LIGHTOLIER

Downlighting

by (\$) ignify 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.

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

Project:	
Location:	
Cat.No:	
Туре:	
Lamps:	Qty:
Notos	

Frame example: 6RNIP

Series	Installation	Voltage/Options	
6R			
6R 6" Non-IC Round	N New construction	Universal 120 V/277V (specify for Power Over Ethernet) Em Emergency (see page 2 for details and limitations) ¹ IP Interact Pro ready (for 0-10V engine only)	 Chicago Plenum 347V (not compatible with ELV dimming) 347V with Interact Pro (for 0-10V engine only)
	R Remodeler	 Universal 120 V/277 V (specify for Power Over Ethernet) IP Interact Pro ready (for 0-10V engine only) 	3 347V (not compatible with ELV dimming)

Engine example: C6L15835NZ10U

Series	Lumens	CRI	ССТ	Beam	Dimming	Voltage
C6L						
C6L Calculite LED 6"	10 1000 lm 15 1500 lm 20 2000 lm 25 2500 lm 30 3000 lm	8 80 CRI 9 90 CRI	27 2700 K 30 3000 K 35 3500 K 40 4000 K	M Medium (56°) W Wide (76°)	Z10 0-10 V 1% SOL EldoLED Solo 0-10 V 0.1% D Dali 0.1% L Lutron LDE1 EcoSystem (fade	U Universal 120 V/277 V/347 V e-to-black)
	35 3500 lm 48 4800 lm (Z10 only)				E ELV (for up to 2000lm only)	1 120 V
	60 6000 lm (Z10 only)				P Power over Ethernet (PoE) Only compatible with 1000 (10) to 2500	E Ethernet 48 V DC (25) lumen configurations.

Trim example: C6RWWCCP

Series	Aperture	Style	Finish	Flange
C6	R			
C6 Calculite LED 6"	R Round	WW Open Wall Wash LW Lensed Wall Wash CW Corner Wall Wash ³	BK Black (annodized) CC Comfort clear CD Comfort clear diffuse CZ Champagne bronze	White (matte)P Polished (matches aperture)F Flangeless (requires CA6RFT)
		DW Double Wall Wash ³	WH White (matte)	White (matte)F Flangeless (requires CA6RFT)

Accessories

CA6RFT Mud-in ring for use in flangeless trim installations (ordered with a flangeless trim)

CAEMField instalable EM pack (for use with new construction frame only) **AMS**ActiLume multi-sensor (optional accessory for PoE configurations)

SWZDT SpaceWise wireless controller with dwell time functionality (compatible with all 0-10V options, see SWZDT spec sheet)

SRAINT InterAct Office Accessory (for use with Lightolier UniFrame 0-10V products)

- 1. Emergency (EM) frame includes emergency battery with ceiling and reflector mountable test switch (see page 2 for details and limitations).
- 2. The 4800lm (48) and 6000lm (60) packages have marked spacing requirements (see page 3).
- 3. Corner (CW) and Double (DW) are not compatible with flangeless (F) option.









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 emd 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 toolless 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

Ouality 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 or 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 or 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 Proportal.
- 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.
- For more information on Interact Ready visit: www.philips.com/interact-ready.

Options and Accessories

Flangeless mud-in ring: Use **CA6RFT** for use with flangless 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 for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

Round Wall Wash

Narrow

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
CCIAO NIZAOU	120V	F0/C011-	0.08	220 4	OW	0)4/	<15%	>0.95
C6L10_NZ10U	277V	50/60Hz	0.04	230 mA	9W	8W	<20%	>0.95
CELSE NZSOU	120V	50/60Hz	0.11	340 mA	15W	11W	<10%	>0.95
C6L15_NZ10U	277V	30/60HZ	0.05	340 IIIA	IDVV	IIVV	<15%	>0.95
C61 20 N71011	120V	50/60Hz	0.16	460 mA	22W	16W	<10%	>0.95
C6L20_NZ10U	277V	77V 30/60H2 0.08 460	46UIIIA	2200	IOW	<15%	>0.95	
C6L25 NZ10U ⊢	120V	50/60Hz	0.20	590 mA	25W	21W	<10%	>0.95
	277V		0.10				<15%	>0.95
C6L35_NZ10U	120V	E0/60U-	0.30	900 mA	36W	30W	<10%	>0.95
COL35_NZ100	277V	50/60Hz	0.14	900 MA	VVσc	3000	<15%	>0.95
CEL 40 N710II	120V	50/60Hz	0.42	1250 mA	51W	44W	<10%	>0.95
C6L48_NZ10U	277V	30/00HZ	0.19	IZSUIIIA	SIVV	4400	<15%	>0.95
C6L60_NZ10U	120V	50/60Hz	0.48	1400 m A	57W	50W	<10%	>0.95
	277V	30/00HZ	0.21	1400 mA	3/W		<15%	>0.95

