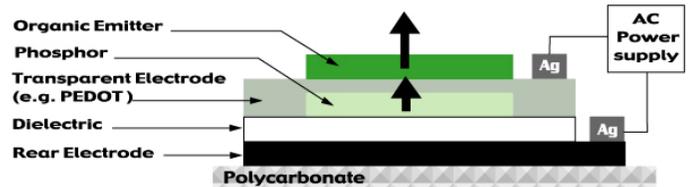




## POLYMER BASED LIGHTING | STEFD

**Start/Completion Dates:** July 2006 - March 2008

- NSRDEC and Crosslink are developing a flexible electroluminescent (EL) polymer lighting system for field shelters. The EL lighting system consists of a number of flexible light panels designed to fold with the shelter walls/ceiling upon strike and erect as a semi-permanent part of the shelter. As a result, the EL lighting system will reduce logistics and deployment time for shelter systems while providing high quality white light.
- The EL lighting program is currently in its second year of a congressionally funded S&T program. This research program transformed an inflexible, but moldable, technology to one that would meet the stringent flexibility and durability requirements of Army shelter fabrics. Crosslink had delivered an early prototype of the EL lighting system to NSRDEC for evaluation. Human factors testing was recently conducted and testing of the system continues at NSRDEC. A second generation prototype will be delivered as part of the ADAMS program in early FY08. Research and development continue to increase lamp brightness and efficiency while maintaining a high level of flexibility and durability.
- Crosslink is in the process of identifying industry partners for high-speed, roll-to-roll printing as a means of mass production. They are also in the process of identifying industry partners for the integration into Army shelters.



**BASIC EL PANEL LAYERS.  
SUBSTRATE IS NOT EXCLUSIVE TO  
POLYCARBONATE.**



**A CROSSLINK EL PANEL DEMONSTRATES  
FLEXIBILITY IN GELBO FLEX TEST**



**CROSSLINK WHITE LIGHT NSRDEC  
PROTOTYPE**

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