



Product Service

Technical Report No. 7040623027112-00

Dated 2023-10-17

- Client:** LONGi Green Energy Technology Co.,Ltd.
No.388, Middle Hangtian Road Chang'an District 710100
Xi'an City, Shaanxi PEOPLE'S REPUBLIC OF CHINA.
Customer No.: 099333
- Manufacturing place:**
- a. LONGi Photovoltaic Technology (Taizhou) Co., Ltd. (Production facility No. in certificate: 99605)
No.8, Taikang Road Hailing District 225300 Taizhou City, Jiangsu Province
PEOPLE'S REPUBLIC OF CHINA.
 - b. LONGi Solar Technology (Zhejiang) Co., Ltd. (Production facility No. in certificate: 99626)
2 Middle Bailing Road, Donggang Industrial Park, Economic Development Zone, 324000, Quzhou, Zhejiang, P.R. China.
 - c. Vina Solar Technology Co., Ltd. (Production facility No. in certificate: 90968) E12 factory, lot CN-03, Van Trung Industrial Park, Viet Yen District, 21000 Bac Giang Province, Vietnam
 - d. LONGi Solar Technology Co., Ltd. (Xi' an Module Factory) (Production facility No. in certificate: 02875)
No.8369 Shangyuan Road, Caotan Ecological Industrial Park, Economic and Technological Development Zone, 710018 Xi'an, Shaanxi PEOPLE'S REPUBLIC OF CHINA.
 - e. LONGi Solar Technology (Chuzhou) Co., Ltd. Production Facility Code: 102892
No. 19 Huaian Road Nanqiao District 239000 Chuzhou City, Anhui Province
PEOPLE'S REPUBLIC OF CHINA.
 - f. LONGi Solar Technology (Jiangsu) Co., Ltd. (Production Facility Code: 108647)
No. 288 Yaojia Road, Jiulong Town, Hailing District 225300 Taizhou City, Jiangsu Province
PEOPLE'S REPUBLIC OF CHINA.
 - g. LONGi Solar Technology (Xianyang) Co., Ltd. (Production Facility Code: 108363)
NO. 120, Wenxing West Road Qindu District 712000 Xianyang City, Shaanxi Province
PEOPLE'S REPUBLIC OF CHINA.

h. LONGi Solar Technology (Jiaxing) Co., Ltd. (Production facility No. in certificate: 110068)

No.130 Ruifeng Street, Gaozhao Subdistrict, Xiuzhou District, 314031
Jiaxing City, Zhejiang Province, PEOPLE'S REPUBLIC OF CHINA

i. LONGi Solar Technology (Xi'an) Co., Ltd. (Production Facility Code: 114737)

No. 388, Middle Hangtian Road, Chang'an District, 710100, Xi'an city,
Shaanxi, P.R. China.

j. LONGi Solar Technology (Qinghai) Co., Ltd. (Production Facility Code: 116018)

No. 1-53 Gabatai Community of Xitai Village, 813000 Gonghe County,
Qinghai Province, PEOPLE'S REPUBLIC OF CHINA.

k. LONGi Solar Technology(Datong) Co., Ltd. (Production Facility Code: 115423)

Room 106B, North Zone, Enterprise Incubation Service Center, Xinrong
Economic and Technological Development Zone, Huayuaton Town, Xinrong
District, 037002 Datong, Shanxi Province, PEOPLE'S
REPUBLIC OF CHINA.

l. LONGi Photovoltaic Technology (Jiaxing) Co., Ltd.

(Production Facility Code: 119607)

Junmin Road, Wangdian Town, Xiuzhou District, 314000 Jiaxing, Zhejiang,
P.R.China.

m. LONGi Solar Technology (Wuhu) Co., Ltd. (Production Facility Code: 120099)

1-57, No. 5 Qijing First Road, Longshan Street, Economic and Technological
Development Zone, Wuhu, Anhui Province, 241000, P.R. China.

Test subject:

Model type:
LR5-54HTD-435M

Test specification:

IEC 61730-2:2016 MST 23 class A fire test.
Test method is referred to UL 790 class A fire test.

Purpose of examination:

Test according to the test specification

The test results show that the presented product is in compliance with the



Product Service

Test result: specified requirements.

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1 Description of the test subject

1.1 Function

Manufacturer's specification for intended use:
The PV modules for electricity generation systems with max. voltage of 1500V DC.

