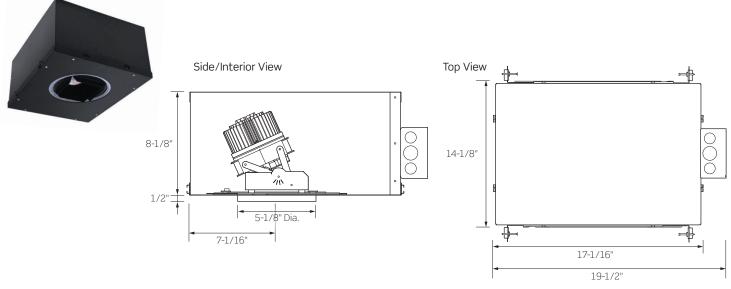


TYPE CATALOG NO.

R4ASQIC SERIES | 4-Inch Square Insulated Ceiling (IC)/StopAire™ Adjustable Downlight





Listed











Certified

ASTM E283

Ceiling Opening: 5-1/4" SQ Ceiling Thickness: 1/2" - 1-1/4"

	R4AIC1	R4AIC2	R4AIC3	R4AIC4			
WATTAGE ¹	12W	15W	21W	29W			
LUMEN OUTPUT ²	900Lm	1200Lm	1700Lm	2400Lm			
COLOR TEMPERATURE	2700K / 3000K / 3500K /	4000K					
CRI	83 (80min)/90+						
BEAM SPREAD	19° Spot / 35° Medium / 5	1° Flood					
DRIVER INPUT WATTAGE	12W	15W	21W	29W			
INPUT CURRENT (A) 120V/277V	.08A/.04A	.12A/.06A	.17A/.08A	.23A/.11A			
INPUT VOLTAGE							
Standard Driver (Phase/0-10V)	90–305VAC, 50/60Hz						
Lutron Eco-System® Driver	120VAC / 277VAC, 50/60Hz						
eldoLED ECOdrive / SOLOdrive	120VAC / 277VAC, 50/60Hz						
DRIVER POWER FACTOR	> 0.90						
TOTAL HARMONIC DISTORTION	< 20%						
LISTINGS	cCSAus Certified to UL924 Backup option (-ER)	(UL) and Canadian (CSA) star Standard for Emergency Lig ate Energy Code (WSEC) for	thting when specified with th	e Emergency Battery			
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% Lumen Maintenance						

 $^{1.} For\ 37W/2900 Im\ and\ 44W/3700 Im\ Non-IC\ Series,\ use\ the\ R4SQANC\ Series\ Specification\ Sheet$ $2.\ Approximate\ lumen\ output\ based\ on\ 3000K\ performance;\ see\ photometric\ test\ results\ for\ additional\ information$



TYPE CATALOG NO.

R4ASQIC SERIES | 4-Inch Square Insulated Ceiling (IC)/StopAire™ Adjustable Downlight

ORDERING INFORMATION

Beam Dist.	Options	
S 19° Spot M 35° Medium F 51° Flood	Emerg	00mA

Example Order: R4ASQIC127KMVDM-ER

- Housing/LED Series¹ Color Temp/CRI **Dimming** R4ASQIC112W/900lm 83 (80min) CRI 90 CRI MVD² Forward/Reverse Phase, 0-10V Dimming 27K 2700K 27KC 2700K R4ASQIC215W/1200lm MVD4 Lutron Hi-lume 1% EcoSystem Driver **30K** 3000K **30KC** 3000K with Soft-on, Fade-to-Black R4ASQIC321W/1700lm 35K 3500K **35KC** 3500K MVD6 eldoLED ECOdrive 0-10V 1% Dimming R4ASQIC429W/2400lm **40K** 4000K **40KC** 4000K MVD7 eldoLED ECOdrive DALI 1% Dimming MVD8 eldoLED SOLOdrive 0-10V 0.1% Dimming MVD9 eldoLED SOLOdrive DALI 0.1% Dimming
- 1. For 37W/2900lm and 44W/3700lm Non-IC Series, use the R4ASQNC Series Specification Sheet
- 2. Forward/Reverse Phase Dimming for 120V only
- 3. Emergency Battery Backup Option cannot be used in Chicago Plenum applications
- 4. 600 Lumen nominal average for Emergency Battery Backup Option

