



Calculite LED 4" generation 3 features industry leading visual comfort and excellent uniform illumination over time.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

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

### Fixture

example: C4SDL15835MZ10UCCW

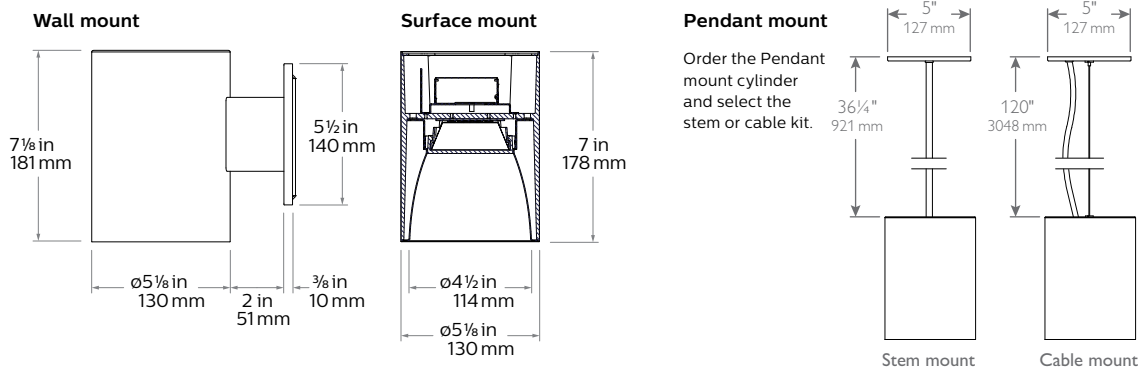
Series	Mounts	Styles	Lumens	CRI	CCT	Beams	Dimming	Voltage	Reflector finish	Cylinder finish
<b>C4</b>										
C4 Calculite LED 4"	S Surface W Wall P Pendant <sup>1</sup>	DL Downlight	05 500	8 80	27 2700K	N Narrow	Z10 0-10V 1%	U Universal 120V/277V	CL Specular clear	W White (matte)
		WW Wall Wash <sup>2</sup>	10 1000	9 90	30 3000K	M Medium			CC Comfort clear	B Black (matte)
		DW Double Wall Wash <sup>2</sup>	15 1500	35 3500K	W Wide <sup>2</sup>	1 ELV ELV <sup>3</sup> (120V only dimming)	1 Universal 120V/277V	CD Comfort clear diffuse	A Aluminum	
			20 2000	40 4000K				CZ Champagne bronze	BK Black (matte)	
		25 2500								
		30 3000								

### Pendant accessories (field adjustable)<sup>1</sup> example: CASK36BK

Series	Mounts	Length	Finish
<b>CA</b>			
CA Calculite Accessory	SK Stem Kit	36 36 inches	WH White (matte) BK Black (matte) AL Aluminum
	CK Cable Kit	10 120 inches	WH White (matte) BK Black (matte)

- Pendant (P) option needs to be ordered with an accessory.
  - Wall Wash (WW) and Double Wall Wash (DW) are only available with Wide (W) beam.
  - ELV (ELV) dimming is not compatible with 500lm (05) configurations and is only compatible with up to 2000lm (20) configurations.
- Note:** Consult factory for Wood ceiling installation.

### Dimensions



# C4 Calculite LED 4" gen 3

## Cylinder

### Cylinder

**Cylinder housing:** Cast aluminum, available for installation onto a 3" or 4" junction box, stem, cable, or wall mounted.

**Surface mounting (C4S):** Mounts directly to junction box. Listed for wet location use.

**Pendant mounting (C4P):** Order with the stem or cable kit.

**Wall Mounting (C4W):** Pre-attached hardware allows for simple installation into wall mounted junction box.

### Pendant accessories

**Stem mounting kit (CASK36xx):** 36" long steel stem, 0.375" diameter (1/8" National Pipe Thread, can be field cut to required length. 5-wire conductor cable runs alongside of stem for power and dimming. Magnetic attachment of canopy to junction box provides clean look free of hardware. Self-aligning swivel mounting system ensures cylinder hangs straight down. Stem can be cut in field for length adjustment (1/8" drill bit required for through hole). Damp location rated.

**Cable mounting kit (CACK10xx):** 10' long steel cable with 5-wire cable for power and dimming. Hardware free canopy for clean aesthetics. Damp location rated.

