

# LIGHTOLIER

by @signify

## Downlighting

Calculite LED 6" gen 3

C6RWW Round Wall Wash



Calculite LED 6" generation 3 features industry leading visual comfort, excellent uniform illumination over time, and patented installation flexibility.

**Standard luminaire:** Complete luminaire = Frame + Engine + Trim + Accessories (optional)

**Buy American Act of 1933 (BAA)<sup>2</sup> Compliant luminaire\*:** Complete luminaire = Frame-BAC + Engine-BAC + Trim-BAC

\* BAA compliance requires that BAC option be selected for each of frame, engine, and trim. Frame and engine will be ordered/shipped together; trim will be ordered/shipped separately. Accessories (optional) are not currently BAA-compliant.

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

### Frame

**standard example:** 6RN | **BAC example:** 6RN-BAC

Series	Installation	Voltage/ Options
<b>6R</b>		
<b>6R</b> 6" Non-IC Round	<b>N</b> New construction	<b>—</b> Universal 120 V/277 V (specify for Power Over Ethernet) <b>RADIO</b> Integral Interact Pro RF sensor (enables wireless connected lighting control) <sup>1</sup> <b>EM</b> Emergency (see page 2 for details and limitations) <sup>2</sup> <b>LC</b> Chicago Plenum <sup>3</sup>
	<b>R</b> Remodeler	<b>—</b> Universal 120 V/277 V (specify for Power Over Ethernet) <b>3</b> 347 V (not compatible with ELV dimming)

### Engine

**standard example:** C6L15835NZ10U | **BAC example:** C6L15835NZ10U-BAC

Series	Lumens	CRI	CCT	Beam	Dimming	Voltage	Options
<b>C6L</b>							
<b>C6L</b> Calculite LED 6"	<b>10</b> 1000lm <b>15</b> 1500lm <b>20</b> 2000lm <b>25</b> 2500lm <sup>5</sup> <b>30</b> 3000lm <sup>5</sup> <b>35</b> 3500lm <b>48</b> 4800lm (Z10 only) <b>60</b> 6000lm (Z10 only)	<b>8</b> 80CRI <b>9</b> 90CRI	<b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K	<b>M</b> Medium (56°) <b>W</b> Wide (76°)	<b>Z10</b> 0-10V 1% <b>SOL</b> EldoLED Solo 0-10V 0.1% <b>D</b> Dali 0.1% <b>L</b> Lutron LDE1 EcoSystem (fade-to-black) <b>DMX</b> Digital Multiplexing <b>E</b> ELV (for up to 2000lm only) <b>P</b> Power over Ethernet (PoE)	<b>U</b> Universal 120V/277V/347V <b>1</b> 120 V <b>E</b> Ethernet 48V DC Only compatible with 1000 (10) to 2500 (25) lumen configurations.	<b>BAC</b> Meets the requirements of the Buy American Act of 1933 (BAA) <sup>4</sup>

### Trim

**standard example:** C6RWWCCP | **BAC example:** C6RWWCCP-BAC

Series	Aperture	Style	Finish	Flange	Options
<b>C6</b>	<b>R</b>				
<b>C6</b> Calculite LED 6"	<b>R</b> Round	<b>WW</b> Open Wall Wash <b>LW</b> Lensed Wall Wash <b>CW</b> Corner Wall Wash <sup>6</sup> <b>DW</b> Double Wall Wash <sup>6</sup>	<b>BK</b> Black (anodized) <b>CL</b> Specular clear <b>WH</b> White (matte)	<b>CC</b> Comfort clear <b>CD</b> Comfort clear diffuse <b>CZ</b> Champagne bronze	<b>—</b> White (matte) <b>P</b> Polished (matches aperture) <b>F</b> Flangeless (requires CA6RFT)
					<b>—</b> White (matte) <b>F</b> Flangeless (requires CA6RFT)

### Accessories (Not currently BAA-compliant)

<b>SBA</b>	Interact Ready System Bridge Accessory (refer to Philips System Bridge Accessory spec sheet for options and details) <sup>7</sup>	<b>CA6RFT</b>	Mud-in ring for use in 6" round flangeless trim installations (ordered with a flangeless trim)
<b>SWZDT</b>	SpaceWise wireless controller with dwell time functionality (compatible with all 0-10V options, see SWZDT spec sheet)	<b>CAEM</b>	Field instalable EM pack (for use with new construction frame only)
<b>7925</b>	Sloped ceiling 6" adapter for 6RN and 6RA frames	<b>AMS</b>	ActiLume multi-sensor (optional accessory for PoE configurations)

