



**Calculite** features industry leading visual comfort and patented installation flexibility. MesoOptics soft focus optical film 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 + Trim + Accessories (optional)

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

**Frame** example: 3RAS  
 Note: For remodeler installations, order light engine and trim only (no frame needed).

Series	Installation	Voltage / Options	
<b>3R</b>			
3R Uniframe 3" round frame	N New Construction Non-IC	- Universal 120/277/347V	LC Chicago plenum EM6 Emergency, 6W Self-Test/Self-Diagnostic <sup>1</sup>
	A AirSeal IC (1000lm max)	- Standard Universal 120/277/347V	S Shallow Universal 120/277/347V <sup>2</sup>

**Engine** example: C3RA05940NSZ10US

Series	Style	Lumens	CRI/CCT	Beam	Dimming	Options	Voltage	Plenum	
<b>C3R</b>	<b>A</b>								
C3R Calculite 3" round light engine	A Adj. Accent	05 500lm	927 90CRI/2700K	NS Narrow Spot (15°) SP Spot (20°) NF Narrow Flood (23°) FL Flood (29°)	Z10 0-10V 1%	--- None D20 Dim to Off	U 120V/277V 3 347V (Z10 only)	- Standard	
		07 750lm	930 90CRI/3000K		L01 Lutron PEQ0 EcoSystem 0.1% L1 Lutron LDE1 EcoSystem <sup>4</sup>	U 120V/277V			
		10 1000lm	935 90CRI/3500K		D DALI 0.1%	--- None LIN Linear	U 120V/277V		
		15 1500lm <sup>3</sup>	940 90CRI/4000K		SOL 0-10V 0.1% DMX Digital Multiplex w/ RDM 0.1%	--- None LIN Linear SQR Square	U 120V/277V		
		07 750lm	9D2W 90CRI/3000-1800K For new const. (N) configs only		LTE Lutron LTE Hi-Lume Phase Cut 1% <sup>4</sup> E Forward/Reverse Phase	1 120V			
		05 500lm	927 90CRI/2700K	RA Integral Interact Pro RF sensor <sup>5</sup>	U 120V/277V				
		10 1000lm	930 90CRI/3000K 935 90CRI/3500K 940 90CRI/4000K	NS Nar. Spot SP Spot NF Nar. Flood FL Flood	Z10 0-10V 1% E Forward/Reverse Phase	--- None D20 Dim to Off	U 120V/277V 3 347V (Z10 only)		R Remodeler <sup>6</sup> S Shallow

**Engine** (continued) example: C3RACLFLS6010

Series	Style	Reflector	Flange	Optics
<b>C3R</b>				
C3R Calculite 3" round trim	A Adjust. Accent AP Adjust. Pinhole <sup>8</sup>	BK Black (anodized)	- White (matte)	<b>MesoOptics</b> - Symmetrical soft focus <b>LS6010</b> Linear spread 60x10 <b>ASY21</b> Asymmetrical 21° bend angle <b>ASY8</b> Asymmetrical 8° bend angle <b>NMO</b> No MesoOptics optical film <sup>7</sup>
		CL Specular clear	P Matching refl.	
		CC Comfort clear	F Flangeless <sup>9</sup>	
		CD Comfort clear diffuse		
		CZ Champagne bronze (anodized)		
		WH White (matte)	- White (matte) F Flangeless <sup>9</sup>	
WT Textured white (painted)	P Matching refl. F Flangeless <sup>9</sup>			
BT Textured black (painted)	- White (matte)			
BZ Bronze (painted)	P Matching refl.			
D Alum. diffuse (painted)	F Flangeless <sup>9</sup>			

1. Emergency (EM6) frame requires remote mounted test switch. Order CAEM6TSCP mounting plate. Not compatible with 347V.  
 2. Shallow frame requires shallow engine (S).  
 3. The 1500lm (15) option is not available with AirSeal IC (3RA-).  
 4. Not available with 500lm (05) option.  
 5. 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 or EM6 options.  
 6. For remodeler installations, order light engine and trim only (no frame needed).  
 7. Light engine optics are factory installed and include media holder (order trim with NMO option).  
 8. Order pinhole with Black (BK) or White (WH) finishes (painted) for oculos and White (-) painted flanges only.  
 9. Flangeless (F) trims require CA3RAAFT mud-in accessory for installation.



