

PHILIPS LIGHTOLIER

Downlighting

Calculite LED gen 3 6" round downlight

1000 – 6000lm



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

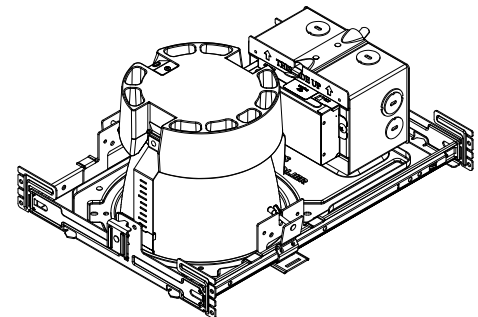
Calculite LED 6" generation 3 features industry leading visual comfort, excellent uniform illumination over time, and patented installation flexibility.

Complete product = Frame + Engine + Trim

Frame

example: C6RN

| Series | Aperture | Installation | Voltage/Options |
|-------------------------------------|----------------|---|---|
| C6 | R | | |
| C6 Calculite LED 6" aperture | R Round | N New construction R Remodeler | — Universal (120/277V) 3 347V ¹ EM Emergency ^{2,3} LC Chicago Plenum ² |



Engine

example: C6L15835NZ10U

| Series | Lumens | CRI | CCT | Beam | Dimming | Voltage |
|--------------------------------------|--|---|--|---|---|--|
| C6L | | | | | | |
| C6L Calculite LED 6" aperture | 10 1000lm 15 1500lm 20 2000lm 25 2500lm 35 3500lm 48 4800lm ⁴ 60 6000lm ⁴ | 8 80CRI 9 90CRI ⁵ | 27 2700K ⁵ 30 3000K ⁵ 35 3500K 40 4000K | N Narrow (40°) M Medium (55°) W Wide (72°) | Z10 0-10V 1% SOL EldoLED Solo 0.1% D Dali L Lutron LDE1 EcoSystem fade-to-black E ELV ⁶ (120V dimming only) | U Universal (120/277/347V) 1 Universal (120/277V) |

Trim

example: C6RDLCCP

| Series | Aperture | Style | Finish | Flange |
|-------------------------------------|----------------|---------------------|--|---|
| C6 | R | DL | | |
| C6 Calculite LED 6" aperture | R Round | DL Downlight | CL Specular clear CC Comfort clear CD Comfort clear diffuse CZ Champagne bronze BK Black (matte) WH White (matte) | — White (matte) P Polished F Flangeless — White (matte) F Flangeless |

Accessories (ordered with a flangeless trim)

| | |
|----------------|---|
| CA6RFT | Mud-in ring for use with flangeless installations. |
| CAEM | Field installable EM pack. |
| C6RVPWH | IP65 rated vandal proof matte white accessory that mounts onto a flangeless trim. |

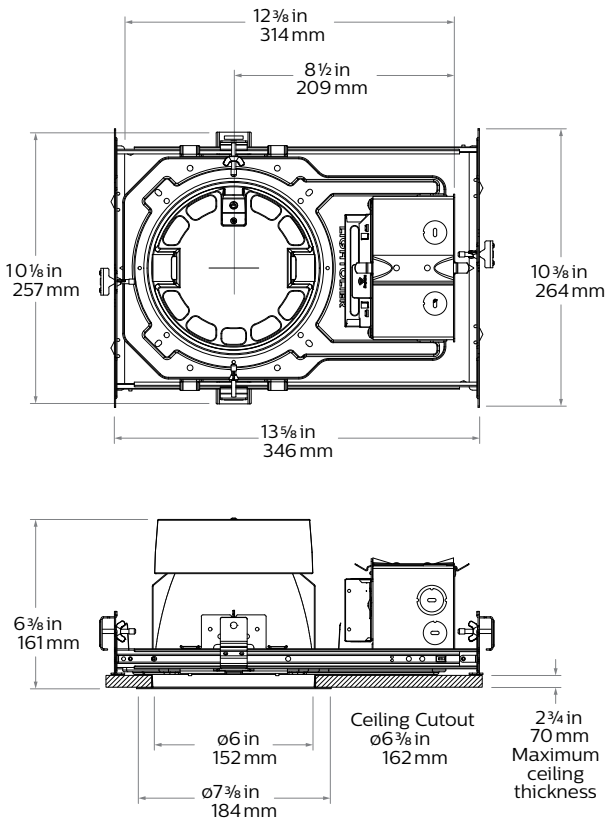
- The 347V is not compatible with ELV dimming.
- Emergency (EM) and Chicago Plenum (LC) options are only available with New construction (N) installations.
- Emergency frame comes with emergency battery pack and ceiling mountable test switch. Reflector mounted test switch requires above ceiling access. For reflector mounted test switch, order emergency frame and add "EM" suffix to reflector (example: C6RDLCCEM).
- The 4800lm (48) and 6000lm (60) packages are only available with 0-10V (Z10) dimming and have marked spacing requirements (see page 2 for the spacing requirements).
- The 90 CRI option is only available with 2700K and 3000K CCT.
- ELV dimming is only compatible with up to 2500lm.



