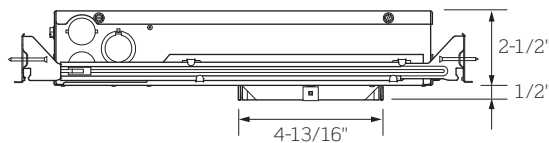


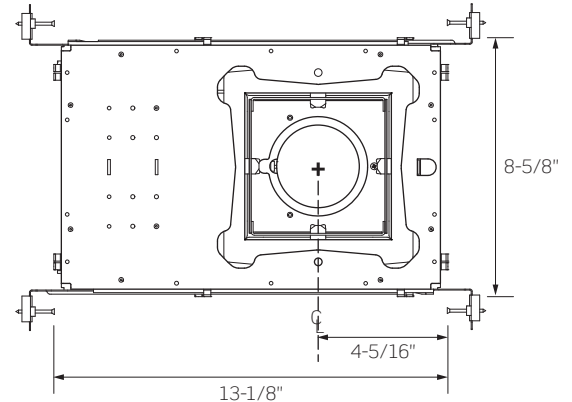
R4SSQIC SERIES | 4-Inch Square Shallow Insulated Ceiling (IC)/StopAir™ Downlight



Side View



Bottom View



cCSAus
Listed



Damp
Location



IC Rated



Air-tight
Certified



ENERGY STAR®
Certified



T24
Compliant



ASTM
E283



CCEA
Approved

Ceiling Opening: 4-7/8-Inches Square
Ceiling Thickness: 1/2- to 1-1/2-Inches

	R4SSQIC1	R4SSQIC2	R4SSQIC3
WATTAGE	9W	13W	19W
LUMEN OUTPUT ¹	1100Lm	1600Lm	2200Lm
BEAM SPREAD	27° Medium, 45° Flood, 61° Wide Flood		
COLOR TEMPERATURE	2700K / 3000K / 3500K / 4000K		
CRI	83 (80min) / 90+		
DRIVER INPUT WATTAGE	9W	13W	19W
INPUT CURRENT (A) 120V/277V	.08/.04	.12/.06	.17/.08
INPUT VOLTAGE			
120V – 277V Standard Driver	90 – 305VAC, 50/60Hz		
Lutron Eco-System® Driver	120 – 277VAC, 50/60Hz		
eldoLED ECodrive / SOLOdrive	120 – 277VAC, 50/60Hz		
DRIVER POWER FACTOR	> 0.90		
TOTAL HARMONIC DISTORTION	< 20%		
LISTINGS	cCSAus Certified to UL Standards; Suitable for Damp Locations ENERGY STAR® Certified Can be used to comply with Title 24 Part 6 JA8 High Efficacy LED Light Source Requirements 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; not for use in Insulated Ceilings (IC)		
WARRANTY	Five (5) year replacement 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

R4SSQIC SERIES | 4-Inch Square Shallow Insulated Ceiling (IC)/StopAire™ Downlight

ORDERING INFORMATION

Example Order: R4SSQIC130KMVD4W

Housing/LED Series	Color Temp/CRI	Dimming ¹	Beam Distribution
R4SSQIC1 9W / 1100lm	83 (80min) CRI 90 CRI	MVD² 120 - 277V Forward/Reverse Phase, 0-10V Dimming	M 27° Medium
R4SSQIC2 13W / 1600lm	27K 2700K 27KC 2700K	MVD4 120 - 277V Lutron Hi-Lume 1% EcoSystem LED Driver with Soft-On, Fade-to-Black Dimming	F 45° Flood
R4SSQIC3 19W / 2200lm	30K 3000K 30KC 3000K	MVD6³ 120 - 277V eldoLED ECOdrive 0-10V, 1% Dimming	W 61° Wide Flood
	35K 3500K 35KC 3500K	MVD7³ 120 - 277V eldoLED ECOdrive DALI, 1% Dimming	
	40K 4000K 40KC 4000K	MVD8³ 120 - 277V eldoLED SOLOdrive 0-10V, 0.1% Dimming	
		MVD9³ 120 - 277V eldoLED SOLOdrive DALI, 0.1% Dimming	
		MDMX^{3,4} 120 - 277V eldoLED POWERdrive DMX, 0.0% Dimming	

1. Consult Factory for 347V Option
2. Phase Dimming available for 120V only
3. eldoLED Drivers are programmed for linear curve dimming as standard; for logarithmic curve dimming, consult Factory
4. Verify DMX Driver and Control System compatibility with Factory prior to ordering

