



TEST REPORT

Reference No	: "1	WTF23D10227078Y
Applicant	: 2	Mid Ocean Brands B.V.
Address	and	7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
Manufacturer	N. T. C.	118144
Address	÷	- It ret write white white white white white
Product	:	Solar TWS earbuds w carabiner
Model(s)	;:	MO2177
Total pages	: m	69 pages and 10 pages of photo.
Standards	: 🔬	EN IEC 62368-1:2020+A11:2020
		Audio/video, information and communication technology equipment- Part 1:Safety requirements
Date of Receipt sample	<u>م</u> ې	2023-10-27
Date of Test	÷	2023-10-30 to 2023-11-07
Date of Issue	: -1	2023-11-08
Test Result	;	Pass set white white white white white white the

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.

Address: No. 77, Houjie Section, Guantai Road, Houjie Town, Dongguan City, Guangdong, China Tel:+86-769-2267 6998 Fax:+86-769-2267 6828

Compiled by:

Grate Feng

Grace Feng / Project Engineer

Approved by:

Almon Zhao / Designated Reviewer

Test item description	Solar TWS e	arbuds w carabiner
Trademark	MOB	
Model and/or type reference	MO2177	
Rating(s)	5VDC	
Remark:	mer mer	at the left of the set of
Whether parts of tests for the product I	have been sub	contracted to other labs:
🗆 Yes 🛛 🖾 No		
If Yes, list the related test items and la	b information:	
Test items:		
Lab information:	- 4	international and and and and and and
Summary of testing:	white the	
Tests performed (name of test and t	test clause):	Testing location:
- EN IEC 62368-1:2020+A11:2020	a la man lu cu ci i la	No. 77, Houjie Section, Guantai Road Houjie Town, Dongguan City, Guangdong, China
The submitted samples were found to the requirements of above specification		
		s (List of countries addressed): 368-1:2020+A11:2020 and BS EN IEC 62368-
EU Group Differences The product fulfils the requirements 1:2020+A11:2020	s of EN IEC 62	368-1:2020+A11:2020 and BS EN IEC 62368-
EU Group Differences The product fulfils the requirements 1:2020+A11:2020 Use of uncertainty of measurement	s of EN IEC 62	368-1:2020+A11:2020 and BS EN IEC 62368- on conformity (decision rule):
EU Group Differences	s of EN IEC 62 for decisions IEC standard, ication in that s	368-1:2020+A11:2020 and BS EN IEC 62368-
EU Group Differences The product fulfils the requirements 1:2020+A11:2020 Use of uncertainty of measurement No decision rule is specified by the applicable limit according to the specif without applying the measurement unce "accuracy method").	s of EN IEC 62 for decisions IEC standard, ication in that s certainty ("simp	368-1:2020+A11:2020 and BS EN IEC 62368- on conformity (decision rule): when comparing the measurement result with the standard. The decisions on conformity are made ble acceptance" decision rule, previously known as
EU Group Differences	s of EN IEC 62 for decisions IEC standard, ication in that s certainty ("simp ole when requir	368-1:2020+A11:2020 and BS EN IEC 62368- on conformity (decision rule): when comparing the measurement result with the standard. The decisions on conformity are made
EU Group Differences Image: Strain	s of EN IEC 62 for decisions IEC standard, ication in that s certainty ("simp ole when requir urement: calculated by	368-1:2020+A11:2020 and BS EN IEC 62368- on conformity (decision rule): when comparing the measurement result with the standard. The decisions on conformity are made ble acceptance" decision rule, previously known as ed by the standard or client, or if national accreditation the laboratory based on application of criteria given by
EU Group Differences X The product fulfils the requirements 1:2020+A11:2020 Use of uncertainty of measurement No decision rule is specified by the applicable limit according to the specif without applying the measurement unce "accuracy method"). Other:(to be specified, for examp requirements apply) Information on uncertainty of measure The uncertainties of measurement are OD-5014 for test equipment and applid IECEE. IEC Guide 115 provides guidance on t the decision rule when reporting test re	s of EN IEC 62 for decisions IEC standard, ication in that s certainty ("simp ole when requir urement: calculated by cation of test m he application esults within IE	368-1:2020+A11:2020 and BS EN IEC 62368- on conformity (decision rule): when comparing the measurement result with the standard. The decisions on conformity are made ble acceptance" decision rule, previously known as



Copy of marking plate:

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



- 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, UKCA 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.

Page 4 of 69

TEST ITEM PARTICULARS:	ALL WALL WALL WALL WALL DAY
Product group	☑ end product ☐ built-in component
Classification of use by:	 ☑ Ordinary person ☑ Instructed person ☑ Skilled person
Supply Connection:	 AC mains DC mains □ DC mains □ 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 :	35°C □ Outdoor: minimum°C
IP protection class	
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
Mass of equipment (kg):	Approx. 0.048kg

Waltek Testing Group Co., Ltd. http://www.waltek.com.cn

Page 5 of 69

POSSIBLE TEST CASE VERDICTS:	white white where where the start with
- 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:	with the state of the
Date of receipt of test item	: 2023-10-27
Date (s) of performance of tests	: 2023-10-30 to 2023-11-07

GENERAL REMARKS:

"(see Enclosure #)" refers to additional information appended to the report.

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

Throughout this report a $\square\,$ comma / $\boxtimes\,$ point is used as the decimal separator.

GENERAL PRODUCT INFORMATION:

Product Description

- 1. The EUT covered by this report is a Solar TWS earbuds w carabiner used as audio / information apparatus.
- 2. The product name Solar TWS earbuds w carabiner specified by the customer, this EN IEC 62368-1 test report did not evaluate any solar content.

F

×

- 3. It is supplied by external power supply or by approved internal lithium-ion battery or USB type-C which complied with PS1.
- 4. The manufacturer specified maximum ambient temperature is 35°C.
- 5. All circuits complied with ES1 and PS1, no other circuit existed.

		1	/
-			P
	λ,		

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	Ň/A	N/A	N/A
3	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	Enclosure	N/A	N/A	N/A
PS1: <15 Watt circuits	PCB	N/A	N/A	N/A
PS1: <15 Watt circuits	The other components/materials	N/A	N/A	N/A
7	Injury caused by hazardous	substances		
Class and Energy Source	Body Part	Safeguards		
(e.g. Ozone)	(e.g., Skilled)	В	S	R
Battery (See Annex M)	Ordinary	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
RS2: Sound output	Ordinary	Instructional safeguards	N/A	N/A

		ENERGY SOURCE	DIAGRAM	
Indicate which energy	gy sources are inc	cluded in the energy so	urce diagram. Insert diagram below	
me m.	🗆 ES	D PS MS		when
Se Se	ee details in OVEI	RVIEW OF ENERGY S	OURCES AND SAFEGUARDS	- let

Waltek Testing Group Co., Ltd. http://www.waltek.com.cn



Г

Page 7 of 69

150 00000

EN IEC 62368-1			1. 24. 2.	
Clause	Requirement – Test	white white w	Result – Remark	Verdict

4	GENERAL REQUIREMENTS	6	P
4.1.1	Acceptance of materials, components and subassemblies	(See appended table 4.1.2)	з ^{ло} Р
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	Inter P
4.1.3	Equipment design and construction	Equipment is adequately designed and constructed.	P
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	_√ P
4.4.3.1	General	2 Jun 2m 1	Р
4.4.3.2	Steady force tests	(See Annex T.4 and T.5).	P
4.4.3.3	Drop tests	(See Annex T.7)	Р
4.4.3.4	Impact tests	(See Annex T.6)	Р
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 mi	Glass impact test (1J)	ster where white white w	N/A
et .et	Push/pull test (10 N)	the state	⊘-N/A
4.4.3.8	Thermoplastic material tests	(See Annex T.8)	Ρ
4.4.3.9	Air comprising a safeguard	and the state	N/A
4.4.3.10	Accessibility, glass, safeguard effectiveness	After tests of 4.4.3.2, 4.4.3.3, 4.4.3.4, 4.4.3.8, no safeguard damaged.	WP INLIEK
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	at at at at is	P
4.5.1	General	No explosion occurs during normal/abnormal operation and single fault conditions	P



Page 8 of 69

2m.	EN IEC 62368-	the internet was	an an
Clause	Requirement – Test	Result – Remark	Verdict
4.5.2	No explosion during normal/abnormal operating condition	(See Clause B.2, B.3)	P
	No harm by explosion during single fault conditions	(See Clause B.4)	Р
4.6	Fixing of conductors	See below	Р
It NIT	Fix conductors not to defeat a safeguard	at at set set	Ster P
24	Compliance is checked by test	(See Clause T.2)	Р
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)	Tet wet wife out	N/A
4.8	Torque (Nm) Equipment containing coin/button cell batteries		N/A
4.8.1	General	No coin/button cell batteries used.	N/A
4.8.2	Instructional safeguard	of lef stat with	N/A
4.8.3	Battery compartment door/cover construction	Mur Mur Mr. 2	N/A
MALTER IN	Open torque test	t stat stat suffer out	N/A
4.8.4.2	Stress relief test	MILL WITH THE WE	N/A
4.8.4.3	Battery replacement test	at antice with	N/A
4.8.4.4	Drop test		N/A
4.8.4.5	Impact test	The other optimized white a	N/A
4.8.4.6	Crush test	w st st	N/A
4.8.5	Compliance	FAL INLIGHT INVITE INVITE INVITE	N/A
1. Art	30N force test with test probe	so a de de	N/A
me m	20N force test with test hook	INTERNATION WATER WAL	⊲∿ [™] N/A
4.9	Likelihood of fire or shock due to entry of cond	luctive object	N/A
4.10	Component requirements	intite white white white	N/A
4.10.1	Disconnect Device	is at at at	N/A
4.10.2	Switches and relays	in which which when we	N/A

5	ELECTRICALLY-CAUSED INJURY		< [™] Р
5.2 <i>/</i>	Classification and limits of electrical energy sou	irces	P
5.2.2	ES1, ES2 and ES3 limits	All internal circuits are considered to be ES1	Р
5.2.2.2	Steady-state voltage and current limits	(See appended table 5.2)	N RM
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



K

Reference No.: WTF23D10227078Y

Page 9 of 69

-29.	EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict		
5007		Er white white white wh			
5.2.2.7	Audio signals	the start is	N/A		
5.3	Protection against electrical energy sources	walte water water water	N/A		
5.3.1	General Requirements for accessible parts to ordinary, instructed and skilled persons	aret aret maret maret	N/A		
5.3.1 a)	Accessible ES1/ES2 derived from ES2/ES3 circuits	the she was a	N/A		
5.3.1 b)	Skilled persons not unintentional contact ES3 bare conductors	Set white white white y	N/A		
5.3.2.1	Accessibility to electrical energy sources and safeguards	Only ES1 circuit	N/A		
Set is	Accessibility to outdoor equipment bare parts	a at at a	N/A		
5.3.2.2	Contact requirements	NALTE MALL MALL WALL	N/A		
5 ⁶⁴ .5 ⁶	Test with test probe from Annex V	A A A A	_		
5.3.2.2 a)	Air gap – electric strength test potential (V)	the white white white	N/A		
5.3.2.2 b)	Air gap – distance (mm)	at let let set	N/A		
5.3.2.3	Compliance	me me me	N/A		
5.3.2.4	Terminals for connecting stripped wire	No stripped wire used.	N/A		
5.4	Insulation materials and requirements	white white when we	Р		
5.4.1.2	Properties of insulating material	No insulation as a safeguard.	N/A		
5.4.1.3	Material is non-hygroscopic		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)	N RV		
5.4.1.5	Pollution degrees	t let set set a	N/A		
5.4.1.5.2	Test for pollution degree 1 environment and for an insulating compound	when we we we we	N/A		
5.4.1.5.3	Thermal cycling test	white white white white	N/A		
5.4.1.6	Insulation in transformers with varying dimensions	at at set set	N/A		
5.4.1.7	Insulation in circuits generating starting pulses	we will we will	N/A		
5.4.1.8	Determination of working voltage	at all set states	N/A		
5.4.1.9	Insulating surfaces	me me me	N/A		
5.4.1.10	Thermoplastic parts on which conductive metallic parts are directly mounted	watter watter watter wat	N/A		
5.4.1.10.2	Vicat test	at let set se	N/A		
5.4.1.10.3	Ball pressure test	WALL WALL WALL WALL	N/A		
5.4.2	Clearances	et set set set set	N/A		
5.4.2.1	General requirements	or more me me	N/A		
WALTER	Clearances in circuits connected to AC Mains, Alternative method	antifet whiles white w	N/A		
5.4.2.2	Procedure 1 for determining clearance	s at the s	N/A		



Page 10 of 69

200	EN IEC 62368-	the and any an	24. 24
Clause	Requirement – Test	Result – Remark	Verdict
Mrs 4		for white white white	me me
15	Temporary overvoltage	the state	
5.4.2.3	Procedure 2 for determining clearance	INTERNINET MALL	N/A
5.4.2.3.2.2	a.c. mains transient voltage	a at at	
5.4.2.3.2.3	d.c. mains transient voltage	MITER WALTE WALTER W	· -
5.4.2.3.2.4	External circuit transient voltage	at at at .	1 –
5.4.2.3.2.5	Transient voltage determined by measurement	in men men me	
5.4.2.4	Determining the adequacy of a clearance using an electric strength test	t minet wantet waite	N/A
5.4.2.5	Multiplication factors for clearances and test voltages	strek wiret whitet	N/A
5.4.2.6	Clearance measurement	an in	N/A
5.4.3	Creepage distances	LIEL MITCH MAIL W	N/A
5.4.3.1	General	i i it	N/A
5.4.3.3	Material group	Et intre white whi	- m
5.4.3.4	Creepage distances measurement	at at at	N/A
5.4.4	Solid insulation	white white white	N/A
5.4.4.1	General requirements	the state	N/A
5.4.4.2	Minimum distance through insulation	S ANN I	N/A
5.4.4.3	Insulating compound forming solid insulation		// N/A
5.4.4.4	Solid insulation in semiconductor devices	er mer mer m	N/A
5.4.4.5	Insulating compound forming cemented joints	the set set all	N/A
5.4.4.6	Thin sheet material	Mur Mur Mur	N/A
5.4.4.6.1	General requirements	Tet Jet Jet	N/A
5.4.4.6.2	Separable thin sheet material	me m m	N/A
LTE WALK	Number of layers (pcs)	THE STREE MUSER I	N/A
5.4.4.6.3	Non-separable thin sheet material	ter min min a	N/A
MAL	Number of layers (pcs)	ist niter uniter whi	N/A
5.4.4.6.4	Standard test procedure for non-separable thin sheet material	t ret ret are	N/A
5.4.4.6.5	Mandrel test	me me me	N/A
5.4.4.7	Solid insulation in wound components	LIEK LIEK NUTER	N/A
5.4.4.9	Solid insulation at frequencies >30 kHz, E_P , K_R , d , V_{PW} (V)	at set set	N/A
t	Alternative by electric strength test, tested voltage (V), K_{R}	a and and an	N/A
5.4.5	Antenna terminal insulation	White white white	
5.4.5.1	General	1 A A	N/A



Page 11 of 69

<u></u>	EN IEC 62368-	2. 4. 4. 4. A.	
Clause	Requirement – Test	Result – Remark	Verdict
5.4.5.2	Voltage surge test	with white all	N/A
5.4.5.3	Insulation resistance (MΩ)	at set set	N/A
0.4.0.0	Electric strength test	1 4 4 4 V	N/A
5.4.6	Insulation of internal wire as part of	and and when	N/A
5.4.0 	supplementary safeguard	m m m	
5.4.7	Tests for semiconductor components and for cemented joints	Set while white wh	N/A
5.4.8	Humidity conditioning	t ret ret we	N/A
auter of	Relative humidity (%), temperature (°C), duration (h)	white white we	
5.4.9	Electric strength test	Main wat wat	N/A
5.4.9.1	Test procedure for type test of solid insulation	at at at	N/A
5.4.9.2	Test procedure for routine test	the me me m	N/A
5.4.10	Safeguards against transient voltages from external circuits	Et MITEL MILTER WALT	N/A
5.4.10.1	Parts and circuits separated from external circuits	the state of the	N/A
5.4.10.2	4.10.2 Test methods		N/A
5.4.10.2.1	General	At 1 At	N/A
5.4.10.2.2	Impulse test		N/A
5.4.10.2.3	Steady-state test		N/A
5.4.10.3	Verification for insulation breakdown for impulse test	e when when when	N/A
5.4.11	Separation between external circuits and earth	white white white	N/A
5.4.11.1	Exceptions to separation between external circuits and earth	MUTER ANUTER MALTER	N/A
5.4.11.2	Requirements	and the	N/A
er with	SPDs bridge separation between external circuit and earth	NUTE WALT WALL W	N/A
when	Rated operating voltage U _{op} (V)	ist which white whi	- n -
đ	Nominal voltage U _{peak} (V)	Sur A al	
me m	Max increase due to variation ΔU_{sp}	White white white	mr -
det d	Max increase due to ageing ΔU_{sa}	at at at	
5.4.11.3	Test method and compliance	WALL WALL WALL	N/A
5.4.12	Insulating liquid	at the state	N/A
5.4.12.1	General requirements	the men mer me	N/A
5.4.12.2	Electric strength of an insulating liquid	x 10 10 5	N/A
5.4.12.3	Compatibility of an insulating liquid	me me me	N/A
5.4.12.4	Container for insulating liquid	the state of the	N/A