### Drivers

- Advance 0-10V 1% dimming
- EldoLED Solo 0.1% dimming
- ELV dimming

### Optical systems

#### Comfort throughout the space:

Patented optical system combines primary and secondary optics to provide a true 50° physical cutoff and 45° reflected cutoff virtually eliminating the view of the light source and bright spots in the reflector. A new reflector curve reduces reflector brightness by up to 50% compared to existing products, allowing for the use of higher lumen packages in smaller apertures without creating bright spots in the ceiling.

**Quality of light:** 2 SDCM ensures color consistency from fixture to fixture and over the luminaire's long lifetime. Proprietary optical grade silicone lens with patterned surface provides soft, even beam diffusion without hotspots or dark rings.

### ENERGY STAR® exceptions

- 90 CRI configurations
- Champagne Bronze and Black finishes
- EldoLED Solo drivers

### Labels and Listings

- cULus listed for wet locations (surface mount)
- cULus listed for damp locations (wall and pendant mount)
- ENERGY STAR® certified
- RoHS certified
- IBEW Union made

### Warranty

5 year warranty on complete system.



Complete warranty available at: [http://images.philips.com/is/content/PhilipsConsumer/PDFDownloads/United%20States/ODLI20150930\\_003-UPD-en\\_US-Philips-warranty-indoor-PLS-us.pdf](http://images.philips.com/is/content/PhilipsConsumer/PDFDownloads/United%20States/ODLI20150930_003-UPD-en_US-Philips-warranty-indoor-PLS-us.pdf)

### Narrow (0-10V)

Lumen package	Input volts	Input freq	Input current	Drive current	Input power	THD power	Power factor
500lm	120V	50/60Hz	0.05	110 mA	6W	<20%	>0.95
	277V		0.03			<20%	>0.90
1000lm	120V	50/60Hz	0.08	230 mA	11W	<15%	>0.95
	277V		0.04			<20%	>0.95
1500lm	120V	50/60Hz	0.12	360 mA	16W	<10%	>0.95
	277V		0.06			<15%	>0.95
2000lm	120V	50/60Hz	0.17	490 mA	21W	<10%	>0.95
	277V		0.08			<15%	>0.95
2500lm	120V	50/60Hz	0.22	640 mA	27W	<10%	>0.95
	277V		0.10			<15%	>0.95
3000lm	120V	50/60Hz	0.27	790 mA	33W	<10%	>0.95
	277V		0.13			<15%	>0.95

### Medium/Wide (0-10V)

Lumen package	Input volts	Input freq	Input current	Drive current	Input power	THD power	Power factor
500lm	120V	50/60Hz	0.05	110 mA	6W	<20%	>0.95
	277V		0.03			<20%	>0.90
1000lm	120V	50/60Hz	0.08	230 mA	11W	<15%	>0.95
	277V		0.04			<20%	>0.95
1500lm	120V	50/60Hz	0.12	350 mA	16W	<10%	>0.95
	277V		0.06			<15%	>0.95
2000lm	120V	50/60Hz	0.16	470 mA	21W	<10%	>0.95
	277V		0.08			<15%	>0.95
2500lm	120V	50/60Hz	0.21	610 mA	25W	<10%	>0.95
	277V		0.09			<15%	>0.95
3000lm	120V	50/60Hz	0.26	770 mA	31W	<10%	>0.95
	277V		0.12			<15%	>0.95

### Lifetime (TM-21) data

Lumens	Narrow beam	Medium/Wide beam
500lm 1000lm 1500lm	L90 @ 60,000 hrs.	L90 @ 60,000 hrs.
2000lm 2500lm 3000lm	L90 @ 60,000hrs.	L85 @ 60,000hrs.

