# UNDER CABINET LIGHTING BUYING

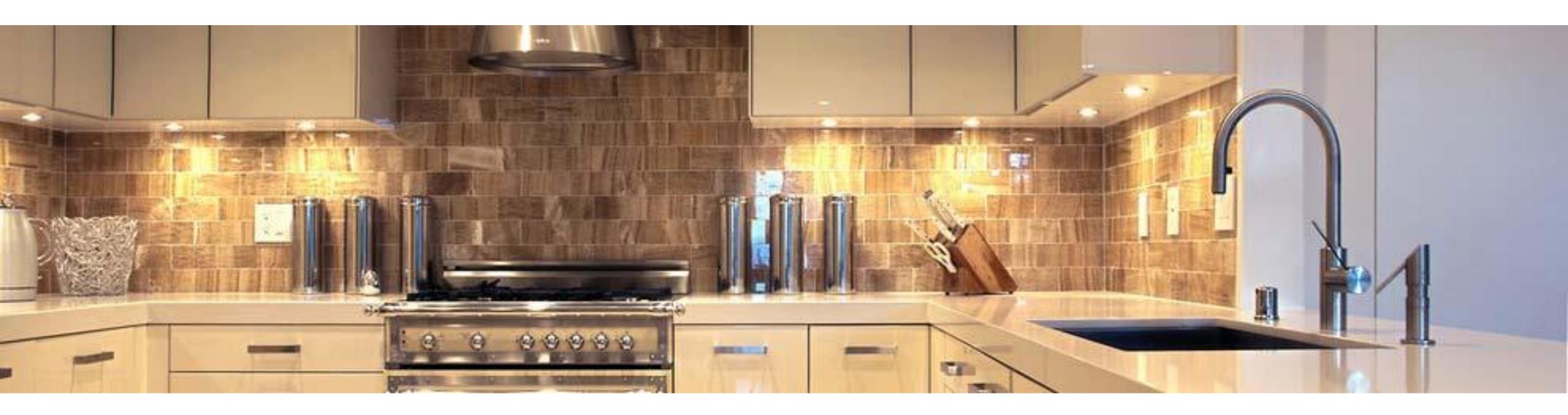
How to properly light your countertops and cabinets. We explore the terms, features and products to find the best solution for your home.

Published by Yale Appliance + Lighting





## Under Cabinet Lighting Overview



#### Kitchens are the toughest room to light.

Under cabinet lighting solves many of the problems though. It's task lighting and effectively illuminates your counters. Under cabinet lighting can also be used on top of cabinets for effective ambient lighting or in cabinets for accent lighting.

You'll learn how to buy the right under cabinet product in terms of color temperature. You'll also see the different bulb types, but at this point you should really be considering LED for efficiency.

Photo credit: Anne Fougeron via Houzz



Click the circles to move between sections

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### What's New

New products and trends to consider

Appliances
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### **Kelvin Scale**

The Kelvin Scale determines the quality of light by color



## **4 Elements of Lighting**

Proper lighting layouts require the 4 lighting elements to be considered



It's important to choose the right product for your unique application





## **Types of Lamps**

There are more lamp types than ever before, each with their own qualities



### How to Buy

How to choose the perfect products for your application at the right price





## **About Yale**

Proud to be family owned since 1923



## WHAT'S NEW

We discuss new products and trends in the industry

Photo credit: Fuse Architecture + Design/ Houzz





### What's New LARC6 LED



LARC6 is a fancy name for a new shielded LED under cabinet lighting system.

It's 300 lumens per foot and only 3/8" tall, so it will fit nicely under any cabinet. The LARC6 can be joined with other light bars.

The LARC6 is also one more powerful at 24 volts. It's designed for longer runs without drops or dimmer bulbs.



Photo credit: Courthouse Contractors / Kitchens & Baths via Houzz



## KELVIN SCALE

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The quality of light and different applications for each

Photo credit: Mitchell Barnett Architect / Houzz



10,000	
9,000	
8,000	
7,000	
6,000	
5,000	
4,000	
3,000	
2,000	
1,000	

**CLEAR BLUE SKY** 10,000K

#### CLOUDY SKY OR SHADE 6500 - 8000K

NOON SUNLIGHT 6000 - 7000K

AVERAGE SUNLIGHT 5500-6500K

ELECTRONIC FLASH 5000 - 5500K

FLUORESCENT LIGHT 3000 - 4000K

TUNGSTEN LIGHT 3200 - 3400K

SUNRISE / SUNSET 2000 - 3000K

**CANDLE LIGHT** 2000K

## Kelvin Scale **Quality of Light**



The Kelvin Scale plots light quality on a scale from 0-5,000 degrees Kelvin. Each type of bulb will have a different rating depending if it's fluorescent, halogen or incandescent.

