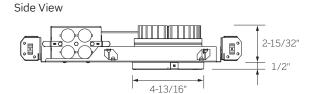
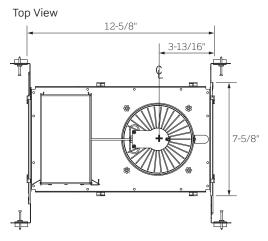


## R4SNC SERIES | 4-In. Shallow New Construction Downlight Housing





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



	R4SNC1	R4SNC2	R4SNC3	R4SNC4		
WATTAGE	9W	13W	19W	28W		
LUMEN OUTPUT <sup>1</sup>	1100Lm	1600Lm	2200Lm	3000Lm		
BEAM SPREAD	27° Medium, 45° Flood, 6	1° Wide Flood				
COLOR TEMPERATURE	2700K / 3000K / 3500K ,	/ 4000K				
CRI	83 (80min) / 90+					
INPUT WATTAGE	9W	13W	19W	28W		
INPUT CURRENT (A) 120V/277V	.08/.04	.12/.06	.17/.08	.23/.11		
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 (THD)	< 20%					
CCSAus Certified to UL Standards; Suitable for Damp Locations  ENERGY STAR® Certified; Lutron and eldoLED Dimming Options are not ENERGY STAR® Certified;  Can be used to comply with the 2016 Title 24 Part 6 JA8 High Efficacy LED Light Source Requi						
WARRANTY	WARRANTY Five (5) year replacement after date of purchase					
SYSTEM RATING	50,000 Hours @ 70% Lum	nen Maintenance				

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



CATALOG NO.

DATE PROJECT TYPE

## R4SNC SERIES | 4-In. Shallow New Construction Downlight Housing

#### **ORDERING INFORMATION**

Example Order:

R4SNC130KMVD4W

Housing/LED Series	Color Temp/CRI	Dimming <sup>1</sup>	Beam Distribution
<b>R4SNC1</b> - 9W/1100lm <b>R4SNC2</b> - 13W/1600lm <b>R4SNC3</b> - 19W/2200lm <b>R4SNC4</b> - 28W/3000lm	83 (80min) CRI 27K - 2700K 30K - 3000K 35K - 3500K	<ul> <li>MVD<sup>2</sup> - 120 - 277V TRIAC, ELV, 0-10V Dimming</li> <li>MVD4 - 120 - 277V Lutron Hi-Lume 1% EcoSystem LED Driver with Soft-On, Fade-to-Black Dimming</li> <li>MVD6<sup>3</sup> - 120 - 277V eldoLED ECOdrive 0-10V, 1% Dimming</li> </ul>	<ul><li>M - 27° Medium</li><li>F - 45° Flood</li><li>W - 61° Wide Flood</li></ul>
	<b>40K</b> - 4000K 90+ CRI <b>27KC</b> - 2700K <b>30KC</b> - 3000K <b>35KC</b> - 3500K <b>40KC</b> - 4000K	MVD7 <sup>3</sup> - 120-277V eldoLED ECOdrive DALI, 1% Dimming MVD8 <sup>3</sup> - 120-277V eldoLED SOLOdrive 0-10V, 0.1% Dimming MVD9 <sup>3</sup> - 120-277V eldoLED SOLOdrive DALI, 0.1% Dimming MDMX <sup>3,4</sup> - 120-277V eldoLED POWERdrive DMX, 0.0% Dimming	

- 1. Consult Factory for 347V Option
- 2. TRIAC and ELV Dimming 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 & REPLACEMENT OPTIC ORDERING INFORMATION**

#### Accessories

Standard Hanger Bars Supplied with Housing **HB-30** - T-Bar Hanger Set

#### Replacement Optics

R4SOPTM - 27° Medium Beam Optic R4SOPTF - 45° Flood Beam Optic R4SOPTW - 61° Wide Flood Beam Optic

