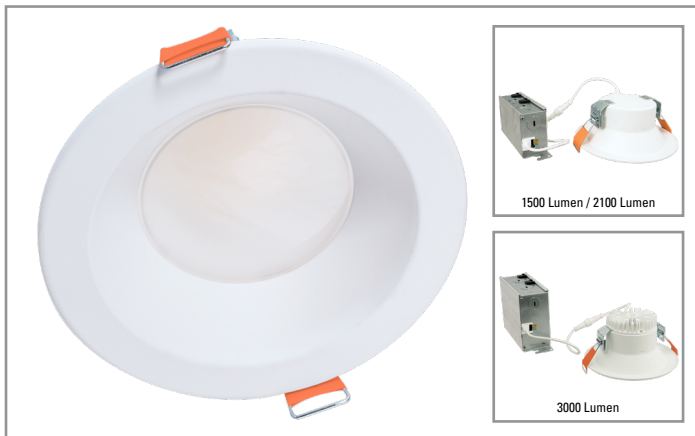


Project		Catalog #		Type	
Prepared by		Notes		Date	



HALO

LCR6" Recessed Smooth Canless Downlight

6" Recessed Canless LED Downlight mounts directly to the ceiling - no housing required. The high and low lumen 6" with 6-position color selectability, and flicker free 5% dimming allow for easy lighting adjustability.

Typical Applications

Residential • Multi-family • Mixed-Use

Interactive Menu

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- Product Specifications [page 2](#)
- Photometric Data [page 3](#)
- Energy & Performance Data [page 3](#)
- Product Warranty
- Dimming Guide



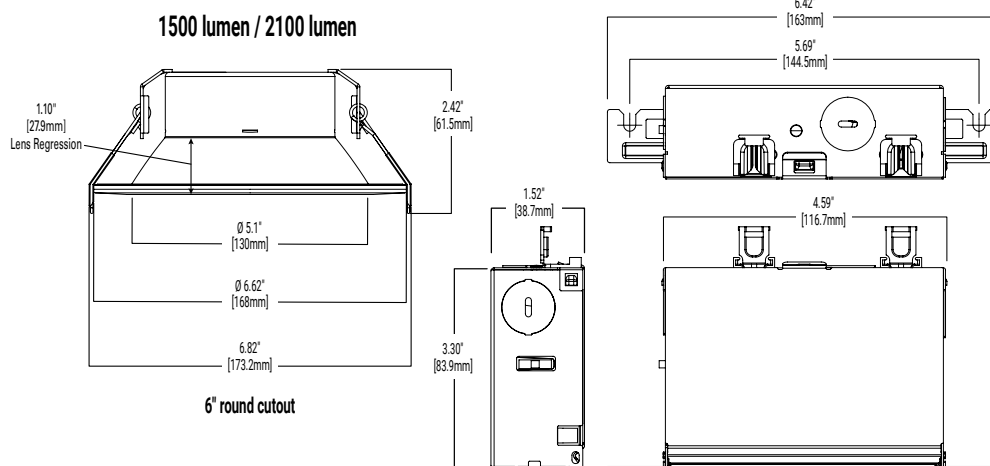
BATTERY BACKUP

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 JA8.

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	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
Notes	Notes	Notes	Notes	Notes
1. Product available in Matte White finish as standard.				

Accessories			Emergency Power Accessories
Designer Trims LCR6TRMAH = 6" Haze, white flange LCR6TRMSC = 6" Specular, white flange LCR6TRMTBZ = 6" Tuscan bronze LCR6TRMWH = 6" Paintable white LCR6WVB = 6" White Baffle Trim LCR6BB = 6" Matte Black Baffle Trim	Overized Trim Ring HLB6ROTMMW = Oversize trim ring for 6" housings Mounting Frame HLG6SMF = 6" round and square mounting frame MF6RC = 6" round mounting frame with drywall collar	Extension Cable seleCCTable Driver/Jbox HLB06BLEEC = 6 ft. extension cable HLB12BLEEC = 12 ft. extension cable HLB20BLEEC = 20 ft. extension cable	INVM-10W-AD = Single Phase 0-10V Auto Dimming (can power up to 1 LCR6 fixtures) INVM-25W-ADSD = Single Phase 0-10V Auto Dimming (can power up to 6 LCR6 fixtures)

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 Mini Inverter

- Provides 90 minutes of 10VA emergency power to lighting fixtures
- 0-10V Auto dimming allows up to 50VA max dimmable load
- 10VA max non-dimmable load
- Automatic 120VAC or 277VAC output power to driver or ballast means easy field install
- UL924 and CSA 22.2 No.141 listed for field or factory installation
- Remote mounting up to 250feet
- Maintenance free lithium-ion battery
- See Mini Inverter Spec Sheet for more information

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

Controls

Connected Lighting System

Two WaveLinx connected solutions. Refer to WaveLinx website for details www.cooperlighting.com.

