



Prüfbericht-Nr.: Test Report No.:	ULR:TC568819400000153F	Auftrags-Nr.: Order No.:	166108047	Seite 1 von 12 Page 1 of 12
Kunden-Referenz-Nr.: Client Reference No.:	410949	Auftragsdatum: Order date:	08/02/2019	
Auftraggeber: Client:	Renewsys India Pvt Ltd.Division: Hyderabad,Fab City (SEZ), Plot No.6,Survey #114/P, Srinagar Village, Maheswaram, R.R District Hyderabad -501359. India			
Prüfgegenstand: Test item:	Photovoltaic (PV) modules			
Bezeichnung / Typ-Nr.: Identification / Type No.:	DESERV MGALACTIC xxx and DESERV SGALACTIC xxx			
Auftrags-Inhalt: Order content:	Testing against PID resistivity			
Prüfgrundlage: Test specification:	Solar Photovoltaic Modules IEC TS 62804 – 1 :Test methods for the detection of potential-induced degradation – Part 1: Crystalline silicon with following severities - Climatic conditions: 85°C and 85% RH - Duration: 288 hours- 3 cycles of 96 hours each			
Wareneingangsdatum: Date of receipt:	08/02/2019	Detaillierte Fotodokumentation siehe Anlage zu diesem Bericht Detailed photo documentation see appendix to this report		
Prüfmuster-Nr.: Test sample No.:	Refer list of test samples			
Prüfzeitraum: Testing period:	21/02/2019 – 08/03/2019			
Ort der Prüfung: Place of testing:	Bangalore			
Prüflaboratorium: Testing laboratory:	TUV Rheinland(India) Pvt. Ltd.,Bangalore,India			
Prüfergebnis*: Test result*:	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
08/04/2019	K.Ganesh Kamath/Manager-PV Products	08/04/2019	Kamalaksha CS/AGM -PV Products	
Datum Date	Name / Stellung Name / Position	Unterschrift Signature	Datum Date	Name / Stellung Name / Position
Sonstiges / Other: Discipline : Electronics Group: Miscellaneous				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend N/A = nicht anwendbar	4 = ausreichend N/T = nicht getestet
Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory N/A = not applicable	4 = sufficient N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

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Liste der verwendeten Prüfmittel
List of used test equipment

[illegible]

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Produktbeschreibung Product description

1 Produktdetails Product details

DESERV MGALACTIC xxx(xxx = 285-350 in steps of 1, 72 Poly cells)
DESERV SGALACTIC xxx(xxx = 320-390 in steps of 1, 72 Mono cells)

xxx represents output power in Wp

2 Verwendete Materialien Used materials

Refer constructional characteristics in the "List of test samples"

3 Adresse(n) der Fertigungsstätte(n) Address(es) of the manufacturing site(s)

Renewsys India Pvt Ltd.Division: Hyderabad,Fab City (SEZ), Plot No.6,Survey #114/P, Srinagar Village, Maheswaram, R.R District Hyderabad -501359. India

4 Zusammenfassung der Prüfergebnisse Summary of test results

"According to the enquiry of the manufacturer for a testing against PID resistivity shall be performed according to IEC TS 62804 with following severities –

- Positive potential of the specified maximum system voltage between the shorted output terminals and the frame(ground), + 1000V DC
- Climatic conditions: 85°C and 85% RH
- Duration: 288 hours (3 cycles of 96 hours each)

Before and after the PID test, Visual inspection, maximum power determination, Ground continuity and documentation by electroluminescence imaging shall be performed.

In line with the international standard for PV module type approval testing EN IEC 61215, two modules will be tested. One additional module will be used as a reference sample.

Pass Criteria:

A module design shall be judged to have passed the PID test , if each test sample meets all the following criteria:

- The degradation of maximum output power does not exceed 5%.
- No evidence of a major visual defect (as defined in IEC 61215:2005)

All presented results are only valid for the exact tested module type and design (cell type, encapsulation material, glass type

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Clause	Anforderungen - Prüfungen / Requirements - Tests	Measuring results - Remarks	Evaluation

—	Test specification		
Photovoltaic (PV) modules – Test methods for the detection of potential-induced degradation - Part 1: Crystalline silicon	IEC TS 62804-1:2015-08, Edition 1.0	—	

—	Marking		
Name, monogram or symbol of manufacturer	On Type label and on module front	P	
Type or model number	On Type label	P	
Serial number	On laminate from front side	P	
Polarity of terminals or leads	On JB and cable	P	
Maximum system voltage	On Type label	P	
Date and place of manufacture	Date traceable from serial number and Manufacturing address mentioned on type label	P	

-	List of test samples		
Sample No.	Sample S/N	Type/Model	Remarks/constructional characteristics (e.g. cell, back sheet, frame type)
A000876127-017	R1000002192103332	DESERV MGALACTIC 330	Cell: Renewsys- RESERV 625 -5bb Multi crystalline
A000876127-018	R1000002192103333	DESERV MGALACTIC 330	Back Sheet: Renewsys - Preserve -150WD EVA: RenewSys-CONSERV A 360.2 14FC
A000876127-019	R1000002192103330	DESERV MGALACTIC 330	Glass: CSG AR coated 3.2mm JB: DhaSh - DSJB03
A000876127-020	R1000002192103339	DESERV SMGALACTIC 370	Cell: URE - NP6WL -5bb mono crystalline
A000876127-021	R1000002192103336	DESERV SGALACTIC 370	Back Sheet: Renewsys - Preserve -150WD EVA: RenewSys-CONSERV A 360.2 14FC
A000876127-022	R1000002192103335	DESERV SGALACTIC 370	Glass: CSG AR coated 3.2mm JB: DhaSh - DSJB03

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Absatz	Solar Photovoltaic Modules	Messergebnisse - Bemerkungen	Bewertung
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10.1	Visual inspection (Initial)		
Test date [DD/MM/YYYY]	Sample No.	Nature and position of initial findings	-
21/02/2019	A000876127-017	No Major visual defects found	P
21/02/2019	A000876127-018	No Major visual defects found	P
21/02/2019	A000876127-019	No Major visual defects found	P
21/02/2019	A000876127-020	No Major visual defects found	P
21/02/2019	A000876127-021	No Major visual defects found	P
21/02/2019	A000876127-022	No Major visual defects found	P
Supplementary information: - None			

10.2	Maximum power determination (Initial)							
Module temperature [°C]		corrected to 25						-
Irradiance [W/m²]		1000						
Test date [DD/MM/YYYY]	Sample No.	P _{max} [W]	V _{mpp} [V]	I _{mpp} [A]	V _{oc} [V]	I _{sc} [A]	FF [%]	
21/02/2019	A000876127-017	319.6	38.01	8.41	45.52	8.97	78.3	-
21/02/2019	A000876127-018	321.1	37.79	8.50	45.51	8.99	78.5	-
21/02/2019	A000876127-019	320.9	38.16	8.41	45.51	8.97	78.6	-
21/02/2019	A000876127-020	356.4	39.39	9.05	47.65	9.55	78.3	
21/02/2019	A000876127-021	357.5	39.43	9.07	47.67	9.52	78.8	
21/02/2019	A000876127-022	354.2	39.32	9.01	47.56	9.45	78.8	
Supplementary information: - None								

10.3	Insulation test (Initial)						
Maximum system voltage [V _{DC}]			1000				
High voltage applied [V _{DC}]			6000				
Insulation resistance measured at [V _{DC}]			1000				
Test date [DD/MM/YYYY]	Sample No.	Measured	Area	Result*	Dielectric breakdown		-
		[GΩ]	[m²]	[GΩ × m²]	Yes (description)	No	
21/02/2019	A000876127-017	45.30	1.97	89.24	--	No	P
21/02/2019	A000876127-018	48.10	1.97	94.75	--	No	P
21/02/2019	A000876127-019	49.70	1.97	97.90	--	No	P
21/02/2019	A000876127-020	45.50	1.97	96.33	--	No	P

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21/02/2019	A000876127-021	40.70	1.97	80.17	--	No	P
21/02/2019	A000876127-022	48.90	1.97	96.33	--	No	P
*Minimum requirement acc. to the standard is 0.04 GΩ × m².							
Supplementary information: - None							

10.15	Wet leakage current test (Initial)				
Insulation resistance measured at [V _{DC}]		1000			-
Solution resistivity [Ω cm]		< 3,500			P
Solution temperature [°C]		22 ± 3			P
Test date [DD/MM/YYYY]	Sample No.	Measured	Area	Result*	-
		[MΩ]	[m²]	[MΩ × m²]	
21/02/2019	A000876127-017	2300.0	1.97	4531.0	P
21/02/2019	A000876127-018	2600.0	1.97	5122.0	P
21/02/2019	A000876127-019	3100.0	1.97	6107.0	P
21/02/2019	A000876127-020	2100.0	1.97	4137.0	P
21/02/2019	A000876127-021	1800.0	1.97	3546.0	P
21/02/2019	A000876127-022	1900.0	1.97	3743.0	P
* Minimum requirement acc. to the standard is 40 MΩ × m².					
Supplementary information: - None					

10.4	Ground continuity (Initial) - MST 13				
Maximum over-current protection rating [A]		15		-	
Current applied [A]		37.5			
Location of designated grounding point		Right side Longer frame			
Location of second contacting point		Opposite frame			
Test date [DD/MM/YYYY]	Sample No.	Voltage [mV]	Resistance [mΩ]		
21/02/2019	A000876127-017	205.6	5.48	P	
21/02/2019	A000876127-018	215.6	5.75	P	
21/02/2019	A000876127-019	213.7	5.69	P	
21/02/2019	A000876127-020	227.1	6.05	P	
21/02/2019	A000876127-021	214.5	5.72	P	
21/02/2019	A000876127-022	208.1	5.54	P	
Supplementary information: - None					

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	Performance of PID Test -1 st Cycle				
Test Method		Chamber		—	
Module Temperature [°C]		85			
Relative Humidity [%]		85			
Grounding polarity		+ve			
Test date [DD/MM/YYYY]	Sample No.		Applied Voltage [V]	Duration[Hrs]	
21/02/2019 to 26/02/2019	A000876127-018		-1000	96	P
	A000876127-019		-1000	96	P
21/02/2019 to 26/02/2019	A000876127-021		-1000	96	P
	A000876127-022		-1000	96	P
Supplementary information: - None					

10.1	Visual inspection after 1 st PID Cycle		
Test date [DD/MM/YYYY]	Sample No.	Nature and position of initial findings	-
26/02/2019	A000876127-018	No Major visual defects found	P
26/02/2019	A000876127-019	No Major visual defects found	P
26/02/2019	A000876127-021	No Major visual defects found	P
26/02/2019	A000876127-022	No Major visual defects found	P
Supplementary information: - None			

10.2	Maximum power determination - after 1 st PID Cycle							
Module temperature [°C]	corrected to 25							
Irradiance [W/m²]	1000							
Test date [DD/MM/YYYY]	Sample No.	P _{max} [W]	V _{mpp} [V]	I _{mpp} [A]	V _{oc} [V]	I _{sc} [A]	FF [%]	Degradation [%]
26/02/2019	A000876127-018	314.2	37.76	8.32	45.46	8.96	77.1	-2.1
26/02/2019	A000876127-019	319.2	38.23	8.35	45.56	8.95	78.2	-0.5
26/02/2019	A000876127-021	355.5	39.54	8.99	47.76	9.50	78.4	-0.6
26/02/2019	A000876127-022	352.4	38.98	9.04	47.64	9.46	78.2	-0.5
Supplementary information: - Initial measurements were considered for calculating degradation								

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10.3	Insulation test after 1 st PID Cycle						
Maximum system voltage [V _{DC}]			1000				
High voltage applied [V _{DC}]			6000				
Insulation resistance measured at [V _{DC}]			1000				
Test date [DD/MM/YYYY]	Sample No.	Measured	Area	Result*	Dielectric breakdown		-
		[GΩ]	[m²]	[GΩ × m²]	Yes (description)	No	
26/02/2019	A000876127-018	38.70	1.97	76.23	--	No	P
26/02/2019	A000876127-019	44.50	1.97	87.66	--	No	P
26/02/2019	A000876127-021	40.90	1.97	80.57	--	No	P
26/02/2019	A000876127-022	48.70	1.97	95.90	--	No	P
*Minimum requirement acc. to the standard is 0.04 GΩ × m².							
Supplementary information: - None							

10.15	Wet leakage current test after 1 st PID Cycle				
Insulation resistance measured at [V _{DC}]		1000			-
Solution resistivity [Ω cm]		< 3,500			P
Solution temperature [°C]		22 ± 3			P
Test date [DD/MM/YYYY]	Sample No.	Measured	Area	Result*	-
		[MΩ]	[m²]	[MΩ × m²]	
26/02/2019	A000876127-018	4100.0	1.97	8077.0	P
26/02/2019	A000876127-019	3300.0	1.97	6501.0	P
26/02/2019	A000876127-021	1700.0	1.97	3349.0	P
26/02/2019	A000876127-022	2300.0	1.97	4531.0	P
* Minimum requirement acc. to the standard is 40 MΩ × m².					
Supplementary information: - None					

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Absatz	Solar Photovoltaic Modules	Messergebnisse - Bemerkungen	Bewertung
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Performance of PID Test – II nd Cycle				
Test Method		Chamber		—
Module Temperature [°C]		85		
Relative Humidity [%]		85		
Grounding polarity		+ve		
Test date [DD/MM/YYYY]	Sample No.		Applied Voltage [V]	Duration[Hrs.]
26/02/2019 to 03/03/2019	A000876127-018		-1000	P
	A000876127-019		-1000	P
26/02/2019 to 03/03/2019	A000876127-021		-1000	P
	A000876127-022		-1000	P
Supplementary information: - None				

10.1	Visual inspection after II nd PID Cycle		
Test date [DD/MM/YYYY]	Sample No.	Nature and position of initial findings	-
03/03/2019	A000876127-018	No Major visual defects found	P
03/03/2019	A000876127-019	No Major visual defects found	P
03/03/2019	A000876127-021	No Major visual defects found	P
03/03/2019	A000876127-022	No Major visual defects found	P
Supplementary information: - None			

10.2	Maximum power determination - after II nd PID Cycle								
Module temperature [°C]		corrected to 25							-
Irradiance [W/m²]		1000							
Test date [DD/MM/YYYY]	Sample No.	P _{max} [W]	V _{mpp} [V]	I _{mpp} [A]	V _{oc} [V]	I _{sc} [A]	FF [%]	Degradation [%]	
03/03/2019	A000876127-018	314.4	37.68	8.34	45.37	8.92	77.7	-2.1	P
03/03/2019	A000876127-019	317.7	37.95	8.37	45.53	8.92	78.3	-1.0	P
03/03/2019	A000876127-021	354.7	39.64	8.95	47.72	9.46	78.6	-0.8	P
03/03/2019	A000876127-022	353.7	39.45	8.97	47.71	9.42	78.7	-0.1	P
Supplementary information: - Initial measurements were considered for calculating degradation									

