

TEST REPORT

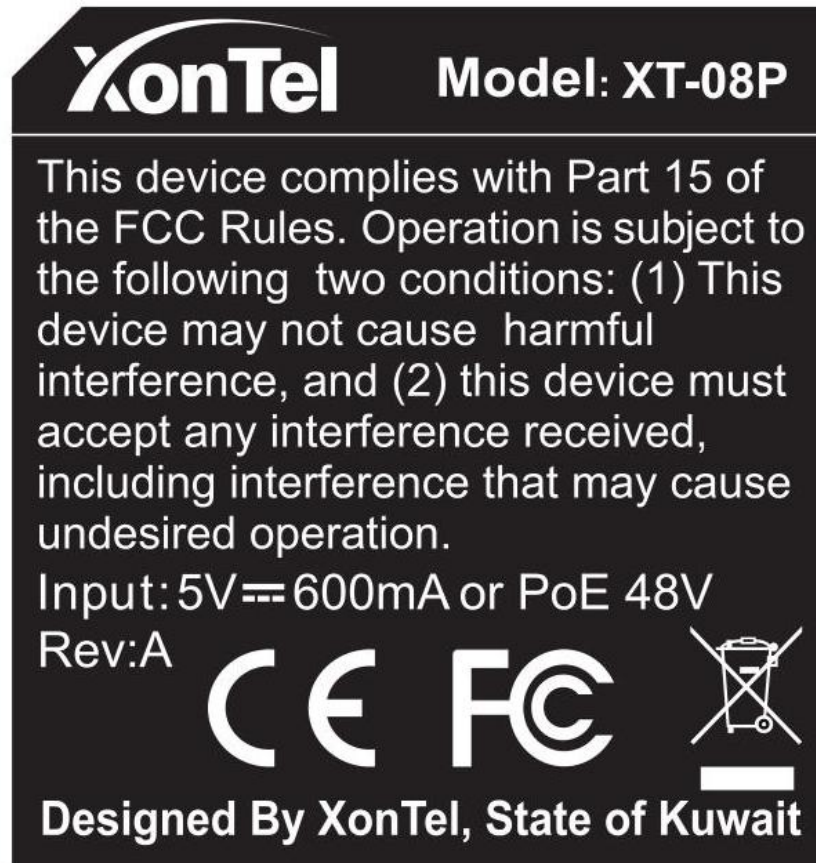
EN 62368-1

Audio/video, information and communication technology equipment

Part 1-Safety requirements

Report reference No	RSZ200924007-SFA1
Compiled by (+ signature)	Steven Shang
Approved by (+ signature)	Safety Manager: Jerry Liu
Date of issue	2020-10-10
Testing laboratory	Bay Area Compliance Laboratories Corp. (Shenzhen)
Address	6/F., West Wing, Third Phase of Wanli Industrial Building, Shihua Road, Futian Free Trade Zone, Shenzhen, Guangdong, China
Testing location	As above
Applicant's name	XonTel Technology Trd. Co. W.L.L
Address.....	Kuwait City, Qibla , Aladel Tower, F21, state of Kuwait .
Manufacturer's name	The same as applicant
Address.....	The same as applicant
Factory's name	N/A
Address.....	N/A
Standard	EN 62368-1:2014+A11:2017
Test sample(s) received	2019-11-04
Test in period	2019-11-04 to 2019-11-12
Procedure deviation	N/A
Non-standard test method	N/A
This test report is for the customer shown above and their specific product only. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Shenzhen).	
Type of test object	IP Phone
Trademark	
Test Model	XT-08P
Mutiple Model.....	N/A
Manufacturer.....	The same as applicant
Rating	5V---600mA or POE 48V

Copy of marking plate:



Note:

- The CE marking and WEEE symbol (if any) should be at least 7.0mm respectively in height.
- Manufacturers shall ensure that the equipment bears a type, batch or serial number or other element allowing its identification.
- Manufacturers shall indicate on the electrical equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted.
- Importers shall indicate on the electrical equipment their name, registered trade name or registered trade mark and the postal address at which they can be contacted.
- "The "manufacturer address xxxxxx" and "importer name xxxxx, address xxxxx" shall be provided on the product before the product into the market."
- When ship to EU, please add import and manufacturer name and address on the label or user manual , package.
- This report is valid only with a valid digital signature. The digital signature may be available only under the Adobe software above version 7.0.
- Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.
- BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.
- The test samples were in good condition and received: 2019-11-04.

Test item particulars	
Classification of use by	<input checked="" type="checkbox"/> Ordinary person <input type="checkbox"/> Instructed person <input type="checkbox"/> Skilled person <input checked="" type="checkbox"/> Children likely to be present
Supply Connection	<input type="checkbox"/> AC Mains <input type="checkbox"/> DC Mains <input checked="" type="checkbox"/> External Circuit - not Mains connected <input checked="" type="checkbox"/> ES1 <input type="checkbox"/> ES2 <input type="checkbox"/> ES3
Supply % Tolerance	<input type="checkbox"/> +10%/-10% <input type="checkbox"/> +20%/-15% <input type="checkbox"/> +__%/- __% <input checked="" type="checkbox"/> None
Supply Connection – Type	<input type="checkbox"/> pluggable equipment type A – <input type="checkbox"/> non-detachable supply cord <input type="checkbox"/> appliance coupler <input type="checkbox"/> direct plug-in <input type="checkbox"/> mating connector <input type="checkbox"/> pluggable equipment type B – <input type="checkbox"/> non-detachable supply cord <input type="checkbox"/> appliance coupler <input type="checkbox"/> permanent connection <input type="checkbox"/> mating connector <input checked="" type="checkbox"/> other: not directly connect to mains.
Considered current rating of protective device as part of building or equipment installation	N/A
Equipment mobility	<input checked="" type="checkbox"/> movable <input checked="" type="checkbox"/> hand-held <input type="checkbox"/> transportable <input type="checkbox"/> stationary <input type="checkbox"/> for building-in <input type="checkbox"/> direct plug-in <input type="checkbox"/> rack-mounting <input checked="" type="checkbox"/> wall-mounted
Over voltage category (OVC)	<input type="checkbox"/> OVC I <input type="checkbox"/> OVC II <input type="checkbox"/> OVC III <input type="checkbox"/> OVC IV <input checked="" type="checkbox"/> other: not directly connect to mains.
Class of equipment	<input type="checkbox"/> Class I <input type="checkbox"/> Class II <input checked="" type="checkbox"/> Class III
Access location	<input type="checkbox"/> restricted access location <input checked="" type="checkbox"/> N/A
Pollution degree (PD)	<input type="checkbox"/> PD 1 <input checked="" type="checkbox"/> PD 2 <input type="checkbox"/> PD 3
Manufacturer's specified maximum operating ambient	45°C
IP protection class	IP20
Power Systems	<input type="checkbox"/> TN <input type="checkbox"/> TT <input type="checkbox"/> IT - ____ V _{L-L}
Altitude during operation (m)	<input checked="" type="checkbox"/> 2000 m or less <input type="checkbox"/> ____ m
Altitude of test laboratory (m)	<input checked="" type="checkbox"/> 2000 m or less <input type="checkbox"/> ____ m
Mass of equipment (kg)	Approx 0.66kg
Possible test case verdicts	
- test case does not apply to the test object	
- test object does meet the requirement	
- test object does not meet the requirement	

General remarks:

"(see remark #)" refers to a remark appended to the report.

(see appended table)" refers to a table appended to the report.

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

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Throughout this report a ☐comma/ ☒point is used as the decimal separator.

General product information:

1. The equipment under tests is a Class III IP Phone. It is powered /charged by 5Vdc SELV source or POE 48Vdc. which complies with ES1 and PS2 according to IEC/EN62368-1.

Ports:

- RJ9 portx2:Handsetx1,Headsetx1
- RJ45 portx2:Networkx1,PCx1(Bridged to Network)

Installation:

- Desktop Stand
- Wall-mounted

2. The product was submitted and tested for use at the manufacturer's recommended ambient temperature (Tma) of 45°C

3. The follows is stated and guaranteed by applicant: The products sell without a Headset. So the related test items of Headset wasnot evaluated in the this report.

4. Compared with the original report RSZ190923003-SF issued by BACL on 2019-12-02 this report only change the applicant ,brand and model.no further tests needed. all test data comes from original report.

ENERGY SOURCE IDENTIFICATION AND CLASSIFICATION TABLE:	
<p>(Note 1: Identify the following six (6) energy source forms based on the origin of the energy.) (Note 2: The identified classification e.g., ES2, TS1, should be with respect to its ability to cause pain or injury on the body or its ability to ignite a combustible material. Any energy source can be declared Class 3 as a worse case classification e.g. PS3, ES3.)</p>	
<p>Electrically-caused injury (Clause 5): (Note: Identify type of source, list sub-assembly or circuit designation and corresponding energy source classification) Example: +5 V dc input</p>	
ES1	
Source of electrical energy	Corresponding classification (ES)
Rated Input: +5V ===	ES1
POE Input :48V===	ES1
<p>Electrically-caused fire (Clause 6): (Note: List sub-assembly or circuit designation and corresponding energy source classification) Example: Battery pack (maximum 85 watts):</p>	
PS2	
Source of power or PIS	Corresponding classification (PS)
Supply by POE:48V===	PS2
Rated Input: +5V === (Evaluated in approved adapter, comply with LPS)	PS1
<p>Injury caused by hazardous substances (Clause 7) (Note: Specify hazardous chemicals, whether produces ozone or other chemical construction not addressed as part of the component evaluation.) Example: Liquid in filled component</p>	
Glycol	
Source of hazardous substances	Corresponding chemical
N/A	N/A
<p>Mechanically-caused injury (Clause 8) (Note: List moving part(s), fan, special installations, etc. & corresponding MS classification based on Table 35.) Example: Wall mount unit</p>	
MS2	
Source of kinetic/mechanical energy	Corresponding classification (MS)
Sharp edges and corners do not cause pain or injury	MS1
Equipment mass <7kg	MS1
Wall mounting means	MS3
<p>Thermal burn injury (Clause 9) (Note: Identify the surface or support, and corresponding energy source classification based on type of part, location, operating temperature and contact time in Table 38.) Example: Hand-held scanner – thermoplastic enclosure</p>	
TS1	
Source of thermal energy	Corresponding classification (TS)
Thermoplastic enclosure	TS1
<p>Radiation (Clause 10) (Note: List the types of radiation present in the product and the corresponding energy source classification.) Example: DVD – Class 1 Laser Product</p>	
RS1	
Type of radiation	Corresponding classification (RS)
LED indicator—Exempt group	RS1

ENERGY SOURCE DIAGRAM

Indicate which energy sources are included in the energy source diagram. Insert diagram below

☐ ES ☐ PS ☐ MS ☐ TS ☐ RS

FINAL

OVERVIEW OF EMPLOYED SAFEGUARDS				
Clause	Possible Hazard			
5.1	Electrically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (ES3: Primary Filter circuit)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
Ordinary	ES2: ringing signal	Plastic enclosure	N/A	N/A
6.1	Electrically-caused fire			
Material part (e.g. mouse enclosure)	Energy Source (PS1: 15Watt circuit)	Safeguards		
		Basic	Supplementary	Reinforced
Enclosure	PS2 circuit	See 6.3.	Plastic	N/A.
PCB	PS2 circuit	See 6.3	V-0	N/A
Internal wiring	PS2 circuit	N/A	N/A	See 6.5
The other component/materials	PS2 circuit	See 6.3	See 6.4.5	N/A
7.1	Injury caused by hazardous substances			
Body Part (e.g., skilled)	Energy Source (hazardous material)	Safeguards		
		Basic	Supplementary	Reinforced
N/A	N/A	N/A	N/A	N/A
8.1	Mechanically-caused injury			
Body Part (e.g. Ordinary)	Energy Source (MS3:High Pressure Lamp)	Safeguards		
		Basic	Supplementary	Reinforced (Enclosure)
N/A	N/A	N/A	N/A	N/A.
9.1	Thermal Burn			
Body Part (e.g., Ordinary)	Energy Source (TS2)	Safeguards		
		Basic	Supplementary	Reinforced
N/A	N/A	N/A.	N/A	N/A
10.1	Radiation			
Body Part (e.g., Ordinary)	Energy Source (Output from audio port)	Safeguards		
		Basic	Supplementary	Reinforced
N/A	N/A	N/A	N/A	N/A
Supplementary Information:				
(1) See attached energy source diagram for additional details.				
(2) "N/A" – Normal Condition; "A" – Abnormal Condition; "S" Single Fault				

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Clause	Requirement + Test	Result - Remark	Verdict

