



#### TEST REPORT

LILR NO '	TC64512420000006E			Page 1 of 21	
Test Report No :	TR120240105002		Issue Date:	05/01/2024	
Discipline:	Flectrical testing		Group:	Miscellaneous	
	MAYURESHWAR SOLAR ENERGY PRIVATE LIMITED				
Customer/Manufacture Name:	PLOT NO.T-3/4, MI	DC NARDANA PHASE 2, BHABALDE, NARDANA,	, DHULE, MAHARA	SHTRA, India, 424309	
	MAYURESHWAR SC	LAR ENERGY PRIVATE LIMITED			
Name of Manufacturer:	PLOT NO.T-3/4, MI	DC NARDANA PHASE 2, BHABALDE, NARDANA,	, DHULE, MAHARA	SHTRA, India, 424309	
Sample Description:	Said to be, "Solar P	/ Module, Model: SLM-M10-144-555, 555Wat	t, Brand/Tradema	rk:	
Sample Condition:	Fit for Testing				
Identification.	Madal Tastadi		Serial No.:	Refer page no.9	
	wodel Tested:	SLIVI-IVI10-144-555	Sample Code:	Nil	
Sample Deposited/Collected by:	Customer				
Customer Reference no.	Nil		Date:	19/09/2023	
Job Order No.:	BTH-R1/EL/230919,	7	Date of receipt:	19/09/2023	
Date(s) of performance of tests	19/09/2023 to 28/12/2023				
Test Location:	At Lab				
	BHARAT TEST HOUSE PVT. LTD.				
Laboratory Name and Address:	1474, HSIIDC, Indl. I	Estate, Rai,			
	Distt. Sonepat-1310	29 Haryana.	- C.S.		
Test specification(s):	Protocol followed as per following IEC 61701: 2020				
General Environmental Conditions: Temperature: 25°C ± 4°C,		22814			
Ceneral Environmental contations.	Relative Humidity: 50%RH ± 15%RH				
Populti	The results reported are as per relevant specifications /			ne na kana	
Result.	standards.	standards.		Scan this QR Code to verify the Report	
	- Deviation from the test methods as prescribed in relevant Specification/Work Instructions: Nil			ructions: Nil	
	- The information supplied by the customer may affect the validity of results reported as per standard			ed as per standard	
	requirement.				
Supplementary Information:	- Statement of Conformity is not required by the customer.				
	- Authorised signatory is responsible for the results reported by the lab for the requested activity by the				
	customer except for the information provided by the customer.				
Remarks:	· ·	<i>i</i>			
1. The report has been gener	rated and verified dia	itally.			

This report is related to the sample submitted.

Tested by:	Reviewed by:	Authorized by:
Cillard	HOUSE AUTO	taps
Vikas	T. Gautam	T. Gautam
Testing Engineer	Authorized Signatory	Authorized Signatory
Date: 05/01/2024	Date: 05/01/2024	Date: 05/01/2024

## BHARAT TEST HOUSE PVT. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com

(1) The above results are related only to the Tests/Calibration performed on the product received. Endorsement of product is neither inferred nor implied. (2) This report is not to be reproduced wholly or in part & forbidden to be used as an evidence in the court law & ought not to be used in any advertising media without our special permission in writing. (3) Samples will be disposed after 30 days except perishable items (within 7days) from date of issue of report or as per the regulatory guidelines, if not collected or claimed by the customer. (4) Total liability of our Test House is limited to the invoice amount only. (5) Report refers to the product received by Bharat Test House Pvt. Ltd. unless mentioned otherwise.

#### ISO 9001, ISO 14001 & ISO 45001 CERTIFIED LAB



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002

**Test Report No.** 

TC-6451

Page : Dated :

