

# LIGHTOLIER

by @signify

## Downlighting

Calculite LED 4" gen 3

C4RA/C4SA Adjustable Accent



**Calculite LED 4" generation 3** features industry leading visual comfort and patented installation flexibility. MesoOptics soft focus optics provides excellent uniform illumination and color consistency at articulated angles. Ideal for use in open office, retail, hospitality, healthcare, and residential applications.

**Complete luminaire:** Frame + Engine + Trim + Accessories (optional)

**Complete remodel luminaire:** Engine (R) + Trim + Accessories (optional)

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Frame

example: 4AR

Series	Installation	Voltage / Options
<input type="text"/>		
<b>4AR</b> 4" Round for C4R Engine <b>4AS</b> 4" Square for C4S Engine	<b>N</b> Non-IC	- Universal (120V-347V) <b>EM6</b> Emergency, 6W Self-Test/Self-Diagnostic <sup>2</sup> <b>LC</b> Chicago Plenum
	<b>A</b> AirSeal (IC) <sup>1</sup>	- Standard Universal (120V-347V)

### Engine

example: C4RA20930NSZ10ULS6010

Series	Lumens	CRI/CCT	Beam	Dimming	Options	Voltage	Options	Plenum
<input type="text"/>								
<b>C4RA</b> 4" Round Adjustable Accent	<b>15</b> 1500lm <b>20</b> 2000lm <b>25</b> 2500lm <sup>1</sup> <b>30</b> 3000lm <sup>1</sup> <b>35</b> 3500lm <sup>1</sup> <b>40</b> 4000lm <sup>1</sup>	<b>927</b> 90CRI/2700K <b>930</b> 90CRI/3000K <b>935</b> 90CRI/3500K <b>940</b> 90CRI/4000K <b>9D2W</b> 90CRI/3000 -1800K <sup>3</sup> <b>96T</b> 90CRI/2700 -6500K tunable white <sup>4</sup>	<b>NS</b> Narrow Spot (13°) <sup>5</sup> <b>NF</b> Narrow Flood (23°) <b>FL</b> Flood (33°) <b>WF</b> Wide Flood (52°)	<b>Z10</b> 0-10V 1%  <b>L01</b> Lutron PEQO 0.1% (up to 2000lm) <sup>1</sup> <b>L1</b> Lutron LDE1 1% (500lm not available) <b>LD</b> Lutron L3D 1% (500lm not available)  <b>DALI</b> DALI 0.1%  <b>SOL</b> EldoLED Solo 0-10V 0.1% <b>DMX</b> Digital Multiplexing w/RDM 0.1%  <b>RA</b> Interact Pro <sup>7</sup>  <b>E</b> Forward & Reverse Phase (up to 2000lm)	<b>---</b> None <b>D20</b> Dim to Off  <b>---</b> None  <b>---</b> None <b>LIN</b> Linear  <b>---</b> None <b>LIN</b> Linear <b>SQR</b> Square	<b>U</b> 120/277V <b>3</b> 347V (Z10 only)  <b>U</b> 120/277V For 347V order T347-75VA accessory  <b>1</b> 120V	<b>---</b> Symmetrical soft focus  <b>LS6010</b> Linear spread 60x10  <b>ASY8</b> Asymmetric 8° bend angle  <b>ASY21</b> Asymmetric 21° bend angle	<b>---</b> Standard  <b>R</b> Remodeler <sup>6</sup>

### Trim

example: C4RACLF

Series	Finish	Flange	Options
<input type="text"/>			
<b>C4RA</b> 4" Round Adjustable Accent	<b>CL</b> Specular clear <b>CC</b> Comfort clear <b>CD</b> Comfort clear diffuse <b>CZ</b> Champagne bronze (C4RA only)	<b>-</b> White (matte) <b>P</b> Polished (matches aperture) - C4RA round trim only <b>B</b> Black (matte) <b>A</b> Aluminum (painted) - C4SA square trim only <b>F</b> Flangeless (requires mud-in ring)	<b>WL</b> Wet location
<b>C4SA</b> 4" Square Adjustable Accent	<b>WT</b> Textured White (painted) <b>BZ</b> Textured bronze (painted) <b>D</b> Aluminum diffuse (painted)  <b>BK</b> Black (C4RA is anodized, C4SA is matte) <b>BT</b> Textured Black (painted)  <b>WH</b> White (matte) <b>WHAMF</b> White (gloss antimicrobial)	<b>-</b> White (matte) <b>P</b> Polished (matches aperture) <b>B</b> Black (matte) <b>F</b> Flangeless (requires mud-in ring)  <b>-</b> White (matte) <b>P</b> Polished (matches aperture) <b>F</b> Flangeless (requires mud-in ring)  <b>-</b> White (matches finish) <b>F</b> Flangeless (requires mud-in ring)	

### Optical Accessories (field-installable)

<b>CA4NSRPO</b>	Narrow Spot upper reflector
<b>CA4NFRPO</b>	Narrow Flood upper reflector
<b>CA4FLRPO</b>	Flood upper reflector
<b>CA4WFRPO</b>	Wide flood upper reflector
<b>CL4HCL</b>	Hex cell louver
<b>CA4RSYM</b>	4" symmetrical MesoOptics
<b>CA4RLS6010</b>	4" 60x10 linear MesoOptics
<b>CA4RASYS8</b>	4" asymmetrical 8° MesoOptics
<b>CA4RASYS21</b>	4" asymmetrical 21° MesoOptics

### Accessories

<b>CA4RFMR</b>	Mud-in ring for use in 4" Round flangeless trim installations (ordered with a flangeless trim)
<b>CA4SFMR</b>	Mud-in ring for use in 4" Square flangeless trim installations (ordered with a flangeless trim)
<b>CAEM6</b>	Field-installable Bodine BSL6 6W battery pack with self-test/self-diagnostic (for new construction frames, 120-277V)
<b>CAEM6TSCP</b>	Must be ordered with EM6 frame for remote test switch, see page 2 for details
<b>SBA</b>	Interact Ready System Bridge accessory w/integral occupancy & daylight sensor (compatible with all 0-10v options, see SBA spec sheet) - Requires IRT9015 IR remote & Interact Pro App for commissioning.
<b>T347-75VA</b>	347:120V step-down transformer for non-IC (N) frame only (see page 2 for details)

