# **Downlighting**

# LIGHTOLIER

## Calculite LED 3"





C3RA Round adjustable accent

Calculite LED 3" 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:		
Туре:		
Qty:		
Mahaa		

Follow the ordering guidelines below. Each step is a separate order line.

Tottow the ordering	Saluctines beton: Euch step is a se	sarate order time.					
Step 1	Frame: Ordered & shipped se	Frame: Ordered & shipped separately.					
	Frame 3R		Example: 4RN				
Step 2	Engine & Trim: Ordered & ship	Engine & Trim: Ordered & shipped as a single product.					
	Engine C3RA	- C3RA	Example: C3RA05940NSZ10US-C3RACC				
Step 3 (optional)	Accessories: Ordered & shipp	ped separately.					
Frame	Note: For remodeler installations, order	light engine and trim only (no frame needed).	example: 3RAS				
Series 3R	Installation	Voltage/Options					
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 C3R	Style	Lumens	CRI/CCT	Beam	Dimming	Options	Voltage	Plenum	
C3R Calculite 3" round light engine	A Adj. Accent	05 500 lm 07 750 lm 10 1000 lm 15 1500 lm <sup>3</sup>	927 90CRI/2700K 930 90CRI/3000K 935 90CRI/3500K 940 90CRI/4000K	/3000K Spot (15°) /3500K SP Spot (20°)	Spot (15°)	<b>Z10</b> 0-10 V 1% <b>L01</b> Lutron PEQ0 EcoSy		U 120 V/277 V 3 347 V (Z10 only) U 120 V/277 V	- Standard
		<b>07</b> 750lm	9D2W 90CRI/ 3000-1800K Specify with new construction (N) frame and 0-10v (Z10) dimming only	D DALI 0.1%  SOL 0-10V 0.1%  DMX Digital Multiplex w/ RDM 0.1%	None LIN Linear None LIN Linear SQR Square	U 120V/277V U 120V/277V			
					E Forward/Reverse F RA Integral Interact Pr	Phase	1 120V U 120V/277V		
		<b>07</b> 750 lm <b>10</b> 1000 lm	927 90 CRI/2700 K 930 90 CRI/3000 K 935 90 CRI/3500 K 940 90 CRI/4000 K	NS Nar. Spot SP Spot NF Nar. Flood FL Flood	Z10 0-10V1%  E Forward/Reverse Ph	None	U 120V/277V 1 120V	R Remodeler <sup>6</sup> S Shallow <sup>2</sup>	











CalculiteLED-3in-AdjAccent-C3RA 10/25 page 1 of 9

# Round adjustable accent

Engine (continued)		Trim	Trim example: C3RACLFLS			xample: C3RACLFLS6010
Optics <sup>7</sup> (choose one)		Series C3R	Style	Reflector	Flange	Optics
MesoOptics optical films	Hex Cell Louver with film	C3R Calculite 3"	A Adjust.	BK Black (anodized)	- White (matte)	MesoOptics
MesoOptics film with holder on TIR optic, order trim with NMO option (no film)	HCL with MesoOptics film and holder on TIR optic, order trim with NMO option (no film)	round trim	ACCENT AP Adjust. Pinhole <sup>8</sup>	CL Specular clear CC Comfort clear CD Comfort clear diffuse	P Matching refl. F Flangeless <sup>9</sup>	- Symmetrical soft focus LS6010 Linear spread
TIR MesoOptics w/Symmetrical soft focus film	HCL Hex cell louver w/Symmetrical soft focus film			CZ Champagne bronze (and WH White (matte)	- White (matte)	60x10 ASY21 Asymmetrical
TIRLS6010 MesoOptics w/Linear spread 60x10 film	HCLLS6010 Hex cell louver w/Linear spread 60x10 film				F Flangeless <sup>9</sup>	21° bend angle - ASY8 Asymmetrical
TIRASY21 MesoOptics	HCLASY21 Hex cell louver			WT Textured white (painted)	P Matching refl. F Flangeless <sup>9</sup>	8° bend angle NMO No MesoOptics
w/Asymmetrical 21° film  TIRASY8 MesoOptics w/Asymmetrical 8° film	w/Asymmetrical 21° film  HCLASY8 Hex cell louver  w/Asymmetrical 8° film			BT Textured black (painted) BZ Bronze (painted) D Alum. diffuse (painted)	<ul> <li>White (matte)</li> <li>Matching refl.</li> <li>F Flangeless<sup>9</sup></li> </ul>	optical film <sup>7</sup>

