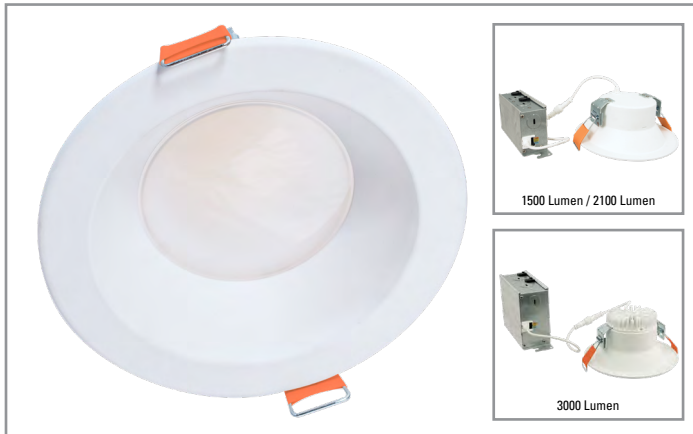


Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

LCR6

6-Inch Round Canless LED Downlight and Wallwash

Typical Applications

Residential • Multi-family • Mixed-Use

Interactive Menu

- Order Information page 2
- Product Specifications page 2
- Photometric Data page 3
- Energy & Performance Data page 3
- Product Warranty
- Dimming Guide

Product Certification



Refer to ENERGY STAR® Certified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JAB.

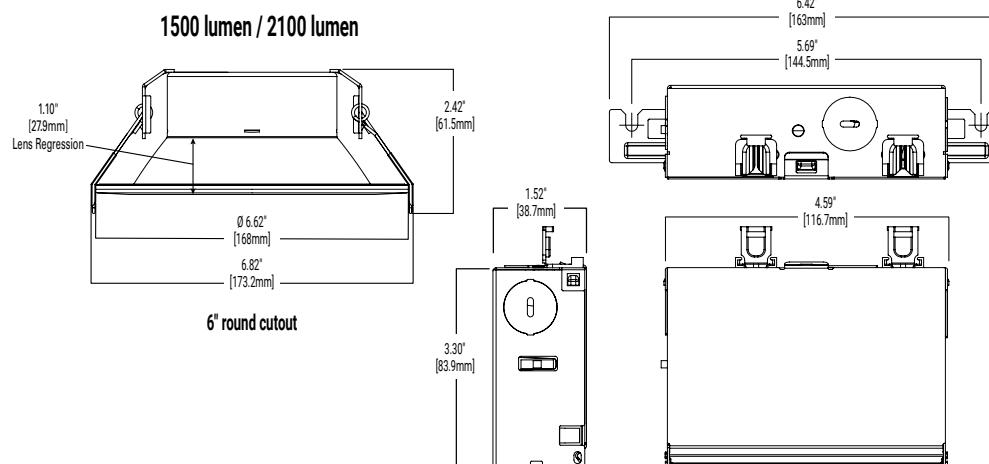
Product Features



Top Product Features

- Select from 6 CCTs via switch; 2700K, 3000K, 3500K, 4000K, 5000K, 6500K CCT; 90 CRI
- Up to 3000 Lumens; IC rated
- Canless - does not require recessed housing or junction box
- Dual Dim: 0-10V and Phase Cut, dimmable down to 5%
 - 0-10V dimmable down to 5% on 3000 Lumen model
- Wet location listed for showers and protected ceilings - Downlights only

