

Case Study

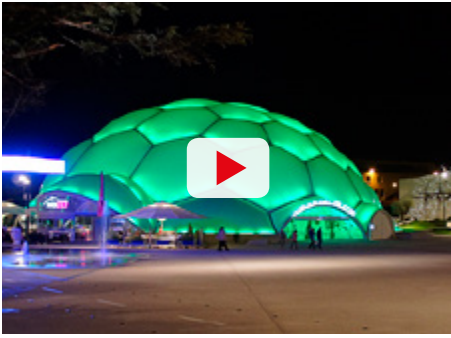
'Rivers of Light'

Location
Philips Lighting

Valladolid, Spain
Graze, LEDline, InLed, Zef floodlights



PHILIPS



Rivers of Light from the city of Valladolid has received the prestigious city.people.light 2011 award, organized by Philips and LUCI. The award rewards urban lighting projects that best demonstrate the added value urban lighting can bring in rehumanizing urban development projects for the well-being of people in a city.



Background

Valladolid is Northwest Spain's largest city. Once the capital of the Spanish empire, Valladolid has a rich historic heritage, and is full of elegant palaces, churches, squares, theaters, parks, and museums. The city council commissioned an innovative urban lighting scheme that would create a spectacular route for tourists to highlight Valladolid's history and beauty and to show the city's identity. Aureoighting, a local design agency, developed the 'Rivers of Light' concept. The name refers to the Esgueva River, which once ran through the old city. The project would create a new "River of Light" where the Esgueva once was, illuminating and connecting the spaces and monuments along the way. LED screens along the route provide information about these highlights.

The project

The Rivers of Light walk flows through and connects different areas of the center of Valladolid. Each area includes buildings and monuments as well as streets and squares. Rivers of Light transmits a message of memory and knowledge, of the flow of new ideas, thought and culture, involving growth and energy, life and movement, that connects with the people, both citizens of Valladolid and visitors alike. One of the many advantages of Rivers of Light has been the creation of a new night vision of Valladolid in which its most important historic monuments and squares appear. The objective of the lighting design was therefore to provide the

citizens of Valladolid with symbolism and visual comfort, taking into account energy and economic factors. The light path thus acquires its own unique personality, becoming a cultural and tourist attraction.

The innovative architectural and outdoor lighting required for the project were already available within Philips Lighting's capabilities. For the lighting along the route, Philips drew on the latest advances in the LED lighting technology. The installation uses Philips LED floodlights with RGB color change. The flow of the imaginary river is simulated by 'river green', a blue-green color produced by various floodlights at closely-controlled wavelengths. Church towers and some window frames are displayed in the Liturgical colors of the Catholic Church - purple for Advent and Lent, white for Holy Week, Christmas and public holidays, red for Saint's days and green at other times. Cultural buildings are illuminated in Valladolid's burgundy color.

To implement the solution, Philips worked in close collaboration with ELPA - the municipality's preferred electrical contracting supplier - acting as project manager and ensuring quick, expert installation. The symbolic river is indicated by a rich blue and green color, and the subtle, ornamental lighting on Valladolid's historical buildings fully demonstrates LED lighting's outstanding potential for beautification. One of the highlights is the Plaza del Milenio, which lighting has transformed into an icon of urban technology. And all these visual effects are highly energy efficient and sustainable as well as beautiful.

Historic Valladolid guides its visitors with 'Rivers of Light'.



The key challenges were technical ones associated with the LED displays. Content was to be provided by the municipality, but it was necessary to establish wireless connections with the screens - a functionality that didn't yet exist. R&D effort provided a solution, however. The result was a new kind of display with integrated processing that enabled flexible, remote programming of a variety of content, including information on current cultural events as well as history. For the LED screen part of the project, Philips delivered a complete turnkey solution to the city including installation, set-up and maintenance services.

Benefits

The Rivers of Light project revolves around the symbolic re-integration of the Esgueva River, diverted from its course years ago to allow growth of the city, creating a light path that runs Valladolid, and giving people the opportunity to follow a path that shows a new city. The two central figures of the project are light and rivers, which together have united different areas and spaces in the center of the city. The Rivers of Light route receives over 5,000 guided visits a year since it was launched in November 2011, while a further 10,000 people are estimated to have visited the attraction on their own accord. Rivers of Light is a unique inspirational attraction that will delight people and encourage them to visit, enjoy and spend time in the city center. The city and local business profits from the increased number of visitors, supporting the local income growth and tourism each year.

Rivers of Light fulfilled the municipality's desire to make Valladolid a pioneer city in the use of new, sustainable lighting technologies. By applying them to promote culture and tourism, Valladolid was able to differentiate itself, and boost its reputation for innovation and dedication to sustainability. The city has managed to highlight and emphasize architectural aspects that were previously out of reach of visitors' eyes and 35 monuments have been illuminated. Energy consumption has been reduced by 44%, CO₂ emissions are also significantly lower and maintenance costs are decreased, mainly due to the installation of LEDs. These cost benefits for the city made the total lighting scheme self-funding.





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