



**CASE STUDY** 

## LUMINA CATHEDRAL OF TOLEDO: AN IMMERSIVE EXPERIENCE IN HISTORY AND ART

Toledo Cathedral becomes a stage of light and sound with Panasonic Connect technology

Location: Barcelona

Product(s) supplied:

PT-MZ14KL

PT-MZ11KL



## Challenge

Discover and document the most striking moments of Toledo Cathedral, capturing the essence of this immersive experience that combines history, art and spirituality.

## Solution

A Panasonic LCD projection system was installed, with twenty-three compact, lightweight and silent PT-MZ14KL and PT-MZ11KL models. These projectors are strategically located inside the cathedral and are combined with more than 150 LED spotlights, many of them robotic, and state-of-the-art sound systems that blend in with the architecture of the monument.

Lumina Toledo Cathedral, an innovative project created by Meraki Cultura Audiovisual for the Cabildo Primado, has revolutionised the way in which one of Spain's most iconic temples is experienced. Thanks to Panasonic Connect projection technology, LED lighting and an advanced sound system, this initiative offers a unique experience that combines history, art and spirituality.

Opened in December 2023, Lumina Toledo Cathedral aims to take visitors on an emotional and cultural journey through the most important corners of the cathedral. This pioneering project is positioned as a world reference in the dissemination of cultural heritage and technological innovation, marking the beginning of a series of commemorative events planned until 2026 to mark the 800th anniversary of the start of construction of the current Gothic temple.



The development of this immersive experience has been a meticulous process involving a multidisciplinary team of twenty-nine experts, including historians, theologians, audiovisual and scenography experts, professional scriptwriters, engineers, architects, designers, voice actors, musicians and artists.



Since its conception in 2017, various ideas have been explored to capture the essence of the cathedral and offer an unforgettable experience for the public. Lumina Toledo Cathedral has represented a quantitative and qualitative leap for the company Meraki Cultura Audiovisual, which has combined its extensive experience in the worlds of audiovisual production and culture in this project.

"We have overcome numerous challenges during the creation and implementation of the project, such as the integration of the facilities into the monument and their synchronization, a very careful script, work at height, renovation and expansion of the existing lighting system, and the creation of the first 3D model of the Toledo Cathedral. However, we are very pleased with the result, the result of the great team we have put together and the significant effort made to turn this immersive experience into a benchmark for Spanish cultural tourism, which we believe we have achieved. We have worked at all times under two fundamental premises: absolute respect for the temple and the conservation of its cultural heritage."

Alfonso López Rivera
Project Director
Meraki



Lumina Toledo Cathedral has represented a qualitative leap for the tourist offer of the city of Toledo which, in addition to differentiating it from other national destinations, promotes the economic revitalization of its historic center and the creation of jobs, while also following the highest standards of efficiency and environmental sustainability.

At the heart of Lumina Toledo Cathedral is a sophisticated integration of cutting-edge technology. Video mapping, choreographed lighting and music, and an immersive voiceover guide visitors through ten landmarks that highlight the temple's artistic and spiritual richness. From the imposing altarpiece in the Capilla Mayor to the masterpieces of El Greco and the audacity of Narciso Tomé in El Transparente, every detail comes to life in a 50-minute experience.



To meet the technological challenges and respect the sacred character of the temple, Panasonic Connect LCD projectors have been used, specifically the PT-MZ14KL and PT-MZ11KL models, for a total of twenty-three devices. These compact, lightweight and silent projectors offer a power of 14,000 and 11,000 lumens respectively, and a WUXGA resolution (1,920x1,200p, 16:10). Thanks to their efficient design and advanced technology, they guarantee exceptional image quality, contributing to the immersive visual experience that defines it.

In addition, these projectors are strategically located inside the cathedral and are combined with more than 150 LED spotlights, many of them robotic, and state-of-the-art sound systems, which blend in with the architecture. This technological combination creates an immersive atmosphere that captivates the senses of visitors, allowing technology to highlight and enrich the beauty and cultural value of the historical and spiritual environment of the monument.



"It's been almost four years since Meraki Cultura Audiovisual entrusted Panasonic with its collaboration in the study of how to illuminate the Primate Cathedral of Toledo, but that time is only a tiny fraction of its almost 800-year history. We are very proud to have been able to contribute our technology to Meraki's most ambitious project to give new life to this space, down to its smallest details. Our new series of LCD laser projectors have risen to the challenge, and we are pleased to help its visitors in the reinterpretation of such a unique cultural legacy. We would like to congratulate the entire team that made this possible."

Xavier Moncuí
Partner Account Manager
Panasonic Spain

Lumina Toledo Cathedral stands as a cutting-edge cultural product, an example of how technology can be used to preserve and promote cultural and spiritual heritage. With its ability to immerse viewers in an emotional journey through art and history, this initiative is a national and international leader in promoting and disseminating the historical legacy inside monuments, in this case fostering the enhancement of Toledo and the Primate Cathedral of Spain.