4	GENERAL REQUIREMENTS		P
4.1.1	Acceptance of materials, components and subassemblies	See appended table 4.1.2	P
4.1.2	Use of components	Components comply with the requirements of this standard or, where specified in a requirements clause, with the safety aspects of the relevant IEC component standards.	P
4.1.3	Equipment design and construction		P
4.1.15	Markings and instructions	(See Annex F)	P
4.4.4	Safeguard robustness	All solid safeguards are compliant with applicable requirements in Annex T.	P
4.4.4.2	Steady force tests	(See Annex T.4)	P
4.4.4.3	Drop tests	1000mm drop test is applied three times on different directions, no hazards as a result of test. (See Annex T.7)	P
4.4.4.4	Impact tests		N/A
4.4.4.5	Internal accessible safeguard enclosure and barrier tests		N/A
4.4.4.6	Glass Impact tests	Not made of glass	N/A
4.4.4.7	Thermoplastic material tests	Enclosure (See Annex T.8)	P
4.4.4.8	Air comprising a safeguard		N/A
4.4.4.9	Accessibility and safeguard effectiveness		P
4.5	Explosion	Compliance is checked by inspection and tests as specified in Clause B.2, Clause B.3 and Clause B.4.	P
4.6	Fixing of conductors	The fixing of the conductors do not defeat the safeguard	P
4.6.1	Fix conductors not to defeat a safeguard	See above	P
4.6.2	10 N force test applied to		N/A
4.7	Equipment for direct insertion into mains socket - outlets	Not connected to mains	N/A
4.7.2	Mains plug part complies with the relevant standard		N/A
4.7.3	Torque (Nm)		N/A
4.8	Products containing coin/button cell batteries	No coin/button cell batteries	N/A
4.8.2	Instructional safeguard		N/A
4.8.3	Battery Compartment Construction		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Means to reduce the possibility of children removing the battery.....:		—
4.8.4	Battery Compartment Mechanical Tests	No batteries used	N/A
4.8.5	Battery Accessibility		N/A
4.9	Likelihood of fire or shock due to entry of conductive object.....:		N/A

5	ELECTRICALLY-CAUSED INJURY		P
5.2.1	Electrical energy source classifications.....:	(See appended table 5.2)	P
5.2.2	ES1, ES2 and ES3 limits	ES1	P
5.2.2.2	Steady-state voltage and current.....:	(See appended table 5.2)	P
5.2.2.3	Capacitance limits		N/A
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	The EUT is not an analogue telephone.	N/A
5.2.2.7	Audio signals		N/A
5.3	Protection against electrical energy sources	All parts are ES1 only.	P
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	No protection requirements for ES1.	P
5.3.2.1	Accessibility to electrical energy sources and safeguards	ES1	P
5.3.2.2	Contact requirements	No ES3	N/A
	a) Test with test probe from Annex V		N/A
	b) Electric strength test potential (V)		N/A
	c) Air gap (mm)		N/A
5.3.2.4	Terminals for connecting stripped wire	No such terminal	N/A
5.4	Insulation materials and requirements		P
5.4.1.2	Properties of insulating material	Considered	P
5.4.1.3	Humidity conditioning.....:	(See sub-clause 5.4.8)	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 degree	PD2	—
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		N/A
5.4.1.6	Insulation in transformers with varying dimensions	No transformers used	N/A
5.4.1.7	Insulation in circuits generating starting pulses	No such circuits	N/A
5.4.1.8	Determination of working voltage		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.4.1.9	Insulating surfaces		N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	No such parts	N/A
5.4.1.10.2	Vicat softening temperature		N/A
5.4.1.10.3	Ball pressure		N/A
5.4.2	Clearances		N/A
5.4.2.2	Determining clearance using peak working voltage		N/A
5.4.2.3	Determining clearance using required withstand voltage		N/A
	a) a.c. mains transient voltage		—
	b) d.c. mains transient voltage		—
	c) external circuit transient voltage		—
	d) transient voltage determined by measurement ... :		—
5.4.2.4	Determining the adequacy of a clearance using an electric strength test		N/A
5.4.2.5	Multiplication factors for clearances and test voltages		N/A
5.4.3	Creepage distances		N/A
5.4.3.1	General		N/A
5.4.3.3	Material Group	Material Group IIIb	—
5.4.4	Solid insulation		N/A
5.4.4.2	Minimum distance through insulation		N/A
5.4.4.3	Insulation compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices		N/A
5.4.4.5	Cemented joints		N/A
5.4.4.6	Thin sheet material		N/A
5.4.4.6.1	General requirements		N/A
5.4.4.6.2	Separable thin sheet material		N/A
	Number of layers (pcs)		N/A
5.4.4.6.3	Non-separable thin sheet material		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		N/A
5.4.4.9	Solid insulation at frequencies >30 kHz..... :		N/A
5.4.5	Antenna terminal insulation		N/A
5.4.5.1	General		N/A
5.4.5.2	Voltage surge test		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Insulation resistance (MΩ)		—
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		N/A
	Relative humidity (%)		N/A
	Temperature (°C)		N/A
	Duration (h)		N/A
5.4.9	Electric strength test		N/A
5.4.9.1	Test procedure for a solid insulation type test		P
5.4.9.2	Test procedure for routine tests		N/A
5.4.10	Protection against transient voltages between external circuit		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
5.4.11	Insulation between external circuits and earthed circuitry		N/A
5.4.11.1	Exceptions to separation between external circuits and earth		N/A
5.4.11.2	Requirements		N/A
	Rated operating voltage U_{op} (V)		—
	Nominal voltage U_{peak} (V)		—
	Max increase due to variation U_{sp}		—
	Max increase due to ageing ΔU_{sa}		—
	$U_{op} = U_{peak} + \Delta U_{sp} + \Delta U_{sa}$		—
5.5	Components as safeguards		
5.5.1	General	No such components	N/A
5.5.2	Capacitors and RC units		N/A
5.5.2.1	General requirement		N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector		N/A
5.5.3	Transformers		N/A
5.5.4	Optocouplers		N/A
5.5.5	Relays		N/A
5.5.6	Resistors		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.5.7	SPD's		N/A
5.5.7.1	Use of an SPD connected to reliable earthing		N/A
5.5.7.2	Use of an SPD between mains and protective earth		N/A
5.5.8	Insulation between the mains and external circuit consisting of a coaxial cable :		N/A
5.6	Protective conductor		N/A
5.6.2	Requirement for protective conductors		N/A
5.6.2.1	General requirements		N/A
5.6.2.2	Colour of insulation		N/A
5.6.3	Requirement for protective earthing conductors		N/A
	Protective earthing conductor size (mm ²) :		—
5.6.4	Requirement for protective bonding conductors		N/A
5.6.4.1	Protective bonding conductors		N/A
	Protective bonding conductor size (mm ²). :		—
	Protective current rating (A) :		—
5.6.4.3	Current limiting and overcurrent protective devices		N/A
5.6.5	Terminals for protective conductors		N/A
5.6.5.1	Requirement		N/A
	Conductor size (mm ²), nominal thread diameter (mm)..... :		N/A
5.6.5.2	Corrosion		N/A
5.6.6	Resistance of the protective system		N/A
5.6.6.1	Requirements		N/A
5.6.6.2	Test Method Resistance (Ω) :)		N/A
5.6.7	Reliable earthing		N/A
5.7	Prospective touch voltage, touch current and protective conductor current		N/A
5.7.2	Measuring devices and networks		N/A
5.7.2.1	Measurement of touch current..... :		N/A
5.7.2.2	Measurement of prospective touch voltage		N/A
5.7.3	Equipment set-up, supply connections and earth connections		N/A
	System of interconnected equipment (separate connections/single connection)..... :		—
	Multiple connections to mains (one connection at a time/simultaneous connections) :		—
5.7.4	Earthed conductive accessible parts :		N/A
5.7.5	Protective conductor current		N/A
	Supply Voltage (V) :		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Measured current (mA)		—
	Instructional Safeguard		N/A
5.7.6	Prospective touch voltage and touch current due to external circuits		N/A
5.7.6.1	Touch current from coaxial cables		N/A
5.7.6.2	Prospective touch voltage and touch current from external circuits		N/A
5.7.7	Summation of touch currents from external circuits	External circuits ID 1	N/A
	a) Equipment with earthed external circuits Measured current (mA)	Less than 0.25mA	N/A
	b) Equipment whose external circuits are not referenced to earth. Measured current (mA)		N/A

6	ELECTRICALLY- CAUSED FIRE		P
6.2	Classification of power sources (PS) and potential ignition sources (PIS)		P
6.2.2	Power source circuit classifications	PS2	P
6.2.2.1	General		P
6.2.2.2	Power measurement for worst-case load fault ... :	(See appended table 6.2.2)	P
6.2.2.3	Power measurement for worst-case power source fault	(See appended table 6.2.2)	P
6.2.2.4	PS1	(See appended table 6.2.2)	P
6.2.2.5	PS2		P
6.2.2.6	PS3		N/A
6.2.3	Classification of potential ignition sources		N/A
6.2.3.1	Arcing PIS		N/A
6.2.3.2	Resistive PIS		P
6.3	Safeguards against fire under normal operating and abnormal operating conditions		P
6.3.1 (a)	No ignition and attainable temperature value less than 90 % defined by ISO 871 or less than 300 °C for unknown materials..... :	(See appended table 5.4.1.5, 6.3.2, 9.0, B.2.6) No ignition occurred, and no part of the equipment attained a temperature value greater than 300 °C.	P
6.3.1 (b)	Combustible materials outside fire enclosure		N/A
6.4	Safeguards against fire under single fault conditions		P
6.4.1	Safeguard Method	The method for control fire spread is used.	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	No PS2 or PS3 circuits	N/A
6.4.3.1	General		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
6.4.3.2	Supplementary Safeguards		N/A
	Special conditions if conductors on printed boards are opened or peeled		N/A
6.4.3.3	Single Fault Conditions :	(See appended table 6.4.3)	N/A
	Special conditions for temperature limited by fuse		N/A
6.4.4	Control of fire spread in PS1 circuits	No supplementary safeguards are needed for protection against PS1	P
6.4.5	Control of fire spread in PS2 circuits	See below	P
6.4.5.2	Supplementary safeguards :	All components in PS2 circuit are made Min. V-2 or VTM-2 materials, and mounted on Min. V-1 class PCB.	P
6.4.6	Control of fire spread in PS3 circuit	No PS3 circuit	N/A
6.4.7	Separation of combustible materials from a PIS		N/A
6.4.7.1	General :		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		N/A
6.4.8.1	Fire enclosure and fire barrier material properties		N/A
6.4.8.2.1	Requirements for a fire barrier		N/A
6.4.8.2.2	Requirements for a fire enclosure		N/A
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	No openings	N/A
6.4.8.3.1	Fire enclosure and fire barrier openings	No openings	N/A
6.4.8.3.2	Fire barrier dimensions		N/A
6.4.8.3.3	Top Openings in Fire Enclosure: dimensions (mm) :	No openings	N/A
	Needle Flame test		N/A
6.4.8.3.4	Bottom Openings in Fire Enclosure, condition met a), b) and/or c) dimensions (mm) :	No openings	N/A
	Flammability tests for the bottom of a fire enclosure :		N/A
6.4.8.3.5	Integrity of the fire enclosure, condition met: a), b) or c) :	No door or cover	N/A
6.4.8.4	Separation of PIS from fire enclosure and fire barrier distance (mm) or flammability rating :		N/A
6.5	Internal and external wiring		P
6.5.1	Requirements	Internal wires in PS2 circuits comply with VW-1.	P
6.5.2	Cross-sectional area (mm ²) :	See appended table 4.1.2	—
6.5.3	Requirements for interconnection to building wiring :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

6.6	Safeguards against fire due to connection to additional equipment		N/A
	External port limited to PS2 or complies with Clause Q.1	See Annex Q	P

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES		N/A
7.2	Reduction of exposure to hazardous substances	No hazardous chemicals	N/A
7.3	Ozone exposure		N/A
7.4	Use of personal safeguards (PPE)		N/A
	Personal safeguards and instructions		—
7.5	Use of instructional safeguards and instructions		N/A
	Instructional safeguard (ISO 7010)		—
7.6	Batteries		N/A
8	MECHANICALLY-CAUSED INJURY		P
8.1	General		P
8.2	Mechanical energy source classifications	MS1: Edges and corners of headset MS1: Equipment mass	P
8.3	Safeguards against mechanical energy sources	No safeguard is required to be interposed between MS1 and ordinary persons.	N/A
8.4	Safeguards against parts with sharp edges and corners	Accessible edges and corners of the equipment are rounded and are classified as MS1.	N/A
8.4.1	Safeguards		N/A
8.5	Safeguards against moving parts	No moving parts	N/A
8.5.1	MS2 or MS3 part required to be accessible for the function of the equipment		N/A
8.5.2	Instructional Safeguard		—
8.5.4	Special categories of equipment comprising moving parts		N/A
8.5.4.1	Large data storage equipment		N/A
8.5.4.2	Equipment having electromechanical device for destruction of media		N/A
8.5.4.2.1	Safeguards and Safety Interlocks		N/A
8.5.4.2.2	Instructional safeguards against moving parts		N/A
	Instructional Safeguard		—
8.5.4.2.3	Disconnection from the supply		N/A
8.5.4.2.4	Probe type and force (N/A)		N/A
8.5.5	High Pressure Lamps		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.5.5.1	Energy Source Classification		N/A
8.5.5.2	High Pressure Lamp Explosion Test		N/A
8.6	Stability	MS1, Mass<7kg, no stability requirements	N/A
8.6.1	Product classification		N/A
	Instructional Safeguard		—
8.6.2	Static stability		N/A
8.6.2.2	Static stability test		N/A
	Applied Force.....		—
8.6.2.3	Downward Force Test		N/A
8.6.3	Relocation stability test		N/A
	Unit configuration during 10° tilt		—
8.6.4	Glass slide test		N/A
8.6.5	Horizontal force test (Applied Force)		N/A
	Position of feet or movable parts		—
8.7	Equipment mounted to wall or ceiling	Use mounting bracket and screws.	P
8.7.1	Mounting Means (Length of screws (mm) and mounting surface)	EUT is seated on the mounting bracket.	P
8.7.2	Direction and applied force	25.87N for vertical and 50N for horizontal	P
8.8	Handles strength	MS1, Mass<7kg	N/A
8.8.1	Classification		N/A
8.8.2	Applied Force		N/A
8.9	Wheels or casters attachment requirements	No wheels or casters used	N/A
8.9.1	Classification		N/A
8.9.2	Applied force.....		—
8.10	Carts, stands and similar carriers		N/A
8.10.1	General		N/A
8.10.2	Marking and instructions		N/A
	Instructional Safeguard		—
8.10.3	Cart, stand or carrier loading test and compliance		N/A
	Applied force.....		—
8.10.4	Cart, stand or carrier impact test		N/A
8.10.5	Mechanical stability		N/A
	Applied horizontal force (N/A)		—
8.10.6	Thermoplastic temperature stability (°C)		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
8.11	Mounting means for rack mounted equipment		N/A
8.11.1	General		N/A
8.11.2	Product Classification		N/A
8.11.3	Mechanical strength test, variable N/A :		N/A
8.11.4	Mechanical strength test 250N, including end stops		N/A
8.12	Telescoping or rod antennas :		N/A
	Button/Ball diameter (mm) :		—

