



Calculite LED 7" generation 3 features industry leading visual comfort, excellent uniform illumination over time, and patented installation flexibility.

Complete luminaire = Frame + Engine + Trim + Accessories (optional)

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

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

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

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

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

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

### Frame

example: 7RNIP

Series	Installation	Voltage/Options
<b>7R</b>		
<b>7R</b> 7" Non-IC Round	<b>N</b> New construction	<b>—</b> Universal 120 V/277 V (specify for Power Over Ethernet) <b>EM</b> Emergency (see page 2 for details and limitations) <sup>1</sup> <b>IP</b> Interact Pro ready (for 0-10V engine only)
	<b>R</b> Remodeler	<b>—</b> Universal 120 V/277 V (specify for Power Over Ethernet) <b>IP</b> Interact Pro ready (for 0-10V engine only)
		<b>LC</b> Chicago Plenum <b>3</b> 347V (not compatible with ELV dimming) <b>3IP</b> 347V with Interact Pro (for 0-10V engine only)
		<b>3</b> 347V (not compatible with ELV dimming)

### Engine

example: C6L15835NZ10U

Series	Lumens	CRI	CCT	Beam	Dimming	Voltage
<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>2</sup> <b>30</b> 3000lm <sup>2</sup> <b>35</b> 3500lm <b>48</b> 4800lm (Z10 only) <b>60</b> 6000lm (Z10 only)	<b>8</b> 80 CRI <b>9</b> 90 CRI	<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>U</b> Universal 120 V/277 V/347 V
					<b>E</b> ELV (for up to 2000lm only)	<b>1</b> 120 V
					<b>P</b> Power over Ethernet (PoE) Only compatible with 1000 (10) to 2500 (25) lumen configurations.	<b>E</b> Ethernet 48 V DC

### Trim

example: C7RWWCCP

Series	Aperture	Style	Finish	Flange
<b>C7</b>	<b>R</b>			
<b>C7</b> Calculite LED 7"	<b>R</b> Round	<b>WW</b> Open Wall Wash <b>LW</b> Lensed Wall Wash <b>CW</b> Corner Wall Wash <sup>3</sup> <b>DW</b> Double Wall Wash <sup>3</sup>	<b>BK</b> Black (anodized) <b>CL</b> Specular clear <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>WH</b> White (matte)	<b>—</b> White (matte)

### Accessories

<b>CAEM</b>	Field instalable EM pack (for use with new construction frame only)
<b>AMS</b>	ActiLume multi-sensor (optional accessory for PoE configurations)
<b>SWZDT</b>	SpaceWise wireless controller with dwell time functionality (compatible with all 0-10V options, see SWZDT spec sheet)
<b>SRAINT</b>	InterAct Office Accessory (for use with Lightolier UniFrame 0-10V products)

- Emergency (EM) frame includes emergency battery with ceiling and reflector mountable test switch (see page 2 for details and limitations).
- 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.

# C7RWW Calculite LED 7" 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 3" 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: C7RWWCEM). 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.

### 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/systemareas/offices](http://www.usa.lighting.philips.com/systems/systemareas/offices).

#### Interact Office Wired (PoE),

##### Static White and Tunable 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/systemareas/offices](http://www.usa.lighting.philips.com/systems/systemareas/offices).

### Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to small and medium businesses without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone).
- Prepare commissioning remotely via Interact Pro portal.
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning.
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch.
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1).
- For more information on Interact Pro visit: [www.interact-lighting.com/pro](http://www.interact-lighting.com/pro).
- For more information on Interact Ready visit: [www.philips.com/interact-ready](http://www.philips.com/interact-ready).

