

COOLEGE™

LIGHTING SYSTEMS



COOLEGE



TRANSFORMING LIGHT

The adoption of LED technology has improved the efficacy, quality, and control of lighting, but has not changed the way illumination is designed and delivered. Lighting continues to be confined to the same bulbs and metal boxes the industry has used since its inception.

**COOLEGE FUNDAMENTALLY
CHANGES THIS PARADIGM**

COOLEGE REINVENTS
THE WAY ILLUMINATION
IS DESIGNED AND
CONTROLLED BY:

- Transforming light from points and lines to seamless integration into all forms and scale of the built environment
- Delivering immersive illumination that replicates natural light and provides the optimal platform for tailored environments
- Leveraging the pervasive nature of luminous surfaces to deliver intelligent controls that provide a range of visual, biological, and emotional benefits
- Supporting interactive and connected interfaces that can provide user control of timing, color temperature, room, or situation





Edmunds.com
Fotoworks

LUMINOUS SURFACES FOR
ILLUMINATION MUST BE:

SEAMLESS

- UNIFORM
- CONSISTENT
- CONTINUOUS

to blend with the
surrounding architecture
without visual distraction

ADAPTABLE

- CUTTABLE
- FLEXIBLE
- DIMMABLE/TUNABLE

to accommodate parametric
forms, shapes, and curves
and create a variety of
illuminated environments



Acne Studios



McGuire Woods
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INTEGRAL

- THIN
- LIGHTWEIGHT
- NO HEAT SINK REQUIRED

to optimize space and accommodate new approaches to architectural design

LUMINOUS SURFACES FOR ILLUMINATION MUST BE:

SCALABLE

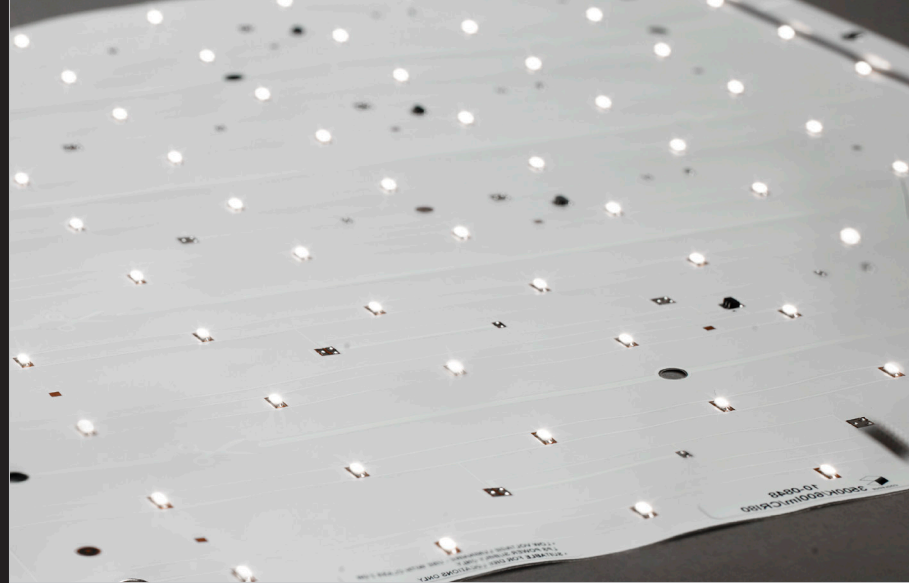
- MODULAR
- SIMPLE
- REPEATABLE

to create illuminated spaces that are expansive in a way that is both natural and inviting



Taser
Aaron Leitz Photography

TILE INTERIOR

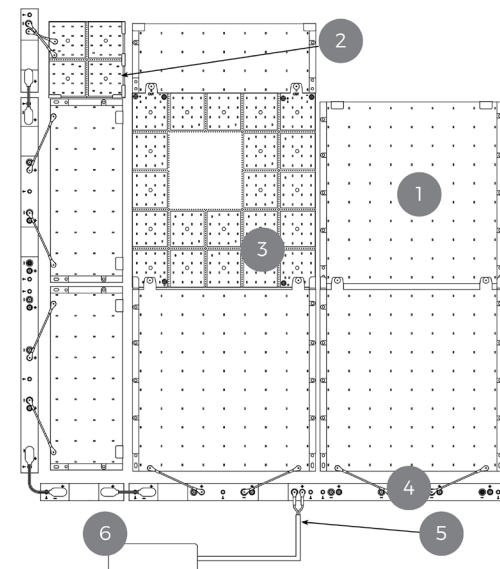


Create luminous ceilings, feature walls, and large graphic displays with Cooledge TILE Interior lighting systems.

