



Calculite LED 7" 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: 7RNIP

| Series | Installation | Voltage/Options |
|---------------------------|---------------------------|--|
| 7R | | |
| 7R 7" Non-IC Round | N New construction | — Universal 120 V/277 V (specify for Power Over Ethernet) EM Emergency (see page 2 for details and limitations) ¹ IP Interact Pro ready (for 0-10V engine only) |
| | R Remodeler | — Universal 120 V/277 V (specify for Power Over Ethernet) IP Interact Pro ready (for 0-10V engine only) |
| | | LC Chicago Plenum 3 347V (not compatible with ELV dimming) ² 3IP 347V with Interact Pro (for 0-10V engine only) 3 347V (not compatible with ELV dimming) |

Engine

example: C6L15835NZ10U

| Series | Lumens | CRI | CCT | Beam ³ | Dimming | Voltage |
|-----------------------------|--|------------------------------------|--|---|--|---|
| C6L | | | | | | |
| C6L Calculite LED 6" | 10 1000lm 15 1500lm 20 2000lm 25 2500lm 30 3000lm 35 3500lm 48 4800lm (Z10 only) 60 6000lm (Z10 only) | 8 80 CRI 9 90 CRI | 27 2700K 30 3000K 35 3500K 40 4000K | N Narrow (40°) M Medium (55°) W Wide (72°) | Z10 0-10V 1% SOL EldoLED Solo 0-10V 0.1% D Dali 0.1% L Lutron LDE1 EcoSystem (fade-to-black) DMX Digital Multiplexing | U Universal 120 V/277 V/347 V |
| | | | | | E ELV (for up to 2000lm only) P Power over Ethernet (PoE) Only compatible with 1000 (10) to 2500 (25) lumen configurations. | 1 120 V E Ethernet 48 V DC |

Trim

example: C7RDLNMCCP

| Series | Aperture | Style | Beam ³ | Finish | Flange |
|----------------------------|----------------|---------------------|--|---|--|
| C7 | R | DL | | | |
| C7 Calculite LED 7" | R Round | DL Downlight | NM Narrow/ Medium W Wide | BK Black (anodized) CL Specular clear WH White (matte) | CC Comfort clear CD Comfort clear diffuse CZ Champagne bronze |
| | | | | | — White (matte) P Polished (matches aperture) |

Beam options

| Trim | Narrow engine | Medium engine | Wide engine |
|-----------------------|-------------------|-------------------|-------------------|
| Narrow/ Medium | 20° (0.3 s.c.) | 44° (0.7 s.c.) | 59° (0.9 s.c.) |
| Wide | 35° (0.6 s.c.) | 59° (1.0 s.c.) | 69° (1.2 s.c.) |

Accessories

| | |
|---------------|---|
| CAEM | Field instalable EM pack (for use with new construction frame only) |
| AMS | ActiLume multi-sensor (optional accessory for PoE configurations) |
| SWZDT | SpaceWise wireless controller with dwell time functionality (compatible with all 0-10V options, see SWZDT spec sheet) |
| SRAINT | InterAct Office Accessory (for use with Lightolier UniFrame 0-10V products) |

1. Emergency (EM) frame includes emergency battery with ceiling and reflector mountable test switch (see page 2 for details and limitations).
 2. The 347V frame is not compatible with lumen packages above 2000lm for lensed wall wash trims.
 3. See beam Options table for light engine and trim combination spacing criterion.

C7RDL Calculite LED 7" 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: C7RDLCCEM). 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 or 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 or 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.
- For more information on Interact Ready visit: www.philips.com/interact-ready.

Options and Accessories

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

ENERGY STAR® exceptions

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

Labels and Listings

- cULus listed for wet locations
- ENERGY STAR® certified
- RoHS certified
- CEC Title 24 JA8 certified
- CCEA (frames with *LC suffix)

Warranty



5 year limited warranty
Visit Signify.com/warranties for more information on Signify's standard 5-year limited warranty on complete luminaire systems.

