Test Report issued under the responsibility of:

TEST REPORT
IEC 62368-1
Audio/video, information and communication technology equipment
Part 1: Safety requirements

Report Number ..... :	SZES230900594701
Date of issue ..... :	2023-11-07
Total number of pages ..... :	86 Pages
Name of Testing Laboratory preparing the Report ..... :	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Applicant's name ..... :	TPV Electronics (Fujian) Co., Ltd.
Address ..... :	Rongqiao Economic & Technological Development Zone, Fuqing, Fujian, China
Test specification:	
Standard ..... :	IEC 62368-1:2018
Test procedure ..... :	CB Scheme
Non-standard test method ..... :	N/A
TRF template used ..... :	IECEE OD-2020-F1:2021, Ed.1.4
Test Report Form No. ..... :	IEC62368_1E
Test Report Form(s) Originator .... :	UL(US)
Master TRF ..... :	Dated 2022-04-14

If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

General disclaimer:

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 CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.

Test item description .....:	LCD Monitor
Trade Mark(s) .....:	AOC
Manufacturer.....:	Same as applicant
Model/Type reference .....:	**Q27G4, Q27G4XN, 27G4X, Q27G4X**, 27G4, **27G4********** (* can be A-Z, a-z, 0-9, blank or symbol +, -, /, \, or sign absence or no mark or no symbol)
Ratings .....:	100 - 240 V ~, 50 / 60 Hz, 1,5 A, Class I

Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):			
☒	**CB Testing Laboratory:**	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch	
Testing location/ address .....:		No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China	
Tested by (name, function, signature) .....:		Yoyo Zhi / Project Engineer	Yoyo zhi
Approved by (name, function, signature)..:		Emily Wang / Report Reviewer	Emily Wang
☐	**Testing procedure: CTF Stage 1:**		
Testing location/ address .....:			
Tested by (name, function, signature) .....:			
Approved by (name, function, signature)..:			
☐	**Testing procedure: CTF Stage 2:**		
Testing location/ address .....:			
Tested by (name, function, signature)			
Witnessed by (name, function, signature). :			
Approved by (name, function, signature)..:			
☐	**Testing procedure: CTF Stage 3:**		
☐	**Testing procedure: CTF Stage 4:**		
Testing location/ address .....:			
Tested by (name, function, signature) .....:			
Witnessed by (name, function, signature). :			
Approved by (name, function, signature)..:			
Supervised by (name, function, signature) :			

List of Attachments (including a total number of pages in each attachment):

Attachment 1: 21 pages of Photos.

Attachment 2: 5 pages of Construction of Transformer;

Attachment 3: 20 pages of EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES;

Attachment 4: 29 pages of AUSTRALIA / NEW ZEALAND NATIONAL DIFFERENCES;

Attachment 5: 8 pages of U.S.A. AND CANADA NATIONAL DIFFERENCES;

Attachment 6: 2 pages of SINGAPORE NATIONAL DIFFERENCES;

Attachment 7: 1 page of SAUDI ARABIA NATIONAL DIFFERENCES;

Attachment 8: 5 pages of CHINA NATIONAL DIFFERENCES.

Summary of testing:

The sample(s) tested complies with the requirements of IEC 62368-1:2018.

All test data are copied from original test report SZES230800493601 dated on 2023-09-07, with the following changes and/or additions:

- Added power board version 2, which is identical with original power board version1 except for updating Line Choke (L9902), see table 4.1.2 List of critical components for details.

- Added main board 715GE382 type A, 715GE382 type B, 715GE276 and 715GE198 type B.

- Added Alt. base.

- Added model No. “Q27G4, Q27G4XN, 27G4X, Q27G4X” which is identical with original model No. except for model name.

