

Measurements and Characterization Division
Photovoltaic Cell Measurements Request Form

Confidential (protection available only to USA requesters)

Requester and Correspondence Information

Requester _____ Requester phone _____
 Requester Affiliation _____ Requester fax or email _____
 Cover letter? Y/N Requester's data supplied? Y/N WFO task number (if WFO) _____
 Other persons authorized to receive data and test report _____

If other than requestor

Technical contact person and contact information _____
 Deliver data to _____ Return sample to _____

Sample information (please use one form for each material/structure)

Manufacturer _____ Device IDs _____
 Property of (if other than Mfr) _____
 World record expected? Y/N Number of junctions 1/2/3/4
 Has this cell been previously measured in this lab? Yes → When _____ No Don't know

Please circle junctions below. Do not indicate windows, AR coatings, or contacts. If you wish to have these or other features indicated on the test report, please note them in the comment section, below.

Mono-Si	a-Si/multi-Si	GaAs	GaInP/GaAs/Ge Triple	ZnO/CdTe
Multi-Si	CdS/CdTe	GaAs/Ge Tandem	GaInP/GaInAs/Ge Triple	ZnO/Cu(In,Ga)Se ₂
a-Si	CdS/Cu(In,Ga)(S,Se)	GaInAs	nano-crystalline	ZnO/CuInSe ₂
a-Si/a-Si	CdS/Cu(In,Ga)Se ₂	GaInAs/GaAs Hetero-j	solid nano-crystalline	
a-Si/a-Si:Ge	CdS/CuInSe ₂	GaInP	Quantum Dot	<input type="checkbox"/> other III/V _____
a-Si/a-Si/a-Si:Ge	GaAlAs/GaAs Tandem	GaInP/GaAs Hetero-j	Organic	<input type="checkbox"/> other II/VI _____
a-Si/a-Si:Ge/a-Si:Ge	GaAlAs/GaAs Hetero-j	GaInP/GaAs Tandem	Ge	<input type="checkbox"/> other _____

Requester's data Area Isc Jsc Voc FF Eff.

Measurement Requested

- QE/LIV Global Performance Quantum Efficiency and current vs. voltage under AM1.5 global normal spectral irradiance (1000 W/m², ASTM G173, IEC 60904-3 edition 2) at 25°C.
- QE/LIV Concentrator Performance Quantum Efficiency and current vs. voltage under AM1.5 direct normal spectral irradiance (1000 W/m², ASTM G173 direct) at 25°C.
- DIV Dark current vs. voltage Don't exceed: _____ A, _____ V(forward), _____ V(reverse).
- Reference cell with built-in shunt resistor
- QE only (Relative) Wavelength Range _____ - _____ nm Light bias _____ mA Voltage Bias _____ V Rev/Fwd
- OTHER (please explain)

Priority

(This section is to be completed only by Paul Ciszek or Keith Emery.)

- Normal (12 weeks, multijunction devices take longer)
- Rush By _____
- Now

Sample identification or contacting diagram

Use back of form if necessary

Other Notes or Instructions

<u>Shipping Address</u>	<u>Postal Address</u>	<u>Contact Information</u>	<u>Phone</u>	<u>email</u>
PV Cell Performance Laboratory Paul Ciszek, NREL, SERF, Lab E220 16253 Denver West Parkway Golden, CO 80401-3393 USA	PV Cell Performance Laboratory Paul Ciszek, NREL, MS 3215 1617 Cole Blvd. Golden, CO 80401-3393 USA	Laboratory Paul Ciszek Keith Emery (team leader) NREL PV website: http://www.nrel.gov/pv	(303) 384-6458 (303) 384-6647 (303) 880-2913	paul.ciszek@nrel.gov keith.emery@nrel.gov

Date Received _____ **Authorization to Proceed** _____

Date Reviewed _____ Reviewer's Initials _____ Date shipped or returned _____