# C3RA Calculite 3"

## Round adjustable accent

### Accessories (order & install separately)

<b>SBA</b>	Interact Ready System Bridge (compatible with 0-10V, see SBA spec sheet) Requires IRT9015 IR remote & Interact Pro App for commissioning.
<b>CAEM6</b>	Field installable Bodine BSL6 6W battery pack with self-test/self-diagnostic for use with new construction frames, 120-277V
<b>CA3RAAFT</b>	Mud-in ring for round flangeless installs (ordered with a flangeless trim)
<b>CAEM6TSCP</b>	Must be ordered with EM6 frame for remote test switch (see page 3 for details)
<b>T347-75VA</b>	347:120V step-down transformer for non-IC (N) frame only (see page 3 for details)

Upper reflector optics (Additional field-installable optics)	MesoOptics optical films (for field placement on trim)	MesoOptics optical films (for field placement on TIR optic, includes holder)	Hex cell louver / MesoOptics (for field placement on TIR optic, includes holder)
<b>CA3NSSFR</b> 15° Narrow Spot	<b>CA3RSYM</b> Symmetrical film	<b>TIRCA3RSYM</b> Symmetrical film	<b>CL3HCL</b> 3" holder / Symmetrical film
<b>CA3SSFR</b> 20° Spot	<b>CA3RLS6010</b> 60x10 Linear spread film	<b>TIRCA3RLS6010</b> 60x10 Linear spread film	<b>CL3HCLS6010</b> 3" holder / 60x10 Linear spread film
<b>CA3NFSFR</b> 23° Narrow Flood	<b>CA3RASY21</b> Asymmetrical 21° bend angle film	<b>TIRCA3RASY21</b> Asymmetrical 21° bend angle film	<b>CL3HCLASY21</b> 3" holder / Asymmetrical 21° bend angle film
<b>CA3FLSFR</b> 29° Flood	<b>CA3RASY8</b> Asymmetrical 8° bend angle film	<b>TIRCA3RASY8</b> Asymmetrical 8° bend angle film	<b>CL3HCLASY8</b> 3" holder / Asymmetrical 8° bend angle film

This meticulously engineered downlight is pre-adjusted to 22.5° out of the box, saving installation time. It can be vertically adjusted to 45° with three quick turns of a screwdriver and locked into place.

### 0-10V electrical tables

Light engine	Input volts	Input current	Drive current	Input power
C3_A05_Z10U/3	120 V	0.08 A	200 mA	9.5 W
	277 V	0.03 A		
C3_A07_Z10U/3	120 V	0.09 A	250 mA	10.9 W
	277 V	0.04 A		
C3_A079D2W_Z10U/3	120 V	0.12 A	330 mA	13.6 W
	277 V	0.05 A		
C3_A10_Z10U/3	120 V	0.13 A	360 mA	15.6 W
	277 V	0.06 A		
C3_A15_Z10U/3	120 V	0.17 A	500 mA	20.4 W
	277 V	0.07 A		
C3_A05_Z10US/3 C3_A05_Z10UR	120 V	0.08 A	220 mA	9.4 W
	277 V	0.03 A		
C3_A10_Z10US/3 C3_A10_Z10UR	120 V	0.12 A	330 mA	14.1 W
	277 V	0.05 A		

### ELV electrical tables

Light engine	Input volts	Input current	Drive current	Input power
C3_A05_E1	120 V	0.08 A	220 mA	8.7 W
	277 V	0.03 A		
C3_A07_E1	120 V	0.09 A	250 mA	10.2 W
	277 V	0.04 A		
C3_A079D2W_E1	120 V	0.11 A	330 mA	13.1 W
	277 V	0.05 A		
C3_A10_E1	120 V	0.11 A	350 mA	12.7 W
	277 V	0.05 A		
C3_A15_E1	120 V	0.17 A	500 mA	19.7 W
	277 V	0.07 A		
C3_A05_E1S C3_A05_E1R	120 V	0.08 A	220 mA	8.7 W
	277 V	0.03 A		
C3_A10_E1R C3_A10_E1S	120 V	0.11 A	330 mA	13.1 W
	277 V	0.05 A		