#### Accessories (order & install separately)

SWCS Interact Ready System Bridge (compatible with 0-10V, see SWCS spec sheet). Requires IRT9015 IR remote & Interact Pro App for commissioning. CAEM6 Field installable Bodine BSL6 6W battery pack with self-test/self-diagnostic for use with new construction frames, 120-277V (see page 3 for details) **CA3RAAFT** Mud-in ring for round flangeless installs (ordered with a flangeless trim) CAEM6TSCP Emergency test switch mounting plate. Must be ordered with EM6 frame for remote test switch (see page 3 for details)

T347-75VA 347:120V step-down transformer for non-IC (N) frame only (see page 3 for details). Not compatible with emergency options.

Upper reflector optics (Additional field-installable optics)

CA3NSSFR 15° Narrow Spot CA3SSFR 20° Spot CA3NFSFR 23° Narrow Flood CA3FLSFR 29° Flood

MesoOptics optical films (for field placement on trim)

CA3RSYM Symmetrical film CA3RLS6010 60x10 Linear spread film Asymmetrical 21° CA3RASY21 bend angle film CA3RASY8

Asymmetrical 8° bend angle film

MesoOptics optical films

(for field placement on TIR optic, includes holder)

TIRCA3RSYM Symmetrical film TIRCA3RLS6010 60x10 Linear Asymmetrical 21° TIRCA3RASY21

bend angle film TIRCA3RASY8 Asymmetrical 8° bend angle film

Hex cell louver / MesoOptics

(for field placement on TIR optic, includes holder)

**CL3HCL** 3" holder/Symmetrical film CL3HCLS6010 3" holder/60x10 Linear spread film

CL3HCLASY21 3" holder/Asymmetrical

21° bend angle film

CL3HCLASY8 3" holder/Asymmetrical 8°

bend angle film

#### 0-10V electrical tables

Light engine	Input volts	Input current	Drive current	Input power
02 405 71011/2	120 V	0.08 A	200 mA	9.5 W
C3_A05_Z10U/3	277 V	0.03 A	200 MA	9.5 W
02 407 71011/2	120 V	0.09 A	250 mA	10.9 W
C3_A07_Z10U/3	277 V	0.04 A	250 MA	10.9 W
02 A070D2W 710U/2	120 V	0.12 A	330 mA	13.6 W
C3_A079D2W_Z10U/3	277 V	0.05 A	330 MA	
02 410 71011/2	120 V	0.13 A	360 mA	15.6 W
C3_A10_Z10U/3	277 V	0.06 A	360 MA	
02 415 71011/2	120 V	0.17 A	500 mA	20.4 W
C3_A15_Z10U/3	277 V	0.07 A	500 MA	
C3_A05_Z10US/3	120 V	0.08 A	000 4	0.434
C3_A05_Z10UR	277 V	0.03 A	220 mA	9.4 W
C3_A10_Z10US/3	120 V	0.12 A	220 4	14 1 14/
C3_A10_Z10UR	277 V	0.05 A	330 mA	14.1 W

## **ELV** electrical tables

Light engine	Input volts	Input current	Drive current	Input power	
C3_A05_E1	120 V	0.08 A	220 mA	0.714	
C3_A05_E1	277 V	0.03 A	220 IIIA	8.7 W	
C3_A07_E1	120 V	0.09 A	250 mA	10.2 W	
C3_A07_E1	277 V	0.04 A	250 IIIA	10.2 W	
C3 A079D2W E1	120 V	0.11 A	330 mA	13.1 W	
C3_A0/9D2W_E1	277 V	0.05 A	330 IIIA		
00 440 54	120 V	0.11 A	350 mA	12.7 W	
C3_A10_E1	277 V	0.05 A	330 IIIA		
C3 A15 E1	120 V	0.17 A	500 mA	19.7 W	
C3_AI5_EI	277 V	0.07 A	500 IIIA		
C3_A05_E1S	120 V	0.08 A	220 mA	0714	
C3_A05_E1R	277 V	0.03 A	220 IIIA	8.7 W	
C3_A10_E1R	120 V	0.11 A	330 mA	13.1 W	
C3_A10_E1S	277 V	0.05 A	330 IIIA	13.1 W	

