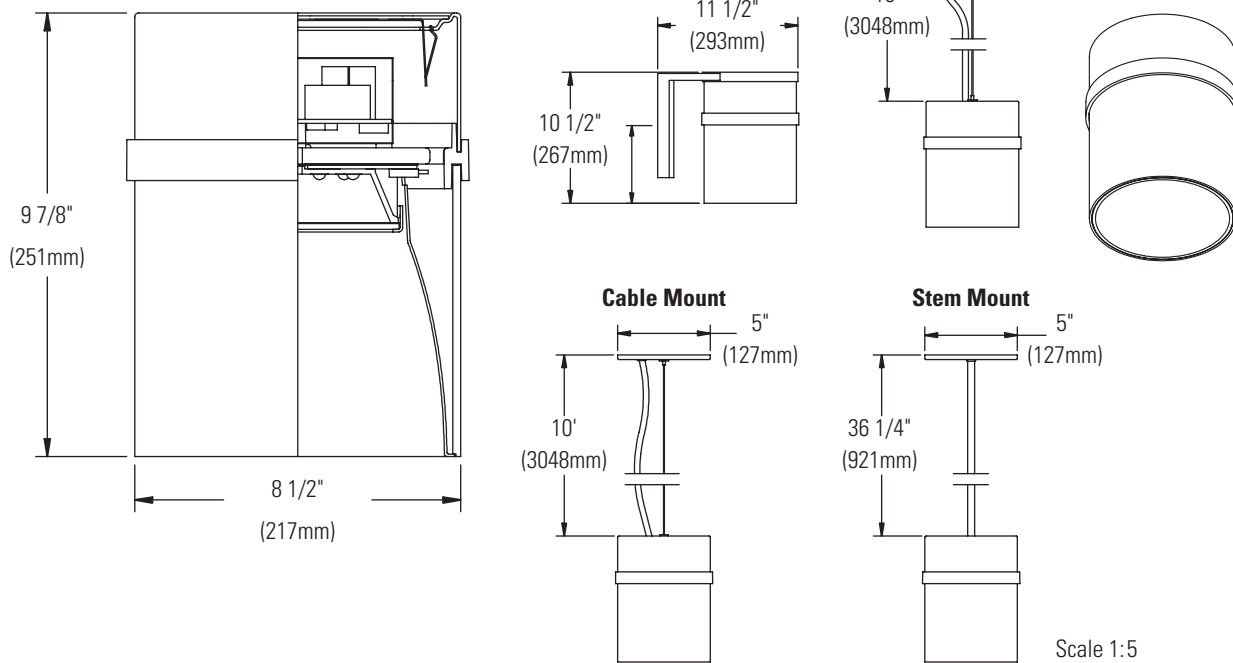


# C7L15C/C7L20C

## Calculite LED 7" Cylinder

Page 1 of 4



### Ordering guide: Cylinders

Frame-in kit series	Style	Color	Color temperature	Beam spread	Reflector finish	Input voltage
<b>C7L15</b> (1500 LUMEN) <b>C7L20</b> (2000 LUMEN)	<b>C</b> (Cylinder)	<b>W</b> = White <b>B</b> = Black <b>A</b> = Painted aluminum	<b>27K</b> (2700K) <b>30K</b> (3000K) <b>35K</b> (3500K) <b>40K</b> (4000K)	<b>M</b> (Medium) <b>W</b> (Wide)	<b>CCL</b> (Comfort Clear)	<b>U</b> (120/277V)

