

# RAIL 1 RML

LED . RECESSED T-BAR . DIRECT



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

PERFORMANCE SUMMARY at 3500K		Meta Cloud
		L3
Lumens per foot	80 CRI	527
	90 CRI	461
Wattage per foot		6.1
Efficacy	80 CRI	87
	90 CRI	76
L70 Estimate (h)		≥ 60,000 hrs

See page 2 for the complete Light Level Performance and 90 CRI Lumen Adjustment charts.

## FEATURES

- Narrow 1.2 inch profile
- Available in 6 standard lengths as well as continuous rows and patterns
- Suitable for dry or damp locations

## ORDERING LOGIC

Example Part Number: RML-1L35K-12-MC-W-L31-T-1-90

<b>1. SERIES</b> <b>RML</b>	<b>2. COLOR TEMP</b> <b>1L30K</b> 3000K <b>1L35K</b> 3500K <b>1L40K</b> 4000K  <small>90 CRI is available under OPTIONS</small>	<b>3. LENGTH</b> <b>2</b> 2 ft <b>4</b> 4 ft <b>6</b> 6 ft <b>8</b> 8 ft <b>10</b> 10 ft <b>12</b> 12 ft <b>RA</b> Continuous Rows* <small>Replace "A" with length in feet</small> <b>C</b> Custom Length* _ None (leave space empty)	<b>4. PATTERN <sup>1</sup></b> <b>GA</b> Square <b>GAxB</b> Rectangle <b>UAxBxC</b> U-Shape <b>LAxB</b> L-Shape <b>C</b> Custom Pattern* _ None (leave space empty)  <b>Standard Patterns Minimum Lengths</b>  Square: A = 4 ft min. Rectangle: A = 4 ft min, B = 4 ft min. U-Shape: A = 3 ft min, B = 4 ft min, C = 3 ft min. L-Shape: A = 3 ft min, B = 3 ft min.  <b>Custom Patterns*</b> <small>Lengths and a drawing of custom pattern are required on page 2</small>  T-Shape X/Cross  <b>Select corner:</b> <input type="checkbox"/> Outside 90° <input type="checkbox"/> Inside 90° 				<b>5. OPTICS UP</b> _ None (leave space empty)	<b>6. OPTICS DOWN</b> <b>MC</b> Meta Cloud  <b>Meta Cloud:</b> Opal diffuse lens	<b>7. FINISH</b> <b>SA</b> Satin Aluminum <b>W</b> White <b>B</b> Black <b>C</b> Custom Finish <small>Specify RAL:</small>			
<b>8. LIGHT LEVEL / DRIVER</b> <b>L1</b> <b>L2</b> Select Driver below. (All drivers are remote.) <b>L3</b> <b>L4</b> See Light Level Performance chart on p2.	<b>9. CIRCUITRY</b> <b>1</b> 1 Circuit <b>B</b> Emergency Battery Pack <sup>2</sup>	<b>10. MOUNTING</b> <b>T</b> Recessed T-bar 15/16" <b>T9</b> Recessed T-bar 9/16"	<b>11. VOLTAGE</b> <b>1</b> 120V <b>2</b> 277V <b>3</b> 347V <b>4</b> UNV(120 - 277V)	<b>12. CONTROLS / SENSORS</b> _ None (leave space empty)	<b>13. OPTIONS</b> <b>90</b> 90 CRI, High R9 _ None (leave space empty)							

\*Consult factory. | <sup>1</sup> Pattern record drawings showing mounting locations and wire entries will be sent out upon order. | <sup>2</sup> Battery operates 4ft sections only.

