## RDA4L SERIES I O2 Mini Adjustable Recessed Multiples



| \# OF <br> LAMPS | OVERALL |  |  |
| :---: | :---: | :---: | :---: |
| X1 | $15-1 / 2^{\prime \prime}$ | $6-7 / 8^{\prime \prime}$ | $6-3 / 4^{\prime \prime}$ |
| X2 | $20-1 / 4^{\prime \prime}$ | $6-7 / 8^{\prime \prime}$ | $6-3 / 4^{\prime \prime}$ |
| X3 | $24-7 / 8^{\prime \prime}$ | $6-7 / 8^{\prime \prime}$ | $6-3 / 4^{\prime \prime}$ |
| X4 | $29-5 / 8^{\prime \prime}$ | $6-7 / 8^{\prime \prime}$ | $6-3 / 4^{\prime \prime}$ |



| \# OF <br> LAMPS | HOUSING |  | TRIM EDGE $=$ 1-INCH |  | CEILING CUT-OUT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $5-7 / 8^{\prime \prime}$ | $5-1 / 4^{\prime \prime}$ | $6-9 / 16^{\prime \prime}$ | $6-9 / 16^{\prime \prime}$ | $6-1 / 8^{\prime \prime}$ | $5-1 / 2^{\prime \prime}$ |
| X2 | $10-9 / 16^{\prime \prime}$ | $5-1 / 4^{\prime \prime}$ | $11-5 / 16^{\prime \prime}$ | $6-9 / 16^{\prime \prime}$ | $10-7 / 8^{\prime \prime}$ | $5-1 / 2^{\prime \prime}$ |
| X3 | $15-5 / 16^{\prime \prime}$ | $5-1 / 4^{\prime \prime}$ | $16^{\prime \prime}$ | $6-9 / 16^{\prime \prime}$ | $15-5 / 8^{\prime \prime}$ | $5-1 / 2^{\prime \prime}$ |
| X4 | $20 "$ | $5-1 / 4^{\prime \prime}$ | $20-3 / 4^{\prime \prime}$ | $6-9 / 16^{\prime \prime}$ | $20-5 / 16^{\prime \prime}$ | $5-1 / 2^{\prime \prime}$ |


| Measurements are from a single head | RDA4L1 | RDA4L2 |
| :---: | :---: | :---: |
| WATTAGE | 10W | 14W |
| LUMEN OUTPUT ${ }^{1}$ | 1200Lm | 1700Lm |
| BEAM SPREADS | $14^{\circ}$ Spot, $29^{\circ}$ Medium, $37^{\circ}$ Flood |  |
| COLOR TEMPERATURE | 2700K, 3000K, 3500K, 4000K, Crisp White |  |
| CRI | 83 (80min) or 90+ |  |
| INPUT WATTAGE | 10W | 14W |
| INPUT CURRENT (A) 120V/277V | .08/.04 | .12/.05 |
| INPUT VOLTAGE 120V Dimming (0-10V) | 120 V AC, $50 / 60 \mathrm{~Hz}$ |  |
| 277V Dimming (0-10V) | 277 V AC, $50 / 60 \mathrm{~Hz}$ |  |
| 120V Triac/ELV Dimming | 120 V AC, $50 / 60 \mathrm{~Hz}$ |  |
| DRIVER POWER FACTOR | $>0.90$ |  |
| TOTAL HARMONIC DISTORTION (THD) | < $20 \%$ |  |
| DIMMING RANGE Triac, ELV, 0-10V | 1-100\% (Performance varies based on dimmer selection, see Dimming Spec Sheet for details) |  |
| Lutron HiLume ${ }^{\text {® }}$ Dimming | 1-100\% |  |
| LISTINGS | cCSAus Certified to UL Standards; Suitable for Dry or Damp Loc. <br> cCSAus Certified to UL924 Standard for Emergency Lighting when specified with the Emergency Battery Backup Option <br> CP Housings are Chicago Plenum CCEA listed |  |
| WARRANTY | Five (5) year replacement after date of purchase |  |
| SYSTEM RATING | 50,000 Hours @ 70\% Lumen Maintenance |  |

[^0]CATALOG NO.

