

CASE STUDY 9: Warp & Weft (NYC)



PROJECT SNAPSHOT

Customer	Warp & Weft
Space Type	Retail
Lighting measures	Retrofit halogen PAR38 bulbs
Project Cost	\$8,280
Incentives	\$5,796
Payback	5 months
Energy Reduction	81%
Yearly Savings	\$5,888*

* includes bulb change-out & AC savings

THE OPPORTUNITY

Warp & Weft offers its customers antique and specialty rugs woven out of silk and wool. They strive to offer the perfect intersection of form, color, and texture essential to all great rugs and carpets. Lighting is a critical part of showing the exquisite nature of these rugs and their beautiful workmanship. Color rendering was critical to show the subtlety and beauty of these hand woven rugs. Finally, load reduction was critical aspect as the Warp & Weft management strives for sustainability.

Starting situation:

- Halogen PAR38s (90W) – Showroom;
- Total electrical load for lighting was 8.28 kW;
- Annual consumption of electricity for lighting: 30,222 kWh
- Annual cost of electricity for lighting: \$4,658

THE SOLUTION

An audit of the existing lighting was made by LED Light Energy, followed by a review of the LED lamp options and the incentives that were available. Several LED products were showcased/tested in order to choose the right product design, color temperature and beam angle most suited to the application.

Final solution:

- EnduraLED PAR38s (17W) – 2700K, 36° beam angle
- Energy load lowered to 1.56 kW, a reduction of 81%.
- Annual consumption of electricity for LED lighting: 5,708.6 kWh
- Annual cost of electricity for lighting: \$1,084.6
- The showroom temperature was notably more comfortable.
- The nuance of the different colors in each carpet improved dramatically.