### Reflector



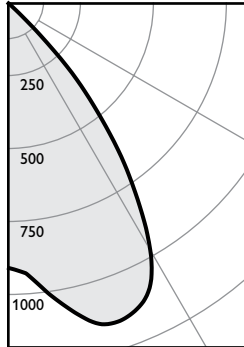


# C4 Calculite LED 4" gen 3

## Cylinder

### Wide beam, 1500lm Engine, 106.6 lm/W

#### Candela Curve



Cylinder:

**C4SDL15835WZ10UCLW**

Output lumens: 1517 lms  
 Input watts: 14.2 W  
 CRI: 80 min  
 CCT<sup>1</sup>: 3500K  
 Spacing Crit.: 1.2  
 Beam Angle: 76°

#### Zonal summary

Zone	Lumens	%Luminaire
0-30	918	60.5%
0-40	1368	90.2%
0-60	1517	100.0%
0-90	1517	100.0%

Angle	Mean CP	Lumens
0	906	
5	945	93
10	1040	
15	1128	318
20	1153	
25	1114	506
30	978	
35	732	450
40	460	
45	175	148
50	18	
55	0	2
60	0	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

#### Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	36	6.0'
6'	25	7.2'
7'	18	8.4'
8'	14	9.6'
9'	11	10.8'

\* Beam diameter is where foot-candles drop to 50% of maximum.

#### Multiple unit data - RCR 2

Spacing on center	Initial center beam foot-candles	Watts per sq. ft.
5'	68.5	0.63
6'	45.0	0.41
7'	32.1	0.30
8'	26.8	0.25
9'	21.4	0.20

38' x 38' x 10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

**Efficacy: 106.6 lm/w**  
 Report#: T20161406

#### Adjustment factors

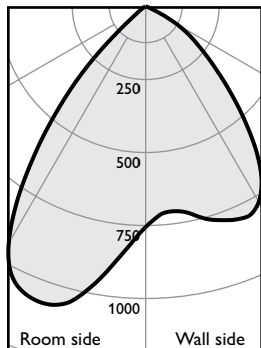
Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

#### Coefficients of utilization

Ceiling	80%		70%		50%		30%		0%			
	70	50	30	10	50	10	50	10	50	10		
Wall	70	50	30	10	50	10	50	10	50	10	0	
RCR	Zonal cavity method - Effective floor reflectance = 20%											
Room Cavity Ratio	0	119	119	119	119	116	116	111	111	106	106	100
1	113	110	108	105	108	104	104	100	100	97	93	86
2	107	102	98	94	100	93	97	91	94	89	86	86
3	101	94	89	85	93	84	90	83	88	81	79	79
4	96	87	82	77	86	77	84	76	82	75	72	72
5	90	81	75	70	80	70	78	69	77	69	66	66
6	85	75	69	64	75	64	73	64	72	63	61	61
7	80	70	64	59	69	59	68	59	67	58	56	56
8	76	65	59	55	65	54	64	54	63	54	52	52
9	72	61	55	50	61	50	60	50	59	50	48	48
10	68	57	51	47	57	47	56	47	55	46	45	45

### Wall Wash, 1500lm Engine, 102.8 lm/W

#### Candela Curve



Cylinder:

**C4SWW15835WZ10UCLW**

Output lumens: 1465 lms  
 Input watts: 14.3 W  
 CRI: 80 min  
 CCT<sup>1</sup>: 3500K

**Efficacy: 102.8 lm/w**  
 Report#: T20161408

#### Multiple unit data

Footcandles on wall

Distance from ceiling in feet	2' from wall		
	3' on ctr.		
1	3	2	3
2	38	21	38
3	37	36	37
4	30	32	30
5	23	25	23
6	19	19	19
7	15	15	15
8	13	13	13
9	11	11	11
10	10	10	10
12	8	8	8
14	7	7	7

#### Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall		
	3' on ctr.		
1	2	2	2
2	2	2	2
3	21	19	21
4	24	25	24
5	24	25	24
6	21	22	21
7	18	19	18
8	16	16	16
9	14	14	14
10	12	12	12
12	10	10	10
14	9	8	9

#### Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall		
	4' on ctr.		
1	2	2	2
2	2	2	2
3	18	16	18
4	20	19	20
5	18	19	18
6	16	17	16
7	14	15	14
8	12	12	12
9	11	11	11
10	9	10	9
12	8	8	8
14	7	7	7

#### Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	3000lm = 200%
CC = 95%	80CRI 3500K = 100%	2500lm = 167%
CD = 87%	80CRI 3000K = 97%	2000lm = 133%
CZ = 63%	80CRI 2700K = 87%	1500lm = 100%
WH = 87%	90CRI 3000K = 77%	1000lm = 67%
BK = 57%	90CRI 2700K = 73%	500lm = 33%

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.