Example: C7L15CW35KCCL1

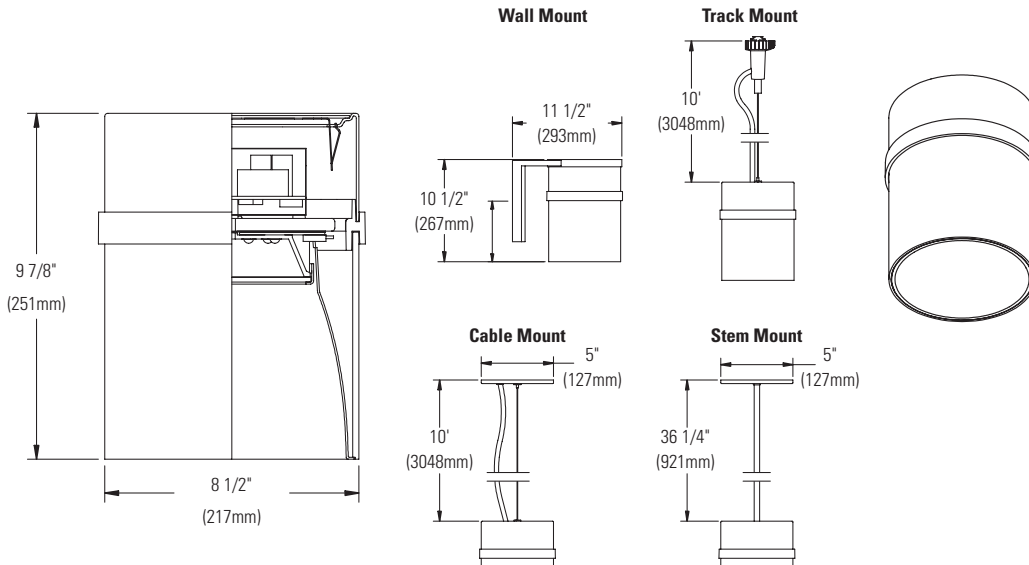
Job Information	Type:
Job Name:	
Cat. No.:	
Notes:	

**PHILIPS**  
**LIGHTOLIER**

# C7L15C/C7L20C

## Calculite LED 7" Cylinder

Page 2 of 4



### Features

**Input wattage:** 27W (1500 lumen)/39W (2000 lumen)  
9W (+/- 5%)

**Cylinder housing:** Aluminum. Suitable for mounting over 3" or 4" outlet box. Available in white, black, silver.

**Mounting capabilities:** Ceiling, wall or track (see "Luminaire Options" below).

**Reflector cone:** Aluminum. Provides 50° cutoff to source & source image. Self-flanged.

**Power connection:** Attaches to frame-in kit via push-in connector (on frame). Removable cover provides access.

### Technology

**LED Board:** Array of high brightness royal blue LED's.

**Remote phosphor technology:** Remote phosphor technology provides increased efficiency and color consistency. Phosphor lens assembly positioned in front of LED array converts blue light to white. Color shift will not exceed +/- 100K over life.

**Optical mixing chamber:** Lightolier-specific mixing chamber redirects back-reflected light through aperture resulting in 20% increase in efficiency.

**Thermal management:** Heat sink and thermal design along with clean room assembly ensures specified performance. 35°C maximum ambient environment.

**Rated life:** Based on IESNA LM-80-2008. 50,000 hours at 70% lumen maintenance (L70)

**Photometric performance:** Tested in accordance to IESNA LM-79-2008

### Options

**Wall mount (C4CW):** Cast aluminum plate. Suitable for mounting over 3" & 4" outlet boxes.

**Track mount (TM01):** Suitable for Basic, Advent, Radius track systems. Silver color only. Cord: 18/3 AWM leads, 10 amps maximum. White color.

**Cable mount (C4CC):** 5" round decorative plate. No visible hardware. Holds aircraft cable. Chrome adjusting hardware for leveling. Cord: 18/3 AWM leads, 10 amps maximum. White color.

**Stem mount (C4CP):** 5" round decorative plate. No visible hardware.

**Cord:** 18/3 AWM leads, 10 amps maximum. White color.

**Dimming capability:** 0-10V. See LED-DIM specification sheet.

**Emergency capability (inverter):** See LED-LMI specification sheet.

### Labels

UL (suitable for wet locations), cUL, I.B.E.W.

5 Year Warranty

<b>Job Information</b>	<b>Type:</b>
------------------------	--------------

**PHILIPS**

**LIGHTOLIER**

# C7L15C/C7L20C

## Calculite LED 7" Cylinder



### Medium beam (M) photometry

#### Correlated color temperature (CCT) multipliers

**2700K** (x 0.92), **3000K** (x 1.00), **3500K** (x 1.07), **4000K** (x 1.14)

#### Reflector finish multipliers

**CL** (x 1.00), **CCL** (x 0.94), **CCD** (x 0.93), **CCZ** (x 0.76), **WH** (x 0.82) — **CL** & **CCD** finishes are tested. **CCL**, **CCZ** & **WH** are calculated.

#### 1500 LM, 3000K, CL FINISH TRIM

Candlepower Distribution	ANGLE	MEAN CP	LUMENS
	0	1692	
	5	1664	158
	10	1634	
	15	1594	449
	20	1518	
	25	1300	562
	30	768	
	35	351	238
	40	147	
	45	35	37
	50	3	
	55	1	
	60	1	
	65	0	0
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

**Trim/Frame:**  
C7L1520DL30KMCLW/C7L15N1

**Output lumens:** 1445 lm

**Correlated Color Temp<sup>1</sup>:** 3000K

**Input Watts<sup>2</sup>:** 26.6 w

**Efficacy:** 54.3 lm/w

**CR<sup>3</sup>:** 78

**Spacing Criterion:** 0.9

CEILING	80%				70%				50%				30%				0%
WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
<b>RCR Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%</b>																	
0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	
1	114	111	109	107	109	105	105	102	101	99	94	94	94	94	94	94	
2	109	104	100	97	102	96	99	94	96	92	88	88	88	88	88	88	
3	104	98	93	89	96	88	94	87	91	86	83	83	83	83	83	83	
4	99	92	87	83	91	82	88	81	86	80	78	78	78	78	78	78	
5	94	86	81	77	85	76	84	76	82	75	73	73	73	73	73	73	
6	90	81	76	72	81	71	79	71	78	71	69	69	69	69	69	69	
7	86	77	71	67	76	67	75	67	74	66	65	65	65	65	65	65	
8	82	73	67	63	72	63	71	63	70	63	61	61	61	61	61	61	
9	78	69	63	60	68	59	67	59	67	59	58	58	58	58	58	58	
10	75	65	60	56	65	56	64	56	63	56	54	54	54	54	54	54	

ZONAL LUMENS AND PERCENTAGES		
ZONE	LUMENS	%LUMINAIRE
0-30	1169	80.9%
0-40	1406	97.3%
0-60	1445	100.0%
0-90	1445	100.0%

Single Unit Data			
Height to Lighted Plane	Initial Footcandles	Beam Diameter	
5'	68	6'	
6'	47	7'	
7'	35	8'	
8'	26	9'	
9'	21	10'	

Multiple Unit Data - RCR 2			
Spacing On Ctr.	Initial Footcandles	Watts/Sq. Ft.	
5'	66.5	1.18	
6'	43.7	0.77	
7'	31.2	0.55	
8'	26.0	0.46	
9'	20.8	0.37	

38"x38"x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

CERTIFIED TEST REPORT NO. F10022<sup>3</sup>

#### 2000 LM, 3000K, CL FINISH TRIM

Candlepower Distribution	ANGLE	MEAN CP	LUMENS
	0	2338	
	5	2298	218
	10	2257	
	15	2201	619
	20	2095	
	25	1792	776
	30	1068	
	35	487	330
	40	205	
	45	49	52
	50	4	
	55	2	2
	60	1	
	65	0	1
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

**Trim/Frame:**  
C7L1520DL30KMCLW/C7L20N1

**Output lumens:** 1998 lm

**Correlated Color Temp<sup>1</sup>:** 3000K

**Input Watts<sup>2</sup>:** 39.5 w

**Efficacy:** 50.6 lm/w

**CR<sup>3</sup>:** 78

**Spacing Criterion:** 0.9

CEILING	80%				70%				50%				30%				0%
WALL	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	0
<b>RCR Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%</b>																	
0	119	119	119	119	116	116	111	111	106	106	100	100	100	100	100	100	
1	114	111	109	107	109	105	105	102	101	99	94	94	94	94	94	94	
2	109	104	100	97	102	96	99	94	96	92	88	88	88	88	88	88	
3	104	98	93	89	96	88	94	87	91	86	83	83	83	83	83	83	
4	99	92	86	83	91	82	88	81	86	80	78	78	78	78	78	78	
5	94	86	81	77	85	76	84	76	82	75	73	73	73	73	73	73	
6	90	81	76	72	81	71	79	71	78	71	69	69	69	69	69	69	
7	86	77	71	67	76	67	75	67	74	66	65	65	65	65	65	65	
8	82	73	67	63	72	63	71	63	70	63	61	61	61	61	61	61	
9	78	69	63	59	68	59	67	59	67	59	58	58	58	58	58	58	
10	75	65	60	56	65	56	64	56	63	56	54	54	54	54	54	54	

