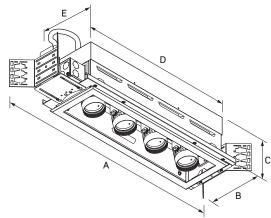


# RDA4L SERIES | 02 Mini Adjustable Recessed Multiples





Ceiling Thickness: 1/2" - 7/8" Wing Bracket Width: 7-3/8"



Pull-down Mechanism

				1						
	OVERALL			LL HOUSING			E = 1-INCH	CEILING CUT-OUT		
# OF LAMPS	LENGTH (A)	WIDTH (B)	HEIGHT (C)	LENGTH (D)	WIDTH (E)	LENGTH (F)	WIDTH (G)	LENGTH	WIDTH	
X1	15-1/2"	6-7/8"	6-3/4"	5-7/8"	5-1/4"	6-9/16"	6-9/16"	6-1/8"	5-1/2"	
X2	20-1/4"	6-7/8"	6-3/4"	10-9/16"	5-1/4"	11-5/16"	6-9/16"	10-7/8"	5-1/2"	
ХЗ	24-7/8"	6-7/8"	6-3/4"	15-5/16"	5-1/4"	16"	6-9/16"	15-5/8"	5-1/2"	
X4	29-5/8"	6-7/8"	6-3/4"	20"	5-1/4"	20-3/4"	6-9/16"	20-5/16"	5-1/2"	

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

<sup>1.</sup> Approximate lumen output based on 3000K performance; see photometric test results for additional information



## RDA4L SERIES | 02 Mini Adjustable Recessed Multiples

#### ORDERING INFORMATION

Example Order: RDA4L127KC12D1SX2BLK-P

#### 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	CCT/CRI	Electrical/Dimming	Beam	Lamps	Housing / Luminaire Finish	Trim Finish	Options
RDA4L1 10W 1200Lm  RDA4L2 14W 1700Lm	83 (80min) CRI 27K 2700K 30K 3000K 35K 3500K 40K 4000K 90+CRI 27KC 2700K 30KC 3000K 35KC 3500K 40KC 4000K	12D1 120V TRIAC/ELV 12D2 120V 0-10V 27D2 277V 0-10V	<b>S</b> 14° Spot <b>M</b> 29° Med. <b>F</b> 37° Flood	X1 One/ Square Housing X2 Two/ Linear Housing X3 Three/ Linear Housing X4 Four/ Linear Housing	BLK Matte Black WHT Matte White	B Matte Black P Matte White N Trimless	CP¹ Chicago Plenum Factory Installed 7W/200mA Emergency Battery Backup: ER² Remote Test Switch El² 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 are ordered separately

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<sup>3</sup> 2-3/8-Inch Dia. Black Honeycomb Louver LF16-\* 60MM<sup>3</sup> 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)

#### **OPTICS**

Optics are interchangeable and can be field replaced

RDA4L-OPTIC-S 14° Beam RDA4L-OPTIC-M 29° Beam RDA4L-OPTIC-F 37° Beam

5500011 2-Inch Diffusion Disc



### RDA4L SERIES | 02 Mini Adjustable Recessed Multiples

#### PRODUCT SPECIFICATIONS

#### 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 coated trim in 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 = 5lbs

2-Head = 8lbs

3-Head = 11lbs

4-Head = 13lbs

- Output over voltage, over-current and short circuit protection
- Approved for through circuit wiring; maximum of eight (8) No. 12 AWG branch circuit conductors (4 in, 4 out)
- Junction Box has nine (9) 1/2-inch pry-outs
- Wire rating: 90°C, thermally protected
- Wing type Mounting Brackets allow for a 3-inch vertical adjustment
- Brackets accept optional HB-24 Flat Hanger Bars or optional HBC-24 C-Channel Hangers

#### **FEATURES**

- Optics available in 14° Spot, 29° Medium and 37° 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°; pull-down mechanism can be locked into place with the provided allen wrench
- Lamp heads provide 370° rotation and 45° 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; with a CRI of 83 (80 min.) or a high CRI of 90+ is available
- 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 | 02 Mini Adjustable Recessed Multiples

#### **PRODUCT SPECIFICATIONS**

#### TEST PERFORMANCE IS FOR A SINGLE HEAD UNIT

#### RDA4L230K12D1SX1: 3000K, 80 CRI, SPOT OPTIC

LM-63 Test No. G24061102; LM-79 Test No. S24012901

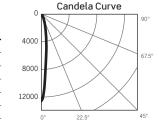
Fixture Delivered Lumens: 1668.7 Total Watts@120V: 13.6 Lumens Per Watt: 122.7 Center Beam Candle Power: 12594

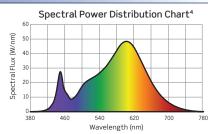
Beam Distribution: 13.9° Spacing Criterion: 0.29

Color Rendering Index (CRI)<sup>1</sup>: 82.9 Color Temperature (CCT)<sup>2</sup>: 3071K Designed for 50,000 Hour Lamp Life<sup>3</sup>

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	787.1	1.0
6 FT	349.8	1.5
8 FT	196.8	2.0
10 FT	125.9	2.4
12 FT	87.5	2.9
14/FT	64.3	3.4