### Lutron electrical tables

Light engine	Input volts	Input current	Drive current	Input power
C3_A05_LU	120 V	0.07 A	200 mA	8.4 W
	277 V	0.03 A		
C3_A07_LU	120 V	0.09 A	250 mA	10.7 W
	277 V	0.04 A		
C3_A079D2W_LU	120 V	0.12 A	330 mA	13.0 W
	277 V	0.05 A		
C3_A10_LU	120 V	0.13 A	360 mA	15.4 W
	277 V	0.06 A		
C3_A15_LU	120 V	0.17 A	500 mA	19.8 W
	277 V	0.07 A		

# C3RA Calculite 3"

## Round adjustable accent

### 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 1.25" (32mm)**

#### 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 D20 for factory-set dim-to-off function, consult factory for linear dimming curve.
- EldoLED SOLODrive (SOL) 0-10V 0.1%
- Lutron PEQ0 (L01) Hi-Lume Premier EcoSystem 0.1%
- Lutron LDE1 (L1) EcoSystem 1%
- Lutron LTE (LTE) Hi-Lume 2-wire phase cut 1%
- Electronic low voltage (E) - forward or reverse phase dimming, remodel and AirSeal IC Shallow are FCC Class B
- DALI (D) - DT6 DALI 0.1%
- DMX (DMX) - Digital multiplexing with RDM 0.1%
- Dim to Warm (D2W) - option changes CCT from 3000 - 1800K gradually as it dims, dimming agnostic

#### Dimming options:

- The following are factory-set 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.

**Construction:** Precision spun high grade aluminum reflectors with options for anodized or painted finishes. Shallow die cast downlight trims available to aesthetically match adjustable accent in painted finish.

### Emergency

Bodine BSL6 6W battery pack with self-test/diagnostic functionality. Factory or field mounted to frame.

- For remote ceiling mounted test switch, order standard Trim (ex: C3RACC). Accessory ceiling mounting plate available (CAEM6TSCP) for remote mounted test switch.
- Refer to Calculite-LyteProfile-EasyLyte Emergency Battery Pack specification sheet for more details.

### Adjustability

- 45° vertical tilt, mechanical aiming with lock
- 360° rotation with lock
- Field changeable optics

### MesoOptics optical diffusion film

- PET film containing surface relieved, microscopic light diffusing structures/elements.
- Provides a clean beam with mitigated spill at articulated angles.
- Optimizes luminaire efficacy via high optical transmission.
- Homogenizes light engine luminance providing smooth gradients of white light.
- Uniformly lit optical aperture creates a balance of beam precision coupled with smooth gradients of pure white light.
- Other distribution options available including linear spread and asymmetric.
- May be field installed with available accessories.
- Field installed accessories include options for MesoOptics on trim (CA3R) or on the upper TIR optic (TIRCA3R).

### 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.
- Predicted 70% lumen maintenance to 57,000 hrs.
- Max operating ambient temperature of 30°C.
- 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.

### Hex Cell Louver

- Hex cell louver in black finish affixed to TIR optic with snap-on holder ring.
- Factory installed option or field installed accessory.
- MesoOptics diffusion film is installed the holder.
- For field installation, discard MesoOptics film supplied with the trim.

### Options and accessories

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

**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.

**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.

**Flangeless mud-in ring:** Use CA3RAAFT for use with flangeless plaster installations.

**Lens Film Accessories:** Trim may accept up to three (3) field installed optical films with a total overall thickness up to 0.060" (1.5mm).

**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.

### Title 24 exceptions

- Round Adjustable Accent CL, CC, CD, WH, WT only
- Must be installed in shallow AirSeal IC Frame
- Shallow luminaires must be ELV

### ENERGY STAR® exceptions

- BK, CZ, BT, BZ, and D finishes
- 347V & Emergency voltage/options
- Adjustable pinhole (AP) trims
- Lutron configurations
- Dim to Warm configurations
- 1000lm configurations

### Labels and listings

- cULus listed for damp locations
- ENERGY STAR® certified
- CEC Title 24 JA8 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.