ZONAL LUMENS AND PERCENTAGES		
ZONE	LUMENS	%LUMINAIRE
0-30	1613	80.7%
0-40	1944	97.3%
0-60	1998	100.0%
0-90	1998	100.0%

Single Unit Data			
Height to Lighted Plane	Initial Footcandles	Beam Diameter	
5'	94	6'	
6'	65	7'	
7'	48	8'	
8'	37	9'	
9'	29	10'	

Multiple Unit Data - RCR 2			
Spacing On Ctr.	Initial Footcandles	Watts/Sq. Ft.	
5'	92.0	1.75	
6'	60.4	1.15	
7'	43.1	0.82	
8'	35.9	0.68	
9'	28.8	0.55	

38"x38"x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

CERTIFIED TEST REPORT NO. F10023<sup>3</sup>

<b>Job Information</b>	<b>Type:</b>
------------------------	--------------

<sup>1</sup> Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSI C78.377-2008: Specifications for the Chromaticity of Solid-State Lighting Products.

<sup>2</sup> Wattage controlled to within 5%.

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

<sup>4</sup> Color Rendering Index within +/- 2%.



# C7L15C/C7L20C

## Calculite LED 7" Cylinder



### Medium beam (W) photometry

### Correlated color temperature (CCT) multipliers

2700K (x 0.92), 3000K (x 1.00), 3500K (x 1.07), 4000K (x 1.14)

### Reflector finish multipliers

CL (x 1.00), CCL (x 0.94), CCD (x 0.93), CCZ (x 0.76), WH (x 0.82) — CL & CCD finishes are tested. CCL, CCZ & WH are calculated.

1500 LM, 3000K, CL FINISH TRIM

Candlepower Distribution	ANGLE	MEAN CP	LUMENS
	0	1692	
	5	1664	158
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	40	147	
	45	35	37
	50	3	
	55	1	1
	60	1	
	65	0	0
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

Trim/Frame:  
C7L1520DL30KMCLW/C7L15N1

Output lumens: 1445 lm

Correlated Color Temp<sup>1</sup>: 3000K

Input Watts<sup>2</sup>: 26.6 w

Efficacy: 54.3 lm/w

CRI<sup>3</sup>: 78

Spacing Criterion: 0.9

CEILING WALL	80%				70%				50%				30%				0%			
	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10
RCR Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%																				
0	119	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									
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Spacing	Initial Watts/ On Ctr.	Watts/ Footcandles Sq. Ft.
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	45	49	52
	50	4	
	55	2	2
	60	1	
	65	0	1
	70	0	
	75	0	0
	80	0	
	85	0	0
	90	0	

Trim/Frame:  
C7L1520DL30KMCLW/C7L20N1

Output lumens: 1998 lm

Correlated Color Temp<sup>1</sup>: 3000K

Input Watts<sup>2</sup>: 39.5 w

Efficacy: 50.6 lm/w

CRI<sup>3</sup>: 78

Spacing Criterion: 0.9

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	70	50	30	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10
RCR Zonal Cavity Method - Effective Floor Cavity Reflectance = 20%																				
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3	104	98	93	89	96	88	94	87	91	86	83									
4	99	92	86	83	91	82	88	81	86	80	78									
5	94	86	81	77	85	76	84	76	82	75	73									
6	90	81	76	72	81	71	79	71	78	71	69									
7	86	77	71	67	76	67	75	67	74	66	65									
8	82	73	67	63	72	63	71	63	70	63	61									
9	78	69	63	59	68	59	67	59	67	59	58									
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ZONE	LUMENS	%LUMINAIRE
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Spacing	Initial Watts/ On Ctr.	Watts/ Footcandles Sq. Ft.
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7'	43.1	0.82
8'	35.9	0.68
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38'x38'x10' Room, Workplane 2 1/2' above floor, 80/50/20% Reflectances

CERTIFIED TEST REPORT NO. F10023<sup>3</sup>

<sup>1</sup> Correlated Color Temperature within specs as defined in ANSI/NEMA/ANSI C78.377-2008: Specifications for the Chromaticity of Solid-State Lighting Products.

<sup>2</sup> Wattage controlled to within 5%.

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

<sup>4</sup> Color Rendering Index within +/- 2%.



Philips Lightolier  
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C7L15C-C7L20C May 7, 2012

Specifications are subject to change without notice.  
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### Job Information Type: