



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) LGXXXN2W-L5 | G) LGXXXQ1C-N5 |
| B) LGXXXN2W-N5 | H) LGXXXN1C-A6 |
| C) LGXXXN1C-L5 | I) LGXXXN1W-A6 |
| D) LGXXXN1W-L5 | J) LGXXXQ1C-A6 |
| E) LGXXXN1C-N5 | K) LGXXXQAC-A6 |
| F) LGXXXN1W-N5 | |

XXX in the type replaces the power in Watt at STC and can be any number between 390-430 for A), B), 310-365 for C), D), 310-370 for E), F), 370-390 for G), 355-385 for H), I), 390-405 for J) and 430-445 for K).

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. 1,24 %

The measured degradation is below the limit.

Dry insulation resistance: required $\geq 19,3 \text{ M}\Omega$
measured min. 500 $\text{M}\Omega$

The measured dry insulation resistance is above the limit.

Wet insulation resistance: required $\geq 19,3 \text{ M}\Omega$
measured min. 500 $\text{M}\Omega$

The measured wet insulation resistance is above the limit.

Bonding path resistance: required < 0,1 Ω
measured max. 0,01 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-2021-40045-3.

VDE Renewables GmbH


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63755 Alzenau, 2021-01-25