After comparison, additional tests 5.4.1.4 & 9.3, Annex B.2.5, Annex B.3,2 and Annex Q.1 need to be evaluated for EUT with power board version 2 & main board 715GE276, additional tests Annex B.2.5, Annex B.4 and Annex Q.1 need to be evaluated for EUT with power board version 2 & main board 715GE198 type B, additional tests Annex B.2.5 and Annex Q.1 need to be evaluated for EUT with power board version 2 & main board 715GE382 type A & 715GE382 type B, and still complied with the requirement of standard covered in this report.

Representative model(s) for full testing: 27G4.

Heating test: Tma = 40 °C (Declared by manufacturer).

T-type thermocouple used for temperature measurement.

Operation mode under test: Unless otherwise specified, all tests were carried out with three vertical bar products three equidistant vertical white bars on a black background and maximum brightness and contrast.

Remark:

There are two versions power board and five version main board for this product:

Power board	Main board
715G7610 version1, 715G7610 version2	715GE198 type A
	715GE198 type B
	715GE276
	715GE382 type A

	715GE382 type B

The power board 715G7610 version2 is identical with power board 715G7610 version1 except for updating Line Choke (L9902).

Tests performed (name of test and test clause):	**Testing location:**
☒ 4. General requirements ☒ 5. Electrically-caused injury ☒ 6. Electrically-caused fire ☐ 7. Injury caused by hazardous substances ☒ 8. Mechanically-caused injury ☒ 9. Thermal burn injury ☒ 10. Radiation ☒ Annex B. Normal operating condition tests, abnormal operating condition tests and single fault condition tests ☒ Annex F.3.9. Performance of Marking test ☐ Annex M. Equipment Containing Batteries And Their Protection Circuits ☒ Annex P.4 Metallized coatings and adhesives securing parts ☒ Annex Q. Limited Power Source ☒ Annex T. Mechanical strength tests ☒ Annex V. Determination of accessible parts	SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China

Summary of compliance with National Differences (List of countries addressed):

EU Group Differences, AU, NZ, US, CA, SG, SA, CN, GB

☒ **The product fulfils the requirements of EN IEC 62368-1:2020+A11:2020, AS/NZS 62368.1:2022, UL 62368-1: 2019 Ed.3, CSA C22.2 No. 62368-1: 19 Ed.3, SASO-IEC 62368-1:2020, GB 4943.1-2022, BS EN IEC 62368-1: 2020 + A11: 2020.**

Use of uncertainty of measurement for decisions on conformity (decision rule) :

☒ No decision rule is specified by the IEC standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").

☐ Other:… (to be specified, for example when required by the standard or client, or if national accreditation requirements apply)

Information on uncertainty of measurement:

The uncertainties of measurement are calculated by the laboratory based on application of criteria given by OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

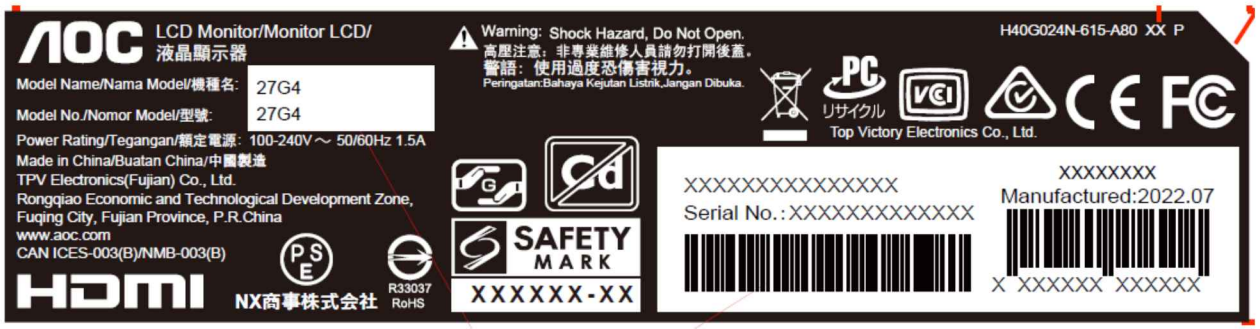
IEC Guide 115 provides guidance on the application of measurement uncertainty principles and applying the decision rule when reporting test results within IECEE scheme, noting that the reporting of the measurement uncertainty for measurements is not necessary unless required by the test standard or customer.

