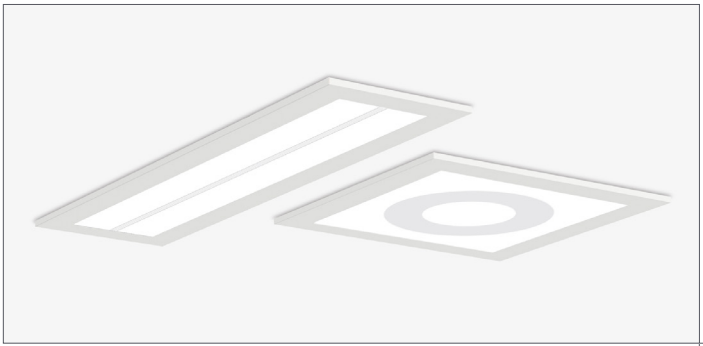
METALUMEN SPECIFICATION SHEET

# SCENE SCEM

**MEDICAL . LED . SURFACE . DIRECT**

**Medilumen**™ Healthcare Lighting

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



| PERFORMANCE SUMMARY @ 3500K | | 2X2 | | | 1X4 | |
|---|---|---|---|---|---|---|
| | | PQ | QQ / CC | SD | PS | SD |
| Light Level | | L1 | | | | |
| Lumens | 80 CRI | 2053 | 2042 | 2227 | 1905 | 2037 |
| Wattage | | 24 | 24 | 24 | 21 | 21 |
| Efficacy | 80 CRI | 86 | 85 | 93 | 91 | 97 |
| L70 Estimate (h) | | ≥ 60,000 hrs | | | | |

See page 2 for the complete Light Level Performance chart.

- Specification Grade Edgelit Light Guide Luminaire
- Efficacy up to 97 LPW
- Suitable for dry or damp locations
- Remote driver

5 YEAR WARRANTY · cULus LISTED E488140 · MR MIN COMPATIBLE · DAMP

## OTHER SCENE PRODUCTS

Scene

Scene Photo Graphics

## ORDERING LOGIC

Example Part Number: SCEM-2L35K-22-QQ-AM-L31-S-1-NRF

| SCEM | | | | AM | | | S | | N | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

**1. SERIES**

**SCEM**

**2. COLOR TEMP**

**2L30K** 3000K
**2L35K** 3500K
**2L40K** 4000K
**2L50K** 5000K

**3. CONFIGURATIONS**

Single / Alone Units

**22** 2x2 ft
**14** 1x4 ft

2x2' Configurations

**B** **E** **H**
**C** **F** **I**
**D** **G**

1x4' Configurations

**J** **K** **L**

**M** Custom configuration

See next page for configuration diagrams

**4. OPTICS**

2x2'

**PQ** Perforated Square
**QQ** Square in Square
**CC** Circle in Circle
**SD** Standard Diffuser

1x4'

**PS** Perforated Strip
**SD** Standard Diffuser

**CUSTOM GRAPHIC**
Must be ordered through the SCENE PHOTO GRAPHICS Spec Sheet

**5. FINISH**

**W** White
**AM** Antimicrobial White Paint
**C** Custom Finish
Specify RAL:

**6. LIGHT LEVEL / DRIVER**

2x2' Optics Lumen Codes

| CODE* | PQ | QQ / CC | SD |
|---|---|---|---|
| **L1** | 2053 | 2042 | 2227 |
| **L2** | 2947 | 2816 | 3185 |
| **L3** | 3316 | 3251 | 3581 |
| **L4** | 3794 | 3852 | 4090 |

1x4' Optics Lumen Codes

| CODE* | PS | SD |
|---|---|---|
| **L1** | 1905 | 2037 |
| **L2** | 3727 | 4068 |
| **L3** | 5668 | 5814 |
| **L4** | 6469 | 6522 |

***Please note Light Level Codes have been updated in accordance with UL certification standards.**

Refer to the Light Level Performance chart on the next page for additional information.

Select Driver below.

