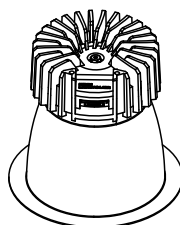




Downlighting

Calculite LED PoE

4" round aperture,
power over ethernet, wide beam



Philips Lightolier Calculite LED downlight 4" round with power over ethernet (PoE) features an LED array of high brightness white light LEDs that ensure high color consistency. The binning process of the LEDs ensure a less than 2-step SDCM color variation between luminaires.

Complete product = Frame-in kit + Trim kit + Optional multi-sensor

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

Frame-in kit

example: C4L20NPVB

Series	Lumens	Installation	Input voltage	Version	Optional accessory ²
C4L	20	N	P	VB	
C4L Calculite 4" LED round aperture	20 ¹ 2000lm	N New construction	P Power over ethernet	VB Version B	AMS ActiLume multi-sensor

1. Consult IES tables and photometry on last page for detailed lumen output.
2. ActiLume multi-sensor frame-in kit accessory must be ordered separately.

Trim kit

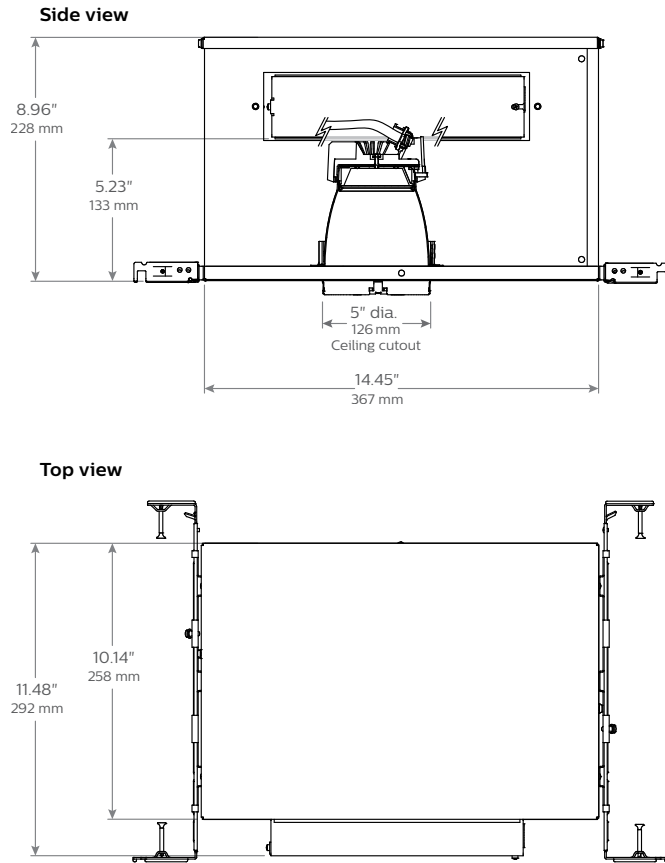
example: C4L10DL35KCCDWVB

Series	Lumens	Style	CCT	Reflector	Flange	Version
C4L	10	DL				VB
C4L Calculite 4" LED round aperture	10 ¹ 1000lm	DL Downlight	27K 2700 K 30K 3000 K 35K 3500 K 40K 4000 K	CL Clear CCL Comfort clear CCD Comfort clear diffuse CCZ Champagne bronze WH White (painted)	W White (painted) P Polished (matches aperture)	VB Version B

C4L-DL-VB Calculite LED downlight with PoE

4" round aperture, power over ethernet, wide beam

Dimensions



Calculite PoE Frame-in kit
with ActiLume multi-sensor
(AMS option).

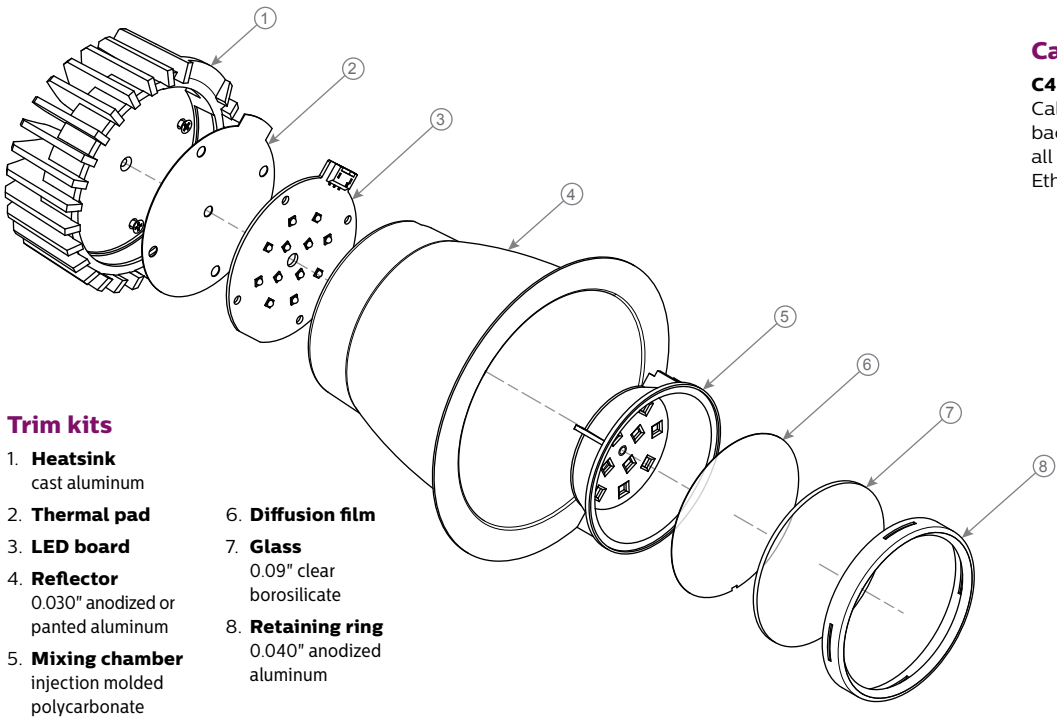
Frame-in kit

Mounting frame: Galvanized stamped steel for dry or plaster ceilings.

Mounting brackets: Galvanized Steel. Adjustable 12" - 16".

C4L-DL-VB Calculite LED downlight with PoE

4" round aperture, power over ethernet, wide beam



Calculite LED 4"

C4L10DL35KCCDWVB

Calculite LED 4" Trim kits are backwards compatible with all Calculite LED 4" Power of Ethernet Frame-in Kit.

Trim kits

- 1. **Heatsink**
cast aluminum
- 2. **Thermal pad**
- 3. **LED board**
- 4. **Reflector**
0.030" anodized or painted aluminum
- 5. **Mixing chamber**
injection molded polycarbonate
- 6. **Diffusion film**
- 7. **Glass**
0.09" clear borosilicate
- 8. **Retaining ring**
0.040" anodized aluminum

Features

Ceiling cutout: 4" aperture; 5" (126mm)

Depth: 8.96" (228 mm) including PoE frame.

Power connection: Attaches to light engine via push-in connector (on frame).

Thermal Management: Heat sink and thermal design along with the clean room assembly process ensures specified performance levels are maintained.

Electrical

Powered via Philips PoE lighting controller. Complies with FCC rules per Title 47 Part 15 (Class A) for EMI / RFI (conducted & radiated). Wire access knockout provides RJ45 connection point for PoE network. PoE lighting controller accessible from below ceiling.

Rated life: 60,000 hrs at 70% lumen maintenance based on IES LM-80-08 and TM-21-11.

Options and accessories

Sensor option: The ActiLume multi-sensor (AMS) is available as an accessory for occupancy sensing and/or daylight harvesting for additional energy savings with no reduction of life.

Mounting bars: Included on frame. (See instruction sheet for installation details).

Labels

cULus, I.B.E.W., Suitable for wet locations. 5 year warranty.

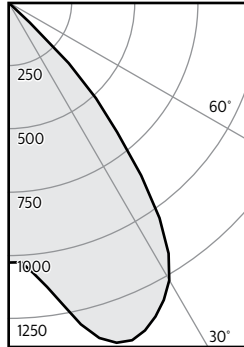
Frame-In kit Electrical specifications	Nominal input volts	Preferred volt range	Input frequency	Input current	Input power	Output power	Standby power
C4L20NPVB 1900lm	53V	51-54V	DC	≤600mA	≤27W	25W	<0.9W

C4L-DL-VB Calculite LED downlight with PoE

4" round aperture, power over ethernet, wide beam

3500K, Wide Beam, Downlight

Candela Curve



Frame: C4L20NPVB
Trim: C4L10DL35KCLWVB
 CCT¹: 3500K
 Output lumens: 1995 lms
 Input watts²: 31.2 W
Efficacy: 64.0 lm/w
 CRI: 80 min
 Spacing Crit.: 1.2
 Report no³: 573GFR3

Zonal summary

Zone	Lumens	%Luminaire
0-30	1116	55.9%
0-40	1740	87.2%
0-60	1991	99.8%
0-90	1995	100.0%

Angle	Mean CP	Lumens
0	1023	
5	1069	106
10	1208	
15	1368	385
20	1416	
25	1365	625
30	1263	
35	1034	624
40	661	
45	329	241
50	27	
55	9	9
60	5	
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'	41	6.0'
6'	28	7.2'
7'	21	8.4'
8'	16	9.6'
9'	13	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'	89.6	1.38
6'	58.8	0.91
7'	42.0	0.65
8'	35.0	0.54
9'	28.0	0.43

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%
Wall	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	106	106	100	97	92
1	113	110	107	105	108	103	104	100	100	97	97	93	93	88	85	85	85
2	107	101	97	93	100	92	96	90	93	88	85	85	80	77	71	71	71
3	101	94	88	84	92	83	89	82	87	80	77	75	67	65	65	65	65
4	95	86	80	76	85	75	83	74	81	73	71	71	65	65	65	65	65
5	89	80	73	69	79	68	77	68	75	67	65	65	61	61	61	61	61
6	84	74	67	63	73	62	72	62	70	61	59	59	56	56	56	56	56
7	79	69	62	57	68	57	67	57	65	56	55	55	53	53	53	53	53
8	74	64	57	52	63	52	62	52	61	52	50	50	48	48	48	48	48
9	70	59	53	48	59	48	58	48	57	48	46	46	44	44	44	44	44
10	66	55	49	45	55	45	54	44	53	44	43	43	42	42	42	42	42

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.

