## Mega M4S

LED . Surface (Ceiling) . Direct


| CAT \#: |
| :--- |
| PREP BY: |
| DATE: |
| PROJECT: |
| TYPE: |
| NOTES: |
|  |
|  |
|  |
|  |

ORDERING LOGIC
Sample part number: M4S-2L35K-4-NN-W-L31-S-1-NR-C

|  | Optics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M4S | N | N | 1 | S | N |  |
| Series/Model Color Temp | Length Up | Down Finish L | LL/Driver Circuitry M | Mounting Voltage | Control | Drive Loc. End Cap |
| Color Temp | Optics Up | Light Levels (LL) /Driver | Circuitry | Voltage | Driver Location |  |
| $2 \mathrm{~L} 30 \mathrm{~K}=3000 \mathrm{~K}$ | N = None | Fixture Lumens - Direct Light level measured at 3500 K. Add $3 \%$ lumen output for 4000 K or subtract $2 \%$ lumen output for 3000 K . | $1=1$ Circuit | $1=120 \mathrm{~V}$ | $\mathrm{N}=$ None (mounted integral) |  |
| $2 \mathrm{~L} 35 \mathrm{~K}=3500 \mathrm{~K}$ | Optics Down |  | Mounting | $2=277 \mathrm{~V}$ |  | $\mathrm{R}=$ Remote Driver Box |
| $2 \mathrm{~L} 40 \mathrm{~K}=4000 \mathrm{~K}$ | $N=$ None | 0-10V Dimming (Standard) | S = Surface (Ceiling) | g) $3=347 \mathrm{~V}$ |  | End Cap Options |
| $\text { 2LTUN }=\begin{aligned} & \text { Tunable White } \\ & (2700-6500 \mathrm{~K}) \end{aligned}$ | Finish | $\mathrm{L} 1=2436$ |  | $4=\operatorname{UNV}(120-277 \mathrm{~V})$ |  | C $=$ Closed (Standard) |
| Length | B = Black | $\mathrm{L} 2=3100$ |  | Control |  | $0=0$ pen |
| $2=2 \mathrm{ft}$ | SA $=$ Satin Aluminum | $\begin{aligned} \mathrm{L3} & =4456 \\ \mathrm{~L} 4 & =8521 \end{aligned}$ |  | $N=$ None |  | X = Custom (Consult Factory) |
| $4=4 \mathrm{ft}$ | W = White | Based on 4 ft sections. |  |  |  |  |
| $8=8 \mathrm{ft}$ | C = Custom Finish Specify RAL\#: |  |  |  |  |  |
| $\mathbf{R}=\underset{\substack{\text { (Consult factory) }}}{\text { Continuous Rows }}$ |  |  |  |  |  |  |

## SPECIFICATIONS

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

Housing: Rigid 3-piece extruded aluminum body with 22-gauge steel top cover plate. End Caps: Steel powder coated, closed (standard) or semi-open end. Consult factory for custom end caps.
Optical System: Mid-flux LED technology transmits to internal smooth, high performance reflectors. Open luminaire, no lens design.

CRI: $83+(3500 \mathrm{~K})$ ( 80 minimum for all CCT) as a standard on our entire LED product Lumen Maintenance: At an ambient operating offering at 0-10V. Dimming range is down to temperature of $25^{\circ} \mathrm{C}$, our LED system output $1 \%$. Power factor @ full load is $>90 \%$ with a remains useful at $\mathrm{L} 85 \geq 60000 \mathrm{hrs}$.
Finish: Black, satin aluminum, or white powder coated paint finish. For custom finish, contact factory.
Mounting: Surface mounting plate provided.
Drivers: Metalumen offers dimming drivers

Class 2 rating.
Controls: Not available.
Lutron Driver Options: Consult factory for Lutron LED driver options:
LHE H-Series Hi-lume 1\% EcoSystem
LA2 A-Series Hi-lume 1\% 2-wire

L5E 5-Series EcoSystem
Approvals: Certified to NRTL safety and IES Recommendation testing standards. All components are UL/CSA/QPS recognized or listed, RoHS, LM79, LM80 and LM82 compliant.
Environment: Suitable for dry 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.

## LUMINAIRE WATTAGE AND OUTPUT SPECIFICATION

| Light <br> Level | Wattage | Lumens <br> Delivered | Efficacy <br> $(\mathbf{l m} / \mathbf{W})$ |
| :---: | :---: | :---: | :---: |
| L1 | 27.78 | 2436 | 87.7 |
| L2 | 35.42 | 3100 | 87.5 |
| L3 | 48.62 | 4456 | 91.6 |
| L4 | 97.24 | 8521 | 87.6 |


| Lumen Adjustment Factor |  |  |
| :---: | :---: | :---: |
| Color Temp | $\mathbf{8 0}$ CRI | $\mathbf{9 0}$ CRI |
| $\mathbf{3 0 0 0 K}$ | 0.984 | 0.880 |
| $\mathbf{3 5 0 0 K}$ | 1.000 | 0.875 |
| $\mathbf{4 0 0 0} \mathbf{K}$ | 1.032 | 0.879 |