# C3RA Calculite 3"

Round adjustable accent

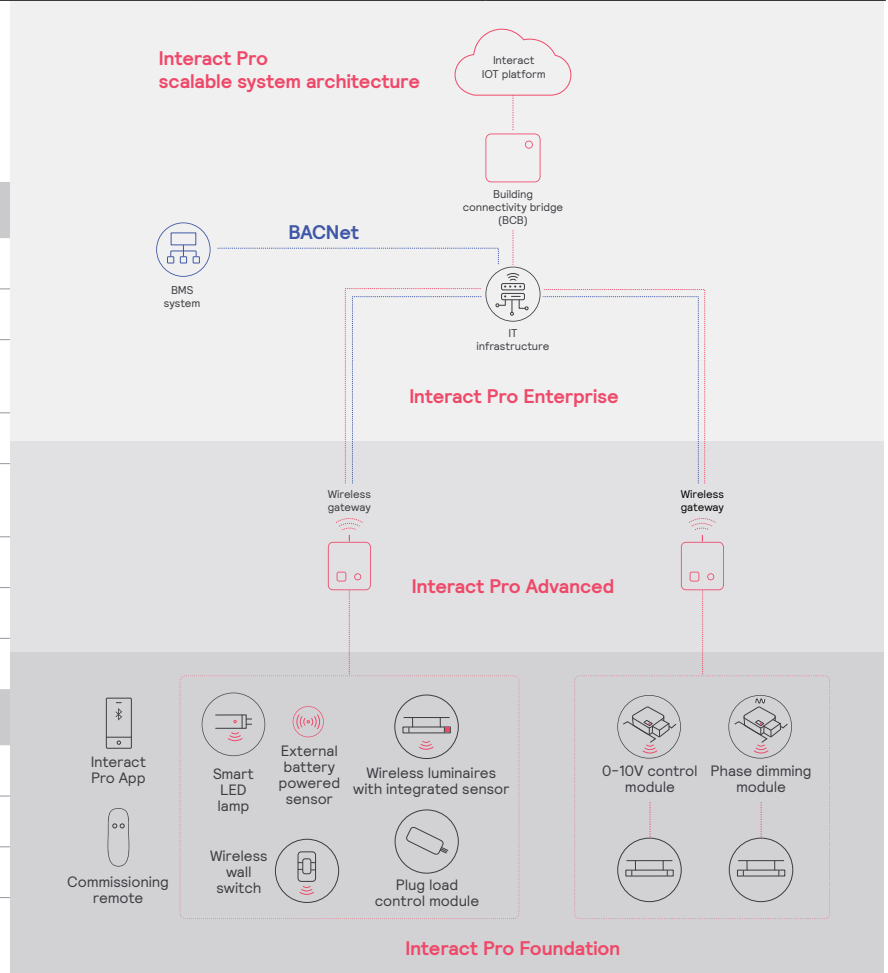
## interact

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



# C3RA Calculite 3"

## Round adjustable accent

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### 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

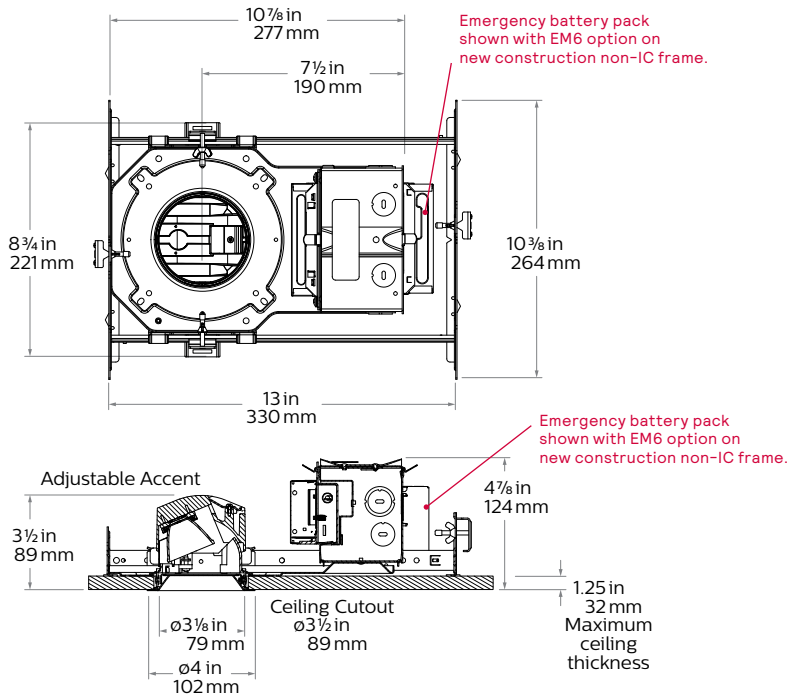
#### Radio only sensor (RA):

- 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 7 for details).
- RA option available on light engines only.