ACCESSORY ORDERING INFORMATION

Mounting Accessories	Replacement Optics
<i>Standard Hanger Bars Supplied with Housing</i>	R4SOPTM 27° Medium Beam Optic
HB-30 T-Bar Hanger Set	R4SOPTF 45° Flood Beam Optic
	R4SOPTW 61° Wide Flood Beam Optic

PRODUCT SPECIFICATIONS

CONSTRUCTION

- Specification Grade 4-inch square 16 gauge Galvanized Steel Insulated Ceiling (IC)/StopAire™ Shallow Housing with Die-Cast Aluminum Heat Sink
- Fits into a 2-1/2-inch plenum space
- For use in applications with direct contact with insulation materials
- Mounting frame features a post installation mechanism that allows 1/4-inch adjustment in all directions, as well as 5° of rotation adjustment, to ensure proper alignment
- Quick-connect Light Engine for easy installation and removal
- Drivers are fully accessible from below the ceiling; can be easily removed
- 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 six (6) 1/2-inch Knockouts and one (1) 1/2- x 3/4-inch concentric Knockout
- Multivolt 120-277V is standard
- Output over-voltage, over-current and short circuit protection
- Approved for Through Circuit Wiring: max. four (4) 12 AWG (2-in/2-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
- Precision Optics produce 27° Medium, 45° Flood, and 61° Wide Flood beam distributions; optics are interchangeable and can be field replaced
- All R4SSQ Downlights are available for non-dimming and dimming applications; for compatible Dimmers, refer to the Dimming Specification Sheet
- Flanged or Trimless Specification Grade Trim options available
- Trimless options require use of a Mud Frame (MF4SSQ, ordered separately) for securing downlight and trim into a 1/2- to 1-inch ceiling thickness only
- UL8750 and Class 2 Compliant; RoHS Compliant, US only

R4SSQ SERIES | Trims for 4-Inch Square Shallow Downlights

TRIMMED OPTIONS



C4322SSQDC-WHT



C4322SSQDC Series

Die-Cast Shallow Reflector

- 4-5/16-Inch Square Aperture, 5-11/16-Inch Square Trim Flange
- Specification Grade Die-Cast Reflector
- Includes Solite Lens
- Wet Location approved
- White Painted Flange available for -SL finish; add "-WPF" to the end of the part number

Trim

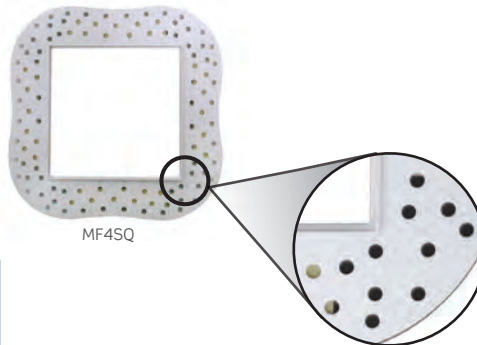
- C4322SSQDC-SL¹** Satin Silver Painted Die-Cast Reflector
C4322SSQDC-WHT Matte White Painted Die-Cast Reflector
 1. Finish available with White Painted Flange; add "-WPF" to end of part number

MUD FRAME

NOTE: The Mud Frame is required for trimless applications

Mud Frame

- Adhesive backed Thermoplastic Mesh Frame
- 8-1/2-Inch Square
- Required for trimless applications

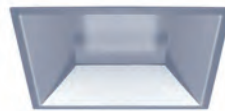


MF4SQ

Mud Frame

MF4SSQ

TRIMLESS OPTIONS



CN4322SSQDC-SL



CN4322SSQDC Series

Specification Grade Die-Cast Trimless Reflector

- 4-5/16-Inch Square Aperture
- Wet Location approved
- For use with 1/2- to 5/8-inch ceiling thicknesses only

Trim

- CN4322SSQDC-SL** Satin Silver Painted Trimless Reflector
CN4322SSQDC-WHT Matte White Painted Trimless Reflector

R4SSQ SERIES | 4-Inch Square Shallow Downlight Photometrics

R4SSQNC430KMVDM / C4322SSQDC-SL: 3000K, 83 CRI, MEDIUM BEAM, PAINTED SILVER REFLECTOR

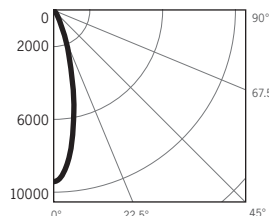
LM-63 Test No. G21072306; LM-79 Test No. S21072901