Dimensional and Mounting Details



additional product diagrams

Order Information

SAMPLE ORDER NUMBER: **LCR615RD9FSE020**

Models	Lumens	Shape	CRI/CCT	Driver
LCR6 = 6" Canless LED Downlight ⁽¹⁾	15 = 1500 lumens (nominal) 21 = 2100 lumens (nominal) 30 = 3000 lumens (nominal)	RD = Round VV = Wall Wash ⁽¹⁾	9FS = 90 CRI minimum, field selectable CCT, choose 2700K, 3000K, 3500K, 4000K, 5000K or 6500K CCT	E010 = UNV 120 - 277V, 50/60Hz, 0-10V analog 100% to 5% dimming; Option available for 3000lm version only E020 = UNV 120-277, 50/60Hz, Dual Dim with 0-10V and Phase Cut options for 100% to 5% dimming; Option available for 1500lm & 2100lm version only E040 = UNV 120-277, 50/60Hz, Dual Dim with 0-10V and Phase Cut options for 100% to 5% dimming + Emergency battery with backup up to 90 minutes ^{(2) (3) (4)}
Notes 1. Product available in Matte White finish as standard.	Notes	Notes 1. Battery backup option not available with VV option	Notes	Notes 2. E040 option only available in RD Shape option 3. E040 provides Phase Cut, 0-10V dual dim with battery backup for 1500lm & 2100lm models 4. E040 provides 0-10V dim with battery backup for 3000lm and higher

Accessories		
Designer Trims LCR6TRMAH = 6" Haze, white flange LCR6TRMSC = 6" Specular, white flange LCR6TRMTBZ = 6" Tuscan bronze LCR6TRMVH = 6" Paintable white LCR6VWB = 6" White Baffle Trim LCR6BB = 6" Matte Black Baffle Trim	Overized Trim Ring HLB6ROTMW = Oversize trim ring for 6" housings Mounting Frame HL6RSMF = 6" round and square mounting frame	Extension Cable select Table Driver/Jbox HLB06BLEEC = 6 ft. extension cable HLB12BLEEC = 12 ft. extension cable HLB20BLEEC = 20 ft. extension cable

Product Specifications

Module

- Module construction includes LED Array, reflector, lens, housing and heat sink where applicable
- Integral aluminum heat sink provides passive thermal cooling achieving L70 at 50,000 hours in IC and non-IC applications
- LED module provides 1.10" lens regression

LED Array

- Mid power LED array provides a uniform source with high efficiency and no pixilation.
- 90 CRI minimum, R9 greater than 50
- Color Accuracy within 3 SDCM and 7 SDCM at the CCT endpoints and 4 SDCM in between the endpoints, provide color accuracy and uniformity.
- Correlated Color Temperature (CCT) has a selectable range from 2700K to 6500K (factory default 3000K)
- Use the switch to choose between 2700K, 3000K, 3500K, 4000K, 5000K and 6500K CCT

Optical Assembly

- Regressed flat lens provides uniformity, UGR ≤ 10
- Exceeds ENERGY STAR® color angular uniformity requirements

Remote Driver/Junction Box

- Metal driver/junction box with captive hinged junction box cover. Listed for (6) #12 AWG 90°C splice conductors, 2-in, 2-out plus (2) ground
- (4) 1/2" conduit pry-outs
- (2) Slide-N-Side™ non-metallic (NM) wire traps all accepts 14-2, 14-3, 12-2, 12-3 U.S and 14-2, 14-3, 12-2 Canadian NM cable
- (3) 4-port push wire nuts with clear caps for quick and reliable mains voltage connections
- Integral keyhole mounting slots facilitate direct mounting to building structure or new

construction mounting frame

Driver

- Integral 120-277V, 50/60Hz constant current driver provides noise free operation
- Dual Dim with 0-10V and Phase Cut options for 100% to 5% dimming up to 2100 lumen
- 0-10V dimming for 3000 lumen
- Continuous, flicker-free dimmer from 100% to 5%
- Plenum rated inline electrical quick connect provides low voltage connection to fixture fitting

Installation

- Can be installed in 3/8" to 1-1/4" thick ceilings
- Cutout can utilize standard round hole saw sizes, cutout template provided
- Mousetrap springs hold fixture fitting securely in the ceiling eliminating light leaks
- Can be removed from below the ceiling for service or replacement

