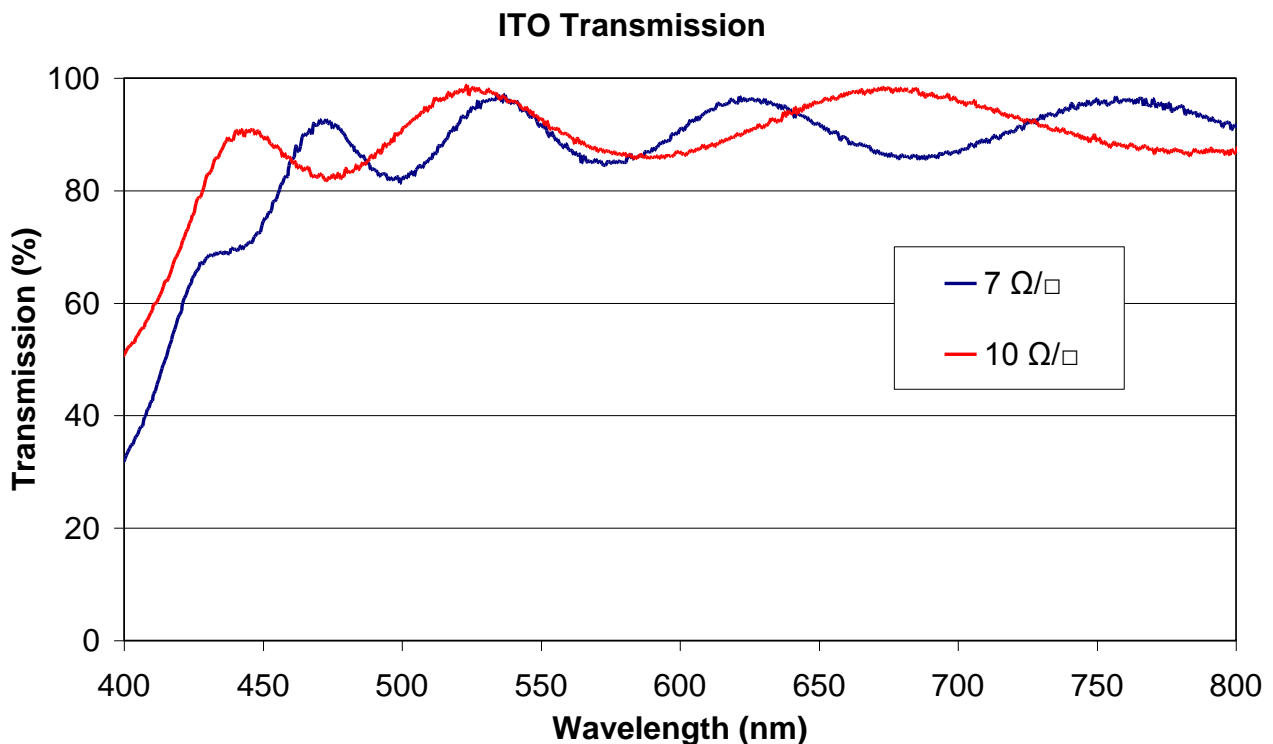




29th June 2009

Indium Tin Oxide

Layers of ITO have been deposited onto planarised PEN substrates supplied by Dupont Teijin Films. Deposition rates of up to approximately 90 nm/min can be achieved using HiTUS technology. The films shown in the graph below have average visible transmissions (from 450 to 750 nm) of 89.7% and 91.6% with sheet resistance of 7 and 10 Ω/\square respectively. These measurements were made with the uncoated glass slide taken as the reference and hence represent the transmission of the coating alone.



A sheet resistance of 3.3 Ω/\square has also been achieved for films with a thickness of 1 μm corresponding to a specific resistivity of $3.3 \times 10^{-4} \Omega\text{cm}$. These exhibited an average visible transmission of 87.0% from 450 to 750 nm. When curled up to approximately a 1.5cm bend radius, no significant change was noted in the sheet resistance across the entire sample.