- Interact Pro (RADIO & 3RADIO) requires above ceiling access.
- Emergency (EM) frame includes emergency battery with ceiling and reflector mountable test switch (see page 2 for details and limitations).
- Chicago Plenum (LC) frame is not available for Buy American Compliant (BAC) configurations.
- Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.
- The 2500lm (25) and 3000lm (30) packages have marked spacing requirements (see page 3).
- Corner (CW) and Double (DW) are not compatible with flangeless (F) option.
- Requires IRT9015 IR remote & Interact Pro App for commissioning.



# C6RWW Calculite LED 6" gen 3

## Round Wall Wash

### Frame-in-kits

#### New Construction:

Galvanized stamped steel for dry or plaster ceilings. Preinstalled telescoping mounting bars from 13" to 24". For 4' distances, use 1/2" EMT, 1-1/2" x 1/2" U or C channel.

**Max ceiling thickness for Lensed Wall Wash (LW) is 2.5" and for Open, Corner, Double Wall Wash (WW, CW, DW) is 2.75".**

#### Emergency:

For reflector mounted emergency test switch add "EM" to end of catalog code (example: C6RWWCCEM). Leave blank for ceiling mounted test switch. Reflector mounted test switch requires above ceiling access.

#### Patented install Mounting frame:

- Pre-installed mounting bars for fast and tool-less installs into T-grid & hat channel ceilings.
- Close-cut aperture design eliminates possibility of gap between ceiling opening and reflector flange.
- Separate wiring compartment for wiring frame to building allows inspection prior to light engine install.
- Simple plug-and-play connection between frame and light engine from below ceiling.

### Dimming

- Advance 0-10V 1% dimming
- Lutron Hi-lume EcoSystem H Series 1% dimming
- EldoLED ECoDrive Dali 1% dimming
- EldoLED SOLOdrive 0-10V 0.1% dimming
- EldoLED DMX POWERdrive

### Power over Ethernet

#### Powered via Lightolier PoE lighting controller:

Complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

### Optical systems

#### Comfort throughout the space:

True 50° physical cutoff and 45° reflected cutoff

#### Quality of light:

2 SDCM ensures color consistency from fixture to fixture and over the luminaire's long lifetime.

### Light Engine

Quick connect power pack allow for easy installation and replacement from below ceiling with no need for additional wiring. This allows for:

- Frame and ceiling installation to be performed while still finalizing details such as lumen packages, CCT and control type.
- Easy replacement of electronics at end of life with minimal wasted material and labor required.
- Ease and upgradability of technology.

### Options and Accessories

**Flangeless mud-in ring:** Use **CA6RFT** for use with flangeless plaster installations.

**Sloped ceilings:** Compatible with sloped ceiling adapters (see **SCA** spec sheet).

**Vandal Proof:** Use **C4RVPWH** for an IP65 rated vandal proof matte white accessory. Must be ordered with flangeless trim and new construction frame.

### ENERGY STAR® exceptions

- 90 CRI configurations
- Champagne Bronze & Black finishes
- 347V & Emergency voltage/options
- Dali, EldoLED Solo & PoE drivers

### Title 24 exceptions

- 1000lm & Lensed Wall Wahser configurations
- Champagne Bronze & Black finishes

### Labels and Listings

- cULus listed for wet locations
- ENERGY STAR® certified
- RoHS certified
- CEC Title 24 JA8 certified
- CCEA (frames with \*LC suffix)

### Warranty



5 year limited warranty  
Visit [Signify.com/warranties](https://www.signify.com/warranties) for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

# C6RWW Calculite LED 6" gen 3

## Round Wall Wash

### Wireless Controls Options

#### **Interact Pro scalable sensor (System Bridge Accessory with -CS option):**

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.
- Interact Pro includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & Bluetooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote onsite to identify and group devices together.
- Compatible with:
  - UID8451/10 wireless dimmer switch
  - SWS200 wireless scene switch
  - Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
  - Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
  - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
  - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH
- For more information on Interact Pro visit:  
[www.interact-lighting.com/interactproscalablesystem](http://www.interact-lighting.com/interactproscalablesystem)

