

# RL20IC

## 4" LED New Construction IC StopAire® Recessed Downlight

### Specifications/Features

#### Housing/Mounting

Performance LED fixture delivering up to 900 lumens in a smooth wide beam. For use in applications with direct contact with insulation materials. Aluminum housing with galvanized steel mounting frame. Dual Extension bars adjustable for 16" and 24" center joists (14-1/4" – 24-1/2"). Nailer bar hangers feature a locking screw to secure housing in desired location along bar hangers. Hanger bars may be extended to rest on T-bar ceilings. Optional clip-on T-bar hangers also available.

#### Electrical

UL8750 and Class 2 Compliant, RoHS Compliant. Output over-voltage, over-current and short circuit protection. Prewired junction box with convenient screwdriver pry-outs: (6) 1/2", (1) 1/2"x3/4" concentric and (4) Romex pryouts. Spring-latch access plates. Quick-connect push-in wire connectors provided. Approved for through-circuit wiring. Max: (8) #12 AWG (4 in/4 out). Wiring should be rated for at least 90°C.

#### 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. Precisely engineered optical system consists of an engineered plastic optical housing, aluminum reflector and highly transmissive diffusion lens. The system provides a smooth uniform beam while eliminating view of LED array. A medium flood distribution is provided as standard. A flood optical system accessory is available. System designed and rated for 50,000 hours at 70% lumen maintenance.

#### Dimming

All RL20 LED downlights are available for non-dimming and dimming applications. For a list of compatible dimmers, refer to [LED Dimming Catalog](#).

#### Trims

Many trims options available to complement any design style. See attached trim spec sheet for information and details.

#### Warranty

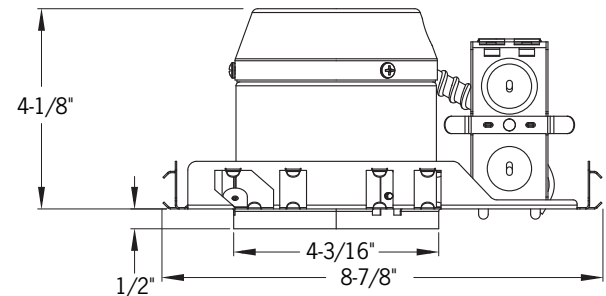
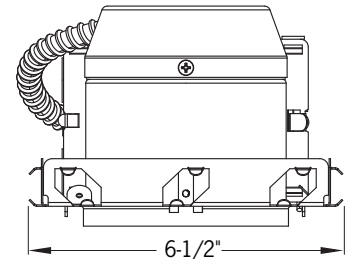
This complete fixture is covered by ConTech's full five (5) year replacement guarantee after date of purchase.

#### Listing

cCSAus Certified to UL Standards. Suitable for damp locations. Conforms to Washington State Energy code (WSEC) for low air infiltration. Tested in accordance with ASTM E283 (2.0 CRM or less). Assembled in the USA.

Energy Star certified:

- Series 1 and 2.
- All CCT's except 27KC.
- Certified trims only: CTR2001W-P, CTR2002-(CLR-P, PL-P, WHT-P).
- Lutron dimming options are not Energy Star certified.



**Ceiling Opening:** 4-3/8"  
**Ceiling Thickness:** 1/2" – 1-1/2"

	Series 1	Series 2
<b>Input Wattage (W)</b>	12	17
<b>Input Current (A) 120/277</b>	.10/.04	.14/.06
<b>Input Voltage</b>		
Dimming (Triac, ELV, 0-10V)	90-305V AC, 50/60Hz	
Lutron HiLume® Dimming	120V AC, 50/60Hz	
Lutron Eco-System® Dimming	120-277V AC, 50/60Hz	
<b>Color Temp</b>	2700K/3000K/3500K/4000K	
<b>CRI</b>	90+	
<b>Driver</b>		
Power Factor	> 0.90	
THD	< 20%	
<b>Dimming</b>		
Triac, ELV, 0-10V	10-100%	
Lutron®	1-100%	

Catalog No. \_\_\_\_\_

Type \_\_\_\_\_

Project \_\_\_\_\_

# RL20IC

## 4" LED New Construction IC StopAire® Recessed Downlight

### Ordering Information

Example Order:

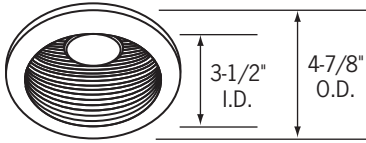
Housing	LED Series	Color Temp/CRI	Electrical/Dimming	Accessories
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>RL20IC</b>	<b>1</b> - 12W, 700lm <b>2</b> - 17W, 900lm	<b>27KC</b> - 2700K 90+ CRI <b>30KC</b> - 3000K 90+ CRI <b>35KC</b> - 3500K 90+ CRI <b>40KC</b> - 4000K 90+ CRI	<b>MVD</b> <sup>1</sup> - TRIAC, ELV, 0-10V Dimming <b>12D3</b> <sup>2</sup> - Hi-Lume 1% 2-Wire LED Driver (120V Forward Phase Only) <b>MVD4</b> - Hi-Lume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black	<b>MGOPT4-FL</b> - Flood Optic <b>HB-20</b> - 20" T-Bar Hanger Set <b>HB-30</b> - 30" T-Bar Hanger Set

1. TRIAC and ELV Dimming for 120V only  
2. Lutron HiLume dimming only available in 120V

## Trims for RL20 LED Recessed Downlights

**All trims have matte white trim finish unless specified.**

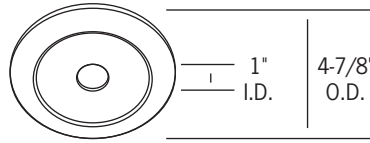
All trims are suitable for damp locations; only shower trims are listed for wet locations.



**CTR2001-P**  
Black Baffled Downlight

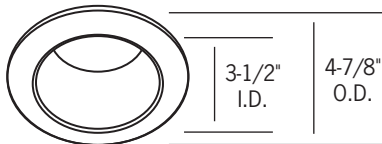
**CTR2001W-P**

White Baffled Downlight  
All steel construction. (3) heat treated spring steel mounting clips. Black socket aiming bracket with screws (provided in carton).



**CTR2005-P**  
Pin Spot

All steel construction. (3) heat treated spring steel mounting clips. Black socket aiming bracket with screws (provided in carton). Aluminum reflector.



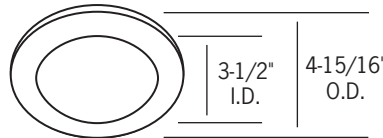
**CTR2002-BLK-B**  
Black Specular Aluminum Reflector, Black Trim

**CTR2002-CLR-P**  
Clear Specular Aluminum Reflector

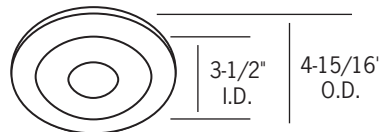
**CTR2002-PL-P**  
Platinum Aluminum Reflector

**CTR2002-WHT-P**  
White Specular Aluminum Reflector

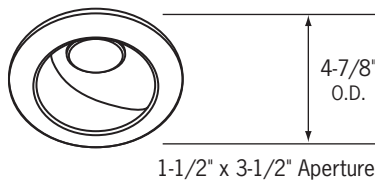
All steel construction. (3) heat treated spring steel mounting clips. Black socket aiming bracket with screws (provided in carton).



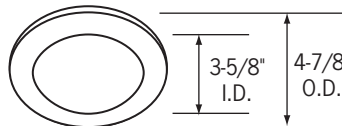
**CTR2011FR-(NK, P)**  
Flat Frosted Glass Lens Shower Light  
All steel construction. (3) heat treated spring steel mounting clips. 1/8" thick heavy duty polyethylene sponge gasket. Wet location listed.



**CTR2011-PH-(NK, P)**  
Flat Frosted Glass Lens Shower Light with Clear Pin Hole  
All steel construction. (3) heat treated spring steel mounting clips. 1/8" thick heavy duty polyethylene sponge gasket. Wet location listed.



**CTR2003-P**  
Scoop Wall Wash  
All steel construction. (3) heat treated spring steel mounting clips. Black socket aiming bracket with screws (provided in carton).



**CTR2012-P**  
Flat Alabite Glass Lens Shower Light  
All steel construction. (3) heat treated spring steel mounting clips. 1/8" thick heavy duty polyethylene sponge gasket. Wet location listed.

