



TEST REPORT

Reference No	:	WTF24D04094069Y
Applicant	:m	Mid Ocean Brands B.V.
Address		7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
Manufacturer	:	110075
Address	5	statist which will will be set at state and
Product	,i	Foldable ANC headphone
Model(s)	10:	MO2275
Total pages	:	68 pages and 5 pages of photo.
Standards	2m	⊠ EN IEC 62368-1: 2020+A11: 2020
		Audio/video, information and communication technology equipment- Part 1:Safety requirements
Date of Receipt sample	:*	2024-04-24
Date of Test	÷	2024-04-24 to 2024-04-29
Date of Issue	:	2024-05-17
Test Result	15	Pass And At And

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By: Waltek Testing Group Co., Ltd.

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Compiled by:

Hen Luo

Glen Luo / Project Engineer

Approved by:

Almon Zhao/ Designated Reviewer

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Test item description Foldable	e ANC headphone		
Trademark MOB			
Model and/or type reference	5 while while while and the rest		
	i-ion Battery: 3.7V, 200mAh, 0.74Wh		
Remark: Whether parts of tests for the product have beer □ Yes □ ☑ No	n subcontracted to other labs:		
If Yes, list the related test items and lab informa Test items: Lab information:	tion: which which which which which which		
Summary of testing:			
Tests performed (name of test and test claus - EN IEC 62368-1: 2020+A11: 2020 The submitted samples were found to comply w the requirements of above specification.	No. 77, Houjie Section, Guantai Road,		
Summary of compliance with National Differe	ences (List of countries addressed):		
$oxed{intermat}$ The product fulfils the requirements of EN IE	C 62368-1:2020+A11:2020.		
applicable limit according to the specification	sions on conformity (decision rule) : tandard, when comparing the measurement result with the in that standard. The decisions on conformity are made γ ("simple acceptance" decision rule, previously known as		
□ Other: (to be specified, for example when r requirements apply)	equired by the standard or client, or if national accreditation		

OD-5014 for test equipment and application of test methods, decision sheets and operational procedures of IECEE.

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

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

RoHS 🗲

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Copy of marking plate:

MOB / MO2275 **PO BOX 644** 6710 BP (NL) Made in China Frequency range: 2402-2480MHz Maximum RF power: 13dBm(EIRP) PO4100114231 **E C K**

Remark:

- 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 CE marking and WEEE symbol should be at least 5.0mm and 7.0mm respectively in height.
- 3. According to the EU directives which have been aligned with EU NLF (new legislative framework), both of manufacturer and importer's name and address shall be affixed on the product or, where that is not possible, on its packaging or in a document accompanying the product before the product is placed on the EU market.

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TEST ITEM PARTICULARS:	ALL L. L
Product group	end product Duilt-in component
Classification of use by:	 ☑ Ordinary person ☑ Instructed person ☑ Skilled person
Supply Connection:	 □ AC mains □ DC mains □ Not mains connected: □ ES1 □ ES2 □ ES3
Supply % Tolerance:	□ +10%/-10% □ +20%/-15% □ +%/% ⊠ None
Supply Connection – Type:	 pluggable equipment type A - non-detachable supply cord appliance coupler direct plug-in pluggable equipment type B - non-detachable supply cord appliance coupler permanent connection mating connector is other: not Mains connected
Considered current rating of protective device as part of building or equipment installation:	□ UK: 13 A; Others: 16 A; Location: □ building □ equipment ⊠ N/A
Equipment mobility:	 movable hand-held transportable direct plug-in stationary for building-in wall/ceiling-mounted SRME/rack-mounted other:
Over voltage 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 □
Access location:	 N/A □ restricted access area □ outdoor location□
Pollution degree (PD):	□ PD 1⊠ PD 2 □ PD 3
Manufacturer's specified maxium operating ambient :	25°C 🗌 Outdoor: minimum°C
IP protection class:	⊠ IPX0 □ IP
Power Systems:	□ TN □ TT □ ITV L-L ⊠ not AC mains
Altitude during operation (m):	⊠ 2000 m or less □m
Altitude of test laboratory (m)	⊠ 2000 m or less □ m

Approx. 0.205kg

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Mass of equipment (kg)

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POSSIBLE TEST CASE VERDICTS:	white white white and the start of
- 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:	it was we we at the
Date of receipt of test item	: See cover page.
Date (s) of performance of tests	: See cover page.
GENERAL REMARKS:	whet with white white white white
"(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 i	s used as the decimal separator.

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GENERAL PRODUCT INFORMATION:

Product Description

- 1. The equipment with model MO2275 is Foldable ANC headphone.
- 2. It is powered by USB port conformed to LPS or powered by rechargeable Li-ion Battery.
- 3. The maximum operating temperature is 25°C.

Model Differences

N/A

Additional application considerations – (Considerations used to test a component or subassembly)

N/A

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-		P

Clause	Possible Hazard			
5	Electrically-caused injury			
Class and Energy Source	Body Part		Safeguards	
(e.g. ES3: Primary circuit)	(e.g. Ordinary)	В	S	R
ES1: All internal circuit	Ordinary	N/A	N/A	_√ [©] N/A ⊲
ES1: Lithium Cell	Ordinary	N/A	N/A	N/A
6	Electrically-caused fire			
Class and Energy Source	Material part		Safeguards	
(e.g. PS2: 100 Watt circuit)	(e.g. Printed board)	В	1 st S	2 nd S
PS1: <15 Watt circuits	PCB	N/A	N/A	N/A
PS1: <15 Watt circuits	The other components/materials	N/A MA	N/A	N/A
7	Injury caused by hazardous su	ubstances		•
Class and Energy Source	Body Part		Safeguards	
(e.g. Ozone)	(e.g., Skilled)	В	S	R
N/A of the set of the	N/A	N/A	N/A	_< [↓] N/A [⊘]
3	Mechanically-caused injury			
Class and Energy Source	Body Part	Safeguards		
(e.g. MS3: Plastic fan blades)	(e.g. Ordinary)	В	S	R
MS1: Edges and corners	Ordinary	N/A	N/A	N/A
MS1: Mass of the unit	Ordinary	N/A	N/A	N/A
9	Thermal burn			
Class and Energy Source	Body Part		Safeguards	
(e.g. TS1: Keyboard caps)	(e.g., Ordinary)	В	S	R
TS1: All accessible parts	Ordinary	√ [™] N/A √ [™]	N/A	N/A
10	Radiation			
Class and Energy Source	Body Part		Safeguards	
(e.g. RS1: PMP sound output)	(e.g., Ordinary)	В	S	R
RS1: LED for indicating	Ordinary	N/A	N/A	N/A
RS1: LED for indicating	Ordinary	N/A	N/A	N/A



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ENERGY SOURCE DIAGRAM						
Indicate which ener	rgy sources are inc	luded in the	e energy sou	ırce diagram. Inser	t diagram below	
the state	ster ster of	Jer Multer	when a	no rue ru		. At
	ES ES	🛛 PS	🖂 MS		Stante and	
S	ee details in OVE	RVIEW OF	ENERGY S	OURCES AND SAF	EGUARDS	



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20.		EN IEC 62368-	1 m and a	1 Za, - A.
Clause	Requirement – Test	strants and a	Result – Remark	Verdict

4	GENERAL REQUIREMENTS	6	P_
4.1.1	Acceptance of materials, components and subassemblies	(See appended table 4.1.2)	"ГР
4.1.2	Use of components	Components which are certified to IEC and/or national standards are used correctly within their ratings. Components not covered by IEC standards are tested under the conditions present in the equipment. See also Annex G	NE P W
4.1.3	Equipment design and construction	Equipment is adequately designed and constructed.	Р
4.1.4	Specified ambient temperature for outdoor use (°C)	Indoor use only	N/A
4.1.5	Constructions and components not specifically covered	No such constructions and components.	N/A
4.1.8	Liquids and liquid filled components (LFC)	No such parts.	N/A
4.1.15	Markings and instructions	(See Annex F)	P
4.4.3	Safeguard robustness	See below	N/A
4.4.3.1	General		N/A
4.4.3.2	Steady force tests	de- at the street	N/A
4.4.3.3	Drop tests	Un me me me	N/A
4.4.3.4	Impact tests	of the state out of and	N/A
4.4.3.5	Internal accessible safeguard tests	No such parts.	N/A
4.4.3.6	Glass impact tests	No such glass used.	N/A
4.4.3.7	Glass fixation tests	No such parts.	N/A
in me	Glass impact test (1J)	stick outer white white w	N/A
* 1	Push/pull test (10 N)	s is a state	N/A
4.4.3.8	Thermoplastic material tests	VIEL INTERNITE WATE W	N/A
4.4.3.9	Air comprising a safeguard	a at at a	N/A
4.4.3.10	Accessibility, glass, safeguard effectiveness	e white white white white	N/A
4.4.4	Displacement of a safeguard by an insulating liquid	No such liquid.	N/A
4.4.5	Safety interlocks	No such parts.	N/A
4.5 🔊	Explosion	NUTER WHITE WALL VALLE	► P ₀
4.5.1	General	No explosion occurs during normal/abnormal operation and single fault conditions	P C
4.5.2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	P



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- an	EN IEC 62368-	the men wat was	en en
Clause	Requirement – Test	Result – Remark	Verdict
whitek at	No harm by explosion during single fault conditions	(See Clause B.4)	P
4.6	Fixing of conductors	MUL MUL MU M	N/A
NETE MAI	Fix conductors not to defeat a safeguard	Tet the wifet wifet	N/A
1 0	Compliance is checked by test	in which we want	N/A
4.7	Equipment for direct insertion into mains sock	et-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)	it while while while wh	N/A
4.8	Equipment containing coin/button cell batteries	5	N/A
4.8.1	General	No coin/button cell batteries used.	N/A
4.8.2	Instructional safeguard	THE STREE NUMER MATTER	N/A
4.8.3	Battery compartment door/cover construction	- Mr. W	N/A
with	Open torque test	et wret white white w	N/A
4.8.4.2	Stress relief test		N/A
4.8.4.3	Battery replacement test	white white white whi	N/A
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test	and white	N/A
4.8.4.6	Crush test		N/A
4.8.5	Compliance	LIE WALT WAL WAL Y	N/A
t stet	30N force test with test probe	e at at at	N/A
- Zm	20N force test with test hook	WALL WITH WAY WAY	N/A
4.9	Likelihood of fire or shock due to entry of cond	luctive object	P
4.10	Component requirements	men mer mer mer	N/A
4.10.1	Disconnect Device	let get wet with with	N/A
4.10.2	Switches and relays	me whe when wh	N/A

5	ELECTRICALLY-CAUSED INJURY Classification and limits of electrical energy sources		Р
5.2			P
5.2.2	ES1, ES2 and ES3 limits	ment we are an	Р
5.2.2.2	Steady-state voltage and current limits	(See appended table 5.2)	ŃP
5.2.2.3	Capacitance limits	No such capacitors	N/A
5.2.2.4	Single pulse limits	No such single pulses	N/A
5.2.2.5	Limits for repetitive pulses	No such repetitive pulses	N/A
5.2.2.6	Ringing signals	No such ringing signals	N/A
5.2.2.7	Audio signals	Mr. m. m.	N/A
5.3	Protection against electrical energy sources	THE STREE MUTER MALE	Jr P



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	EN IEC 62368-	and the same	5 ×
Clause	Requirement – Test	Result – Remark	Verdict
- m	a set i de alter de set	I WILL WALL WITH M	- un
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	the life life with	et Per
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits	mur mur mur to	N/A
5.3.1 b)	Skilled personsnot unintentional contact ES3 bare conductors	NITER WALTER WALTER WALTER	N/A
5.3.2.1	Accessibility to electrical energy sources and safeguards	ES1 circuit and the enclosure (safeguard) are accessed to person.	P
white w	Accessibility to outdoor equipment bare parts	t when when white wh	N/A
5.3.2.2	Contact requirements	Mr. In the St	N/A
mer m	Test with test probe from Annex V	where outer white white	
5.3.2.2 a)	Air gap – electric strength test potential (V)	s at the	N/A
5.3.2.2 b)	Air gap – distance (mm)	STEE WALTER WALTER WALTE	N/A
5.3.2.3	Compliance	i it at at	N/A
5.3.2.4	Terminals for connecting stripped wire	No stripped wire used.	N/A
5.4	Insulation materials and requirements	A A A A	P
5.4.1.2	Properties of insulating material	No insulation as a safeguard.	N/A
5.4.1.3 🔬	Material is non-hygroscopic	At 1 At 5th	N/A
5.4.1.4	Maximum operating temperature for insulating materials	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6, B.3, B.4)	P
5.4.1.5	Pollution degrees	LIE WALT WALL WALL V	N/A
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	* suret muset whitek wh	N/A
5.4.1.5.3	Thermal cycling test	Str. St. St. A	N/A
5.4.1.6	Insulation in transformers with varying dimensions	NUE WALF WALF WALF	_≪ [®] N/A
5.4.1.7	Insulation in circuits generating starting pulses	i i it it it	N/A
5.4.1.8	Determination of working voltage	NUTE INTE INTE UNIT	N/A
5.4.1.9	Insulating surfaces	s at at at	N/A
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	water water water and	N/A
5.4.1.10.2	Vicat test	NUTER INTER WALLS WAL	N/A
5.4.1.10.3	Ball pressure test	the state of	N/A
5.4.2	Clearances	INTER INTERIORITE WALL	N/A
5.4.2.1	General requirements	s at at at	N/A
t st	Clearances in circuits connected to AC Mains, Alternative method	and white white white	N/A
5.4.2.2	Procedure 1 for determining clearance	et outer and the and the own	N/A
dit.	Temporary overvoltage	the state of the s	_
5.4.2.3	Procedure 2 for determining clearance	the street only which	N/A



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Clause	EN IEC 62368- Requirement – Test	Result – Remark	Verdict
Clause	Requirement – rest	Result – Remark	Verdici
5.4.2.3.2.2	a.c. mains transient voltage	where we have	
5.4.2.3.2.3	d.c. mains transient voltage	white white white	water -
5.4.2.3.2.4	External circuit transient voltage	in it it	_dt -
5.4.2.3.2.5	Transient voltage determined by measurement	MITE WALTE WALT W	<u></u>
5.4.2.4	Determining the adequacy of a clearance using an electric strength test	tet miret miret wa	N/A
5.4.2.5	Multiplication factors for clearances and test voltages	t set wet with	N/A
5.4.2.6	Clearance measurement	Mrs. Mr. M.	N/A
5.4.3	Creepage distances	The street white	N/A
5.4.3.1	General	201 - 201 - 20 - 20	N/A
5.4.3.3	Material group	with miles with an	ч ^и –
5.4.3.4	Creepage distances measurement		, N/A
5.4.4	Solid insulation	Et unite while whi	N/A
5.4.4.1	General requirements	A of A	N/A
5.4.4.2	Minimum distance through insulation	white white white	√ [™] N/A
5.4.4.3	Insulating compound forming solid insulation		N/A
5.4.4.4	Solid insulation in semiconductor devices	S . wat a	N/A
5.4.4.5	Insulating compound forming cemented joints		
5.4.4.6	Thin sheet material	the super super super	N/A
5.4.4.6.1	General requirements	at let set all	N/A
5.4.4.6.2	Separable thin sheet material	mer mer m	N/A
Intre in	Number of layers (pcs)	Tet Jet Jet	N/A
5.4.4.6.3	Non-separable thin sheet material	me me m	N/A
LIE MAL	Number of layers (pcs)	till still shirt of	N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material	at all the	N/A
5.4.4.6.5	Mandrel test	when the she	N/A
5.4.4.7	Solid insulation in wound components	+ set set set	N/A
5.4.4.9	Solid insulation at frequencies >30 kHz, E_P , K_R , d , V_{PW} (V)	white white white	N/A
it it	Alternative by electric strength test, tested voltage (V), K_{R}	untit whit whit w	N/A
5.4.5	Antenna terminal insulation	LIER NALIE WALL W	N/A
5.4.5.1	General	a at at a	st N/A
5.4.5.2	Voltage surge test	MALL WALL WALL	N/A
5.4.5.3	Insulation resistance (MΩ)	1 A A	N/A