Medium/Wide

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
CEL10 M710H	120V	FO/6011=	0.08	210 m A	9W	8W	<15%	>0.95
C6L10_MZ10U	277V	50/60Hz	0.04	210 mA	900	OVV	<20%	>0.95
66145 1474011	120V	F0/C011-	0.11	220 4	15\4/	1114/	<10%	>0.95
C6L15_MZ10U	277V	50/60Hz	0.05	320 mA	15W	11W	<15%	>0.95
C6L20 MZ10U⊢	120V	F0/C011-	0.15	430 mA	19W	15W	<10%	>0.95
	277V	50/60Hz	0.07				<15%	>0.95
C6L25_MZ10U	120V	50/60Hz	0.19	550 mA	23W	19W	<10%	>0.95
	277V		0.09				<15%	>0.95
66135 1474011	120V	F0/C011-	0.25	570 mA	30W	25W	<10%	>0.95
C6L35_MZ10U	277V	50/60Hz	0.11				<15%	>0.95
661.40 1474011	120V	F0/C011-	0.36	010 4	40)4/	34W	<10%	>0.95
C6L48_MZ10U	277V	50/60Hz	0.16	810 mA	40W		<15%	>0.95
C6L60_MZ10U	120V	50/C0U-	0.50	1120 1	F7\A/	50W	<10%	>0.95
	277V	50/60Hz	0.22	1130 mA	57W		<15%	>0.95

Narrow (Power over Ethernet)

	Input					
Light engine	Volts1	Voltage ²	Freq	Current	Power	
C6L10NPE	53V	51-54V	DC	160 mA	8.9 W	
C6L15NPE	53V	51-54V	DC	250 mA	13.7 W	
C6L20NPE	53V	51-54V	DC	330 mA	17.7 W	
C6L25NPE	53V	51-54V	DC	420 mA	22.8 W	

Medium (Power over Ethernet)

	Input					
Light engine	Volts1	Voltage ²	Freq	Current	Power	
C6L10MPE	53V	51-54V	DC	160 mA	8.4 W	
C6L15MPE	53V	51-54V	DC	230 mA	12.5 W	
C6L20MPE	53V	51-54V	DC	310 mA	16.7 W	
C6L25MPE	53V	51-54V	DC	390 mA	21.4 W	

Wide (Power over Ethernet)

	Input					
Light engine	Volts1	Voltage ²	Freq	Current	Power	
C6L10WPE	53V	51-54V	DC	160 mA	8.4 W	
C6L15WPE	53V	51-54V	DC	230 mA	12.5 W	
C6L20WPE	53V	51-54V	DC	310 mA	16.7 W	
C6L25 WPE	53V	51-54V	DC	390 mA	21.4 W	

Marked spacing applications

Light engine	4800lm	6000lm
C6L_Z10U series	Х	Х
C6L_LU series	_	_
C6L_DU series	_	_

Modules marked with an X require marked spacing:

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*
1000lm 1500lm 2000lm 2500lm 3500lm* 4800lm	L90 @ 60,000hrs.	L90 @ 60,000hrs.
6000lm	L90 @ 60,000hrs.	L80 @ 60,000hrs.

 $^{^{\}star}$ Lutron 3500lm with Medium/Wide beam is L85 @ 60,000hrs.

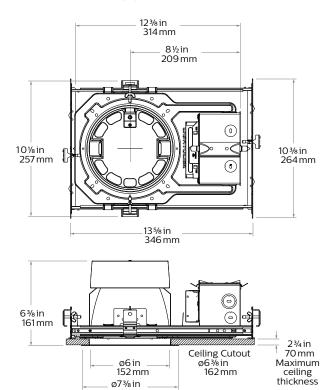
Nominal input volts.
 Preferred volt range.

⁻ Center-to-center of adjacent luminaires: 24" (610mm)

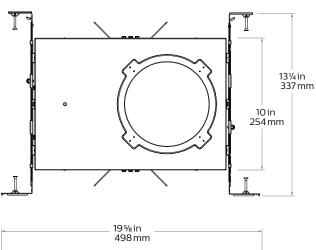
⁻ Luminaire center to side building member: 12" (305mm)

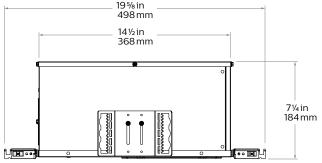
Round Wall Wash

New Construction (N)

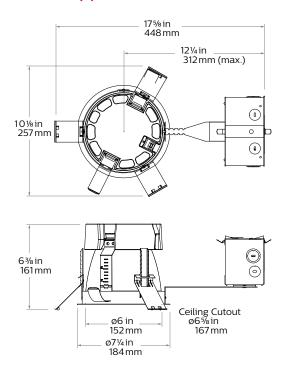


Chicago Plenum (LC)



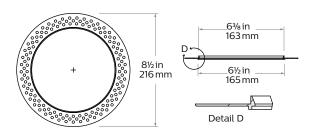


Remodeler (R)

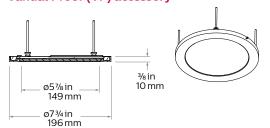


184 mm

Flangeless mud-in ring (CA6RFT) accessory



Vandal Proof (VP) accessory



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



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.

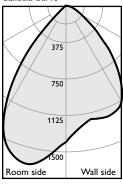
Round Wall Wash

Adjustment factors

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

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

Candela Curv



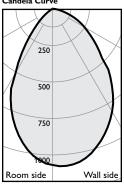
Frame: C6RN or 6RN Engine: C6L25835WZ10U Trim: C6RWWCL

CCT¹: 3500K Output lumens: 2204 lms Input watts: 21.3 W CRI: 80 min

Efficacy: 103.5 lm/w Report²: 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

CCT¹: 3500K Output lumens: 1538 lms Input watts: 21.3 W CRI: 80 min

Efficacy: 72.2 lm/w Report²: F37142

- 1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG 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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