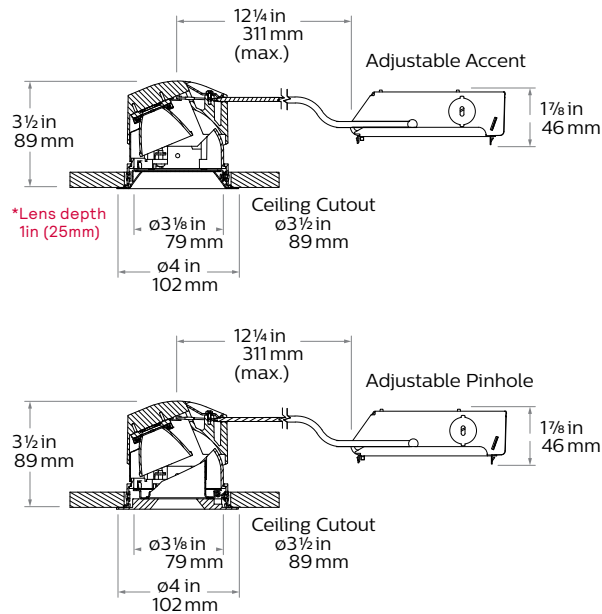
# C3RA Calculite 3"

## Round adjustable accent

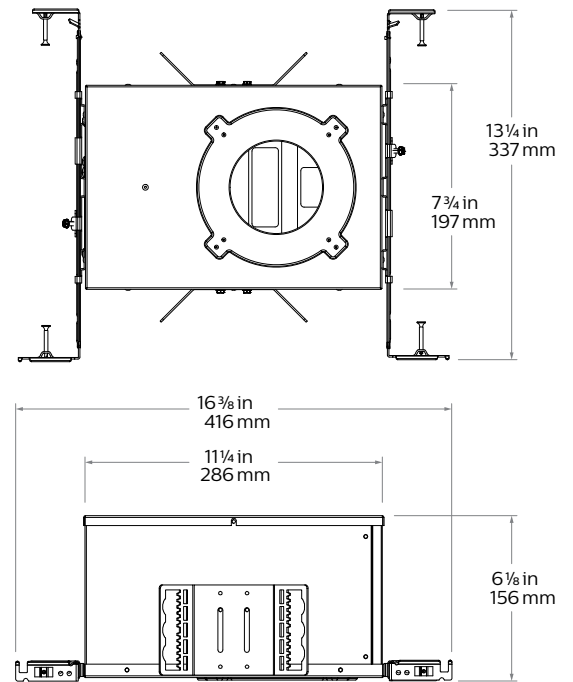
### New construction (N)



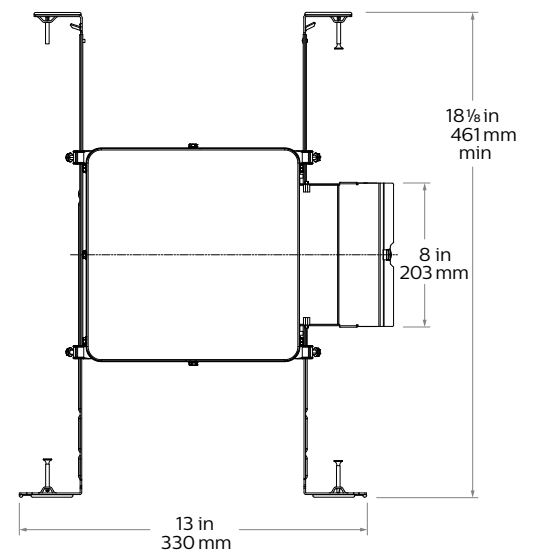
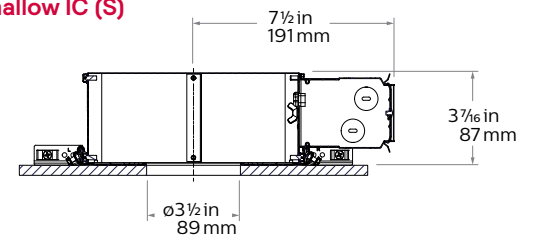
### Remodeler (R)



