

# High Volume Light Soaking and UV Testing of Photovoltaic Modules

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## Atonometrics Light Soaking System with *in situ* I-V



Capable of simultaneous testing of 4 to 6 standard size PV modules

## Atonometrics UV Exposure System

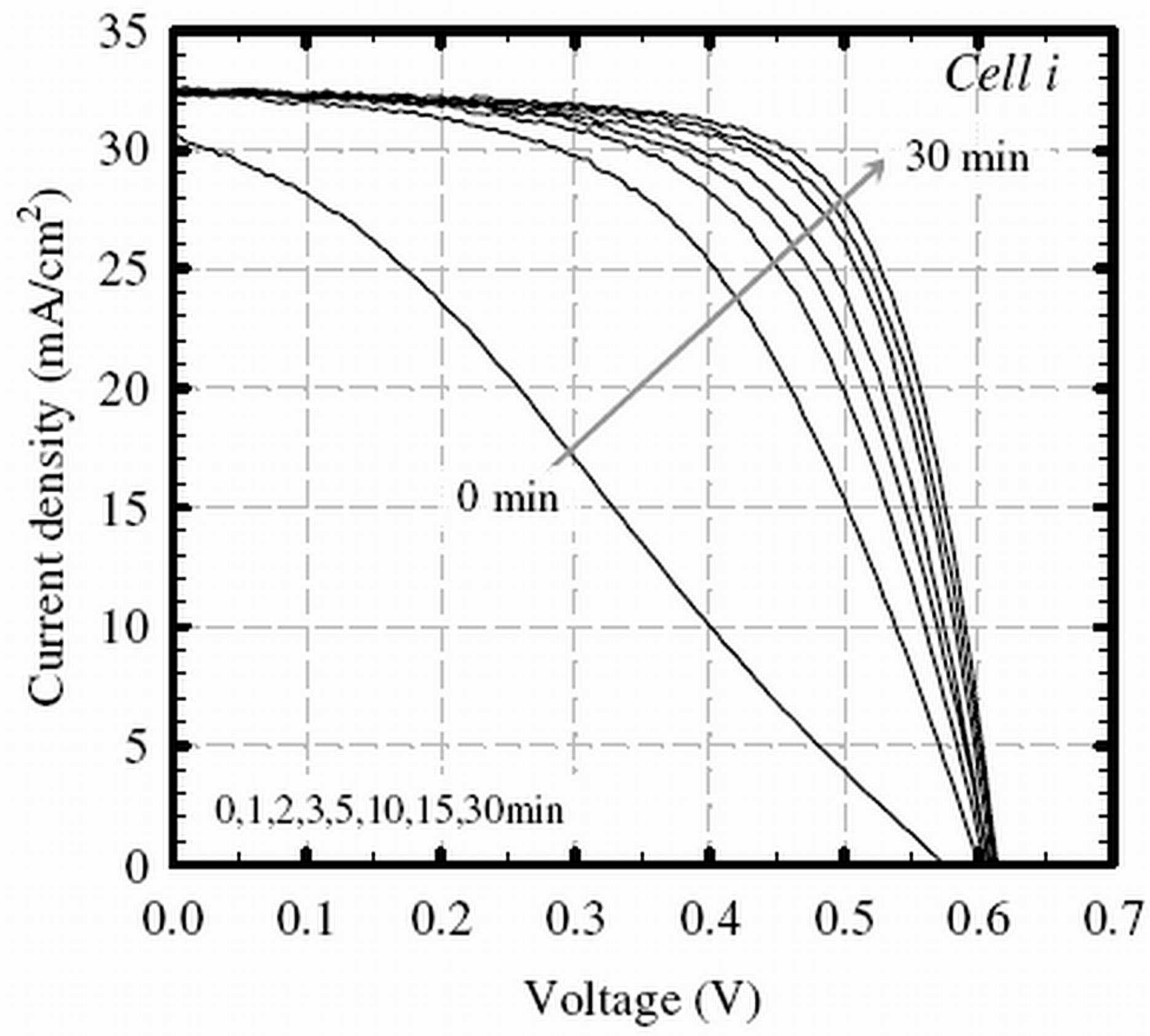


Capable of simultaneous testing of 4 to 6 standard size PV modules

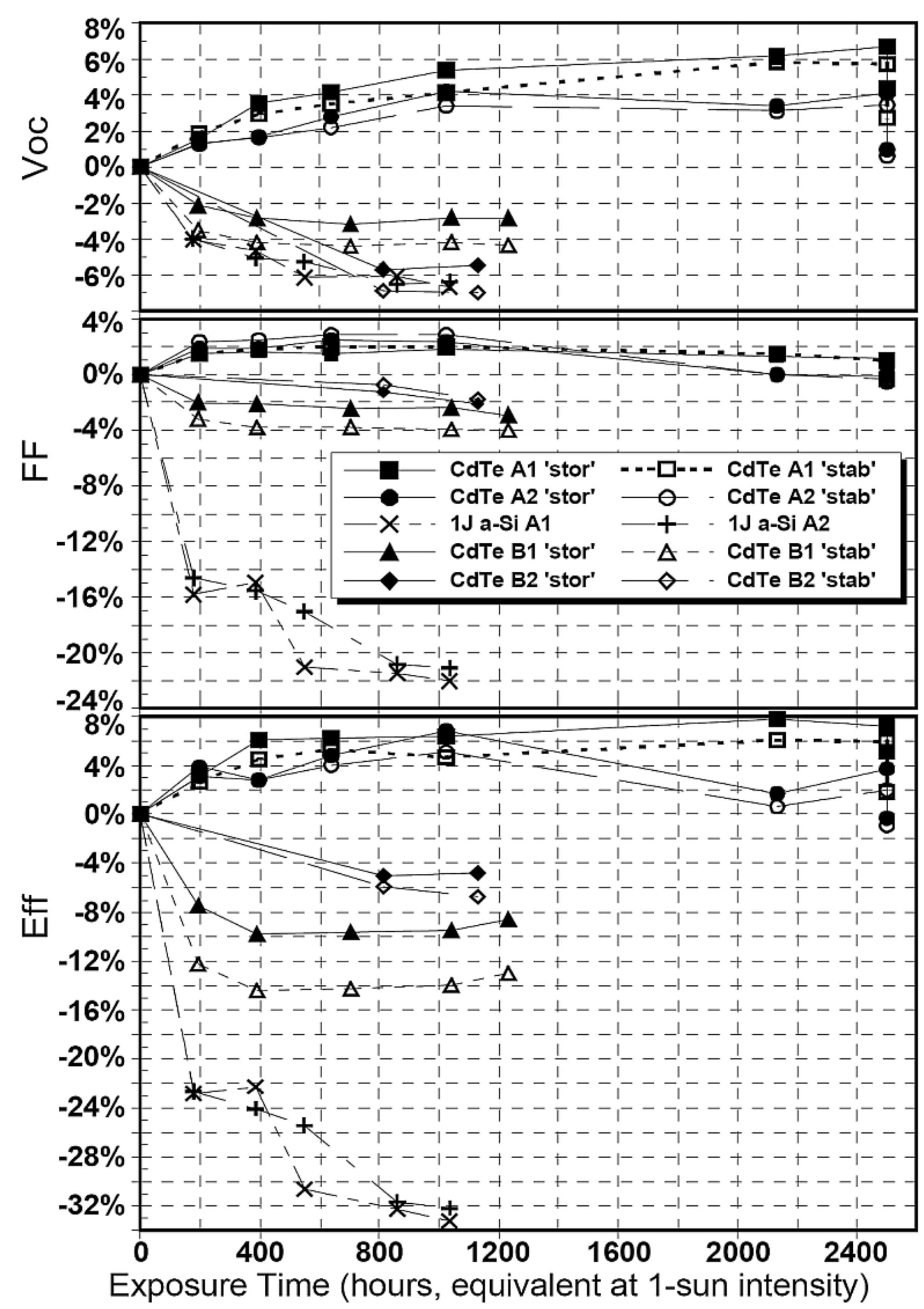
## Light Soaking results from Literature

### CIGS<sup>1</sup>

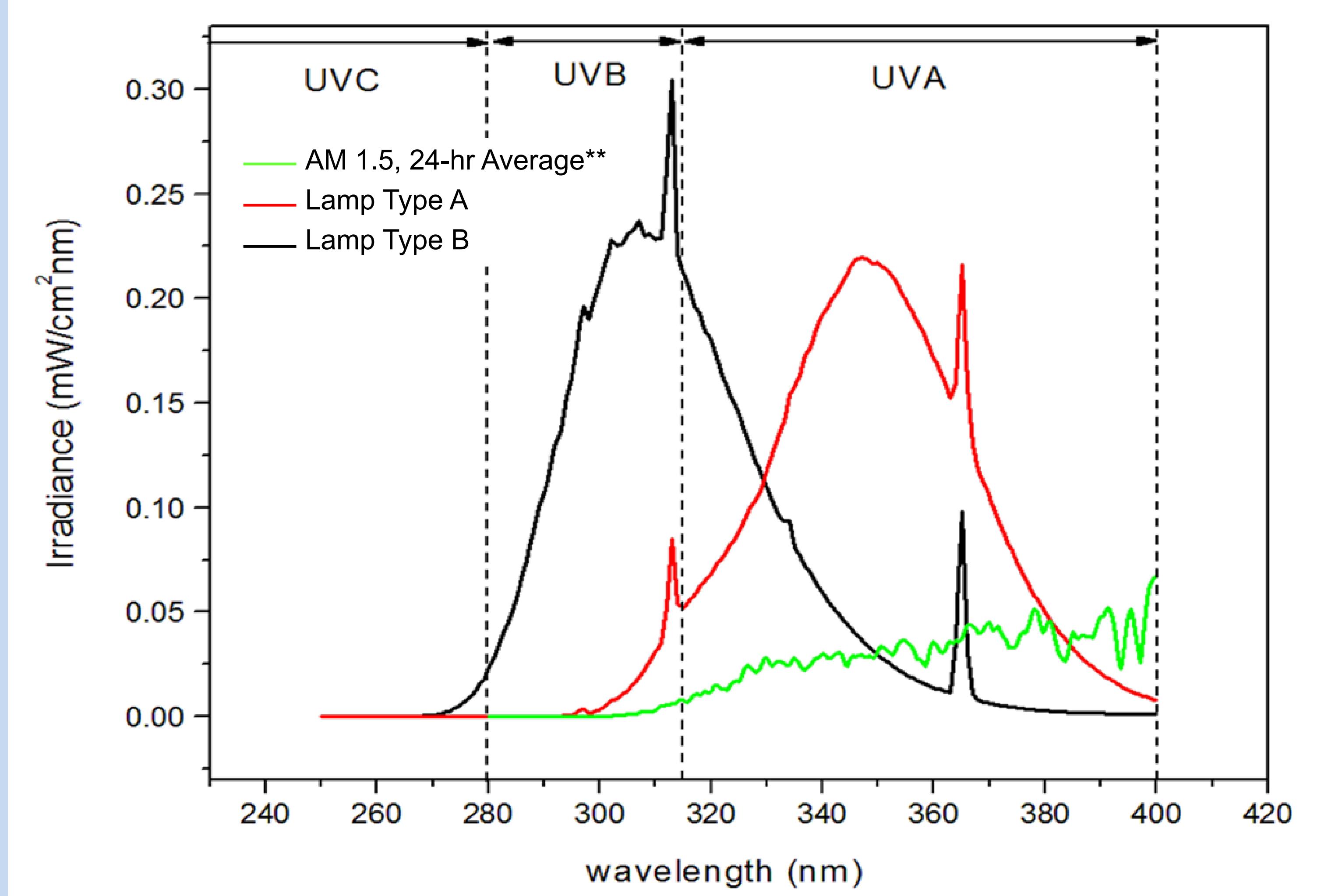
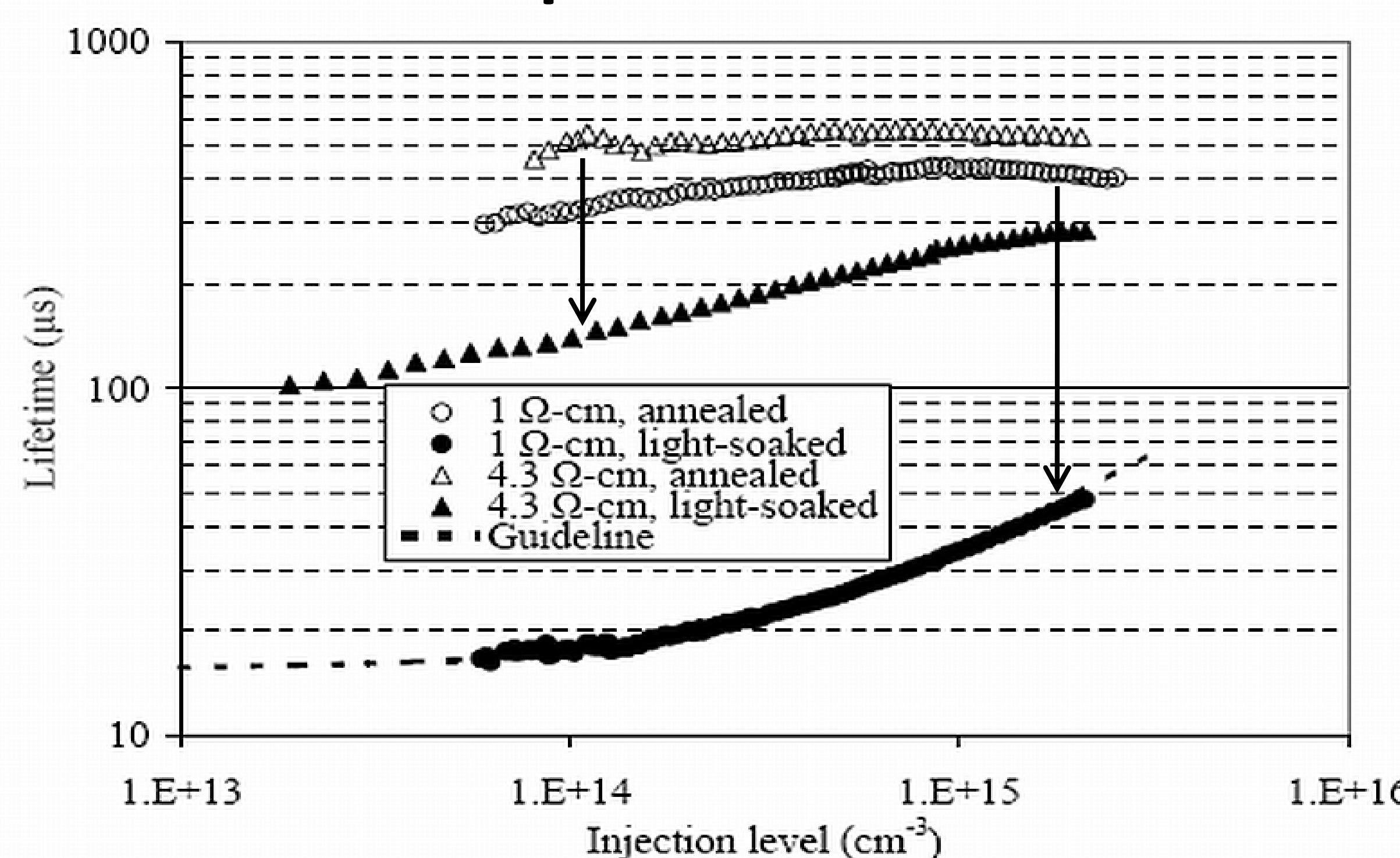
ZMO/CdS/CIGS (CBO: 0.24 eV)



### a-Si and CdTe<sup>2</sup>



### B-Doped Cz C-Si<sup>3</sup>



<sup>1</sup>"Variable Light Soaking Effect of Cu(In,Ga)Se<sub>2</sub> Solar Cells with Conduction Band Offset Control of Window/Cu(In,Ga)Se<sub>2</sub> Layers", T. Minemoto *et. al.*, Mater. Res. Soc. Symp. Proc. Vol. **1012** (2007).

<sup>2</sup>"Advanced Indoor Light-Soaking Facility", J. A. del Cueto, *et. al.*, Presented at the 2004 DOE Solar Energy Technologies Program Review Meeting

<sup>3</sup>"Fundamental Research and Development for Improved Crystalline Silicon Solar Cells", A. Rohatgi, NREL Subcontract Report NREL/SR-520-42324 (2007).