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Clause	Requirement – Test	Result – Remark	Verdict
SUL S	Electric strength test	WILL WALL WALL	N/A
5.4.6	Insulation of internal wire as part of supplementary safeguard	white white white w	N/A
5.4.7	Tests for semiconductor components and for cemented joints	MITTER WAITER WAITER WAIT	N/A
5.4.8	Humidity conditioning	at let let 5th	N/A
	Relative humidity (%), temperature (°C), duration (h)	white white white	-
5.4.9	Electric strength test	intro white white y	N/A
5.4.9.1	Test procedure for type test of solid insulation	a at at .	N/A
5.4.9.2	Test procedure for routine test	White white whe wh	N/A
5.4.10	Safeguards against transient voltages from external circuits	stet miter miter white	N/A
5.4.10.1	Parts and circuits separated from external circuits	i i at at at	N/A
5.4.10.2	Test methods	the write write write	√″ N/A
5.4.10.2.1	General	that the	N/A
5.4.10.2.2	Impulse test	white white white w	N/A
5.4.10.2.3	Steady-state test	at a star	N/A
5.4.10.3	Verification for insulation breakdown for impulse test	a sur with	N/A
5.4.11	Separation between external circuits and earth	LIE WALTE WALL WALL	N/A
5.4.11.1	Exceptions to separation between external circuits and earth	a suret miret aniret	N/A
5.4.11.2	Requirements	the second	N/A
me m	SPDs bridge separation between external circuit and earth	WALTER WALTE WALTE WA	N/A
The WULL	Rated operating voltage U _{op} (V)	Tet the street while	_
t it	Nominal voltage U _{peak} (V)	1 m m	
which	Max increase due to variation ΔU_{sp}	Let allet mile white	
dit.	Max increase due to ageing ΔU_{sa}	i she she	_
5.4.11.3	Test method and compliance	MITE MAIL MALL M	N/A
5.4.12	Insulating liquid	a at at	N/A
5.4.12.1	General requirements	WALTE WALT WALL WAL	N/A
5.4.12.2	Electric strength of an insulating liquid	to the de	N/A
5.4.12.3	Compatibility of an insulating liquid	in which which which	N/A
5.4.12.4	Container for insulating liquid	at at let set	N/A
5.5	Components as safeguards	white white white	N/A
5.5.1	General	No such components as safeguards.	N/A



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01	EN IEC 62368-		N/ P
Clause	Requirement – Test	Result – Remark	Verdict
5.5.2	Capacitors and RC units	er mer mer mer	N/A
5.5.2.1	General requirement	at st st	N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector	which which which	N/A
5.5.3	Transformers	mit water water will	N/A
5.5.4	Optocouplers	at at at a	N/A
5.5.5	Relays	me me m	N/A
5.5.6	Resistors	t set with and	N/A
5.5.7	SPDs	And And And	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable	MULTER WALTER WALTER	N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment	LIEK WAITER WALTER WA	N/A
at intres	RCD rated residual operating current (mA)	at the set of	×
5.6	Protective conductor	We me me	N/A
5.6.2	Requirement for protective conductors	t set set set	N/A
5.6.2.1	General requirements	Class III equipment	N/A
5.6.2.2	Colour of insulation	and a state of	
5.6.3	Requirement for protective earthing conductors		N/A
in main	Protective earthing conductor size (mm ²)	JE MIL WITH ANY	- I
+ INLIEK	Protective earthing conductor serving as a reinforced safeguard	t the tet with	N/A
. ITEK .	Protective earthing conductor serving as a double safeguard	when we we	N/A
5.6.4	Requirements for protective bonding conductors	MALL WALL WALL	N/A
5.6.4.1	Protective bonding conductors	it it set	<u></u> N/А
	Protective bonding conductor size (mm ²)	her and an an	
5.6.4.2	Protective current rating (A)	at the the state	N/A
5.6.5	Terminals for protective conductors	and an in	N/A
5.6.5.1	Terminal size for connecting protective earthing conductors (mm)	WALTER MULTER WALTER	N/A
INLIER WA	Terminal size for connecting protective bonding conductors (mm)	Whitek whitek whitek of	N/A
5.6.5.2	Corrosion	s at at	۸/A
5.6.6	Resistance of the protective bonding system	L'E WALL WALL WA	N/A
5.6.6.1	Requirements	a de de de	N/A
5.6.6.2	Test Method	white white white	N/A
5.6.6.3	Resistance (Ω) or voltage drop	A A AT	N/A



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	EN IEC 62368-	the water water water	
Clause	Requirement – Test	Result – Remark	Verdict
5.6.7	Reliable connection of a protective earthing conductor	the set of the	N/A
5.6.8	Functional earthing	MULT MULT MULT WAL	N/A
J.T.E. MA	Conductor size (mm ²)	alt alt are wat	N/A
	Class II with functional earthing marking	her mer mer so	N/A
in white	Appliance inlet cl &cr (mm)	let wet with which we	N/A
5.7	Prospective touch voltage, touch current and p	rotective conductor current	N/A
5.7.2	Measuring devices and networks	et allet miles while wh	N/A
5.7.2.1	Measurement of touch current	SN ST AL	N/A
5.7.2.2	Measurement of voltage	NUTER INTER MALTE MALT	~ [©] N/A
5.7.3	Equipment set-up, supply connections and earth connections	Tet stret wiret white	N/A
5.7.4	Unearthed accessible parts	a the same	N/A
5.7.5	Earthed accessible conductive parts	et allet while while w	N/A
5.7.6	Requirements when touch current exceeds ES2 limits	The state with and	N/A
	Protective conductor current (mA)	when the she are	N/A
NUTE ON	Instructional Safeguard	at and a south	N/A
5.7.7	Prospective touch voltage and touch current associated with external circuits		N/A
5.7.7.1	Touch current from coaxial cables	in which when when it	N/A
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables	* MUTER WALFER MAILER WA	N/A
5.7.8	Summation of touch currents from external circuits	stret while south water	N/A
LIFEK MAL	a) Equipment connected to earthed external circuits, current (mA)	Tet is at miret miret	N/A
et alle	b) Equipment connected to unearthed external circuits, current (mA)	at let let set	N/A
5.8	Backfeed safeguard in battery backed up supplies		N/A
INLIER	Mains terminal ES	No battery used	N/A
~	Air gap (mm)	me me me	N/A

6	ELECTRICALLY- CAUSED FIRE		P
6.2	Classification of PS and PIS	at at let the work	STE P ST
6.2.2	Power source circuit classifications	PS (power source) classification determined by measuring the maximum power in Figures 34 and 35 for load and power source circuits. (See appended table 6.2.2)	P P



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Clause	Requirement – Test	Result – Remark	Verdict	
<u> </u>				
6.2.3	Classification of potential ignition sources	See the following details.	P	
6.2.3.1	Arcing PIS	No Arcing PIS exist in the equipment	N/A	
6.2.3.2	Resistive PIS	(See appended table 6.2.3.2)	N/A	
6.3	Safeguards against fire under normal operating conditions	and abnormal operating	TIPL 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	No ignition and no such temperature attained within the equipment. (See appended table B.1.5 & B.3)	P VINLI	
	Combustible materials outside fire enclosure	No such parts	N/A	
6.4	Safeguards against fire under single fault condition	tions	P	
6.4.1	Safeguard method	Control fire spread	Р	
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits	et milet whilet whilet w	N/A	
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits	THE NUT MUTER AND	N/A	
6.4.3.1	Supplementary safeguards	Mr. Sur Sur St.	N/A	
6.4.3.2	Single Fault Conditions	att and and and	N/A	
de de	Special conditions for temperature limited by fuse		N/A	
6.4.4	Control of fire spread in PS1 circuits	LIE MITE WALT WALT	P	
6.4.5	Control of fire spread in PS2 circuits	i s s to	N/A	
6.4.5.2	Supplementary safeguards	and white white white wh	N/A	
6.4.6	Control of fire spread in PS3 circuits	a at at at	N/A	
6.4.7	Separation of combustible materials from a PIS	WALL WALL WALL WALL	N/A	
6.4.7.2	Separation by distance	at at let set	Ń/A	
6.4.7.3	Separation by a fire barrier	No fire barrier used.	N/A	
6.4.8	Fire enclosures and fire barriers	See below.	N/A	
6.4.8.2	Fire enclosure and fire barrier material properties	V-0 plastic enclosure used	N/A	
6.4.8.2.1	Requirements for a fire barrier	No fire barrier used.	N/A	
6.4.8.2.2	Requirements for a fire enclosure	V-0 plastic enclosure used	N/A	
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	See below	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	No specific barrier provided.	N/A	
6.4.8.3.3	Top openings and properties	No top opening	N/A	
	Openings dimensions (mm)	mur mur mur no	N/A	
6.4.8.3.4	Bottom openings and properties	No bottom opening	N/A	



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Clause	Requirement – Test	Result – Remark	Verdict

	Openings dimensions (mm)		N/A
men m	Flammability tests for the bottom of a fire enclosure	white white white white	N/A
LITE MAL	Instructional Safeguard	ster ster when when	N/A S
6.4.8.3.5	Side openings and properties	No side openings	N/A
White	Openings dimensions (mm)	Tet allet aller and and	N/A
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)	No enclosure can be opened by an ordinary person	N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating	when when we we the	N/A
6.4.9	Flammability of insulating liquid	while while whe whe	N/A
6.5	Internal and external wiring	at at at at	P
6.5.1	General requirements	The internal wires are complied with UL standard, of which the test method and testing condition are equal to IEC/EN 60695-11-21.	P
6.5.2	Requirements for interconnection to building wiring	See 6.5.1.	N/A
6.5.3 🔊	Internal wiring size (mm2) for socket-outlets	No such wire used	"/ [~] N/A.»
6.6	Safeguards against fire due to the connection to a	ditional 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 ~^
dt.	Personal safeguards and instructions	-
7.5 🚿	Use of instructional safeguards and instructions	N/A
dt 3	Instructional safeguard (ISO 7010)	
7.6	Batteries and their protection circuits	Р

8	MECHANICALLY-CAUSED INJURY Mechanical energy source classifications Safeguards against mechanical energy sources		_√ ⁰ P
8.2			P
8.3 📣			<i>∿</i> 0 P √
8.4	Safeguards against parts with sharp edg	ges and corners	Р
8.4.1	Safeguards	NUTER AN LITE ANALIS ANALY ANALY	Р
X WALTE	Instructional Safeguard	MS1: Edges and corners of enclosure	Ster P.Se
8.4.2	Sharp edges or corners	Edges and corners of the enclosure are rounded.	Pet



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Clause	Requirement – Test	Result – Remark	Verdict	

8.5	Safeguards against moving parts		N/A
8.5.1	Fingers, jewellery, clothing, hair, etc., contact with MS2 or MS3 parts	No moving parts.	N/A
The WULL	MS2 or MS3 part required to be accessible for the function of the equipment	See above.	N/A
et ster	Moving MS3 parts only accessible to skilled person	at at at at	N/A
8.5.2	Instructional safeguard	it with the we we	N/A
8.5.4	Special categories of equipment containing moving parts	Multiple mailed multiple mail	N/A
8.5.4.1	General	at at at at	N/A
8.5.4.2	Equipment containing work cells with MS3 parts	white white white white	N/A
8.5.4.2.1	Protection of persons in the work cell	at the tet state	N/A
8.5.4.2.2	Access protection override	the me me me	N/A
8.5.4.2.2.1	Override system	at the state what we	N/A
8.5.4.2.2.2	Visual indicator	me m m m	N/A
8.5.4.2.3	Emergency stop system	whet whet white white	N/A
NUTER ANUT	Maximum stopping distance from the point of activation (m)	at start sugar	N/A
iet stet	Space between end point and nearest fixed mechanical part (mm):		N/A
8.5.4.2.4	Endurance requirements	it water water water of	N/A
WALTER V	Mechanical system subjected to 100 000 cycles of operation	A INTER MATER MATTER WAT	N/A
Set .	- Mechanical function check and visual inspection	i at at at	N/A
me m	- Cable assembly	white white white white	N/A
8.5.4.3	Equipment having electromechanical device for destruction of media	stret miret aniret waiter	N/A
8.5.4.3.1	Equipment safeguards	i it it it	⊘ [_] N/A
8.5.4.3.2	Instructional safeguards against moving parts:	it white white white wh	N/A
8.5.4.3.3	Disconnection from the supply	LA A A S	N/A
8.5.4.3.4	Cut type and test force (N):	white white white white	N/A
8.5.4.3.5	Compliance	at at set set	N/A
8.5.5	High pressure lamps	No high pressure lamps used.	N/A
TEL NATE	Explosion test:	the set when when	N/A
8.5.5.3	Glass particles dimensions (mm):	a me me an a	N/A
8.6	Stability of equipment	et wifet wifet white wh	N/A
8.6.1	General	MS1: Mass of the unit	N/A
une un	Instructional safeguard	with the out only	N/A

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	EN IEC 62368-	1 remark white white	
Clause	Requirement – Test	Result – Remark	Verdict
8.6.2	Static stability	The super super super st	N/A
8.6.2.2	Static stability test	uter auter and and	N/A
8.6.2.3	Downward force test	And the second	N/A
8.6.3	Relocation stability	NUTEX UNLITE WALTE WATE	N/A
1 .C	Wheels diameter (mm):	a state state	
The	Tilt test	White Main Main Main	N/A
8.6.4	Glass slide test	t at at at	N/A
8.6.5	Horizontal force test:	which which when the	N/A
8.7	Equipment mounted to wall, ceiling or other stru	ucture to the state of the state	N/A
8.7.1	Mount means type:	No wall or ceiling	N/A
8.7.2	Test methods	tet stet stet state	N/A
s at	Test 1, additional downwards force (N):	a sur an a	N/A
when	Test 2, number of attachment points and test force (N):	Tet white white white	N/A
where a	Test 3 Nominal diameter (mm) and applied torque (Nm):	MULEY MULTER WALTER WA	N/A
8.8	Handles strength	A 1 A 5	N/A
8.8.1	General	No handles	N/A
8.8.2	Handle strength test	and the state	N/A
· · · · ·	Number of handles:	in me me m	
MULTE	Force applied (N):	at the state with a	Nº MARINE
8.9	Wheels or casters attachment requirements	Mr. m. m.	N/A
8.9.2	Pull test	No such parts	N/A
8.10	Carts, stands and similar carriers	Mr. W. W.	N/A
8.10.1	General	No carts, stands or similar carriers	N/A
8.10.2	Marking and instructions:	let set ster with	N/A
8.10.3	Cart, stand or carrier loading test	Mr. Mr. M.	N/A
MALIN	Loading force applied (N):	the state white white all	N/A
8.10.4	Cart, stand or carrier impact test	The second second	N/A
8.10.5	Mechanical stability	NUTER UNITER WALTER WALT	N/A
1 1	Force applied (N):	the state	
8.10.6	Thermoplastic temperature stability	LIEF MALL MALL MALL	N/A
8.11 _	Mounting means for slide-rail mounted equipme	ent (SRME)	N/A
8.11.1	General	No such parts	N/A
8.11.2	Requirements for slide rails	to the state	<n td="" â<=""></n>

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Requirement – Test	Result – Remark	Verdict
	1 1 1 1 1 1 S	

	Instructional Safeguard:	white the second	N/A
8.11.3	Mechanical strength test	white white white white	_√N/A ≦
8.11.3.1	Downward force test, force (N) applied :	my at at at	N/A
8.11.3.2	Lateral push force test	NUTE WALTE WALT WAL	N/A
8.11.3.3	Integrity of slide rail end stops	i it it it	N/A
8.11.4	Compliance	see white white white w	N/A
8.12	Telescoping or rod antennas	s at at at a	N/A
m i	Button/ball diameter (mm):	No such parts	_

9	THERMAL BURN INJURY		<i>ч</i> л. Ь . <
9.2	Thermal energy source classifications	in a state of	. Р
9.3	Touch temperature limits		P.c.
9.3.1	Touch temperatures of accessible parts	: (See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	Set P.S
9.3.2	Test method and compliance	See B.1.6 & B.2.3	F Por
9.4	Safeguards against thermal energy sources	where white white white white	<i>⊴</i> n P
9.5	Requirements for safeguards		P
9.5.1	Equipment safeguard	Enclosure provided to limit the transfer of thermal energy of internal parts under normal operating conditions and abnormal operating conditions.	an P a
9.5.2	Instructional safeguard	: Instructional safeguard is not required.	N/A
9.6	Requirements for wireless power transmitte	rs to the state with	N/A
9.6.1	General	No wireless power transmitters	N/A
9.6.2	Specification of the foreign objects	et wet wiret white white	N/A
9.6.3	Test method and compliance	:1	N/A

10	RADIATION		Р
10.2	Radiation energy source classification	the state state with which	Р
10.2.1	General classification	See below	P
Mar W	Lasers:	white white white	
Tex mut	Lamps and lamp systems:	RS1: LED only for indicating use which is considered as low power application.	
+	Image projectors:	at at let set a	
24	X-Ray:	white when when we	
. S.C.	Personal music player	at all the safe	

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Clause	Requirement – Test	Result – Remark	Verdict

10.3	Safeguards against laser radiation		N/A
mer m	The standard(s) equipment containing laser(s) comply:	No laser radiation	N/A
10.4	Safeguards against optical radiation from lamps and lamp systems (including LED types)		NULL P N
10.4.1	General requirements	LED indication light: Classed as RS1 (Exempt Group)	Cret Port
MALTER	Instructional safeguard provided for accessible radiation level needs to exceed	t wet work wiret we	N/A
de .	Risk group marking and location:	when the second second	N/A
ner in	Information for safe operation and installation	street while white white	N/A <
10.4.2	Requirements for enclosures	and and	N/A
and and	UV radiation exposure:	when when white white	N/A
10.4.3	Instructional safeguard:	i i de de	~~ N/A <
10.5	Safeguards against X-radiation	JET INTE WALT WALT WA	N/A
10.5.1	Requirements	No X-radiation	N/A
m a	Instructional safeguard for skilled persons	Intranti white white white	
10.5.3	Maximum radiation (pA/kg)		
10.6	Safeguards against acoustic energy sources		Р
10.6.1	General	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ST P.S
10.6.2	Classification	Headphones: RS2	Р
WALTE	Acoustic output <i>L</i> _{Aeq,T} , dB(A):	See EN 50332-2 test report No.: WTF24X04094072Y.	P
WALLEK W	Unweighted RMS output voltage (mV):	No such electrical output socket	N/A
de s	Digital output signal (dBFS)	and the state	N/A
10.6.3	Requirements for dose-based systems	NUTE WALTE WALT WAT	N/A
10.6.3.1	General requirements	s at at at	N/A
10.6.3.2	Dose-based warning and automatic decrease	in white white white all	N/A
10.6.3.3	Exposure-based warning and requirements	- at at at 5	N/A
20. 1	30 s integrated exposure level (MEL30):	main mar mar mar	N/A
STER IN	Warning for MEL ≥ 100 dB(A)	at the state state	N/A
10.6.4	Measurement methods	net me me m	Р
10.6.5	Protection of persons	set set set with	P.S
	Instructional safeguards:	in m m	Р
10.6.6	Requirements for listening devices (headphones, earphones, etc.)	at white white white wh	Р
10.6.6.1	Corded listening devices with analogue input	A A A A	N/A



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Clause F	Requirement – Test	Result – Remark	Verdict

	Listening device input voltage (mV):		N/A
10.6.6.2	Corded listening devices with digital input	white mater white white	_√N/A √
the state	Max. acoustic output <i>L</i> _{Aeq,T} , dB(A):	where the state of	N/A
10.6.6.3	Cordless listening devices	NUTER INTERNATION	N/A
et .0	Max. acoustic output <i>L</i> _{Aeq,T} , dB(A):	· · · · ·	N/A

В	NORMAL OPERATING CONDITION TESTS, ABI CONDITION TESTS AND SINGLE FAULT COND		P P
B.1	General	me m m	Р
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	, P
B.2	Normal operating conditions	Mr. Mr. m. r.	Р
B.2.1	General requirements:	(See Test Item Particulars and appended test tables)	P _o r
WALTER	Audio Amplifiers and equipment with audio amplifiers:	et united united united wh	P
B.2.3	Supply voltage and tolerances	Rated input 5Vdc	Р
B.2.5	Input test	(See appended table B.2.5)	∽° P
B.3	Simulated abnormal operating conditions	at the set	. ŚР
B.3.1	General	(See appended table B.3)	Р
B.3.2	Covering of ventilation openings	No ventilation openings.	N/A
	Instructional safeguard	mur mur mur a	N/A
B.3.3	DC mains polarity test	Not supplied by D.C. mains	N/A
B.3.4	Setting of voltage selector	No such selector	N/A
B.3.5	Maximum load at output terminals	(See appended table B.3)	N/A
B.3.6	Reverse battery polarity	No such battery	N/A
B.3.7	Audio amplifier abnormal operating conditions	(See appended table B.3)	n [∞] P.√
B.3.8	Safeguards functional during and after abnormal operating conditions	All safeguards remained effective	THE P
B.4	Simulated single fault conditions	when the we are	Р
B.4.1	General	- JEX JEX NUE MITE MITE	Р
B.4.2	Temperature controlling device	NTC used on battery protective board. The test is carried out for three times, no failure. See appended table B.4 for details	P
B.4.3	Blocked motor test	No motors	N/A
B.4.4	Functional insulation	See below.	P.
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.4)	Р



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Clause	Requirement – Test	Result – Remark	Verdict
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.4)	Р
B.4.4.3	Short circuit of functional insulation on coated printed boards	No coated printed boards within the EUT	N/A
B.4.5	Short-circuit and interruption of electrodes in tubes and semiconductors	(See appended table B.4)	Р
B.4.6	Short circuit or disconnection of passive components	(See appended table B.4)	P
B.4.7	Continuous operation of components	The EUT is continuous operating type and no such components intended for short time operation or intermittent operation	N/A
B.4.8	Compliance during and after single fault conditions:	No change to circuits classified in 5.3	P.
B.4.9	Battery charging and discharging under single fault conditions	See annex M	NUTER PUT
С	UV RADIATION		N/A
C.1	Protection of materials in equipment from UV radiation		N/A
C.1.2	Requirements	No such UV generated from the equipment.	N/A
C.1.3	Test method		N/A
C.2	UV light conditioning test	LIFE MITE MILLE WALLE	N/A
C.2.1	Test apparatus:	in a state	N/A
C.2.2	Mounting of test samples	antifer and the matter water wa	N/A
C.2.3	Carbon-arc light-exposure test	a at at a	N/A
C.2.4	Xenon-arc light-exposure test	white white white white	N/A
D	TEST GENERATORS		N/A
D.1	Impulse test generators	inter white white white	N/A
D.2	Antenna interface test generator	at let set set	N/A
D.3	Electronic pulse generator	white white white a	N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAIN	NING AUDIO AMPLIFIERS	Р
E.1	Electrical energy source classification for audi	o signals	P
IN THE M	Maximum non-clipped output power (W):	(See appended table B.2.5)	
A I	Rated load impedance (Ω):	(See appended table 4.1.2)	
I' when	Open-circuit output voltage (V):	(See appended table B.2.5)	
t st	Instructional safeguard:	Provided in the manual	
E.2	Audio amplifier normal operating conditions	LEK INTER MUTE MALL W	° ⊲P
dit.	Audio signal source type:	(See appended table B.2.5)	e —
in in	Audio output power (W):	(See appended table B.2.5)	_



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	EN IEC 62368-	2. M. 2. 2.	
Clause	Requirement – Test	Result – Remark	Verdict
	Audio output voltage (V):	(See appended table B.2.5)	
We way	Rated load impedance (Ω):	(See appended table 4.1.2)	_
NITEK WAT	Requirements for temperature measurement	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6, B.3, B.4)	J. S. P
E.3	Audio amplifier abnormal operating conditions	(See appended table B.3)	Р
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND SAFEGUARDS	INSTRUCTIONAL	P
F.1	General	at wet whet when wh	Р
4	Language	English	_
F.2 S	Letter symbols and graphical symbols	iter aller outer and	N ^P P
F.2.1	Letter symbols according to IEC60027-1	Letter symbols for quantities and units are complied with IEC 60027-1.	P
F.2.2 Graphic symbols according to IEC, ISO or manufacturer specific		Graphical symbols are complied with IEC 60417, ISO 3864-2, ISO 7000 or ISO 7010.	Ρ
F.3	Equipment markings		Р
F.3.1	Equipment marking locations	The required marking is located on the enclosure of the equipment and is easily visible.	SUNT P
F.3.2	Equipment identification markings	See below for details.	Р
F.3.2.1	Manufacturer identification:	See copy of marking plate	P
F.3.2.2	Model identification	: See copy of marking plate	Р
F.3.3	Equipment rating markings	See below for details.	, P
F.3.3.1	Equipment with direct connection to mains	Supplying by 5Vdc	N/A
F.3.3.2	Equipment without direct connection to mains	See above.	N ^{SC} P _S
F.3.3.3	Nature of the supply voltage:	In the the second	N/A
F.3.3.4	Rated voltage:	It will mill white we	N/A
F.3.3.5	Rated frequency	su st at	N/A
F.3.3.6	Rated current or rated power:	mile white white whi	N/A
F.3.3.7	Equipment with multiple supply connections	i i at at	N/A
F.3.4 🖑	Voltage setting device	INTER INTER WALL WALL	N/A
F.3.5	Terminals and operating devices	a st st st	N/A
F.3.5.1	.3.5.1 Mains appliance outlet and socket-outlet markings		N/A
F.3.5.2	Switch position identification marking	et mitter antite antite and	N/A
F.3.5.3 Replacement fuse identification and rating markings		the set set set	N/A



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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:	No such battery.	N/A
F.3.5.5	Neutral conductor terminal	No such parts.	N/A
F.3.5.6	Terminal marking location	NUTER MUTER WALTE WALTE	N/A
F.3.6 Equipment markings related to equipment Class classification		Class III equipment	N/A
F.3.6.1	Class I equipment	Mr. Mr.	N/A
F.3.6.1.1	Protective earthing conductor terminal	t state nite white whi	N/A
F.3.6.1.2	Protective bonding conductor terminals:	the state	N/A
F.3.6.2	Equipment class marking	white white white white	N/A
F.3.6.3	Functional earthing terminal marking:	and at at	N/A
F.3.7	Equipment IP rating marking	This equipment is classified as IPX0.	or <u>-</u> al
F.3.8	External power supply output marking:	et allet mile waite wa	N/A
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	PE
F.3.10	Test for permanence of markings	The label was subjected to thepermanence of marking test. Thelabel was rubbed with cloth soakedwith water for 15 sec. And thenagain for 15 sec, with the clothsoaked with petroleum spirit. After this test there was nodamage to the label. The markingon the label did not fade. Therewas no curling and lifting of thelabel edge. After each test, the markingremained legible.	ALLER WALLER
F.4	Instructions	were sure sure and a	Р
et mile	a) Information prior to installation and initial use	See user manual	Pro Pro
JEK	b) Equipment for use in locations where children not likely to be present	and the set of	N/A
211- 1	c) Instructions for installation and interconnection	mer me me m	N/A
INLIEK WAY	d) Equipment intended for use only in restricted access area	minet whitet whitet whitet	N/A
the st	e) Equipment intended to be fastened in place	s at at at	_
-mer	f) Instructions for audio equipment terminals	LIE while while while of	N/A
+ Set	g) Protective earthing used as a safeguard	s at at at a	N/A
NN .	h) Protective conductor current exceeding ES2 limits	while while while while	N/A
when all	i) Graphic symbols used on equipment	stres stres inter white	N/A



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	EN IEC 62368-	S	
Clause	Requirement – Test	Result – Remark	Verdict
Whitek al	j) Permanently connected equipment not provided with all-pole mains switch	white white white	N/A
Set S	k) Replaceable components or modules providing safeguard function	when when we	N/A
	I) Equipment containing insulating liquid	nett water water wa	N/A
It NITE	m) Installation instructions for outdoor equipment	at at at 5	N/A
F.5	Instructional safeguards	the way way with	N/A
G	COMPONENTS		Р
G.1	Switches	Mur Mur Mur	N/A
G.1.1	General	No switch used	N/A
G.1.2	Ratings, endurance, spacing, maximum load	me me m	N/A
G.1.3	Test method and compliance	THE STREE NUTRE AN	N/A
G.2	Relays	L. Th. Th. L.	N/A
G.2.1	Requirements	No relay used.	N/A
G.2.2	Overload test	St. A. A.	N/A
G.2.3 Relay controlling connectors supplying power to other equipment		WATE WATE WATE	N/A
G.2.4	Test method and compliance	At Shirts	S N/A
G.3	Protective devices		N/A
G.3.1	Thermal cut-offs	No such component	N/A
t INLIEK	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	at that they will	N/A
JTEK .	Thermal cut-outs tested as part of the equipment as indicated in c)	when we we	N/A
G.3.1.2	Test method and compliance	white white white y	N/A
G.3.2	Thermal links	No such component	<u></u> N/A
G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics	n' white white	N/A
m	b) Thermal links tested as part of the equipment	ite matin white white	N/Å
G.3.2.2	Test method and compliance	- at at at	N/A
G.3.3	PTC thermistors	No such component	N/A
G.3.4	Overcurrent protection devices	No such component	N/A
G.3.5	Safeguards components not mentioned in G.3.1 to G.3.4	which which where w	N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided	The mouth white white	N/A
G.3.5.2	Single faults conditions:	let outer only on other	N/A
G.4	Connectors	and the state	N/A
G.4.1	Spacings	No such component	N/A



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0	EN IEC 62368-	1 40 - 50 - 3	
Clause	Requirement – Test	Result – Remark	Verdict
G.4.2	Mains connector configuration	and when when	N/A
G.4.3	Plug is shaped that insertion into mains socket-	THE THE NUMBER	N/A
outlets or appliance coupler is unlikely		mer mer m	
G.5	Wound components	ster ster atter of	N/A
G.5.1	Wire insulation in wound components	No such component	N/A
G.5.1.2	Protection against mechanical stress	set allet aller white	N/A
G.5.2	Endurance test	which we are	N/A
G.5.2.1	General test requirements	a street white white	N/A
G.5.2.2	Heat run test	su at at	N/A
me m	Test time (days per cycle):	INFERT MALTER MALTER	M
	Test temperature (°C):	s at at	<u>_</u>
G.5.2.3	Wound components supplied from the mains	the while while wh	N/A
G.5.2.4	No insulation breakdown	a at at a	N/A
G.5.3	Transformers	white white white	N/A
G.5.3.1	Compliance method:	. It let set	N/Á
14. 20	Position	white show show	N/A
NUTER INL	Method of protection	the state	N/A
G.5.3.2	Insulation	- a gut m	N/A
Let Multe	Protection from displacement of windings:	the store with all	<u> </u>
G.5.3.3	Transformer overload tests	Mr. Mr. M.	N/A
G.5.3.3.1	Test conditions	the state street water	N/A
G.5.3.3.2	Winding temperatures	Mr. M. M.	N/A
G.5.3.3.3	Winding temperatures - alternative test method	auter multi white a	ر الأكرى ال
G.5.3.4	Transformers using FIW	the second second	N/A
G.5.3.4.1	General	NUTER INUTE WAITE WA	N/A
et set	FIW wire nominal diameter:		* –
G.5.3.4.2	Transformers with basic insulation only	TET MALTE MALL WALL	N/A
G.5.3.4.3	Transformers with double insulation or reinforced insulation:	- NUTER MUTER MUTER	N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core	Tet set sitet	N/A
G.5.3.4.5	Thermal cycling test and compliance	m. m. m. n	N/A
G.5.3.4.6	Partial discharge test	THE STREE STREET INT	N/A
G.5.3.4.7	Routine test	20. 20. 20	N/A
G.5.4	Motors	No motors used.	N/A
G.5.4.1	General requirements	with the state	N/A
G.5.4.2	Motor overload test conditions	site site with	N/A



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1 mr. m. m. s.	EN IEC 62368-1	

Clause	Requirement – Test	Result – Remark	Verdict	
<u></u>		for and the south of the	un un	
G.5.4.3	Running overload test	the state	N/A	
G.5.4.4.2	Locked-rotor overload test	white white white	JN/A	
St. St.	Test duration (days)			
G.5.4.5	Running overload test for DC motors	mine white white wh	N/A	
G.5.4.5.2	Tested in the unit	a de lat d	N/A	
G.5.4.5.3	Alternative method	it whit whit whe	N/A	
G.5.4.6	Locked-rotor overload test for DC motors	e at at set	N/A	
G.5.4.6.2	Tested in the unit	white and some	N/A	
NUEL N	Maximum Temperature	at at at	N/A	
G.5.4.6.3	Alternative method	white white where it	N/A	
G.5.4.7	Motors with capacitors	let tet tet a	N/A	
G.5.4.8	Three-phase motors	the shere shere an	N/A	
G.5.4.9	Series motors	et tet ster ste	N/A	
	Operating voltage:	The the w	_	
G.6	Wire Insulation		N/A	
G.6.1	General	Only ES1 existed	N/A	
G.6.2 Enamelled winding wire insulation		N/A		
G.7	Mains supply cords		N/A	
G.7.1	General requirements	No such component	N/A	
t At	Туре	i s s th		
G.7.2	Cross sectional area (mm ² or AWG):	and white white white		
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords	alitek mittek mittek a	N/A	
G.7.3.2	Cord strain relief	all and the	N/A	
G.7.3.2.1	Requirements	still mill white wh	N/A	
of the	Strain relief test force (N)		- N/A	
G.7.3.2.2	Strain relief mechanism failure	ist intro white white	N/A	
G.7.3.2.3	Cord sheath or jacket position, distance (mm):	that at	N/A	
G.7.3.2.4	Strain relief and cord anchorage material	WALLS WALL WALL	N/A	
G.7.4	Cord Entry	it at at	N/A	
G.7.5	Non-detachable cord bend protection	NALL WALL WALL W	N/A	
G.7.5.1	Requirements	A de de	N/A	
G.7.5.2	Test method and compliance	the main sure sure	N/A	
A WALTER	Overall diameter or minor overall dimension, <i>D</i> (mm)	at white white white	un -	
Ar	Radius of curvature after test (mm)			



EN IEC 62368-1 Clause Requirement - Test Result – Remark Verdict 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 N/A Varistors G.8.1 General requirements No such component N/A G.8.2 Safeguards against fire N/A G.8.2.1 General 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 No such component 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 No such component 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** N/A G.11.1 General requirements No such component 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 with No such component N/A specifics Type test voltage V_{ini,a}.....:

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Printed boards

General requirements

G.13

G.13.1

Routine test voltage, V_{ini, b}.....:

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N/A

N/A

Only need to comply with

B.4.4.

functional insulation, see only



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- an	EN IEC 62368-	the ment wat wat	- the str
Clause	Requirement – Test	Result – Remark	
G.13.2	Uncoated printed boards	WALL WALL WALL	N/A
G.13.3	Coated printed boards	UTER NUTER INTER	N/A
G.13.4	Insulation between conductors on the same inner surface	the set when	N/A
G.13.5	Insulation between conductors on different surfaces	at all the set	N/A
	Distance through insulation:	our more more mu	N/A
NUTER	Number of insulation layers (pcs)	at net iset iset	¹
G.13.6	Tests on coated printed boards	me me m	N/A
G.13.6.1	Sample preparation and preliminary inspection	Tet user when	N/A
G.13.6.2	Test method and compliance	me me me	N/A
G.14	Coating on components terminals	THE STREE STREET STR	N/A
G.14.1	Requirements:	a the contract	N/A
G.15	Pressurized liquid filled components	Tex where white white	N/A
G.15.1	Requirements	No such component	N/A
G.15.2	Test methods and compliance	NUTER INTER WATER	√ × Ñ/A
G.15.2.1	Hydrostatic pressure test		N/A
G.15.2.2	Creep resistance test	NUT IN	N/A [®]
G.15.2.3	Tubing and fittings compatibility test		<u>م</u>
G.15.2.4	Vibration test	white white white white	N/A
G.15.2.5	Thermal cycling test	L A At At	N/A
G.15.2.6	Force test	white white white	N/A
G.15.3	Compliance	at let set	N/A
G.16	IC including capacitor discharge function (ICX)	Mrs. Mr. Mr. V	N/A
G.16.1	Condition for fault tested is not required	No such component	N/A
1	ICX with associated circuitry tested in equipment	but mu me m	N/A
ET MUTE	ICX tested separately	let ster ster with	N/A
G.16.2	Tests	me m m	N/A
WALL N	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test:	would would would be	white -
nuter whi	Mains voltage that impulses to be superimposed on	Whitek whitek whitek w	
TEX MALTE	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test	Tet sufet south and	
G.16.3	Capacitor discharge test:	in the second	
н	CRITERIA FOR TELEPHONE RINGING SIGNAL	S	N/A
H.1_&	General	a at at	N/A
H.2	Method A	NUTE MUT MALL	N/A

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Clause	Requirement – Test	Result – Remark	Verdict	

Н.3 🖉	Method B	10 - 11 - 1 - 1	N/A
H.3.1	Ringing signal	No telephone ringing signal generated within the equipment.	N/A
H.3.1.1	Frequency (Hz):	ALT WALL WAL WAT	
H.3.1.2	Voltage (V):	at not not when	
H.3.1.3	Cadence; time (s) and voltage (V):	me me me me	
H.3.1.4	Single fault current (mA):	t get what what we	
H.3.2	Tripping device and monitoring voltage	Mr. M. M.	N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage	white white phile white	N/A
H.3.2.2	Tripping device	at at the the water	N/A
H.3.2.3	Monitoring voltage (V)	er me me me	N/A
J	INSULATED WINDING WIRES FOR USE WITHO INSULATION	UT INTERLEAVED	N/A
J.1	General	t at at at at	N/A
20. 0	Winding wire insulation:	WALL WALL MAN WI	
NUTER	Solid round winding wire, diameter (mm):	At a start with	N/A
set all	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm ²):	and the state	N/A
J.2/J.3	Tests and Manufacturing	the must when we as	
к	SAFETY INTERLOCKS		N/A
K.1	General requirements	when we we we	N/A
WILLIER W	Instructional safeguard:	No safety interlock provided within the equipment.	N/A
K.2	Components of safety interlock safeguard mec	hanism	N/A
K.3	Inadvertent change of operating mode	inter white white where a	N/A
K.4 🦪	Interlock safeguard override	at not not what a	N/A
K.5	Fail-safe	y my my my m	N/A
K.5.1	Under single fault condition	+ ret the with	N/A
K.6	Mechanically operated safety interlocks	MAL WITH WITH WITH	N/A
K.6.1	Endurance requirement	aret aret white white	N/A
K.6.2	Test method and compliance		N/A
K.7	Interlock circuit isolation	with aller with white a	N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements	at the state state and	N/A
.tt	In circuit connected to mains, separation distance for contact gaps (mm)	white when we are	N/A



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20.	EN IEC 62368-	and the she is		
Clause	Requirement – Test	Result – Remark	Verdict	
m	MI W STATES	Et alte whit whit wh	-m.	
UNLIEK N	In circuit isolated from mains, separation distance for contact gaps (mm)	the week and and	N/A	
	Electric strength test before and after the test of K.7.2	(See appended table 5.4.9)	N/A	
K.7.2	Overload test, Current (A):	Mill WALL WAL WAL	N/A	
K.7.3	Endurance test	at at at at	N/A	
K.7.4	Electric strength test	it was war we will	N/A	
L	DISCONNECT DEVICES		N/A	
L.1	General requirements	my m m m	N/A	
L.2	Permanently connected equipment	let the the the	N/A	
L.3	Parts that remain energized	me me me m	N/A	
L.4	Single-phase equipment	THE THE STREE MUTET.	N/A	
L.5	Three-phase equipment	- m m n	N/A	
L.6	Switches as disconnect devices	et wet miter white we	N/A	
L.7	Plugs as disconnect devices	WIT WIT THE A	N/A	
L.8	Multiple power sources			
jet .	Instructional safeguard:	the second second	N/A	
М	EQUIPMENT CONTAINING BATTERIES AND TH	EIR PROTECTION CIRCUITS	SILL P	
M.1 🔜	General requirements			
M.2	Safety of batteries and their cells	LIFE WALTE WALL WALL W	Р	
M.2.1	Batteries and their cells comply with relevant IEC standards	Approved battery pack used	P	
M.3	Protection circuits for batteries provided within the equipment	Tet Tet with with	- P.	
M.3.1	Requirements	me in me	Р	
M.3.2	Test method	ster street aller and	N ^{SC} PS	
et miret	Overcharging of a rechargeable battery	(See appended table AnnexM)	Jet P	
	Excessive discharging	(See appended table AnnexM)	P	
where a	Unintentional charging of a non-rechargeable battery	No such battery used	N/A	
ne m	Reverse charging of a rechargeable battery	Built-in battery used, reverse charging is prevented	N/A	
M.3.3	Compliance No chemical leakage, no spillage of liquid, no explosion of the battery, no emission of flame or expulsion of molten metal		NU Pol	
M.4	Additional safeguards for equipment containing	and the stand	P	



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	Clause	Requirement – Test	MUT. MIL. In.	Result – Remark	Verdict

M.4.1	General	20. 20	P
M.4.2	Charging safeguards	Under normal operating conditions, abnormal operating conditions or single fault conditions, the charging voltage, charging current of the battery no exceed the maximum specified charging voltage and maximum specified charging current.	P
M.4.2.1	Requirements	white white white white	N/A
M.4.2.2	Compliance	(See appended table M.4.2)	, °Р
M.4.3	Fire enclosure	V-0 fire enclosure used	Р
M.4.4	Drop test of equipment containing a secondary lithium battery	LIET WHITEK WAITER WALTER W	UT P
M.4.4.2	Preparation and procedure for the drop test	at at at at 5	್ P್ವರ
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%)::	The voltage difference not exceed 5%.	P
M.4.4.4	Check of the charge/discharge function	Three complete discharge and charge cycles under normal operating conditions.	S ^M P
M.4.4.5	Charge / discharge cycle test	No fire, explosion and any electrolyte leakage	P
M.4.4.6	Compliance	ite white white white a	Р
M.5	Risk of burn due to short-circuit during carrying		° ₽∕
M.5.1	Requirement	No bare conductive terminal used	P
M.5.2	Test method and compliance	intre-water water water	√ [™] N/A
M.6	Safeguards against short-circuits	s at at at	́Р
M.6.1	External and internal faults	MIT WALL WALL WIT .	N/A
M.6.2	Compliance	The battery complied with IEC 62133-2 which considered the internal fault tests. No such explosion or fire likely to result from short circuits.	VINTE
M.7	Risk of explosion from lead acid and NiCd batteries		N/A
M.7.1	Ventilation preventing explosive gas concentration	No such battery used	N/A
in when	Calculated hydrogen generation rate:	Tet street mile white a	N/A
M.7.2	Test method and compliance	Nº State	N/A
with	Minimum air flow rate, Q (m ³ /h)	et outer unite would work	N/A
M.7.3	Ventilation tests	the state	N/A
M.7.3.1	General	stree with white white	N/A



211-	EN IEC 62368-1	in which which when	m. a
Clause	Requirement – Test	Result – Remark	Verdict
M.7.3.2	Ventilation test – alternative 1	with sure with all	N/A
WALL N	Hydrogen gas concentration (%):	ister aller aller and	N/A
M.7.3.3	Ventilation test – alternative 2	mar she and so	N/A
Net mi	Obtained hydrogen generation rate	The alles and smalles and	N/A
M.7.3.4	Ventilation test – alternative 3	p pr sp st	N/A
- main	Hydrogen gas concentration (%):	ret intret intre which w	N/A
M.7.4	Marking	, i at at a	N/A
M.8	Protection against internal ignition from externa with aqueous electrolyte	al spark sources of batteries	N/A
M.8.1 📣	General	white white white white	_√ [™] N/A
M.8.2	Test method	i i it it	Ń/A
M.8.2.1	General	LIFE MALIE MALIE WALL	N/A
M.8.2.2	Estimation of hypothetical volume V _z (m ³ /s)::	1 A A At	Alt -
M.8.2.3	Correction factors:	MALL WALL WALL WI	- in
M.8.2.4	Calculation of distance <i>d</i> (mm):	at at at a	1
M.9	Preventing electrolyte spillage		N/A
M.9.1	Protection from electrolyte spillage	THE THE STAR	N/A
M.9.2	Tray for preventing electrolyte spillage		N/A
M.10	Instructions to prevent reasonably foreseeable misuse	iter waiter whilthe waiter w	N/A
t ster	Instructional safeguard:	t at all set is	N/A
N	ELECTROCHEMICAL POTENTIALS	when when when we	N/A
WITER of	Material(s) used:	at the set of	1015
0	MEASUREMENT OF CREEPAGE DISTANCES A	ND CLEARANCES	N/A
ute mu	Value of <i>X</i> (mm)	the the state street	NNLT -
P	SAFEGUARDS AGAINST CONDUCTIVE OBJECTS		Р
P.1	General	See below	P
P.2	Safeguards against entry or consequences of e	ntry of a foreign object	P
P.2.1	General	WIFE MUTE MUTE WAL	JUP .
P.2.2	Safeguards against entry of a foreign object	when the state of the	P
no m	Location and Dimensions (mm)	No opening.	m.
P.2.3	Safeguards against the consequences of entry of a foreign object	TEX SUPER MUTER MUTER	N/A
P.2.3.1	Safeguard requirements	Sup 20	N/A
with	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment	et watter watter watter wa	N/A

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Clause	Requirement – Test	Result – Remark	Verdict	
What where where	Transportable equipment with metalized plastic parts	e and and and and	N/A	
P.2.3.2	Consequence of entry test:	MILL MILL MILL MARK	N/A	
P.3	Safeguards against spillage of internal liquids	alt alt all all all	N/A	
P.3.1	General	No such liquids.	N/A	
P.3.2	Determination of spillage consequences	let whet while white an	N/A	
P.3.3	Spillage safeguards	the the second	N/A	
P.3.4	Compliance	t still out and and and	N/A	
P.4	Metallized coatings and adhesives securing pa	rts	N/A	
P.4.1 📣	General	No such construction.	_∞ [©] N/A	
P.4.2	Tests	i it at at	N/A	
e m	Conditioning, T _C (°C):	LIFE WALLS WALL WALL	nn	
* 50	Duration (weeks)	a at at at	10t -0	
Q S	CIRCUITS INTENDED FOR INTERCONNECTION WITH BUILDING WIRING		N/A	
Q.1	Limited power sources	at at at a	N/A	
Q.1.1	Requirements	white white white white	N/A	
Jet a	a) Inherently limited output	at the state	Ň/A	
	b) Impedance limited output		N/A	
SER WILLE	c) Regulating network limited output	All and a start of the	N/A	
1 A	d) Overcurrent protective device limited output	me m m	N/A	
MALT	e) IC current limiter complying with G.9		N/A	
Q.1.2	Test method and compliance	241 24	N/A	
WALL W	Current rating of overcurrent protective device (A)	MALTER WALTER WALTER WALT	N/A	
Q.2	Test for external circuits – paired conductor cable	No such circuit for connection to the EUT	N/A	
et jiet	Maximum output current (A):	it at let set	N/A	
24	Current limiting method:	in me we we w	<u> </u>	
R	LIMITED SHORT CIRCUIT TEST	t alt the the all	N/A	
R.1	General	No such consideration.	N/A	
R.2	Test setup	THE THE STREE MUTER	N/A	
	Overcurrent protective device for test:	me me in in		
R.3	Test method	stat what white white	N/A	
t st	Cord/cable used for test	211 111 1	st -	
R.4	Compliance	at the star of a	N/A	

S



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in an	EN IEC 62368-1		
Clause	Requirement – Test	Result – Remark	Verdict

S 🔬	TESTS FOR RESISTANCE TO HEAT AND FIRE	
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W	
L'IL M	Samples, material	min-
1 I	Wall thickness (mm)	<u>_</u>
NILL SULL	Conditioning (°C)	h
- NNLTEX	Test flame according to IEC 60695-11-5 with conditions as set out	N/A
*	- Material not consumed completely	N/A
Mere of	- Material extinguishes within 30s	N/A
de la	- No burning of layer or wrapping tissue	N/A
S.2	Flammability test for fire enclosure and fire barrier integrity	N/A
* 1	Samples, material	dt — 1
m	Wall thickness (mm)	- m.
Alt	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
let nu	Mounting of samples	LIET
	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
dt .	Samples, material	<u>straine</u>
in the	Wall thickness (mm)	hn
1 J	Conditioning (°C)	5 ¹⁰ - 5
т 🥠 🗋	MECHANICAL STRENGTH TESTS	N/A
T.1 5	General	N/A
Т.2	Steady force test, 10 N	N/A
Т.3	Steady force test, 30 N	N/A
Т.4	Steady force test, 100 N	N/A
Т.5	Steady force test, 250 N	N/A
Т.6	Enclosure impact test	N/A
min	Fall test	N/A
A	Swing test	N/A
Т.7	Drop test	N/A



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Clause	Requirement – Test	Result – Remark	Verdict
T.8	Stress relief test:	the second secon	N/A
Ţ.9 🕔	Glass Impact Test:	No such glass	~\N/A ~
T.10	Glass fragmentation test	i i i it it	N/A

_
N
-
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-
1

Т.9	Glass Impact Test:	No such glass	⊲∕ N/A
T.10	Glass fragmentation test		N/A
	Number of particles counted:	No such glass	N/A
T.11 💉	Test for telescoping or rod antennas		N/A
- Jet	Torque value (Nm):	No such antennas provided within the equipment.	N/A
UN	MECHANICAL STRENGTH OF CATHODE RAY T PROTECTION AGAINST THE EFFECTS OF IMPL		N/A
U.1 🕔	General		N/A -
LIEX MAL	Instructional safeguard:	No CRT provided within the equipment.	N/A
U.2	Test method and compliance for non-intrinsical	ly protected CRTs	N/A
U.3	Protective screen	ret with aller mile and	N/A
V	DETERMINATION OF ACCESSIBLE PARTS	The second second	N/A
V.1	Accessible parts of equipment		N/A
V.1.1	General	No Start And	N/A
V.1.2	Surfaces and openings tested with jointed test probes	and write write	N/A
V.1.3	Openings tested with straight unjointed test probes	The star white white w	N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe	WIT THE WAY	N/A
V.1.5	Slot openings tested with wedge probe	A WITH MUTH WAIT WAT	N/A
V.1.6	Terminals tested with rigid test wire	W W L A	N/A
V.2	Accessible part criterion	NUTER INTERNATION	N/A
X of a	ALTERNATIVE METHOD FOR DETERMINING CLEARANCES FOR INSULATION IN CIRCUITS CONNECTED TO AN AC MAINS NOT EXCEEDING 420 V PEAK (300 V RMS)		N/A
et nur	Clearance:	at all all all the	N/A
Y	CONSTRUCTION REQUIREMENTS FOR OUTDO	OR ENCLOSURES	N/A
Y.1	General	Indoor equipment	N/A
Y.2	Resistance to UV radiation	Mar Mar Mr. W.	N/A
Y.3	Resistance to corrosion	set sitet aller aute	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	The waiter waiter waiter	N/A
Y.3.2	Test apparatus	at not stat when we	N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere	me me me en	N/A
Y.3.4	Test procedure:	at the the the	N/A



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- n.	EN IEC 6	52368-1	in the th
Clause	Requirement – Test	Result – Remark	Verdict
an	MI W TI	t street out white white	mr mr
Y.3.5	Compliance	an a star	N/A
Y.4	Gaskets	with aller and walk	N/A
Y.4.1	General	in in the st	N/A
Y.4.2	Gasket tests	LIER NUTE MUTE MUTE W	N/A
Y.4.3	Tensile strength and elongation tests	the state	N/A
m	Alternative test methods	Et in let white white white	N/A
Y.4.4	Compression test	LA A A	N/A
Y.4.5	Oil resistance	white white white white	N/A
Y.4.6	Securing means	A A A A	N/A
Y.5	Protection of equipment within an outdoo	r enclosure	N/A
Y.5.1	General	it at let set	N/A
Y.5.2	Protection from moisture	I WE WILL WIT W	N/A
A MULTER	Relevant tests of IEC 60529 or Y.5.3	······: #	N/A
Y.5.3	Water spray test	me we we we	N/A
Y.5.4	Protection from plants and vermin	all set site with	N/A
Y.5.5	Protection from excessive dust	Mar Mar Mr. Mr.	N/A
Y.5.5.1	General	At At ALL	N/A
Y.5.5.2	IP5X equipment		N/A
Y.5.5.3	IP6X equipment	et after miller and the and	N/A
Y.6 🦽	Mechanical strength of enclosures	30 30 × ×	N/A
Y.6.1	General	and martin white white	N/A
Y.6.2	Impact test		N/A



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	EN IEC 62368-	1 the mile while white wh	
Clause	Requirement – Test	Result – Remark	Verdict
str.	all an a start set as	iter with white white white	m
	ATTACHMENT TO TEST	REPORT	
	IEC 62368-1	ALTER MUTE WALK WALK	
(Audia	EUROPEAN GROUP DIFFERENCES AND N		nonto)
	o/video, information and communication technology e	Mr. Mr. Mr. M. 2	nems)
Difference	s according to EN IEC 62368-1:2020+A	11:2020	Set a
Attachme	nt Form No : EU_GD_IEC62368_1E	the watt wat wat war	24
Attachme	nt Originator: UL(Demko)		
Master Att	achment: 2021-02-04	at at set set	NUTER
Copyright	© 2021 IEC System for Conformity Testing and C	Certification of Electrical Equipm	nent
(IECEE), C	Seneva, Switzerland. All rights reserved.	at not not when a	LIEF, N
i i i	CENELEC COMMON MODIFICATIONS (EN)	ner whe she she we	Р
WALTER	Clause numbers in the cells that are shaded light of IEC 62368-1:2020+A11:2020. All other clause nur those in the paragraph below, refers to IEC 62368	nbers in that column, except for	NP NP
	Clauses, subclauses, notes, tables, figures and ar those in IEC 62368-1:2018 are prefixed "Z".	nexes which are additional to	wiret .
1. 20	Add the following annexes:	S Sunt sult 5	Р
	Annex ZA (normative)Normative references to inter corresponding European publications	national publications with their	THE WIN
	Annex ZB (normative)Special national conditions		4
	Annex ZC (informative)A-deviations		mon
	Appay 7D (informative) IFO and OFNEL FO and a	signations for nexible cords	
WALTER	Annex ZD (informative)IEC and CENELEC code de		N1/A
	Modification to Clause 3.		N/A
		when we we are	N/A N/A
1 3.3.19 3.3.19.1	Modification to Clause 3. Sound exposure	when we we are	

Channels, based on EN 50332-1:2013, 4.2. Note 1 to entry: MEL is measured as A-weighted levels in dB. Note 2 to entry: See B.3 of EN 50332-3:2017 for additional information.



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- apr	EN IEC 62368-1	LIE INTE MALL WAL	an an
Clause	Requirement – Test	Result – Remark	Verdict
3.3.19.3	sound exposure, E A-weighted sound pressure (<i>p</i>) squared and integrated over a stated period of time, <i>T</i>	white white white	N/A
	Note 1 to entry: The SI unit is Pa ² s. $E = \int_{0}^{T} p(t)^{2} dt$	eret whitet whitet white	AT N IN N
3.3.19.4	sound exposure level, SEL	- let set set	N/A
	logarithmic measure of sound exposure relative to a reference value, E_0 , typically the 1 kHz threshold of hearing in humans.	MALEX MALEX MALIEX W	where where
	Note 1 to entry: SEL is measured as A-weighted levels in dB.	Tet whitet whitet whi	iet on the out
	$SEL = 10 \lg \left(\frac{E}{E_0}\right) dB$	* white white white	whit it whit
	Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.	white watter souther	WALTER MALTER
3.3.19.5	digital signal level relative to full scale, dBFS levels reported in dBFS are always r.m.s. Full scale level, 0 dBFS, is the level of a dc-free 997- Hz sine wave whose undithered positive peak value is positive digital full scale, leaving the code corresponding to negative digital full scale unused	it water water water	N/A
	Note 1 to entry: It is invalid to use dBFS for non-r.m.s. levels. Because the definition of full scale is based on a sine wave, the level of signals with a crest factor lower than that of a sine wave may exceed 0 dBFS. In particular, square wave signals may reach +3,01 dBFS.	white white white	MALTER WALTER
2	Modification to Clause 10		N/A
10.6 🖋	Safeguards against acoustic energy sources	wifer outer only only	N/A
	Replace 10.6 of IEC 62368-1 with the following:		t at a
10.6.1.1	Introduction	Not such equipment	N/A
	Safeguard requirements for protection against long-term exposure to excessive sound pressurelevels from personal music players closely coupled to the ear are specified below. Requirements for earphones and headphones intended for use with personal music players are also covered.	Martinet white white	somered somered
	A personal music player is a portable equipment intended for use by an ordinary person , that:	Tet white white whi	we we
	 is designed to allow the user to listen to audio or audiovisual content / material; and uses a listening device, such as headphones or earphones that can be worn in or on or around the ears; and 	wontret whitet white	white white



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	EN IEC 62368-	125 million while white	
Clause	Requirement – Test	Result – Remark	Verdict
NATER N	– has a player that can be body worn (of a size suitable to be carried in a clothing pocket) and is intended for the user to walk around with while in continuous use (for example, on a street, in a subway, at an airport, etc.).	WALTER WALTER WALTER	untret untret
	EXAMPLES Portable CD players, MP3 audio players, mobile phones with MP3 type features, PDAs or similar equipment.	Verter worth worth wo	et alt a
	Personal music players shall comply with the requirements of either 10.6.2 or 10.6.3.	The wonthe wonth won't	NAL MAN
	NOTE 1 Protection against acoustic energy sources from telecom applications is referenced to ITU-T P.360.	WALTER MALTE MALL	sunt mot
	NOTE 2 It is the intention of the Committee to allow the alternative methods for now, but to only use the dose measurement method as given in 10.6.5 in future. Therefore, manufacturers are encouraged to implement 10.6.5 as soon as possible.	Tet milet while while	NET MENT
	Listening devices sold separately shall comply with the requirements of 10.6.6. These requirements are valid for music or video	Net miret aniret waite	white white
	mode only. The requirements do not apply to: – professional equipment;	whitek whitek whitek	MALIER MALIER
	NOTE 3Professional equipment is equipment sold through special sales channels. All products sold throughnormal electronics stores are considered not to be professional equipment.	white w	et with m
	 hearing aid equipment and other devices for assistive listening; 	a ret ret ret riet	NUTE MALTE
	 the following type of analogue personal music players: long distance radio receiver (for example, a 	while white white	The street
	multiband radio receiver or world band radio receiver, an AM radio receiver), and • cassette player/recorder;	white white white y	ret tret
	NOTE 4 This exemption has been allowed because this technology is falling out of use and it is expected that within a few years it will no longer exist. This exemption will not be extended to other technologies.	and another and an	t unit sunit
	 – a player while connected to an external amplifier that does not allow the user to walk around while in use. 	MALTER MALTER MALTER	white smith
	For equipment that is clearly designed or intended primarily for use by children, the limits of the relevant toy standards may apply.	Whitek whitek whitek w	ist on ret on
+ white	The relevant requirements are given in EN 71-1:2011, 4.20 and the related tests methods and measurement distances apply.	et white white white	white white
10.6.1.2	Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz	A at at	N/A

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20	EN IEC 62368-1	an an an	~ ~
Clause	Requirement – Test	Result – Remark	Verdict
de	with the second se	atter with which a	no m
Jet .	The amount of non-ionizing radiation is regulated by European Council Recommendation	the state	set sitet
	1999/519/EC of 12 July 1999 on the limitation of exposure of the general public to electromagnetic	antite antite and an	Jun .
	fields (0 Hz to 300 GHz). For intentional radiators, ICNIRP guidelines should	stat strat murat smith	A WALTER N
	be taken into account for Limiting Exposure to	in which we we will	et
	Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz). For hand-	et ourer ourres would	me in
	held and body mounted devices, attention is drawn to EN 50360 and EN 50566.	a at at	1 S
10.6.2	Classification of devices without the capacity to	estimate sound dose	N/A
10.6.2.1	General	Not such equipment	<u>́ N/А</u>
	This standard is transitioning from short-term	white white white whe	- Mr.
	based (30 s) requirements to long-term based (40 hour) requirements. These clauses remain in	a at at a	t set
	effect only for devices that do not comply with	TEN WALTE WALT WALT	m. m
	sound dose estimation as stipulated in EN 50332-	i i at at	14 5
	3.	MUTER MAILE MAILE	une me
	For classifying the acoustic output L_{Aeq}, τ ,	we we at	at at
	measurements are based on the A-weighted equivalent sound pressure level over a 30 s	when when white we	the wat
	period.	Mr. Sur St.	t it
		at a number of	S ALL S
	For music where the average sound pressure (long term $LAeq, \tau$) measured over the duration of		14
	the song is lower than the average produced by	and the state of the	in Stan
	the programme simulation noise, measurements	me me m	
	may be done over the duration of the complete song. In this case, <i>T</i> becomes the duration of the	- let set set	NUTE WIT
	song.	when when when a	n. 22
	NOTE Classical music, acoustic music and broadcast typically	at let set a	JEt NITER
	has an average sound pressure (long term $L_{Aeq,7}$) which is much lower than the average programme simulation noise.	unit wat wat wat	20.
	Therefore, if the player is capable to analyse the content and	at at at at	t Jet
	compare it with the programme simulation noise, the warning does not need to be given as long as the average sound	the work white white	21 21
	pressure of the song does not exceed the required limit. For example, if the player is set with the programme simulation	1 A A A	Set 5
	noise to 85 dB, but the average music level of the song is only	and white white white	me m
	65 dB, there is no need to give a warning or ask an acknowledgement as long as the average sound level of the	a at at	1 1
10.6.2.2	song is not above the basic limit of 85 dB. RS1 limits (to be superseded, see 10.6.3.2)	NALE MAL WALL	N/A
	The number inter india when when the	at the state of	et ster
	RS1 is a class 1 acoustic energy source that does	mill white white white	
	not exceed the following: – for equipment provided as a package (player	a state of	e de .
	with its listening device), and with a proprietary	ret intre white white	m m
	connector between the player and its listening device, or where the combination of player and	the state	14 1
	listening device is known by other means such as	t stift intig inite	while which
	setting or automatic detection, the LAeq, racoustic	No. 20. 20	t it
	output shall be \leq 85 dB when playing the fixed	at the set	J. J.

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20	EN IEC 62368-	in the sure sure	24. 24
Clause	Requirement – Test	Result – Remark	Verdict
Clause	Requirement – Test 50332-1. – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1. – The RS1 limits will be updated for all devices as per 10.6.3.2. RS2 limits (to be superseded, see 10.6.3.3) RS2 is a class 2 acoustic energy source that does not exceed the following: – for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or when the combination of player and listening device is known by other means such as setting or automatic 130 detection, the <i>L</i> Aeq, <i>τ</i> acoustic output shall be ≤ 100 dB(A) when playing the fixed "programme simulation noise" as described in EN 50332-1. – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 150 mV (analogue interface) or -10 dBFS (digital interface) when playing the fixed "programme simulation noise" as described in EN 50332-1.		P
10.6.2.4	RS3 limits RS3 is a class 3 acoustic energy source that exceeds RS2 limits.	WAITER WAITER WAITE	N/A
10.6.3	Classification of devices (new)	NUTER WAITE WILL'E W	N/A
10.6.3.1	General Previous limits (10.6.2) created abundant false negative and false positive PMP sound level warnings. New limits, compliant with The Commission Decision of 23 June 2009, are given below.	Not such equipment	N/A
10.6.3.2	RS1 limits (new) RS1 is a class 1 acoustic energy source that does not exceed the following: – for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the $LAeq, \pi acoustic$ output shall be \leq 80 dB when playing the fixed "programme simulation noise" described in EN 50332-1. – for equipment provided with a standardized	Martinet martinet martinet	N/A



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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
SALLER SAL	connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output voltage shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	antifet antifet antifet a	NITES SPATE
	RS2 limits (new) RS2 is a class 2 acoustic energy source that does not exceed the following: – for equipment provided as a package (player with its listening device), and with a proprietary connector between the player and its listening device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the weekly sound exposure level, as described in EN 50332-3, shall be ≤ 80 dB when playing the fixed "programme simulation noise" described in EN 50332-1. – for equipment provided with a standardized connector (for example, a 3,5 phone jack) that allows connection to a listening device for general use, the unweighted r.m.s. output level, integrated over one week, as described in EN50332-3, shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	et warret warret warret	- N/A
10.6.4	Requirements for maximum sound exposure	and the state state	N/A
10.6.4.1	Measurement methodsAll volume controls shall be turned to maximum during tests.Measurements shall be made in accordance with EN 50332-1 or EN 50332-2 as applicable.	Not such equipment	N/A
10.6.4.2	 Protection of persons Except as given below, protection requirements for parts accessible to ordinary persons, instructed persons and skilled persons are given in 4.3. NOTE 1 Volume control is not considered a safeguard. Between RS2 and an ordinary person, the basic safeguard may be replaced by an instructional safeguard in accordance with Clause F.5, except that the instructional safeguard shall be placed on the equipment, or on the packaging, or in the instruction manual. Alternatively, the instructional safeguard may be given through the equipment display during use. 	A MALTER WALTER WALTER	P

