



Guangdong Dongdian Testing Service Co., Ltd.

TEST REPORT

Applicant	:	XGIMI Technology CO., LTD.
Address of Applicant	:	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, 610041 Chengdu City, PEOPLE'S REPUBLIC OF CHINA
Manufacturer	:	XGIMI Technology CO., LTD.
Address of Manufacturer	:	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, 610041 Chengdu City, PEOPLE'S REPUBLIC OF CHINA
Equipment under Test	:	Projector
Model No.	:	XR03B, XR06B
Test Standard(s)	:	J62368-1(2023)
Report No.	:	DDT-RE25090923-1S02
Issue Date	:	December 17, 2025
Issued By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

TEST REPORT J62368-1 Audio/video, information and communication technology equipment Part 1: Safety requirements	
Report Reference No.	DDT-RE25090923-1S02
Date of issue	December 17, 2025
Total number of pages	89 pages
Testing Laboratory	Guangdong Dongdian Testing Service Co., Ltd.
Address	Unit 2, Building 1, No.17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808
Tested by (name + signature)	Wyman Huang
Approved by (+ signature)	Henry Fu
Applicant's name	XGIMI Technology CO., LTD.
Address	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, 610041 Chengdu City, PEOPLE'S REPUBLIC OF CHINA
Manufacturer's name	XGIMI Technology CO., LTD.
Address	Building No.4, Zone A, No.1129, Shijicheng Road, Chengdu High-tech Zone, Sichuan Pilot Free Trade Zone, 610041 Chengdu City, PEOPLE'S REPUBLIC OF CHINA
Factory's name	Yibin XGIMI Optoelectronic Co., Ltd.
Address	No.2, West Section 4, Changjiang North Road, Lingang Economic Development Zone, 644000 YiBin, Sichuan Province, PEOPLE'S REPUBLIC OF CHINA
Test specification:	
Standard	J62368-1(2023)
Test procedure	Test Report
Non-standard test method	N/A
Test item description:	Projector
Trade Mark	 (XGIMI)
Model/Type reference	XR03B, XR06B
Ratings	Input: 100V-240VAC, 7A MAX, 50Hz/60Hz

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.

XGIMI TITAN

⚠ 警告

電気ショックの危険を避けるために開けないでください。

Product Information

Product: Projector Model: XR03B
Rated: 100V~240V~7A MAX 50Hz/60Hz

Manufacturer

XGIMI Technology Co., Ltd.
Made in China

Contact Information

service@xgimi.com www.xgimi.com

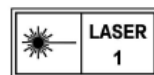
Building A4, No. 1129 Century City Road,
High-tech Zone, Chengdu, China



動作時の光線をのぞき
込まないでください。ま
ぶしい光により目を傷
めるおそれがあります。



XGIMI株式会社 中国製
東京都台東区蔵前3丁目1-3

IMAX® ENHANCED**Dolby Vision Dolby Audio****dtshd****HDMI®**

IEC 60825-1:2014

CONSUMER LASER PRODUCT
EN 50689:2021

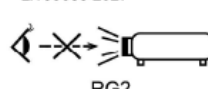
当該機器には電波法施行規則第46条
の2第1項五に基づく誘導式読み書き
通信設備: 第



R 210-234956

号を装着している

Year: 2025



RG2



RN56LZ2E8XW4

**Note:**

1. The above markings are the minimum requirements required by the safety standard. For the final production, the additional markings which do not give rise to misunderstanding may be added.
2. The "TITAN" close to the trademark "XGIMI" is a part of product description.

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%	
	☐ + %/ - %	
	☐ Supplied by client	
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: not Mains connected	
Considered current rating of protective device ...:	☒ 16 A;	
	Location: ☒ building ☐ equipment	
	☐ N/A, not Mains connected	
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: not Mains connected
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	☒ IP20
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	☐ m
Mass of equipment (kg)	Approx. 11.4kg	

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: 2025-10-14
Date (s) of performance of tests.....: 2025-10-14 to 2025-12-05
(taken from CB Report No. 211-21251930-000)

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.

General product information and other remarks:

1. The product is intended to use with other information technology equipment or audio and Video equipment, and for indoor use only.
2. The product shall only be connected to a USB interface of version USB2.0(5VDC, 0.5A) and USB3.0(5VDC, 1.0A), which specified in user manual, and the maximum attainable current is USB2.0(5VDC, 2.0A) and USB3.0(5VDC, 2.2A).
3. The maximum operating temperature is 40°C.
4. Clearances were evaluated for operating altitude up to 5000m above sea level.
5. The product was classified as RG2 projector according to IEC/EN 62471-5, refer to test report 68.140.25.0653.01 for details.
6. The product was classified as Class 1 Laser product according to IEC/EN 60825-1, refer to test report 68.184.25.0880.01 for details.
7. The remote control is powered by two "AAA" batteries.
8. Both models listed in the test report are identical except for different model No., internal DC fans, laser module and main board with a few differences. Unless otherwise specified, XR06B served as the representative model for all tests, and XR03B underwent only partial testing.

Remark:

All data taken from CB Report No. 211-21251930-000 (Certif. No. SG PSB-IV-15661, issued by TÜV SÜD PSB Pte Ltd). No any change, no additional need to test.

OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS				
Clause	Possible Hazard			
5	Electrically-caused injury			
Class and Energy Source (e.g. ES3: Primary circuit)	Body Part (e.g. Ordinary)	Safeguards		
		B	S	R
ES3: All primary circuits (to secondary circuits and accessible parts)	Ordinary person, Instructed person	N/A	N/A	Enclosure, Isolated transformer, Optocoupler, Y1-cap.
ES3: All primary circuits (to earthing part)	Ordinary person, Instructed person	Basic insulation	Protective bonding and protective earthing	N/A
ES3: Transformer (TH1) secondary pins of power supply board	Ordinary person, Instructed person	Separated from ES3 mains by a double safeguard or a reinforced safeguard	Touch voltage/ current on accessible parts didn't exceed ES1 under single fault condition	N/A
ES3: Appliance inlet (Primary Filter circuit)	Ordinary person, Instructed person	Approved ICX and bleeder resistors provided	Accessible voltage didn't exceed ES2 limits of Table 5 under fault condition (after 2s disconnection)	N/A
ES3: All primary circuits; ES3: Transformer (TH1) secondary pins of power supply board; ES3: Appliance inlet (Primary Filter circuit)	Skilled person	N/A (unintentional contact with parts during service condition is unlikely)	N/A	N/A (Skill safeguard)
ES1: Secondary circuits after DH1/DH2 of power supply board; ES1: Other secondary circuits /terminals; ES1: Batteries output (used in remote controller); ES1: Accessible enclosure	Ordinary person, Instructed person, Skilled person	N/A	N/A	N/A
6	Electrically-caused fire			
Class and Energy Source (e.g. PS2: 100 Watt circuit)	Material part (e.g. Printed board)	Safeguards		
		B	1 st S	2 nd S

PS3: All internal circuits/ components except for DC Fans, USB2.0/USB3.0 ports output, speaker; PS2: DC fans	Internal combustible material/ plastic enclosure	For "N" & "A" condition: 1, No ignition occurred. 2, No parts exceeding 90% of its spontaneous Ignition temperature.	For control fire spread under single fault condition: 1, PCB is complied with min. V-1 material. 2, Internal wire insulation and tubing complied with Clause 6.5.1; 3, Motors complied with G.5.4; 4, Transformer complied with G.5.3; 5, All other components: at least V-2 except for mounted on min. V-1 material or small parts of combustible material.	For control fire spread under single fault condition: V-0 plastic enclosure provided.
PS1: USB2.0/USB3.0 ports output; PS1: Supply of speaker; PS1: Batteries output (used in remote controller)	Internal combustible material/ plastic enclosure	For "N" & "A" condition: 1, No ignition occurred. 2, No parts exceeding 90% of its spontaneous ignition temperature.	N/A	N/A
7	Injury caused by hazardous substances			
Class and Energy Source (e.g. Ozone)	Body Part (e.g., Skilled)	Safeguards		
		B	S	R
Batteries used in remote controller (Complied with Annex M)	Ordinary person, Instructed person, Skilled person	N/A	N/A	N/A
8	Mechanically-caused injury			
Class and Energy Source (e.g. MS3: Plastic fan blades)	Body Part (e.g. Ordinary)	Safeguards		
		B	S	R
MS2: Equipment mass	Ordinary person, Instructed person, Skilled person	Means of stabilize the equipment used (complied with clause 8.6)	N/A	N/A
MS1: Plastic fan blades MS1: Sharp edges and corners of accessible parts	Ordinary person, Instructed person, Skilled person	N/A	N/A	N/A

9	Thermal burn			
Class and Energy Source (e.g. TS1: Keyboard caps)	Body Part (e.g., Ordinary)	Safeguards		
		B	S	R
TS1: Accessible parts	Ordinary person, Instructed person, Skilled person	N/A	N/A	N/A
10	Radiation			
Class and Energy Source (e.g. RS1: PMP sound output)	Body Part (e.g., Ordinary)	Safeguards		
		B	S	R
Image projectors with lasers (according to IEC/EN 62471-5)	Ordinary person, Instructed person, Skilled person	N/A (Instructional safeguard also be provided)	N/A	N/A
Image projectors with lasers (according to IEC/EN 60825-1)	Ordinary person, Instructed person, Skilled person	N/A	N/A	N/A
LEDs for indicating lights (according to IEC/EN 62471)	Ordinary person, Instructed person, Skilled person	N/A	N/A	N/A
Supplementary Information: “B” – Basic Safeguard; “S” – Supplementary Safeguard; “R” – Reinforced Safeguard				

ENERGY SOURCE DIAGRAM

Optional. Manufacturers are to provide the energy sources diagram identify declared energy sources and identifying the demarcations are between power sources. Recommend diagram be provided included in power supply and multipart systems.

Insert diagram below. Example diagram designs are; Block diagrams; image(s) with layered data; mechanical drawings

(Refer to **OVERVIEW OF ENERGY SOURCES AND SAFEGUARDS** table for details)

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

4	GENERAL REQUIREMENTS		P
4.1.1	Acceptance of materials, components and subassemblies		P
4.1.2	Use of components	(See appended table 4.1.2)	P
4.1.3	Equipment design and construction		P
4.1.4	Specified ambient temperature for outdoor use (°C):	Not outdoor equipment.	N/A
4.1.5	Constructions and components not specifically covered		N/A
4.1.8	Liquids and liquid filled components (LFC)		N/A
4.1.15	Markings and instructions	(See Annex F)	P
4.4.3	Safeguard robustness		P
4.4.3.1	General		P
4.4.3.2	Steady force tests	(See Annex T.2, T.3, T.5)	P
4.4.3.3	Drop tests		N/A
4.4.3.4	Impact tests	(See Annex T.6)	P
4.4.3.5	Internal accessible safeguard tests	The external enclosure cannot be opened without tool.	N/A
4.4.3.6	Glass impact tests		N/A
4.4.3.7	Glass fixation tests		N/A
	Glass impact test (1J)		N/A
	Push/pull test (10 N)		N/A
4.4.3.8	Thermoplastic material tests	(See Annex T.8)	P
4.4.3.9	Air comprising a safeguard	(See Annex T)	P
4.4.3.10	Accessibility, glass, safeguard effectiveness	All safeguards remain effective	P
4.4.4	Displacement of a safeguard by an insulating liquid		N/A
4.4.5	Safety interlocks	No such component.	N/A
4.5	Explosion		P
4.5.1	General		P
4.5.2	No explosion during normal/abnormal operating condition	(See Annex B.2, B.3)	P
	No harm by explosion during single fault conditions	(See Annex B.4)	P
4.6	Fixing of conductors		P
	Fix conductors not to defeat a safeguard		P
	Compliance is checked by test:	(See Annex T.2)	P
4.7	Equipment for direct insertion into mains socket-outlets		N/A
4.7.2	Mains plug part complies with relevant standard:	Not direct plug-in equipment.	N/A
4.7.3	Torque (Nm).....:	See above	N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

4.8	Equipment containing coin/button cell batteries		N/A
4.8.1	General		N/A
4.8.2	Instructional safeguard.....:		N/A
4.8.3	Battery compartment door/cover construction		N/A
	Open torque test		N/A
4.8.4.2	Stress relief test		N/A
4.8.4.3	Battery replacement test		N/A
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test		N/A
4.8.4.6	Crush test		N/A
4.8.5	Compliance		N/A
	30N force test with test probe		N/A
	20N force test with test hook		N/A
4.9	Likelihood of fire or shock due to entry of conductive object		P
4.10	Component requirements		P
4.10.1	Disconnect Device	(See Annex L)	P
4.10.2	Switches and relays		N/A

5	ELECTRICALLY-CAUSED INJURY		P
5.2	Classification and limits of electrical energy sources		P
5.2.2	ES1, ES2 and ES3 limits		P
5.2.2.2	Steady-state voltage and current limits.....:	(See appended table 5.2)	P
5.2.2.3	Capacitance limits.....:	(See appended table 5.2)	P
5.2.2.4	Single pulse limits.....:		N/A
5.2.2.5	Limits for repetitive pulses.....:		N/A
5.2.2.6	Ringing signals		N/A
5.2.2.7	Audio signals	(See Annex E)	P
5.3	Protection against electrical energy sources		P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons		P
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits		P
5.3.1 b)	Skilled persons not unintentional contact ES3 bare conductors		P
5.3.2.1	Accessibility to electrical energy sources and safeguards		P
	Accessibility to outdoor equipment bare parts		N/A
5.3.2.2	Contact requirements		P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
	Test with test probe from Annex V	The test probe cannot contact with the bare internal conductive part.	—
5.3.2.2 a)	Air gap – electric strength test potential (V)		N/A
5.3.2.2 b)	Air gap – distance (mm)	Air gap >0.26mm	P
5.3.2.3	Compliance		P
5.3.2.4	Terminals for connecting stripped wire		N/A
5.4	Insulation materials and requirements		P
5.4.1.2	Properties of insulating material		P
5.4.1.3	Material is non-hygroscopic	No hygroscopic insulating material used	N/A
5.4.1.4	Maximum operating temperature for insulating materials	(See appended table 5.4.1.4)	P
5.4.1.5	Pollution degrees	2	P
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound		N/A
5.4.1.5.3	Thermal cycling test		N/A
5.4.1.6	Insulation in transformers with varying dimensions		N/A
5.4.1.7	Insulation in circuits generating starting pulses		N/A
5.4.1.8	Determination of working voltage	(See appended table 5.4.1.8)	P
5.4.1.9	Insulating surfaces		P
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted		P
5.4.1.10.2	Vicat test		N/A
5.4.1.10.3	Ball pressure test	(See appended table 5.4.1.10.3)	P
5.4.2	Clearances		P
5.4.2.1	General requirements		P
	Clearances in circuits connected to AC Mains, Alternative method		N/A
5.4.2.2	Procedure 1 for determining clearance	(See appended table 5.4.2)	P
	Temporary overvoltage	2000V _{peak}	—
5.4.2.3	Procedure 2 for determining clearance	(See appended table 5.4.2)	P
5.4.2.3.2.2	a.c. mains transient voltage	2500V _{peak} for Overvoltage Cat. II	—
5.4.2.3.2.3	d.c. mains transient voltage		—
5.4.2.3.2.4	External circuit transient voltage		—
5.4.2.3.2.5	Transient voltage determined by measurement		—

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.2.4	Determining the adequacy of a clearance using an electric strength test	(See appended table 5.4.2)	N/A
5.4.2.5	Multiplication factors for clearances and test voltages	Clearance was evaluated for altitude up to 5000m above sea level, correction factor for clearance is 1.48	P
5.4.2.6	Clearance measurement	(See appended table 5.4.2, 5.4.3)	P
5.4.3	Creepage distances		P
5.4.3.1	General		P
5.4.3.3	Material group	IIIb	—
5.4.3.4	Creepage distances measurement	(See appended table 5.4.2, 5.4.3)	P
5.4.4	Solid insulation		P
5.4.4.1	General requirements		P
5.4.4.2	Minimum distance through insulation	(See appended table 5.4.4.2)	P
5.4.4.3	Insulating compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices	Approved optocouplers used (See appended table 4.1.2)	P
5.4.4.5	Insulating compound forming cemented joints		N/A
5.4.4.6	Thin sheet material		P
5.4.4.6.1	General requirements		P
5.4.4.6.2	Separable thin sheet material		P
	Number of layers (pcs)	-TH1: 2 layers of insulation tape wrapped on core (min. thickness 0.05mm for each layer insulation tape	P
5.4.4.6.3	Non-separable thin sheet material		N/A
	Number of layers (pcs)		N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material		N/A
5.4.4.6.5	Mandrel test		N/A
5.4.4.7	Solid insulation in wound components		P
5.4.4.9	Solid insulation at frequencies >30 kHz, E_p , K_R , d , V_{PW} (V)	(See appended Table 5.4.4.9)	P
	Alternative by electric strength test, tested voltage (V), K_R	(See appended Table 5.4.4.9)	P
5.4.5	Antenna terminal insulation		P
5.4.5.1	General		P
5.4.5.2	Voltage surge test	10kV, 50 times	P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.4.5.3	Insulation resistance (MΩ)	>100MΩ	P
	Electric strength test	No break down during the test.	P
5.4.6	Insulation of internal wire as part of supplementary safeguard		N/A
5.4.7	Tests for semiconductor components and for cemented joints		N/A
5.4.8	Humidity conditioning		P
	Relative humidity (%), temperature (°C), duration (h)	95%R.H., 40°C, 120h	—
5.4.9	Electric strength test		P
5.4.9.1	Test procedure for type test of solid insulation.....	(See appended table 5.4.9)	P
5.4.9.2	Test procedure for routine test		N/A
5.4.10	Safeguards against transient voltages from external circuits	No external circuits	N/A
5.4.10.1	Parts and circuits separated from external circuits		N/A
5.4.10.2	Test methods		N/A
5.4.10.2.1	General		N/A
5.4.10.2.2	Impulse test.....		N/A
5.4.10.2.3	Steady-state test		N/A
5.4.10.3	Verification for insulation breakdown for impulse test		N/A
5.4.11	Separation between external circuits and earth		N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	SPDs bridge separation between external circuit and earth		N/A
	Rated operating voltage U_{op} (V)		—
	Nominal voltage U_{peak} (V)		—
	Max increase due to variation ΔU_{sp}		—
	Max increase due to ageing ΔU_{sa}		—
5.4.11.3	Test method and compliance		N/A
5.4.12	Insulating liquid		N/A
5.4.12.1	General requirements		N/A
5.4.12.2	Electric strength of an insulating liquid.....		N/A
5.4.12.3	Compatibility of an insulating liquid.....		N/A
5.4.12.4	Container for insulating liquid.....		N/A
5.5	Components as safeguards		P

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
5.5.1	General		P
5.5.2	Capacitors and RC units	(See appended table 4.1.2)	P
5.5.2.1	General requirement	(See appended table 4.1.2)	P
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector	(See appended table 5.5.2.2)	P
5.5.3	Transformers	(See Annex G.5.3)	P
5.5.4	Optocouplers	(See Annex G.12)	P
5.5.5	Relays		N/A
5.5.6	Resistors		N/A
5.5.7	SPDs	Used between L and N	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable		N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment		N/A
	RCD rated residual operating current (mA)		—
5.6	Protective conductor		P
5.6.2	Requirement for protective conductors		P
5.6.2.1	General requirements	Considered	P
5.6.2.2	Colour of insulation	Green-and-yellow wire	P
5.6.3	Requirement for protective earthing conductors	The suitable certified power supply cordset shall be assessed to the national standard.	N/A
	Protective earthing conductor size (mm ²)	Rated current: 7A, Min. 0.75mm ² or 18AWG.	—
	Protective earthing conductor serving as a reinforced safeguard		N/A
	Protective earthing conductor serving as a double safeguard		N/A
5.6.4	Requirements for protective bonding conductors		P
5.6.4.1	Protective bonding conductors		P
	Protective bonding conductor size (mm ²).....	Min. 18AWG (0.75mm ²)	—
5.6.4.2	Protective current rating (A)	Max. 20A	P
5.6.5	Terminals for protective conductors		P
5.6.5.1	Terminal size for connecting protective earthing conductors (mm)	Approved appliance inlet used	P
	Terminal size for connecting protective bonding conductors (mm).....	Protective bonding conductors size: 0.75mm ² ; Nominal thread diameter: 3.5mm	P
5.6.5.2	Corrosion		P

IEC 62368-1			
Clause	Requirement + Test		Verdict
5.6.6	Resistance of the protective bonding system		P
5.6.6.1	Requirements		P
5.6.6.2	Test Method	(See appended table 5.6.6.2)	P
5.6.6.3	Resistance (Ω) or voltage drop	(See appended table 5.6.6.2)	P
5.6.7	Reliable connection of a protective earthing conductor		N/A
5.6.8	Functional earthing		N/A
	Conductor size (mm ²)		N/A
	Class II with functional earthing marking		N/A
	Appliance inlet cl & cr (mm)		N/A
5.7	Prospective touch voltage, touch current and protective conductor current		P
5.7.2	Measuring devices and networks		P
5.7.2.1	Measurement of touch current		P
5.7.2.2	Measurement of voltage		P
5.7.3	Equipment set-up, supply connections and earth connections		P
5.7.4	Unearthed accessible parts	(See appended table 5.7.4)	P
5.7.5	Earthed accessible conductive parts	(See appended table 5.7.5)	P
5.7.6	Requirements when touch current exceeds ES2 limits		N/A
	Protective conductor current (mA)		N/A
	Instructional Safeguard		N/A
5.7.7	Prospective touch voltage and touch current associated with external circuits	No such external circuits	N/A
5.7.7.1	Touch current from coaxial cables		N/A
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables		N/A
5.7.8	Summation of touch currents from external circuits		N/A
	a) Equipment connected to earthed external circuits, current (mA)		N/A
	b) Equipment connected to unearthed external circuits, current (mA)		N/A
5.8	Backfeed safeguard in battery backed up supplies		N/A
	Mains terminal ES		N/A
	Air gap (mm)		N/A
6	ELECTRICALLY- CAUSED FIRE		P
6.2	Classification of PS and PIS		P
6.2.2	Power source circuit classifications.....	(See appended table 6.2.2)	P

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Clause	Requirement + Test	Result - Remark	Verdict
6.2.3	Classification of potential ignition sources		P
6.2.3.1	Arcing PIS	(See appended table 6.2.3.1)	P
6.2.3.2	Resistive PIS	(See appended table 6.2.3.2)	P
6.3	Safeguards against fire under normal operating and abnormal operating conditions		P
6.3.1	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials	(See appended table B.1.5, B.2.6 and B.3)	P
	Combustible materials outside fire enclosure	(See appended table 4.1.2)	P
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Safeguard method		P
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits		P
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		P
6.4.3.1	Supplementary safeguards		P
6.4.3.2	Single Fault Conditions	(See appended table B.4)	P
	Special conditions for temperature limited by fuse		P
6.4.4	Control of fire spread in PS1 circuits		P
6.4.5	Control of fire spread in PS2 circuits		P
6.4.5.2	Supplementary safeguards		P
6.4.6	Control of fire spread in PS3 circuits	-Printed board: rated V-1 or better; -Internal wire insulation and tubing complied with Clause 6.5.1; - Motors complied with G.5.4; - Transformers complied with G.5.3; - All other components: at least V-2 except for mounted on min. V-1 material or small parts of combustible material; -Fire enclosure material: rated V-0.	P
6.4.7	Separation of combustible materials from a PIS		N/A
6.4.7.2	Separation by distance		N/A
6.4.7.3	Separation by a fire barrier		N/A
6.4.8	Fire enclosures and fire barriers		P
6.4.8.2	Fire enclosure and fire barrier material properties		P
6.4.8.2.1	Requirements for a fire barrier		N/A
6.4.8.2.2	Requirements for a fire enclosure	Fire enclosure material: rated V-0	P

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Clause	Requirement + Test	Result - Remark	Verdict

6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier		P
6.4.8.3.1	Fire enclosure and fire barrier openings		P
6.4.8.3.2	Fire barrier dimensions		N/A
6.4.8.3.3	Top openings and properties		N/A
	Openings dimensions (mm)	No top openings	N/A
6.4.8.3.4	Bottom openings and properties		P
	Openings dimensions (mm)	No bottom openings below a PIS as shown in Figure 42	P
	Flammability tests for the bottom of a fire enclosure		N/A
	Instructional Safeguard.....		N/A
6.4.8.3.5	Side openings and properties		P
	Openings dimensions (mm)	No side openings(below a PIS located in a PS3 circuit) that fall within the area indicated by the 5 degree angle in Figure 44.	P
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)		N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating.....	Fire enclosure is made of V-0 class material	P
6.4.9	Flammability of insulating liquid		N/A
6.5	Internal and external wiring		P
6.5.1	General requirements	(See appended table 4.1.2)	P
6.5.2	Requirements for interconnection to building wiring		N/A
6.5.3	Internal wiring size (mm ²) for socket-outlets		N/A
6.6	Safeguards against fire due to the connection to additional equipment		P

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES		P
7.2	Reduction of exposure to hazardous substances		N/A
7.3	Ozone exposure		N/A
7.4	Use of personal safeguards or personal protective equipment (PPE)		N/A
	Personal safeguards and instructions.....	No personal safeguards	—
7.5	Use of instructional safeguards and instructions		N/A
	Instructional safeguard (ISO 7010)	No instructional safeguards	—
7.6	Batteries and their protection circuits <i>(see Annex M)</i>		P

8	MECHANICALLY-CAUSED INJURY		P
8.2	Mechanical energy source classifications		P

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Clause	Requirement + Test	Result - Remark	Verdict

8.3	Safeguards against mechanical energy sources		P
8.4	Safeguards against parts with sharp edges and corners		P
8.4.1	Safeguards		P
	Instructional Safeguard.....:	MS1 classification, no safeguard required	N/A
8.4.2	Sharp edges or corners		P
8.5	Safeguards against moving parts		P
8.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts	All plastic fan blades: MS1 classification.	N/A
	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
	Moving MS3 parts only accessible to skilled person		N/A
8.5.2	Instructional safeguard		N/A
8.5.4	Special categories of equipment containing moving parts		N/A
8.5.4.1	General		N/A
8.5.4.2	Equipment containing work cells with MS3 parts		N/A
8.5.4.2.1	Protection of persons in the work cell		N/A
8.5.4.2.2	Access protection override		N/A
8.5.4.2.2.1	Override system		N/A
8.5.4.2.2.2	Visual indicator		N/A
8.5.4.2.3	Emergency stop system		N/A
	Maximum stopping distance from the point of activation (m)		N/A
	Space between end point and nearest fixed mechanical part (mm).....:		N/A
8.5.4.2.4	Endurance requirements		N/A
	Mechanical system subjected to 100 000 cycles of operation		N/A
	- Mechanical function check and visual inspection		N/A
	- Cable assembly.....:		N/A
8.5.4.3	Equipment having electromechanical device for destruction of media		N/A
8.5.4.3.1	Equipment safeguards		N/A
8.5.4.3.2	Instructional safeguards against moving parts.....:		N/A
8.5.4.3.3	Disconnection from the supply		N/A
8.5.4.3.4	Cut type and test force (N)		N/A
8.5.4.3.5	Compliance		N/A

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Clause	Requirement + Test		Verdict
8.5.5	High pressure lamps		N/A
	Explosion test		N/A
8.5.5.3	Glass particles dimensions (mm)		N/A
8.6	Stability of equipment		P
8.6.1	General	MS2 classification	P
	Instructional safeguard		N/A
8.6.2	Static stability		P
8.6.2.2	Static stability test	The equipment is placed on a plane at an angle of 10° from the horizontal and rotated slowly through an angle of 360° about its normal vertical axis; during the tests, the equipment was not tip over.	P
8.6.2.3	Downward force test		N/A
8.6.3	Relocation stability		N/A
	Wheels diameter (mm)	No wheels used	—
	Tilt test		N/A
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test.....		N/A
8.7	Equipment mounted to wall, ceiling or other structure		N/A
8.7.1	Mount means type		N/A
8.7.2	Test methods		N/A
	Test 1, additional downwards force (N).....		N/A
	Test 2, number of attachment points and test force (N)		N/A
	Test 3 Nominal diameter (mm) and applied torque (Nm)		N/A
8.8	Handles strength		N/A
8.8.1	General	No handle	N/A
8.8.2	Handle strength test		N/A
	Number of handles		—
	Force applied (N)		—
8.9	Wheels or casters attachment requirements		N/A
8.9.2	Pull test	Not such equipment	N/A
8.10	Carts, stands and similar carriers		N/A
8.10.1	General	Not such equipment	N/A
8.10.2	Marking and instructions		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

8.10.3	Cart, stand or carrier loading test		N/A
	Loading force applied (N)		N/A
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Force applied (N)		—
8.10.6	Thermoplastic temperature stability		N/A
8.11	Mounting means for slide-rail mounted equipment (SRME)		N/A
8.11.1	General	Not such equipment	N/A
8.11.2	Requirements for slide rails		N/A
	Instructional Safeguard		N/A
8.11.3	Mechanical strength test		N/A
8.11.3.1	Downward force test, force (N) applied		N/A
8.11.3.2	Lateral push force test		N/A
8.11.3.3	Integrity of slide rail end stops		N/A
8.11.4	Compliance		N/A
8.12	Telescoping or rod antennas		N/A
	Button/ball diameter (mm)	No such antennas.	—

9	THERMAL BURN INJURY		P
9.2	Thermal energy source classifications		P
9.3	Touch temperature limits		P
9.3.1	Touch temperatures of accessible parts	(See appended table 9.3)	P
9.3.2	Test method and compliance		P
9.4	Safeguards against thermal energy sources		P
9.5	Requirements for safeguards		N/A
9.5.1	Equipment safeguard		N/A
9.5.2	Instructional safeguard	TS1 classification, no safeguard required	N/A
9.6	Requirements for wireless power transmitters		N/A
9.6.1	General		N/A
9.6.2	Specification of the foreign objects		N/A
9.6.3	Test method and compliance		N/A

10	RADIATION		P
10.2	Radiation energy source classification		P
10.2.1	General classification		P

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Clause	Requirement + Test	Result - Remark	Verdict

	Lasers	LEDs used for indicating lights: Exempt group	—
	Lamps and lamp systems	RG2 according to IEC/EN 62471-5; Class 1 according to IEC/EN 60825-1.	—
	Image projectors		—
	X-Ray		—
	Personal music player.....		—
10.3	Safeguards against laser radiation		P
	The standard(s) equipment containing laser(s) comply	Image projector with lasers (according to IEC/EN 60825-1)	P
10.4	Safeguards against optical radiation from lamps and lamp systems (including LED types)		P
10.4.1	General requirements	The image projector was classified as RG2 projector according to IEC/EN 62471-5	P
	Instructional safeguard provided for accessible radiation level needs to exceed		N/A
	Risk group marking and location.....	See copy of marking plate	P
	Information for safe operation and installation		P
10.4.2	Requirements for enclosures		N/A
	UV radiation exposure		N/A
10.4.3	Instructional safeguard.....	The instructional safeguard complied with the requirements of IEC/EN 62471-5 for Risk Group 2.	P
10.5	Safeguards against X-radiation		N/A
10.5.1	Requirements	No X-radiation	N/A
	Instructional safeguard for skilled persons.....		—
10.5.3	Maximum radiation (pA/kg)		—
10.6	Safeguards against acoustic energy sources		N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
	Acoustic output $L_{Aeq,T}$, dB(A)		N/A
	Unweighted RMS output voltage (mV).....		N/A
	Digital output signal (dBFS).....		N/A
10.6.3	Requirements for dose-based systems		N/A
10.6.3.1	General requirements		N/A
10.6.3.2	Dose-based warning and automatic decrease		N/A
10.6.3.3	Exposure-based warning and requirements		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

	30 s integrated exposure level (MEL30)		N/A
	Warning for MEL ≥ 100 dB(A)		N/A
10.6.4	Measurement methods		N/A
10.6.5	Protection of persons		N/A
	Instructional safeguards		N/A
10.6.6	Requirements for listening devices (headphones, earphones, etc.)		N/A
10.6.6.1	Corded listening devices with analogue input		N/A
	Listening device input voltage (mV)		N/A
10.6.6.2	Corded listening devices with digital input		N/A
	Max. acoustic output $L_{Aeq,T}$, dB(A)		N/A
10.6.6.3	Cordless listening devices		N/A
	Max. acoustic output $L_{Aeq,T}$, dB(A)		N/A

B	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS		P
B.1	General		P
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	P
B.2	Normal operating conditions		P
B.2.1	General requirements	(See Test item particulars and appended table)	P
	Audio Amplifiers and equipment with audio amplifiers	(See Annex E)	P
B.2.3	Supply voltage and tolerances		P
B.2.5	Input test	(See appended table B.2.5)	P
B.3	Simulated abnormal operating conditions		P
B.3.1	General		P
B.3.2	Covering of ventilation openings	(See appended table B.3, B.4)	P
	Instructional safeguard		N/A
B.3.3	DC mains polarity test		N/A
B.3.4	Setting of voltage selector		N/A
B.3.5	Maximum load at output terminals	(See appended table B.3, B.4)	P
B.3.6	Reverse battery polarity	(See Annex M)	P
B.3.7	Audio amplifier abnormal operating conditions	(See Annex E)	P
B.3.8	Safeguards functional during and after abnormal operating conditions	All safeguards remained effective.	P
B.4	Simulated single fault conditions		P
B.4.1	General		P

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Clause	Requirement + Test	Result - Remark	Verdict
B.4.2	Temperature controlling device		N/A
B.4.3	Blocked motor test		P
B.4.4	Functional insulation		P
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.3, B.4)	P
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.3, B.4)	P
B.4.4.3	Short circuit of functional insulation on coated printed boards	No coated printed boards used	N/A
B.4.5	Short-circuit and interruption of electrodes in tubes and semiconductors	(See appended table B.3, B.4)	P
B.4.6	Short circuit or disconnection of passive components	(See appended table B.3, B.4)	P
B.4.7	Continuous operation of components	No such components	N/A
B.4.8	Compliance during and after single fault conditions	(See appended table B.3, B.4)	P
B.4.9	Battery charging and discharging under single fault conditions	(See Annex M)	P
C	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV radiation		N/A
C.1.2	Requirements		N/A
C.1.3	Test method		N/A
C.2	UV light conditioning test		N/A
C.2.1	Test apparatus		N/A
C.2.2	Mounting of test samples		N/A
C.2.3	Carbon-arc light-exposure test		N/A
C.2.4	Xenon-arc light-exposure test		N/A
D	TEST GENERATORS		P
D.1	Impulse test generators		P
D.2	Antenna interface test generator		P
D.3	Electronic pulse generator		N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS		P
E.1	Electrical energy source classification for audio signals		P
	Maximum non-clipped output power (W)	8.97W for each	—
	Rated load impedance (Ω)	4 Ω (2pcs provided for model XR03B) 4 Ω (one provided for model XR06B)	—
	Open-circuit output voltage (V)	5.98V for each	—
	Instructional safeguard.....	No safeguard necessary	—
E.2	Audio amplifier normal operating conditions		P

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Clause	Requirement + Test	Result - Remark	Verdict

	Audio signal source type	(See append table B.2.5)	—
	Audio output power (W)	1.12W for each	—
	Audio output voltage (V)	2.11V for each	—
	Rated load impedance (Ω)	4 Ω (2pcs provided for model XR03B) 4 Ω (one provided for model XR06B)	—
	Requirements for temperature measurement	(See append table B.1.5)	P
E.3	Audio amplifier abnormal operating conditions	(See append table B.3, B.4)	P
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS		P
F.1	General		P
	Language	English and French version	—
F.2	Letter symbols and graphical symbols		P
F.2.1	Letter symbols according to IEC60027-1		P
F.2.2	Graphic symbols according to IEC, ISO or manufacturer specific		P
F.3	Equipment markings		P
F.3.1	Equipment marking locations	Located on the exterior of the bottom enclosure and the location of the marking was mentioned in the instructions.	P
F.3.2	Equipment identification markings	See copy of marking plate.	P
F.3.2.1	Manufacturer identification	See copy of marking plate.	P
F.3.2.2	Model identification	See copy of marking plate.	P
F.3.3	Equipment rating markings	See copy of marking plate.	P
F.3.3.1	Equipment with direct connection to mains		P
F.3.3.2	Equipment without direct connection to mains		N/A
F.3.3.3	Nature of the supply voltage	See copy of marking plate	—
F.3.3.4	Rated voltage	See copy of marking plate	—
F.3.3.5	Rated frequency	See copy of marking plate	—
F.3.3.6	Rated current or rated power	See copy of marking plate	—
F.3.3.7	Equipment with multiple supply connections		N/A
F.3.4	Voltage setting device		N/A
F.3.5	Terminals and operating devices		P
F.3.5.1	Mains appliance outlet and socket-outlet markings		N/A
F.3.5.2	Switch position identification marking		N/A
F.3.5.3	Replacement fuse identification and rating markings	"T8AH 250V~" was marked on PCB near the fuse F1	P

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Clause	Requirement + Test	Result - Remark	Verdict
	Instructional safeguards for neutral fuse		N/A
F.3.5.4	Replacement battery identification marking	Relevant warnings were mentioned in user manual	P
F.3.5.5	Neutral conductor terminal		N/A
F.3.5.6	Terminal marking location		P
F.3.6	Equipment markings related to equipment classification		P
F.3.6.1	Class I equipment		P
F.3.6.1.1	Protective earthing conductor terminal	Approved appliance inlet used	P
F.3.6.1.2	Protective bonding conductor terminals	Not be identified	P
F.3.6.2	Equipment class marking	Class I equipment	N/A
F.3.6.3	Functional earthing terminal marking		N/A
F.3.7	Equipment IP rating marking	IP20, no marking is needed	—
F.3.8	External power supply output marking		N/A
F.3.9	Durability, legibility and permanence of marking		P
F.3.10	Test for permanence of markings		P
F.4	Instructions		P
	a) Information prior to installation and initial use		P
	b) Equipment for use in locations where children not likely to be present		N/A
	c) Instructions for installation and interconnection		P
	d) Equipment intended for use only in restricted access area		N/A
	e) Equipment intended to be fastened in place		N/A
	f) Instructions for audio equipment terminals		N/A
	g) Protective earthing used as a safeguard		P
	h) Protective conductor current exceeding ES2 limits		N/A
	i) Graphic symbols used on equipment	Provided in the manual.	P
	j) Permanently connected equipment not provided with all-pole mains switch		N/A
	k) Replaceable components or modules providing safeguard function		N/A
	l) Equipment containing insulating liquid		N/A
	m) Installation instructions for outdoor equipment		N/A
F.5	Instructional safeguards		P
G	COMPONENTS		P
G.1	Switches		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.1.1	General		N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.1.3	Test method and compliance		N/A
G.2	Relays		N/A
G.2.1	Requirements		N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supplying power to other equipment		N/A
G.2.4	Test method and compliance		N/A
G.3	Protective devices		P
G.3.1	Thermal cut-offs		N/A
	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Test method and compliance		N/A
G.3.2	Thermal links		N/A
G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics		N/A
	b) Thermal links tested as part of the equipment		N/A
G.3.2.2	Test method and compliance		N/A
G.3.3	PTC thermistors	Secondary approved PTC thermistor used (See appended table 4.1.2)	P
G.3.4	Overcurrent protection devices	Approved current fuse provided (See appended table 4.1.2)	P
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.4		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A
G.3.5.2	Single faults conditions		N/A
G.4	Connectors		P
G.4.1	Spacings		P
G.4.2	Mains connector configuration	Approved appliance inlet used	P
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely	Mismatching of connectors to mains plugs or sockets are impossible.	P
G.5	Wound components		P
G.5.1	Wire insulation in wound components	Approved TIW used as primary winding of transformer (TH1)	P

