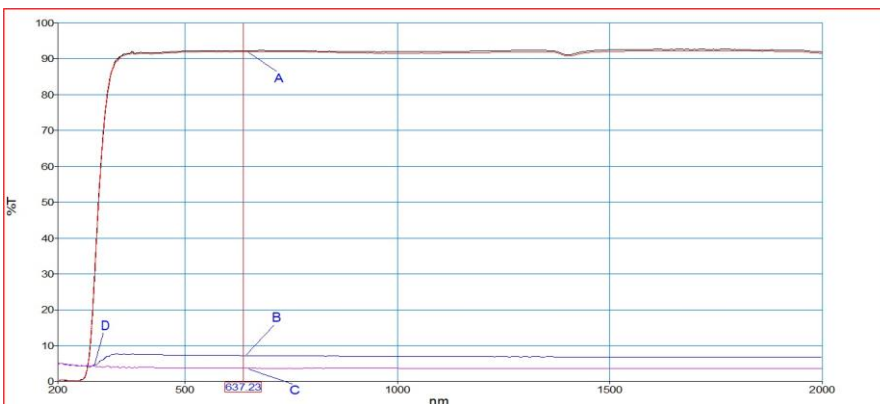
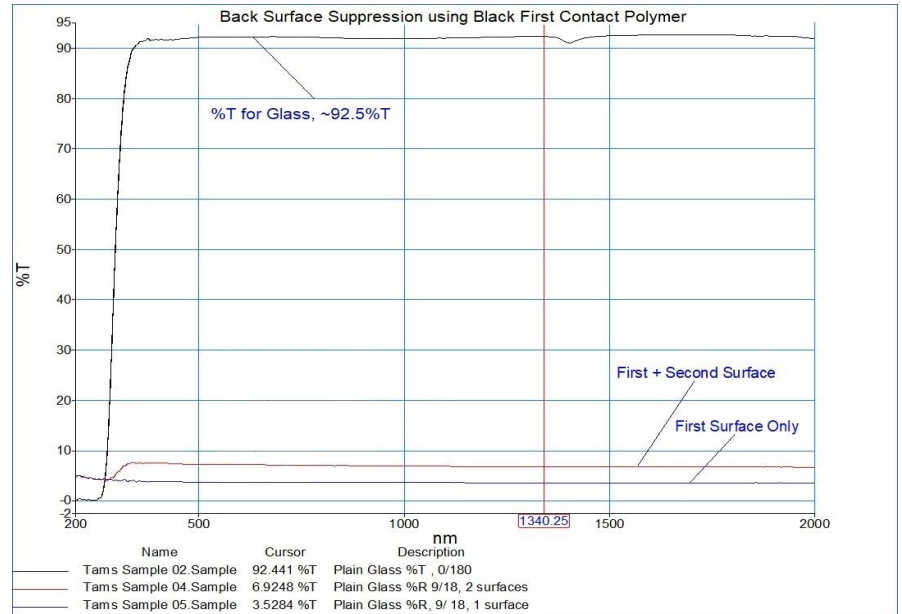


Black First Contact™ Polymer

Black First Contact™ Polymer solution was developed to hide optical backside reflections during optical metrology, interferometry, and microscopy. Backside reflections reduce signal to noise, are recorded as artifacts, or introduce false signals. These reflections often need to be suppressed, and traditional methods involve paints or other hard-to-remove anti-reflection (AR) coatings. The images below show the extent to which Black First Contact Polymers removes backside reflections. Like all our formulas, Black First Contact removes particles to the molecular level yet the low adhesion exhibited by the polymer ensures it is safe for all coatings.

The images at right and below indicate the percentage of transmission of the glass.

- A.** Represents glass transmission ~92.1 %
- B.** Represents reflectance of both surfaces (front and rear), ~ 7.3 %. The sum total of A and B is ~ 99.5 %, the difference amounts to ~ 0.5%.
- C.** Represents reflectance of a single surface when black polymer is applied on rear surface ~ 3.65 %. This is 50% of the reflectance of the 2 surfaces – hence rear surface suppression was successful (within error).



- D.** Below ~ 370 nm the glass absorbs progressively more energy and rear surface reflection is gradually reduced. Eventually at 'D' all energy is absorbed, less the front surface reflection which is always present. Hence at point D, reflection for both surfaces represents front surface reflection value. Spectral overlap at < 280 nm (blue line = pink line) means the data is robust

First Contact™ Polymers – A Solution for Precision Cleaning Needs!

All **First Contact™ Polymer Solutions** provide Next Generation cleaning technology allowing researchers and practitioners the ability to clean optics without any possibility of scratching precision surfaces or optical thin films. These products can be applied with a brush, pipette, or by spraying. When used properly there is no way to scratch the substrate – no matter how much particulate matter is on the dirty surface.

Contact us directly or one of our distributors for more information about **First Contact™ Polymer Solutions**.

Photonic Cleaning Technologies, LLC

PO Box 435

Platteville, WI 53818 USA

(P) 608 467-5396 (F) 608 467-5397