



Calculite LED 6" generation 3 features industry leading visual comfort, excellent uniform illumination over time, and patented installation flexibility.

Complete luminaire = Frame + Engine + Trim + Accessories (optional)

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Cat.No: \_\_\_\_\_

Type: \_\_\_\_\_

Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

### Frame

example: 6RNP

Series	Installation	Voltage/Options
<b>6R</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>6R</b> 6" Non-IC Round	<b>N</b> New construction	<b>—</b> Universal 120 V/277 V (specify for Power Over Ethernet) <b>EM</b> Emergency (see page 2 for details and limitations) <sup>1</sup> <b>IP</b> Interact Pro ready (for 0-10V engine only)
	<b>R</b> Remodeler	<b>—</b> Universal 120 V/277 V (specify for Power Over Ethernet) <b>IP</b> Interact Pro ready (for 0-10V engine only)
		<b>LC</b> Chicago Plenum <b>3</b> 347V (not compatible with ELV dimming) <sup>2</sup> <b>3IP</b> 347V with Interact Pro (for 0-10V engine only) <b>3</b> 347V (not compatible with ELV dimming)

### Engine

example: C6L15835NZ10U

Series	Lumens	CRI	CCT	Beam	Dimming	Voltage
<b>C6L</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C6L</b> Calculite LED 6"	<b>10</b> 1000lm <b>15</b> 1500lm <b>20</b> 2000lm <b>25</b> 2500lm <b>30</b> 3000lm <b>35</b> 3500lm <b>48</b> 4800lm (Z10 only) <b>60</b> 6000lm (Z10 only)	<b>8</b> 80CRI <b>9</b> 90CRI	<b>27</b> 2700K <b>30</b> 3000K <b>35</b> 3500K <b>40</b> 4000K	<b>N</b> Narrow (40°) <b>M</b> Medium (56°) <b>W</b> Wide (76°)	<b>Z10</b> 0-10V 1% <b>SOL</b> EldoLED Solo 0-10V 0.1% <b>D</b> Dali 0.1% <b>L</b> Lutron LDE1 EcoSystem (fade-to-black) <b>DMX</b> Digital Multiplexing	<b>U</b> Universal 120 V/277 V/347 V
					<b>E</b> ELV (for up to 2000lm only) <b>P</b> Power over Ethernet (PoE) Only compatible with 1000 (10) to 2500 (25) lumen configurations.	<b>1</b> 120 V <b>E</b> Ethernet 48 V DC

### Trim

example: C6RDLCCP

Series	Aperture	Style	Finish	Flange
<b>C6</b>	<b>R</b>	<b>DL</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>C6</b> Calculite LED 6"	<b>R</b> Round	<b>DL</b> Downlight	<b>BK</b> Black (anodized) <b>CL</b> Specular clear <b>WH</b> White (matte)	<b>CC</b> Comfort clear <b>CD</b> Comfort clear diffuse <b>CZ</b> Champagne bronze <b>P</b> Polished (matches aperture) <b>F</b> Flangeless (requires CA6RFT)
		<b>SL</b> Shower light (non-conductive) <sup>3</sup>	<b>WH</b> White (matte)	<b>—</b> White (matte) <b>F</b> Flangeless (requires CA6RFT) <b>—</b> Not applicable

### Accessories

<b>CA6RFT</b>	Mud-in ring for use in flangeless trim installations (ordered with a flangeless trim)
<b>CAEM</b>	Field instalable EM pack (for use with new construction frame only)
<b>C6RVPWH</b>	IP65 Rated vandal proof matte white accessory mounts onto flangeless trims (C4RDL*F) and new construction frame only
<b>AMS</b>	ActiLume multi-sensor (optional accessory for PoE configurations)
<b>SWZDT</b>	SpaceWise wireless controller with dwell time functionality (compatible with all 0-10V options, see SWZDT spec sheet)
<b>SRAINT</b>	InterAct Office Accessory (for use with Lightolier UniFrame 0-10V products)

- Emergency (EM) frame includes emergency battery with ceiling and reflector mountable test switch (see page 2 for details and limitations).
- The 347V frame is not compatible with lumen packages above 2000lm for lensed wall wash trims.
- Non-conductive flush mount lens with pre-installed gasket (matte white non-conductive flange with diffuse lens that is flush with the flange).