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.1.2	Protection against mechanical stress	Separated by insulation tape and tube used on TIW of the transformer (TH1)	P
G.5.2	Endurance test		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Test time (days per cycle)		—
	Test temperature (°C)		—
G.5.2.3	Wound components supplied from the mains		N/A
G.5.2.4	No insulation breakdown		N/A
G.5.3	Transformers		P
G.5.3.1	Compliance method	The isolation transformer meets the requirements given in G.5.3.2 and G.5.3.3	P
	Position	(See appended table 4.1.2)	P
	Method of protection	Electronic protection	P
G.5.3.2	Insulation		P
	Protection from displacement of windings	Fixed by bobbin and insulation tape	—
G.5.3.3	Transformer overload tests	(See appended table B.3, B.4)	P
G.5.3.3.1	Test conditions		P
G.5.3.3.2	Winding temperatures	Maximum temperatures of windings did not exceed the limits given in Table G.3. During the test, the transformer did not emit flames or molten metal and withstand the electric strength test in 5.4.9.1	P
G.5.3.3.3	Winding temperatures - alternative test method		N/A
G.5.3.4	Transformers using FIW		N/A
G.5.3.4.1	General		N/A
	FIW wire nominal diameter		—
G.5.3.4.2	Transformers with basic insulation only		N/A
G.5.3.4.3	Transformers with double insulation or reinforced insulation		N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core		N/A
G.5.3.4.5	Thermal cycling test and compliance		N/A
G.5.3.4.6	Partial discharge test		N/A
G.5.3.4.7	Routine test		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.5.4	Motors		P
G.5.4.1	General requirements	DC Fan used (See appended table 4.1.2)	P
G.5.4.2	Motor overload test conditions		P
G.5.4.3	Running overload test		N/A
G.5.4.4.2	Locked-rotor overload test		N/A
	Test duration (days)		—
G.5.4.5	Running overload test for DC motors		N/A
G.5.4.5.2	Tested in the unit		N/A
G.5.4.5.3	Alternative method		N/A
G.5.4.6	Locked-rotor overload test for DC motors		P
G.5.4.6.2	Tested in the unit	(See appended table B.3, B.4)	P
	Maximum Temperature	Maximum temperatures of windings did not exceed the limits given in Table G.3.	P
G.5.4.6.3	Alternative method		N/A
G.5.4.7	Motors with capacitors		N/A
G.5.4.8	Three-phase motors		N/A
G.5.4.9	Series motors		N/A
	Operating voltage		—
G.6	Wire Insulation		P
G.6.1	General		P
G.6.2	Enamelled winding wire insulation		N/A
G.7	Mains supply cords		N/A
G.7.1	General requirements		N/A
	Type		—
G.7.2	Cross sectional area (mm ² or AWG)		N/A
G.7.3	Cord anchorages and strain relief for non-detachable power supply cords		N/A
G.7.3.2	Cord strain relief		N/A
G.7.3.2.1	Requirements		N/A
	Strain relief test force (N)		N/A
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm)		N/A
G.7.3.2.4	Strain relief and cord anchorage material		N/A
G.7.4	Cord Entry		N/A
G.7.5	Non-detachable cord bend protection		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.7.5.1	Requirements		N/A
G.7.5.2	Test method and compliance		N/A
	Overall diameter or minor overall dimension, D (mm).....:		—
	Radius of curvature after test (mm)		—
G.7.6	Supply wiring space		N/A
G.7.6.1	General requirements		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Requirements		N/A
G.7.6.2.2	Test with 8 mm strand		N/A
G.8	Varistors		P
G.8.1	General requirements	Approved varistor used (See appended table 4.1.2)	P
G.8.2	Safeguards against fire		N/A
G.8.2.1	General	The varistor located more than 13mm from plastic enclosure	N/A
G.8.2.2	Varistor overload test		N/A
G.8.2.3	Temporary overvoltage test		N/A
G.9	Integrated circuit (IC) current limiters		N/A
G.9.1	Requirements		N/A
	IC limiter output current (max. 5A)		—
	Manufacturers' defined drift		—
G.9.2	Test Program		N/A
G.9.3	Compliance		N/A
G.10	Resistors		N/A
G.10.1	General		N/A
G.10.2	Conditioning		N/A
G.10.3	Resistor test		N/A
G.10.4	Voltage surge test		N/A
G.10.5	Impulse test		N/A
G.10.6	Overload test		N/A
G.11	Capacitors and RC units		P
G.11.1	General requirements	Approved Y1 capacitors and X2 capacitors used. (See appended table 4.1.2)	P
G.11.2	Conditioning of capacitors and RC units		P
G.11.3	Rules for selecting capacitors		P

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Clause	Requirement + Test	Result - Remark	Verdict

G.12	Optocouplers		P
	Optocouplers comply with IEC 60747-5-5 with specifics	Approved optocoupler used (See appended table 4.1.2)	P
	Type test voltage $V_{ini,a}$	(See appended table 4.1.2)	—
	Routine test voltage, $V_{ini,b}$	(See appended table 4.1.2)	—
G.13	Printed boards		P
G.13.1	General requirements		P
G.13.2	Uncoated printed boards		P
G.13.3	Coated printed boards		N/A
G.13.4	Insulation between conductors on the same inner surface		N/A
G.13.5	Insulation between conductors on different surfaces		N/A
	Distance through insulation.....		N/A
	Number of insulation layers (pcs)		—
G.13.6	Tests on coated printed boards		N/A
G.13.6.1	Sample preparation and preliminary inspection		N/A
G.13.6.2	Test method and compliance		N/A
G.14	Coating on components terminals		N/A
G.14.1	Requirements		N/A
G.15	Pressurized liquid filled components		N/A
G.15.1	Requirements		N/A
G.15.2	Test methods and compliance		N/A
G.15.2.1	Hydrostatic pressure test		N/A
G.15.2.2	Creep resistance test		N/A
G.15.2.3	Tubing and fittings compatibility test		N/A
G.15.2.4	Vibration test		N/A
G.15.2.5	Thermal cycling test		N/A
G.15.2.6	Force test		N/A
G.15.3	Compliance		N/A
G.16	IC including capacitor discharge function (ICX)		P
G.16.1	Condition for fault tested is not required	Approved ICX used (See appended table 4.1.2)	N/A
	ICX with associated circuitry tested in equipment		N/A
	ICX tested separately		N/A
G.16.2	Tests		N/A
	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test		—

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Clause	Requirement + Test		Verdict
	Mains voltage that impulses to be superimposed on		—
	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test		—
G.16.3	Capacitor discharge test		N/A
H	CRITERIA FOR TELEPHONE RINGING SIGNALS		N/A
H.1	General		N/A
H.2	Method A		N/A
H.3	Method B		N/A
H.3.1	Ringing signal		N/A
H.3.1.1	Frequency (Hz)		—
H.3.1.2	Voltage (V)		—
H.3.1.3	Cadence; time (s) and voltage (V)		—
H.3.1.4	Single fault current (mA):		—
H.3.2	Tripping device and monitoring voltage		N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V)		N/A
J	INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION		P
J.1	General		P
	Winding wire insulation	Approved TIW used in transformer TH1	—
	Solid round winding wire, diameter (mm)		N/A
	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm ²)		N/A
J.2/J.3	Tests and Manufacturing		—
K	SAFETY INTERLOCKS		N/A
K.1	General requirements		N/A
	Instructional safeguard		N/A
K.2	Components of safety interlock safeguard mechanism		N/A
K.3	Inadvertent change of operating mode		N/A
K.4	Interlock safeguard override		N/A
K.5	Fail-safe		N/A
K.5.1	Under single fault condition		N/A
K.6	Mechanically operated safety interlocks		N/A
K.6.1	Endurance requirement		N/A
K.6.2	Test method and compliance		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements		N/A
	In circuit connected to mains, separation distance for contact gaps (mm)		N/A
	In circuit isolated from mains, separation distance for contact gaps (mm)		N/A
	Electric strength test before and after the test of K.7.2.....		N/A
K.7.2	Overload test, Current (A)		N/A
K.7.3	Endurance test		N/A
K.7.4	Electric strength test		N/A
L	DISCONNECT DEVICES		P
L.1	General requirements	The mains plug used as disconnect device	P
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized		N/A
L.4	Single-phase equipment	The mains plug disconnect both poles simultaneously	P
L.5	Three-phase equipment		N/A
L.6	Switches as disconnect devices		N/A
L.7	Plugs as disconnect devices		N/A
L.8	Multiple power sources		N/A
	Instructional safeguard.....		N/A
M	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS		P
M.1	General requirements		P
M.2	Safety of batteries and their cells		N/A
M.2.1	Batteries and their cells comply with relevant IEC standards		N/A
M.3	Protection circuits for batteries provided within the equipment	2pcs AAA batteries used in remote controller	P
M.3.1	Requirements		P
M.3.2	Test method		P
	Overcharging of a rechargeable battery		N/A
	Excessive discharging		P
	Unintentional charging of a non-rechargeable battery		P
	Reverse charging of a rechargeable battery		N/A
M.3.3	Compliance	(See appended table M.3)	P
M.4	Additional safeguards for equipment containing a portable secondary lithium battery		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

M.4.1	General		N/A
M.4.2	Charging safeguards		N/A
M.4.2.1	Requirements		N/A
M.4.2.2	Compliance		N/A
M.4.3	Fire enclosure		N/A
M.4.4	Drop test of equipment containing a secondary lithium battery		N/A
M.4.4.2	Preparation and procedure for the drop test		N/A
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%):		N/A
M.4.4.4	Check of the charge/discharge function		N/A
M.4.4.5	Charge / discharge cycle test		N/A
M.4.4.6	Compliance		N/A
M.5	Risk of burn due to short-circuit during carrying		N/A
M.5.1	Requirement		N/A
M.5.2	Test method and compliance		N/A
M.6	Safeguards against short-circuits		N/A
M.6.1	External and internal faults		N/A
M.6.2	Compliance		N/A
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration	Not such battery	N/A
	Calculated hydrogen generation rate		N/A
M.7.2	Test method and compliance		N/A
	Minimum air flow rate, Q (m ³ /h)		N/A
M.7.3	Ventilation tests		N/A
M.7.3.1	General		N/A
M.7.3.2	Ventilation test – alternative 1		N/A
	Hydrogen gas concentration (%)		N/A
M.7.3.3	Ventilation test – alternative 2		N/A
	Obtained hydrogen generation rate		N/A
M.7.3.4	Ventilation test – alternative 3		N/A
	Hydrogen gas concentration (%)		N/A
M.7.4	Marking		N/A
M.8	Protection against internal ignition from external spark sources of batteries with aqueous electrolyte		N/A
M.8.1	General		N/A
M.8.2	Test method		N/A

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Clause	Requirement + Test		Verdict
M.8.2.1	General		N/A
M.8.2.2	Estimation of hypothetical volume V_2 (m³/s)		—
M.8.2.3	Correction factors.....		—
M.8.2.4	Calculation of distance d (mm)		—
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage		N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse		P
	Instructional safeguard.....	Relevant warnings were mentioned in user manual	P
N	ELECTROCHEMICAL POTENTIALS		P
	Material(s) used	Considered	—
O	MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES		P
	Value of X (mm)	Considered	—
P	SAFEGUARDS AGAINST CONDUCTIVE OBJECTS		P
P.1	General	See P.2.2	P
P.2	Safeguards against entry or consequences of entry of a foreign object		P
P.2.1	General		P
P.2.2	Safeguards against entry of a foreign object		N/A
	Location and Dimensions (mm)		—
P.2.3	Safeguards against the consequences of entry of a foreign object	The openings are not located vertically or by a 5° vertical projection above bare conductive parts of a safeguard or PIS or bare conductive parts of ES3 or PS3 circuits.	P
P.2.3.1	Safeguard requirements		N/A
	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment		N/A
	Transportable equipment with metalized plastic parts		N/A
P.2.3.2	Consequence of entry test		N/A
P.3	Safeguards against spillage of internal liquids		N/A
P.3.1	General		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Compliance		N/A
P.4	Metallized coatings and adhesives securing parts		N/A

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Clause	Requirement + Test		Verdict
P.4.1	General		N/A
P.4.2	Tests		N/A
	Conditioning, T _C (°C).....:		—
	Duration (weeks).....:		—
Q	CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING		P
Q.1	Limited power sources		P
Q.1.1	Requirements		P
	a) Inherently limited output		N/A
	b) Impedance limited output		N/A
	c) Regulating network limited output	(See appended table Q.1)	P
	d) Overcurrent protective device limited output		N/A
	e) IC current limiter complying with G.9		N/A
Q.1.2	Test method and compliance.....:	(See appended table Q.1)	P
	Current rating of overcurrent protective device (A):		N/A
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A)		N/A
	Current limiting method.....:		—
R	LIMITED SHORT CIRCUIT TEST		N/A
R.1	General		N/A
R.2	Test setup		N/A
	Overcurrent protective device for test.....:		—
R.3	Test method		N/A
	Cord/cable used for test.....:		—
R.4	Compliance		N/A
S	TESTS FOR RESISTANCE TO HEAT AND FIRE		N/A
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W		N/A
	Samples, material		—
	Wall thickness (mm).....:		—
	Conditioning (°C).....:		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	- Material not consumed completely		N/A
	- Material extinguishes within 30s		N/A
	- No burning of layer or wrapping tissue		N/A
S.2	Flammability test for fire enclosure and fire barrier integrity		N/A

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Clause	Requirement + Test		Verdict
	Samples, material		—
	Wall thickness (mm).....		—
	Conditioning (°C).....		—
S.3	Flammability test for the bottom of a fire enclosure		N/A
S.3.1	Mounting of samples		N/A
S.3.2	Test method and compliance		N/A
	Mounting of samples		—
	Wall thickness (mm).....		—
S.4	Flammability classification of materials		N/A
S.5	Flammability test for fire enclosure materials of equipment with a steady state power exceeding 4 000 W		N/A
	Samples, material		—
	Wall thickness (mm).....		—
	Conditioning (°C).....		—
T	MECHANICAL STRENGTH TESTS		P
T.1	General		P
T.2	Steady force test, 10 N	(See appended table T.2)	P
T.3	Steady force test, 30 N		N/A
T.4	Steady force test, 100 N		N/A
T.5	Steady force test, 250 N	(See appended table T.5)	P
T.6	Enclosure impact test	(See appended table T.6)	P
	Fall test		P
	Swing test		P
T.7	Drop test		N/A
T.8	Stress relief test	(See appended table T.8)	P
T.9	Glass Impact Test.....		N/A
T.10	Glass fragmentation test		N/A
	Number of particles counted		N/A
T.11	Test for telescoping or rod antennas		N/A
	Torque value (Nm)		N/A
U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		N/A
U.1	General		N/A
	Instructional safeguard :		N/A
U.2	Test method and compliance for non-intrinsically protected CRTs		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

U.3	Protective screen		N/A
V	DETERMINATION OF ACCESSIBLE PARTS		P
V.1	Accessible parts of equipment		P
V.1.1	General		P
V.1.2	Surfaces and openings tested with jointed test probes		P
V.1.3	Openings tested with straight unjointed test probes		P
V.1.4	Plugs, jacks, connectors tested with blunt probe		N/A
V.1.5	Slot openings tested with wedge probe		N/A
V.1.6	Terminals tested with rigid test wire		N/A
V.2	Accessible part criterion		P
X	ALTERNATIVE METHOD FOR DETERMINING CLEARANCES FOR INSULATION IN CIRCUITS CONNECTED TO AN AC MAINS NOT EXCEEDING 420 V PEAK (300 V RMS)		N/A
	Clearance		N/A
Y	CONSTRUCTION REQUIREMENTS FOR OUTDOOR ENCLOSURES		N/A
Y.1	General	Indoor equipment.	N/A
Y.2	Resistance to UV radiation		N/A
Y.3	Resistance to corrosion		N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by		N/A
Y.3.2	Test apparatus		N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere		N/A
Y.3.4	Test procedure		N/A
Y.3.5	Compliance		N/A
Y.4	Gaskets		N/A
Y.4.1	General		N/A
Y.4.2	Gasket tests		N/A
Y.4.3	Tensile strength and elongation tests		N/A
	Alternative test methods		N/A
Y.4.4	Compression test		N/A
Y.4.5	Oil resistance		N/A
Y.4.6	Securing means		N/A
Y.5	Protection of equipment within an outdoor enclosure		N/A
Y.5.1	General		N/A
Y.5.2	Protection from moisture		N/A
	Relevant tests of IEC 60529 or Y.5.3.....		N/A
Y.5.3	Water spray test		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

Y.5.4	Protection from plants and vermin		N/A
Y.5.5	Protection from excessive dust		N/A
Y.5.5.1	General		N/A
Y.5.5.2	IP5X equipment		N/A
Y.5.5.3	IP6X equipment		N/A
Y.6	Mechanical strength of enclosures		N/A
Y.6.1	General		N/A
Y.6.2	Impact test		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 62368-1:2018 JAPAN NATIONAL DIFFERENCES Audio/video, information and communication technology equipment – Part 1: Safety requirements			
Differences according to: J62368-1(2023)			
TRF template used:: IEC EE OD-2020-F3:2022, Ed. 1.2			
Attachment Form No.: JP_ND_IEC62368_1E			
Attachment Originator.....: UL Solutions (JP)			
Master Attachment: Dated 2023-05-12			
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	National Differences		
4.1.2	Where the component, or a characteristic of a component, is a safeguard or a part of a safeguard, components shall comply with the requirements of this document or, where specified in a requirements clause, with the safety aspects of the relevant JIS component standards or IEC component standards, or components shall have properties equivalent to or better than these.	Complied	P
5.6.1	Mains socket-outlet and interconnection coupler shall comply with Clause G.4.2A if they are incorporated as part of the equipment.		N/A
5.6.2.1	Connection for protective conductor of class 0I equipment provided with instructional safeguard in accordance with Clause F.3.6.1A is considered to make earlier and break later than supply connection. Mains plug having a lead wire for protective earthing connection of class 0I equipment shall comply with all of the following: – Not to be used for equipment having a rated voltage of 150 V or more – Clip is not used for the earthing connection of the lead wire. – The lead wire for earthing is at least 10 cm long If class 0I equipment provides an independent main protective earthing terminal and is intended to be installed by ordinary person, earthing wire shall be provided in the package of the equipment.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.6.2.2	Internal earthing conductor of the cord set that is covered by the sheath of mains cord and is formed together with mains plug and appliance connector need not be green-and-yellow.		N/A
5.6.3	In case of class 0I equipment using power supply cord having two conductors (no earthing conductor), the conductor of protective earthing lead wire shall comply with either of the following: – use of annealed copper wire with 1.6 mm diameter or corrosion-inhibiting metal wire having size and strength that are equivalent to or more than the above copper wire – single core cord or single core cable with 1.25 mm ² or more cross-sectional area		N/A
5.7.3	For class 0I equipment that is provided with mains socket-outlet in the configuration as specified in JIS C 8282 series, JIS C 8300 or JIS C 8303, or that is provided with mains appliance outlet as specified in JIS C 8283 series for the purpose of interconnection, the measurement is conducted on the system of the interconnected equipment having a single connection to the mains.		N/A
5.7.5	In case of class 0I equipment, touch current shall not exceed 1.41 mA peak or for sinusoidal wave, 1.0 mA r.m.s. when measured using the network specified in Figure 4 of IEC 60990:2016.		N/A
6.4.3.2	A fuse complying with JIS C 6575 series or a fuse having equivalent characteristics shall open within 1 s. A fuse having time/current characteristics other than those specified in IEC 60127 shall be tested with the characteristics taken into account. In case of Class A fuse of JIS C 6575, replace “2.1 times” by “1.35 times” and in case of Class B fuse of JIS C 6575, replace “2.1 times” by “1.6 times”.		P
8.5.4.3.1	Only three-phase stationary equipment rated more than AC 200 V can be considered as being for use in locations where children are not likely to be present, when complying with Clause F.4.		N/A
8.5.4.3.2	For equipment installed where children may be present, an instructional safeguard shall be provided by easily understandable wording in accordance with Clause F.5, except that element 3 is optional.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.4.3.4	The media destruction device is tested according to Clause V.1.2 with applicable jointed test probes to the opening. And then the wedge probe per Figure V.4 shall not contact any moving part.		N/A
8.5.4.3.5	The wedge probe of Figure V.4 and applicable jointed test probes specified in Clause V.1.2 shall not contact any moving part. Instructional safeguard shall not be used instead of equipment safeguard for preventing access to hazardous moving parts.		N/A
F.3.5.1	When the mains socket-outlet is configured in accordance with JIS C 8282 series, JIS C 8300 or JIS C 8303, the assigned current or power shall be marked. If the voltage of the socket-outlet is the same as the mains voltage, the voltage need not be marked. Instructional safeguard of Class 0I equipment shall be provided with an instructional safeguard in accordance with Clause F.5 when a mains socket-outlet as specified in JIS C 8282 series, JIS C 8300 or JIS C 8303 to which class I equipment can be connected is provided in accordance with Clause G.4.2A except for the cases where the socket-outlet is accessible only to skilled persons.		N/A
F.3.5.3	If the fuse is necessary for the safeguard function, the symbols indicating pre-arcing time-current characteristic shall be included.		P
F.3.6.1A	Marking for class 0I equipment The requirements of Clauses F.3.6.1.1 and F.3.6.1.2 shall be applied to class 0I equipment. For class 0I equipment, a marking of instructions shall be provided regarding the earthing connection. In addition to the above, for class 0I equipment, an instruction to connect earthing before and disconnect earthing after the connection of supply conductors shall be marked on the visible place of the main body or shall be in the text of an accompanying document.		N/A
F.3.6.2	Symbols, IEC 60417-5172 (2003-02) or IEC 60417-6092 (2011-10), shall not be used for class I equipment or class 0I equipment.		P

