

### RA4LRM

# 4" LED Recessed Downlight: Remodel Housing

Catalog No	 	

**RA4LRM127K12D2** 

<b>.</b>			
Type -	 	 	

#### Specifications/Features

#### Housing/Mounting

Specification grade 4\* remodel housing, 5-1/4\* O.D. plaster ring flange. 4-7/8\* Ceiling opening. Works in ceiling thicknesses from 1/2\* – 2\*. 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. Heavy duty steel plaster ring is secured to ceiling by three (3) spring clamps. LED drivers are fully accessible from below the ceiling, and with the springlatch housing attachment, can be easily removed. Quick-connect LED light engine enables easy installation and removal.

#### **Flectrical**

UL8750 and Class 2 Compliant; RoHS Compliant, US only.
Output over voltage, over-current and short circuit protection.
Approved for through-circuit wiring. Max.: (4) 12 AWG (2in/2out).
Pre-wired junction box with convenient screwdriver pry-outs. (4) 1/2" concentric knockouts.

#### Lamp

Light engine consists of a high output multi-chip LED array arranged into a single LED package, enabling precise optical control without requiring lensing to diffuse multiple LED sources.

Excellent fixture-to-fixture color consistency within a 3-step MacAdam Ellipse tolerance.

#### **Dimming**

All RA4LRM downlights are available for non-dimming and dimming applications. For non-dimming applications, use driver option D2.

#### Trims

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

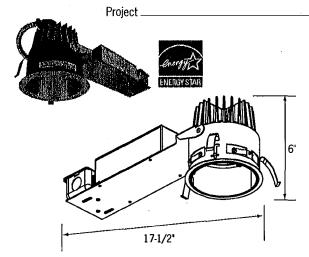
#### Warranty

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

#### Labels/Usage

CSAus Certified to UL Standards. Suitable for damp locations. CSA Certified to UL Standards. Refer to trim spec sheet for Canada compliant trims.

Energy Star approved when used with CST4322L-CLR (all beam distributions) and CST4322L-PL trims. Not approved for 4000K options. Assembled in the USA.



Ceiling Opening: 4-7/8"
Ceiling Thickness: 1/2" - 5/8"

ı	1
1000 Series	2000 Series
90-305V AC, 47-63Hz	90-305V AC, 47-63Hz
90-305V AC, 47-63Hz	90-305V AC, 47-63Hz
90-135V AC, 47-63Hz	Not Available
120V AC, 50/60Hz	120V AC, 50/60Hz
16	29
350	700
2700K/3000K	2700K/3000K
3500K/4000K	3500K/4000K
83 (80min)	83 (80min)
> 0.90	> 0.90
< 20%	< 20%
15-100%	15-100%
10-100%	Not Available
1-100%	1-100%
Not Available	Not Available
	90-135V AC, 47-63Hz 120V AC, 50/60Hz 16 350 2700K/3000K 3500K/4000K 83 (80min)   > 0.90   < 20%   15-100%   10-100%   1-100%

#### **Ordering Information**

lousing	LED Module/Color Temp	Electrical/Dirnming	Trim Type
RA4 RM	_	12D2	
RA4LRM)	1000 Series 127K - 16W/2700K 130K - 16W/3000K 135K - 16W/3500K 140K - 16W/4000K 2000 Series 227K - 29W/2700K 230K - 29W/3000K 235K - 29W/3500K 240K - 29W/4000K Consult factory for high CRI options	12D1 - 120V Triac Dimming 12D2 - 120V Non-Dimming/0-10V Dimming 12D3 - 120V Lutron HiLume® Dimming 27D2 - 277V Non-Dimming/0-10V Dimming	* - All Others Leave Blank <b>W</b> - Wall Wash
	RA4LRM)	1000 Series 127K - 16W/2700K 130K - 16W/3000K 135K - 16W/3500K 140K - 16W/4000K 2000 Series 227K - 29W/2700K 230K - 29W/3000K 235K - 29W/3500K 240K - 29W/4000K	1000 Series 127K - 16W/2700K 130K - 16W/3000K 135K - 16W/3500K 140K - 16W/4000K 2000 Series 227K - 29W/2700K 230K - 29W/3500K 240K - 29W/4000K Consult factory for high CRI options  12D1 - 120V Triac Dimming 12D2 - 120V Non-Dimming/0-10V Dimming 12D3 - 120V Lutron HiLume® Dimming 27D2 - 277V Non-Dimming/0-10V Dimming 27D2 - 277V Non-Dimming/0-10V Dimming 27D2 - 277V Non-Dimming/0-10V Dimming