Page 12 of 69

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

5.5	Components as safeguards		N/A
5.5.1	General	No such components as safeguards.	N/A
5.5.2	Capacitors and RC units	let the state with	N/A
5.5.2.1	General requirement	the the the	N/A
5.5.2.2	Safeguards against capacitor discharge after disconnection of a connector	Tet watter watter watter	N/A
5.5.3	Transformers	t at all all a	N/A
5.5.4	Optocouplers	Mur Mur Mur M	N/A
5.5.5	Relays	alt alt with with	N/A
5.5.6	Resistors	mer mer mer so	N/A
5.5.7	SPDs	tet ster ster wire	N/A
5.5.8	Insulation between the mains and an external circuit consisting of a coaxial cable	at the test state	N/A
5.5.9	Safeguards for socket-outlets in outdoor equipment	which will all a	N/A
m 1	RCD rated residual operating current (mA)	white white where whe	_
5.6	Protective conductor	the state of	N/A
5.6.2	Requirement for protective conductors	and the survey of the	N/A
5.6.2.1	General requirements	Class III equipment	N/A
5.6.2.2	Colour of insulation	the man with the	N/A
5.6.3	Requirement for protective earthing conductors	at the set when a	N/A
al and	Protective earthing conductor size (mm ²)	me me in i	_
WULLE W	Protective earthing conductor serving as a reinforced safeguard	MALTER MALTER MALTER MALT	N/A
LIEK WAL	Protective earthing conductor serving as a double safeguard	NITER MUTER MUTER MUTER	N/A
5.6.4 🧹	Requirements for protective bonding conductors	L A A A	N/A
5.6.4.1	Protective bonding conductors	fer white white white y	N/A
. Stell	Protective bonding conductor size (mm ²)	i at at at	5 —
5.6.4.2	Protective current rating (A)	white white white white	N/A
5.6.5	Terminals for protective conductors	at all all all	N/A
5.6.5.1	Terminal size for connecting protective earthing conductors (mm)	unt with with with	N/A
y with	Terminal size for connecting protective bonding conductors (mm)	The work with the	N/A
5.6.5.2	Corrosion	LEK MITER MALTE MALTE M	N/A
5.6.6	Resistance of the protective bonding system	t t at	N/A
5.6.6.1	Requirements	with which which which	N/A



Page 13 of 69

EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
5.6.6.2	Test Method	which which where we	N/A	
5.6.6.3	Resistance (Ω) or voltage drop	whet whet makes which	N/A	
5.6.7	Reliable connection of a protective earthing conductor	tet set with with	N/A	
5.6.8	Functional earthing	in the sur so	N/A	
an when	Conductor size (mm ²)	Tex whet when white a	N/A	
- 15	Class II with functional earthing marking	the the	N/A	
when a	Appliance inlet cl &cr (mm)	t aller mile while wh	N/A	
5.7	Prospective touch voltage, touch current and p	rotective conductor current	N/A	
5.7.2	Measuring devices and networks	WIER WIEL WALTER WALTER WALTE	_√ [®] N/A	
5.7.2.1	Measurement of touch current	i it it it	N/A	
5.7.2.2	Measurement of voltage	LIE UNITE WALT WAT	N/A	
5.7.3	Equipment set-up, supply connections and earth connections		N/A	
5.7.4	Unearthed accessible parts		N/A	
5.7.5	Earthed accessible conductive parts	NUTER UNITE WALTE WAL	~N/A	
5.7.6	Requirements when touch current exceeds ES2 limits	at with with	N/A	
1 1	Protective conductor current (mA)		N/A	
in mer	Instructional Safeguard	The Alle Maine Maine	N/A	
5.7.7	Prospective touch voltage and touch current associated with external circuits	t the set with m	N/A	
5.7.7.1	Touch current from coaxial cables	me me me	N/A	
5.7.7.2	Prospective touch voltage and touch current associated with paired conductor cables	WALTER WALTER WALTER WALT	N/A	
5.7.8	Summation of touch currents from external circuits	NTEL WITCH WAITER WAITER	N/A	
EX WALTER	a) Equipment connected to earthed external circuits, current (mA)	let write writet writet	N/A	
MITER	b) Equipment connected to unearthed external circuits, current (mA)	- the state state of	N/A	
5.8	Backfeed safeguard in battery backed up supplies		N/A	
INLIE IN	Mains terminal ES	No battery used	N/A	
	Air gap (mm)	Mr. Mr. mr. cu	N/A	

6	ELECTRICALLY- CAUSED FIRE		Р
6.2	Classification of PS and PIS	at the left lifet suffer in	Р
6.2.2	Power source circuit classifications	All internal and output circuits are considered to be PS1 circuits.	Pr.



Page 14 of 69

	EN IEC 62368-	2. J. Z. Z.	
Clause	Requirement – Test	Result – Remark	Verdict
6.2.3	Classification of potential ignition sources	See the following details.	N/A
6.2.3.1	Arcing PIS	All internal circuits are not considered as arcing PIS. They are supplied by external power supply whose open voltage is less than 50V.	N/A
6.2.3.2	Resistive PIS	All internal circuits of PS1 circuits	N/A
6.3	Safeguards against fire under normal operating conditions	and abnormal operating	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)	whitek
et set	Combustible materials outside fire enclosure	Min.HB	
6.4	Safeguards against fire under single fault condition	tions of an an an	Р
6.4.1	Safeguard method	Method by control of fire spread applied	P P
6.4.2	Reduction of the likelihood of ignition under single fault conditions in PS1 circuits	at white white	N/A
6.4.3	Reduction of the likelihood of ignition under single fault conditions in PS2 and PS3 circuits		N/A
6.4.3.1	Supplementary safeguards	an mer and and a	N/A
6.4.3.2	Single Fault Conditions	to at the set of	N/A
- S.	Special conditions for temperature limited by fuse	when the the we	N/A
6.4.4	Control of fire spread in PS1 circuits	All internal circuits of PS1 circuits	JUN P
6.4.5	Control of fire spread in PS2 circuits	at at let let	N/A
6.4.5.2	Supplementary safeguards	ner mer mer mer	N/A
6.4.6	Control of fire spread in PS3 circuits	at at set set	N/A
6.4.7	Separation of combustible materials from a PIS	me me me m	N/A
6.4.7.2	Separation by distance	t set stat stat wi	N/A
6.4.7.3	Separation by a fire barrier	when the same sa	N/A
6.4.8	Fire enclosures and fire barriers	Only PS1 circuit , no fire enclosures or barriers required	N/A
6.4.8.2	Fire enclosure and fire barrier material properties	at all set set	N/A
6.4.8.2.1	Requirements for a fire barrier	the super super super s	N/A
6.4.8.2.2	Requirements for a fire enclosure	of the set set a	N/A
6.4.8.3	Constructional requirements for a fire enclosure and a fire barrier	which which will be	N/A



Reference No.: WTF23D10227078Y	
--------------------------------	--

Page 15 of 69

	EN IEC 62368-	the mer wat was	
Clause	Requirement – Test	Result – Remark	Verdict
where .		CER MITE MAR MAR M	n m
6.4.8.3.1	Fire enclosure and fire barrier openings	No openings	N/A
6.4.8.3.2	Fire barrier dimensions	No fire barrier used.	N/A
6.4.8.3.3	Top openings and properties	No top opening	N/A
in mer	Openings dimensions (mm)	mile white white white	N/A
6.4.8.3.4	Bottom openings and properties	No bottom opening	N/A
m	Openings dimensions (mm)	see white white white w	N/A
WALTER V	Flammability tests for the bottom of a fire enclosure	t minet minet united united un	N/A
dt .	Instructional Safeguard	and the state	N/A
6.4.8.3.5	Side openings and properties	No side openings	N/A
1 5	Openings dimensions (mm)	1 A A A	N/A
6.4.8.3.6	Integrity of a fire enclosure, condition met: a), b) or c)	the water water water	N/A
6.4.8.4	Separation of a PIS from a fire enclosure and a fire barrier distance (mm) or flammability rating	et white white white w	N/A
6.4.9	Flammability of insulating liquid	the set set when mi	N/A
6.5	Internal and external wiring	When when we are	Р
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.	WALLP
6.5.2	Requirements for interconnection to building wiring	No such wire used	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	dditional equipment	[√] [™] P

7	INJURY CAUSED BY HAZARDOUS SUBSTANCES	P an
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
-m	Personal safeguards and instructions	_
7.5	Use of instructional safeguards and instructions	N/A
an s	Instructional safeguard (ISO 7010)	
7.6	Batteries and their protection circuits	NOT PUNCT

8	MECHANICALLY-CAUSED INJURY	Set Post
8.2	Mechanical energy source classifications	Р
8.3	Safeguards against mechanical energy sources	Р



Page 16 of 69

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

8.4	Safeguards against parts with sharp edges and corners		⊧ P∕+
8.4.1	Safeguards	where our on the work	JU P
LIEK NALIS	Instructional Safeguard:	MS1: Edges and corners of enclosure	UNLITEP
8.4.2	Sharp edges or corners	Edges and corners of the enclosure are rounded.	JEL P
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
INLIEK WIN	MS2 or MS3 part required to be accessible for the function of the equipment	See above.	N/A
1 1	Moving MS3 parts only accessible to skilled person	shi wa tat	N/A
8.5.2	Instructional safeguard	LIER MITE WALL WALL V	N/A
8.5.4	Special categories of equipment containing moving parts	et wet wret while we	N/A
8.5.4.1	General	Mr. Mr. S.	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		N/A
8.5.4.2.2	Access protection override	and white white	N/A
8.5.4.2.2.1	Override system		_≪N/A
8.5.4.2.2.2	Visual indicator	it with which when we	N/A
8.5.4.2.3	Emergency stop system	t at let the st	N/A
State of	Maximum stopping distance from the point of activation (m)	white white with an	N/A
What when	Space between end point and nearest fixed mechanical part (mm):	white white white white	N/A
8.5.4.2.4	Endurance requirements	whet intre- white white	N/A
et whitet	Mechanical system subjected to 100 000 cycles of operation	of the state mark and	N/A
. At	- Mechanical function check and visual inspection	with the state	N/A
which we	- Cable assembly	ALTER INTER MATTER WAT	N/A
8.5.4.3	Equipment having electromechanical device for destruction of media	Tex Tex State with	N/A
8.5.4.3.1	Equipment safeguards	mer mer in me	N/A
8.5.4.3.2	Instructional safeguards against moving parts:	THE STREE MUTER WATER A	N/A
8.5.4.3.3	Disconnection from the supply	the second second	N/A
8.5.4.3.4	Cut type and test force (N):	at miles and and and any	N/A
8.5.4.3.5	Compliance	s at at all	N/A
8.5.5	High pressure lamps	No high pressure lamps used.	N/A



Page 17 of 69

20.	EN IEC 62368-	the she she	20. 2.
Clause	Requirement – Test	Result – Remark	Verdict
Mr		and which which a	<u>100 - 100 -</u>
	Explosion test	the states	N/A
8.5.5.3	Glass particles dimensions (mm):	white white white wh	N/A
8.6	Stability of equipment	the state of	N/A
8.6.1	General	MS1: Mass of the unit	N/A
et se	Instructional safeguard	at at let set	N/A
8.6.2	Static stability	se white white white	N/A
8.6.2.2	Static stability test:	t set set set	N/A
8.6.2.3	Downward force test	mer sur sur su	N/A
8.6.3	Relocation stability	alt alt with a state out	N/A
	Wheels diameter (mm) :	me me m	_
ine whi	Tilt test	THE STORE NUTER SPUTC	N/A
8.6.4	Glass slide test	the second	N/A
8.6.5	Horizontal force test:	et allet intre- while y	N/A
8.7	Equipment mounted to wall, ceiling or other stru	ucture	N/A
8.7.1	Mount means type:	No wall or ceiling	N/A
8.7.2	Test methods		N/A
the star	Test 1, additional downwards force (N):	and white white	N/A
rek white	Test 2, number of attachment points and test force (N):	TE MILE WILL WHITE	N/A
L NNLTEX	Test 3 Nominal diameter (mm) and applied torque (Nm):	t set set wet	N/A
8.8	Handles strength	Mr. Mr. M. S.	N/A
8.8.1 📣	General	No handles	N/A
8.8.2	Handle strength test	m m t	N/A
the all	Number of handles	street white white white	_
8 1	Force applied (N)	i i i it	
8.9	Wheels or casters attachment requirements	TEX INTER INNER WALL	N/A
8.9.2	Pull test	No such parts	N/A
8.10	Carts, stands and similar carriers	WALLEY WALL WALL WI	N/A
8.10.1	General	No carts, stands or similar carriers	N/A
8.10.2	Marking and instructions	the state of	N/A
8.10.3	Cart, stand or carrier loading test	LIER MUTE WHITE WALL	N/A
4 set	Loading force applied (N):	1 to the state	< N/A
8.10.4	Cart, stand or carrier impact test	and white white white	N/A
8.10.5	Mechanical stability		< N/Â



Page 18 of 69

- m	A A A	EN IEC 62368-1	
Clause	Requirement – Test	Result – Remark	Verdict

	Force applied (N):	No and the	at the
8.10.6	Thermoplastic temperature stability	NUTER INTERNATION	^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	a at at let	N/A
- m	Instructional Safeguard:	it was war way	N/A
8.11.3	Mechanical strength test	t at at at	N/A
8.11.3.1	Downward force test, force (N) applied:	where whe whe we	N/A
8.11.3.2	Lateral push force test	let let set al	N/A
8.11.3.3	Integrity of slide rail end stops	when when when when	N/A
8.11.4	Compliance	let get get wife	N/A
8.12	Telescoping or rod antennas	We all all an	N/A
JULIE .	Button/ball diameter (mm):	No such parts	ri —

9	THERMAL BURN INJURY		Р
9.2	Thermal energy source classifications	When when any we	Р
9.3	Touch temperature limits	Late street with	N ² P
9.3.1	Touch temperatures of accessible parts:	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6)	SELP.
9.3.2	Test method and compliance	See B.1.6 & B.2.3	Р
9.4	Safeguards against thermal energy sources		P
9.5	Requirements for safeguards		Р
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.	WINE P
9.5.2	Instructional safeguard:	Instructional safeguard is not required.	N/A
9.6 🦽	Requirements for wireless power transmitters	in a state of state	N/A
9.6.1	General	No wireless power transmitters	N/A
9.6.2	Specification of the foreign objects	a at at at	N/A
9.6.3	Test method and compliance:	white white white white	N/A

0 10	RADIATION		P
10.2	Radiation energy source classification	i stat tot	J P J
10.2.1	General classification	See below	P
t set	Lasers	1 1 1 1 A	_