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10.3	Insulation test after II nd PID cycle						
Maximum system voltage [V _{DC}]				1000			
High voltage applied [V _{DC}]				6000			
Insulation resistance measured at [V _{DC}]				1000			
Test date [DD/MM/YYYY]	Sample No.	Measured	Area	Result*	Dielectric breakdown		-
		[GΩ]	[m²]	[GΩ × m²]	Yes (description)	No	
03/03/2019	A000876127-018	40.50	1.97	79.78	--	No	P
03/03/2019	A000876127-019	38.70	1.97	76.23	--	No	P
03/03/2019	A000876127-021	43.20	1.97	85.10	--	No	P
03/03/2019	A000876127-022	37.50	1.97	73.87	--	No	P
*Minimum requirement acc. to the standard is 0.04 GΩ × m².							
Supplementary information: - None							

10.15	Wet leakage current after II nd PID Cycle				
Insulation resistance measured at [V _{DC}]			1500		-
Solution resistivity [Ω cm]			< 3,500		P
Solution temperature [°C]			22 ± 3		P
Test date [DD/MM/YYYY]	Sample No.	Measured [MΩ]	Area [m ²]	Result* [MΩ × m ²]	-
03/03/2019	A000876127-018	4200.0	1.97	8274.0	P
03/03/2019	A000876127-019	3700.0	1.97	7289.0	P
03/03/2019	A000876127-021	3300.0	1.97	6501.0	P
03/03/2019	A000876127-022	3700.0	1.97	7289.0	P
* Minimum requirement acc. to the standard is 40 MΩ × m ² .					
Supplementary information: - None					

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	Performance of PID Test – III rd Cycle				
Test Method		Chamber		—	
Module Temperature [°C]		85			
Relative Humidity [%]		85			
Grounding polarity		+ve			
Test date [DD/MM/YYYY]	Sample No.		Applied Voltage [V]	Duration[Hrs.]	
03/03/2019 to 08/03/2019	A000876127-018		+1500	96	P
	A000876127-019		+1500	96	P
03/03/2019 to 08/03/2019	A000876127-021		-1000	96	P
	A000876127-022		-1000	96	P
Supplementary information: - None					

10.1	Visual inspection after IIIrd PID Cycle		
Test date [DD/MM/YYYY]	Sample No.	Nature and position of initial findings	-
08/03/2019	A000876127-018	No Major visual defects found	P
08/03/2019	A000876127-019	No Major visual defects found	P
08/03/2019	A000876127-021	No Major visual defects found	P
08/03/2019	A000876127-022	No Major visual defects found	P
Supplementary information: - None			

10.2	Maximum power determination - after IIIrd Cycle							
Module temperature [°C]	corrected to 25							
Irradiance [W/m²]	1000							
Test date [DD/MM/YYYY]	Sample No.	P _{max} [W]	V _{mpp} [V]	I _{mp} [A]	V _{oc} [V]	I _{sc} [A]	FF [%]	Degradation [%]
08/03/2019	A000876127-018	314.7	37.67	8.35	45.39	8.89	78.0	-2.0
08/03/2019	A000876127-019	316.8	38.14	8.31	45.43	8.90	78.4	-1.2
08/03/2019	A000876127-021	353.9	39.19	9.03	47.63	9.44	78.8	-1.0
08/03/2019	A000876127-022	351.9	40.00	8.80	47.63	9.40	78.6	-0.6
Supplementary information: - Initial measurements were considered for calculating degradation								

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10.3	Insulation test after III rd Cycle						
Maximum system voltage [V _{DC}]			1000				
High voltage applied [V _{DC}]			6000				
Insulation resistance measured at [V _{DC}]			1000				
Test date [DD/MM/YYYY]	Sample No.	Measured	Area	Result*	Dielectric breakdown		-
		[GΩ]	[m²]	[GΩ × m²]	Yes (description)	No	
08/03/2019	A000876127-018	37.30	1.97	73.48	--	No	P
08/03/2019	A000876127-019	39.50	1.97	77.81	--	No	P
08/03/2019	A000876127-021	31.80	1.97	62.64	--	No	P
08/03/2019	A000876127-022	37.50	1.97	73.87	--	No	P
*Minimum requirement acc. to the standard is 0.04 GΩ × m².							
Supplementary information: - None							

10.15	Wet leakage current after III rd PID Cycle				
Insulation resistance measured at [V _{DC}]		1000			-
Solution resistivity [Ω cm]		< 3,500			P
Solution temperature [°C]		22 ± 3			P
Test date [DD/MM/YYYY]	Sample No.	Measured	Area	Result*	-
		[MΩ]	[m²]	[MΩ × m²]	
08/03/2019	A000876127-018	3300.0	1.97	6501.0	P
08/03/2019	A000876127-019	2800.0	1.97	3516.0	P
08/03/2019	A000876127-021	1800.0	1.97	3546.0	P
08/03/2019	A000876127-022	2600.0	1.97	5122.0	P
* Minimum requirement acc. to the standard is 40 MΩ × m².					
Supplementary information: - None					

Result:

1. The degradation of maximum output power does not exceed 5%
2. There is no evidence of a major local degradation in electroluminescence inspection.

ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION

Statement of the estimated uncertainty of the test verdicts

The Laboratory apply decision rule for giving verdict, considering measurement of Un-Certainty at 95% confident level

- Electrical performance rating is outside the scope of IEC 61215:2005 qualification testing. The verdicts of performance rating are only related to the test samples that were subjected to the tests. They cannot be generalised to the modules from the series production.
- The calibration to STC was performed with a class AAA solar simulator. The extended measurement uncertainty is:
 - Pmax measurement: 2.49% with a coverage factor $k=2$
 - Current measurement: 2.28% with a coverage factor $k=2$
 - Voltage measurement: 2.08% with a coverage factor $k=2$
- Relative measurements were performed with a flash type solar simulator.
- The accuracy of measurement reproduction with the solar simulator is less than ± 1 %.

ANLAGE zum Prüfbericht-Nr.:
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ZUSATZ-DOKUMENTATION ADDITIONAL DOCUMENTATION

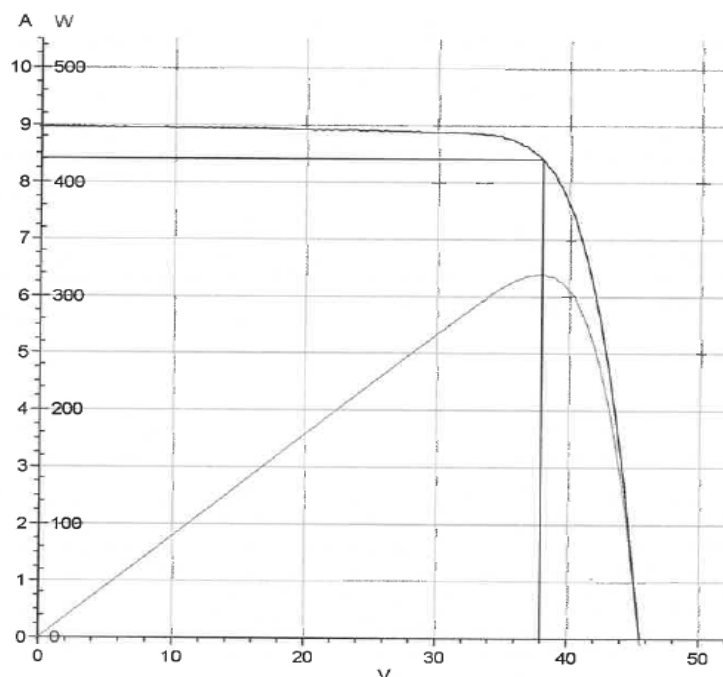
Measurement reports: Initial



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

21-02-19 16:44



Measurement Data (Temp. compensated results)

PASAN Tester version 2.4.4
Module ID Code R1000002192103332
Standard temperature 25.0 °C
Mean Irradiance 1.006 kW/m²
Module Temp. 25.4 °C
Mask NO-MASK 1.000 -
Module Area 19716.60 cm²
Cells in Series 72
Isc 8.97 A
Imp 8.41 A
Pmax 319.59 W
Reference vlt 2 0.00 V
Power at ref 2 -1.00 W
Current at ref 2 0.00 A
Cell Efficiency 18.1 %
Shunt res. 568.438 Ohm

Operator A000876127-017 initi
Serial number
Monitor Cell TVI001/002-2012
Calibration Value 35.00 mV/(kW/m²)
Mon. Cell Temp. 25.4 °C
Cell Area 122.84 cm²
Cells in Parallel 2
Measurement irradiance 1.000 kW/m²
Voc 45.52 V
Vmp 38.01 V
Reference vlt 1 0.00 V
Power at ref 1 -1.00 W
Current at ref 1 0.00 A
Fill Factor 78.3 %
Module Efficiency 16.2 %
Serie res. 0.465 Ohm

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21/08/19

ANLAGE zum Prüfbericht-Nr.:
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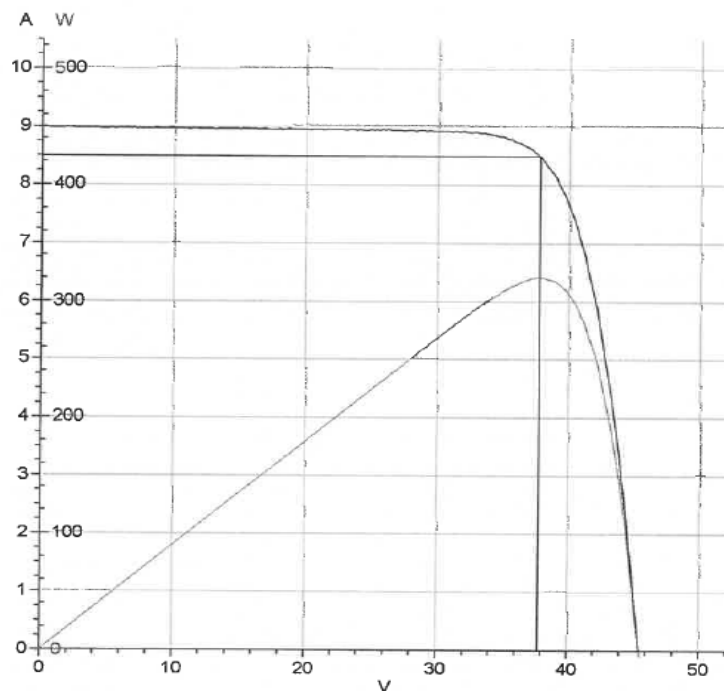
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

21-02-19 16:07



Measurement Data (Temp. compensated results)

PASAN Tester version 2.4.4
Module ID Code R1000002192103333
Standard temperature 25.0 °C
Mean Irradiance 1.006 kW/m²
Module Temp. 25.2 °C
Mask NO-MASK 1.000 -
Module Area 19716.60 cm²
Cells in Series 72
Isc 8.99 A
Imp 8.50 A
Pmax 321.08 W
Reference vlt 2 0.00 V
Power ar ref 2 -1.00 W
Current at ref 2 0.00 A
Cell Efficiency 18.2 %
Shunt res. 731.398 Ohm

Operator A000876127-018 initi
Serial number
Monitor Cell TVI001/002-2012
Calibration Value 35.00 mV/(kW/m²)
Mon. Cell Temp. 25.2 °C
Cell Area 122.84 cm²
Cells in Parallel 2
Measurement irradiance 1.000 kW/m²
Voc 45.51 V
Vmp 37.79 V
Reference vlt 1 0.00 V
Power ar ref 1 -1.00 W
Current at ref 1 0.00 A
Fill Factor 78.5 %
Module Efficiency 16.3 %
Serie res. 0.465 Ohm

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ANLAGE zum Prüfbericht-Nr.:
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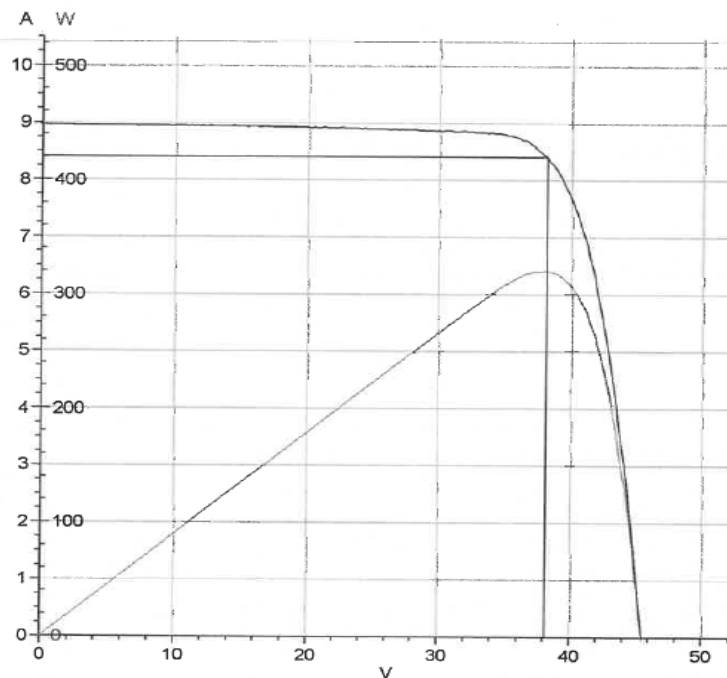
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

21-02-19 16:04



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-019 initi
Module ID Code	R1000002192103330	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m²	Calibration Value	35.00 mV/(kW/m²)
Module Temp.	25.1 °C	Mon. Cell Temp.	25.1 °C
Mask	NO-MASK 1.000 -	Cell Area	122.84 cm²
Module Area	19716.60 cm²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m²
Isc	8.97 A	Voc	45.51 V
Imp	8.41 A	Vmp	38.16 V
Pmax	320.88 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power ar ref 1	-1.00 W
Power ar ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.6 %
Cell Efficiency	18.1 %	Module Efficiency	16.3 %
Shunt res.	527.230 Ohm	Serie res.	0.459 Ohm

