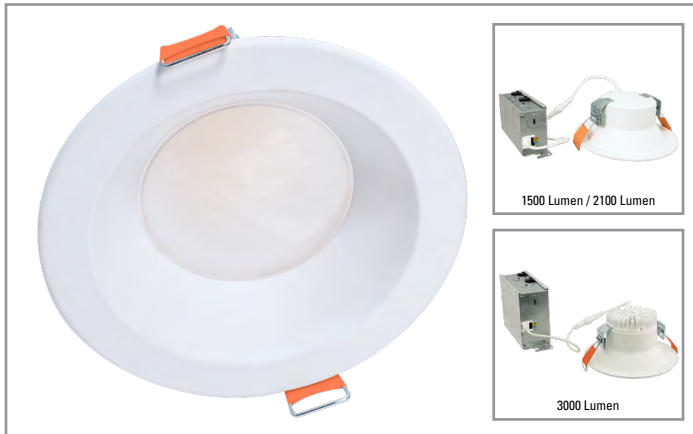


Project		Catalog #		Type	
Prepared by		Notes		Date	



# 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.

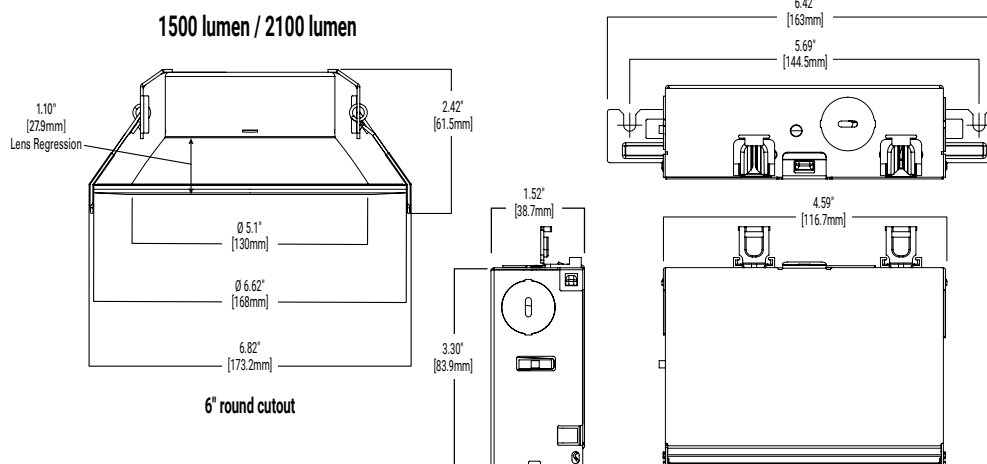
#### Product Features



#### 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
<b>LCR6</b> = 6" Canless LED Downlight <sup>(1)</sup>	<b>15</b> = 1500 lumens (nominal) <b>21</b> = 2100 lumens (nominal) <b>30</b> = 3000 lumens (nominal)	<b>RD</b> = Round <b>WW</b> = Wall Wash <sup>(1)</sup>	<b>9FS</b> = 90 CRI minimum, field selectable CCT, choose 2700K, 3000K, 3500K, 4000K, 5000K or 6500K CCT	<b>E010</b> = UNV 120 - 277V, 50/60Hz, 0-10V analog 100% to 5% dimming; Option available for 3000lm version only <b>E020</b> = 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 <b>E040</b> = 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 <sup>(2)(3)(4)</sup>
<b>Notes</b> 1. Product available in Matte White finish as standard.	<b>Notes</b>	<b>Notes</b> 1. Battery backup option not available with WW option	<b>Notes</b>	<b>Notes</b> 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		
<b>Designer Trims</b> LCR6TRMAH = 6" Haze, white flange LCR6TRMSC = 6" Specular, white flange LCR6TRMTBZ = 6" Tuscan bronze LCR6TRMWH = 6" Paintable white LCR6VWB = 6" White Baffle Trim LCR6BB = 6" Matte Black Baffle Trim	<b>Overized Trim Ring</b> HLB6ROTMW = Oversize trim ring for 6" housings <b>Mounting Frame</b> HL6RSMF = 6" round and square mounting frame	<b>Extension Cable   seleCCTable Driver/Jbox</b> 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 for US and Canada, type IC suitable for direct contact with air permeable insulation
- Not for use in direct contact with spray foam insulation, reference NEMA LSD57-2013
- 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](http://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