#### **SpaceWiseDT (SWZDT) (SWZDT Accessory):**

- Remote mounted and centralized SWZDT module accessory controls multiple luminaires.
- Compatible with any 0-10v driver
- 120-347V mains input voltage
- Up to 730VA load at 120V

#### **Interact Pro Enterprise (System Bridge Accessory with -SB option):**

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible with UID8451/10 wireless dimmer switch, SWS200 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- SB option in addition to occupancy and daylight sensing supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit:  
[www.interact-lighting.com/office](http://www.interact-lighting.com/office) or  
[www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices)

#### **Emergency Options (ER100) (System Bridge Accessory with ER100 option):**

- Power Sensing (Factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output
- Power Interruption Detection (Field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output

#### **Radio only sensor (RADIO):**

- Integral RADIO only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.

### Wired Controls Options

#### **Interact Office Wired (PoE):**

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output.
- Test switch and indicator light mounted on side of chassis on one end.

- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information on Interact Office Wired, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or  
[www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices)

#### **Interact Office Wired (PoE), Static White:**

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or  
[www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices)

# C6RWW Calculite LED 6" gen 3

## Round Wall Wash

interact

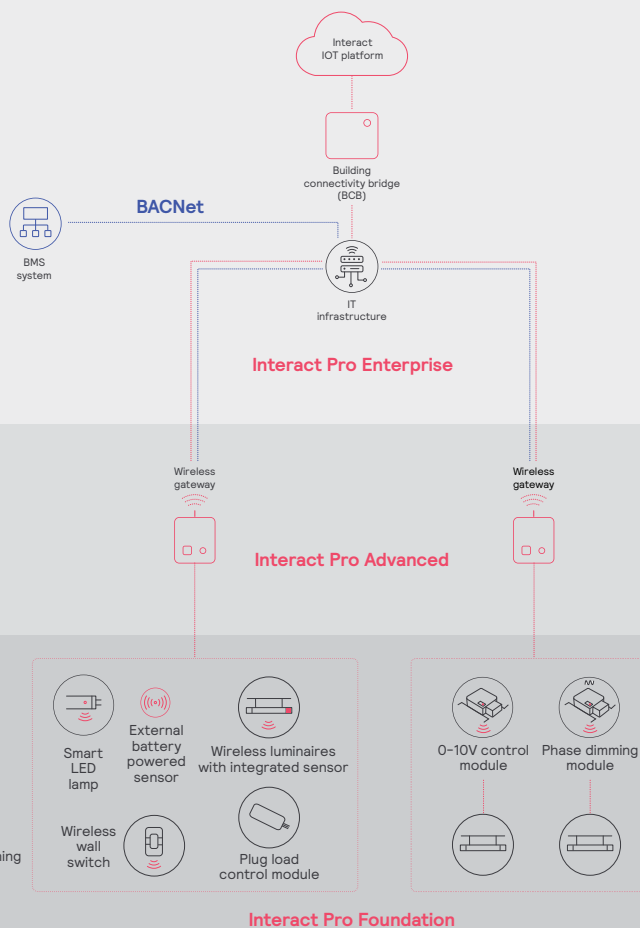
### Interact Pro scalable system

	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

### Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
• luminaires with integrated sensors	150
• smart TLEDs	150
Total number of ZGP devices (sensors and switches)	50
• sensors	30
• switches	50
• zones and groups	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



# C6RWW Calculite LED 6" gen 3

## Round Wall Wash

### Narrow

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
<b>C6L10_NZ10U</b>	120V	50/60Hz	0.08	230 mA	9W	8W	<15%	>0.95
	277V		0.04				<20%	>0.95
<b>C6L15_NZ10U</b>	120V	50/60Hz	0.11	340 mA	15W	11W	<10%	>0.95
	277V		0.05				<15%	>0.95
<b>C6L20_NZ10U</b>	120V	50/60Hz	0.16	460 mA	22W	16W	<10%	>0.95
	277V		0.08				<15%	>0.95
<b>C6L25_NZ10U</b>	120V	50/60Hz	0.20	590 mA	25W	21W	<10%	>0.95
	277V		0.10				<15%	>0.95
<b>C6L35_NZ10U</b>	120V	50/60Hz	0.30	900 mA	36W	30W	<10%	>0.95
	277V		0.14				<15%	>0.95
<b>C6L48_NZ10U</b>	120V	50/60Hz	0.42	1250 mA	51W	44W	<10%	>0.95
	277V		0.19				<15%	>0.95
<b>C6L60_NZ10U</b>	120V	50/60Hz	0.48	1400 mA	57W	50W	<10%	>0.95
	277V		0.21				<15%	>0.95