9	THERMAL BURN INJURY		P
9.2	Thermal energy source classifications	All accessible surfaces are classified as TS1.	P
9.3	Safeguard against thermal energy sources	Measured temperature for external enclosure does not exceed TS1 limit.	N/A
9.4	Requirements for safeguards		P
9.4.1	Equipment safeguard	Measured temperature for external enclosure does not exceed TS1 limit.	P
9.4.2	Instructional safeguard :		N/A

10	RADIATION		P
10.2	Radiation energy source classification	Radiation energy source(LED indicator) classifications considered be RS1	P
10.2.1	General classification		P
10.3	Protection against laser radiation	No laser within the EUT	N/A
	Laser radiation that exists equipment:		—
	Normal, abnormal, single-fault :		N/A
	Instructional safeguard..... :		—
	Tool :		—
10.4	Protection against visible, infrared, and UV radiation	No visible, infrared, and UV radiation within the EUT	N/A
10.4.1	General		N/A
10.4.1.a)	RS3 for Ordinary and instructed persons..... :		N/A
10.4.1.b)	RS3 accessible to a skilled person :		N/A
	Personal safeguard (PPE) instructional safeguard :		—
10.4.1.c)	Equipment visible, IR, UV does not exceed RS1..:		N/A
10.4.1.d)	Normal, abnormal, single-fault conditions :		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
10.4.1.e)	Enclosure material employed as safeguard is opaque		N/A
10.4.1.f)	UV attenuation		N/A
10.4.1.g)	Materials resistant to degradation UV		N/A
10.4.1.h)	Enclosure containment of optical radiation		N/A
10.4.1.i)	Exempt Group under normal operating conditions		N/A
10.4.2	Instructional safeguard.....		N/A
10.5	Protection against x-radiation	No X-radiation within the EUT	N/A
10.5.1	X- radiation energy source that exists equipment		N/A
	Normal, abnormal, single fault conditions		
	Equipment safeguards		
	Instructional safeguard for skilled person		
10.5.3	Most unfavourable supply voltage to give maximum radiation		—
	Abnormal and single-fault condition.....		N/A
	Maximum radiation (pA/kg)		N/A
10.6	Protection against acoustic energy sources	No personal music players included	N/A
10.6.1	General		N/A
10.6.2	Classification		N/A
	Acoustic output, dB(A)		N/A
	Output voltage, unweighted r.m.s.		N/A
10.6.4	Protection of persons		N/A
	Instructional safeguards		N/A
	Equipment safeguard prevent ordinary person to RS2		—
	Means to actively inform user of increase sound pressure		—
	Equipment safeguard prevent ordinary person to RS2.....		—
10.6.5	Requirements for listening devices (headphones, earphones, etc.)		N/A
10.6.5.1	Corded passive listening devices with analog input		N/A
	Input voltage with 94 dB(A) L_{Aeq} acoustic pressure output		—
10.6.5.2	Corded listening devices with digital input		N/A
	Maximum dB(A)		—

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Clause	Requirement + Test	Result - Remark	Verdict
10.6.5.3	Cordless listening device		N/A
	Maximum dB(A)		—

B	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS		P
B.2	Normal Operating Conditions		P
B.2.1	General requirements	(See Test Item Particulars and appended test tables)	P
	Audio Amplifiers and equipment with audio amplifiers.....	No such parts	N/A
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 requirements	(See appended table B.3)	P
B.3.2	Covering of ventilation openings		N/A
B.3.3	D.C. mains polarity test		N/A
B.3.4	Setting of voltage selector.....	No voltage selector	N/A
B.3.5	Maximum load at output terminals.....		N/A
B.3.6	Reverse battery polarity	No batteries used	N/A
B.3.7	Abnormal operating conditions as specified in Clause E.2.		N/A
B.3.8	Safeguards functional during and after abnormal operating conditions	During an abnormal operating Condition that does not lead to a single fault condition, all safeguards are remained effective.	P
B.4	Simulated single fault conditions		P
B.4.2	Temperature controlling device open or short-circuited.....	No such parts used for the equipment	N/A
B.4.3	Motor tests	No motor used	N/A
B.4.3.1	Motor blocked or rotor locked increasing the internal ambient temperature		N/A
B.4.4	Short circuit of functional insulation	See appended table B.4	P
B.4.4.1	Short circuit of clearances for functional insulation		P
B.4.4.2	Short circuit of creepage distances for functional insulation		P
B.4.4.3	Short circuit of functional insulation on coated printed boards		N/A
B.4.5	Short circuit and interruption of electrodes in tubes and semiconductors		N/A
B.4.6	Short circuit or disconnect of passive components		P

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Clause	Requirement + Test	Result - Remark	Verdict
B.4.7	Continuous operation of components		N/A
B.4.8	Class 1 and Class 2 energy sources within limits during and after single fault conditions		P
B.4.9	Battery charging under single fault conditions		N/A
C	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV radiation	No 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 apparatus		N/A
C.2.4	Xenon-arc light exposure apparatus		N/A
D	TEST GENERATORS		N/A
D.1	Impulse test generators		N/A
D.2	Antenna interface test generator		N/A
D.3	Electronic pulse generator		N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAINING AUDIO AMPLIFIERS		N/A
E.1	Audio amplifier normal operating conditions		N/A
	Audio signal voltage (V)		—
	Rated load impedance (Ω)		N/A
E.2	Audio amplifier abnormal operating conditions		N/A
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND INSTRUCTIONAL SAFEGUARDS		P
F.1	General requirements	Equipment is provided with operator instructions.	P
	Instructions – Language	English version evaluated.	—
F.2	Letter symbols and graphical symbols		N/A
F.2.1	Letter symbols according to IEC60027-1		N/A
F.2.2	Graphic symbols IEC, ISO or manufacturer specific		N/A
F.3	Equipment markings		P
F.3.1	Equipment marking locations		P
F.3.2	Equipment identification markings		P
F.3.2.1	Manufacturer identification		—
F.3.2.2	Model identification		—
F.3.3	Equipment rating markings	Refer below	P
F.3.3.1	Equipment with direct connection to mains	Not direct connection to mains	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
F.3.3.2	Equipment without direct connection to mains		P
F.3.3.3	Nature of supply voltage	Not direct connection to mains	—
F.3.3.4	Rated voltage		—
F.3.3.4	Rated frequency	Not direct connection to mains	—
F.3.3.6	Rated current or rated power		—
F.3.3.7	Equipment with multiple supply connections		N/A
F.3.4	Voltage setting device	No such device	N/A
F.3.5	Terminals and operating devices		N/A
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		N/A
F.3.5.4	Replacement battery identification marking		N/A
F.3.5.5	Terminal marking location		N/A
F.3.6	Equipment markings related to equipment classification	Class III equipment	N/A
F.3.6.1	Class I Equipment		N/A
F.3.6.1.1	Protective earthing conductor terminal		N/A
F.3.6.1.2	Neutral conductor terminal		N/A
F.3.6.1.3	Protective bonding conductor terminals		N/A
F.3.6.2	Class II equipment (IEC60417-5172)		N/A
F.3.6.2.1	Class II equipment with or without functional earth		N/A
F.3.6.2.2	Class II equipment with functional earth terminal marking		N/A
F.3.7	Equipment IP rating marking	IP20	—
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) Equipment for use in locations where children not likely to be present - marking		N/A
	b) Instructions given for installation or initial use		P
	c) Equipment intended to be fastened in place		N/A
	d) Equipment intended for use only in restricted access area		N/A
	e) Audio equipment terminals classified as ES3 and other equipment with terminals marked in accordance F.3.6.1		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	f) Protective earthing employed as safeguard		N/A
	g) Protective earthing conductor current exceeding ES 2 limits		N/A
	h) Symbols used on equipment		N/A
	i) Permanently connected equipment not provided with all-pole mains switch		N/A
j)	j) Replaceable components or modules providing safeguard function		N/A
F.5	Instructional safeguards		N/A
	Where "instructional safeguard" is referenced in the test report it specifies the required elements, location of marking and/or instruction		N/A
G	COMPONENTS		P
G.1	Switches		N/A
G.1.1	General requirements	No such components	N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.2	Relays		N/A
G.2.1	General requirements	No such components	N/A
G.2.2	Overload test		N/A
G.2.3	Relay controlling connectors supply power		N/A
G.2.4	Mains relay, modified as stated in G.2		N/A
G.3	Protection Devices		N/A
G.3.1	Thermal cut-offs	No such components	N/A
G.3.1.1a) &b)	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)		N/A
G.3.1.1c)	Thermal cut-outs tested as part of the equipment as indicated in c)		N/A
G.3.1.2	Thermal cut-off connections maintained and secure		N/A
G.3.2	Thermal links		N/A
G.3.2.1a)	Thermal links separately tested with IEC 60691		N/A
G.3.2.1b)	Thermal links tested as part of the equipment		N/A
	Aging hours (H)		—
	Single Fault Condition		—
	Test Voltage (V) and Insulation Resistance (Ω) .:		—
G.3.3	PTC Thermistors	No such components	N/A
G.3.4	Overcurrent protection devices		N/A
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.5		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
G.3.5.2	Single faults conditions	(See appended Table B.4)	N/A
G.4	Connectors		N/A
G.4.1	Spacings		N/A
G.4.2	Mains connector configuration		N/A
G.4.3	Plug is shaped that insertion into mains socket-outlets or appliance coupler is unlikely		N/A
G.5	Wound Components		N/A
G.5.1	Wire insulation in wound components		N/A
G.5.1.2 a)	Two wires in contact inside wound component, angle between 45° and 90°		N/A
G.5.1.2 b)	Construction subject to routine testing		N/A
G.5.2	Endurance test on wound components		N/A
G.5.2.1	General test requirements		N/A
G.5.2.2	Heat run test		N/A
	Time (s)		—
	Temperature (°C)		—
G.5.2.3	Wound Components supplied by mains		N/A
G.5.3	Transformers		N/A
G.5.3.1	Requirements applied (IEC61204-7, IEC61558-1/-2, and/or IEC62368-1)	No such components	N/A
	Position		—
	Method of protection		—
G.5.3.2	Insulation		N/A
	Protection from displacement of windings		—
G.5.3.3	Overload test.....		N/A
G.5.3.3.1	Test conditions		N/A
G.5.3.3.2	Winding Temperatures testing in the unit		N/A
G.5.3.3.3	Winding Temperatures - Alternative test method		N/A
G.5.4	Motors		N/A
G.5.4.1	General requirements	No motor used	N/A
	Position		—
G.5.4.2	Test conditions		N/A
G.5.4.3	Running overload test		N/A
G.5.4.4	Locked-rotor overload test		N/A
	Test duration (days)		—
G.5.4.5	Running overload test for d.c. motors in secondary circuits		N/A
G.5.4.5.2	Tested in the unit		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Electric strength test (V)..... :		—
G.5.4.5.3	Tested on the Bench - Alternative test method; test time (h)		N/A
	Electric strength test (V)..... :		—
G.5.4.6	Locked-rotor overload test for d.c. motors in secondary circuits		N/A
G.5.4.6.2	Tested in the unit		N/A
	Maximum Temperature		N/A
	Electric strength test (V)		N/A
G.5.4.6.3	Tested on the bench - Alternative test method; test time (h)..... :		N/A
	Electric strength test (V)..... :		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		N/A
G.6.1	General	Class III	N/A
G.6.2	Solvent-based enamel wiring insulation		N/A
G.7	Mains supply cords		N/A
G.7.1	General requirements		N/A
	Type		—
	Rated current (A)		—
	Cross-sectional area (mm ²), (AWG)		—
G.7.2	Compliance and test method		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/A)..... :		—
G.7.3.2.2	Strain relief mechanism failure		N/A
G.7.3.2.3	Cord sheath or jacket position, distance (mm) ... :		—
G.7.3.2.4	Strain relief comprised of polymeric material		N/A
G.7.4	Cord Entry		N/A
G.7.5	Non-detachable cord bend protection		N/A
G.7.5.1	Requirements		N/A
G.7.5.2	Mass (g)		—
	Diameter (m)		—

