**TECH LIGHTING®**

Unilume LED Lighting Systems

## Redefining Undercabinet, Task & Cove Lighting

Undercabinet, task and cove lighting were some of the first applications to go LED. Since that time, there has been little innovation. Many LED products were designed around traditional hardware and discrete white LEDs. The result: Hot Spots. Glare. Multiple surface shadows. Inconsistent color reproduction. Poor or non-existent dimming. Unattractive housings.

**Until now.** Tech Lighting's Unilume LED Lighting Systems are designed specifically to address the shortcomings of existing LED solutions. By utilizing tightly clustered blue LEDs, optimized light mixing chambers and Intematix ChromaLit™ remote phosphor, the result is incredibly consistent illumination and high efficiency within an ultra-low profile.

## The Possibilities are Endless

The Unilume LED Lighting Systems lineup features a collection of products that can accommodate countless unique applications. Perfect for home, office, retail displays, accent lighting and more. We are confident lighting designers and home owners alike are more empowered than ever to put light exactly where they need it. Unilume systems are designed to melt into architecture, leaving only consistent, beautiful white light behind. Although there are thousands of creative uses for Unilume systems, below you will find a short list of industries that are sure to benefit from it:

Airports, Assisted Living, Custom Closets, Display/ POP, Healthcare, Hotels, Libraries, Museums/Galleries, Offices/Cubicles, Residential, Restaurants/Bars, Retail, Schools, Universities

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## UNILUME LED SLIMLINE

## UNILUME LED DIRECT WIRE

Offers a class-leading combination of performance and aesthetics due to its powerful, uniform light output and diverse offering of fixture options. Ideal for undercabinet and under-shelf.

Unilume LED Direct Wire offers a class-leading combination of reliability and performance with its commercial-grade construction and powerful, consistent light output. Ideal for undercabinet and under-shelf.

| | | | | |
|---|---|---|---|---|
| PRODUCT DEPTH | 0.74" | | PRODUCT DEPTH | 1.25" |
| PRODUCT WIDTH | 2.80" | | PRODUCT WIDTH | 3.73" |
| PRODUCT LENGTHS | 7", 13", 19", 30" | | PRODUCT LENGTHS | 7", 13", 19", 30" |
| WATTAGE | 4.0, 8.5, 10.5, 18.0 | | WATTAGE | 4.0, 8.5, 10.5, 18.0 |
| LUMENS PER WATT | 54, 51, 61, 61 | | LUMENS PER WATT | 54, 51, 61, 61 |
| LUMENS PER FOOT | ~430 | | LUMENS PER FOOT | ~430 |
| COLOR TEMPERATURES | 2700K, 3000K | | COLOR TEMPERATURES | 2700K, 3000K |
| CRI OPTIONS | 80+, 90+ | | CRI OPTIONS | 80+, 90+ |
| POWER FACTOR | 0.94 | | POWER FACTOR | 0.94 |
| INPUT POWER | 120V | | INPUT POWER | 120V |
| DIMMER TYPE | ELV | | DIMMER TYPE | ELV |
| DIMMING RANGE | To 5%-15% Depending on Dimmer | | DIMMING RANGE | To 5%-15% Depending on Dimmer |
| UNIT TO UNIT CONNECTORS | Jumper Connectors | | UNIT TO UNIT CONNECTORS | Contractor Supplied |
| ON/OFF SWITCH | Integrated | | ON/OFF SWITCH | Integrated |
| OCCUPANCY SENSOR | N/A | | OCCUPANCY SENSOR | Optional |
| FIELD-CUTTABLE | N/A | | FIELD-CUTTABLE | N/A |
| MAXIMUM RUN LENGTH | 70 feet | | MAXIMUM RUN LENGTH | 70 feet |
| MOUNTING METHOD | Wood Screws | | MOUNTING METHOD | Wood Screws |
| INSTALLABLE ANGLES | Flush | | INSTALLABLE ANGLES | Flush |
| HOUSING COLORS | White, Black | | HOUSING COLORS | White, Black |
| REMOTE PHOSPHOR COLOR IN OFF-STATE | Yellow | | REMOTE PHOSPHOR COLOR IN OFF-STATE | Yellow |
| WARRANTY | 5 years | | WARRANTY | 5 years |

SHOWN OFF

SHOWN OFF

## UNILUME LED LIGHT BAR

Unilume LED Light Bar offers the best combination of compact size, performance and versatility. It's unique snap-together design allows for long runs of uninterrupted, uniform light. Ideal for display and cove.