2

Reference No.: WTF23D10227078Y

Page 19 of 69

<u></u>	EN IEC 62368-	5. 41. 48. S.	
Clause	Requirement – Test	Result – Remark	Verdict
WALTER OUT	Lamps and lamp systems	RS1: LED only for indicating use which is considered as low power application.	_
50 .5	Image projectors:	at at let set	_
	X-Ray:	and wat was we	_
et aller	Personal music player:		
10.3	Safeguards against laser radiation	the man in a	N/A
where y	The standard(s) equipment containing laser(s) comply:	No laser radiation	N/A
10.4	Safeguards against optical radiation from lamp (including LED types)	s and lamp systems	SINC P
10.4.1	General requirements	LED indication light: Classed as RS1 (Exempt Group)	MITER N
A INLIEK	Instructional safeguard provided for accessible radiation level needs to exceed	et tet tet stat w	N/A
N. A.	Risk group marking and location:	when we we we	N/A
Intre N	Information for safe operation and installation	the state of the second	N/A
10.4.2	Requirements for enclosures	mu m m	N/A
NUT MAD	UV radiation exposure::	set and the mainte	N/A
10.4.3	Instructional safeguard:		N/A
10.5	Safeguards against X-radiation	LIE ALTE WALLS WALL W	N/A
10.5.1	Requirements	No X-radiation	N/A
mur.	Instructional safeguard for skilled persons	A WILLEY WILL WILL WILL	
10.5.3	Maximum radiation (pA/kg)		
10.6	Safeguards against acoustic energy sources	white white white white	√ [™] P
10.6.1	General	at at let let	P
10.6.2	Classification	RS2 N	Р
ek whitek	Acoustic output <i>L</i> _{Aeq,T} , dB(A):	See test report No. WTF23X10227081Y	N/A
WALTER W	Unweighted RMS output voltage (mV):	See test report No. WTF23X10227081Y	N/A
nuter uni	Digital output signal (dBFS)	See test report No. WTF23X10227081Y	N/A
10.6.3	Requirements for dose-based systems	were and any and	N/A
10.6.3.1	General requirements	att att att att	N/A
10.6.3.2	Dose-based warning and automatic decrease	a man an an	N/A
10.6.3.3	Exposure-based warning and requirements	et with nuter muter an	N/A
.t.	30 s integrated exposure level (MEL30):	The In the	N/A
in in	Warning for MEL ≥ 100 dB(A)	THE THE NUT OUT	N/A



Page 20 of 69

	the state of	EN IEC 62368-1	
Clause	Requirement – Test	Result – Remark	Verdict

10.6.4	Measurement methods		N/A
10.6.5	Protection of persons	ALTER INLIES WALL WAL	N/A 🚽
de la	Instructional safeguards:	See user manual	N/A
10.6.6	Requirements for listening devices (headphones, earphones, etc.)	onlife white white white	on P on
10.6.6.1	Corded listening devices with analogue input	Tet with aller white	N/A
t at	Listening device input voltage (mV):	Mr. In the	N/A
10.6.6.2	Corded listening devices with digital input	et whet white white w	N/A
dt.	Max. acoustic output <i>L</i> _{Aeq,T} , dB(A):	where the state of	N/A
10.6.6.3	Cordless listening devices	white white white white	20 P 20
LIEK WALT	Max. acoustic output <i>L</i> _{Aeq,T} , dB(A):	See test report No. WTF23X10227081Y	MIT PMIT

В	NORMAL OPERATING CONDITION TESTS, ABNORMAL OPERATING CONDITION TESTS AND SINGLE FAULT CONDITION TESTS		P
B.1 🖉	General	s at at at at	[↓] P
B.1.5	Temperature measurement conditions	(See appended table B.1.5)	P
B.2	Normal operating conditions	at the state	× P
B.2.1	General requirements	.: (See Test Item Particulars and appended test tables)	P
- Mr	Audio Amplifiers and equipment with audio amplifiers	(See appended table B.2.5)	Р
B.2.3	Supply voltage and tolerances	Rated input 5Vdc	_√P`
B.2.5	Input test	: (See appended table B.2.5)	- P
B.3	Simulated abnormal operating conditions		N P
B.3.1	General	(See appended table B.3)	P
B.3.2	Covering of ventilation openings	No ventilation openings.	N/A
t . I	Instructional safeguard	i s st st	
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	No such selector	N/A
B.3.6	Reverse battery polarity	No such output terminals	N/A
B.3.7	Audio amplifier abnormal operating conditions	(See appended table B.3)	Р
B.3.8	Safeguards functional during and after abnorma operating conditions		P.
В.4 🧷	Simulated single fault conditions	to the state of	P.
B.4.1	General	nt white when when wh	Р



Page 21 of 69

-20.	EN IEC 62368-	the she she she	b
Clause	Requirement – Test	Result – Remark	Verdict
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.	N. RU
B.4.4.1	Short circuit of clearances for functional insulation	(See appended table B.4)	Р
B.4.4.2	Short circuit of creepage distances for functional insulation	(See appended table B.4)	P
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)	MUTER P
B.4.6	Short circuit or disconnection of passive components	(See appended table B.4)	JEK 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	Jul P
B.4.9	Battery charging and discharging under single fault conditions	See annex M	Р
С	UV RADIATION		N/A
C.1_0+	Protection of materials in equipment from UV r	adiation	N/A
C.1.2	Requirements	No such UV generated from the equipment.	N/A
C.1.3	Test method	with a state on the owner of	N/A
C.2	UV light conditioning test	he she was a start	N/A
C.2.1	Test apparatus:	it's milter while while w	N/A
C.2.2	Mounting of test samples	i at at	N/A
C.2.3	Carbon-arc light-exposure test	intre white water wat	N/A
C.2.4	Xenon-arc light-exposure test	a at at at	N/A
D	TEST GENERATORS		N/A
D.1	Impulse test generators	it at at at	N/A
D.2	Antenna interface test generator	NET WATER WALL WALL Y	N/A
D.3 🖉	Electronic pulse generator	at at set set	N/A
E	TEST CONDITIONS FOR EQUIPMENT CONTAIN	NING AUDIO AMPLIFIERS	Р
E.1	Electrical energy source classification for audi	o signals	P



Page 22 of 69

Clause	EN IEC 62368- Requirement – Test	Result – Remark	Verdict
Clause	Requirement – Test	Result – Remark	verdict
S.	Maximum non-clipped output power (W):	(See appended table B.2.5)	_
m inn	Rated load impedance (Ω):	(See appended table 4.1.2)	_
de la	Open-circuit output voltage (V):	(See appended table B.2.5)	_
the second	Instructional safeguard:	Provided in the manual	_
E.2	Audio amplifier normal operating conditions	a at at at	P.
2m	Audio signal source type:	(See appended table B.2.5)	_
NUTER	Audio output power (W):	(See appended table B.2.5)	_
	Audio output voltage (V):	(See appended table B.2.5)	
INLIE N	Rated load impedance (Ω):	(See appended table 4.1.2)	_
JEX NI	Requirements for temperature measurement	(See appended table 5.4.1.4, 9.3, B.1.5, B.2.6, B.3, B.4)	P
E.3	Audio amplifier abnormal operating conditions	(See appended table B.3)	Р
F	EQUIPMENT MARKINGS, INSTRUCTIONS, AND SAFEGUARDS	INSTRUCTIONAL	ST P.
F.1 5	General	L at at at 5	P
14. 1	Language	English	
F.2	Letter symbols and graphical symbols	the state state	√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.	P
F.3 🔊	Equipment markings	white white white white	N ^P P
F.3.1	Equipment marking locations	The required marking is located on the enclosure of the equipment and is easily visible.	MITP N
F.3.2	Equipment identification markings	See below for details.	Р
F.3.2.1	Manufacturer identification:	See copy of marking plate	e Pé
F.3.2.2	Model identification	See copy of marking plate	P
F.3.3	Equipment rating markings	Not direct connection to the mains, it need not be marked with any electrical rating	N/A
F.3.3.1	Equipment with direct connection to mains	Tet Tet aller miles	N/A
F.3.3.2	Equipment without direct connection to mains	Mr. Mr. A.	N/A
F.3.3.3	Nature of the supply voltage:	et whet while white wh	N/A
F.3.3.4	Rated voltage:	all and at at	N/A
F.3.3.5	Rated frequency	ifthe sife out only	N/A



Page 23 of 69

EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
F.3.3.6	Poted current or roted power	White white white wh	
	Rated current or rated power	the state of the	N/A
F.3.3.7 V	Equipment with multiple supply connections		N/A
F.3.4	Voltage setting device	No voltage setting device.	N/A
F.3.5	Terminals and operating devices	mite white white white	N/A
F.3.5.1	Mains appliance outlet and socket-outlet markings	tet stret surret united w	N/A
F.3.5.2	Switch position identification marking	the second second	N/A
F.3.5.3	Replacement fuse identification and rating markings:	WATER WATE WATE WATE	N/A
INCIE WAY	Instructional safeguards for neutral fuse:	and after aller white	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	a m. m. a	N/A
F.3.6	Equipment markings related to equipment classification	Class III equipment	N/A
F.3.6.1	Class I equipment	tet set ster ster wit	N/A
F.3.6.1.1	Protective earthing conductor terminal	when all all an	N/A
F.3.6.1.2	Protective bonding conductor terminals:	At A ALLE MILE	N/A
F.3.6.2	Equipment class marking:		N/A
F.3.6.3	Functional earthing terminal marking:	The off which white	N/A
F.3.7	Equipment IP rating marking	This equipment is classified as IPX0.	et .
F.3.8	External power supply output marking:	See copy of marking plate.	P
F.3.9	Durability, legibility and permanence of marking	Marking is considered to be legible and easily discernible. See also the following details.	WN P
F.3.10	Test for permanence of markings	The label was subjected to the permanence of marking test. The label was rubbed with cloth soaked with water for 15 sec. And then again for 15 sec, with the cloth soaked with petroleum spirit. After this test there was no damage to the label. The marking on the label did not fade. There was no curling and lifting of the label edge. After each test, the marking remained legible.	
F.4	Instructions	at at left set	P S
Mr. 1	a) Information prior to installation and initial use	See user manual	Р
whitek wh	b) Equipment for use in locations where children not likely to be present	NITER MITER MAILER MALLE	N/A



Page 24 of 69

Clause	EN IEC 62368-	Popult Demort	Verdict
Clause	Requirement – Test	Result – Remark	veraict
.lt-	c) Instructions for installation and interconnection	where the second	N/A
we serve	d) Equipment intended for use only in restricted access area	JUNIFER WAITE WAITE	N/A
NUTE MAI	e) Equipment intended to be fastened in place	The state when an	N/A
1 0	f) Instructions for audio equipment terminals	he the the re	N/A
main	g) Protective earthing used as a safeguard	ret with mitter whit	N/A
NUTER	h) Protective conductor current exceeding ES2 limits	t ret set set	N/A
	i) Graphic symbols used on equipment	me me m	N/A
WALTE WA	j) Permanently connected equipment not provided with all-pole mains switch	WALTER WALTER WALTER W	N/A
LIEK WALT	k) Replaceable components or modules providing safeguard function	LIFE INTER WATER WAT	N/A
the set	I) Equipment containing insulating liquid	1 A A A	N/A
m	m) Installation instructions for outdoor equipment	NALT WALL WAL	N/A
F.5	Instructional safeguards	the state	N/A
G	COMPONENTS		P
G.1	Switches	at the	N/A
G.1.1	General	No switch used	N/A
G.1.2	Ratings, endurance, spacing, maximum load		N/A
G.1.3	Test method and compliance	in which when whe	N/A
G.2	Relays	et the test with	N/A
G.2.1	Requirements	No relay used.	N/A
G.2.2	Overload test	and and white	N/A
G.2.3	Relay controlling connectors supplying power to other equipment	when we are a	N/A
G.2.4	Test method and compliance	ne we we we	N/A
G.3	Protective devices	at the state with	N/A
G.3.1	Thermal cut-offs	No such component	N/A
WINLIE S	Thermal cut-outs separately approved according to IEC 60730 with conditions indicated in a) & b)	White white white	N/A
INLIEK WIN	Thermal cut-outs tested as part of the equipment as indicated in c)	miret miret whitet w	N/A
G.3.1.2	Test method and compliance	1 A A	N/A
G.3.2	Thermal links	No such component	N/A
G.3.2.1	a) Thermal links tested separately according to IEC 60691 with specifics	et with white white	N/A
dit.	b) Thermal links tested as part of the equipment	w w	N/A
G.3.2.2	Test method and compliance	THE STREEMEN	N/A



Page 25 of 69

<u></u>	EN IEC 62368-	the me me m	20. 2.
Clause	Requirement – Test	Result – Remark	Verdict
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		N/A
G.3.5.1	Non-resettable devices suitably rated and marking provided	A LA LA LA	N/A
G.3.5.2	Single faults conditions:	which which which	N/A
G.4	Connectors	at lef left stat	N/A
G.4.1	Spacings	No such component	N/A
G.4.2	Mains connector configuration:	let let set	N/A
G.4.3	Plug is shaped that insertion into mains socket- outlets or appliance coupler is unlikely	Mr. Mr. Mr. V	N/A
G.5	Wound components	were and and an	N/A
G.5.1	Wire insulation in wound components	No such component	N/A
G.5.1.2	Protection against mechanical stress	when when when	N/A
G.5.2	Endurance test	alt stat stat	N/A
G.5.2.1	General test requirements	when any and	N/A
G.5.2.2	Heat run test	At A AT	N/A
A 18	Test time (days per cycle):		
in which	Test temperature (°C):	The still with south	
G.5.2.3	Wound components supplied from the mains	and the state	N/A
G.5.2.4	No insulation breakdown	of our and a white	-N/A
G.5.3	Transformers	and the	N/A
G.5.3.1	Compliance method:	INTERNATE WALL V	N/A
St 5	Position:	s at at	
24	Method of protection:	MIT WALL WAL WA	N/A
G.5.3.2	Insulation	x x x x x	N/A
201	Protection from displacement of windings:	white white white	
G.5.3.3	Transformer overload tests	t at at at	N/A
G.5.3.3.1	Test conditions	mur mur m	N/A
G.5.3.3.2	Winding temperatures	the state states	N/A
G.5.3.3.3	Winding temperatures - alternative test method	NU MU MU M	N/A
G.5.3.4	Transformers using FIW	set stat whet whi	N/A
G.5.3.4.1	General	20. 20. 2.	N/A
when	FIW wire nominal diameter:	et stret intree water	uri —
G.5.3.4.2	Transformers with basic insulation only	20 10 1	N/A

2 5



Page 26 of 69

EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
G.5.3.4.3	Transformers with double insulation or reinforced insulation	en and and and and	N/A
G.5.3.4.4	Transformers with FIW wound on metal or ferrite core	when when when	N/A
G.5.3.4.5	Thermal cycling test and compliance	mill until which will	N/A
G.5.3.4.6	Partial discharge test	at at at is	N/A
G.5.3.4.7	Routine test	mus mus me	N/A
G.5.4	Motors	No motors used.	N/A
G.5.4.1	General requirements	mur mur m	N/A
G.5.4.2	Motor overload test conditions	let set state	N/A
G.5.4.3	Running overload test	me me in i	N/A
G.5.4.4.2	Locked-rotor overload test	The state street in	N/A
e at	Test duration (days):	a the the second	
G.5.4.5	Running overload test for DC motors	et with mile white	N/A
G.5.4.5.2	Tested in the unit	where we have	N/A
G.5.4.5.3	Alternative method	NUTER INLIE MALLE	N/A
G.5.4.6	Locked-rotor overload test for DC motors		N/A
G.5.4.6.2	Tested in the unit	A ANTIN M	N/A
et det	Maximum Temperature:		
G.5.4.6.3	Alternative method	the watter water wat	N/A
G.5.4.7	Motors with capacitors	e at at all	N/A
G.5.4.8	Three-phase motors	while while whi	N/A
G.5.4.9	Series motors	at at at	N/A
10 - 20 -	Operating voltage:	white white white a	20° —
G.6	Wire Insulation	at set set	S N/A
G.6.1	General	Only ES1 existed	N/A
G.6.2	Enamelled winding wire insulation	et set set and	N/A
G.7	Mains supply cords	m m m	N/A
G.7.1	General requirements	No such component	N/A
	Туре	we we set	
G.7.2	Cross sectional area (mm ² or AWG):	suffic sufficients	N/A
G.7.3	Cord anchorages and strain relief for non- detachable power supply cords	not set stat of	N/A
G.7.3.2	Cord strain relief	AND AND AN	N/A
G.7.3.2.1	Requirements	et the street where	N/A
A	Strain relief test force (N)	The shire of	N/A
G.7.3.2.2	Strain relief mechanism failure	JEL JEL ME	N/A