#### Daylight

A very blue light, good for distinguishing darker colors

#### **Candle Light**

Makes everyone look good, most closely emulated by incandescent bulbs

#### Note

Purchase under cabinet lighting rated at 2,700-3,200 degrees for best effects











In modern kitchens with lighter countertops and backsplashes, a cooler color LED closer to 3,000K may be best. This tends to make white look whiter and crisper.



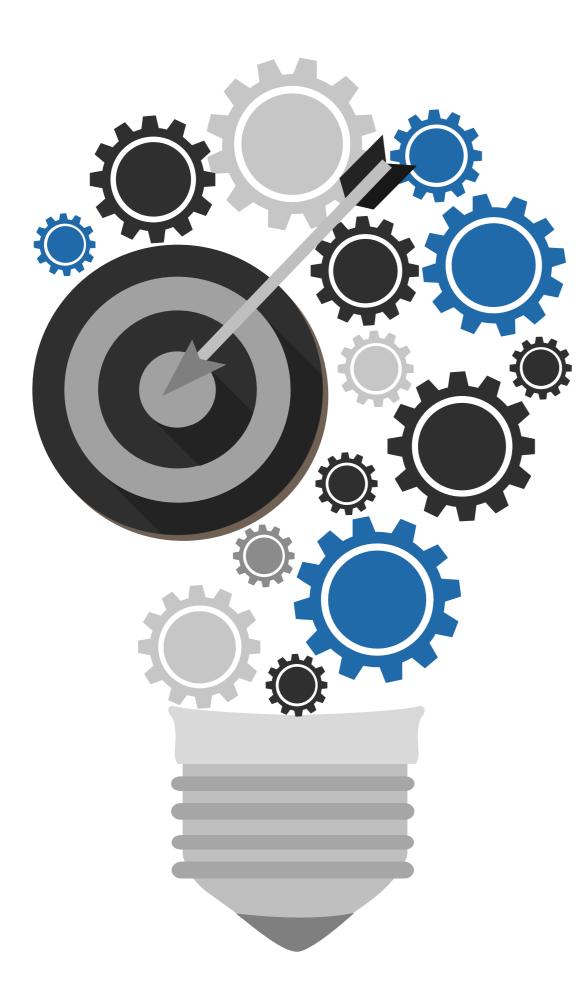
## 4 ELEMENTS OF LIGHTING

When designing a kitchen layout there are 4 elements to discover: Task, Accent, Decorative and Ambient lighting

Photo credit: Echelon Custom Homes / Houzz



## 4 Elements of Lighting



There are 4 elements to proper illumination: Task, Accent, Decorative and Ambient. Under cabinet lighting can accomplish 3 of the 4 elements.









#### Task Lighting

Most common task fixtures are recessed, track and under cabinet lighting. These are used as intense light for work spaces.

#### **Accent Lighting**

Highlights objects. Under cabinet accents and qualifies, because it accents well and illuminates the countertops.



Chandeliers, flush mounts, semi flush, pendants and sconces which personalize the room or area.

#### **Ambient Lighting**

Ambient is the most overlooked lighting element, yet it provides the main environmental lighting. Under cabinet fixtures can be used on top of cabinets or soffits.



## 4 ELEMENTS OF LIGHTING

Under cabinet lighting is not just used for cabinets. When used properly, it can provide illumination for any space.

Photo credit: LOCZIdesign/ Houzz



## TYPES OF BULBS

DAME ( File atting

Fluorescent, Incandescent and LED are the most popular are the most popular and have their own advantages

Photo credit: John Maniscalo Architecture / Houzz





## Types of Light The Original Energy Saver



Fluorescent is the original under cabinet light. It was simply a shop light and Alkco was the main manufacturer in the 1970s.

Fluorescent was improved by designing the chassis to be 1" so it wouldn't hang below the reveal of the cabinet. Fluorescent is not used much due to its poor quality of light.





## Types of Light The Best Quality of Light



Halogen was the first good color rendering light (incandescent) for under cabinet applications.

Despite its excellent color, it is energy efficient and emits 300 degrees of heat, so it can melt the peanut butter inside your cabinet.





### Types of Light The Halogen Alternative



Xenon gas allows the bulb to last much longer and like halogen bulbs it's also energy efficient. Only 10% of its energy gives light and the rest is heat emission. Therefore, you have the same problems as halogen except with a longer life.





### Types of Light **The Energy Efficient** Alternative

LED offers unbelievable energy efficiency with the color rendering of an incandescent. It is more expensive, but will pay for itself in reduced energy costs after 2-3 years.

LED should be considered for most of your kitchen applications.





## LIGHTING SYSTEMS

Applications of under cabinet lighting installations

Photo credit: Robert Legere Design / Houzz





LED Pucks vs. LED **Strips for Under Cabinet Lighting** 

## Fixture Types **Puck Lights**



Pucks are available in LED and low voltage. Typically, pucks are higher wattage.