### Medium/Wide

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
<b>C6L10_MZ10U</b>	120V	50/60Hz	0.08	210 mA	9W	8W	<15%	>0.95
	277V		0.04				<20%	>0.95
<b>C6L15_MZ10U</b>	120V	50/60Hz	0.11	320 mA	15W	11W	<10%	>0.95
	277V		0.05				<15%	>0.95
<b>C6L20_MZ10U</b>	120V	50/60Hz	0.15	430 mA	19W	15W	<10%	>0.95
	277V		0.07				<15%	>0.95
<b>C6L25_MZ10U</b>	120V	50/60Hz	0.19	550 mA	23W	19W	<10%	>0.95
	277V		0.09				<15%	>0.95
<b>C6L35_MZ10U</b>	120V	50/60Hz	0.25	570 mA	30W	25W	<10%	>0.95
	277V		0.11				<15%	>0.95
<b>C6L48_MZ10U</b>	120V	50/60Hz	0.36	810 mA	40W	34W	<10%	>0.95
	277V		0.16				<15%	>0.95
<b>C6L60_MZ10U</b>	120V	50/60Hz	0.50	1130 mA	57W	50W	<10%	>0.95
	277V		0.22				<15%	>0.95

### Narrow (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
<b>C6L10___NPE</b>	53V	51-54V	DC	160 mA	8.9 W
<b>C6L15___NPE</b>	53V	51-54V	DC	250 mA	13.7 W
<b>C6L20___NPE</b>	53V	51-54V	DC	330 mA	17.7 W
<b>C6L25___NPE</b>	53V	51-54V	DC	420 mA	22.8 W

### Medium (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
<b>C6L10___MPE</b>	53V	51-54V	DC	160 mA	8.4 W
<b>C6L15___MPE</b>	53V	51-54V	DC	230 mA	12.5 W
<b>C6L20___MPE</b>	53V	51-54V	DC	310 mA	16.7 W
<b>C6L25___MPE</b>	53V	51-54V	DC	390 mA	21.4 W

### Wide (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
<b>C6L10___WPE</b>	53V	51-54V	DC	160 mA	8.4 W
<b>C6L15___WPE</b>	53V	51-54V	DC	230 mA	12.5 W
<b>C6L20___WPE</b>	53V	51-54V	DC	310 mA	16.7 W
<b>C6L25___WPE</b>	53V	51-54V	DC	390 mA	21.4 W

1. Nominal input volts.  
2. Preferred volt range.

### Marked spacing applications

Light engine	4800lm	6000lm
<b>C6L_Z10U series</b>	X	X
<b>C6L_LU series</b>	—	—
<b>C6L_DU series</b>	—	—

Modules marked with an X require marked spacing:  
- Center-to-center of adjacent luminaires: 24" (610mm)  
- Luminaire center to side building member: 12" (305mm)

In accordance with CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

### Lifetime (TM-21) data

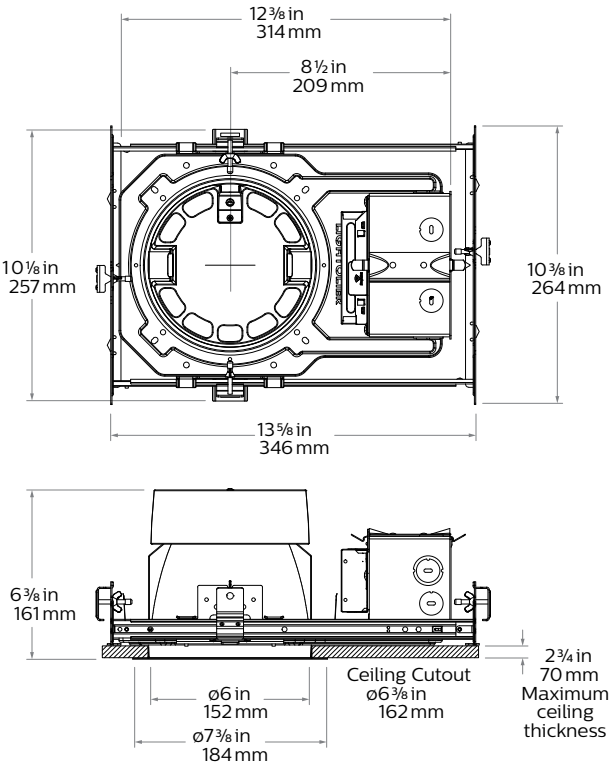
Lumens	Narrow beam	Medium/Wide beam*
<b>1000lm</b> <b>1500lm</b> <b>2000lm</b> <b>2500lm</b> <b>3500lm*</b> <b>4800lm</b>	L90 @ 60,000hrs.	L90 @ 60,000hrs.
<b>6000lm</b>	L90 @ 60,000hrs.	L80 @ 60,000hrs.