## Lutron electrical tables

Light engine	Input	Input	Drive current	Input
			ouonc	POWE
C3_A05_LU	120 V	0.07 A	200 mA	8.4 W
C3_A03_L0	277 V	0.03 A	200 IIIA	0.4 W
02 407 111	120 V	0.09 A	250 mA	10.7 W
C3_A07_LU	277 V	0.04 A	250 IIIA	
C3 A079D2W LU	120 V	0.12 A	330 mA	13.0 W
C3_A0/9D2W_L0	277 V	0.05 A	330 IIIA	
C3 A10 LU	120 V	0.13 A	360 mA	15.4 W
C3_AIU_LU	277 V	0.06 A	360 IIIA	
C2 A1E III	120 V	0.17 A	500 mA	19.8 W
C3_A15_LU	277 V	0.07 A	500 mA	19.8 W

## Footnotes for page 1

- Emergency (EM6) frame requires remote mounted test switch. Order CAEM6TSCP mounting plate. Not compatible with 347V.
- Shallow frame requires shallow engine (S).
- The 1500lm (15) option is not available with AirSeal IC (3RA-).
- 4. Not available with 500lm (05) option.

- $5. \ \ \, \text{Linear driver profile, enables wireless connected lighting control (see page 7 for details)}.$
- Specify only with Non-IC (N) frame, not for use with LC or EM6 options.
- For remodeler installations, order light engine and trim only (no frame needed).
- Light engine optics are factory installed and include media holder (order trim with NMO option).

  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.

# 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 D2O 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%
- 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, 0-10V (Z10) dimming only

#### 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.
   Mitigates LED pixilation for a uniform light emitting surface.
- 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.

#### Remodeler Engine (R)

- Remodeler Engine (R)
- · No frame is required.
- Remodeler engine is suited for new construction, remodel, and retrofit applications.
- All wiring is done on the integral j-box to the engine.
- LCEM6 6W battery pack accessory is available for field installation.

#### **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.  $\frac{1}{2}$ " (25mm) hole, 4%" (109mm) x 2%" (69mm) rectangular. Includes two mounting screws.

Flangeless mud-in ring: Use CA3RAAFT for use with flangless 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. Not for use with emergency options.

SWCS: Interact Ready system bridge accessory, requires IRT9015 IR remote and Interact Pro App for commissioning. Refer to SWCS spec sheet for detail.

## 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

## Labels and listings

- · cULus listed for damp locations
- · CEC Title 24 JA8 certified
- · CCEA (frames with \*LC suffix)
- Red List Declare label certified, ID SIG-0021 (View full Declare label)