FEATURES

- Three choices of constant lumen output ensure consistent highly calibrated illumination
- Color consistency of typically 2 SDCM between TILES meets stringent requirements for large area installations
- Cut-to-fit means systems are adaptable to any size installation and can accommodate obstacles and shapes
- Constant voltage electrical architecture is fully scalable without loss of performance or need to reconfigure drivers
- Low setback distances, flexibility, and no requirement for a heat sink enable optimal integration into luminous surfaces
- Multiple options for dimming, lumens, and CCT offer the most adaptable illumination for large surface areas available today
- Mounts directly to most common non-conductive construction materials (eg. drywall, plywood)

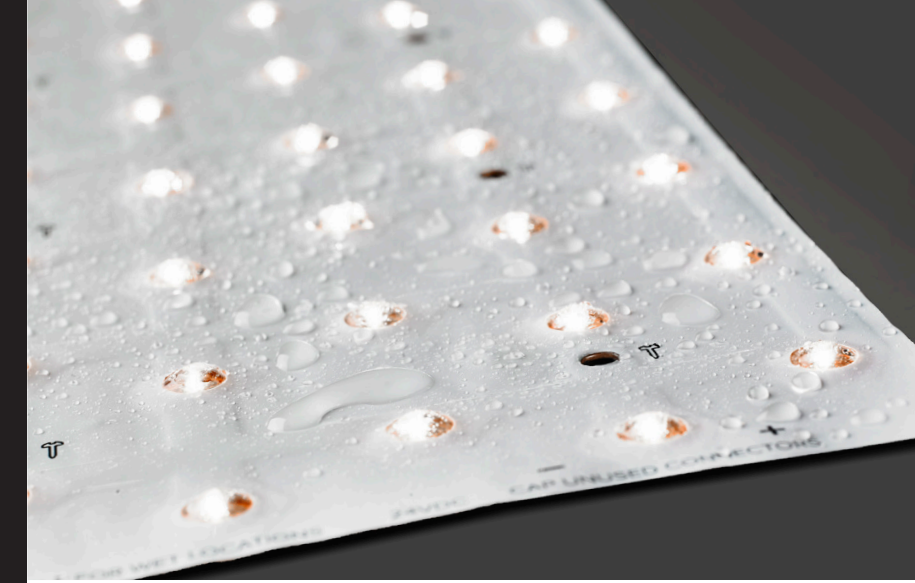
SYSTEM OVERVIEW



- 1 TILE Interior
- 2 TILE Interior Corner Kit (optional)
- 3 TILE Interior Cut-out Kit (optional)
- 4 TILE Interior Connector Kit
- 5 TILE Interior Starter Cable
- 6 LED Driver

- INCLUDED**
TILE Interior Installation Kit
- ALSO AVAILABLE**
Extension Cable

TILE EXTERIOR

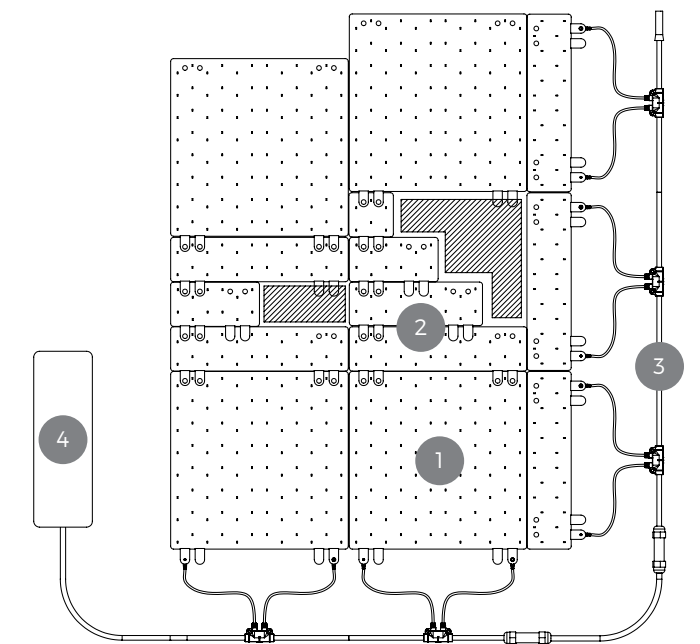


Illuminate facades, canopies, entrances and large-scale graphics.

