



# Unilume LED Undercabinet System

Undercabinet lighting was one of the first applications to go LED. Since that time, there has been little in the way of innovation. That is because most undercabinet fixtures were designed around traditional undercabinet housings and discrete LEDs. The result: Hot spots. Glare. Multiple shadows on the surface. Unnecessarily deep housings. Poor or non-existent dimming.

#### Until now.

Tech Lighting is proud to introduce Unilume LED undercabinet, the latest innovation in LED undercabinet lighting. Utilizing tightly clustered blue pump LEDs, a 98% reflective mixing chamber and an Internatix ChromaLit™ remote phosphor lens, the result is consistent illumination with ultra high efficiency – all in a housing that is less than ¾ of an inch deep. An integrated LED driver makes installation easy and allows smooth dimming down to 15% using a TRIAC or ELV dimmer.

Perfect not only for the home, but also for the office, retail displays and more.



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

# **CUSTOM CAPABILITIES**

Color Temperature Color Rendering Index (CRI) Length Finish

# TECH LIGHTING'S UNILUME LED UNDERCABINET SOLUTION VS. TYPICAL LED UNDERCABINET

# Tech Lighting's **Unilume** LED Undercabinet

#### - REMOTE PHOSPHOR SOLUTION

Thirty LEDs per foot, 98% reflective mixing chamber and Internatix Chromalit" remote phosphor lens, consuming just 8.5 and 10.5 watts for the 13" and 19", respectively.

### - CONSISTENT, EVEN ILLUMINATION

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 when viewed from below.

#### - ELIMINATES DISTRACTING 'MULTI-SHADOWS'

Because the entire remote phosphor lens is illuminated, multiple shadows are not produced. Therefore it is much more desirable to view objects below. This is particularly helpful in a task application (e.g. working on a cutting board) or when displaying merchandise.

#### - 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 undercabinet units spread at greater distances with more even output over the entire space.

#### - 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.

#### - HIGH EFFICIENCY

With the remote phosphor lens, we do not need a secondary diffusing lens. This helps us achieve 50-60+ lumens per watt depending on length.

### - MULTIPLE COLOR TEMPERATURE AND CRI OPTIONS

Offered in 2700K and 3000K color temperatures. Additional color temperatures are easily available on a custom basis (contact the factory). 80+ CRI (Color Rendering Index) or 90+ CRI for more discerning applications.

## - INTEGRATED DRIVER AND SMOOTH DIMMING

120 volt input makes installation easy. Smooth dimming down to 15% using a TRIAC or ELV dimmer. Jumper cables make it easy to link one unit to another. Each unit has an integrated on-off switch.

## - RUGGED, MINIMALIST DESIGN

Heavy gauge aluminum housing with die-cast steel end-caps and less than ¾ of an inch deep.

### Typical LED Undercabinet

A few discrete LEDs spaced several inches apart.

When viewing the fixture from below, each LED appears extremely glary – particularly in the sight-line of a young child. Unattractive dots of light appear on any reflective surface below like a granite countertop.

Each point source of light hits an object beneath at a different angle and creates a shadow at that angle. For every LED, a unique shadow is created. Thus, a 12 inch LED solution that uses four individual LEDs creates four distracting shadows beneath the object.

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

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.

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 can be achieved at the cost of significant glare.

Typically offered in only a single color temperature option and 80 CRI (Color Rendering Index).

May require an external power supply making installation more complicated. Dimming may be non-existent or require a more expensive low-voltage electronic dimmer.

Thinner gauge housing and plastic components, often ir housings 1-1.5 inches deep.





UNILUME GIVES CONSISTENT, EVEN ILLUMINATION





UNILUME HAS WIDE BEAM SPREAD



TYPICAL LED UNDERCABINET



TYPICAL LED UNDERCABINET



TYPICAL LED UNDERCABINET





UNILUME ELIMINATES DISTRACTING 'MULTI-SHADOWS' IN OFFICE



TYPICAL LED UNDERCABINET



UNILUME ELIMINATES DISTRACTING 'MULTI-SHADOWS' IN KITCHEN



TYPICAL LED UNDERCABINET





# 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 not possible with traditional LED undercabinet lights.





13" Black Shown Off

19" White Shown Off

# UNILUME LED UNDERCABINET

700UCF			

#### TECHNICAL SPECIFICATIONS\*

	13" Length	19" Length	
	432	645	
System Efficacy:			
	2700K, 3000K		
ower Factor: 0.94			
	To 15% with TRIAC or ELV Dimmer		

<sup>\*</sup>Based on 3000K, 80+ CRI option





#### **ACCESSORIES**







# **SPLICE BOX**

Required for hardwire applications. The 1" Jumper Connector can be used to place the Splice Box next to the Undercabinet Housing or a longer Jumper Connector can be used to place the Splice Box in a more convenient or remote location. Includes Romex/1/2 conduit connector.

#### 700UCSB

B BLACK

# **JUMPER CONNECTORS**

Can be used to link one Undercabinet Housing to another or to a Splice Box.

Link up to 71 units of the 13" and 57 units of the 19".

700UCJC				
	01 03		B W	

# **PLUG-IN WALL FEED**

Can be used to plug one Undercabine Housing directly into an outlet.

700UCPL	LENGTH*	COLOR	
	<b>24</b> 24" <b>72</b> 72"	B BLACK W WHITE	

\*For custom lengths, contact our factor