Page 27 of 69

Clause	EN IEC 62368- Requirement – Test	Result – Remark	Verdict
Clause	Trequiement - Test		Veruici
G.7.3.2.3	Cord sheath or jacket position, distance (mm):	The second second	N/A
G.7.3.2.4	Strain relief and cord anchorage material	white white white	N/A
G.7.4	Cord Entry	w w t	N/A
G.7.5	Non-detachable cord bend protection	NUTER UNITE UNIT UN	N/A
G.7.5.1	Requirements	a she she sh	, ∕~ N/A
G.7.5.2	Test method and compliance	NET WALT WALT WAL	N/A
WALTER N	Overall diameter or minor overall dimension, <i>D</i> (mm)	t super multiple multiple	sure -
de .	Radius of curvature after test (mm):	the state	
G.7.6	Supply wiring space	INTER NALLE MALL N	N/A
G.7.6.1	General requirements	s at at .	<u>م</u> الم
G.7.6.2	Stranded wire	LIET WAITE WALL WA	N/A
G.7.6.2.1	Requirements	a at at a	N/A
G.7.6.2.2	Test with 8 mm strand	the wait was way	N/A
G.8	Varistors	t at all set	N/A
G.8.1	General requirements	No such component	N/A
G.8.2	Safeguards against fire	the state	N/A
G.8.2.1	General		N/A
G.8.2.2	Varistor overload test	the training of the	N/A
G.8.2.3	Temporary overvoltage test	my me m	N/A
G.9	Integrated circuit (IC) current limiters	et unet stret with	N/A
G.9.1	Requirements	No such component	N/A
white we	IC limiter output current (max. 5A):	whet whet white a	mer -
the th	Manufacturers' defined drift	with the second	A -
G.9.2	Test Program	NUTER INTER WATE WA	N/A
G.9.3	Compliance		,
G.10	Resistors	TER UNITE WHITE WALL	N/A
G.10.1	General	No such component	N/A
G.10.2	Conditioning	white white white	N/A
G.10.3	Resistor test	at at at	N/A
G.10.4	Voltage surge test	White white white w	N/A
G.10.5	Impulse test	at at at a	N/A
G.10.6	Overload test	the wat wat we	N/A
G.11	Capacitors and RC units	at at at at	N/A
G.11.1	General requirements	No such component	N/A
G.11.2	Conditioning of capacitors and RC units	the state of the	N/A



Page 28 of 69

EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
G.11.3	Rules for selecting capacitors	which which which which	N/A	
G.12	Optocouplers	- itel and mark and	N/A	
LIFEX MAL	Optocouplers comply with IEC 60747-5-5 with specifics	No such component	N/A	
1 A	Type test voltage V _{ini,a} :	her and and an	_	
I MALI	Routine test voltage, V _{ini, b} :	tet allet aller and and	(
G.13	Printed boards	100 CO	- P -	
G.13.1	General requirements	Only need to comply with functional insulation, see only B.4.4.	NP STEF	
G.13.2	Uncoated printed boards	while while while while	N/A	
G.13.3	Coated printed boards	at at at set	N/A	
G.13.4	Insulation between conductors on the same inner surface	the with our out	N/A	
G.13.5	Insulation between conductors on different surfaces	while while whe will	N/A	
wints w	Distance through insulation:	MITER UNITE WALT WALT	N/A	
to t	Number of insulation layers (pcs)		_	
G.13.6	Tests on coated printed boards	and white white	N/A	
G.13.6.1	Sample preparation and preliminary inspection	t the	N/A	
G.13.6.2	Test method and compliance	ist white white where a	N/A	
G.14	Coating on components terminals	at the set set a	N/A	
G.14.1	Requirements:	where we we we	N/A	
G.15	Pressurized liquid filled components	. at the user with	N/A	
G.15.1	Requirements	No such component	N/A	
G.15.2	Test methods and compliance	let net net nitet nitet	N/A	
G.15.2.1	Hydrostatic pressure test	me me me m	N/A	
G.15.2.2	Creep resistance test	ist ister aller with a	N/A	
G.15.2.3	Tubing and fittings compatibility test	Mr. M. M. M.	N/A	
G.15.2.4	Vibration test	- with mile mile whi	N/A	
G.15.2.5	Thermal cycling test	The man of the	N/A	
G.15.2.6	Force test	ALTER MUTER WALTE WALTE	N/A	
G.15.3	Compliance	a the state	N/A	
G.16	IC including capacitor discharge function (ICX)	LIFE MILE MALTE MALL	N/A	
G.16.1	Condition for fault tested is not required	No such component	<- N/A	
m.	ICX with associated circuitry tested in equipment	antite white white wh	N/A	
Set.	ICX tested separately	at at at at	N/A	
G.16.2	Tests	white white white white	N/A	



Page 29 of 69

20	EN IEC 62368-	The sure sure sure	$a_{b} = a_{b}$
Clause	Requirement – Test	Result – Remark	Verdict
sur.	W W Y A St S	the write write write w	in m
INLIEK N	Smallest capacitance and smallest resistance specified by ICX manufacturer for impulse test:	tet stat stat mi	< _
	Mains voltage that impulses to be superimposed on	sunt with sur st	-
et et	Largest capacitance and smallest resistance for ICX tested by itself for 10000 cycles test	MIT WALL WALL WALL	_
G.16.3	Capacitor discharge test:	Tex muter white white	N/A
н	CRITERIA FOR TELEPHONE RINGING SIGNAL	S	N/A
H.1	General	white white whe wh	N/A
H.2	Method A	a de de de	N/A
Н.3	Method B	white white white white	N/A
H.3.1	Ringing signal	No telephone ringing signal generated within the equipment.	N/A
H.3.1.1	Frequency (Hz):	et allet allet and a	r —
H.3.1.2	Voltage (V)	All Strict	
H.3.1.3	Cadence; time (s) and voltage (V):	MITER MATE WALL WAL	_
H.3.1.4	Single fault current (mA):		ь —
H.3.2	Tripping device and monitoring voltage	and white	N/A
H.3.2.1	Conditions for use of a tripping device or a monitoring voltage	TE MITE MULT MATER	N/A
H.3.2.2	Tripping device	i e e et	N/A
H.3.2.3	Monitoring voltage (V):	antifer white white w	N/A
J	INSULATED WINDING WIRES FOR USE WITHO	UT INTERLEAVED	N/A
J.1	General	The she was the	N/A
The short	Winding wire insulation:	whet whet white white	_
at at	Solid round winding wire, diameter (mm):	the state	N/A
with	Solid square and rectangular (flatwise bending) winding wire, cross-sectional area (mm ²):	antic while while a	N/A
J.2/J.3	Tests and Manufacturing	- TEX WIFE WIFE W	a water
к	SAFETY INTERLOCKS		N/A
к.1 📣	General requirements	NUTER MUTER MOUTE MALL	N/A
JEX NALTE	Instructional safeguard:	No safety interlock provided within the equipment.	N/A
K.2	Components of safety interlock safeguard mechanism		N/A
K.3	Inadvertent change of operating mode	let stret white white w	N/A
K.4	Interlock safeguard override	an an a	N/A
K.5 🔬	Fail-safe	- the ster with wi	N/A



Page 30 of 69

01-	EN IEC 62368-	Denut D.	M. P. C
Clause	Requirement – Test	Result – Remark	Verdict
K.5.1	Under single fault condition	and and all in	N/A
K.6	Mechanically operated safety interlocks	The with any and the	N/A
K.6.1	Endurance requirement	The second second	N/A
K.6.2	Test method and compliance:	aller with white white	N/A
K.7 🦽	Interlock circuit isolation		_⊘ ⁺ N/A
K.7.1	Separation distance for contact gaps & interlock circuit elements	TE WALTE WALTE WAS W	N/A
MALE	In circuit connected to mains, separation distance for contact gaps (mm)	watter white white wat	N/A
WALTER WI	In circuit isolated from mains, separation distance for contact gaps (mm)	whitet whitet white white	N/A
LIEK WALT	Electric strength test before and after the test of K.7.2	LIEX MUTEX MALTER WALLER	N/A
K.7.2 🦽	Overload test, Current (A):	1 t at at	_⊘−N/A
K.7.3	Endurance test	Er Muit Muit white w	N/A
K.7.4	Electric strength test	A de de d	N/A
L	DISCONNECT DEVICES		N/A
L.1	General requirements	at the set	N/A
L.2	Permanently connected equipment		N/A
L.3 ്	Parts that remain energized	and the state	N/A
L.4	Single-phase equipment	a more mar and a	N/A
L.5	Three-phase equipment	at that the with a	N/A
L.6	Switches as disconnect devices	white when we we	N/A
L.7	Plugs as disconnect devices	state state with anyth	N/A
L.8	Multiple power sources	mer mi mi in	N/A
the shi	Instructional safeguard	whet whet white white	N/A
М	EQUIPMENT CONTAINING BATTERIES AND TH	EIR PROTECTION CIRCUITS	P
M.1	General requirements	TER MITER WITE WATE W	P.
M.2	Safety of batteries and their cells	in the state	⊳ P _e
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	white white phile shire	N ^D P
M.3.1	Requirements	set set set set	NI P
M.3.2	Test method	the super super super s	Р
white	Overcharging of a rechargeable battery	(See appended table Annex M)	P
UNLIEK W	Excessive discharging	(See appended table Annex M)	P



Page 31 of 69

	EN IEC 62368-	the and any and a	<u> </u>
Clause	Requirement – Test	Result – Remark	Verdict
sile	with the state of the state	ter alter and white white	- age
	Unintentional charging of a non-rechargeable battery	No such battery used	N/A
Set al	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	P
M.4	Additional safeguards for equipment containin lithium battery	g a portable secondary	P
M.4.1 📣	General	where where while while	N ^P 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 North P
M.4.2.1	Requirements	A 1 5th	P
M.4.2.2	Compliance:	(See appended table M.4.2)	Р
M.4.3	Fire enclosure:	Only PS1 circuit , no fire enclosures or barriers required	N/A
M.4.4	Drop test of equipment containing a secondary lithium battery	* stret maret white wh	et P.S
M.4.4.2	Preparation and procedure for the drop test	WW W ALL ALL ALL ALL	- P*
M.4.4.3	Drop, Voltage on reference and dropped batteries (V); voltage difference during 24 h period (%)::	The voltage difference not exceed 5%.	N ^P P
M.4.4.4	Check of the charge/discharge function	Three complete discharge and charge cycles under normal operating conditions.	P
M.4.4.5	Charge / discharge cycle test	No fire, explosion and any electrolyte leakage	Р
M.4.4.6	Compliance	The mater and a white	_√0P
M.5	Risk of burn due to short-circuit during carryin	g	P
M.5.1	Requirement	No bare conductive terminal used	VIN P
M.5.2	Test method and compliance	Tet with aller with a	N/A
M.6	Safeguards against short-circuits	the state of the s	Р
M.6.1	External and internal faults	of the the state of	N/A



Page 32 of 69

EN IEC 62368-1			
Clause	Requirement – Test	Result – Remark	Verdict
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.	P.
M.7	Risk of explosion from lead acid and NiCd bat	teries	N/A
M.7.1	Ventilation preventing explosive gas concentration	No such battery used	N/A
- NITER	Calculated hydrogen generation rate:	t at the set of	N/A
M.7.2	Test method and compliance	white sure sure sure	N/A
MUTER NO	Minimum air flow rate, Q (m ³ /h):		N/A
M.7.3	Ventilation tests	Mr. Mr. M. m.	N/A
M.7.3.1	General	ret tret stret white	N/A
M.7.3.2	Ventilation test – alternative 1	her the the	N/A
white	Hydrogen gas concentration (%):	tet with miles with wi	N/A
M.7.3.3	Ventilation test – alternative 2	Mr. m. w.	N/A
men of	Obtained hydrogen generation rate:	A street intreet while while	N/A
M.7.3.4	Ventilation test – alternative 3		N/A
we we	Hydrogen gas concentration (%):	All Martin Martin	N/A
M.7.4	Marking		⊘N/A
M.8	Protection against internal ignition from extern with aqueous electrolyte	nal spark sources of batteries	N/A
M.8.1	General	it allet allet white whi	N/A
M.8.2	Test method	with the second	N/A
M.8.2.1	General	Multiple and the analytic and the	N/A
M.8.2.2	Estimation of hypothetical volume V _Z (m ³ /s)::	a to be the	1 the
M.8.2.3	Correction factors:	intre white white white	m_n
M.8.2.4	Calculation of distance d (mm):	a at at at	5 ⁶⁴ - 5
M.9	Preventing electrolyte spillage	the white white white we	N/A
M.9.1	Protection from electrolyte spillage	of at the tit is	N/A
M.9.2	Tray for preventing electrolyte spillage	white white white white	N/A
M.10	Instructions to prevent reasonably foreseeable misuse	WHITEK WALTER WALTER WALTER	N/A
1 ⁶⁴ .51	Instructional safeguard	the state	N/A
N - 50	ELECTROCHEMICAL POTENTIALS	mile white white white a	N/A
* Jitt	Material(s) used:	at at at at	5 - S
0	MEASUREMENT OF CREEPAGE DISTANCES	AND CLEARANCES	N/A
S.C.	Value of X (mm):	e at at at st	5 <u>58</u>



Page 33 of 69

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

P	SAFEGUARDS AGAINST CONDUCTIVE OBJECTS		N/A
P.1 🕔	General	Only PS1	N/A
P.2	Safeguards against entry or consequences of e	entry of a foreign object	N/A
P.2.1	General	NUTER INTE MALL WALL	N/A
P.2.2 🧹	Safeguards against entry of a foreign object	i it it it	N/A_
m	Location and Dimensions (mm)	No opening.	~ u
P.2.3	Safeguards against the consequences of entry of a foreign object	+ writet mittet mutet ymi	N/A
P.2.3.1	Safeguard requirements	in the state	N/A
when wh	The ES3 and PS3 keep-out volume in Figure P.3 not applicable to transportable equipment	watter watter water water	N/A
the wints	Transportable equipment with metalized plastic parts	stret white white white	N/A
P.2.3.2	Consequence of entry test:	at let the state of	N/A
P.3	Safeguards against spillage of internal liquids	me me m m	N/A
P.3.1	General	No such liquids.	N/A
P.3.2	Determination of spillage consequences	When the start of	N/A
P.3.3	Spillage safeguards	At MITE WAITE	N/A
P.3.4	Compliance		N/A
P.4	Metallized coatings and adhesives securing part	rts of the second second	N/A
P.4.1	General	No such construction.	N/A
P.4.2	Tests	t miller white white wh	N/A
	Conditioning, T _C (°C):	L A A A	r 54
m. m	Duration (weeks):	white white white white	an-
Qo ^{rt}	CIRCUITS INTENDED FOR INTERCONNECTION	WITH BUILDING WIRING	N/A
Q.1	Limited power sources	ner when whe whe	N/A
Q.1.1	Requirements	it it get get .	N/A
24	a) Inherently limited output	me me me m	N/A
NUTER .	b) Impedance limited output	- Let the state of	N/A
the state	c) Regulating network limited output	ner ner m	N/A
INVIET ON	d) Overcurrent protective device limited output	THE SET STEP WITH	N/A
	e) IC current limiter complying with G.9	me me m m	N/A
Q.1.2	Test method and compliance	ret the state with	N/A
+ Just	Current rating of overcurrent protective device (A)	at the test test	N/A
Q.2	Test for external circuits – paired conductor cable	white white white white	N/A
an a	Maximum output current (A)	atter mark and which	N/A



Page 34 of 69

nu. Mur		EN IEC 62368-1	
Clause	Requirement – Test	Result – Remark	Verdict
Clause	Requirement – Test	Result – Remark	Verd

	Current limiting method	a de at tot
R	LIMITED SHORT CIRCUIT TEST	N/A
R.1	General No such c	onsideration. N/A
Ř.2 🖑	Test setup	N/A
et 5	Overcurrent protective device for test:	4 14 14 14 -
R.3	Test method	N/A
- Jith	Cord/cable used for test	the set as the set
R.4	Compliance	N/A
S	TESTS FOR RESISTANCE TO HEAT AND FIRE	N/A
S.1	Flammability test for fire enclosures and fire barrier materials of equipment where the steady state power does not exceed 4 000 W	
. In.	Samples, material	white white a manual way where we have a manual second sec
A STE	Wall thickness (mm):	the set set - S
2011	Conditioning (°C)	me me m
WALTER	Test flame according to IEC 60695-11-5 with conditions as set out	N/A
Set .	- Material not consumed completely	N/A
1. 20	- Material extinguishes within 30s	N/A
fert out	- No burning of layer or wrapping tissue	N/A
S.2	Flammability test for fire enclosure and fire barrier integri	ity N/A
MUTER	Samples, material	Tet allet in et and
*	Wall thickness (mm):	m m -
MALLY S	Conditioning (°C):	NUTER INLIER MULTE MULT
S.3	Flammability test for the bottom of a fire enclosure	
S.3.1	Mounting of samples	N/A
S.3.2	Test method and compliance	N/A
	Mounting of samples	WALTE WALT WE MAN
Set	Wall thickness (mm):	1 1 5 5 5
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
JE IN	Samples, material:	et allet allet allet
1 A	Wall thickness (mm):	5 10 5 1 × -
MALIE	Conditioning (°C)	NUTER MUTER WALTER WIT
T A	MECHANICAL STRENGTH TESTS	L A P
T.1	General	NUT ON NOT