FEATURES

- The entire TILE Exterior system including light sheets, connectors, cables, and LED drivers is rated for wet location environments
- “True-Temp” optics ensure minimal CCT shift from the rated color temperature of the LEDs for five available choices
- Proprietary waterproof snap connectors maintain the simplicity of tool-less connections unique to Cooledge TILE products
- Field configurable to manage obstacles such as standoffs and conform to shapes and unusual dimensions where necessary
- Constant lumen output and high color consistency ensure seamless illumination through exterior surface materials

SYSTEM OVERVIEW



- 1 TILE Exterior
- 2 TILE Exterior Fit 1, 2, 3, 4 (optional)
- 3 TILE Exterior Starter Cable
- 4 LED Driver

- ALSO AVAILABLE**
TILE Exterior Fit Kit

TILE TUNABLE WHITE

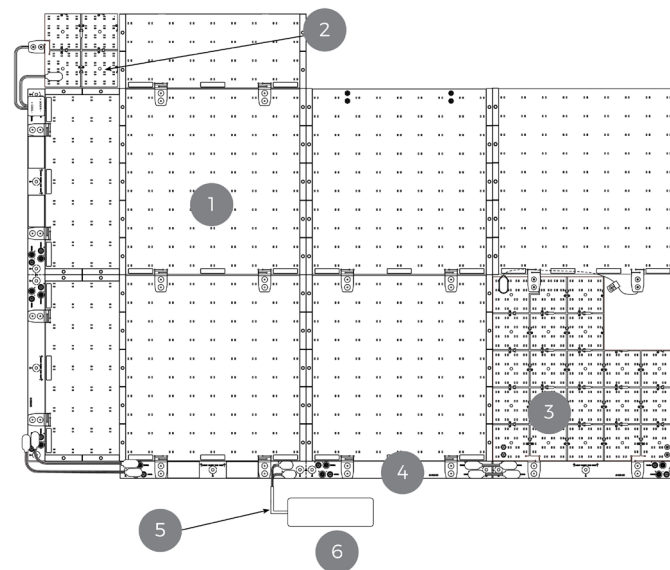


Replicate natural light both in scale and through dynamic changes in color temperature.

FEATURES

- Unique system design provides constant lumen output at all CCTs in the range 2700K-5700K and at all dimming levels
- Two control channels allow dimming and CCT tuning on simple control interfaces or as input from building controls systems
- Uniquely suited for installations requiring high CRI such as retail and hospitality
- Cut-to-fit means systems are adaptable to any size installation and can accommodate obstacles and shapes
- Deep dimming capability down to 0.05% light output

SYSTEM OVERVIEW



- 1 TILE Tunable White
- 2 TILE Tunable White Corner Kit (optional)
- 3 TILE Tunable White Cut-out Kit (optional)
- 4 TILE Tunable White Connector Kit
- 5 TILE Tunable White Starter Cable
- 6 LED Driver

LINE

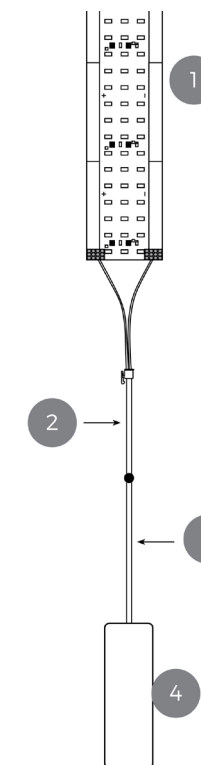


Create low profile linear accents with Cooledge LINE products.

