

# RL20SAR

## 4" LED Remodel StopAire® Non-IC Recessed Downlight

### Specifications/Features

#### Housing/Mounting

Performance LED fixture delivering up to 1200 lumens in a smooth wide beam.

Aluminum housing and heat-sink with galvanized steel mounting arm and junction box.

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

Housing secured to ceiling by three (3) spring clamps.

#### Electrical

UL8750 and Class 2 Compliant, RoHS Compliant.

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

Approved for through-circuit wiring. Max: (4) 12AWG (2in/2out). Wiring should be rated for at least 90°C.

Pre-wired junction box with convenient screwdriver pry-outs. (6) 1/2" and (1) 1/2" x 3/4" concentric pry-out and (4) Romex pry-outs.

#### 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. An accessory flood optical system is available. Please consult factory.

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

#### Warranty

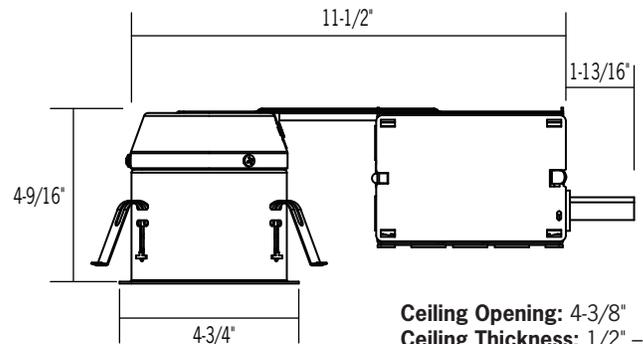
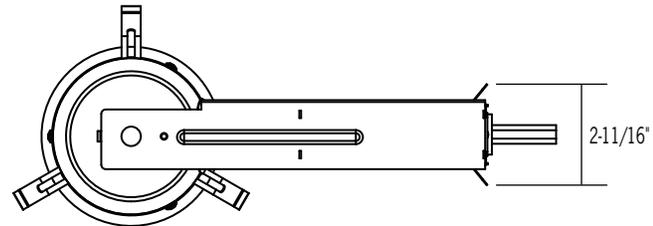
This complete fixture is covered by ConTech's full five (5) year replacement guarantee after date of purchase.

#### 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 only.
- 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.



	Series 1	Series 2	Series 3
<b>Input Wattage (W)</b>	12	17	23
<b>Input Current (A) 120/277</b>	.10/.04	.14/.06	.19/.08
<b>Input Voltage</b>			
120V Dimming (Triac, ELV, 0-10V)	120V AC, 50/60Hz		
277V Dimming (0-10V)	277V AC, 50/60Hz		
Lutron HiLume® Dimming	120V AC, 50/60Hz		
Lutron EcoSystem® Dimming	120V AC, 50/60Hz		
	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%		

# RL20SAR

## 4" LED Remodel StopAire® Non-IC Recessed Downlight

### Ordering Information

Example Order:  -

Housing	LED Series	Color Temp/CRI	Electrical	Dimming
<b>RL20SAR</b>	<b>1</b> - 12W, 700lm <b>2</b> - 17W, 900lm <b>3</b> - 23W, 1200lm	<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>D1</b> - TRIAC, ELV, 0-10V Dimming <b>D3<sup>2</sup></b> - Hi-Lume 1% 2-Wire LED Driver (120V Forward Phase Only) <b>D4</b> - Hi-Lume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black

#### Accessories

**MGOPT4-FL** - Flood Optic

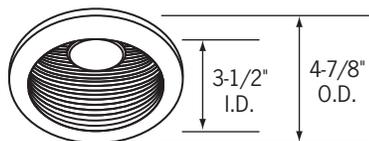
1. TRIAC and ELV Dimming for 120V only.

2. Lutron Hi-Lume 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.

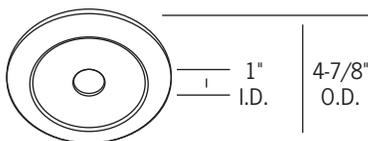


**CTR2001-P**  
Black Baffled Downlight

**CTR2001W-P**

White Baffled Downlight

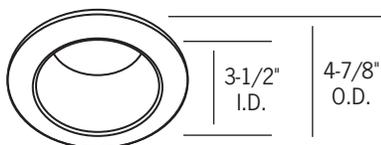
All steel construction. (3) heat treated spring steel mounting clips. Black socket aiming bracket with screws (provided in carton).



**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

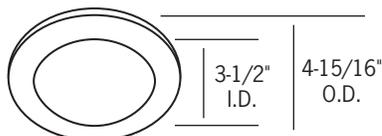
**CTR2002-PL-P**

Platinum Aluminum Reflector

**CTR2002-WHT-P**

White Specular Aluminum Reflector

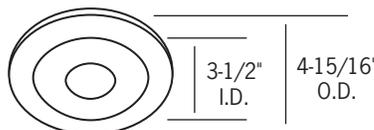
All steel construction. (3) heat treated spring steel mounting clips. Black socket aiming bracket with screws (provided in carton).