## UNILUME LED MICRO CHANNEL

Unilume LED Micro Channel's compact size and superior light performance combine with onsite length customization for applications where custom length, end-to-end illumination are crucial. Ideal for cove, wall grazing and display.

| | | | |
|---|---|---|---|
| PRODUCT DEPTH | 0.68" | PRODUCT DEPTH | 0.85" |
| PRODUCT WIDTH | 1.13" | PRODUCT WIDTH | 1.02" |
| PRODUCT LENGTHS | 7", 13", 19" | PRODUCT LENGTHS | 12", 24", 48" |
| WATTAGE | 4.0, 8.0, 12.0 | WATTAGE | 3.0, 6.0, 12.0 (300) 6.0, 12.0, 24.0 (600) |
| LUMENS PER WATT | 65 | LUMENS PER WATT | 100 (est.) |
| LUMENS PER FOOT | 520 | LUMENS PER FOOT | 300, 600 |
| COLOR TEMPERATURES | 2700K, 3000K | COLOR TEMPERATURES | 2400K, 3000K, 3500K, 4,000K |
| CRI OPTIONS | 80+, 90+ | CRI OPTIONS | 80+ |
| POWER FACTOR | 0.95 | POWER FACTOR | 0.95 |
| INPUT POWER | 24V DC | INPUT POWER | 24V DC |
| DIMMER TYPE | ELV | DIMMER TYPE | ELV |
| DIMMING RANGE | To 5%-15% Depending on Dimmer | DIMMING RANGE | To 5%-15% Depending on Dimmer |
| UNIT TO UNIT CONNECTORS | End-to-End or Jumper Connectors | UNIT TO UNIT CONNECTORS | Jumper Connectors |
| ON/OFF SWITCH | N/A | ON/OFF SWITCH | N/A |
| OCCUPANCY SENSOR | N/A | OCCUPANCY SENSOR | N/A |
| FIELD-CUTTABLE | N/A | FIELD-CUTTABLE | 3" increments (end of run) |
| MAXIMUM RUN LENGTH | 40 feet | MAXIMUM RUN LENGTH | 40 feet |
| MOUNTING METHOD | Wood Screws | MOUNTING METHOD | Wood Screws/ Adhesive |
| INSTALLABLE ANGLES | Flush, 30°, 45°, 90° | INSTALLABLE ANGLES | Flush, 30°, 45°, 90° |
| HOUSING COLORS | White, Black | HOUSING COLORS | Aluminum |
| REMOTE PHOSPHOR COLOR IN OFF-STATE | Yellow | REMOTE PHOSPHOR COLOR IN OFF-STATE | White |
| WARRANTY | 5 years | WARRANTY | 5 years |

# OPTIMAL APPLICATION GUIDE

| APPLICATIONS | UNILUME LED SLIMLINE | UNILUME LED DIRECT WIRE | UNILUME LED LIGHT BAR | UNILUME LED MICRO CHANNEL |
|---|---|---|---|---|
| Undercabinet/ Shelves – Residential | ••• | ••• | •• | • |
| Undercabinet/Industrial/ Shelves – Office | •• | ••• | •• | • |
| Undercabinet/ Shelves – Cubicle | ••• | ••• | • | • |
| Cove | | | •• | ••• |
| Toe Kick | | | •• | ••• |
| Wall Graze | | | •• | ••• |
| Display – Retail/POP | • | • | •• | ••• |
| Display – Signage/Backlighting | | | ••• | ••• |



