

R6RM

6" LED Recessed Downlight: Remodel 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. Heavy duty steel plaster ring is secured to ceiling by three (3) spring clamps. LED module/trim assembly is held in place with three (3) "trim lock" dimpled spring clips. 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: (4) 12AWG (2in/2out). Wiring should be rated for at least 75°C. Pre-wired junction box with convenient screwdriver pry-outs. (4) 1/2" and (1) 1/2" x 3/4" concentric pry-out.

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 R6RM downlights are available for non-dimming and dimming applications. For a list of compatible dimmers, refer to [LED Dimming Catalog](#).

Trims

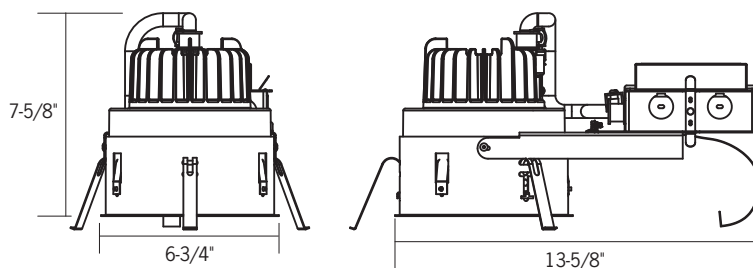
Specification Grade trims are available in several different styles and finishes. Featuring a high quality Alzak™ finish; optically designed for reduced glare while maintaining maximum lumen output. See attached trim spec sheet for information and details.

Warranty

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

Labels/Usage

cCSAus Certified to UL Standards. Suitable for damp locations. Energy Star certified with the following trims: C6322-PL, C6322-WHT and C6322-CLR (all beam distributions). The -C and -SL options are not certified. Lutron and eldoLED dimming options are not Energy Star certified. Assembled in the USA.



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

	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6
Input Wattage (W)	10	14	20	28	37	43
Input Current (A) 120/277	.08/.04	.12/.06	.17/.08	.23/.11	.31/.14	.36/.17
Input Voltage						
Dimming (Triac, ELV, 0-10V)	120V AC, 50/60Hz					
	277V AC, 50/60Hz					
Lutron HiLume® Dimming	120V AC, 50/60Hz					
Lutron Eco-System® Dimming	120V AC, 50/60Hz					
	277V AC, 50/60Hz					
eldoLED ECOdrive/SOLOdrive/POWERdrive DMX	120V AC, 50/60Hz					
	277V AC, 50/60Hz					
Color Temp	2700K/3000K/3500K/4000K					
CRI Standard/High	83 (80min) / 90+					
Driver						
Power Factor	> 0.90					
THD	< 20%					
Dimming						
Triac, ELV, 0-10V	10-100%					
Lutron®	1-100%					
eldoLED ECOdrive	1-100%					
eldoLED SOLOdrive	0.1-100%					
eldoLED POWERdrive DMX	0-100%					

R6RM

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Ordering Information

Example Order:

R6RMI27KI2D

C6322N-CLR

Housing	LED Series	Color Temp	Electrical	Dimming

R6RM

1 - 10W, 1000lm	27K - 2700K, 83CRI	12 - 120V
2 - 14W, 1400lm	30K - 3000K, 83CRI	27 - 277V
3 - 20W, 2000lm	35K - 3500K, 83CRI	
4 - 28W, 2600lm	40K - 4000K, 83CRI	
5 - 37W, 3200lm	27KC - 2700K, 90+ CRI	
6 - 43W, 3600lm	30KC - 3000K, 90+ CRI	
	35KC - 3500K, 90+ CRI	
	40KC - 4000K, 90+ CRI	

D1 - Triac, ELV, 0-10V Dimming
D3² - Lutron Hi-Lume 1% 2-Wire LED Driver (120V Forward Phase Only)
D4 - Lutron Hi-Lume 1% EcoSystem LED Driver with Soft-on, Fade-to-Black
D6³ - eldoLED ECOdrive, 0-10V, 1% Dimming
D7³ - eldoLED ECOdrive, DALI, 1% Dimming
D8³ - eldoLED SOLOdrive, 0-10V, 0.1% Dimming
D9³ - eldoLED SOLOdrive, DALI, 0.1% Dimming
DMX^{3,4} - eldoLED POWERdrive, DMX 0.0% Dimming

1. Triac and ELV dimming for 120V only
2. Lutron Hi-Lume dimming only available in 120V
3. eldoLED Drivers are programmed for linear curve dimming as standard. For logarithmic curve dimming, please consult factory.
4. Verify DMX Driver and Control System compatibility with factory prior to ordering.

Trims

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

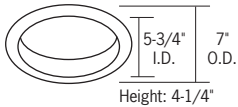
R6 Series

6" LED Recessed Downlight Trims



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*** - Platinum Reflector
- C6322-PLWHE*** - Platinum Wheat Reflector
- C6322-WHT** - White Reflector

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



Lensed Wall Wash Trim

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



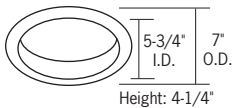
- C6323-CLR*** - Clear Reflector
- C6323-PL*** - Platinum Reflector
- C6323-WHT** - White Reflector

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



Two Piece Reflector 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



Floating Glass Trim

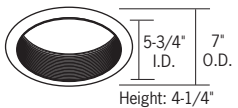
Floating glass disc; clear or white reflector. 1-1/4" Drop from ceiling. Glass OD: 8-3/4".

