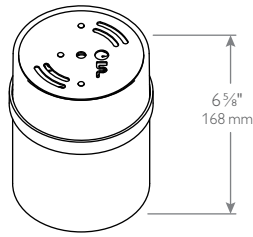


**PHILIPS
LIGHTOLIER**

Downlighting

Calculite LED 4" Cylinder
Downlight & Wall Wash

Wide beam, 1000/2250lm



Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Calculite LED 4" features an LED array of high brightness white light LEDs. The new LED boards in Calculite LED ensure a less than 2-step SDCM color variation between luminaires.

Complete product = Fixture kit + Mounting kit
 Fixture comes with standard ceiling mount.

Fixture kit

example: C4L10CW35KCCLUVB

Series	Lumens	Style	Finish	CCT	Model	Reflector	Input voltage	Version
<input type="text" value="C4L"/>	<input type="text"/>	<input type="text" value="C"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="U"/>	<input type="text" value="VB"/>
C4L Calculite 4" LED round aperture	10 1000 lm 20 2250 lm	C Cylinder	B Black W White A Alum.	27K 2700 K 30K 3000 K 35K 3500 K 40K 4000 K	blank Downlight WW Wall Wash	CL Clear CCL Comfort clear CCD Comfort clear diffuse	U Universal (120/277V)	VB Version B

Mounting kit

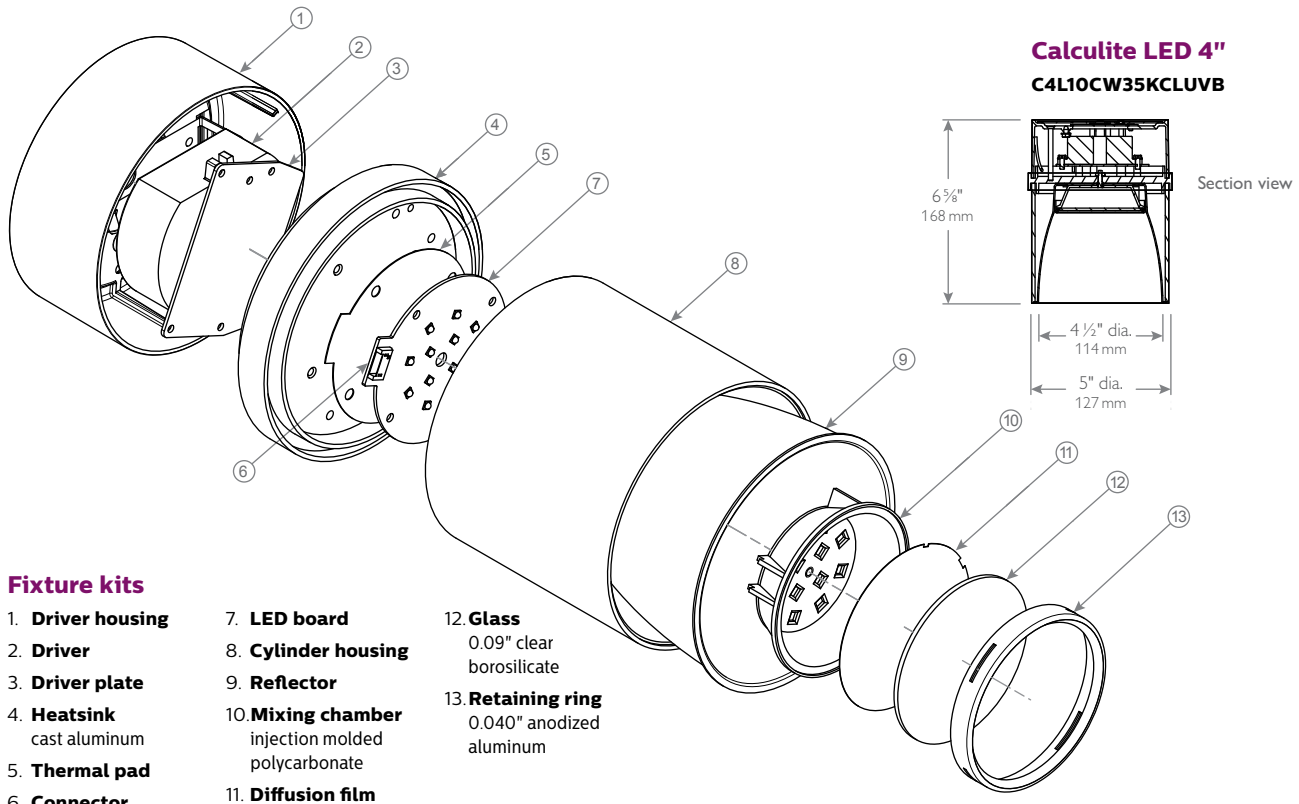
example: C4CPA

Series	Details	Finish	Dimming
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
C4 Mounting for Calculite 4" LED Cylinder	CW Wall mount	B Black W White A Alum.	-
	CP Stem mount		X5 For dimming applications
	CC Cable mount		X5 For dimming applications
TM Mounting for Calculite 4" & 7" Cylinders to track	O1 Track mount	-	-



C4L-C-VB Calculite LED

4" Cylinder, Downlight & Wall Wash, Wide Beam 1000/2250 lm



Fixture kits

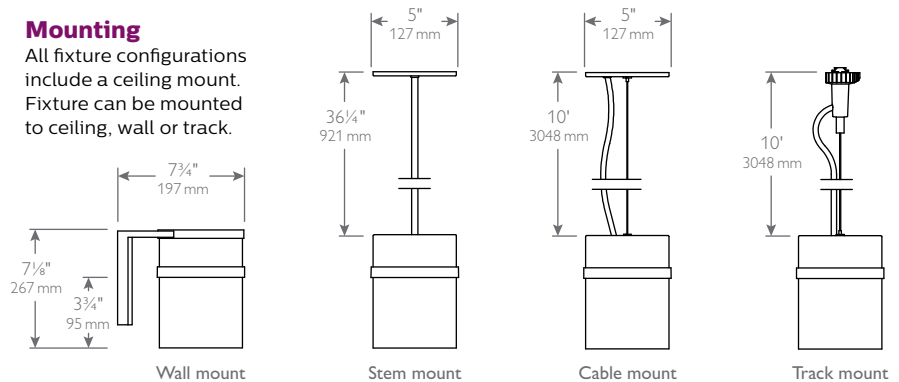
- | | | |
|-------------------------------------|---|---|
| 1. Driver housing | 7. LED board | 12. Glass
0.09" clear borosilicate |
| 2. Driver | 8. Cylinder housing | 13. Retaining ring
0.040" anodized aluminum |
| 3. Driver plate | 9. Reflector | |
| 4. Heatsink
cast aluminum | 10. Mixing chamber
injection molded polycarbonate | |
| 5. Thermal pad | 11. Diffusion film | |
| 6. Connector | | |

Features

Cylinder housing: For mounting over 3" or 4" outlet box. Available in white, black, aluminum.
Reflector cone: Aluminum. Provides 50° cutoff to source and source image (self-flanged).
LED Board: Array of 12 high brightness LEDs.
Thermal management: Heat sink and thermal design along with clean room assembly ensures specified performance.
Optical mixing chamber: Lightolier-specific mixing chamber redirects back-reflected light through aperture resulting in a 20% increase in efficiency.

Mounting

All fixture configurations include a ceiling mount. Fixture can be mounted to ceiling, wall or track.



Electrical

Rated life: Offers 60,000 hour rated life (2250lm offers 50,000 hour rated life) at 70% lumen maintenance (L70). Tested in accordance with IES NA LM-79-2008. Color consistency between luminaires over the duration of our standard warranty will not be greater than 3 points in u', v'.