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Clause	Requirement + Test	Result - Remark	Verdict
F.3.8A	Attention marking for aging deterioration of CRT television Year of manufacture, standard usage period by design according to JIS C 9921-5 and cautionary statement for possible risks of aging deterioration when used beyond the specified period shall be marked on CRT television except for industrial use CRT television.		N/A
F.4	For audio equipment with terminals classified as ES3 in accordance with Table E.1, and for other equipment with terminals marked in accordance with F.3.6.1 and F.3.6.1A, the instructions shall require that the external wiring connected to these terminals shall be installed by a skilled person, or shall be connected by means of ready-made leads or cords that are constructed in a way that would prevent contact with any ES3 circuit. For class 0I equipment provided with independent main protective earthing terminal, where the cord for the protective earthing connection is not provided in the package of the equipment, if the protective earthing connection is made by instructed person or skilled person, the suitable installation instruction for the protective earthing connection shall be provided.		N/A
G.3.2.1	The thermal link when tested as a separate component, shall comply with the requirements of JIS C 6691 or have properties equivalent to or better than that.		N/A
G.3.4	Except for devices covered by Clause G.3.5, overcurrent protective devices used as a safeguard shall comply with the applicable JIS or IEC standard in accordance with 4.1.2 or shall have equivalent or better properties. Such a protective device shall have adequate breaking (rupturing) capacity to interrupt the maximum fault current (including short-circuit current) that can flow.		P
G.4.1	This requirement does not apply to connectors covered in Clauses G.4.2 and G.4.2A.		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
G.4.2	Mains connectors, mains plugs and socket-outlets shall comply with JIS C 8283 series, JIS C 8285, IEC 60309 series, JIS C 8282 series, JIS C 8300, JIS C 8303, or have equivalent or better properties. A power supply cord set provided with appliance connector that can fit appliance inlet complying with JIS C 8283-1 shall comply with JIS C 8286. Construction shall prevent mechanical stress not to transmit to the soldering part of appliance inlet terminal. When an equipment is rated not more than 125 V and all of the following are met, Type C14 and C18 appliance inlet complying with JIS C 8283-3 can be considered as rated 15 A. – The temperature of appliance inlet does not exceed the value specified in JIS C 8283-1 under the most unfavourable normal operating condition as specified in Clause B.2.1. – "Use only designated cord set attached in this equipment" or equivalent text is described in the operating instruction. If the cord set is not provided in the package of the equipment, suitable information regarding to the cord set is described in the operating instruction.		N/A
G.4.2A	Mains socket-outlet and interconnection coupler provided with the class II, class I and class 0I equipment respectively		N/A
G.7.1	A mains supply cord need not include the protective earthing conductor for class 0I equipment provided with independent protective earthing conductor.		N/A
G.7.2 Table G.7	Cross-sectional area of equipment rated up to and including 3 A shall be 0.75 mm ² .		N/A
G.7.6.1 Table G.9	The cross-sectional area of mains cords according to JIS C 3010 may comply with relevant Japanese wiring regulation. For cables other than those complying with JIS C 3662 series or JIS C 3663 series, the terminals shall be suitable for the size of the intended cables.		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict

APPENDIX	J3000 (H25) Special National conditions, National deviation and other information according to MITI Ordinance No. 85.		--
1	General requirement When equipment provides with appliance inlet complying with JIS C 8283-1 (2008), soldered parts of appliance inlet is not applied by force during insert or removal of connector. This is not applied when inlet body is fixed itself and not fixed by solder.		P
2	Requirement for equipment		N/A
2.1	Electric heater, and the matches that are connected in parallel to power regulation diode, and that there is no abnormality in a state of being opened diode 1. Compliance is checked by the following.		N/A
	- Diode 1 has a rated capacity of more than the current of the main circuit, a diode which are connected in parallel, that this is the same specifications.		N/A
	- When subjected to a temperature rise test as specified in 11 JIS C 9335-2-30 (2006) and uncoupled one of the diode connected in parallel, to conform thereto. "		N/A
	In and an electric heating device, it can be in one that is connected in parallel rectifier connected to the power supply to adjust the power consumption, and that there is no abnormality in a state where the rectifier 1 is opened. Compliance is checked by the following.		N/A
	- Rectifier 1 has a rated capacity of more than the current of the main circuit, rectifiers connected in parallel, that this is the same specifications.		N/A
	- The Addition 11. JIS C 9335-1 (2003), when subjected to temperature rise test specified in the individual requirements of the application, can be adapted to this in uncoupled one of the rectifier connected in parallel. "		N/A
2.2	Electronic heater with glowing heating elements		N/A
	Surface treatment by paint or adhesive on protective frame or protective mesh shall not be used.		N/A
	Caution marking like below shall be on -easily visible place of the equipment or -Instruction manual		N/A
3	Components used in equipment		N/A

IEC 62368-1			
Clause	Requirement + Test	Result - Remark	Verdict
3.1	To be used for electric freezer Electric Cooling machines, electric washing machine, or electric refrigerator "		N/A
	To be used for electricity Freezer hood, electric fan, electric cooling machines, electric washing machine, or electric refrigerator		N/A
	Due to malfunction of the capacitor, which are housed to prevent the spread of flame or melt, the outer shell of metal or ceramic. However, the shell, there may be openings for connecting wires to the motor capacitor.		N/A
	Due to malfunction of the capacitor, which are housed to prevent nucleic acid melt or flame, the outer metal or ceramic. However, the shell, there may be openings for connecting wires to the motor capacitor.		N/A
	In this case, the expression "are housed in a ceramic shell or metal" is housed case ceramic (inner shell) metal or prevent the diffusion of the melt flame or means of the shell except the capacitor touches the test finger even if there to within 50mm of the capacitor is non-metallic section that refers to, housed along with capacitor not specified JIS C 4908 (2007) in the case of metal or ceramic thereof, and the melt or flame shall be deemed to prevent it from spreading.		N/A
	No non-metallic materials within 50 mm from capacitor surface		N/A
	Non-metallic material with 50 mm from capacitor surface comply with needle frame test of JIS 9335-1(2003), Annex E		N/A
	Non-metallic material with 50 mm from capacitor surface comply with V-1 test of JIS C 60965-11-10(2006)		N/A
3.2	Plug directly inserted to outlet used refrigerator or electric freezer. Shall comply with - Face contact with outlet shall have CTI with more than 400 according to JIS C 2134(2007) or - Supporting material of blades shall comply with glow wire test by temperature of 750oC according to JIS C 60695-2-11(2004) or JIS C 60695-2-12(2004). Materials having glow wire frame temperature of 775oC are acceptable.		N/A

5.2	TABLE: Classification of electrical energy sources						P
Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters				ES Class
			U (V)	I (mA)	Type ¹⁾	Additional Info ²⁾	
264V~ 60Hz	All primary circuits	Normal	--	--	--	--	ES3 (declared)
		Abnormal	--	--	--	--	
		Single fault – SC/OC	--	--	--	--	
264V~ 60Hz	Transformer (TH1) secondary pins	Normal	--	--	--	--	ES3 (declared)
		Abnormal: Overload	--	--	--	--	
		Single fault: R6 SC	--	--	--	--	
264V~ 60Hz	TH1 pin 7,8 (11,12) - 9,10 (after DH1, DH2)	Normal	49.18VDC	--	SS	--	ES1
		Abnormal	--	--	--	--	
		Single fault: DH1 SC	0	--	SS	--	
264V~ 60Hz	USB3.0 port output “+” to “-”	Normal	5.07VDC	--	SS	--	ES1
		Abnormal	--	--	--	--	
		Single fault: UU2 pin 1-6 SC	5.07VDC	--	SS	--	
		Single fault: RU19 SC	5.07VDC	--	SS	--	
264V~ 60Hz	USB2.0 port output “+” to “-”	Normal	5.00VDC	--	SS	--	ES1
		Abnormal	--	--	--	--	
		Single fault: QMS2 pin D-S (bypass FU2) SC	5.00VDC	--	SS	--	
Supplementary information:							
Abbreviation: SC=Short Circuit, OC=Open Circuit							
1) Type: Steady state (SS), Capacitance (CP), Single pulse (SP), Repetitive pulses (RP), etc.							
2) Additional Info: Frequency, Pulse duration, Pulse off time, Capacitance value, etc.							
3) Models XR06B and XR03B were considered and recorded the worst result.							

5.4.1.8	TABLE: Working voltage measurement				P
Location	RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Comments	
TH1 pin 1-7,8	204	404	51.3	--	
TH1 pin 1-9,10	234	458	51.3	--	
TH1 pin 1-11,12	278	512	51.3	Max. VRMS & Vpeak	
TH1 pin 2-7,8	182	348	51.3	--	

TH1 pin 2-9,10	166	292	51.3	--
TH1 pin 2-11,12	165	312	51.3	--
TH1 pin 4-7,8	177	375	51.3	--
TH1 pin 4-9,10	174	377	51.3	--
TH1 pin 4-11,12	188	428	51.3	--
TH1 pin 5-7,8	180	418	51.3	--
TH1 pin 5-9,10	174	368	51.3	--
TH1 pin 5-11,12	180	404	51.3	--
TH1 pin 6-7,8	189	436	51.3	--
TH1 pin 6-9,10	175	384	51.3	--
TH1 pin 6-11,12	176	384	51.3	--
Optocoupler primary to secondary (PH1) (Max.)	212	362	0.06	--
CY4 primary to secondary	172	362	0.06	--
CY1 primary to earth	106	197	0.06	--
CY2 primary to earth	121	220	0.06	--
Supplementary information:				
Test voltage / frequency: 240V~ / 60Hz				
Tested at model XR06B.				

5.4.1.10.2	TABLE: Vicat softening temperature of thermoplastics			N/A
Method.....:		ISO 306 / B50		—
Object/ Part No./Material	Manufacturer/trademark	Thickness (mm)	T softening (°C)	
--	--	--	--	
Supplementary information:				
--				

5.4.1.10.3	TABLE: Ball pressure test of thermoplastics				P
Allowed impression diameter (mm).....:			≤ 2 mm		—
Object/Part No./Material	Manufacturer/trademark	Thickness (mm)	Test temperature (°C)	Impression diameter (mm)	
AC connector (CON1)	1)	Min. 2.5	125	Max. 1.2	
Supplementary information:					
1). Each source of enclosure in table 4.1.2 was applied and passed the relevant tests. The material of the transformer's bobbin is phenolic, no test is required.					

5.4.2, 5.4.3	TABLE: Minimum Clearances/Creepage distance							P
Clearance (cl) and creepage distance (cr) at/of/between:	U _p (V)	U _{rms} (V)	Freq ¹⁾ (Hz)	Required cl (mm)	cl (mm)	E.S. ²⁾ (V)	Required cr (mm)	cr (mm)

L to N before fuse F1 (BI)	340	240	<30	2.3	4.4	--	2.4	4.4
Across fuse F1(BI)	340	240	<30	2.3	9.2	--	2.4	9.2
L trace before fuse to primary trace (BI)	340	240	<30	2.3	4.4	--	2.4	4.4
Primary trace/components to earthed metal cover (BI)	340	240	<30	2.3	3.3	--	2.4	6.9
Across Y-cap CY1, CY2 (BI)	340	240	<30	2.3	7.1	--	2.4	7.1
Across Y-cap CY4 (BI)	362	240	<30	2.3	7.6	--	2.4	7.6
Across optocoupler (PH1)	362	240	<30	2.3	7.6	--	2.4	7.6
Primary trace to secondary trace under transformer TH1 (RI)	512	278	*	4.5	7.6	--	5.6	7.6
TH1: core to primary windings/pins (RI)	512	278	*	4.5	7.1	--	5.6	7.1
TH1 core to around primary components (RI)	512	278	*	4.5	8.0	--	5.6	8.0
TH1: Primary windings/pins to secondary windings (RI)	512	278	*	4.5	7.1	--	5.6	7.1
Primary live parts to secondary components/wires (RI)	340	240	<30	4.5	>5.9	--	4.8	>6.3
Primary live parts to accessible surface (RI)	340	240	<30	4.5	>5.9	--	4.8	>6.3

Supplementary information:

- 1) Only for frequency above 30 kHz
- 2) Complete Electric Strength voltage (E.S. (V) when 5.4.2.4 applied)
 1. * means the frequency above and below 30kHz.
 2. Provide Material Group IIIb;
 3. BI: basic insulation; SI: supplementary insulation; DI: double insulation; RI: reinforced insulation;
 4. The core of transformer (TH1) was considered as secondary part.
 5. At least two layers insulation tape was wrapped on bottom core of transformer TH1, used as reinforced insulation.
 6. The insulation sheet under/above the power supply board used as basic insulation.
 7. Heat shrinkable tube used on L/N lead wire as basic insulation and secondary lead wires of power supply board as supplementary insulation.
 8. Glue used to fix between CY1 and CY2.
 9. Limit from Table 14 based on the required withstand voltage (2500Vpeak), which is higher than Table 10 and Table 11.
 10. Unit was evaluated for altitude up to 5000m above sea level correction factor for clearance is 1.48.
 11. Both models XR06B and XR03B were considered and recorded the worst result.

5.4.4.2	TABLE: Minimum distance through insulation				P
Distance through insulation (DTI) at/of	Peak voltage (V)	Insulation	Required DTI (mm)	Measured DTI (mm)	
Plastic enclosure	340	Reinforced	0.4	Min. 1.50	
Bobbin of TH1	512	Reinforced	0.4	Min. 0.71	
*Optocoupler (PH1)	362	Reinforced	0.4	Min. 0.40	
*Heat shrinkable tube (used on secondary lead wires of power supply board)	340	Supplementary	0.4	Min. 0.40	
Supplementary information:					
* means that the tests were evaluation on all alternative sources, with the same results.					

5.4.4.9	TABLE: Solid insulation at frequencies >30 kHz					P
Insulation material	E_p	Frequency (kHz)	K_R	Thickness d (mm)	Insulation	V_{PW} (Vpk)
Transformer TH1 bobbin	--	51.3	0.39	0.71	Reinforced	512
Supplementary information:						
As an alternative method, the electric strength test according to 5.4.9.1 was applied, see appended table 5.4.9.						

5.4.9	TABLE: Electric strength tests			P
Test voltage applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No	
L and N before fuse (F1 disconnected)	DC	2500	No	
L/N to earthing metal parts	DC	2500	No	
*Heat shrinkable tube (wrapped on L/N lead wires and secondary lead wires of power supply board)	DC	2500	No	
*Insulation sheet under/above power board	DC	2500	No	
L/N to plastic enclosure with metal foil	DC	4000	No	
L/N to secondary unearthed terminals	DC	4000	No	
Transformer TH1: core to primary windings/pins	DC	4000	No	
Transformer TH1: primary windings to secondary windings	DC	4000	No	
*Each layer of two layers insulation tape (used in TH1)	DC	4000	No	
Supplementary information:				
1. All the electric strength tests were conducted after humidity conditioning which comply to clause 5.4.8.				
2. * means that the tests were evaluation on all alternative sources, with the same results.				
3. Both models XR06B and XR03B were considered and recorded the worst result.				

5.5.2.2	TABLE: Stored discharge on capacitors	P
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Location	Supply voltage (V)	Operating and fault condition ¹⁾	Switch position	Measured voltage (Vpk)	ES Class
Phase to Neutral	264	Normal operation	--	8	ES1
Phase to Earth	264	Normal operation	--	4	ES1
Neutral to Earth	264	Normal operation	--	4	ES1
Phase to Neutral	264	RP14 OC	--	12	ES1
Supplementary information:					
X-capacitors installed for testing: CX1=CX2=0.68μF					
☒ Bleeding resistor rating: RP5= RP7= 10MΩ					
☒ ICX: U1					
A. Test Location:					
Phase to Neutral; Phase to Phase; Phase to Earth; and/or Neutral to Earth					
B. Operating condition abbreviations:					
N – Normal operating condition (e.g., normal operation, or open fuse); S –Single fault condition					

5.6.6	TABLE: Resistance of protective conductors and terminations				P
Location	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)	
Earth pin of AC inlet to earthed metal parts	40	2	0.20	0.005	
Earth pin of AC inlet to earthed metal parts	32	2	0.16	0.005	
Supplementary information:					
Both models XR06B and XR03B were considered and recorded the worst result.					

5.7.4	TABLE: Unearthed accessible parts					P
Location	Operating and fault conditions	Supply Voltage (V)	Parameters			ES class
			Voltage (V _{rms} or V _{pk})	Current (A _{rms} or A _{pk})	Freq. (Hz)	
Accessible plastic enclosure with metal foil and either pole of the supply source	Normal Condition	264	--	0.08mA _{pk}	60	ES1
	Abnormal Condition:	--	--	--	--	--
	Fault Condition: SCCP6 (Fuse opened)	264	--	0.14mA _{pk}	60	ES1
	Fault Condition: Earth opened	264	--	0.09mA _{pk}	60	ES1
Secondary unearthed terminals and either pole of the supply source	Normal	264	--	0.11mA _{pk}	60	ES1
	Abnormal	--	--	--	--	--
	Fault Condition: SCCP6 (Fuse opened)	264	--	0.19mA _{pk}	60	ES1
	Fault Condition:	264	--	0.16A _{pk}	60	ES1

	Earth opened				
Supplementary information:					
Both models XR06B and XR03B were considered and recorded the worst result.					

5.7.5	TABLE: Earthed accessible conductive part			P
Supply voltage (V).....:	264Vac/60Hz			—
Phase(s)	[X] Single Phase; [] Three Phase: [] Delta [] Wye			
Power Distribution System	[X] TN [X]TT [] IT			
Location	Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Comment	
Measured to protective earthing terminal	1 (Earth opened)	0.33mA _{pk}	--	
	1 (Neutral opened)	0.26mA _{pk}	--	
Supplementary Information:				
Both models XR06B and XR03B were considered and recorded the worst result.				