WaveLinx PRO Tilemount Sensor Kit

- WaveLinx PRO WTA tilemount sensor kit offers daylight dimming, PIR motion sensing, scene and zone configuration, automatic commissioning; and optional RLTS - Real Time Location Services available.

WaveLinx LITE Tilemount Sensor Kit

- WaveLinx LITE WTK tilemount sensor kit offers daylight dimming and PIR motion sensing, scene and grouping configuration.

WaveLinx Tilemount Kits Application:

- The WTA and WTK tilemount kits include a control module mounted on the luminaire junction box via 1/2" knock-out, and a tilemount sensor on 54-inch whip; for ceiling installation by direct-mount spring clips or via mounting bracket in octagon ceiling boxes.
- he WTA and WTK tilemount kits may be ordered as factory installed on the luminaire, or ordered separately as a field installed accessory kit.
- Note: WaveLinx PRO devices are only compatible with the WaveLinx PRO system.**
- Note: WaveLinx LITE devices are only compatible with the WaveLinx LITE system.**

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.

Energy and Performance Data

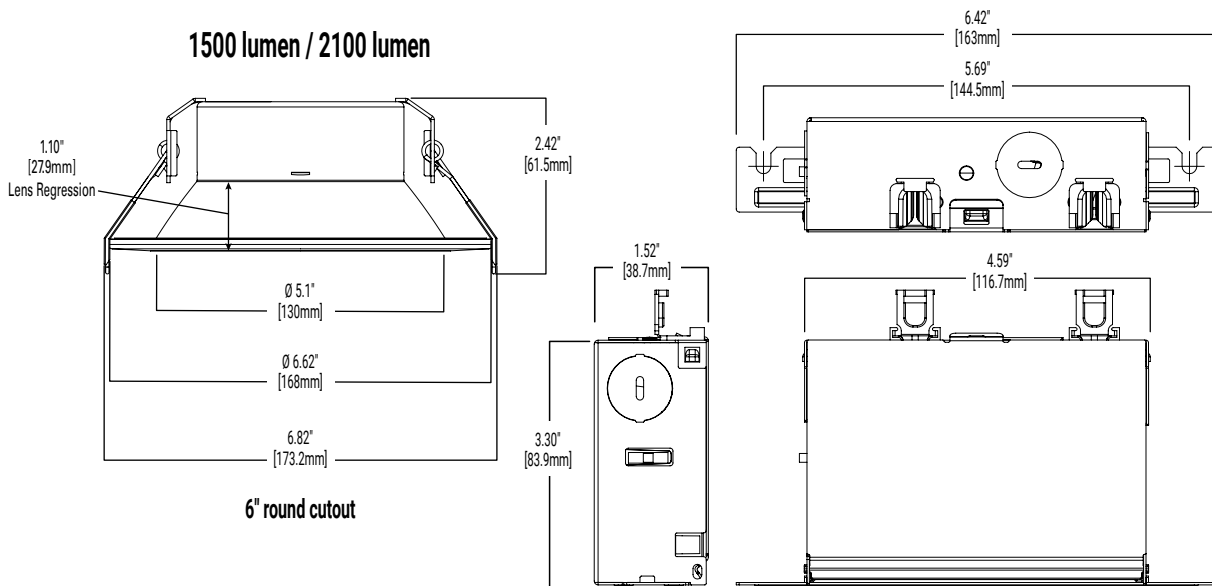
[View IES files](#)

LCR6 - 1500 Lumen Wall Wash		
	UNV	120V
Lumens	1350	1350
Input Voltage	120-277	120
Input current	0.15A	0.15 A
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