ACCESSORY & REPLACEMENT OPTICS ORDERING INFORMATION

Mounting	g Accessories
Standard I	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

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						

Replacement Optics ADJOPT-S 16° Spot ADJOPT-M 36° Medium ADJOPT-F 51° Flood

See page 3 for compatible Trim information and details

Remote Test Switch

**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)

PRODUCT SPECIFICATIONS

CONSTRUCTION

- Specification Grade 4-inch square 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 direct contact with insulation materials
- Can be used in slope ceiling applications
- Housing is painted matte black inside and out; aperture can be adjusted 1/4-inch in each direction, as well as 11° of angular adjustment (5.5° per side) post installation to ease fixture alignment
- Ouick-connect Module design enables easy installation and removal: can be accessed from above or below the ceiling
- Class 2 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
- Fully lockable Adjustment Mechanism allows 45° of tilt with white graduation marks every 15° for consistent aiming plus 360° for rotational adjustment
- 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 (4-in/4-out), wiring rated to 90°C

PERFORMANCE SUMMARY

- 2700K, 3000K, 3500K and 4000K CCTs; 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 a spring steel clips support the glass optic available in 19° Spot, 35° Medium and 51° Flood beam distributions
- · Optics are interchangeable and can be field replaced
- Spec Grade Trims available in several different styles and finishes; NOTE: R4ASQ and R4SQ Series Trims are NOT compatible with each other
- FA-57 Black Accessory Holder Clips can support two (2) media
- All R4ASQ Downlights 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



DATE PROJECT

TYPE

CATALOG NO.

R4ASQ SERIES | Specification Grade Trims for 4-Inch Square Adjustable Downlights

TRIM OPTIONS







C4304SQ Series

Angle-Cut Reflector with Solite Lens

- 4-1/2-Inch Square Aperture, 5-3/4-Inch Trim Flange
- Includes Clear Glass Lens
- Approved for Wet Locations

Trim

C4304SQ-CLR¹ Clear Specular Reflector
C4304SQ-PL¹ Platinum Reflector

C4304SQ-WHT Matte White Painted Reflector

1. Finish available with White Panted Flange; add "-WPF" to end of part number



C4305SQ Series

Pinhole Trim

• 2-1/4-Inch Square Aperture, 5-5/8-Inch Trim Flange

Trim

C4305SQ-BLK Matte Black Painted Pinhole **C4305SQ-WHT** Matte White Painted Pinhole



TYPE CATALOG NO.

R4ASQ SERIES | 4-Inch Square Adjustable Downlight Photometrics

R4ASQNC630K12DS / C4304-CLR: 3000K, 80 CRI, SPOT BEAM, CLEAR REFLECTOR

LM-63 Test No. G21101204; LM-79 Test No. S21072703

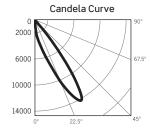
Luminaire aimed 30° from Nadir

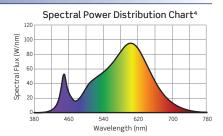
Fixture Delivered Lumens: 2096.0 Total Watts@120V: 44.2 Lumens Per Watt: 47.4

Center Beam Candle Power: 14252

Beam Distribution: 19.4° Spacing Criterion: 1.10

Color Rendering Index (CRI)¹: 83.1 Color Temperature (CCT)²: 3088K Designed for 50,000 Hour Lamp Life³





R4ASQNC630K12DM / C4304-CLR: 3000K, 80 CRI, MEDIUM BEAM, CLEAR REFLECTOR

LM-63 Test No. G21100702 LM-79 Test No. S21072703

Luminaire aimed 30° from Nadir

Fixture Delivered Lumens: 3705.4 Total Watts@120V: 44.4

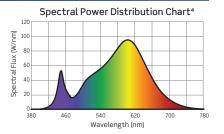
Lumens Per Watt: 83.5

Center Beam Candle Power: 8230

Beam Distribution: 34.6° Spacing Criterion: 1.19

Color Rendering Index (CRI)¹: 83.1 Color Temperature (CCT)²: 3088K Designed for 50,000 Hour Lamp Life³