5.8	TABLE: Backfeed safeguard in battery backed up supplies					N/A
Location	Supply voltage (V)	Operating and fault condition	Time (s)	Open-circuit voltage (V)	Touch current (A)	ES Class
--	--	--	--	--	--	--
Supplementary information:						
--						

6.2.2	TABLE: Power source circuit classifications					P
Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class
All internal circuits/ components except for DC Fans, USB2.0/USB3.0 ports output, speaker	Normal, abnormal and fault condition	--	--	--	--	PS3 (declared)
Batteries output (used in remote controller)*	Normal	1.40	1.10	1.54	>3s	PS1
USB2.0 port output	Normal	4.83	2.0	9.66	>3s	PS1
	Single fault: QMS2 pin D-S (bypass FU2) SC	4.83	2.0	9.66	>3s	PS1
USB3.0 port output	Normal	4.82	2.2	10.60	>3s	PS1
	Single fault: UU2 pin 1-6 SC	4.82	2.2	10.60	>3s	PS1

	Single fault: RU16 SC	4.82	2.2	10.60	>3s	PS1
Supply of DC Fan for model XR06B	Normal	10.34	5.0	51.70	>5s	PS2
	Single fault: RX4 SC	10.34	5.0	51.70	>5s	PS2
Supply of DC Fan 1 for model XR03B	Normal	10.16	6.0	60.96	>5s	PS2
	Single fault: RX4 SC	10.16	6.0	60.96	>5s	PS2
Supply of DC Fan 2 for model XR03B	Normal	10.44	4.5	46.98	>5s	PS2
	Single fault: RX4 SC	10.44	4.5	46.98	>5s	PS2
Supply of speaker	Normal	2.11	0.53	1.12	>3s	PS1
	Max. non- clipped output power	5.98	1.50	8.97	>3s	PS1

Supplementary information:

Abbreviation: SC= Short circuit.

- 1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.
- 2) *means that the remote controller was supplied by 2pcs fresh batteries.
- 3) All DC fans are in parallel with same circuits.

Unless otherwise specified, both models XR06B and XR03B were considered and recorded the worst result.

6.2.3.1	TABLE: Determination of Arcing PIS				P
Location		Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No
All internal primary circuits		> 50Vpk	--	> 15VA	Yes*
Supplementary information:					
* All internal primary circuits were considered as arcing PIS.					

6.2.3.2	TABLE: Determination of resistive PIS			P
Location		Operating and fault condition	Dissipate power (W)	Resistive PIS? Yes / No
All internal circuits/components except for USB2.0/USB3.0 ports output and speaker		--	>15	Yes*
Supplementary information:				
* All internal circuits/components except for USB2.0/USB3.0 ports output and speaker were considered as resistive PIS.				

8.5.5	TABLE: High pressure lamp				N/A
Lamp manufacturer	Lamp type	Explosion method	Longest axis of glass particle (mm)	Particle found beyond 1 m Yes / No	
--	--	--	--	--	

Supplementary information:
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9.6	TABLE: Temperature measurements for wireless power transmitters							N/A
Supply voltage (V)				--				—
Max. transmit power of transmitter (W)				--				—
Foreign objects	w/o receiver and direct contact		with receiver and direct contact		with receiver and at distance of 2 mm		with receiver and at distance of 5 mm	
	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
--	--	--	--	--	--	--	--	--
Supplementary information:								
--								

5.4.1.4, 9.3, B.1.5, B.2.6	TABLE: Temperature measurements				P
Supply voltage (V).....	90V/ 60Hz ¹⁾	264V/ 60Hz ¹⁾	90V/ 60Hz ²⁾	264V/ 60Hz ²⁾	—
Ambient temperature during test T_{amb} (°C)	See below	See below	See below	See below	—
Maximum measured temperature T of part/at:	T (°C)				Allowed T_{max} (°C)
AC inlet	53.6	50.1	53.9	44.8	70
Primary lead wires connected to power supply board	52.9	49.7	53.2	44.2	105
AC connector CN1	50.5	46.2	51.2	44.8	85
CX1 body	69.8	51.0	68.6	46.4	85
LP2 winding	64.2	48.3	62.8	45.3	130
LP4 winding	70.7	51.3	69.4	46.5	130
CY1 body	51.9	46.8	52.1	45.1	125
RV1 body	71.6	52.2	70.6	46.0	85
CP6 body	57.3	50.5	57.7	46.0	105
LP1 winding	92.1	64.5	89.5	50.2	130
PCB near BD2	96.9	64.4	95.5	52.4	130
PCB near QP4	98.6	65.4	97.1	53.2	130
PCB near QH1	71.8	64.1	70.3	50.9	130
LH1 winding	70.2	63.2	69.2	50.2	130
TH1 core	102.1	88.0	99.7	69.0	130
TH1 winding	105.3	91.0	102.8	70.0	130
PCB near DB1	87.4	61.7	85.0	49.1	130
CY4 body	89.6	80.2	87.8	58.2	125

Optocoupler PH1	68.8	63.6	68.6	50.2	110		
PCB near DH1	100.3	83.8	97.2	56.6	130		
CH6 body	84.8	76.3	83.3	61.5	105		
L1 winding	67.2	62.7	66.9	54.5	130		
Insulation sheet under power board	67.9	58.0	67.0	46.4	Ref.		
Metal heat sink	65.3	58.8	68.0	63.3	Ref.		
Internal wire for main board	51.1	50.0	52.5	58.5	80		
PCB near US1 (on main board)	67.1	65.9	66.9	62.2	130		
PCB near UD8 (on main board)	62.9	61.6	62.8	50.7	130		
PCB near UP7 (on main board)	54.3	53.3	54.9	47.6	130		
Internal wire for speaker	56.3	55.4	56.3	47.4	80		
Internal wire for motor	62.3	61.1	62.2	50.1	80		
DC fan right	50.4	49.2	51.5	50.3	Ref.		
DC fan left	44.6	43.5	45.8	43.0	Ref.		
Enclosure inside near Fan vent (side)	53.7	51.4	56.7	50.2	Ref.		
Enclosure inside near USB port (rear)	52.8	51.1	52.6	49.1	Ref.		
Enclosure inside near power board (bottom)	52.3	51.0	56.7	49.5	Ref.		
Enclosure inside near main board (top)	52.7	46.6	53.1	50.5	Ref.		
Ambient	40.0	40.0	40.0	40.0	--		
Touch temperature for accessible parts							
Enclosure outside near Fan vent (side)	30.1	31.1	32.8	31.4	77*		
Enclosure outside near USB port (rear)	33.5	30.4	33.8	30.0	77*		
Enclosure outside near power board (bottom)	35.0	30.9	32.1	29.0	77*		
Enclosure outside near main board (top)	33.3	30.1	31.8	29.0	77*		
Button	32.5	28.8	31.8	28.1	77*		
Lens surface	42.1	40.0	40.1	36.8	71*		
Ambient	25.0	25.0	25.0	25.0	77*		
Temperature T of winding:	t ₁ (°C)	R ₁ (°C)	t ₂ (°C)	R ₂ (°C)	T (°C)	Allowed T _{max} (°C)	Insulation class
--	--	--	--	--	--	--	--
Supplementary information:							
- Thermal coupler method used for above temperature tests.							
- * means that surfaces touched occasionally for very short periods (> 1 s and < 10 s).							
- Tests was conducted at HDMI mode with maximum power consumption configuration, three vertical bar signal and 1kHz sine wave input, adjust volume to 1/8 max.non-clipped output power at speaker, and DC fans with min. air flow installed. USB2.0 port loading 5VDC/2.0A(max. attainable) and USB3.0 port loading 5VDC/2.2A(max. attainable) during test.							
- ¹⁾ For model XR06B, ²⁾ For model XR03B.							

B.2.5	TABLE: Input test	P
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U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
Tested at model XR06B								
90	50	4.694	--	421.4	--	F1	421.4	HDMI mode, Maximum normal condition
100	50	4.190	7.0	417.9	--	F1	417.9	
240	50	1.667	7.0	396.4	--	F1	396.4	
264	50	1.508	--	395.2	--	F1	395.2	
90	60	4.703	--	422.7	--	F1	422.7	
100	60	4.196	7.0	418.2	--	F1	418.2	
240	60	1.672	7.0	398.0	--	F1	398.0	
264	60	1.517	--	396.9	--	F1	396.9	
Tested at model XR03B								
90	50	4.485	--	402.9	--	F1	4.485	HDMI mode, Maximum normal condition
100	50	3.991	7.0	398.8	--	F1	3.991	
240	50	1.590	7.0	379.7	--	F1	1.590	
264	50	1.442	--	378.8	--	F1	1.442	
90	60	4.491	--	403.2	--	F1	4.491	
100	60	4.006	7.0	399.1	--	F1	4.006	
240	60	1.595	7.0	380.2	--	F1	1.595	
264	60	1.446	--	379.9	--	F1	1.446	
Supplementary information:								
Maximum normal condition: Three vertical bar signal and 1kHz sine wave input, projection display adjusted to obtain maximum power consumption configuration, the speaker was adjusted to 1/8 Max. non-clipped output power, and DC fans with min. air flow installed. USB2.0 port loading 5VDC/2.0A(max.attainable) and USB3.0 port loading 5VDC/2.2A(max. attainable) during test.								

B.3, B.4 TABLE: Abnormal operating and fault condition tests						P
Ambient temperature T_{amb} (°C)..... :						23.4(unless otherwise specified)
Power source for EUT: Manufacturer, model/type, output rating .. :						--
Component No.	Condition	Supply voltage (VAC)	Test time	Fuse no.	Fuse current (A)	Observation
Tested at model XR06B						
Openings	Blocked	264	1hr 42mins	F1	1.517	Unit operated normally, no damage, no hazard. TH1 core: 73.2°C; TH1 winding: 76.2°C; PCB (main board): 51.1°C; Plastic enclosure outside: 32.2°C; Button: 29.8°C; Lens surface: 40.9°C; Ambient: 25.0°C
Speaker	Maximum non-	264	1hr 59mins	F1	1.581	Unit operated normally, no damage, no hazard.

	clipped output power					TH1 core: 76.4°C; TH1 winding: 79.6°C; PCB (main board): 54.8°C; Plastic enclosure outside: 34.1°C; Button: 30.6°C; Lens surface: 41.3°C; Ambient: 25.0°C
DC Fan (left)	Locked	264	7hrs	F1	1.517-0.106	Unit operated normally, and shut down after 15 minutes. no damage, no hazard. TH1 core: 64.1°C; TH1 winding: 67.6°C; PCB (main board): 49.4°C; Plastic enclosure outside: 30.5°C; DC fan right: 33.1°C; DC fan left: 40.5°C; Button: 32.9°C; Lens surface: 29.3°C; Ambient: 25.0°C
DC Fan (right)	Locked	264	7hrs	F1	1.517-0.106	Unit operated normally, and shut down after 15 minutes. no damage, no hazard. TH1 core: 64.0°C; TH1 winding: 67.0°C; PCB (main board): 49.2°C; Plastic enclosure outside: 30.9°C; DC fan right: 40.9°C; DC fan left: 34.8°C; Button: 33.2°C; Lens surface: 30.8°C; Ambient: 25.0°C
Speaker	SC	264	10mins	F1	1.499	Speaker shut down, other function operated as normal, no damage, no hazard.
TH1 pin 7,8-9 (after DH2)	OL	264	4hrs 03mins	FP1	2.428 Max.	The max. extra loaded current was 7.0A and max. temperature was obtained. Over it, unit shut down immediately, no damage, no hazards. TH1 core: 103.5°C; TH1 winding: 110.0°C; PCB (main board): 51.4°C; Plastic enclosure outside: 32.7°C; Button: 35.1°C; Lens surface: 42.8°C; Ambient: 25.0°C
BD2*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open immediately, no hazard.
BD1*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open immediately, no hazard.
CP6*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open

						immediately, no hazard.
QP1 pin D-S*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open immediately, no hazard.
QP1 pin D-G*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open immediately, no hazard.
QP1 pin S-G	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
QH4 pin D-S*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open immediately, no hazard.
QH4 pin D-G*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open immediately, no hazard.
QH4 pin S-G	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
U1 pin 1-16*	SC	264	<1s	F1	>22 to 0	Fuse (F1) open immediately, no hazard.
U1 pin 3-16	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
U1 pin 13-16	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
PH1 pin 1-2	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
PH1 pin 3-4	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
TH1 pin 1-2	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
TH1 pin 4-5	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
TH1 pin 5-6	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
TH1 pin 7,8-9	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
TH1 pin 11,12-10	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
CH3	SC	264	10mins	F1	0.106	Unit shut down immediately, no damage, no hazard.
USB2.0 output (bypass FU2)	SC	264	10mins	F1	1.460	USB2.0 output shut down immediately, unit normal work, no damaged, no hazard.
USB3.0 output	SC	264	10mins	F1	1.451	USB3.0 output shut down immediately, unit normal work, no damaged, no hazard.
One battery#	Reversed	--	10mins	--	--	Unit shutdown, batteries no explosion, no chemical leaks, no damage, no

						hazards.
Batteries Output#	SC	3VDC	10mins	--	--	No explosion, no chemical leaks, no damage, no hazards.
Tested at model XR03B						
Openings	Blocked	264	1hr 33mins	F1	1.446	Unit operated normally, no damage, no hazard. TH1 core: 71.6°C; TH1 winding: 74.3°C; PCB (main board): 50.8°C; Plastic enclosure outside: 32.1°C; Button: 30.5°C; Lens surface: 40.5°C; Ambient: 25.0°C
Speaker	Maximum non-clipped output power	264	1hr 46mins	F1	1.509	Unit operated normally, no damage, no hazard. TH1 core: 75.0°C; TH1 winding: 78.1°C; PCB (main board): 52.6°C; Plastic enclosure outside: 32.8°C; Button: 30.7°C; Lens surface: 41.9°C; Ambient: 25.0°C
DC Fan (left)	Locked	264	7hrs	F1	1.446-0.096	Unit operated normally, and shut down after 4 minutes. no damage, no hazard. TH1 core: 63.7°C; TH1 winding: 67.2°C; PCB (main board): 49.2°C; Plastic enclosure outside: 31.7°C; Button: 33.4°C; Lens surface: 29.6°C; Ambient: 25.0°C
DC Fan (right)	Locked	264	7hrs	F1	1.446-0.096	Unit operated normally, and shut down after 15 minutes. no damage, no hazard. TH1 core: 61.1°C; TH1 winding: 64.3°C; PCB (main board): 47.4°C; Plastic enclosure outside: 32.9°C; DC fan right: 39.1°C; DC fan left: 32.5°C; Button: 30.2°C; Lens surface: 35.9°C; Ambient: 25.0°C
Supplementary information:						
1) SC: short circuit, OL: overload, OC: open circuit; CD: components damaged; 2) The electric strength tests conducted successfully after the completion of abnormal condition test and fault condition test. 3) Temperature limits under the abnormal condition: Transformer TH1 wingding: 190°C (Class F); PCB: 130°C; DC fan: Reference;						

Accessible plastic parts: 87°C (>1s and <10s).

4) *: test repeated for all alternative sources listed in table 4.1.2 and same result came out.

5) # means 2pcs fresh batteries were used in the remote controller for test.

6) Tests was conducted at HDMI mode with maximum power consumption configuration, three vertical bar signal and 1kHz sine wave input, adjust volume to 1/8 max.non-clipped output power at speaker, and DC fans with min. air flow installed. USB2.0 port loading 5VDC/2.0A(max. attainable) and USB3.0 port loading 5VDC/2.2A(max. attainable) during test.

M.3	TABLE: Protection circuits for batteries provided within the equipment						N/A
Is it possible to install the battery in a reverse polarity position?				--		—	
Equipment Specification	Charging						
	Voltage (V)			Current (A)			
	--			--			
Manufacturer/type	Battery specification						
	Non-rechargeable batteries		Rechargeable batteries				
	Discharging current (A)	Unintentional charging current (A)	Charging		Discharging current (A)	Reverse charging current (A)	
			Voltage (V)	Current (A)			
--	--	--	--	--	--	--	
Note: The tests of M.3.2 are applicable only when above appropriate data is not available.							
Specified battery temperature (°C)				--			
Component No.	Fault condition	Charge/ discharge mode	Test time	Temp. (°C)	Current (A)	Voltage (V)	Observation
--*)	--	--	--	--	--	--	--
Supplementary information:							
Abbreviation: SC= short circuit; OC= open circuit; NL= no chemical leakage; NS= no spillage of liquid; NE= no explosion; NF= no emission of flame or expulsion of molten metal, NH= no hazard.							
*) Details see table B.3, B.4.							
Only “AAA” alkaline battery use in remote controller.							

M.4.2	TABLE: Charging safeguards for equipment containing a secondary lithium battery					N/A
Maximum specified charging voltage (V)			--			—
Maximum specified charging current (A)			--			—
Highest specified charging temperature (°C)			--			
Lowest specified charging temperature (°C)			--			
Battery manufacturer/type	Operating and fault condition	Measurement			Observation	
		Charging voltage (V)	Charging current (A)	Temp. (°C)		
--	Normal	--	--	--	--	
	Abnormal: --	--	--	--	--	
	Single fault: - -	--	--	--	--	
Supplementary information:						

--

Q.1	TABLE: Circuits intended for interconnection with building wiring (LPS)						P
Output Circuit	Condition	Uoc (V)	Time (s)	Isc (A)		S (VA)	
				Meas.	Limit	Meas.	Limit
USB2.0 port	Normal operation	4.99	5	2.0	8	9.66	100
	Single fault: QMS2 pin D-S(bypass FU2) SC	4.99	5	2.0	8	9.66	100
USB3.0 port	Normal operation	5.07	5	2.2	8	10.6	100
	Single fault: UU2 pin 1-6 SC	5.07	5	2.2	8	10.6	100
	Single fault: RU16 SC	5.07	5	2.2	8	10.6	100
Supplementary information:							
SC=Short circuit							
Both models XR06B and XR03B were considered and recorded the worst result.							