Page 35 of 69

Clause	Requirement – Test	Result – Remark	Verdict
--------	--------------------	-----------------	---------

Т.2	Steady force test, 10 N:	(See appended table T.2)	P
Т.3	Steady force test, 30 N:	ALTER INTE WALT WALT	N/A
T.4	Steady force test, 100 N:	W + At At	N/A
T.5 🖋	Steady force test, 250 N:	(See appended table T.5)	1 P - 1
T.6	Enclosure impact test	(See appended table T.6)	
m	Fall test	ster white white white will	Р
. Jet	Swing test	- at at at 5	P. ^C
Т.7	Drop test:	(See appended table T.7)	Р
Т.8	Stress relief test:	(See appended table T.8)	P
Т.9	Glass Impact Test:	No such glass	N/A
T.10	Glass fragmentation test		N/A
t 10	Number of particles counted:	No such glass	~~N/A_
T.11	Test for telescoping or rod antennas	THE MITER MAILE MALLE WA	N/A
MULTER	Torque value (Nm):	No such antennas provided within the equipment.	N/A
U	MECHANICAL STRENGTH OF CATHODE RAY TUBES (CRT) AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		N/A
U.1	General		N/A
it whit	Instructional safeguard:	No CRT provided within the equipment.	N/A
U.2 🖉	Test method and compliance for non-intrinsical	Test method and compliance for non-intrinsically protected CRTs	
U.3	Protective screen		N/A
V	DETERMINATION OF ACCESSIBLE PARTS		N/A
V.1	Accessible parts of equipment		N/A
V.1.1	General	let the state state	N/A
V.1.2	Surfaces and openings tested with jointed test probes	at the test test	N/A
V.1.3	Openings tested with straight unjointed test probes	which which which we	N/A
V.1.4	Plugs, jacks, connectors tested with blunt probe	- 14 14 5th 55	N/A
V.1.5	Slot openings tested with wedge probe	JUNE WIT WIT WIT	N/A
V.1.6	Terminals tested with rigid test wire	at at and are	N/A
V.2	Accessible part criterion	ne ne so a	N/A
X	ALTERNATIVE METHOD FOR DETERMINING CLEARANCES FOR INSULATION IN CIRCUITS CONNECTED TO AN AC MAINS NOT EXCEEDING 420 V PEAK (300 V RMS)		N/A
m	Clearance:	and white white white who	N/A
Y A	CONSTRUCTION REQUIREMENTS FOR OUTDO	OR ENCLOSURES	N/A
and the second se			



Page 36 of 69

20.	EN IEC 62368-	2 minut an	<u>. n. n.</u>
Clause	Requirement – Test	Result – Remark	Verdict
Y.2	Resistance to UV radiation	I WILL WALL WALL	N/A
Y.3		the state of the	N/A
8. N	Resistance to corrosion	water water war	
Y.3	Resistance to corrosion	at at set	N/A
Y.3.1	Metallic parts of outdoor enclosures are resistant to effects of water-borne contaminants by	min white where we	N/A
Y.3.2	Test apparatus	set sifet aller wh	N/A
Y.3.3	Water – saturated sulphur dioxide atmosphere	All Street	N/A
Y.3.4	Test procedure:	et intret intre white	N/A
Y.3.5	Compliance	where the state	N/A
Y.4 📣	Gaskets	INTER INTER WATER	۸ ^۲ ۸/۸
Y.4.1	General	a st st	N/A
Y.4.2	Gasket tests	WIEL WAIT WALL W	N/A
Y.4.3	Tensile strength and elongation tests	a at at a	√ N/A
m	Alternative test methods:	antit white white	N/A
Y.4.4	Compression test	the second second	N/A
Y.4.5	Oil resistance	white white white	N/A
Y.4.6	Securing means	at a stat	N/A
Y.5	Protection of equipment within an outdoor enclosure		N/A
Y.5.1	General		N/A
Y.5.2	Protection from moisture	and an an	N/A
INTE.	Relevant tests of IEC 60529 or Y.5.3	at the the will	N/A
Y.5.3	Water spray test	The me in	N/A
Y.5.4	Protection from plants and vermin	JEK NIEK MITER	N/A
Y.5.5	Protection from excessive dust	Mr. M. M.	N/A
Y.5.5.1	General	strek miles anticity	N/A
Y.5.5.2	IP5X equipment	1. Ju. 2. 1	N/A
Y.5.5.3	IP6X equipment	let mile white whi	N/A
Y.6	Mechanical strength of enclosures	t at at	N/A
Y.6.1	General	INTER WALL WALL	
Y.6.2	Impact test:	the state of the s	N/A

č



Page 37 of 69 EN IEC 62368-1

Clause

Requirement - Test

Result - Remark

Verdict

	ATTACHMENT TO TEST R	EPORT	
(Audio	IEC 62368-1 EUROPEAN GROUP DIFFERENCES AND N video, information and communication technology ed		ents)
Difference	s according to EN IEC 62368-1:2020+A	11:2020	
Attachmer	nt Form No EU_GD_IEC62368_1E	TEX INSTER INSTER MINISTER WALT	"an
	nt Originator: UL(Demko)		
Master Att	achment: 2021-02-04	we we de the	jit-
	© 2021 IEC System for Conformity Testing and Co seneva, Switzerland. All rights reserved.	ertification of Electrical Equipmo	ent
in white	CENELEC COMMON MODIFICATIONS (EN)	LIET MALTE MALT MALL MA	P
	Clause numbers in the cells that are shaded light g IEC 62368-1:2020+A11:2020. All other clause num those in the paragraph below, refers to IEC 62368- Clauses, subclauses, notes, tables, figures and and those in IEC 62368-1:2018 are prefixed "Z".	bers in that column, except for 1:2018.	S P.
ret sources	Add the following annexes:Annex ZA (normative)Normative references to interr corresponding European publicationsAnnex ZB (normative)Special national conditionsAnnex ZC (informative)A-deviationsAnnex ZD (informative)IEC and CENELEC code dest	and the ret and	P
1	Modification to Clause 3.		N/A
3.3.19	Sound exposure Replace 3.3.19 of IEC 62368-1 with the following d	efinitions:	N/A
3.3.19.1	momentary exposure level, MELmetric for estimating 1 s sound exposure level fromthe HD 483-1 S2 test signal applied to bothchannels, 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 additionalinformation.	Not such equipment	N/A
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>	ALTER MALLE WALLEY WALLEY	N/A
	Note 1 to entry: The SI unit is Pa ² s. $E = \int_{0}^{T} p(t)^{2} dt$	white white white	



Page 38 of 69

24m	EN IEC 62368-1	in which which which	The ap
Clause	Requirement – Test	Result – Remark	Verdict
3.3.19.4	sound exposure level, SEL logarithmic measure of sound exposure relative to a reference value, <i>Eo</i> , typically the 1 kHz threshold of hearing in humans.	Mainet Mainet Mainet	N/A
	Note 1 to entry: <i>SEL</i> is measured as A-weighted levels in dB. $SEL = 10 \lg \left(\frac{E}{E_0}\right) \text{dB}$	at white white wh	et while whi
whitek of	Note 2 to entry: See B.4 of EN 50332-3:2017 for additional information.	wonth wonth wonth	where where
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 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	ANT WATER WATER WATER	N/A
SW - S 	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.	MALL MALL MARL	sur. sur.
2	Modification to Clause 10		P
10.6	Safeguards against acoustic energy sources		P
	Replace 10.6 of IEC 62368-1 with the following:	and the she	
10.6.1.1	Introduction Safeguard requirements for protection against long-term exposure to excessive sound pressure levels 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. A personal music player is a portable equipment intended for use by an ordinary person , that:	whitek whitek whitek	P
	 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 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.). 	A MATCH WATCH WATCH	WALLEY WALTER
	EXAMPLES Portable CD players, MP3 audio players, mobile phones with MP3 type features, PDAs or similar equipment.	t set set and	INTER MALT



Page 39 of 69

EN IEC 62368-1					
Clause	Requirement – Test	Result – Remark	Verdict		
sur	NOTE 1 Protection against acoustic energy sources from	and white white white	Jun Jun		
	telecom applications is referenced to ITU-T P.360.	a de de	Let Set		
	NOTE 2 It is the intention of the Committee to allow the	White white white	NUT MUT		
	alternative methods for now, but to only use the dose measurement method as given in 10.6.5 in future. Therefore,	and the state	it let .		
	manufacturers are encouraged to implement 10.6.5 as soon as	The with white w	in more m		
	possible.	24. 24. 1	st at a		
	Listening devices sold separately shall comply	et the state with	while while		
	with the requirements of 10.6.6. These requirements are valid for music or video	and the so	the state		
	mode only.	t let set set	WIFE WALTE		
	The requirements do not apply to:	white white white	201 24		
	– professional equipment;	at at at	THE STREET		
	NOTE 3Professional equipment is equipment sold through	inter white white a	1. m. 2		
	special sales channels. All products sold through normal electronics stores are considered not to be professional	i it it i	at let is		
	equipment.	TER INTE WITH WA	an an		
	– hearing aid equipment and other devices for	and the state	6 . 18 . L		
	assistive listening;	et allet intre white	white white		
	– the following type of analogue personal music players:	the second	A At		
	Iong distance radio receiver (for example, a	ster ster atter	WALTE WALT.		
	multiband radio receiver or world band radio	When the m			
	receiver, an AM radio receiver), and • cassette player/recorder;	. dt . 5 lt .	STEP NITE N		
		- 5 Jun - 51	20. 21		
	NOTE 4 This exemption has been allowed because this technology is falling out of use and it is expected that within a		et ster out		
	few years it will no longer exist. This exemption will not be extended to other technologies.	it while white white	an an		
	The star with which we are	A A A	5 ⁶ .5 ⁶		
	 – a player while connected to an external amplifier that does not allow the user to walk around while 	White white white	mur mur		
	in use.	St. A. At	at at		
	- when we are a set offer offer	allet intreasonite of	min white		
	For equipment that is clearly designed or intended primarily for use by children, the limits of the	m. m. a.	A At		
	relevant toy standards may apply.	ster ster aller in	The WELL WI		
	The relevant construction of the second second	an an an	s. A. A		
	The relevant requirements are given in EN 71-1:2011, 4.20 and the related tests methods	at the till all	Int's white		
	and measurement distances apply.	mer mer m			
10.6.1.2	Non-ionizing radiation from radio frequencies in the range 0 to 300 GHz	INTER WATER WATER	N/A		
	The amount of non-ionizing radiation is regulated	su et et	de de		
	by European Council Recommendation 1999/519/EC of 12 July 1999 on the limitation of	SLIEV MUTER MAILE N	nr. mr. n		
	exposure of the general public to electromagnetic	1. In A. A	at at		
	fields (0 Hz to 300 GHz).	set stret stret out	in nor whi		
	For intentional radiators, ICNIRP guidelines should be taken into account for Limiting Exposure to	the an an			
	Time-Varying Electric, Magnetic, and	+ let set se	MUT MUTE		
	Electromagnetic Fields (up to 300 GHz). For hand-	white white white	20 20		
	held and body mounted devices, attention is drawn to EN 50360 and EN 50566.	A A A	10 50 C		



Page 40 of 69

EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
all'	M M S S S	et and a state of the second	no m	
10.6.2	Classification of devices without the capacity to	o estimate sound dose	N/A	
10.6.2.1	General	Not such equipment	N/A	
EX WALTER	This standard is transitioning from short-term based (30 s) requirements to long-term based (40 hour) requirements. These clauses remain in effect only for devices that do not comply with sound dose estimation as stipulated in EN 50332- 3.	AND WATER MALIER WALTER	sunt ex sunt	
	For classifying the acoustic output $L_{Aeq,T}$, measurements are based on the A-weighted equivalent sound pressure level over a 30 s period.	Whitek whitek whitek w	NUTE SMILLE	
	For music where the average sound pressure (long term $LAeq, \tau$) measured over the duration of	ret stet stret wire	- Intret with	
	the song is lower than the average produced by the programme simulation noise, measurements may be done over the duration of the complete song. In this case, <i>T</i> becomes the duration of the song.	A WALTER WALTER WALTER	aniset anti	
MALA MALE	NOTE Classical music, acoustic music and broadcast typically has an average sound pressure (long term <i>L</i> Aeq, <i>T</i>) which is much lower than the average programme simulation noise. Therefore, if the player is capable to analyse the content and compare it with the programme simulation noise, the warning does not need to be given as long as the average sound pressure of the song does not exceed the required limit. For example, if the player is set with the programme simulation noise to 85 dB, but the average music level of the song is only 65 dB, there is no need to give a warning or ask an acknowledgement as long as the average sound level of the song is not above the basic limit of 85 dB.	white white white white	et surret s	
10.6.2.2	RS1 limits (to be superseded, see 10.6.3.2)	The sure miret and	N/A	
	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	PITET WALLEY WALTER WALTE	" W ^{LIFEK} W	
	device, or where the combination of player and listening device is known by other means such as setting or automatic detection, the $LAeq, \tau$ acoustic output shall be ≤ 85 dB when playing the fixed "programme simulation noise" described in EN	whitek whitek whitek	NITE MALTER	
	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	Inter white white white	WALTER WA	
	≤ 27 mV (analogue interface) or -25 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	et anitet wattet anitet	untif & junit	
	- The RS1 limits will be updated for all devices as per 10.6.3.2.	i i it	at at	

Page 41 of 69



EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
sur	W W I I I I I I I	and the work's white	me m	
10.6.2.3	RS2 limits (to be superseded, see 10.6.3.3)	Tet wiret wiret w	N/A	
	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 $LAeq, \tau$ acoustic output shall be $\leq 100 \text{ dB}(A)$ when playing the fixed "programme simulation noise" as described in EN 50332-1. – for equipment provided with a standardized	and win on on or	et whitet white	
Fek whitek	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.	and whitek whitek white	et worther wo	
10.6.2.4	RS3 limits	m. m. m.	N/A	
	RS3 is a class 3 acoustic energy source that exceeds RS2 limits.	Whitek MALTER SMILLER W	NUTER WALTE	
10.6.3	Classification of devices (new)			
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)	- m - m - m	N/A	
NATES NA	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 <i>L</i> Aeq, <i>T</i> acoustic output 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 voltage shall be ≤ 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	and set and se		
10.6.3.3	RS2 limits (new)	MALTE MALL WALL	√\`\N/A	
	RS2 is a class 2 acoustic energy source that does not exceed the following: – for equipment provided as a package (player	MUTER MALTER MALTER W	NITEK WALTER	

Page 42 of 69



Clause	Requirement – Test	Result – Remark	Verdict
	Requirement – Test	Result – Remark	Verdici
Superiet and	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 \leq 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 \leq 15 mV (analogue interface) or -30 dBFS (digital interface) when playing the fixed "programme simulation noise" described in EN 50332-1.	and an an and an an and an	
10.6.4	Requirements for maximum sound exposure	the water water when	N/A
10.6.4.1	All volume controls shall be turned to maximum during tests. Measurements shall be made in accordance with		N/A
10.6.4.2	EN 50332-1 or EN 50332-2 as applicable. Protection of persons	the state of	N/A
	 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 	Te vontret vontret vontret	whitek white
	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.	united waited waited waite	et waret war
	The elements of the instructional safeguard shall be as follows:	whitet positet positet	WITE WALTER
	- element 1a: the symbol , IEC 60417- 6044 (2011-01) - element 2: "High sound pressure" or equivalent wording	ALTER MALTER MALTER MA	No Tet W
	 – element 3: "Hearing damage risk" or equivalent wording – element 4: "Do not listen at high volume levels for long periods." or equivalent wording 	t antifet annifet antifet	white shirt
	for long portous. or equivalent working		



