

# R6NC

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

### Specifications/Features

#### Housing/Mounting

Specification grade 6" housing, 6-1/2" aperture. 6-5/8" 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; 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.

#### Electrical

UL8750 and Class 2 Compliant, RoHS Compliant. Output over-voltage, over-current and short circuit protection. Approved for through-circuit wiring. Max: (8) 12AWG (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 knockout. 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 R6 downlights are available for non-dimming and dimming applications. For a list of compatible dimmers, refer to [LED Dimming Catalog](#).

#### Trims

Specification Grade trims are offered with trimmed and trimless options. Several different styles and finishes are available. Featuring a high quality Alzak™ finish; optically designed for reduced glare while maintaining maximum lumen output. See "6" 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. Emergency Battery option is covered by a one (1) year replacement guarantee after date of purchase.

#### Labels/Usage

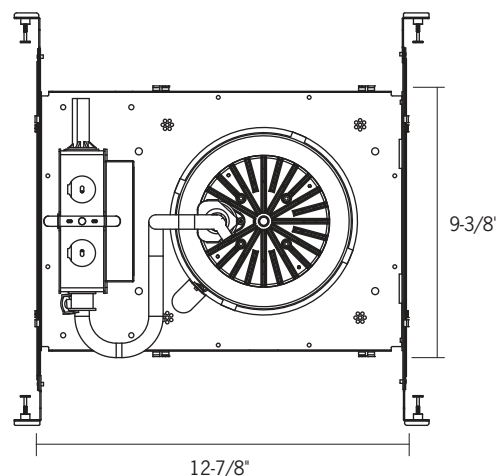
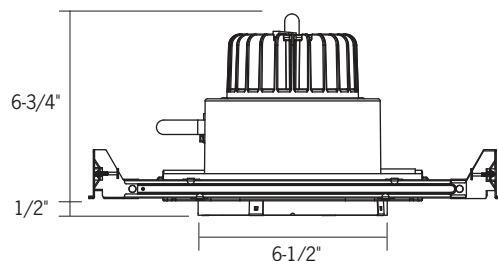
cCSAus Certified to UL Standards. Suitable for damp locations.

cCSAus Certified to UL924 Standard for Emergency Lighting.

Assembled in the USA.

Energy Star certified:

- Series 1 through 6.
- Certified trims only: C6322-PL, CN6322-PL, C6322-WHT, CN6322-WHT, C6322-CLR and CN6322-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.



Ceiling Opening: 6-5/8"  
Ceiling Thickness: 1/2" – 2"

	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%					

# R6NC

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

### Ordering Information

Example Order:  —

Housing	LED Series	Color Temp	Electrical	Dimming	Options
<input type="text" value="R6NC"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>R6NC</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 Hi-Lume 1% 2-Wire LED Driver (120V Forward Phase Only) <b>D4</b> - Lutron Hi-Lume 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>5</sup></b> - Factory Installed 7W/200mA Emergency Battery Backup [Remote Test Switch]

For Intellect™ Enabled housing, refer to R6NCIE specification sheet.

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

**MF6** - 6" Mud Frame  
**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  
**RSA6L-5-WHT** - 6" Slope Ceiling Adapter, 5° Pitch  
**RSA6L-10-WHT** - 6" Slope Ceiling Adapter, 10° Pitch  
**RSA6L-15-WHT** - 6" Slope Ceiling Adapter, 15° Pitch  
**RSA6L-20-WHT** - 6" Slope Ceiling Adapter, 20° Pitch  
**RSA6L-25-WHT** - 6" Slope Ceiling Adapter, 25° Pitch  
**RSA6L-30-WHT** - 6" Slope Ceiling Adapter, 30° Pitch

#### Trims

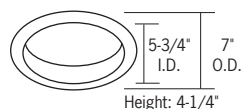
See "6" LED Recessed Trims" sheet for trim information and details.

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 Hi-Lume 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.

# R6 Series

## 6" LED Recessed Downlight Trims

### Trimmed Options

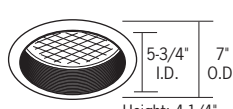


#### Specification Grade Specular Reflector

Specification grade specular reflector: narrow beam clear, medium beam clear, wide beam clear, platinum, platinum wheat, or white. OD: 7"; ID: 5-3/4"  
Add "C" (clear lens) or "SL" (sandblast lens) after finish code for wet location approved trim.

- C6322N-CLR\*** - 34° Clear Reflector
- C6322M-CLR\*** - 65° Clear Reflector
- C6322W-CLR\*** - 75° Clear Reflector
- C6322-PL\*** - 69° Platinum Reflector
- C6322-PLWHE\*** - 69° Platinum Wheat Reflector
- C6322-WHT** - 72° White Reflector

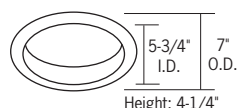
\*Available with White Painted Flange, add "-WPF" to part number.



