



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-20200108-008-2

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

Product: Crystalline Silicon Photovoltaic (PV)-Modules

Type: A) NU-JD440M
B) NU-JD445M
C) NU-JD445
D) NU-445KG
E) NU-JD450
F) NU-JD450M

XXX in the type replace the power in Watt and can be any number between:

440 for A)
445 B), C) and D)

Manufacturer: JINZHOU YANGGUANG ENERGY CO., LTD.

Standard: TS IEC 62804-1:2015

Test conditions

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

Pass criteria

Power degradation: < 5%
Dry Insulation: > 40 MΩm²
Wet insulation: > 40 MΩm²
Ground continuity: < 0.1Ω



Summary of test results:

Maximum power degradation:	allowed	max. 5 %
	measured	max. 1.0 %

The measured degradation is below the allowed degradation.

Dry insulation resistance:	required	18.1 M Ω
	measured	>1000 M Ω

Wet insulation resistance:	required	18.1 M Ω
	measured	>1000 M Ω

The measured wet insulation resistance is above the limit.

Ground continuity test:	required	max. 0.1 Ω
	measured	max. 0.005 Ω

Visual inspection:	No findings
---------------------------	-------------

The complete test results and the relevant bill of materials are given in Test Report No.: TRPVM-ET-20200108-008-2.

VDE Renewables GmbH


Ariel Ma


Dean Wen

2021-10-08

