

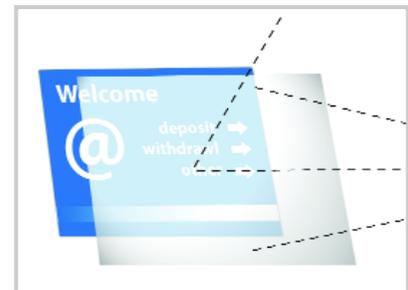


## CONTRAST ENHANCEMENT TECHNOLOGY

A protective layer specially designed to enhance your display.

### FEATURES:

- > Rugged vandal glass with integrated Contrast Enhancement Technology (CET): protects you and your display system from impact and contaminants
- > Increases display contrast ratio by as much as 75% in high ambient light and high glare, improving readability and user satisfaction
- > Reduces need for a brighter backlight lamp, increasing overall system reliability and reducing maintenance costs
- > Improves display system's thermal performance in direct sunlight
- > Based on patent-pending technology invented by Planar's optics experts



- > Protects your display investment.
- > Standard vandal glass.
- > Planar's Contrast Enhancement Technology.

Your display system represents a significant investment that must be protected from accidental or deliberate damage. Typical "vandal glass" is a common addition to many kiosk installations. Unfortunately, this protective layer of glass or plastic can actually reduce the value of your display investment!

Planar is the expert in display solutions for rugged environments. Now, the optics experts at Planar Systems have invented a vandal glass with patent-pending Contrast Enhancement Technology (CET) that not only protects the display - it enhances readability.



Every layer of the display system creates reflections, and reflections reduce contrast ratio. Images are hard to see, colors fade and users become frustrated. Anti-reflective (AR) and anti-glare (AG) coatings can help, but they can't overcome the decreased contrast ratio that occurs in high-ambient light and glare situations, such as outdoors or in brightly lit areas.

Planar's vandal glass with CET protects your display from damage. It also protects your display system investment by improving the contrast ratio by as much as 75% in high-ambient light conditions – 8000 fc / 2000 fL – compared to standard vandal glass. There is very little reduction in brightness, and no reduction in the viewing angle.

Planar's CET layer increases the display contrast ratio without the need for a brighter backlight. This improves reliability as well as readability. Reducing backlight lamp brightness decreases system heat and power consumption, improves overall display reliability and reduces maintenance costs. The CET layer also absorbs infrared radiation, reducing thermal effects of direct sunlight on the display and increasing display life. And it reduces reflection caused by dust on interior surfaces.

Customize your optics system to precisely meet your needs. Planar can provide multiple anti-reflective coating options, as well as custom sizes, strengths and materials. Planar's CET layer can also be applied to touchscreens. Let Planar provide your complete, integrated display solution.

SPECIFICATIONS:									
Weight (15" version)	1.4 kg (3.0 lb.) typical								
Dimensions (15" version)	333 mm (13.1") x 262 mm (10.3") x 7.3 mm (.29")								
Contrast Ratio	<p>With Planar's vandal glass with CET mounted in front of the LC15 (typically 1000 nit brightness) the resulting contrast ratios (CR) will be as follows:</p> <table> <tr> <td>Dark ambient:</td> <td>CR = 420 typical</td> </tr> <tr> <td>7800 fL specular ambient:</td> <td>CR = 41.4 typical</td> </tr> <tr> <td>2000 fC diffuse ambient:</td> <td>CR = 22.2 typical</td> </tr> <tr> <td>Both specular and diffuse:</td> <td>CR = 16.2 typical</td> </tr> </table>	Dark ambient:	CR = 420 typical	7800 fL specular ambient:	CR = 41.4 typical	2000 fC diffuse ambient:	CR = 22.2 typical	Both specular and diffuse:	CR = 16.2 typical
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7800 fL specular ambient:	CR = 41.4 typical								
2000 fC diffuse ambient:	CR = 22.2 typical								
Both specular and diffuse:	CR = 16.2 typical								

(For the purposes of mechanical design, use 1.6 gr./ cm<sup>2</sup> 0.02 lb./in<sup>2</sup>) as the mass per unit area.)

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