



LUMO PANEL

Innovative Solar Greenhouse Solution

info@soliculture.com

Benefits

Harvest light for power generation

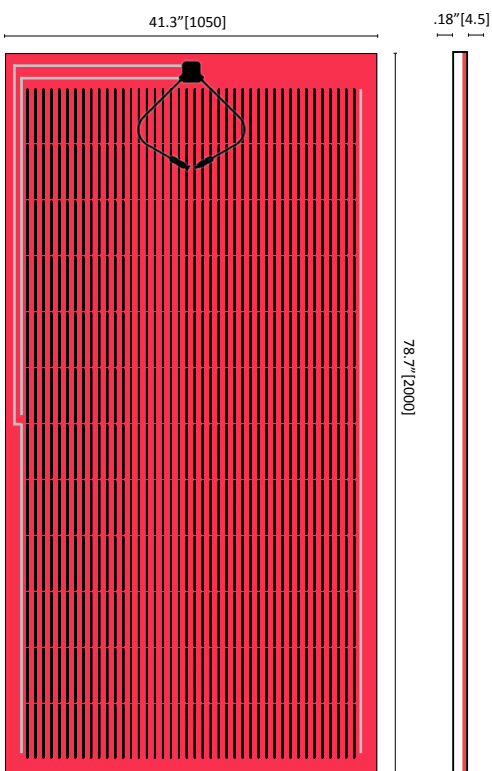
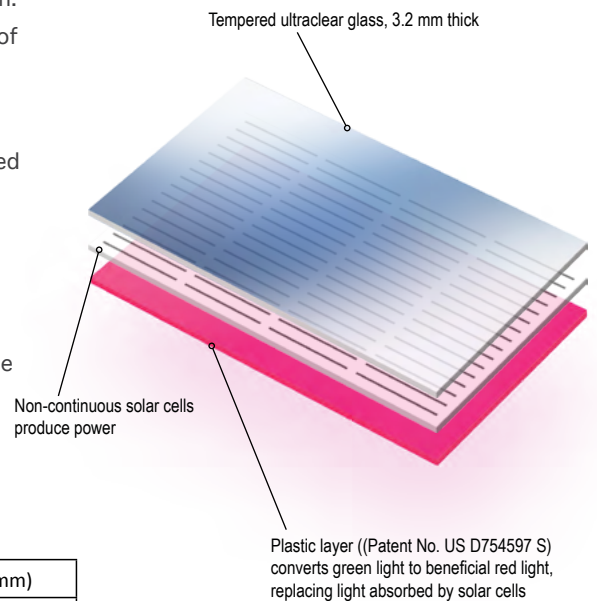
Soliculture's panels combine efficient greenhouse growing with solar power production. The panels offset expensive agricultural energy costs and are customizable to any roof configuration and glass size.

Enhance the solar spectrum for plants

Soliculture LUMO uses a luminescent dye to convert the green light not efficiently used by plants into beneficial red light. Yields under the LUMO have been positive in extensive plant trials.

Let your greenhouse pay for itself

The LUMO uses photovoltaic cells in a patented interdigitated array developed by the Solaria Corporation. Dye concentration has been selected so that light removed by the cells is offset by the increase in usable red light from the dye.



Mechanical Specifications

Length	78.7 in (2,000 mm)
Width	41.3 in (1,050 mm)
Thickness	0.18 in (4.5 mm)
Module Area	22.2 ft ² (2.06 m ²)
Weight	45 lbs. (20.5 kg)

Electrical Specifications*

Module	LUMO-114
Rated Power (Pmax)	114 W
Maximum Power Voltage (Vmp)	13.6 V **
Maximum Power Current (Imp)	8.4 A
Open Circuit Voltage (Voc)	17.3 V **
Short Circuit Current (Isc)	9.2 A
Connector Type	Amphenol® H4

* Taken at STC: Irradiance 1000W/m², Air Mass 1.5, Temperature 25°C. Specified power rating is +3/-2% of indicated Pmax under STC.

** Soliculture modules run at a low temperature in the field and do not have a significant loss in voltage due heating when exposed to high irradiances.