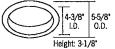
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#### **Specification Grade Specular Reflector**

Specification grade specular reflector: narrow beam clear, medium beam clear, wide beam clear, platinum, or white. OD: 5-5/8"; ID: 4-3/8"

Approved for use in U.S. and Canada. Add "-C" after finish code for wet location approved trim.



CST4322LN-CLR - Narrow Beam (47°),

Clear Reflector

CST4322LM-CLR - Medium Beam (55°),

Clear Reflector CST4322LW-CLR - Wide Beam (72°),

Clear Reflector

CST4322L-PL - Platinum Reflector - White Reflector



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Height: 3-1/8"

#### Two Piece Reflector Trim

Two piece reflector: clear or white upper reflector, clear or platinum lower cone; Includes (1) LF20-CL glass lens. OD: 5-5/8": ID: 3-1/2"

Approved for use in U.S. and Canada when glass lens is installed (in dry or wet locations).

CTR4321L-CLR-(CLR,PL) - Clear Reflector CTR4321L-WHT-(CLR,PL) - White Reflector



#### 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: 5-5/8"; ID: 3-1/2"



Approved for use in U.S. and Canada when glass lens is installed (in dry or wet locations).

CTR4321L-CLR-(B,P) - Clear Reflector CTR4321L-WHT-P-(B,P) - White Reflector



#### 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: 5-5/8"; ID: 3-7/8"



Approved for use in U.S. and Canada.

CTR4327L-CLR-(CLR,PL) - Clear Reflector CTR4327L-WHT-(CLR,PL) - White Reflector



## 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: 5-5/8"; ID: 3-7/8" Approved for use in U.S. and Canada.



CTR4327L-CLR-(B,P) - Clear Reflector CTR4327L-WHT-P-(B,P) - White Reflector



#### **Lensed Wall Wash Trim**

Lensed Wall Wash Trim; Clear, Platinum or White Reflector. OD: 5-1/2"; ID: 4\*

Approved for use in U.S. and Canada.



CTR4323L-CLR - Clear Reflector CTR4323L-PL - Platinum Reflector CTR4323L-WHT - White Reflector

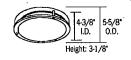


#### Floating Glass Trim

Floating glass disc; clear or white reflector. 1-1/4" Drop from ceiling. Glass OD: 6-1/16".

Approved for use in U.S. and Canada.

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: 6-1/16".

Approved for use in U.S. and Canada.



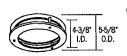
CTR4326L-(CLR,WHT)-P



#### Floating Single Acrylic Ring

Single floating colored acrylic ring; clear or white reflector. 1-1/2" Drop from ceiling, Acrylic Ring OD: 6-7/8"; ID: 4-3/8".

Approved for use in U.S. and Canada.



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: 6-7/8"; ID: 4-3/8".

Approved for use in U.S. and Canada.



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

Finishes: -B (black baffle), -CLR (clear reflector), -P (white baffle), -PL (matte platinum), -WHT (white reflector)
Acrylic Ring Finishes: -B (blue), -F (frosted), -G (green), -R (red), -Y (yellow)



# 4" LED Recessed Downlight

Catalog No.
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Type	
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#### **Photometrics**

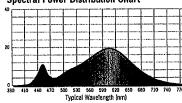
Project.

