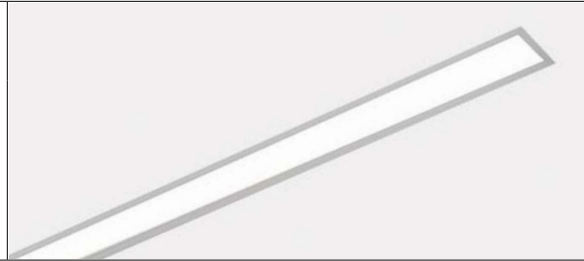
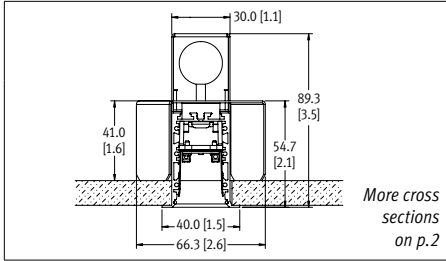


# Rail 1 RML (Formerly Caledonia)

LED . Recessed



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



## ORDERING LOGIC

RML			Optics																															
Series	Color Temp	Length	Up	Down	Finish	LL/Driver	Circuitry	Mounting	Voltage	Control	Options																							
<b>Color Temp</b>		<b>Optics Up</b>		<b>Light Level (LL) / Driver *</b>			<b>Circuitry</b>		<b>Voltage</b>																									
1L30K = 3000K		= None (leave space empty)		<b>Fixture Lumens</b> *Light level measured at 3500K. Add 3% lumen output for 4000K or subtract 2% lumen output for 3000K.			1 = 1 Circuit		1 = 120 V																									
1L35K = 3500K		<b>Optics Down</b>					<table border="1"> <thead> <tr> <th>0-10V Dimming (Standard)</th> <th>Lumens Delivered</th> <th>Wattage</th> <th>Efficacy (LPW)</th> </tr> </thead> <tbody> <tr> <td>L1</td> <td>1355</td> <td>13.7</td> <td>99</td> </tr> <tr> <td>L2</td> <td>1726</td> <td>17.4</td> <td>99</td> </tr> <tr> <td>L3</td> <td>2474</td> <td>24</td> <td>104</td> </tr> <tr> <td>L4</td> <td>4742</td> <td>48</td> <td>99</td> </tr> </tbody> </table>		0-10V Dimming (Standard)	Lumens Delivered	Wattage	Efficacy (LPW)	L1	1355	13.7	99	L2	1726	17.4	99	L3	2474	24	104	L4	4742	48	99	B = Battery Pack (remote mounted)		2 = 277 V			
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1L40K = 4000K		M = Meta Ice		Based on 4ft sections. * All drivers remote mounted		<b>Mounting - Recessed</b>		3 = 347 V																										
<b>Length</b>		<b>Finish</b>		<table border="1"> <thead> <tr> <th colspan="3">Lumen Adjustment Factor</th> </tr> <tr> <th>Color Temp</th> <th>80 CRI</th> <th>90 CRI</th> </tr> </thead> <tbody> <tr> <td>3000K</td> <td>0.984</td> <td>0.873</td> </tr> <tr> <td>3500K</td> <td>1.000</td> <td>0.875</td> </tr> <tr> <td>4000K</td> <td>1.032</td> <td>0.879</td> </tr> </tbody> </table>		Lumen Adjustment Factor			Color Temp	80 CRI	90 CRI	3000K	0.984	0.873	3500K	1.000	0.875	4000K	1.032	0.879	D = Drywall Flanged **		4 = UNV (120-277 V)											
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2 = 2 ft		SA = Satin Aluminum				DF = Drywall Flangeless **		For other voltage, consult factory																										
4 = 4 ft		W = White				T = T-Bar Flanged		<b>Control</b>																										
8 = 8 ft		C = Custom Finish Specify RAL#:				See DF & T cross sections on p.2		_ = None (leave space empty)																										
12 = 12 ft						** Horizontal or vertical mount		<b>Options</b>																										
R = Continuous Rows (Consult factory)								90 = 90 CRI																										
								_ = None (leave space empty)																										

## SPECIFICATIONS

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

**Housing:** Anodized Extruded Aluminum 65% post-industrial recycled content with a 20 Gauge steel die cast onboard hangers, complete with die cast zinc alloy powder coated end caps.

**Optical System:** Computer modeled, formed painted steel materials are utilized to provide wide, horizontal direct distribution.

**CRI:** 83 (3500K) (80 minimum)

**Lumen Maintenance:** At an ambient operating temperature of 35°C the LED lifetime expectancy <= 60 000hrs at L70.

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

**Weight:** 1.0lb/ft or 0.5kg/300mm.

**Mounting:** Mounting brackets/clips provided. Recessed T-Bar fits 15/16" T-Bar.

**Drivers:** Metalumen offers dimming drivers

as a standard on our entire LED product offering at 0-10V. Dimming is 10%-100% range Power factor is <90% with a Class 2 rating. All drivers remote mounted.

**Lutron Driver Options:** Consult factory for Lutron driver options:

- L3DAE Hi-lume 1% EcoSystem LED Driver
- L3DA3W Hi-lume 1% 3-wire LED Driver
- LTEA2W Hi-lume 1% 2-wire LED Driver
- LDE1 Hi-lume 1% -H EcoSystem LED Driver

• **LDE5 5-Series EcoSystem LED Driver Approvals:** Certified to NRTL and IES testing standards. All components are UL Recognized or Listed. RoHS compliant.  
**Environment:** Suitable for dry or damp indoor locations.