#### Two Piece Reflector/Baffle Trim with Lens

Two piece aluminum reflector and baffle 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: 7"; ID: 5-3/4"

- C6327-CLR-(B,P)** - Clear Reflector/  
Black or White  
Lower Baffle
- C6327-WHT-(B,P)** - White Reflector/  
Black or White  
Lower Baffle

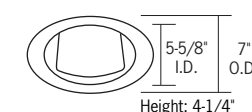


#### Two Piece Reflector Trim

Two piece reflector: clear or white upper reflector, clear or platinum lower cone; Includes (1) LF38-CL glass lens. OD: 7"; ID: 5-3/4"

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

- C6321-CLR-(CLR,PL)** - Clear Reflector/  
Clear or Platinum Lower Cone
- C6321-WHT-(CLR,PL)** - White Reflector/  
Clear or Platinum Lower Cone

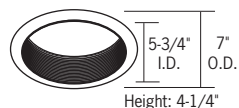


#### Lensed Wall Wash Trim

Lensed Wall Wash Trim; Clear, Platinum or White Reflector. OD: 7"; ID: 5-5/8"

- C6323-CLR\*** - Clear Reflector
- C6323-PL\*** - Platinum Reflector
- C6323-WHT** - White Reflector

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



#### Two Piece Reflector/Baffle Trim

Two piece reflector/baffle: clear or white upper reflector, black or white lower baffle; Includes (1) LF38-CL glass lens. OD: 7"; ID: 5-3/4"

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

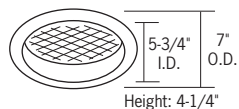
- C6321-CLR-(B,P)** - Clear Reflector/  
Black or White Lower Baffle
- C6321-WHT-(B,P)** - White Reflector/  
Black or White Lower Baffle



#### Floating Glass Trim

Floating glass disc; clear or white reflector. 1-1/4" Drop from ceiling. Glass OD: 8-3/4".

**CTR6325L2-(CLR,WHT)-P**



#### Two Piece Reflector Trim with Lens

Two piece reflector: Clear or white upper reflector, clear or platinum lower cone; regressed prismatic convex lens, Wet Location Listed. OD: 7"; ID: 5-3/4"

- C6327-CLR-(CLR,PL)** - Clear Reflector/  
Clear or Platinum Lower Cone
- C6327-WHT-(CLR,PL)** - White Reflector/  
Clear or Platinum Lower Cone



#### Floating Glass Ring

Floating glass ring; clear or white reflector. 1-1/4" Drop from ceiling; 3-1/2" center hole. Glass OD: 8-3/4".

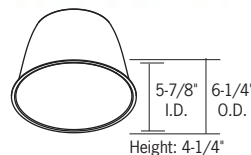
**CTR6326L2-(CLR,WHT)-P**

# R6 Series

## 6" LED Recessed Downlight Trims

### Trimless Options

**Important Notes:** Trimless option requires use of accessory mud frame (**MF6** – ordered separately).  
Trimless option CANNOT be used on Remodel (R6RM) style housings.  
Trimless option for use with 1/2" - 1" ceiling thicknesses only.



#### Specification Grade Specular Reflector

Specification grade reflector: narrow beam clear, medium beam clear, wide beam clear, platinum, or white. ID: 6"  
Add "-C" (clear lens) or "-SL" (sandblast lens) after finish code for wet location approved trim.

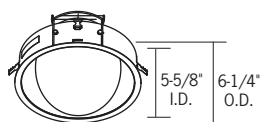
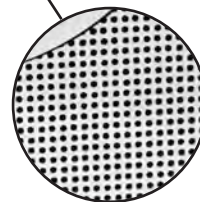
- CN6322N-CLR** - 34° Clear Reflector
- CN6322M-CLR** - 65° Clear Reflector
- CN6322W-CLR** - 75° Clear Reflector
- CN6322-PL** - 69° Platinum Reflector
- CN6322-WHT** - 72° White Reflector



#### Mud Frame

Required for use with Trimless trim option.  
Die-cast ring with steel mesh frame – painted white. OD: 12"

**MF6** - 6" Mud Frame



#### Lensed Wall Wash Trim

Lensed Wall Wash Trim; Clear, Platinum or White Reflector.  
ID: 5-5/8"

- CN6323-CLR** - Clear Reflector
- CN6323-PL** - Platinum Reflector
- CN6323-WHT** - White Reflector

# R6NC

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

### Photometrics

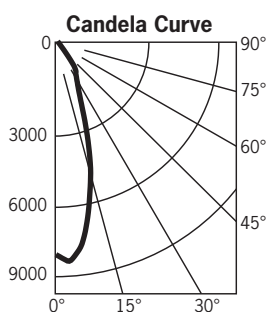
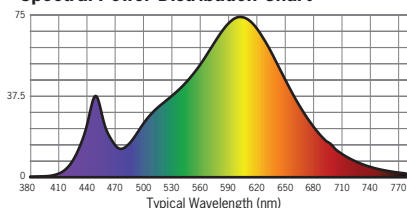
#### Multiplication Factors

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

### R6NC630K12D/C6322N-CLR

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 85531

**Light Output (Fixture Delivered Lumens):** 3544  
**Total Watts@120V:** 43.0  
**Lumens Per Watt:** 82.4  
**Color Rendering Index (CRI)<sup>1</sup>:** 83  
**Color Temperature (CCT)<sup>2</sup>:** 3034K  
**Spectral Power Distribution Chart<sup>3</sup>**



#### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	8149	
5	8114	731
15	4969	1336
25	1863	898
35	1073	530
45	35	28
55	15	14
65	6	6
75	2	2
85	0	0
95	0	

#### Intensity Distribution

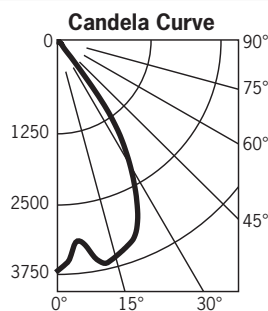
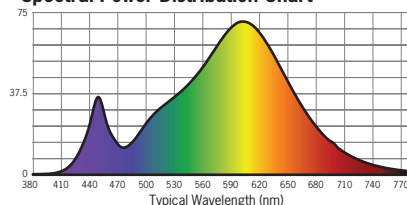
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	226.4	3.4
8'	127.3	4.6
10'	81.5	5.7
12'	56.6	6.9
14'	41.6	8.0
16'	31.8	9.1

**Beam Distribution:** 34°  
**Spacing Criteria:** 0.56

### R6NC630K12D/C6322M-CLR

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 85912

**Light Output (Fixture Delivered Lumens):** 3539  
**Total Watts@120V:** 43.3  
**Lumens Per Watt:** 81.7  
**Color Rendering Index (CRI)<sup>1</sup>:** 82  
**Color Temperature (CCT)<sup>2</sup>:** 3088K  
**Spectral Power Distribution Chart<sup>3</sup>**



#### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	3647	
5	3210	320
15	3537	994
25	2954	1328
35	1389	761
45	95	76
55	43	39
65	15	16
75	4	5
85	1	1
95	0	

#### Intensity Distribution

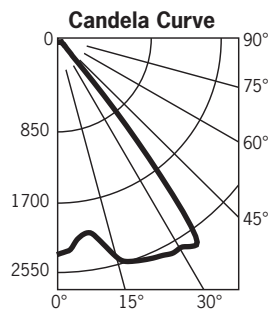
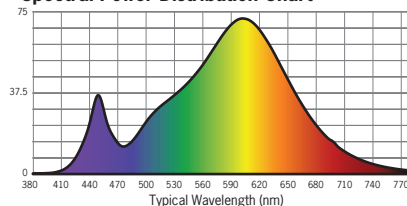
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	101.3	6.2
8'	57.0	8.3
10'	36.5	10.4
12'	25.3	12.5
14'	18.6	14.6
16'	14.2	16.7

**Beam Distribution:** 66°  
**Spacing Criteria:** 0.95

### R6NC630K12D/C6322W-CLR

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 85700

**Light Output (Fixture Delivered Lumens):** 3521  
**Total Watts@120V:** 44.0  
**Lumens Per Watt:** 80.0  
**Color Rendering Index (CRI)<sup>1</sup>:** 82  
**Color Temperature (CCT)<sup>2</sup>:** 3075K  
**Spectral Power Distribution Chart<sup>3</sup>**



#### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	2330	
5	2183	208
15	2469	691
25	2596	1203
35	2475	1235
45	114	118
55	49	44
65	16	17
75	4	5
85	1	1
95	0	

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	64.7	8.6
8'	36.4	11.5
10'	23.3	14.4
12'	16.2	17.3
14'	11.9	20.1
16'	9.1	23.0

**Beam Distribution:** 75°  
**Spacing Criteria:** 1.11

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

\*Dependent on surrounding temperatures

# R6NC

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

### 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

### R6NC630K12D/C6322-PL

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 86084

Light Output (Fixture Delivered Lumens): 3304

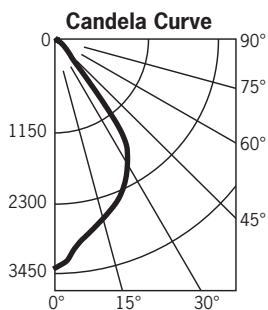
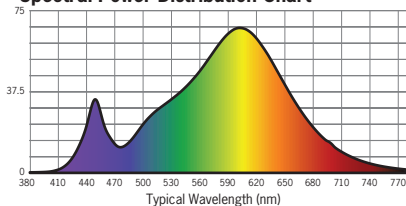
Total Watts@120V: 43.2

Lumens Per Watt: 76.5

Color Rendering Index (CRI)<sup>1</sup>: 82

Color Temperature (CCT)<sup>2</sup>: 3030K

Spectral Power Distribution Chart<sup>3</sup>



#### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	3359	
5	3092	289
15	2708	764
25	2346	1073
35	1612	852
45	244	194
55	95	88
65	31	32
75	9	10
85	1	2
95	0	

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	93.3	5.8
8'	52.5	7.7
10'	33.6	9.7
12'	23.3	11.6
14'	17.1	13.6
16'	13.1	15.5

Beam Distribution: 69°  
Spacing Criteria: 0.97

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

\*Dependent on surrounding temperatures