- IC rated up to 2000lm with AirSeal (A) frame, above 2000lm non-IC (L01 dimming option IC to 1500lm only).
- Emergency (EM6) frame requires remote mounted test switch (not compatible with 347V).  
Order CAEM6TSCP mounting plate accessory. Not available with Chicago plenum (LC) option.
- Dim-to-warm (D2W) available only with 0-10V (Z10) and DALI (D) dimming options (available up to 2000lm).
- Tunable white available with 0-10v, DMX, DALI, and Lutron T, and RA dimming options (available up to 2000lm).
- Narrow spot beam available up to 2000lm.
- For remodeler installations, order light engine and trim only, no frame needed (not available with RA dimming).
- Linear driver profile, enables wireless connected lighting control (see page 7 for details).  
Specify only with Non-IC (N) frame, not for use with LC, EM6, nor 9D2W options.



# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent

### Frame-in-kits

#### New Construction:

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

#### AirSeal (air-tight/IC):

Galvanized steel housing for dry or plaster ceilings. Pre-installed telescoping mounting bars from 13" to 24". Tested in compliance with ASTM E283 for airtight.

Max ceiling thickness is 0.75" (19 mm)  
Min ceiling thickness is 0.5" (12 mm)

#### 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

All configurations are FCC Class A unless otherwise specified.

- Advance 0-10V 1% (Z10), logarithmic curve is standard, specify D2O for factory-set dim-to-off function, consult factory for linear dimming curve.
- EldoLED SOLODrive (SOL) 0-10V 0.1%
- Lutron PEQO (L) Hi-Lume Premier 0.1% EcoSystem
- Lutron LDE1 (LH) EcoSystem 1%
- Lutron L3DA (LD) Hi-Lume A 3-wire 1%
- Electronic low voltage (E) - forward or reverse phase dimming
- DALI (D) - DT6 DALI 0.1%
- DMX (DMX) - Digital Multiplexing with RDM 0.1%

#### Dimming Options

The following are factory-set options for the SOL, D, and DMX driver options (ex. DMXLIN):

- SOL/D/DMX** Logarithmic (-) standard
- SOL/D/DMX** Linear (LIN)
- SOL/DMX** Square (SQR)

### Optical systems

#### Quality of light:

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

#### C4RA round trim construction:

Precision spun high grade aluminum reflectors with options for anodized or painted finishes.

#### C4SA square trim construction:

Precision die-cast aluminum reflectors with options for anodized or painted finishes.

#### Color rendering:

Consistent CRI of greater than 90 across the spectrum.

#### Dim to warm (D2W) and tunable white (6T):

Delivered CCT gradually warms from 3000-1800K along dimming range. 0-10V dimming only. Fixture-to-fixture consistency of  $\leq 3$ SDCM at 2700K & 3000K, and  $\leq 5$ SDCM at 1800K.

### Diffusion Media

- PET film containing surface relieved, microscopic light diffusing structures/elements
- Optimizes luminaire efficacy via high optical transmission.
- Homogenizes light engine luminance providing smooth gradients of light.
- Other distribution options available including linear spread and asymmetric.
- Hex cell louver may be ordered factory or field installed. Works with media holder supplied with original light engine.
- All media factory or field assembled to primary optic via integral holder.

### Light engine

**Quick connect power pack** allows 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.

**347V light engines** are Z10 dimming only and include dedicated 347V driver. For 347V non-Z10 dimming, order T347-75VA field-installed step-down transformer accessory.

**Predicted 90% lumen maintenance** to 60,000 hours at 30C ambient.

### Emergency

- Bodine BSL6 6W battery pack with self-test/diagnostic functionality installed.
- Indicator light/test switch mounted remote.
- CAEM6TSCP accessory ceiling plate to remote mount test switch. Required with EM6 frame.

### Adjustability



- 45° vertical tilt, mechanical aiming with lock and indicator
- 362° rotation with lock
- Field changeable optics

### Options and Accessories

**Field Installed Emergency:** Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

#### C4RA round flangeless mud-in ring:

CA4RFMR - round mud-in ring for plaster installs.

#### C4SA square flangeless mud-in ring:

CA4SFMR - square mud-in ring for plaster installs.

**CAEM6TSCP:** Ceiling cover plate for remote mounted EM6 test switch. 1/2" (25mm) hole, 4 3/8" (109mm) x 2 3/4" (69mm) rectangular. Includes two mounting screws.

**CAEM6:** Field install EM6 kit with Bodine BSL6 6W battery pack with self-test/self-diagnostic, mounts to new construction frames. Includes remote ceiling plate for test switch.

**SBA:** Interact Ready System Bridge Accessory Requires IRT9015 IR remote and Interact Pro App for commissioning.

**T347-75VA:** Field installable 347:120V 75VA step-down transformer, attaches to knock out on frame junction box, for use with non-IC (N) frame only. Not available with EM6 frame option.

### Labels and Listings

- cULus listed for damp locations (wet loc. available)
- RoHS certified
- CCEA (frames with \*LC suffix)

### Warranty



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

# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent

### Polished Reflectors



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

### Flanges



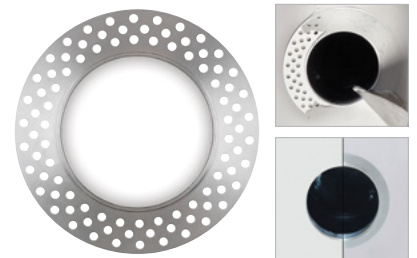
**White (-):** (matte) Provides the smoothest transition to ceilings when off.