Mounting / Retention

- The LCR6 requires no housing or third party junction box
- The remote enclosure may be used in direct contact with insulation.
- Installer must cut template out of drywall and install into aperture with the clips compressed.
- When released, the mousetrap springs will rest on to the back side of the drywall
- Not for installation in recessed cans

Emergency Battery Backup

- Emergency battery backup only available in downlight versions, not available in wall wash versions
- Emergency battery backup up to 90 minutes
- Emergency battery backup light will be at 6500K CCT

- Emergency battery backup will provide xxx lumen output for 90 minutes.
- Emergency battery backup is a separate battery junction box provided with unit.

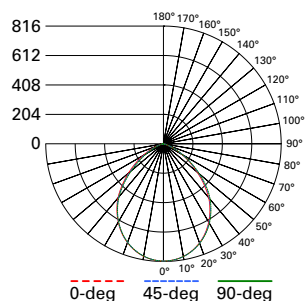
Compliance

- UL certified US and Canada
- Wet location listed and IP64 ingress protection rated, covered ceiling only (downlights only)
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions per FCC 47CFR Part 15 consumer limits, CAN ICES-005(B)/NMB-005 (B)
- Contains no mercury or lead and RoHS compliant
- Photometric testing in accordance with IES LM-79-08
- Lumen maintenance projections in accordance with IES LM-80-08 and TM-21-11
- Can be used for State of California Title 24 high efficacy LED compliance under JA8, reference Modernized Appliance Efficiency Database System (MAEDBS) for 2019 JA8 High Efficacy Lighting
- ENERGY STAR® certified, reference "Certified Light Fixtures" database (does not apply to EM versions)

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/warranty

Photometric Data

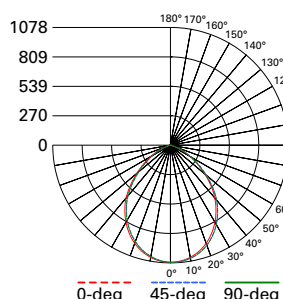
[View IES files](#)
**LCR615RD9FSE020-18W-3000K**

Spacing criterion:
(0-180) 1.16 | (90-270) 1.16 | (Diagonal) 1.23
Beam Angle: 90°
Field Angle: 130°
Lumens: 1610
Input Watts: 17.5 W
Efficacy: 92 LPW
UGR: 20
Test Report: P640132

Zonal Lumen	Lumens	% Lumens
0-30	609	37.8
0-40	962	59.7
0-60	1477	91.8
0-90	1609	99.9

TM-30-15	Rf = 92 Rg = 104
CRI/CIE	Ra = 93 R9 = 87.6

CCT - Range of 2700K- 6500K

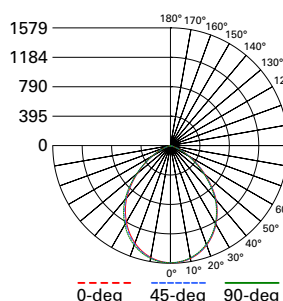
**LCR621RD9FSE020-23W-3000K**

Spacing criterion:
(0-180) 1.14 | (90-270) 1.15 | (Diagonal) 1.22
Beam Angle: 89°
Field Angle: 134°
Lumens: 2105
Input Watts: 22.9 W
Efficacy: 91.9 LPW
UGR: 21
Test Report: P640144

Zonal Lumen	Lumens	% Lumens
0-30	798	37.9
0-40	1255	59.6
0-60	1928	91.6
0-90	2103	99.9

TM-30-15	Rf = 92 Rg = 104
CRI/CIE	Ra = 93 R9 = 86.1

CCT - Range of 2700K- 6500K

**LCR630RD9FSE010-42W-3000K**

Spacing criterion:
(0-180) 1.15 | (90-270) 1.16 | (Diagonal) 1.22
Beam Angle: 89°
Field Angle: 134°
Lumens: 3100
Input Watts: 31.6 W
Efficacy: 98.1 LPW
UGR: 22
Test Report: P640156

