



## TEST REPORT IEC 62368-1

# Audio/video, information and communication technology equipment Part 1: Safety requirements

Report Number....: CN22QVI9 001

**Date of issue** .....: 2022-Oct-23

Total number of pages .....: 195

Name of Testing Laboratory

preparing the Report .....: TÜV Rheinland (Shenzhen) Co., Ltd.

Applicant's name.....: TPV Electronics (Fujian) Co., Ltd.

Address .....: Rongqiao Economic and Technological Development Zone,

Fuqing City, Fujian, P.R.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

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#### General disclaimer:

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

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Test item description:	LCD monitor (LED backlight)			
Trade Mark(s): AOC				
Manufacturer:	Same	as applicant		
Model/Type reference:	U34P2*******, Q34P2********, 34P2*******, U34E2*******, Q34E2*******, C34E2********, C34P2********, C34E2********, C34P2********, C34P2********, C34P3*******, C34P3*******, C34P3*******, C34P3*******, C34P2*******, C34P2*******, C34P2*******, C34P2*******, C34P2*******, C34P2*******, Q32P2********, Q32P2*******, Q32P2*******, C32P2********, U32E2********, U32E2********, U32E3*******, Q32G3********, C32E2********, U32P3********, Q32P3********, 32P3********, C32E3********, U32P3********, Q32P3********, 32P3*********, C32E2********, U32P3********, Q32P3********, 32P3**********, C32E2********, U32P3*********, Q32P3*********, U32P3**********, U32P3*********, U32P3**********, U32P3***********, U32P3************, U32P3************, U32P3***********************************			
Ratings:	1/2. 10	0-240V~, 50/60Hz, 1.5A or	2.0A	
Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):				
		TÜV Rheinland (Shenzhen) Co., Ltd.		
Testing location/ address:		1601-1604, 17-18F, Tower A Building 2, Shenzhen International Innovation Valley, Dashi 1st Road, Xili Street, Xili Community, Shenzhen 518052 Nanshan District, China		
Tested by (name, function, signature):		Same as below		
Approved by (name, function, signature) :		Same as below		
☐ Testing procedure: CTF Stage 1:		TPV Electronics (Fujian) Co., Ltd.		
Testing location/ address:		Shangzheng, Yuan Hong Road Fuqing City, Fujian, P.R.China		
Tested by (name, function, signature):		Anderson Wang Senior Project Manager	And	
Approved by (name, function, signature):		Steven Lin Technical Reviewer	San Co	
☐ 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) :				

5.4.8

5.4.9

5.6.6

5.7.4

5.7.5

6.2.2

6.4.8.3.3

6.4.8.3.4 8.6

Annex B.2.5

Annex F.3.10

Annex G.5.3.2 Annex G.5.3.3

Annex P.2.2

Annex P.4

Annex Q.1
Annex T.2, T.3,

Annex T.6

Annex T.8

T.5

8.7

5.5.2.2

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

- Measurement Section (22 Pages)
- National Differences (33 Pages)
- Other National Requirements (7 Pages)

Tests performed (name of test and test clause):

Safeguards against capacitance discharge test

Electrical Power Source (PS) measurements for

Resistance of the protective bonding system

Earthed accessible conductive part test

- Photo documentation (40 Pages)

#### Summary of testing:

Humidity test

classification

Stability

Input test

Electric strength test

(Ground continuity test)

Unearthed accessible parts

Top Openings in Fire Enclosure

Bottom Openings in Fire Enclosure

Wall or ceiling mount loading test

Test for permanence of markings

Limited power source test (LPS)

Steady force test, 10N, 30N, 250N

Transformer insulation

Transformer overload

Adhesive test

Abnormal operating and fault condition tests

Safeguards against entry of foreign object

name of test	test clause number
Classification of electrical energy sources	5.2
Accessibility to electrical energy sources and safeguards (Accessibility test)	5.3.2
Maximum operating temperature test (Heating test)	5.4.1.4, 9.3, B.1.5, B.2.6
Determination of working voltage	5.4.1.8
Ball pressure test	5.4.1.10.3
Minimum Clearances/Creepage distance	5.4.2, 5.4.3

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Stress relief test

Enclosure impact test

#### **Testing location:**

- 1) All tests except Ball pressure test and Wall mounting test as described in Test Case and Measurement Sections were performed at the CTF stage 1 described on page 2.
- 2) Ball pressure test and Wall mounting test was performed at CB Testing Laboratory described on page 2.

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

EU Group Differences, EU Special National Conditions, CA, DK, SG, US

Explanation of used codes: CA=Canada, DK=Demark, SG=Singapore, US=United States of America

The product fulfils the requirements of <u>EN IEC 62368-1:2020+ A11:2020</u> and <u>BS EN IEC 62368-1:2020+ A11:2020</u>.

For National Differences see corresponding Attachment.

#### 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.

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