**7. CIRCUITRY**

**1** 1 Circuit
**EM** Emergency / Night Light
**B** Emergency Battery Pack

**8. MOUNTING**

**S** Surface

**9. VOLTAGE**

**1** 120 V
**2** 277 V
**3** 347 V
**4** UNV (120 - 277V)

**10. CONTROLS / SENSORS**

**N** None

**11. OPTIONS**

**N** None
**RF** Medical Power Line Filter (Remote)

Select Driver:

- ☐ **FD** Factory option 0-10V, 1% Dimming
- ☐ **D2** DALI
- ☐ **LHE** Lutron H-Series Hi-lume 1% EcoSystem LED Driver
- ☐ **L5E** Lutron 5-Series EcoSystem LED Driver

## Light Level Performance | 3500K, 80 CRI, 0-10V Dimming (Standard)

| 2x2 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Optics | Perforated Square (PQ) | | | Square in Square (QQ) | | | Circle in Circle (CC) | | | Standard Diffuse (SD) | | |
| Light Level | Lumens | Wattage | Efficacy (LPW) | Lumens | Wattage | Efficacy (LPW) | Lumens | Wattage | Efficacy (LPW) | Lumens | Wattage | Efficacy (LPW) |
| **L1** | 2053 | 24 | 86 | 2042 | 24 | 85 | 2042 | 24 | 85 | 2227 | 24 | 93 |
| **L2** | 2947 | 37 | 80 | 2816 | 37 | 76 | 2816 | 37 | 76 | 3185 | 37 | 86 |
| **L3** | 3316 | 43 | 77 | 3251 | 43 | 76 | 3251 | 43 | 76 | 3581 | 43 | 83 |
| **L4** | 3794 | 51 | 74 | 3852 | 51 | 76 | 3846 | 51 | 75 | 4090 | 51 | 80 |

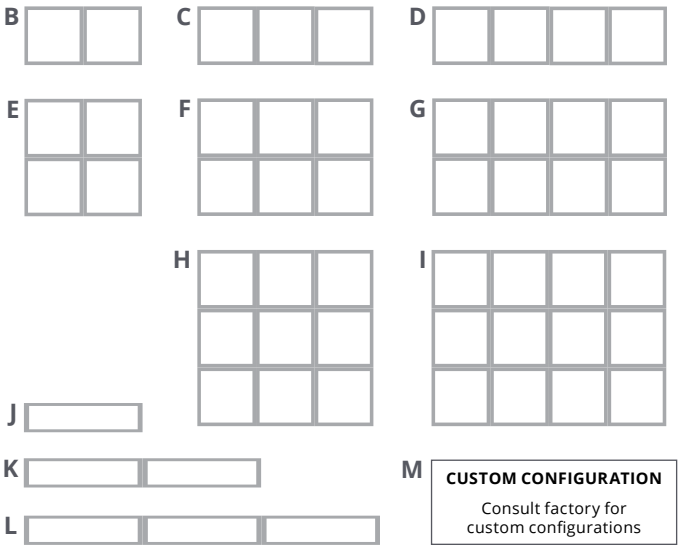
| 1x4 | | | | | | |
|---|---|---|---|---|---|---|
| Optics | Perforated Strip (PS) | | | Standard Diffuse (SD) | | |
| Light Level | Lumens | Wattage | Efficacy (LPW) | Lumens | Wattage | Efficacy (LPW) |
| **L1** | 1905 | 21 | 91 | 2037 | 21 | 97 |
| **L2** | 3727 | 48 | 78 | 4068 | 48 | 85 |
| **L3** | 5668 | 74 | 77 | 5814 | 74 | 79 |
| **L4** | 6469 | 85 | 76 | 6522 | 85 | 77 |

### Lumen Adjustment Factor

| Color Temp | 80 CRI | 90 CRI |
|---|---|---|
| 3000K | 0.984 | 0.880 |
| 3500K | 1.000 | 0.875 |
| 4000K | 1.032 | 0.879 |
| 5000K | 1.032 | 0.879 |

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

## CONFIGURATIONS




## STANDARD OPTICS

**PQ** Perforated Square

**QQ** Square in Square

**CC** Circle In Circle

**SD** Standard Diffuse

**PS** Perforated Strip

**SD** Standard Diffuse

**To clean the optics:**
Gently wipe down the optics with a clean, dry cloth to remove any dust and light residues. For heavier smudges, spray clean cloth with mild soap and water solution and gently wipe optics surface.
**Warning:** Hard wiping and abrasive cloths will scratch the optics.
**Do not use** cleaning products containing alcohol or acetone which will damage the optics.