Airports
Assisted Living
Custom Closets
Display/POP
Healthcare
Hotels
Libraries

Museums/Galleries
Offices/Cubicles
Residential
Restaurants/Bars
Retail
Schools
Universities

# WHAT IS REMOTE PHOSPHOR TECHNOLOGY?

Most white LEDs are actually blue LEDs with a phosphor coating. The phosphor absorbs the blue light and re-emits the photons at longer wavelengths which we perceive as white light. In most lighting applications, the phosphor is directly on the LED chip; and this is the right approach for many applications. However, by utilizing a remote phosphor solution – a linear phosphor lens that sits above the LEDs – we are able to achieve-performance levels and consistency not possible with traditional LED linear solutions.

REMOTE PHOSPHOR LENS

MIXING CHAMBER

BLUE LEDS
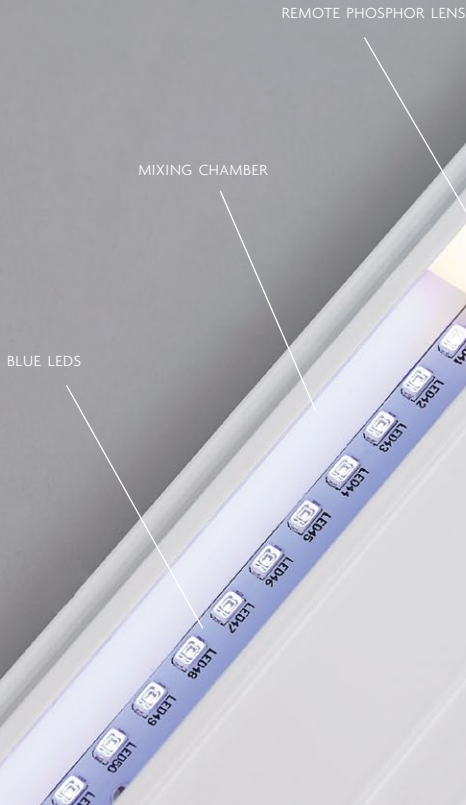
|                          |       |                        |
|--------------------------|-------|------------------------|
| TECH LIGHTING UNILUME LED | VS.   | TYPICAL LED SOLUTION   |

## REMOTE PHOSPHOR SOLUTION

Because the entire remote phosphor lens illuminates, we are able to achieve an extremely consistent and even wash of light. This is both attractive and easier on the eyes.

Discrete LEDs spaced several inches apart. Each LED appears extremely glary. Unattractive dots of light appear on any reflective surface.

## ELIMINATES DISTRACTING 'MULTI-SHADOWS'

Because the entire remote phosphor lens is illuminated, multiple shadows are not produced.

Each point source of light hits an object at a different angle and creates a shadow at that angle. For every LED, a unique shadow is created.

## WIDE BEAM DISTRIBUTION

The entire phosphor lens is illuminated and sits at the surface of the housing creating a much wider beam distribution. This makes it possible to use fewer units spread at greater distances with more even output over the entire space.

LEDs are typically recessed into the housing or hidden behind a diffusing lens. This causes light cut-off at the edges.

## COLOR CONSISTENCY OVER TIME

The phosphor sits away from the LED and remains cooler over time. Therefore the phosphor does not experience the same level of degradation.

Overtime, LEDs can experience some level of color shift. This is caused in large part by the degradation of the phosphor that sits directly on the LED due to heat coming directly off the LED.

## HIGH EFFICIENCY

With the remote phosphor lens, we do not need a secondary diffusing lens. This helps us achieve greater lumens per watt.

In order to minimize glare created by individual LEDs, most traditional products utilize a diffusing lens. This typically creates an efficiency loss of 15% to 35%. In fixtures without a diffusing lens, high efficiency is sometimes achieved at the cost of significant glare.