Page 43 of 69

EN IEC 62368-1				
Clause	Requirement – Test Result – Remark			
WALTER WALT	 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. 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 cumulative listening time. NOTE 2 Examples of means include visual or audible signals. Action from the user is always needed. 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. 		AND	
10.6.5	exposed to RS3. Requirements for dose-based systems	AND THE WALTER WALTE WE	N/A	
10.6.5.1	General requirements	Not such equipment	N/A	
	 Personal music players shall give the warnings as provided below when tested according to EN 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 configuration. The personal music player shall be supplied with 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 	s to y wish ers to ir s. If strator all be ific with of the d, and be antly		
10.6.5.2	races, etc. Dose-based warning and requirements	t alt alt alt	N/A	
WALTER W	When a dose of 100 % <i>CSD</i> is reached, and at least at every 100 % further increase of <i>CSD</i> , the device shall warn the user and require an	WALL WALL AND THE MALTER AND	TEX WALTER	



Page 44 of 69

	EN IEC 62368-1	the antit wat wat	
Clause	Requirement – Test	Result – Remark	Verdict
SUPER SU	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 % <i>CSD</i> leads to the risk of hearing damage or loss.	antifet antifet antifet ant	NUTER SPATE
0.6.5.3	Exposure-based requirements	at let set se	N/A
	 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 	eed l80 3. s to for its s	
WALTER W	150 mV for an analogue interface and no more than -10 dBFS for a digital interface. NOTE In case the source is known not to be music (or test signal), the EL may be disabled.	WALTER WALTER WALTER	white white
10.6.6	Requirements for listening devices (headphone	s, earphones, etc.)	P
10.6.6.1	 Corded listening devices with analogue input With 94 dB <i>L</i>Aeq acoustic 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 like equalization, etc.) set to the combination of positions that maximize the measured acoustic 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. 	Not such equipment	N/A
10.6.6.2	Corded listening devices with digital input 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	MALIER WALLER WALLER	N/A



Page 45 of 69

EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
whitek w	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.	antifet white white	anitet anitet	
10.6.6.3	Cordless listening devicesIn cordless mode,- with any playing and transmitting device playingthe fixed programme simulation noise described inEN 50332-1; and- respecting the cordless transmission standards,where an air interface standard exists thatspecifies the equivalent acoustic level; and- with volume and sound settings in the receivingdevice (for example, built-in volume level control,additional sound features like equalization, etc.)set to the combination of positions that maximizethe measured acoustic output for the abovementioned programme simulation noise, the LAeq, Tacoustic output of the listening device shall be \$100 dB with an input signal of -10 dBFS.	white white white		
10.6.6.4	Measurement method Measurements shall be made in accordance with	white white white	P	
3	EN 50332-2 as applicable. Modification to the whole document		P	



R

2

Reference No.: WTF23D10227078Y

Page 46 of 69

		24	4	EN I	EC 62368-1	Jen Mile N	mer white we	2 m
use	Re	equirement -	- Test	when	20. 20.	Result – Rema	ark	Verdict
m .	en.	<i>u.</i> .		<u></u>	5 ¹⁰ 5 ¹⁰	The second	in which which	-m.
	De list		"country" note	s in the refe	rence docur	nent according	to the following	P
	0-	0.2.1	Note 1 and 2	1	Note 4 and 5	5 3.3.8.1	Note 2	A
		3.3.8.3	Note 1	4.1.15	Note	4.7.3	Note 1 and 2	W. W
	-54	5.2.2.2	Note	5.4.2.3.2.2 Table 12	Note c	5.4.2.3.2.4	Note 1 and 3	et whi
	w.L.T	5.4.2.3.2.4 Table 13	Note 2	5.4.2.5	Note 2	5.4.5.1	Note	WALTER
	564	5.4.10.2.1	Note	5.4.10.2.2	Note	5.4.10.2.3	Note	UNLIEK .
	*	5.5.2.1	Note	5.5.6	Note	5.6.4.2.1	Note 2 and 3 and 4	JEX
		5.6.8	Note 2	5.7.6	Note	5.7.7.1	Note 1 and Note 2	et unit
	1254	8.5.4.2.3	Note	10.2.1 Table 39	Note 3 and 4 and 5	4 10.5.3	Note 2	WALTER
	3	10.6.1	Note 3	F.3.3.6	Note 3	Y.4.1	Note	JTEK .
		Y.4.5	Note					at s
MALIE					15 1	v	the same	in white
	Mo	odification	to Clause 1					P
NUT V	NC ele	ctronic equipm	ing note: of certain substa ent is restricted w			WALTER WAL	WALL WALL	NP Strik
		odification	to 4.Z1					Р
et syntic	AC NC ele 20	Y.4.5 odification to dd the follow DTE Z1 The use actronic equipm 11/65/EU.	Note to Clause 1 ing note: e of certain substa ent is restricted w	ances in electri	cal and	Y.4.1	Note	501



Page 47 of 69

EN IEC 62368-1					
Clause	Requirement – Test	est Result – Remark \			
NA	M N The second s	and the super super super			
	 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 shall be regarded as providing protection in accordance with the rating of the wall socket outlet. 	1 it at at .	N/A		
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: The requirement for interconnection with external circuit is in addition given in EN 50491-3:2009.	No connection to external circuit.	N/A		
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		



Page 48 of 69

24	EN IEC 62368-1	in min white white	In in
Clause	Requirement – Test	Result – Remark	Verdict
10 5 1	Add the following ofter the first paragraph:	WILL'S WILL WILL	N/A
	 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 	and and and an and an and an and an an an and an and an and an and an and an an and an and an	N/A
	 measurement is made. 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 cm², at any point 10 cm from the outer surface of the apparatus. 	and an an and an area	ALTER WALTER
	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	where white white	WALTER WALTER
	taking account of the background level. NOTE Z2 These values appear in Directive 96/29/Euratom of 13 May 1996.	ite water water water	en weite wei
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 Annex ZD.	united waited whited	N/A
10	Modification to Bibliography		P

Page 49 of 69



Clause	Dequirement T	EN IEC 62368-	2 Ju. 2. 2.	1/0
Clause	Requirement – Test	Mr. Mr.	Result – Remark	Verdict
20	Add the following no	tes for the standards indicated	1. Mr. Jun Jun - Mr.	Р
				S SITE
	IEC 60130-9	NOTE Harmonized as EN 60		211.
	IEC 60269-2	NOTE Harmonized as HD 602		1.th
	IEC 60309-1	NOTE Harmonized as EN 603	10.10 Contract and a second process statement of the second se	100
	IEC 60364 IEC 60601-2-4	NOTE some parts harmonized NOTE Harmonized as EN 606		2
	IEC 60664-5	NOTE Harmonized as EN 600		the .
	IEC 61032:1997	NOTE Harmonized as EN 610		r m
	IEC 61508-1	NOTE Harmonized as EN 615		
	IEC 61558-2-1	NOTE Harmonized as EN 61		9° . 5°
	IEC 61558-2-4	NOTE Harmonized as EN 615		-24
	IEC 61558-2-6	NOTE Harmonized as EN 61		
	IEC 61643-1	NOTE Harmonized as EN 616	22 C C C C C C C C C C C C C C C C C C	NUT
	IEC 61643-21	NOTE Harmonized as EN 616		-20
	IEC 61643-311	NOTE Harmonized as EN 616		15
	IEC 61643-321	NOTE Harmonized as EN 616		11 - 1
	IEC 61643-331	NOTE Harmonized as EN 616		
				At a
	1 2m m	t de la companya de l	15 15 15 N	<u>2</u>
11	ADDITION OF ANNE	EXES		P
ZB	ANNEX ZB, SPECIA	L NATIONAL CONDITIONS	(EN) 1	P
	 added: Class I pluggable end connection to other end if safety relies on com if surge suppressors network terminals and marking stating that the connected to an earth The marking text in the be as follows: In Denmark: "Apparate stikkontakt med jord as stikproppens jord." In Finland: "Laite on varustettuun pistorass in Norway: "Apparate stikkontakt" 	atets stikprop skal tilsluttes en som giver forbindelse til ane applicable countries shall be applicable of tilsluttes en som giver forbindelse til liitettävä suojakoskettimilla iaan" et må tilkoples jordet	Set white white white white	NITEX NATE
4.7.3	United Kingdom	et outer woute woute	1 mar all w	N/A
JIII VINLI		oclause the following is	aret waiter waiter waiter w	
	complying with BS 13	rformed using a socket-outlet 863, and the plug part shall be vant clauses of BS 1363. Also	and and an a	Set would



Page 50 of 69

	EN IEC 62368-1	in and any and	10. 0.
Clause	Requirement – Test	Result – Remark	Verdict
in in		et aller which which we	Ver alle
5.2.2.2	Denmark 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.	No high touch current measured.	N/A
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:		
	For separation of the telecommunication network from earth the following is applicable:	white white white wh	et uter
	If this insulation is solid, including insulation forming part of a component, it shall at least consist of either	anter white white white	wherek wh
	• two layers of thin sheet material, each of which shall pass the electric strength test below, or	t ret ret with	NUTEX INIT
	 one layer having a distance through insulation of at least 0,4 mm, which shall pass the electric strength test below. 	white with white	Set white
	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 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	where white white white	would would
	• 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 white	WITEK W
	and	at that stat what	NUTEX MIL
	 is subject to routine testing for electric strength during manufacturing, using a test voltage of 1,5 kV. 	white white white	TEN WALTER
	It is permitted to bridge this insulation with a capacitor complying with EN 60384-14:2005, subclass Y2.	MITER MAILER MAILER MAILE	* vourex v
	A capacitor classified Y3 according to EN 60384- 14:2005, may bridge this insulation under the following conditions:	tet whitet white white	NIT MILIT
	 the insulation requirements are satisfied by having a capacitor classified Y3 as defined by EN 60384-14, which in addition to the Y3 	white white with a	iet whitet



Page 51 of 69

- all	EN IEC 62368-	the men white white	an an
Clause	Requirement – Test	Result – Remark	Verdict
NALITER ON	 testing, is tested with an impulse test of 2,5 kV defined in 5.4.11; the additional testing shall be performed on all the test specimens as described in EN 60384-14; 	antifet antifet antifet anti	NITER WALTER
et yunires	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.	ance test in EN 60384-14, in the	
5.5.2.1	Norway After the 3rd paragraph the following is added: Due to the IT power system used, capacitors are required to be rated for the applicable line-to-line voltage (230 V).	WALTER WALTER WALTER	N/A
5.5.6	Finland, Norway and Sweden To the end of the subclause the following is added: 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.	No such resistors.	N/A
	Denmark Add to the end of the subclause Due to many existing installations where the socket-outlets can be protected with fuses with higher rating than the rating of the socket-outlets the protection for pluggable equipment type A shall be an integral part of the equipment. Justification: In Denmark an existing 13 A socket outlet can be protected by a 20 A fuse.	No such equipment.	N/A
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.	Fortet whitet whitet white	N/A
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.	WALTER WALTER WALTER	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 would would would	N/A



Reference No.: WTF23D10227078Y

Page 52 of 69

0	EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict		
5.6.8	Norway	white white white	Р		
	To the end of the subclause the following is added: Equipment connected with an earthed mains plug	MUTER WATER MALTER	MUTER WALTER		
EX UNITED	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.	I LIFE WALTER WATER WA	et and et and		
5.7.6	Denmark de de ser ser ser	when the sec	P		
	To the end of the subclause the following is added:	WALTER WALTER WALTER	white white		
INLIER M	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.	united united whited w	MITER WALTER		
5.7.6.2	Denmark	JER NUTER MUTE WI	Pol		
	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	antiet antiet untie	t whitet whit		
	protective current exceed the limits of 3,5 mA .	A A At	18 .5 ⁶		
5.7.7.1	Norway and Sweden	Not such system.	N/A		
	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.	antifet whitet white	et waster water		
	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.	united anited antited an	Inter anti-		
	The user manual shall then have the following or similar information in Norwegian and Swedish language respectively, depending on in what country the equipment is intended to be used in:	at white white white	et warder war		
	"Apparatus connected to the protective earthing of the building installation through the mains	white white white	where where		
	connection or through other apparatus with a connection to protective earthing – and to a television distribution system using	and whit whit we	ret minet an		
	coaxial cable, may in some circumstances create a fire hazard. Connection to a television	and the second	the second se		
	distribution system therefore has to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)"	et whitet whitet white	WALT SHALL		
	NOTE In Norway, due to regulation for CATV-installations, and	all mill and	ne m		



Page 53 of 69

- S.	EN IEC 62368-1	in the sure sure s	1 - N.
Clause	Requirement – Test	Result – Remark	Verdict
. dr	N W SU	and the second second	- m
whitek w	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.	NUTER AND SALES AND STREET AND IT	* whitek
	Translation to Norwegian (the Swedish text will also be accepted in Norway):	where the sentral white	Whitek w
	 "Apparater som er koplet til beskyttelsesjord via nettplugg og/eller via annet jordtilkoplet utstyr – og er tilkoplet et koaksialbasert kabel-TV nett, kan forårsake brannfare. For å unngå dette skal det ved tilkopling av apparater til kabel-TV nett installeres en galvanisk isolator mellom apparatet og kabel-TV nettet." 	at white white white whi	E WALTE
	Translation to Swedish: "Apparater som är kopplad till skyddsjord via jordat vägguttag och/eller via annan utrustning och samtidigt är kopplad till kabel-TV nät kan i vissa fall medfőra risk főr brand. Főr att undvika detta skall vid anslutning av apparaten till kabel-TV nät galvanisk isolator finnas mellan apparaten och kabel-TV nätet."	and the superior superior superior	WALTER WI
8.5.4.2.3	United Kingdom	No external circuits.	N/A
	Add the following after the 2 nd dash bullet in 3 rd paragraph: 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.	and the south souther and	WALLEX W
B.3.1 and	Ireland and United Kingdom	Not directly connected to the	N/A
B.4	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		SULTER SUL
G.4.2	Denmark	Not directly connected to the	N/A
	 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 	mains	NUNTER SUP



Page 54 of 69

24.	EN IEC 62368-1	the share show a	n. co
Clause	Requirement – Test	Result – Remark	Verdict
WALTER W	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	antifet antifet antifet antifet	WINLIEK WINLIEK
	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.	et white white white	No Et MAN
	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.	Whitek whitek whitek white	IE WALTER
	Other current rating socket outlets shall be in compliance with Standard Sheet DKA 1-3a or DKA 1-1c.	aret whitet whitet whitet	IN JEK W
	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	WAITER WAITER WAITER WAITE	er white
NUTEX MAI	<i>Justification:</i> Heavy Current Regulations, Section 6c	at white white	WALTER V
G.4.2	United KingdomTo the end of the subclause the following is	Not directly connected to the mains	N/A
	added:	and when when when a	
MALTER MA	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.	whitek whitek whitek white	re wours t wourst wourset
G.7.1	United Kingdom	at the the states a	N/A
	To the first paragraph the following is added: 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.	Mainet and and and an	er vuniter vniter niter
	NOTE "Standard plug" is defined in SI 1768:1994 and essentially means an approved plug conforming to BS 1363 or an approved conversion plug.	et whitet whitet whitet wh	Jan Walt

Page 55 of 69



EN IEC 62368-1				
Clause	Requirement – Test	Result – Remark	Verdict	
str	an an a star star star star	and the south south south	-201-	
G.7.1	Ireland 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	and set and set and set and set	N/A	
G.7.2	Ireland and United KingdomTo the first paragraph the following is added:A power supply cord with a conductor of 1,25 mm²is allowed for equipment which is rated over 10 Aand up to and including 13 A.	white white white white	N/A	
zc	ANNEX ZC, NATIONAL DEVIATIONS (EN)		N/A	
10.5.2	GermanyThe 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.Justification: German ministerial decree against ionizing radiation (Röntgenverordnung), in force since 2002-07-01, implementing the European Directive 96/29/EURATOM.NOTE Contact address: Physikalisch-Technische Bundesanstalt, Bundesallee 100, D- 38116 Braunschweig,	No CRT within the equipment.	N/A	
	Tel.: Int+49-531-592-6320, Internet: http://www.ptb.de			



Page 56 of 69

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

Type of flexible cord	Code de	esignations
	IEC	CENELEC
PVC insulated cords		
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	(s.,	10.
Rubber insulated and sheathed cord	60245 IEC 86	H03RR-H
Rubber insulated, crosslinked PVC sheathed cord	60245 IEC 87	H03RV4-H
Crosslinked PVC insulated and sheathed cord	60245 IEC 88	H03V4V4-H
Cords insulated and sheathed with halogen- free therm oplastic 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-

Waltek Testing Group Co., Ltd. http://www.waltek.com.cn



Page 57 of 69

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

5.2	TABLE: Classificati	on of electrical er	nergy source	es		the setting	P
Supply Voltage	Location (e.g.	Test conditions		Parame	ters		ES Class
	designation)		U (V)	l (mA)	Type ¹⁾	Additional Info ²⁾	Class
mr m	The EUT is	Normal	<60Vdc	1 - 15	SS	DC	ES1
	designed to be supplied by USB type-C port	Abnormal	unit un	an an a	n		MALTER
		Single fault – SC/OC	JIE NI	* Intret out	iret-	et whiter.	
4.2VDC	The EUT is	Normal	<60Vdc	π.	SS	DC	ES1
	designed to be supplied by	Abnormal	Set	white whi	242	m. m	
	Internal Li-ion battery	Single fault – SC/OC		UN THE	. N. Tet	Intret MIL	

Supplementary 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.

