



# 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:** Reflekt Prime white

**Manufacturer:** Madico Inc.

**Foil thickness (mm):** 0.252

**Layer structure** 15 µm Fluorocoating white  
127 µm PET  
110 µm Dielectric Bonding Layer white

**Number of measurements:** 11

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

Min. value $U_{emin}(V)$ :	1520
Max. value $U_{emax}(V)$ :	1630
Mean value $U_{emean}(V)$ :	1563.636

**Standard deviation  $\sigma(V)$ :** 36.95

**$U_{emean}(V) - \sigma(V)$ :** 1526.686

**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  $U_{sys}$ : 1017 Vdc**

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