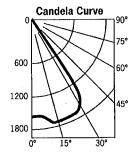
#### RA4LNC-230K12D2/CST4322LW-CLR

Designed for 50,000 Hour Lamp Life\*; LM-79 Test No. 70358

Light Output (Fixture Delivered Lumens): 2056 Total Watts@120V: 28.6 Lumens Per Watt: 72 Color Rendering Index (CRI)1: 83

Color Temperature (CCT)2: 3079K Warm White Spectral Power Distribution Chart<sup>3</sup>





Candlepower Summary				
FROM 0	CANDELA	LUMENS		
0	1553			
. 5	1519	150		
15	1731	489		
25	1714	783		
35	924	542		
45	78	64		
55	24	21		
65	6	6		
75	2	1		
85	0	. 0		
95	0			

Intensity Distribution				
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)		
6'	43.1	7.7		
8'	24.3	10.3		
10'	15.5	12.9		
12'	10.8	15.5		
14'	7.9	18.0		
16'	6.1	20.6		
	Doom Dietr	hution: 72°		

Spacing Criteria: 1.29

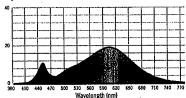
#### RA4LNC-230K12D2/CST4322L-PL

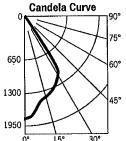
Designed for 50,000 Hour Lamp Life\*; LM-79 Test No. 70359

Light Output (Fixture Delivered Lumens): 1806 Total Watts@120V: 29.5 Lumens Per Watt: 61

Color Rendering Index (CRI)1: 82

Color Temperature (CCT)2: 3080K Warm White Spectral Power Distribution Chart<sup>3</sup>





Candlepower Summary				
FROM 0	CANDELA	LUMENS		
0	1855			
5	1725	161		
15	1502	428		
25	1347	616		
35	721	436		
45	139	112		
55	40	39		
65	10	11		
75	2	2		
85	0	0		
95	0			

Intensity Distribution			
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)	
6'	∕51.5∖	6.0	
. 8'	29.0	8.0	
10'	18.5	10.0	
12'	12.9	12.1	
14'	9.5	14.1	
16'/	7.2	\16.1	

Beam Distribution: 68° Spacing Criteria: 1.0

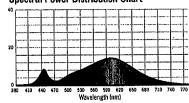
#### RA4LNC-230K12D2/CTR4323L-CLR

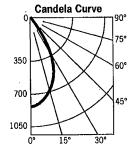
Light Output (Fixture Delivered Lumens): 876 Total Watts@120V: 28.7

Lumens Per Watt: 31

Color Rendering Index (CRI)1: 81

Color Temperature (CCT)2: 3168K Warm White Spectral Power Distribution Chart<sup>3</sup>





Candlepower Summary			
FROM 0	CANDELA	LUMENS	
0	812		
5	907	76	
15	931	196	
25	778	239	
35	479	180	
45	236	99	
55	131	52	
65	61	24	
75	16	8	
85	3	3	
95	0		

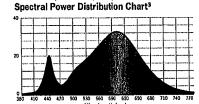
	Footcandles on Wall								
	Single Unit, 3' From Wall								
		0'	1'	2'	3'	4'	_5'_		
Distance from Ceiling	1'	3	2	_1	0	0	0		
	2'	8	6	3	1	0	0		
	3	9	8	4 .	2	1	0		
	4'	10	8	5	3	1	1		
	5'	9	8	5	3	1	1		
	6'	7	7	5	3	2	1		
	7'	. 6	5	4	3	2	1		
	8'	4	4	3	3	2	1		
	9'	3	3	3	2	2	1		
	be	am ce	nter						

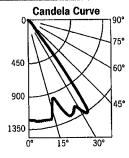
#### RA4LNC-230K12D2/CTR4326L-CLR-P

Designed for 50,000 Hour Lamp Life\*; LM-63 Test No. 71563

Designed for 50,000 Hour Lamp Life\*; LM-79 Test No. 72139

Light Output (Fixture Delivered Lumens): 1730 Total Watts@120V: 29 Lumens Per Watt: 60 Color Rendering Index (CRI)1: 82 Color Temperature (CCT)2: 3138K Warm White





Candlepower Summary							
FROM 0	CANDELA	LUMENS					
0	1258						
5	1280	122					
15	1107	326					
25	1256	587					
35	628	461					
45	105	84					
55	53	49					
65	29	. 29					
75	14	16					
85	5	6					
95	5						

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Intensity Distribution								
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)						
6'	/34.9\	8.0						
8'	19.7	10.6						
10'	12.6	13.3						
12'	8.7	15.9						
14'	6.4	18.6						
16'/	4.9	21.2						

Beam Distribution: 70° Spacing Criteria: 1.30

Accuracy of rendering colors
 Color appearance of light source
 Colors present within the light source