Pucks are best for accents rather than under cabinet applications and typically cost \$20-\$26 in low voltage or \$50 for LED.

**Bulb Types** Can be LED or low voltage halogen

#### Scalloping

Shadows can develop because of the puck shape. Some people don't mind but it's worth considering.





LED Strips vs. LED **Tape Under Cabinet** Lighting

### **Fixture Types Under Cabinet Strips**



Strips are the most common for under cabinet fixtures. They're available in 8", 12", 18", 24" and 32" sizes depending on the manufacturer. Look at the LARC6. It illuminates at 5 watts per foot and is only 3/8" tall. Sections can be joined together easily and is 24 volts.

#### Sizes

Designed to fit inside the widths of cabinets. Multiple sizes can be combined to accommodate different lengths.

#### Popular

Strips are the most common under cabinet solution and available with many bulb options.

Photo credit: Tarallo Kitchen & Bath via Houzz





## Fixture Types Flexible LED Tape



LED tape is the newest, and perhaps greatest, under cabinet solution devised yet. LED tape consists of LED diodes on a clear, tape-like roll. It can be installed practically anywhere and provides even, consistent light. LED tape comes in 3' or 16' rolls and cost \$50-\$350 per roll, plus a transformer. The LED diodes may reflect off polished surfaces.

#### Efficient

LED technology means you aren't changing bulbs every year. LED tape can last up to 22 years (at 3 hours/day).

#### Convenient

Flexible tape allows easy installation for applications Houzz





Legrand vs. LED Tape **Under Cabinet** Lighting

## Fixture Types Legrand Under Cabinet System

Legrand is the most interesting LED under cabinet system. This system can provide light as well as electrical outlets, wireless speakers and iPad cradles. It's entertainment as well as lighting. Also a bit more stylish by allowing you to save your backsplash from electrical cutouts.

#### Lighting

Move LED lighting around where you need it, it's modular.

#### **Entertaining**

Connect your smartphone to a Bluetooth speaker and play your tunes.





#### Fixture Types **Installation Types**

#### **New Construction**

Installation is simple until the walls are closed. Plan accordingly.

#### **Old Construction**

You can't easily or affordably switch between pucks, strips, LED tape or Legrand in older construction.

Also, most older dimmers can't dim LED. You'll have to switch to LED compatible products. Legrand dimmers work with every bulb source.



## BUYING STRATEGIES

How to choose the right products

Photo credit: Kitchen Masters, Inc. / Houzz





## Under Cabinet Lighting **Buying Strategies**



We are in the midst of a revolution (yes, the term is appropriate) as low voltage and halogen give way to newer, more energy efficient LED. While the incandescent options were once popular, LED is the only light source actually improving. Many companies such as WAC, Nora, Tech Lighting, GM and Legrand are racing to the market with newer, better products.

There are lots of options to consider when selecting under cabinet lighting. Make sure you know the lengths of your cabinets and the amount of light you desire over your work space.

Photo credit: Barbra Bright Design via Houzz





## Under Cabinet Lighting **Buying Strategies**



Color is also an important factor, as low voltage and halogen accent browns and earth tones better. LED is better for whites, blues and grays. There have been great leaps in creating more color variation within the LED color temperature spectrum, so you could find a LED light that is similar to an incandescent.

You should really be considering LED lighting. There are a ton of good options, but be sure to check the Kelvin rating before you purchase.

LED tape has great versatility, but the bulbs are exposed. The new LARC6 strips are really thin and are shielded so only light is shown.

Photo credit: Steding Interiors & Joinery via Houzz





## Under Cabinet Lighting Buying Strategies



Legrand is more of an all-purpose solution with under cabinet lighting, sound system and electrical sockets included.

But the fact that your backsplash is uninterrupted with sockets or switch plates is appealing as well.

Under cabinet lighting is incredibly versatile. It can be used to accent and highlight items. It can provide task and safety lighting, even ambient lighting. It's a great investment for your kitchen project and relatively inexpensive to buy.



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Houzz

### Buy where you're comfortable

There are tons of stores and products, but a limited number of consumers. Check review sites like Yelp, CitySearch, Google and the Better Business Bureau before you purchase.

Remember, any store can sell an appliance; the biggest issues are shipping and service.

Buying Strategies Wisdom of Crowds







Proud to be family owned and operated since 1923.

