



# TS IEC 62804-1:2015

Photovoltaic (PV) Modules - Test Methods for the detection of potential-induced degradation

Part 1: Crystalline silicone  
Confirmation of test results

Ref.: TRPVM-ET-20190521-077

Applicant: Sharp Corporation  
282-1, Hajikami, Katsuragi-shi 639-2198 NARA (NARA-KEN),  
Japan

Product: Crystalline Silicon Photovoltaic (PV)-Modules

Type:

A)	ND-AF330C;	B)	ND-AF330E;
C)	NU-AF365E;	D)	NU-AF370E;
E)	NU-AF345H;	F)	NU-395KG;
G)	NU-JB395;	H)	NU-AF380C;
I)	NU-325KC;	J)	NU-330KC;
K)	NU-JC320B;	L)	NU-JC330;

Manufacturer: JINZHOU YANGGUANG ENERGY CO., LTD.

Standard: TS IEC 62804-1:2015

Test conditions

Testing time: 96 h  
Chamber temperature: 60°C  
Relative Humidity: 85 %  
Potential to ground: - 1500 V

Pass criteria

Power degradation: < 5%  
Dry Insulation: > 40 MΩm<sup>2</sup>  
Wet insulation: > 40 MΩm<sup>2</sup>  
Ground continuity: < 0.1Ω



### Summary of test results:

<b>Maximum power degradation:</b>	allowed	max. 5 %
	measured	max. 0.8 %

The measured degradation is below the allowed degradation.

<b>Dry insulation resistance:</b>	required	20.6 M $\Omega$
	measured	>500 M $\Omega$

<b>Wet insulation resistance:</b>	required	20.6 M $\Omega$
	measured	>500 M $\Omega$

The measured wet insulation resistance is above the limit.

<b>Ground continuity test:</b>	required	max. 0.1 $\Omega$
	measured	max. 0.005 $\Omega$

<b>Visual inspection:</b>	No findings
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The complete test results and the relevant bill of materials are given in Test Report No.: TRPVM-ET-20190920-165-1, TRPVM-ET-20190920-165-2 and TRPVM-ET-20190920-165-3, TRPVM-ET-20190920-165-4, TRPVM-ET-20190920-165-5.

### VDE Renewables GmbH

  
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