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Clause	Requirement + Test	Result - Remark	Verdict
	Temperature (°C)		—
G.7.6	Supply wiring space		N/A
G.7.6.2	Stranded wire		N/A
G.7.6.2.1	Test with 8 mm strand		N/A
G.8	Varistors		N/A
G.8.1	General requirements	No such components	N/A
G.8.2	Safeguard against shock		N/A
G.8.3	Safeguard against fire		N/A
G.8.3.2	Varistor overload test		N/A
G.8.3.3	Temporary overvoltage		N/A
G.9	Integrated Circuit (IC) Current Limiters		N/A
G.9.1 a)	Manufacturer defines limit at max. 5A.		N/A
G.9.1 b)	Limiters do not have manual operator or reset		N/A
G.9.1 c)	Supply source does not exceed 250 VA		—
G.9.1 d)	IC limiter output current (max. 5A)		—
G.9.1 e)	Manufacturers' defined drift		—
G.9.2	Test Program 1		N/A
G.9.3	Test Program 2		N/A
G.9.4	Test Program 3		N/A
G.10	Resistors		N/A
G.10.1	General requirements		N/A
G.10.2	Resistor test		N/A
G.10.3	Test for resistors serving as safeguards between the mains and an external circuit consisting of a coaxial cable		N/A
G.10.3.1	General requirements		N/A
G.10.3.2	Voltage surge test		N/A
G.10.3.3	Impulse test		N/A
G.11	Capacitor and RC units		N/A
G.11.1	General requirements		N/A
G.11.2	Conditioning of capacitors and RC units		N/A
G.11.3	Rules for selecting capacitors		N/A
G.12	Optocouplers		N/A
	Optocouplers comply with IEC 60747-5-5:2007 Spacing or Electric Strength Test (specify option and test results)		N/A
	Type test voltage Vini		—
	Routine test voltage, Vini,b		—

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Clause	Requirement + Test	Result - Remark	Verdict
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
	Compliance with cemented joint requirements (Specify construction)		—
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.13.6.2a)	Thermal conditioning		N/A
G.13.6.2b)	Electric strength test		N/A
G.13.6.2c)	Abrasion resistance test		N/A
G.14	Coating on components terminals		N/A
G.14.1	Requirements		N/A
G.15	Liquid filled components		N/A
G.15.1	General requirements		N/A
G.15.2	Requirements		N/A
G.15.3	Compliance and test methods		N/A
G.15.3.1	Hydrostatic pressure test		N/A
G.15.3.2	Creep resistance test		N/A
G.15.3.3	Tubing and fittings compatibility test		N/A
G.15.3.4	Vibration test		N/A
G.15.3.5	Thermal cycling test		N/A
G.15.3.6	Force test		N/A
G.15.4	Compliance		N/A
G.16	IC including capacitor discharge function (ICX)		N/A
a)	Humidity treatment in accordance with sc5.4.8 – 120 hours		N/A
b)	Impulse test using circuit 2 with U_c = to transient voltage		N/A
C1)	Application of ac voltage at 110% of rated voltage for 2.5 minutes		N/A
C2)	Test voltage		—

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Clause	Requirement + Test	Result - Remark	Verdict
D1)	10,000 cycles on and off using capacitor with smallest capacitance resistor with largest resistance specified by manufacturer		N/A
D2)	Capacitance		—
D3)	Resistance		—
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 complied with		N/A
H.3.2.2	Tripping device		N/A
H.3.2.3	Monitoring voltage (V)		—
J	INSULATED WINDING WIRES FOR USE WITHOUT INTERLEAVED INSULATION		N/A
	General requirements		N/A
K	SAFETY INTERLOCKS		N/A
K.1	General requirements		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
	Compliance		N/A
K.6	Mechanically operated safety interlocks		N/A
K.6.1	Endurance requirement		N/A
K.6.2	Compliance and Test method		N/A
K.7	Interlock circuit isolation		N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements (type and circuit location)		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

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Clause	Requirement + Test	Result - Remark	Verdict
L	DISCONNECT DEVICES		N/A
L.1	General requirements		N/A
L.2	Permanently connected equipment		N/A
L.3	Parts that remain energized		N/A
L.4	Single phase equipment		N/A
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
M	EQUIPMENT CONTAINING BATTERIES AND THEIR PROTECTION CIRCUITS		N/A
M.1	General requirements	No batteries used	N/A
M.2	Safety of batteries and their cells		N/A
M.2.1	Requirements		N/A
M.2.2	Compliance and test method (identify method):		N/A
M.3	Protection circuits		N/A
M.3.1	Requirements		N/A
M.3.2	Tests		N/A
	- Overcharging of a rechargeable battery		N/A
	- Unintentional charging of a non-rechargeable battery		N/A
	- Reverse charging of a rechargeable battery		N/A
	- Excessive discharging rate for any battery		N/A
M.3.3	Compliance:		N/A
M.4	Additional safeguards for equipment containing secondary lithium battery		N/A
M.4.1	General		N/A
M.4.2	Charging safeguards		N/A
M.4.2.1	Charging operating limits		N/A
M.4.2.2a)	Charging voltage, current and temperature.....:		—
M.4.2.2 b)	Single faults in charging circuitry:		—
M.4.3	Fire Enclosure		N/A
M.4.4	Endurance of equipment containing a secondary lithium battery		N/A
M.4.4.2	Preparation		N/A
M.4.4.3	Drop and charge/discharge function tests		N/A
	Drop		N/A
	Charge		N/A
	Discharge		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
M.4.4.4	Charge-discharge cycle test		N/A
M.4.4.5	Result of charge-discharge cycle test		N/A
M.5	Risk of burn due to short circuit during carrying		N/A
M.5.1	Requirement		N/A
M.5.2	Compliance and Test Method (Test of P.2.3)		N/A
M.6	Prevention of short circuits and protection from other effects of electric current		N/A
M.6.1	Short circuits		N/A
M.6.1.1	General requirements		N/A
M.6.1.2	Test method to simulate an internal fault		N/A
M.6.1.3	Compliance (Specify M.6.1.2 or alternative method)		N/A
M.6.2	Leakage current (mA)		N/A
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration		N/A
M.7.2	Compliance and test method		N/A
M.8	Protection against internal ignition from external spark sources of lead acid batteries		N/A
M.8.1	General requirements		N/A
M.8.2	Test method		N/A
M.8.2.1	General requirements		N/A
M.8.2.2	Estimation of hypothetical volume V_z (m ³ /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 (Determination of compliance: inspection, data review; or abnormal testing)		N/A
N/A	ELECTROCHEMICAL POTENTIALS		N/A
	Metal(s) used	Pollution degree considered as pollution degree 2	—
O	MEASUREMENT OF CREEPAGE DISTANCES AND CLEARANCES		N/A
	Figures O.1 to O.20 of this Annex applied.....		—
P	SAFEGUARDS AGAINST ENTRY OF FOREIGN OBJECTS AND SPILLAGE OF INTERNAL LIQUIDS		N/A
P.1	General requirements		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
P.2.2	Safeguards against entry of foreign object		N/A
	Location and Dimensions (mm)		—
P.2.3	Safeguard against the consequences of entry of foreign object		N/A
P.2.3.1	Safeguards against the entry of a foreign object		N/A
	Openings in transportable equipment	Non transportable equipment	N/A
	Transportable equipment with metalized plastic parts		N/A
P.2.3.2	Openings in transportable equipment in relation to metallized parts of a barrier or enclosure (identification of supplementary safeguard)		N/A
P.3	Safeguards against spillage of internal liquids	No internal liquids	N/A
P.3.1	General requirements		N/A
P.3.2	Determination of spillage consequences		N/A
P.3.3	Spillage safeguards		N/A
P.3.4	Safeguards effectiveness		N/A
P.4	Metallized coatings and adhesive securing parts		N/A
P.4.2 a)	Conditioning testing		N/A
	T _c (°C)		—
	T _r (°C)		—
	T _a (°C)		—
P.4.2 b)	Abrasion testing		N/A
P.4.2 c)	Mechanical strength testing		N/A
Q	CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING		P
Q.1	Limited power sources		P
Q.1.1 a)	Inherently limited output		N/A
Q.1.1 b)	Impedance limited output		N/A
	- Regulating network limited output under normal operating and simulated single fault condition	(See appended Tables Annex Q.1)	P
Q.1.1 c)	Overcurrent protective device limited output		N/A
Q.1.1 d)	IC current limiter complying with G.9		N/A
Q.1.2	Compliance and test method		P
Q.2	Test for external circuits – paired conductor cable		N/A
	Maximum output current (A)		—
	Current limiting method.....		—
R	LIMITED SHORT CIRCUIT TEST		N/A
R.1	General requirements		N/A
R.2	Determination of the overcurrent protective device and circuit		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
R.3	Test method Supply voltage (V) and short-circuit current (A)). :		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
	Samples, material		—
	Wall thickness (mm)		—
	Conditioning (°C)		—
	Test flame according to IEC 60695-11-5 with conditions as set out		N/A
	Test specimen does not show any additional hole		N/A
S.3	Flammability test for the bottom of a fire enclosure		N/A
	Samples, material		—
	Wall thickness (mm)		—
	Cheesecloth did not ignite		N/A
S.4	Flammability classification of materials		N/A
S.5	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 (test condition), (°C).....		—
	Test flame according to IEC 60695-11-20 with conditions as set out		N/A
	After every test specimen was not consumed completely		N/A
	After fifth flame application, flame extinguished within 1 min		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
T	MECHANICAL STRENGTH TESTS		P
T.1	General requirements		P
T.2	Steady force test, 10 N		N
T.3	Steady force test, 30 N		N/A
T.4	Steady force test, 100 N	(See appended table T.4)	P
T.5	Steady force test, 250 N		N/A
T.6	Enclosure impact test		N/A
	Fall test		N/A
	Swing test		N/A
T.7	Drop test	(See appended table T7)	P
T.8	Stress relief test	(See appended table T8)	P
T.9	Impact Test (glass)		N/A
T.9.1	General requirements		N/A
T.9.2	Impact test and compliance		N/A
	Impact energy (J)		—
	Height (m).....		—
T.10	Glass fragmentation test.....	(See sub-clause 4.4.4.9)	N/A
T.11	Test for telescoping or rod antennas		N/A
	Torque value (Nm)		—
U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		N/A
U.1	General requirements	No such components	N/A
U.2	Compliance and test method for non-intrinsically protected CRTs		N/A
U.3	Protective Screen.....		N/A
V	DETERMINATION OF ACCESSIBLE PARTS (FINGERS, PROBES AND WEDGES)		N/A
V.1	Accessible parts of equipment		N/A
V.2	Accessible part criterion		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT TO TEST REPORT IEC 62368-1 EUROPEAN GROUP DIFFERENCES AND NATIONAL DIFFERENCES (Audio/video, information and communication technology equipment Part 1: Safety requirements)	
Differences according to	EN 62368-1:2014+A11:2017
Attachment Form No	EU_GD_IEC62368_1B
Attachment Originator	Intertek Semko AB
Master Attachment	Date (2017-09-22)
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	CENELEC COMMON MODIFICATIONS (EN)	N/A
1	NOTE Z1	N/A
4.Z1	Protective devices included as integral parts of the equipment or as parts of the building installation:	N/A
	a) Included as parts of the equipment	N/A
	b) For components in series with the mains; by devices in the building installation	N/A
	c) For pluggable type B or permanently connected; by devices in the building installation	N/A
5.4.2.3.2.4	Interconnection with external circuit	N/A
10.2.1	Additional requirements in 10.5.1	N/A
10.5.1	RS1 compliance measurement conditions	N/A
10.6.2.1	EN 71-1:2011, 4.20 and methods and distances	N/A
10.Z1	Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz	N/A
G.7.1	NOTE Z1	N/A

ZB	ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	N/A
4.1.15	Denmark, Finland, Norway and Sweden: Class I pluggable equipment type A marking	N/A
4.7.3	United Kingdom: Torque test socket-outlet BS 1363, and the plug part BS 1363.	N/A
5.2.2.2	Denmark: Warning for high touchcurrent	N/A
5.4.11.1 and Annex G	Finland and Sweden: Separation of the telecommunication network from earth	N/A
5.5.2.1	Norway: Capacitors rated for the applicable line-to-line voltage (230 V).	N/A
5.5.6	Finland, Norway and Sweden: Resistors used as basic safeguard or bridging basic insulation comply with G.10.1 and G.10.2.	N/A
5.6.1	Denmark: Protection for pluggable equipment type A; integral part of the equipment	N/A
5.6.4.2.1	Ireland and United Kingdom: The protective current rating is taken to be 13 A	N/A
5.6.5.1	Ireland and United Kingdom: Conductor sizes of flexible cords to be accepted by terminals for equipment rated 10 A to 13 A	N/A

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Clause	Requirement + Test	Result - Remark	Verdict
5.7.5	Denmark: The installation instruction affixed to the equipment if high protective conductor current		N/A
5.7.6.1	Norway and Sweden: Television distribution system isolation text in user manual		N/A
5.7.6.2	Denmark: Warning for high touch current		N/A
B.3.1 and B.4	Ireland and United Kingdom: Tests conducted using an external miniature circuit breaker or protective devices included as an integral part of the direct plug-in equipment		N/A
G.4.2	Denmark: Appliances rated ≤ 13 A provided with a plug according to DS 60884-2-D1:2011.		N/A
	Class I equipment provided with socket-outlets provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a.		N/A
	If a single-phase equipment having rated >13 A or poly-phase equipment provided with a supply cord with a plug, plug in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2.		N/A
	Mains socket outlets intended for providing power to Class II apparatus rated 2,5 A in accordance with DS 60884-2-D1:2011 standard sheet DKA 1-4a.		N/A
	Other current rating socket outlets in compliance with Standard Sheet DKA 1-3a or DKA 1-1c.		N/A
	Mains socket-outlets with earth in compliance with DS 60884-2-D1:2011 Standard Sheet DK 1-3a, DK 1-1c, DK1-1d, DK 1-5a or DK 1-7a		N/A
G.4.2	United Kingdom: The plug part of direct plug-in equipment assessed to BS 1363		N/A
G.7.1	United Kingdom: Equipment fitted with a 'standard plug' in accordance with the Plugs and Sockets etc (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768		N/A
G.7.1	Ireland: Apparatus provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use		N/A
G.7.2	Ireland and United Kingdom: A power supply cord for equipment which is rated over 10 A and up to and including 13 A.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict

ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A
10.5.2	Germany: Cathode ray tube intended for the display of visual images, authorization or application of type approval and marking.		N/A

FINAL

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Clause	Requirement + Test	Result - Remark	Verdict

4.1.2	TABLE: List of critical components				P
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard	Mark(s) of conformity ¹⁾
Enclosure material	Interchangeable	Interchangeable	Min.HB, 85°C	UL94 UL746	UL
PCB	Interchangeable	Interchangeable	Min. V-1,105°C	UL796	UL
Internal wire	Interchangeable	Interchangeable	VW-1, 80°C, 0.5mm ²	UL758	UL
Speaker for receiver	Interchangeable	Interchangeable	64Ω, 20mW	EN 62368-1: 2014+A11:2017	Tested with equipment
Switching Mode Power Adaptor(EU plug)	SHENZHEN FRECOM ELECTRONCS CO., LTD	F05L5-050060SPAV	Input: 100-240V~ 50/60Hz 0.2A Output: 5.0V $\overline{\text{---}}$ 0.6A,L.P.S, Tmax:45°C	IEC 60950-1: 2005 (Second Edition)+Am1: 2009+Am2: 2013	Tested by TÜV SÜD Certification and Testing(China)Co.,Ltd. Shenzhen Branch Report No.:65.210.15.108.02
Switching Mode Power Adaptor(EK plug)	SHENZHEN FRECOM ELECTRONCS CO.,LTD	F05L5-050060SPAB	Input: 100-240V~ 50/60Hz 0.2A Output: 5.0V $\overline{\text{---}}$ 0.6A,L.P.S, Tmax:45°C	IEC 60950-1: 2005 (Second Edition)+Am1: 2009+Am2: 2013	Tested by TÜV SÜD Certification and Testing(China)Co.,Ltd. Shenzhen Branch Report No.: 65.210.15.108.02
Switching Mode Power Adaptor(EU plug)	CHENZHOUE FRECOM ELECTRONCS CO., LTD	F05L5-050060SPAV	Input: 100-240V~ 50/60Hz 0.2A Output: 5.0V $\overline{\text{---}}$ 0.6A,L.P.S, Tmax:45°C	IEC 60950-1: 2005 (Second Edition)+Am1: 2009+Am2: 2013	Tested by TÜV SÜD Certification and Testing(China)Co.,Ltd. Shenzhen Branch Report No.: 211-700166-000
Switching Mode Power Adaptor(EK plug)	CHENZHOUE FRECOM ELECTRONCS CO.,LTD	F05L5-050060SPAB	Input: 100-240V~ 50/60Hz 0.2A Output: 5.0V $\overline{\text{---}}$ 0.6A,L.P.S, Tmax:45°C	IEC 60950-1: 2005 (Second Edition)+Am1: 2009+Am2: 2013	Tested by TÜV SÜD Certification and Testing(China)Co.,Ltd. Shenzhen Branch Report No.: 211-700166-000

EN 62368-1					
Clause	Requirement + Test			Result - Remark	Verdict
Speaker for base	Interchangeable	Interchangeable	4Ω, 2W	EN 62368-1: 2014+A11:2017	Tested with equipment
LCD	TECHSHiNE	TS-GG128048011W	VDD:3.0V VOP:8.0V	EN 62368-1: 2014+A11:2017	Tested with equipment
Description ²⁾ :					
Supplementary information:					
1) Provided evidence ensures the agreed level of compliance. See OD-CB2039.					
2) Description line content is optional. Main line description needs to clearly detail the component used for testing					

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

4.8.4, 4.8.5	TABLE: Lithium coin/button cell batteries mechanical tests	N/A
(The following mechanical tests are conducted in the sequence noted.)		
4.8.4.2	TABLE: Stress Relief test	—
Part	Material	Oven Temperature (°C)
---	---	---
4.8.4.3	TABLE: Battery replacement test	—
Battery part no.		—
Battery Installation/withdrawal		Battery Installation/Removal Cycle
		1
		2
		3
		4
		5
		6
		8
		9
		10
4.8.4.4	TABLE: Drop test	—
Impact Area	Drop Distance	Drop No.
---	---	---
4.8.4.5	TABLE: Impact	—
Impacts per surface	Surface tested	Impact energy (Nm)
---	---	---
4.8.4.6	TABLE: Crush test	—
Test position	Surface tested	Crushing Force (N/A)
---	---	---
Supplementary information:		

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Clause	Requirement + Test	Result - Remark	Verdict

4.8.5	TABLE: Lithium coin/button cell batteries mechanical test result			N/A
Test position	Surface tested	Force (N/A)	Duration force applied (s)	
---	---	---	---	
---	---	---	---	
Supplementary information:				

5.2		Table: Classification of electrical energy sources					P
5.2.2.2 – Steady State Voltage and Current conditions							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				U (Vrms or Vpk)	I (Apk or Arms)	Hz	
1	5V	Input Power	Normal	+4.95Vdc	---	---	ES1
			Abnormal	+5.01Vdc	---	---	
			Single fault – SC/OC	+5.02Vdc	---	---	
2	48V	Input Power	Normal	+48Vdc	---	---	ES1
			Abnormal	+48Vdc	---	---	
			Single fault – SC/OC	+48Vdc	---	---	
5.2.2.3 - Capacitance Limits							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters		ES Class	
				Capacitance, nF	Upk (V)		
---	---	---	Normal	---	---	---	
			Abnormal	---	---		
			Single fault – SC/OC	---	---		
5.2.2.4 - Single Pulses							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Duration (ms)	Upk (V)	Ipk (mA)	
---	---	---	Normal	---	---	---	---
			Abnormal	---	---	---	
			Single fault – SC/OC	---	---	---	

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Clause	Requirement + Test	Result - Remark	Verdict

5.2.2.5 - Repetitive Pulses							
No.	Supply Voltage	Location (e.g. circuit designation)	Test conditions	Parameters			ES Class
				Off time (ms)	Upk (V)	Ipk (mA)	
---	---	---	Normal	---	---	---	---
			Abnormal	---	---	---	
			Single fault – SC/OC	---	---	---	
Test Conditions: Normal – Abnormal - Supplementary information: SC=Short Circuit, OC=Short Circuit							

5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measurements					P		
	Supply voltage (V) :	A		B		—		
	Ambient T _{min} (°C) :	25.6	---	25.9	---	—		
	Ambient T _{max} (°C) :	26.3	Shift to T _{ma} 45°C	26.4	Shift to T _{ma} 45°C	—		
	T _{ma} (°C) :	--	---	--	--	—		
Maximum measured temperature T of part/at:		T (°C)				Allowed T _{max} (°C)		
Ambient		26.3	45.0	26.4	45.0	--		
PCB near T501		35.1	53.8	33.7	52.3	105		
PCB near U4		36.6	55.3	34.8	53.4	105		
PCB (Key button)		30.3	49.0	29.0	47.6	105		
PCB(connect the handset)		26.7	45.4	26.3	44.9	105		
Internal enclosure		27.3	46.0	27.0	45.6	85		
Internal enclosure of Handset		26.9	45.6	25.8	44.4	75		
Measured Enclosure only								
LCD (>1 min)		27.2	--	26.7	--	60		
External enclosure (>1 min)		28.9	--	27.7	--	60		
Key (>1 min)		27.6	--	26.6	--	60		
External enclosure of Handset		27.5	--	26.5	--	60		
Supplementary information: 1. T _{ma} is 45°C 2. A: On hook B:Off hook 3. Power by adaptor 4. Installation: Desktop Stand								
Temperature T of winding:		t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class

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

---	---	---	---	---	---	---	---
Supplementary information: Note 1: Tma should be considered as directed by applicable requirement Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)							

5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measurements					P	
	Supply voltage (V) :	A		B		—	
	Ambient T _{min} (°C) :	23.7	---	23.6	---	—	
	Ambient T _{max} (°C) :	24.2	Shift to Tma 45°C	24.5	Shift to Tma 45°C	—	
	Tma (°C) :	--	---	--	--	—	
Maximum measured temperature T of part/at:		T (°C)				Allowed T _{max} (°C)	
Ambient		24.2	45.0	24.5	45.0	--	
PCB near T501		35.6	56.4	34.3	54.8	105	
PCB near U4		34.8	55.6	33.6	54.1	105	
PCB (Key button)		30.0	50.8	29.4	49.9	105	
PCB(connect the handset)		26.5	47.3	26.3	46.8	105	
Internal enclosure		26.2	47.0	26.0	46.5	105	
Internal enclosure of Handset		24.8	45.6	25.0	45.5	75	
Measured Enclosure only							
LCD (>1 min)		25.9	--	26.1	--	60	
External enclosure (>1 min)		26.6	--	26.5	--	60	
Key (>1 min)		26.4	—	26.3	—	60	
External enclosure of Handset		26.5	--	26.4	--	60	
Supplementary information: 1.Tma is 45°C 2.A: On hook B:Off hook 3.Power by POE 4. Installation: Desktop Stand							
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
---	---	---	---	---	---	---	---
Supplementary information: Note 1: Tma should be considered as directed by applicable requirement Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)							

EN 62368-1							
Clause	Requirement + Test	Result - Remark				Verdict	
5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measurements					P	
	Supply voltage (V) :	A		B		—	
	Ambient T _{min} (°C) :	26.7	---	26.8	---	—	
	Ambient T _{max} (°C) :	27.3	Shift to T _{ma} 45°C	27.8	Shift to T _{ma} 45°C	—	
	T _{ma} (°C) :	--	---	--	--	—	
Maximum measured temperature T of part/at:		T (°C)				Allowed T _{max} (°C)	
Ambient		27.3	45.0	27.8	45.0	--	
PCB near T501		34.3	52.0	32.8	50.0	105	
PCB near U4		36.0	53.7	34.7	51.9	105	
PCB (Key button)		31.0	48.7	30.5	47.7	105	
PCB(connect the handset)		28.8	46.5	28.4	45.6	105	
Internal enclosure		28.9	46.6	28.5	45.7	105	
Internal enclosure of Handset		29.1	46.8	28.9	46.1	75	
Measured Enclosure only							
LCD (>1 min)		28.0	--	28.4	--	60	
External enclosure (>1 min)		28.7	--	28.4	--	60	
Key (>1 min)		28.1	--	27.9	--	60	
External enclosure of Handset		28.2	--	28.0	--	60	
Supplementary information:							
5. T _{ma} is 45°C							
6. A: On hook B:Off hook							
7. Power by adaptor							
8. Installation: Wall-mounted							
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
---	---	---	---	---	---	---	---
Supplementary information:							
Note 1: T _{ma} should be considered as directed by applicable requirement							
Note 2: T _{ma} is not included in assessment of Touch Temperatures (Clause 9)							

EN 62368-1							
Clause	Requirement + Test	Result - Remark				Verdict	
5.4.1.4, 6.3.2, 9.0, B.2.6	TABLE: Temperature measurements					P	
	Supply voltage (V) :	A		B		—	
	Ambient T _{min} (°C) :	27.5	---	27.9	---	—	
	Ambient T _{max} (°C) :	28.1	Shift to Tma 45°C	28.6	Shift to Tma 45°C	—	
	Tma (°C) :	--	---	--	--	—	
Maximum measured temperature T of part/at:		T (°C)				Allowed T _{max} (°C)	
Ambient		28.1	45.0	28.6	45.0	--	
PCB near T501		38.2	55.1	36.8	53.2	105	
PCB near U4		37.9	54.8	36.6	53.0	105	
PCB (Key button)		33.2	50.1	32.6	49.0	105	
PCB(connect the handset)		30.8	47.7	30.4	46.8	105	
Internal enclosure		30.0	46.9	29.5	45.9	105	
Internal enclosure of Handset		29.3	46.2	29.1	45.5	75	
Measured Enclosure only							
LCD (>1 min)		29.2	--	29.0	--	60	
External enclosure (>1 min)		30.0	--	29.8	--	60	
Key (>1 min)		29.8	--	29.6	--	60	
External enclosure of Handset		29.9	--	29.7	--	60	
Supplementary information:							
9. Tma is 45°C							
10. A: On hook B:Off hook							
11. Power by POE							
12. Installation: Wall-mounted							
Temperature T of winding:	t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
---	---	---	---	---	---	---	---
Supplementary information:							
Note 1: Tma should be considered as directed by applicable requirement							
Note 2: Tma is not included in assessment of Touch Temperatures (Clause 9)							

5.4.1.10.2	TABLE: Vicat softening temperature of thermoplastics		N/A
Penetration (mm)		---	—
Object/ Part No./Material	Manufacturer/t rademark	T softening (°C)	
---	---	---	
---	---	---	