\* Lutron 3500lm with Medium/Wide beam is L85 @ 60,000hrs.

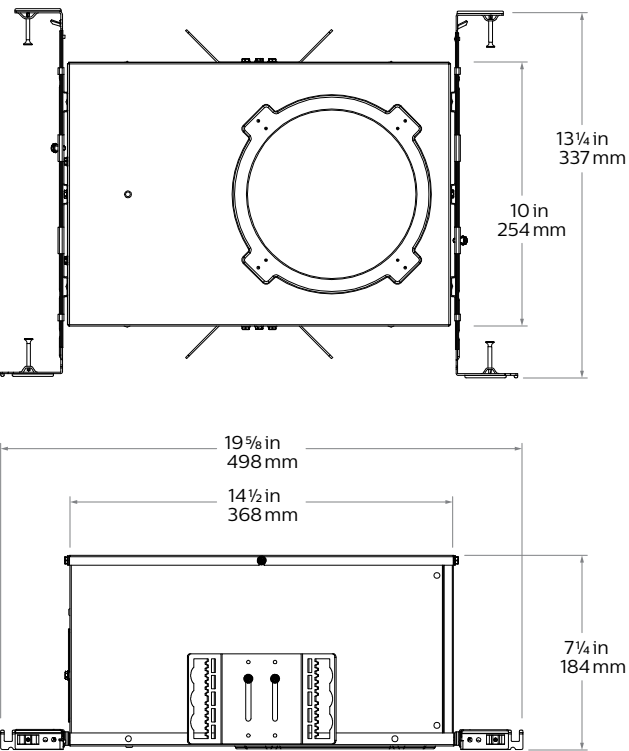
# C6RWW    Calculite LED 6" gen 3

## Round Wall Wash

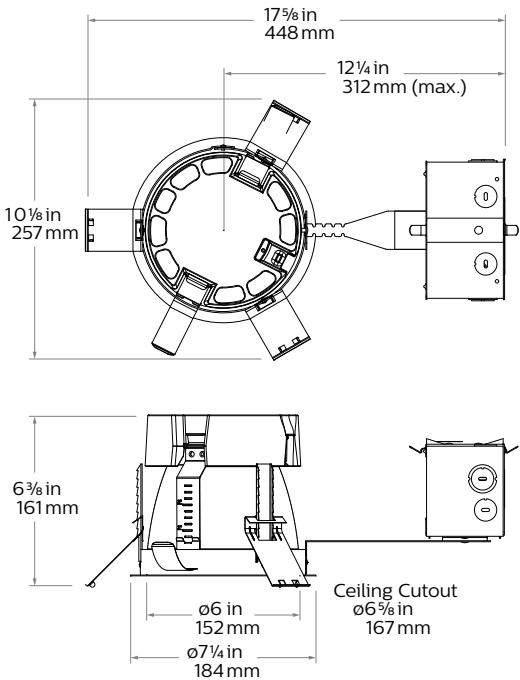
### New Construction (N)



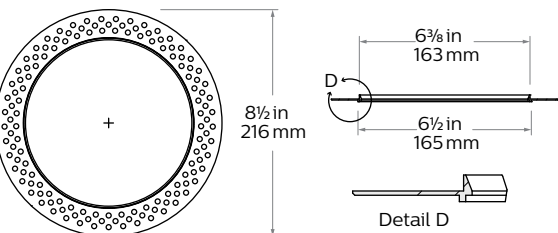
### Chicago Plenum (LC)



