

R4AIC SERIES | 4-Inch Round Adjustable Downlight: Insulated Ceiling (IC)/StopAire™ Housing

Side/Interior View

Top View

1/2"

14-1/8"

17-1/16"

19-1/2"

Ceiling Opening: 4-7/8"
Ceiling Thickness: 1/2" - 1-1/4"

For 37W/2600lm and 44W/3000lm LED Series, use the R4ANC Series Specification Sheet

			=3, use the N-ANC Series				
	R4AIC1	R4AIC2	R4AIC3	R4AIC4			
WATTAGE	12W	15W	21W	29W			
LUMEN OUTPUT ¹	800Lm	1100Lm	1600Lm	2100Lm			
BEAM SPREAD	16° Spot / 36° Medium / 5	l° Flood					
COLOR TEMPERATURE	2700K / 3000K / 3500K / 4000K						
CRI	83 (80min) / 90+						
INPUT WATTAGE	12W	15W	21W	29W			
INPUT CURRENT (A) 120V/277V	.08A/.04A	.12A/.06A	.17A/.08A	.23A/.11A			
INPUT VOLTAGE							
Standard Driver (Triac, ELV, 0-10V)	90-305VAC, 50/60Hz						
Lutron Eco-System® Driver	120VAC / 277VAC, 50/60Hz						
eldoLED ECOdrive	120VAC / 277VAC, 50/60Hz						
eldoLED SOLOdrive	120VAC / 277VAC, 50/60Hz						
DRIVER POWER FACTOR	> 0.90						
TOTAL HARMONIC DISTORTION (THD)	< 20%						
LISTINGS	cCSAus Certified using US (UL) and Canadian (CSA) standards; Suitable for Damp Locations						
	cCSAus Certified to UL924 Standard for Emergency Lighting when specified with the Emergency Battery Backup option (-ER)						
cCSAus Damp UL924 IC Rated Air-tight WSEC Listed Location Certified Compliant	Damp UL924 IC Rated Air-tight WSEC Compliant C						
	City of Chicago Environmer	ntal Air (CCEA) Rated; not	for use in Insulated Ceilings	(IC)			
WARRANTY	Five (5) year replacement after date of purchase Emergency Battery Backup option covered by a one (1) year replacement guarantee after date of purchase						
SYSTEM RATING	50,000 Hours @ 70% Lume	· , , , , , , , , , , , , , , , , , , ,					

^{1.} Approximate lumen output based on 3000K performance; see photometric test results for additional information



CATALOG NO.

DATE PROJECT TYPE

R4AIC SERIES | 4-Inch Round Adjustable Downlight: Insulated Ceiling (IC)/StopAire™ Housing

ORDERING INFORMATION

Example Order: R4AIC127KMVDM - ER

For 37W/2600lm and 44W/3000lm LED Series, use the R4ANC Series Specification Sheet

Housing/LED Series R4AIC1 - 12W/800lm R4AIC2 - 15W/1100lm R4AIC3 - 21W/1600lm R4AIC4 - 29W/2100lm

CCT/CRI Dimming 83 (80min) CRI MVD¹ - ¬

27K - 2700K **30K** - 3000K

35K - 3500K

40K - 4000K

27KC - 2700K

30KC - 3000K

35KC - 3500K

40KC - 4000K

90+ CRI

MVD1 - TRIAC, ELV, 0-10V Dimming

MVD4 - Lutron Hi-lume 1% EcoSystem Driver with Soft-on, Fade-to-Black

MVD6 - eldoLED ECOdrive 0-10V 1% Dimming

MVD7 - eldoLED ECOdrive DALI 1% Dimming

MVD8 - eldoLED SOLOdrive 0-10V 0.1% Dimming

MVD9 - eldoLED SOLOdrive DALI 0.1% Dimming

Beam Dist.

S - 16° Spot **M** - 36° Medium **F** - 51° Flood

Options

ER^{2,3} - Factory Installed 7W/200mA Emergency Battery Backup (Remote Test Switch)

- 1. TRIAC and ELV Dimming for 120V only
- 2. Emergency Battery Backup Option cannot be used in Chicago Plenum applications
- 3. 600 Lumen nominal average for Emergency Battery Backup Option

ACCESSORY & REPLACEMENT OPTIC ORDERING INFORMATION

Housing Accessories

Standard Hanger Bars Supplied with Housing

HB-30 - T-Bar Hanger Set

RL-KIT - Commercial Mounting Brackets 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

Replacement Optics

ADJOPT-S - 16° Spot ADJOPT-M - 36° Medium ADJOPT-F - 51° Flood Lenses and Louvers