## SPECIFICATIONS

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

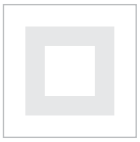
**Housing:** Luminaire body is constructed with 20 gauge aluminum and welded seams.
**Optical System:** The light emitted from the mid-flux LEDs is channeled inside Metalumen's AccuRay® optical plane where a precisely controlled micro dot matrix pattern directs, shapes and distributes the light throughout the material. A high performance optical reflector and diffuser further guide and extract the light with superb efficiency and beam control. Standard optics available. Custom graphics must be ordered through the SCENE PHOTO GRAPHICS Spec Sheet.
**CRI:** 83+ (3500K) (80 minimum) Consult factory for 90+ CRI.
**Lumen Maintenance:** At an ambient operating temperature of 25°C the LED lifetime expectancy ≥ 60 000hrs at L70.
**Finish:** The luminaire housing and associated parts are finished in highly reflective, matte powder coat white paint (91% reflectance) or antimicrobial white paint. For custom finish, consult factory.
**Mounting:** Surface mounting brackets provided.
**Drivers:** Metalumen offers dimming* drivers as a standard on our entire LED product offering at 0-10V. Dimming range is 1%-100%. Power factor is > 90%. Class 2 rating. One driver box per luminaire is provided. Driver is remote.
**RFI Filter:** The noise suppression filter provides exceptional suppression of broadband, common mode, and differential mode noise across a wide frequency range, ensuring stable, interference-free power converter operation. Effective above 30kHz, it adapts dynamically to operational conditions, reducing harmonics and mitigating high-frequency parasitics for optimal performance. When installed, the RFI filter is placed inside a remote driver box.
**MRI RF Shielding:** All wiring entering/exiting the MRI suite shall be routed through RF-filtered penetrations by others. Metalumen is not responsible for RF shielding or system filtering.
**Approvals:** Certified to NRTL safety and IES Recommended testing standards. All components are UL/CSA/QPS recognized or listed, RoHS, LM79, LM80 and LM82 compliant. This product is cULus listed and retains the listing with the remote battery pack.
**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: **Square in Square**
IES File: **SCE-2L35K-22-QQ-L3**
Lumens: **3251** Wattage: **43**
Efficacy: **76 LPW**

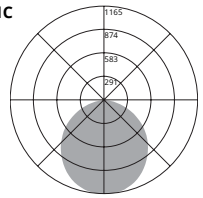
**ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Fixt |
|---|---|---|
| 0-90 | 3251 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 3251 | 100 |

**LUMINANCE DATA (CD/M2)**

| Vertical Angle | Horizontal Angle 0 | 45 | 90 |
|---|---|---|---|
| 45 | 3736 | 3736 | 3736 |
| 55 | 3571 | 3571 | 3571 |
| 65 | 3294 | 3294 | 3294 |
| 75 | 2750 | 2750 | 2750 |
| 85 | 1553 | 1553 | 1553 |

**PHOTOMETRIC CURVE**
100% Down



Optics: **Circle in Circle**
IES File: **SCE-2L35K-22-CC-L3**
Lumens: **3251** Wattage: **43**
Efficacy: **76 LPW**

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Optics: **Perforated Square**
IES File: **SCE-2L35K-22-PQ-L3**
Lumens: **3316** Wattage: **43**
Efficacy: **77 LPW**

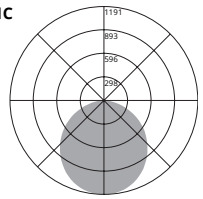
**ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Fixt |
|---|---|---|
| 0-90 | 3316 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 3316 | 100 |

**LUMINANCE DATA (CD/M2)**

| Vertical Angle | Horizontal Angle 0 | 45 | 90 |
|---|---|---|---|
| 45 | 3834 | 3834 | 3834 |
| 55 | 3674 | 3674 | 3674 |
| 65 | 3376 | 3376 | 3376 |
| 75 | 2736 | 2736 | 2736 |
| 85 | 1195 | 1195 | 1195 |

**PHOTOMETRIC CURVE**
100% Down

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Optics: **Standard Diffuse**
IES File: **SCE-2L35K-22-SD-L3**
Lumens: **3581** Wattage: **43**
Efficacy: **83 LPW**