3) Test Conditions:

Normal –Full load and no load.

Abnormal - Overload output

SC= short circuit; OC= open circuit

5.4.1.8 TABLE: Working	g voltage measu	rement				et j	N/A
Location	-		eak voltage Frequency (V) (Hz)		Comments		
- Mer an an a		et . 54 . 5	et intre in	STE .	when	m.	an.
- let set ster al	anti- m	20 20.		A	de		Set.

5.4.1.10.2	TABLE: Vicat soft	ening temperature of thermo	plastics		o∽ N/A o
Method			: ISO 306 / B50	mer me	
Object/ Par	t No./Material	Manufacturer/trademark	Thickness (mm)	T softer	ing (°C)
-m n	i i i	at the states	St. MALL - WALL V	ur m.	20. 1
Supplemen	tary information:				

5.4.1.10.3	TABLE: Ball	pressure test of thermopla	stics	5 ⁶⁷ . N	NITE WALT WAT	-m	N/A
Allowed imp	pression diame	ter (mm)	:	≤ 2 m	m	6 5	
Object/Part	No./Material	Manufacturer/trademark	Thickness	; (mm)	Test temperature (°C)	Impi diame	ression ter (mm)



Reference No.: WTF23D10227078Y Page 58 of 69

Requirement – Test	Result – Remark	Verdict
	Requirement – Test	Requirement – Test Result – Remark

Supplementary information:

5.4.2, 5.4.3 TABLE: Minimum	Clearan	ces/Cre	epage o	listance	-2m	200		N/A
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 white whe	m.	20.			14-		et Jule	NULL

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	distance through insu	lation		n n	N/A
Distance tł (DTI) at/of	nrough insulation	Peak voltage (V)	Insulation*	Required DTI (mm)	Mea	asured DTI (mm)
- 4	10t . 50t . 55	Multer while whi	m m	t	d	- 1
Supplemer	ntary information:					

*See also sub-clause 5.4.4.9

5.4.4.9 TABLE: Solid in	nsulation at	t frequencies	>30 kHz			N/A
Insulation material	E _P	Frequency (kHz)	K _R	Thickness d (mm)	Insulation	V _{PW} (Vpk)
- white white white w	- m			10t . 50	- NUTER OF	Se mar
Supplementary information:						

5.4.9	TABLE: Electric strength tests	s at at	Tet Jet all	N/A
Test voltage	applied between:	Voltage shape (Surge, Impulse, AC, DC, etc.)	Test voltage (V)	Breakdown Yes / No
Functional:	Tet stret outer water water	me m m	i it it	at at
-m. m	and an an an at	- Jet Jet mit	- min main a	U. M. A
Basic/supple	ementary:	Mr. M. D.	t it	et et a
the me	with the state of the	The sufer while	This was way	m. m.
Reinforced:	NITER MUTE WALL WALL WAL	h. The A.	at at A	t stat with
- 20-	The set of the st	2 miles while w	the way	nu - m
Routine Tes	sts:	, , , , t	at at set	STEP NUTER
- 10 2	at it is the set	- INTER WALT WAT	- m. m.	64
Supplement	tary information:			



Page 59 of 69

-20.		EN IEC 62368-1	24. 4.
Clause	Requirement – Test	Result – Remark	Verdict

5.5.2.2 TABL	E: Stored discharge o	on capacitors			N/A
Location	Supply voltage (V)	Operating and fault condition ¹⁾	Switch position	Measured voltage (Vpk)	ES Class
m - m		Normal	JET JET	Will Have .	me -m
Multer Multer	N JE WALL WALL	Single fault: SC/ OC	et steet as	Set Tet	LIEK - INNLIEK

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	f protective conduc	ctors and terminat	ions	N/A
Location		Test current (A)	Duration (min)	Voltage drop (V)	Resistance (Ω)
		the set of the	Mart - Mater y	un the w	
Suppleme	ntary information:				

5.7.4	TABLE: Unearthed access	sible parts				N/A
Location	Operating and fault	Supply	Parameters			ES class
	conditions	Voltage (V)	Voltage (V _{rms} or V _{pk})	Current (A _{rms} or A _{pk})	Freq. (Hz)	
The she	Normal	1+ 1+		Intre- Intre	with .	m- n
at the	Abnormal	NUT AUT	an - m			10- 1
	Single fault: SC/OC	1 - At	Set -Set	NUTE ON UNE S	1 - m	~-m
Suppleme	ntary information:				1	
SC= short	circuit; OC= open circuit	, At ,	et set a	TE ALL IN	in the	w.

5.7.5	TABLE: Earthed acces	sible conductive part	sible conductive part				
Supply vol	tage (V)		A It	let set			
Phase(s)		[] Single Phase; [] Three	Phase: [] Delta	[]Wye			
Power Dist	ribution System	[] TN []TT [] IT	a de a	at at a			
Location		Fault Condition No in IEC 60990 clause 6.2.2	Touch current (mA)	Commer	t		
- John J	with my me	x - x 1	<u></u>	and a star	- Maria		
Supplemer	ntary Information:		·				



Reference No.: WTF23D10227078Y Page 60 of 69

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

5.8	TABLE	ABLE: Backfeed safeguard in battery backed up supplies							
		Supply voltage (V)	Operating and fault condition	Time (s)	Open-circuit voltage (V)	Touch current (A)	ES Class		
the spin	Maria	m. m		1 5 - 1	et - the	Jet - NJE	white wh		
Supplement	tary infor	mation:	· · · · · · · ·						

6.2.2	TABLE: Power source	e circuit classif	ications			P
Location	Operating and fault condition	Voltage (V)	Current (A)	Max. Power ¹⁾ (W)	Time (S)	PS class
For charging	base:	LITER WAL	mer me	24	Se and	ste
Battery	Output pin + to -	2.71	3.42	9.3	3S	PS1 N
Battery boa	ard Signal fault (U1 Pin 1-3 SC)	0*	0****	0*	3S	PS1
For earbuds:		it it	SUTER INLIE	mar mar	mr m	24
Battery	Output pin + to -	2.67	0.56	1.5	3S	PS1
Battery board Signal fau (U4 Pin 1-3		0*	0*	0*	3S	PS1
Supplementa	ary information:					
1) Measured	: SC= short circuit; OC= after 3 s for PS1 and m own immediately, recove	easured after 5		PS3.	whitek	uniter pint

6.2.3.1	1 TABLE: Determination of Arcing PIS						
Location		Open circuit voltage after 3 s (Vpk)	Measured r.m.s current (A)	Arcing PIS? Yes / No			
The w	the second second	1 - 1t J	at mile white	men and m	. m. 1		
Suppleme	ntary information:						
24		at at 5th	STE MEN	NE. MAY MAY	In in		

6.2.3.2	TABLE: Determ	ABLE: Determination of resistive PIS							m	N/A
Location		Operating	erating and fault condition			Dis	Dissipate power (W)			cing PIS? ′es / No
	1. A. A.	4 At		- NUT	- Maria	m	24 - 1	$n \sim s$		

Supplementary information:

All circuits are considered as resistive PIS;

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

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

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



Reference No.: WTF23D10227078Y

Г

Page 61 of 69

100		EN IEC 62368-1	24. 4.
Clause	Requirement – Test	Result – Remark	Verdict

8.5.5	TABLE: High	pressure lamp	sur sur un	a A	N/A
Lamp manu	ufacturer	Lamp type	Explosion method	Longest axis of glass particle (mm)	Particle found beyond 1 m Yes / No
- 20	1 1	- the set is	TEX - MULTE MALL MA	n m m	
Supplemen	tary information:				

9.6	TABL	E: Temper	rature mea	surement	s for wirel	ess power	transmitte	ers	N/A
Supply vol	tage (V)				4	L At	st.	5th .5	
Max. trans	mit powe	er of transr	nitter (W)	·	TE WALTE	when	men m	-24	
							with receiver and at distance of 2 mm		eiver and at ce of 5 mm
Foreign o	objects	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)	Object (°C)	Ambient (°C)
	At	55- 5	6	JAN .	m - m			15-	at -at

5.4.1.4, 9.3, B.1.5,	TABLE: Temperature measure	ments			State of	et P
B.2.6	and the state				mr m	
Supply volta	age (V):	Condition 1: (5.0VDC ⁾):	Tet MITE	and the set	LIEK - NUTER	_
Ambient ter	mperature during test <i>T</i> _{amb} (°C):	See below		T.	st - 15	
Maximum n part/at:	neasured temperature <i>T</i> of		T (°	C)		Allowed <i>T</i> _{max} (°C)
DC input te	rminal (Charging base)	44.6	write wr	-4 ⁿ ~	m m	Ref.
PCB near D	05 (Charging base)	49.4		* - 5	JEt- JE	105
PCB near L	I3 (Charging base)	56.9	men - me	m 1		105
Battery bod	y (Charging base)	41.8	s - s	5 ⁴⁴ - 5	Set The	45
Plastic encl	osure inside (Charging base)	44.5	- 4° -	m m		Ref.
PCB near D	01 (Earbuds)	46.0	+ et	5 ⁶⁴ 5 ⁶	NATE N	105
PCB near L	J1 (Earbuds)	47.7	n n		T	105
Battery bod	y (Earbuds)	40.4	<u></u>	Set	mer me	45
Plastic enclosure inside near battery (Earbuds)		43.3	m. n		10 - 10	Ref.
Ambient		35.0	NUTER MULL	w - w	2 <u>- 2</u> h.	20
Plastic encl (Charging b	osure outside near battery base)	31.8	at - at	5 ⁴ - 5	et niret	77



Reference No.: WTF23D10227078Y	
--------------------------------	--

Page 62 of 69

				EN IEC 6236	68-1			
Clause	Requirement	– Test	in al	Result – Remark V				
silve	m m			s to	Str. St	IL THE	the share	n
Plastic en (Earbuds)	closure outside r	ear battery	Er while	31.5			et - et	48
Ambient				25.0	Sec. JT-LIC .	with - with	20th	- m
Supply vo	ltage (V)		:	Condition 2 (4.2VDC):	- Stret	LIEK NUTER	whitek v	n _
Ambient te	emperature durin	g test T _{amb}	(°C):	See below		A-		. —
Maximum measured temperature <i>T</i> of part/at:				<i>Τ</i> (°C)				
PCB near D1 (Earbuds)				39.5	LI JOL	m. m	-10	105
PCB near	U1 (Earbuds)	in men	m	40.2	* -*	.d5	5	105
Battery bo	dy (Earbuds)	t st	Set	37.9	1 <u>1</u> 1	1n		Ref.
Plastic en (Earbuds)	closure inside ne	ar battery	sur-	37.9	JAT IN	Jet Juliet	white w	Ref.
Ambient			NUT N	35.0	10 2.		A	at - 1
Plastic en (Earbuds)	closure outside r	ear battery	et e	27.0	INLIET-WILLE	in the		48
Ambient	MUTER WALTE V	wer when	m	25.0	* - #	A S	et the	
Temperatu winding:	ure T of	t ₁ (°C)	R ₁ (Ω)) t ₂ (°C)	R ₂ (Ω)	T (°C)	Allowed T _{max} (°C)	Insulatio n class
the che		7		- 1° - 1			J - 10	12 - 2h

Supplementary information:

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

Note 1: ¹⁾ Supplied by DC source. ²⁾ Measured battery voltage and current for charging case and/or bluetooth headset.

Note 2: The apparatus was submitted and evaluated for maximum manufacturer's recommended ambient (Tma) of 35°C.

Note 3: The temperatures were measured under the worse case normal mode defined in clause B.2.1. Condition 1: Empty battery of earbuds together with empty battery of charging base were charged by USB type-C.

Condition 2: Normal operation, fully charged battery of earbuds operated under max. volume.

B.2.5	TABL	E: Input te	est					P			
U (V)	Hz	I (A)	I rated (A)	P (W)	P rated (W)	Fuse No	I fuse (A)	Condition/status			
5V	505 <u>-</u>	0.305	WT LIT	1.22	NUTER .	Ni et	Whitek	Empty battery of earbuds togetl with empty battery of charging b were charged by USB type-C.			
LIEK WALTER	whit		WALL	NIT	Alt .	set .	JEX .	Battery charging current of charging base: 0.305A.			
at muret	NUTER		NUTER W	in w	Nr. WA	- 14) 	* *	Battery charging current of earbuds: 0.025A.			



V

S

Reference No.: WTF23D10227078Y

Page 63 of 69

	EN IEC 62368-1							
Verdict	Clause Requirement – Test							
	Clause Requirement – Test							

4.2 (fully charged	(# ** - 3	0.074	VINIT	0.303	- 40°	- SAN - SAN EX	- 20 Minel	Empty battery of earbuds were charged by fully charged battery of charging base.
battery of	- m	SEX WALTE	white	white	white			Battery charging current of earbuds: 0.025A.
charging base)	NUTE	t initet	NUTEX	ster s	NUTER W		n	Battery discharging current of charging base: 0.074A.
4.2 (fully	STER.	0.025	LIEK-	0.105	SEK - MAL	- Juni		Normal operation, fully charged battery of earbuds operated under max.volume.
charged battery of earbuds)	ex-sul	strek whit	ex white	WALTE	White		WAL .	Battery discharging current of earbuds: 0.025A.

1) Supplied by DC source. ²⁾ Measured battery voltage and current for charging base and/or earbuds. The maximum measured current under rated voltage did not exceed 110% of the rated current.

2) For charging base: Max. charge current by manufacturer: 0.32A, Max. discharge current by manufacturer: 0.32A. For earbuds: Max. charge current by manufacturer: 0.025A, Max. discharge current by manufacturer: 0.025A.

B.3, B.4	TABLE: Abnorr	nal operatin	g and fau	It conditi	ion tes	sts	m. m. m.	Р
Ambient terr	perature T _{amb} (°	C)			:	See b	pelow	_
Power sourc	e for EUT: Man	ufacturer, mo	del/type, o	outputratir	ng :		t at	
Component No.	Condition	Supply voltage (V)	Test time	Fuse no.		ise nt (A)	Observation	
Empty batte	ry of earbuds to	gether with er	npty batte	ery of chai	rging b	ase w	ere charged by USB type-	·C.
U3 pin 9-14 (charging base)	Short circuit	5VDC	10mins	nes - w	ex wnit	un Lifet et	Unit working normally. N damage, no hazard. Battery charging current charging base: 0.187A. Battery charging current earbuds: 0.008A.	of
C10 (charging base)	Short circuit	5VDC	10mins	Martinet wo	Intres Inter X	where where where where	Unit shut down immediat damage, no hazard. Recoverable. Battery charging current charging base: 0.00A. Battery charging current earbuds: 0.00A.	of
U1 pin 1-5 (charging base)	Short circuit	5VDC	10mins	WALTER NUTER	SULTE SULTE	VNN VNN VNLTE	Unit normally working. N damage, no hazard. Battery charging current charging base: 0.073A. Battery charging current earbuds: 0.008A.	of which
D5 (charging	Short circuit	5VDC	10mins	STERT AN		Lifet.	Unit normally working. N damage, no hazard.	0

Waltek Testing Group Co., Ltd. http://www.waltek.com.cn



Page 64 of 69

24	See. 1	de la	EN	IEC 62368	8-1	white white	In In		
Clause	Requirement – Test				Result – Remark Verc				
an a	h. 10. 2.			Alt .	Str. St	Inter apple	mer and		
base)	ret waiter was	Son the son	SUNJEC .	ne vi	et whitet	Battery charging charging base: 0 Battery charging earbuds: 0.008A).075A. current of		
Normal oper	ration, fully charg	ed battery c	of earbuds o	perated u	inder max.v	olume. 🔪 📣			
Speaker (Earbuds)	Short circuit	4.2VDC	10mins	untret of	Milet whi	Speaker stop wo damage, no haz Battery discharg earbuds: 0.005A	ard. ing current of		
Speaker	Max. available output power	4.2VDC	10mins	NTTER NO	WALTER WALT	Normal operatio battery of earbuds opera max.volume. temperature rise 5.4.1.4, 9.3, B.1 Battery discharg earbuds: 0.025A.	ated under see table .5, B.2.6.		
P+ to P- (Earbuds)	Short circuit	4.2VDC	10mins	110 1115 8	et - ret whitet	Unit shut down i damage, no haz Battery discharg earbuds: 0A.	ard.		
B- to P- (Earbuds)	Short circuit	4.2VDC	10mins		UNLIFE WING	Unit normally wo damage, no haz Battery discharg earbuds: 0.025A	ard. ing current of		

Supplementary information:

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) SC: Short-circuited; OL: 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.