C7RDL Calculite LED 7" gen 3

Round Downlight

Narrow

| Light engine | Input volts | Input freq | Input current | Drive current | Input power | LED power | THD power | Power factor |
|--------------------|-------------|------------|---------------|---------------|-------------|-----------|-----------|--------------|
| C6L10_NZ10U | 120V | 50/60Hz | 0.08 | 230 mA | 9W | 8W | <15% | >0.95 |
| | 277V | | 0.04 | | | | <20% | >0.95 |
| C6L15_NZ10U | 120V | 50/60Hz | 0.11 | 340 mA | 15W | 11W | <10% | >0.95 |
| | 277V | | 0.05 | | | | <15% | >0.95 |
| C6L20_NZ10U | 120V | 50/60Hz | 0.16 | 460 mA | 22W | 16W | <10% | >0.95 |
| | 277V | | 0.08 | | | | <15% | >0.95 |
| C6L25_NZ10U | 120V | 50/60Hz | 0.20 | 590 mA | 25W | 21W | <10% | >0.95 |
| | 277V | | 0.10 | | | | <15% | >0.95 |
| C6L35_NZ10U | 120V | 50/60Hz | 0.30 | 900 mA | 36W | 30W | <10% | >0.95 |
| | 277V | | 0.14 | | | | <15% | >0.95 |
| C6L48_NZ10U | 120V | 50/60Hz | 0.42 | 1250 mA | 51W | 44W | <10% | >0.95 |
| | 277V | | 0.19 | | | | <15% | >0.95 |
| C6L60_NZ10U | 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 |
|--------------------|-------------|------------|---------------|---------------|-------------|-----------|-----------|--------------|
| C6L10_MZ10U | 120V | 50/60Hz | 0.08 | 210 mA | 9W | 8W | <15% | >0.95 |
| | 277V | | 0.04 | | | | <20% | >0.95 |
| C6L15_MZ10U | 120V | 50/60Hz | 0.11 | 320 mA | 15W | 11W | <10% | >0.95 |
| | 277V | | 0.05 | | | | <15% | >0.95 |
| C6L20_MZ10U | 120V | 50/60Hz | 0.15 | 430 mA | 19W | 15W | <10% | >0.95 |
| | 277V | | 0.07 | | | | <15% | >0.95 |
| C6L25_MZ10U | 120V | 50/60Hz | 0.19 | 550 mA | 23W | 19W | <10% | >0.95 |
| | 277V | | 0.09 | | | | <15% | >0.95 |
| C6L35_MZ10U | 120V | 50/60Hz | 0.25 | 570 mA | 30W | 25W | <10% | >0.95 |
| | 277V | | 0.11 | | | | <15% | >0.95 |
| C6L48_MZ10U | 120V | 50/60Hz | 0.36 | 810 mA | 40W | 34W | <10% | >0.95 |
| | 277V | | 0.16 | | | | <15% | >0.95 |
| C6L60_MZ10U | 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 ¹ | Voltage ² | Freq | Current | Power |
| C6L10___NPE | 53V | 51-54V | DC | 160 mA | 8.9 W |
| C6L15___NPE | 53V | 51-54V | DC | 250 mA | 13.7 W |
| C6L20___NPE | 53V | 51-54V | DC | 330 mA | 17.7 W |
| C6L25___NPE | 53V | 51-54V | DC | 420 mA | 22.8 W |

Medium (Power over Ethernet)

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

Wide (Power over Ethernet)

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

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

Marked spacing applications

| Light engine | 4800lm | 6000lm |
|------------------------|--------|--------|
| C6L_Z10U series | X | X |
| C6L_LU series | — | — |
| C6L_DU series | — | — |