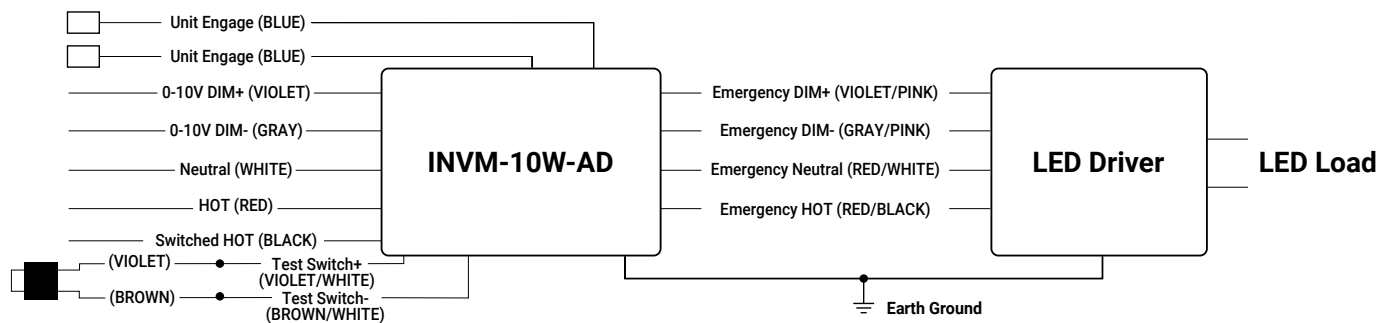
LCR6 - 2100 Lumen Wall Wash		
	UNV	120V
Lumens	1890	1890
Input Voltage	120-277	120
Input current	0.21A	0.21 A
Input Power	23W	23W
Efficiency	82.00%	82.00%
Inrush(A)	3	2
THD	<20%	<20%
PF	>0.9	>0.9
Sound Rating	<22dB	<22dB

LCR6 - 3000 Lumen 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



Mini Inverter Schematic



Connected Systems

WaveLinx LITE - WLST Tilemount Sensor

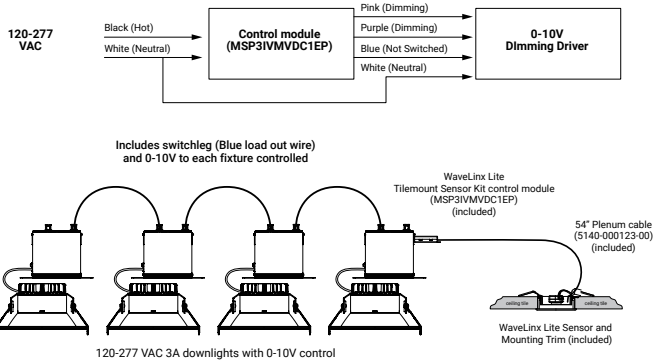
WaveLinx LITE devices only compatible with the WaveLinx LITE system.



- Intuitive Android™ or Apple® iOS® app for basic system code compliant set up and configuration via Bluetooth
- Up to 28 unique areas per project site (WaveLinx LITE Bluetooth network)
- Up to 50 devices for an area, any one of 16 control zones, up to 6 occupancy sets, and custom lighting scenes
- Automatic occupancy or vacancy, sensor sensitivity, daylight dimming, etc. configurable through the app
- Refer to the WaveLinx system specifications for details



WaveLinx LITE WLST Tilemount Wiring Diagram



WaveLinx LITE Bluetooth Enabled System



WaveLinx PRO Wireless – WPST Tilemount Sensor

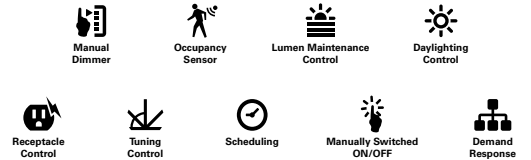
WaveLinx PRO devices only compatible with the WaveLinx PRO system.



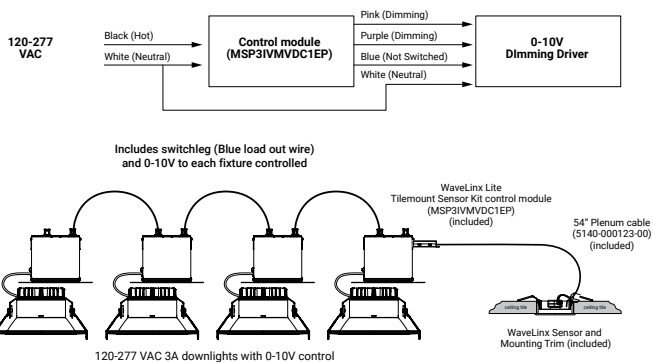
- WaveLinx PRO Wireless functionality configures zones and customizes settings from one secure mobile app
- Automatic code commissioning that meets the strictest codes
- Fixtures and sensors integrate with Wireless Area Controller, Wall Stations, and Control Devices
- Stand-Alone Offices or Entire Building Network Installations



WaveLinx mobile app settings



WaveLinx PRO WPST Tilemount Wiring Diagram



WaveLinx CORE Building Management Integration