**Polished (P):** (matches aperture) Produces a continuous look throughout the reflector (aperture matching). Not available for square trims with CL, CD, CC, and CZ finishes.



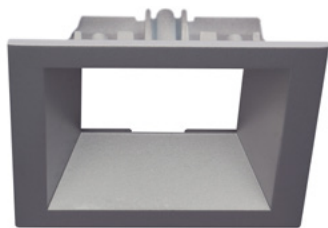
**Flangeless (F):** (flush-mount) Creates a flush, virtually seamless transition from aperture to ceiling.



**Mud-in ring (FMR):** Low profile, non-metallic 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.

### Textured Reflectors

Shown as square reflectors but represent the finish of Calculite round reflectors.



**Aluminum diffuse (D):** Matte painted finish.



**Textured white (WT):** Matte painted finish.



**Bronze (BZ):** Matte painted finish.

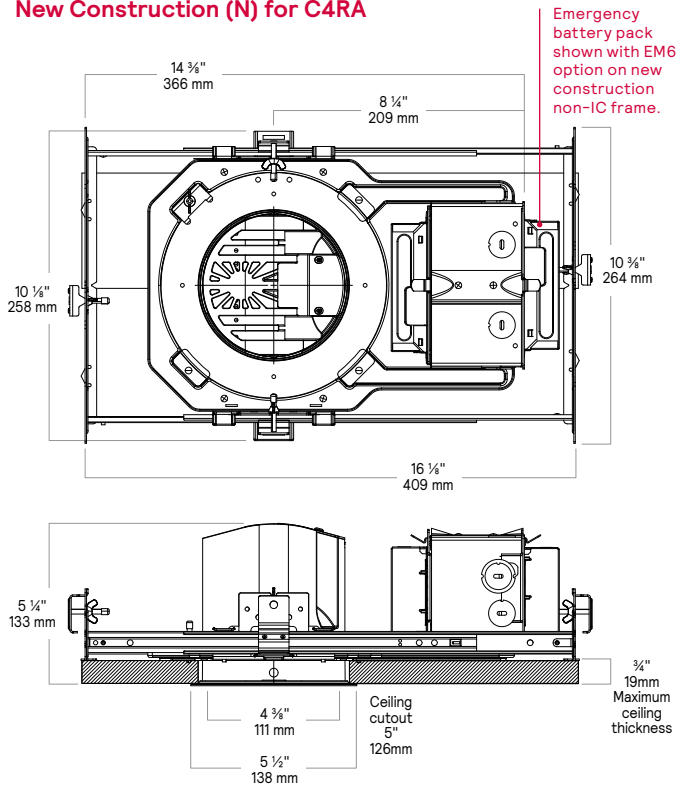


**Textured black (BT):** Matte painted finish.

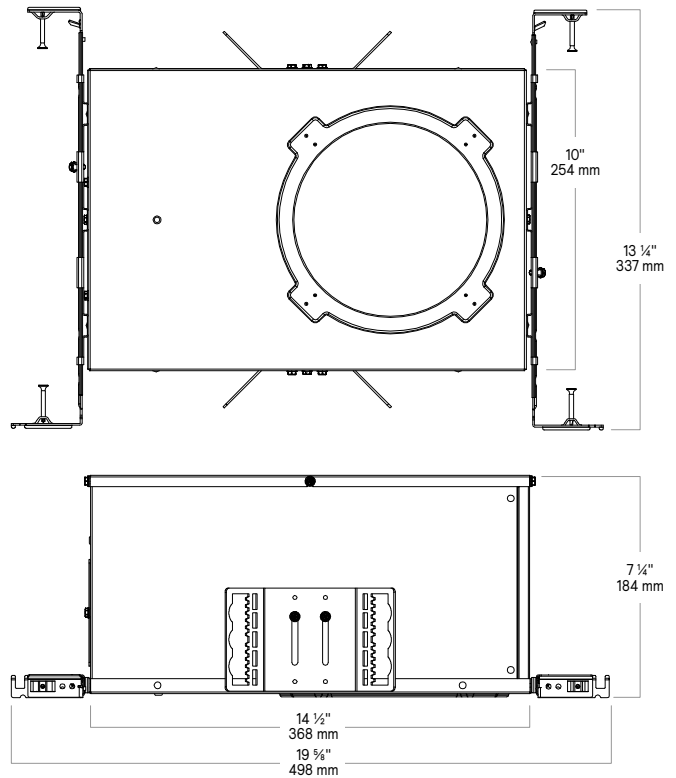
# C4RA Calculite LED 4" gen 3

## Round Adjustable Accent

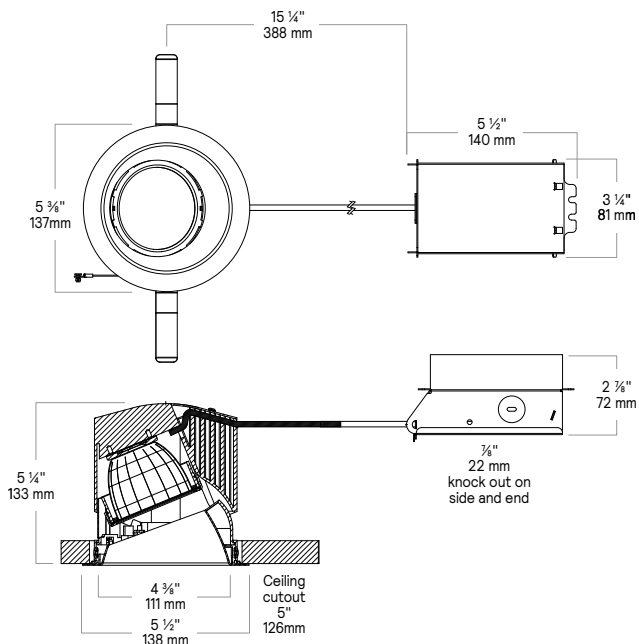
### New Construction (N) for C4RA



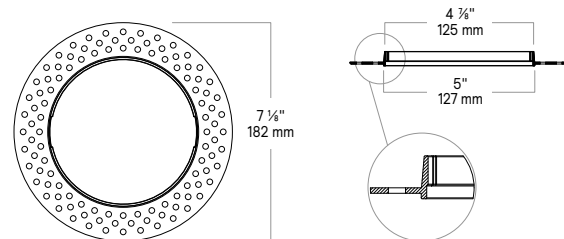
### AirSeal (ASIC) & Chicago Plenum (LC) for C4RA