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21/02/19

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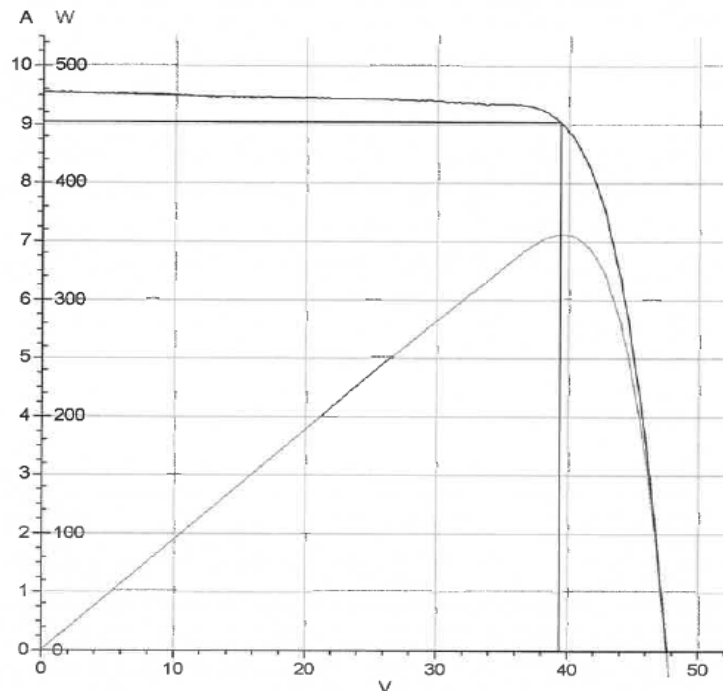
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

21-02-19 16:53



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-020 initi
Module ID Code	R1000002192103339	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	25.6 °C	Mon. Cell Temp.	25.6 °C
Mask	NO-MASK 1.000 -	Cell Area	122.20 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	9.55 A	Voc	47.65 V
Imp	9.05 A	Vmp	39.39 V
Pmax	356.38 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power ar ref 1	-1.00 W
Power ar ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.3 %
Cell Efficiency	20.3 %	Module Efficiency	18.1 %
Shunt res.	187.872 Ohm	Serie res.	0.458 Ohm

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8-102-119

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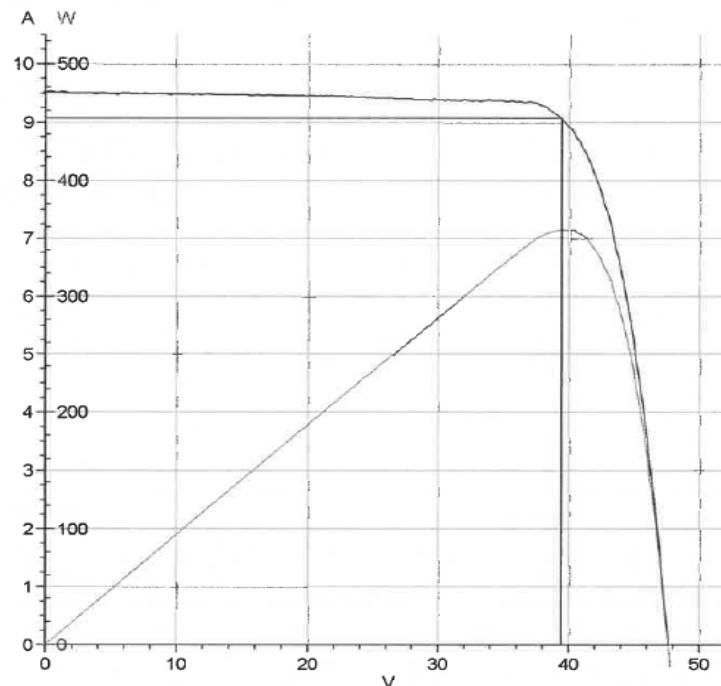
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

21-02-19 16:10



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-021 initi
Module ID Code	R1000002192103336	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	25.5 °C	Mon. Cell Temp.	25.5 °C
Mask	NO-MASK 1.000 -	Cell Area	122.20 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	9.52 A	Voc	47.67 V
Imp	9.07 A	Vmp	39.43 V
Pmax	357.55 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power ar ref 1	-1.00 W
Power ar ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.8 %
Cell Efficiency	20.3 %	Module Efficiency	18.1 %
Shunt res.	335.913 Ohm	Serie res.	0.450 Ohm

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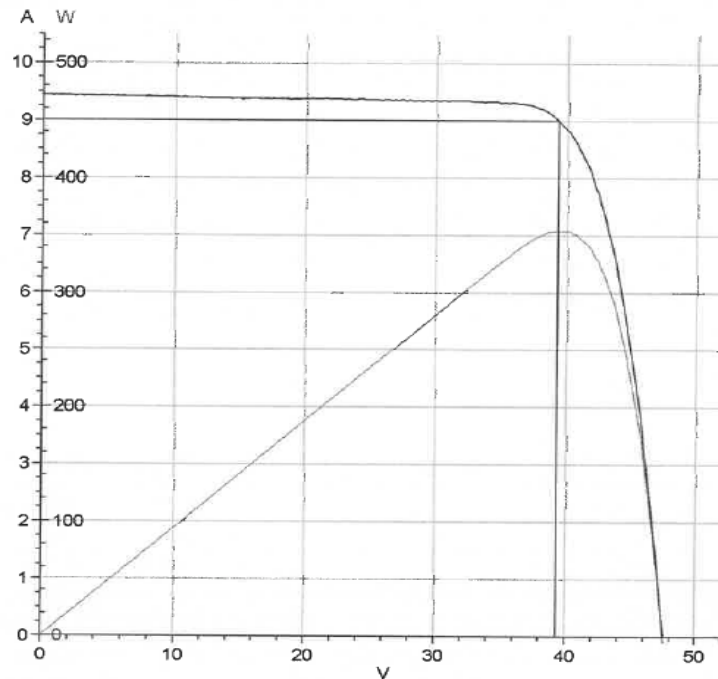
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

21-02-19 16:00



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-022 initi
Module ID Code	R1000002192103335	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	25.2 °C	Mon. Cell Temp.	25.2 °C
Mask	NO-MASK 1.000 -	Cell Area	122.20 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	9.45 A	Voc	47.56 V
Imp	9.01 A	Vmp	39.32 V
Pmax	354.17 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power ar ref 1	-1.00 W
Power ar ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.8 %
Cell Efficiency	20.1 %	Module Efficiency	18.0 %
Shunt res.	268.779 Ohm	Serie res.	0.467 Ohm

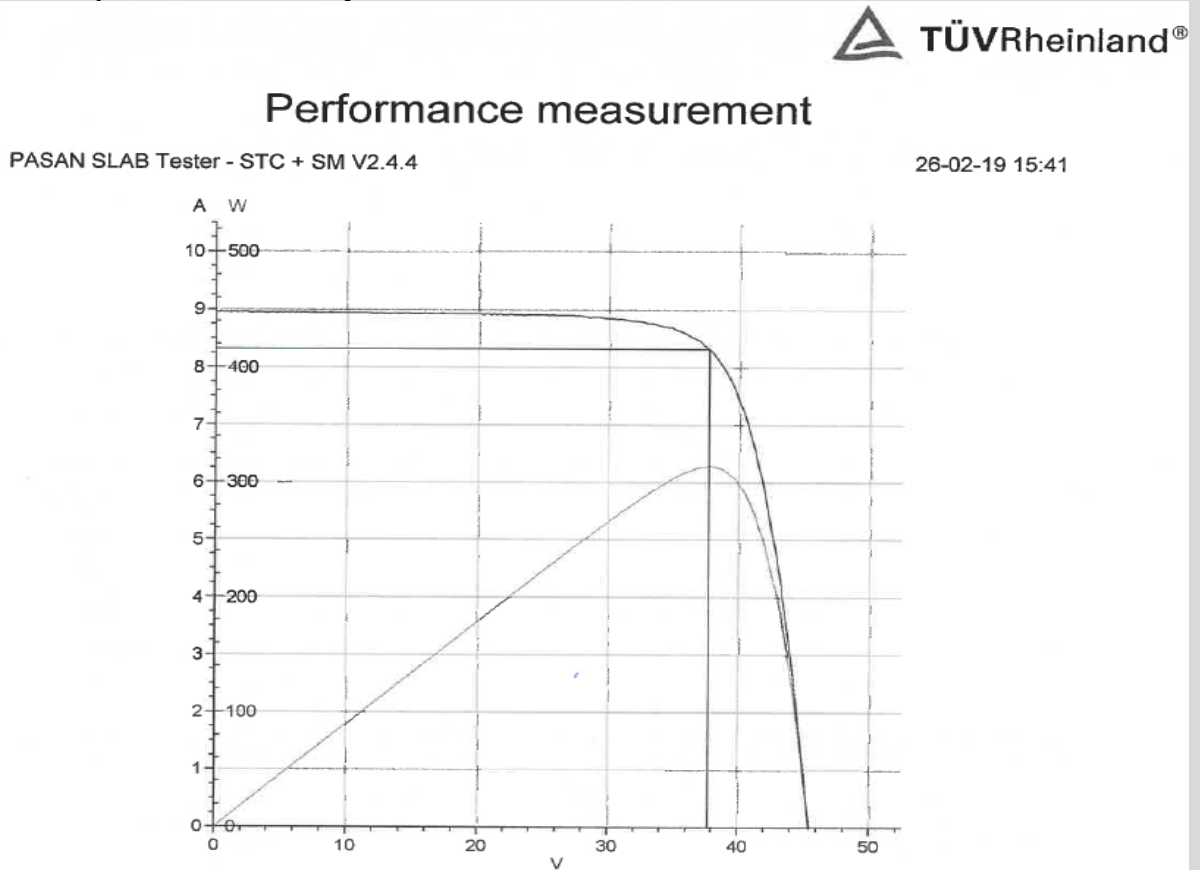
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21/02/19

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Measurement Reports after 1st PID Cycle:



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4
Module ID Code	R1000002192103333
Standard temperature	25.0 °C
Mean Irradiance	1.006 kW/m²
Module Temp.	25.8 °C
Mask	NO-MASK 1.000 -
Module Area	19716.60 cm²
Cells in Series	72
Isc	8.96 A
Imp	8.32 A
Pmax	314.18 W
Reference vlt 2	0.00 V
Power at ref 2	-1.00 W
Current at ref 2	0.00 A
Cell Efficiency	17.8 %
Shunt res.	537.500 Ohm

Operator	A000876127-018 af pi		
Serial number			
Monitor Cell	TVI001/002-2012		
Calibration Value	35.00	mV/(kW/m ²)	
Mon. Cell Temp.	25.8	°C	
Cell Area	122.84	cm ²	
Cells in Parallel	2		
Measurement irradiance	1.000	kW/m ²	
Voc	45.46	V	
Vmp	37.76	V	
Reference vlt 1	0.00	V	
Power at ref 1	-1.00	W	
Current at ref 1	0.00	A	
Fill Factor	77.1	%	
Module Efficiency	15.9	%	
Series res.	0.488	Ohm	

8. work:-
26/02/19

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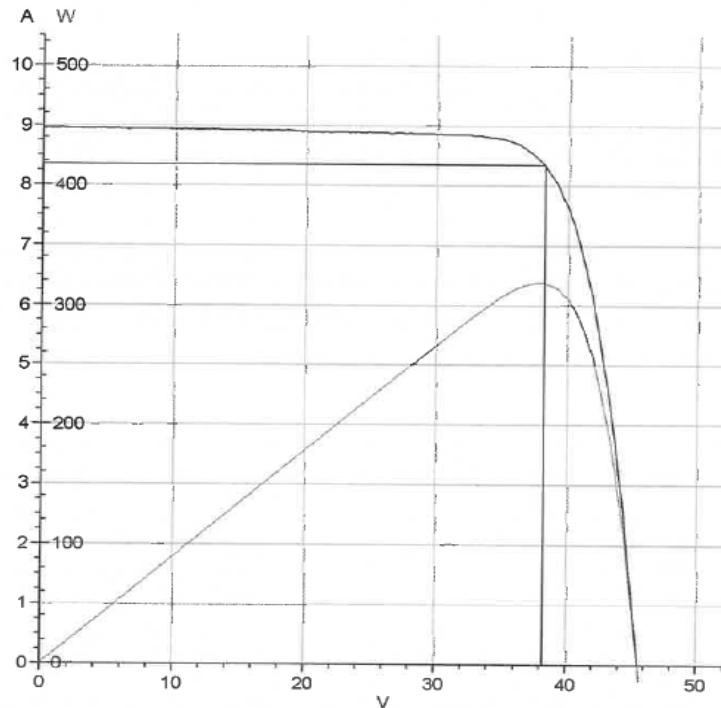
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

26-02-19 15:47



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-019 af pi
Module ID Code	R1000002192103330	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m²	Calibration Value	35.00 mV/(kW/m²)
Module Temp.	26.0 °C	Mon. Cell Temp.	26.0 °C
Mask	NO-MASK 1.000 -	Cell Area	122.84 cm²
Module Area	19716.60 cm²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m²
Isc	8.95 A	Voc	45.56 V
Imp	8.35 A	Vmp	38.23 V
Pmax	319.18 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power ar ref 1	-1.00 W
Power ar ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.2 %
Cell Efficiency	18.0 %	Module Efficiency	16.2 %
Shunt res.	514.123 Ohm	Serie res.	0.470 Ohm

8.40002
26/02/19

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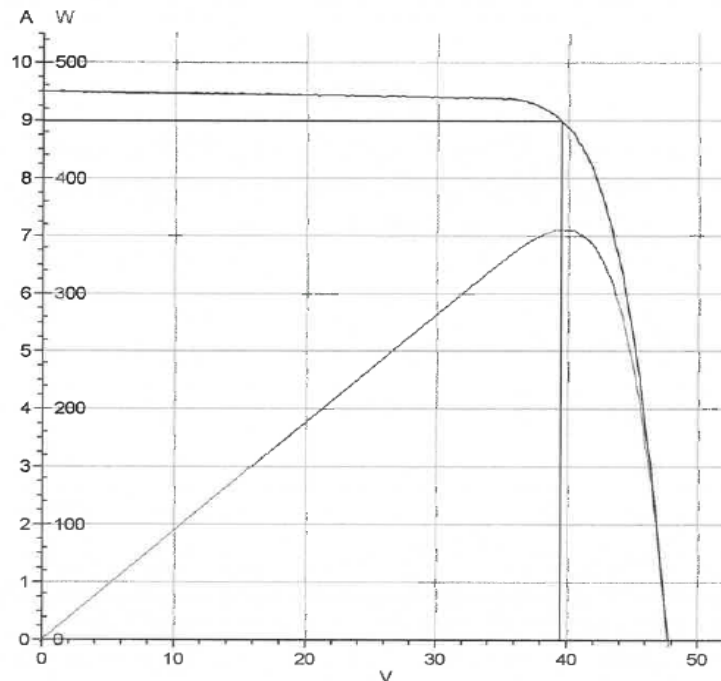
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