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

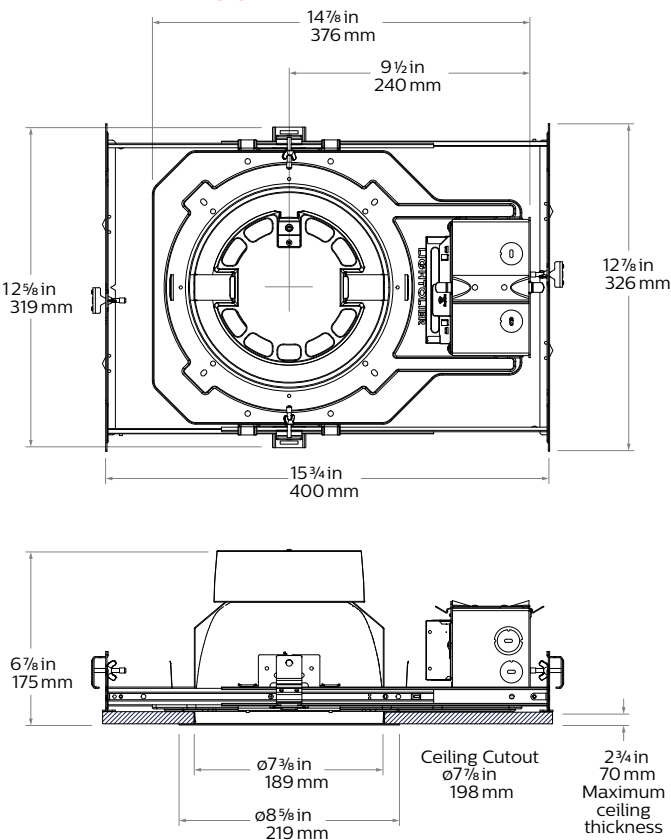
| Lumens | Narrow beam | Medium/Wide beam* |
|--|------------------|-------------------|
| 1000lm 1500lm 2000lm 2500lm 3500lm* 4800lm 6000lm | L90 @ 60,000hrs. | L90 @ 60,000hrs. |
| | L90 @ 60,000hrs. | L80 @ 60,000hrs. |

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

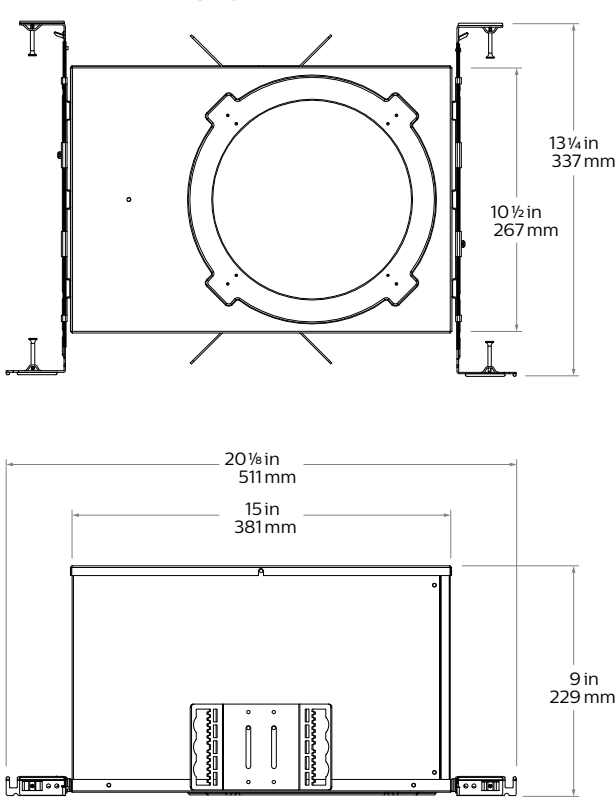
C7RDL Calculite LED 7" gen 3

Round Downlight

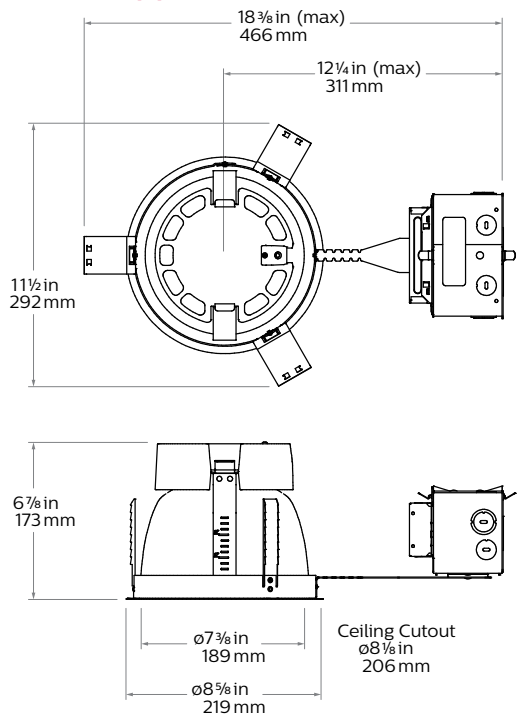
New Construction (N)



Chicago Plenum (LC)



Remodeler (R)



C7RDL Calculite LED 7" 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.