2 of 21 05/01/2024

IFIG REPORT         IFIG REPORT         IFIG REPORT         Report Reference No.         TR120240105002         Date of issue			
The durable Solution Composition to the streng modules - Salt mist corrosion testing         Report Reference No.       TR120240105002         Date of issue			
Report Reference No	IEC 01/01: 2020 Photovoltaic (PV) modulos — Salt mist corresion testing		
Date of issue       05/01/2024         Total number of pages       21         Testing Laboratory       BHARAT TEST HOUSE PVT. LTD.         Address       Distt. Sonepat-131029 Haryana.         Applicant's name       MAYURESHWAR SOLAR ENERGY PRIVATE LIMITED         PLOT NO. T-3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, India, 424309         Test specification       IEC 61701 : 2020 (Severity 6)         Compliance report       Compliance report         Non-standard test method       N/A         Test item description       Solar PV Module         Trade Mark/Brand       ES of PV Module         Manufacturer       PLOT NOT 3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, India, ASHTRA, 424309         Model/Type reference       Mayureshwar solar energy private limited         Factory       PLOT NOT 3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, 424309         Model/Type reference       Mayureshwar solar energy private limited         Factory       PLOT NOT 144-550, SLM-M10-144-555         Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)         SUM-M10-144-50, SLM-M10-144-50,	Report Reference No.	TR120240105002	
Total number of pages       21         Testing Laboratory       BHARAT TEST HOUSE PVT. LTD.         1474, HSIDC Indi. Estate, Rai,       Dist. Sonepat-131029 Haryana.         Applicant's name       MAYURESHWAR SOLAR ENERGY PRIVATE LIMITED         Address       PLOT NO.T-3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,         India, 424309       IEC 61701 : 2020 (Severity 6)         Standard       IEC 61701 : 2020 (Severity 6)         Compliance report       N/A         Test item description       N/A         Trade Mark/Brand       Solar PV Module         Trade Mark/Brand       Solar PV Module         Trade Mark/Brand       Solar PV Module         Mayureshwar solar energy private limited         PLOT NO 3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE,         Mayureshwar solar energy private limited         Factory       PLOT NO 3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE,         Mayureshwar solar energy private limited         PLOT NO 3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE,         Mayureshwar solar energy private limited         Factory       Model Tested: SLM-M10-144-555         Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)         SLM-M10-144-530, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-530,         SLM-M10-1	Date of issue	05/01/2024	
Testing Laboratory	Total number of pages	21	
Address1474, HSIIDC Indl. Estate, Rai, Distt. Sonepat-131029 Haryana.Applicant's name.MAYURESHWAR SOLAR ENERGY PRIVATE LIMITED PLOT NO.T-3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, India, 424309Test specification.IEC 61701 : 2020 (Severity 6) 	Testing Laboratory	BHARAT TEST HOUSE PVT. LTD.	
Address		1474. HSIIDC Indl. Estate. Rai.	
Applicant's name:       MAYURESHWAR SOLAR ENERGY PRIVATE LIMITED         Address:       PLOT NO.T-3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, India, 424309         Test specification:       IEC 61701 : 2020 (Severity 6)         Compliance report       Compliance report         Non-standard test method:       N/A         Test item description:       Solar PV Module         Trade Mark/Brand:       Solar PV Module         Manufacturer:       Mayureshwar solar energy private limited         PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, 2009         Model/Type reference::       Mayureshwar solar energy private limited         PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, 424309         Model/Type reference::       Model Tested: SLM-MIO-144-555         Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)         SLM-MI0-144-530, SLM-MIO-144-525, SLM-MIO-144-520, SLM-MIO-144-535, SLM-MIO-144-530, SLM-MIO-144-53	Address	Distt. Sonepat-131029 Haryana.	
Address	Applicant's name:	MAYURESHWAR SOLAR ENERGY PRIVATE LIMITED	
India, 424309         Test specification         Standard         IEC 61701 : 2020 (Severity 6)         Compliance report         Non-standard test method         N/A         Solar PV Module         Trade Mark/Brand         Solar PV Module         Trade Mark/Brand         Manufacturer         Factory         Model/Type reference         Model/Type reference         Model/Type reference         Stim-M10-144-550, SLM-M10-144-555, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-530,	Address	PLOT NO.T-3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,	
Test specification       IEC 61701 : 2020 (Severity 6)         Standard       Compliance report         Non-standard test method       N/A         Test item description         Trade Mark/Brand       Solar PV Module         Trade Mark/Brand       Solar PV Module         Manufacturer       Mayureshwar solar energy private limited         Factory       PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,424309         Model/Type reference       Model Tested: SLM-M10-144-555         Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)       SLM-M10-144-530, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-535, SLM-M10-144-530, SLM-M10-144-530, SLM-M10-144-530, SLM-M10-144-500,         Ratings.       Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.		India, 424309	
StandardIEC 61701 : 2020 (Severity 6)Test procedureCompliance reportNon-standard test methodN/ATest item descriptionTrade Mark/BrandSolar PV ModuleTrade Mark/BrandSolar PV ModuleManufacturerMayureshwar solar energy private limitedFactoryPLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,424309Model/Type referenceModel Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V) SLM-M10-144-530, SLM-M10-144-545, SLM-M10-144	Test specification		
Test procedure       Compliance report         Non-standard test method       N/A         Solar PV Module         Trade Mark/Brand       Solar PV Module         Manufacturer.       Solar PV Module         Factory.       Mayureshwar solar energy private limited         PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE,         MAHARASHTRA,424309         Model/Type reference         Model/Type reference.         SUM-M10-144-550, SLM-M10-144-555         Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)         SLM-M10-144-500, SLM-M10-144-500, SLM-M10-144-515, SLM-M10-144-500,         Ratings.       Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.	Standard	IEC 61701 : 2020 (Severity 6)	
Non-standard test methodi:       N/A         Test item descriptioni:       Solar PV Module         Trade Mark/Brandi:       Solar PV Module         Manufacturer       Mayureshwar solar energy private limited         Factoryi:       Mayureshwar solar energy private limited         PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE,         MAHARASHTRA,424309         Model/Type reference:       Model Tested: SLM-M10-144-555         Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)         SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-515, SLM-M10-144-500,         Ratings:       Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A	Test procedure:	Compliance report	
Test item description: Trade Mark/Brand:Solar PV ModuleManufacturer:Solar PV ModuleManufacturer:Mayureshwar solar energy private limitedPLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,424309Model/Type reference::Model Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V) SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-545, SLM-M10-144-535, SLM-M10-144-530, SLM-M10-144-500,Ratings:Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.	Non-standard test method:	N/A	
Test item description:Solar PV ModuleTrade Mark/Brand:Solar PV ModuleManufacturer:Mayureshwar solar energy private limitedFactory:PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,424309Model/Type reference::Model Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V) SLM-M10-144-550, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-550, SLM-M10-144-500, SLM-M10-144-500,Ratings:Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.			
Trade Mark/Brand:SoloriousManufacturer:Mayureshwar solar energy private limitedFactory:PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,424309Model/Type reference::Model Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V) SLM-M10-144-550, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-550, SLM-M10-144-500, SLM-M10-144-500,Ratings:Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.	Test item description	Solar PV Module	
ManufacturerMayureshwar solar energy private limitedFactoryPLOT NOT -3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,424309Model/Type referenceModel Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V) SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,RatingsMaximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.	Trade Mark/Brand	Solorious	
ManufacturerMayureshwar solar energy private limitedFactoryPLOT NOT -3/4, MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA, 424309Model/Type referenceModel Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V) SLM-M10-144-550, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-530, SLM-M10-144-520, SLM-M10-144-520, SLM-M10-144-515, SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,RatingsMaximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.		ENERGY	
FactoryPLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE, MAHARASHTRA,424309Model/Type referenceModel Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V) SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515, SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,RatingsMaximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.	Manufacturer	Mayureshwar solar energy private limited	
MAHARASHTRA,424309Model/Type reference:Model Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535,SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515,SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,RatingsMaximum System Voltage: 1500V, Maximum over-current protection rating: 25ASee copy of Marking label and General product information.	Factory	PLOT NOT -3/4,MIDC NARDANA PHASE 2, BHABALDE, NARDANA, DHULE,	
Model/Type reference:Model Tested: SLM-M10-144-555Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535,SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515,SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,Ratings:Maximum System Voltage: 1500V, Maximum over-current protection rating: 25ASee copy of Marking label and General product information.		MAHARASHTRA,424309	
Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535,SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515,SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,Ratings:Maximum System Voltage: 1500V, Maximum over-current protection rating: 25ASee copy of Marking label and General product information.	Model/Type reference	Model Tested: SLM-M10-144-555	
SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535, SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515, SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,RatingsMaximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.		Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)	
SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515, SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,RatingsMaximum System Voltage: 1500V, Maximum over-current protection rating: 25A See copy of Marking label and General product information.		SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535,	
SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,         Ratings       Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A         See copy of Marking label and General product information.		SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515,	
Ratings       Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A         See copy of Marking label and General product information.		SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,	
See copy of Marking label and General product information.	Ratings	Maximum System Voltage: 1500V, Maximum over-current protection rating: 25A	
		See copy of Marking label and General product information.	