#### Warranty



5 year limited warranty

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

# Round adjustable accent

# interact

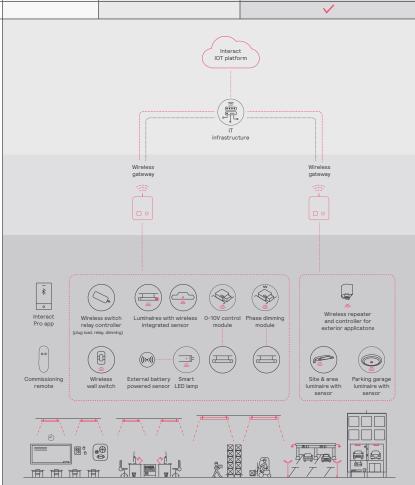
THUCHACU				
			Gatev	vay Connected
		Standalone	Option 1	Option 2
Dimming, grouping, and zoning		<b>~</b>	<b>~</b>	<b>~</b>
Bluetooth and ZigBee enabled		<b>~</b>	<b>~</b>	<b>~</b>
Motion sensing and daylight harvesting		<b>✓</b>	<b>✓</b>	<b>~</b>
Integration with 0-10V and phase dimming fixtures		<b>~</b>	<b>✓</b>	<b>~</b>
Code compliance		<b>~</b>	<b>~</b>	<b>~</b>
Granular dimming and dwell time		<b>~</b>	<b>✓</b>	<b>~</b>
Correlated color temperature (CCT) tuning by switch	New	<b>~</b>	<b>✓</b>	<b>~</b>
Support for sensor-based Tunable White luminaires	New	<b>~</b>	<b>✓</b>	<b>~</b>
Energy reporting and monitoring			<b>✓</b>	<b>~</b>
Scheduling			<b>✓</b>	<b>~</b>
Demand response			<b>✓</b>	<b>~</b>
BMS integration (BACnet)				<b>~</b>
Floor plan visualization				<b>~</b>
IoT sensors for wellness				<b>~</b>
IoT Apps for productivity				<b>~</b>

## 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
Luminaires with integrated sensors	150
Smart TLEDS	150
· Zones + groups	64
Total number of ZGP devices (sensors and switches)	50
Sensors	30
· Switches	50

Group level	
Recommended number of lights	40 (maximum 150)
Number of ZGP devices	5
Number of scenes	16



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# Round adjustable accent

## Wireless controls options

#### Interact

- SWZCS is a connected sensor with integral occupancy and daylight sensing and supports wireless mesh connectivity.
- The sensor works in the standalone mode (similar to SpaceWise) when configured without a gateway or in a cloud connected mode if a compatible gateway is used.
- Interact 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 on-site to identify and group devices together.

#### Compatible with:

- SWS200 & UID8465 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
- LCN3110: battery powered IP65 presence sensor, OCC sensor IA CM IP65W
- LCN3120: battery powered IP65 presence & daylight sensor, OCC-DL sensor IA CM IP65 WH
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

#### Radio only sensor (RA or RADIO)

- Integral RA or RADIO 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.
- Interact 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, identify and group devices together onsite.
- Compatible with SWS200 and UID8465 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).
- For more information on Interact visit: interact-lighting.com/interactproscalablesystem

### Sensor bundle (IAOSB or SB)

- 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 SENSORIA 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.
- IAOSB or SB option in addition to occupancy and daylights 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: interact-lighting.com/interactproscalablesystem

#### **Emergency Options (ER100)**

- 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.

# Wired controls options

### Interact (PoE):

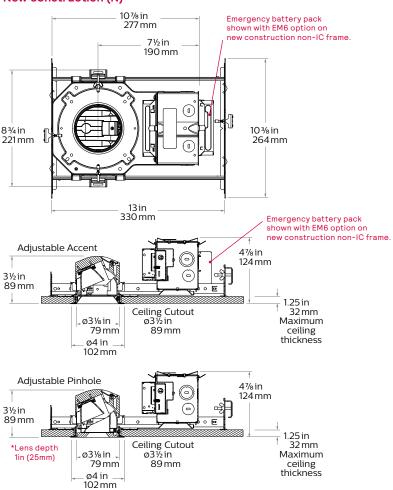
- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Test switch and indicator light mounted on side of chassis on one end.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- 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.
- PoE lighting controller is accessible from below.
- 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: interact-lighting.com/office or www.usa.lighting.philips.com/systems/systemareas/offices

## Interact supported sensor option codes across Genlyte product lines

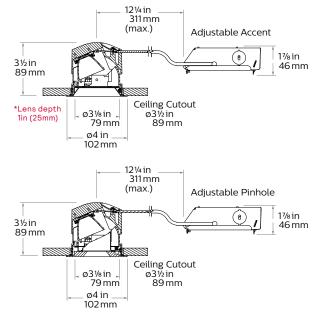
	Evokit	Day-Brite	Ledalite	Lightolier
ZigBee + Bluetooth + Sensing	SWZCS	SWZCS	CS	SBA accessory (external)
ZigBee + Bluetooth	RADIO	RADIO	RA	RA
ZigBee + Bluetooth + Sensing + Environmental data	IAOSB	IAOSB	SB	SB
ZigBee + Highbay + Sensing	-	SWZCSH	-	-

