

How to Layout and Quote LED Kitchen Lighting

- 1** Determine the number and size of lights needed:
- a) Decide how many lights are needed and where they should be installed. Under cabinet lights provide great lighting on the kitchen work surfaces where it is needed. **General Rule: Install lights as close to the front of the cabinet as possible to allow for maximum light output.**
 - b) Determine size of lights to be used. For under cabinet lights the width of the cabinet will need to be measured (**Table 1 & Figure 1**).



Cabinet Size	Overall Light Length (A)	Part Number	Wattage
12"	8"	690313F08.35.24	3 Watts
18"	14"	690313F14.35.24	4 Watts
24"	20"	690313F20.35.24	6 Watts
30"	26"	690313F26.35.24	8 Watts
36"	32"	690313F32.35.24	10 Watts
42"	40"	690313F20.35.24 x 2	12 Watts
48"	46"	690313F20.35.24 690313F26.35.24	14 Watts

TABLE 1

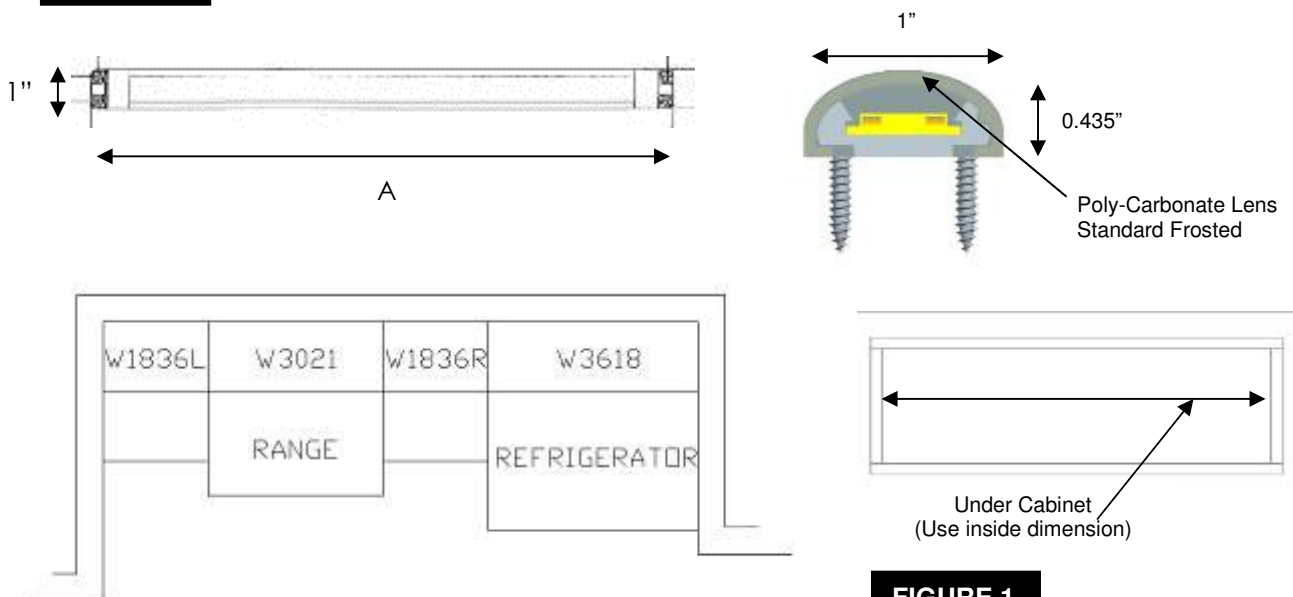
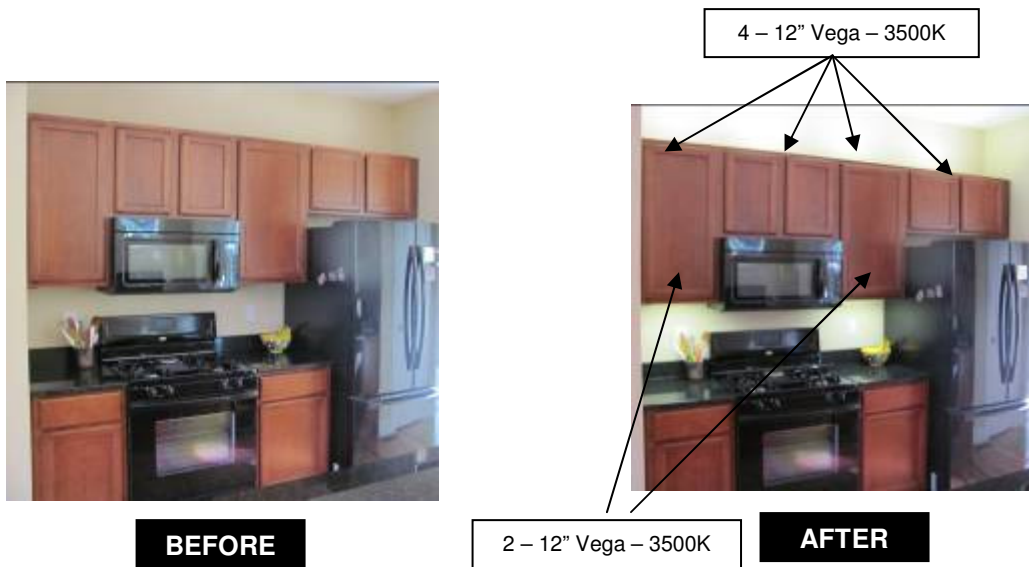


