

MOST EFFICIENT LED OFFICE LIGHTING FOR THE TALLEST BUILDING IN SWITZERLAND.

HOFFMANN-LA ROCHE REALISES ONE OF THE MOST COMPREHENSIVE LED OFFICE LIGHTING CONCEPTS IN EUROPE.



CLIENT

F. HOFFMANN-LA ROCHE AG,
BASEL

ARCHITECTS

HERZOG & DE MEURON
ARCHITEKTEN AG, BASEL

LIGHTING DESIGN

REFLEXION AG, ZURICH

Basel's new landmark is clearly visible far and wide – the impressive office tower of the Roche pharmaceutical company. Designed and built by the renowned architects' firm HdM, the 178 metre high tower is the tallest building in Switzerland, providing space for around 2000 attractive, high-quality workplaces, and setting new standards when it comes to efficiency and sustainability.

Client expectations stipulated a level of energy efficiency that would meet Swiss Minergie standard requirements. It was presumed that one third of the primary energy would be consumed by the lighting. Tests were carried out on sample luminaires with the Regent solution coming out top thanks to excellent system efficiency ratings of up to 118 lm/W. The company reckons on a return-on-investment on the LED solution within a few years. Together with the energy saved thanks to the high light output, the company will also benefit from the lower life-cycle costs for LED products.

The specifications for the design of the round custom luminaires for the ambient lighting in the attractive and flexible office landscape came from HdM. Regent met the spec with products from the Solo LED range of recessed ceiling luminaires. A microprismatic diffuser specially developed for application with highly efficient LEDs delivers pleasant, glare-free light. In communication areas and the staff restaurant, decorative Tea LED pendant luminaires are applied, designed by HdM and Regent.

The Tea LED pendant luminaires are suspended at different heights – at up to 8.7 metres in areas that extend over several floors. One challenge comprised counterbalancing the luminaires in the case of movement in the building, especially on floors five to 32. The upper part of the pendant luminaire consists of metal tubes, which limits the amount to which the luminaire swings to and fro. Static calculations were carried out to determine the exact diameter and thickness required for the metal tubes.