Zonal Lumen	Lumens	% Lumens
0-30	1177	38
0-40	1854	59.8
0-60	2844	91.7
0-90	3098	99.9

TM-30-15	Rf = 92 Rg = 104
CRI/CIE	Ra = 93 R9 = 85.9

CCT - Range of 2700K- 6500K



Energy and Performance Data

LCR6 - 1500 Lumen Downlight		
	UNV	120V
Lumens	1500	1500
Input Voltage	120-277	120
Input current	0.16A	0.16 A
Input Power	18W	18W
Efficiency	82.00%	82.00%
Inrush(A)	3	2
THD	<20%	<20 %
PF	>0.9	>0.9
Sound Rating	<22dB	<22dB

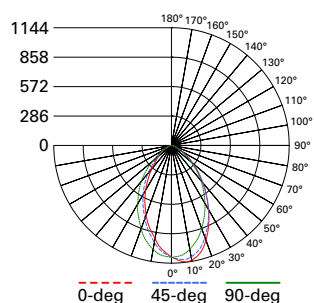
LCR6 - 2100 Lumen Downlight		
	UNV	120V
Lumens	2100	2100
Input Voltage	120-277	120
Input current	0.21A	0.21 A
Input Power	23W	23W
Efficiency	82.00%	82.00%
Inrush(A)	3	2
THD	<20%	<20 %
PF	>0.9	>0.9
Sound Rating	<22dB	<22dB

LCR6 - 3000 Lumen Downlight	
	UNV
Lumens	3000
Input Voltage	120-277
Input current	0.3A
Input Power	32.5W
Efficiency	88.00%
Inrush(A)	5
THD	<20%
PF	>0.9
Sound Rating	<22dB

Tested in accordance with IES LM63. Field results may vary.

Note: Refer to IES files for more product data.

Photometric Data

 View IES files
**LCR615WW9FSE020-17W-3000K**

Spacing criterion:
(0-180) 0.94 | (90-270) 0.96 | (Diagonal) 1.02
Lumens: 1520
Input Watts: 16.5 W
Efficacy: 92.1 LPW
Test Report: P645624

Zonal Lumen	Lumens	% Lumens
0-30	709	46.7
0-40	1036	68.1
0-60	1424	93.7
0-90	1520	100

TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 93
	R9 = 81.7
CCT - Range of 2700K-6500K	

SINGLE UNIT FOOTCANDLES

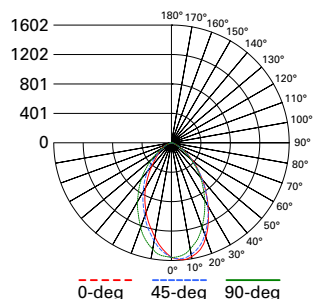
3' from wall
(distance from fixture along wall)

	1	2	3	4	5	6	7	8	9	10
1	2.9	2.2	1.2	0.6	0.3	0.2	0.1			
2	10.9	8.6	4.7	2.1	0.9	0.4	0.2			
3	14.2	12.1	7.8	4.1	1.9	0.9	0.5			
4	13	11.6	8.3	5.1	2.8	1.5	0.8			
5	10.4	9.6	7.4	5	3.1	1.9	1.1			
6	8	7.5	6.1	4.5	3.1	2	1.3			
7	6.1	5.7	4.9	3.8	2.7	1.9	1.3			
8	4.6	4.4	3.8	3.1	2.4	1.8	1.3			
9	3.6	3.4	3	2.5	2	1.6	1.2			
10	2.8	2.7	2.4	2.1	1.7	1.4	1.1			

MULTIPLE UNIT FOOTCANDLES

3' from wall
(spacing between fixtures)