4) Limit temperature: Plastic material: 87°C;

For charging base: Max. charge current by manufacturer: 0.32A, Max. discharge current by manufacturer: 0.32A. For earbuds: Max. charge current by manufacturer: 0.025A, Max. discharge current by manufacturer: 0.025A.

M.3	TABLE: Pro	ABLE: Protection circuits for batteries provided within the equipment P							
Is it possible	to install the	battery in a reverse polarity position?:		_					
		Charging							
Equipment S	uipment Specification Voltage (V) Current (A)								
		5VDC	TET WITE WITT - WAL	mer y					



Page 65 of 69

n m		EN IEC 62368-1				
Clause	Requirement – Test	when we we	Result – Remark			

Verdict

				Batter	y specifica	ation			
		Non-recharge	able batteries	Rechargeable batteries					
			Unintentional	(Charging		Discharging	Reverse	
Manufact	urer/tvpe	current (A)	charging current (A)	Voltage	(V) Cur	rent (A)	current (A)	charging current (A	
Dongguan Yifan Electronics Co. Ltd / 502030		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>			4.2 0.32		0.32		
Shenzhen Jin yu zhou Energy Co., Ltd. / 400909		NUTER ANUTER	whitek whi	4.2 0.025		0.025	r _a nt		
Note: The tes	sts of M.3.2 a	are applicable o	nly when abov	e appropr	iate data i	is not av	ailable.		
Specified bat	ttery tempera	ature (ºC)	the set	500			30: 5-45 °C 09: 0-45 °C	11	
Component No.	Fault condition	Charge/ discharge mo	Test de time	Temp. (ºC)	Current (A)	Voltag (V)	e Obs	ervation	
For charging	base (5020	30):	until un	111-	20			at at	
B- to P-	SC	Charge mod	e 7hour	42.5	0.308	4.09	NL, NS, NI	E, NF	
B- to P-	SC	Discharge mo	de 7hour	42.5	0.308	4.09	NL, NS, NI	E, NF	
For earbuds	(400909):			.et	5 ⁰⁰ - 5	57 3	I WALLEY	UNLIER WIT	
B- to P-	SCSC	Charge mod	e 7hour	42.1	0.025	4.06	NL, NS, NI	E, NF	
B- to P-	sc sc	Discharge mo	de 7hour	42.1	0.025	4.09	NL, NS, NI	E, NF	
D= 10 T =								and the second	

no explosion; NF= no emission of flame or expulsion of molten metal.

For charging base: Max. charge current by manufacturer: 0.32A, Max. discharge current by manufacturer: 0.32A. For earbuds: Max. charge current by manufacturer: 0.025A, Max. discharge current by manufacturer: 0.025A.



Page 66 of 69

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

battery	Let Jet	JIE NITE			
Maximum specified	charging voltag		For charging base (502030): 4.2 For bluetooth headset: 4.2		
Maximum specified	charging curre		For charging ba	ase (502030): 0.32 — 00909): 0.025	
Highest specified ch	arging tempera	For charging ba	ase (502030): 45 00909): 45		
Lowest specified ch	arging tempera	JALIE AN	For charging ba		
Battery	Operating		Measureme	ent	Observation
manufacturer/type	and fault condition	Charging Charging voltage (V) current (A) Temp.) (°C)	
Dongguan Yifan Electronics Co. Ltd / 502030	Normal condition	4.09	0.00	47 (>45°C)	Stop charging
	(B P- SC)	4.09	0.00	47 (>45°C)	Stop charging
	Normal condition	4.09	0.183	in sur 5 sur	The charging voltage doe not exceed 4.20V and the charging current does no exceed 0.32A
	(B P- SC)	4.09	0.183	white white	The charging voltage does not exceed 4.2V and the charging current does not exceed 0.32A
Shenzhen Jin yu zhou Energy Co., Ltd. / 400909	Normal condition	4.06	0.00	47 (>45°C)	Stop charging
Liu. / 400909	(B P- SC)	4.06	0.00	47 (>45°C)	Stop charging
	Normal condition	4.06	0.019	NUT ONLY	The charging voltage does not exceed 4.2V and the charging current does not exceed 0.025A
	(B P- SC)	4.06	0.019	U UNITE SU	The charging voltage does not exceed 4.2V and the charging current does not exceed 0.025A

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.

For charging base: Max. charge current by manufacturer: 0.32A, Max. discharge current by manufacturer: 0.32A. For earbuds: Max. charge current by manufacturer: 0.025A, Max. discharge current by manufacturer: 0.025A.



Г

Page 67 of 69

-24		N IEC 62368-1	20. 20
Clause	Requirement – Test	Result – Remark	Verdict

Q.1	TABLE: Circuits intended for interconnection with building wiring (LPS) N/A							
Output Circuit	Condition		Time (s)	I _{sc} (A)		S (VA)		
	Condition	U _{oc} (V)		Meas.	Limit	Meas.	Limit	
er mer	Normal				N 8 N	No.	100	
- 18 A	Single fault - SC/OC	n. <u>-</u> 17	-20		8		100 <	

SC = short circuit, OC = open circuit

T.2, T.3, T.4, T.5	TABLE: Steady force test P							
Location / Part	Material Thickness (mm)		Probe	Force (N)	Test Duration (s)	Observation		
Enclosure (T.4)	Plastics	1.5	· ··	100	5	Enclosure remained intact, no crack/ opening developed		
Enclosure (T.5)	Plastics	UNC 1.5 MIC	e. Mult	250	5	Enclosure remained intact, no crack/ opening developed		

T.6, T.9 T/	ABLE: Impa	ct test		at the set state of Post
Location/Part	Material	Thickness (mm)	Height (mm)	Observation
Enclosure	Plastics	1.5	1300	Enclosure remained intact, no crack/ opening developed. No hazards.
Supplementar	y information	:		

T.7 T.	ABLE: Drop	IESI	20. 2.	
Location/Part	Material	Thickness (mm)	Height (mm)	Observation
Enclosure	Plastics	1.5	1000	Enclosure remained intact, no crack/ opening developed. No hazards.

	T.8	TABLE: Stres	s relief test	mer mer	-me	m m x	+ P_+
4	Location/Part	Material	Thickness (mm)	Oven Temperatur e (°C)	Duration (h)	Observation	



Reference No.: WTF23D10227078Y Page 68 of 69

EN IEC 62368-1							
Clause	Requirement – Test			10	Result – Remark		
in the	h. da		1 A	* 5	the second second	me m	
Enclosure Plastic S		See table 4.1.2	70°C	7h	Enclosure remained cracking/opening dev enclosure joint. No h	veloped in the	
Supplementa	ary information	:					

X	TABLE: Alternative method for determining minimum clearances distances						
	nce distanced etween:	Peak of working voltage (V)	Required cl (mm)	Measure (mm)			
	et set se	netter water water	m. m.	A 15	dit.		
Supplement	ary information:	·					
1. 18	- 10 SP	white white when y	h to a	4 At	jit .		

4.1.2	TABLE: Critical com	oonents informat	ion		P	
Object / part No.	Manufacturer/ trademark	Type / model	Technical data	Standard ²	Mark(s) of conformity ¹	
Speaker for headset	Interchangeable	Interchangeabl e	Max. 5mW, 32±15%ohm, 2Pcs	EN IEC 62368-1	Test with appliance	
Plastic enclosure for charging base	CHI MEI CORPORATION	PA-757(+)	ABS, HB, 80°C, min. thickness 1.5mm	UL 94	UL E56070	
Plastic enclosure for earbuds	CHI MEI CORPORATION	PA-757(+)	ABS, HB, 80°C, min. thickness 1.5mm	UL 94	UL E56070	
All PCB	Interchangeable	Interchangeabl e	Min. V-1, Min. 105°C	UL 796	UL M	
Internal wire	Interchangeable	Interchangeabl e	Min. 30V, min. 80°C, Min. 30AWG, VW-1	UL 758	UL	
Battery lead wire	Interchangeable	Interchangeabl e	Min. 200V, min. 200°C, Min. 30AWG, VW-1	UL 758	UL SUITE	
Internal Li- ion battery (for charging base)	Dongguan Yifan Electronics Co. Ltd	502030	3.7V, 200mAh	IEC 62133-2: 2017 EN 62133-2: 2017	Test Report No.: TCT report no.: TCTTJ202101 09696ZB- BR03	



- CO -

Reference No.: WTF23D10227078Y

Page 69 of 69

Clause	Requirement – Test	White white	Re	Result – Remark		
Internal lithium ion battery (for earbuds)	Shenzhen Jin yu zhou Energy Co., Ltd.	400909	3.7V, 25mAh	IEC 62133-2: 2017; IEC 62133- 2:2017/AMD1:2021 EN 62133-2: 2017; EN 62133- 2:2017/AMD1:2021	Test Report No.: S03A2204020 5L00101	
	ary information: vailable upon request. F	Provided evide	nce ensures the aç	2:2017/AMD1:2021	e. See OD-	

²⁾License available upon request.



C

Page 1 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y

Reference No.: WTF23L





Figure 2: External view for charging base

Waltek Testing Group Co., Ltd. http://www.waltek.com.cn



•

i

5

Page 2 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y



Figure 3: External view for charging base



Figure 4: Internal view for charging base



Page 3 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y



Figure 5: Internal view for charging base



Figure 6: Internal view for charging base



Page 4 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y



Figure 7: Internal view for charging base



Figure 8: Internal view for charging base



Page 5 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y

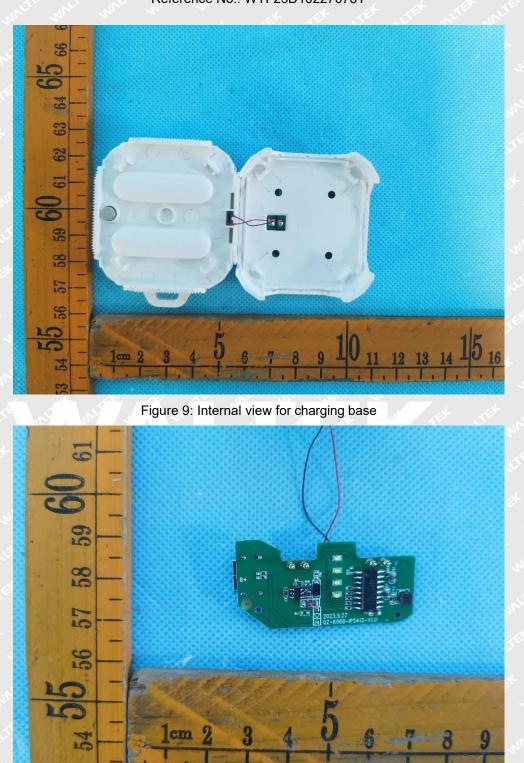


Figure 10: PCB view for charging base

53



Page 6 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y

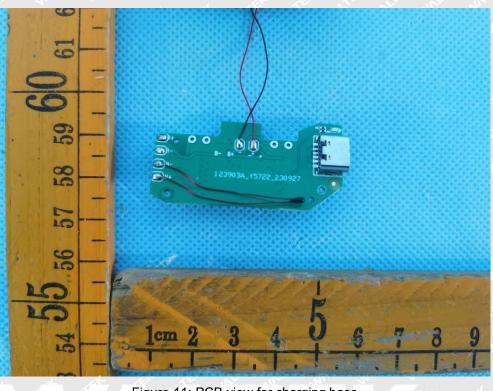


Figure 11: PCB view for charging base

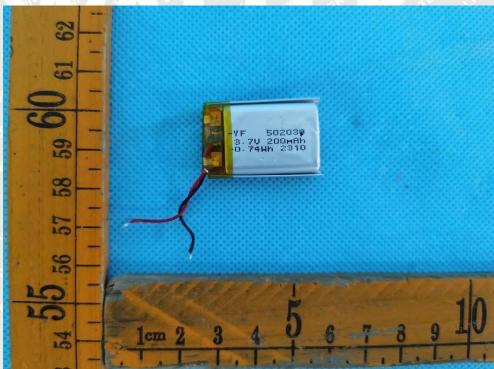


Figure 12: Battery for charging base

Waltek Testing Group Co., Ltd. http://www.waltek.com.cn



.

Page 7 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y



Figure 13: External view for earbuds



Figure 14: External view for earbuds



-D-LLD

Page 8 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y

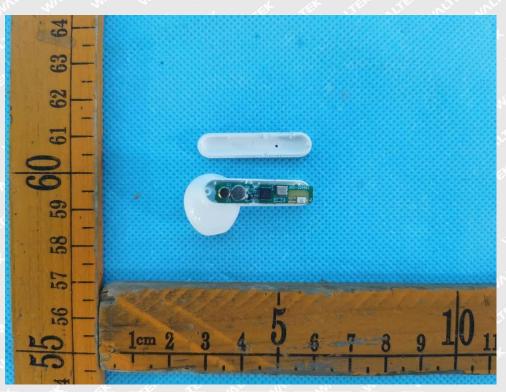


Figure 15: Internal view for earbuds



Figure 16: Internal view for earbuds



Page 9 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y

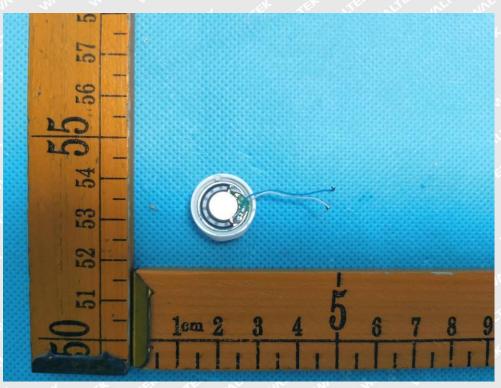


Figure 17: Internal view for earbuds

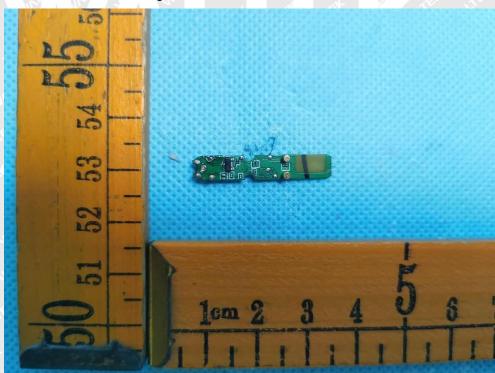


Figure 18: PCB view for earbuds



Page 10 of 10 **Photo Documentation** Reference No.: WTF23D10227078Y

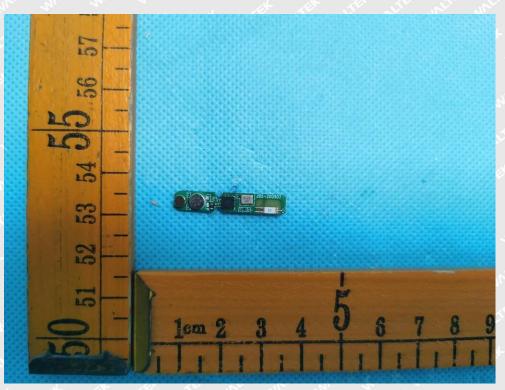


Figure 19: PCB view for earbuds



Figure 20: Battery for earbuds

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

Waltek Testing Group Co., Ltd. http://www.waltek.com.cn