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Clause	Requirement + Test	Result - Remark	Verdict

supplementary information:

5.4.1.10.3	TABLE: Ball pressure test of thermoplastics			N/A
Allowed impression diameter (mm)		≤ 2 mm		—
Object/Part No./Material	Manufacturer/trademark	Test temperature (°C)	Impression diameter (mm)	
---	---	---	---	
---	---	---	---	
---	---	---	---	
Supplementary information:				

5.4.2.2, 5.4.2.4 and 5.4.3	TABLE: Minimum Clearances/Creepage distance						N/A
Clearance (cl) and creepage distance (cr) at/of/between:	Up (V)	U r.m.s. (V)	Frequency (kHz) ¹	Required cl (mm)	cl (mm) ²	Required ³ cr (mm)	cr (mm)
---	---	---	---	---	---	---	---
Supplementary information:							
Note 1: Only for frequency above 30 kHz							
Note 2: See table 5.4.2.4 if this is based on electric strength test							
Note 3: Provide Material Group is Class IIIb ,Pollution degree 2,							

5.4.2.3	TABLE: Minimum Clearances distances using required withstand voltage			N/A
	Overvoltage Category (OV):			-
	Pollution Degree:			2
Clearance distanced between:		Required withstand voltage	Required cl (mm)	Measured cl (mm)
---		---	---	---
---		---	---	---
---		---	---	---
Supplementary information:				

5.4.2.4	TABLE: Clearances based on electric strength test			N
Test voltage applied between:	Required cl (mm)	Test voltage (kV) peak/ r.m.s. / d.c.	Breakdown Yes / No	
---	---	---	---	
---	---	---	---	
---	---	---	---	

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Clause	Requirement + Test	Result - Remark	Verdict
---	---	---	---
---	---	---	---
Supplementary information:			

5.4.4.2, 5.4.4.5 c) 5.4.4.9	TABLE: Distance through insulation measurements					N/A
Distance through insulation di at/of:	Peak voltage (V)	Frequency (kHz)	Material	Required DTI (mm)	DTI (mm)	
---	---	---	---	---	---	
---	---	---	---	---	---	
---	---	---	---	---	---	
Supplementary information:						

5.4.9	TABLE: Electric strength tests			N/A
Test voltage applied between:	Voltage shape (AC, DC)	Test voltage (V)	Breakdown Yes / No	
Basic/supplementary:	---	---	---	
---	---	---	---	
---	---	---	---	
---	---	---	---	
Supplementary information: N/A				

5.5.2.2	TABLE: Stored discharge on capacitors					N/A
Supply Voltage (V), Hz	Test Location	Operating Condition (N/A, S)	Switch position On or off	Measured Voltage (after 2 seconds)	ES Classification	
---	---	---	---	---	---	
---	---	---	---	---	---	
---	---	---	---	---	---	

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary information:

X-capacitors installed for testing are:

☐ bleeding resistor rating:

☐ ICX:

Notes:

A. Test Location:

Phase to Neutral; Phase to Phase; Phase to Earth; and/or Neutral to Earth

B. Operating condition abbreviations:

N/A – Normal operating condition (e.g., normal operation, or open fuse); S –Single fault condition

5.6.6.2	TABLE: Resistance of protective conductors and terminations				N/A
Accessible part	Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)	
---	---	---	---	---	
---	---	---	---	---	
---	---	---	---	---	
Supplementary information:					

5.7.2.2, 5.7.4	TABLE: Earthed accessible conductive part		N/A
Supply voltage	---	---	---
Location	Test conditions specified in 6.1 of IEC 60990 or Fault Condition No in IEC 60990 clause 6.2.2.1 through 6.2.2.8, except for 6.2.2.7		Touch current (mA)
	1		---
	2*		---
	3		---
	4		---
	5		---
	6		---
	8		---
Supplementary Information:			
Notes:			
[1] Supply voltage is the anticipated maximum Touch Voltage			
[2] Earthed neutral conductor [Voltage differences less than 1% or more]			
[3] Specify method used for measurement as described in IEC 60990 sub-clause 4.3			
[4] IEC60990, sub-clause 6.2.2.7, Fault 7 not applicable.			
[5] (*) IEC60990, sub-clause 6.2.2.2 is not applicable if switch or disconnect device (e.g., appliance coupler) provided.			

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Clause	Requirement + Test	Result - Remark	Verdict

6.2.2	Table: Electrical power sources (PS) measurements for classification					P
Source	Description	Measurement	Max Power after 3 s	Max Power after 5 s	PS Classification	
POE port port	48Vdc	Power (W) :	---	---	PS2	
		V _A (V) :	48	---		
		I _A (A) :	---	---		
Rated input	+5V --- (Evaluated in approved adapter,comply with LPS)	Power (W) :	---	---	PS2	
		V _A (V) :	---	---		
		I _A (A) :	---	---		
Supplementary Information:						

6.2.3.1	Table: Determination of Potential Ignition Sources (Arcing PIS)				N/A
Location	Open circuit voltage After 3 s (V _p)	Measured r.m.s current (I _{rms})	Calculated value (V _p x I _{rms})	Arcing PIS? Yes / No	
---	---	---	---	---	
---	---	---	---	---	
---	---	---	---	---	
---	---	---	---	---	
Supplementary information:					
An Arcing PIS requires a minimum of 50 V (peak) a.c. or d.c. An Arcing PIS is established when the product of the open circuit voltage (V _p) and normal operating condition rms current (I _{rms}) is greater than 15.					

6.2.3.2	Table: Determination of Potential Ignition Sources (Resistive PIS)				N/A
Circuit Location (x-y)	Operating Condition (Normal / Describe Single Fault)	Measured wattage or VA During first 30 s (W / VA)	Measured wattage or VA After 30 s (W / VA)	Protective Circuit, Regulator, or PTC Operated? Yes / No (Comment)	Resistive PIS? Yes/No
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---

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Clause	Requirement + Test	Result - Remark	Verdict

Supplementary Information:

A combination of voltmeter, VA and ammeter IA may be used instead of a wattmeter.

If a separate voltmeter and ammeter are used, the product of (VA x IA) is used to determine Resistive PIS classification.

A Resistive PIS: (a) dissipates more than 15 W, measured after 30 s of normal operation, or (b) under single fault conditions has either a power exceeding 100 W measured immediately after the introduction of the fault if electronic circuits, regulators or PTC devices are used, or has an available power exceeding 15 W measured 30 s after introduction of the fault.

8.5.5	TABLE: High Pressure Lamp		N/A
Description	Values	Energy Source Classification	
Lamp type :	---	—	
Manufacturer :	---	—	
Cat no. :	---	—	
Pressure (cold) (MPa) :	---	MS_	
Pressure (operating) (MPa) :	---	MS_	
Operating time (minutes)..... :	---	—	
Explosion method..... :	---	—	
Max particle length escaping enclosure (mm). :	---	MS_	
Max particle length beyond 1 m (mm) :	---	MS_	
Overall result :			
Supplementary information:			

B.2.5	TABLE: Input test						P
U (V)	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status
5V	0.41*	0.6	2.05	---	---	---	Max. load condition
5V	0.45**	0.6	2.25	---	---	---	Max. load condition
48Vdc	0.50	---	2.40	---	---	---	Max. load condition
Supplementary information:							
*For EU plug, **For UK plug							

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Clause	Requirement + Test	Result - Remark	Verdict

B.3 and B.4	TABLE: Abnormal operating and fault condition tests							P
Ambient temperature (°C)					26.3°C		---	
Power source for EUT: Manufacturer, model/type, output rating ..					---		---	
Component No.	Abnormal Condition	Supply voltage, (V)	Test time (ms)	Fuse no.	Fuse current, (A)	T-couple	Temp. (°C)	Observation
Speaker	S-C	5Vdc	10min	---	---	---	---	Speaker shut down immediately. NCD, NFG, NHT. Recoverable.
EC8	S-C	5Vdc	10min	---	---	---	---	NCD, NFG, NHT.
R4	S-C	5Vdc	10min	---	---	---	---	NCD, NFG, NHT.
C102	S-C	5Vdc	10min	---	---	---	---	NCD, NFG, NHT.
Speaker	S-C	POE 48V	10min	---	---	---	---	Speaker shut down immediately. NCD, NFG, NHT. Recoverable.
EC8	S-C	POE 48V	10min	---	---	---	---	NCD, NFG, NHT.
R4	S-C	POE 48V	10min	---	---	---	---	NCD, NFG, NHT.
C102	S-C	POE 48V	10min	---	---	---	---	NCD, NFG, NHT.
<p>Supplementary information:</p> <p>Test table is provided to record abnormal and fault conditions for all applicable energy sources including Thermal burn injury. Column "Abnormal/Fault." Specify if test condition by indicating "Abnormal" then the condition for a Clause B.3 test or "Single Fault" then the condition for Clause B.4.</p> <p>NHT: No High Temperature; NCD: No Component Damage; NFG: no flammability gas; S-C: Short circuit</p>								

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Clause	Requirement + Test	Result - Remark	Verdict

Annex M	TABLE: Batteries								N/A
The tests of Annex M are applicable only when appropriate battery data is not available									--
Is it possible to install the battery in a reverse polarity position?							No	N/A	
	Non-rechargeable batteries			Rechargeable batteries					
	Discharging		Un-intentional charging	Charging		Discharging		Reversed charging	
	Meas. current	Manuf. Specs.		Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.	Meas. current	Manuf. Specs.
Max. current during normal condition	---	---	---	---	---	---	---	---	---
Max. current during fault condition	---	---	---	---	---	---	---	---	---
Test results:							---	Verdict	
- Chemical leaks							---	---	
- Explosion of the battery							---	---	
- Emission of flame or expulsion of molten metal							---	---	
- Electric strength tests of equipment after completion of tests							---	---	
Supplementary information:									

Annex M.4	Table: Additional safeguards for equipment containing secondary lithium batteries				N/A
Battery/Cell No.	Test conditions	Measurements			Observation
		U	I (A)	Temp (C)	
	Normal	---	---	---	---
	Abnormal	---	---	---	---
	Single fault –SC/OC	---	---	---	---
	Normal	---	---	---	---
	Abnormal	---	---	---	---
	Single fault – SC/OC	---	---	---	---
Supplementary Information:					

Battery identification	Charging at T _{lowest} (°C)	Observation	Charging at T _{highest} (°C)	Observation
---	---	---	---	---

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Clause	Requirement + Test	Result - Remark	Verdict

Battery identification	Charging at T_{lowest} (°C)	Observation	Charging at T_{highest} (°C)	Observation
---	---	---	---	---
Supplementary Information:				

Annex Q.1	TABLE: Circuits intended for interconnection with building wiring (LPS)					P
Note: Measured UOC (V) with all load circuits disconnected:RJ9 ports						
Output Circuit	Components	U _{oc} (V)	I _{sc} (A)		S (VA)	
			Meas.	Limit	Meas.	Limit
RJ9 Port#01 (Headset)	normal	3.3	0.031	8	0.099	100
RJ9 Port#02 (Handset)	normal	3.3	0.036	8	0.115	100
Supplementary Information: SC=Short circuit, OC=Open circuit						

T.2, T.3, T.4, T.5	TABLE: Steady force test					P
Part/Location		Material	Thickness (mm)	Force (N/A)	Test Duration (sec)	Observation
External Enclosure of Hanset		plastic	Min.2.40	100	5	No hazard as a result of the test.
Supplementary information:						

T.6, T.9	TABLE: Impact tests				N/A
Part/Location	Material	Thickness (mm)	Vertical distance (mm)	Observation	
---	---	---	---	---	
Supplementary information:					

T.7	TABLE: Drop tests			P
Part/Location	Material	Thickness (mm)	Drop Height (mm)	Observation
Top side of handset	Plastic	Min.2.40	1000±10	No any damage and hazards during test
Bottom side of handset	Plastic	Min.2.40	1000±10	No any damage and hazards during test
Front side of handset	Plastic	Min.2.40	1000±10	No any damage and hazards during test

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Clause	Requirement + Test		Result - Remark	Verdict
Top side of base	Plastic	Min.2.62	750±10	No any damage and hazards during test
Bottom side of base	Plastic	Min.2.62	750±10	No any damage and hazards during test
Front side of base	Plastic	Min.2.62	750±10	No any damage and hazards during test
Supplementary information:				

T.8	TABLE: Stress relief test					P
Part/Location	Material	Thickness (mm)	Oven Temperature (°C)	Duration (h)	Observation	
Enclosure of handset	Plastic	Min.2.40	70	7	No shrinkage or distortion on enclosure	
Enclosure of base	plastic	Min.2.62	70	7	No shrinkage or distortion on enclosure	
Supplementary information:						

