



# IEC 61646 ed.2

## Clause 10.17 Hail Test

Reference No.: **5018108-3972-0002/217259**

Applicant: **Solar Frontier K.K. Atsugi Research Center,  
Product Management Group, Product Development Division  
123-1, Shimokawairi, Atsugi, Kanagawa 243-0206, Japan**

Product: **Thin-film Terrestrial Photovoltaic (PV) Modules - CIS**

Type Reference: **SF165-S**

Manufacturer: **Solar Frontier K.K.**

Standard: **IEC 61646 ed.2 clause 10.17**

Ice ball diameter: **25 mm / 35 mm / 45 mm**

Ice ball mass: **7,53 g / 20,7 g / 43,9 g**

Test velocity: **23,0 m/s / 27,2 m/s / 30,7 m/s**

Impact locations: **11**

Hail test in accordance with the test basis mentioned above passed.  
The complete test results are given in Test Report No.: Testreport-217259-ET2-1, dated 2015-12-04.

**VDE Prüf- und Zertifizierungsinstitut GmbH**  
**VDE Testing and Certification Institute**  
Fachgebiet ET2 / Section ET2

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