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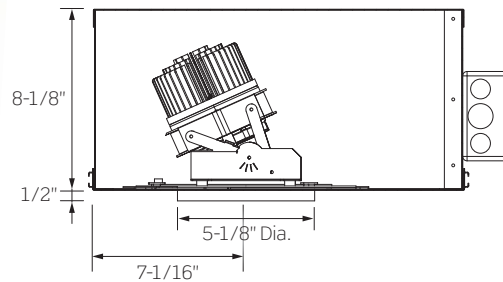
PROJECT

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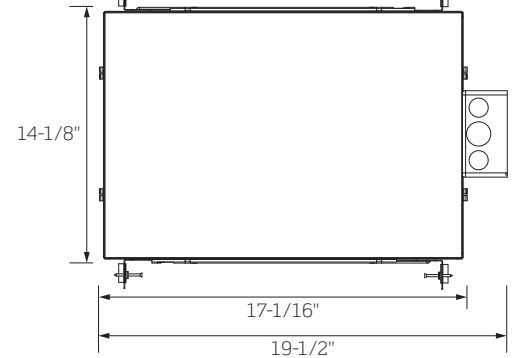
# R4ASQNC SERIES | 4-Inch Square Adjustable Downlight: Non-IC/StopAire™ Housing



Side/Interior View









Top View



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

For the 12W/900lm, 15W/1200lm, 21W/1700lm and 29W/2400lm LED Series, use the R4ASQIC Series Specification Sheet

	R4ASQNC5	R4ASQNC6
WATTAGE	37W	44W
LUMEN OUTPUT <sup>1</sup>	2900Lm	3700Lm
BEAM SPREAD	19° Spot / 35° Medium / 51° Flood	
COLOR TEMPERATURE	2700K / 3000K / 3500K / 4000K	
CRI	83 (80min) / 90+	
INPUT WATTAGE	37W	44W
INPUT CURRENT (A) 120V/277V	.31/.13	.37/.17
INPUT VOLTAGE (DIMMING RANGE)		
Standard Driver (TRIAC, ELV, 0-10V)	120VAC / 277VAC, 50/60Hz (10-100%)	
eldoLED ECOdrive	120VAC / 277VAC, 50/60Hz (1-100%)	
eldoLED SOLOdrive	120VAC / 277VAC, 50/60Hz (0.1-100%)	
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) Conforms to Washington State Energy Code (WSEC) for Low Air Infiltration; tested in accordance with ASTM E283 (2.0 CFM or less) City of Chicago Environmental Air (CCEA) Rated	
	     	
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. Approximate lumen output based on 3000K performance; see photometric test results for additional information

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# R4ASQNC SERIES | 4-Inch Square Adjustable Downlight: Non-IC/StopAire™ Housing

## ORDERING INFORMATION

Example Order:  -

For the 12W/900lm, 15W/1200lm, 21W/1700lm and 29W/2400lm LED Series, use the R4ASQIC Series Specification Sheet

Housing/LED Series	CCT / CRI	Electrical	Dimming	Beam Dist.	Options
<b>R4ASQNC5</b> - 37W 2900lm	83 (80min) CRI <b>27K</b> - 2700K	<b>12</b> - 120V <b>27</b> - 277V	<b>D<sup>1</sup></b> - TRIAC, ELV, 0-10V Dimming	<b>S</b> - 19° Spot	<b>ER<sup>2,3</sup></b> - Factory Installed 7W/200mA Emergency Battery Backup (Remote Test Switch)
<b>R4ASQNC6</b> - 44W 3700lm	<b>30K</b> - 3000K <b>35K</b> - 3500K <b>40K</b> - 4000K 90+ CRI <b>27KC</b> - 2700K <b>30KC</b> - 3000K <b>35KC</b> - 3500K <b>40KC</b> - 4000K		<b>D6</b> - eldoLED ECOdrive 0-10V 1% Dimming <b>D7</b> - eldoLED ECOdrive DALI 1% Dimming <b>D8</b> - eldoLED SOLOdrive 0-10V 0.1% Dimming <b>D9</b> - eldoLED SOLOdrive DALI 0.1% Dimming	<b>M</b> - 35° Medium <b>F</b> - 51° Flood	