#### **PRODUCT DETAILS**

#### Construction

- Specification Grade 4-inch Round 16 Gauge Galvanized Steel Shallow New Construction Housing with Die-Cast Aluminum Heat Sink
- Fits into a 2-1/2-inch plenum space
- Requires minimum 3-inch clearance around fixture from insulation materials; thermal protection provided in case of improper insulation use
- · 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-inch x 3/4-inch Concentric Knockout
- Mulit-volt 120-277V standard
- Output over-voltage, over-current and short circuit protection
- Approved for Through Circuit Wiring: max. four (4) 12 AWG (2in/2out); wiring rated to 90°C

### Performance Summary

- 2700K, 3000K, 3500K and 4000K Color Temperatures
- CRI of 80 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 R4S Downlights are available for non-dimming and dimming applications; for compatible Dimmers, refer to the Dimming Specification Sheet
- Flanged or Trimless Specification Grade Trims available
- Trimless options require use of a Mud Frame (MF4, ordered separately) for securing housing and trim in 1/2- to 1-inch ceiling thicknesses only
- UL8750 and Class 2 Compliant; RoHS Compliant, US only



CATALOG NO.

DATE PROJECT TYPE

## R4S SERIES | Trims for 4-Inch Shallow Downlights

#### TRIMMED OPTIONS







#### C4322S Series

Specification Grade Reflector 4-7/16-Inch ID, 5-3/4-Inch OD, 3-1/8-Inch Height

Specification Grade Reflector. Includes Solite Lens. Wet Location approved.

C4322S - Specular Reflector

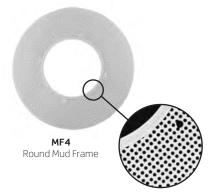
CLR<sup>1</sup> - Anodized Clear
PL<sup>1</sup> - Anodized Platinum
WHT - Matte White Painted

1 Available with White Painted

 Available with White Painted Flange: add -WPF to end of part number

#### **TRIMLESS OPTIONS**

#### Trimless Options require use of Mud Frame accessory (MF4, ordered separately)



#### 4-Inch Round Mud Frame

10-Inch OE

**Required for use with trimless options.** Die-cast Ring with Steel Mesh Frame. Painted white.



**CN4322S-CLR**Anodized Clear Trimless Reflector



#### CN4322S Series

Specification Grade Trimless Reflector with Solite Lens 4-7/16-Inch Aperture

Specification Grade Specular Reflector. Includes Solite Lens. For use with 1/2- to 1-inch ceiling thicknesses only. Wet Location approved.

CN4322S - Specular Reflector

CLR - Clear SpecularPL - Platinum

WHT - Matte White Painted

MF4 - 4-Inch Round Mud Frame



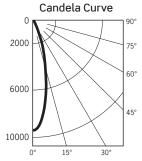
## R4S SERIES | 4-Inch Round Shallow Downlight Photometrics

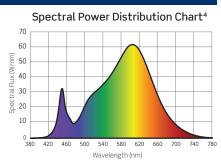
#### R4SNC430KMVDM / C4322S-CLR

Fixture Delivered Lumens: 2949.2 Total Watts@120V: 28.4 Lumens Per Watt: 103.8 Center Beam Candle Power: 9461 Beam Distribution: 26.8° Spacing Criterion: 0.47 Color Rendering Index (CRI)<sup>1</sup>: 83.3 Color Temperature (CCT)<sup>2</sup>: 3047K

Designed for 50,000 Hour Lamp Life<sup>3</sup> LM-63 Test No. G21072705 LM-79 Test No. S21072902

#### Intensity Distribution BEAM DISTANCE **FOOTCANDLES** DIAMETER (FT.) (FT.) 6 FT 262.8 2.9 8 FT 147.8 3.8 10 FT 94 6 4.8 12 FT 65.7 5.7 14 FT 48.3 6.7 16/FT 37.0 7.6





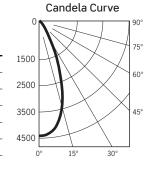
#### R4SNC430KMVDF / C4322S-CLR

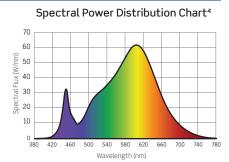
Fixture Delivered Lumens: 3007.2 Total Watts@120V: 28.4 Lumens Per Watt: 105.9 Center Beam Candle Power: 4418 Beam Distribution: 44.8° Spacing Criterion: 0.70 Color Rendering Index (CRI)<sup>1</sup>: 83.3 Color Temperature (CCT)<sup>2</sup>: 3047K