PROJECT
TYPE

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## ORDERING INFORMATION

## Consult factory for custom configurations, including:

- Different Beams, Color Temperatures, Lumen Packages or Multiple Circuits (2-maximum) are required in a single multiple-head fixture
- Non-standard, custom paint finishes


| LED Series | Color Temp/CRI | Electrical/Dimming | Beam | Lamps | Housing \& Luminaire Finish <br> BLK - Matte Black <br> WHT - Matte White | Trim Finish |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RDA4L1 - 10W | 83 (80min) CRI | 12D1-120V | S - $14^{\circ}$ Spot | X1 - One/ |  | B - Matte Black |
| 1200Lm | 27K - 2700K | TRIAC/ELV | $\text { M - } 29^{\circ} \text { Med. }$ | Square Housing |  | P - Matte White |
| RDA4L2 - 14W 1700Lm | $\begin{array}{ll} 30 K & -3000 K \\ 35 K & -3500 K \end{array}$ | 12D2 - 120V 0-10V | F-37 ${ }^{\circ}$ Flood | X2 - Two/ Linear Housing |  | $\mathbf{N}$ - Trimless |
|  | 40K - 4000K |  |  | X3 - Three/ |  |  |
|  | 90+CRI |  |  | Linear Housing |  |  |
|  | 27KC - 2700K |  |  | X4 - Four/ |  |  |
|  | 30KC - 3000K |  |  | Linear Housing |  |  |
|  | 35KC - 3500K |  |  |  |  |  |
|  | 40KC - 4000K |  |  |  |  |  |
|  | 30KW - 3000K C | Wp White |  |  |  |  |

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## Options

CP ${ }^{1}$ - Chicago Plenum
ER ${ }^{2}$ - Factory Installed
7W/200mA Emergency Battery Backup,
Remote Test Switch
El ${ }^{2}$ - Factory Installed
7W/200mA Emergency Battery Backup, Internal Test Switch in Side Wall of Housing

1. Chicago Plenum is not available for use with Series 2. Cannot be used with the Emergency Battery Backup option.
2. Emergency Battery Backup: For use in new construction applications only - requires above ceiling access. Will only energize one (1) head on a multi-head unit - 400 lumen nominal average for either Series 1 or Series 2.

## ACCESSORY \& OPTIC ORDERING INFORMATION

## MOUNTING ACCESSORIES

Wing Type Commercial Mounting Brackets are included, Hanger Bars ordered separately
HB-24 - 27-Inch Flat Hanger Bars for RL-KIT
HBC-24 - 25-Inch C-Channel Hanger Bars for RL-KIT in Grid Ceiling Construction

## LUMINAIRE ACCESSORIES

NOTE: When a Snoot, Louver or Lens is desired, ensure the same quantity is ordered as the number of lamps on the unit, e.g. a two-lamp unit would require two (2) media to be ordered

FA-44-(B, P) - 1-Inch Snoot/ Accessory Holder
FA-16 60MM ${ }^{3}$ - 2-3/8-Inch Dia. Black Honeycomb Louver

LF16-* 60MM ${ }^{3}$ - 2-3/8-Inch Dia.
Tempered Glass Lenses
3. Requires FA-44 Snoot/Accessory Holder

## Color/Pattern Legend

73 (Spread Lens), -LS (Linear Spread Lens), -SL (Soft Light), -SOL (Solite)
-UV (Optivex UV Filter), -A (Amber), -B (Blue), -CL (Clear), -G (Green),
-LB (Light Blue), -R (Red), -RO (Rose), -Y (Yellow)

## RDA4L SERIES I O2 Mini Adjustable Recessed Multiples

## PRODUCT DETAILS

## Construction

- Non-IC Housing; requires minimum 3-inch clearance around luminaire from insulation material
- Thermal protection provided in case of improper insulation use
- Heavy duty 18 -gauge steel housing; powder coat painted in matte black or matte white
- Housing may be used for trimmed or trimless applications
- Trimmed housings are available with a steel powder coat matte black or matte white trim; steel torsion springs provide secure retention in housing
- Trimless housings allow the ceiling to be finished and painted right to the aperture opening for a clean appearance; trimless frame is steel with a matte white powder coat finish
- Single to four head units available
- Housing weights: $1-$ Head $=5 \mathrm{lbs}$
$2-$ Head $=81 \mathrm{bs}$
3 -Head $=11 \mathrm{lbs}$
$4-$ Head $=13 \mathrm{lbs}$
- Output over voltage, over-current and short circuit protection
- Approved for through circuit wiring; maximum of (8) No. 12 AWG branch circuit conductors (4 in, 4 out)
- Junction Box has nine (9) $1 / 2$-inch pry-outs
- Wire rating: $90^{\circ} \mathrm{C}$, thermally protected
- Wing type Mounting Brackets allow for 3-inch vertical adjustment; brackets accept optional HB-24 Flat Hanger Bars or HBC-24 "C" Channel Hangers.


