

CTR4321LCLRB RA4LRM 4" LED Recessed Downlight:

CTR4321CLRB TRIM ONLY

Catalog No.

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.

Remodel Housing

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

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.: (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.

 $\ensuremath{\mathsf{Excellent}}$ 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[™] finish; optically designed for reduced glare while maintaining maximum lumen output. See attached trim spec sheet for information and details.

Warranty

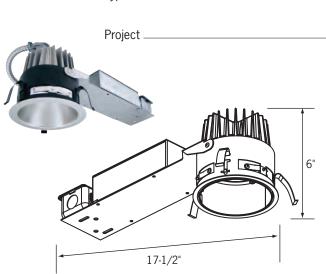
This complete fixture is covered by Con-Tech's full five (5) year replacement guarantee after date of purchase.

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.

Assembled in the USA.



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

	1000 Series	2000 Series
Input Voltage		
Non-dimming	90-305V AC, 47-63Hz	90-305V AC, 47-63Hz
0-10V dimming	90-305V AC, 47-63Hz	90-305V AC, 47-63Hz
Triac dimming	90-135V AC, 47-63Hz	Not Available
Lutron HiLume® Dimming	120V AC, 50/60Hz	120V AC, 50/60Hz
Input Wattage	16	29
Output Current (mA)	350	700
Color Temp	2700K/3000K/3500K	2700K/3000K/3500K
CRI: Standard / High	83 (80min) / 93+	83 (80min) / 93+
Driver		
Power Factor	> 0.90	> 0.90
THD	< 20%	< 20%
Dimming		
0-10V	15-100%	15-100%
Triac	10-100%	Not Available
Lutron HiLume®	1-100%	1-100%
Emrgncy Batt. Backup	Not Available	Not Available

Ordering Information

Example Order:	RAHLRM — I30k	CST4322LN-CLR		
Housing	LED Module/Color Temp	Electrical/Dimming	Trim Type	CSA Listing
RA4LRM	1000 Series 127K - 16W/2700K 130K - 16W/3000K 135K - 16W/3500K 127KC - 16W/2700K/93+ CRI 130KC - 16W/3000K/93+ CRI 135KC - 16W/3500K/93+ CRI 2000 Series 227K - 29W/2700K 230K - 29W/3000K 235K - 29W/3500K 227KC - 29W/2700K/93+ CRI 230KC - 29W/3000K/93+ CRI 235KC - 29W/3500K/93+ CRI	12D1 ¹ - 120V Triac Dimming 12D2 - 120V Non-Dimming/0-10V Dimming 12D3 ² - 120V Lutron HiLume® Dimming 27D2 - 277V Non-Dimming/0-10V Dimming	 ★ - All Others Leave Blank ₩ - Wall Wash 	 Listed for Use in U.S. Leave Blank C - Listed for Use in Canada³
*Trims				le on the 1000 Series LED Module only.
See attached "4" LED Re	ecessed Trims" sheet for trim information a	nd details.	2. 12D3 Driver/Dimming 3. MUST use cCSAus con	option not approved for use in Canada. opliant trim.



4" LED Recessed Downlight Trims

Catalog No._____

Type _

Proiect ____

5-1/2" 0.D.

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



5-5/8"

0.D.

4-3/8"

I.D.

Height: 3-1/8"

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.; for Canadian approved trim add "-C" after finish code. Only the "-C" version is wet location certified for U.S. and Canada.

CST4322LN-CLR - Narrow Beam, Clear Reflector CST4322LM-CLR - Medium Beam, Clear Reflector CST4322LW-CLR - Wide Beam, Clear Reflector CST4322L-PL - Platinum Reflector CST4322L-WHT - White Reflector

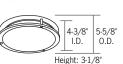


Floating Glass Trim Floating glass disc; clear or white reflector. 1-1/4" Drop from ceiling. Glass OD: 6-1/16". Approved for use in U.S. and Canada. CTR4325L-(CLR,WHT)-P



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













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.; for Canadian approved trim, add "-C" after the finish code. Only the "-C" version is wet location certified for both U.S. and Canada.

CTR4326L-(CLR,WHT)-P

Floating Single Acrylic Ring

Single sandblasted floating colored acrylic ring supported by three (3) posts. 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.; for Canadian approved trim, add "-C" after the finish code. Only the "-C" version is wet location certified for both U.S. and Canada.

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

Floating Double Acrylic Ring

Stacked floating colored, sandblasted acrylic rings supported by three (3) posts. 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.; for Canadian approved trim, add "-C" after the finish code. Only the "-C" version is wet location certified for both U.S. and Canada.

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



4-3/8"

4-3/8"

I.Ď.

Height: 3-1/8"

5-5/8"

0.D.

