dimming	Select HANGER LENGTH and HANGER COLOR on p. 2	<b>0</b> = Occupancy Sensor
			<b>D2 =</b> DALI		<b>DO =</b> 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 yoke complete with a Quick-Grip field

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: Pendant: Steel aircraft cable

lens; asymmetric reflector open bottom (not adjustable suspension system provides for quick and easy on-site alignment.

> 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.

Date

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.

#### **APPROVALS** Signature

FILE NAME: Rail\_RM2D\_FL\_PA\_PT\_SPEC\_SHEET 072516

570 Southgate Drive, Guelph, Ontario N1G 4P6 Mailing Address: P.O. Box 1779 Guelph, Ontario, N1H 6Z9

1.800.621.6785 | T 519.822.4381 | F 519.822.4589 www.metalumen.com Metalumen SPECIFICATION SHEET | PAGE 1

### **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.

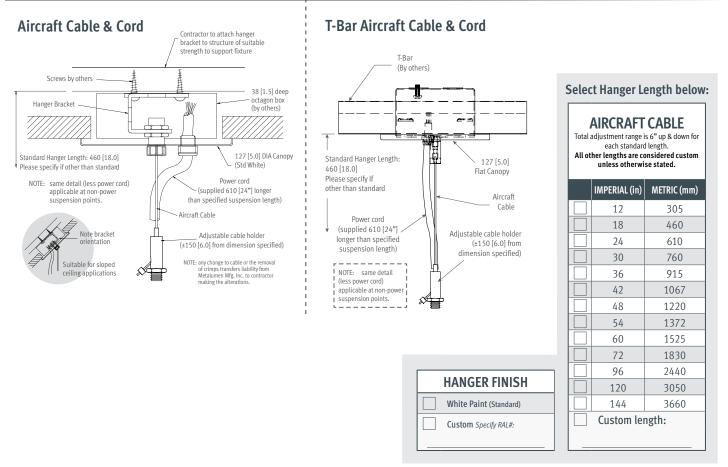
Metalumen's Lighting Solutions have been applied to customer projects requiring: high profile architectural installations; improved energy efficiency; retrofit installations; unique installations. Metalumen can provide top-quality innovative fixtures when and where they are needed and, at the same time,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



### HANGERS



FILE NAME: Rail\_RM2D\_FL\_PA\_PT\_SPEC\_SHEET 072516



## **PHOTOMETRIC DATA**



 File Name:
 RM2D-1T8-4-M

 Luminaire Lumens:
 1737

 Efficiency:
 60%

 Efficacy:
 50 lms/W

 Total Watts:
 35

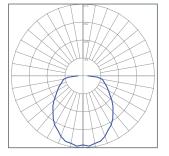
 Optics Down:
 Meta Ice

#### **COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC	80 70							50			
RW	70			10	70	, 50	30	10	50		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**



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

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

#### **CANDLE DISTRIBUTION**

Vertical	Horizontal Angle							
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			



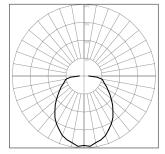
File Name:RM2D-1T5-4-MLuminaire Lumens:1814Efficiency63%Efficacy:59 lms/WTotal Watts:31Optics Down:Meta Ice

#### **COEFFICIENTS OF UTILIZATION**

Zonal Cavity Method Effective Floor Cavity Reflectance = .20

RC		8	0			7	0			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



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

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

#### **CANDLE DISTRIBUTION**

Vertical		н	lorizontal A	ngle	
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



FILE NAME: Rail\_RM2D\_FL\_PA\_PT\_SPEC\_SHEET 072516