### Remodeler (R) for C4RA



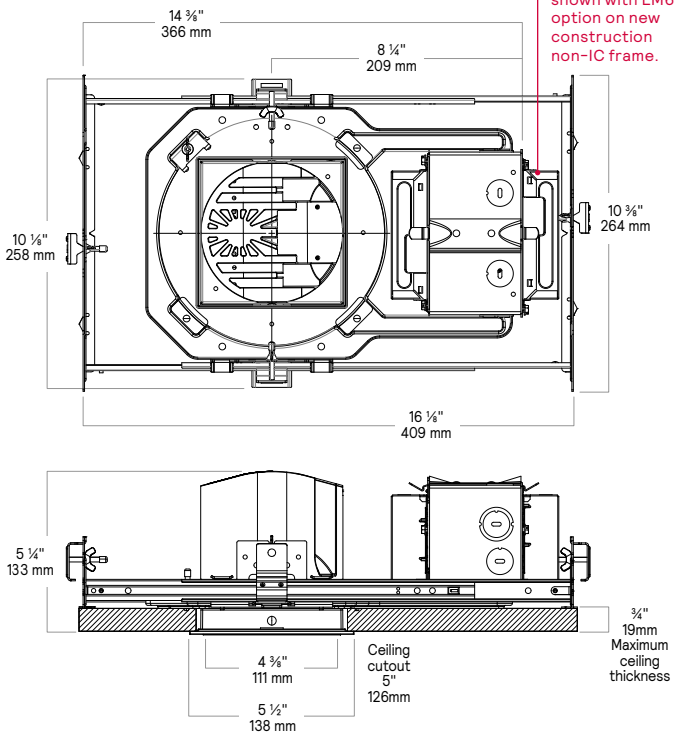
### Flangeless mud-in ring (CA4RFMR) accessory for C4RA



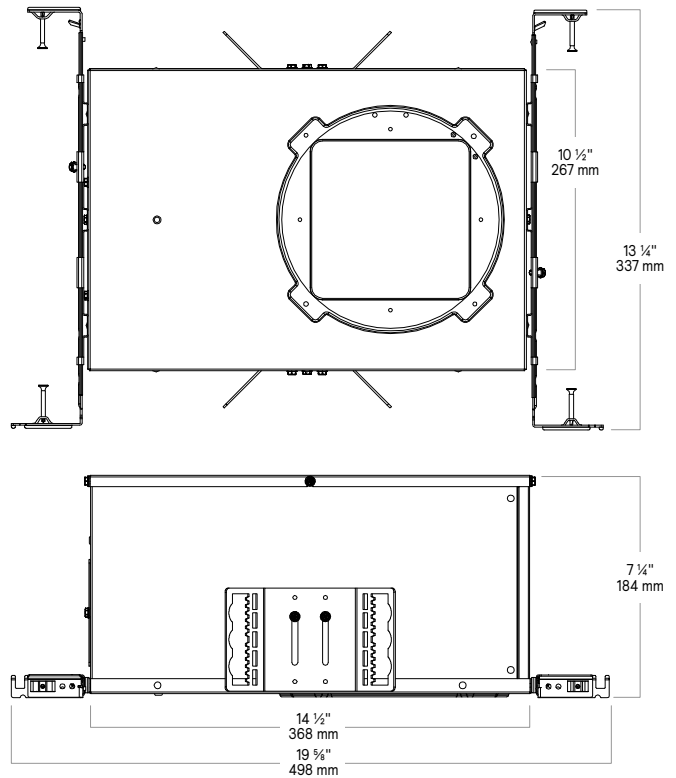
# C4SA Calculite LED 4" gen 3

## Square Adjustable Accent

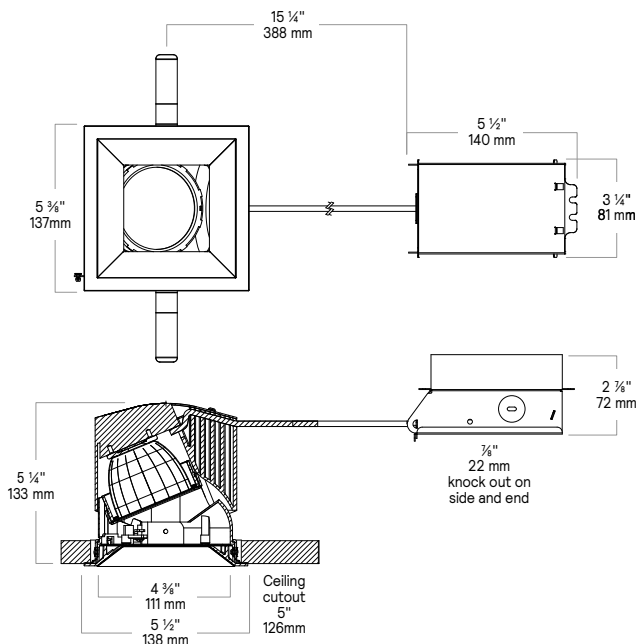
### New Construction (N) for C4SA



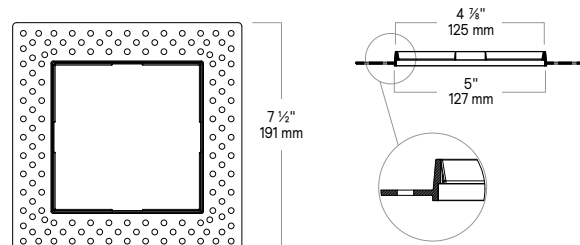
### AirSeal (ASIC) & Chicago Plenum (LC) for C4SA



### Remodeler (R) for C4SA



### Flangeless mud-in ring (CA4SFMR) accessory for C4SA



# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent



### AccuRender Technology (CRI 90+)

The right light brings colors to life. Our new AccuRender technology helps ensure colors are rendered more accurately and consistently, while doing so as efficiently as CRI 80 products.