26-02-19 15:51



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-021 af pi
Module ID Code	R1000002192103336	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m²	Calibration Value	35.00 mV/(kW/m²)
Module Temp.	26.5 °C	Mon. Cell Temp.	26.5 °C
Mask	NO-MASK 1.000 -	Cell Area	122.20 cm²
Module Area	19716.60 cm²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m²
Isc	9.50 A	Voc	47.76 V
Imp	8.99 A	Vmp	39.54 V
Pmax	355.50 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power at ref 1	-1.00 W
Power at ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.4 %
Cell Efficiency	20.2 %	Module Efficiency	18.0 %
Shunt res.	321.427 Ohm	Series res.	0.459 Ohm

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2.40225
26/02/19

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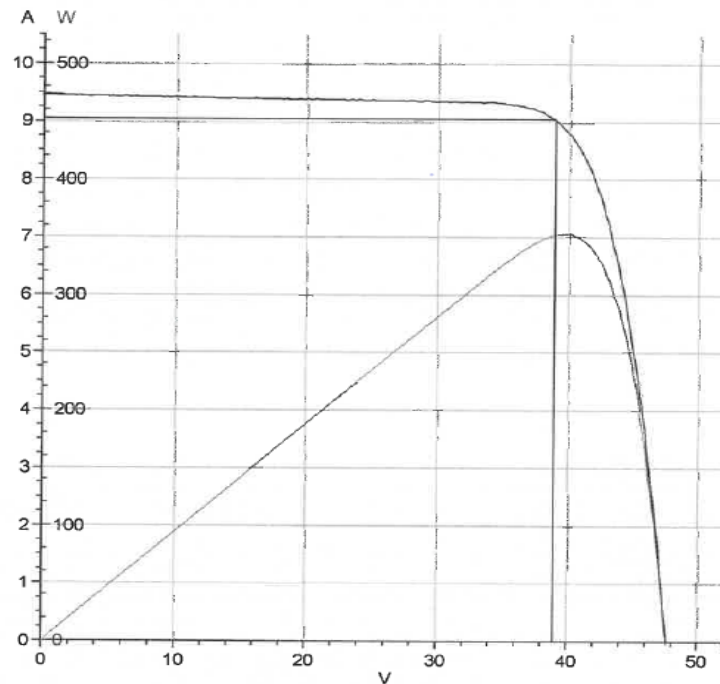
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

26-02-19 16:18



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-022 af pi
Module ID Code	R1000002192103335	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m²	Calibration Value	35.00 mV/(kW/m²)
Module Temp.	25.5 °C	Mon. Cell Temp.	25.5 °C
Mask	NO-MASK 1.000 -	Cell Area	122.20 cm²
Module Area	19716.60 cm²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m²
Isc	9.46 A	Voc	47.64 V
Imp	9.04 A	Vmp	38.98 V
Pmax	352.42 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power ar ref 1	-1.00 W
Power ar ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.2 %
Cell Efficiency	20.0 %	Module Efficiency	17.9 %
Shunt res.	260.231 Ohm	Serie res.	0.468 Ohm

S. 40921
26/02/19

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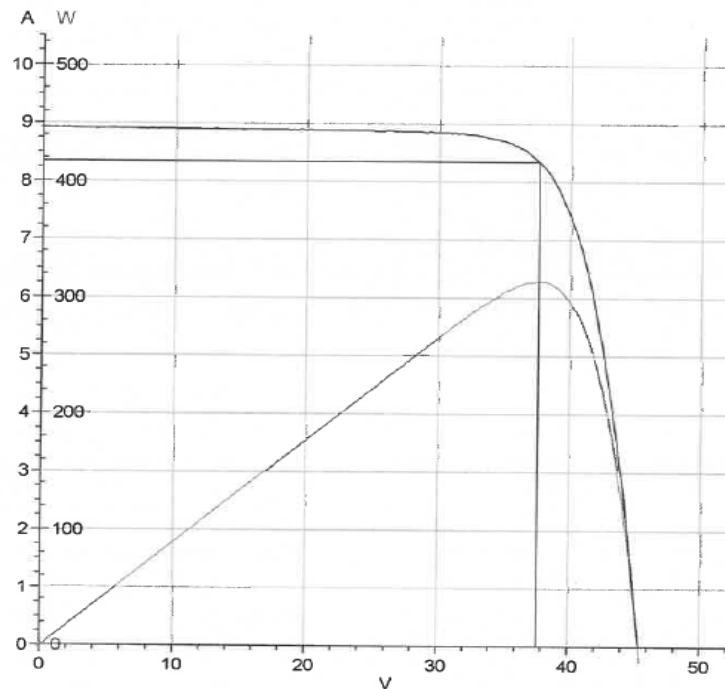
Measurement Reports after IInd PID Cycle:



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

03-03-19 16:35



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-018 AF PI
Module ID Code	R1000002192103333	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	26.6 °C	Mon. Cell Temp.	26.6 °C
Mask	1.000 -	Cell Area	122.84 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	8.92 A	Voc	45.37 V
Imp	8.34 A	Vmp	37.68 V
Pmax	314.42 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power at ref 1	-1.00 W
Power at ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	77.7 %
Cell Efficiency	17.8 %	Module Efficiency	15.9 %
Shunt res.	574.869 Ohm	Series res.	0.466 Ohm

8-4000
03/03/19

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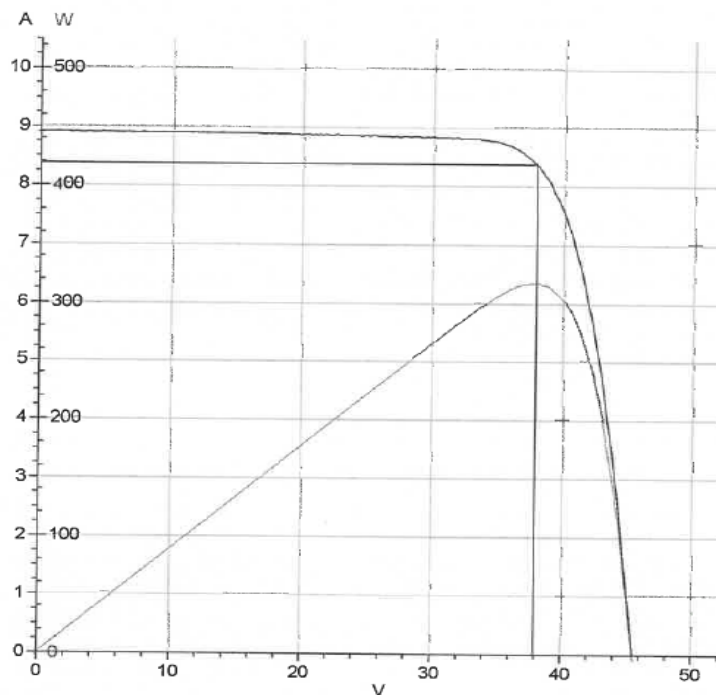
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

03-03-19 16:24



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-019-initi
Module ID Code	R1000002192103330	Serial number	AF PID
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m²	Calibration Value	35.00 mV/(kW/m²)
Module Temp.	26.7 °C	Mon. Cell Temp.	26.7 °C
Mask	1.000 -	Cell Area	122.84 cm²
Module Area	19716.60 cm²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m²
Isc	8.92 A	Voc	45.53 V
Imp	8.37 A	Vmp	37.95 V
Pmax	317.75 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power at ref 1	-1.00 W
Power at ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.3 %
Cell Efficiency	18.0 %	Module Efficiency	16.1 %
Shunt res.	548.498 Ohm	Series res.	0.479 Ohm

g. y. 03/03/19

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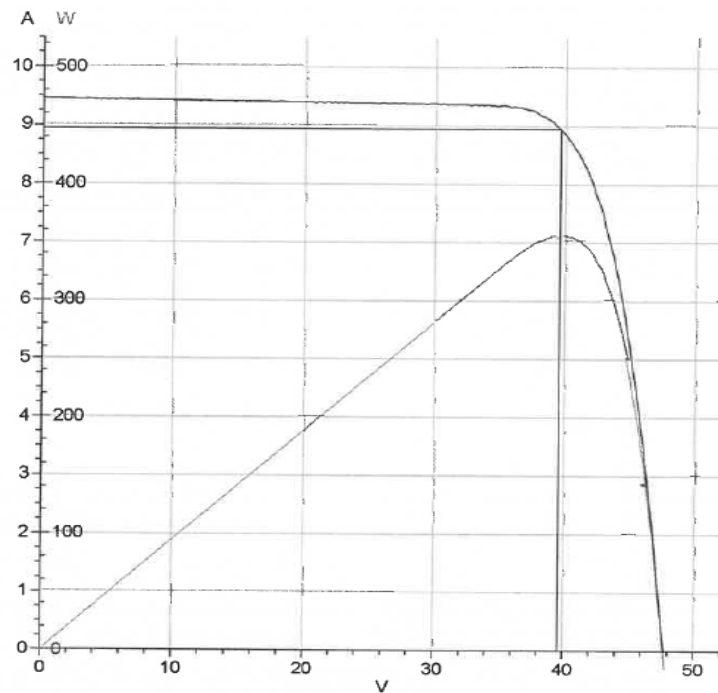
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

03-03-19 16:19



Measurement Data (Temp. compensated results)

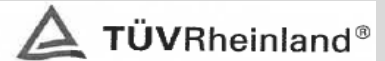
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Module ID Code	R1000002192103336	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m²	Calibration Value	35.00 mV/(kW/m²)
Module Temp.	27.0 °C	Mon. Cell Temp.	27.0 °C
Mask	1.000 -	Cell Area	122.20 cm²
Module Area	19716.60 cm²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m²
Isc	9.46 A	Voc	47.72 V
Imp	8.95 A	Vmp	39.64 V
Pmax	354.72 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power ar ref 1	-1.00 W
Power ar ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.6 %
Cell Efficiency	20.2 %	Module Efficiency	18.0 %
Shunt res.	368.407 Ohm	Serie res.	0.454 Ohm

8.400000
03/03/19

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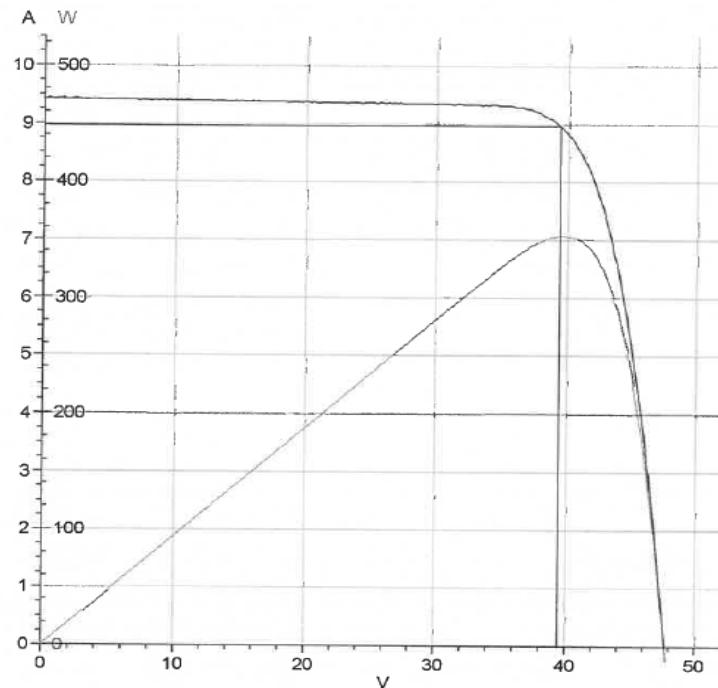
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

03-03-19 16:30



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-022 AF PI
Module ID Code	R1000002192103335	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	26.8 °C	Mon. Cell Temp.	26.8 °C
Mask	1.000 -	Cell Area	122.20 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	9.42 A	Voc	47.71 V
Imp	8.97 A	Vmp	39.45 V
Pmax	353.69 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power at ref 1	-1.00 W
Power at ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.7 %
Cell Efficiency	20.1 %	Module Efficiency	17.9 %
Shunt res.	364.968 Ohm	Series res.	0.458 Ohm

8.4.2019
03/03/19

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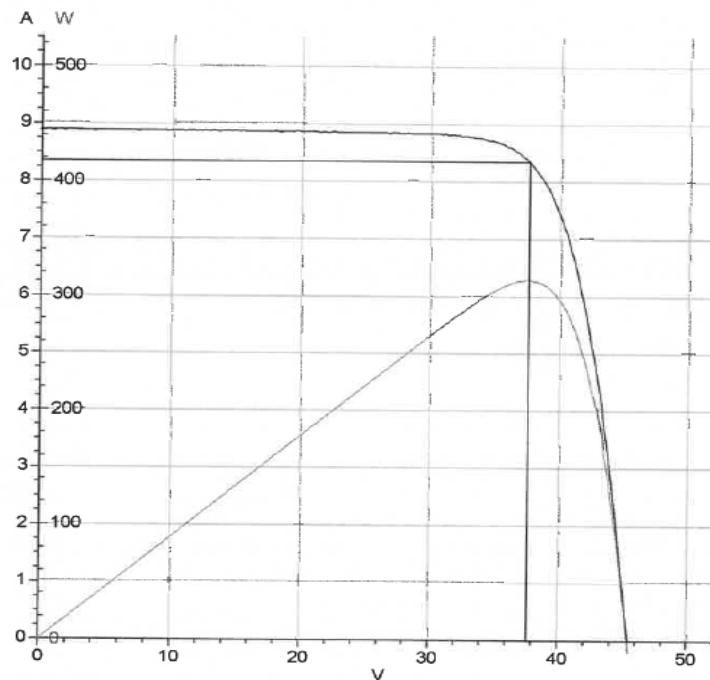
Measurement Reports after Illrd PID Cycle:



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

08-03-19 10:51



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-018 AF PI
Module ID Code	R1000002192103333	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	26.6 °C	Mon. Cell Temp.	26.6 °C
Mask	NO-MASK 1.000 -	Cell Area	122.84 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	8.89 A	Voc	45.39 V
Imp	8.35 A	Vmp	37.67 V
Pmax	314.66 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power at ref 1	-1.00 W
Power at ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.0 %
Cell Efficiency	17.8 %	Module Efficiency	16.0 %
Shunt res.	1002.248 Ohm	Series res.	0.487 Ohm