UNILUME GIVES CONSISTENT, EVEN ILLUMINATION
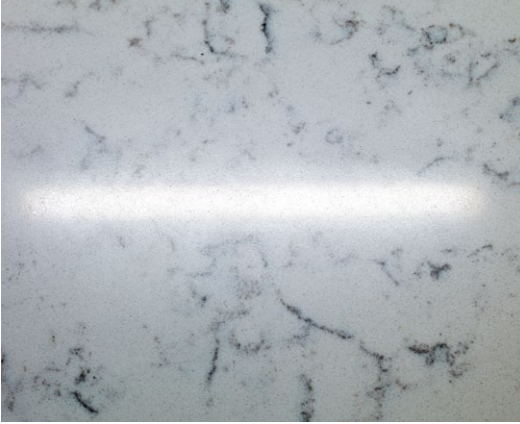
TYPICAL LED SYSTEMS

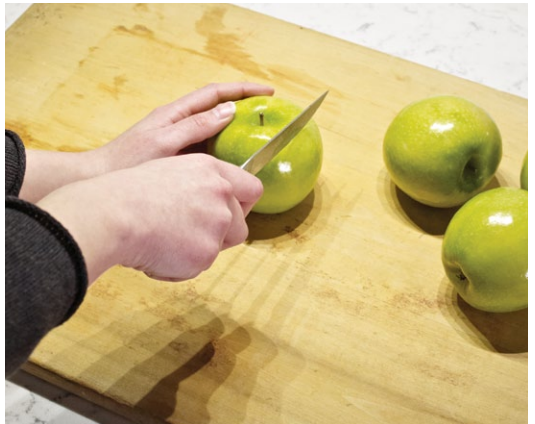UNILUME ELIMINATES DISTRACTING 'MULTI-SHADOWS' IN RETAIL

TYPICAL LED SYSTEMS

UNILUME ELIMINATES DISTRACTING 'MULTI-SHADOWS' IN TASK

TYPICAL LED SYSTEMS

# UNILUME LED SLIMLINE

For undercabinet and task applications where a 120V input is desirable, Unilume LED Slimline offers a class-leading combination of performance and versatility. With four convenient lengths, the ability to power up to 70 linked units from a single outlet, a standard on/off switch, a reliable integrated driver, and color temperature/CRI options; Unilume LED Slimline is perfect for residential or commercial use.

REMOTE PHOSPHOR LENS
(SHOWN OFF)

MOUNTING HOLES

INTEGRATED
ON/OFF SWITCH

DIE-CAST END-CAPS

SLIMLINE DESIGN

JUMPER CONNECTION PORTS ARE LOCATED ON
EACH END OF THE HOUSING
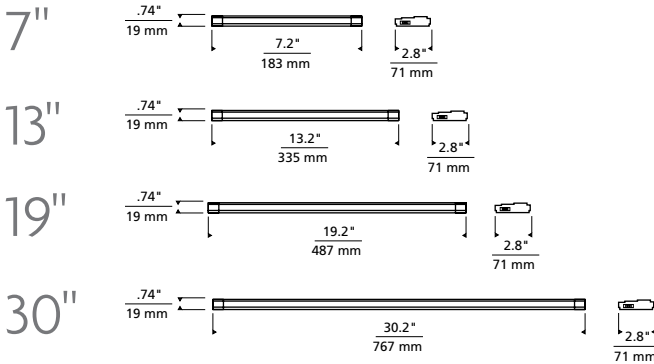(SHOWN WITHOUT FINISHING CAP)

# UNILUME LED SLIMLINE

WHITE
(SHOWN OFF)

BLACK
(SHOWN ON)

## AVAILABLE SIZES

**7"**
.74" / 19 mm
7.2" / 183 mm
2.8" / 71 mm

**13"**
.74" / 19 mm
13.2" / 335 mm
2.8" / 71 mm

**19"**
.74" / 19 mm
19.2" / 487 mm
2.8" / 71 mm

**30"**
.74" / 19 mm
30.2" / 767 mm
2.8" / 71 mm

## ACCESSORIES

Splice Box
Cord with Plug
Jumper Connectors
T-Connector
Female/Female Connector

For Unilume Accessory ordering grids, please see techlighting.com

| 700UCF | LENGTH | CRI | COLOR TEMPERATURE | FINISH | LAMP TYPE |
|---|---|---|---|---|---|
| | **07** 7.2" | **8** 80+ | **2** 2700K | **B** BLACK | **-LED** LED |
| | **13** 13. 2" | **9** 90+ | **3** 3000K | **W** WHITE | |
| | **19** 19.2" | | | | |
| | **30** 30.2" | | | | |

