

Color Select[®] LED Technology

A Case Study

by

Matthias Nikolakopulos, P.E.



Matthias Nikolakopulos, P.E. President

Nikolakopulos, inc. Electrical Engineering · Lighting Design

2780 SKYPARK DR. #280 · TORRANCE, CA · 90505 Tel: (310) 530-7277 · Fax: (310) 530-7283 www.nikolakopulos.com



A novel use for USAI's new Color Select[®] LED technology would be in a high-end auto dealership - where the adjustable white light could be utilized in every area. Luxury auto dealerships are competitive, high dollar environments - where important, and sometimes emotional, decisions are made.

In the showroom: large, slow moving, yet expensive merchandise would benefit greatly from color-changeable fixtures that could be easily, yet discreetly, set to augment the particular car's color.

For example, a showcased car today could be red - and look its best under a warmer color temperature, and then tomorrow, it could be a blue car - that would benefit from cooler color temperatures. And all the while, the innocuous showroom downlights would just look white to the untrained, and unsuspecting, customer's eye - completely unaware that this subtle - yet important - adjustment is subliminally facilitating the sale.



A dealership has both the advantages of time - wherein the effects can take hold, and is also a dynamic environment where repeat customers will continue to be entranced.

This is often done in museum lighting: where art will be so subtlety lit (in comparison to the ambient light) - that the patron will not even realize it is being lit; it will just speak to them. The colors will pop - larger than life - but no one will realize why that is.

Nikolakopulos, inc. Electrical Engineering • lighting Design

Perimeter areas would follow circadian rhythms - making the store look crisp by day:



And then warm and inviting at night:



To attract customers during all hours...

2780 SKYPARK DR. · #280 · TORRANCE, CA 90505 · 310/530-7277 · Fax 310/530-7283 · www.nikolakopulos.com

Nikolakopulos, inc. Electrical Engineering • lighting Design

Customer Lounge and Waiting areas would be warm and comfortable:



Accessories and Parts areas could be bright and sparkling to highlight merchandise and augment sales:



Transitioning in between to defy any discernible difference to the casual observer.

2780 SKYPARK DR. · #280 · TORRANCE, CA 90505 · 310/530-7277 · Fax 310/530-7283 · www.nikolakopulos.com



Exclusive areas that feature selections of various interior leather and wood samples could be warmly lit to provide an inviting atmosphere, and juxtaposed against arrays of exterior paint samples - ranging from warm to cool colors - with overhead lights bringing out the best of both.

Office areas remain cool and functional, perhaps following circadian rhythms throughout the day, with Customer Finance and Closing areas warm and calming.

Yet the whole facility appearing to just be conventionally lit by white LED downlights.

In addition to the usual suspects (e.g., airports, hospitals, markets, nurseries, etc.), the auto dealership presents a unique opportunity to utilize USAI's Color Select[®] LED technology - because it can take advantage of color changing in all of its forms: natural circadian rhythms to emulate sunlight - whether manually controlled, or automatically by astronomical time clocks, as well as artificial control of color to subliminally enhance aesthetic, mood, and function, and thus greatly contribute to the success of the facility.

Other than a house, a car is the most expensive item people will ever buy.

Combining all of the usual office functions, with the highest end retail environment -<u>all under one roof</u> - allows for essentially "one-stop shopping" with the ultimate light fixture technology to achieve all goals. Truly a lighting designer's, as well as a manufacturer's, dream...