### Select Driver:

- Factory option 0-10V (Standard)
- Factory option 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

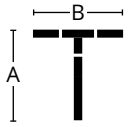
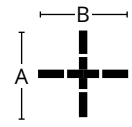
3500K, 80 CRI, 0-10V Dimming (Standard)

Optics	Meta Cloud		
	Lumens per foot	Wattage per foot	Efficacy (LPW)
L1	320	3.5	92
L2	395	4.4	89
L3	527	6.1	87
L4	971	12.1	80

### Lumen Adjustment Factor

Color Temp	80 CRI	90 CRI
3000K	0.984	0.873
3500K	1.000	0.875
4000K	1.032	0.879

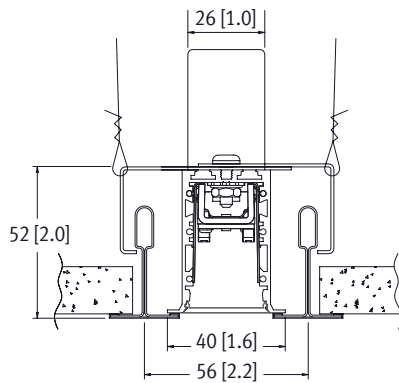
## PATTERNS

Select Pattern:	T-SHAPE (C)	X / CROSS (C)
Pattern Configuration		
Indicate Desired Lengths (ft)	A = B =	A = B =
Minimum Lengths	A = 3 ft B = 6 ft	A = 6 ft B = 6 ft

A pattern configuration drawing is required in the grid below.

Record drawings will be sent out upon order showing mounting locations.

## CROSS SECTIONS



Meta Cloud

## 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, 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:** 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 options. For custom finish, contact factory.

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

**Mounting:** Fits 9/16" and 15/16" T-bars.

**Electrical:** Each section is individually connected in the field to a remote driver box.

**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 are

remote mounted.

**Approvals:** Certified to NRTL and IES testing standards. All components are UL Recognized or Listed. RoHS compliant.

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

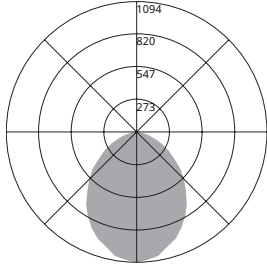
## WARRANTY

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.

PHOTOMETRIC DATA - 3500K, 80 CRI

Optics: **Meta Cloud**  
 IES File: **RML-1L35K-4-MC-L3**  
 Lumens: **527/ft** Wattage: **6/ft**  
 Efficacy: **87 Lm/W**

**PHOTOMETRIC CURVE**  
 100% Down



**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixt
0-20	374	17.70
0-30	753	35.60
0-40	1160	54.90
0-60	1820	86.10
0-80	2094	99.10
0-90	2112	100.00
10-90	2012	95.20
20-40	786	37.20
20-50	1156	54.70
40-70	847	40.10
60-80	274	13.00
70-80	87	4.10
80-90	18	0.90
90-110	0	0.00
90-120	0	0.00
90-130	0	0.00
90-150	0	0.00
90-180	0	0.00
110-180	0	0.00
0-180	2112	100.00

**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	100	97	100	97	94	94
2	101	94	88	83	99	92	87	82	89	84	80	80
3	93	84	76	71	91	82	75	70	79	74	69	69
4	86	75	67	61	84	74	66	61	71	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	65	52	44	38	63	51	44	38	50	43	38	38
9	60	48	40	35	59	47	40	35	46	39	35	35
10	57	44	37	32	56	44	37	32	43	36	32	32

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

Vertical Angle	Horizontal Angle		
	0	45	90
45	20944	8413	6170
55	17284	5707	3942
65	13923	3400	2161
75	9716	1538	930
85	4415	251	142

**CANDELA DISTRIBUTION**

Vertical Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1094	1094	1094	1094	1094
5	1074	1073	1053	1049	1074
10	1053	1051	1031	1016	1012
15	992	992	985	956	937
20	951	930	894	868	871
25	887	860	823	782	764
30	815	785	740	693	673
35	736	700	646	595	584
40	641	620	553	506	497
45	560	530	470	430	415
50	477	445	390	353	336
55	381	362	318	283	272
60	307	283	248	219	210
65	232	214	184	158	148
70	163	151	128	108	104
75	105	95	78	65	62
80	55	49	37	32	29
85	20	17	11	9	9
90	4	2	1	1	1

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