## 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.

APPROVALS Signature \_\_\_\_\_

Date \_\_\_\_\_

FILE NAME: RML\_D\_DF\_T\_SPEC\_SHEET

20180103

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

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.

**EDULUMEN** // Educational Lighting Edulumen is a collection of premium luminaires that maximize both the functionality and performance of any educational facility. Based on maximum efficiency, integration of controls and exceptional design, Edulumen will earn high marks for meeting your requirements. Students challenge themselves throughout the day to achieve, and Metalumen is dedicated to this by creating sustainable environments that foster enhanced educational experiences.

**MEDILUMEN** // Healthcare Lighting Every product in our broad line of healthcare luminaires has been strategically engineered to meet modern healthcare demands while addressing patient needs and aesthetic requirements.

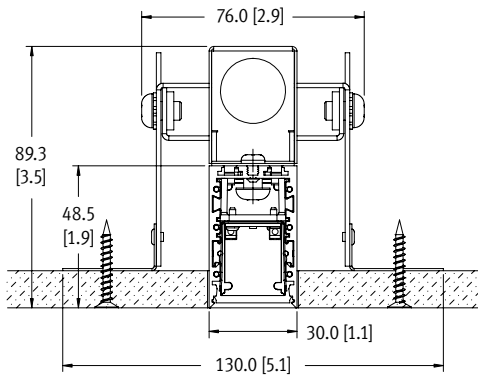
**META ICE** META ICE is a smooth Continuum Optical System with a 91% transmission rate that creates smooth subduced lighting with no source imagery. Meta Ice is a premium lensing optic unique to Metalumen but coupled with a high performance side kicking specular reflector to maximize the lumens from the source creating an unparallelled lumen delivery.

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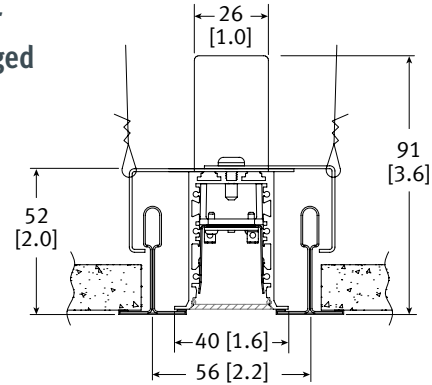
**META** LED boards with a raw efficacy of over 120lm/W, proprietary to Metalumen. A slim LED platform for any of your LED linear application.

MOUNTING

Drywall Flangeless



T-Bar Flanged



PHOTOMETRIC DATA - 3500K

L3

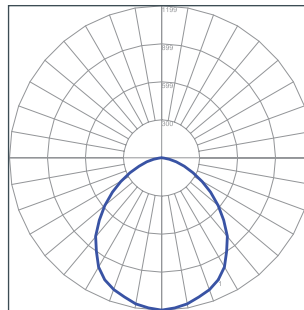
**File Name:** RML-1L35K-4-M-L3  
**Luminaire Lumens:** 2474  
**Total Watts:** 23.89  
**Efficacy:** 104 lms/W  
**Optics Up:** None  
**Optics Down:** Meta Ice

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	119	119	119	119	116	116	116	116	111	111	111	111
1	110	106	102	99	108	104	101	97	100	97	94	94
2	101	94	88	83	99	92	87	82	89	84	80	80
3	93	84	77	71	91	82	76	70	79	74	69	69
4	86	75	67	61	84	74	66	61	72	65	60	60
5	80	68	60	54	78	67	59	53	65	58	53	53
6	74	62	53	47	72	61	53	47	59	52	47	47
7	69	56	48	42	67	56	48	42	54	47	42	42
8	64	52	44	38	63	51	43	38	50	43	38	38
9	60	48	40	35	59	47	40	35	46	39	34	34
10	57	44	37	32	56	44	37	32	43	36	32	32

PHOTOMETRIC CURVE



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

Vertical Angle	Horizontal Angle		
	0	45	90
45	25946	10005	7102
55	21406	6533	4374
65	16400	3798	2487
75	11151	1679	999
85	4655	265	141

CANDLE DISTRIBUTION

Vertical Angle	Horizontal Angle				
	0.0	22.5	45.0	67.5	90.0
0	1198.56	1198.56	1198.56	1198.56	1198.56
5	1185.28	1188.29	1180.71	1159.37	1160.16
10	1168.45	1157.07	1156.57	1157.79	1146.76
15	1134.22	1139.52	1106.47	1102.72	1091.57
20	1102.74	1079.88	1045.02	1012.54	997.22
25	1058.18	1030.58	975.67	917.09	909.88
30	991.54	951.67	882.05	813.58	792.66
35	896.48	862.78	776.76	708.14	677.98
40	807.88	758.87	663.37	592.01	575.57
45	694.07	656.64	558.79	495.86	478
50	584.99	542.47	457.19	400.79	384.46
55	472.14	436	364.33	317.22	301.94
60	369.28	336.8	280.47	243.59	233.04
65	273.75	252.87	205.07	175.18	170.78
70	189.77	174.03	139.42	118.49	115.03
75	120.66	107.55	84.9	71.32	66.17
80	63.68	54.82	39.87	33.7	30.75
85	21.51	17.62	12.08	9.75	8.68
90	4.7	2.44	1.48	.84	1.06