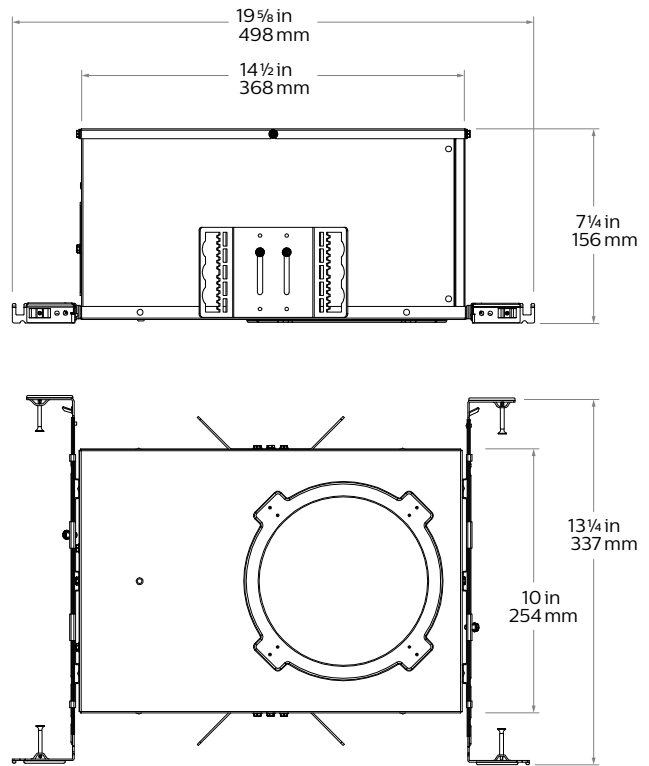
C6RDL Calculite LED generation 3

6" round downlight

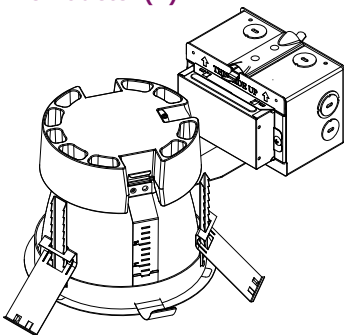
New Construction (N)



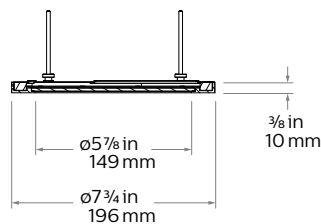
Chicago Plenum (LC)



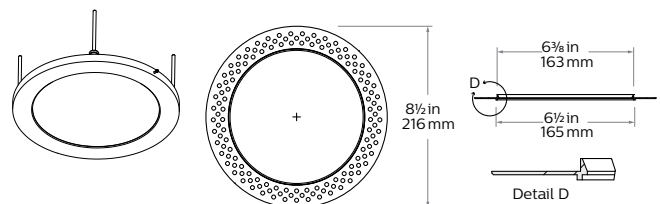
Remodeler (R)



Vandal Proof accessory



Flangeless mud-in ring (CA6RFT)



Consult factory for wood installation instructions.

Marked spacing applications

| Light engine | 4800lm | 6000lm |
|-----------------|--------|--------|
| C6L_Z10U series | X | X |
| C6L_LU series | N/A | N/A |
| C6L_DU series | N/A | N/A |

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

Lifetime (TM-21) data

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

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

C6RDL Calculite LED generation 3

6" 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 2-3/4"

Patented install Mounting frame

With no driver attached, this versatile frame is independent of driver accommodating a wide range of lumen packages, driver types and CCTs, including 120V and 277V inputs.

