

Adding Extra Sparkle in Specialty Retail with SynJet®



Project Statistics:

End User: F. Hinds

Application: high-end retail lighting

Products: Baylight PAR38 downlight

Partner: Brillianz Electronic Systems



Situation:

One of the most alluring features of a diamond is its sparkle. No other mineral reflects and refracts light like a diamond, ensuring a luster and shine that is unparalleled. F. Hinds, one of the UK's most popular and respected jewelry retailers, understands this fact about diamonds and wanted to take advantage of the stone's natural ability to sparkle by installing LED lighting in its high-end jewelry stores.

To develop an LED lighting solution for its more than 100 jewelry stores, F. Hinds tapped UK-based electronics and lighting manufacturer Brillianz Electronic Systems Ltd.

Brillianz faced a number of strict requirements when creating an LED lighting solution for the store. The LEDs had to be bright and clear to best enhance the natural sparkle of each store's collection of diamonds, gold and other jewels. The light fixtures also had to be quiet and attractive. Aesthetics matter a great deal in high-end stores and the unsightliness of a large heat sink or the whirring of a fan would detract from ambiance and, ultimately, the jewelry. Finally, the lights had to be energy efficient.

“Another perk of the SynJet’s efficiency is the limited amount of airflow moving through the system. A low airflow rate translates to a quieter LED light. Furthermore, the SynJet has no joints or ball bearings to rub together and create friction. The SynJet ensures that the LED light will only be seen and not heard.”

**For more information about
Nuventix and SynJet®
Technology visit
www.nuventix.com**

Solution:

To meet these requirements, Brillianz created its Baylight series, a 3000-lumen PAR38 downlight. In order to guarantee the Baylight’s brightness, efficiency and acoustics, and make it a viable solution for F. Hinds stores, Brillianz selected the Nuventix SynJet as its LED thermal management solution.

The benefits the SynJet brings to high-end retail lighting are numerous.

There is no thermal management solution as effective as the SynJet. By delivering targeted pulses of air directly to the LED’s heat sink, the SynJet is able to dissipate 50 percent more heat than fans and 300 percent more heat than natural convection. Because of this, lighting designers are able to fit more lumens into less space while reducing the size of the LED’s heat sink by up to two-thirds – both critical details when developing an attractive downlight for the F. Hinds stores.

Another perk of the SynJet’s efficiency is the limited amount of airflow moving through the system. A low airflow rate translates to a quieter LED light. Furthermore, the SynJet has no joints or ball bearings to rub together and create friction. The SynJet ensures that the LED light will only be seen and not heard.

Thermal efficiency also translates directly to energy efficiency. SynJets consume very little power and allow LED light engines to run up to two times brighter and last longer – all enabling a reduction in energy costs. The Baylight system is expected to save F. Hinds more than GBP 500,000 (around \$307,000 US dollars) in energy costs over the next 10 years.

The Nuventix SynJet, coupled with Brillianz’ Baylight series, provided F. Hinds with the perfect LED solution for its high-end jewelry stores. SynJet technology is the only proven active cooling solution that can answer all the demands of high-end retail lighting while maintaining the durability and efficiency promised of LED lighting solutions.