**Standard CRI 80**  
Good color rendering and high efficacy



**Standard CRI 90**  
Better color rendering and low efficacy



**AccuRender**  
Best color rendering, color preference and high efficacy

#### Enjoy design flexibility

##### Full range of products and options:

- Available soon in across Lightolier portfolio for application flexibility
- Multiple color temperatures (CCTs) and lumen packages offered

#### Promote savings

##### High efficacy, with no penalty:

- Energy efficacy compares well to conventional 80 CRI
- Up to 25% more energy savings vs competitor 90 CRI<sup>1</sup>
- Helps meet Title 24 requirements

#### Show your true colors

##### High color rendering:

- True to life colors that help energize your environment and render better flesh tones critical for healthcare hospitality and retail applications.
- R<sub>a</sub> up to 94 CRI    • R<sub>f</sub> up to 92 TM-30  
R<sub>g</sub> up to 67 CRI    R<sub>e,h1</sub> up to 91 TM-30  
G<sub>a</sub> up to 99 CRI    R<sub>g</sub> up to 100 TM-30  
C<sub>g</sub> up to 94 CRI    R<sub>cs,h1</sub> up to -5% TM-30

#### Achieve color balance

##### Best in class color consistency:

- Promote aesthetic harmony in your space with  $\leq 2$  SDCM

# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent

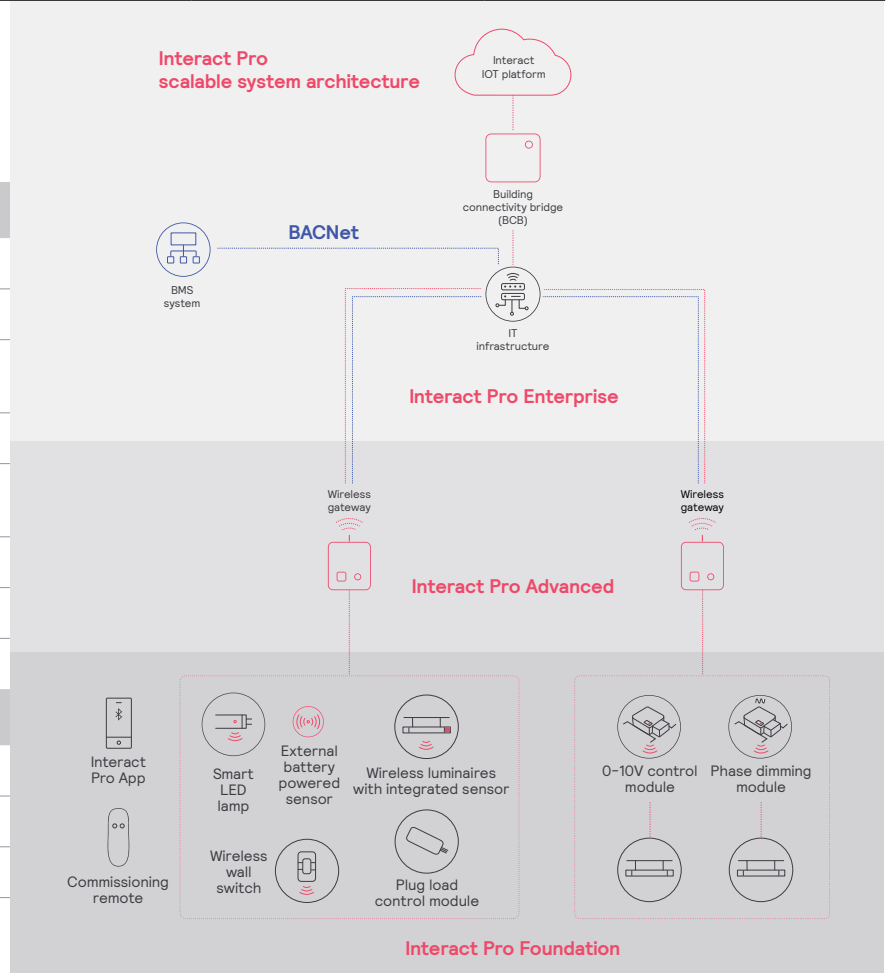
interact

	Interact Pro scalable system		
	Foundation	Advanced	Enterprise
Dimming, grouping, and zoning	✓	✓	✓
Bluetooth and ZigBee enabled	✓	✓	✓
Motion sensing and daylight harvesting	✓	✓	✓
Integration with 0-10V and phase dimming fixtures	✓	✓	✓
Code compliance	✓	✓	✓
Granular dimming and dwell time	✓	✓	✓
Energy reporting and monitoring		✓	✓
Scheduling		✓	✓
Demand response		✓	✓
BMS integration (BACnet)			✓
Floor plan visualization			✓
IoT sensors for wellness			✓
IoT Apps for productivity			✓

### Currently supported maximum system size

To be able to design the lighting system correctly for the customer, it is important to know the prime characteristics of the system, its possibilities and limitations.