Frame-In kit Electrical specifications	Input volts	Input freq.	Input current	Drive current	Input power*	LED power	THD factor	Power factor
C4L10C__K__UVB 1000lm w/0-10V dimming	120V	50/60Hz	0.15A	350mA	15W	12W	<20%	>0.90
	277V	50/60Hz	0.07A	350mA	15W	12W	<20%	>0.90
C4L20C__K__UVB 2250lm w/0-10V dimming	120V	50/60Hz	0.23A	700mA	28W	24W	<15%	>0.95
	277V	50/60Hz	0.11A	700mA	28W	24W	<15%	>0.90

* +/-5%

Dimming

Compatible with 0-10V dimming.

Labels

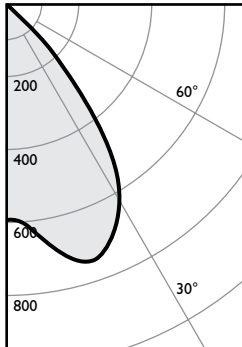
cULus, I.B.E.W.
 Suitable for wet locations
 (direct ceiling and wall mount only).
 5 year warranty.

C4L-C-VB Calculite LED

4" Cylinder, Downlight & Wall Wash, Wide Beam 1000/2250 lm

15W LED, 3500K, 1000 lumen, Downlight

Candela Curve



Fixture: C4L10CW35KCLUVB

CCT¹: 3500K
 Output lumens: 1012 lms
 Input watts²: 14.8 W
Efficacy: 68.4 lm/w
 CRI: 80 min
 Spacing Crit.: 1.2
 Report no³: 146GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	586	57.9%
0-40	888	87.8%
0-60	1002	99.0%
0-90	1012	100.0%

Angle	Mean CP	Lumens
0	592	
5	609	60
10	672	
15	733	206
20	743	
25	701	320
30	624	
35	500	303
40	317	
45	127	106
50	18	
55	8	8
60	5	3
65	4	4
70	3	
75	3	3
80	3	
85	3	3
90	2	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	24	6.0'
6'	16	7.2'
7'	12	8.4'
8'	9	9.6'
9'	7	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'	45.4	0.66
6'	29.8	0.43
7'	21.3	0.31
8'	17.7	0.26
9'	14.2	0.20

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

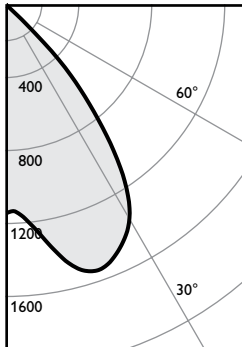
4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
	70	50	30	10	50	10	50	10	50	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	100	97	92	85	85
1	113	110	107	105	108	103	104	100	100	97	90	93	88	85	85	85	
2	107	101	97	93	100	92	96	90	93	88	85	85	85	85	85	85	
3	101	93	88	84	92	83	89	82	87	80	77	77	77	77	77	77	
4	95	86	80	76	85	75	83	74	81	73	71	71	71	71	71	71	
5	89	80	74	69	79	68	77	68	75	67	65	65	65	65	65	65	
6	84	74	68	63	73	63	72	62	70	62	60	60	60	60	60	60	
7	79	69	62	58	68	57	67	57	66	57	55	55	55	55	55	55	
8	75	64	58	53	64	53	62	53	61	52	51	51	51	51	51	51	
9	71	60	53	49	59	49	58	49	57	49	47	47	47	47	47	47	
10	67	56	50	45	56	45	55	45	54	45	43	43	43	43	43	43	

28W LED, 3500K, 2250 lumen, Downlight

Candela Curve



Fixture: C4L20CW35KCLUVB

CCT¹: 3500K
 Output lumens: 2126 lms
 Input watts²: 28.3 W
Efficacy: 75.1 lm/w
 CRI: 80 min
 Spacing Crit.: 1.2
 Report no³: 584GFR

Zonal summary

Zone	Lumens	%Luminaire
0-30	1213	57.1%
0-40	1876	88.3%
0-60	2121	99.8%
0-90	2126	100.0%