Tested by:	Reviewed by:
Dillarg	TEST HOUSE
Vikas	T. Gautam
Testing Engineer	Authorized Signatory
Date: 05/01/2024	Date: 05/01/2024



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

TEST HOUSE **B**harat Pvt. Ltd 1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



3 of 21 05/01/2024

Summary of testing:		
Tests performed (name of test and test clause):	Testing location: BHARAT TEST HOUSE PVT. LTD.	
Preconditioning	1474, HSIIDC, Indl. Estate, Rai,	
MQT 01 Visual Inspection (Initial and Final)	Distt. Sonepat-131029 Haryana.	
MQT 19 Stabilization (Initial and Final)		
MQT 02 Maximum Power Determination (Initial and Final)		
MQT 03 Insulation test (Initial and Final)		
MST 17 Wet leakage current test (Initial and Final)		
MST 13 Continuity test of equipotential bonding (Initial and Final)		
Salt mist test according to IEC 60068-2-52, Severity 6 (8 cycles = 56 Days (one cycle = 7 days)		
MQT 18 Bypass diode testing		



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

Bharat Test House Pvt. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



 ULR No.
 :
 TC64512420000006F

 Test Report No.
 :
 TR120240105002



Page : Dated : 4 of 21 05/01/2024





The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



### ULR No. : TC64512420000006F

Test Report No.