System level	
Total number of gateways	Unlimited
Total number of devices	200 per network
<ul style="list-style-type: none"> <li>• luminaires with integrated sensors</li> </ul>	150
<ul style="list-style-type: none"> <li>• smart TLEDS</li> </ul>	150
Total number of ZGP devices (sensors and switches)	50
<ul style="list-style-type: none"> <li>• sensors</li> </ul>	30
<ul style="list-style-type: none"> <li>• switches</li> </ul>	50
<ul style="list-style-type: none"> <li>• zones and groups</li> </ul>	64
Group level	
Recommended number of lights	40 (recommended 25)
Number of ZGP devices	5
Number of scenes	16



# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent

### Wireless Controls Options

#### Interact Pro scalable sensor

##### (System Bridge Accessory with -CS option):

- CS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the Foundation mode (similar to SpaceWise) when configured without a gateway or in an Interact Pro Advanced or Enterprise mode if a compatible gateway is used.
- Interact Pro includes an App, a portal and a broad portfolio of wireless luminaires, lamps and retrofit kits all working on the same system.
- Startup is implemented via Interact Pro App (Android or iPhone) & BlueTooth connectivity. The App provides flexibility to choose between a gateway or non gateway mode for setup.
- Setup with the gateway requires wired internet access to the gateway. It is possible to add a gateway at a later point.
- Prepare project configuration steps remotely and use IRT9015 remote onsite to identify and group devices together.
- Compatible with:
  - SWS200 wireless scene switch
  - Battery powered IP42 presence sensor OCC sensor IA CM WH 10/1
  - Battery powered IP42 presence & daylight sensor OCC-DL sensor IA CM IP42 WH
  - Battery powered IP65 presence sensor OCC sensor IA CM IP65 WH
  - Battery powered IP65 presence & daylight sensor OCC-DL sensor IA CM IP65 WH
- For more information on Interact Pro visit: [www.interact-lighting.com/interactproscalablesystem](http://www.interact-lighting.com/interactproscalablesystem).

#### Interact Pro Enterprise

##### (System Bridge Accessory with -SB option):

- 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 with SWS200 wireless scene switch, wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) and wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1) and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- SB option in addition to occupancy and daylight sensing supports advanced IoT capabilities such as people estimation analysis, desk level temperature & humidity sensing, noise classification, and BLE beacon.
- Requires compatible Gateway and internet connectivity for commissioning.
- For more information, visit: [www.interact-lighting.com/office](http://www.interact-lighting.com/office) or [www.usa.lighting.philips.com/systems/system-areas/offices](http://www.usa.lighting.philips.com/systems/system-areas/offices).

#### Emergency Options (ER100)

##### (System Bridge Accessory with -ER100 option):

- Power Sensing (Factory default) – Recommended UL924 option requires unswitched power sense line, absence of voltage on the normal circuit triggers luminaire to 100% output
- Power Interruption Detection (Field option) – Detects AC power interruption >30ms triggers 90 minute emergency mode with luminaire at 100% output

#### Radio only sensor (RA):

- Integral radio (RA) only sensor simply enables wireless mesh connectivity to the luminaire without any occupancy or daylight sensing.
- Ideal for applications where sensing functionality is managed by other Interact devices and the luminaire only needs to have wireless connectivity.
- Integral RF device affixed to the driver box (see page 6 for details).
- RA option available on light engines only.
- 120-347V universal.



# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent

### Narrow Spot

Light engine		Input volts	Input freq	Input current	LED Drive current	Input power	LED Power	THD power @ Max Load	Power factor @ Max Load
C4_A05_NSZ10U/3	2	120V	50/60Hz	0.053A	0.15A	6.3W	5.0W	<10%	>0.9
	2	277V	50/60Hz	0.024A	0.15A	6.5W	5.0W	<30%	>0.9
	2	347V	50/60Hz	0.021A	0.15A	7.3W	5.0W	N/A	>0.9
C4_A10_NSZ10U/3	7	120V	50/60Hz	0.087A	0.25A	10.4W	8.6W	<10%	>0.9
	7	277V	50/60Hz	0.038A	0.25A	10.6W	8.6W	<10%	>0.9
	7	347V	50/60Hz	0.035A	0.25A	12.1W	8.6W	<30%	>0.9
C4_A15_NSZ10U/3	12	120V	50/60Hz	0.126A	0.36A	15.1W	12.7W	<10%	>0.9
	12	277V	50/60Hz	0.055A	0.36A	15.2W	12.7W	<10%	>0.9
	12	347V	50/60Hz	0.050A	0.36A	17.3W	12.7W	<25%	>0.9
C4_A20_NSZ10U/3	17	120V	50/60Hz	0.191A	0.55A	22.9W	19.4W	<10%	>0.9
	17	277V	50/60Hz	0.083A	0.55A	23.0W	19.4W	<10%	>0.9
	17	347V	50/60Hz	0.070A	0.55A	24.3W	19.4W	<20%	>0.9
C4_A25_NSZ10U/3	24	120V	50/60Hz	0.198A	0.60A	23.8W	20.2W	<10%	>0.9
	24	277V	50/60Hz	0.086A	0.60A	23.8W	20.2W	<10%	>0.9
	24	347V	50/60Hz	0.072A	0.60A	25.1W	20.2W	<20%	>0.9
C4_A30_NSZ10U/3	29	120V	50/60Hz	0.239A	0.72A	28.7W	24.5W	<10%	>0.9
	29	277V	50/60Hz	0.103A	0.72A	28.5W	24.5W	<10%	>0.9
	29	347V	50/60Hz	0.086A	0.72A	29.9W	24.5W	<15%	>0.9
C4_A35_NSZ10U/3	35	120V	50/60Hz	0.288A	0.86A	34.5W	29.7W	<10%	>0.9
	35	277V	50/60Hz	0.124A	0.86A	34.3W	29.7W	<10%	>0.9
	35	347V	50/60Hz	0.101A	0.86A	34.9W	29.7W	<10%	>0.9
C4_A40_NSZ10U/3	41	120V	50/60Hz	0.324A	0.96A	38.9W	33.5W	<10%	>0.9
	41	277V	50/60Hz	0.140A	0.96A	38.7W	33.5W	<10%	>0.9
	41	347V	50/60Hz	0.113A	0.96A	39.4W	33.5W	<10%	>0.9

