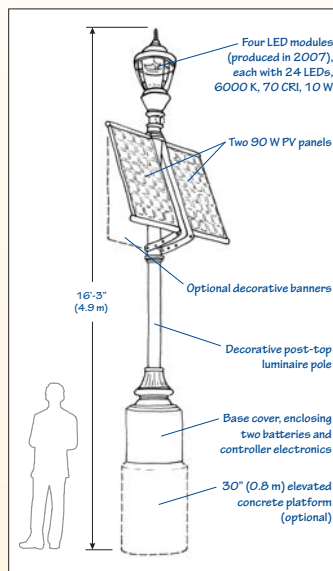


Field Test DELTA: Post-Top Photovoltaic Pathway Luminaire

Cities and towns across the United States are considering ways to reduce outdoor lighting energy consumption, and much attention is being paid to the use of light-emitting diodes (LEDs).

The *Field Test DELTA: Post-Top Photovoltaic Pathway Luminaire* publication details evaluation results for twenty-four prototype Renaissance luminaires designed by Philips Hadco and SolarOne® Solutions. The Renaissance is a post-top luminaire with a decorative, Victorian appearance, but operates with modern LED technology powered by photovoltaic (PV) panels. The Renaissance luminaires were installed at



Renaissance luminaire detail

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Findings

- The Renaissance luminaires save energy by avoiding conventional utility power, which translates to pollution avoided. In fact, the three installations combined are expected to avoid about 3,000 lbs of CO₂ emissions when compared with the same systems without PV power.
- The Renaissance luminaires were well-liked by residents and visitors at all three sites.
- The on/off programming operated generally as expected year-round, as confirmed through monitoring devices installed at each site.
- The illuminance levels at all three sites were consistent with IESNA recommendations for similar applications.
- Staff characterized the installation as “easy.”

With refinements brought about from this demonstration, the Renaissance PV LED luminaire is now commercially available.