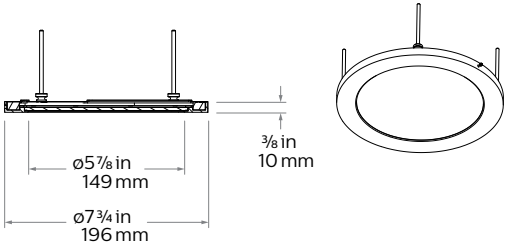
### Remodeler (R)



### Flangeless mud-in ring (CA6RFT) accessory



### Vandal Proof (VP) accessory



# C6RWW Calculite LED 6" gen 3

## Round Wall Wash

### Reflector



**Specular clear (CL):** Most specular and most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



**Champagne bronze (CZ):** Semi-specular finish that softens light at the source of the reflector while providing a warmer reflector appearance (slightly warmer).



**Comfort clear (CC):** Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



**White (WH):** (matte) Brightest illuminated aperture and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



**Comfort clear diffuse (CD):** Slightly diffuse clear finish, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.



**Black (BK):** (matte) Specular finish that provides the lowest aperture brightness possible and significantly reduces source identification in a ceiling.



**Vandal proof (VP):** Provides an elegant solution for vandal resistant needs. One piece machined aluminum ring with impact resistant clear lens. Flangeless (F) flange must be ordered. Provides the luminaire with an IK10 impact and IP65 rating.

### Flange



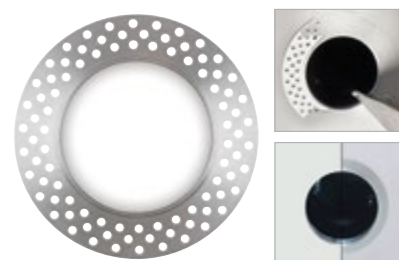
**White (-):** (matte) Provides the smoothest transition to ceilings when off.



**Polished (P):** (matches aperture) Produces a continuous look throughout the reflector (aperture matching).



**Flangeless (F):** (flush-mount) Creates a flush, virtually seamless transition from aperture to ceiling.



**Mud-in ring (FT):** Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.



# C6RWW    Calculite LED 6" gen 3

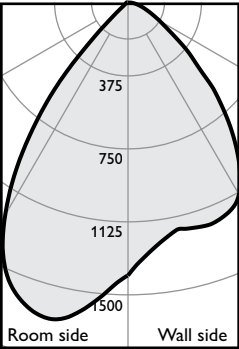
## Round Wall Wash

### Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	6000lm = 202%
CC = 95%	80CRI 3500K = 100%	4800lm = 192%
CD = 87%	80CRI 3000K = 97%	3500lm = 140%
CZ = 63%	80CRI 2700K = 87%	2500lm = 100%
WH = 87%	90CRI 3000K = 77%	2000lm = 80%
BK = 57%	90CRI 2700K = 73%	1500lm = 60%
		1000lm = 40%

### Wall Wash, 2500lm Engine, 103.5 lm/w or 103.0 lm/W at 21.4W (Power over Ethernet)

#### Candela Curve



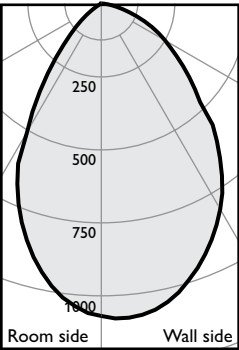
Frame: **C6RN or 6RN**  
Engine: **C6L25835WZ10U**  
Trim: **C6RWWCL**

CCT<sup>1</sup>: 3500K  
Output lumens: 2204 lms  
Input watts: 21.3 W  
CRI: 80 min

**Efficacy: 103.5 lm/w**  
Report<sup>2</sup>: F37141

### Lensed Wall Wash, 2500lm Engine, 72.2 lm/w or 71.9 lm/W at 21.4W (Power over Ethernet)

#### Candela Curve



Frame: **C6RN or 6RN**  
Engine: **C6L25835WZ10U**  
Trim: **C6RLWCL**

CCT<sup>1</sup>: 3500K  
Output lumens: 1538 lms  
Input watts: 21.3 W  
CRI: 80 min

**Efficacy: 72.2 lm/w**  
Report<sup>2</sup>: F37142

1. Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.  
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