## Features

- Optics available in $14^{\circ}$ Spot, $29^{\circ}$ Medium and $37^{\circ}$ Flood and can easily be changed in the field
- Optics have been engineered to provide a smooth uniform beam, maximizing output and minimizing glare
- Complete luminaire (Heads, Drivers and Junction Box) can be accessed from below the ceiling
- Lamp heads have a constant tension design for tilt and rotation adjustability; tilt mechanism can be locked into place with a provided allen wrench
- Lamp head features a firm-feel detent pull-down mechanism (2-inch extension) which allows the head to tilt up to $90^{\circ}$; pull-down mechanism can be locked into place with a provided allen wrench
- Lamp heads provide $370^{\circ}$ rotation and $45^{\circ}$ tilt adjustability inside the housing


## Performance Summary

- Single, high lumen output multi-chip LED array available in 10W/ 1200Lm and 14W/1700Lm. Wattage/lumen values are per head
- Select from 2700K, 3000K, 3500K and 4000K; CRI of 83 (80 min.) or high CRI of 90+ available
- 3000K Crisp White LED delivers 90+ color rendering with additional violet wavelengths that enhance white visibility
- Excellent fixture-to-fixture color consistency within a 2-step MacAdam Ellipse Tolerance
- Optional FA-44 Snoot/Accessory Holder accepts up to two (2) LF16 60MM Lenses or FA-16 60MM Black Honeycomb Louver
- All RDA4L Series luminaires are available for dimming and non- dimming applications; for a list of compatible dimmers, refer to the Dimming Specification Sheet
- UL8750 and Class 2 Compliant; RoHS Compliant, US only


# RDA4L SERIES I O2 Mini Adjustable Recessed Multiples 

## PHOTOMETRICS

TEST PERFORMANCE IS FOR A SINGLE HEAD UNIT

## RDA4L230K12D1SX1: Spot Optic

Fixture Delivered Lumens: 1669 Total Watts@120V: 13.6 Lumens Per Watt: 122.7 Center Beam Candle Power: 12594 Beam Distribution: $14^{\circ}$
Spacing Criterion: 0.29 Color Rendering Index (CRI)1: 83 Color Temperature (CCT)²: 3071 K
Designed for 50,000 Hour Lamp Life ${ }^{3}$
LM-63 Test No. G24061102
LM-79 Test No. S24012901


Spectral Power Distribution Chart ${ }^{4}$


## RDA4L230K12D1MX1: Medium Optic

Fixture Delivered Lumens: 1719 Total Watts@120V: 13.6 Lumens Per Watt: 126.4 Center Beam Candle Power: 6619 Beam Distribution: $29^{\circ}$ Spacing Criterion: 0.47 Color Rendering Index (CRI) ${ }^{1}: 83$ Color Temperature (CCT)²: 3071K Designed for 50,000 Hour Lamp Life ${ }^{3}$ LM-63 Test No. G24061103
LM-79 Test No. S24012901

| Intensity Distribution |  |  |
| :---: | :---: | :---: |
| DISTANCE <br> (FT.) | FOOTCANDLES <br> (FC) | BEAM <br> DIAMETER <br> (FT.) |
| $4^{\prime}$ | 413.7 | 2.0 |
| $6^{\prime}$ | 183.9 | 3.1 |
| $8^{\prime}$ | 103.4 | 4.1 |
| $10^{\prime}$ | 66.2 | 5.1 |
| $12^{\prime}$ | 46.0 | 6.1 |
| $14^{\prime}$ | 33.8 | $\mathbf{7 . 1}$ |



Spectral Power Distribution Chart ${ }^{4}$


## RDA4L230K12D1FX1: Flood Optic

Fixture Delivered Lumens: 1728
Total Watts@120V: 13.6
Lumens Per Watt: 127.1
Center Beam Candle Power: 3941
Beam Distribution: $37^{\circ}$
Spacing Criterion: 0.63
Color Rendering Index (CRI) ${ }^{1}$ : 83 Color Temperature (CCT) ${ }^{2}$ : 3071 K
Designed for 50,000 Hour Lamp Life ${ }^{3}$
LM-63 Test No. G24061104
LM-79 Test No. S24012901