Flange



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



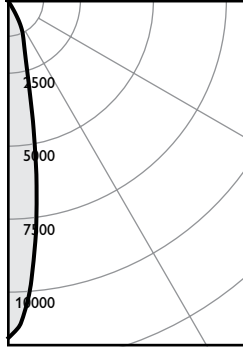
Polished (P): (matches aperture) Produces a continuous look throughout the reflector (aperture matching).

C7RDL Calculite LED 7" gen 3

Round Downlight

Narrow beam (0.3 s.c.), 2500lm Engine, 101.0 lm/w or 105.9 lm/W at 22.8W (Power over Ethernet)

Candela Curve



Frame: **C7RN or 7RN**
Engine: **C6L25835NZ10U**
Trim: **C7RDLNMCL**

Output lumens: 2414 lms
Input watts: 23.9 W
CRI: 80 min
CCT¹: 3500K
Spacing Crit.: 0.3
Beam Angle: 20°

Zonal summary

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 2193 | 90.8% |
| 0-40 | 2380 | 98.6% |
| 0-60 | 2412 | 99.9% |
| 0-90 | 2414 | 100.0% |

| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0 | 11585 | |
| 5 | 9590 | 788 |
| 10 | 5675 | |
| 15 | 2794 | 837 |
| 20 | 1736 | |
| 25 | 1267 | 567 |
| 30 | 738 | |
| 35 | 242 | 188 |
| 40 | 92 | |
| 45 | 33 | 29 |
| 50 | 7 | |
| 55 | 2 | 2 |
| 60 | 2 | |
| 65 | 1 | 1 |
| 70 | 1 | |
| 75 | 1 | 1 |
| 80 | 0 | |
| 85 | 1 | 1 |
| 90 | 0 | |

Single unit data

| Height to lighted plane | Initial center beam foot-candles | Beam diameter (ft)* |
|-------------------------|----------------------------------|---------------------|
| 5' | 463 | 1.5' |
| 6' | 322 | 1.8' |
| 7' | 236 | 2.1' |
| 8' | 181 | 2.4' |
| 9' | 143 | 2.7' |

* 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' | 114.1 | 1.06 |
| 6' | 74.9 | 0.70 |
| 7' | 53.5 | 0.50 |
| 8' | 44.6 | 0.41 |
| 9' | 35.6 | 0.33 |

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

Efficacy: 101.0 lm/w
Report²: F37146

Adjustment factors

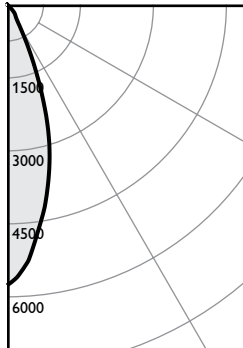
| Finish | CCT | Lumens |
|-----------|--------------------|---------------|
| CL = 100% | 80CRI 4000K = 103% | 6000lm = 202% |
| CC = 95% | 80CRI 3500K = 100% | 4800lm = 192% |
| CD = 87% | 80CRI 3000K = 95% | 3500lm = 140% |
| CZ = 63% | 80CRI 2700K = 93% | 2500lm = 100% |
| WH = 87% | 90CRI 3000K = 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 | 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 | 115 | 113 | 111 | 109 | 110 | 107 | 106 | 104 | 103 | 101 | 96 |
| | 2 | 111 | 107 | 104 | 101 | 105 | 100 | 102 | 98 | 99 | 96 | 92 |
| | 3 | 107 | 102 | 98 | 95 | 100 | 94 | 98 | 93 | 96 | 91 | 89 |
| | 4 | 103 | 97 | 93 | 90 | 96 | 89 | 94 | 88 | 92 | 87 | 85 |
| | 5 | 100 | 93 | 89 | 86 | 92 | 85 | 91 | 85 | 89 | 84 | 82 |
| | 6 | 96 | 90 | 85 | 82 | 89 | 82 | 88 | 81 | 86 | 81 | 79 |
| | 7 | 93 | 86 | 82 | 79 | 86 | 78 | 85 | 78 | 84 | 78 | 76 |
| | 8 | 90 | 83 | 79 | 76 | 83 | 76 | 82 | 75 | 81 | 75 | 74 |
| | 9 | 88 | 80 | 76 | 73 | 80 | 73 | 79 | 73 | 78 | 72 | 71 |
| 10 | 85 | 78 | 74 | 71 | 77 | 71 | 77 | 70 | 76 | 70 | 69 | |