	1	2	3
1	3.5	3.3	3.5
2	12.8	13.1	13
3	18.1	19.8	18.3
4	17.9	19.9	18
5	15.4	17	15.5
6	12.5	13.6	12.5
7	9.9	10.6	9.9
8	7.7	8.3	7.8
9	6.1	6.5	6.1
10	4.8	5.1	4.8

**LCR621WW9FSE020-23W-3000K**

Spacing criterion:
(0-180) 0.91 | (90-270) 0.94 | (Diagonal) 1.01
Lumens: 2125
Input Watts: 22.5 W
Efficacy: 94.4 LPW
Test Report: P645630

Zonal Lumen	Lumens	% Lumens
0-30	997	46.9
0-40	1450	68.2
0-60	1992	93.7
0-90	2125	100

TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 93
	R9 = 83.4
CCT - Range of 2700K-5000K	

SINGLE UNIT FOOTCANDLES

3' from wall
(distance from fixture along wall)

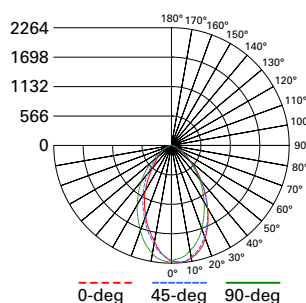
	1	2	3	4	5	6	7	8	9	10
1	3.6	2.8	1.5	0.8	0.4	0.2	0.1			
2	14.4	11.3	6.1	2.8	1.3	0.6	0.3			
3	19.6	16.7	10.6	5.6	2.6	1.3	0.6			
4	18.1	16.1	11.4	6.9	3.8	2	1.1			
5	14.5	13.3	10.2	6.9	4.3	2.5	1.5			
6	11.2	10.4	8.5	6.2	4.2	2.7	1.7			
7	8.5	8	6.8	5.2	3.8	2.6	1.8			
8	6.5	6.2	5.4	4.4	3.3	2.4	1.7			
9	5	4.8	4.2	3.6	2.8	2.1	1.6			
10	3.9	3.7	3.4	2.9	2.4	1.9	1.5			

MULTIPLE UNIT FOOTCANDLES

3' from wall
(spacing between fixtures)

	1	2	3
1	4.4	4.3	4.4
2	17	17.1	17.2
3	24.9	27.3	25.2
4	24.7	27.6	25
5	21.3	23.7	21.4
6	17.2	19	17.3
7	13.6	14.9	13.7
8	10.8	11.6	10.8
9	8.5	9.1	8.5
10	6.7	7.1	6.8

Photometric Data

[View IES files](#)
**LCR630WW9FSE010-30W-3000K**

Spacing criterion:

(0-180) 0.91 | (90-270) 0.94 | (Diagonal) 1

Lumens: 2970

Input Watts: 29.9 W

Efficacy: 99.3 LPW

Test Report: P645636

Zonal Lumen	Lumens	% Lumens
0-30	1410	47.5
0-40	2045	68.9
0-60	2790	93.9
0-90	2970	100

TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 93
	R9 = 82.7

CCT - Range of 2700K- 6500K

SINGLE UNIT FOOTCANDLES

3' from wall
 (distance from fixture along wall)

1	5.1	3.9	2.2	1.1	0.6	0.3	0.2
2	19.9	15.9	8.6	3.8	1.7	0.8	0.4
3	27.4	23.5	14.9	7.8	3.7	1.7	0.9
4	25.1	22.6	16.1	9.7	5.4	2.8	1.5
5	20.4	18.8	14.4	9.7	6	3.5	2
6	15.7	14.8	11.9	8.6	5.9	3.8	2.4
7	11.9	11.3	9.5	7.3	5.3	3.7	2.5
8	9.1	8.7	7.5	6.1	4.6	3.4	2.4
9	7	6.7	6	5	3.9	3	2.3
10	5.4	5.3	4.8	4.1	3.3	2.6	2