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	Replacement Optics	Lenses and Louvers
<i>Standard Hanger Bars Supplied with Housing</i> <b>HB-30</b> - T-Bar Hanger Set <b>RL-KIT</b> - Commercial Mounting Brackets <b>HB-24</b> - 27-Inch Flat Hanger Bars for RL-KIT <b>HBC-24</b> - 25-Inch C-Channel Hanger Bars for RL-KIT in Grid Ceiling Construction	<b>ADJOPT-S</b> - 16° Spot <b>ADJOPT-M</b> - 36° Medium <b>ADJOPT-F</b> - 51° Flood	<b>FA-57</b> - Black Accessory Holder Clip Accepts Two (2) Media <b>LA-36-83MM</b> - Black Honeycomb Louver Requires FA-57 Accessory Holder <b>LF20-** 86MM</b> - 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

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## R4ASQNC SERIES | 4-Inch Square Adjustable Downlight: Non-IC/StopAire™ Housing

### PRODUCT DETAILS

#### Construction

- Specification Grade 4–inch Square 16 Gauge Galvanized Steel New Construction Housing with Die-Cast Aluminum Heat Sink
- Requires minimum 3–inch clearance around Housing from insulation material; thermal protection provided in case of improper insulation use
- Can be used in sloped ceiling applications
- 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
- Fully lockable adjustment mechanism allows 45° of tilt with white graduation marks every 15° for consistent aiming, plus 360° for rotational adjustment.
- Housing 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
- 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 seven (7) 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

- Select from 2700K, 3000K, 3500K and 4000K Color Temperatures
- 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
- 19° Spot, 35° Medium and 51° Flood beam distributions; optics are interchangeable and can be field replaced
- FA-57 Black Accessory Holder Clip 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:** R4ASQ and R4SQ Series Trims are **NOT** compatible with each other
- UL8750 and Class 2 Compliant; RoHS Compliant, US only

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# R4ASQ SERIES | 4-Inch Square Adjustable Downlight Trims

## TRIM OPTIONS



**C4304SQ-CLR**  
Clear Specular  
Angle-Cut Reflector



**C4304SQ Series**  
*Specification Grade Angle-Cut Reflector with Solite Lens*

4-1/2-Inch Sq. Aperture  
5-3/4-Inch Trim Flange

Specification Grade Reflector. Wet Location approved.



**C4305SQ-BLK**  
Matte Black Painted  
Pinhole Trim

**C4305SQ Series**  
*Pinhole Trim*

2-1/4-Inch Sq. Aperture  
5-5/8-Inch Trim Flange

**C4304SQ** - Angle-Cut Reflector

**CLR** - Clear Specular  
**PL** - Platinum  
**WHT** - Matte White Painted

**C4305SQ** - Pinhole Trim

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

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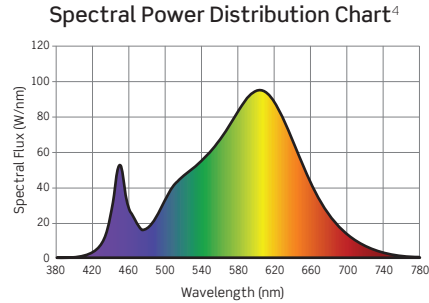
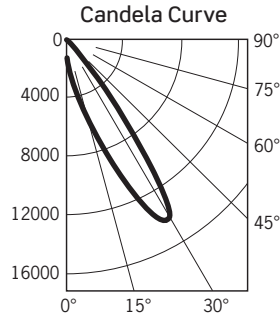
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# R4ASQ SERIES | 4-In. Square Adjustable Downlight Photometrics