### Narrow Flood, Flood, Wide Flood

Light engine		Input volts	Input freq	Input current	LED Drive current	Input power	LED Power	THD power @ Max Load	Power factor @ Max Load
C4_A05_[NF FL WF] Z10U/3	4	120V	50/60Hz	0.050A	0.15A	6.0W	4.8W	<10%	>0.9
	4	277V	50/60Hz	0.023A	0.15A	6.3W	4.8W	<30%	>0.9
	4	347V	50/60Hz	0.020A	0.15A	7.0W	4.8W	N/A	>0.9
C4_A10_[NF FL WF] Z10U/3	9	120V	50/60Hz	0.072A	0.22A	8.7W	7.1W	<10%	>0.9
	9	277V	50/60Hz	0.032A	0.22A	8.9W	7.1W	<20%	>0.9
	9	347V	50/60Hz	0.029A	0.22A	10.1W	7.1W	<30%	>0.9
C4_A15_[NF FL WF] Z10U/3	14	120V	50/60Hz	0.114A	0.35A	13.7W	11.5W	<10%	>0.9
	14	277V	50/60Hz	0.050A	0.35A	13.8W	11.5W	<10%	>0.9
	14	347V	50/60Hz	0.045A	0.35A	15.7W	11.5W	<25%	>0.9
C4_A20_[NF FL WF] Z10U/3	19	120V	50/60Hz	#N/A	0.45A	#N/A	14.9W	#N/A	>0.9
	19	277V	50/60Hz	#N/A	0.45A	#N/A	14.9W	#N/A	>0.9
	19	347V	50/60Hz	#N/A	0.45A	#N/A	14.9W	#N/A	>0.9
C4_A25_[NF FL WF] Z10U/3	24	120V	50/60Hz	0.198A	0.60A	23.8W	20.2W	<10%	>0.9
	24	277V	50/60Hz	0.086A	0.60A	23.8W	20.2W	<10%	>0.9
	24	347V	50/60Hz	0.072A	0.60A	25.1W	20.2W	<20%	>0.9
C4_A30_[NF FL WF] Z10U/3	29	120V	50/60Hz	0.239A	0.72A	28.7W	24.5W	<10%	>0.9
	29	277V	50/60Hz	0.103A	0.72A	28.5W	24.5W	<10%	>0.9
	29	347V	50/60Hz	0.086A	0.72A	29.9W	24.5W	<15%	>0.9
C4_A35_[NF FL WF] Z10U/3	34	120V	50/60Hz	0.288A	0.86A	34.5W	29.7W	<10%	>0.9
	34	277V	50/60Hz	0.124A	0.86A	34.3W	29.7W	<10%	>0.9
	34	347V	50/60Hz	0.101A	0.86A	34.9W	29.7W	<10%	>0.9
C4_A40_[NF FL WF] Z10U/3	39	120V	50/60Hz	0.324A	0.96A	38.9W	33.5W	<10%	>0.9
	39	277V	50/60Hz	0.140A	0.96A	38.7W	33.5W	<10%	>0.9
	39	347V	50/60Hz	0.113A	0.96A	39.4W	33.5W	<10%	>0.9

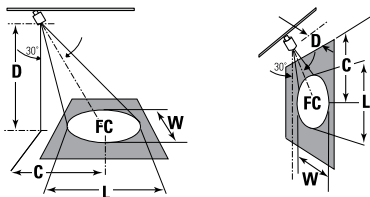
# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent

### Aiming angles

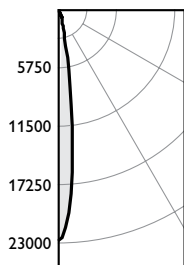
L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.

FC Footcandles  
L Beam length  
W Beam Width  
D Distance  
A Aiming Angle  
C Distance to center beam  
CBCP Center Beam Candlepower



### Adjustment Factors

Standard	Shallow 1" Regress	CCT (90CRI)	Lumens
CL = 105%	WT = 112%	4000K = 104%	1500lm = 130%
CC = 100%	D = 100%	3500K = 100%	1000lm = 100%
CD = 80%	BZ = 77%	3000K = 96%	750lm = 70%
WH = 80%	BT = 74%	2700K = 90%	500lm = 50%
CZ = 78%			
BK = 40%			



Frame: 4ARN  
Engine: C4RA20935NSZ10U  
Trim: C4RAACL

Output lumens: 2192lms  
Input watts: 19.4W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 22,737cd  
Beam Angle: 14°

Efficacy: 113.0lm/w  
Report<sup>2</sup>: STMR-2778

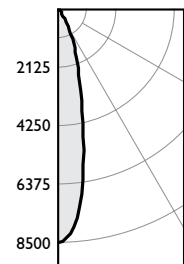
### Narrow Spot, 2000lm engine, 113lm/W at 19W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
10	5.8	148	3.3	2.8
12	6.9	103	3.9	3.4
14	8.1	75	4.6	4.0
18	10.4	46	5.9	5.1

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
3	5.2	316	3.1	1.5
4	6.9	178	4.1	2.0
5	8.7	114	5.1	2.5
6	10.4	79	6.2	2.9



Frame: 4ARN  
Engine: C4RA20935NFZ10U  
Trim: C4RAACL

Output lumens: 2078lms  
Input watts: 17.3W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 8,480cd  
Beam Angle: 24°

Efficacy: 120.1lm/w  
Report<sup>2</sup>: STMR-3283

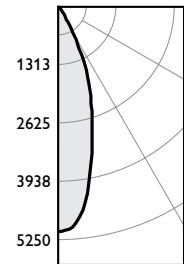
### Narrow Flood, 2000lm engine, 120lm/W at 17W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	153	3.5	2.9
8	4.6	86	4.6	3.9
10	5.8	55	5.8	4.9
12	6.9	38	6.9	5.9

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	265	3.9	1.7
3	5.2	118	5.9	2.6
4	6.9	66	7.9	3.4
5	8.7	42	9.8	4.3



Frame: 4ARN  
Engine: C4RA20935FLZ10U  
Trim: C4RAACL

Output lumens: 2049lms  
Input watts: 17.9W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 5,060cd  
Beam Angle: 35°