## APPROVALS Signature

## Date

FILE NAME: M4S_LED_S_SPEC_SHEET_20191121

## PHOTOMETRIC DATA - 3500K

| L3 | File Name: | M4S-2L35K-4-NN-L3 |
| :--- | :--- | :--- |
| Luminaire Lumens: | 4456 |  |
|  | Total Watts: | 48 |
|  | Efficacy: | $91.6 \mathrm{~lm} / \mathrm{W}$ |
|  | Optics Up: | None |
|  | Optics Down: | None |

## COEFFICIENTS OF UTILIZATION

Zonal Cavity Method
Effective Floor Cavity Reflectance = . 20

| $\begin{aligned} & \mathrm{RC} \\ & \mathrm{RW} \end{aligned}$ | 80 |  |  |  | 70 |  |  |  | 50 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 |  | 111 | 111 |
| 1 | 108 | 103 | 98 | 94 | 105 | 100 | 96 | 92 | 96 | 92 | 89 |
| 2 | 97 | 88 | 81 | 75 | 94 | 86 | 80 | 74 | 83 | 77 | 72 |
| 3 | 88 | 77 | 68 | 61 | 85 | 75 | 67 | 60 | 72 | 65 | 59 |
| 4 | 80 | 67 | 58 | 51 | 77 | 66 | 57 | 50 | 63 | 55 | 49 |
| 5 | 73 | 59 | 50 | 43 | 71 | 58 | 49 | 43 | 56 | 48 | 42 |
| 6 | 67 | 53 | 43 | 37 | 65 | 52 | 43 | 36 | 50 | 42 | 36 |
| 7 | 62 | 48 | 38 | 32 | 60 | 47 | 38 | 32 | 45 | 37 | 31 |
| 8 | 57 | 43 | 34 | 28 | 56 | 42 | 34 | 28 | 41 | 33 | 28 |
| 9 | 53 | 39 | 31 | 25 | 52 | 39 | 30 | 25 | 37 | 30 | 25 |
| 10 | 50 | 36 | 28 | 22 | 48 | 35 | 27 | 22 | 34 | 27 | 22 |

PHOTOMETRIC CURVE


LUMINANCE DATA (CD/M²)

| Vertical <br> Angle | $\mathbf{0}$ | $\mathbf{3 5}$ Horizontal Angle |  |
| :---: | :---: | :---: | :---: |
| 45 | 6583 | 6614 | 6290 |
| 55 | 6812 | 6009 | 4323 |
| 65 | 7204 | 4065 | 2693 |
| 75 | 7203 | 2157 | 1373 |
| 85 | 4788 | 634 | 339 |

## CANDLE DISTRIBUTION

| Vertical <br> Angle | $\mathbf{0}$ | $\mathbf{2 2 . 5}$ | $\mathbf{4 5}$ | $\mathbf{6 7 . 5}$ | $\mathbf{9 0}$ |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  |  | Horizontal Angle |  |  |  |
| 0 | 861.09 | 861.09 | 861.09 | 861.09 | 861.09 |
| 5 | 888.37 | 935.69 | 933.44 | 976.76 | 964.07 |
| 10 | 863.88 | 920.78 | 1002.59 | 1048.29 | 1045.73 |
| 15 | 879.4 | 946.87 | 1052.51 | 1140.32 | 1174.61 |
| 20 | 868.54 | 973.25 | 1139.57 | 1259.27 | 1283.6 |
| 25 | 860.31 | 1005.23 | 1196.17 | 1316.11 | 1349.22 |
| 30 | 830.85 | 998.01 | 1246.4 | 1349.76 | 1394.51 |
| 35 | 799.31 | 1017.54 | 1249.86 | 1346.61 | 1384.64 |
| 40 | 777.62 | 1026.33 | 1252.78 | 1330.82 | 1356.17 |
| 45 | 742.23 | 1004.97 | 1209.77 | 1286.43 | 1297.29 |
| 50 | 683.07 | 970.46 | 1158.7 | 1170.69 | 1118.28 |
| 55 | 646.12 | 919.2 | 1058.22 | 942.62 | 878.18 |
| 60 | 595.99 | 858.63 | 883.07 | 723.18 | 680.3 |
| 65 | 533.54 | 766.15 | 666.54 | 544 | 522.14 |
| 70 | 450.06 | 622.34 | 471.3 | 394.08 | 368.71 |
| 75 | 367.5 | 452.16 | 316.71 | 262.79 | 245.44 |
| 80 | 258.2 | 264.86 | 186.68 | 155.53 | 146.63 |
| 85 | 126.55 | 120.2 | 79.42 | 61.1 | 53.68 |
| 90 | 33.29 | 37.66 | 21.57 | 8.45 | 2.6 |