Spectral Power Distribution Chart ${ }^{4}$


1. Accuracy of Rendering Colors 2. Color Appearance of Light Source 3. Dependent on Surrounding Temperatures 4. Colors Present within the Light Source

## PHOTOMETRIC MULTIPLICATION FACTORS

Lumen output values fluctuate based on CCT. To estimate lumen output of the various CCT/CRI options, multiply 3000 K ( 80 CRI min) results by the following:

| CCT | CRI |  | CRISP WHITE |
| :---: | :---: | :---: | :---: |
|  | STD CRI | HIGH CRI | 10W |
| 2700 K | 0.95 | 0.84 | N/A |
| 3000 K | N/A | 0.87 | 0.49 |
| 3500 K | 1.02 | 0.90 | $\mathrm{~N} / \mathrm{A}$ |
| 4000 K | 1.04 | 0.92 | $\mathrm{~N} / \mathrm{A}$ |


| OUTPUT |
| :---: |
| 10W |
|  |
| 0.73 |

## RDA4L SERIES | O2 Mini Adjustable Recessed Multiples Dimming Specifications

- Incandescent 120VAC dimmers adjust the light with "forward phase control," where the dimmer "chops" the forward part of the AC wave to deliver less or more power to the light source. No neutral wire connection required.
- Electronic low voltage 120VAC dimmers adjust the light with "reverse phase control," where the dimmer "chops" the back part of the AC wave to deliver less or more power to the light source. Neutral wire connection required.
- 0-10V DC low voltage dimmers operate using two low voltage dimming wires that are separate from the 120V or 277V AC power. The dimmer sends a variable output voltage to the fixture based upon the dimming level. 10 V corresponds to undimmed operation, 5 V to $50 \%$ and so on. Switching on/off is controlled with the line voltage power ( 120 V or 277 V AC ) input to the dimmer and then dimming operation is controlled with the 0-10V DC low voltage wiring connection between the dimmer and the LED driver. The control signal runs on two low voltage control wires (color coded violet and pink/gray).

|  |  |  | RDA4* <br> Dimming Option 12D1, 12D2 or 27D2 |
| :---: | :---: | :---: | :---: |
| Manufacturer | Product | Model | Light Output |
| Leviton | IllumaTech | IPI06-1LZ | 1\%-100\% |
| Leviton | SureSlide | 6631-2 | 1\%-100\% |
| Leviton | Renoir | AWSMT7 | 22\%-100\% |
| Leviton | Vizia | VPE06 | 9\%-100\% |
| Leviton | Trimatron | 6683-IW | 4\%-100\% |
| Leviton | Decora | 6161 | 15\%-100\% |
| Leviton | SureSlide | 6633-P | 0\%-100\% |
| Leviton | IllumaTech | IPE04 | 6\%-100\% |
| Leviton | IllumaTech | IP710-DLX | NA |
| Cooper | Devine | DLC03P | 1\%-100\% |
| Cooper | Skye | SLC03P | 0\%-100\% |
| Cooper | Decorator | DAL06P | 0\%-100\% |
| Pass \& Seymour | Titan | CD4FB-W | NA |
| Synergy |  | ISD BC | NA |
| Watt Stopper | Miro Decorator | DCLV1 | NA |
| Lutron | Ariadni | TGCL-153P | 4\%-100\% |
| Lutron | Ariadni | TG-600P | 11\%-100\% |
| Lutron | Diva | DVCL-153P | 0\%-100\% |
| Lutron | Diva | DV600P | 0\%-100\% |
| Lutron | Diva | DVELV303P | 6\%-100\% |
| Lutron | Diva | DVTV | NA |
| Lutron | Diva | DVSTWH | 8\%-100\% |
| Lutron | Faedra | FAELV500 | 12\%-100\% |
| Lutron | Lumea | LG600P | 5\%-100\% |
| Lutron | Maestro | MAELV600 | 11\%-100\% |
| Lutron | Nova | NFTV | NA |
| Lutron | Nova T | NTFTV | NA |
| Lutron | Skylark | S-603PG | 4\%-96\% |
| Lutron | Skylark | S600P | 1\%-100\% |
| Lutron | Skylark | SELV300P | 7\%-100\% |
| Lutron | Skylark | CT103P | 9\%-100\% |

*277V Triac and ELV Dimming is not available


[^0]:    1. Approximate lumen output based on 3000 K performance; see photometric test results for additional information