MULTIPLE UNIT FOOTCANDLES

3' from wall
 (spacing between fixtures)

1	6.2	6	6.2
2	23.5	23.8	23.8
3	34.6	38.2	35.2
4	34.3	38.8	34.8
5	29.9	33.4	30.1
6	24.3	26.9	24.4
7	19.2	21.1	19.3
8	15.1	16.4	15.1
9	11.9	12.8	11.9
10	9.5	10.1	9.5

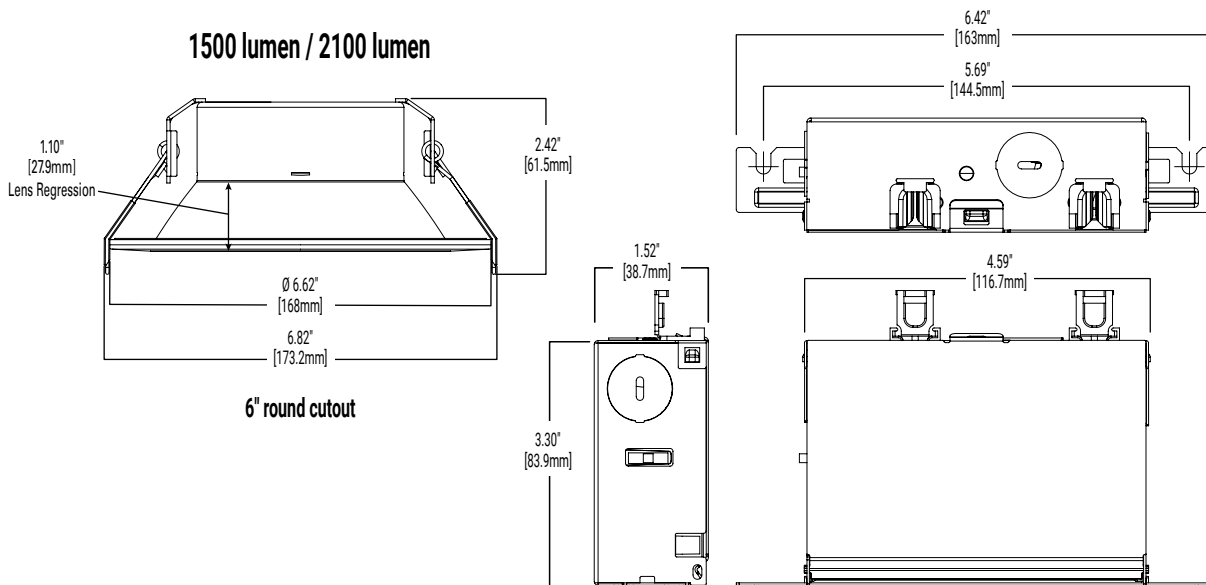
Energy and Performance Data

LCR6 - 1500 Lumen Wall Wash		
	UNV	120V
Lumens	1350	1350
Input Voltage	120-277	120
Input current	0.15A	0.15A
Input Power	16.5W	16.5W
Efficiency	81.00%	81.00%
Inrush(A)	3	2
THD	<20%	<20%
PF	>0.9	>0.9
Sound Rating	<22dB	<22dB

LCR6 - 2100 Lumen Wall Wash		
	UNV	120V
Lumens	1890	1890
Input Voltage	120-277	120
Input current	0.21A	0.21A
Input Power	23W	23W
Efficiency	82.00%	82.00%
Inrush(A)	3	2
THD	<20%	<20%
PF	>0.9	>0.9
Sound Rating	<22dB	<22dB

LCR6 - 3000 Lumen Wall Wash	
	UNV
Lumens	2700
Input Voltage	120-277
Input current	0.3A
Input Power	30W
Efficiency	88.00%
Inrush(A)	5
THD	<20%
PF	>0.9
Sound Rating	<22dB

Dimensional Details



Emergency Battery Backup

