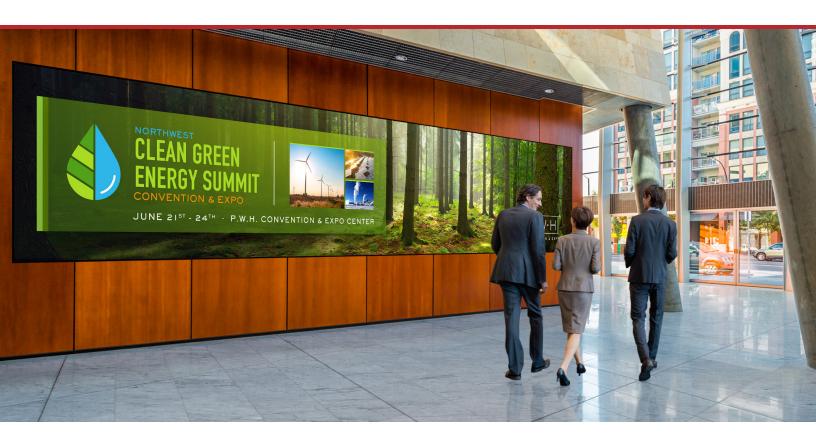


## Planar ERO-LED

## Extended Ruggedness and Optics Technology



# Rugged and Optically-Optimized LED Video Walls

Planar<sup>®</sup> ERO-LED<sup>™</sup> is a proprietary protective coating applied exclusively to best-in-class Planar<sup>®</sup> LED display products to deliver protection and durability in high-traffic environments at a reasonable cost. Unlocking new applications for fine pitch LED displays, Planar ERO-LED enhances the visual performance of an LED video wall with significantly increased contrast in ambient light and improved off-axis performance.

By adding Planar ERO-LED's protective and optically enhancing coating, customers can deploy seamless LED video walls in more environments than ever before, including public spaces where casual contact with video walls may occur, as well as applications that encourage touch interaction with the video wall.

### Proprietary Formula & Process

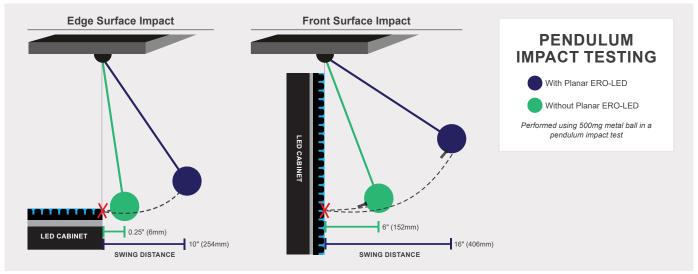
The Planar ERO-LED proprietary coating material is applied at the LED module (printed circuit board) level. This precision coating application process is conducted at Planar and Planar manufacturing facilities by experienced LED technicians to ensure outstanding quality and consistency. Applying the protective surface at the module level allows for individual module removal and replacement, rather than having to remove an entire LED cabinet within a video wall.



Planar ERO-LED is available in a variety of pixel pitches on many of the most popular front service and rear service Planar LED display products to leverage the reliable, high performance and cost-effective SMD LED technology and provide the broadest set of choices at a reasonable price.

#### Added Protection

Adding Planar ERO-LED to LED video walls provide ruggedness and protection from casual contact, front impact, edge impact, liquids, dust, electrostatic discharge (ESD) and humidity. Pendulum impact testing reveals significant improvements in edge and front surface resistance to impact.

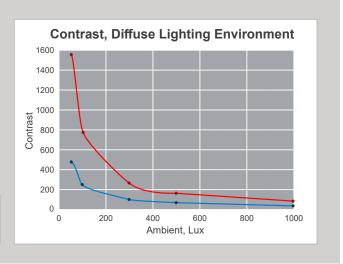


Planar LED-ERO dramatically improves impact-resistance to LED cabinet surface.

## Improved Optical Performance

Visual properties on an LED video wall are enhanced when using protective Planar ERO-LED technology. At varying levels of ambient light, Planar ERO-LED delivers three times the contrast ratio of LED video walls without Planar ERO-LED.





PLANAR ERO-LED SPECIFICATIONS	
Material	Proprietary Epoxy Resin
Hardness	Between 2H and 3H on Mohs Scale
Casual Contact Resistant	Yes, Resistant to casual contact, finger nails or LED catching
Front Impact Resistant	Yes, Increased resistance to front impact damage (Pendulum test)
Edge Impact Resistant	Yes, Dramatically increased resistance to edge impact damage (Pendulum test)
Liquid Protection	Yes, Seals front from liquid and is cleanable
Dust Protection	Yes, Seals front from dust and is cleanable
Contrast Level in Ambient Light	3x that of equivalent non-ERO LED display
ESD Resistant	Yes, Significant protection against ESD event
Humidity Resistant	Yes, Sealed LED and PCB connection provides protection
Cleaner compatible	Yes, Tested with multiple brands glass cleaner, all-purpose cleaner, anti-static cleaner, Isopropyl alcohol and lacquer thinner. Recommended: Glass cleaner