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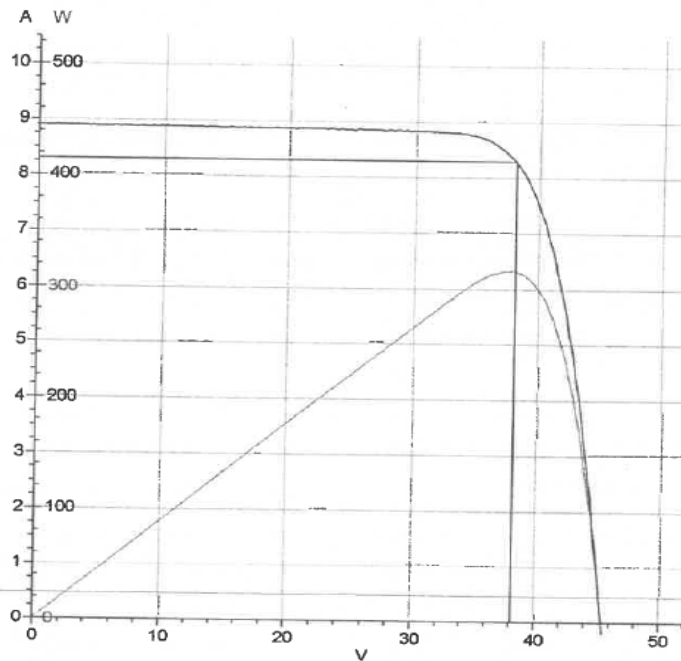
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

08-03-19 10:15



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-019 af pi
Module ID Code	R1000002192103330	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	26.8 °C	Mon. Cell Temp.	26.8 °C
Mask	NO-MASK 1.000 -	Cell Area	122.84 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	8.90 A	Voc	45.43 V
Imp	8.31 A	Vmp	38.14 V
Pmax	316.84 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power at ref 1	-1.00 W
Power at ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.4 %
Cell Efficiency	17.9 %	Module Efficiency	16.1 %
Shunt res.	641.838 Ohm	Series res.	0.478 Ohm

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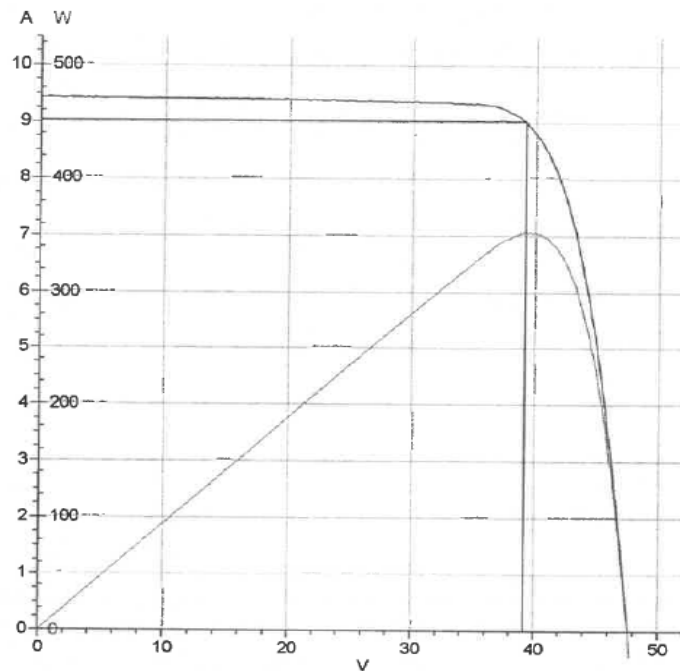
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

08-03-19 10:22



Measurement Data (Temp. compensated results)

PASAN Tester version 2.4.4
Module ID Code R1000002192103336
Standard temperature 25.0 °C
Mean Irradiance 1.006 kW/m²
Module Temp. 27.1 °C
Mask NO-MASK 1.000 -
Module Area 19716.60 cm²
Cells in Series 72
Isc 9.44 A
Imp 9.03 A
Pmax 353.98 W
Reference vlt 2 0.00 V
Power ar ref 2 -1.00 W
Current at ref 2 0.00 A
Cell Efficiency 20.1 %
Shunt res. 576.949 Ohm

Operator A000876127-021 AF PI
Serial number
Monitor Cell TVI001/002-2012
Calibration Value 35.00 mV/(kW/m²)
Mon. Cell Temp. 27.1 °C
Cell Area 122.20 cm²
Cells in Parallel 2
Measurement irradiance 1.000 kW/m²
Voc 47.63 V
Vmp 39.19 V
Reference vlt 1 0.00 V
Power ar ref 1 -1.00 W
Current at ref 1 0.00 A
Fill Factor 78.8 %
Module Efficiency 18.0 %
Serie res. 0.455 Ohm

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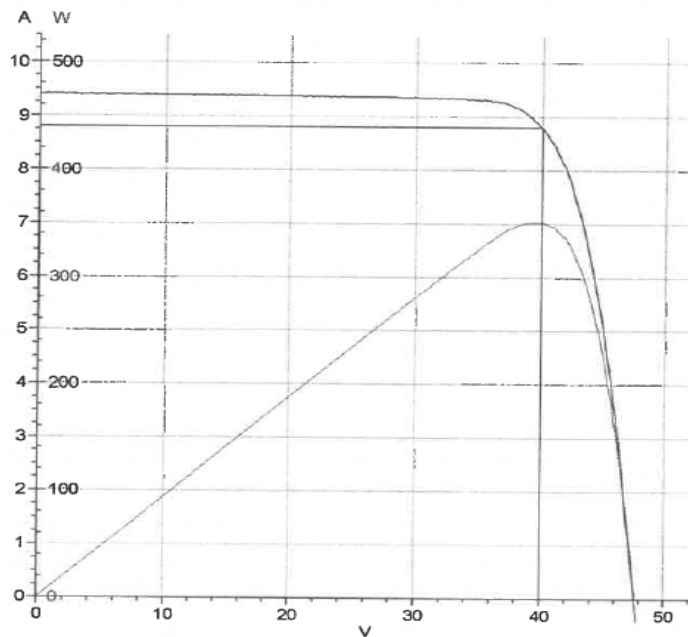
ZUSATZ-DOKUMENTATION
ADDITIONAL DOCUMENTATION



Performance measurement

PASAN SLAB Tester - STC + SM V2.4.4

08-03-19 10:20



Measurement Data (Temp. compensated results)

PASAN Tester version	2.4.4	Operator	A000876127-022 AF PI
Module ID Code	R1000002192103335	Serial number	
Standard temperature	25.0 °C	Monitor Cell	TVI001/002-2012
Mean Irradiance	1.006 kW/m ²	Calibration Value	35.00 mV/(kW/m ²)
Module Temp.	27.1 °C	Mon. Cell Temp.	27.1 °C
Mask	NO-MASK 1.000 -	Cell Area	122.20 cm ²
Module Area	19716.60 cm ²	Cells in Parallel	2
Cells in Series	72	Measurement irradiance	1.000 kW/m ²
Isc	9.40 A	Voc	47.63 V
Imp	8.80 A	Vmp	40.00 V
Pmax	351.92 W	Reference vlt 1	0.00 V
Reference vlt 2	0.00 V	Power at ref 1	-1.00 W
Power at ref 2	-1.00 W	Current at ref 1	0.00 A
Current at ref 2	0.00 A	Fill Factor	78.6 %
Cell Efficiency	20.0 %	Module Efficiency	17.8 %
Shunt res.	575.070 Ohm	Series res.	0.462 Ohm

Signature:
08/03/19

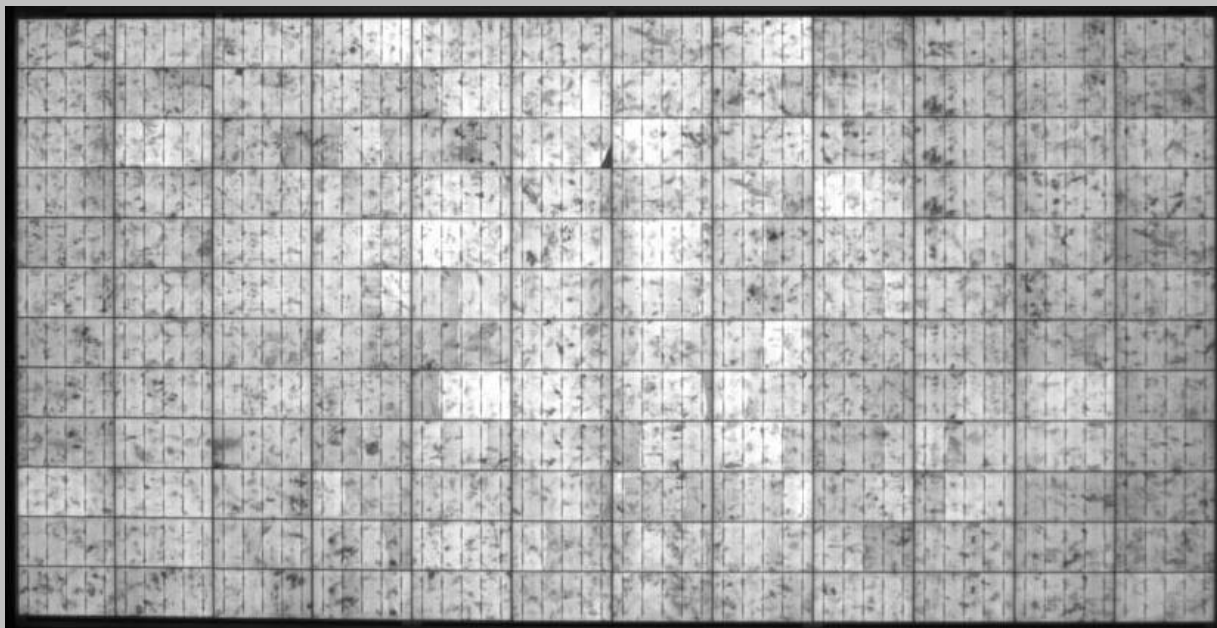
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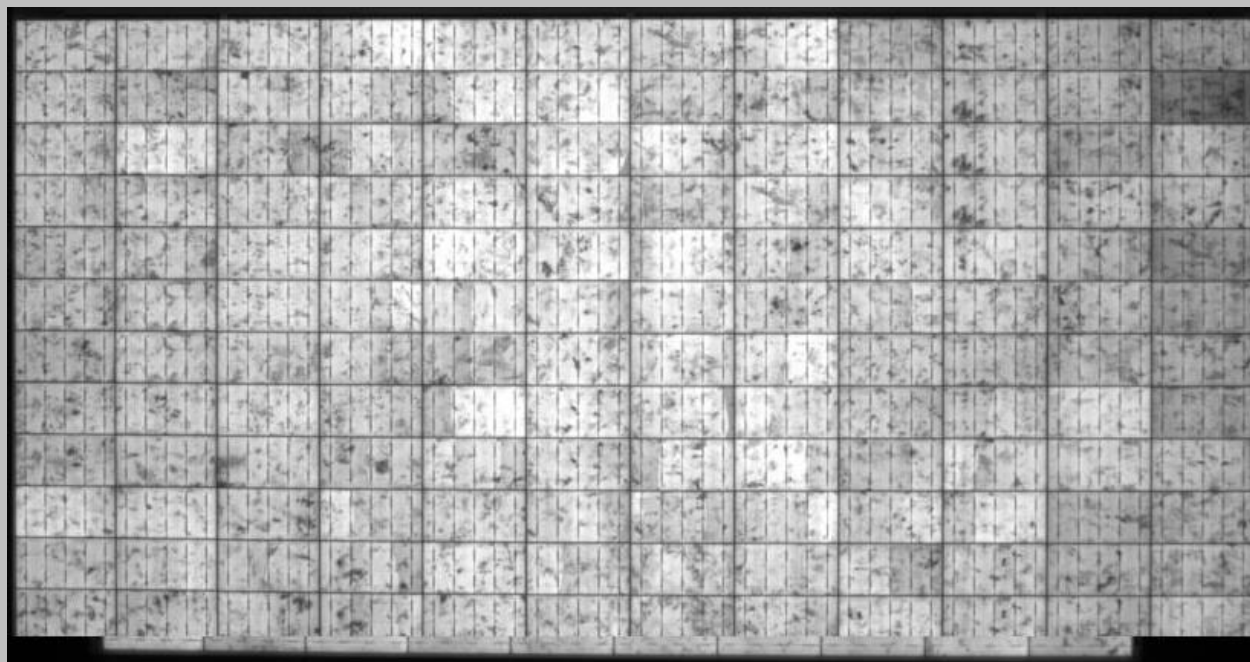
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EL Images of Test samples :

A000876127-018 -(Initial)



A000876127-018 (After- 1st PID Cycle)