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





Height: 3-1/8"

Two Piece Reflector Trim with Lens

Two piece reflector/baffle: 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



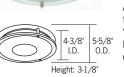
I.D. 0.D. Height: 3-1/8"

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: 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

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)





Total Watts@120V: 28.6

Color Rendering Index (CRI)1: 83

Spectral Power Distribution Chart³

Lumens Per Watt: 72

Photometrics

RA4 **LED Recessed Downlight**

600

1200

1800

Catalog No.

Type

Proiect -

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

igned for 50,000 fibur Lamp Life , Life 9 lest No. 70350					
r Sı	Summary Intensity Distribution				
LA	LUMENS			-	BEAM
}		DIS	STANCE	FOOTCANDLES	DIAMETER
)	150		(FT.)	(FC)	(FT.)
	489		6'	43.1	7.7
Ļ	783		0	43.1	1.1
	542		8'	24.3	10.3
	64		10'	15.5	12.9
	21		12'	10.8	15.5
	6		14'	7.9	18.0
	1		10	6.1	
	0		16' /	6.1	20.6
				Roam Dist	ribution: 72°

Beam Distribution: 72°

Spacing Criteria: 1.29

RA4LNC-230K12D2/CST4322L-PL

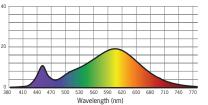
Typical Wavelength (nm)

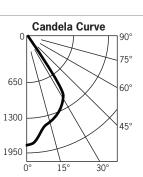
Light Output (Fixture Delivered Lumens): 1806 Total Watts@120V: 29.5 Lumens Per Watt: 61 Color Rendering Index (CRI)1: 82 Color Temperature (CCT)2: 3080K Warm White Spectral Power Distribution Chart³

RA4LNC-230K12D2/CST4322LW-CLR

Light Output (Fixture Delivered Lumens): 2056

Color Temperature (CCT)2: 3079K Warm White





Candela Curve

15

90°

75°

60°

45°

30

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				

Candlepower

CANDEL

1553

1519

1731

1714

924

78

24

6

2

0

0

Г

FROM 0

0

5

15

25

35

45

55

65

75

85

95

Intensity Distribution BEAM DISTANCE FOOTCANDLES DIAMETER (FC) (FT.) (FT.) 6' 51.5 6.0 8' 29.0 8.0 10' 18.5 10.0 12 129 121 14 9.5 14.1 16' 7.2 16.1

> Beam Distribution: 68° Spacing Criteria: 1.0

4' 5

0 0

2 1

2 1

2

0

0

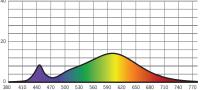
1

18.6

21.2

RA4LNC-230K12D2/CTR4323L-CLR

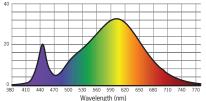
Light Output (Fixture Delivered Lumens): 876 Total Watts@120V: 28.7 Lumens Per Watt: 31 Color Rendering Index (CRI)1: 81 Color Temperature (CCT)2: 3168K Warm White Spectral Power Distribution Chart³



RA4LNC-230K12D2/CTR4326L-CLR-P

Wavelength (nm)

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 Spectral Power Distribution Chart³



1. Accuracy of rendering colors

2. Color appearance of light source

3. Colors present within the light source

Candela Curve

15

Candlepower Summar CANDELA FROM 0 LUMEN 0 812 907 76 5 15 931 196 25 778 239 35 479 180 45 236 99 55 52 131 65 61 24

16

3

0

8

3

75

85

95

,000 11001 Editip Elic , Elit 75 1050 100. 7215.									
y	Footcandles on Wall								
S			Si	ingle	Unit,	3' Fr	om Wa	all	
			0'	1'	2'	3'	4'	5	
		1'	3	2	1	0	0	(
	Ceiling	2'	8	6	3	1	0	(
	Ceil	3'	9	8	4	2	1	(
	с Е	4'	10	8	5	3	1	1	
	froi	5'	9	8	5	3	1	1	
	ce	6'	7	7	5	3	2	1	
	listance from	7'	6	5	4	3	2	1	
)is	8'	4	4	3	.3	2	1	

beam center

14'

16'

3

9

Designed for 50,000 Hour Lamp Life*; LM-63 Test No. 71563					
ower Su	ummary		Int	tensity Distribut	tion
ANDELA	LUMENS				BEAM
1258			DISTANCE	FOOTCANDLES	DIAMETER
1280	122		(FT.)	(FC)	(FT.)
1107	326		6'	34.9	8.0
1256	587				
628	461		8'	19.7	10.6
105	84		10'	12.6	13.3
53	49		12'	8.7	15.9
				/	\

3 2

Beam Distribution: 70° Spacing Criteria: 1.30

6.4

49

*Dependent on surrounding temperatures

30

90°

75°

60°

45

For the 1000 Series/16W data, multiply results by .50

1-847-559-5500

www.con-techlighting.com

450

900

1350

All specifications subject to change without notice.

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