## TECHNICAL SPECIFICATIONS

| | 7" length | 13" length | 19" length | 30" length |
|---|---|---|---|---|
| SYSTEM POWER | 4.0 watts | 8.5 watts | 10.5 watts | 18.0 watts |
| SYSTEM EFFICACY | 54 lms/watt | 51 lms/watt | 61 lms/watt | 61 lms/watt |
| LUMENS PER FOOT | ~430 | ~430 | ~430 | ~430 |
| COLOR TEMPERATURES | 2700K, 3000K | 2700K, 3000K | 2700K, 3000K | 2700K, 3000K |
| COLOR RENDERING INDEX | 80+, 90+ | 80+, 90+ | 80+, 90+ | 80+, 90+ |
| POWER FACTOR | 0.94 | 0.94 | 0.94 | 0.94 |
| INPUT POWER | 120V | 120V | 120V | 120V |
| DIMMING | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer |
| WARRANTY | 5 years | 5 years | 5 years | 5 years |

# UNILUME LED DIRECT WIRE

For undercabinet and task applications where 120V input is desirable, Unilume LED Direct Wire offers a class-leading combination of performance and versatility. With four convenient lengths, the ability to power up to 70 linked units from a power connection, a standard on/off switch, a reliable integrated driver, an optional occupancy sensor and color temperature/CRI options; Unilume LED Direct Wire is perfect for residential or commercial use.

TOOL-FREE WIRING ACCESS WITH MAGNETIC LID
SHOWN WITH OCCUPANCY SENSOR

REMOTE PHOSPHOR LENS
(SHOWN OFF)

INTEGRATED
ON/OFF SWITCH

COMMERCIAL-GRADE
CONSTRUCTION

MOUNTING HOLES

WIRING KNOCK-OUTS
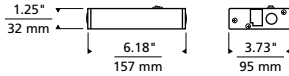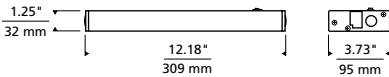(SHOWN KNOCKED OUT)

# UNILUME LED DIRECT WIRE

WHITE
(SHOWN OFF)

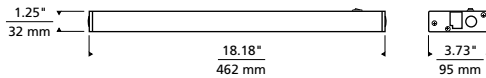WHITE WITH
OCCUPANCY SENSOR
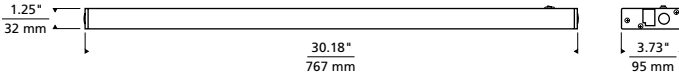(SHOWN ON)

## AVAILABLE SIZES

**7"**

1.25" / 32 mm

6.18" / 157 mm

3.73" / 95 mm

**13"**

1.25" / 32 mm

12.18" / 309 mm

3.73" / 95 mm

**19"**

1.25" / 32 mm

18.18" / 462 mm

3.73" / 95 mm

**30"**

1.25" / 32 mm

30.18" / 767 mm

3.73" / 95 mm

**700UCFDW**

| LENGTH | CRI | COLOR TEMPERATURE | FINISH | LAMP TYPE | OCCUPANCY SENSOR |
|---|---|---|---|---|---|
| **07** 7.2"<br>**13** 13.2"<br>**19** 19.2"<br>**30** 30.2" | **8** 80+<br>**9** 90+ | **2** 2700K<br>**3** 3000K | **B** BLACK<br>**W** WHITE | **-LED** LED | NONE<br>**-OCS** WITH OCCUPANCY SENSOR* |

* INTEGRATED OCCUPANCY SENSOR ONLY AVAILABLE ON 13", 19" AND 30"