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	EN IEC 62368-1	Lite min white white	
Clause	Requirement – Test	Result – Remark	Verdict
white .	with with a set of the set	and white white white	we we
WALTER W	– element 1a: the symbol , IEC 60417- 6044 (2011-01)	MALTER MALTER MALTER W	NITER WALTER
	– element 2: "High sound pressure" or equivalent wording	and white white whi	Et WALTER S
	 – element 3: "Hearing damage risk" or equivalent wording – element 4: "Do not listen at high volume levels 	et maret maret amare	whitek wh
	for long periods." or equivalent wording	which the state	1- 1
	An equipment safeguard shall prevent exposure of an ordinary person to an RS2 source without intentional physical action from the ordinary person and shall automatically return to an output level not exceeding what is specified for an RS1 source when the power is switched off.	White white white	and and and
	The equipment shall provide a means to actively inform the user of the increased sound level when the equipment is operated with an output exceeding RS1. Any means used shall be acknowledged by the user before activating a mode of operation which allows for an output exceeding RS1. The acknowledgement does not need to be repeated more than once every 20 h of	A WALL WALLER WALLER	MALTER MALTER
	cumulative listening time. NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed.	and the same	t instex of
	NOTE 3 The 20 h listening time is the accumulative listening time, independent of how often and how long the personal music player has been switched off.	white white white	NUTE WALT
INLIEK ING	A skilled person shall not be unintentionally exposed to RS3.	the state minet of	LIFEK WALIFEK
0.6.5	Requirements for dose-based systems	m. m. w.	N/A
10.6.5.1	General requirements Personal music players shall give the warnings as provided below when tested according to EN	Not such equipment	N/A
	50332-3, using the limits from this clause. The manufacturer may offer optional settings to allow the users to modify when and how they wish to receive the notifications and warnings to promote a better user experience without defeating the safeguards. This allows the users to be informed in a method that best meets their physical capabilities and device usage needs. If such optional settings are offered, an administrator (for example, parental restrictions, business/educational administrators, etc.) shall be able to lock any optional settings into a specific	MALIER MALIER MALIER MALIER	ANTER ANTER
	configuration. The personal music player shall be supplied with	the set set	LIEK WALTER

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20.	EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict	
MALTER M	easy to understand explanation to the user of the dose management system, the risks involved, and how to use the system safely. The user shall be made aware that other sources may significantly contribute to their sound exposure, for example work, transportation, concerts, clubs, cinema, car races, etc.	antifet antifet antifet an	NUTER SUPERIE	
10.6.5.2	Dose-based warning and requirementsWhen a dose of 100 % CSD is reached, and at least at every 100 % further increase of CSD, the device shall warn the user and require an acknowledgement. In case the user does not acknowledge, the output level shall automatically decrease to compliance with class RS1.The warning shall at least clearly indicate that listening above 100 % CSD leads to the risk of hearing damage or loss.	and	N/A	
	 Exposure-based requirements With only dose-based requirements, cause and effect could be far separated in time, defying the purpose of educating users about safe listening practice. In addition to dose-based requirements, a PMP shall therefore also put a limit to the short-term sound level a user can listen at. The exposure-based limiter (EL) shall automatically reduce the sound level not to exceed 100 dB(A) or 150 mV integrated over the past 180 s, based on methodology defined in EN 50332-3. The EL settling time (time from starting level reduction to reaching target output) shall be 10 s or faster. Test of EL functionality is conducted according to EN 50332-3, using the limits from this clause. For equipment provided as a package (player with its listening device), the level integrated over 180 s shall be 100 dB or lower. For equipment provided with a standardized connector, the unweighted level integrated over 180 s shall be no more than 150 mV for an analogue interface and no more than -10 dBFS for a digital interface. 			
10.6.6 10.6.6.1	Requirements for listening devices (headphoneCorded listening devices with analogue inputWith 94 dB LAeqacoustic pressure output of the listening device, and with the volume and sound settings in the listening device (for example, built- in volume level control, additional sound features 	es, earphones, etc.)	N/A N/A	

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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
whitek whit	output, the input voltage of the listening device when playing the fixed "programme simulation noise" as described in EN 50332-1 shall be ≥ 75 mV. NOTE The values of 94 dB and 75 mV correspond with 85 dB and 27 mV or 100 dB and 150 mV.	and and and an area	antifet antifet
10.6.6.2	Corded listening devices with digital input	a at at a	N/A
SUNTER SUNTER	With any playing device playing the fixed "programme simulation noise" described in EN 50332-1, and with the volume and sound settings in the listening device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output, the $LAeq, \tau acoustic$ output of the listening device shall be ≤ 100 dB with an input signal of - 10 dBFS.	And the sources and the sources	WIND WINTER
10.6.6.3	Cordless listening devices	i i de de	N/A
WAITER WAITER	In cordless mode, – with any playing and transmitting device playing the fixed programme simulation noise described in EN 50332-1; and – respecting the cordless transmission standards, where an air interface standard exists that specifies the equivalent acoustic level; and – with volume and sound settings in the receiving device (for example, built-in volume level control, additional sound features like equalization, etc.) set to the combination of positions that maximize the measured acoustic output for the above mentioned programme simulation noise, the $LAeq, \pi coustic output of the listening device shall$ be ≤ 100 dB with an input signal of -10 dBFS.	ANTIEL ANTIEL ANTIEL	White wares
10.6.6.4	Measurement method	which which when i	N/A
ister mais	Measurements shall be made in accordance with EN 50332-2 as applicable.	the the whet	LIEK W LIEK W
3	Modification to the whole document		P



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ment – Test all the "country" no Note 1 and .3 Note 1 .2 Note .3.2.4 Note 2 e 13 0.2.1 Note .1 Note	-2m	Set Set	3.3.8.1 4.7.3 5.4.2.3.2.4 5.4.5.1 5.4.10.2.3	to the following Note 2 Note 1 and 2 Note 1 and 3 Note Note	Verdict
Note 1 and .3 Note 1 .2 Note .3.2.4 Note 2 e 13 Note	2 1 4.1.15 5.4.2.3.2.2 Table 12 5.4.2.5 5.4.2.5	Note 4 and 5 Note Note c Note 2 Note	3.3.8.1 4.7.3 5.4.2.3.2.4 5.4.5.1 5.4.10.2.3	Note 2 Note 1 and 2 Note 1 and 3 Note Note	
Note 1 and .3 Note 1 .2 Note .3.2.4 Note 2 e 13 Note	2 1 4.1.15 5.4.2.3.2.2 Table 12 5.4.2.5 5.4.2.5	Note 4 and 5 Note Note c Note 2 Note	3.3.8.1 4.7.3 5.4.2.3.2.4 5.4.5.1 5.4.10.2.3	Note 2 Note 1 and 2 Note 1 and 3 Note Note	
I.3 Note 1 I.2 Note I.3.2.4 Note 2 e 13 0.2.1	4.1.15 5.4.2.3.2.2 Table 12 5.4.2.5 5.4.10.2.2	Note c Note c Note 2 Note	4.7.3 5.4.2.3.2.4 5.4.5.1 5.4.10.2.3	Note 1 and 2 Note 1 and 3 Note Note	SULTER S
2 Note 3.2.4 Note 2 e 13 0.2.1 Note	5.4.2.3.2.2 Table 12 5.4.2.5 5.4.10.2.2	Note c Note 2 Note	5.4.2.3.2.4 5.4.5.1 5.4.10.2.3	Note 1 and 3 Note Note	o unitex
2.3.2.4 Note 2 e 13 0.2.1 Note	Table 12 5.4.2.5 5.4.10.2.2	Note 2 Note	5.4.5.1 5.4.10.2.3	Note Note	E EK WIN
e 13 0.2.1 Note	5.4.10.2.2	Note	5.4.10.2.3	Note	e-wnure wnurex
0.2.1 Note	Station and stations				whitek
	Station and stations				MULTER
.1 Note	5.5.6	Note	50404	Net 0 and 0	
			5.6.4.2.1	Note 2 and 3 and 4	NETEX W
Note 2	5.7.6	Note	5.7.7.1	Note 1 and Note 2	JEX MAL
.2.3 Note	10.2.1 Table 39	Note 3 and 4 and 5	10.5.3	Note 2	4 WALTEN
.1 Note 3	F.3.3.6	Note 3	Y.4.1	Note	NUTER
5 Note					St. 1
		107 <u>1</u> .14		57 . 19 ¹ . 19	No. The
ation to Clause 1					P
	A Note 3 Note Note	Table 39 A Note 3 F.3.3.6 Note	Image: Table 39 and 5 Image: Table 39 F.3.3.6 Note 3 Image: Table 39 Note 3 Image: Table 39 Image: Table 39 Image: Table 39 Image: Table 39	Table 39 and 5 .4 Note 3 F.3.3.6 Note 3 Y.4.1 5 Note Image: State of the st	Table 39 and 5 .4 Note 3 F.3.3.6 Note 3 Y.4.1 Note 5 Note Image: station to Clause 1 station to Clause 1 Final substances in electrical and

Modification to 4.Z1

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Clause	Requirement – Test	Result – Remark	Verdict	
4.Z1	Add the following new subslause after 4.0:	Not directly connected to the		
	 Add the following new subclause after 4.9: To protect against excessive current, short-circuits and earth faults in circuits connected to an a.c.mains, protective devices shall be included either as integral parts of the equipment or as parts of the building installation, subject to the following, a), b) and c): a) except as detailed in b) and c), protective devices necessary to comply with the requirements of B.3.1 and B.4 shall be included as parts of the equipment; b) for components in series with the mains input to the equipment such as the supply cord, appliance coupler, r.f.i. filter and switch, short-circuit and earth fault protection may be provided by protective devices in the building installation; c) it is permitted for pluggable equipment type B or permanently connected equipment, to rely on dedicated overcurrent and short-circuit protection in the building installation, provided that the means of protection, e.g. fuses or circuit breakers, is fully specified in the installation instructions. If reliance is placed on protection in the building installation, the installation instructions shall so state, except that for pluggable equipment type A the building installation shall be regarded as providing protection in accordance with the rating of the wall socket outlet. 	Whitek white whitek whitek		
6	Modification to 5.4.2.3.2.4		N/A	
5.4.2.3.2.4	Add the following to the end of this subclause:	No connection to external	N/A	
Set .	The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.	circuit.	NJ. Ek	
7	Modification to 10.2.1		N/A	
10.2.1	Add the following to c) and d) in table 39:For additional requirements, see 10.5.1.	No such radiation from the equipment.	N/A	
8	Modification to 10.5.1		N/A	



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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
sur	Mr. W. S.	and and and and	me m
10.5.1	 Add the following after the first paragraph: For RS 1 compliance is checked by measurement under the following conditions: In addition to the normal operating conditions, all controls adjustable from the outside by hand, by any object such as a tool or a coin, and those internal adjustments or pre-sets which are not locked in a reliable manner, are adjusted so as to give maximum radiation whilst maintaining an intelligible picture for 1 h, at the end of which the measurement is made. 	ANTIEL ANTIEL ANTIEL	N/A
	NOTE Z1 Soldered joints and paint lockings are examples of adequate locking. The dose-rate is determined by means of a radiation monitor with an effective area of 10 cm ² , at any point 10 cm from the outer surface of the apparatus.	aniset aniset aniset a	neret antiet and
	Moreover, the measurement shall be made under fault conditions causing an increase of the high voltage, provided an intelligible picture is maintained for 1 h, at the end of which the measurement is made. For RS1, the dose-rate shall not exceed 1 µSv/h	WALLEY WALTER WALTER	south souther
WALTER	taking account of the background level. NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.	WINTER WINTER WINT	WIN IC WAS
9	Modification to G.7.1		N/A
G.7.1	Add the following note: NOTE Z1 The harmonized code designations corresponding to the IEC cord types are given in AnnexZD.	UNLER WALLER WALLER	N/A
10	Modification to Bibliography		P



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Verdict

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20.		EN IEC 6230	68-1
Clause	Requirement – Te	st	Result – Remark
- SNI	Add the following	notes for the standards indica	ated:
white	IEC 60130-9	NOTE Harmonized as EN	

SULVER MALTER	IEC 60130-9 NOTE Harmonized as EN 60130-9. IEC 60269-2 NOTE Harmonized as HD 60269-2. IEC 60309-1 NOTE Harmonized as EN 60309-1. IEC 60364 NOTE some parts harmonized in HD 384/HD 60364 series. IEC 60601-2-4 NOTE Harmonized as EN 60601-2-4. IEC 60664-5 NOTE Harmonized as EN 60664-5. IEC 61032:1997 NOTE Harmonized as EN 61032:1998 (not modified). IEC 61508-1 NOTE Harmonized as EN 61508-1. IEC 61558-2-1 NOTE Harmonized as EN 61558-2-1. IEC 61558-2-4 NOTE Harmonized as EN 61558-2-4. IEC 61558-2-6 NOTE Harmonized as EN 61558-2-6. IEC 61643-1 NOTE Harmonized as EN 61643-1. IEC 61643-1 NOTE Harmonized as EN 61643-1. IEC 61643-1 NOTE Harmonized as EN 61643-21. IEC 61643-21 NOTE Harmonized as EN 61643-21. IEC 61643-311 NOTE Harmonized as EN 61643-311. IEC 61643-31 NOTE Harmonized as EN 61643-311. IEC 61643-321 NOT	AND AND
11	ADDITION OF ANNEXES	P
ZB	ADDITION OF ANNEXES ANNEX ZB, SPECIAL NATIONAL CONDITIONS (EN)	
	Denmark, Finland, Norwayand SwedenNot directly connected to the mainsTo the end of the subclause the following is added:Not directly connected to the mainsClass I pluggable equipment type A intended for connection to other equipment or anetwork shall, if safety relies on connection to reliable earthing or if surge suppressors are connected between the network terminals and accessible parts, have a marking stating that the equipment shall be connected to an earthed mains socket-outlet.Not directly connected to the mainsThe marking text in the applicable countries shall be as follows:In Denmark: "Apparatetsstikpropskaltilsluttesenstikkontakt med jordsom giver forbindelsetilstikproppensjord." In Finland: "Laite on liitettäväsuojakoskettimillavarustettuunpistorasiaan "Not directly connected to the mainsIn Sweden: "Apparatenskallanslutas till jordatuttag"Apparatenskallanslutas till jordatuttag"Not directly connected to the mains	



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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
she a	N W W ST I	the state on the share and	the man
4.7.3	United Kingdom To the end of the subclause the following is added: The torque test is performed using a socket-outlet complying with BS 1363, and the plug part shall be assessed to the relevant clauses of BS 1363. Also see Annex G.4.2 of this annex	and and an and an and and and and and an	N/A
5.2.2.2	Denmark	No high touch current	N/A
white whi	After the 2nd paragraph add the following: A warning (marking safeguard) for high touch current is required if the touch current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.	measured.	at white
5.4.11.1	Finland and Sweden	No such external circuits.	N/A
and Annex G	To the end of the subclause the following is added:	Ter white white white	- 10 - 10 - 15 - 15
	For separation of the telecommunication network from earth the following is applicable:	MULTE WALL WALL W	NE WAR
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	white white white white	t Nitet
	• two layers of thin sheet material, each of which shall pass the electric strength test below, or	and survey when	a fet
	• one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below.	A STOR ALLER AND AND	on on
	If this insulation forms part of a semiconductor component (e.g. an optocoupler), there is no distance through insulation requirement for the insulation consisting of an insulating compound	whitek whitek whitek whit	et antret
	completely filling the casing, so that clearances and creepage distances do not exist, if the component passes the electric strength test in accordance with the compliance clause below and in addition	and white white white	W LIE W
	• passes the tests and inspection criteria of 5.4.8 with an electric strength test of 1,5 kV multiplied by 1,6 (the electric strength test of 5.4.9 shall be performed using 1,5 kV),	whitet whitet whitet wh	TE WALTER
	and	at at set set	Tex .
	• is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV.	t white white white	NIT WALT
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.	wiret miret sources and	et white



