



# Partial Discharge Test

**Ref.:** 5012644-3972-0000/172090

**Product:** Reverse side foils for PV modules

**Standards:** DIN EN 61730-2 (VDE 0126-30-2):2007-10  
EN 61730-2:2007-05, IEC 61730-2 ed. 1

**Foil type:** Hytek

**Manufacturer:** Madico Inc.

**Foil thickness (mm):** 0.252

**Layer structure** 10 µm Fluorocoating white  
127 µm PET  
5 µm Adhesive  
110 µm EVA white

**Number of measurements:** 11

**Extinction voltage  $U_e$  (peak values)**

Min. value $U_{emin}(V)$ :	1510
Max. value $U_{emax}(V)$ :	1680
Mean value $U_{emean}(V)$ :	1580.909

**Standard deviation  $\sigma$  (V):** 53.38

**$U_{emean}(V) - \sigma$  (V):** 1527.529

*Calculation of the maximum permissible system voltage  $U_{sys}$ :*

**Formula:**  $U_e / 1,2 \times 1,25$

(1,2 = Safety factor (humidity/temperature); 1,25 = Safety factor (double or reinforced insulation))

**Max. permissible system voltage  $U_{sys}$ : 1018 Vdc**

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