



Calculite LED 4" generation 3 Cylinders features industry leading visual comfort, excellent uniform illumination over time, and patented installation flexibility. IntelliHue color changing capability combines the consistent quality of light from both Lightolier Calculite cylinders with Color Kinetics, and provides millions of combinations of precise white and color to maximize potential of architectural appeal in application. Calculite plus Color Kinetics greatly expands product flexibility in addition to providing peace of mind with precision quality from a broad array of IntelliHue luminaires.

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

Fixture

example: C6SDL15CKMDMXUCCW

Series	Mounts	Styles	Lumens	Color Kinetics	Beams	Dimming	Voltage	Reflector finish	Cylinder finish
C6			15	CK		DMX	U		
C6 Calculite LED 6"	S Surface W Wall P Pendant ¹	DL Downlight WW Wall Wash ² DW Double Wall Wash ²	15 1500lm	CK IntelliHue by Color Kinetics	M Medium W Wide ²	DMX Digital Multiplexing	U Universal 120V/277V	CL Specular clear CC Comfort clear CD Comfort clear diffuse CZ Champagne bronze BK Black	W White (matte) B Black (matte) A Aluminum RAL RAL Color ⁵ (standard code)

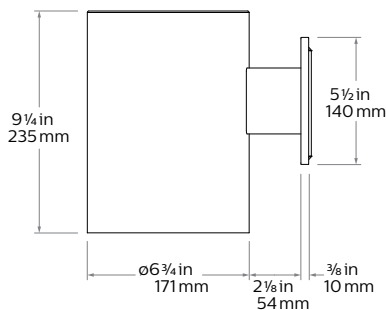
Pendant accessories (field adjustable)¹ example: CASK36BK

Series	Mounts	Length	Finish
CA			
CA Calculite Accessory	SK Stem Kit	36 36 inches 48 48 inches 60 60 inches 72 72 inches	WH White (matte) BK Black (matte) AL Aluminum RAL RAL Color ³ (standard code)
	CK Cable Kit ⁷	10 120 inches	WH White (matte) BK Black (matte) AL Aluminum RAL RAL Color ^{3,4} (standard code)

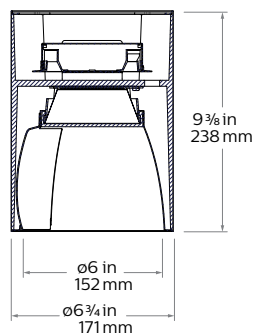
- Pendant (P) option needs to be ordered with an accessory.
- Wall Wash (WW) and Double Wall Wash (DW) are only available with Wide (W) beam.
- RAL standard colors can be specified upon request. Add RAL standard code to (RALxxxx).
- RAL cable canopy kit will be with black cord.

Dimensions

Wall mount

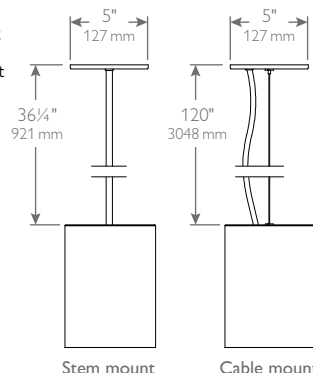


Surface mount



Pendant mount

Order the Pendant mount cylinder and select the stem or cable kit.



C6CK Calculite LED 6" gen 3

Cylinder with IntelliHue

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. Listed for damp location use.

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

Pendant accessories (damp location rated)

Stem mounting kit: 0.375" diameter steel stem (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. A 1/8" hole is required to reconnect the pendant stem to the canopy swivel. Swivel accommodates maximum 45° pitch.

Cable mounting kit: 10' long steel cable with 5-wire cable for power and dimming. Hardware free canopy for clean aesthetics.

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. Time tested 3-step technology from Color Kinetics now exclusively available in Calculite downlights assures color consistency between luminaires in the space.

Optibin
A proprietary binning optimization process that exceeds industry standards for chromaticity leading to uniformity and consistency of hue and color temperature

Chromasync
An advanced algorithm that delivers improved color consistency between luminaires by adjusting color points. Factory adjustments translates to less time calibrating in the field and more time commissioning for desired lighting effect.

IntelliHue
Brings unparalleled consistency in CRI and quality of both white and color LED light to Calculite downlights. Color-control technology enables use of millions of colors and shades of white light with pinpoint precision.

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.
- Predicted 70% lumen maintenance to 78,000 hrs.
- Max operating ambient temperature 30°C.

