

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	Ge	ZnO/Cu(In,Ga)Se2
a-Si	CdS/Cu(In,Ga)(S,Se)	GaInAs	nano-crystalline	ZnO/CuInSe2
a-Si/a-Si	CdS/Cu(In,Ga)Se2	GaInAs/GaAs Hetero-j	solid nano-crystalline	
a-Si/a-Si:Ge	CdS/CuInSe2	GaInP		<input type="checkbox"/> other III/V _____
a-Si/a-Si/a-Si:Ge	GaAlAs/GaAs Tandem	GaInP/GaAs Hetero-j		<input type="checkbox"/> other II/VI _____
a-Si/a-Si:Ge/a-Si:Ge	GaAlAs/GaAs Hetero-j	GaInP/GaAs Tandem		<input type="checkbox"/> other _____

Requester's data	Area	Isc	Jsc	Voc	FF	Eff.
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**Measurement Requested**

- QE/LIV Global Performance Quantum Efficiency and current vs. voltage under AM1.5 global normal spectral irradiance (1000 W/m<sup>2</sup>, 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/m<sup>2</sup>, ASTM G173 direct) at 25°C.
- DIV Dark current vs. voltage Don't exceed: \_\_\_\_\_ A, \_\_\_\_\_ V(forward), \_\_\_\_\_ V(reverse).
- Reference cell Calibration Current at zero volts / Voltage **NOTE: only for devices that incorporate resistors or other elements**
- QE only Absolute/Relative Wavelength Range \_\_\_\_\_ - \_\_\_\_\_ nm Light bias \_\_\_\_\_ mA Voltage Bias \_\_\_\_\_ V Rev/Fwd
- OTHER (parameter v. temperature, bias rate, or irradiance, non-standard reporting conditions)

**Priority**

(This section is to be completed only by Tom Moriarty or Keith Emery.)

- Normal (4 to 8 weeks, multijunction devices take longer)
- Rush By \_\_\_\_\_
- Now

**Sample identification or contacting diagram**

Use back of form if necessary

**Other Notes or Instructions**

Shipping Address	Postal Address	Contact Information	Phone	email
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: <a href="http://www.nrel.gov/pv">http://www.nrel.gov/pv</a>	(303) 384-6458 (303) 384-6647 (303) 384-6632	paul_ciszek@nrel.gov keith_emery@nrel.gov

Date Received \_\_\_\_\_ **Authorization to Proceed** \_\_\_\_\_

Date Reviewed \_\_\_\_\_ Reviewer's Initials \_\_\_\_\_ Date shipped or returned \_\_\_\_\_