TR120240105002



Page : Dated : 5 of 21 05/01/2024

GENERAL INFORMATION	
Test item particulars:	
Accessories and detachable parts included in the evaluation	N/A
Options included	N/A
Abbreviations used in the report:	
Pmp –Maximum power	Vmp–Maximum power voltage
Imp–Maximum power current	Voc–Open circuit voltage
Isc-Short circuit current	FF–Fill Factor
STC –Standard Test Conditions	-
Possible test case verdicts:	
-test case does not apply to the test object	N/A (Not Applicable)
-test object does meet the requirement	Pass (P)
-test object does not meet the requirement:	Fail (F)

General remarks:

The test results presented in this report relate only to the object tested.

This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.

"(See Enclosure #)" refers to additional information appended to the report.

"(See appended table)" refers to a table appended to the report.

Throughout this report a point is used as the decimal separator.



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



Page Dated 05/01/2024 :

6 of 21

#### **General Product Information:**

144 half cut cells family models with Maximum System Voltage: 1500Vare included in this test report. Model tested and series models are same except the differences as declared by the manufacturer for the family formation according to MNRE guidelines. Differences (Refer annexure and Description of module construction): Electrical rating 1. PV module type reference..... SLM-M10-144-555 Product Electrical Ratings at STC Nominal maximum power (Pmax)...... 555W Nominal open circuit voltage at (Voc)...... 49.90V Nominal short circuit current at (Isc).....: 13.43A Nominal maximum power voltage (Vpm)...... 43.78V Nominal maximum power current (Ipm).....: 12.68A **Product Safety Ratings** Maximum system voltage.....: 1500V

Maximum over-current protection rating:	25A
Safety application class:	Class A
Safety class in accordance with IS 61140:	Class II
Fire safety class:	Class C
Recommended maximum series/parallel module configurations:	Maximum number of modules in series depends on the system design, type of inverter used on and environment condition.



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

Bharat Test House Pvt. Ltd 1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC64512420000006F
Test Report No.	:	TR120240105002



7 of 21 05/01/2024

Description of module construction:	
(Manufactories and part numbers, unless oth	nerwise specified)
Sample:	Random sampling
<u>Module</u>	Model Tested: SLM-M10-144-555
	Series models: (144 Half Cut Cells Family and Max. system voltage 1500V)
	SLM-M10-144-550, SLM-M10-144-545, SLM-M10-144-540, SLM-M10-144-535,
	SLM-M10-144-530, SLM-M10-144-525, SLM-M10-144-520, SLM-M10-144-515,
	SLM-M10-144-510, SLM-M10-144-505, SLM-M10-144-500,
Front cover	Tempered glass with external AR coating, Thickness: 3.2mm,
	Manufactured by: WUJIANG CSG GLASS CO.,LTD.
Rear cover	KNACK BS PVDF W15(a), THICKNESS:0.360MM
	Manufactured by Knack Energy Pvt Ltd
-	Partial discharge File No. E527726 By UL Solutions
Encapsulation material	Type: KNACK 360 PFC Thickness=0.45 to 0.75mm
	Manufactured by Knack Energy Pvt Ltd
<b>F</b>	File No. E527726 By UL Solutions
Frame	1 YPE:6005-16 Aluminum frame, 35 frame,
Discoursions (Incourse)	Manufactured by SUNSHINE TECHNOLOGY COMPANY LIMITED
Dimensions (I x w x n) mm	(144 haif cut cells family)2284mm*1134mm*35mm
Module area [m <sup>2</sup> ]	2.59
Minimum distance between current	10.75 mm 14
carrying parts and module edge [mm]	13.75 mm±1
Cell	-
Cell (include type)	MC 182-10BB-144F Bifacial PERC Cell. half cut cell.
	Manufactured by Aikosolar
Cells (lxw) [mm]	182mmx182mm ±0.5mm
Cell thickness [µm]	185±18.5μm
Cell area [cm <sup>2</sup> ]	331.24
Number of cells	144 (half cell),
Components and other	-
Cells per bypass diode	48 for 144 (half cell),
Type of bypass diode	Туре:40РV045, VRRM: 45V, I <sub>(FSM</sub> ): 400А, I <sub>F(AV)</sub> : 40А, Тј: 200°С max., RθJ-С: 0.8 °С/W,
	Manufactured by Sinotech
No. of bypass diode	3
Cell connector	Sn 60% Pb40 %,, Diameter: Ф0.24mm,
	Manufactured by TaiCang JuRen PV Material Co.,Ltd
String connector	Sn 60% Pb40 %, Diameter:0.45mm x 5.0mm,
	Manufactured by TaiCang JuRen PV Material Co.,Ltd
Junction box	ST618, Rated Voltage 1500VDC, rated current:30A, IP68, Ambient temperature: -40 $^{\circ}C$ to +85 $^{\circ}C$ ,
	Manufactured by Cixi Sinwo Solar Technoloay Co.Ltd., Certificate No. B 092685 0003 Rev. 04
	tested by TUV SUD
Cable	62930 IEC 131 1 x 4mm <sup>2</sup> HALOGEN ,Manufactured by Cixi Sinwo Solar Technology co.Ltd.
	Certificate no. B 0926850005 Rev.01 by Tuv SUD
Connectors	ST6, Max. Voltage: DC 1500V, Max. Current: 30A, IP68, manufactured by Cixi Sinwo Solar
	Technology Co.Ltd., Certificate No. B 092685 0004 Rev. 03 tested by TUV SUD
Adhesive for frame	1527 Color: White Manufactured by TONISON
Adhesives (junction box)	
Potting material (junction box)	1521,Color: White, Manufactured by TONSON
	ITO AT

