TEST CERTIFICATE

The product Photovoltaic Module has been tested by UL International Germany GmbH and found to comply in accordance with the Standards and criteria indicated on this report.

Certificate Number: 4790084986.2-B

Issue Date: 2022-10-27

Test Location: China Telecommunication Technology Labs (vendor)

Issued to: PHILADELPHIA SOLAR LTD CO

Tested Model: Type 1) PS-M144(HC)-540W (half-cut monofacial)

Type 2) PS-M144(HCBF)-GG-540W (half-cut bifacial)

(Refer to Report No. 4790084986.2-B for BOM and Test details)

Test Sequence: DUST AND SAND TEST FOR PHOTOVOLTAIC (PV) MODULES (Lc1)

Test Condition: Test method: Lc2

Dust/Sand type: Quartz, SiO₂

Dust/Sand concentration: 10 g/m3 ± 3 g/m3

Air velocity: 20 m/s ± 2 m/s

Duration: 8 hours (4 hours for front and 4 hours for rear side)

Standard(s): IEC 60068-2-68 first Edition, dated 1994-08. Environmental testing -

Part 2: Tests - Test L: Dust and sand

Disclaimer: Test results apply only to the sample(s) actually tested by UL International Germany GmbH or its vendor. The client provided all of the test samples for testing by UL. UL did not select the samples or determine whether the samples provided were representative of other manufactured products. UL has not established Follow-Up Service or other surveillance of the product. The client and or manufacturer are solely and fully responsible for conformity of all products to all applicable standards, specifications or requirements. UL Logo and Marks shall not be used in connection with the above tested product(s). Only those products bearing the UL Listing and Classification Marks should be considered as being covered by UL's Listing, Classification and Follow-Up Service. Look for the UL Listing and Classification Mark on the product.

Issued By:

UL International Germany GmbH

Authorized By

Ali Eminel

UL International Germany GmbH



^{*} Manufacturer declares that samples submitted for evaluation are representative of the covered models and produced using the same materials, components, equipment, and processes. Details of the bill of materials are provided in Appendix 4 of the test report. Any change in design, materials, components, equipment, and processes may require retesting to maintain the compliance.

TEST CERTIFICATE

Certificate Number: 4790084986.2-B

Issue Date: 2022-10-27

Models Covered*: Series of Product Type 1) Half-cut Monofacial:

PS-M156(HC)-xxxW (Where xxx: 525-640 watt)

PS-M144(HC)-xxxW (Where xxx: 485-590 watt) (Tested series)

PS-M132(HC)-xxxW (Where xxx: 450-540 watt) PS-M120(HC)-xxxW (Where xxx: 405-495 watt) PS-M108(HC)-xxxW (Where xxx: 365-445 watt)

Series of Product Type 2) Half-cut Bifacial:

PS-M156(HCBF)-GG-xxxW (Where xxx: 525-640 watt)

PS-M144(HCBF)-GG-xxxW (Where xxx: 485-590 watt) (Tested series)

PS-M132(HCBF)-GG-xxxW (Where xxx: 450-540 watt) PS-M120(HCBF)-GG-xxxW (Where xxx: 405-495 watt) PS-M108(HCBF)-GG-xxxW (Where xxx: 365-445 watt)

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