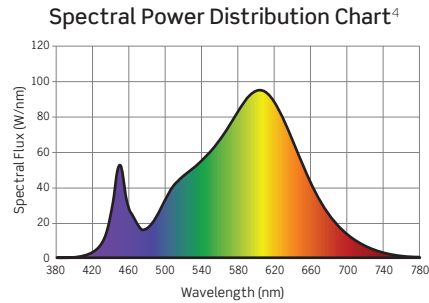
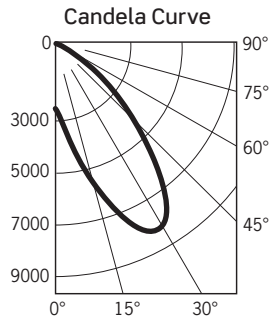
## R4ASQNC630K12DS / C4304SQ-CLR

**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°  
 Color Rendering Index (CRI)<sup>1</sup>: 83.1  
 Color Temperature (CCT)<sup>2</sup>: 3088K  
 Designed for 50,000 Hour Lamp Life<sup>3</sup>  
 LM-63 Test No. G21101204  
 LM-79 Test No. S21072703



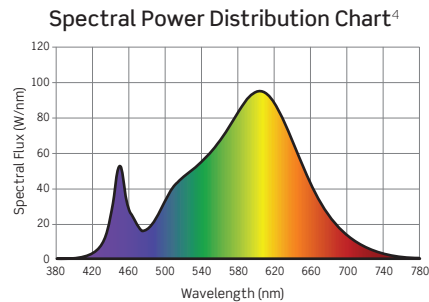
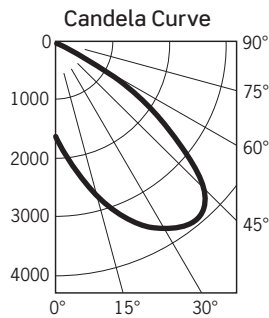
## R4ASQNC630K12DM / C4304SQ-CLR

**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°  
 Color Rendering Index (CRI)<sup>1</sup>: 83.1  
 Color Temperature (CCT)<sup>2</sup>: 3088K  
 Designed for 50,000 Hour Lamp Life<sup>3</sup>  
 LM-63 Test No. G21100702  
 LM-79 Test No. S21072703



## R4ASQNC630K12DF / C4304SQ-CLR

**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°  
 Color Rendering Index (CRI)<sup>1</sup>: 83.1  
 Color Temperature (CCT)<sup>2</sup>: 3088K  
 Designed for 50,000 Hour Lamp Life<sup>3</sup>  
 LM-63 Test No. G21080202  
 LM-79 Test No. S21072703



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:

CCT MULTIPLIERS			OUTPUT MULTIPLIERS					TRIM MULTIPLIERS		
CCT	STD CRI	HIGH CRI	12W/SERIES 1	15W/SERIES 2	21W/SERIES 3	29W/SERIES 4	38W/SERIES 5	C4304-PL	C4305-WHT	C4302-CLR
2700K	0.94	0.70	0.25	0.34	0.48	0.65	0.79	0.89	0.88	0.58
3000K	N/A	0.75								
3500K	1.0	0.81								
4000K	1.0	0.87								

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# R4ASQ SERIES | 4-In. Square Adjustable Downlight Photometrics

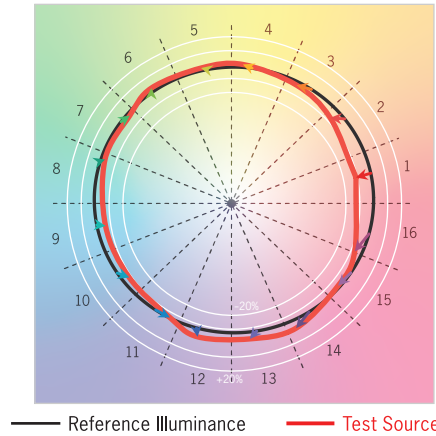
## TM-30 DATA: R4ASQNC630K12DM / C4304SQ-CLR