### Options and Accessories

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

### 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](http://Signify.com/warranties) for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

# C7RWW Calculite LED 7" 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

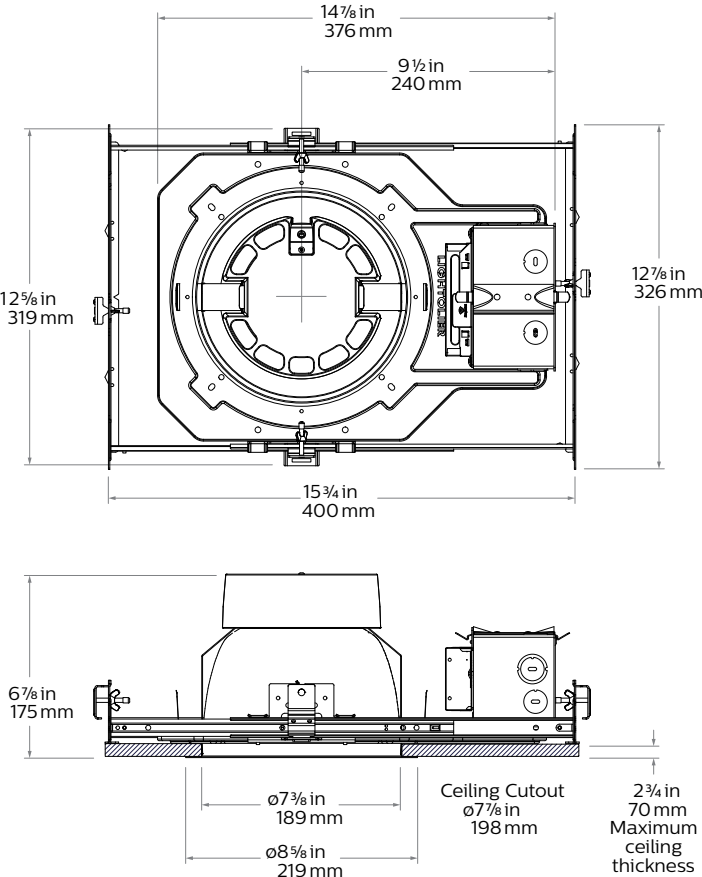
Lumens	Narrow beam	Medium/Wide beam*
<b>1000lm</b> <b>1500lm</b> <b>2000lm</b> <b>2500lm</b> <b>3500lm*</b> <b>4800lm</b>	L90 @ 60,000hrs.	L90 @ 60,000hrs.
<b>6000lm</b>	L90 @ 60,000hrs.	L80 @ 60,000hrs.

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

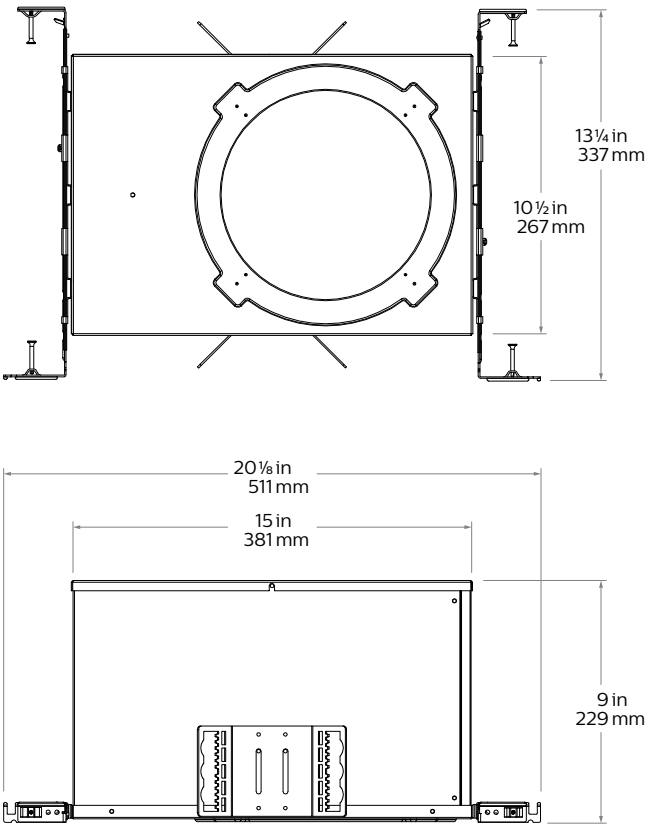
# C7RWW    Calculite LED 7" gen 3

## Round Wall Wash

### New Construction (N)



### Chicago Plenum (LC)



# C7RWW Calculite LED 7" 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.

### Flange



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



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

# C7RWW Calculite LED 7" gen 3

## Round Wall Wash

### Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	6000lm = 240%
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, 107.8 lm/w

