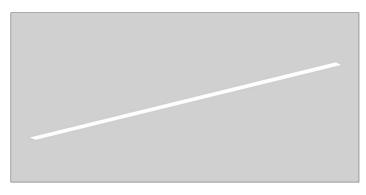
# RAIL 1 RML

# **LED** . **RECESSED DRYWALL FLANGELESS** . **DIRECT**









| PART #:                |            |           |
|------------------------|------------|-----------|
| PREP BY:               | DATE:      |           |
| PROJECT:               |            | QTY:      |
| NOTES:                 |            |           |
| APPROVAL<br>SIGNATURE: | DATE (DD/N | MM/YYYY): |

| PERFORMANCE<br>SUMMARY at 3500K |        | Meta Cloud   | Drop Lens |  |
|---------------------------------|--------|--------------|-----------|--|
|                                 |        | L3           | L3        |  |
| Lumana nar faat                 | 80 CRI | 527          | 559       |  |
| Lumens per foot                 | 90 CRI | 461          | 489       |  |
| Wattage per foot                |        | 6.1          |           |  |
| Efficacy (Im (M)                | 80 CRI | 87           | 93        |  |
| Efficacy (lm/W)                 | 90 CRI | 76           | 80        |  |
| 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 11 standard lengths as well as continuous rows and patterns
- Suitable for dry or damp locations

| ORDE                 | ORDERING LOGIC Example Part Number: RML-1L35K-G2x6-MC-W-L31-DF-1-90   |  |  |   |  |                                    |                         |            |                               |   |     |  |  |
|----------------------|---|--|--|---|--|------------------------------------|-------------------------|------------|-------------------------------|---|-----|--|--|
| RML                  |   |  |  |   | $\sim$   |                                    |                         |            | DF                            |   |     | $\sim$   |  |
| 1                    | 2 3   |  | 4  | 5 | 6  | 7                                  | 8                       | 9          | 10                            | 11  | 12  | 13   |  |
| 1. SERIES            | 2. COLOR TEMP   |  |  |   | 4. PATTERN <sup>1</sup>  |                                    |                         |            | 5. OPTICS UP                  | 6. OPTICS DOW   | N : | 7. FINISH  |  |
| RML                  | 1L30K 3000K<br>1L35K 3500K<br>1L40K 4000K   | 3<br>4<br>5<br>6                       | 2 ft<br>3 ft<br>4 ft<br>5 ft<br>6 ft   |   | GA Square GAxB Rectangle UAxBxC U-Shape LAxB L-Shape C Custom P _ None (leav | attern <sup>:</sup>                |                         |            | _ None (leave<br>space empty) | MC Meta Clou<br>MD Drop Lens                                      |     | <ul><li>SA Satin Alumi</li><li>W White</li><li>B Black</li><li>C Custom Fin Specify RAL:</li></ul> |  |
|                      | 90 CRI is available<br>under OPTIONS  | 8<br>9<br>10<br>11<br>12<br>R <u>A</u> | 7 ft 8 ft 9 ft 10 ft 11 ft 12 ft Continuous Rows* Replace "A" with length ir Custom Length* None (leave space er |   | Standard Patterns Min  | nimum ngle min. min. tustom nage 3 |                         | 90°        |                               | Meta Cloud:<br>Opal diffuse len<br>Drop Lens:<br>Opal diffuse len |     |  |  |
| L1<br>L2<br>L3<br>L4 | EVEL / DRIVER  Select Driver below. All drivers are remote e p2 for max. wire leng See Light Level erformance chart on p r desired lm/ft: | gth.                                   | 9. CIRCUITRY  1 1 Circuit  B Emergency Battery Pack <sup>2</sup>   |   | MOUNTING<br>F Recessed Drywall Fla   | angeles                            | <b>2</b> 27 <b>3</b> 34 | 0 V<br>7 V |                               | 6 / SENSORS<br>ve space empty)                                    |     | . OPTIONS<br>D 90 CRI, High R9<br>None<br>(leave space em  |  |

<sup>\*</sup>Consult factory. | \*\*Drop lens is not available with patterns. | 1 Pattern record drawings showing mounting locations and wire entries will be sent out upon order. | 2 Battery operates 4ft sections only.