### Standard IC (A) and Chicago plenum (LC)



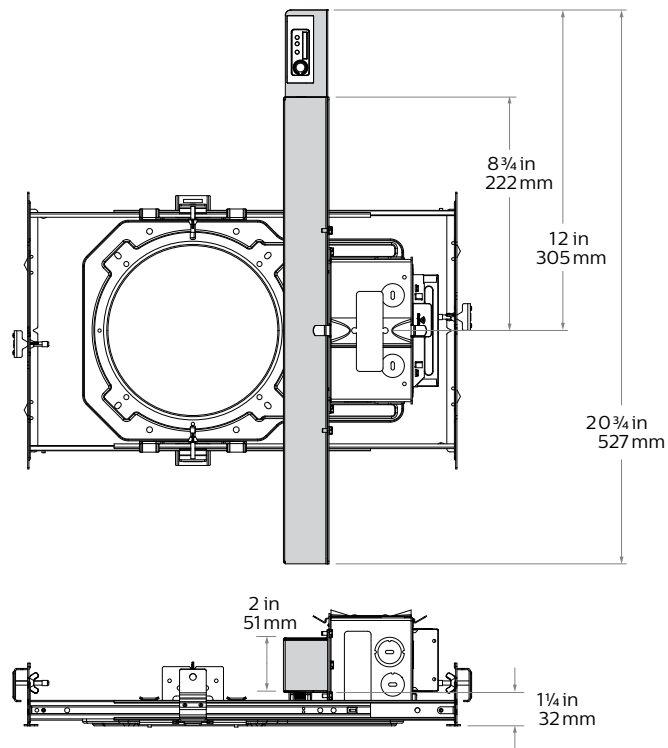
### Shallow IC (S)



# C3RA Calculite 3"

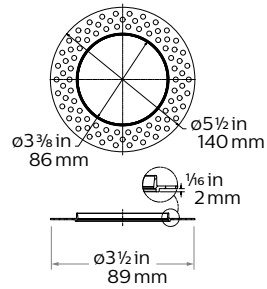
## Round adjustable accent

### Linear driver (RA)



Requires either top accessory or 19" plenum space without sensor, and 22" with sensor.

### Flangeless mud-in ring (CA3RAAFT) accessory



# C3RA Calculite 3"

## Round adjustable accent

**Polished Reflectors** Shown as round reflectors but represent the finish of Calculite square 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).

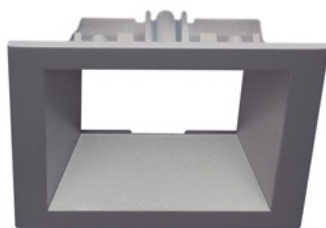


**Comfort clear diffuse (CD):** Slightly diffuse clear finish, that eliminates iridescence and reduces the mirror image effect inherent with specular finishes.



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

**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.

**Flanges**



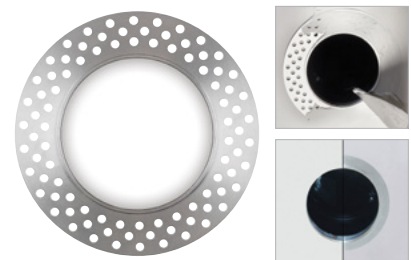
**White (-):** (matte) Provides the smoothest transition to ceilings when off.



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



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



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



**Adjustable Accent (A):** Augments precision of the optical design to produce a unique accent luminaire. Finishing Reflector provides discrete, low luminance appearance while allowing maximum lighting efficacy.



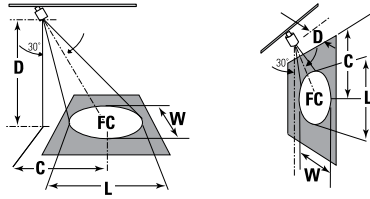
# C3RA Calculite 3"

## Round adjustable accent

### Aiming angles

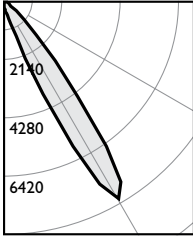
L and W are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.

