

Partial Discharge Test

on reverse side foils of PV modules
 according to IEC 60664-1, IEC61730

8. November 2010

Company / Examined foil:

Filmcutter	
Filmback-PVS 190 Transparent	
Special Primer transparent	80 micron
PET transparent	190 micron
Air-side PET	50 micron

Number of measurements: 10

Remarks: none

Extinction voltage		Deviation from the mean value (%)
Min. value in (V)	1134	-6.3
Mean value in (V)	1211	
Max. value in (V)	1288	6.4

The mean value minus the experimental standard deviation will be used to calculate the max. permissible voltage.

Experimental standard deviation: 43 V

Calculation of the max. permissible operating voltage on the basis of the ascertain values

Basis: IEC 60664-1


$$U_{max} = U_e \times 1,414 / 1,2 \times 1,25$$

- 1.414 Calculation of the peak value
- 1.2 Safety factor (humidity, temperature, etc.)
- 1.25 Safety factor (double or reinforced insul.)

Maximum permissible system voltage	1100 VDC
---	-----------------

Responsible for Partial Discharge Testing


 Dipl.-Ing. S. Merzler


 Dipl.-Ing. H. Becker