**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

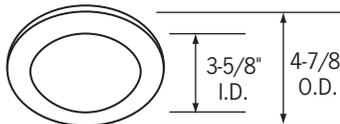
All steel construction. (3) heat treated spring steel mounting clips. 1/8" thick heavy duty polyethylene sponge gasket. Wet location listed.



**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  
**CLR** - Clear

**PL** - Platinum  
**WHT** - White

**Trim Finish Codes:**

**B** - Black  
**NK** - Brushed Nickel

**P** - Matte White

# RL20SAR

## 4" LED Remodel StopAire® Non-IC Recessed Downlight

### Photometrics

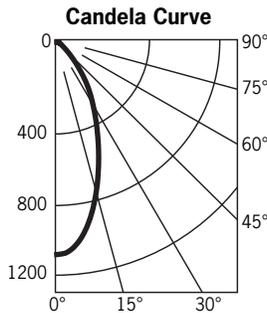
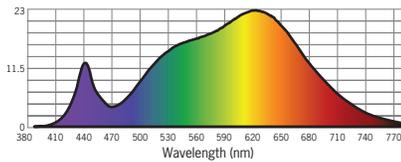
#### Multiplication Factors

CCT	CRI	SERIES 1	SERIES 2
2700K	0.9	0.56	0.74
3000K	N/A	0.56	0.74
3500K	1.0	0.56	0.74
4000K	1.0	0.56	0.74

### RL20SA330KC12D/CTR2001W-P

Designed for 50,000 Hour Lamp Life<sup>1</sup>; LM-63 Test No. G17011604

Light Output (Fixture Delivered Lumens): 1131  
 Total Watts@120V: 22.8; Lumens Per Watt: 49.6  
 Center Beam Candle Power: 1450  
 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	1450	
5	1398	142
15	1065	302
25	677	313
35	295	185
45	121	94
55	60	54
65	38	38
75	18	19
85	4	2
95	0	

#### Intensity Distribution

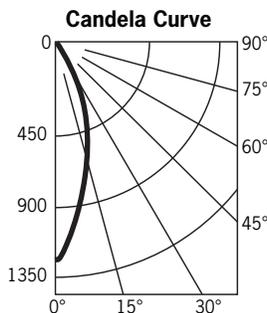
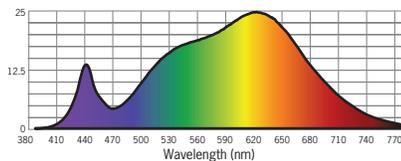
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
4'	90.6	3.5
6'	40.3	5.3
8'	22.7	7.1
10'	14.5	8.8
12'	10.1	10.6
14'	7.4	12.4

Beam Distribution: 48°  
 Spacing Criterion: 0.77

### RL20SA330KC12D/CTR2002-CLR-P

Designed for 50,000 Hour Lamp Life<sup>1</sup>; LM-63 Test No. G17011612

Light Output (Fixture Delivered Lumens): 1221  
 Total Watts@120V: 22.8; Lumens Per Watt: 53.5  
 Center Beam Candle Power: 2304  
 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	2304	
5	2017	206
15	1305	370
25	777	360
35	314	198
45	106	82
55	29	26
65	5	5
75	3	3
85	2	1
95	0	

#### Intensity Distribution

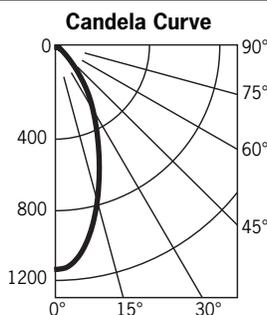
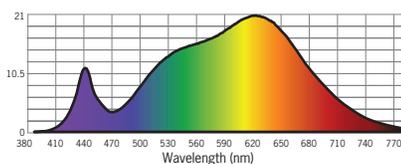
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
4'	144.0	2.5
6'	64.0	3.8
8'	36.0	5.1
10'	23.0	6.3
12'	16.0	7.6
14'	11.8	8.8

Beam Distribution: 35°  
 Spacing Criterion: 0.66

### RL20SA330KC12D/CTR2002-PL-P

Designed for 50,000 Hour Lamp Life<sup>1</sup>; LM-63 Test No. G17011601

Light Output (Fixture Delivered Lumens): 1155  
 Total Watts@120V: 22.8; Lumens Per Watt: 50.7  
 Center Beam Candle Power: 1686  
 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	1686	
5	1596	162
15	1171	332
25	742	343
35	320	201
45	117	90
55	36	32
65	10	10
75	5	5
85	3	2
95	0	

#### Intensity Distribution

DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
4'	105.4	3.3
6'	46.8	5.0
8'	26.3	6.7
10'	16.9	8.3
12'	11.7	10.0
14'	8.6	11.7

Beam Distribution: 45°  
 Spacing Criterion: 0.75

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