The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com





:

:

05/01/2024

Dated

TC64512420000006F ULR No. : **Test Report No.** TR120240105002 :

Others	Fixing tape: FF-3665 ,Manufactured by CYBRID
	Fluxing agent: 952-S, Manufactured by Kester
	Light redirecting film: NA

MODULE DESIGN - MINIMUM DISTANCES	
Between cells:	Top and Bottom: 1.5mm
Between cell and edge of laminate	23 ±1mm
Between any current carrying part and edge of laminate	13.75 ±1mm

MODULE DESIGN - ELECTRICAL CONFIGURATION		
Total number of cells	144 half cut cells,	
Serial-parallel connection of cells	3 sting in series and 2 string in parallel	
Cells per bypass diode:	(144 Half cut Cells Family): 48,	
No. of bypass diodes	3	



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

TEST HOUSE PVT. BHARAT Ltd 1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com

(1)The above results are related only to the Tests/Calibration performed on the product received. Endorsement of product is neither inferred nor implied. (2) This report is not to be reproduced wholly or in part & forbidden to be used as an evidence in the court law & ought not to be used in any advertising media without our special permission in writing. (3) Samples will be disposed after 30 days except perishable items (within 7days) from date of issue of report or as per the regulatory guidelines, if not collected or claimed by the customer. (4) Total liability of our Test House is limited to the invoice amount only. (5) Report refers to the product received by Bharat Test House Pvt. Ltd. unless mentioned otherwise.

ISO 9001, ISO 14001 & ISO 45001 CERTIFIED LAB



:

:

TC64512420000006F

3

TR120240105002

ULR No.

**Test Report No.** 

BC-MRA	L Atha wither ar	Reference of the second	
F	age	:	9 of 21

Dated :

SLM72H55509230000011

05/01/2024

Module group assignmen	t:	
Sample #	Sample Group ID	Serial number
	1	SLM72H55509230000012 (Control)
SI M-M10-144-555	2	SI M72H55509230000009

1.5	STI	101	
E	2	N	m
AR	A	-	핀
120	*	.0	×/

The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com

(1)The above results are related only to the Tests/Calibration performed on the product received. Endorsement of product is neither inferred nor implied. (2) This report is not to be reproduced wholly or in part & forbidden to be used as an evidence in the court law & ought not to be used in any advertising media without our special permission in writing. (3) Samples will be disposed after 30 days except perishable items (within 7days) from date of issue of report or as per the regulatory guidelines, if not collected or claimed by the customer. (4) Total liability of our Test House is limited to the invoice amount only. (5) Report refers to the product received by Bharat Test House Pvt. Ltd. unless mentioned otherwise.

ISO 9001, ISO 14001 & ISO 45001 CERTIFIED LAB



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



10 of 21 05/01/2024

TEST PROCEDURES

10



BHARAT TEST HOUSE PVT. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



11 of 21 05/01/2024

Clause	Requirement + Test	Result-Remark	Verdict
4	MARKING		Р
	Name, monogram or symbol of manufacturer:	Mayureshwar solar energy private limited	Р
	Type or model number	SLM-M10-144-555	Р
	Serial number:	Marked	Р
	Polarity of terminals or leads	Marked	Р
	Maximum system voltage	1500V	Р
	The date and place of manufacture	Date of manufacture traceable from the serial no.	Р
-	Initial examination	All Modules	-
MQT 19.1	Initial stabilization	5.0 kWh/m <sup>2</sup>	Р
MQT 01	Visual Inspection	See table MQT 01	Р
MQT 02	Maximum Power Determination:	See table MQT 02	Р
MQT 03	Insulation test	See table MQT 03	Р
MST 17	Wet leakage current test	See table MST 17	Р
MST 13	Continuity test of equipotential bonding	See table MST 13	Р
-	Salt mist test according to IEC 60068-2-52, Severity 6:	See table Salt mist test	Р
MQT 01	Visual Inspection	See table MQT 01	Р
MQT 02	Maximum Power Determination:	See table MQT 02	Р
MQT 03	Insulation test:	See table MQT 03	Р
MST 17	Wet leakage current test	See table MST 17	Р
MST 13	Continuity test of equipotential bonding	See table MST 13	Р
MQT 18	Bynass diode testing	See table MQT 18	Р



