TEST REPORT

Report No.:	**TH18JR-1429R**
Product:	**Flexible Solar Panel**
Model:	eGo S5W, eGo S7W, eGo S14W, eGo S20W, eGo S30W, eGo S35W, eGo S40W, eGo S50W, eGo S55W, eGo S60W, eGo S70W, eGo S80W, eGo S90W, eGo S100W, eGo S110W, eGo S120W, eGo S130W, eGo S135W, eGo S140W, eGo S145W, eGo S150W
Applicant:	**SHENZHEN AHONY POWER CO.,LTD**
Address:	4B, Quanju Industrial Park, Guangming District, Shenzhen, 518106, China
Sample Received Date:	2018-10-15
Testing completed Date:	2018-11-02
Test Method:	**Please refer to next page(s)**
Test Conclusion:	Based on the performed tests on submitted sampLe(s), the results of lead,Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs),Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthaLate (DEHP),Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) , and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive (EU)2017/2102 .
Note	All tests performed on model: eGo S150W.

Uthorized by:
For Shenzhen Tian Hai Test Technology Co.,Ltd.

Thomas Wong

Test data presented in this report are gathered and based on the test reports of separated parts supplied by the applicant. Shenzhen Tian Hai Test Technology Co.,Ltd. is not responsible for the authenticity of all the test data of these reports.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the Shenzhen Tian Hai Test Technology Co.,Ltd.

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Test Method :

1. With reference to IEC 62321-2:2013, review was performed for the samples disjointed from the submitted articles.

2. With reference to IEC 62321-1:2013, tests were performed for the samples indicated by the photos in this report

(1) With reference to IEC 62321-3-1:2013, screening by EDXRF spectroscopy

(2) Wet chemical test method

a. With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES

b. With reference to IEC 62321-5:2013, determination of Lead by ICP-OES

c. With reference to IEC 62321-4:2013+A1:2017, determination of Mercury by ICP-OES

d. With reference to IEC 62321-7-1:2015 & IEC 62321:2008, determination of Hexavalent chromium by Colorimetric method using UV-Vis.

e. With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.

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In accordance with the result of material risk assessment, the following disjointed parts in the submitted sample have been verified.

Part No.	Part Description.	BOM No.	Restricted Substances.	Results of EDXRF (1)	Result of Wet Chemical Testing(2) (mg/kg)	Conclusion on EU RoHS
1	**Connector** Color:Black	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
2	**Fasteners** Color:Black	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
3	**Rubber mat** Color:Red	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
4	**Wire** Color:Black	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply

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Part No.	Part Description.	BOM No.	Restricted Substances.	Results of EDXRF (1)	Result of Wet Chemical Testing(2) (mg/kg)	Conclusion on EU RoHS
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
5	**Casing** Color:Black	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
6	**Connector mental** Color:Silver	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
7	**Rubber plug** Color:Black	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
8	**Wire inner layer** Color:White	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply

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Part No.	Part Description.	BOM No.	Restricted Substances.	Results of EDXRF (1)	Result of Wet Chemical Testing(2) (mg/kg)	Conclusion on EU RoHS
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
9	**Wire mental** Color:Silver	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
10	**Plastic enclosure** Color:White	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
11	**Plastic coating layer** Color:Black	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
12	**EVA** Color:Transparent	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply

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Part No.	Part Description.	BOM No.	Restricted Substances.	Results of EDXRF (1)	Result of Wet Chemical Testing(2) (mg/kg)	Conclusion on EU RoHS
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
13	**TPT** Color:White	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply
14	**Battery cell** Color:Blue	-	Pb	BL	---	Comply
			Cd	BL	---	Comply
			Hg	BL	---	Comply
			Cr(VI)	BL	---	Comply
			PBBs	BL	---	Comply
			PBDEs	BL	---	Comply
			DIBP	BL	---	Comply
			DEHP	BL	---	Comply
			DBP	BL	---	Comply
			BBP	BL	---	Comply

Remark:

(1) (a) There are the results on total Br while test items on restricted substances are PBBs and PBDEs. There is the result on total Cr while test item on restricted substances is Cr(VI).

(b) Results are obtained by EDXRF for primary screening, and further chemical testing by ICP-OES (for Cd, Pb, Hg), UV-Vis (for Cr(VI)) and GC-MS (for PBBs, PBDEs) is recommended to be performed, if the concentration exceeds the below warning value according to IEC62321-3-1:2013 (unit: mg/kg).

Element	Polymer	Metal	Composite Materials
Cd	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(70-3σ)<X<(130+3σ)≤OL	LOD <X<(150+3σ)≤OL

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Pb	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(500-3σ)<X<(1500+3σ)≤OL
Hg	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(500-3σ)<X<(1500+3σ)≤OL
Br	BL≤(300-3σ)< X	--	BL≤(250-3σ)< X
Cr	BL≤(700-3σ)< X	BL≤(700-3σ)< X	BL≤(500-3σ)< X

(c) BL = Below Limit, OL = Over Limit, IN = Inconclusive, LOD = Limit of Detection, -- = Not regulated.

(d) The XRF screening test for RoHS elements - The reading may be different to the Actual content in the sample be of non-uniformity composition.

(2) (a) mg/kg = 0.0001%, MDL = Method detection Limit, ND = Not Detected (<MDL), --- = Not conducted, - = Without BOM.