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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
str	WI W Y THE STAR	and white white white	mer mer
	A capacitor classified Y3 according to EN 60384- 14:2005, may bridge this insulation under the following conditions:	MALIER WALTER WALTER	nives whites
	 the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 testing, is tested with an impulse test of 2,5 kV defined in 5.4.11; 	erer whiter white white	and and and
	 the additional testing shall be performed on all the test specimens as described in EN 60384- 14; 	MALIFE WATER WALTER	while white
irek yntif	the impulse test of 2,5 kV is to be performed before the endurance test in EN 60384-14, in the sequence of tests as described in EN 60384-14.	and whitek whitek white	et whitet w
5.5.2.1	Norway	i i it it	N/A
	After the 3rd paragraph the following is added:	st aller and e and	me me
	Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).	whitet whitet whitet	INLIEN WALTEN
5.5.6	Finland, Norwayand Sweden	No such resistors.	N/A
	To the end of the subclause the following is added:	and the second	t lift
WALTER	Resistors used as basic safeguard or bridging basic insulation in class I pluggable equipment type A shall comply with G.10.1 and the test of G.10.2.	Antiet whitek whitek	WALTE WALT
5.6.1	Denmark	No such equipment.	N/A
SIL SI	 Add to the end of the subclause Due to many existing installations where the socket-outlets can be protected with fuseswith higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. <i>Justification:</i> In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse. 	and	ance anter
5.6.4.2.1	Ireland and United Kingdom After the indent for pluggable equipment type A, the following is added: – the protective current rating is taken to be 13 A, this being the largest rating of fuse used in the mains plug.	ANTER ANTIFE ANTIFE AN	N/A



	EN IEC 62368-	lifer intite white white	
Clause	Requirement – Test	Result – Remark	Verdict
5.6.4.2.1	France After the indent for pluggable equipment type A, the following is added: – in certain cases, the protective current rating of the circuit supplied from the mains is taken as 20 A instead of 16 A.	and and and and and an	N/A
5.6.5.1	To the second paragraph the following is added: The range of conductor sizes of flexible cords to be accepted by terminals for equipment with a rated current over 10 A and up to and including 13 A is: 1,25 mm ² to 1,5 mm ² in cross-sectional area.	et wantet wantet water	N/A
5.6.8	NorwayTo the end of the subclause the following is added:Equipment connected with an earthed mains plug is classified as class I equipment. See the Norway marking requirement in 4.1.15. The symbol IEC 60417-6092, as specified in F.3.6.2, is accepted.	anistek annistek annistek anni	ALTER ATT
5.7.6	Denmark To the end of the subclause the following is added: The installation instruction shall be affixed to the equipment if the protective conductor current exceeds the limits of 3,5 mA a.c. or 10 mA d.c.	WALTER WALTER WALTER	
5.7.6.2	Denmark To the end of the subclause the following is added: The warning (marking safeguard) for high touch current is required if the touch current or the protective current exceed the limits of 3,5 mA.	WALTER WALTER WALTER	AND P
	Norway and Sweden To the end of the subclause the following is added: The screen of the television distribution system is normally not earthed at the entrance of the building and there is normally no equipotential bonding system within the building. Therefore the protective earthing of the building installation needs to be isolated from the screen of a cable distribution system. It is however accepted to provide the insulation external to the equipment by an adapter or an interconnection cable with galvanic isolator, which may be provided by a retailer, for example. The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what	Not such system.	



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EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
stra	W W States	atter with white	mr m	
	 "Apparatus connected to the protective earthing of the building installation through the mains connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, 	antifet antifet antifet anti	nirek sourek	
	see EN 60728-11)"	- ret ster ster	Inter Mater	
	NOTE In Norway, due to regulation for CATV-installations, and in Sweden, a galvanic isolator shall provide electrical insulation below 5 MHz. The insulation shall withstand a dielectric strength of 1,5 kV r.m.s., 50 Hz or 60 Hz, for 1 min.	MALE WALFER WALFER WA	LTEX WALTER.	
	Translation to Norwegian (the Swedish text will also be accepted in Norway):	Jet whilet whilet whi	et win the wi	
	"Apparatersom er koplettilbeskyttelsesjord via nettpluggog/eller via annetjordtilkoplet utstyr – og er tilkoplet et koaksialbasertkabel-TV	Whitek whitek whitek	MALL CH MALL	
	nett, kanforårsakebrannfare. For å unngådetteskal det vedtilkoplingavapparatertilkabel-TV nett installeresengalvanisk isolator mellomapparatetogkabel-TV nettet."	Whitek whitek whiteh w	anter suntra	
or white	Translation to Swedish: "Apparatersomärkopplad till skyddsjord via jordatvägguttagoch/eller via annanutrustningochsamtidigtärkopplad till kabel- TV nätkanivissa fall medfőra risk főr brand. Főrattundvikadettaskall vid anslutningavapparaten till kabel-TV nätgalvanisk isolator finnasmellanapparatenochkabel-TV nätet."	and and and and and an	SALLER MALLER	
8.5.4.2.3	United Kingdom	No external circuits.		
	Add the following after the 2 nd dash bullet in 3 rd paragraph:	LIET WALTE WALT WAL	W W	
	An emergency stop system complying with the requirements of IEC 60204-1 and ISO 13850 is required where there is a risk of personal injury.	watter watter wait	with white	

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EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
B.3.1 and B.4	Ireland and United Kingdom The following is applicable: To protect against excessive currents and short- circuits in the primary circuit of direct plug-in equipment, tests according to Annexes B.3.1 and B.4 shall be conducted using an external miniature circuit breaker complying with EN 60898-1, Type B, rated 32A. If the equipment does not pass these tests, suitable protective devices shall be included as an integral part of the direct plug-in equipment, until the requirements of Annexes B.3.1 and B.4 are met	Not directly connected to the mains	N/A
	 Denmark To the end of the subclause the following is added: Supply cords of single phase appliances having a rated current not exceeding 13 A shall be provided with a plug according to DS 60884-2-D1:2011. CLASS I EQUIPMENT provided with socket- outlets with earth contacts or which are intended to be used in locations where protection against indirect contact is required according to the wiring rules shall be provided with a plug in accordance with standard sheet DK 2-1a or DK 2-5a. If a single-phase equipment having a RATED CURRENT exceeding 13 A or if a polyphase equipment is provided with a supply cord with a plug, this plug shall be in accordance with the standard sheets DK 6-1a in DS 60884-2-D1 or EN 60309-2. Mains socket outlets intended for providing power to Class II apparatus with a rated current of 2,5 A shall be in accordance DS 60884-2-D1:2011 standard sheet DKA 1-4a. Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c. Mains socket-outlets with earth shall be 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 	Not directly connected to the mains	
	Justification: Heavy Current Regulations, Section 6c	it whit whit whit is	

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EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
G.4.2	United Kingdom	Not directly connected to the	N/A	
	To the end of the subclause the following is added:	mains	WALTE	
et would	The plug part of direct plug-in equipment shall be assessed to BS 1363: Part 1, 12.1, 12.2, 12.3, 12.9, 12.11, 12.12, 12.13, 12.16, and 12.17, except that the test of 12.17 is performed at not less than 125 °C. Where the metal earth pin is replaced by an Insulated Shutter Opening Device (ISOD), the requirements of clauses 22.2 and 23 also apply.	antiet whitet whitet whitet	WALL W	
G.7.1	United Kingdom	let let set ster	N/A	
	To the first paragraph the following is added:	with more when with		
	Equipment which is fitted with a flexible cable or cord and is designed to be connected to a mains socket conforming to BS 1363 by means of that flexible cable or cord shall be fitted with a 'standard plug' in accordance with the Plugs and Sockets etc. (Safety) Regulations 1994, Statutory Instrument 1994 No. 1768, unless exempted by those regulations.	Tek whitek whitek whitek	un tret wh	
NITEX WAY	NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	at aniter writer	WALTER V	
G.7.1 💉	Ireland		N/A	
whitek whi	To the first paragraph the following is added: Apparatus which is fitted with a flexible cable or cord shall be provided with a plug in accordance with Statutory Instrument 525: 1997, "13 A Plugs and Conversion Adapters for Domestic Use Regulations: 1997. S.I. 525 provides for the recognition of a standard of another Member State which is equivalent to the relevant Irish Standard	whitek whitek whitek whitek	STREET SU	
G.7.2	Ireland and United Kingdom	en all all an	N/A	
	To the first paragraph the following is added:	at the the states	L'E MAL	
WALTER V	A power supply cord with a conductor of 1,25 mm ² is allowed for equipment which is rated over 10 A and up to and including 13 A.	white white white	et white	
ZC	ANNEX ZC, NATIONAL DEVIATIONS (EN)	See Section 1	N/A	



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EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
10.5.2	Germany	No CRT within the equipment.	N/A	
	The following requirement applies: For the operation of any cathode ray tube intended for the display of visual images operating at an acceleration voltage exceeding 40 kV, authorization is required, or application of type approval (Bauartzulassung) and marking.	entret untret antiet untret	Whitek wh	
	<i>Justification:</i> German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive 96/29/EURATOM.	whitet whitet whitet white	e whitek	
inet whit	NOTE Contact address: Physikalisch-TechnischeBundesanstalt, Bundesallee 100, D- 38116 Braunschweig, Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de	TEK MALTER MALTER WALTER W	n Jet win	
ZD	IEC and CENELEC CODE DESIGNATIONS FOR I	FLEXIBLE CORDS (EN)	P	

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EN IEC 62368-1					
Clause	Requirement – Test	white the same	Result – Remark	Verdict	

Type of flexible cord		signations
	IEC	CENELE(
PVC insulated cords	1	
Flat twin tinsel cord	60227 IEC 41	H03VH-Y
Light polyvinyl chloride sheathed flexible cord	60227 IEC 52	H03VV-F H03VVH2-F
Ordinary polyvinyl chloride sheathed flexible cord	60227 IEC 53	H05VV-F H05VVH2-F
Rubber insulated cords		
Braided cord	60245 IEC 51	H03RT-F
Ordinary tough rubber sheathed flexible cord	60245 IEC 53	H05RR-F
Ordinary polychloroprene sheathed flexible cord	60245 IEC 57	H05RN-F
Heavy polychloroprene sheathed flexible cord	60245 IEC 66	H07RN-F
Cords having high flexibility	J.,	
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H
Rubber insulated, crosslinked PVC sheathed cord	60245 IEC 87	ноз¦RV4-н
Crosslinked PVC insulated and sheathed cord	60245 IEC 88	H03V4V4-H
Cords insulated and sheathed with halogen- free thermoplastic compounds		
Light halogen-free thermoplastic insulated and sheathed flexible cords		H03Z1Z1-F H03Z1Z1H2
Ordinary halogen-free thermoplastic insulated and sheathed flexible cords		H05Z1Z1-F H05Z1Z1H2



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20.		EN IEC 62368-1	
Clause	Requirement – Test	Result – Remark	Verdict

5.2	TABLE: Classificat	ion of electrical er	nergy sourc	ces		the state	Р
Supply Voltage	Location (e.g.	Test conditions		Parame	ters		ES Class
voltage	designation)		U (V)	I (mA)	Type ¹⁾	Additional Info ²⁾	Class
LET INLIE	MULT MALL WA	Normal	5.0VDC	st - st	SS	S DC S	ES1
5VDC	Input circuit	Abnormal	wetter ou	$\sim \pi_{\sim} <$	n - 1	- <u>-</u> _	untrest w
JULIE D		Single fault – SC/OC	NUTER MAL	et unitet ou	LIEN- MIL	er wire	
STER IN	TE UNITE WALK	Normal	4.2VDC		s⊢ SS ∕	DC	ES1
4.2VDC	Battery	Abnormal	Les Julie	me - me	du.	w - w	
		Single fault – SC/OC	- Tet	NITEK - WAITEK	whitek.	WILLIE WILL	- whit
Supplemen	tary information:						

Type: Steady state (SS), Capacitance (CP), Single pulse (SP), Repetitive pulses (RP), etc.
 Additional Info: Frequency, Pulse duration, Pulse off time, Capacitance value, etc.
 Test Conditions:

Normal –Full load and no load.

Abnormal - Overload output

SC= short circuit; OC= open circuit

5.4.1.8	TABLE: Working	voltage measu	rement		N/A
Location		RMS voltage (V)	Peak voltage (V)	Frequency (Hz)	Comments
		- # .5	et and the and	North M	er me the m
- Jith N	The MAIL MALL	mer m			et get and wifet
Supplemen	tary information:				
15 5	The star	Mr. m.	· · · · · · · · · · · · · · · · · · ·	de de	- A A S

5.4.1.10.2	5.4.1.10.2 TABLE: Vicat softening temperature of thermoplastics						
Method: ISO 306 / B50							
Object/ Part No./Material Manufacturer/trademark Thickness (mm) T softenin						ing (°C)	
-20. 20.	s at the	at and mark and		mr -m m	-24		
Supplemen	tary information:			'			
<u>.</u>		1 18 5° 5°		in the stre	24		

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	Thickness ((mm)	Test temperature (°C)	Imp diame	ression eter (mm)



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

Supplementary information:

5.4.2, 5.4.3 TABLE: Minimum Clearances/Creepage distance									
Clearance (cl) and creepage distance (cr) at/of/between:	U _p (V)	U _{rms} (V)	Freq ¹⁾ (kHz)	Required cl (mm)	cl (mm)	E.S. ²⁾ (V)	Required cr (mm)	cr (mm)	
- white white where where	20	<u> </u>				5 ⁶⁷	5.5	me	

Supplementary information:

Only for frequency above 30 kHz
 Complete Electric Strength voltage (E.S. (V) when 5.4.2.4 applied)

5.4.4.2	TABLE: Minimum	BLE: Minimum distance through insulation							
Distance through insulation (DTI) at/of		Peak voltage (V)	Insulation*	Required DTI (mm)	Mea	sured DTI (mm)			
- 1	wifet wifet white	white white white		1+ 1+	. Alt	-5%			
Suppleme	ntary information:								

*See also sub-clause 5.4.4.9

5.4.4.9 TABLE: Solid insulation at frequencies >30 kHz							
Insulation material	EP	Frequency (kHz)	K _R	Thickness d (mm)	Insulation	V _{PW} (Vpk)	
- min mar me a		- 1 1	+ 54	JIE MITE	- mile m	The sure	
Supplementary information:			·				

5.4.9	TABLE: Electric strength tests	at at at	. LER NUTER MUTE	N/A
Test voltage	applied between:	Voltage shape	Test voltage (V)	Breakdown
		(Surge, Impulse, AC, DC, etc.)		Yes / No
Functional:	inter antition which we are	1 A 4	t at at	JER NUE
	a at let let when	- nere white white	- m m s	
Basic/supple	ementary:	t at at	the state of	Et INLIE MAI
-	at set set outer a	ATT WALL WAL	the me m	I J
Reinforced:	white white where we a	at at at	JER JIER MIE	MULLE MALL
T A	the set ster mile white	- more more a	v. an an	1 dt
Routine Tes	sts:	t at at a	let allet antifered	Where white
- *	ret ret wet with whit	-me me me		
Supplement	ary information:			



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the man	m m t	EN IEC 62368-1	me m
Clause	Requirement – Test	Result – Remark	Verdict

5.5.2.2	TABLE	Stored discharge o	on capacitors			N/A
Location		Supply voltage (V)	Operating and fault condition ¹⁾	Switch position	Measured voltage (Vpk)	ES Class
- man -	In.		et - ster o	LIER JELL N	the start .	nu -nu
- 1 ^t -	. 15	JE NIE MIT	Mr. Zn Zn.		1 A-	10t 10t

Supplementary information:

X-capacitors installed for testing are:[] bleeding resistor rating: [] ICX: 1) Normal operating condition (e.g., normal operation, or open fuse), SC= short circuit, OC= open circuit

5.6.6	TABLE: Resistance of	N/A			
Location		Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)
	Martin Martin Martin Martin	- m_ r.	s. ∧= ∧t		JER RUFE

Supplementary information:

5.7.4 TABL	E: Unearthed acces	ssible parts				<`N/A <	
Location	Operating and	Supply	F	Parameters		ES class	
	fault conditions Voltage (V)		Voltage (V _{rms} or V _{pk})	Current Freq. (A _{rms} or A _{pk}) (Hz)			
- * *	Normal 🔗	t and an	m m	2º			
	Abnormal: overload	NUTER UNLIP	MALTER WALTER	WALLE WALTE	weiter		
	Single fault: SC/ OC	et stret	NUTEK - NUTEK	WALTER WALTER	INCLES N	ITL - MUT	
Supplementary info	ormation:						
SC= short circuit;	OC= open circuit	A St.	JET JIE J	in ann with	~ m	24	

5.7.5	TABLE: Earthed acces	sible conductive part	JEE NITER		N/A		
Supply volt	age (V)	- white white where	m m	a at			
Phase(s)		[] Single Phase; [] Three F	Phase: [] Delta [] Wye			
Power Dist	ribution System	[] TN _[]TT _[] IT _/					
Location		Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Comme	nt		
1- 5 ⁶⁵	street mile while w	- 10 - Ju.		- 1 -0	- 5 ⁰		
- 200 - 1	he de la	t set - set alle	until - white	mer m	24		
Supplemer	ntary Information:						
no m	- In In a	at at at	Nº 51	MAN IN .	Sr 4		

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20.	and the state of t	IEC 62368-1	24. 14.
Clause	Requirement – Test	Result – Remark	Verdict

5.8	TABLE	TABLE: Backfeed safeguard in battery backed up supplies							
Location	·	Supply voltage (V)	Operating a condition		Time (s)	Open-cii voltage		Touch current (A)	ES Class
in in	N. L	Ţ.	et _1+-	Set	INITE MAL	-m-	- su	r - The	20 20.
Supplemer	itary infor	mation:							

6.2.2 TA	6.2.2 TABLE: Power source circuit classifications									
Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class				
Battery circuit	Output pin + to -	3.3	2.6	8.6	_∕r 3S_∕*	PS1				
Supplementary ir	formation:				·					

Abbreviation: SC= short circuit; OC= open circuit1) Measured after 3 s for PS1 and measured after 5 s for PS2 and PS3.* Unit shutdown immediately, recoverable, no hazard.