Fixture Delivered Lumens: 2818.7
Total Watts@120V: 28.5
Lumens Per Watt: 98.9
Center Beam Candle Power: 9402
Beam Distribution: 26.6°
Spacing Criterion: 0.44
Color Rendering Index (CRI)¹: 83.6
Color Temperature (CCT)²: 3023K
Designed for 50,000 Hour Lamp Life³

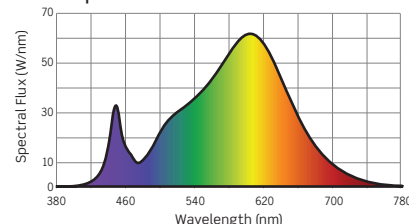
Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
6 FT	261.2	2.8
8 FT	146.9	3.8
10 FT	94.0	4.7
12 FT	65.3	5.7
14 FT	48.0	6.6
16 FT	36.7	7.6

Candela Curve



Spectral Power Distribution Chart⁴



R4SSQNC430KMVDF / C4322SSQDC-SL: 3000K, 83 CRI, FLOOD BEAM, PAINTED SILVER REFLECTOR

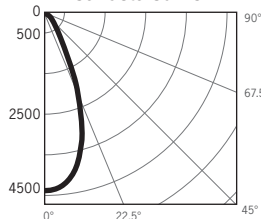
LM-63 Test No. G21072302; LM-79 Test No. S21072901

Fixture Delivered Lumens: 2837.2
Total Watts@120V: 28.4
Lumens Per Watt: 99.9
Center Beam Candle Power: 4303
Beam Distribution: 44.5°
Spacing Criterion: 0.73
Color Rendering Index (CRI)¹: 83.6
Color Temperature (CCT)²: 3023K
Designed for 50,000 Hour Lamp Life³

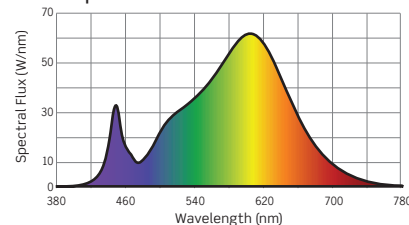
Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
6 FT	119.5	4.9
8 FT	67.2	6.6
10 FT	43.0	8.2
12 FT	29.9	9.8
14 FT	22.0	11.5
16 FT	16.8	13.1

Candela Curve



Spectral Power Distribution Chart⁴



R4SSQNC430KMVDW / C4322SSQDC-SL: 3000K, 83 CRI, WIDE FLOOD BEAM, PAINTED SILVER REFLECTOR

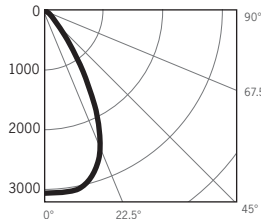
LM-63 Test No. G21072307; LM-79 Test No. S21072901

Fixture Delivered Lumens: 3017.7
Total Watts@120V: 28.5
Lumens Per Watt: 105.9
Center Beam Candle Power: 3004
Beam Distribution: 60.4°
Spacing Criterion: 0.97
Color Rendering Index (CRI)¹: 83.6
Color Temperature (CCT)²: 3023K
Designed for 50,000 Hour Lamp Life³

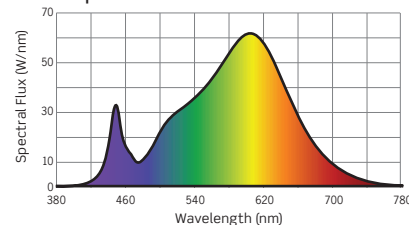
Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIA. (FT.)
6 FT	83.4	7.0
8 FT	46.9	9.3
10 FT	30.0	11.6
12 FT	20.9	14.0
14 FT	15.3	16.3
16 FT	11.7	18.6

Candela Curve



Spectral Power Distribution Chart⁴



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		
9W/SERIES 1	13W/SERIES 2	19W/SERIES 3
0.38	0.54	0.73

