

LIGHTOLIER

by Signify

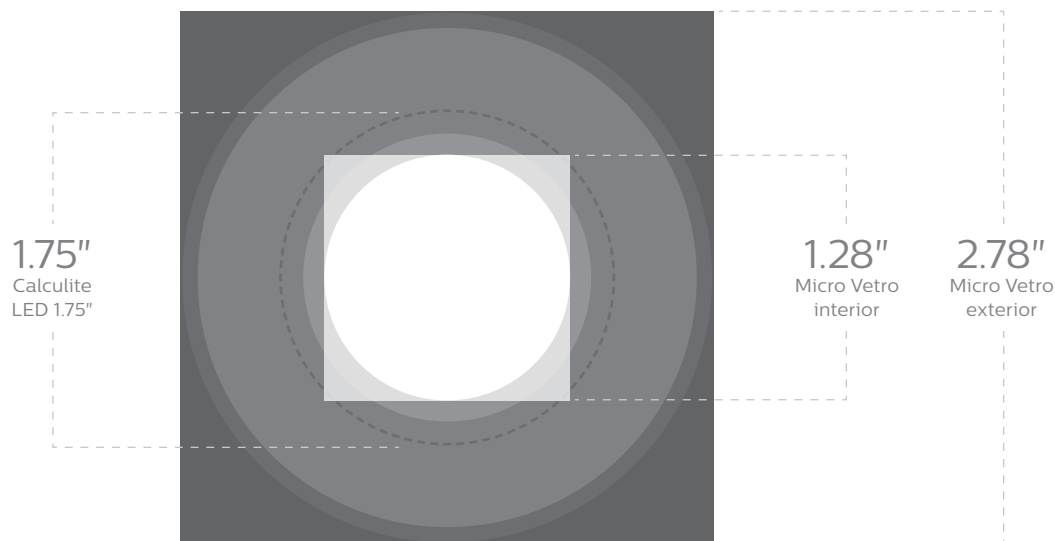
Add style and light
to any space easily

Downlighting

Calculite LED 1.75"
with Micro Vetro







Powerful. Affordable. Versatile.

The Calculite 1.75" downlight is now available with Micro Vetro glass and acrylic element accessories. Light levels from the original aperture range from 400 to 1,000 lumens with input wattages up to 14W. Micro Vetro adds decorative appeal while maintaining architectural output at approximately 80% of the standard trim options.

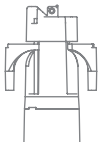
Beam spread options for the standard trims are 25°, 30°, 40°, and 50°. The wall wash option features an integral lens. Add-on optics include a linear spread lens. Micro Vetro decorative elements are optimized for 25° beams.

LED 1.75" with Micro Vetro

Features at a glance



Dual-hinge construction limits required plenum depth to 5.5".



Drive-actuated swing arms. Accommodates 1/8" to 2" thick ceilings.



Color temperatures of 2700K, 3000K, 3500K & 4000K CCT. Field interchangeable optics. Field replaceable LED board. Lifetime of L90 at 66,000 hours (10% light loss after 66,000 hours).



Screws actuate swing arms from below ceiling.



Optional decorative round and square glass elements.



Secure twist and lock reflector.

Wet location rated².

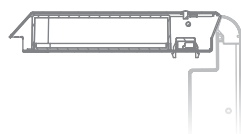
50° cutoff 2 1/8" ceiling cutout (standard hole saw size).

Flanged and flush-mount option.

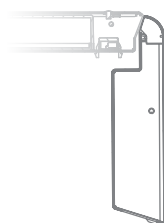


Round acrylic decorative element
Actual size

1. Based on IESNA LM-80-2008
2. Excludes 12° beam



ELV dimming or 0-10V dimming options. Remote driver option.
 50,000 hour rated driver life.
 Field replaceable LED driver.

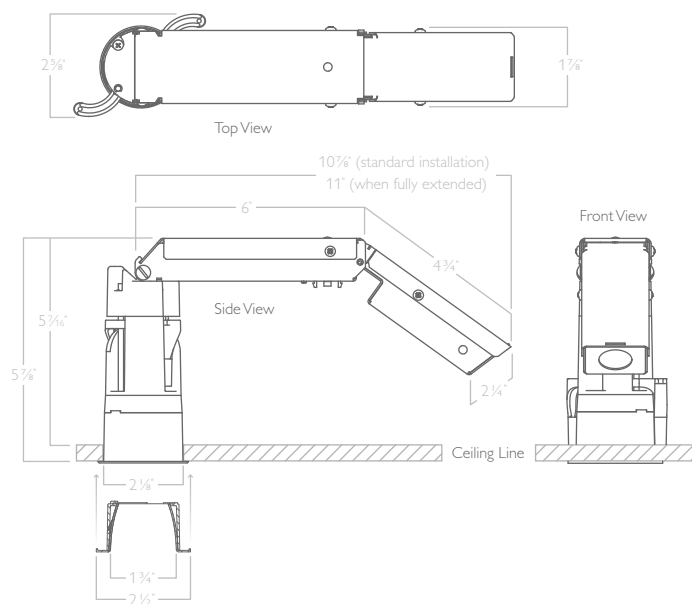


Daisy-chain capable with a standard 2-1 conduit connector.

Calculite LED 1.75"

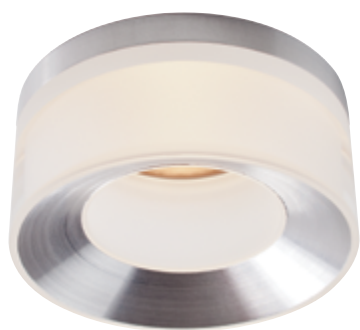
Actual size

Dimensions



LED 1.75" with Micro Vetro

Professional-grade downlighting with decorative round glass elements



D2LR01

Round acrylic
decorative element
with aluminum insert



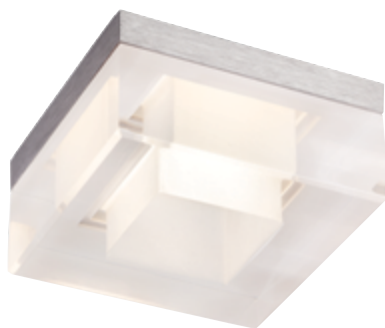
D2LR02

Round acrylic
decorative element



D2LR03

Round glass
decorative element



D2LS01

Square acrylic
decorative element



D2LS02

Square glass
decorative element



LED 1.75" with Micro Vetro

Technical specifications



Color rendering

Calculite LED 1.75" features an 82 CRI typical, 80 CRI minimum (see "R" values below)

RA	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
XX	95.2	98.4	99.0	95.1	95.3	98.0	91.9	82.6	62.7	95.7	97.5	88.1	96.3	99.4
														

While CRI continues to be used as a tool to predict color appearance in objects, the industry understands that CRI is an incomplete metric for many lighting technologies. With LED technology, CRI can be inflated without truly improving the rendering of most colors. Therefore, Calculite's emphasis is the overall color spectrum.

Microstructure lenses

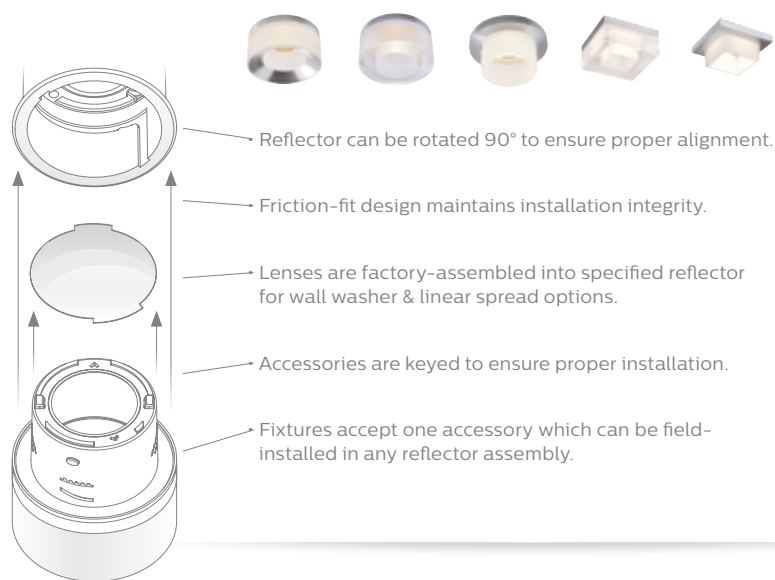
To minimize accessory thickness and thus maximize optical performance, microstructure lenses are utilized in lieu of traditional glass lenses.

Durability

Calculite LED 1.75" fixture operating temperature is well below the recommended thermal limit of each optical accessory, eliminating lens degradation and ensuring maximum optical stability.

Micro Vetro¹

Comfort clear diffuse reflector is standard



1. Compatible with all open and lensed reflectors.
 Other finishes are available.

Performance

Calculite LED 1.75" comparison to MR16 halogen lamping

Though small in aperture, Calculite LED 1.75" performance compares favorably to MR16 halogen alternatives. This comparison is to a magnetic transformer MR16 downlight with a Solite diffusion lens.

