

Main Squeeze

Oakland, CA

Restaurant Case Study

Main Squeeze, a “Premium Organic Juicery” located in Oakland, California is a great example of a small independently owned business and a “great candidate for a lighting upgrade,” according to The PG&E Food Service Technology Center’s (FSTC) lighting expert Richard Young.

As is common with many small independent foodservice operators, Main Squeeze was outfitted with low-cost residential style track lighting, which comes standard with MR16 halogen lamps – typically 50 watts. Young worked with Main Squeeze to replace (7) 50 watt Philips halogen MR16 lamps with (7) 4.5 watt Philips LED lamps. The upgrade required that the LED lamps have a GU10 base in order to fit into the existing fixture. These lamps were purchased at a local big-box home improvement store.

Once installed, the track heads were oriented for maximum effective illumination of the space. This simple upgrade improved the lighting and reduced the annual energy bill for Main Squeeze by \$234.

To help Main Squeeze understand the savings associated with the LED replacement, Young quickly did a side-by-side comparison using the fishnick.com lighting calculator. (fishnick.com/saveenergy/tools/calculators/silampcalc.php)

	Halogen MR16 Lamp*	LED MR16 Lamp*
Annual Cost to Operate	\$260	\$26

* 7-Lamps operating 12 hrs/day, 365 days/year with an electric energy cost of \$0.17/kWh

“Energy wasted by inefficient devices, like halogen lamps, directly impacts profits,” states Young. In the case of Main Squeeze, if the store is making a five percent profit they would have to sell \$4,680 worth of smoothies a year to cover the energy wasted by the halogen lamps or \$24,440 worth of smoothies over the 5 ½ year life of the LED lamps.

The LED lamps Main Squeeze installed only cost \$65 and will pay for themselves in less than 3.5 months.



Savings By the Numbers

Annual Energy Bill Reduction	\$234
Total Capital Cost for LED Lamps	(\$65)
First-Year Savings	\$169
Total Savings Over 5-Years	\$1,222

LED lamps were ten times less expensive to operate than the equivalent Halogen lamps.



LED Lamp and Fixture with GU10 Base.



LED Lamp (left) and Halogen Lamp (right).



Lighting Fixture with new LED lamps.