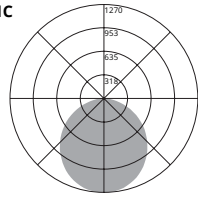
**ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Fixt |
|---|---|---|
| 0-90 | 3581 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 3581 | 100 |

**LUMINANCE DATA (CD/M2)**

| Vertical Angle | Horizontal Angle 0 | 45 | 90 |
|---|---|---|---|
| 45 | 4039 | 4053 | 4068 |
| 55 | 3872 | 3890 | 3908 |
| 65 | 3590 | 3606 | 3639 |
| 75 | 3050 | 3090 | 3117 |
| 85 | 1969 | 1969 | 2009 |

**PHOTOMETRIC CURVE**
100% Down

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Optics: **Perforated Strip**
IES File: **SCE-2L35K-14-PS-L3**
Lumens: **5668** Wattage: **74**
Efficacy: **77 LPW**

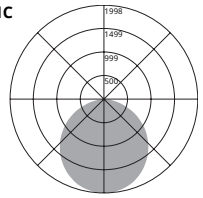
**ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Fixt |
|---|---|---|
| 0-90 | 5668 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 5668 | 100 |

**LUMINANCE DATA (CD/M2)**

| Vertical Angle | Horizontal Angle 0 | 45 | 90 |
|---|---|---|---|
| 45 | 6999 | 6999 | 6999 |
| 55 | 6743 | 6743 | 6743 |
| 65 | 6274 | 6274 | 6274 |
| 75 | 5303 | 5303 | 5303 |
| 85 | 3209 | 3209 | 3209 |

**PHOTOMETRIC CURVE**
100% Down

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Optics: **Standard Diffuse**
IES File: **SCE-2L35K-14-SD-L3**
Lumens: **5814** Wattage: **74**
Efficacy: **79 LPW**

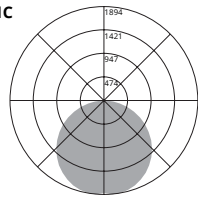
**ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Fixt |
|---|---|---|
| 0-90 | 5814 | 100 |
| 90-180 | 0 | 0 |
| 0-180 | 5814 | 100 |

**LUMINANCE DATA (CD/M2)**

| Vertical Angle | Horizontal Angle 0 | 45 | 90 |
|---|---|---|---|
| 45 | 5180 | 5121 | 4912 |
| 55 | 5142 | 5039 | 4731 |
| 65 | 5084 | 4880 | 4392 |
| 75 | 5005 | 4562 | 3705 |
| 85 | 5614 | 4289 | 2132 |

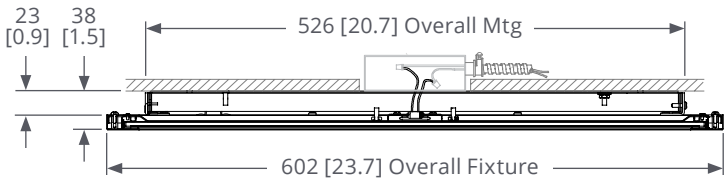
**PHOTOMETRIC CURVE**
100% Down



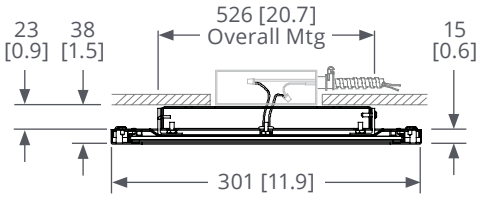

Photometric performance is measured and scaled in accordance with IESNA LM-79.

