



Manor Group was the first European department store to install energy saving LED lighting. Since then we have retrofitted many of our department stores with LEDs, replacing the HID luminaires traditionally used in the past. It has been a fantastic improvement. We continue to receive compliments from our customers regarding the excellent color and quality of our merchandise. Thanks to the modern LED luminaires the merchandise appears much more natural than in the past. This has been noticed and appreciated by our customers. In addition, we continue to demonstrate the Manor Group's authentic commitment to environmentally conscious and sustainable solutions.

Antonio Giangreco
Head of Facility & Security Konzern

FAST FACTS

- Client**
Manor AG
- Location**
Switzerland, multiple locations
- Project**
Retrofit of Manor Department Stores
- Manufacturer**
RD Leuchten AG
- LED technology**
Bridgelux, Inc.



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CASE STUDY

MANOR
Over 35 Stores Installed

CASE STUDY



After trial installations in Zurich for non-perishable goods and in Basel for food Manor found the illumination quality so improved and the energy savings so significant that it was decided to further deploy the concept to retrofit all of its stores. The fresh food sections were prioritized first due to the fact that the lack of UV and IR radiation can extend the shelf life of perishable goods. In addition to energy savings, the elimination of heat in the light beam created a more pleasant shopping environment, which gained the appreciation of both clients and employees. Manor continues to receive compliments from customers regarding how much more vivid and natural the colors appear in the product displays. To date, Manor has installed over 32,000 LED spot lights from RD Leuchten using Bridgelux RS LED array light sources in a total retail space of 840,000 sq. ft. Through the lower power consumption of the LED lighting and the reduction of air conditioning requirements due to the increased efficiency of the lights, Manor has been able to reduce its annual energy consumption by 1,000 KWh. In addition the LED luminaires will not require replacement for at least 15 years, significantly reducing maintenance costs and material waste.



Bridgelux LED Arrays offer us platform stability, enabling us to take advantage of the latest improvements in LED technology with minimal design changes to our products. This increases our market competitiveness while reducing time to market and development costs. Such platform stability is critically important to support a multi year retrofit program such as Manor.

Rudolf Huegin
CEO RD Leuchten

BACKGROUND

Manor, the largest Swiss department store chain with 69 shops, decided to further its focus on sustainable governance and reduce operating costs to ensure a healthy future throughout the financial crisis with an expected reduction in demand. It became clear to the company that the innovative LED Array technology provided by Bridgelux and the high quality lighting systems developed by RD Leuchten gave the best chance to both improve their cost structure and enhance the lighting experience to increase merchandise velocity and create a more pleasing shopping environment.

THE CHALLENGE

- › Replace installed traditional lighting with LEDs in over 35 stores, covering over 840,000 sq. ft. of retail interior space
- › Dramatically reduce the energy consumption without compromising the light levels delivered by traditional light sources
- › Provide an inviting and comfortable shopping atmosphere

THE SOLUTION

- › A total of 32,000 RD Leuchten fixtures using RS LED arrays from Bridgelux were used to replace the traditional lighting technology
- › For area lighting, RD Leuchten Carda LED Spot fixtures were used to replace a mixture of Fluorescent lamps (Linear & CFL)
- › For spot lighting, RD Leuchten Micro LED Spot track lighting was used to replace HID spot lights

BENEFITS

- › A reduction of 1,000 kW in energy load for lighting and air conditioning has been measured and reported by Manor, with an estimated annual savings of \$115k
- › Reduced electrical consumption equates to annual CO₂ savings of 125 metric tons
- › The vivid and natural high quality light, enhancing the appeal of merchandise on display, has proven to be noticed and appreciated by customers
- › Reduced maintenance costs and long service life
- › No failures reported
- › Lack of UV and IR radiation eliminates damage to merchandise on display
- › Customers and personnel report a more pleasant shopping and working environment due to the elimination of heat in the light beam