Calculations leading to the reported values are on file with the NCB and testing laboratory that conducted the testing.

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

For model No. 27G4**:**



For UK market:

UK
CA

Remark:

1. As declared by the applicant, the importer (and manufacturer, if it is different)'s name, registered trade name or registered trade mark and the postal address will be marked on the products before being place on the market. The contact details shall be in a language easily understood by end-users and market surveillance authorities.

2. Marking on the packaging or in a document accompanying the electrical equipment is only acceptable if it is not possible to place such markings on the product.

3. The Height of CE & UKCA logo shall not be less than 5 mm; Height of WEEE logo shall not be less than 7 mm.

4. The marking plates as above of other models are of the same pattern.

Test item particulars:	
Product group ..... :	☒ end product ☐ built-in component
Classification of use by ..... :	☒ Ordinary person ☒ Children likely present ☐ Instructed person ☐ Skilled person
Supply connection ..... :	☒ AC mains ☐ DC mains ☐ not mains connected: ☐ ES1 ☐ ES2 ☐ ES3
Supply tolerance ..... :	☒ +10%/-10% ☐ +20%/-15% ☐ + %/ - % ☐ None
Supply connection – type ..... :	☒ pluggable equipment type A - ☐ non-detachable supply cord ☒ appliance coupler ☐ direct plug-in ☐ pluggable equipment type B - ☐ non-detachable supply cord ☐ appliance coupler ☐ permanent connection ☐ mating connector ☐ other:
Considered current rating of protective device ..... :	☒ 16 A; 20A for US/CA Location: ☒ building ☐ equipment ☐ N/A
Equipment mobility ..... :	☒ movable ☐ hand-held ☐ transportable ☐ direct plug-in ☐ stationary ☐ for building-in ☒ wall/ceiling-mounted ☐ SRME/rack-mounted ☐ other:
Overvoltage category (OVC) ..... :	☐ OVC I ☒ OVC II ☐ OVC III ☐ OVC IV ☐ other:
Class of equipment ..... :	☒ Class I ☐ Class II ☐ Class III ☐ Not classified ☐
Special installation location ..... :	☒ N/A ☐ restricted access area ☐ outdoor location ☐
Pollution degree (PD) ..... :	☐ PD 1 ☒ PD 2 ☐ PD 3
Manufacturer's specified T_{ma} ..... :	40 °C ☐ Outdoor: minimum °C
IP protection class ..... :	☒ IPX0 ☐ IP___
Power systems ..... :	☒ TN ☒ TT ☐ IT - V_{L-L} ☐ not AC mains
Altitude during operation (m) ..... :	☐ 2000 m or less ☒ 5000 m
Altitude of test laboratory (m) ..... :	☐ 2000 m or less ☒ <120 m
Mass of equipment (kg) ..... :	4,96 kg with base stand, Base stand: 1,44 kg 5,07kg with Alt. base stand, Alt. Base stand: 1,87kg

Possible test case verdicts:	
- test case does not apply to the test object....:	N/A
- test object does meet the requirement.....:	P (Pass)
- test object does not meet the requirement....:	F (Fail)
Testing:	
Date of receipt of test item .....:	2023-09-28 Original: 2023-08-14
Date (s) of performance of tests .....:	2023-09-28 to 2023-10-16 Original: 2023-08-14 to 2023-08-30

General remarks:

"(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 ☒ comma / ☐ point is used as the decimal separator.

Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:

The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....:	☒ **Yes** ☐ **Not applicable** **Factory declaration letter.pdf, dated on 2023-09-20**

When differences exist; they shall be identified in the General product information section.