Angle	Mean CP	Lumens
0	1143	
5	1179	118
10	1334	
15	1497	421
20	1534	
25	1474	675
30	1352	
35	1093	663
40	710	
45	291	236
50	21	
55	9	9
60	5	3
65	3	3
70	2	
75	1	1
80	1	
85	0	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	46	6.0'
6'	32	7.2'
7'	23	8.4'
8'	18	9.6'
9'	14	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'	95.5	1.25
6'	62.7	0.82
7'	44.8	0.59
8'	37.3	0.49
9'	29.9	0.39

38'x38'x10' Room, Workplane 2.5' above floor, 80/50/20% Reflectances

Finish Adjust. factors

CL = 100%
 CCL = 95%
 CCD = 87%
 CCZ = 63%
 WH = 87%

CCT Adjust. factors

4000K = 103%
 3500K = 100%
 3000K = 97%
 2700K = 87%

Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
	70	50	30	10	50	10	50	10	50	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	100	97	93	85	85
1	113	110	107	105	108	103	104	100	100	97	90	93	88	85	85	85	
2	107	102	97	94	100	92	97	90	94	88	85	85	85	85	85	85	
3	101	94	88	84	92	83	90	82	87	81	78	78	78	78	78	78	
4	95	87	81	76	85	75	83	75	81	74	71	71	71	71	71	71	
5	89	80	74	69	79	69	77	68	76	67	65	65	65	65	65	65	
6	84	74	68	63	73	63	72	62	70	62	60	60	60	60	60	60	
7	79	69	62	58	68	58	67	57	66	57	55	55	55	55	55	55	
8	75	64	58	53	64	53	62	53	61	52	51	51	51	51	51	51	
9	70	60	53	49	59	49	58	49	57	49	47	47	47	47	47	47	
10	67	56	49	45	56	45	55	45	54	45	43	43	43	43	43	43	

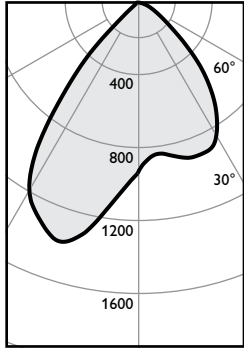
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Wattage controlled to within +/- 5%.
 3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C4L-C-VB Calculite LED

4" Cylinder, Downlight & Wall Wash, Wide Beam 1000/2250 lm

28W LED, 3500K, 2250 lumen, Wall Wash

Candela Curve



Room side Wall side

Fixture:
C4L20CW35KWWCLUVB

CCT¹: 3500K
 Output lumens: 1872 lms
 Input watts²: 28.2 W
Efficacy: 66.4 lm/w
 CRI: 80 min
 Report no³: 585GFR

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	2' from wall		
	3' on ctr.		
1	25	18	25
2	50	33	50
3	44	47	44
4	37	39	37
5	29	30	29
6	23	23	23
7	18	19	18
8	15	16	15
9	13	13	13
10	12	12	12
12	10	10	10
14	9	9	9

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall		
	3' on ctr.		
1	11	10	11
2	20	19	20
3	29	28	29
4	32	32	32
5	30	30	30
6	26	26	26
7	22	22	22
8	19	19	19
9	17	16	17
10	15	15	15
12	12	12	12
14	10	10	10

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall		
	4' on ctr.		
1	9	8	9
2	17	14	17
3	25	19	25
4	24	25	24
5	23	24	23
6	20	20	20
7	17	17	17
8	15	15	15
9	13	13	13
10	11	12	11
12	9	9	9
14	8	8	8

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. Wattage controlled to within +/- 5%.

3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

© 2015 Koninklijke Philips N.V. All rights reserved.
 Philips reserves the right to make changes in specifications and/or to discontinue any product at any time without notice or obligation and will not be liable for any consequences resulting from the use of this publication.
philips.com/luminaires



Philips Lighting, North America Corporation
 200 Franklin Square Drive, Somerset, NJ 08873
 Tel. 855-486-2216

Imported by: Philips Lighting,
 A division of Philips Electronics Ltd.
 281 Hillmount Rd, Markham, ON, Canada L6C 2S3
 Tel. 800-668-9008