FEATURES

- Available in two widths with three light output options that are dimmable to 1% light output
- The close spacing of LEDs allows for small setback distances (to <math>< 1\text{''}/25\text{mm}</math>) when used with diffusers delivering high quality illumination where light levels are an important design consideration
- Delivered in standard lengths that can be adapted to field conditions and still meet all of the required performance specifications and reliability needs of each application
- Flexible to conform to curved surfaces and unique geometries
- Suitable for mounting directly to common millwork, cove, and slot materials

SYSTEM OVERVIEW



- 1 LINE
- 2 LINE Starter Cable
- 3 LINE Extension Cable (optional)
- 4 LED Driver

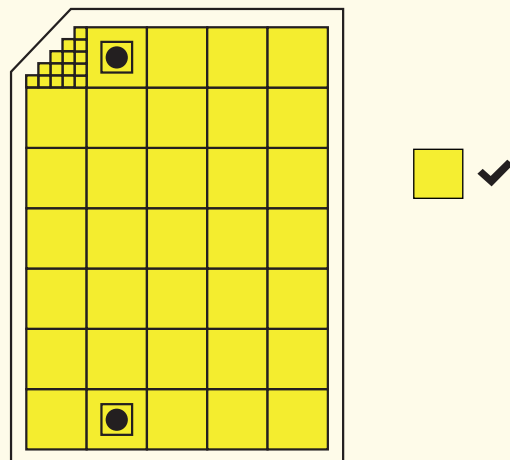
COOLEGE ADVANTAGES



CONSTANT VOLTAGE

DELIVERS uniform illuminations regardless of size & scale.

CONSISTENT LIGHT OUTPUT:



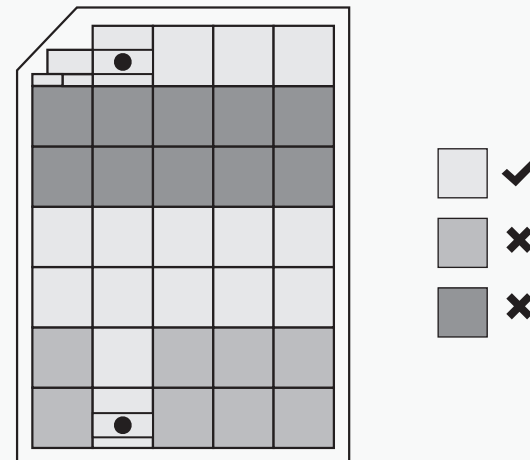
Cooledge constant voltage design ensures that illumination is always uniform and consistent, independent of the size of the electrical load connected to the LED driver.

For instance, the same LED driver can power a single TILE or more than 50 TILES. This electrical architecture also means that any layout changes made to meet site conditions will not require the resizing of power sources.

CONSTANT CURRENT

REQUIRES substantial design and installation effort to prevent inconsistent results.

INCONSISTENT LIGHT OUTPUT:



By comparison, constant current products must be configured specifically to the quantity of LEDs per driver to offer this same level of uniformity. If there are any changes required at the time of installation or if there is high variability in the turn-on voltage of the LEDs, constant current products require complex calculations on-site and re-configuration of the current value to maintain uniform performance across the installation.

If not configured correctly, the result will be visible intensity variations. Such constant current approaches are particularly challenging for large installation with abstract shapes and many drivers.

PROPERTY		COOLEGE	OTHER LIGHT SHEETS	EDGE LIT PANELS	LINEAR
SEAMLESS	Uniform	✓✓	✓✓	✓✓	✓
	Consistent	✓✓	✗	✓	✓
	Continuous	✓✓	✓	✗	✗
ADAPTABLE	Cuttable	✓✓	✓✓	✗	✓✓
	Flexible	✓✓	✓✓	✗	✓✓
	Dimmable	✓✓	✓	✓	✓✓
	Tunable	✓✓	✗	✓	✓
SCALABLE	Modular	✓✓	✓	✗	✓
	Simple	✓✓	✓	✓	✓
	Repeatable	✓✓	✓	✓	✓
INTEGRAL	Thin	✓✓	✓✓	✓✓	✓✓
	Lightweight	✓✓	✓✓	✗	✓✓
	Formable	✓✓	✓✓	✗	✓✓
	No Heat Sink	✓✓	✓✓	✓✓	✓
	Integrated Solutions	✓✓	✗	✗	✗

IN ADDITION TO THE PERFORMANCE ADVANTAGES (CITED ABOVE), COOLEGE'S SURFACE ILLUMINATION PRODUCTS HAVE THE FOLLOWING BENEFITS:

QUALITY

The company's products are individually inspected, subjected to burn-in tests, and optically measured to meet rigorous quality specifications

SUSTAINABILITY

The company's technology architecture operates LEDs at low power to minimize heat generation and maximize efficiency, meeting stringent energy standards and reducing the burden on HVAC systems

DIFFUSION MATERIALS

Cooledge's surface illumination portfolio can be combined with almost any light-transmitting material to create luminous surfaces in any shape or form

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