Supporting information for Solid-state electrochromic devices: relationship of contrast as a function of device preparation parameters

By: Amrita Kumar\textsuperscript{a}, Michael T. Otley\textsuperscript{a}, Fahad Alhasmi Alamar\textsuperscript{b}, Yumin Zhu\textsuperscript{a}, Blaise G. Arden\textsuperscript{a} and Gregory A. Sotzing\textsuperscript{a,b}

Corresponding Author: Gregory Sotzing\textsuperscript{*}

Contact: sotzing@mail.ims.uconn.edu, tel: 860-486-4619, fax: 860-486-4745,

University of Connecticut, Department of Chemistry, Polymer Program, and Department of Physics, 97 North Eagleville Road, Storrs, CT 06269-3136

Photopic contrast as a function of effective polymer layer thickness for PBPMOM-ProDOT using the \textit{in situ} method:

\begin{itemize}
  \item \textbf{Fig. S1} Photopic contrast as a function of effective polymer layer thickness for 2.5 wt\% BPMOM-ProDOT using the \textit{in situ} method.
\end{itemize}
Fig. S2 a) Colored state and b) Bleached state for an electrochromic window with a 4cm² active area using the *in situ* procedure with 2.5 wt% ProDOT-Me₂ in the electrolyte gel.

**Diffusion study:** Diffusion coefficients of different concentrations of EDOT, ProDOT-Me₂, and BPMOM-ProDOT were performed following our previous work.¹
Diffusion coefficient of different concentrations of ProDOT-Me$_2$ in solid gel electrolyte:

**Fig. S3**: Diffusion coefficient of ProDOT-Me$_2$ at different concentrations (w/w) inside the gel matrix.

Reference: