

**SPEIRS
MAJOR**

Copenhagen Opera House,
Denmark

**LIGHT
ARCHITECTURE**

8 Shepherdess Walk
London,
N1 7LB
United Kingdom

T +44 (0)20 7067 4700

Co-lab Shibuya Cast
23-21, Shibuya 1-Chome
Tokyo 150-0002
Japan

T +81 (0)3 3400 8855

info@smlightarchitecture.com
press@smlightarchitecture.com

SPEIRS MAJOR



Light reveals the rich timber of the interior spaces to transform the building into a lantern that draws the audience in.

CLIENT
The A.P. Møller
Foundation

ARCHITECT
Henning Larsen
Architects

ACOUSTICIANS
Arup Acoustics

INTERIOR DESIGN
Henning Larsen
Architects

CHANDELIER DESIGN
Olafur Eliasson

THEATRE CONSULTANT
Theatreplan UK

LANDSCAPE ARCHITECT
TST

PHOTOGRAPHER
Adam Mork

PROJECT TEAM
Jonathan Speirs,
Keith Bradshaw,
Carrie Donahue
Bremner

SPEIRS MAJOR



SPEIRS MAJOR

A Rare and Challenging Commission

The lighting design of a world-class opera house is a rare and challenging commission. In this case, we also needed to consider its unique location on the Copenhagen harbourside, in sight of the Royal Palace and Nyhavn.

Since Copenhagen remains one of the most sparingly lit cities in Europe, our project needed to both respect this and complement it. Our first task was to fully understand the context of the project and to determine how much light and emphasis the building should command in the context of its adjacencies.

It became clear to us that the best expression of the building was achieved with light from within the inner foyers. By celebrating the rich timber paneled auditorium box and inner foyer areas the building becomes a lantern, allowing the mingling crowd to be seen in dynamic silhouette from the outdoor plaza.



SPEIRS MAJOR



Blue light to the rooflight above the foyer crowns the space and contrasts wonderfully with the warm appearance of the timber. A hidden cove in the foyer uses two colour temperatures of white light - cool, for a fresh impression during the day, and a warm white for evening. With no other feature exterior light, the window slots glow and the canopy roof floats above the bed of light emanating from the interior space. This composition creates a strong internal and external image, without overlighting any aspect.



Arrival into the acoustically perfect auditorium is a striking experience. The gold-leaf ceiling glows like a setting sun, an effect we created by grazing it with lanterns from the technical gallery. Clustered fibre optic points with remote illuminators provide both practical light and sparkle, without any potentially disruptive noise. At the balcony fronts a series of linear glowing slots are covered with rose colour-corrected glass, suggesting the sparkle of light from a chandelier - but without a chandelier being present. Each of these elements is individually controlled, allowing the house lighting to be dramatically modulated before and during performances.



A special element of the project was the orchestral rehearsal room, located five stories below ground level. To create a sense of daylight for this space, we concealed sources that mimic the effect of light filtering in from a clerestory.

SPEIRS MAJOR



SPEIRS MAJOR

