



Hedensted is a small Danish town on the outskirts of Vejle. Like many towns, it has been expanded with large residential areas around the original town centre, along with industrial estates to the south and west.

Renovation of a prime residential area combined with a high agenda to replace all mercury lamps to reduce energy use and comply with future regulations meant a replacement for the old Avenue Deco HME lanterns was required. In keeping with the area's design guidelines, the Avenue F LED post top lantern mounted on the existing poles offered the ideal solution.

LED meets the high performance specification

Avenue F LED features a prismatic crown for reduced glare as well as a distinctive modern yet elegant aesthetic. Its state-of-the-art LED system ensures performance, comfort and efficiency, along with a unique light signature to show the town in a fresh new light.

Avenue F LED is equipped with the Bi power dimming facility as standard to easily maximise energy savings. The Bi power system reduces energy consumption and light output by 50% for eight hours during the quietest part of the night. Using a simple on/off switch located on the top of the gear tray, nighttime power reduction can be activated and deactivated as and when required.



Bi power reduces energy consumption with no effect on colour rendering or colour temperature. It will also extend the lifetime of the LED by reducing the power and in turn, the stress and heat it encounters.

Avenue F LED is part of a wider family with coordinated columns and a wall version, which offers flexibility and consistency for future lighting schemes and refurbishments. For more information, go to www.thornlighting.com/AVFL

Product used



Avenue F LED

Key Facts

Open Spaces

Old installation: Avenue Deco HME 80W including ballast:

Annual energy consumption: 36,000 kWh
Annual energy costs: 72,000 DKK

New installation: Avenue F LED 20W:

Annual energy consumption: 5,110 kWh
Annual energy costs: 10,220 DKK

Total annual energy savings:

- 86%
- 30,890 kWh
- 61,780 DKK

Product used: Avenue F LED with Bi power dimming

eControl From Thorn's 15 ways to save energy, the following are key to minimising energy consumption in Hedensted:



Lamp efficacy

By switching from Avenue Deco 80W HME to Avenue F 20W LED, power use has been reduced, while the state-of-the-art LED system has increased light output.



System efficacy

Optical and thermal control within the luminaire are essential as even two lanterns containing the same LED module can have widely differing light output ratios (LOR), lifetimes and colour performance. Avenue F LED's precision design achieves a strong LOR and therefore minimises light loss.



Scene-setting

Bi-power dimming allows light levels to be reduced during the quietest hours of the night. Automatically reducing light output and energy use by 50% for 8 hours per night results in significant energy savings with minimal impact on pedestrians and users.



Maintenance schedule

With a 50,000 hour @L70 Ta 25°C life expectancy and an IP66 rating, Avenue F LED minimises loss of light over time. In turn, the frequency of maintenance and the number of luminaires required to maintain lighting levels over the years are kept to a minimum.