## KING'S REALM

Forming part of a major transformation, LEC Lyon and Speirs + Major have collaborated to provide an adaptable lighting scheme for Lewis Cubitt Square in London's King's Cross district.

With the help of LED manufacturer LEC Lyon, lighting design practice Speirs + Major has turned London's King's Cross district into a safe place for meeting, chatting and everyday life. To meet the requirements of this project, LEC manufactured 45 specially designed, manouverable 4040-Luminy 4 LED spotlights, incorporating custom lenses that provide uniform ground lighting, without risk of dazzling pedestrians.

To meet with the aesthetic, functional and regulatory requirements, the lighting concept is based on five lighting columns, placed in line at the periphery of Lewis Cubitt Square. They highlight the water jets, the relaxation areas and the green spaces around the edge.

These wooden columns, approximately 13-metres tall, each have nine LEC 4040-Luminy 4 spotlights at the top. On each column, the spotlights are fitted with different custom-made lenses, designed for the spaces they are meant to light; the masts and mountings are the work of Townshend Landscape Architects. For several years, the north side of King's Cross has been undergoing a major transformation with numerous renovations. The new Lewis Cubitt Square is part of that. This open space, with its clean lines, is split into areas for relaxation, games and a central area left open for holding events and activities. This new, completely redeveloped district now holds concerts, markets and open-air film screenings throughout the year.

LEC's solution produces a soft ambience, with three different lighting effects designed specifically for the different parts of the square:

- Oval shapes projected by elliptical beams for relaxation areas;
- Round shapes of different sizes projected by circular beams around the edges of the square;
- Small round shapes projected by narrow circular beams near the fountains.

The 45 LEC 4040-Luminy 4 LED spotlights, each fitted with a set of specially designed lenses, ensure these shapes are projected uniformly on the ground.

To do so, LEC placed three independent groups of spotlights on each of the masts:

- Four sets of twelve LEDs with custom lenses that form narrow round shapes for the lighting near the fountains;
- Three sets of eight LEDs with custom lenses that produce wide round shapes for lighting the edges of the square;
- Two sets of twelve LEDs with custom lenses that form ellipses for the relaxation

General lighting to the area is provided by DMX-controlled warm white (3,000 K) LED spotlights, producing a peaceful ambience in the heart of the square. To minimise glare, each LEC 4040-Luminy 4 spotlight is fitted with an anti-glare honeycomb grille. The set was developed based on a lighting scenario imagined by Speirs + Major that varies light intensity depending on time of day and natural lighting.

Benz Roos, Senior Light Designer at Speirs + Major commented on why they opted for LED technology for this project: "LED technology offers a better overall return than equivalent halogen lighting. Choosing 100% LED lighting allows major energy savings. LEDs also perfectly met the project specifications, which required lighting effects for the busiest times of the square." Describing its partnership with LEC, Roos concluded: "It's a loyal partnership in keeping with the commitments signed with LEC in the past, for example the Paddington Basin project and the Greenwich Meridian project, both in London. Responsive, reliable and adaptable are how I would describe LEC's people both offsite and onsite when needing their technical expertise, with customised solutions, meeting the requirements of our projects." www.lec-lyon.com