FA-57 - Black Accessory Holder Clip Accepts Two (2) Media

LA-36-83MM - Black Honeycomb Louver Requires FA-57 Accessory Holder

LF20-** 86MM - Tempered Glass Lenses;

Requires FA-57 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), -DPE (Dichroic Peach), -G (Green), -LB (Light Blue), -R (Red), -RO (Rose), -Y (Yellow)

See "Trims for 4-Inch Adjustable LED Downlights" Specification Sheet for compatible Trim information and details





R4AIC SERIES | 4-Inch Round Adjustable Downlight: Insulated Ceiling (IC)/StopAire™ Housing

PRODUCT DETAILS

Construction

- Specification Grade 4-inch Round 16 Gauge Galvanized Steel New Construction Insulated Ceiling (IC) Air Tight Housing with Die-Cast Aluminum Heat Sink
- Rated for Insulated Ceiling (IC) and StopAire™ applications; can be used in slope ceiling applications
- Can be used in direct contact with insulation materials
- Housing is painted matte black inside and out
- Housing aperture can be adjusted 1/4-inch in each direction post installation to ease fixture alignment
- Quick-connect Module design enables easy installation and removal; can be accessed from above or below the ceiling
- Class 2 Output Drivers are fully accessible from below the ceiling and can be easily removed
- Housing has a removable cover when Module and Driver access from above the ceiling is required
- Adjustment Mechanism is constructed of 16 Gauge Sheet Metal and Die-Cast Aluminum, painted matte black
- White graduation marks are painted every 15° on the adjustment mechanism for consistent aiming; 360° rotational adjustment
- Adjustment mechanism allows 45° of tilt and is fully lockable
- Dual Nailer Hanger Bars are adjustable for 16– and 24–inch center joists (14-1/4– to 24-1/2–inch). Nailer Bars may be extended to rest on T-Bar ceilings; optional clip-on T-Bar Hangers available
- Pre-wired Junction Box with eight (8) 1/2-inch Knockouts and four (4) 3/4-inch Knockouts
- Output over-voltage, over-current and short circuit protection
- Approved for Through Circuit Wiring: max. eight (8) 12 AWG (4in/4out), wiring rated to 90°C

Performance Summary

- 2700K, 3000K, 3500K and 4000K Color Temperatures available
- 80 CRI min., 83 typical; high CRI of 90+ available
- Excellent fixture-to-fixture color consistency with a 3-step MacAdam Ellipse tolerance
- Engineering grade thermoplastic housing with spring steel clip support the glass TIR optics
- 16° Spot, 36° Medium and 51° Flood beam distributions; optics are interchangeable and can be field replaced
- FA-57 Black Accessory Holder Clips can support two (2) media
- All R4A Downlights are available for non-dimming and dimming applications; for compatible Dimmers, refer to the Dimming Specification Sheet
- Specification Grade Trims in several different styles and finishes available
- NOTE: R4A and R4 Series Trims are NOT compatible with each other
- UL8750 and Class 2 Compliant; RoHS Compliant, US only





R4A SERIES | 4-Inch Round Adjustable Downlight Trims

TRIM OPTIONS





C4304 Series

Specification Grade Angle-Cut Reflector with Solite Lens

4-3/8-Inch ID, 5-11/16-Inch OD

Specification Grade Reflector. Wet Location approved.



C4304BF-WHTMatte White Painted
Angle-Cut Baffle



C4304BF Series

Specification Grade Angle-Cut Baffle with Solite Lens

4-3/8-Inch ID, 5-11/16-Inch OD

Specification Grade Baffle. Wet Location approved.

C4304 - Angle-Cut Reflector

CLR¹ - Clear Specular

PL1 - Platinum

WHT - Matte White Painted

 Available with White Painted Flange: add -WPF to end of part number C4304BF - Angle-Cut Baffle

BLK - Matte Black Painted **WHT** - Matte White Painted







C4302 Series

Specification Grade Full Cone Reflector

4-3/8-Inch ID, 5-11/16-Inch OD

Accepts one (1) LA-45 Black Honeycomb Louver or (1) LF20 Tempered Glass Lens. Wet Location approved when used with LF20 Lens.



C4301-WHTMatte White Painted
Full Cone Baffle



C4301 SeriesSpecification Grade
Full Cone Baffle

4-3/8-Inch ID, 5-11/16-Inch OD

Accepts one (1) LA-45 Black Honeycomb Louver or (1) LF20 Tempered Glass Lens. Wet Location approved when used with LF20 Lens.

C4302 - Full Cone Reflector

CLR¹ - Clear Specular

PL¹ - Platinum

WHT - Matte White Painted

 Available with White Painted Flange: add -WPF to end of part number C4301 - Full Cone Baffle

BLK - Matte Black Painted **WHT** - Matte White Painted



C4305-WHTPainted Matte White
Pinhole Trim



C4305 Series *Pinhole Trim*

2-1/4-Inch ID; 5-5/8-Inch OD

Accepts one (1) LA-45 Black Honeycomb Louver or (1) LF20 Tempered Glass Lens. Wet Location approved when used with LF20 Lens.