# DIMENSIONS

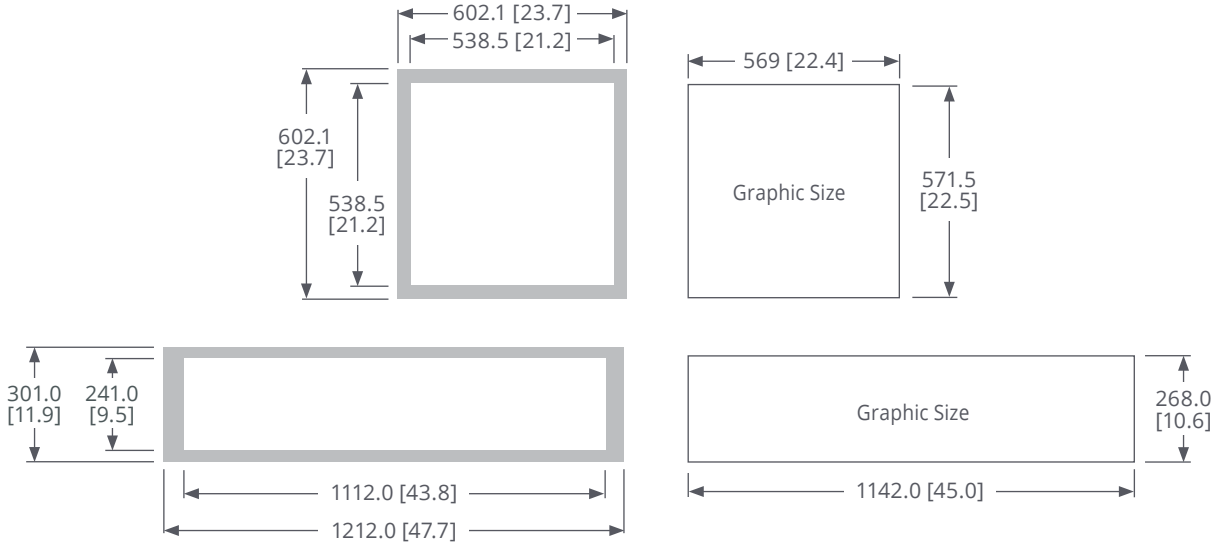
## Body and Lens



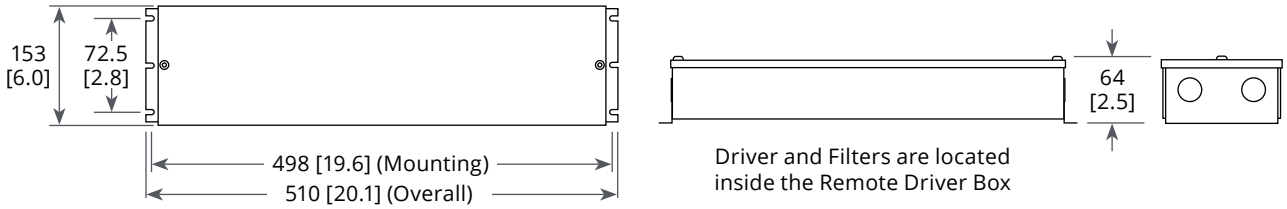

2x2




1x4




## Remote Driver Box

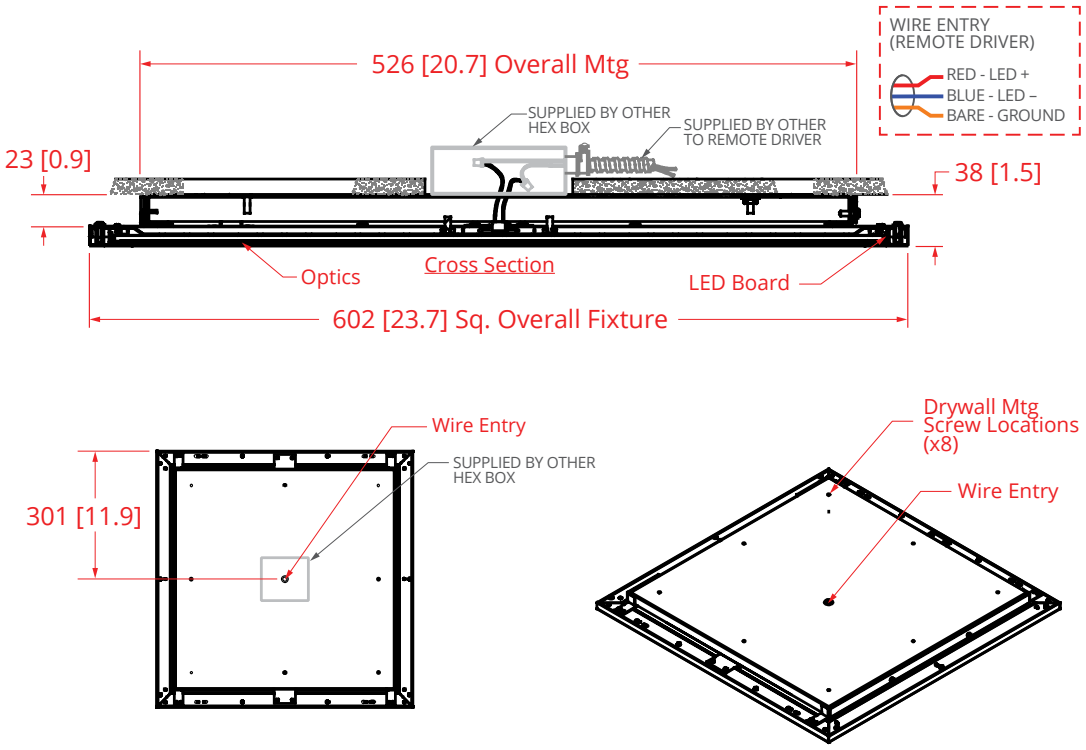


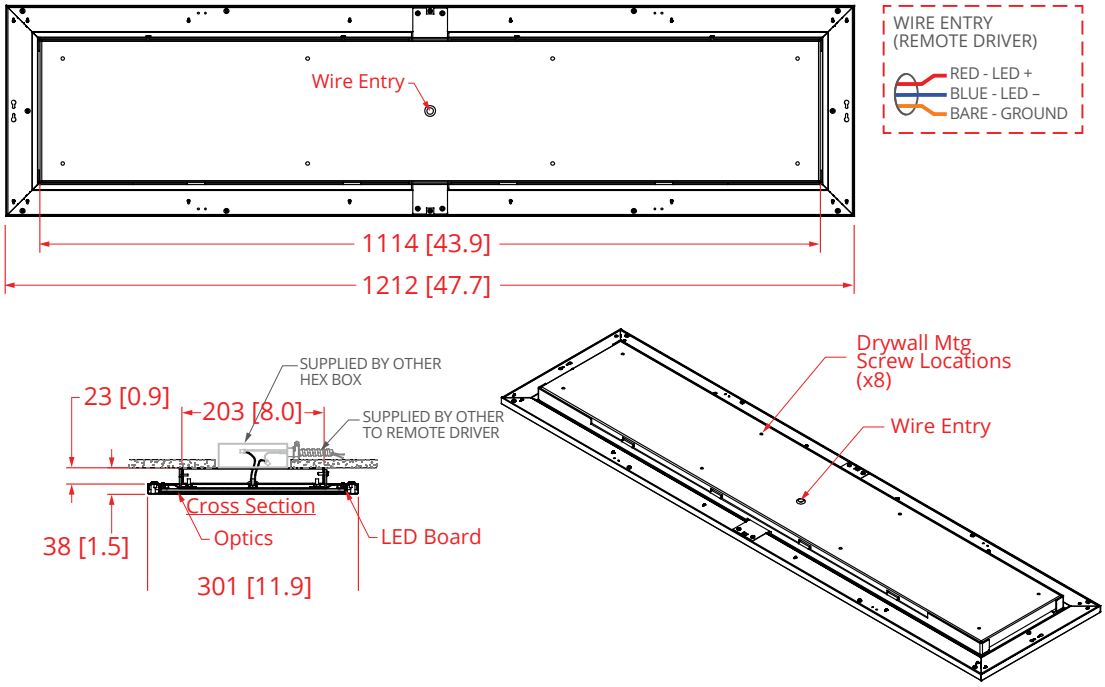

Driver and Filters are located inside the Remote Driver Box

| Remote Driver Mounting Maximum Wire Length | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Light Level | Driver Qty. | Driver Current (mA) | Fixture Length | Distance in feet / Wire Gauge | | | | | |
| | | | | 22 Ga. | 20 Ga. | 18 Ga. | 16 Ga. | 14 Ga. | 12 Ga. |
| **L1** | 1 | 700 | 2x2 | 13 | 42 | 67 | 107 | 170 | 280 |
| **L2** | 1 | 1050 | 2x2 | 8 | 28 | 45 | 71 | 113 | 180 |
| **L3** | 1 | 1200 | 2x2 | 7 | 25 | 39 | 62 | 99 | 157 |
| **L4** | 1 | 1400 | 2x2 | 6 | 21 | 34 | 53 | 85 | 135 |

## CROSS SECTIONS | Surface Remote Driver

### 2x2




### 1x4