(b) Unit and MDL in wet chemical test

Test Item	Pb	Cd	Hg
Unit	mg/kg	mg/kg	mg/kg
MDL	10	10	10

The MDL for single compound of PBBs and PBDEs is 100 mg/kg.
MDL of Cr(VI) for polymer and composite sample is 10 mg/kg.
MDL of Cr(VI) for metal sample is 0.10 μg/cm².

(c) ▼ =Metal sample

a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 μg/cm². The sample coating is considered to contain CrVI.

b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 μg/cm²). The coating is considered a non-CrVI based coating.

c. The result between 0.10 μg/cm² and 0.13 μg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

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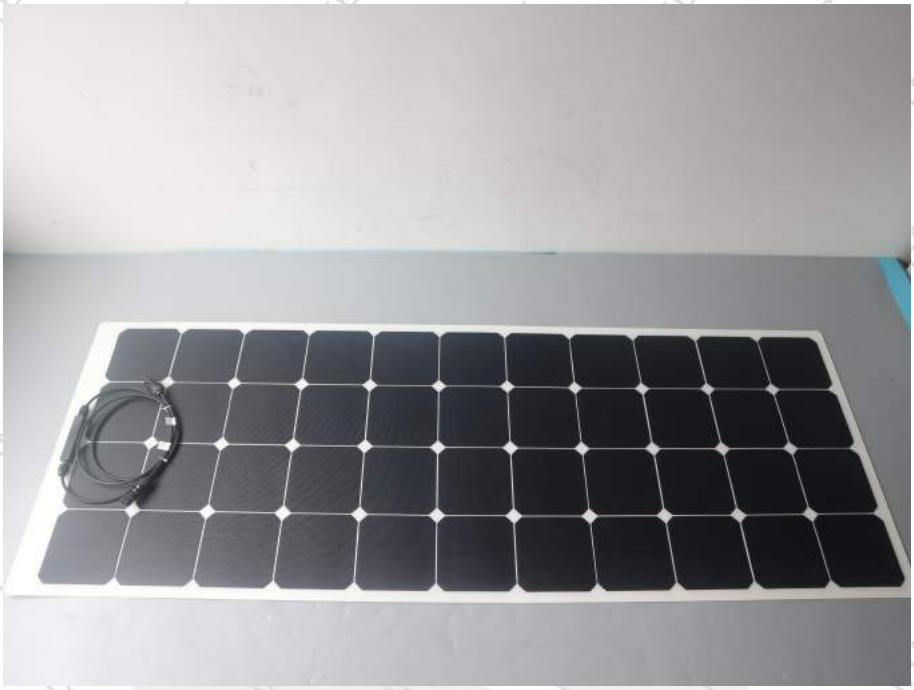
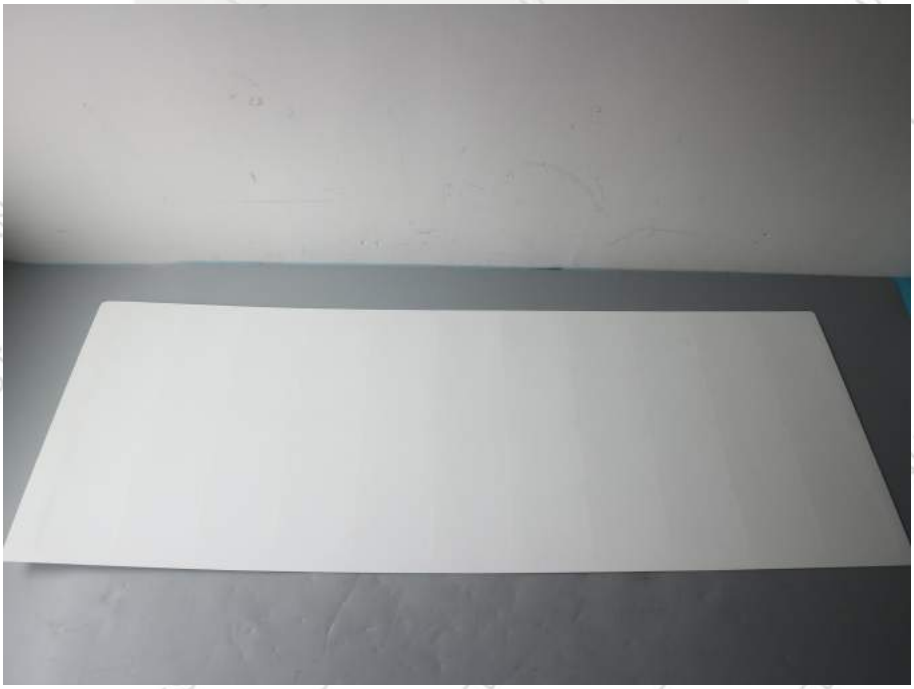
Product photographs





****** End of Report ******

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China National Accreditation Service for Conformity Assessment

LABORATORY ACCREDITATION CERTIFICATE

(Registration No. CNAS L5885)

Shenzhen Tianhai Test Technology Co., Ltd.

(Legal Entity: Shenzhen Tianhai Test Technology Co., Ltd.)

4B/F., Building A3, The Silicon Valley Power Intelligent Terminal Industrial Park, Guanlan Street, Longhua District, Shenzhen, Guangdong, China

is accredited in accordance with ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories(CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence to undertake the service described in the schedule attached to this certificate.

The scope of accreditation is detailed in the attached schedule bearing the same registration number as above. The schedule forms an integral part of this certificate.

Effective Date：2019-01-22

Expiry Date：2025-01-21

Signed on behalf of China National Accreditation Service for Conformity Assessment

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