90°

**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

89°

**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

89°

## 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

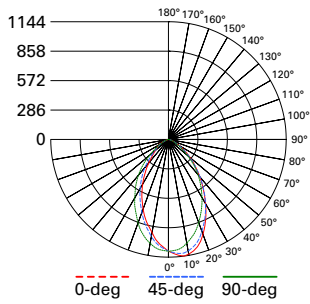
LCR6 - 3000 Lumen Downlight	
	UNV
Lumens	3000
Input Voltage	120-277
Input current	0.3A
Input Power	32.5W
Efficiency	88.00%
Inrush(A)	5
THD	<20%
PF	>0.9
Sound Rating	<22dB

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

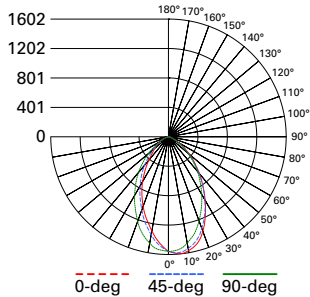
Spacing criterion:  
 (0-180) 0.94 | (90-270) 0.96 | (Diagonal) 1.02  
 Lumens: 1520  
 Input Watts: 16.5 W  
 Efficacy: 92.1 LPW  
 Test Report: P645624

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	2.9	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	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

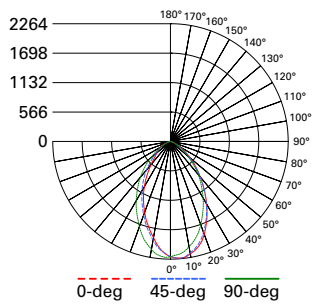
TM-30-15	Rf = 92
	Rg = 103
CRI/CIE	Ra = 93
	R9 = 83.4
	CCT - Range of 2700K - 5000K

SINGLE UNIT FOOTCANDLES							
3' from wall (distance from fixture along wall)							
1	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	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

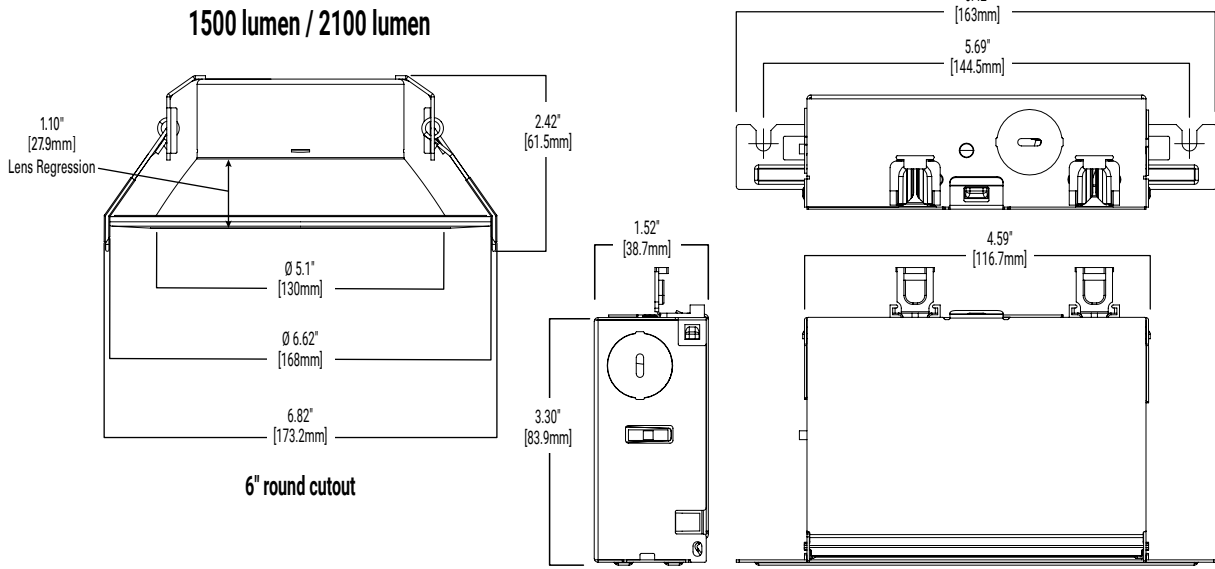
## Energy and Performance Data

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

