

A prototype solar awning has been designed and installed on a University of Oregon campus building. The solar awning is composed of a light shelf with photovoltaic modules attached tilted 20° to the south. An interior light shelf and LED lights have been installed along with monitoring equipment to evaluate the total amount of energy produced by the system and saved by reducing the heat load of the building. The system has been extensively monitored and the analysis of this system will be used to evaluate the economics of solar awnings on campus buildings across the university system.

A kiosk in the hallway turns the system into a solar awning lab where students and faculty can perform tests and experiments on a real solar awning -- daylighting system. The data are also available over the internet.

The solar awning produces electricity, reduces heat buildup in the hallway, provides daylighting to reduce electrical load and heat associated with lighting, provides experience for future the installation of solar awnings, and offers educational opportunities.