Narrow beam (0.6 s.c.), 2500lm Engine, 95.5 lm/w or 100.1 lm/W at 22.8W (Power over Ethernet)

Candela Curve



Frame: **C7RN or 7RN**
Engine: **C6L25835NZ10U**
Trim: **C7RDLWCL**

Output lumens: 2283 lms
Input watts: 23.9 W
CRI: 80 min
CCT¹: 3500K
Spacing Crit.: 0.6
Beam Angle: 35°

Zonal summary

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 1956 | 85.6% |
| 0-40 | 2170 | 95.0% |
| 0-60 | 2276 | 99.7% |
| 0-90 | 2283 | 100.0% |

| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0 | 5763 | |
| 5 | 5234 | 469 |
| 10 | 4320 | |
| 15 | 3368 | 918 |
| 20 | 2272 | |
| 25 | 1203 | 569 |
| 30 | 543 | |
| 35 | 319 | 215 |
| 40 | 250 | |
| 45 | 128 | 99 |
| 50 | 21 | |
| 55 | 6 | 7 |
| 60 | 4 | |
| 65 | 3 | 3 |
| 70 | 3 | |
| 75 | 2 | 2 |
| 80 | 2 | |
| 85 | 2 | 2 |
| 90 | 0 | |

Single unit data

| Height to lighted plane | Initial center beam foot-candles | Beam diameter (ft)* |
|-------------------------|----------------------------------|---------------------|
| 5' | 231 | 3.0' |
| 6' | 160 | 3.6' |
| 7' | 118 | 4.2' |
| 8' | 90 | 4.8' |
| 9' | 71 | 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' | 106.5 | 1.06 |
| 6' | 69.9 | 0.70 |
| 7' | 49.9 | 0.50 |
| 8' | 41.6 | 0.41 |
| 9' | 33.3 | 0.33 |

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

Efficacy: 95.5 lm/w
Report²: F37147

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 | 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 | 114 | 112 | 110 | 108 | 110 | 106 | 106 | 103 | 102 | 100 | 95 |
| | 2 | 110 | 105 | 102 | 99 | 104 | 98 | 101 | 96 | 98 | 94 | 90 |
| | 3 | 105 | 100 | 95 | 92 | 98 | 91 | 96 | 90 | 93 | 88 | 86 |
| | 4 | 101 | 95 | 90 | 86 | 93 | 86 | 91 | 85 | 89 | 84 | 81 |
| | 5 | 97 | 90 | 85 | 81 | 89 | 81 | 87 | 80 | 86 | 80 | 78 |
| | 6 | 93 | 86 | 81 | 77 | 85 | 77 | 83 | 76 | 82 | 76 | 74 |
| | 7 | 90 | 82 | 77 | 73 | 81 | 73 | 80 | 73 | 79 | 72 | 71 |
| | 8 | 86 | 78 | 73 | 70 | 78 | 70 | 77 | 69 | 76 | 69 | 68 |
| | 9 | 83 | 75 | 70 | 67 | 75 | 67 | 74 | 66 | 73 | 66 | 65 |
| 10 | 80 | 72 | 67 | 64 | 72 | 64 | 71 | 64 | 70 | 63 | 62 | |

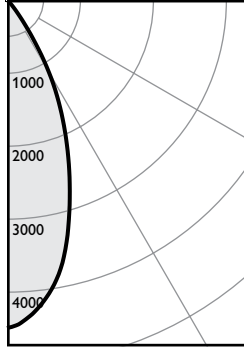
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State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

C7RDL Calculite LED 7" gen 3

Round Downlight

Medium beam (0.7 s.c.), 2500lm Engine, 117.6 lm/w or 117.1 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C7RN or 7RN**
Engine: **C6L25835MZ10U**
Trim: **C7RDLNMCL**

Output lumens: 2506 lms
Input watts: 21.3 W
CRI: 80 min
CCT¹: 3500K
Spacing Crit.: 0.7
Beam Angle: 44°

Zonal summary

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 2111 | 84.3% |
| 0-40 | 2457 | 98.1% |
| 0-60 | 2504 | 99.9% |
| 0-90 | 2506 | 100.0% |

| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0 | 4494 | |
| 5 | 4292 | 397 |
| 10 | 3893 | |
| 15 | 3239 | 893 |
| 20 | 2493 | |
| 25 | 1807 | 821 |
| 30 | 1153 | |
| 35 | 513 | 346 |
| 40 | 168 | |
| 45 | 42 | 44 |
| 50 | 7 | |
| 55 | 2 | 3 |
| 60 | 2 | |
| 65 | 1 | 1 |
| 70 | 1 | |
| 75 | 0 | 0 |
| 80 | 0 | |
| 85 | 1 | 0 |
| 90 | 0 | |