Efficacy: 114.5lm/w  
Report<sup>2</sup>: STMR-2981

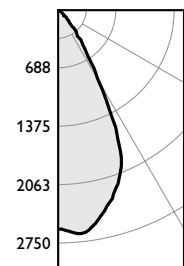
### Flood, 2000lm engine, 59 lm/W at 16W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	91	5.2	4.4
8	4.6	51	7.0	5.8
10	5.8	33	8.7	7.3
12	6.9	23	10.4	8.7

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	158	7.2	2.5
3	5.2	70	10.8	3.8
4	6.9	40	14.4	5.0
5	8.7	25	18.0	6.3



Frame: 4ARN  
Engine: C4RA20935WFZ10U  
Trim: C4RAACL

Output lumens: 2080lms  
Input watts: 17.4W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 2,578cd  
Beam Angle: 54°

Efficacy: 119.5lm/w  
Report<sup>2</sup>: STMR-2867

### Wide Flood, 1000lm engine, 55 lm/W at 16W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	47	8.9	7.1
8	4.6	26	11.9	9.4
10	5.8	17	14.9	11.8
12	6.9	12	17.8	14.1

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	81	36.9	4.1
3	5.2	36	55.3	6.1
4	6.9	20	73.7	8.2
5	8.7	13	92.2	10.2

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.

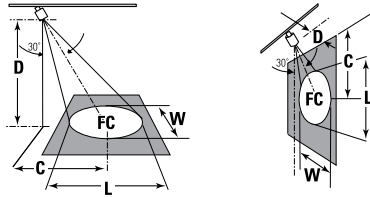
# C4RA/C4SA Calculite LED 4" gen 3

## Round & Square Adjustable Accent

### Aiming angles

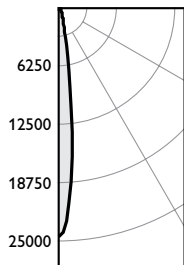
L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.

FC Footcandles  
L Beam length  
W Beam Width  
D Distance  
A Aiming Angle  
C Distance to center beam  
CBCP Center Beam Candlepower



### Adjustment Factors

Standard	Shallow 1" Regress	CCT (90CRI)	Lumens
CL = 105%	WT = 112%	4000K = 104%	1500lm = 130%
CC = 100%	D = 100%	3500K = 100%	1000lm = 100%
CD = 80%	BZ = 77%	3000K = 96%	750lm = 70%
WH = 80%	BT = 74%	2700K = 90%	500lm = 50%
CZ = 78%			
BK = 40%			



Frame: 4ASN  
Engine: C4SA20935NSZ10U  
Trim: C4SACD

Output lumens: 2028lms  
Input watts: 23.4W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 24,525cd  
Beam Angle: 13°

Efficacy: 86.7lm/w  
Report<sup>2</sup>: STMR-3344

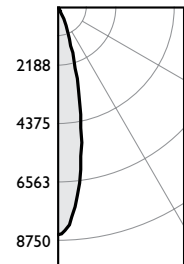
### Narrow Spot, 2000lm engine, 113lm/W at 19W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
10	5.8	159	3.1	2.6
12	6.9	111	3.7	3.2
14	8.1	81	4.3	3.7
18	10.4	49	5.5	4.7

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
3	5.2	341	2.8	1.4
4	6.9	192	3.8	1.8
5	8.7	123	4.7	2.3
6	10.4	85	5.7	2.7



Frame: 4ASN  
Engine: C4SA20935NFZ10U  
Trim: C4SACD

Output lumens: 1748lms  
Input watts: 17.0W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 8,545cd  
Beam Angle: 24°

Efficacy: 102.8lm/w  
Report<sup>2</sup>: STMR-3345

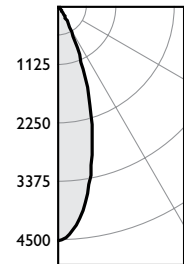
### Narrow Flood, 2000lm engine, 103lm/W at 17W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	154	3.5	2.9
8	4.6	87	4.6	3.9
10	5.8	56	5.8	4.9
12	6.9	39	6.9	5.9

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	267	3.9	1.7
3	5.2	119	5.9	2.6
4	6.9	67	7.9	3.4
5	8.7	43	9.8	4.3



Frame: 4ASN  
Engine: C4SA20935FLZ10U  
Trim: C4SACD

Output lumens: 1648lms  
Input watts: 17.0W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 4,497cd  
Beam Angle: 33°

Efficacy: 96.9lm/w  
Report<sup>2</sup>: STMR-3346

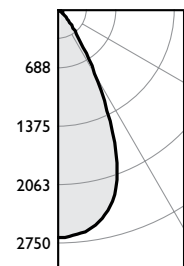
### Flood, 2000lm engine, 97lm/W at 17W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	81	4.9	4.1
8	4.6	46	6.5	5.5
10	5.8	29	8.1	6.8
12	6.9	20	9.8	8.2

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	141	6.4	2.4
3	5.2	62	9.6	3.6
4	6.9	35	12.9	4.7
5	8.7	22	16.1	5.9



Frame: 4ASN  
Engine: C4SA20935WFZ10U  
Trim: C4SACD

Output lumens: 1998lms  
Input watts: 17.0W  
CRI: 90min  
CCT<sup>1</sup>: 3500K  
CBCP: 2,670cd  
Beam Angle: 52°

Efficacy: 117.5lm/w  
Report<sup>2</sup>: STMR-3347

### Wide Flood, 2000lm engine, 118lm/W at 17W

#### 30° Horizontal Aiming

Distance			Beam	
D	C	F.C.	L	W
6	3.5	48	8.5	6.8
8	4.6	27	11.3	9.0
10	5.8	17	14.1	11.3
12	6.9	12	17.0	13.5

#### 30° Vertical Aiming

Distance			Beam	
D	C	F.C.	L	W
2	3.5	83	27.3	3.9
3	5.2	37	40.9	5.9
4	6.9	21	54.5	7.8
5	8.7	13	68.1	9.8

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.

