

# R4NC

## 4" LED Recessed Downlight: Universal New Construction Housing

Type \_\_\_\_\_

Project \_\_\_\_\_

### Specifications/Features

#### Housing/Mounting

Specification grade 4" New Construction housing, 4-3/4" aperture; 4-7/8" ceiling opening.

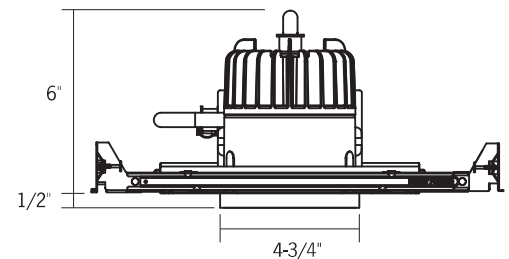
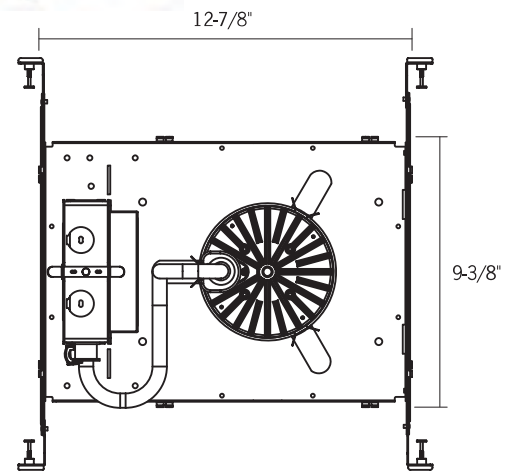
16 Gauge galvanized steel housing with die-cast aluminum heat sink.

Requires minimum 3" clearance around fixture from insulation material. Thermal protection provided in case of improper insulation use.

Dual nailer hanger bars are adjustable for 16" and 24" center joists (14-1/4" to 24-1/2"). Nailer bars enable easy installation and may be extended to rest on T-bar ceilings. Optional clip-on T-bar hangers also available.

Quick-connect LED light engine enables easy installation and removal.

LED Drivers are fully accessible from below the ceiling and can be easily removed.



**Ceiling Opening: 4-7/8"**

**Ceiling Thickness: 1/2" – 1-1/2"**

#### Electrical

UL8750 and Class 2 Compliant; RoHS Compliant, US only.

Output over voltage, over-current and short circuit protection.

Approved for through-circuit wiring. Max.: (8) 12 AWG (4in/4out). Wiring rated to 90°C.

Pre-wired junction box with convenient screwdriver pry-outs. (3) 1/2" and (1) 1/2" x 3/4" concentric knockouts.

Optional emergency battery pack with remote test switch is available.

#### Lamp

Light engine consists of a single, high output multi-chip LED array enabling precise optical control. Excellent fixture-to-fixture color consistency with a 3-step MacAdam Ellipse tolerance.

System designed and rated for 50,000 hours at 70% lumen maintenance.

#### Dimming

All R4NC downlights are available for non-dimming and dimming applications.

For a list of compatible dimmers, refer to the [Dimming Specifications](#) sheet.

#### Trims

Specification Grade trims are available in several different styles and finishes for your space. Featuring a high quality Alzak™ finish; optically designed for reduced glare while maintaining maximum lumen output. See "4" LED Recessed Trims" spec sheet for information and details.

#### Warranty

This complete fixture is covered by ConTech's full five (5) year replacement guarantee after date of purchase.

#### Labels/Usage

cCSAus Certified to UL Standards. Suitable for damp locations.

cCSAus Certified to UL924 Standard for Emergency Lighting.

Assembled in the USA.

Energy Star certified:

- Series 1 through 6.
- Certified trims only: C4322-PL, C4322-WHT and C4322-CLR (all beam distributions). The -C and -SL options are not Energy Star certified.
- Lutron and eldoLED dimming options are not Energy Star certified.
- 347V option is not Energy Star Certified.