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

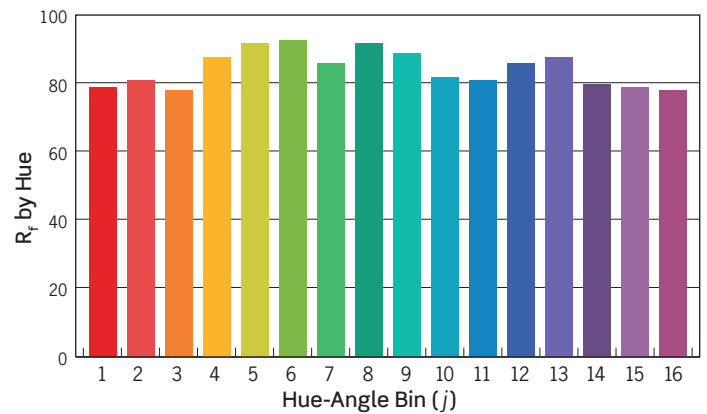
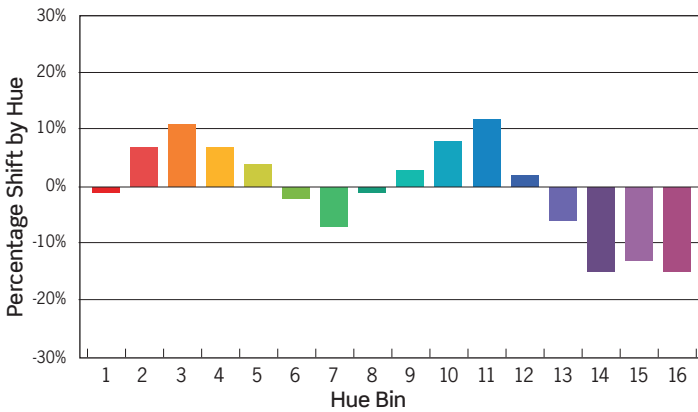
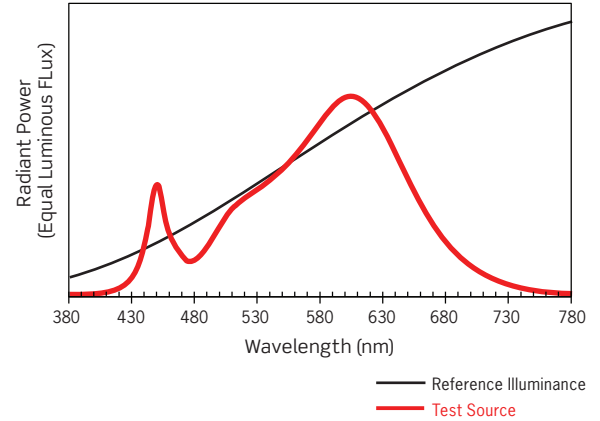
Colors are for visual orientation purposes only

$R_f$	86
$R_g$	96
CCT(K)	3088K
$D_{uv}$	0.0018
$u^I$	0.2469
$v^I$	0.5221

Color Vector Graphic



Spectral Power Distribution Comparison



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 <sub>f</sub> VALUE	81	82	79	89	93	93	87	94	90	84	82	88	89	82	80	79

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# R4ASQ SERIES | 4-Inch Square Adjustable Downlights: 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 Purple and Pink/Grey).
- Lutron EcoSystem Drivers provide continuous dimming from 1%-100%. For a complete list of compatible dimmers and controls, please visit [www.lutron.com](http://www.lutron.com)
- Use DALI approved controls for dimming eldoLED MVD7 (1%-100%) and MVD9 (0.1%-100%) options.

Manufacturer	Product	Model	TRIAC, ELV, 0-10V*	eldoLED ECOdrive 0-10V	eldoLED SOLOdrive 0-10V
			(12D, 27D, MVD)	(12D6, 27D6, MVD6)	(12D8, 27D8, MVD8)
			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	Faetra	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.