Single unit data

| Height to lighted plane | Initial center beam foot-candles | Beam diameter (ft)* |
|-------------------------|----------------------------------|---------------------|
| 5' | 180 | 3.5' |
| 6' | 125 | 4.2' |
| 7' | 92 | 4.9' |
| 8' | 70 | 5.6' |
| 9' | 55 | 6.3' |

* 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' | 116.3 | 0.94 |
| 6' | 76.3 | 0.62 |
| 7' | 54.5 | 0.44 |
| 8' | 45.4 | 0.37 |
| 9' | 36.3 | 0.30 |

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

Efficacy: 117.6 lm/w
Report²: F37137

Adjustment factors

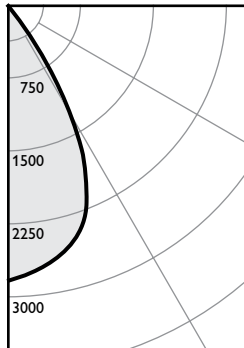
| Finish | CCT | Lumens |
|-----------|--------------------|---------------|
| CL = 100% | 80CRI 4000K = 102% | 6000lm = 240% |
| CC = 95% | 80CRI 3500K = 100% | 4800lm = 192% |
| CD = 87% | 80CRI 3000K = 97% | 3500lm = 140% |
| CZ = 63% | 80CRI 2700K = 87% | 2500lm = 100% |
| WH = 87% | 90CRI 3000K = 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 | 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 | 114 | 112 | 109 | 107 | 109 | 106 | 105 | 102 | 102 | 99 | 95 |
| | 2 | 109 | 105 | 101 | 98 | 103 | 97 | 100 | 95 | 97 | 93 | 90 |
| | 3 | 105 | 99 | 94 | 91 | 98 | 90 | 95 | 89 | 93 | 87 | 85 |
| | 4 | 100 | 93 | 89 | 85 | 92 | 84 | 90 | 83 | 88 | 82 | 80 |
| | 5 | 96 | 88 | 83 | 79 | 88 | 79 | 86 | 78 | 84 | 78 | 76 |
| | 6 | 92 | 84 | 79 | 75 | 83 | 75 | 82 | 74 | 80 | 74 | 72 |
| | 7 | 88 | 80 | 74 | 71 | 79 | 71 | 78 | 70 | 77 | 70 | 68 |
| | 8 | 84 | 76 | 71 | 67 | 75 | 67 | 74 | 67 | 73 | 66 | 65 |
| | 9 | 81 | 72 | 67 | 64 | 72 | 63 | 71 | 63 | 70 | 63 | 62 |
| 10 | 78 | 69 | 64 | 61 | 69 | 60 | 68 | 60 | 67 | 60 | 59 | |

Medium beam (0.9 s.c.), 2500lm Engine, 110.0 lm/w or 109.4 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C7RN or 7RN**
Engine: **C6L25835WZ10U**
Trim: **C7RDLNMCL**

Output lumens: 2342 lms
Input watts: 21.3 W
CRI: 80 min
CCT¹: 3500K
Spacing Crit.: 0.9
Beam Angle: 59°

Zonal summary

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 1830 | 78.1% |
| 0-40 | 2259 | 96.4% |
| 0-60 | 2340 | 99.9% |
| 0-90 | 2342 | 100.0% |

| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0 | 2826 | |
| 5 | 2766 | 261 |
| 10 | 2678 | |
| 15 | 2545 | 711 |
| 20 | 2318 | |
| 25 | 1924 | 858 |
| 30 | 1309 | |
| 35 | 647 | 428 |
| 40 | 270 | |
| 45 | 81 | 78 |
| 50 | 11 | |
| 55 | 3 | 4 |
| 60 | 2 | |
| 65 | 1 | 1 |
| 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' | 113 | 4.5' |
| 6' | 79 | 5.4' |
| 7' | 58 | 6.3' |
| 8' | 44 | 7.2' |
| 9' | 35 | 8.1' |

