



IEC 61701:2011

Salt mist corrosion testing of photovoltaic (PV) modules

Confirmation of test results

Ref.: 10036/2021-40045

Applicant: LG Electronics Inc.
168, Suchul-daero, Gumi-si, Gyeongsangbuk-do, 730-903,
South Korea

Product: Crystalline Silicon Photovoltaic (PV)-Modules

Type: A) LGXXXQ1K-N5
B) LGXXXN1K-L5
C) LGXXXN1K-N5
D) LGXXXN1K-A6
E) LGXXXN1K-B6
F) LGXXXQ1K-A6
G) LGXXXQAK-A6

XXX in the type replaces the power in Watt at STC and can be any number between 360-380 for A), 310-370 for B), C), 345-370 for D), E), 375-390 for F) and 415-430 for G).

Manufacturer: LG Electronics Inc.

Standard: IEC 61701:2011

Test conditions: As given in IEC 61701:2011

Severity:	6
Testing time:	56 days
Mist ph level:	7
Angle of inclination from horizontal:	75°

Pass criteria

Visual inspection:	No findings which may affect safety.
Power degradation:	< 5 %
Dry Insulation:	> 40 MΩm ²
Wet insulation:	> 40 MΩm ²
Bonding path resistance:	< 0.1 Ω
Bypass diode functionality test:	Bypass diodes shall remain functional



Summary of test results:

Visual inspection: No findings.

Maximum power degradation: allowed < 5 %
measured max. 1,34 %

The measured degradation is below the limit.

Dry insulation resistance: required $\geq 23,1 \text{ M}\Omega$
measured min. 500 M Ω

The measured dry insulation resistance is above the limit.

Wet insulation resistance: required $\geq 23,1 \text{ M}\Omega$
measured min. 500 M Ω

The measured wet insulation resistance is above the limit.

Bonding path resistance: required < 0,1 Ω
measured max. 0,004 Ω

The measured bonding path resistance below the limit.

Bypass diode functionality test: Bypass diodes remain functional

The complete test results and the related bill of materials are given in the Test Report No. TRPVM-2021-40045-4.

VDE Renewables GmbH


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