Appendix A EUT PHOTOS

A.1 EUT- Whole view



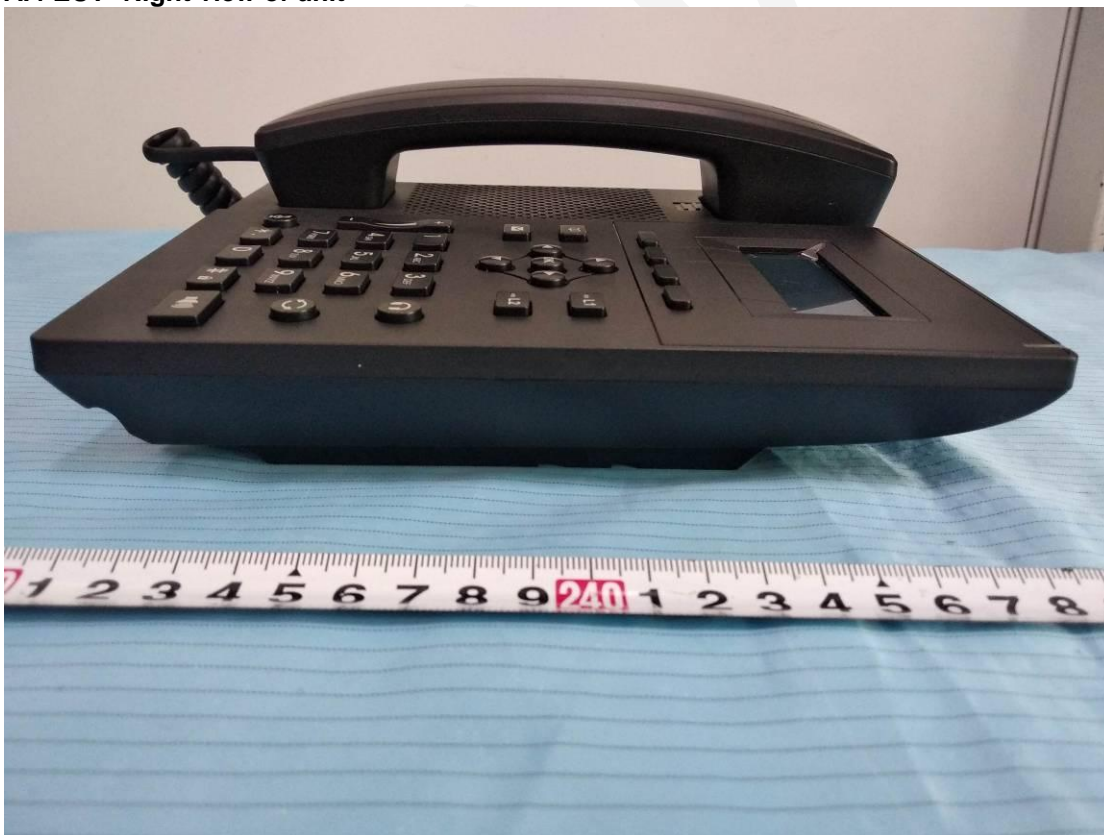
A.2 EUT-Front view of unit



A.3 EUT- Left view of unit



A.4 EUT- Right view of unit



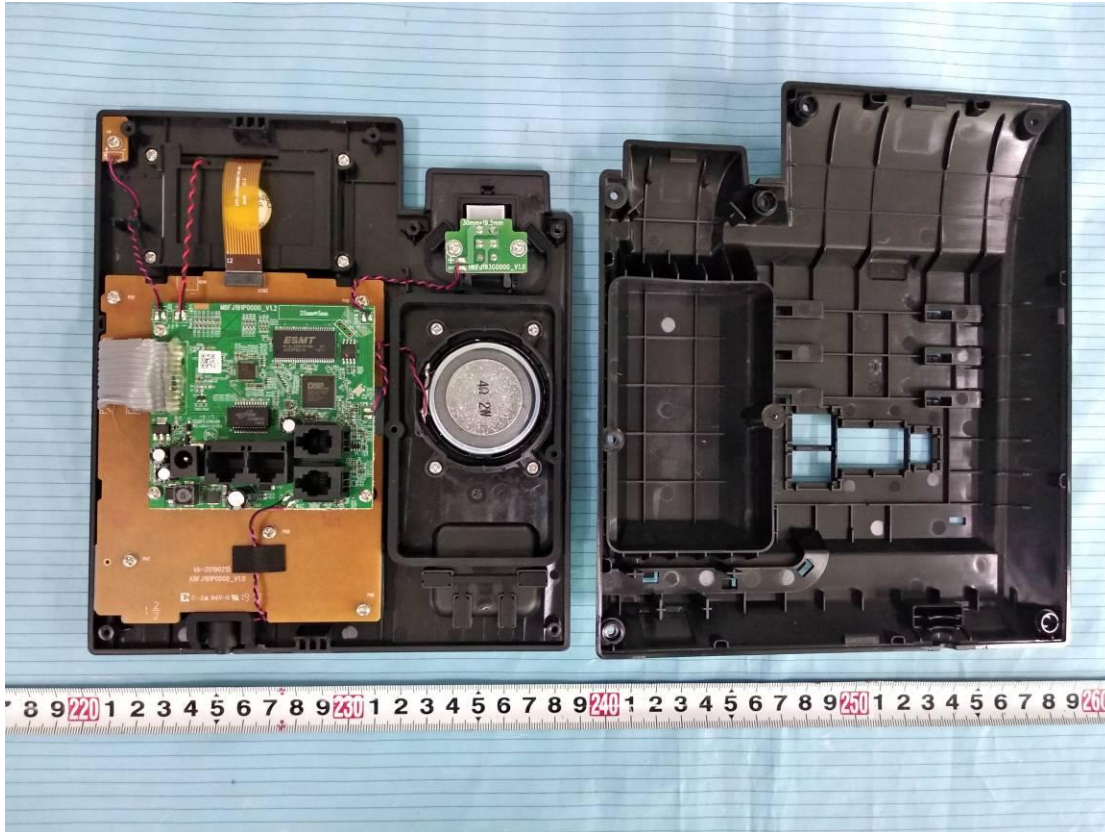
A.5 EUT- Top view of unit



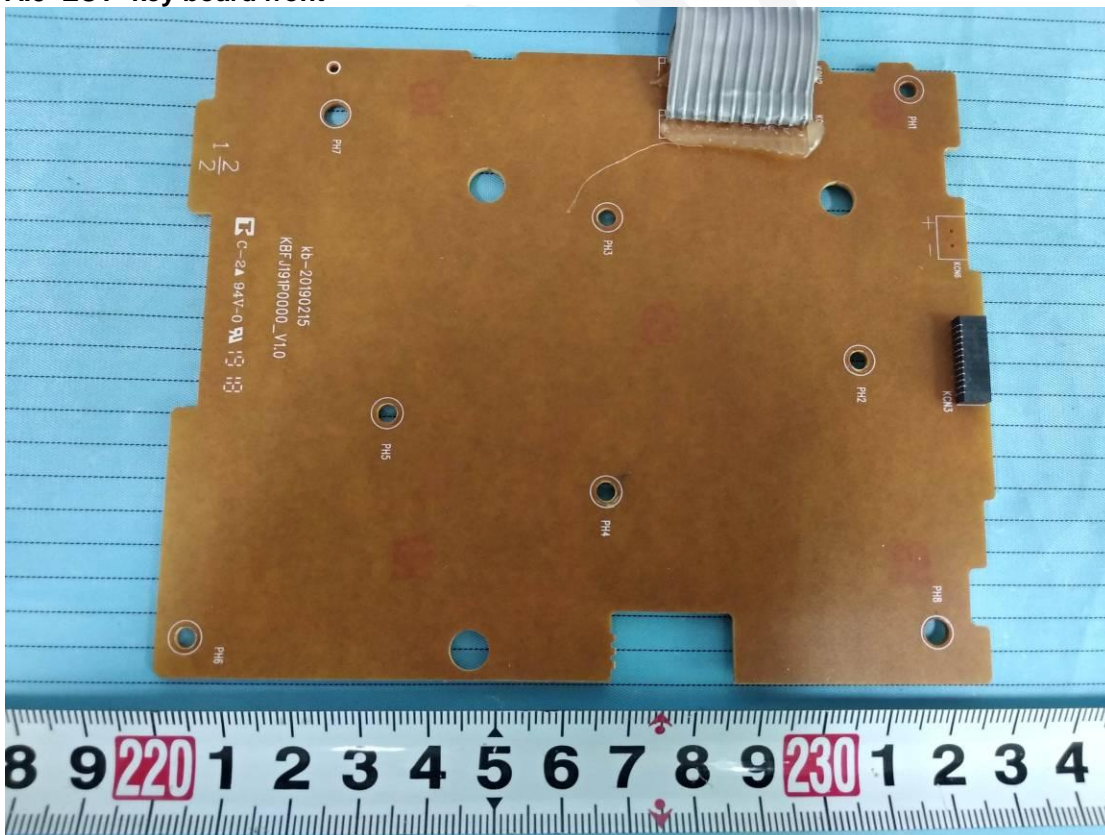
A.6 EUT- Bottom view of unit



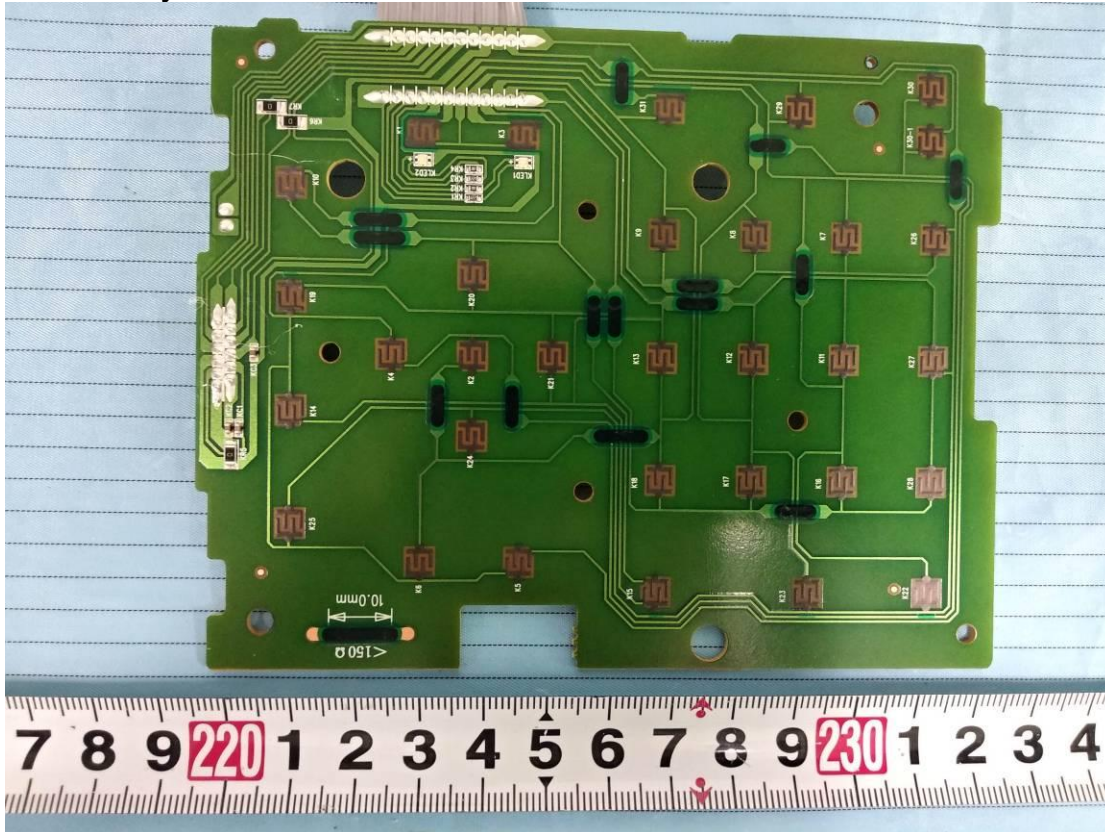
A.7 EUT- Uncover view of unit



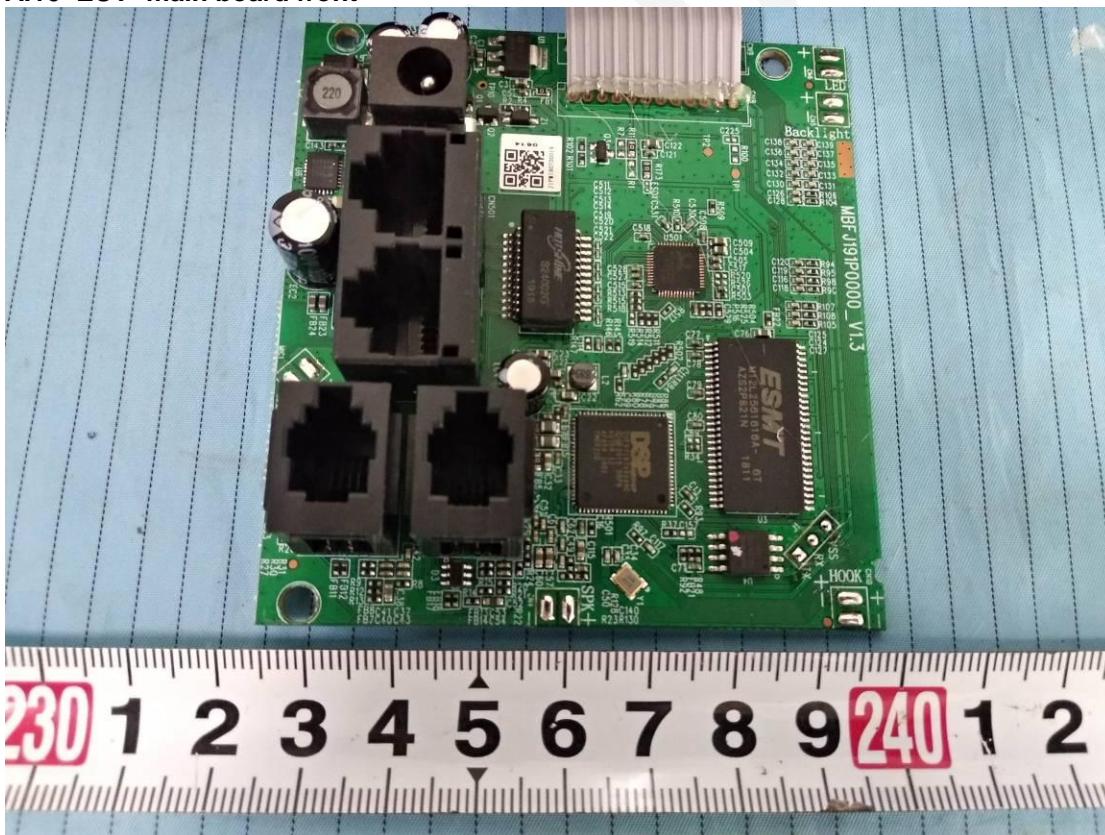
A.8 EUT- key board front



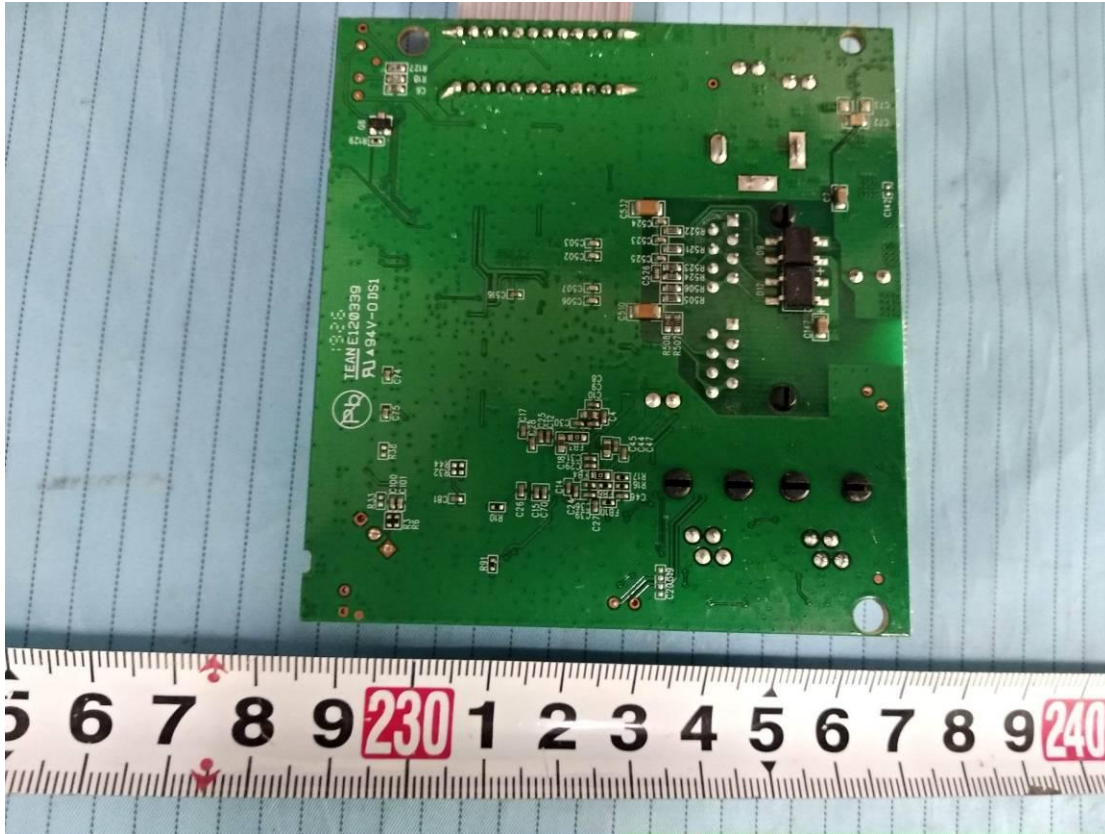
A.9 EUT- key board back



A.10 EUT- main board front



A.11 EUT- main board front



A.12 EUT- Switching Mode Power Adaptor(EU plug) View 01



A.13 EUT- Switching Mode Power Adaptor (EU plug) View 02
Manufacturer: SHENZHEN FRECOM ELECTRONCS CO.,LTD



A.14 EUT- Switching Mode Power Adaptor(EU plug) View 03
Manufacturer: CHENZHOUE FRECOM ELECTRONCS CO.,LTD



A.15 EUT- Switching Mode Power Adaptor(UK plug) View 01



A.16 EUT- Switching Mode Power Adaptor(UK plug) View 02
Manufacturer: SHENZHEN FRECOM ELECTRONCS CO.,LTD



A.17 EUT- Switching Mode Power Adaptor(UK plug) View 03
Manufacturer: CHENZHOU FRECOM ELECTRONCS CO.,LTD



Appendix B – Instruction Manual(representative)

Important Safety Instructions

Recycle your device.



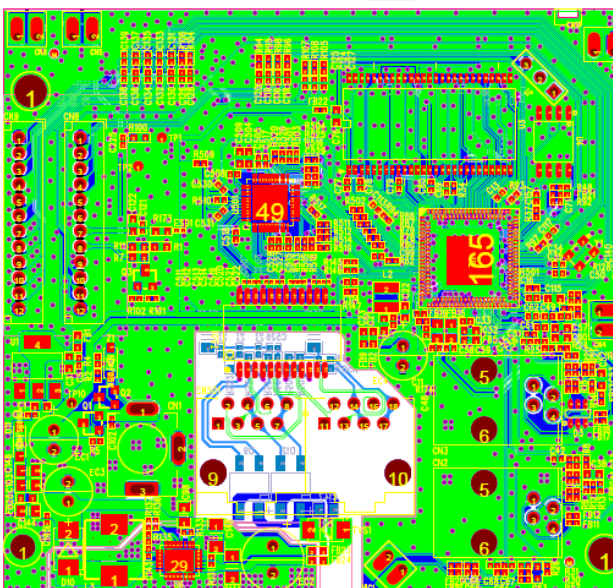
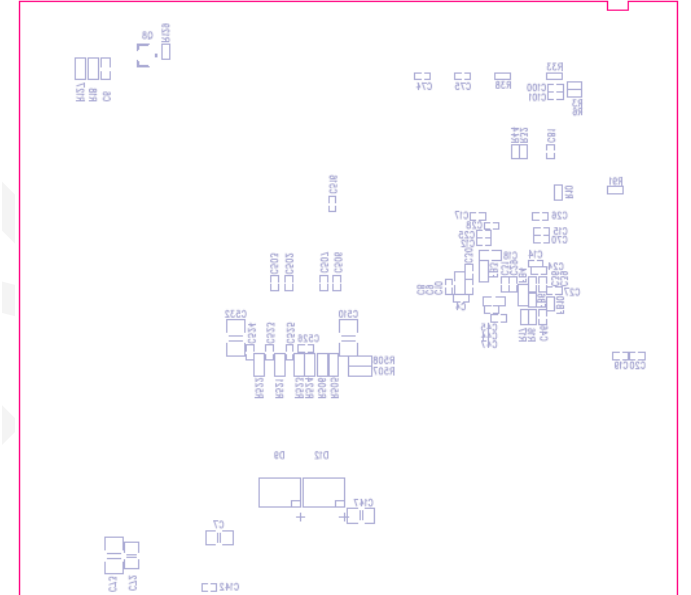
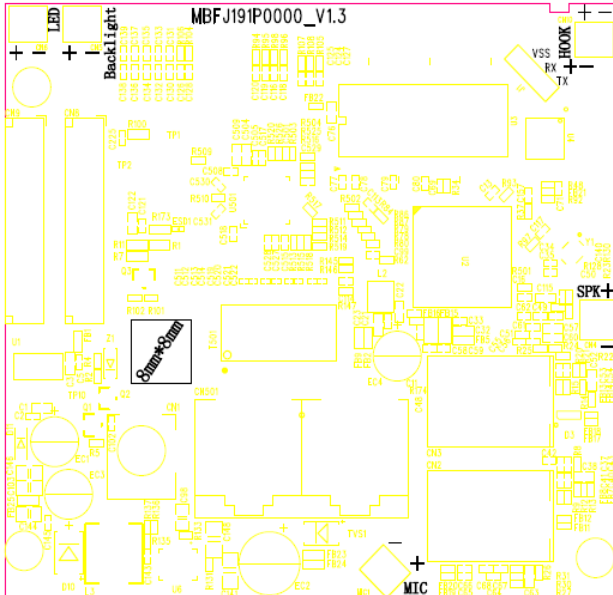
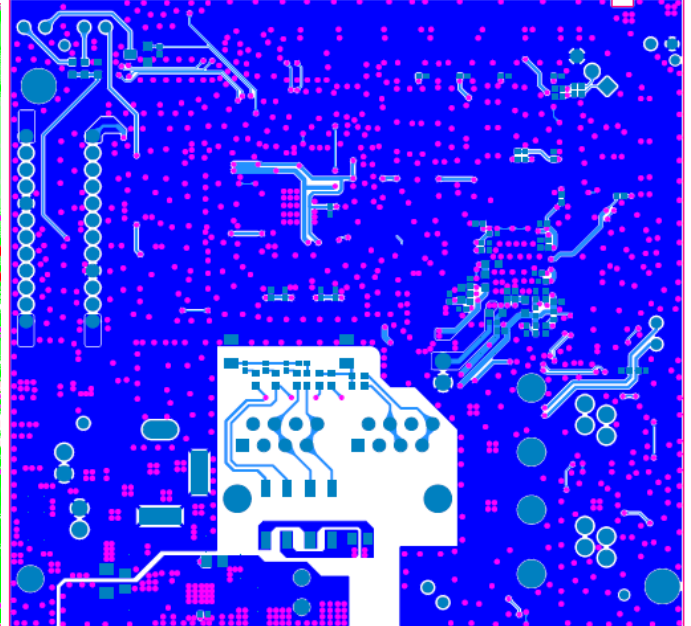
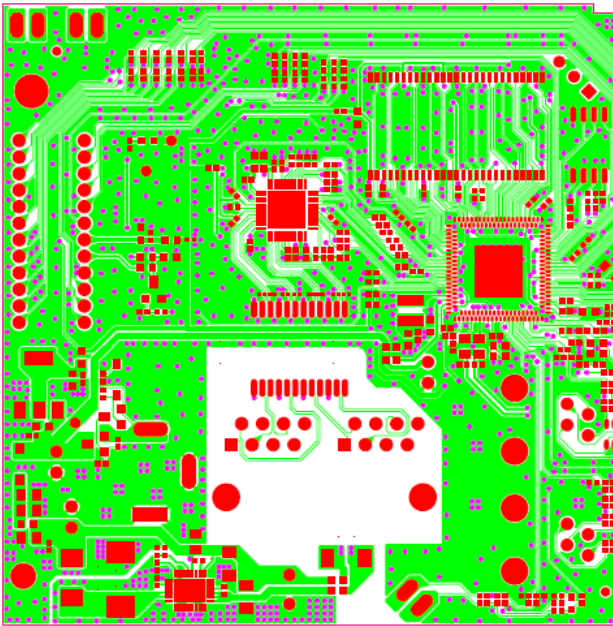