* 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' | 107.7 | 0.94 |
| 6' | 70.7 | 0.62 |
| 7' | 50.5 | 0.44 |
| 8' | 42.1 | 0.37 |
| 9' | 33.6 | 0.30 |

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

Efficacy: 115.2 lm/w
Report²: F37143

Adjustment factors

| Finish | CCT | Lumens |
|-----------|--------------------|---------------|
| CL = 100% | 80CRI 4000K = 107% | 6000lm = 240% |
| CC = 95% | 80CRI 3500K = 100% | 4800lm = 192% |
| CD = 87% | 80CRI 3000K = 99% | 3500lm = 140% |
| CZ = 63% | 80CRI 2700K = 93% | 2500lm = 100% |
| WH = 87% | 90CRI 3000K = 87% | 2000lm = 80% |
| BK = 57% | 90CRI 2700K = 81% | 1500lm = 60% |
| | | 1000lm = 40% |

Coefficients of utilization

| Ceiling | 80% | | | | 70% | | 50% | | 30% | | 0% | |
|-------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall | 70 | 50 | 30 | 10 | 50 | 105 | 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 | 114 | 111 | 109 | 107 | 109 | 105 | 105 | 102 | 101 | 99 | 94 |
| | 2 | 109 | 104 | 100 | 97 | 102 | 96 | 99 | 94 | 96 | 92 | 88 |
| | 3 | 103 | 97 | 93 | 89 | 96 | 88 | 93 | 87 | 91 | 85 | 83 |
| | 4 | 98 | 91 | 86 | 82 | 90 | 82 | 88 | 81 | 86 | 80 | 77 |
| | 5 | 94 | 86 | 80 | 76 | 85 | 76 | 83 | 75 | 82 | 75 | 73 |
| | 6 | 89 | 81 | 75 | 71 | 80 | 71 | 79 | 70 | 77 | 70 | 68 |
| | 7 | 85 | 76 | 71 | 67 | 76 | 66 | 74 | 66 | 73 | 66 | 64 |
| | 8 | 81 | 72 | 66 | 63 | 72 | 62 | 71 | 62 | 70 | 62 | 60 |
| | 9 | 78 | 68 | 63 | 59 | 68 | 59 | 67 | 59 | 66 | 58 | 57 |
| 10 | 74 | 65 | 59 | 56 | 64 | 55 | 64 | 55 | 63 | 55 | 54 | |

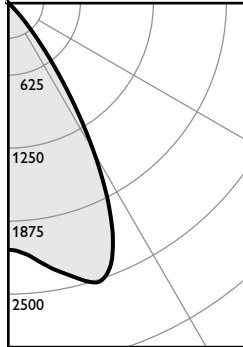
1. Correlated Color Temperature within specs as defined in ANSI_NEMA_ANSLG C78.377-2008: Specifications for the Chromaticity of Solid State Lighting Products.
2. Tested using absolute photometry as specified in LM79: IESNA Approved Method for the Electrical and Photometric Measurements of Solid-State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

C7RDL Calculite LED 7" gen 3

Round Downlight

Wide beam (1.0 s.c.), 2500lm Engine, 117.1 lm/w or 116.6 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C7RN or 7RN**
Engine: **C6L25835MZ10U**
Trim: **C7RDLWCL**

Output lumens: 2495 lms
Input watts: 21.3 W
CRI: 80 min
CCT¹: 3500K
Spacing Crit.: 1.0
Beam Angle: 59°

Zonal summary

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 1855 | 74.4% |
| 0-40 | 2383 | 95.5% |
| 0-60 | 2491 | 99.8% |
| 0-90 | 2495 | 100.0% |

| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0 | 2123 | |
| 5 | 2180 | 213 |
| 10 | 2325 | |
| 15 | 2461 | 696 |
| 20 | 2486 | |
| 25 | 2128 | 947 |
| 30 | 1490 | |
| 35 | 823 | 527 |
| 40 | 354 | |
| 45 | 112 | 104 |
| 50 | 15 | |
| 55 | 4 | 5 |
| 60 | 3 | |
| 65 | 2 | 2 |
| 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' | 85 | 5.0' |
| 6' | 59 | 6.0' |
| 7' | 43 | 7.0' |
| 8' | 33 | 8.0' |
| 9' | 26 | 9.0' |