Photo credit: Laura Burton Interiors / Houzz



## About Us The Yale Difference

#### Sales

Browse our two 15,000 sq. ft. showrooms guided by our sales staff with 269 years of combined experience

#### Delivery

We bring the products right into your home, not just to the curb. Every delivery includes removal of the old appliance

#### Install

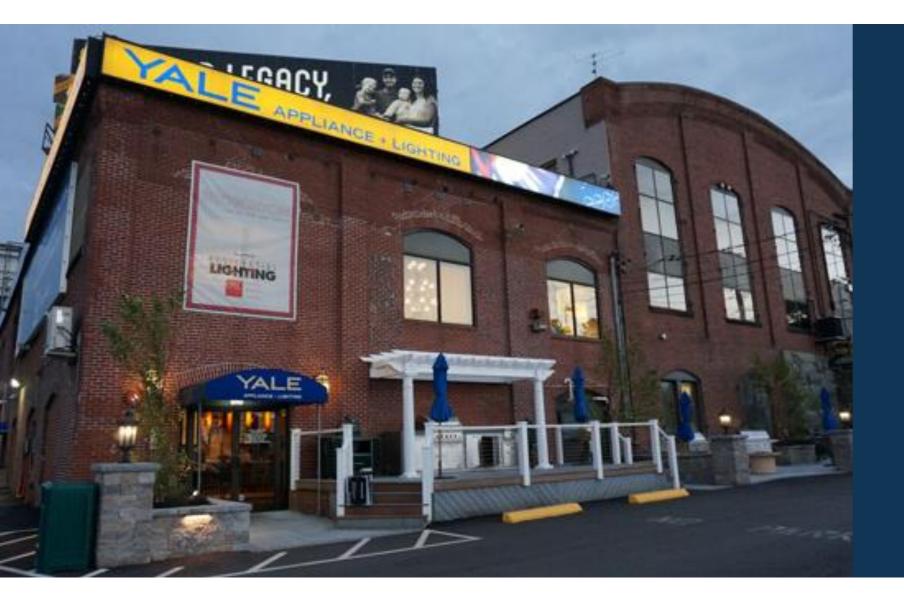
Our professional install team can hook up your new dishwasher or reconfigure your cabinets to accept a new wall oven

#### Repair

20 service techs on the road every day backed by our Yale Warranty. Service is the largest department at Yale



Under Cabinet Lighting **About Us** 



Yale has been based in Boston for over 90 years and operates two showrooms; in Boston and Framingham. We operate the largest independent service and repair department in New England with 50 people and 21 service technicians. Our sales staff has an average of 7 years experience, and our staff chef can help you learn to use your new appliances.





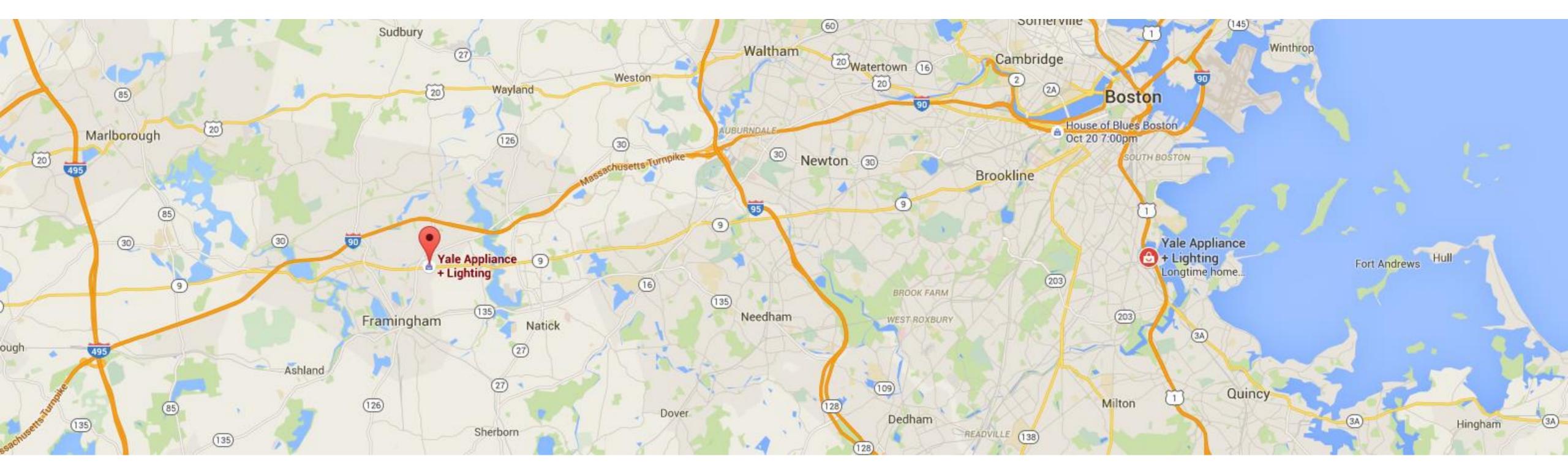
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Now you can schedule a free, private showroom visit to go over the needs of your project. Choose a time that works for your schedule to visit our Boston or Framingham, MA showrooms.

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Schedule a Showroom Appointment





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