# 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      |     |      |    | Drop Lens          |                     |                    |
|-------------|-----|------|----|--------------------|---------------------|--------------------|
| Light Level |     |      |    | Lumens<br>per foot | Wattage<br>per foot | Efficacy<br>(lm/W) |
| L1          | 320 | 3.5  | 92 | 339                | 3.5                 | 98                 |
| L2          | 395 | 4.4  | 89 | 419                | 4.4                 | 95                 |
| L3          | 527 | 6.1  | 87 | 559                | 6.1                 | 93                 |
| L4          | 971 | 12.1 | 80 | 1030               | 12.1                | 85                 |

### Lumen Adjustment Factor

| Color<br>Temp | 80 CRI | 90 CRI |
|---------------|--------|--------|
| 3000K         | 0.984  | 0.880  |
| 3500K         | 1.000  | 0.875  |
| 4000K         | 1.032  | 0.879  |

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

# Remote Driver Mounting Maximum Wire Length

Consult approval drawings for maximum remote mounting distances

| Light | Driver | Drive Current | Fixture | Distance in feet / Wire Gauge |        |        |        |        |        |
|-------|--------|---------------|---------|-------------------------------|--------|--------|--------|--------|--------|
| Level | Qty    | (mA)          | Length  | 22 Ga.                        | 20 Ga. | 18 Ga. | 16 Ga. | 14 Ga. | 12 Ga. |
| L4    | 1      | 1200          | 4'      | 19                            | 30     | 47     | 75     | 119    | 189    |
| L4    | 2      | 1200          | 8'      | 19                            | 30     | 47     | 75     | 119    | 189    |
| L4    | 3      | 1200          | 12'     | 19                            | 30     | 47     | 75     | 119    | 189    |
| L3    | 1      | 600           | 4'      | 37                            | 59     | 94     | 149    | 238    | 378    |
| L3    | 1      | 1200          | 8'      | 19                            | 30     | 47     | 75     | 119    | 189    |
| L3    | 1      | 1800          | 12'     | 12                            | 20     | 31     | 50     | 79     | 126    |
| L2    | 1      | 440           | 4'      | 51                            | 81     | 128    | 204    | 324    | 515    |
| L2    | 1      | 880           | 8'      | 25                            | 40     | 64     | 102    | 162    | 258    |
| L2    | 1      | 1320          | 12'     | 17                            | 27     | 43     | 68     | 108    | 172    |
| L1    | 1      | 345           | 4'      | 65                            | 103    | 163    | 260    | 413    | 657    |
| L1    | 1      | 690           | 8'      | 32                            | 51     | 82     | 130    | 207    | 329    |
| L1    | 1      | 1035          | 12'     | 22                            | 34     | 54     | 87     | 138    | 219    |

