



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

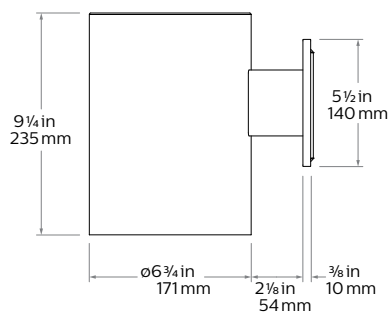
### Pendant accessories (field adjustable)<sup>1</sup> example: CASK36BK

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

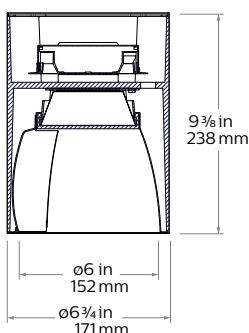
- Pendant (P) option needs to be ordered with an accessory.
- Wall Wash (WW) and Double Wall Wash (DW) are only available with Wide (W) beam.
- RAL standard colors can be specified upon request. Add RAL standard code to (RALxxxxx).
- RAL cable canopy kit will be with black cord.

### Dimensions

#### Wall mount

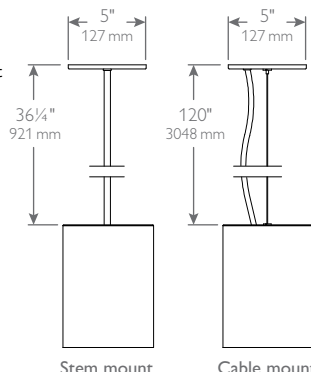


#### Surface mount



#### 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](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



Specular clear (CL)



Comfort clear diffuse (CD)



White (WH)



Comfort clear (CC)



Champagne bronze (CZ)



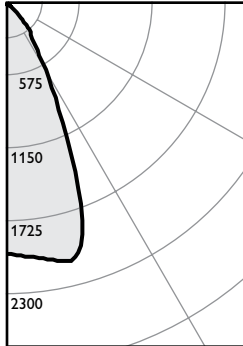
Black (BK)

# 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<sup>1</sup>: 20.7 W  
CRI: 90 min  
CCT<sup>2</sup>: 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<sup>3</sup>: STMR-95-I

#### Adjustment factors

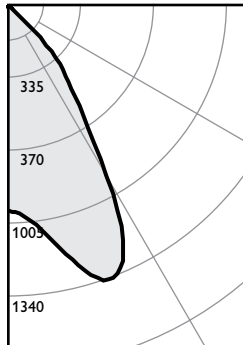
Finish	CCT
CL = 100%	2700K = 103%
CC = 95%	3000K = 101%
CD = 87%	3500K = 100%
CZ = 63%	4000K = 103%
WH = 87%	5000K = 96%
BK = 57%	6500K = 88%

#### Coefficients of utilization

Ceiling	80%				70%				50%				30%				0%
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	100	100
1	114	111	109	107	109	105	105	102	102	101	99	94	101	99	94	94	94
2	109	104	100	97	102	96	96	94	94	96	92	88	96	92	88	88	88
3	104	98	93	89	96	89	89	87	87	91	86	83	91	86	83	83	83
4	99	92	87	83	91	82	82	81	81	87	80	78	87	80	78	78	78
5	94	87	81	77	86	77	77	76	76	82	75	73	82	75	73	73	73
6	90	82	76	72	81	72	72	71	71	78	71	69	78	71	69	69	69
7	86	77	72	68	77	68	68	67	67	74	67	65	74	67	65	65	65
8	82	73	68	64	73	64	64	63	63	71	63	62	71	63	62	62	62
9	79	70	64	60	69	60	60	59	59	67	60	58	67	60	58	58	58
10	75	66	61	57	66	57	57	56	56	64	57	55	64	57	55	55	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<sup>1</sup>: 20.7 W  
CRI: 90 min  
CCT<sup>2</sup>: 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<sup>3</sup>: STMR-95-I

#### 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%
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	100	100
1	113	110	108	105	108	104	104	104	104	101	100	98	100	98	93	93	93
2	107	102	98	95	101	94	94	97	97	91	94	89	94	89	86	86	86
3	102	95	90	86	93	85	85	91	91	84	88	82	88	82	79	79	79
4	96	88	82	78	87	78	78	85	85	77	83	76	83	76	73	73	73
5	91	82	76	71	81	71	71	79	79	70	78	70	78	70	68	68	68
6	86	77	70	66	76	65	65	74	74	65	73	65	73	65	63	63	63
7	81	71	65	61	71	61	61	69	69	60	68	60	68	60	58	58	58
8	77	67	61	56	66	56	56	65	65	56	64	56	64	56	54	54	54
9	73	63	56	52	62	52	52	61	61	52	60	52	60	52	50	50	50
10	69	59	53	49	58	49	49	58	58	48	57	48	57	48	47	47	47

1. Wattage controlled to within 65%.

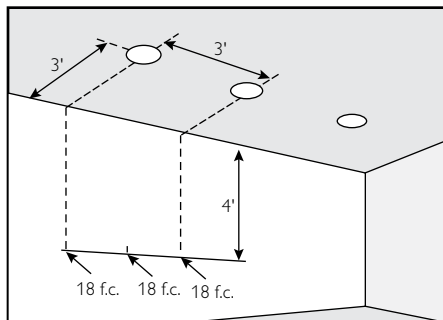
2. Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.

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

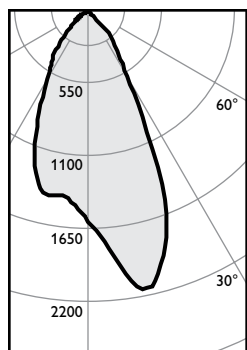


#### Adjustment factors

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  
CCT<sup>1</sup>: 3500K

Efficacy: 68.0 lm/w  
Report<sup>2</sup>: STMR-95-I

#### Multiple unit data

##### Footcandles on wall

	2' from wall			
	3' on ctr.			
Distance from ceiling in feet	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

	3' from wall			
	3' on ctr.			
Distance from ceiling in feet	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

	3' from wall			
	4' on ctr.			
Distance from ceiling in feet	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/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.