#### RDA4L230K12D1MX1: 3000K, 80 CRI, MEDIUM OPTIC

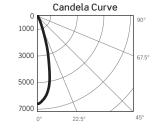
#### LM-63 Test No. G24061103; LM-79 Test No. S24012901

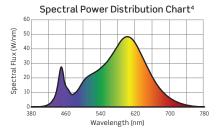
Fixture Delivered Lumens: 1718.7
Total Watts@120V: 13.6
Lumens Per Watt: 126.4
Center Beam Candle Power: 6619
Beam Distribution: 28.6°
Spacing Criterion: 0.47
Color Rendering Index (CRI)<sup>1</sup>: 82.9

Color Rendering Index (CRI)<sup>1</sup>: 82.9 Color Temperature (CCT)<sup>2</sup>: 3071K Designed for 50,000 Hour Lamp Life<sup>3</sup>

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	413.7	2.0
6 FT	183.9	3.1
8 FT	103.4	4.1
10 FT	66.2	5.1
12 FT	46.0	6.1
14/FT	33.8	7,1





#### RDA4L230K12D1FX1: 3000K, 80 CRI, FLOOD OPTIC

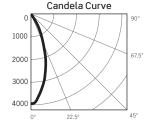
#### LM-63 Test No. G24061104; LM-79 Test No. S24012901

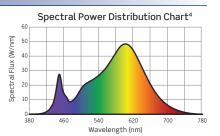
Fixture Delivered Lumens: 1728.0 Total Watts@120V: 13.6 Lumens Per Watt: 127.1 Center Beam Candle Power: 3941 Beam Distribution: 37.2° Spacing Criterion: 0.63

Color Rendering Index (CRI)<sup>1</sup>: 82.9 Color Temperature (CCT)<sup>2</sup>: 3071K Designed for 50,000 Hour Lamp Life<sup>3</sup>

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
4 FT	246.3	2.7
6 FT	109.5	4.0
8 FT	61.6	5.4
10 FT /	39.4	6.7
12 FT	27.4	8.1
14/FT	20.1	9,4





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 Color Temperature, Luminaire Wattage/ Output and Trim Selection. To estimate lumen output of the various CCT/CRI options, multiply 3000K (80 CRI min) results by the following:

CCT MULTIPLIERS							
CCT	STANDARD CRI	HIGH (90+) CRI					
2700K	0.95	0.84					
3000K	1.00	0.87					
3500K	1.02	0.90					
4000K	1.04	0.92					

OUTPUT MULTIPLIERS						
10W/SERIES 1						
0.73						



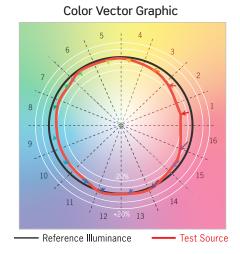
## RDA4L SERIES | 02 Mini Adjustable Recessed Multiples

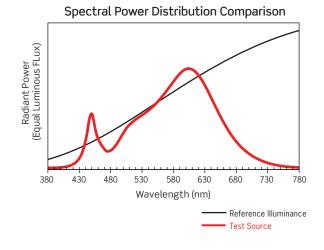
#### TM-30 DATA

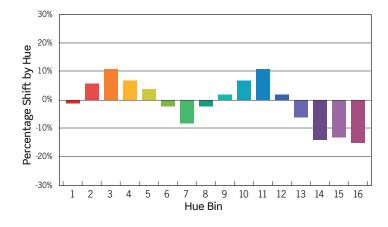
RDA4L230K12D1MX1: 3000K, 80 CRI, MEDIUM OPTIC

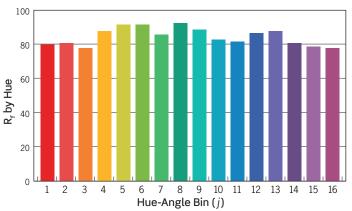
ANSI/IES TM-30-18 Color Rendition Report Test No. S24012901 Colors are for visual orientation purposes only

# $\begin{array}{c|cc} R_{_f} & 86 \\ R_{_g} & 96 \\ CCT(K) & 3071K \\ D_{_{UV}} & -0.0001 \\ u^{_I} & 0.2481 \\ v^{_I} & 0.5199 \\ \end{array}$









HUE BIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HUE SHIFT	-1%	7%	11%	7%	4%	-2%	-7%	-2%	2%	7%	11%	1%	-7%	-15%	-14%	-15%
R <sub>f</sub> VALUE	80	82	79	89	93	93	87	94	90	85	83	87	88	81	79	79



# RDA4L SERIES | 02 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. 10V corresponds to undimmed operation, 5V to 50% and so on. Switching on/off is controlled with the line voltage power (120V or 277V 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).

			<b>RDA4*</b> 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

<sup>1.</sup> Testing was performed with a single fixture connected to dimmer.

Testing has been performed on these dimmers, but this does not imply any warranty of compatibility.
 Dimming performance can be influenced by different loads, as well as variations in dimmer switches within the same model.

<sup>4.</sup> Dimmer maximum load rating with LED may differ from published traditional source dimmer ratings. Consult manufacturer for maximum dimmer information.

<sup>5.</sup> Consult factory for additional dimming information.