CTR6325L2-(CLR,WHT)-P



Two Piece Reflector/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 Ring

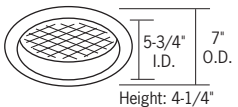
Floating glass ring; clear or white reflector. 1-1/4" Drop from ceiling; 3-1/2" center hole. Glass OD: 8-3/4".

CTR6326L2-(CLR,WHT)-P

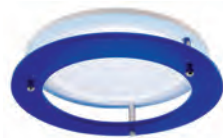


Two Piece Reflector Trim with Lens

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

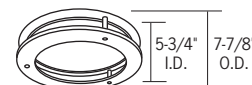


Floating Single Acrylic Ring

Single sandblasted floating colored acrylic ring supported by three (3) posts. Clear or white reflector. 1-1/2" Drop from ceiling.

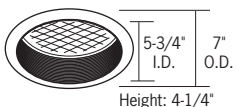
Acrylic Ring OD: 8-5/8"; ID: 6-1/8".

CTR6324L2-(CLR,WHT)-P 1AR6(B,F,G,R,Y)



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



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: 8-5/8"; ID: 6-1/8".

CTR6324L2-(CLR,WHT)-P 2AR6(B,F,G,R,Y)



Acrylic Ring Finishes: -B (blue), -F (frosted), -G (green), -R (red), -Y (yellow)

R6RM

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Photometrics

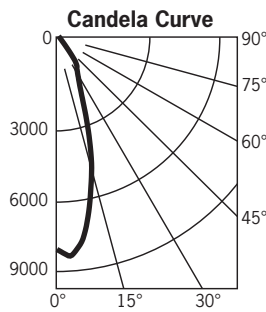
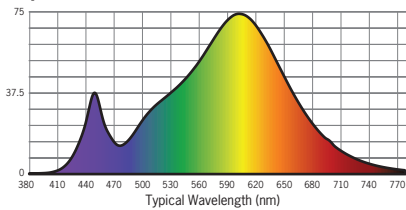
Multiplication Factors

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)¹: 83
Color Temperature (CCT)²: 3034K
Spectral Power Distribution Chart³



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

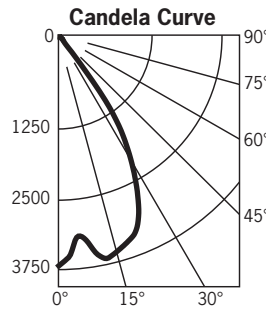
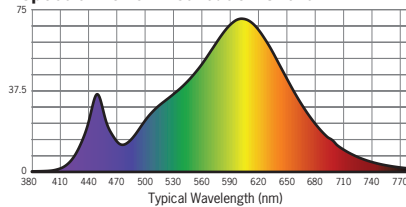
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	226.4	3.4
8'	127.3	4.6
10'	81.5	5.7
12'	56.6	6.9
14'	41.6	8.0
16'	31.8	9.1

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)¹: 82
Color Temperature (CCT)²: 3088K
Spectral Power Distribution Chart³



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

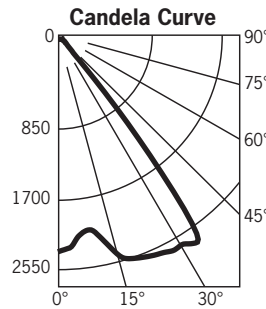
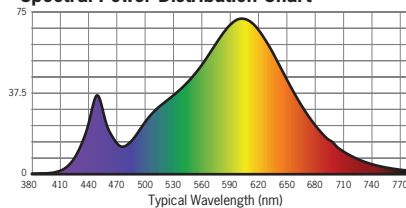
DISTANCE (FT.)	FOOTCANDLES (FC)	BEAM DIAMETER (FT.)
6'	101.3	6.2
8'	57.0	8.3
10'	36.5	10.4
12'	25.3	12.5
14'	18.6	14.6
16'	14.2	16.7

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)¹: 82
Color Temperature (CCT)²: 3075K
Spectral Power Distribution Chart³



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

R6RM

6" LED Recessed Downlight: Remodel Housing

Photometrics

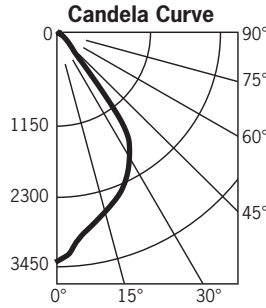
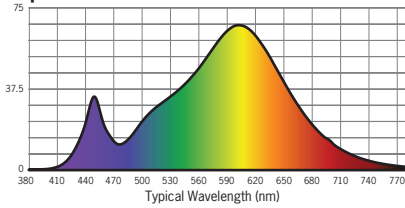
Multiplication Factors

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)¹: 82
 Color Temperature (CCT)²: 3030K
 Spectral Power Distribution Chart³



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