6.2.3.1 TABLE: Determination of Arcing PIS								
Location	Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Calculated value	Arcing PIS? Yes / No				
1. In	1 1 T T 1 1 1 1	.ur	ne me	- 24 - 24.				
Supplementary inform	ation:							

6.2.3.2 TABLE: Determination of resistive PIS							
Location	Operating and fault condition	Dissipate power (W)	Arcing PIS? Yes / No				
- i at at at	TEX MUTE WALL WAL	m. m m r					
Supplementary information:							

All circuits are considered as resistive PIS; A combination of voltmeter, VA and ammeter IA may be used 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 pro	essure lamp	MALIC WALL W	in my m		N/A
Lamp manu	lfacturer	Lamp type	Explosion method	Longest axis of glass particle (mm)	beyon	cle found d 1 m Yes / No
- 242 1	ne m m	T A At	JEK NITER MITE	white white	m	-one
Supplemen	tary information:					
m m	- 240 - 24.	i de l	et 15 50	and and a	pr.	Nr. W

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Clause	Requirement – Test	Result – Remark	Verdict

9.6 TAB	ABLE: Temperature measurements for wireless power transmitters							
Supply voltage (V)								
Max. transmit pov	ver of transr	nitter (W)		2 m	100	at a	at de	
							eiver and at ce of 5 mm	
Foreign objects	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
MITE - MAIL	an - an	-740.	20-		st 18		52 3	5°°

5.4.1.4, TABL 9.3, B.1.5, B.2.6	E: Temp	perature m	easurem	ents	whitek	untret win	Tex WALTER	P
Supply voltage (V).			:	Condition 1	Condition 2	net	WILLE V	_
Ambient temperatu	re during	g test T _{amb}	(°C):	See below	See belo	w		_
Maximum measure	ed tempe	erature <i>T</i> of	part/at:		Τ(°C)		Allowed T _{max} (°C)
PCB near U1				ر 36.3	32.1	- <u>-</u> 1	3 - Aur	130
Battery wire			38.8	30.7	- L. I	t the	80	
Battery body	A	dt.	the a	40.2	32.5	Ver the	-11-	Ref.
Enclosure inside ne	ear batte	ry w	~	32.2	29.6	dd	·	Ref.
Enclosure outside	near bat	tery	it white	29.3	27.7	-m-	20 - 20	48
Button	in m	- m		28.9	26.5	F 524	J. J. C	48
Ambient			NUTER	25.0	25.0	v	·	
Temperature T of winding:		t ₁ (°C)	R ₁ (Ω)	t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulation class
at the wife	Mille	in the	~ - v			15- 15	t 18t	JEt - NJE
Supplementary info	rmation.							

Supplementary information:

* Temperature limit for TS1 of accessible enclosure according to Table 38 to be measured at normal ambient temperature.

Note 1: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient (Tma) of 25° C.

Note 2: The temperatures were measured under the worse case normal mode defined in clause B.2.1. Condition 1: Off mode, charging empty battery by DC source. (Type C: 5.0VDC) Condition 2: Only discharge with internal fully battery.

B.2.5	TA	BLE: Inp	out test	2m	an a	de la	de la	et set set of P
U (V)	Hz	I (A)	l rated (A)	P (W)	P rated (W)	Fuse No	l fuse (A)	Condition/status



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					EN IE	C 62368	3-1		
Clause	Re	equireme	nt – Test	where a	v_r , v		Resu	ılt – Remark	Verdict
5VDC ¹⁾	NI Surret	0.160	STOP I	0.8	retw			Empty battery Only current: 0.155A	charge. Battery
4.2VDC ²⁾	¢-	0.012	NUTEX MA	0.06	NTUTE NT	man	<u>sun</u> e	Fully battery discha current: 0.012A	rge. Battery
Supplemer	ntary	informat	ion:	I					
¹⁾ Supply by Input signa Normal coi Normal coi	ıl: 1k nditio	Hz: on, speak	er 1/8 of n	nax. output	power: 3	2Ω, 0.1	- 79V, 0.0		WALTER WALTER

B.3, B.4	TABLE: Abnor	mal operating	g and fau	lt condit	ion tests		Nº P N
Ambient ter	nperature T _{amb} (°C)	S		: See t	pelow	
Power sour	ce for EUT: Man	ufacturer, mo	del/type, c	outputrati	ng :	LIET MALTE WALLE	_
Componer No.	nt Condition	Supply voltage (V)	Test time	Fuse no.	Fuse current (A)	Observatio	bn
Powered by	/ 5VDC with emp	oty battery (at	battery ch	arging m	node)	1. T	t st
Speaker	Max. non- clipped output	5Vdc ¹⁾	37min	uret _a n	0.172	Normal operation wor Enclosure outside ne 31.0°C Ambient: 25.0°C	
Speaker	S-C	5Vdc ¹⁾	10mins		0.021	Speaker no voice, no hazard.	damage,no
U1 Pin 2-3	3 S-C	5Vdc ¹⁾	10mins	WILLEX	0	Unit shut down imme damage, no hazard. Recoverable.	diately. No
U1 Pin 3-7	7 S-C	5Vdc ¹⁾	10mins	5 ^{et}	0.155	Unit normal working, no hazard.	no damage
Powered by	/ Li-ion Battery (I	Discharging m	node with f	fully char	ged battery)	at let let	. JEt
B+ to P-	S-C	4.20Vdc ²⁾	10mins	NITUTE	0.012	Unit normal working, damaged, No hazard	

¹⁾ Supply by external DC source, ²⁾ Measured battery cell voltage and current.

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.

1) S-C: Short-circuited; O-L: Overloaded; BL=Blocked.

2) The test result shown all safeguards remained effective and didn't lead to a single fault condition during abnormal operating condition; In addition all safeguards complied with applicable requirements in this standard after restoration of normal operating conditions.

3) The test result showed no Class 1 or 2 energy source become Class 3 level during and after single fault condition.

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				EN IE	C 62368-	1				
Clause	Requirem	ent – Test	NUT	were a	1. 24	R	esult -	Remark	()-	Verdict
and a	the she				S 5	E.		NIN .	in the	in me
M.3	TABLE:	Protection cir	cuits f	or batteri	es provid	ded	within	the equ	lipment	s ₽+
Is it possible	e to install t	ne battery in a	revers	e polarity	position?		5	NUTE	JILIE WAL	
					(Cha	rging			
Equipment	Specificatio	n	Vo	ltage (V)					Current (A)	
		er intre	Mar 1	5	24	ş.,			1(Reference) 🖉 🖒
					Batter	y sp	ecifica	tion	·····	
		Non-recha	rgeable	batteries			Rec	hargeab	le batteries	
		Dischargir		ntentional		Cha	arging		Discharging	Reverse
N 4	4	current (A	.) cł	harging	Voltage			ent (A)	current (A)	charging
57	turer/type		cu	rrent (A)		· /				current (A)
	uan Lirui s Co., Ltd. /	NIFE WALTE	MALL	-m	4.2			0.2	0.2	JEF N
502	2030	a de	A	lit	STER.	12	an l	nu.	- when	m m
Note: The te	sts of M.3.2	2 are applicabl	e only v	vhen abov	e approp	riate	e data i	s not ava	ailable.	
Specified ba	attery temp	erature (°C)			<u></u>	<u> </u>	. Main	surve	10-45	
Component No.	Fault conditior	Charg discharge		Test time	Temp. (°C)	C	urrent (A)	Voltage (V)	e Obs	ervation
Battery	Normal	Charg	e	7h	JUTEN JUTEN	C).155	0	Unit norma No damag hazard.	
Battery	B- to P- SC	Charg	e Set	7h	NUTER JU	().155	0 Juni	Unit norma No damag hazard.	al working. ed, no
Battery	Normal	Dischar	ge	7h	set	(0.012	NIN OF	Unit norma No damag hazard.	al working. ed, no
Battery	B- to P- SC	Dischar	ge Sunt	7h (*	WINTER V	(0.012	0	Unit norma No damag hazard.	al working. led, no
Supplement	ary informa	tion:					<u>× .</u>			- AU
		t circuit; OC=	open c	ircuit NL=	no chem	ical	leakad	e; NS= i	no spillage of	f liquid; NE=
		mission of fla	•				0	me	100 1	
		ne in	~ ~		A	÷.	, de	. set		
	TABLE: C battery	harging safe	guards	for equi	pment co	onta	aining	a secor	idary lithiun	n P
Maximum sp	pecified cha	arging voltage	(V)			:	4.2	NUTER N	Mill MALL	
Maximum sp	pecified cha	arging current	(A)			Der.	0.2		at at	
Highest spe	cified charg	ing temperatu	ire (°C)				45	in mark	when a	10
Lowest spec	cified charg	ing temperatu	re (°C)		1. V	:	10		t st	
Battery		Operating		Mea	suremen	t			Observ	vation
manufacture	er/type	and fault condition	Chargi voltage		arging rent (A)		Temp.			



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Clause	Requirement – Test	Result – Remark	Verdict

Dongguan Lirui	Normal	1.00	0.002	Detten	The better (charging ourrent
Electronics Co., Ltd. / 502030	Normal	4.20	0.003	Battery temperature: 10°C	The battery charging current decreases
ret surficet writtet	B- to P- SC	4.20	0.003	Battery temperature: 10°C	The battery charging current decreases
Highest specified cha	arging temperatu	ıre: 45°C	mer m	2 m 1	s a to the
Dongguan Lirui Electronics Co., Ltd. / 502030	Normal	4.20	UNIT O UNIT	Battery temperature: 45.3°C	The battery charging circuit stop charging
inter introd innifed	B- to P- SC	4.20	0	Battery temperature: 45.3°C	The battery charging circuit stop charging

Supplementary information:

Abbreviation: SC= short circuit; OC= open circuit; MSCV= maximum specified charging voltage; MSCC= maximum specified charging current; HSCT= highest specified charging temperature; LSCT= lowest specified charging temperature

Q.1	TABLE: Circuits inte	ended for inte	rconnectio	n with build	ding wiring	(LPS)	N/A
Output	Condition		Time (a)	I _{sc}	(A)	S	(VA)
Circuit	Condition	U _{oc} (V)	Time (s)	Meas.	Limit	Meas.	Limit
m		5	et -5et	NUTE IN	The BUT	un - u	7 4.
	JIE NIE MIT	men - m	24		ss	14-1	et -5th
-m.	A	18 - 5 ¹⁰	- <u>-</u>	LIE - WE	with .	me - m	200
	1 the mile - mile w	er our		t.		18 - 1 ⁰	

Supplementary Information:

SC = short circuit, OC = open circuit* Unit shutdown immediately, recoverable, no hazard.

T.2, T.3, T.4, T.5	TABLE: S	teady force te		et mint which which whi				<u>4</u> <		
Location / Part	Material	Thickness (mm)	Probe	Force (N)	Test Duration (s)		Obse	rvation		
NUTER- MUT	NIN THE	no -m	- <u></u>	<u> </u>	s ,	t de	SER	SUPER	NUTE	
Supplementa	ary informati	on:								

*Test was performed on product with each source listed in table 4.1.2.

Т.6, Т.9	TABLE: Impa	N/A			
Location/Pa	art Material	Thickness (mm)	Height (mm)	Observation	
20 - 20		1	et -set	WIEL MILE WALL MALL MALL	m. n

			7
A	-		P
\$			
	-	1	1

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Clause	Requirement – Test	White Mr. Mr.	Result – Remark	de la	Verdict

Supplementary information:

*Test was performed on product with each source listed in table 4.1.2.

Т.7 💦 Т	ABLE: Drop	test		dt i	et :	State	JER IN	JE. N	N/A S
Location/Part	Material	Thickness (mm)	Height (mm)			Obse	ervation		
-	1 - A	_dtdt	15 Et 10 LE	- mur	mar	m	-2m	20.	4
Supplementar	vinformation								

Supplementary information:

*Test was performed on product with each source listed in table 4.1.2.

T.8	TABLE: Stress relief test				white white white	N/A
Location/Par	rt Material	Thickness (mm)	Oven Temperatur e (°C)	Duration (h)	Observation	
in the	n an			5	Tet intre white white	me
Supplement	ary information:					

*Test was performed on product with each source listed in table 4.1.2.

	native method for determinin	ig minimum cicarance	es distances N/A	
Clearance distanced	Peak of working voltage	Required cl	Measured cl (mm)	
between:	(V)	(mm)		
I A A A	VER STER-WAR WAR	m. m. m	1 - 1 At	
- white white white	our our - at set	aft to the all	intre inter water	
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	FORMOSA CHEMICALS & FIBRE CORP PLASTICS DIV	ANC180	V-0, 60°C, Min. Thickness 1.5mm	UL 94, UL 746	UL E162823	
Li-ion Polymer Battery	Dongguan Lirui Electronics Co., Ltd.	502030	3.7V, 200mAh, 0.74Wh	IEC 62133- 2:2017	Report No.: TCTTJ2021 0411022ZB- BR09	
РСВ	Shenzhen Hecheng Fast Electronic Technology Co Ltd	1a	V-0, 130°C	UL 796	UL E159194	

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Tested with

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appliance

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Interchangeable

of compliance. See OD-CB2039.

Internal

Speaker

EN IEC 62368-1						
Clause	Requirement – Test	White white	Result –	Result – Remark		
(Alternative)	Interchangeable	Interchangeabl e	V-0, 130°C	UL 796	UL	
NTC thermistors	MURATA MFG CO LTD	NCP15WF104 @*&**	100kΩ at 25°C	UL 1434	E137188	
Internal wires	Interchangeable	Interchangeabl e	Min. 26AWG, Min. 80°C, Min. 300V, VW-1	UL 758	UL	

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Supplementary information:¹⁾ License available upon request. Provided evidence ensures the agreed level

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Photo 1 Overall view



Photo 2 Overall view



Page 2 of 5 **Photo Documentation** Reference No.: WTF24D04094069Y



Photo 3 Overall view



Photo 4 Overall view



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Photo 5 Internal view



Photo 6 Internal view



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Photo 7 Internal view

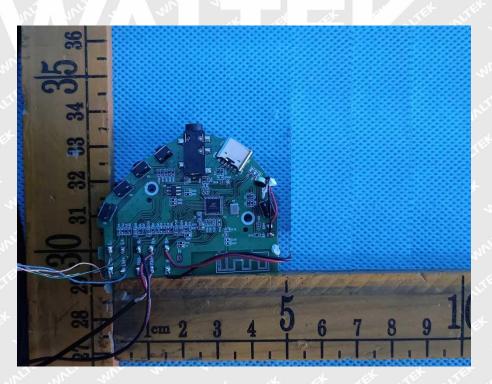


Photo 8 PCB view



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Photo 9 PCB view



Photo 10 Li-ion Battery view

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