Candela Curve 0 2000 4000 6000 8000



R4ASQNC630K12DF / C4304-CLR: 3000K, 80 CRI, FLOOD BEAM, CLEAR REFLECTOR

LM-63 Test No. G21080202: LM-79 Test No. S21072703

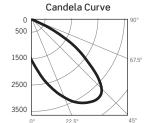
Luminaire aimed 30° from Nadir

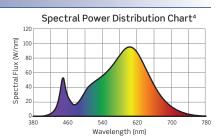
Fixture Delivered Lumens: 3144.3 Total Watts@120V: 44.4 Lumens Per Watt: 70.8

Center Beam Candle Power: 3661 Beam Distribution: 50.8°

Spacing Criterion: 1.56

Color Rendering Index (CRI)¹: 83.1 Color Temperature (CCT)²: 3088K Designed for 50,000 Hour Lamp Life³





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	0.94	0.70						
3000K	1.00	0.75						
3500K	1.02	0.81						
4000K	1.04	0.87						

OUTPUT MULTIPLIERS										
12W/SERIES 1	12W/SERIES 1 16W/SERIES 2 21W/SERIES 3 30W/SERIES 4 38W/SERIE									
0.25	0.34	0.48	0.65	0.79						

TRIM MULTIPLIERS								
C4304SQ-PL	C4304SQ-WHT	C4305SQ-WHT						
0.88	0.89	0.58						



TYPE CATALOG NO.

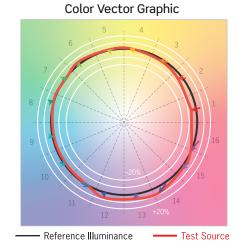
R4ASQ SERIES | 4-Inch Square Adjustable Downlight Photometrics

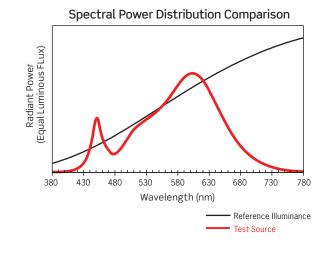
TM-30 DATA: R4ASQNC630K12DM / C4304SQ-CLR

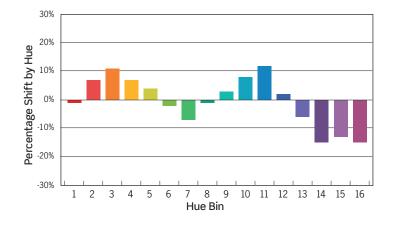
ANSI/IES TM-30-18 Color Rendition Report Test No. S21072703

Colors are for visual orientation purposes only

$R_{\rm f}$	86
R_{g}	96
CCT(K)	3088K
D _{uv}	0.0018
u ^I	0.2469
V ^I	0.5221









HUE BIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HUE SHIFT	-1%	6%	11%	7%	4%	-2%	-7%	-2%	2%	8%	12%	2%	-6%	-14%	-13%	-15%
R _f VALUE	81	82	79	89	93	93	87	94	90	84	82	88	89	82	80	79



TYPE CATALOG NO.

R4ASQ SERIES | 4-Inch Square Adjustable Downlights: Dimming Specifications

			PHASE/0-10V DIMMING (D or MVD Option*)	eldoLED ECOdrive 0-10V (D6 or MVD6 Option)	eldoLED SOLOdrive 0-10V (D8 or MVD8 Option)
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 Phase Dimming is not available

PHASE DIMMING

- 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 DIMMING

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 Violet and Pink/Gray.

EcoSystem/ECOdrive DIMMING

- 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 D7 or MVD7) and eldoLED SOLOdrive, 0.1% Dimming (Dimming Option D9 or MVD9).

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.