

IEC 61701:2011

Salt mist corrosion testing of photovoltaic (PV) modules

Confirmation of test results

Ref.: 10036/2020-40522

Applicant: LG Electronics Inc.

168, Suchul-daero, Gumi-si, Gyeongsangbuk-do,

730-903, South Korea

Product: Crystalline Silicon Photovoltaic (PV)-Modules

Type: A) LGXXXN2W-E6

B) LGXXXN2W-E6.AW5

C) LGXXXN2T-E6 D) LGXXXN1C-E6 E) LGXXXN1W-E6 F) LGXXXN1K-E6 G) LGXXXN1T-E6

XXX in the type replace the power in Watt and can be any number between: 430 – 470 for A), B), 420 – 440 for C), 355 – 390 for D), E),

350 - 380 for F) and 345 - 365 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: $> 40 \text{ M}\Omega\text{m}^2$

Wet insulation: $> 40 \text{ M}\Omega\text{m}^2$

Bonding path resistance: $< 0.1 \Omega$

Bypass diode functionality test: Bypass diodes shall

remain functional

BIC: DEUTDEFFXXX



Summary of test results:

Visual inspection: No findings.

Maximum power degradation: allowed < 5 %

measured max. 1,21 %

The measured degradation is below the limit.

Dry insulation resistance: required $\geq 20,2 \text{ M}\Omega$

measured min. 999 $M\Omega$

The measured dry insulation resistance is above the limit.

Wet insulation resistance: required ≥20,2 MΩ

measured min. 999 MΩ

The measured wet insulation resistance is above the limit.

Bonding path resistance: required <0,1 Ω

measured max. $0,0295 \Omega$

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-2020-40522-1 and TRPVM-2020-40523-1.

VDE Renewables GmbH

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63755 Alzenau, 2021-02-05

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