1.2 Consideration of the foreseeable misuse

(Regulated by law, e.g. GPSG, MDD, therefore always applicable)

- Not applicable
 Covered through the applied standard
 Covered by the following comment
 Covered by attached risk analysis

1.3 Technical Data (minimum Rating plate)

Model :	LR5-54HTD-435M	
	LRR010139230805800003	GDP230803-1
	LRR010139230805800001	GDP230803-2
	LRR010139230805800002	GDP230803-3
Rated output Power at STC:	435W	
Max. system voltage:	Maximum system voltage (VDC) 1500	
Fuse rating	30A	
Protection Class	II	
YOT lab project No.	GDP230803	
Remark: The sample GDP230803-1 and GDP230803-3 is arranged for flaming spread test class A test, and GDP230803-2 is arranged for the burning brand class A test.		

2 Order

2.1 Date of Purchase Order, Customer's Reference

The order dated 2023-10-07

2.2 Receipt of Test Sample, Location

Yangzhou Opto-Electrical Products Testing Institute.



2.3 Date of Testing

2023-10-07

2.4 Location of Testing

Yangzhou Opto-Electrical Products Testing Institute.
No.10 West Kaifa Road, Yangzhou, 225009 Jiangsu, P.R. China.

2.5 Points of Non-compliance or Exceptions of the Test Procedure

• N/A

3 Test Results

3.1 Positive Test Results

TABLE: Fire Test - MST 23 (Spread-of-flame test)		P
Test Date [YYYY/MM/DD].....:	2023-10-09	—
Module fire resistance class	Class A	—
No. of modules provided to create the test assembly.....	2	—
Testing method.....	according to UL790	—
Test environmental conditions.....	25°C, 32% R.H.	—
Test temperature (°C).....	744-784°C	—
Wind speed (m/s)	5.26 (76mm from right)	—
	5.23 (middle)	
	5.26 (76mm from left)	
	5.25(Average)	
Test duration time (s).....	240	—
Sample No.	Observations	—
GDP230803-1 GDP230803-3	<input checked="" type="checkbox"/> Modules comply with the requirements for the fire resistance class	P

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Test photos:GDP230803-1 :

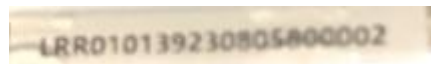
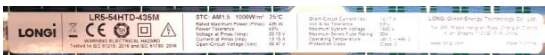


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Posted test



GDP230803-3:



Supplementary information: sample GDP230803-1/ GDP230803-3 are prepared for spread of flame test.

The backpanel has broken, but nothing has been blown off or fallen off the test deck in the form of flaming or growing brands.



3.3	TABLE: Fire Test - MST 23 (Ignition of brands)		P
	Test Date [YYYY/MM/DD].....:	2023-10-09	—
	Module fire resistance class.....	Class A	—
	No. of modules provided to create the test assembly	1	—
	Testing method	according to UL790	—
	Test environmental conditions	25°C, 32% R.H.	—
	The dry weight of the finished brand (g)	2028	—
	Test temperature of the igniting flame(°C)	872~896°C	—
	Wind speed (m/s).....	5.26 (76mm from right)	—
		5.23 (middle)	
		5.26 (76mm from left)	
		5.25 (Average)	
	Sample No.	Observations	—
	GDP230803-2	<input checked="" type="checkbox"/> Modules comply with the requirements for the fire resistance class	P
Supplementary information: sample -2 for burning of brands.			
The backpanel has broken, but nothing has been blown off or fallen off the test deck in the form of flaming or growing brands.			

Test photos:

GDP230803-2:

LRR010139230805800001

Front

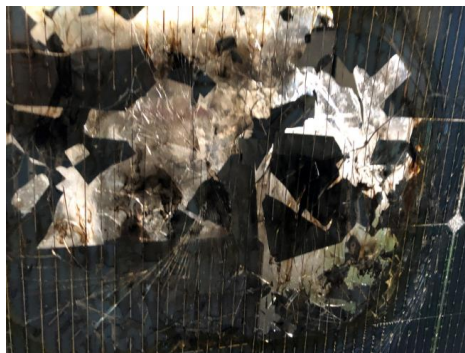


Back



After test:

Front



Back



3.2 Points of Non-Compliance according to the test specification

- None

4 Remark:

4.1 General

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

4.2 Factory surveillance cycle

Your production facility is currently on a

- Annual (12 month)
 Bi-Annual (6 month)
 Quarterly (3 month)

surveillance cycle.



Product Service

4.3 Additional information for routine tests to be performed by the factory(ies)

Routine tests for electrical appliances / equipment:

Routine test requirements for production are described in annual inspection test reports.

5 Documentation

File	File name	Date
Data form (CDF):	N/A	N/A
User manual:	N/A	N/A
Installation manual:	N/A	N/A
Product specifications:	N/A	N/A

6. Summary

The test specification is met.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch
TÜV SÜD Group

Tested by: Yang Xu
Printed name,function & signature

Approved by: Tao Wang
Printed name,function & signature

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