Designed for 50,000 Hour Lamp Life<sup>3</sup> LM-63 Test No. G21072701 LM-79 Test No. S21072902

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6 FT	122.7	5.0
8 FT	69.0	6.6
10 FT	44.2	8.3
12 FT /	30.7	9.9
14 FT	22.5	11.5
16/FT	17.3	13.2





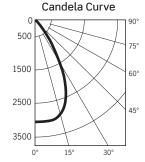
#### R4SNC430KMVDW / C4322S-CLR

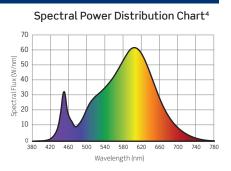
Fixture Delivered Lumens: 3119.4 Total Watts@120V: 28.4 Lumens Per Watt: 109.8 Center Beam Candle Power: 3061 Beam Distribution: 60.6° Spacing Criterion: 0.89 Color Rendering Index (CRI)¹: 83.3 Color Temperature (CCT)²: 3047K

Designed for 50,000 Hour Lamp Life<sup>3</sup> LM-63 Test No. G21072706 LM-79 Test No. S21072902

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	DIAMETER (FT.)
6 FT	85.0	7.0
8 FT	47.8	9.4
10 FT /	30.6	11.7
12 FT /	21.3	14.0
14 FT	15.6	16.4
16/FT	12.0	18.7





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 MULTIPLII	ERS	OU	TPUT MULTIPLIE	TRIM MULTIPLIERS			
CCT	STD CRI	HIGH CRI	SERIES 1 - 9W	SERIES 2 - 13W	SERIES 3 - 19W	C4322S-PL	C4322S-WHT	
2700K	0.94	0.70	0.39			0.99	1.00	
3000K	N/A	0.75		0.54	0.73			
3500K	1.0	0.81	0.55	0.54	0.75		1.00	
4000K	1.0	0.87						





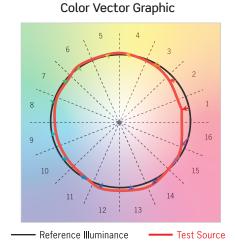
## R4S SERIES | 4-Inch Round Shallow Downlight Photometrics

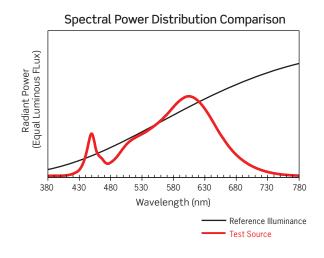
#### TM-30 DATA: R4SNC430KMVDF / C4322S-CLR

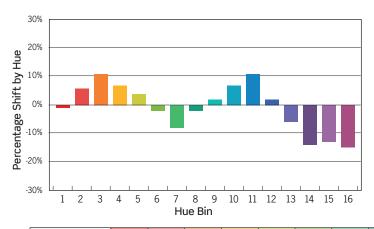
ANSI/IES TM-30-18 Color Rendition Report Test No. S21072902

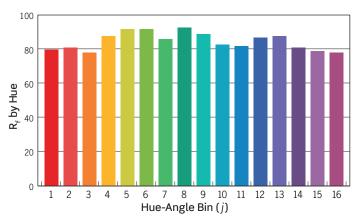
Colors are for visual orientation purposes only

## R<sub>f</sub> 86 R<sub>g</sub> 96 CCT(K) 3047K D<sub>uv</sub> 0.0024 u<sup>I</sup> 0.2480 v<sup>I</sup> 0.5238









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%	- 1%	2%	7%	12%	3%	-6%	- 14%	-13%	-15%
R <sub>f</sub> VALUE	81	83	80	89	93	94	88	94	90	84	83	86	89	82	80	79



# R4S SERIES | 4-Inch Round Shallow 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 DIMMING (MVD Option*)	eldoLED ECOdrive 0-10V (MVD6 Option)	eldoLED SOLOdrive 0-10V (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

#### NOTES

\*277V TRIAC Dimming is not available

- 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.