The WEEE logo (shown at the left) appears on the product to indicate that this product must not be disposed off or dumped with your other household wastes. You are liable to dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling. of such hazardous waste.



SAVE THESE INSTRUCTIONS

FINAL

Appendix C –PCB layout



Appendix E -Test Equipments

NO.	The Name of Equipment	Model	S/N	Calibration Date	Due Date	Capability Range	Manufacturer	Equipment condition
T-03-SF378	Hygrothermograph	TA218A	NA	2019-10-14	2020-10-13	0-50°C, 30%-90% R.H	KTJ	<input checked="" type="checkbox"/> OK
T-03-SF208	Data Acquisition Switch Unit	34970A	N/A	2019-04-12	2020-04-11	0-200°C	Agilent	<input checked="" type="checkbox"/> OK
T-03-SF210	Digital multimeter	17B	16284529	2019-4-12	2020-4-11	0-1000V AC/DC, 0-10A AC/DC, 0-40Mohm	Fluke	<input checked="" type="checkbox"/> OK
T-03-SF021	Push & Pull Tester	SN-500	2601050032	2019-4-29	2020-4-28	0-50kg	SUNDOO	<input checked="" type="checkbox"/> OK
T-03-SF183	Stopwatch	PC396	N/A	2019-04-25	2020-04-24	0-3600s/3.0s/d	TianFu	<input checked="" type="checkbox"/> OK
T-03-SF027	Electron Balance	ACS-30	40136285	2018-12-25	2019-12-25	0~30kg	Huade	<input checked="" type="checkbox"/> OK
T-03-SF028	EU drop board	EU TYPE	L:40X V:40X H: (13+19+19)	NCR	NCR	N/A	SHENZHEN HUAWEI UYE CO., LTD	<input checked="" type="checkbox"/> OK
T-03-SF207	Steel tape	5m	N/A	2017-12-25	2020-12-24	0~5m	N/A	<input checked="" type="checkbox"/> OK
T-03-SF283	Oven	DHG-9203A	N/A	2019-07-05	2020-07-04	N/A	ATER	<input checked="" type="checkbox"/> OK
T-03-SF343	Digital caliper	0-200mm/0.01m	S0070	2019-4-29	2020-4-29	0-200mm	EXPLOIT	<input checked="" type="checkbox"/> OK

END OF REPORT