* 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' | 114.1 | 0.94 |
| 6' | 74.8 | 0.62 |
| 7' | 53.5 | 0.44 |
| 8' | 44.6 | 0.37 |
| 9' | 35.6 | 0.30 |

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

Efficacy: 117.1 lm/w
Report²: F37136

Adjustment factors

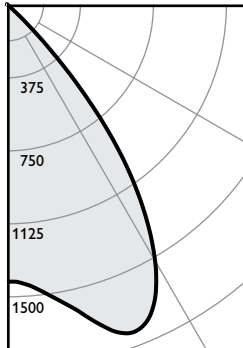
| Finish | CCT | Lumens |
|-----------|--------------------|---------------|
| CL = 100% | 80CRI 4000K = 102% | 6000lm = 240% |
| CC = 95% | 80CRI 3500K = 100% | 4800lm = 192% |
| CD = 87% | 80CRI 3000K = 97% | 3500lm = 140% |
| CZ = 63% | 80CRI 2700K = 87% | 2500lm = 100% |
| WH = 87% | 90CRI 3000K = 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 | 0 |
| RCR | Zonal cavity method - Effective floor reflectance = 20% | | | | |
| Room Cavity Ratio | 0 | 119 | 119 | 119 | 119 |
| 1 | 114 | 111 | 108 | 106 | 105 |
| 2 | 108 | 103 | 99 | 96 | 95 |
| 3 | 103 | 96 | 92 | 88 | 92 |
| 4 | 98 | 90 | 85 | 81 | 89 |
| 5 | 93 | 84 | 79 | 74 | 83 |
| 6 | 88 | 79 | 73 | 69 | 78 |
| 7 | 84 | 74 | 68 | 64 | 72 |
| 8 | 80 | 70 | 64 | 60 | 68 |
| 9 | 76 | 66 | 60 | 56 | 65 |
| 10 | 72 | 62 | 57 | 53 | 61 |

Wide beam (1.2 s.c.), 2500lm Engine, 109.7 lm/w or 109.2 lm/W at 21.4W (Power over Ethernet)

Candela Curve



Frame: **C6RN or 7RN**
Engine: **C6L25835MZ10U**
Trim: **C6RDLCL**

Output lumens: 2336 lms
Input watts: 21.3 W
CRI: 80 min
CCT¹: 3500K
Spacing Crit.: 1.2
Beam Angle: 69°

Zonal summary

| Zone | Lumens | %Luminaire |
|------|--------|------------|
| 0-30 | 1411 | 60.4% |
| 0-40 | 2117 | 90.6% |
| 0-60 | 2332 | 99.8% |
| 0-90 | 2336 | 100.0% |

| Angle | Mean CP | Lumens |
|-------|---------|--------|
| 0 | 1426 | |
| 5 | 1454 | 142 |
| 10 | 1544 | |
| 15 | 1676 | 479 |
| 20 | 1798 | |
| 25 | 1751 | 791 |
| 30 | 1522 | |
| 35 | 1160 | 706 |
| 40 | 690 | |
| 45 | 224 | 207 |
| 50 | 25 | |
| 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' | 57 | 6.0' |
| 6' | 40 | 7.2' |
| 7' | 29 | 8.4' |
| 8' | 22 | 9.6' |
| 9' | 18 | 10.8' |

* 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' | 105.4 | 0.94 |
| 6' | 69.1 | 0.62 |
| 7' | 49.4 | 0.44 |
| 8' | 41.2 | 0.37 |
| 9' | 32.9 | 0.30 |

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

Efficacy: 109.7 lm/w
Report²: F37144

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 | 0 |
| RCR | Zonal cavity method - Effective floor reflectance = 20% | | | | |
| Room Cavity Ratio | 0 | 119 | 119 | 119 | 119 |
| 1 | 113 | 110 | 108 | 105 | 104 |
| 2 | 107 | 102 | 98 | 94 | 97 |
| 3 | 101 | 94 | 89 | 85 | 93 |
| 4 | 95 | 87 | 81 | 77 | 86 |
| 5 | 90 | 81 | 75 | 70 | 78 |
| 6 | 85 | 75 | 69 | 64 | 73 |
| 7 | 80 | 70 | 63 | 59 | 68 |
| 8 | 76 | 65 | 59 | 54 | 64 |
| 9 | 71 | 61 | 55 | 50 | 59 |
| 10 | 68 | 57 | 51 | 47 | 56 |

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.

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