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

## BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



Hac-mRA	TC-6451	
---------	---------	--

12 of 21 05/01/2024

Clause	Requirement + Test	Result-Remark	Verdict
MQT 01 Initial	TABLE: Visual inspection (Initial)		Р
Test Date [MM/	DD/YYYY]	10/25/2023	-
Sample #	Nature and position	n of initial findings – comments or attach photos	-
1 (Control)		No visual defect	Р
2		No visual defect	Р
3		No visual defect	Р

Supplementary information: Nil

MQT 02 Initial	TABLE: Maximum power determination (Initial)					
Test Date [MM/DD/YYYY]: 10/26/2023					-	
Module temperature [°C] 25					-	
Irradiance [W/m <sup>2</sup> ] 1000						-
Sample#	Voc[V]	Vmp [V]	Isc [A]	Imp [A]	Pmp [W]	FF[%]
1 (Control)	49.72	42.95	13.665	12.879	553.18	80.60
2	49.65	42.83	13.691	12.904	552.70	81.31
3	49.80	43.04	13.645	12.861	553.56	81.46
Supplementary information: Nil						

MQT 03 Initial	Table: Insulation	Table: Insulation test (initial)		
Test Date [MM/DD/YYYY] 10/27/20		:	10/27/2023	-
Test Voltage applied [V] 4000V for 1min / 1500V for 2min		4000V for 1min / 1500V for 2min	-	
Comple#	Measured	Required	Dielectric break down	Decult
Sample#	GΩ	MΩ	Yes(description)/No	Result
1 (Control)	15.02	15.44	No	Р
2	15.45	15.44	No	Р
3	14.83	15.44	No	Р
Supplementary	/ information: Area of n	nodule 2.59 [m <sup>2</sup> ].		

MST 17 Initial	T 17 Initial TABLE: Wet leakage current test (Initial)			Р	
Test Date [MM/	DD/YYYY]	: 10/28/2023			
Test Voltage app	olied [V]	1500	1500		
Solution resistivi	ty [Ω cm]	<3500 at 22 ± 3°C	2510	-	
Surface tension	[Nm <sup>-1</sup> ]:	<0.03 at 22 ± 3°C 0.02		-	
Solution temperature [°C] 24.2		24.2		-	
Sample#	Measured[GΩ]	Lin	nit[MΩ]	Result	
1 (Control)	4.04	1	5.44	Р	
2	3.81	1	5.44	Р	
3	4.14	1	5.44	Р	
Supplementary i	nformation: Area of module 2.59 [m <sup>2</sup> ].				

The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

# Bharat Test House Pvt. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



13 of 21

05/01/2024

Clause	Requirement +	Fest	Result-Remark	Verdict	
MST 13 Initial	TABLE: Continui	ty test of equipotential bonding - MST 13 (Ini	tial)	Р	
	Test Date [MM/	DD/YYYY]	10/30/2023	-	
	Maximum syste	m voltage [V <sub>DC</sub> ]	1500V	-	
	<b>Current applied</b>	[A]	62.5	-	
	Location of design	gnated grounding point	Ground holes on the sides of the frame	-	
	Location of cose	nd contracting point	Greatest physical displacement from		
	Location of seco		the grounding point.	-	
Samp	le No.	Voltage [V <sub>DC</sub> ]	Resistance [mΩ]	-	
1 (Co	ntrol)	0.292	4.67	Р	
2 0.285		0.285	4.56	Р	
3 0.309		0.309	4.94	Р	
Supplementary	information: NIL				

Annex A	TABLE: Salt Mist Corrosion Test (Severity 6)		Р
Test Date [MM/D	D/YYYY]	10/31/2023 to 12/27/2023	-
Sample#		2 & 3	-
NaCl concentratio	n:	Neutral 5% Sodium Chloride Solution	-
Course of cycle	:	Test method 6 (Cl. 9.4.7 of IEC 60068-2-52)	-
Duration		8 cycles = 56 Days (one cycle = 7 days)	-
Supplementary in	formation: Area of module 2.59 [m <sup>2</sup> ].		