	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6
<b>Input Wattage (W)</b>	10	14	20	28	37	43
<b>Input Current (A) 120/277/347</b>	.08/.04/.03	.12/.06/.04	.17/.08/.06	.23/.11/.08	.31/.14/.11	.36/.16/.12
<b>Input Voltage</b>						
Standard Driver (120V & 277V)	120V AC, 50/60Hz					
	277V AC, 50/60Hz					
Standard Driver (347V)	347V AC, 50/60Hz					
Lutron HiLume® Driver	120V AC, 50/60Hz					
Lutron Eco-System® Driver	120V AC, 50/60Hz					
	277V AC, 50/60Hz					
eldoLED ECOdrive / SOLOdrive	120V AC, 50/60Hz					
	277V AC, 50/60Hz					
<b>Color Temp</b>	2700K/3000K/3500K/4000K					
<b>CRI Standard/High</b>	83 (80min) / 90+					
<b>Driver</b>						
Power Factor	> 0.90					
THD	< 20%					

# R4NC

## 4" LED Recessed Downlight: Universal New Construction Housing

### Ordering Information

Example Order: R4NCI30KI2D — ER C4322N-CLR

Housing	LED Series	Color Temp	Electrical	Dimming	Options
<b>R4NC</b>	<b>3</b>	<b>27K</b>	<b>12</b>	<b>D</b>	— <span style="border: 1px solid black; padding: 2px;"></span>
<b>R4NC</b>	<b>1</b> - 10W, 1000lm <b>2</b> - 14W, 1400lm <b>3</b> - 20W, 2000lm <b>4</b> - 28W, 2600lm <b>5</b> - 37W, 3200lm <b>6</b> - 43W, 3600lm	<b>27K</b> - 2700K <b>30K</b> - 3000K <b>35K</b> - 3500K <b>40K</b> - 4000K <b>27KC</b> - 2700K, 90+ CRI <b>30KC</b> - 3000K, 90+ CRI <b>35KC</b> - 3500K, 90+ CRI <b>40KC</b> - 4000K, 90+ CRI	<b>12</b> - 120V <b>27</b> - 277V <b>34<sup>1</sup></b> - 347V	<b>D<sup>2</sup></b> - Triac, ELV, 0-10V Dimming <b>D2<sup>1</sup></b> - 347V, 0-10V Dimming Only <b>D3<sup>3</sup></b> - Lutron HiLume 1% 2-Wire LED Driver (120V Forward Phase Only) <b>D4</b> - Lutron HiLume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black <b>D6<sup>4</sup></b> - eldoLED ECOdrive, 0-10V, 1% Dimming <b>D7<sup>4</sup></b> - eldoLED ECOdrive, DALI, 1% Dimming <b>D8<sup>4</sup></b> - eldoLED SOLOdrive, 0-10V, 0.1% Dimming <b>D9<sup>4</sup></b> - eldoLED SOLOdrive, DALI, 0.1% Dimming <b>DMX<sup>4,5</sup></b> - eldoLED POWERdrive, DMX 0.0% Dimming	<b>ER<sup>6</sup></b> - Factory Installed 7W/200mA Emergency Battery Backup [Remote Test Switch]

#### Accessories (Standard Hanger Bars Supplied with Housing)

**RL-KIT** - Commercial Mounting Brackets  
**HB-24** - 27" Flat Hanger Bars for RL-KIT  
**HBC-24** - 25" C-Channel Hanger Bars for RL-KIT in Grid Ceiling Construction  
**HB-30** - T-Bar Hanger Set  
**RSA4L-5-WHT** - 4" Slope Ceiling Adapter, 5° Pitch  
**RSA4L-10-WHT** - 4" Slope Ceiling Adapter, 10° Pitch  
**RSA4L-15-WHT** - 4" Slope Ceiling Adapter, 15° Pitch  
**RSA4L-20-WHT** - 4" Slope Ceiling Adapter, 20° Pitch  
**RSA4L-25-WHT** - 4" Slope Ceiling Adapter, 25° Pitch  
**RSA4L-30-WHT** - 4" Slope Ceiling Adapter, 30° Pitch

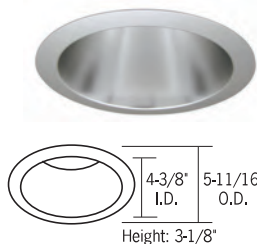
#### Trims

See "4" LED Recessed Trims" sheet for trim information and details.

1. Only available for 347V Dimming option (D2). Cannot be used with Emergency Battery Backup option.
2. Triac and ELV dimming for 120V only.
3. Lutron HiLume dimming only available in 120V.
4. eldoLED Drivers are programmed for linear curve dimming as standard.  
For logarithmic curve dimming, please consult factory.
5. Verify DMX Driver and Control System compatibility with factory prior to ordering.
6. Emergency battery backup option: 725 lumen nominal average for any Series 1 through 6.