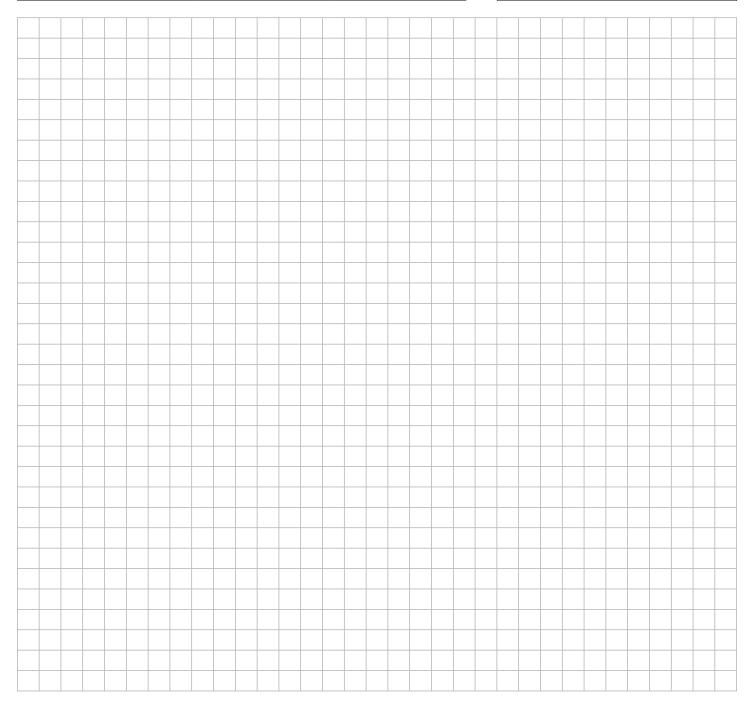


# **PATTERNS**

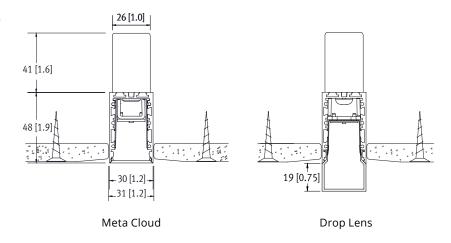
| Select<br>Pattern:                  | T-SHAPE (C)                               | CROSS / X-SHAPE (C)        | WALL-TO-CEILING (C)  |
|-------------------------------------|---|----------------------------|----------------------|
| Pattern<br>Configuration            | ⊢ B — · · · · · · · · · · · · · · · · · · | ⊢—B——<br>A <b>———</b><br>1 | CEILING TA T         |
| Indicate<br>Desired<br>Lengths (ft) | A =<br>B =                                | A =<br>B =                 | A =<br>B =           |
| Minimum<br>Lengths                  | A = 3 ft<br>B = 6 ft                      | A = 6 ft<br>B = 6 ft       | A = 3 ft<br>B = 3 ft |

# A custom pattern configuration drawing is required in the grid below

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



### **CROSS SECTIONS**



### **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: 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.

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:** Mounting brackets/clips provided.

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

**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. All drivers are remote

mounted.

**Approvals:** Certified to NRTL and IES testing standards. All components are UL Recognized or Listed. RoHS compliant. Plenum - CCEA approved. **Environment:** Suitable for dry or damp locations.

\*Standard drivers compatible with passive/ sinking dimmers. Please contact Metalumen if active/sourcing dimmer support is required.

### 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

| ZONAL | LUMEN | SUMMAR | ' |
|-------|-------|--------|---|
|-------|-------|--------|---|

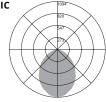
| Zone   | Lumens | %Fixt |
|--------|--------|-------|
| 0-90   | 2112   | 100   |
| 90-180 | 0      | 0     |
| 0-180  | 2112   | 100   |

### **LUMINANCE DATA (CD/M2)**

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

PHOTOMETRIC CURVE

100% Down



Optics: Drop Lens
IES File: RM4DOD-1L35K-4-MA-L3
Lumens: 636/ft Wattage: 6.1/ft
Efficacy: 105 lm/W

### **ZONAL LUMEN SUMMARY**

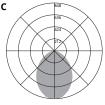
| Zone   | Lumens | %Fixt |
|--------|--------|-------|
| 0-90   | 2009   | 89.7  |
| 90-180 | 230    | 10.30 |
| 0-180  | 2239   | 100   |

### **LUMINANCE DATA (CD/M2)**

| Vertical | Horizontal Angle |      |      |  |  |  |
|----------|------------------|------|------|--|--|--|
| Angle    | 0                | 45   | 90   |  |  |  |
| 45       | 15161            | 6094 | 5128 |  |  |  |
| 55       | 12296            | 4645 | 3866 |  |  |  |
| 65       | 9702             | 3250 | 2823 |  |  |  |
| 75       | 6615             | 2194 | 1933 |  |  |  |
| 85       | 3866             | 1481 | 1333 |  |  |  |
|          |                  |      |      |  |  |  |

PHOTOMETRIC CURVE





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