T.2, T.3, T.4, T.5	TABLE: Steady force test						P
Location/Part	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)	Observation	
Internal components/wires (T.2)	--	--	--	10	5	No reduction the clearances and creepage distances.	
Enclosure top (T.5)	Plastic	Min. 1.5	Circular plane surface 30 mm in diameter	250	5	Enclosure remained intact, no damage, no hazard	
Enclosure bottom (T.5)	Plastic	Min. 1.5	Circular plane surface 30 mm in diameter	250	5	Enclosure remained intact, no damage, no hazard	
Enclosure side (T.5)	Plastic	Min. 1.5	Circular plane surface 30 mm in diameter	250	5	Enclosure remained intact, no damage, no hazard	
Supplementary information:							

T.6, T.9	TABLE: Impact test				P
Location/Part	Material	Thickness (mm)	Height (mm)	Observation	

Enclosure top (T.5)	Plastic	Min. 1.5	1300	Enclosure remained intact, no damage, no hazard
Enclosure bottom (T.5)	Plastic	Min. 1.5	1300	Enclosure remained intact, no damage, no hazard
Enclosure side (T.5)	Plastic	Min. 1.5	1300	Enclosure remained intact, no damage, no hazard
Supplementary information:				

T.7	TABLE: Drop test				N/A
Location/Part	Material	Thickness (mm)	Height (mm)	Observation	
--	--	--	--	--	
Supplementary information:					
--					

T.8	TABLE: Stress relief test				P
Location/Part	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation
Enclosure	Plastic	Min. 1.5	70	7	No damaged, no hazards
Insulation sheet under/above power supply board	Plastic	Min. 0.4	77.9	7	No damaged, no hazards
Supplementary information:					

X	TABLE: Alternative method for determining minimum clearances distances			N/A
Clearance distanced between:	Peak of working voltage (V)	Required cl (mm)	Measured cl (mm)	
--	--	--	--	
Supplementary information:				
--				

4.1.2	TABLE: Critical components information				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Plastic enclosure	Guangdong Aldex Advanced Plastics Co., Ltd.	PC/ABS-551(X)	V-0, 60 °C, min. thickness 1.6mm	UL 94, IEC 60695-11-10, CSA C22.2 No. 0.17, J62368-1	cURus & Tested with appliance
Plastic material of laser module	TEIJIN LIMITED RESIN AND PLASTIC	GN-3630H	V-0, 80°C, min. thickness 1.6mm	UL 94, IEC 60695-11-10, CSA C22.2 No. 0.17	cURus
Insulation sheet under and above power supply board	SABIC JAPAN L L C	FR1(E1) (GG1)	VTM-0, 125°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, J62368-1	UR & Tested with appliance
(Alternative)	Nantong Huapu photoelectric Material Co., Ltd	EFR86EFR87EFR83	VTM-0, 80°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, J62368-1	UR & Tested with appliance
(Alternative)	SABIC JAPAN L L C	FR700	V-0, min. 125°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, CSA C22.2 No. 0.17, J62368-1	cURus E207780 & Tested with appliance
(Alternative)	SABIC INNOVATIVE PLASTICS US L L C	FR700(GG)	V-0, min. 125°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, J62368-1	UR & Tested with appliance
(Alternative)	FORMEX, DIV OF ILLINOIS TOOL WORKS INC	FORMEX GK-(a)(d)(f2)	VTM-0, 115°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, CSA C22.2 No. 0.17, J62368-1	cURus & Tested with appliance
(Alternative)	DUPONT HONGJI FILMS FOSHAN CO LTD	EM, EP, EM1	VTM-2, 105°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, CSA C22.2 No. 0.17, J62368-1	cURus & Tested with appliance
(Alternative)	JIANGSU YUXING FILM TECHNOLOGY CO LTD	6021	VTM-2, 105°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, J62368-1	UR & Tested with appliance
(Alternative)	SICHUAN DONGFANG INSULATING MATERIAL CO LTD	DFR3716A(d)	V-0, min. 110°C, min. thickness: 0.25 mm	UL 94, IEC 60695-11-10, J62368-1	UR & Tested with appliance
Speaker (2pcs provided) for model XR03B	Interchangeable	Interchangeable	4ohm, 12W	--	--
Plastic enclosure of speaker cover model XR03B	Interchangeable	Interchangeable	Min. V-0, 80°C	UL 94, IEC 60695-11-10, CSA C22.2 No. 0.17	cURus

Speaker (one provided) for model XR06B	Interchangeable	Interchangeable	4ohm, 10W	--	--
DC Fans (4pcs provided) for model XR06B	NIDEC ADVANCED MOTOR CORP.	D1225R12B9YP-K1	12VDC, 0.61A, Min. 3800 RPM, V-0 plastic	UL 507, J62368-1	UR TUV RH & Tested with appliance
DC Fan (JX2, JX3) (2pcs provided for model XR03B)	YIJIE ELECTRONIC	DAHD0401B	12VDC, 0.68A 2800±10% RPM, V-0 plastic	UL 507, J62368-1	UR & Tested with appliance
DC Fan (JX1) (one provided for model XR03B)	YIJIE ELECTRONIC	DAHC0251H	12VDC, 0.60A 3000±10% RPM, V-0 plastic	UL 507, J62368-1	UR TUV SUD & Tested with appliance
Laser diode used for model XR06B	NICHIA CORPORATION	NUBB38	VF: 39.4V, IF: 3.0A, 455nm, 57W	IEC/EN 60825-1	TÜV SÜD
		NURB22	VF: 22.5V, IF: 3.2A, 643nm, 26.8W	IEC/EN 60825-1	
Laser diode used for model XR03B	NICHIA CORPORATION	NUBB38	VF: 39.4V, IF: 3.0A, 455nm, 57W	IEC/EN 60825-1	TÜV SÜD
		NURB21	VF: 11.3V, IF: 3.2A, 643nm, 13.5W	IEC/EN 60825-1	
		NURB22	VF: 22.5V, IF: 3.2A, 643nm, 26.8W	IEC/EN 60825-1	
Appliance inlet	INALWAYS ELECTRONICS INC	0707 series	10A, 250Vac, C14, 70°C	IEC/EN 60320-1, UL 60320-1, CAN/CSA-C22.2 No. 60320.1	cURus ENEC
Primary lead wires (connecting between AC inlet and power supply board CN1)	Kunshan Xinghongmeng Electronic Co Ltd	1015	600V, 18AWG, 105°C, VW-1	UL 758, UL 2556	UR
(Alternative)	XINYA ELECTRONIC CO LTD	1015	600V, 18AWG, 105°C, VW-1	UL 758, UL 2556	UR
(Alternative)	Interchangeable	Interchangeable	Min. 300V, Min. 18AWG, Min. 105°C, VW-1	UL 758, UL 2556	UR
Earthing wire (green-and-yellow)	Kunshan Xinghongmeng Electronic Co Ltd	1015	600V, 18AWG, 105°C, VW-1	UL 758, UL 2556	UR
(Alternative)	XINYA ELECTRONIC CO LTD	1015	600V, 18AWG, 105°C, VW-1	UL 758, UL 2556	UR

(Alternative)	Interchangeable	Interchangeable	Min. 300V, Min. 18AWG, Min. 105°C, VW-1	UL 758, UL 2556	UR
Secondary lead wires (connecting power supply board to main board/laser module)	Kunshan Xinghongmeng Electronic Co Ltd	10064	24AWG, 30V, 105°C, VW-1	UL 758, UL 2556	UR
(Alternative)	SUZHOU RENDE TECHNOLOGY CO LTD	10064	24AWG, 30V, 105°C, VW-1	UL 758, UL 2556	UR
(Alternative)	Kunshan Xinghongmeng Electronic Co Ltd	1571	28AWG, 30V, 80°C, VW-1	UL 758, UL 2556	UR
(Alternative)	XINYA ELECTRONIC CO LTD	1571	28AWG, 30V, 80°C, VW-1	UL 758, UL 2556	UR
Internal secondary wires except for connecting power supply board to main board/laser module	Interchangeable	Interchangeable	Min. 28AWG, Min. 30V, Min. 80°C, VW-1 or FT1	UL 758, UL 2556	UR
Heat shrinkable tube (wrapped on primary lead wires and secondary wires of power supply board)	SHENZHEN WOER HEAT-SHRINKABLE MATERIAL CO LTD	RSFR, RSFR(CB), RSFR-H	VW-1, 125°C, Min.300VAC, min. thickness: 0.4mm	UL 224, CSA-C22.2 No. 198.1, J62368-1	cURus & Tested with appliance
(Alternative)	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-HFT	VW-1, 125°C, 600VAC, min. thickness: 0.4mm	UL 224, CSA-C22.2 No. 198.1, IEC/EN IEC 62368-1, UL 62368-1, CSA C22.2 No. 62368-1	cURus & Tested with appliance
All PCBs	SHEN ZHEN SUN & LYNN CIRCUITS CO LTD	SL-2, SL-D, SL-HD, SL-M, SL-HM, SL-2M, SL-4M, SL-M2	V-0, 130°C	UL 94, UL 796	UR
(Alternative)	Interchangeable	Interchangeable	V-1 or better, 130°C	UL 94, UL 796	UR

Secondary PTC (FU2) on main board	POLYTRONICS TECHNOLOGY CORP	SMD1206P110T FT	Vmax: 8Vdc, 85 °C, Ih: 1.10A, It: 2.20A Imax: 100A	IEC/EN 62319-1, IEC/EN 62319-1-1, IEC/EN 60738-1, IEC/EN 60738-1-1, Clauses 15, 17, annex J of IEC 60730-1, UL 1434	TUV RH UR
Components & materials used on power supply board:					
PCB	Interchangeable	Interchangeable	V-1 or better, 130°C	UL 94, UL 796	UR
AC connector (CN1)	CKM Electronics Co Ltd	3962WV-5P series, 3962WR-5P series, 3962WR	Min. 250VAC, min. 7A, min. 85°C, V-0	UL 1977, CSA C22.2 No. 182.3, J62368-1	cURus & Tested with appliance
Fuse (F1)	Hollyland Company Limited	50CT, 50CT(P)	T8AH, 250VAC	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14, CSA-C22.2 No. 248.1, CSA-C22.2 No. 248.14	VDE cURus
(Alternative)	Conquer Electronics Co., Ltd.	UDA, UDA-A	T8AH, 250VAC	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14, CSA-C22.2 No. 248.1, CSA-C22.2 No. 248.14	VDE cURus
(Alternative)	Suzhou Walter Electronic Co. Ltd.	TSC-Serie(s) (for VDE), TSC, TSC+P (for UL)	T8AH, 250VAC	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14, CSA-C22.2 No. 248.1, CSA-C22.2 No. 248.14	VDE cURus
(Alternative)	XC Electronics (Shen Zhen) Corp. Ltd.	5H	T8AH, 250VAC	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14, CSA-C22.2 No. 248.1, CSA-C22.2 No. 248.14	VDE cURus
(Alternative)	Dongguan Better Electronics Technology Co., Ltd.	524	T8AH, 250VAC	IEC/EN 60127-1, IEC/EN 60127-2, UL 248-1, UL 248-14, CSA-C22.2 No. 248.1, CSA-C22.2 No. 248.14	VDE cURus

Thermistor (RT1, RT3)	Interchangeable	Interchangeable	NTC, 0.7Ω at 25°C, min. 4A	--	--
Varistor (RV1)	Thinking Electronic Industrial Co., Ltd.	TVR14681	Min. 420VAC, Min. 105°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	cURus VDE TUV RH
(Alternative)	Thinking Electronic Industrial Co., Ltd.	TVR14681-M	Min. 420VAC, Min. 125°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	TUV RH VDE cURus
(Alternative)	Centra Science Corp.	CNR-14D681K	Min. 420VAC, Min. 105°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	VDE cURus
(Alternative)	BestBright Electronics Co. Ltd	681KD14, 14D681K	Min. 420VAC, Min. 105°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	VDE cURus
(Alternative)	Guangdong Huiwan Electronics Technology Co., LTD.	V-681K-14 DEH for VDE, V-681K-14D H, V-681K-14E H for UL	Min. 420VAC, Min. 125°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	VDE cURus
(Alternative)	Shantou High-New Technology Dev. Zone Songtian Enterprise Co., Ltd.	14D681K	Min. 420VAC, Min. 125°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	VDE cURus

(Alternative)	Xiamen Wanming Electronics Co., Ltd.	14D681K for VDE, WMR14D681K for UL	Min. 420VAC, Min. 85°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	VDE cURus
(Alternative)	Fujian Qiaoguang Electronic Technology co., Ltd.	FTR14D681K	Min. 420VAC, Min. 125°C, min. V-0 coating	UL 1449, CSA C22.2 No. 269.5, IEC/EN IEC 61051-1, IEC/EN IEC 61051-2, IEC 61051-2-2, IEC 62368-1/ Annex G.8.1	VDE cURus
X-Capacitor (CX1, CX2)	Shenzhen Jinghao Capacitor Co., Ltd.	CBB62B	Max. 0.68uF, Min. 250VAC, 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Euoptronic (SuZhou) Co. Ltd.	MPX	Max. 0.68uF, Min. 250VAC, 40/105/21, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Euoptronic (SuZhou) Co. Ltd.	MPX2	Max. 0.68uF, Min. 250VAC, 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Xiamen Faratronic Co., Ltd.	MKP62	Max. 0.68uF, Min. 250VAC, 40/100/56 or 40/105/56 or 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Nistronics (Jiangxi) Co., Ltd.	MPR	Max. 0.68uF, Min. 250VAC, 40/100/21 or 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Yangzhou Nissei Electronics Co., Ltd.	MP1	Max. 0.68uF, Min. 250VAC, 40/110/56 or 40/100/21, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Shenzhen Yimanfeng Science And Technology Co., Ltd.	X2-MPX/MKP (for VDE) MPX/MKP (for UL)	Max. 0.68uF, Min. 250VAC, 40/100/21 or 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Ultra Tech Xiphi Enterprise Co. Ltd.	HQX	Max. 0.68uF, Min. 250VAC, 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus

(Alternative)	Sichuan Sincerity Technology Co., Ltd.	MPX/MKP	Max. 0.68uF, Min. 250VAC, 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Sichuan Zhongxing Electr. Co.Ltd.	MKP61	Max. 0.68uF, Min. 250VAC, 40/085/21 or 40/100/21 or 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	GUANGDONG FENGMING ELECTRONIC TECH. CO., LTD.	MKP-X2	Max. 0.68uF, Min. 250VAC, 40/105/21 or 40/110/56, X2 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
Bleeder resistor (RP5, RP7)	Interchangeable	Interchangeable	Max. 10MΩ, Min. 1/4W	--	--
Discharge ICX (U1)	Chengdu Monolithic Power Systems Co., Ltd.	HF81	100-240V~, 50-60Hz (Tested for 85-265V~, 47~63Hz)	IEC 62368-1	CB issued by Nemko
(Alternative)	CHIPOWN	PN8200	85~265Vac (with tolerance considered), 50-60Hz	IEC 62368-1	CB issued by UL-CCIC
(Alternative)	Power Integrations, Inc.	CAP200DG	240VAC, 50-60 Hz nominal	IEC 62368-1	CB issued by Nemko
(Alternative)	Chengdu Monolithic Power Systems Co., Ltd.	HR1270	100-240VAC, 50-60 Hz (Tested for 85-265VAC, 47-63Hz)	IEC 62368-1	CB issued by Nemko
(Alternative)	NXP Semiconductors Taiwan Ltd	TEA8918YZT (Y = 0-9, B-J or blank; Z = 0-9, A-Z or blank)	100-240VAC, 47-63Hz	IEC 62368-1	CB issued by TÜV RH
(Alternative)	NXP Semiconductors Taiwan Ltd	TEA8919YZT/N (Y=B, G~Z, 0~9 or blank, Z and N=0 to 9, A to Z or Blank)	100-240VAC, 47-63Hz	IEC 62368-1	CB issued by TÜV RH
Y-Capacitor (CY1, CY2)	Walsin Technology Corp.	AH	Max. 470pF, Min. 250VAC, 40/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Yinan Don's Electronic Component Co., Ltd.	CT81	Max. 470pF, Min. 250VAC, 25/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	TDK Corporation	CD	Max. 470pF, Min. 250VAC, 55/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus

(Alternative)	Xiamen Wanming Electronics Co., Ltd.	HJ	Max. 470pF, Min. 250VAC, 40/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	KunShan WanSheng Electronics Co., Ltd.	CT7	Max. 470pF, Min. 250VAC, 40/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Guangdong Huiwan Electronics Technology Co., LTD.	AR	Max. 470pF, Min. 250VAC, 40/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
Y-Capacitor (CY4)	Sichuan Teruixiang Technology International Co Ltd	TRX	Max. 1000pF, Min. 250VAC, 40/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	ENEC CB issued by CQC cURus
(Alternative)	ANSHAN KEIFAT ELECTRONIC CERAMIC TECHNICAL CO LTD	CT7	Max. 1000pF, Min. 250VAC, 25/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	VDE cURus
(Alternative)	Interchangeable	Interchangeable	Max. 1000pF, Min. 250VAC, 25/125/21 or 40/125/21, Y1 type	IEC/EN 60384-14, UL 60384-14, CAN/CSA-E60384-14	cURus, VDE or equal EU mark
Optocoupler (PH1)	Renesas Electronics Corporation	PS2381-1 (for VDE), PS2381-1 (c) (for UL)	Reinforced Insulation, Ext. Cl./Cr. $\geq$ 8.0mm, Dti. $\geq$ 0.4mm, 115°C, Vini,a/Vini,b: 6000Vpeak	IEC/EN IEC 60747-5-5, IEC/EN IEC 62368-1, UL 1577	VDE UR
(Alternative)	Lite-On Technology Corporation	LTV-10xx x = (0;1;2;3;4;5;6;7;8;9)	Reinforced Insulation, Ext. Cl./Cr. $\geq$ 8.0mm, Dti. $\geq$ 0.4mm, 115°C, Vini,a/Vini,b: 6000Vpeak	IEC/EN IEC 60747-5-5, IEC/EN IEC 62368-1, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus

(Alternative)	Everlight Electronics Co., Ltd.	EL101X ("X" may be 0 to 9) for UL, EL101(0;1;2;3;4;5;6;7;8;9) V for VDE	Reinforced Insulation, Ext. Cl./Cr. $\geq 8.1\text{mm}$, Dti. $\geq 0.4\text{mm}$, 110°C , Vini,a/Vini,b: 6000Vpeak	IEC/EN IEC 60747-5-5, IEC/EN IEC 62368-1, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus
(Alternative)	CT Microelectronics Far East Ltd (For UL), CT Micro International Corporation (For VDE)	CT101(X1)(X2)-W (For UL), CT1(X1)1(X2)(X3) V (Y)(Z)-(H)(G), CT1(X1)1(X2)(X3) V (Y)(Z)-W-(H)(G) (For VDE)	Reinforced Insulation, Ext. Cl./Cr. $\geq 8.0\text{mm}$, Dti. $\geq 0.4\text{mm}$, 110°C , Vini,a/Vini,b: 4000Vpeak	IEC/EN 60747-5-5, IEC/EN IEC 62368-1, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus
(Alternative)	Shenzhen Orient Components Co. Ltd.	OR10XXXX (for VDE); OR10xx (for UL)	Reinforced Insulation, Ext. Cl./Cr. $\geq 8.0\text{mm}$, Dti. $\geq 0.4\text{mm}$, 125°C , Vini,a/Vini,b: 6000Vpeak	IEC/EN IEC 60747-5-5, IEC/EN IEC 62368-1, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus
(Alternative)	VISHAY Semiconductor GmbH	VOL617A (For VDE), VOL617A+ (For UL)	Reinforced Insulation, Ext. Cl./Cr. $\geq 8.0\text{mm}$, Dti. $\geq 0.4\text{mm}$, 110°C , Vini,a/Vini,b: 6000Vpeak	IEC/EN IEC 60747-5-5, IEC/EN IEC 62368-1, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus
(Alternative)	Toshiba Electronic Devices & Storage Corporation	TLP383 Option (D4) (For VDE); P383 (For UL)	Reinforced Insulation, Ext. Cl./Cr. $\geq 8.0\text{mm}$, Dti. $\geq 0.4\text{mm}$, 125°C , Vini,a/Vini,b: 6000Vpeak	IEC/EN IEC 60747-5-5, IEC/EN IEC 62368-1, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus
(Alternative)	NingBo Qunxin Microelectronics Co., LTD	QX10yy-UNY-WVZZ (For VDE); QX10xx-UNY-W (For UL)	Reinforced Insulation, Ext. Cl./Cr. $\geq 8.0\text{mm}$, Dti. $\geq 0.4\text{mm}$, 125°C , Vini,a/Vini,b: 5000Vpeak	IEC/EN IEC 60747-5-5, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus

(Alternative)	Xiamen Hualian Semiconductor Technology Co. LTD	HPC101xx-x (For VDE); HPC1018 (For UL)	Reinforced Insulation, Ext. Cl./Cr. $\geq 8.0\text{mm}$, Dti. $\geq 0.4\text{mm}$, 110°C , Vini,a/Vini,b: $6000\text{V}_{\text{peak}}$	IEC/EN IEC 60747-5-5, UL 1577, CSA Component Acceptance Service Notice No. 5A	VDE cURus
PFC inductor (LP1)	Shenzhen MEGMEET Electrical CO., LTD	MPL600-S4-LP2	$500\mu\text{H} \pm 12\%$, Min. 130°C	J62368-1	Tested with appliance
-Magnet wire	Interchangeable	Interchangeable	Min. 130°C	UL 1446	UR
- Base	KINGBOARD LAMINATES HOLDINGS LTD	KB-6150	V-0, 130°C	UL 94	UR
- Margin tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	WF* (c)(h)	130°C	UL 510A	UR
Filter choke (LP2, LP3)	Shenzhen MEGMEET Electrical CO., LTD	SQ2418-V-5.3mH	5.3mH , Min. 130°C	J62368-1	Tested with appliance
- Bobbin	CHANG CHUN PLASTICS CO LTD	T200HF, T375HF	Phenolic, V-0, 150°C , Min. thickness: 0.45mm	UL 94	UR
(Alternative)	SUMITOMO BAKELITE CO LTD	PM-9823	Phenolic, V-0, 150°C , min. thickness 0.45mm	UL 94	UR
- Magnet wire	Interchangeable	Interchangeable	Min. 130°C	UL 1446	UR
Filter choke (LP4)	Shenzhen MEGMEET Electrical CO., LTD	MP660SG-5Q64-L1	$15-60\mu\text{H}$, Min. 130°C	J62368-1	Tested with appliance
- Base	SUMITOMO BAKELITE CO LTD	PM-9823	Phenolic, V-0, 150°C , min. thickness 0.45mm	UL 94	UR
- Magnet wire	Interchangeable	Interchangeable	Min. 130°C	UL 1446	UR
- Triple insulation wire	GREAT LEOFLON INDUSTRIAL CO LTD	TRW(F)* for UL, TRW(F) Serie(s) for VDE	Reinforced insulation, 155°C	IEC/EN IEC 62368-1, UL 2353	VDE UR
PFC inductor (LH1)	Shenzhen MEGMEET Electrical CO., LTD	MPL-500W-LH2	$45\mu\text{H} \pm 5\%$, Min. 130°C	J62368-1	Tested with appliance

- Margin tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	CT* (c)(g)	130°C	UL 510A	UR
- Magnet wire	Interchangeable	Interchangeable	Min. 130°C	UL 1446	UR
- Insulation tube	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT-T	200°C, 300V, VW-1	UL 224	UR
(Alternative)	GREAT HOLDING INDUSTRIAL CO LTD	TFT	200°C, 300V, VW-1	UL 224	UR
- Polymeric Materials	KINGBOARD LAMINATES HOLDINGS LTD	KB-6150	V-0, 130°C	UL 94, UL 746E	UR
- Varnish	Shanghai Huachenya New Material Co.,Ltd.	JS-844@	155°C	UL 1446	UR
(Alternative)	HANG CHEUNG COATINGS (HUIYANG) LTD	8562*	155°C	UL 1446	UR
Transformer (TH1)	Shenzhen MEGMEET Electrical CO., LTD	PQ3225-50V10A	Class F	J62368-1	Tested with appliance
- Electrical insulation system	Shenzhen MEGMEET Electrical Co., Ltd	G-F	Class F	UL 1446	UR
- Magnet wire	Interchangeable	Interchangeable	Min. 155°C	UL 1446	UR
- Bobbin	SUMITOMO BAKELITE CO LTD	PM-9823	Phenolic, V-0, 150°C, min. thickness: 0.70mm	UL 94	UR
(Alternative)	CHANG CHUN PLASTICS CO LTD	T200HF, T375HF	Phenolic, V-0, 150°C, min. thickness: 0.70mm	UL 94	UR
- Triple insulation wire	E&B TECHNOLOGY CO LTD	E&B-XXX*YYZF, E&B-XXXP	Reinforced insulation, 155°C	IEC/EN IEC 62368-1, UL 2353	VDE UR
- Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	PF* (d)(g)	180°C	UL 510A	UR

(Alternative)	XINFENG GHILLIE ELECTRICAL MATERIALS CO LTD	JL-N408	180°C	UL 510A	UR
- Margin Tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO LTD	WF* (c)(h)	130°C	UL 510A	UR
- Insulation tube	CHANGYUAN ELECTRONICS GROUP CO LTD	CB-TT-T	200°C, 300V, VW-1	UL 224	UR
- Varnish	ELANTAS North America, Inc	V1630FS	155°C	UL 1446	UR
(Alternative)	John C Dolph Co	BC-346A	155°C	UL 1446	UR

Supplementary information:

¹⁾ License available upon request. Provided evidence ensures the agreed level of compliance.

