

Module Power Evaluation Report

commissioned by

Schott Solar AG
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This report includes 4 pages. The results may neither be published fractional nor in an ambiguous manner.

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1 Task and Procedure

A power measurement in accordance with IEC 60904-1 was performed for a total number of 20 Schott PV modules, model PQ40 (previously AEG PQ40) which have been manufactured in 1984. The measurement accuracy for the power measurements is $\pm 3\%$. The PV modules have been under operation at ISE since 1984.

2 Results and Evaluation

For all 20 modules, the results of the measurement in 2009 showed power values below the nominal values listed on the rating plate (upon delivery in 1984, the nominal value was 38.4 Wp).

Two of the modules showed significant differences of up to 30% off the rated power values. For both modules with significant deviation we recommend to undertake further analysis in order to investigate the cause of the reduced power output.

The measurement results for the remaining 18 modules show an average power output of 7% below the nominal value listed by the manufacturer on delivery, even after 25 years of operation.

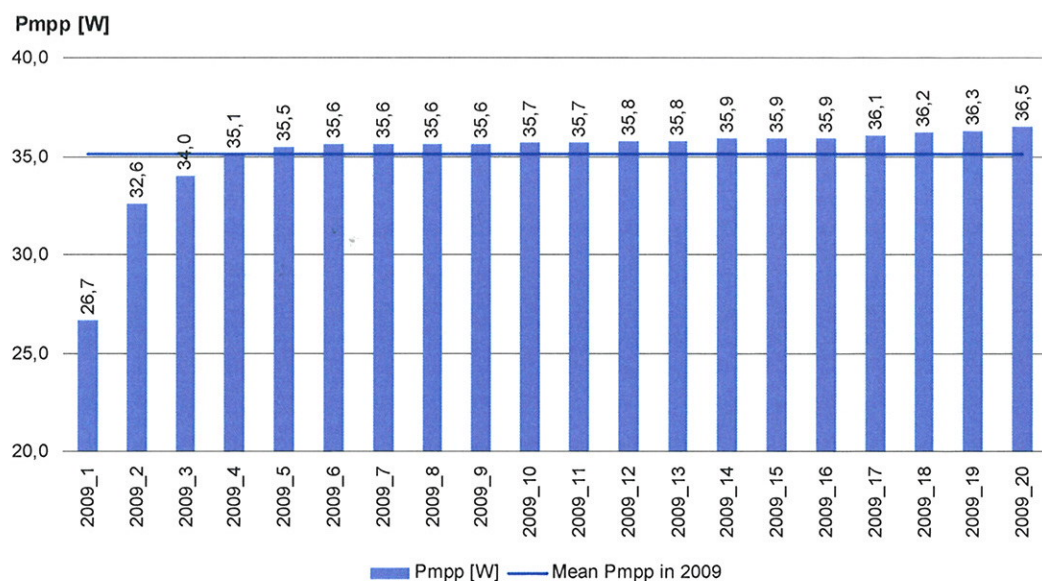


Figure 1: Power output of the 20 modules measured in 2009



Photo 1: PV generator consisting of modules AEG PQ40

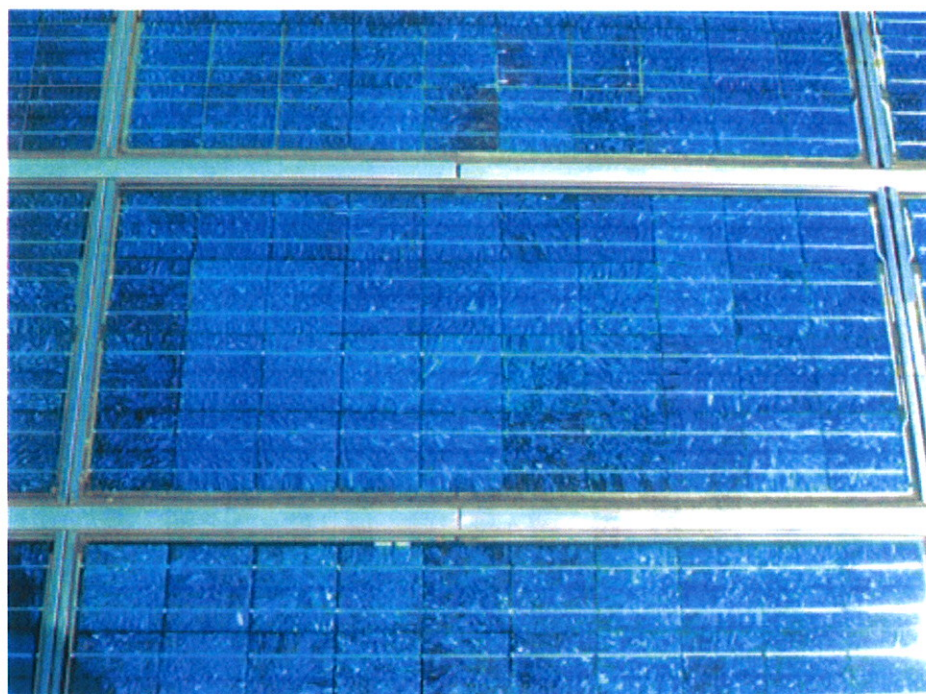


Photo 2: PV modules AEG PQ40