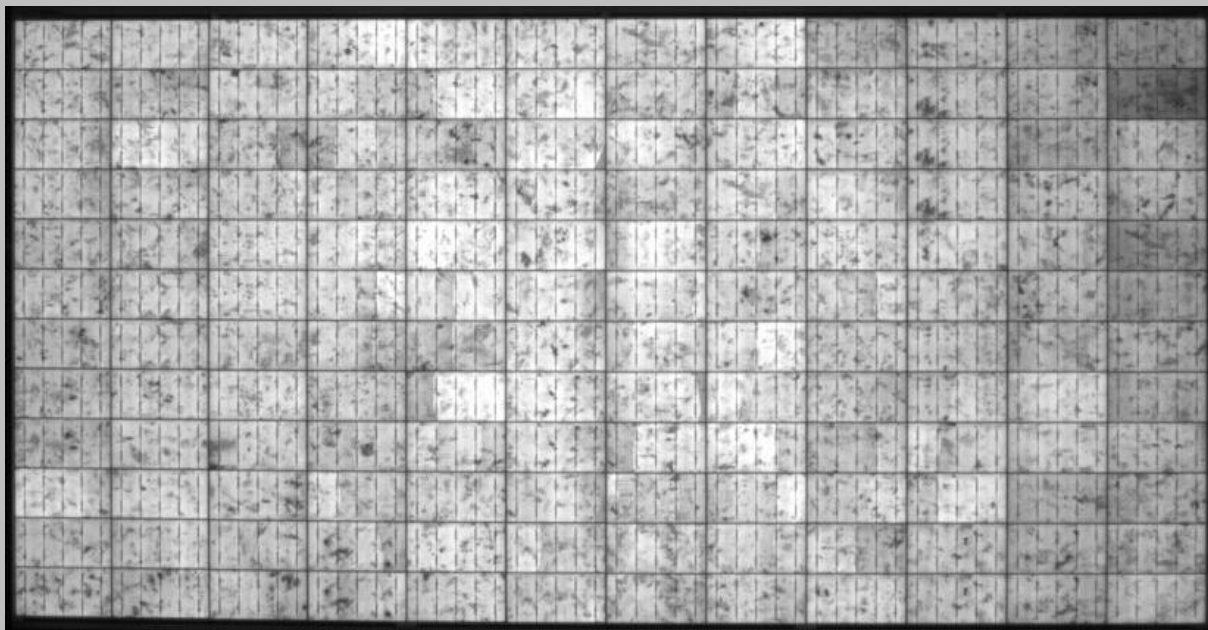


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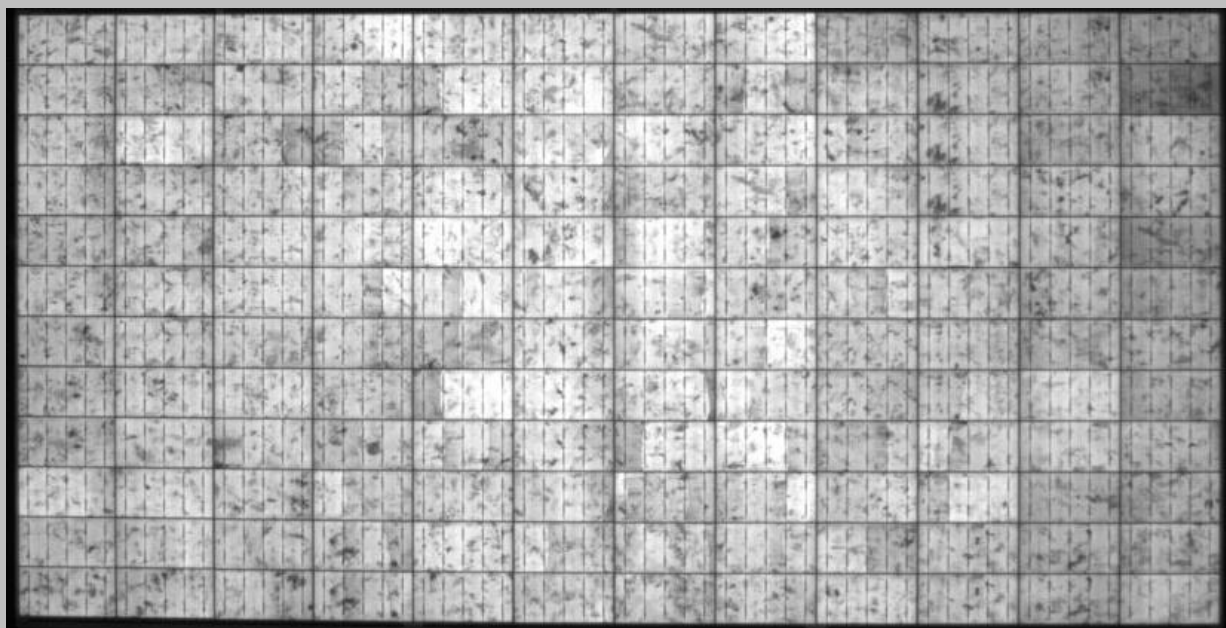
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A000876127-018 (After- IIInd PID Cycle)



A000876127-018 (After- IIIrd PID Cycle)

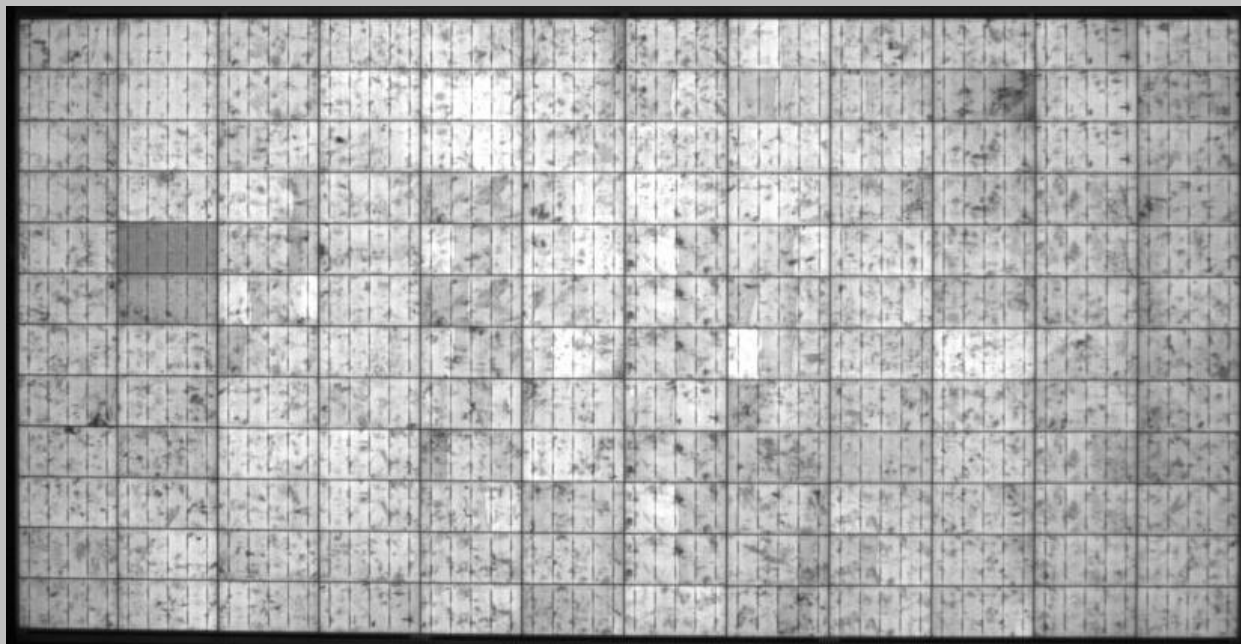


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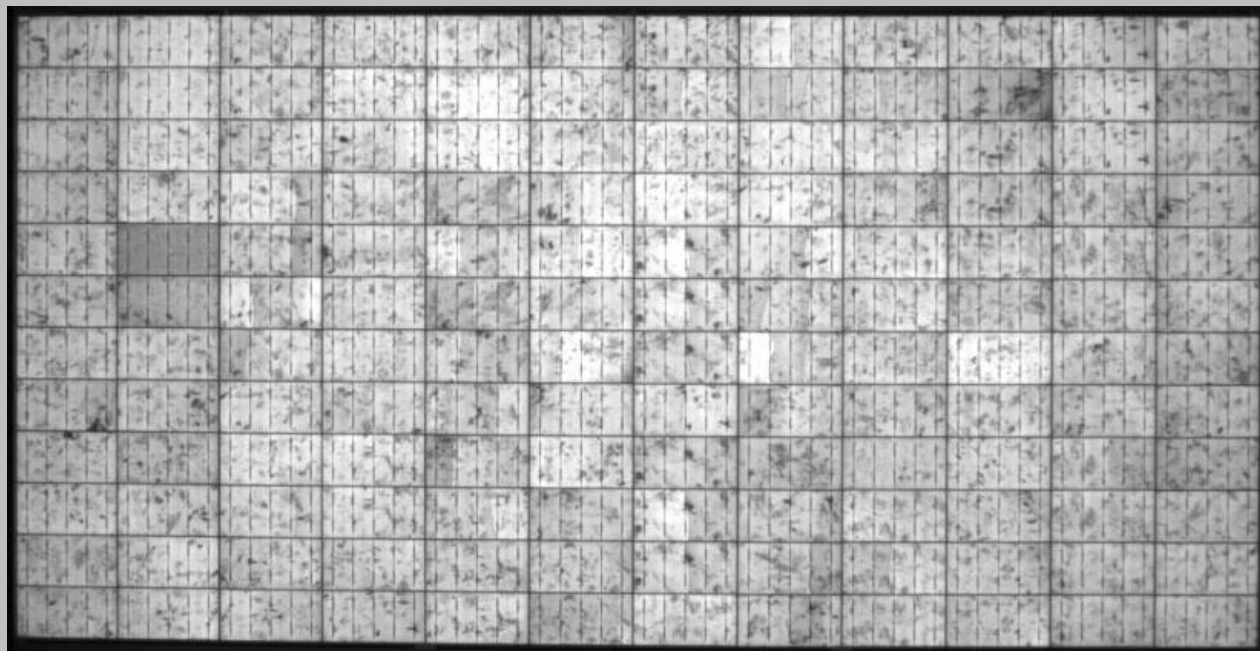
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A000876127-019(After- 1st PID Cycle)

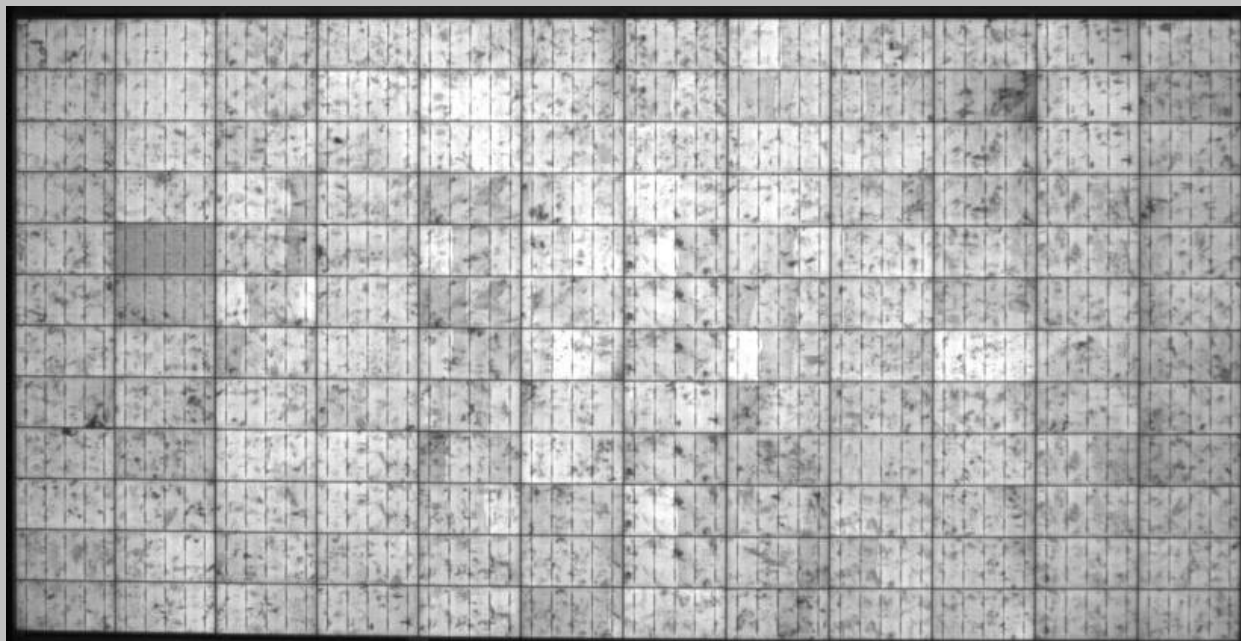


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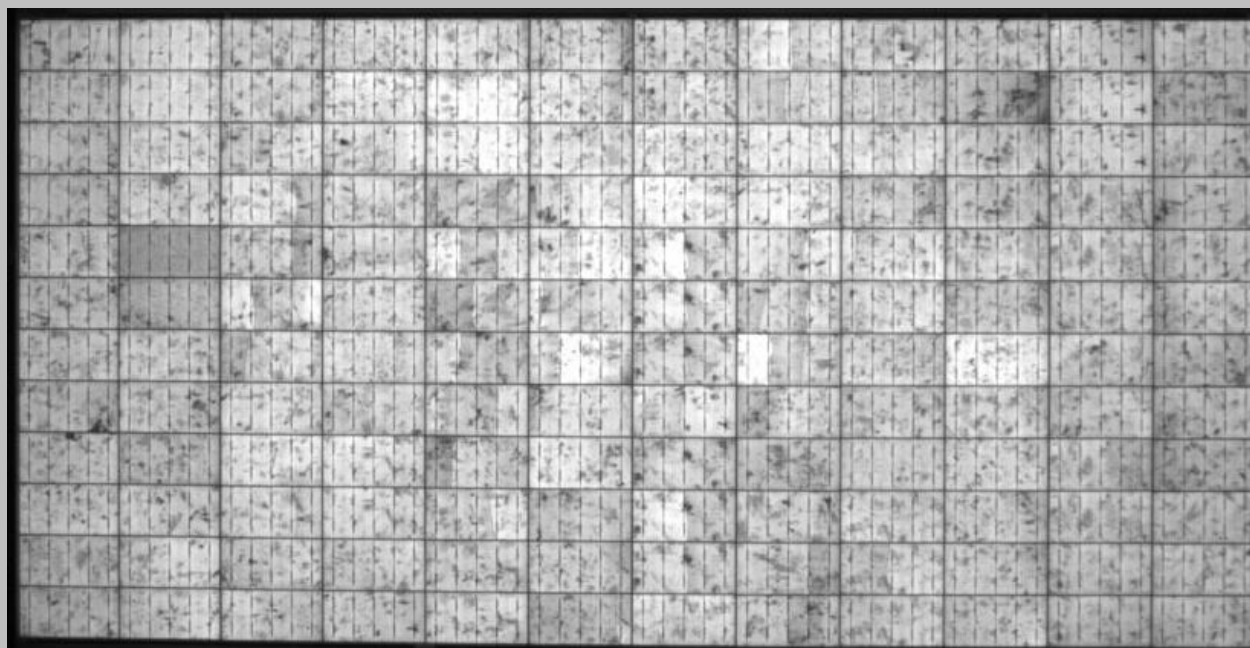
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A000876127-019(After- IIInd PID Cycle)