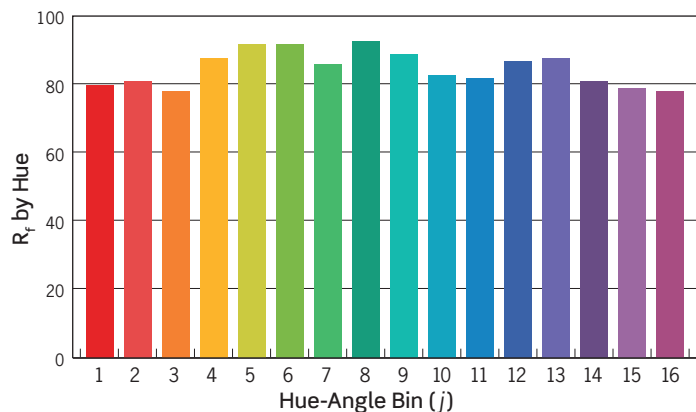
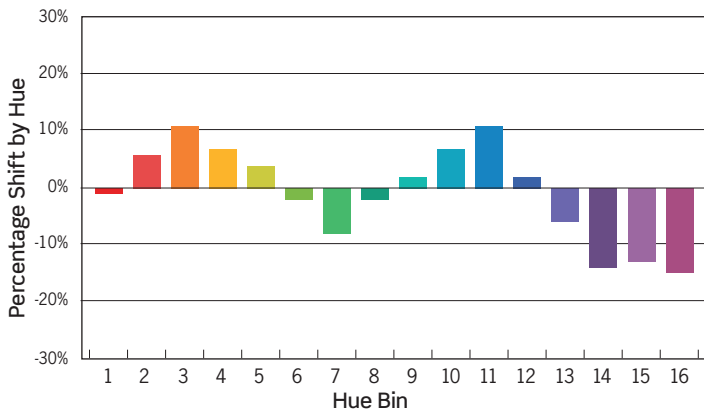
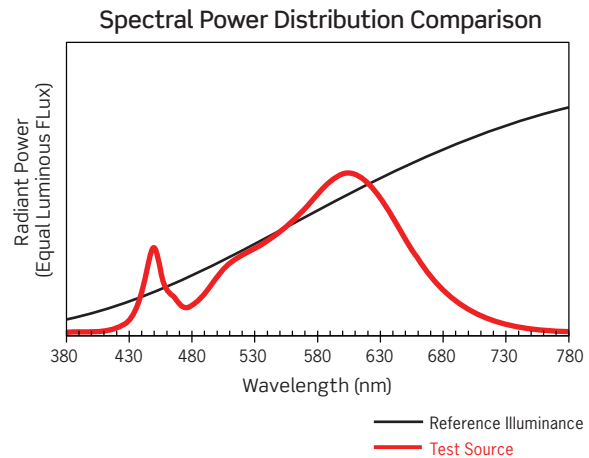
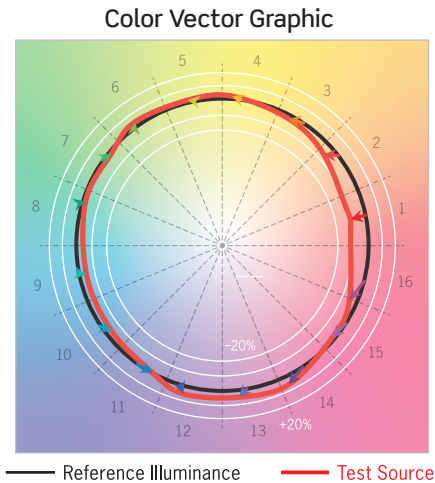
TRIM MULTIPLIERS
C4322S-WHT
1.04

R4SSQ SERIES
| 4-Inch Square Shallow Downlight Photometrics

TM-30 DATA: R4SSQNC430KMVDF / C4322SSQDC-SL

ANSI/IES TM-30-18 Color Rendition Report Test No. S21072901
Colors are for visual orientation purposes only

R_f	86
R_g	96
CCT(K)	3023K
D_{uv}	0.0016
u^I	0.2492
v^I	0.5231



HUE BIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
HUE SHIFT	-1%	6%	10%	7%	4%	-2%	-7%	-2%	2%	8%	12%	3%	-6%	-14%	-13%	-15%
R _f VALUE	81	83	80	90	93	94	88	94	90	84	83	86	89	81	80	79

R4SSQ SERIES | 4-Inch Square Shallow Downlights: Dimming Specifications

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

*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 MVD7) and eldoLED SOLOdrive, 0.1% Dimming (Dimming Option MVD9).

NOTES

- Testing was performed with a single luminaire 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.
- Dimmer Maximum Load Rating with LED may differ from published Traditional Source Dimmer Ratings. Consult manufacturer for maximum Dimmer information.
- Consult factory for additional dimming information.