#### Candela Curve



Frame: **C7RN or 7RN**  
Engine: **C6L25835WZ10U**  
Trim: **C7RWWCL**

Output lumens: 2297 lms  
Input watts: 21.3 W  
CRI: 80 min  
CCT<sup>1</sup>: 3500K

**Efficacy: 107.8 lm/w**  
Report<sup>2</sup>: F37166

#### Multiple unit data

Footcandles on wall

	2' from wall		
	3' on ctr.		
Distance from ceiling in feet	1	2	3
1	44	31	44
2	60	47	60
3	48	54	48
4	41	45	41
5	35	35	35
6	28	28	28
7	23	23	23
8	20	19	20
9	17	17	17
10	15	15	15
12	12	12	12
14	11	11	11

#### Multiple unit data

Footcandles on wall

	3' from wall		
	3' on ctr.		
Distance from ceiling in feet	1	2	3
1	17	18	17
2	34	35	34
3	37	37	37
4	35	38	35
5	33	33	33
6	29	30	29
7	26	27	26
8	23	23	23
9	20	20	20
10	18	18	18
12	15	15	15
14	13	13	13

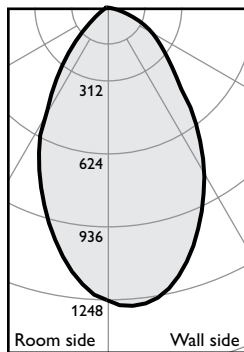
#### Multiple unit data

Footcandles on wall (shown above)

	3' from wall		
	4' on ctr.		
Distance from ceiling in feet	1	2	3
1	15	13	15
2	29	24	29
3	30	27	30
4	27	29	27
5	24	27	24
6	22	23	22
7	20	21	20
8	18	18	18
9	16	16	16
10	14	14	14
12	12	12	12
14	10	10	10

### Lensed Wall Wash, 2500lm Engine, 72.3 lm/w

#### Candela Curve



Frame: **C7RN or 7RN**  
Engine: **C6L25835WZ10U**  
Trim: **C7RLWCL**

Output lumens: 1541 lms  
Input watts: 21.3 W  
CRI: 80 min  
CCT<sup>1</sup>: 3500K

**Efficacy: 72.3 lm/w**  
Report<sup>2</sup>: F37165

#### Multiple unit data

Footcandles on wall

	2' from wall		
	3' on ctr.		
Distance from ceiling in feet	1	2	3
1	41	29	41
2	49	42	49
3	45	42	45
4	36	35	36
5	27	28	27
6	22	22	22
7	17	17	17
8	14	14	14
9	12	12	12
10	11	11	11
12	9	8	9
14	8	7	8

#### Multiple unit data

Footcandles on wall

	3' from wall		
	3' on ctr.		
Distance from ceiling in feet	1	2	3
1	15	15	15
2	29	28	29
3	31	31	31
4	31	31	31
5	28	28	28
6	24	24	24
7	21	21	21
8	18	18	18
9	15	15	15
10	13	13	13
12	11	11	11
14	9	9	9

#### Multiple unit data

Footcandles on wall (shown above)

	3' from wall		
	4' on ctr.		
Distance from ceiling in feet	1	2	3
1	13	10	13
2	23	20	23
3	24	22	24
4	24	23	24
5	21	21	21
6	18	19	18
7	16	16	16
8	14	14	14
9	12	12	12
10	10	10	10
12	8	8	8
14	7	7	7

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.

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