# Round adjustable accent

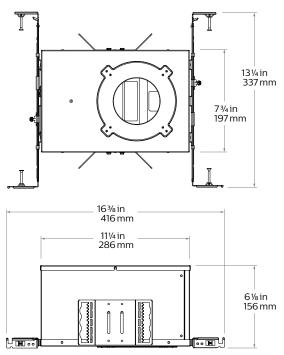
## New construction (N)

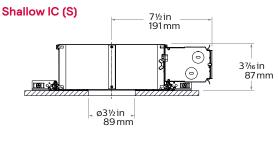


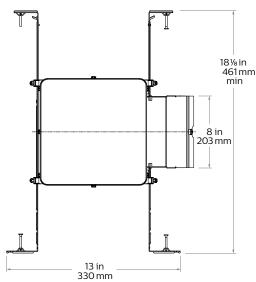
# Remodeler (R)



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

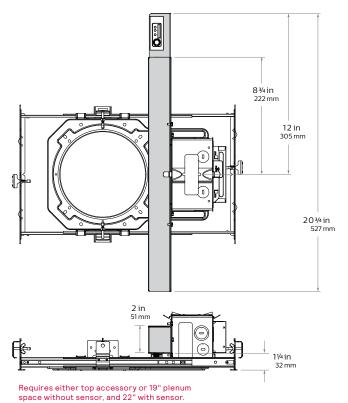




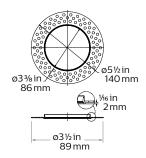


# Round adjustable accent

# Linear driver (RA)



# Flangeless mud-in ring (CA3RAAFT) accessory



# 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.



**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.



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



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



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



**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.



Bronze (BZ): Matte painted finish.



Textured white (WT): 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.

# Round adjustable accent

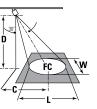
#### Aiming angles

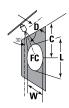
 $\boldsymbol{L}$  and  $\boldsymbol{W}$  are the outer points where the candle power drops to 50% of the maximum. FC are the initial footcandles at the center of the beam. Data shown is for 3000K, use the table on the right for CRI/CCT adjustment factors.



- Beam Width D
- Distance Aiming Angle
- Distance to center beam

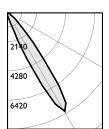
Center Beam Candlepower





#### **Adjustment Factors**

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



Frame: 3RN Engine: C3RA10935NSZ10U Trim: C3RACC

Output lumens: Input watts: 15.6W 90 min CRI: CCT 1: 3500 K CRCP: 8449cd Beam Angle: 15°

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

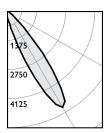
# Narrow Spot, 1000lm engine, 81 lm/W at 16W

٩n٥	Horizo	ntal	Δim	ina

Distance			Bean	n		
D	С	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	С	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: 948 lms 15.6 W Input watts: CRI-90 min CCT1 3500 K CBCP: 5235cd Beam Angle: 20°

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

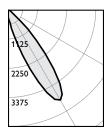
# Spot, 1000lm engine, 61 lm/W at 16W

#### 30° Horizontal Aiming

Distance			Beam	
D	С	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			Bean	1
D	С	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



Engine: C3RA10935NFZ10U Trim: C3RACC

Output lumens: 9231ms Input watts: 15.6 W CRI: 90 min CCT1: 3500 K CBCP: 4005 cd Beam Angle:

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

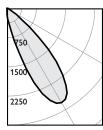
## Narrow Flood, 1000lm engine, 59 lm/W at 16W

#### 30° Horizontal Aiming

Distance			Beam		
D	С	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			Bean	า
D	С	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: 942 lms Input watts: 15.6W CRI: 90 min CCT 1: 3500 K CBCP: 2796 cd Beam Angle: 29°

Efficacy: 60.4 lm/w F041206

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

#### 30° Horizontal Aiming

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

#### 30° Vertical Aiming

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Distance			Beam		
D	С	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\_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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