# C6RDL Calculite LED 6" gen 3

## Round Downlight

### Frame-in-kits

#### New Construction:

Galvanized stamped steel for dry or plaster ceilings. Preinstalled telescoping mounting bars from 13" to 24". For 4' distances, use 1/2" EMT, 1-1/2" x 1/2" U or C channel.

**Max ceiling thickness is 2.75" (70 mm) including PoE frame 4.88" (124 mm) plenum depth for installation.**

#### Emergency:

For reflector mounted emergency test switch add "EM" to end of catalog code (example: C6RDLCCEM). Leave blank for ceiling mounted test switch. Reflector mounted test switch requires above ceiling access.

#### Patented install Mounting frame:

- Pre-installed mounting bars for fast and tool-less installs into T-grid & hat channel ceilings.
- Close-cut aperture design eliminates possibility of gap between ceiling opening and reflector flange.
- Separate wiring compartment for wiring frame to building allows inspection prior to light engine install.
- Simple plug-and-play connection between frame and light engine from below ceiling.

### Dimming

- Advance 0-10V 1% dimming
- Lutron Hi-lume EcoSystem H Series 1% dimming
- EldoLED ECoDrive Dali 1% dimming
- EldoLED SOLOdrive 0-10V 0.1% dimming
- EldoLED DMX POWERdrive

### Power over Ethernet

#### Powered via Lightolier PoE lighting controller:

Complies with FCC rules per Title 47 part 15 (Class A) for EMI / RFI (conducted & radiated). PoE lighting controller accessible from below ceiling.

### 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.

### 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.

### Wired Controls Options

#### Interact Office Wired (PoE):

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output.
- Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (-4F to 86F) ambient, and 45-85% relative humidity.
- For more information on Interact Office Wired, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or [www.usa.lighting.philips.com/systems/systemareas/offices](http://www.usa.lighting.philips.com/systems/systemareas/offices).

#### Interact Office Wired (PoE),

##### Static White and Tunable White:

- A wireless IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or [www.usa.lighting.philips.com/systems/systemareas/offices](http://www.usa.lighting.philips.com/systems/systemareas/offices).

### Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to small and medium businesses without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone).
- Prepare commissioning remotely via Interact Pro portal.
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning.
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch.
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1).
- For more information on Interact Pro visit: [www.interact-lighting.com/pro](http://www.interact-lighting.com/pro).
- For more information on Interact Ready visit: [www.philips.com/interact-ready](http://www.philips.com/interact-ready).

### Options and Accessories

#### Flangeless mud-in ring: Use CA6RFT

for use with flangeless plaster installations.

**Sloped ceilings:** Compatible with sloped ceiling adapters (see SCA spec sheet).

**Vandal Proof:** Use C6RVPWH for an IP65 rated vandal proof matte white accessory. Must be ordered with flangeless trim and new construction frame.

### ENERGY STAR® exceptions

- 90 CRI configurations
- Champagne Bronze & Black finishes
- 347V & Emergency voltage/options
- Dali, EldoLED Solo & PoE drivers

### Title 24 exceptions

- 1000lm configurations
- Champagne Bronze & Black finishes

### Labels and Listings

- cULus listed for wet locations
- ENERGY STAR® certified
- RoHS certified
- CEC Title 24 JA8 certified
- CCEA (frames with \*LC suffix)
- IP65 rated with vandal proof accessory

### Warranty



5 year limited warranty

Visit [Signify.com/warranties](http://Signify.com/warranties) for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

# C6RDL Calculite LED 6" gen 3

## Round Downlight

### Narrow

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
<b>C6L10_NZ10U</b>	120V	50/60Hz	0.08	230 mA	9W	8W	<15%	>0.95
	277V		0.04				<20%	>0.95
<b>C6L15_NZ10U</b>	120V	50/60Hz	0.11	340 mA	15W	11W	<10%	>0.95
	277V		0.05				<15%	>0.95
<b>C6L20_NZ10U</b>	120V	50/60Hz	0.16	460 mA	22W	16W	<10%	>0.95
	277V		0.08				<15%	>0.95
<b>C6L25_NZ10U</b>	120V	50/60Hz	0.20	590 mA	25W	21W	<10%	>0.95
	277V		0.10				<15%	>0.95
<b>C6L35_NZ10U</b>	120V	50/60Hz	0.30	900 mA	36W	30W	<10%	>0.95
	277V		0.14				<15%	>0.95
<b>C6L48_NZ10U</b>	120V	50/60Hz	0.42	1250 mA	51W	44W	<10%	>0.95
	277V		0.19				<15%	>0.95
<b>C6L60_NZ10U</b>	120V	50/60Hz	0.48	1400 mA	57W	50W	<10%	>0.95
	277V		0.21				<15%	>0.95

### Medium/Wide

Light engine	Input volts	Input freq	Input current	Drive current	Input power	LED power	THD power	Power factor
<b>C6L10_MZ10U</b>	120V	50/60Hz	0.08	210 mA	9W	8W	<15%	>0.95
	277V		0.04				<20%	>0.95
<b>C6L15_MZ10U</b>	120V	50/60Hz	0.11	320 mA	15W	11W	<10%	>0.95
	277V		0.05				<15%	>0.95
<b>C6L20_MZ10U</b>	120V	50/60Hz	0.15	430 mA	19W	15W	<10%	>0.95
	277V		0.07				<15%	>0.95
<b>C6L25_MZ10U</b>	120V	50/60Hz	0.19	550 mA	23W	19W	<10%	>0.95
	277V		0.09				<15%	>0.95
<b>C6L35_MZ10U</b>	120V	50/60Hz	0.25	570 mA	30W	25W	<10%	>0.95
	277V		0.11				<15%	>0.95
<b>C6L48_MZ10U</b>	120V	50/60Hz	0.36	810 mA	40W	34W	<10%	>0.95
	277V		0.16				<15%	>0.95
<b>C6L60_MZ10U</b>	120V	50/60Hz	0.50	1130 mA	57W	50W	<10%	>0.95
	277V		0.22				<15%	>0.95

### Narrow (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
<b>C6L10___NPE</b>	53V	51-54V	DC	160 mA	8.9 W
<b>C6L15___NPE</b>	53V	51-54V	DC	250 mA	13.7 W
<b>C6L20___NPE</b>	53V	51-54V	DC	330 mA	17.7 W
<b>C6L25___NPE</b>	53V	51-54V	DC	420 mA	22.8 W

### Medium (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
<b>C6L10___MPE</b>	53V	51-54V	DC	160 mA	8.4 W
<b>C6L15___MPE</b>	53V	51-54V	DC	230 mA	12.5 W
<b>C6L20___MPE</b>	53V	51-54V	DC	310 mA	16.7 W
<b>C6L25___MPE</b>	53V	51-54V	DC	390 mA	21.4 W

### Wide (Power over Ethernet)

Light engine	Input				
	Volts <sup>1</sup>	Voltage <sup>2</sup>	Freq	Current	Power
<b>C6L10___WPE</b>	53V	51-54V	DC	160 mA	8.4 W
<b>C6L15___WPE</b>	53V	51-54V	DC	230 mA	12.5 W
<b>C6L20___WPE</b>	53V	51-54V	DC	310 mA	16.7 W
<b>C6L25___WPE</b>	53V	51-54V	DC	390 mA	21.4 W

1. Nominal input volts.  
2. Preferred volt range.

### Marked spacing applications

Light engine	4800lm	6000lm
<b>C6L_Z10U series</b>	X	X
<b>C6L_LU series</b>	—	—
<b>C6L_DU series</b>	—	—

Modules marked with an X require marked spacing:  
– Center-to-center of adjacent luminaires: 24" (610mm)  
– Luminaire center to side building member: 12" (305mm)

In accordance with CAN ICES-005-A/ NEB-005-A and FCC Part 15-A.

### Lifetime (TM-21) data

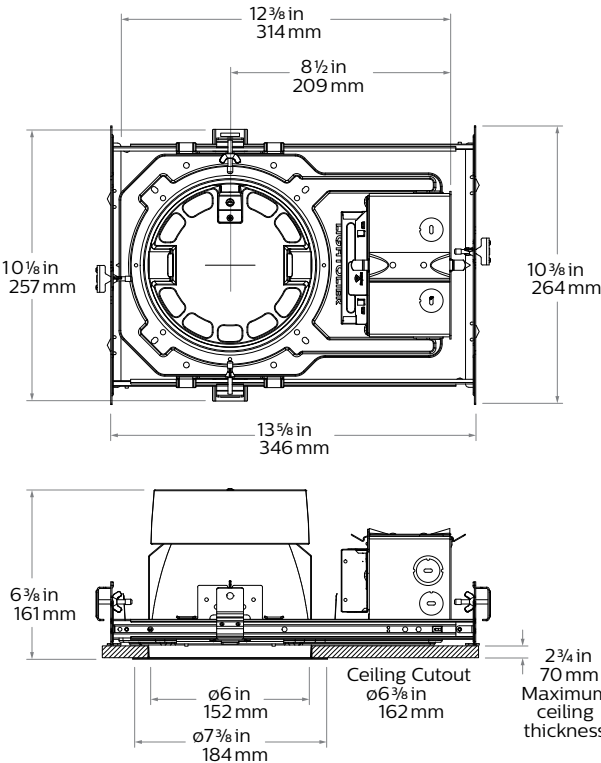
Lumens	Narrow beam	Medium/Wide beam*
<b>1000lm</b> <b>1500lm</b> <b>2000lm</b> <b>2500lm</b> <b>3500lm*</b> <b>4800lm</b> <b>6000lm</b>	L90 @ 60,000hrs.	L90 @ 60,000hrs.
	L90 @ 60,000hrs.	L80 @ 60,000hrs.

\* Lutron 3500lm with Medium/Wide beam is L85 @ 60,000hrs.

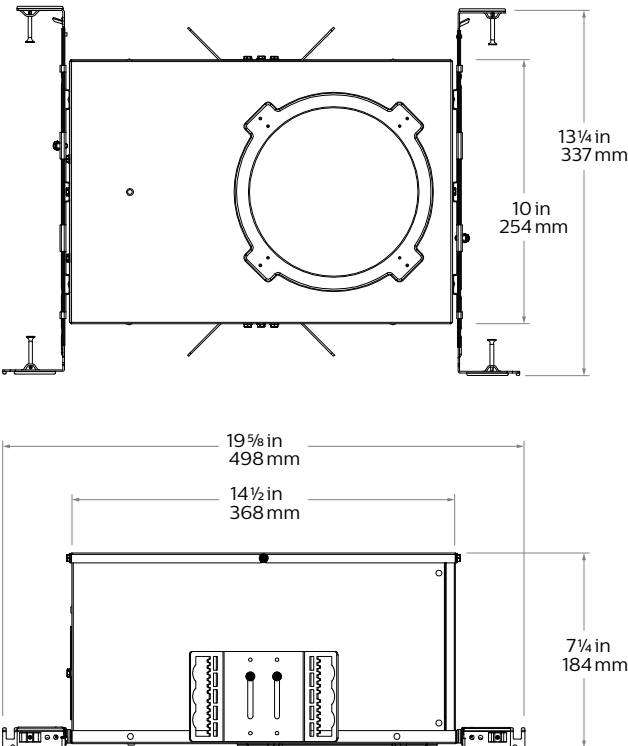
# C6RDL    Calculite LED 6" gen 3

## Round Downlight

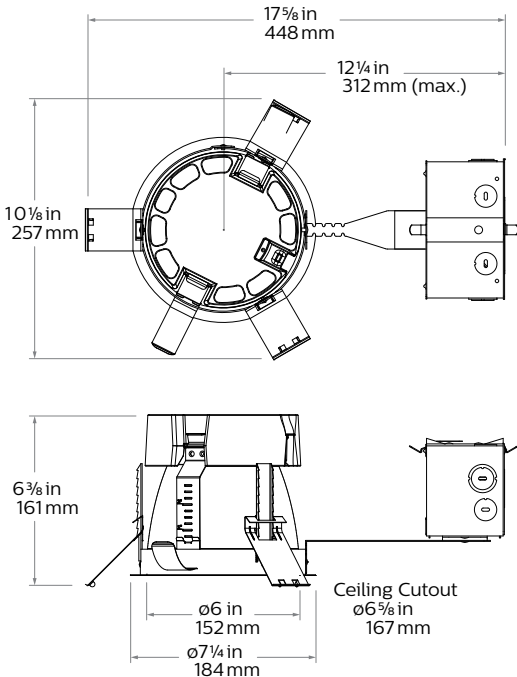
### New Construction (N)



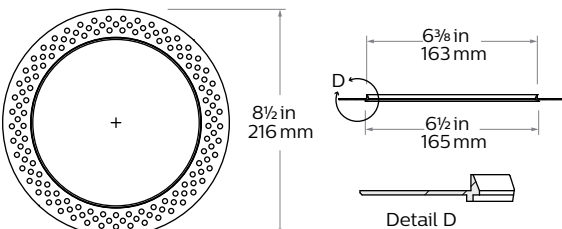
### Chicago Plenum (LC)



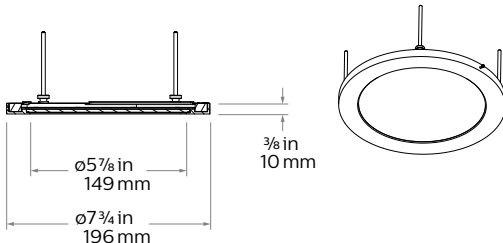
### Remodeler (R)



### Flangeless mud-in ring (CA6RFT) accessory



### Vandal Proof (VP) accessory



# C6RDL Calculite LED 6" gen 3

## Round Downlight

### Reflector



**Specular clear (CL):** Most specular and most efficient finish, delivers maximum photometric performance but can produce a mirror image effect of the interior space.



**Champagne bronze (CZ):** Semi-specular finish that softens light at the source of the reflector while providing a warmer reflector appearance (slightly warmer).



**Comfort clear (CC):** Semi-specular finish that softens the light at the source of the reflector and creates a subtle, even luminance from the reflector cone.



**White (WH):** (matte) Brightest illuminated aperture and provides the smoothest transition to most ceilings when off (white is only available with a white flange).



**Comfort clear diffuse (CD):** Slightly diffuse clear finish, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.



**Black (BK):** (matte) Specular finish that provides the lowest aperture brightness possible and significantly reduces source identification in a ceiling.



**Vandal proof (VP):** Provides an elegant solution for vandal resistant needs. One piece machined aluminum ring with impact resistant clear lens. Flangeless (F) flange must be ordered. Provides the luminaire with an IK10 impact and IP65 rating.



**Shower light (SL):** Wet location rated shower light applicable in any installation requiring dead front trims, interior or exterior non-corrosive applications, or where a diffused lens at the ceiling is required (non-conductive).

### Flange



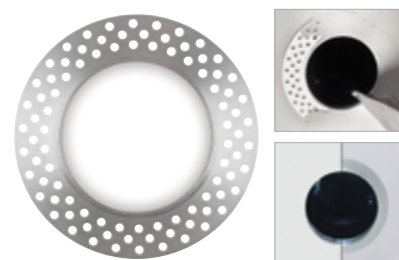
**White (-):** (matte) Provides the smoothest transition to ceilings when off.



**Polished (P):** (matches aperture) Produces a continuous look throughout the reflector (aperture matching).



**Flangeless (F):** (flush-mount) Creates a flush, virtually seamless transition from aperture to ceiling.



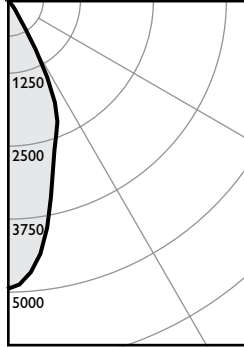
**Mud-in ring (FT):** Low profile, machined aluminum mud-in ring provides a raised rib to plaster up to and a 3/16" flange thickness. The ring is attached to the ceiling material as opposed to the frame-in kit to avoid conduction of heat and vibration which can cause yellowing or cracking of the plaster.

# C6RDL Calculite LED 6" gen 3

## Round Downlight

Narrow beam, 2500lm Engine, 103.0 lm/W or 108.0 lm/W at 22.8W (Power over Ethernet)

Candela Curve



Frame: **C6RN or 6RN**  
Engine: **C6L25835NZ10U**  
Trim: **C6RDLCL**

Output lumens: 2462 lms  
Input watts: 23.9 W  
CRI: 80 min  
CCT<sup>1</sup>: 3500K  
Spacing Crit.: 0.6  
Beam Angle: 40°

Zonal summary

Zone	Lumens	%Luminaire
0-30	2113	85.8%
0-40	2383	96.8%
0-60	2459	99.9%
0-90	2462	100.0%

Angle	Mean CP	Lumens
0	4938	
5	4667	423
10	3948	
15	3027	856
20	2456	
25	1936	834
30	977	
35	352	270
40	205	
45	87	72
50	13	
55	4	4
60	3	
65	2	2
70	1	
75	1	1
80	0	
85	1	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	198	3.0'
6'	137	3.6'
7'	101	4.2'
8'	77	4.8'
9'	61	5.4'

\* 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'	114.3	1.06
6'	75.0	0.70
7'	53.6	0.50
8'	44.7	0.41
9'	35.7	0.33

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

**Efficacy: 103.0 lm/w**  
Report<sup>2</sup>: F37145

Adjustment factors

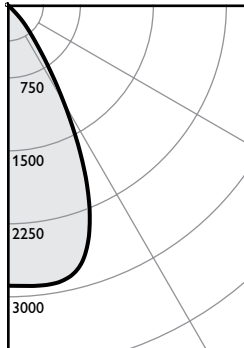
Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 103%	6000lm = 202%
CC = 95%	80CRI 3500K = 100%	4800lm = 192%
CD = 87%	80CRI 3000K = 95%	3500lm = 140%
CZ = 63%	80CRI 2700K = 93%	2500lm = 100%
WH = 87%	90CRI 3000K = 83%	2000lm = 80%
BK = 57%	90CRI 2700K = 78%	1500lm = 60%
		1000lm = 40%

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	95	95
	1	114	112	109	107	110	106	105	102	102	99	95	102	99	95	90	90
	2	109	105	101	98	103	97	100	95	97	93	90	97	93	90	85	85
	3	105	99	95	91	98	90	95	89	93	88	85	93	88	85	80	80
	4	100	94	89	85	93	85	90	84	88	83	80	88	83	80	76	76
	5	96	89	84	80	88	79	86	79	84	78	76	84	78	76	72	72
	6	92	84	79	75	83	75	82	74	81	74	72	81	74	72	69	69
	7	88	80	75	71	79	71	78	71	77	70	69	77	70	69	65	65
	8	85	76	71	67	76	67	75	67	74	67	65	74	67	65	62	62
	9	81	73	68	64	72	64	72	64	71	64	62	71	64	62	59	59
	10	78	70	65	61	69	61	68	61	68	61	59	68	61	59		

Medium beam, 2500lm Engine, 115.2 lm/W or 114.7 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C6RN or 6RN**  
Engine: **C6L25835MZ10U**  
Trim: **C6RDLCL**

Output lumens: 2454 lms  
Input watts: 21.3 W  
CRI: 80 min  
CCT<sup>1</sup>: 3500K  
Spacing Crit.: 0.8  
Beam Angle: 55°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1896	77.2%
0-40	2319	94.5%
0-60	2450	99.8%
0-90	2454	100.0%

Angle	Mean CP	Lumens
0	2886	
5	2900	277
10	2903	
15	2809	777
20	2472	
25	1880	842
30	1178	
35	644	423
40	347	
45	153	124
50	23	
55	6	8
60	4	
65	3	3
70	2	
75	1	1
80	1	
85	1	0
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	115	4.0'
6'	80	4.8'
7'	59	5.6'
8'	45	6.4'
9'	36	7.2'

\* 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'	112.7	0.94
6'	74.0	0.62
7'	52.8	0.44
8'	44.0	0.37
9'	35.2	0.30

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

**Efficacy: 115.2 lm/w**  
Report<sup>2</sup>: F37135

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	6000lm = 240%
CC = 95%	80CRI 3500K = 100%	4800lm = 192%
CD = 87%	80CRI 3000K = 97%	3500lm = 140%
CZ = 63%	80CRI 2700K = 87%	2500lm = 100%
WH = 87%	90CRI 3000K = 77%	2000lm = 80%
BK = 57%	90CRI 2700K = 73%	1500lm = 60%
		1000lm = 40%

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	94	94
	1	114	111	109	107	109	105	105	102	101	99	94	101	99	94	88	88
	2	108	104	100	97	102	96	99	94	96	92	88	96	92	88	82	82
	3	103	97	92	89	96	88	93	87	91	85	82	91	85	82	77	77
	4	98	91	86	82	90	81	88	80	86	79	77	86	79	77	72	72
	5	94	86	80	76	85	76	83	75	81	74	72	81	74	72	68	68
	6	89	81	75	71	80	71	78	70	77	70	68	77	70	68	64	64
	7	85	76	70	66	76	66	74	66	73	66	64	73	66	64	60	60
	8	81	72	66	62	71	62	70	62	69	62	60	69	62	60	57	57
	9	77	68	63	59	68	59	67	58	66	58	57	66	58	57	54	54
	10	74	65	59	55	64	55	63	55	63	55	54	63	55	54		

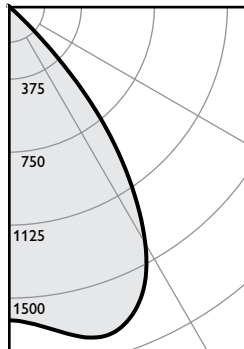
1. Correlated Color Temperature within specs as defined in ANSI\_NEMA\_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products.

# C6RDL Calculite LED 6" gen 3

## Round Downlight

Wide beam, 2500lm Engine, 108.3 lm/W or 107.8 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C6RN or 6RN**  
Engine: **C6L25835WZ10U**  
Trim: **C6RDLCL**

Output lumens: 2307 lms  
Input watts: 21.3 W  
CRI: 80 min  
CCT<sup>1</sup>: 3500K  
Spacing Crit.: 1.1  
Beam Angle: 72°

Zonal summary

Zone	Lumens	%Luminaire
0-30	1394	60.4%
0-40	2059	89.2%
0-60	2302	99.8%
0-90	2307	100.0%

Angle	Mean CP	Lumens
0	1612	
5	1641	159
10	1705	
15	1760	495
20	1740	
25	1629	740
30	1408	
35	1083	665
40	700	
45	270	232
50	39	
55	9	12
60	5	
65	3	3
70	2	
75	1	1
80	1	
85	1	1
90	0	

Single unit data

Height to lighted plane	Initial center beam foot-candles	Beam diameter (ft)*
5'	64	5.5'
6'	45	6.6'
7'	33	7.7'
8'	25	8.8'
9'	20	9.9'

\* 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'	104.1	0.94
6'	68.3	0.62
7'	48.8	0.44
8'	40.7	0.37
9'	32.5	0.30

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

**Efficacy: 108.3 lm/w**  
Report#: F37140

Adjustment factors

Finish	CCT	Lumens
CL = 100%	80CRI 4000K = 102%	6000lm = 240%
CC = 95%	80CRI 3500K = 100%	4800lm = 192%
CD = 87%	80CRI 3000K = 97%	3500lm = 140%
CZ = 63%	80CRI 2700K = 87%	2500lm = 100%
WH = 87%	90CRI 3000K = 77%	2000lm = 80%
BK = 57%	90CRI 2700K = 73%	1500lm = 60%
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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%																
0	119	119	119	119	116	116	111	111	106	106	100	100	106	106	100	100	93
1	113	110	108	105	108	104	104	100	100	97	93	93	94	89	85	85	85
2	107	102	98	94	100	93	97	91	94	89	85	85	94	89	85	85	85
3	101	94	89	85	93	84	90	83	88	81	79	79	88	81	79	79	79
4	95	87	81	77	86	76	84	76	82	75	72	72	82	75	72	72	72
5	90	81	75	70	80	70	78	69	77	69	66	66	77	69	66	66	66
6	85	75	69	64	75	64	73	64	72	63	61	61	72	63	61	61	61
7	80	70	64	59	70	59	68	59	67	58	57	57	67	58	57	57	57
8	76	66	59	55	65	55	64	54	63	54	52	52	63	54	52	52	52
9	72	61	55	51	61	51	60	50	59	50	49	49	59	50	49	49	49
10	68	57	51	47	57	47	56	47	55	47	45	45	55	47	45	45	45

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

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