Pre-installed mounting bars allow for fast and tool-less installation into T-grid and hat channel ceilings.

Close-cut aperture design eliminates the possibility of undesired gap between ceiling opening and reflector flange.

Separate wiring compartment for wiring frame to building allows inspection prior to light engine installation.

Simple plug-and-play connection between the frame and light engine from below the ceiling eliminates the need for wiring between frame and LED driver, and also saves time during installation and future replacements/upgrades. Plug-and-play receptacle accommodates technology upgrade of light engines and replacements for the life of the building.

Drivers

- 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
- ELV dimming

Optical systems

Comfort throughout the space

Patented optical system combines primary and secondary optics to provide a true 50° physical cutoff and 45° reflected cutoff virtually eliminating the view of the light source and bright spots in the reflector.

A new reflector curve reduces reflector brightness by up to 50% compared to existing products, allowing for the use of higher lumen packages in smaller apertures without creating bright spots in the ceiling.

Quality of light

2 SDCM ensures color consistency from fixture to fixture and over the luminaire's long lifetime.

Proprietary optical grade silicone lens with patterned surface provides soft, even beam diffusion without hotspots or dark rings.

Light Engine

Quick connect power pack comprised of light source and driver 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

Options and Accessories

Flangeless mud-in ring: Use **CA6RFT** for use with flangeless 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 a flangeless trim.

ENERGY STAR® exceptions

1. Dali configurations
2. 90 CRI configurations
3. Champagne Bronze and Black finishes
4. 347V and Emergency configurations
5. ELV & EldoLED Solo dimming

Labels and Listings

cULus listed for wet location

ENERGY STAR

CCEA (frames with *LC suffix)

IP65 rated with vandal proof accessory

IBEW Union made (light engines & reflectors)

RoHS compliant

Warranty

5 year warranty on complete system.

Complete warranty available at: http://images.philips.com/is/content/PhilipsConsumer/PDFDownloads/United%20States/ODLI20150930_003-UPD-en_US-Philips-warranty-indoor-PLS-us.pdf

Narrow

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

Medium/Wide

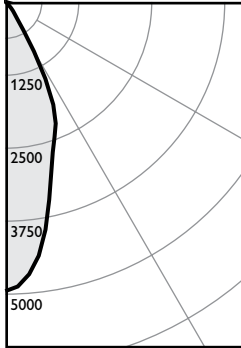
| Light engine | Input volts | Input freq | Input current | Drive current | Input power | THD power | Power factor |
|--------------------|-------------|------------|---------------|---------------|-------------|-----------|--------------|
| C6L10_MZ10U | 120V | 50/60Hz | 0.08 | 210 mA | 9W | <15% |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

C6RDL Calculite LED generation 3

6" round downlight

Narrow beam, 2500lm Engine, 103.0 lm/W

Candela Curve



Frame: **C6RN**
 Engine: **C6L25835NZ10U**
 Trim: **C6RDLCL**

Output lumens: 2462 lms
 Input watts: 23.9 W
 CRI: 80 min
 CCT¹: 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#: F37145

Adjustment factors

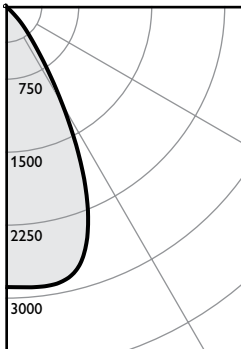
| Finish | CCT | Lumens |
|-----------|--------------------|---------------|
| CL = 100% | 80CRI 4000K = 103% | 6000lm = 202% |
| CC = 95% | 80CRI 3500K = 100% | 4800lm = 192% |
| CD = 87% | 80CRI 3000K = 95% | 3500lm = 140% |
| CZ = 63% | 80CRI 2700K = 93% | 2500lm = 100% |
| WH = 87% | 90CRI 3000K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