### Reflector/Trim Finishes

**Reflector Finish Options:**

**BLK** - Black      **PL** - Platinum  
**CLR** - Clear      **WHT** - White

**Trim Finish Codes:**

**B** - Black      **P** - Matte White  
**NK** - Brushed Nickel

# RL20IC

## 4" LED New Construction IC StopAire® Recessed Downlight

### Photometrics

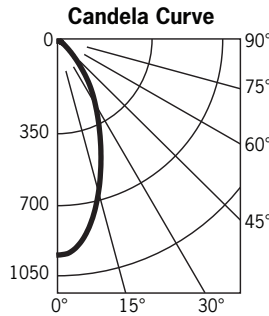
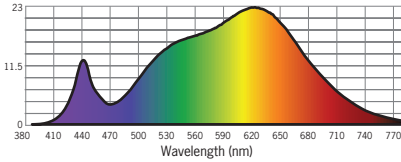
#### Multiplication Factors

CCT	CRI	SERIES 1
2700K	0.9	0.76
3000K	N/A	0.76
3500K	1.0	0.76
4000K	1.0	0.76

### RL20SA230KC12D/CTR2001W-P

Designed for 50,000 Hour Lamp Life<sup>1</sup>; LM-63 Test No. G17021402

Light Output (Fixture Delivered Lumens): 912  
 Total Watts@120V: 16; Lumens Per Watt: 56.5  
 Center Beam Candle Power: 1103  
 Color Rendering Index (CRI)<sup>2</sup>: 90  
 Color Temperature (CCT)<sup>3</sup>: 3065K  
 Spectral Power Distribution Chart<sup>4</sup>



#### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	1103	
5	1064	108
15	809	229
25	526	244
35	266	167
45	110	85
55	51	46
65	28	28
75	15	16
85	3	2
95	0	

#### Intensity Distribution

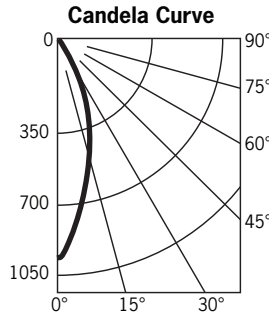
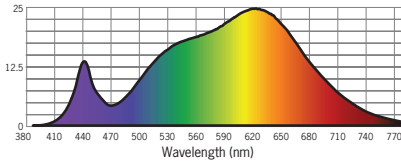
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
4'	68.9	3.6
6'	30.6	5.3
8'	17.2	7.1
10'	11.0	8.9
12'	7.7	10.7
14'	5.6	12.4

Beam Distribution: 48°  
 Spacing Criterion: 0.79

### RL20SA230KC12D/CTR2002-CLR-P

Designed for 50,000 Hour Lamp Life<sup>1</sup>; LM-63 Test No. G17011613

Light Output (Fixture Delivered Lumens): 909  
 Total Watts@120V: 16.1; Lumens Per Watt: 56.5  
 Center Beam Candle Power: 1711  
 Color Rendering Index (CRI)<sup>2</sup>: 90  
 Color Temperature (CCT)<sup>3</sup>: 3048K  
 Spectral Power Distribution Chart<sup>4</sup>



#### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	1711	
5	1503	154
15	972	275
25	579	268
35	235	148
45	79	61
55	22	20
65	4	4
75	2	2
85	2	1
95	0	

#### Intensity Distribution

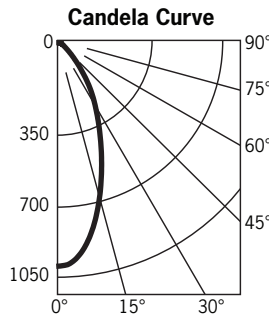
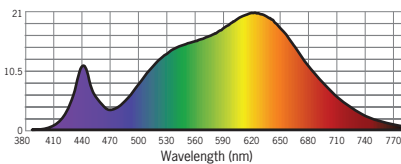
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
4'	107.0	2.5
6'	47.5	3.8
8'	26.7	5.1
10'	17.1	6.3
12'	11.9	7.6
14'	8.7	8.9

Beam Distribution: 35°  
 Spacing Criterion: 0.66

### RL20SA230KC12D/CTR2002-PL-P

Designed for 50,000 Hour Lamp Life<sup>1</sup>; LM-63 Test No. G17021401

Light Output (Fixture Delivered Lumens): 924  
 Total Watts@120V: 16.0; Lumens Per Watt: 57.7  
 Center Beam Candle Power: 1259  
 Color Rendering Index (CRI)<sup>2</sup>: 90  
 Color Temperature (CCT)<sup>3</sup>: 3035K  
 Spectral Power Distribution Chart<sup>4</sup>



#### Candlepower Summary

FROM 0	CANDELA	LUMENS
0	1259	
5	1194	122
15	887	251
25	581	269
35	282	177
45	106	82
55	33	30
65	8	8
75	3	3
85	2	1
95	0	

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
4'	78.7	3.4
6'	35.0	5.1
8'	19.7	6.9
10'	12.6	8.6
12'	8.7	10.3
14'	6.4	12.0

Beam Distribution: 46°  
 Spacing Criterion: 0.78

1. Dependent on surrounding temperatures, 2. Accuracy of rendering colors, 3. Color appearance of light source, 4. Colors present within the light source