MQT 01 Final	TABLE: Visual inspection (Final)		
Test Date [MM/	DD/YYYY]	12/27/2023	-
Sample #	Nature and positio	n of initial findings – comments or attach photos	-
2	No visual defect		Р
3		No visual defect	Р
Supplementary	information: Nil		

MQT 02 Final TA	TABLE: Maximum power determination (Final)					Р		
Test Date [MM/DD/YYYY]: 12/27/2023					-			
Module temperature [°C] 25					-			
Irradiance [W/m <sup>2</sup> ] 1000				-				
Sample#	Voc[V]	Vmp [V]		Isc [A]	Imp [A]	Pmp [W]	FF[%]	
1 (control)	49.65	42.91		13.657	12.872	552.35	81.45	
2	49.32	42.61		13.537	12.759	543.69	81.43	
3	49.56	42.90		13.475 12.700 544.87 81.58				
Supplementary information: Nil								

The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

## BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



14 of 21 05/01/2024

Clause	Requirement + Test	st Result-Remark		Verdict
MQT 03 Final	Table: Insulation	test (Final)		Р
Test Date [MM	1/DD/YYYY]	:	12/27/2023	-
Test Voltage a	pplied [V]	:	4000V for 1min / 1500V for 2min	-
Comple#	Measured	Required	Dielectric break down	Decult
Sample#	GΩ	MΩ	Yes(description)/No	Result
1 (control)	14.93	15.44	No	Р
2	14.14	15.44	No	Р
3	12.37	15.44	No	Р
Supplementar	v information: Area of n	nodule 2.59 $[m^2]$ .		

MST 17 Final	T 17 Final TABLE: Wet leakage current test (Final)			
Test Date [MM/D	DD/YYYY]			
Test Voltage app	lied [V]	1500		-
Solution resistivit	ty [Ω cm]	<3500 at 22 ± 3°C	2495	-
Surface tension [	[Nm <sup>-1</sup> ] < <0.03 at 22 ± 3°C 0.02		-	
Solution temperature [°C]		24.3		-
Sample#	Measured[GΩ]	Limi	Limit[MΩ]	
1 (control)	3.65	15	.44	Р
2	2.76	15.44		Р
3	2.98	15.44		Р
Supplementary in	nformation: Area of module 2.59 [m <sup>2</sup> ].			

MST 13 Final	TABLE: Continuity test of equipotential bonding - MST 13 (Final)			Р	
	Test Date [MM/	'DD/YYYY]	12/27/2023	-	
	Maximum syste	m voltage [V <sub>DC</sub> ]	1500V	-	
	Current applied	[A]	62.5	-	
	Location of desi	gnated grounding point	Ground holes on the sides of the frame	-	
	Location of second contacting point		Greatest physical displacement from	-	
			the grounding point.		
Samp	ole No.	Voltage [V <sub>DC</sub> ]	Resistance [mΩ]	-	
1 (cc	1 (control) 0.291		4.70	Р	
2 0.30		0.307	4.91	Р	
3 0.282		0.282	4.51	Р	
Supplementary	information: NIL				



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

## BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Demont No.		TD12024010E002



TR120240105002



Page : Dated :

15 of 21 05/01/2024

6.8 (MQT 18) TABLE: Bypass diode thermal test					
Sample No	2	-			
Test Date [MM/DD/YYYY] start/end	12/28/2023			-	
Module temperature [°C]	75±5			-	
Number of diodes in junction box	3			-	
Diode manufacturer	Sinotech			-	
Diode type designation	40PV045			-	
Max. Permissible junction temperature T <sub>jmax</sub> [°C] (according to diode datasheet)				-	
	Diode1	Diode2	Diode3	Result	
Current flow applied [A]	13.43	13.43	13.43	-	
Max. diode surface temperature [°C] a or b:	129.5	131.2	130.3	-	
Voltage drop [V]	0.37	0.43	0.36	-	
Power dissipation [W]	4.97	5.77	4.83	-	
Thermal resistance junction to leads (RTHJL)/to case (RTHJC) [K/W] (according to datasheet)	0.8	0.8	0.8	-	
Calculated max. junction temperature T <sub>jcalc</sub> [°C] a or b :	133.48	135.82	134.17	-	
T <sub>jcalc</sub> <t<sub>jmax (test passed)? Yes/No</t<sub>	Yes	Yes	Yes	Р	
Current flow (1.25 * lsc) [A]	16.79	16.79	16.79	-	
Max. diode surface temperature [°C] a or b :	135.01 136.93 135.56			Р	
Remarks: After completion of the test, diode is still functional.					

