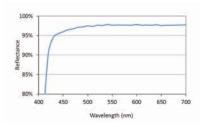
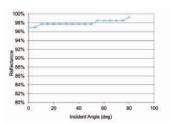
#### WhiteOptics™ Material

WhiteOptics M16 High Diffuse Reflector Material

REFLECTANCE VS WAVELENGTH



High Reflectance across the color spectrum for high efficiency and color neutrality REFLECTANCE VS INCIDENT ANGLE



High Reflectance at all incident angles for optimal utilization of light

- UV stable, does not yellow
- Cleanable with common cleaners
- UL certified to over 100C
- ROHS and REACH compliant

### **Options for all applications:**



Die cut film reflectors with or without adhesive backing





Thermoformed 3D parts



Reflectors and fixture housings formed from **WhiteOptics** Metal



#### **About WhiteOptics**

WhiteOptics™ is a global leader in the development and manufacture of high performance optical films, composites and coatings.

Headquartered in New Castle, DE with sales and distribution across America, the EMEA, and Asia Pacific, WhiteOptics provides innovative products that improve lighting efficiency and design. Originally based on DuPont technology, our unique, multi-generational line of products is transforming fluorescent lighting and enabling a new generation of LED lighting to become possible.

WhiteOptics is proud to be part of many award winning designs and are recognized for our commitment to excellence for delivery, quality, and performance.

#### **Contact:**

North America Headquarters WhiteOptics LLC

243-G Quigley Blvd New Castle, DE 19720 (1) 302-476-2055 x 0 Inquiries@whiteoptics.com

# EMEA (EUROPE, MIDDLE EAST & AFRICA) A.L.P. Europe LTD

Park Lane Industrial Estate Park Lane, Unit 3 West Midlands, B69 4JX United Kingdom +44 (0) 121 552 1519 Fax: +44 (0) 121 552 820

## Asia WhiteOptics Asia Pacific

D610 China-Singapore Ecology Building, 18 Zhan Ye Road Suzhou Industrial Park, Jiangsu Province, China 215121 Tel: 86-512-62713330 inquiries@whiteoptics.com.cn



# white optics

IMPROVING LIGHTING EFFICIENCY AND DESIGN

Increase light output

Increase efficiency

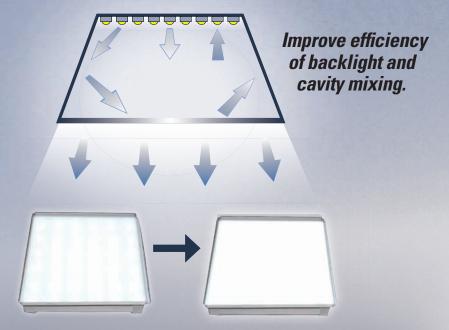
Improve optical æsthetics

Reduce components

Reduce System Cost

# **Back-Lit** Lighting Designs

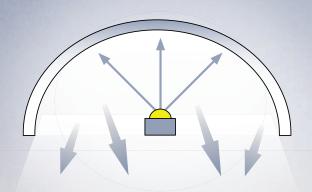
WhiteOptics<sup>™</sup> high diffuse reflection efficiently recycles the light backscattered off of lenses and cavity walls simultaneously increasing light output and diffusion.



- ► Increase light output over 20%
- ► Decrease LED "dots" imaging
- ► Reduce LEDs

## **Indirect** Lighting Designs

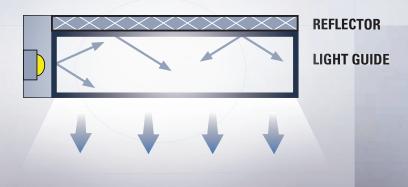
With high diffuse reflection, indirect lighting designs with high efficiency, minimized hot spots and uniform distribution are possible.



- ► Increase efficiency
- **►** Improve distribution
- **▶** Diffuse lamp imaging
- ► Reduce LEDs



For edge-lit lighting, display and signage applications, using **WhiteOptics**<sup>™</sup> as a backplane reflector improves brightness as much as 30% over standard white surfaces through efficient reflection and extraction of light at the light-guide interface. Uniformity of brightness is achieved with greater LED spacing allowing cost savings and design flexibility.



- ► Increase brightness
- ► Improve uniformity
- ► Reduce LEDs

#### REDUCE OVERALL COST • IMPROVE EFFICIENCY & LIGHT DISTRIBUTION

FECEX.
ShipSite







