



IEC 60068-2-68:1994
Dust and Sand test Lc1
Confirmation of test results

VDE Renewables File Ref.: 10011/ ET-20221016-187

Applicant: Wuxi Suntech Power Co., Ltd.
16 Xin Hua Road, Xinwu District, 214028 Wuxi City, China

Product: Crystalline silicon Photovoltaic (PV)-Modules

Type: **A) STPXXXS-C72/Nsh+** **B) STPXXXS-C54/Nshb+**
B) STPXXXS-C54/Nsh+ **B) STPXXXS-C54/Nshm+**

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

545 – 580 for A); 405 – 435 for B)

Manufacturer: Wuxi Suntech Power Co., Ltd.

Standard: IEC 60068-2-68, Dust and Sand test Lc1

Test sequence: Based on IEC 61701:2011

Test conditions

Dust concentration: 4.9 - 5.2 g/m³

Wind velocity: 19.1 – 20.4 m/s

Particle size: Variant 3, <590 µm

Dust composition: Quartz, 95% SiO₂

Testing time: Front side: 4 h, Rear side: 4 h

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. 0.32 %

The measured degradation is below the allowed degradation.

Dry insulation resistance: required min. 15.5 M Ω
measured >500 M Ω

The measured dry insulation resistance is above the limit.

Wet insulation resistance: required min. 15.5 M Ω
measured >500 M Ω

The measured wet insulation resistance is above the limit.

Ground continuity test: required max. 0.1 Ω
measured max. 0.0038 Ω

The measured ground continuity test is below the limit.

The complete test results and the relevant bill of materials are given in Test Report No.: TRPVM-ET-20221016-187-1.

VDE Renewables GmbH

Zhiyao Wang

Dean Wen

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