Labels and Listings

- cULus listed for wet locations (surface mount)
- cULus listed for damp locations (wall and pendant mount)
- RoHS certified

Warranty

5 year warranty on complete system.



Complete warranty available at:
http://images.philips.com/is/content/PhilipsConsumer/PDFDownloads/United%20States/ODL120150930_003-UPD-en_US-Philips-warranty-indoor-PLS-us.pdf

Output

Beam Angle	Medium	Wide
Lumens @ 2700K	1601	1514
Lumens @ 4000K	1610	1524
Efficacy @ 2700K	72.9	68.8
Efficacy @ 4000K	71.0	69.9
CRI @ 2700K	88	88
CRI R9 @ 2700K	74	75
CRI @ 4000K	90	91
CRI R9 @ 4000K	59	61
LED Channels	Red-Orange, Green, Blue, Mint, Lime	

Electrical

Input Voltage	100 to 277 VAC, auto-ranging, 50/60Hz
Power Consumption	24W
Input Current	120V @ 0.205A 277V @ 0.087A
Power Factor	>0.9 @ 100 to 240 VAC
LED Channels	>0.85 @ 277 VAC

Reflector

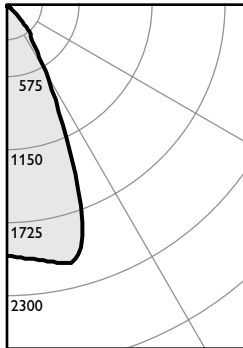


C6CK Calculite LED 6" gen 3

Cylinder with IntelliHue

Downlight, Medium beam, 1500lm Engine, 74.8 lm/W at 20.7W

Candela Curve



Engine: **C6L15CKMDMXU**
Trim: **C6RDLCL**

Output lumens: 1548 lms
Input watts: 20.7 W
CRI: 90 min
CCT²: 3500K
Spacing Crit.: 0.84

Zonal summary

Zone	Lumens	%Luminaire
0-30	1223	79.0%
0-40	1458	94.2%
0-60	1543	99.7%
0-90	1548	100.0%

Angle	Mean CP	Lumens
0	1982	
5	2010	
10	2058	195
15	2075	
20	1689	549
25	1039	
30	601	479
35	366	
40	245	236
45	100	
50	9	82
55	3	
60	2	3
65	1	
70	1	1
75	0	
80	0	0
85	0	
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	79	4.2'
6'	55	5.0'
7'	40	5.9'
8'	31	6.7'
9'	24	7.6'

* 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'	72.0	0.92
6'	47.0	0.60
7'	34.0	0.43
8'	28.0	0.36
9'	22.0	0.29

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

Efficacy: **74.8 lm/w**
Report#: STMR-95-1

Adjustment factors

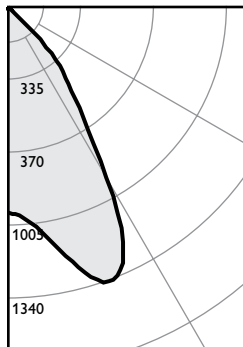
Finish	CCT
CL = 100%	2700K = 103%
CC = 95%	3000K = 101%
CD = 87%	3500K = 100%
CZ = 63%	4000K = 103%
WH = 87%	5000K = 96%
BK = 57%	6500K = 88%

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	116	116	111	111	106	106	100						
	1	114	111	109	107	109	105	105	102	101	99	94					
	2	109	104	100	97	102	96	99	94	96	92	88					
	3	104	98	93	89	96	89	94	87	91	86	83					
	4	99	92	87	83	91	82	89	81	87	80	78					
	5	94	87	81	77	86	77	84	76	82	75	73					
	6	90	82	76	72	81	72	80	71	78	71	69					
	7	86	77	72	68	77	68	75	67	74	67	65					
	8	82	73	68	64	73	64	72	64	71	63	62					
	9	79	70	64	60	69	60	68	60	67	60	58					
	10	75	66	61	57	66	57	65	57	64	57	55					

Downlight, Wide beam, 1500lm Engine, 70.7 lm/W at 20.7W

Candela Curve



Engine: **C6L15CKWDMXU**
Trim: **C6RDLCL**

Output lumens: 1464 lms
Input watts: 20.7 W
CRI: 90 min
CCT²: 3500K
Spacing Crit.: 1.24

Zonal summary

Zone	Lumens	%Luminaire
0-30	974	66.5%
0-40	1327	90.6%
0-60	1459	99.7%
0-90	1464	100.0%