Coefficients of utilization

| Ceiling | 80% | | | | | 70% | | | | | 50% | | | | | 30% | | | | | 0% | | | | |
|-------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | 70 | 50 | 30 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 0 | | |
| Wall | Zonal cavity method - Effective floor reflectance = 20% | | | | | | | | | | | | | | | | | | | | | | | | |
| RCR | Zonal cavity method - Effective floor reflectance = 20% | | | | | | | | | | | | | | | | | | | | | | | | |
| Room Cavity Ratio | 0 | 119 | 119 | 119 | 119 | 116 | 116 | 111 | 111 | 106 | 106 | 100 | 100 | 100 | 100 | 106 | 106 | 100 | 100 | 100 | 100 | 100 | 100 | | |
| 1 | 114 | 112 | 109 | 107 | 110 | 106 | 105 | 102 | 102 | 99 | 99 | 95 | 95 | 95 | 95 | 102 | 102 | 99 | 99 | 99 | 99 | 99 | 95 | | |
| 2 | 109 | 105 | 101 | 98 | 103 | 97 | 100 | 95 | 97 | 93 | 93 | 90 | 90 | 90 | 90 | 97 | 97 | 93 | 93 | 93 | 93 | 93 | 90 | | |
| 3 | 105 | 99 | 95 | 91 | 98 | 90 | 95 | 89 | 93 | 88 | 88 | 85 | 85 | 85 | 93 | 93 | 88 | 88 | 88 | 88 | 88 | 85 | 85 | | |
| 4 | 100 | 94 | 89 | 85 | 93 | 85 | 90 | 84 | 88 | 83 | 83 | 80 | 80 | 80 | 88 | 88 | 83 | 83 | 83 | 83 | 83 | 80 | 80 | | |
| 5 | 96 | 89 | 84 | 80 | 88 | 79 | 86 | 79 | 86 | 79 | 84 | 78 | 76 | 76 | 84 | 84 | 78 | 78 | 78 | 78 | 78 | 76 | 76 | | |
| 6 | 92 | 84 | 79 | 75 | 83 | 75 | 82 | 74 | 81 | 74 | 81 | 74 | 72 | 72 | 81 | 81 | 74 | 74 | 74 | 74 | 74 | 72 | 72 | | |
| 7 | 88 | 80 | 75 | 71 | 79 | 71 | 78 | 71 | 77 | 70 | 77 | 70 | 69 | 69 | 77 | 77 | 70 | 70 | 70 | 70 | 70 | 69 | 69 | | |
| 8 | 85 | 76 | 71 | 67 | 76 | 67 | 75 | 67 | 74 | 67 | 74 | 67 | 65 | 65 | 74 | 74 | 67 | 67 | 67 | 67 | 67 | 65 | 65 | | |
| 9 | 81 | 73 | 68 | 64 | 72 | 64 | 72 | 64 | 71 | 64 | 71 | 64 | 62 | 62 | 71 | 71 | 64 | 64 | 64 | 64 | 64 | 62 | 62 | | |
| 10 | 78 | 70 | 65 | 61 | 69 | 61 | 68 | 61 | 68 | 61 | 68 | 61 | 59 | 59 | 68 | 68 | 61 | 61 | 61 | 61 | 61 | 59 | 59 | | |