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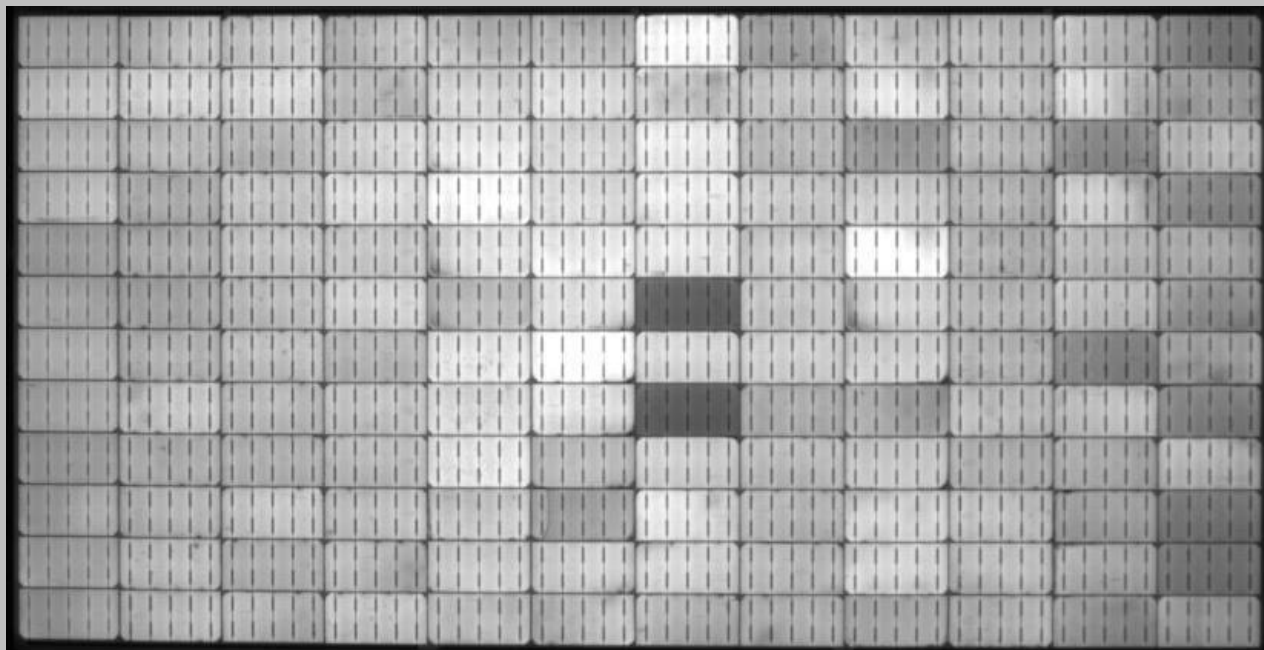


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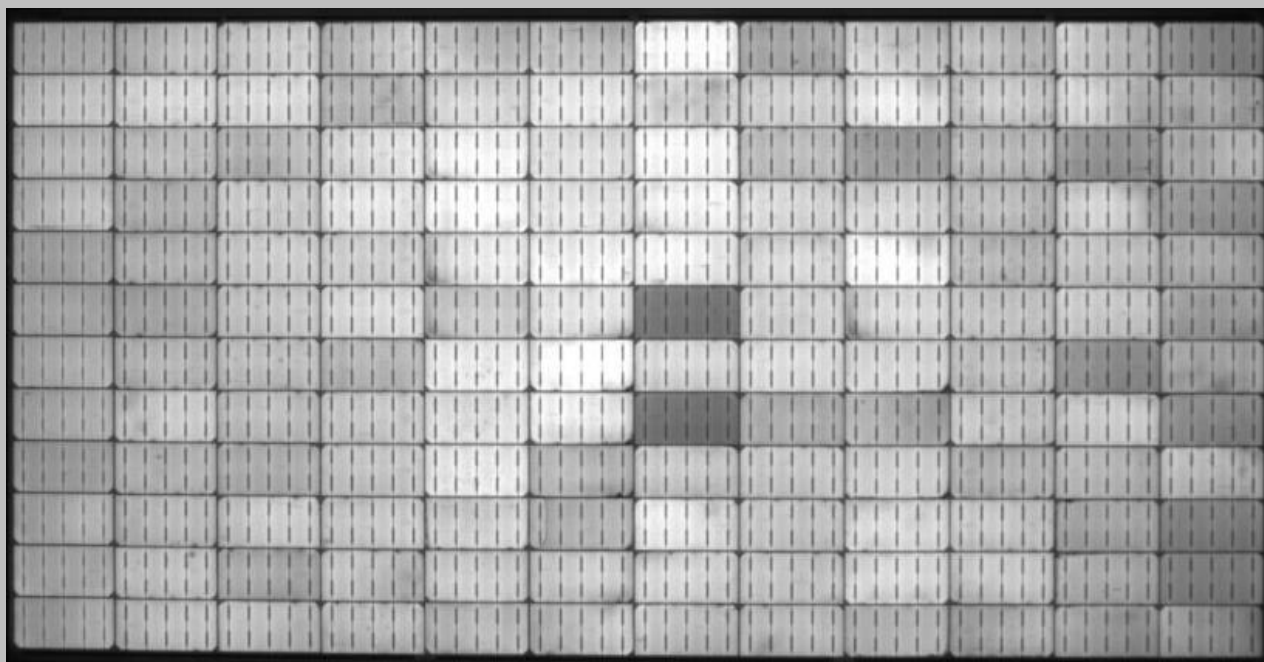
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A000876127-021(After- 1st PID Cycle)

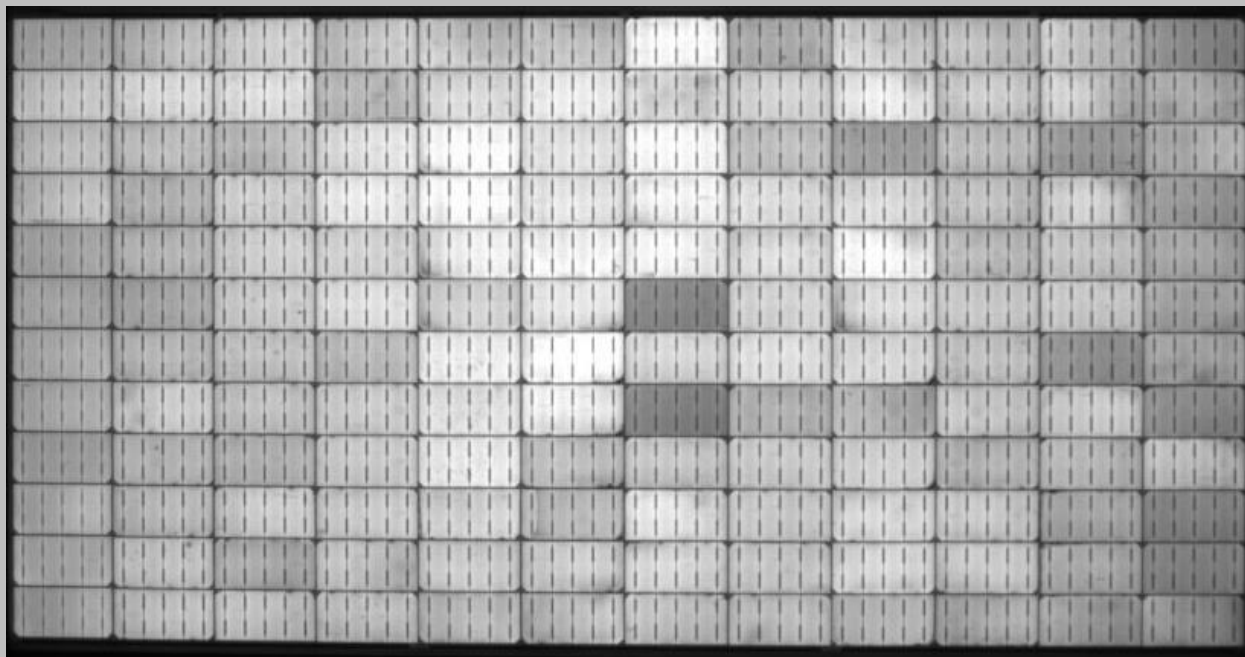


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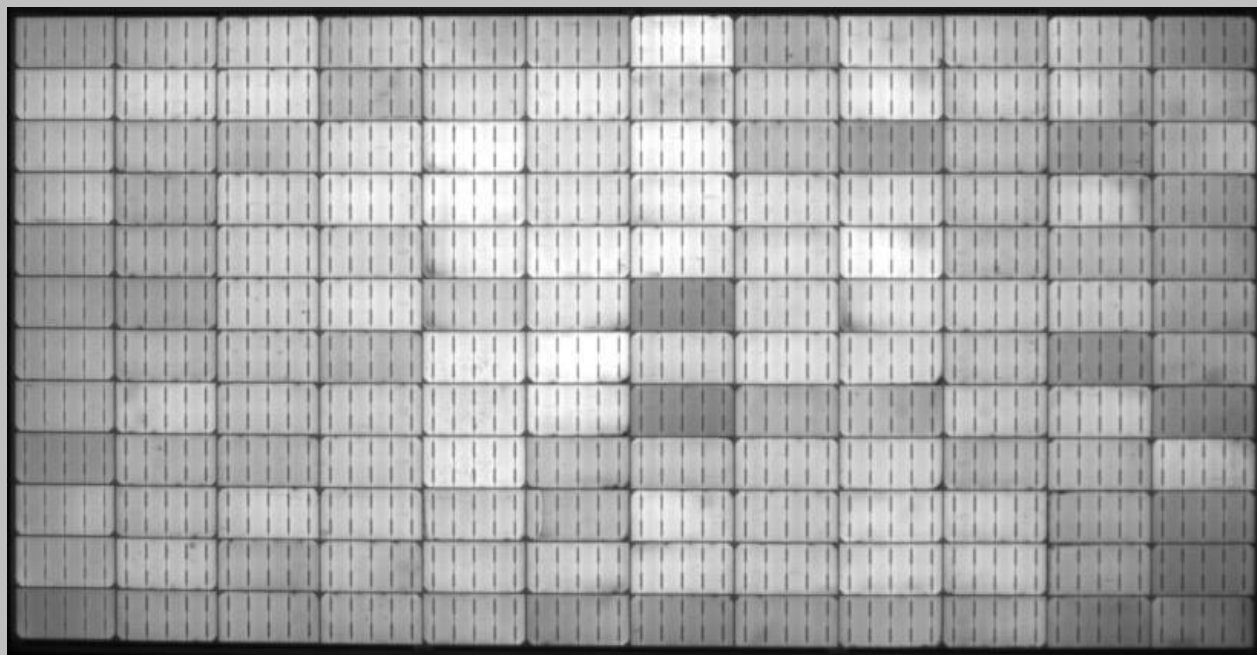
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A000876127-021(After- IIInd PID Cycle)



A000876127-021(After- IIIrd PID Cycle)

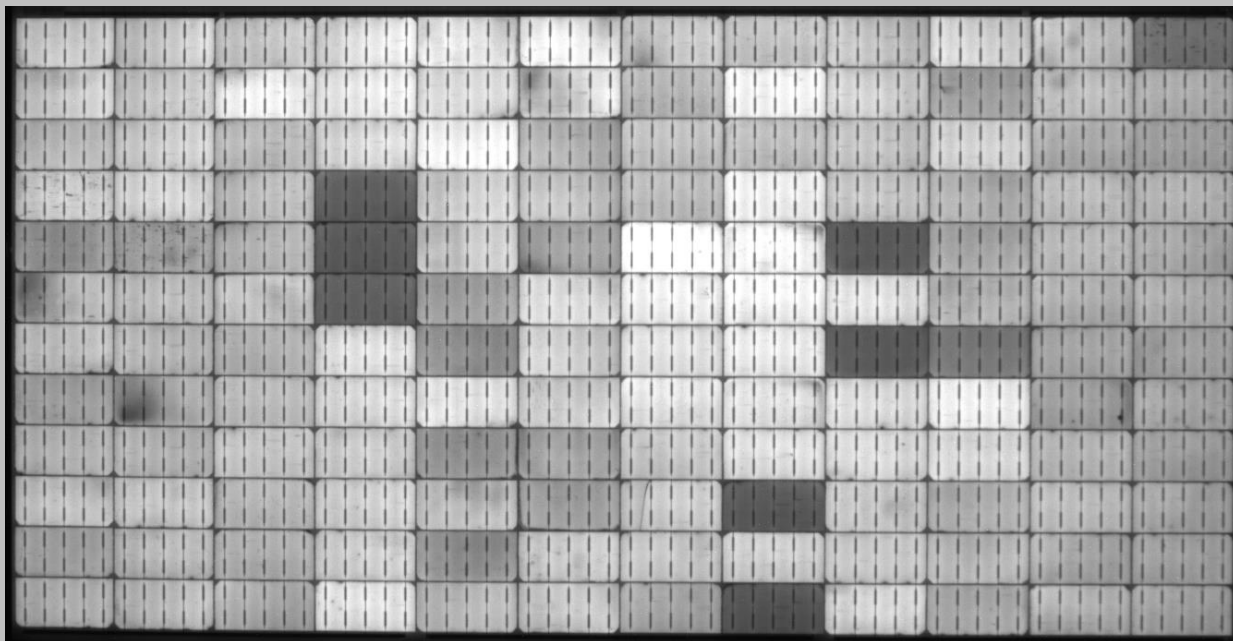


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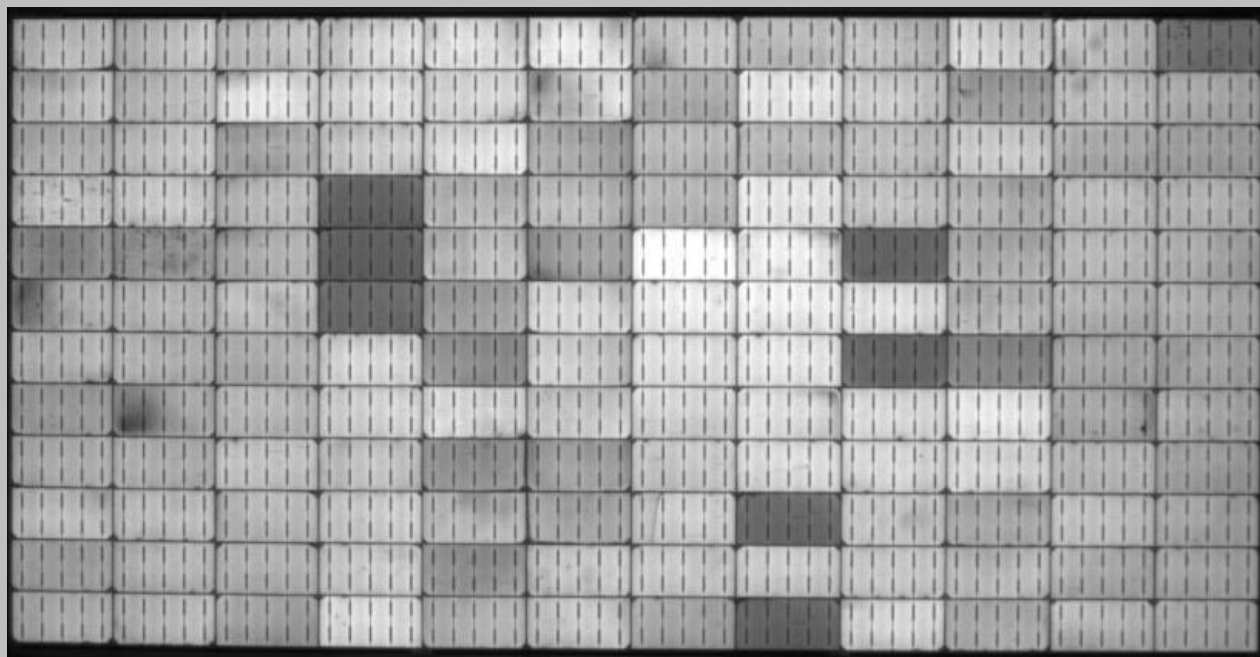
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A000876127-022(Initial)