## TECHNICAL SPECIFICATIONS

|  | 7" length | 13" length | 19" length | 30" length |
|---|---|---|---|---|
| **SYSTEM POWER** | 4.0 watts | 8.5 watts | 10.5 watts | 18.0 watts |
| **SYSTEM EFFICACY** | 54 lms/watt | 51 lms/watt | 61 lms/watt | 61 lms/watt |
| **LUMENS PER FOOT** | ~430 | ~430 | ~430 | ~430 |
| **COLOR TEMPERATURES** | 2700K, 3000K | 2700K, 3000K | 2700K, 3000K | 2700K, 3000K |
| **COLOR RENDERING INDEX** | 80+, 90+ | 80+, 90+ | 80+, 90+ | 80+, 90+ |
| **POWER FACTOR** | 0.94 | 0.94 | 0.94 | 0.94 |
| **INPUT POWER** | 120V | 120V | 120V | 120V |
| **DIMMING** | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer |
| **WARRANTY** | 5 years | 5 years | 5 years | 5 years |

# UNILUME LED LIGHT BAR

For undercabinet, task, display and cove applications where space is limited but performance is crucial, Unilume LED Light Bar offers the best combination of compact size, performance and versatility. Unilume LED Light Bar's ultra slim housing design and unique snap-together connectors allow for forty feet of uninterrupted, uniform light without the use of wire jumpers. With three convenient lengths, two color temperature options, two CRI options, two finish colors and several accessories; customizing a Unilume LED Light Bar for one-of-a-kind applications is easy.

STANDARD END-TO-END CONNECTIONS
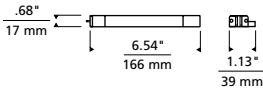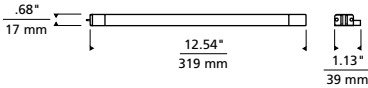
REMOTE PHOSPHOR LENS (SHOWN OFF)

ULTRA-SLIM PROFILE

HEAVY-DUTY ALUMINUM HOUSING

SNAP-TOGETHER END-TO-END CONNECTIONS

# UNILUME LED LIGHT BAR

BLACK
(SHOWN OFF)

BLACK
(SHOWN ON)

## AVAILABLE SIZES

**7"**
.68"
17 mm
6.54"
166 mm
1.13"
39 mm

**13"**
.68"
17 mm
12.54"
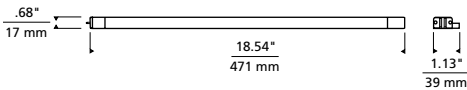319 mm
1.13"
39 mm

**19"**
.68"
17 mm
18.54"
471 mm
1.13"
39 mm

## ACCESSORIES

Transformer
(Remote or plug-in)
Power Feed
Jumper Connectors
Mounting Brackets (30°, 45°, 90°)
L-Connector
T-Connector

For Unilume Accessory
ordering grids, please see
techlighting.com

| 700UCRD | LENGTH | CRI | COLOR TEMPERATURE | FINISH | LAMP TYPE |
|---------|--------|-----|-------------------|--------|-----------|
| | **07** 7" | **8** 80+ | **27** 2700K | **B** BLACK | **-LED** LED |
| | **13** 13" | **9** 90+ | **30** 3000K | **W** WHITE | |
| | **19** 19" | | | | |

## TECHNICAL SPECIFICATIONS

| | 7" length | 13" length | 19" length |
|---|---|---|---|
| SYSTEM POWER | 4.0 watts | 8.0 watts | 12.0 watts |
| SYSTEM EFFICACY | 65 lms/watt | 65 lms/watt | 65 lms/watt |
| LUMENS PER FOOT | 520 | 520 | 520 |
| COLOR TEMPERATURES | 2700K, 3000K | 2700K, 3000K | 2700K, 3000K |
| COLOR RENDERING INDEX | 80+, 90+ | 80+, 90+ | 80+, 90+ |
| POWER FACTOR | 0.95 | 0.95 | 0.95 |
| INPUT POWER | 24V DC | 24V DC | 24V xDC |
| DIMMING | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer |
| WARRANTY | 5 years | 5 years | 5 years |

# UNILUME LED
# MICRO CHANNEL

Unilume LED Micro Channel was specifically developed for applications where custom length, end-to-end illumination is crucial. Combining on-site length customization with ultra slim housing design and superior light performance makes the Unilume Micro Channel one of the most unique LED products available. The special co-extruded remote phosphor mixing channel provides a sleek profile while providing impressive general illumination. As an added benefit, it also creates a clean, white look even when turned off. Available in 300 lumens per foot and 600 lumens per foot.