**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: **3RN**  
 Engine: **C3RA10935NSZ10U**  
 Trim: **C3RACC**

Output lumens: 1267lms  
 Input watts: 15.6W  
 CRI: 90 min  
 CCT<sup>1</sup>: 3500K  
 CBCP: 8449cd  
 Beam Angle: 15°

**Efficacy: 81.2lm/w**  
 Report<sup>2</sup>: F041197

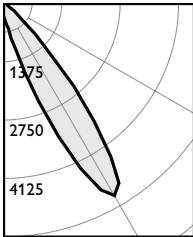
### Narrow Spot, 1000lm engine, 81 lm/W at 16W

#### 30° Horizontal Aiming

Distance			Beam		
D	C	F.C.	L	W	
6	3.5	152	2.1	1.8	
8	4.6	86	2.8	2.4	
10	5.8	55	3.5	3.0	
12	6.9	38	4.2	3.6	

#### 30° Vertical Aiming

Distance			Beam		
D	C	F.C.	L	W	
2	3.5	264	2.2	1.1	
3	5.2	117	3.3	1.6	
4	6.9	66	4.4	2.1	
5	8.7	42	5.6	2.6	



Frame: **3RN**  
 Engine: **C3RA10935SPZ10U**  
 Trim: **C3RACC**

Output lumens: 948lms  
 Input watts: 15.6W  
 CRI: 90 min  
 CCT<sup>1</sup>: 3500K  
 CBCP: 5235cd  
 Beam Angle: 20°

**Efficacy: 60.8lm/w**  
 Report<sup>2</sup>: F041200

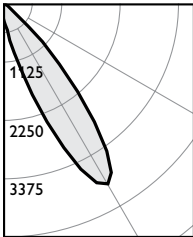
### Spot, 1000lm engine, 61 lm/W at 16W

#### 30° Horizontal Aiming

Distance			Beam		
D	C	F.C.	L	W	
6	3.5	94	2.9	2.4	
8	4.6	53	3.8	3.3	
10	5.8	34	4.8	4.1	
12	6.9	24	5.7	4.9	

#### 30° Vertical Aiming

Distance			Beam		
D	C	F.C.	L	W	
2	3.5	164	3.1	1.4	
3	5.2	73	4.7	2.1	
4	6.9	41	6.2	2.8	
5	8.7	26	7.8	3.5	



Frame: **3RN**  
 Engine: **C3RA10935NFZ10U**  
 Trim: **C3RACC**

Output lumens: 923lms  
 Input watts: 15.6W  
 CRI: 90 min  
 CCT<sup>1</sup>: 3500K  
 CBCP: 4005cd  
 Beam Angle: 23°

**Efficacy: 59.2lm/w**  
 Report<sup>2</sup>: F041203

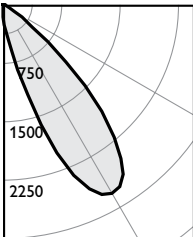
### Narrow Flood, 1000lm engine, 59 lm/W at 16W

#### 30° Horizontal Aiming

Distance			Beam		
D	C	F.C.	L	W	
6	3.5	72	3.3	2.8	
8	4.6	41	4.4	3.8	
10	5.8	26	5.5	4.7	
12	6.9	18	6.6	5.6	

#### 30° Vertical Aiming

Distance			Beam		
D	C	F.C.	L	W	
2	3.5	125	3.7	1.6	
3	5.2	56	5.6	2.4	
4	6.9	31	7.4	3.3	
5	8.7	20	9.3	4.1	



Frame: **3RN**  
 Engine: **C3RA10935NSZ10U**  
 Trim: **C3RACC**

Output lumens: 942lms  
 Input watts: 15.6W  
 CRI: 90 min  
 CCT<sup>1</sup>: 3500K  
 CBCP: 2796cd  
 Beam Angle: 29°

**Efficacy: 60.4lm/w**  
 Report<sup>2</sup>: F041206

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

#### 30° Horizontal Aiming

Distance			Beam		
D	C	F.C.	L	W	
6	3.5	50	4.2	3.6	
8	4.6	28	5.6	4.8	
10	5.8	18	7.1	6.0	
12	6.9	13	8.5	7.2	

#### 30° Vertical Aiming

Distance			Beam		
D	C	F.C.	L	W	
2	3.5	87	5.2	2.1	
3	5.2	39	7.8	3.1	
4	6.9	22	10.4	4.1	
5	8.7	14	12.9	5.2	

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.