Medium beam, 2500lm Engine, 115.2 lm/W

Candela Curve



Frame: **C6RN**
 Engine: **C6L25835MZ10U**
 Trim: **C6RDLCL**

Output lumens: 2454 lms
 Input watts: 21.3 W
 CRI: 80 min
 CCT¹: 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#: 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% | | | | |
|-------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | 70 | 50 | 30 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 0 | | |
| Wall | Zonal cavity method - Effective floor reflectance = 20% | | | | | | | | | | | | | | | | | | | | | | | | |
| RCR | Zonal cavity method - Effective floor reflectance = 20% | | | | | | | | | | | | | | | | | | | | | | | | |
| Room Cavity Ratio | 0 | 119 | 119 | 119 | 119 | 116 | 116 | 111 | 111 | 106 | 106 | 100 | 100 | 100 | 100 | 106 | 106 | 100 | 100 | 100 | 100 | 100 | 100 | | |
| 1 | 114 | 111 | 109 | 107 | 109 | 105 | 105 | 102 | 102 | 101 | 99 | 94 | 94 | 94 | 99 | 99 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | | |
| 2 | 108 | 104 | 100 | 97 | 102 | 96 | 99 | 94 | 96 | 92 | 88 | 88 | 88 | 88 | 96 | 96 | 92 | 92 | 92 | 92 | 92 | 88 | 88 | | |
| 3 | 103 | 97 | 92 | 89 | 96 | 88 | 93 | 87 | 91 | 85 | 82 | 82 | 82 | 88 | 88 | 85 | 85 | 85 | 85 | 85 | 85 | 82 | 82 | | |
| 4 | 98 | 91 | 86 | 82 | 90 | 81 | 88 | 80 | 86 | 79 | 77 | 77 | 77 | 84 | 84 | 79 | 79 | 79 | 79 | 79 | 79 | 77 | 77 | | |
| 5 | 94 | 86 | 80 | 76 | 85 | 76 | 83 | 75 | 81 | 74 | 72 | 72 | 72 | 81 | 81 | 76 | 76 | 76 | 76 | 76 | 76 | 72 | 72 | | |
| 6 | 89 | 81 | 75 | 71 | 80 | 71 | 78 | 70 | 77 | 70 | 68 | 68 | 68 | 77 | 77 | 72 | 72 | 72 | 72 | 72 | 72 | 68 | 68 | | |
| 7 | 85 | 76 | 70 | 66 | 76 | 66 | 74 | 66 | 73 | 66 | 64 | 64 | 64 | 73 | 73 | 66 | 66 | 66 | 66 | 66 | 66 | 64 | 64 | | |
| 8 | 81 | 72 | 66 | 62 | 71 | 62 | 70 | 62 | 69 | 62 | 60 | 60 | 60 | 69 | 69 | 62 | 62 | 62 | 62 | 62 | 62 | 60 | 60 | | |
| 9 | 77 | 68 | 63 | 59 | 68 | 59 | 67 | 58 | 66 | 58 | 57 | 57 | 57 | 66 | 66 | 58 | 58 | 58 | 58 | 58 | 58 | 57 | 57 | | |
| 10 | 74 | 65 | 59 | 55 | 64 | 55 | 63 | 55 | 63 | 55 | 54 | 54 | 54 | 63 | 63 | 55 | 55 | 55 | 55 | 55 | 54 | 54 | | | |

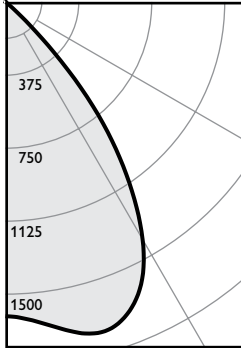
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
 2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State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

C6RDL Calculite LED generation 3

6" round downlight

Wide beam, 2500lm Engine, 108.3 lm/W

Candela Curve



Frame: **C6RN**
 Engine: **C6L25835WZ10U**
 Trim: **C6RDLCL**

Output lumens: 2307 lms
 Input watts: 21.3 W
 CRI: 80 min
 CCT¹: 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% |
| | | 1000lm = 40% |

Coefficients of utilization

| | 80% | | | | | 70% | | 50% | | 30% | | 0% |
|-------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 70 | 50 | 30 | 10 | 50 | 10 | 50 | 10 | 50 | 10 | 0 | |
| Wall | 70 | 50 | 30 | 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 |
| 1 | 113 | 110 | 108 | 105 | 108 | 104 | 104 | 100 | 100 | 97 | 97 | 93 |
| 2 | 107 | 102 | 98 | 94 | 100 | 93 | 97 | 91 | 94 | 89 | 85 | 85 |
| 3 | 101 | 94 | 89 | 85 | 93 | 84 | 90 | 83 | 88 | 81 | 79 | 79 |
| 4 | 95 | 87 | 81 | 77 | 86 | 76 | 84 | 76 | 82 | 75 | 72 | 72 |
| 5 | 90 | 81 | 75 | 70 | 80 | 70 | 78 | 69 | 77 | 69 | 66 | 66 |
| 6 | 85 | 75 | 69 | 64 | 75 | 64 | 73 | 64 | 72 | 63 | 61 | 61 |
| 7 | 80 | 70 | 64 | 59 | 70 | 59 | 68 | 59 | 67 | 58 | 57 | 57 |
| 8 | 76 | 66 | 59 | 55 | 65 | 55 | 64 | 54 | 63 | 54 | 52 | 52 |
| 9 | 72 | 61 | 55 | 51 | 61 | 51 | 60 | 50 | 59 | 50 | 49 | 49 |
| 10 | 68 | 57 | 51 | 47 | 57 | 47 | 56 | 47 | 55 | 47 | 45 | 45 |

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.