# R4 Series

## 4" LED Recessed Downlight Trims



### Specification Grade Specular Reflector

Specification grade specular reflector: narrow beam clear, medium beam clear, wide beam clear, platinum, platinum wheat, or white. OD: 5-11/16"; ID: 4-3/8"  
Add "C" (clear lens) or "SL" (sandblast lens) after finish code for wet location approved trim.

**C4322N-CLR\*** - Narrow Beam (36°),  
Clear Reflector

**C4322M-CLR\*** - Medium Beam (54°),  
Clear Reflector

**C4322W-CLR\*** - Wide Beam (80°),  
Clear Reflector

**C4322-PL\*** - Platinum Reflector

**C4322-PLWHE\*** - Platinum Wheat Reflector

**C4322-WHT** - White Reflector

\*Available with White Painted Flange, add "-WPF" to part number



### Two Piece Reflector Trim with Lens

Two piece reflector with lens: Clear or white upper reflector, clear or platinum lower cone; regressed prismatic convex lens, Wet Location Listed. OD: 5-11/16"; ID: 3-7/8"

**C4327-CLR-(CLR,PL)** - Clear Reflector/  
Clear or Platinum  
Lower Cone

**C4327-WHT-(CLR,PL)** - White Reflector/  
Clear or Platinum  
Lower Cone

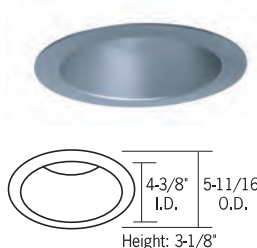


### Two Piece Reflector/Baffle Trim with Lens

Two piece reflector with lens: Clear or white upper reflector, black or white lower baffle with regressed prismatic convex glass lens; 1-1/2" Regress. Wet Location Listed. OD: 5-11/16"; ID: 3-7/8"

**C4327-CLR-(B,P)** - Clear Reflector/  
Black or White  
Lower Baffle

**C4327-WHT-(B,P)** - White Reflector/  
Black or White  
Lower Baffle



### ISOWET Dead Front Reflector Trim

Isolated, wet location approved thermoplastic reflector with clear glass lens. Lens is deeply regressed inside top of reflector. OD: 5-11/16"; ID: 4-3/8"

**C4322DF-SL** - Satin Silver Paint

**C4322DF-SL-WPF** - Satin Silver Paint with  
White Painted Flange

**C4322DF-WHT** - Matte White Paint



### Two Piece Reflector Trim

Two piece reflector: clear or white upper reflector, clear or platinum lower cone; Includes (1) LF20-CL glass lens. OD: 5-11/16"; ID: 3-7/8"

Approved for dry/damp locations. Approved for wet locations when glass lens is installed.

**C4321-CLR-(CLR,PL)** - Clear Reflector/Clear or  
Platinum Lower Cone

**C4321-WHT-(CLR,PL)** - White Reflector/Clear or  
Platinum Lower Cone



### Lensed Wall Wash Trim

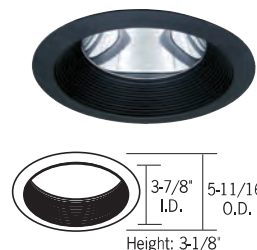
Lensed Wall Wash Trim; Clear, Platinum or White Reflector. OD: 5-11/16"; ID: 4"

**C4323-CLR\*** - Clear Reflector

**C4323-PL\*** - Platinum Reflector

**C4323-WHT** - White Reflector

\*Available with White Painted Flange, add "-WPF" to part number



### Two Piece Reflector/Baffle Trim

Two piece reflector: clear or white upper reflector, black or white lower baffle; Includes (1) LF20-CL glass lens. OD: 5-11/16"; ID: 3-7/8"

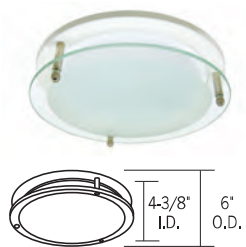
Approved for dry/damp locations. Approved for wet locations when glass lens is installed.

**C4321-CLR-(B,P)** - Clear Reflector/  
Black or White Lower Baffle

**C4321-WHT-(B,P)** - White Reflector/  
Black or White Lower Baffle

# R4 Series

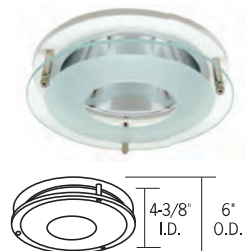
## 4" LED Recessed Downlight Trims



### Floating Glass Trim

Floating glass disc; clear or white reflector. 1-1/4" Drop from ceiling. Glass OD: 6".