Angle	Mean CP	Lumens
0	792	
5	824	
10	923	81
15	1028	
20	1077	285
25	1035	
30	835	449
35	566	
40	381	349
45	173	
50	16	127
55	3	
60	2	4
65	1	
70	1	1
75	0	
80	0	0
85	0	
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	32	6.2'
6'	22	7.4'
7'	16	8.7'
8'	12	9.9'
9'	10	11.2'

* 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'	59.0	0.92
6'	43.0	0.60
7'	31.0	0.43
8'	25.0	0.36
9'	21.0	0.29

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

Efficacy: **70.7 lm/w**
Report#: STMR-95-1

Adjustment factors

Finish	CCT
CL = 100%	2700K = 103%
CC = 95%	3000K = 101%
CD = 87%	3500K = 100%
CZ = 63%	4000K = 103%
WH = 87%	5000K = 96%
BK = 57%	6500K = 88%

Coefficients of utilization

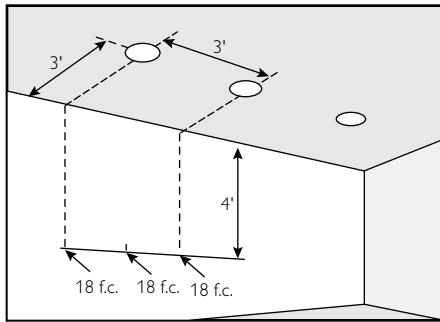
Ceiling	80%				70%				50%				30%				0%
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
RCR	Zonal cavity method - Effective floor reflectance = 20%																
Room Cavity Ratio	0	119	119	119	116	116	111	111	106	106	100						
	1	113	110	108	105	108	104	104	101	100	98	93					
	2	107	102	98	95	101	94	97	91	94	89	86					
	3	102	95	90	86	93	85	91	84	88	82	79					
	4	96	88	82	78	87	78	85	77	83	76	73					
	5	91	82	76	71	81	71	79	70	78	70	68					
	6	86	77	70	66	76	65	74	65	73	65	63					
	7	81	71	65	61	71	61	69	60	68	60	58					
	8	77	67	61	56	66	56	65	56	64	56	54					
	9	73	63	56	52	62	52	61	52	60	52	50					
	10	69	59	53	49	58	49	58	48	57	48	47					

1. Wattage controlled to within 65%.
2. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
3. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

C6CK Calculite LED 6" gen 3

Cylinder with IntelliHue

Spacing

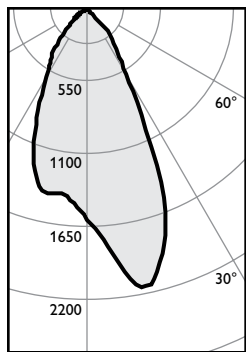


Adjustment factors

Finish	CCT
CL = 100%	2700K = 103%
CC = 95%	3000K = 101%
CD = 87%	3500K = 100%
CZ = 63%	4000K = 103%
WH = 87%	5000K = 96%
BK = 57%	6500K = 88%

Wall wash, 1500lm Engine, 68.0 lm/W at 21.3W

Candela Curve



Engine: C6L15CKWDMXU
Trim: C6RWWCL

Output lumens: 1447 lms
Input watts: 21.3 W
CRI: 90 min
CCT¹: 3500K

Efficacy: 68.0 lm/w
Report²: STMR-95-1

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	2' from wall			
	3' on ctr.			
1	5	6	5	
2	15	16	15	
3	22	23	22	
4	26	27	26	
5	25	26	25	
6	22	24	22	
7	19	20	19	
8	16	17	16	
9	14	14	14	
10	12	12	12	
12	11	11	11	
14	10	10	10	

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall			
	3' on ctr.			
1	5	5	5	
2	11	11	11	
3	16	16	16	
4	18	18	18	
5	18	18	18	
6	16	17	16	
7	14	15	14	
8	13	13	13	
9	11	11	11	
10	10	10	10	
12	8	9	8	
14	7	8	7	

Multiple unit data

Footcandles on wall

Distance from ceiling in feet	3' from wall		
	4' on ctr.		
1	3	3	3
2	6	6	6
3	10	10	10
4	12	12	12
5	13	13	13
6	12	12	12
7	12	12	12
8	12	12	12
9	11	11	11
10	10	10	10
12	9	9	9
14	8	8	8

1. Wattage controlled to within 65%.
2. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
3. 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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