C4305 - Pinhole Trim

BLK - Matte Black Painted **WHT** - Matte White Painted

ACCESSORIES

LA-45 - 3-25/32-Inch Dia.Black Honeycomb Louver

LF20-* - 3-3/4-Inch Diameter Tempered Glass Lenses and Filters; 1/8-Inch Thick, typ.

*Color/Pattern Legend

-73 (Spread Lens), -LS (Linear Spread Lens), -SL (Soft Light), -SOL (Solite),

 $\textbf{-UV} \ (\text{Optivex UV Filter}), \textbf{-A} \ (\text{Amber}), \textbf{-B} \ (\text{Blue}), \textbf{-CL} \ (\text{Clear}), \textbf{-DPE} \ (\text{Dichroic Peach}),$

-G (Green), -LB (Light Blue), -R (Red), -RO (Rose), -Y (Yellow)

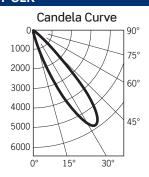


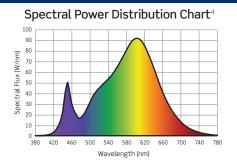
R4A SERIES | 4-Inch Round Adjustable Downlight Photometrics

R4ANC630K12DS / C4304-CLR

Luminaire aimed 30° from Nadir Fixture Delivered Lumens: 877.5 Total Watts@120V: 44.2 Lumens Per Watt: 19.9 Center Beam Candle Power: 11261 Beam Distribution: 15.5° Color Rendering Index (CRI)¹: 82.8 Color Temperature (CCT)²: 3109K

Designed for 50,000 Hour Lamp Life³ LM-63 Test No. G21101202 LM-79 Test No. S21072701



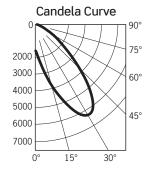


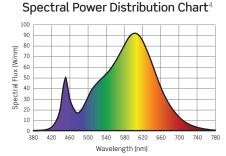
R4ANC630K12DM / C4304-CLR

Luminaire aimed 30° from Nadir Fixture Delivered Lumens: 3129.4 Total Watts@120V: 44.3 Lumens Per Watt: 70.6 Center Beam Candle Power: 7085 Beam Distribution: 36.2° Color Rendering Index (CRI)¹: 82.8

Color Rendering Index (CRI)²: 82.8 Color Temperature (CCT)²: 3109K Designed for 50,000 Hour Lamp Life³

Designed for 50,000 Hour Lamp Life³ LM-63 Test No. G21100701 LM-79 Test No. S21072701

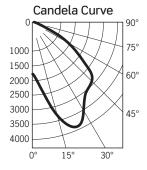


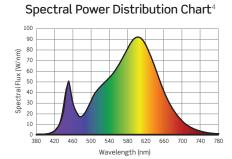


R4ANC630K12DF / C4304-CLR

Luminaire aimed 30° from Nadir Fixture Delivered Lumens: 2943.8 Total Watts@120V: 44.4 Lumens Per Watt: 66.3 Center Beam Candle Power: 3603 Beam Distribution: 51.3° Color Rendering Index (CRI)¹: 82.8 Color Temperature (CCT)²: 3109K

Designed for 50,000 Hour Lamp Life³ LM-63 Test No. G21072003 LM-79 Test No. S21072701





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 these various options, multiply 3000K results by the following:

CC.	T MULTIP	LIERS		OUT	TRIM MULTIPLIERS					
CCT	STD CRI	HIGH CRI	12W/SERIES 1	16W/SERIES 2	21W/SERIES 3	30W/SERIES 4	38W/SERIES 5	C4304-PL	C4305-WHT	C4302-CLR
2700K	0.94	0.70	0.26	0.36	0.50	0.68	0.83	0.94	0.68	1.24
3000K	N/A	0.75								
3500K	1.0	0.81								
4000K	1.0	0.87								





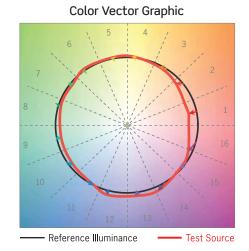
R4A SERIES | 4-Inch Round Adjustable Downlight Photometrics