Photos



External view 1 for models XR06B and XR03B

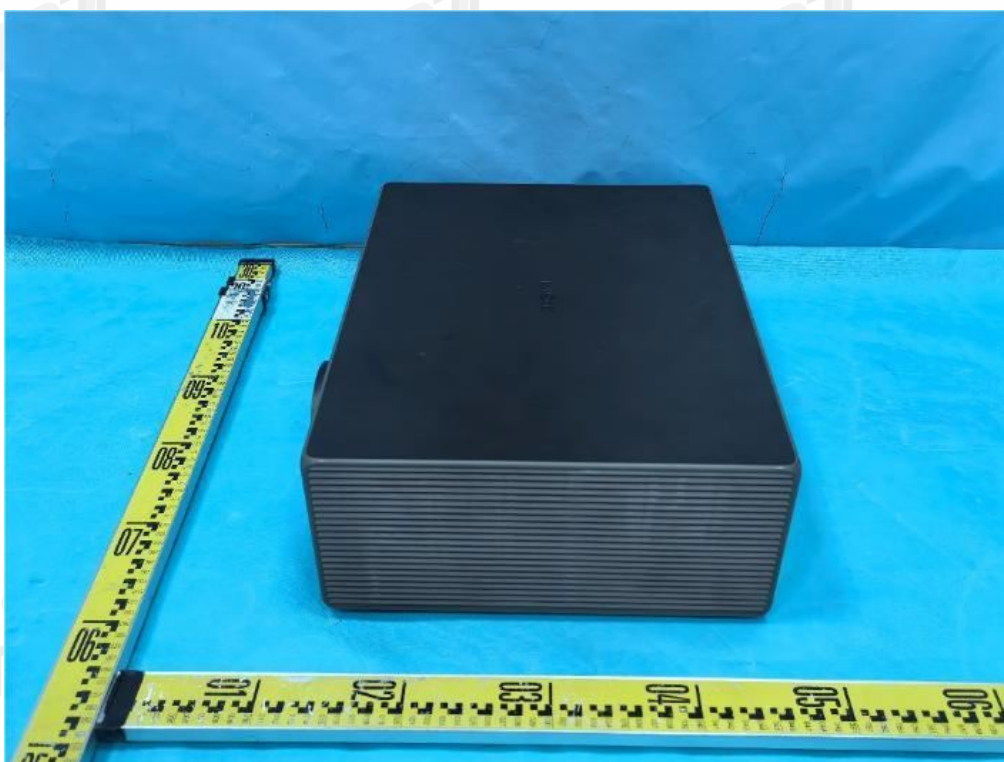


External view 2 for models XR06B and XR03B

Photos



External view 3 for models XR06B and XR03B



External view 4 for models XR06B and XR03B

Photos



External view 5 for models XR06B and XR03B

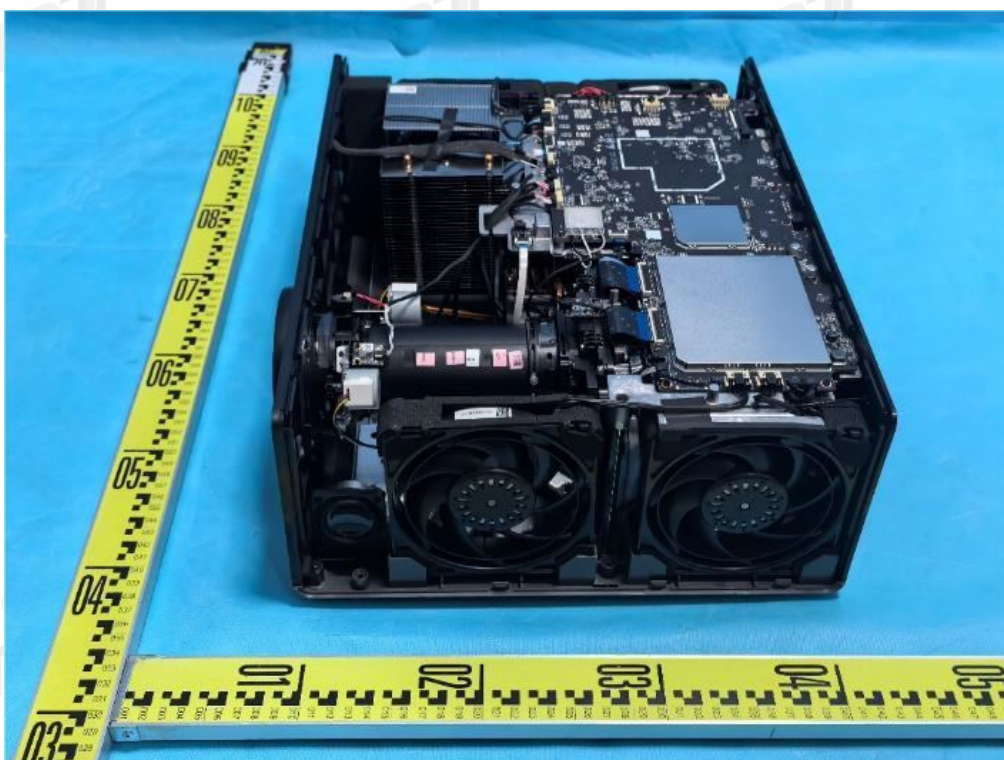


External view 6 for models XR06B and XR03B

Photos



Internal view 1 for model XR06B



Internal view 2 for model XR06B

Photos



Internal view 3 for model XR06B

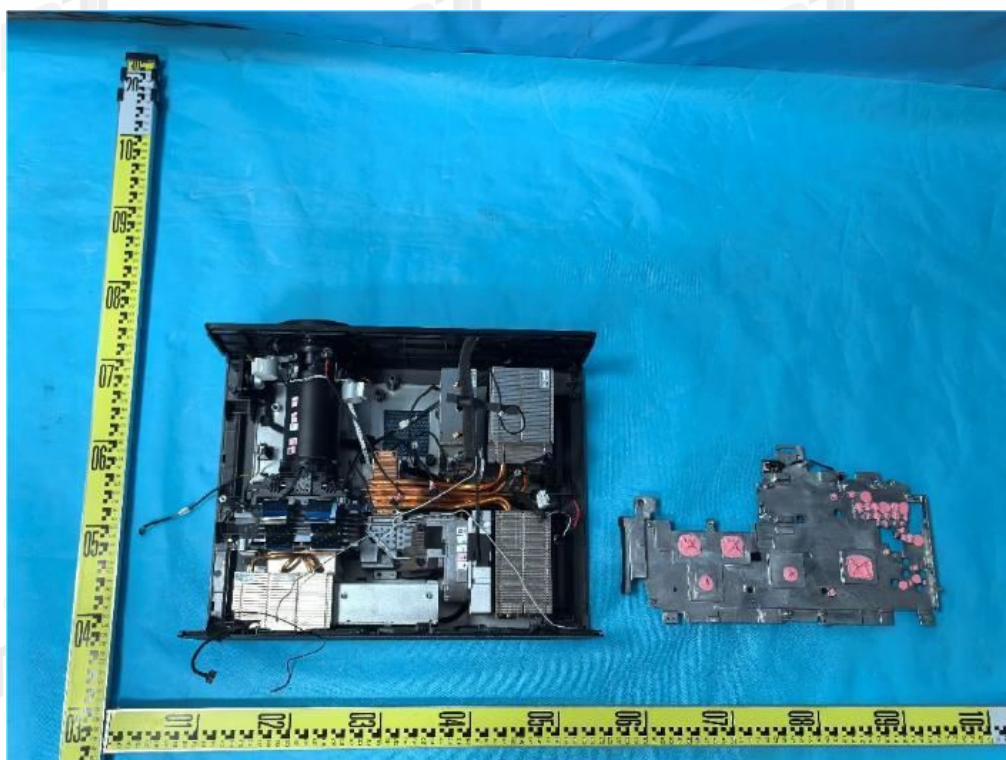


Internal view 4 for model XR06B

Photos



Internal view 5 for model XR06B



Internal view 6 for model XR06B

Photos

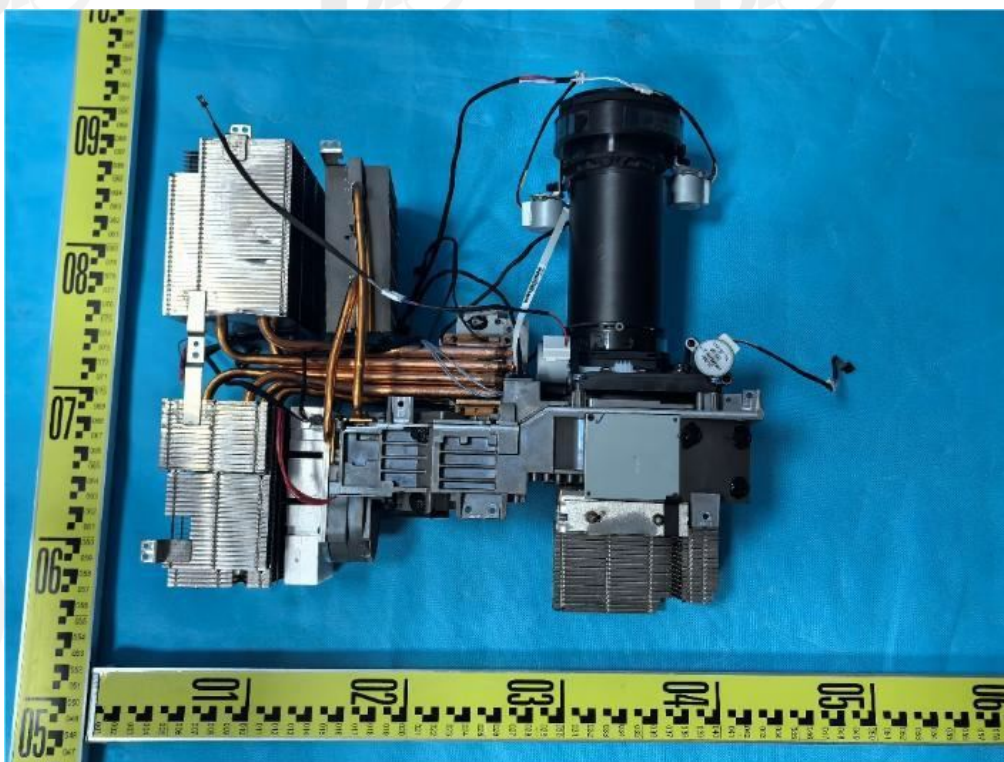


Internal view 7 for model XR06B

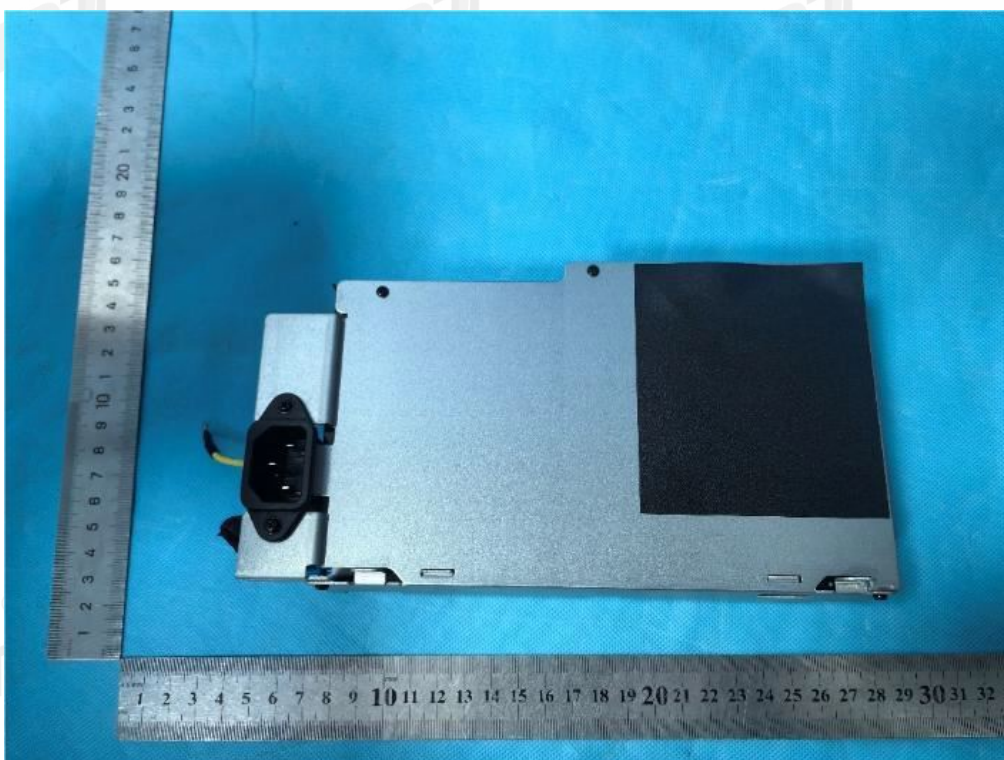


Internal view 8 for model XR06B

Photos

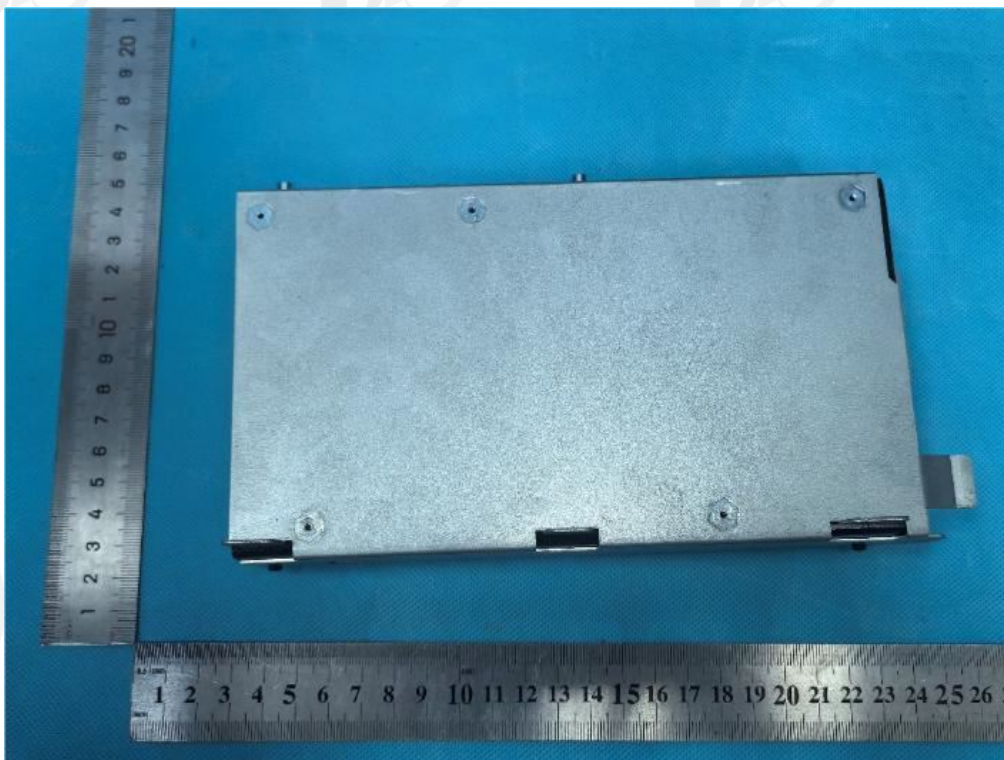


Internal view 9 for model XR06B

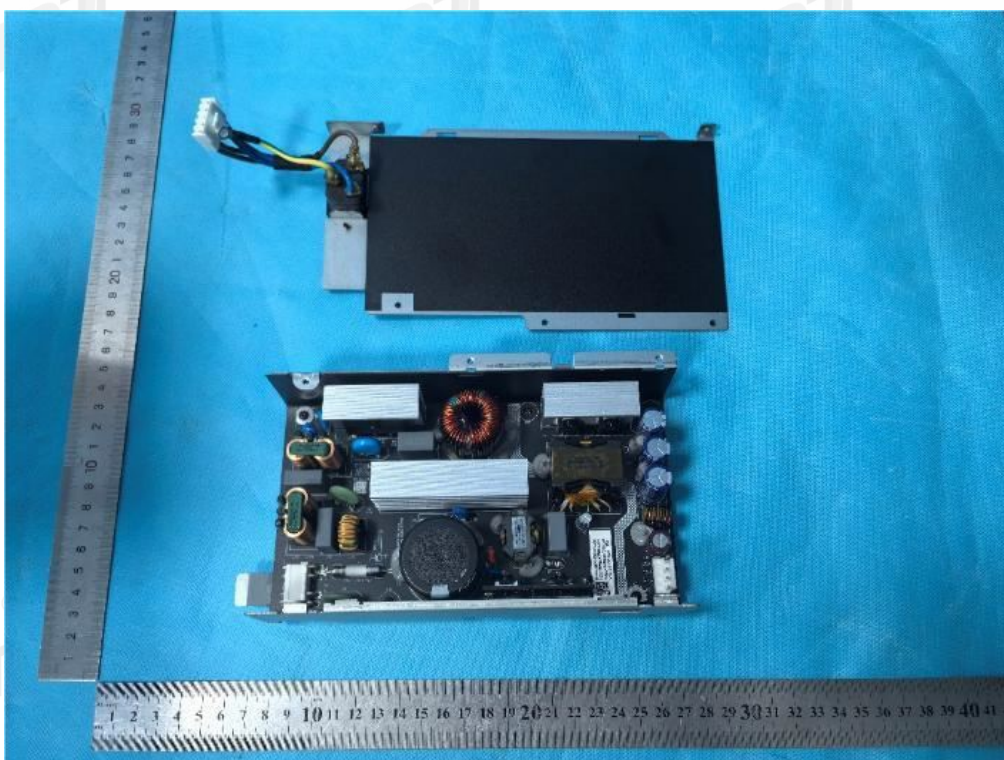


Internal view 10 for models XR06B and XR03B

Photos

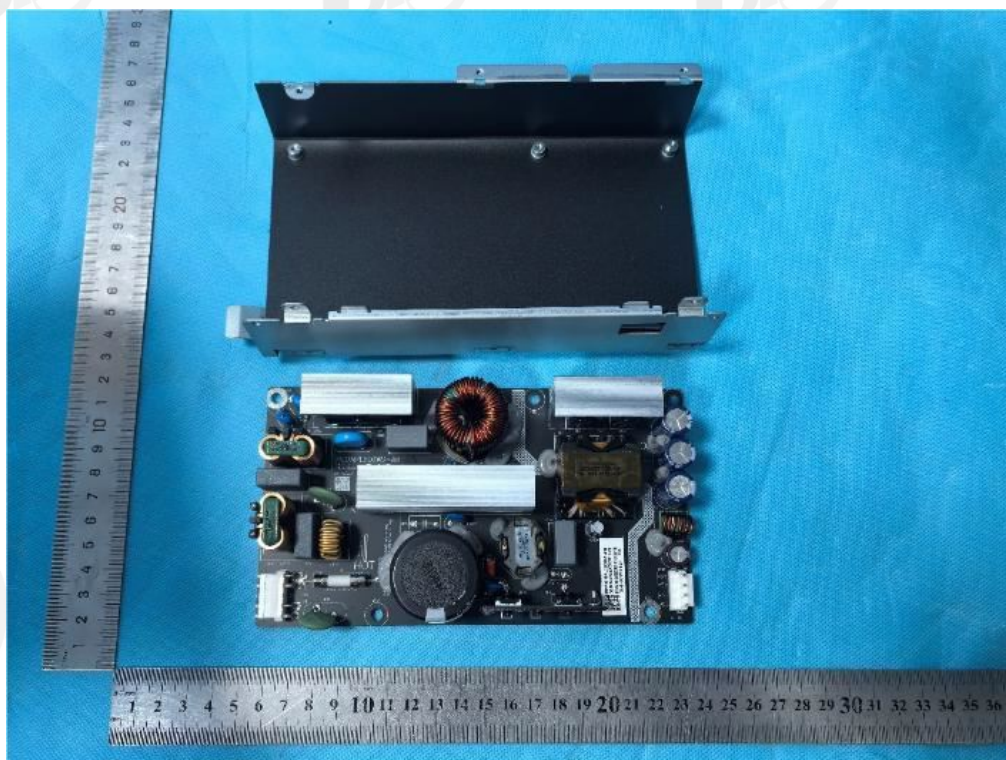


Internal view 11 for models XR06B and XR03B

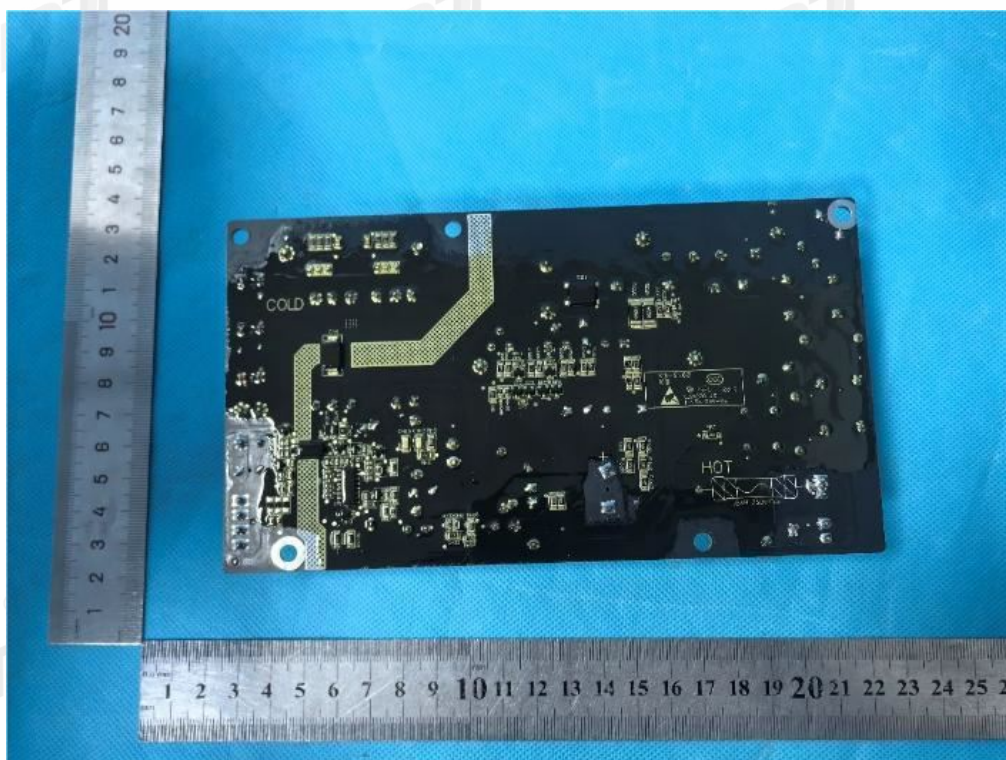


Internal view 12 for models XR06B and XR03B

Photos



Internal view 13 for models XR06B and XR03B

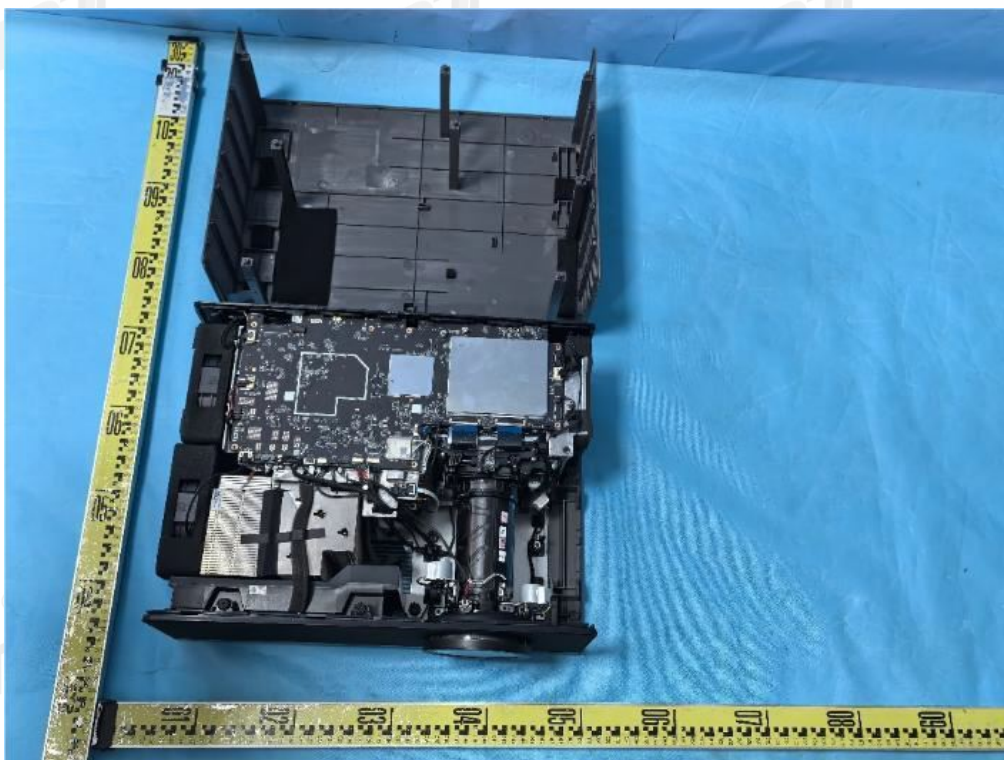


Internal view 14 (PCB view) for models XR06B and XR03B

Photos



Internal view 15 (Protective earthing) for models XR06B and XR03B

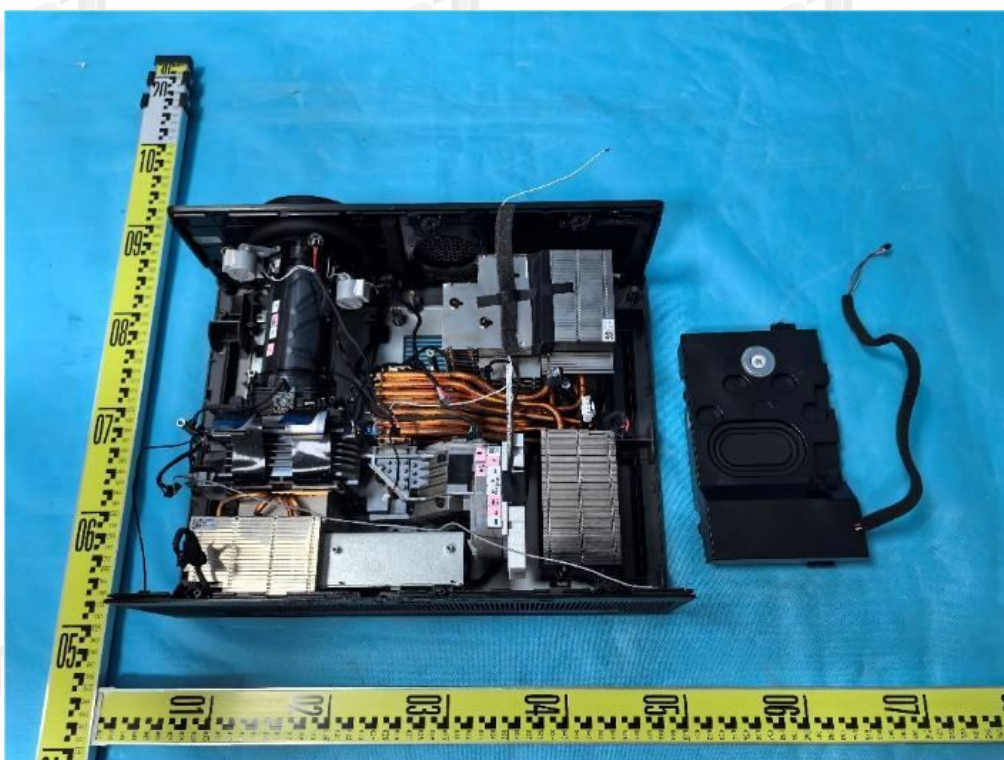


Internal view 16 for model XR03B

Photos



Internal view 17 for model XR03B



Internal view 18 for model XR03B

Photos



Internal view 19 for model XR03B

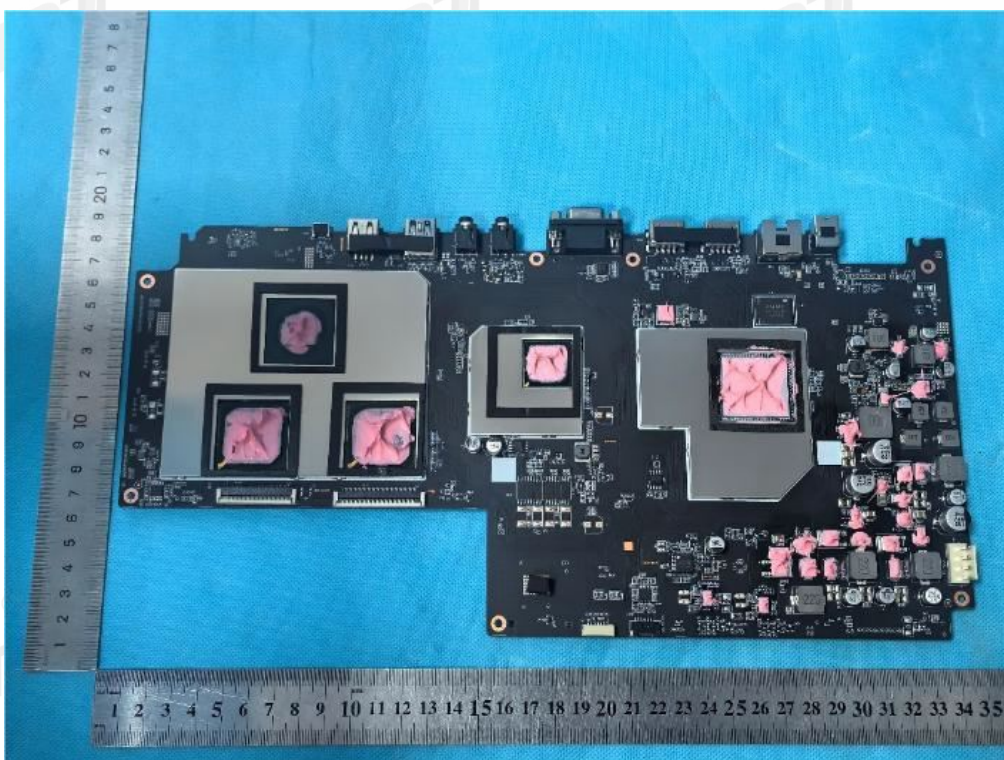


Internal view 20 for model XR03B

Photos



Internal view 21 for model XR03B

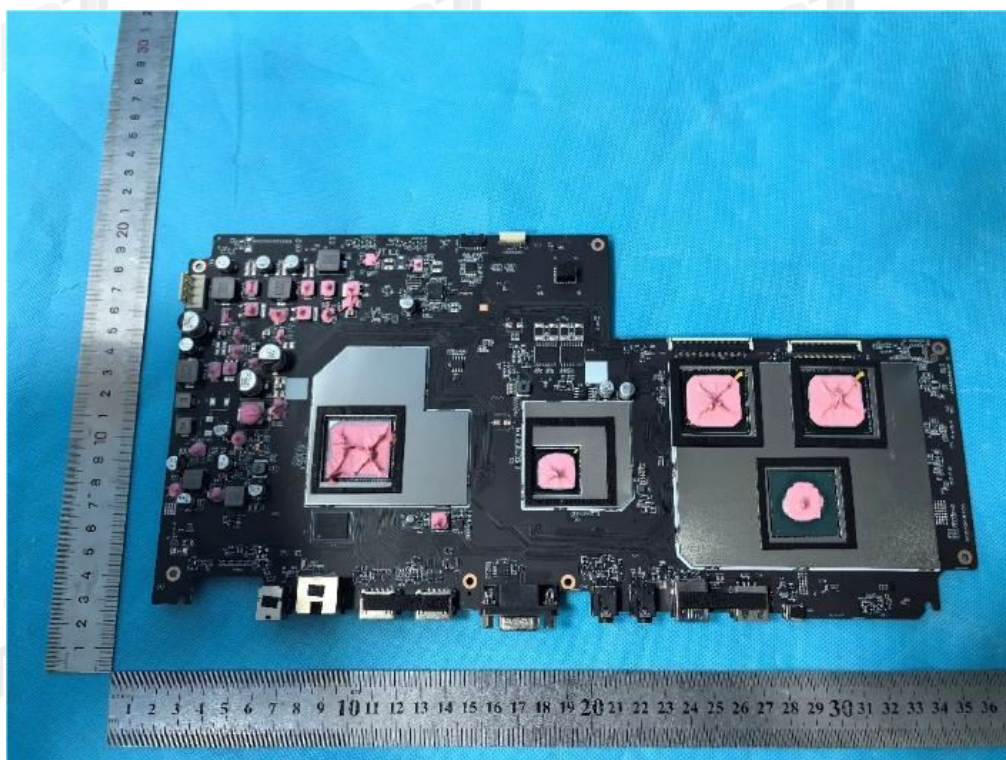


PCB view 1 for model XR03B

Photos

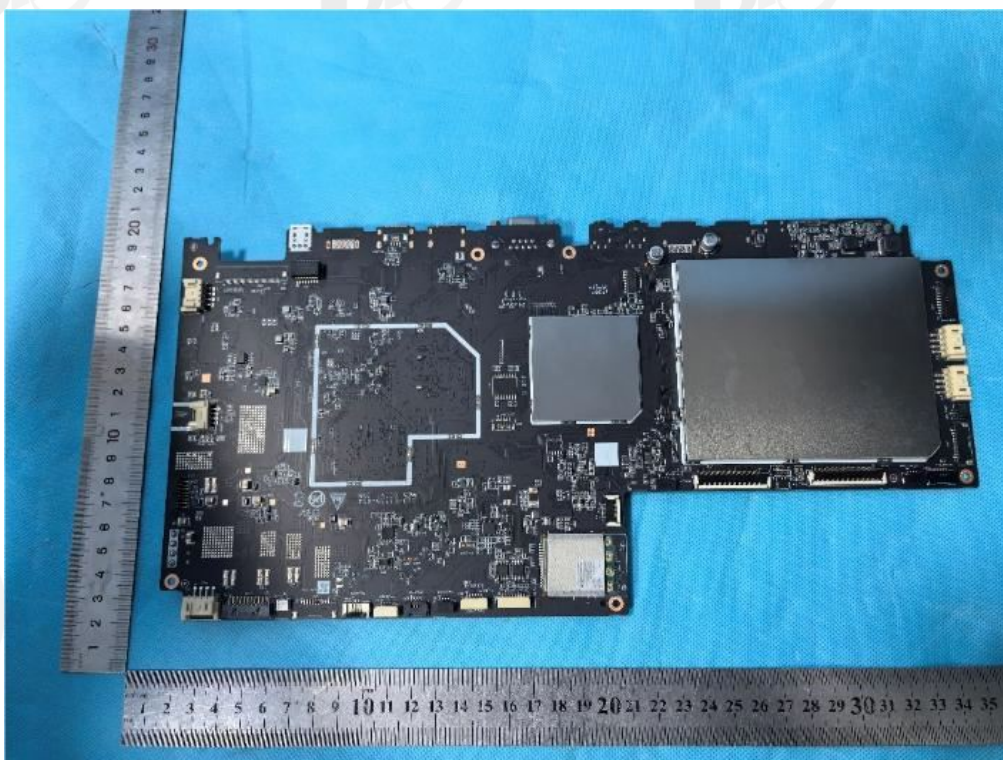


PCB view 2 for model XR03B



PCB view 3 for model XR06B

Photos



PCB view 4 for model XR06B



Remote controller view 1 for models XR06B and XR03B

Photos



Remote controller view 2 for models XR06B and XR03B

===== End of Test Report =====