**CTR4325L-(CLR,WHT)-P**



### Floating Glass Ring

Floating glass ring; clear or white reflector. 1-1/4" Drop from ceiling; 3-1/2" center hole. Glass OD: 6".

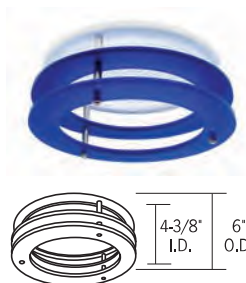
**CTR4326L-(CLR,WHT)-P**



### Floating Single Acrylic Ring

Single floating colored acrylic ring; clear or white reflector. 1-1/2" Drop from ceiling. Acrylic Ring OD: 6"; ID: 4-3/8".

**CTR4324L-(CLR,WHT)-P**  
**1AR4(B,F,G,R,Y)**



### Floating Double Acrylic Ring

Stacked floating colored acrylic rings; clear or white reflector. 2-3/4" Drop from ceiling. Acrylic Ring OD: 6"; ID: 4-3/8".

**CTR4324L-(CLR,WHT)-P**  
**2AR4(B,F,G,R,Y)**

# R4 Series

## 4" LED Recessed Downlight Photometrics

Type **LED RD6**

Project **Panera Bread**

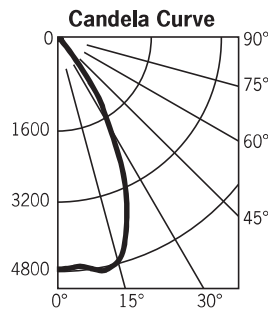
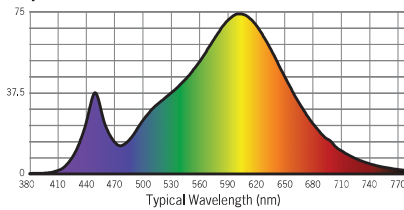
### Multiplication Factors

CCT	STD CRI	HIGH CRI	SERIES 1	SERIES 2	SERIES 3	SERIES 4	SERIES 5	WHT/PL REFLECTORS
2700K	0.94	0.70	0.29	0.39	0.53	0.73	0.90	1.0
3000K	N/A	0.75	0.29	0.39	0.53	0.73	0.90	1.0
3500K	1.0	0.81	0.29	0.39	0.53	0.73	0.90	1.0
4000K	1.0	0.87	0.29	0.39	0.53	0.73	0.90	1.0

### R4NC630K12D/C4322M-CLR

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 85098

**Light Output (Fixture Delivered Lumens):** 3603  
**Total Watts@120V:** 43.0  
**Lumens Per Watt:** 83.8  
**Color Rendering Index (CRI)<sup>1</sup>:** 83  
**Color Temperature (CCT)<sup>2</sup>:** 2988K  
**Spectral Power Distribution Chart<sup>3</sup>**



### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	4747	
5	4706	455
15	4680	1278
25	2956	1316
35	815	514
45	30	24
55	11	11
65	4	4
75	1	1
85	0	0
95	0	

### Intensity Distribution

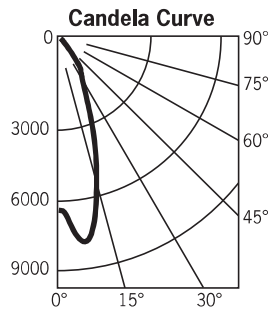
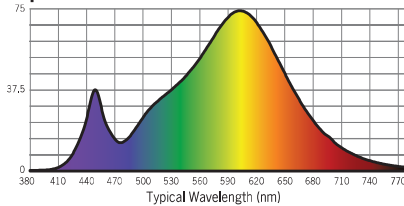
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	131.9	5.4
8'	74.2	7.2
10'	47.5	9.0
12'	33.0	10.8
14'	24.2	12.6
16'	18.5	14.4

**Beam Distribution:** 54°  
**Spacing Criteria:** 0.82

### R4NC630K12D/C4322N-CLR

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 85317

**Light Output (Fixture Delivered Lumens):** 3567  
**Total Watts@120V:** 43.0  
**Lumens Per Watt:** 83.0  
**Color Rendering Index (CRI)<sup>1</sup>:** 82  
**Color Temperature (CCT)<sup>2</sup>:** 3027K  
**Spectral Power Distribution Chart<sup>3</sup>**



### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	6579	
5	7684	716
15	5015	1377
25	1967	950
35	780	462
45	46	36
55	18	17
65	6	7
75	2	2
85	0	0
95	0	

### Intensity Distribution

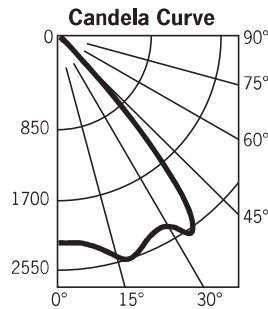
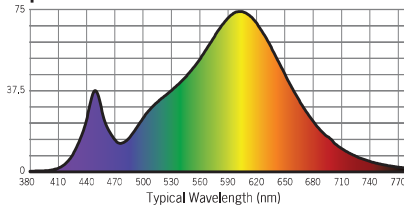
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	182.8	3.9
8'	102.8	5.3
10'	65.8	6.6
12'	45.7	7.9
14'	33.6	9.2
16'	25.7	10.5

**Beam Distribution:** 36°  
**Spacing Criteria:** 0.63

### R4NC630K12D/C4322W-CLR

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 84842

**Light Output (Fixture Delivered Lumens):** 3749  
**Total Watts@120V:** 44.4  
**Lumens Per Watt:** 84.4  
**Color Rendering Index (CRI)<sup>1</sup>:** 82  
**Color Temperature (CCT)<sup>2</sup>:** 3025K  
**Spectral Power Distribution Chart<sup>3</sup>**



### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	2248	
5	2256	218
15	2506	701
25	2356	1102
35	2448	1380
45	222	294
55	43	41
65	11	11
75	2	2
85	0	0
95	0	

### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	62.4	8.9
8'	35.1	11.9
10'	22.5	14.9
12'	15.6	17.9
14'	11.5	20.8
16'	8.8	23.8

**Beam Distribution:** 80°  
**Spacing Criteria:** 1.19

1. Accuracy of rendering colors  
 2. Color appearance of light source  
 3. Colors present within the light source

\*Dependent on surrounding temperatures

# R4 Series

## 4" LED Recessed Downlight Photometrics

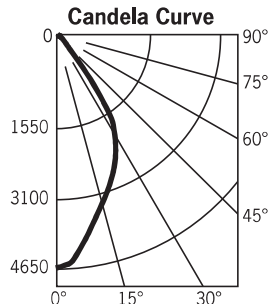
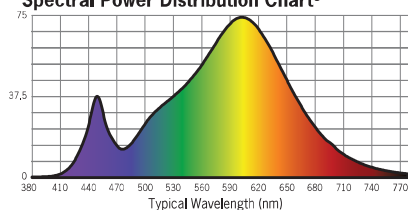
### Multiplication Factors

CCT	STD CRI	HIGH CRI	SERIES 1	SERIES 2	SERIES 3	SERIES 4	SERIES 5	WHT/PL REFLECTORS
2700K	0.94	0.70	0.29	0.39	0.53	0.73	0.90	1.0
3000K	N/A	0.75	0.29	0.39	0.53	0.73	0.90	1.0
3500K	1.0	0.81	0.29	0.39	0.53	0.73	0.90	1.0
4000K	1.0	0.87	0.29	0.39	0.53	0.73	0.90	1.0

### R4NC630K12D/C4322-PL

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 85318

**Light Output (Fixture Delivered Lumens):** 3423  
**Total Watts@120V:** 43.0  
**Lumens Per Watt:** 79.6  
**Color Rendering Index (CRI)<sup>1</sup>:** 82  
**Color Temperature (CCT)<sup>2</sup>:** 3033K  
**Spectral Power Distribution Chart<sup>3</sup>**



### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	4582	
5	4309	395
15	3376	949
25	2619	1194
35	1191	725
45	140	116
55	33	33
65	8	9
75	2	2
85	0	0
95	0	

### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	127.3	4.8
8'	71.6	6.4
10'	45.8	8.0
12'	31.8	9.6
14'	23.4	11.3
16'	17.9	12.9

**Beam Distribution:** 57°  
**Spacing Criteria:** 0.80

1. Accuracy of rendering colors  
2. Color appearance of light source  
3. Colors present within the light source

\*Dependent on surrounding temperatures