Lamping		Beam spread	CBCP	Lumens	Watts	lm/w
Calculite LED 1.75"	(25° option)	25°	1995	382	11	35
35W MR16	(10° lamp)	23°	1491	333	42	8
35W MR16	(24° lamp)	28°	1186	348	42	8
50W MR16	(24° lamp)	27°	1888	511	58	9

LED 1.75" with Micro Vetro

Installation process

Standard product in Non-IC installation

Calculite LED 1.75" is an install-from-below product for either remodel or new construction. The standard product offering is Non-IC, wet location with no additional "frame-in-kit" required. Install as illustrated below:



Insert fixture through 2 1/8" cutout in ceiling. 2 1/8" is standard hole saw size. Hinged design requires only 5 1/2" plenum depth (Non-IC).

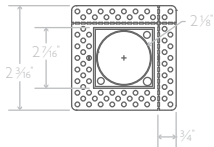
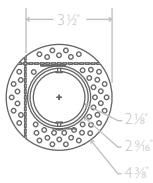
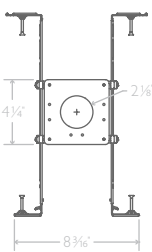
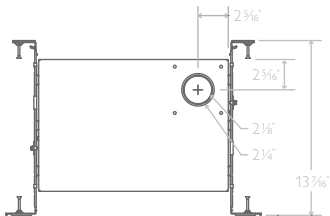


Using screwdriver (electric or manual), rotate installation screws in aperture to actuate pivoting installation arms. Arms will secure fixture directly to ceiling.



Align bumps on reflector housing with grooves in fixture body. Press flush to ceiling and rotate. Slight force is required to overcome initial resistance, ensuring proper installation.

IC and other installation accessories



New construction (enhanced mounting configuration)

- C2LIC** Insulated ceiling (IC) rated new construction frame-in kit. Features an off-center fixture installation point.
- C2LMP** New construction mounting pan provides ability to prelocate wiring for easy below-ceiling access. Includes bar hangers with preset screws which accommodate 12" to 24" joist spacing. Bars also attach to T-bar ceilings. Width: 5.5", Length (min.): 13.12"

Mud rings (for use with flush mount fixtures)

- CA2FMR** Round aperture flush-mount mud-in ring. Recommended for gypsum applications. Perforated flange allows installation only 1.4" from vertical structure, including corners.
- CA2X2FMR** Square aperture flush-mount mud-in ring. Recommended for gypsum applications. Perforated flange allows installation only 1.4" from vertical structure, including corners.

Ordering guide and specifications

A + B or C (optional) + D (if required) = complete unit.

Calculite 1.75" with Micro Vetro is composed of fixture, reflector, decorative element, installation accessories (if required), and microstructure lens (optional)
Calculite LED 1.75" 400lm version is also available, see C2L04 spec sheet for 400lm ordering guide.

A Fixture

Series	Lumen package	Trim flange	Color temp	Beam spread	Installation style	Input voltage
C2L	09	DL			R	
C2L Calculite LED 1.75"	09 900lms	DL Flanged	927K 2700K / 90CRI 930K 3000K / 90CRI 935K 3500K / 90CRI 940K 4000K / 90CRI	25 25° Narrow Spot ¹ 30 30° Spot 40 40° Narrow Flood 50 50° Flood	R Installs from below	1 120V UZ10V Universal with 0-10V dimming
For IC fixture add C2LIC mounting accessory (D).						

B Open and lensed reflectors

Series	Style	Finish	Flange
C2L	DL DLLS LW	BK CCD CCZ WH	P FT
C2L Calculite LED 1.75" Round	Downlight (50° cutoff) Downlight (75° cutoff) w/linear spread lens Lensed wall washer ¹	Black Comfort clear linear diffuse Champagne bronze Painted white	Aperture-matching Flush mount ²
C2X2L Calculite LED 1.75" Square	Downlight (50° cutoff) Lensed wall washer ¹	Black Painted white	Aperture-matching Flush mount ²

C Micro Vetro decorative elements

Series	Style
D2L	
D2L Decorative LED 1.75" Micro Vetro elements	R01 Round acrylic w/aluminum insert R02 Round acrylic R03 Round glass S01 Square acrylic S02 Square glass
Comfort clear diffuse reflector is standard. Compatible with all open and lensed reflectors. Other finishes are available. Please contact factory.	

D Installation accessories³

Cat. no.	Description
C2LIC	IC frame (new construction)
C2LMP	New construction mounting pan
CA2FMR	Round aperture flush-mount mud-in ring
CA2X2FMR	Square aperture flush-mount mud-in ring

1. The 25° beam spread is recommended (A).

2. Requires flush-mount mud-in ring (CA2FMR or CA2X2FMR).

3. Recommended for specific applications, see page 2 for details.