CO-EXTRUDED
REMOTE PHOSPHOR LENS
(SHOWN OFF)

PHOSPHOR AND
RUN-TO-RUN
COVER HOLDER

END-CAP

EXTRUDED ALUMINUM
LOW-PROFILE CHANNEL

FIELD-CUTTABLE
WITH HACK SAW EVERY 3"
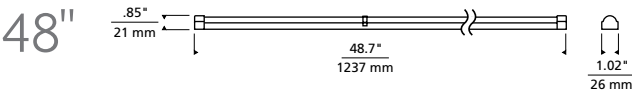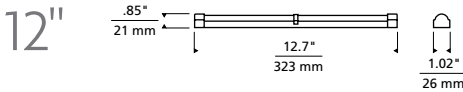AT END OF RUN

# UNILUME LED MICRO CHANNEL



ALUMINUM
(SHOWN OFF)



ALUMINUM
(SHOWN ON)

## AVAILABLE SIZES

**12"**  .85" / 21 mm — 12.7" / 323 mm — 1.02" / 26 mm

**24"**  .85" / 21 mm — 24.7" / 627 mm — 1.02" / 26 mm

**48"**  .85" / 21 mm — 48.7" / 1237 mm — 1.02" / 26 mm

## ACCESSORIES

Transformer
Power Feed
Jumper Connectors
Mounting Bracket (30°, 45°, 90°)
L-Connector
T-Connector
End-Caps
Joint Clips
Rigid Wall Mount Bracket
Rigid Wall Mount
Power Feed Brackets

For Unilume Accessory ordering grids, please see techlighting.com

**700UMCD**

| OUTPUT | LENGTH | CRI | COLOR TEMPERATURE | FINISH |
|---|---|---|---|---|
| 3 300LMS / FT | 01 1' | 8 80+ | 24 2400K | A ALUMINUM |
| 6 600LMS / FT | 02 2' | | 30 3000K | |
| | 04 4' | | 35 3500K | |
| | | | 40 4000K | |

## TECHNICAL SPECIFICATIONS

| | 12" length | 24" length | 48" length |
|---|---|---|---|
| SYSTEM POWER | 3.0 watts/300<br>6.0 watts/600 | 6.0 watts/300<br>12.0 watts/600 | 12.0 watts/300<br>24.0 watts/600 |
| SYSTEM EFFICACY | 100 lms/watt (est.) | 100 lms/watt (est.) | 100 lms/watt (est.) |
| LUMENS PER FOOT | 300, 600 | 300, 600 | 300, 600 |
| COLOR TEMPERATURES | 2400K, 3000K<br>3500K, 4000K | 2400K, 3000K<br>3500K, 4000K | 2400K, 3000K<br>3500K, 4000K |
| COLOR RENDERING INDEX | 80+ | 80+ | 80+ |
| POWER FACTOR | 0.95 | 0.95 | 0.95 |
| INPUT POWER | 24V DC | 24V DC | 24V DC |
| DIMMING | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer | To 5%-15% Depending on Dimmer |
| WARRANTY | 5 years | 5 years | 5 years |

There are thousands of applications in today's energy-conscious, productivity-focused and aesthetically-demanding world where incredibly uniform illumination is needed within increasingly smaller spaces. From health care to hospitality and retail to residential, Tech Lighting's expanding line of Unilume LED Lighting Systems are designed to be the most versatile and highest performing task, cove, and undercabinet lighting products on the market today. Find out more at techlighting.com.

**TECH LIGHTING**®

**TECH LIGHTING**®

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