(a: measured at diode case or ambient near diode case, b: measured at diode leads)

6.8 (MQT 18) TABLE: Bypass diode thermal test				
Sample No	3	-		
Test Date [MM/DD/YYYY] start/end:	12/28/2023			-
Module temperature [°C]	75±5			-
Number of diodes in junction box:	3			-
Diode manufacturer	Sinotech			-
Diode type designation	40PV045			-
Max. Permissible junction temperature $T_{jmax} \left[ ^{\circ}C \right]$ (according to	200			-
diode datasheet)	200			
	Diode1	Diode2	Diode3	Result
Current flow applied [A]	13.43	13.43	13.43	-
Max. diode surface temperature [°C] a or b:	128.2	129.5	131.7	-
Voltage drop [V]	0.36	0.35	0.38	-
Power dissipation [W]	4.83	4.70	5.51	-
Thermal resistance junction to leads (RTHJL)/to case (RTHJC) [K/W] (according to datasheet)	0.8	0.8	0.8	-
Calculated max. junction temperature T <sub>jcalc</sub> [°C] a or b :	132.07	133.26	135.78	-
T <sub>jcalc</sub> <t<sub>jmax (test passed)? Yes/No</t<sub>	Yes	Yes	Yes	Р
Current flow (1.25 * Isc) [A]	16.79	16.79	16.79	-
Max. diode surface temperature [°C] a or b :         134.24         135.31         136.91				Р
Remarks: After completion of the test, diode is still functional.				
(a: measured at diode case or ambient near diode case, b: measured at diode leads)				

The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

Bharat Test House Pvt. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC64512420000006F
Test Report No.	:	TR120240105002



16 of 21 05/01/2024

MQT 02	TABLE: Maximum power determination (Degradation)							Р	
Test Date [MM/	DD/YYYY]	:		11/28/2023				-	
Module temper	ature [°C]	:		25			-		
Irradiance [W/n	າ <sup>2</sup> ]	:		1000				-	
Samplett	Voc[V]	Vmp[V]	lsc	[\]		EE[0/]	Dmp [\\/]	Degradation	Limit[0/]
Sample#	v0c[v]	vinp[v]	150	[~]	πιρ[Δ]	11[/0]	FIID[M]	[%]	Entite[70]
1 (Control)	49.65	42.91	13.	657	12.872	81.45	552.35	-	-
2	49.32	42.61	13.537		12.759	81.43	543.69	-1.63	- 5
3	49.56	42.90	13.	475	12.700	81.58	544.87	-1.57	- 5
Supplementary information: Nil									



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002

#### List of Annexes

Annex 1: List of measurement equipment

Annex 2: Statement of the estimated uncertainty of the test results

Annex 3: Photographs of EUT

Annex 4: Specification of PV modules



Page : Dated : 17 of 21 05/01/2024



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



 ULR No.
 :
 TC64512420000006F

 Test Report No.
 :
 TR120240105002

#### Annex 1: List of measurement equipment



Page : Dated : 18 of 21 05/01/2024

Description	Identification #	Application
Visual inspection test setup	BTH-R1/EL/581	Visual inspection test
Irradiance meter	BTH-R/EL/411	Preconditioning test
Flasher – Solar simulator with IV tracer	BTH-R/EL/457	Maximum power determination
Steady-state solar simulator with IV tracer	BTH-R/EL/410	Maximum power determination
DC HV source with Insulation Resistance	BTH-B1/EL/506	Insulation test
tester	BIII-RI/LL/300	Wet leakage current test
Environmental chamber with data logger	BTH-R/EL/566	Salt mist test
DC power supply with logger	BTH-R1/EL/578	Salt mist test
Temperature logger	BTH-R/EL/276	Salt mist test
Continuity tester with logger	BTH-R/EL/254	To check the continuity of PV module
Wet leakage test setup	BTH-R/EL/449	Wet leakage current test
Mechanical load test setup (PV module)	BTH-R1/EL/580	Mechanical load test
Heating chamber	BTH-R/EL/425	Bypass diode thermal test



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



19 of 21 05/01/2024

#### Annex 2: Statement of the estimated uncertainty of the test results

For Pmp – Measurement uncertainty is  $\pm 2.5\%$ For Isc – Measurement uncertainty is  $\pm 2.4\%$ For Voc – Measurement uncertainty is  $\pm 2.0\%$ 



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. Ltd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



20 of 21 05/01/2024

Annex 3: Photographs of EUT



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com



ULR No.	:	TC645124200000006F
Test Report No.	:	TR120240105002



21 of 21 05/01/2024



......End of the document.....



The NABL Accreditation and the BIS recognition claimed is valid only for the scope of accreditation and recognition as on date of this report, as mentioned on NABL and BIS Website respectively. BTHPL/7.2/01

## BHARAT TEST HOUSE PVT. LTd.

1474, HSIIDC Industrial Estate, Rai, Distt. Sonipat, Haryana-131029 Tel.: 0130-2367673 | Mob.: 9310314585, 8930260106 | email: bthrai@bharattesthouse.com