A000876127-022(After- 1st PID Cycle)

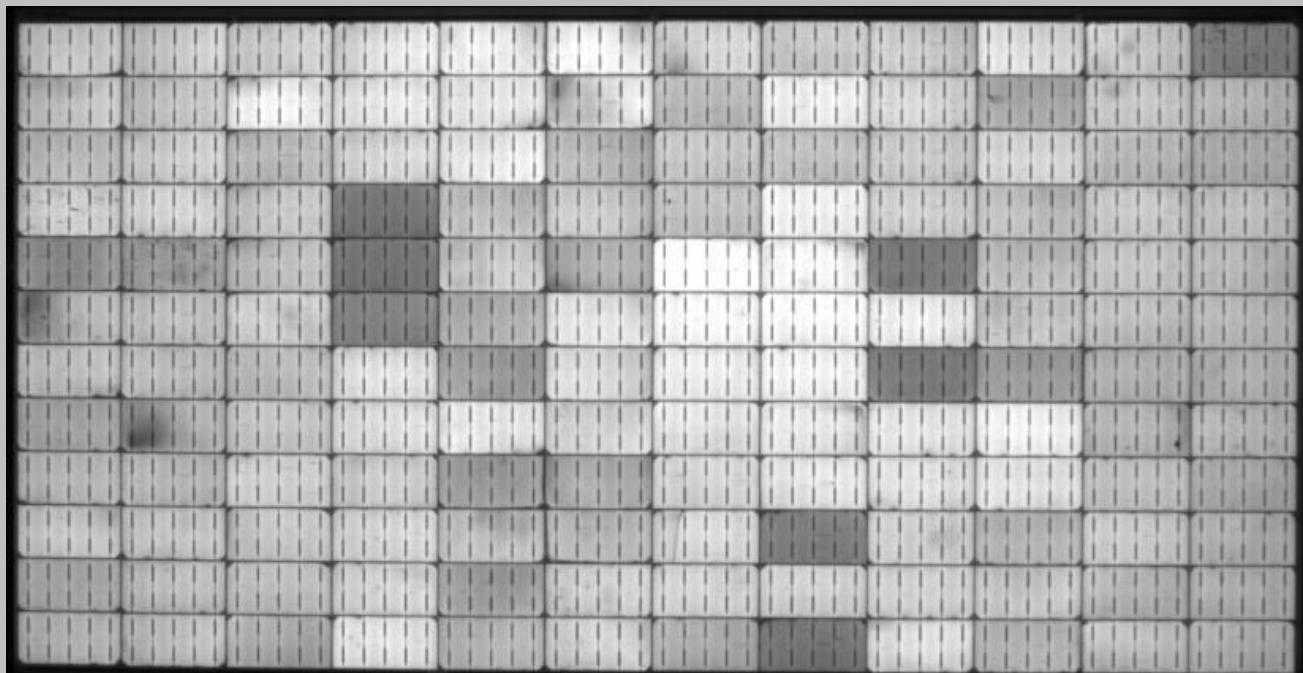


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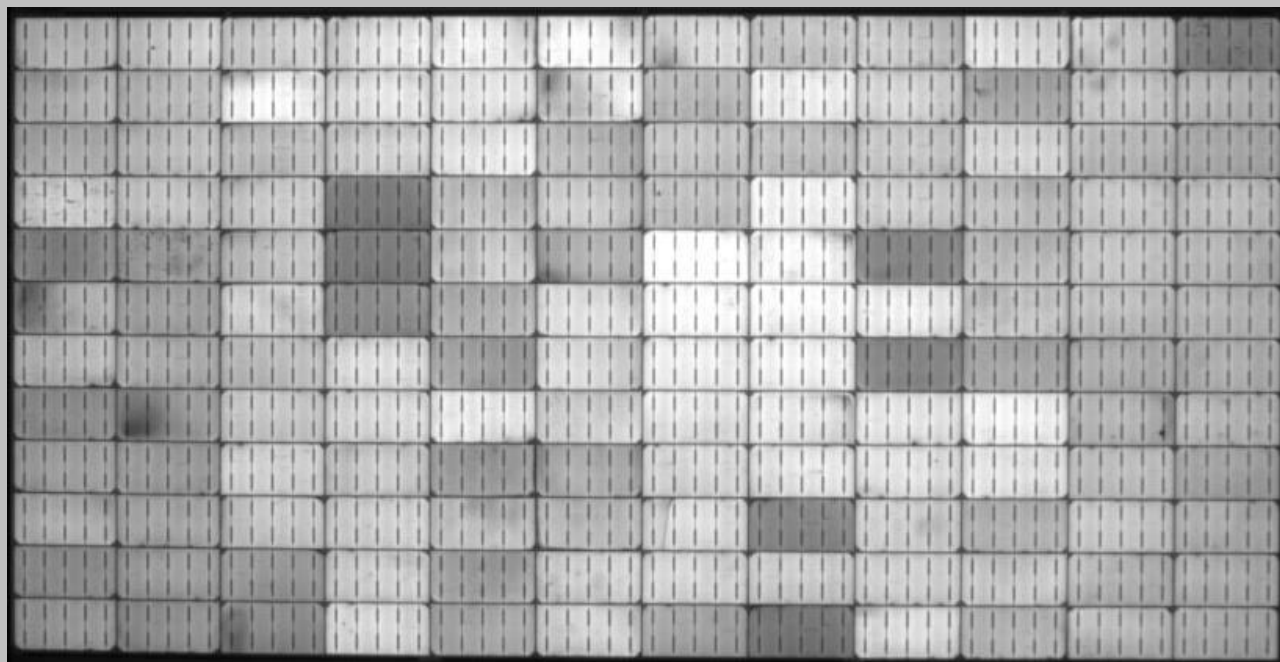
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A000876127-022(After- IInd PID Cycle)



A000876127-022(After- IIIrd PID Cycle)

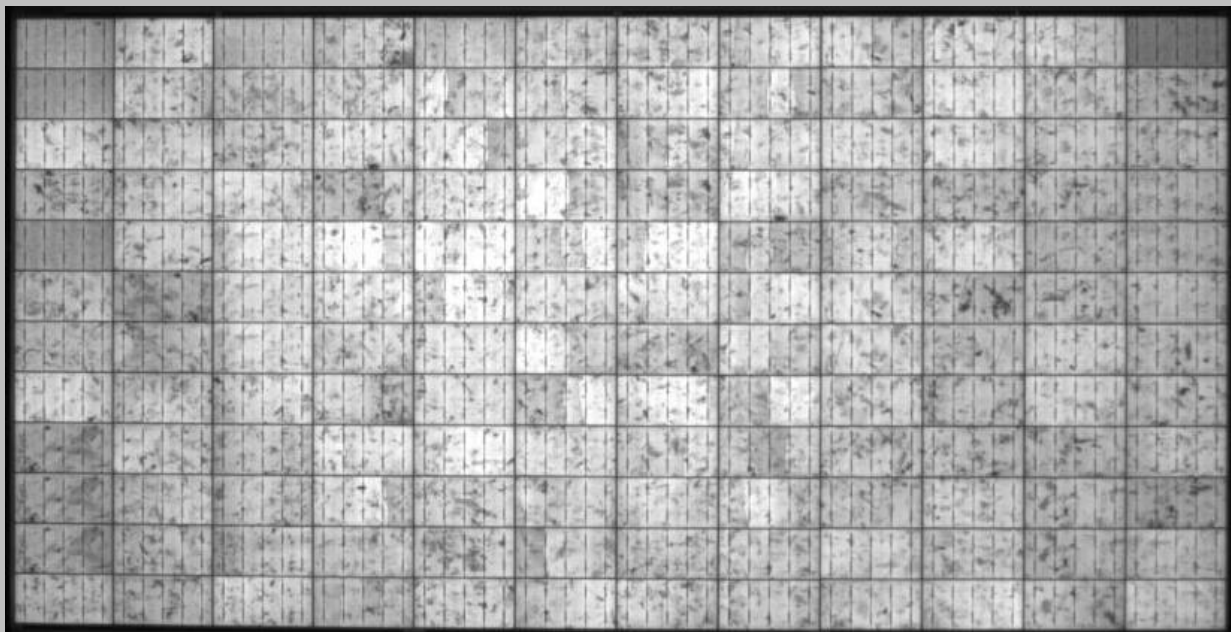


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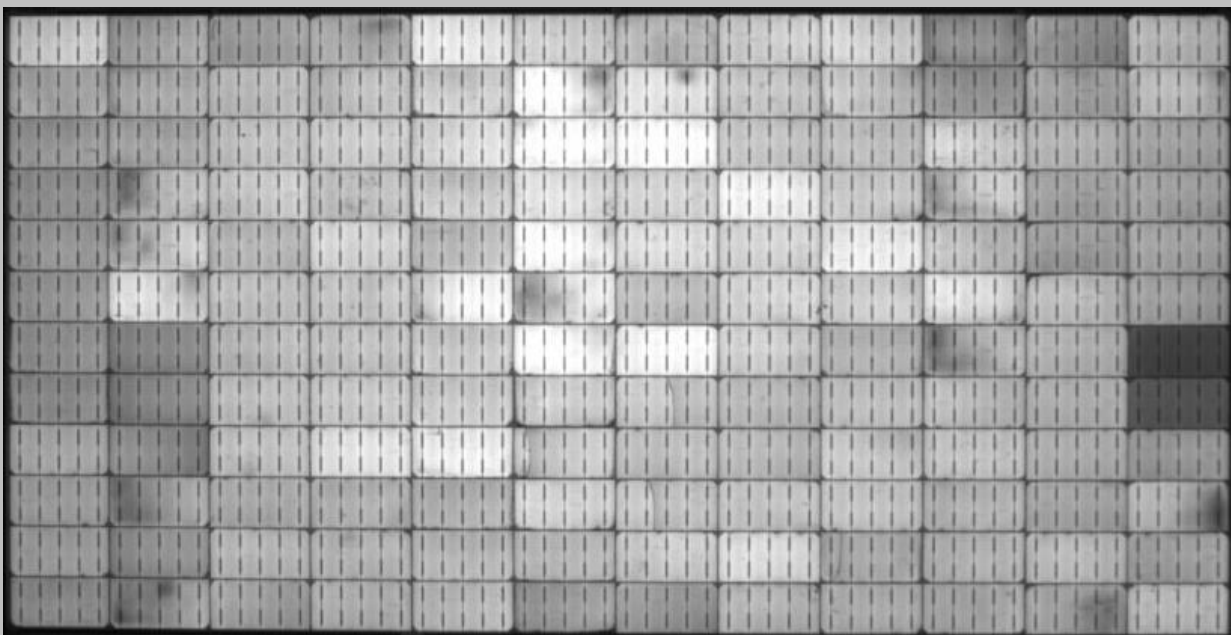
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A000876127-017(Control module)



A000876127-020(Control module)



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FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Pictures of Modules - DESERV MGalactic- 330



Fig.1:Front view of the module



Fig.2:Rear view of the module



Fig.3:Detail view of the Solar cell



Fig.4: Detail view of Junction Box



Fig.5: detail view of the connector

RenewSys India Pvt Ltd
Sy.No. 114/P, Srinagar (V),
Fabcity, Maheswaram (M),
Ranga Reddy District.

Model : DESERV MGalactic-330 High Performance Multicrystalline Modules

Rated Power	Voc	Isc	Vmp	Imp	Max System Voltage	Binning	Weight
330Wp	46.24V	9.26A	37.67V	8.77A	1500V (EU)	0~+4.99Wp	21.5 Kgs

Series Fuse Rating : 15A
Diode Rating : 15A

Application Class: A
Fire Hazard Rating : C

For field connections use AWG 12 insulated cable min. of rating at least 90°C

IEC 61215, IEC 61730 Certified

All Technical Data at Standard Test Conditions (AM1.5, E=1000W/Sq.m, T=25°C subject to measurement Uncertainty)

CAUTION: This Unit produces electricity when exposed to light. Cover the front surface of the Module with opaque material during installation and handling.

WARNING: Before installing, operating and servicing this unit check installation and operating manual. DO NOT connect or disconnect when system is on load. Failure to comply can be hazardous.

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31.12.2018
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Fig.6: detail view of the Type label

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FOTO-DOKUMENTATION
PHOTO-DOCUMENTATION

Pictures of Modules - DESERV MGalactic- 330



Fig.1:Front view of the module



Fig.2:Rear view of the module

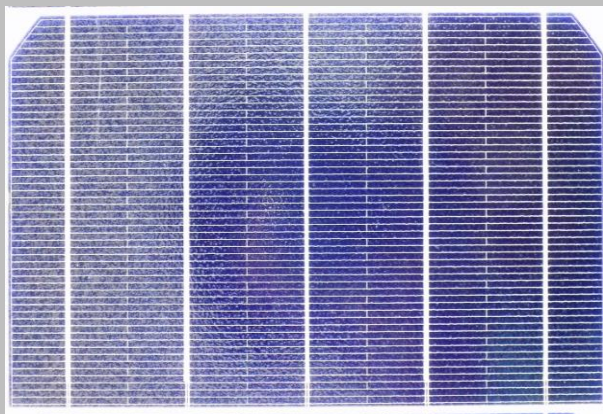


Fig.3:Detail view of the Solar cell



Fig.4: Detail view of Junction Box



Fig.5: detail view of the connector



RenewSys India Pvt Ltd
Sy.No. 114/P, Srinagar (V),
Fabcity, Maheswaram (M),
Ranga Reddy District.

Model : DESERV SGalactic-370 High Performance Monocrystalline Modules

Rated Power	Voc	Isc	Vmp	Imp	Max System Voltage	Binning	Weight
370Wp	49.12V	9.79A	39.94V	9.27A	1500V (EU)	0~+4.99Wp	21.5 Kgs

Series Fuse Rating : 15A Diode Rating : 15A

Application Class: A Fire Hazard Rating : C

For field connections use AWG 12 insulated cable min. of rating at least 90°C

IEC 61215, IEC 61730 Certified




All Technical Data at Standard Test Conditions :AM1.5, E=1000W/Sq.m,
T=25°C subject to measurement Uncertainty

CAUTION!
This Unit produces electricity when exposed to light. Cover the front surface of the Module with opaque material during installation and handling.

WARNING!
Before installing, operating and servicing this unit check installation and operating manual.DO NOT connect or disconnect when system is on load. Failure to comply can be hazardous.

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Fig.6: detail view of the Type label