FIGURE 1

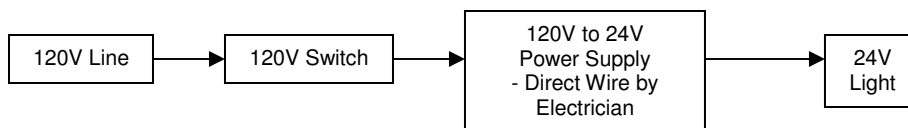


In the "After" picture above, the over-cabinet goal was ambient lighting so 4 of the 12" VEGA LED lights were used. The lights were centered over each cabinet door regardless of cabinet width. The under-cabinet goal was maximum light on the countertops. Due to the cabinet width 2 of the 12" VEGA LED lights were used.

2 Determine the total wattage of the under-cabinet lights and the total wattage of the over cabinet light (**See Table 1 for wattage breakdown**). The total watts of the under-cabinet lights will determine the size and the number of power supplies to be used. In the "After" picture, one 30W power supply was used for the total 24W of over-cabinet lights. One 30W power supply was used for the total 12W of under-cabinet lights.

3 Determine the wiring options, the ON/OFF control options and power supply options.

Power Supply Options – ON/OFF Options



Line Voltage Switch/Dimmer

Determine the power supply (transformer) location. Power supply options (**Figure 2**) can either plug in to an electrical outlet or be direct wired to the electrical system. Location options for the power supplies are:

- On top of the cabinets if room is available – this allows the easiest access to wiring going thru the cabinets and everything is hidden from view.
- Under false bottoms of cabinets if space is available.
- Behind microwave unit
- In a 4x4 outlet box
- Under lower cabinet where space is available
- In basement or other storage area with access space

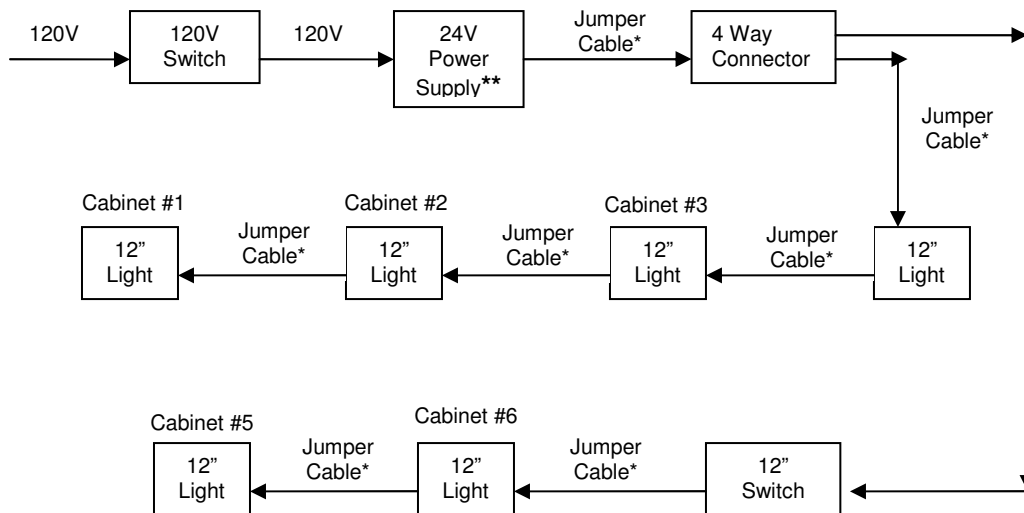
Power Supply Options:



FIGURE 2

Do a simple wiring layout to help understand what cords or connectors will be needed (Below is the example for the kitchen shown in the "After" picture).

Wiring Layout



*You will need a jumper cable to connect lights – wire length options are 10", 30", 72", 10ft. and 30ft. – allow plenty of extra length between connecting points. A Male/Male connector can also be used to combine any two wires together.

**Direct wired power supplies may need a 12" pigtail cord and a Male/Male connector to properly use the Plug 'N Lite™ low voltage wiring system (Requires a licensed electrician).