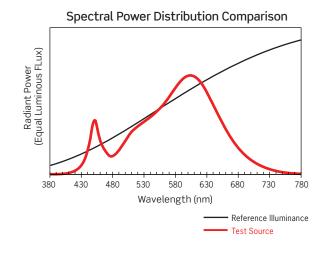
TM-30 DATA: R4ANC630K12DM / C4304-CLR

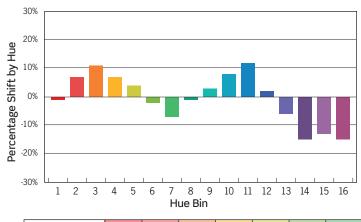
ANSI/IES TM-30-18 Color Rendition Report Test No. S21072701

Colors are for visual orientation purposes only

$\begin{array}{c|c} R_{\rm f} & 85 \\ R_{\rm g} & 96 \\ CCT(K) & 3109K \\ D_{uv} & 0.0015 \\ u^{\rm I} & 0.2463 \\ v^{\rm I} & 0.5212 \\ \end{array}$









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%	- 1%	3%	8%	12%	2%	-6%	- 15%	-13%	-15%
R _f VALUE	80	82	79	89	93	94	87	93	90	83	82	87	89	81	80	79



R4A SERIES | 4-Inch Adjustable Downlights: Dimming Specifications

- Incandescent 120V AC 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 120V AC 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 (2) Low Voltage Dimming Wires that are separate from the 120V or 277V AC Power. The Dimmer sends a Variable Output Voltage to the luminaire 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 Input to the Dimmer (120V or 277V AC). 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 (2) low voltage control wires color coded Purple and Pink/Gray.
- Lutron EcoSystem Drivers provide continuous dimming from 1%-100%. For a complete list of compatible Dimmers and Controls, visit www.lutron.com
- Use DALI approved Controls for dimming eldoLED ECOdrive, 1% Dimming (Dimming Option MVD7) and eldoLED SOLOdrive, 0.1% Dimming (Dimming Option MVD9)

			TRIAC, ELV, 0-10V* (12D, 27D, MVD)	eldoLED ECOdrive 0-10V (12D6, 27D6, MVD6)	eldoLED SOLOdrive 0-10V (12D8, 27D8, MVD8)
Manufacturer	Product	Model	Light Output	Light Output	Light Output
Leviton	IllumaTech	IPI06-1LZ	1%-100%	NA	NA
Leviton	SureSlide	6631-2	1%-100%	NA	NA
Leviton	Vizia	VPE06	9%-100%	NA	NA
Leviton	Trimatron	6683-IW	6%-100%	NA	NA
Leviton	Decora	6161	15%-100%	NA	NA
Leviton	SureSlide	6633-P	1%-100%	NA	NA
Leviton	IllumaTech	IPE04	6%-100%	NA	NA
Leviton	IllumaTech	IP710-DLX	NA	1%-100%	0.1%-100%
Cooper	Devine	DLC03P	1%-100%	NA	NA
Cooper	Skye	SLC03P	0%-100%	NA	NA
Cooper	Decorator	DAL06P	0%-100%	NA	NA
Pass & Seymour	Titan	CD4FB-W	NA	1%-100%	0.1%-100%
Synergy		ISD BC	NA	1%-100%	0.1%-100%
Watt Stopper	Miro Decorator	DCLV1	NA	1%-100%	0.1%-100%
Lutron	Ariadni	TGCL-153P	1%-100%	NA	NA
Lutron	Ariadni	TG-600P	13%-100%	NA	NA
Lutron	Diva	DVCL-153P	1%-100%	NA	NA
Lutron	Diva	DV600P	6%-100%	NA	NA
Lutron	Diva	DVELV303P	6%-100%	NA	NA
Lutron	Diva	DVTV	NA	1%-100%	0.1%-100%
Lutron	Faedra	FAELV500	12%-100%	NA	NA
Lutron	Lumea	LG600P	8%-100%	NA	NA
Lutron	Maestro	MAELV600	16%-100%	NA	NA
Lutron	Nova	NFTV	NA	1%-100%	0.1%-100%
Lutron	Nova T	NTFTV	NA	1%-100%	0.1%-100%
Lutron	Skylark	S-603PG	5%-96%	NA	NA
Lutron	Skylark	S600P	5%-100%	NA	NA
Lutron	Skylark	SELV300P	10%-100%	NA	NA
Lutron	Skylark	CT103P	9%-100%	NA	NA

*277V TRIAC Dimming is not available

NOTES

- 1. Testing was performed with a single luminaire connected to Dimmer.
- 2. Testing has been performed on these Dimmers, but this does not imply any warranty of compatibility.
- 3. Dimming performance can be influenced by different Loads, as well as variations in Dimmer Switches within the same Model.
- 4. Dimmer Maximum Load Rating with LED may differ from published Traditional Source Dimmer Ratings. Consult manufacturer for maximum Dimmer information.
- 5. Consult factory for additional dimming information.